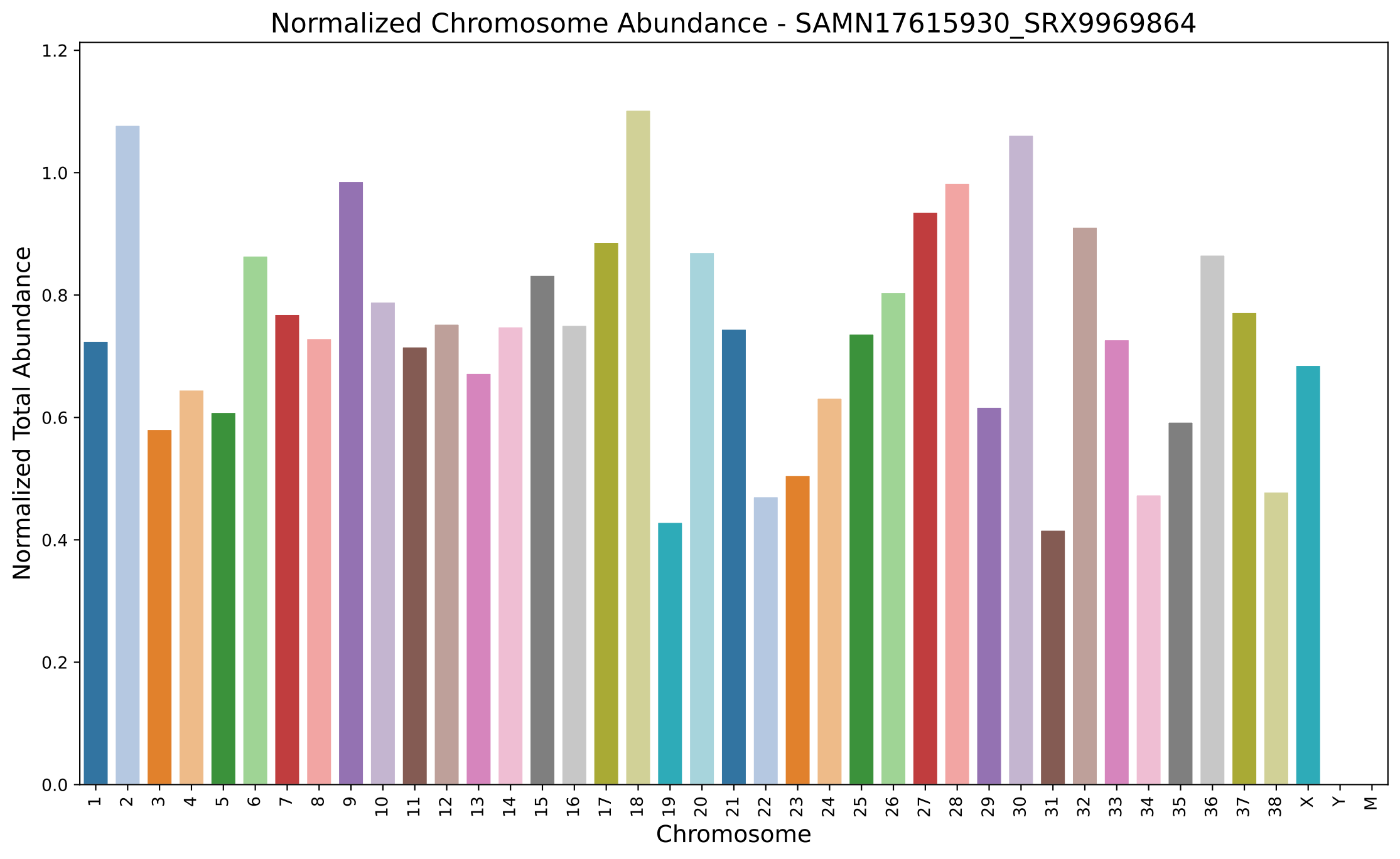
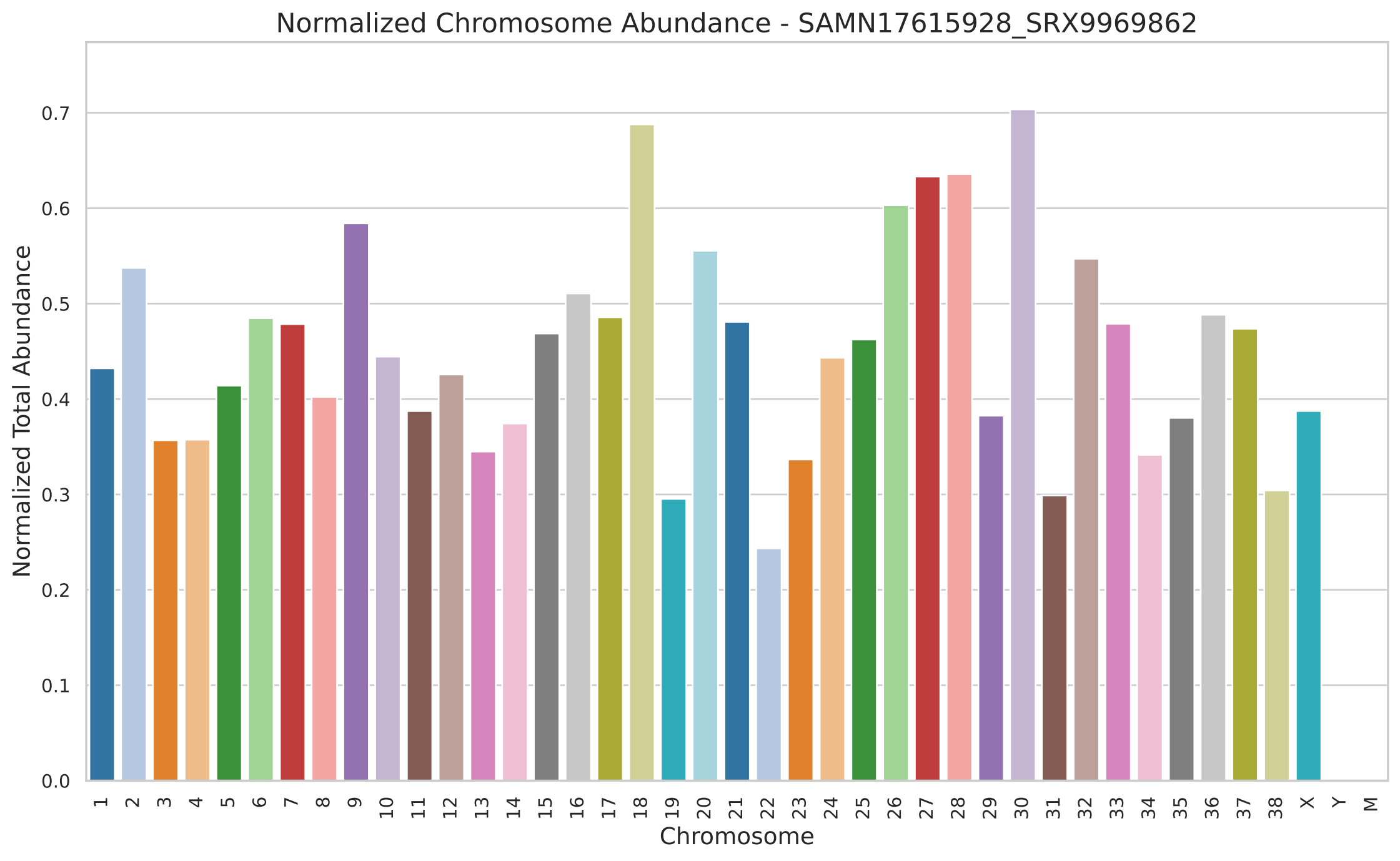
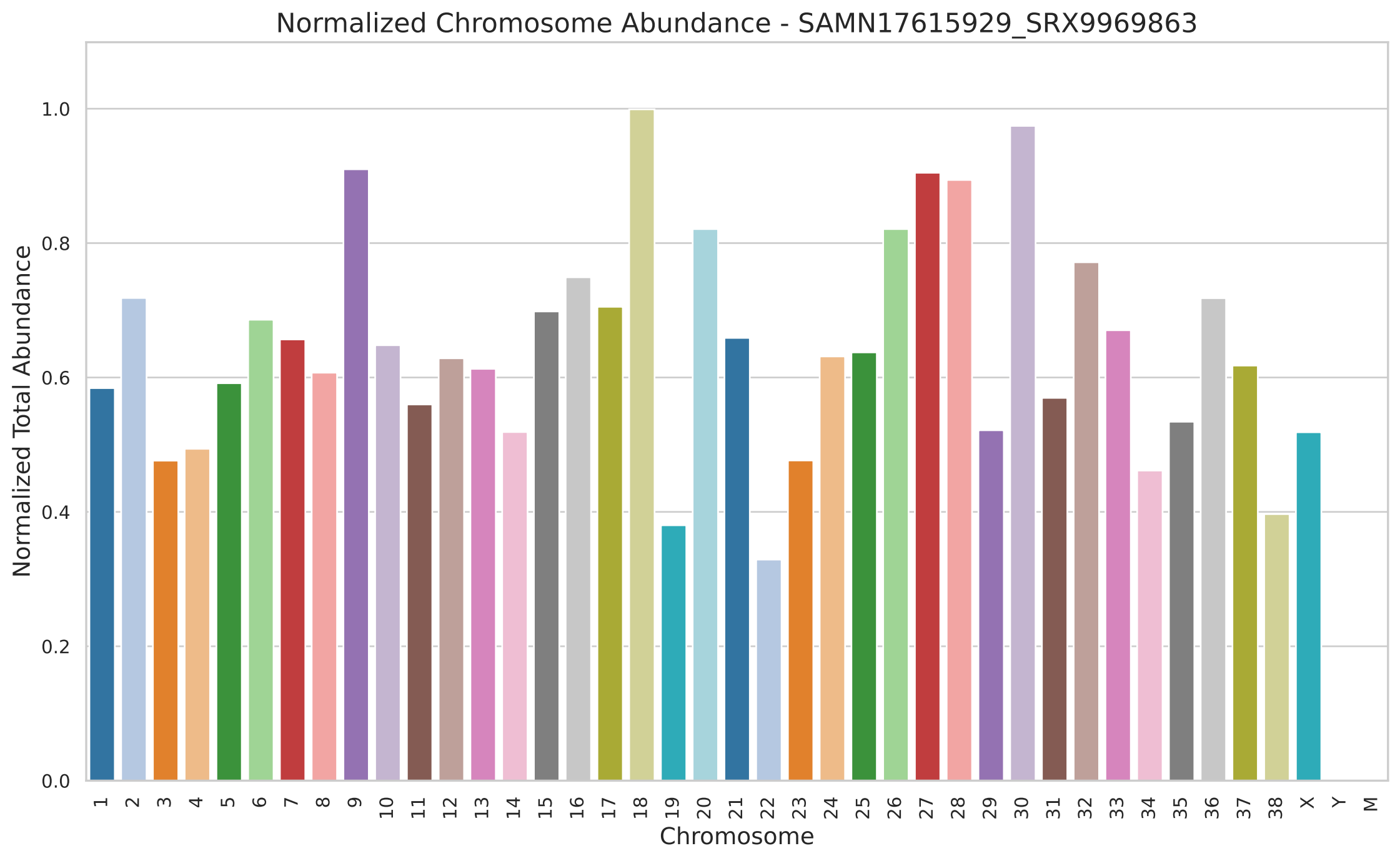
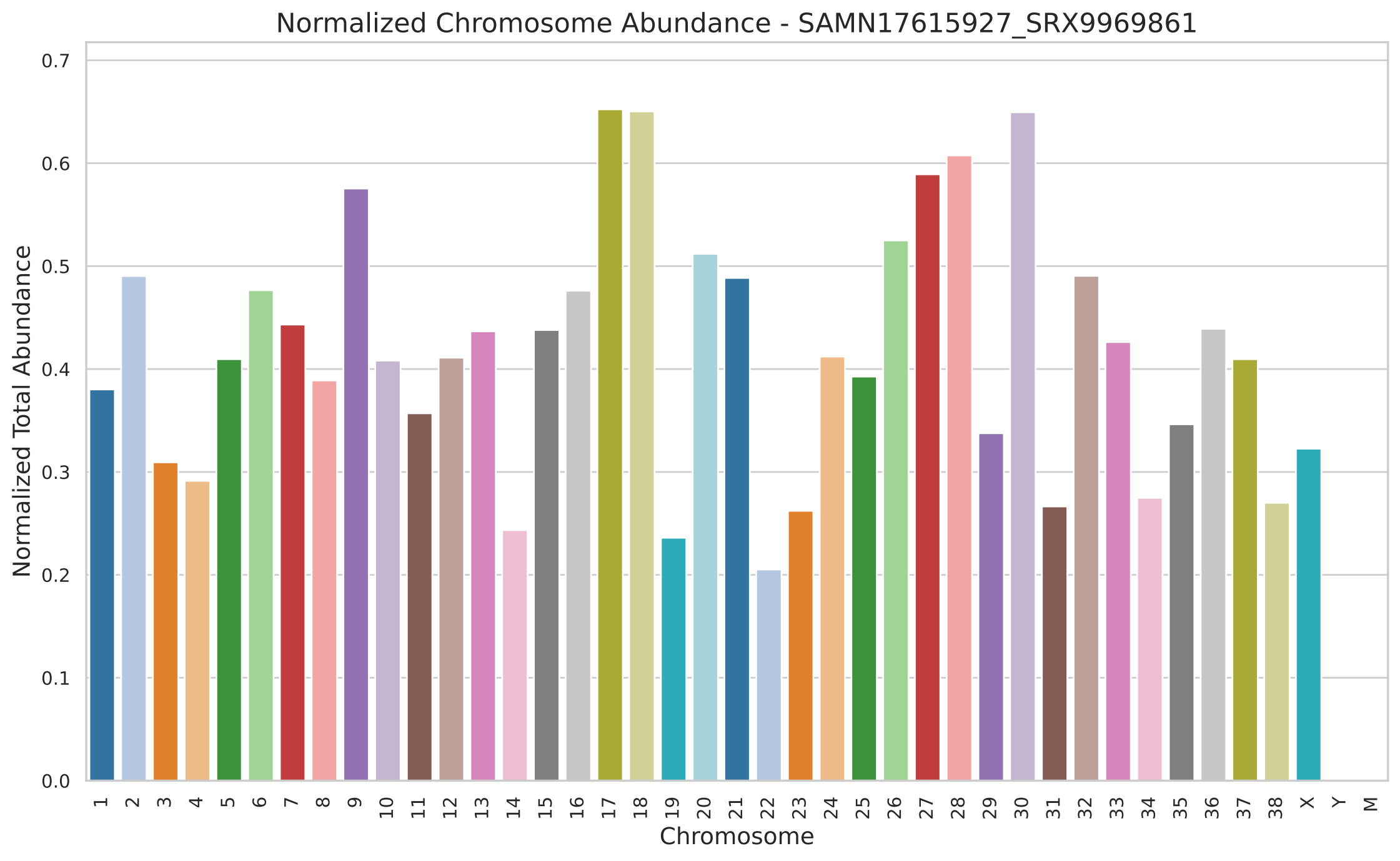
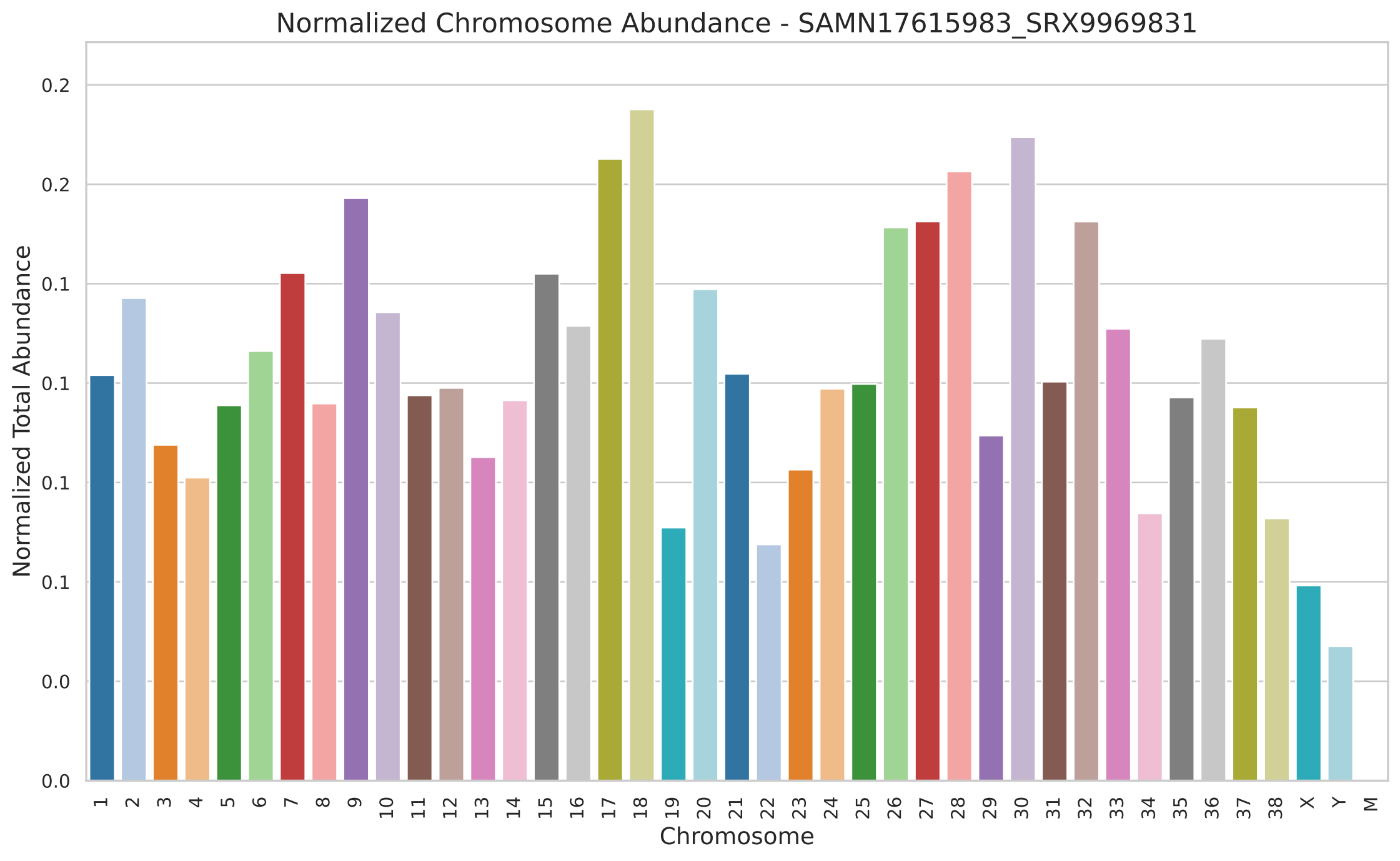
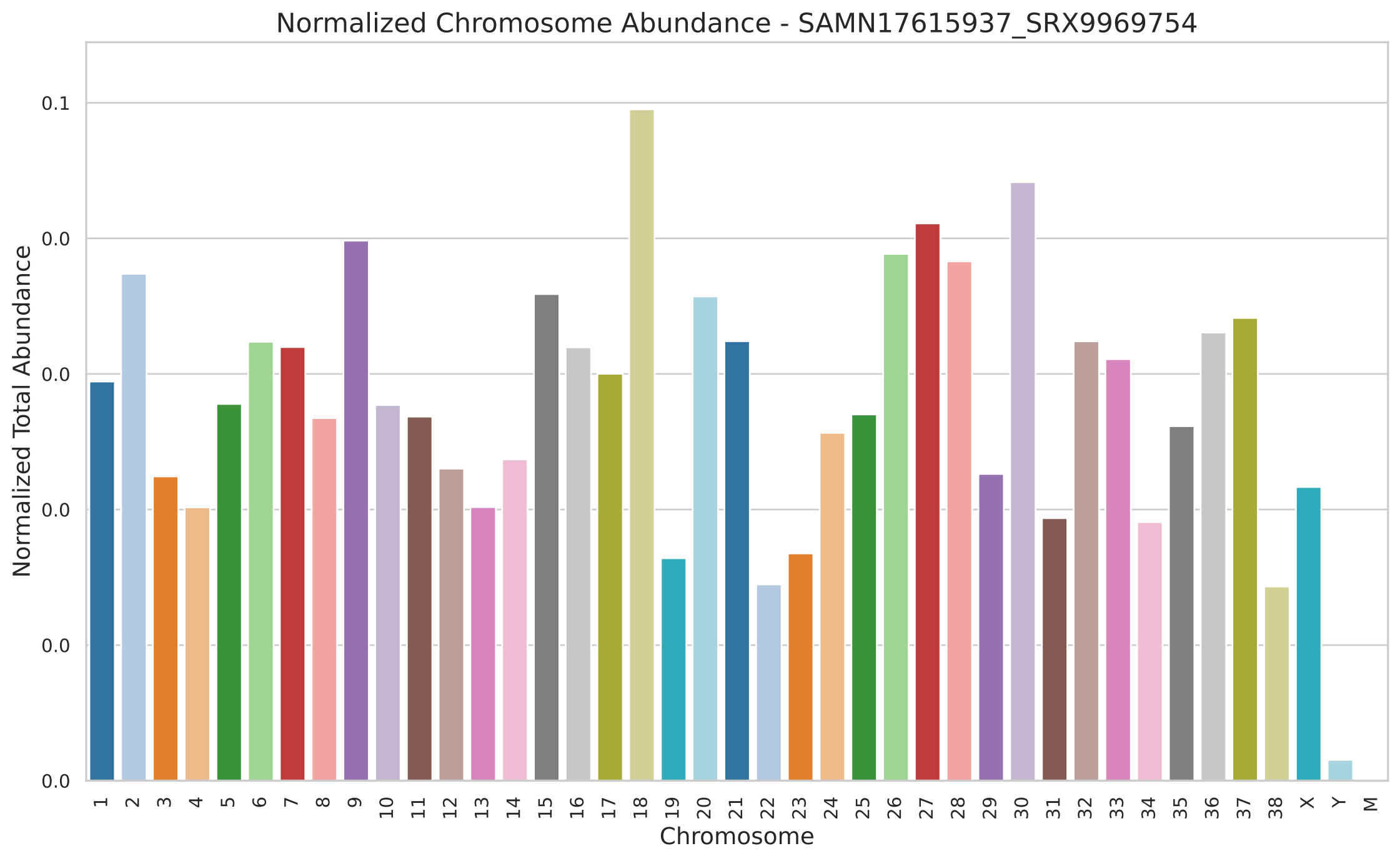

Normalized Chromosome Abundance - SAMN17615930_SRX9969864
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

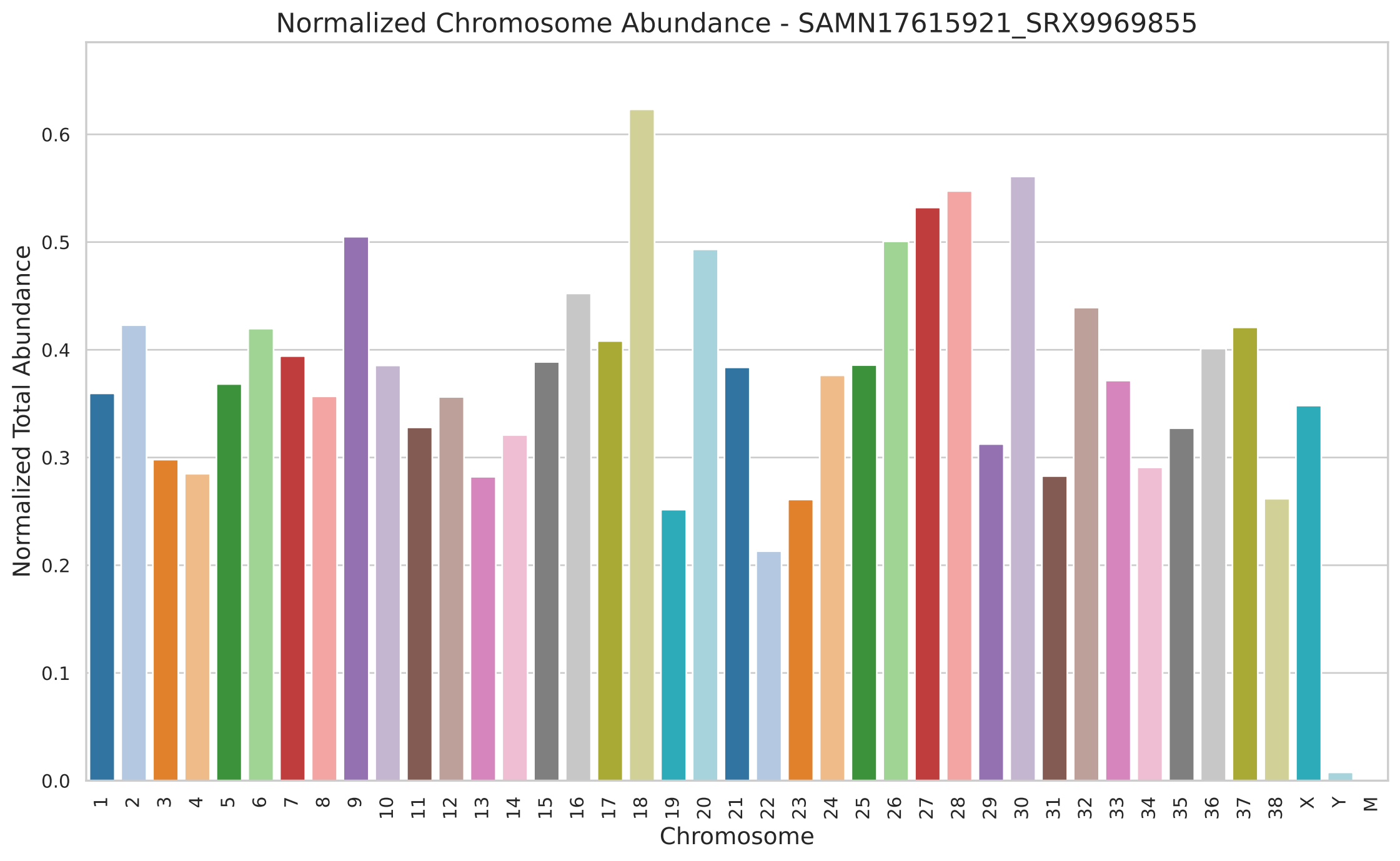

Normalized Chromosome Abundance - SAMN17615928_SRX9969862
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

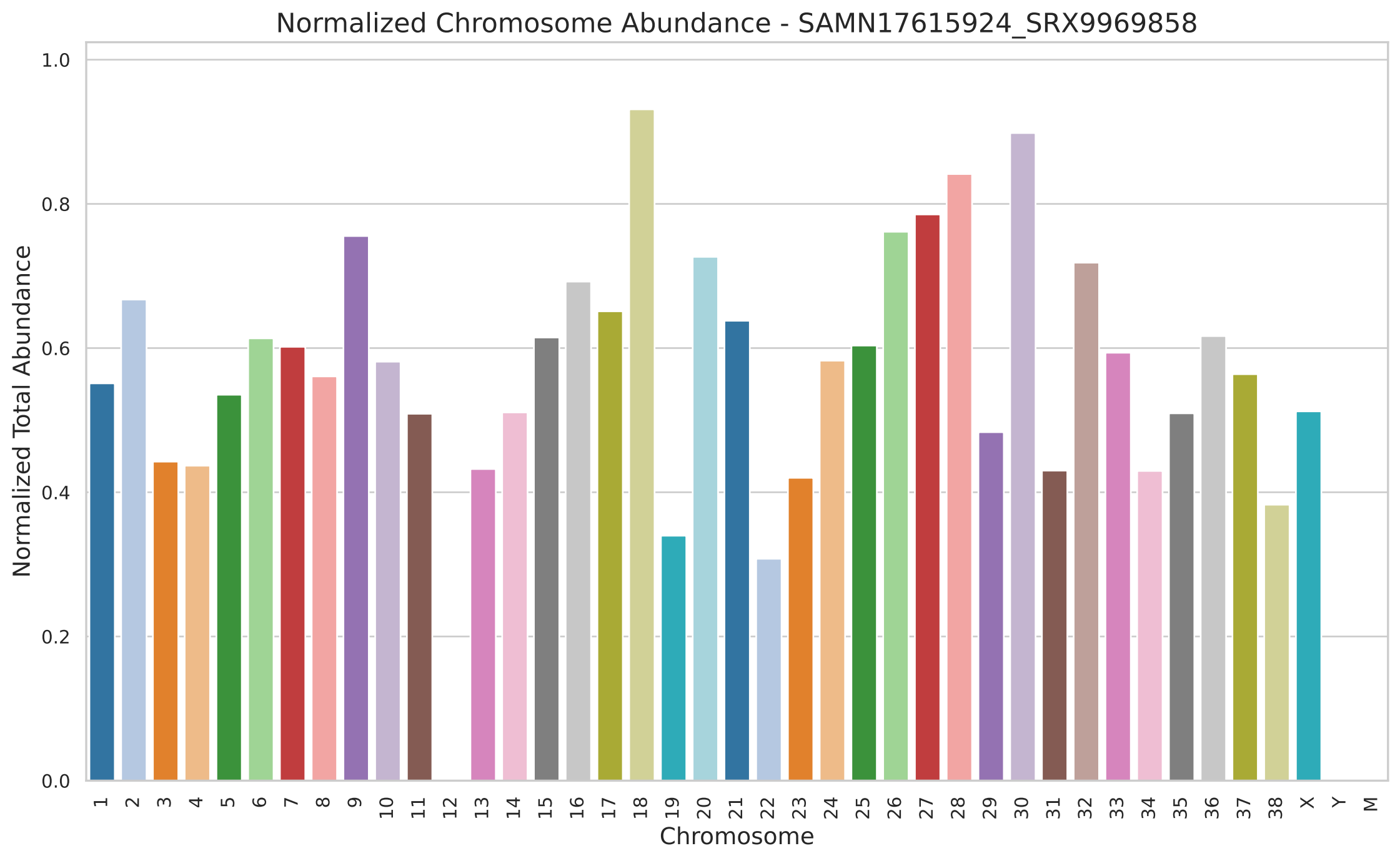

Normalized Chromosome Abundance - SAMN17615929_SRX9969863
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

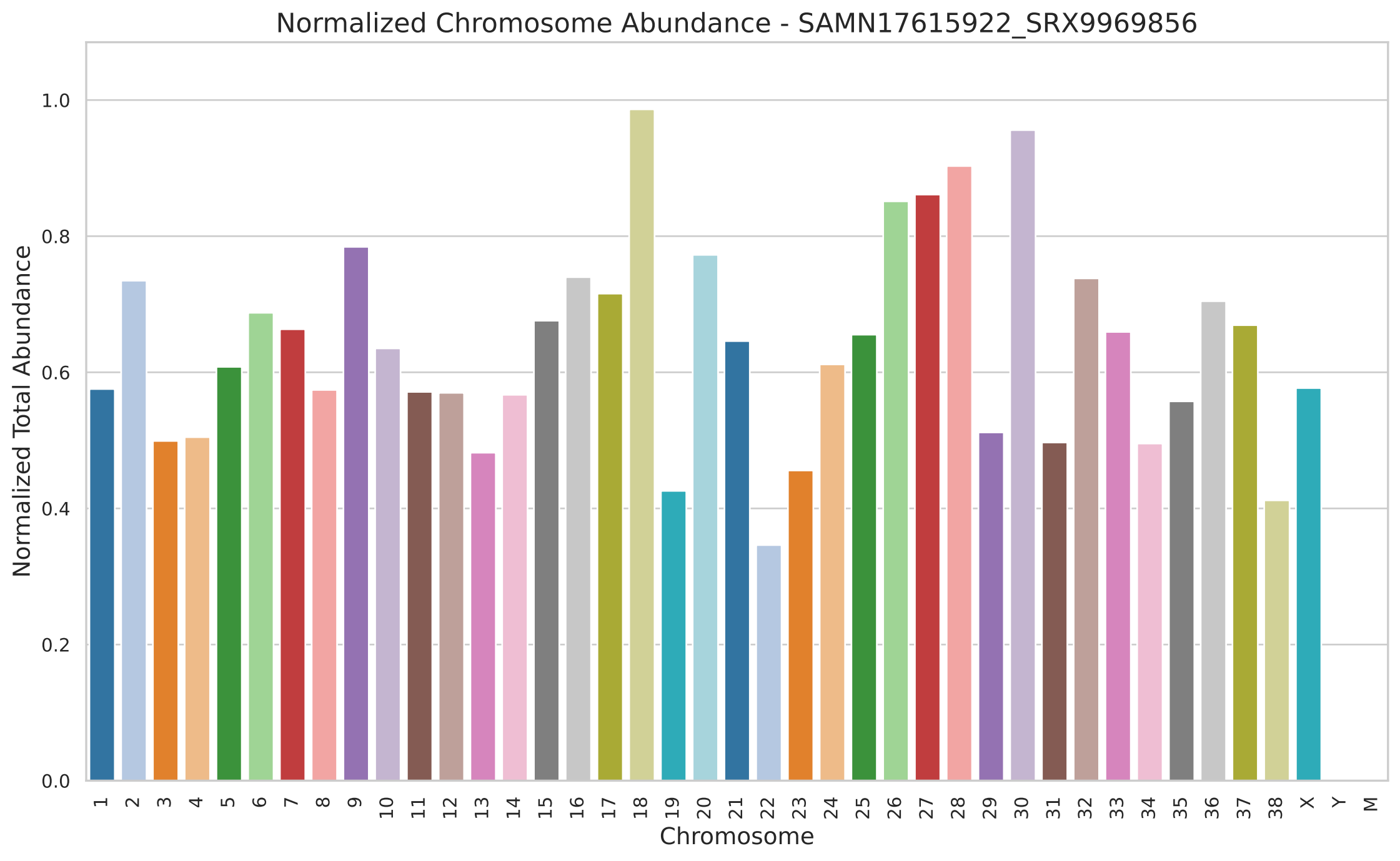

Normalized Chromosome Abundance - SAMN17615927_SRX9969861
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

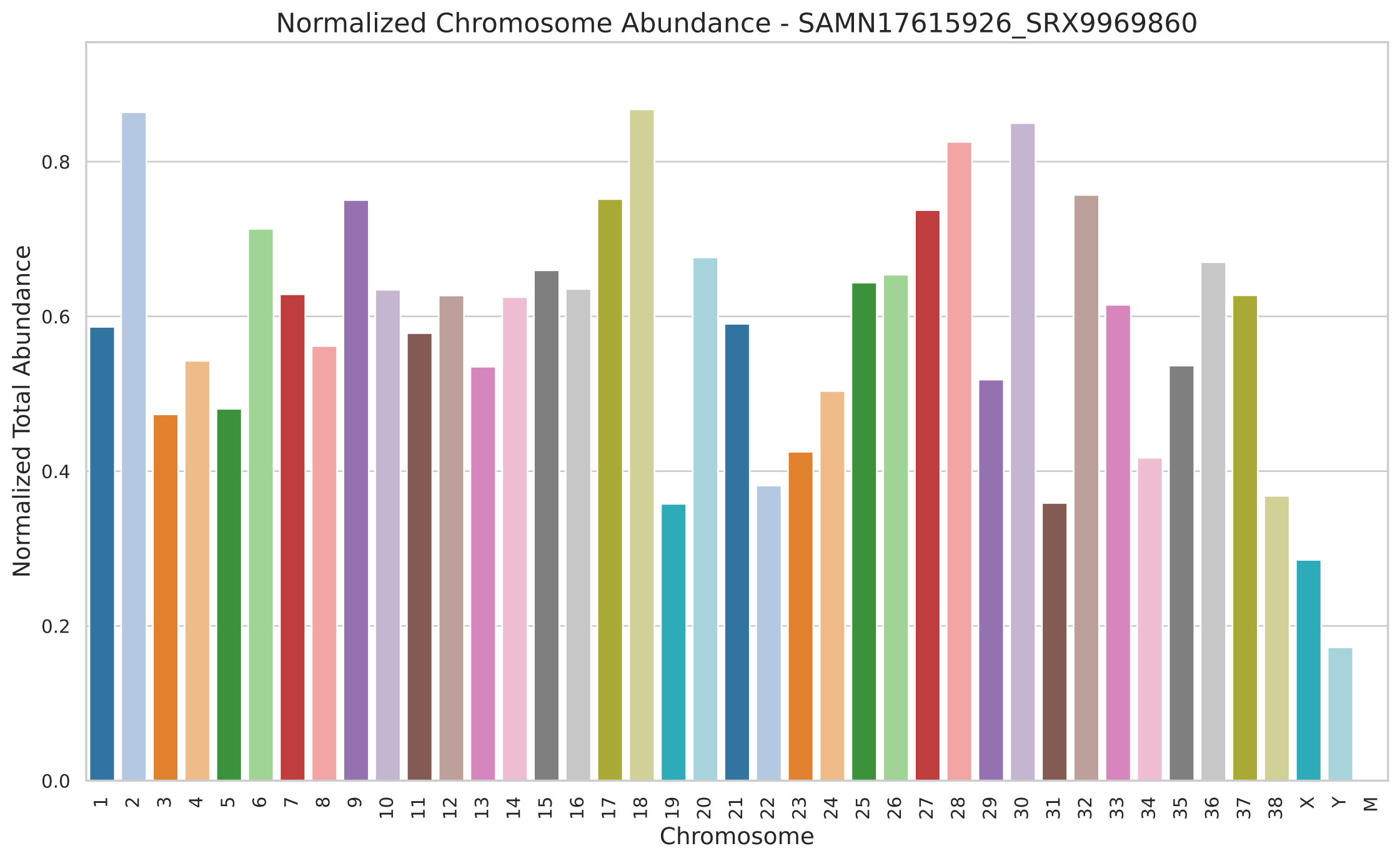

Normalized Chromosome Abundance - SAMN17615983_SRX9969831
Normalized Total Abundance
0.2
0.2
0.1
0.1
0.1
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

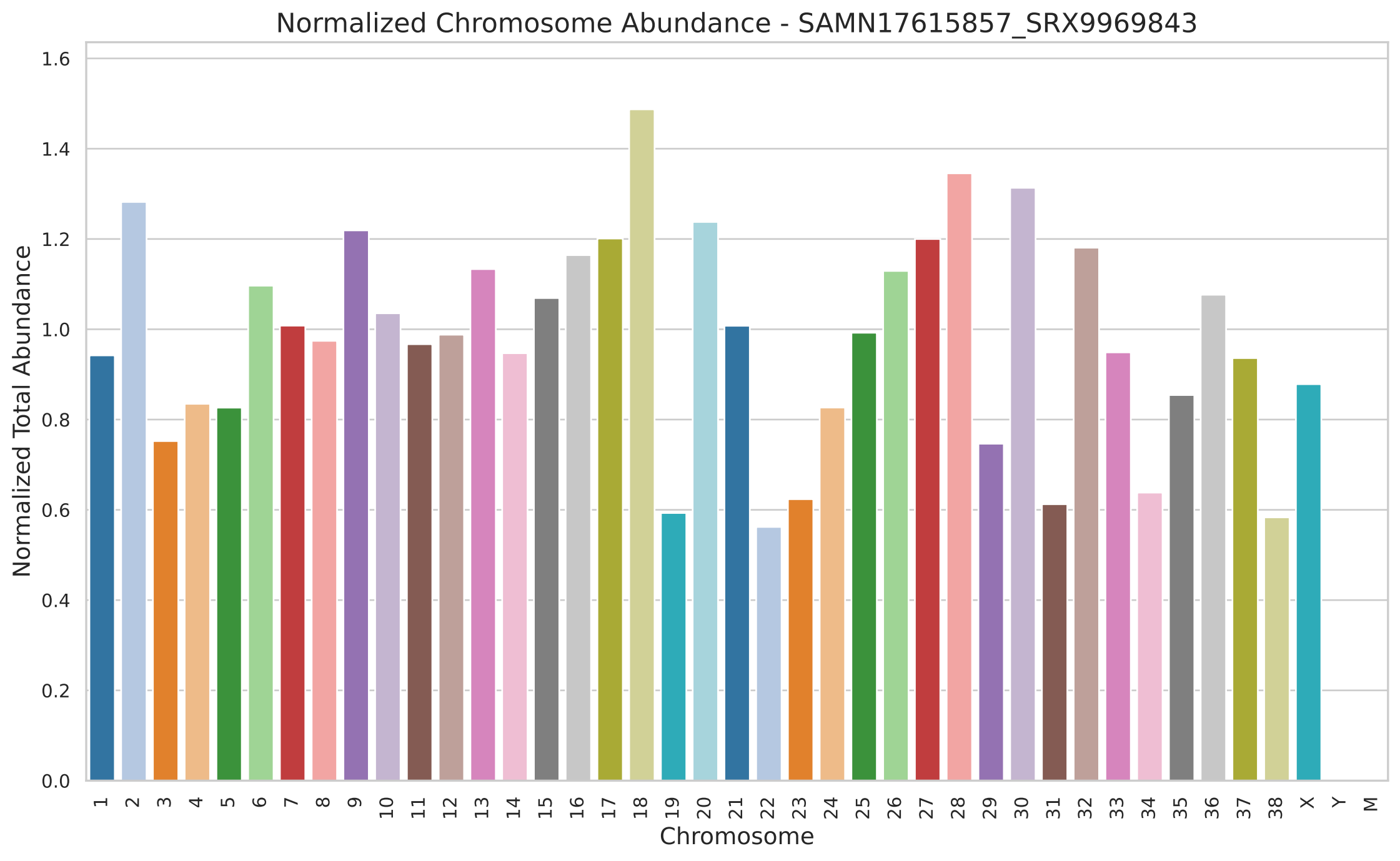

Normalized Chromosome Abundance - SAMN17615937_SRX9969754
Normalized Total Abundance
0.1
0.0
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

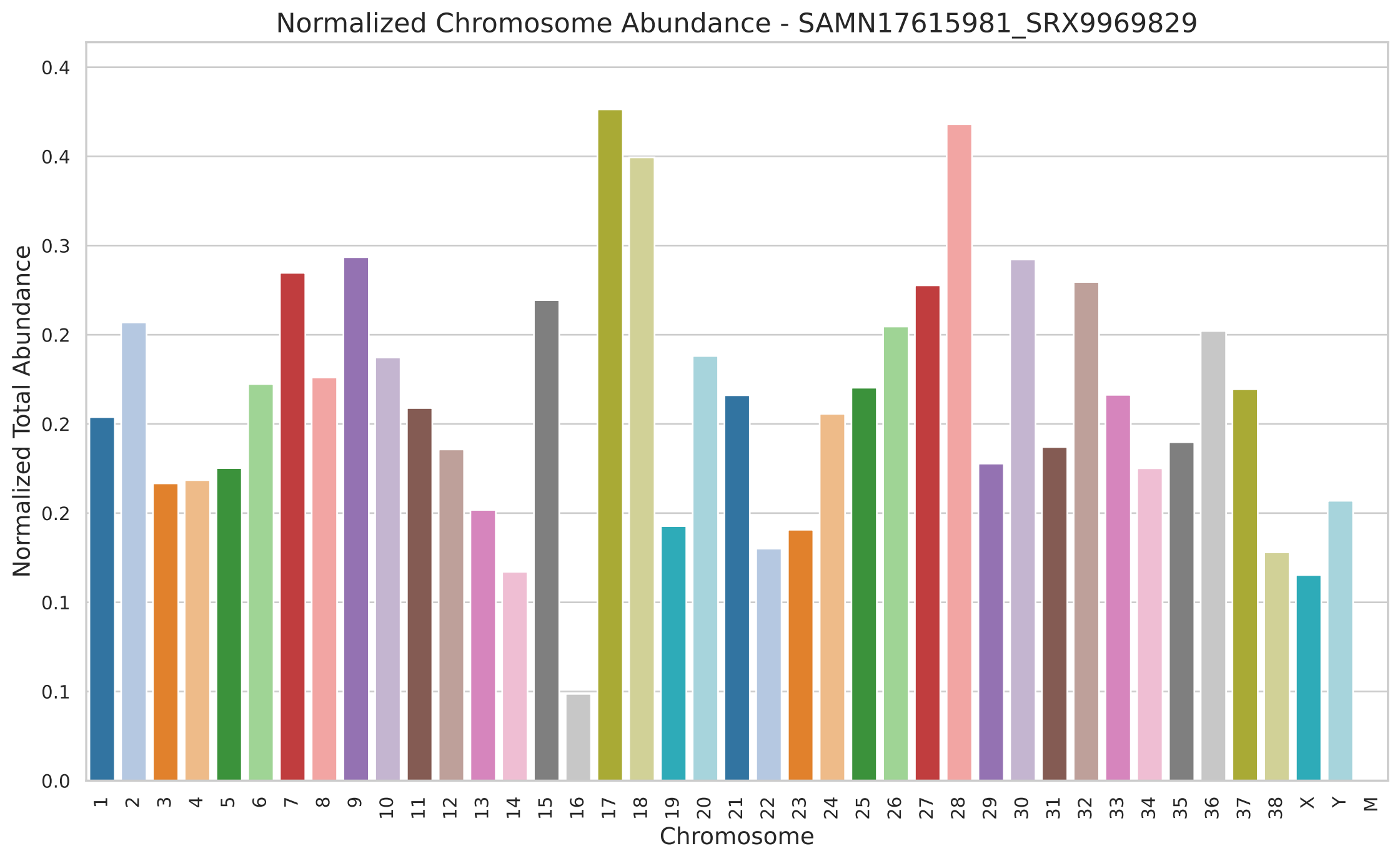

Normalized Chromosome Abundance - SAMN17615921_SRX9969855
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

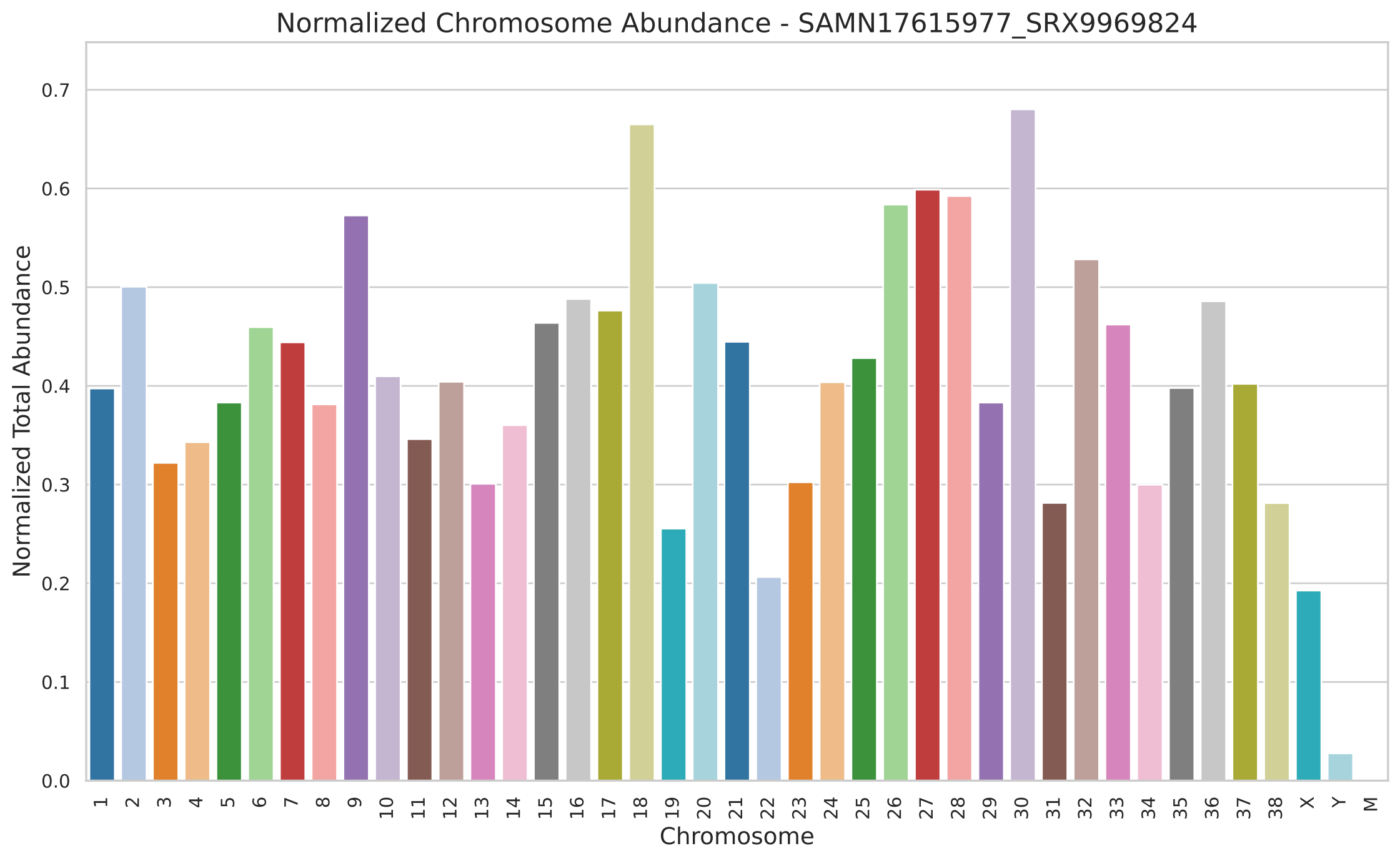

Normalized Chromosome Abundance - SAMN17615924_SRX9969858
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

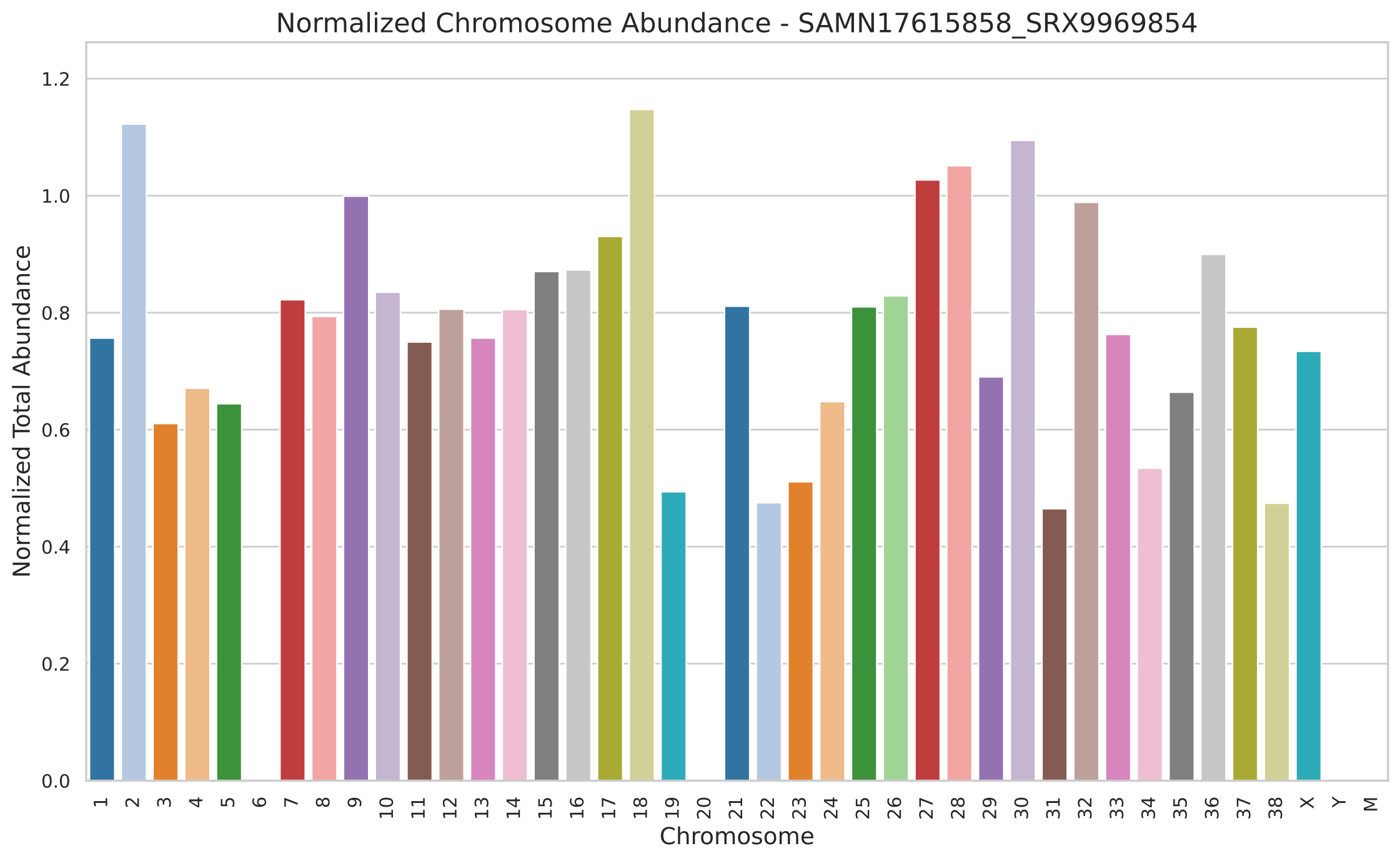

Normalized Chromosome Abundance - SAMN17615922_SRX9969856
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

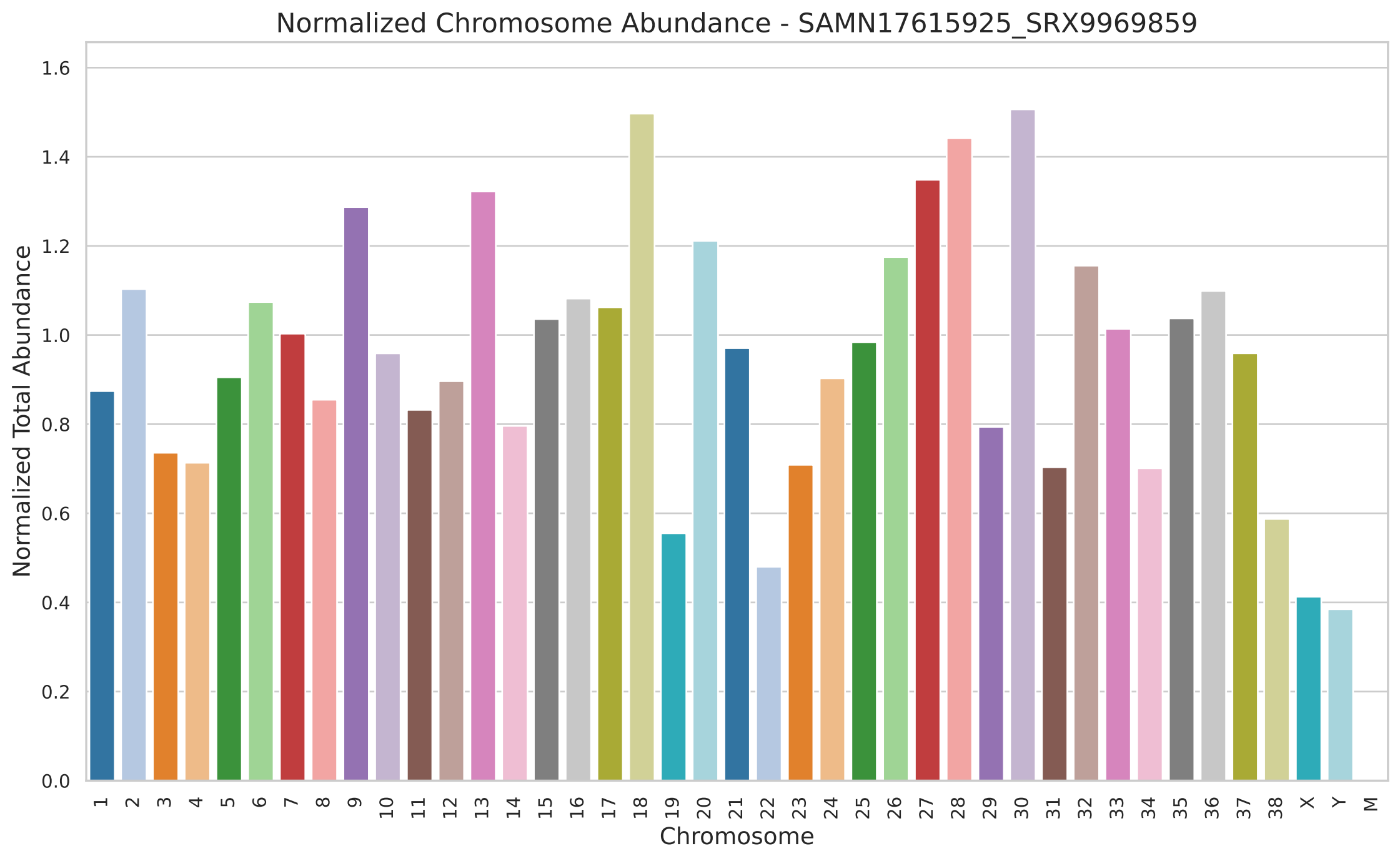

Normalized Chromosome Abundance - SAMN17615926_SRX9969860
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

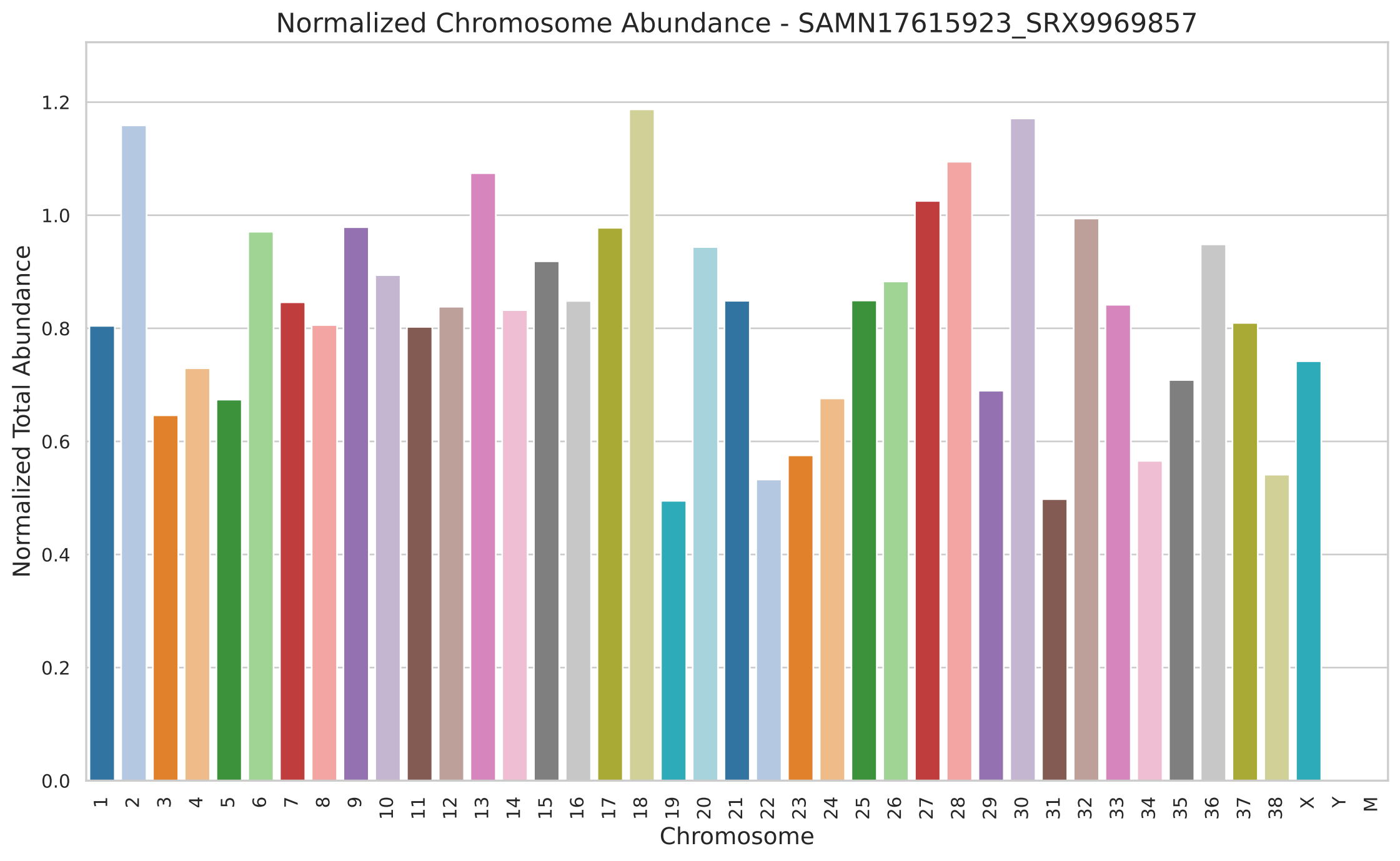

Normalized Chromosome Abundance - SAMN17615857_SRX9969843
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

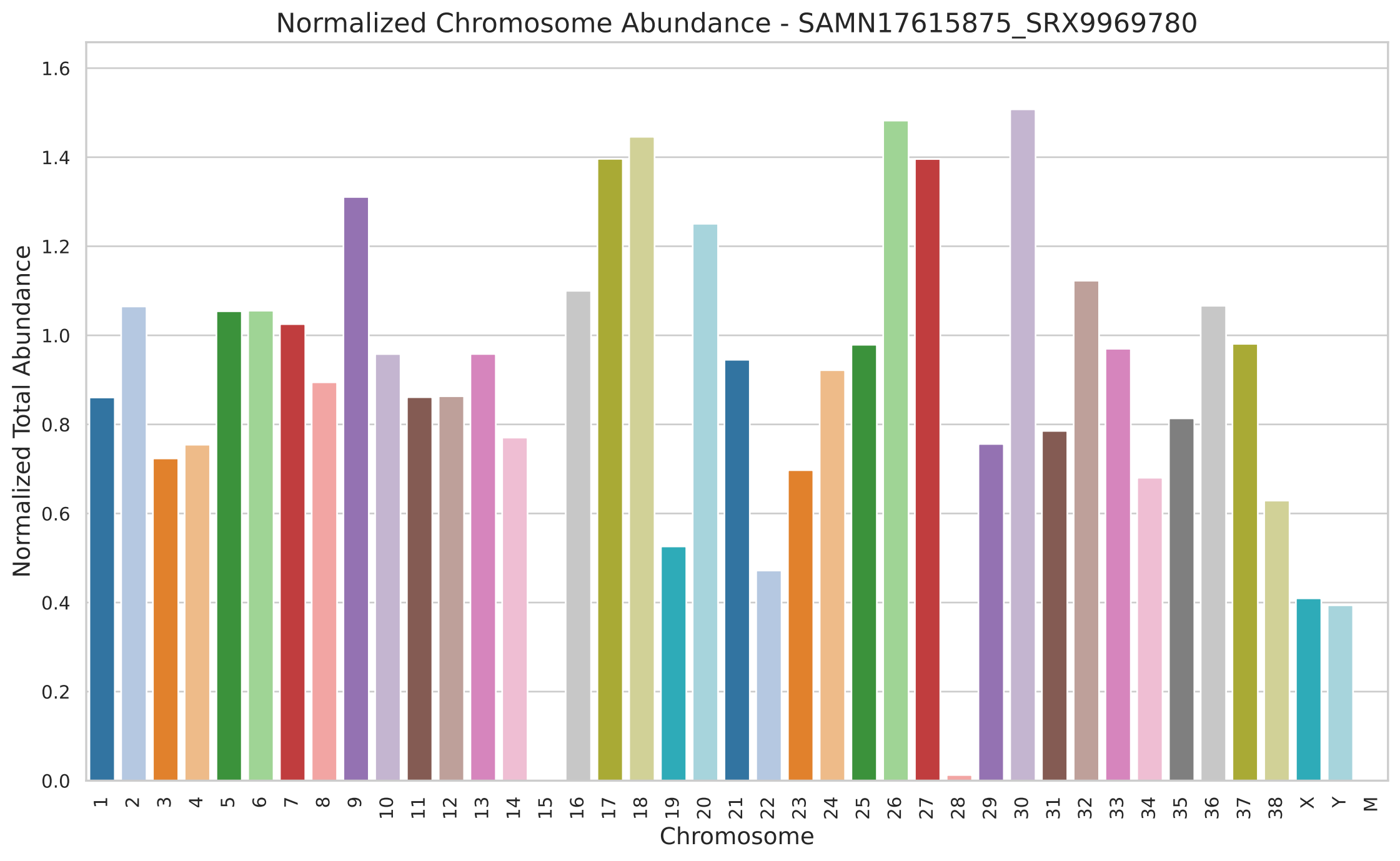

Normalized Chromosome Abundance - SAMN17615981_SRX9969829
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
0.4
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

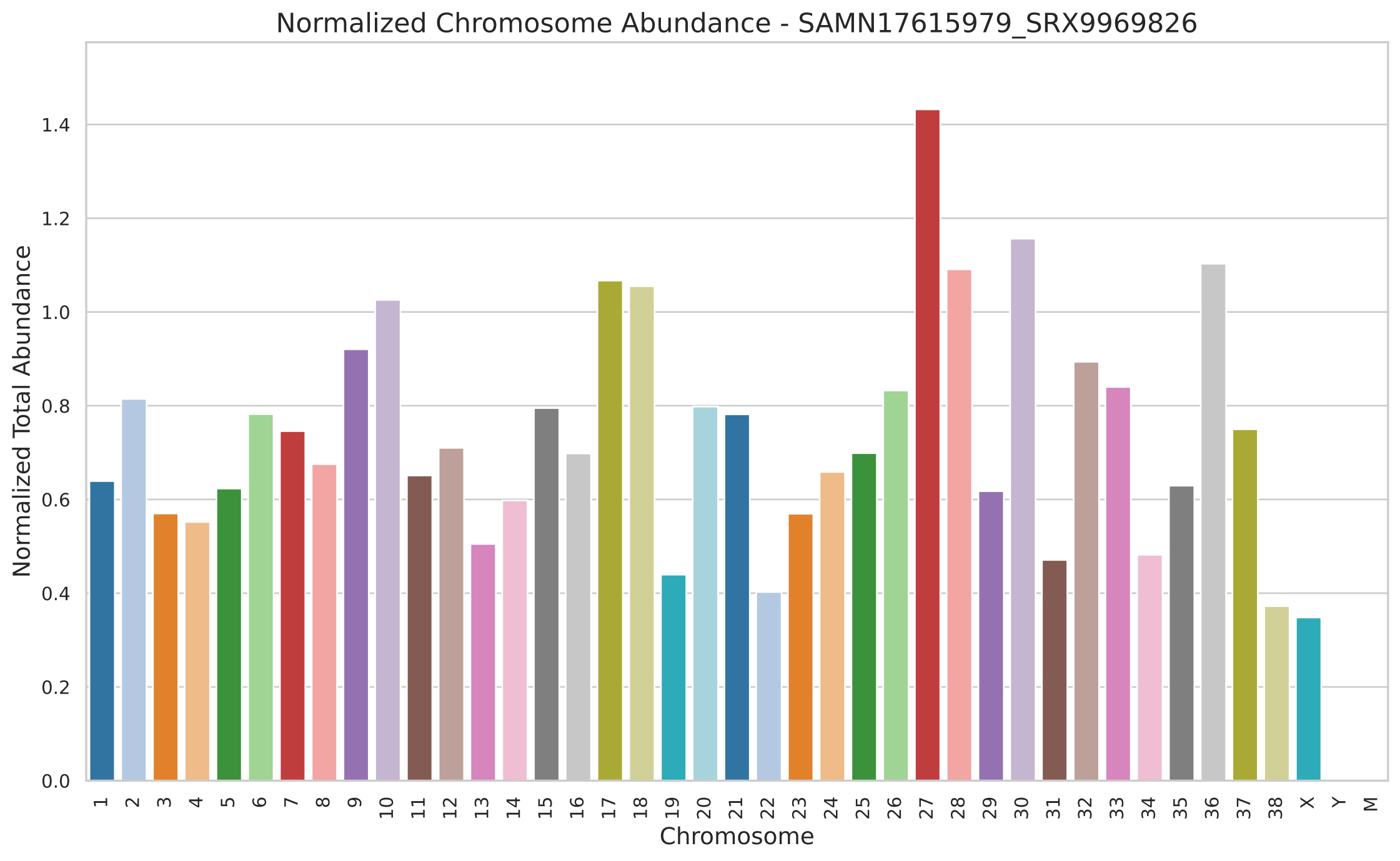

Normalized Chromosome Abundance - SAMN17615977_SRX9969824
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

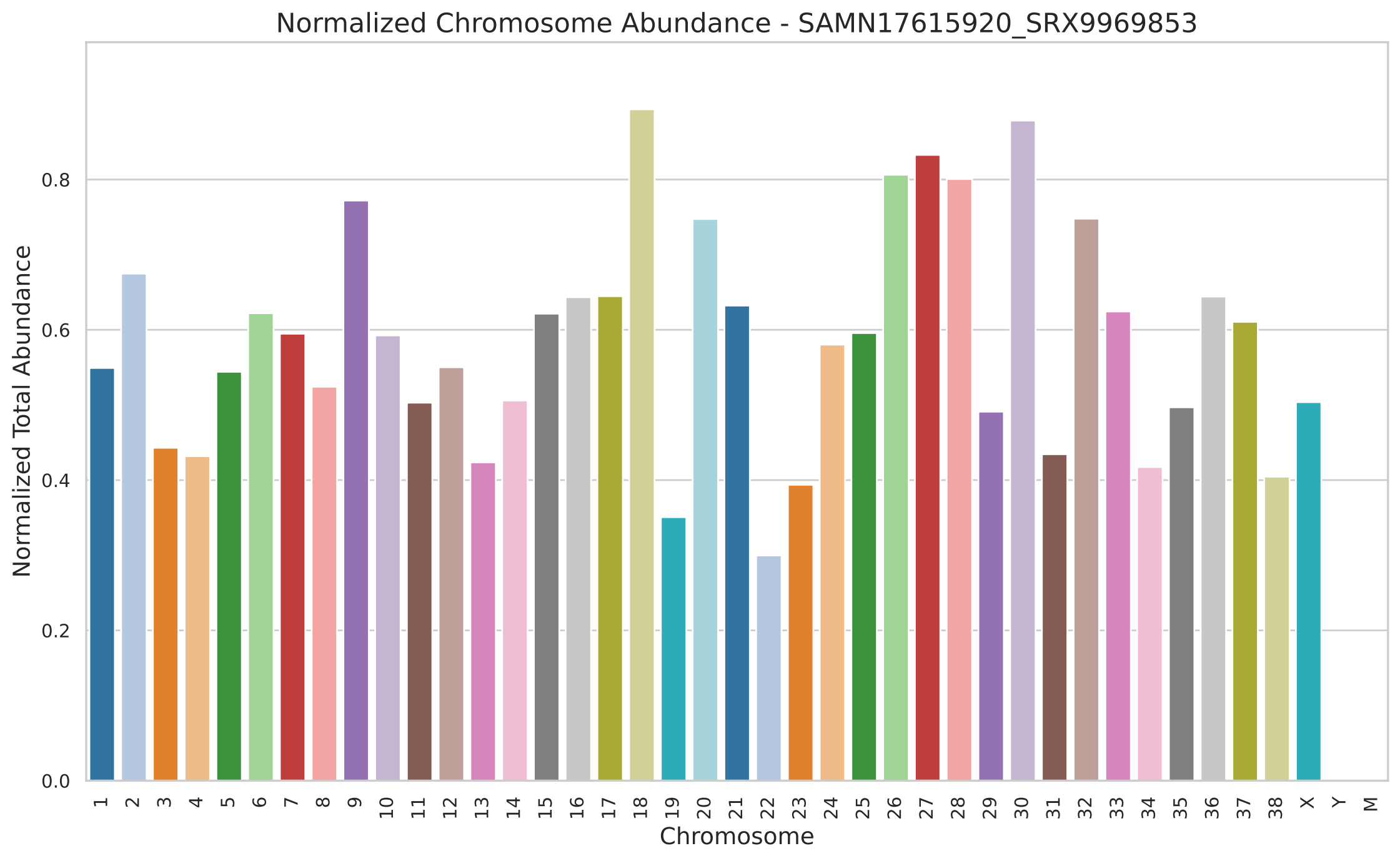

Normalized Chromosome Abundance - SAMN17615858_SRX9969854
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

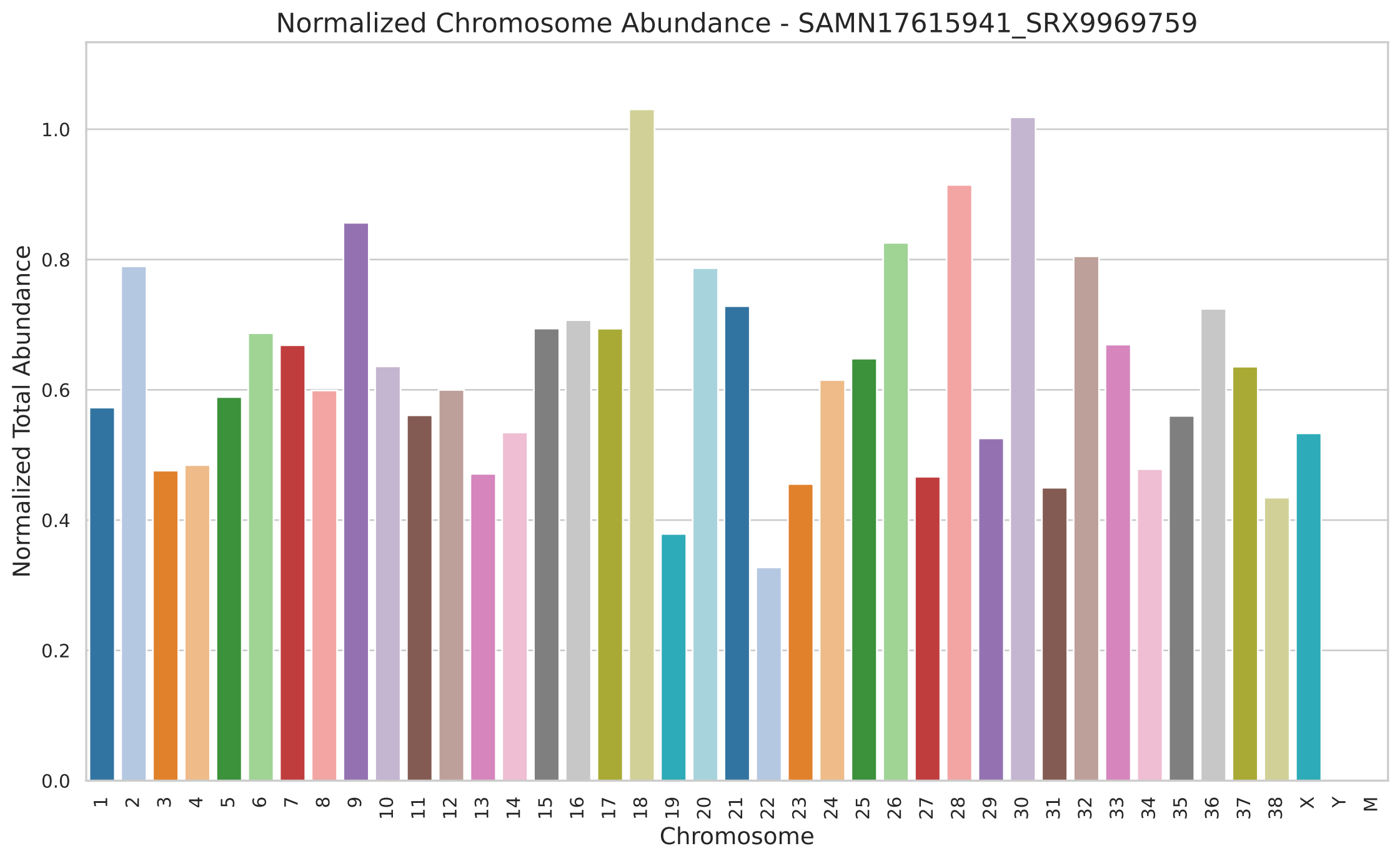

Normalized Chromosome Abundance - SAMN17615925_SRX9969859
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

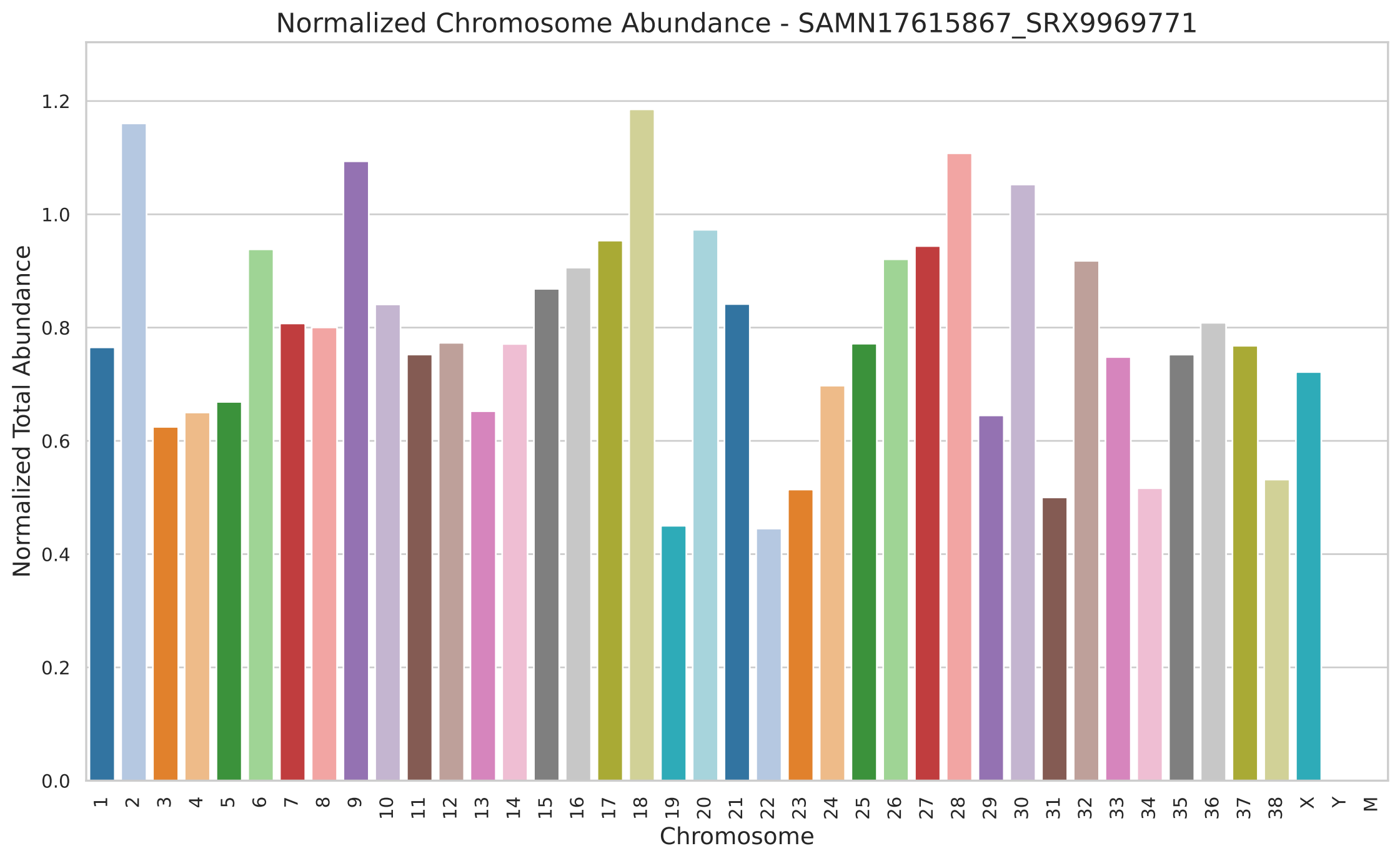

Normalized Chromosome Abundance - SAMN17615923_SRX9969857
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

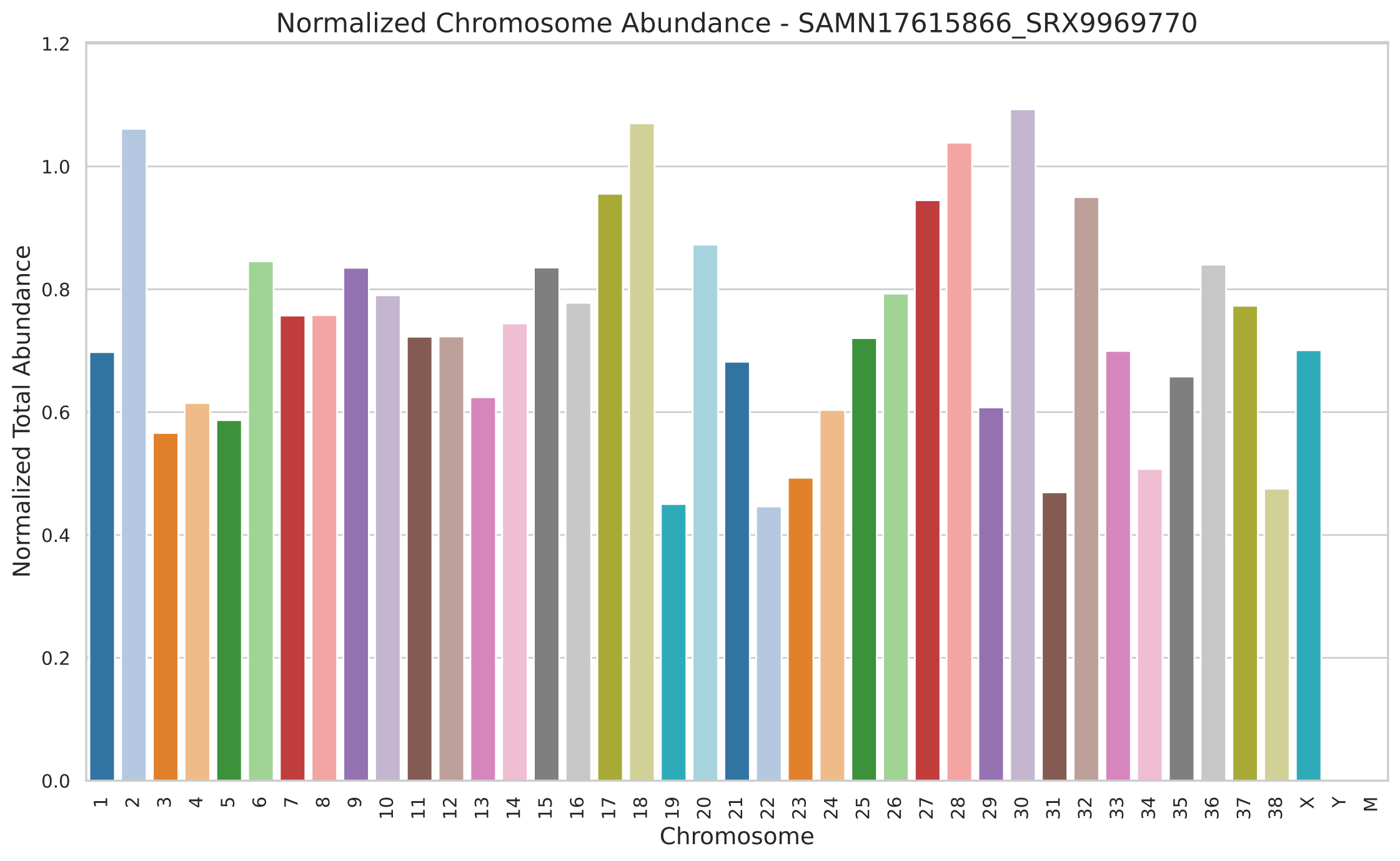

Normalized Chromosome Abundance - SAMN17615875_SRX9969780
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

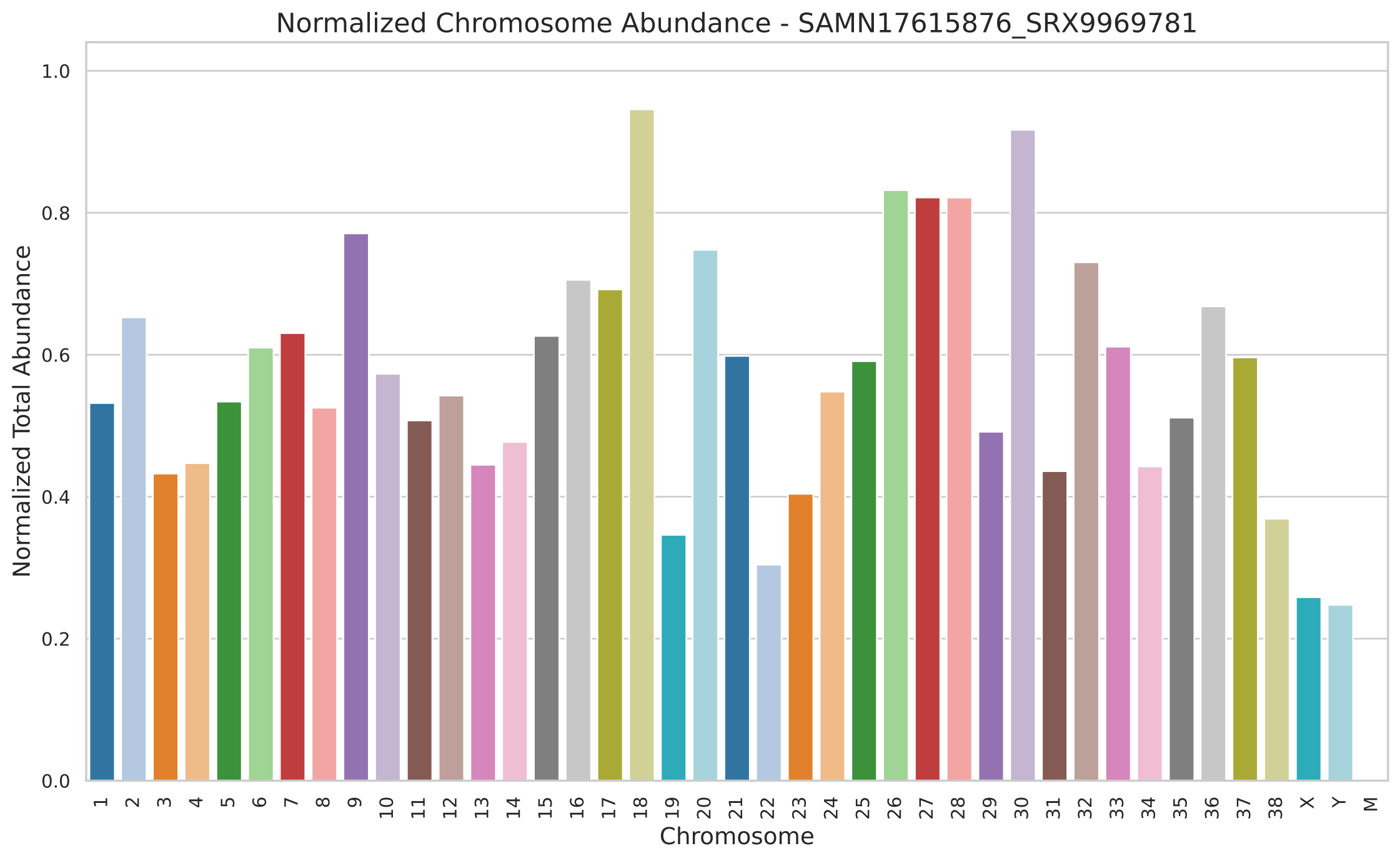

Normalized Chromosome Abundance - SAMN17615979_SRX9969826
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

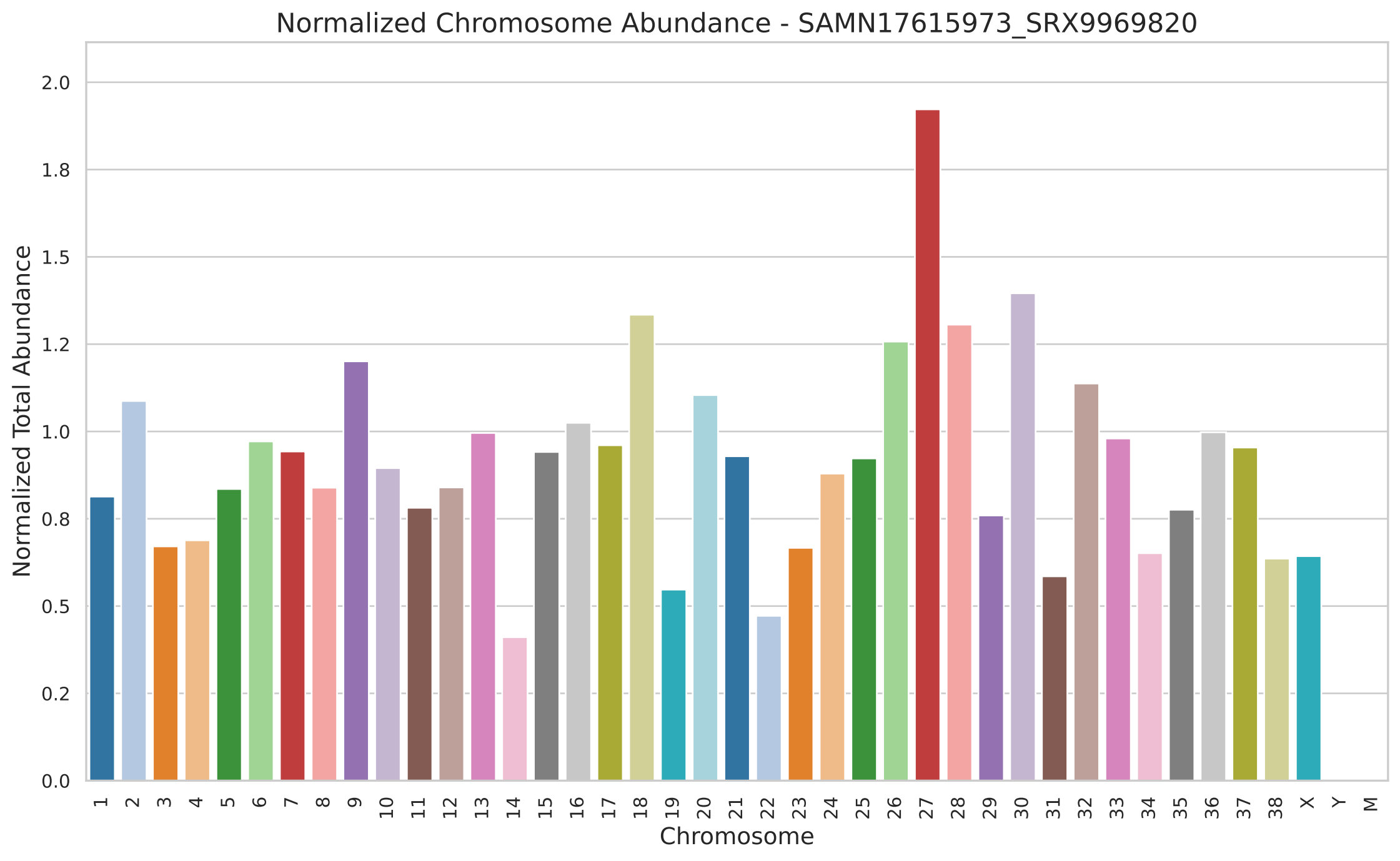

Normalized Chromosome Abundance - SAMN17615920_SRX9969853
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

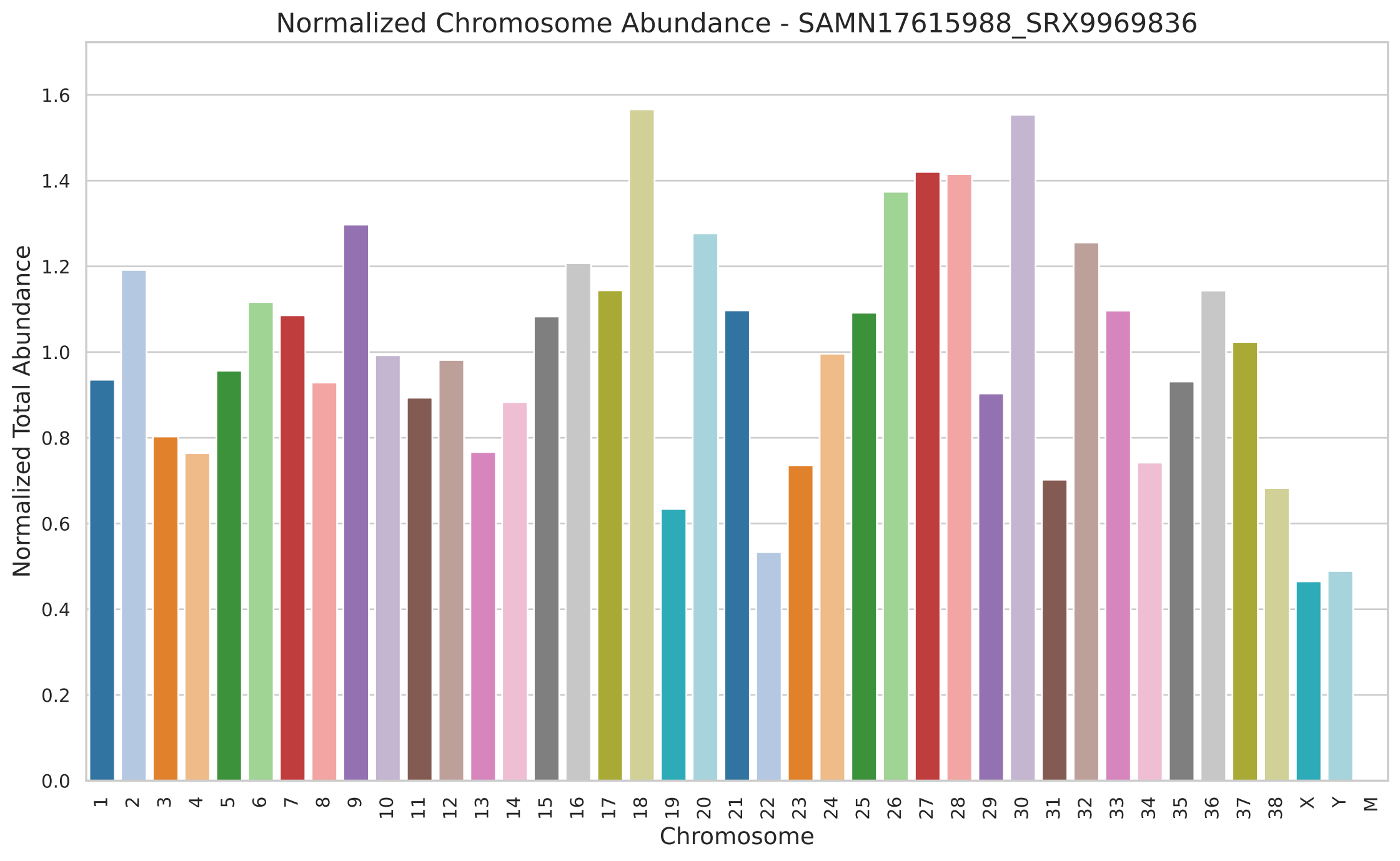

Normalized Chromosome Abundance - SAMN17615941_SRX9969759
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

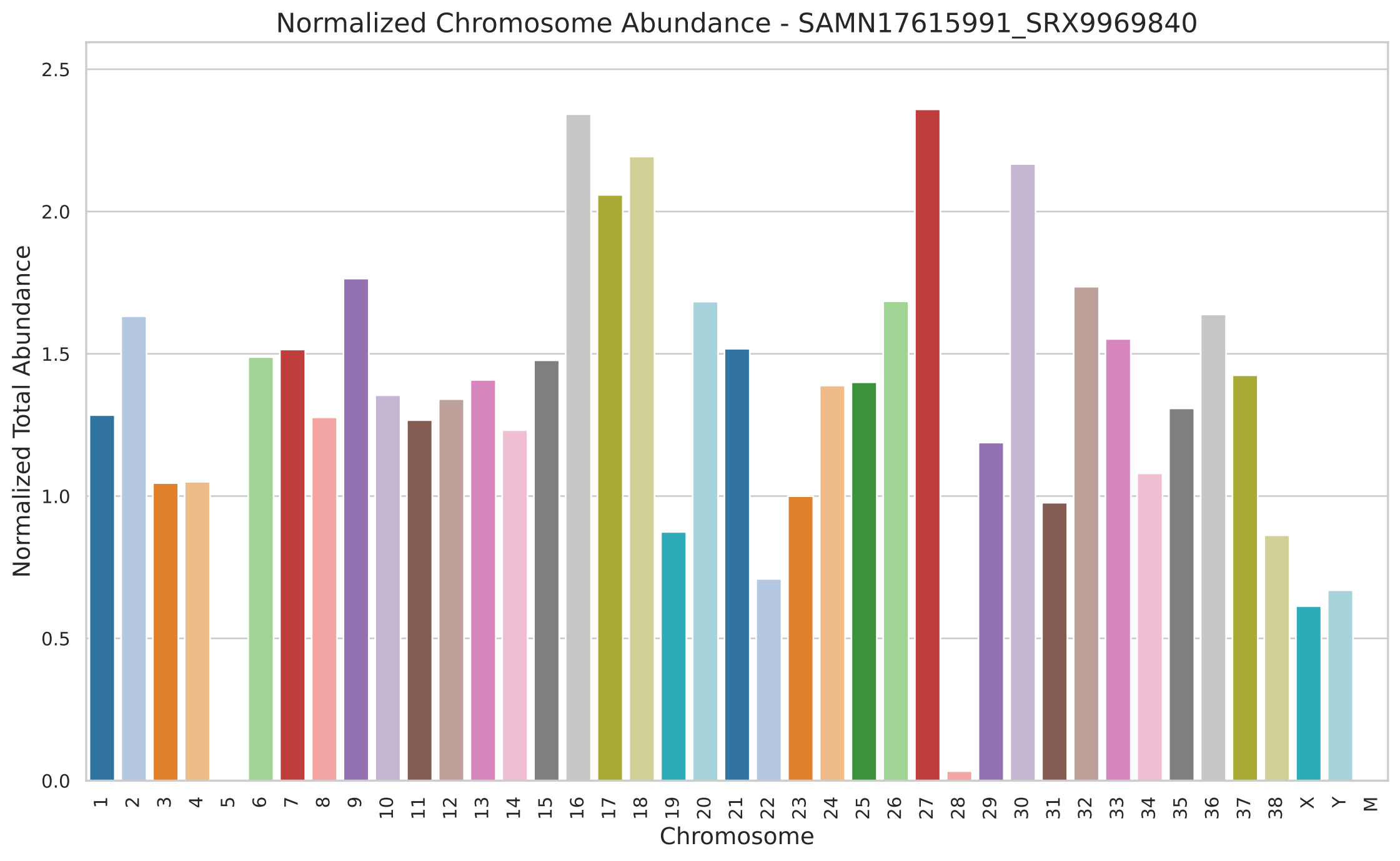

Normalized Chromosome Abundance - SAMN17615867_SRX9969771
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

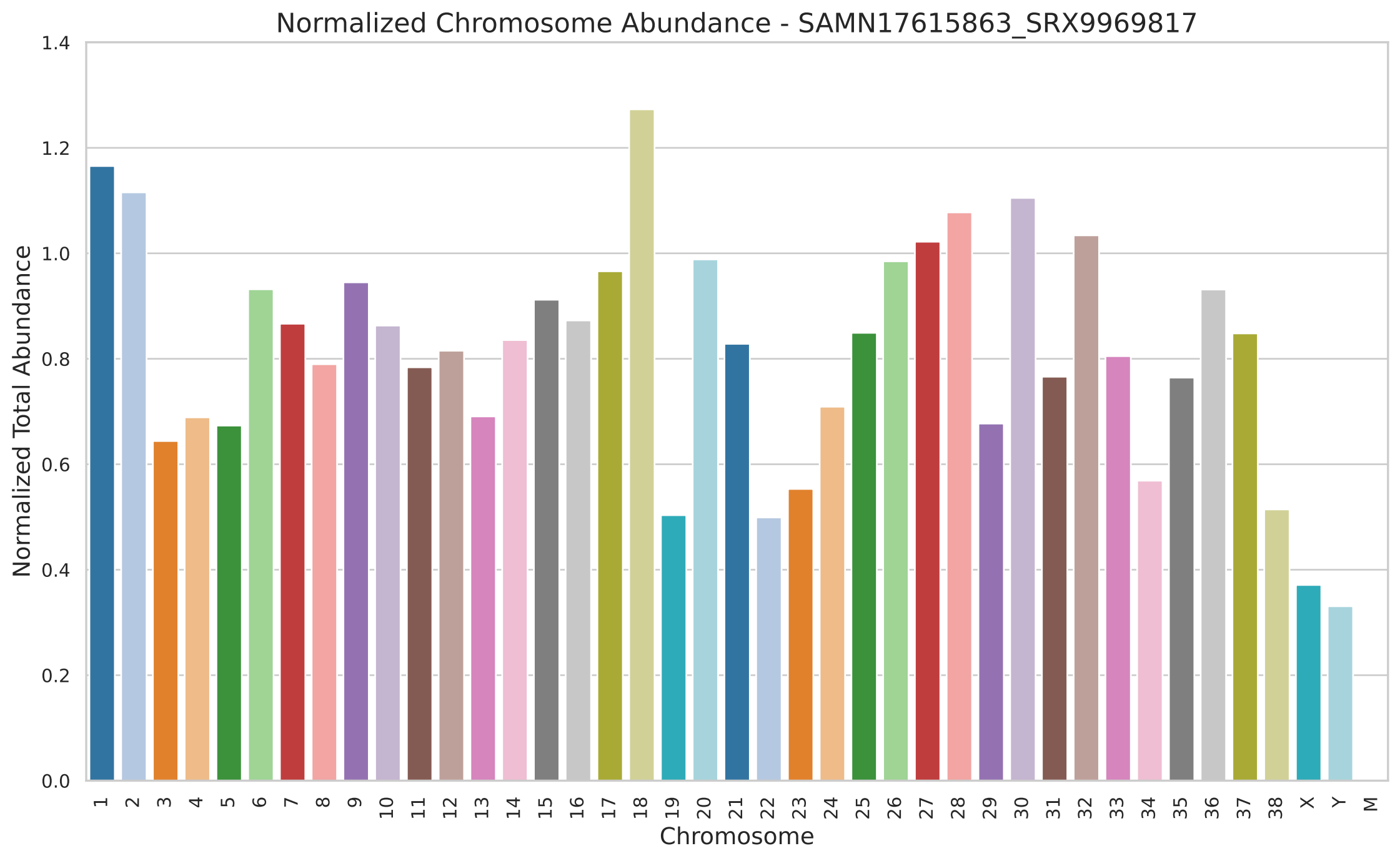

Normalized Chromosome Abundance - SAMN17615866_SRX9969770
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

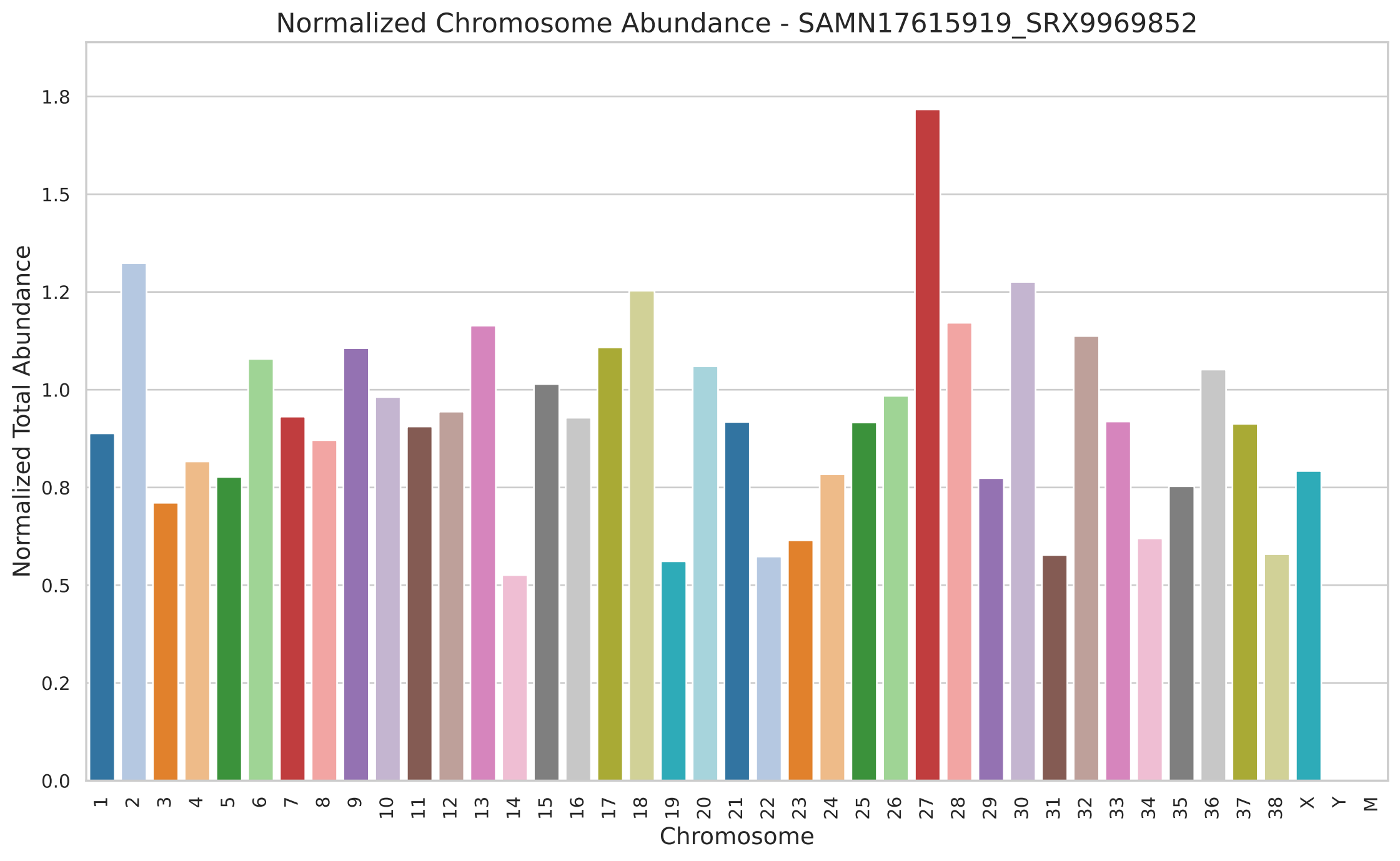

Normalized Chromosome Abundance - SAMN17615876_SRX9969781
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

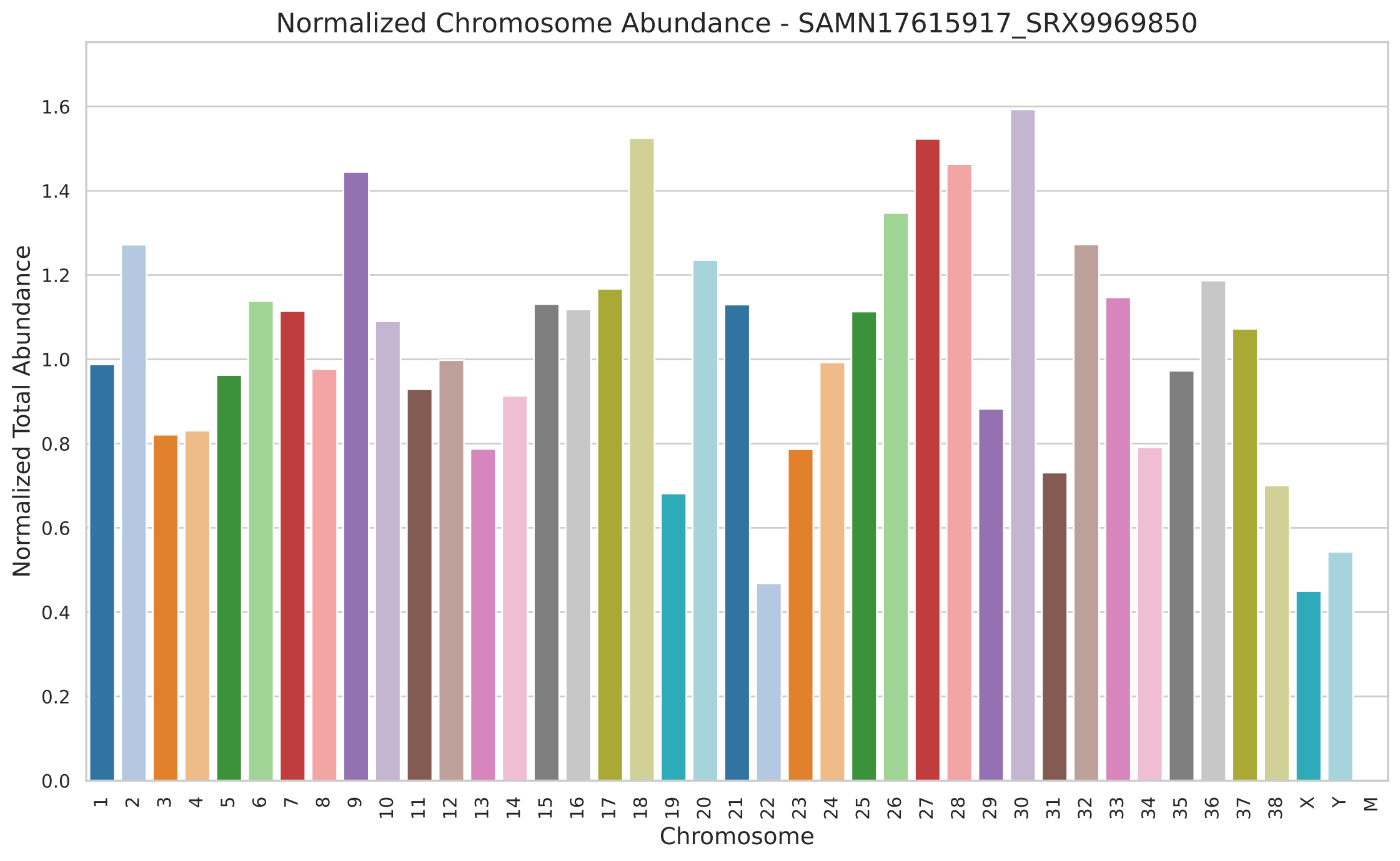

Normalized Chromosome Abundance - SAMN17615973_SRX9969820
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

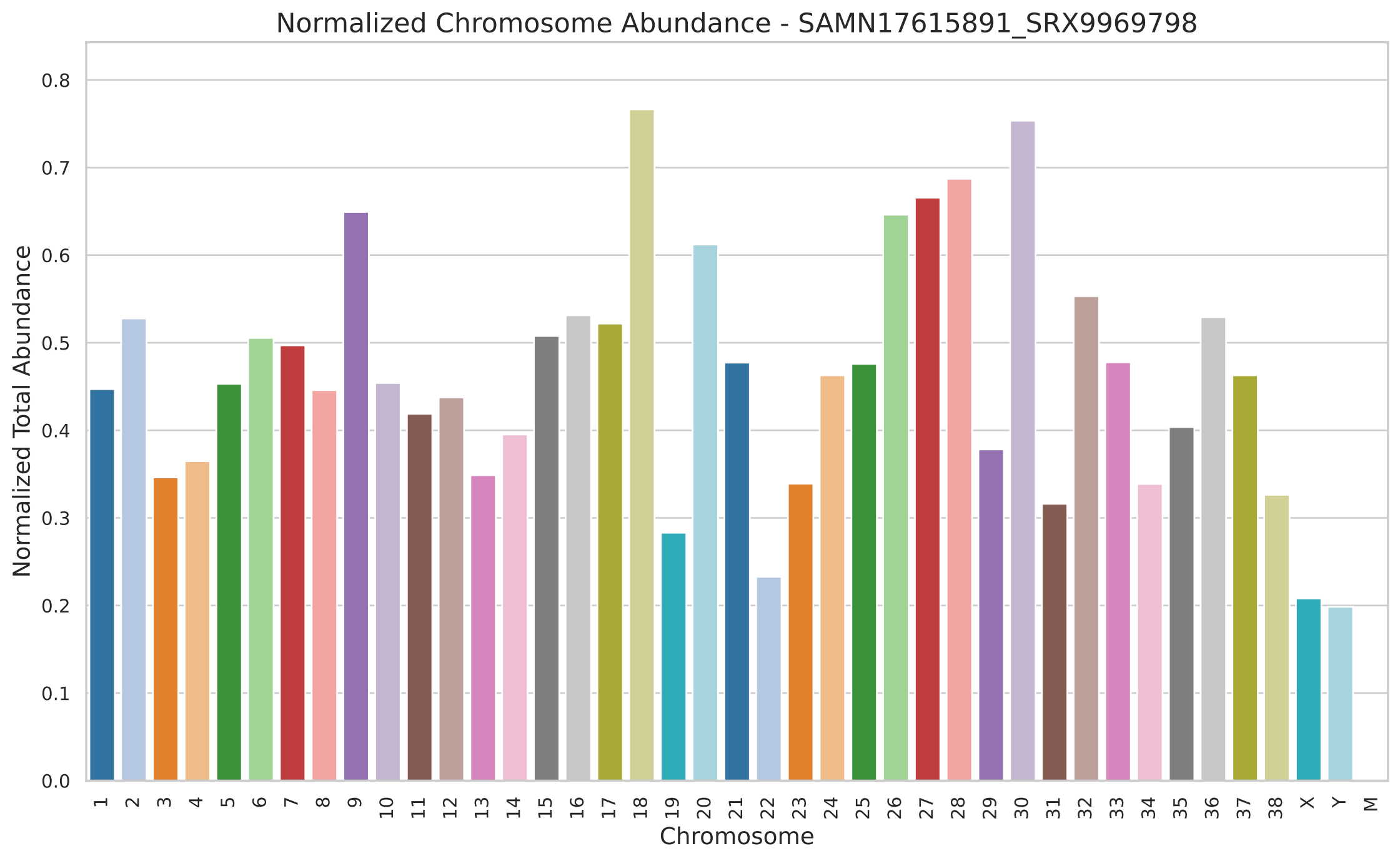

Normalized Chromosome Abundance - SAMN17615988_SRX9969836
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

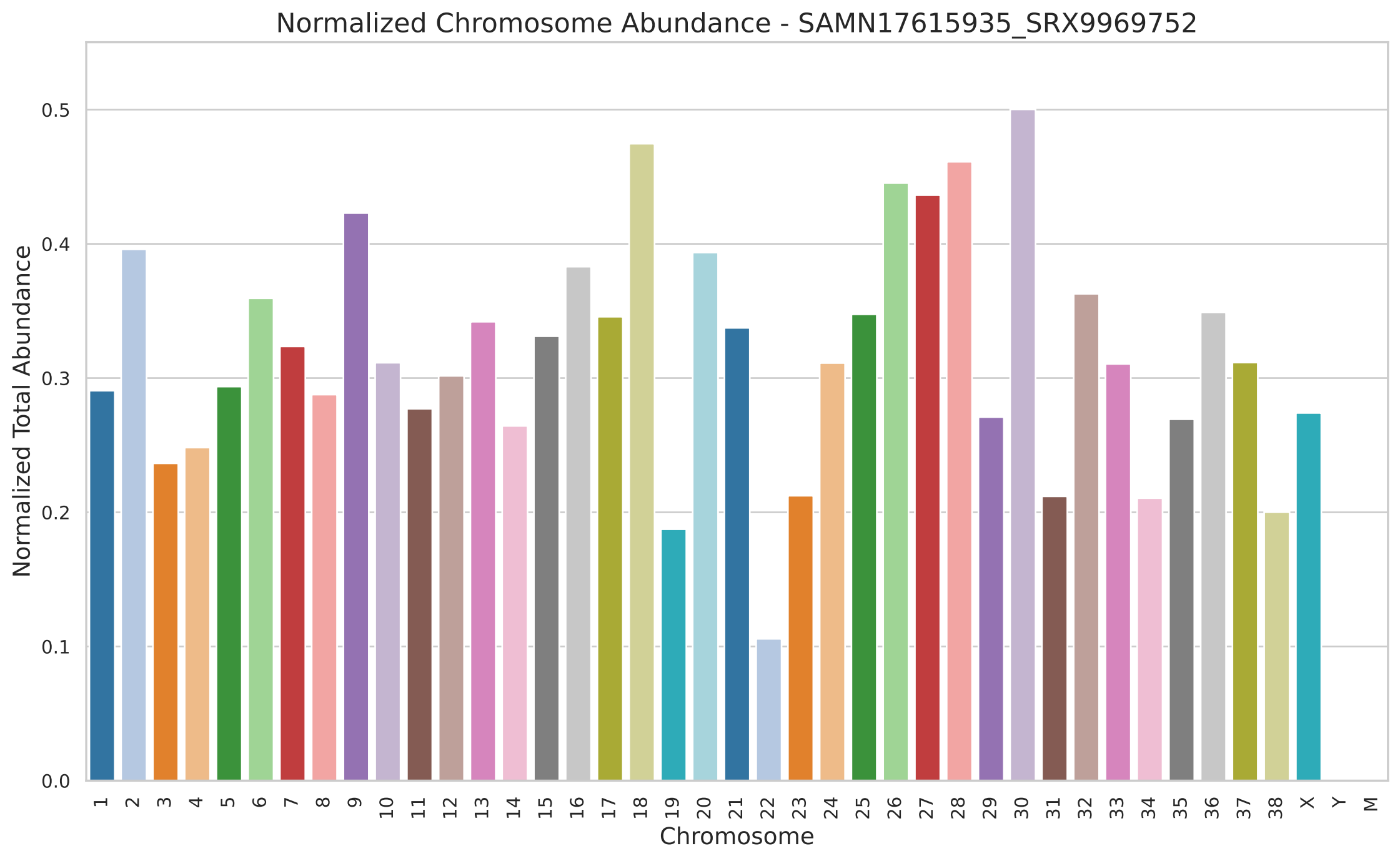

Normalized Chromosome Abundance - SAMN17615991_SRX9969840
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

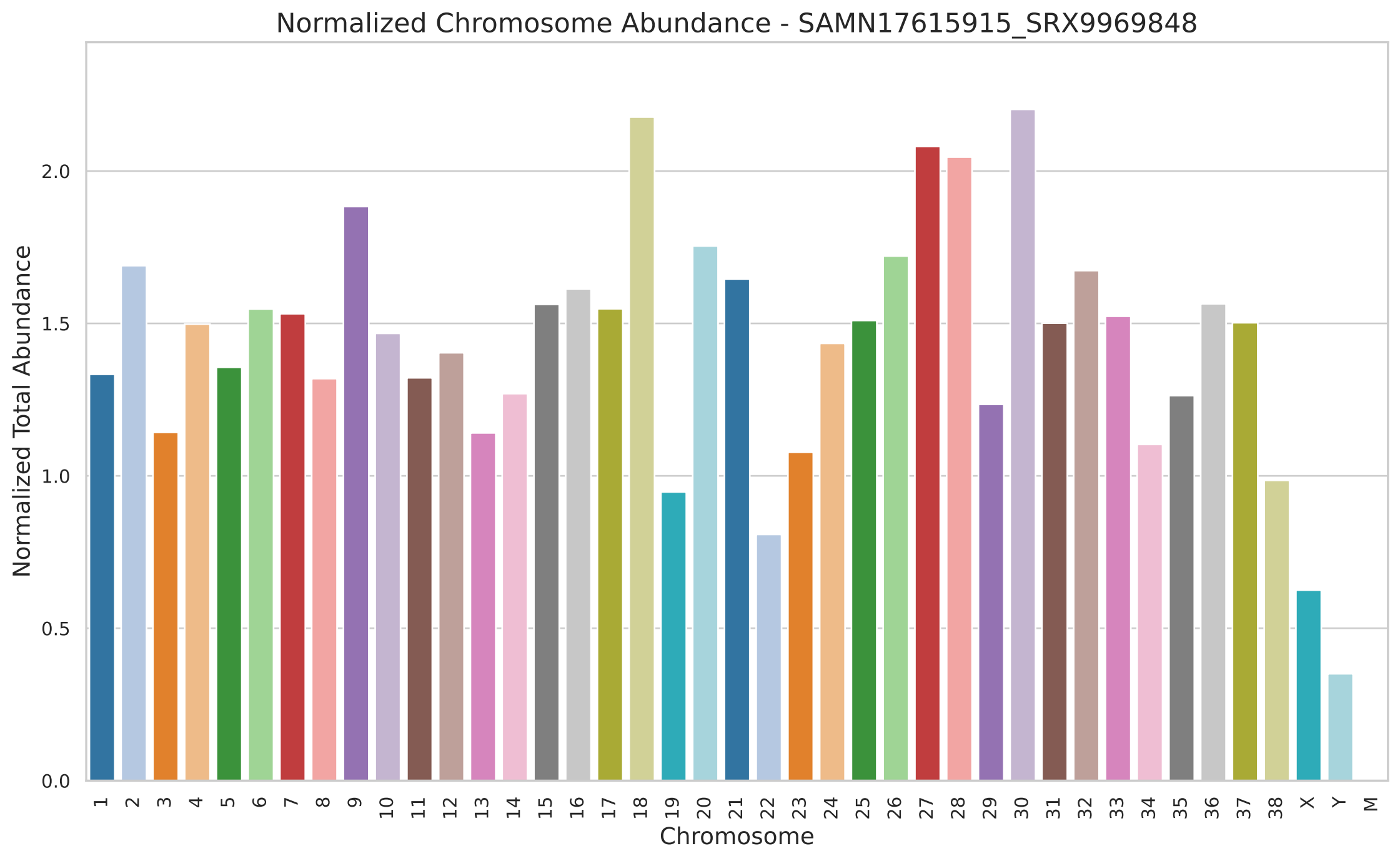

Normalized Chromosome Abundance - SAMN17615863_SRX9969817
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

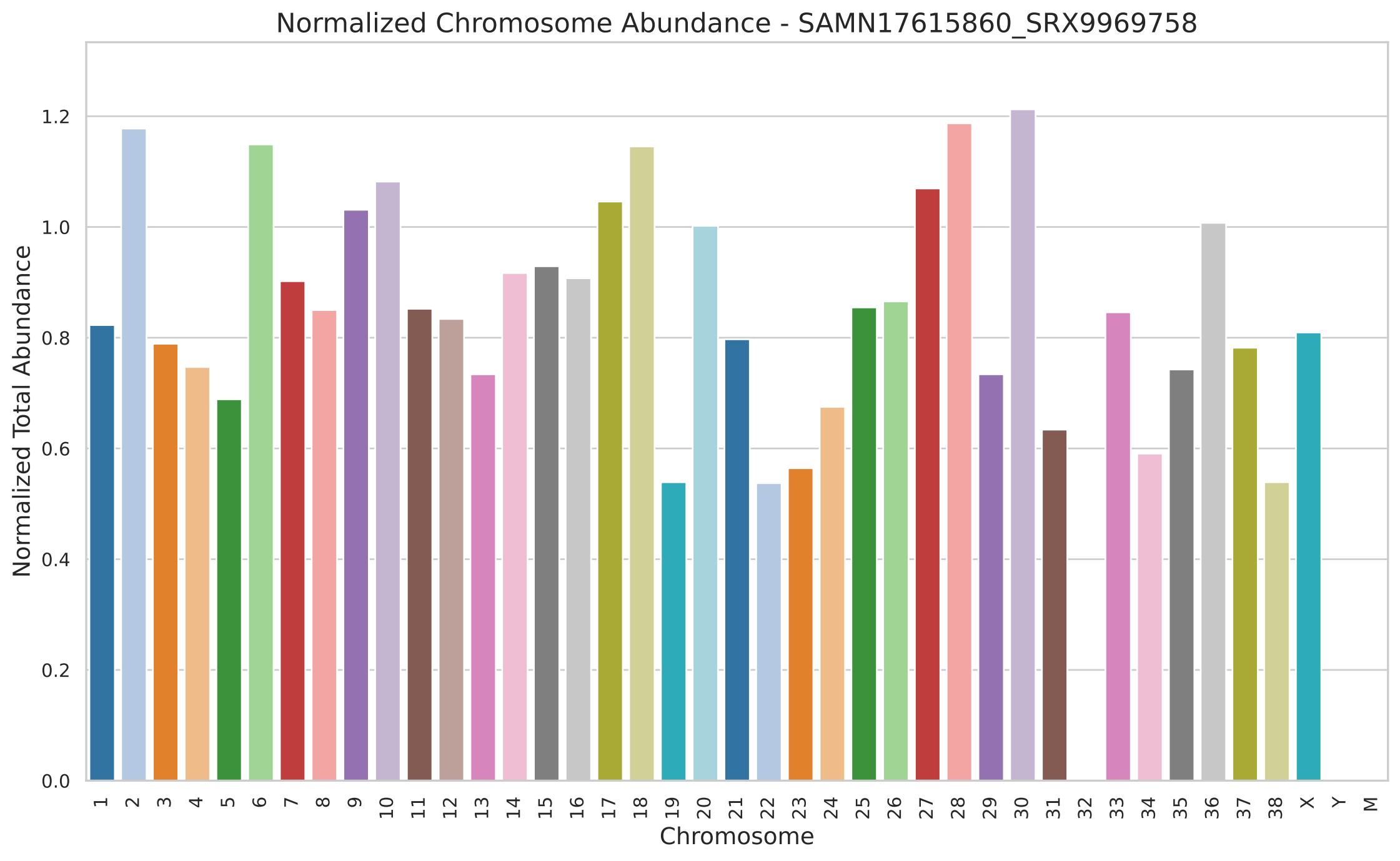

Normalized Chromosome Abundance - SAMN17615919_SRX9969852
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

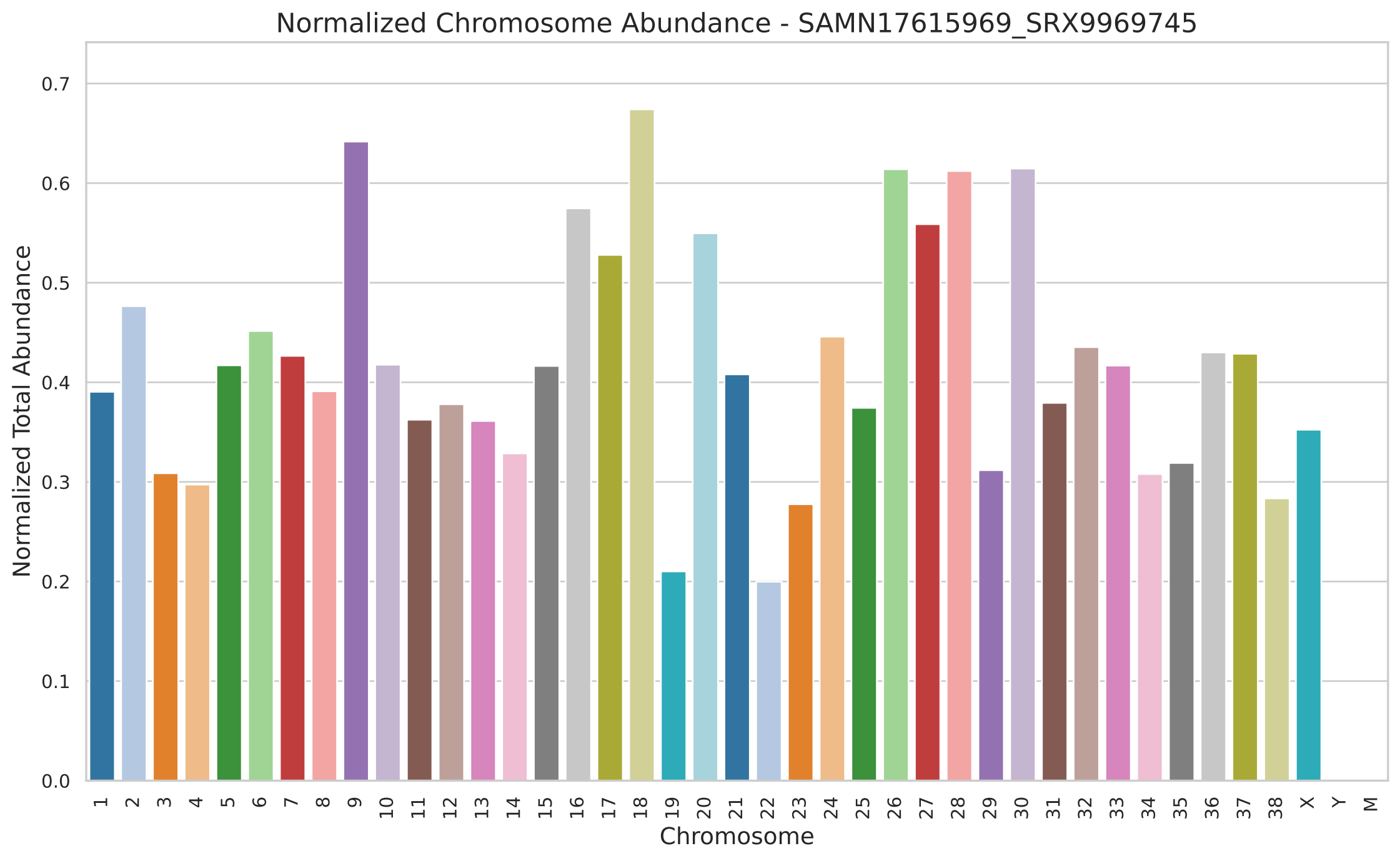

Normalized Chromosome Abundance - SAMN17615917_SRX9969850
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

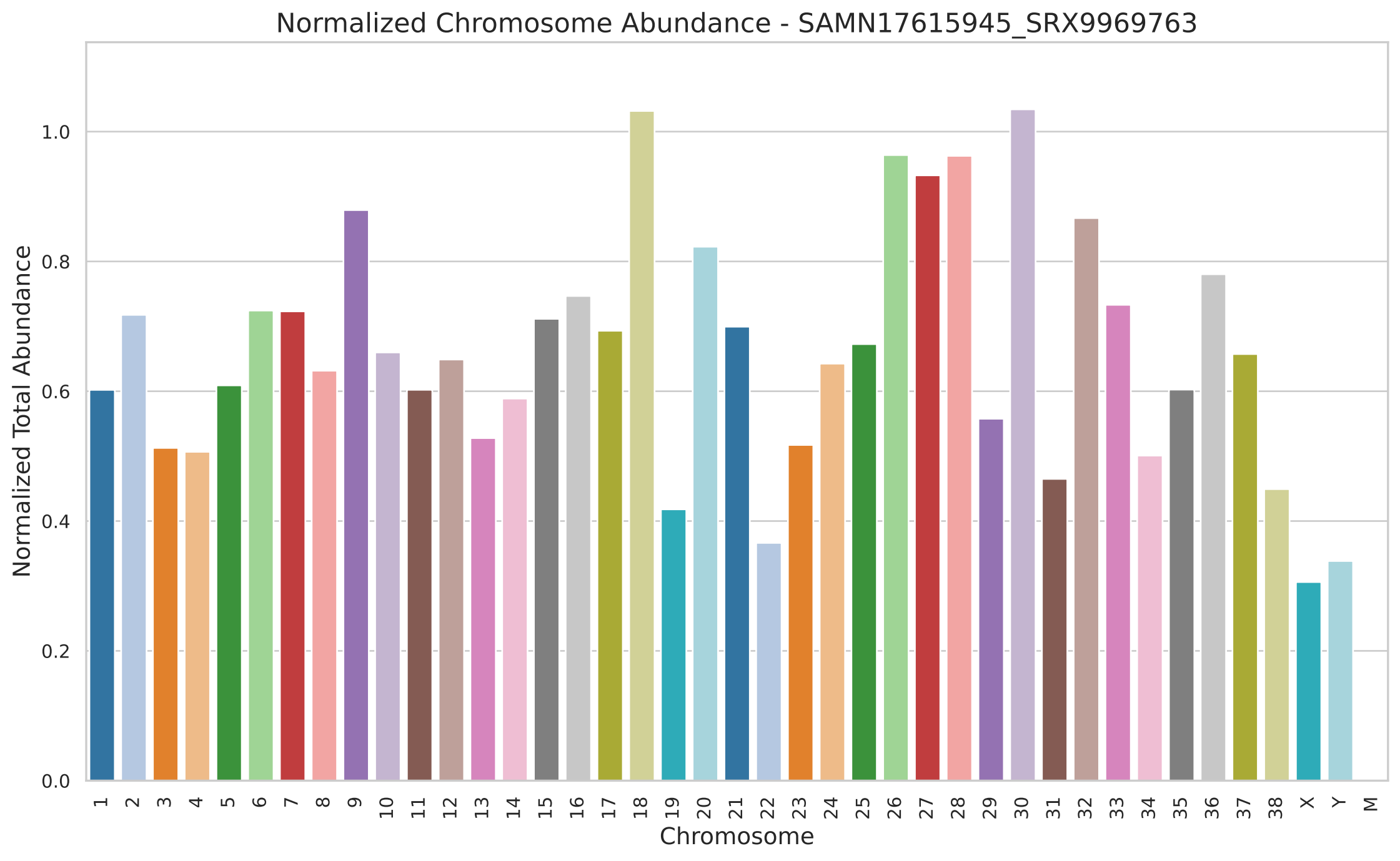

Normalized Chromosome Abundance - SAMN17615891_SRX9969798
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

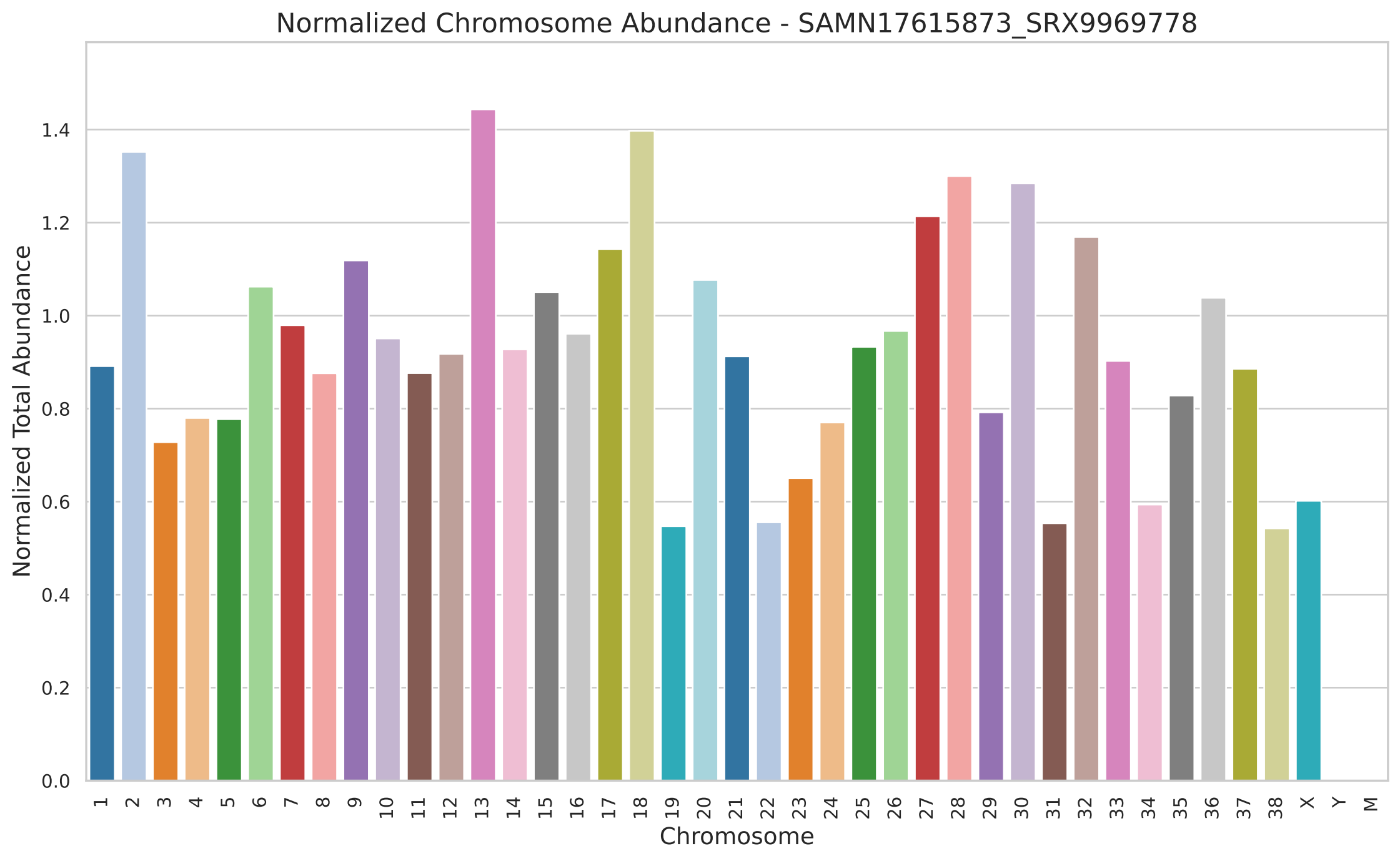

Normalized Chromosome Abundance - SAMN17615935_SRX9969752
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

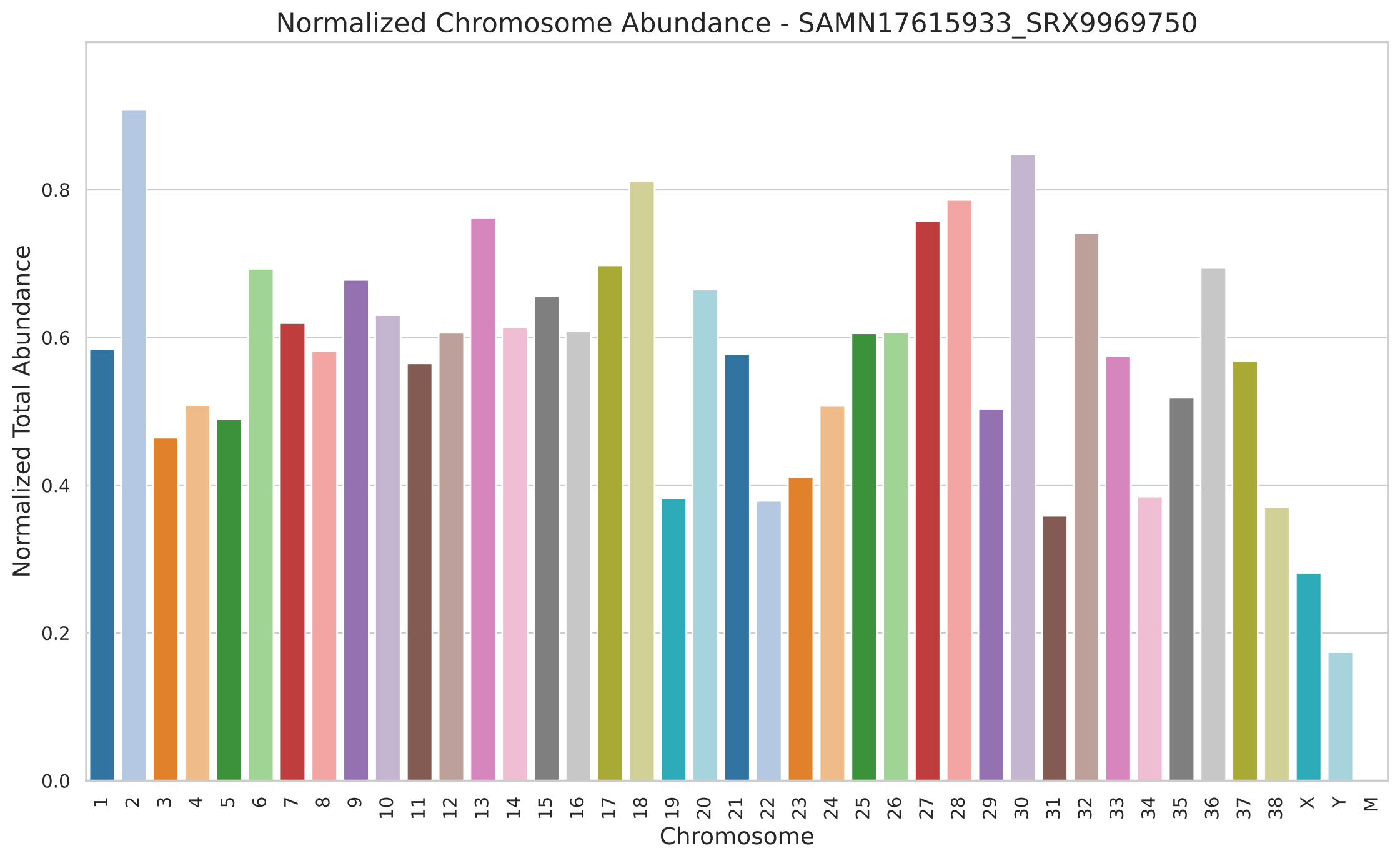

Normalized Chromosome Abundance - SAMN17615915_SRX9969848
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

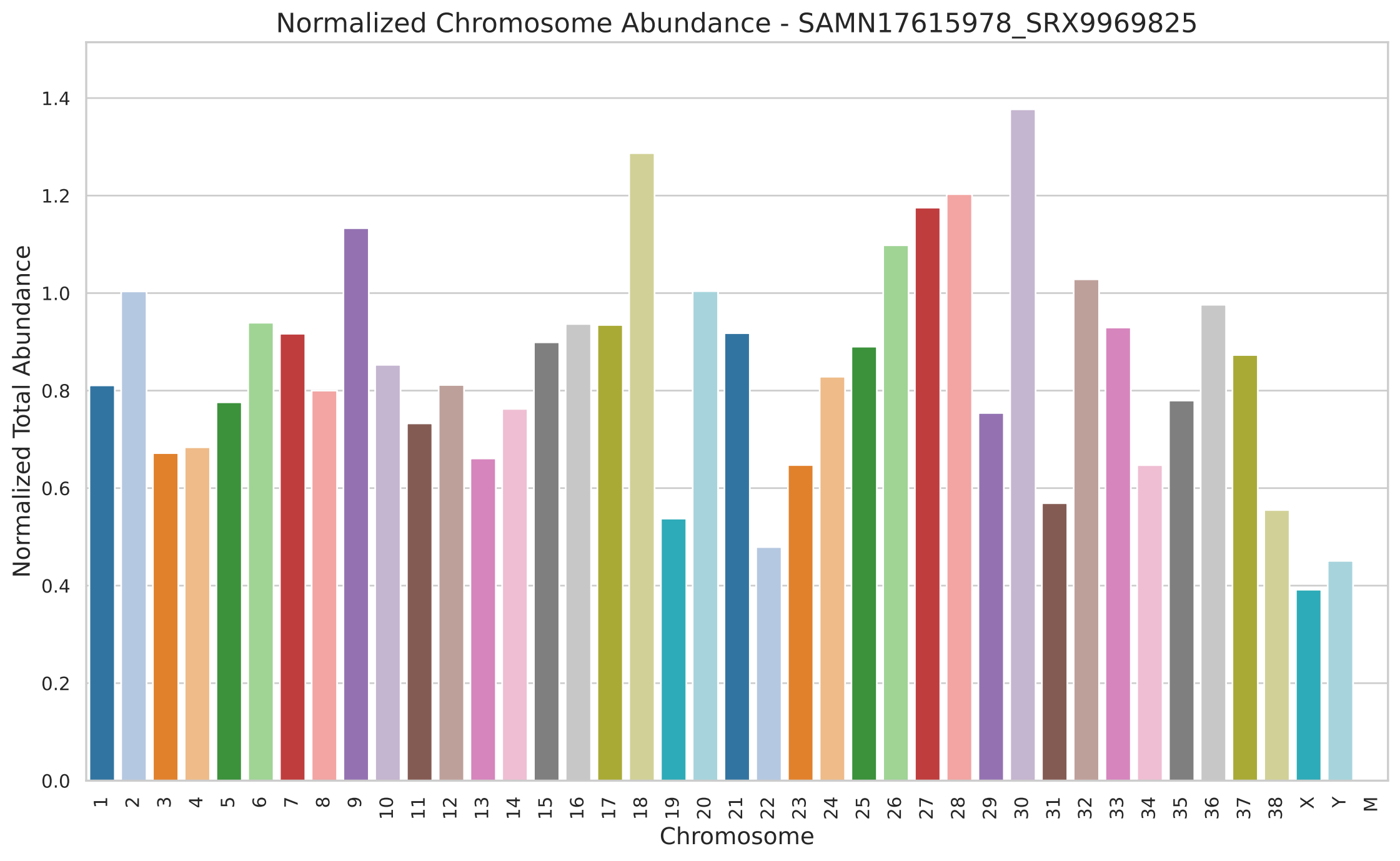

Normalized Chromosome Abundance - SAMN17615860_SRX9969758
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

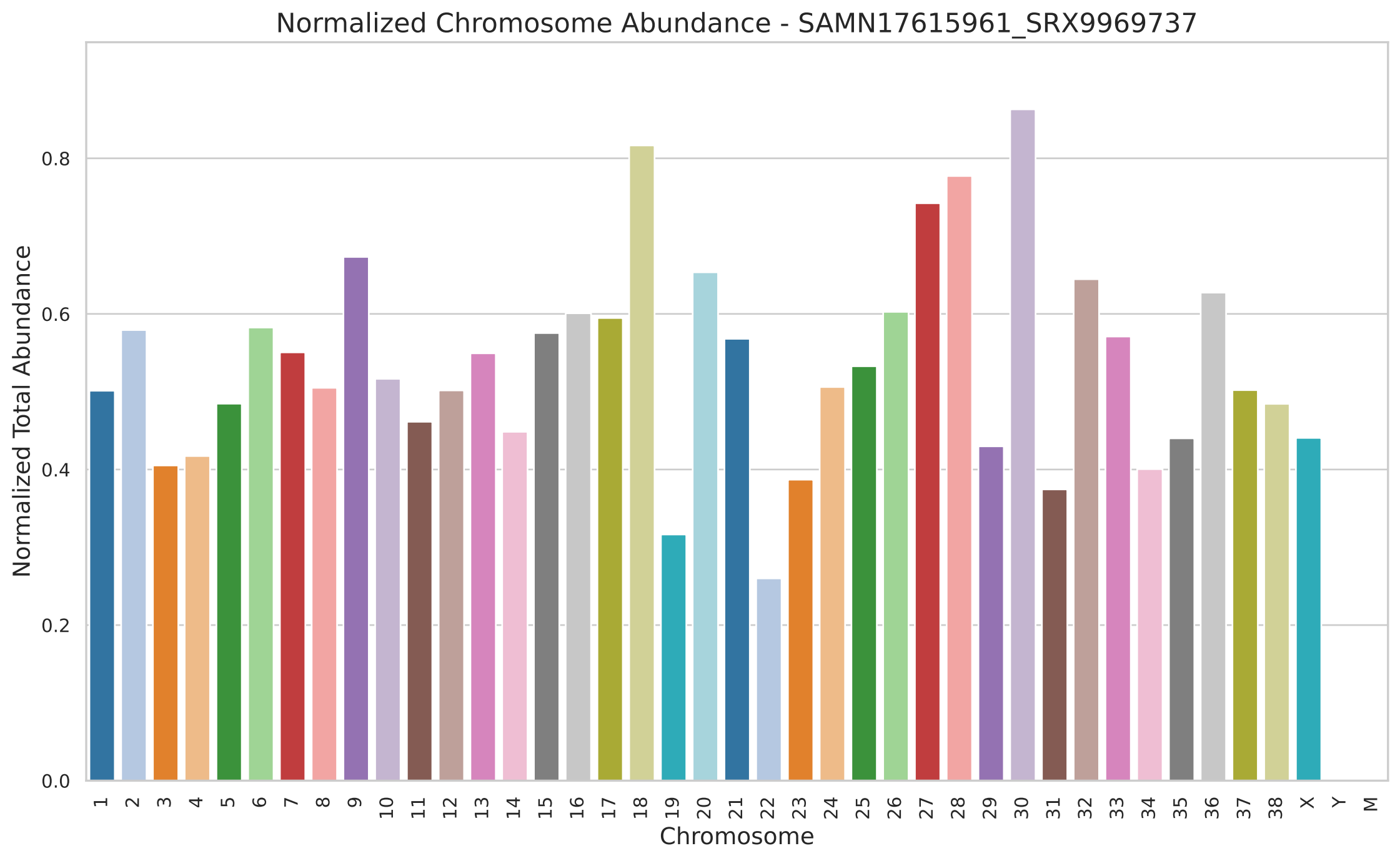

Normalized Chromosome Abundance - SAMN17615969_SRX9969745
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

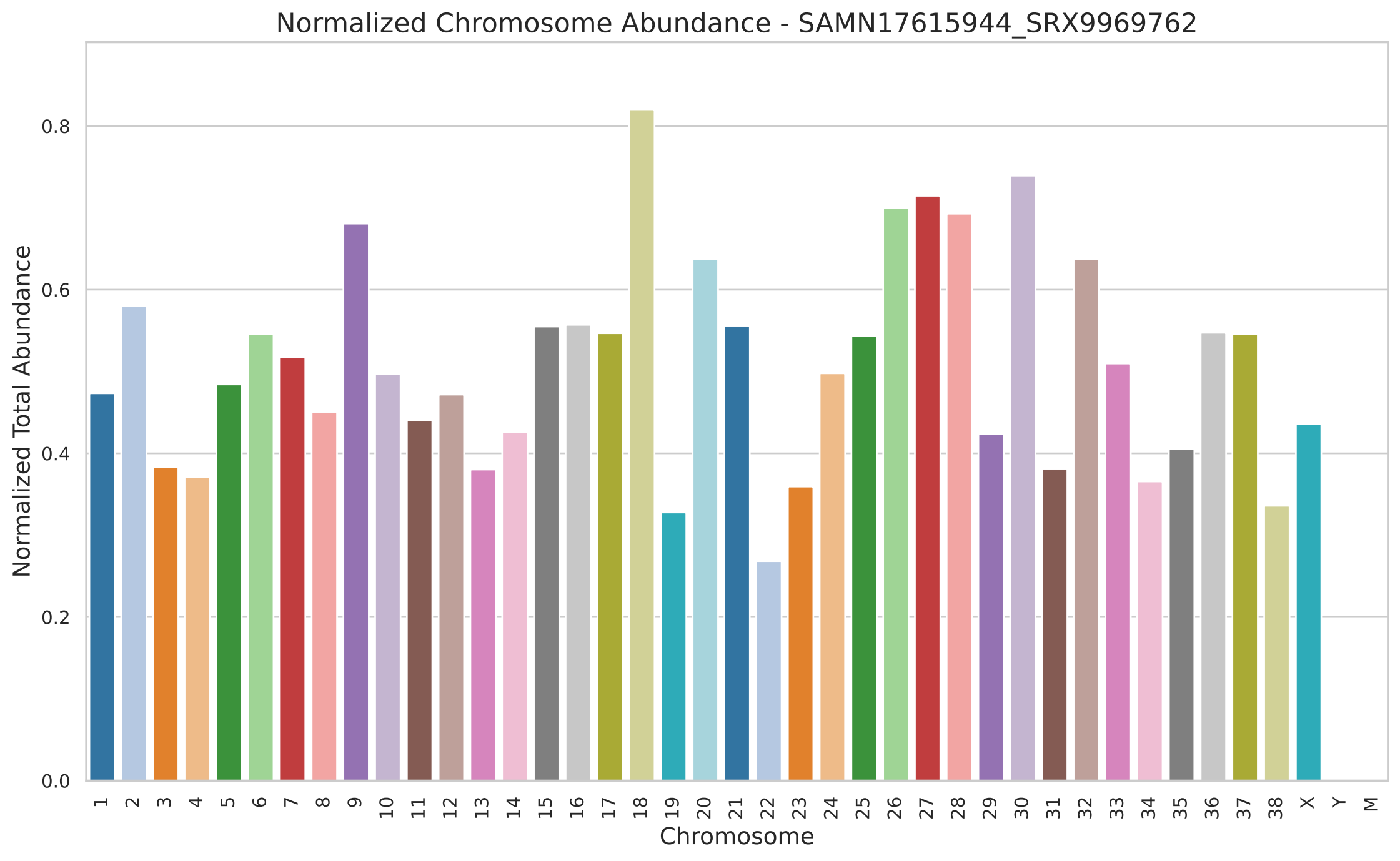

Normalized Chromosome Abundance - SAMN17615945_SRX9969763
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

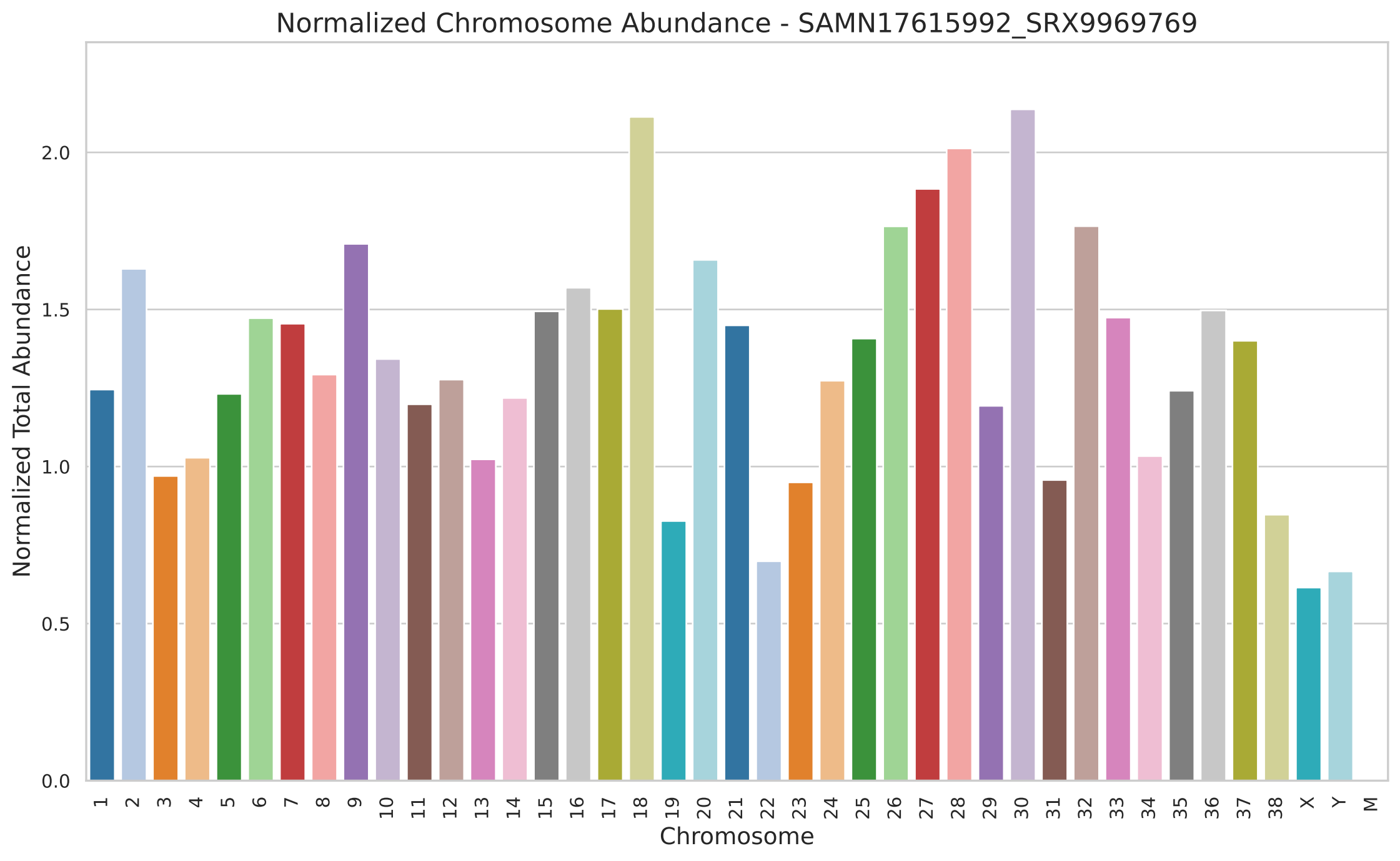

Normalized Chromosome Abundance - SAMN17615873_SRX9969778
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

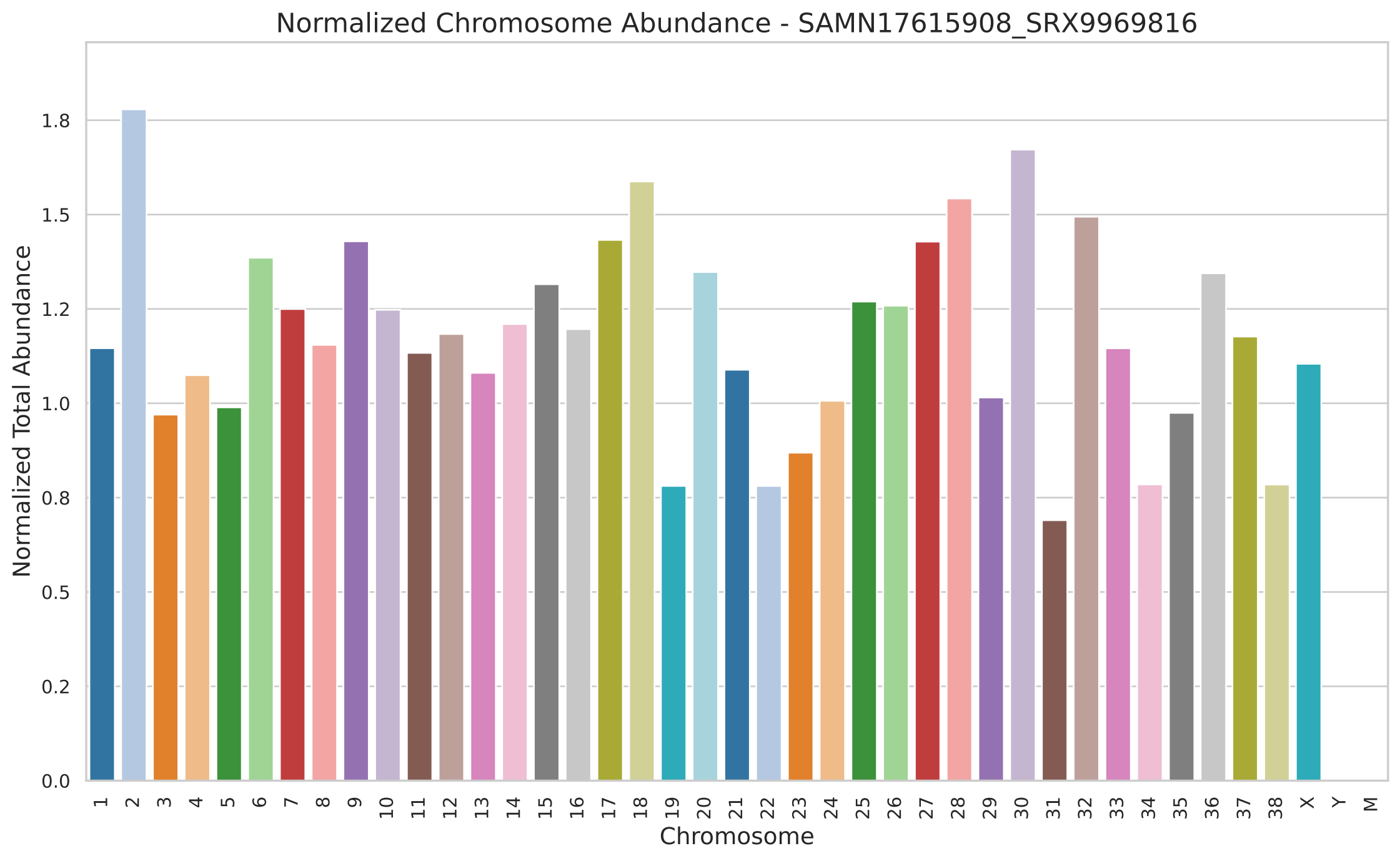

Normalized Chromosome Abundance - SAMN17615933_SRX9969750
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

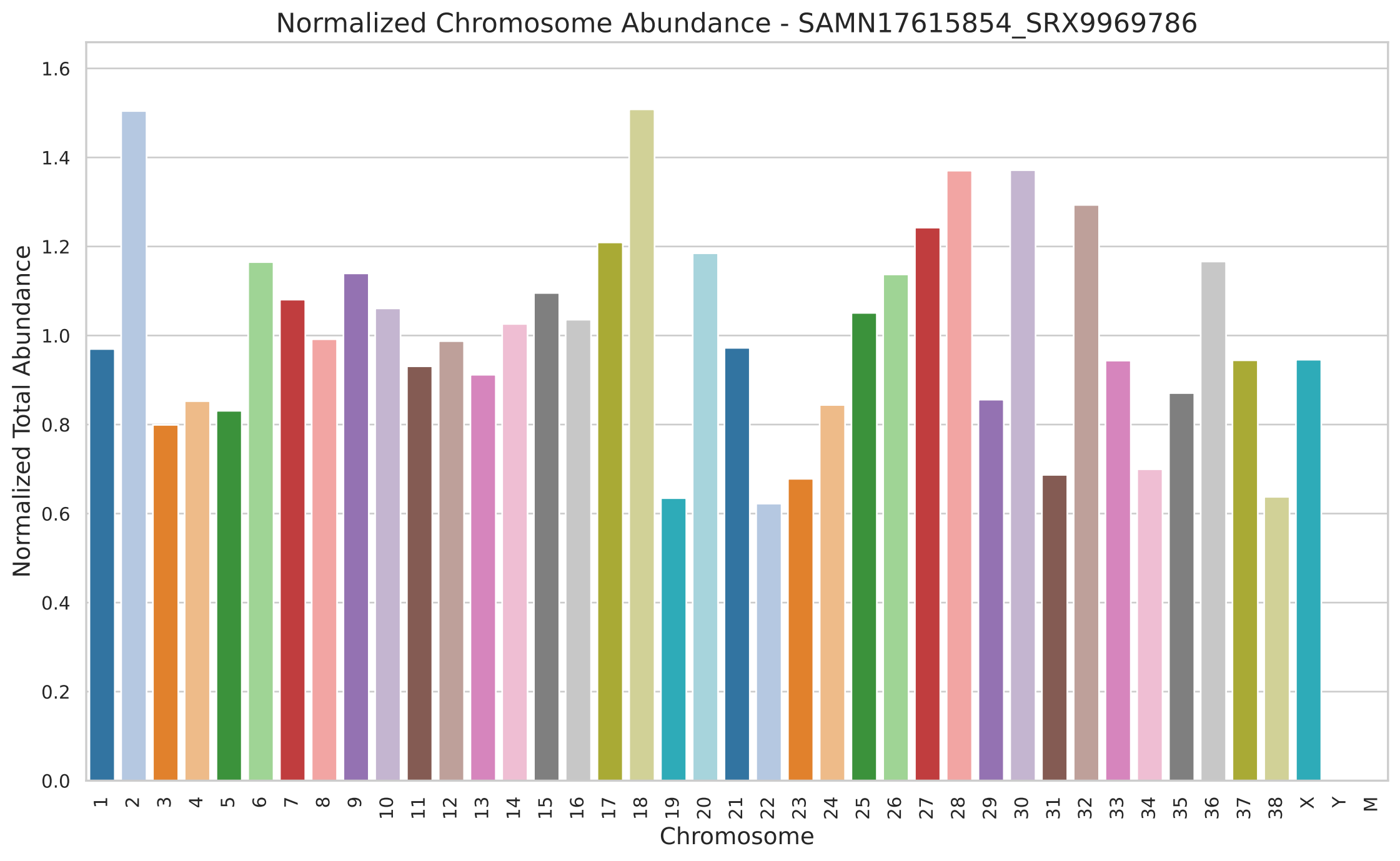

Normalized Chromosome Abundance - SAMN17615978_SRX9969825
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

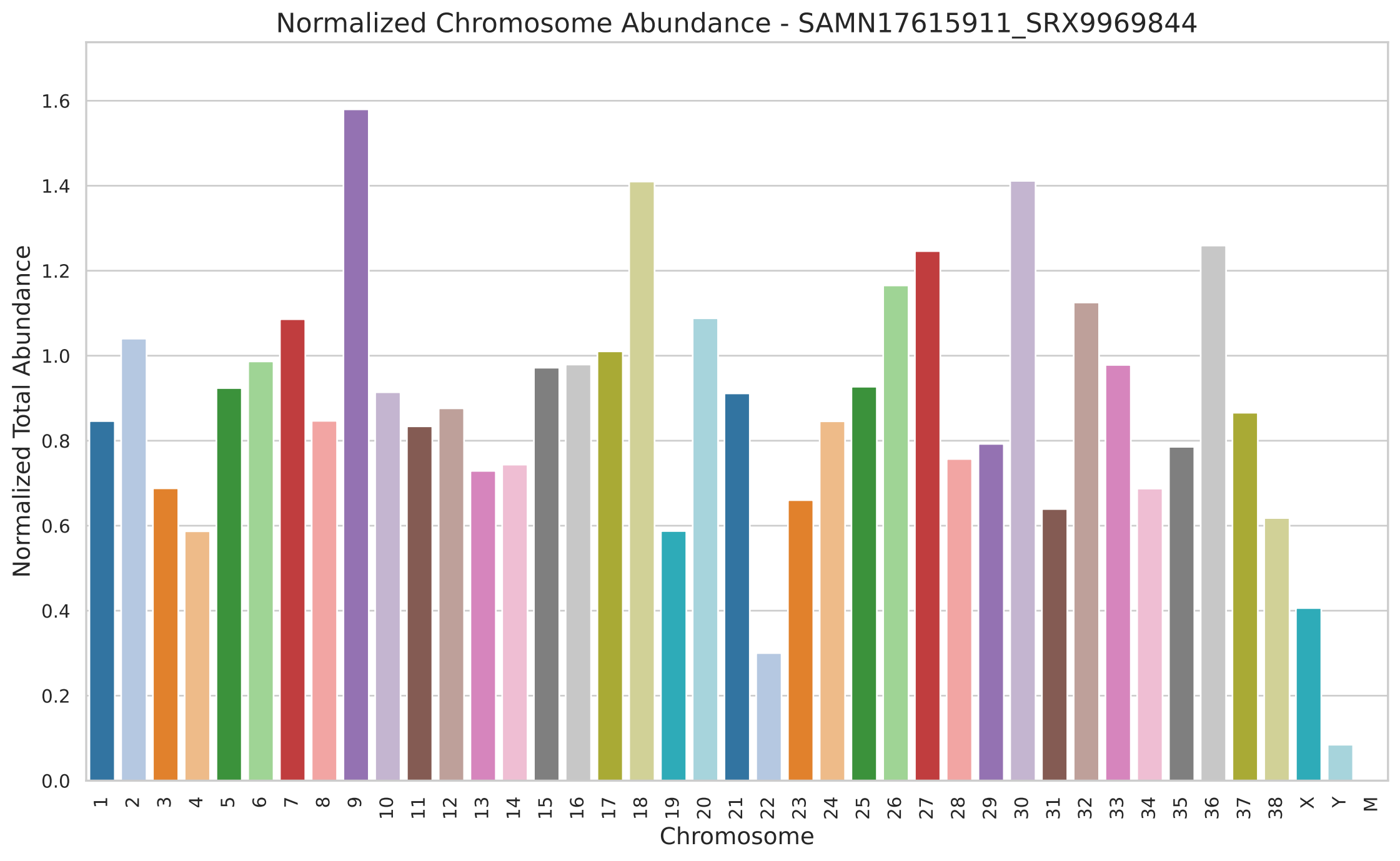

Normalized Chromosome Abundance - SAMN17615961_SRX9969737
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

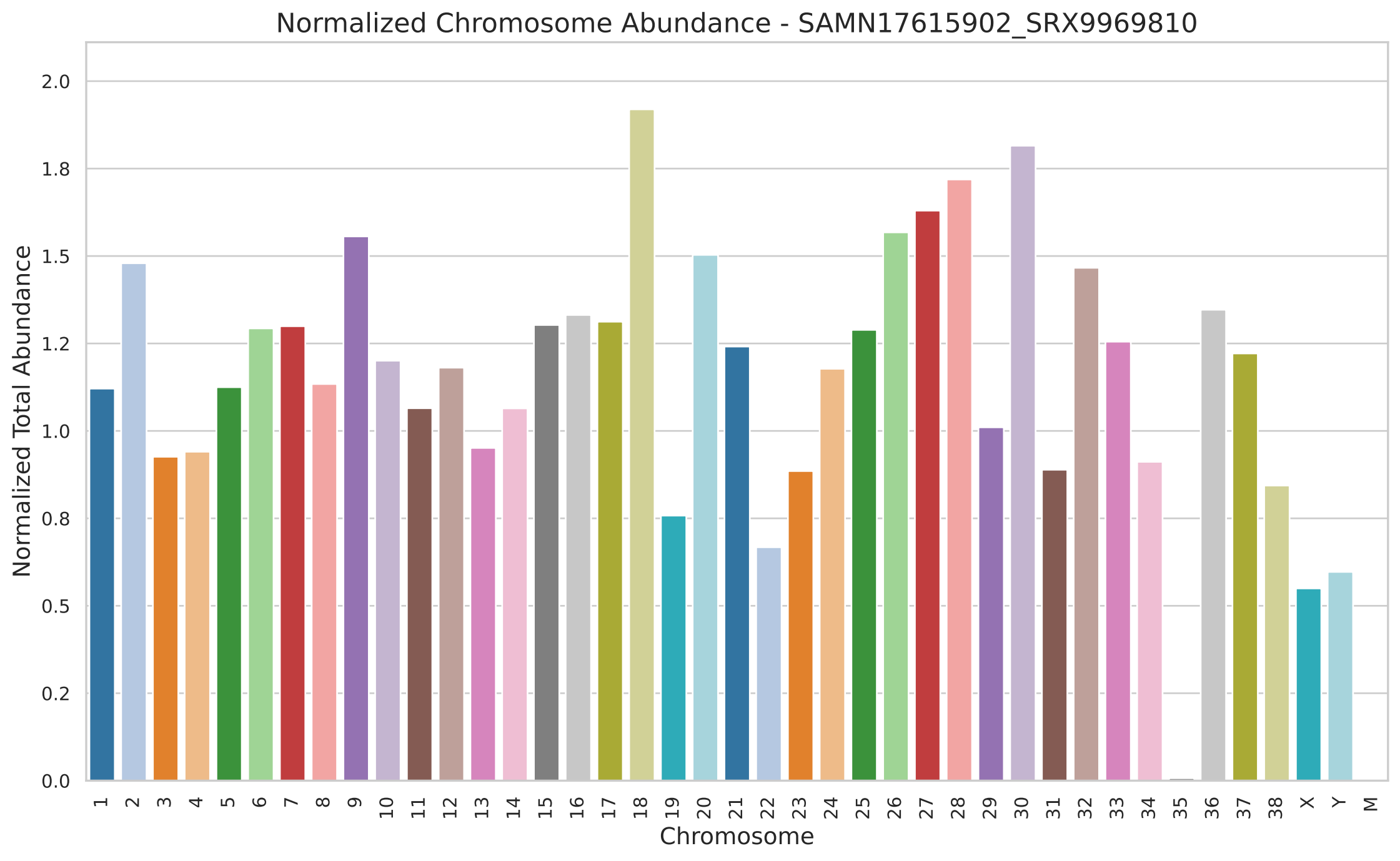

Normalized Chromosome Abundance - SAMN17615944_SRX9969762
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

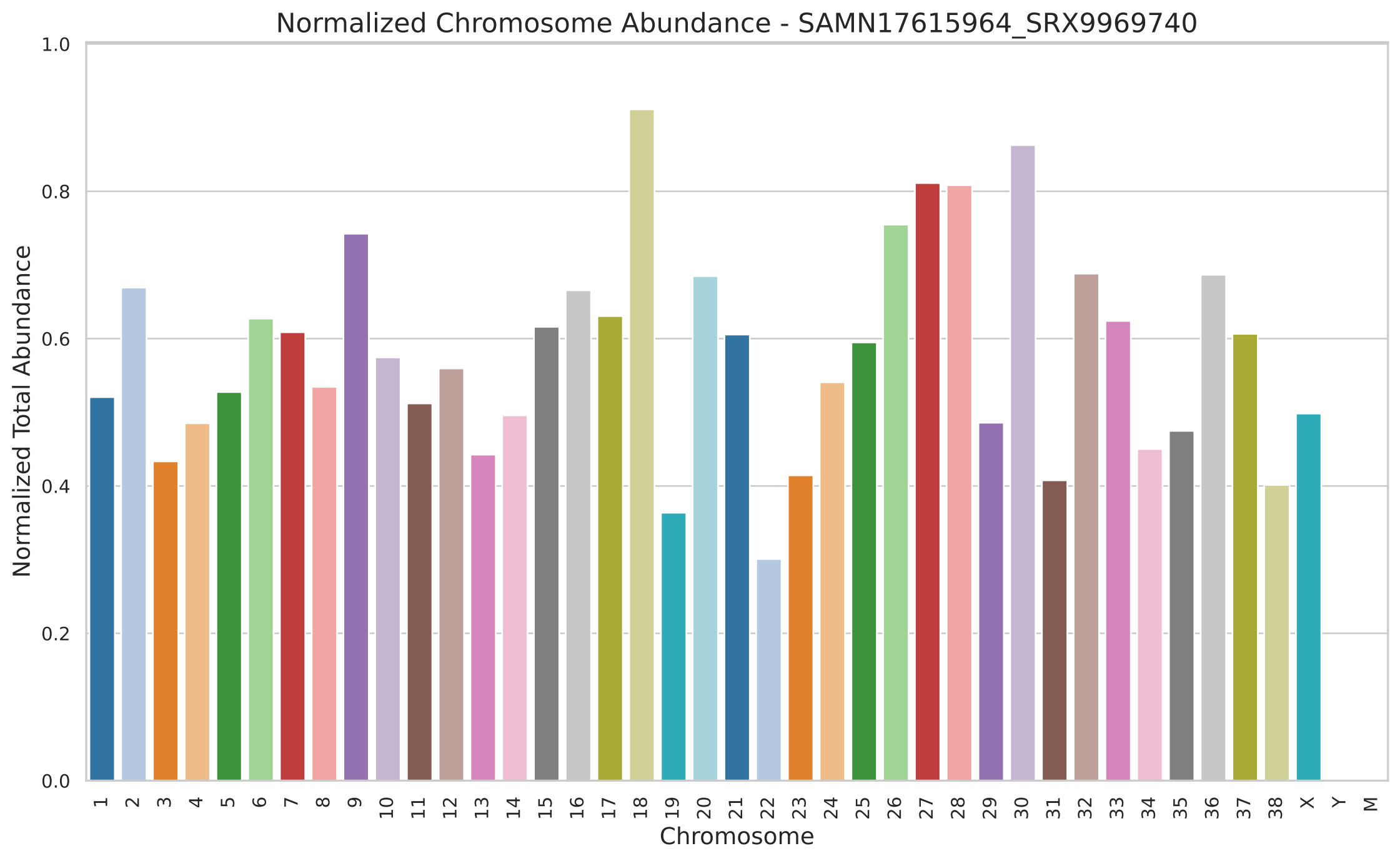

Normalized Chromosome Abundance - SAMN17615992_SRX9969769
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

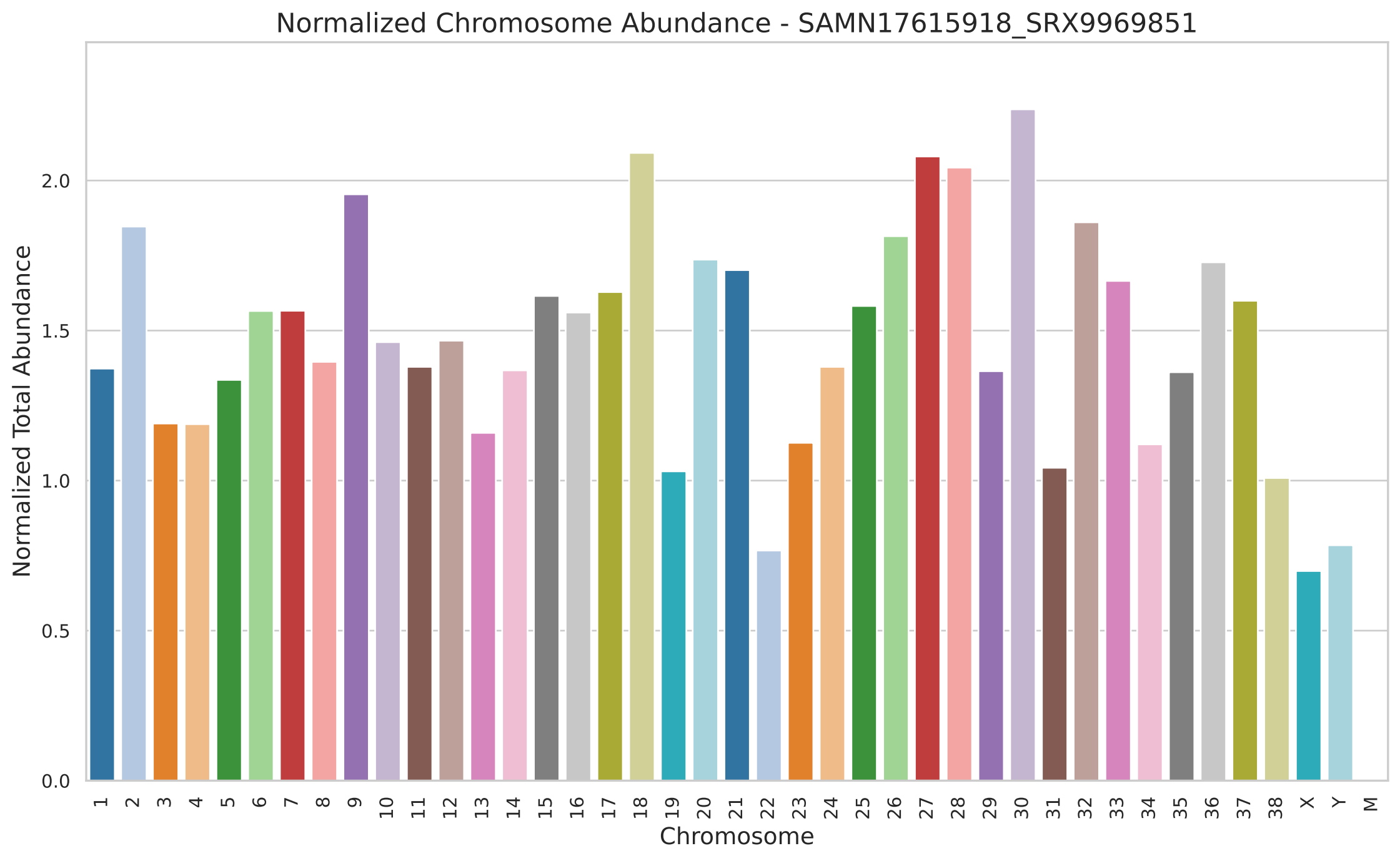

Normalized Chromosome Abundance - SAMN17615908_SRX9969816
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

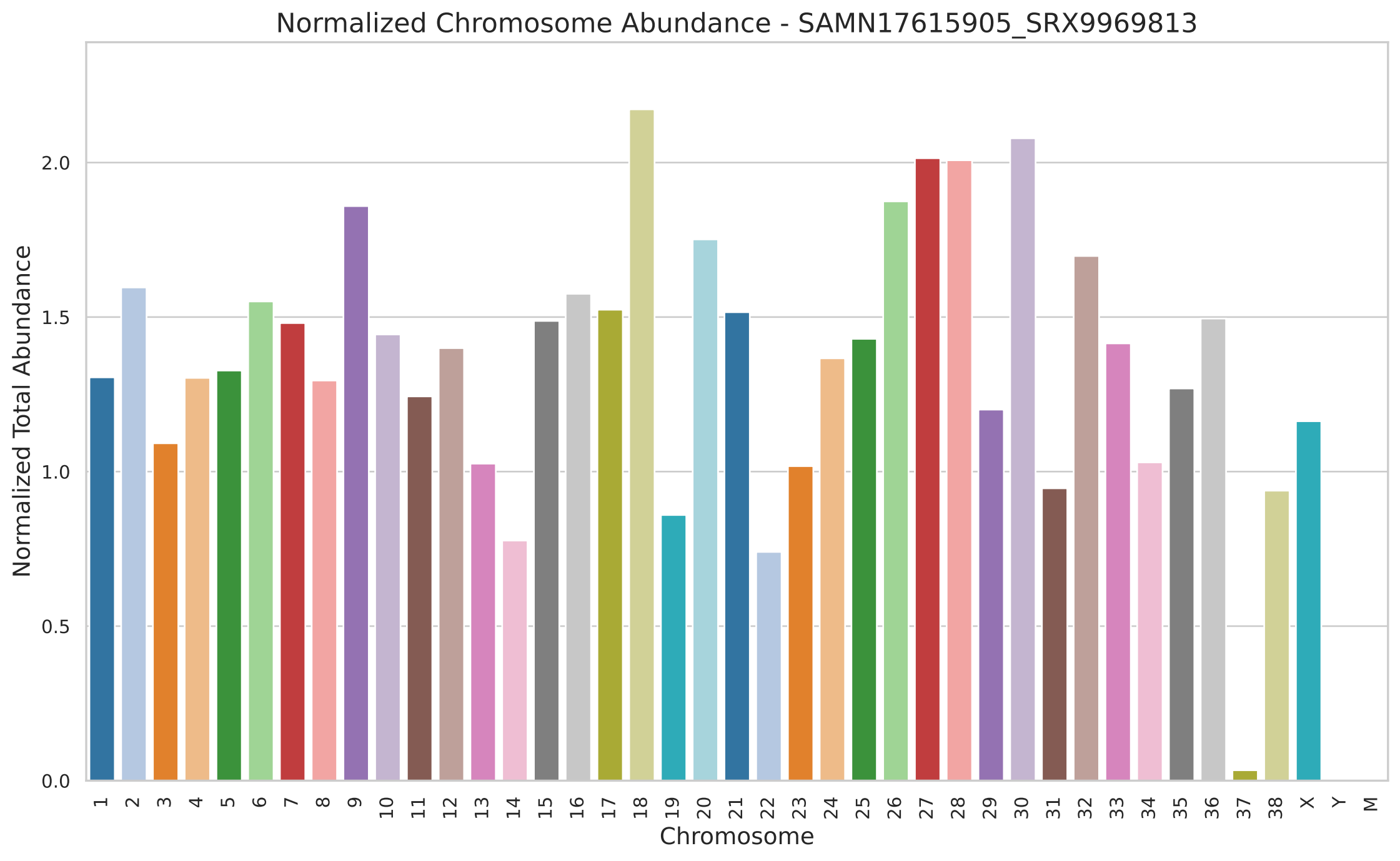

Normalized Chromosome Abundance - SAMN17615854_SRX9969786
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

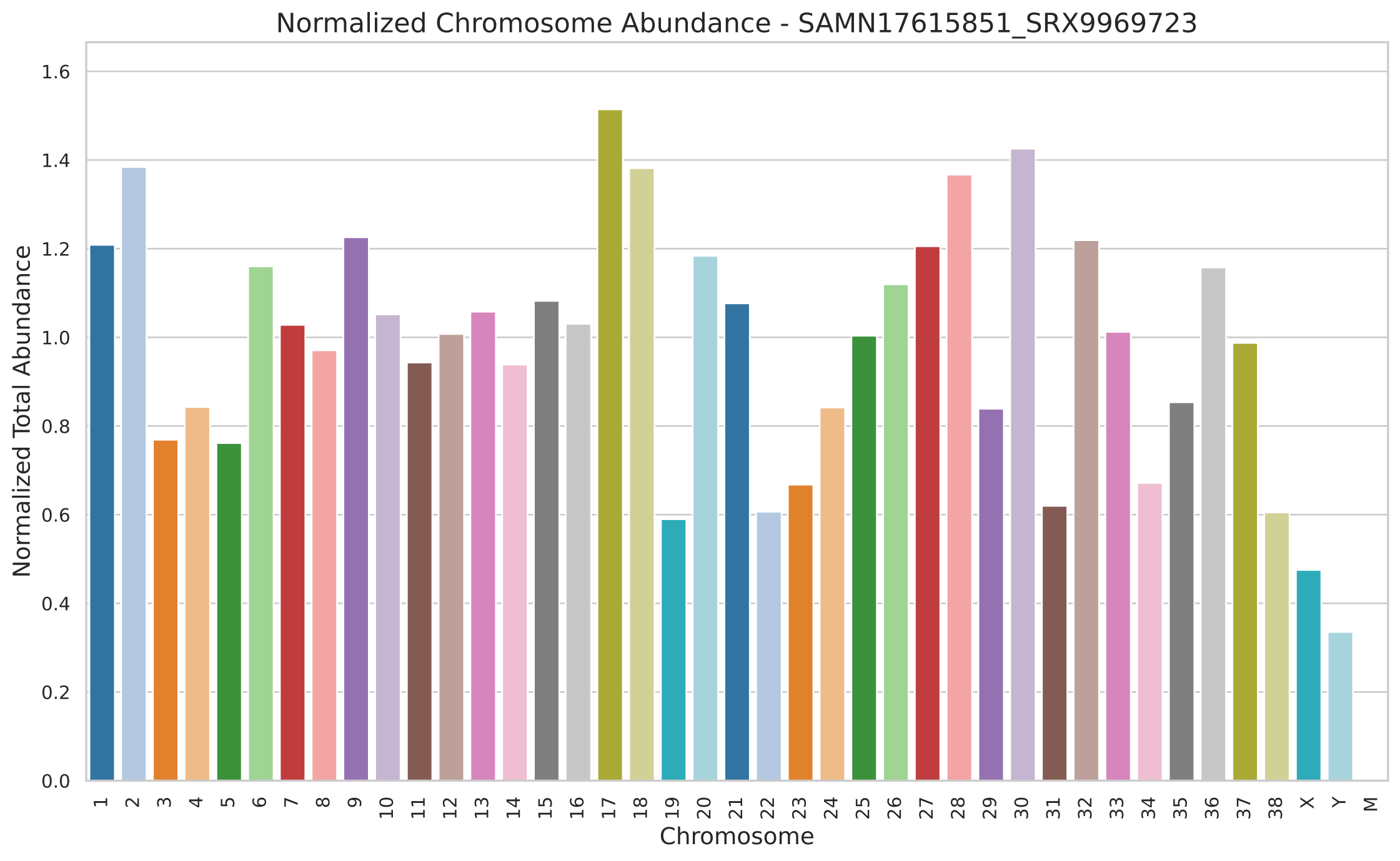

Normalized Chromosome Abundance - SAMN17615911_SRX9969844
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

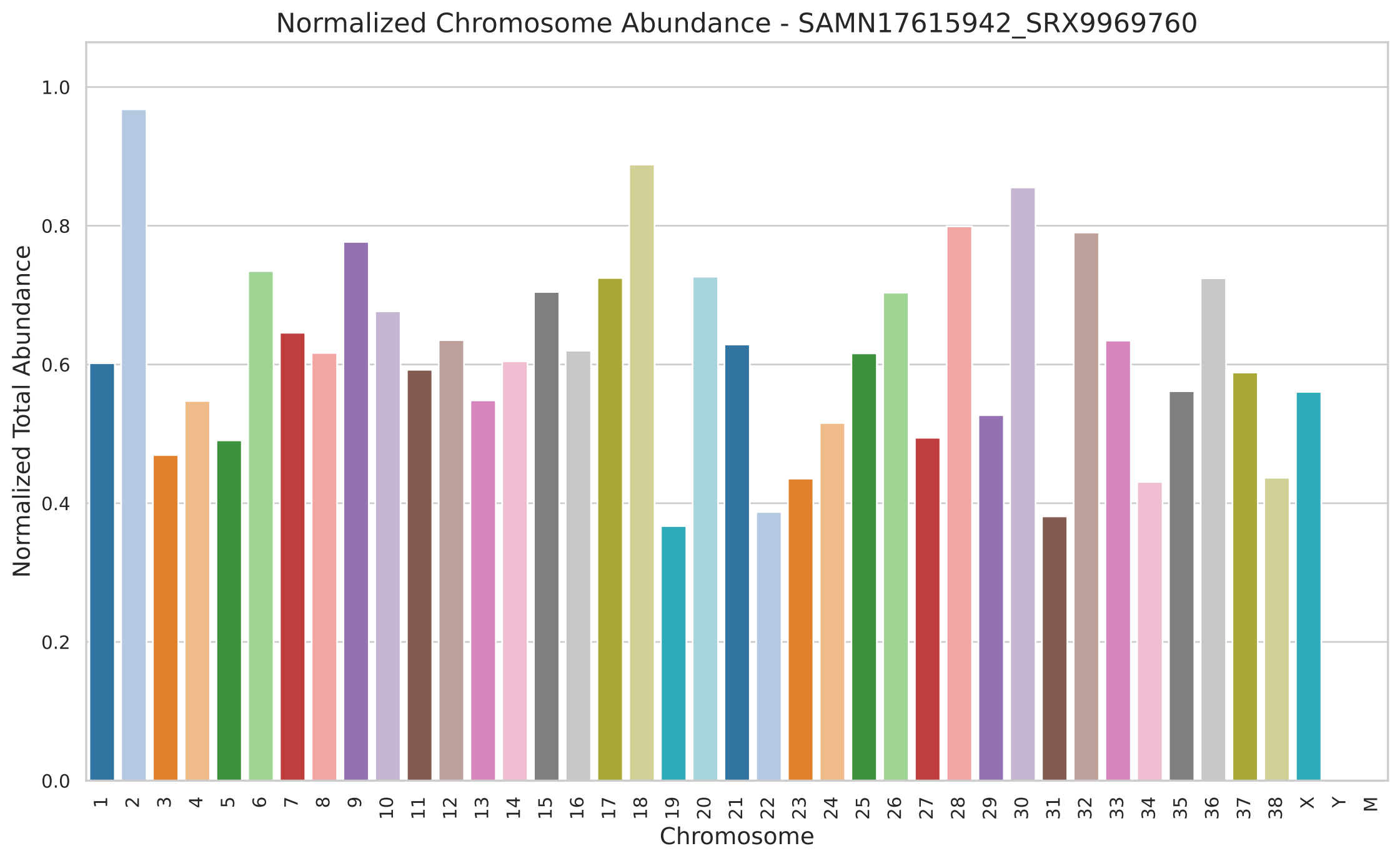

Normalized Chromosome Abundance - SAMN17615902_SRX9969810
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

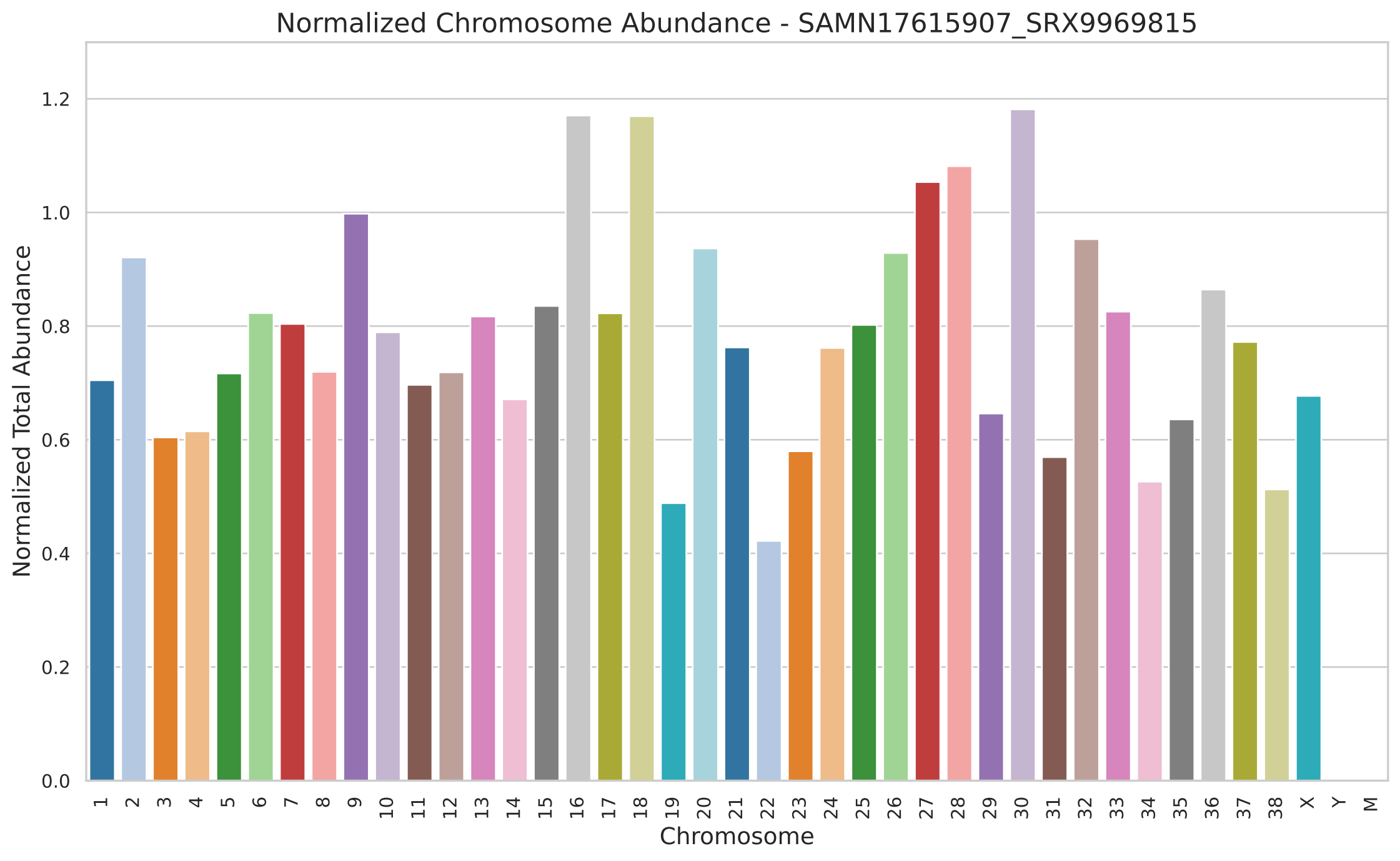

Normalized Chromosome Abundance - SAMN17615964_SRX9969740
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

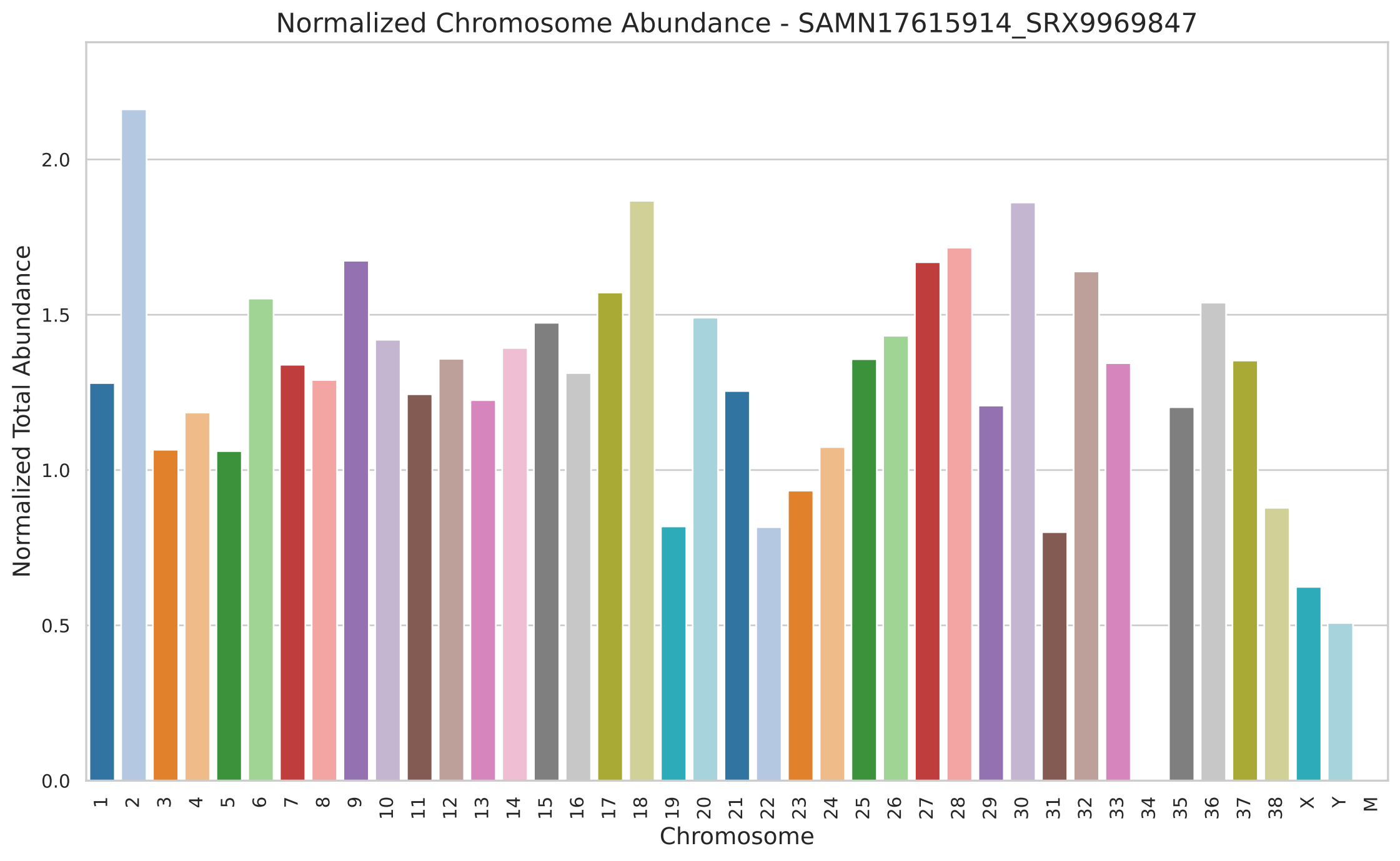

Normalized Chromosome Abundance - SAMN17615918_SRX9969851
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

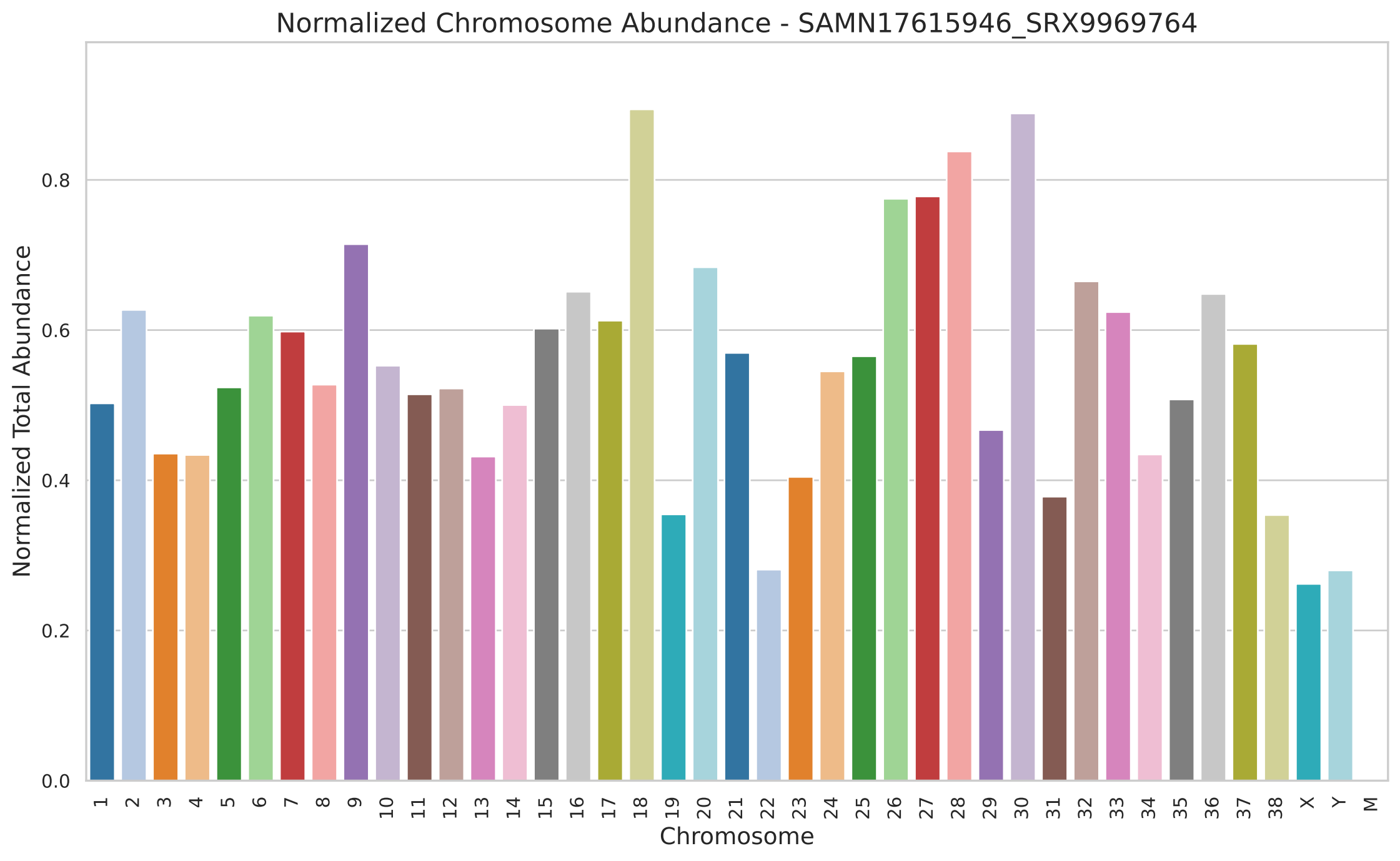

Normalized Chromosome Abundance - SAMN17615905_SRX9969813
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

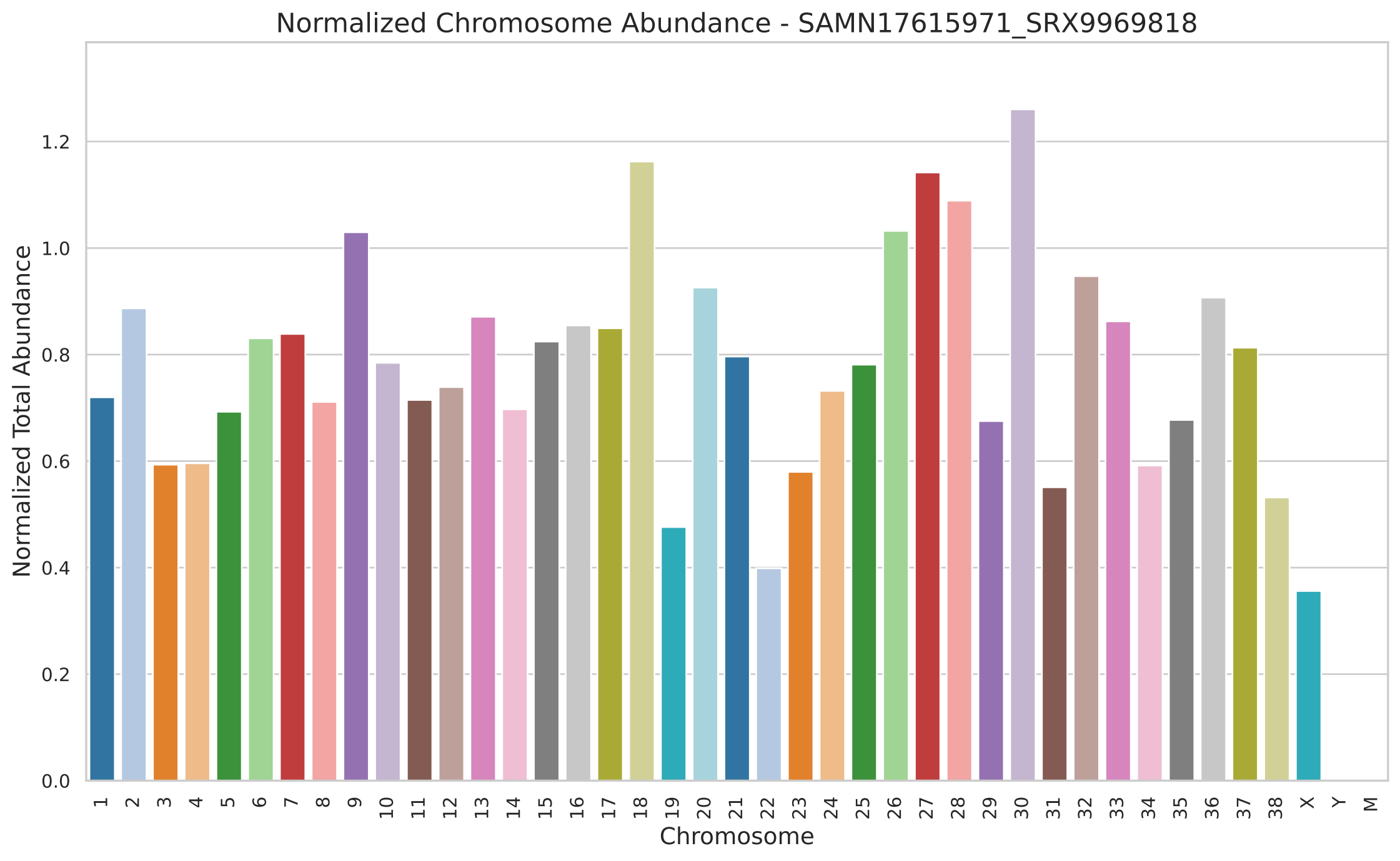

Normalized Chromosome Abundance - SAMN17615851_SRX9969723
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

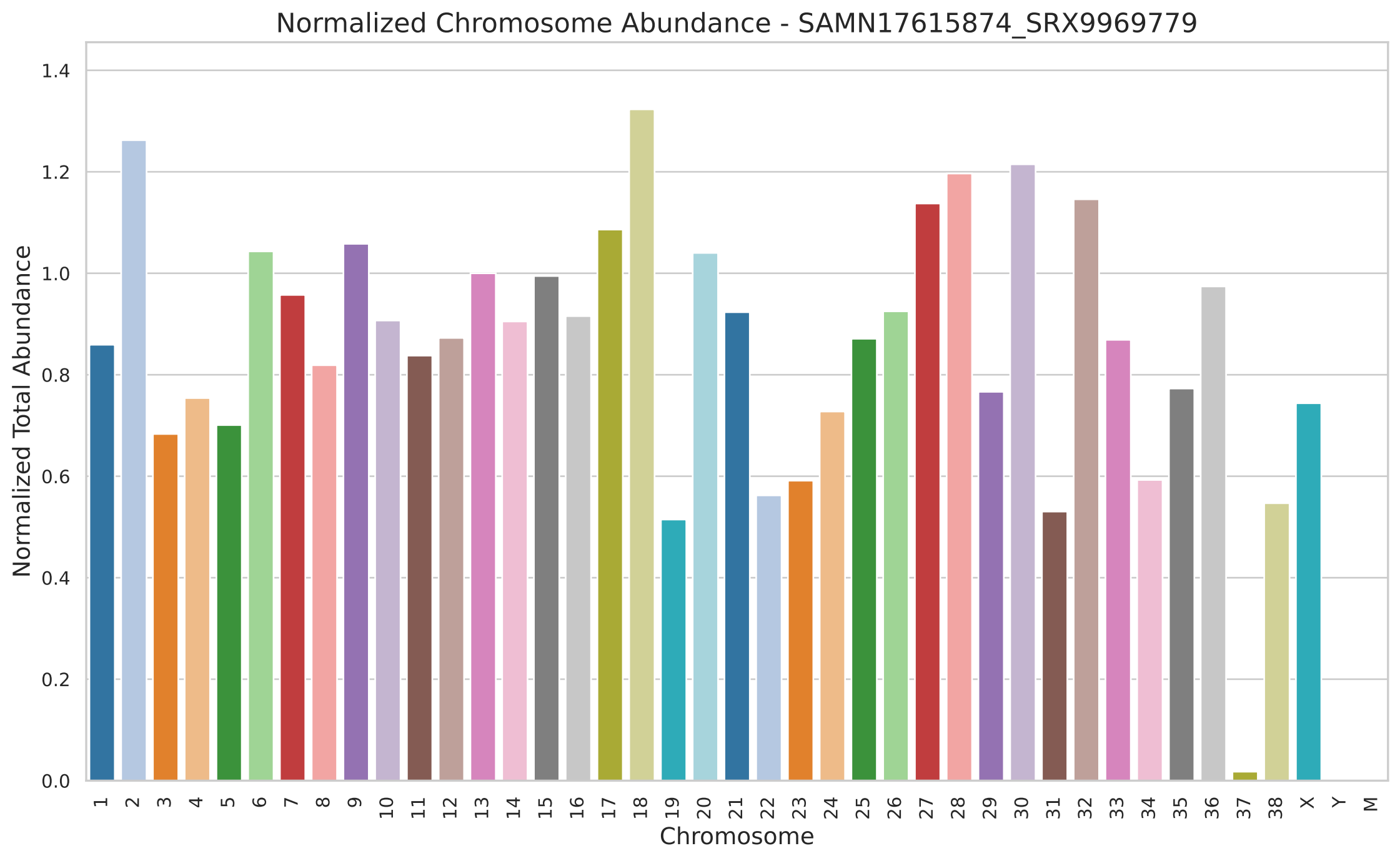

Normalized Chromosome Abundance - SAMN17615942_SRX9969760
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

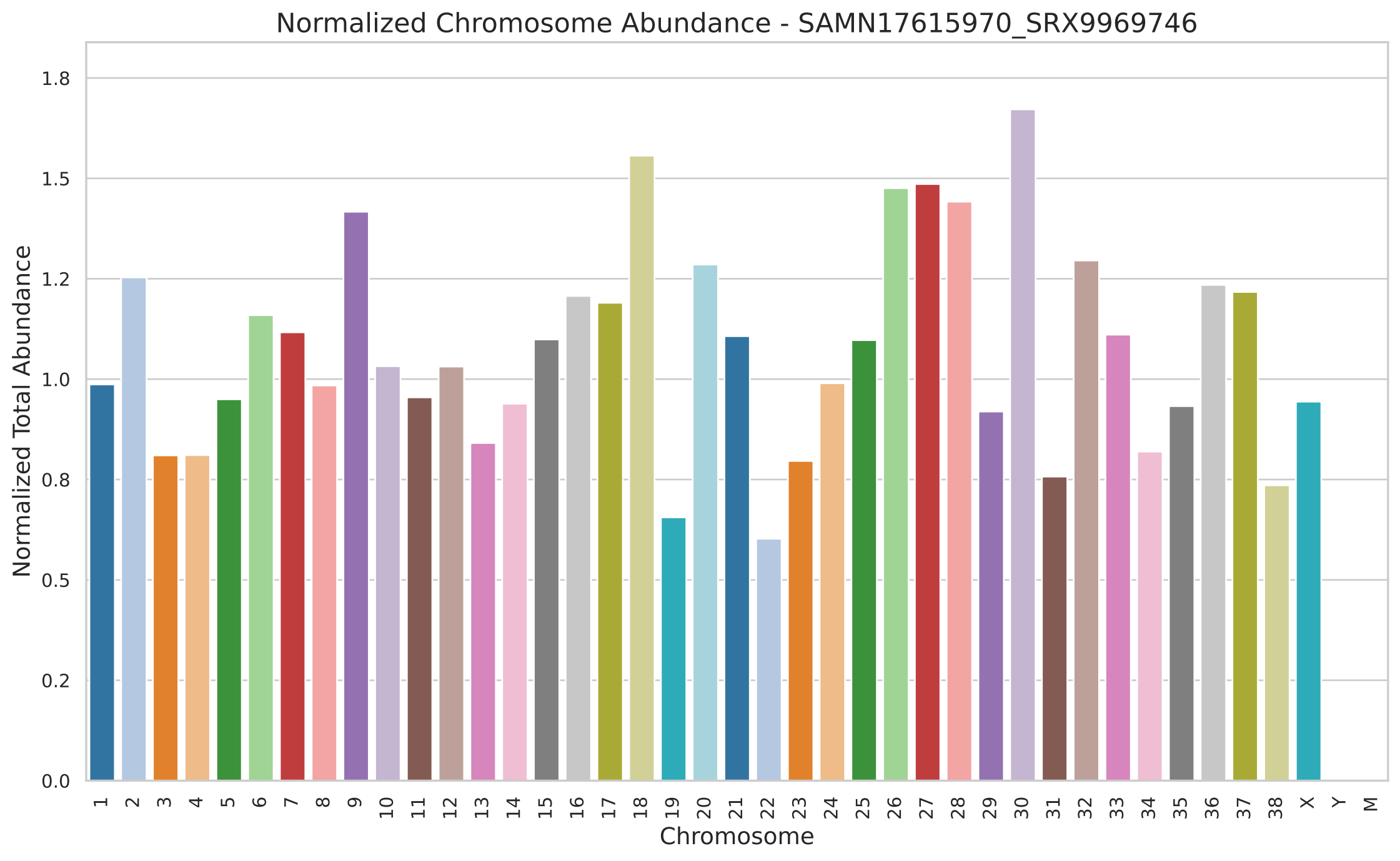

Normalized Chromosome Abundance - SAMN17615907_SRX9969815
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

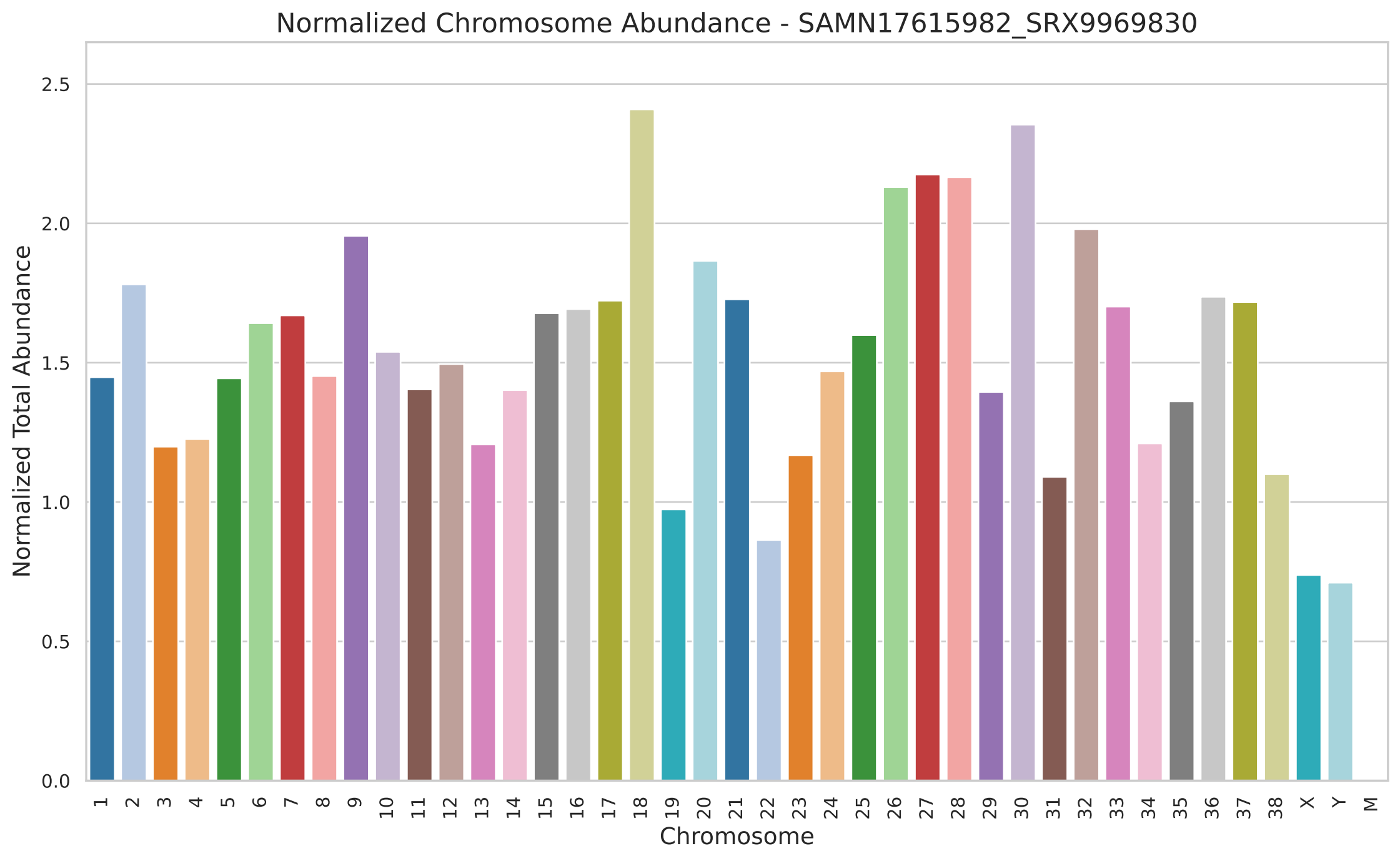

Normalized Chromosome Abundance - SAMN17615914_SRX9969847
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

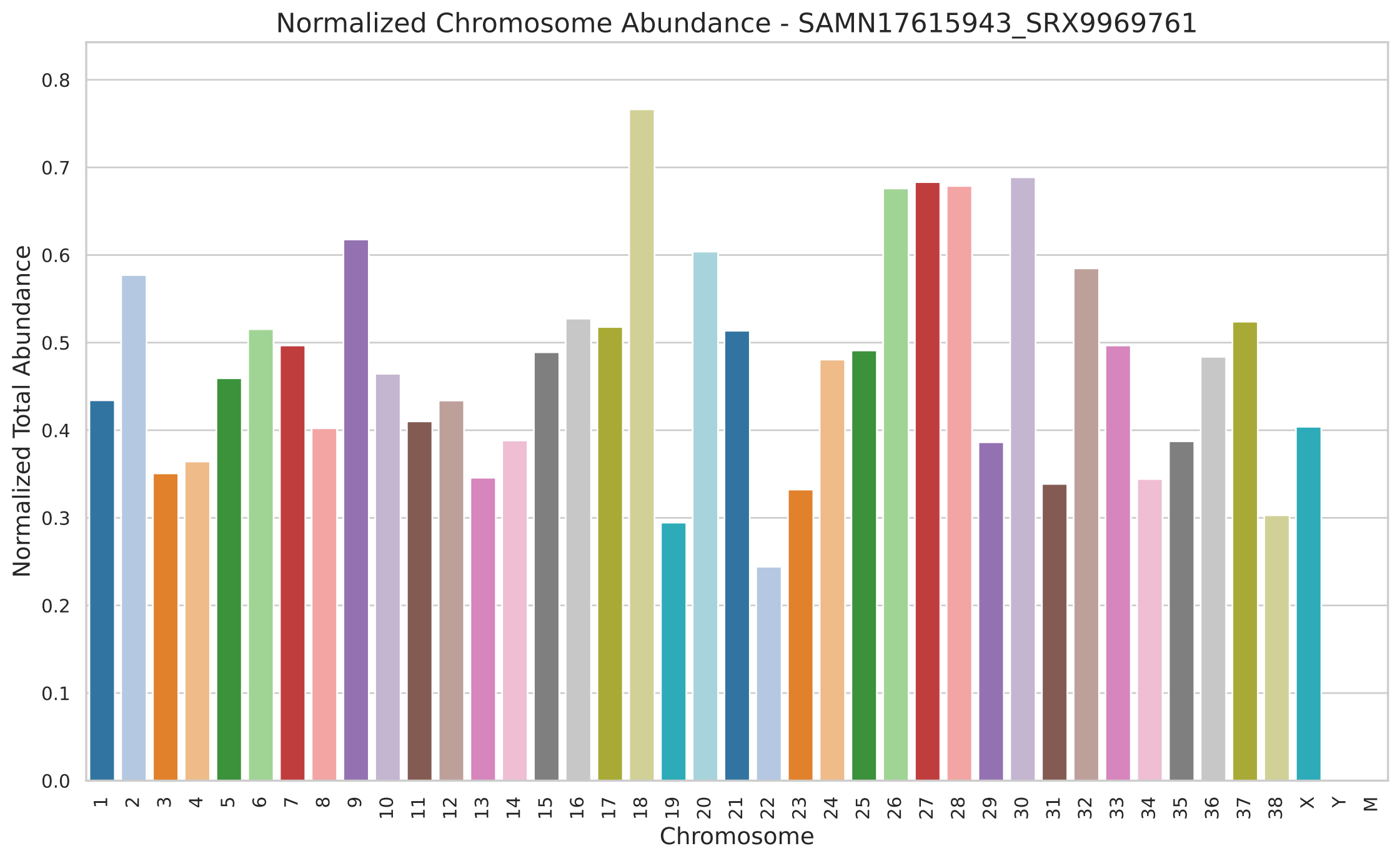

Normalized Chromosome Abundance - SAMN17615946_SRX9969764
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

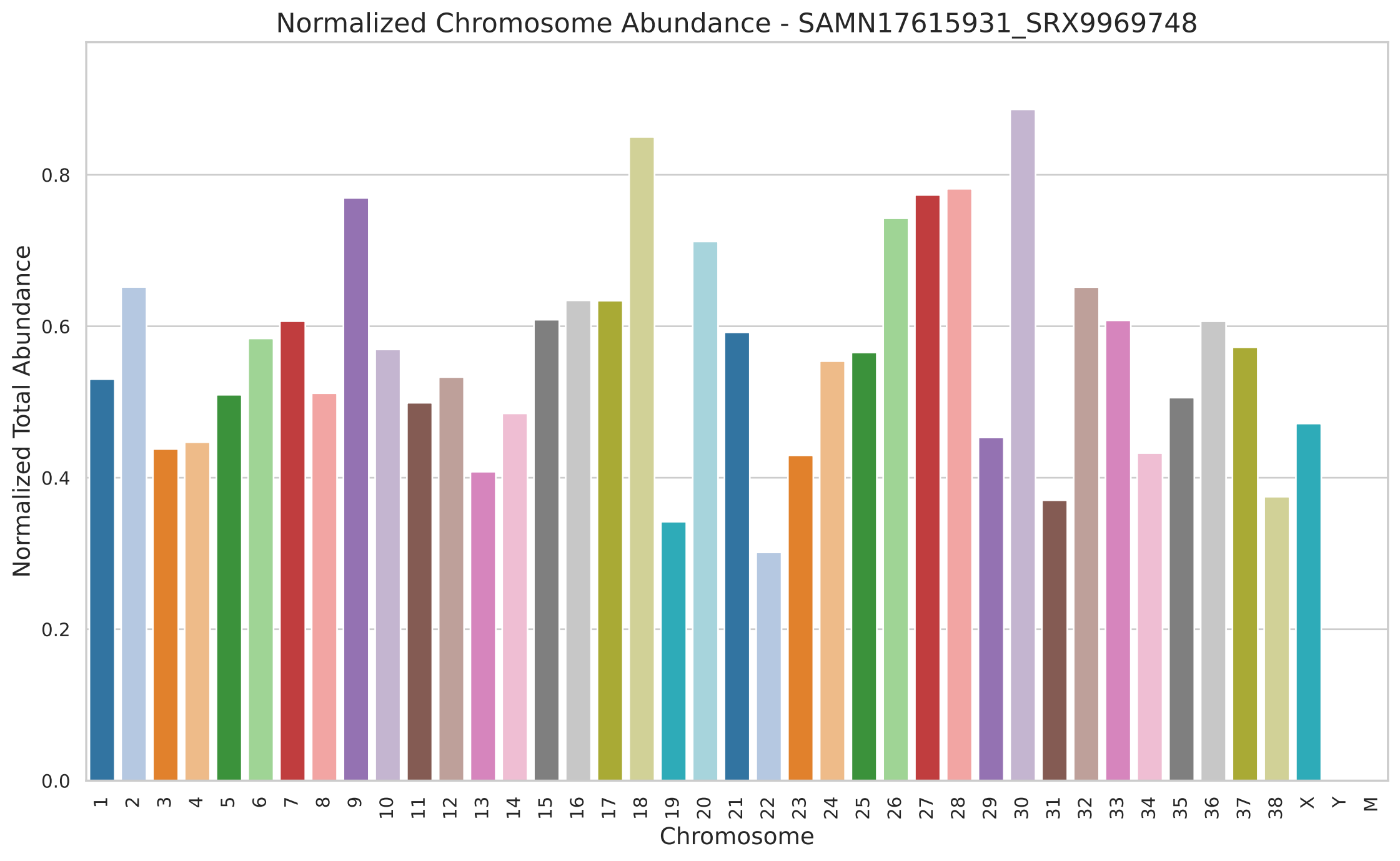

Normalized Chromosome Abundance - SAMN17615971_SRX9969818
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

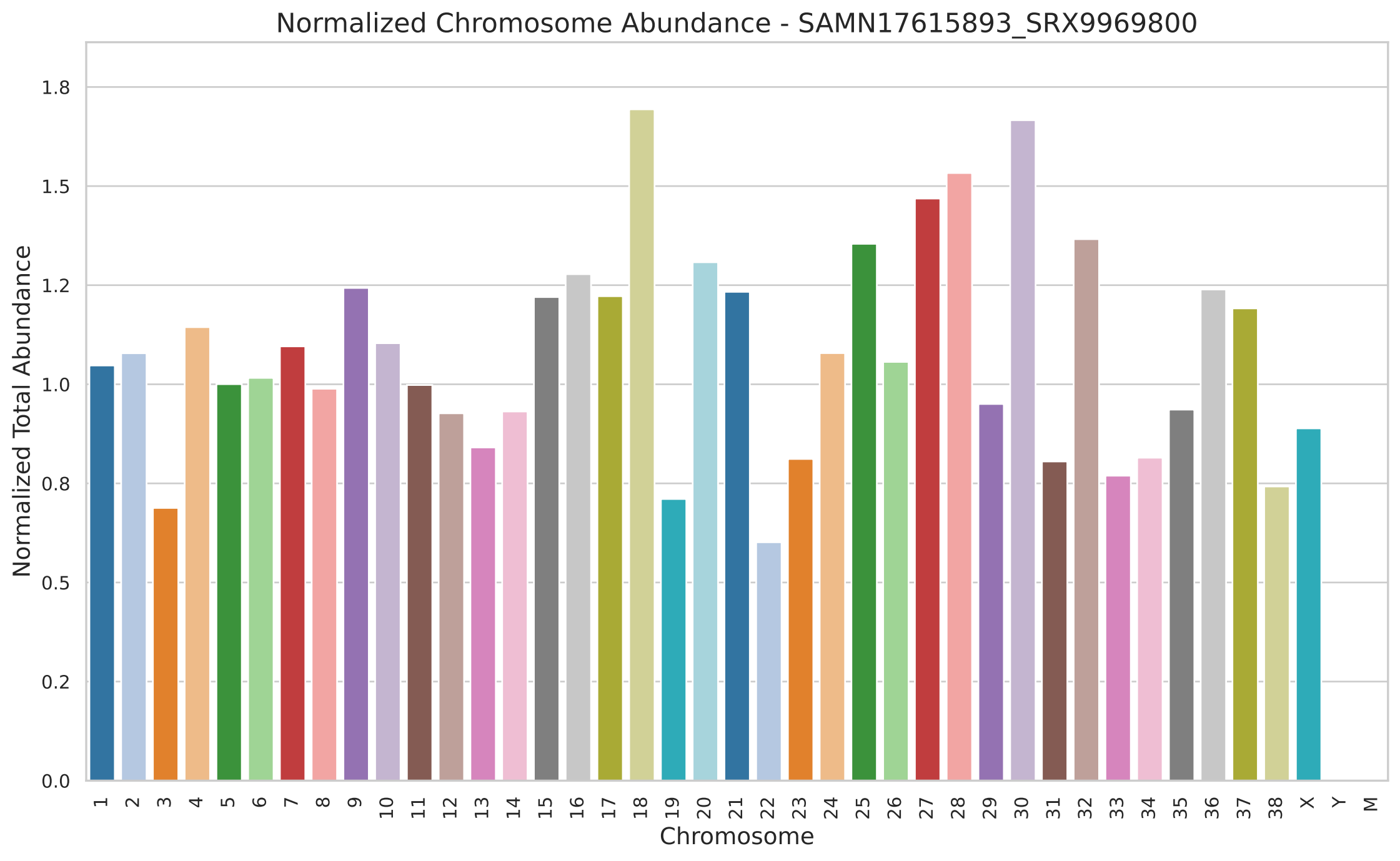

Normalized Chromosome Abundance - SAMN17615874_SRX9969779
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

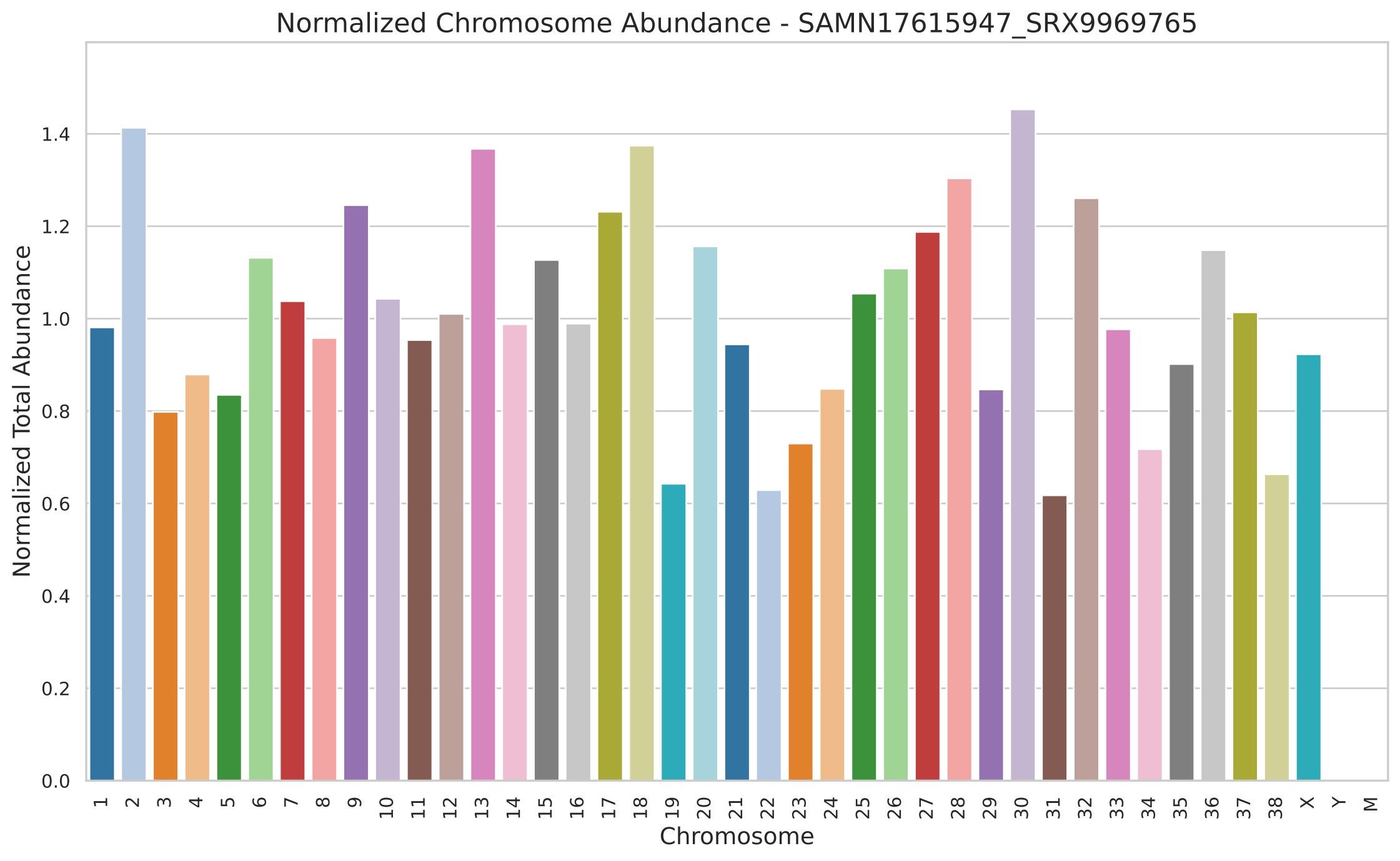

Normalized Chromosome Abundance - SAMN17615970_SRX9969746
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

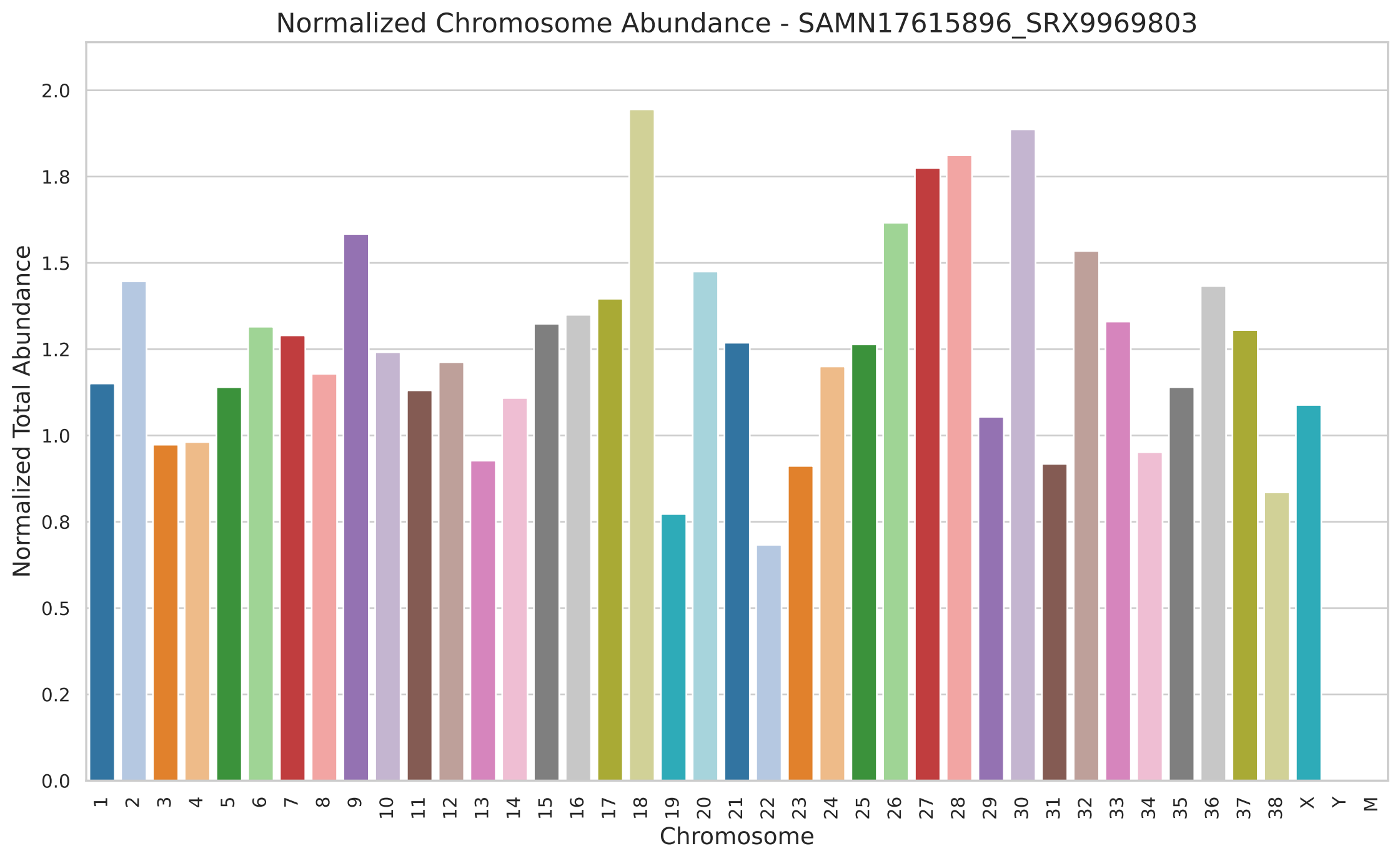

Normalized Chromosome Abundance - SAMN17615982_SRX9969830
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

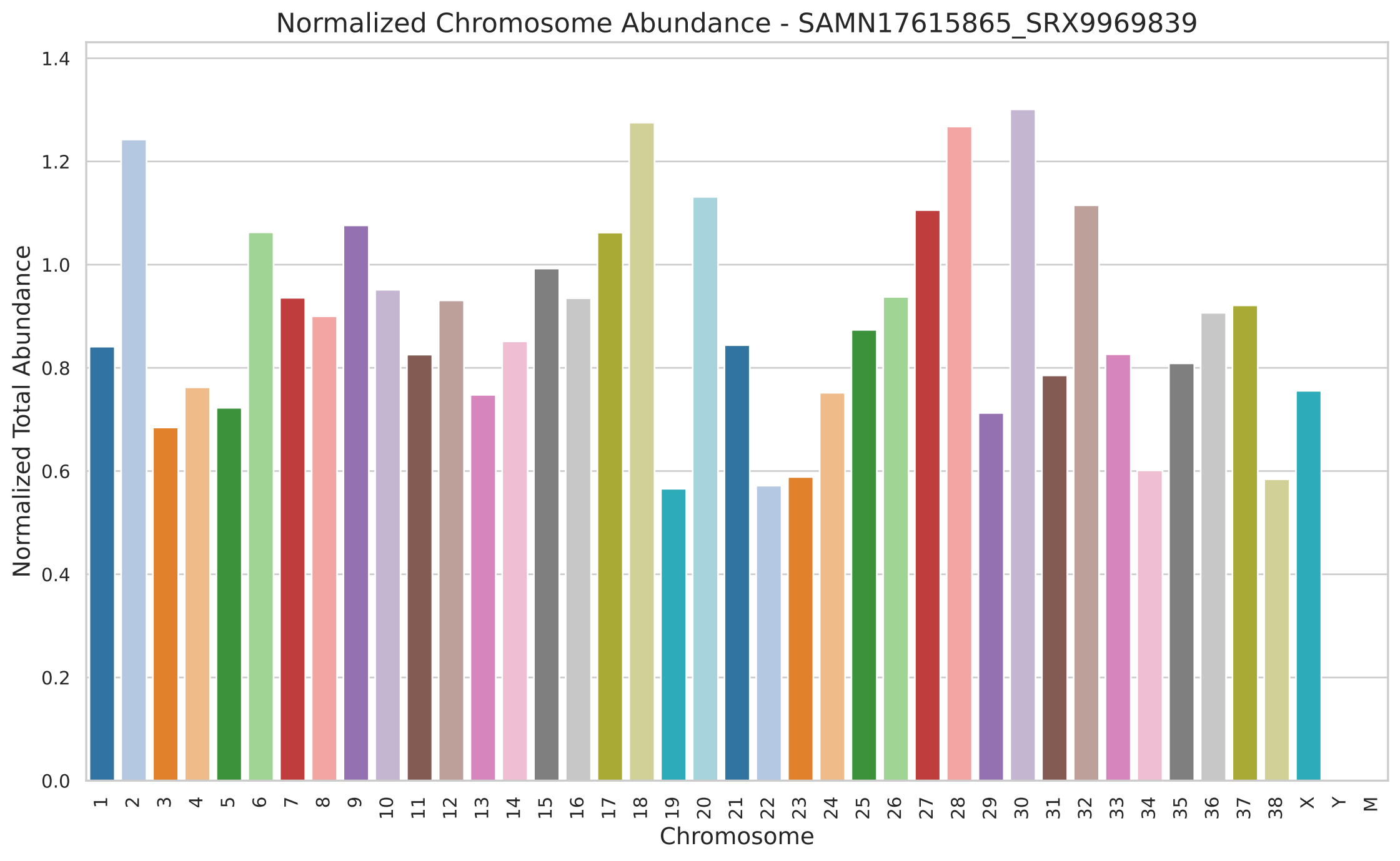

Normalized Chromosome Abundance - SAMN17615943_SRX9969761
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

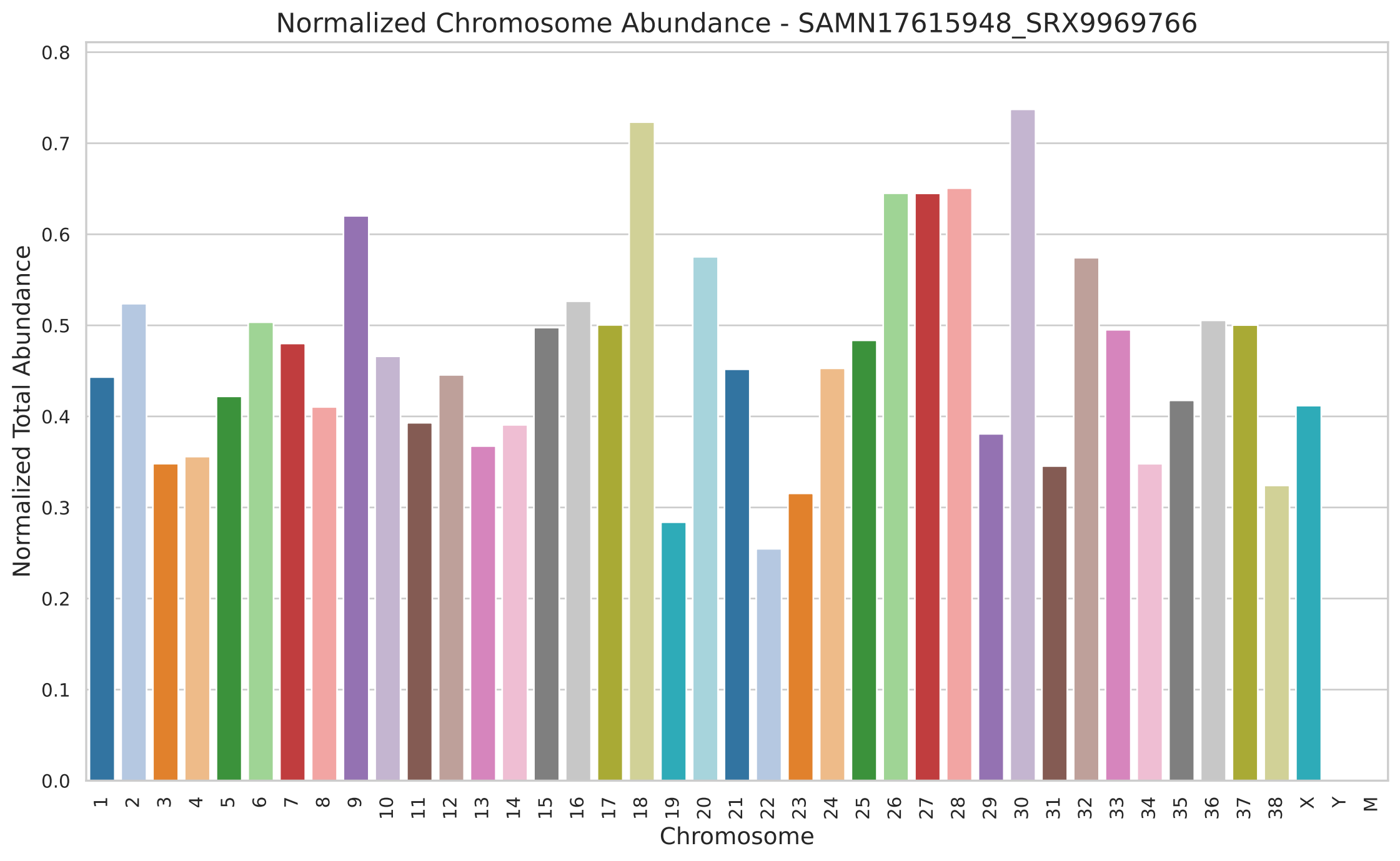

Normalized Chromosome Abundance - SAMN17615931_SRX9969748
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

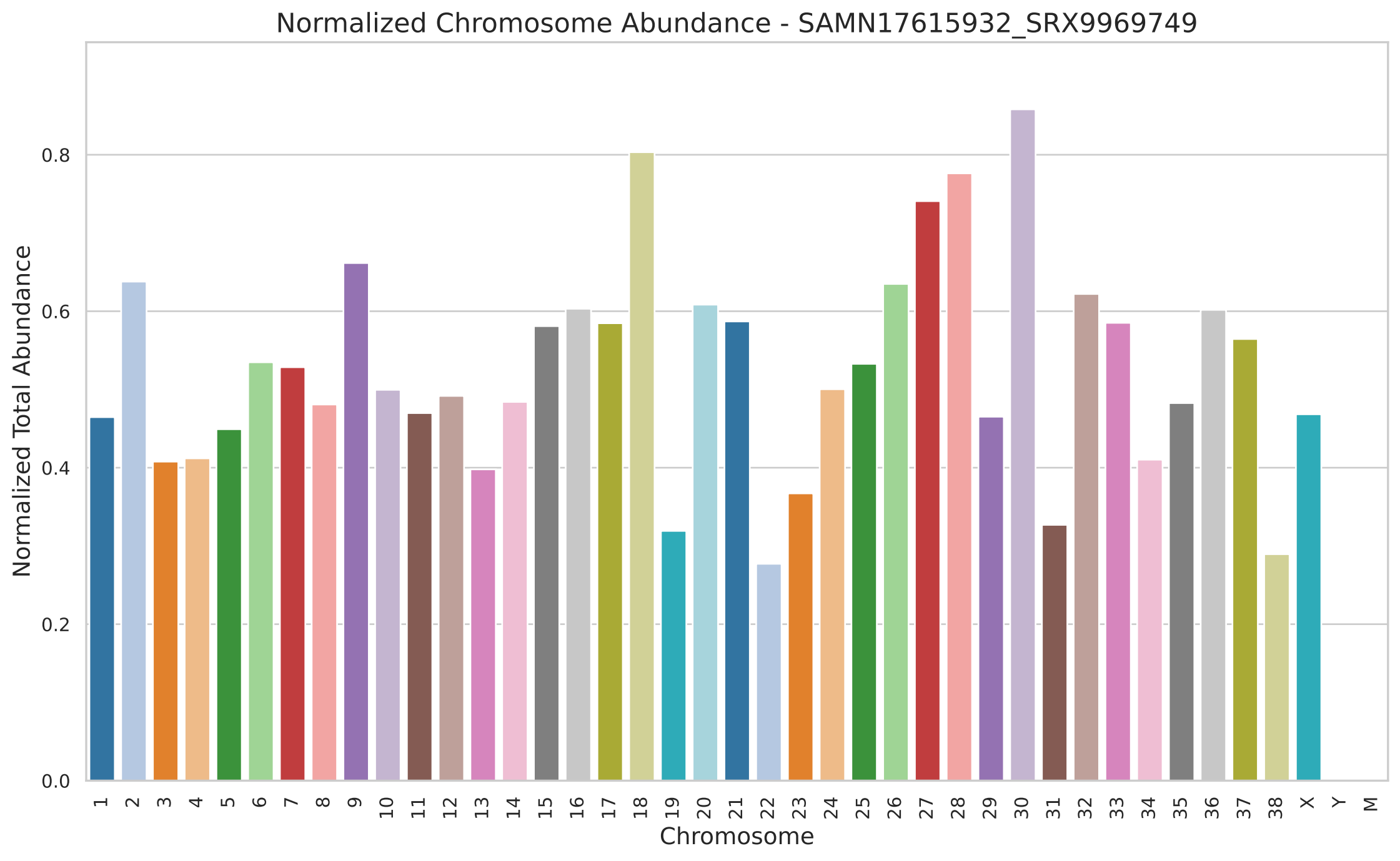

Normalized Chromosome Abundance - SAMN17615893_SRX9969800
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

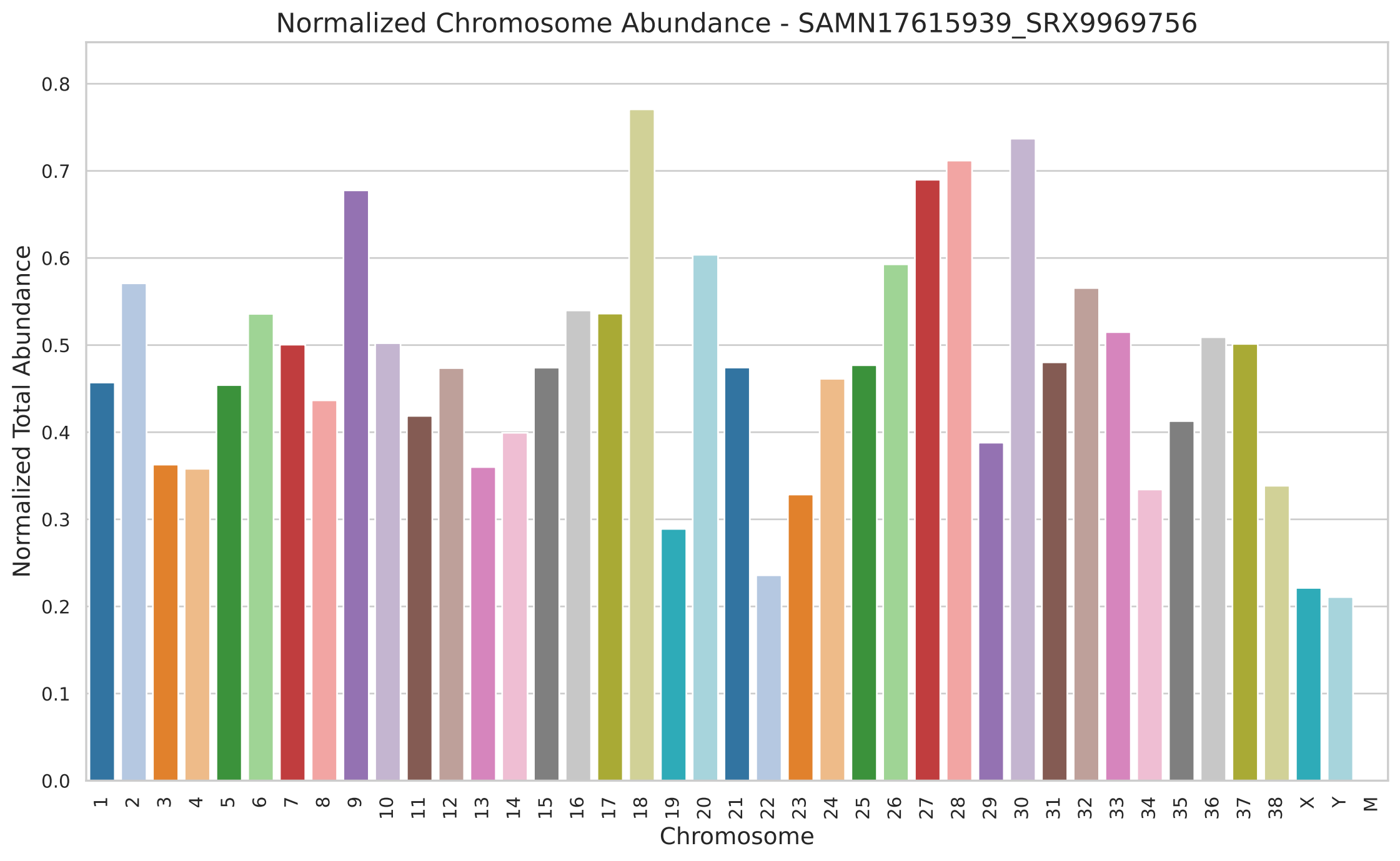

Normalized Chromosome Abundance - SAMN17615947_SRX9969765
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

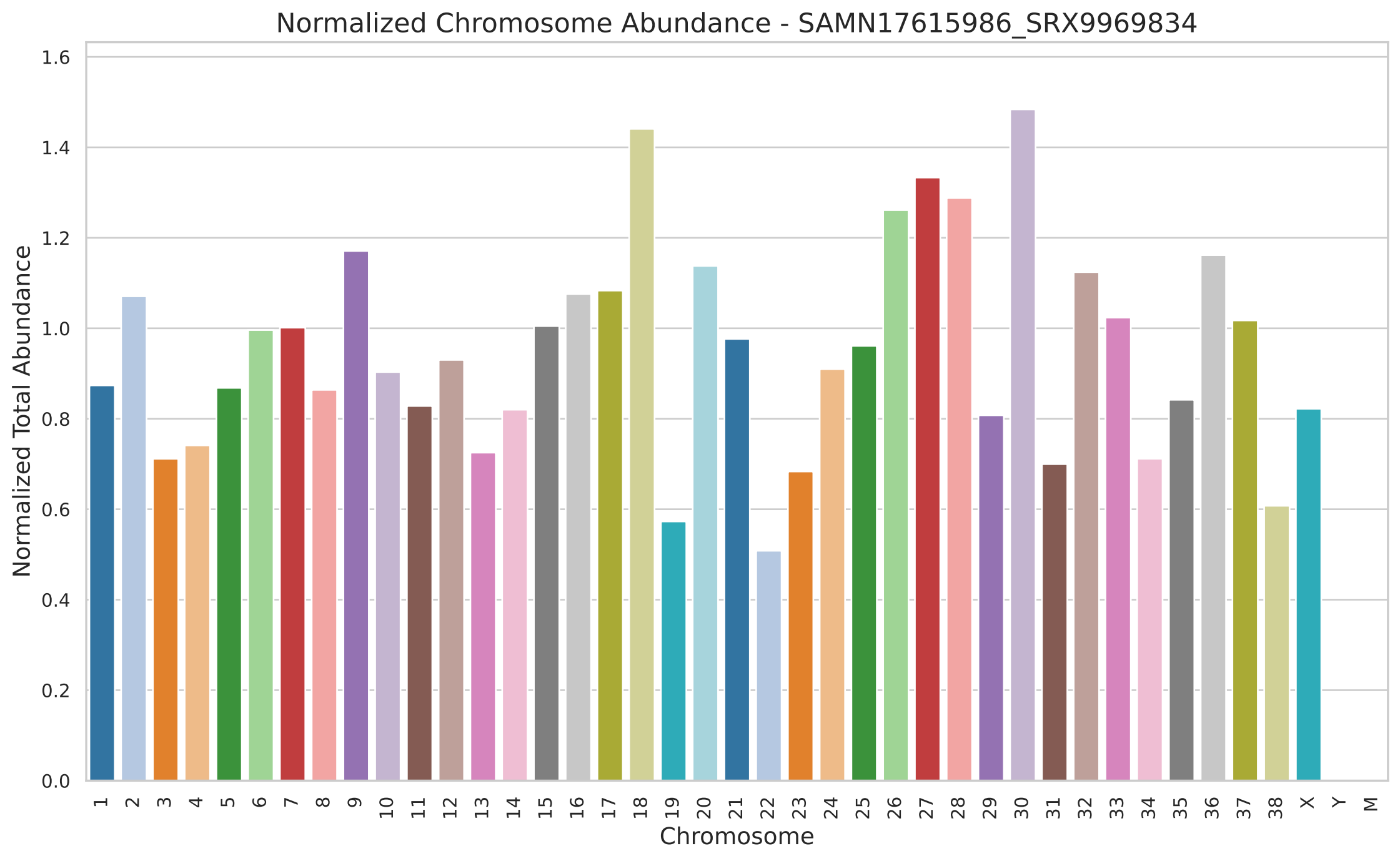

Normalized Chromosome Abundance - SAMN17615896_SRX9969803
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

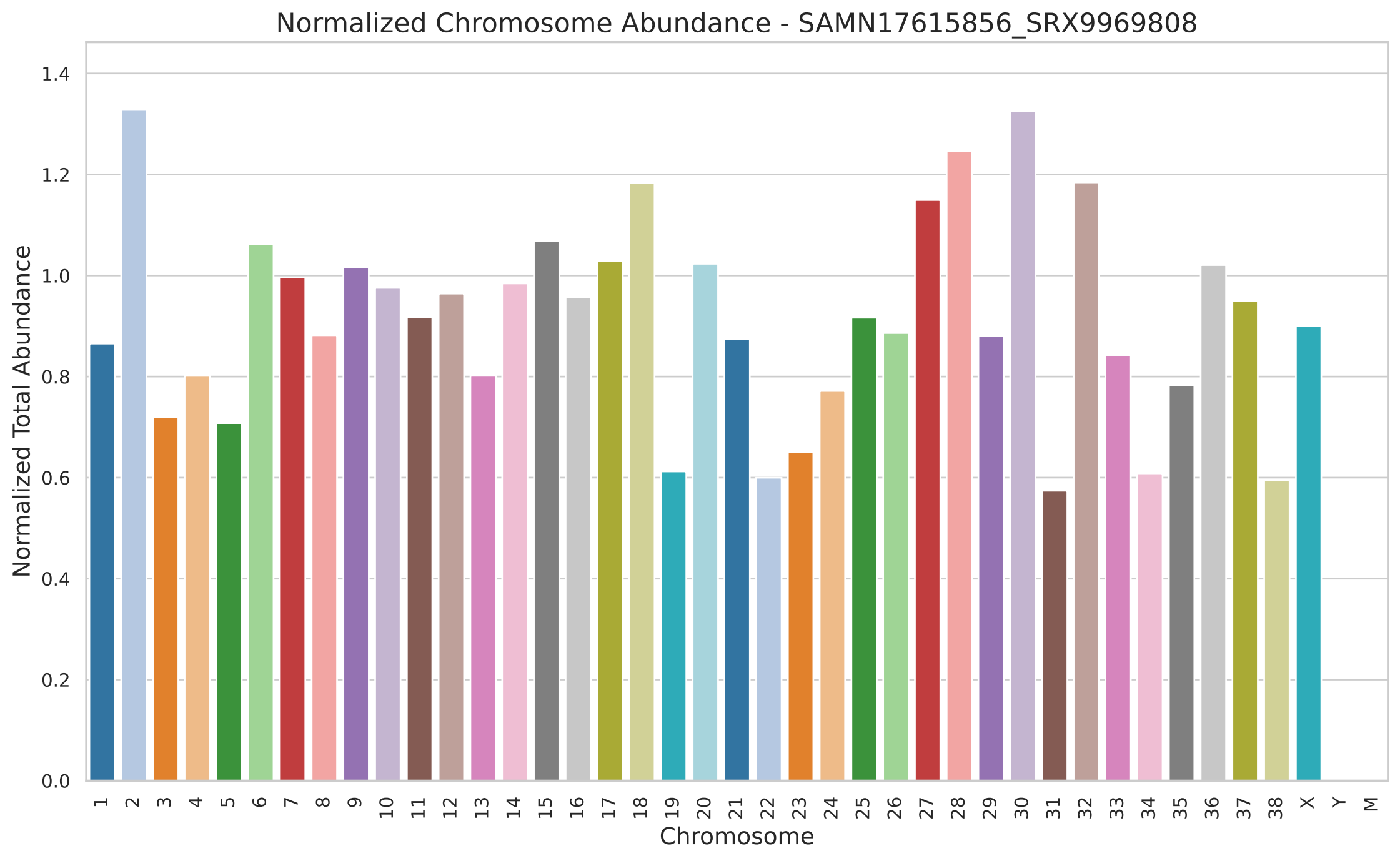

Normalized Chromosome Abundance - SAMN17615865_SRX9969839
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 X Y M
Chromosome

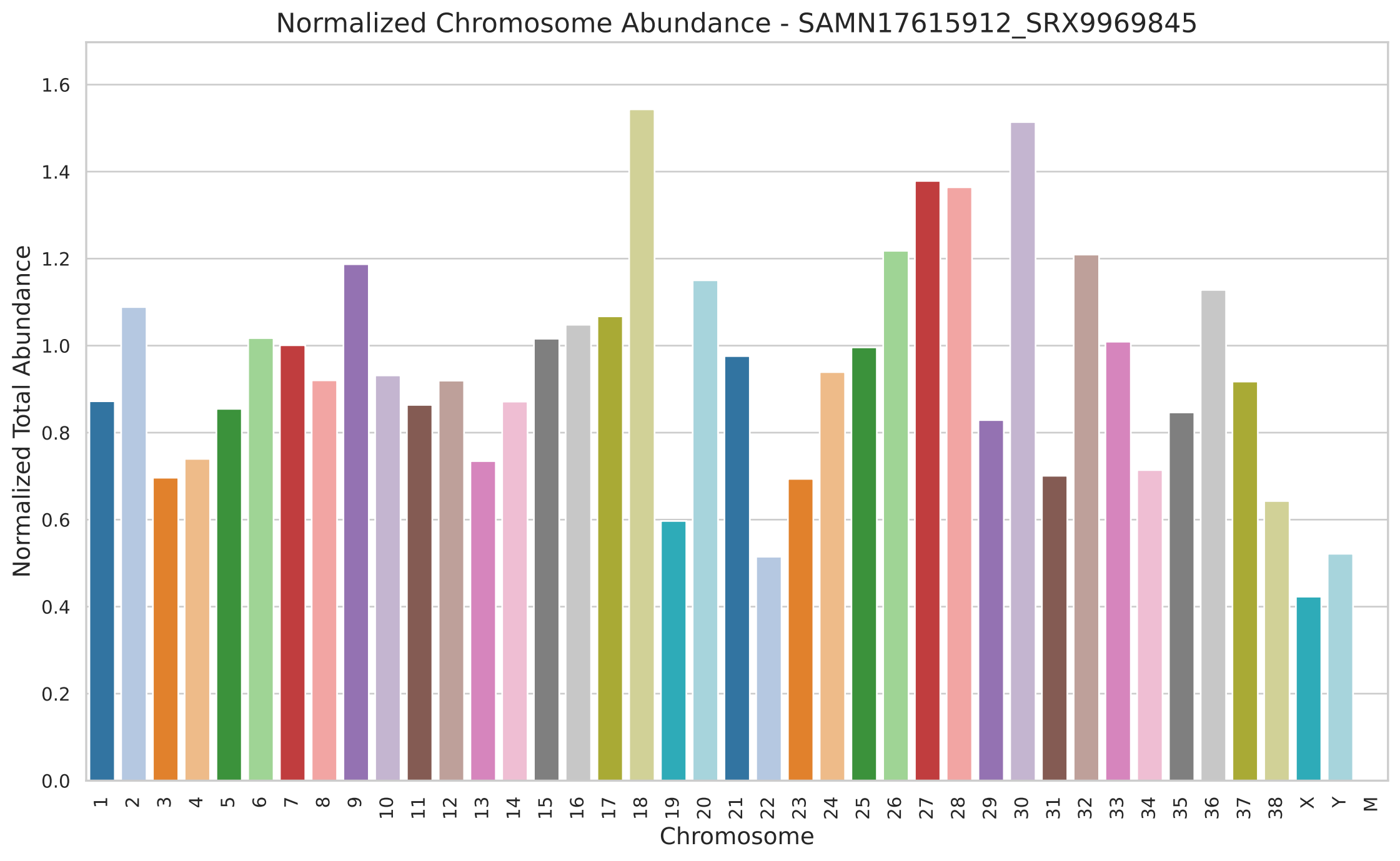

Normalized Chromosome Abundance - SAMN17615948_SRX9969766
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

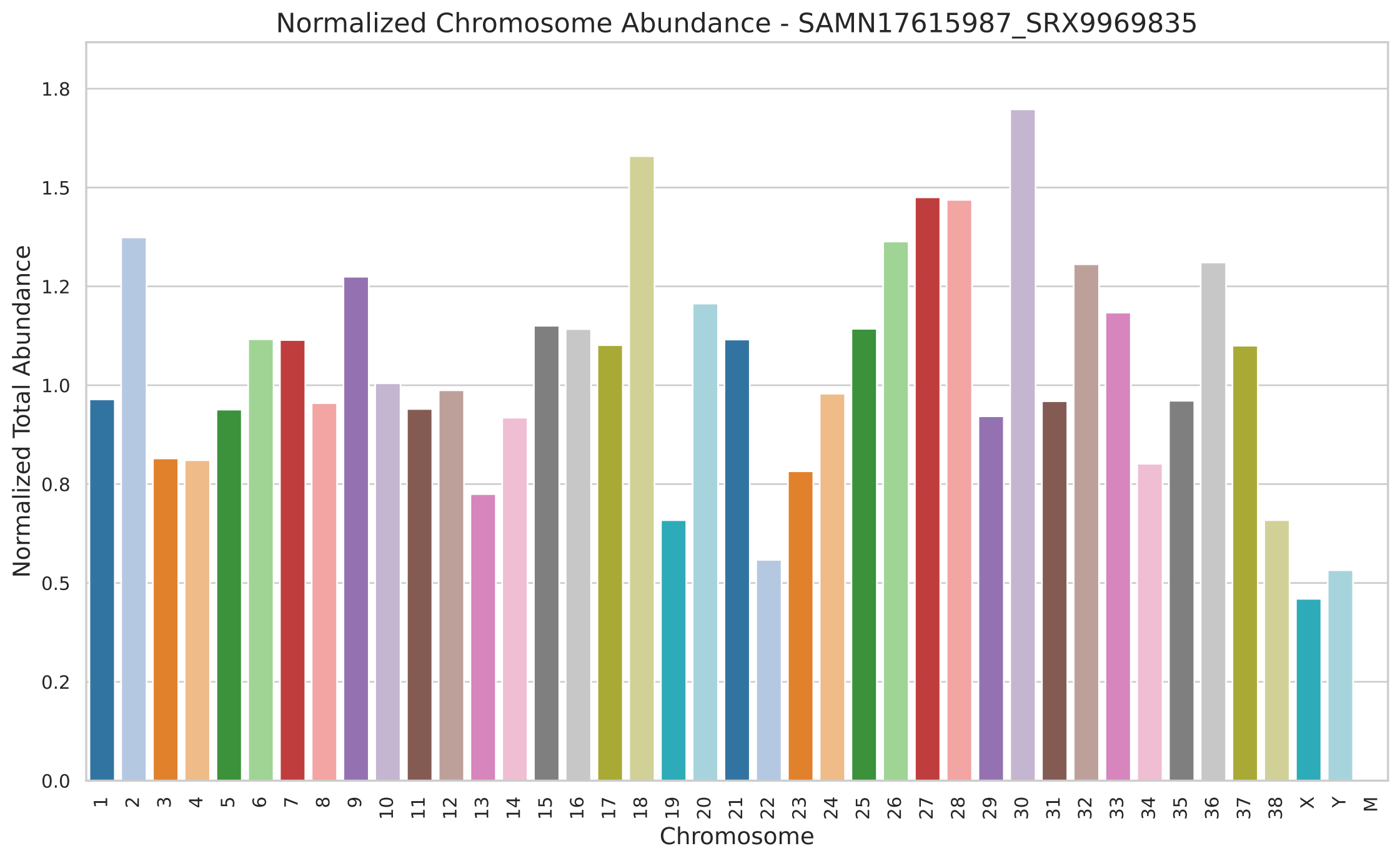

Normalized Chromosome Abundance - SAMN17615932_SRX9969749
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

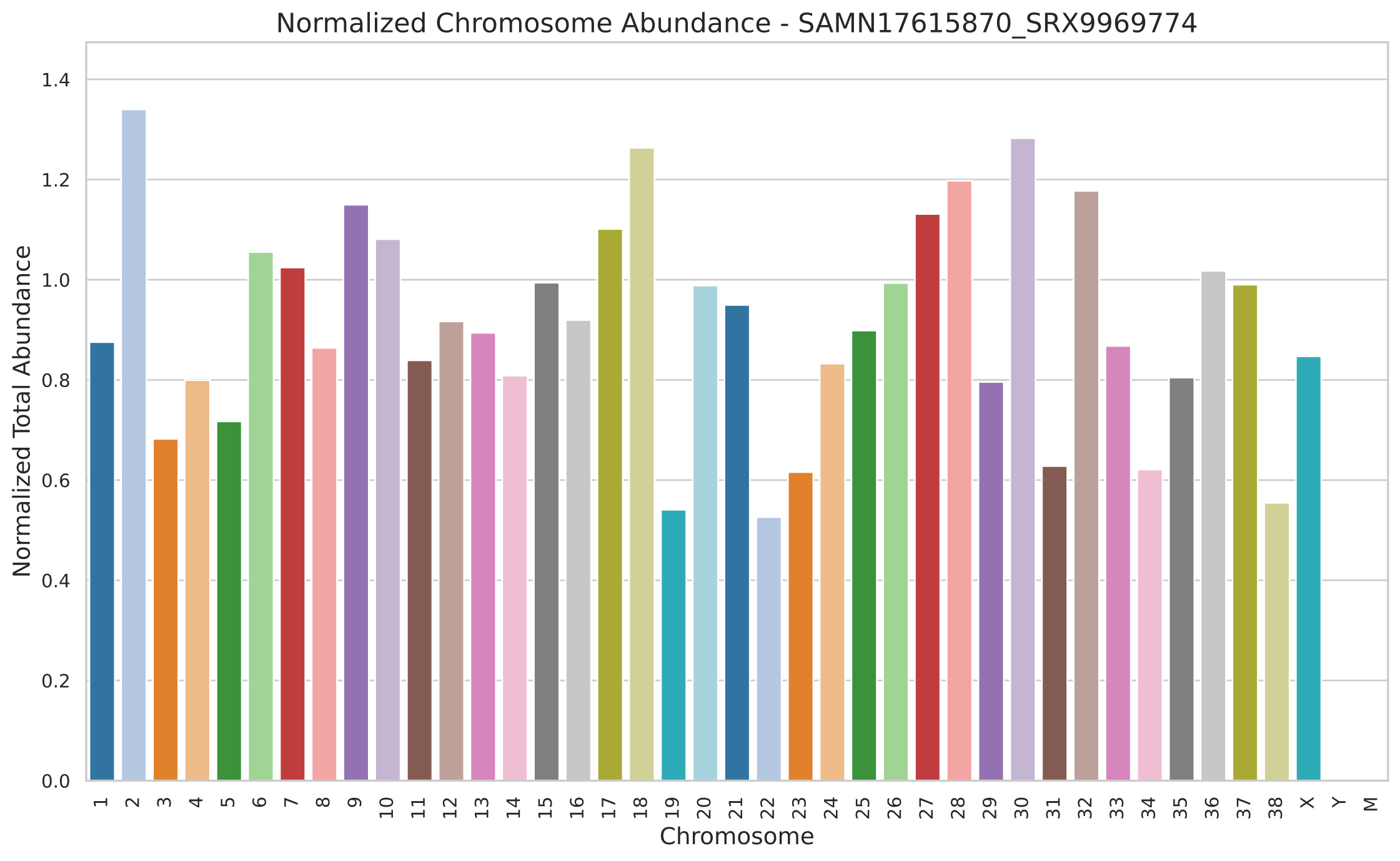

Normalized Chromosome Abundance - SAMN17615939_SRX9969756
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

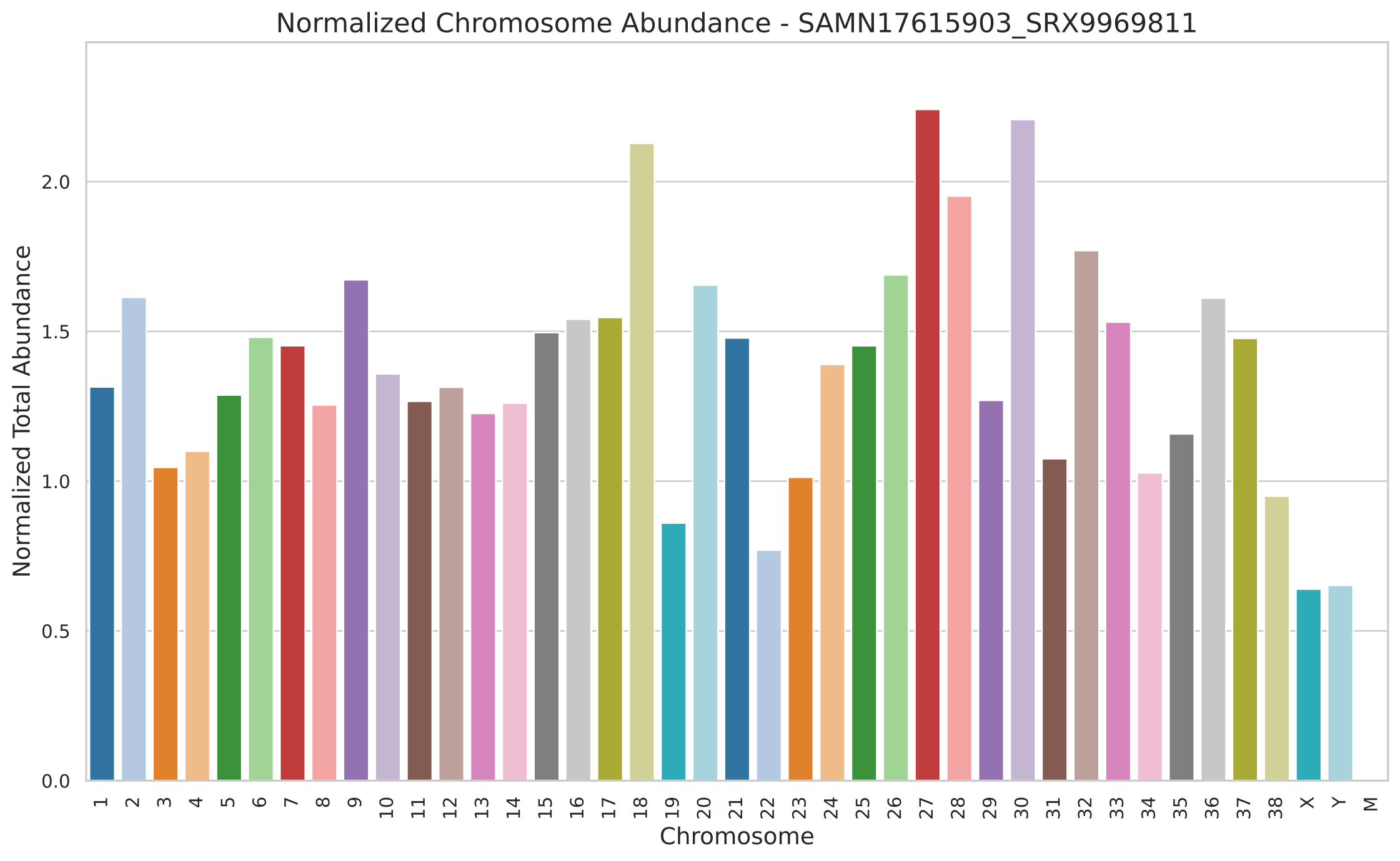

Normalized Chromosome Abundance - SAMN17615986_SRX9969834
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

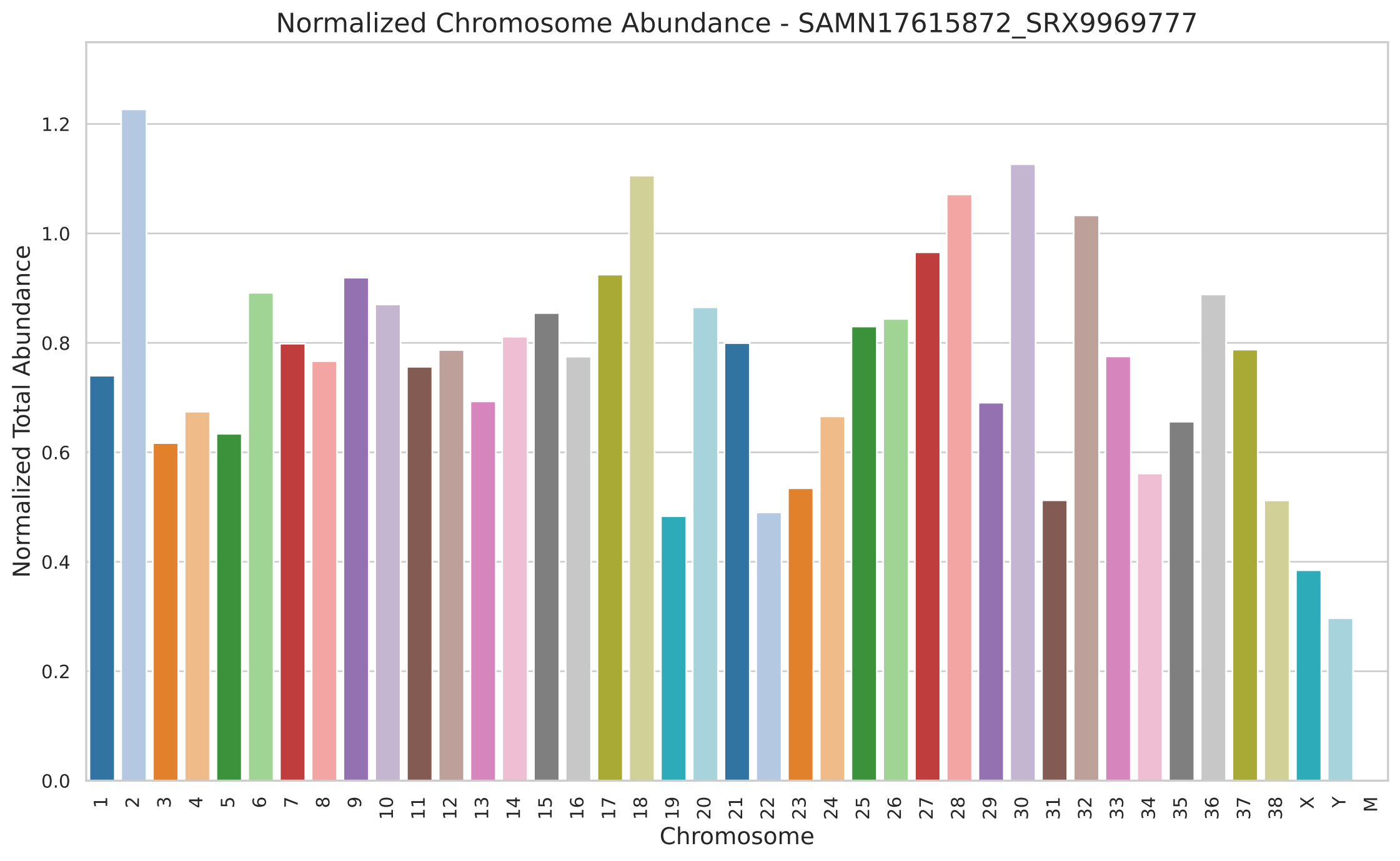

Normalized Chromosome Abundance - SAMN17615856_SRX9969808
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

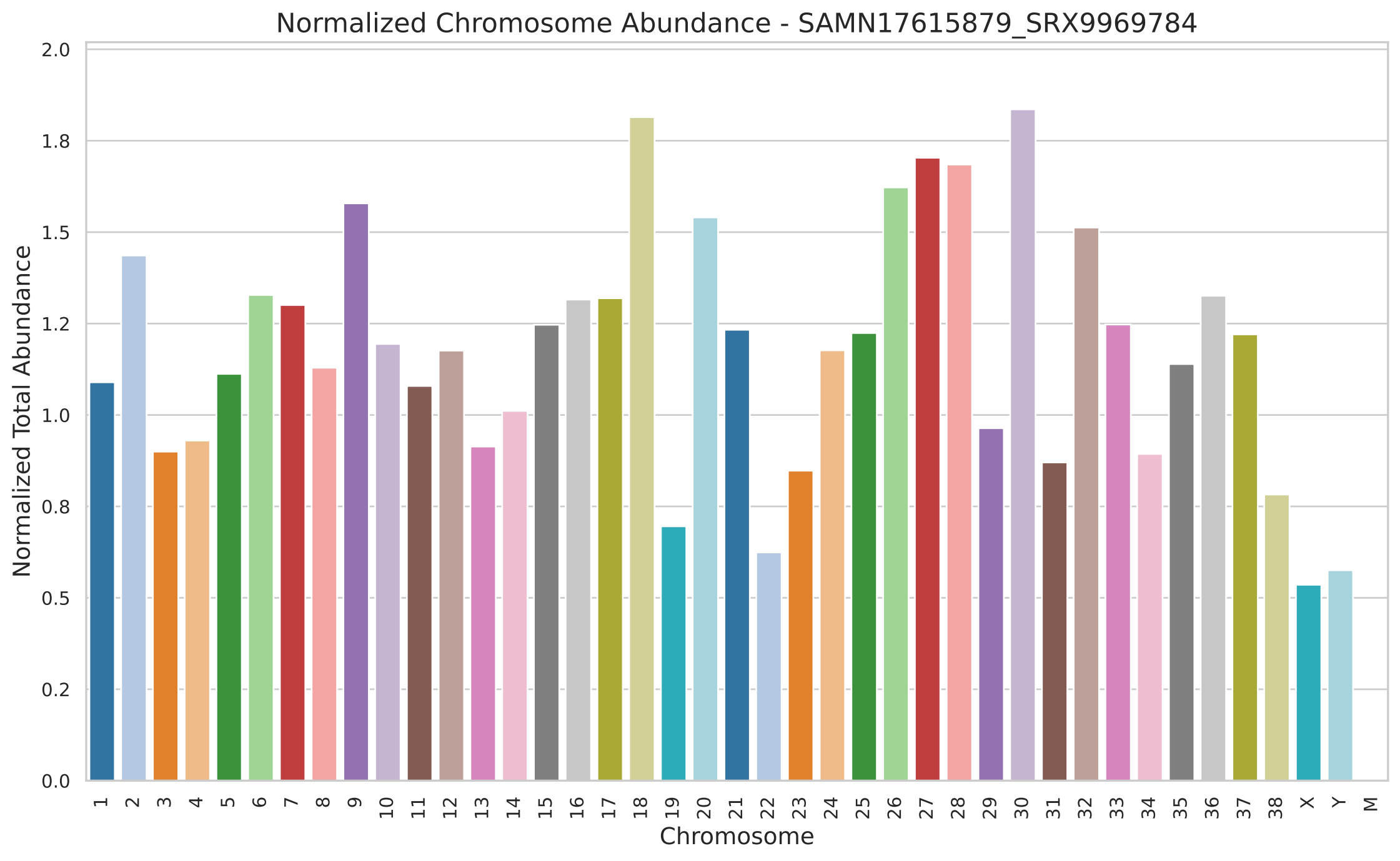

Normalized Chromosome Abundance - SAMN17615912_SRX9969845
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

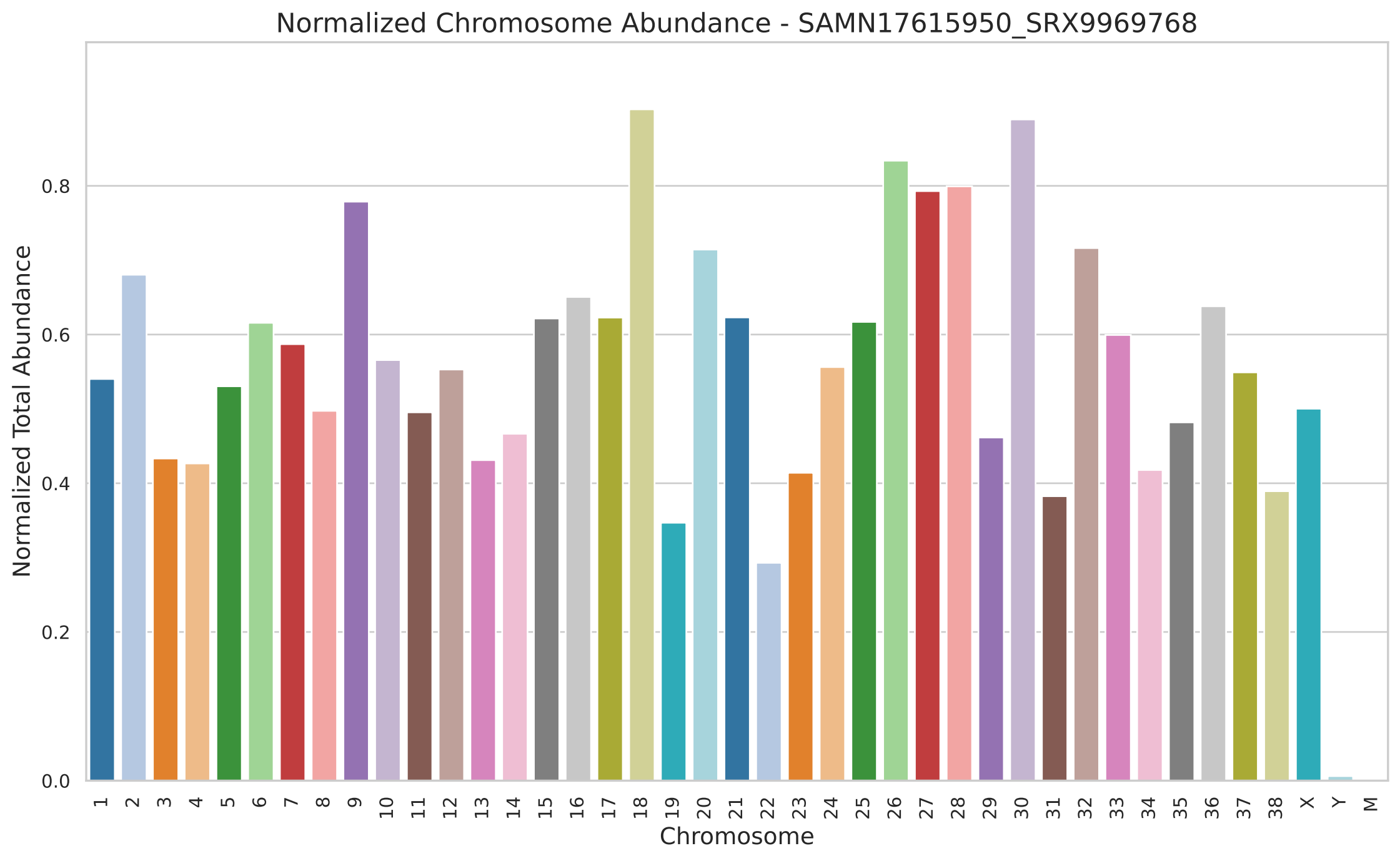

Normalized Chromosome Abundance - SAMN17615987_SRX9969835
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

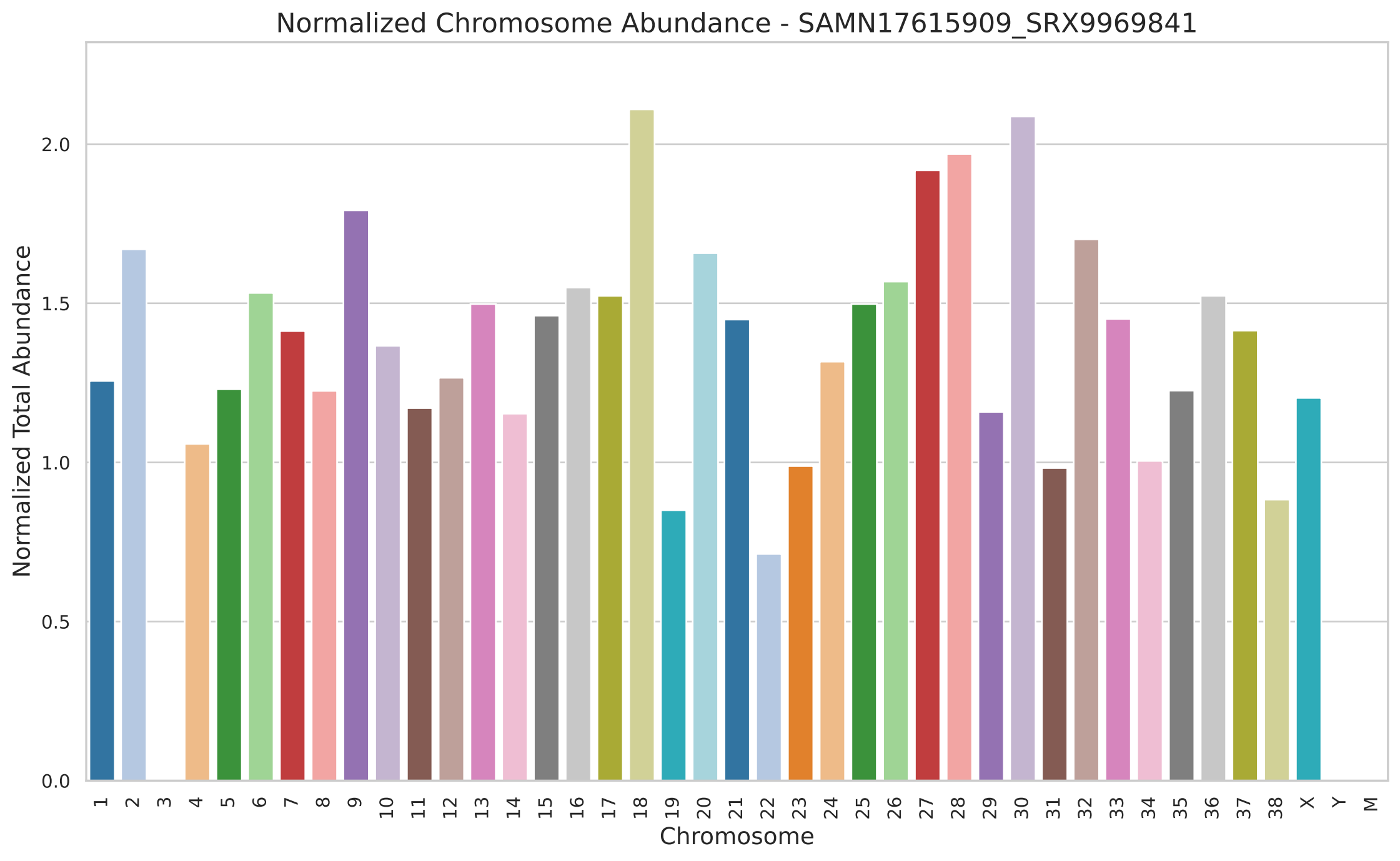

Normalized Chromosome Abundance - SAMN17615870_SRX9969774
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

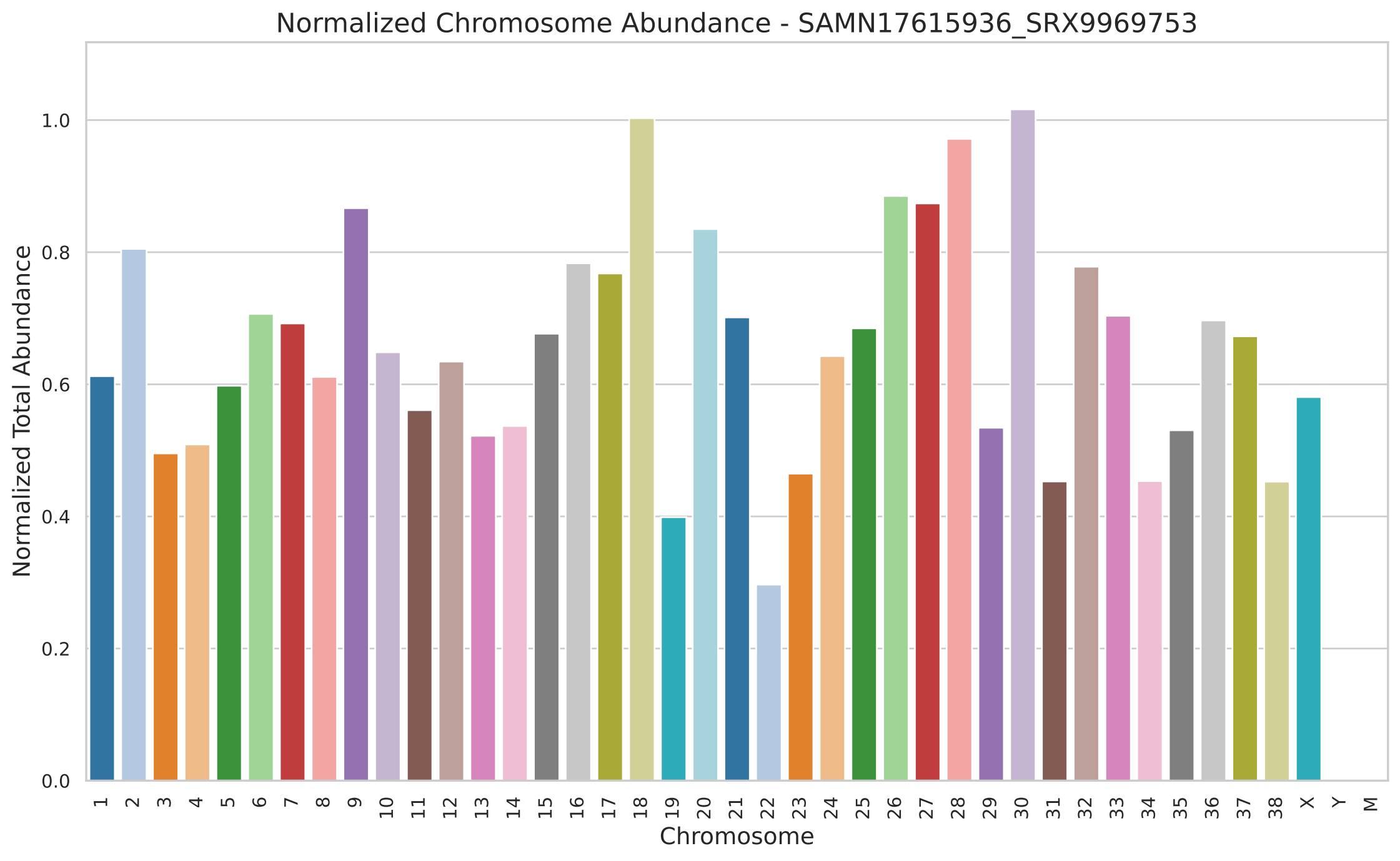

Normalized Chromosome Abundance - SAMN17615903_SRX9969811
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

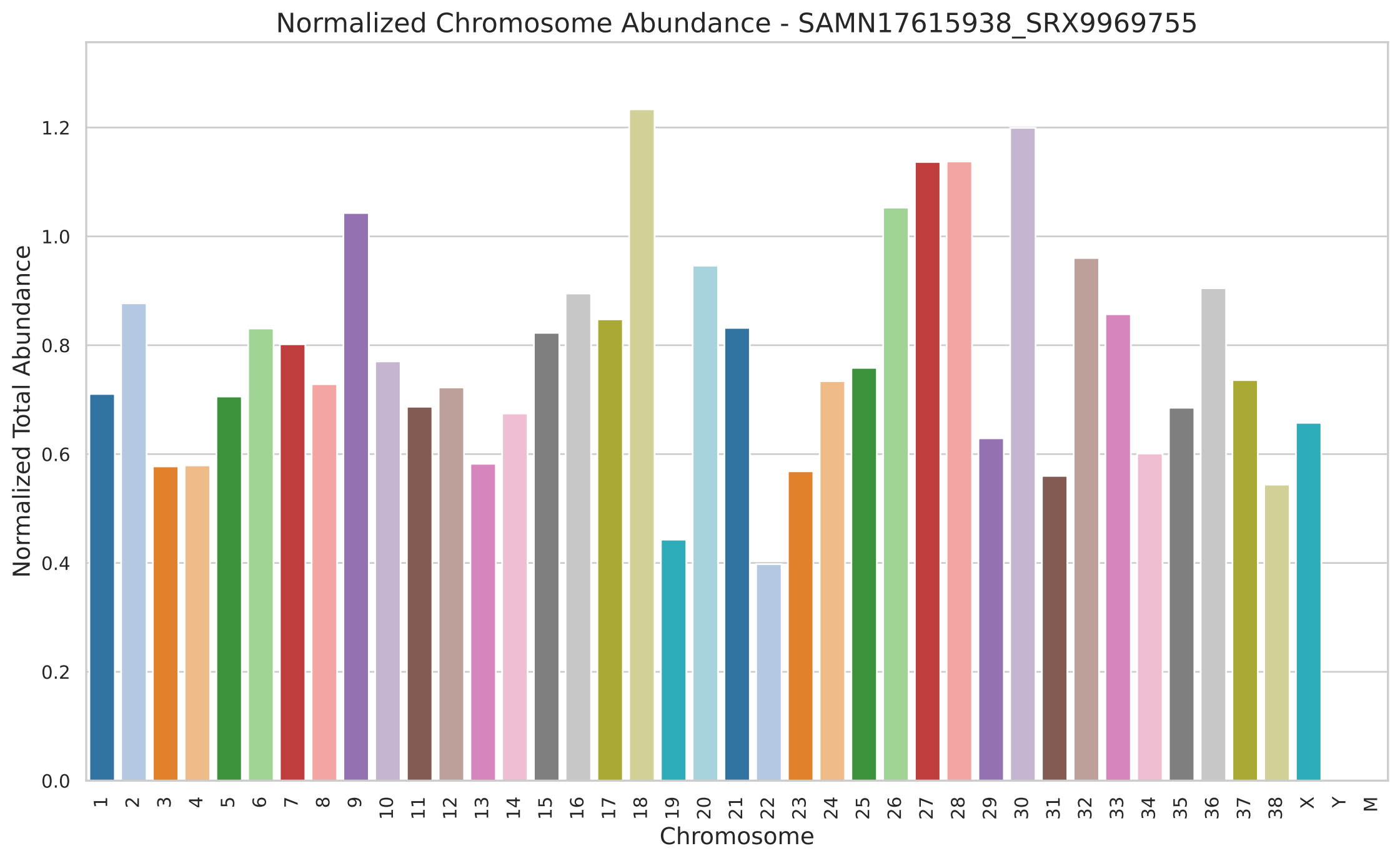

Normalized Chromosome Abundance - SAMN17615872_SRX9969777
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

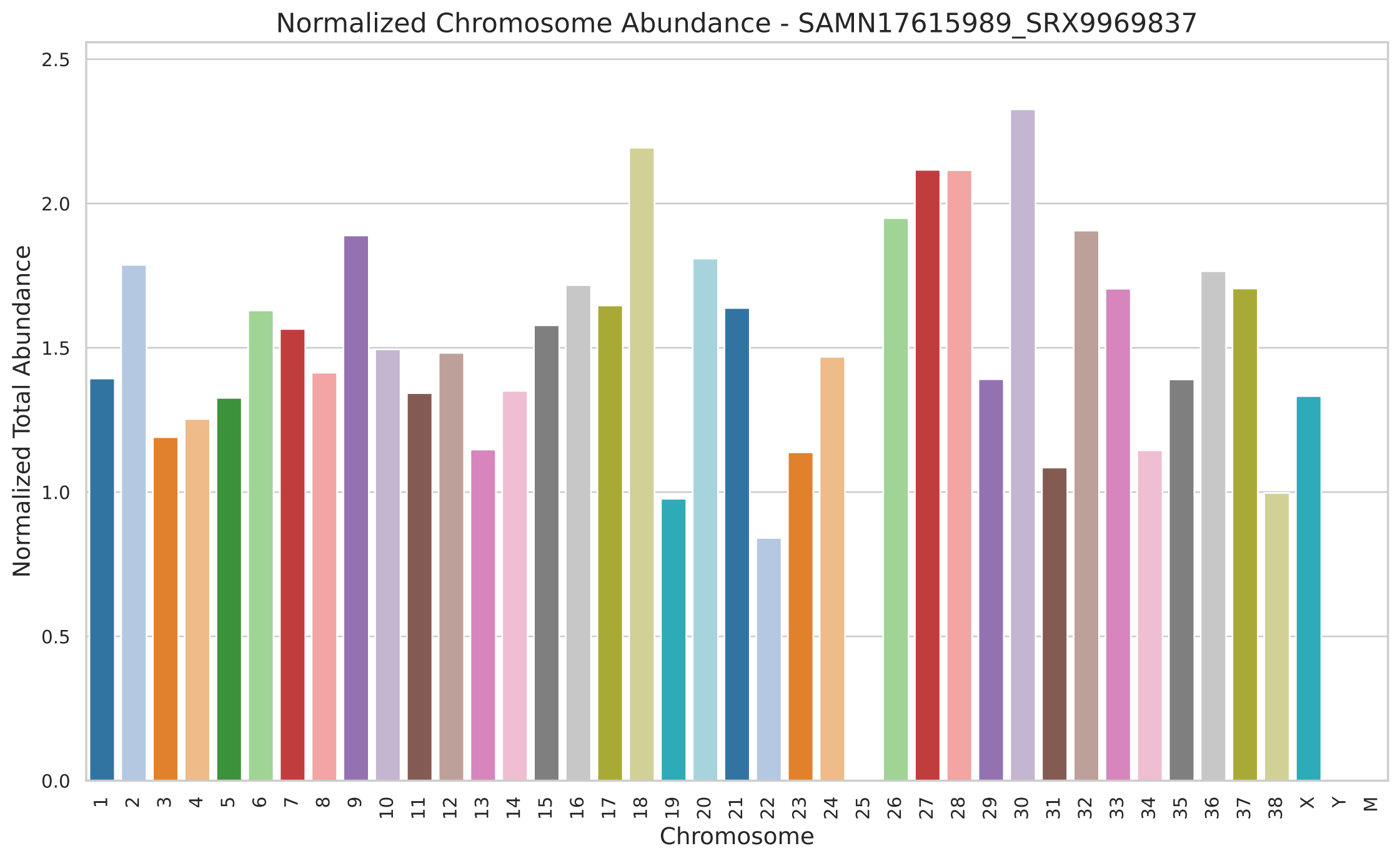

Normalized Chromosome Abundance - SAMN17615879_SRX9969784
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

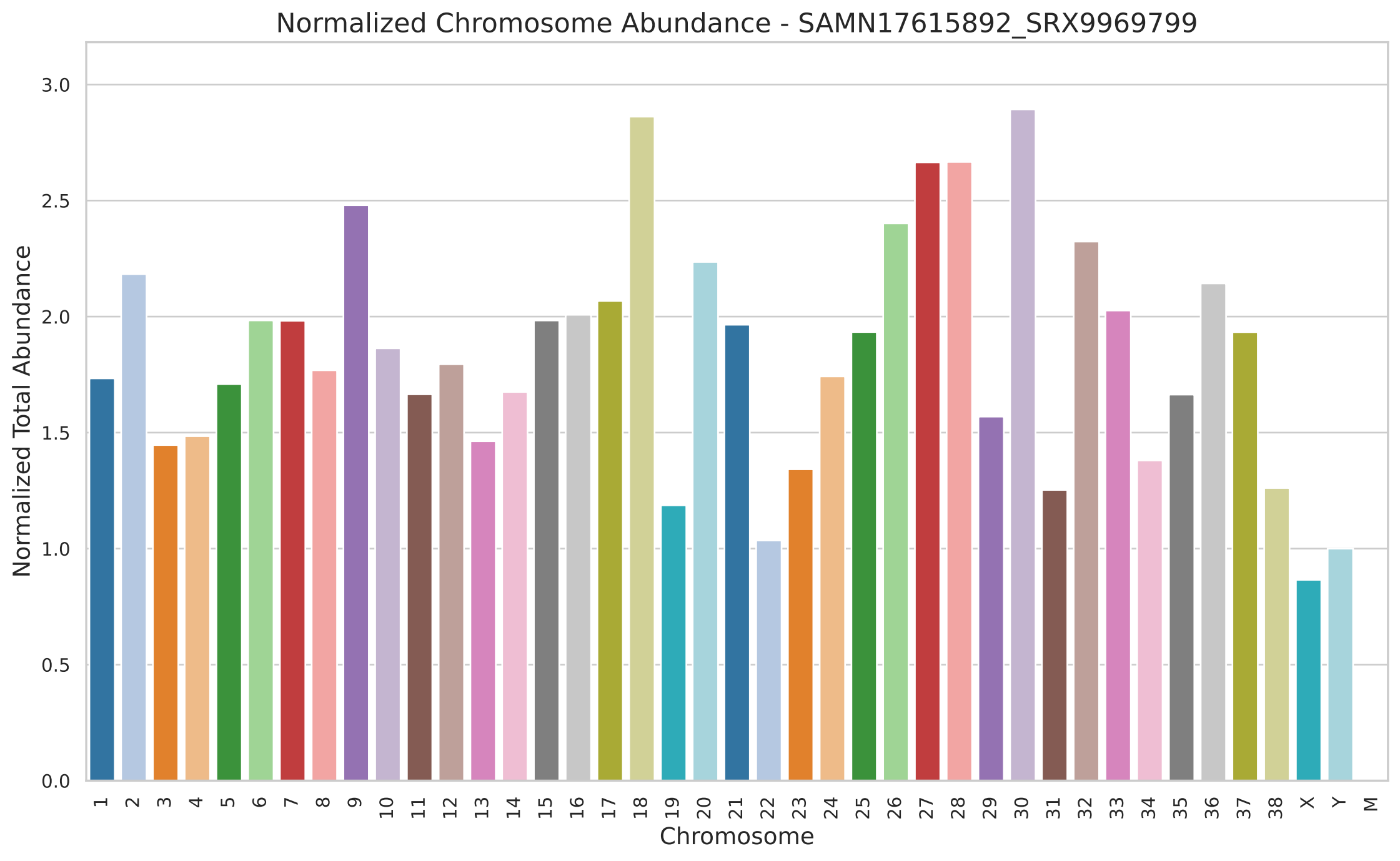

Normalized Chromosome Abundance - SAMN17615950_SRX9969768
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

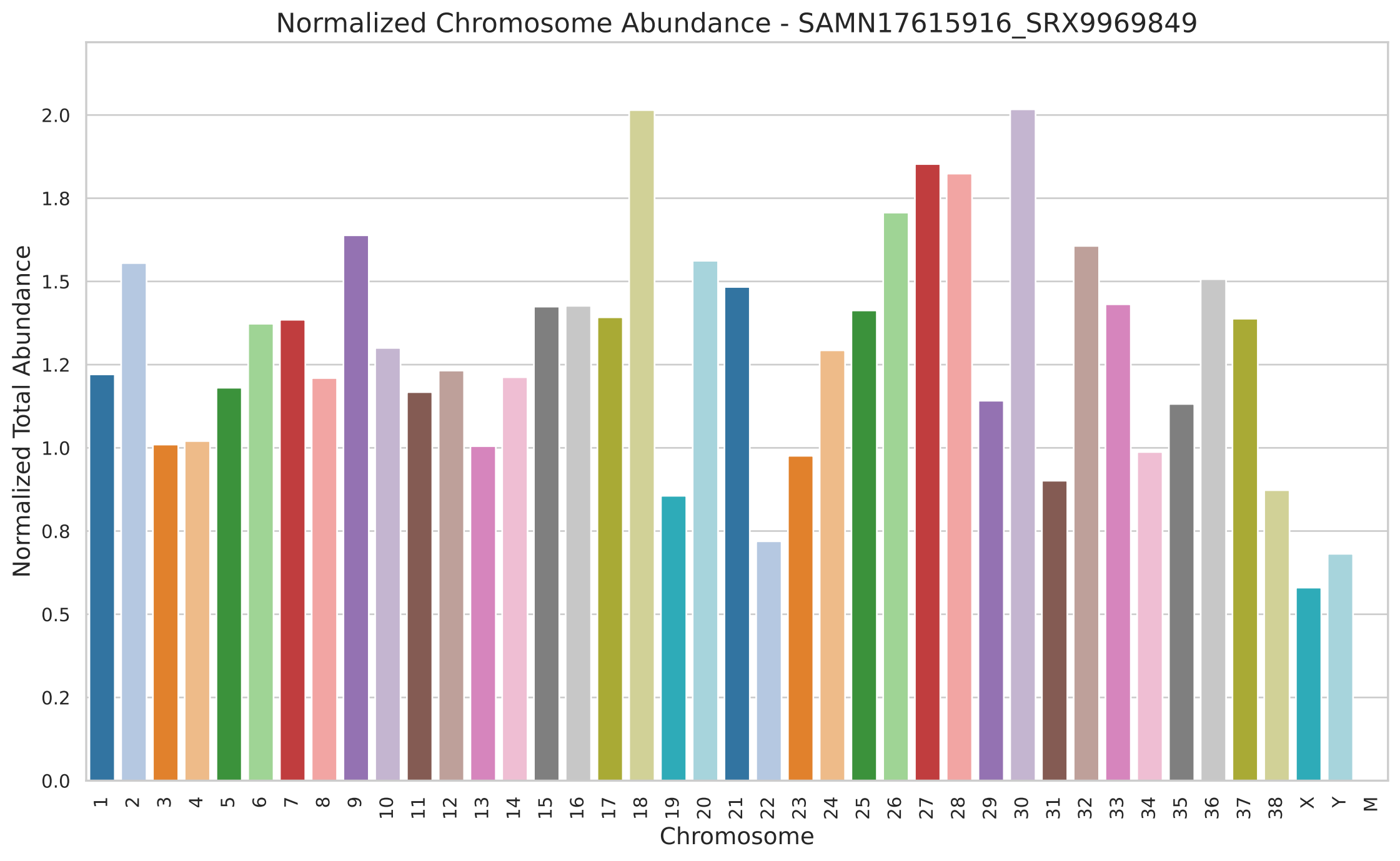

Normalized Chromosome Abundance - SAMN17615909_SRX9969841
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

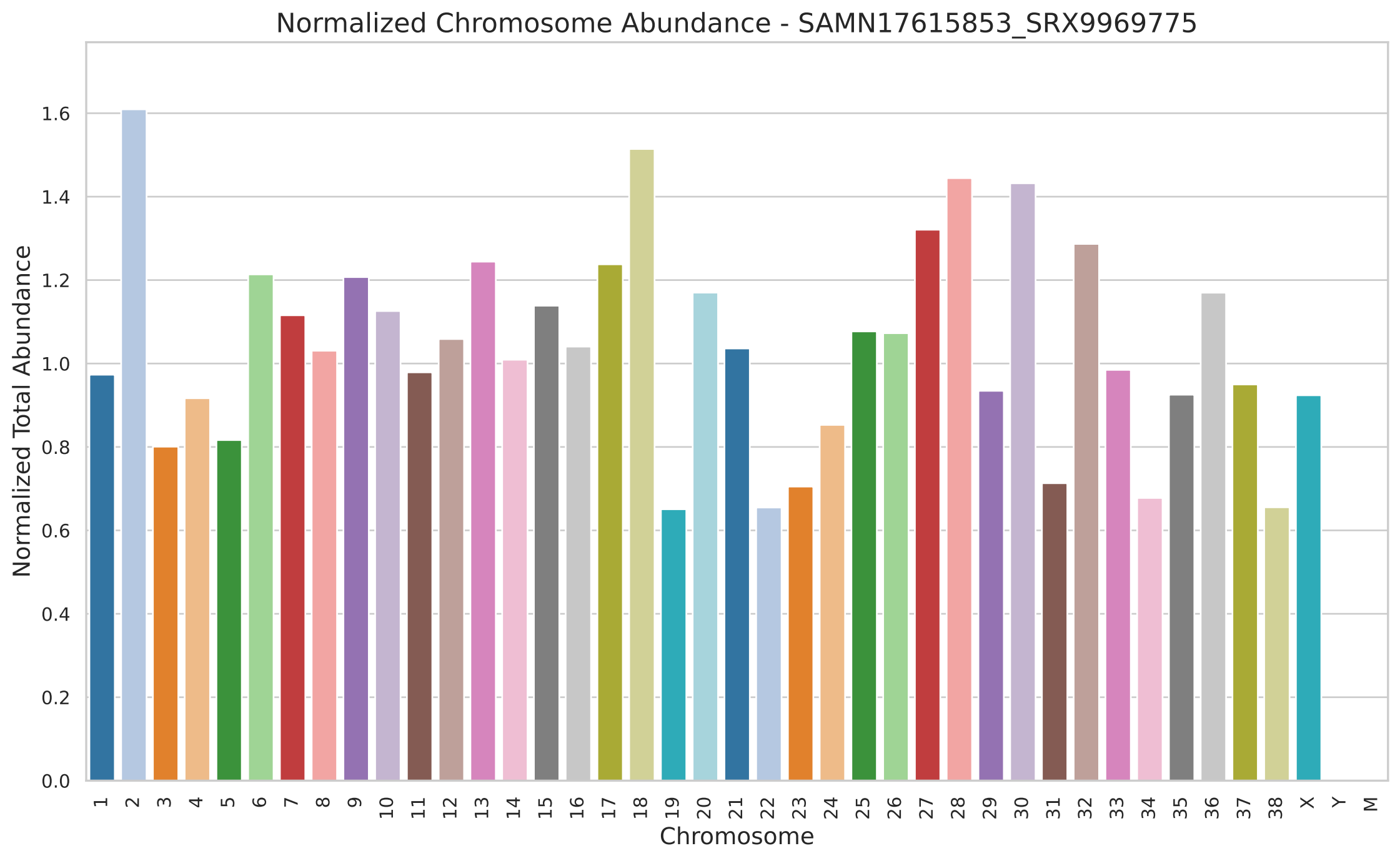

Normalized Chromosome Abundance - SAMN17615936_SRX9969753
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

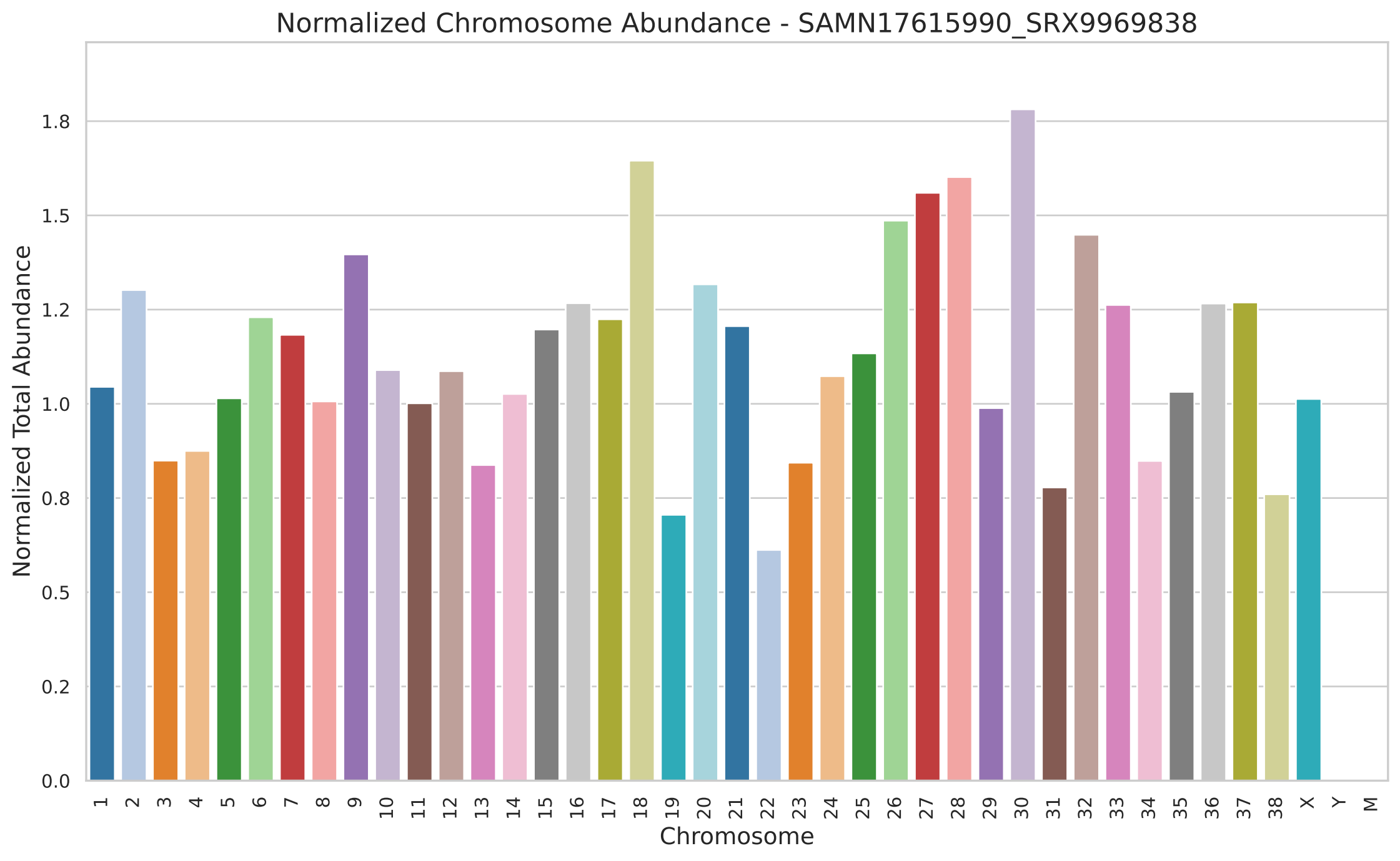

Normalized Chromosome Abundance - SAMN17615938_SRX9969755
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

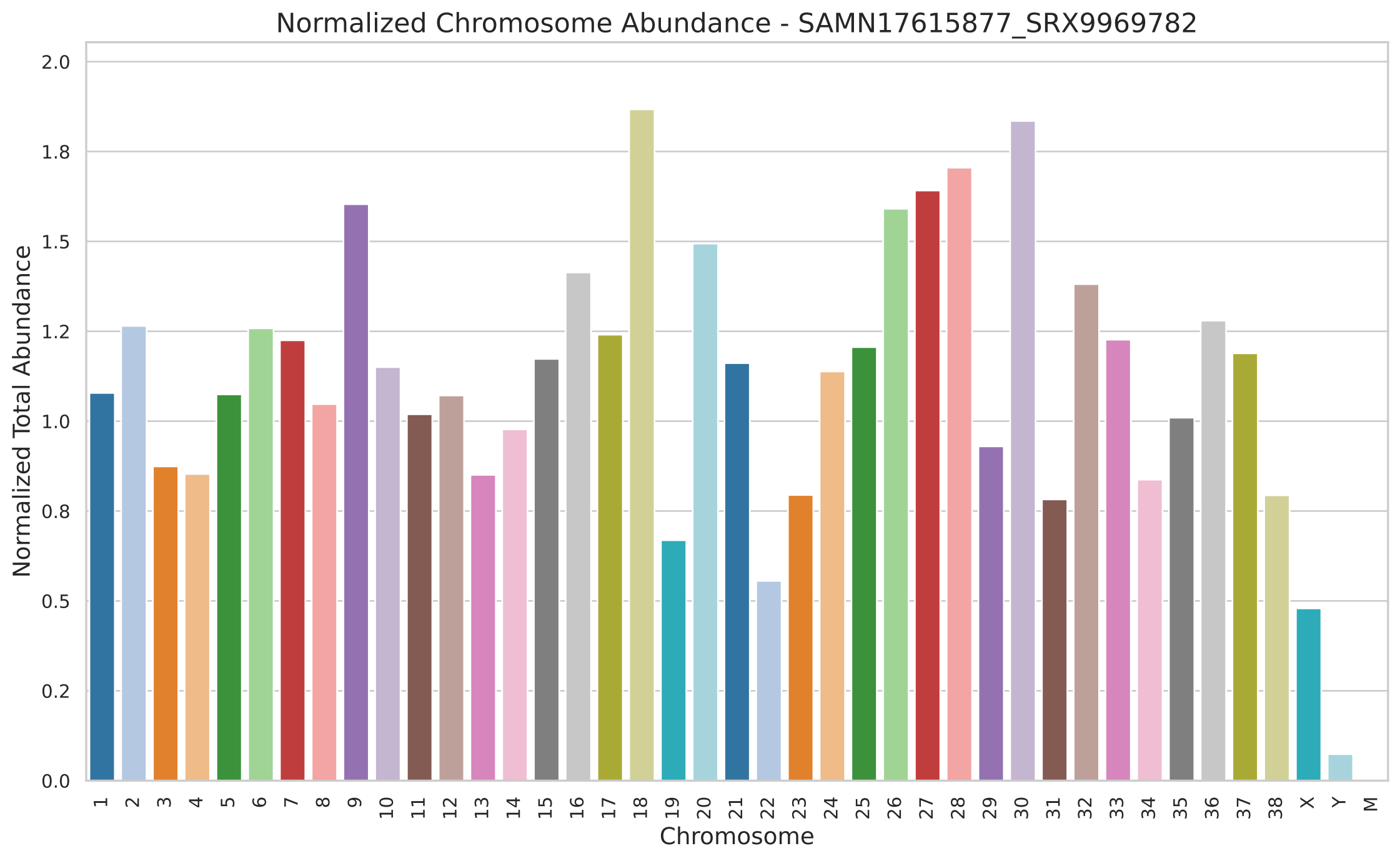

Normalized Chromosome Abundance - SAMN17615989_SRX9969837
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

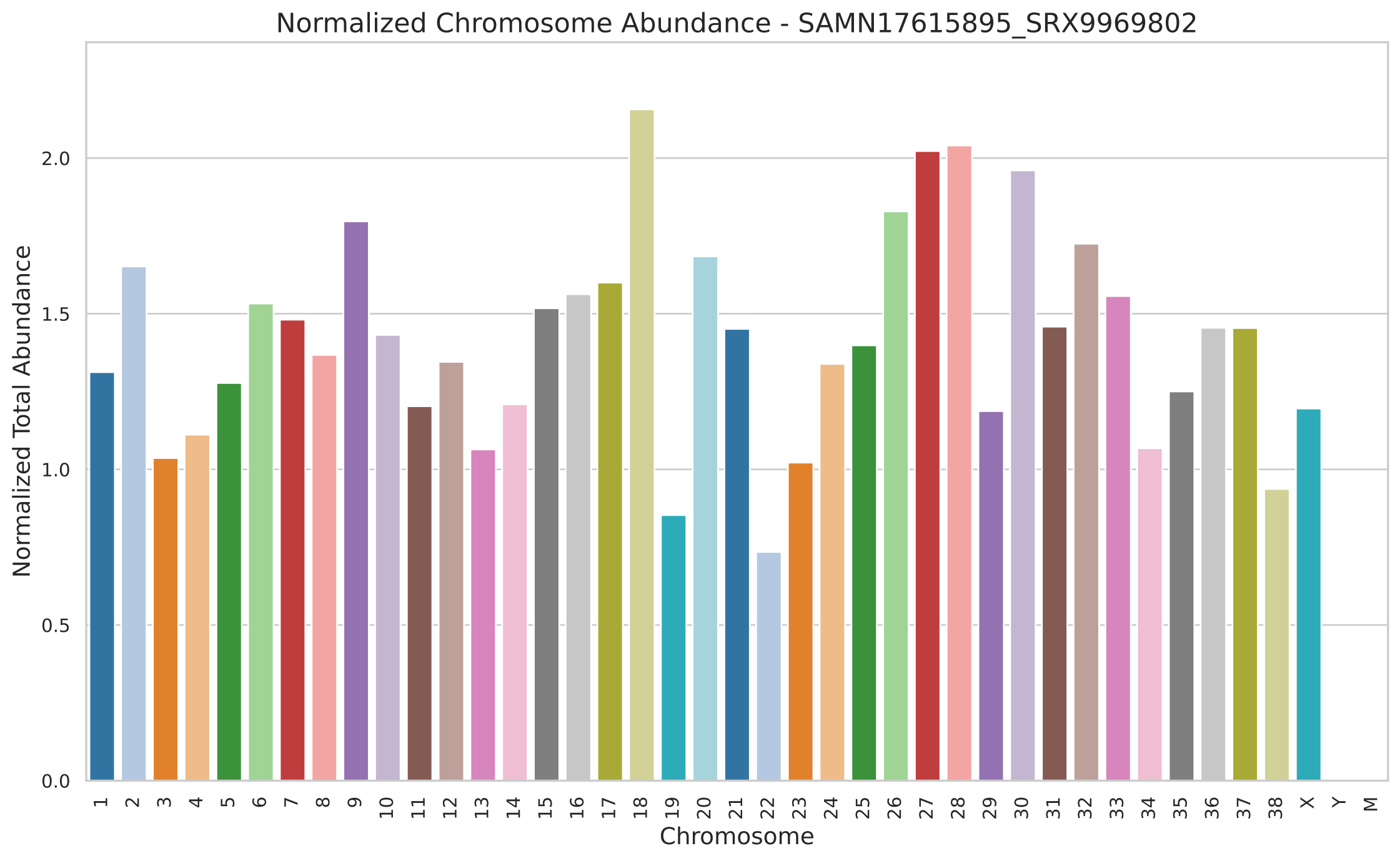

Normalized Chromosome Abundance - SAMN17615892_SRX9969799
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

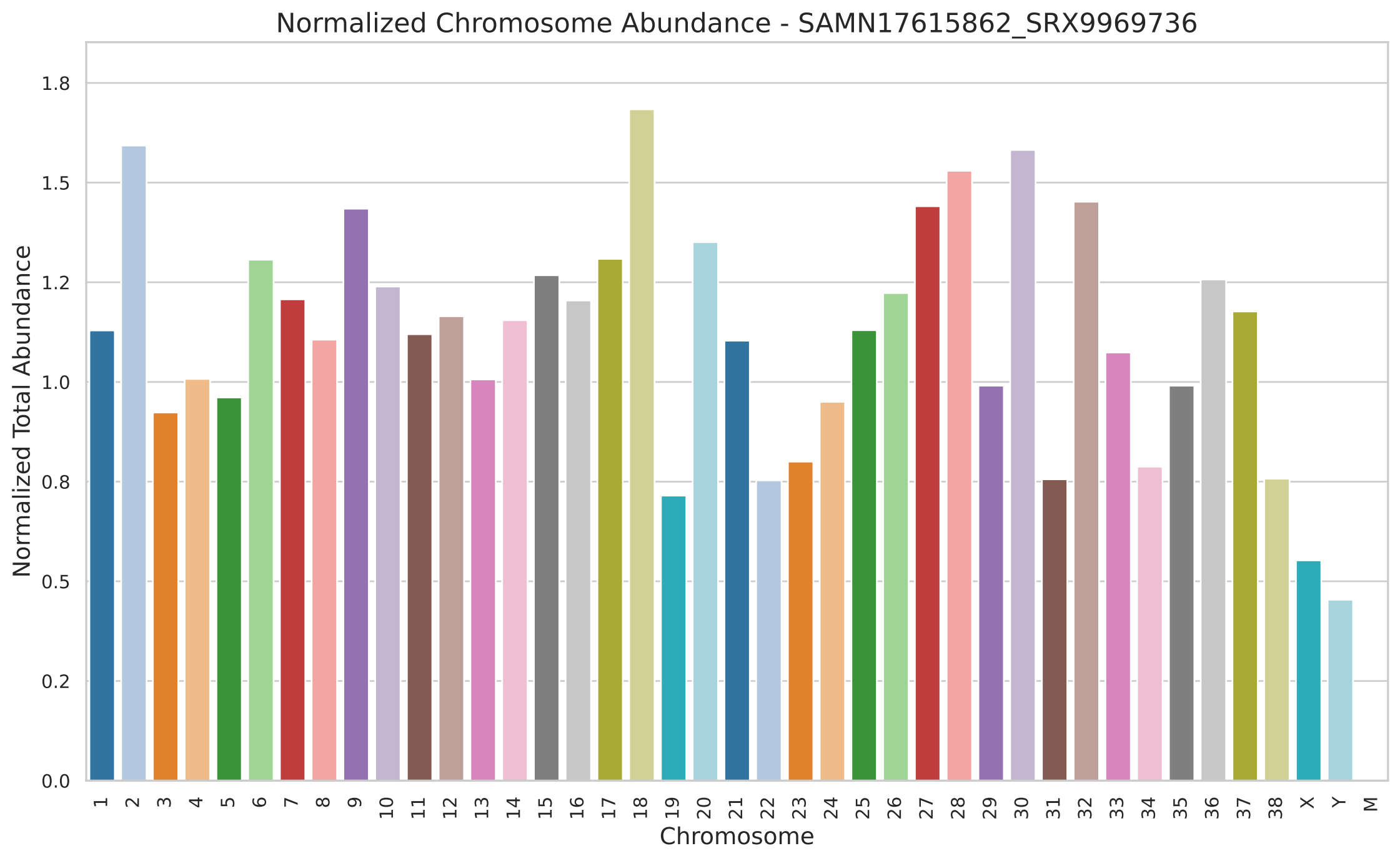

Normalized Chromosome Abundance - SAMN17615916_SRX9969849
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

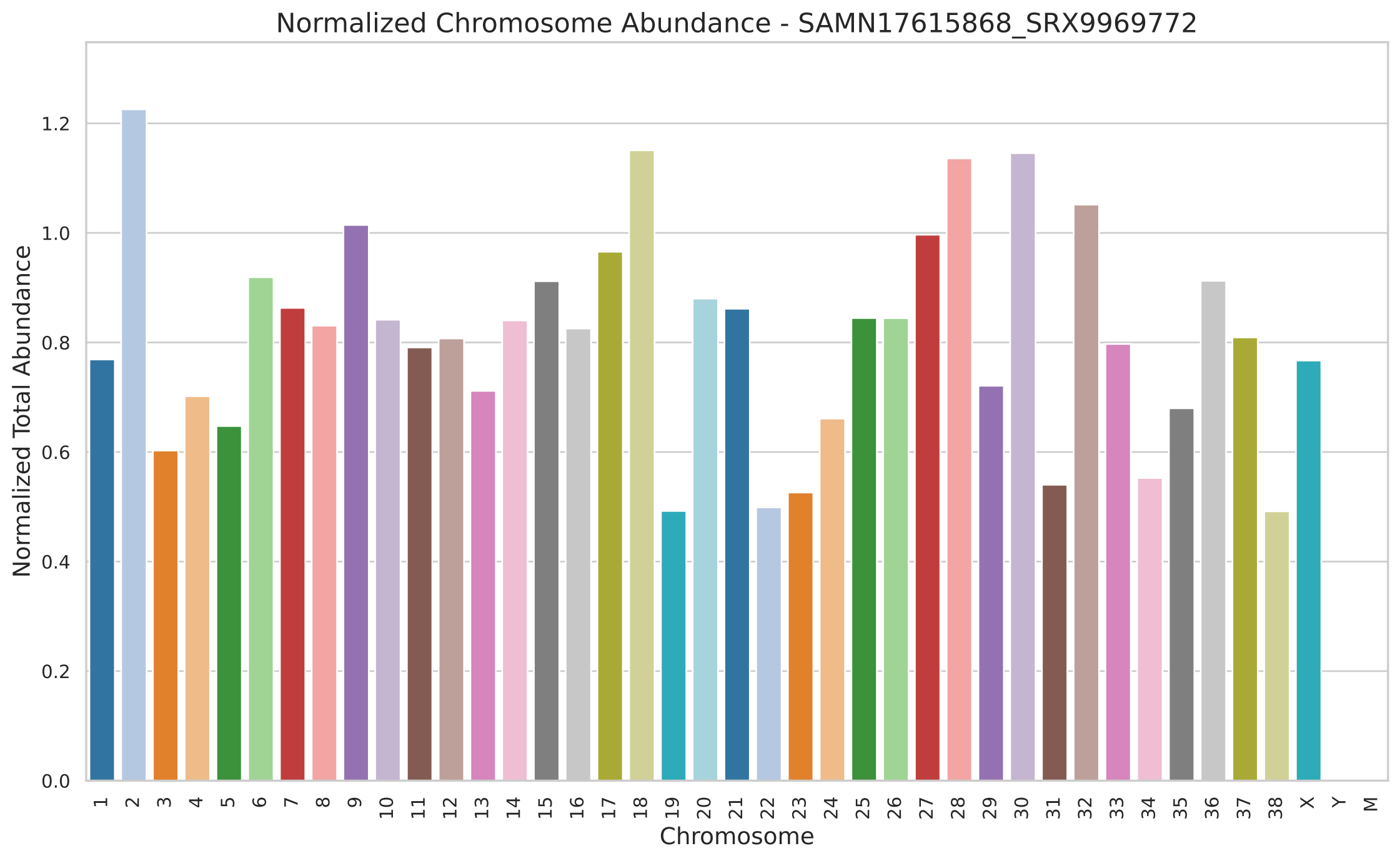

Normalized Chromosome Abundance - SAMN17615853_SRX9969775
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

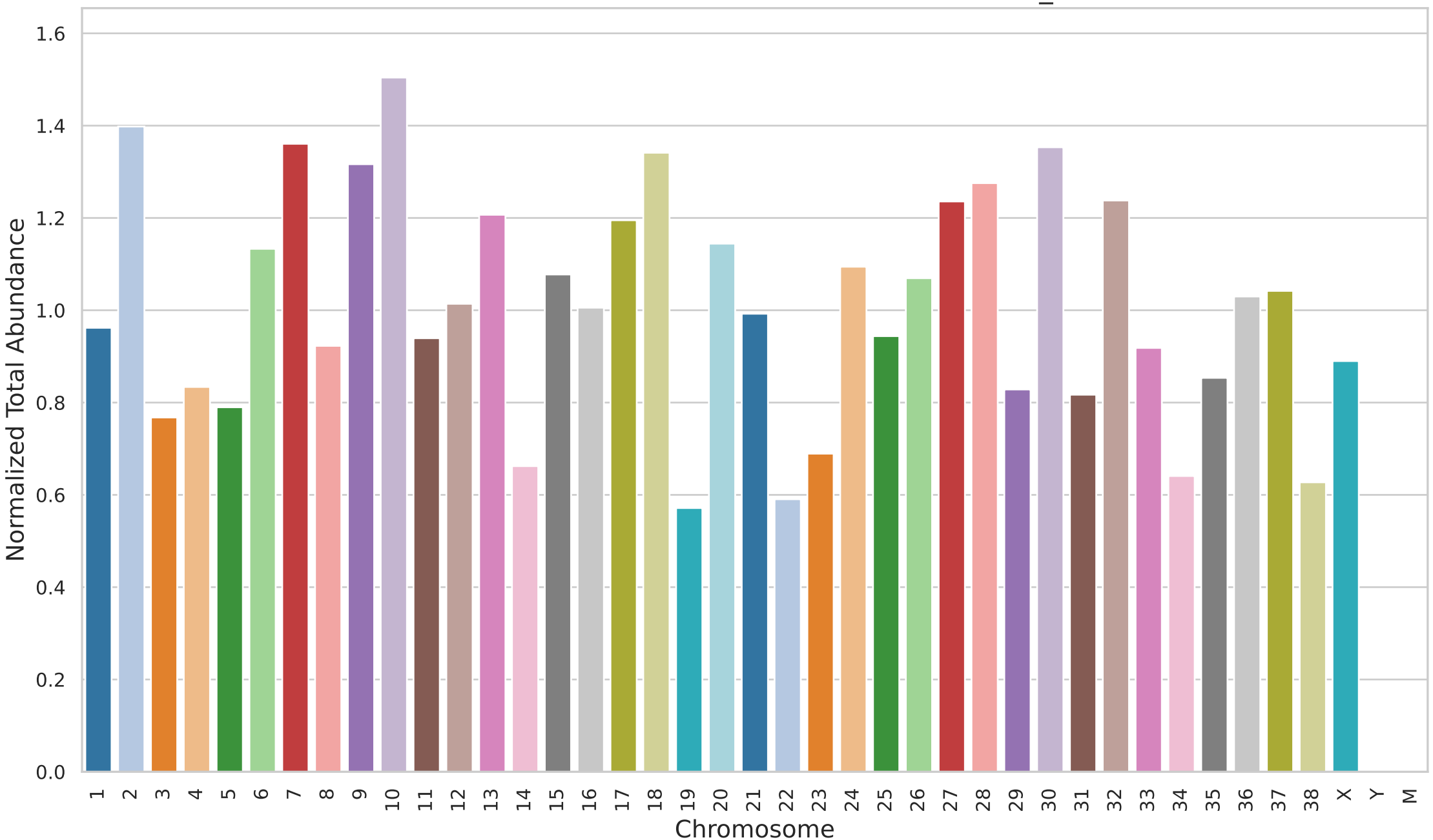

Normalized Chromosome Abundance - SAMN17615990_SRX9969838
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

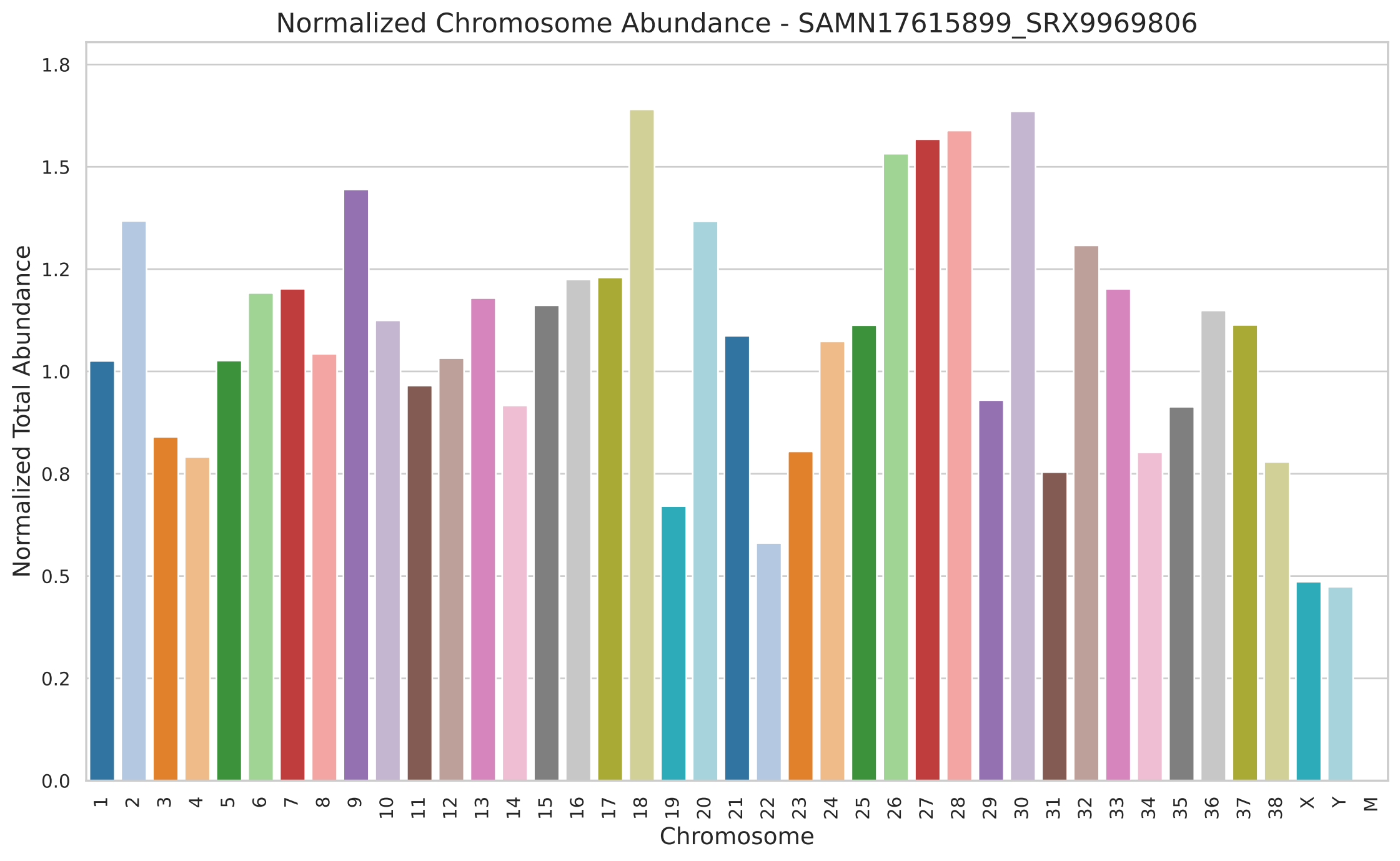

Normalized Chromosome Abundance - SAMN17615877_SRX9969782
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

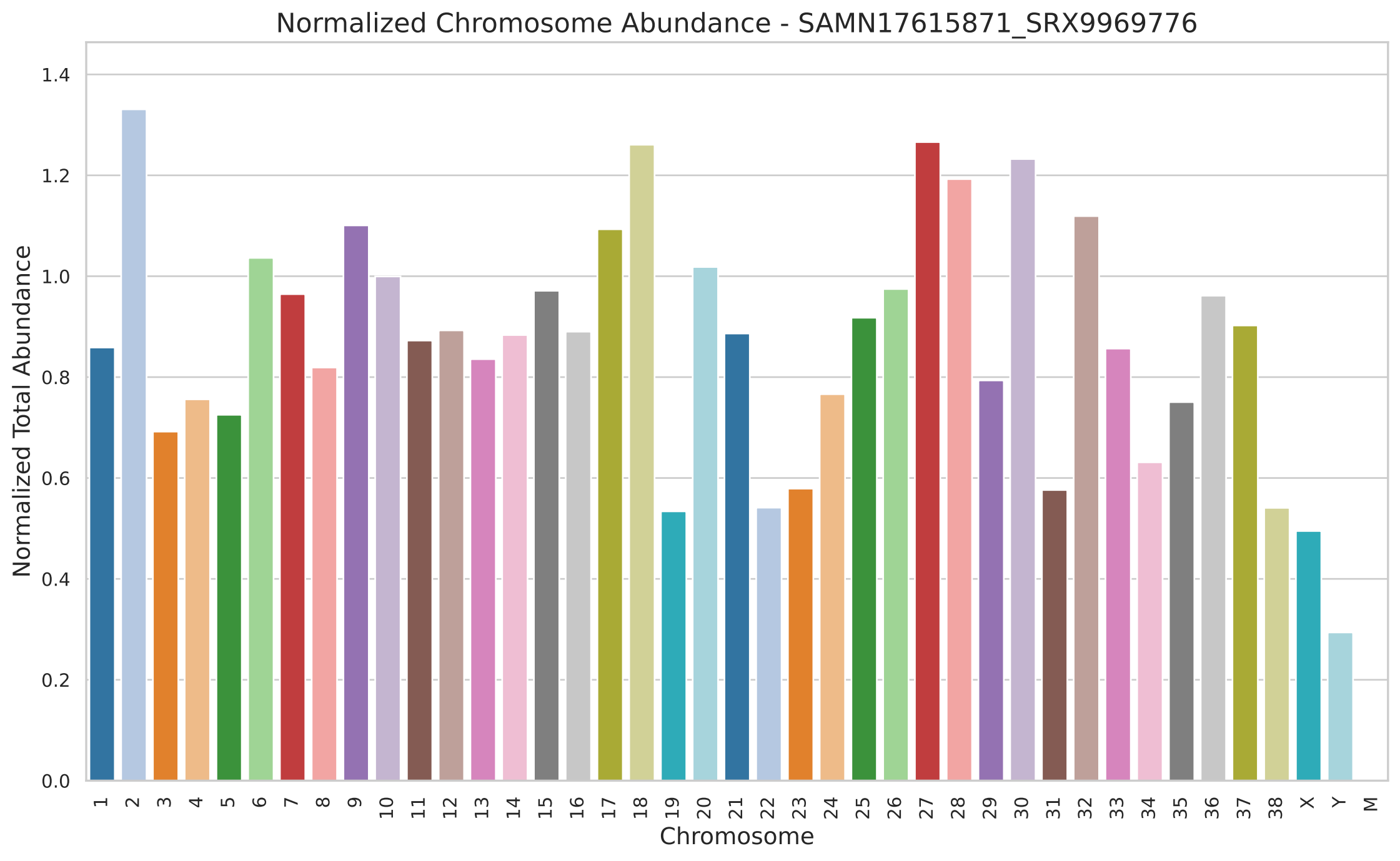

Normalized Chromosome Abundance - SAMN17615895_SRX9969802
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

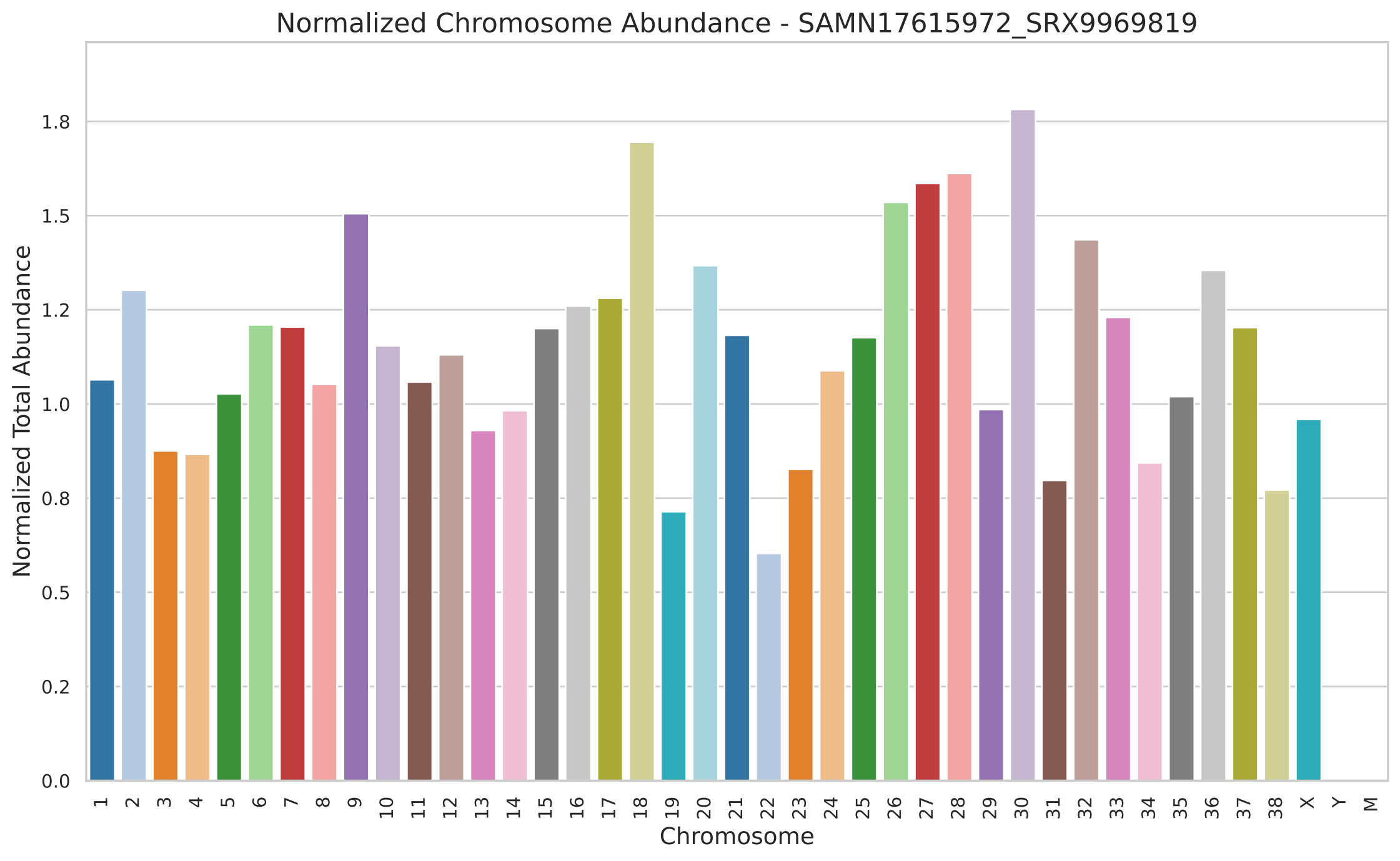

Normalized Chromosome Abundance - SAMN17615862_SRX9969736
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

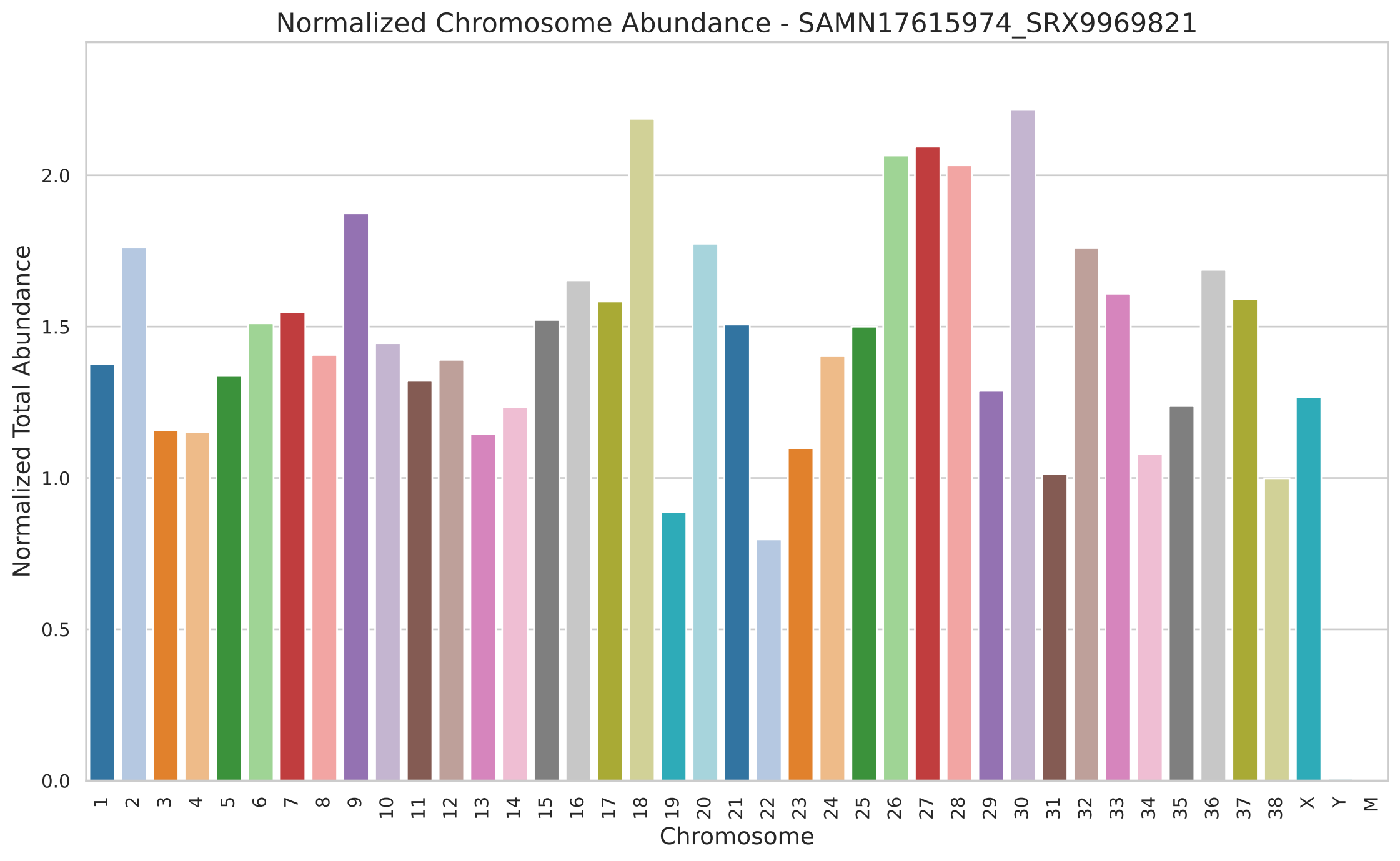

Normalized Chromosome Abundance - SAMN17615868_SRX9969772
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

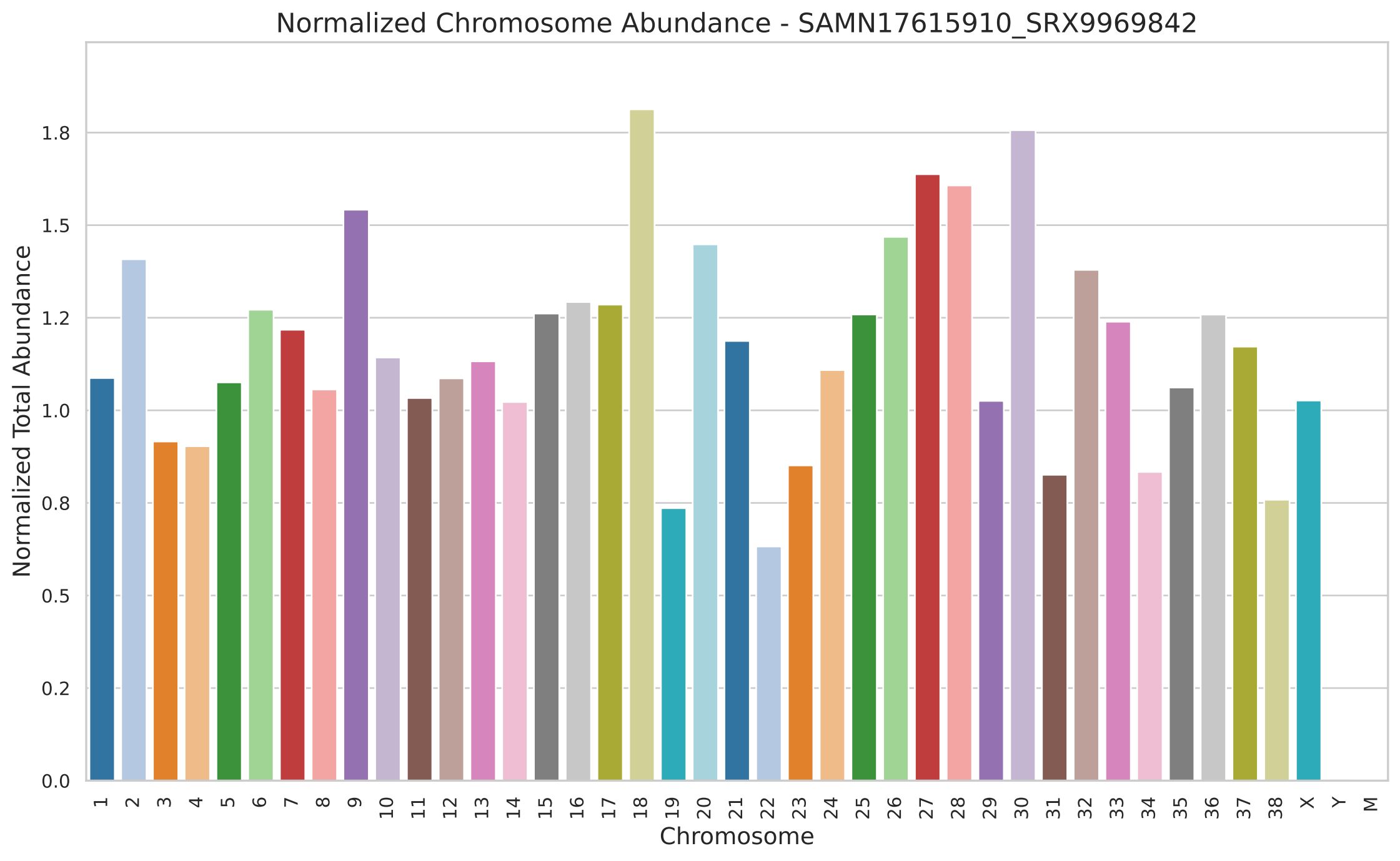

Normalized Chromosome Abundance - SAMN17615869_SRX9969773
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

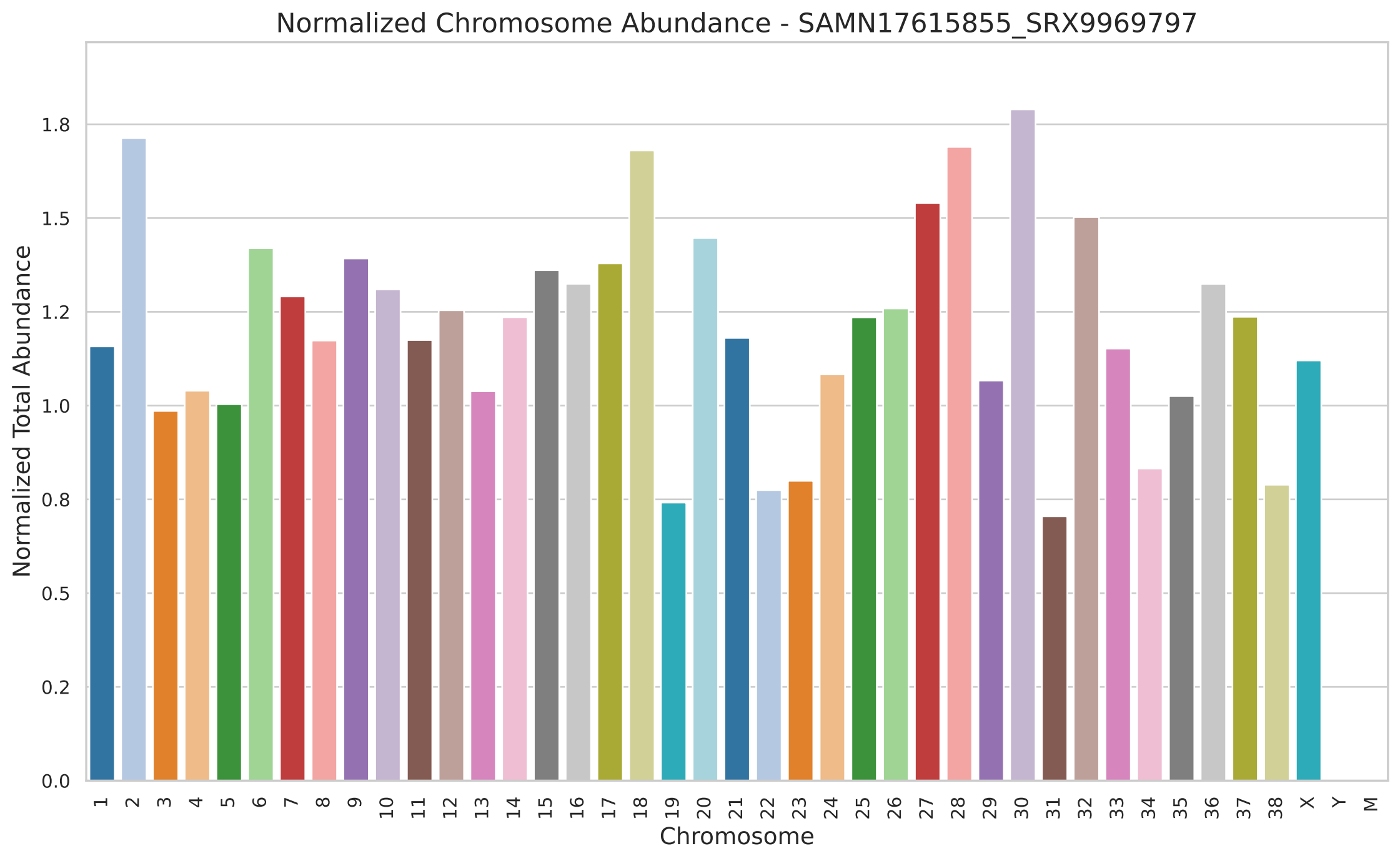

Normalized Chromosome Abundance - SAMN17615899_SRX9969806
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

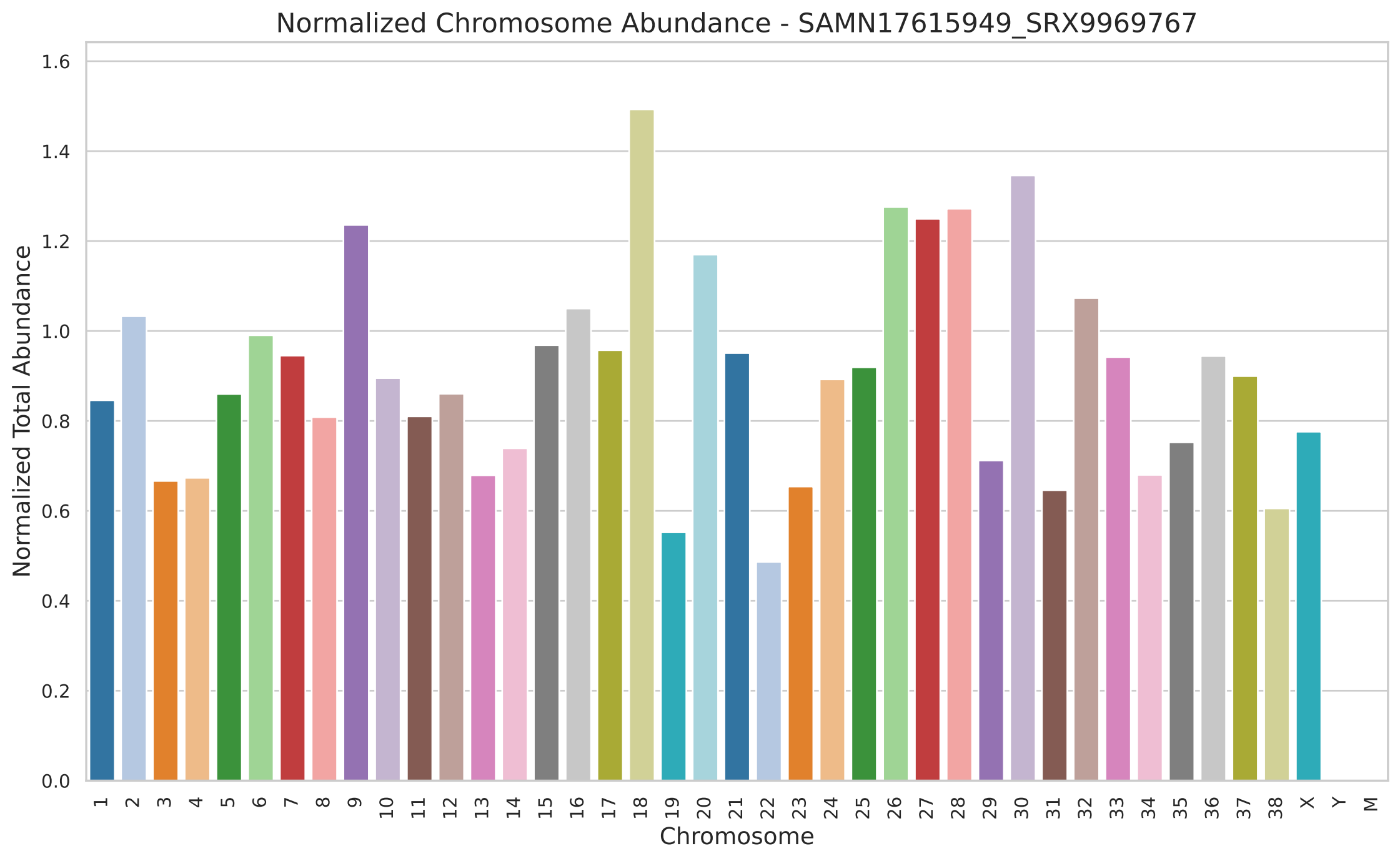

Normalized Chromosome Abundance - SAMN17615871_SRX9969776
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

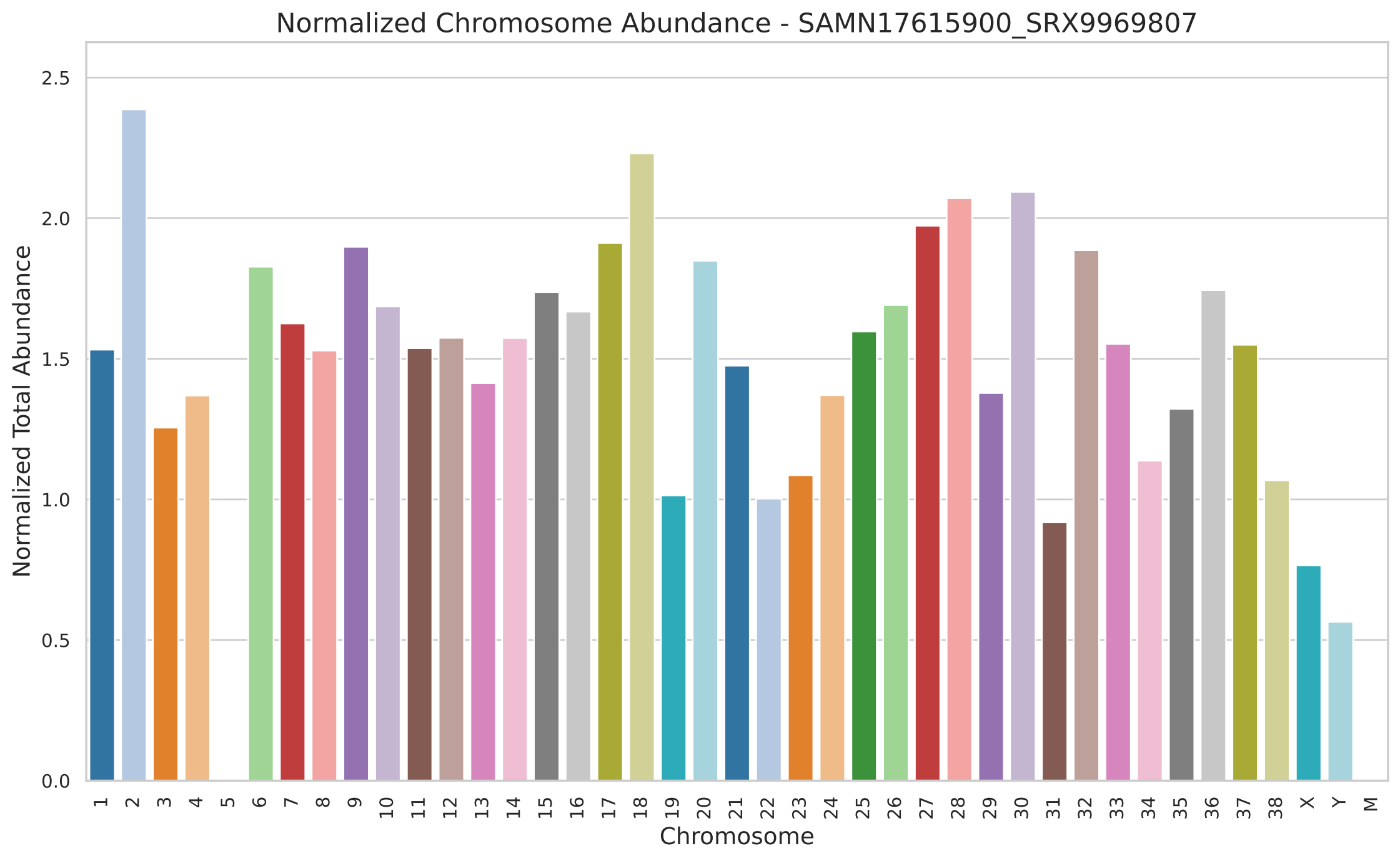

Normalized Chromosome Abundance - SAMN17615972_SRX9969819
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

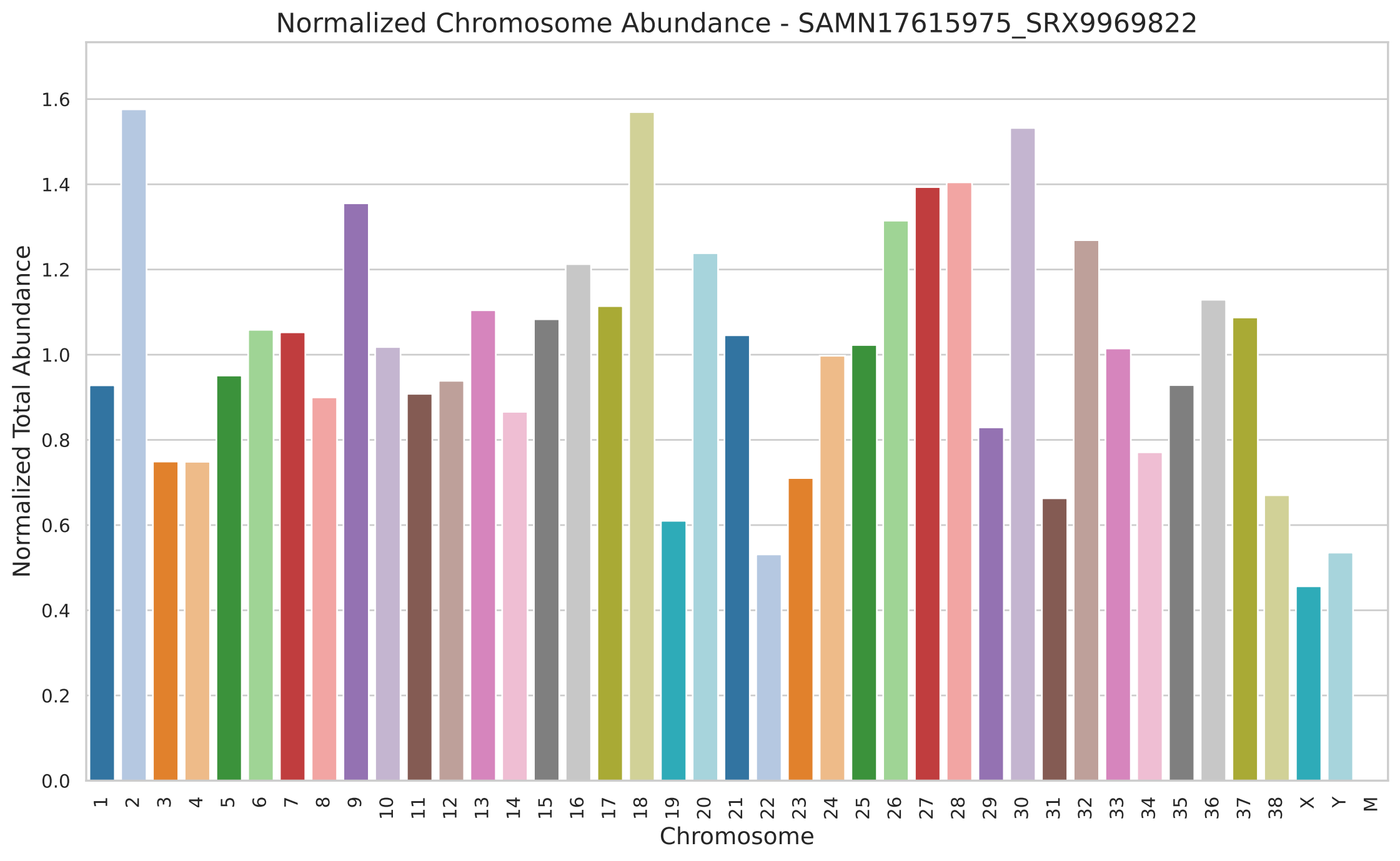

Normalized Chromosome Abundance - SAMN17615974_SRX9969821
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

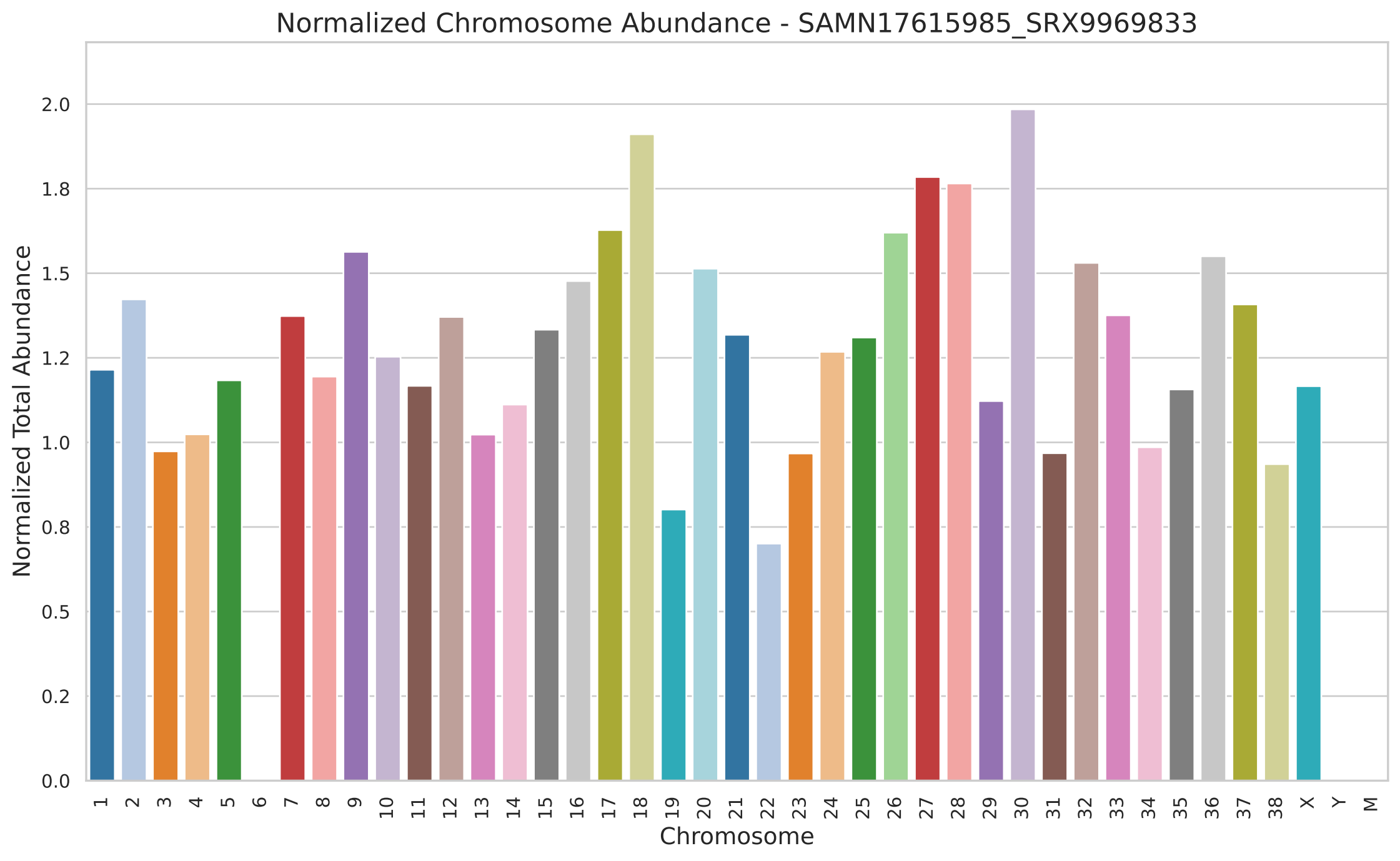

Normalized Chromosome Abundance - SAMN17615910_SRX9969842
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

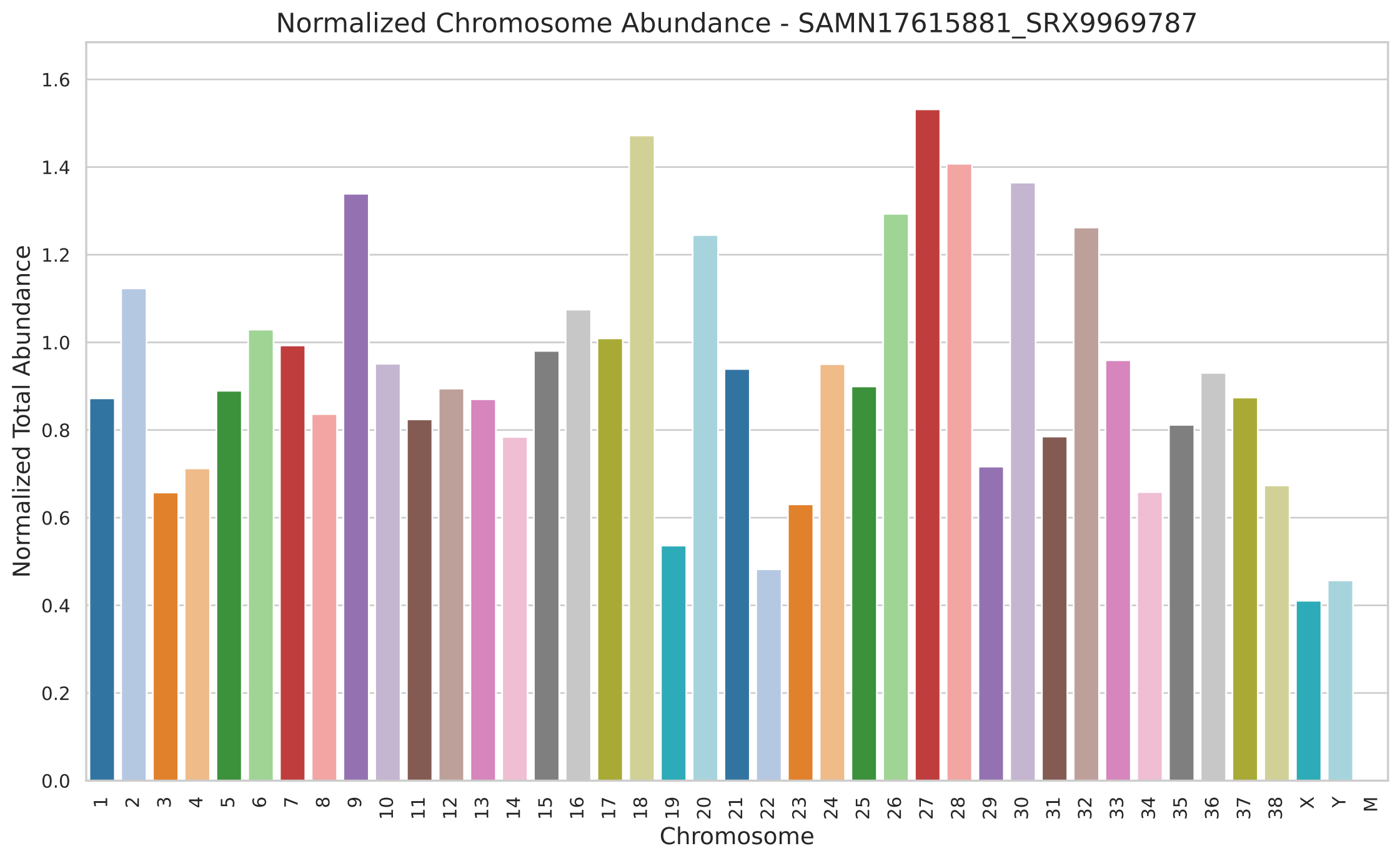

Normalized Chromosome Abundance - SAMN17615855_SRX9969797
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

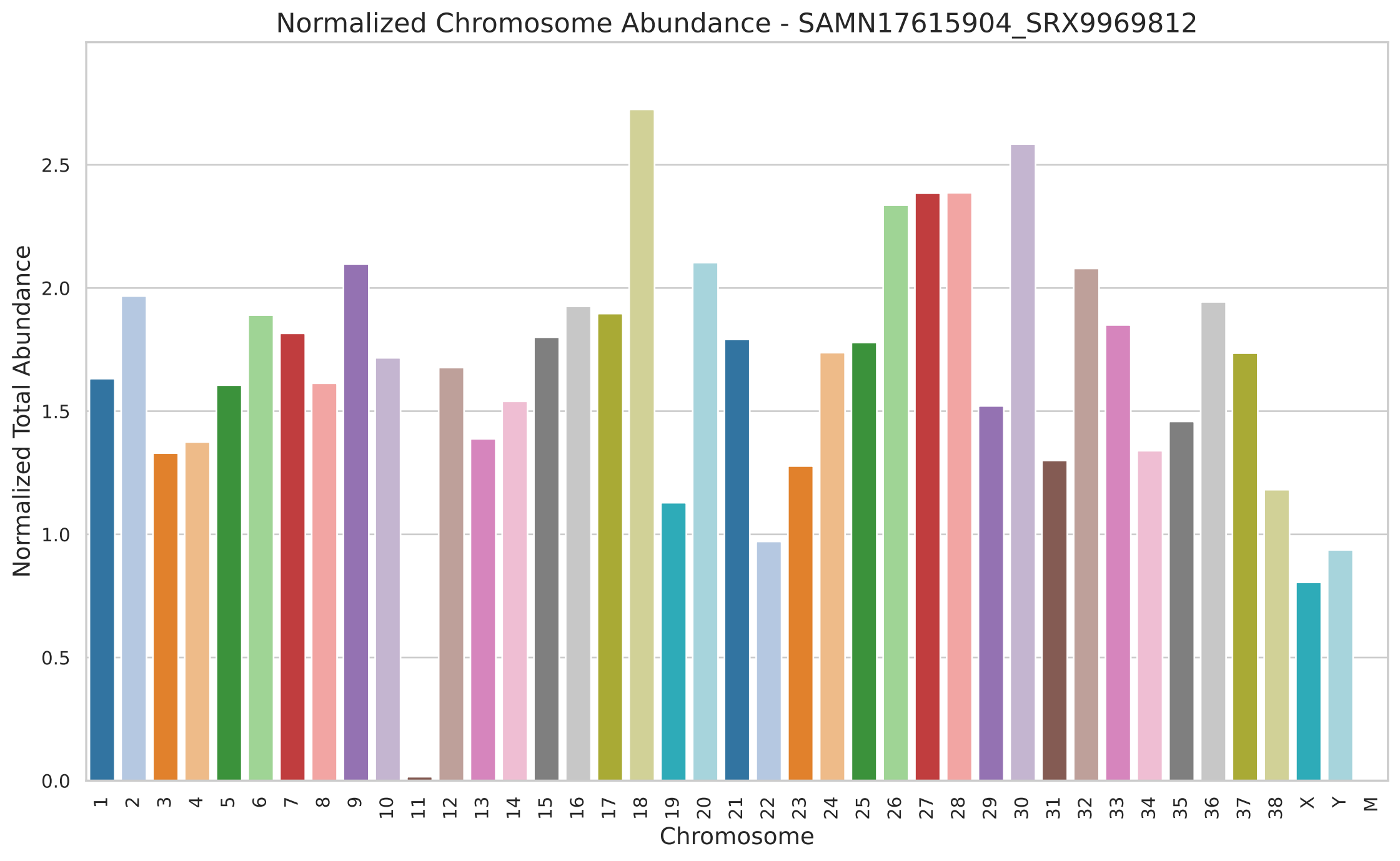

Normalized Chromosome Abundance - SAMN17615949_SRX9969767
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

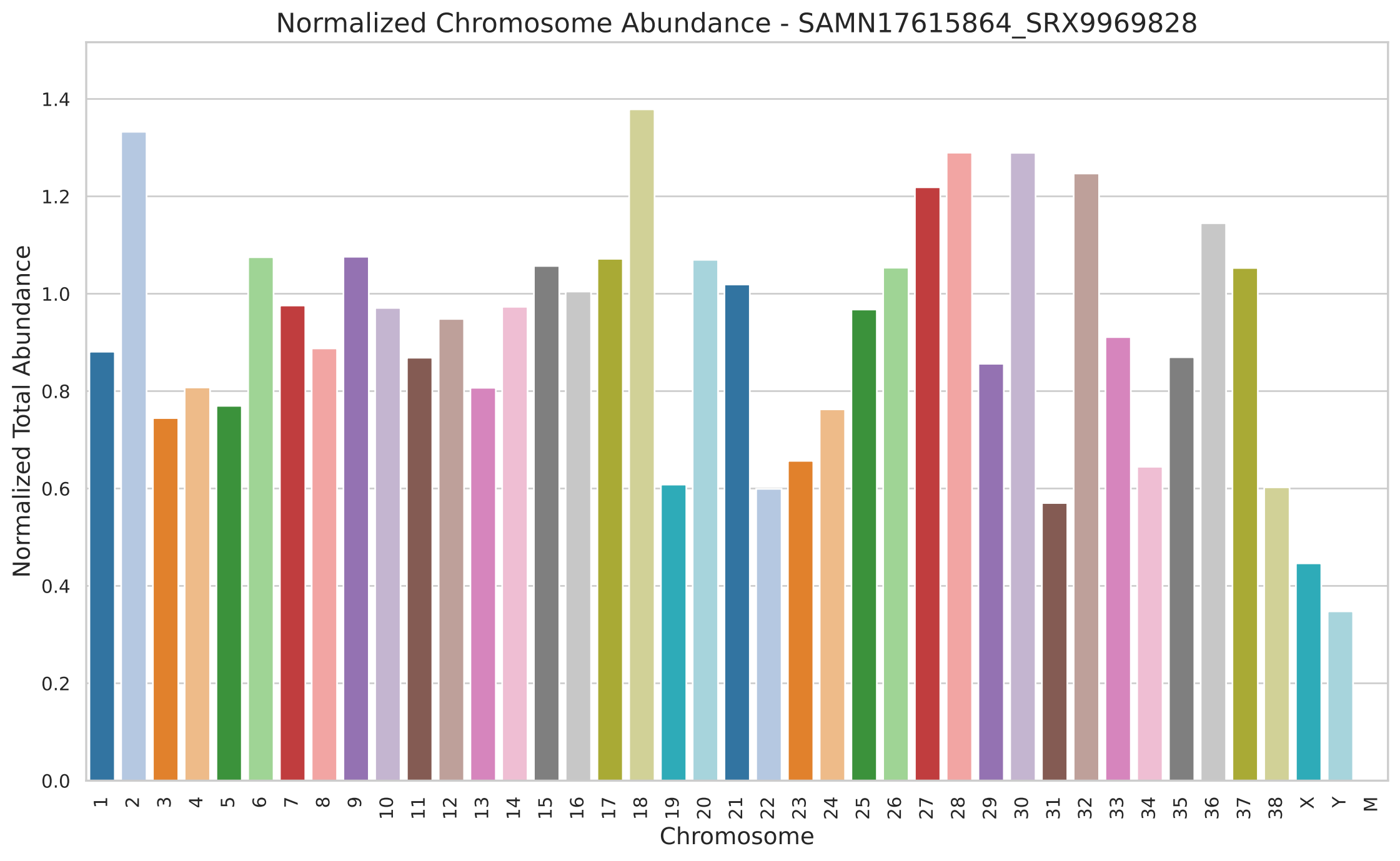

Normalized Chromosome Abundance - SAMN17615900_SRX9969807
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

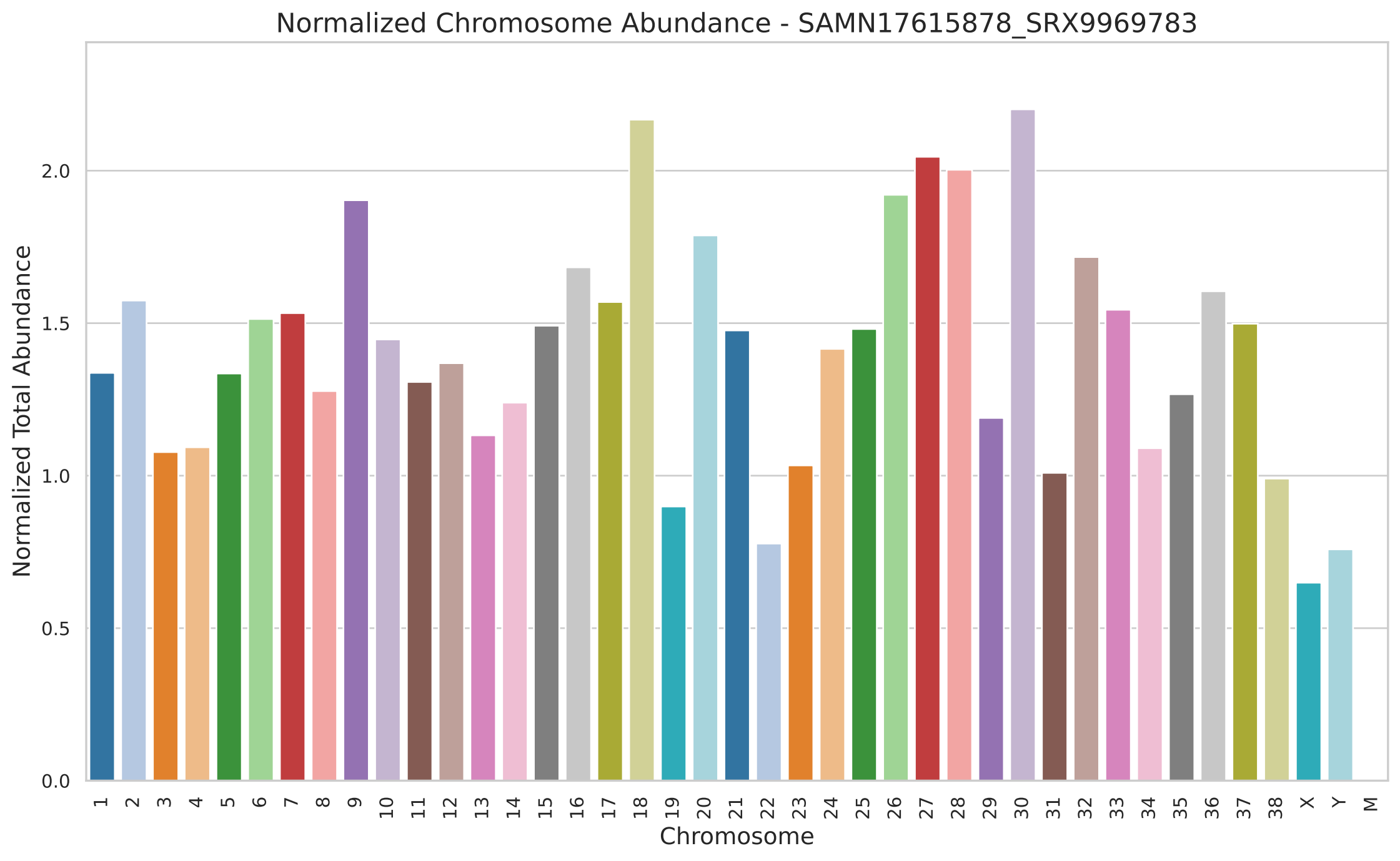

Normalized Chromosome Abundance - SAMN17615975_SRX9969822
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

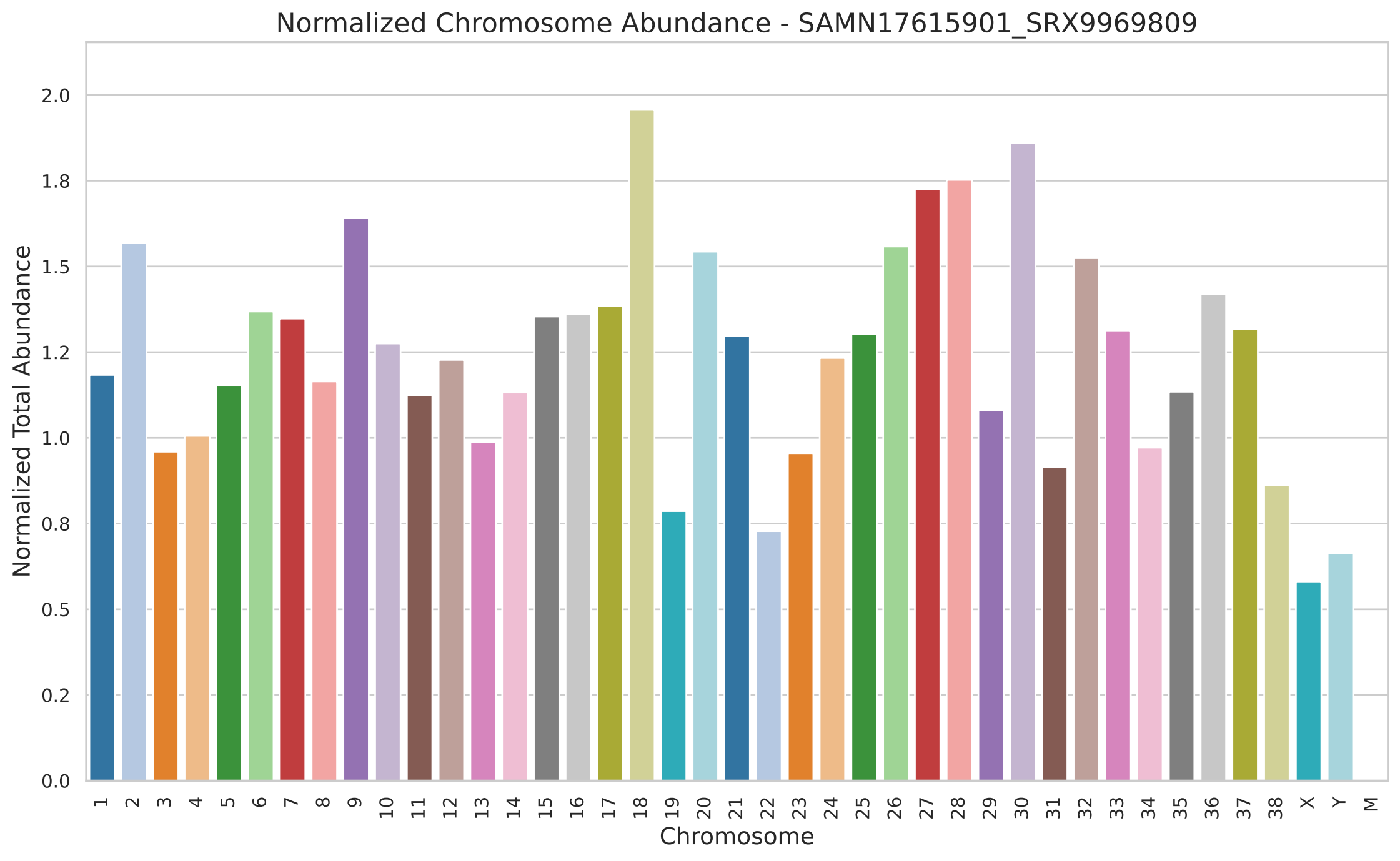

Normalized Chromosome Abundance - SAMN17615985_SRX9969833
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

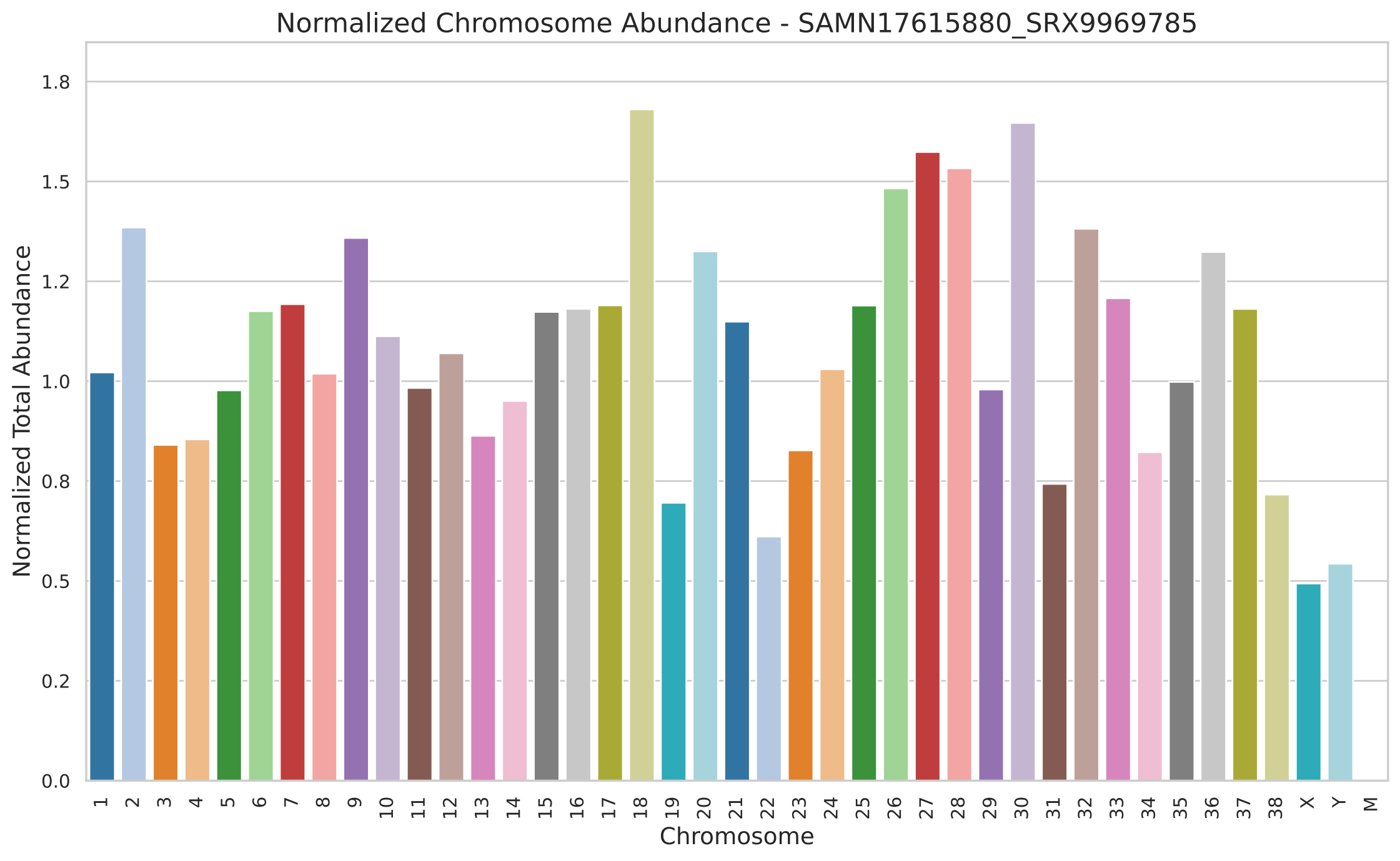

Normalized Chromosome Abundance - SAMN17615881_SRX9969787
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

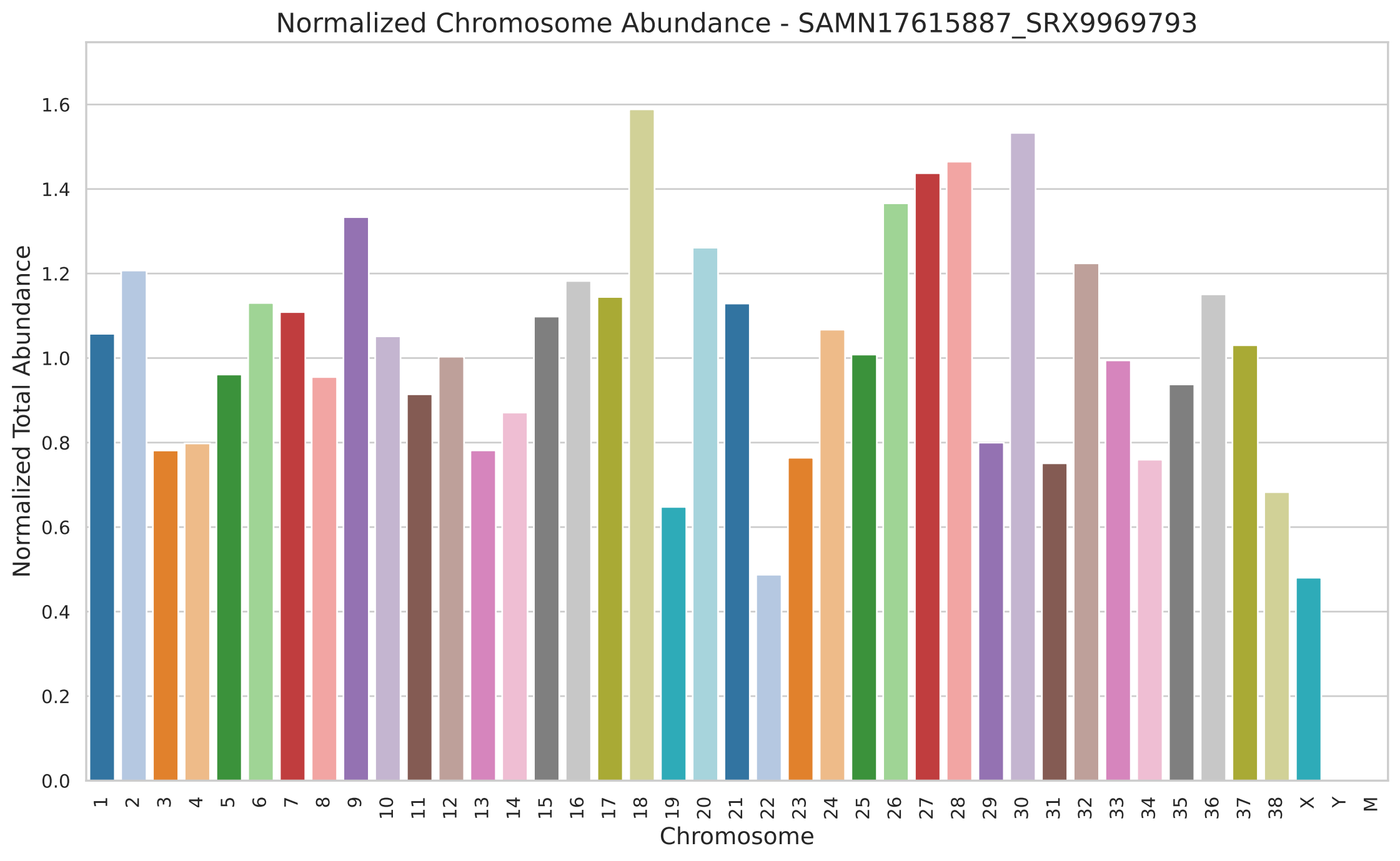

Normalized Chromosome Abundance - SAMN17615904_SRX9969812
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

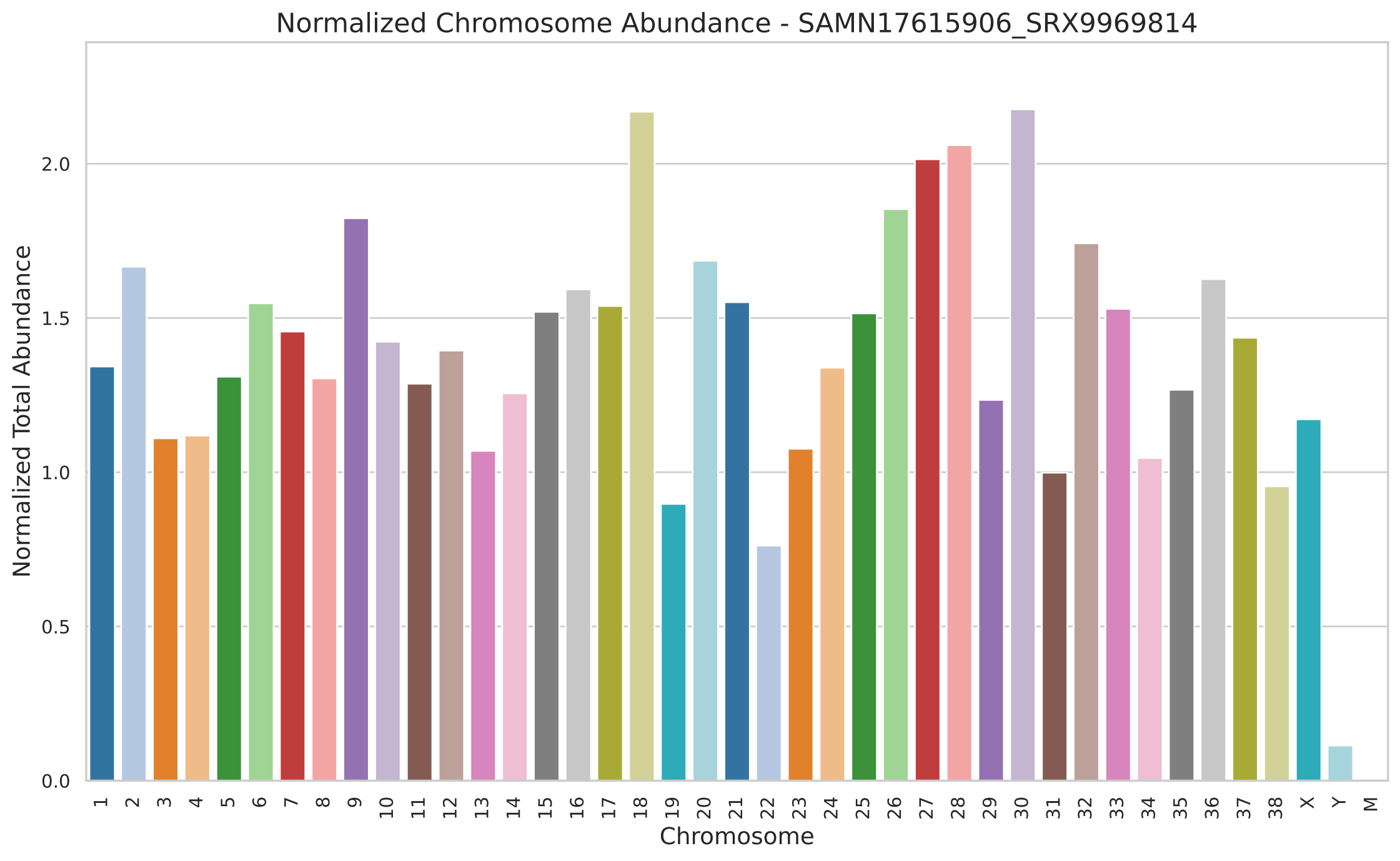

Normalized Chromosome Abundance - SAMN17615864_SRX9969828
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

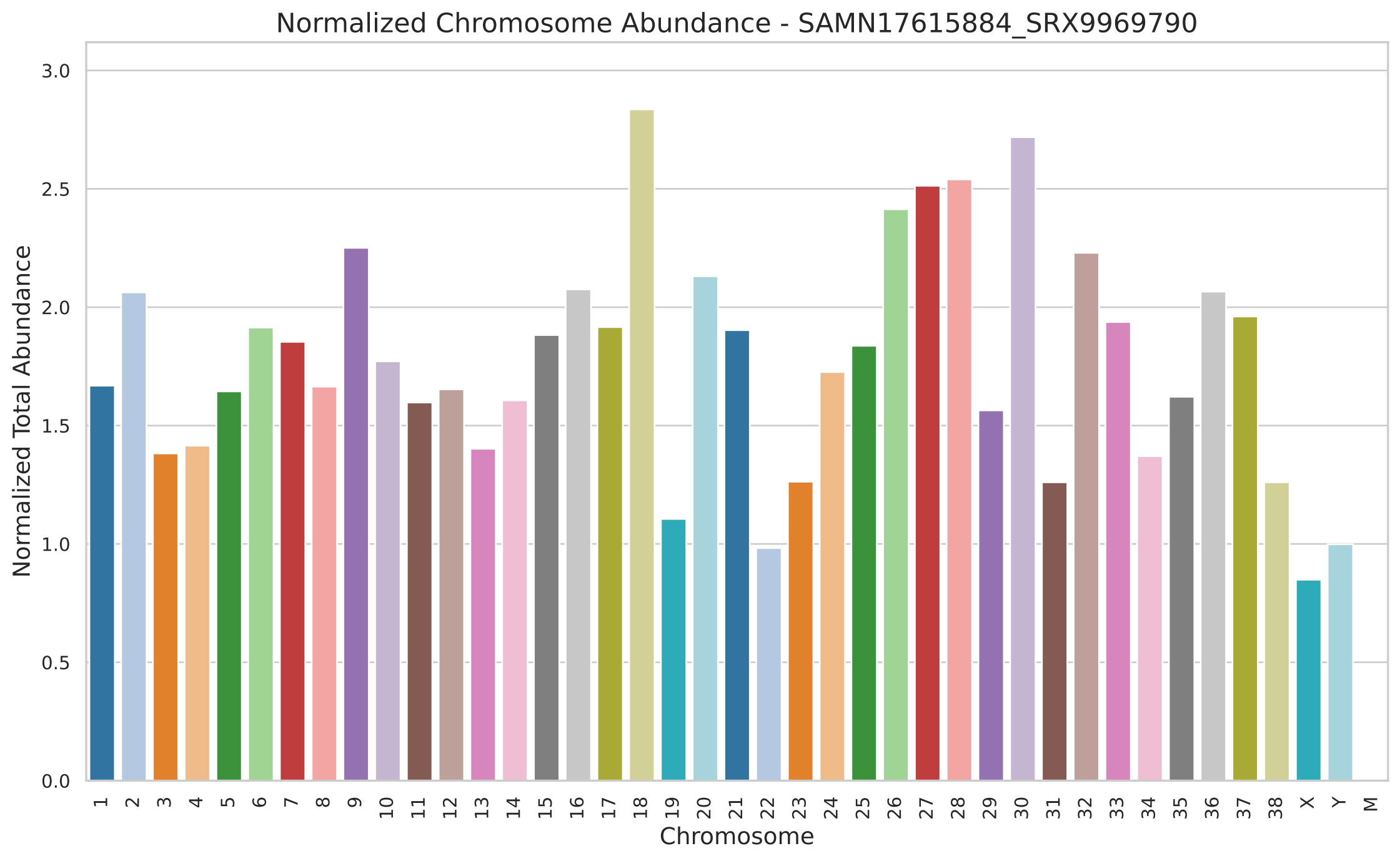

Normalized Chromosome Abundance - SAMN17615878_SRX9969783
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

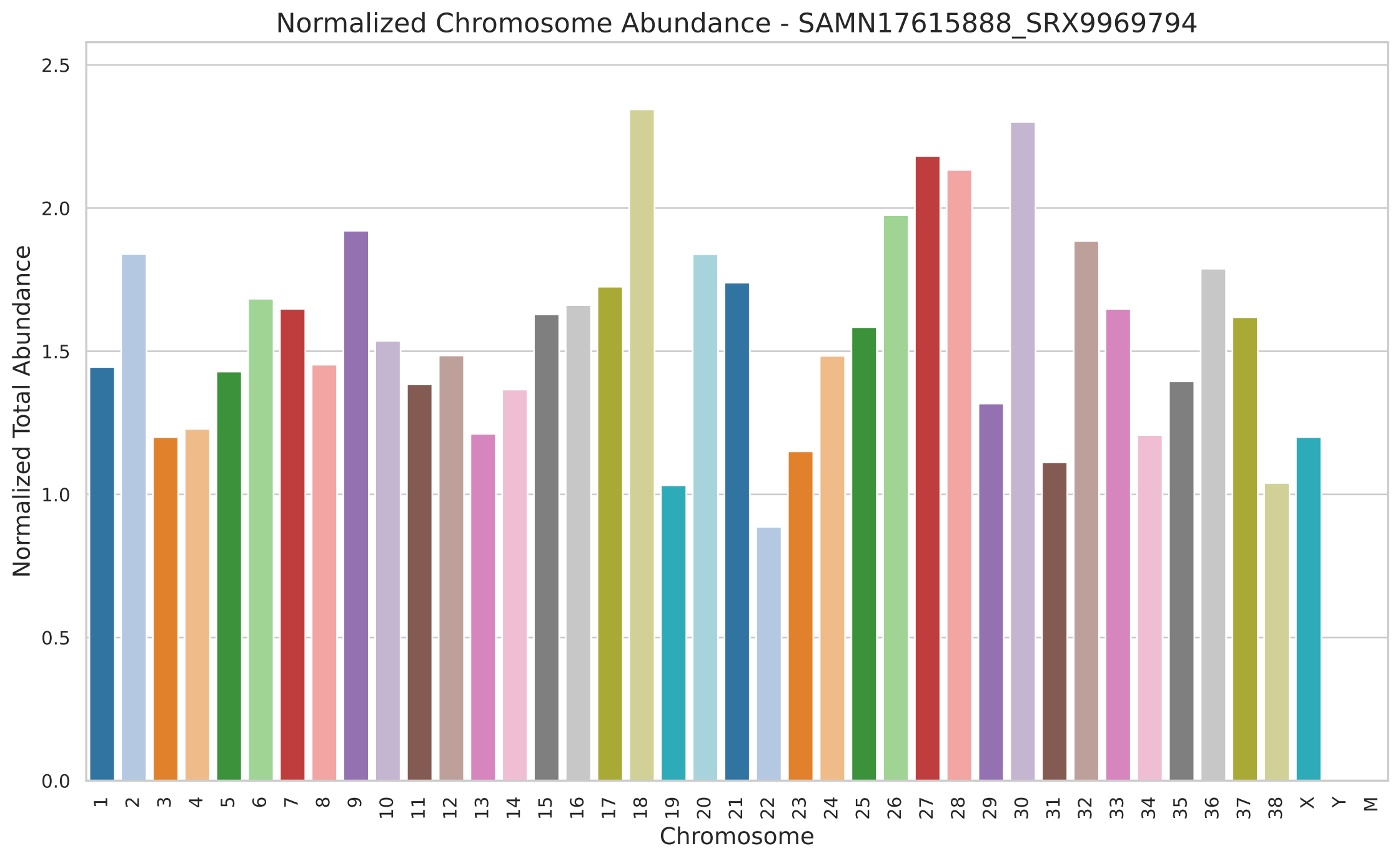

Normalized Chromosome Abundance - SAMN17615901_SRX9969809
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

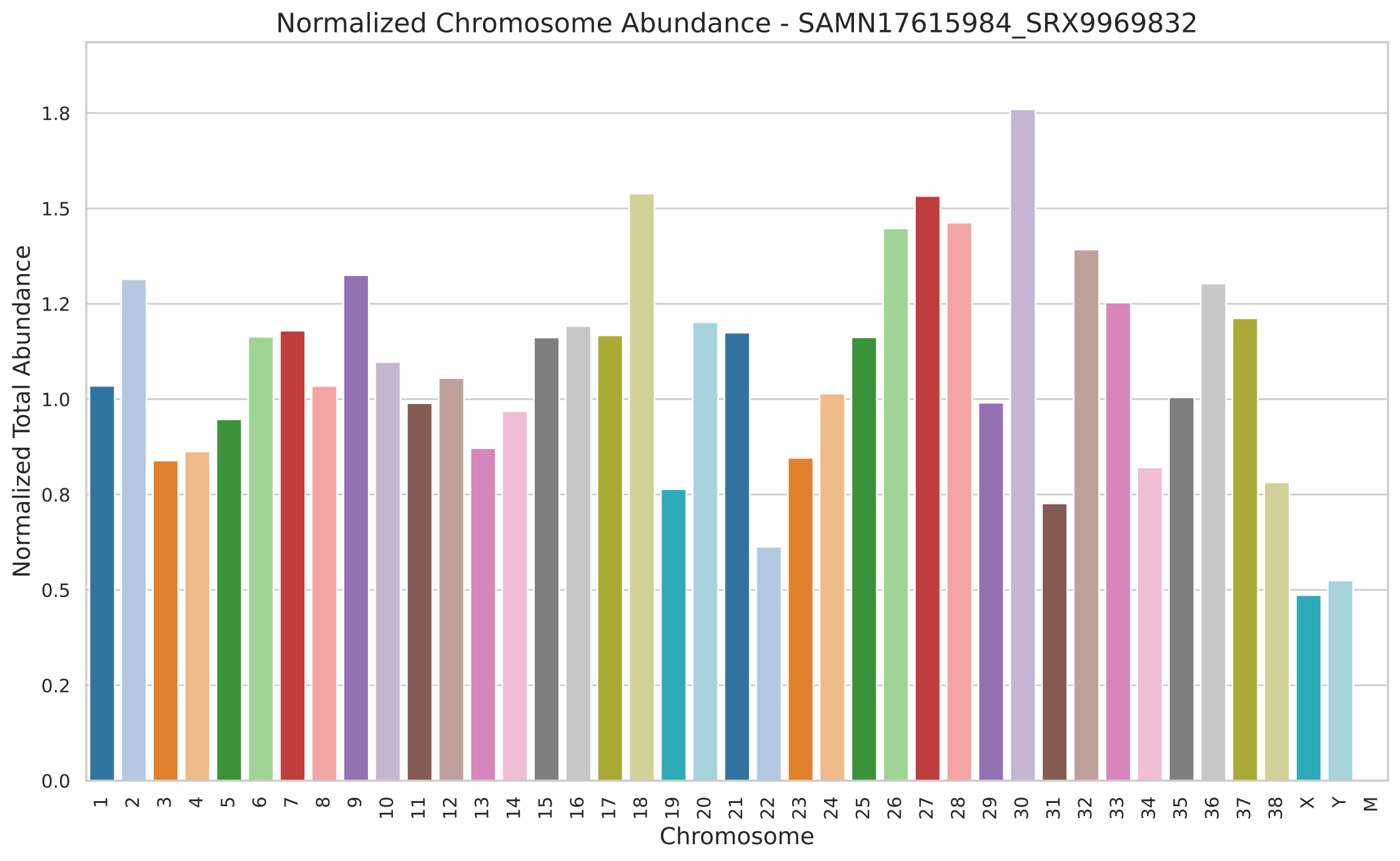

Normalized Chromosome Abundance - SAMN17615880_SRX9969785
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

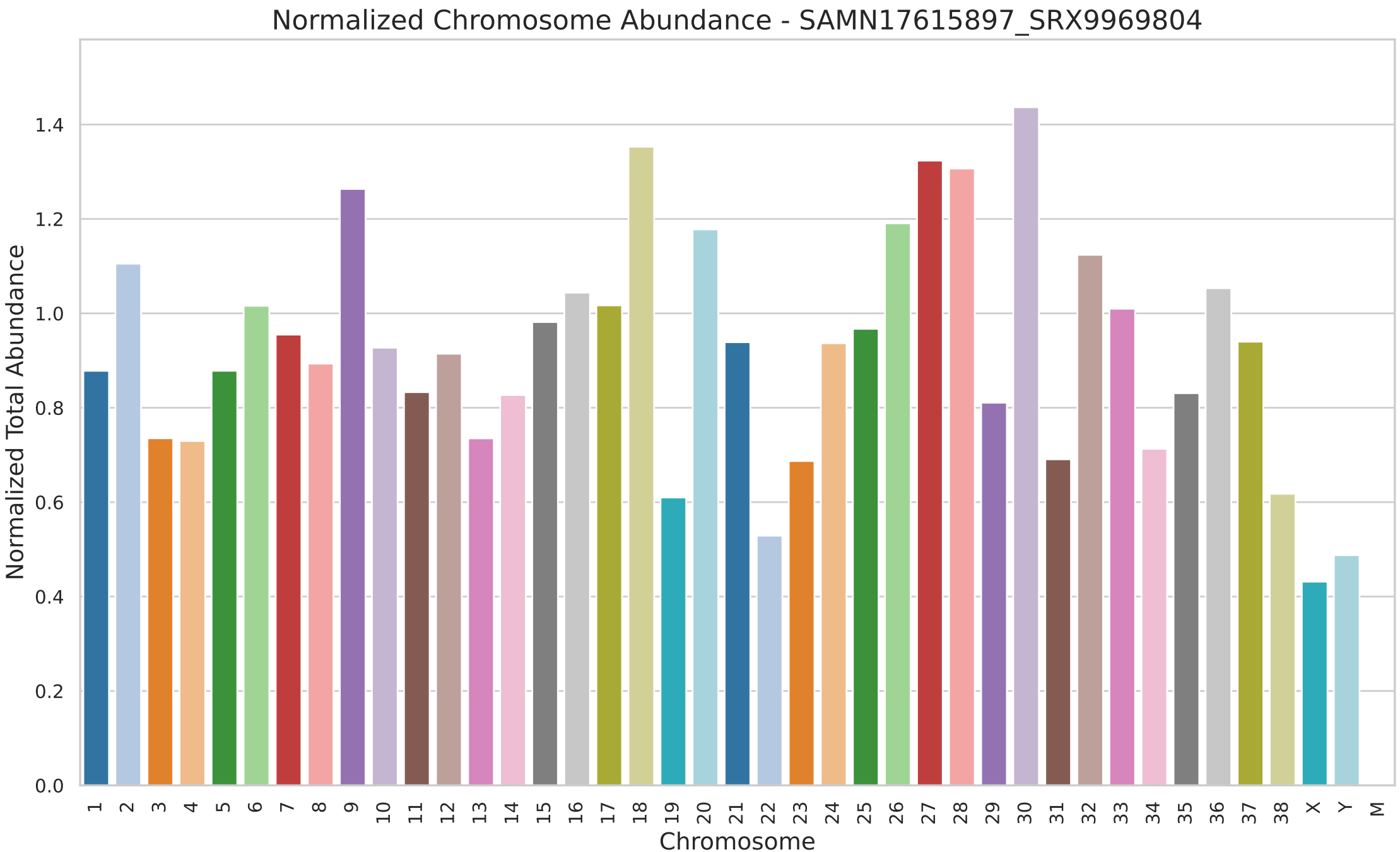

Normalized Chromosome Abundance - SAMN17615887_SRX9969793
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

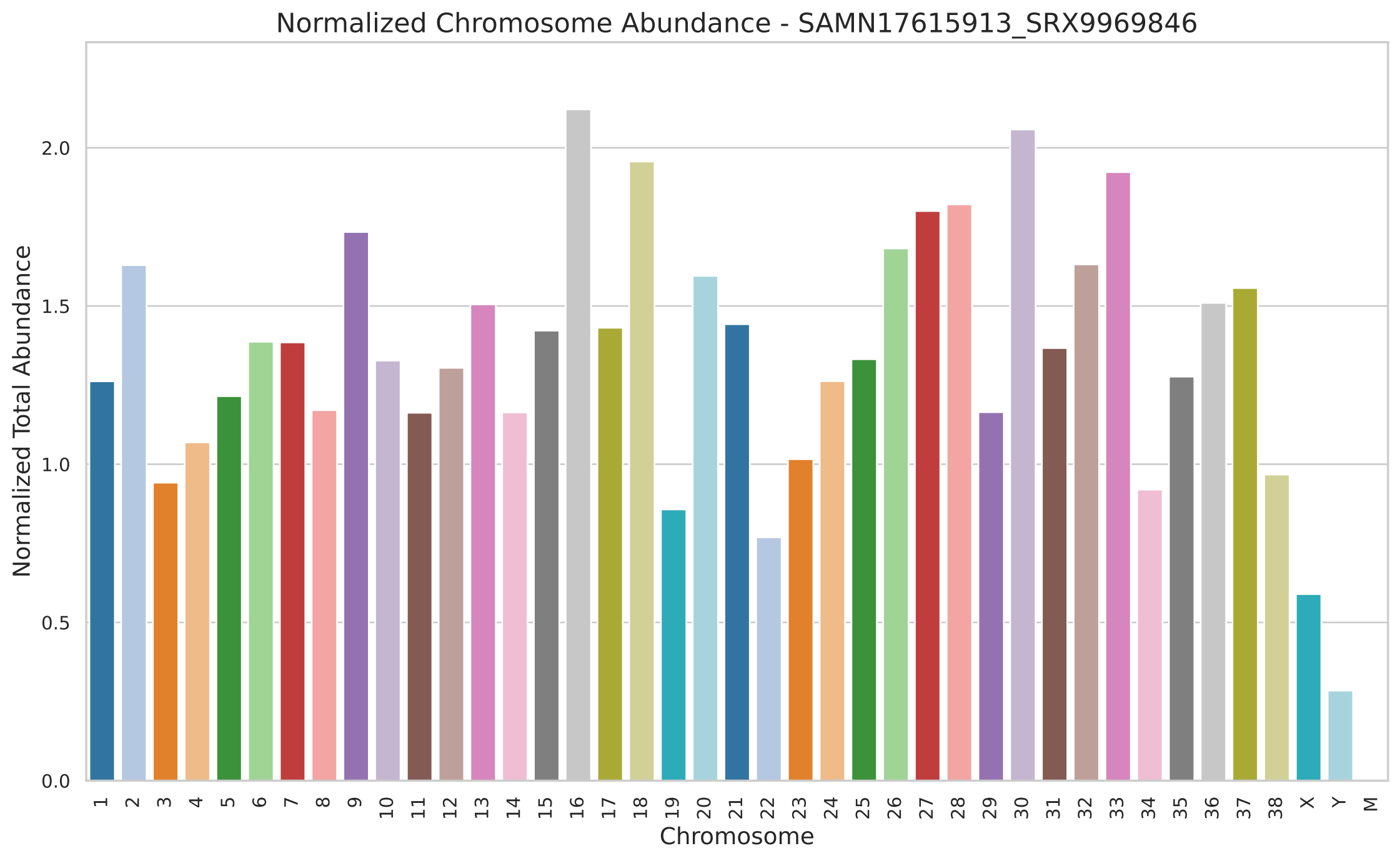

Normalized Chromosome Abundance - SAMN17615906_SRX9969814
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

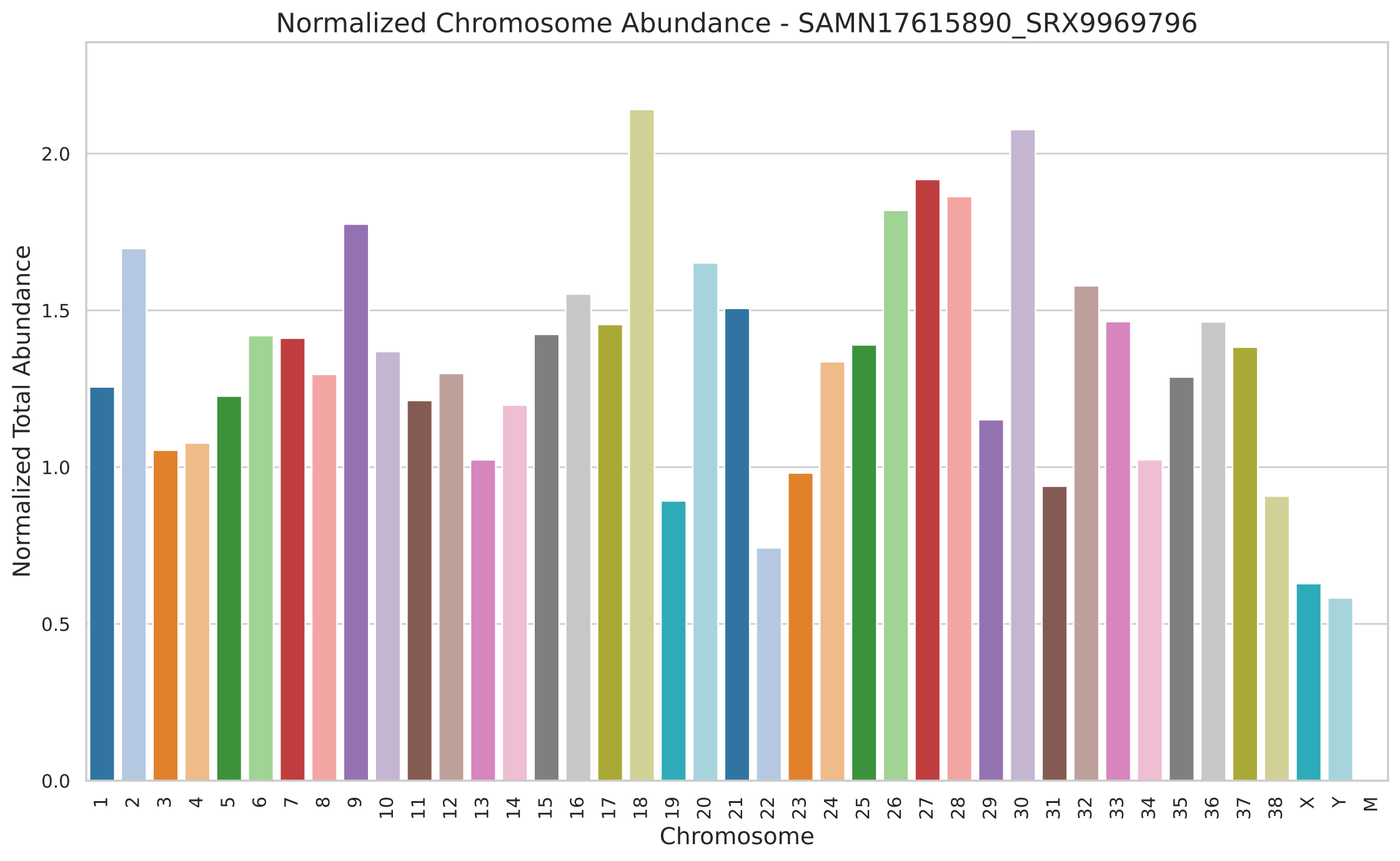

Normalized Chromosome Abundance - SAMN17615884_SRX9969790
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

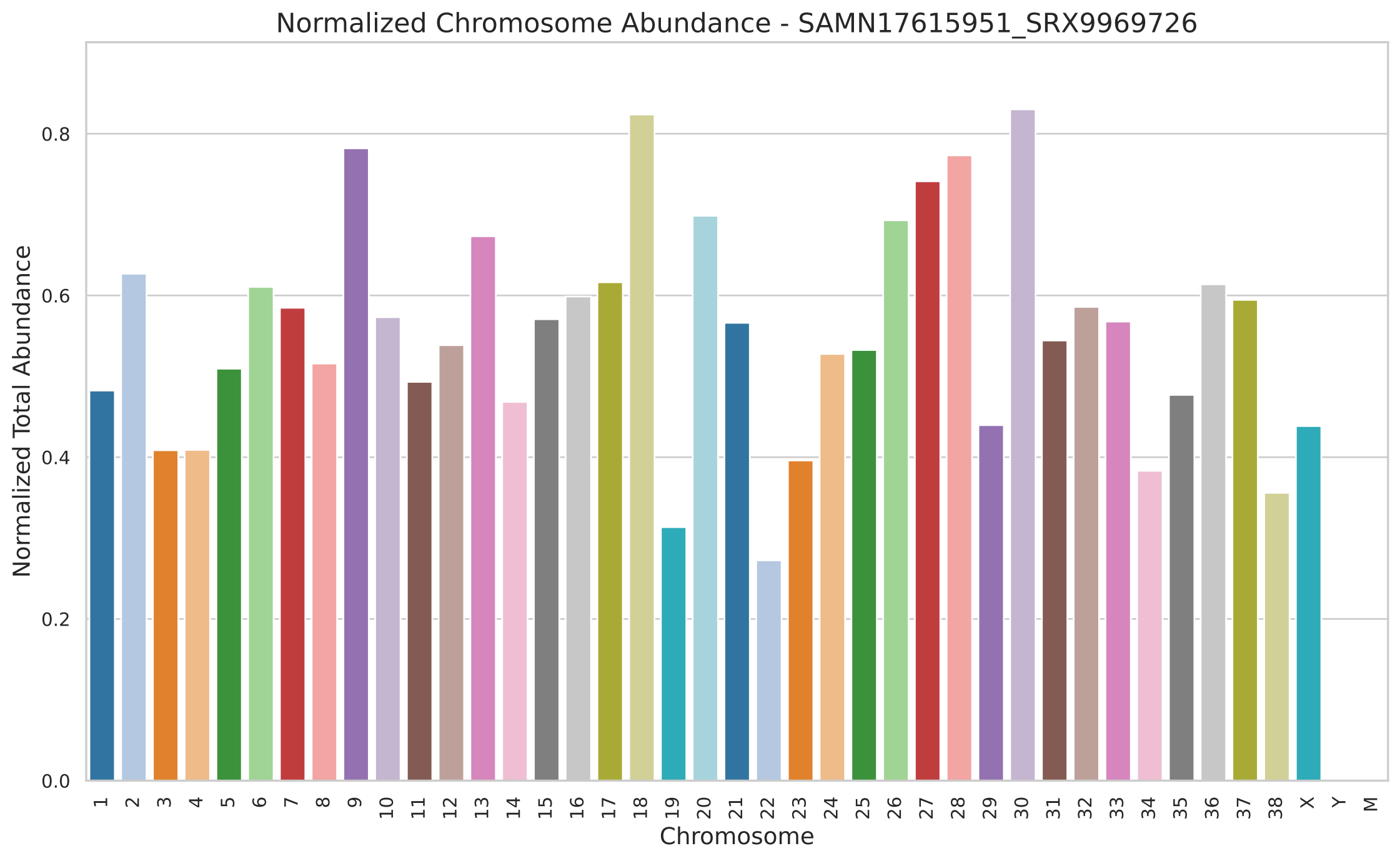

Normalized Chromosome Abundance - SAMN17615888_SRX9969794
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

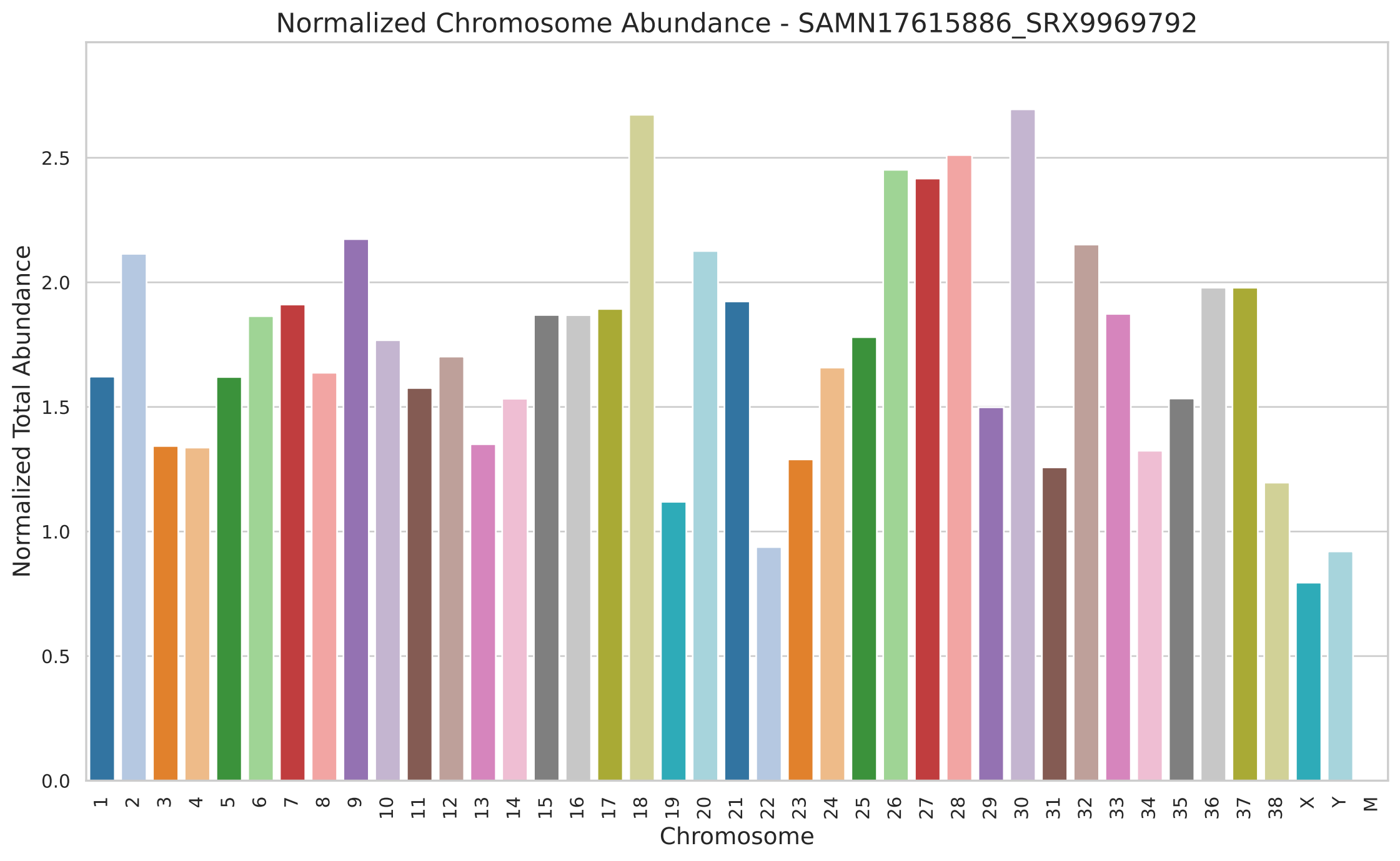

Normalized Chromosome Abundance - SAMN17615984_SRX9969832
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

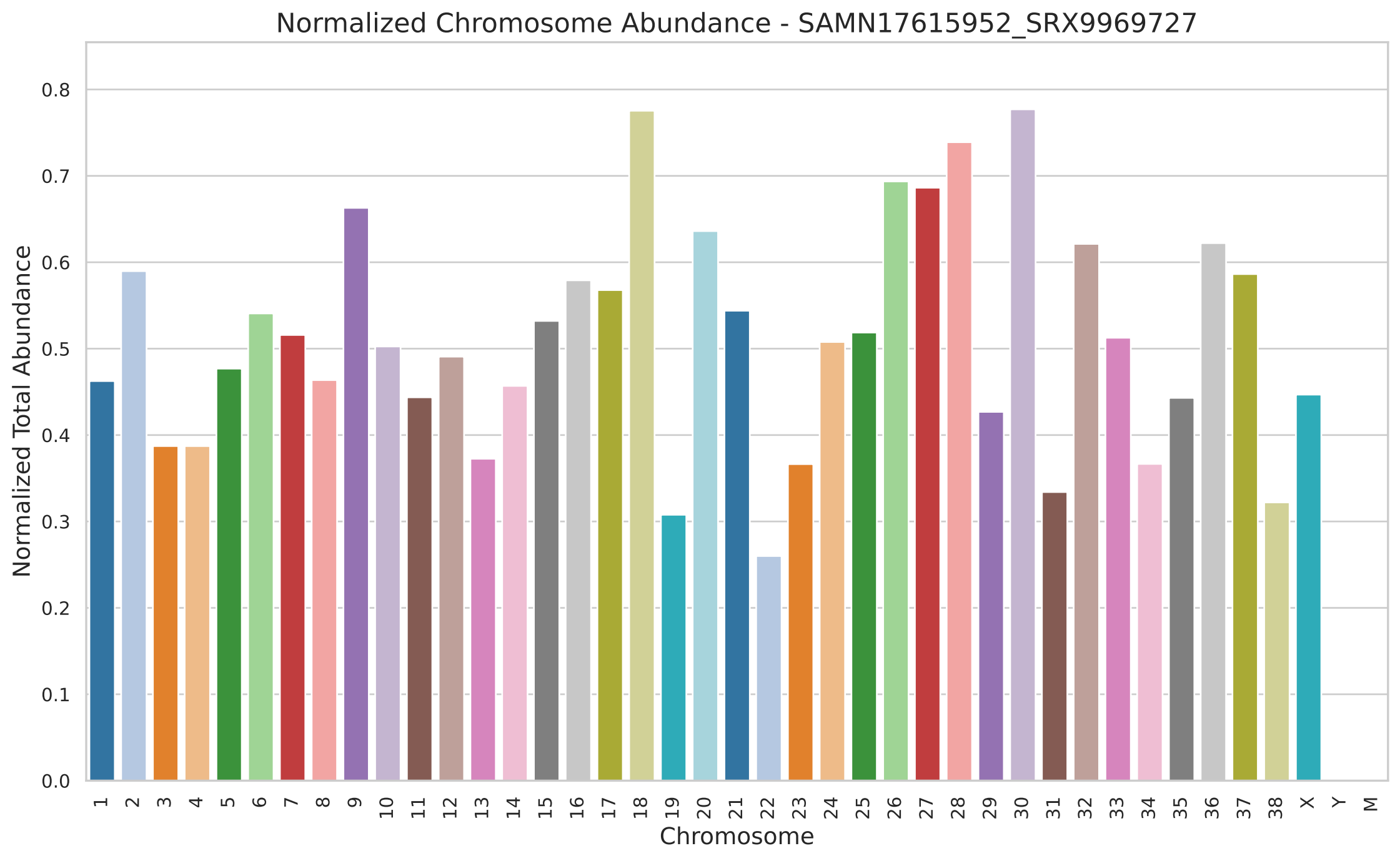

Normalized Chromosome Abundance - SAMN17615897_SRX9969804
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

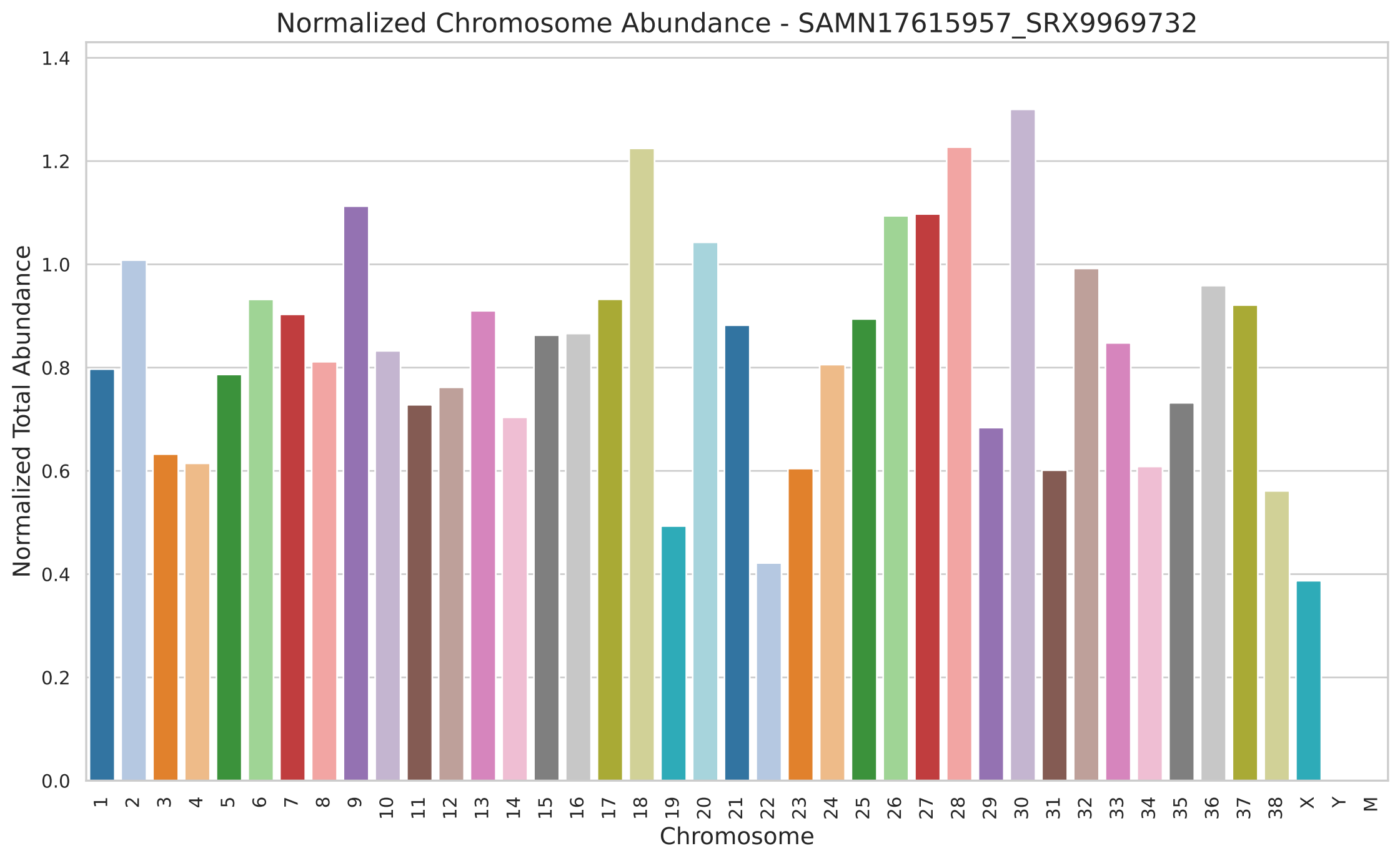

Normalized Chromosome Abundance - SAMN17615913_SRX9969846
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

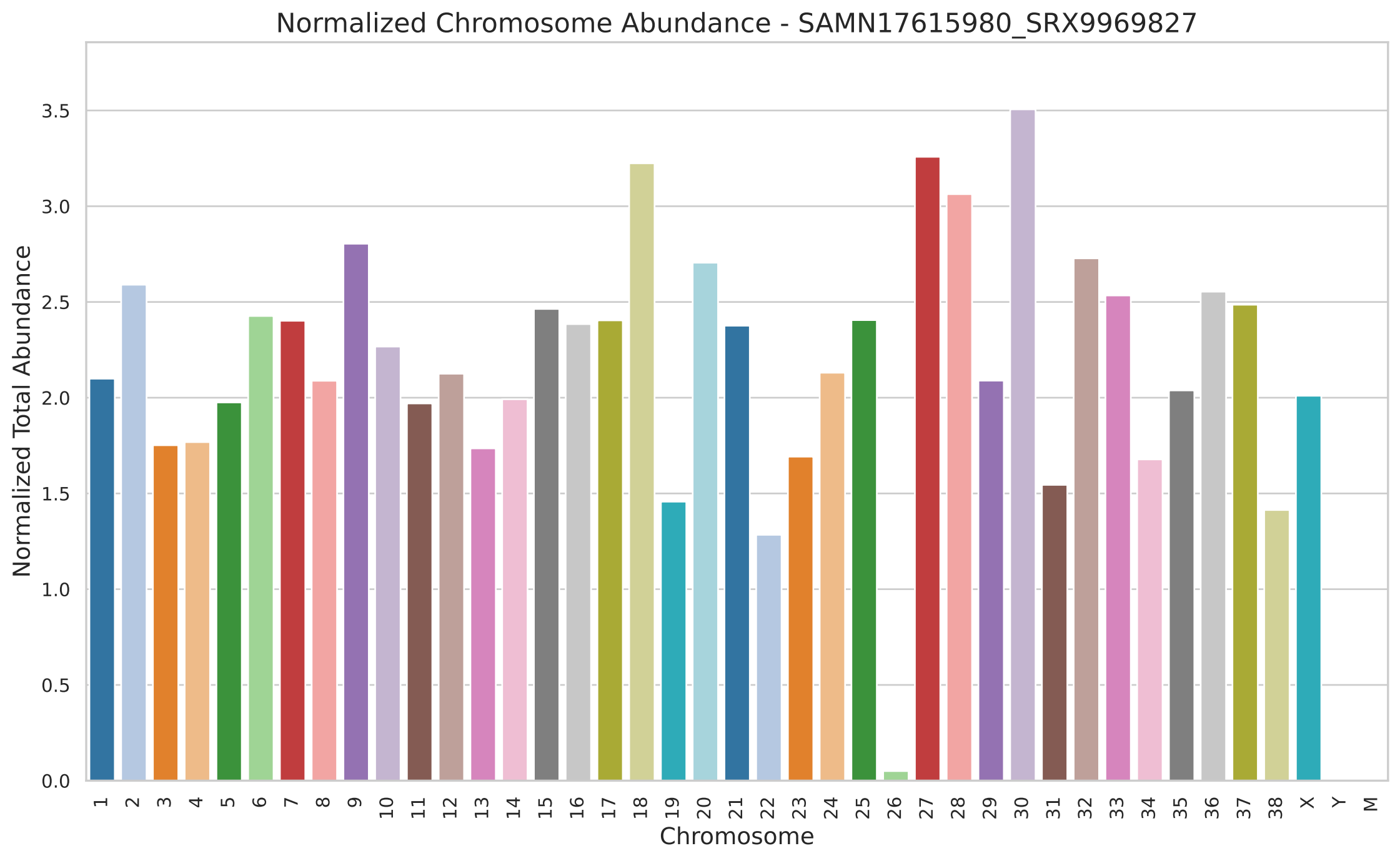

Normalized Chromosome Abundance - SAMN17615890_SRX9969796
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

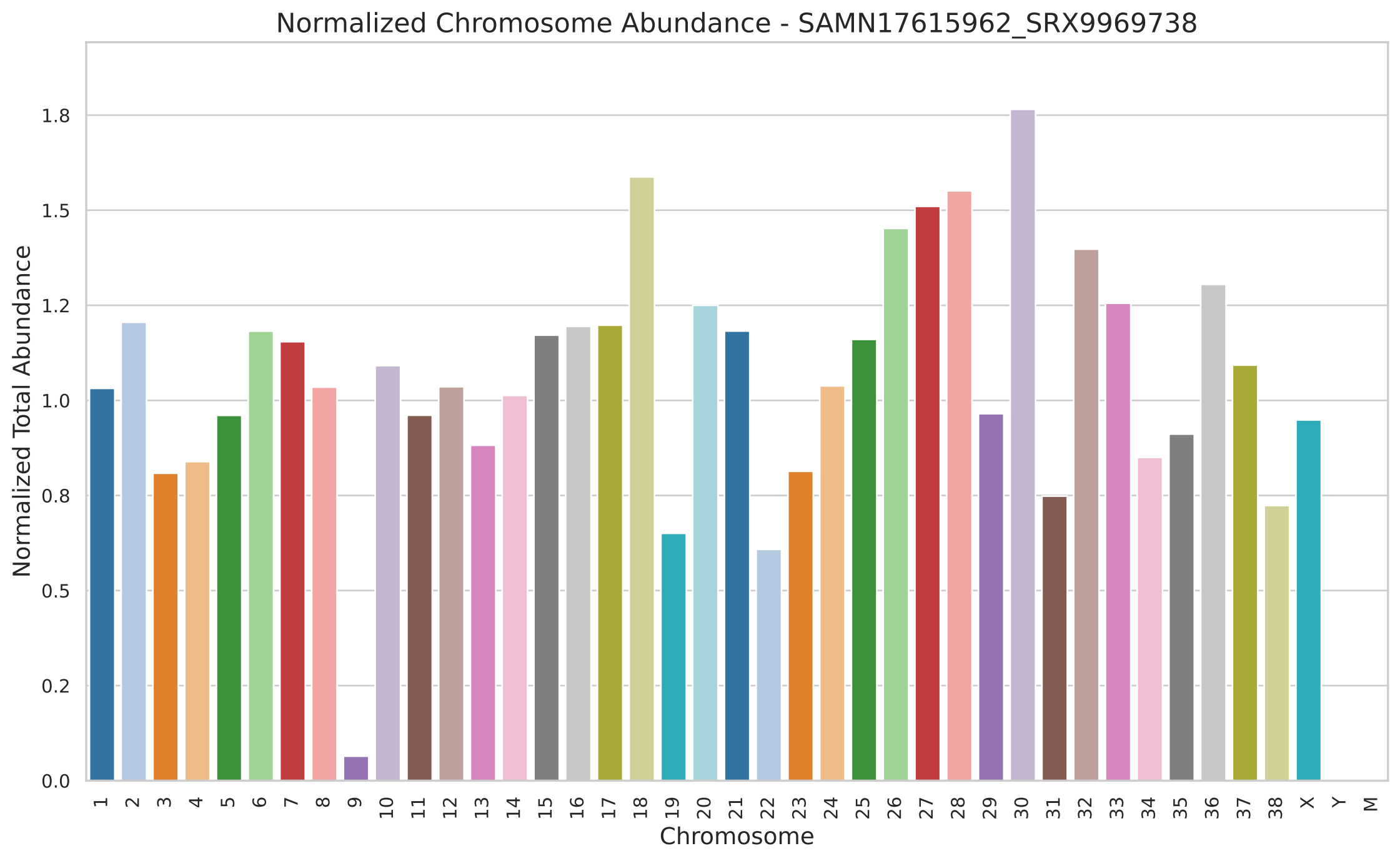

Normalized Chromosome Abundance - SAMN17615951_SRX9969726
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

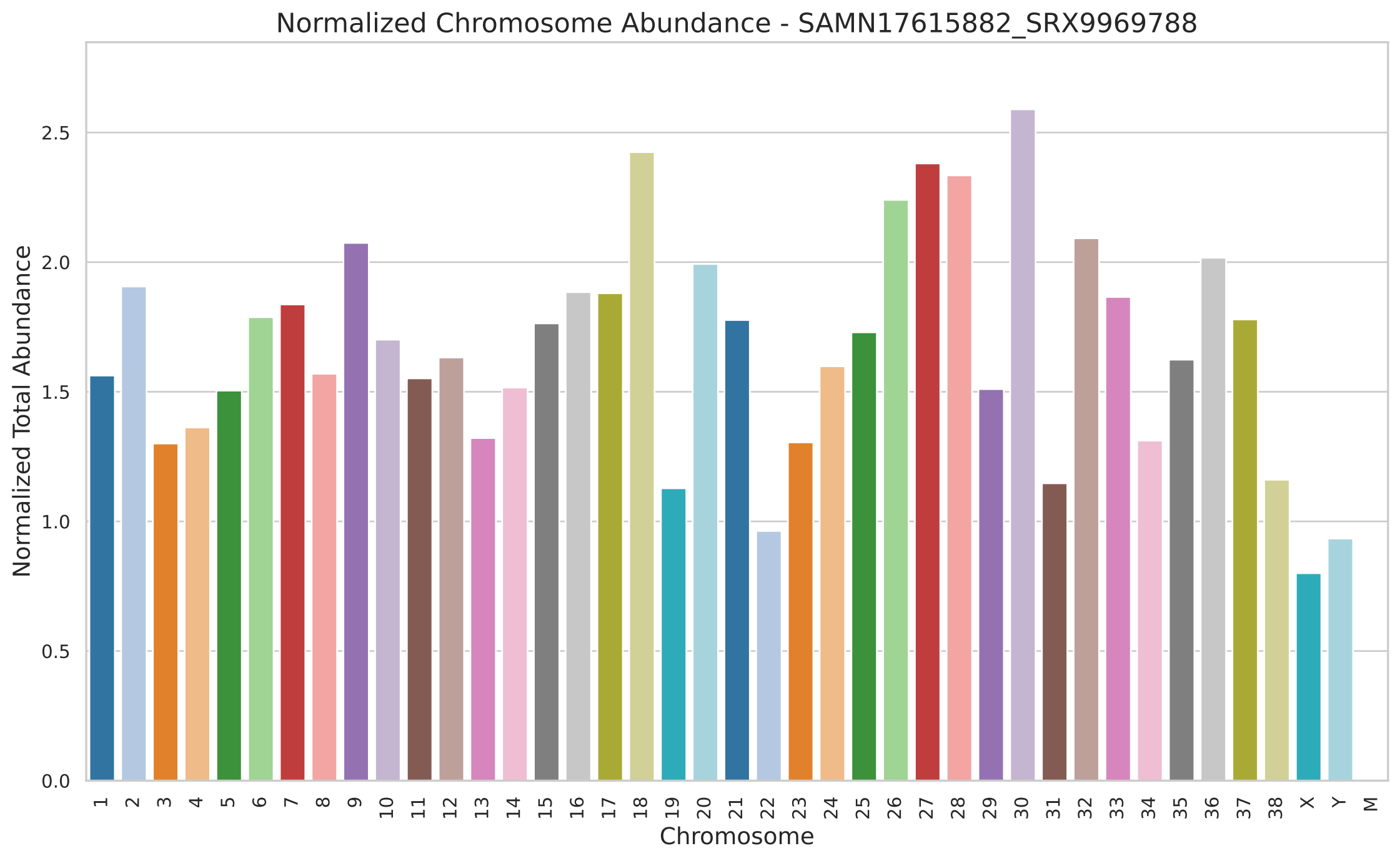

Normalized Chromosome Abundance - SAMN17615886_SRX9969792
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

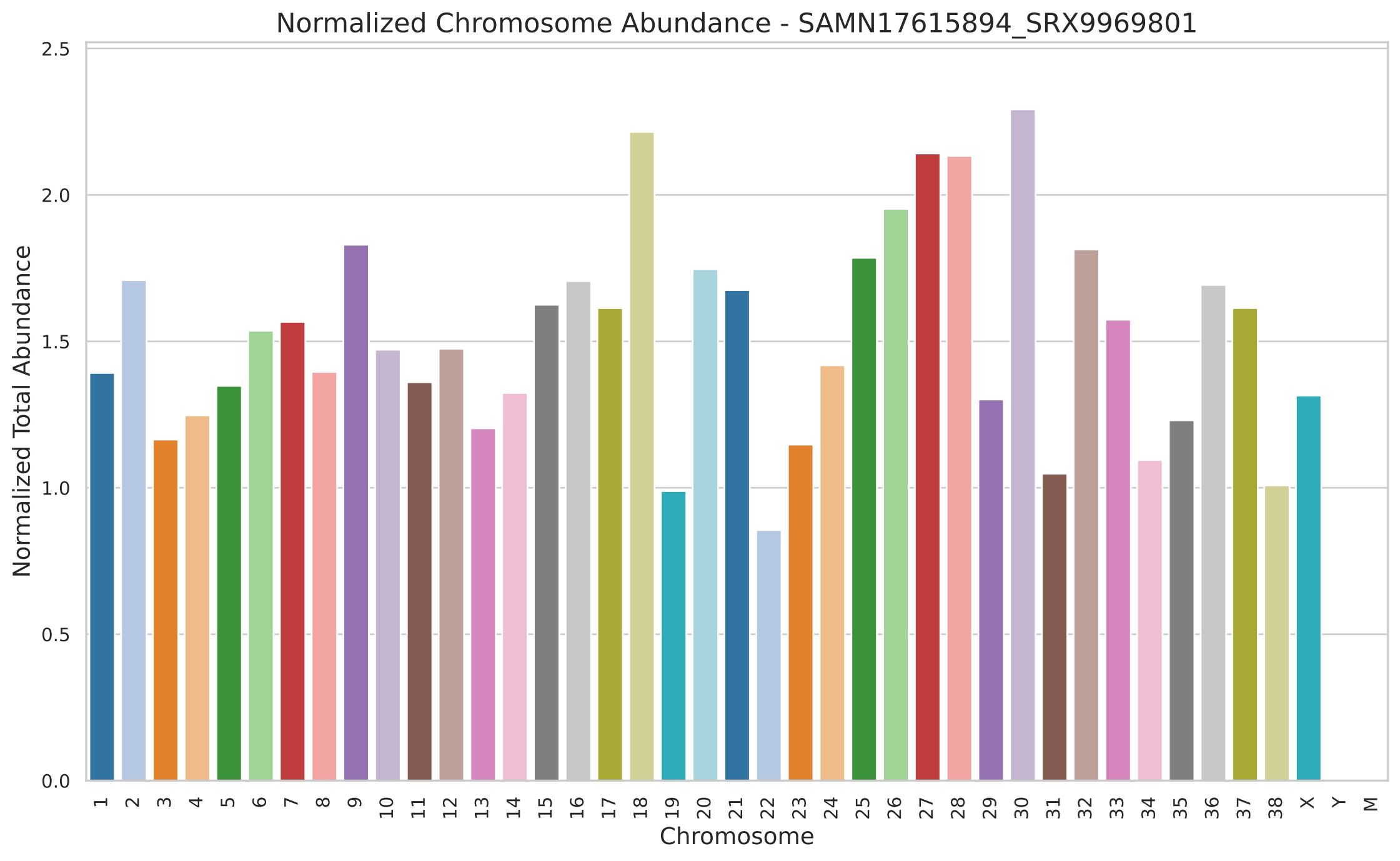

Normalized Chromosome Abundance - SAMN17615952_SRX9969727
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

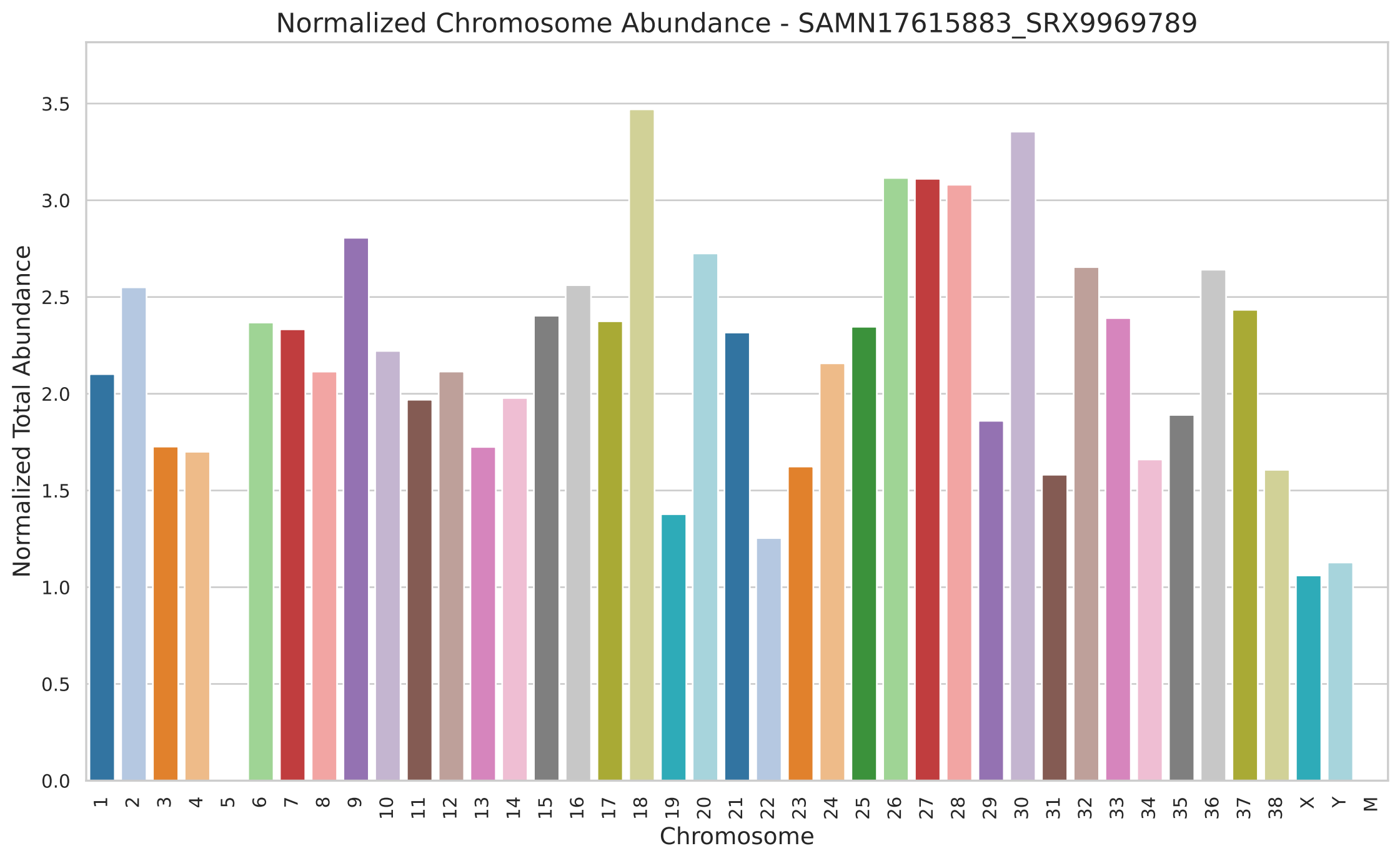

Normalized Chromosome Abundance - SAMN17615957_SRX9969732
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 X Y M
Chromosome

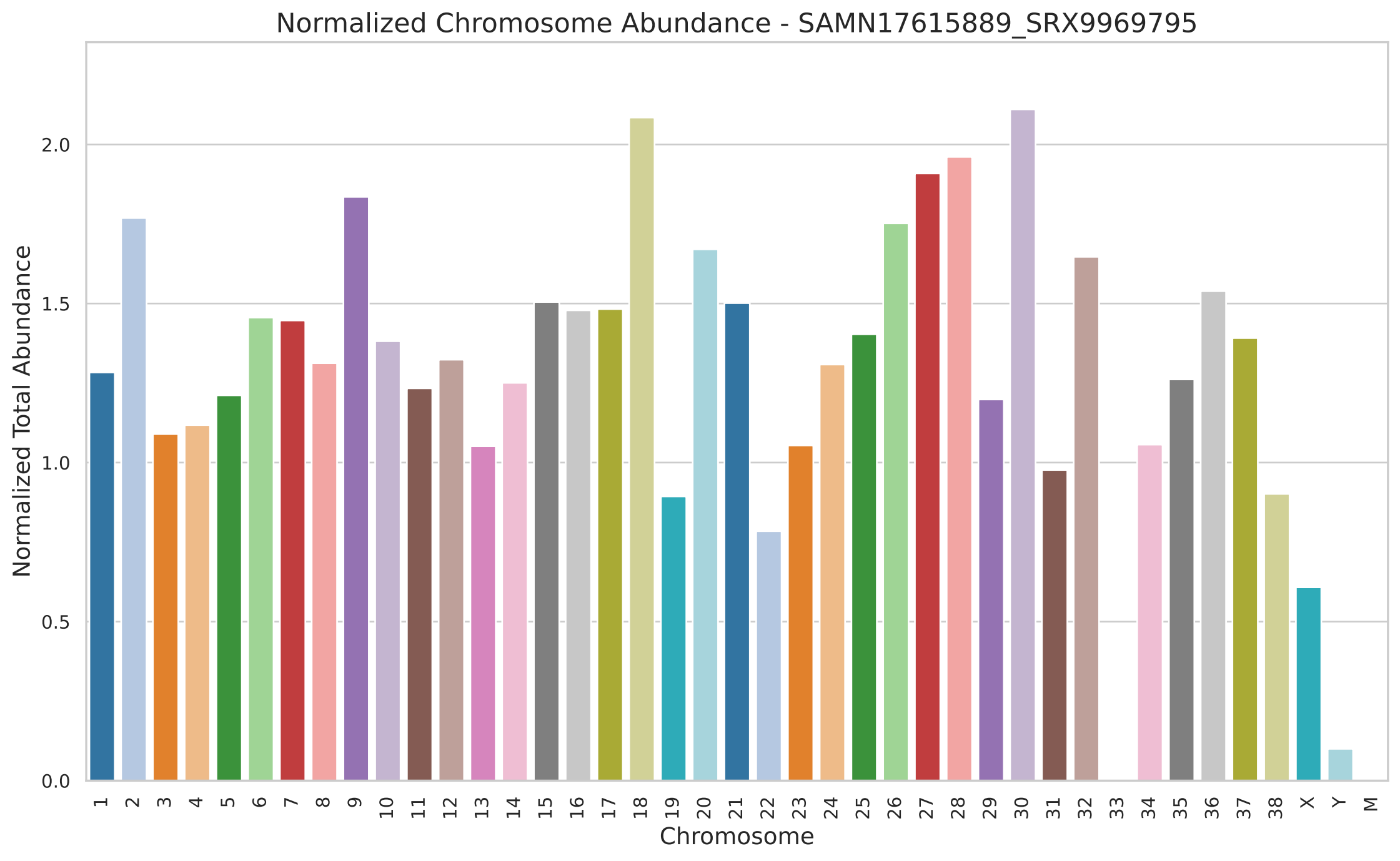

Normalized Chromosome Abundance - SAMN17615980_SRX9969827
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

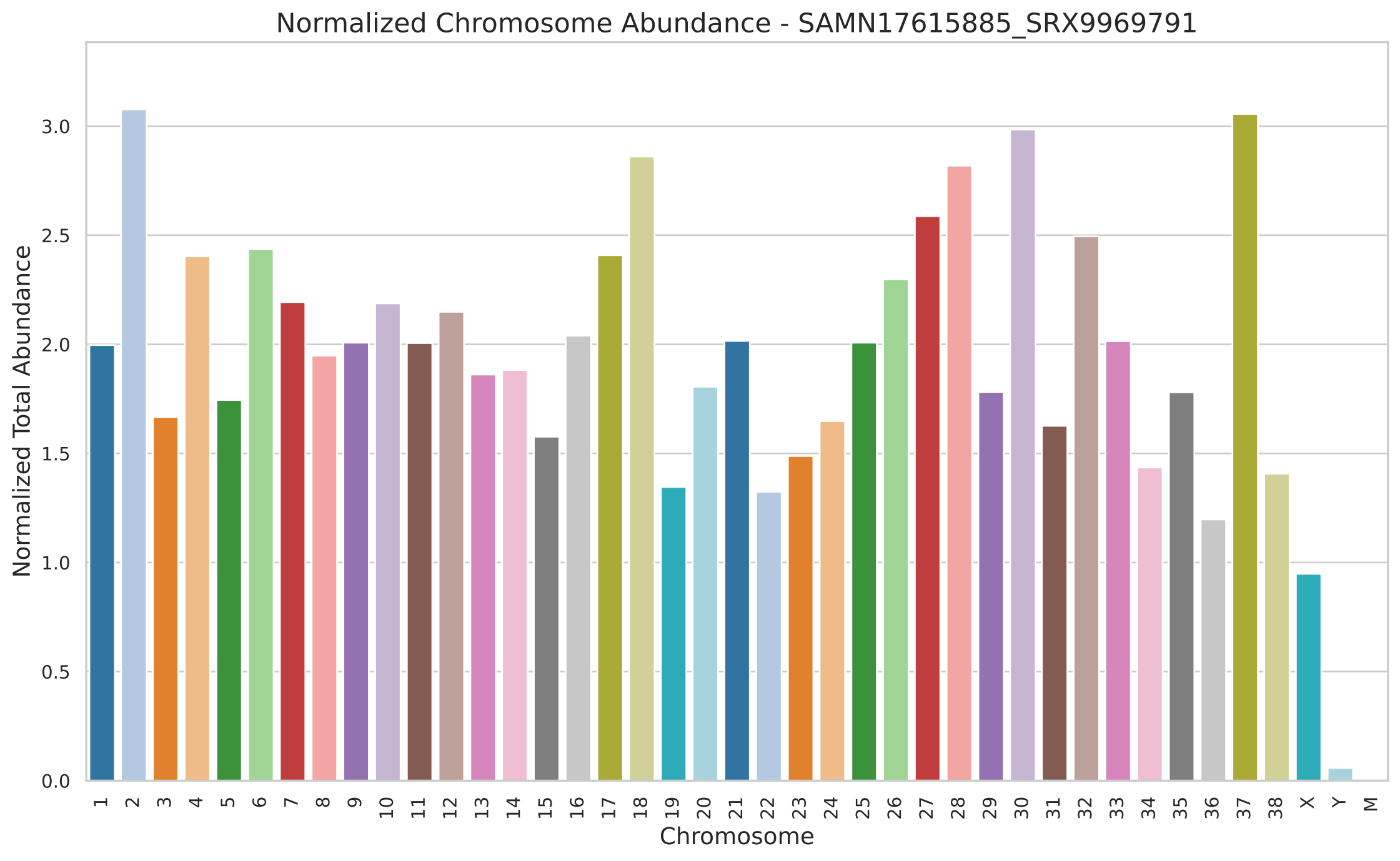

Normalized Chromosome Abundance - SAMN17615962_SRX9969738
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

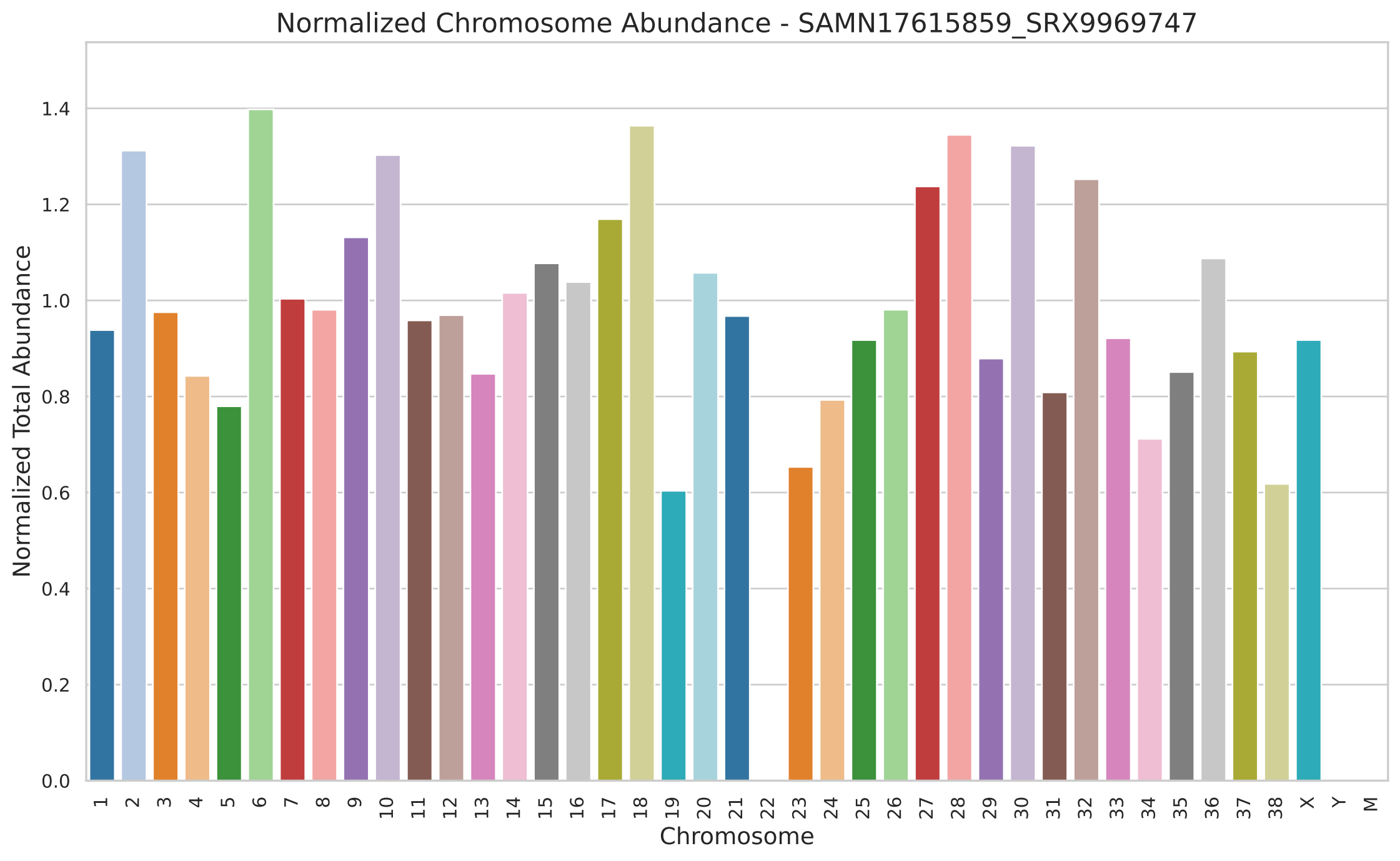

Normalized Chromosome Abundance - SAMN17615882_SRX9969788
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

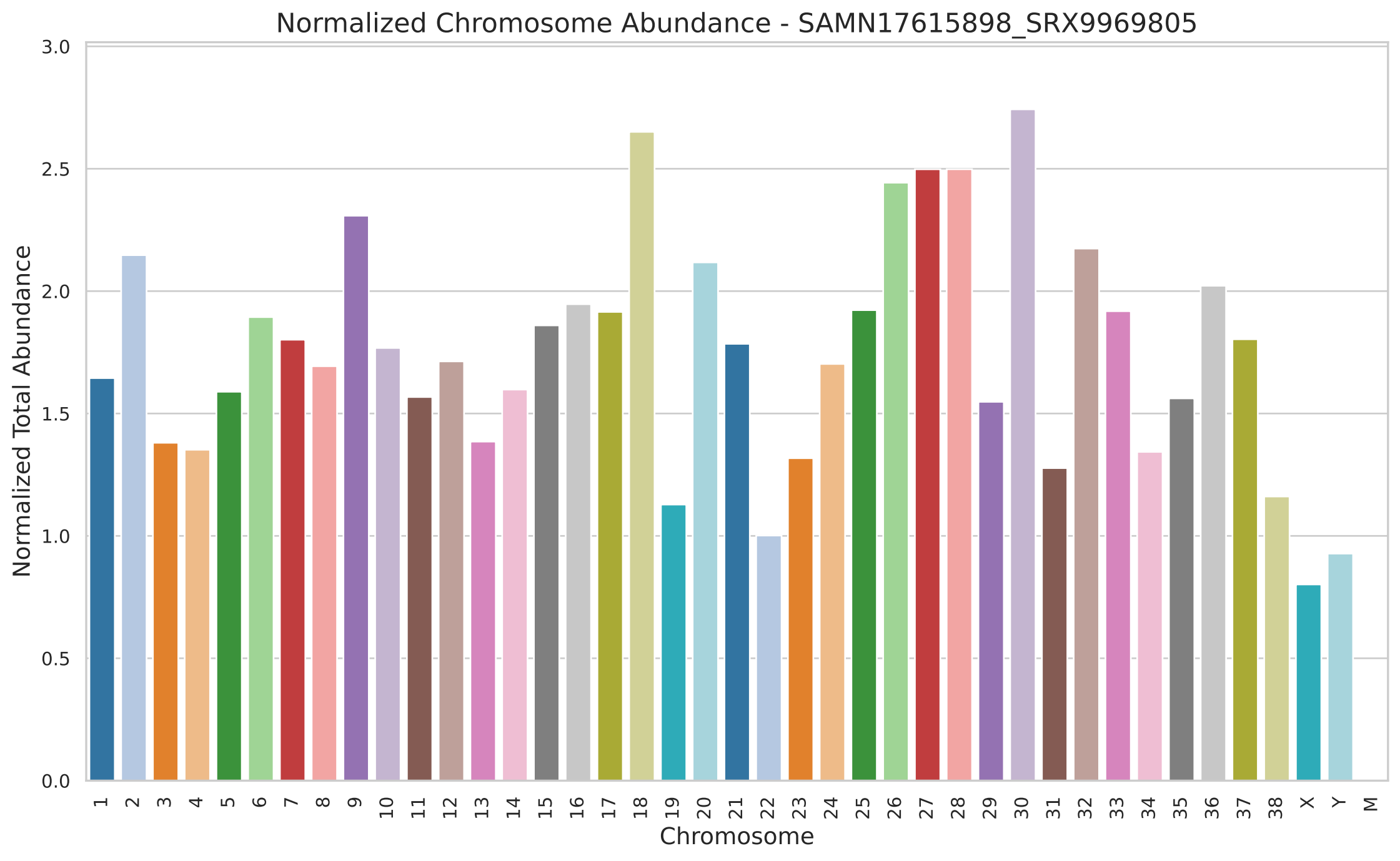

Normalized Chromosome Abundance - SAMN17615894_SRX9969801
Normalized Total Abundance
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

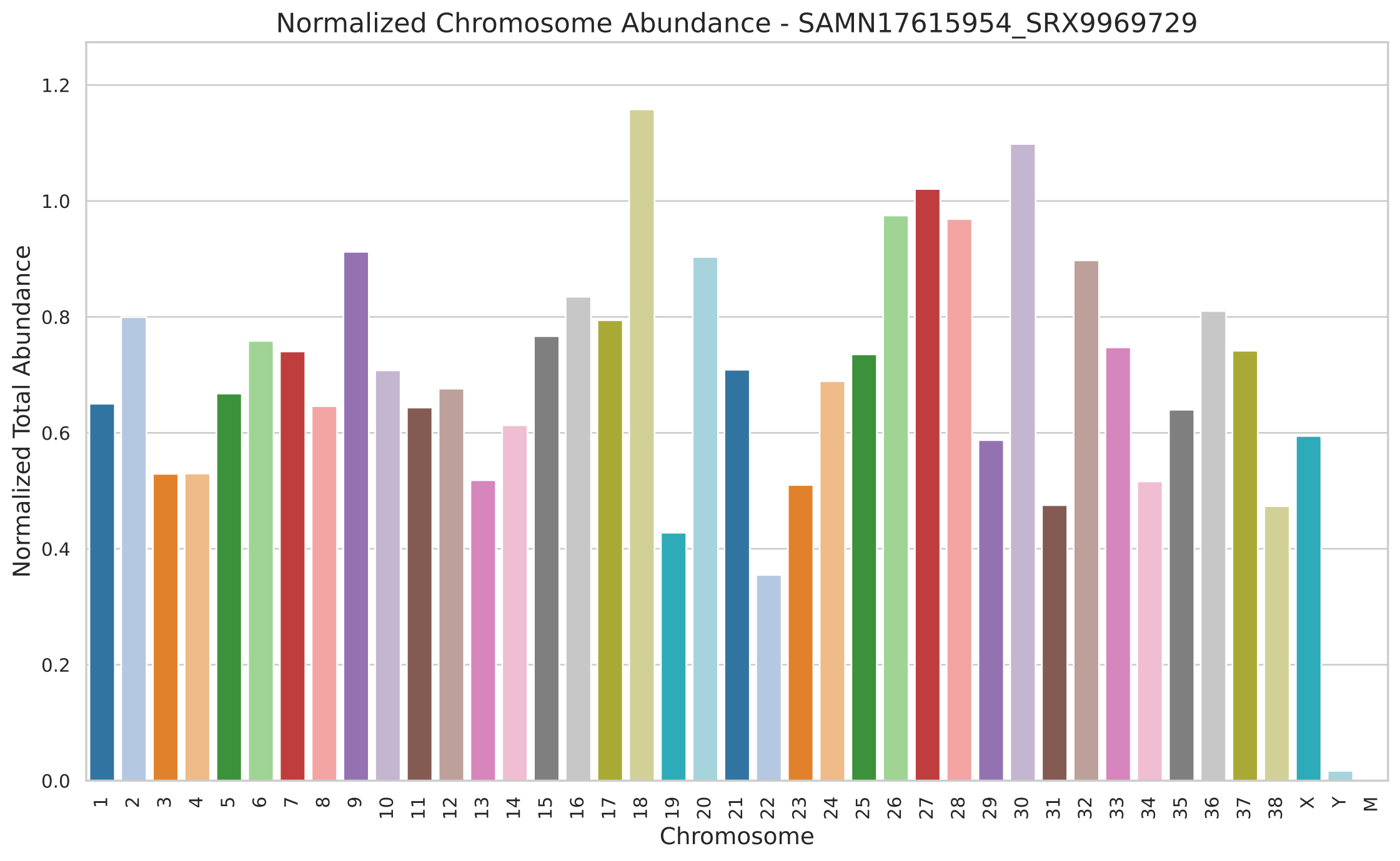

Normalized Chromosome Abundance - SAMN17615883_SRX9969789
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

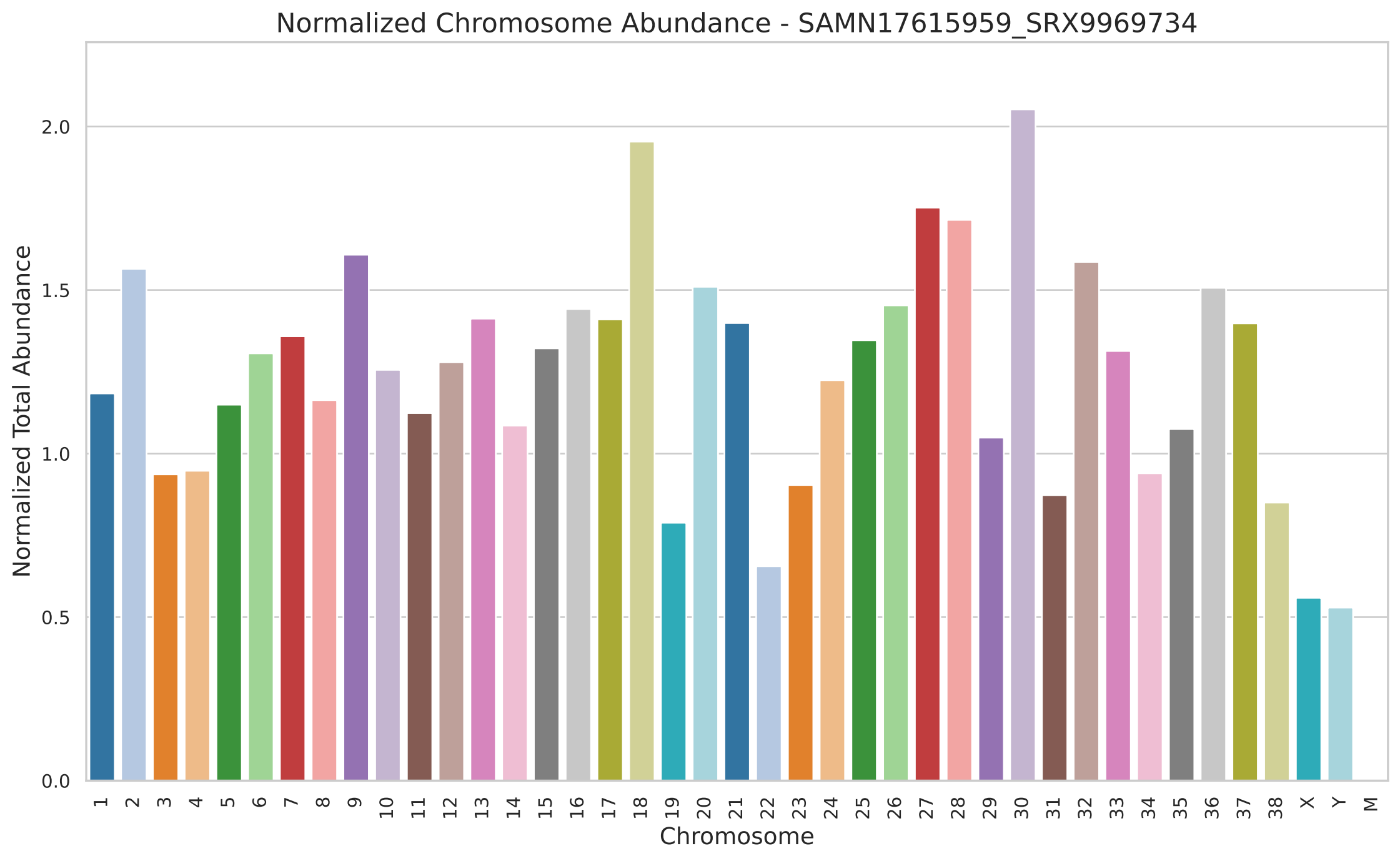

Normalized Chromosome Abundance - SAMN17615889_SRX9969795
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

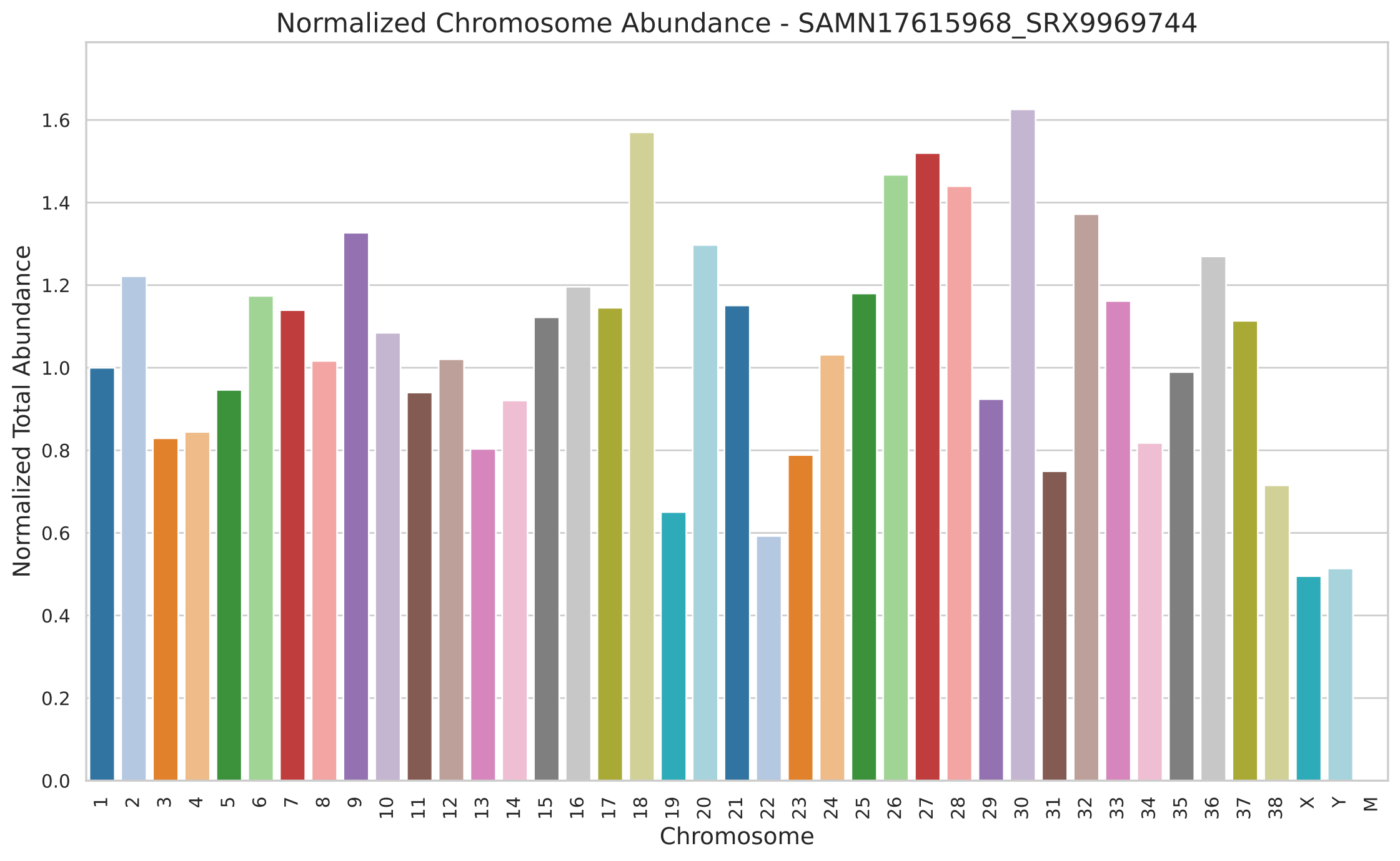

Normalized Chromosome Abundance - SAMN17615885_SRX9969791
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

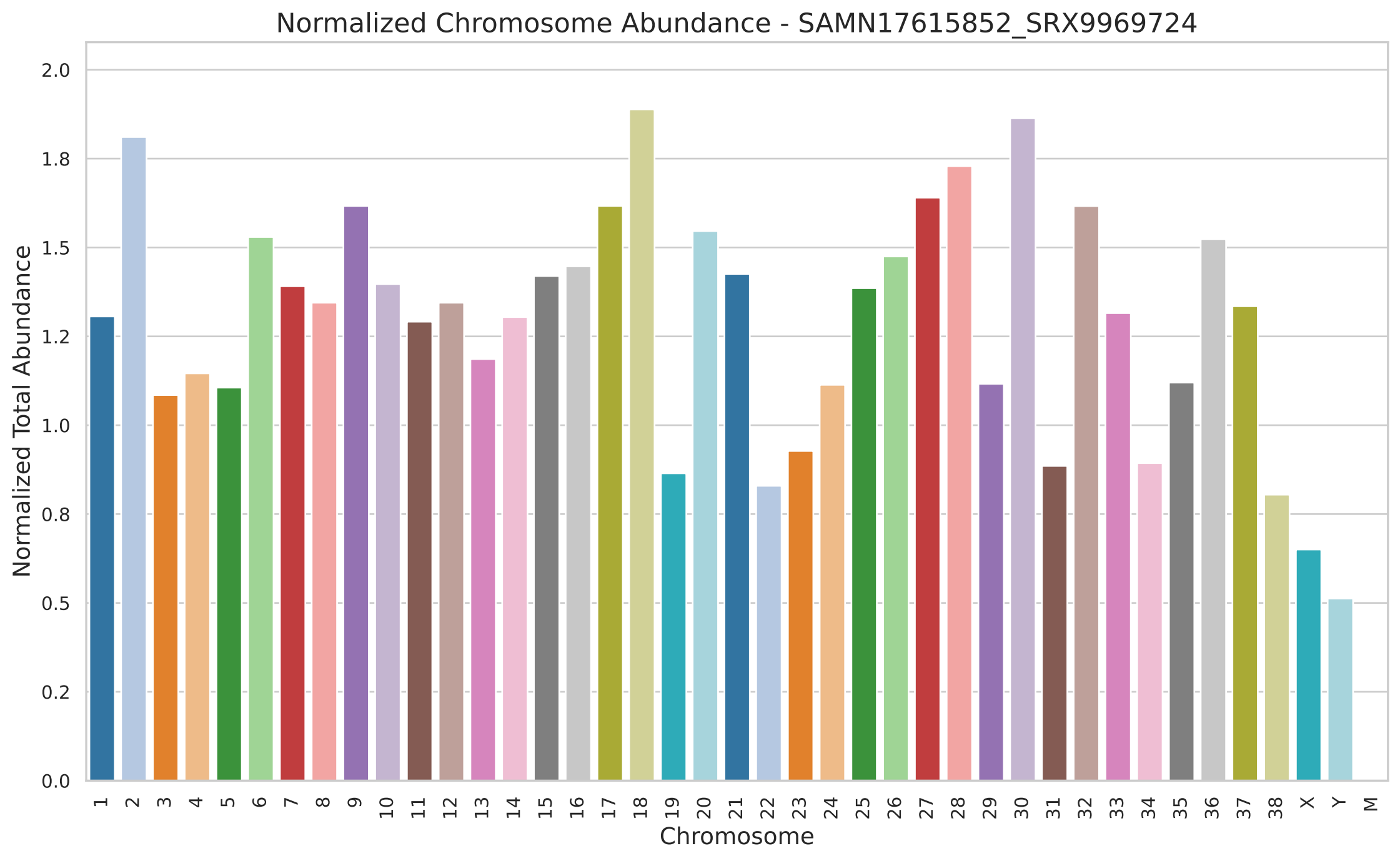

Normalized Chromosome Abundance - SAMN17615859_SRX9969747
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

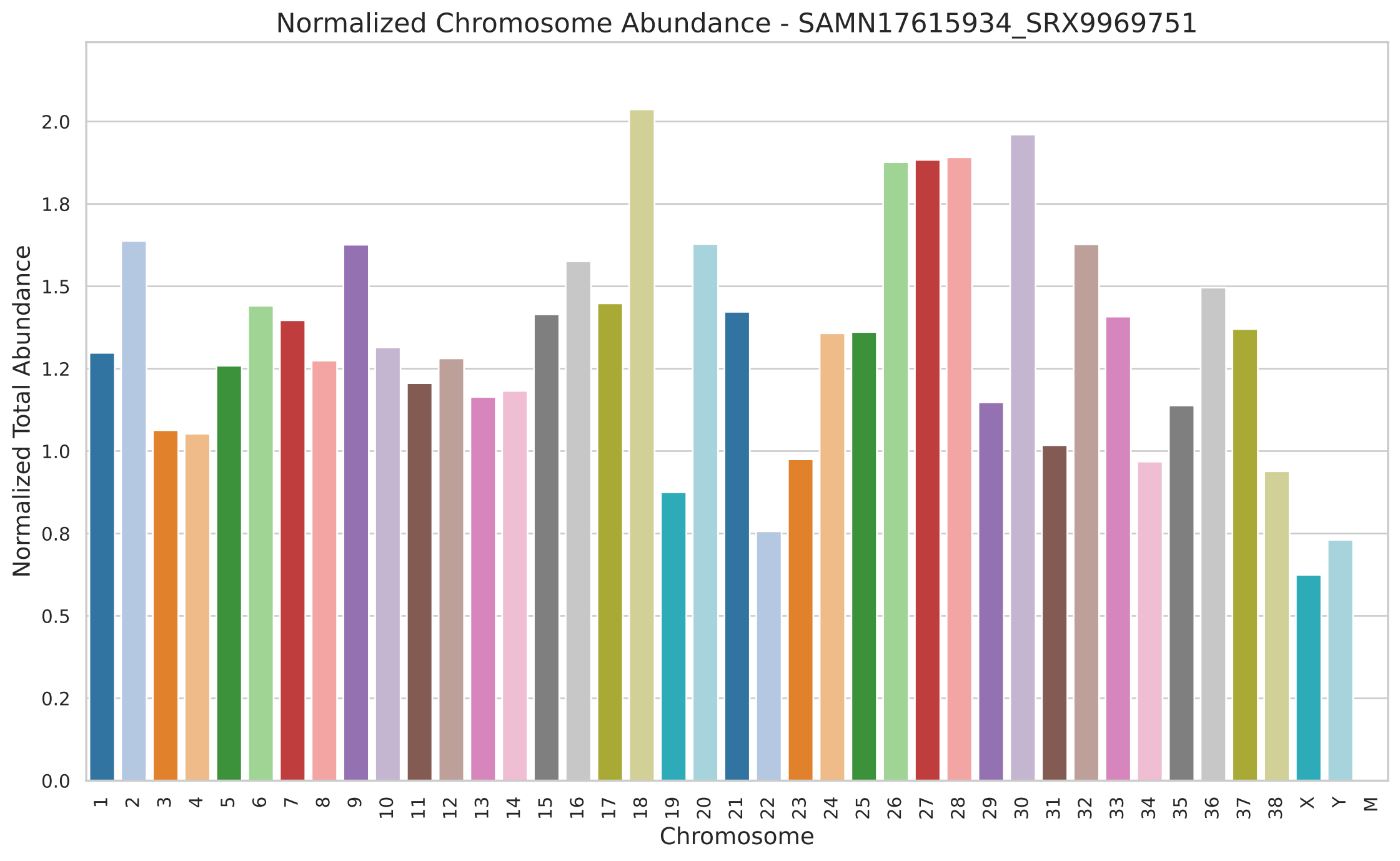

Normalized Chromosome Abundance - SAMN17615898_SRX9969805
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

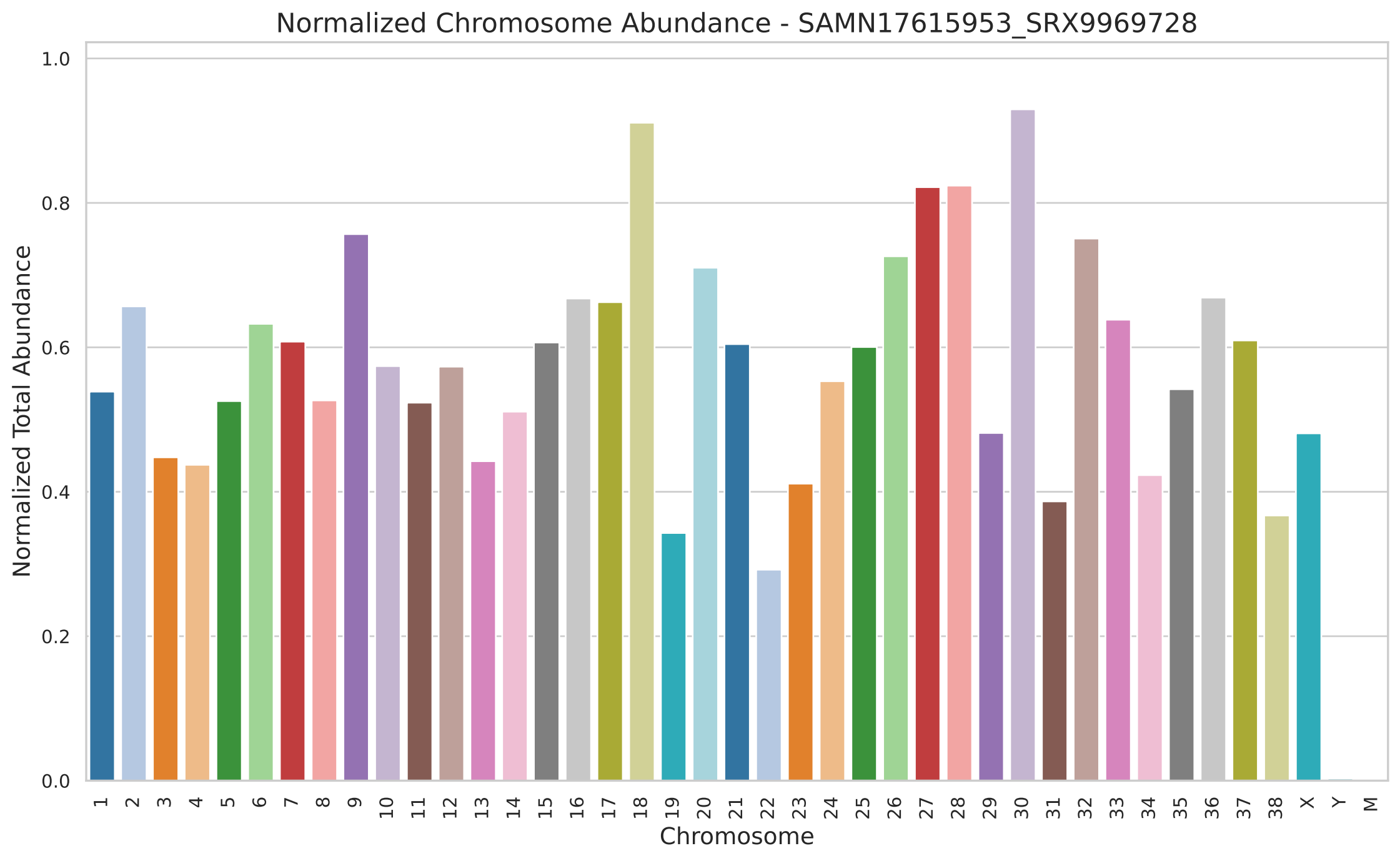

Normalized Chromosome Abundance - SAMN17615954_SRX9969729
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

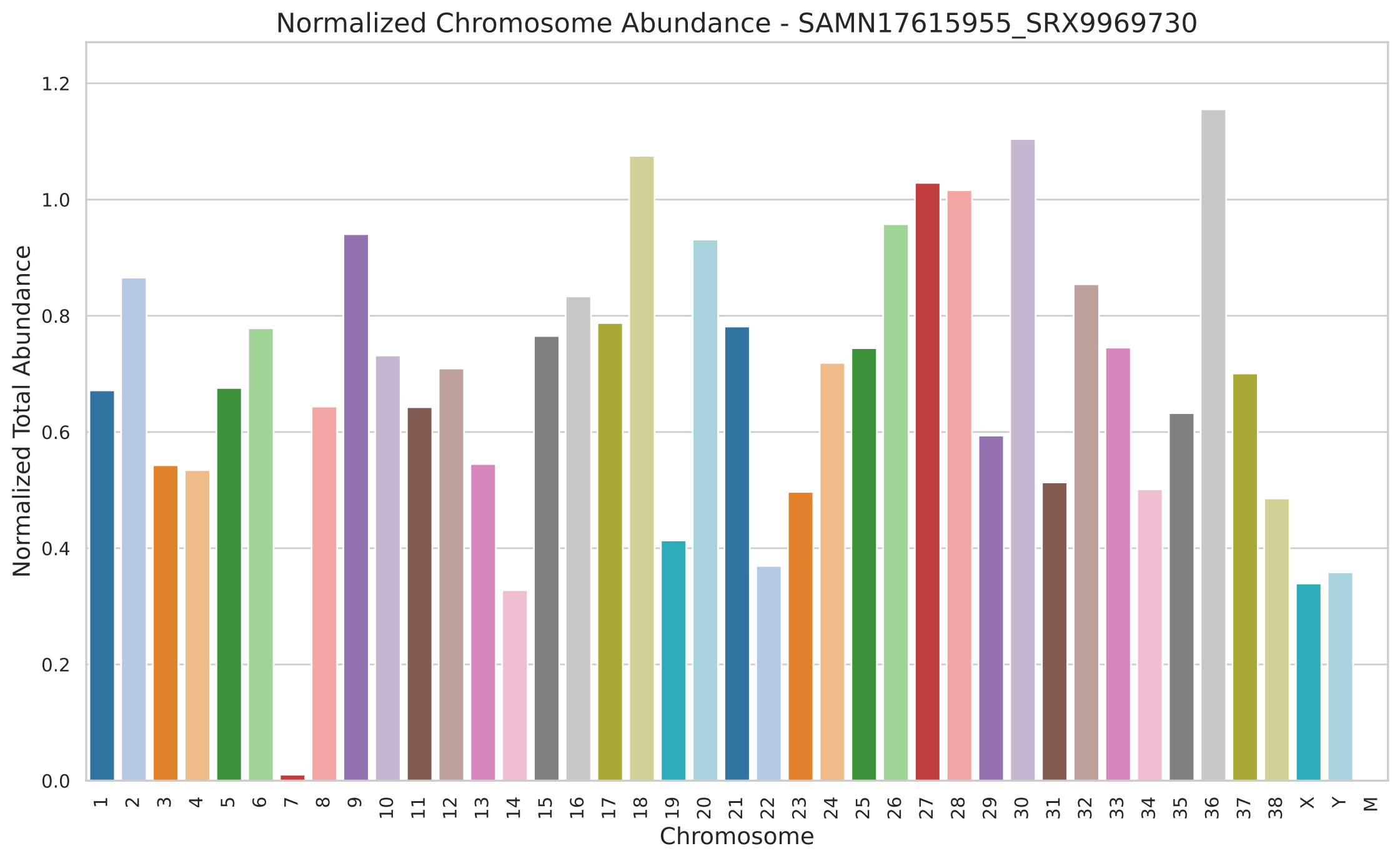

Normalized Chromosome Abundance - SAMN17615959_SRX9969734
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

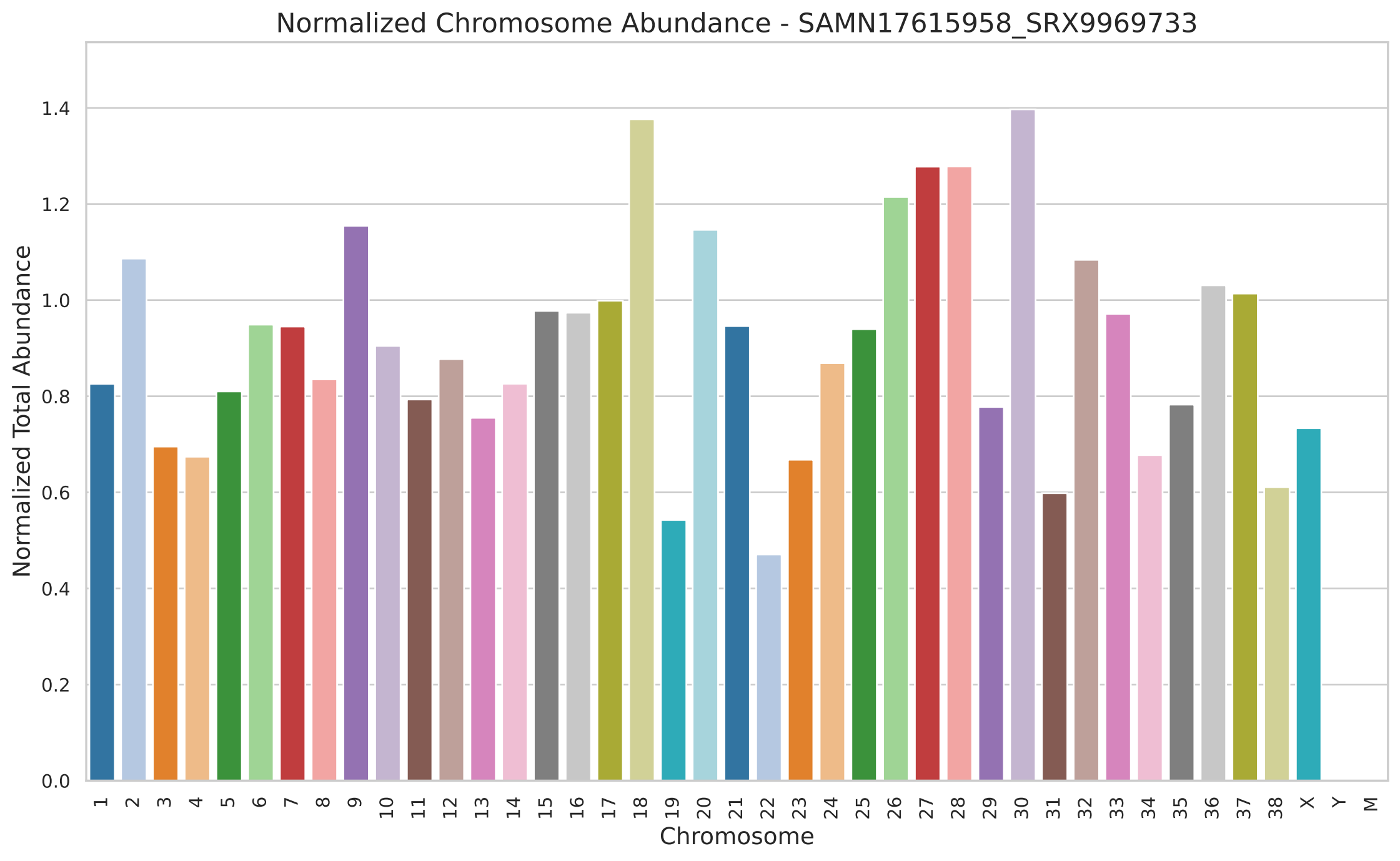

Normalized Chromosome Abundance - SAMN17615968_SRX9969744
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

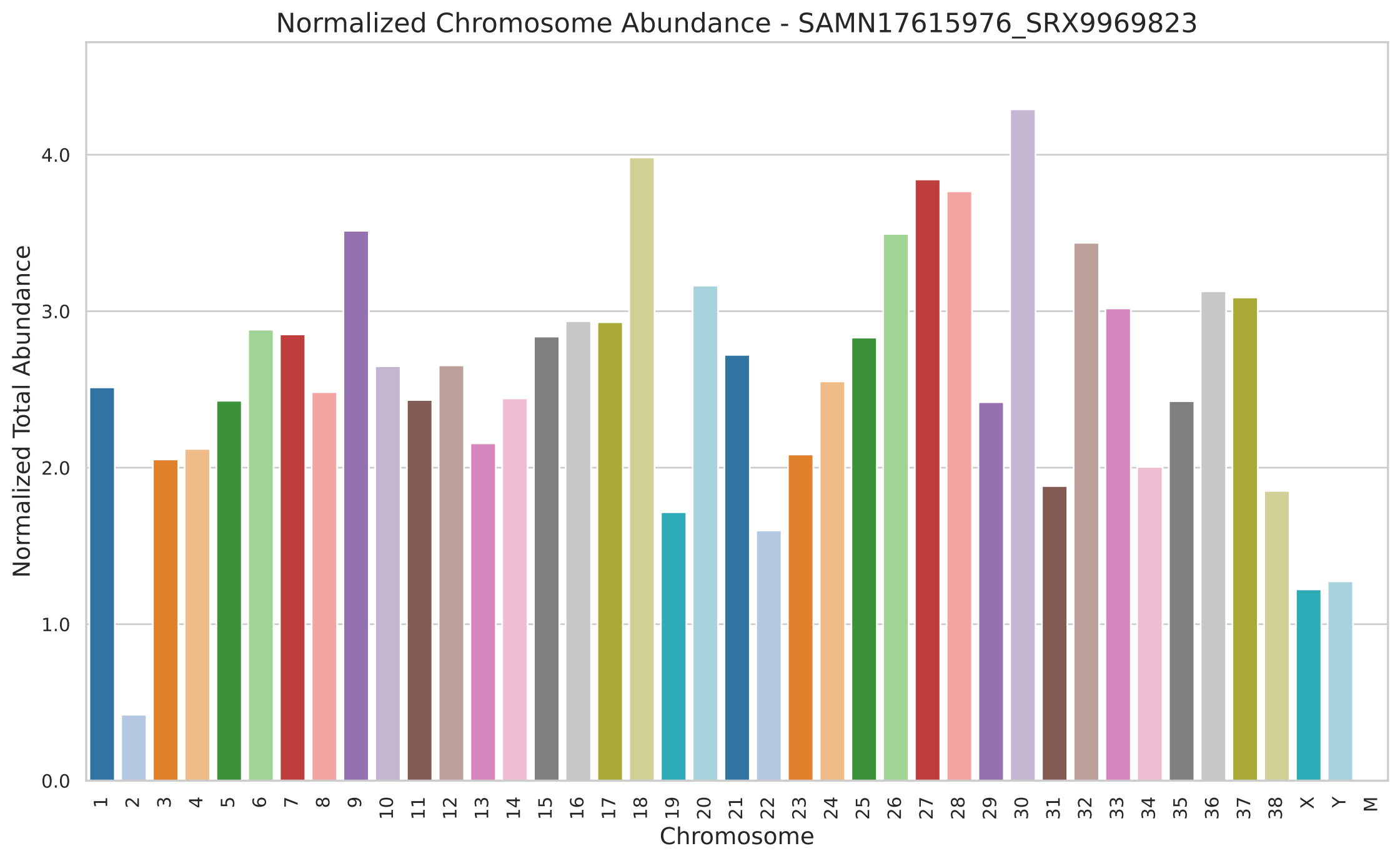

Normalized Chromosome Abundance - SAMN17615852_SRX9969724
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

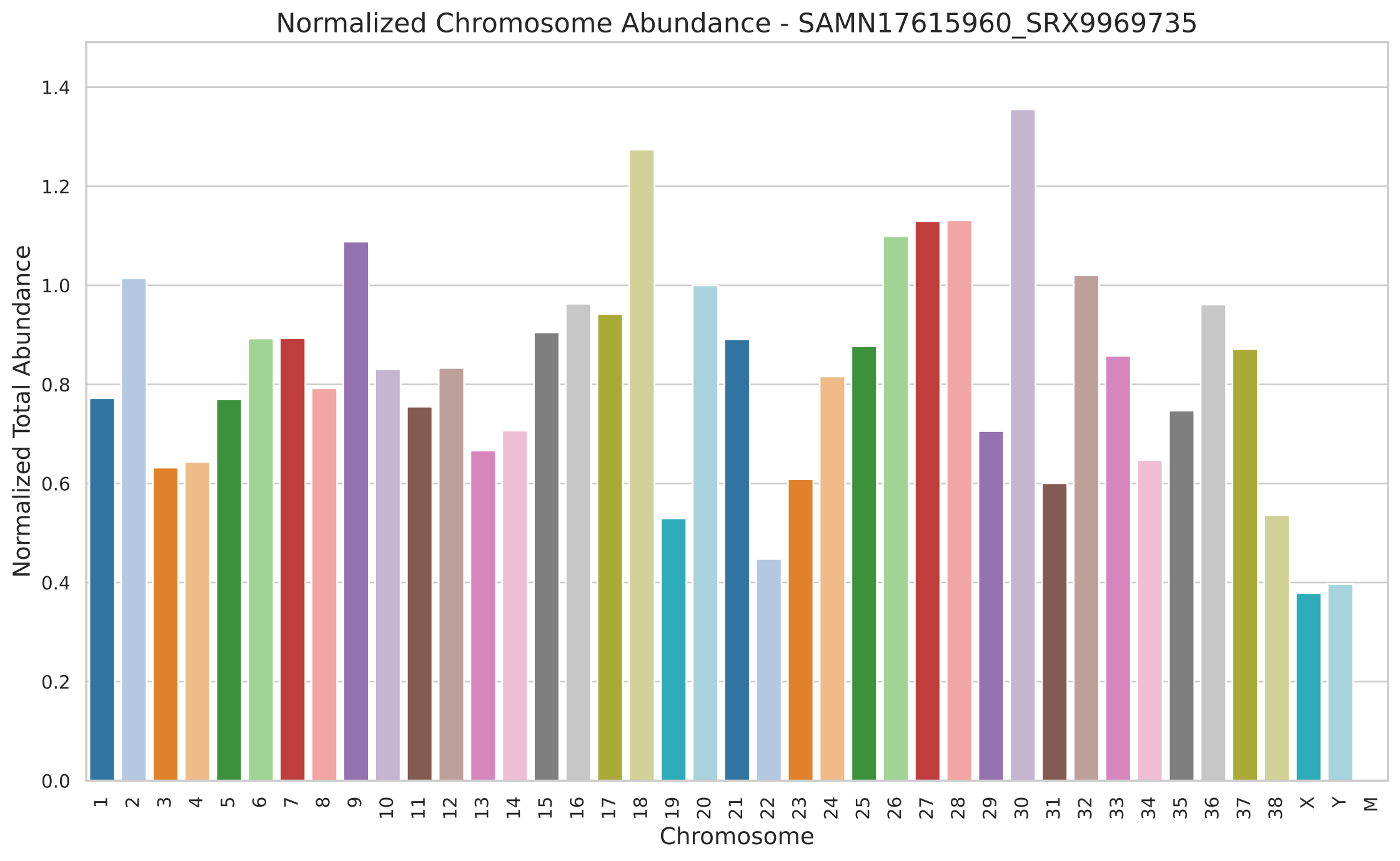

Normalized Chromosome Abundance - SAMN17615934_SRX9969751
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

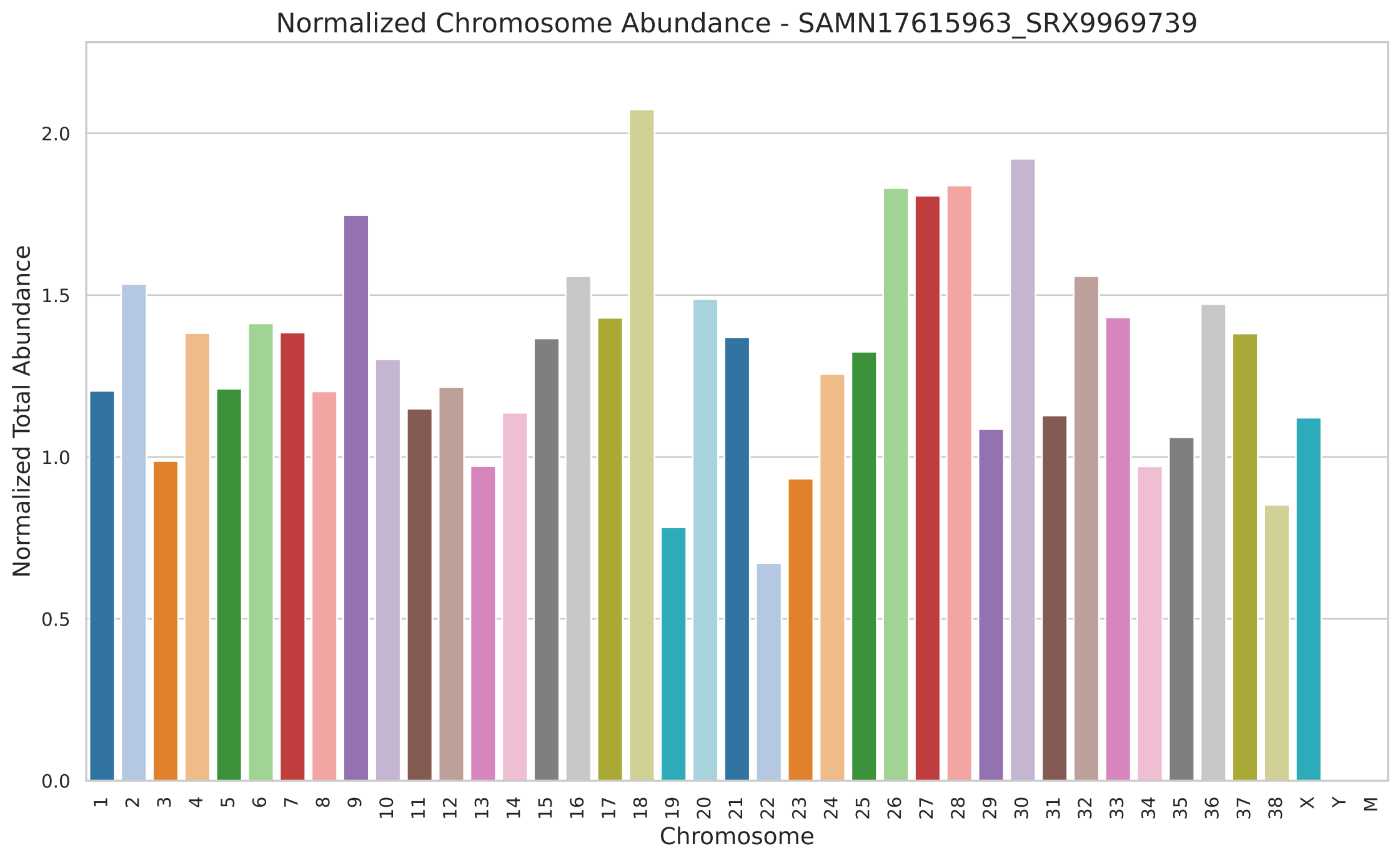

Normalized Chromosome Abundance - SAMN17615953_SRX9969728
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

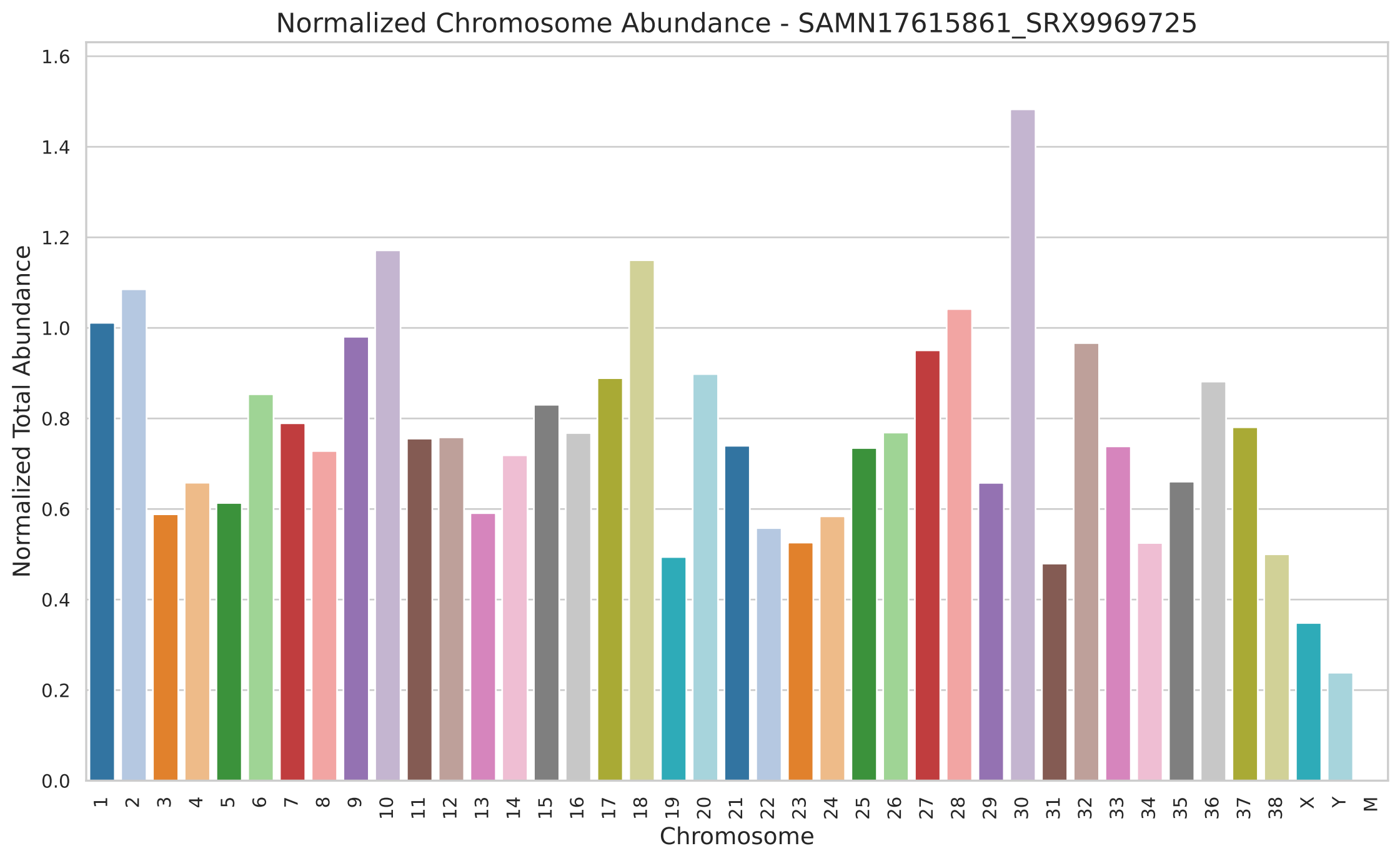

Normalized Chromosome Abundance - SAMN17615955_SRX9969730
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

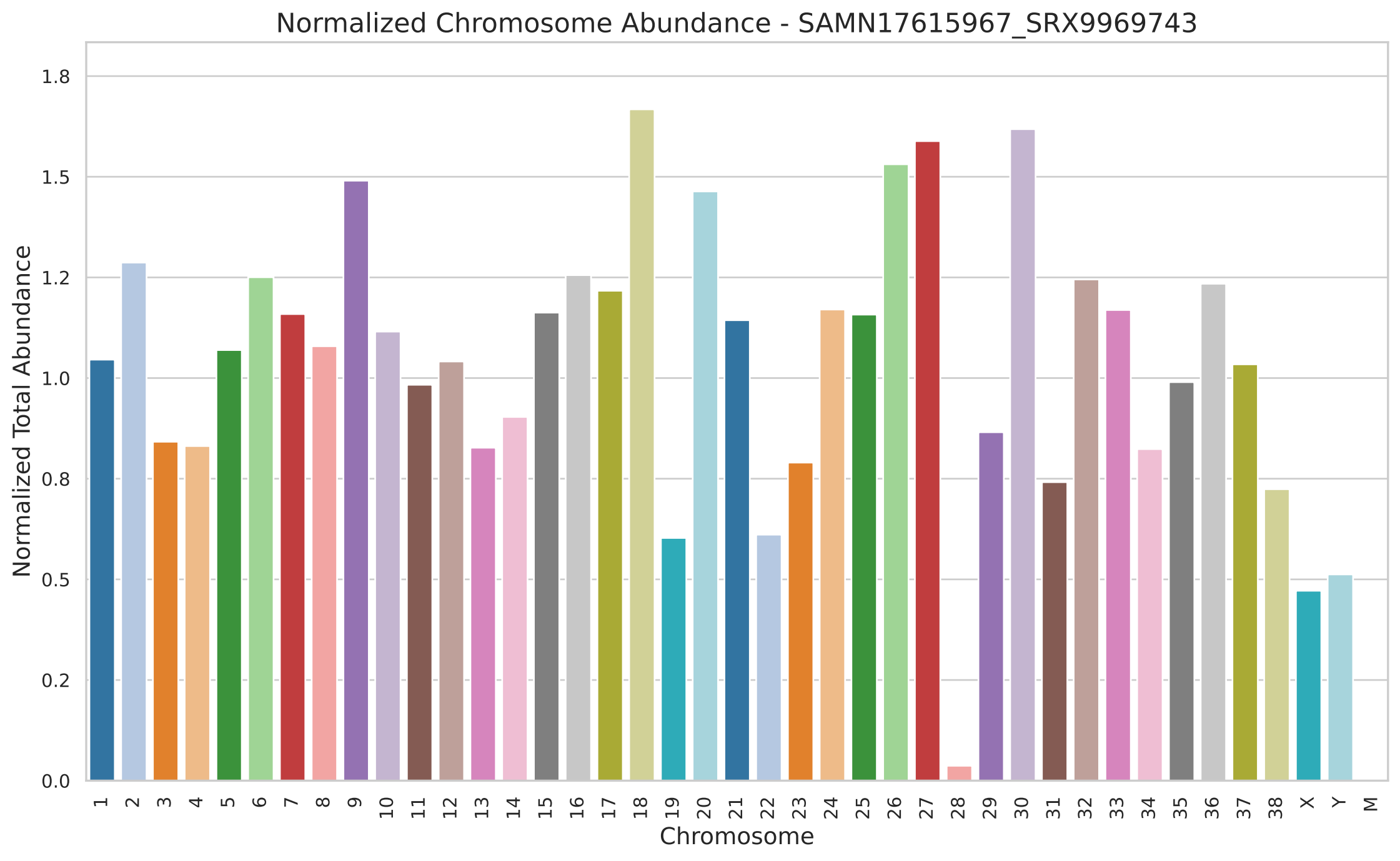

Normalized Chromosome Abundance - SAMN17615958_SRX9969733
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

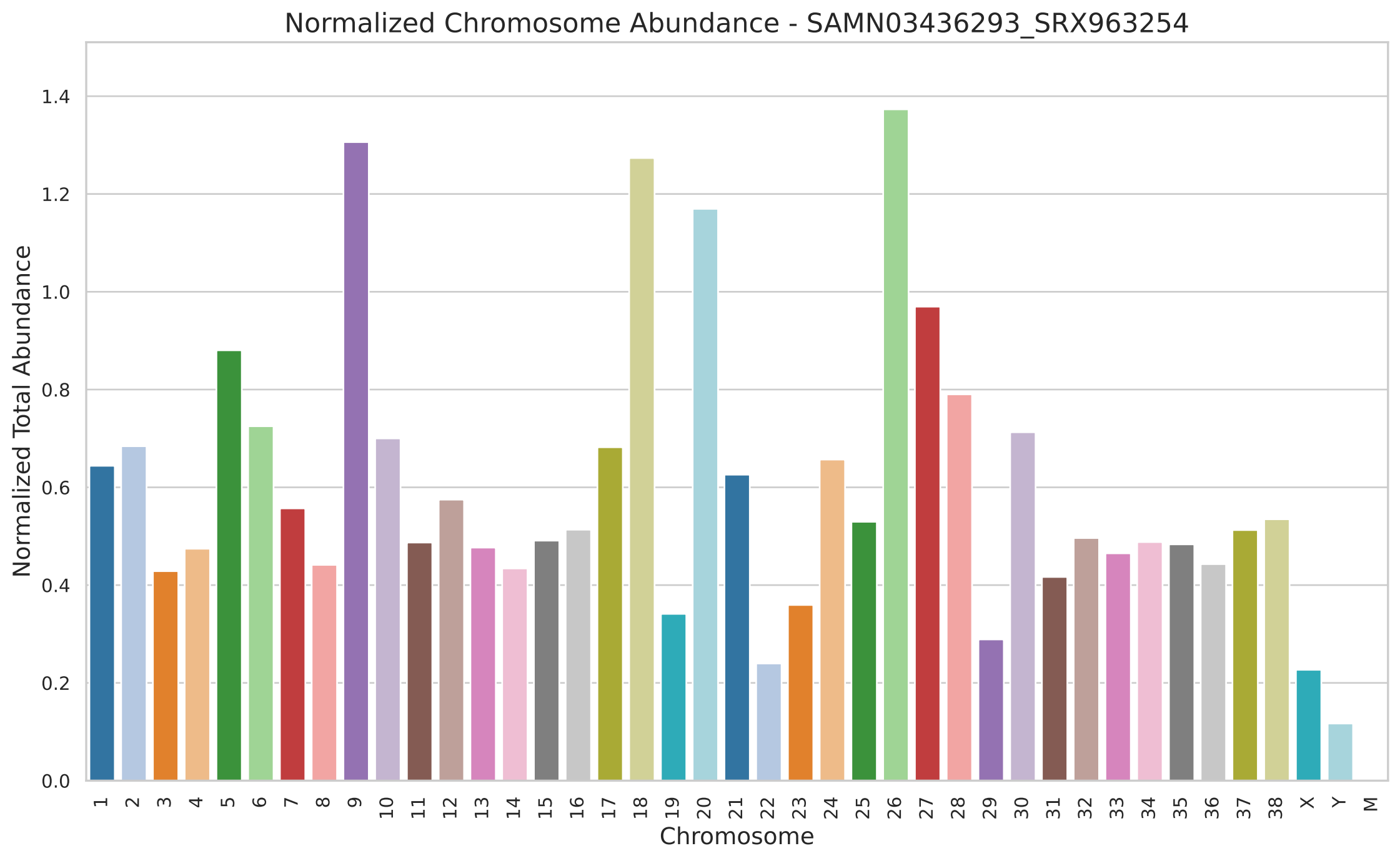

Normalized Chromosome Abundance - SAMN17615976_SRX9969823
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

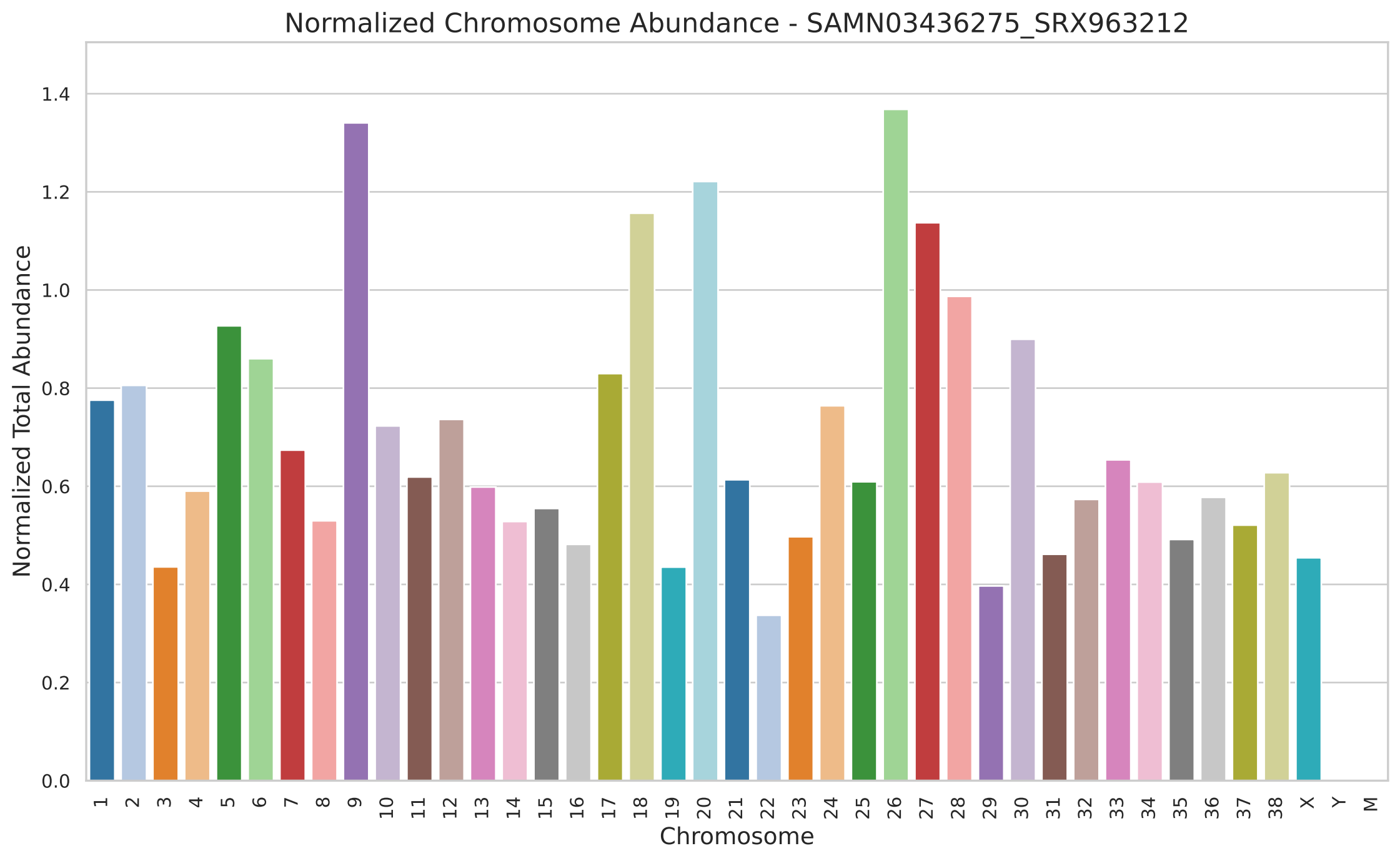

Normalized Chromosome Abundance - SAMN17615960_SRX9969735
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

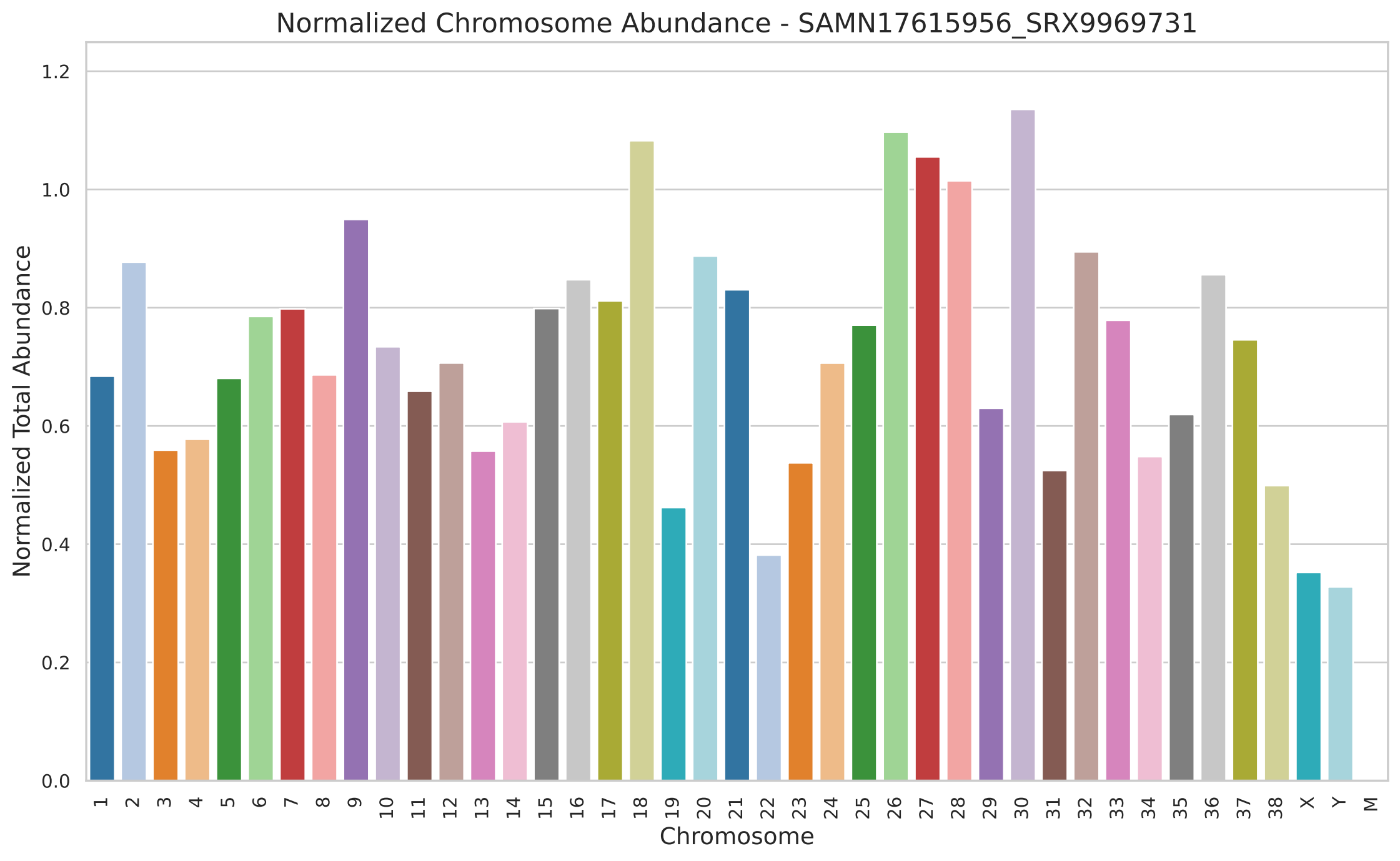

Normalized Chromosome Abundance - SAMN17615963_SRX9969739
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

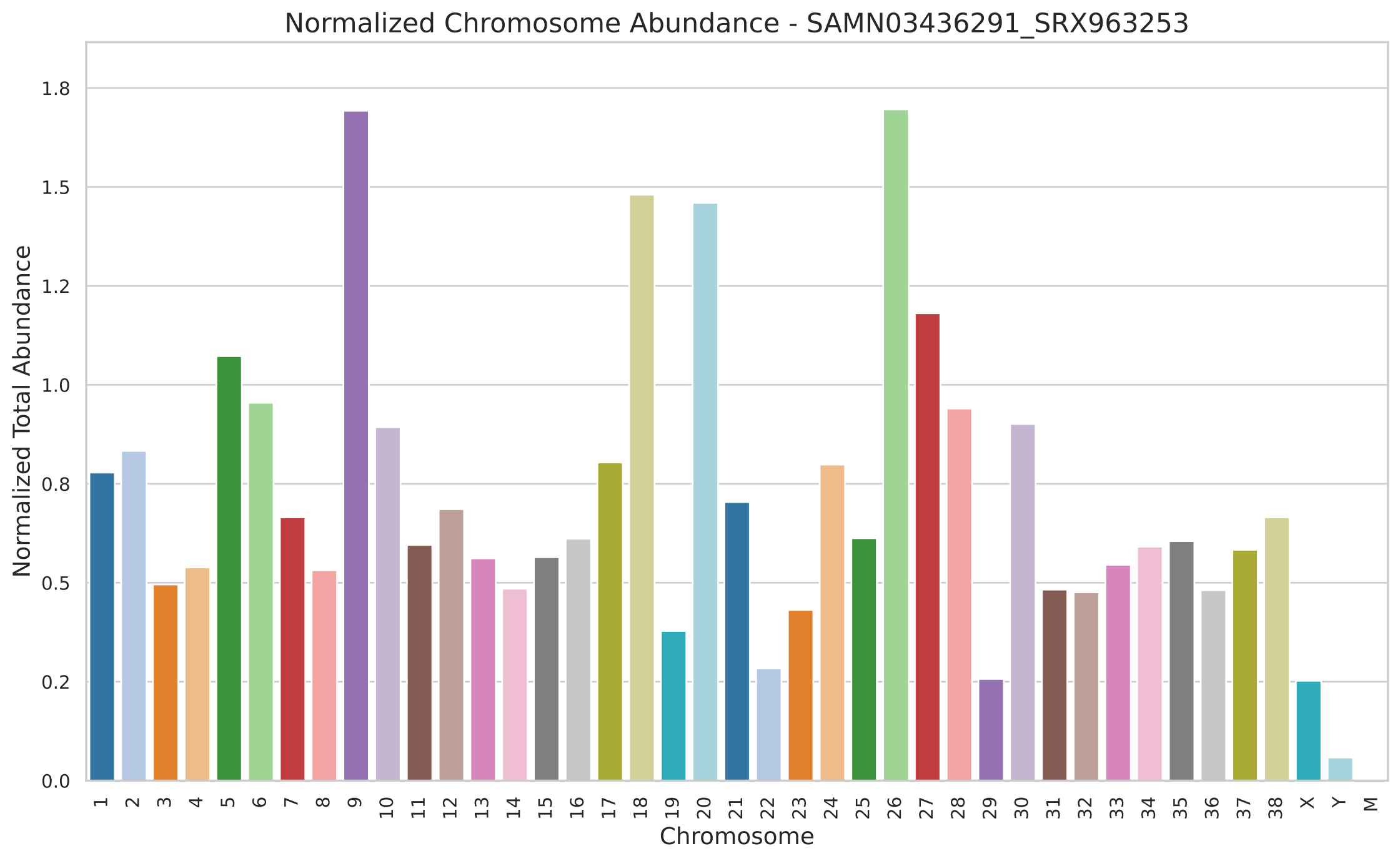

Normalized Chromosome Abundance - SAMN17615861_SRX9969725
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

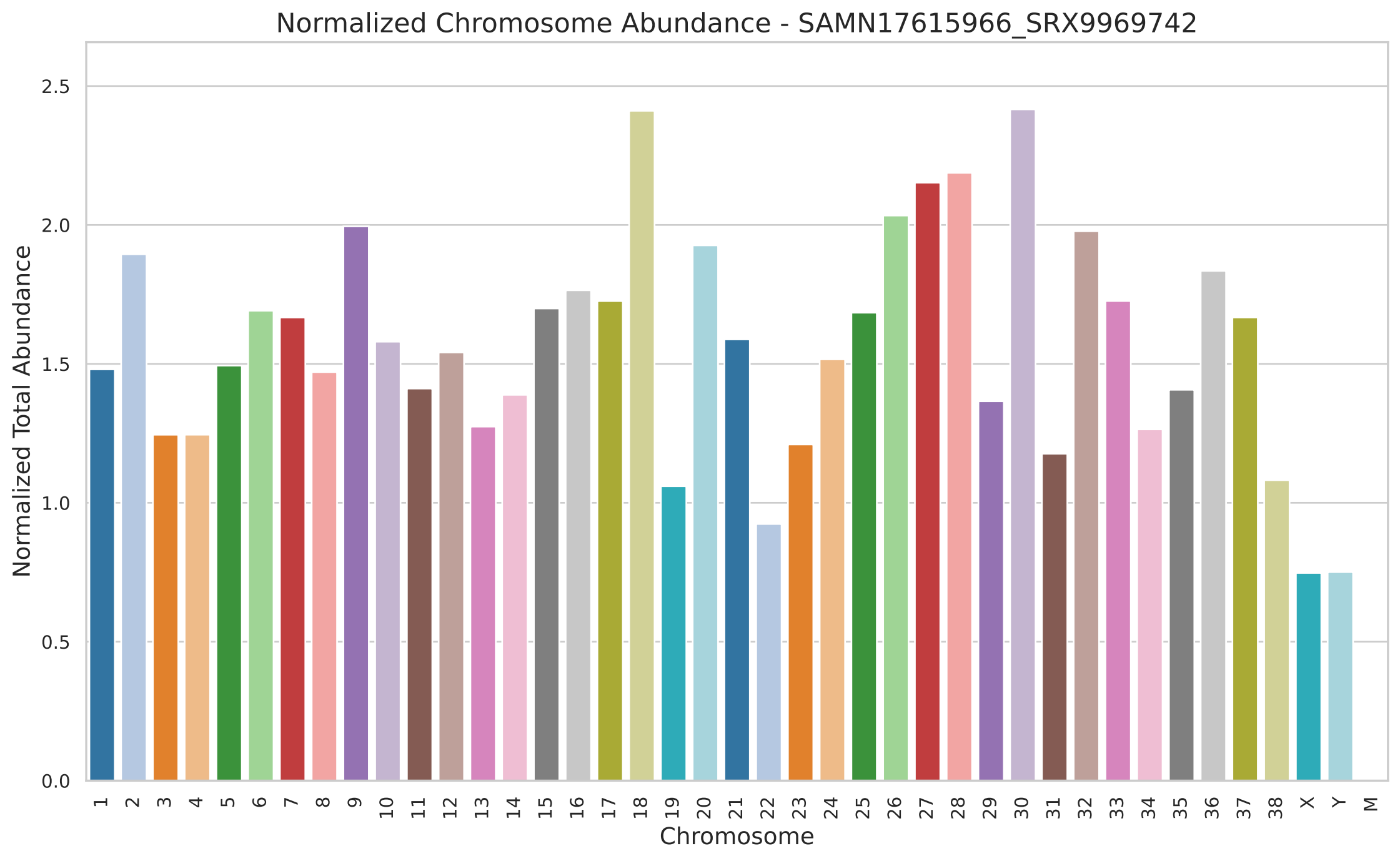

Normalized Chromosome Abundance - SAMN17615967_SRX9969743
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

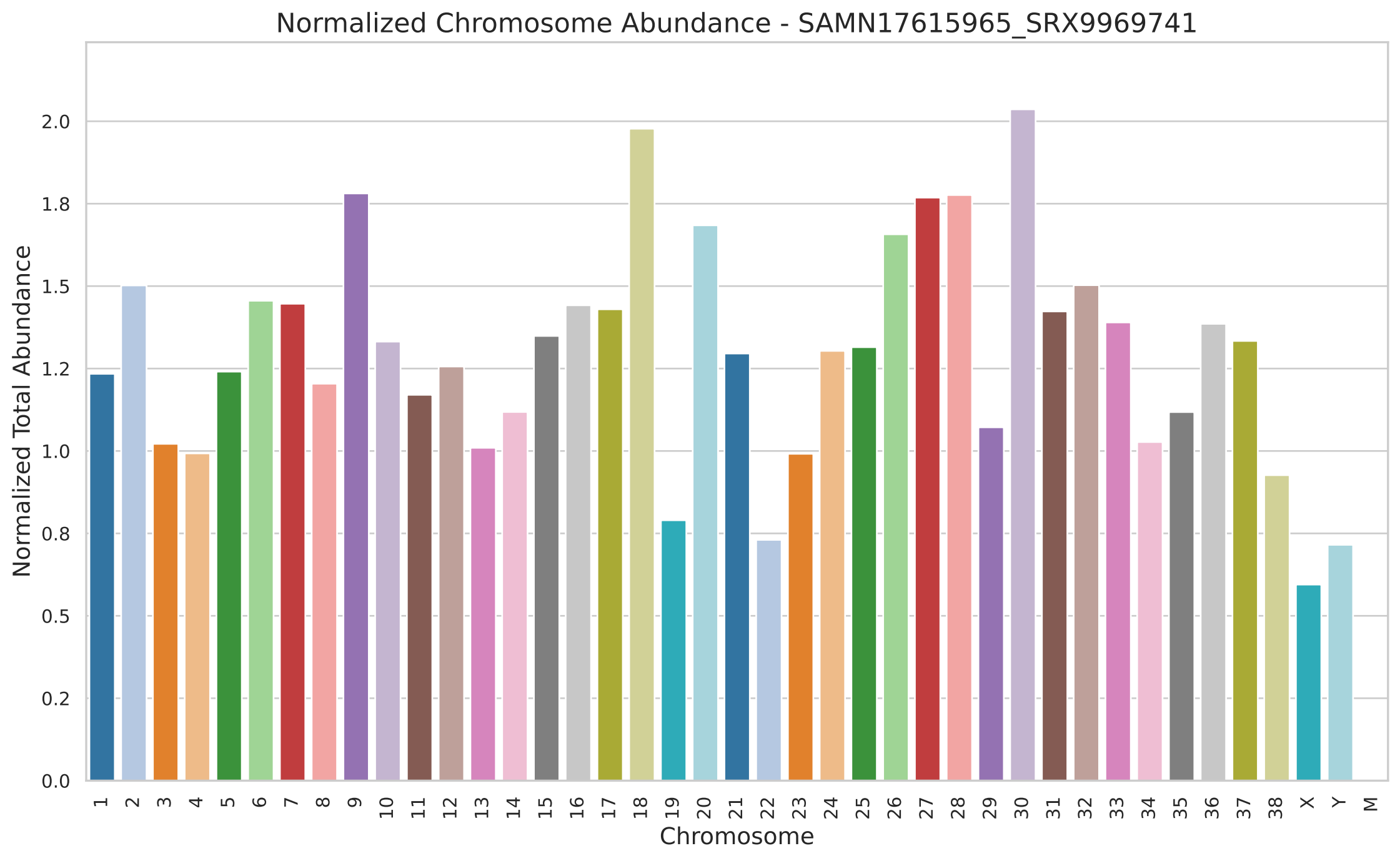

Normalized Chromosome Abundance - SAMN03436293_SRX963254
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

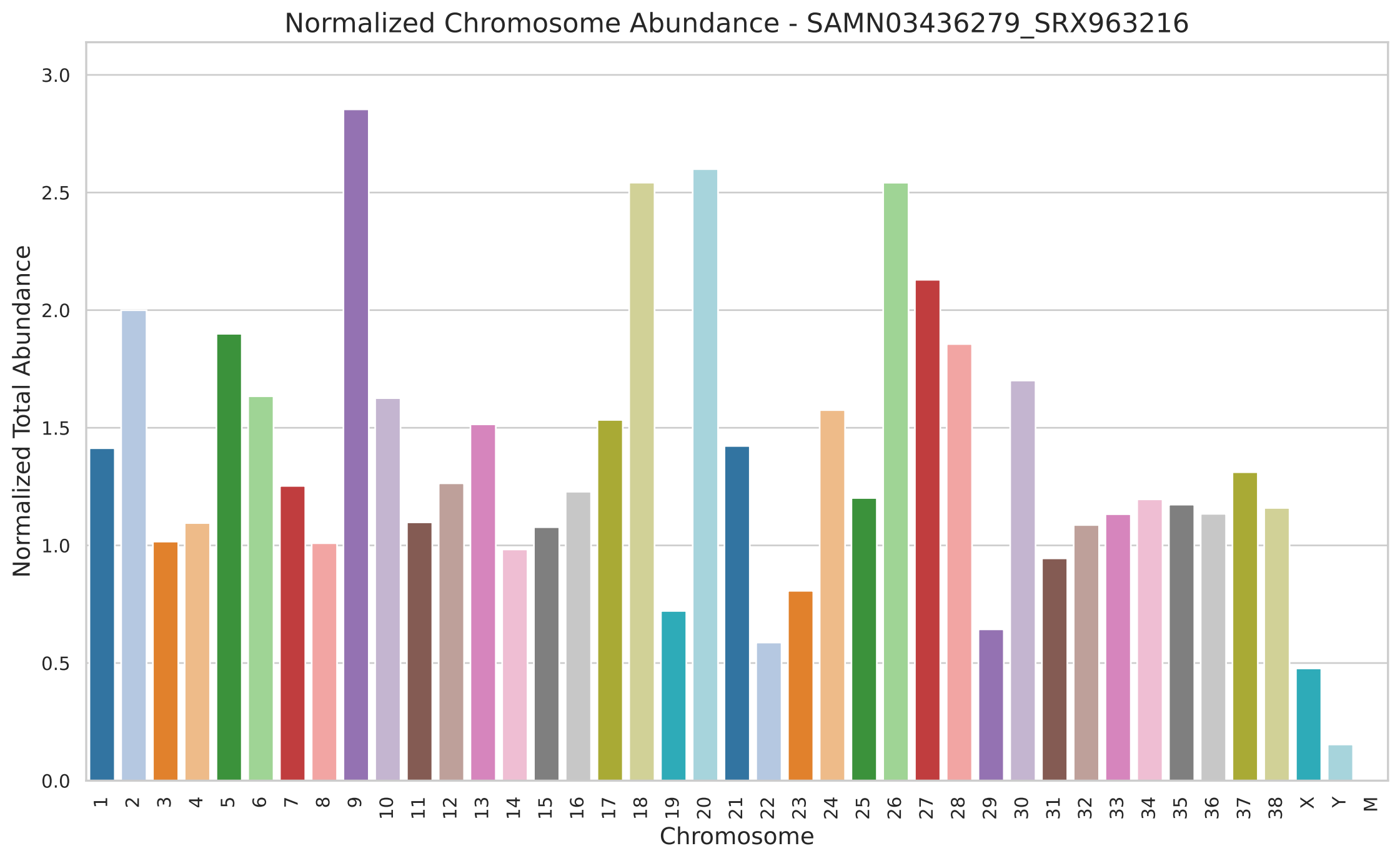

Normalized Chromosome Abundance - SAMN03436275_SRX963212
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

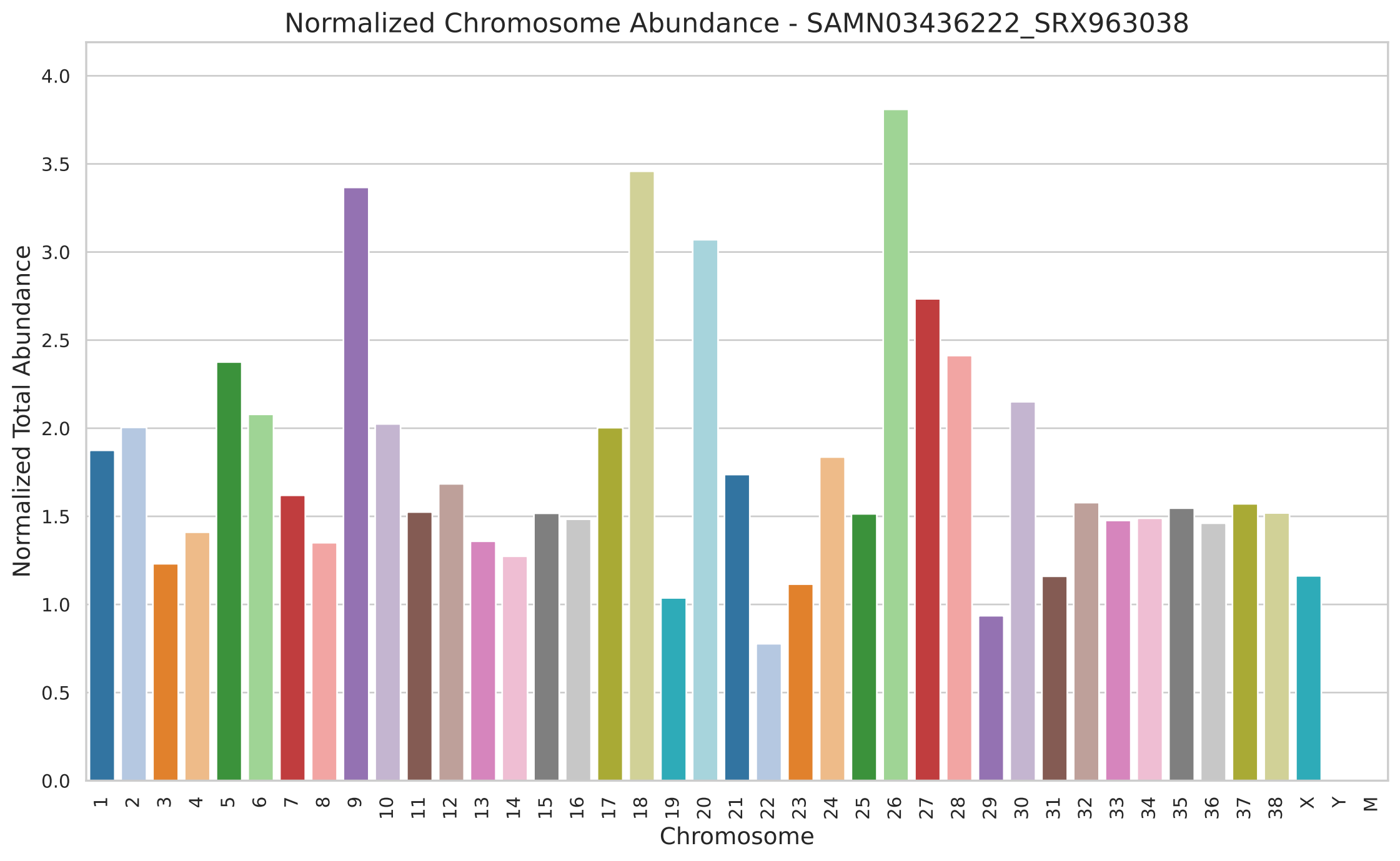

Normalized Chromosome Abundance - SAMN17615956_SRX9969731
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

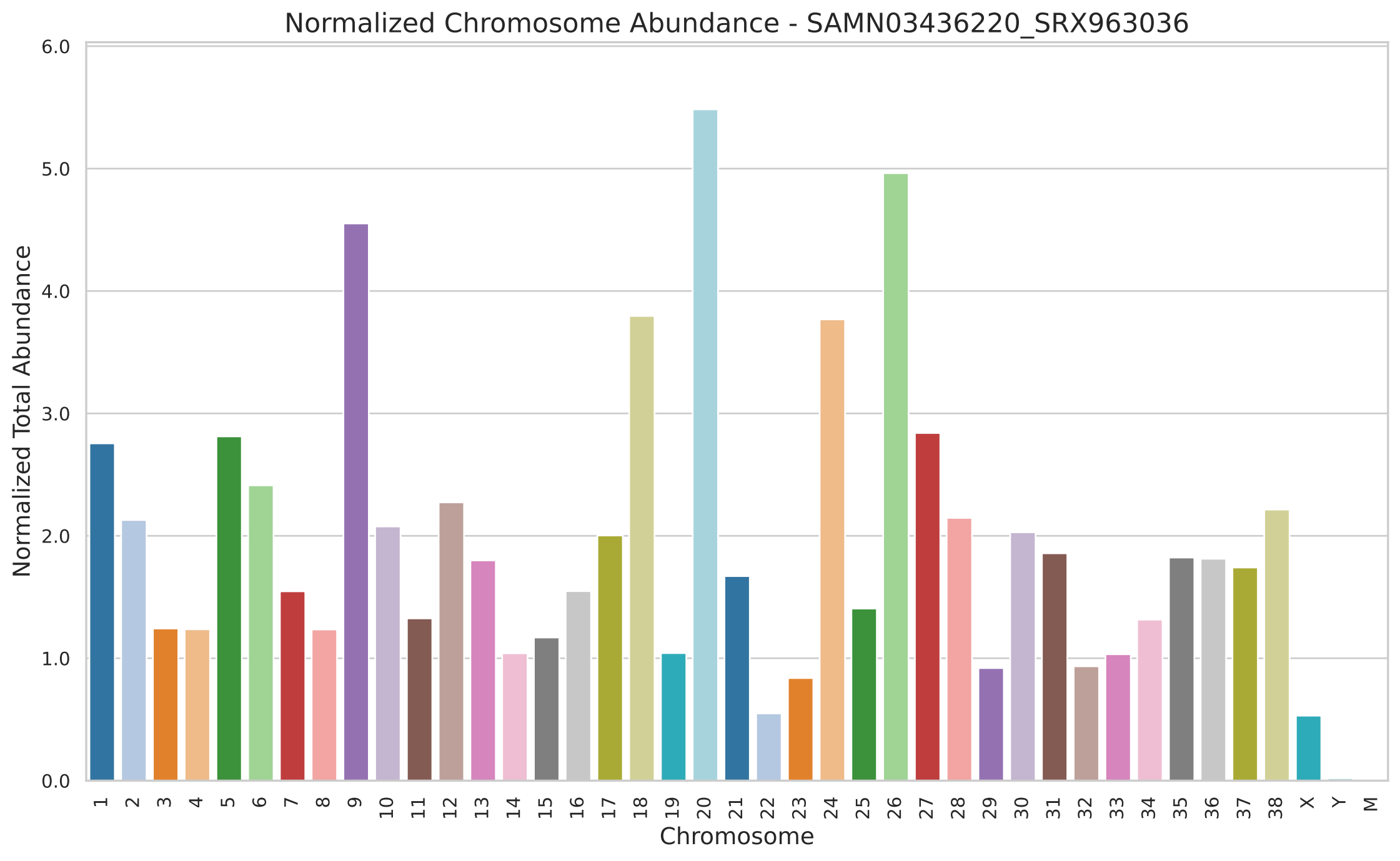

Normalized Chromosome Abundance - SAMN03436291_SRX963253
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

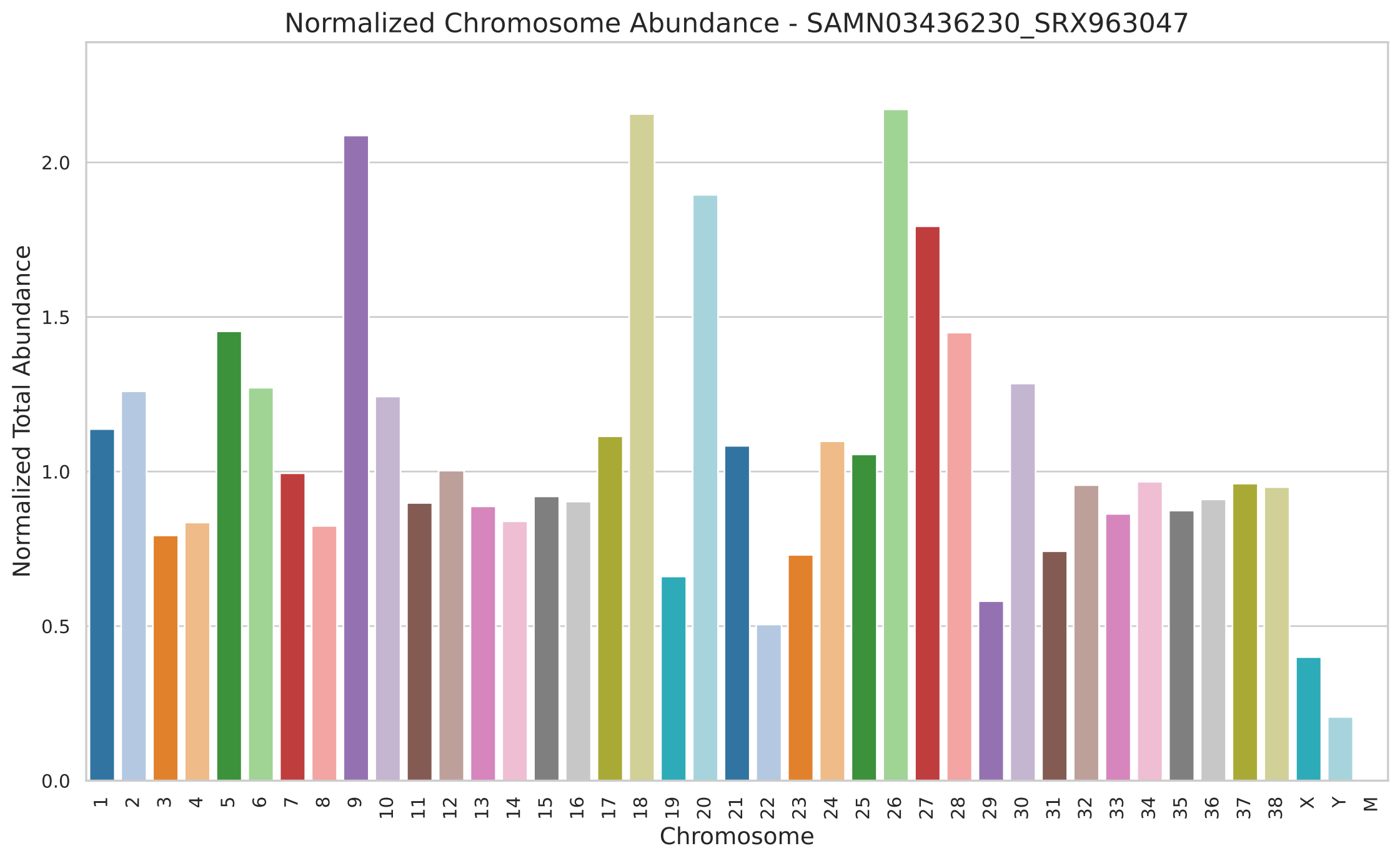

Normalized Chromosome Abundance - SAMN17615966_SRX9969742
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

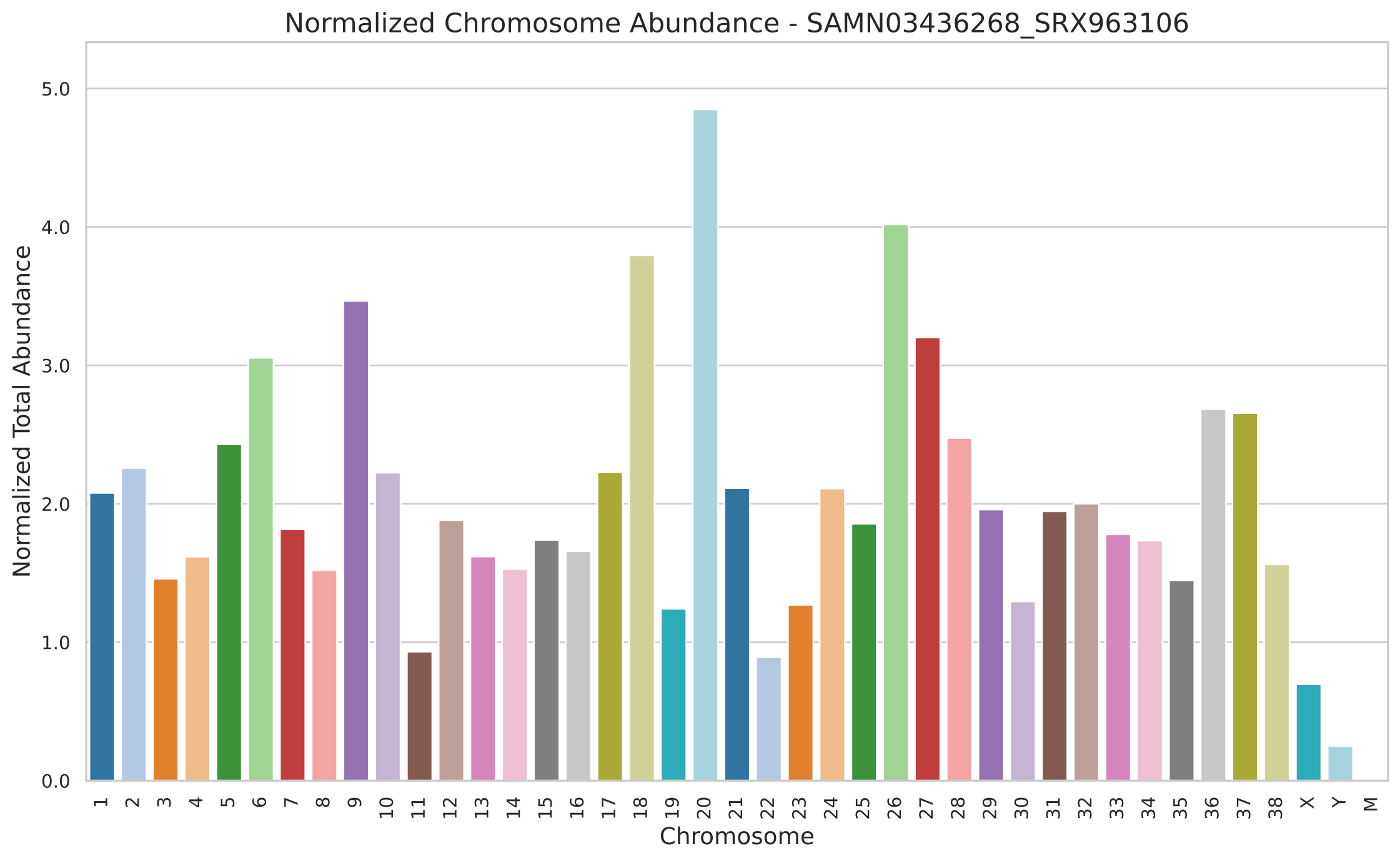

Normalized Chromosome Abundance - SAMN17615965_SRX9969741
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

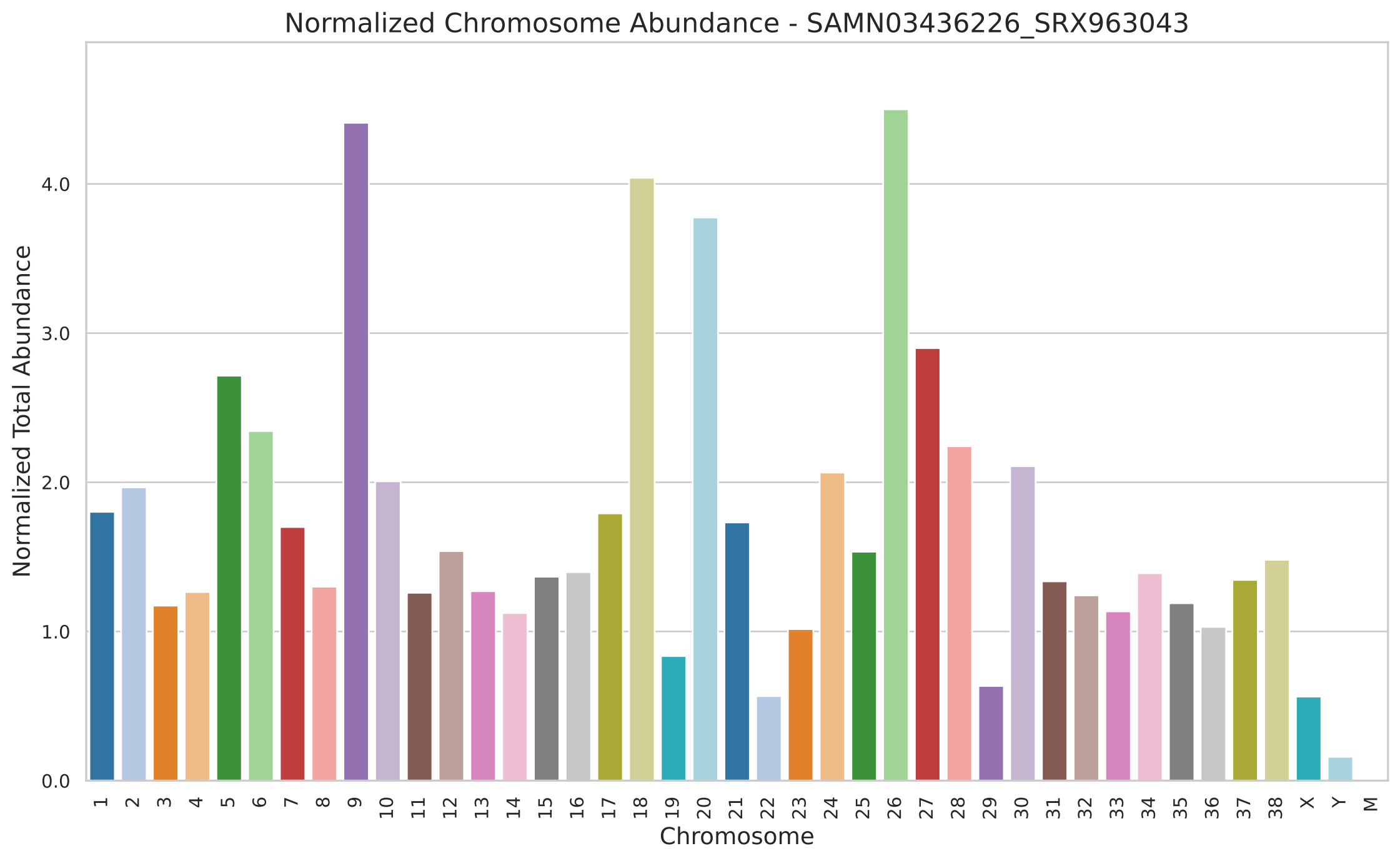

Normalized Chromosome Abundance - SAMN03436279_SRX963216
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

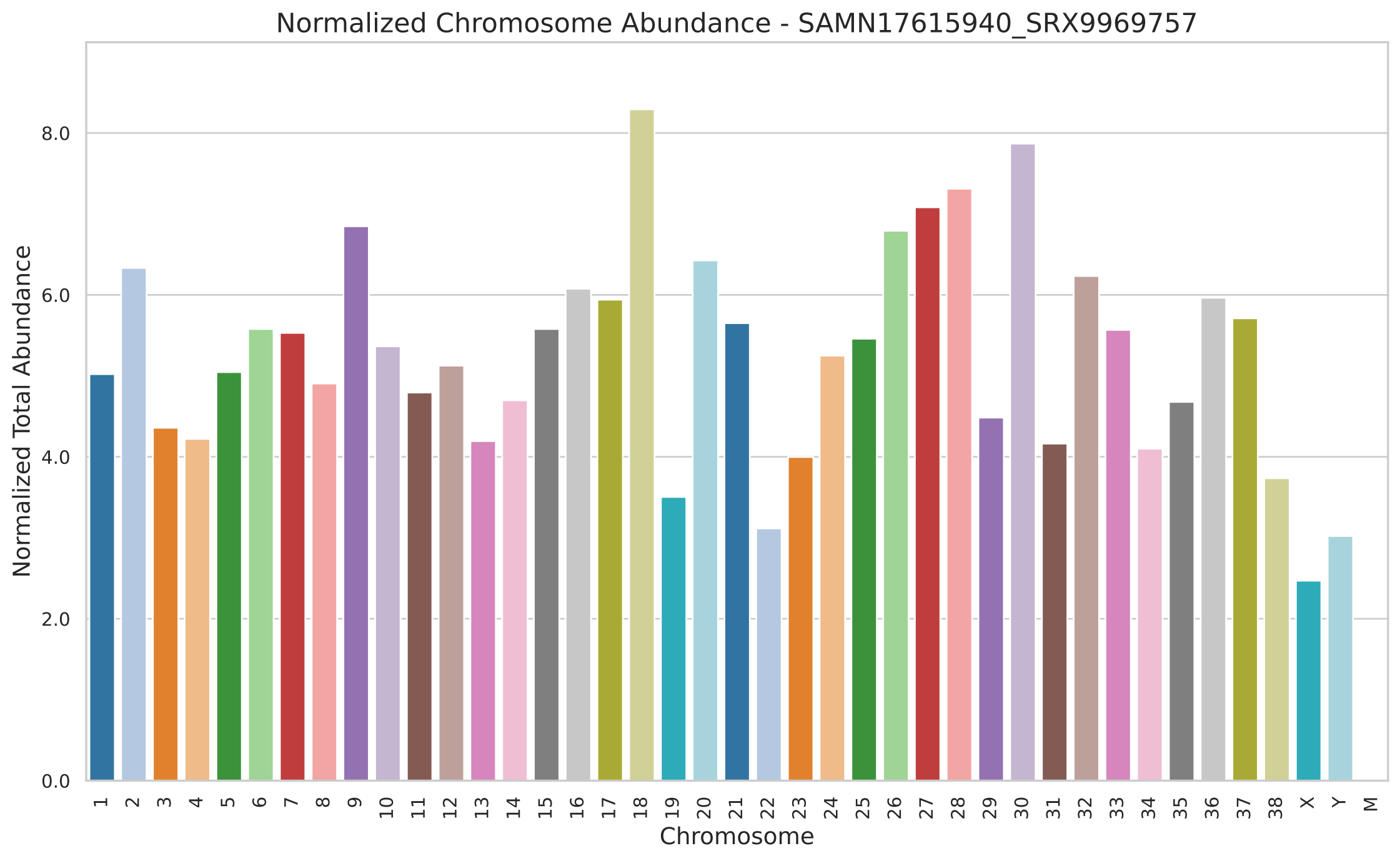

Normalized Chromosome Abundance - SAMN03436222_SRX963038
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

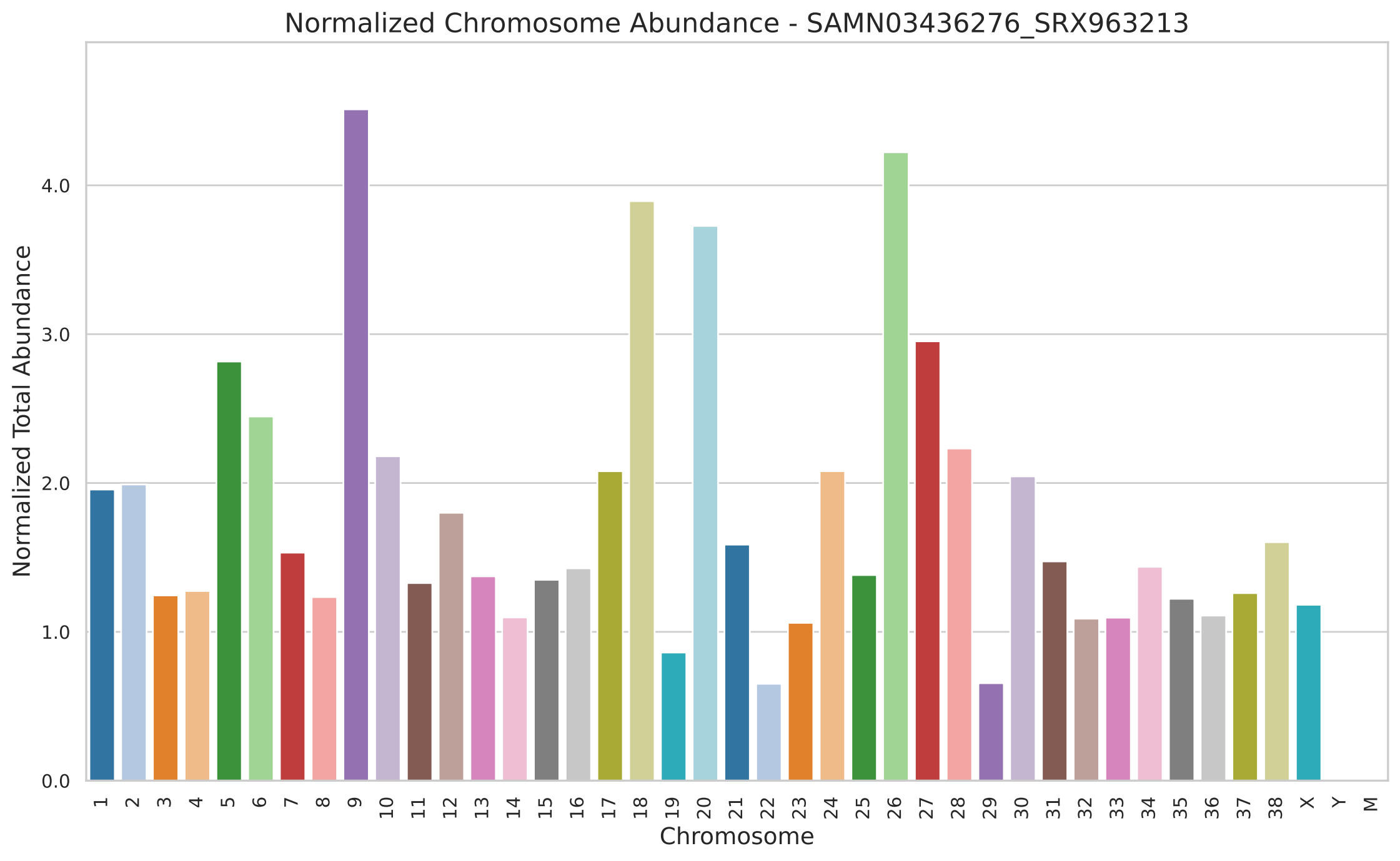

Normalized Chromosome Abundance - SAMN03436220_SRX963036
Normalized Total Abundance
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

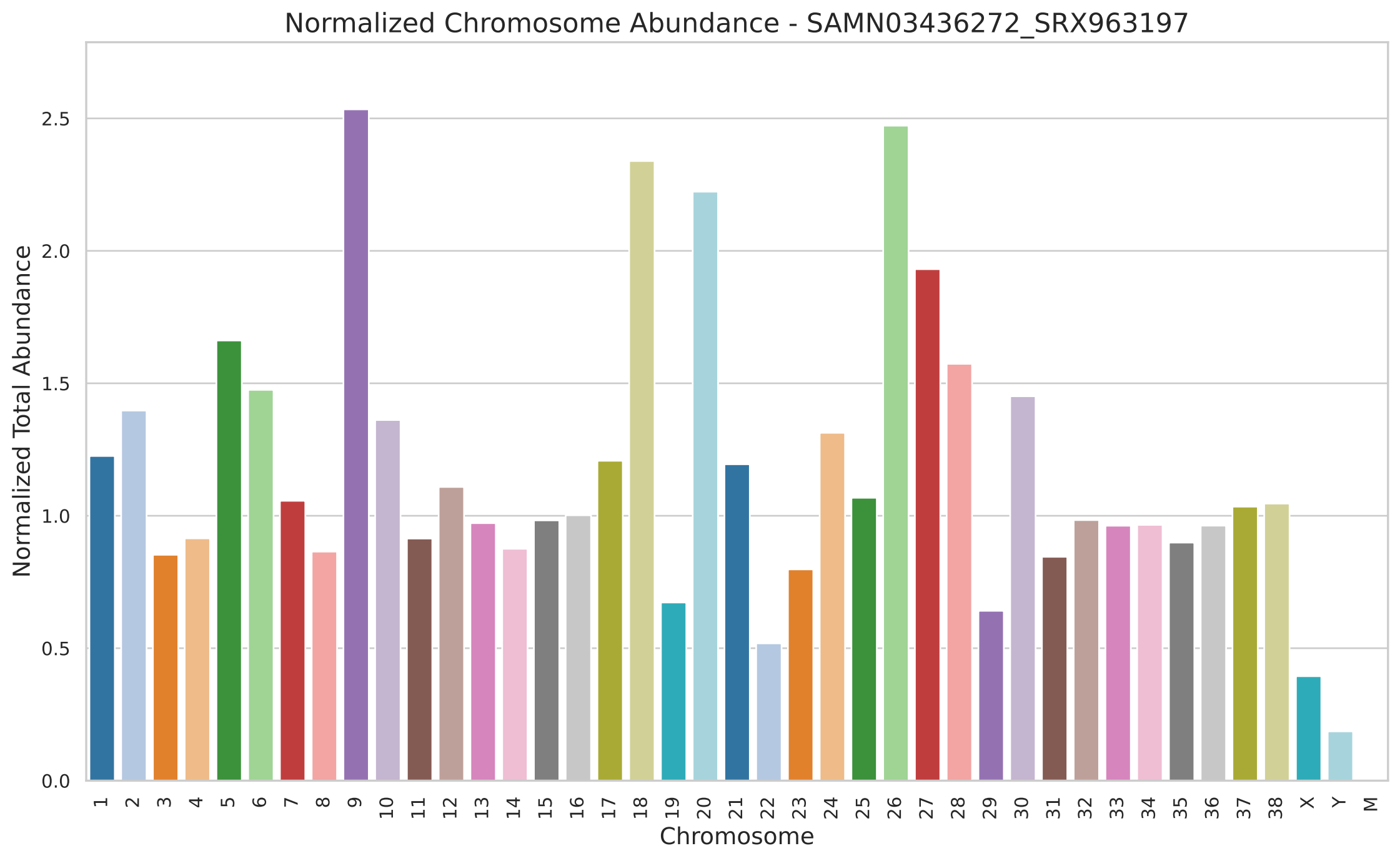

Normalized Chromosome Abundance - SAMN03436230_SRX963047
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

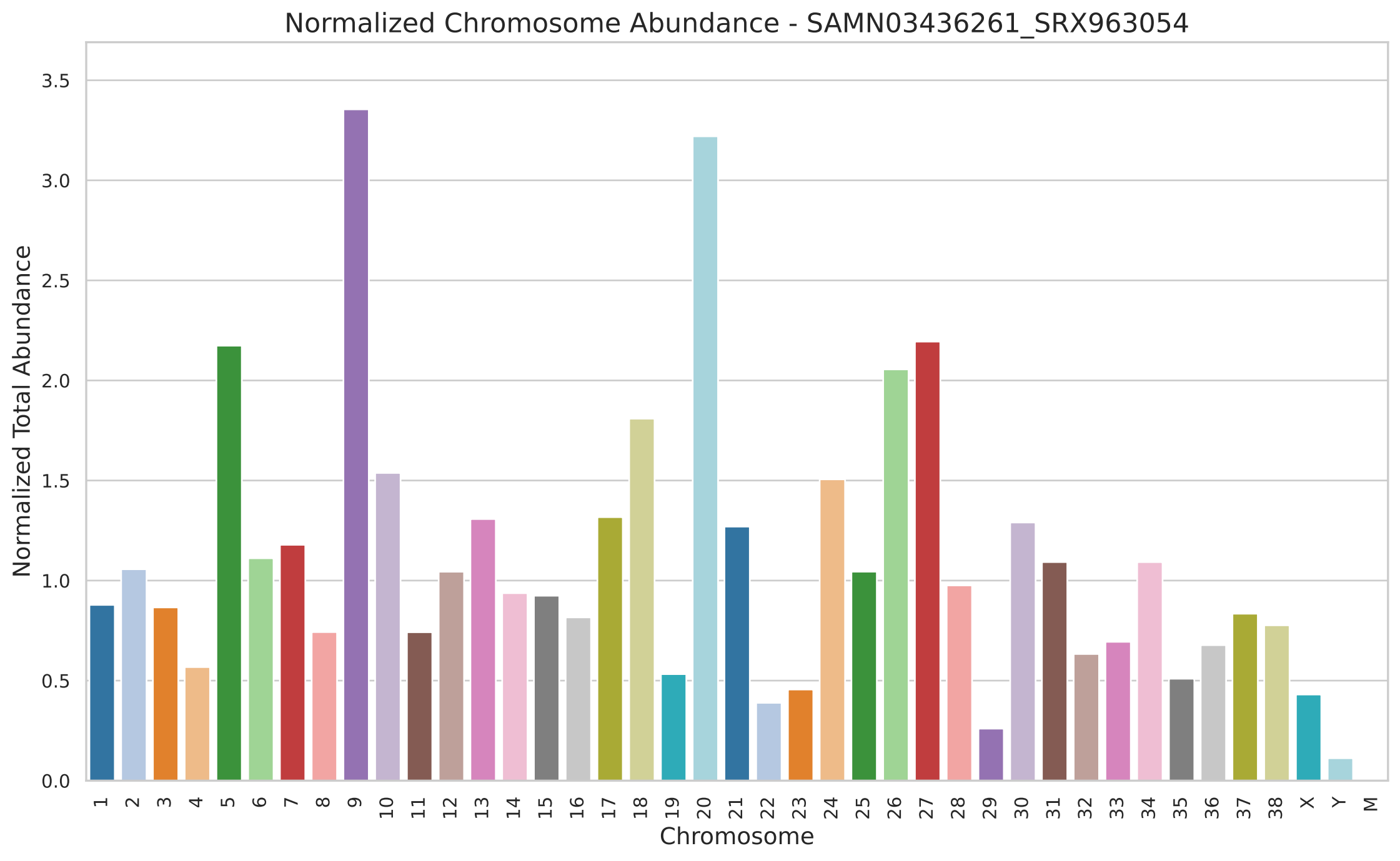

Normalized Chromosome Abundance - SAMN03436268_SRX963106
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

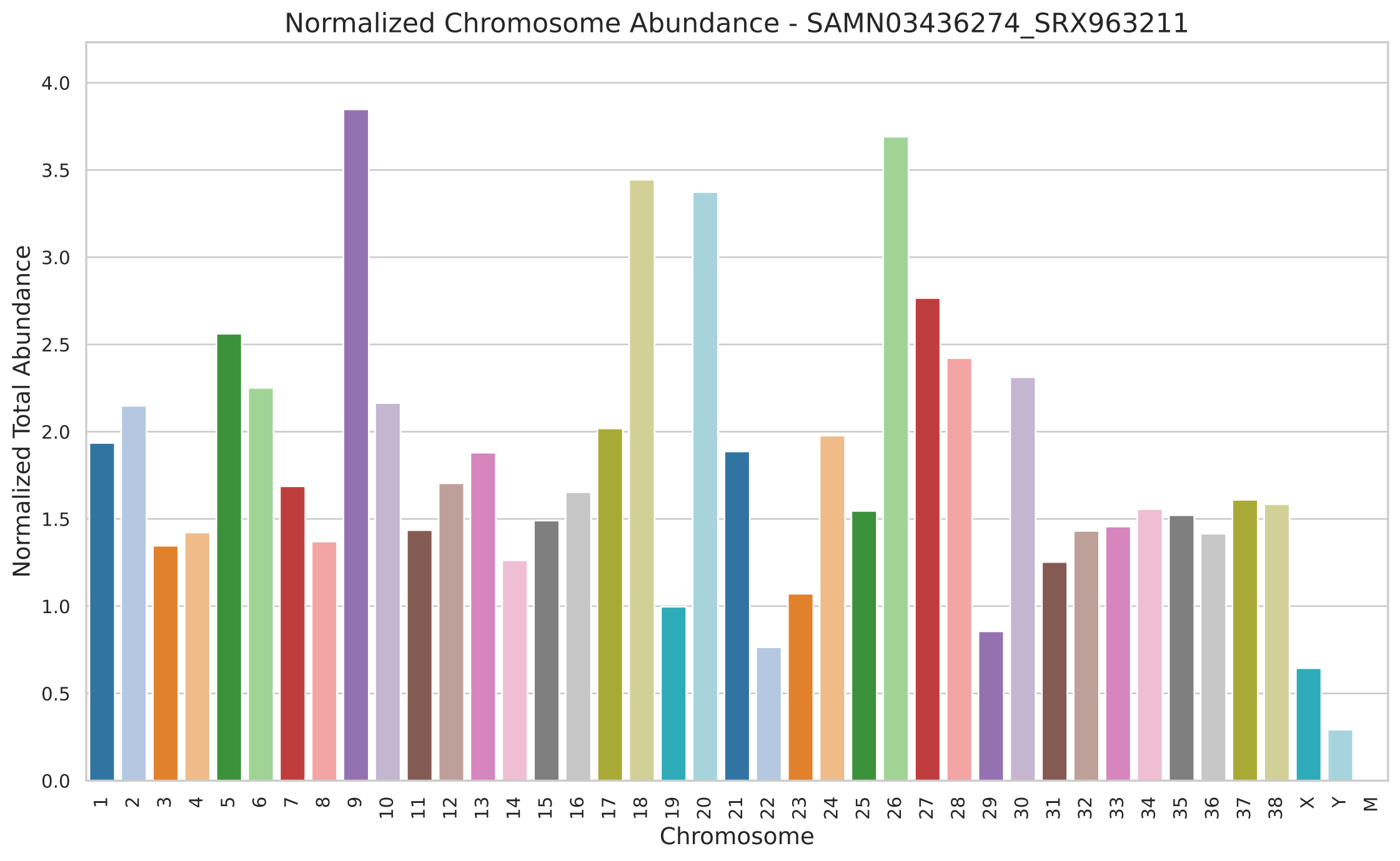

Normalized Chromosome Abundance - SAMN03436226_SRX963043
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

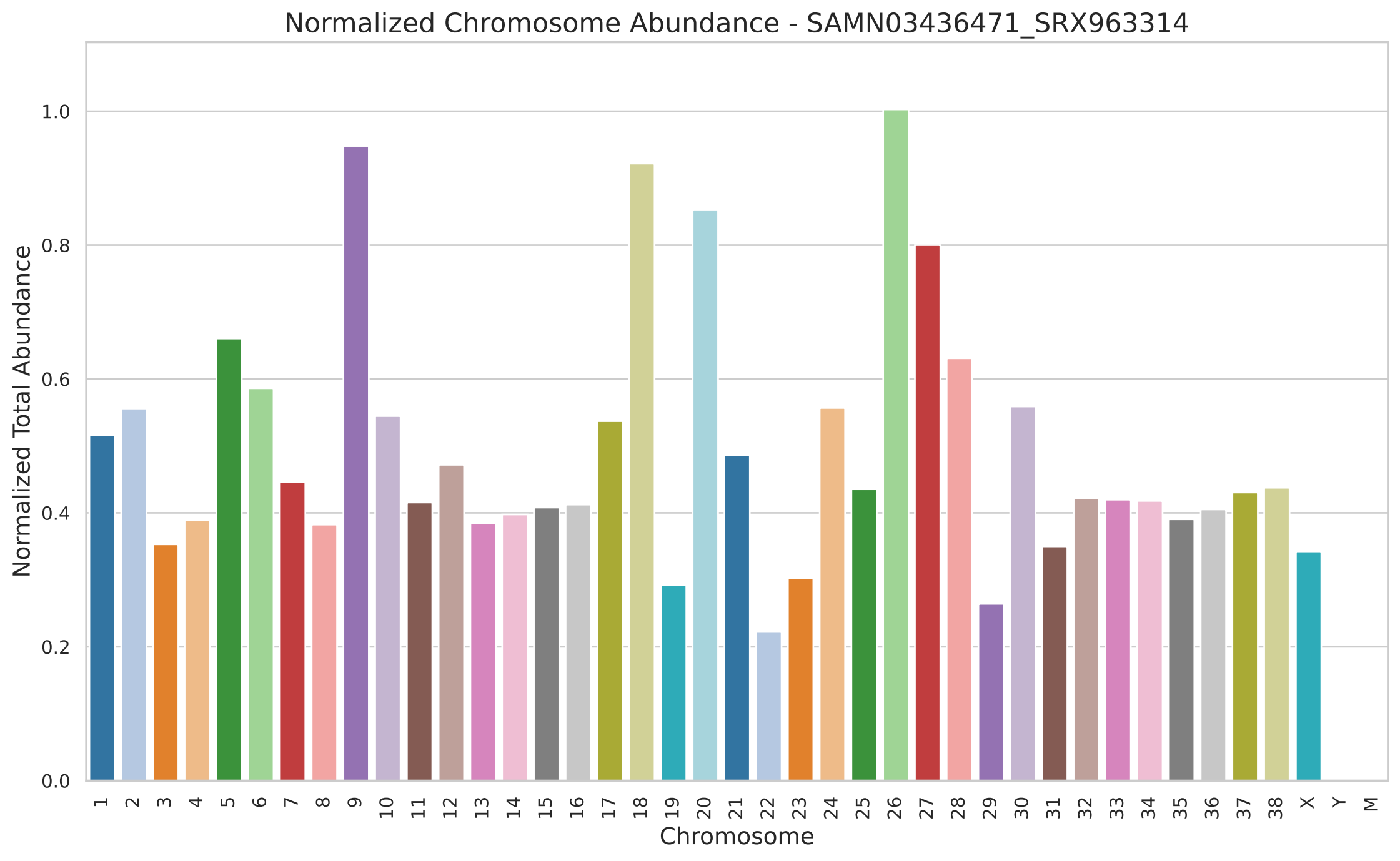

Normalized Chromosome Abundance - SAMN17615940_SRX9969757
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

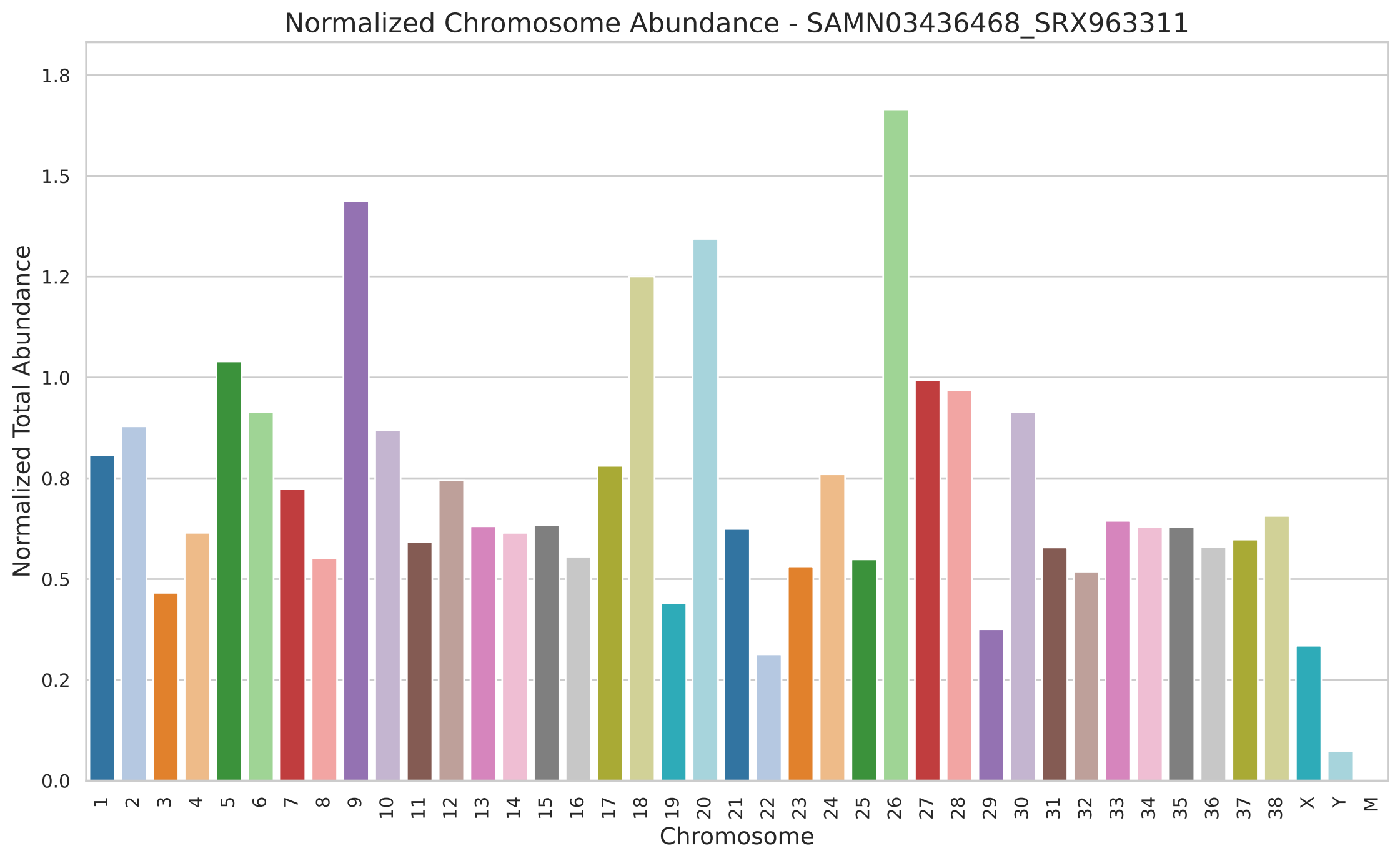

Normalized Chromosome Abundance - SAMN03436276_SRX963213
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

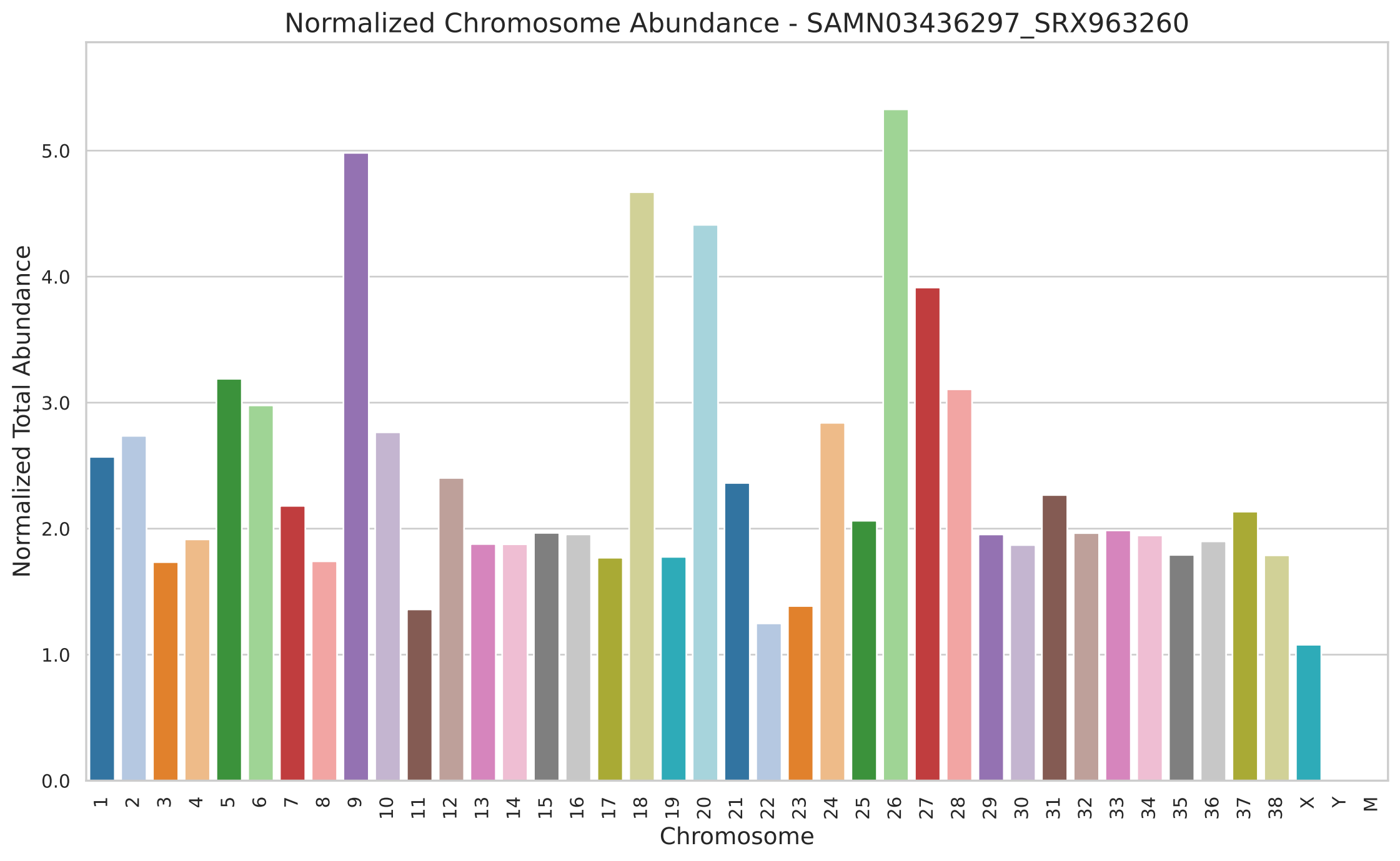

Normalized Chromosome Abundance - SAMN03436272_SRX963197
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

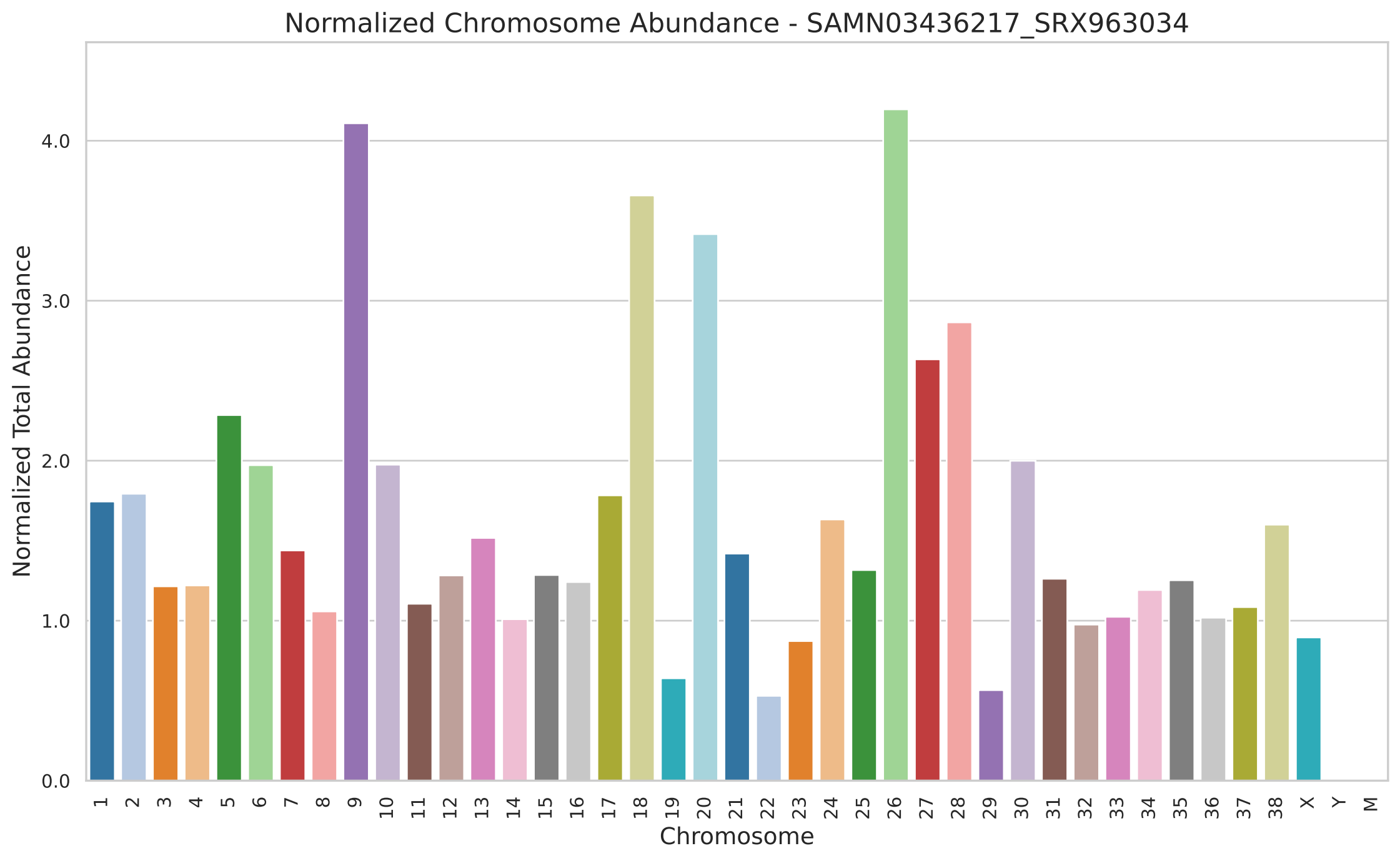

Normalized Chromosome Abundance - SAMN03436261_SRX963054
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

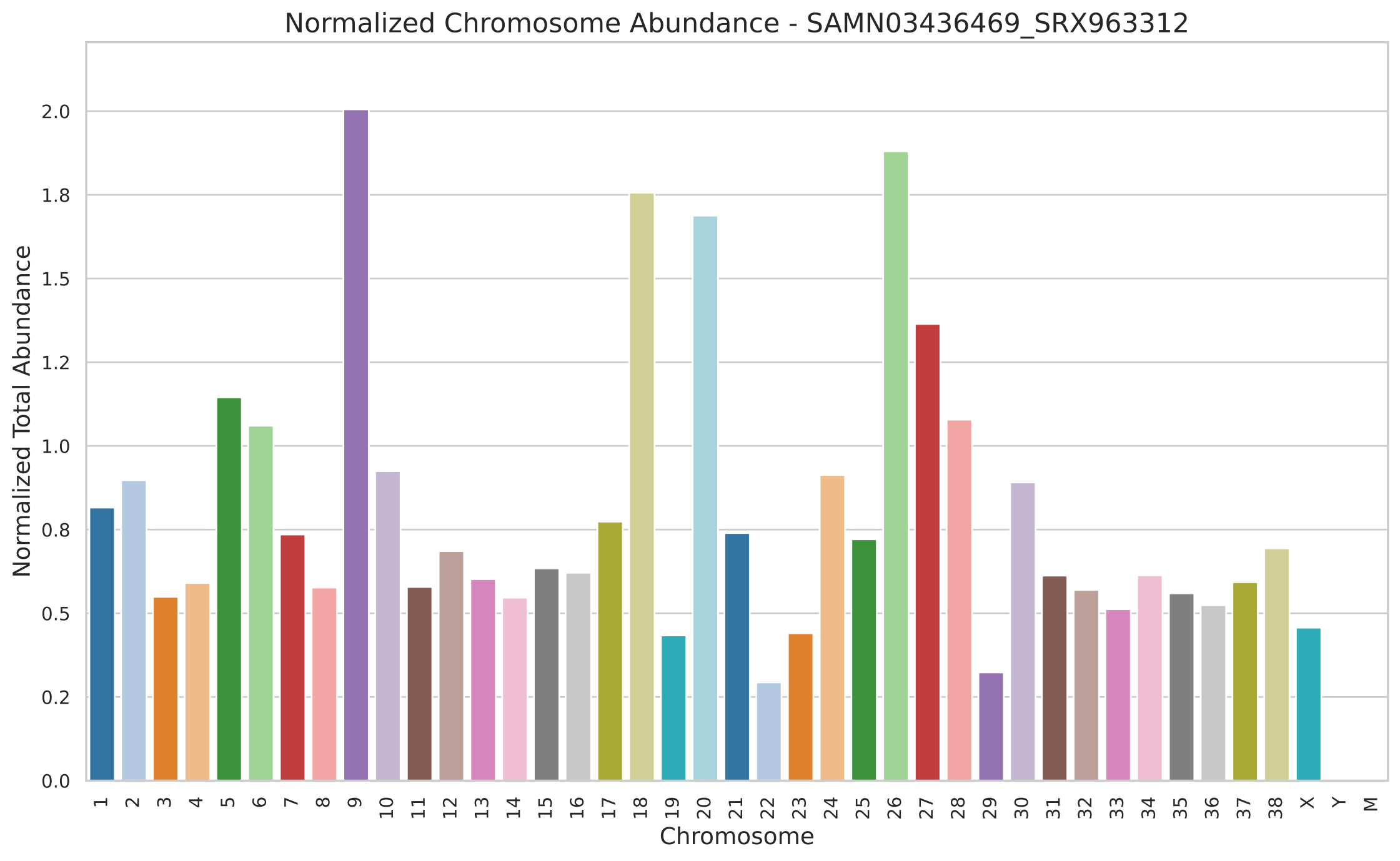

Normalized Chromosome Abundance - SAMN03436274_SRX963211
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

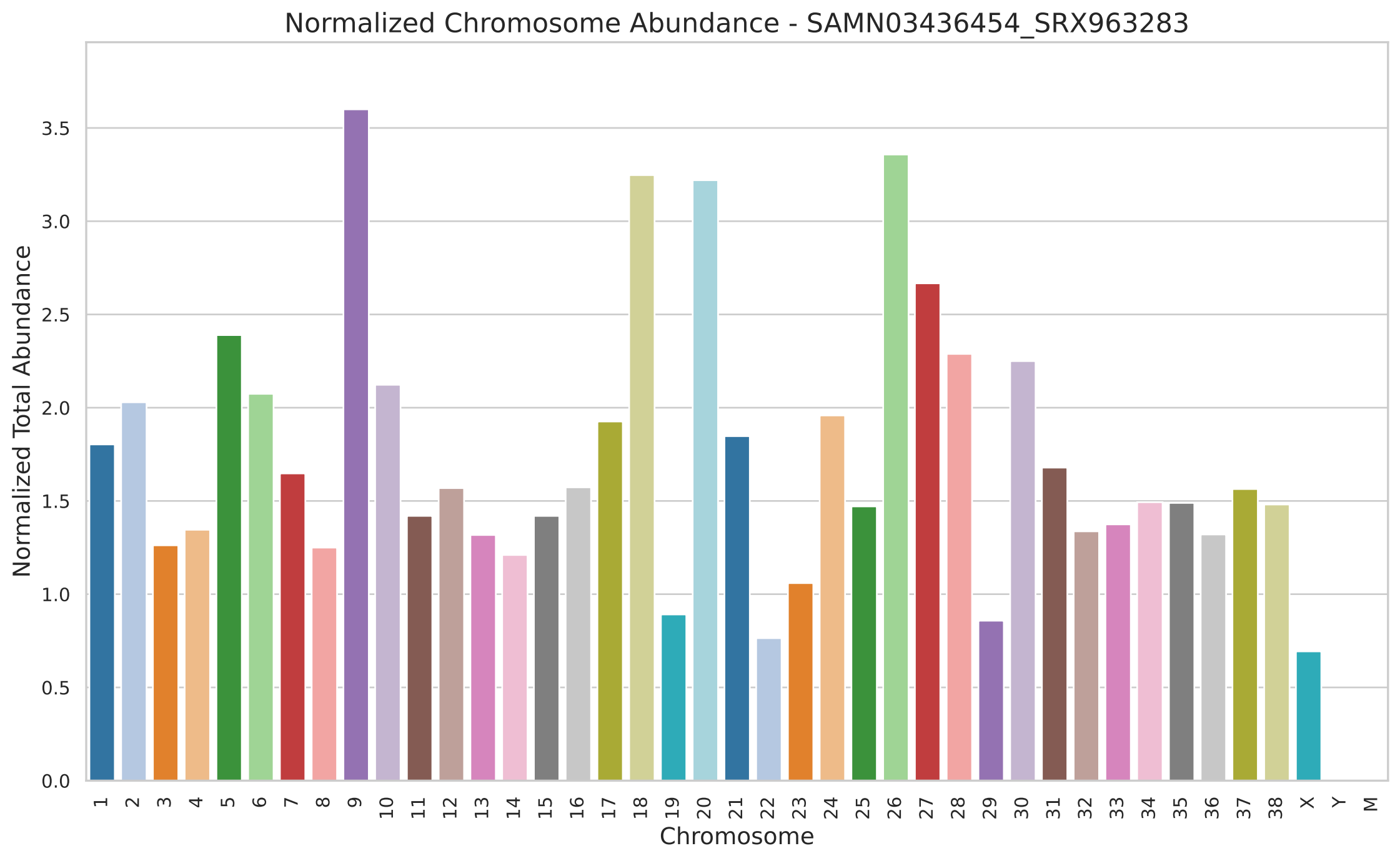

Normalized Chromosome Abundance - SAMN03436471_SRX963314
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

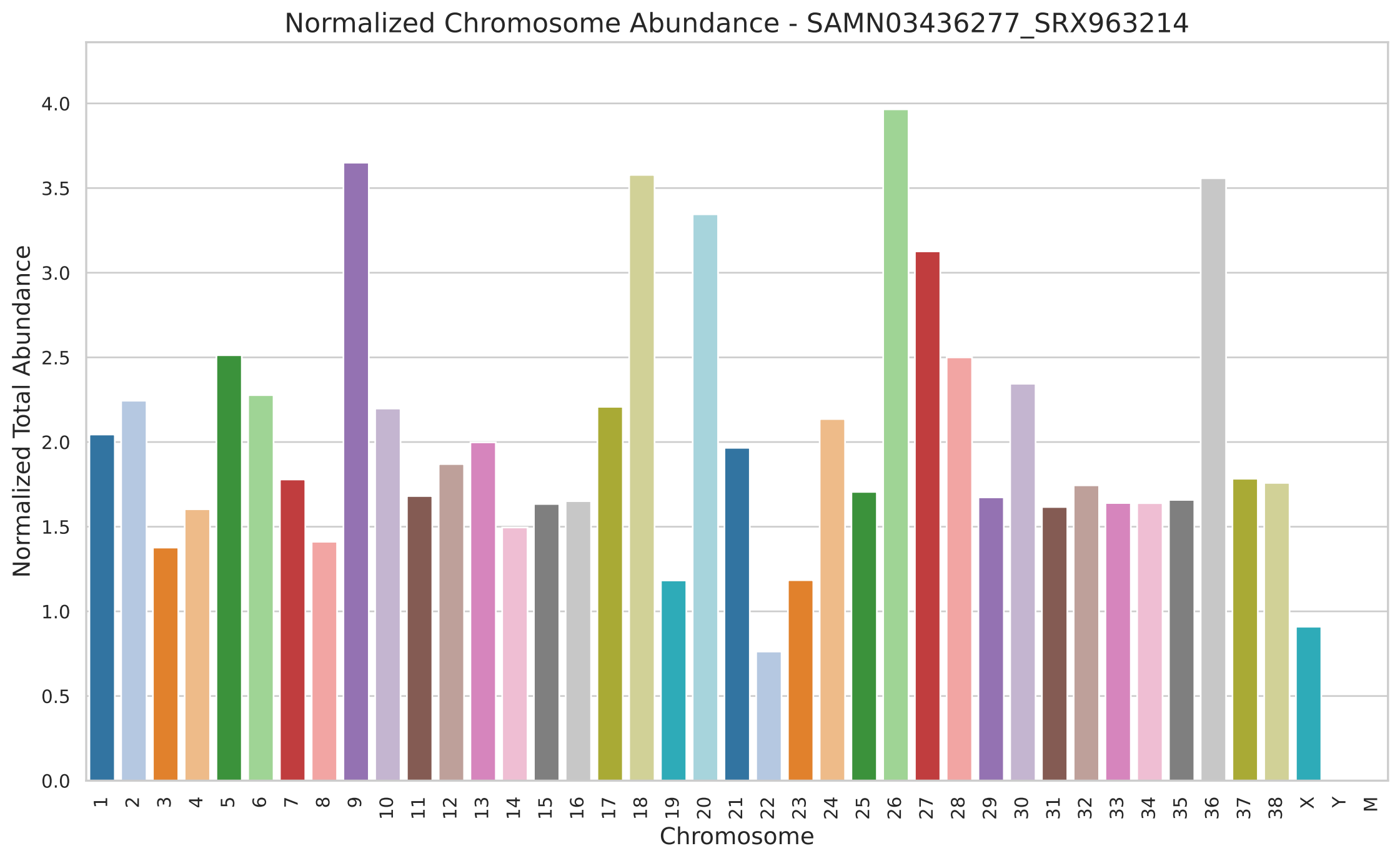

Normalized Chromosome Abundance - SAMN03436468_SRX963311
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

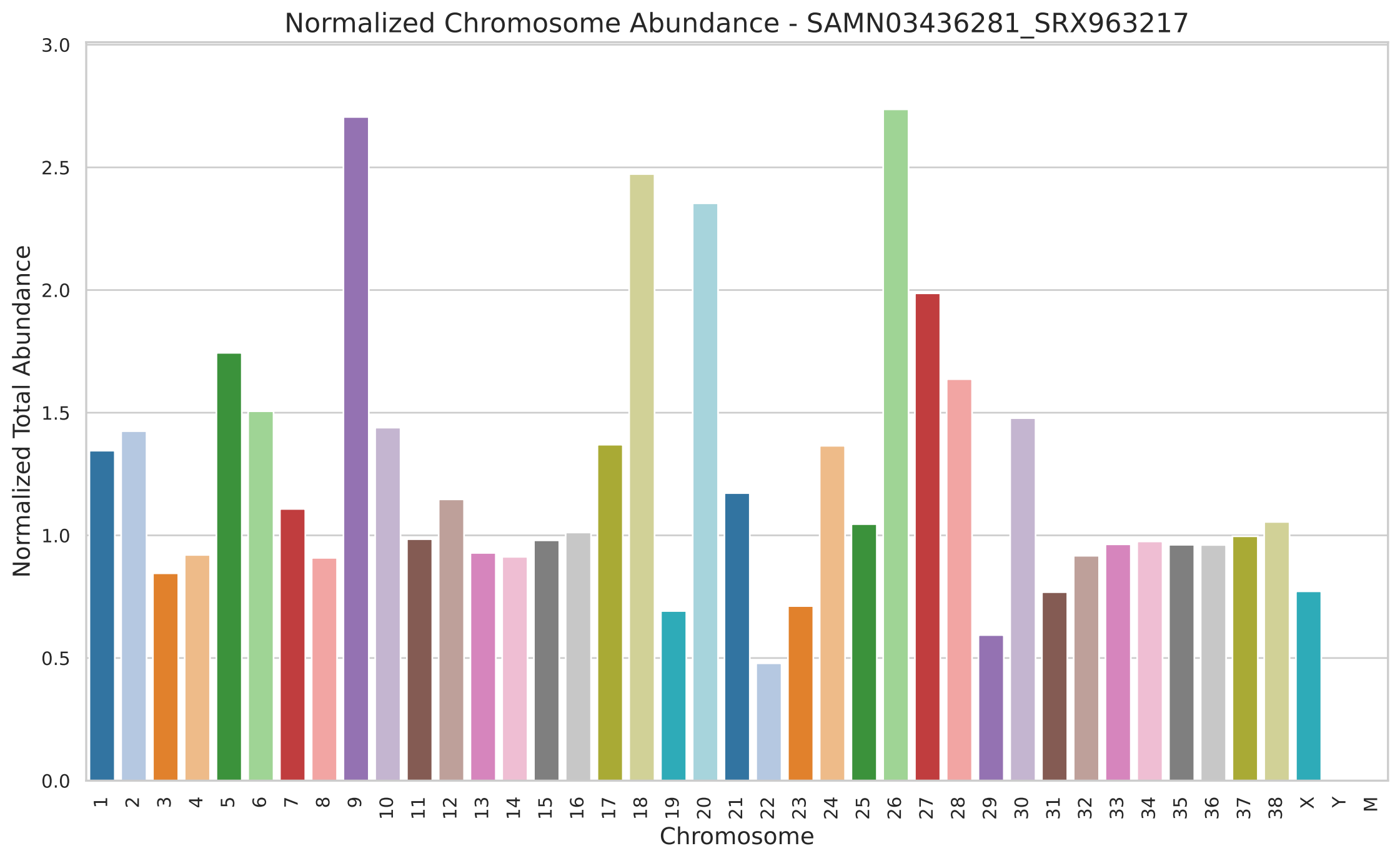

Normalized Chromosome Abundance - SAMN03436297_SRX963260
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

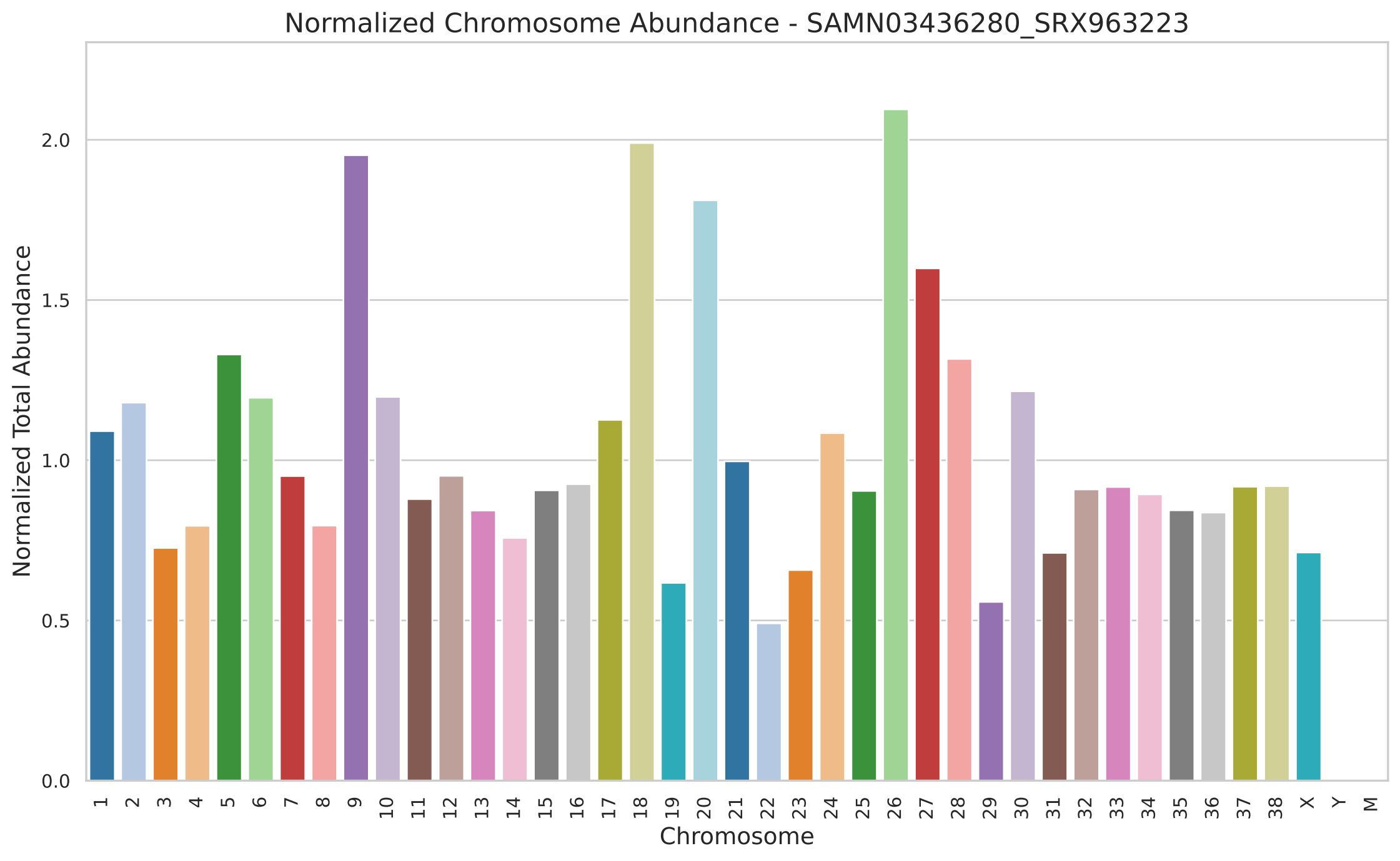

Normalized Chromosome Abundance - SAMN03436217_SRX963034
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

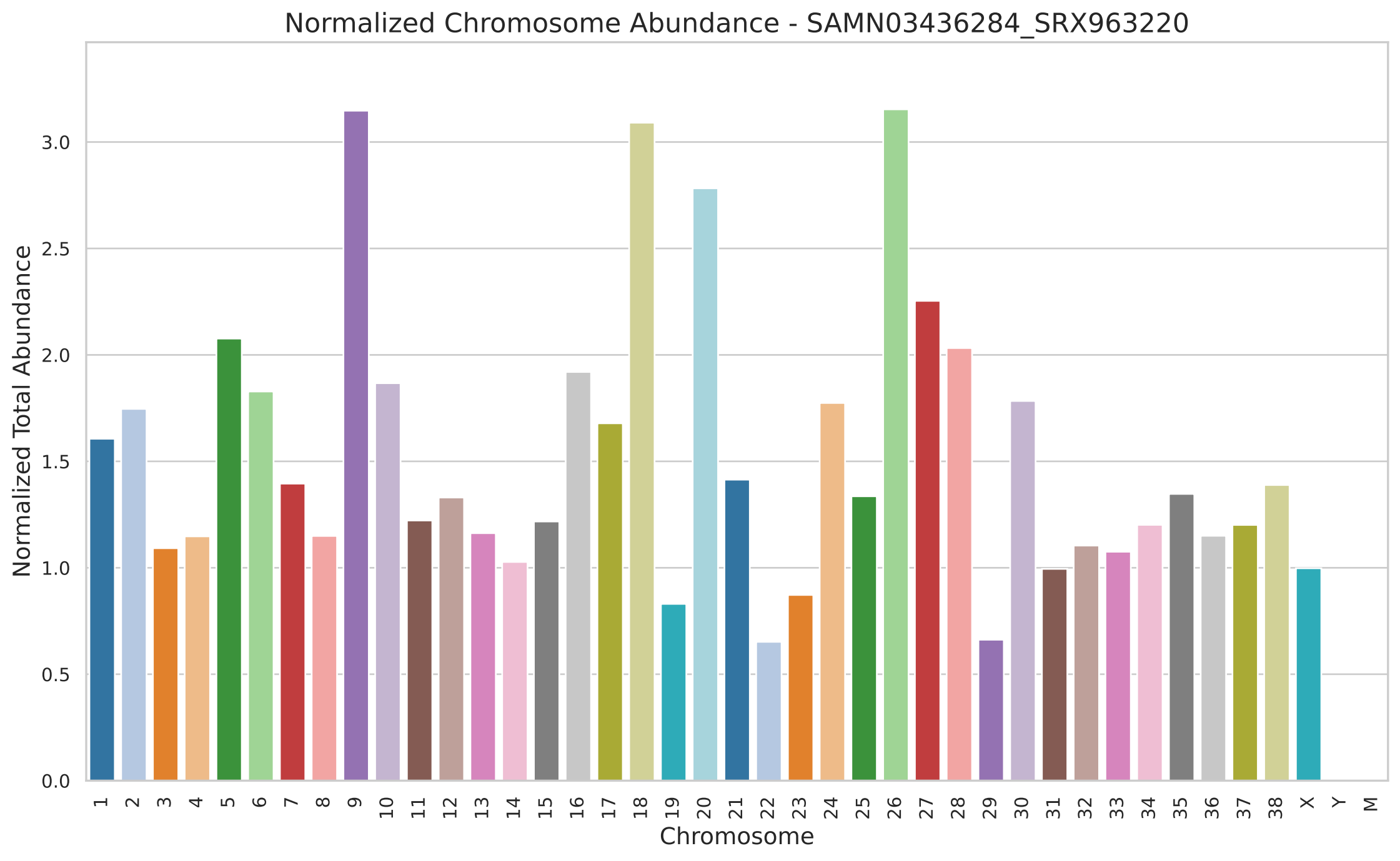

Normalized Chromosome Abundance - SAMN03436469_SRX963312
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

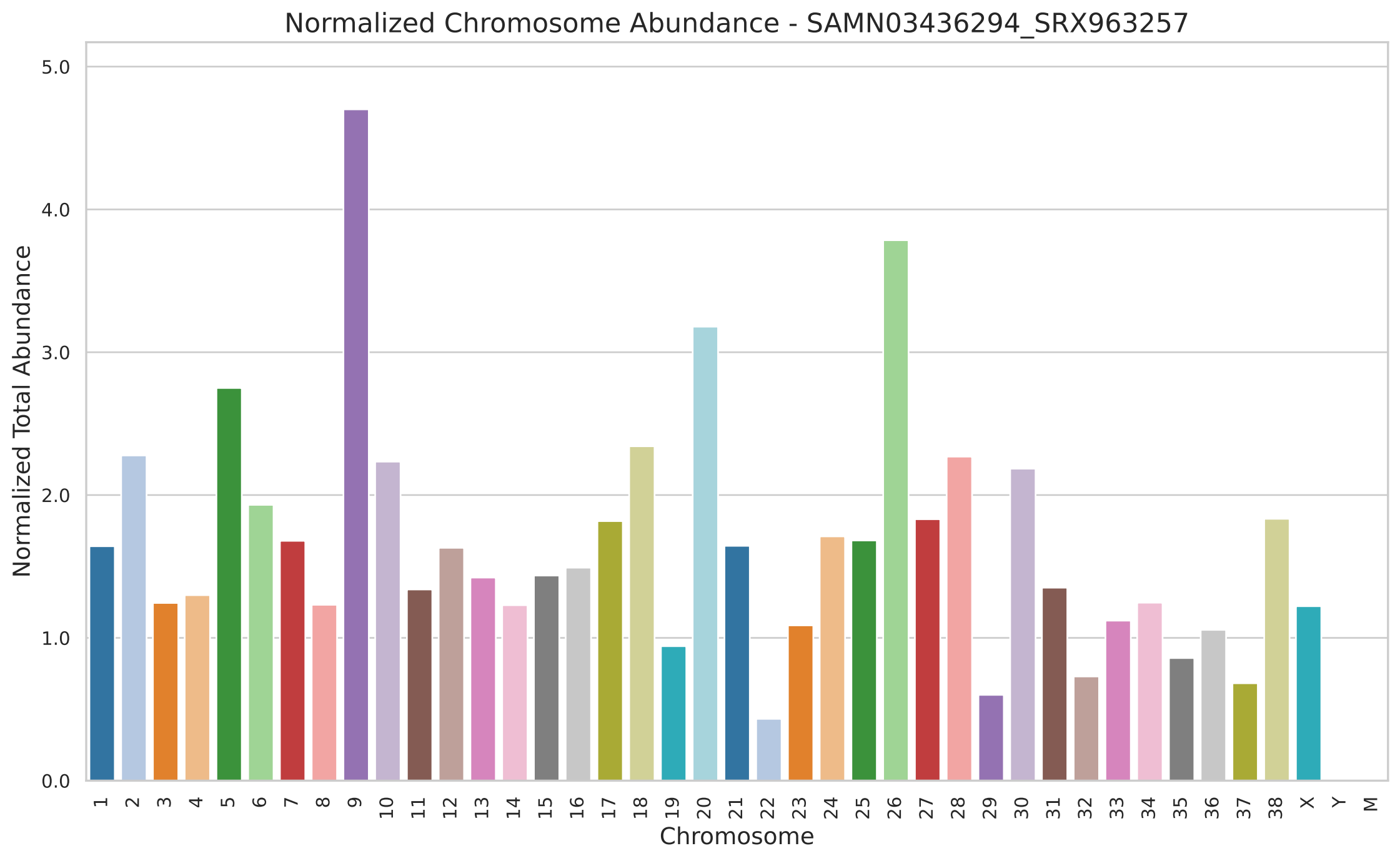

Normalized Chromosome Abundance - SAMN03436454_SRX963283
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

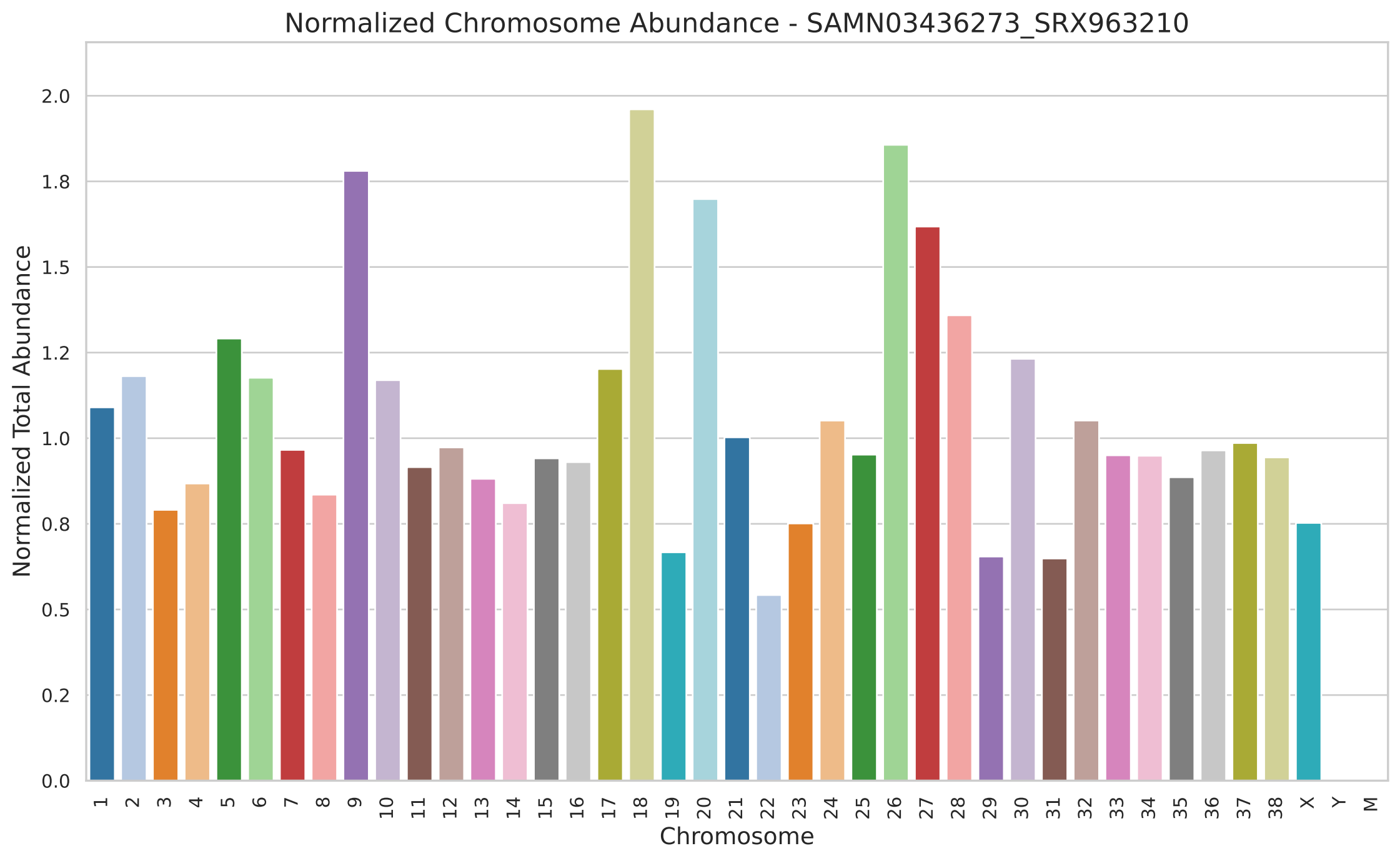

Normalized Chromosome Abundance - SAMN03436277_SRX963214
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

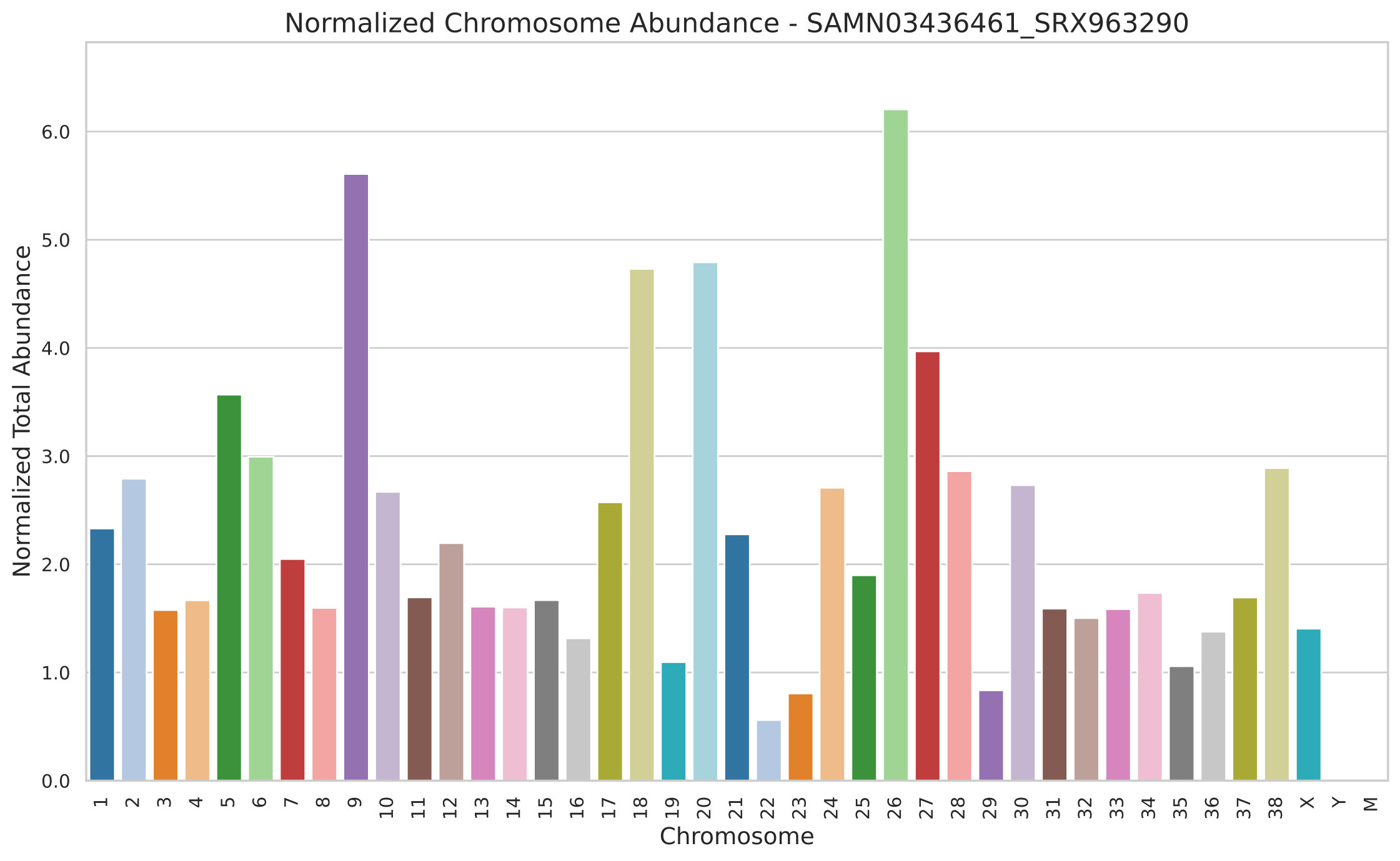

Normalized Chromosome Abundance - SAMN03436281_SRX963217
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

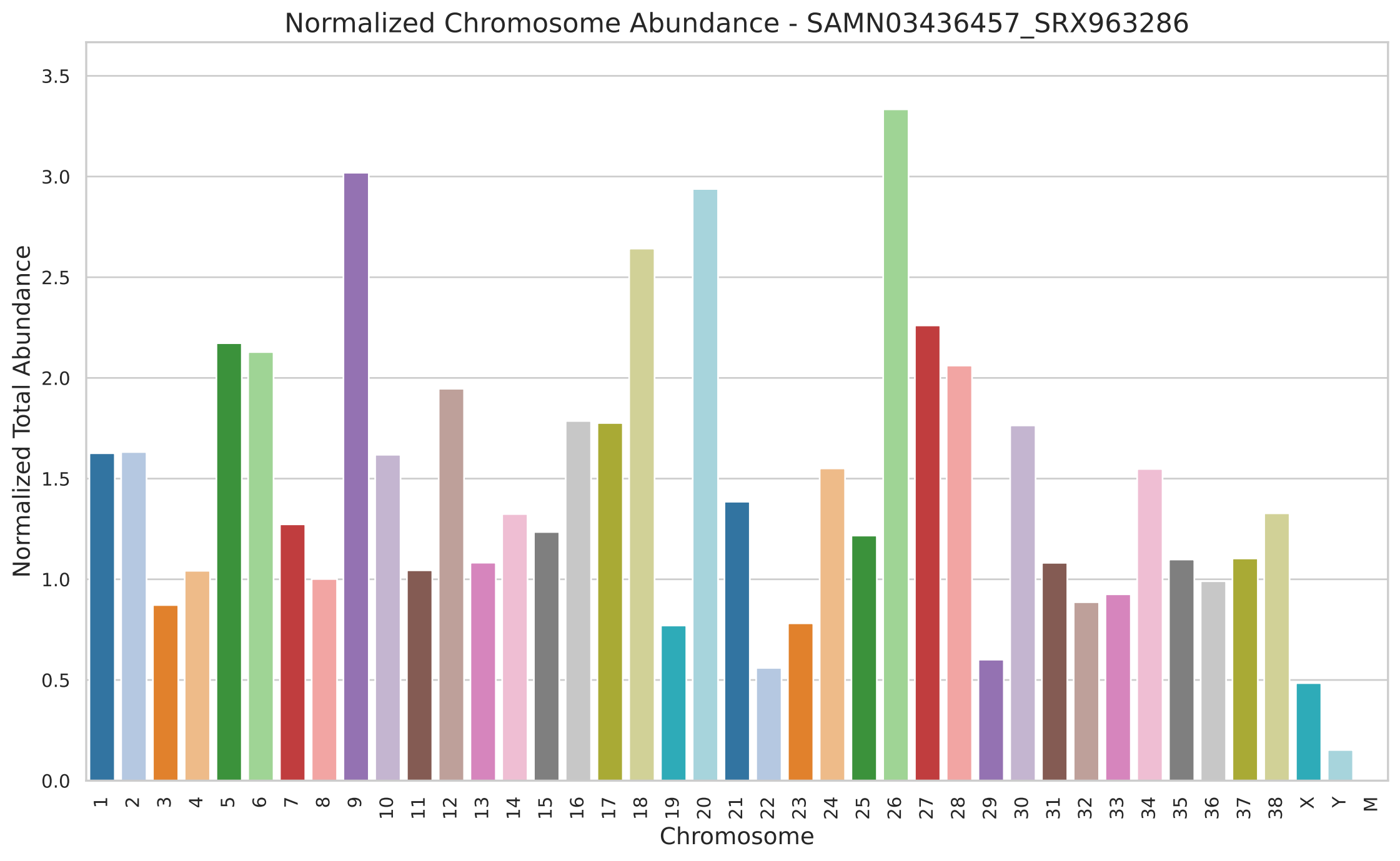

Normalized Chromosome Abundance - SAMN03436280_SRX963223
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

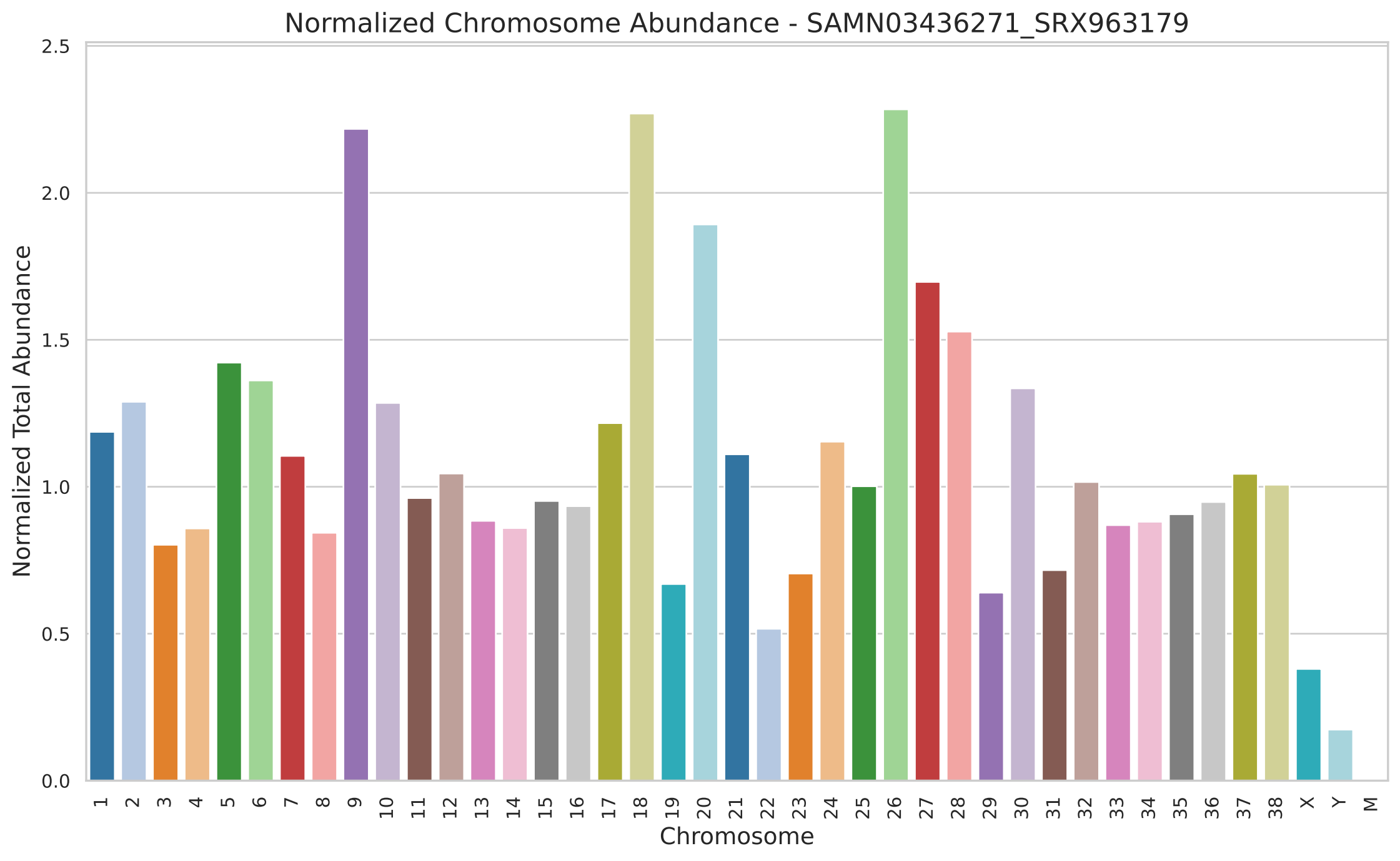

Normalized Chromosome Abundance - SAMN03436284_SRX963220
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

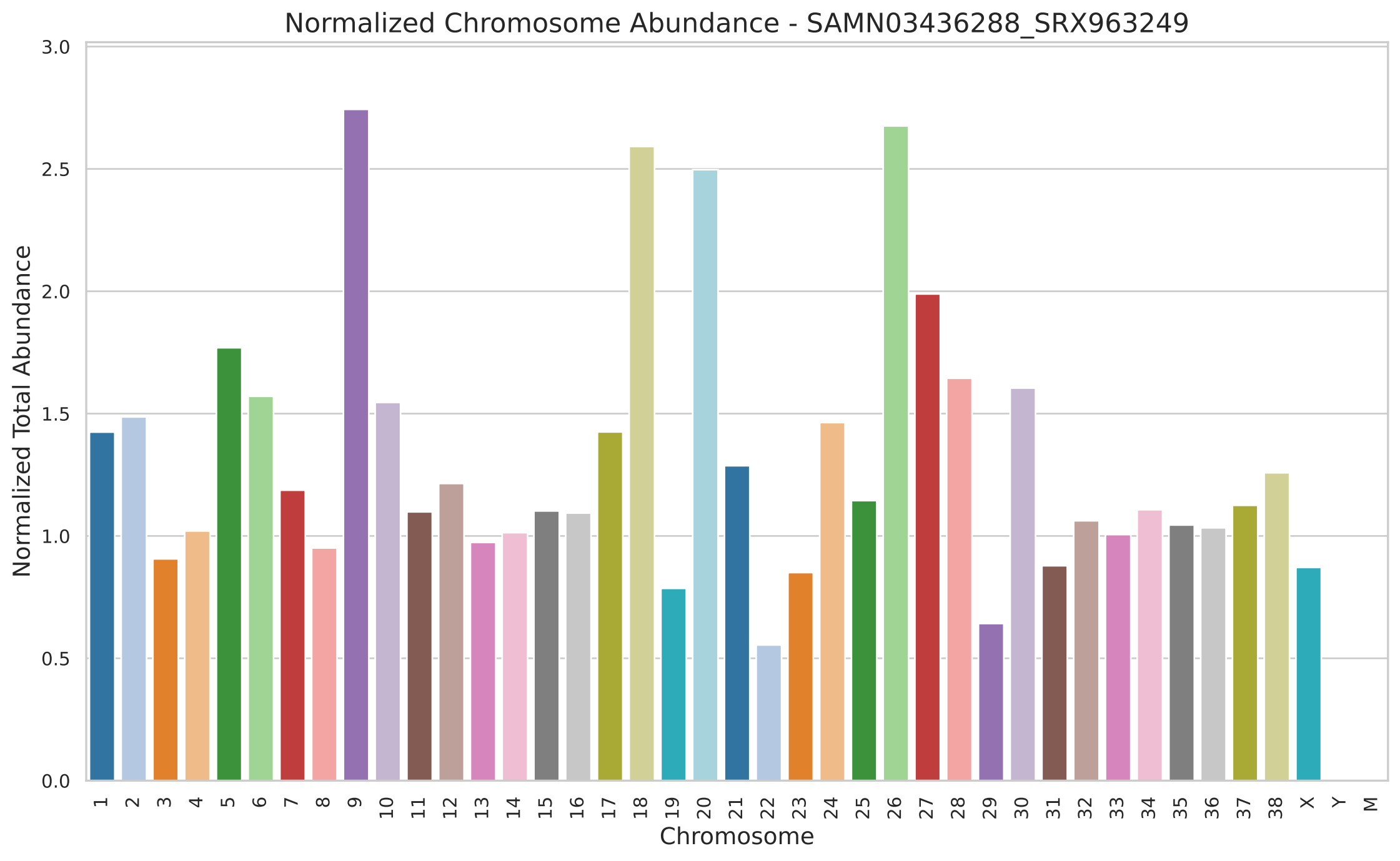

Normalized Chromosome Abundance - SAMN03436294_SRX963257
Normalized Total Abundance
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

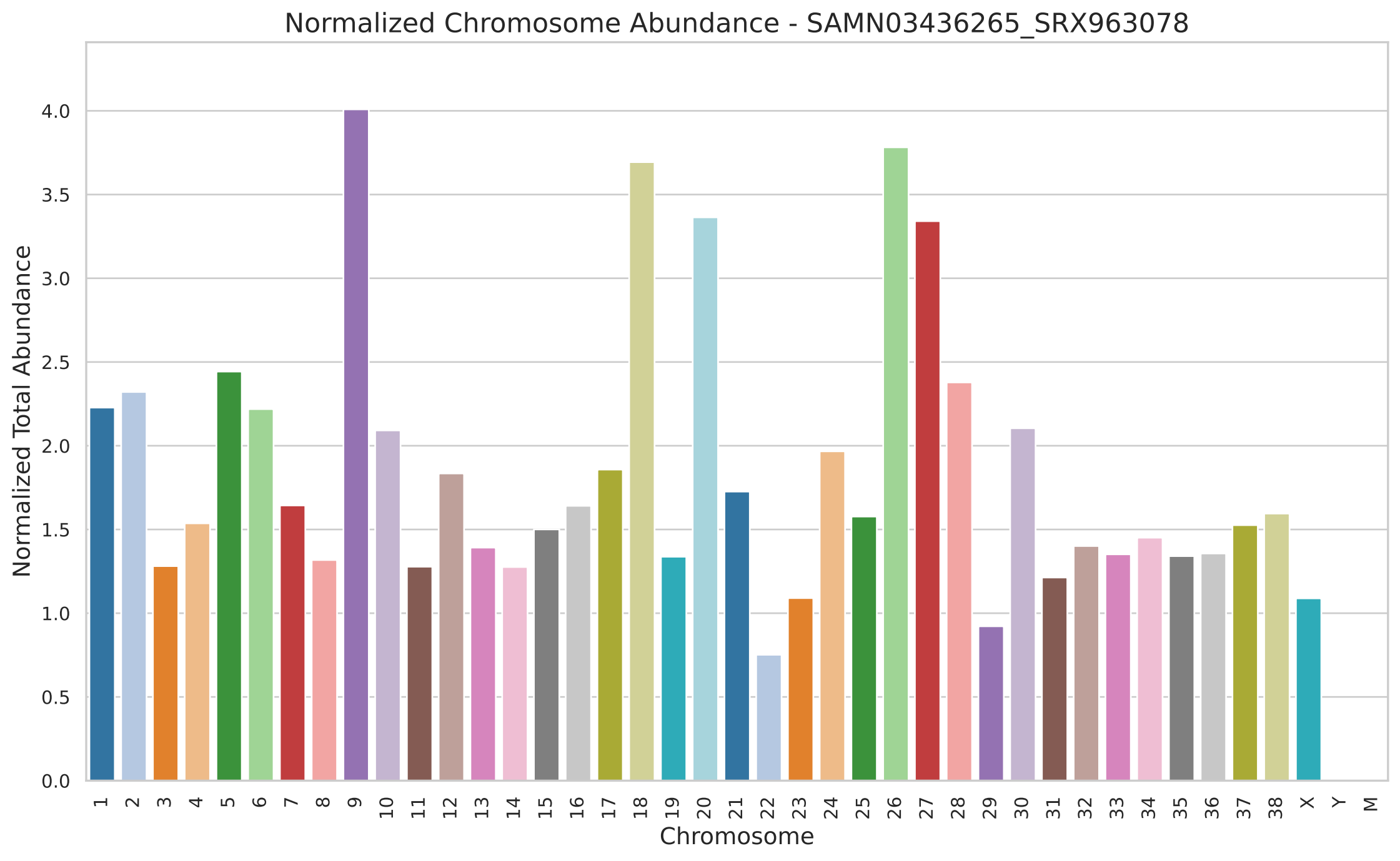

Normalized Chromosome Abundance - SAMN03436273_SRX963210
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

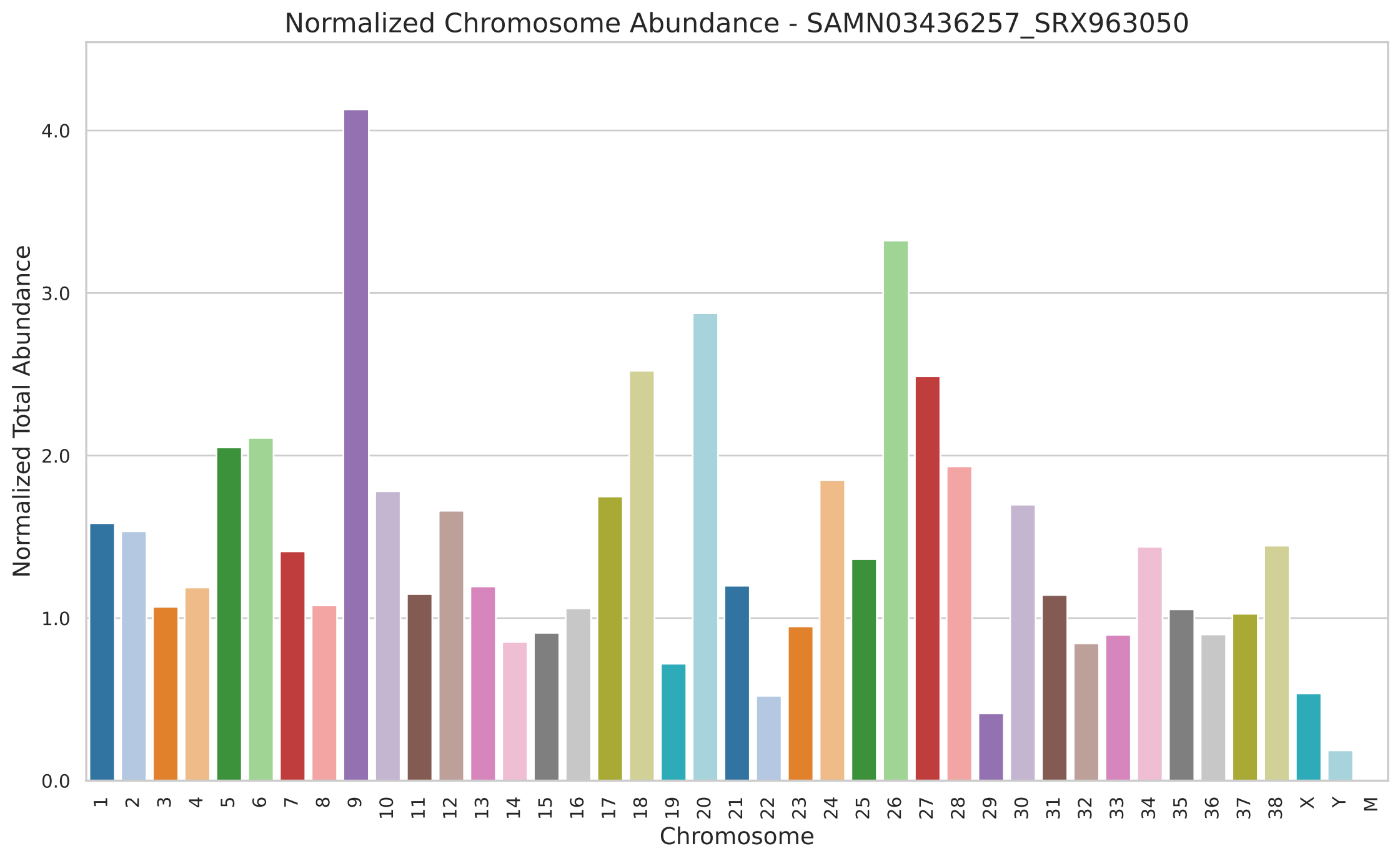

Normalized Chromosome Abundance - SAMN03436461_SRX963290
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

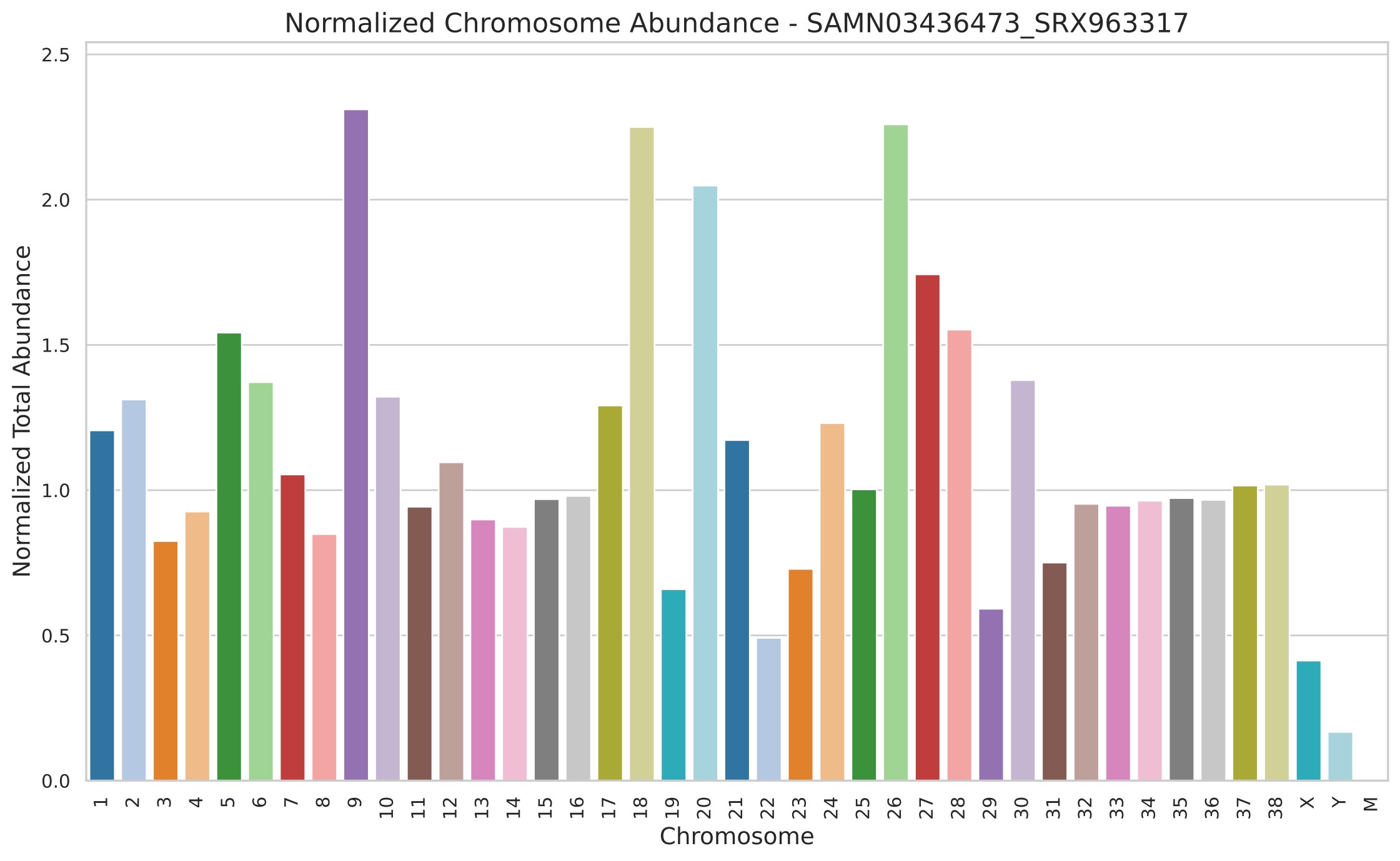

Normalized Chromosome Abundance - SAMN03436457_SRX963286
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

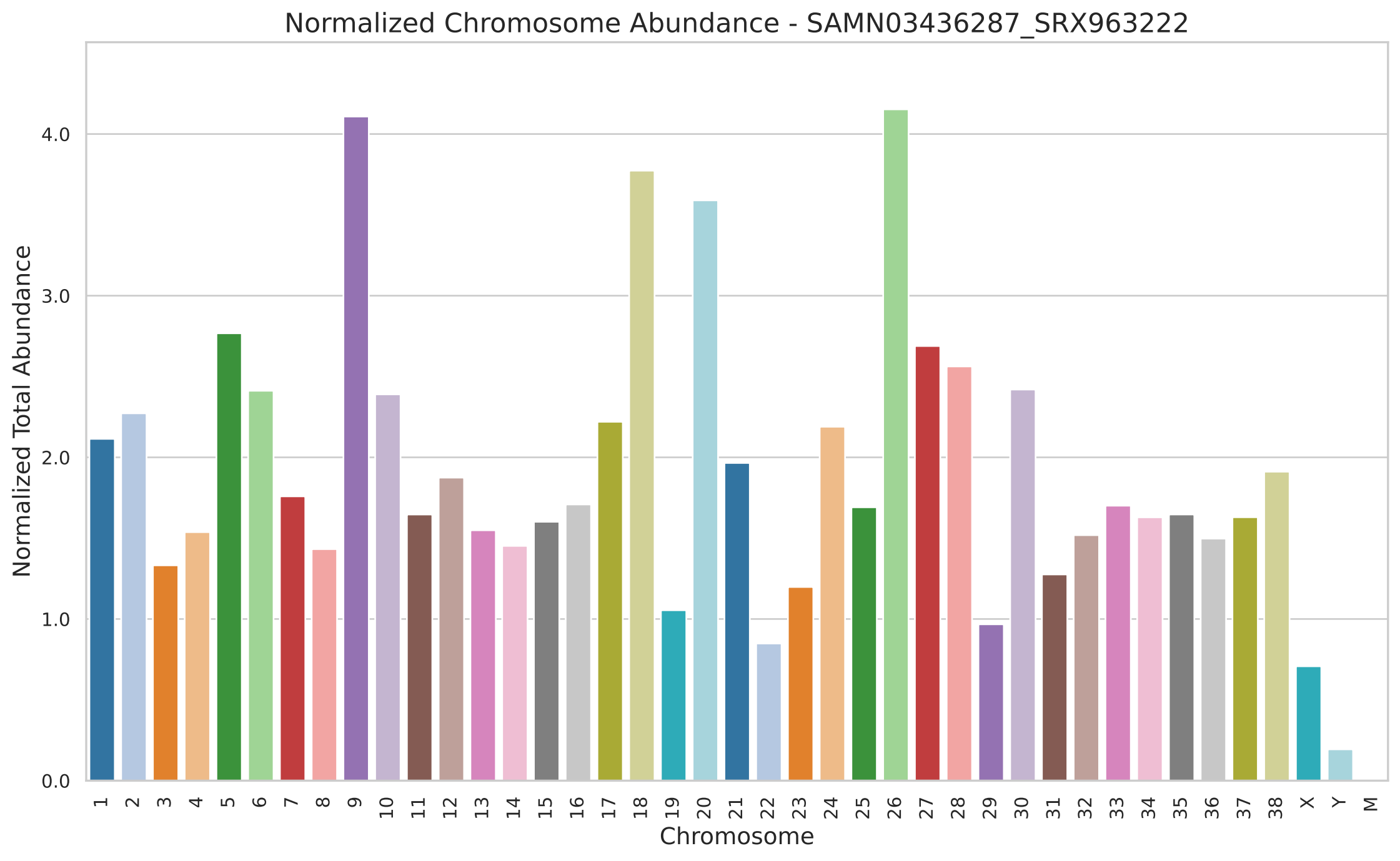

Normalized Chromosome Abundance - SAMN03436271_SRX963179
Normalized Total Abundance
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

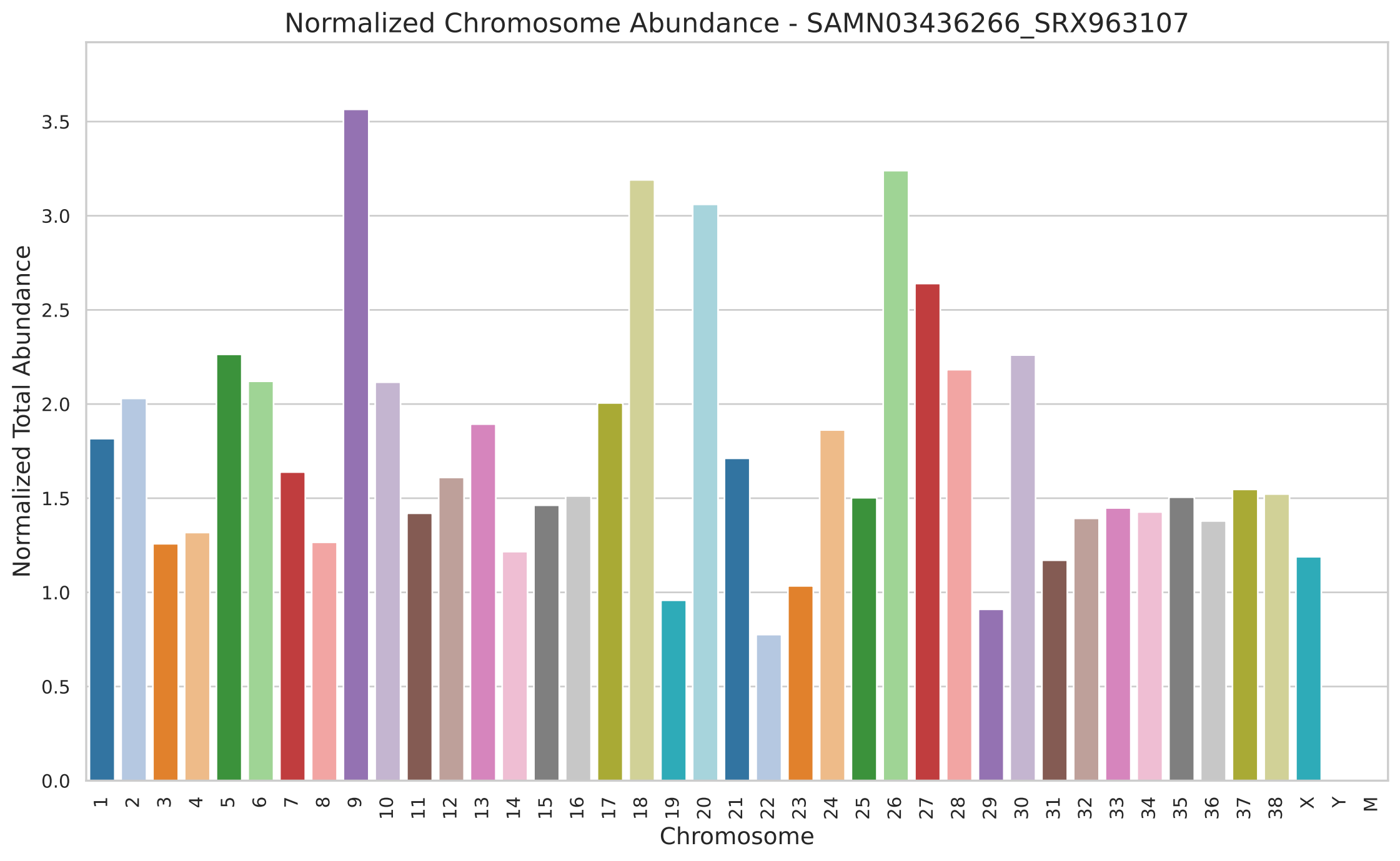

Normalized Chromosome Abundance - SAMN03436288_SRX963249
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

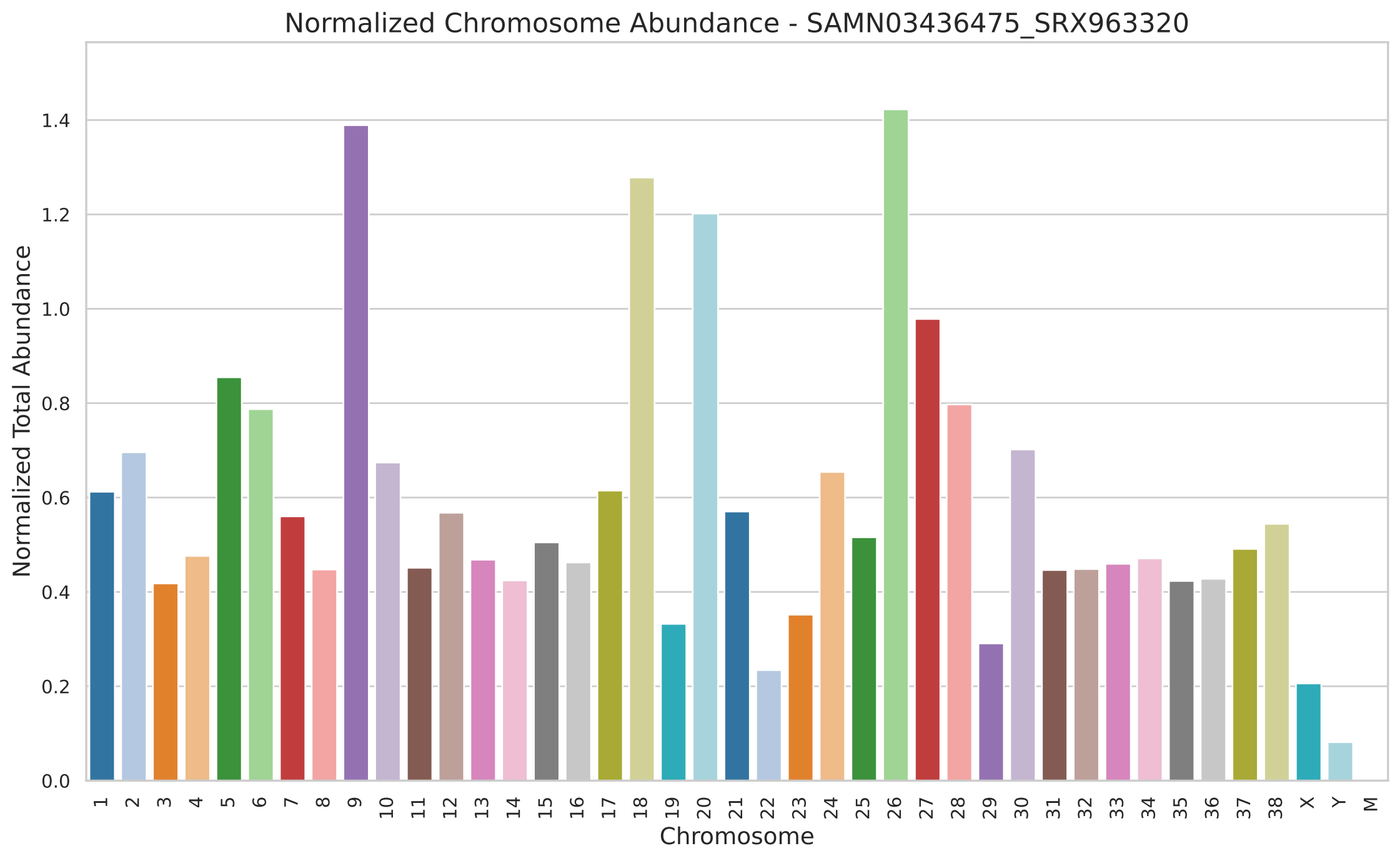

Normalized Chromosome Abundance - SAMN03436265_SRX963078
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

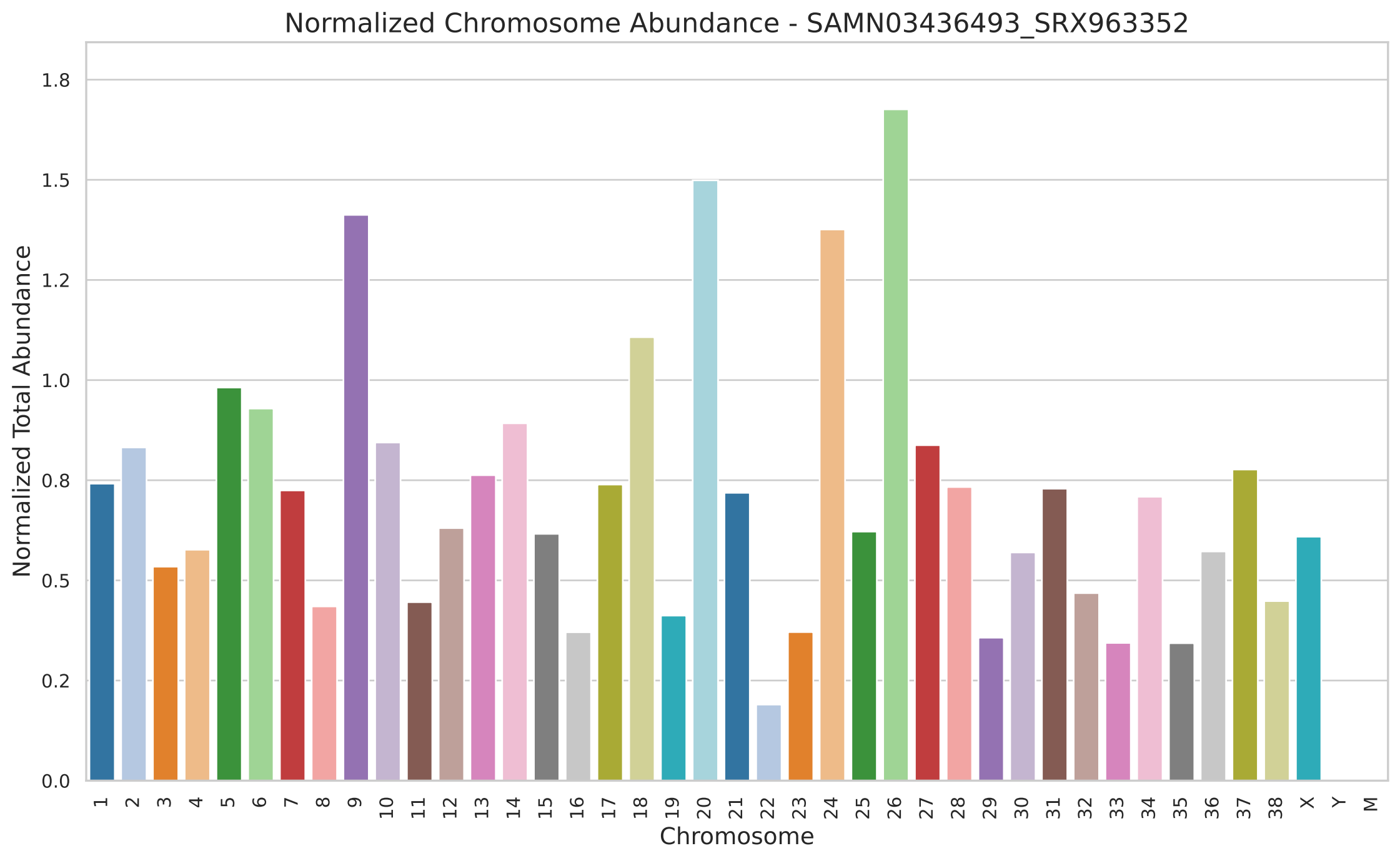

Normalized Chromosome Abundance - SAMN03436257_SRX963050
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

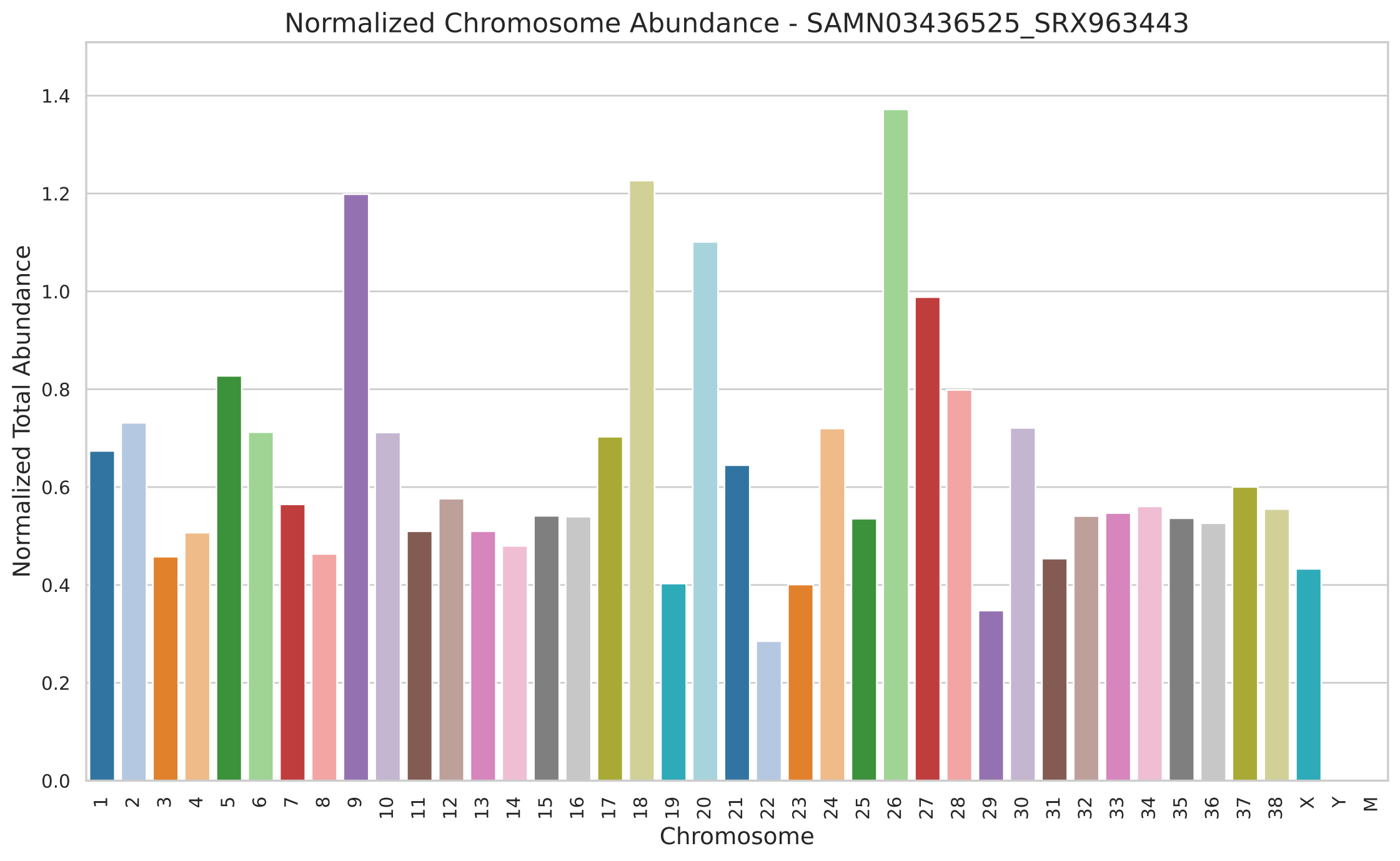

Normalized Chromosome Abundance - SAMN03436473_SRX963317
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

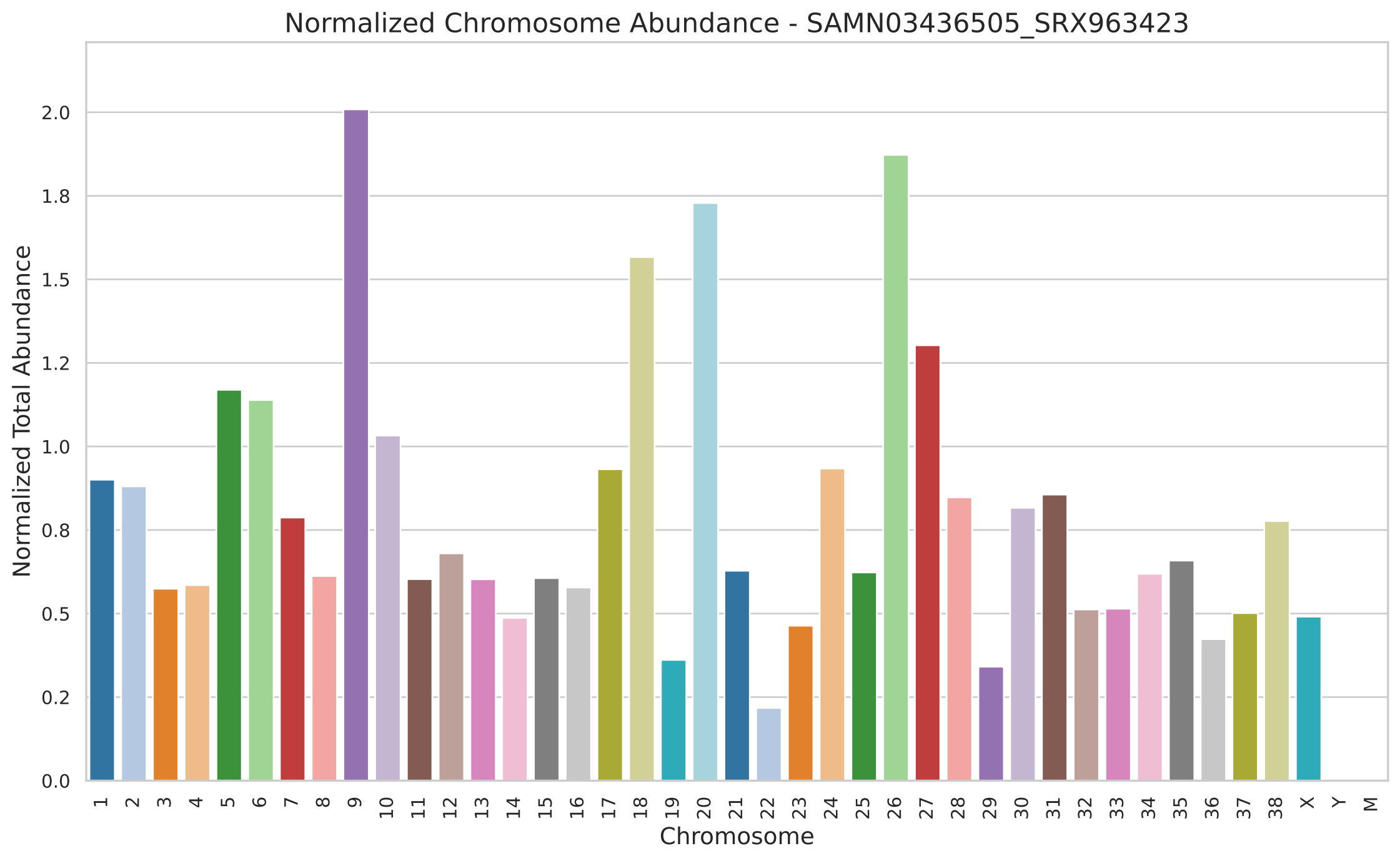

Normalized Chromosome Abundance - SAMN03436287_SRX963222
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

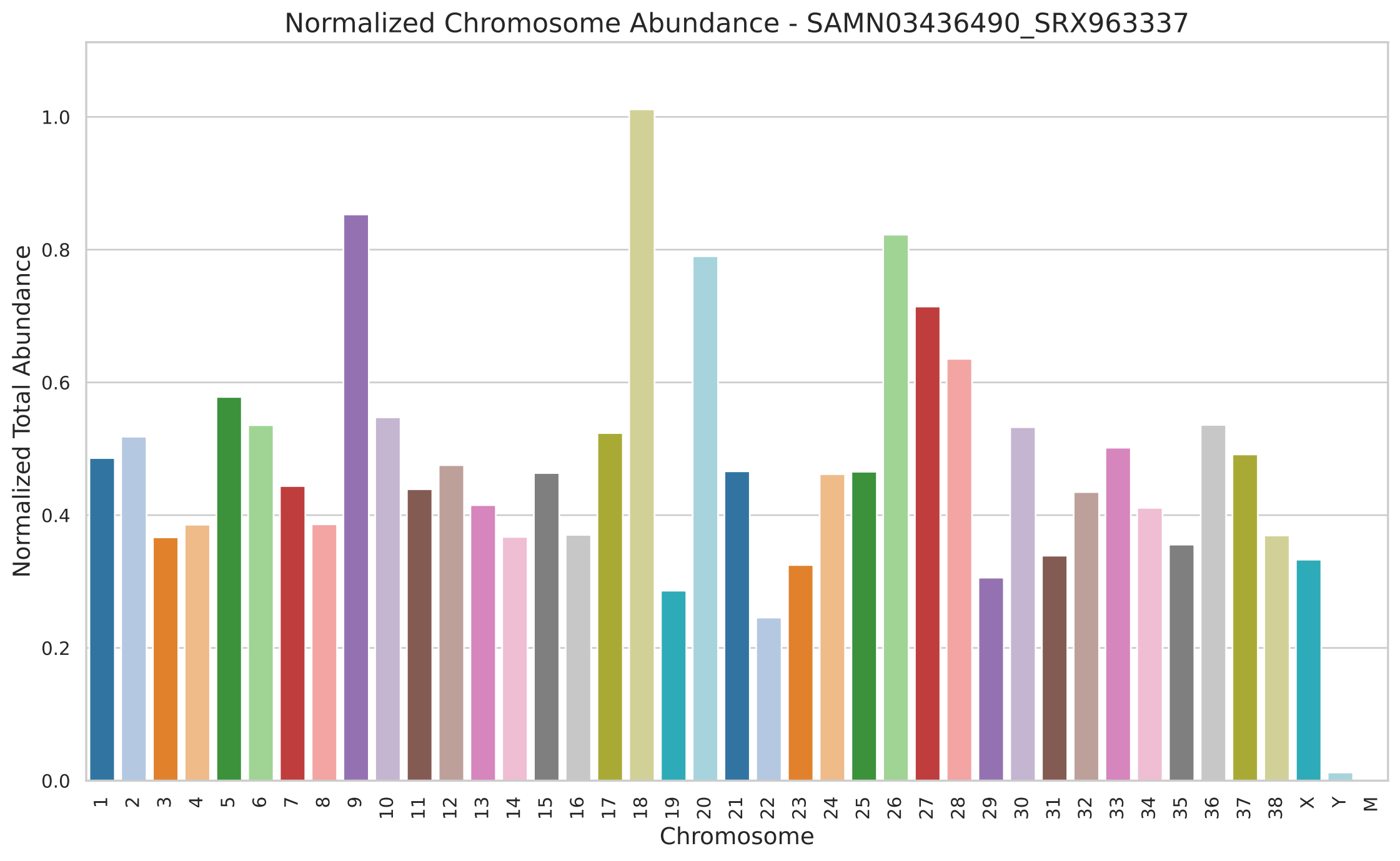

Normalized Chromosome Abundance - SAMN03436266_SRX963107
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

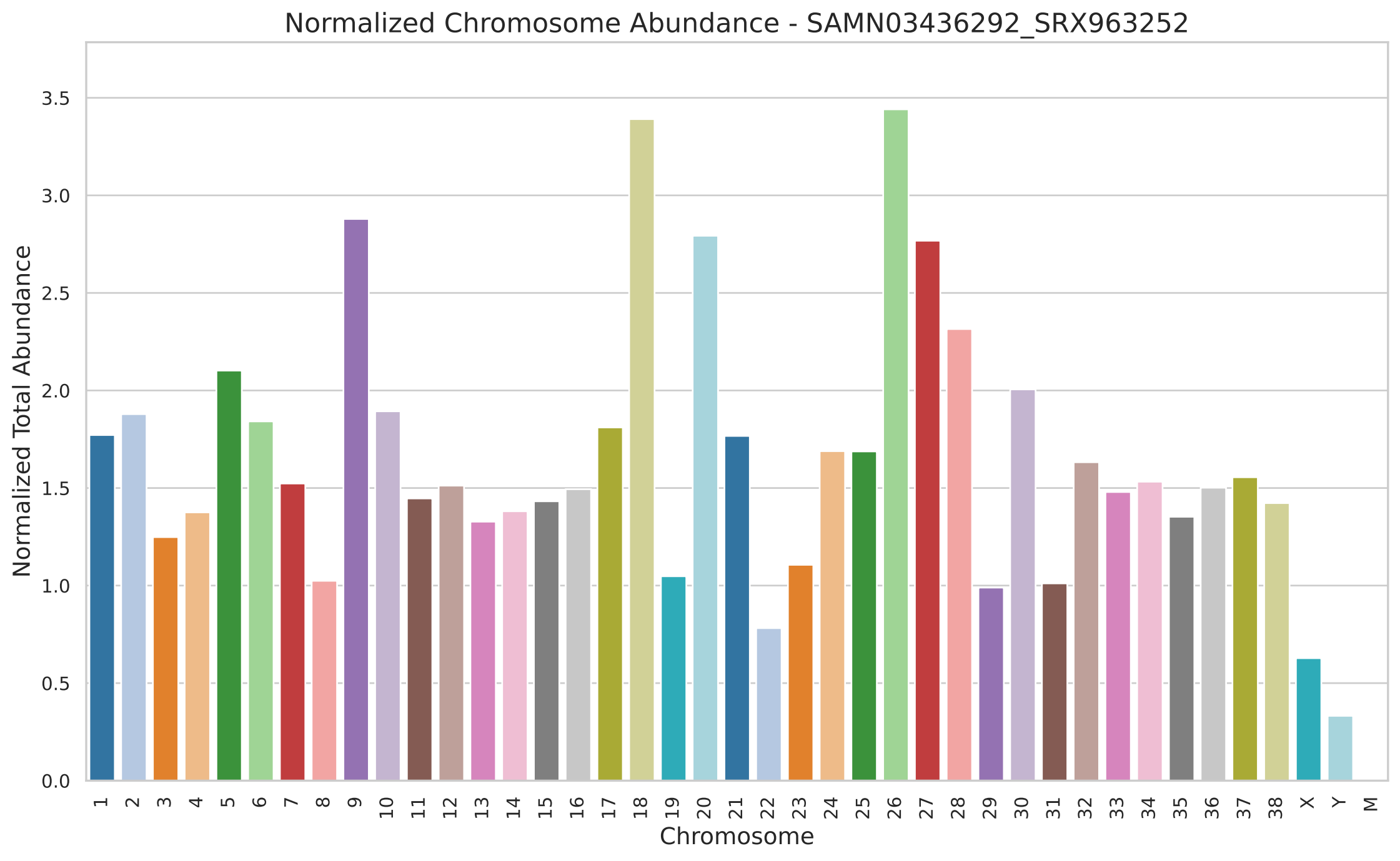

Normalized Chromosome Abundance - SAMN03436475_SRX963320
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

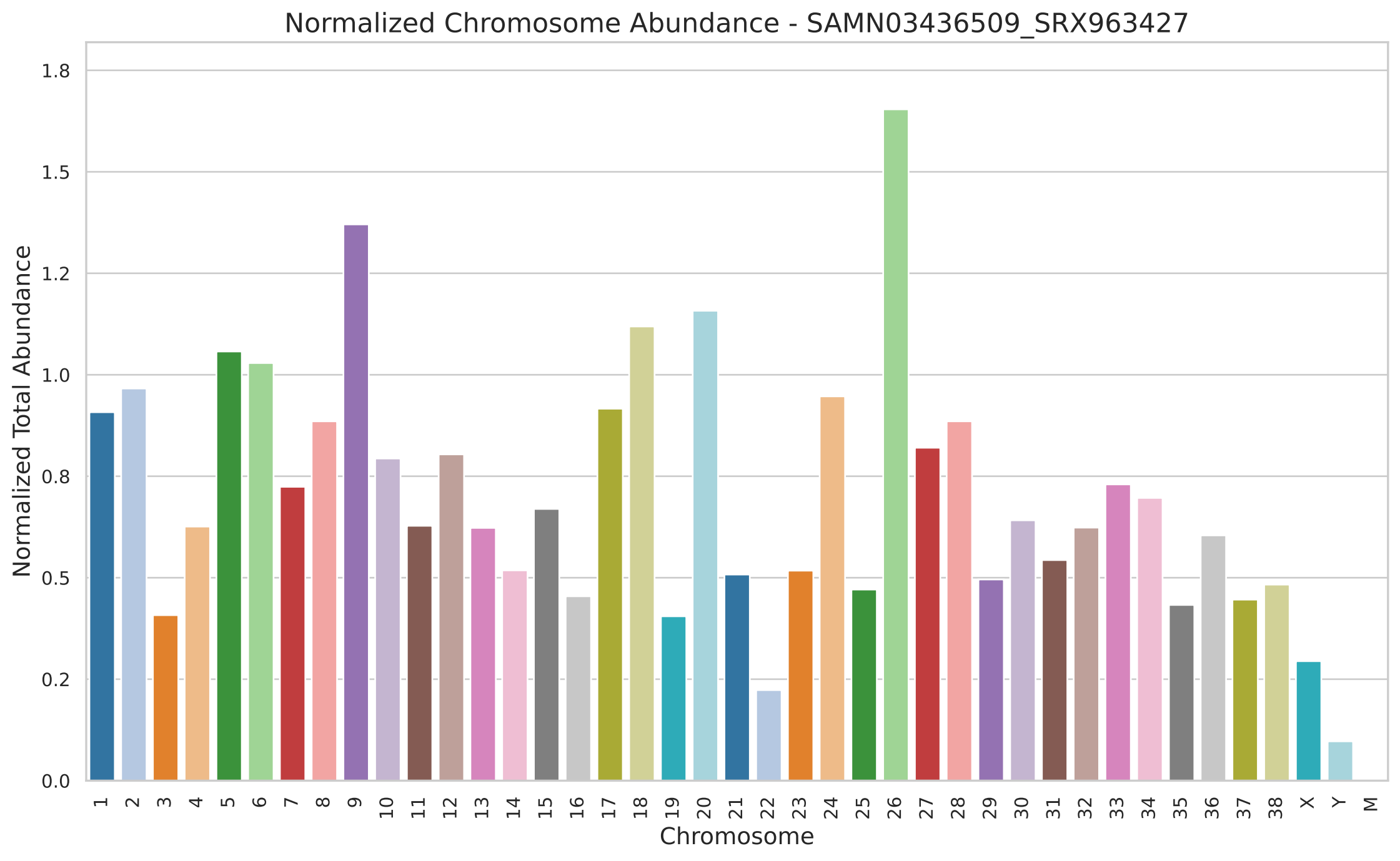

Normalized Chromosome Abundance - SAMN03436493_SRX963352
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

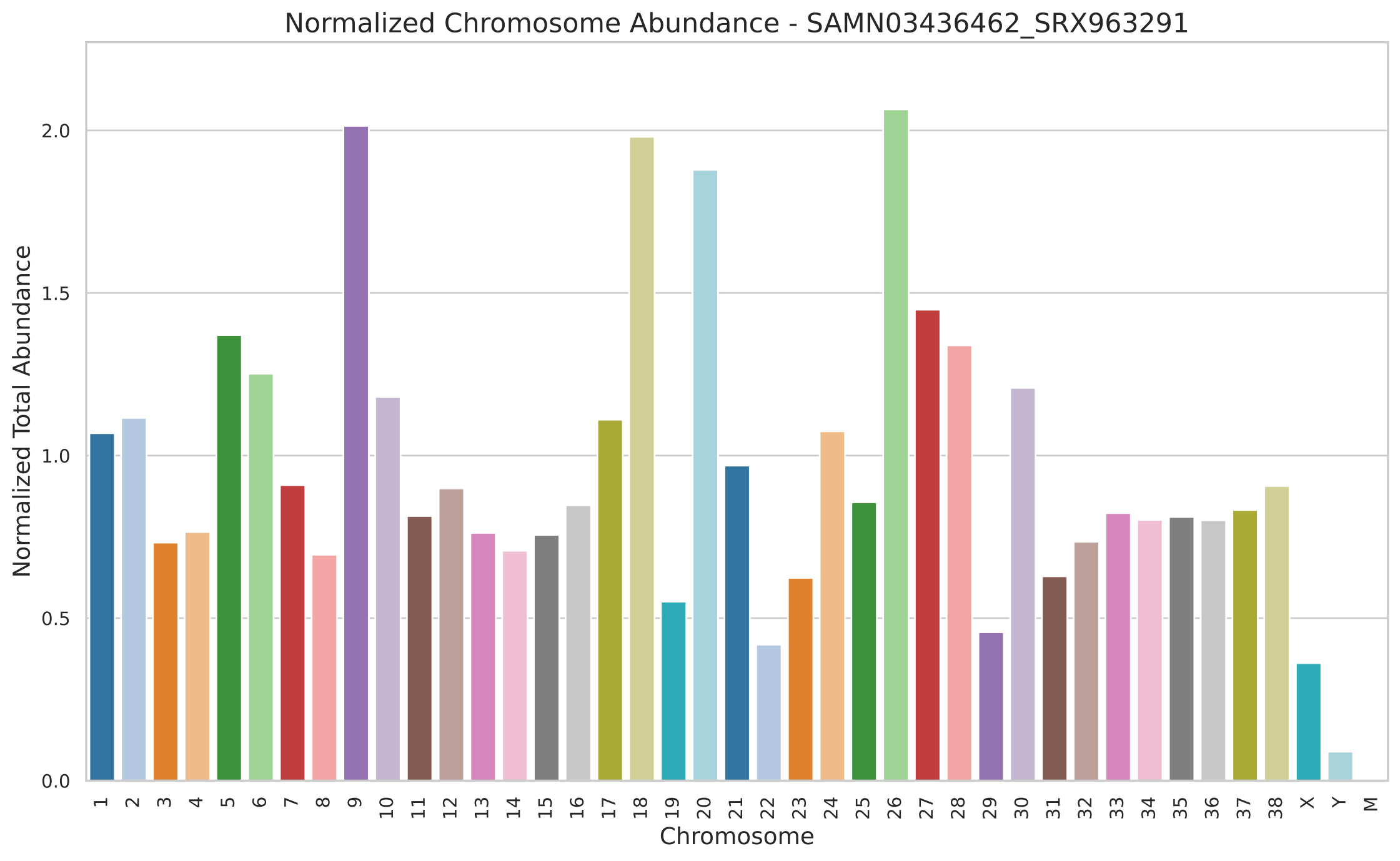

Normalized Chromosome Abundance - SAMN03436525_SRX963443
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

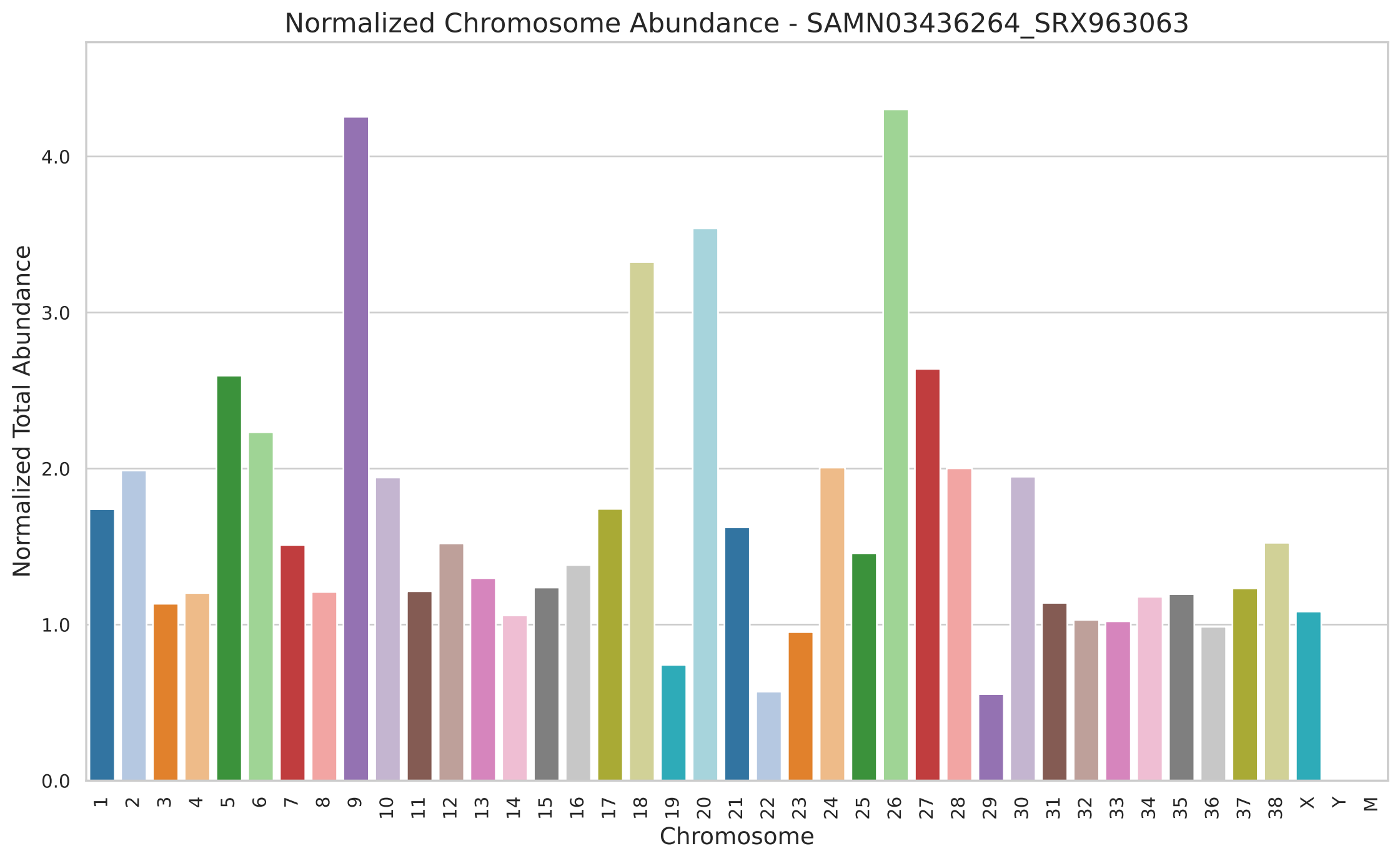

Normalized Chromosome Abundance - SAMN03436505_SRX963423
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

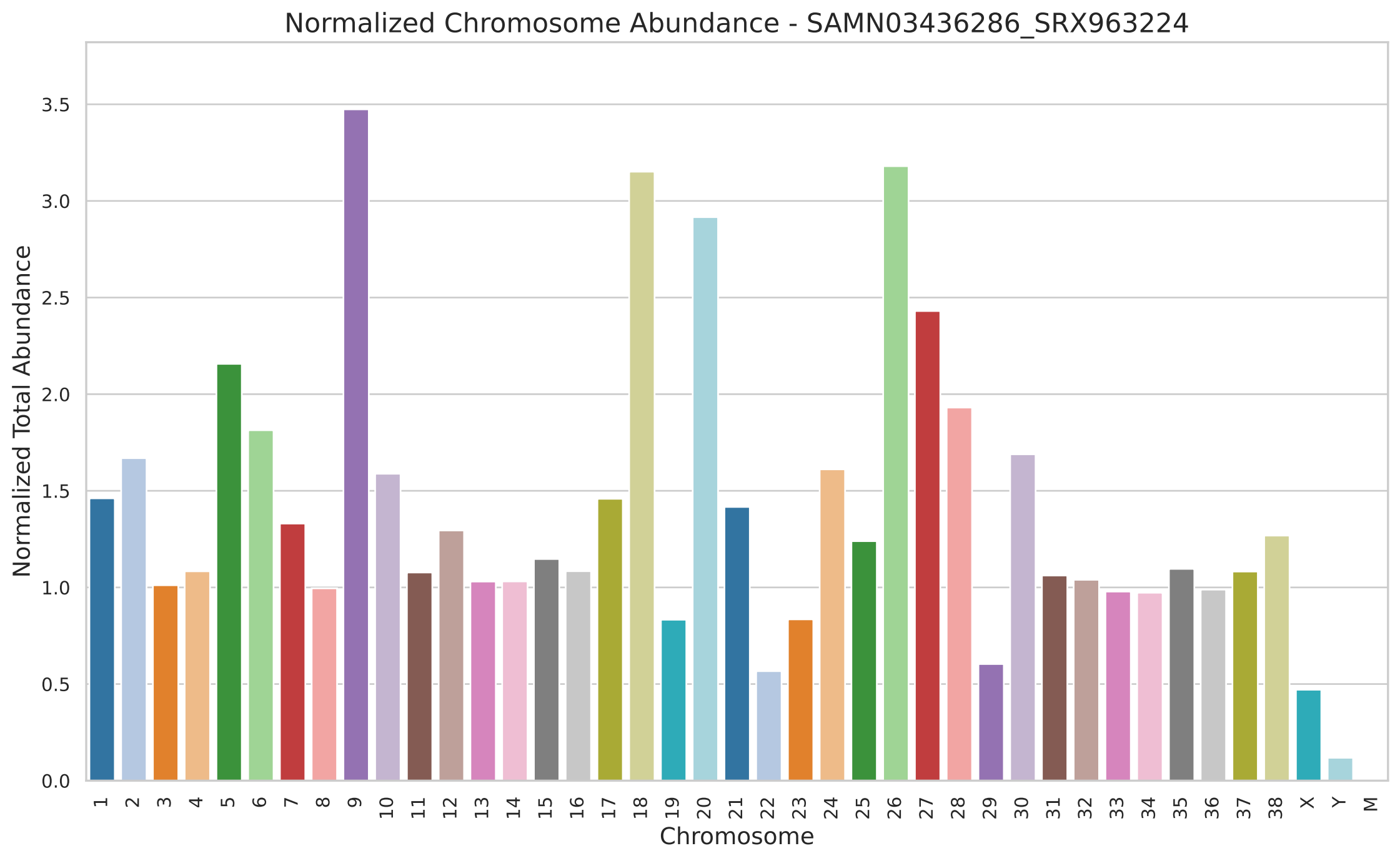

Normalized Chromosome Abundance - SAMN03436490_SRX963337
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

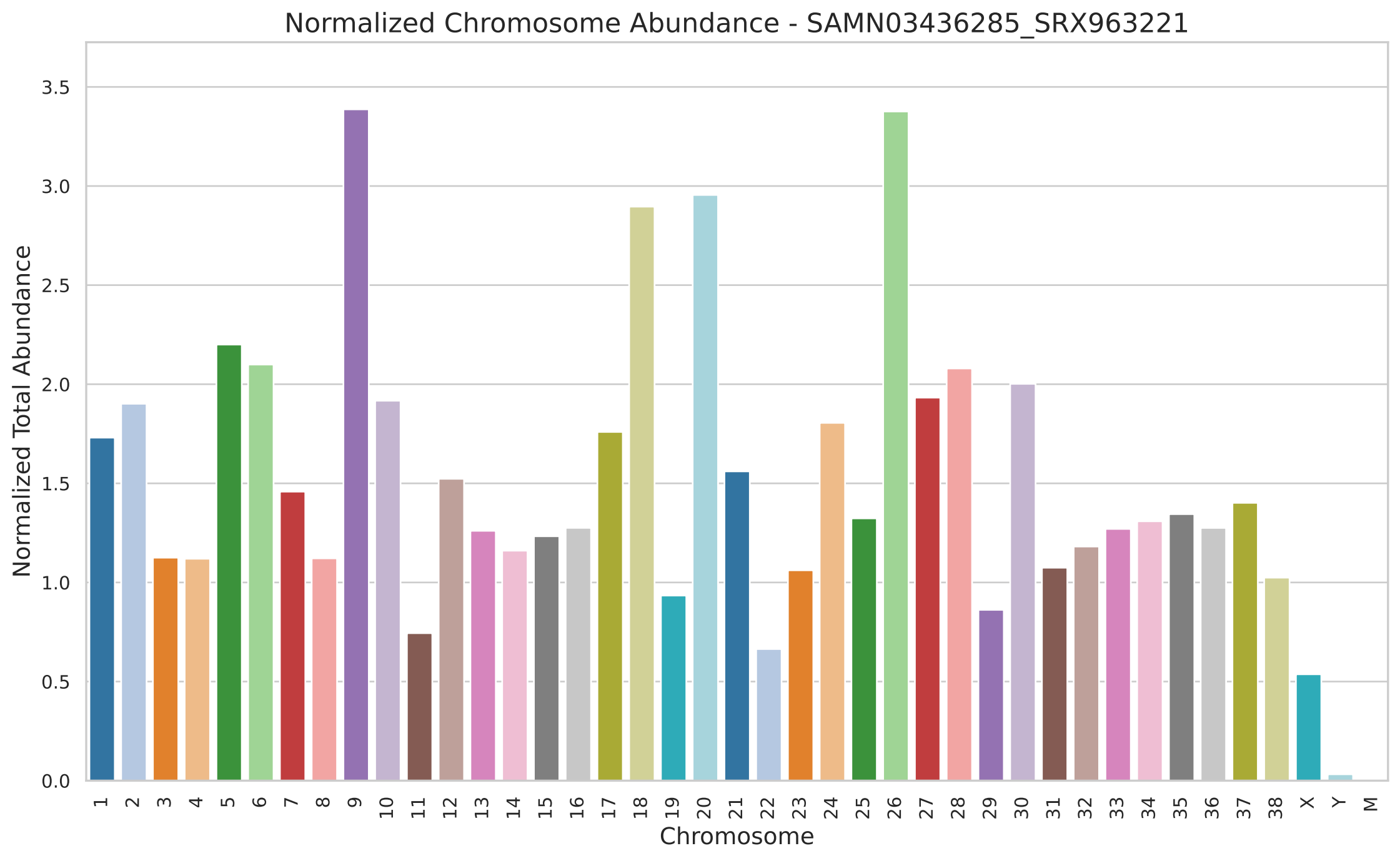

Normalized Chromosome Abundance - SAMN03436292_SRX963252
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

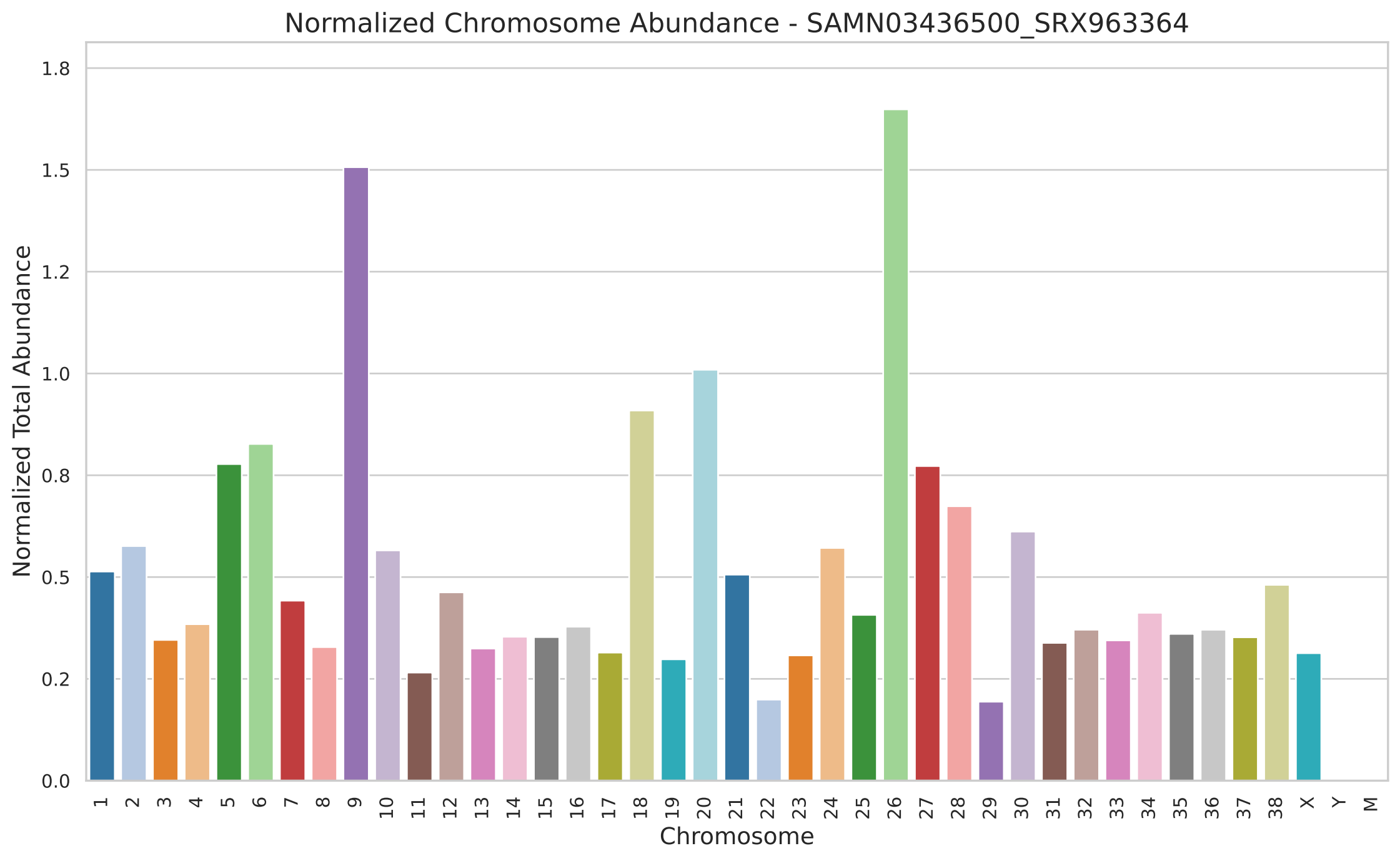

Normalized Chromosome Abundance - SAMN03436509_SRX963427
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

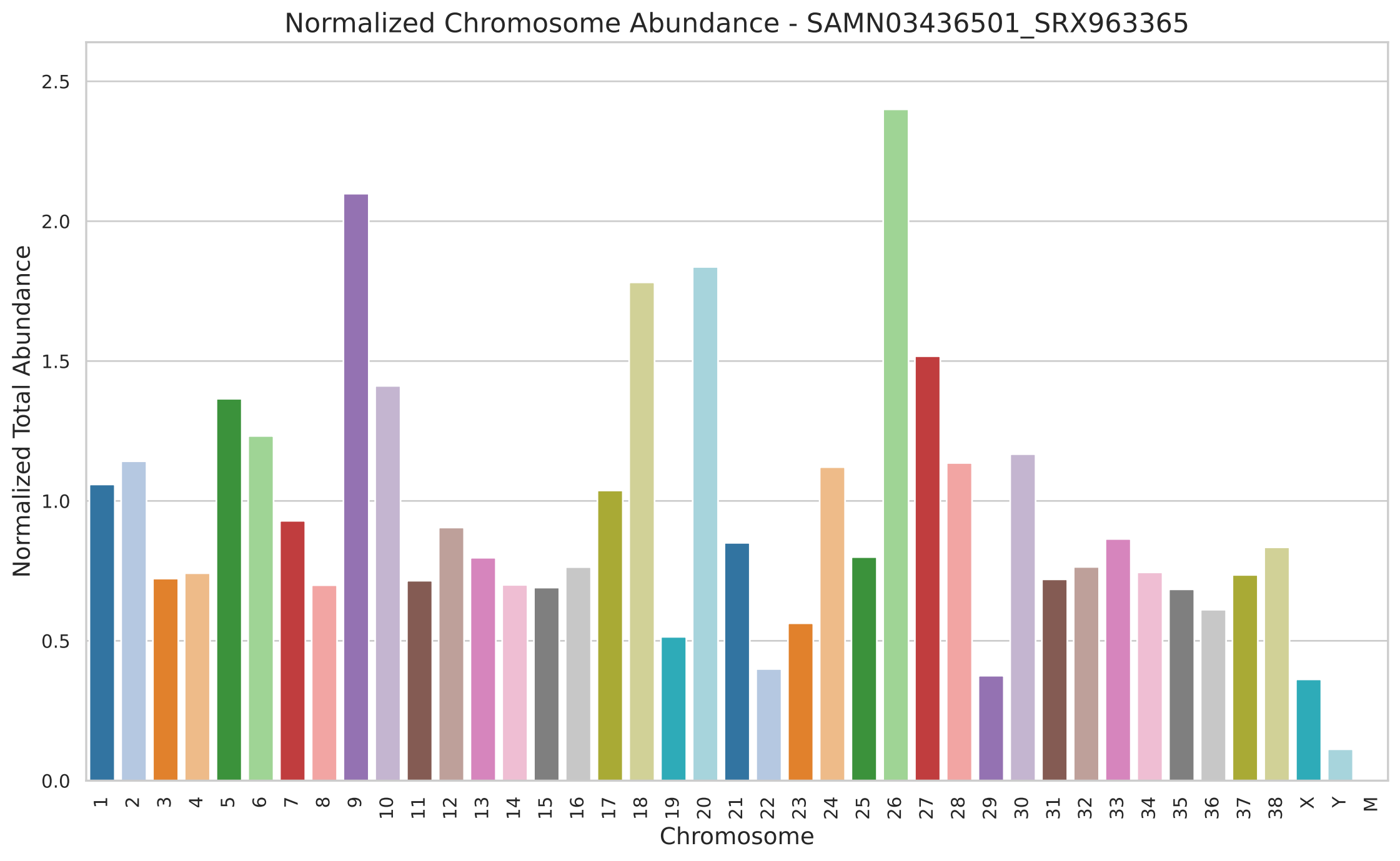

Normalized Chromosome Abundance - SAMN03436462_SRX963291
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

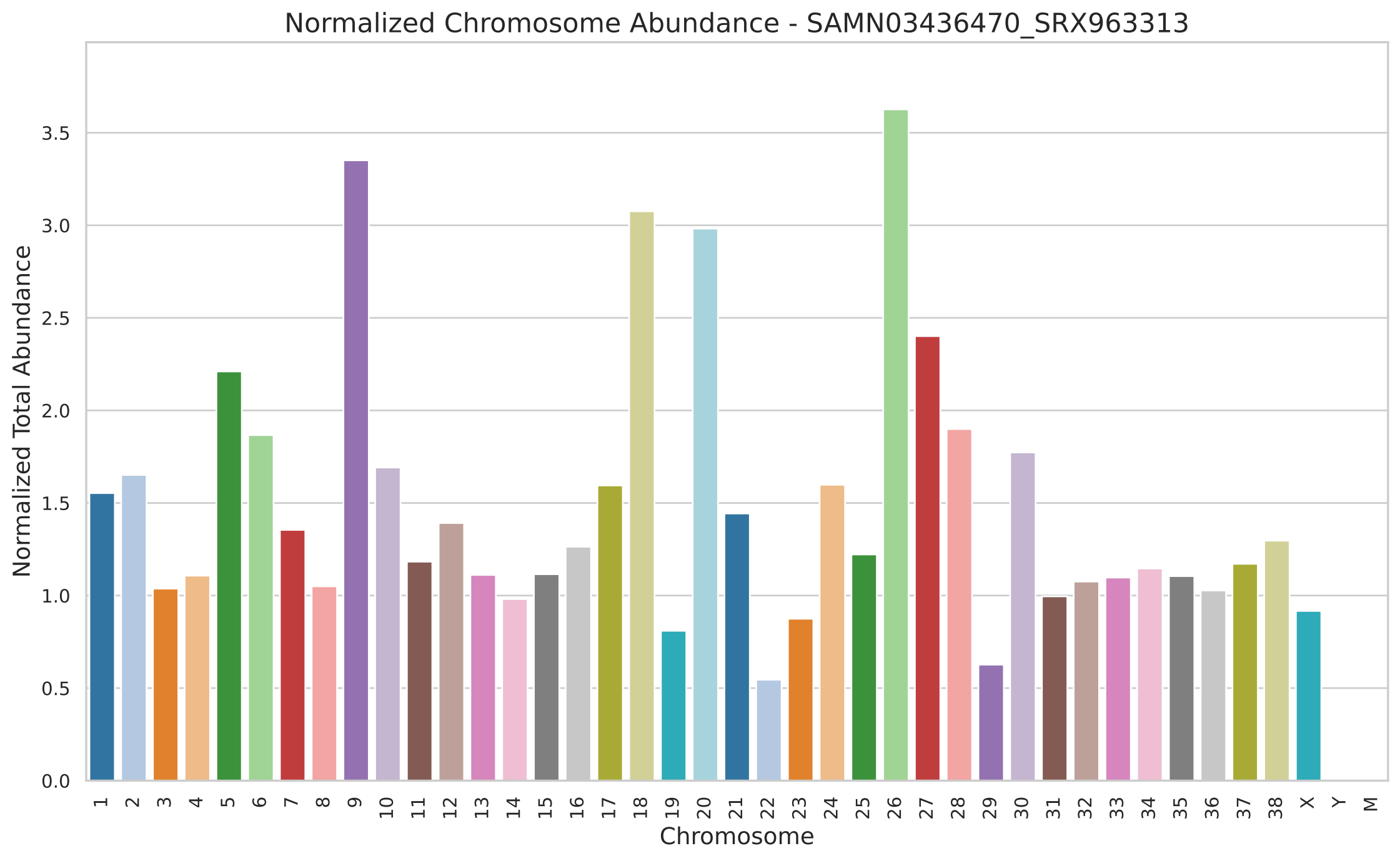

Normalized Chromosome Abundance - SAMN03436264_SRX963063
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

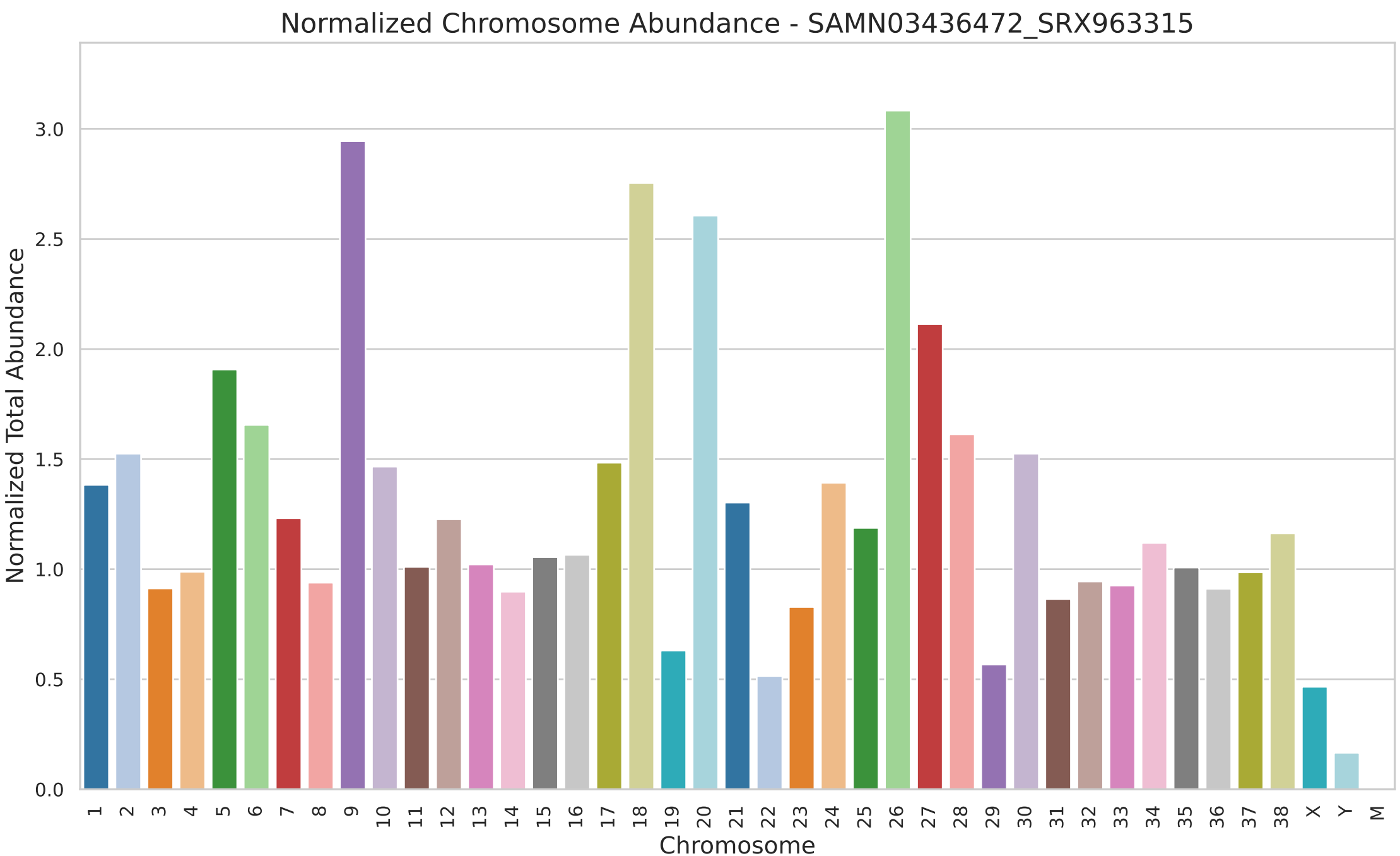

Normalized Chromosome Abundance - SAMN03436286_SRX963224
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

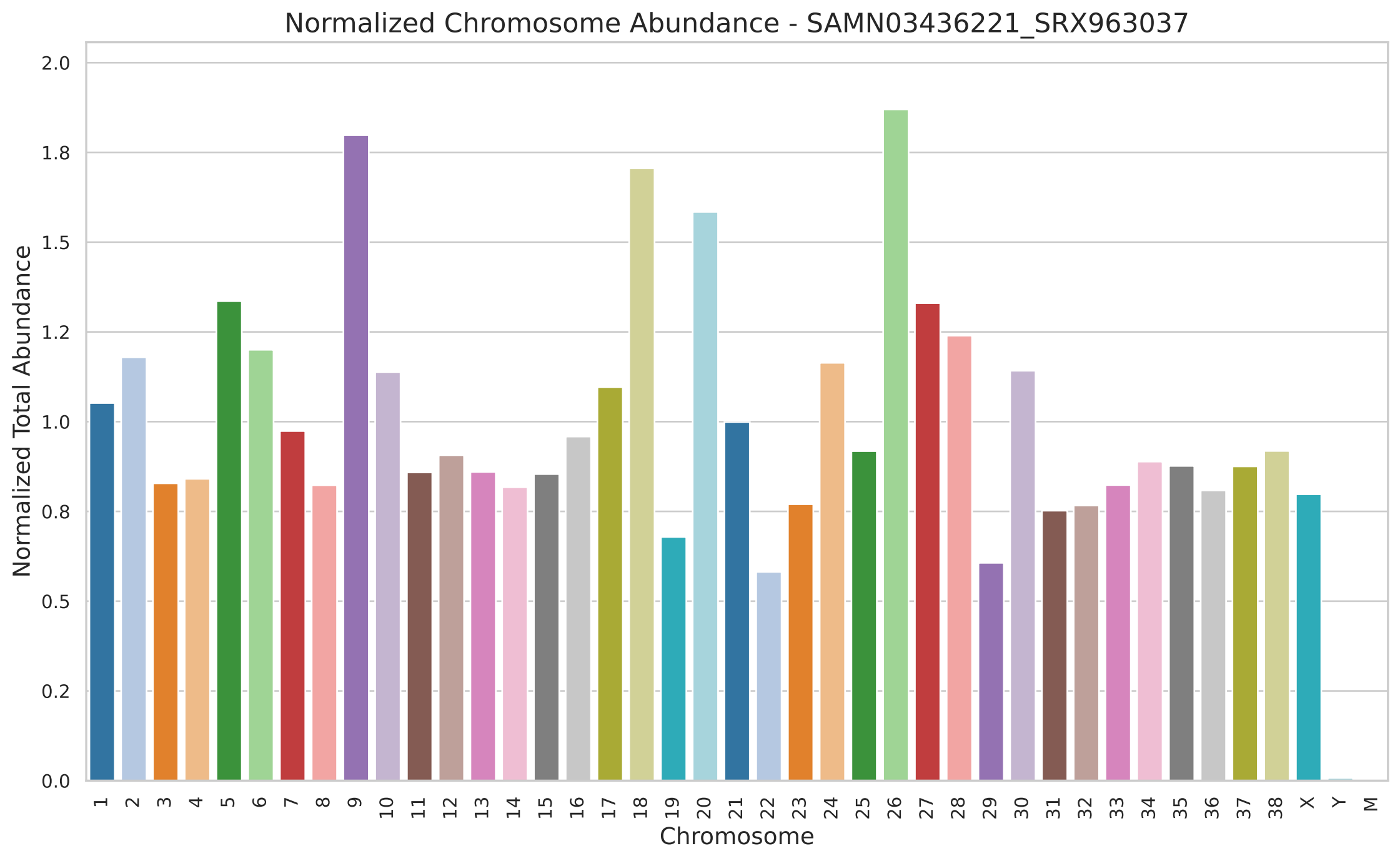

Normalized Chromosome Abundance - SAMN03436285_SRX963221
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

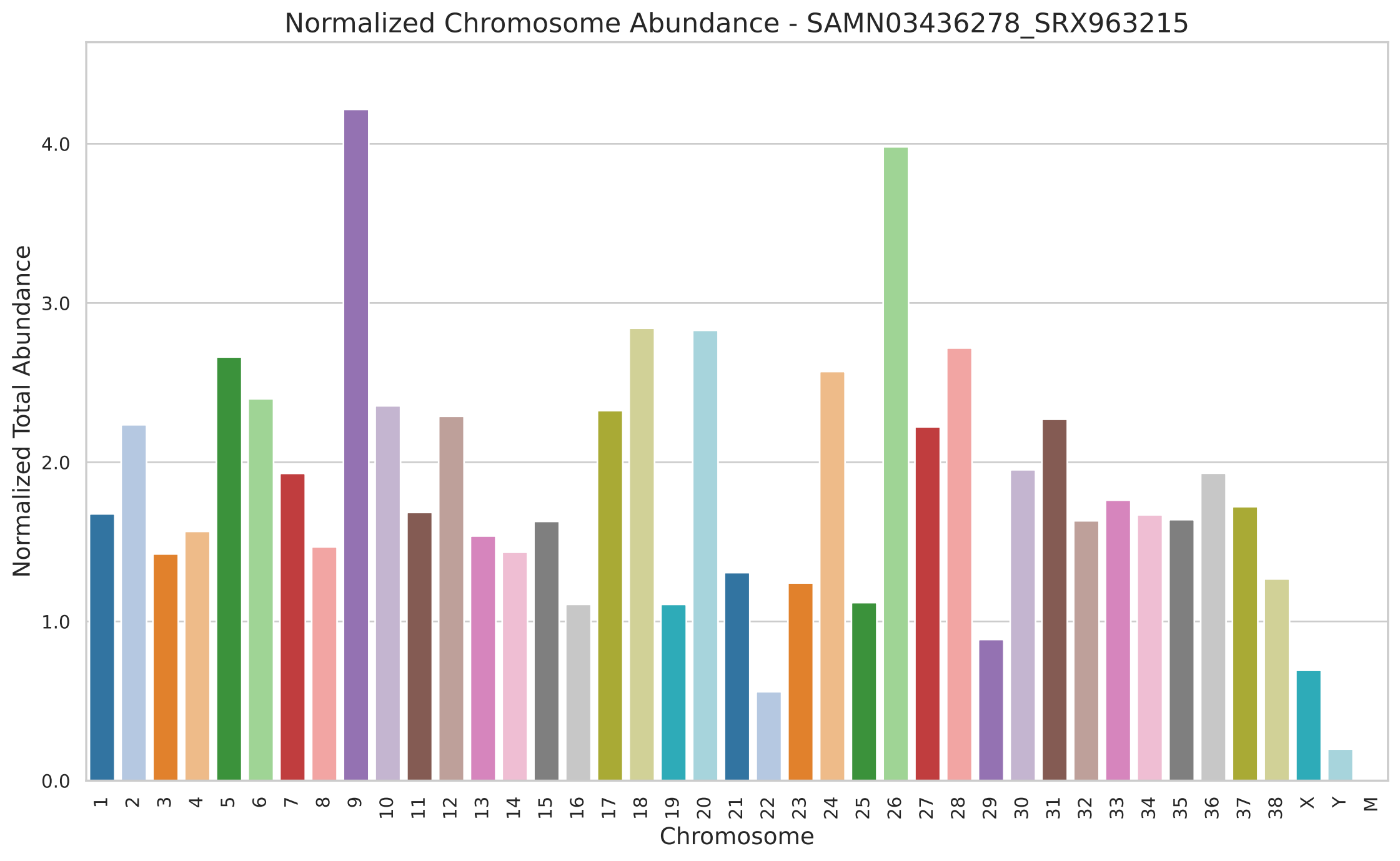

Normalized Chromosome Abundance - SAMN03436500_SRX963364
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

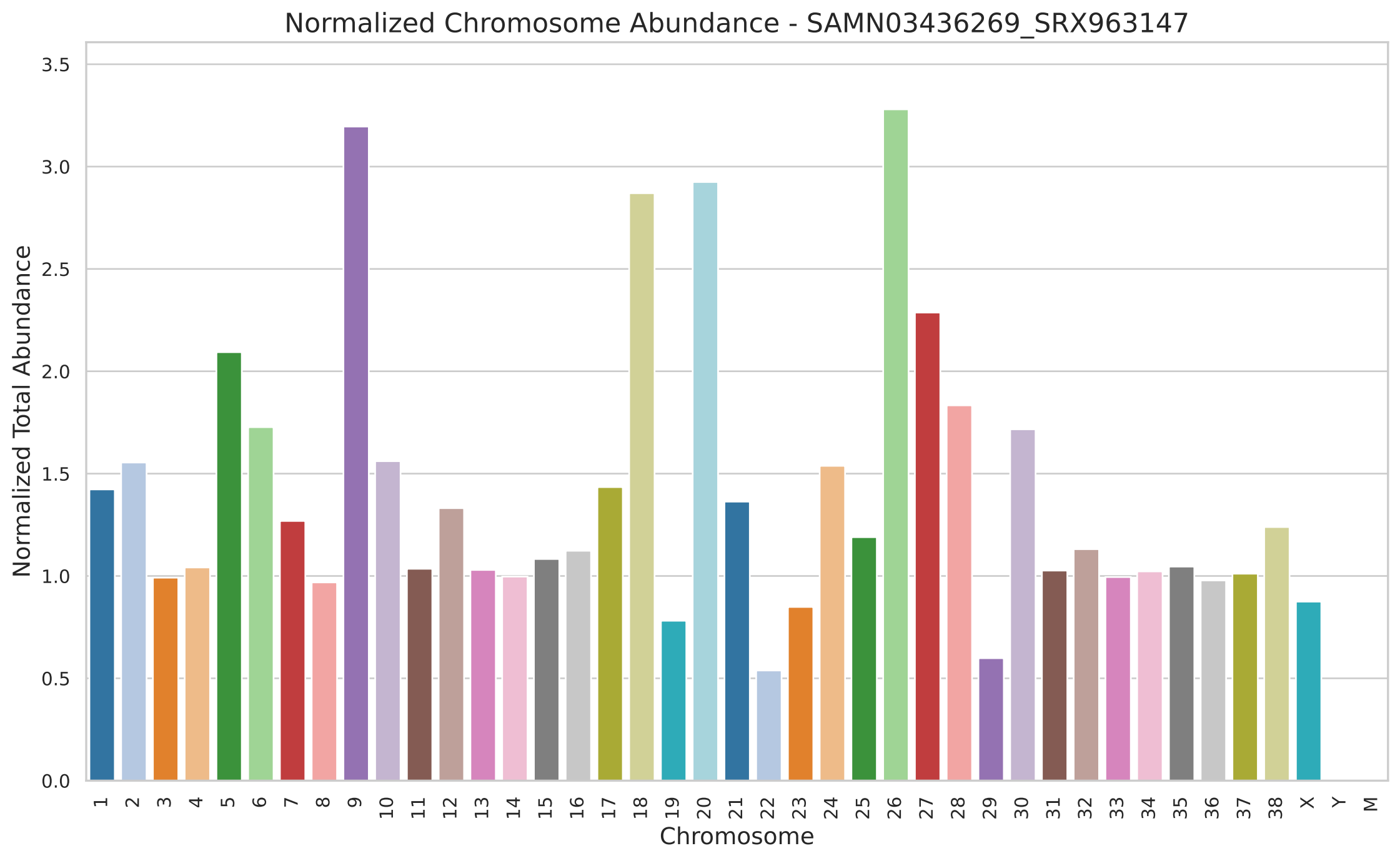

Normalized Chromosome Abundance - SAMN03436501_SRX963365
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

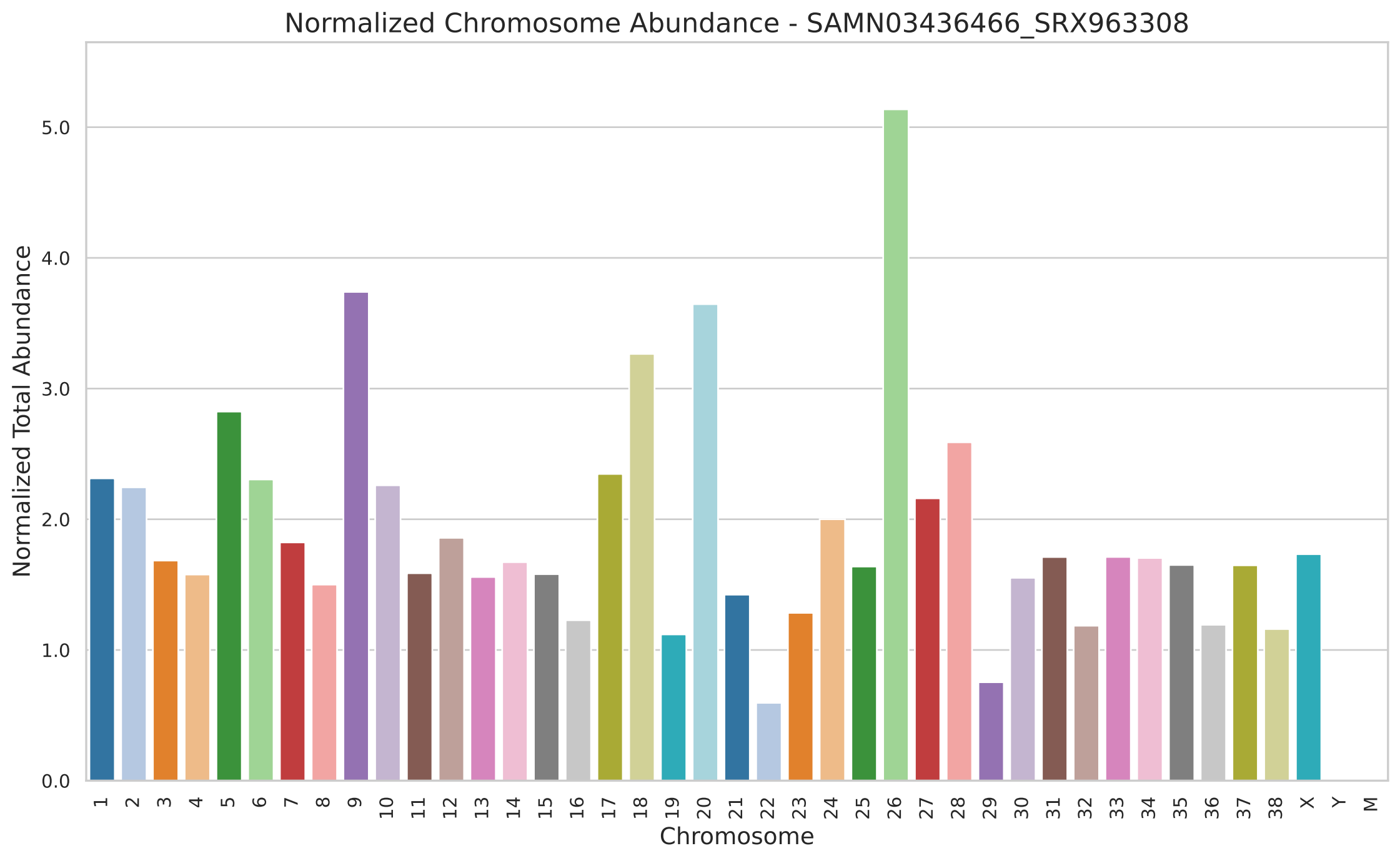

Normalized Chromosome Abundance - SAMN03436470_SRX963313
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

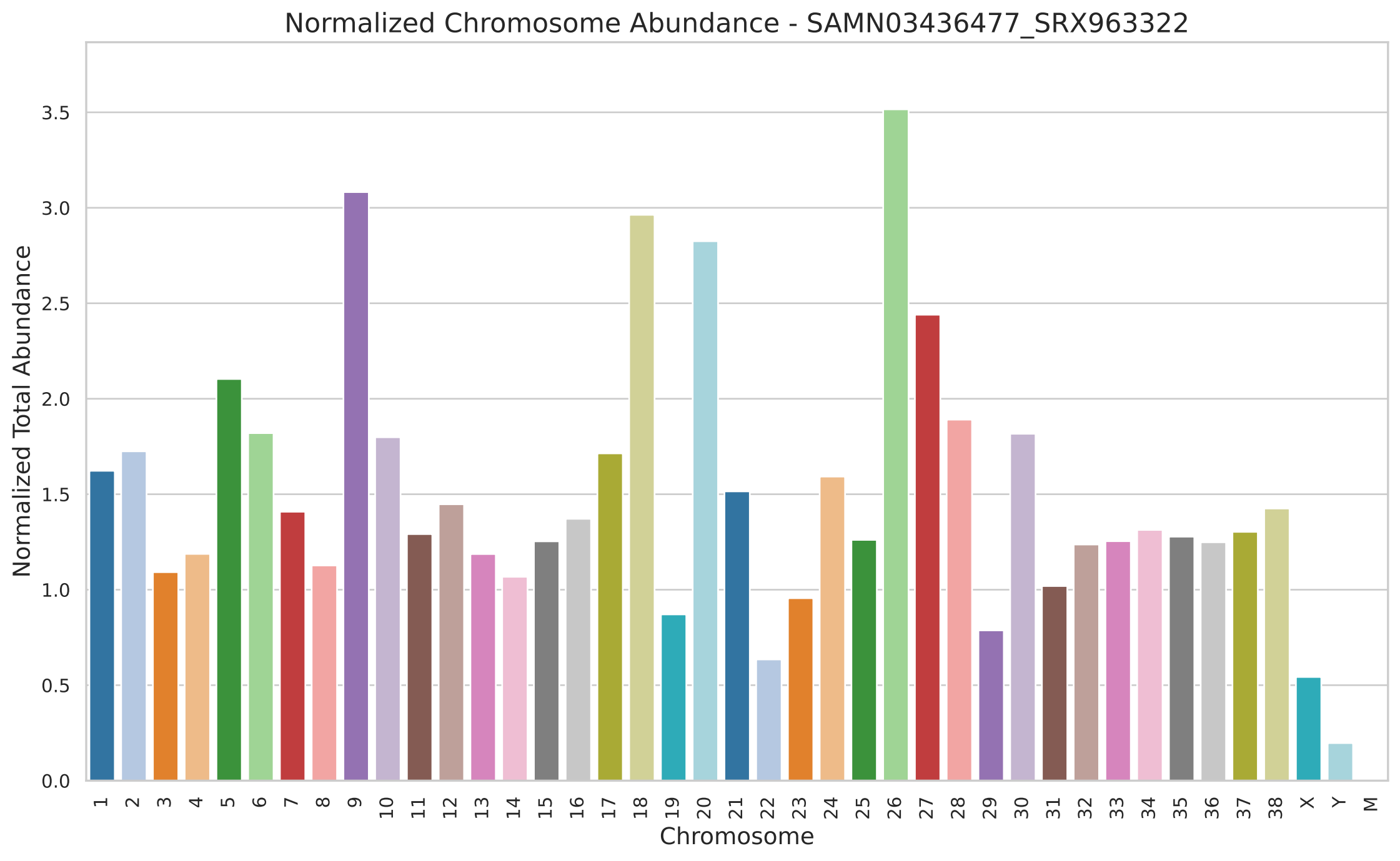

Normalized Chromosome Abundance - SAMN03436472_SRX963315
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

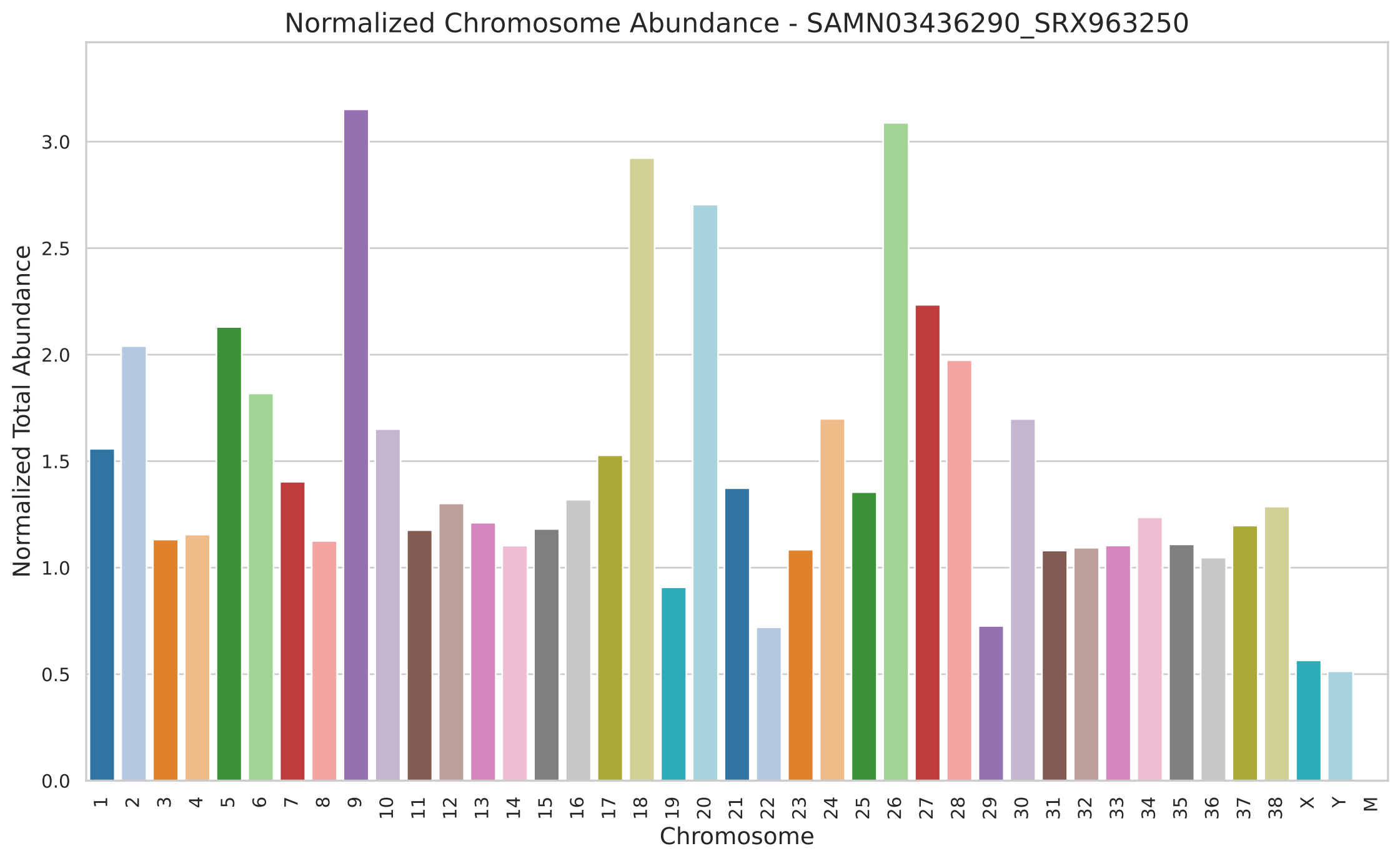

Normalized Chromosome Abundance - SAMN03436221_SRX963037
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

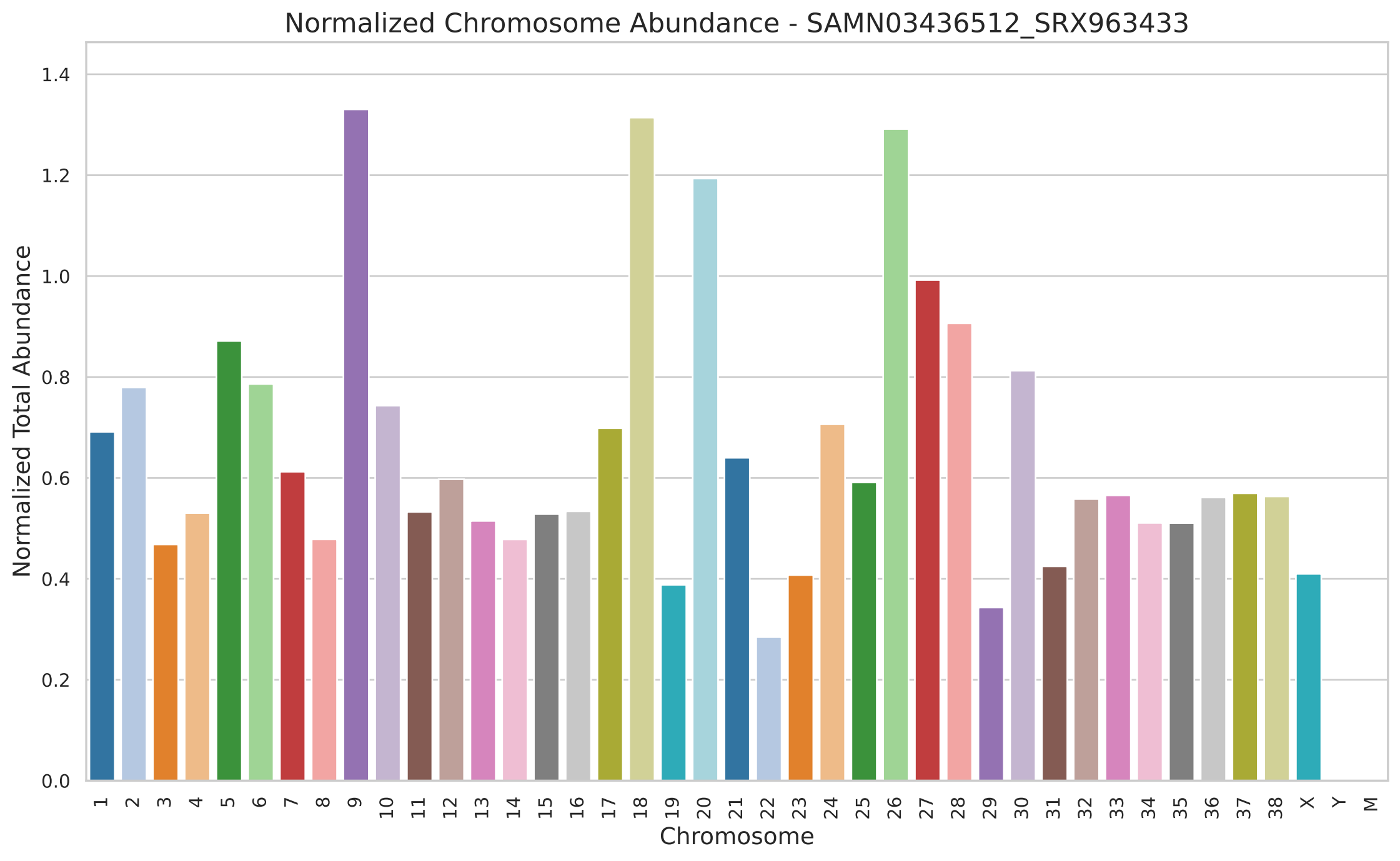

Normalized Chromosome Abundance - SAMN03436278_SRX963215
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

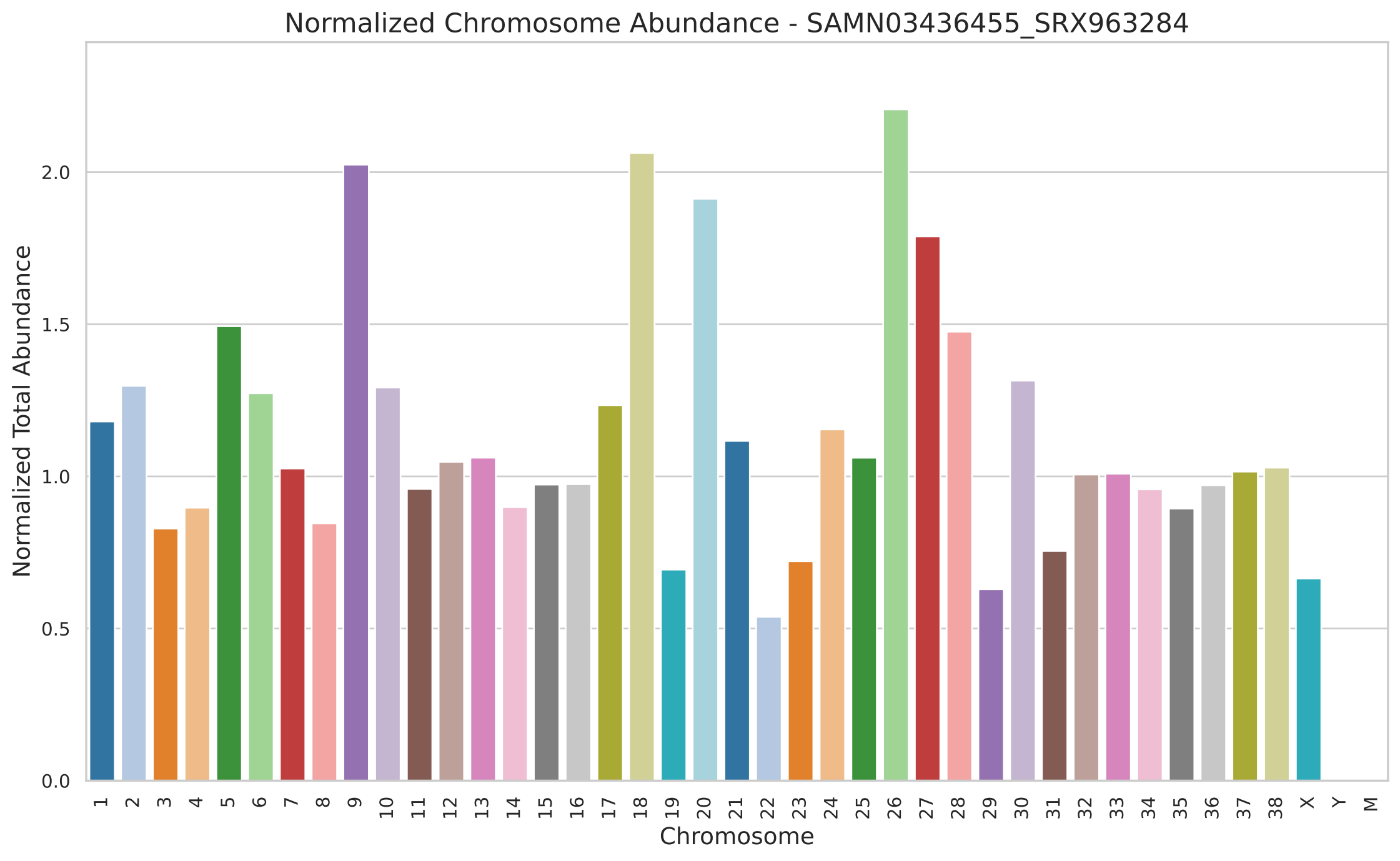

Normalized Chromosome Abundance - SAMN03436269_SRX963147
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

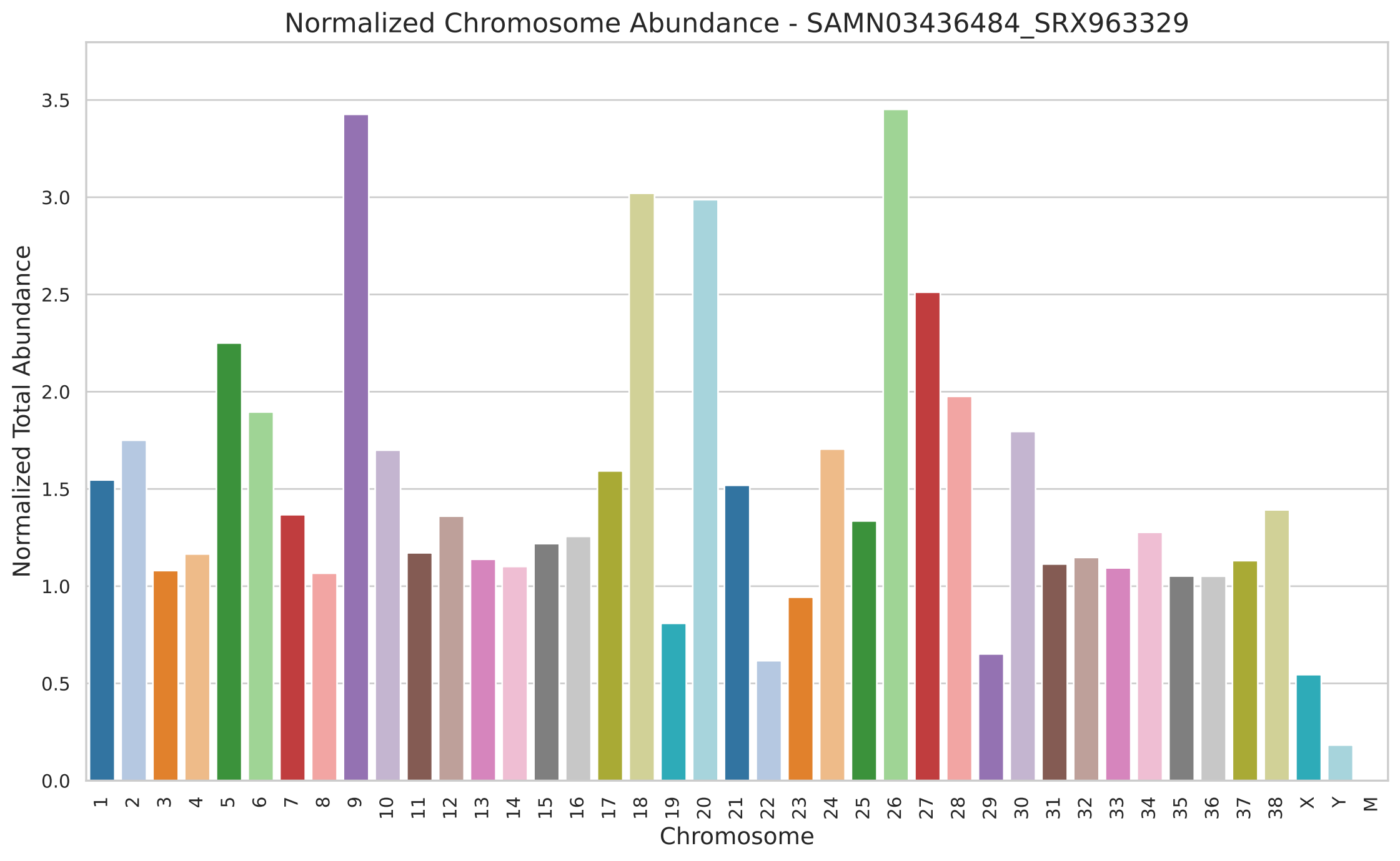

Normalized Chromosome Abundance - SAMN03436466_SRX963308
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

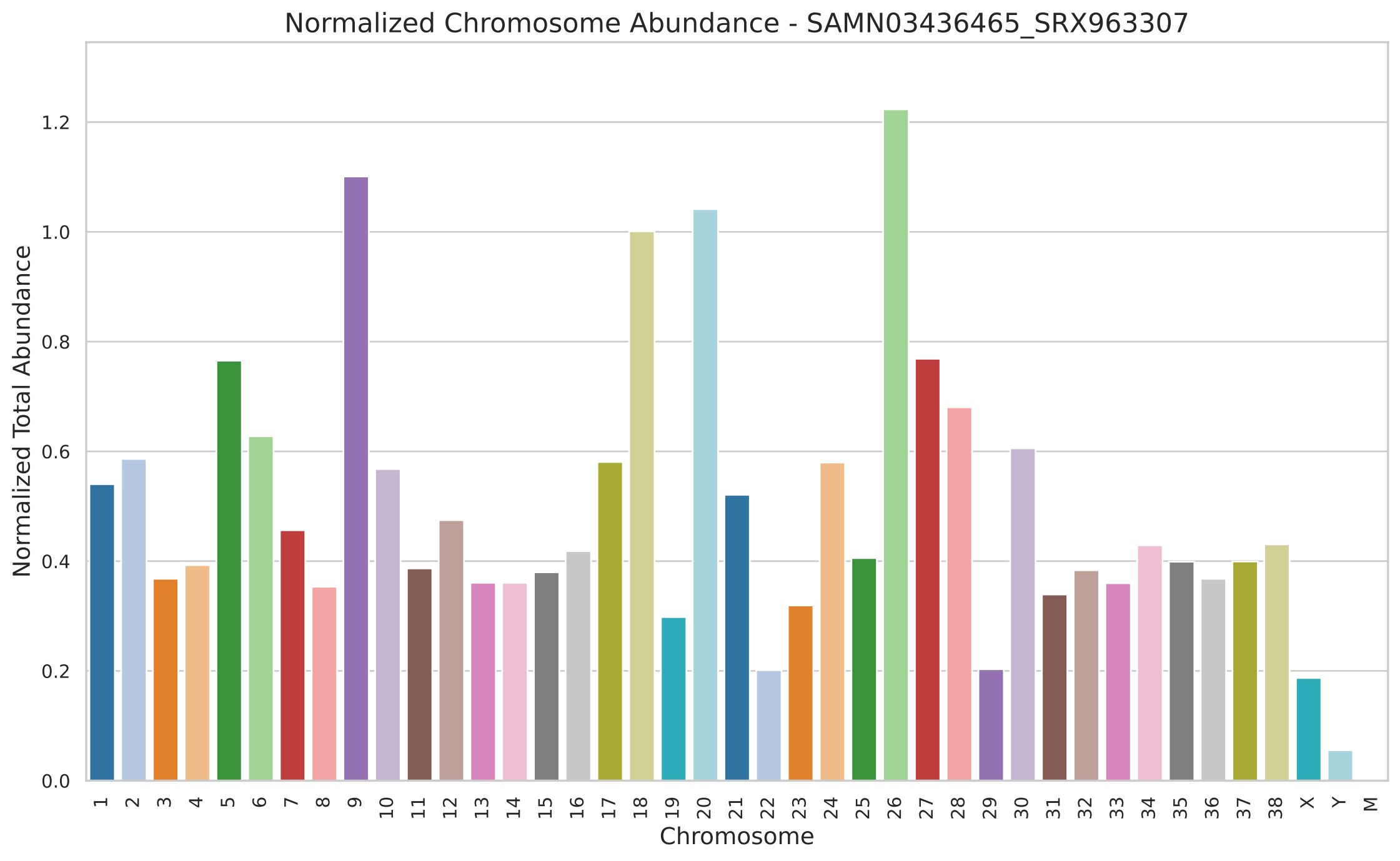

Normalized Chromosome Abundance - SAMN03436477_SRX963322
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

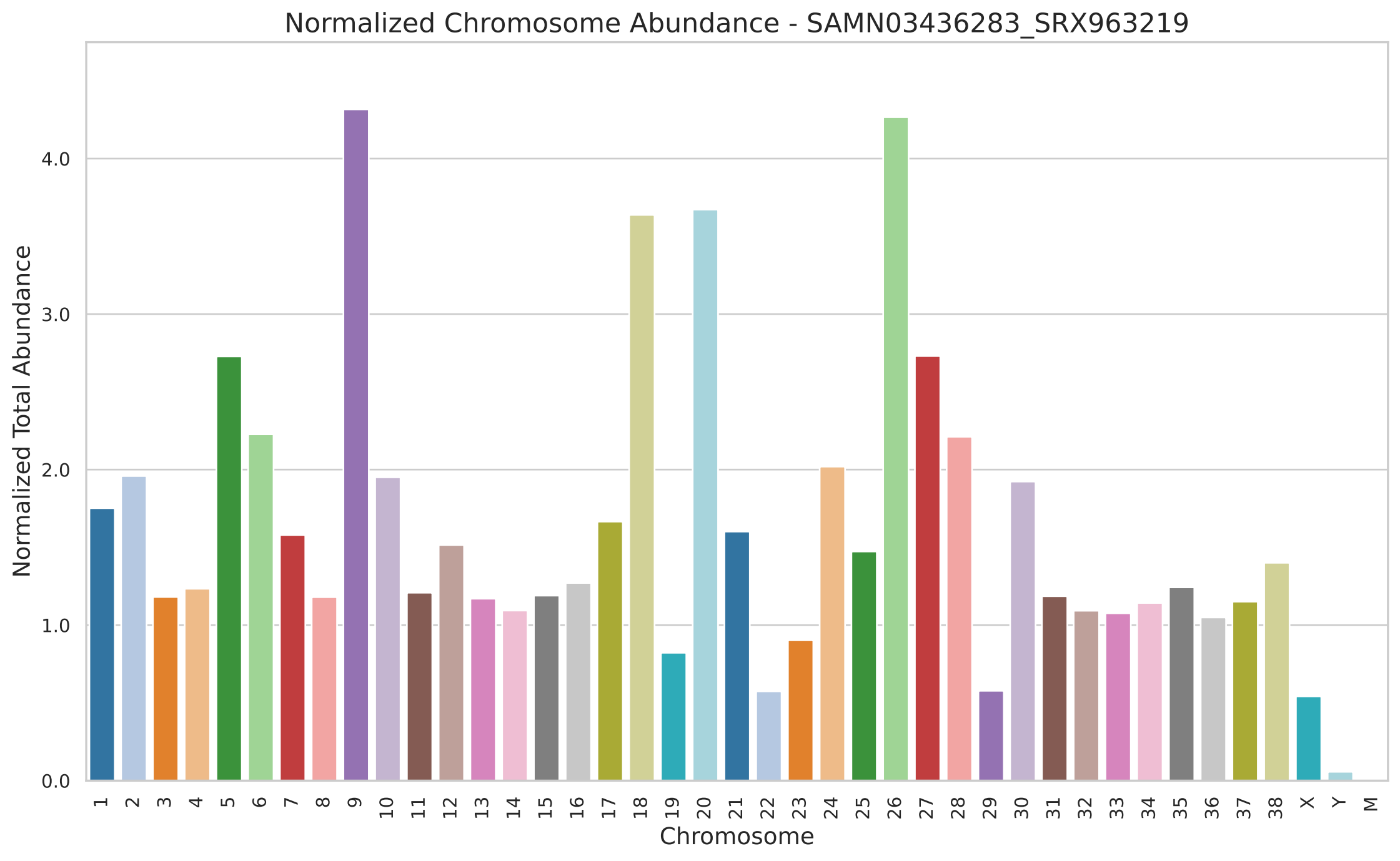

Normalized Chromosome Abundance - SAMN03436290_SRX963250
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

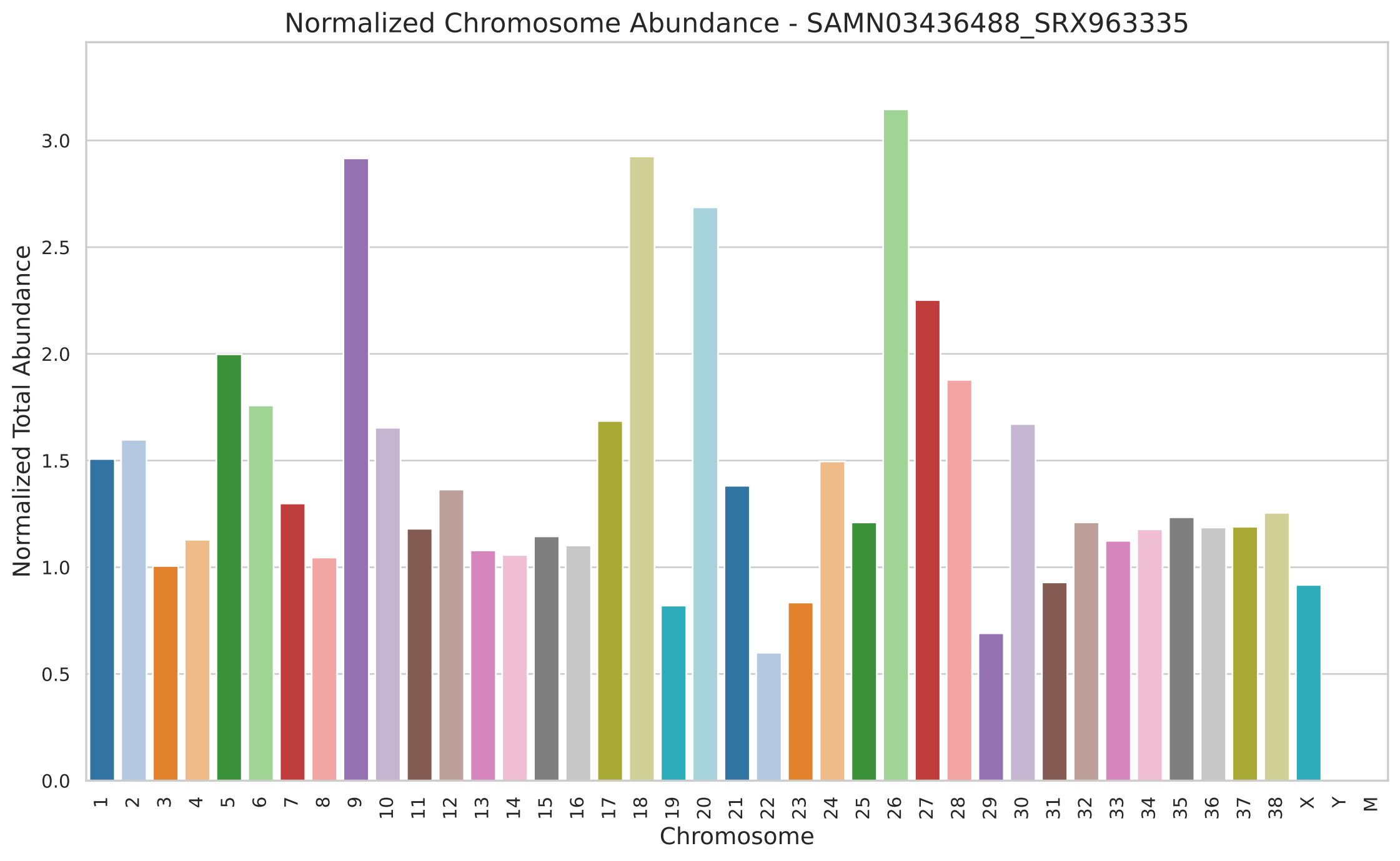

Normalized Chromosome Abundance - SAMN03436512_SRX963433
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

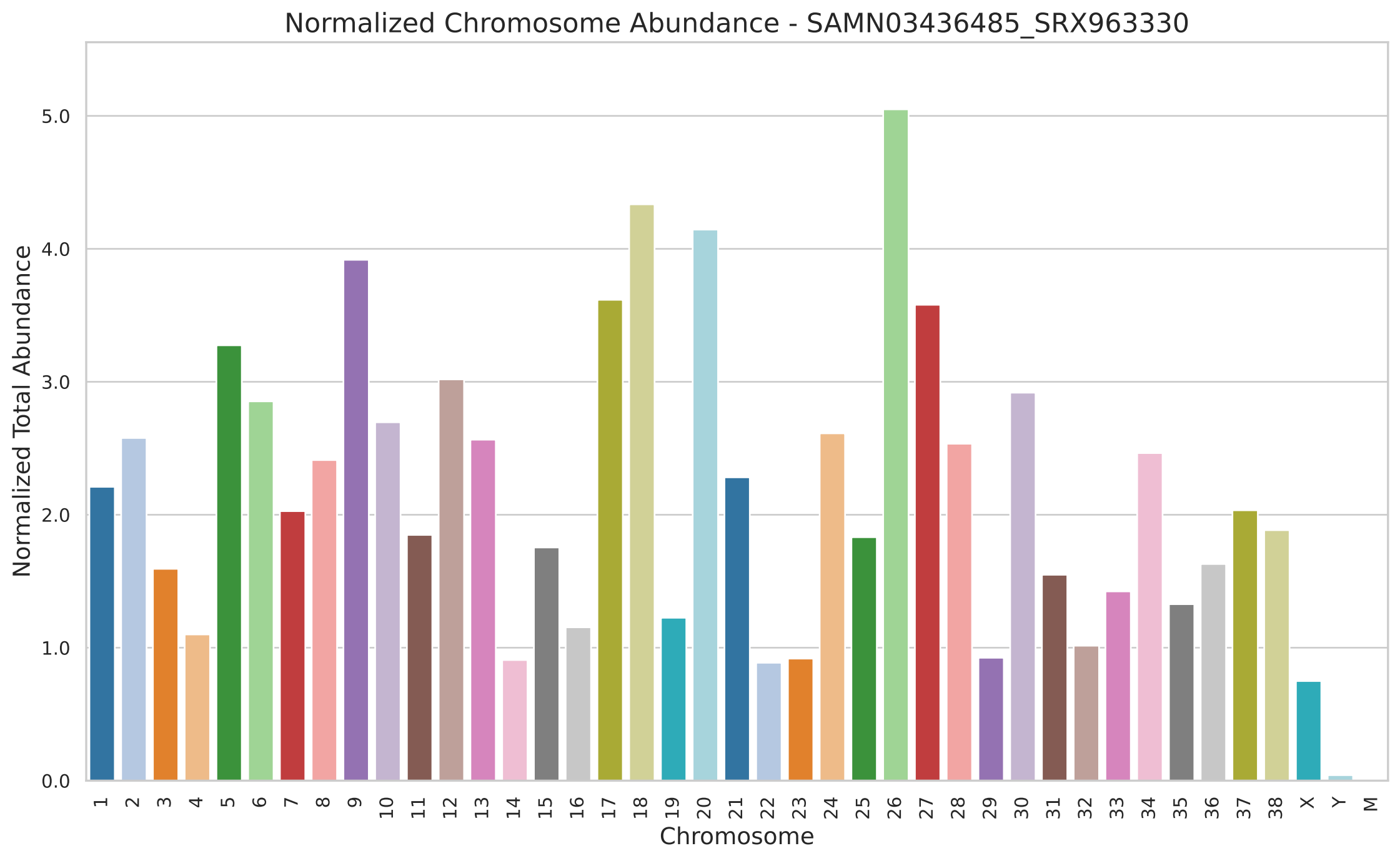

Normalized Chromosome Abundance - SAMN03436455_SRX963284
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

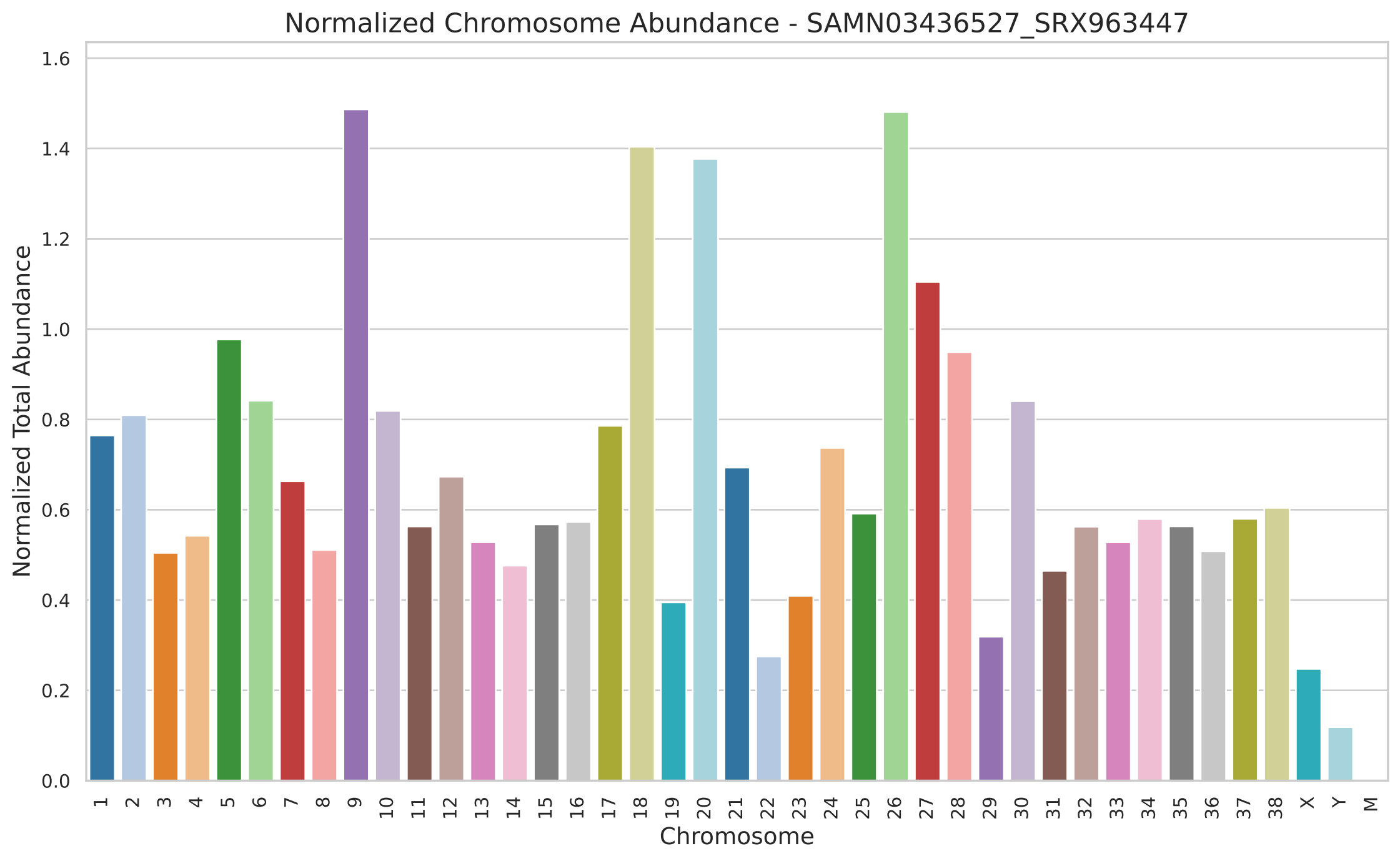

Normalized Chromosome Abundance - SAMN03436484_SRX963329
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

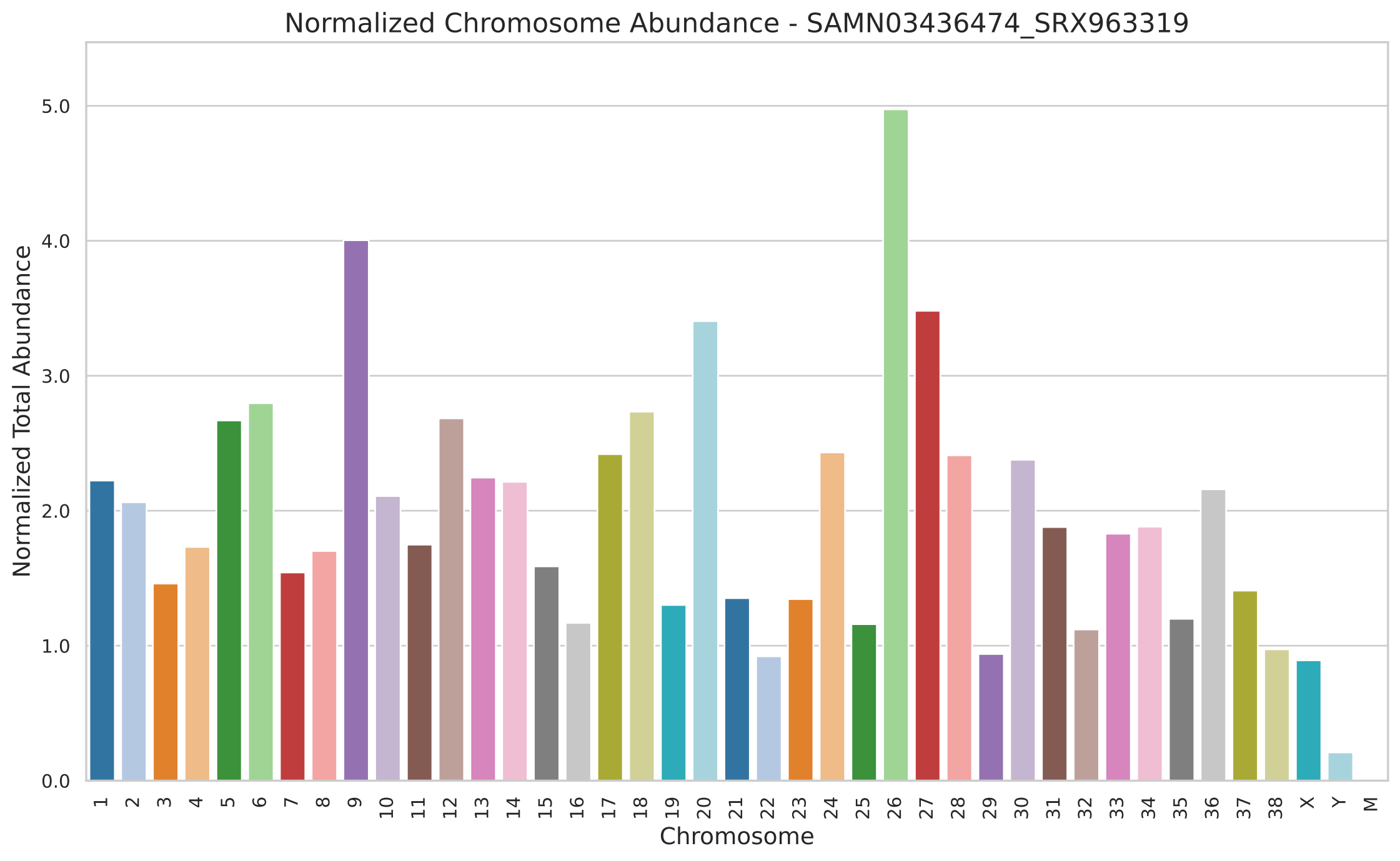

Normalized Chromosome Abundance - SAMN03436465_SRX963307
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

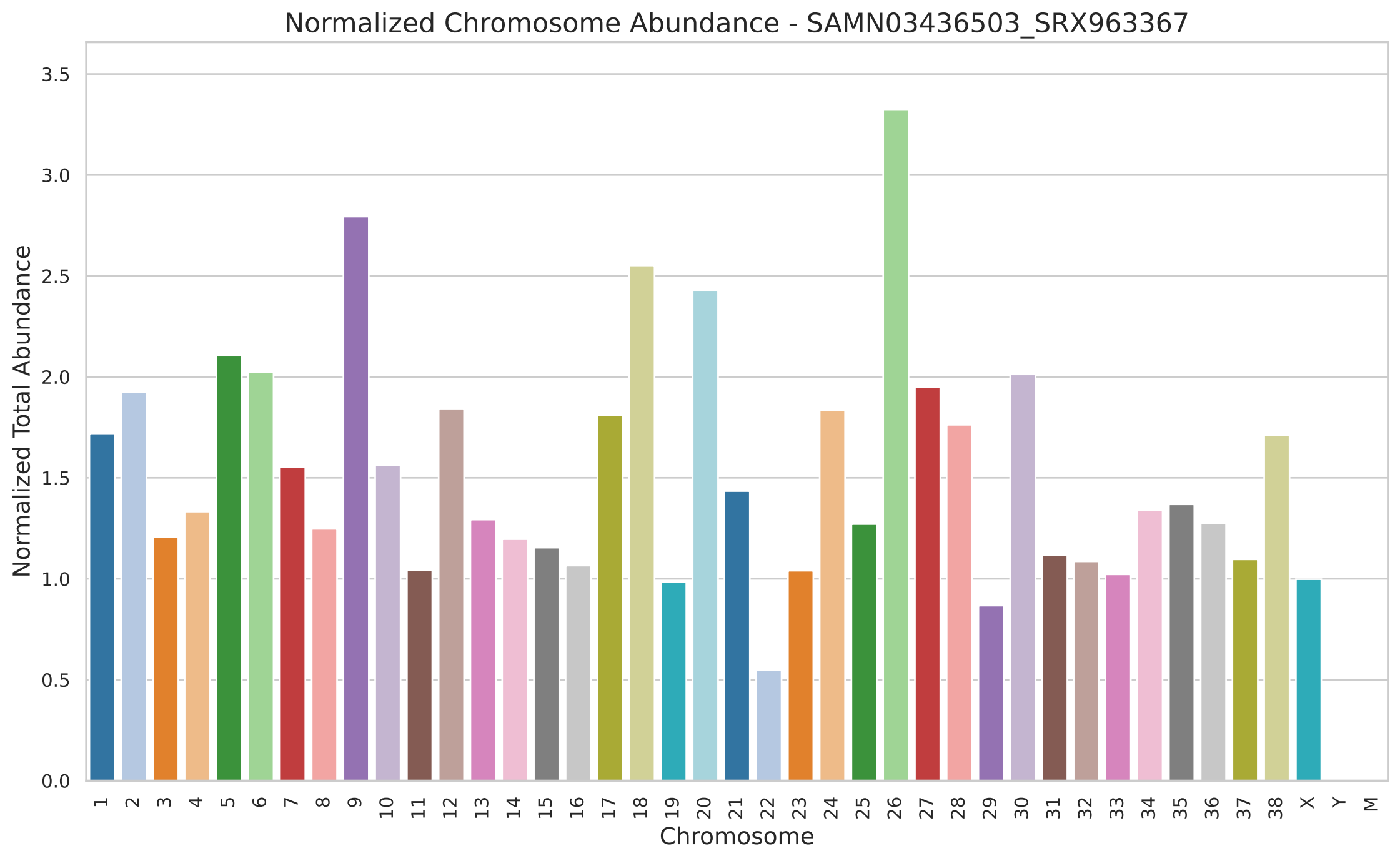

Normalized Chromosome Abundance - SAMN03436283_SRX963219
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

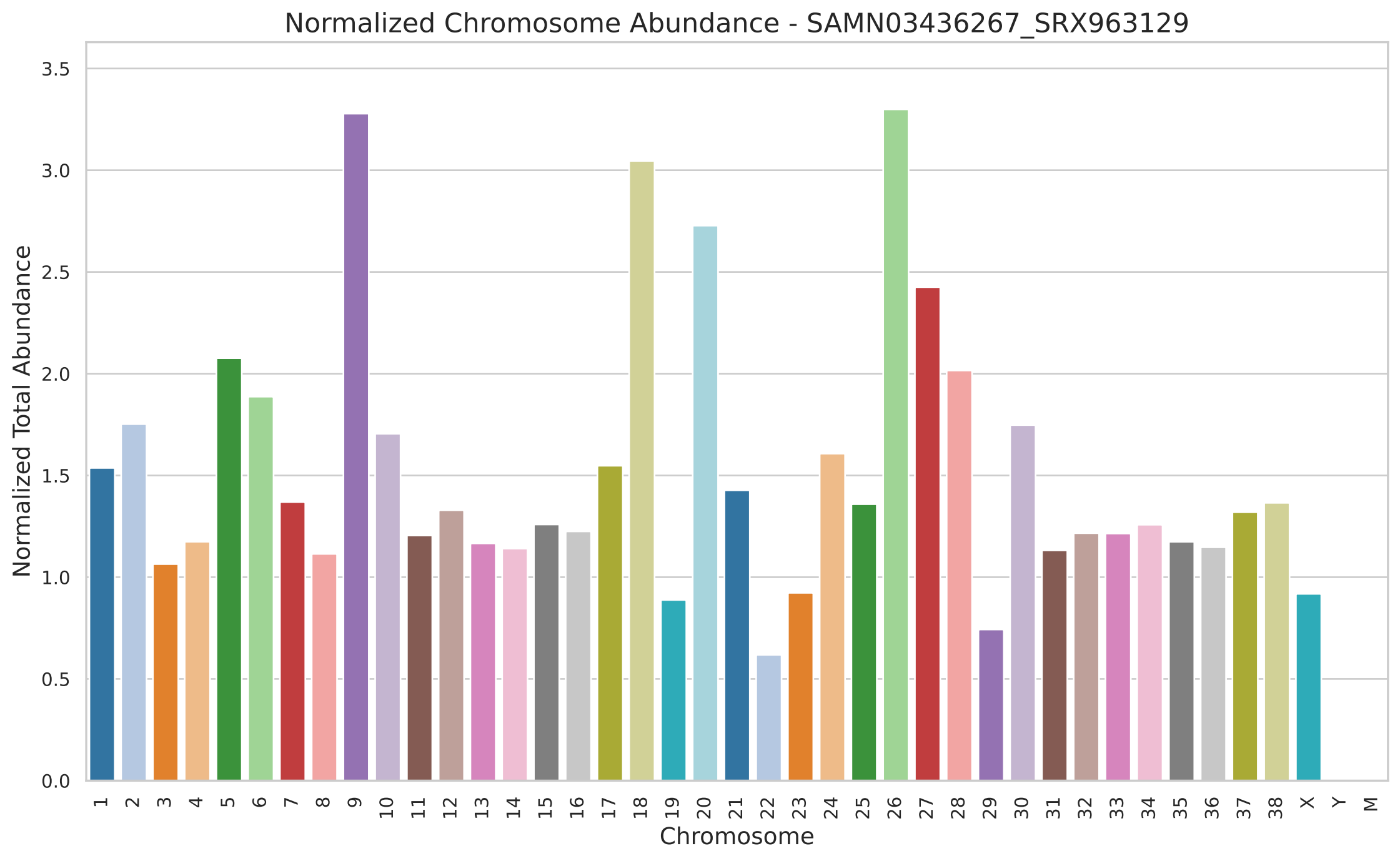

Normalized Chromosome Abundance - SAMN03436488_SRX963335
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

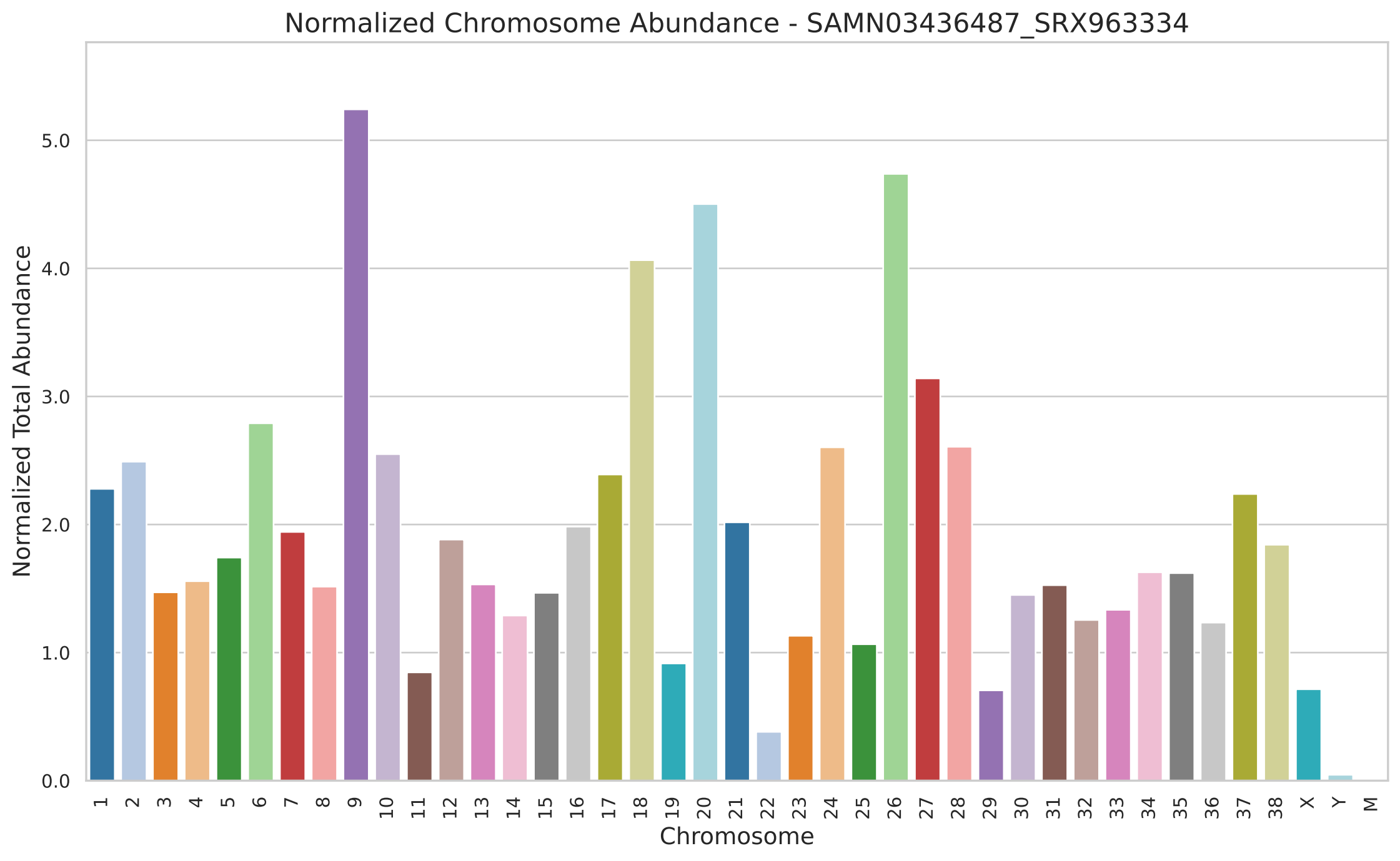

Normalized Chromosome Abundance - SAMN03436485_SRX963330
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

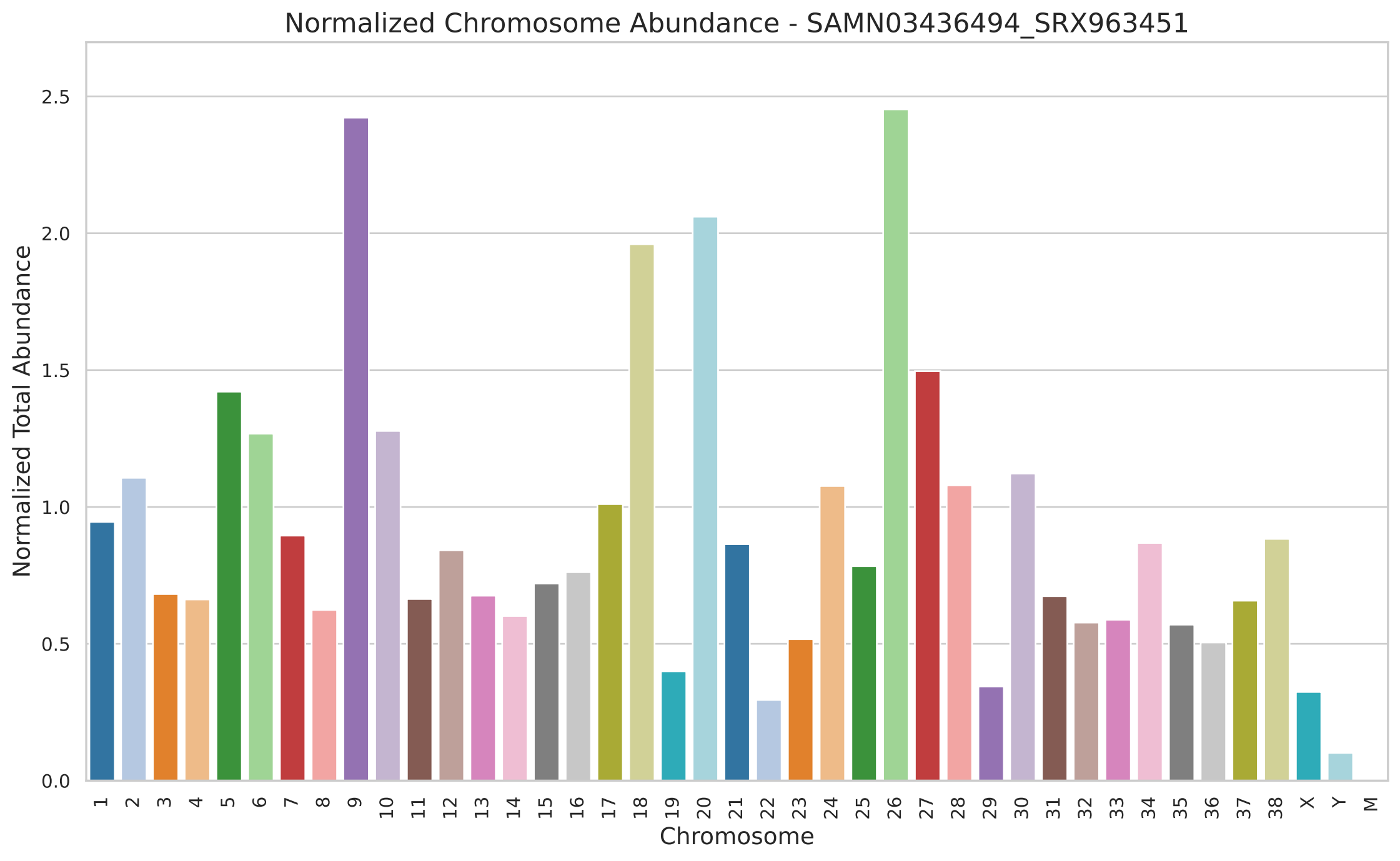

Normalized Chromosome Abundance - SAMN03436527_SRX963447
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

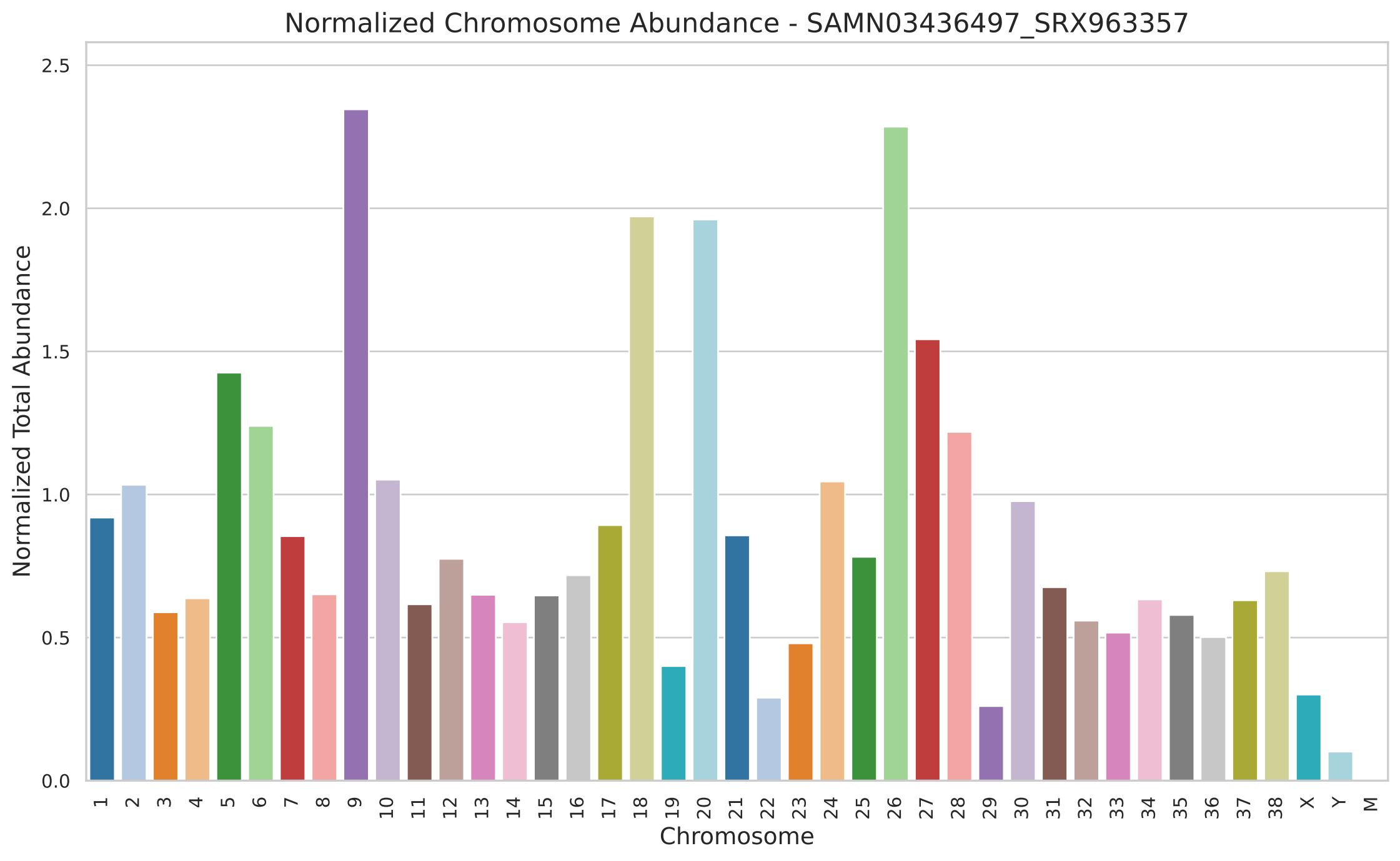

Normalized Chromosome Abundance - SAMN03436474_SRX963319
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

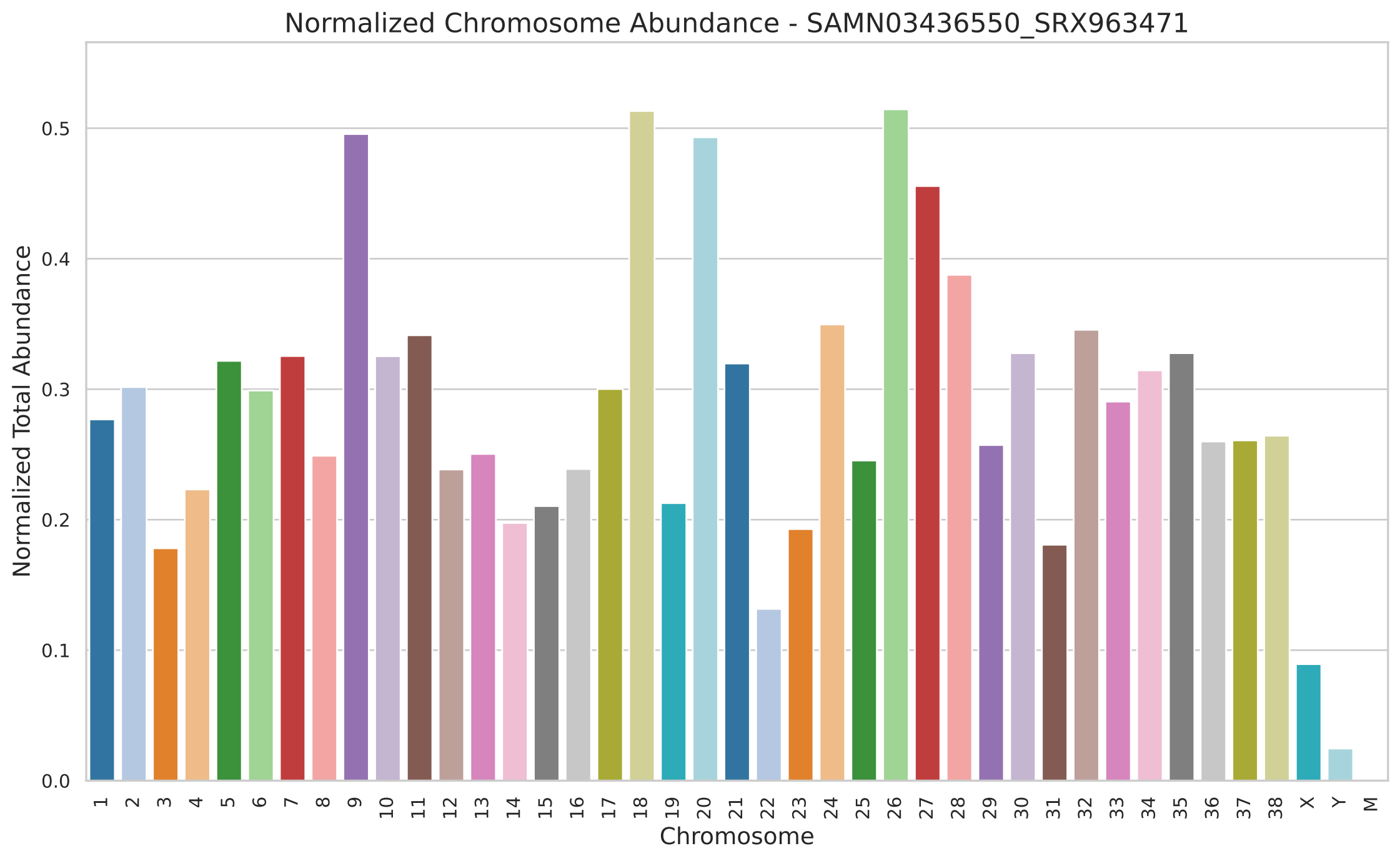

Normalized Chromosome Abundance - SAMN03436503_SRX963367
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

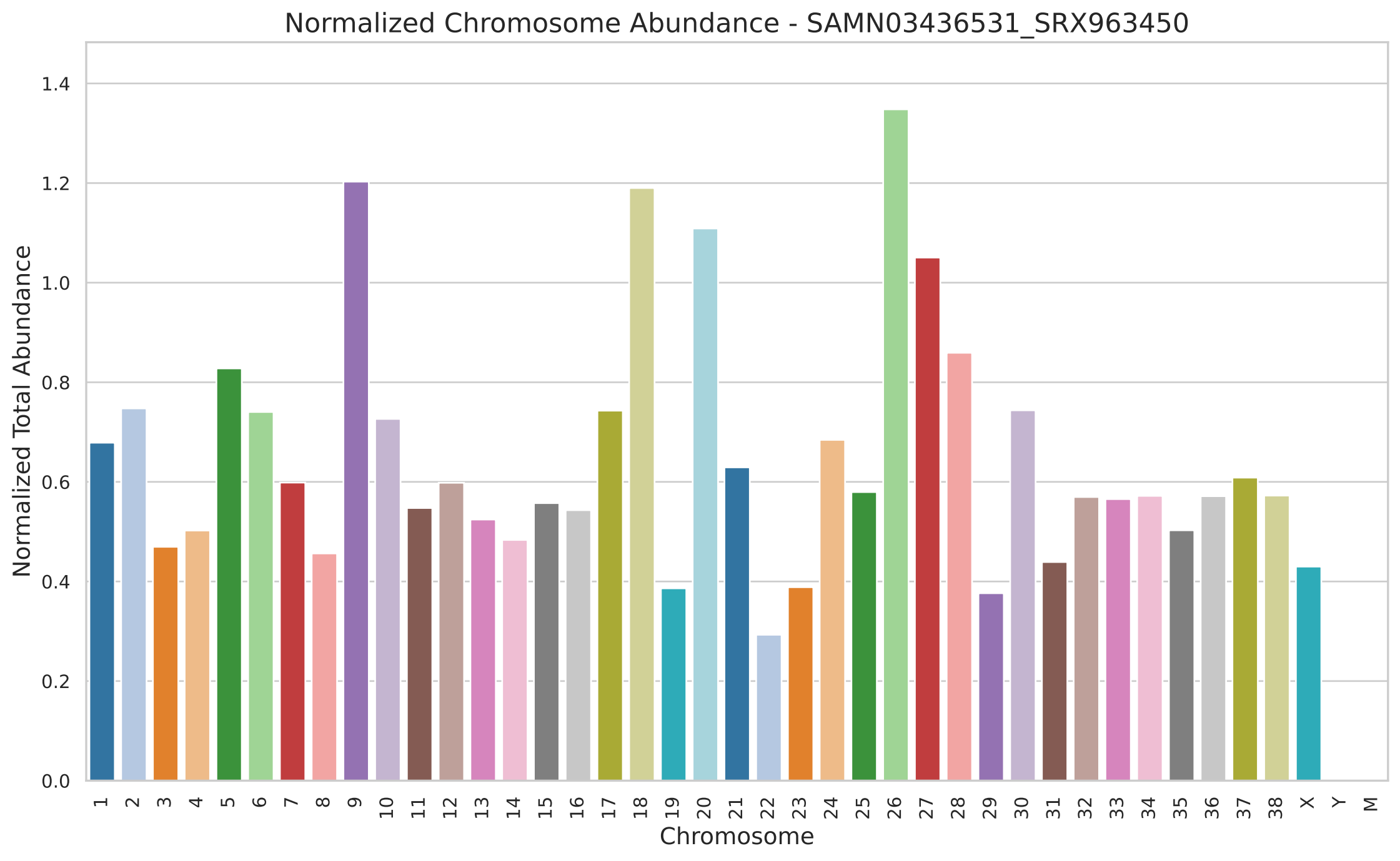

Normalized Chromosome Abundance - SAMN03436267_SRX963129
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

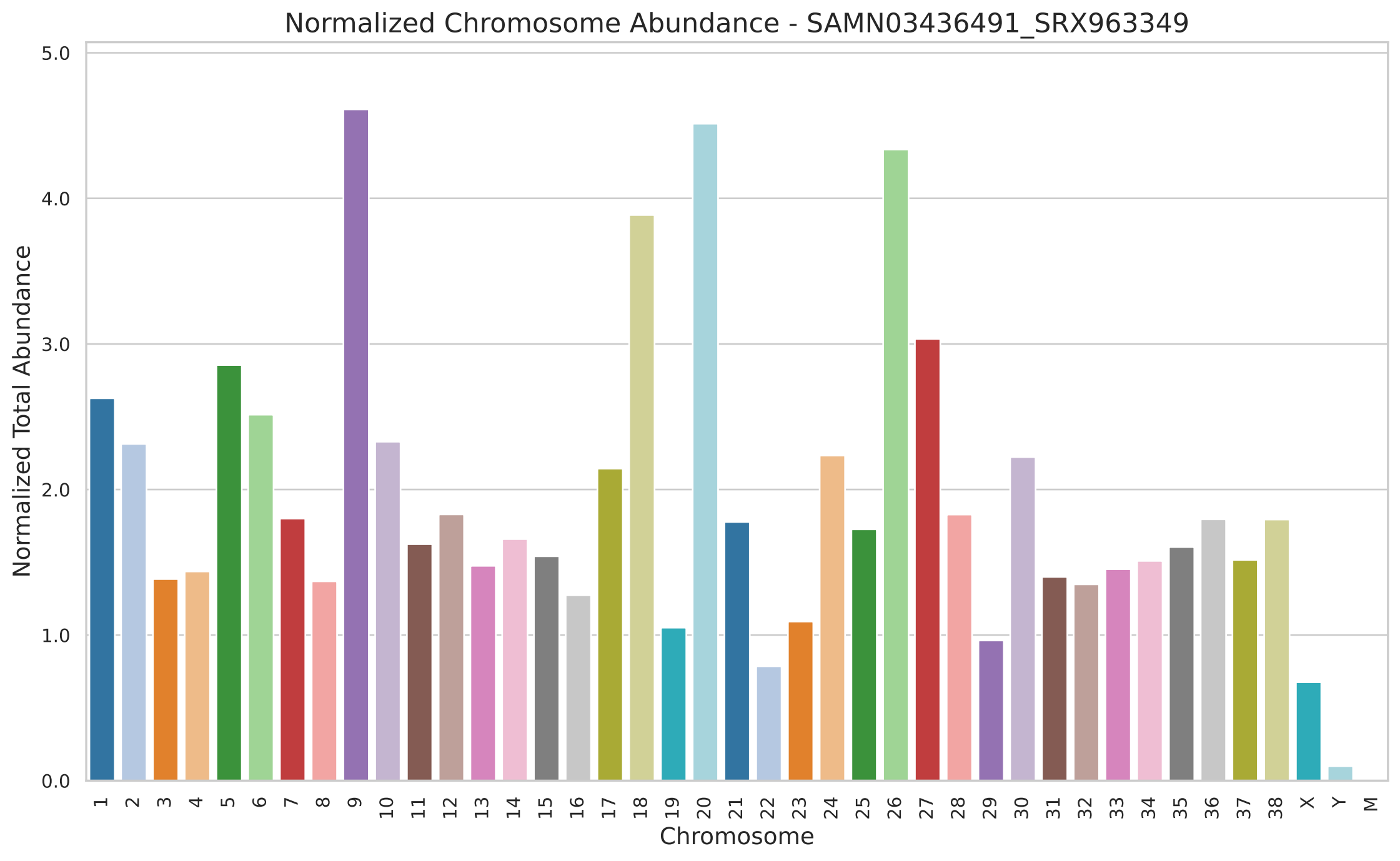

Normalized Chromosome Abundance - SAMN03436487_SRX963334
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

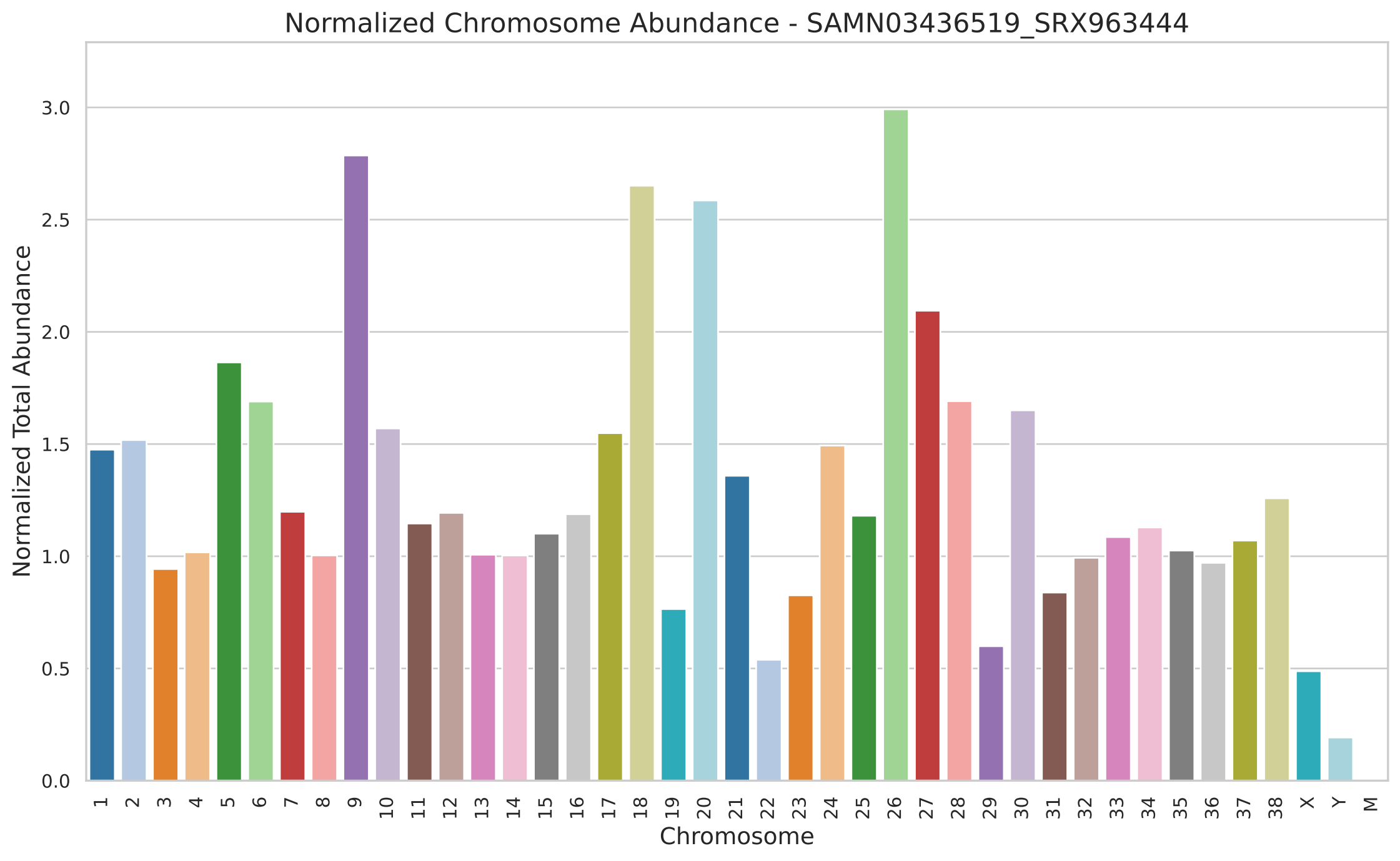

Normalized Chromosome Abundance - SAMN03436494_SRX963451
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

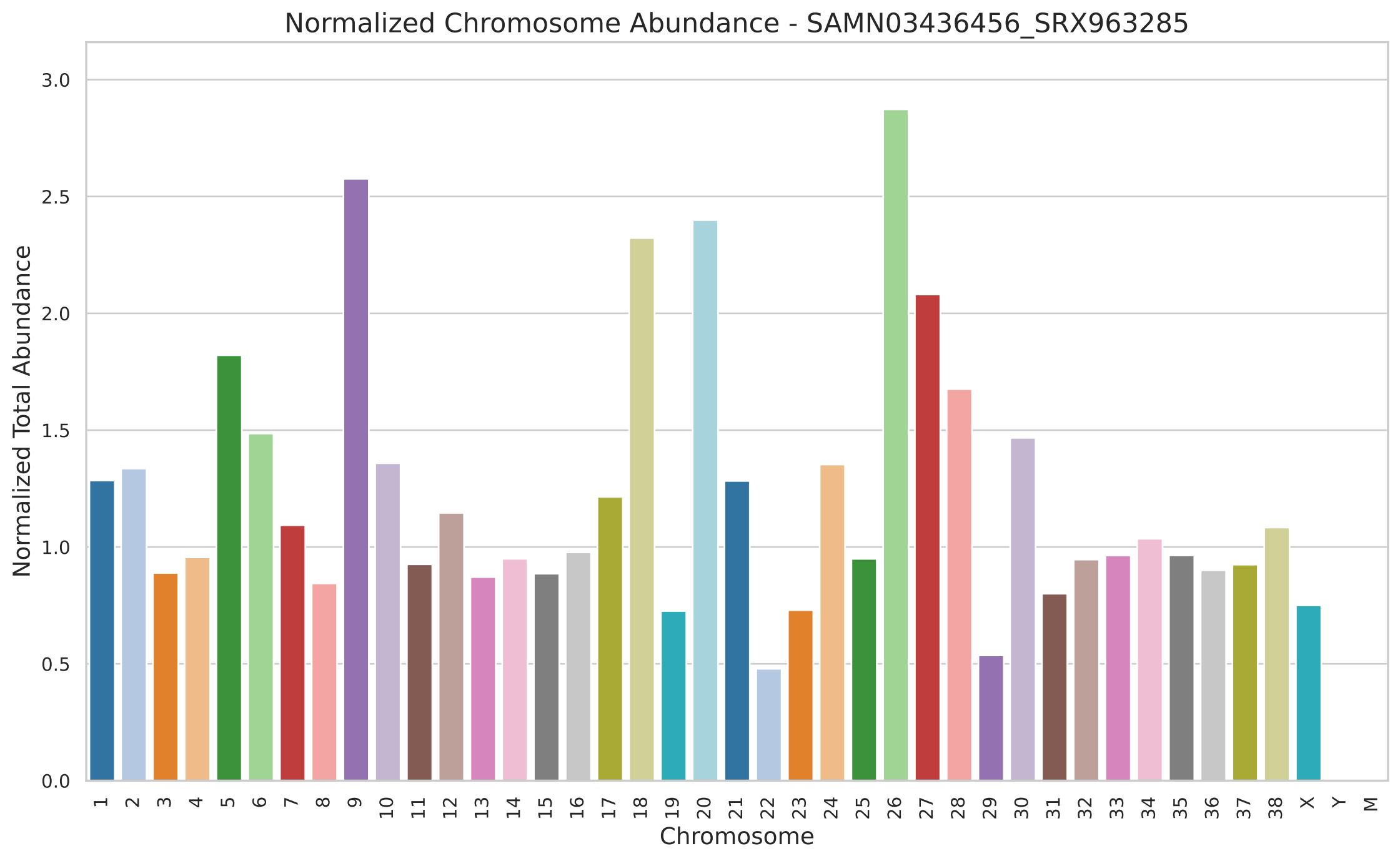

Normalized Chromosome Abundance - SAMN03436497_SRX963357
Normalized Total Abundance
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

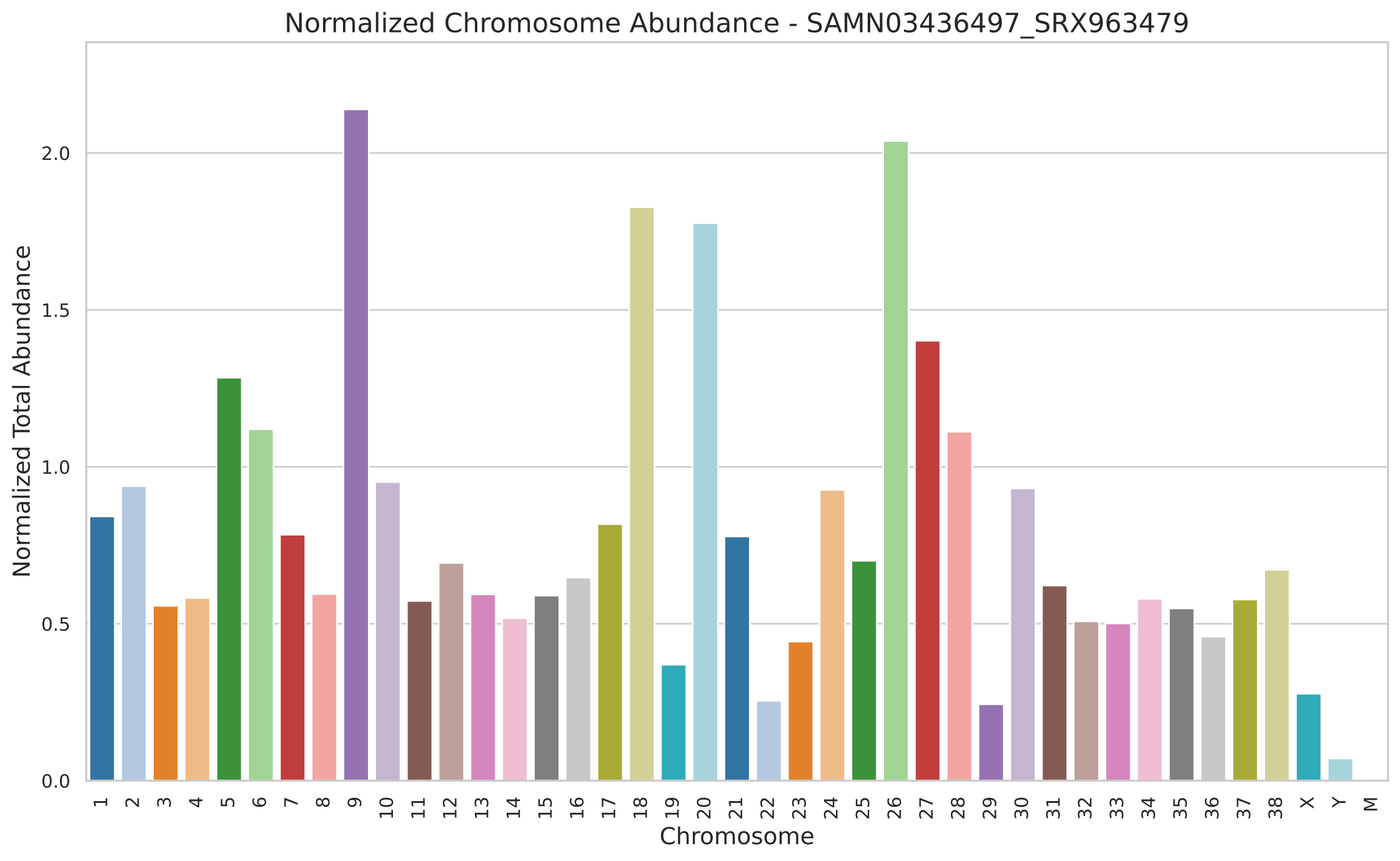

Normalized Chromosome Abundance - SAMN03436550_SRX963471
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

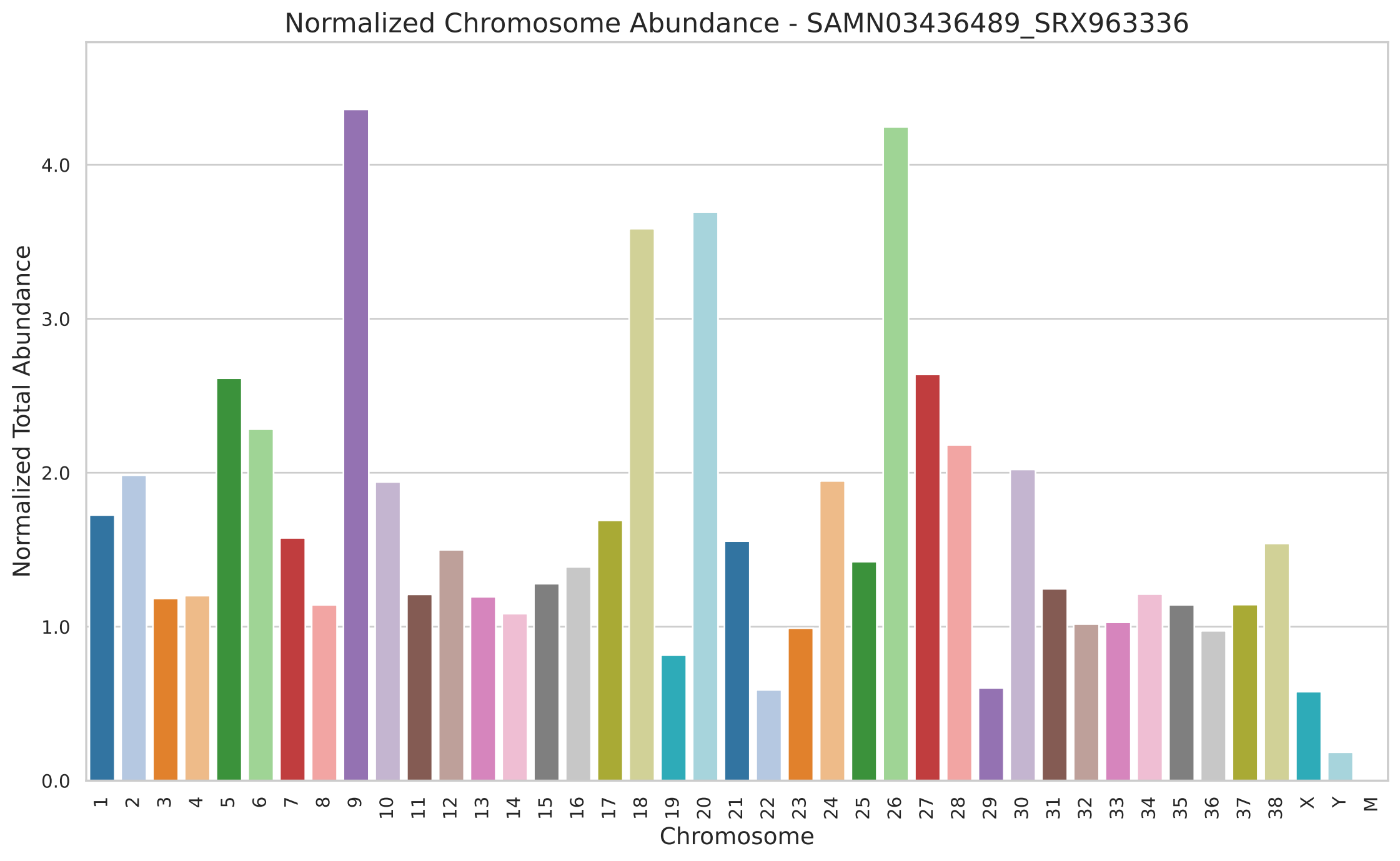

Normalized Chromosome Abundance - SAMN03436531_SRX963450
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

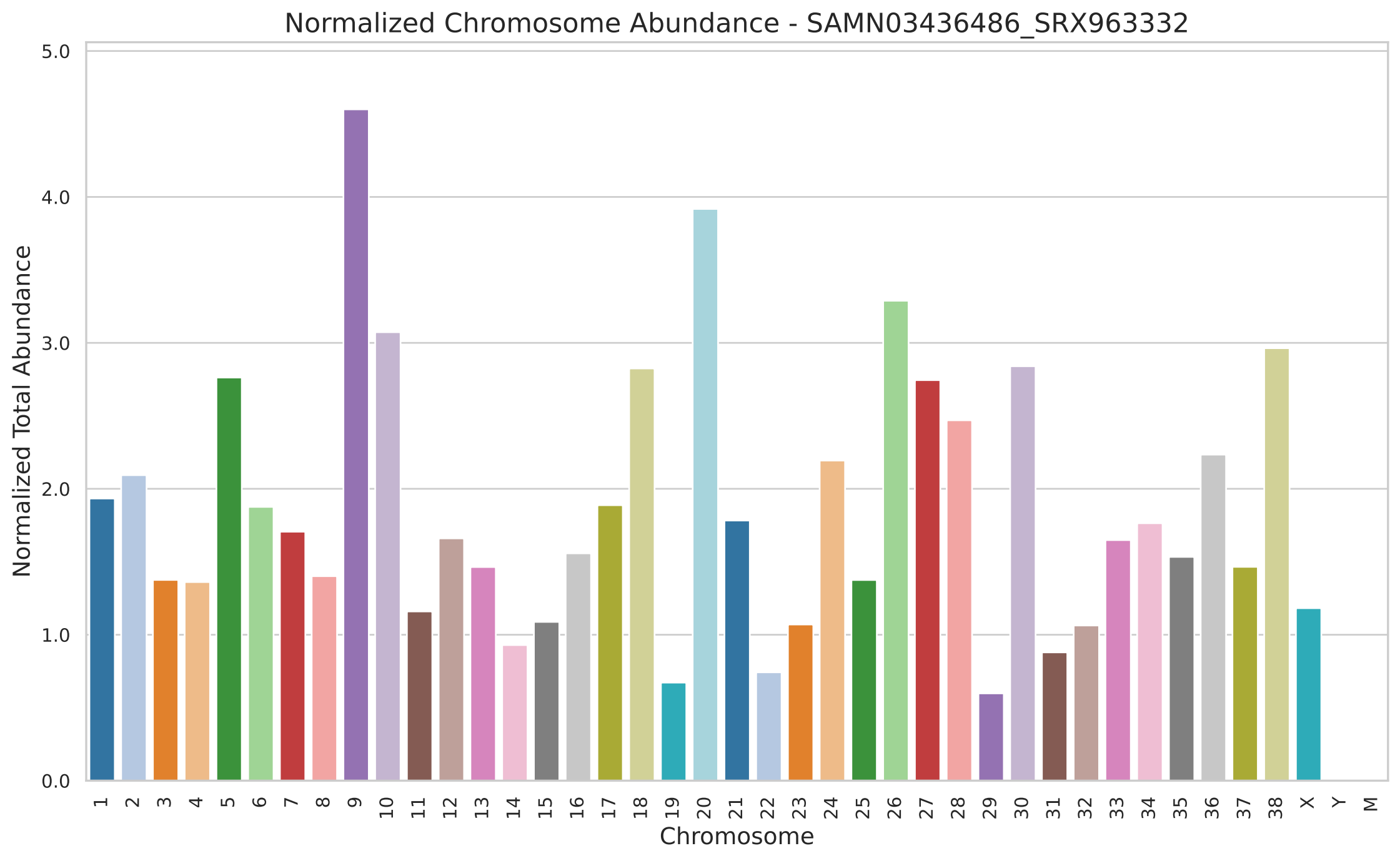

Normalized Chromosome Abundance - SAMN03436491_SRX963349
Normalized Total Abundance
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

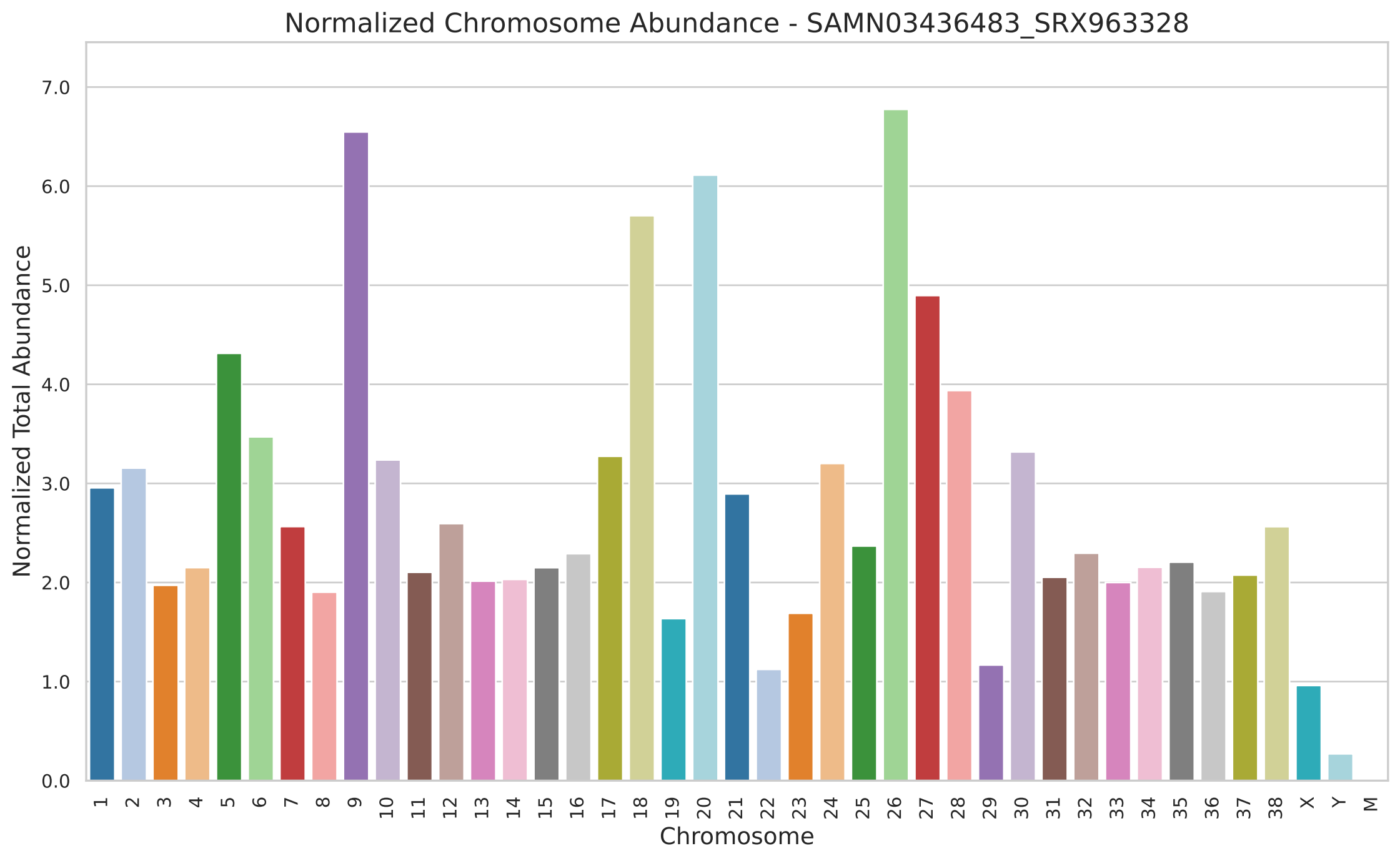

Normalized Chromosome Abundance - SAMN03436519_SRX963444
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

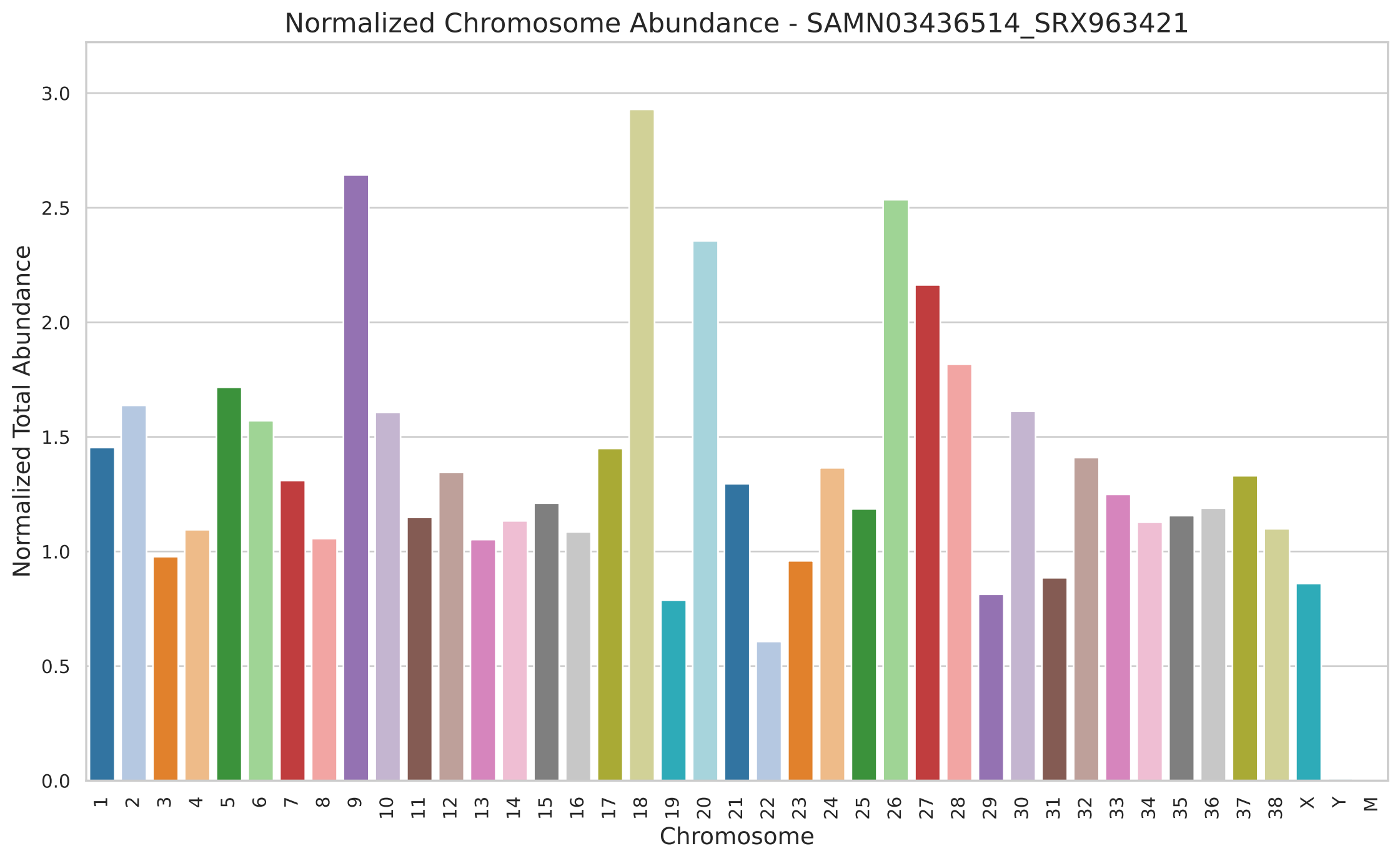

Normalized Chromosome Abundance - SAMN03436456_SRX963285
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

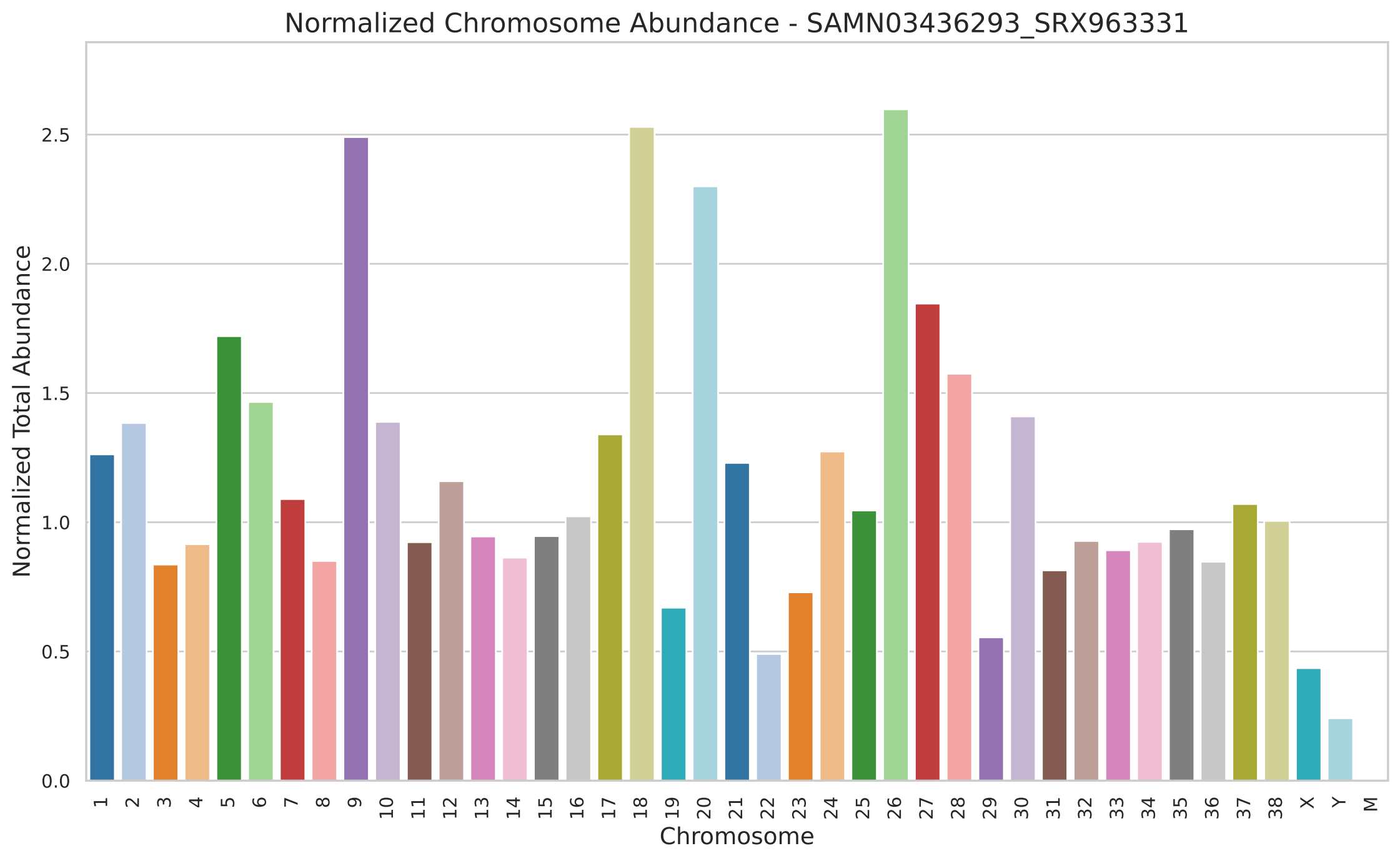

Normalized Chromosome Abundance - SAMN03436497_SRX963479
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

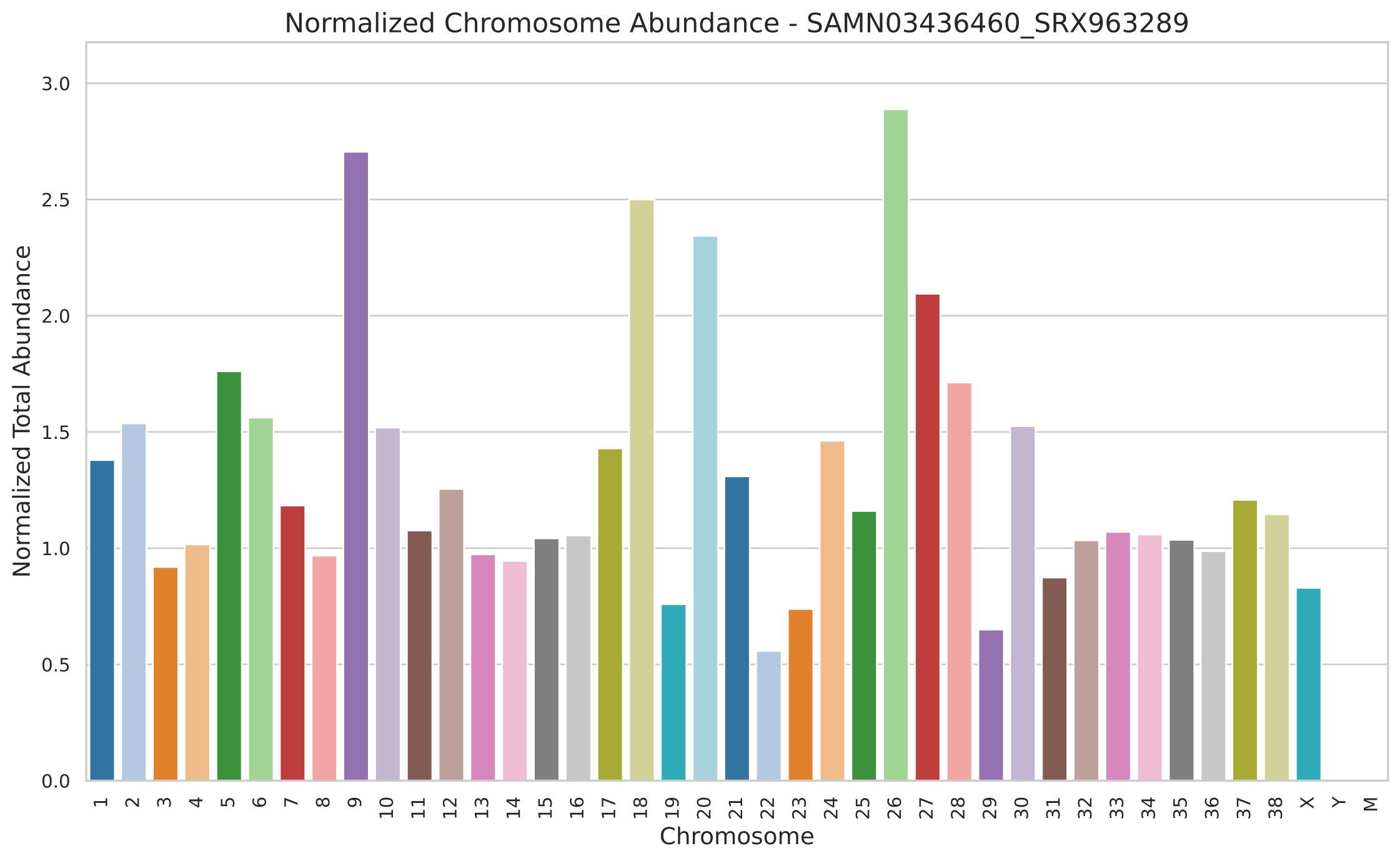

Normalized Chromosome Abundance - SAMN03436489_SRX963336
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

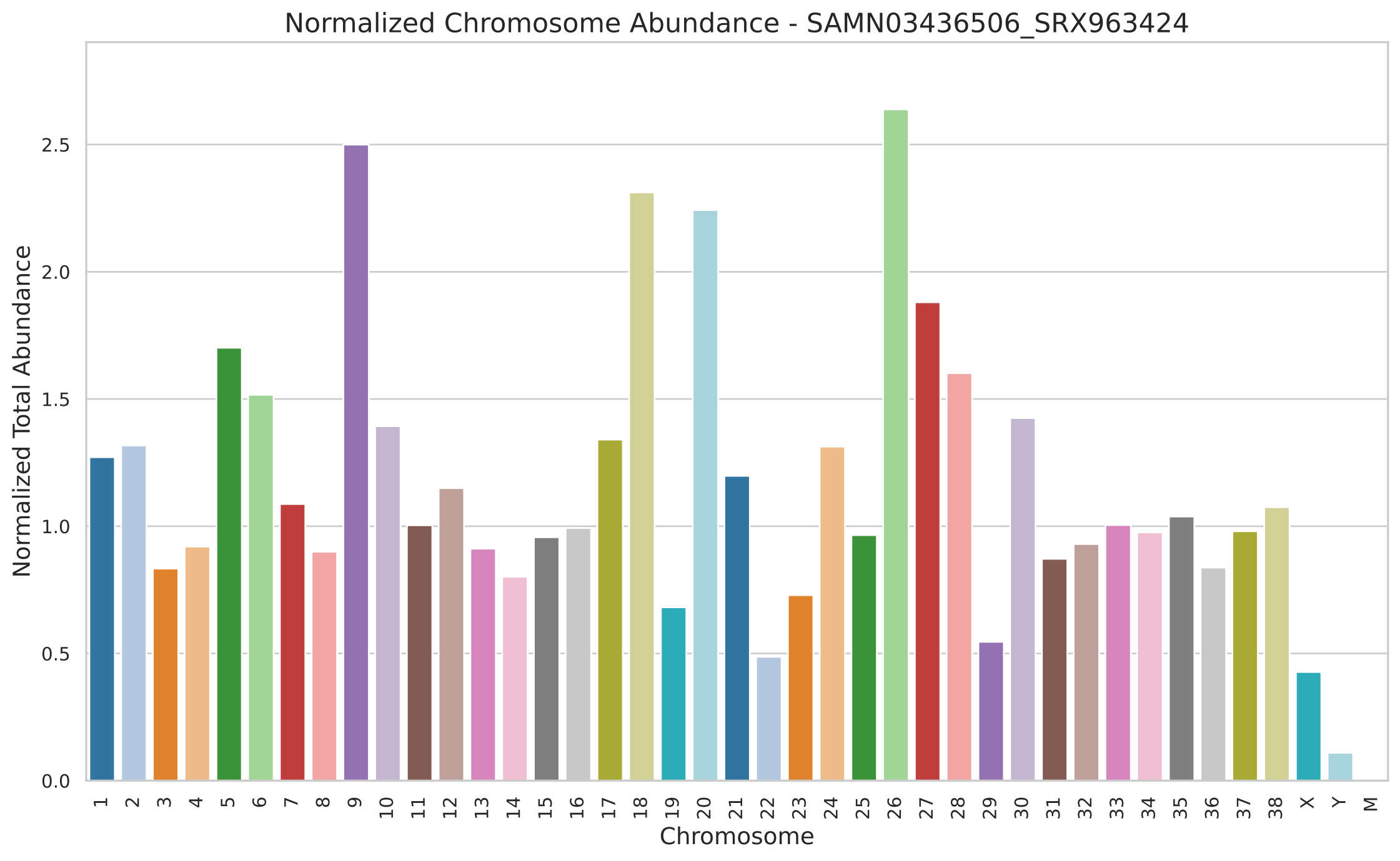

Normalized Chromosome Abundance - SAMN03436486_SRX963332
Normalized Total Abundance
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

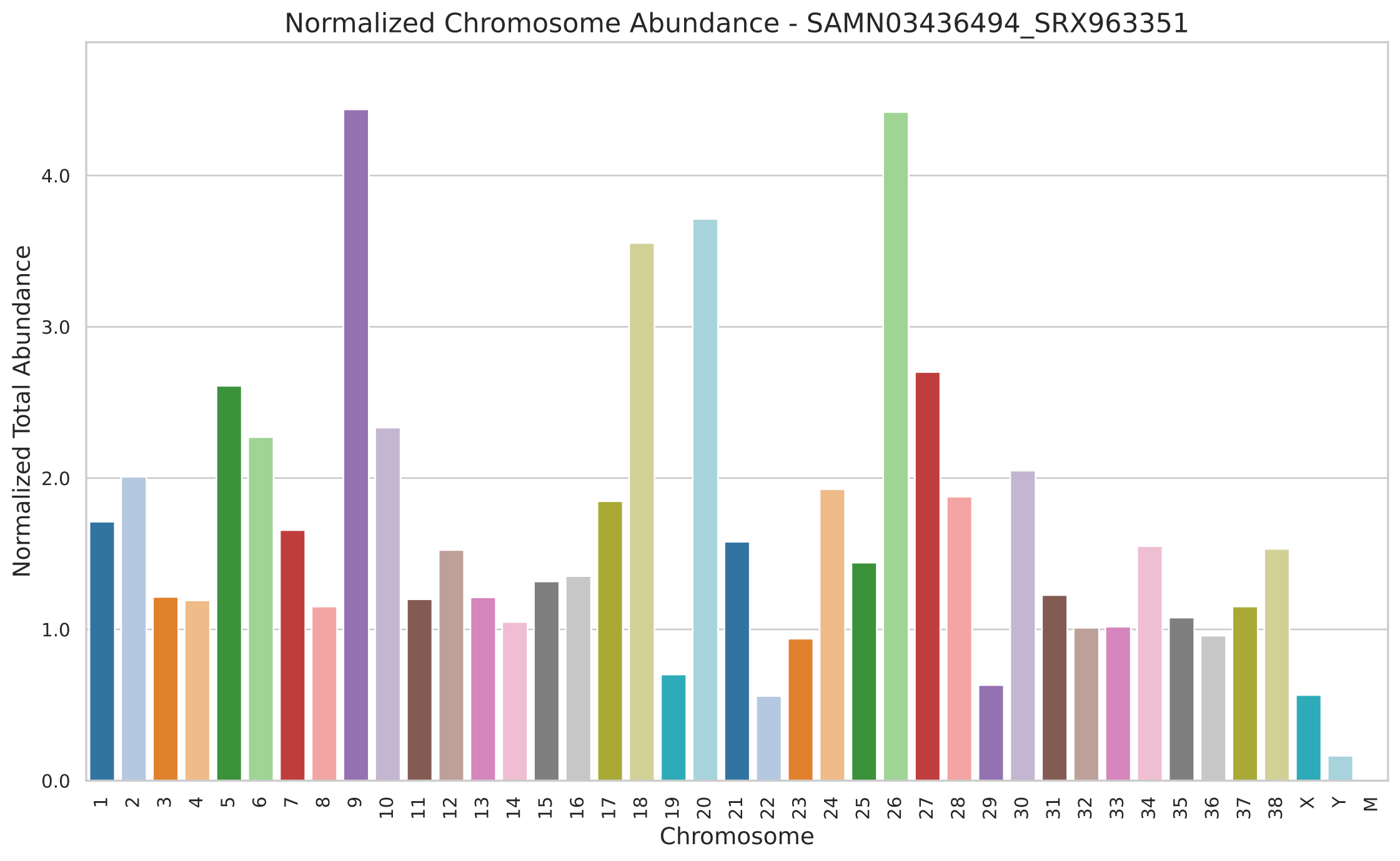

Normalized Chromosome Abundance - SAMN03436483_SRX963328
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

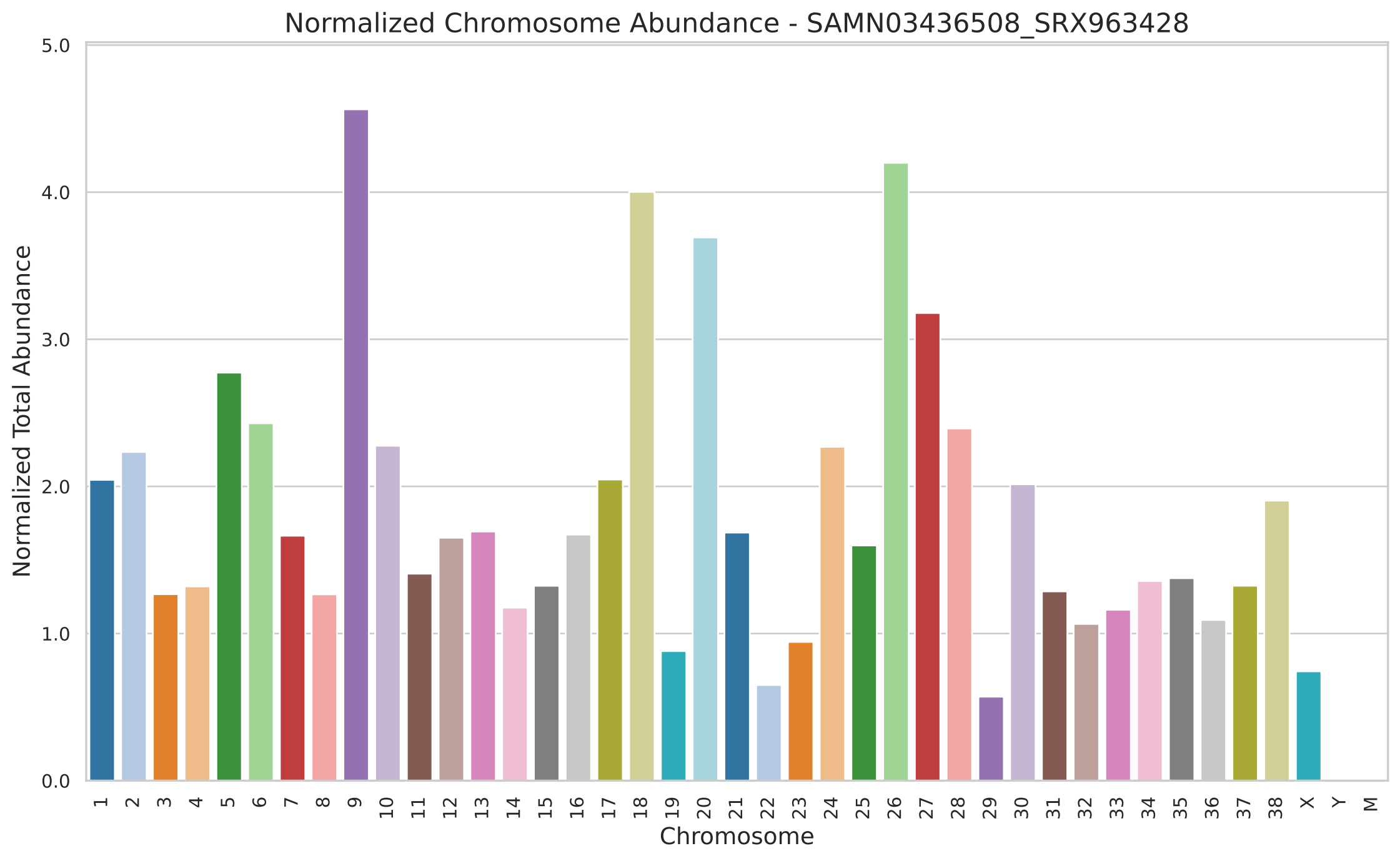

Normalized Chromosome Abundance - SAMN03436514_SRX963421
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

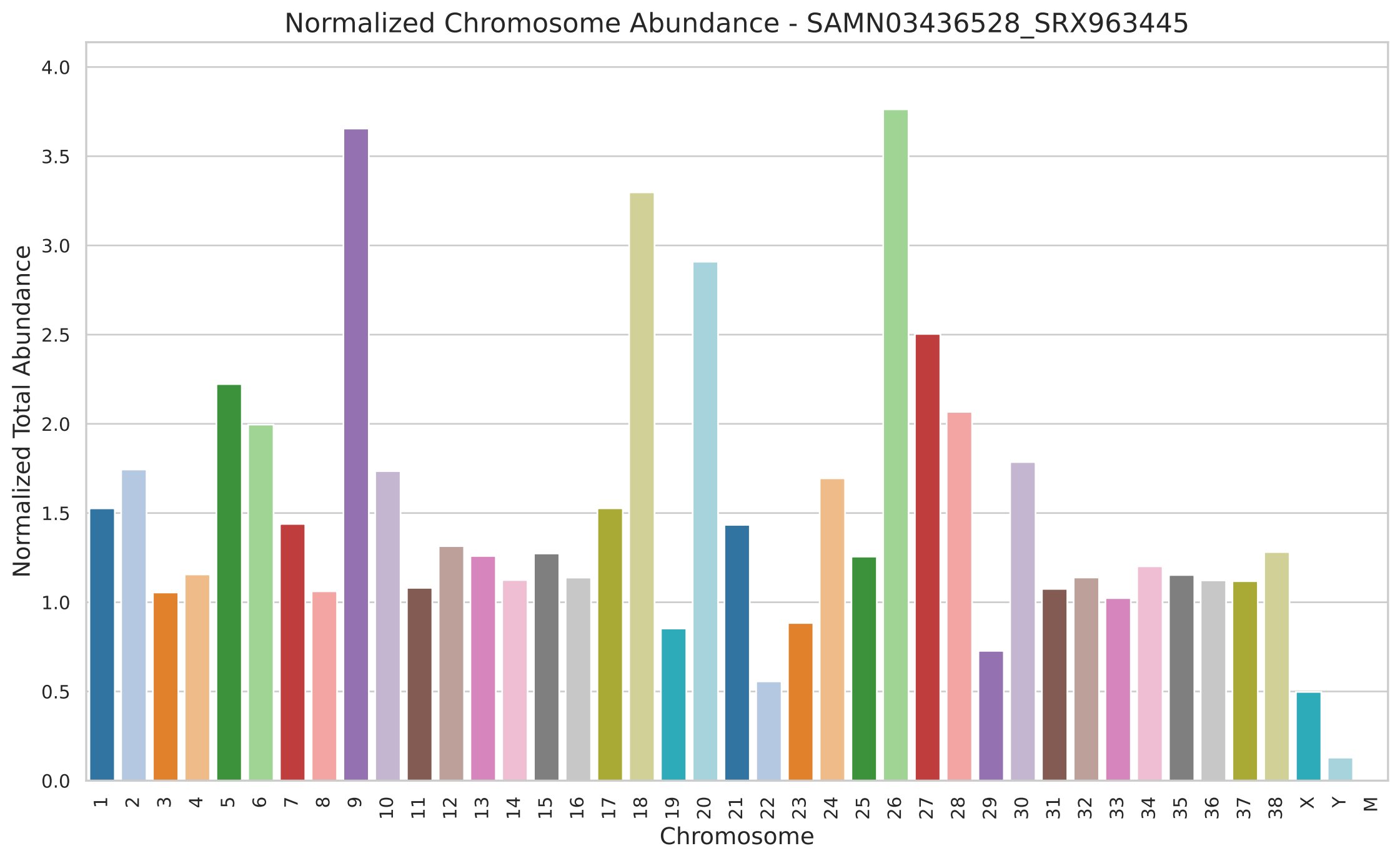

Normalized Chromosome Abundance - SAMN03436293_SRX963331
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

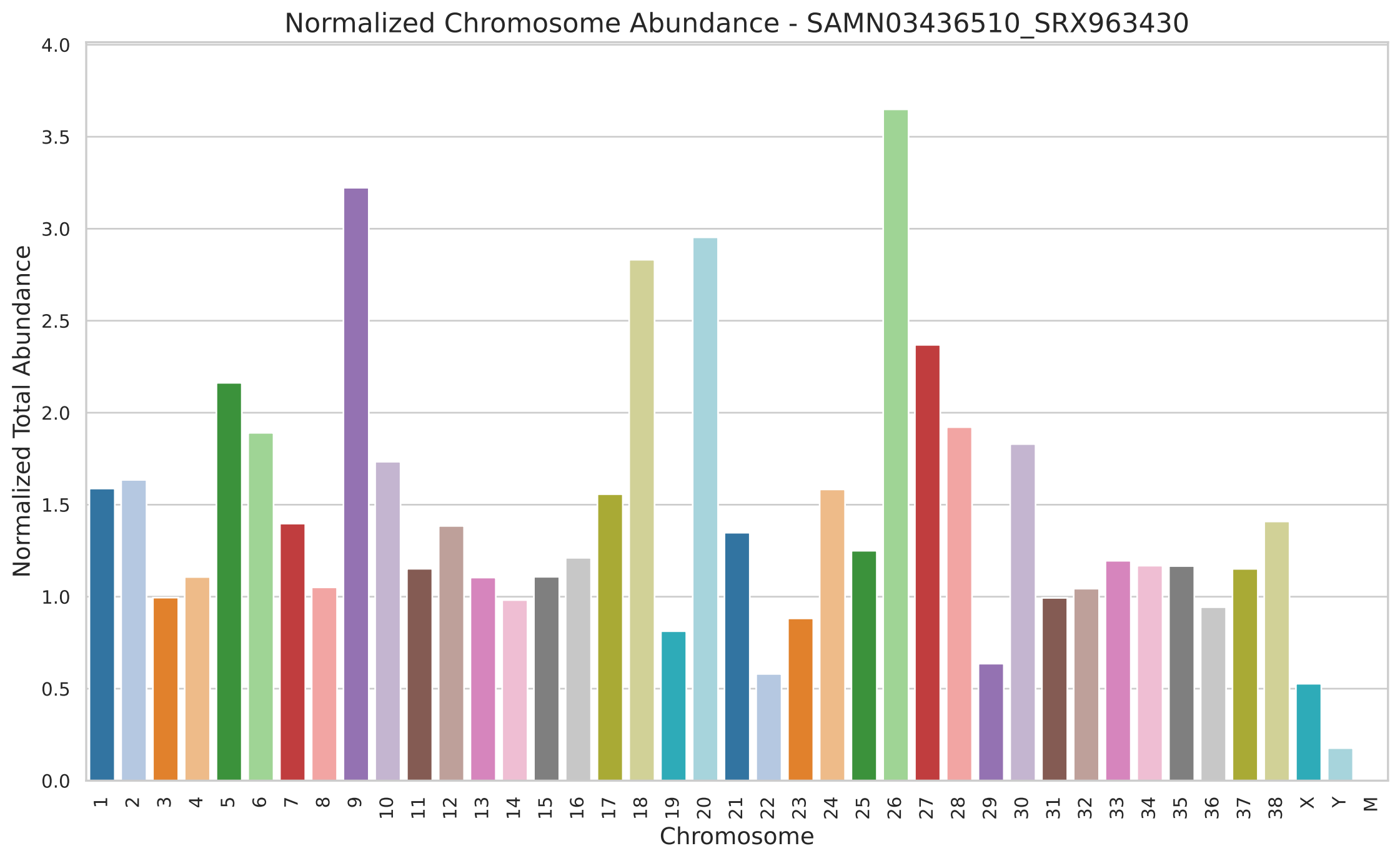

Normalized Chromosome Abundance - SAMN03436460_SRX963289
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

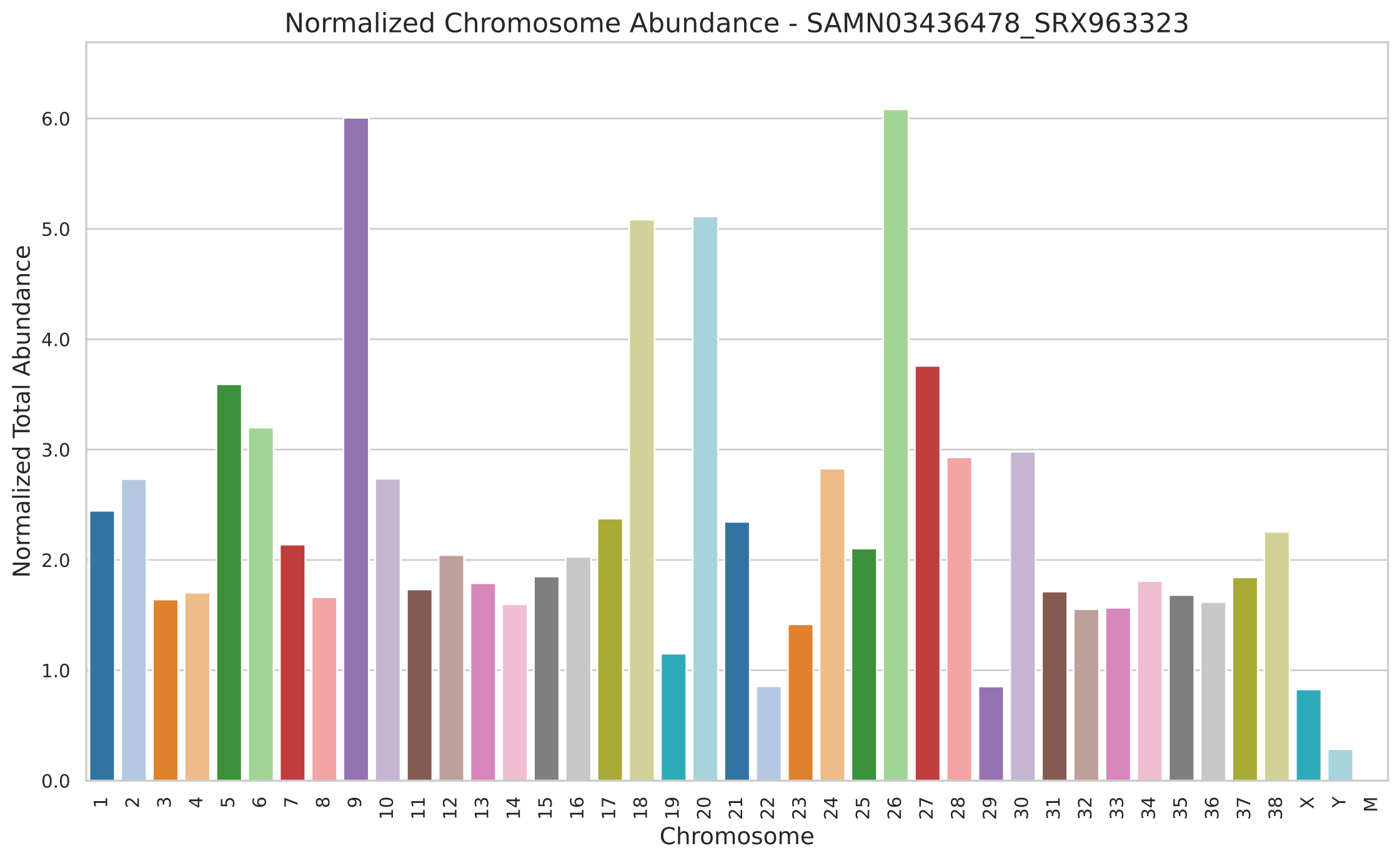

Normalized Chromosome Abundance - SAMN03436506_SRX963424
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

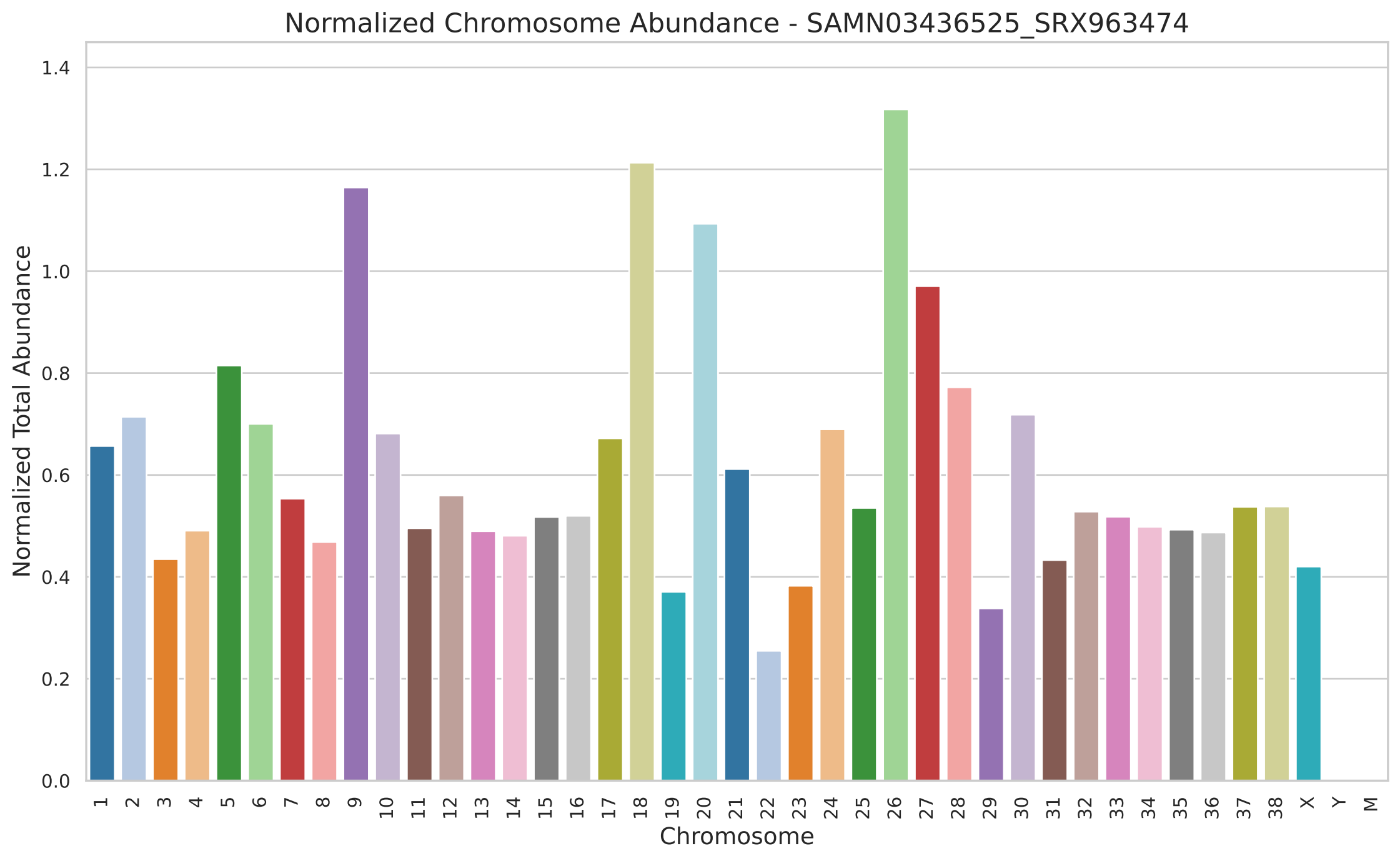

Normalized Chromosome Abundance - SAMN03436494_SRX963351
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

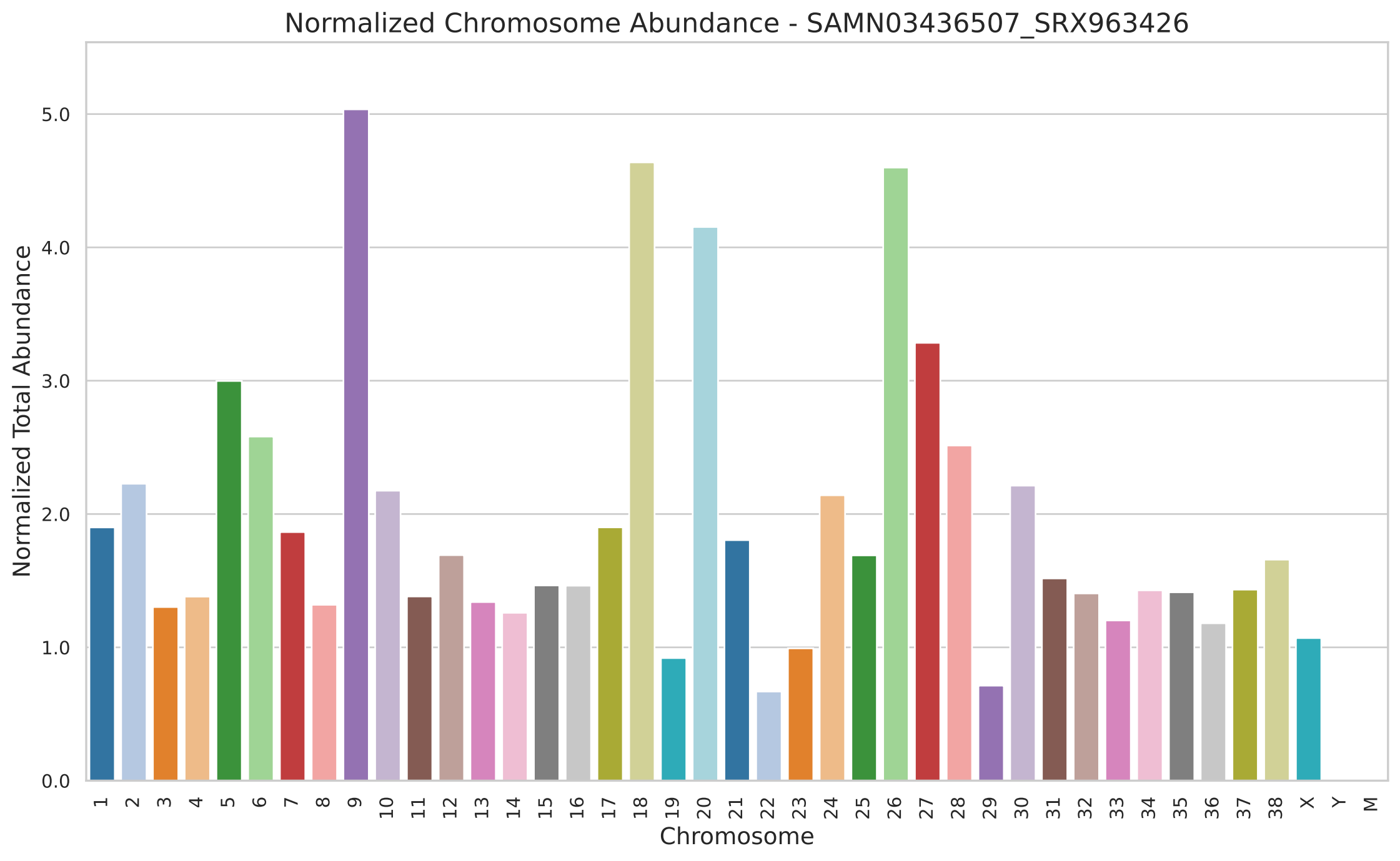

Normalized Chromosome Abundance - SAMN03436508_SRX963428
Normalized Total Abundance
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

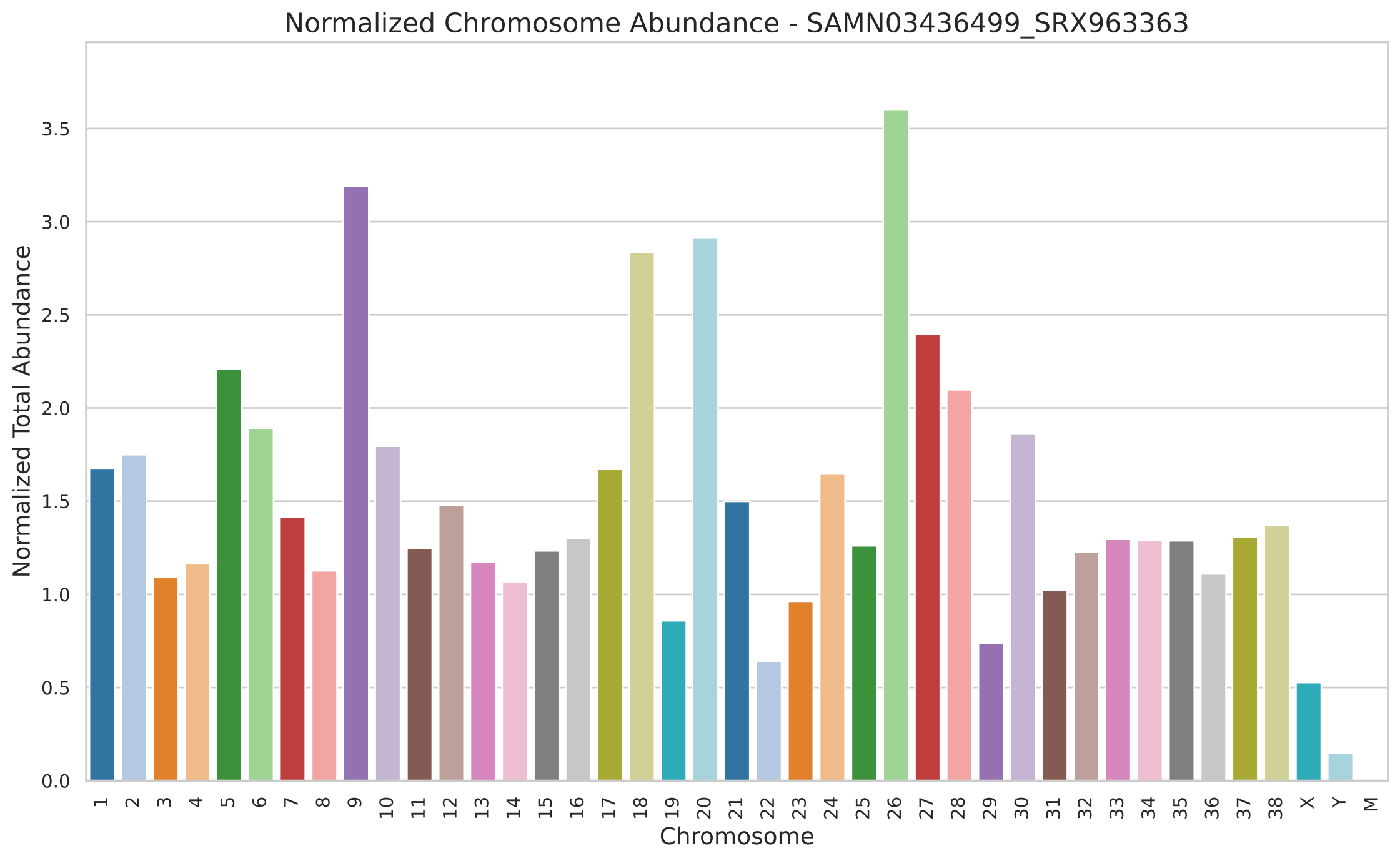

Normalized Chromosome Abundance - SAMN03436528_SRX963445
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

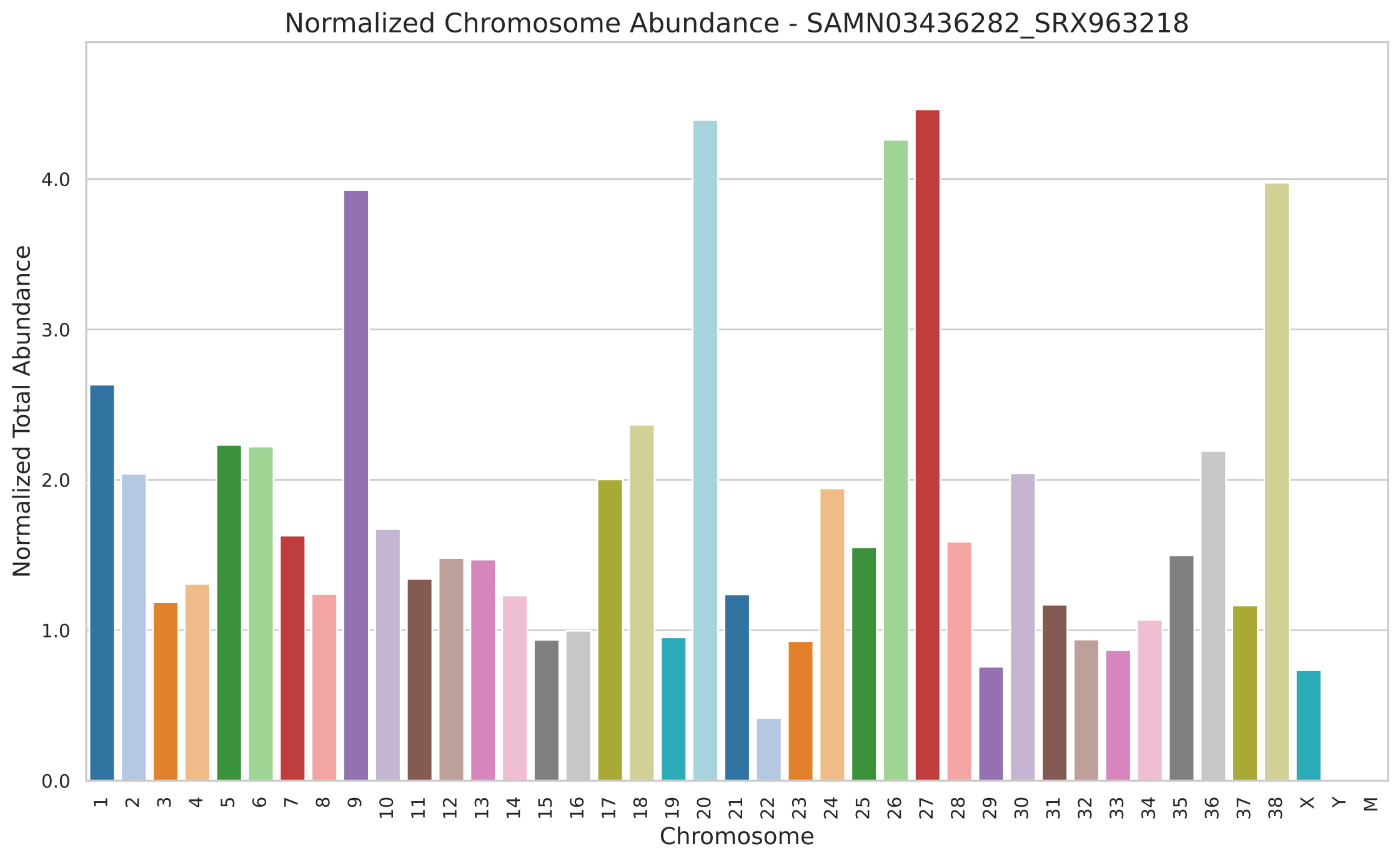

Normalized Chromosome Abundance - SAMN03436510_SRX963430
Normalized Total Abundance
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

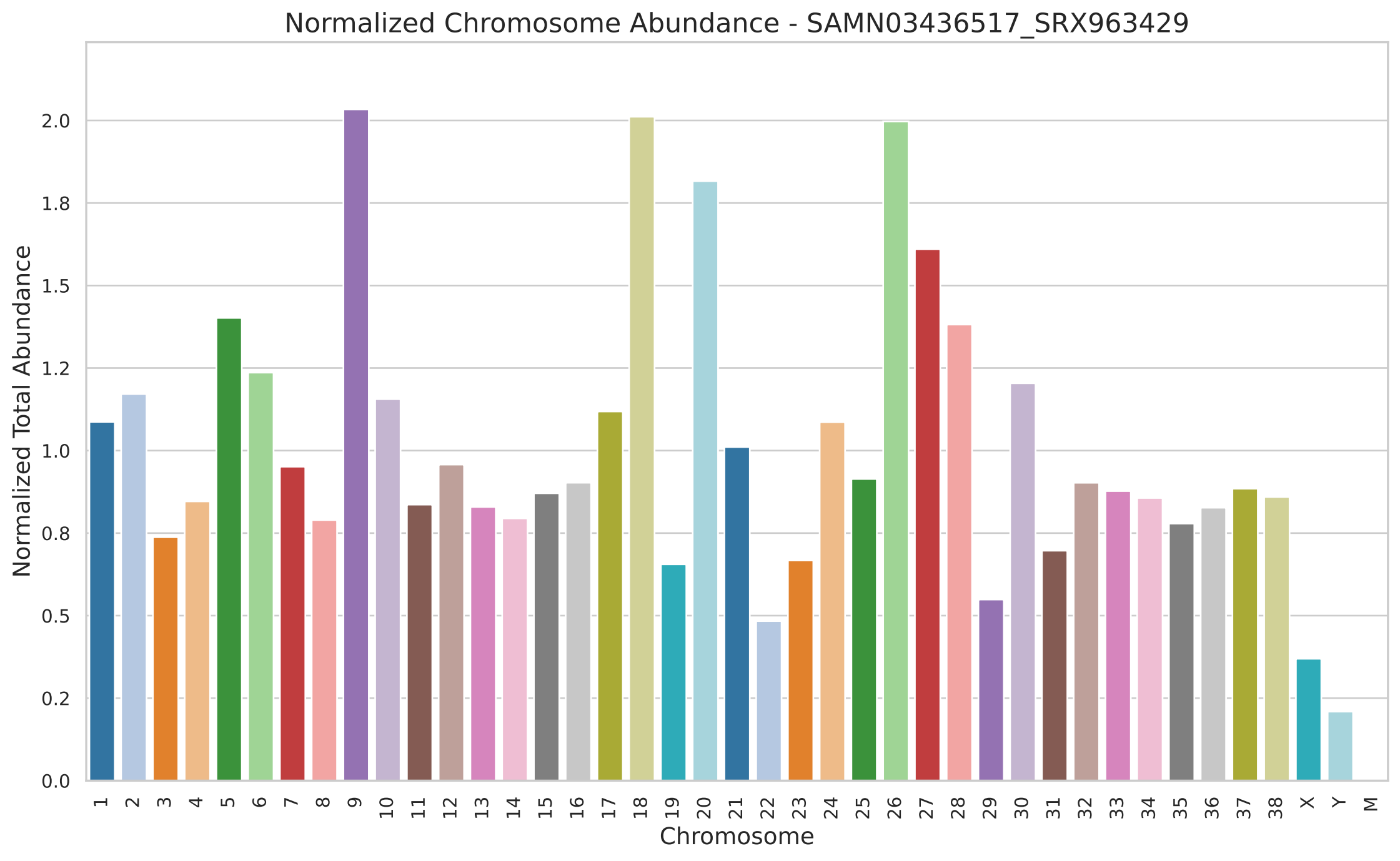

Normalized Chromosome Abundance - SAMN03436478_SRX963323
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

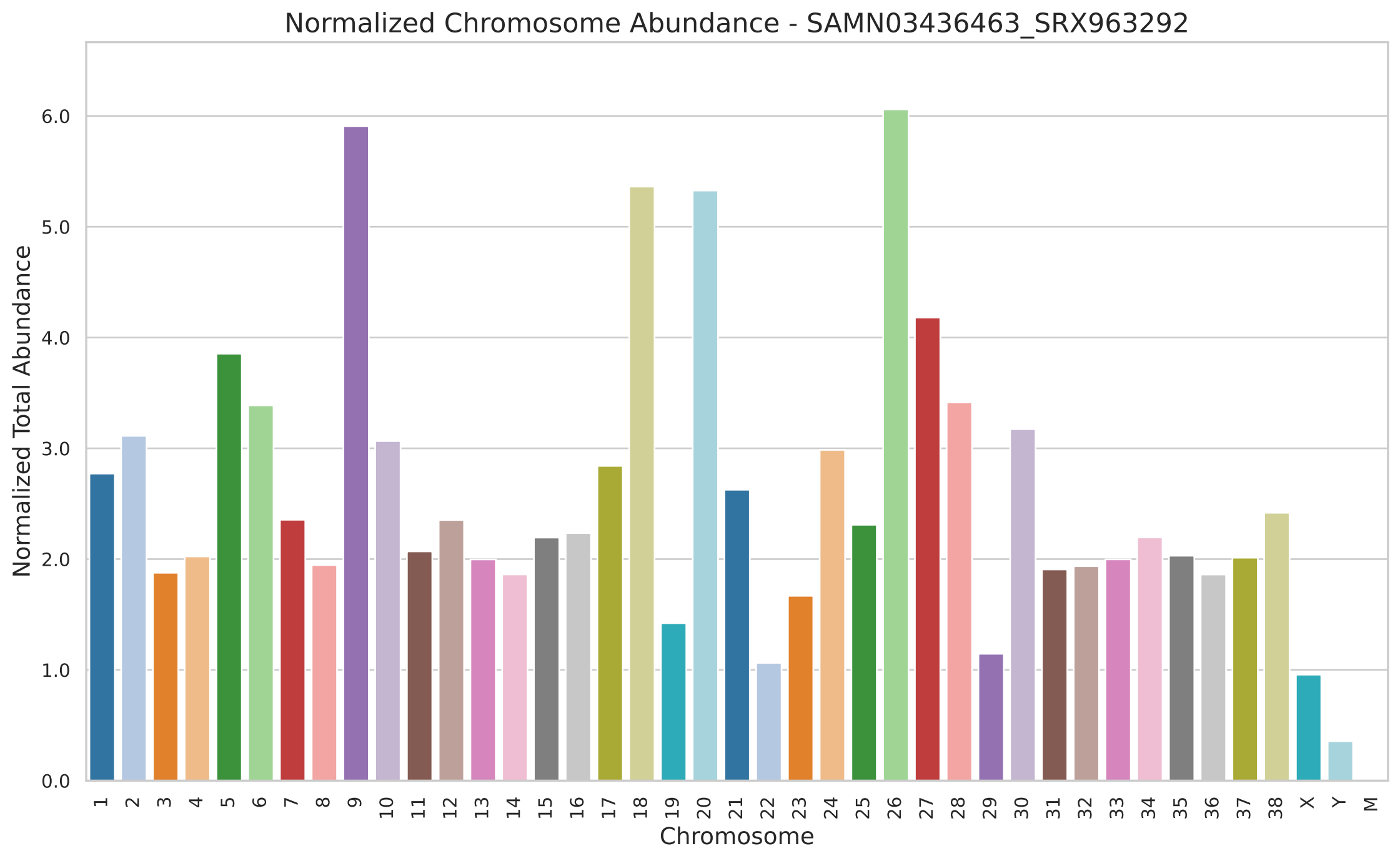

Normalized Chromosome Abundance - SAMN03436525_SRX963474
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

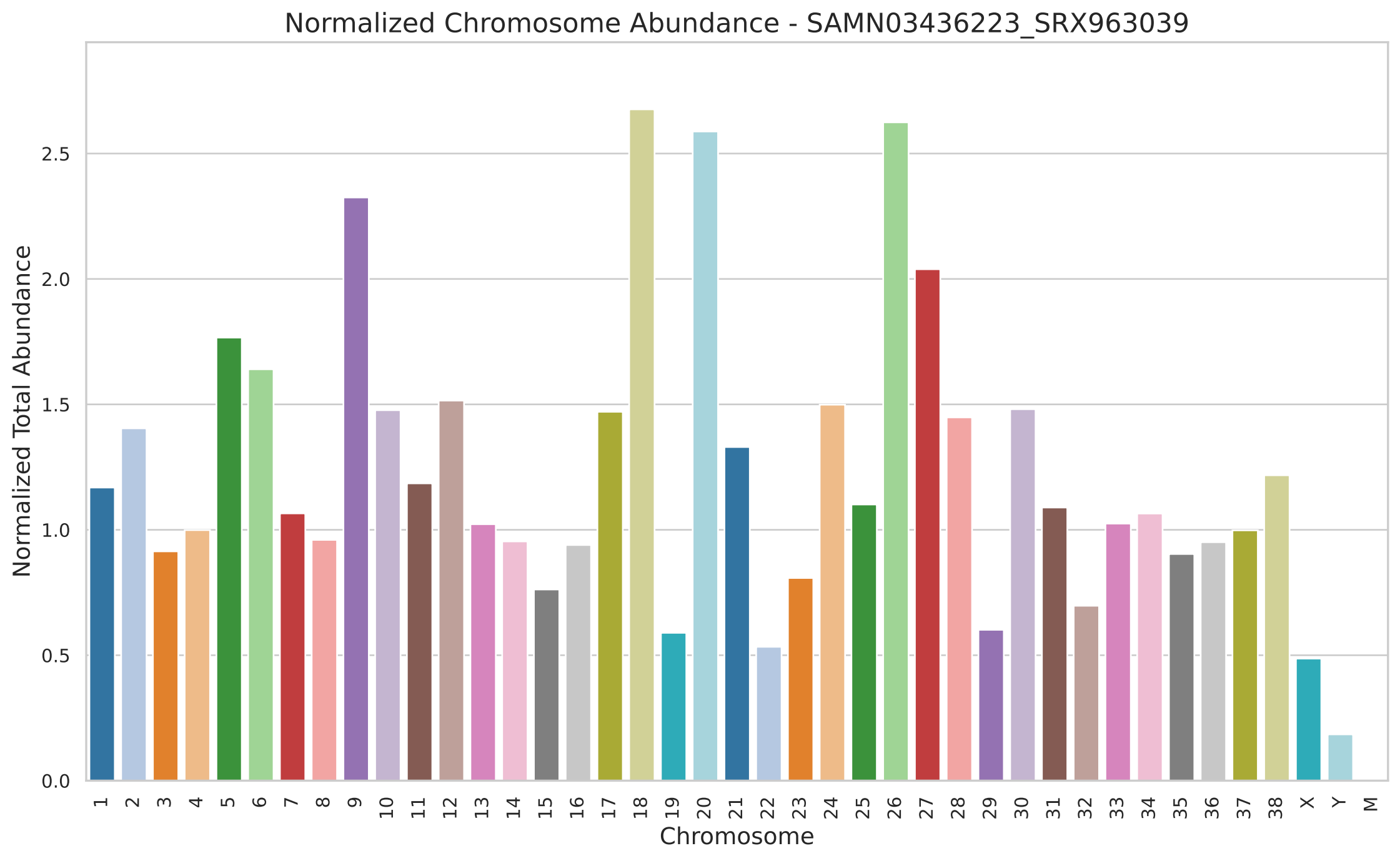

Normalized Chromosome Abundance - SAMN03436507_SRX963426
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

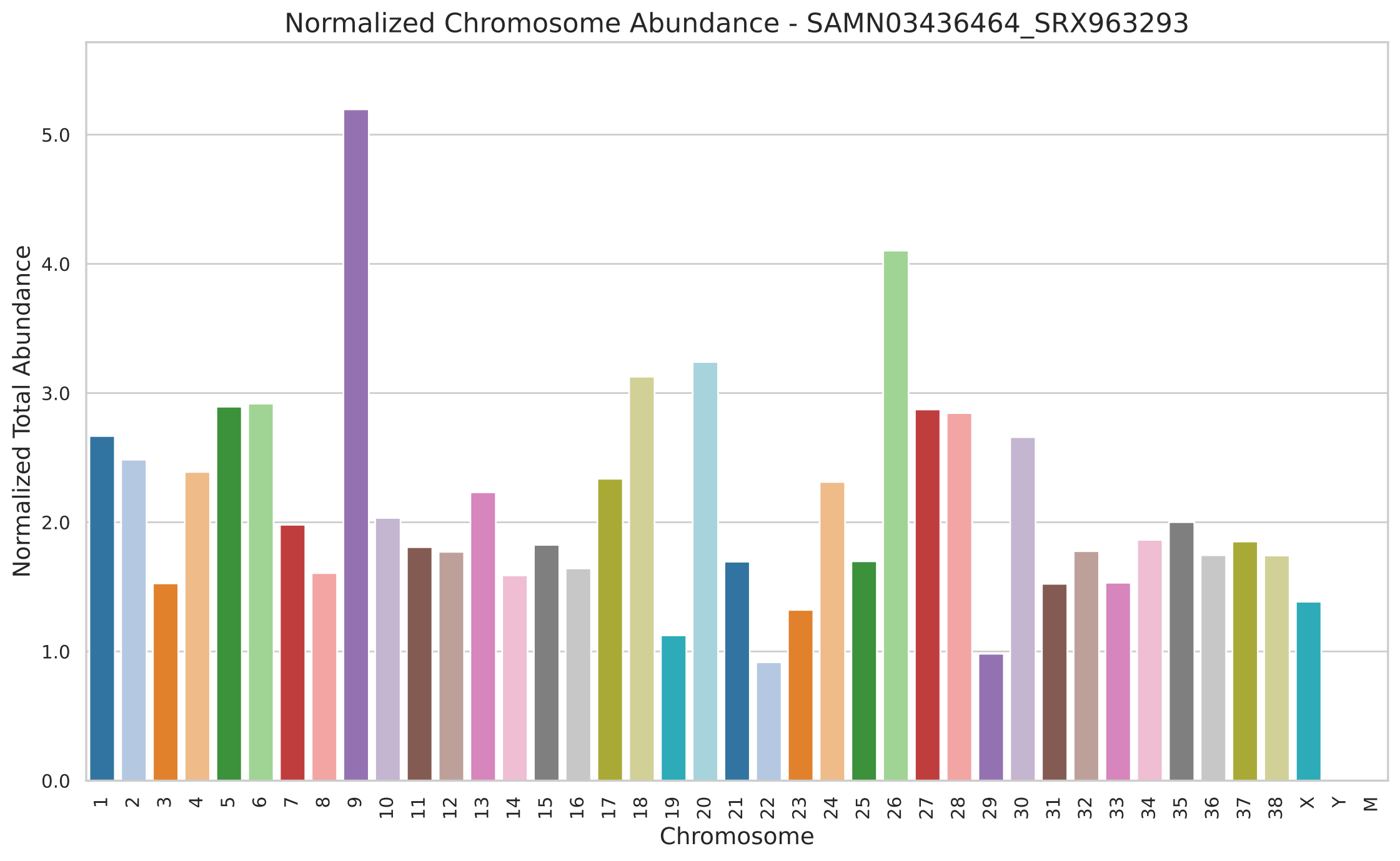

Normalized Chromosome Abundance - SAMN03436499_SRX963363
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

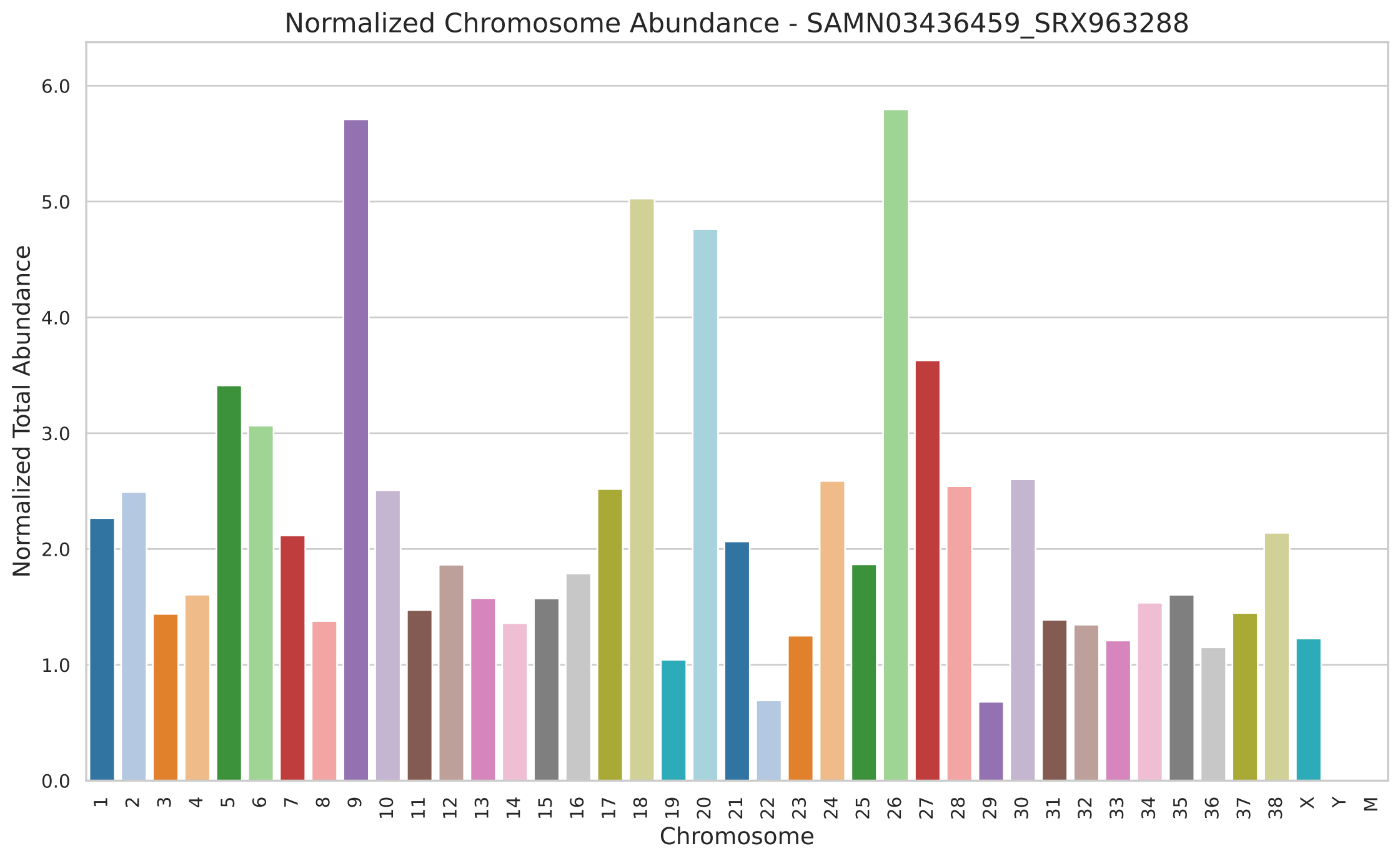

Normalized Chromosome Abundance - SAMN03436282_SRX963218
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

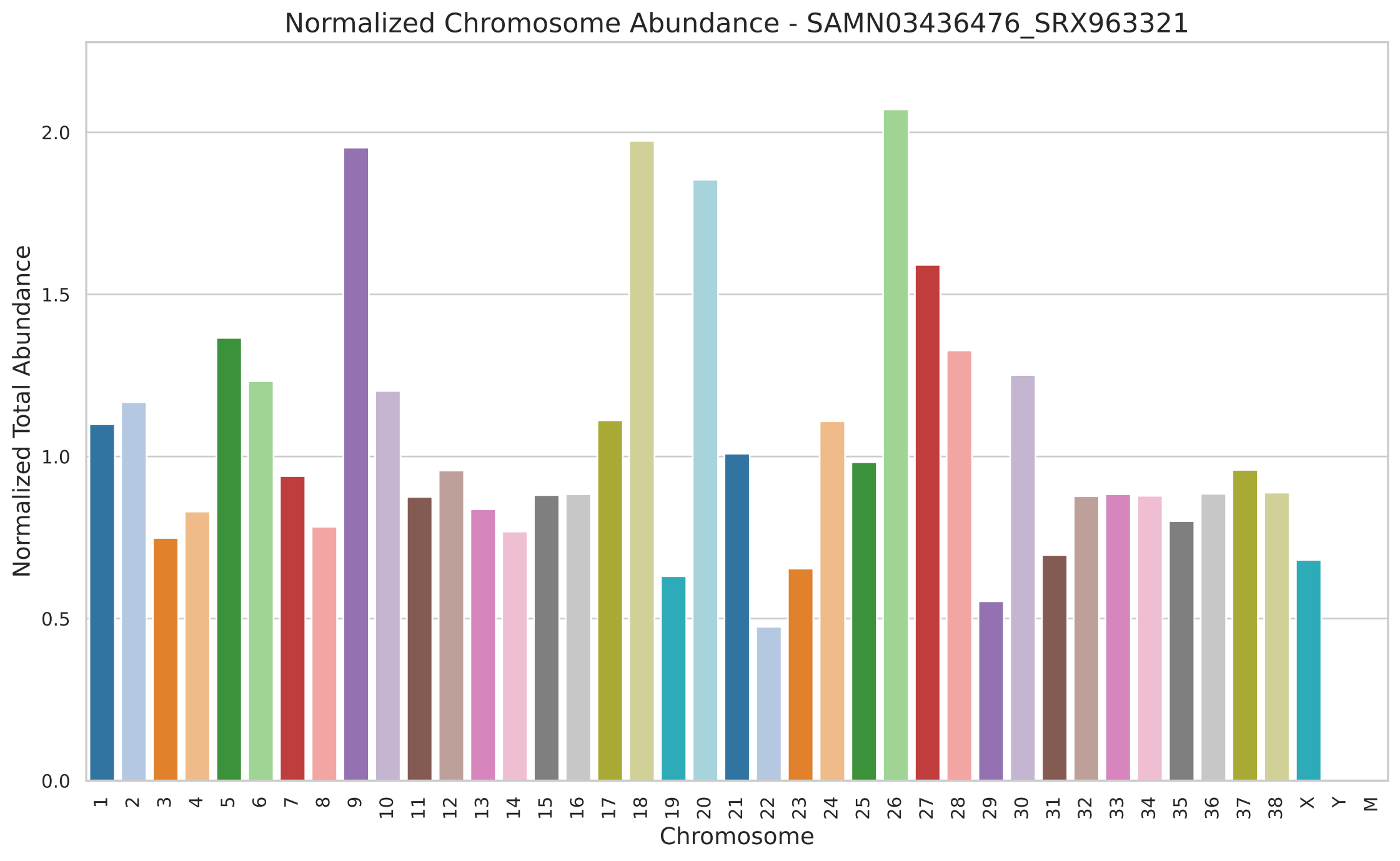

Normalized Chromosome Abundance - SAMN03436517_SRX963429
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

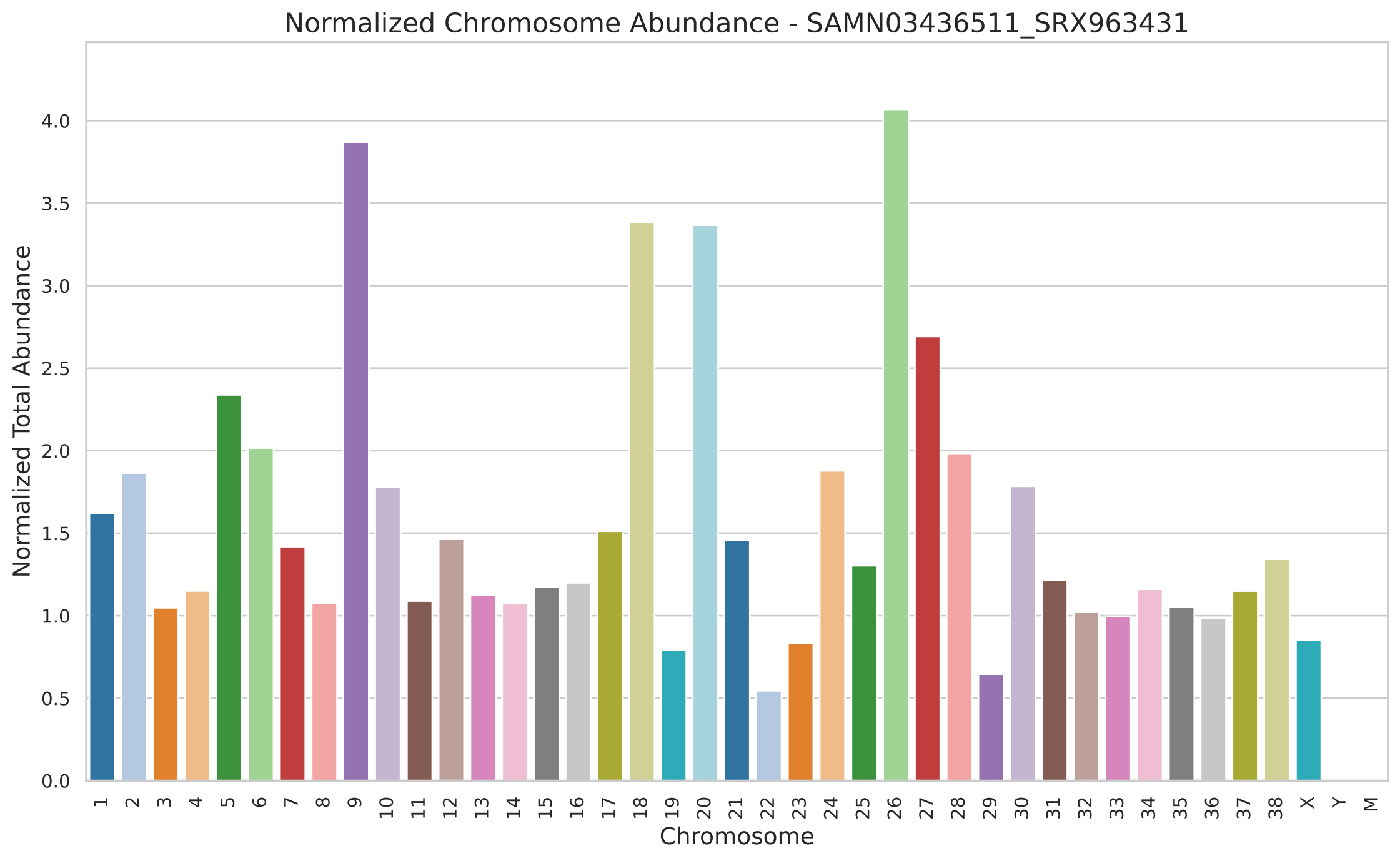

Normalized Chromosome Abundance - SAMN03436463_SRX963292
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

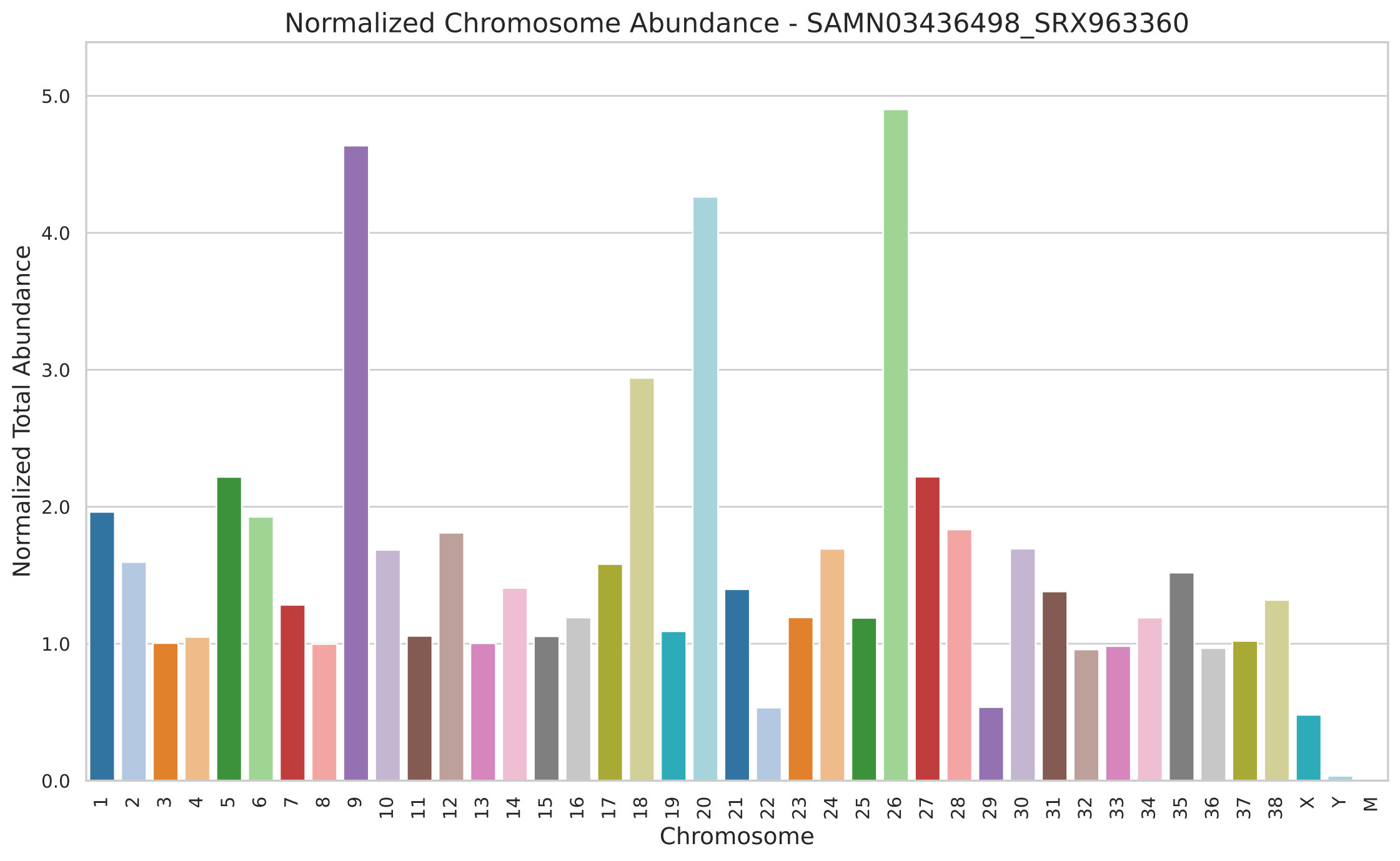

Normalized Chromosome Abundance - SAMN03436223_SRX963039
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

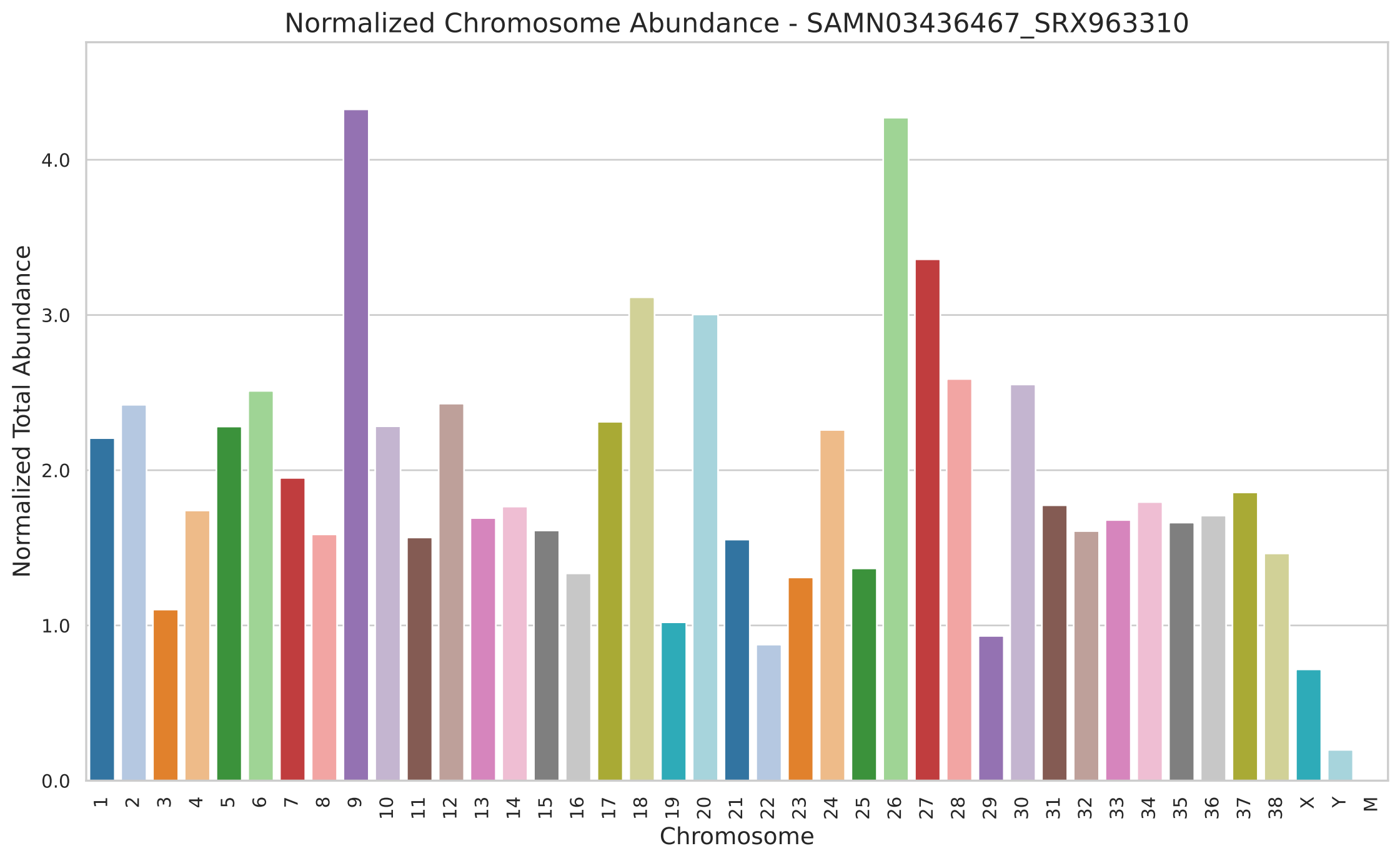

Normalized Chromosome Abundance - SAMN03436464_SRX963293
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

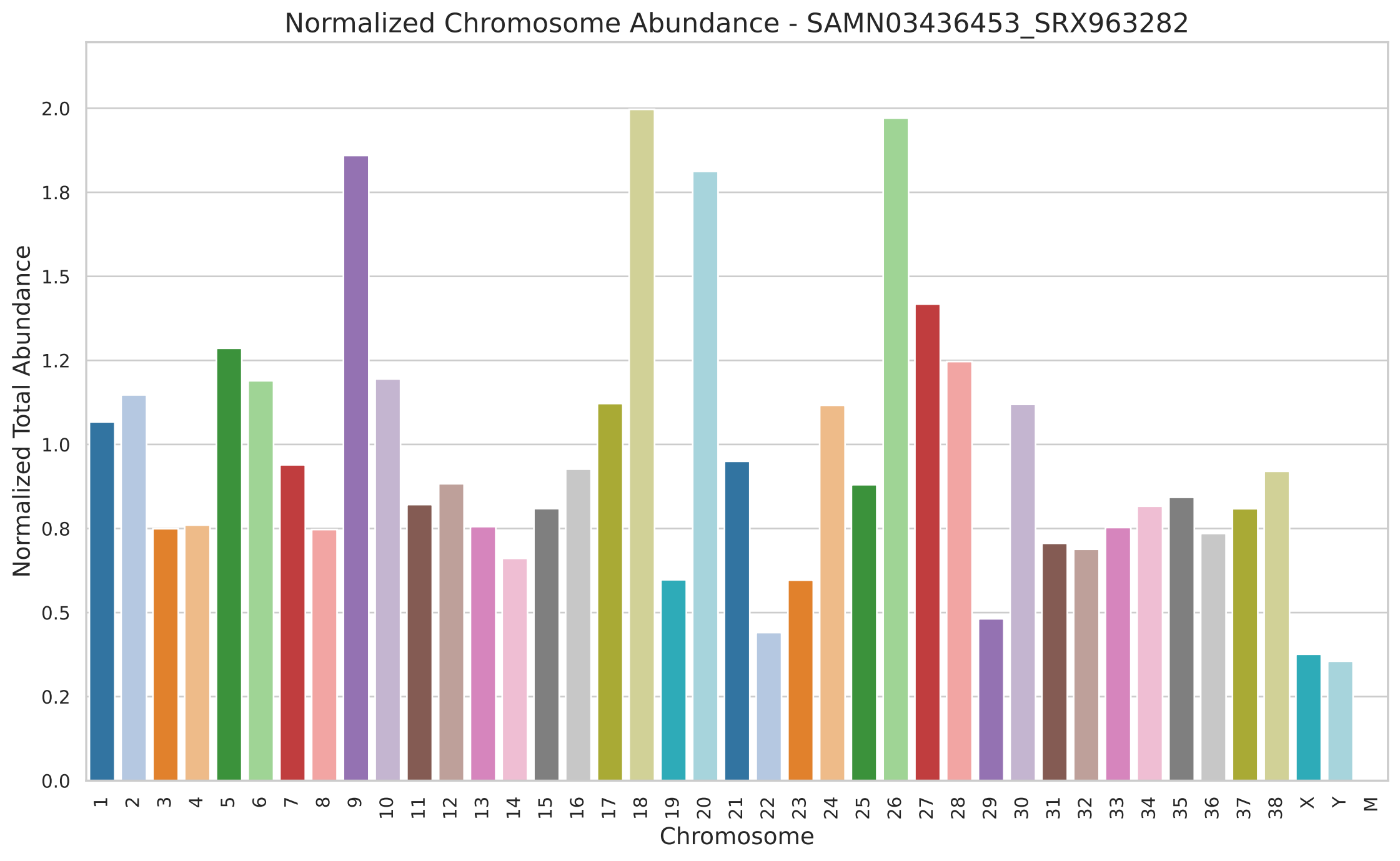

Normalized Chromosome Abundance - SAMN03436459_SRX963288
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

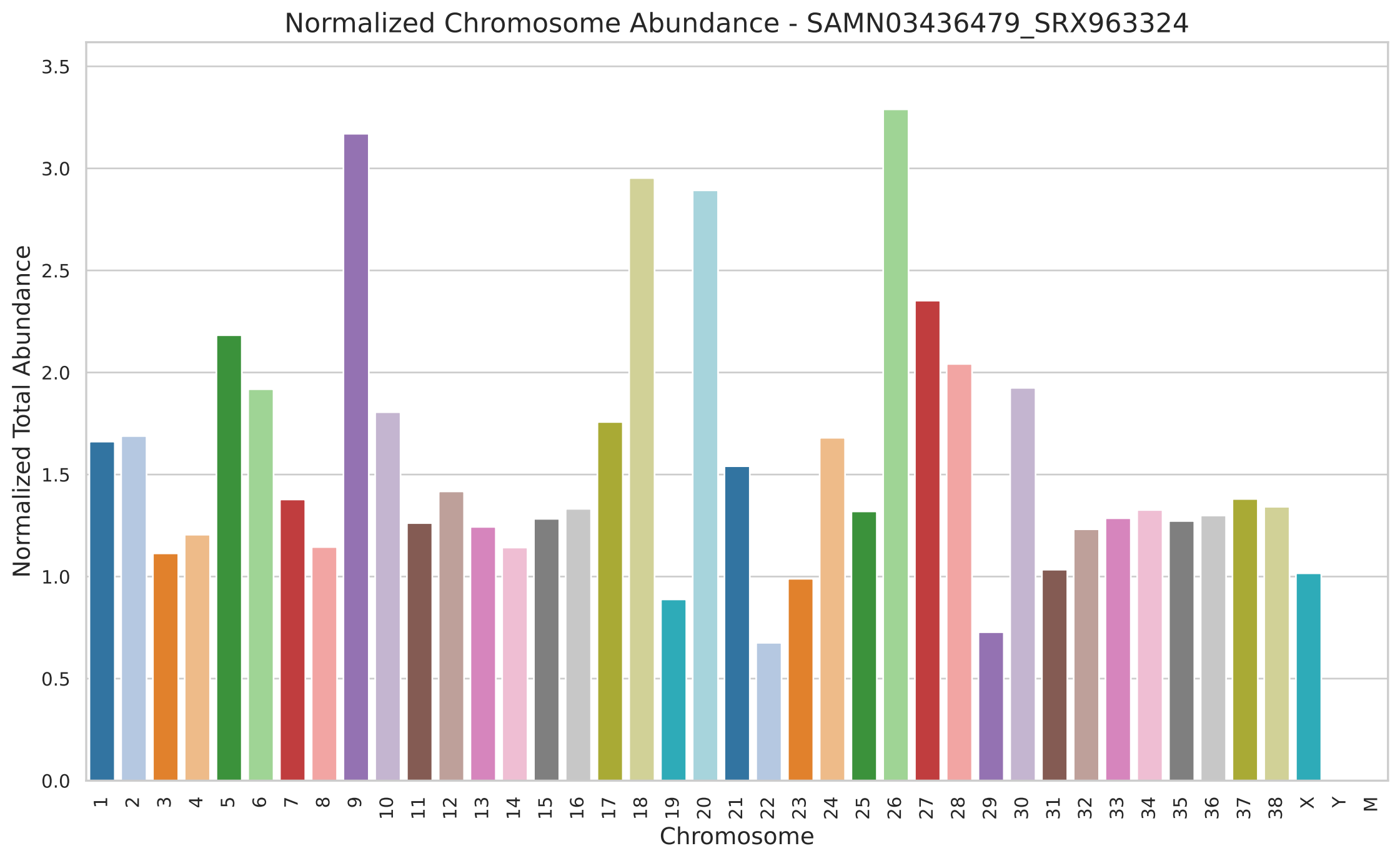

Normalized Chromosome Abundance - SAMN03436476_SRX963321
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

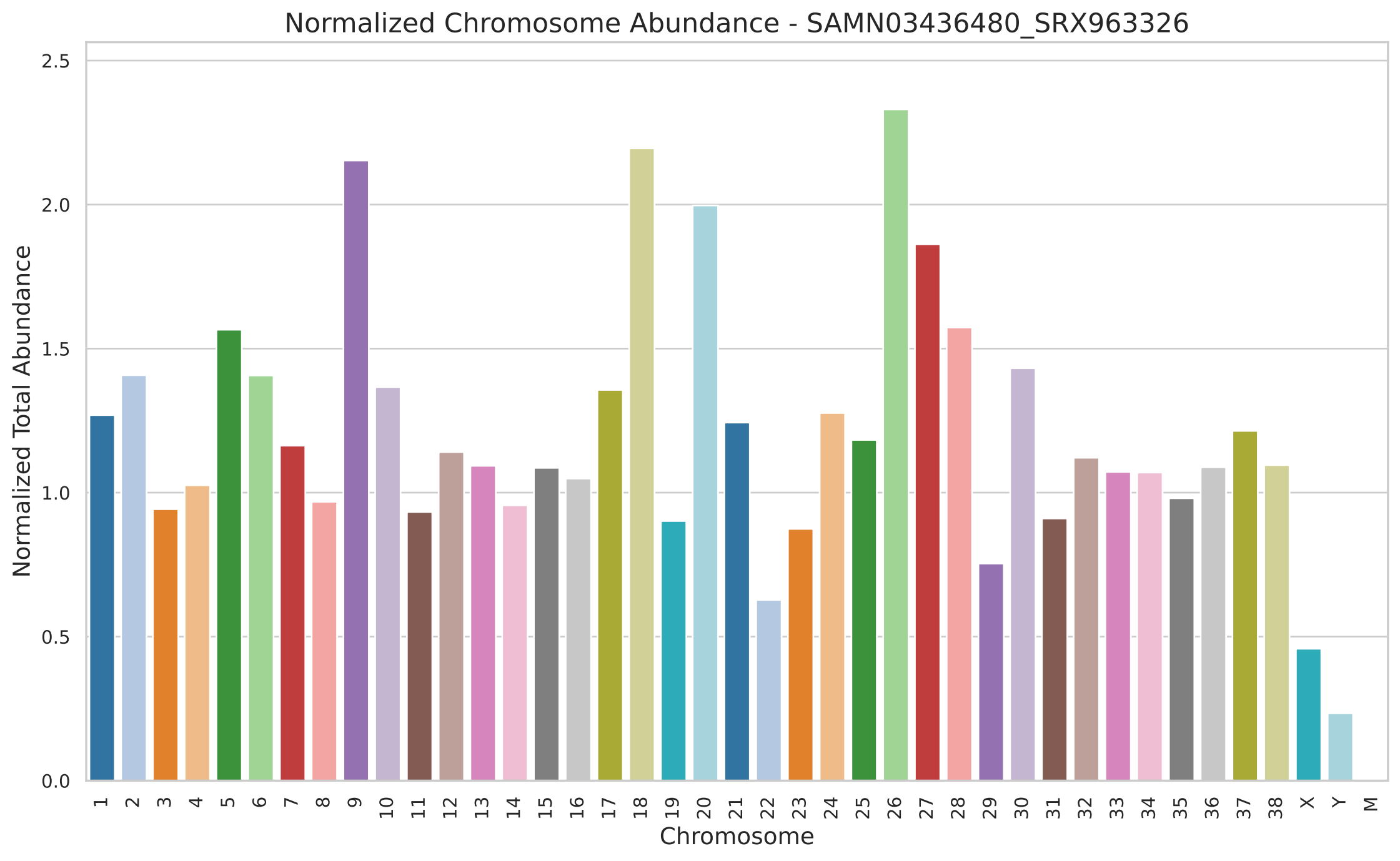

Normalized Chromosome Abundance - SAMN03436511_SRX963431
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

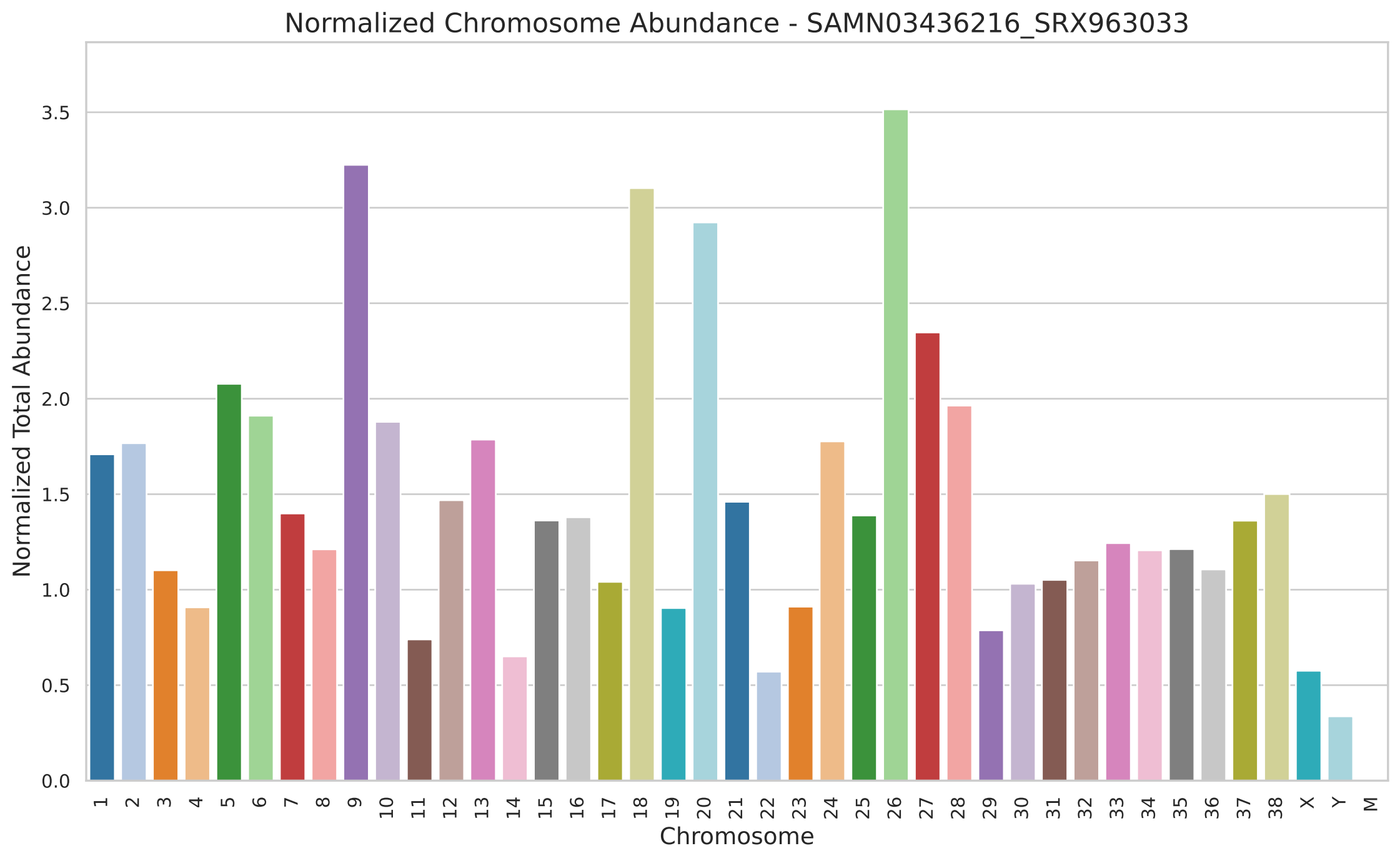

Normalized Chromosome Abundance - SAMN03436498_SRX963360
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

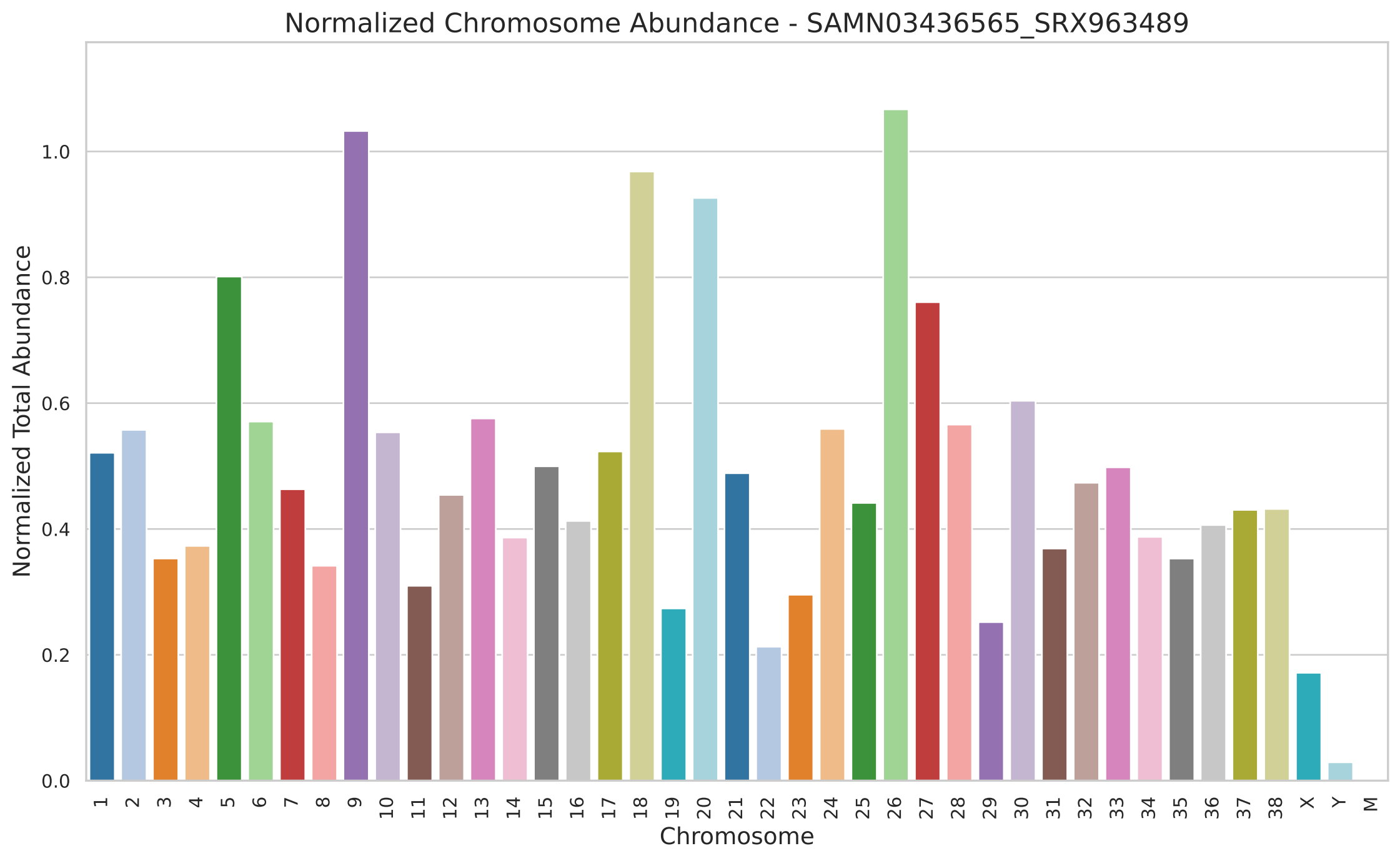

Normalized Chromosome Abundance - SAMN03436467_SRX963310
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

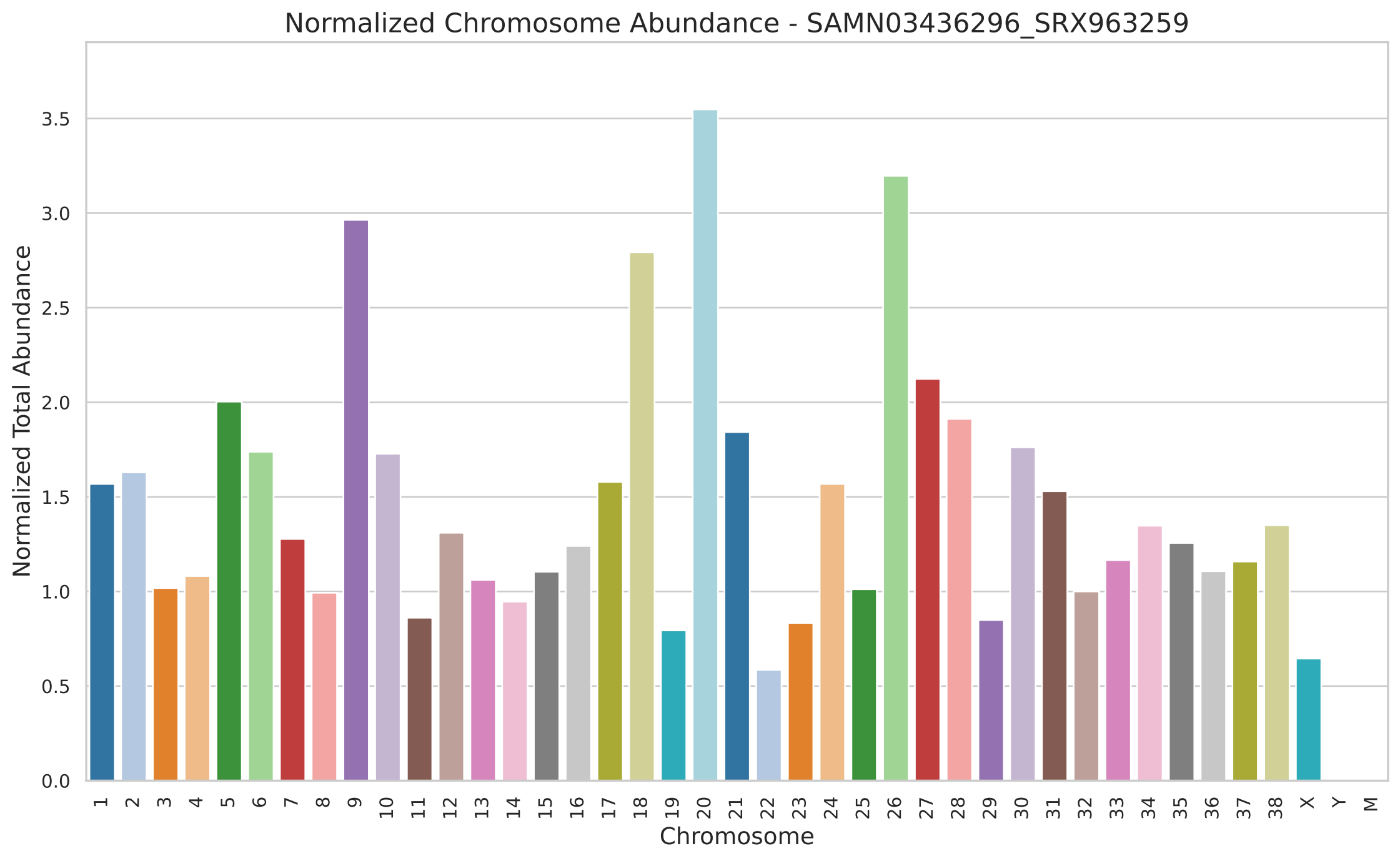

Normalized Chromosome Abundance - SAMN03436453_SRX963282
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

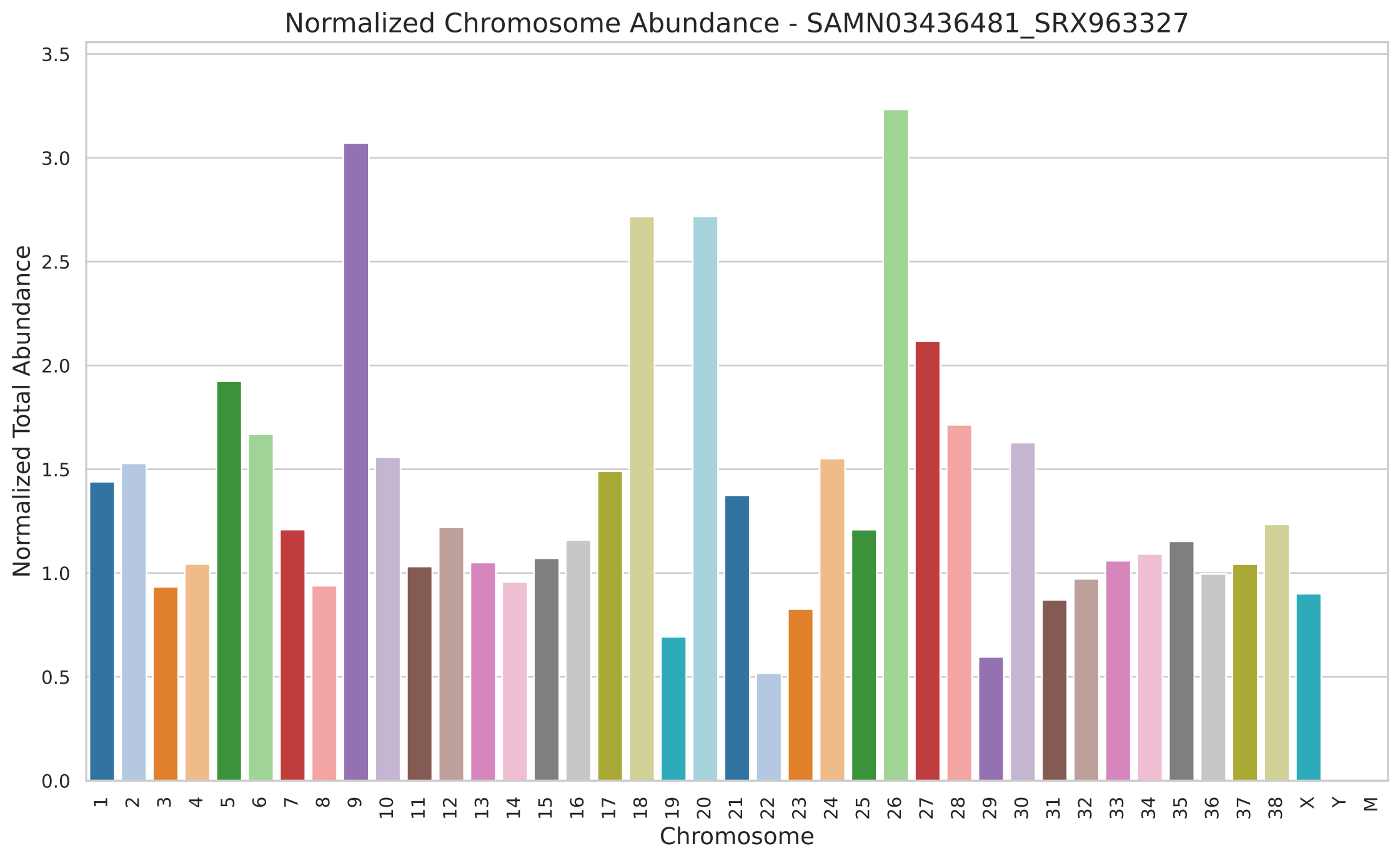

Normalized Chromosome Abundance - SAMN03436479_SRX963324
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

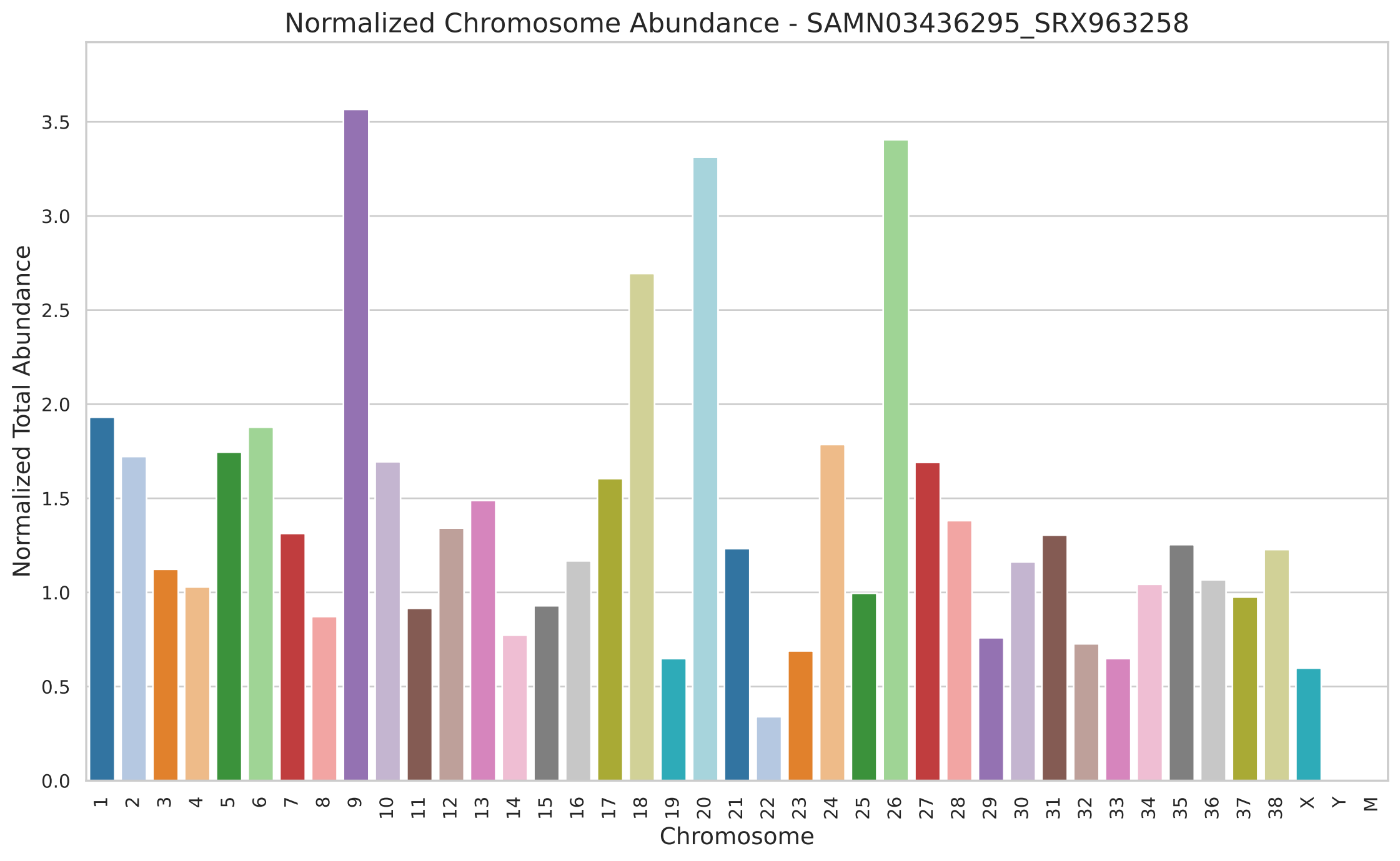

Normalized Chromosome Abundance - SAMN03436480_SRX963326
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

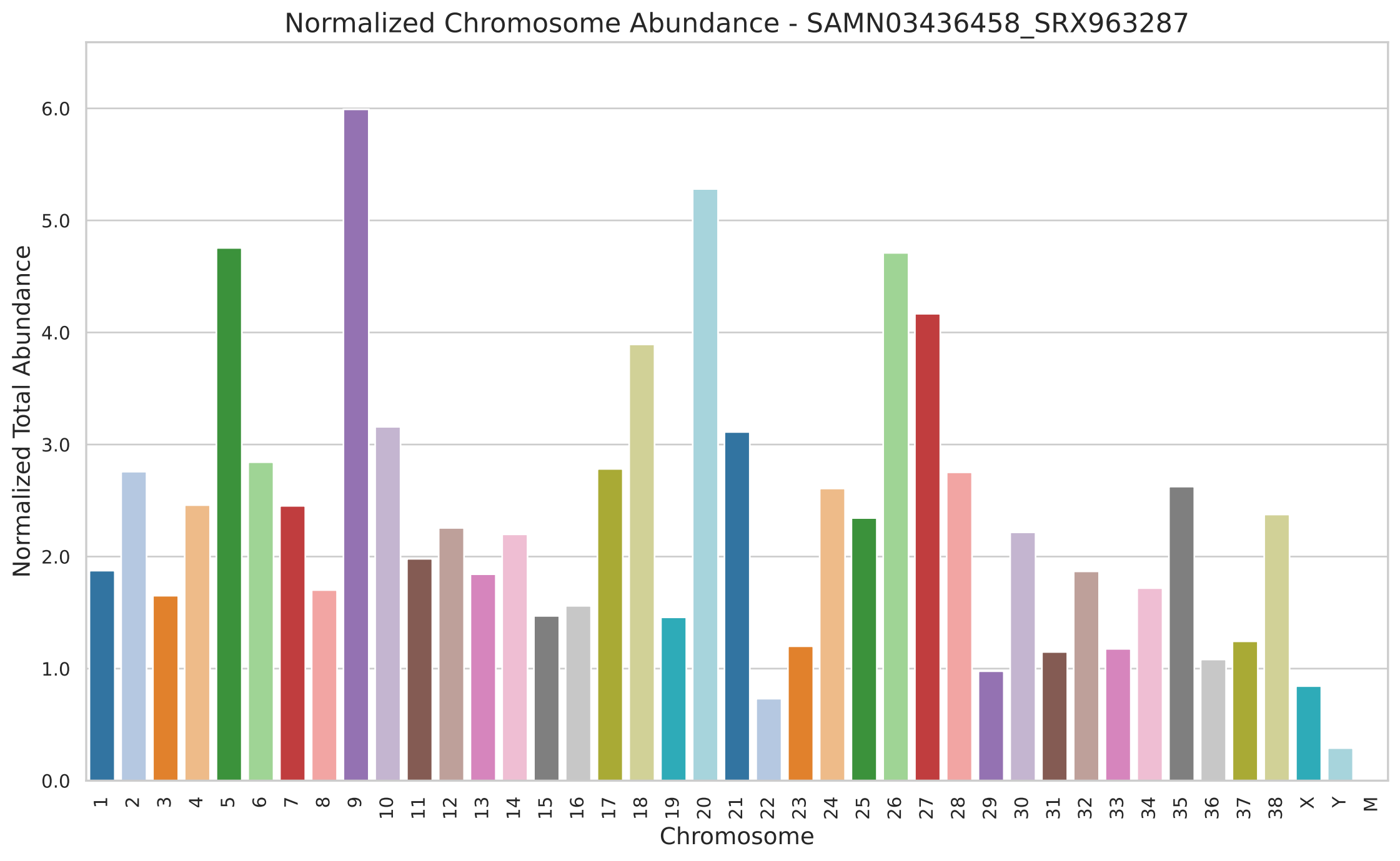

Normalized Chromosome Abundance - SAMN03436216_SRX963033
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

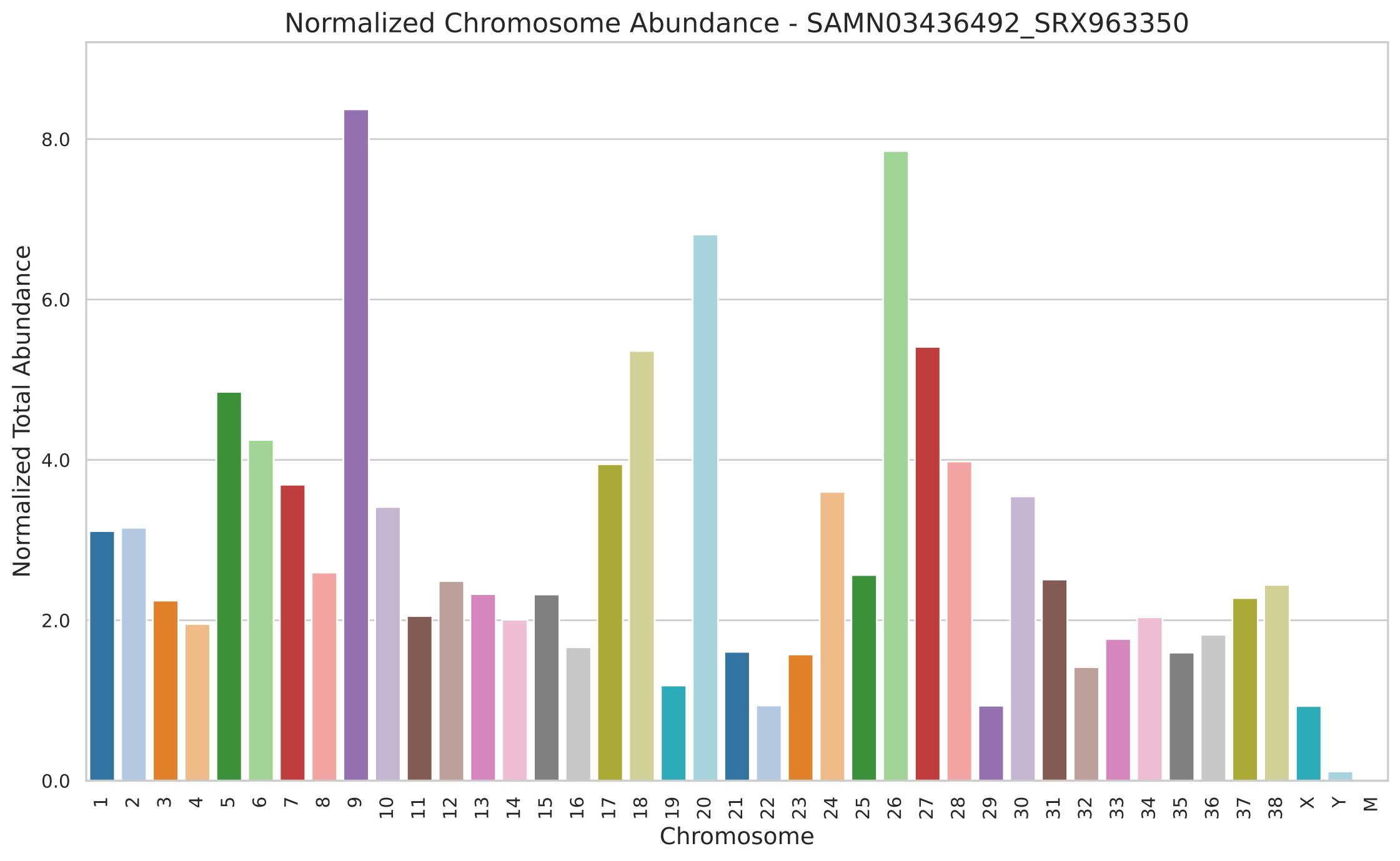

Normalized Chromosome Abundance - SAMN03436565_SRX963489
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

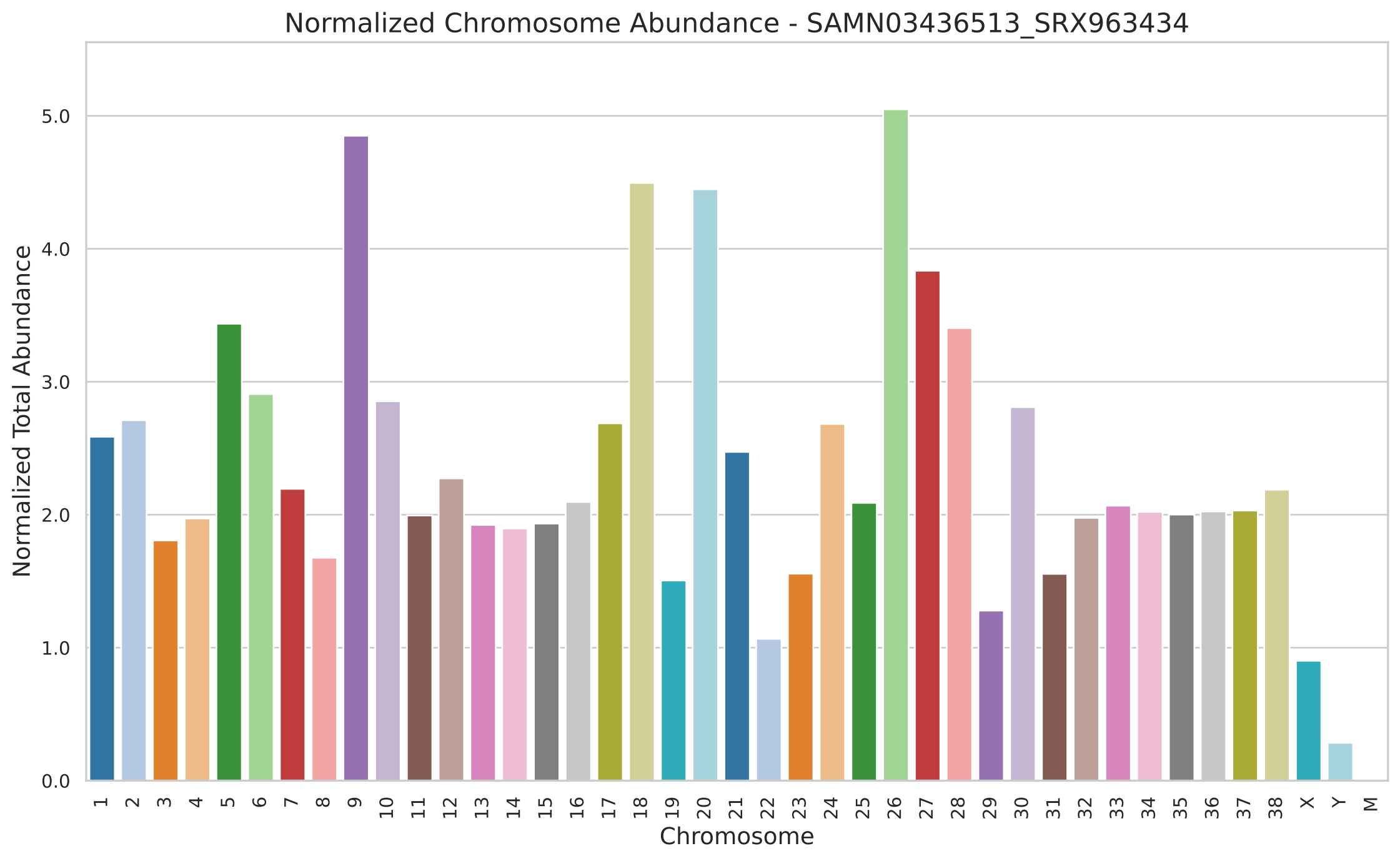

Normalized Chromosome Abundance - SAMN03436296_SRX963259
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

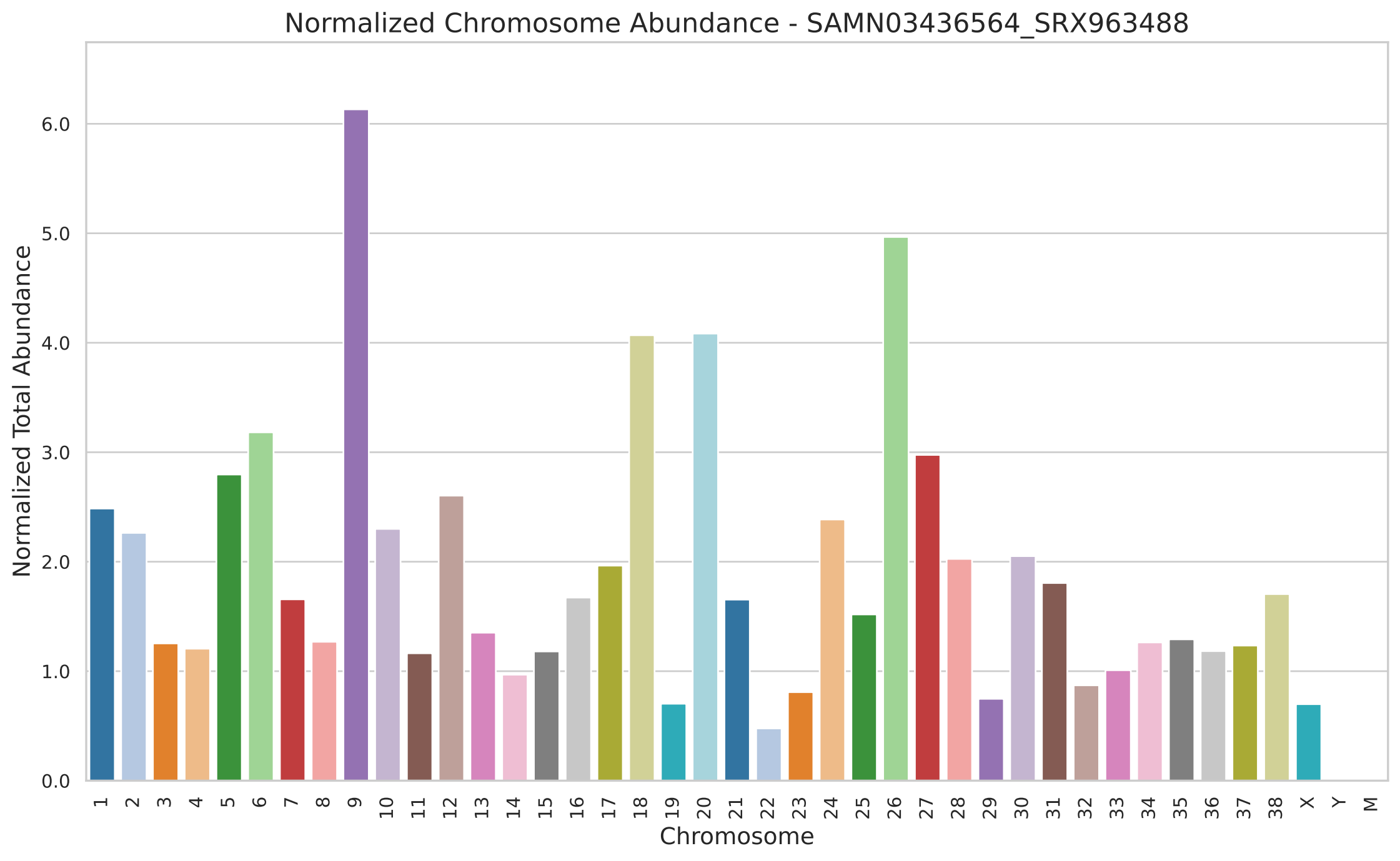

Normalized Chromosome Abundance - SAMN03436481_SRX963327
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

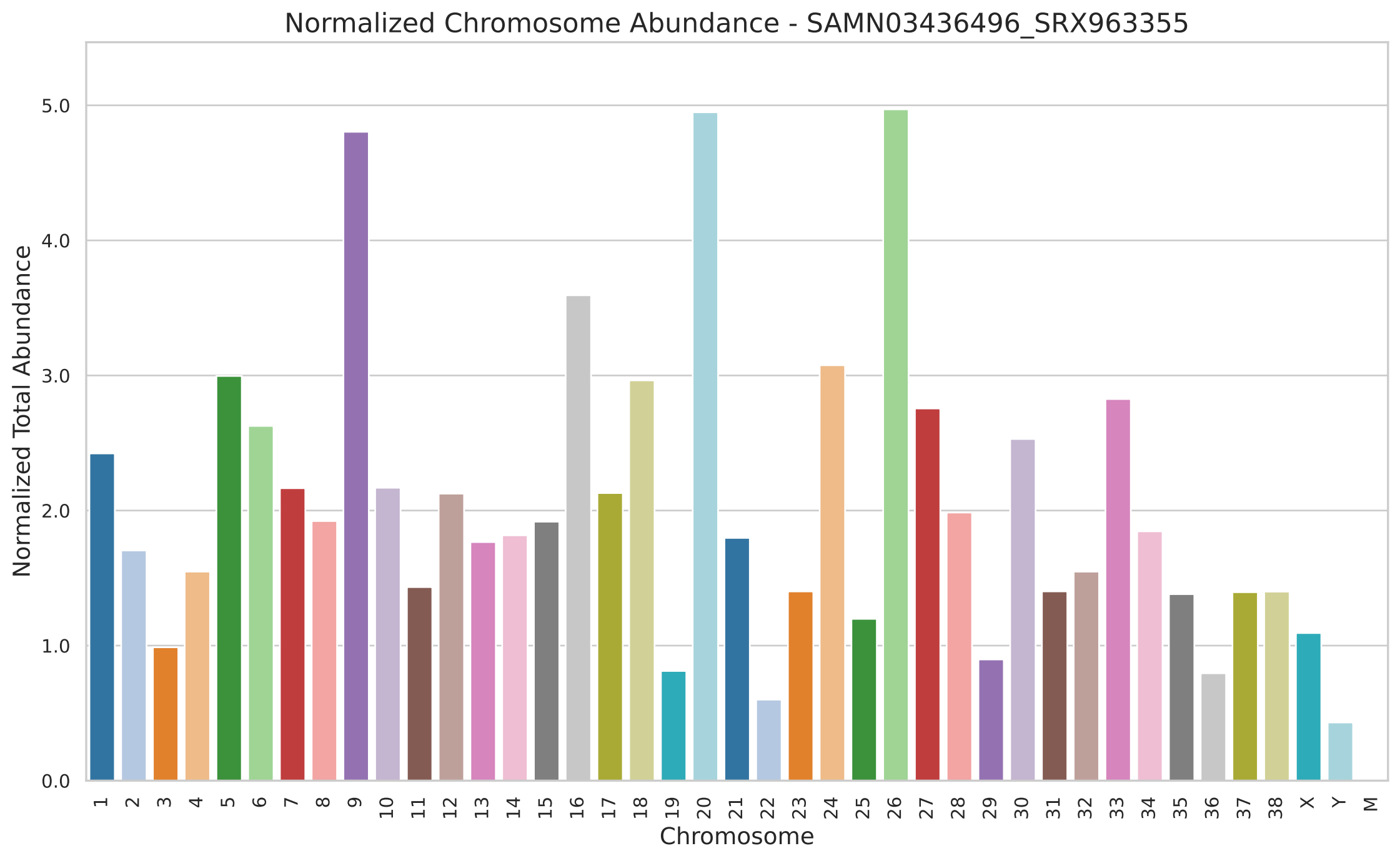

Normalized Chromosome Abundance - SAMN03436295_SRX963258
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

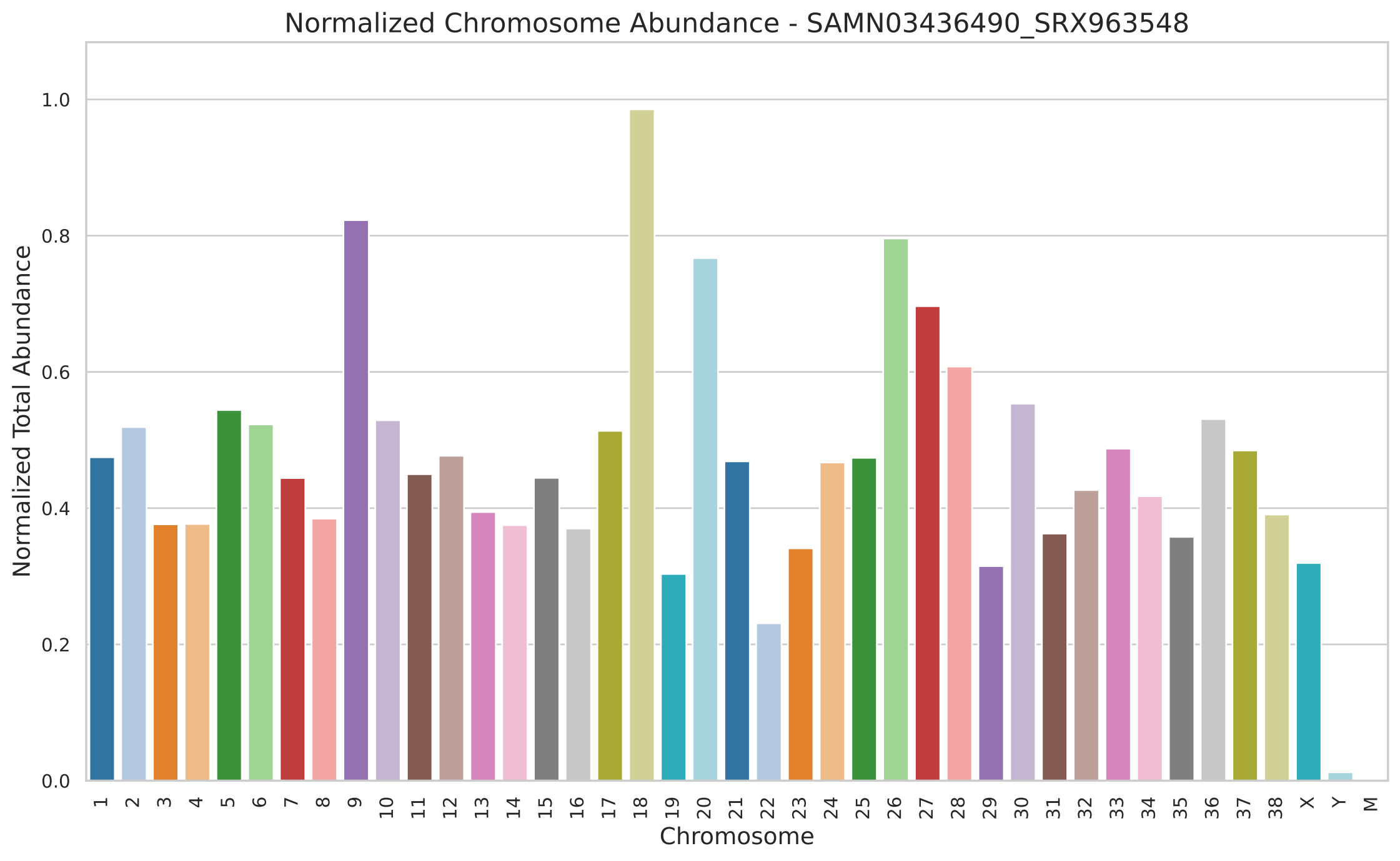

Normalized Chromosome Abundance - SAMN03436458_SRX963287
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

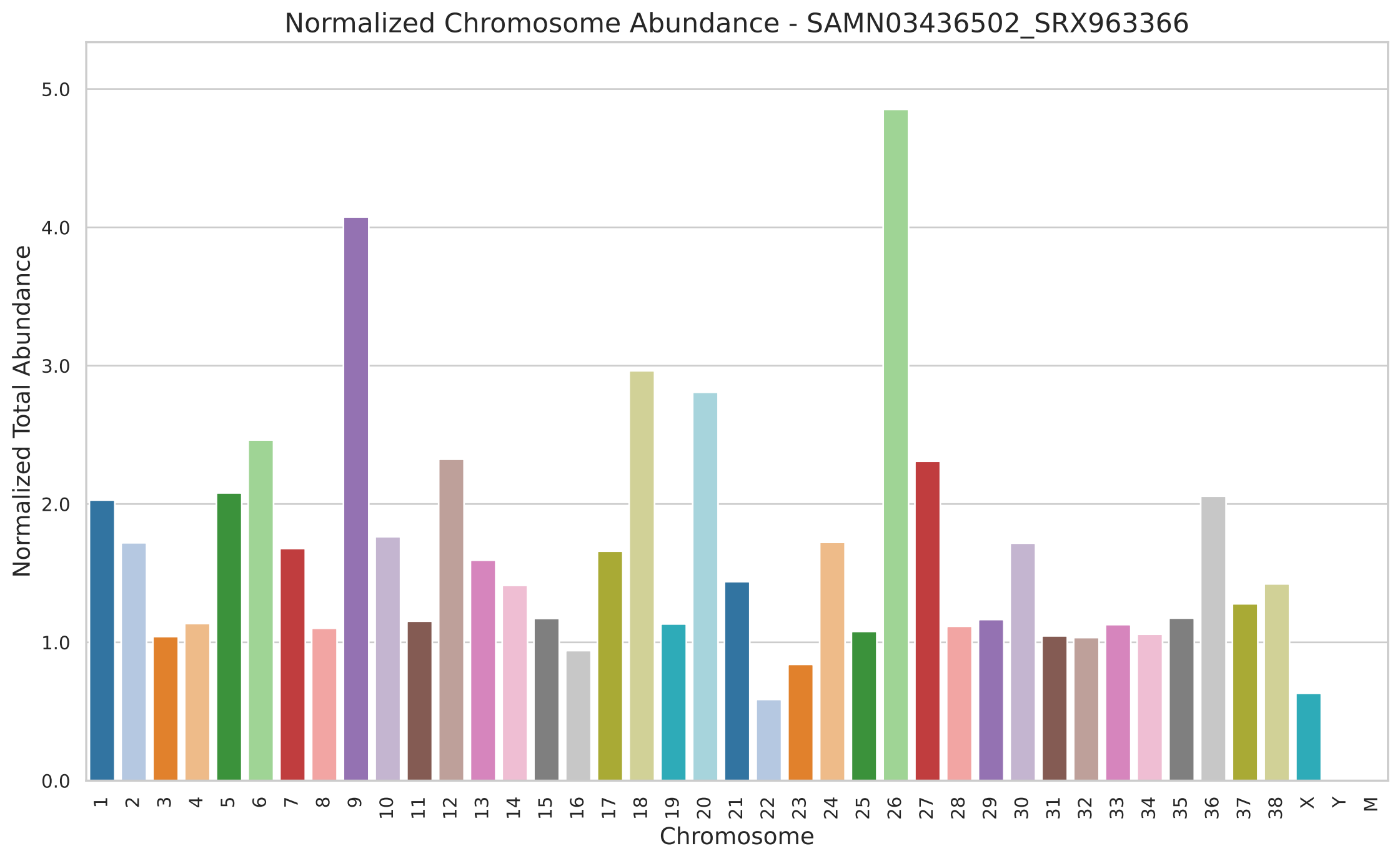

Normalized Chromosome Abundance - SAMN03436492_SRX963350
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

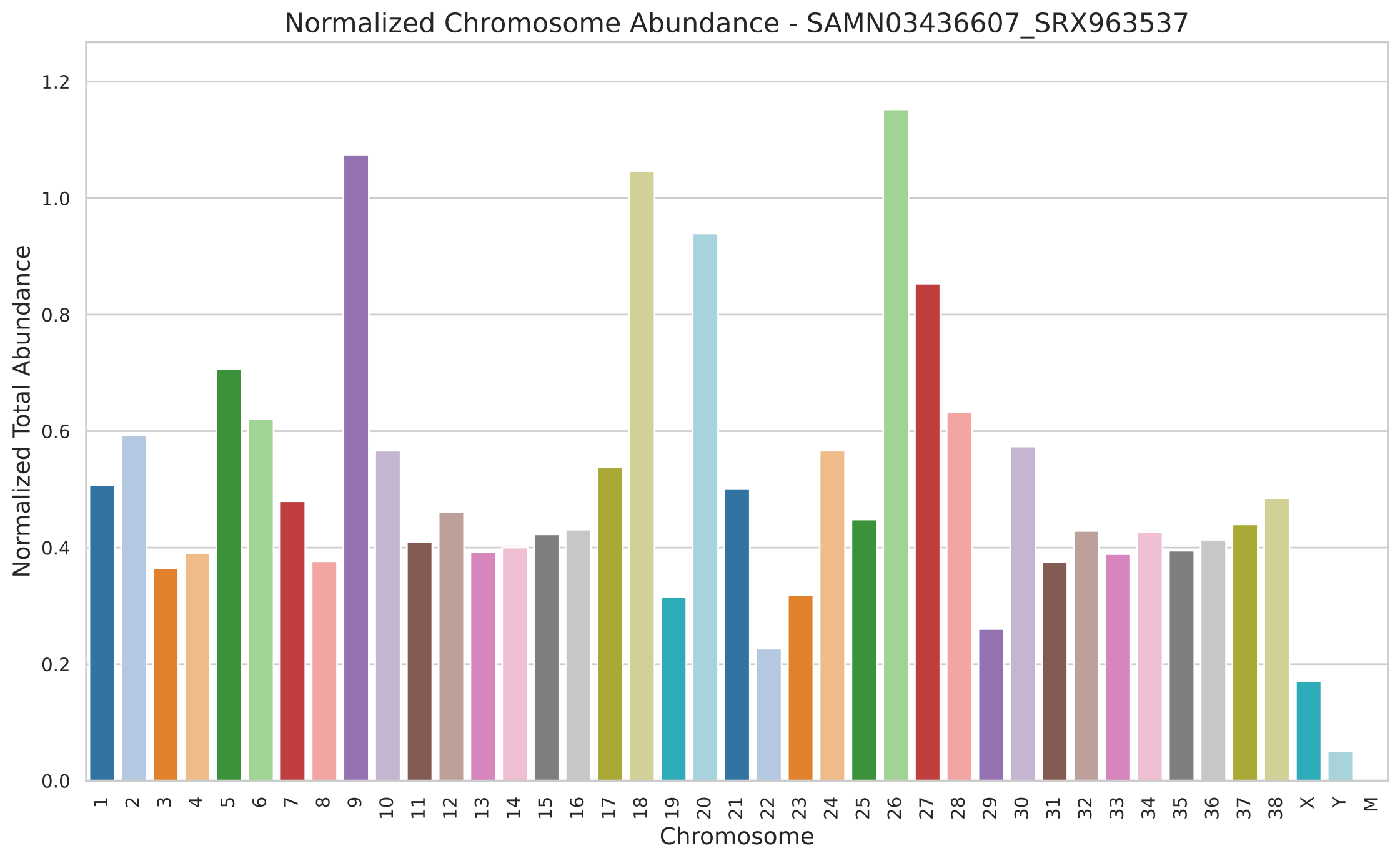

Normalized Chromosome Abundance - SAMN03436513_SRX963434
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

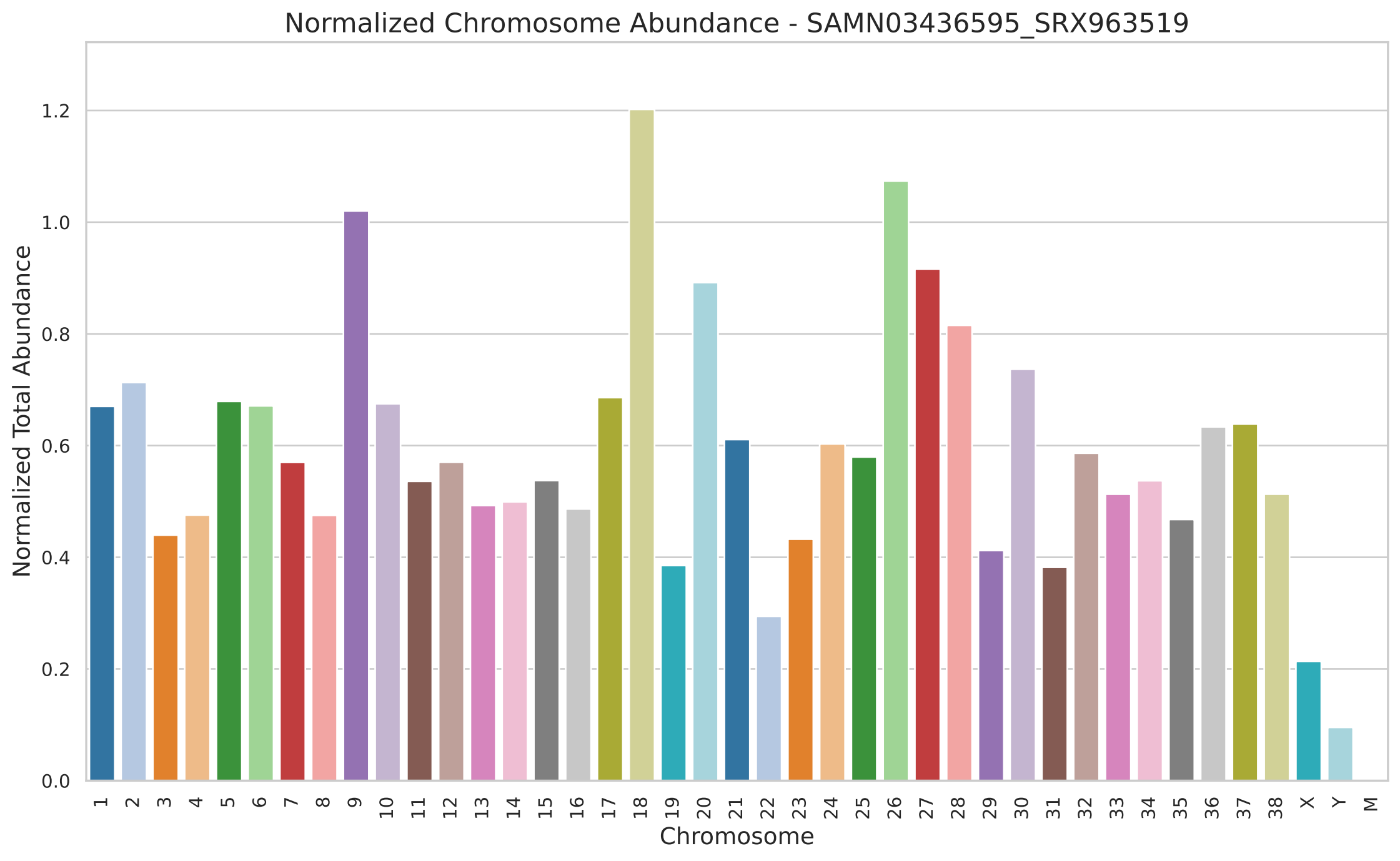

Normalized Chromosome Abundance - SAMN03436564_SRX963488
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

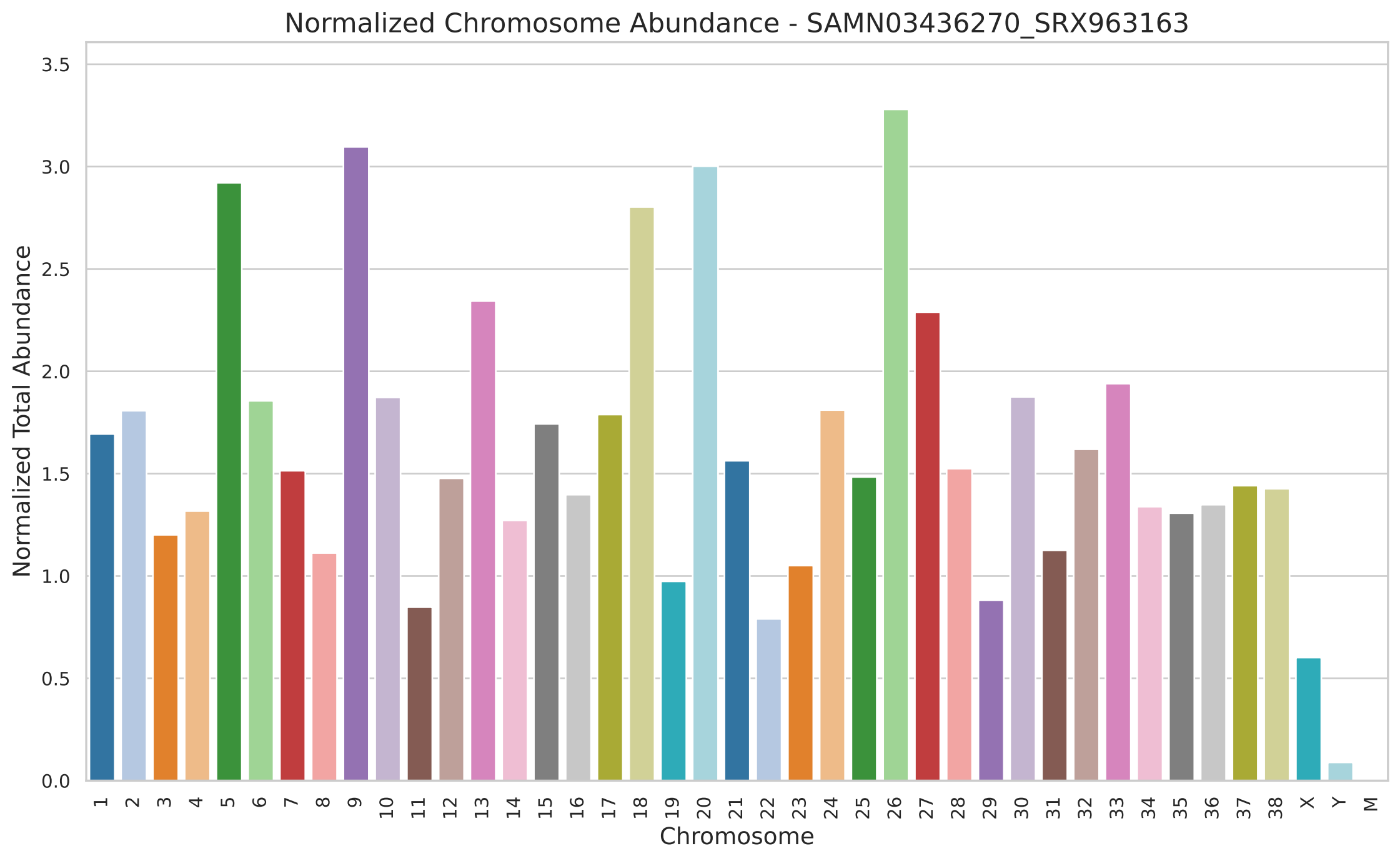

Normalized Chromosome Abundance - SAMN03436496_SRX963355
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

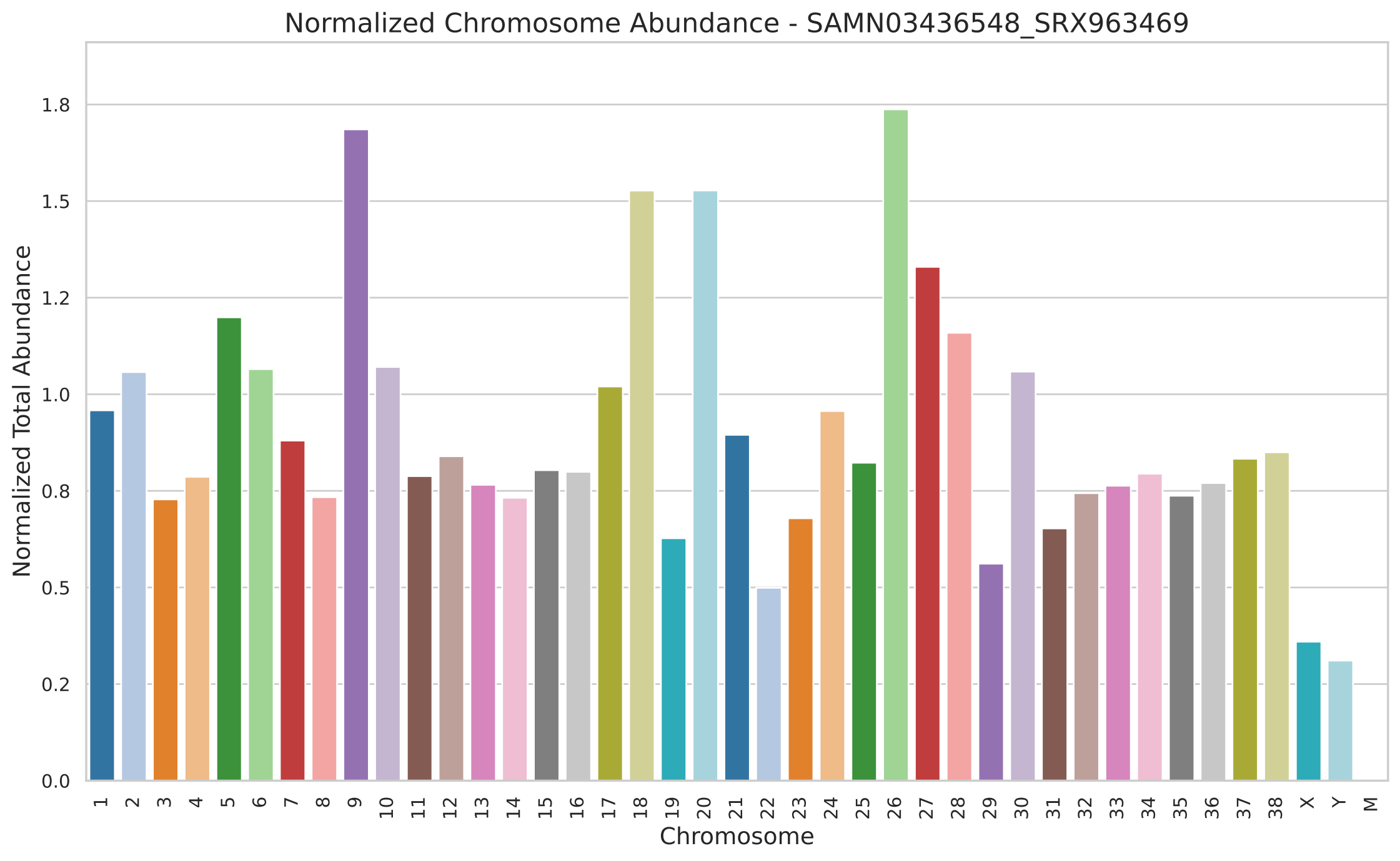

Normalized Chromosome Abundance - SAMN03436490_SRX963548
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

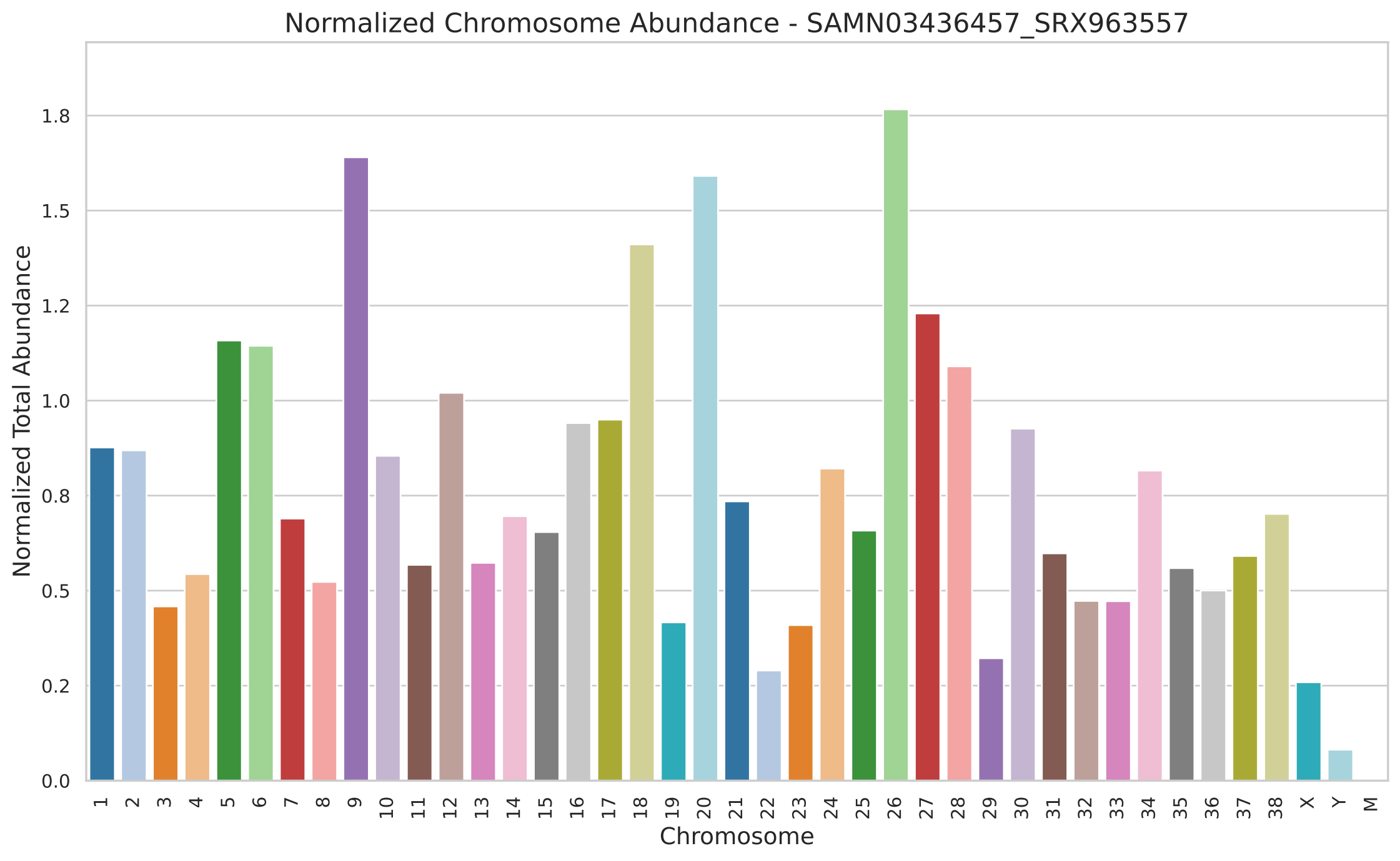

Normalized Chromosome Abundance - SAMN03436502_SRX963366
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

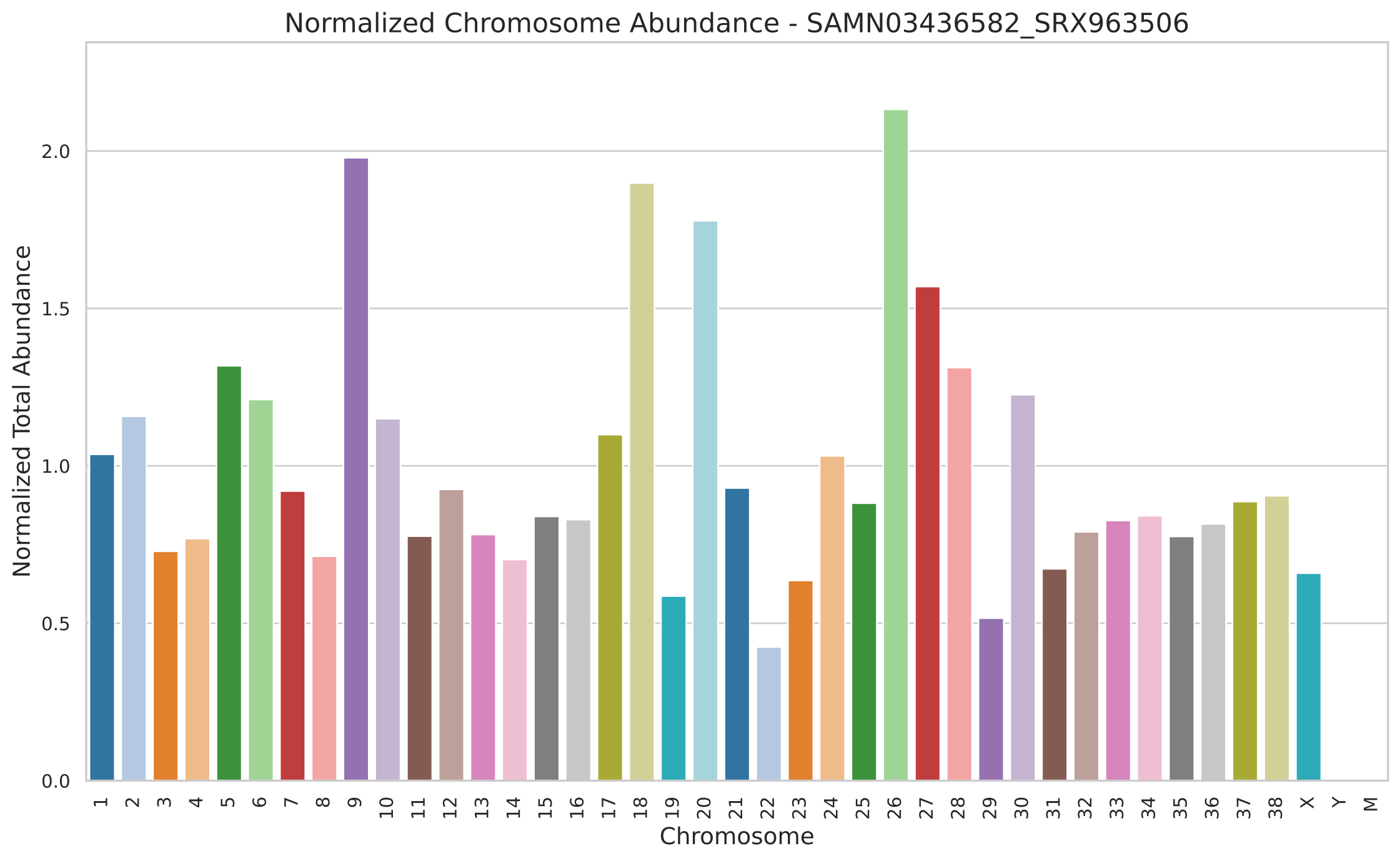

Normalized Chromosome Abundance - SAMN03436607_SRX963537
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

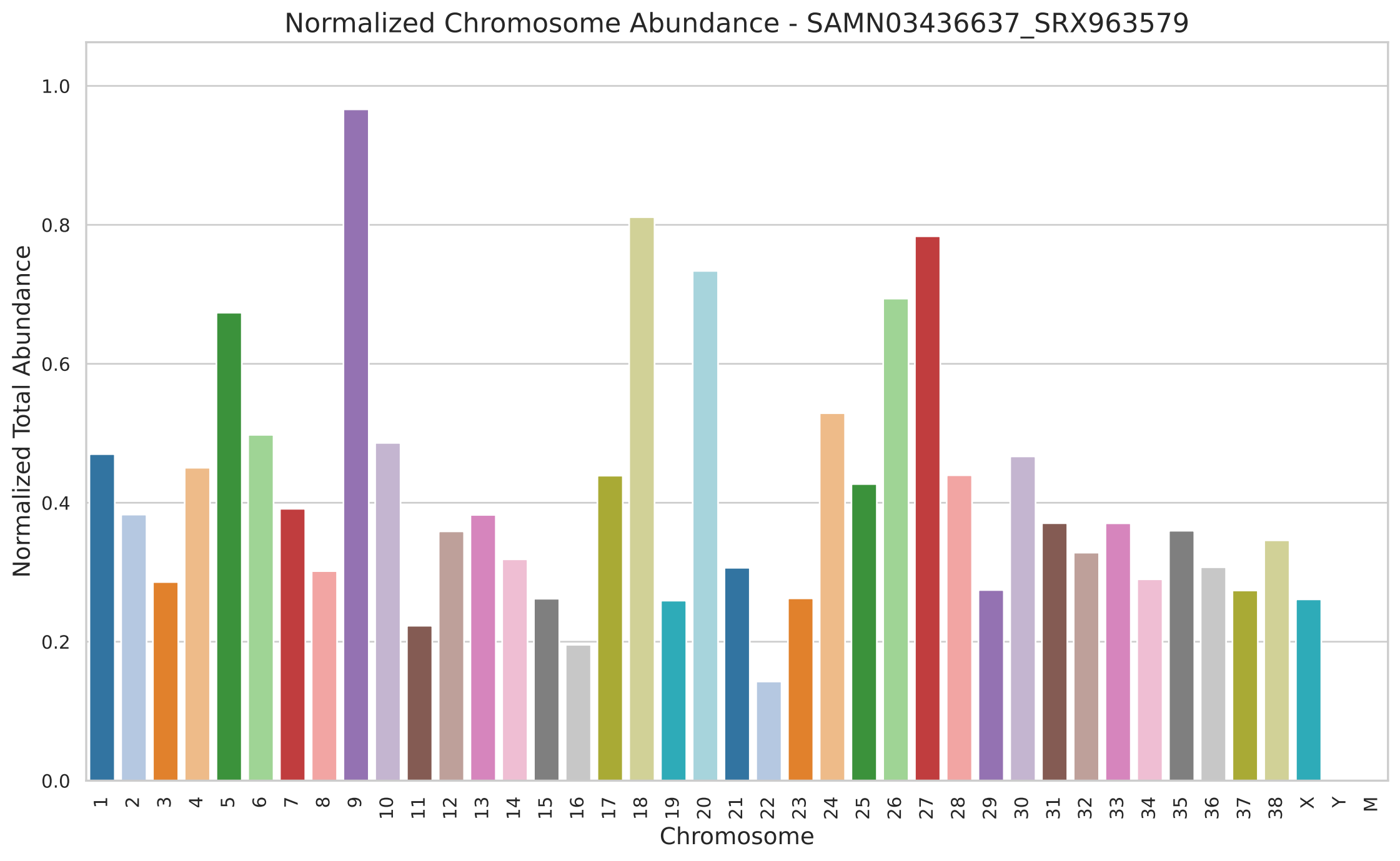

Normalized Chromosome Abundance - SAMN03436595_SRX963519
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

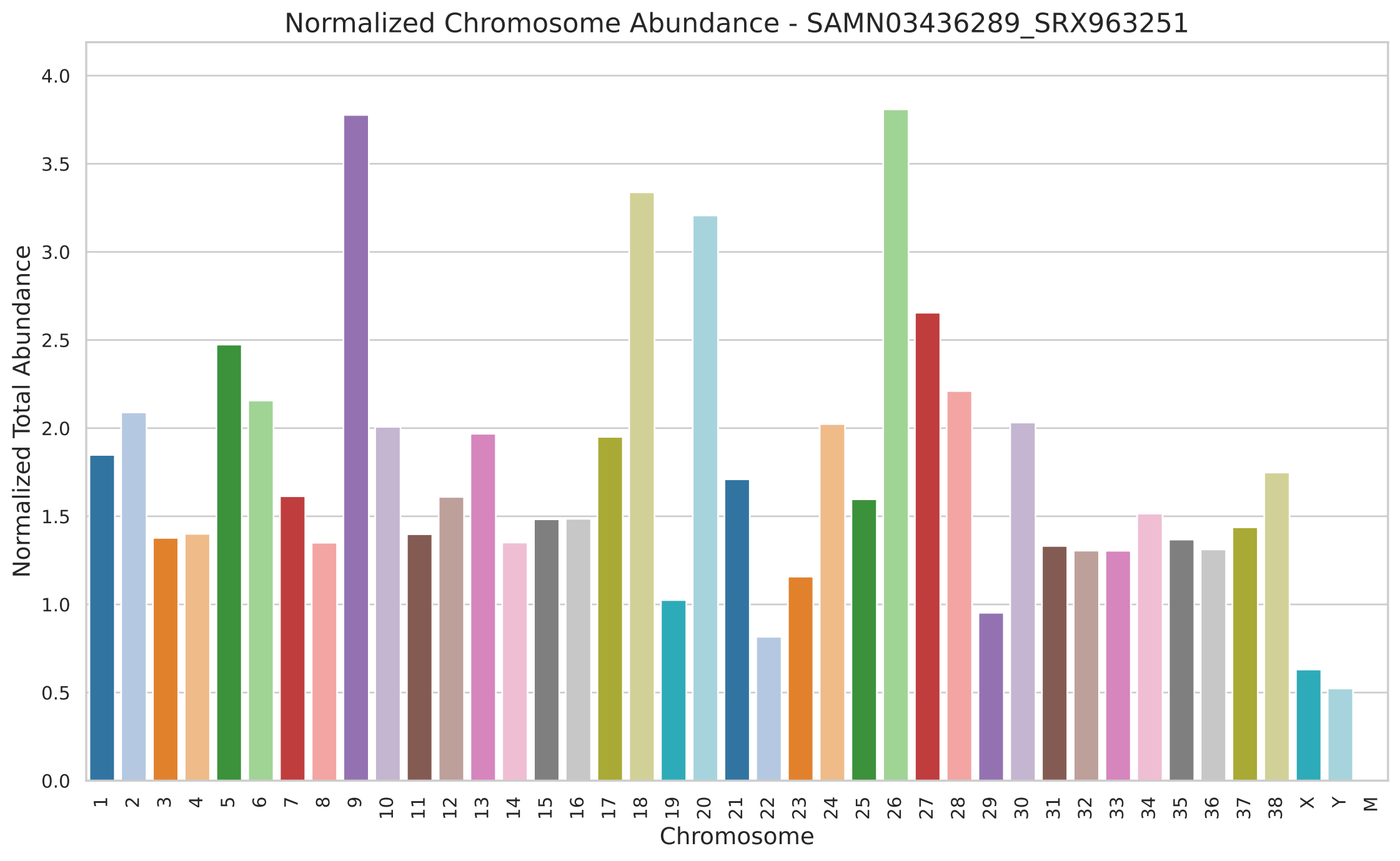

Normalized Chromosome Abundance - SAMN03436270_SRX963163
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

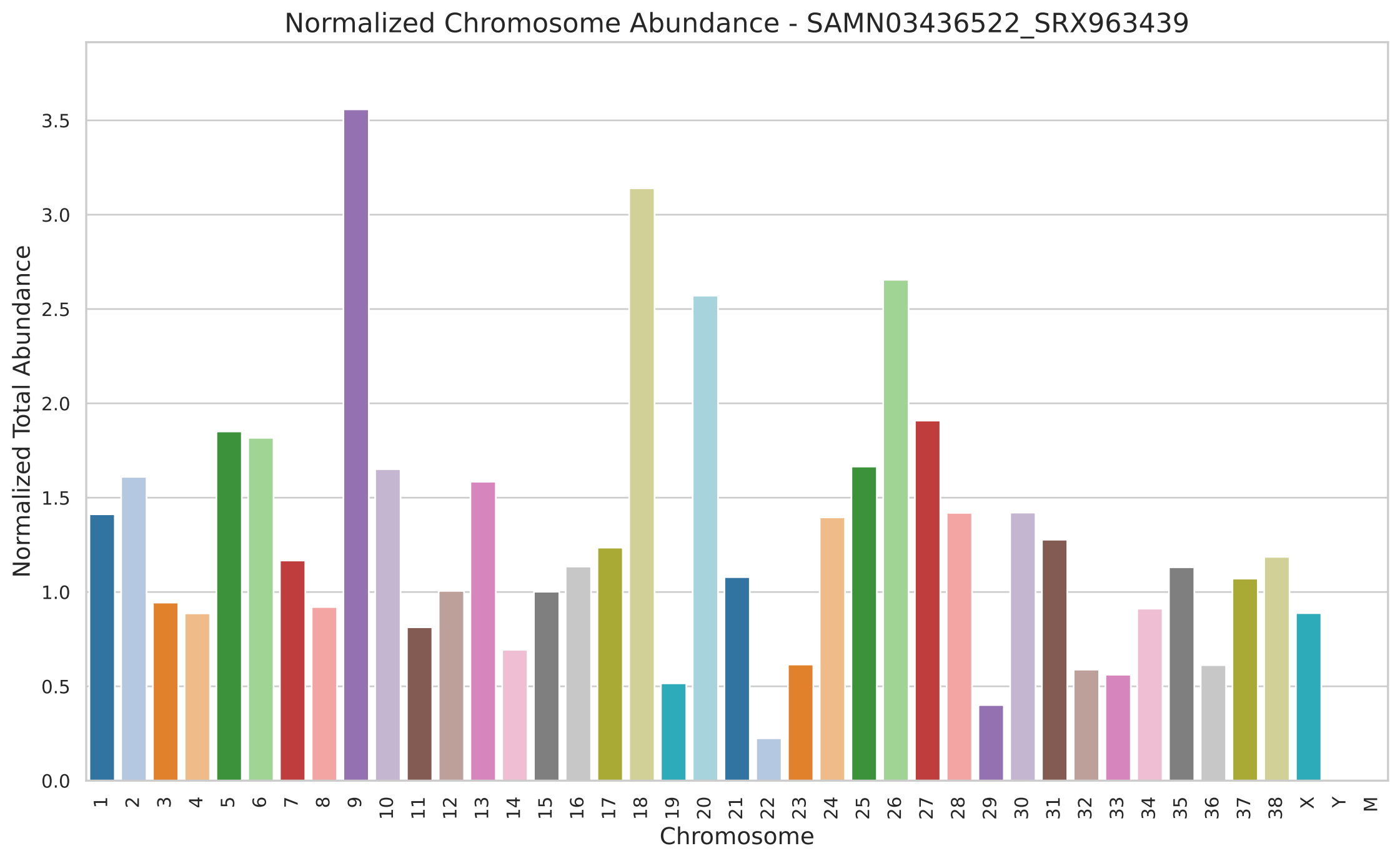

Normalized Chromosome Abundance - SAMN03436548_SRX963469
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

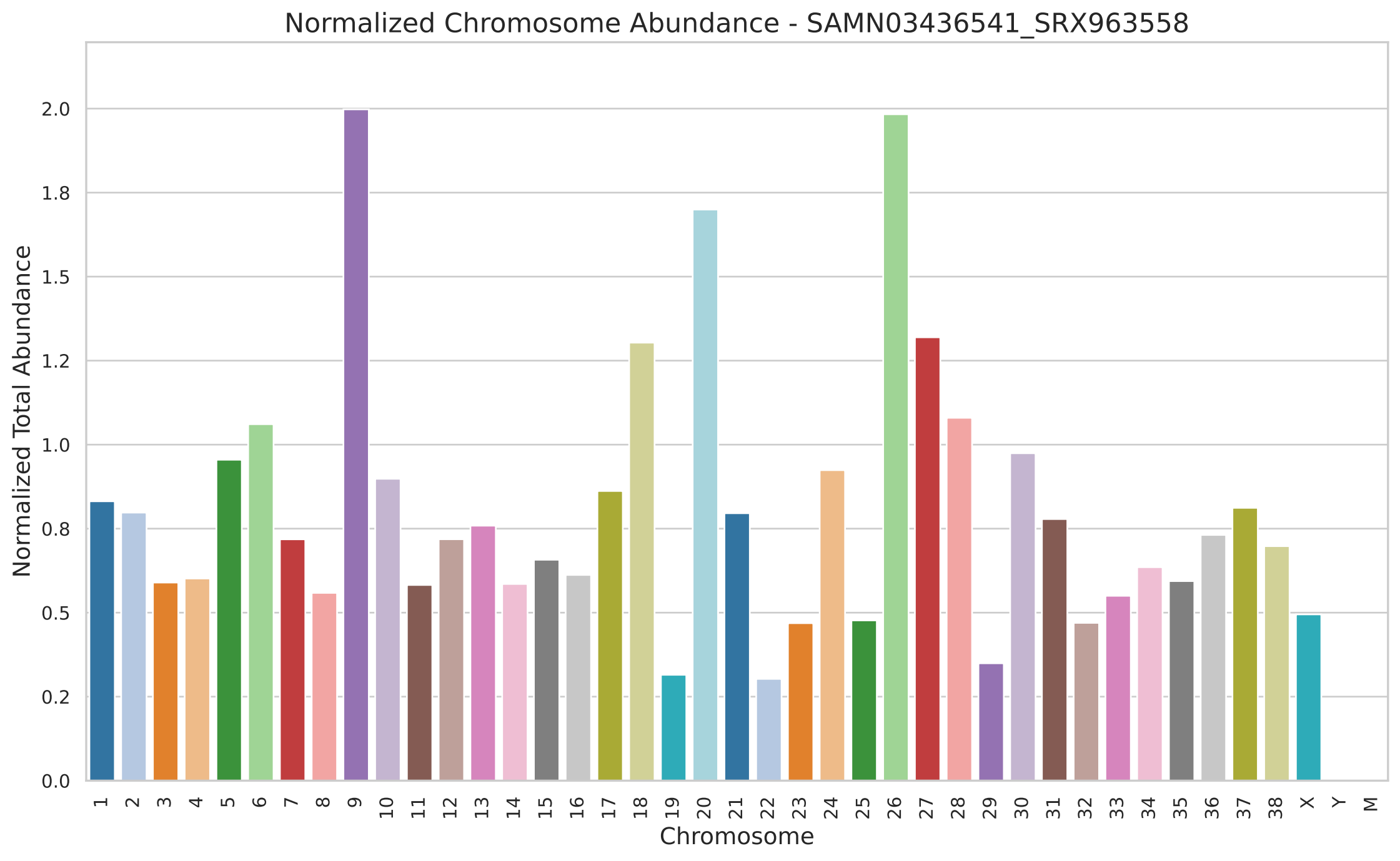

Normalized Chromosome Abundance - SAMN03436457_SRX963557
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

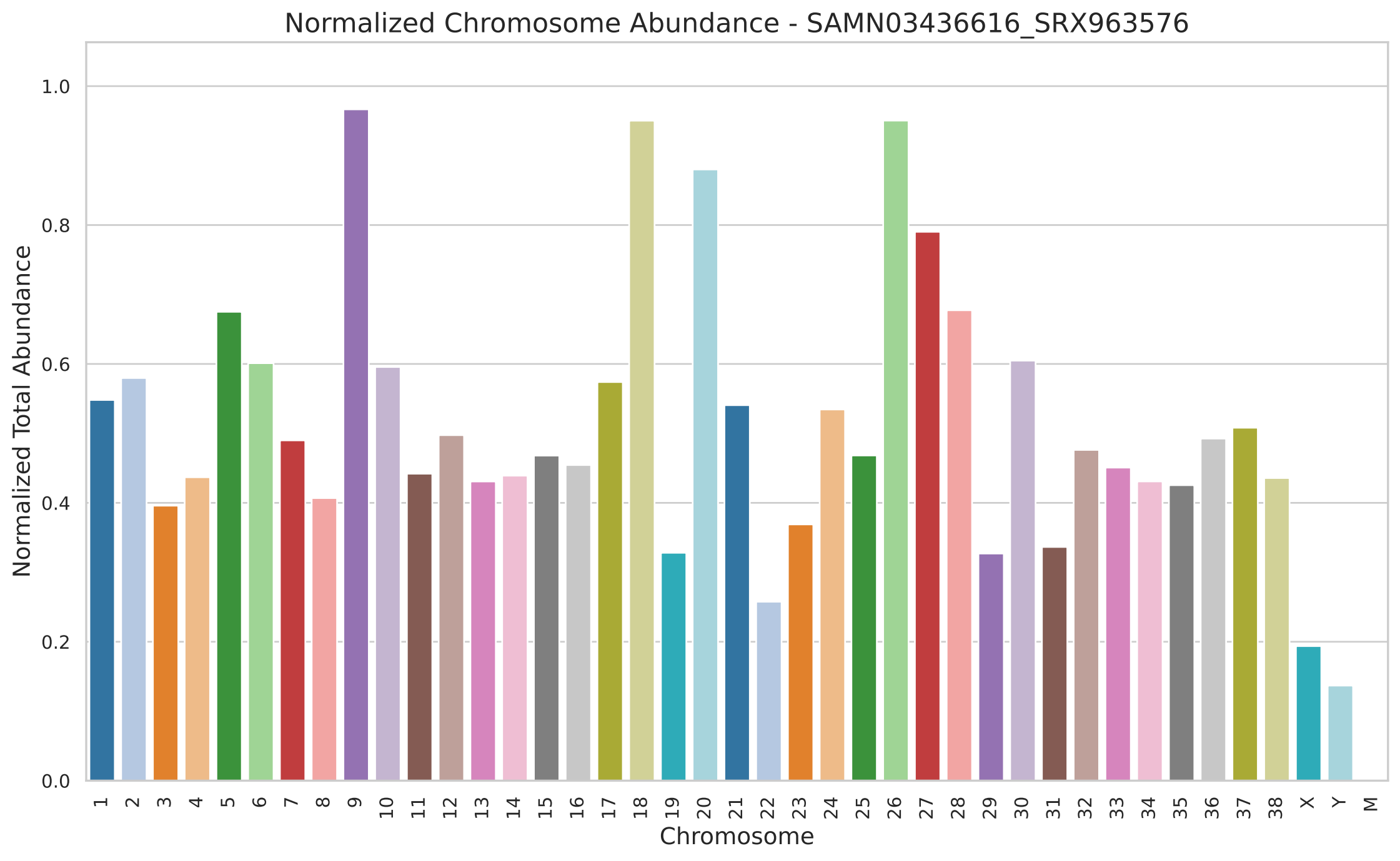

Normalized Chromosome Abundance - SAMN03436582_SRX963506
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

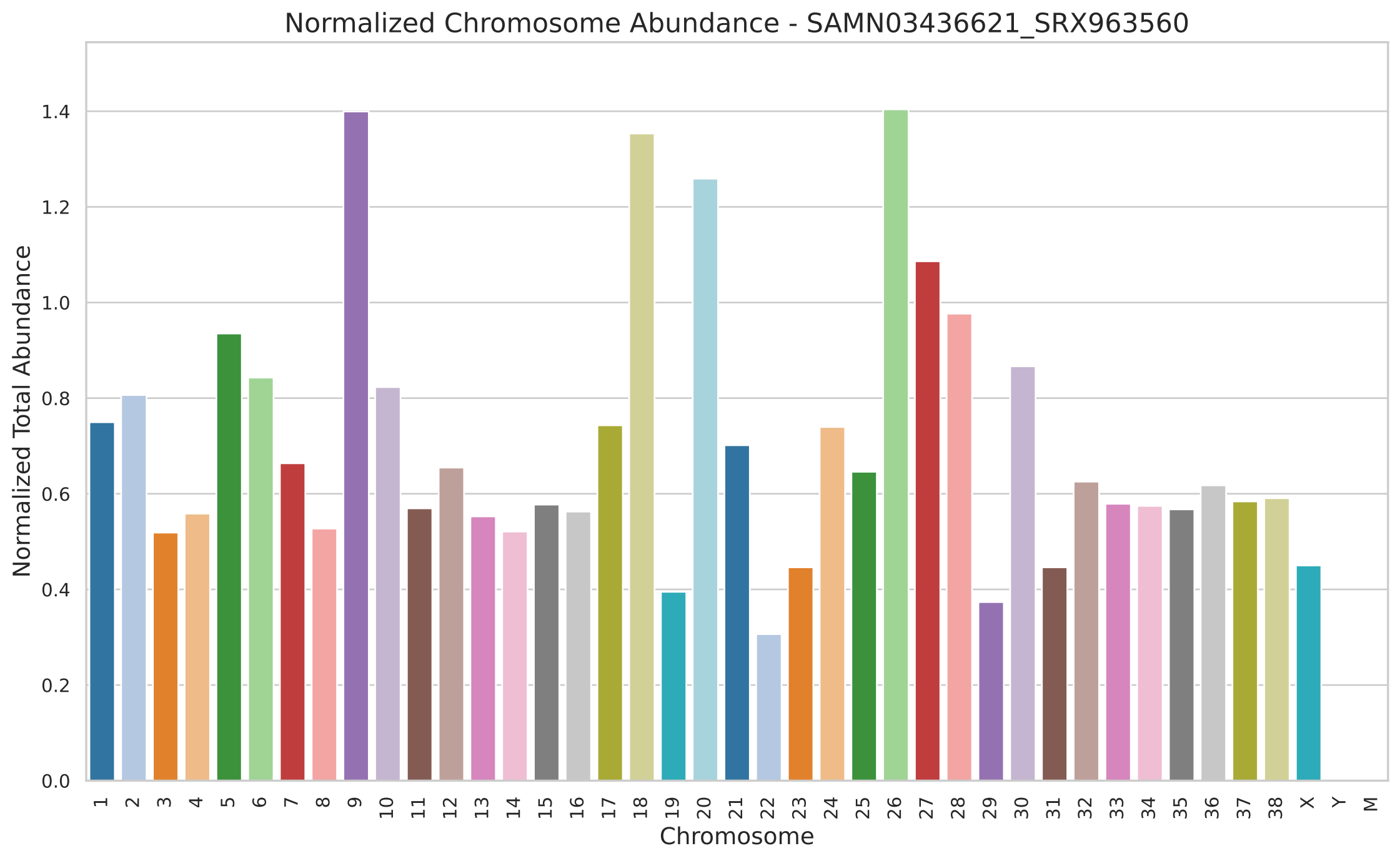

Normalized Chromosome Abundance - SAMN03436637_SRX963579
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

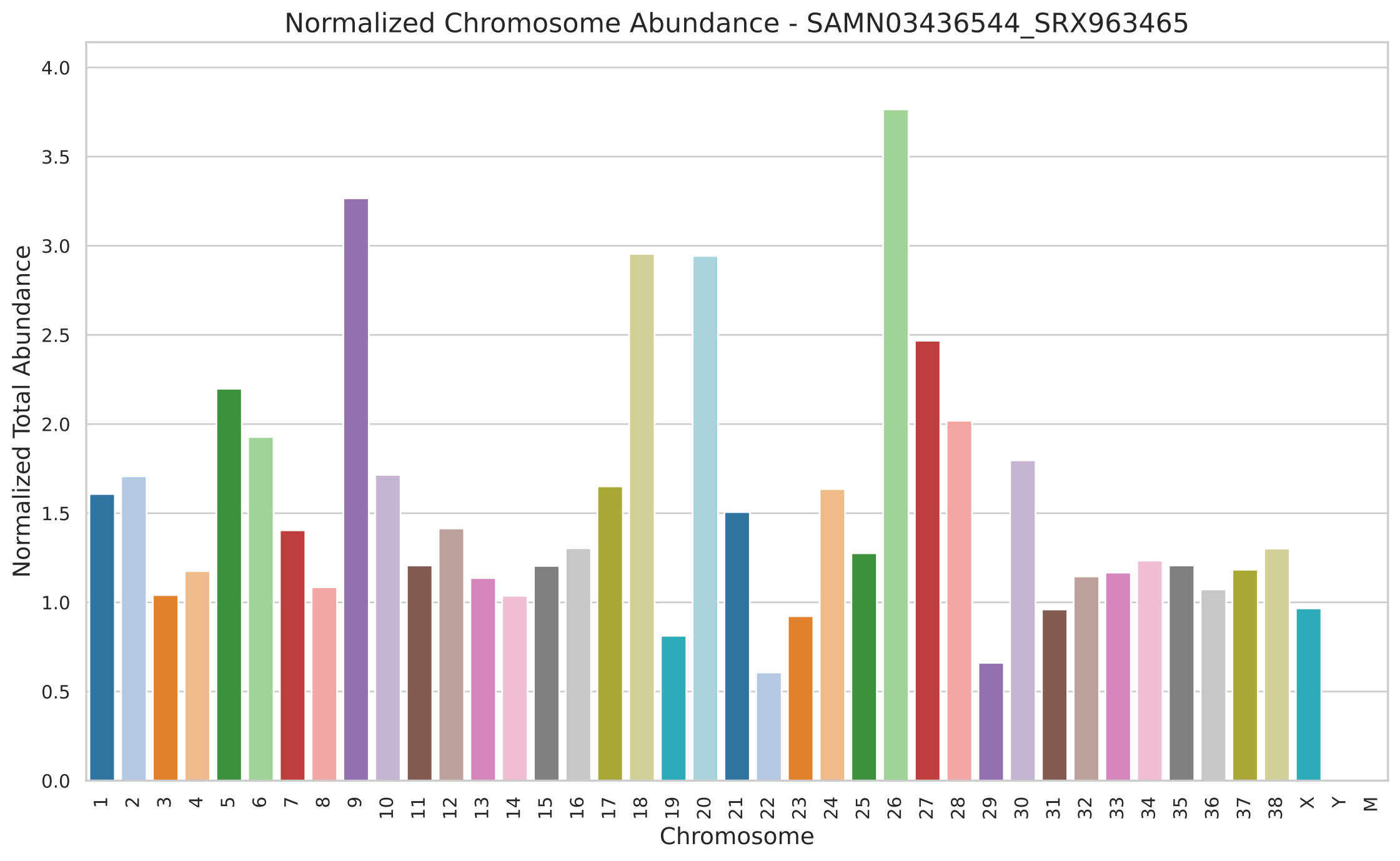

Normalized Chromosome Abundance - SAMN03436289_SRX963251
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

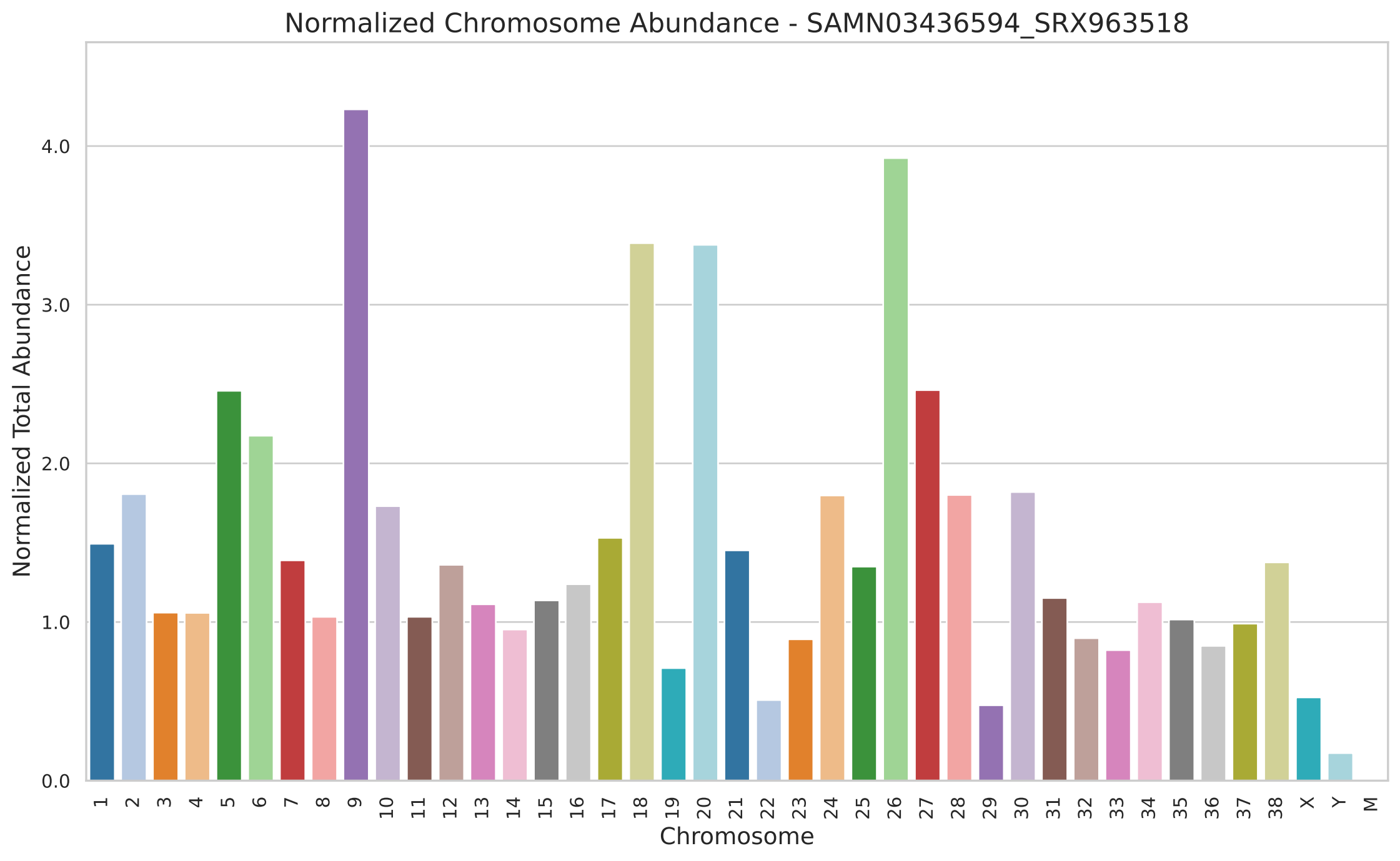

Normalized Chromosome Abundance - SAMN03436522_SRX963439
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

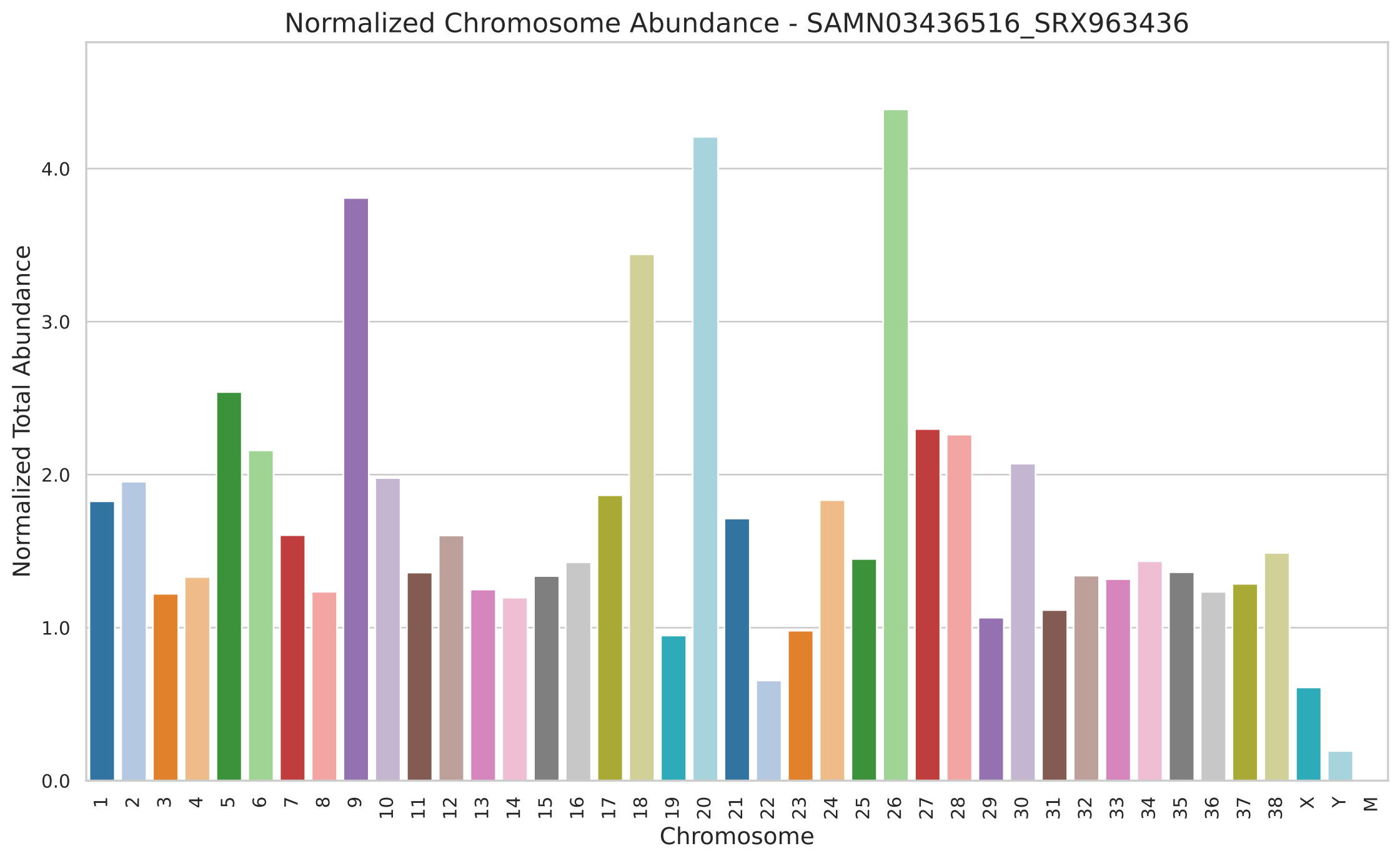

Normalized Chromosome Abundance - SAMN03436541_SRX963558
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

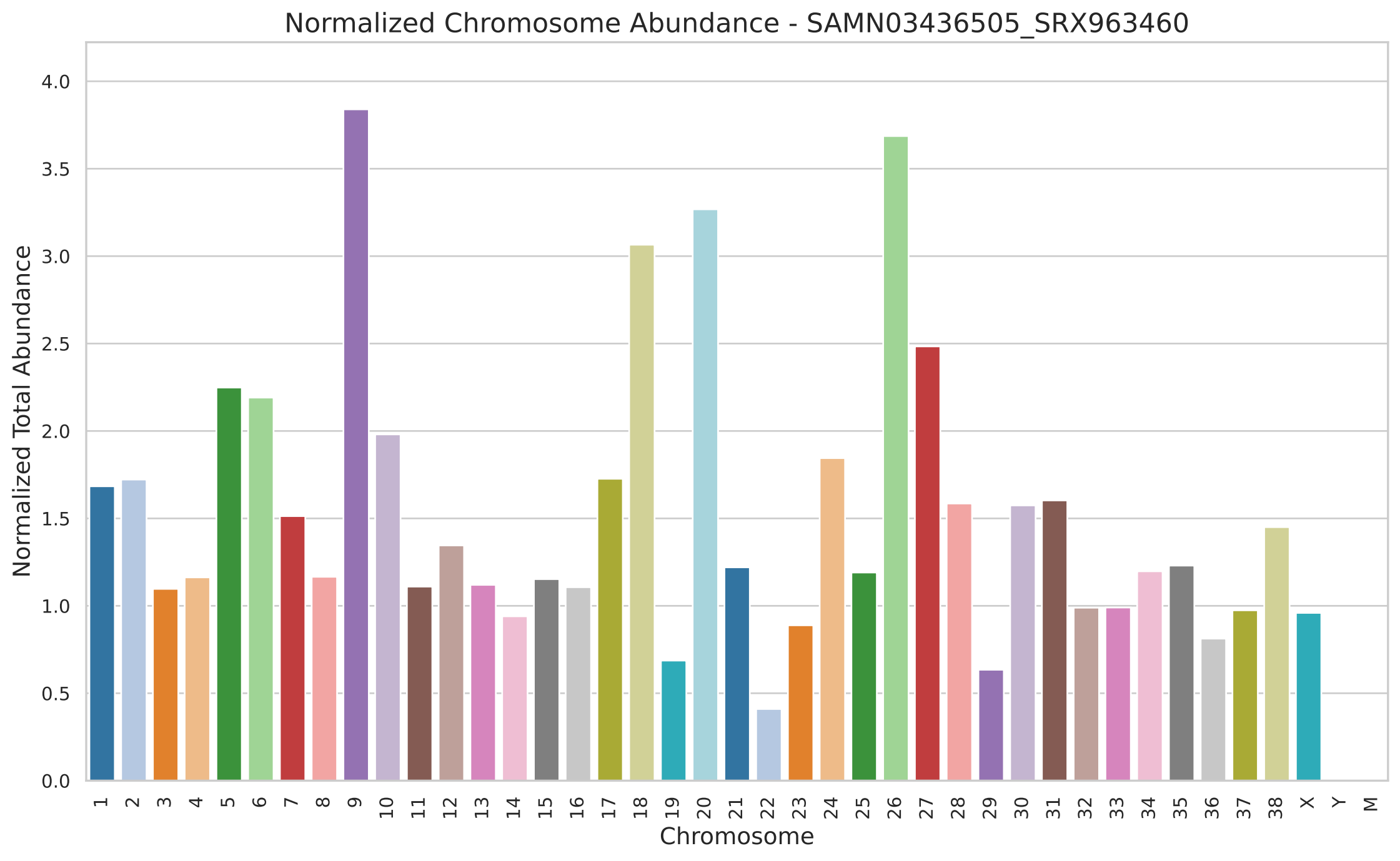

Normalized Chromosome Abundance - SAMN03436616_SRX963576
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

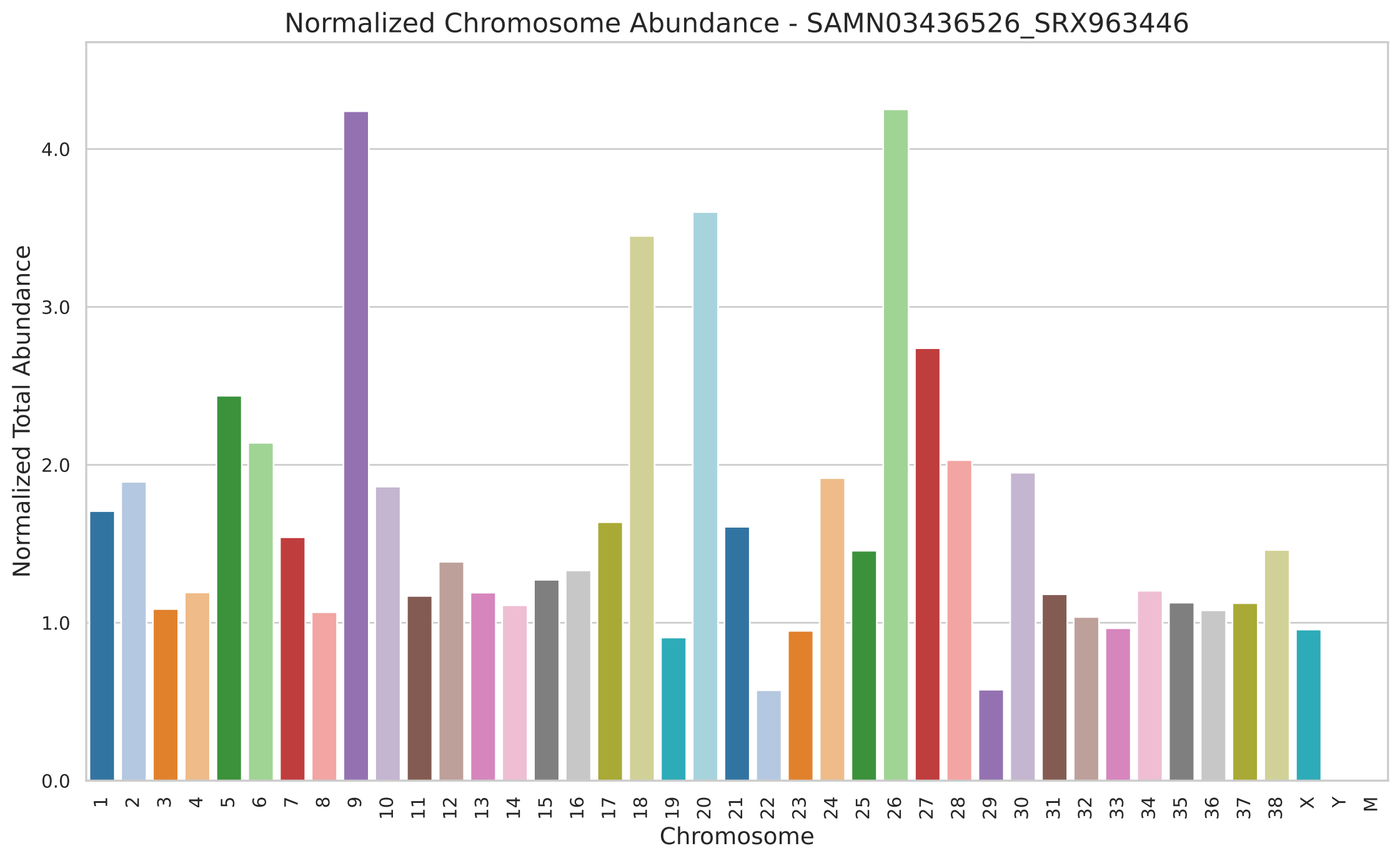

Normalized Chromosome Abundance - SAMN03436621_SRX963560
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

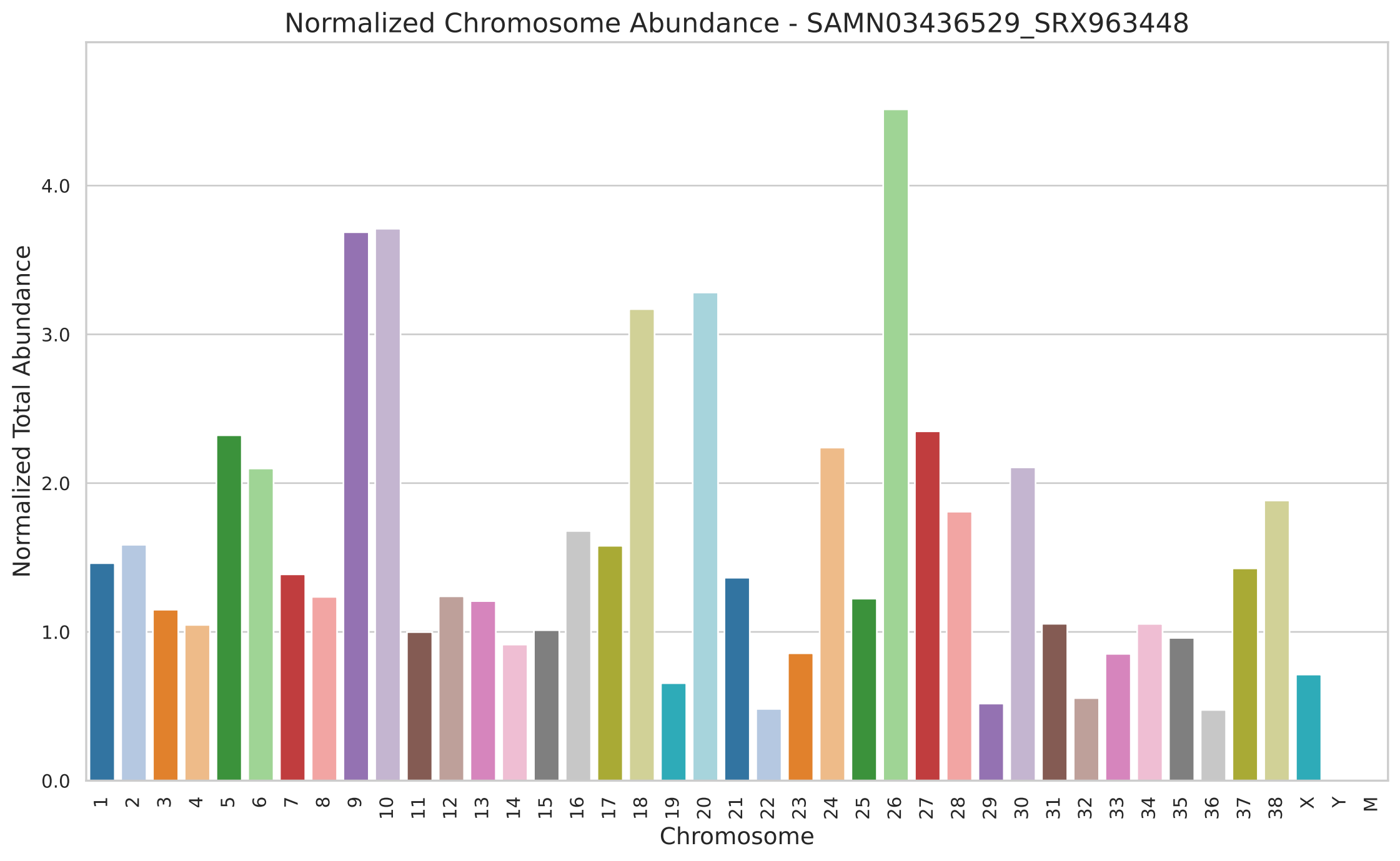

Normalized Chromosome Abundance - SAMN03436544_SRX963465
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

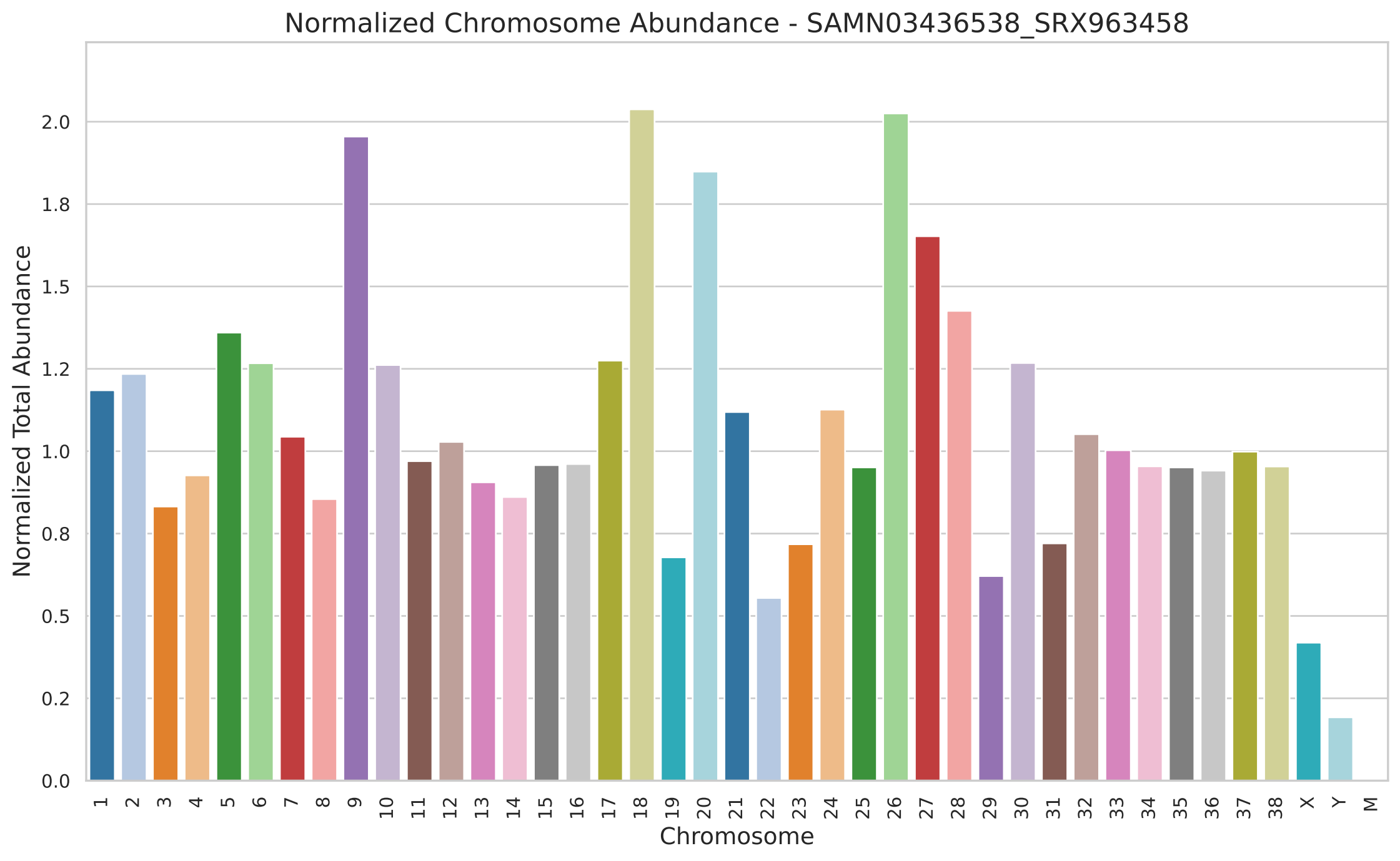

Normalized Chromosome Abundance - SAMN03436594_SRX963518
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

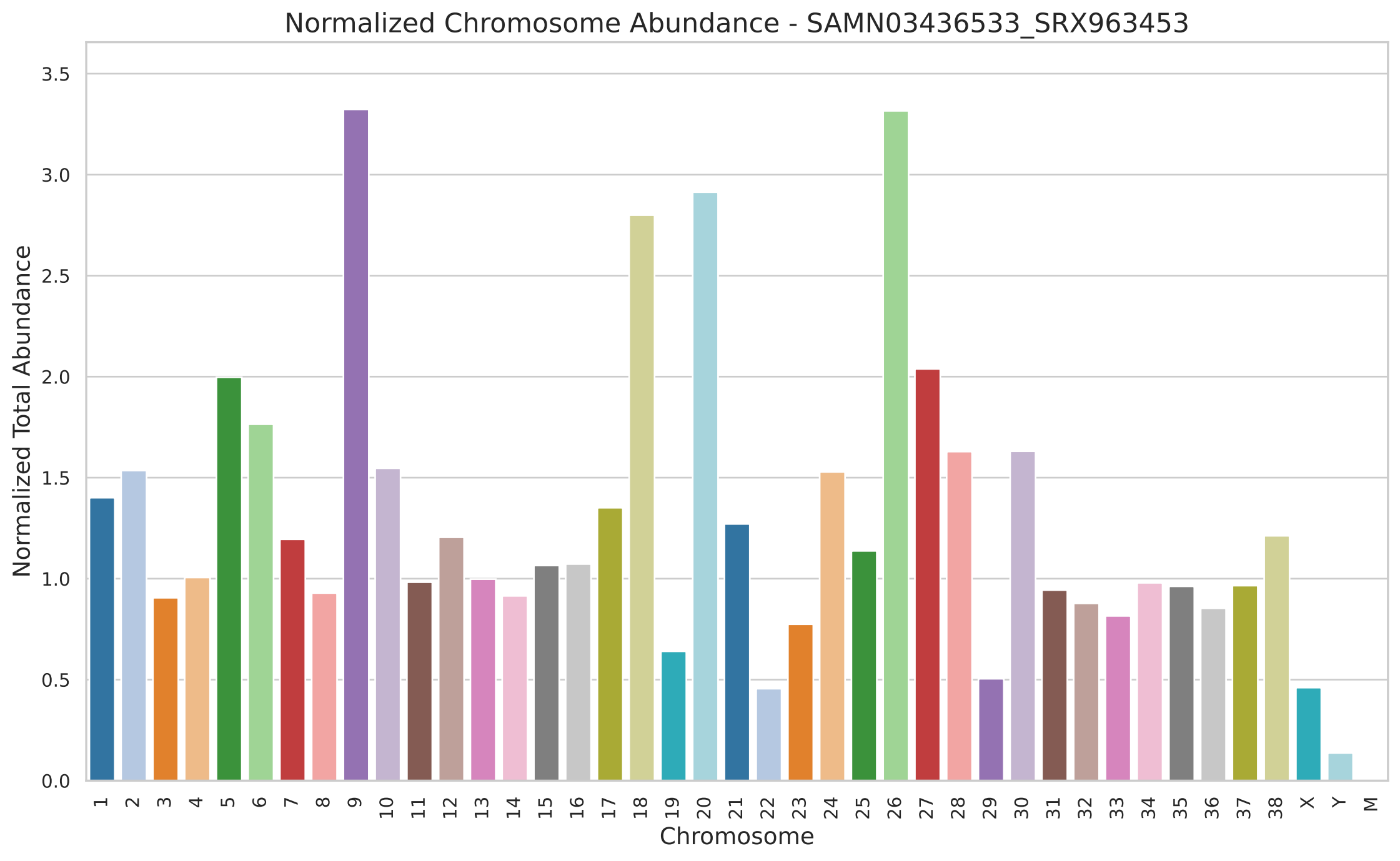

Normalized Chromosome Abundance - SAMN03436516_SRX963436
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

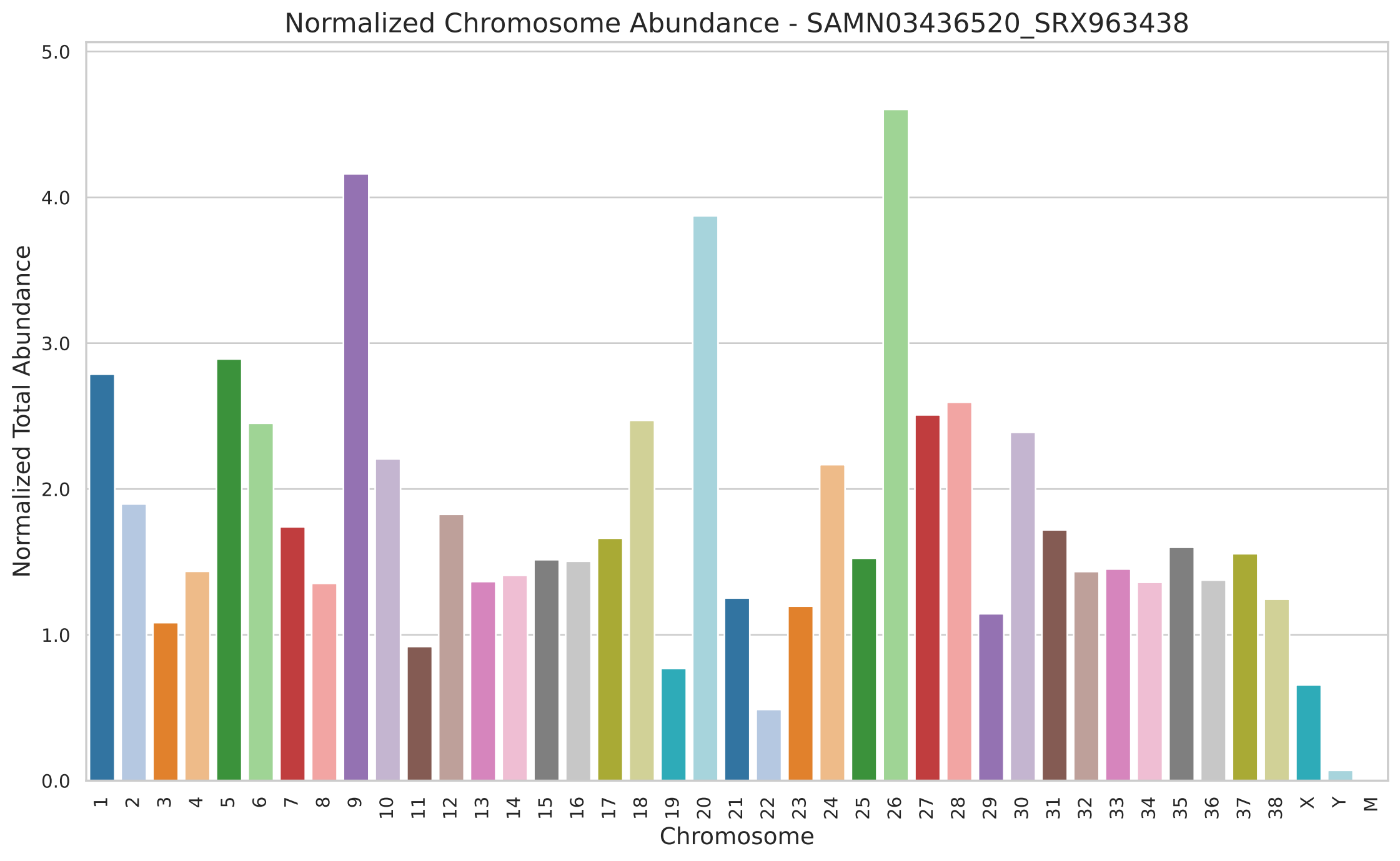

Normalized Chromosome Abundance - SAMN03436505_SRX963460
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

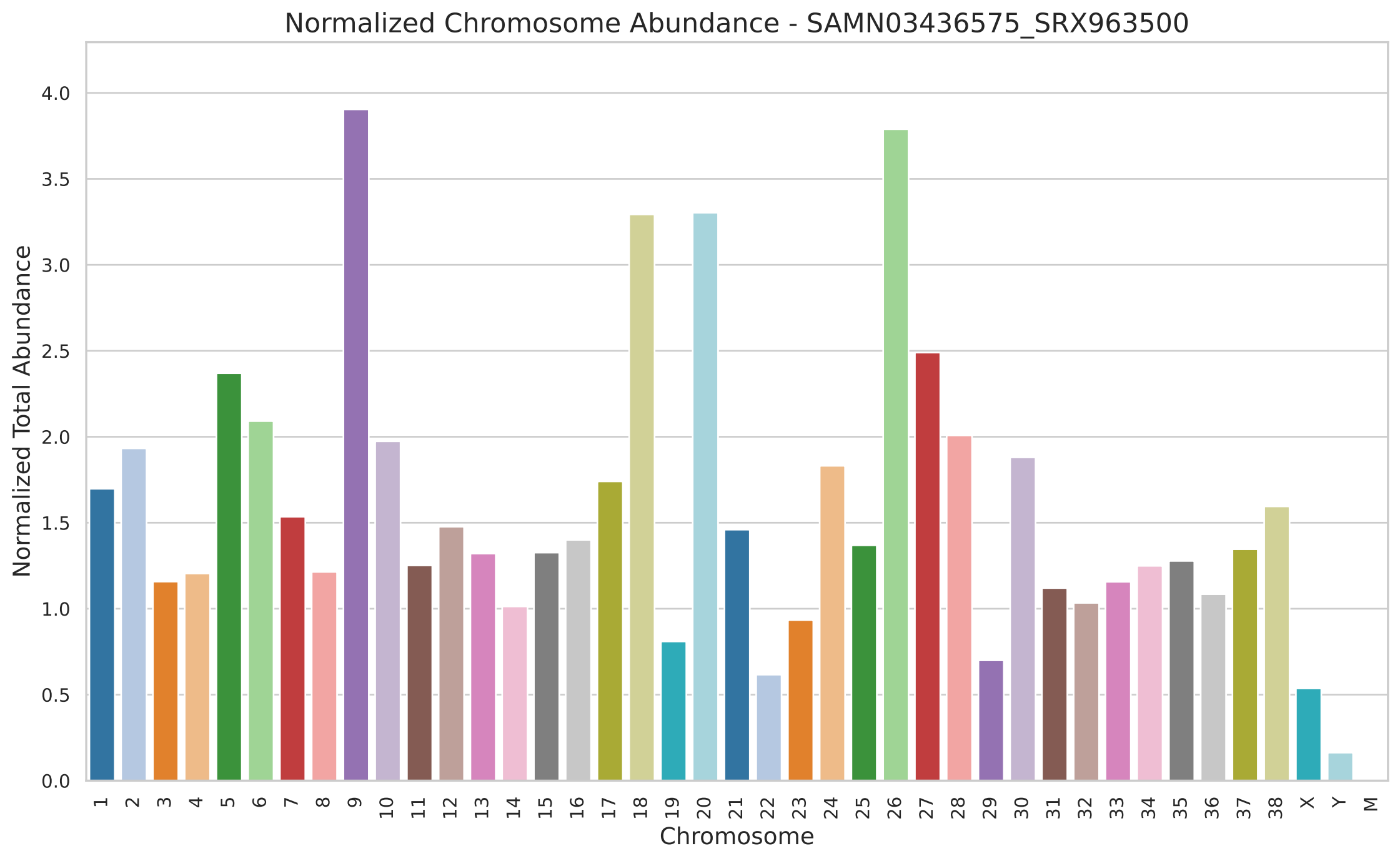

Normalized Chromosome Abundance - SAMN03436526_SRX963446
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

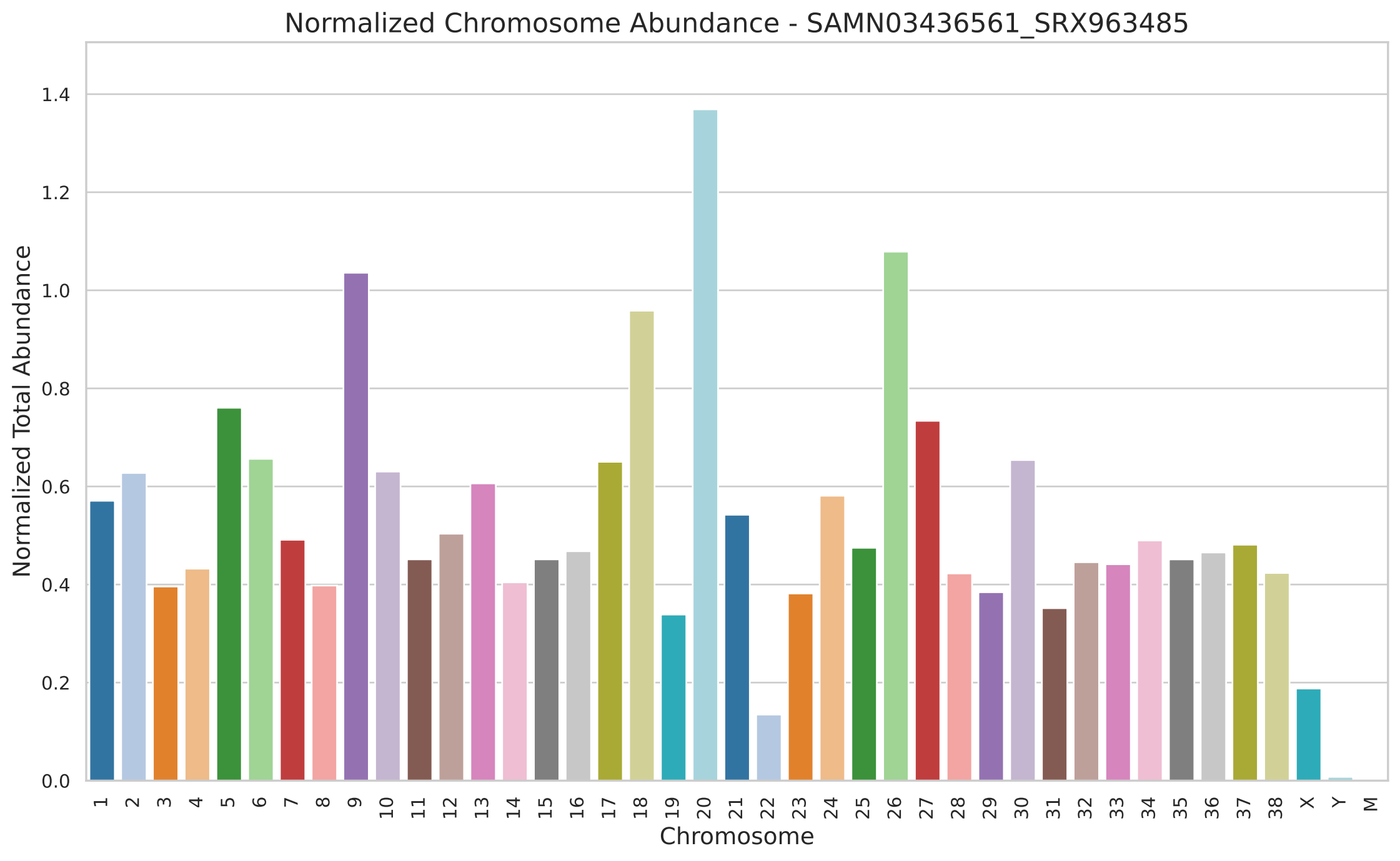

Normalized Chromosome Abundance - SAMN03436529_SRX963448
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

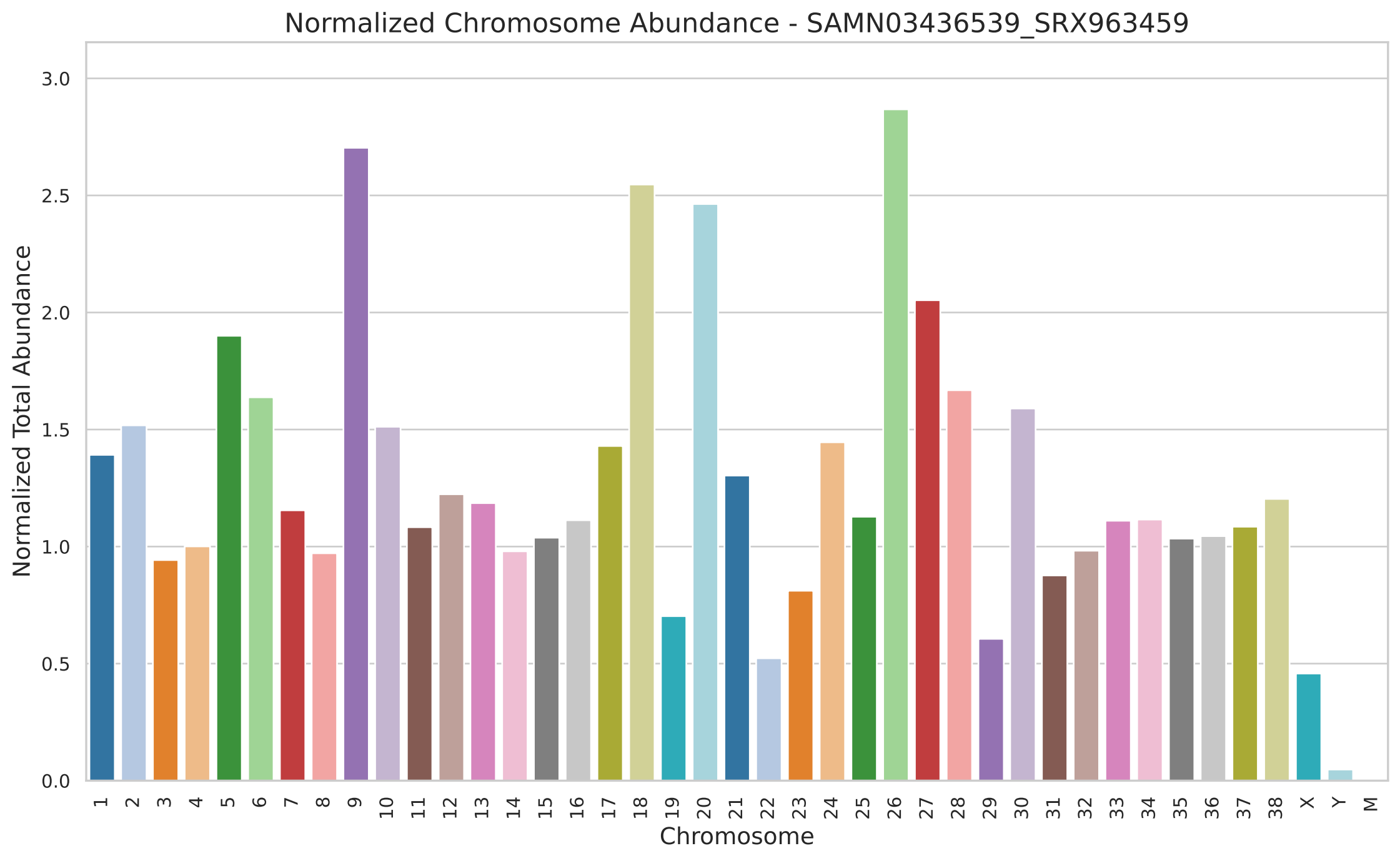

Normalized Chromosome Abundance - SAMN03436538_SRX963458
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

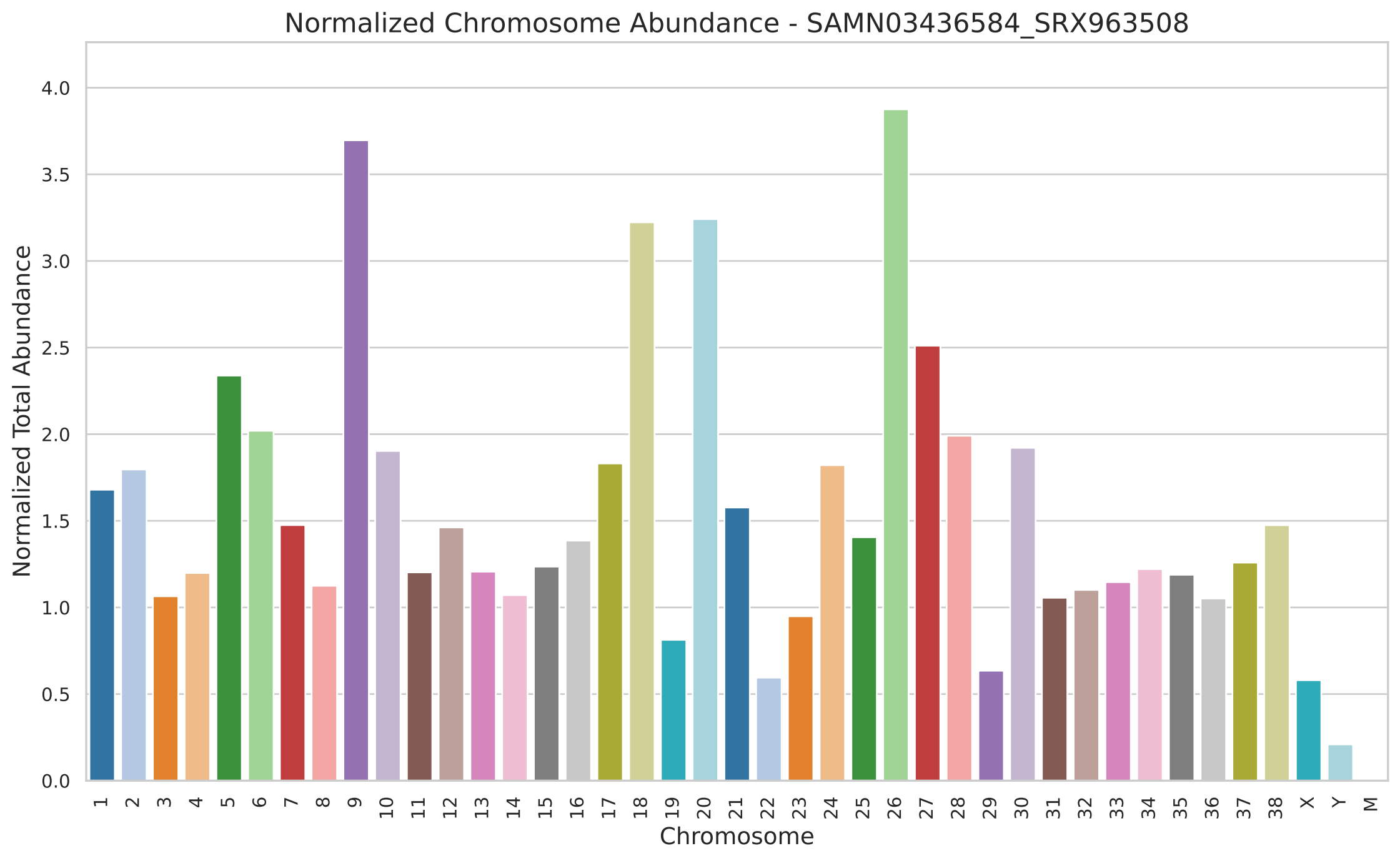

Normalized Chromosome Abundance - SAMN03436533_SRX963453
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

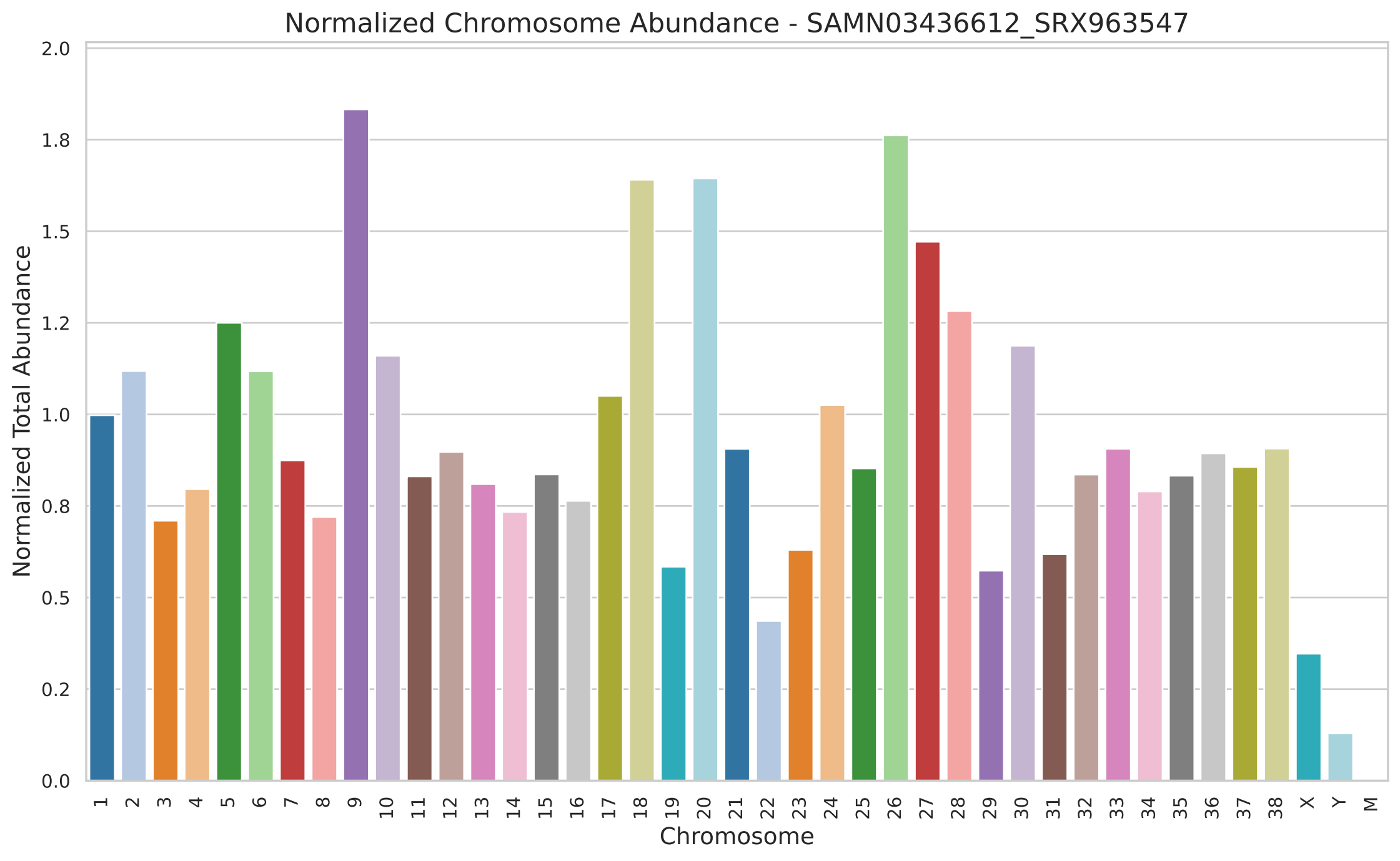

Normalized Chromosome Abundance - SAMN03436520_SRX963438
Normalized Total Abundance
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

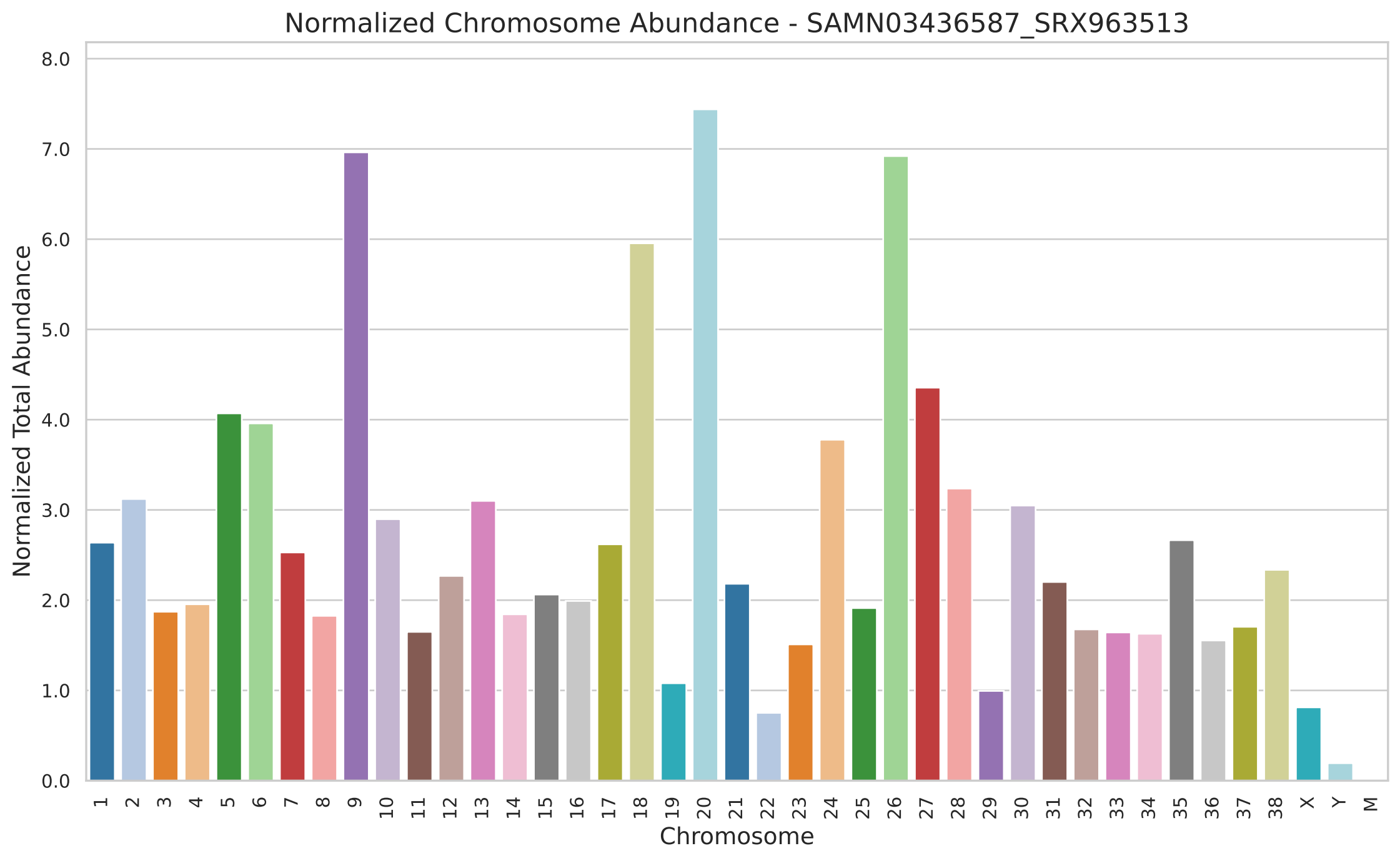

Normalized Chromosome Abundance - SAMN03436575_SRX963500
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

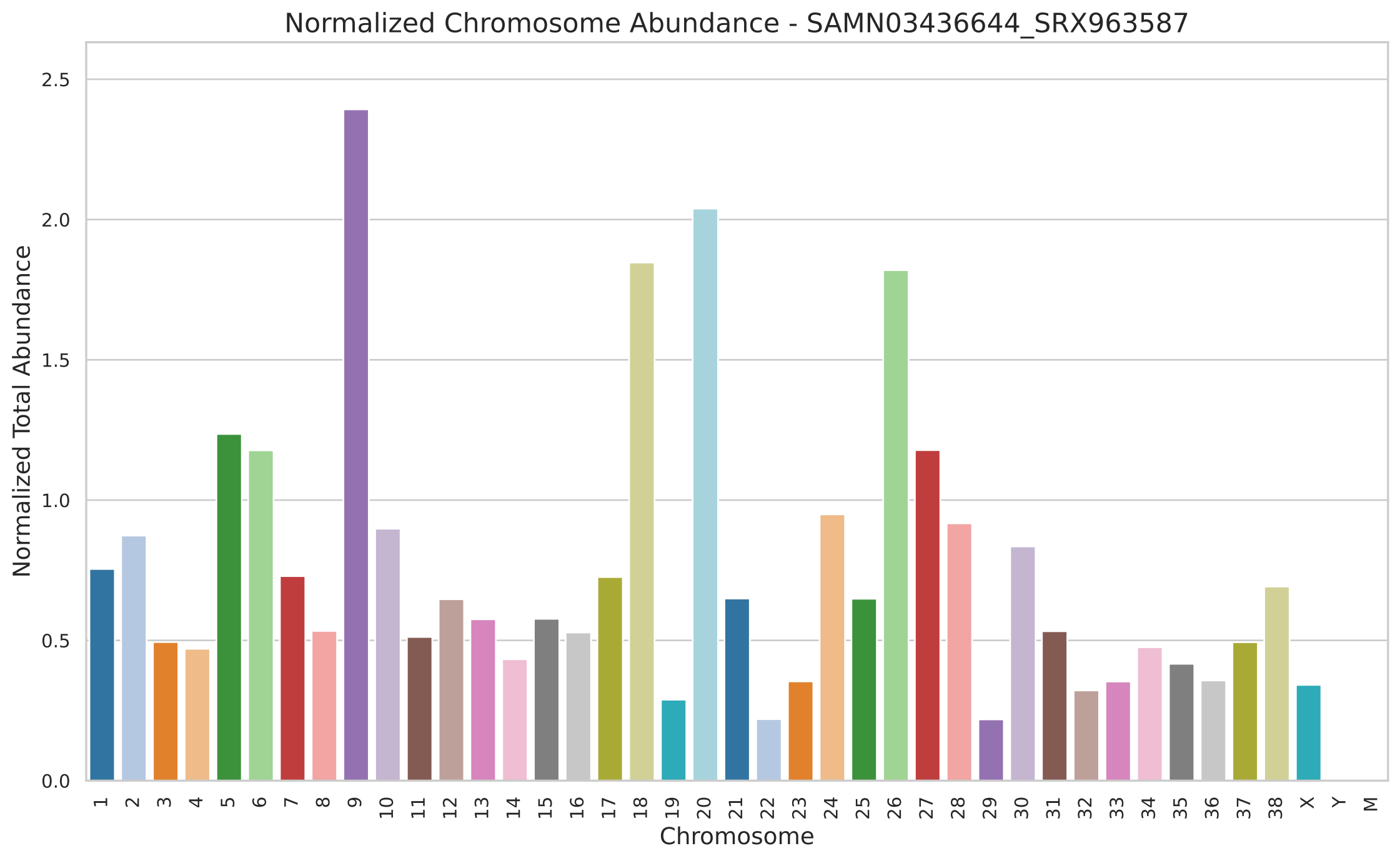

Normalized Chromosome Abundance - SAMN03436561_SRX963485
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

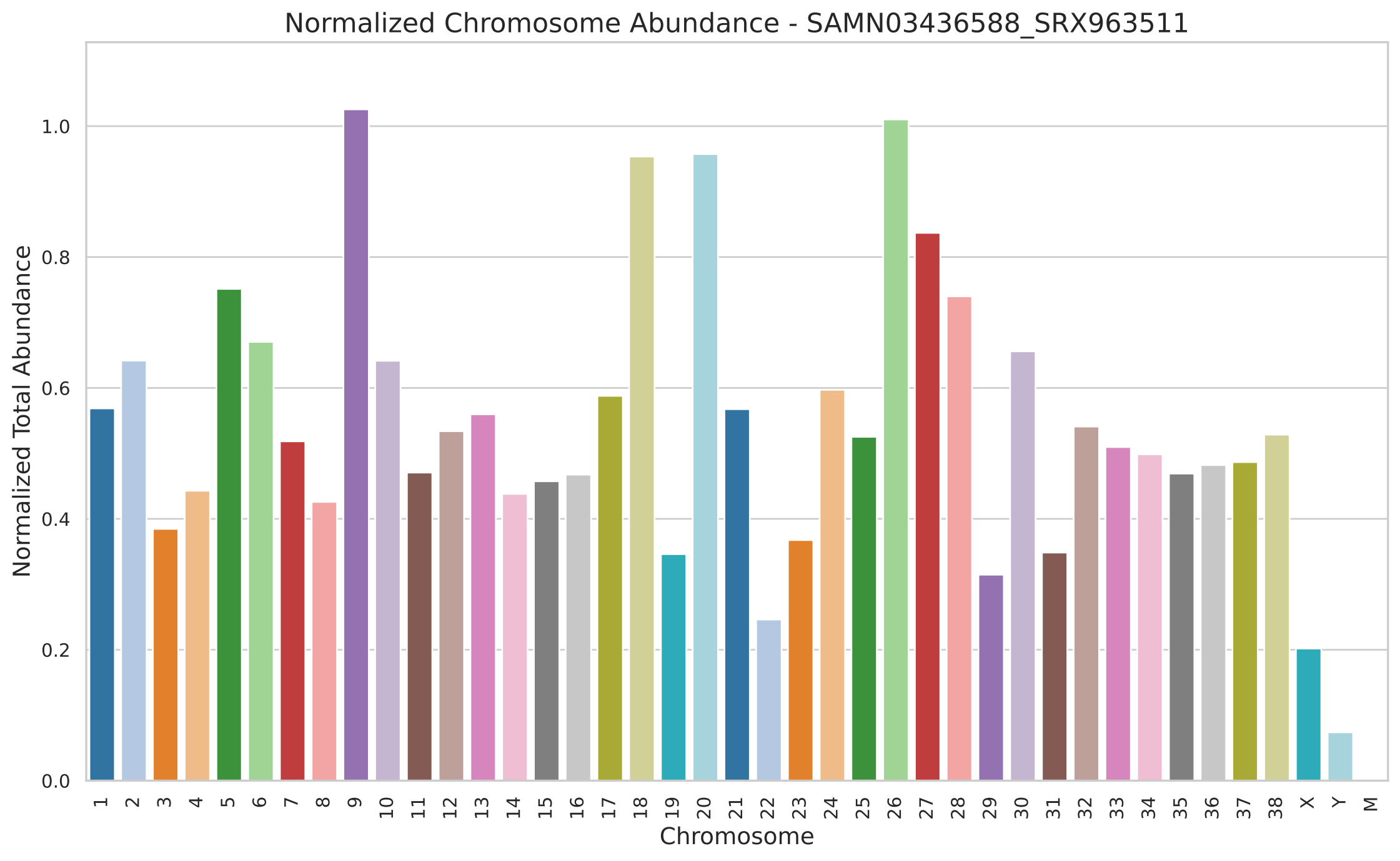

Normalized Chromosome Abundance - SAMN03436539_SRX963459
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

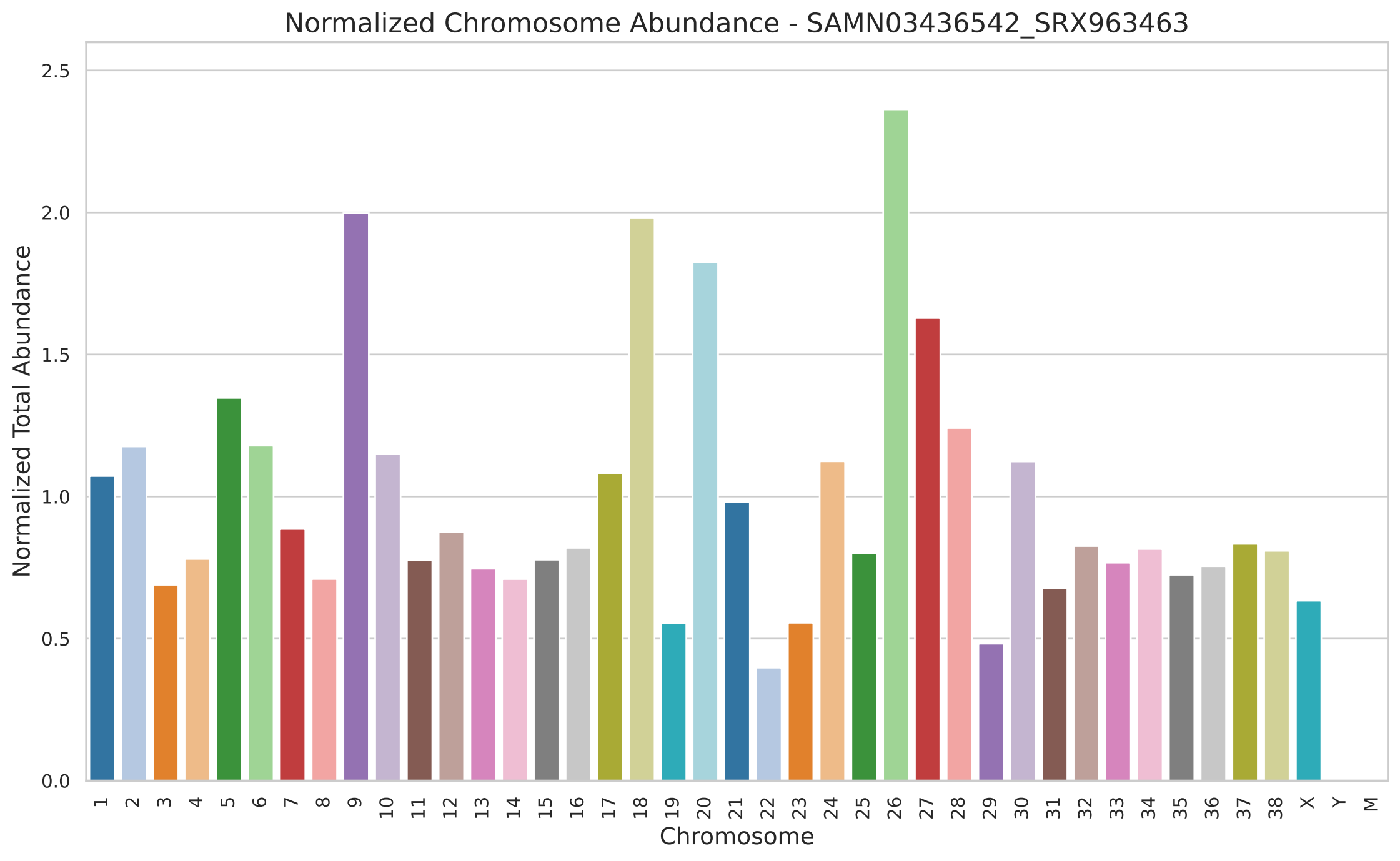

Normalized Chromosome Abundance - SAMN03436584_SRX963508
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

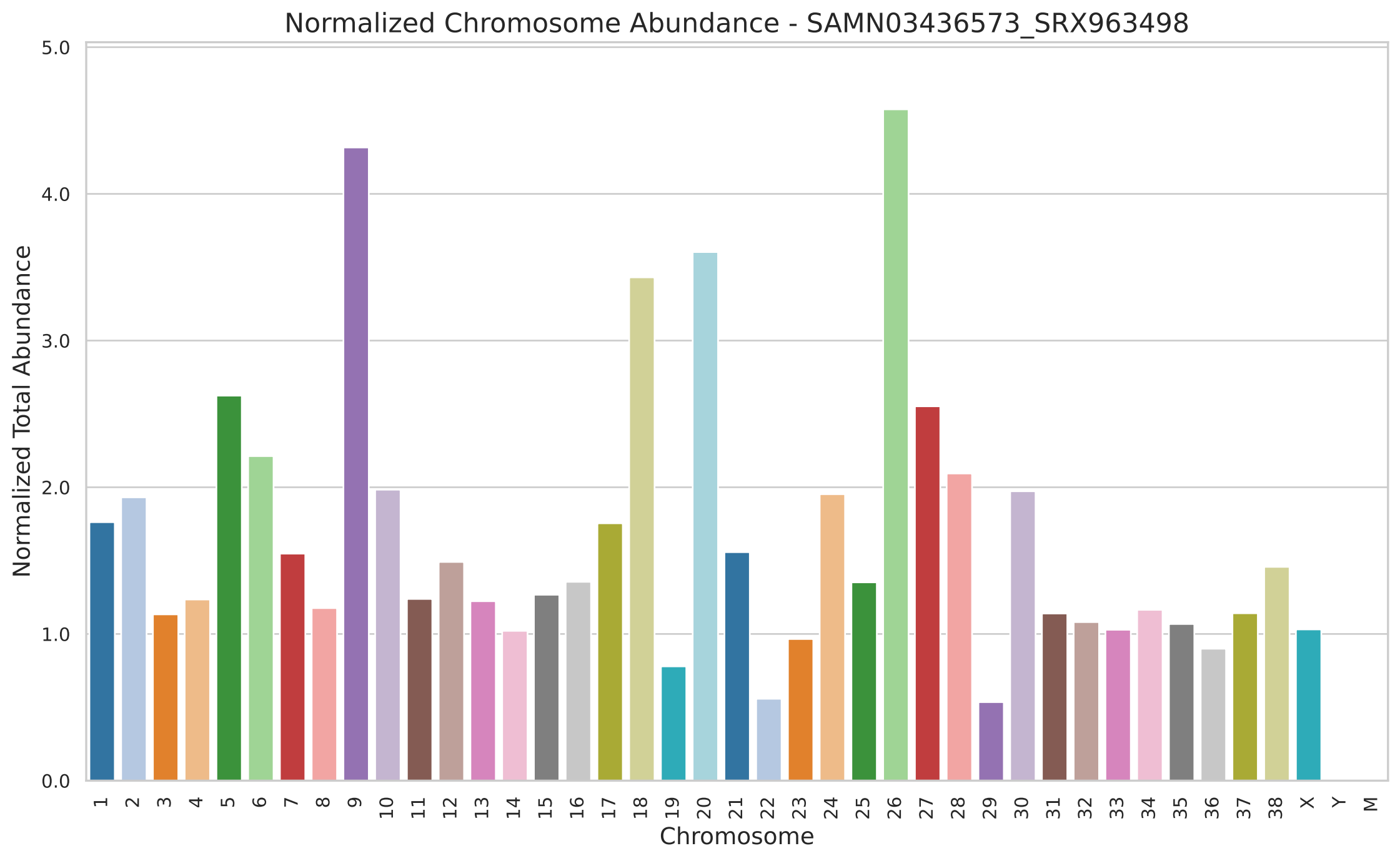

Normalized Chromosome Abundance - SAMN03436612_SRX963547
Normalized Total Abundance
2.0
1.8
1.5
1.2
1.0
0.8
0.5
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

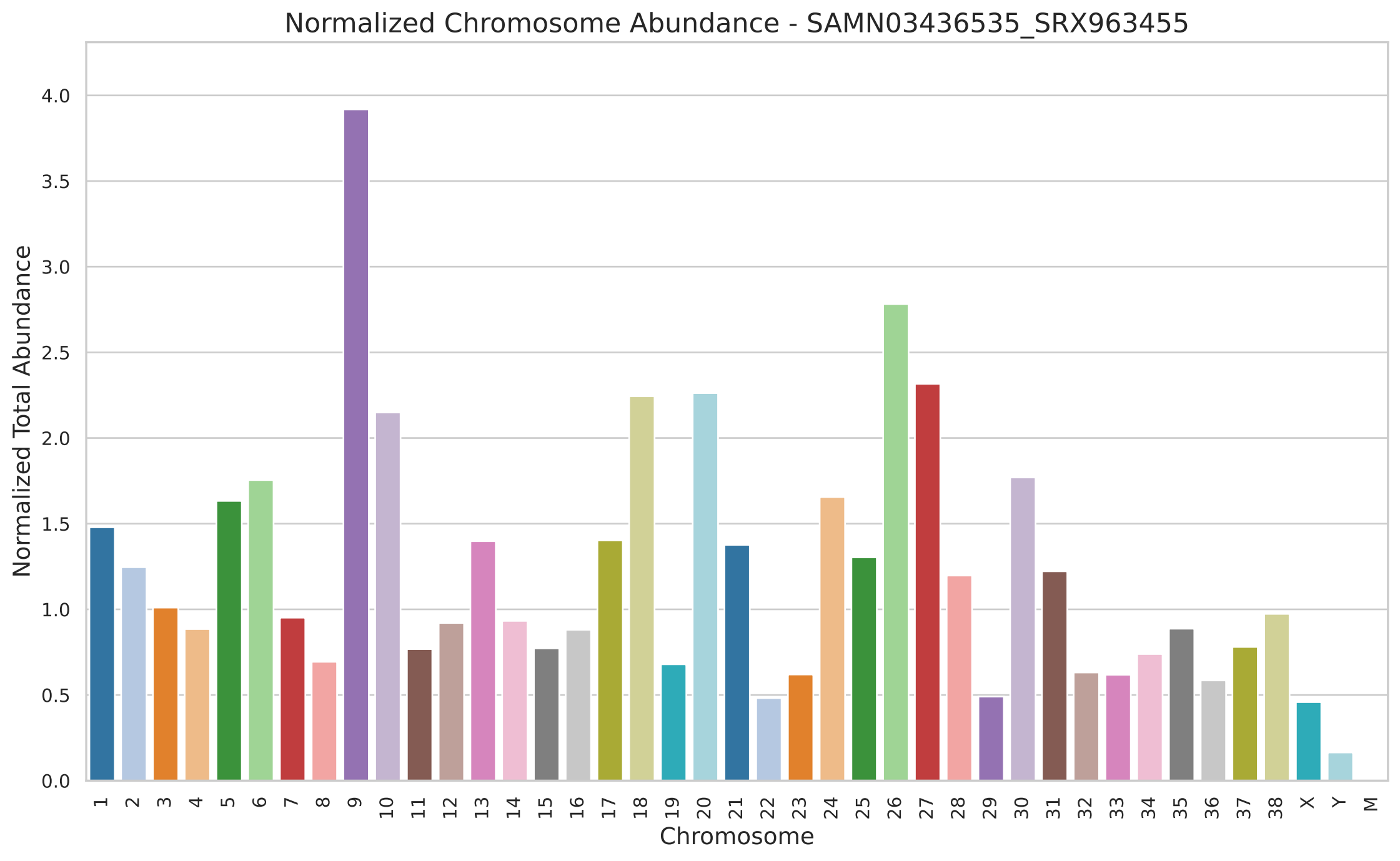

Normalized Chromosome Abundance - SAMN03436587_SRX963513
Normalized Total Abundance
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

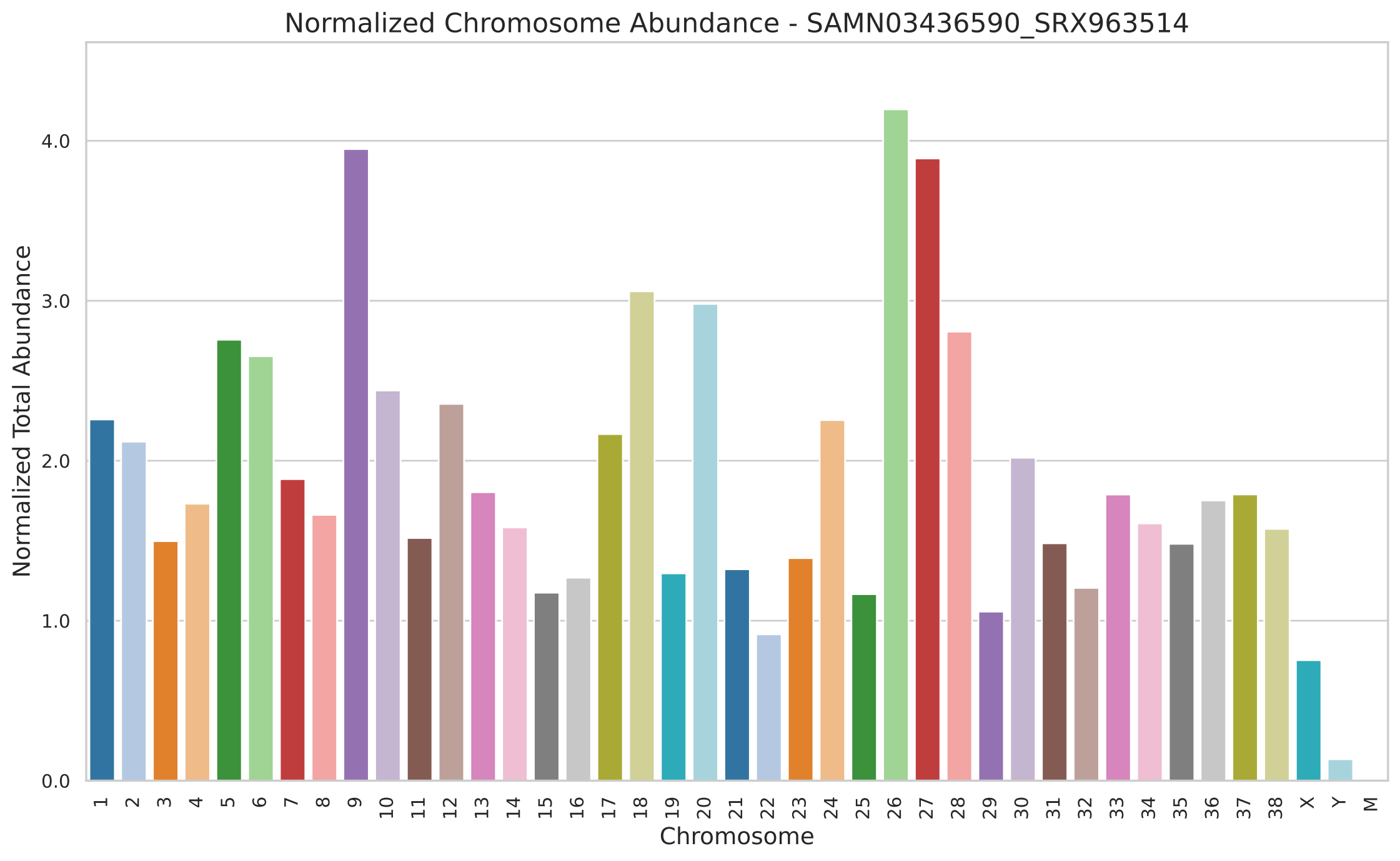

Normalized Chromosome Abundance - SAMN03436644_SRX963587
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

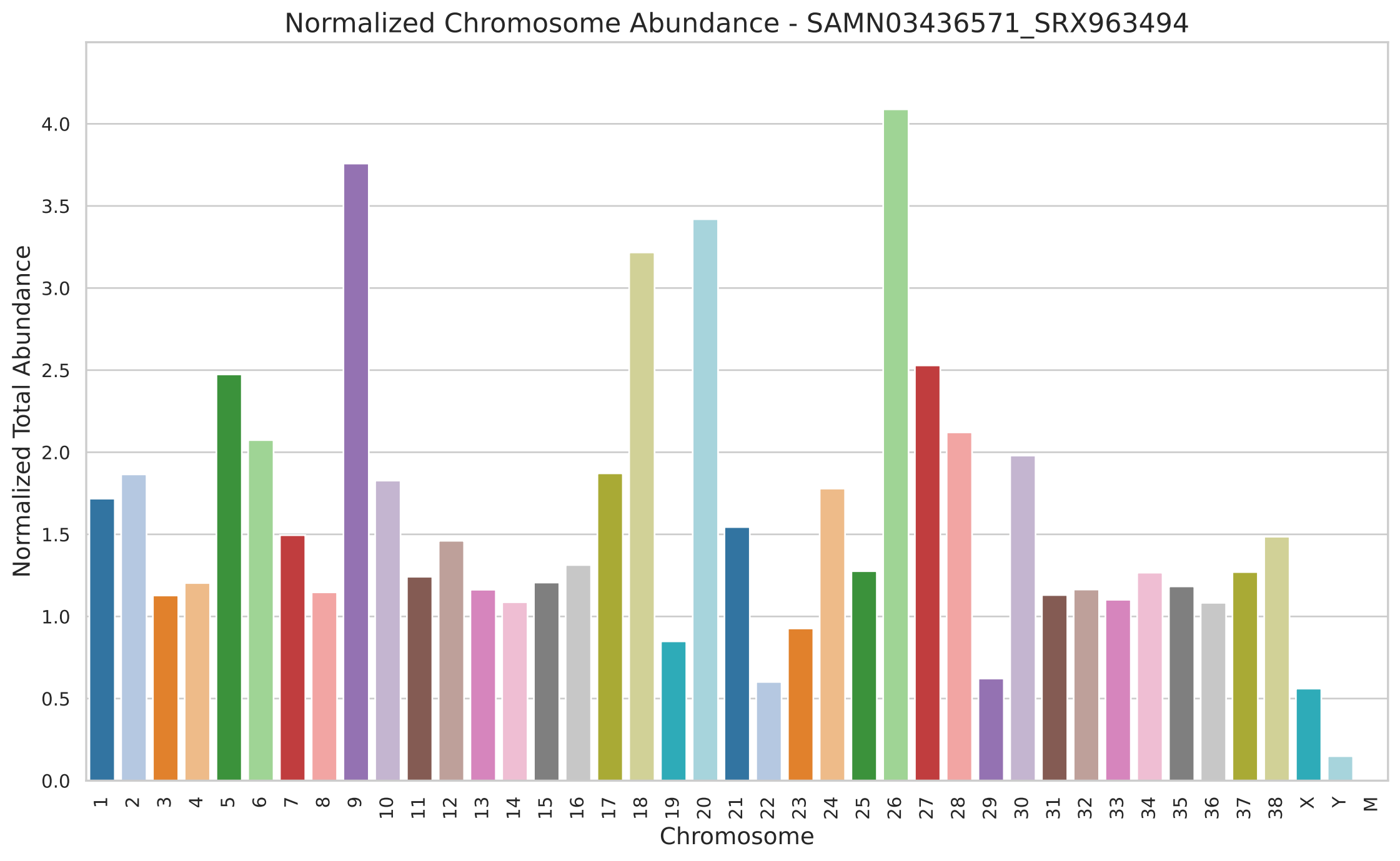

Normalized Chromosome Abundance - SAMN03436588_SRX963511
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

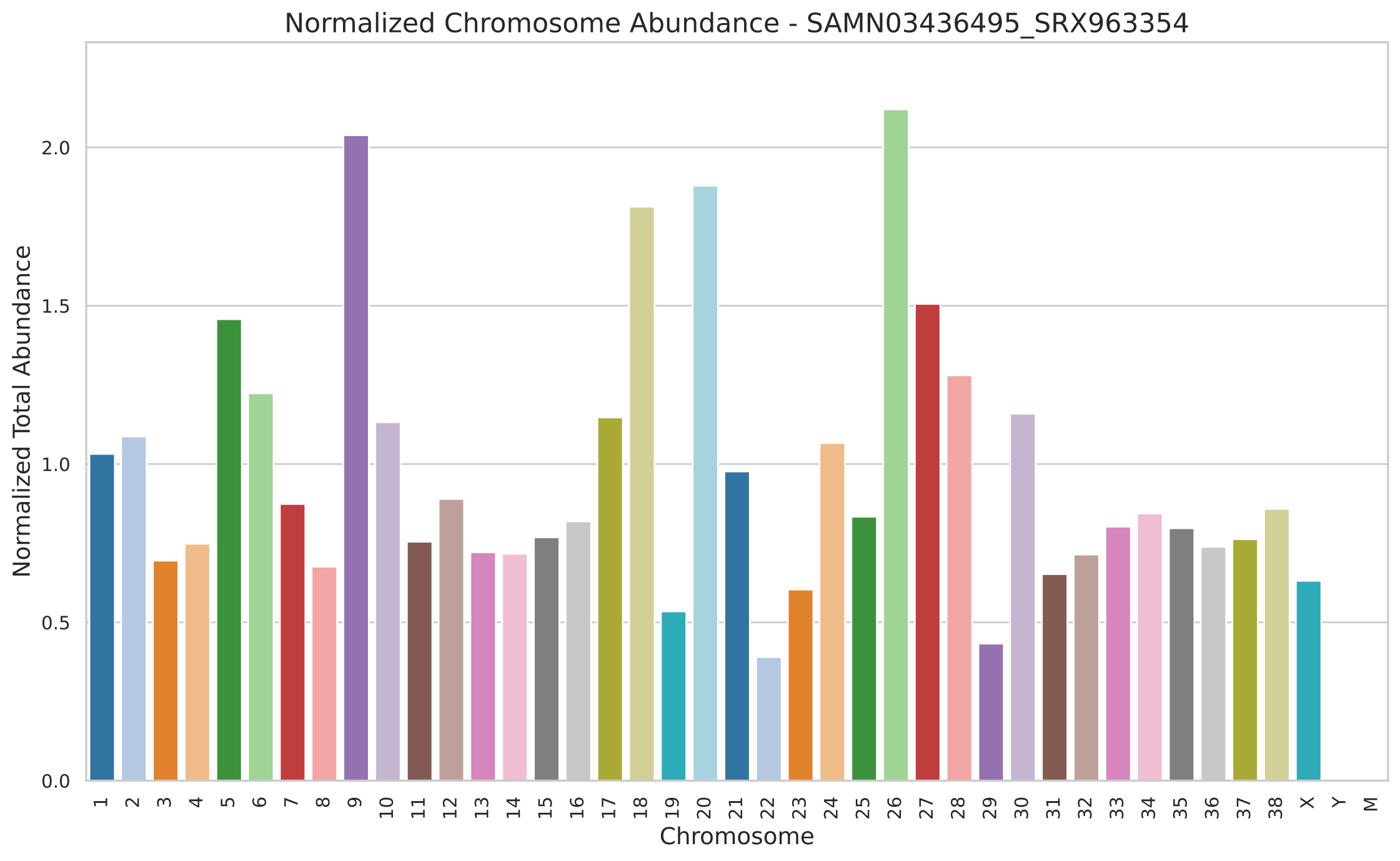

Normalized Chromosome Abundance - SAMN03436542_SRX963463
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

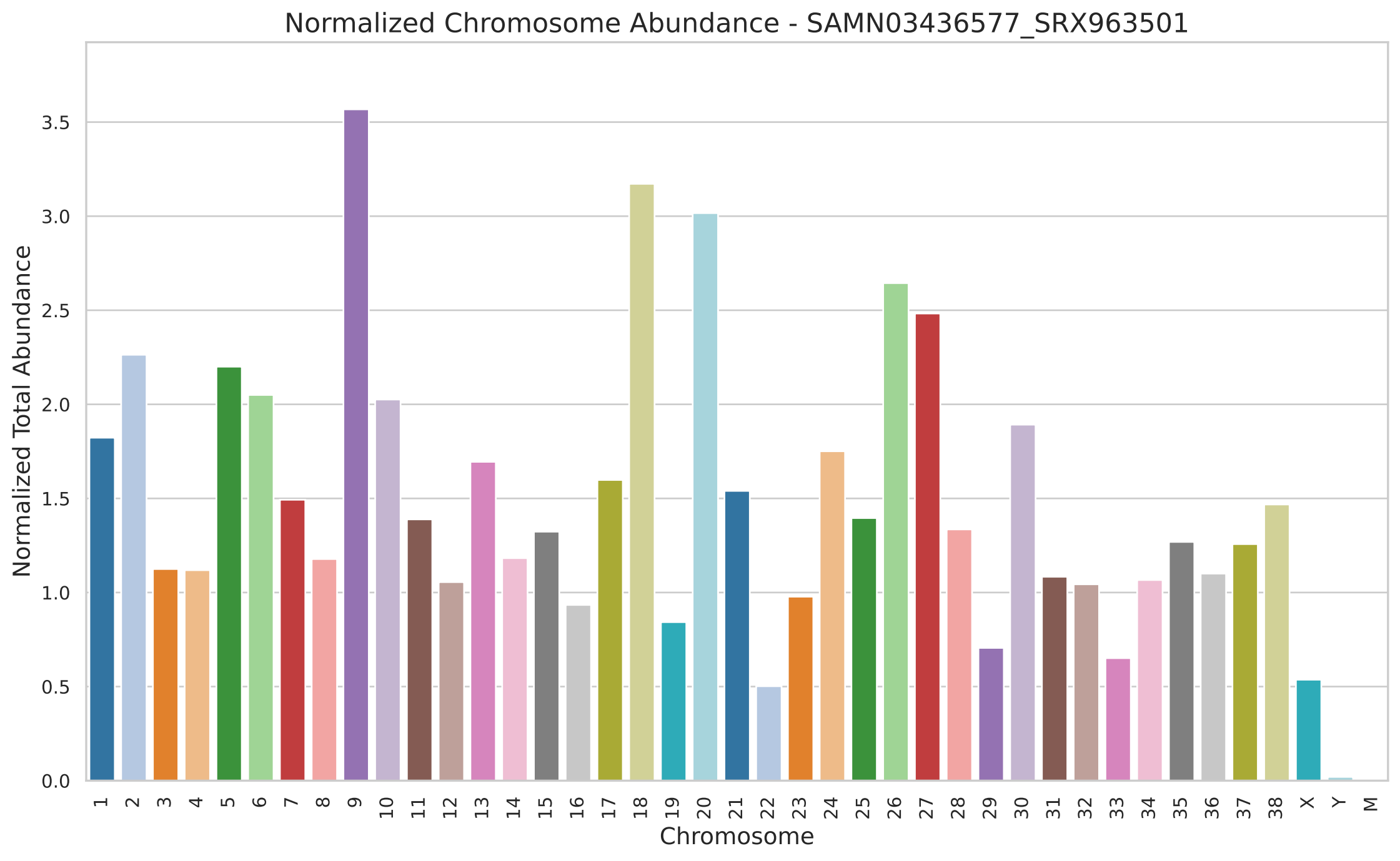

Normalized Chromosome Abundance - SAMN03436573_SRX963498
Normalized Total Abundance
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

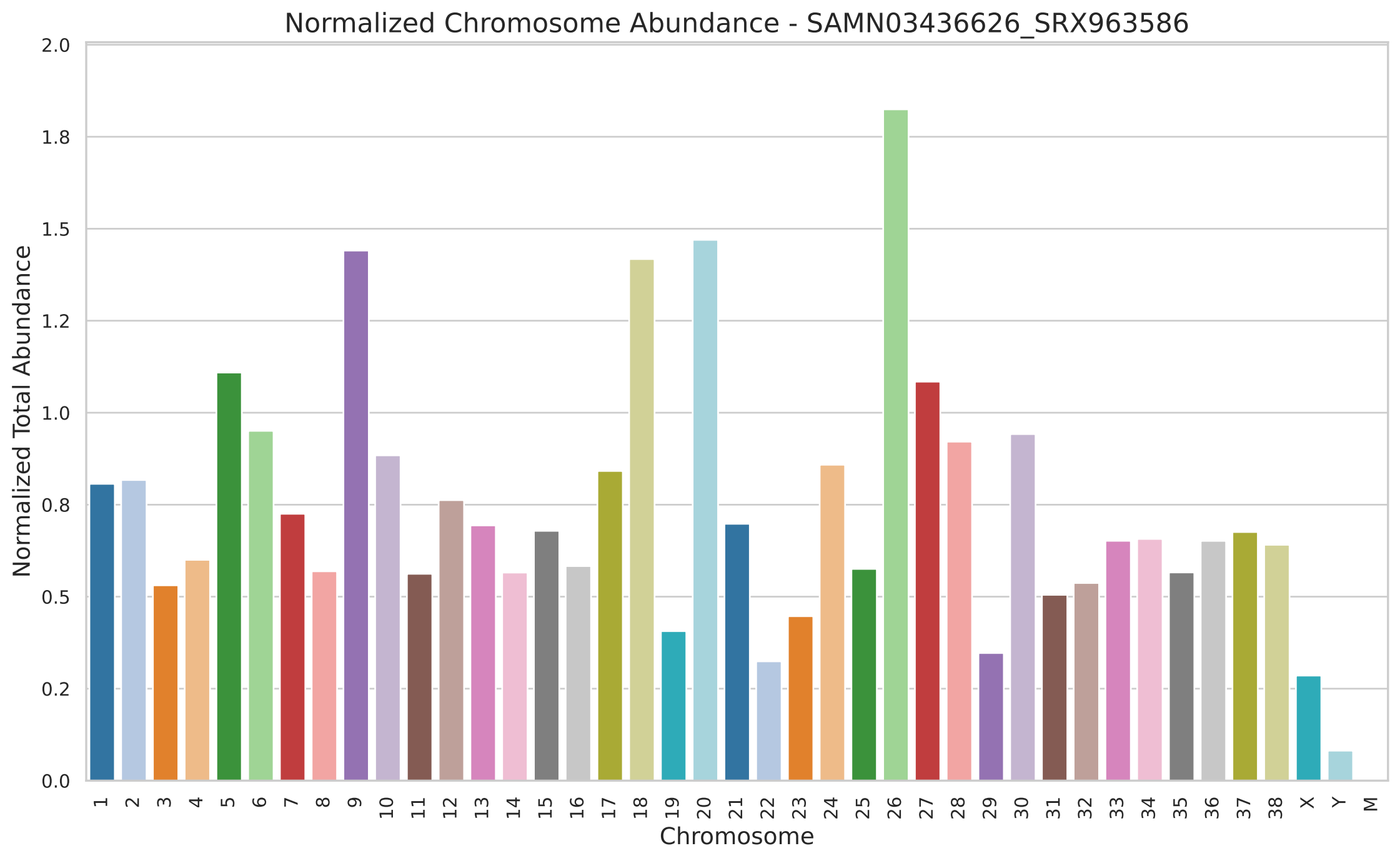

Normalized Chromosome Abundance - SAMN03436535_SRX963455
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

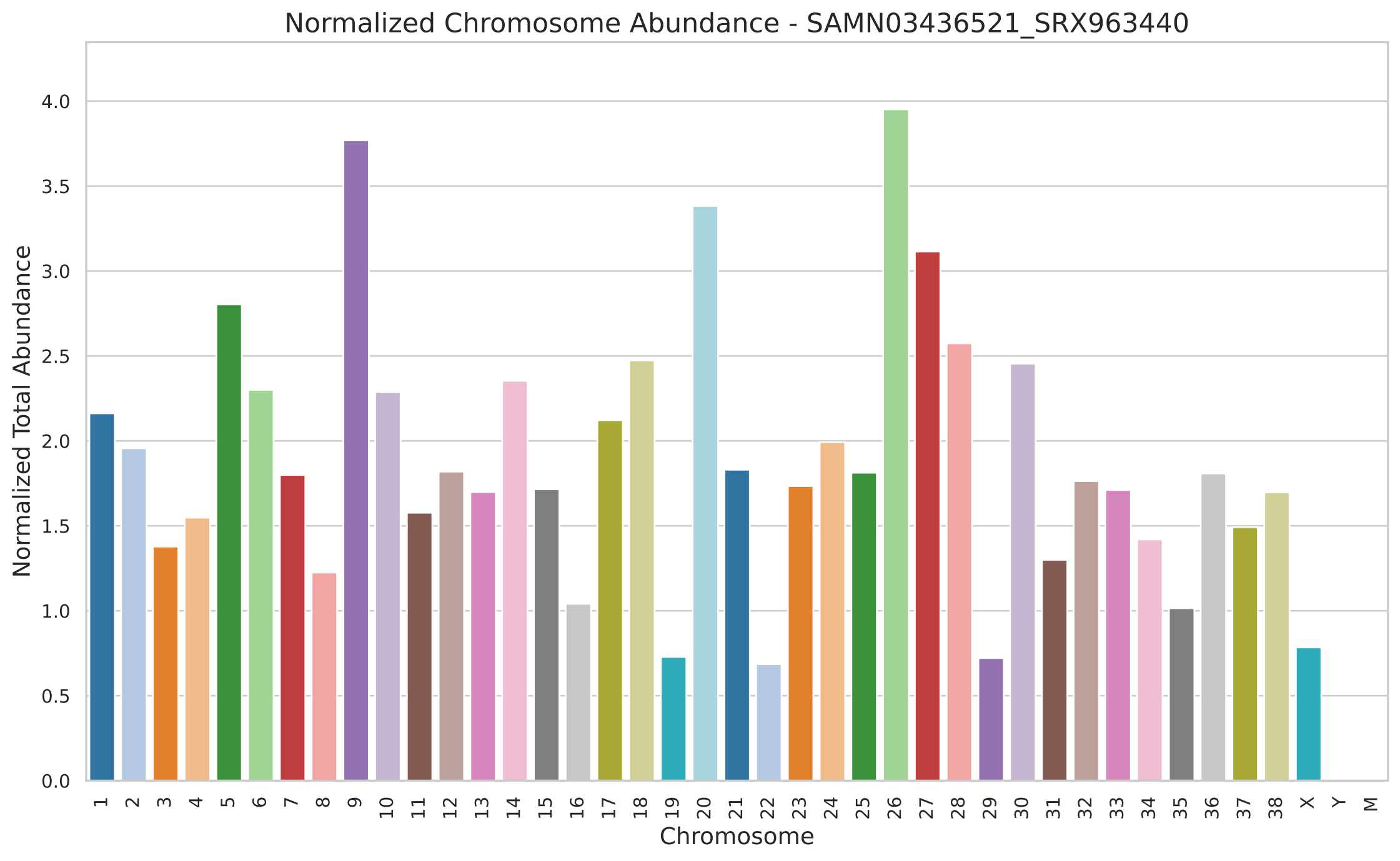

Normalized Chromosome Abundance - SAMN03436590_SRX963514
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

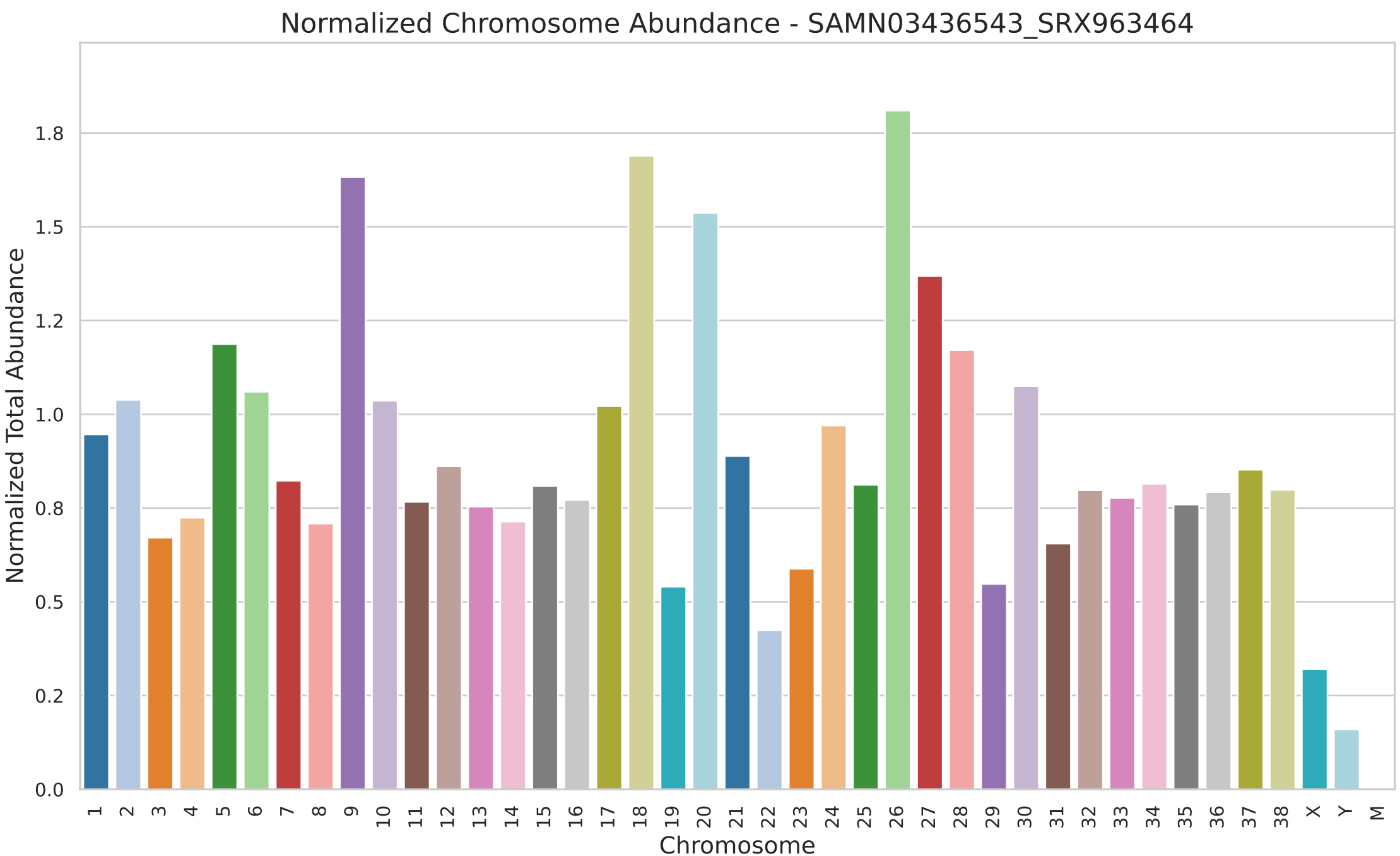

Normalized Chromosome Abundance - SAMN03436571_SRX963494
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

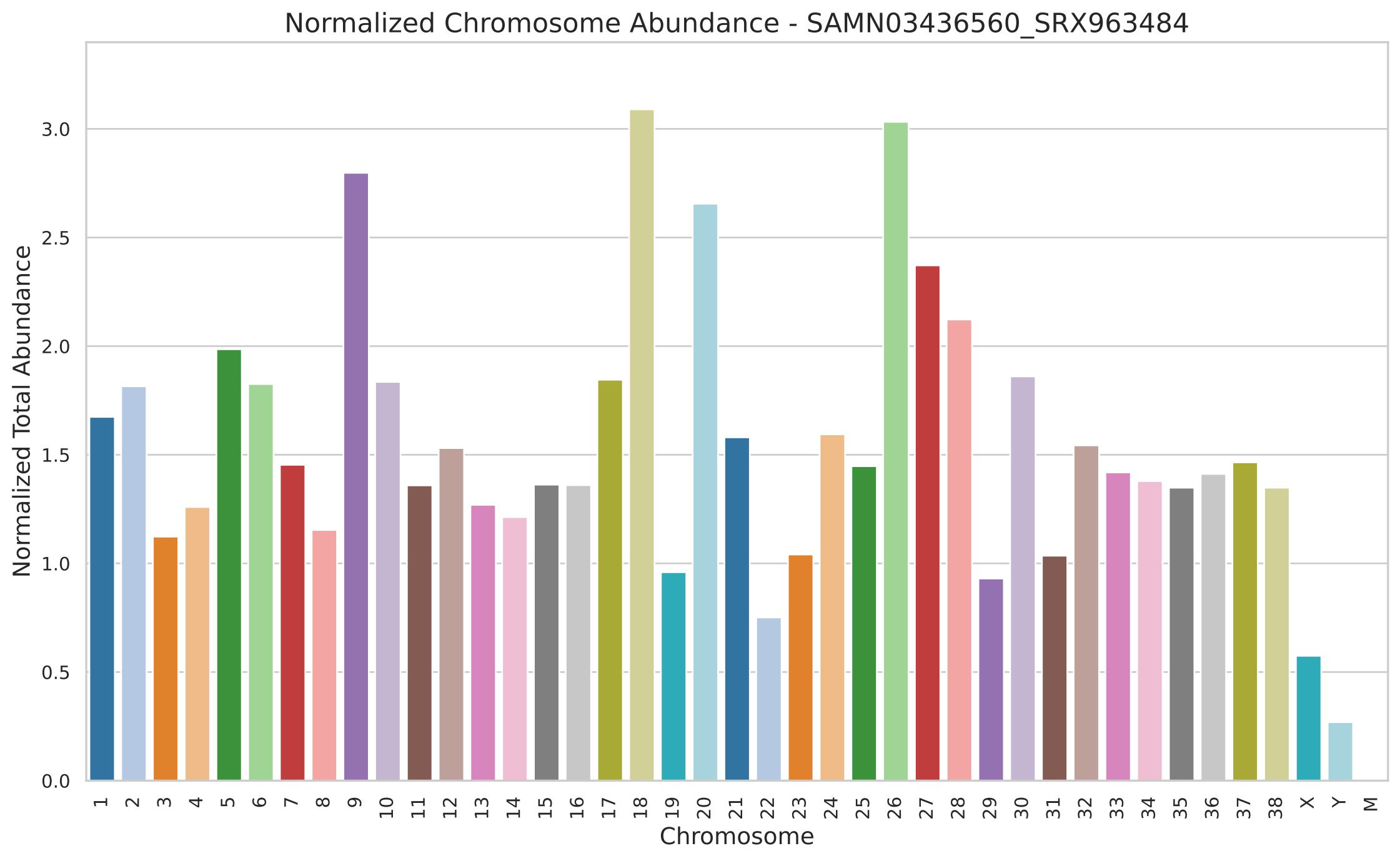

Normalized Chromosome Abundance - SAMN03436495_SRX963354
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

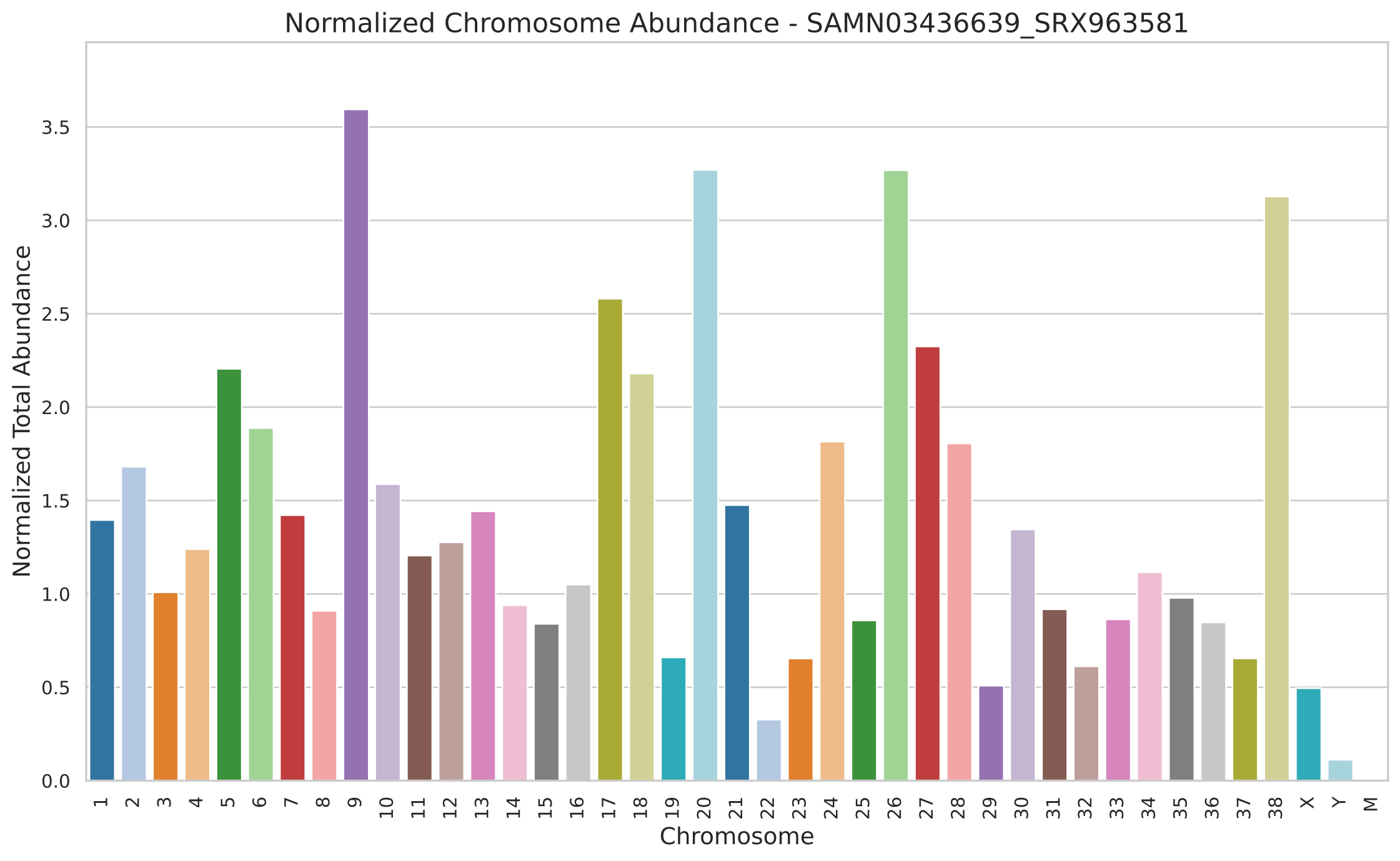

Normalized Chromosome Abundance - SAMN03436577_SRX963501
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

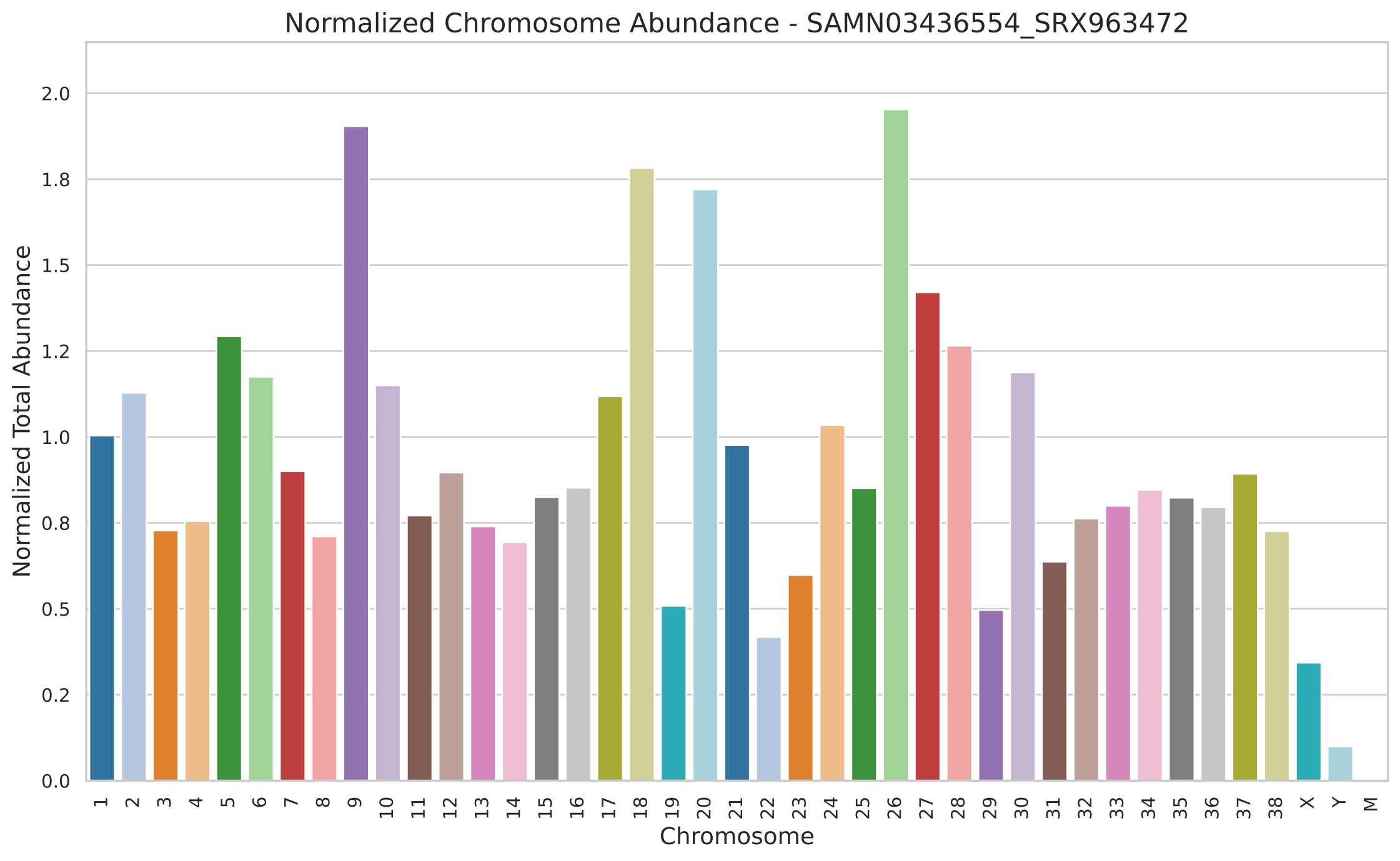

Normalized Chromosome Abundance - SAMN03436626_SRX963586
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

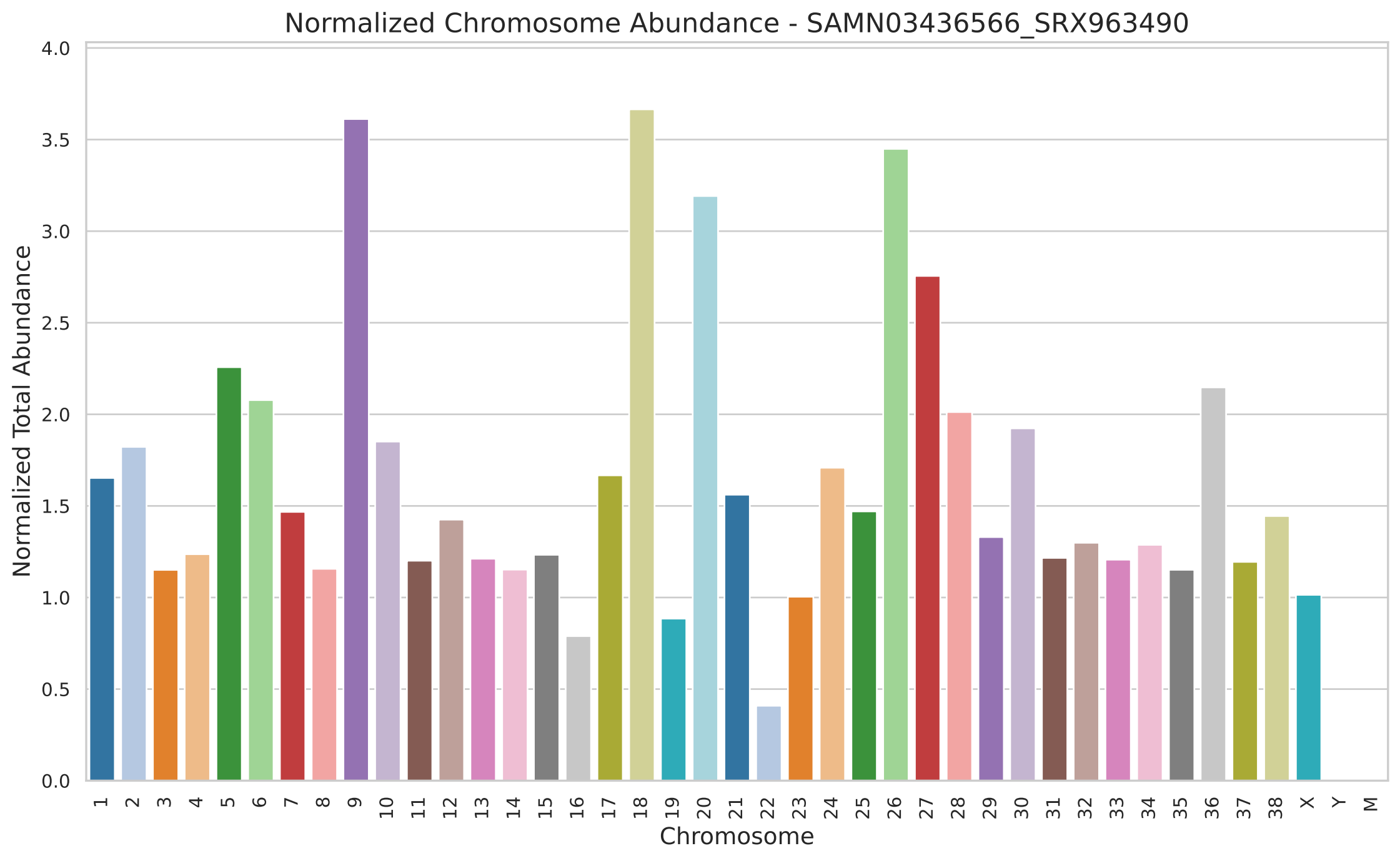

Normalized Chromosome Abundance - SAMN03436521_SRX963440
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

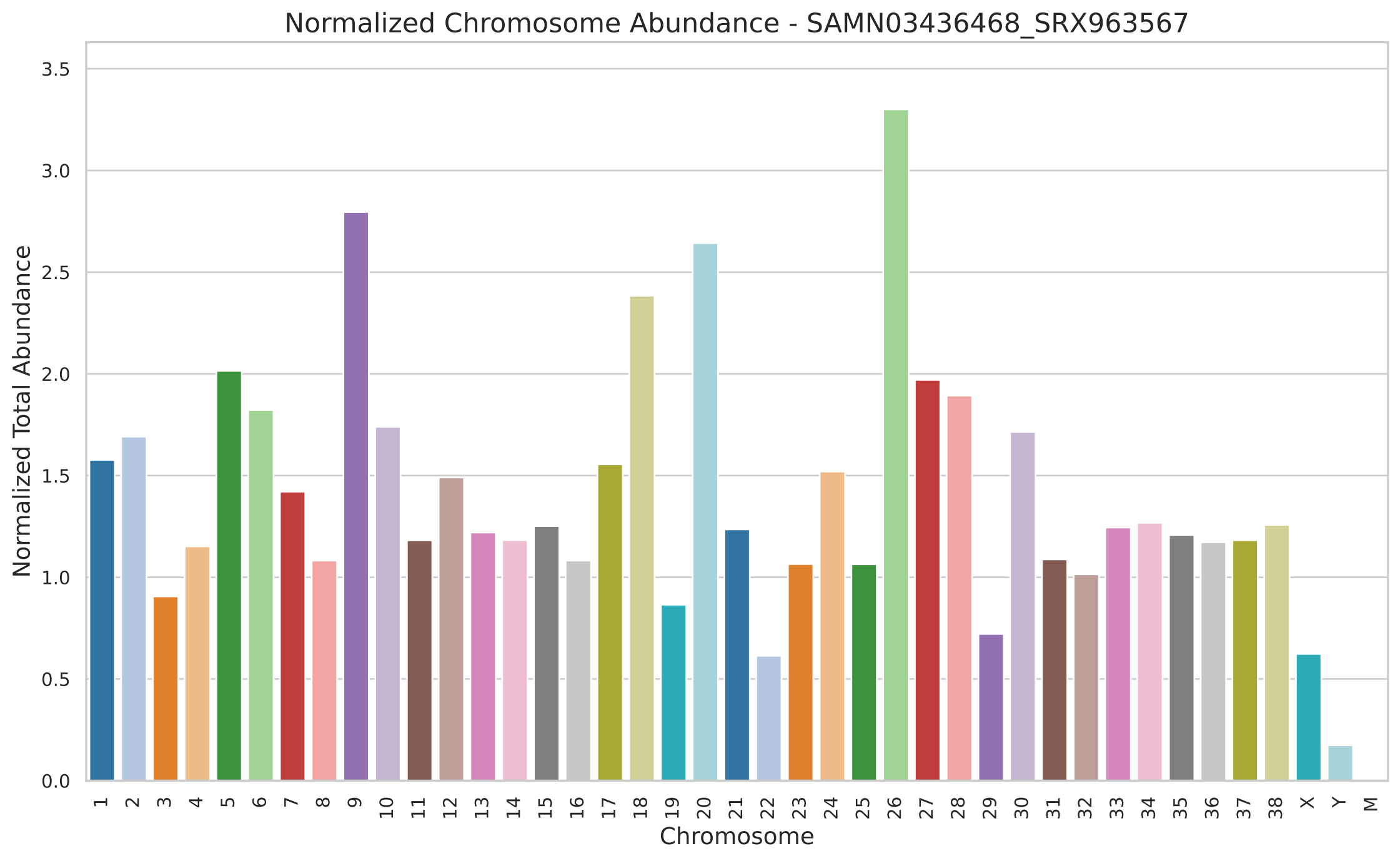

Normalized Chromosome Abundance - SAMN03436543_SRX963464
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

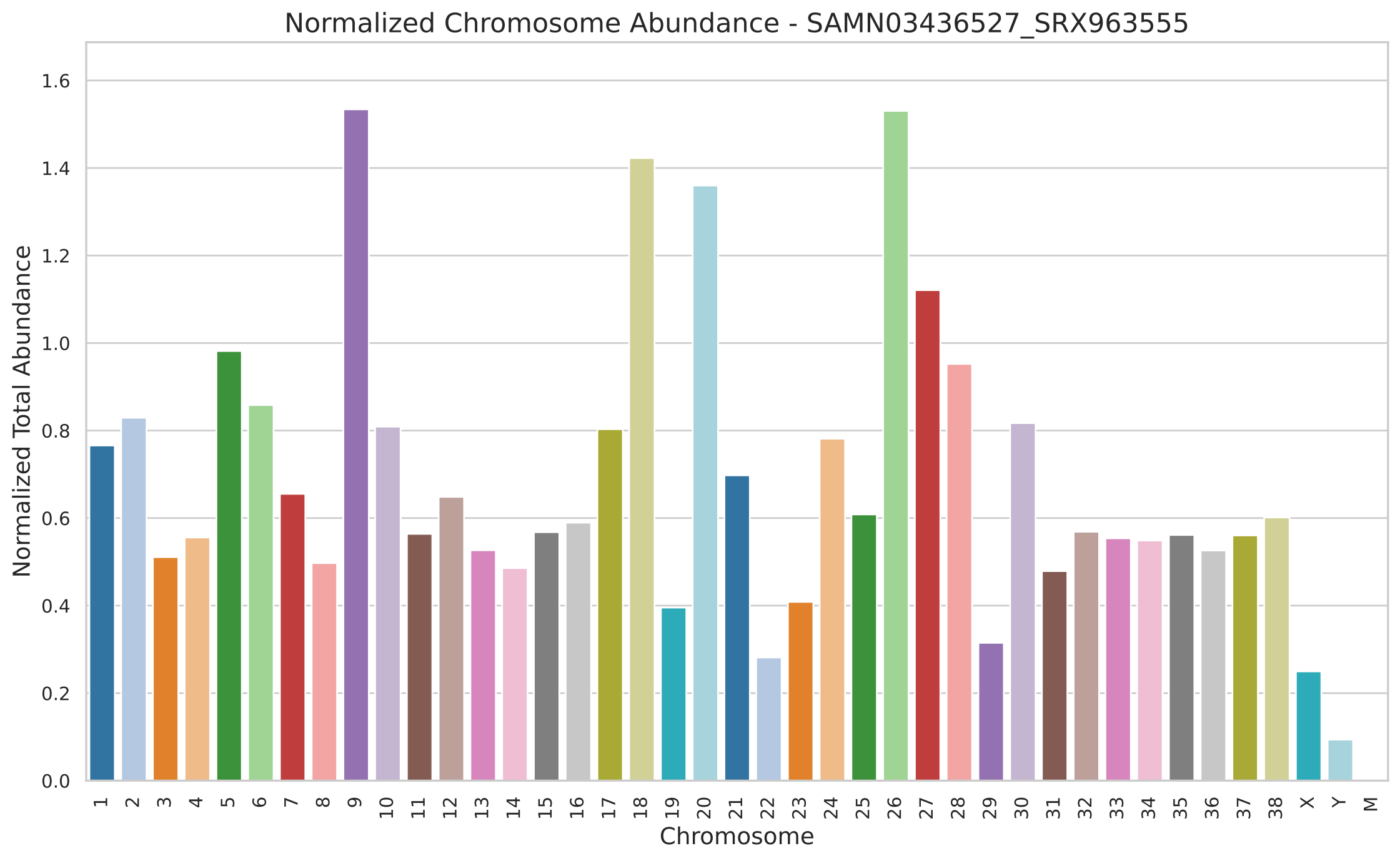

Normalized Chromosome Abundance - SAMN03436560_SRX963484
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

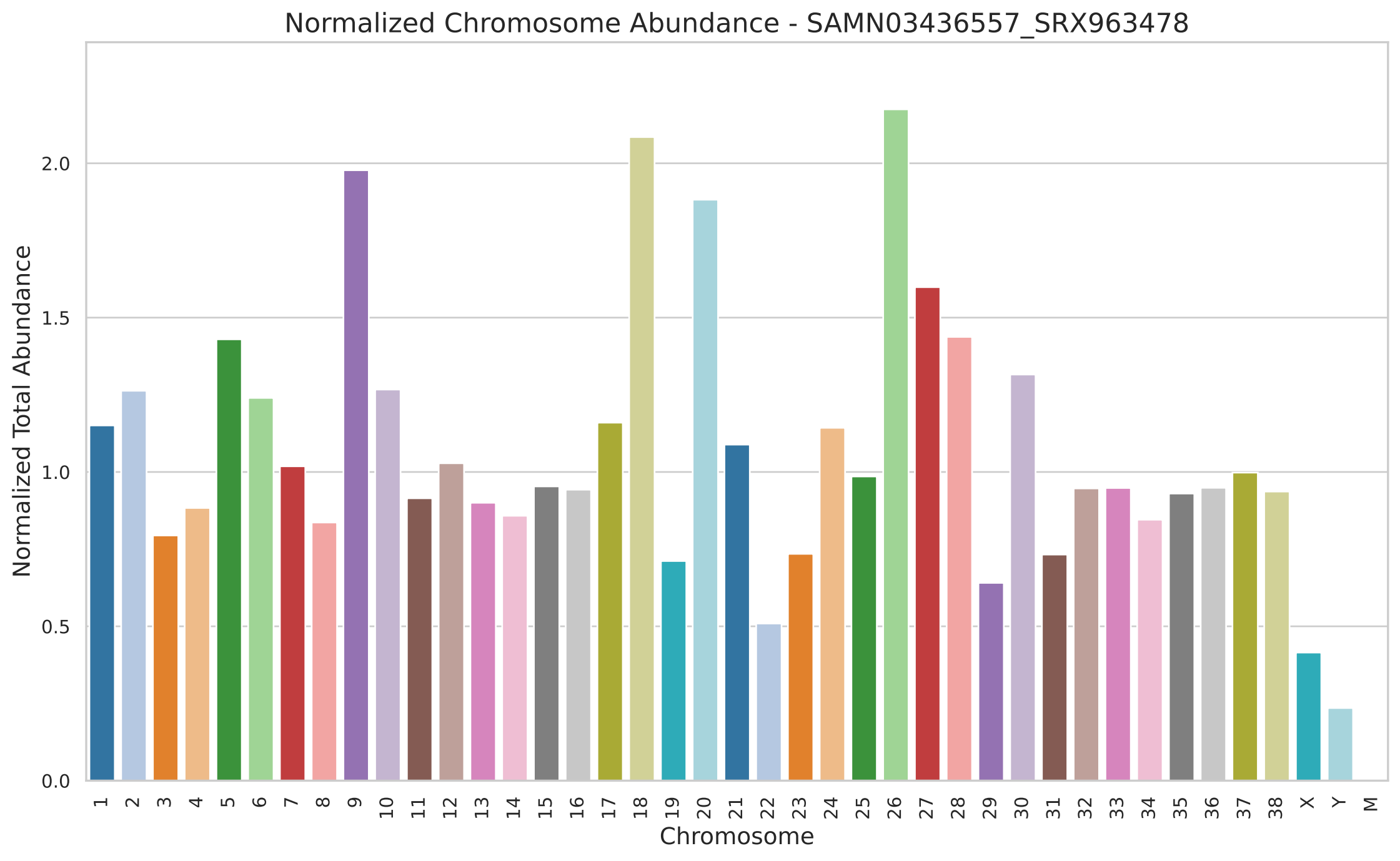

Normalized Chromosome Abundance - SAMN03436639_SRX963581
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

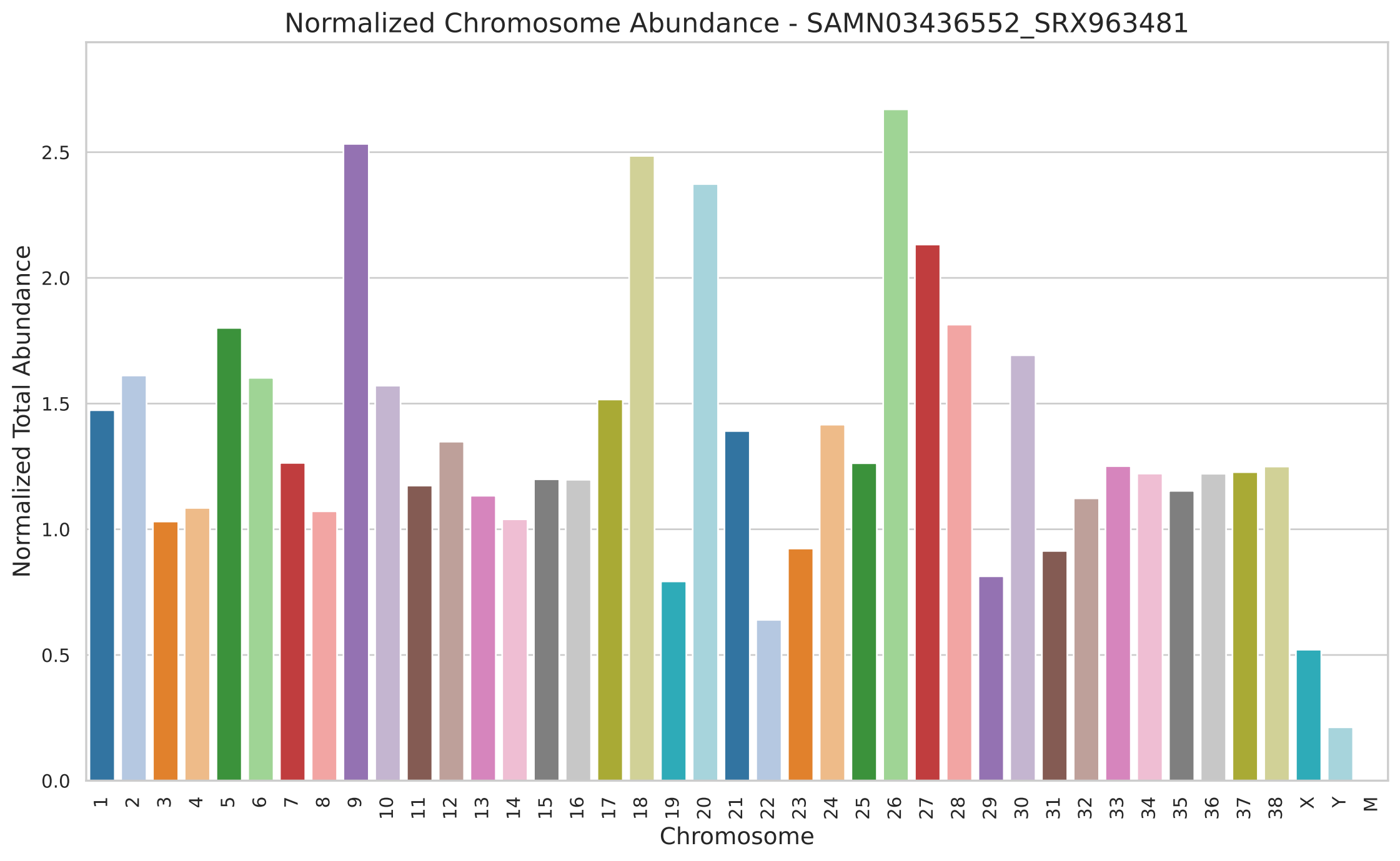

Normalized Chromosome Abundance - SAMN03436554_SRX963472
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

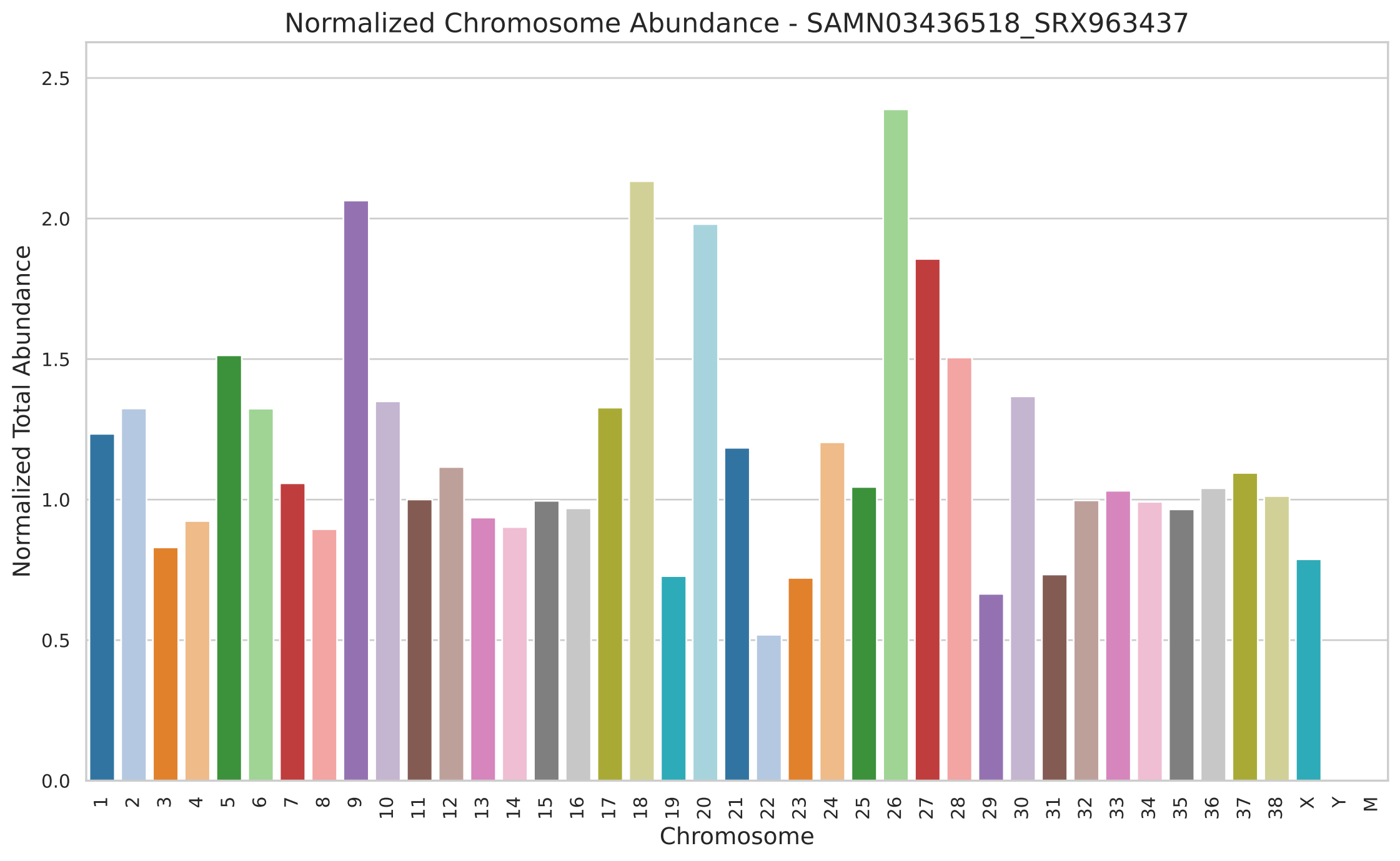

Normalized Chromosome Abundance - SAMN03436566_SRX963490
Normalized Total Abundance
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

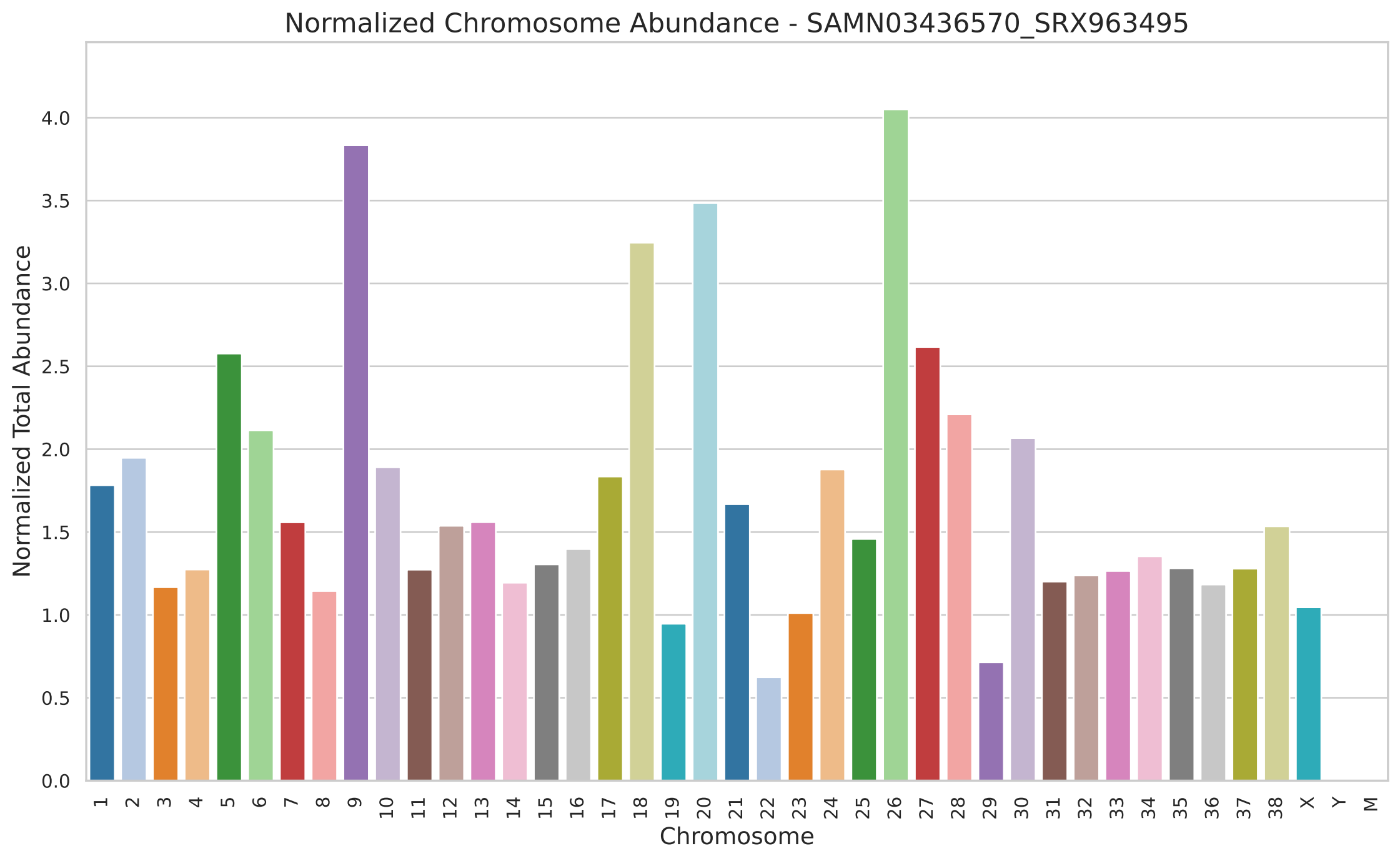

Normalized Chromosome Abundance - SAMN03436468_SRX963567
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

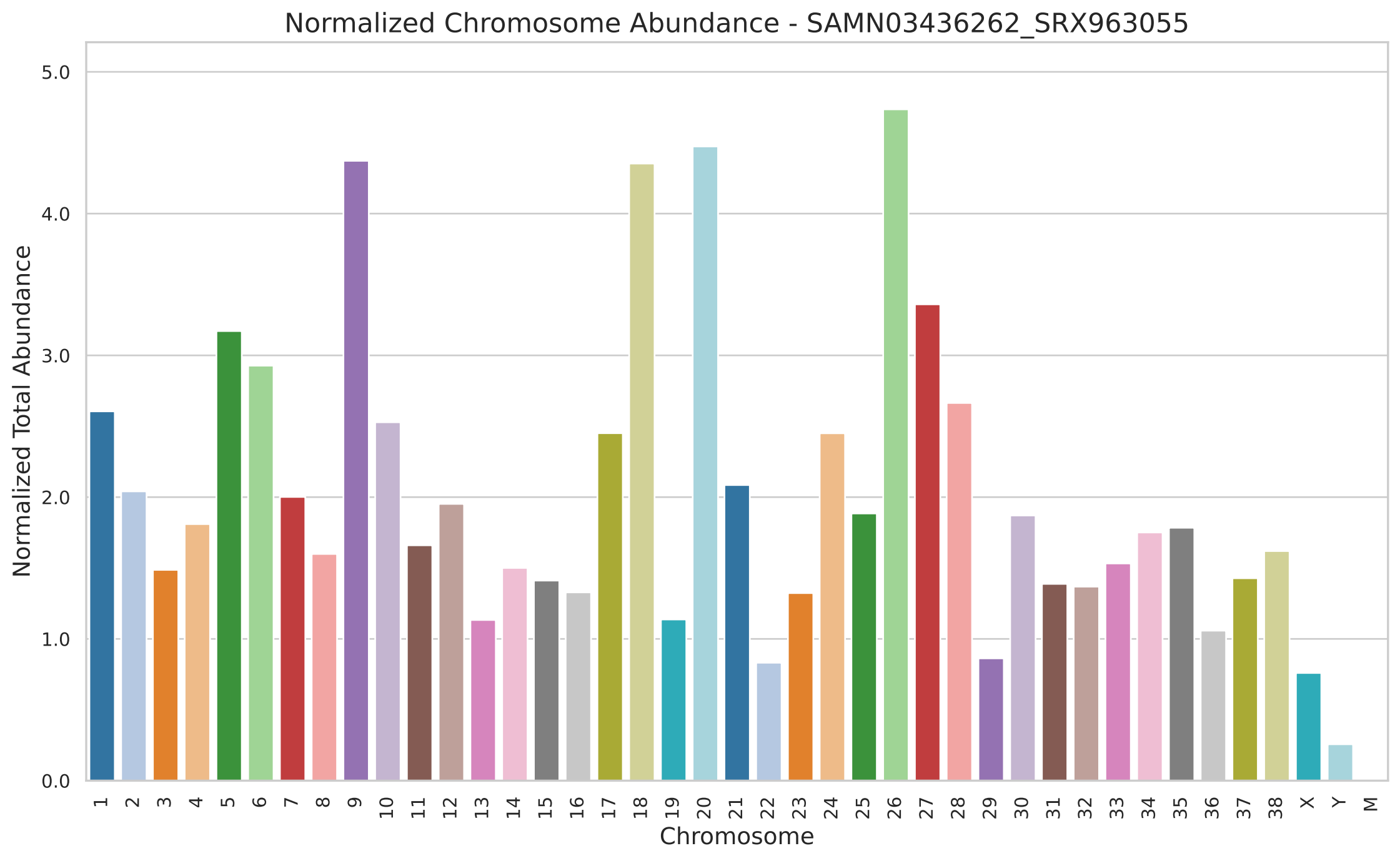

Normalized Chromosome Abundance - SAMN03436527_SRX963555
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

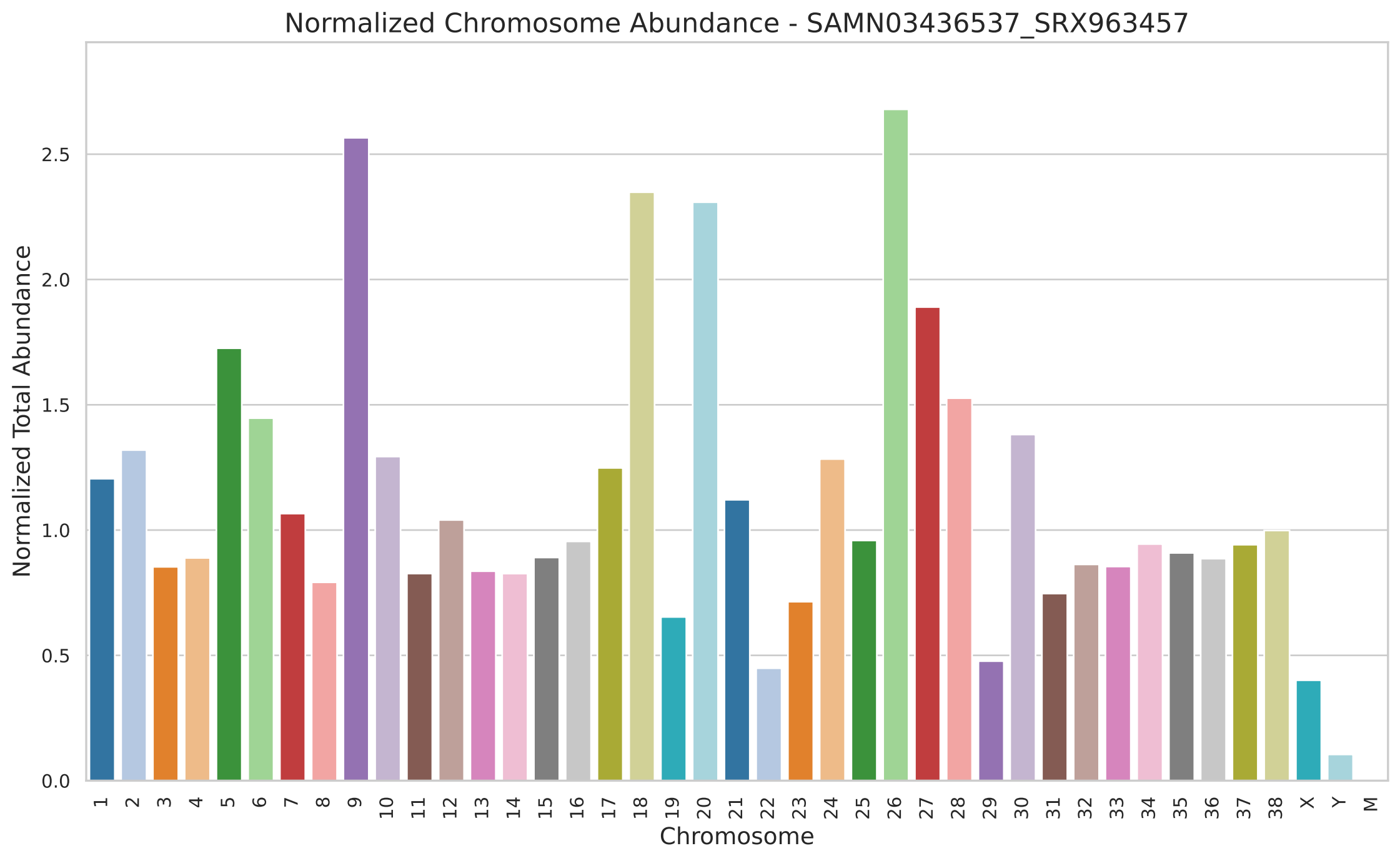

Normalized Chromosome Abundance - SAMN03436557_SRX963478
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

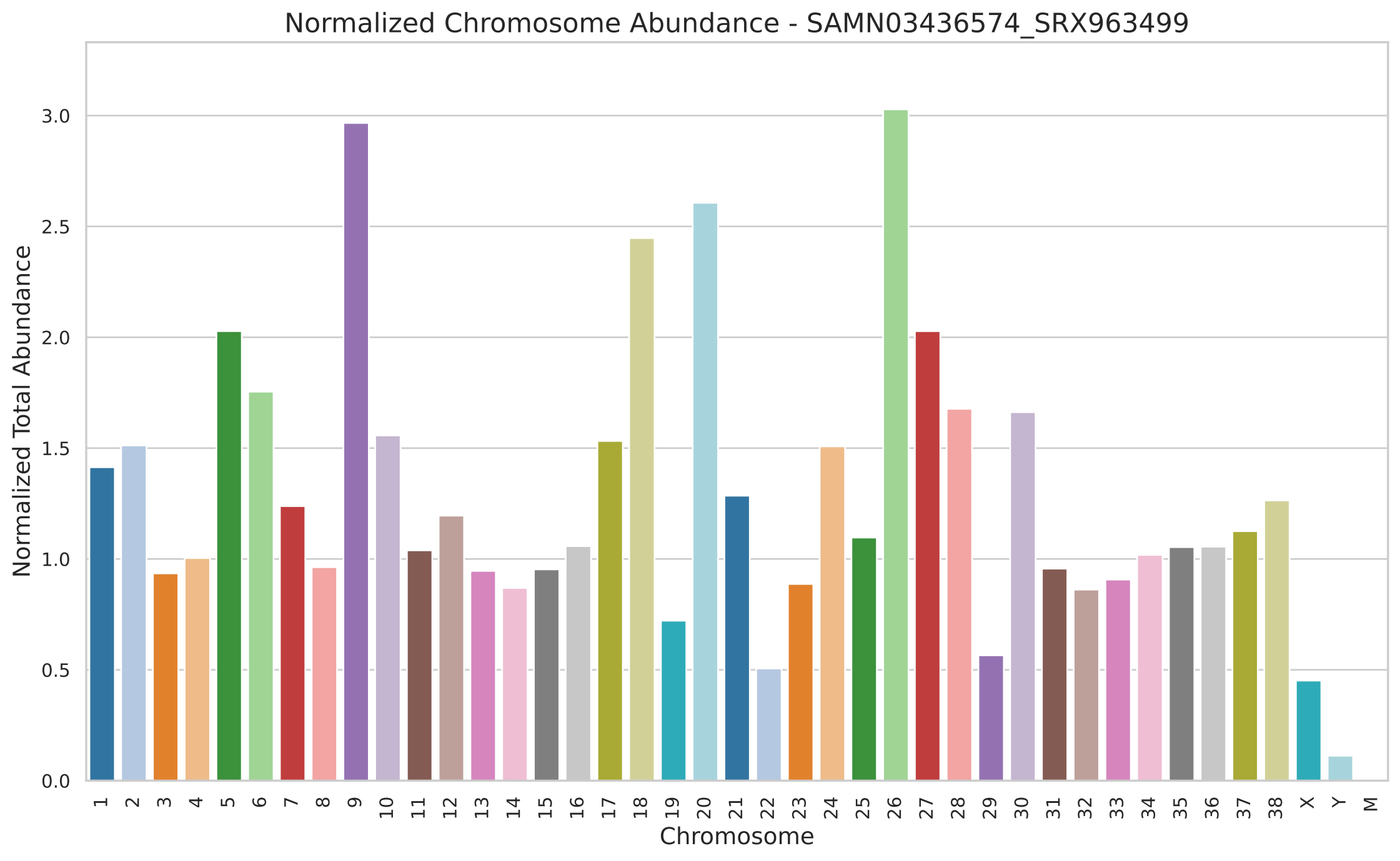

Normalized Chromosome Abundance - SAMN03436552_SRX963481
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

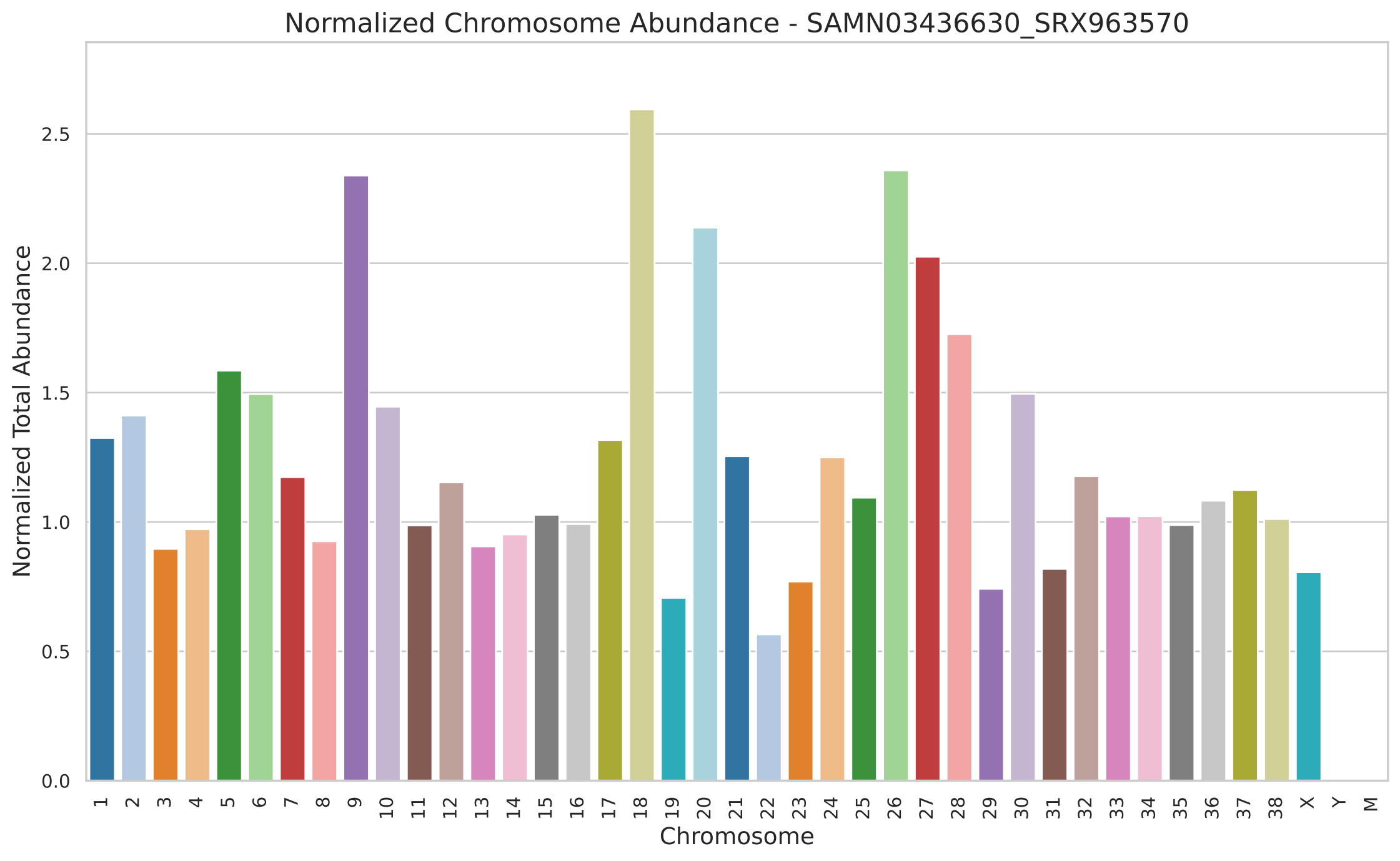

Normalized Chromosome Abundance - SAMN03436518_SRX963437
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

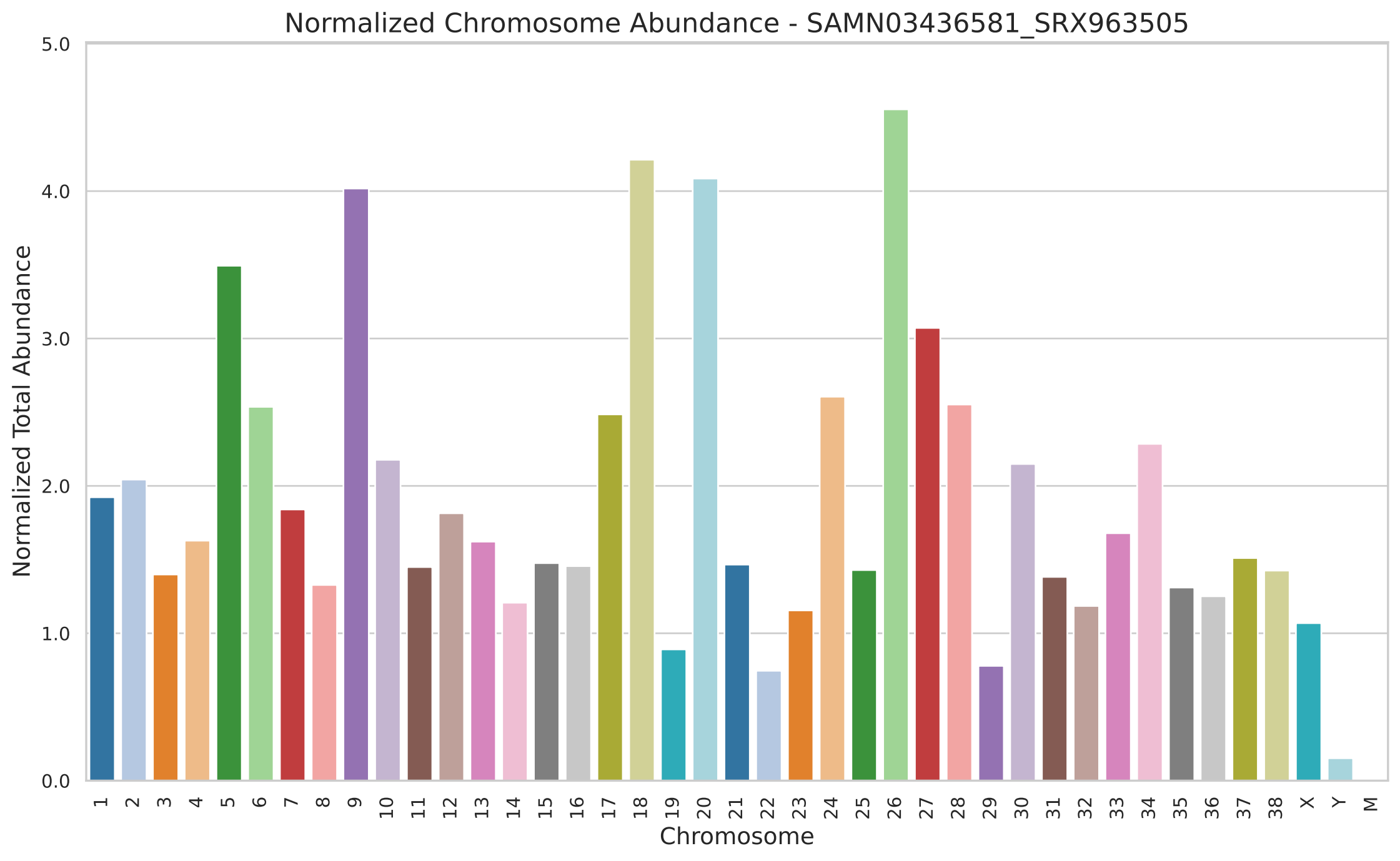

Normalized Chromosome Abundance - SAMN03436570_SRX963495
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

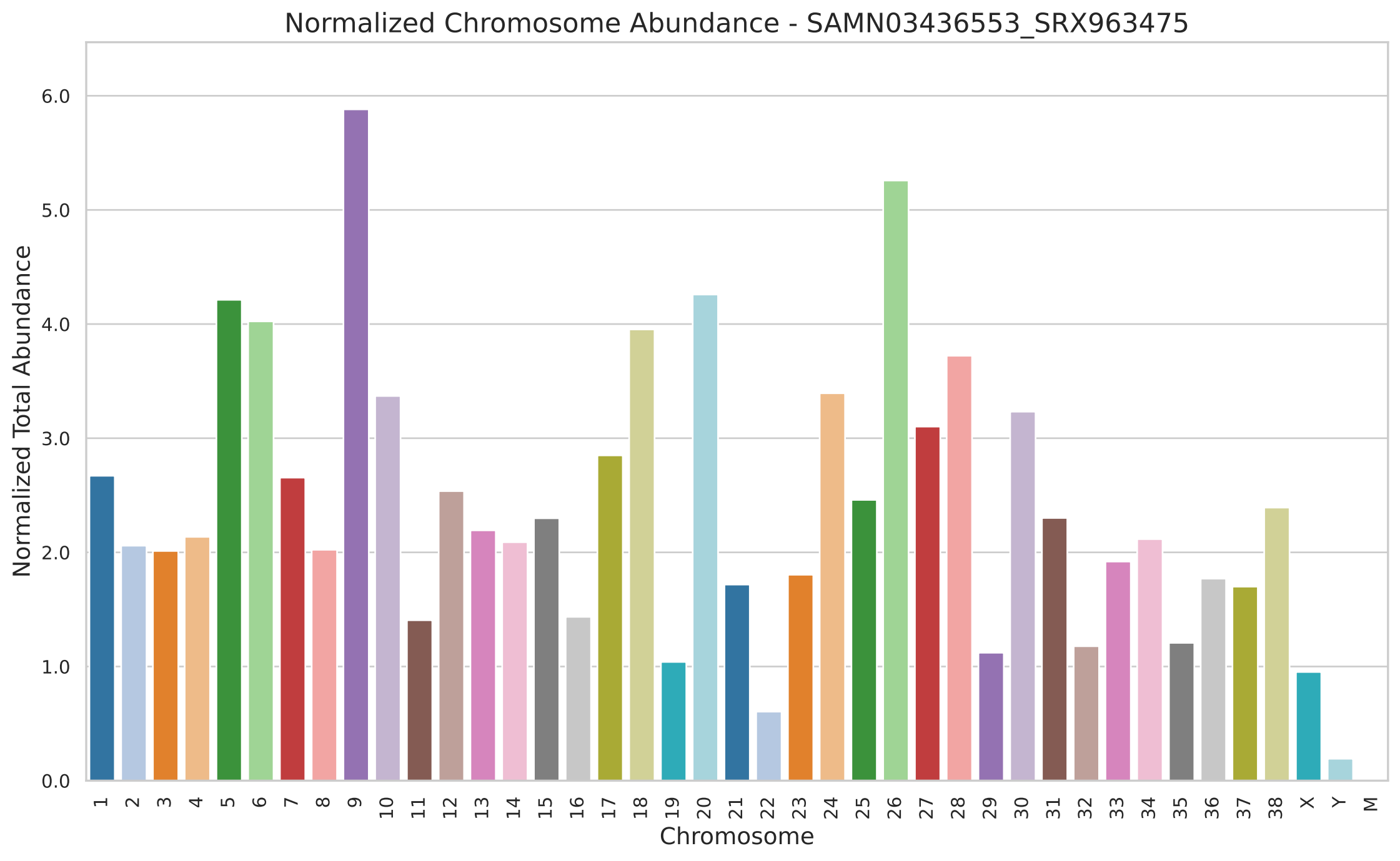

Normalized Chromosome Abundance - SAMN03436262_SRX963055
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

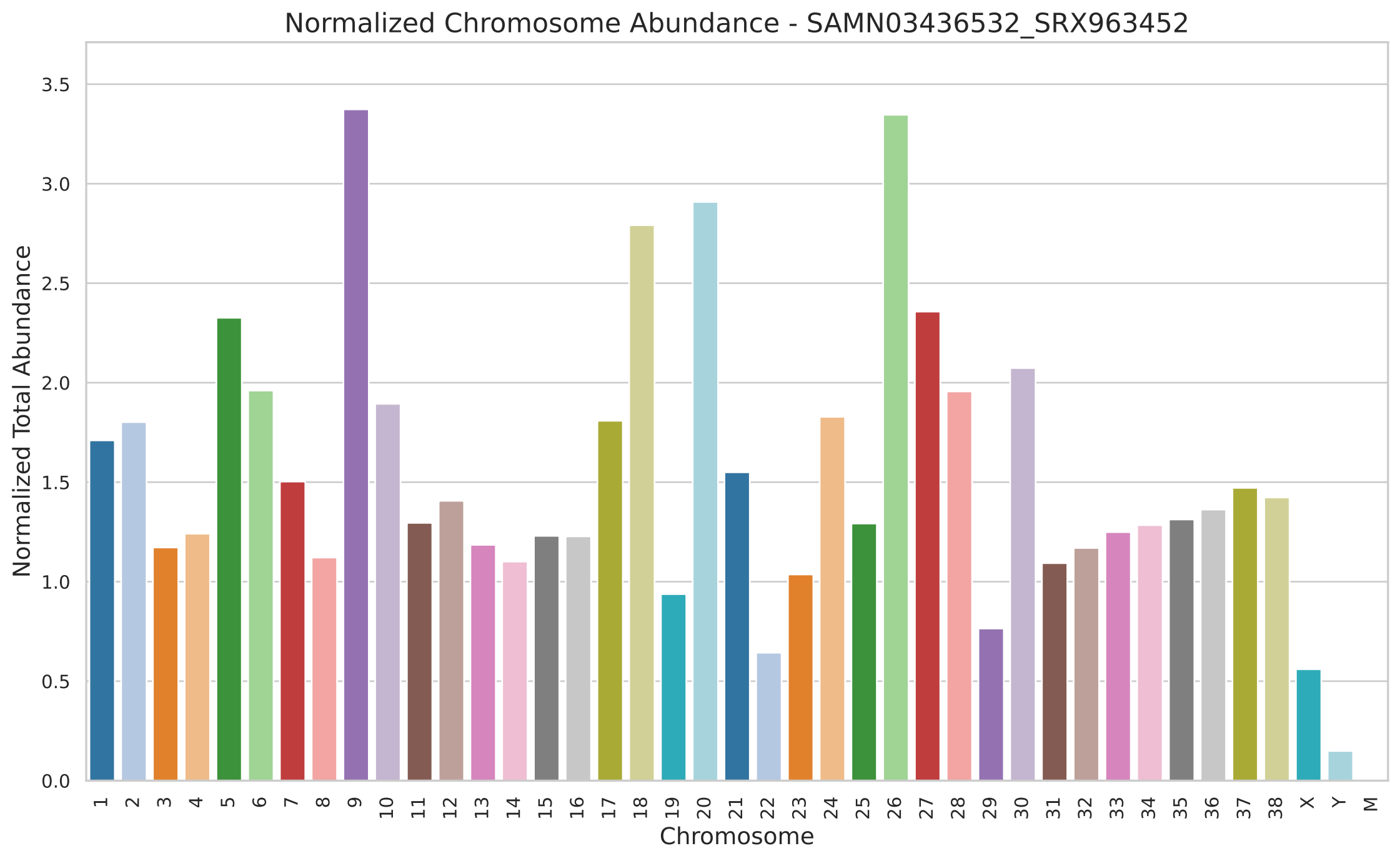

Normalized Chromosome Abundance - SAMN03436537_SRX963457
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

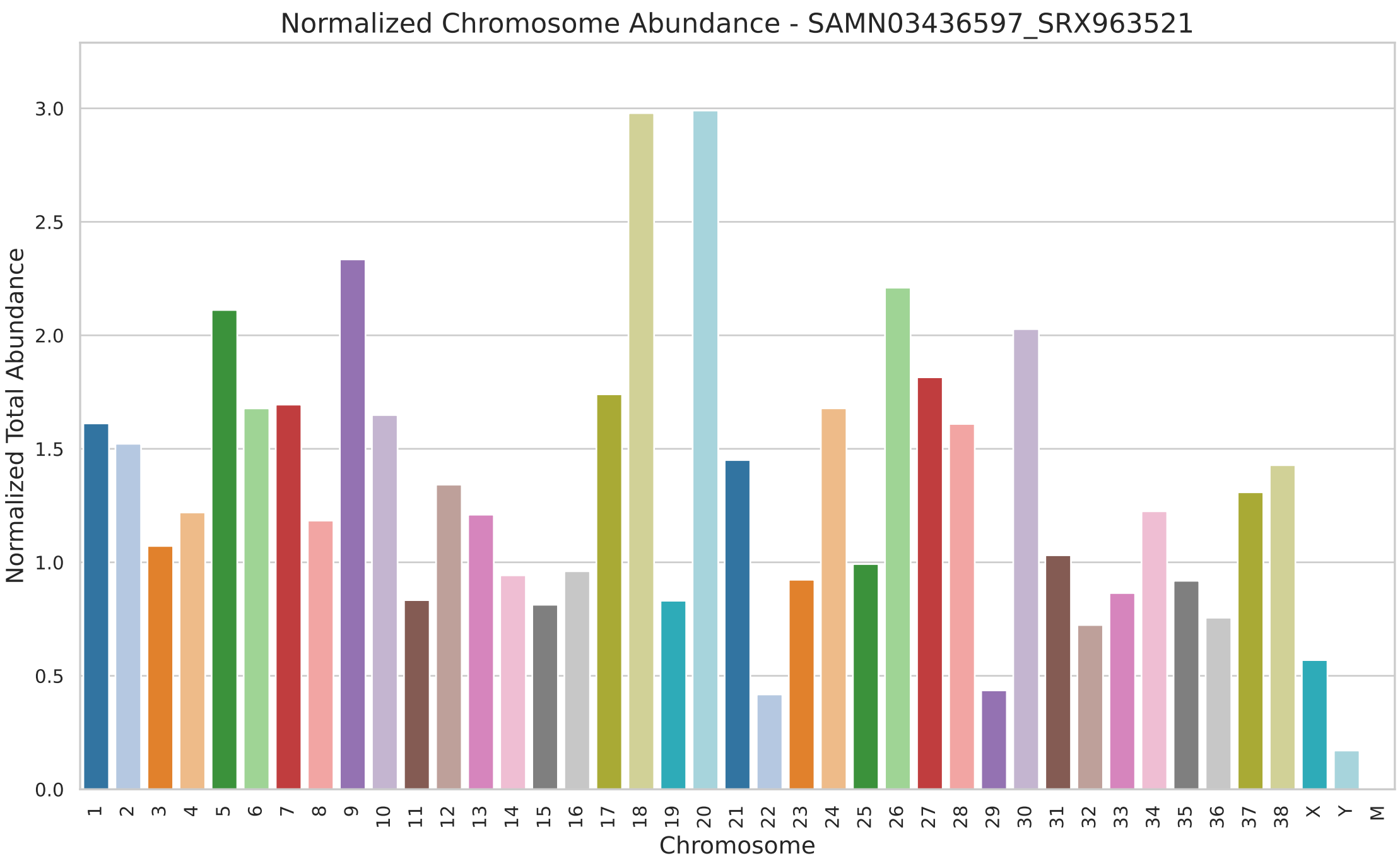

Normalized Chromosome Abundance - SAMN03436574_SRX963499
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

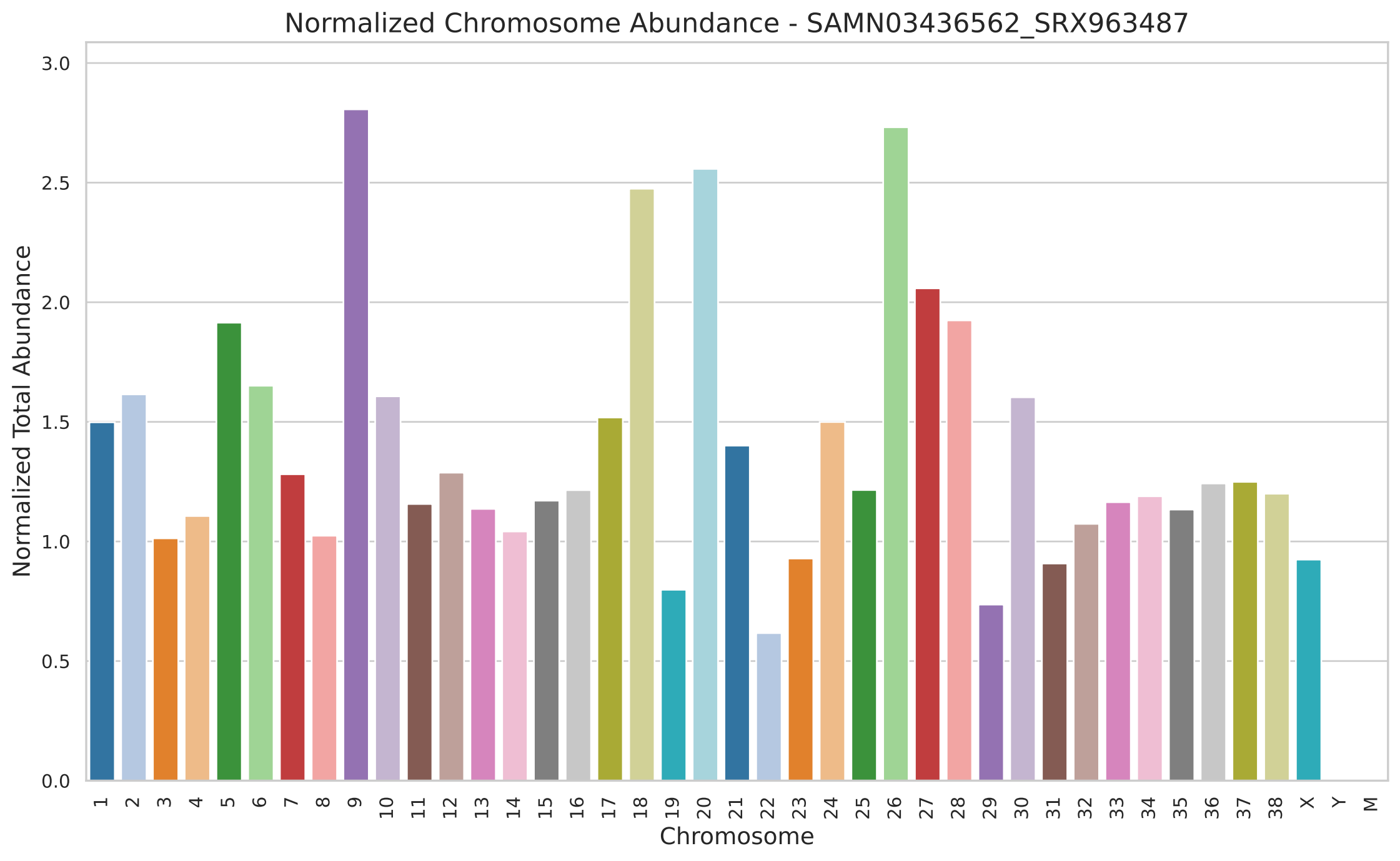

Normalized Chromosome Abundance - SAMN03436630_SRX963570
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

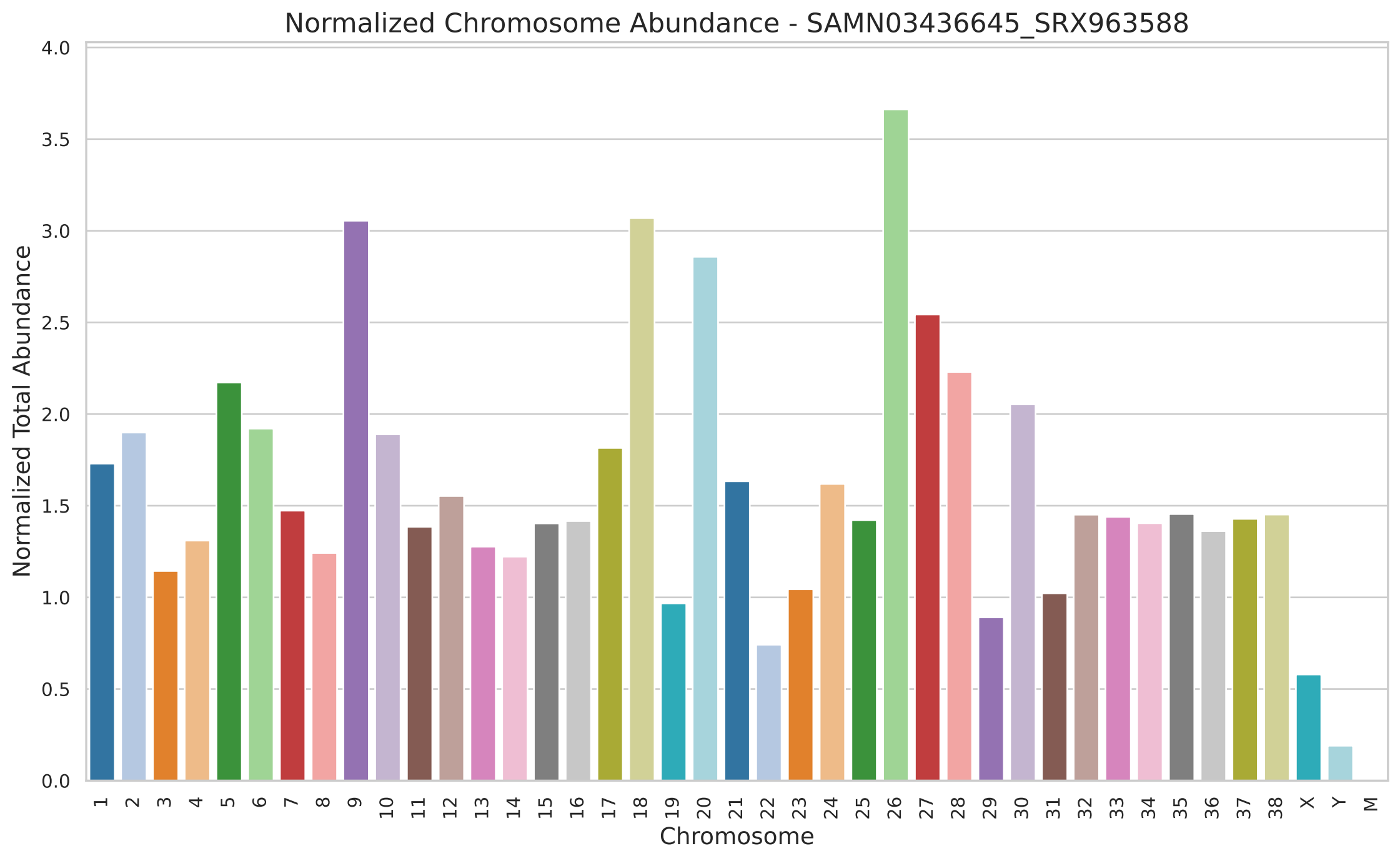

Normalized Chromosome Abundance - SAMN03436581_SRX963505
Normalized Total Abundance
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

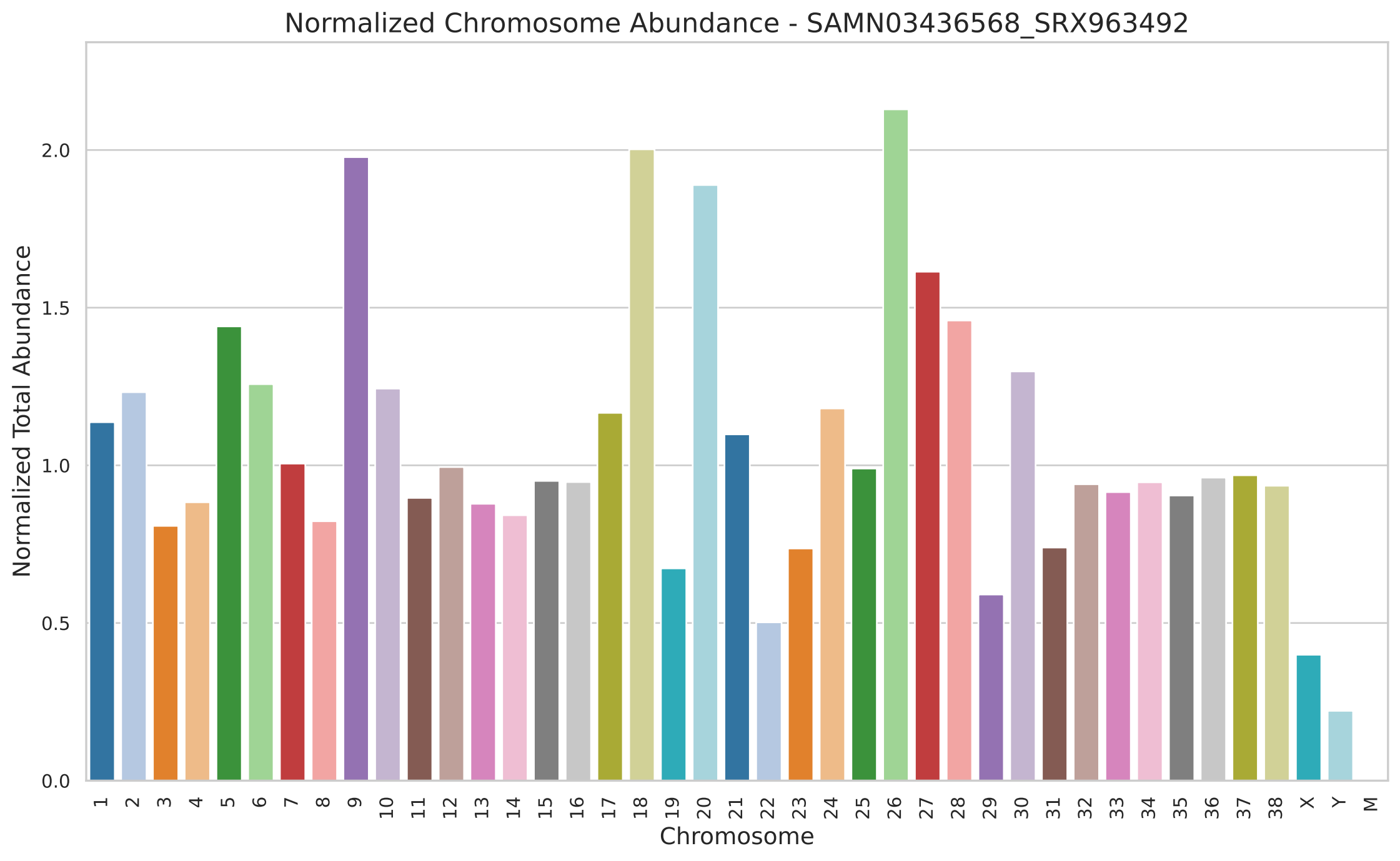

Normalized Chromosome Abundance - SAMN03436553_SRX963475
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

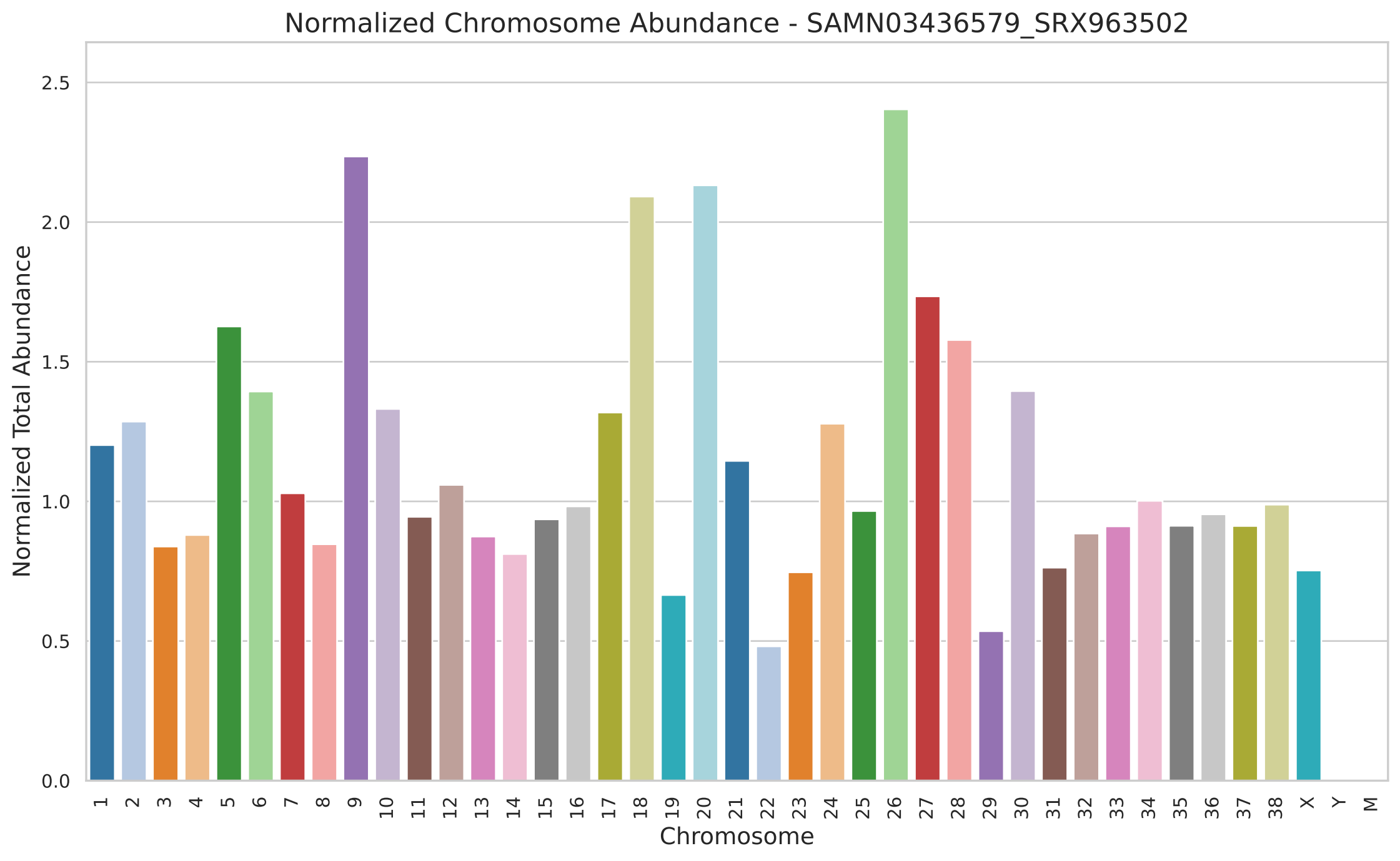

Normalized Chromosome Abundance - SAMN03436532_SRX963452
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

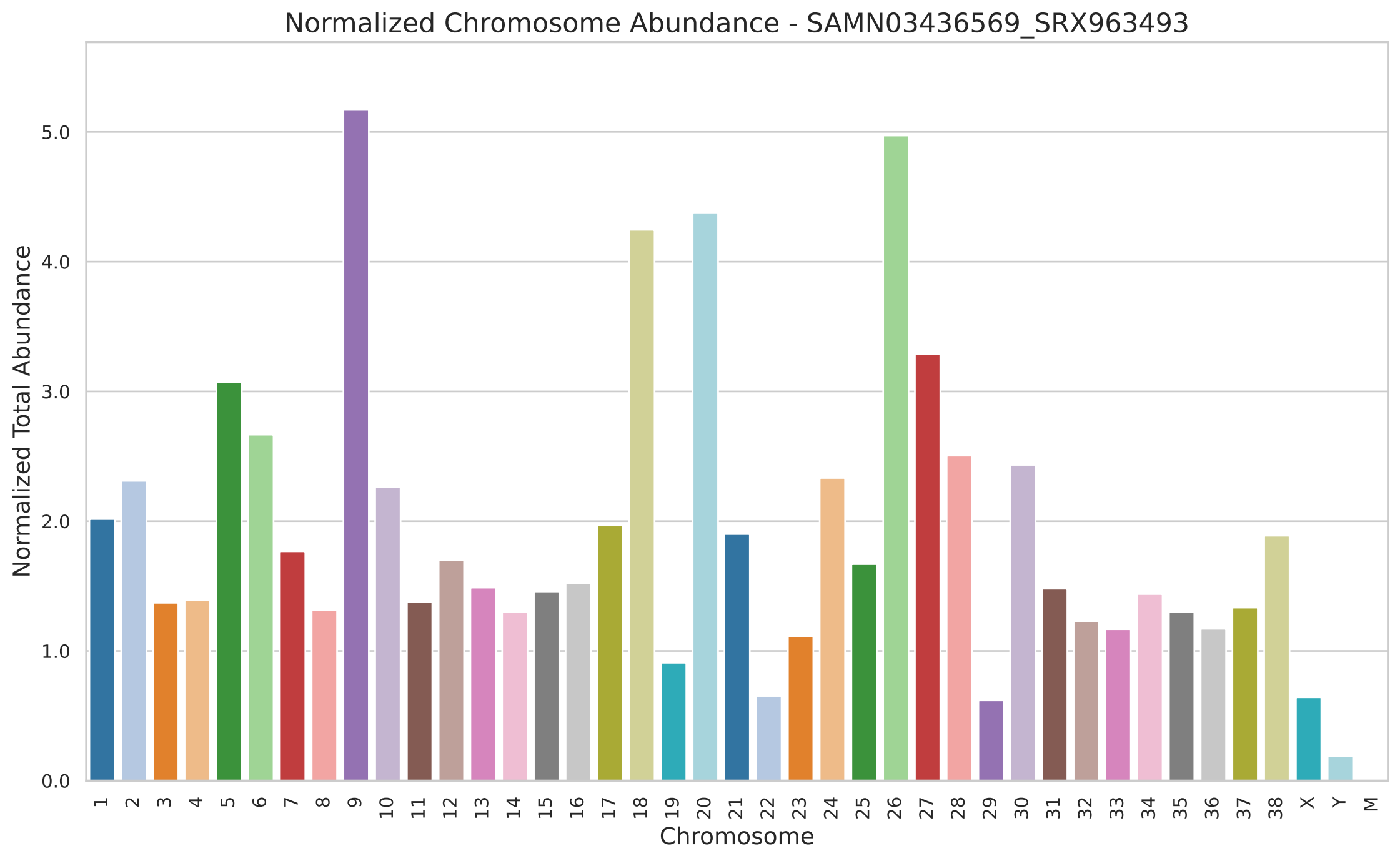

Normalized Chromosome Abundance - SAMN03436597_SRX963521
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

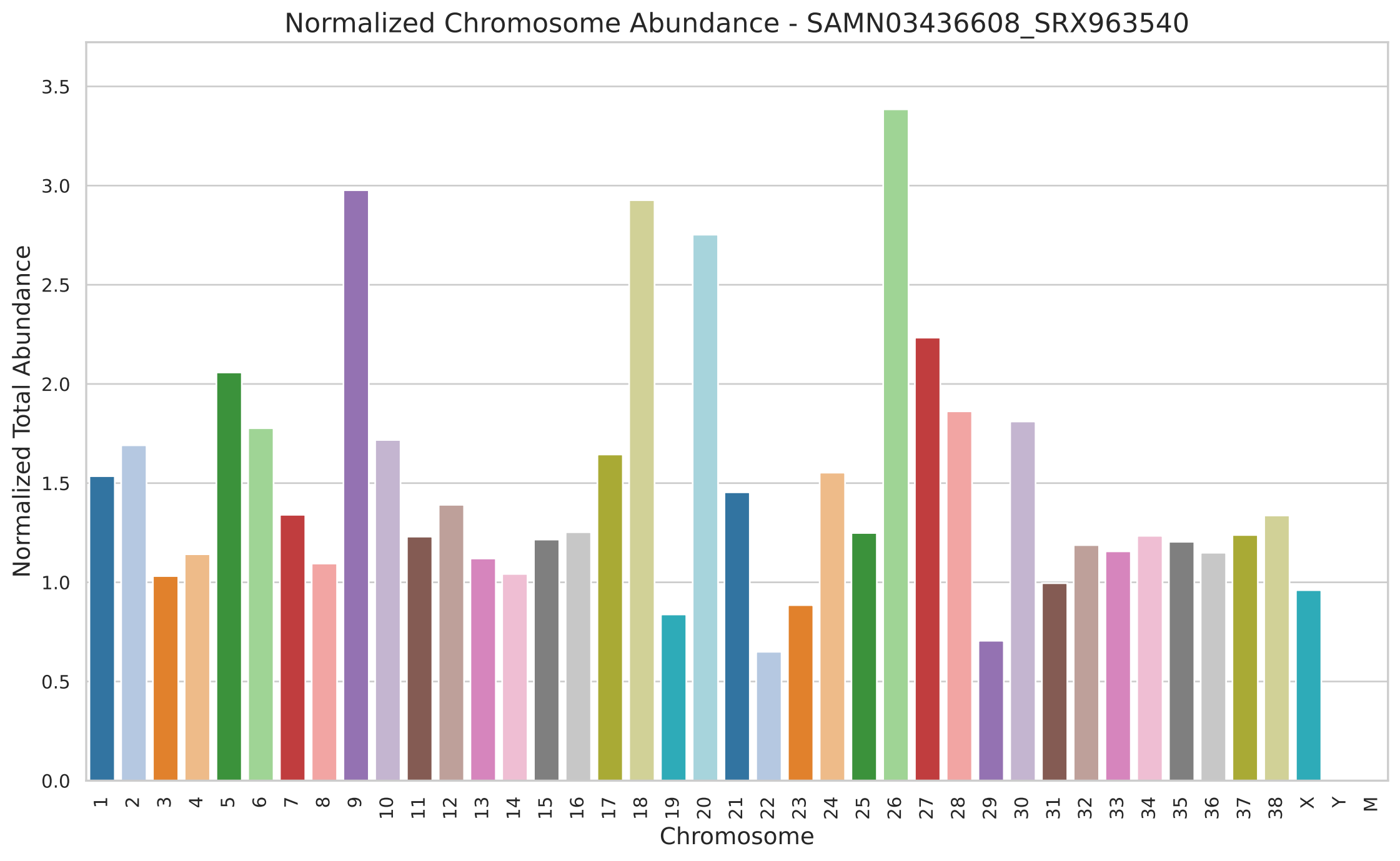

Normalized Chromosome Abundance - SAMN03436562_SRX963487
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

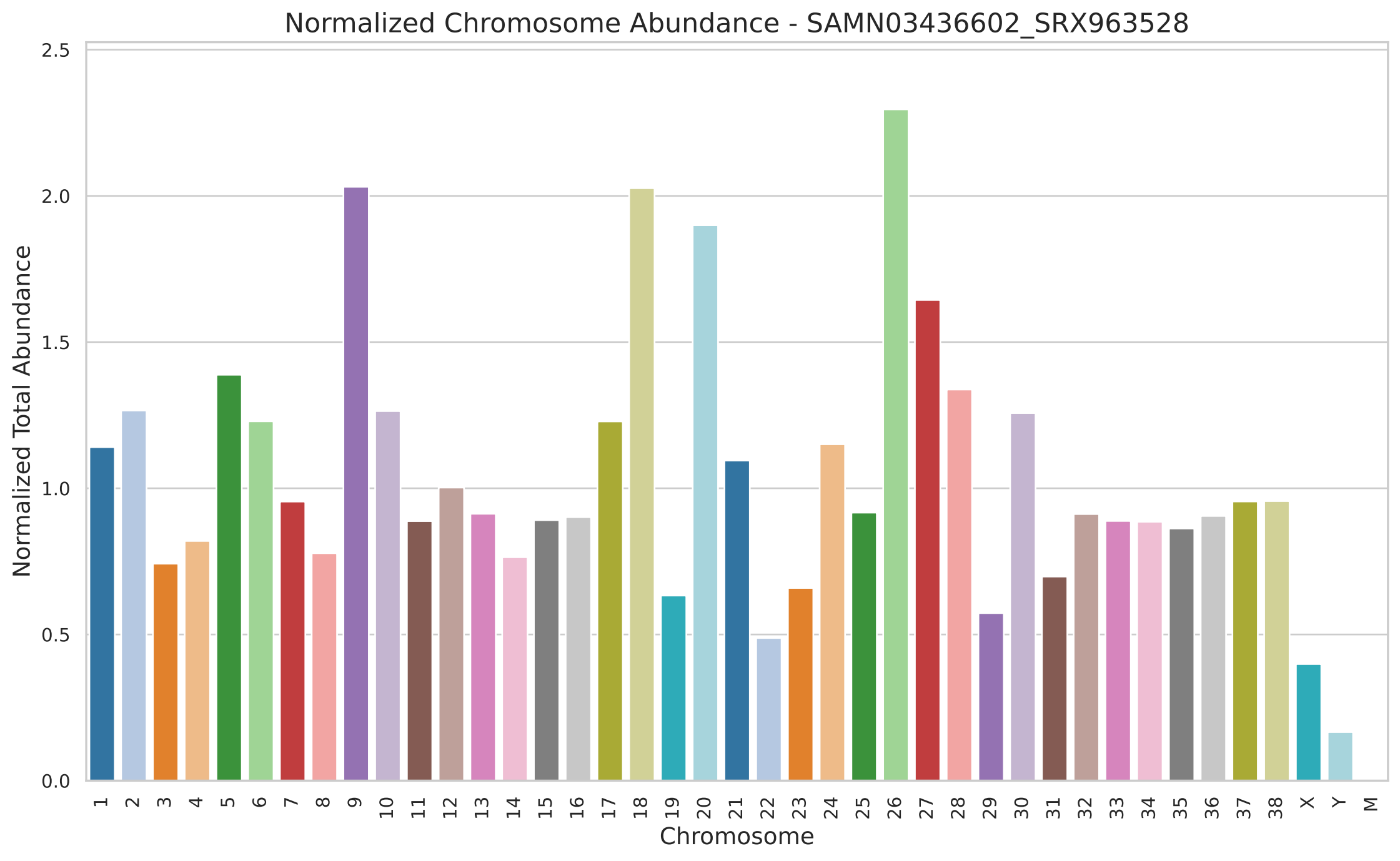

Normalized Chromosome Abundance - SAMN03436645_SRX963588
Normalized Total Abundance
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

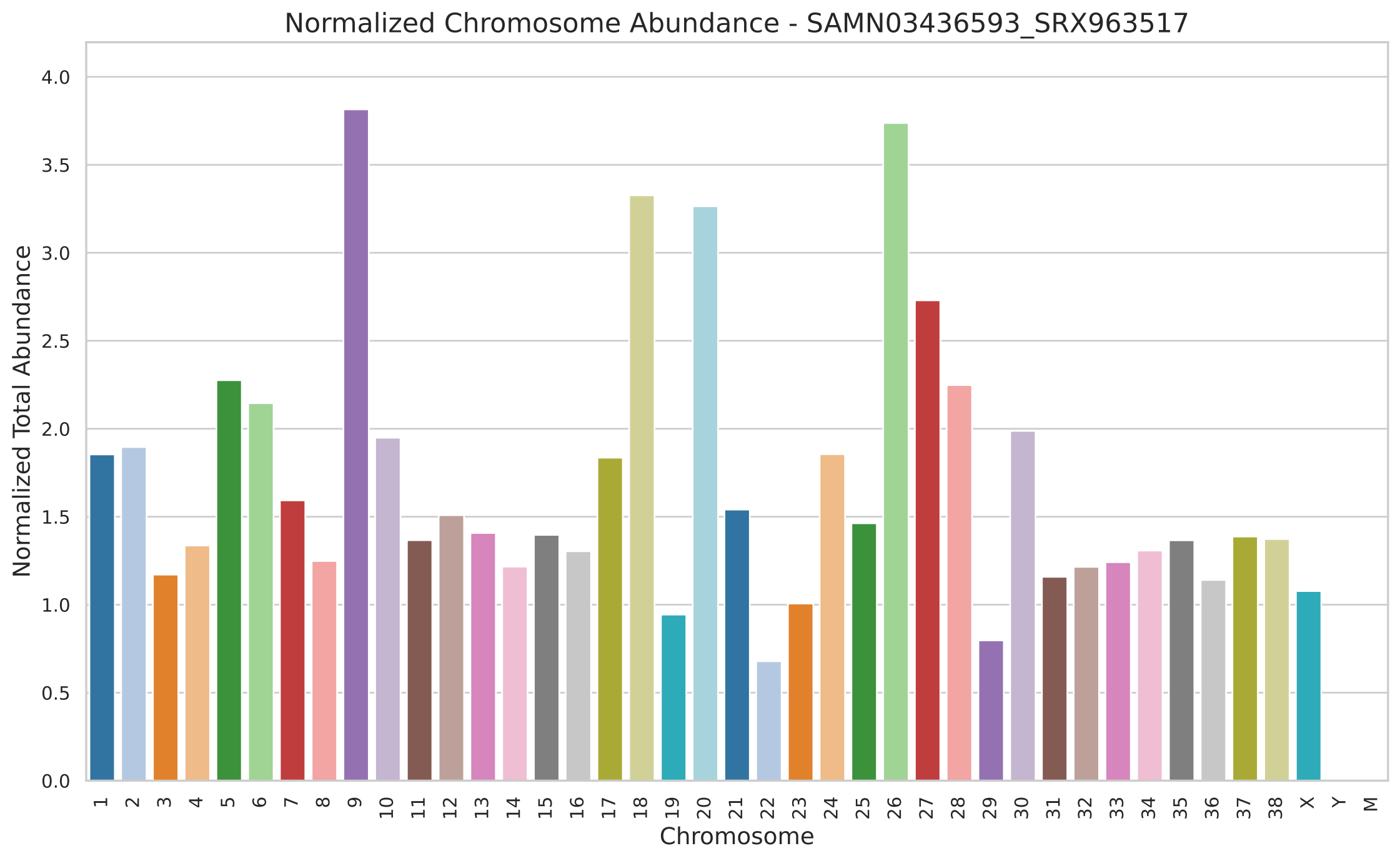

Normalized Chromosome Abundance - SAMN03436568_SRX963492
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

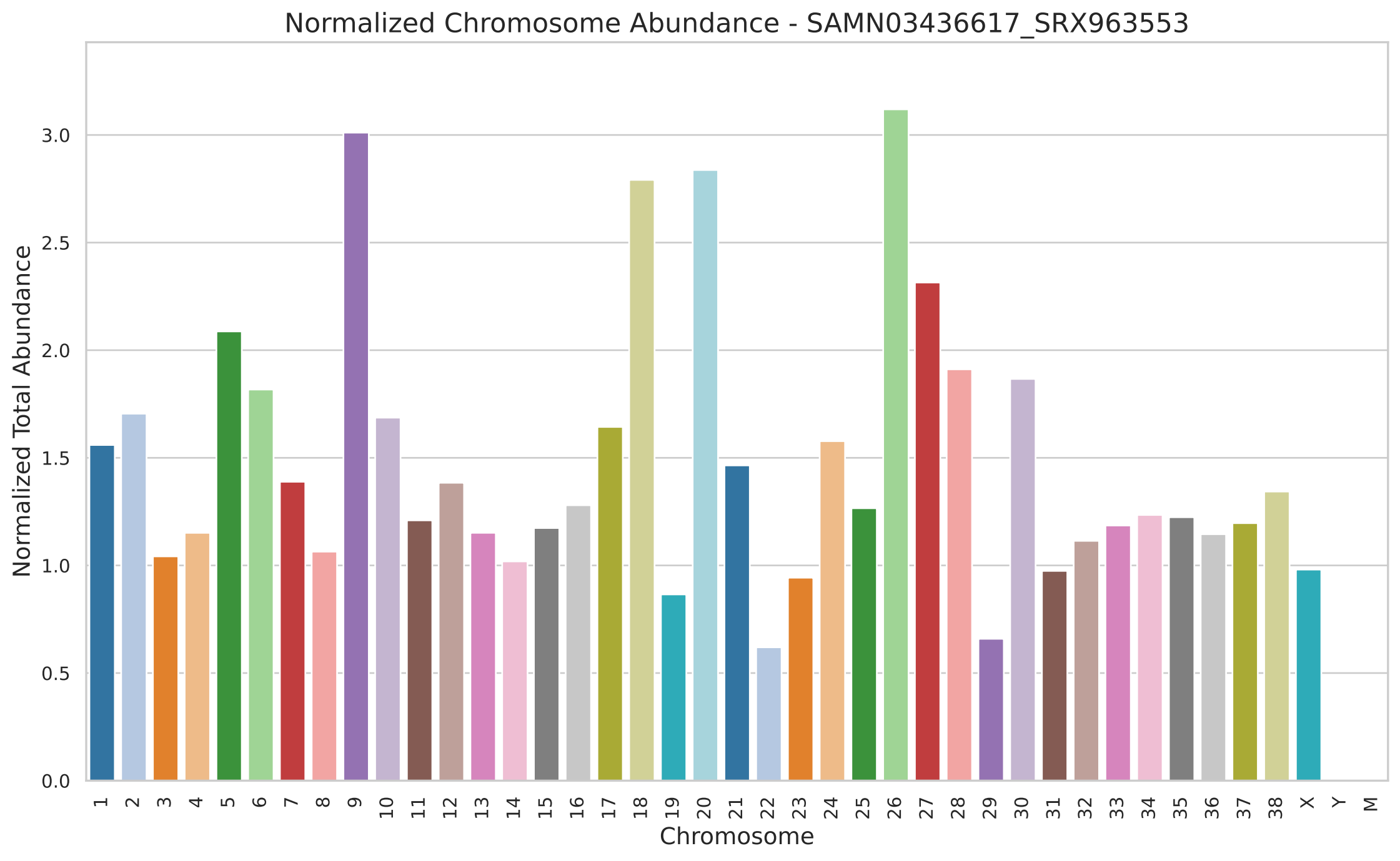

Normalized Chromosome Abundance - SAMN03436579_SRX963502
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

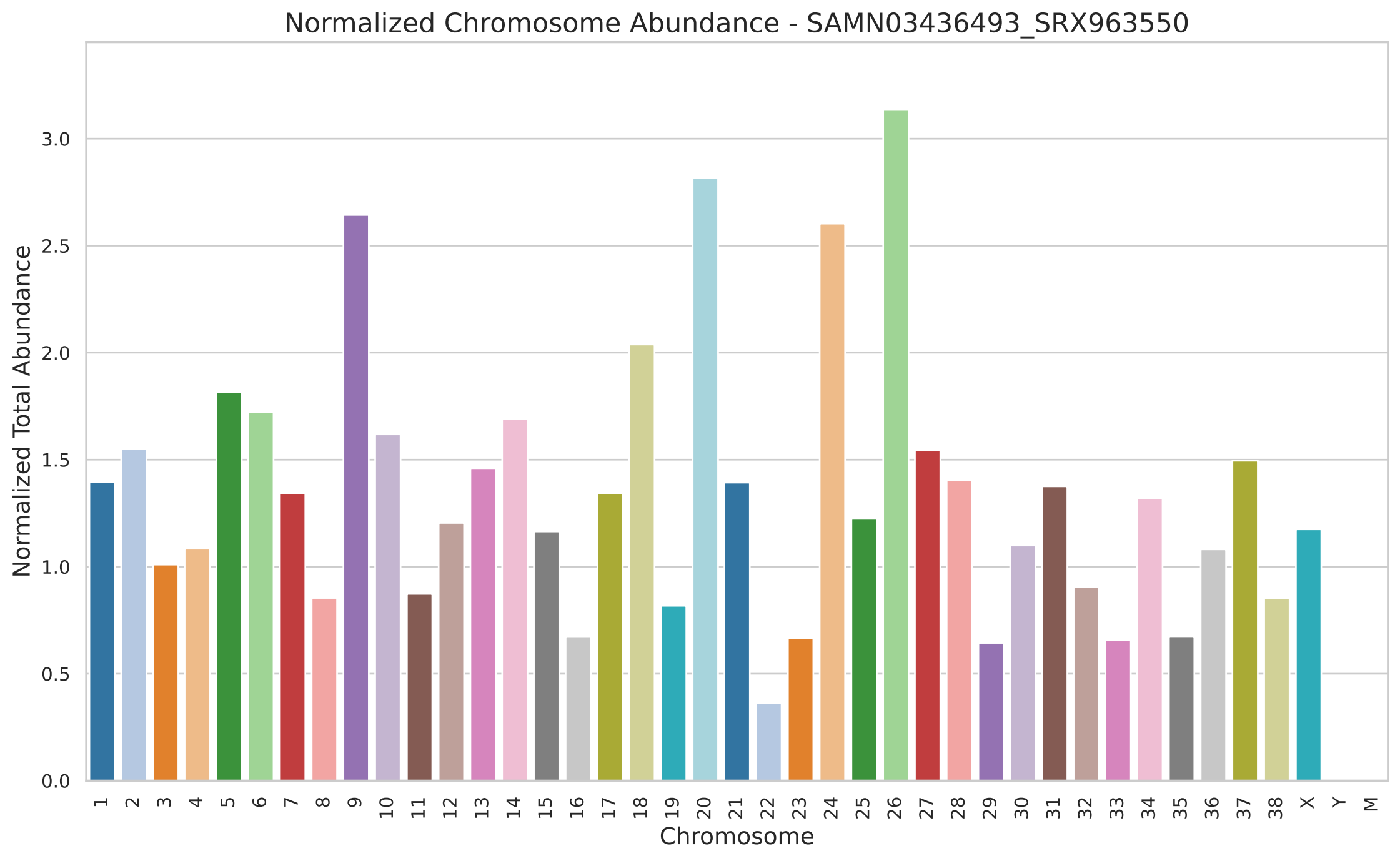

Normalized Chromosome Abundance - SAMN03436569_SRX963493
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

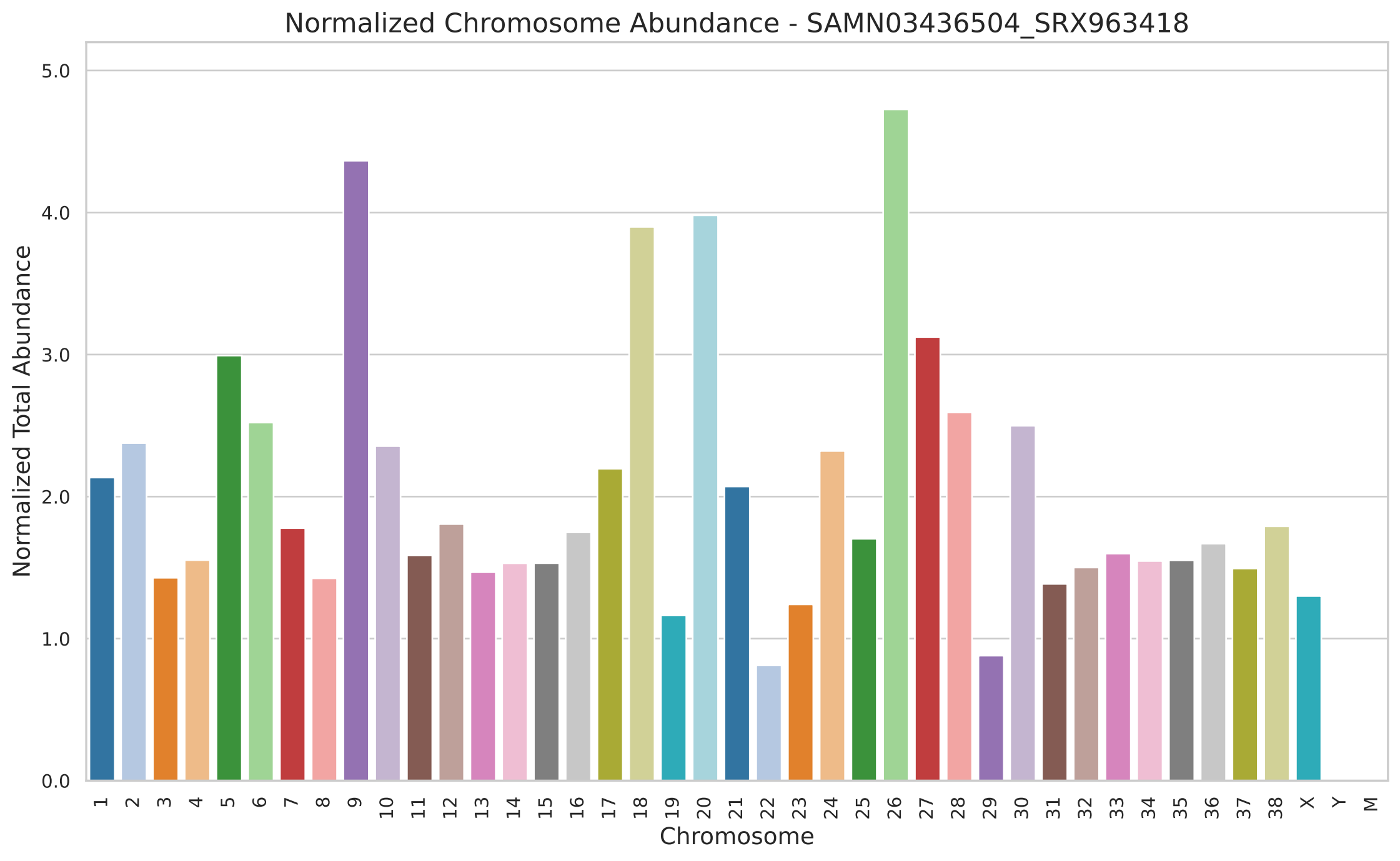

Normalized Chromosome Abundance - SAMN03436608_SRX963540
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

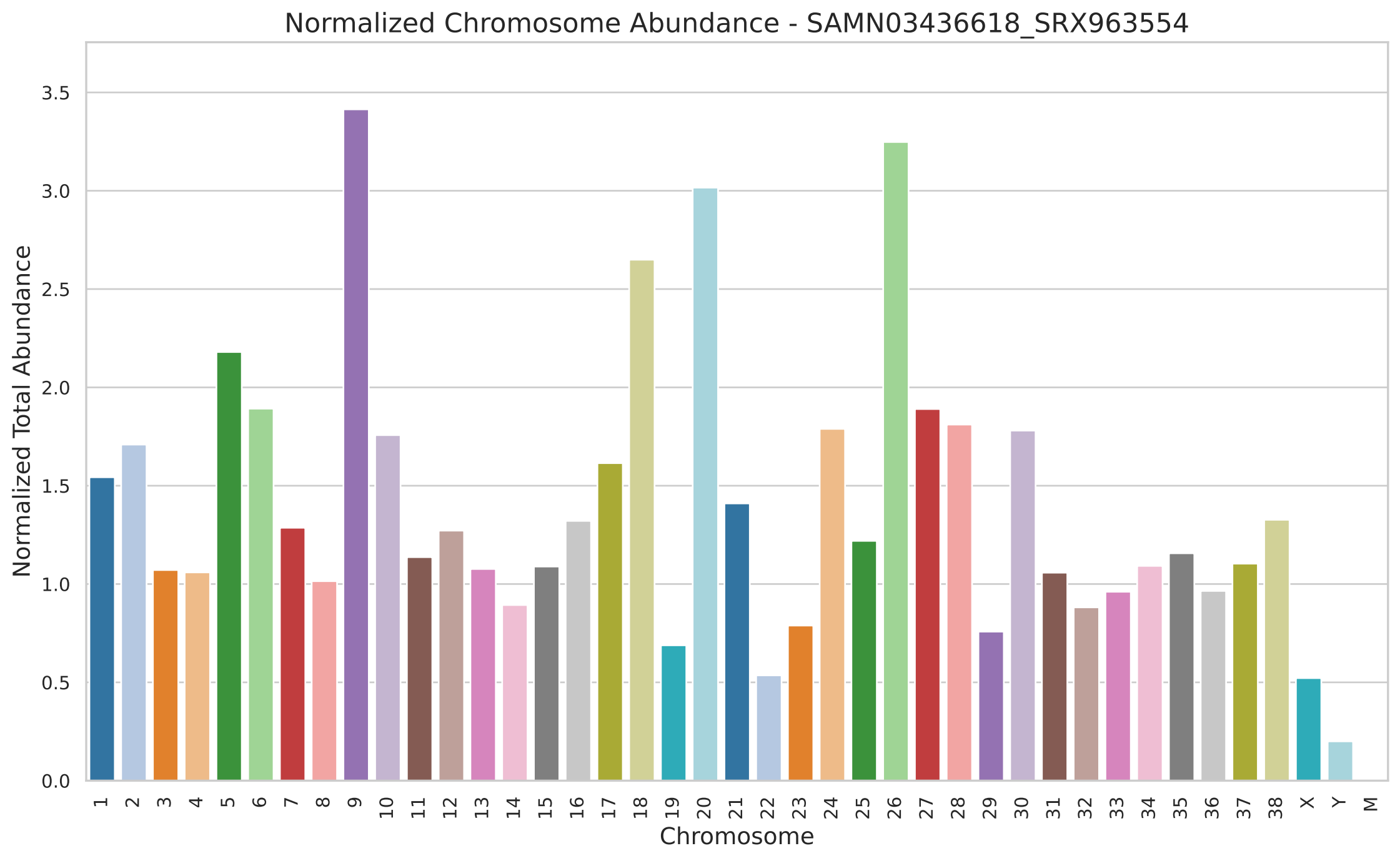

Normalized Chromosome Abundance - SAMN03436602_SRX963528
Normalized Total Abundance
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

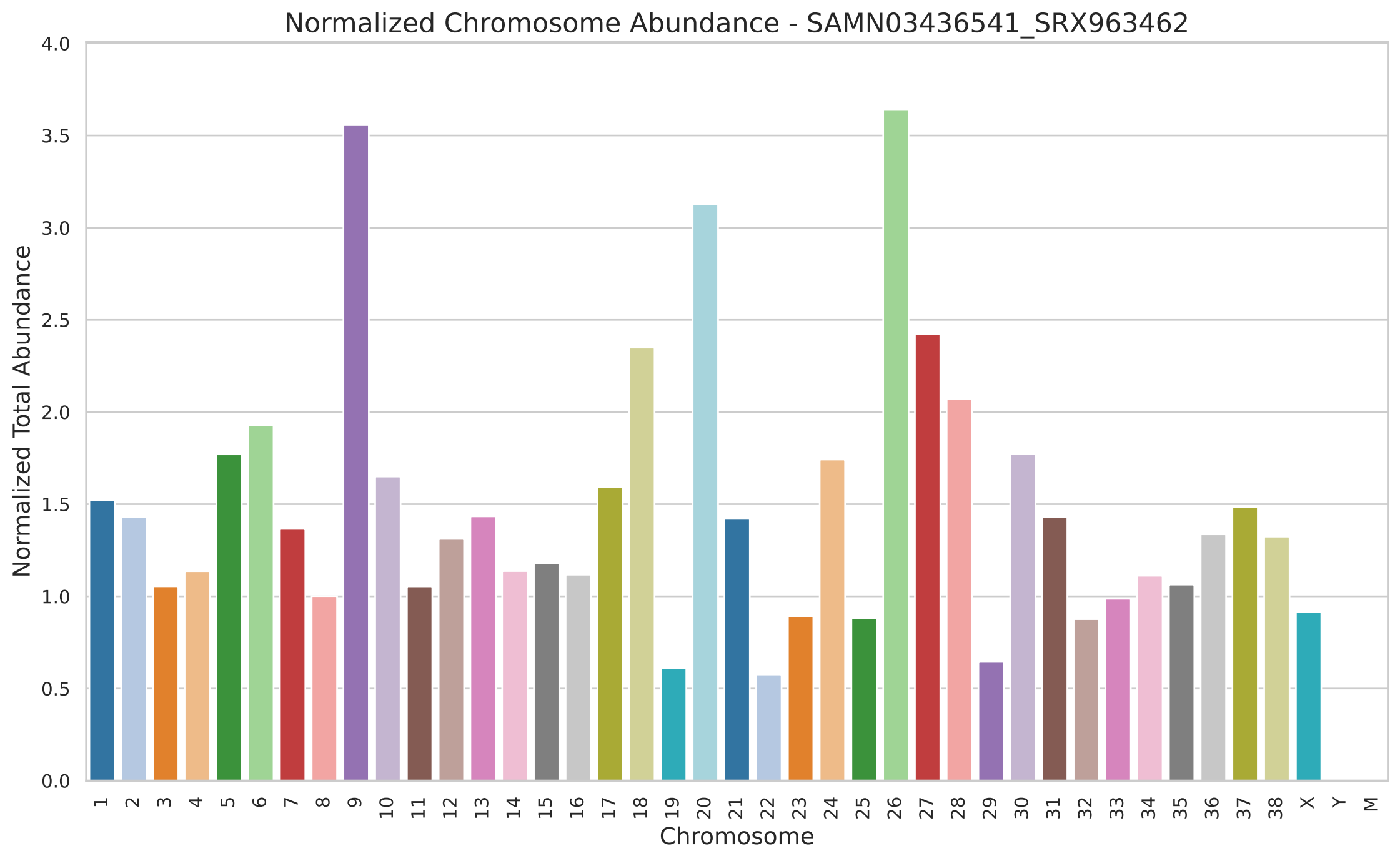

Normalized Chromosome Abundance - SAMN03436593_SRX963517
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

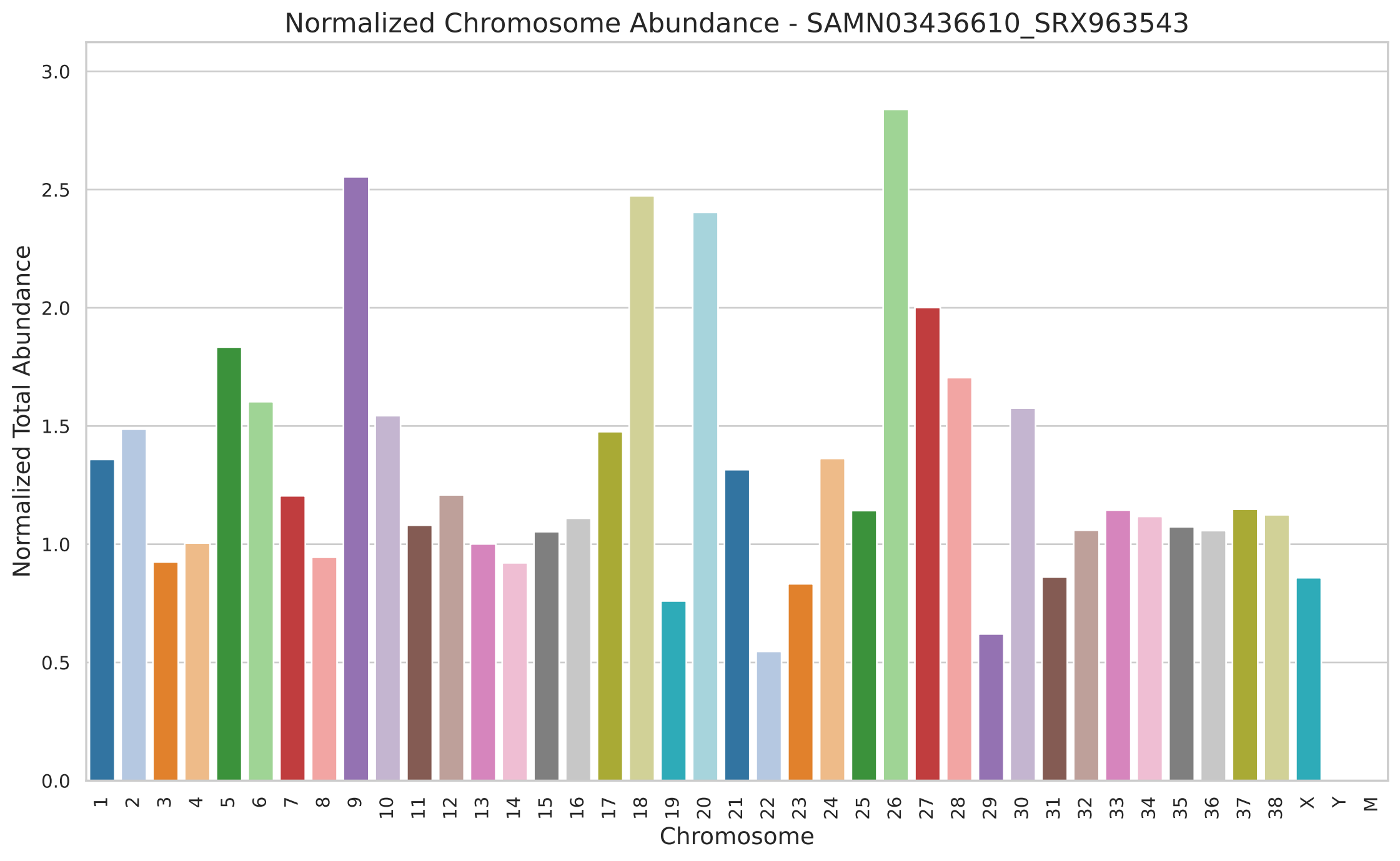

Normalized Chromosome Abundance - SAMN03436617_SRX963553
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

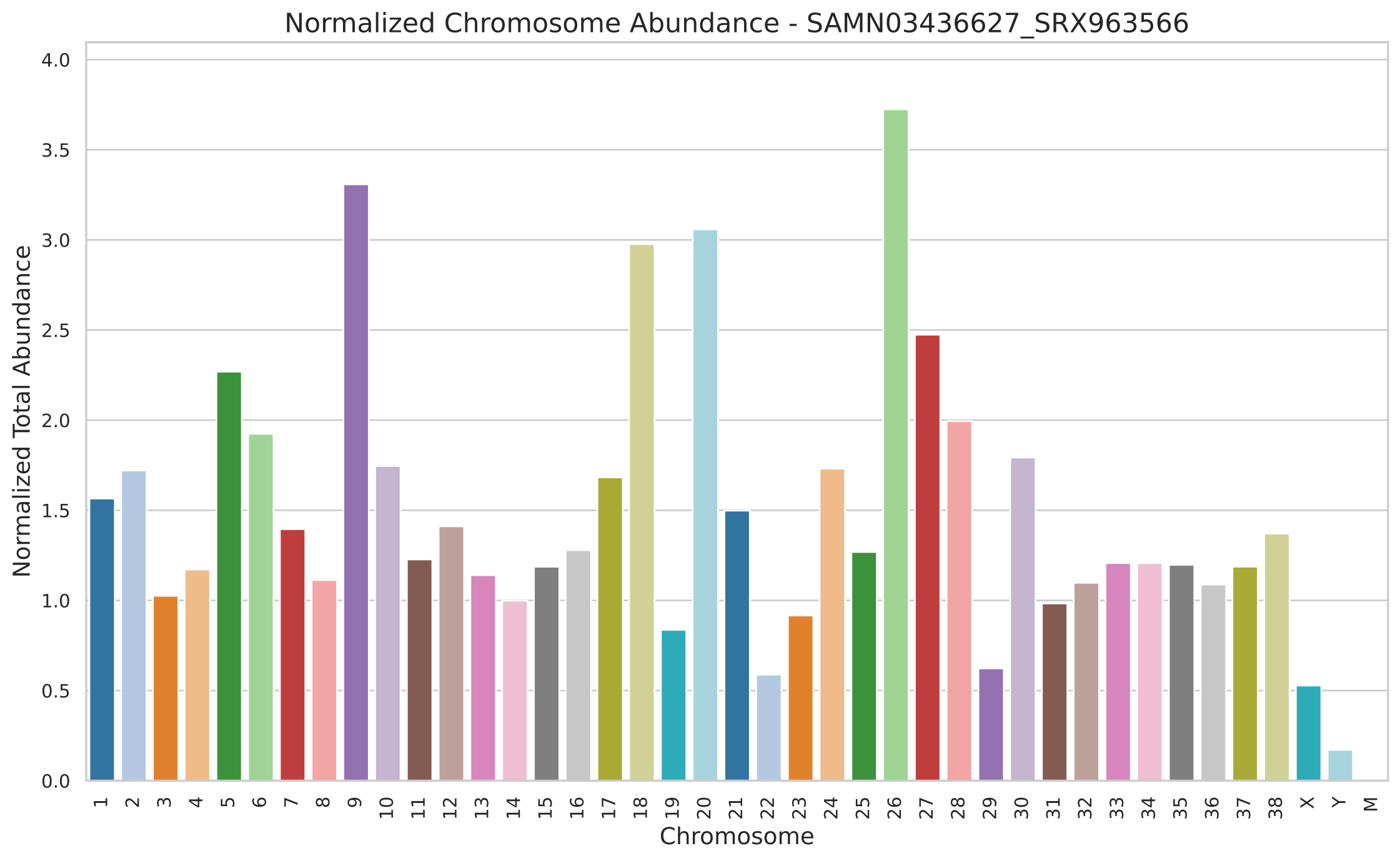

Normalized Chromosome Abundance - SAMN03436493_SRX963550
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

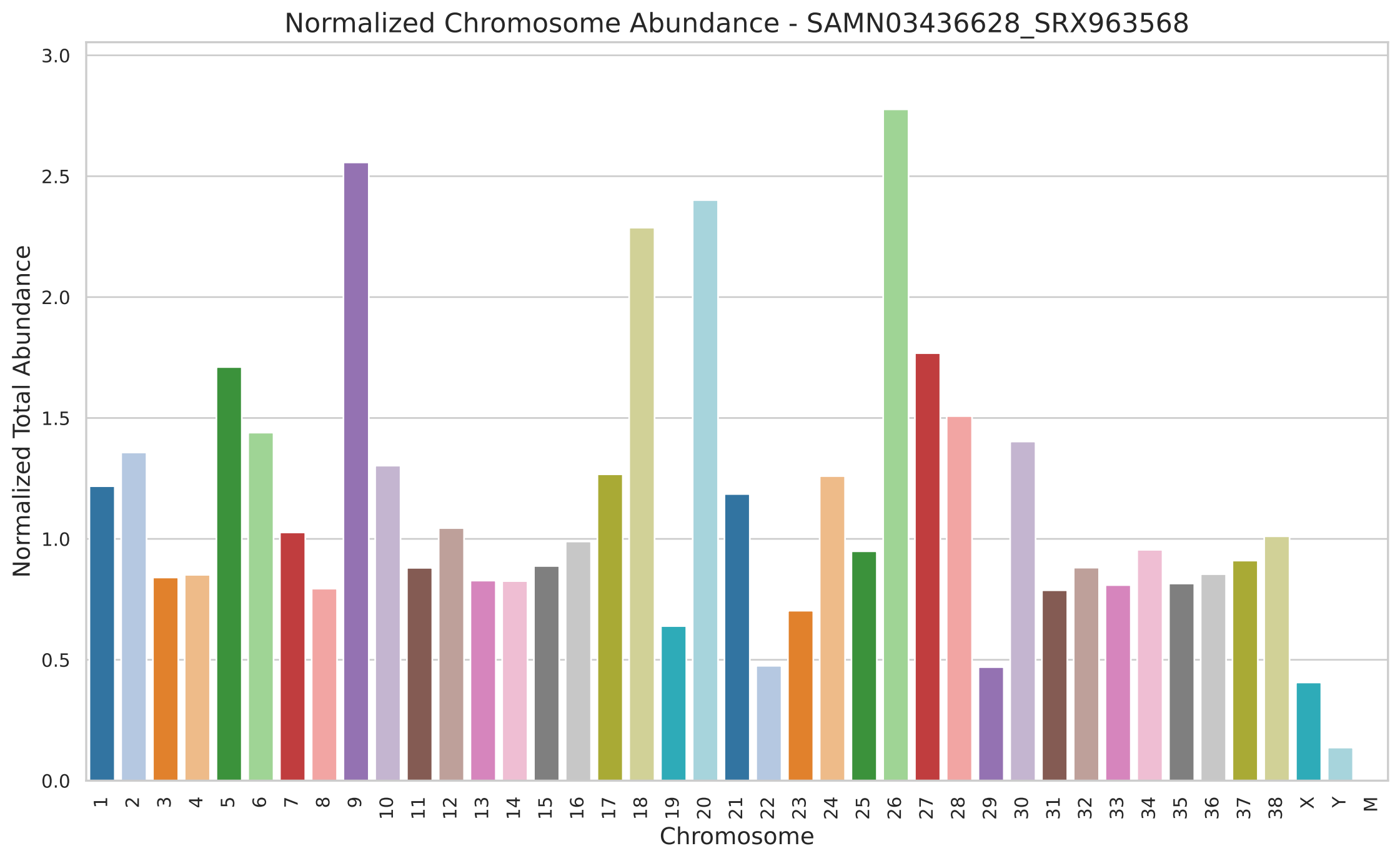

Normalized Chromosome Abundance - SAMN03436504_SRX963418
Normalized Total Abundance
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

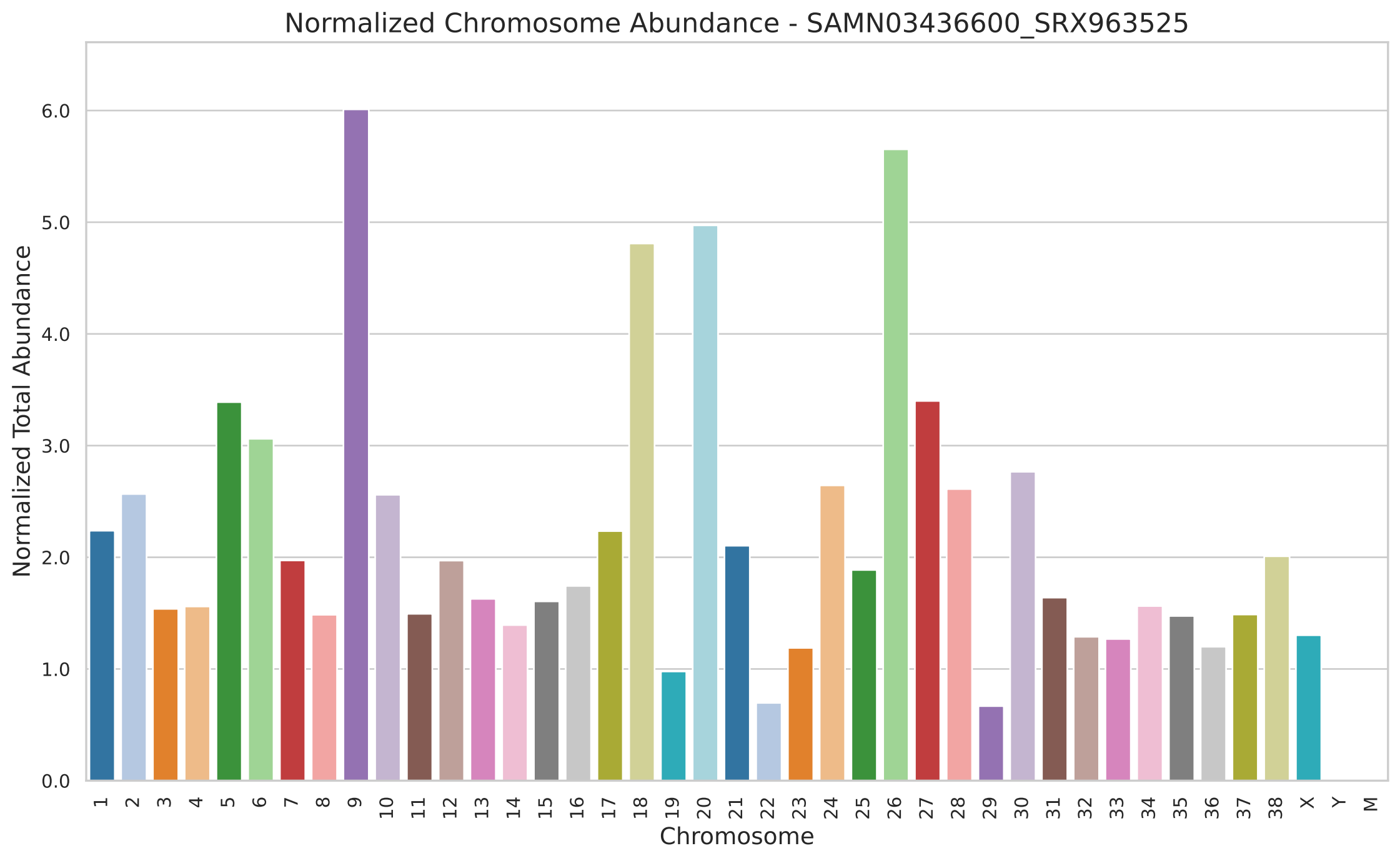

Normalized Chromosome Abundance - SAMN03436618_SRX963554
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

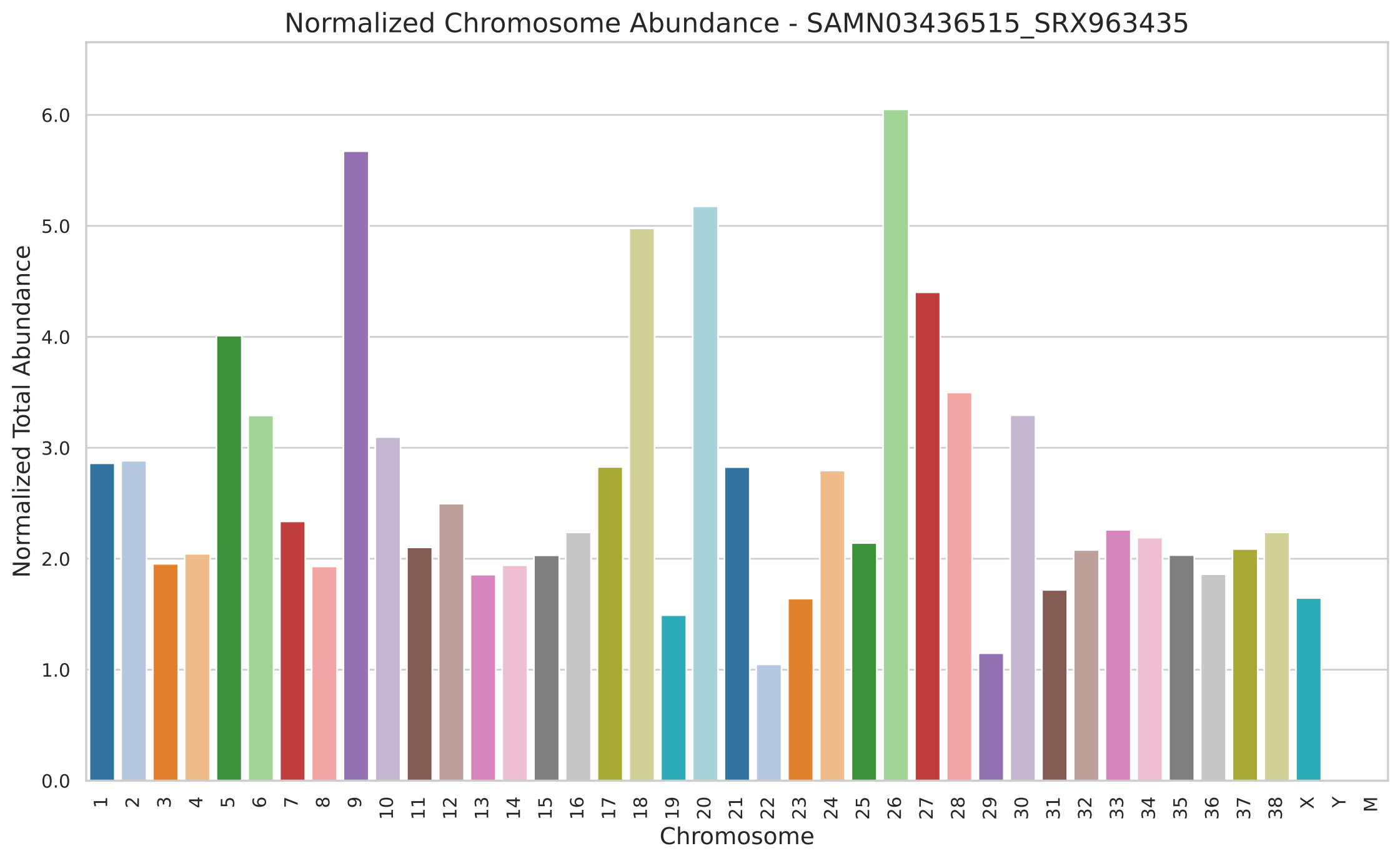

Normalized Chromosome Abundance - SAMN03436541_SRX963462
Normalized Total Abundance
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

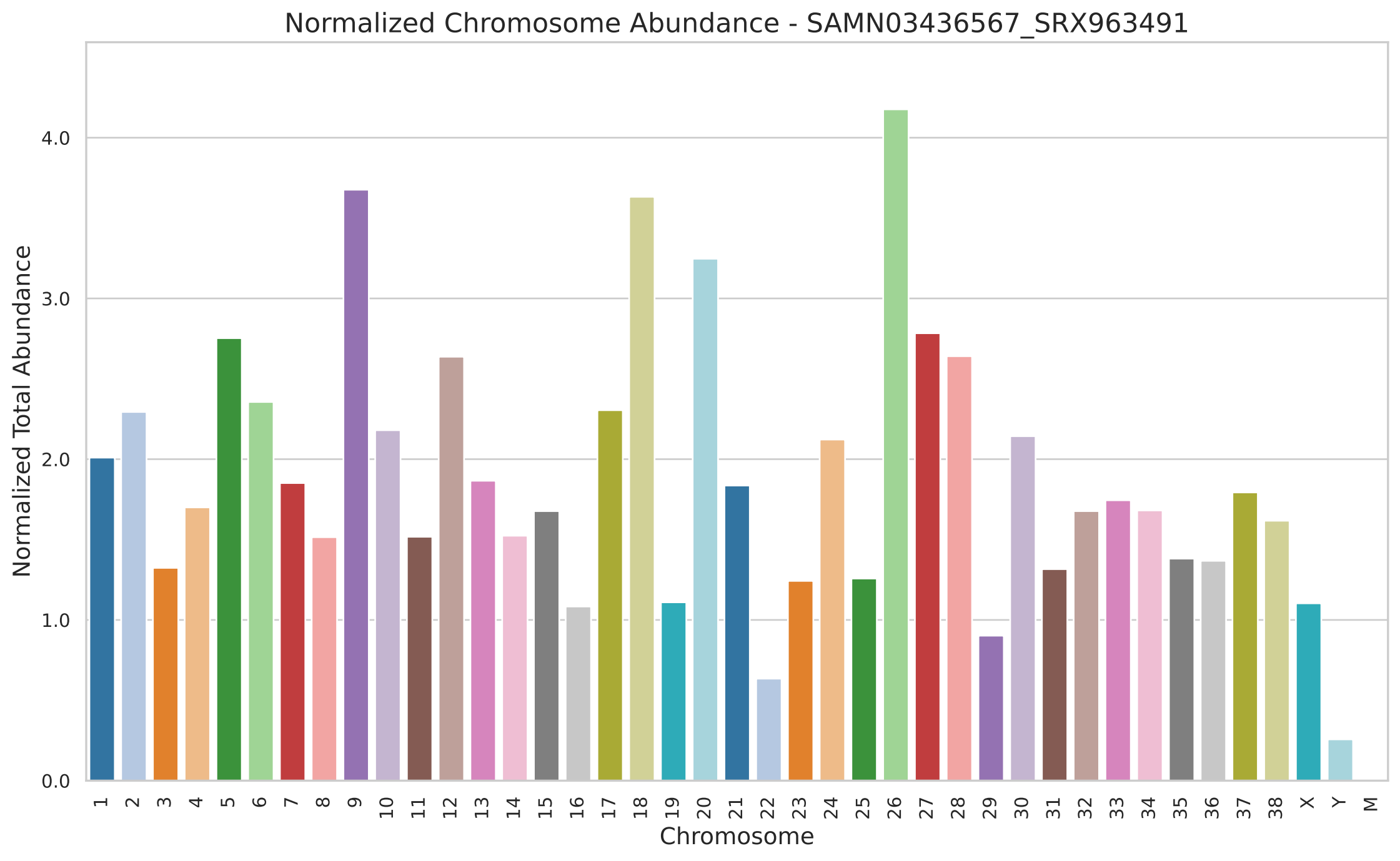

Normalized Chromosome Abundance - SAMN03436610_SRX963543
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

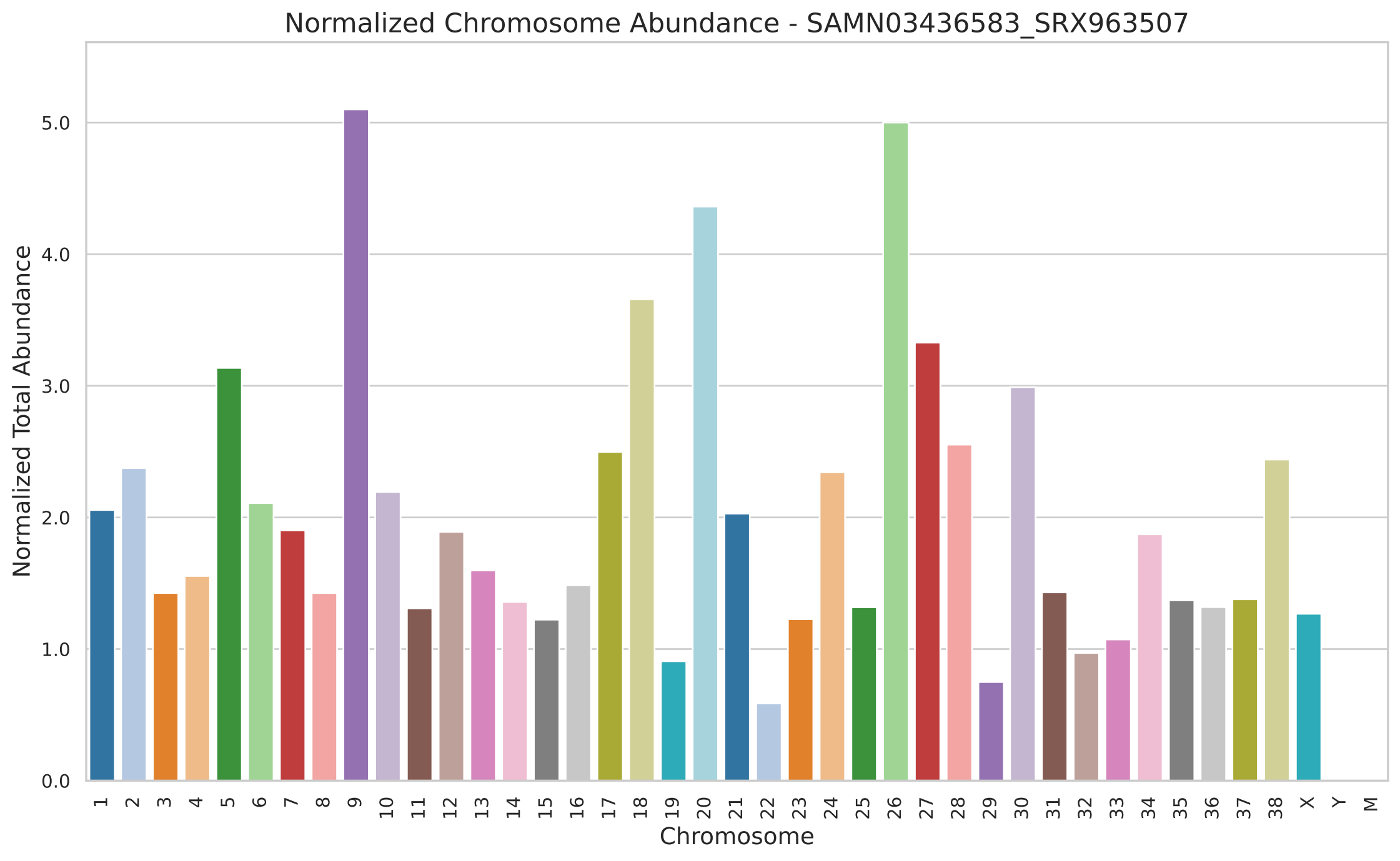

Normalized Chromosome Abundance - SAMN03436627_SRX963566
Normalized Total Abundance
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

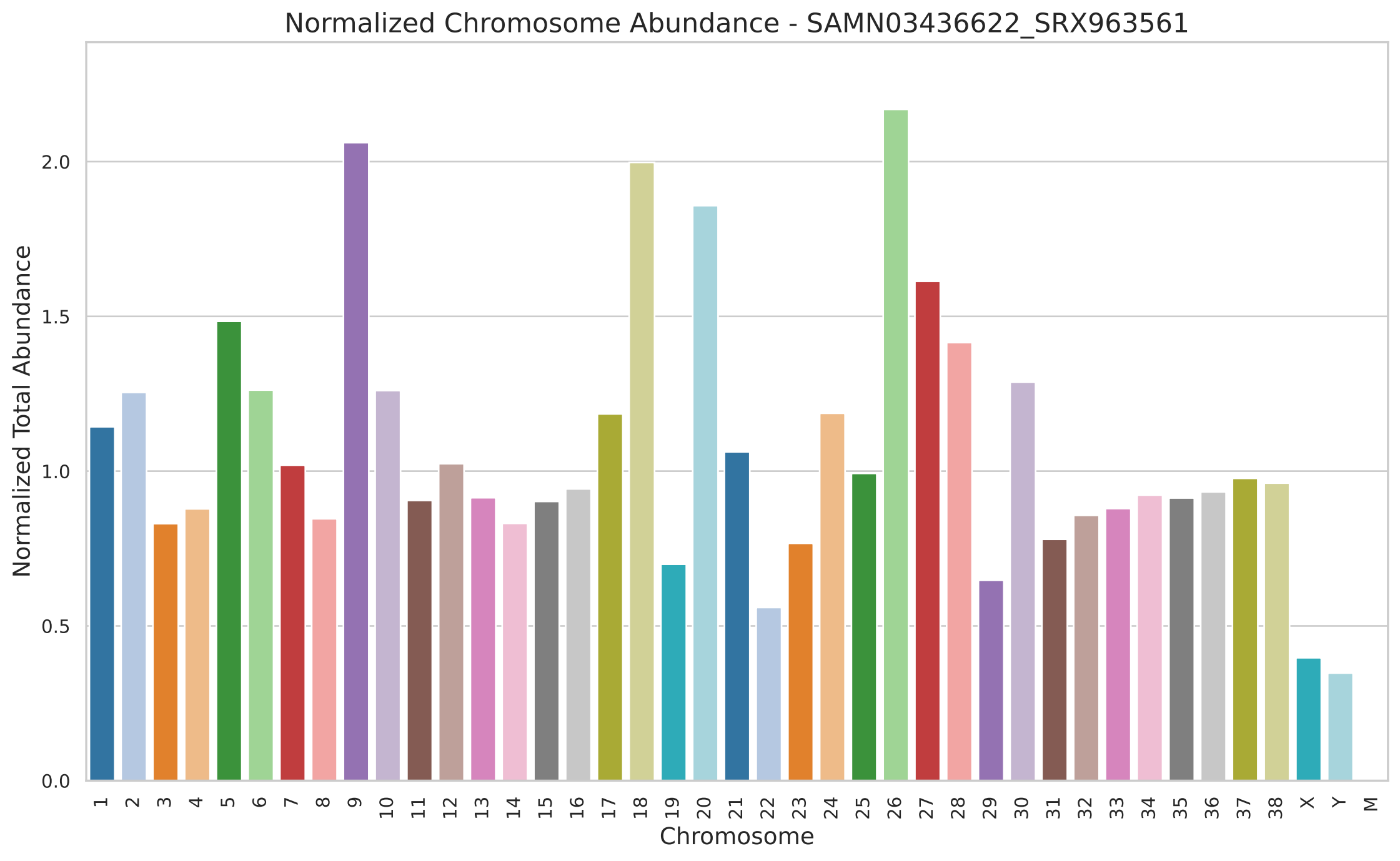

Normalized Chromosome Abundance - SAMN03436628_SRX963568
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

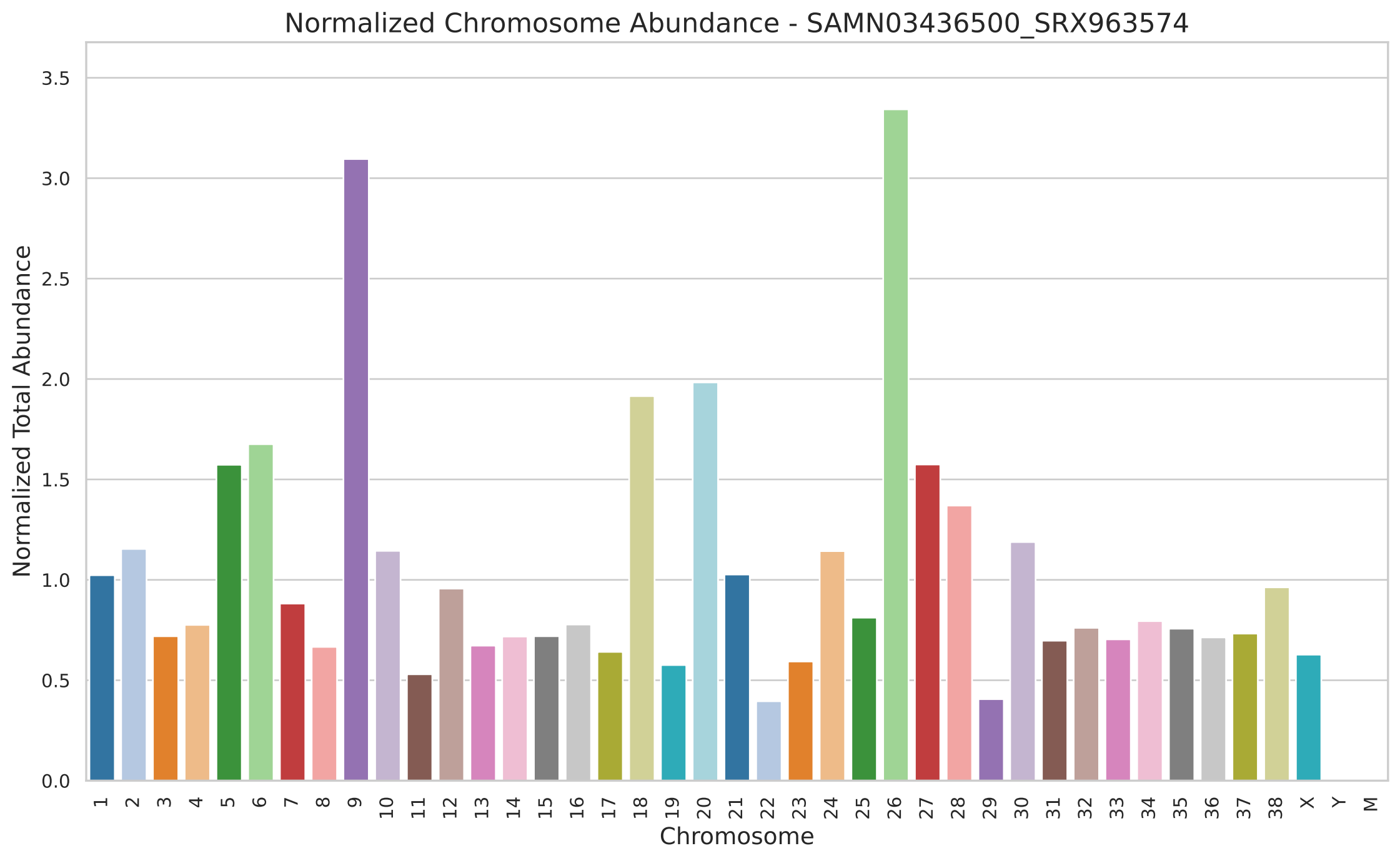

Normalized Chromosome Abundance - SAMN03436600_SRX963525
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

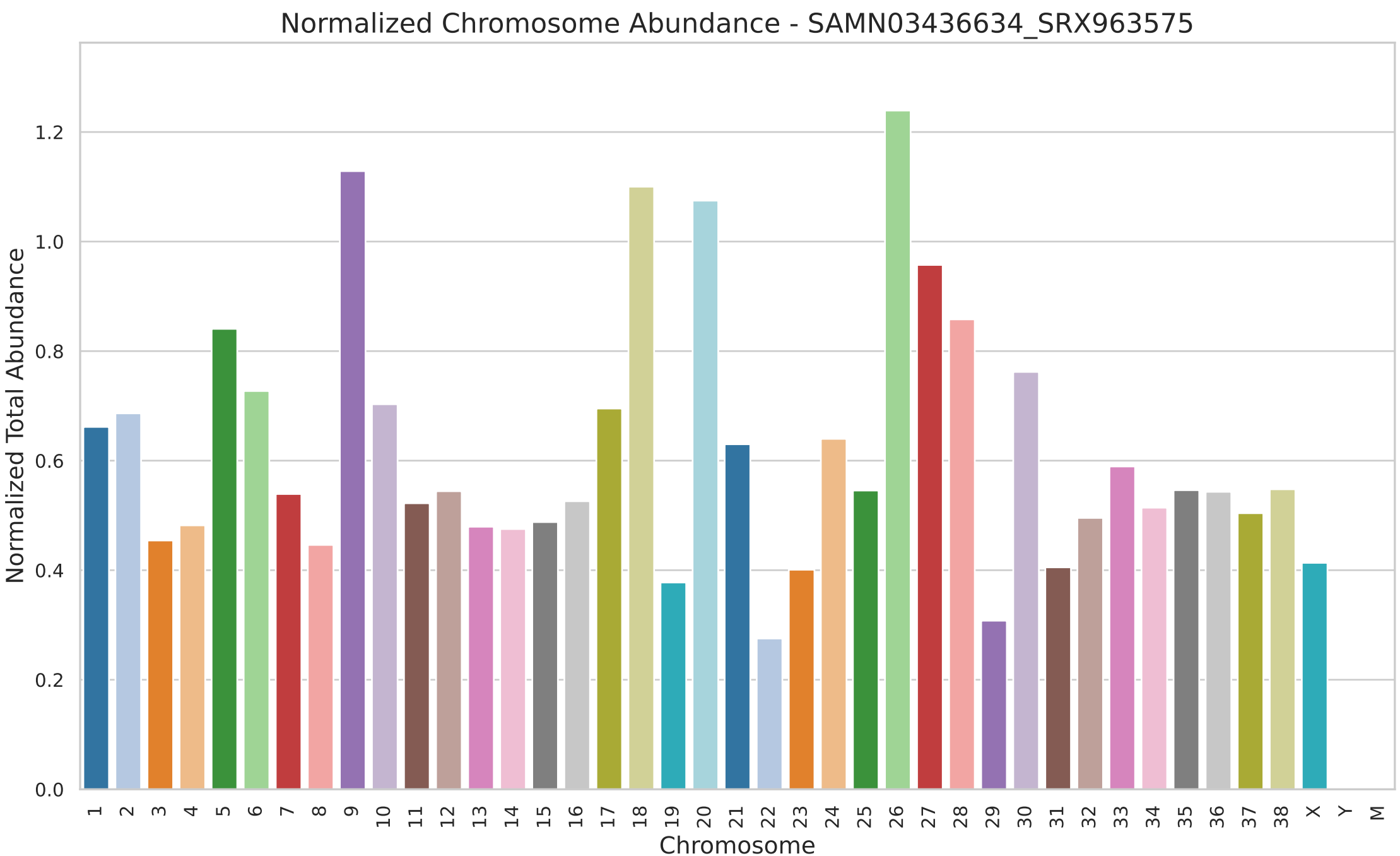

Normalized Chromosome Abundance - SAMN03436515_SRX963435
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

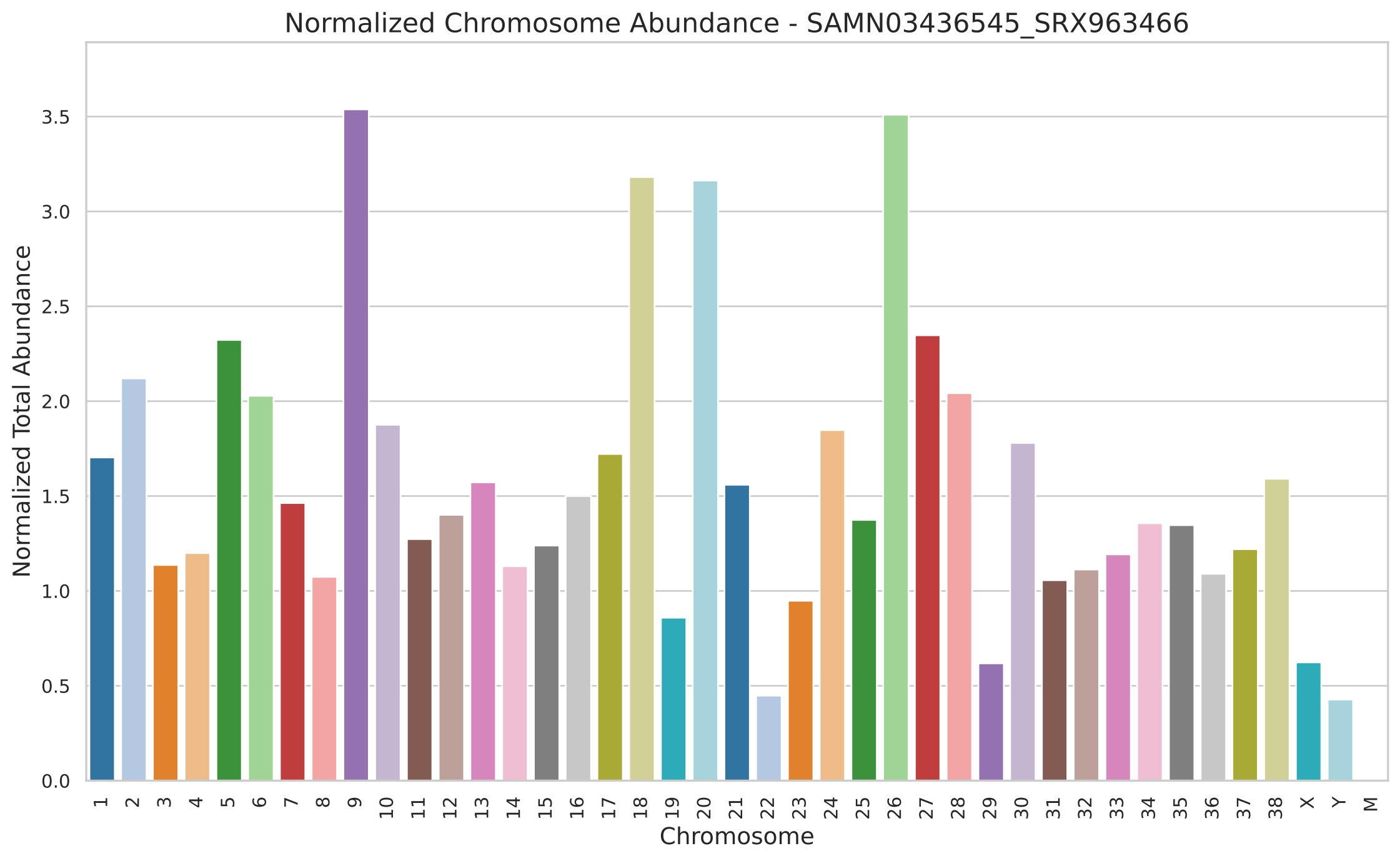

Normalized Chromosome Abundance - SAMN03436567_SRX963491
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

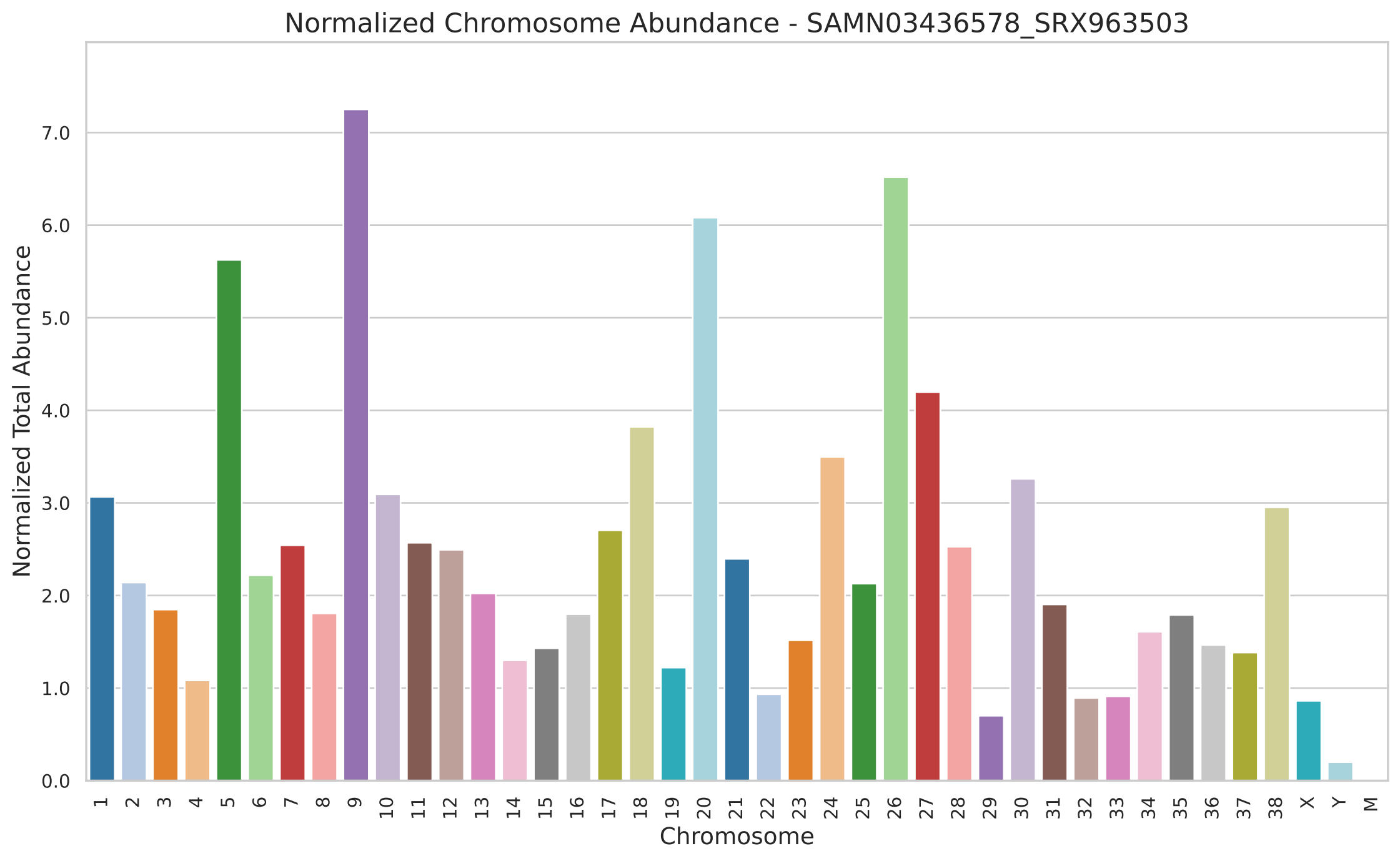

Normalized Chromosome Abundance - SAMN03436583_SRX963507
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

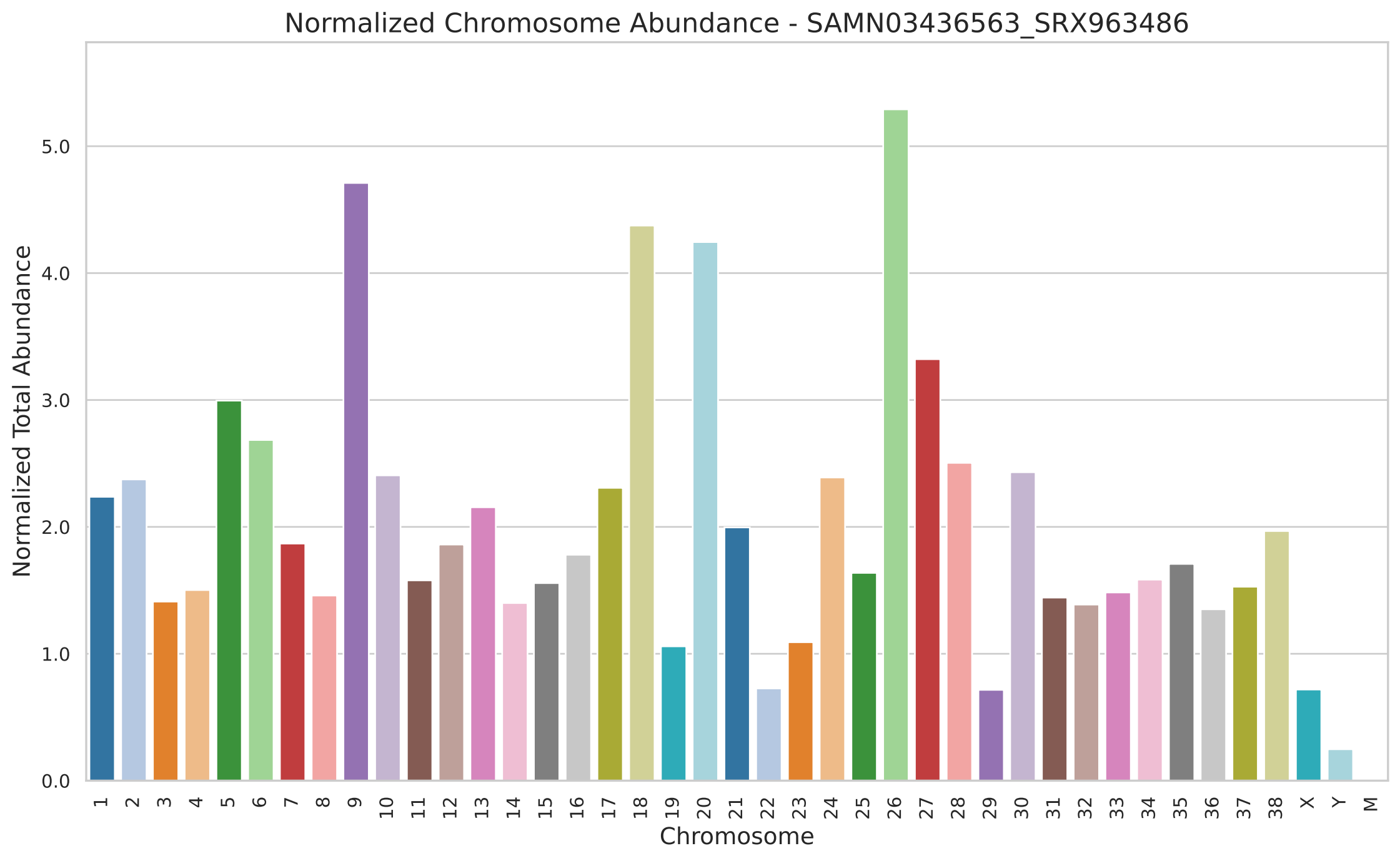

Normalized Chromosome Abundance - SAMN03436622_SRX963561
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

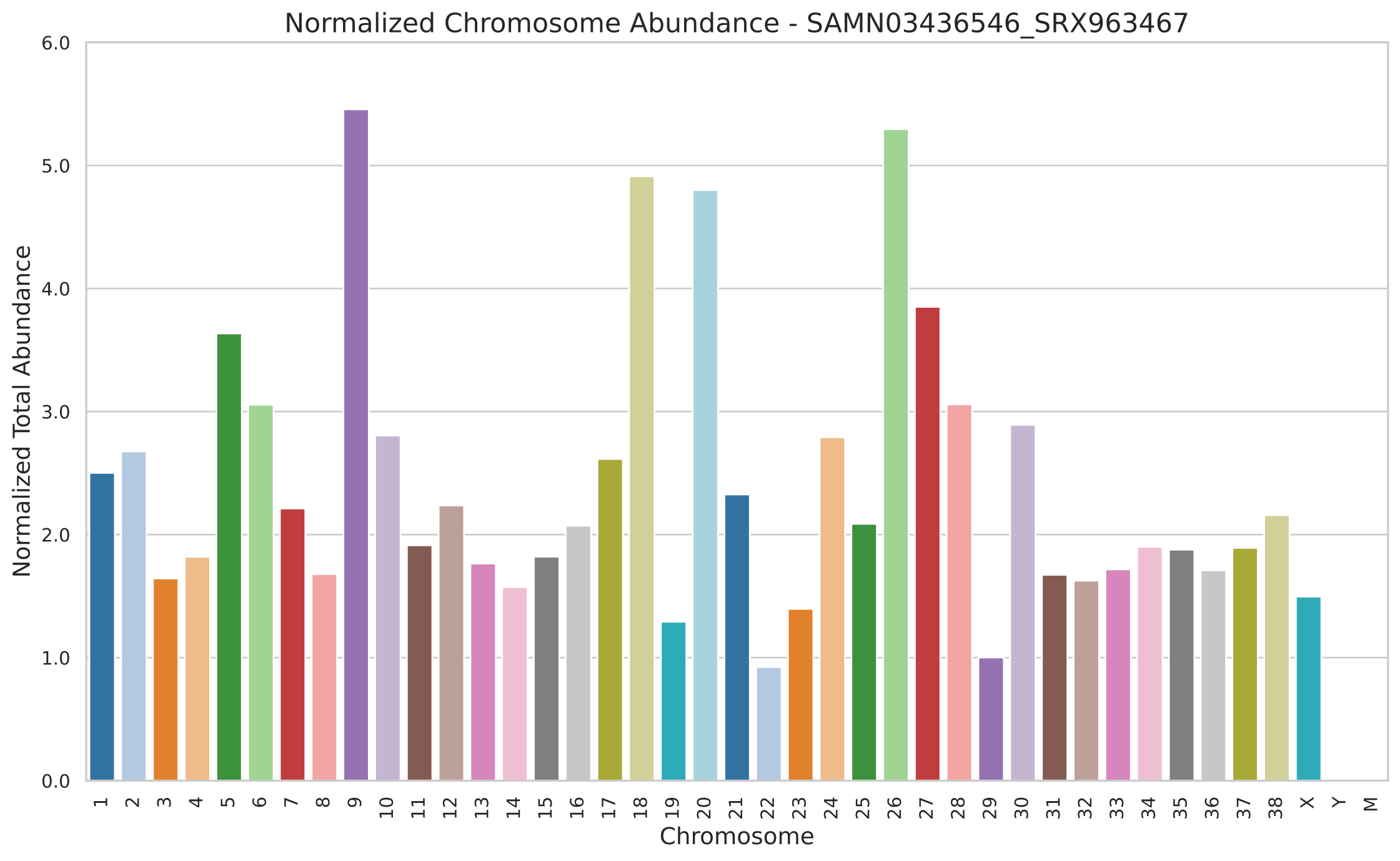

Normalized Chromosome Abundance - SAMN03436500_SRX963574
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

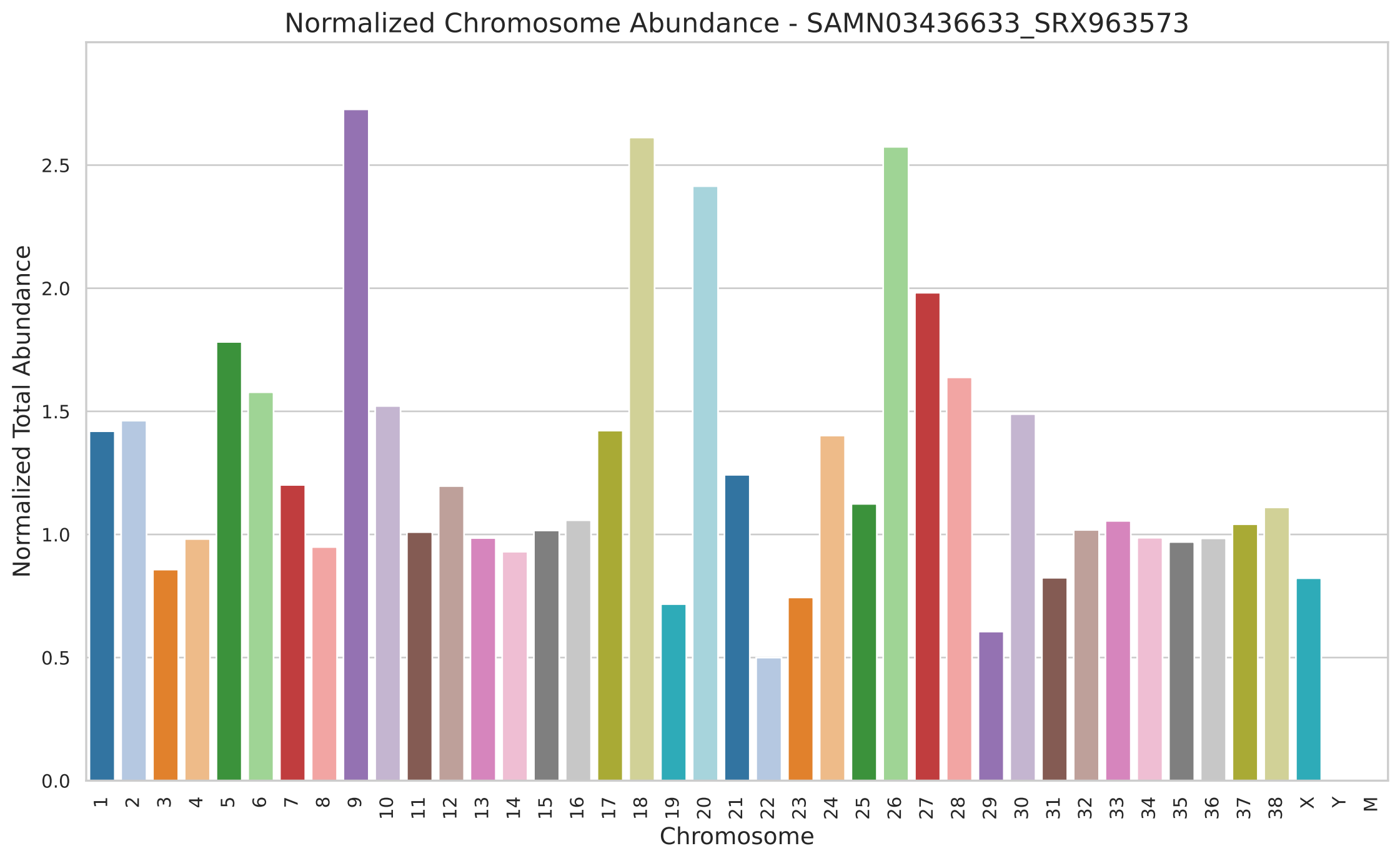

Normalized Chromosome Abundance - SAMN03436634_SRX963575
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

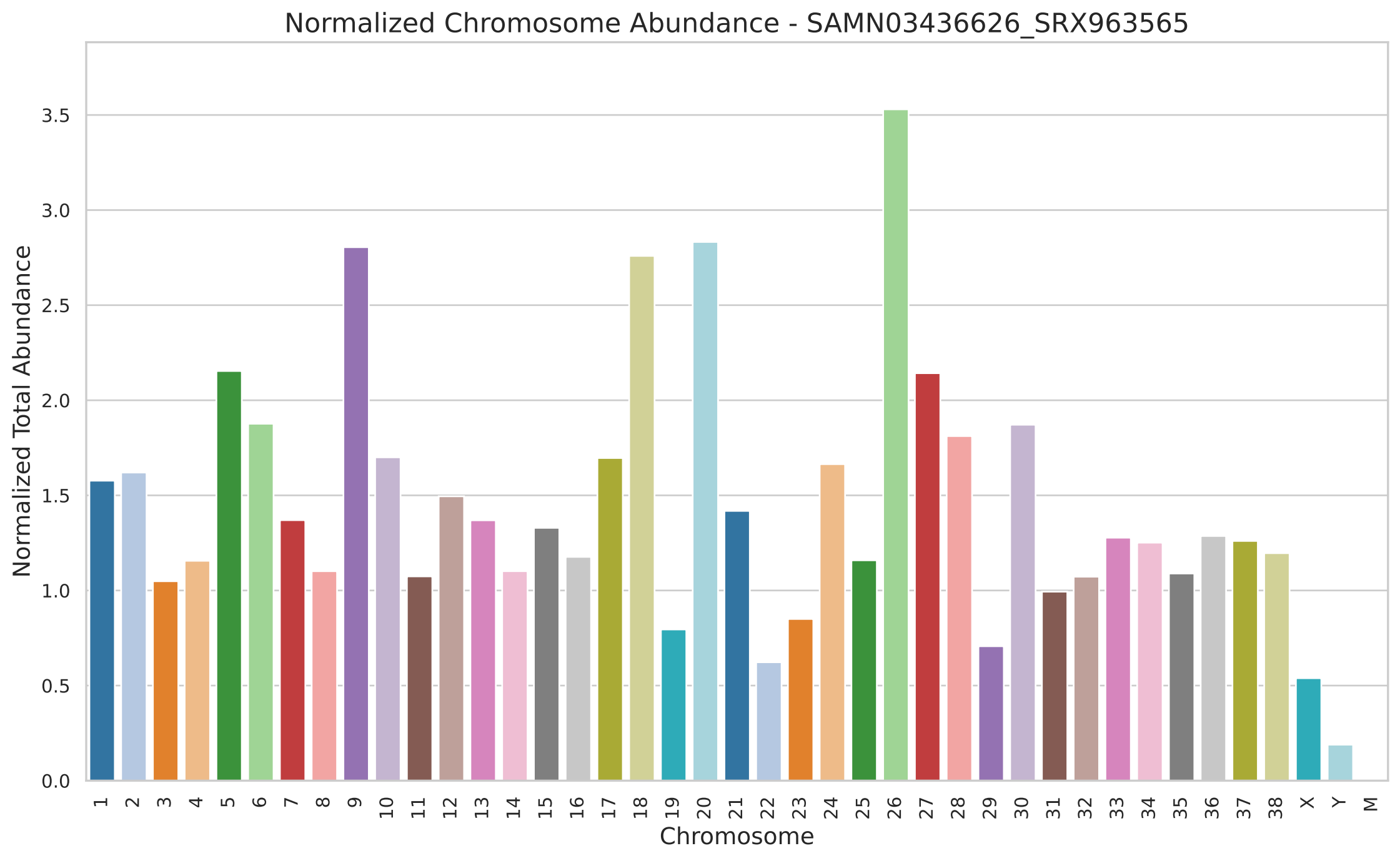

Normalized Chromosome Abundance - SAMN03436545_SRX963466
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

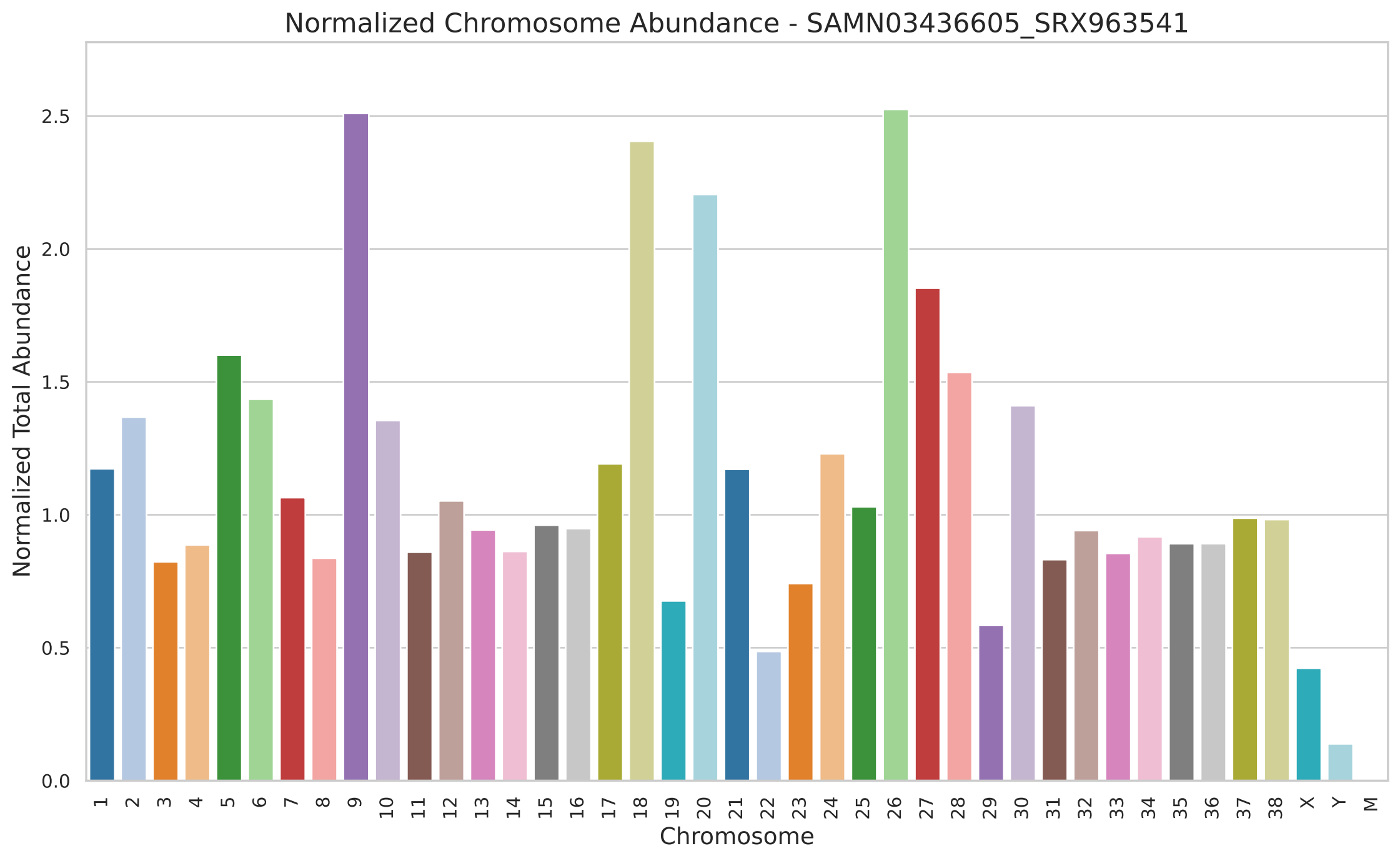

Normalized Chromosome Abundance - SAMN03436578_SRX963503
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

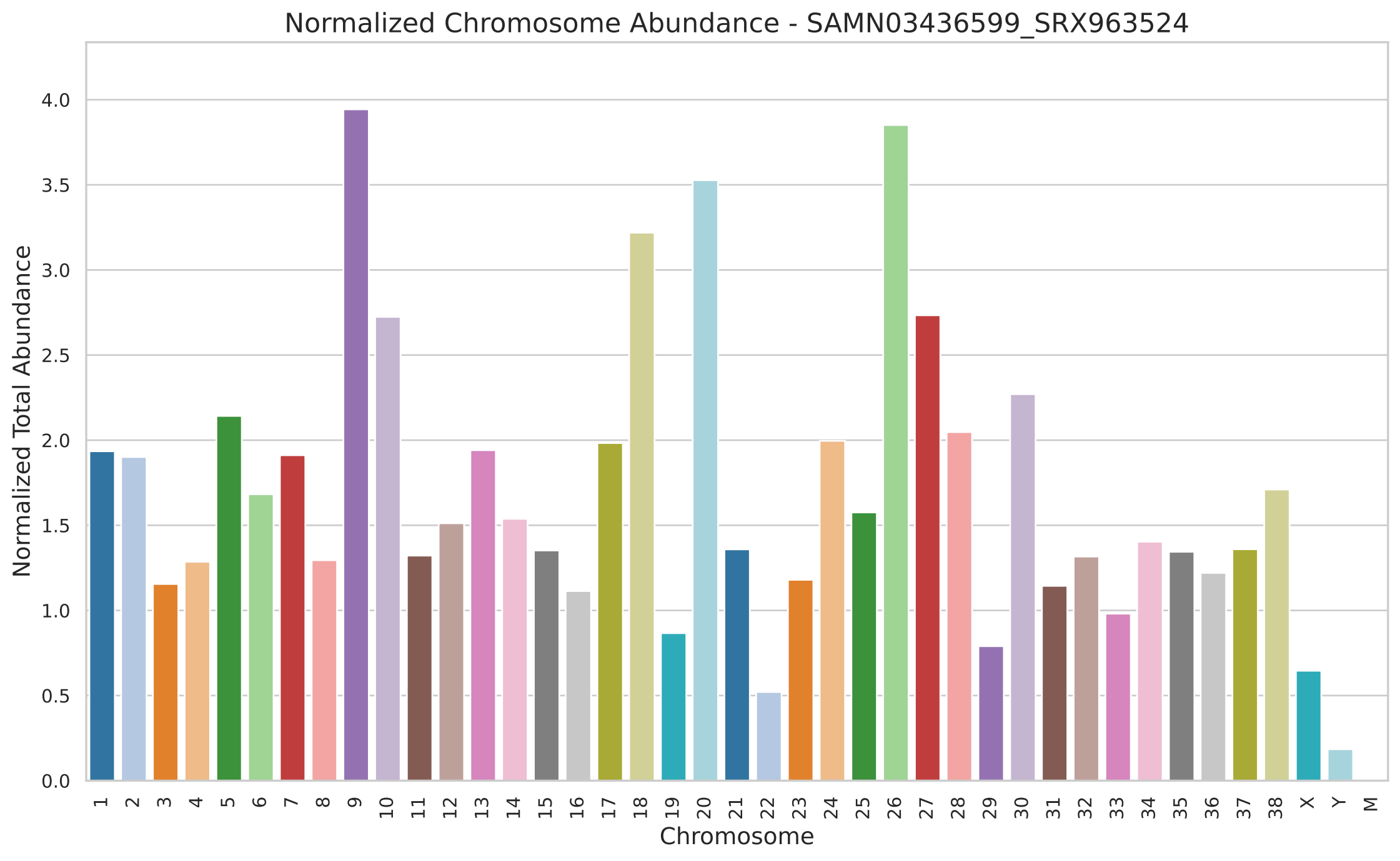

Normalized Chromosome Abundance - SAMN03436563_SRX963486
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

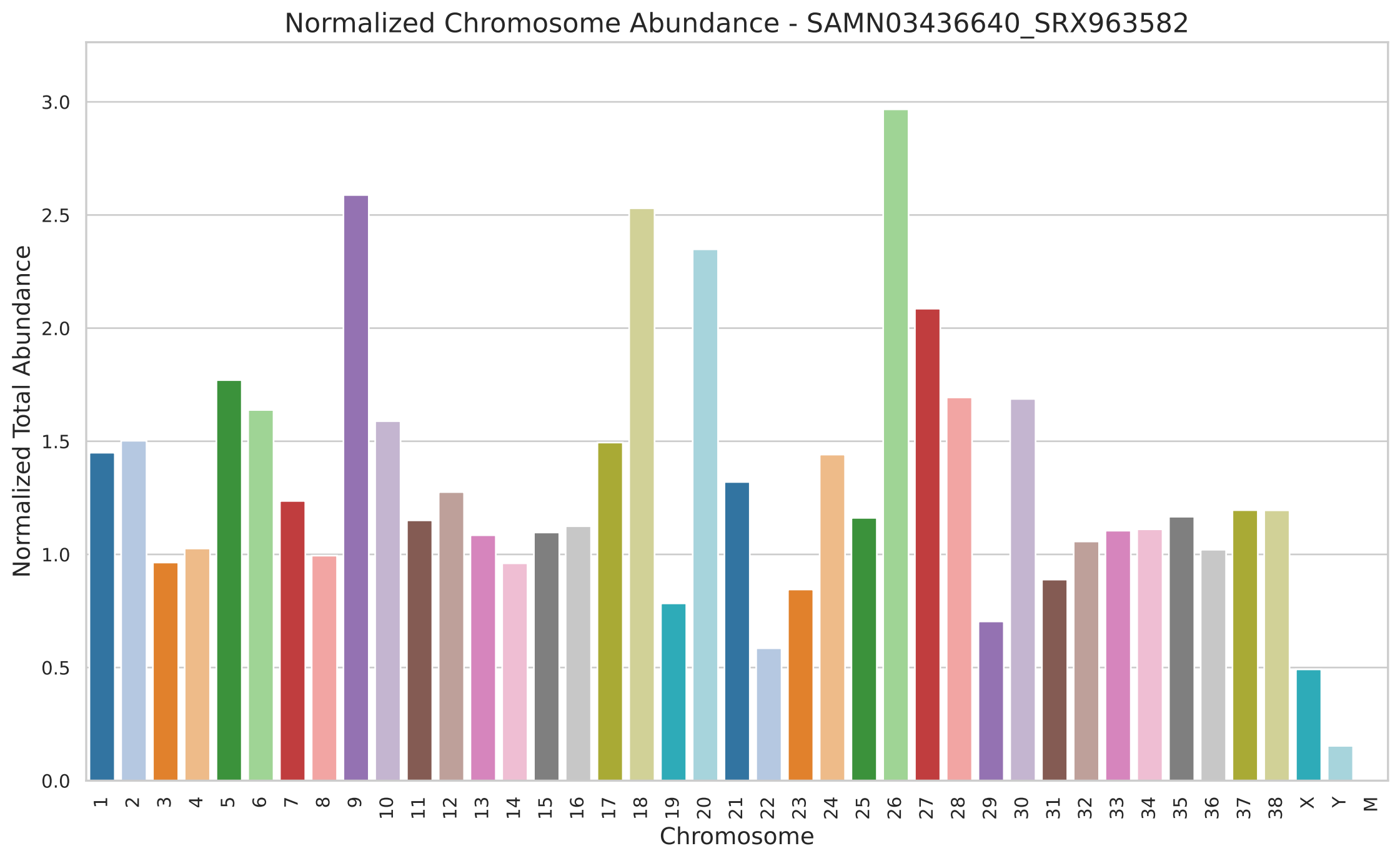

Normalized Chromosome Abundance - SAMN03436546_SRX963467
Normalized Total Abundance
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

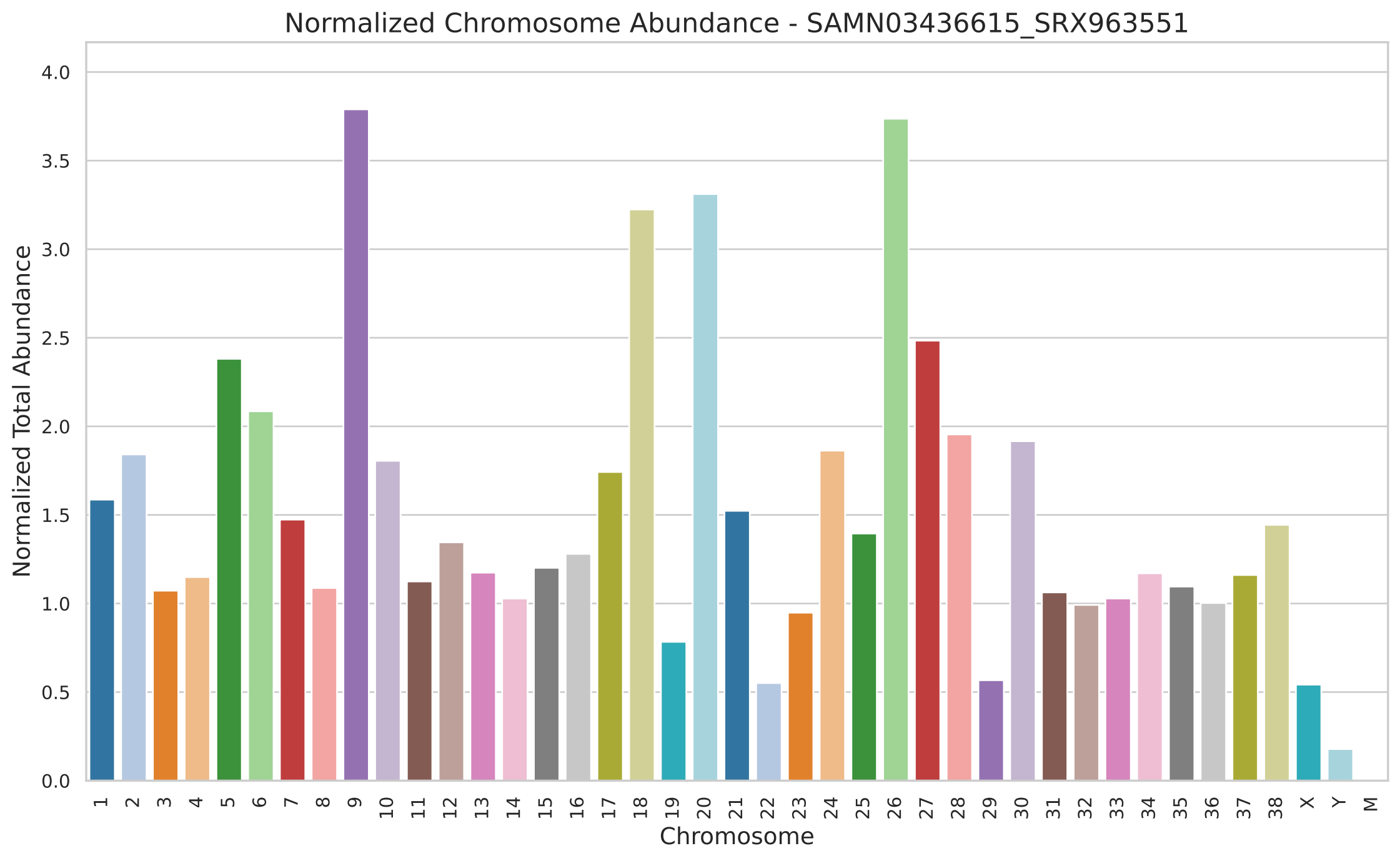

Normalized Chromosome Abundance - SAMN03436633_SRX963573
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

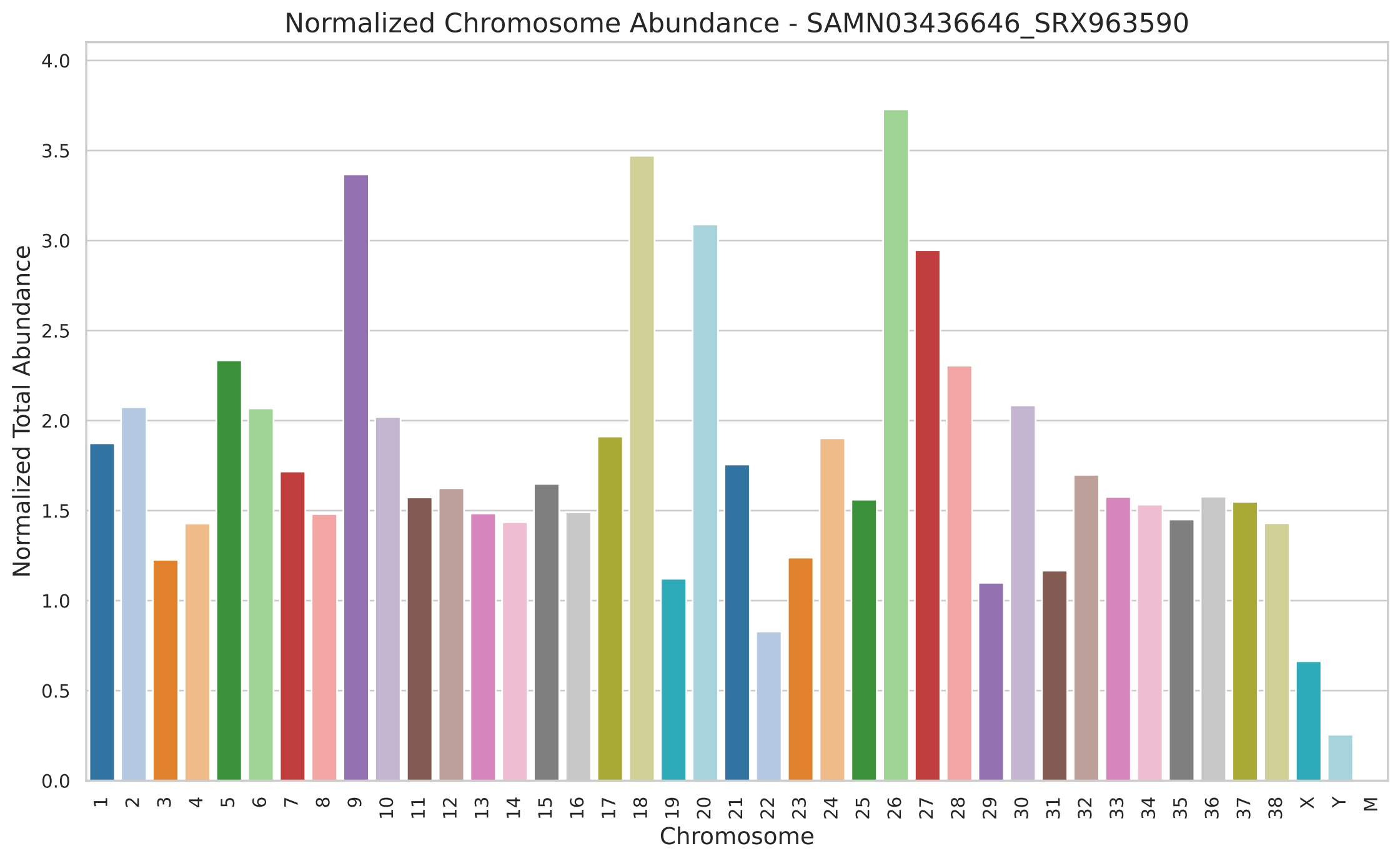

Normalized Chromosome Abundance - SAMN03436626_SRX963565
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

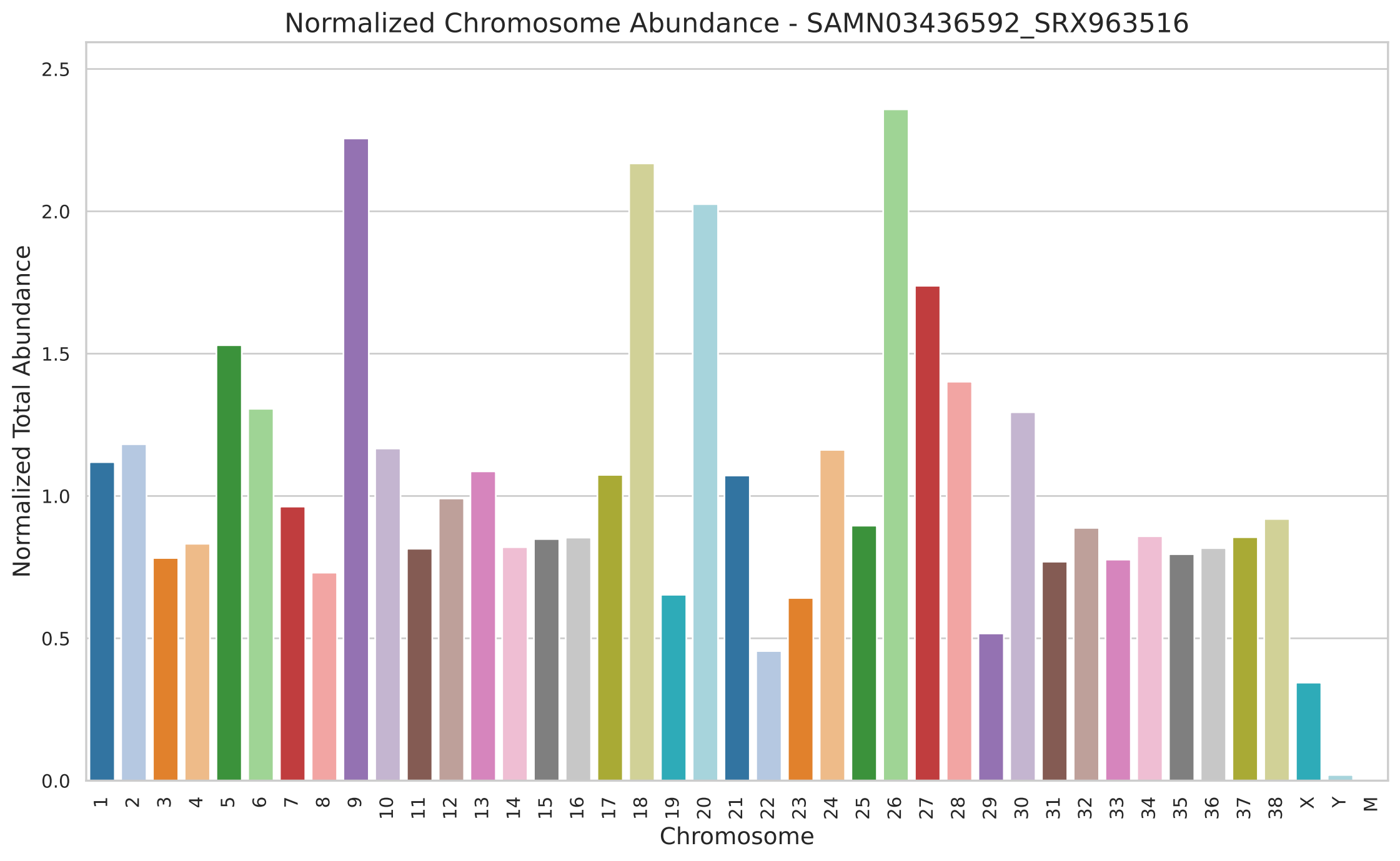

Normalized Chromosome Abundance - SAMN03436605_SRX963541
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

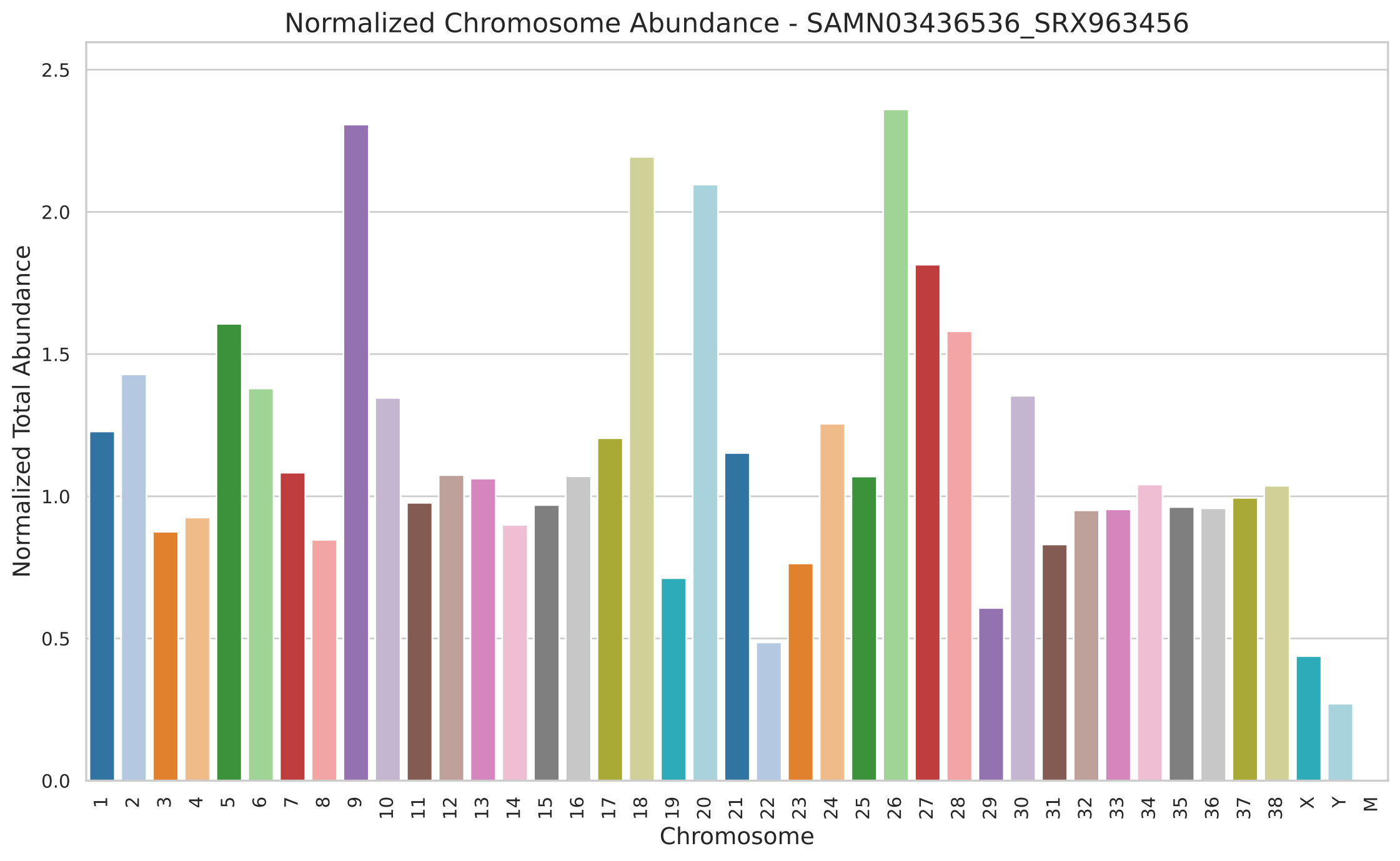

Normalized Chromosome Abundance - SAMN03436599_SRX963524
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

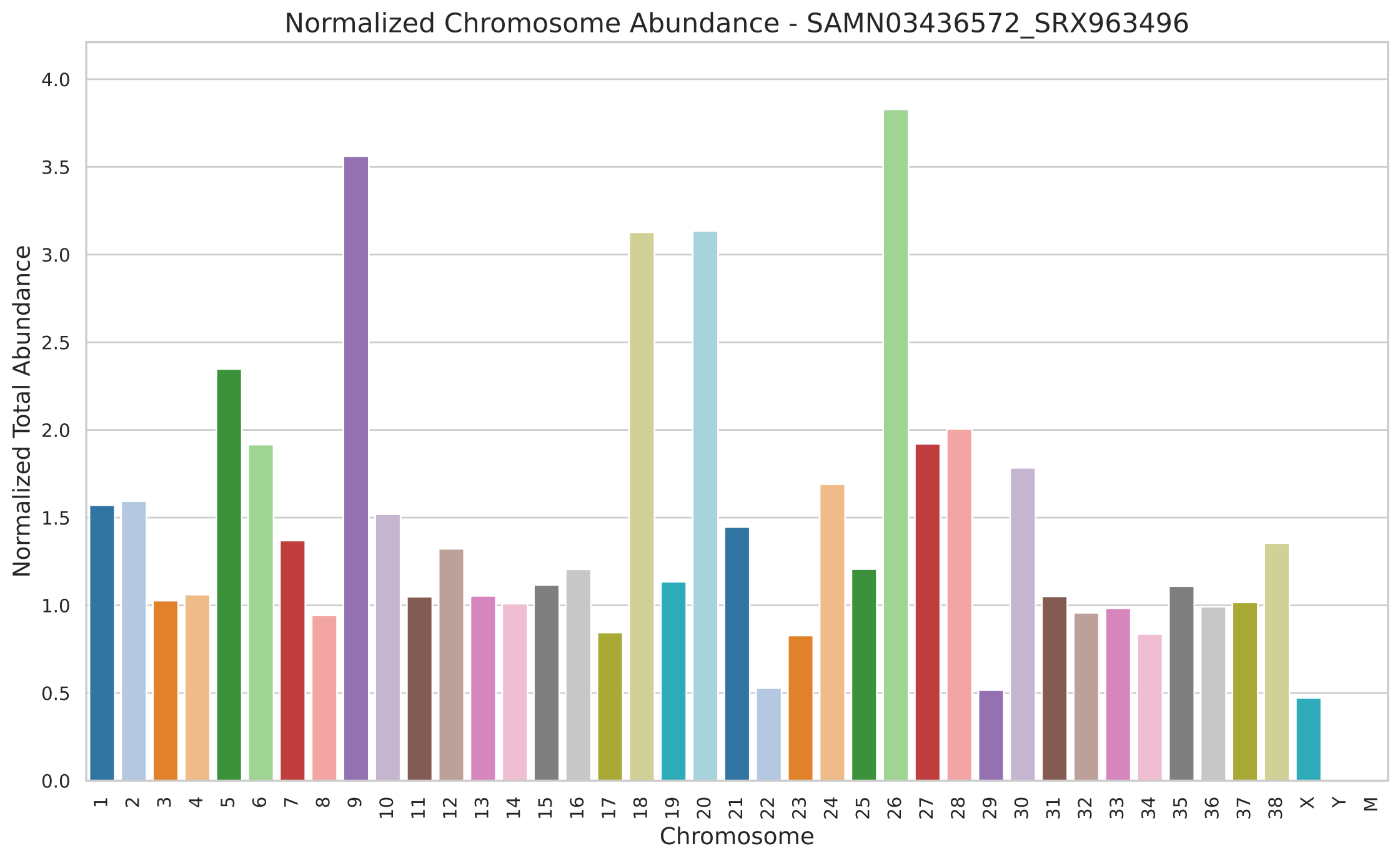

Normalized Chromosome Abundance - SAMN03436640_SRX963582
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

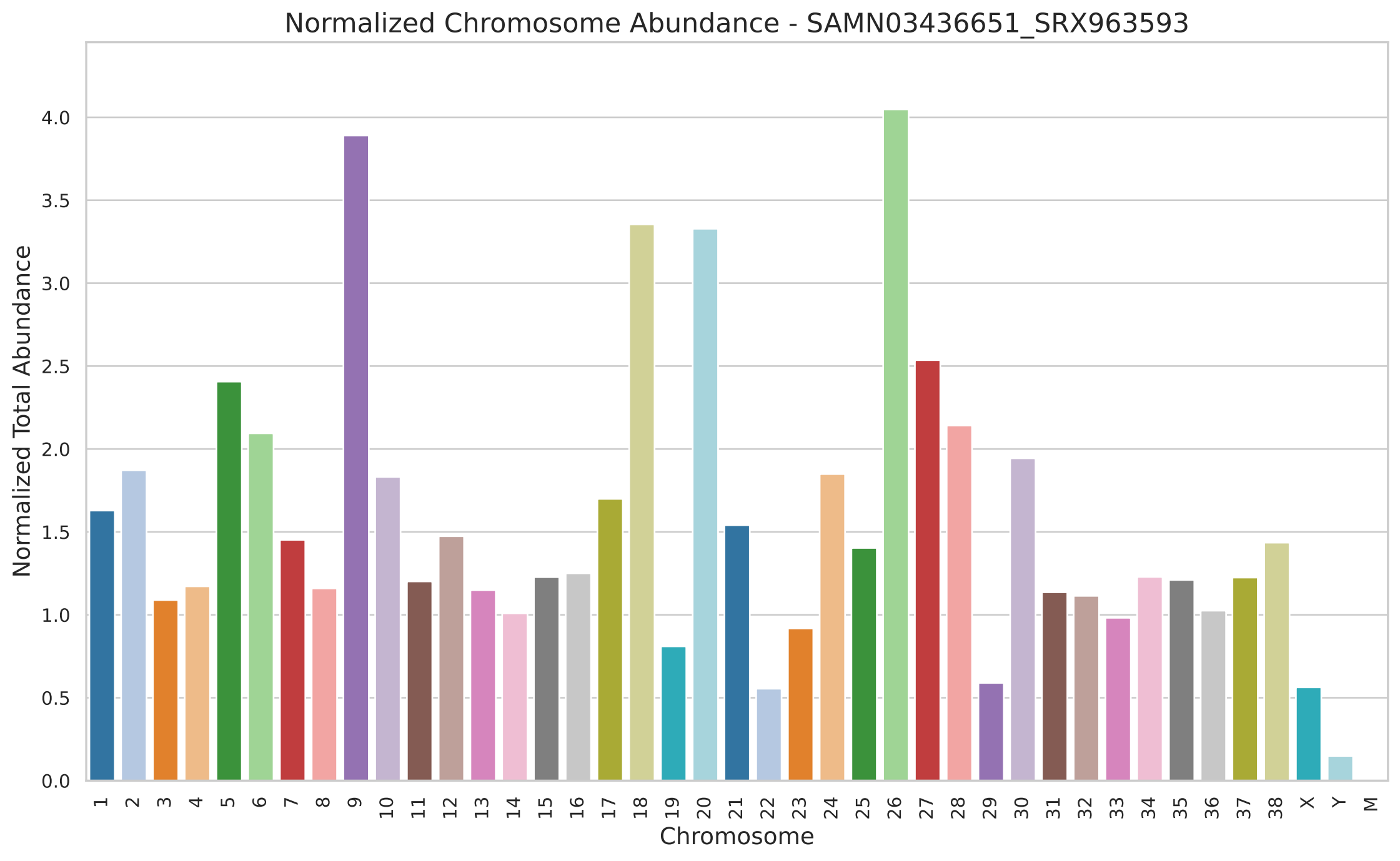

Normalized Chromosome Abundance - SAMN03436615_SRX963551
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

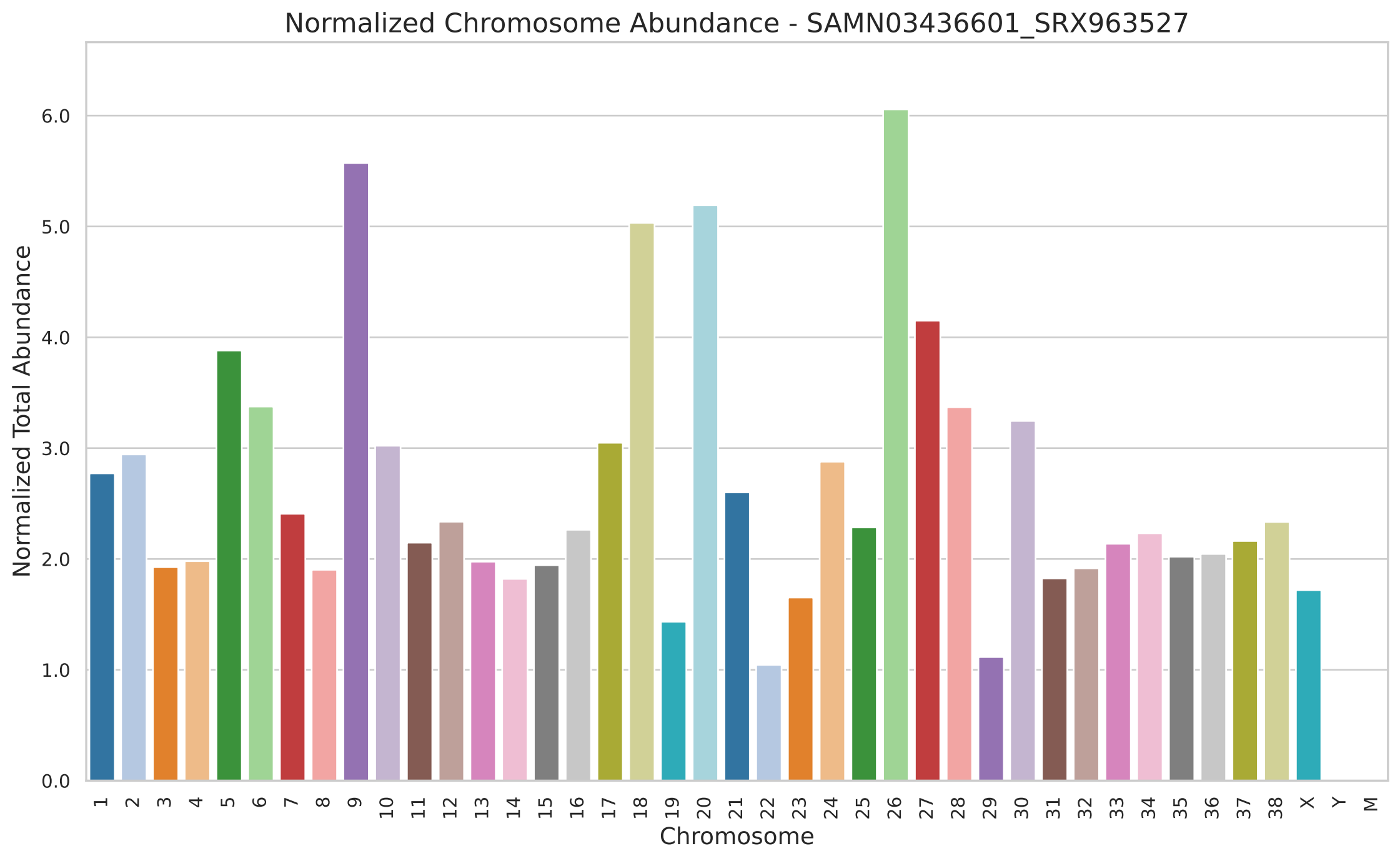

Normalized Chromosome Abundance - SAMN03436646_SRX963590
Normalized Total Abundance
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

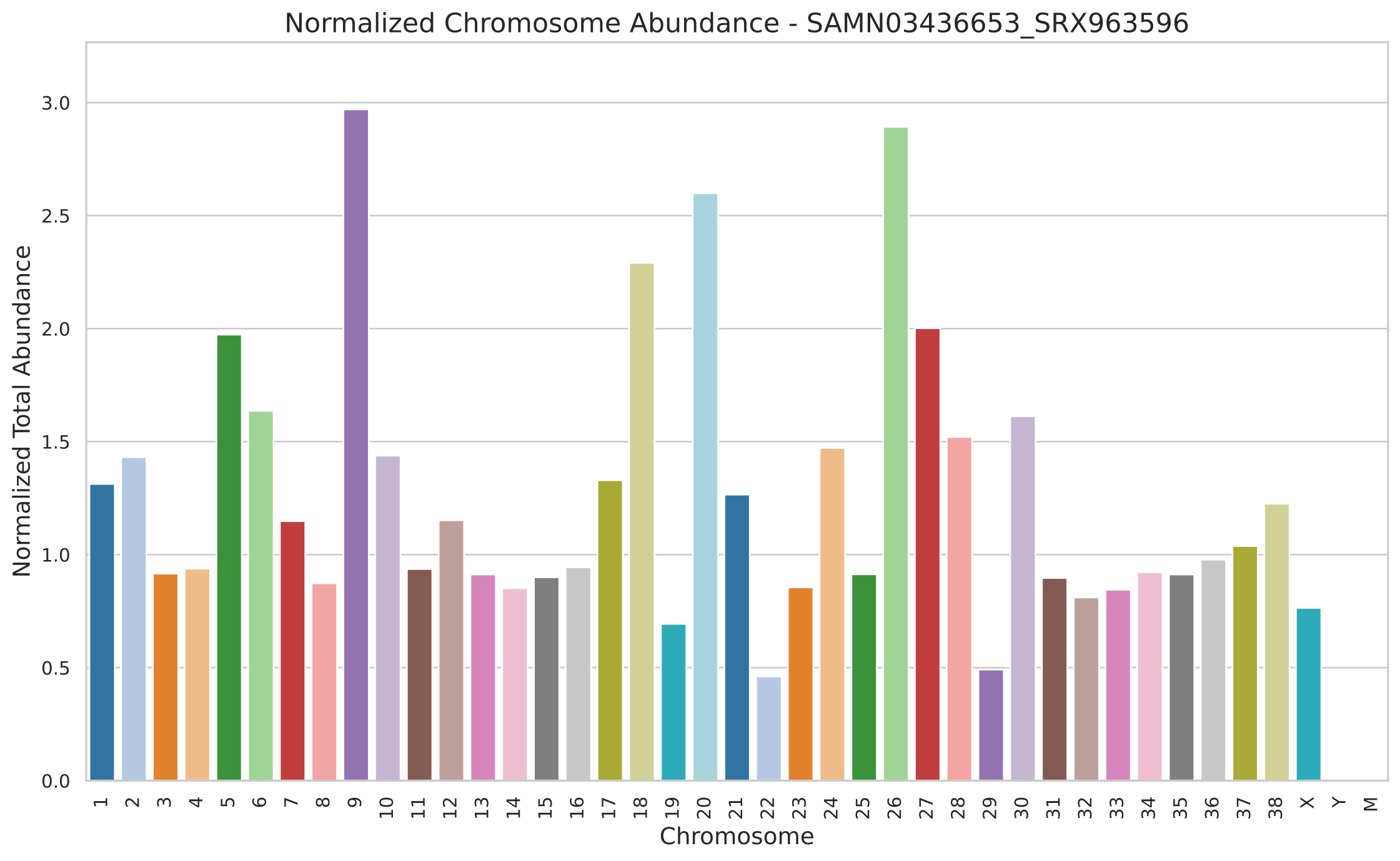

Normalized Chromosome Abundance - SAMN03436592_SRX963516
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

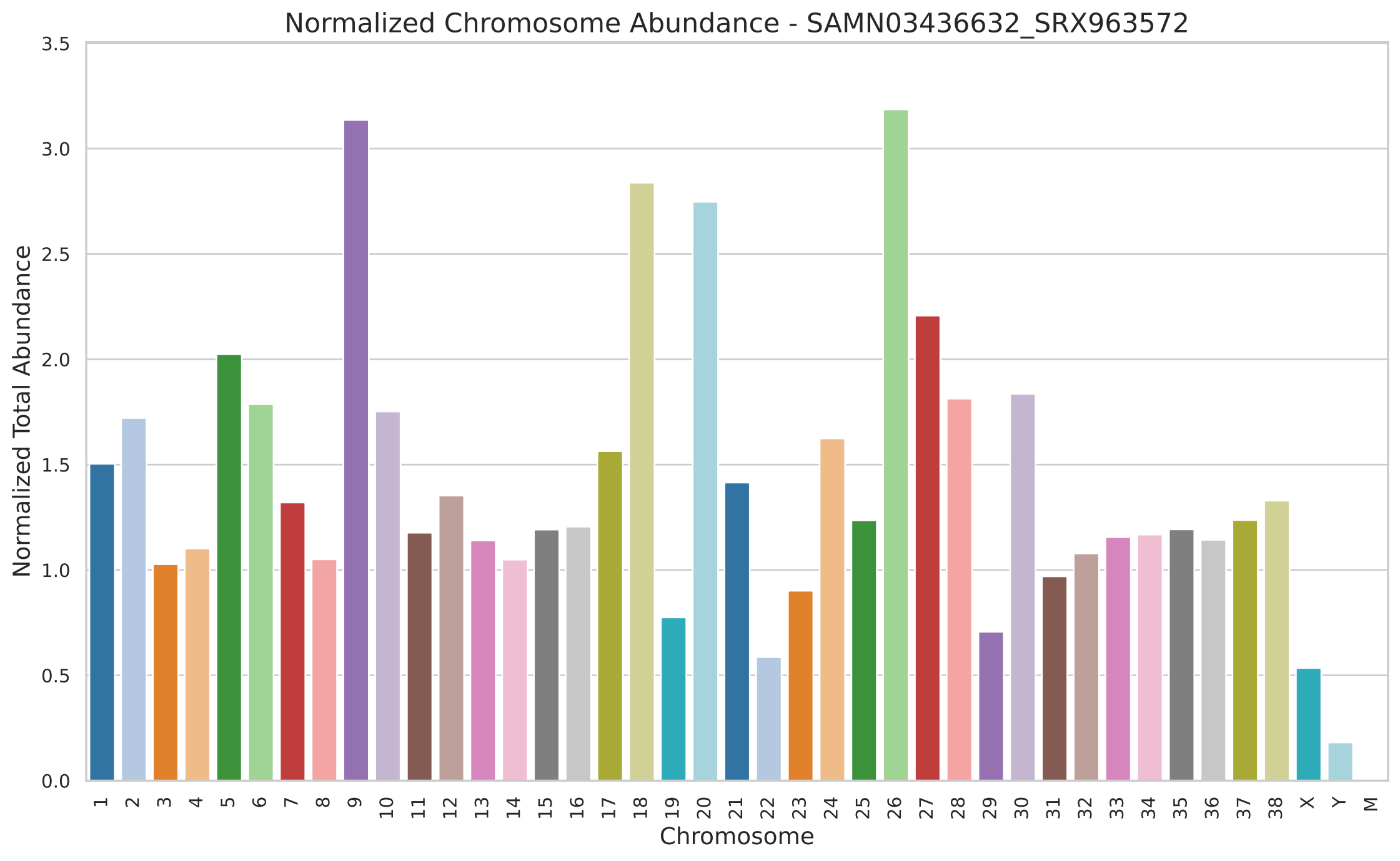

Normalized Chromosome Abundance - SAMN03436536_SRX963456
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

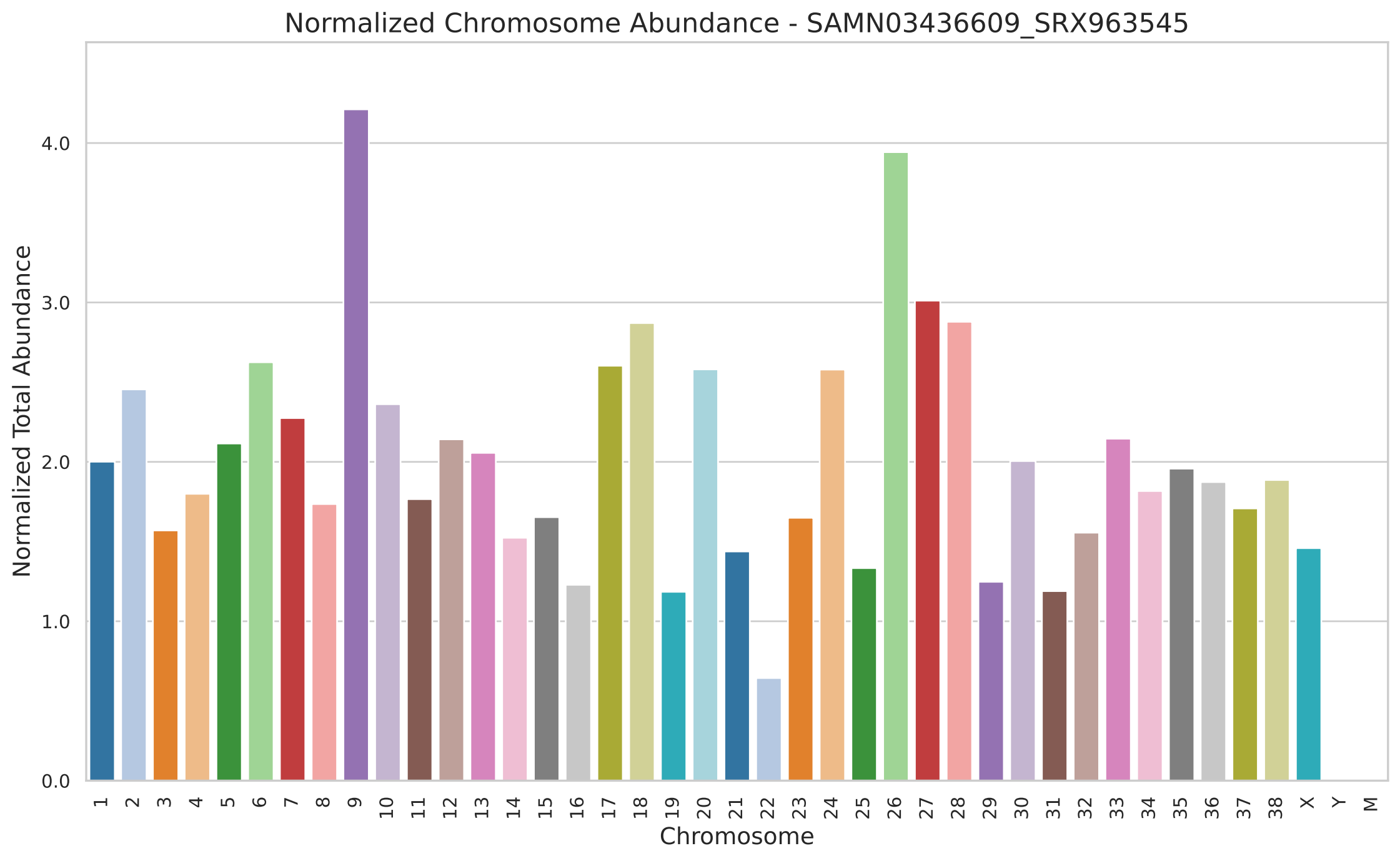

Normalized Chromosome Abundance - SAMN03436572_SRX963496
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

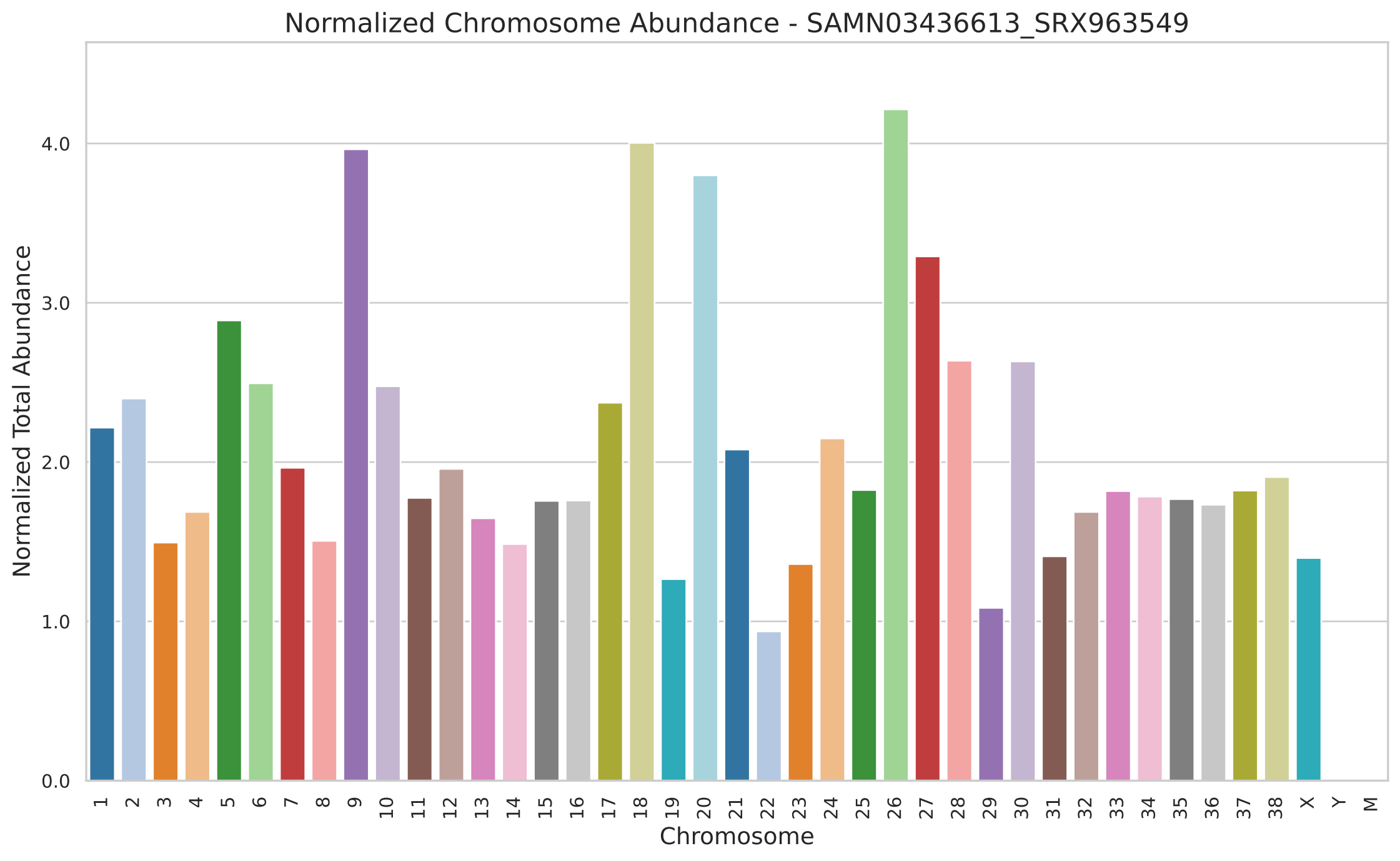

Normalized Chromosome Abundance - SAMN03436651_SRX963593
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

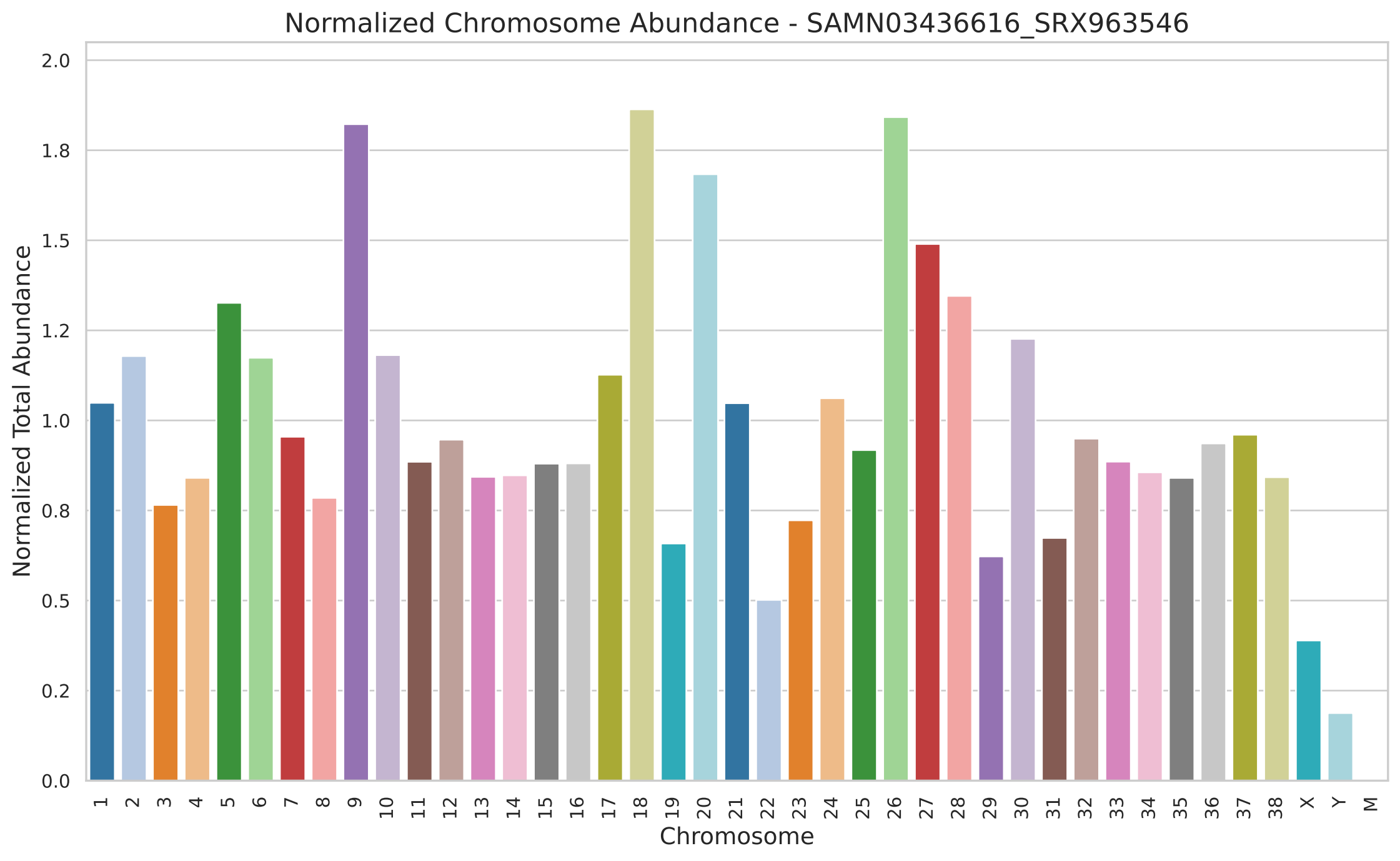

Normalized Chromosome Abundance - SAMN03436601_SRX963527
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

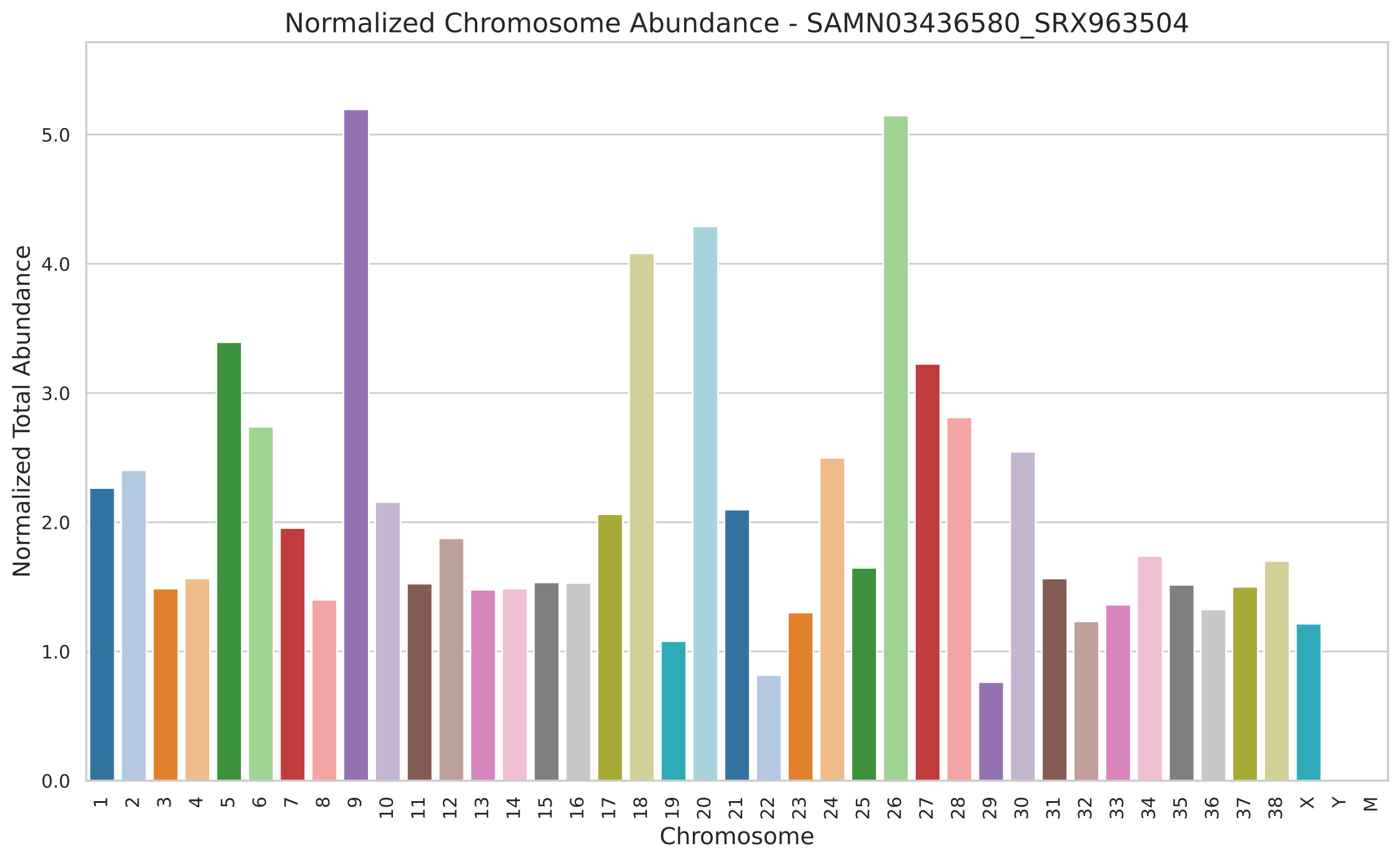

Normalized Chromosome Abundance - SAMN03436653_SRX963596
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

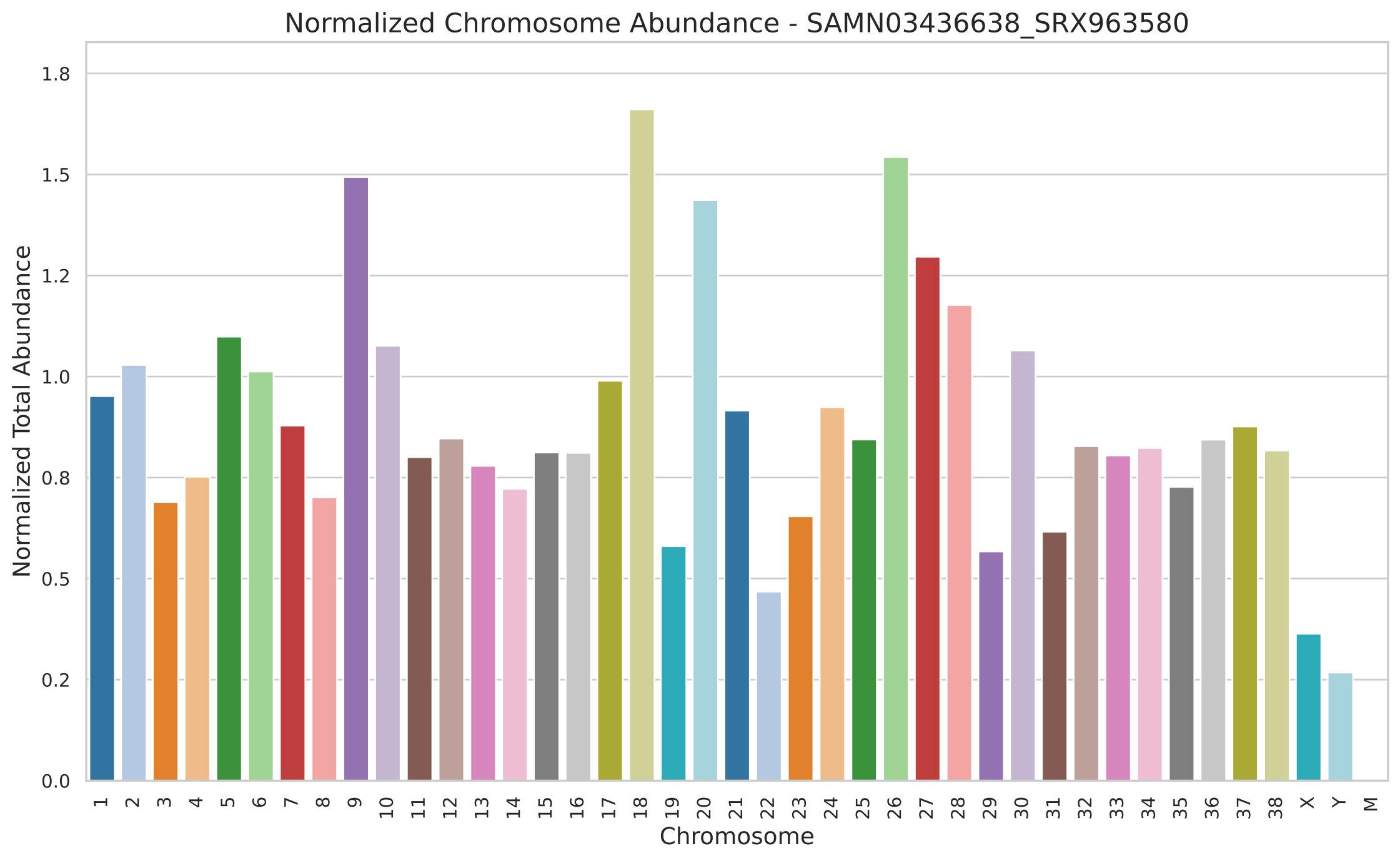

Normalized Chromosome Abundance - SAMN03436632_SRX963572
Normalized Total Abundance
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

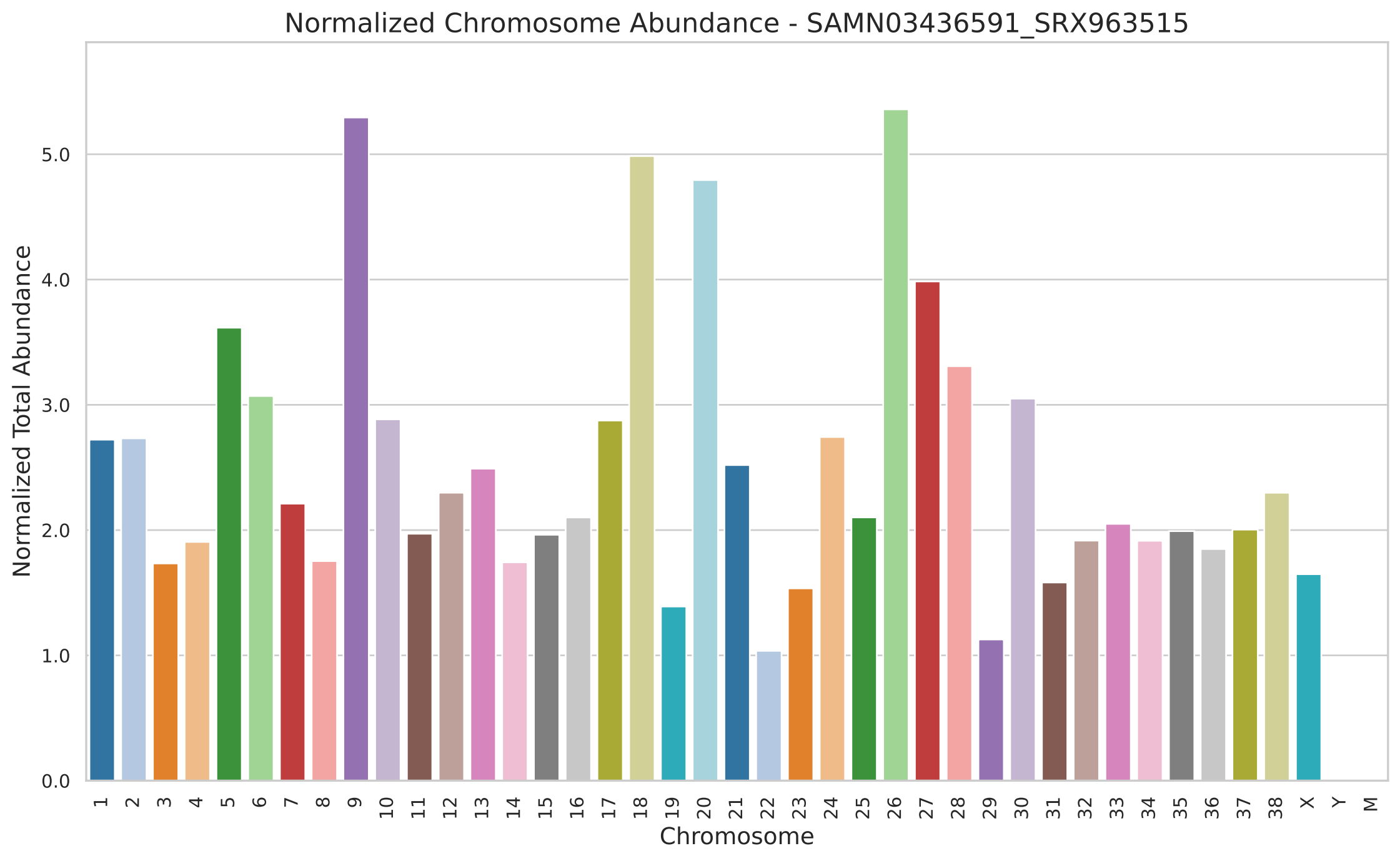

Normalized Chromosome Abundance - SAMN03436609_SRX963545
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

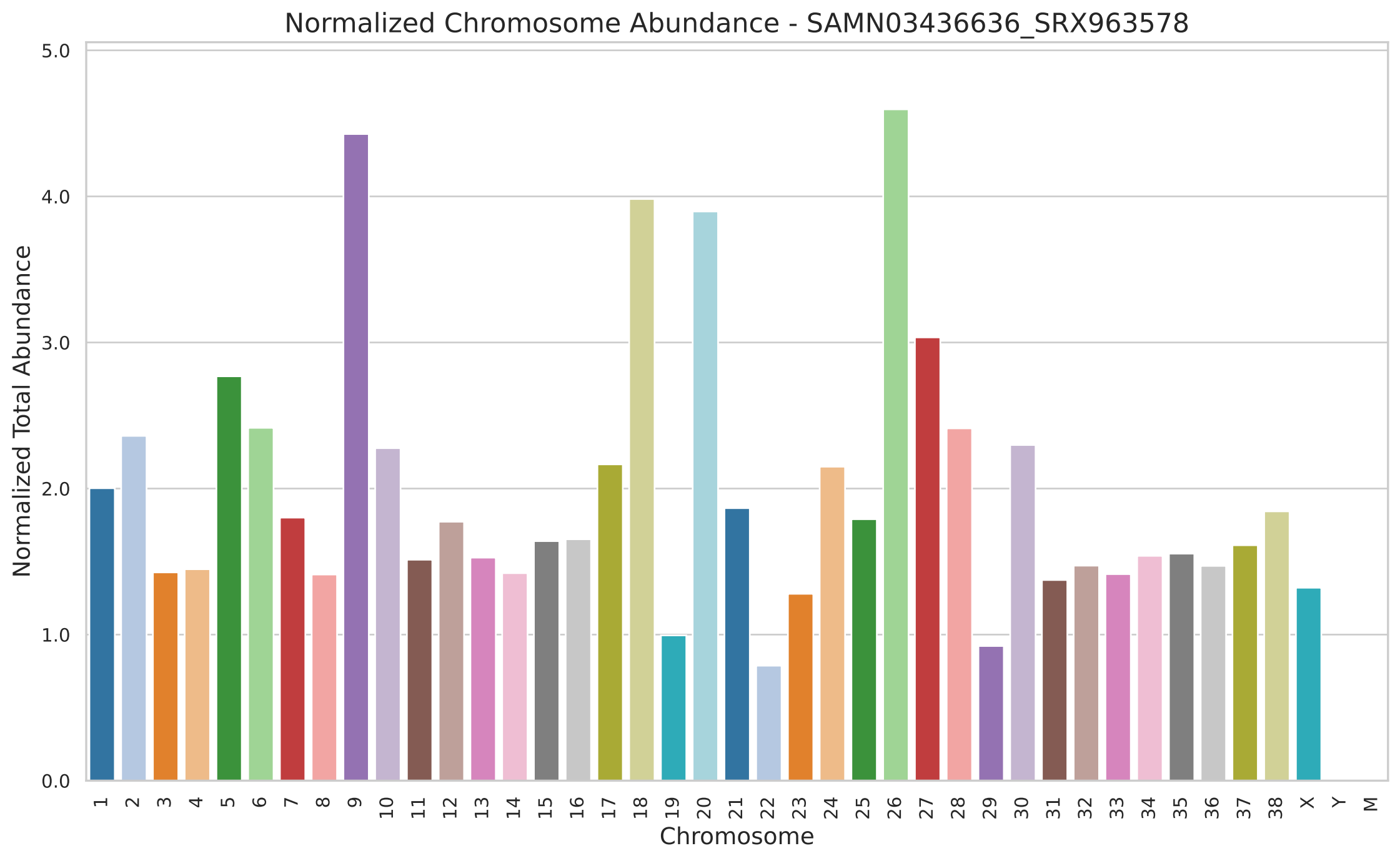

Normalized Chromosome Abundance - SAMN03436613_SRX963549
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

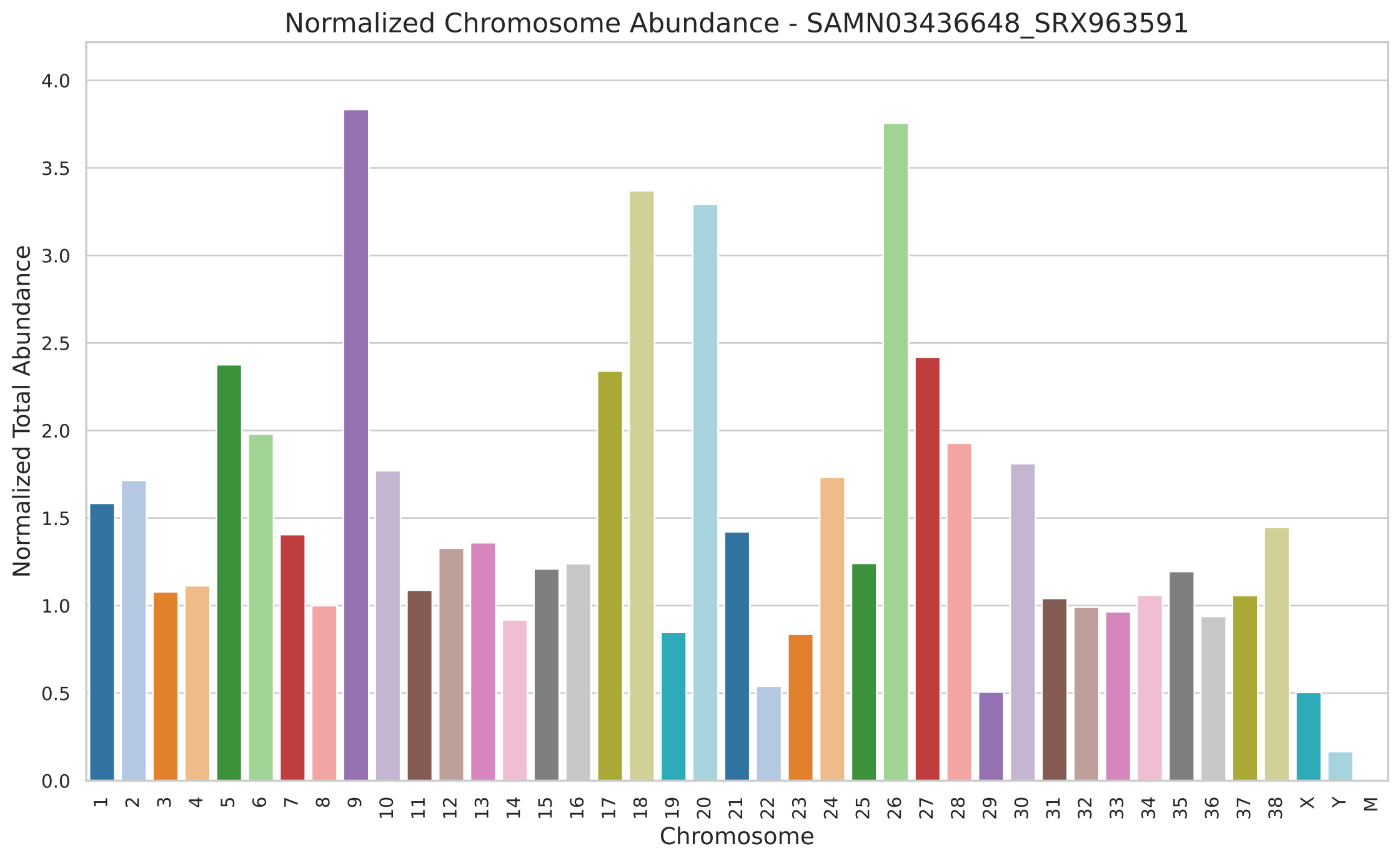

Normalized Chromosome Abundance - SAMN03436616_SRX963546
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

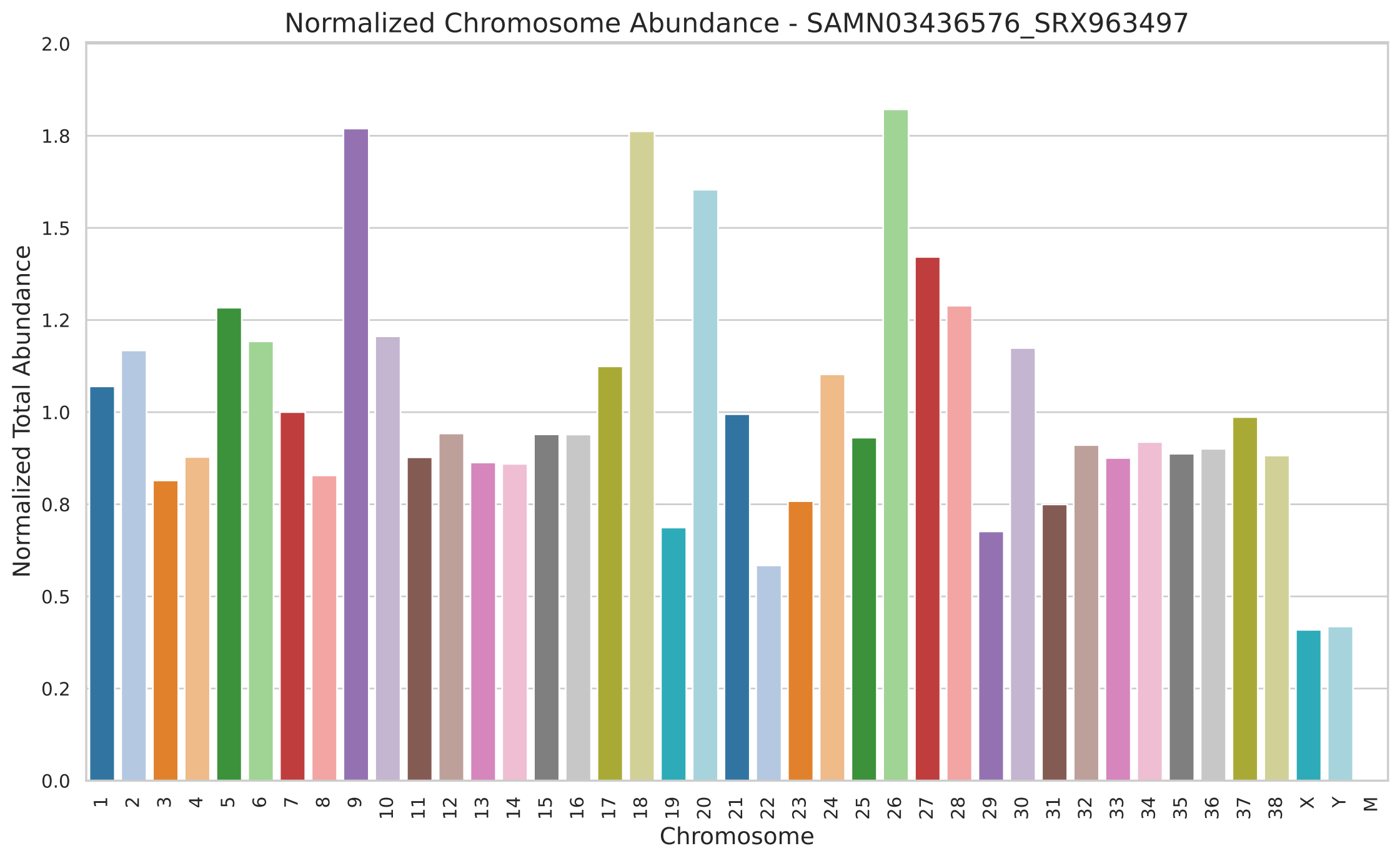

Normalized Chromosome Abundance - SAMN03436580_SRX963504
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

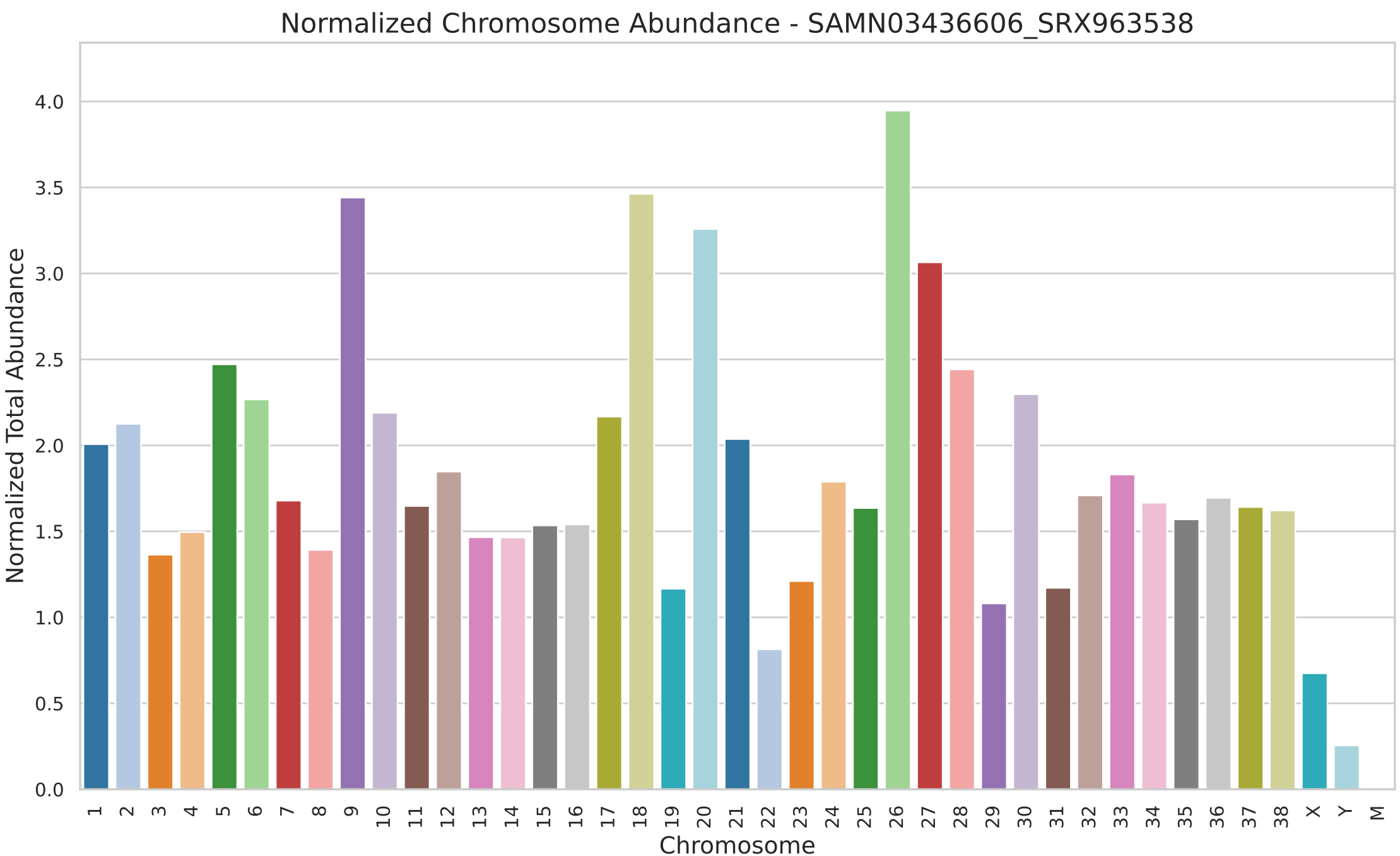

Normalized Chromosome Abundance - SAMN03436638_SRX963580
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

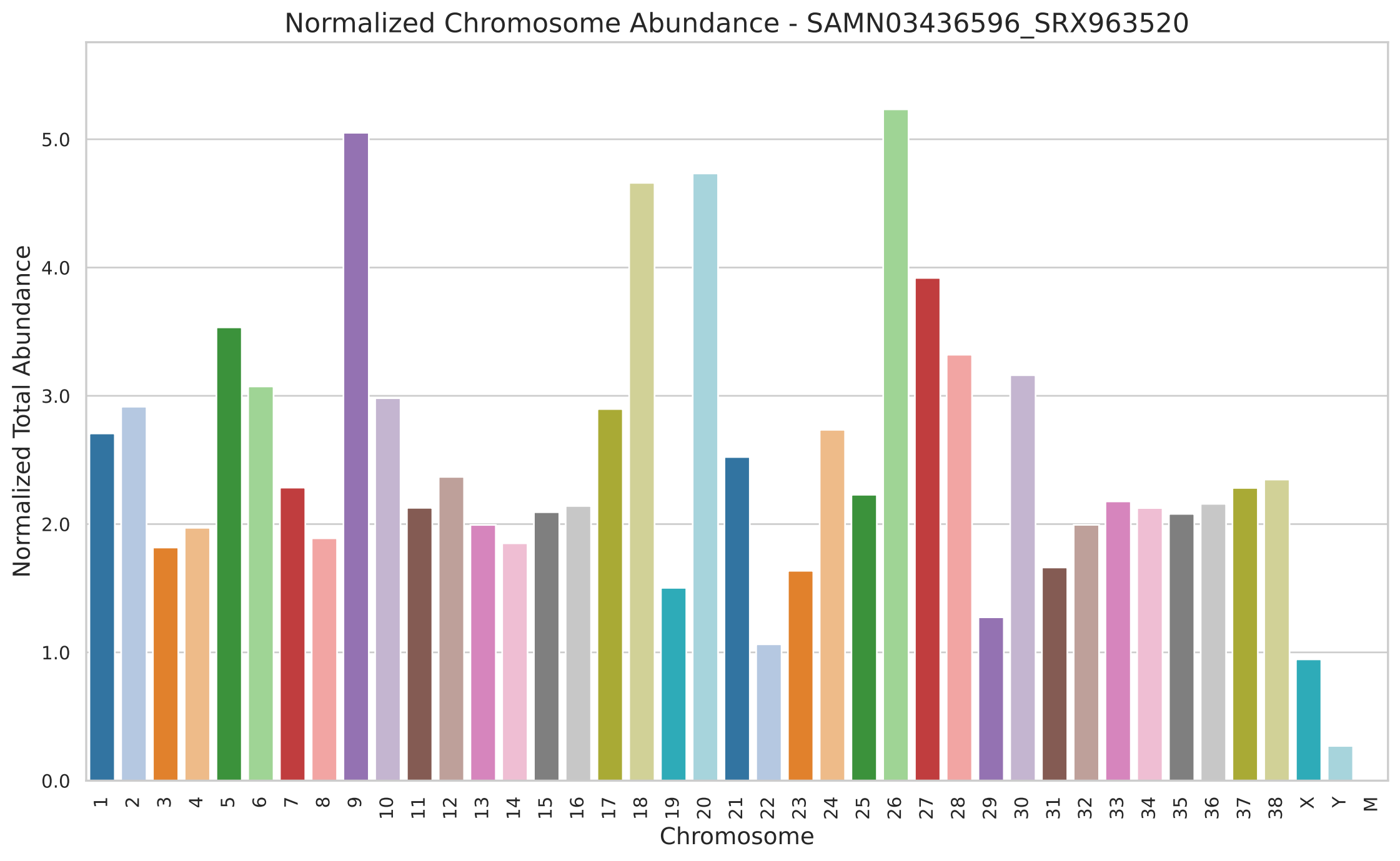

Normalized Chromosome Abundance - SAMN03436591_SRX963515
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

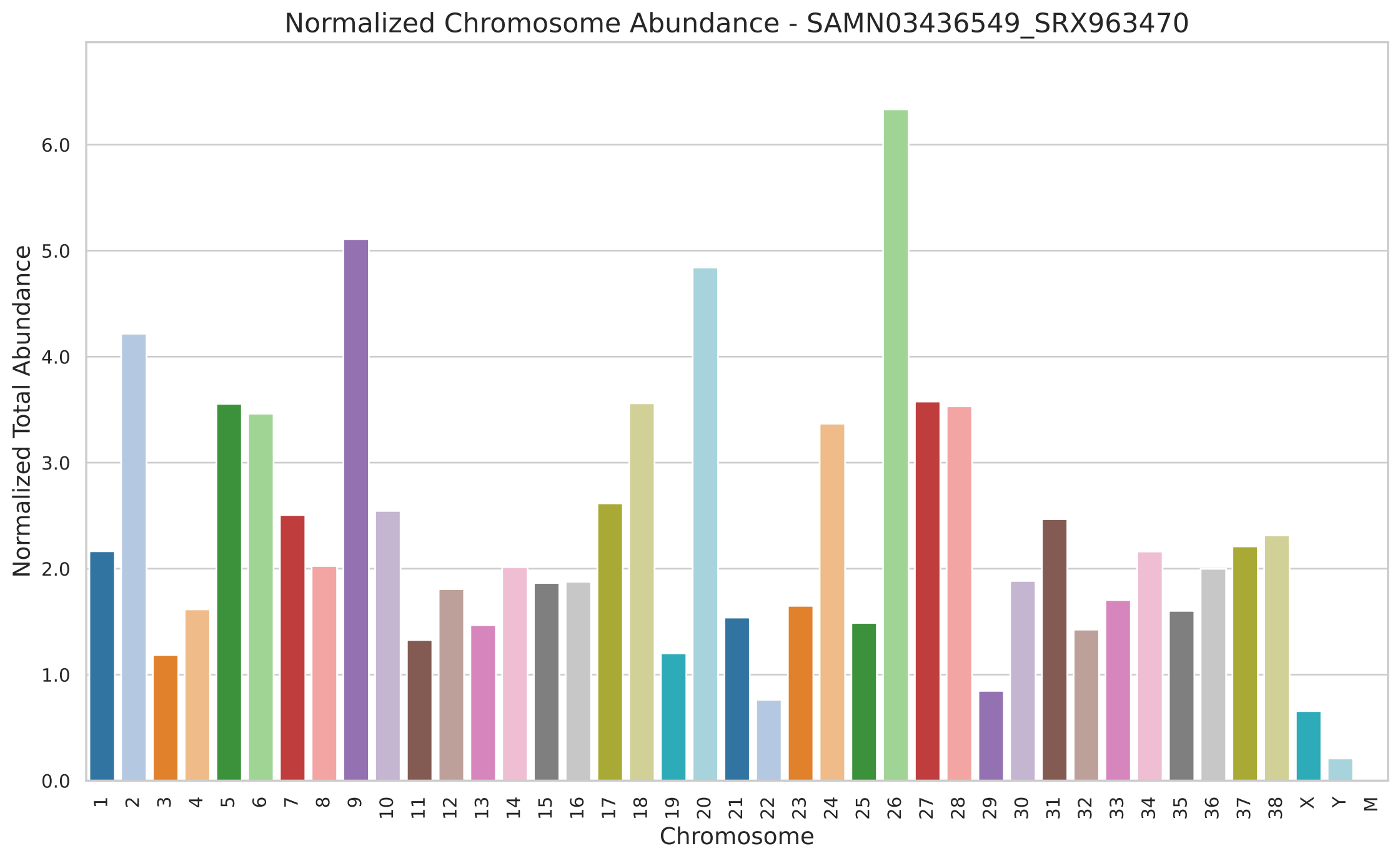

Normalized Chromosome Abundance - SAMN03436636_SRX963578
Normalized Total Abundance
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

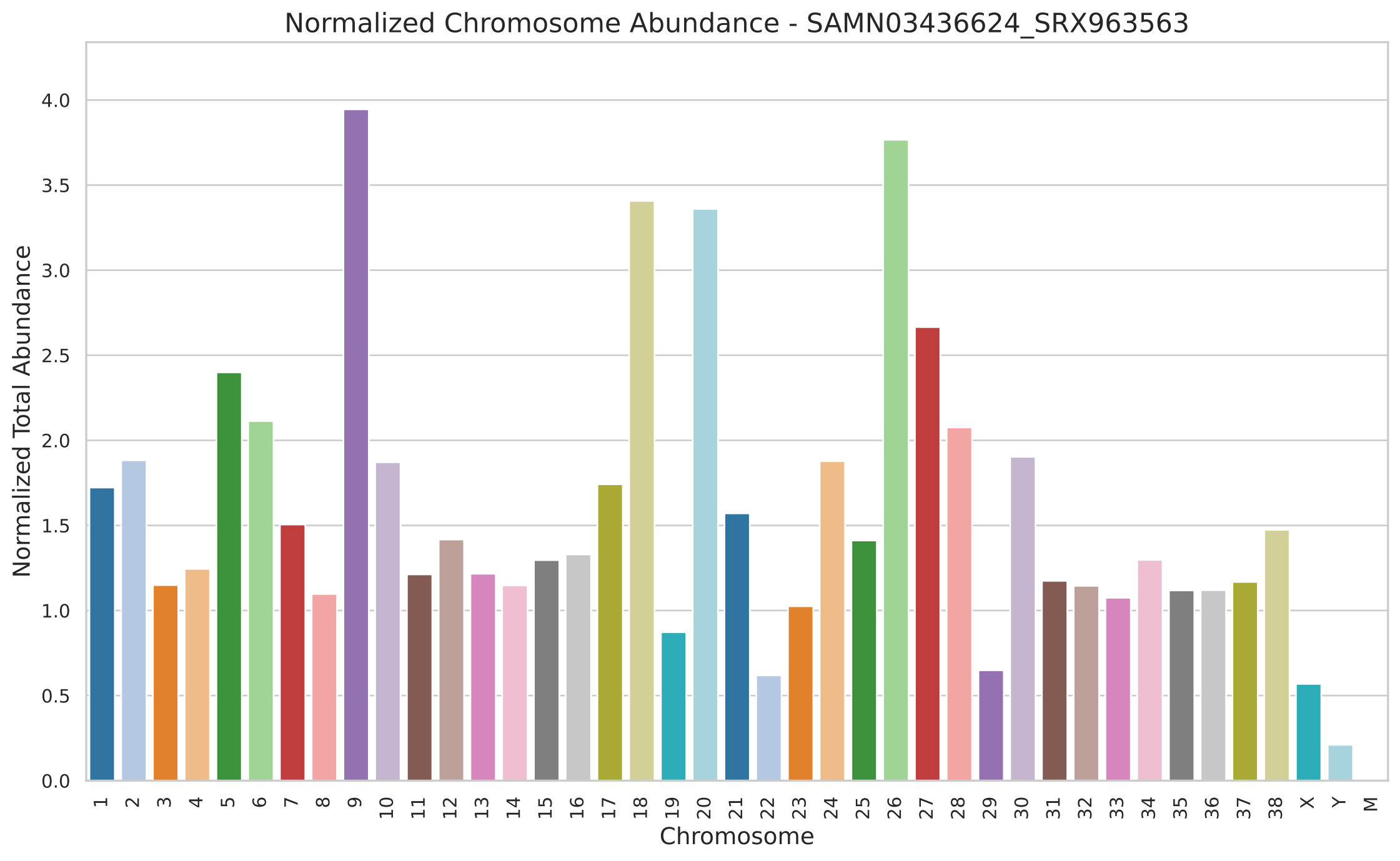

Normalized Chromosome Abundance - SAMN03436648_SRX963591
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

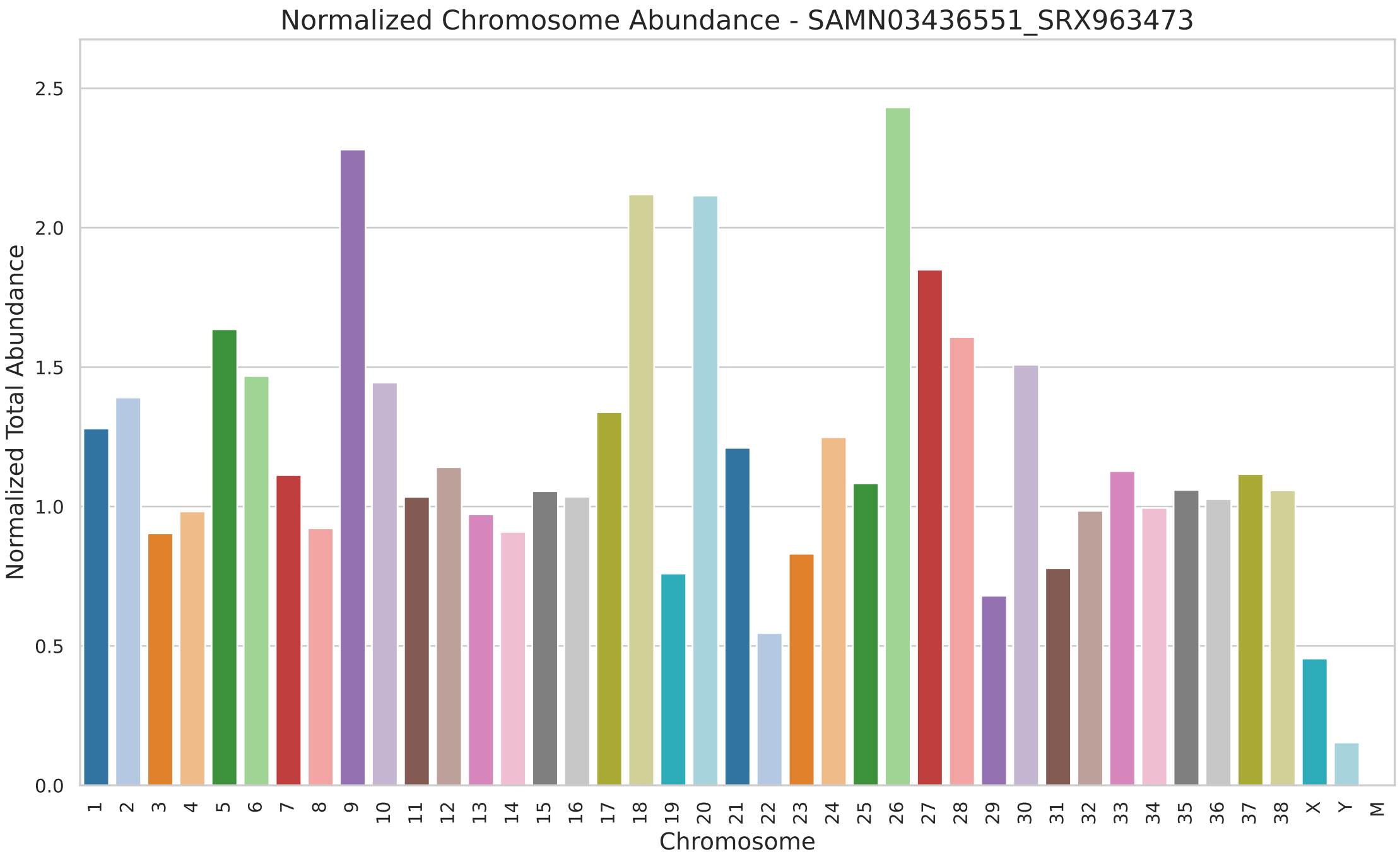

Normalized Chromosome Abundance - SAMN03436576_SRX963497
Normalized Total Abundance
2.0
1.8
1.5
1.2
1.0
0.8
0.5
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

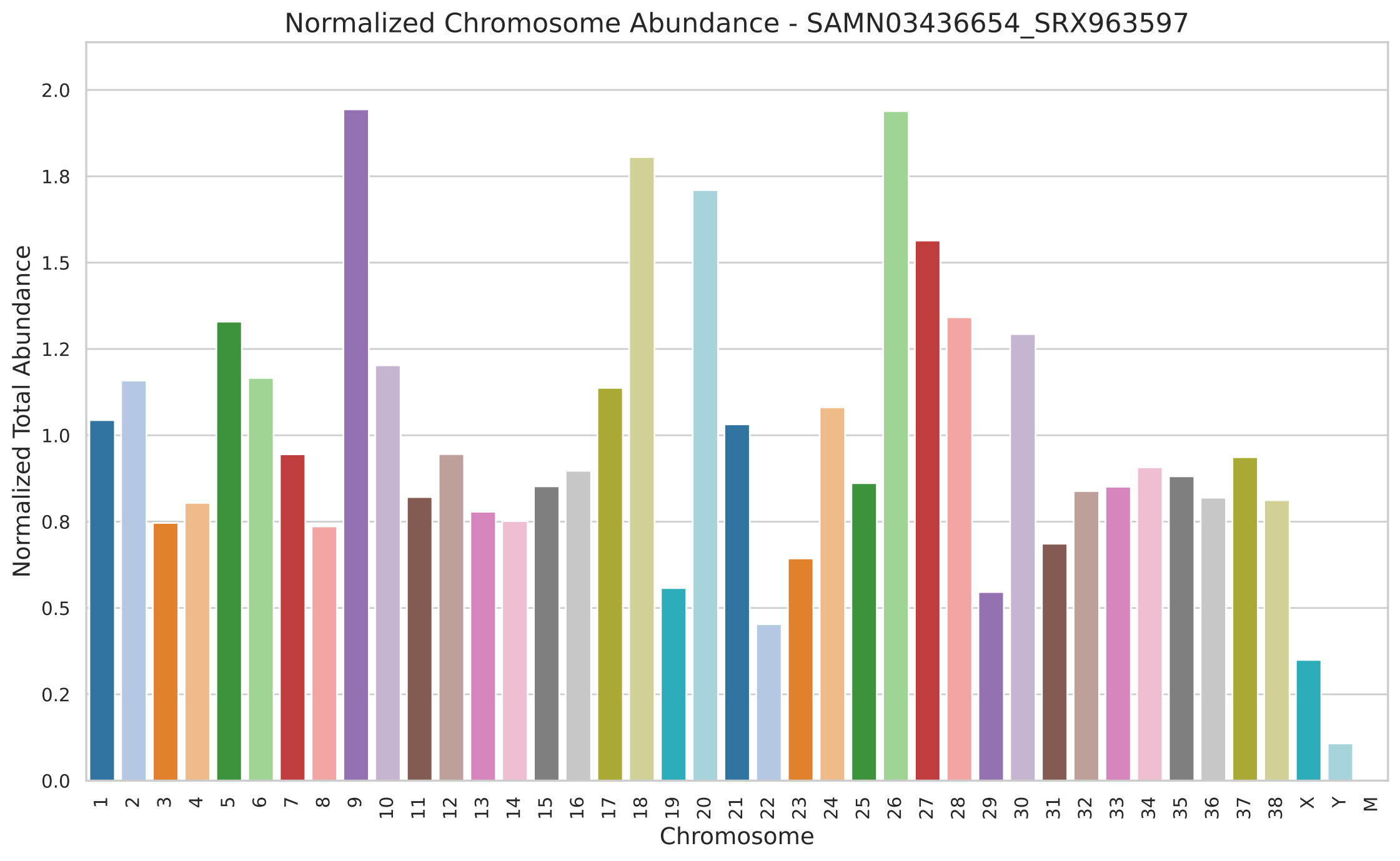

Normalized Chromosome Abundance - SAMN03436606_SRX963538
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

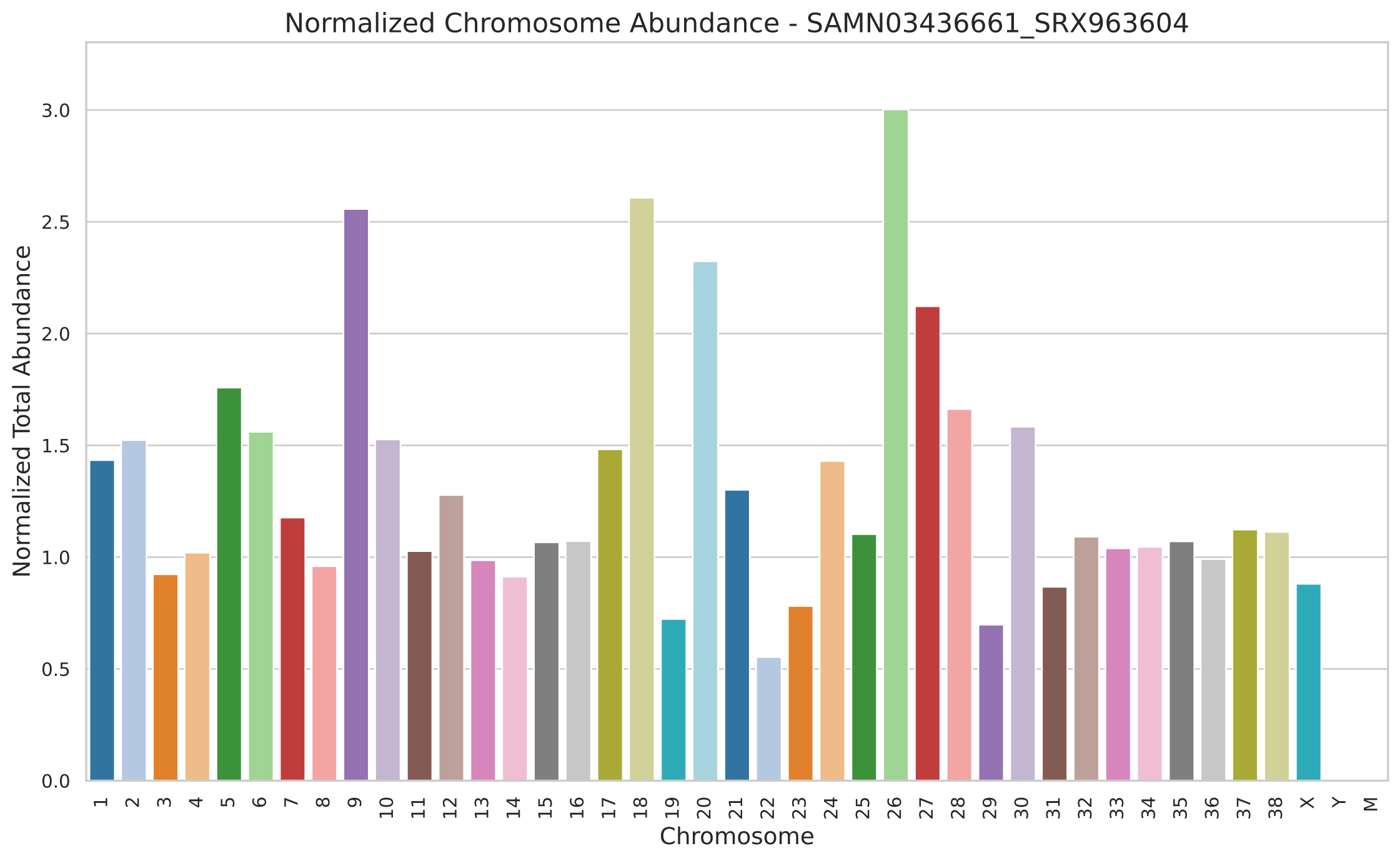

Normalized Chromosome Abundance - SAMN03436596_SRX963520
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

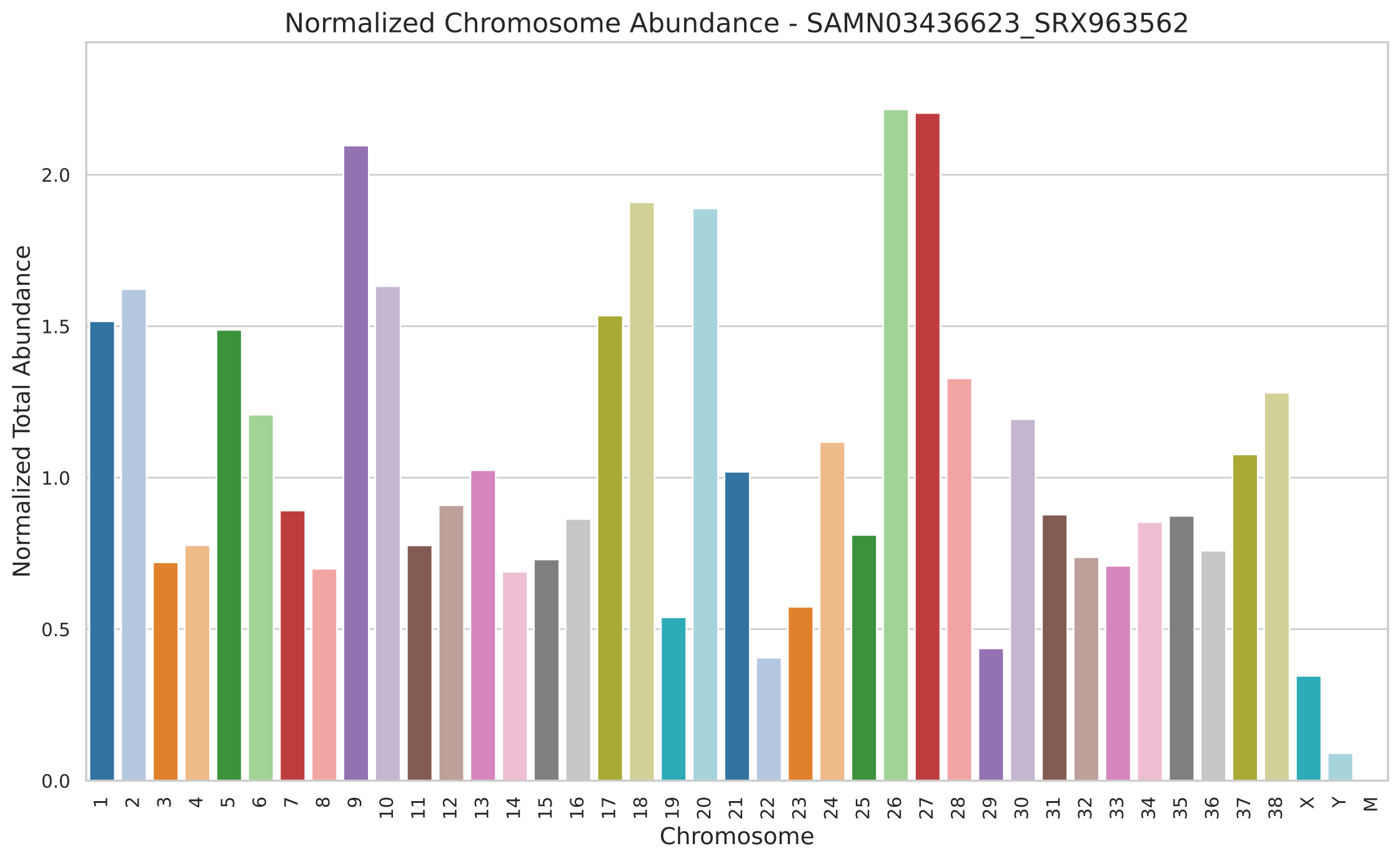

Normalized Chromosome Abundance - SAMN03436549_SRX963470
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

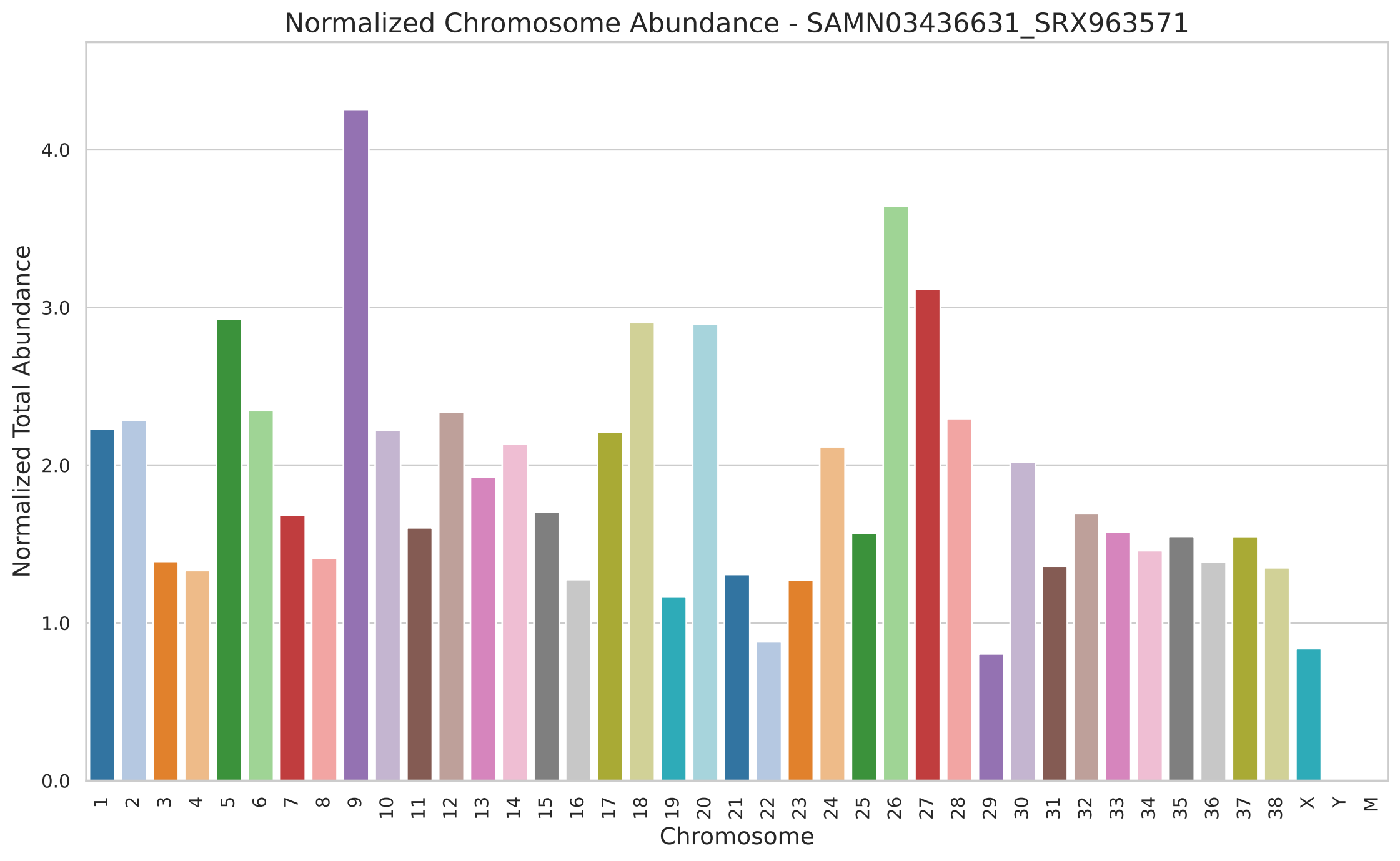

Normalized Chromosome Abundance - SAMN03436624_SRX963563
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

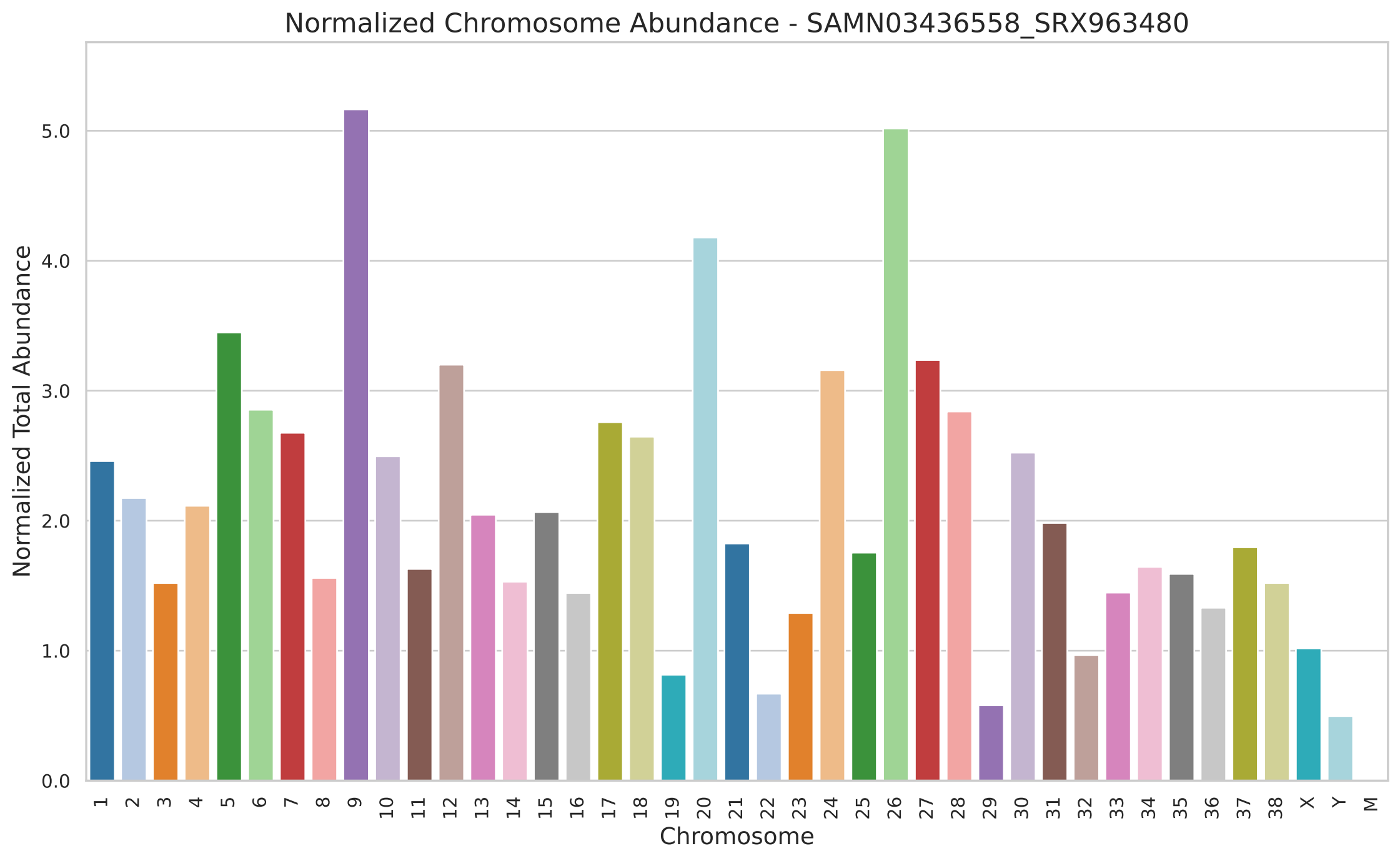

Normalized Chromosome Abundance - SAMN03436551_SRX963473
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

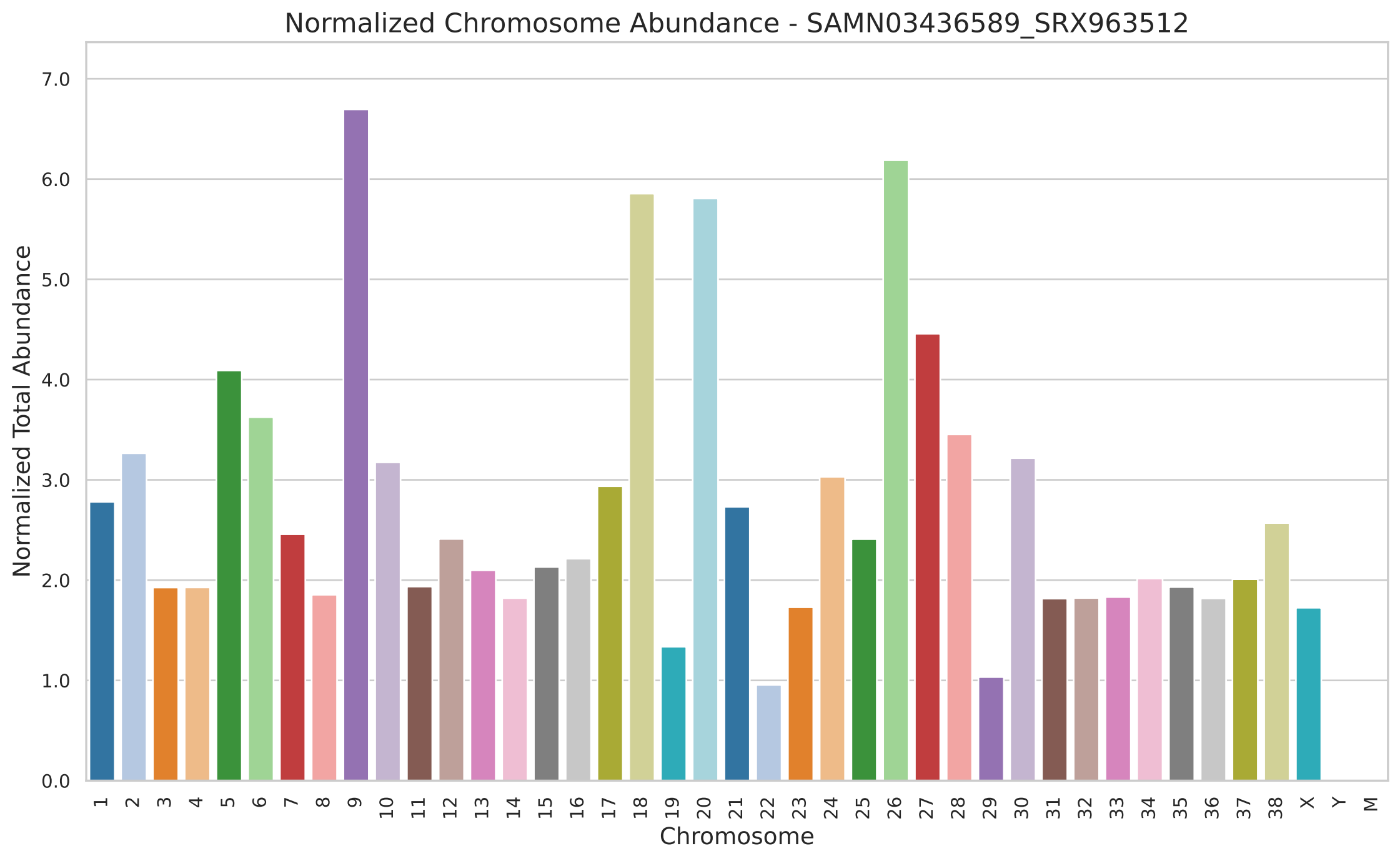

Normalized Chromosome Abundance - SAMN03436654_SRX963597
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

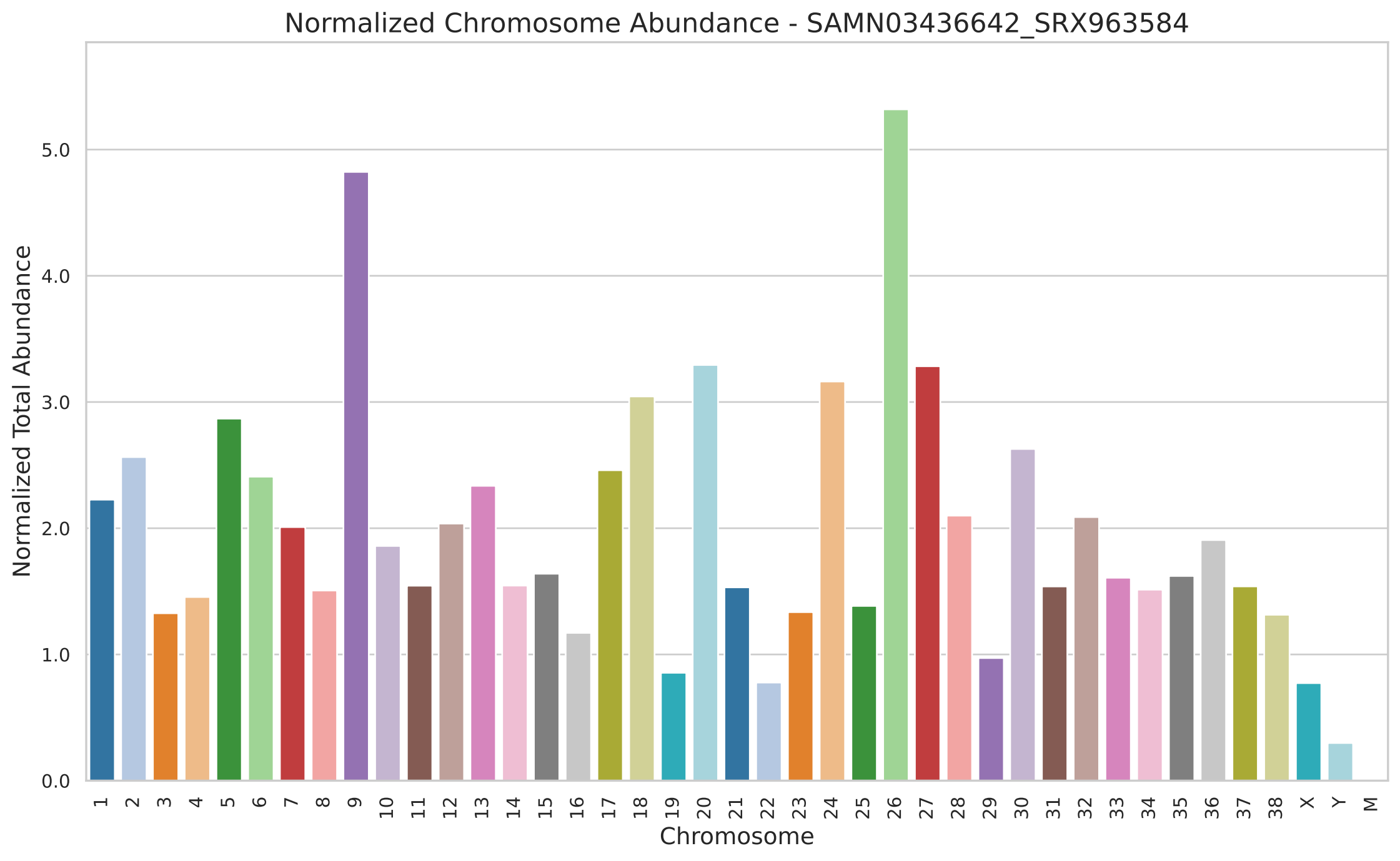

Normalized Chromosome Abundance - SAMN03436661_SRX963604
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

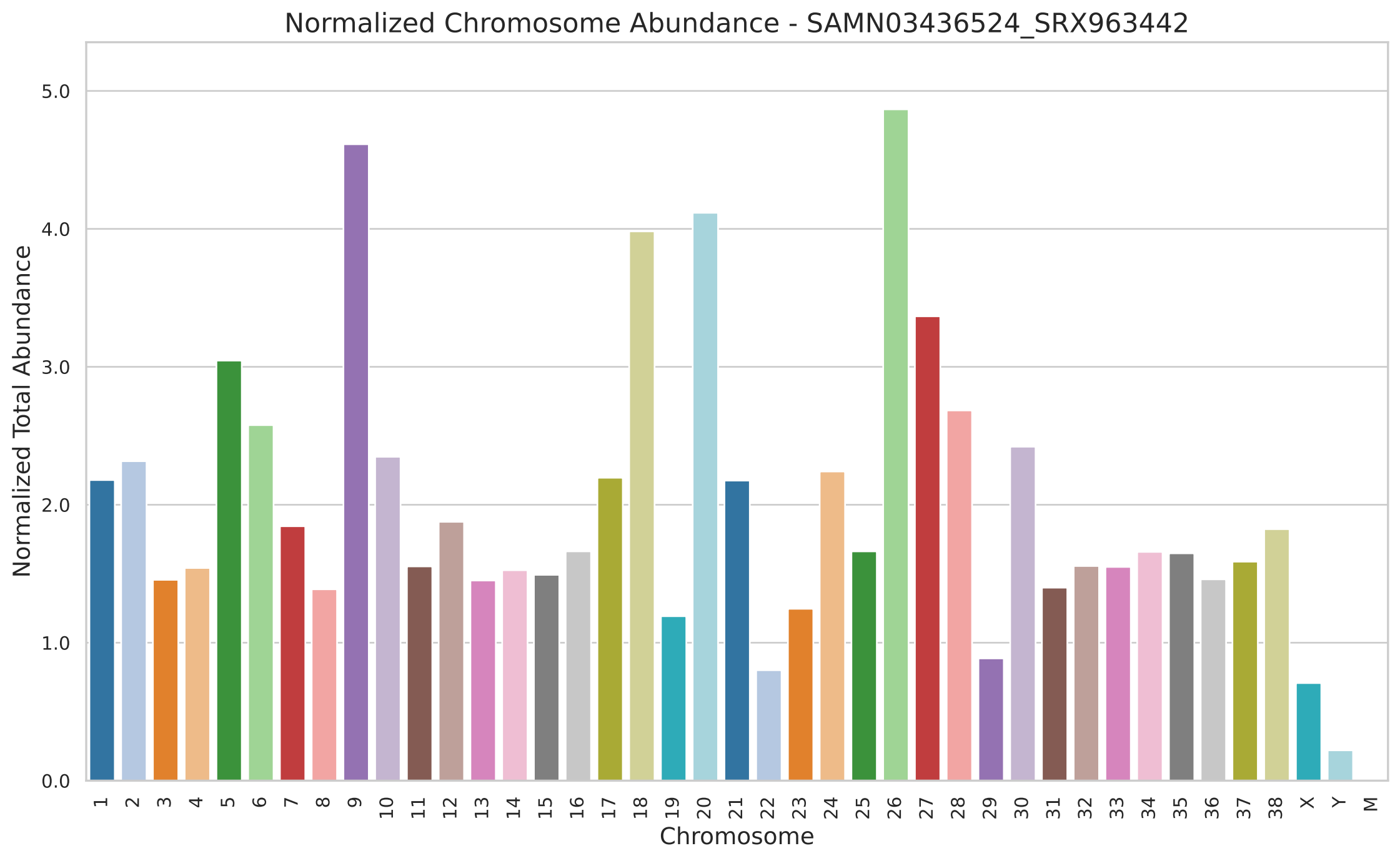

Normalized Chromosome Abundance - SAMN03436623_SRX963562
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

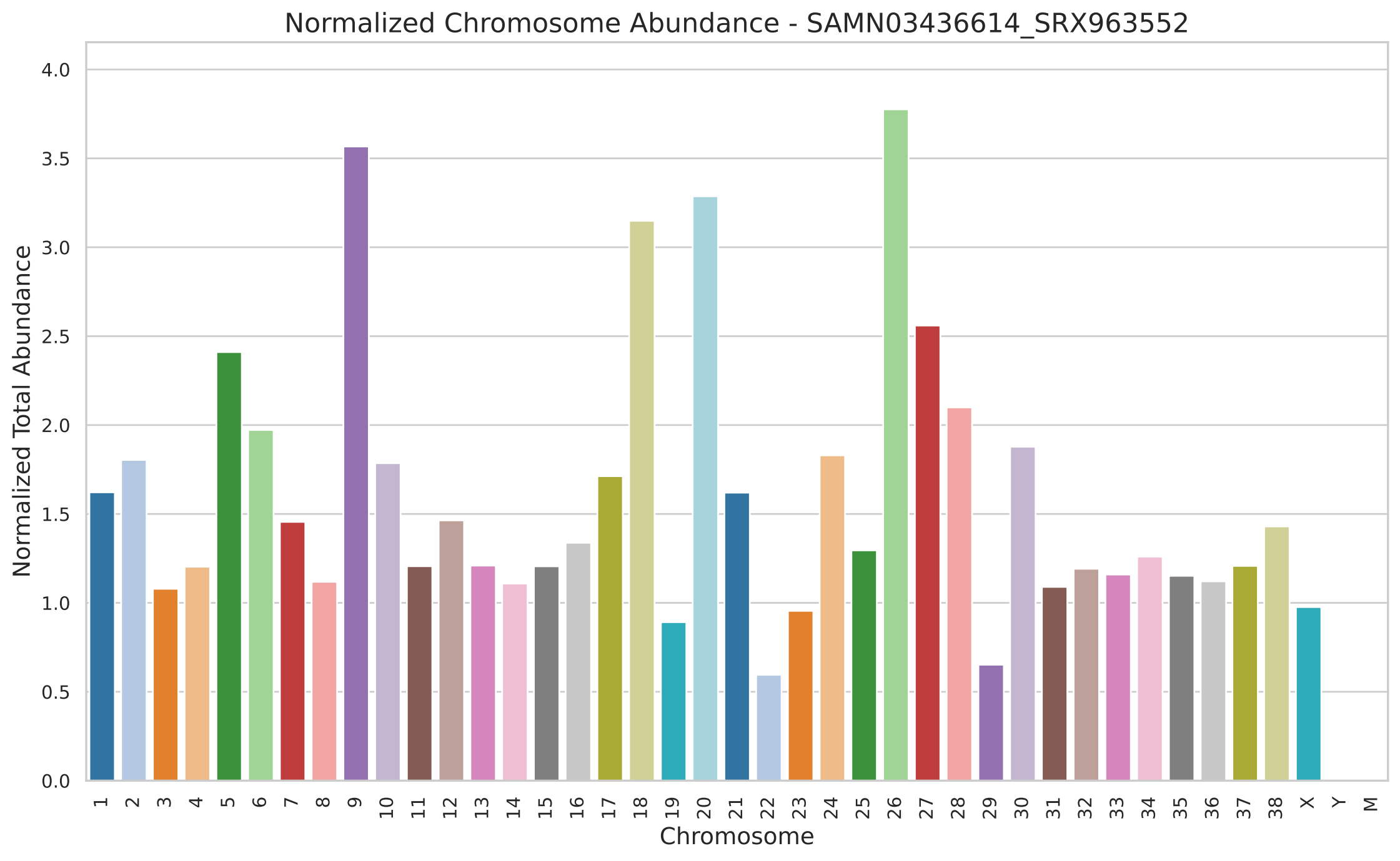

Normalized Chromosome Abundance - SAMN03436631_SRX963571
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

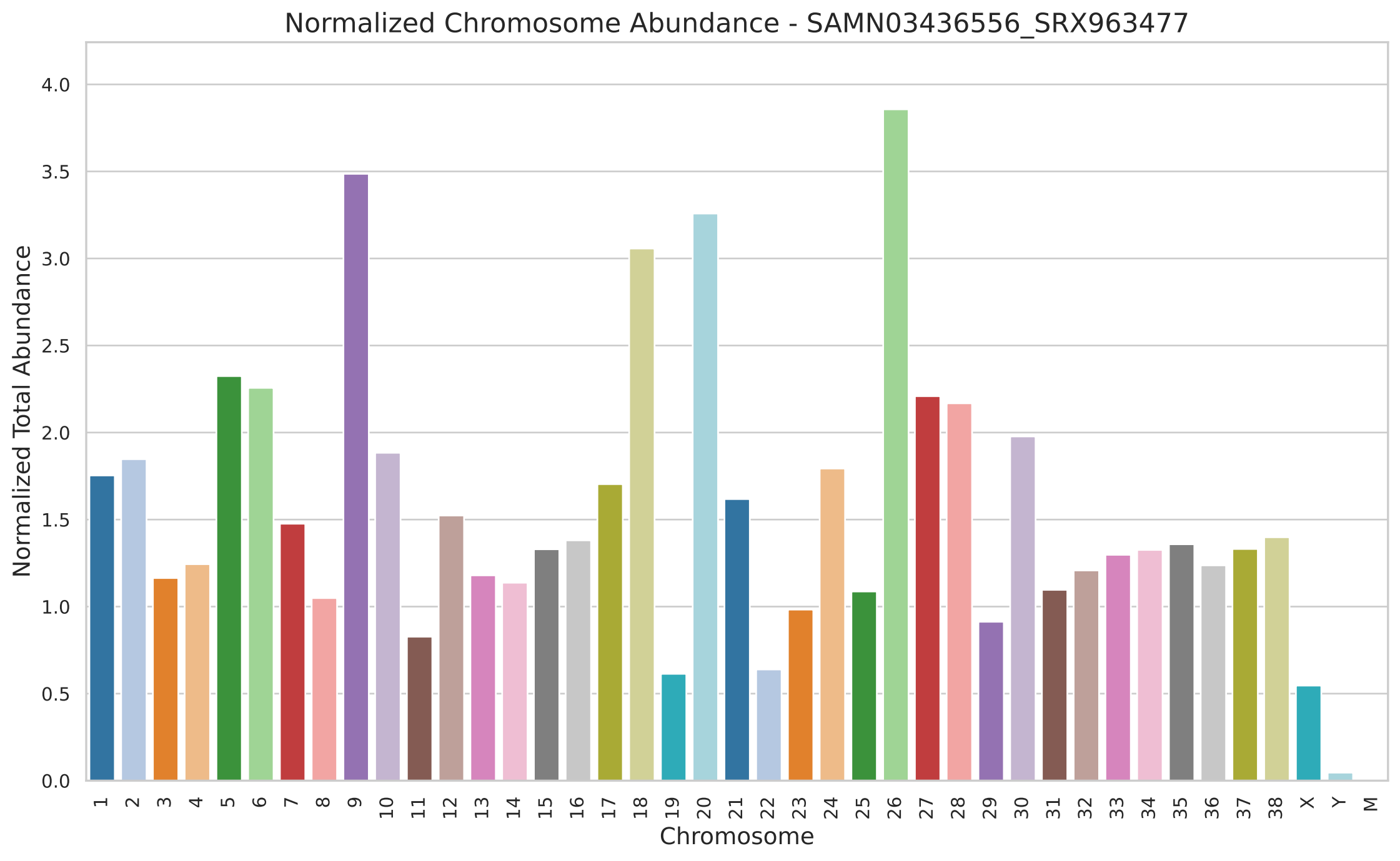

Normalized Chromosome Abundance - SAMN03436558_SRX963480
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

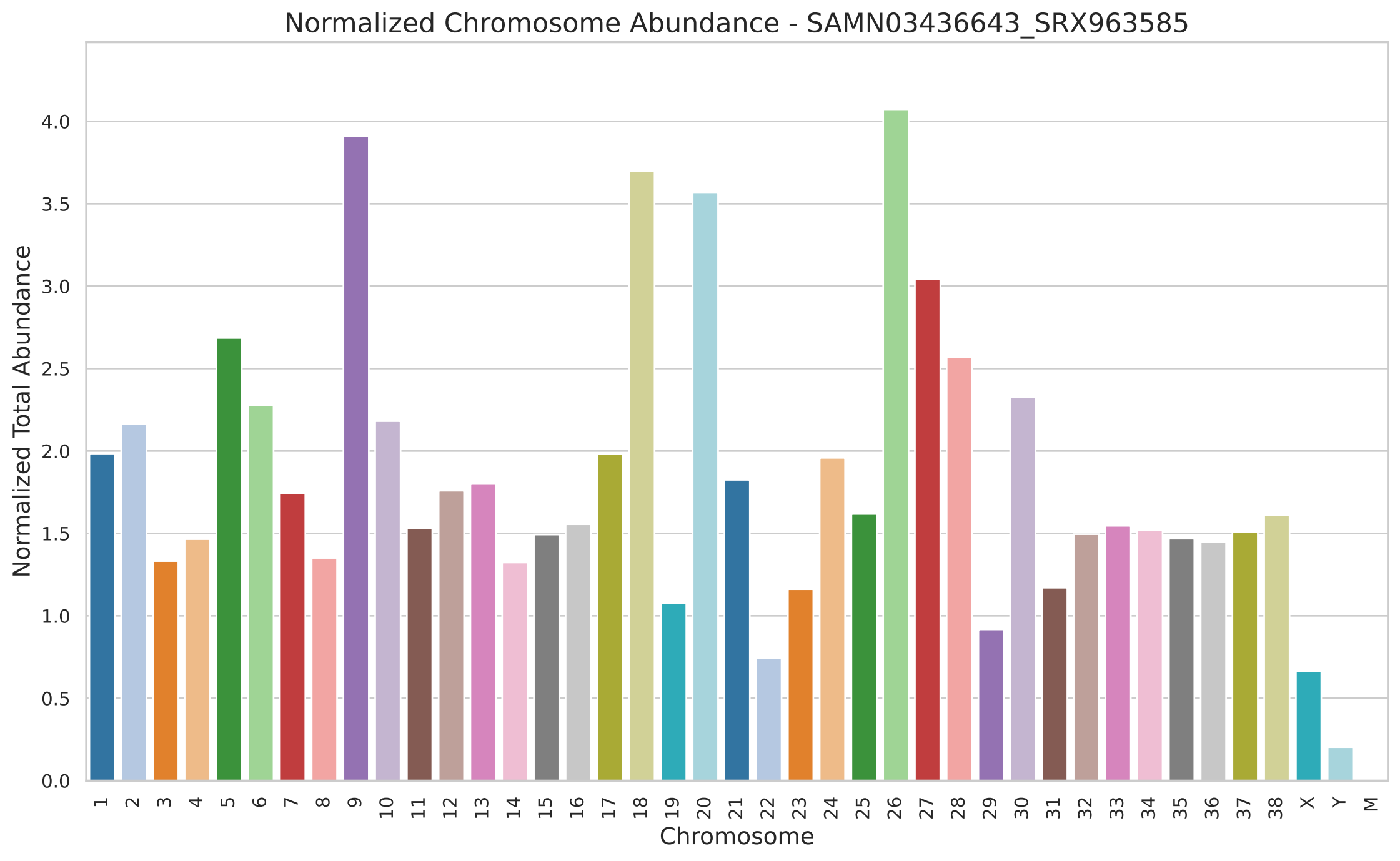

Normalized Chromosome Abundance - SAMN03436589_SRX963512
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

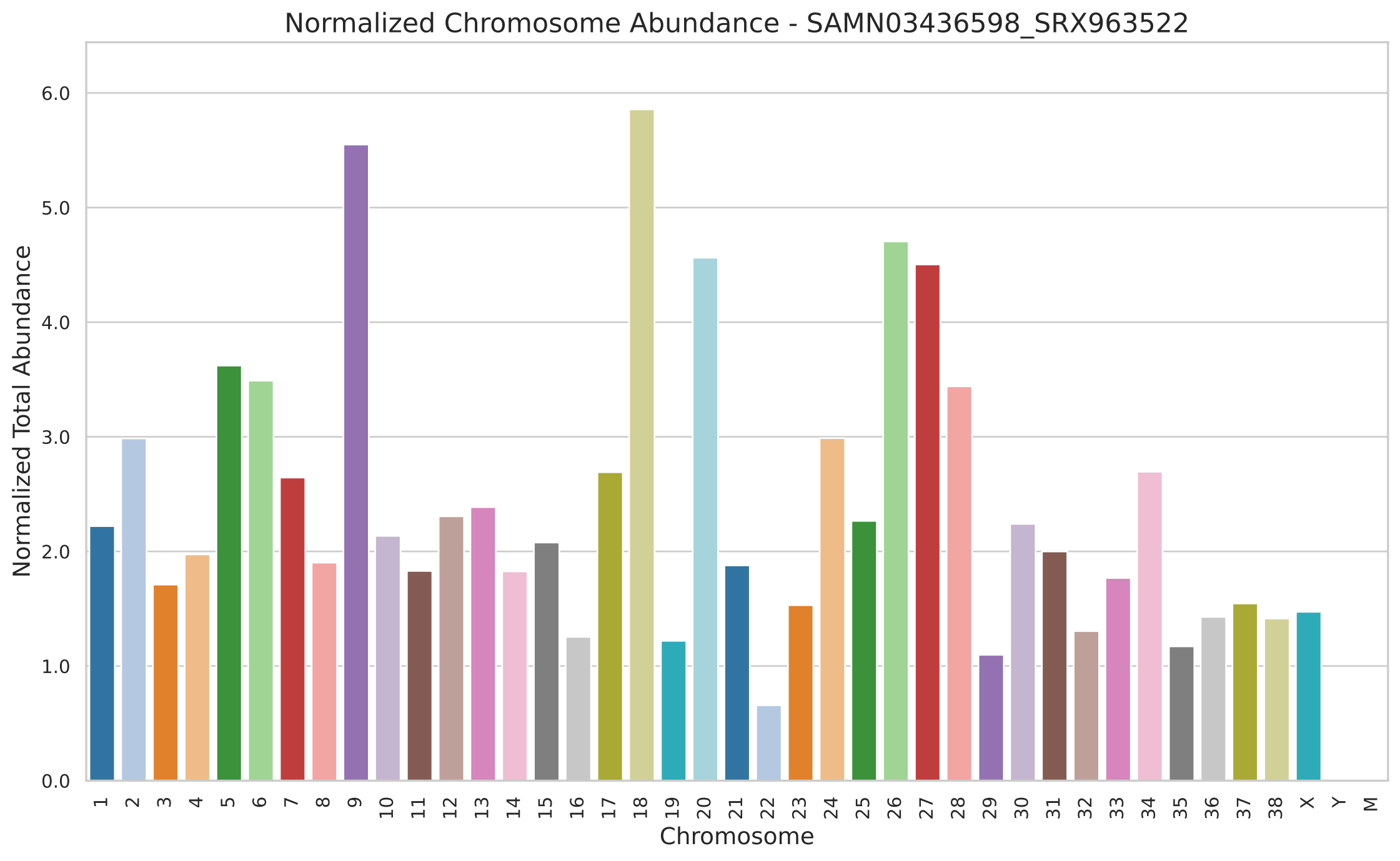

Normalized Chromosome Abundance - SAMN03436642_SRX963584
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

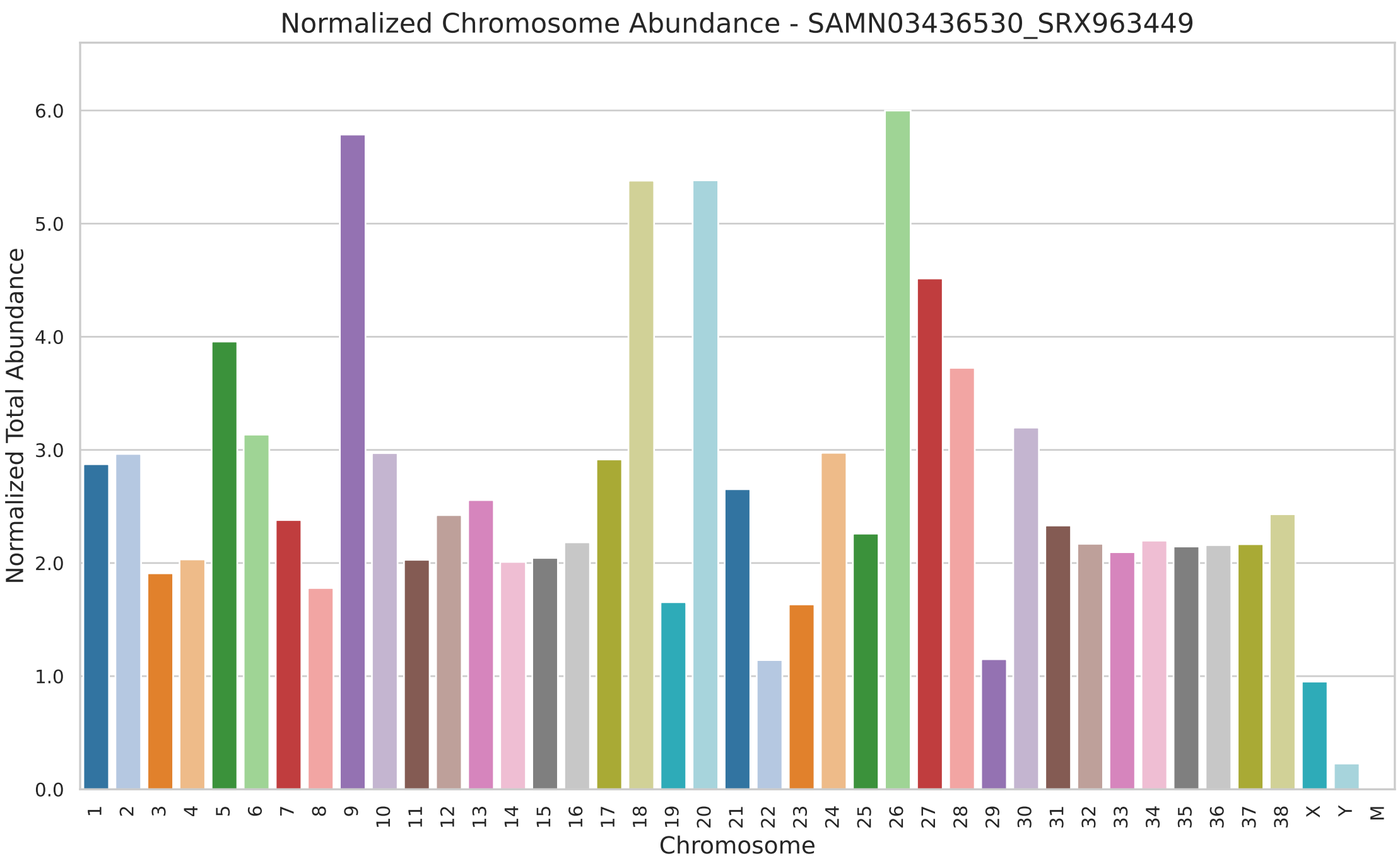

Normalized Chromosome Abundance - SAMN03436524_SRX963442
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

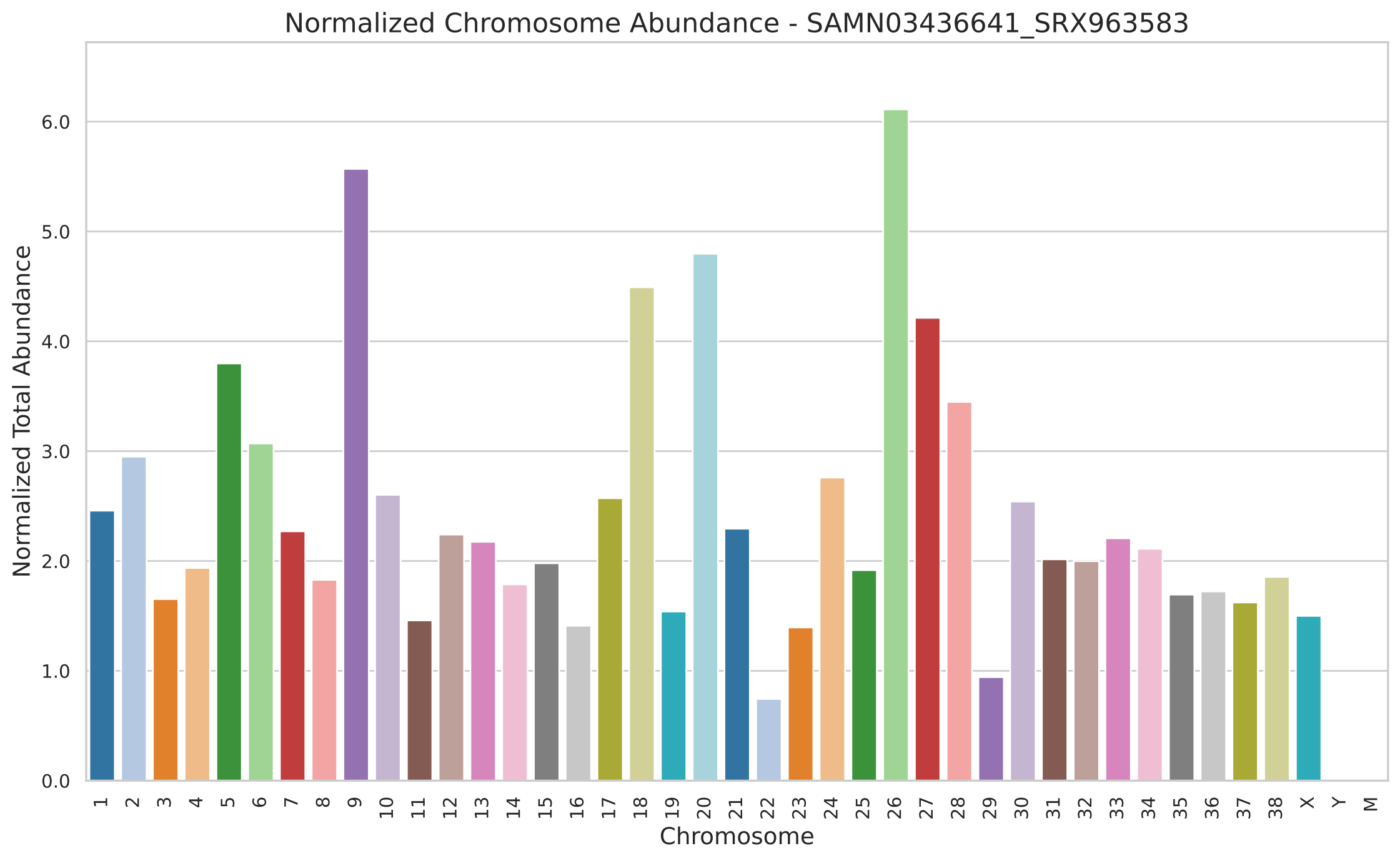

Normalized Chromosome Abundance - SAMN03436614_SRX963552
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

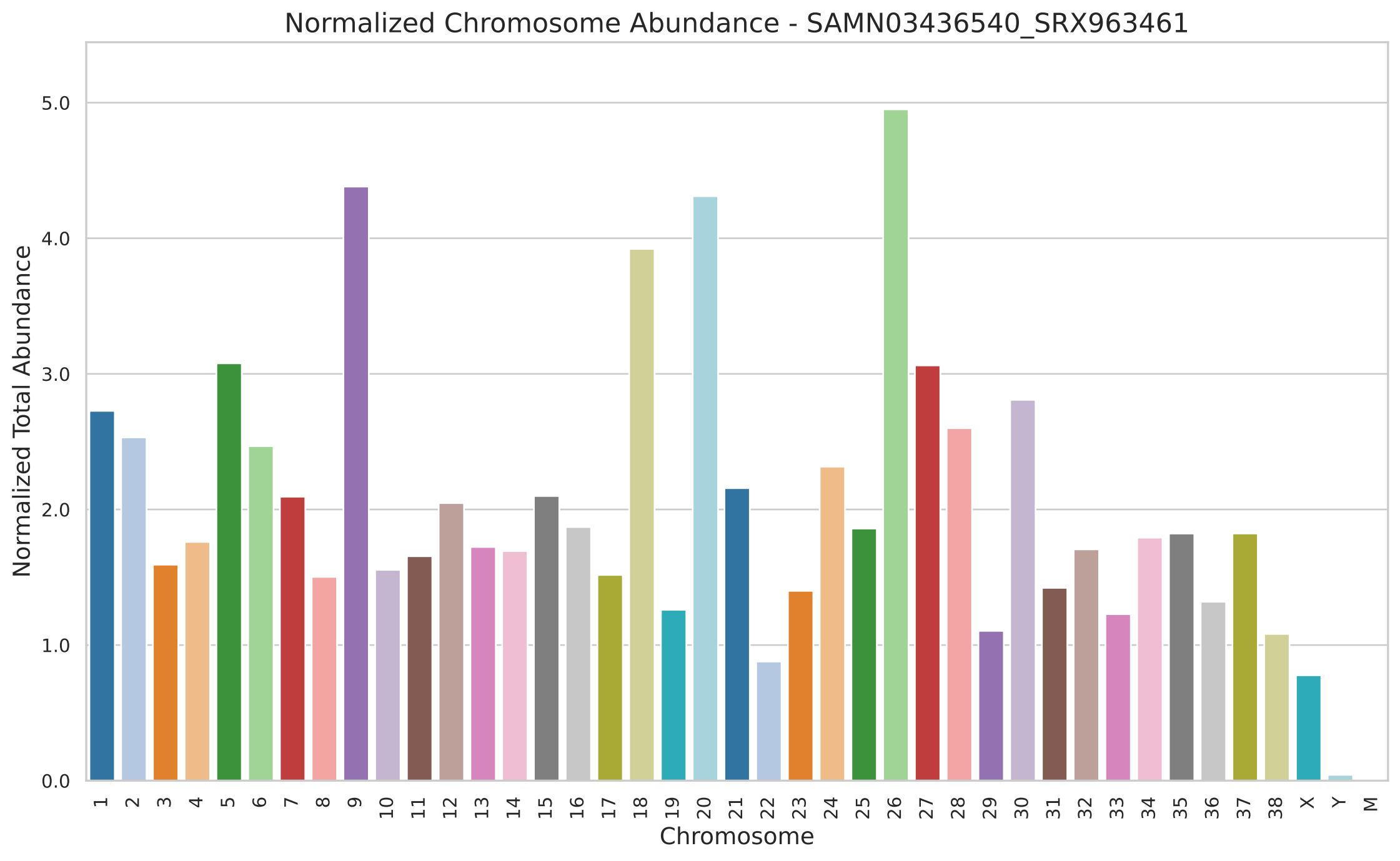

Normalized Chromosome Abundance - SAMN03436556_SRX963477
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

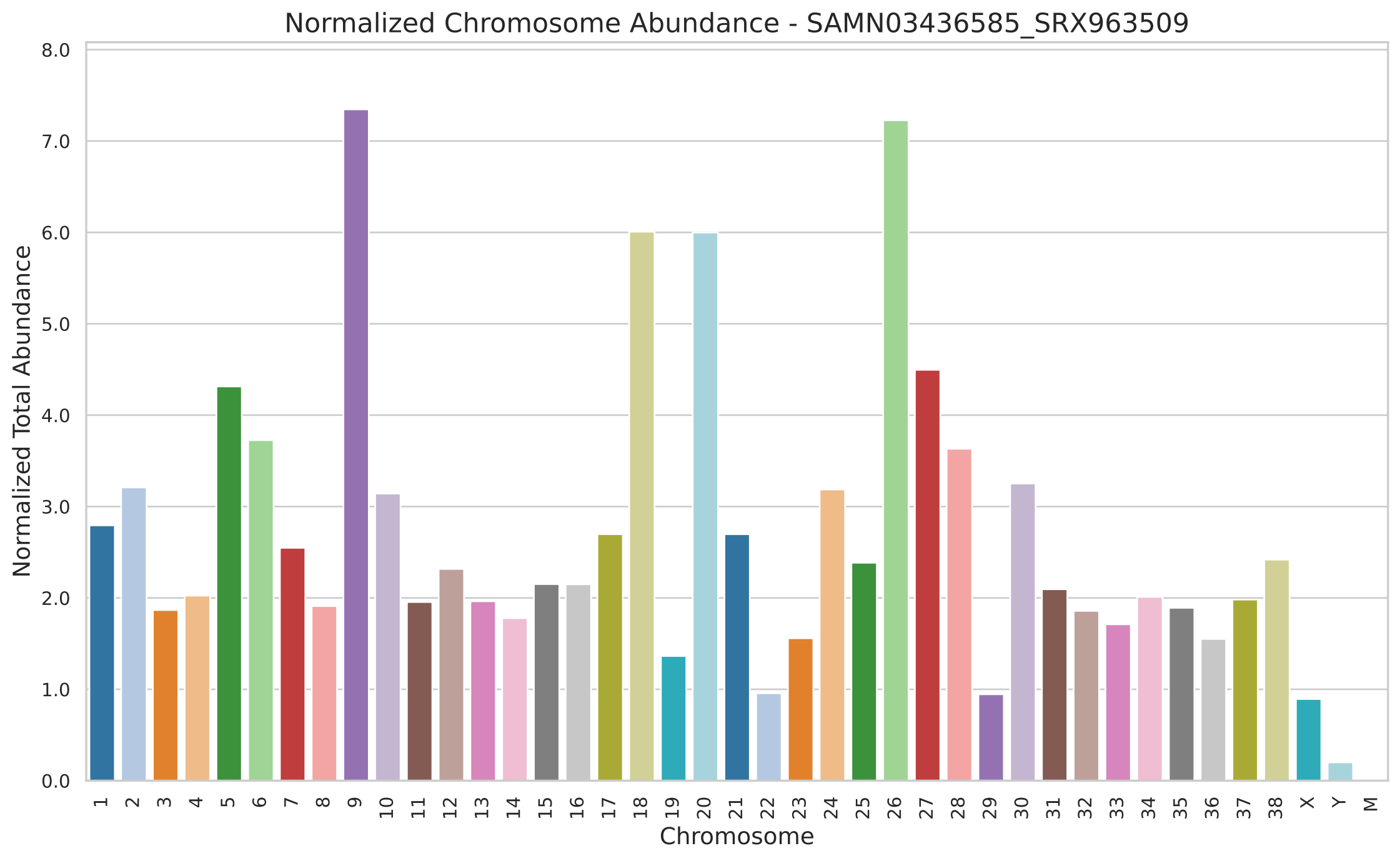

Normalized Chromosome Abundance - SAMN03436643_SRX963585
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

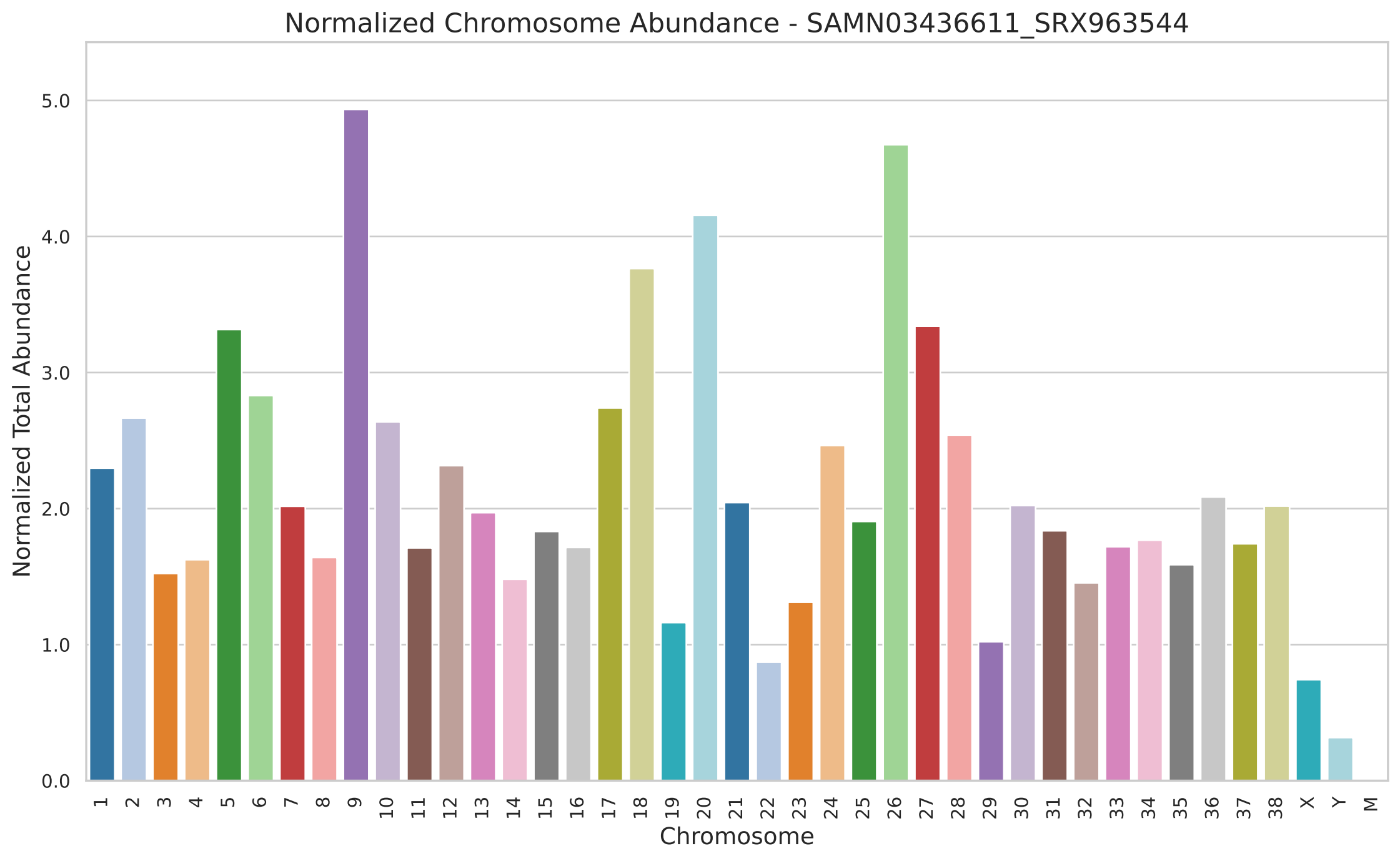

Normalized Chromosome Abundance - SAMN03436598_SRX963522
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

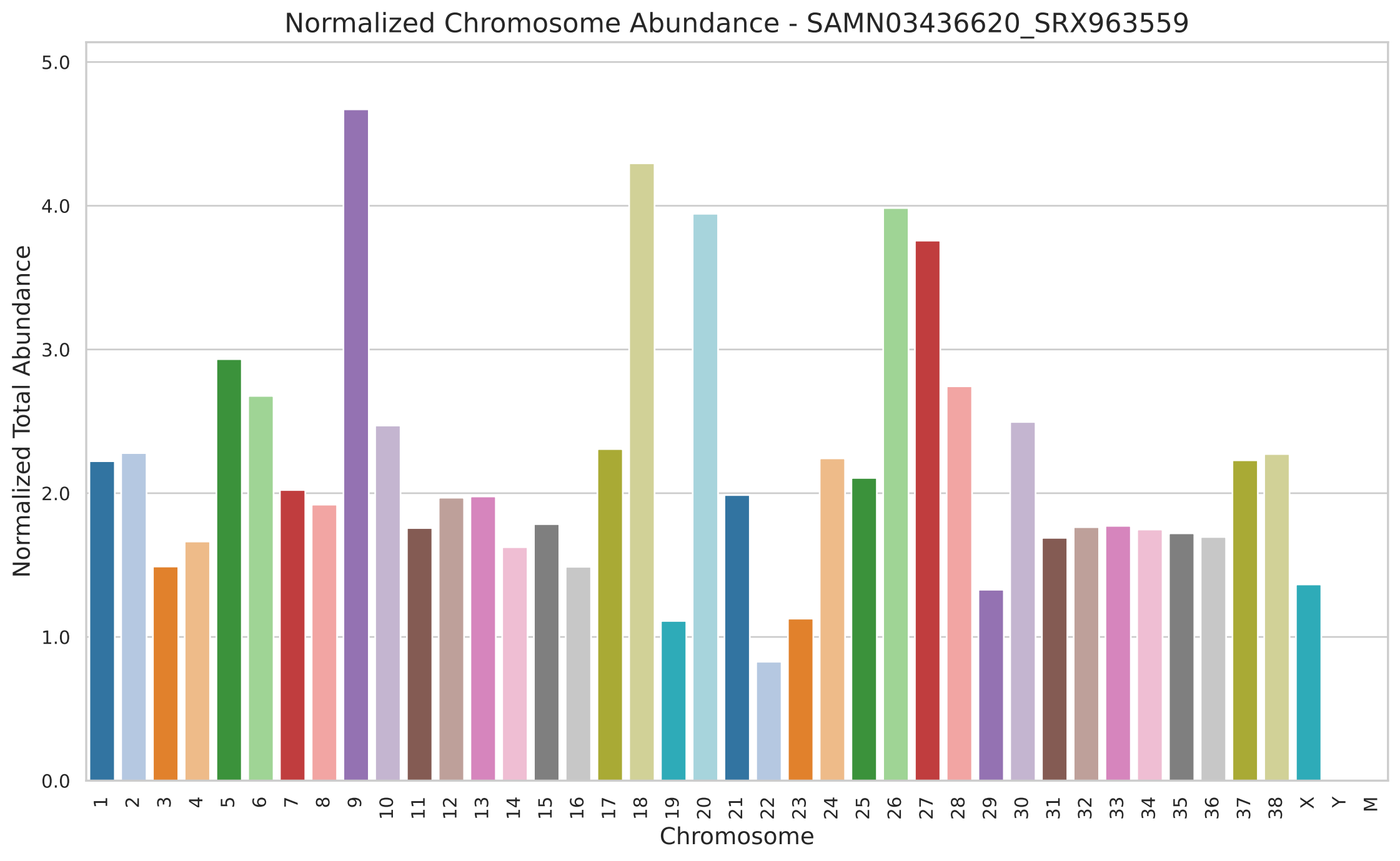

Normalized Chromosome Abundance - SAMN03436530_SRX963449
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

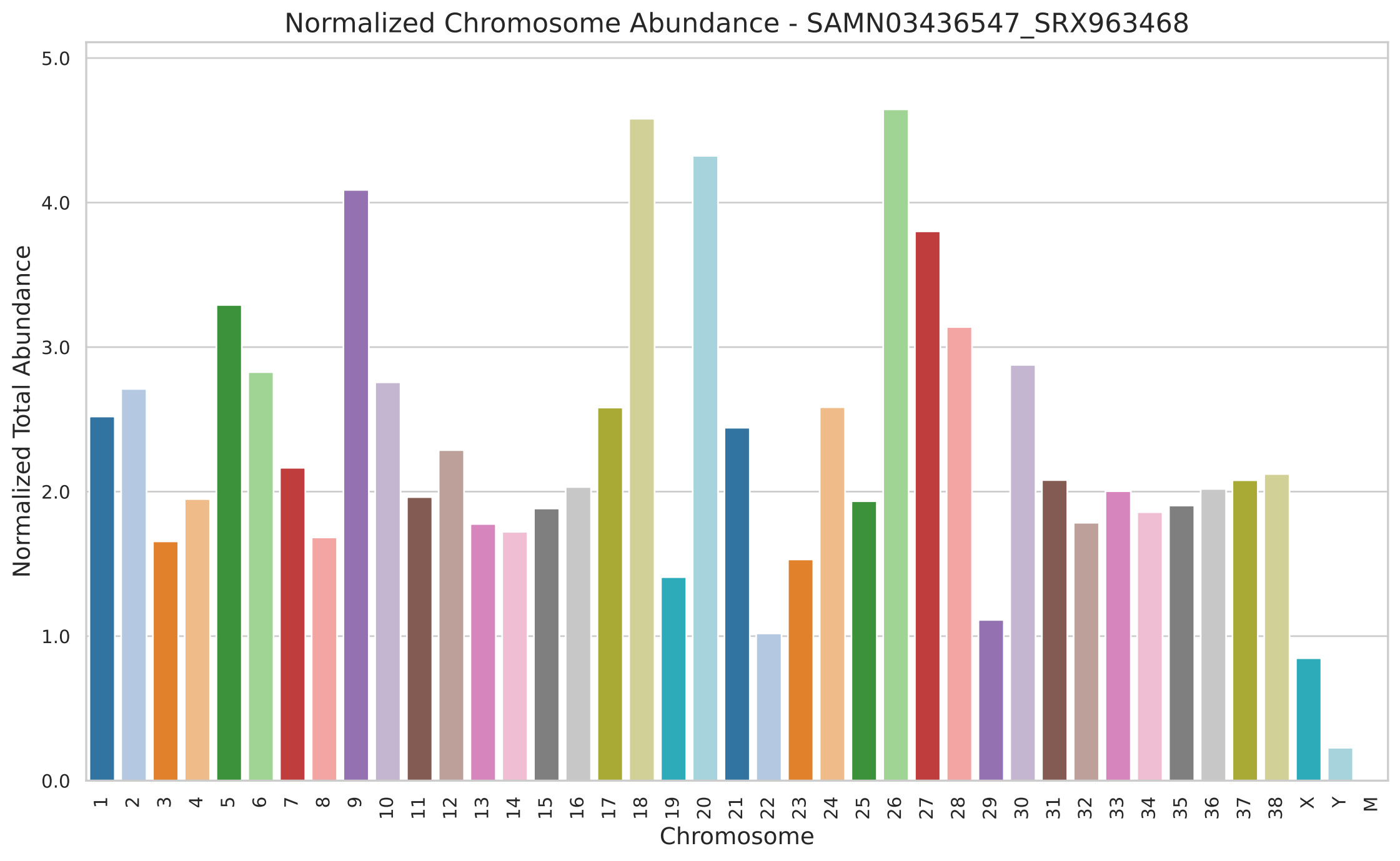

Normalized Chromosome Abundance - SAMN03436641_SRX963583
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

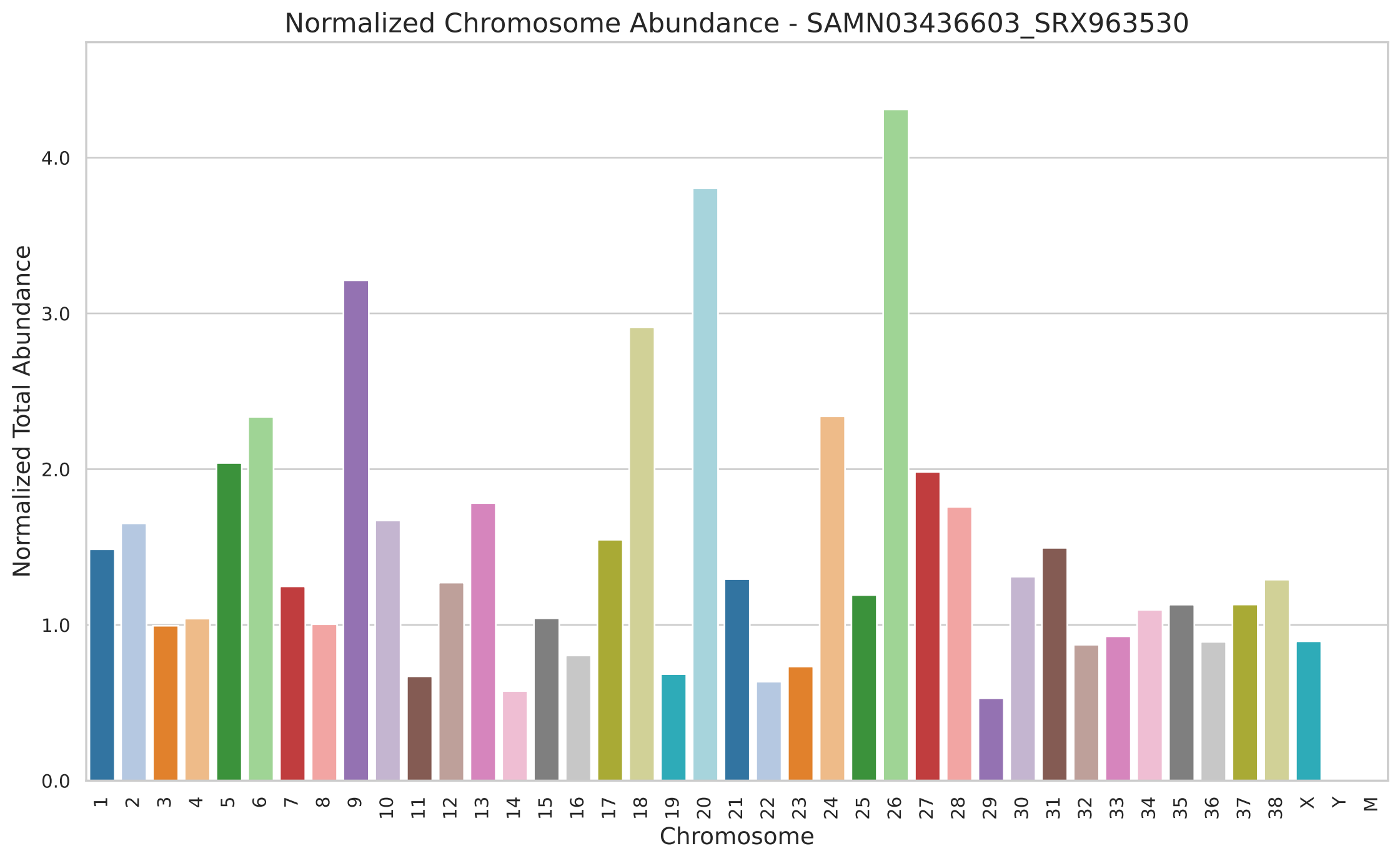

Normalized Chromosome Abundance - SAMN03436540_SRX963461
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

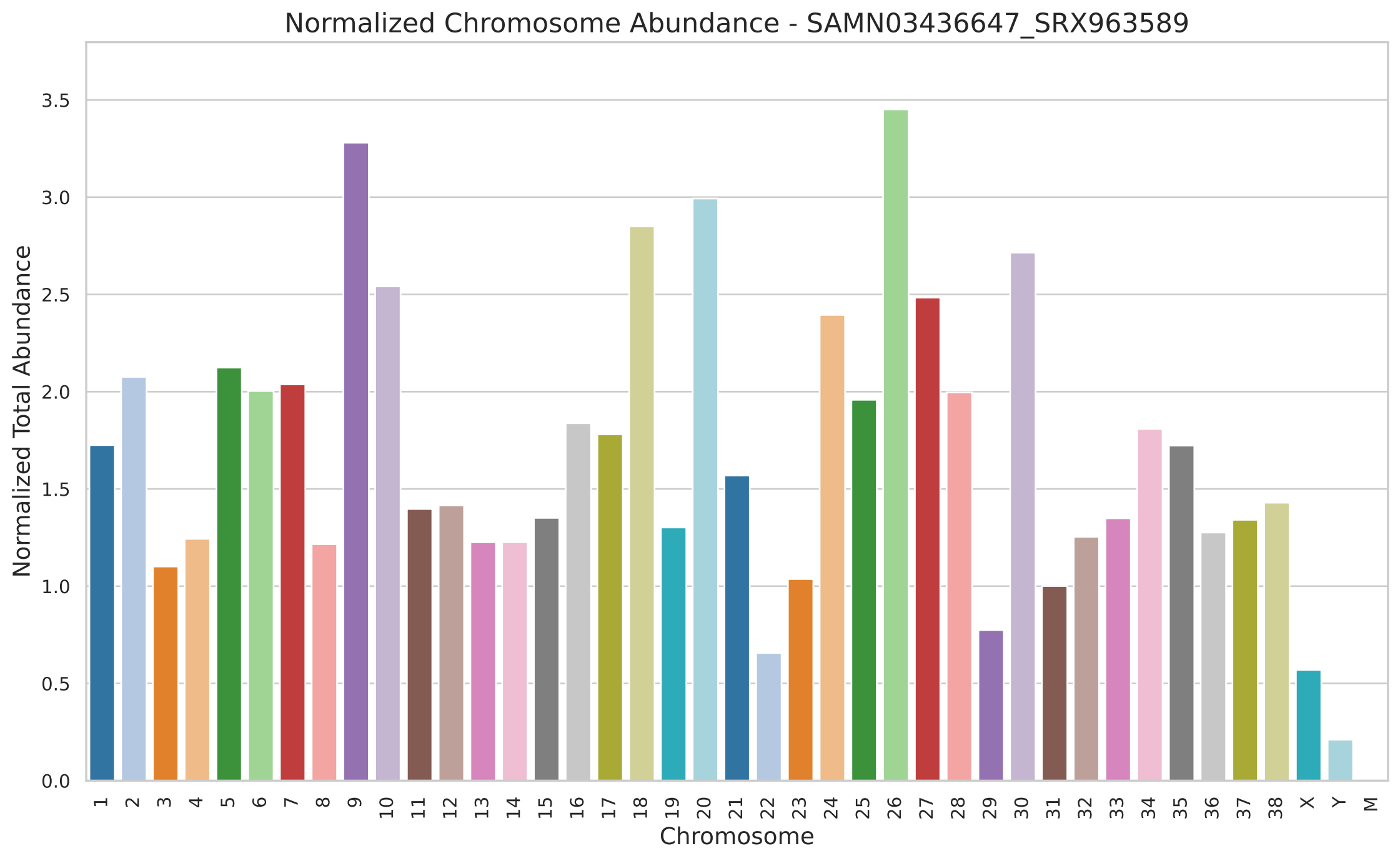

Normalized Chromosome Abundance - SAMN03436585_SRX963509
Normalized Total Abundance
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

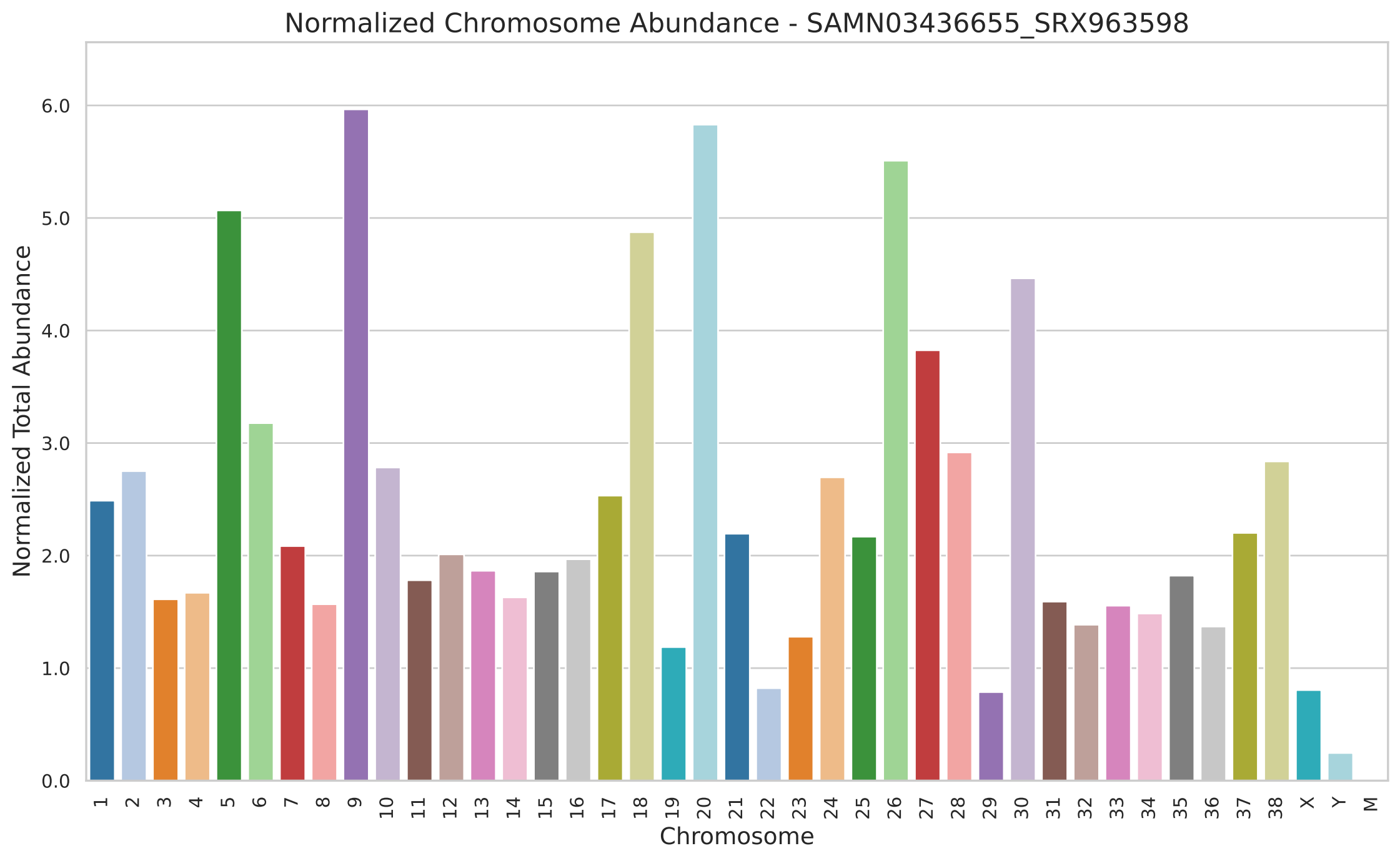

Normalized Chromosome Abundance - SAMN03436611_SRX963544
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

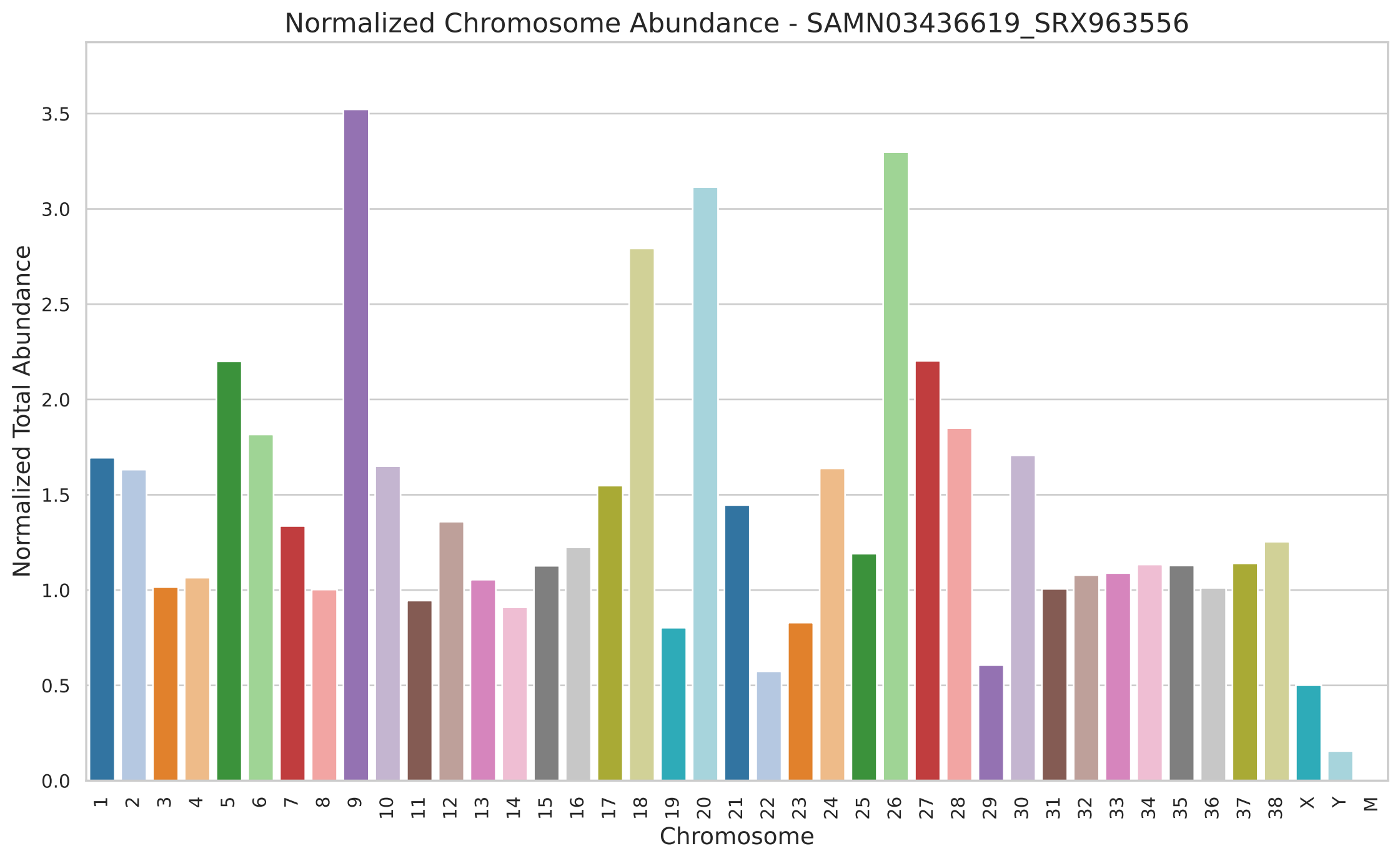

Normalized Chromosome Abundance - SAMN03436620_SRX963559
Normalized Total Abundance
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

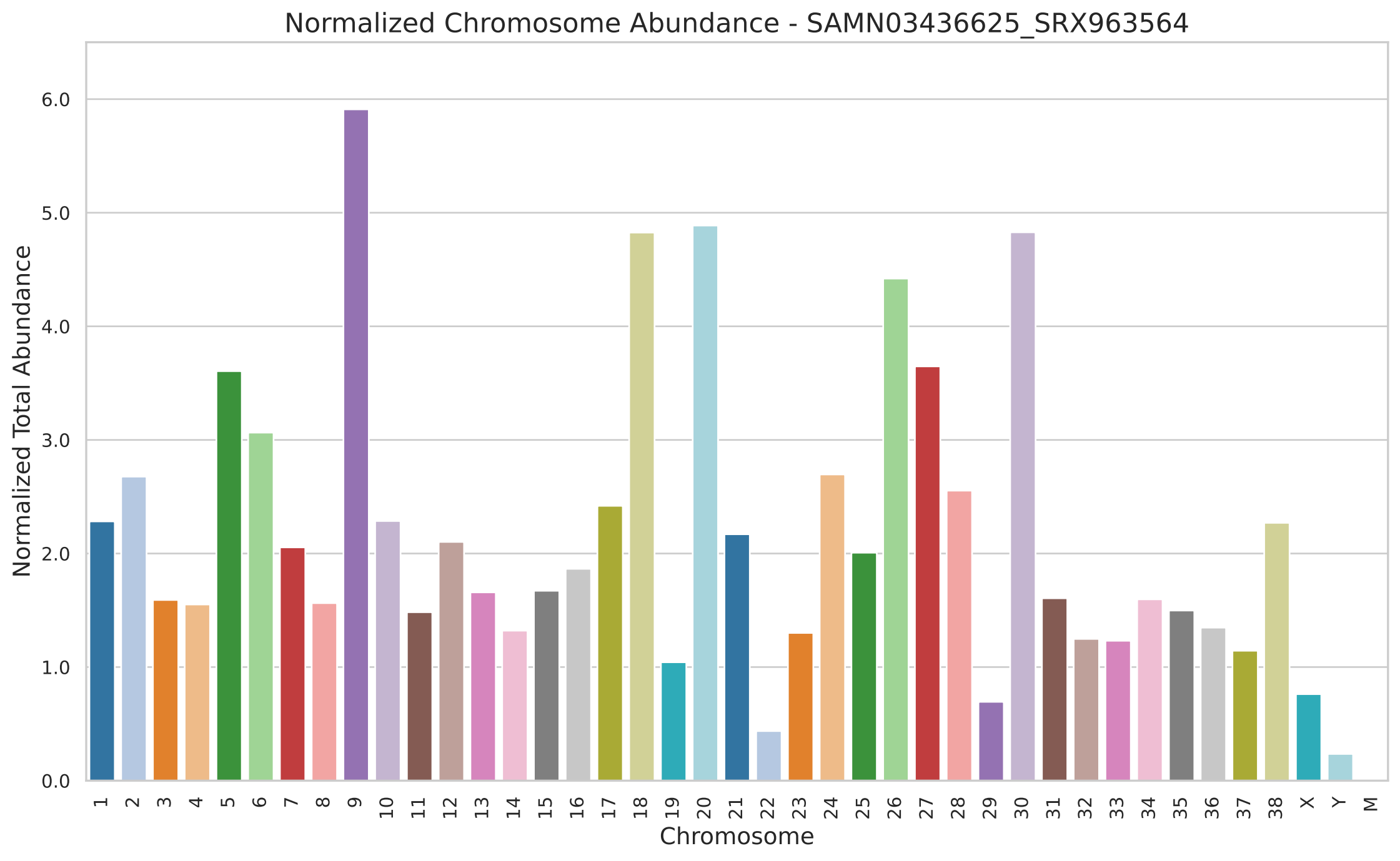

Normalized Chromosome Abundance - SAMN03436547_SRX963468
Normalized Total Abundance
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

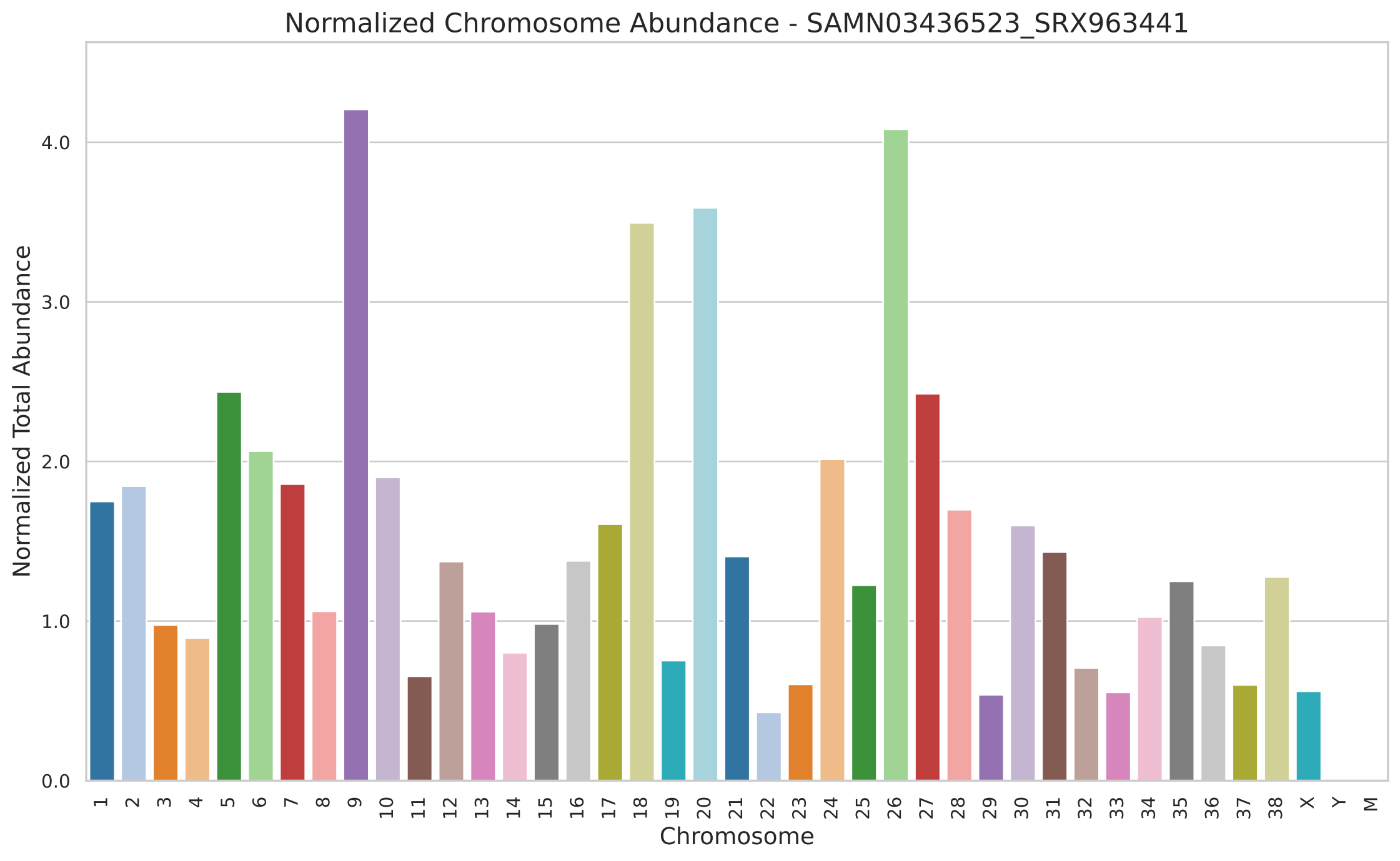

Normalized Chromosome Abundance - SAMN03436603_SRX963530
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

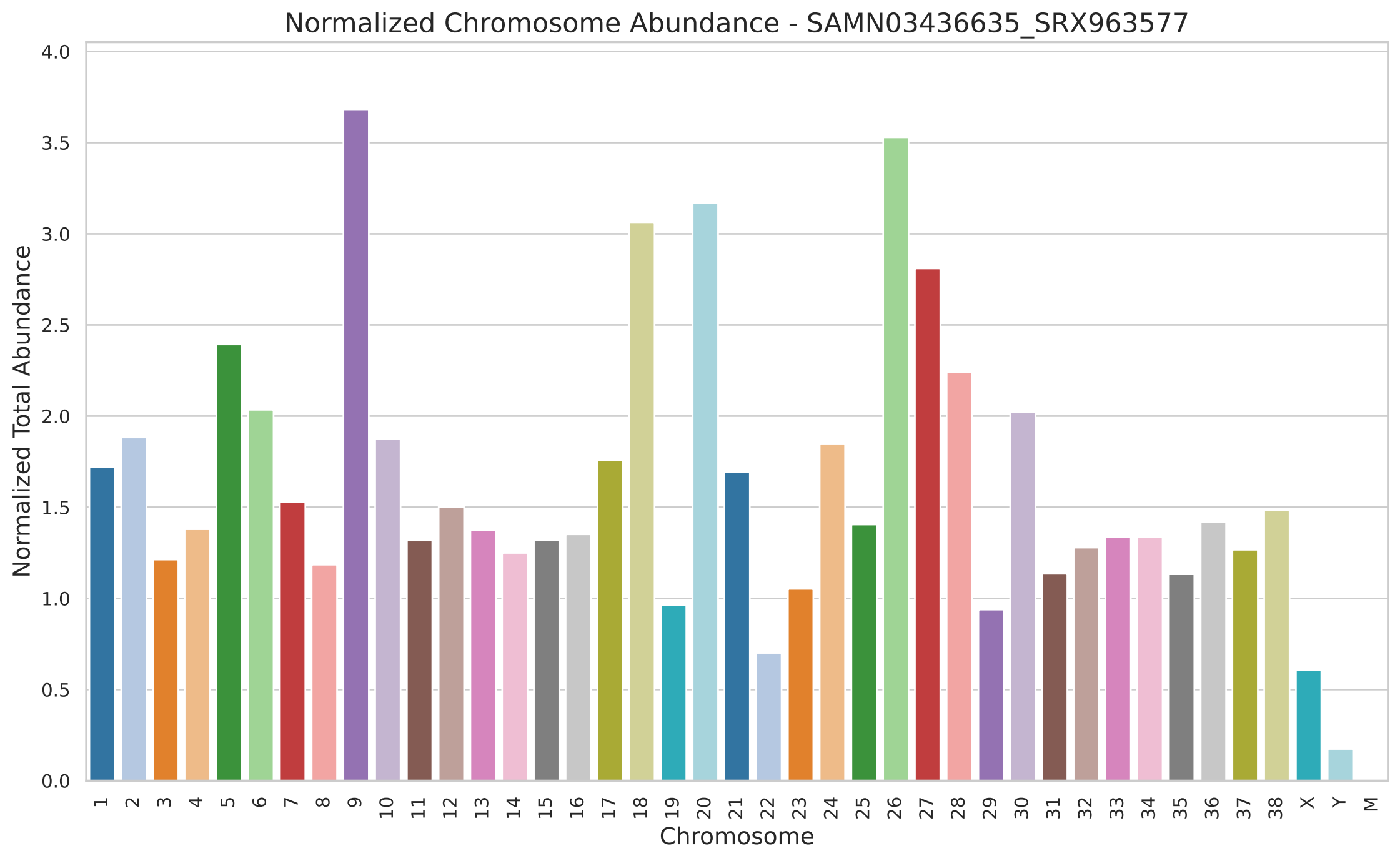

Normalized Chromosome Abundance - SAMN03436647_SRX963589
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

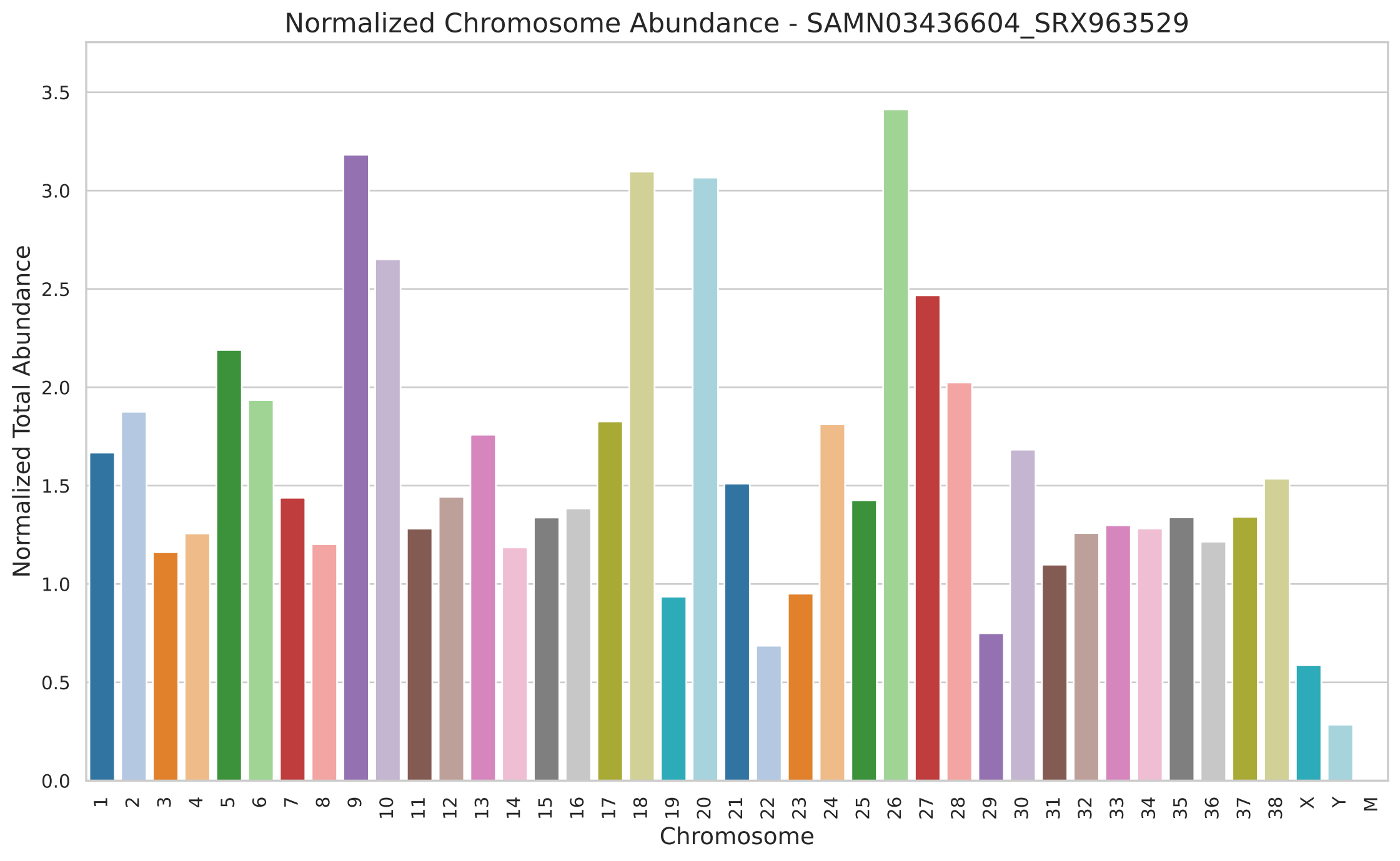

Normalized Chromosome Abundance - SAMN03436655_SRX963598
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

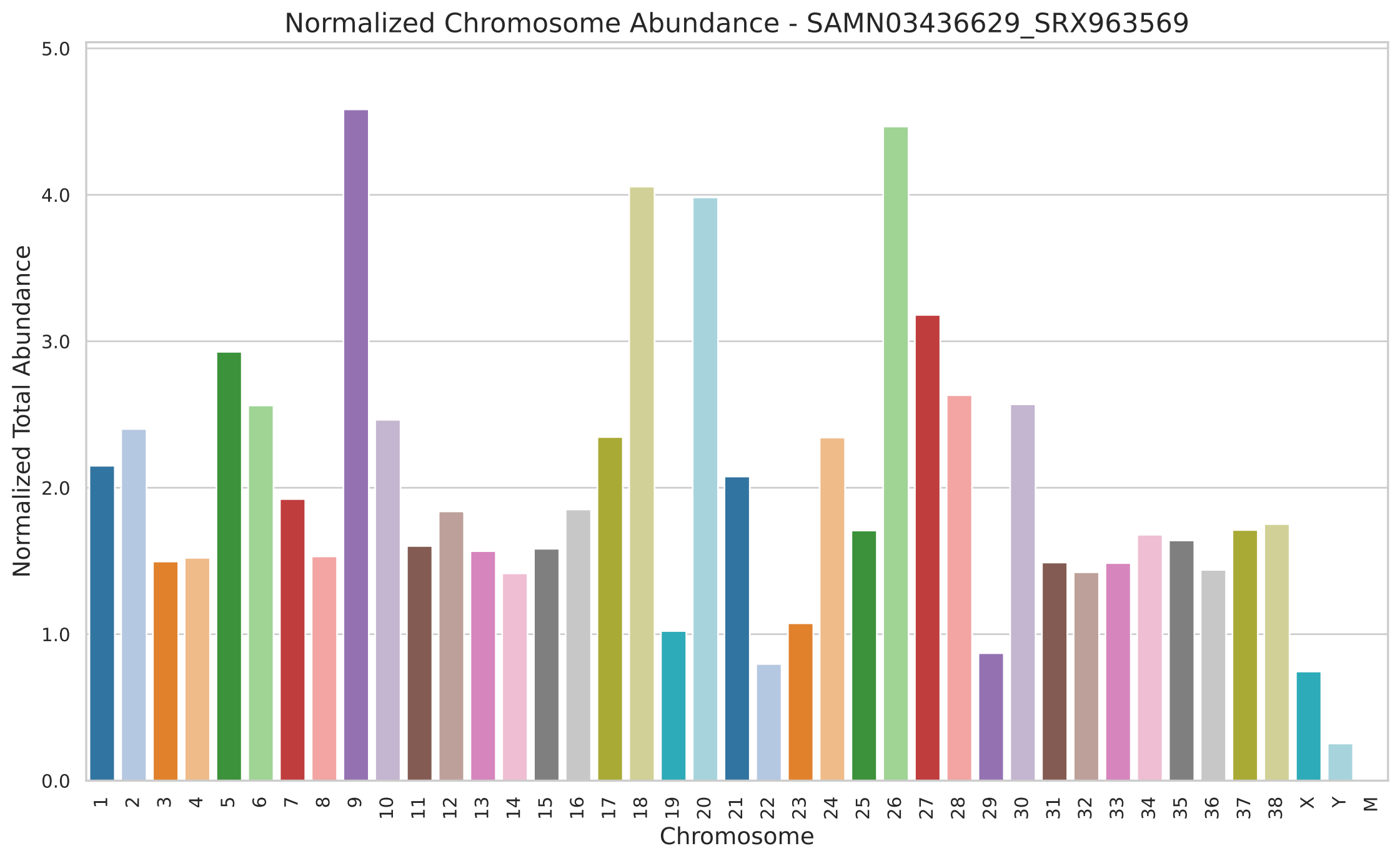

Normalized Chromosome Abundance - SAMN03436619_SRX963556
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

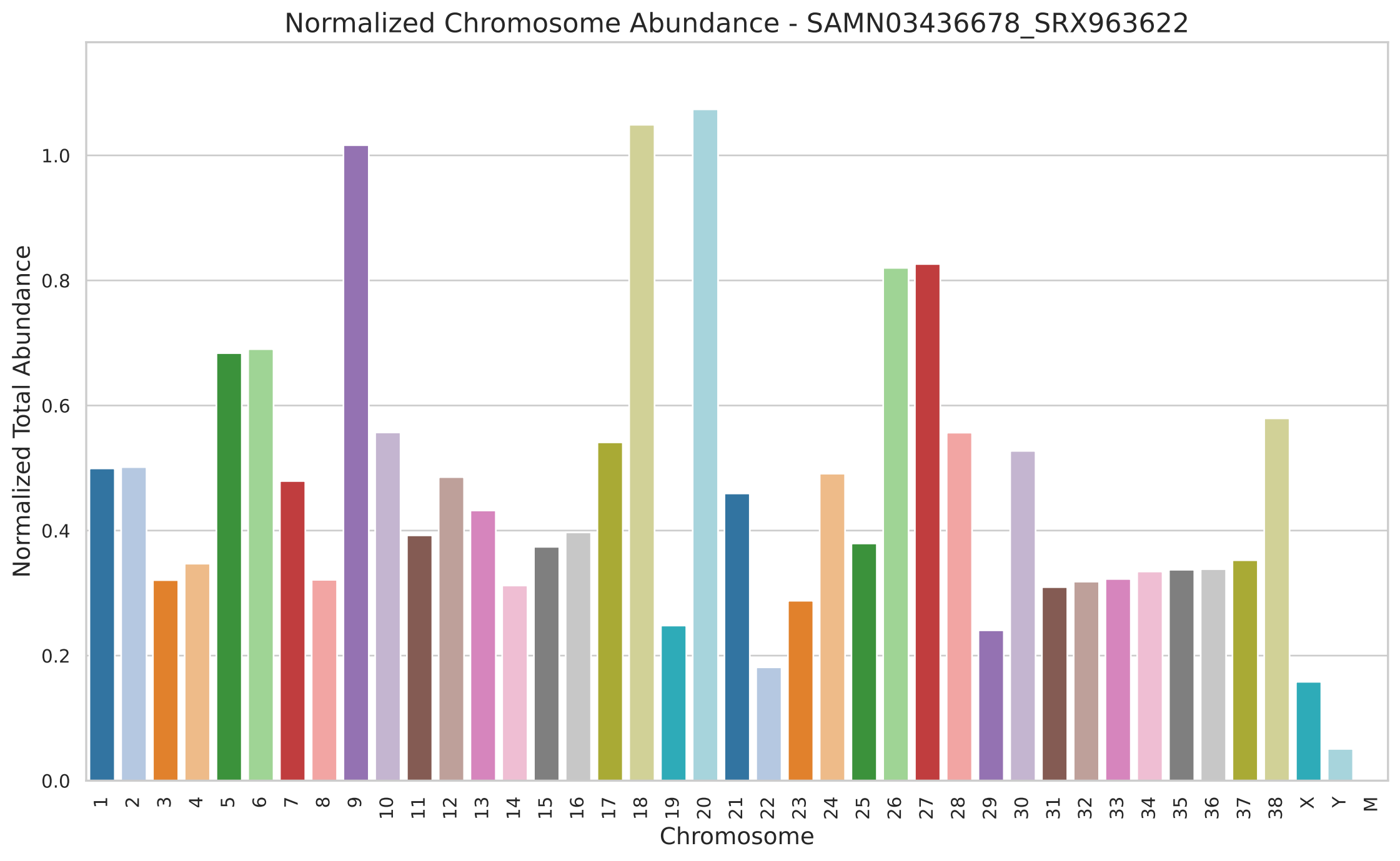

Normalized Chromosome Abundance - SAMN03436625_SRX963564
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

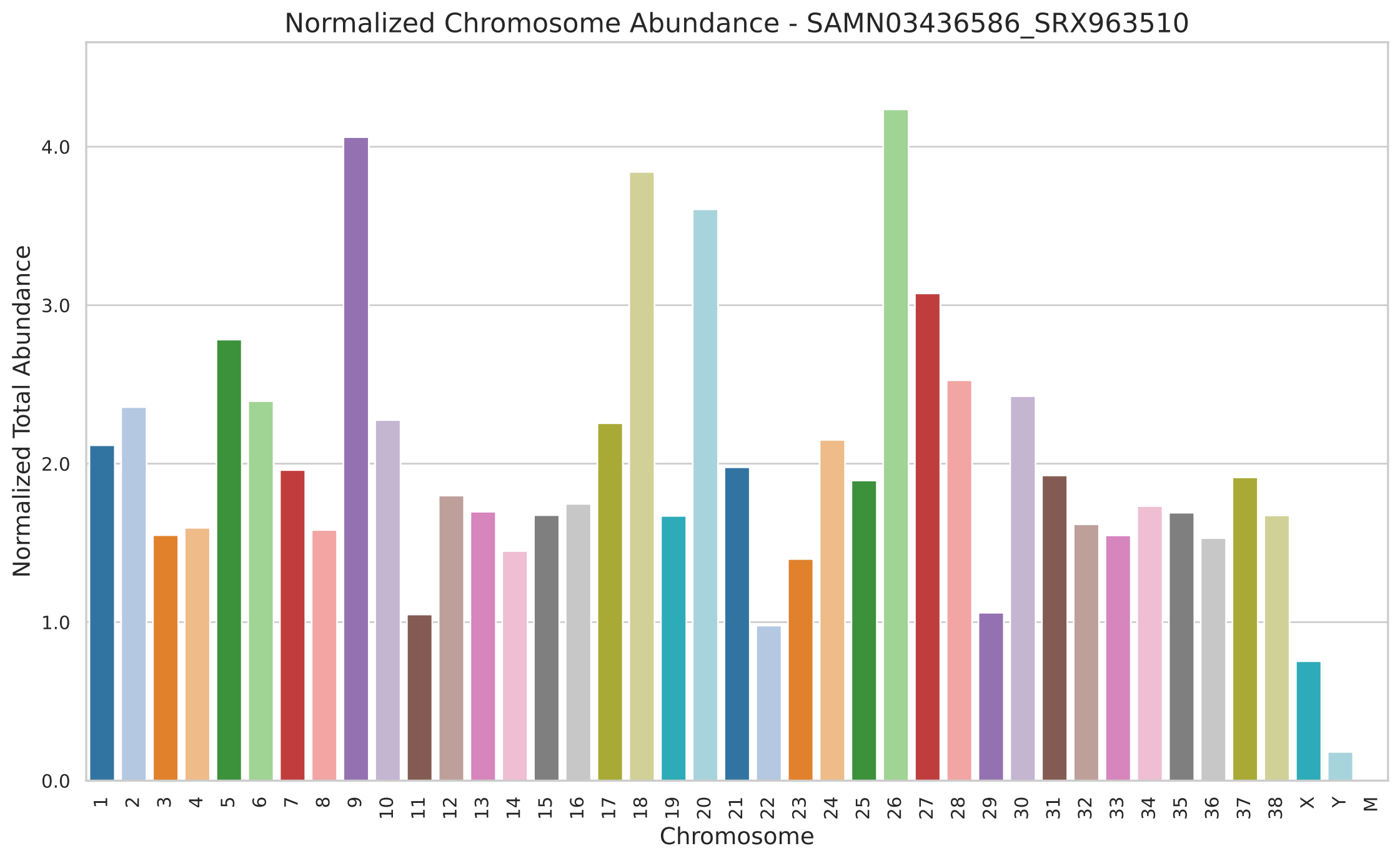

Normalized Chromosome Abundance - SAMN03436523_SRX963441
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

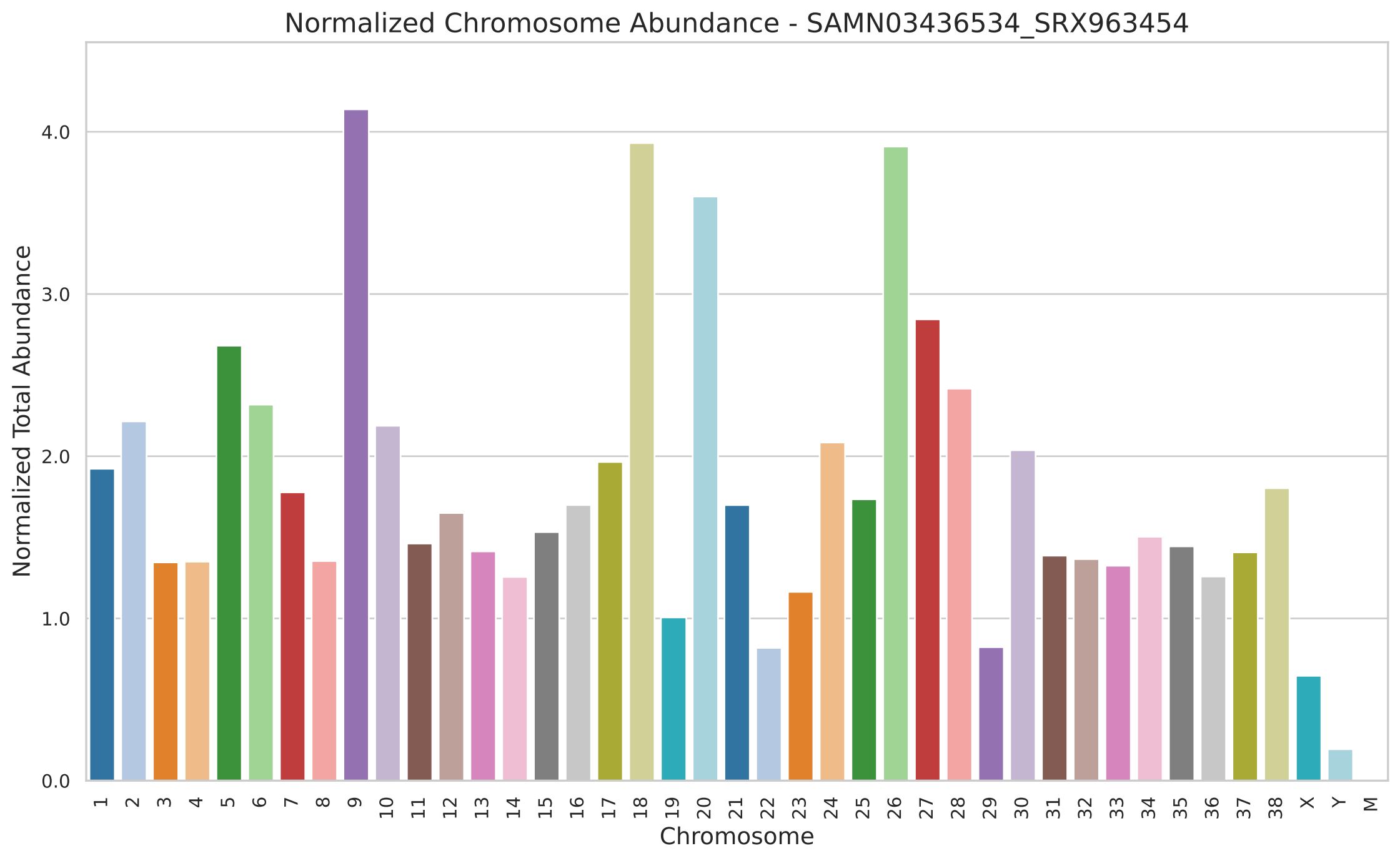

Normalized Chromosome Abundance - SAMN03436635_SRX963577
Normalized Total Abundance
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

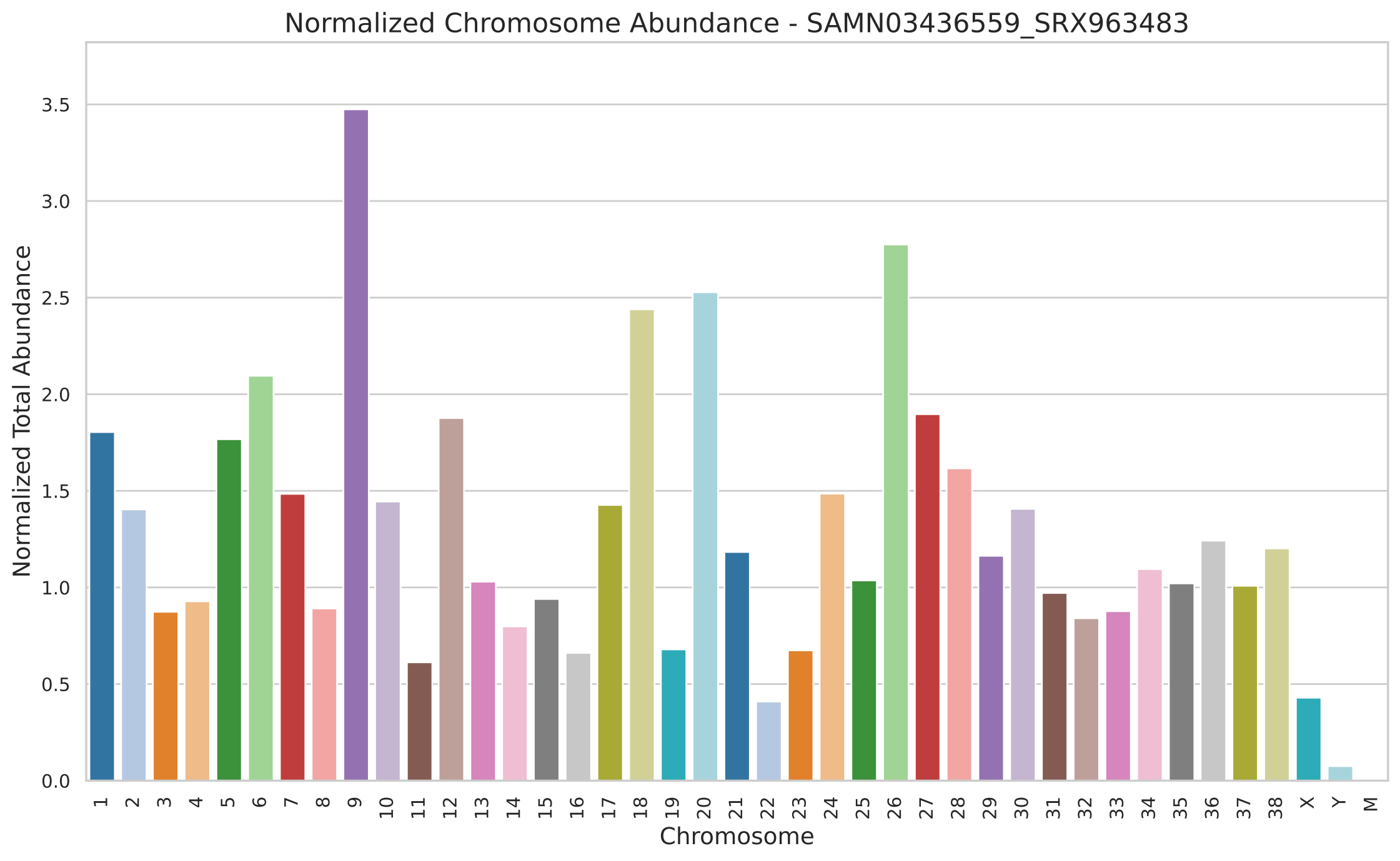

Normalized Chromosome Abundance - SAMN03436604_SRX963529
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

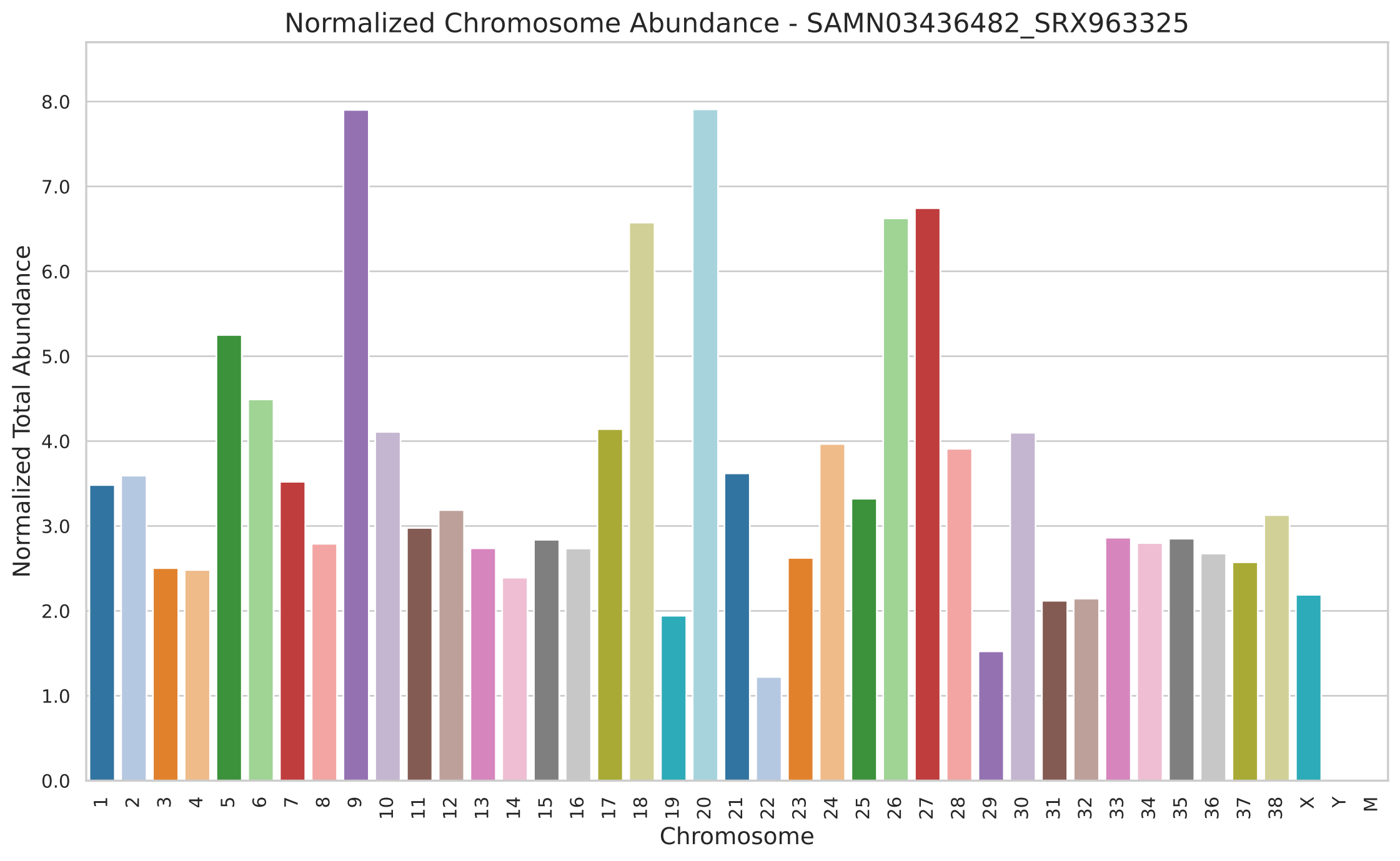

Normalized Chromosome Abundance - SAMN03436629_SRX963569
Normalized Total Abundance
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

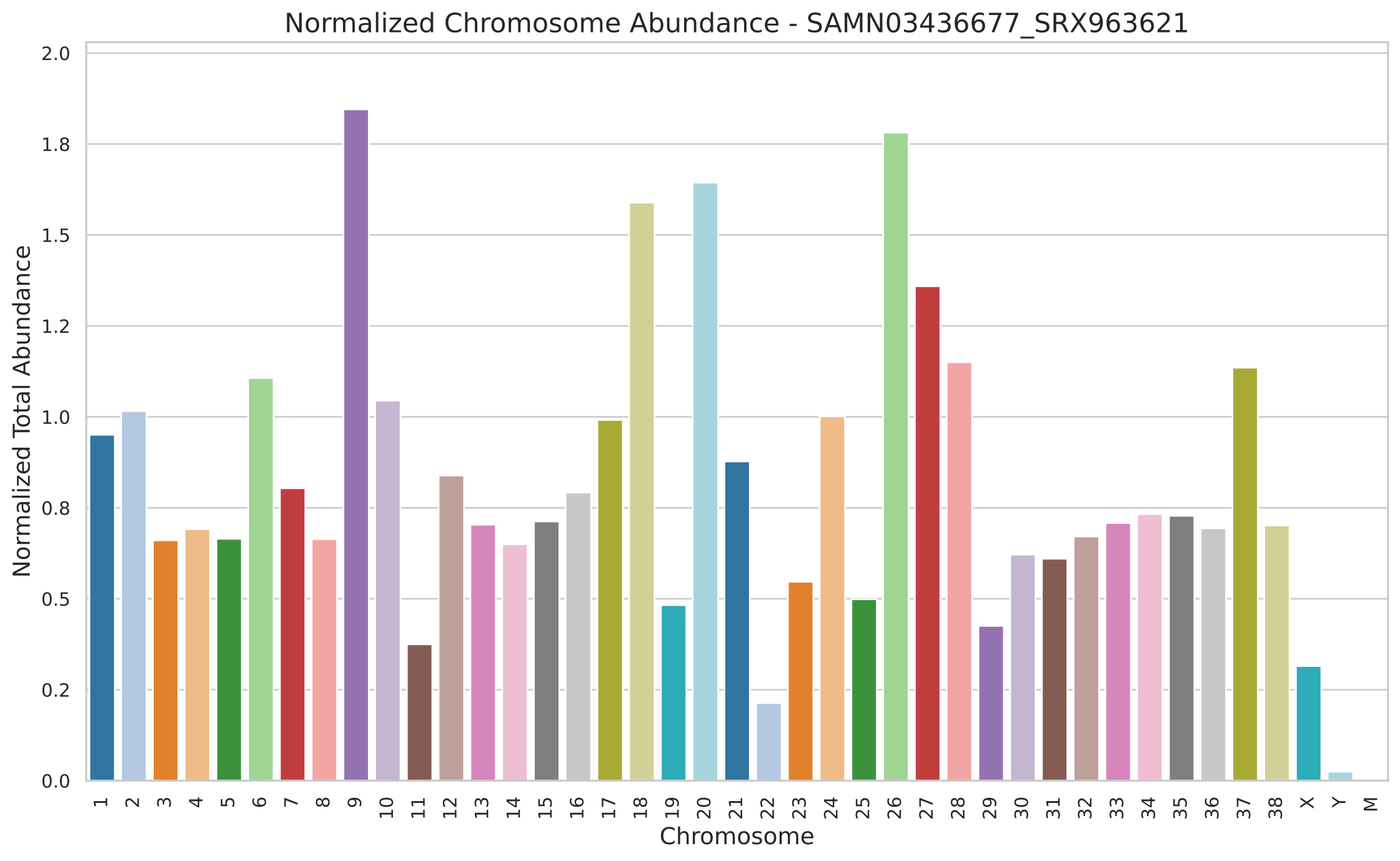

Normalized Chromosome Abundance - SAMN03436678_SRX963622
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

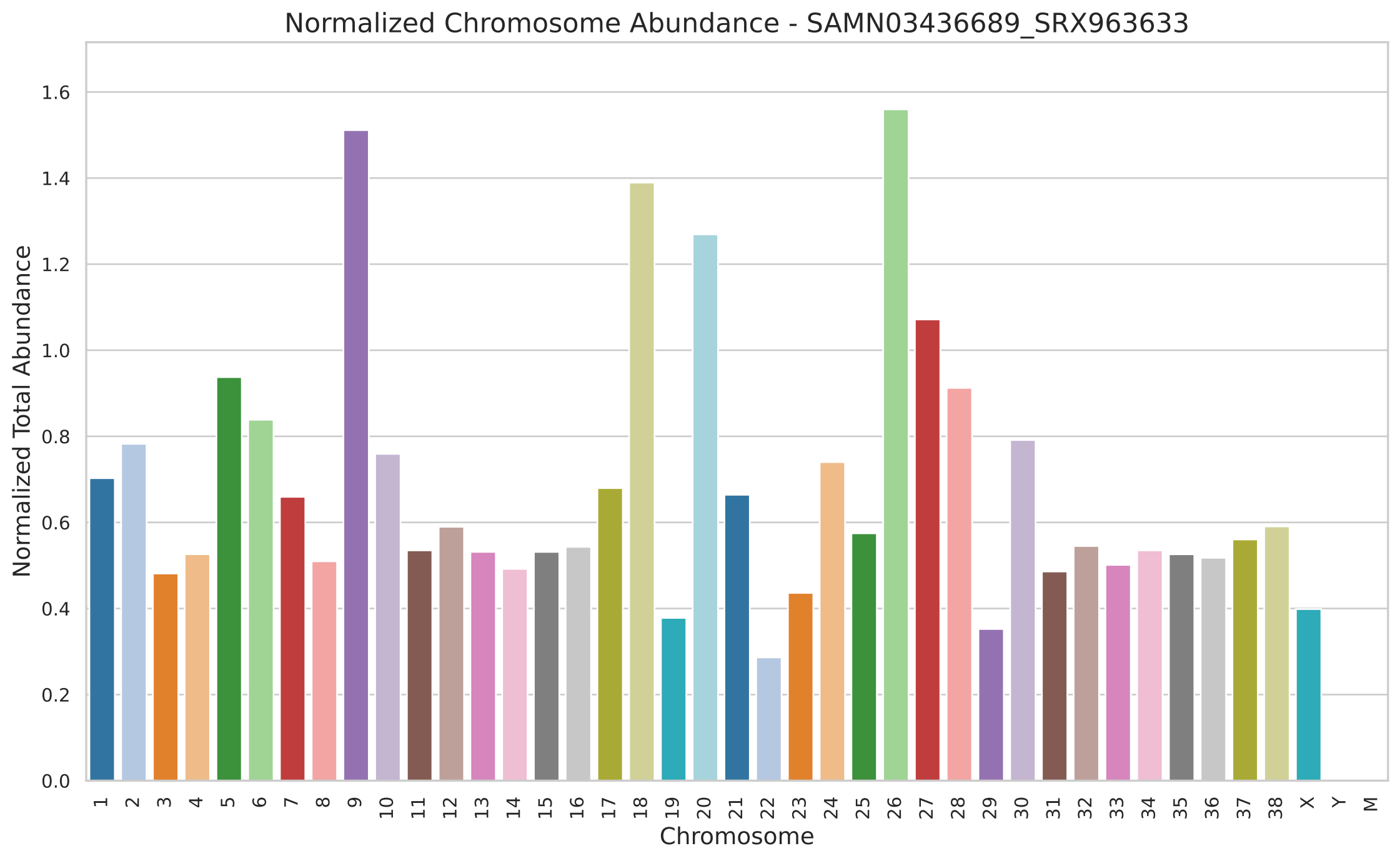

Normalized Chromosome Abundance - SAMN03436586_SRX963510
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

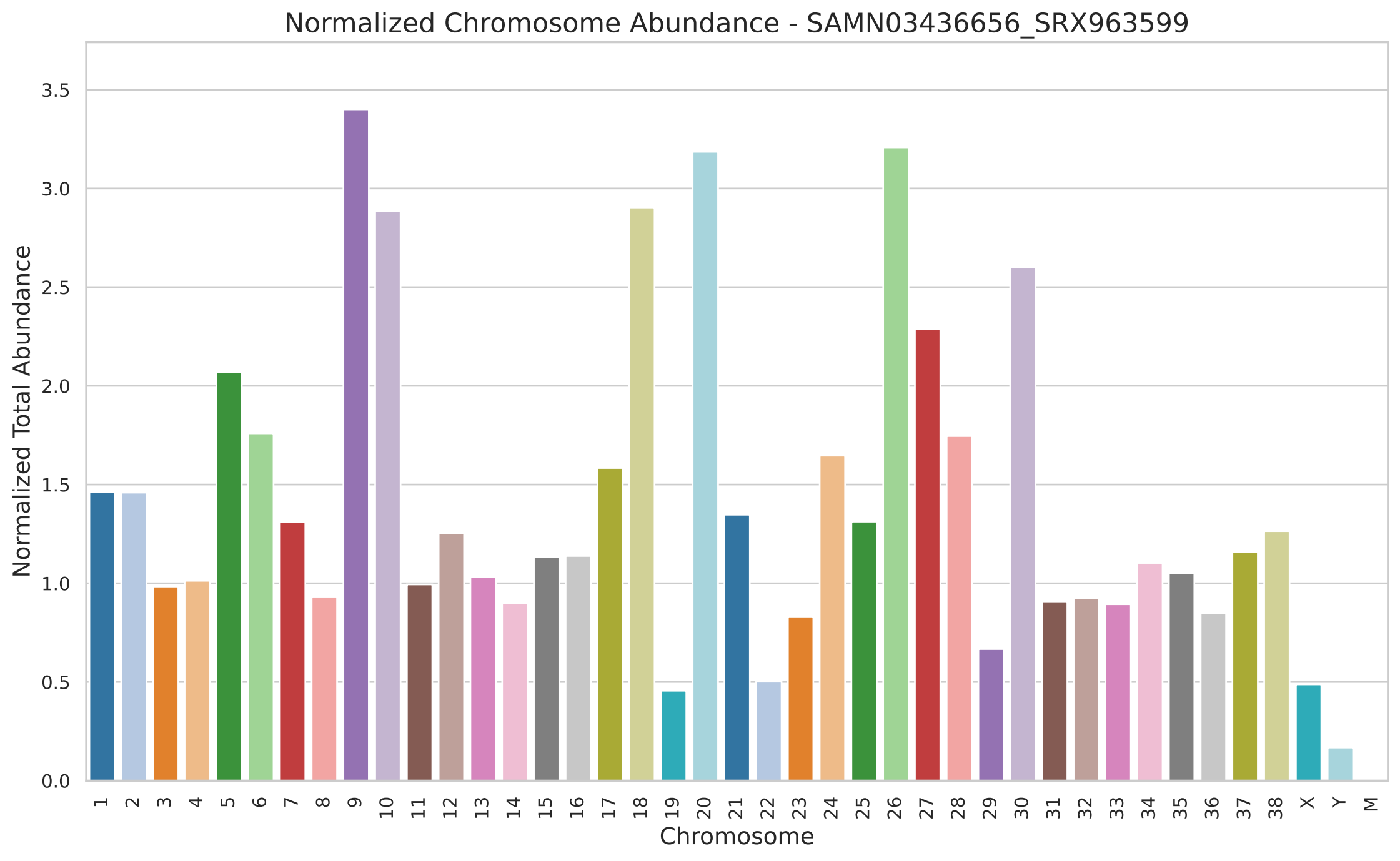

Normalized Chromosome Abundance - SAMN03436534_SRX963454
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

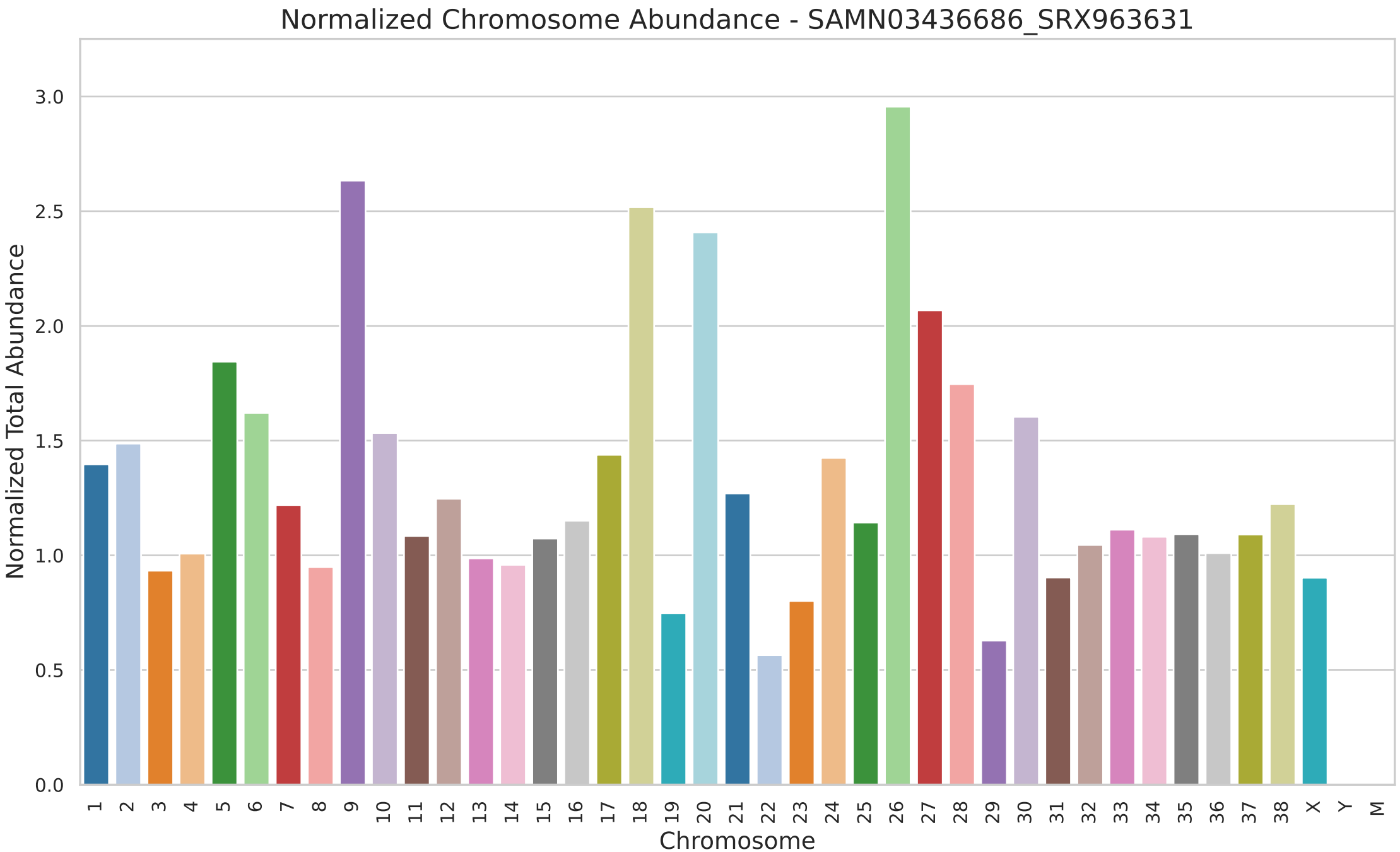

Normalized Chromosome Abundance - SAMN03436559_SRX963483
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

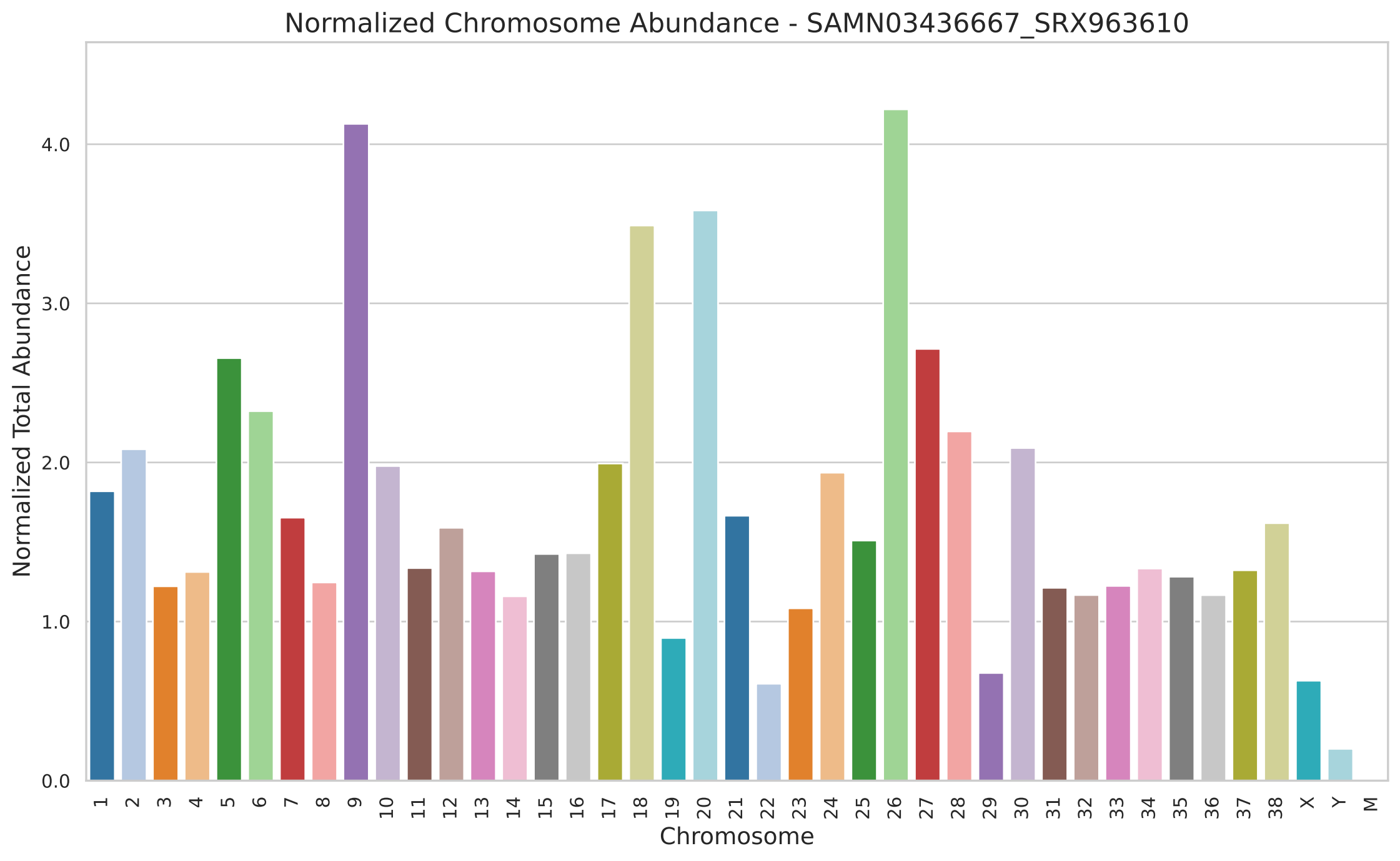

Normalized Chromosome Abundance - SAMN03436482_SRX963325
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

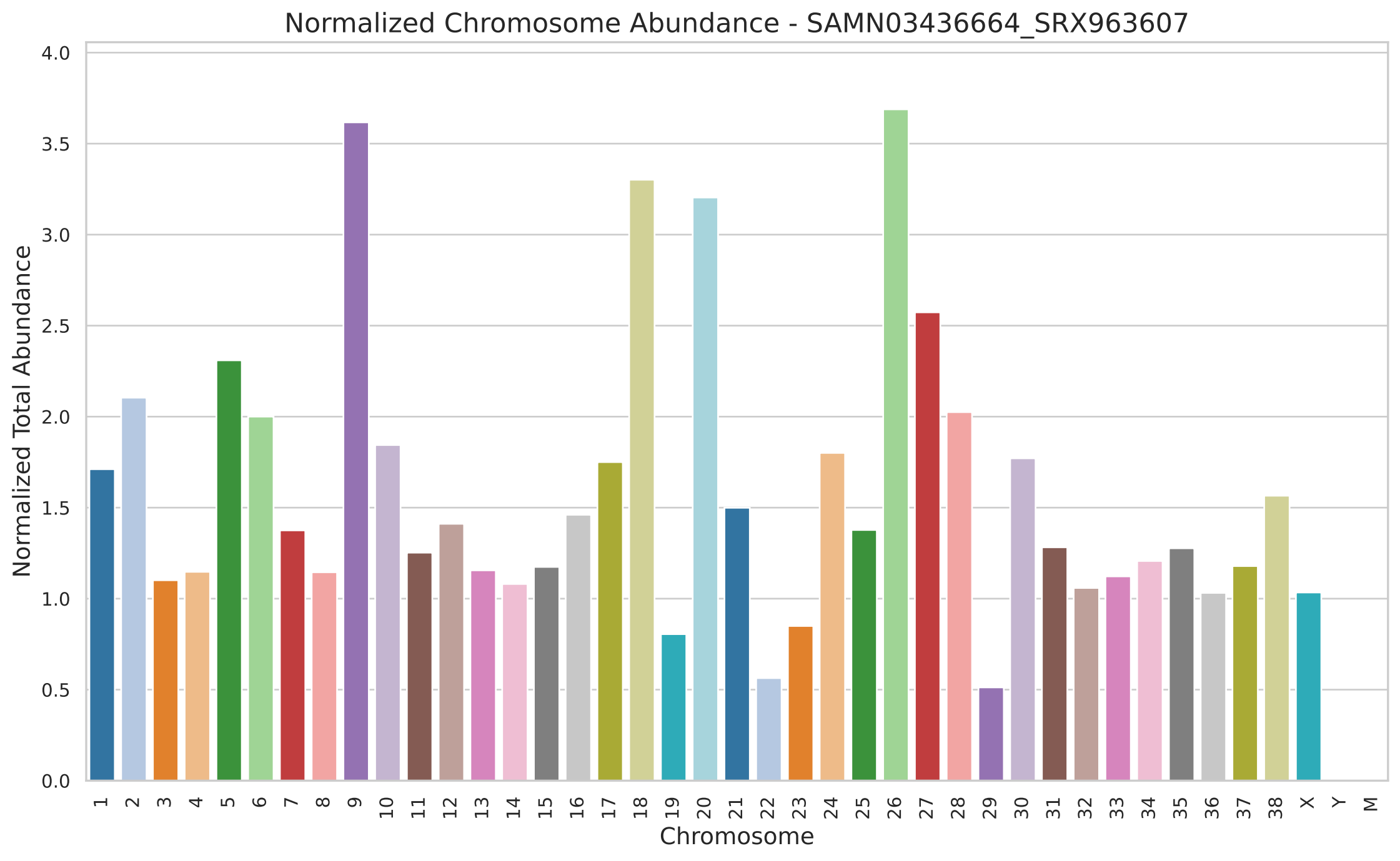

Normalized Chromosome Abundance - SAMN03436677_SRX963621
Normalized Total Abundance
2.0
1.8
1.5
1.2
1.0
0.8
0.5
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

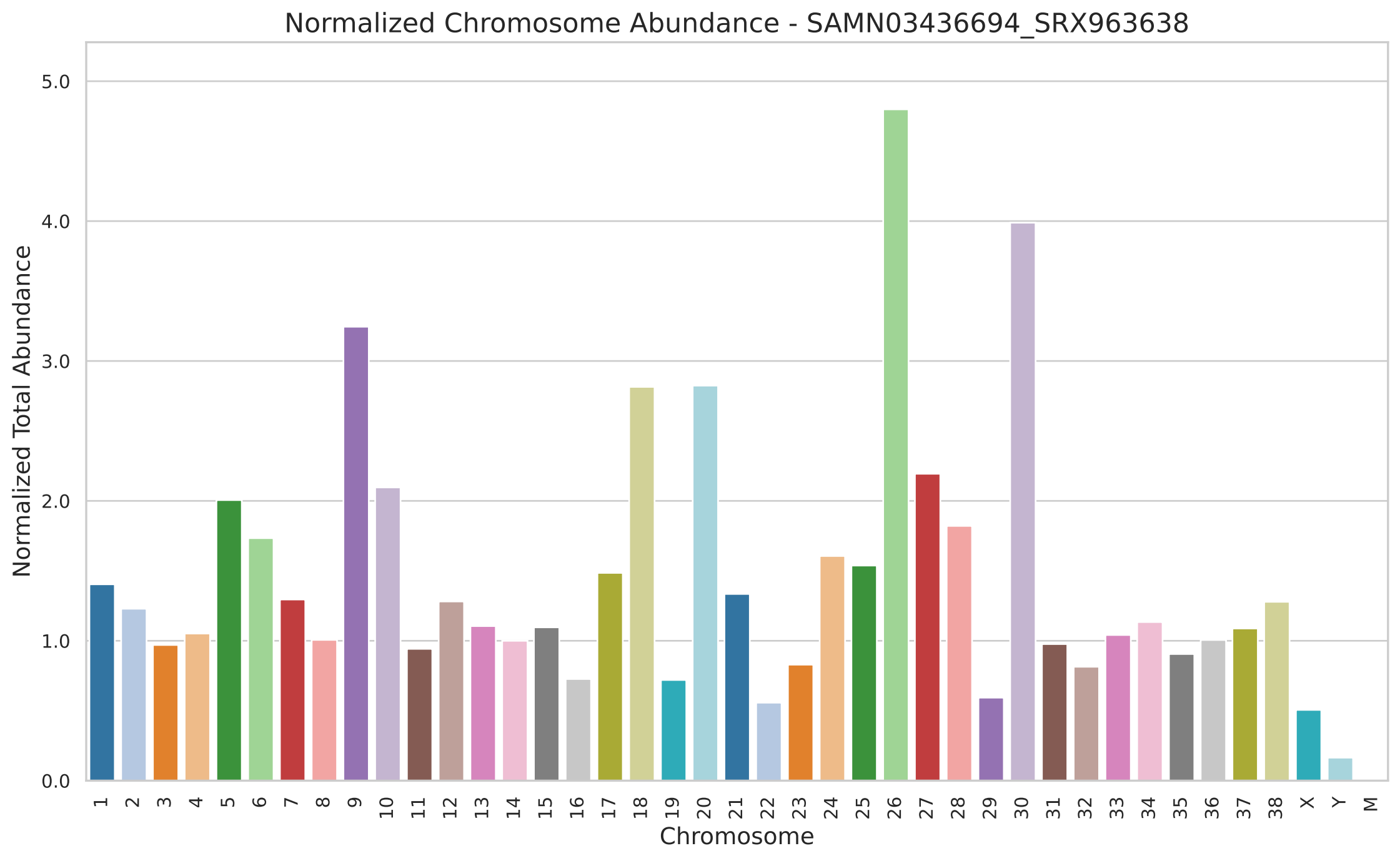

Normalized Chromosome Abundance - SAMN03436689_SRX963633
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

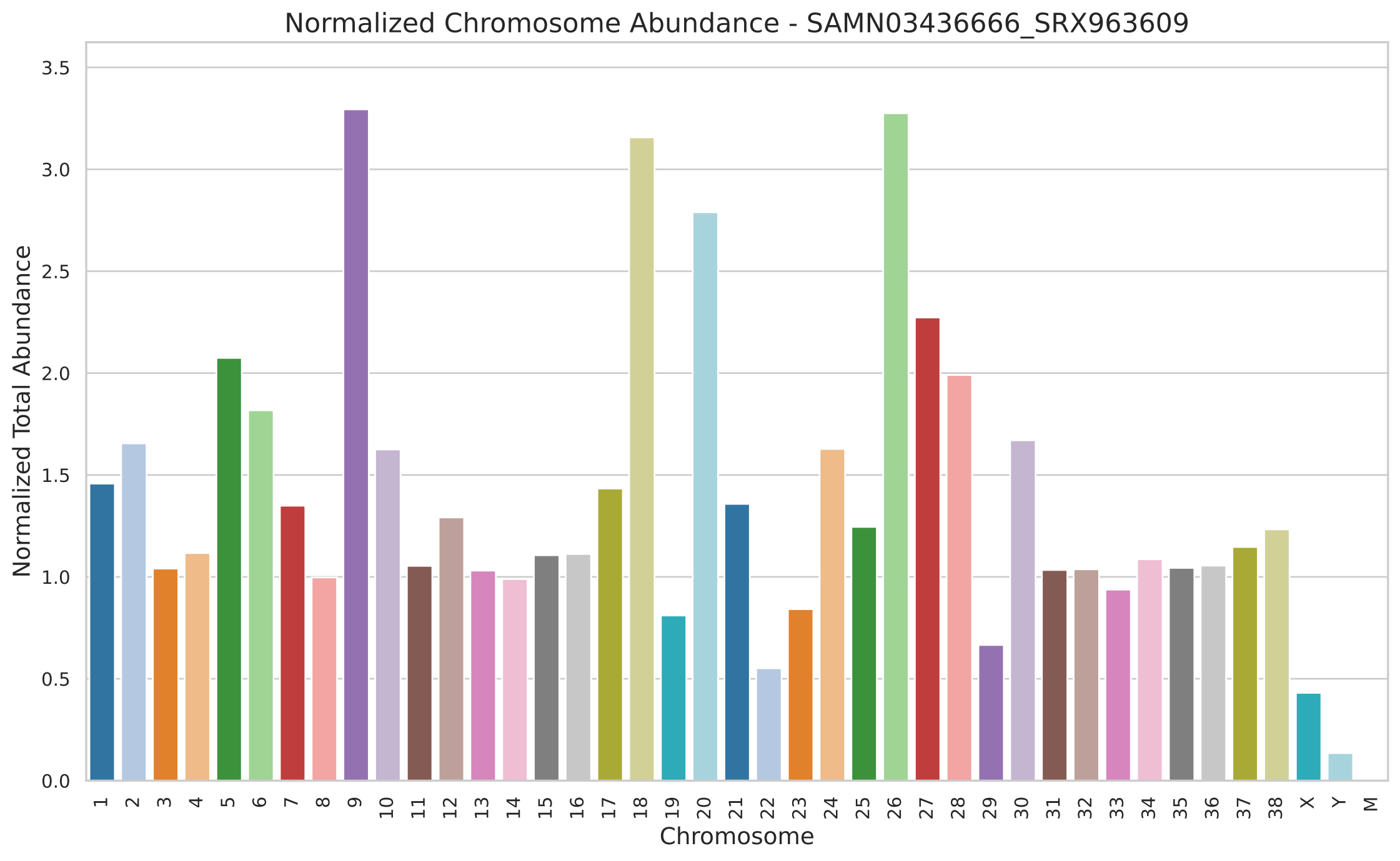

Normalized Chromosome Abundance - SAMN03436656_SRX963599
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

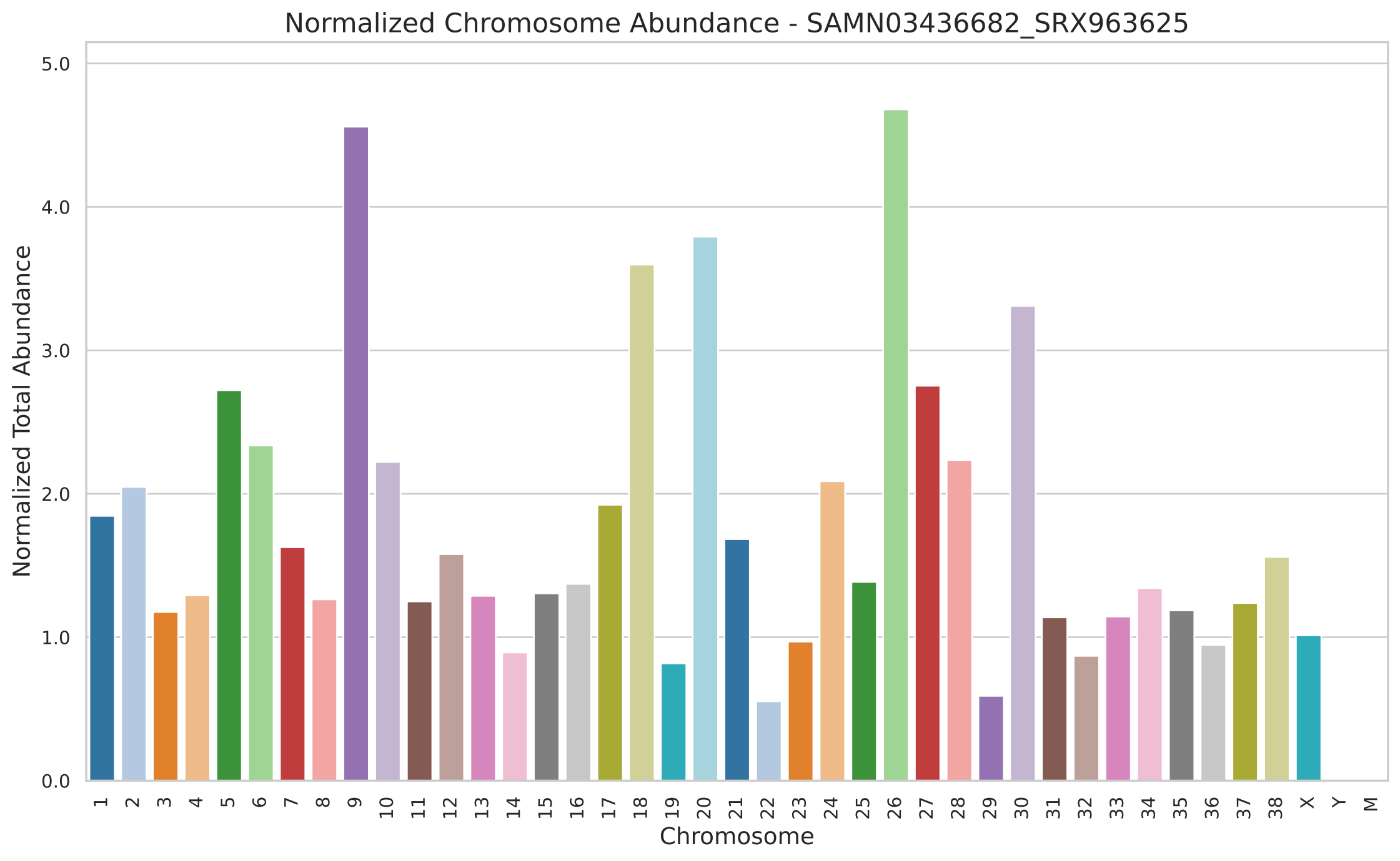

Normalized Chromosome Abundance - SAMN03436686_SRX963631
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

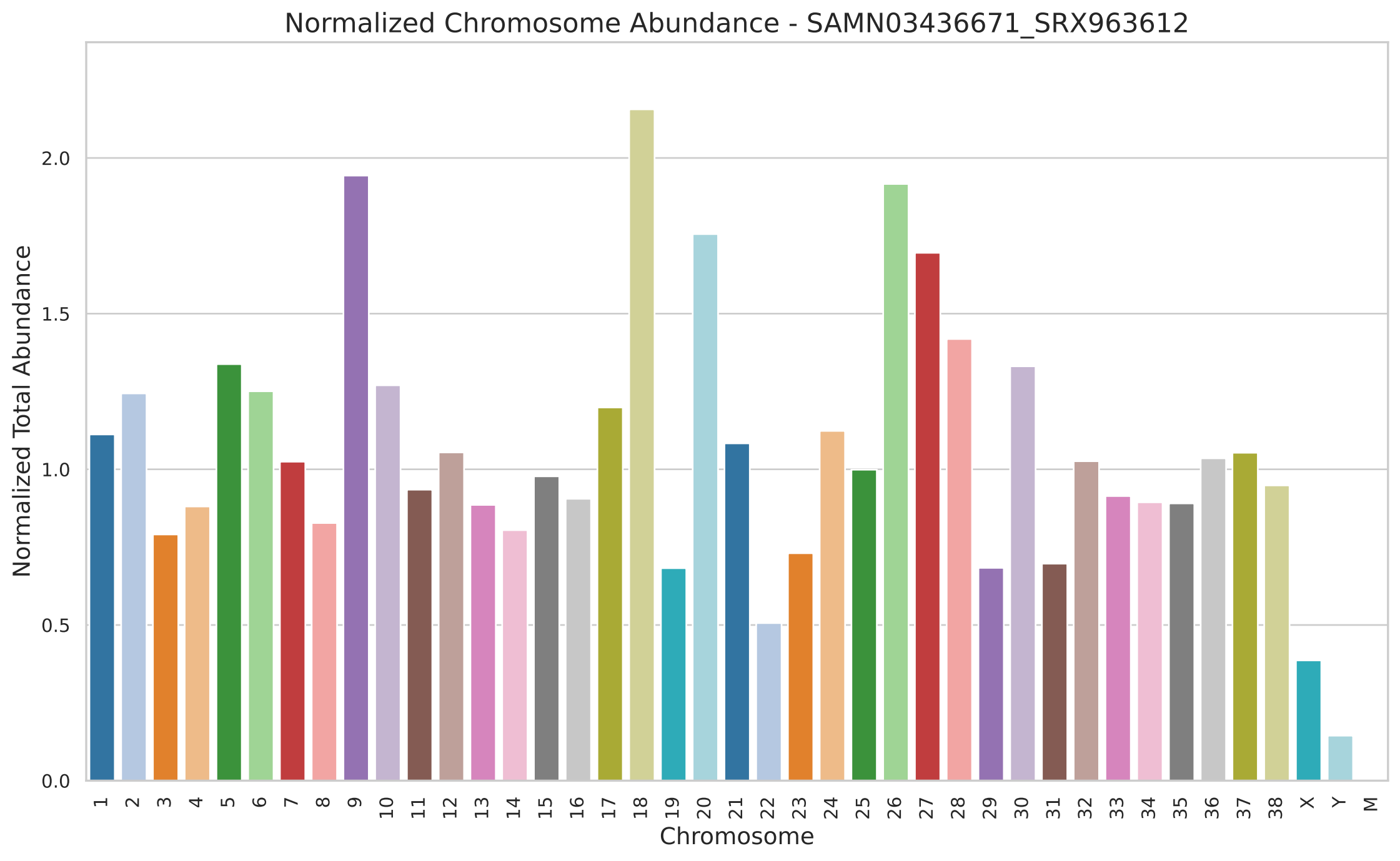

Normalized Chromosome Abundance - SAMN03436667_SRX963610
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

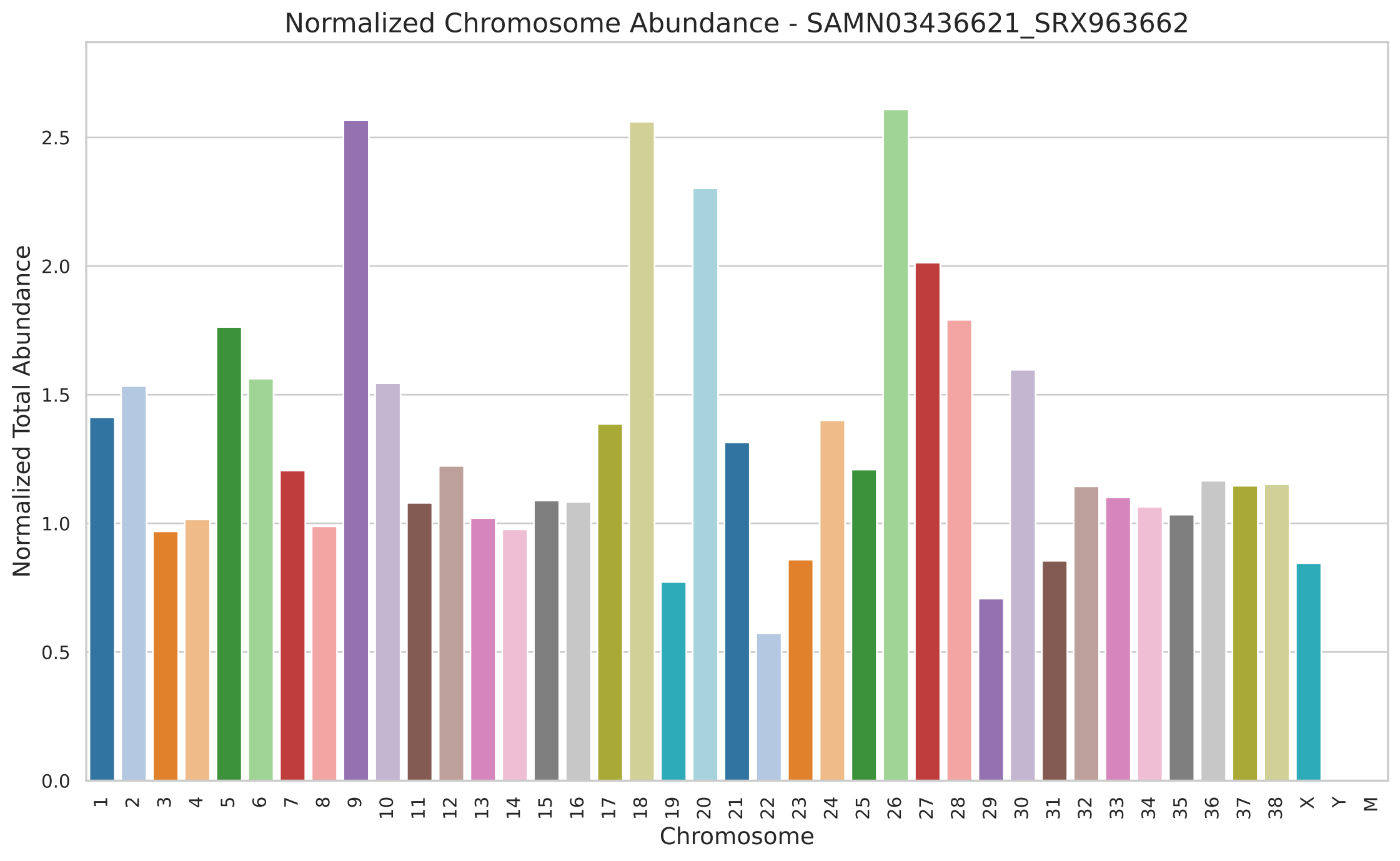

Normalized Chromosome Abundance - SAMN03436664_SRX963607
Normalized Total Abundance
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

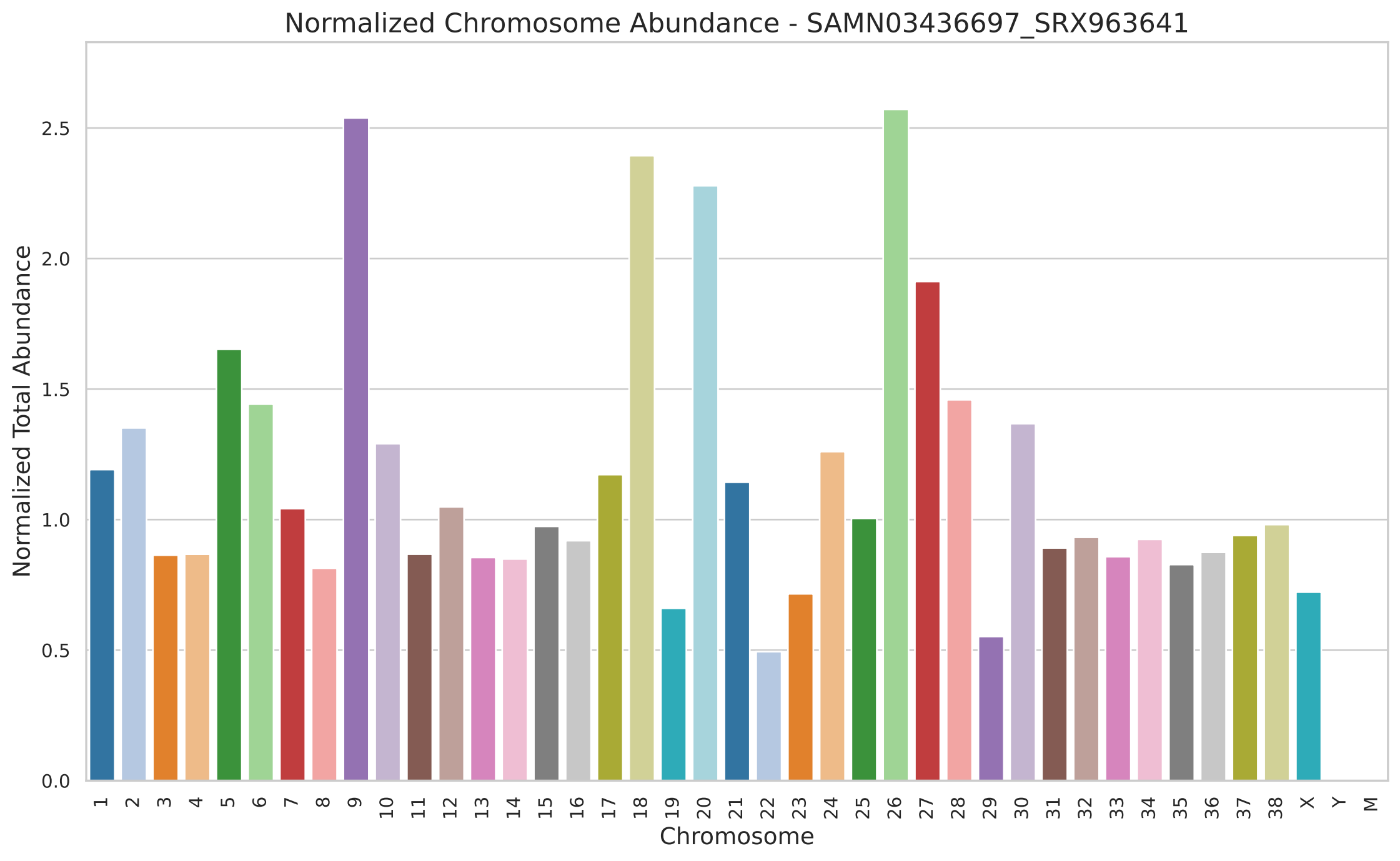

Normalized Chromosome Abundance - SAMN03436694_SRX963638
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

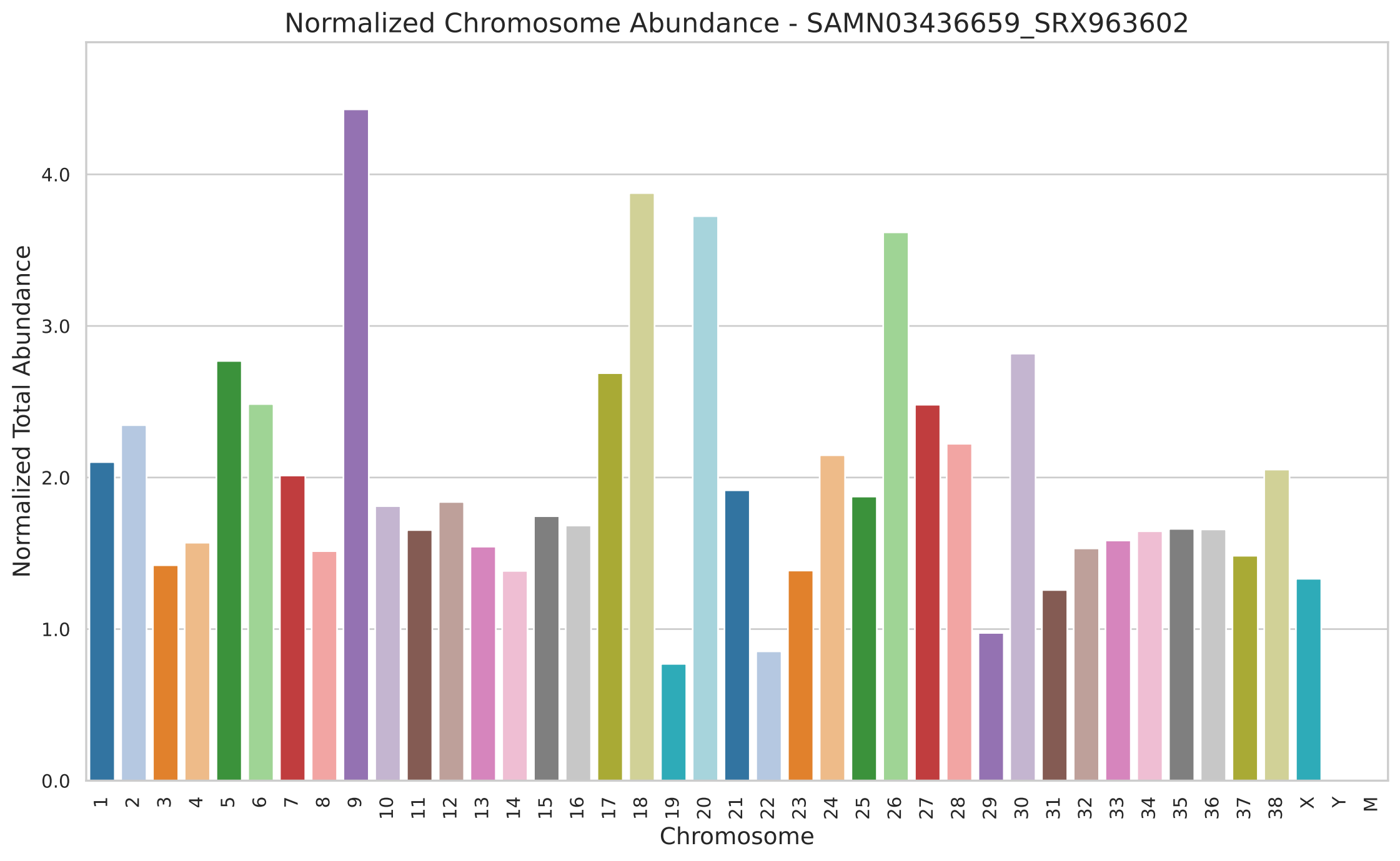

Normalized Chromosome Abundance - SAMN03436666_SRX963609
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

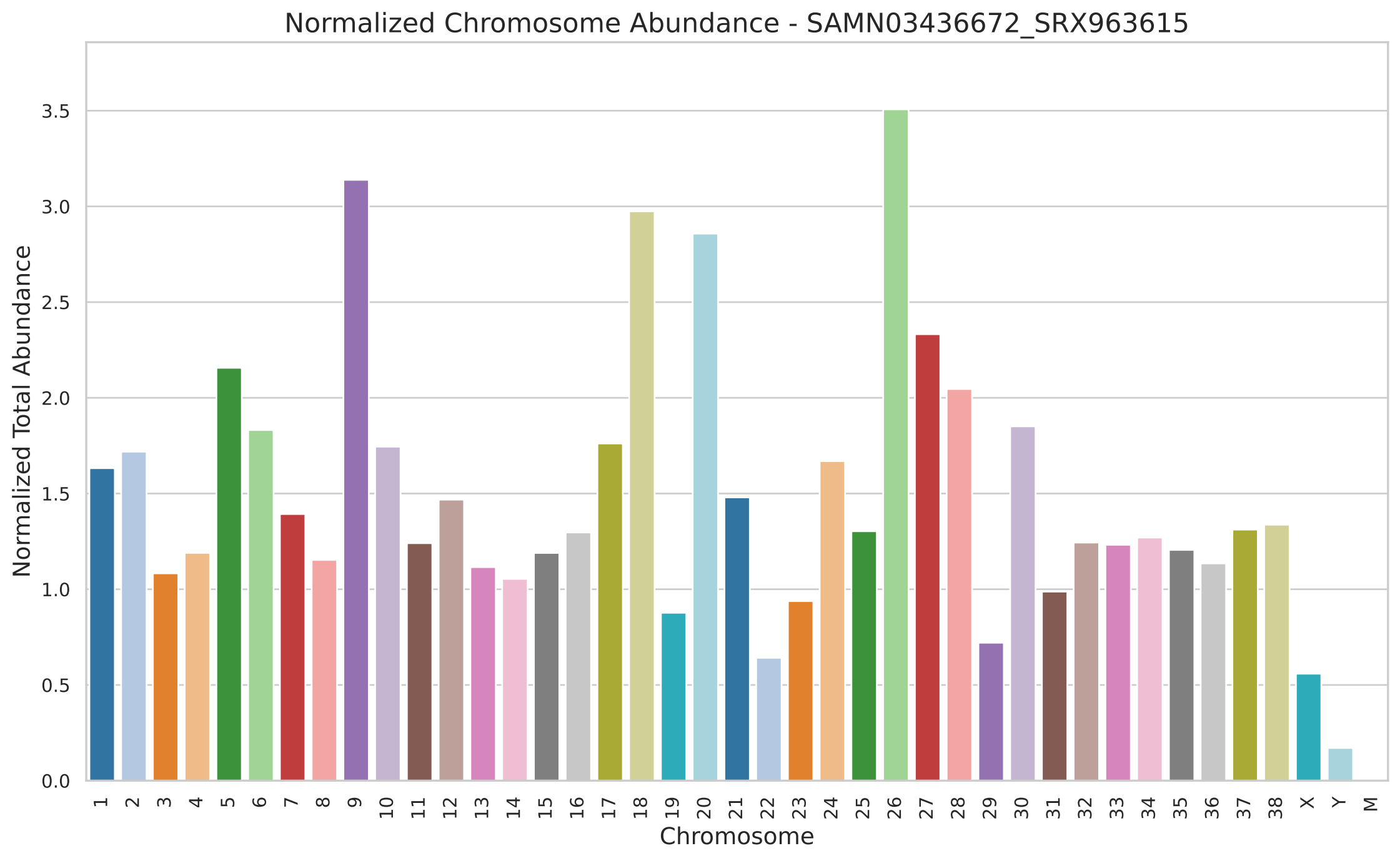

Normalized Chromosome Abundance - SAMN03436682_SRX963625
Normalized Total Abundance
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

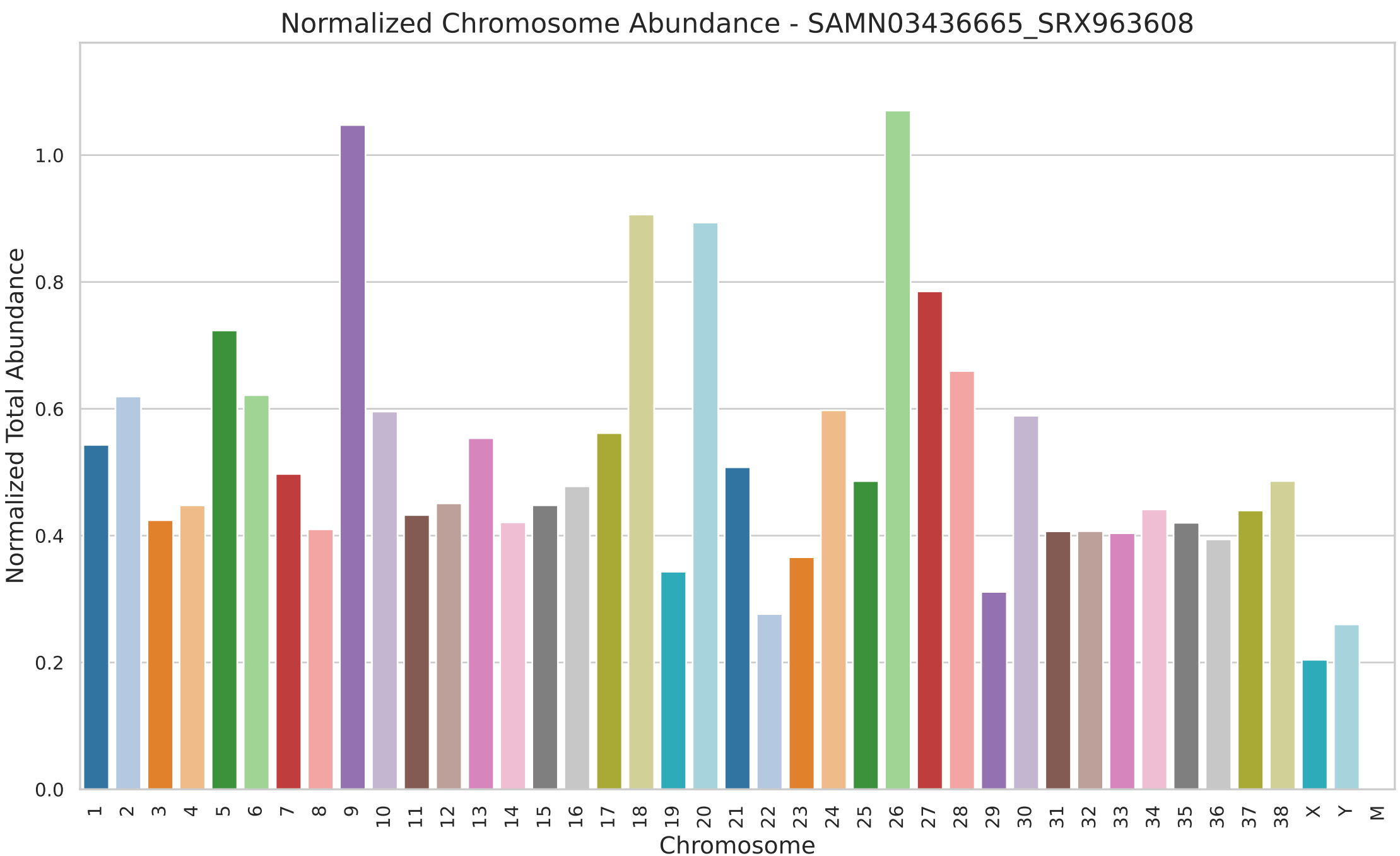

Normalized Chromosome Abundance - SAMN03436671_SRX963612
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

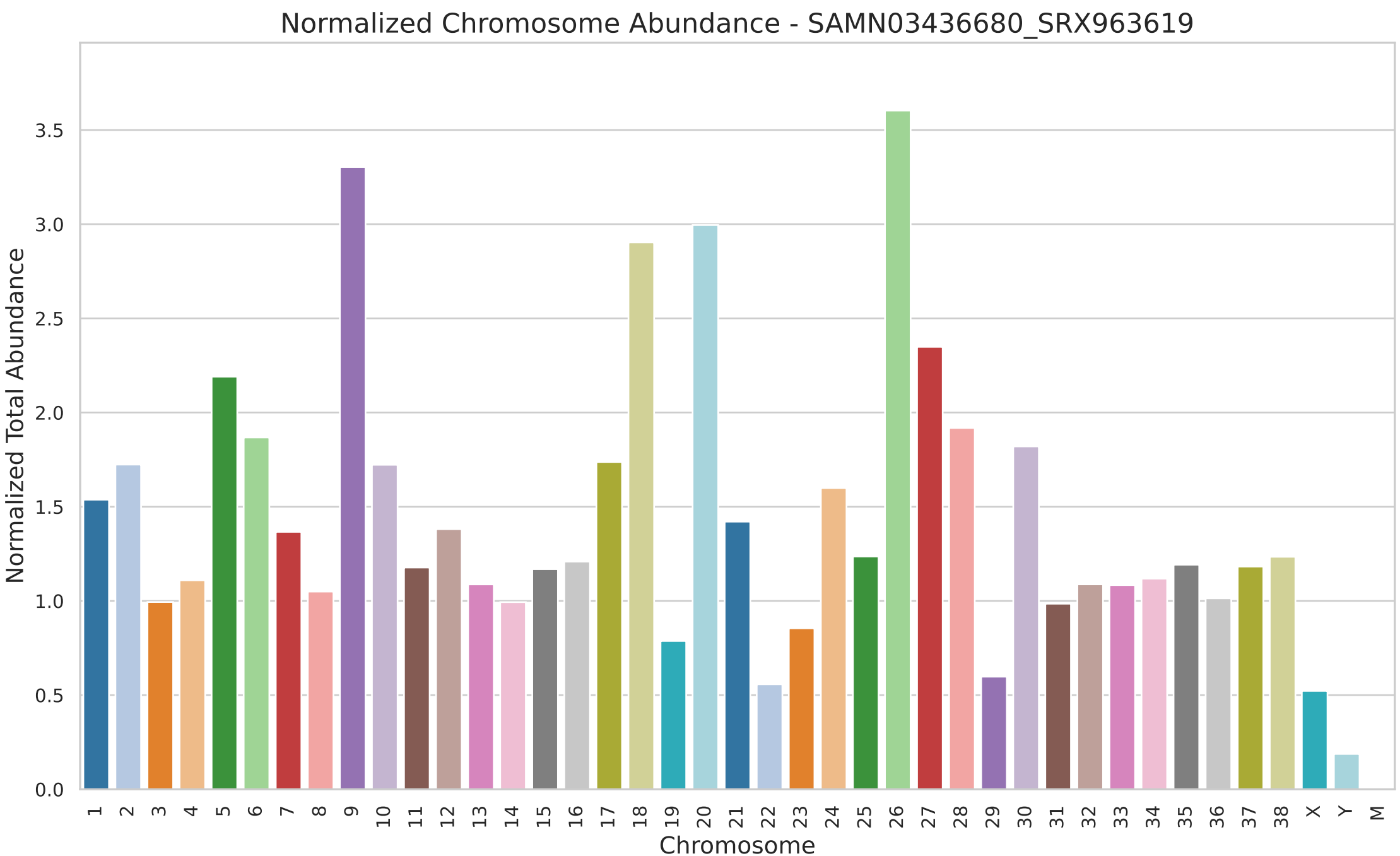

Normalized Chromosome Abundance - SAMN03436621_SRX963662
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

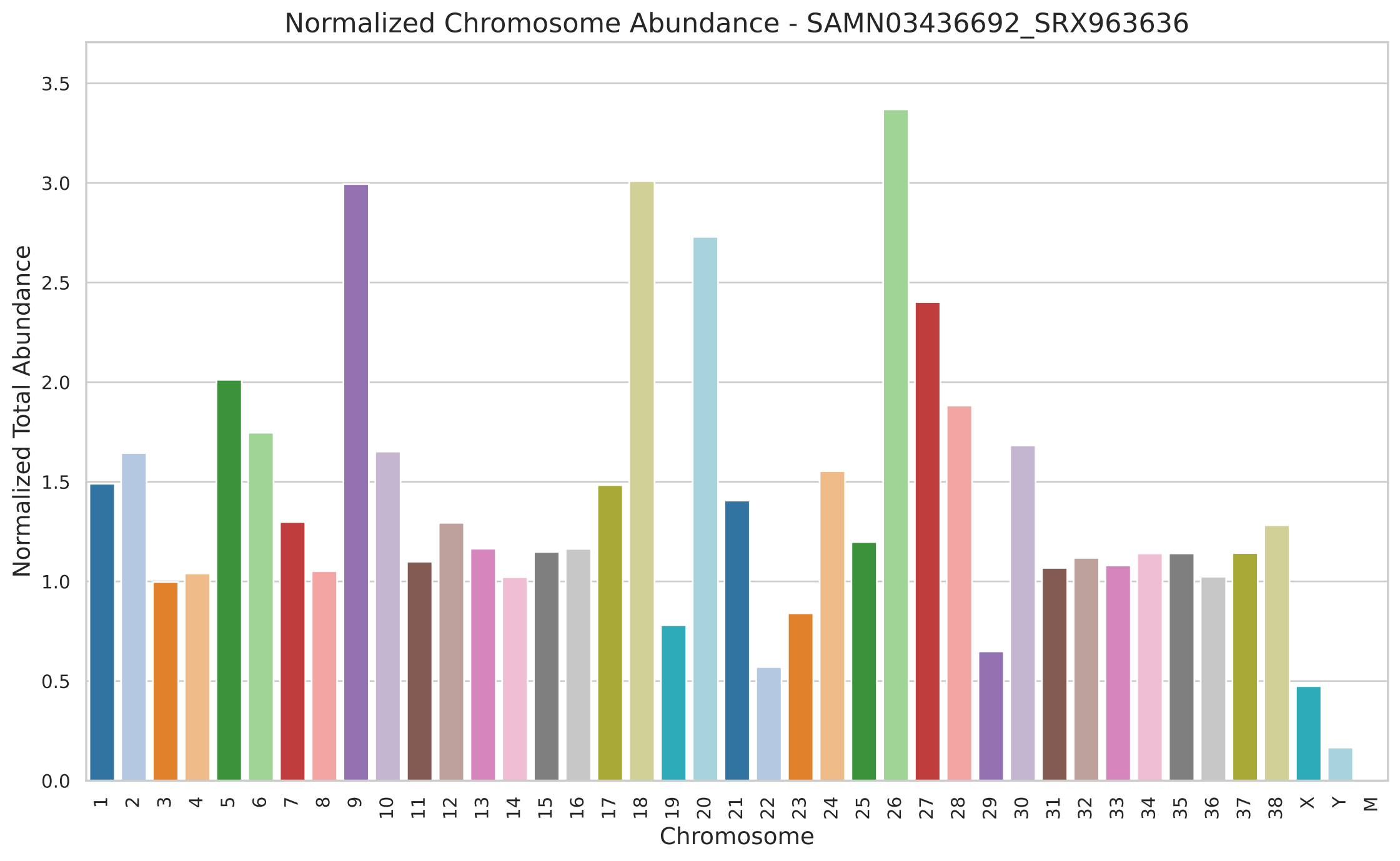

Normalized Chromosome Abundance - SAMN03436697_SRX963641
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

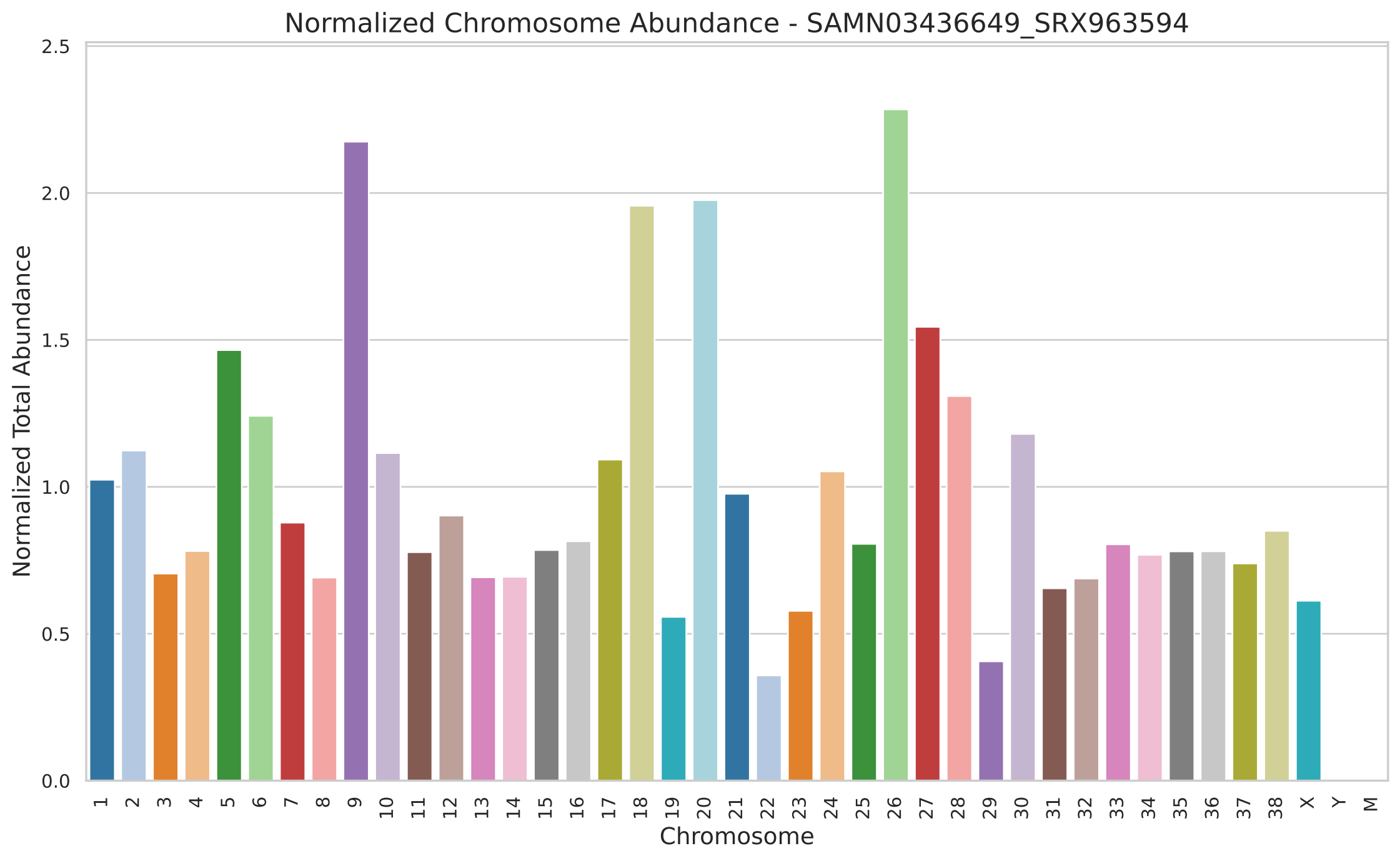

Normalized Chromosome Abundance - SAMN03436659_SRX963602
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

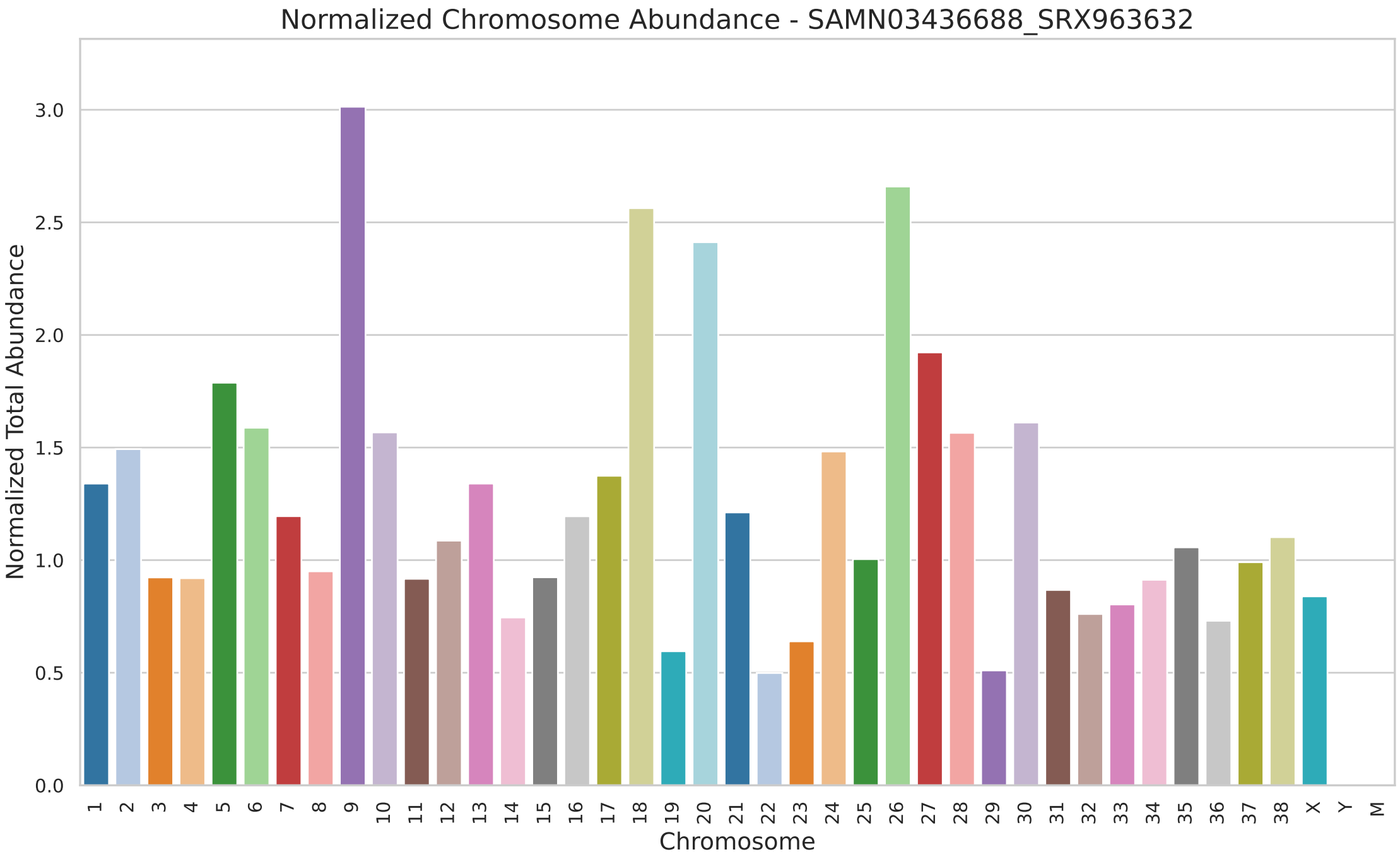

Normalized Chromosome Abundance - SAMN03436672_SRX963615
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

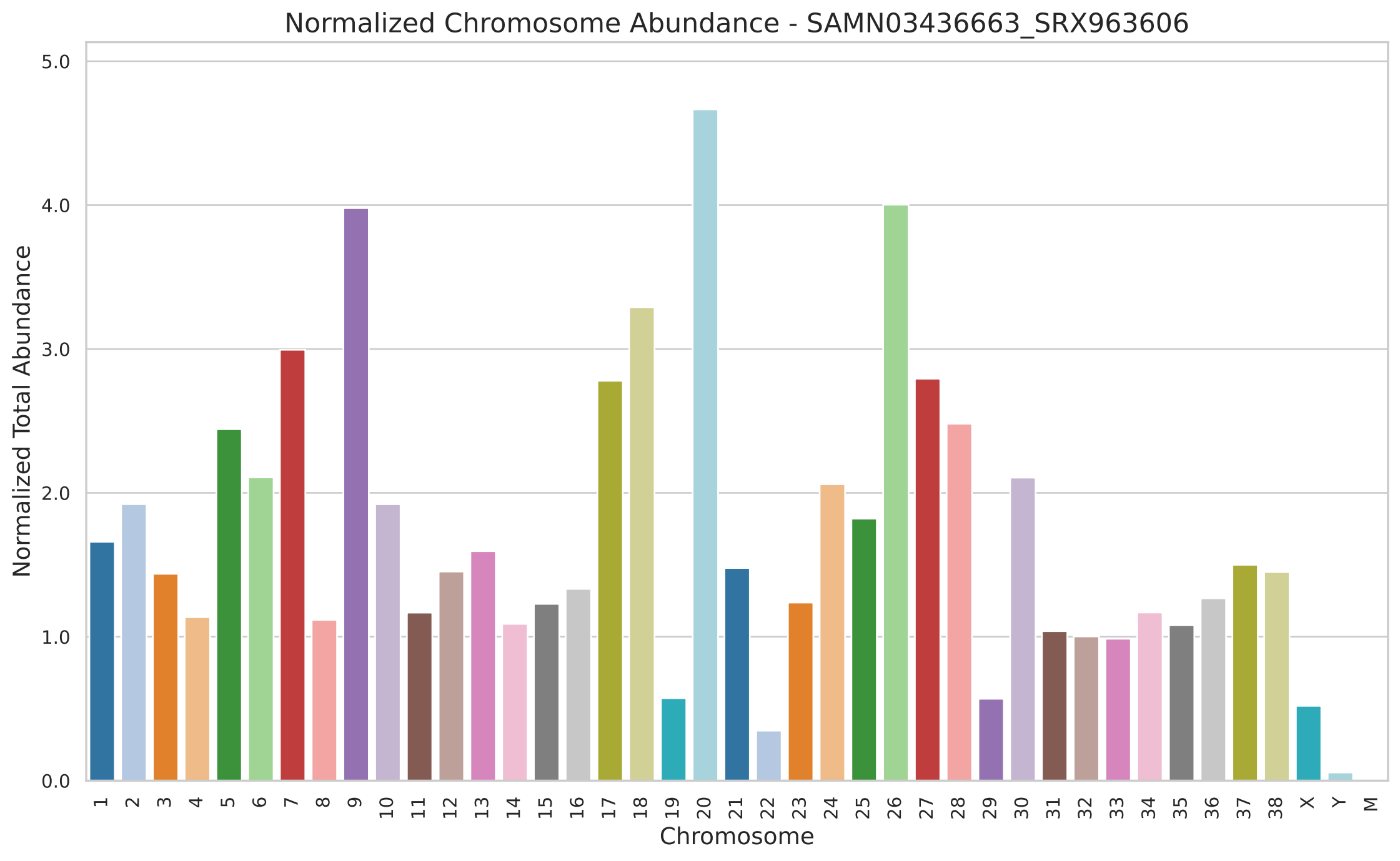

Normalized Chromosome Abundance - SAMN03436665_SRX963608
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

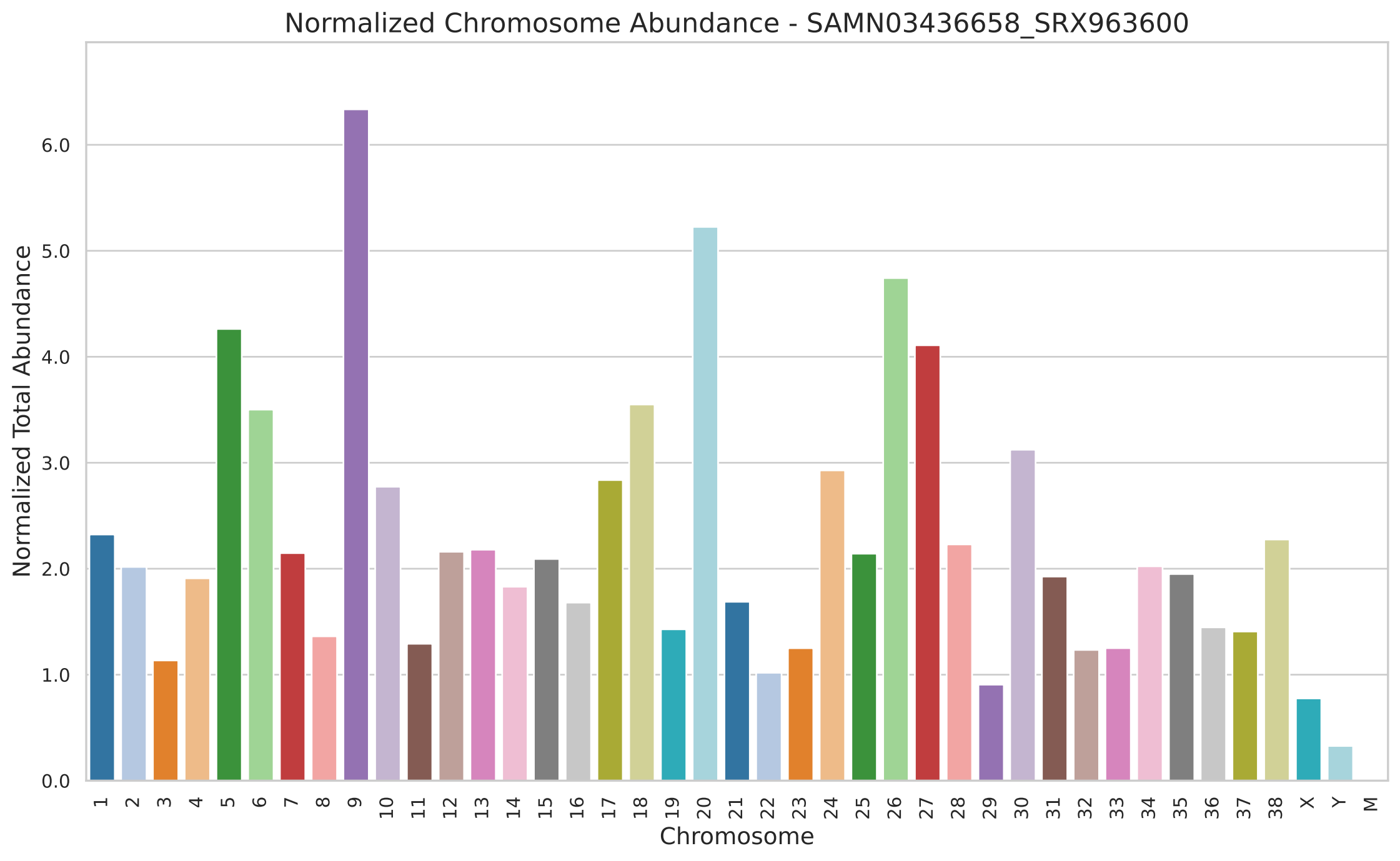

Normalized Chromosome Abundance - SAMN03436680_SRX963619
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

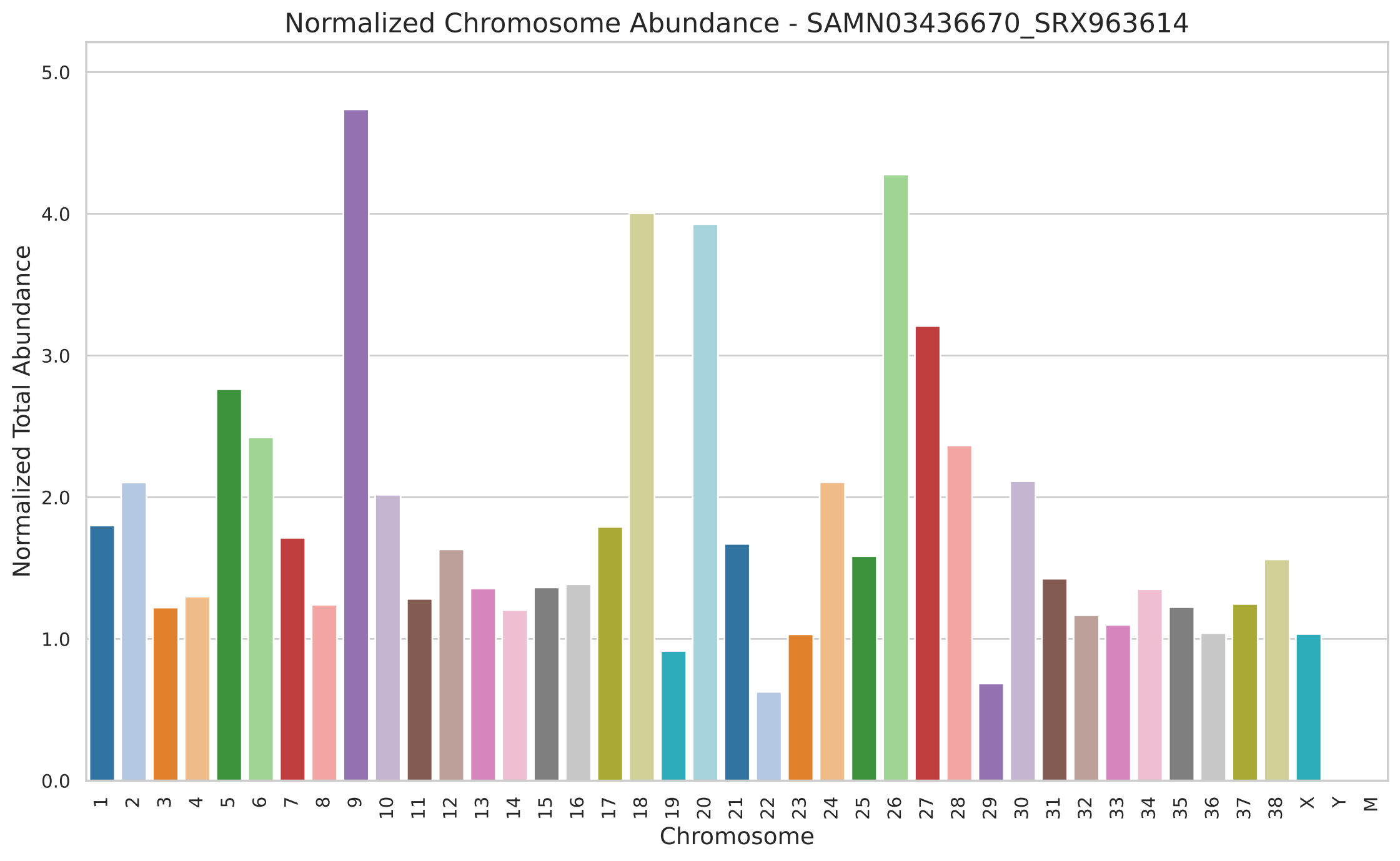

Normalized Chromosome Abundance - SAMN03436692_SRX963636
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

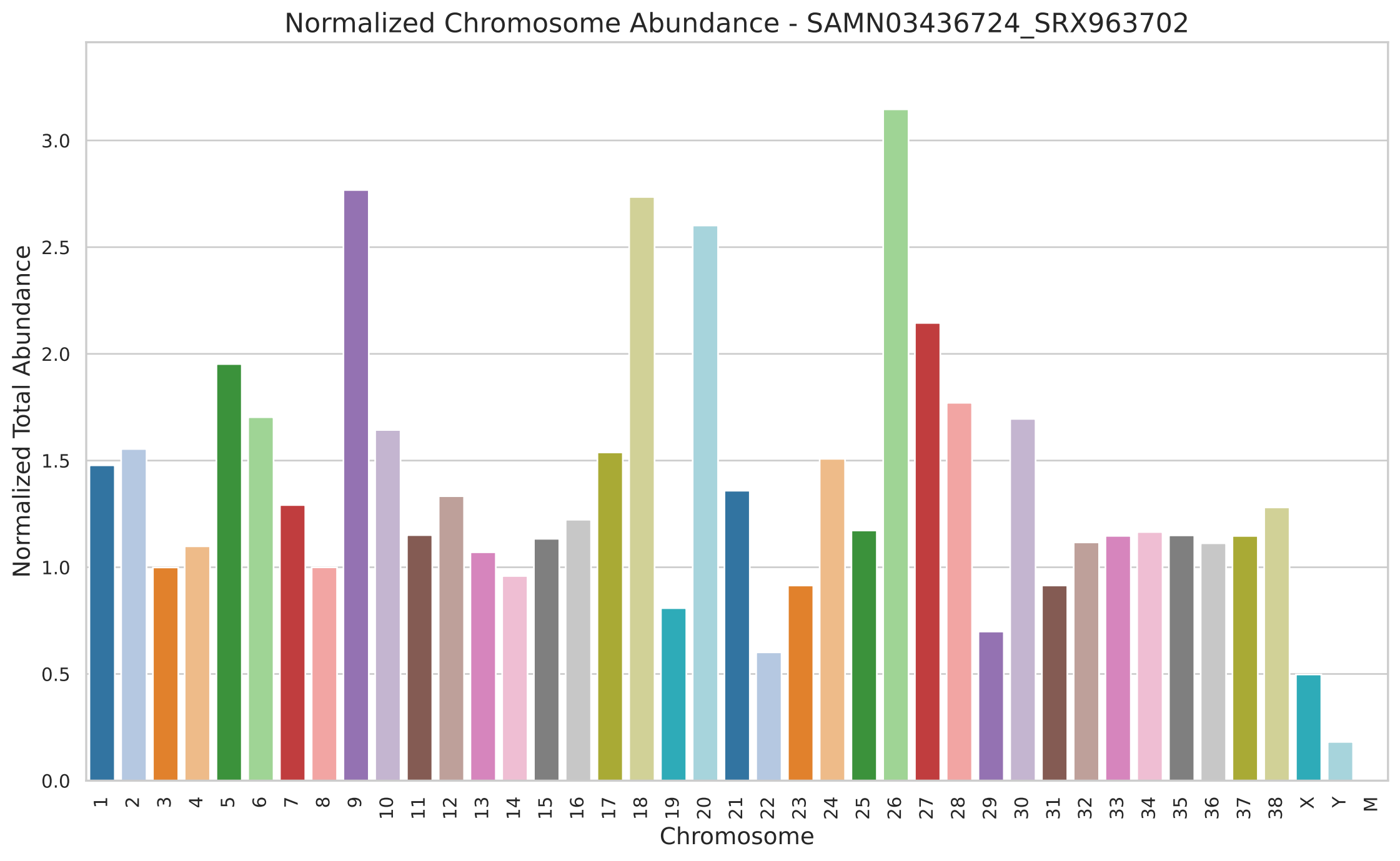

Normalized Chromosome Abundance - SAMN03436649_SRX963594
Normalized Total Abundance
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

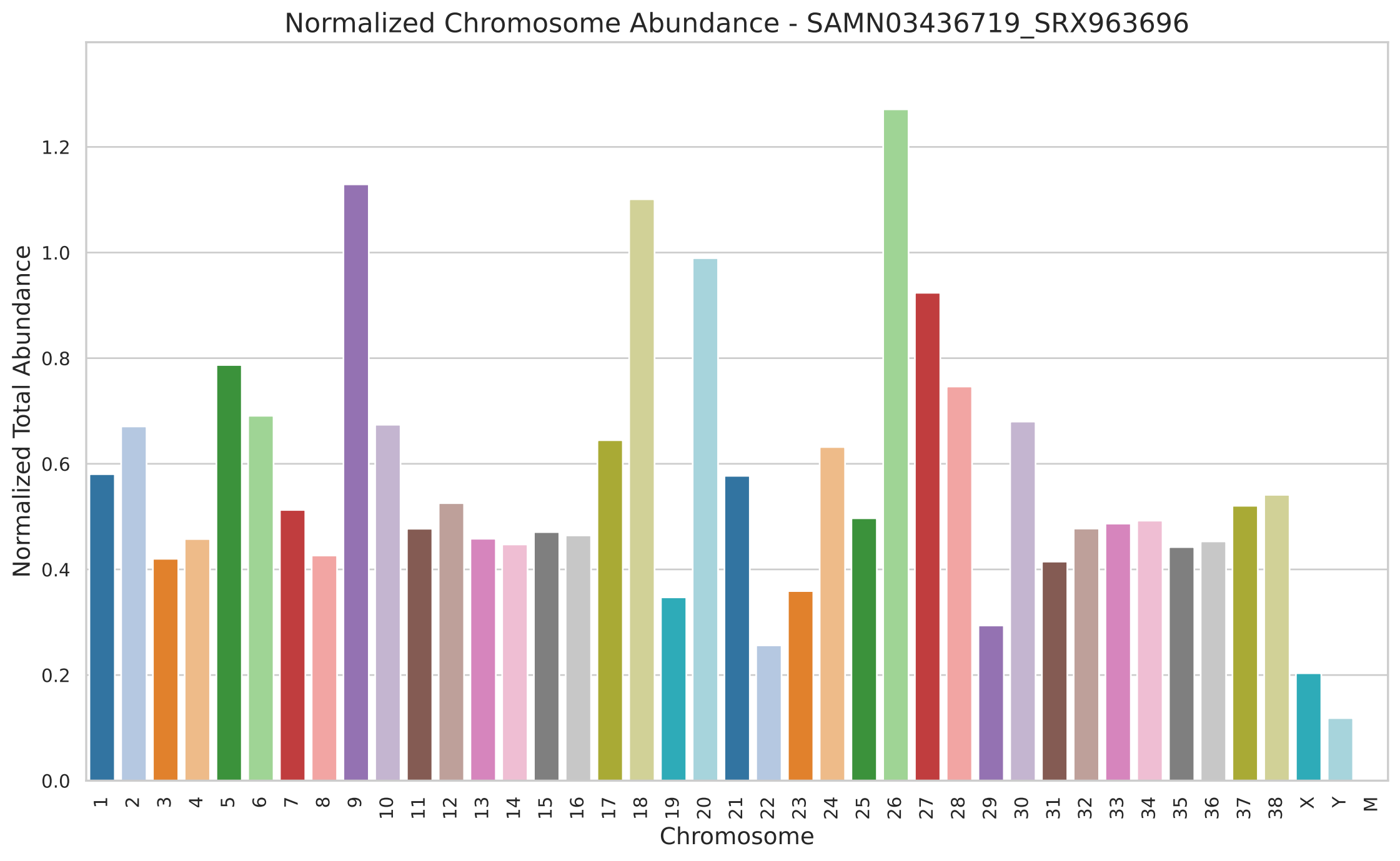

Normalized Chromosome Abundance - SAMN03436688_SRX963632
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

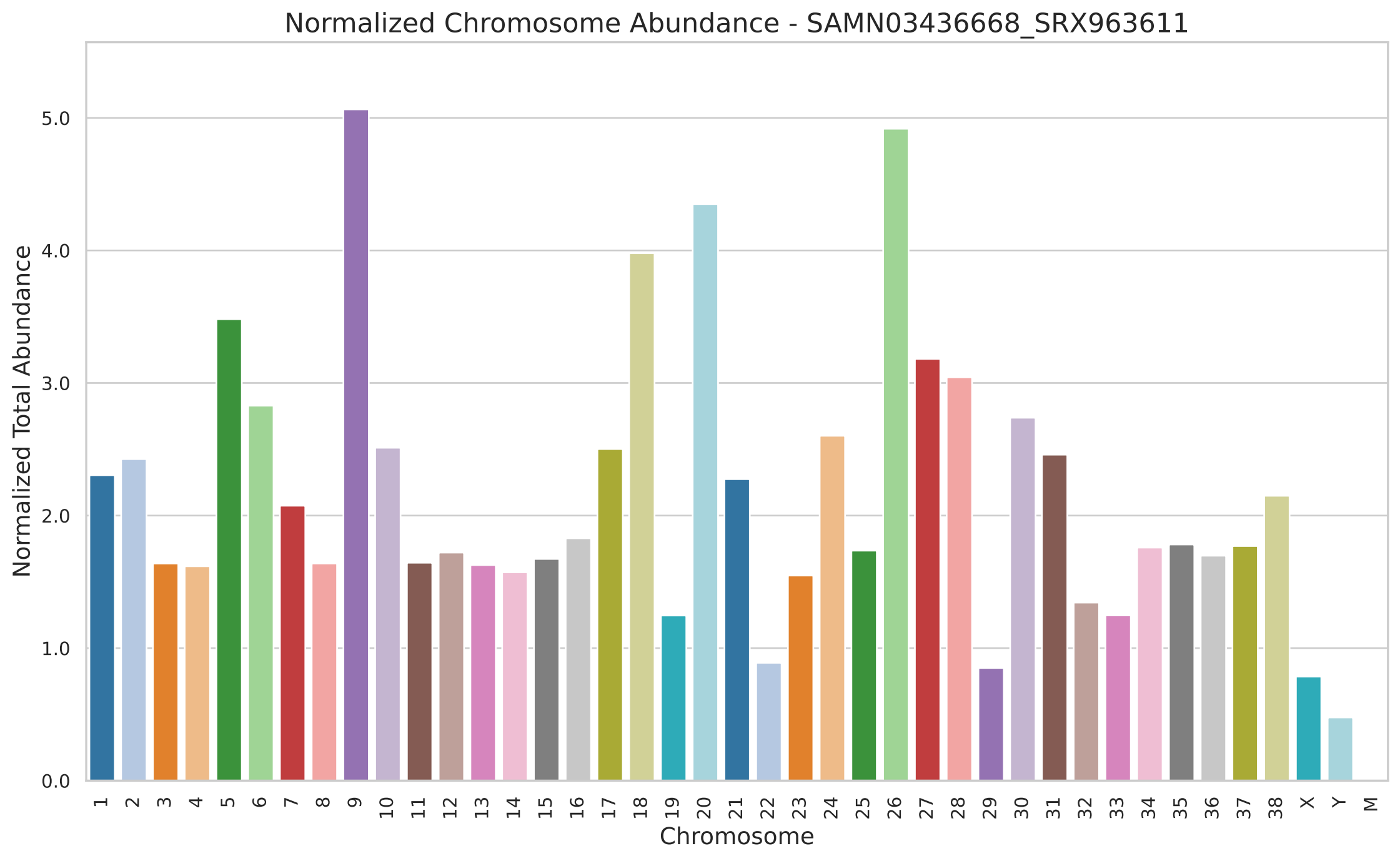

Normalized Chromosome Abundance - SAMN03436663_SRX963606
Normalized Total Abundance
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

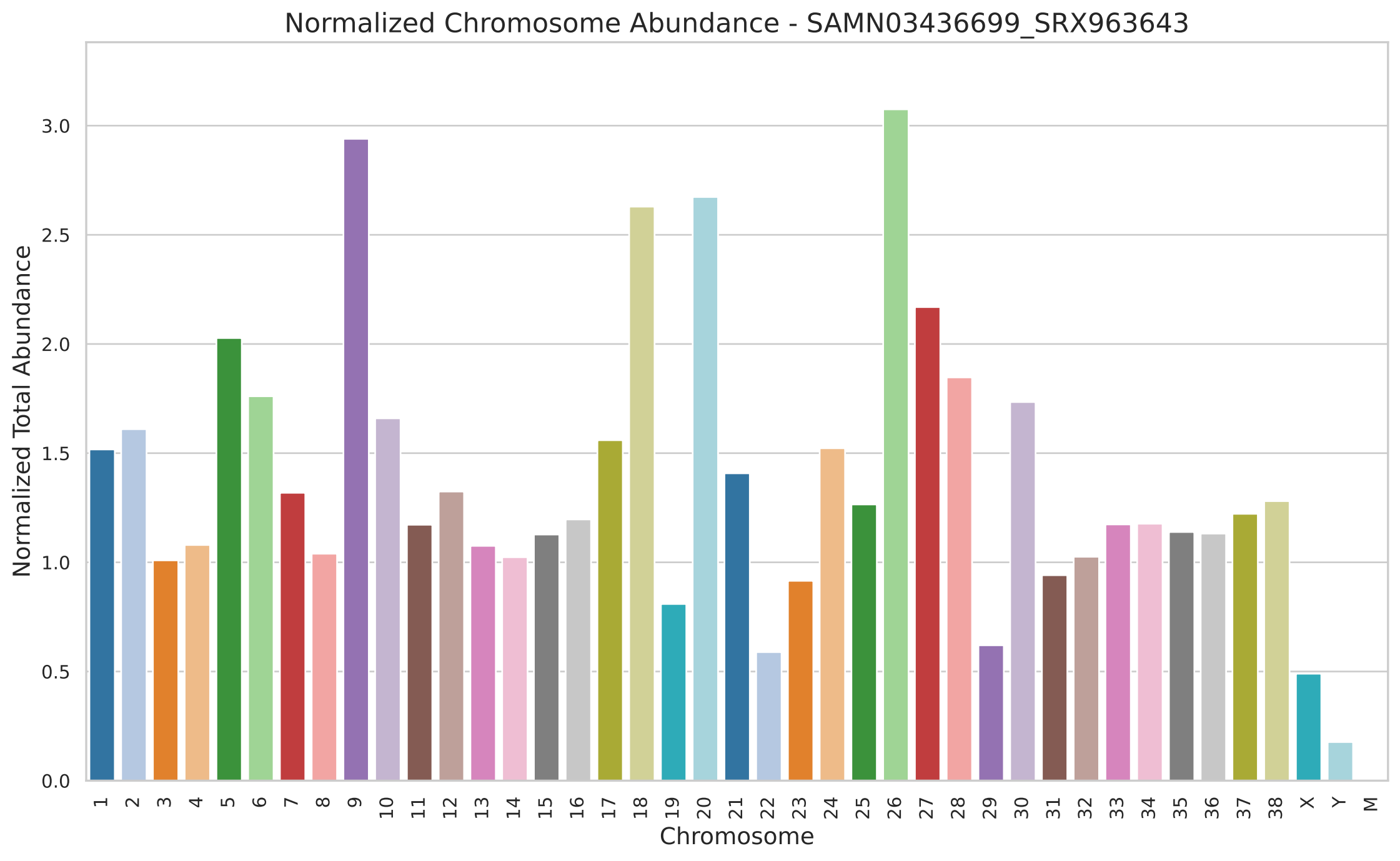

Normalized Chromosome Abundance - SAMN03436658_SRX963600
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

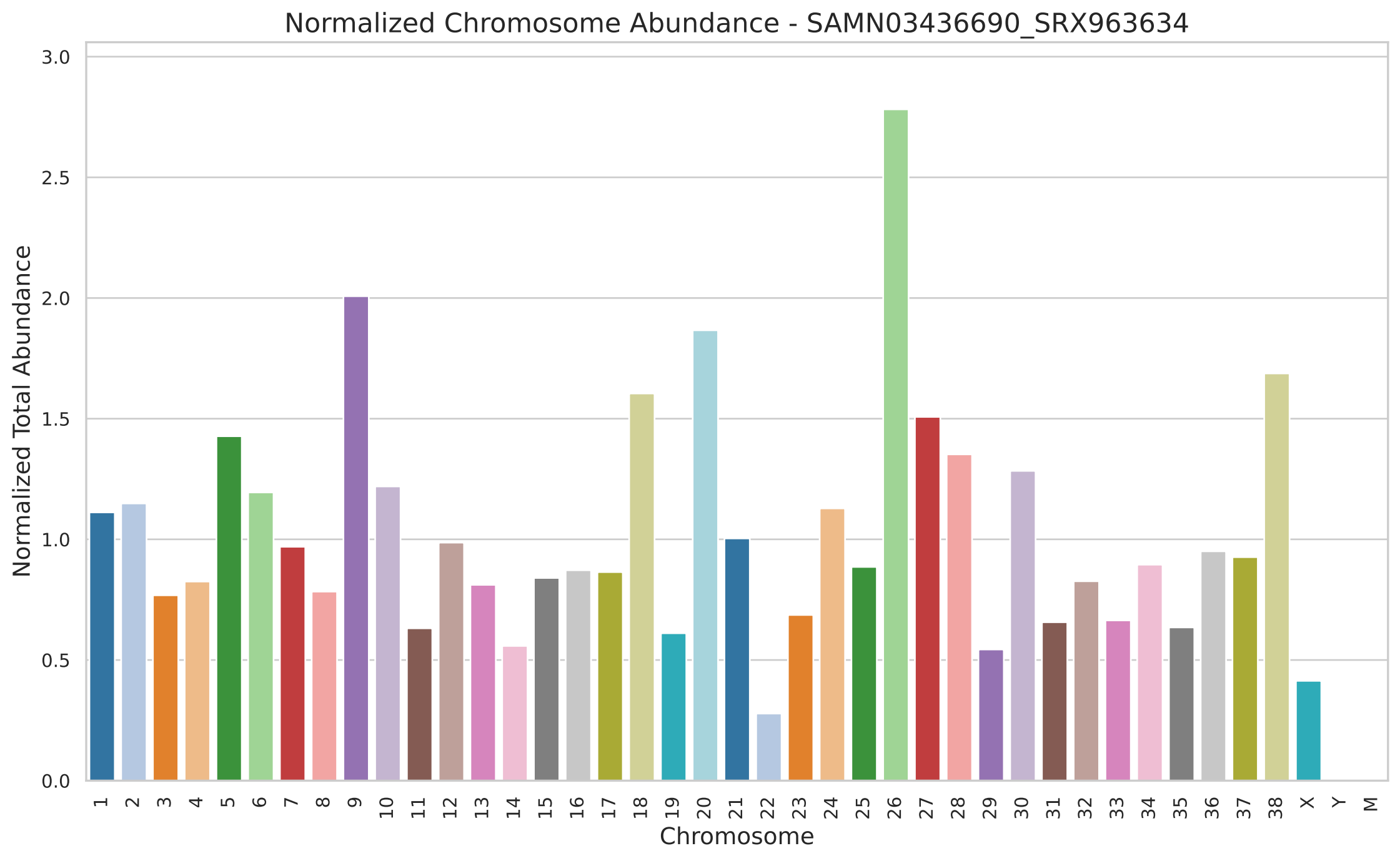

Normalized Chromosome Abundance - SAMN03436670_SRX963614
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

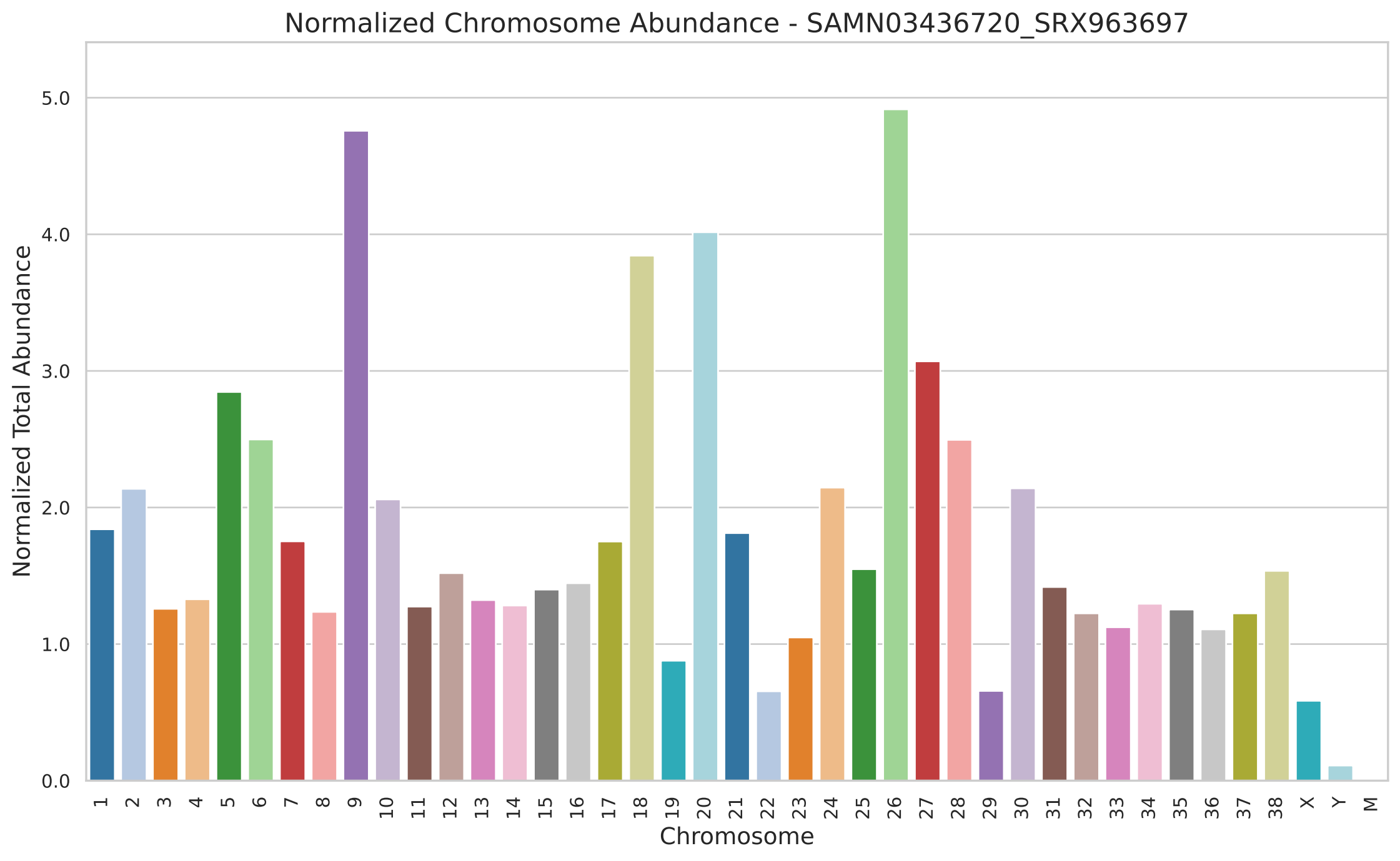

Normalized Chromosome Abundance - SAMN03436724_SRX963702
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

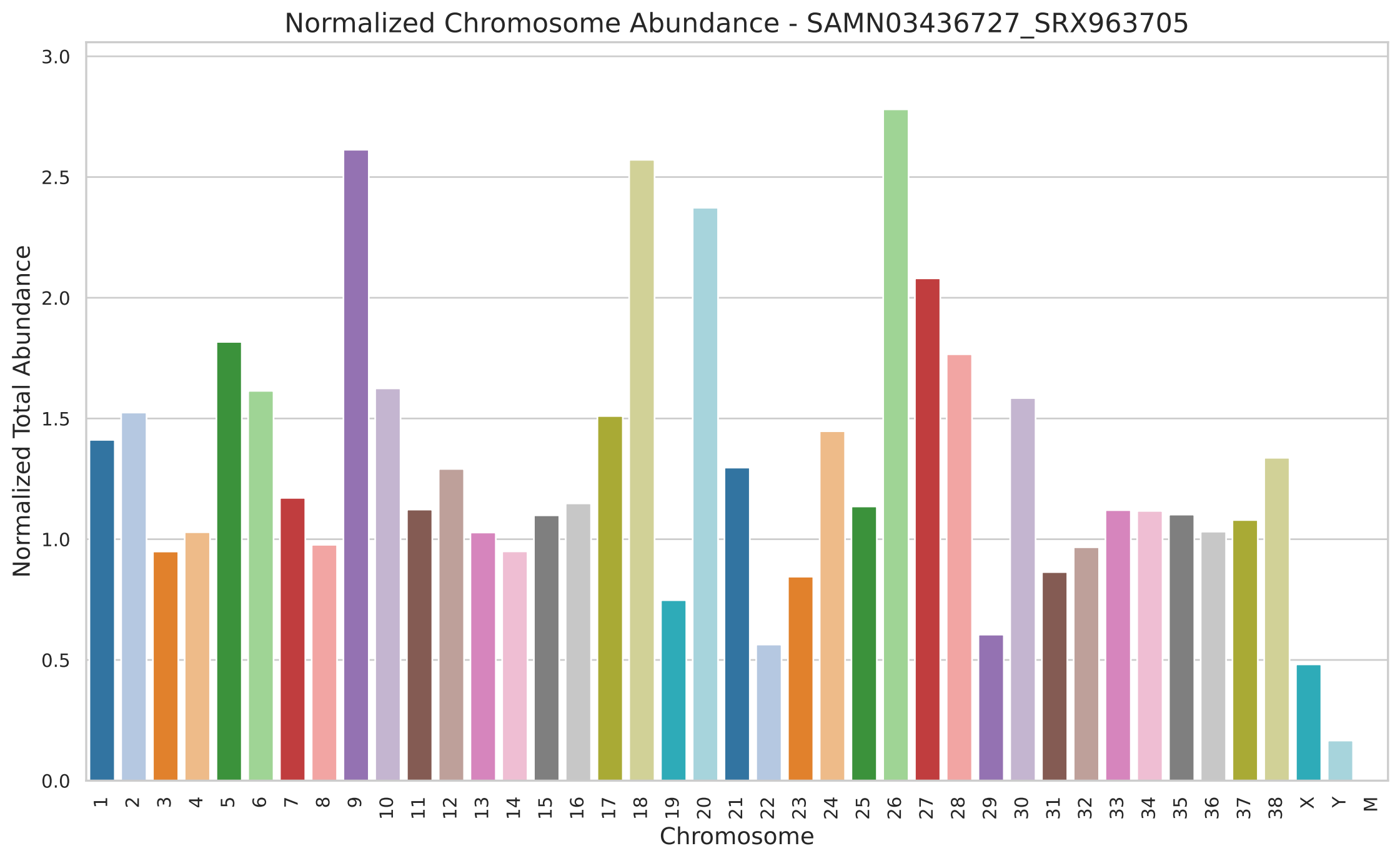

Normalized Chromosome Abundance - SAMN03436719_SRX963696
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

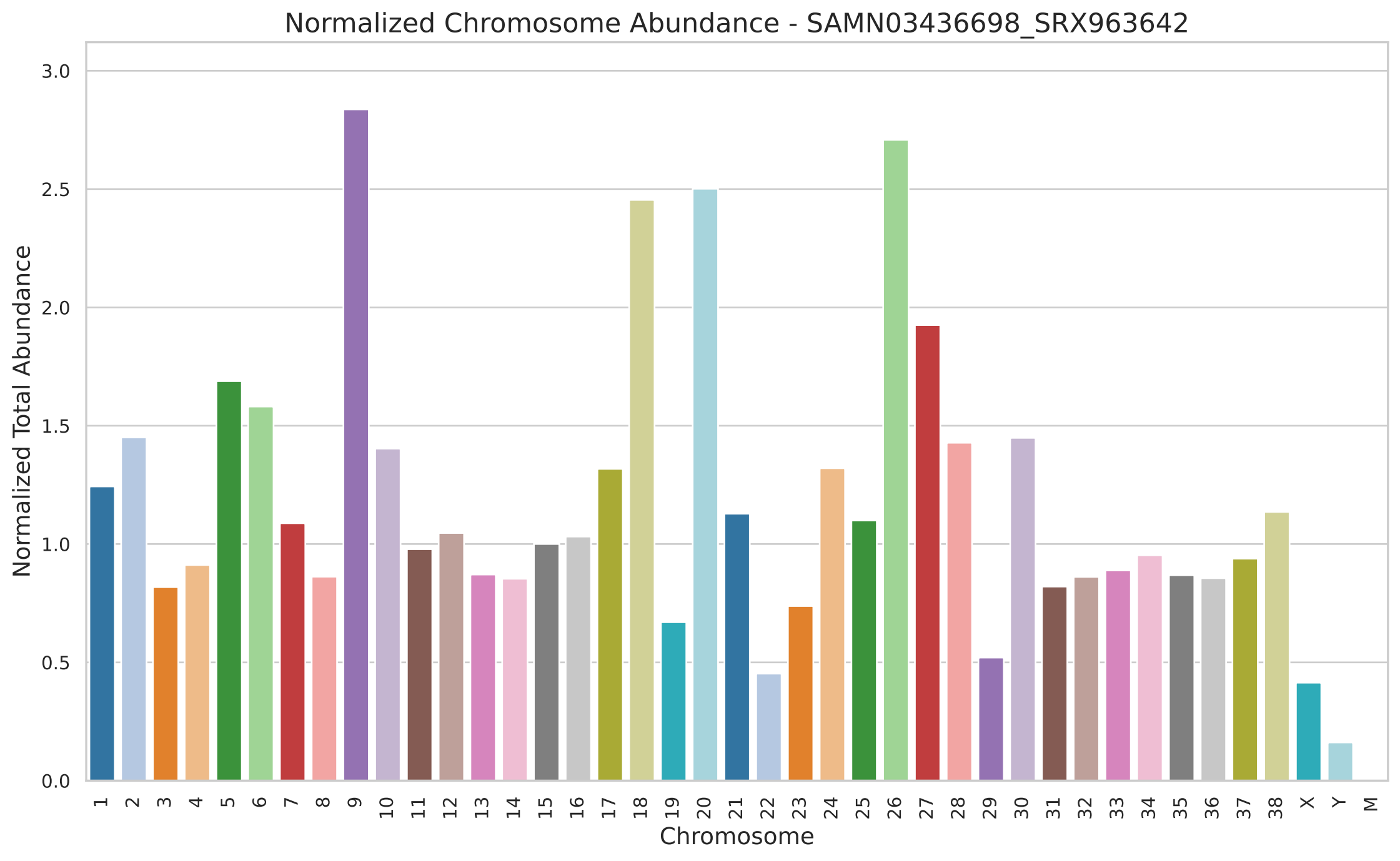

Normalized Chromosome Abundance - SAMN03436668_SRX963611
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

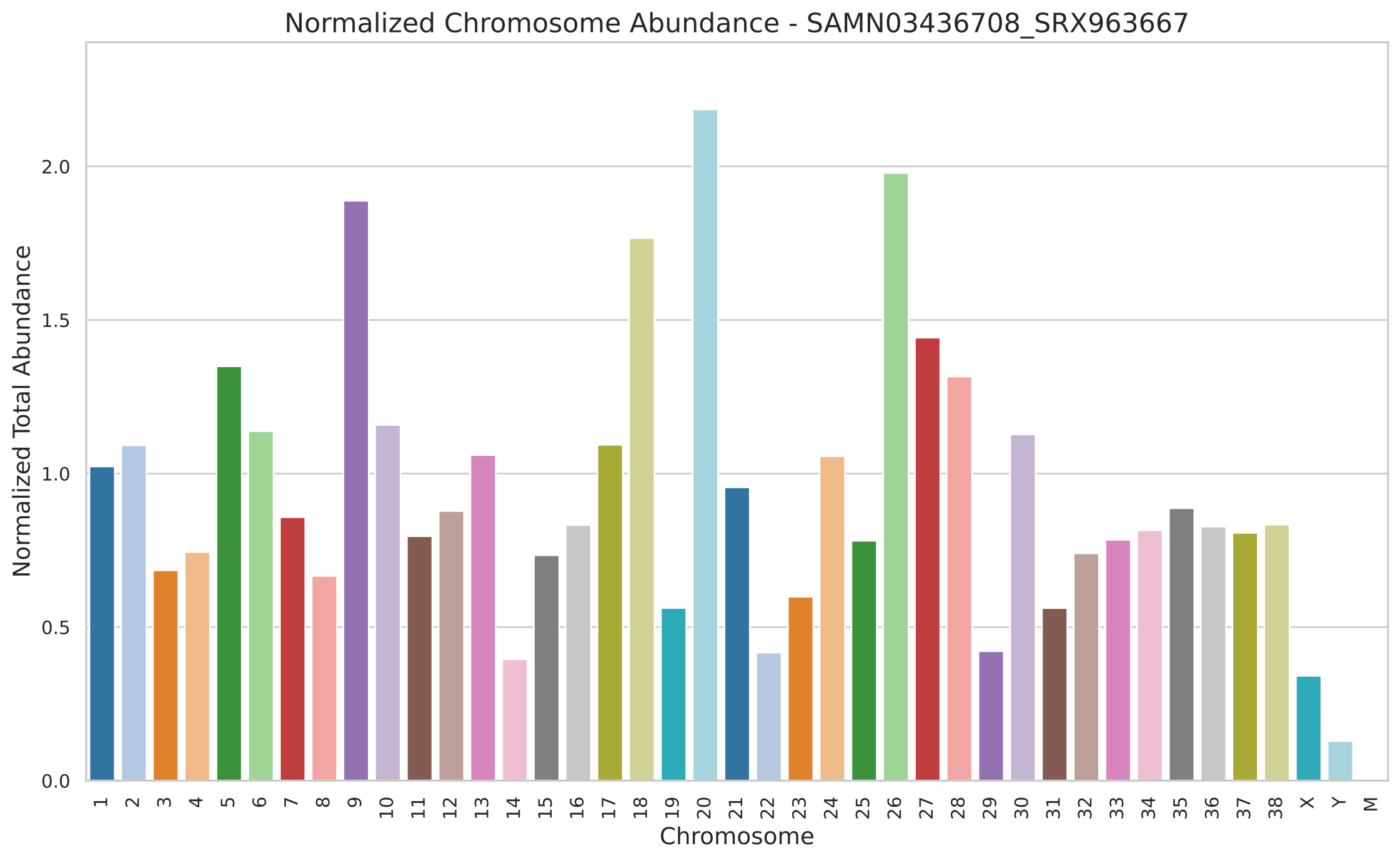

Normalized Chromosome Abundance - SAMN03436699_SRX963643
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

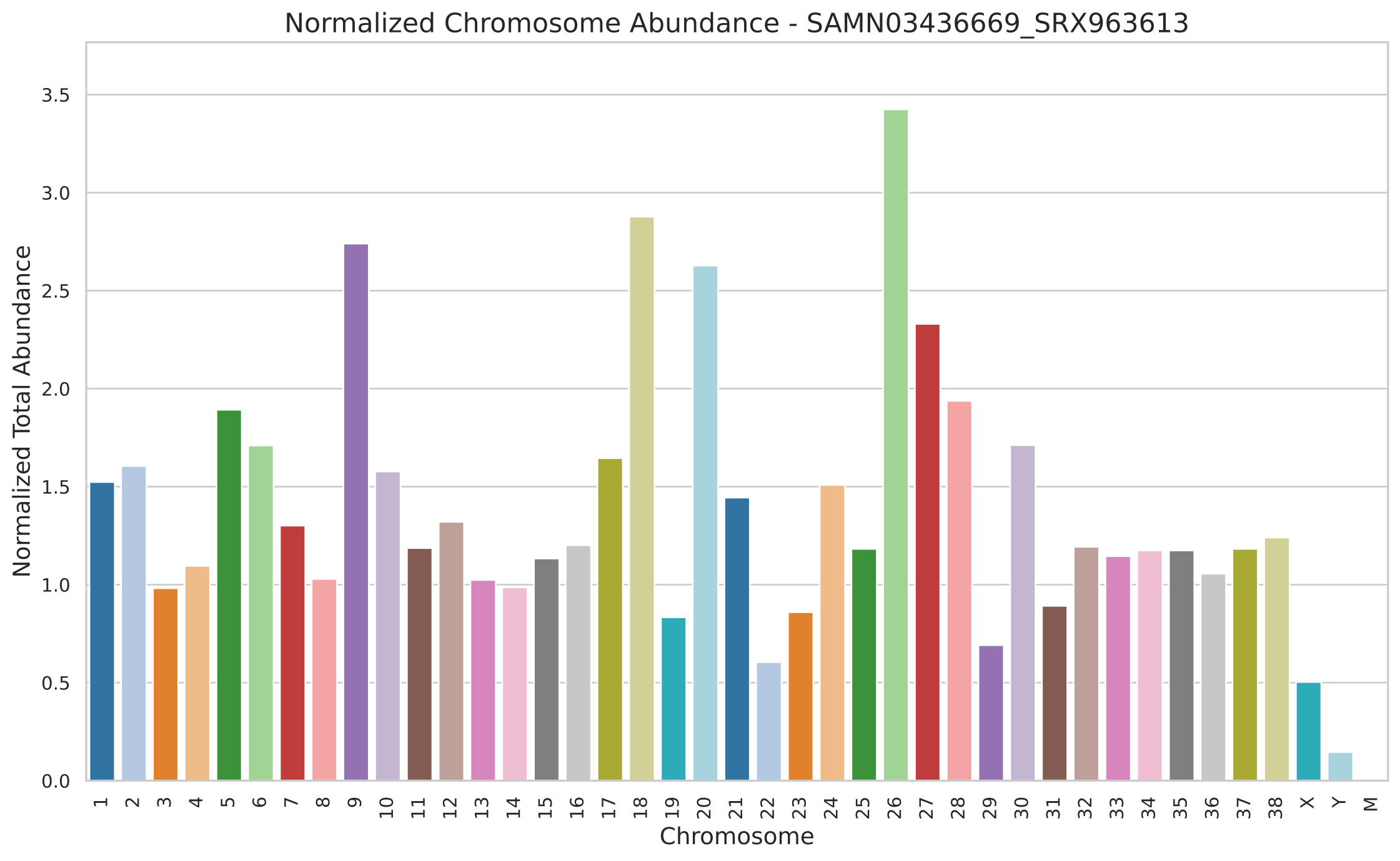

Normalized Chromosome Abundance - SAMN03436690_SRX963634
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

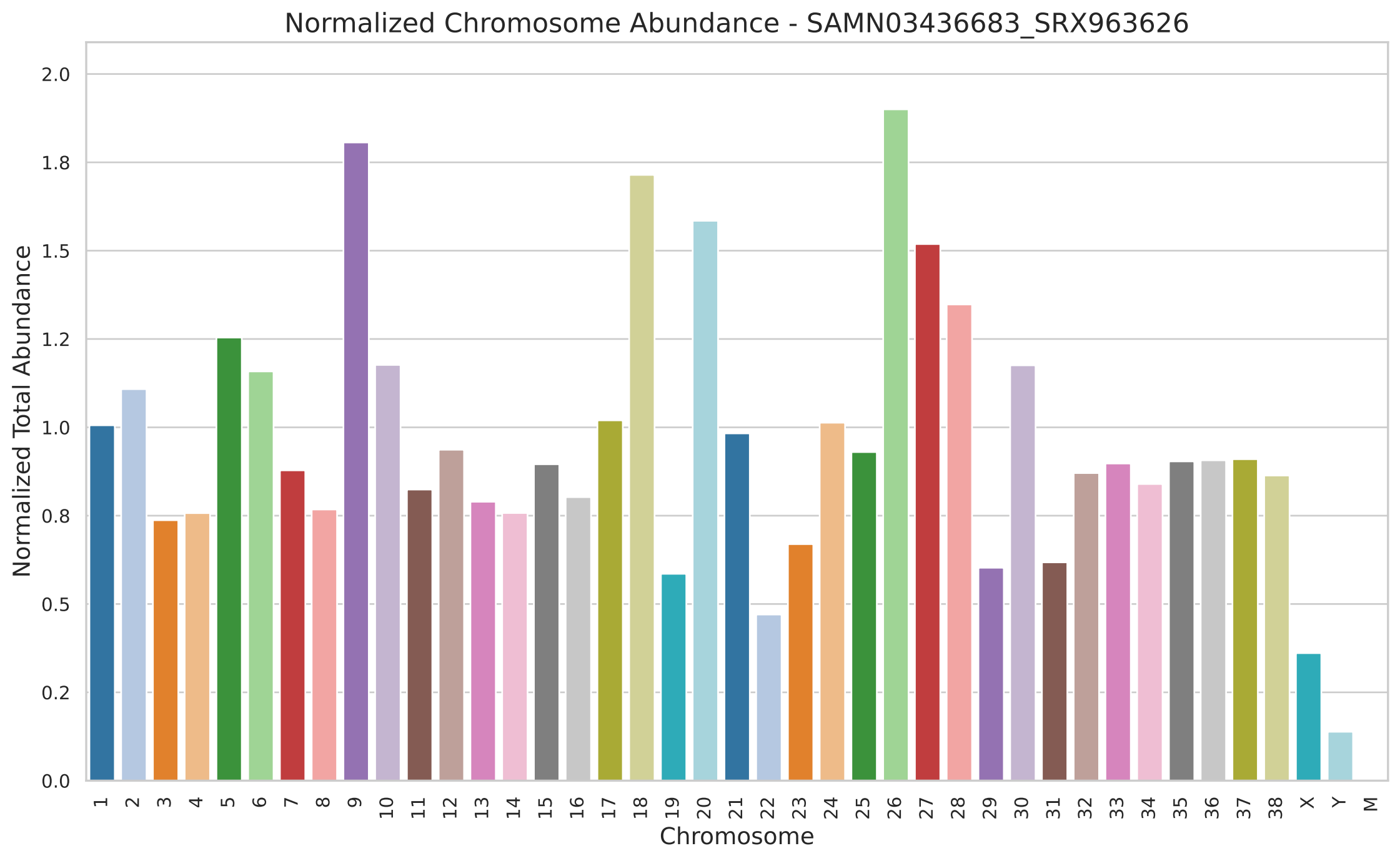

Normalized Chromosome Abundance - SAMN03436720_SRX963697
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

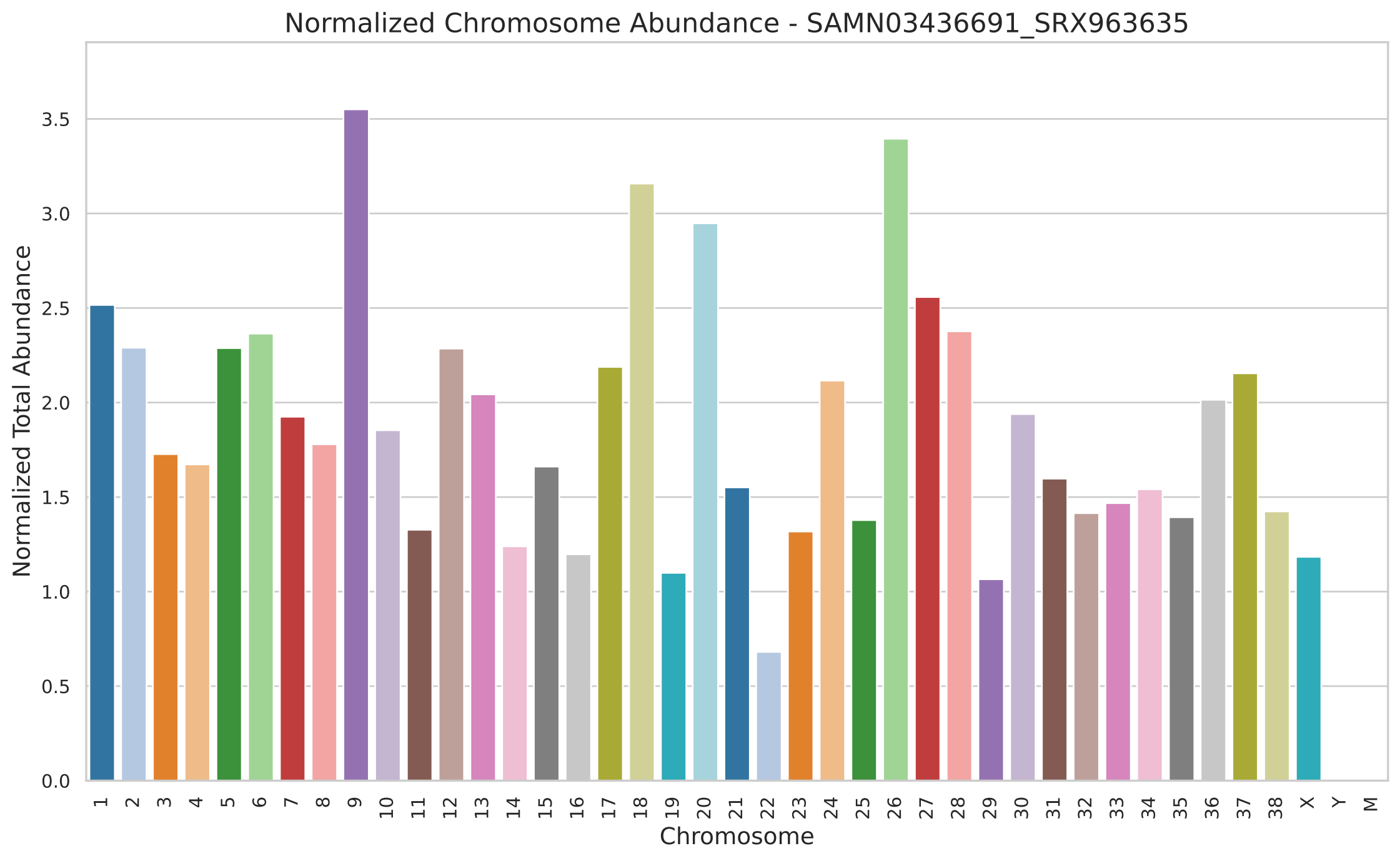

Normalized Chromosome Abundance - SAMN03436727_SRX963705
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

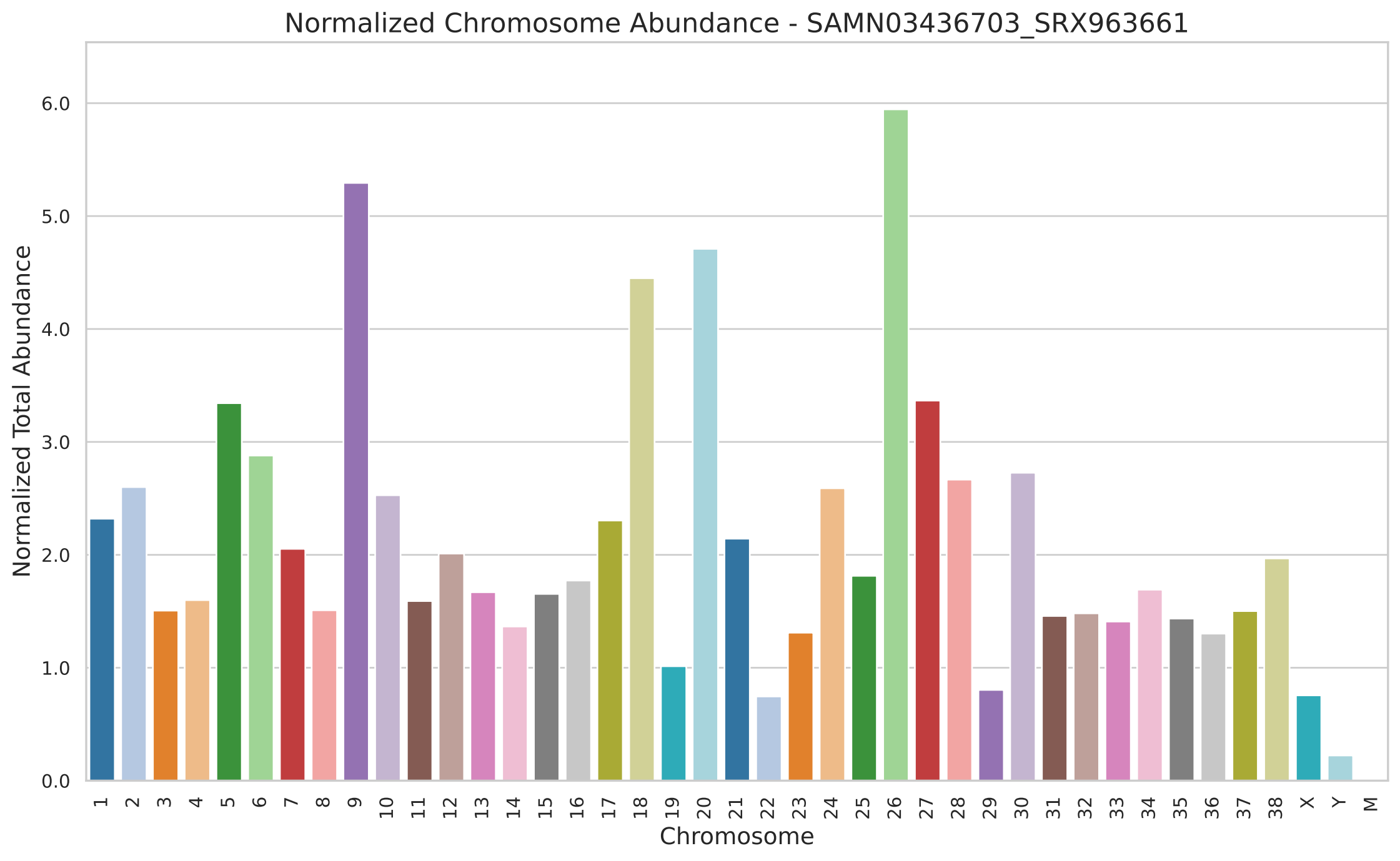

Normalized Chromosome Abundance - SAMN03436698_SRX963642
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

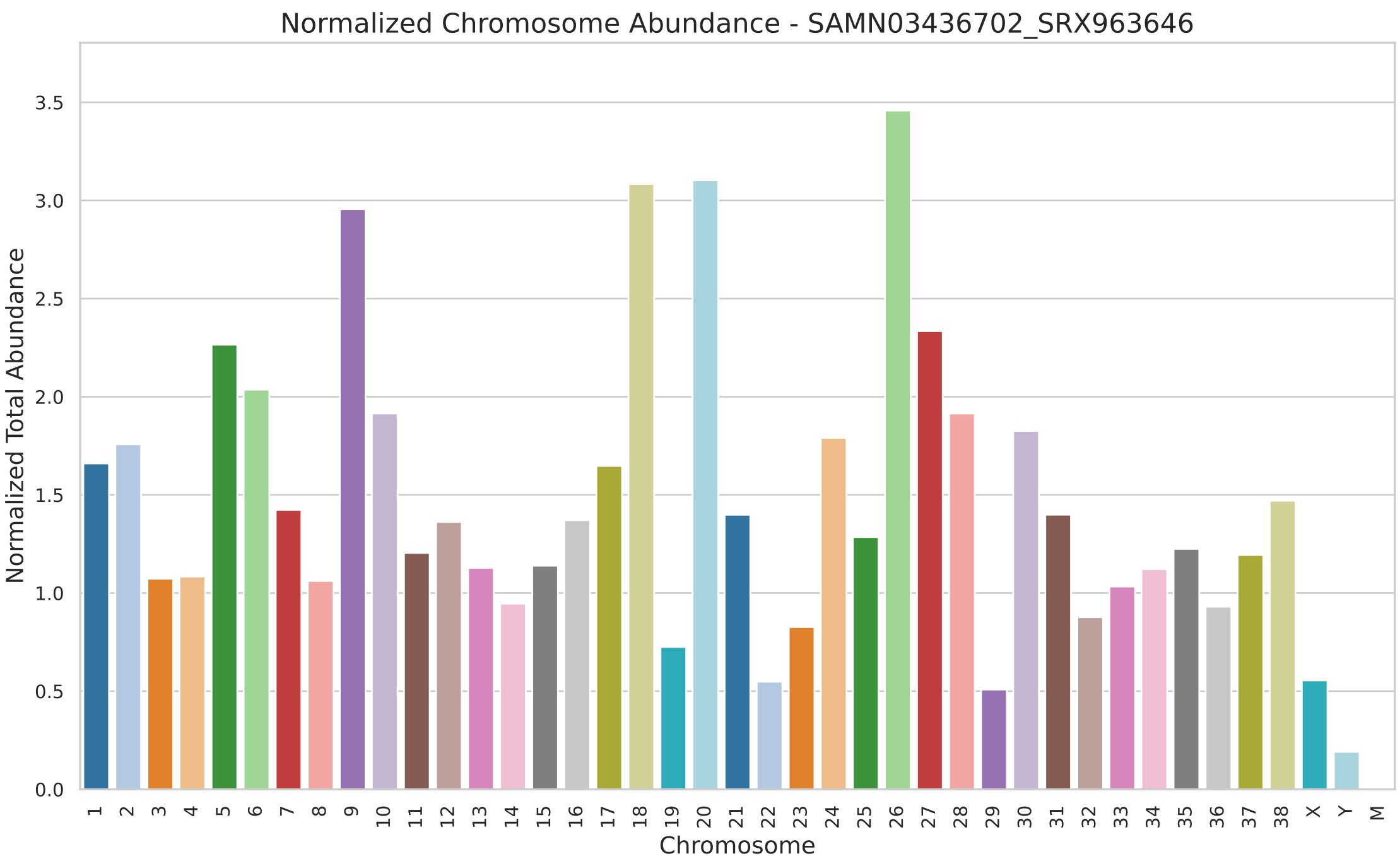

Normalized Chromosome Abundance - SAMN03436708_SRX963667
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

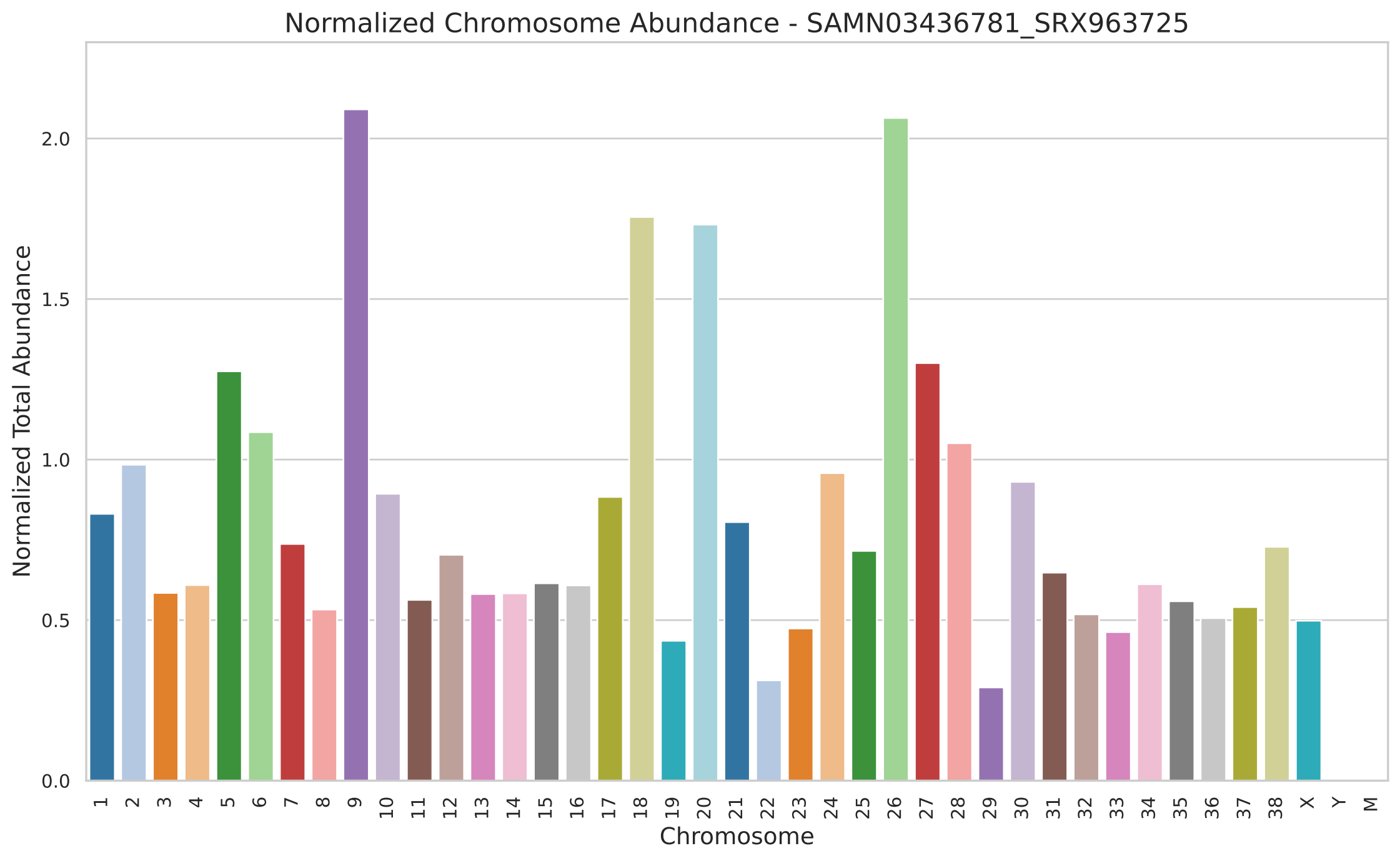

Normalized Chromosome Abundance - SAMN03436669_SRX963613
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

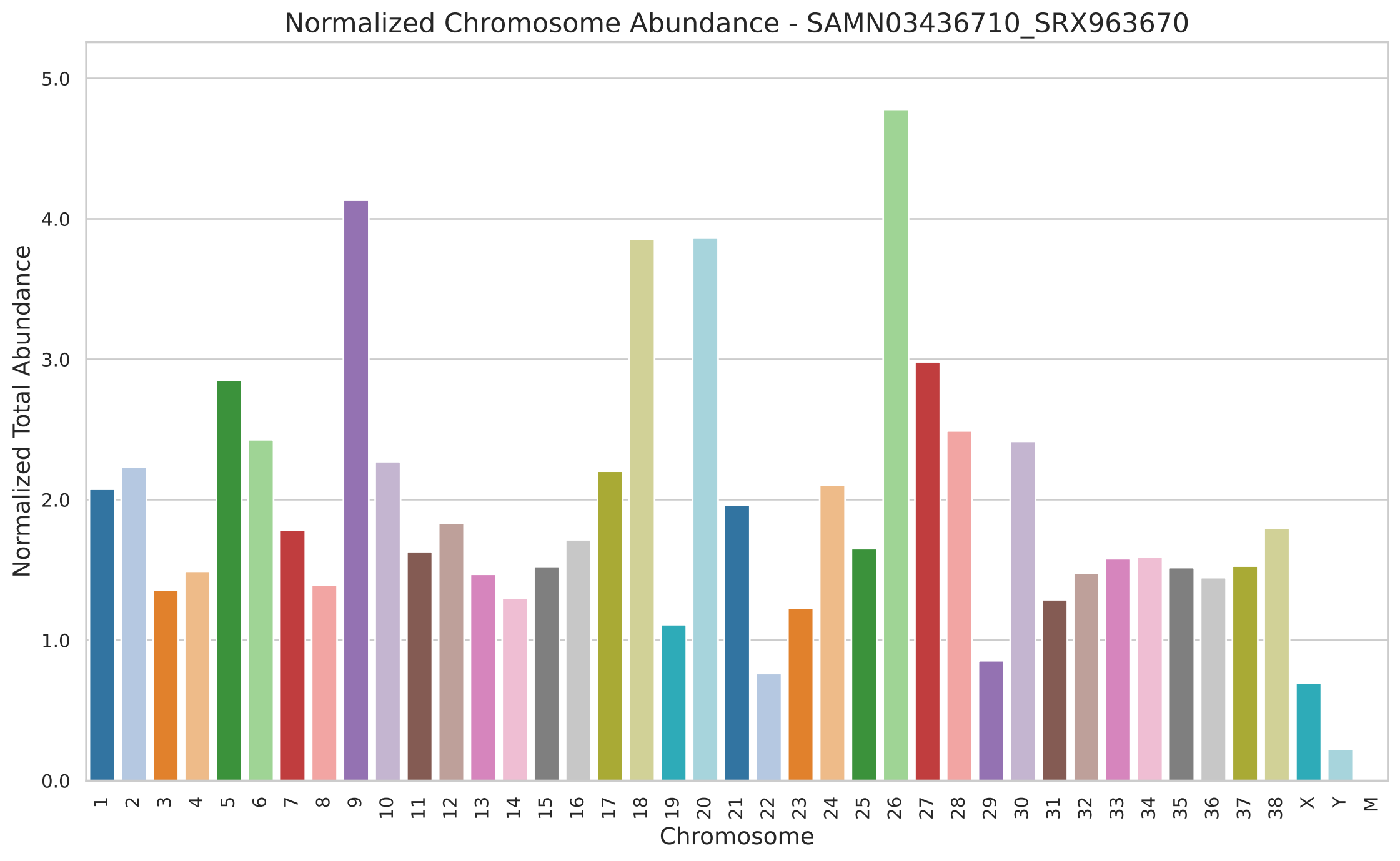

Normalized Chromosome Abundance - SAMN03436683_SRX963626
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

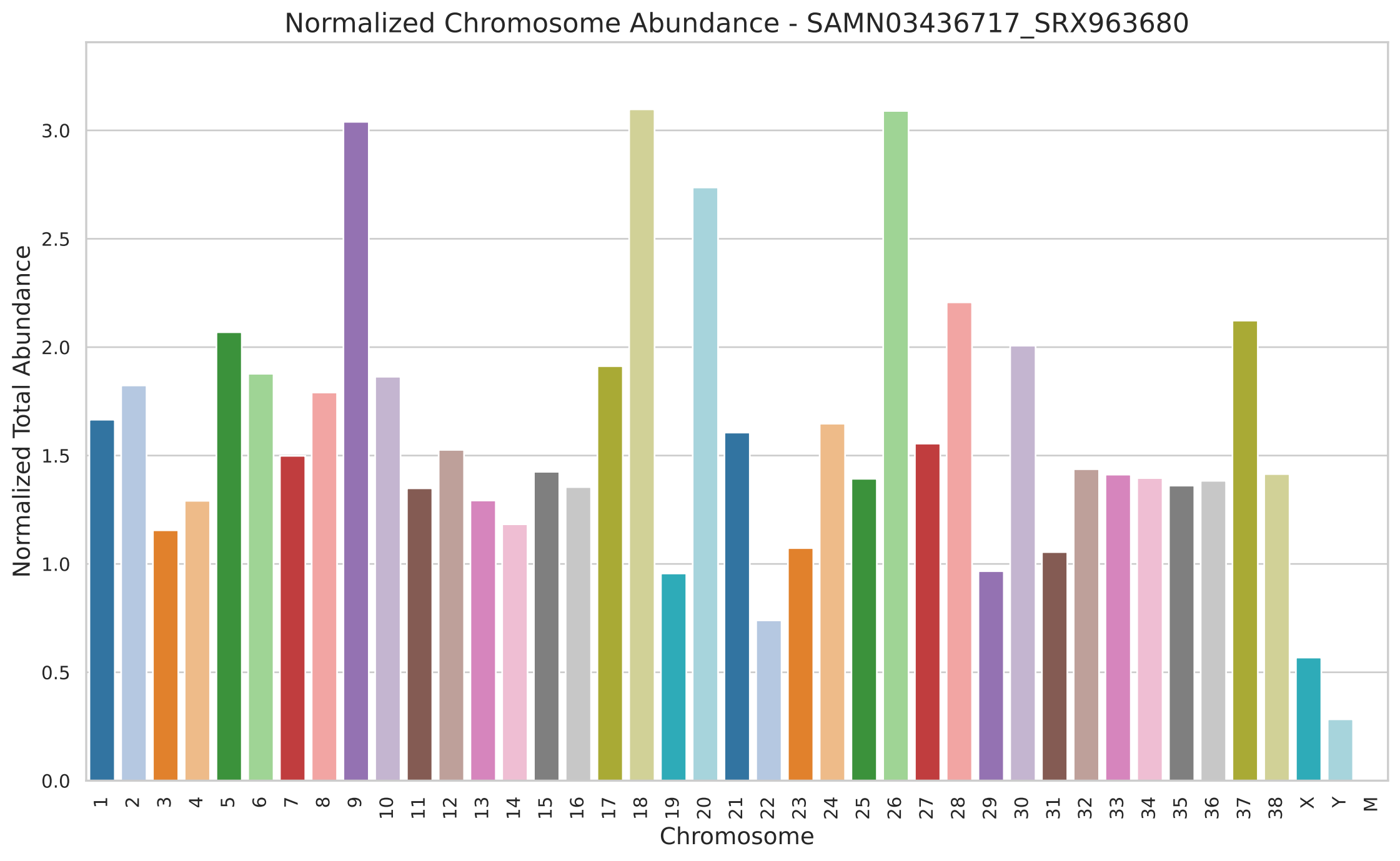

Normalized Chromosome Abundance - SAMN03436691_SRX963635
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

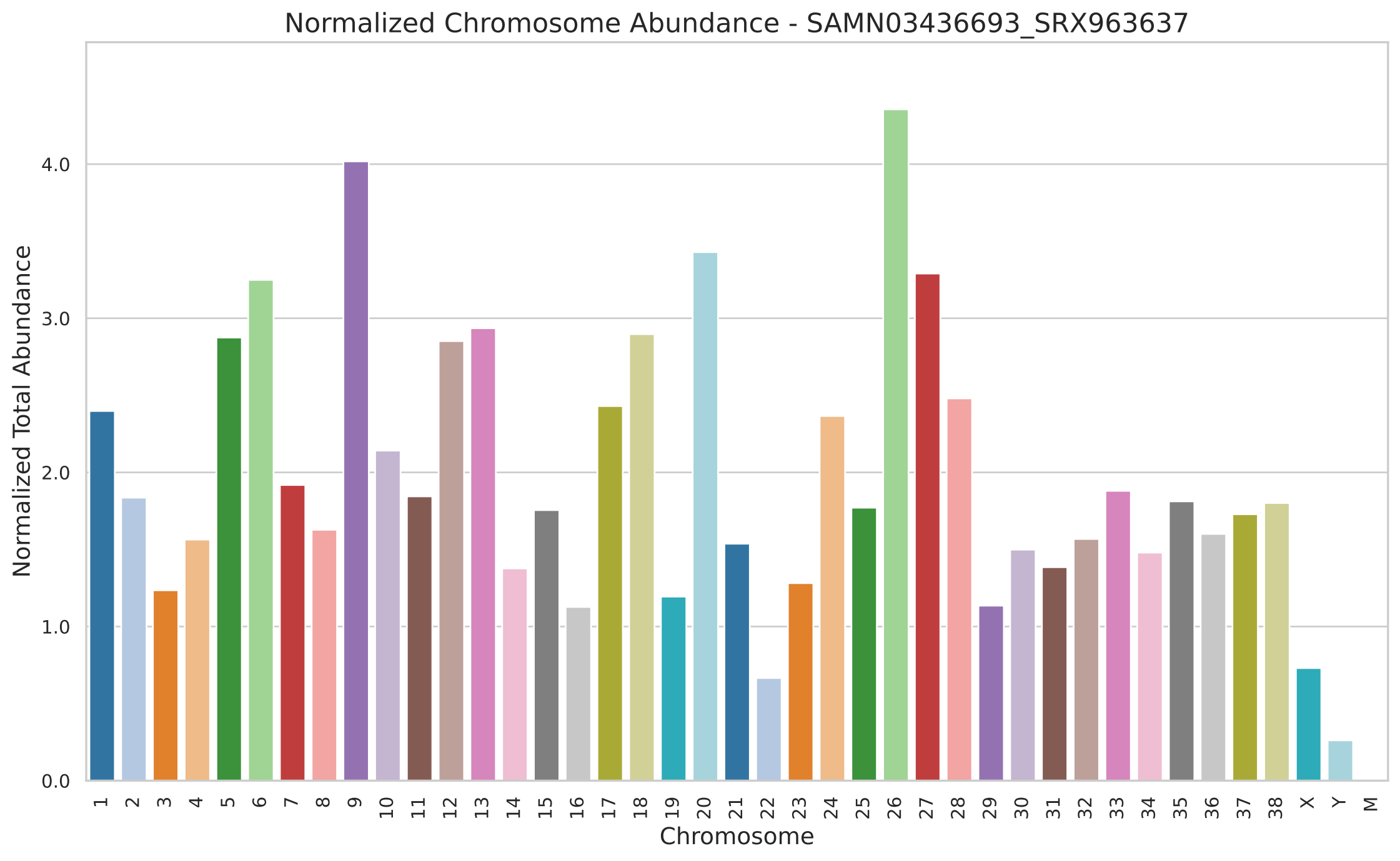

Normalized Chromosome Abundance - SAMN03436703_SRX963661
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

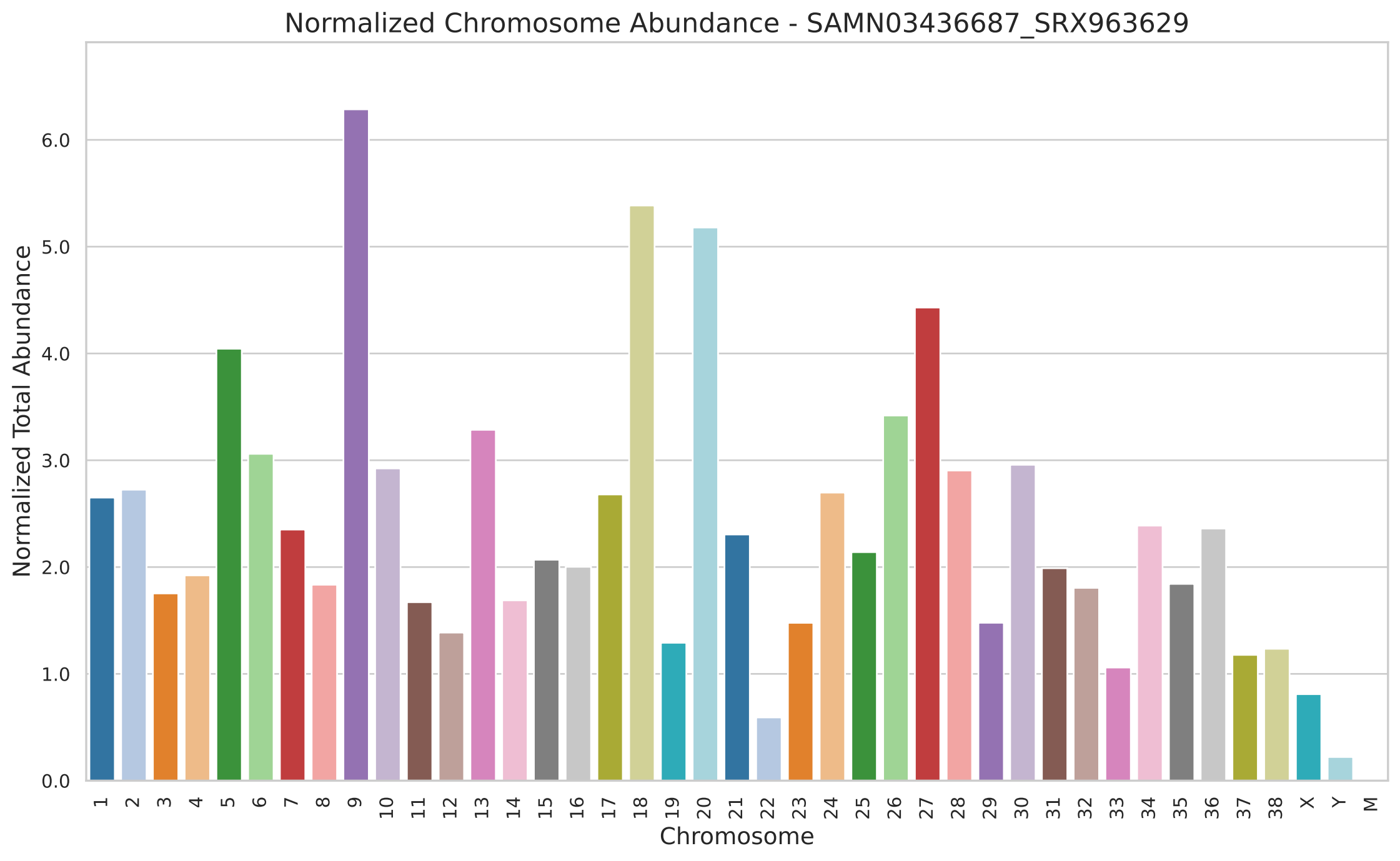

Normalized Chromosome Abundance - SAMN03436702_SRX963646
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

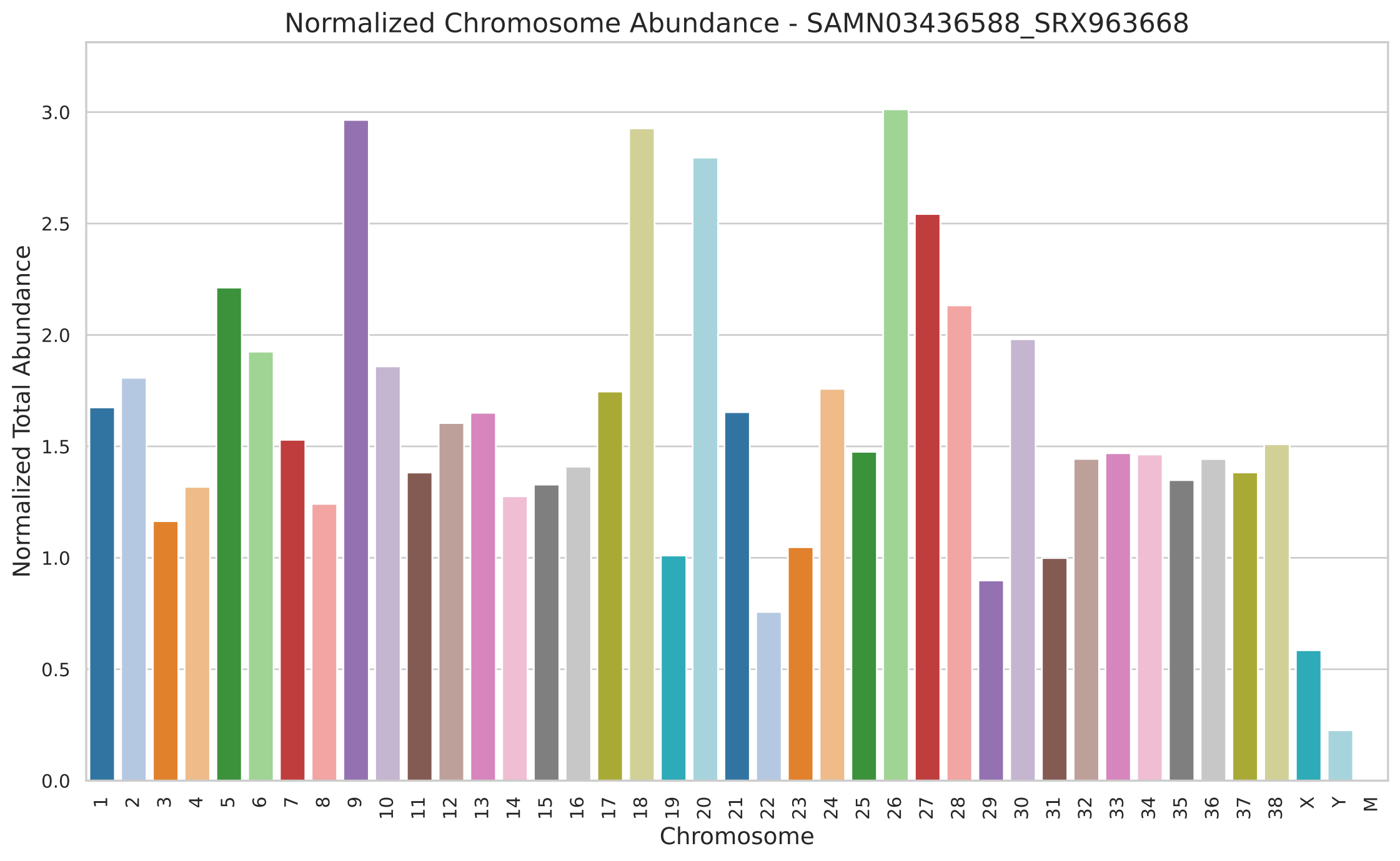

Normalized Chromosome Abundance - SAMN03436781_SRX963725
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

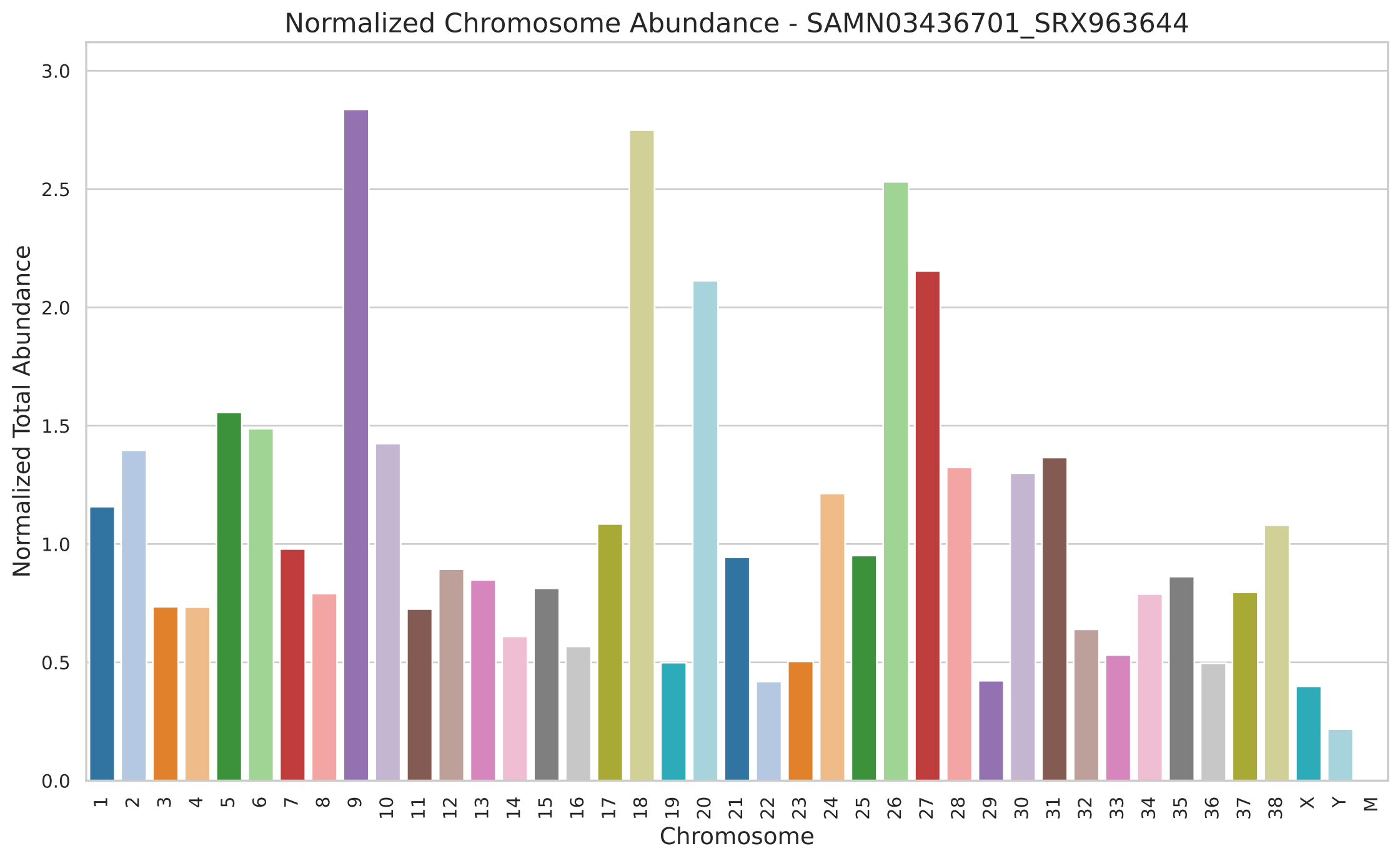

Normalized Chromosome Abundance - SAMN03436710_SRX963670
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

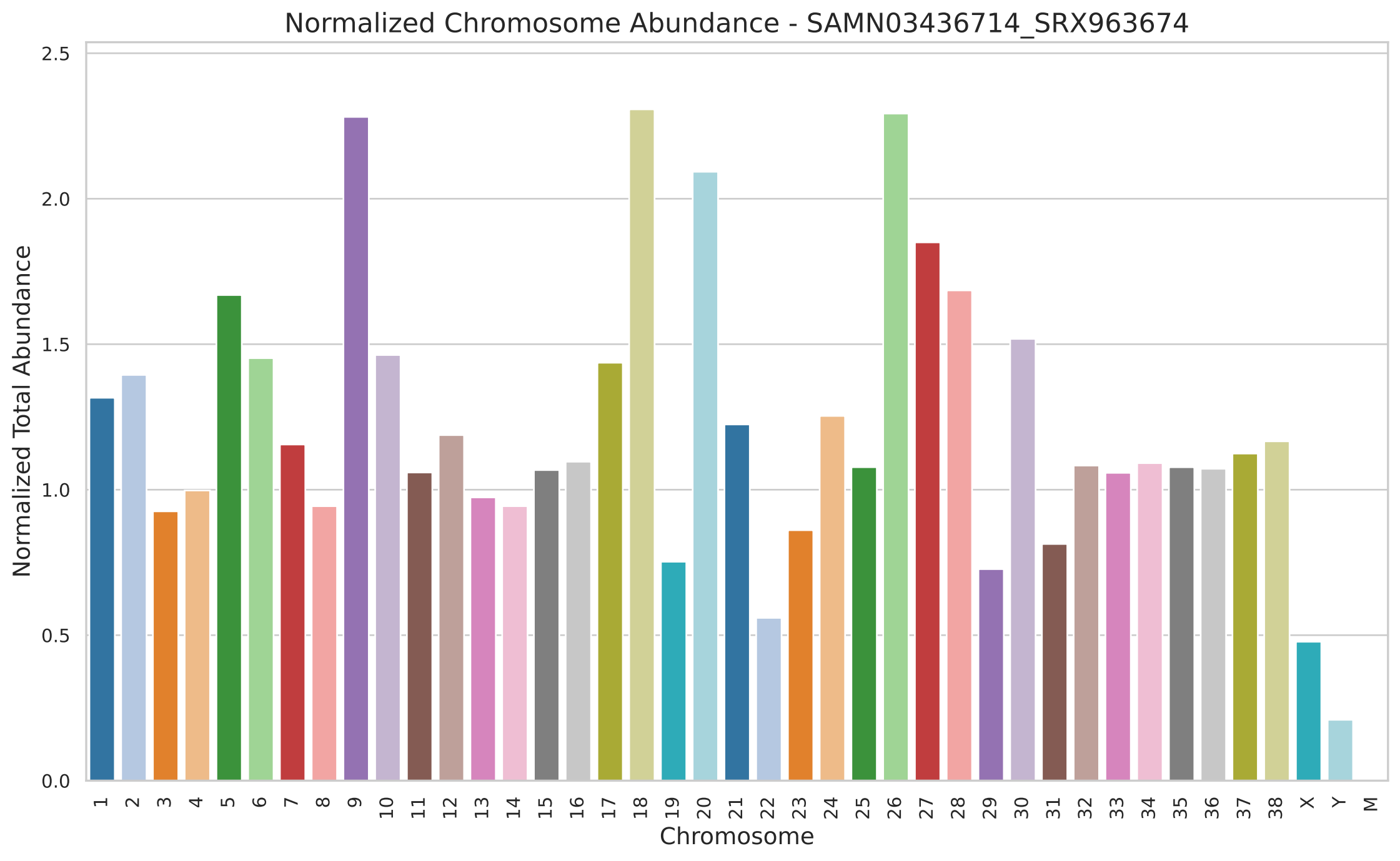

Normalized Chromosome Abundance - SAMN03436717_SRX963680
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

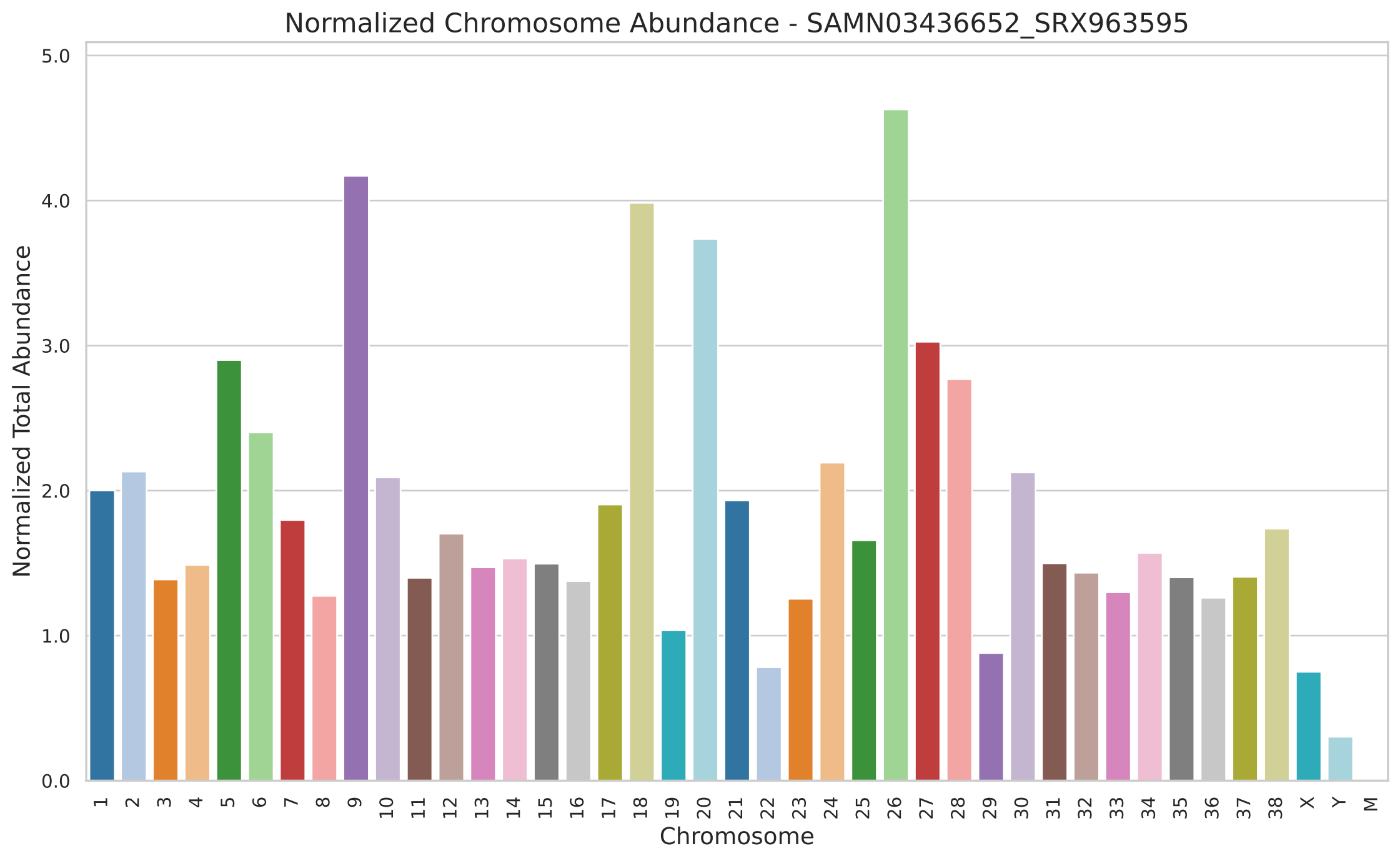

Normalized Chromosome Abundance - SAMN03436693_SRX963637
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

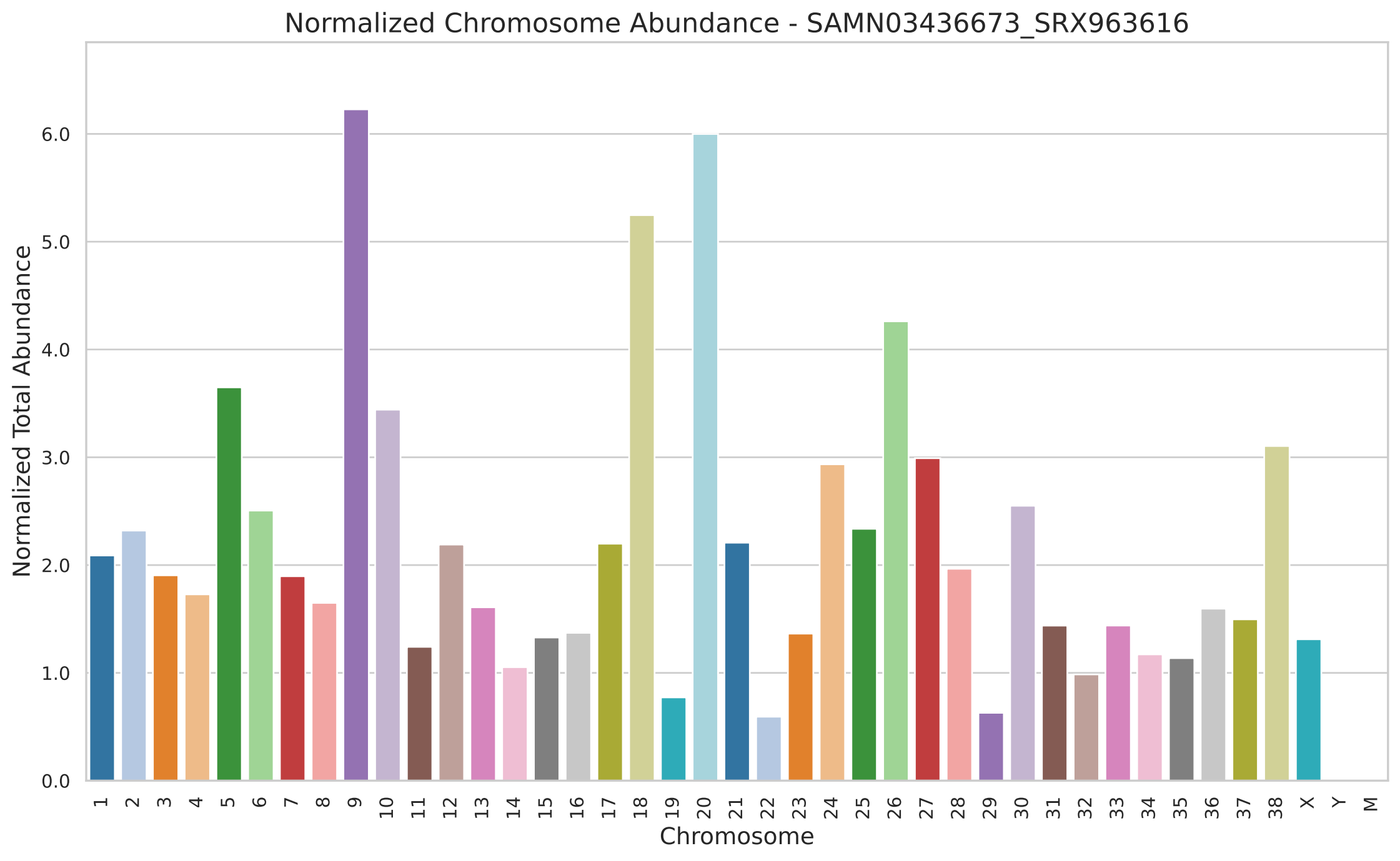

Normalized Chromosome Abundance - SAMN03436687_SRX963629
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

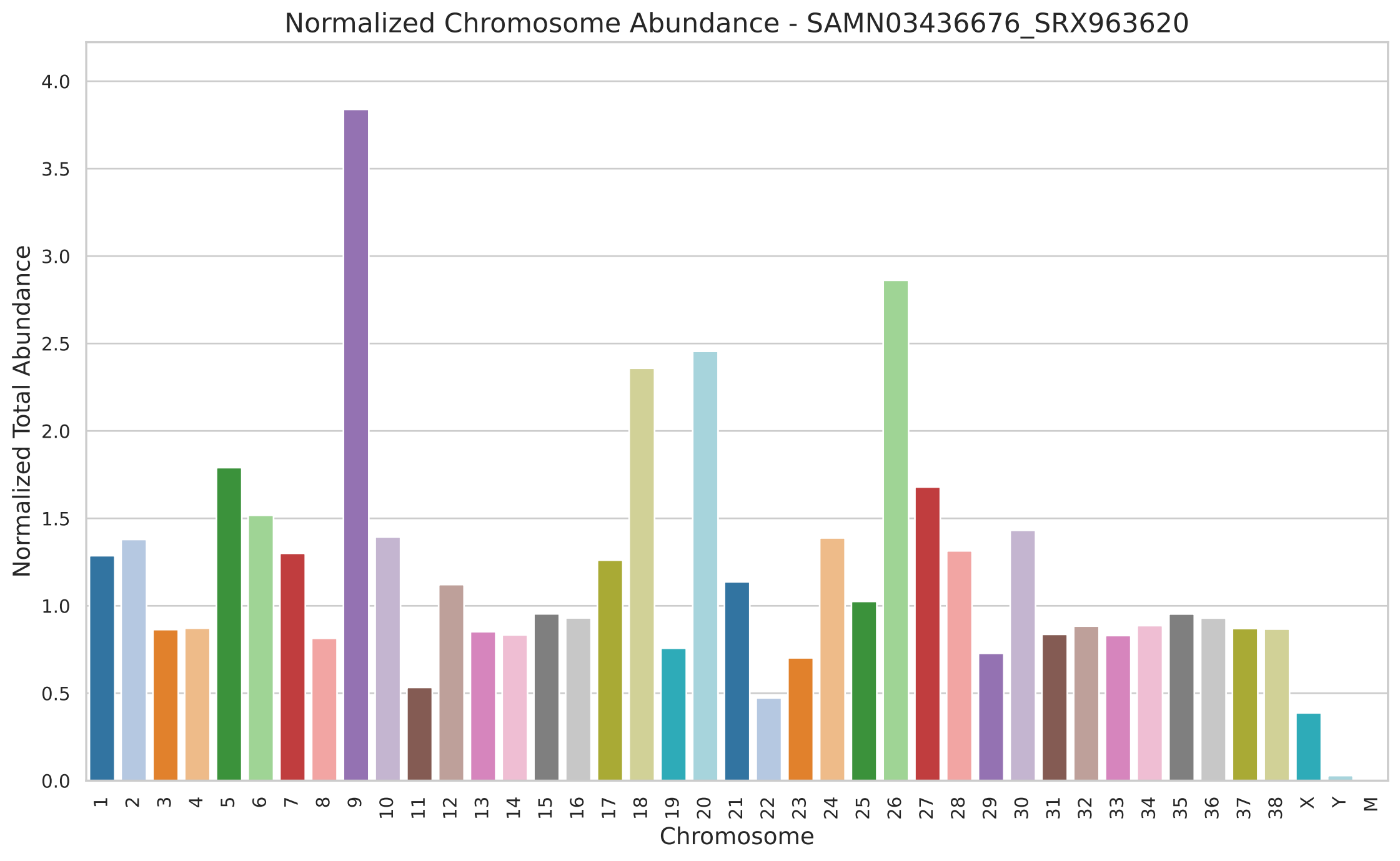

Normalized Chromosome Abundance - SAMN03436588_SRX963668
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

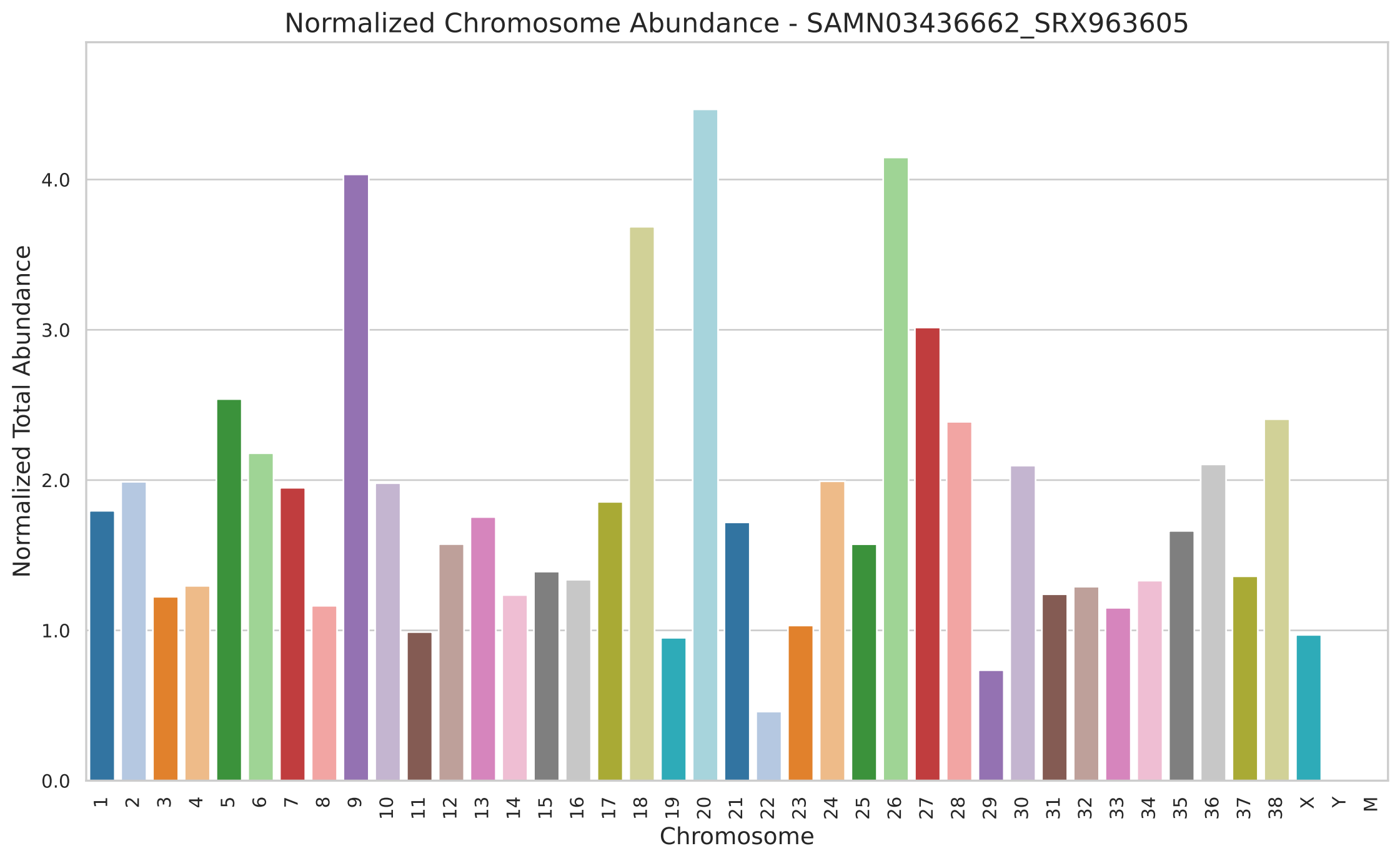

Normalized Chromosome Abundance - SAMN03436701_SRX963644
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

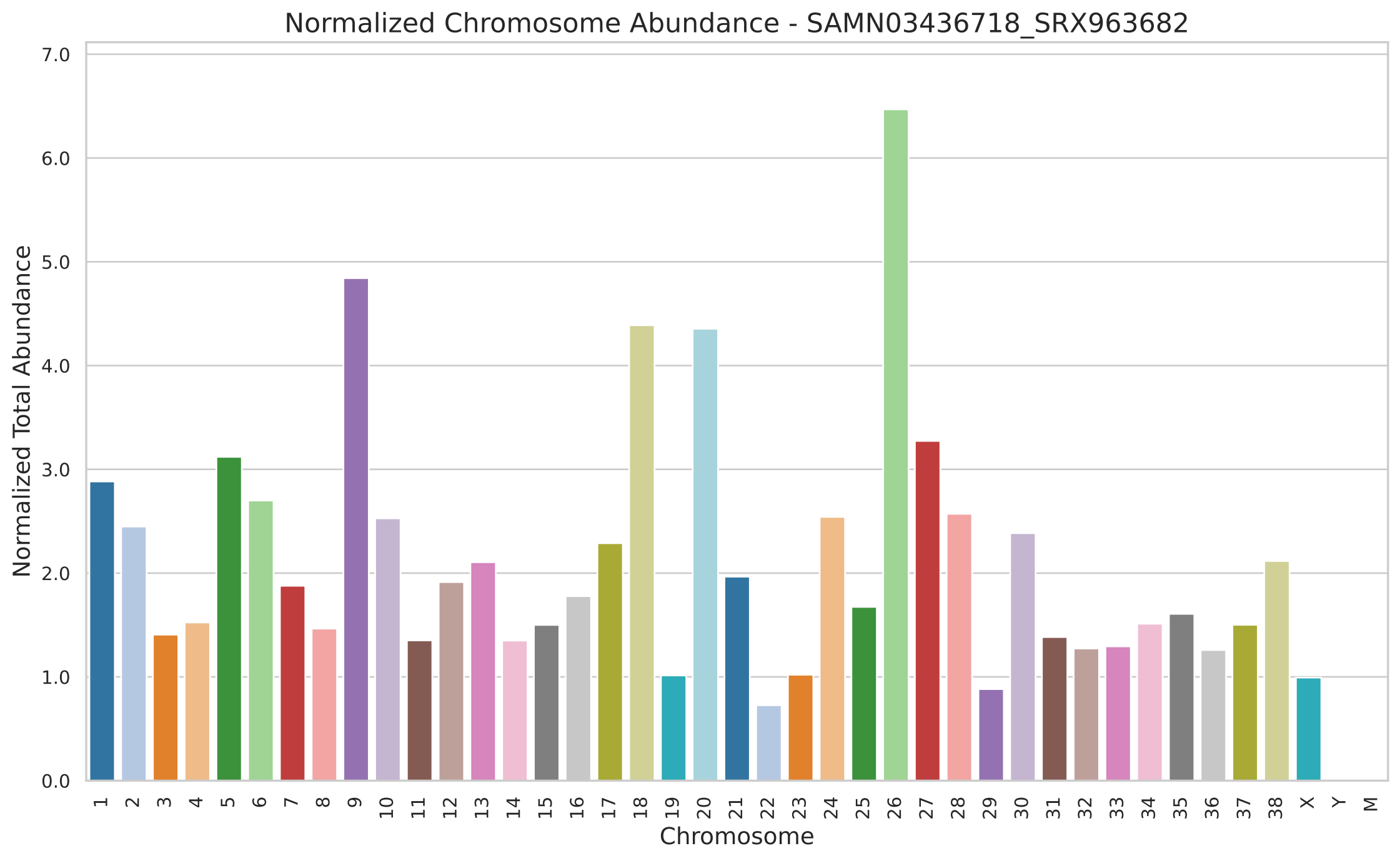

Normalized Chromosome Abundance - SAMN03436714_SRX963674
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

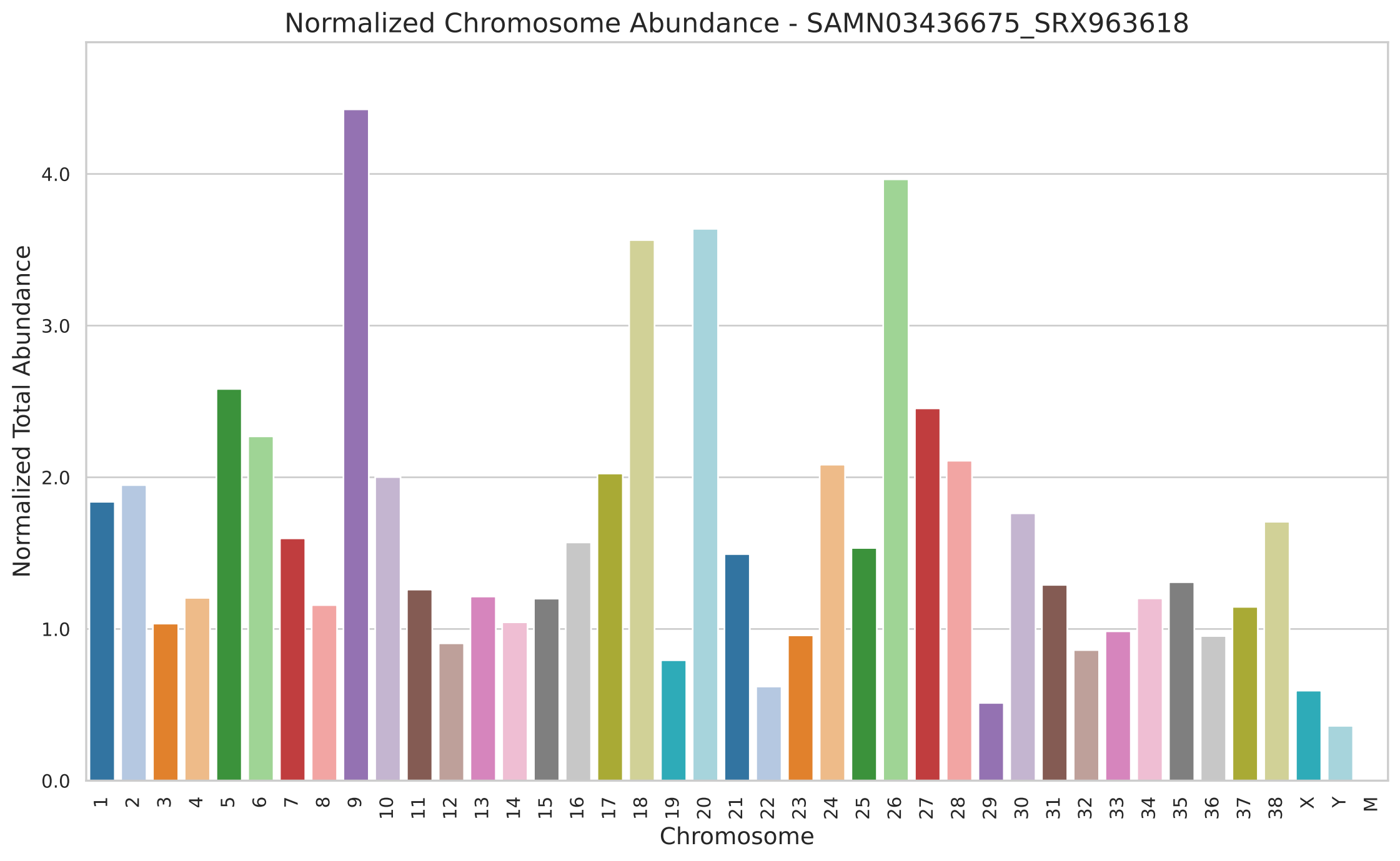

Normalized Chromosome Abundance - SAMN03436652_SRX963595
Normalized Total Abundance
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

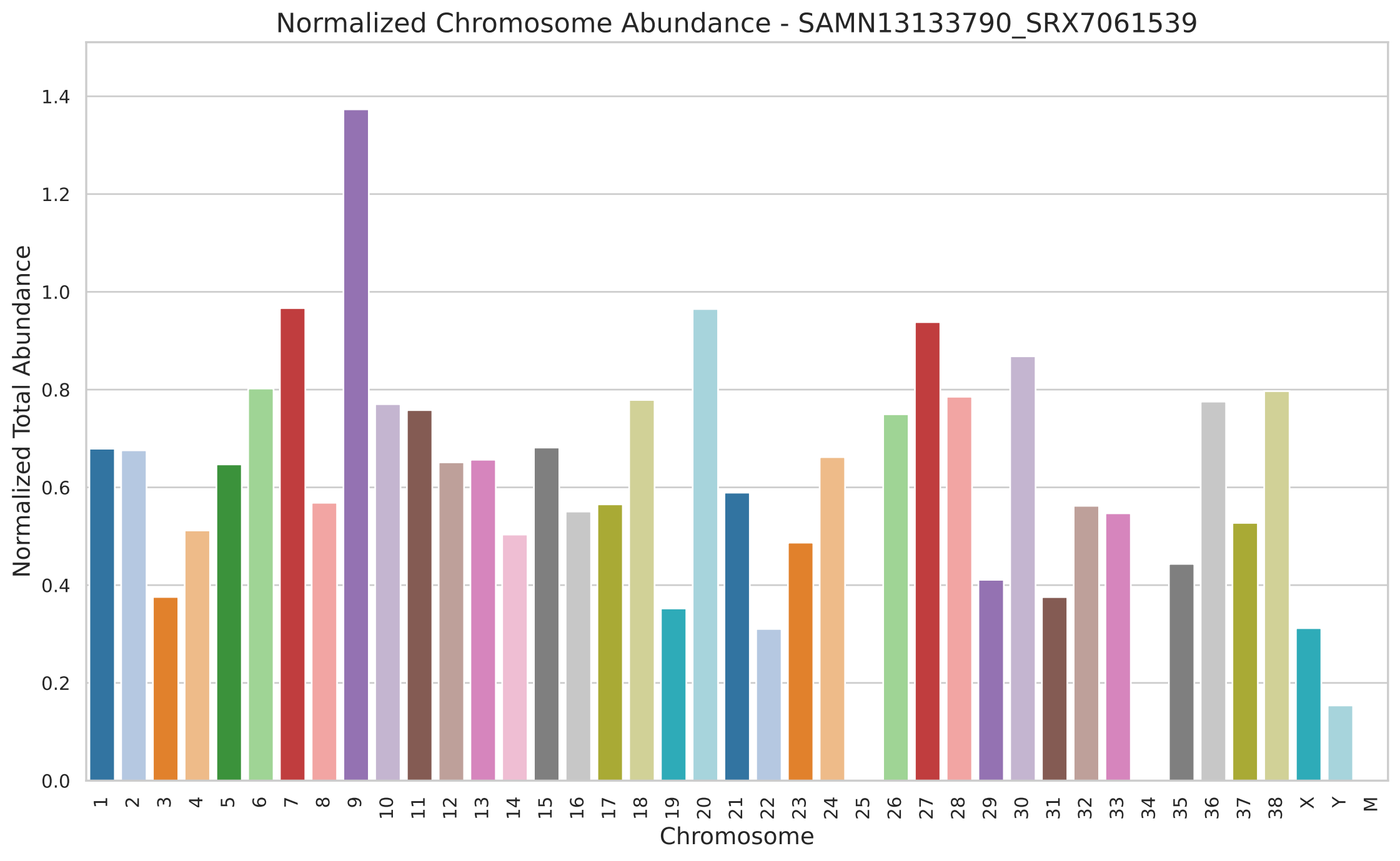

Normalized Chromosome Abundance - SAMN03436673_SRX963616
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

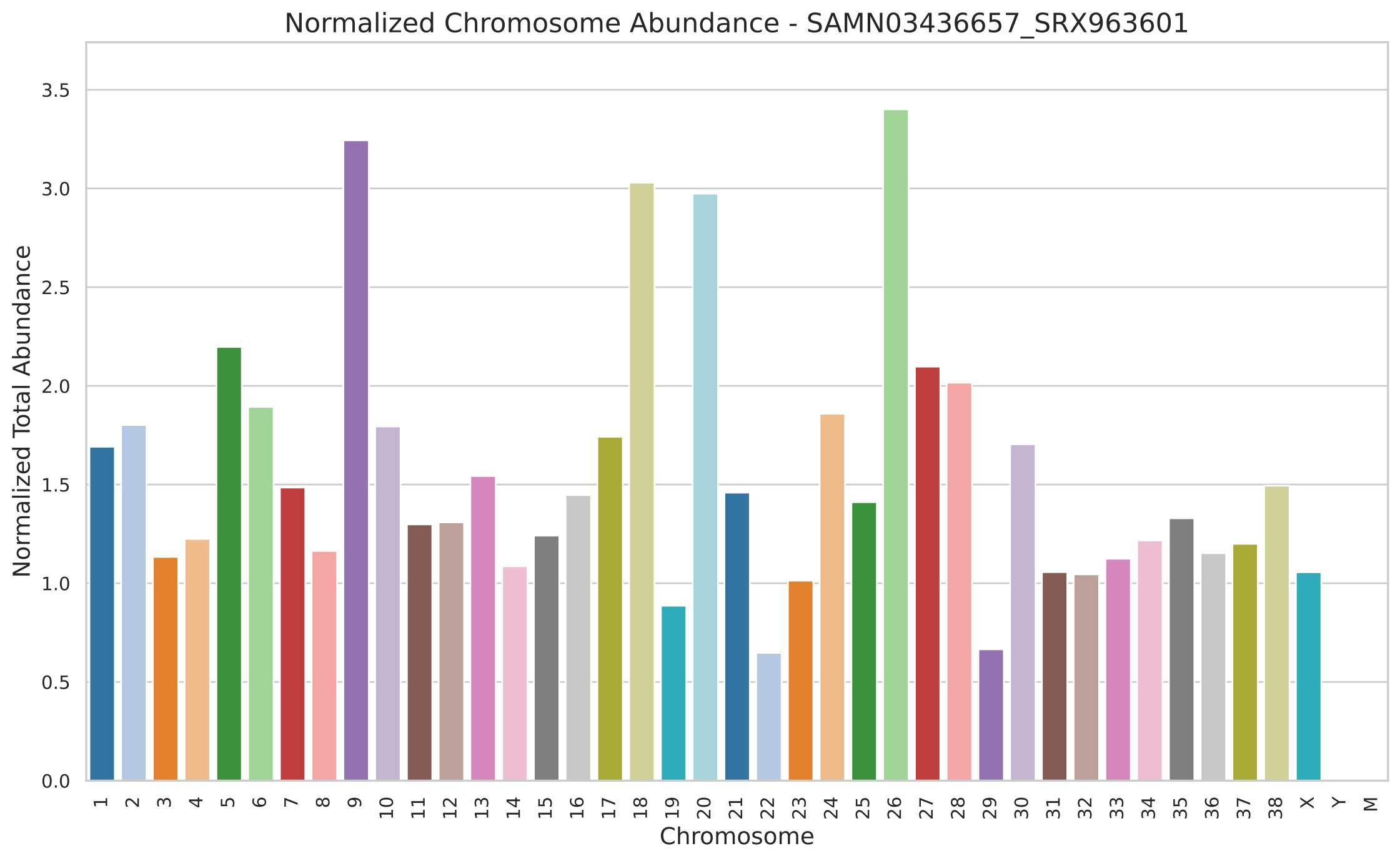

Normalized Chromosome Abundance - SAMN03436676_SRX963620
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

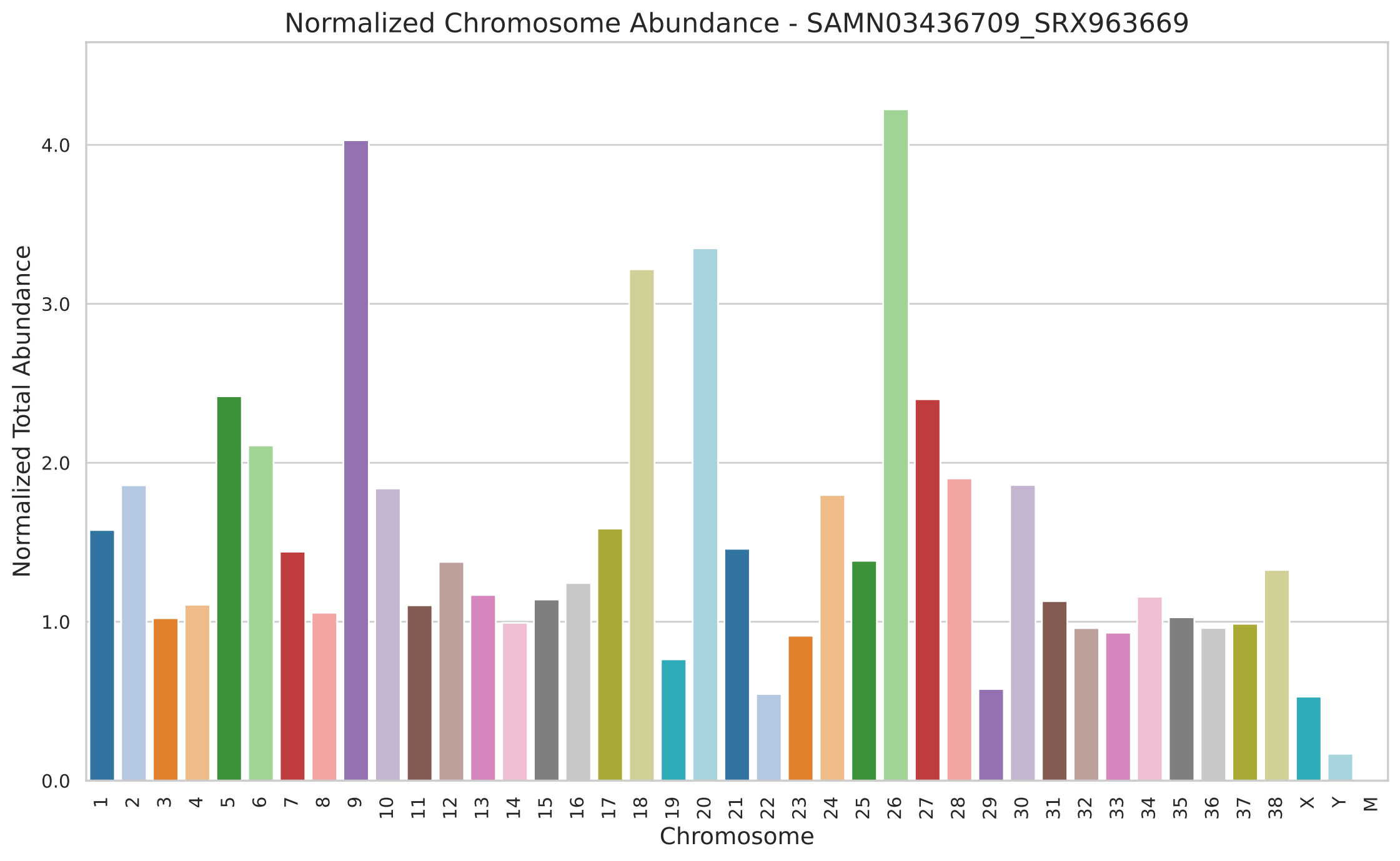

Normalized Chromosome Abundance - SAMN03436662_SRX963605
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

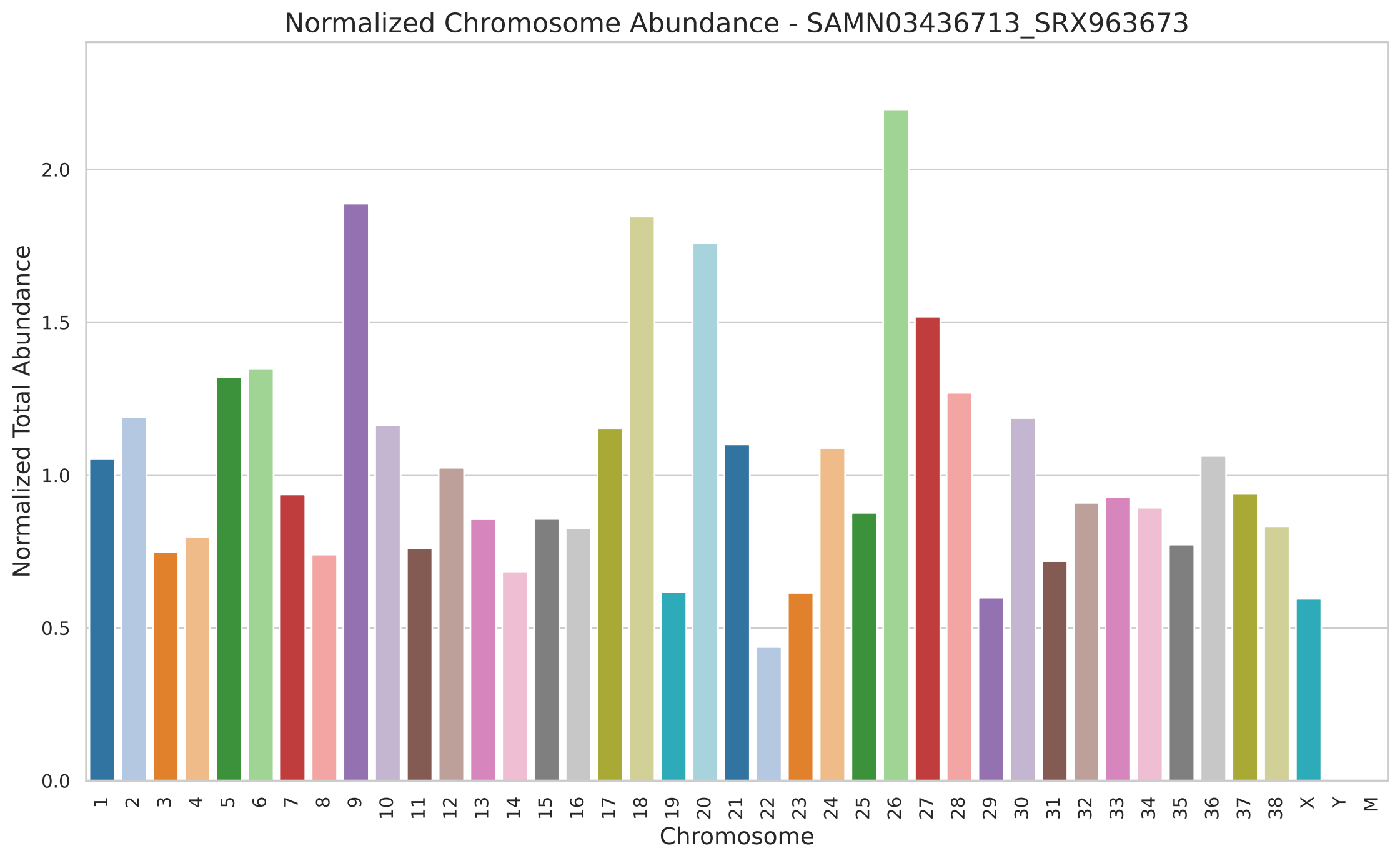

Normalized Chromosome Abundance - SAMN03436718_SRX963682
Normalized Total Abundance
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

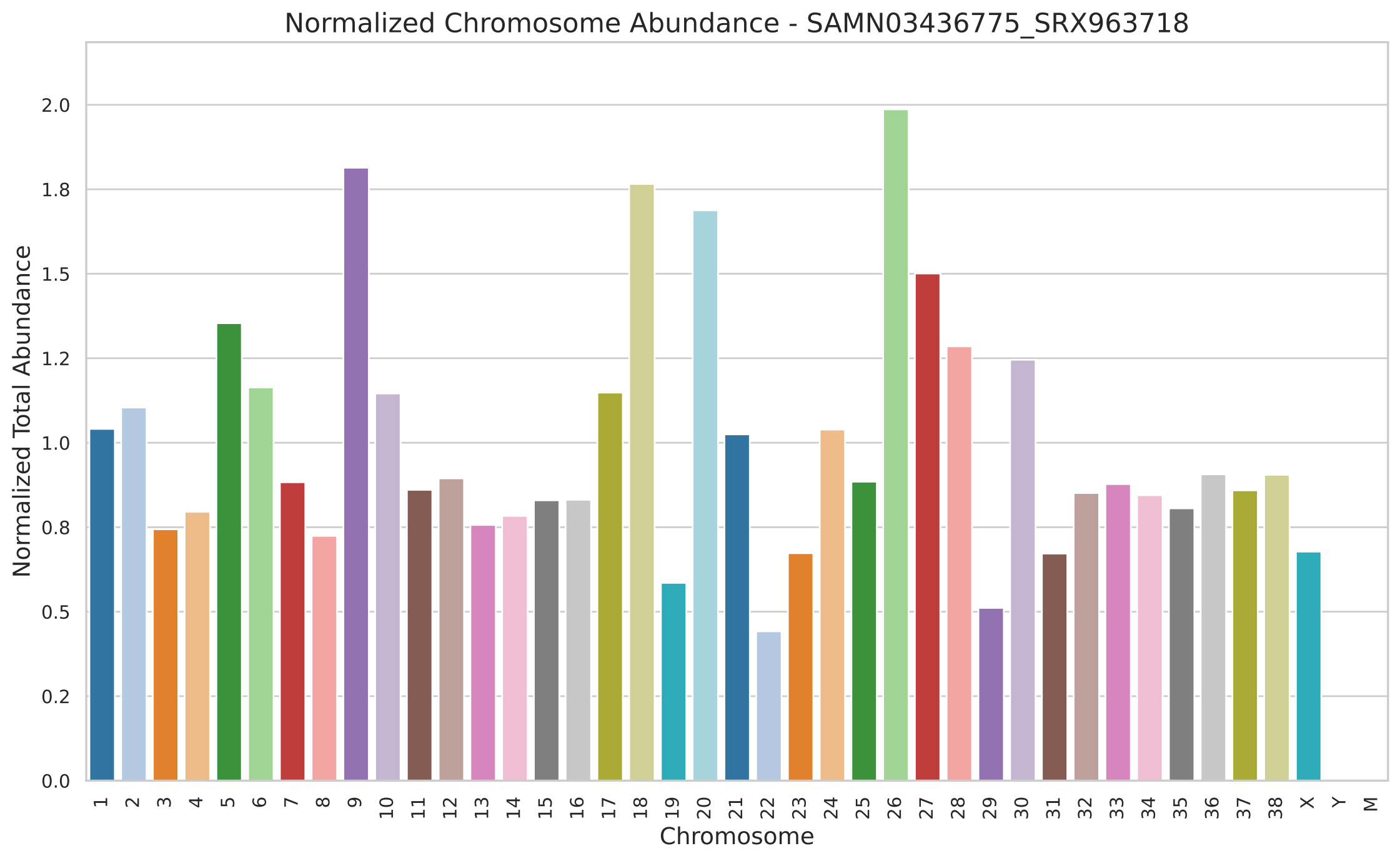

Normalized Chromosome Abundance - SAMN03436675_SRX963618
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

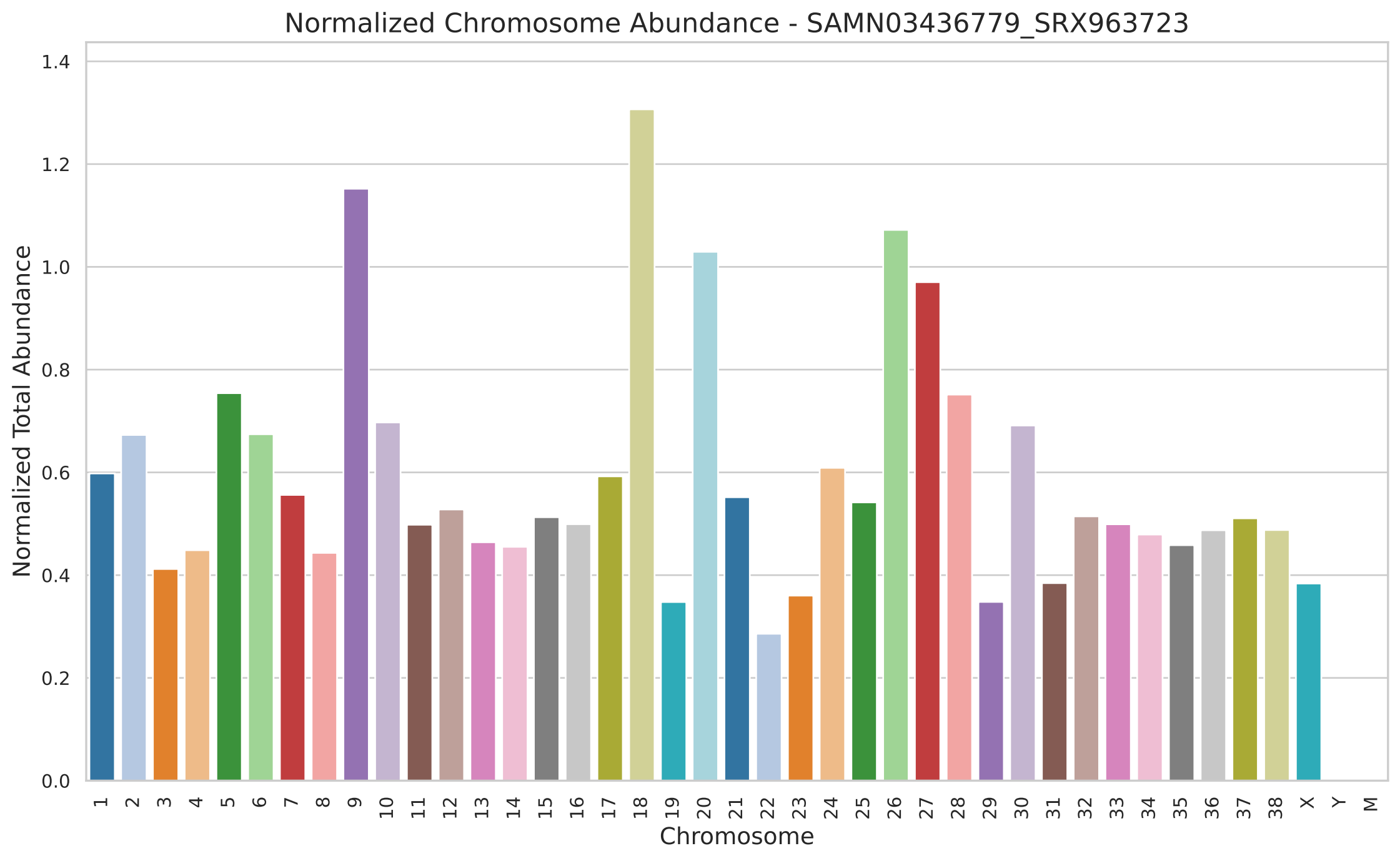

Normalized Chromosome Abundance - SAMN13133790_SRX7061539
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

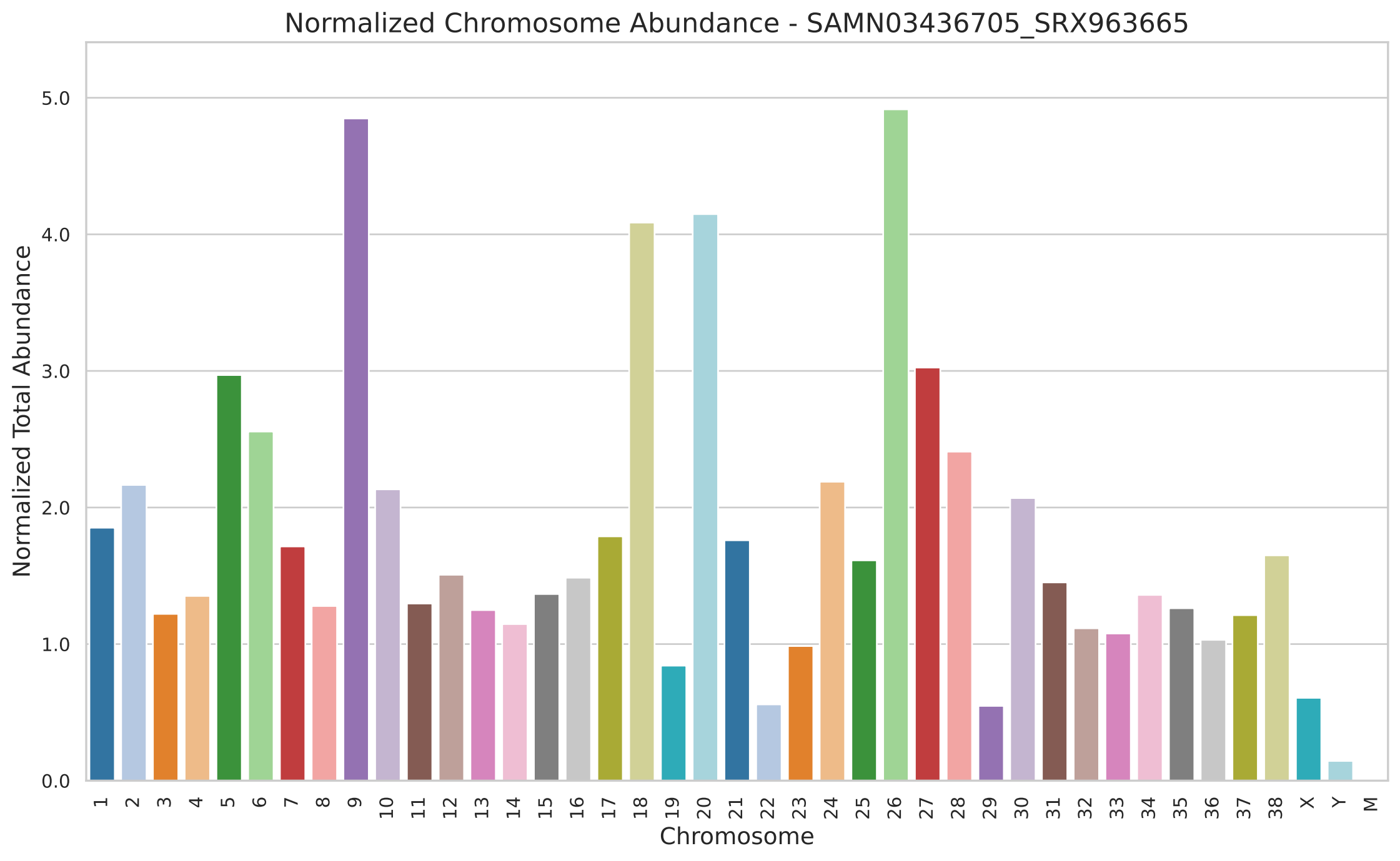

Normalized Chromosome Abundance - SAMN03436657_SRX963601
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

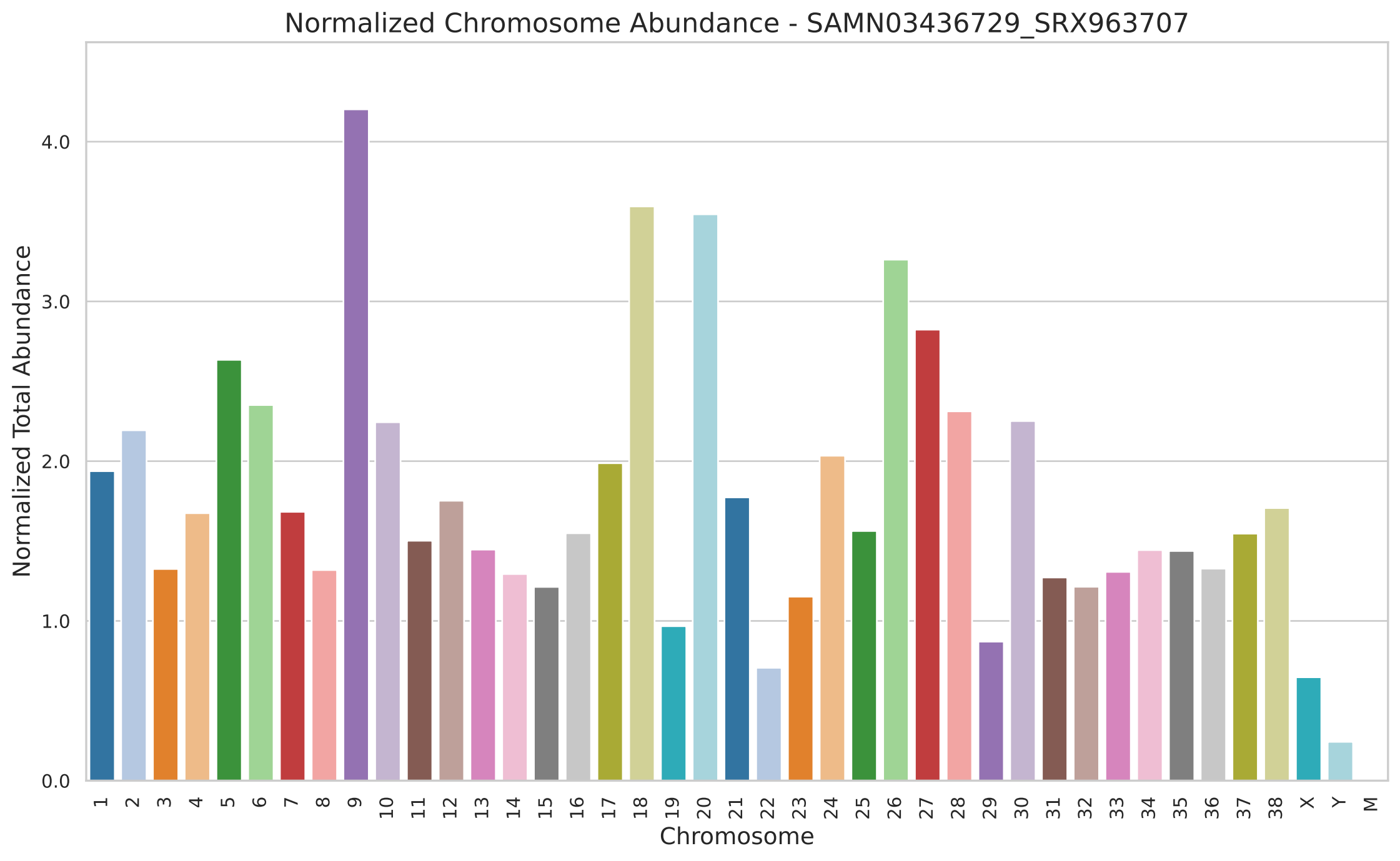

Normalized Chromosome Abundance - SAMN03436709_SRX963669
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

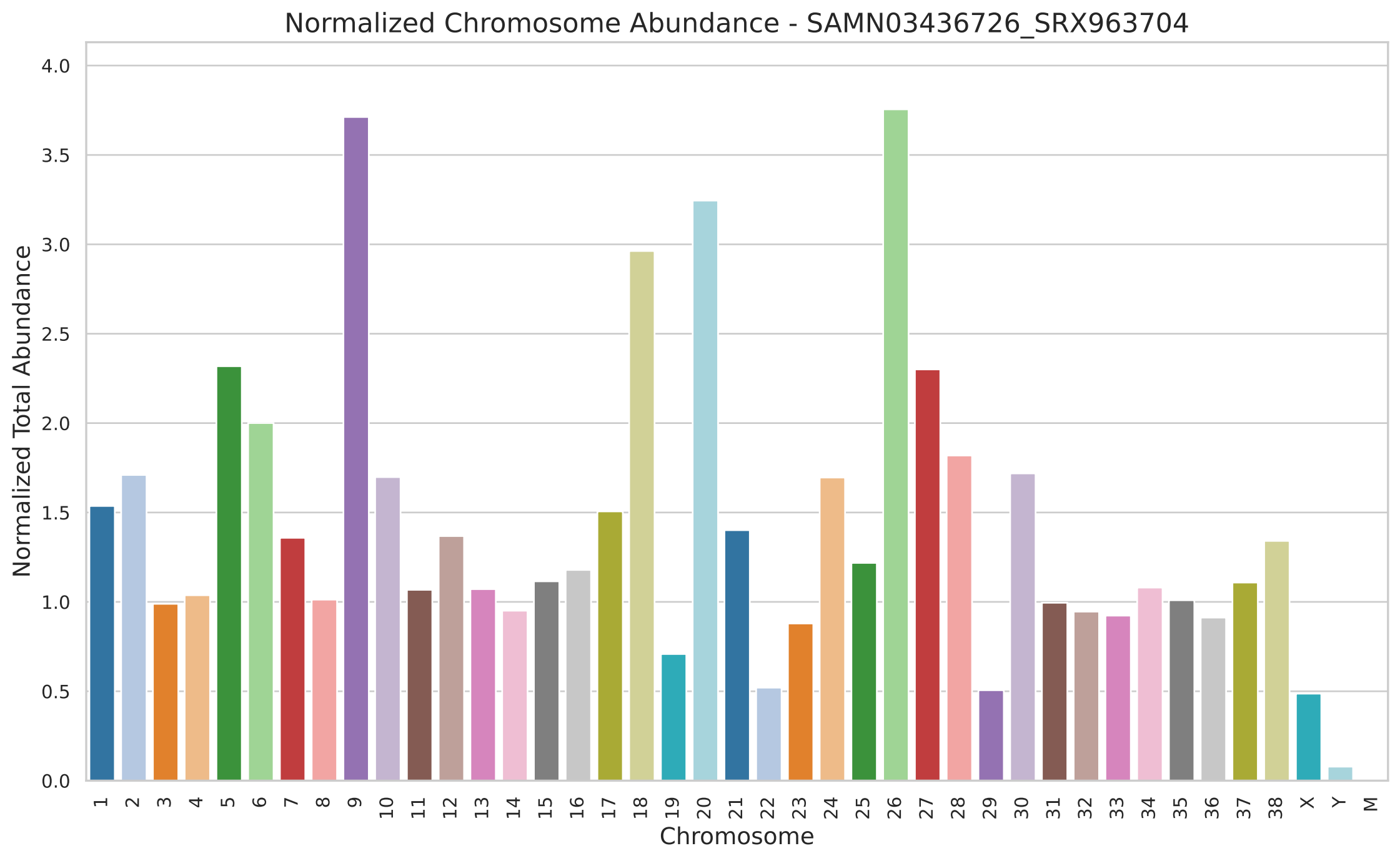

Normalized Chromosome Abundance - SAMN03436713_SRX963673
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

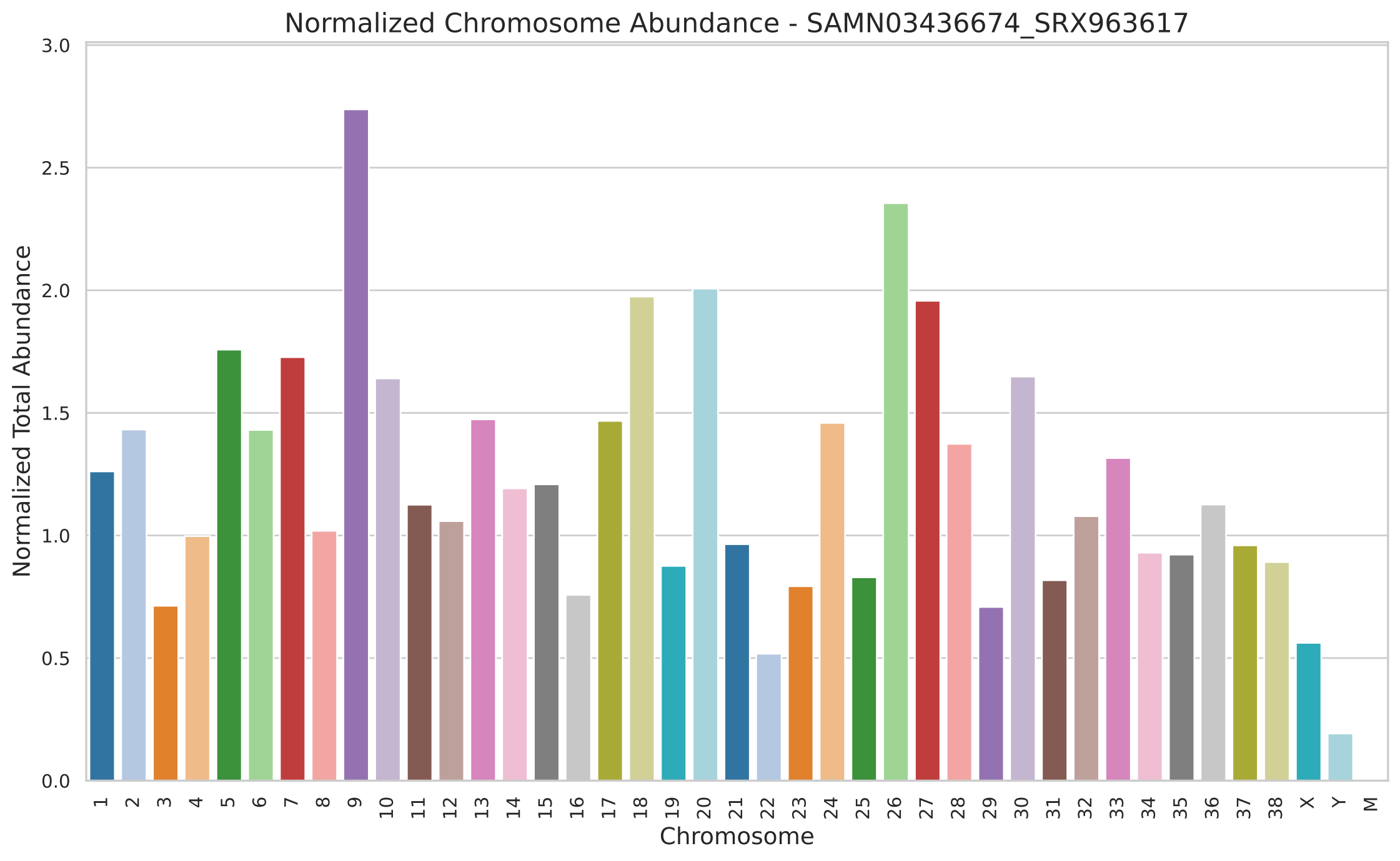

Normalized Chromosome Abundance - SAMN03436775_SRX963718
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

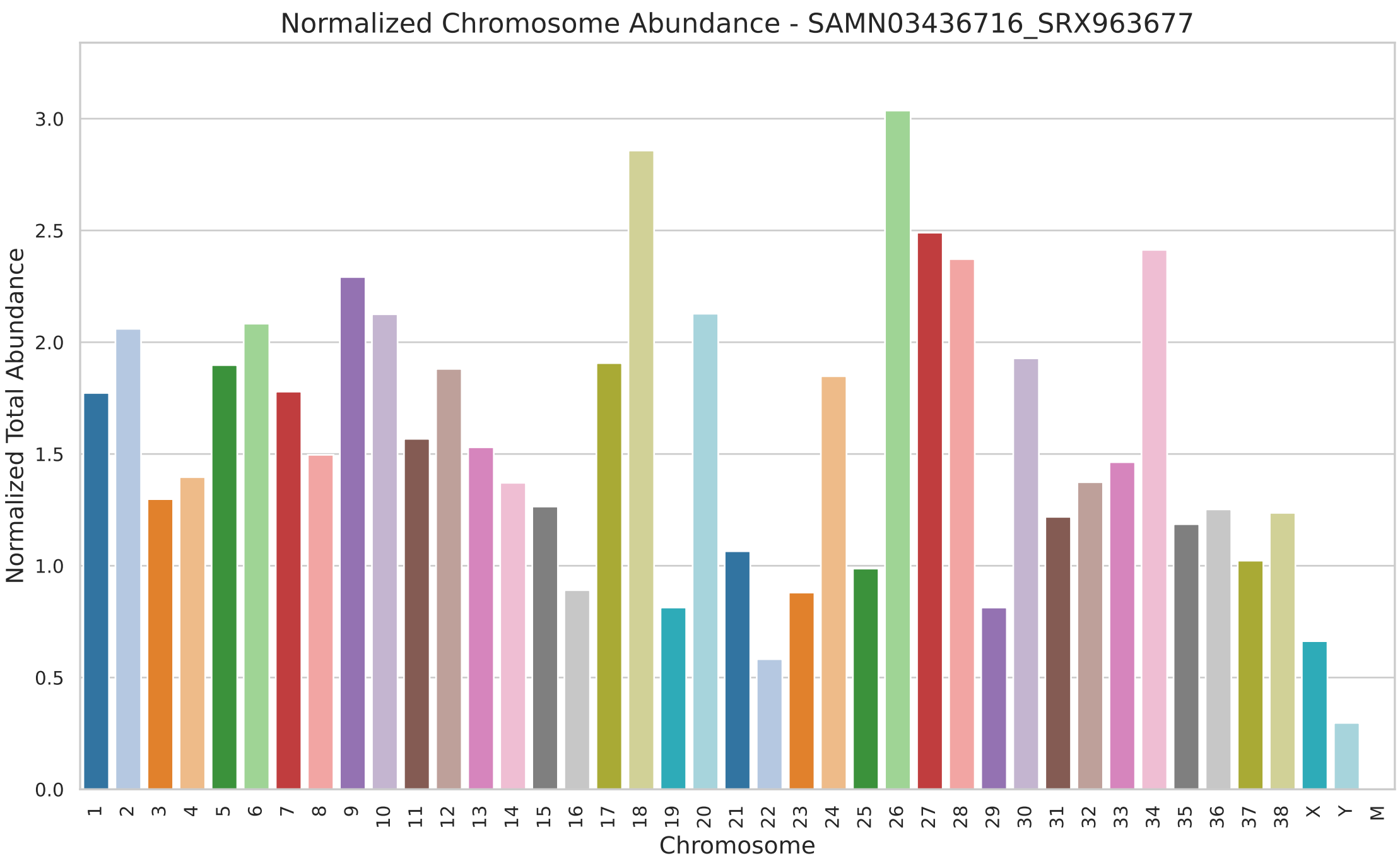

Normalized Chromosome Abundance - SAMN03436779_SRX963723
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

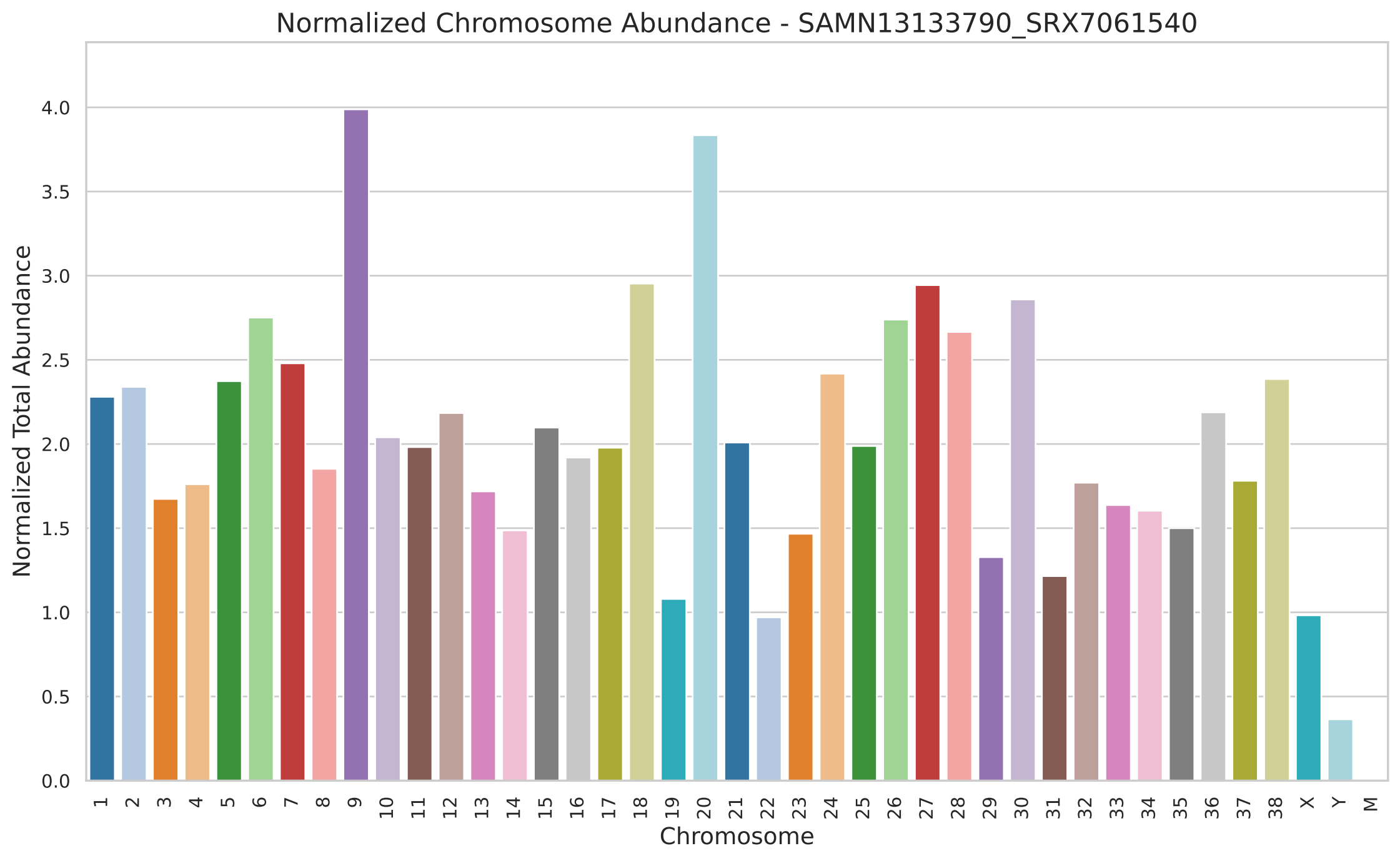

Normalized Chromosome Abundance - SAMN03436705_SRX963665
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

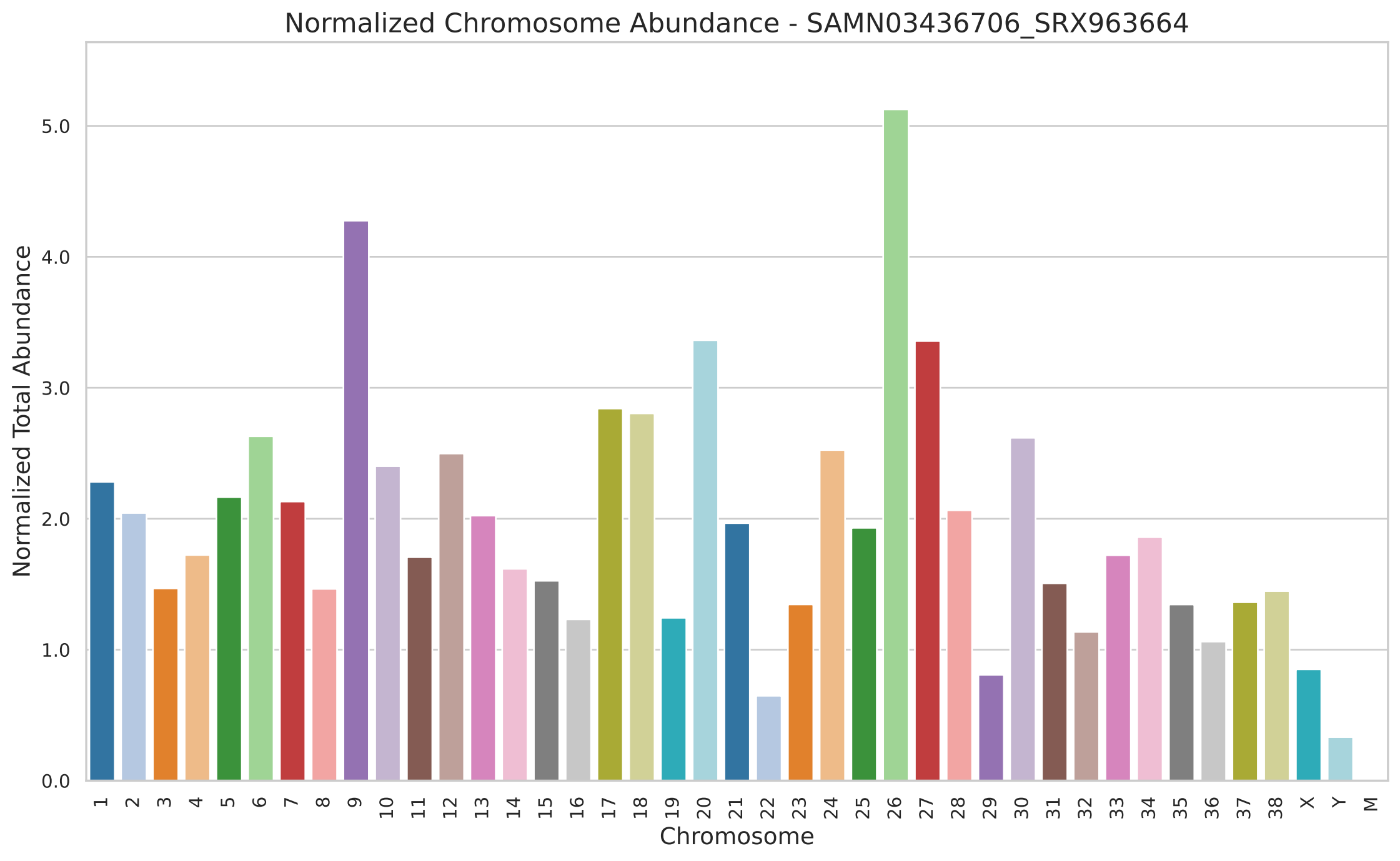

Normalized Chromosome Abundance - SAMN03436729_SRX963707
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

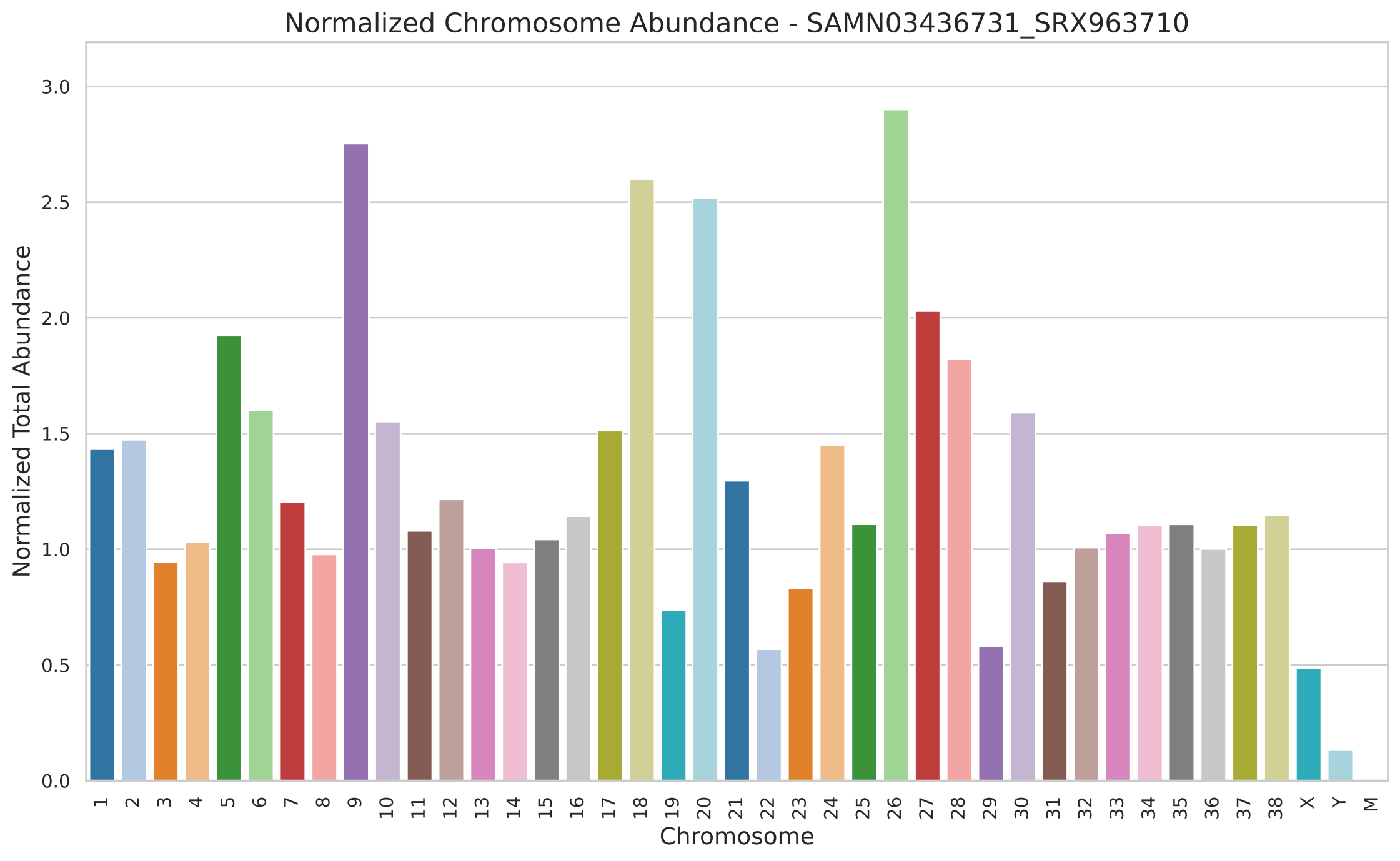

Normalized Chromosome Abundance - SAMN03436726_SRX963704
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

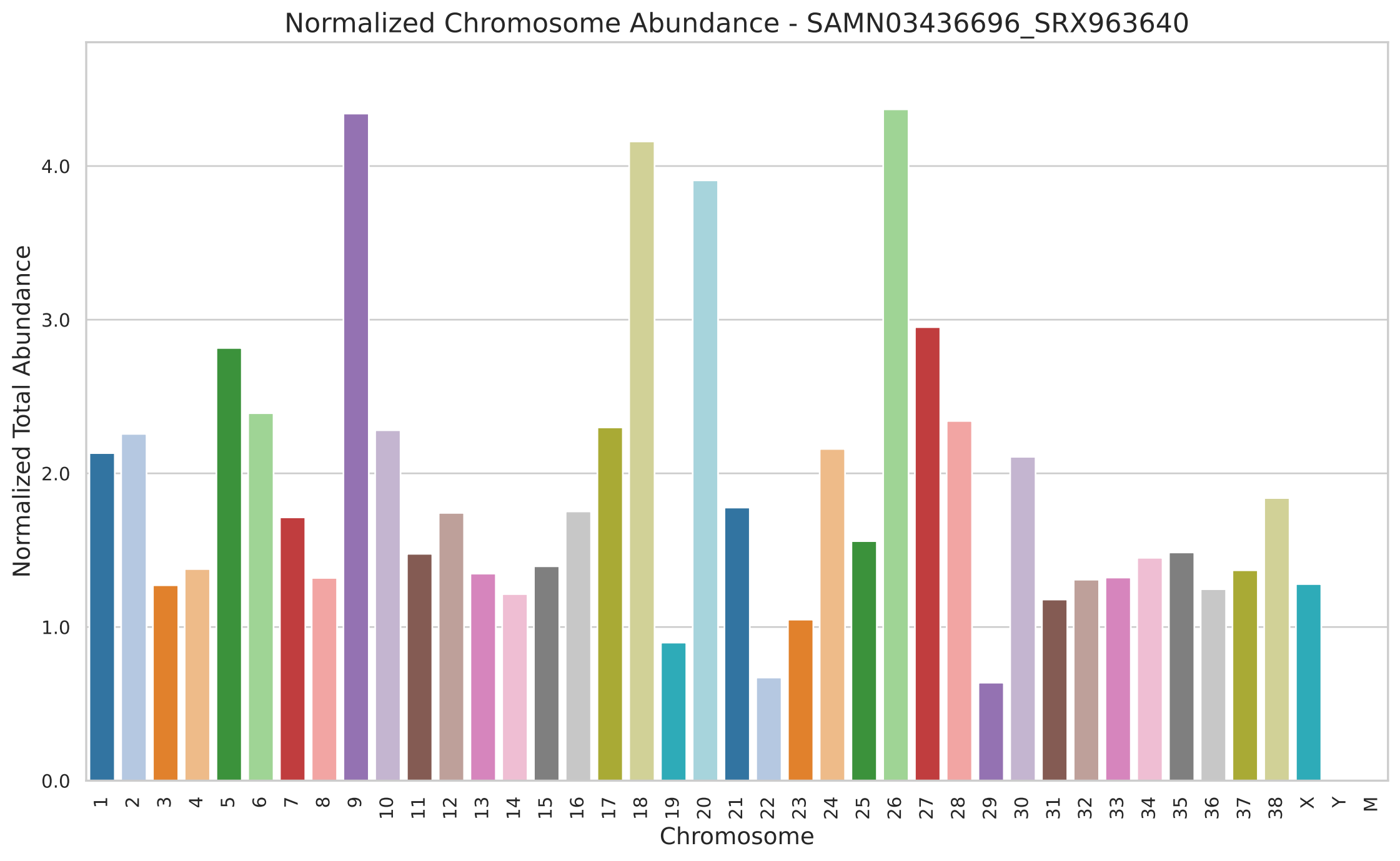

Normalized Chromosome Abundance - SAMN03436674_SRX963617
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

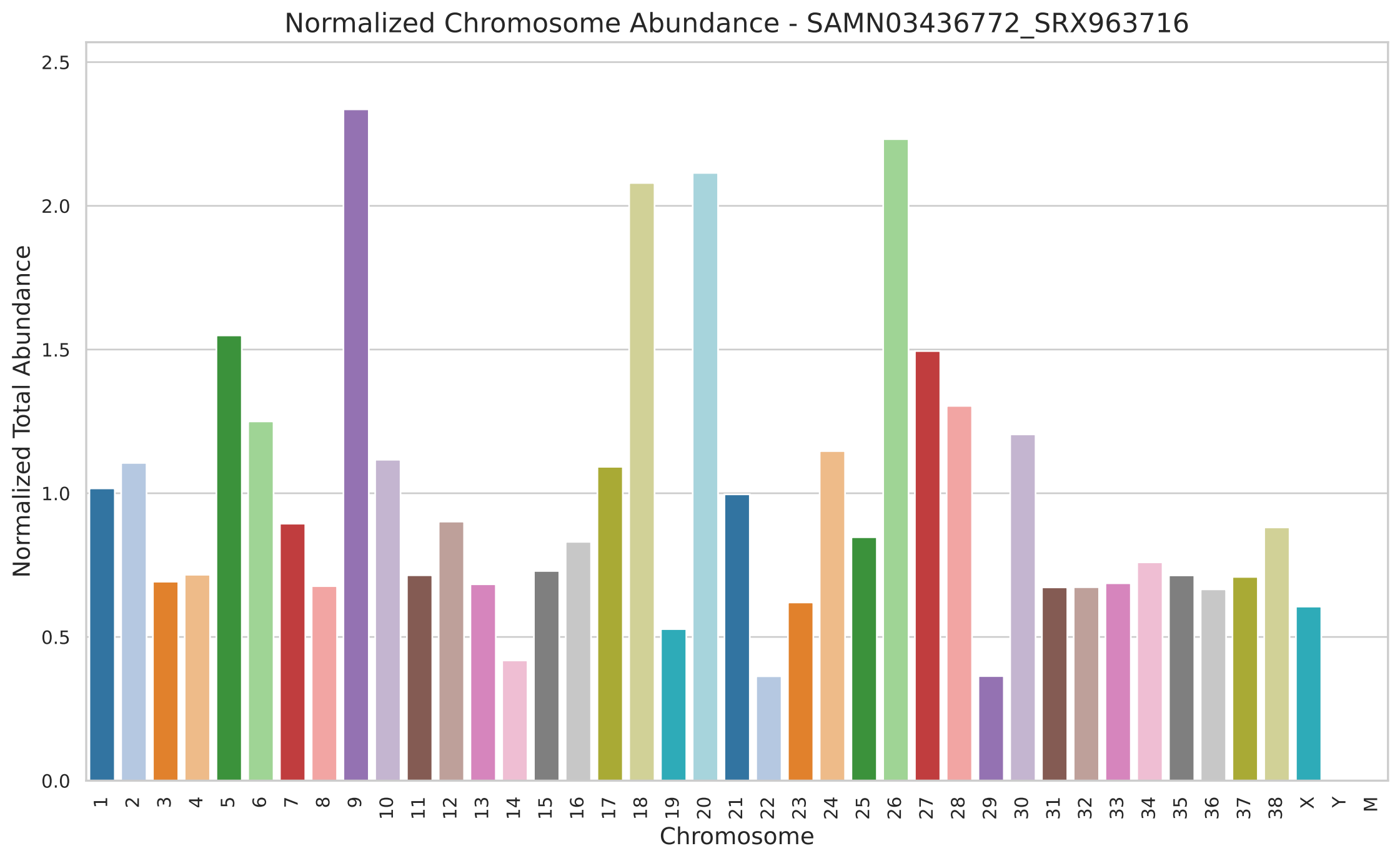

Normalized Chromosome Abundance - SAMN03436716_SRX963677
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

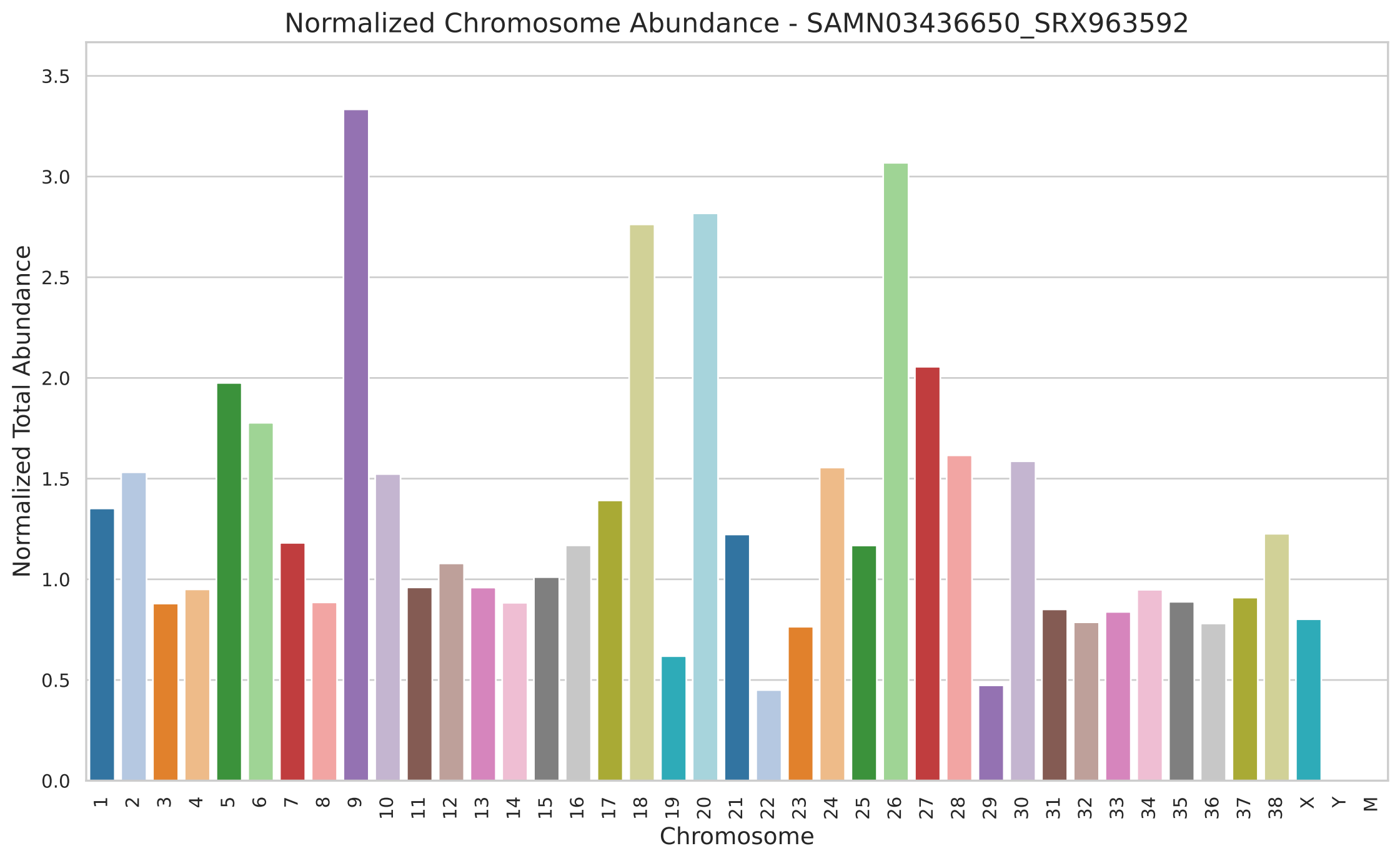

Normalized Chromosome Abundance - SAMN13133790_SRX7061540
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

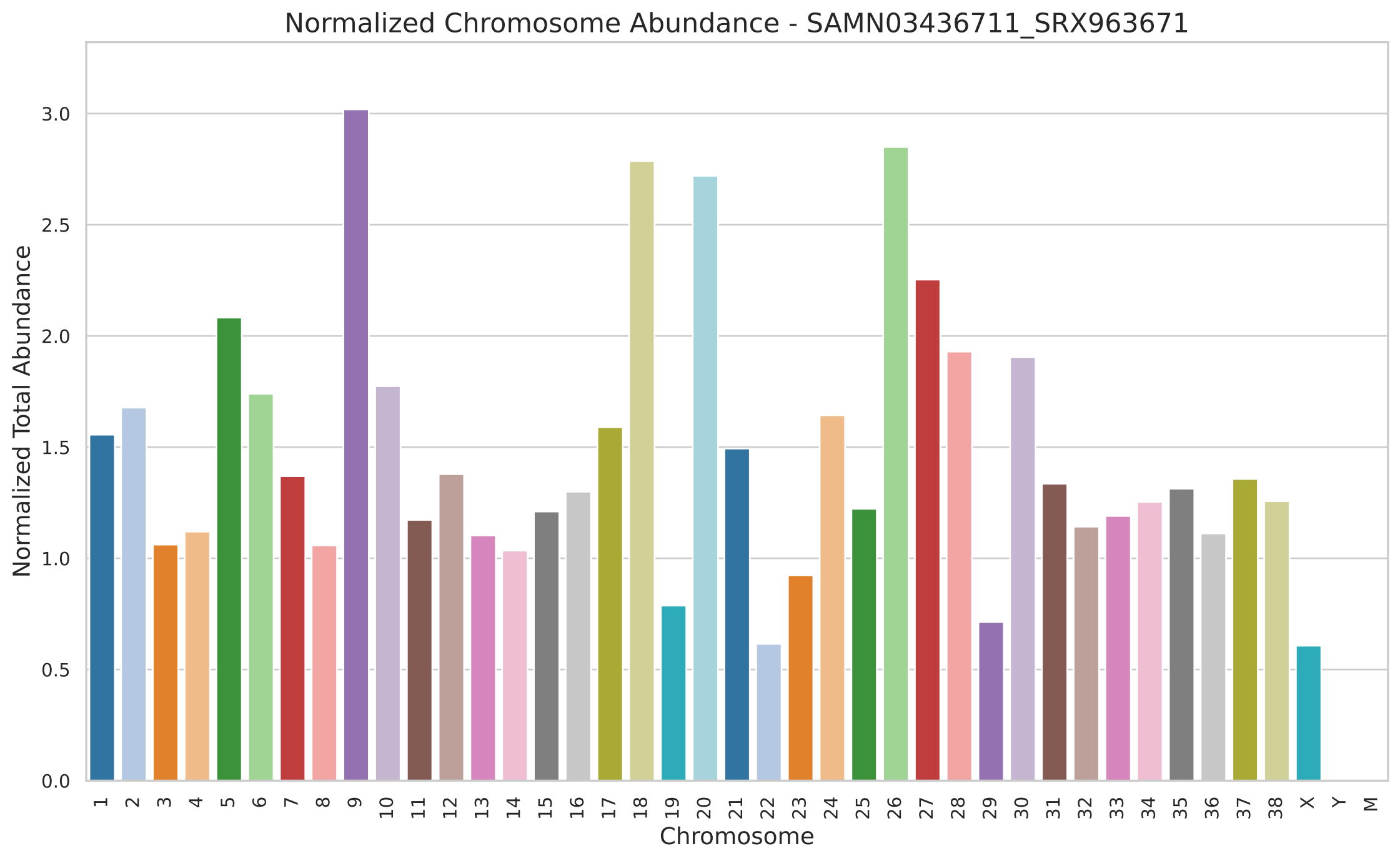

Normalized Chromosome Abundance - SAMN03436706_SRX963664
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

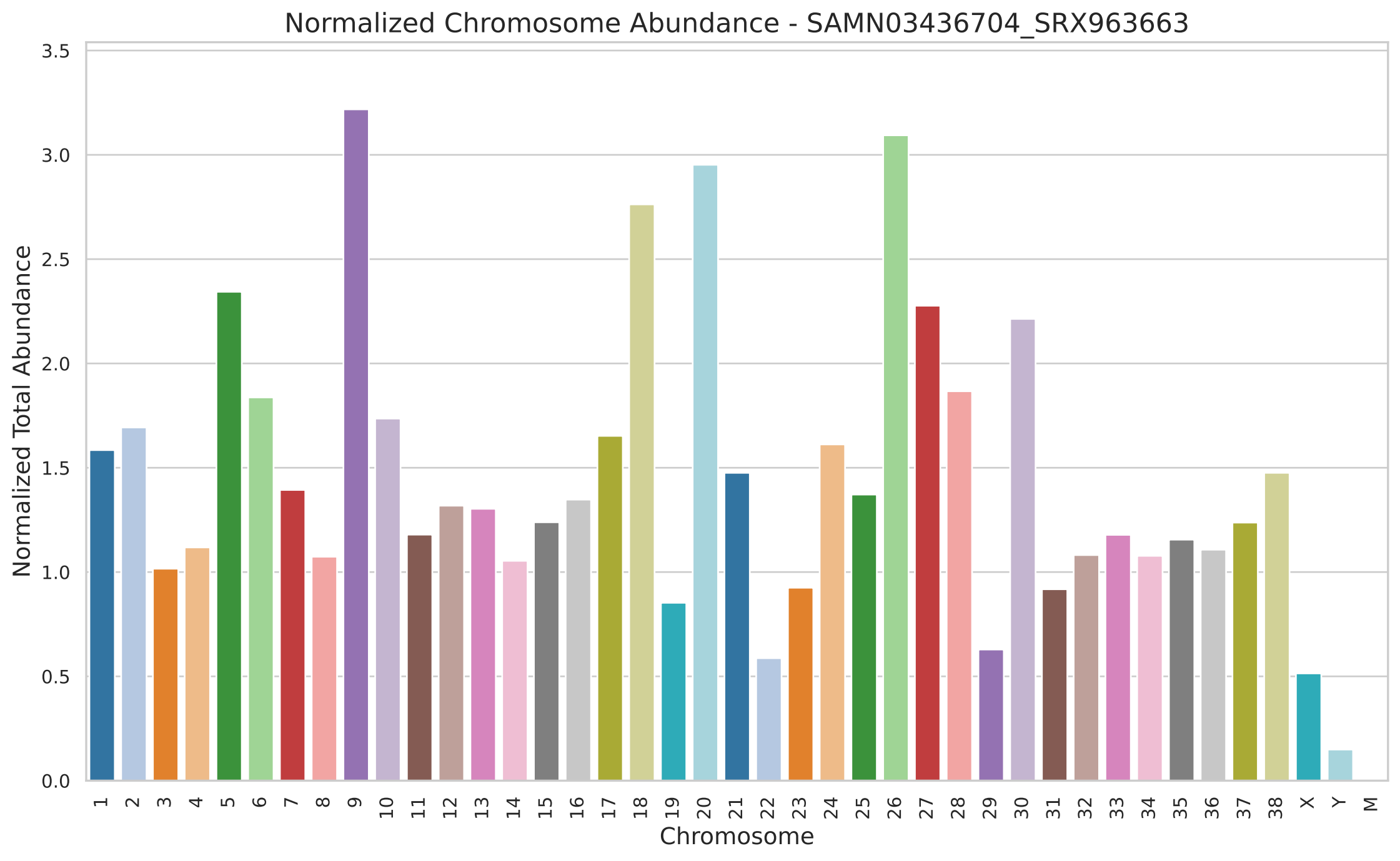

Normalized Chromosome Abundance - SAMN03436731_SRX963710
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

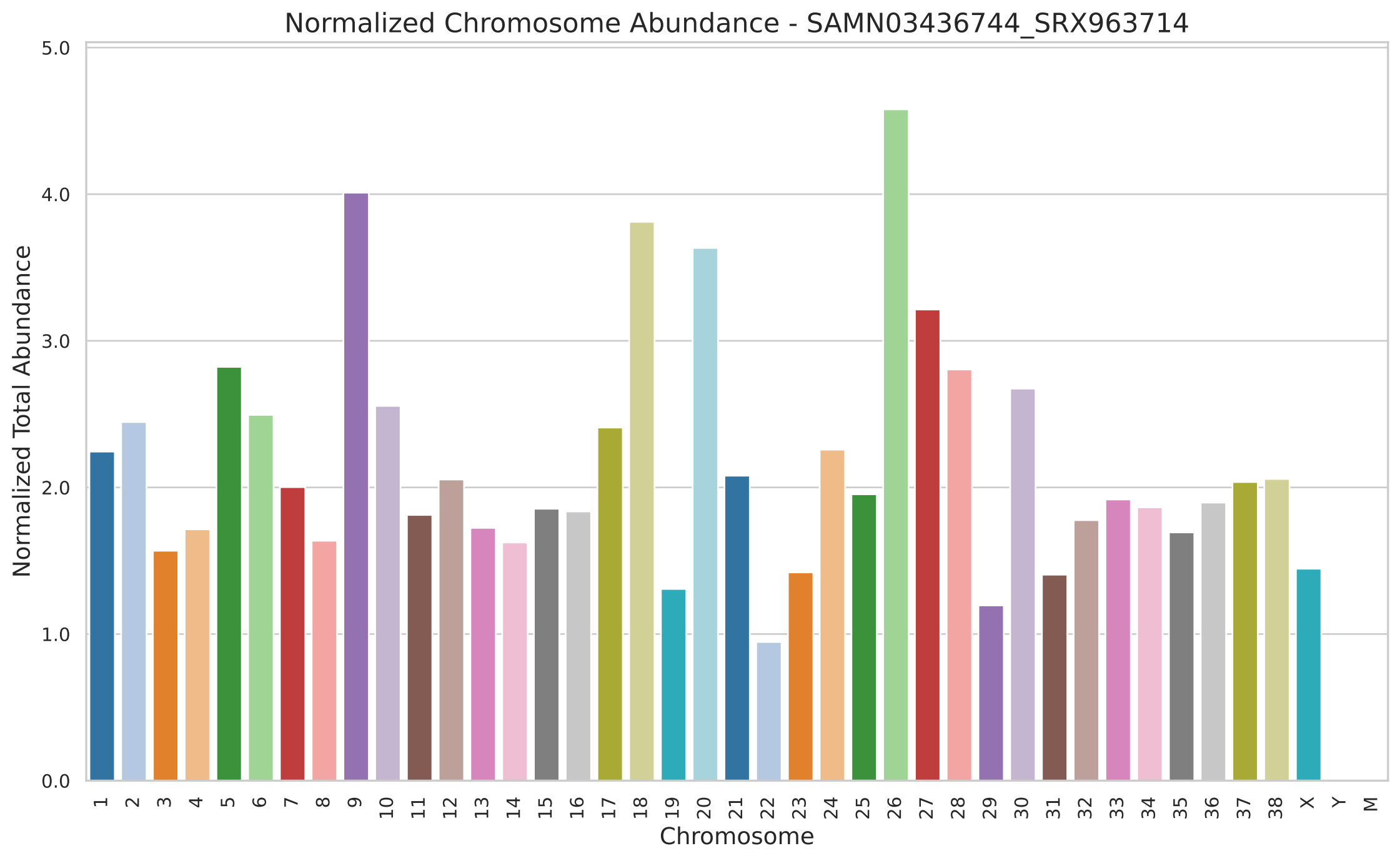

Normalized Chromosome Abundance - SAMN03436696_SRX963640
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

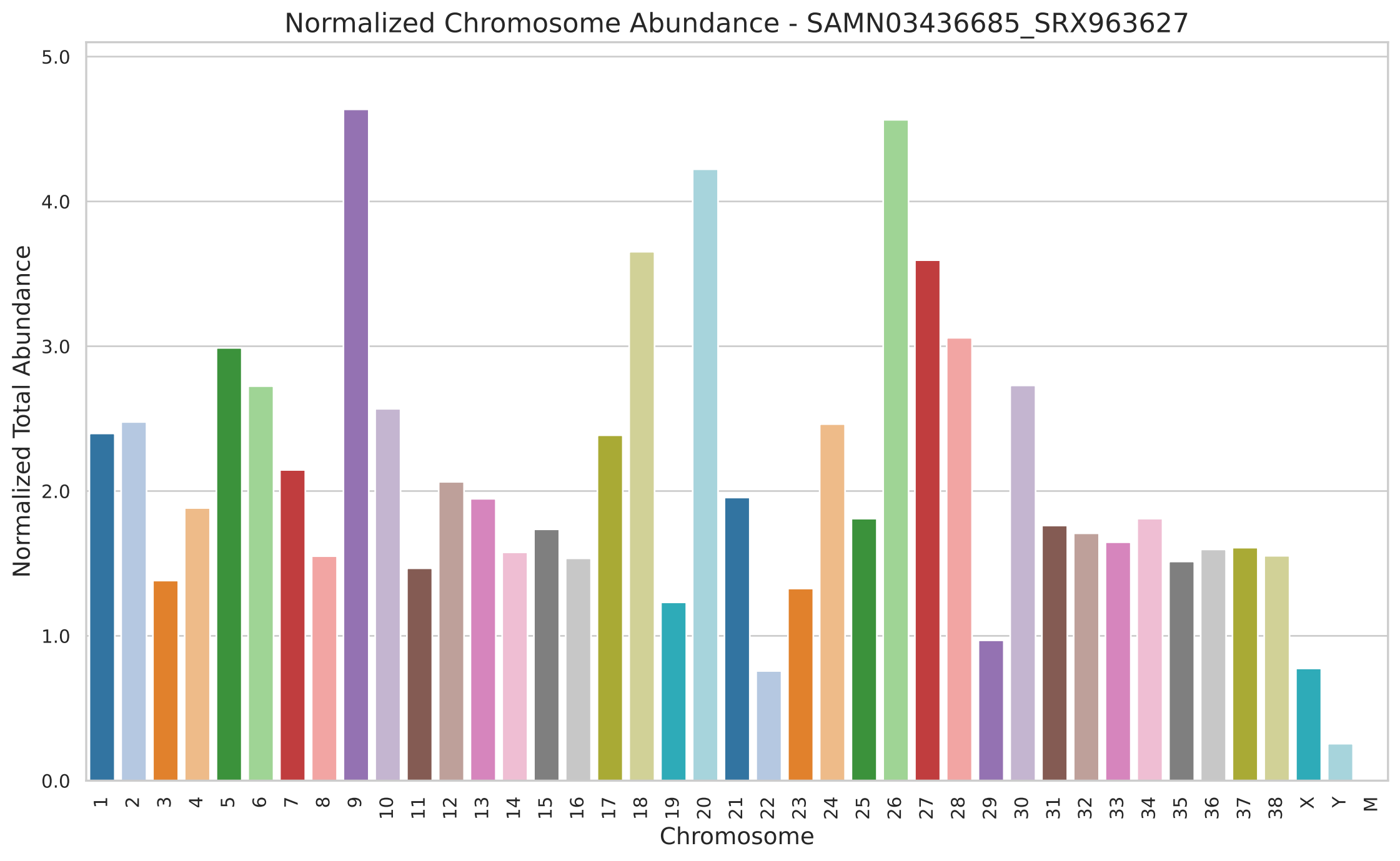

Normalized Chromosome Abundance - SAMN03436772_SRX963716
Normalized Total Abundance
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

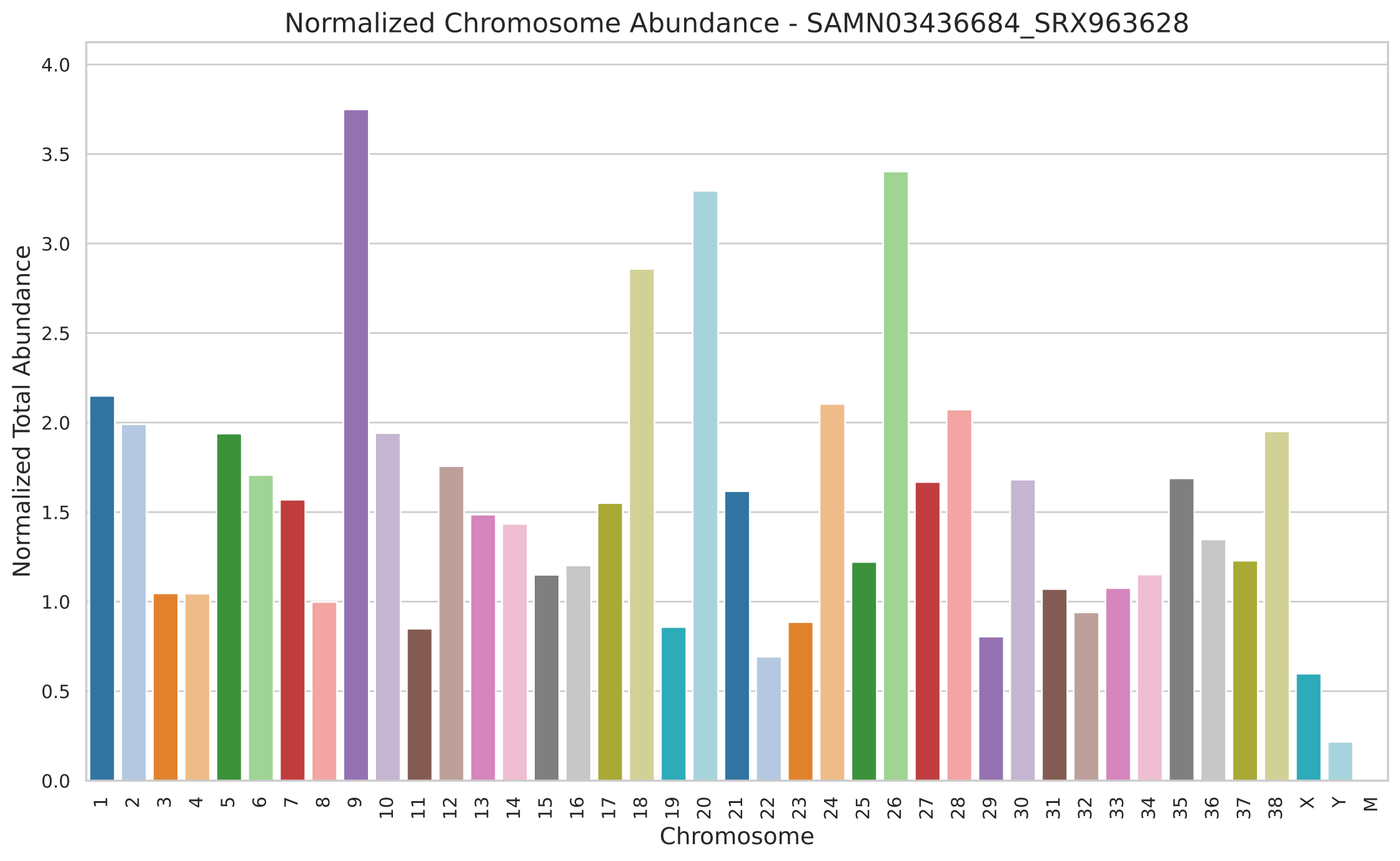

Normalized Chromosome Abundance - SAMN03436650_SRX963592
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

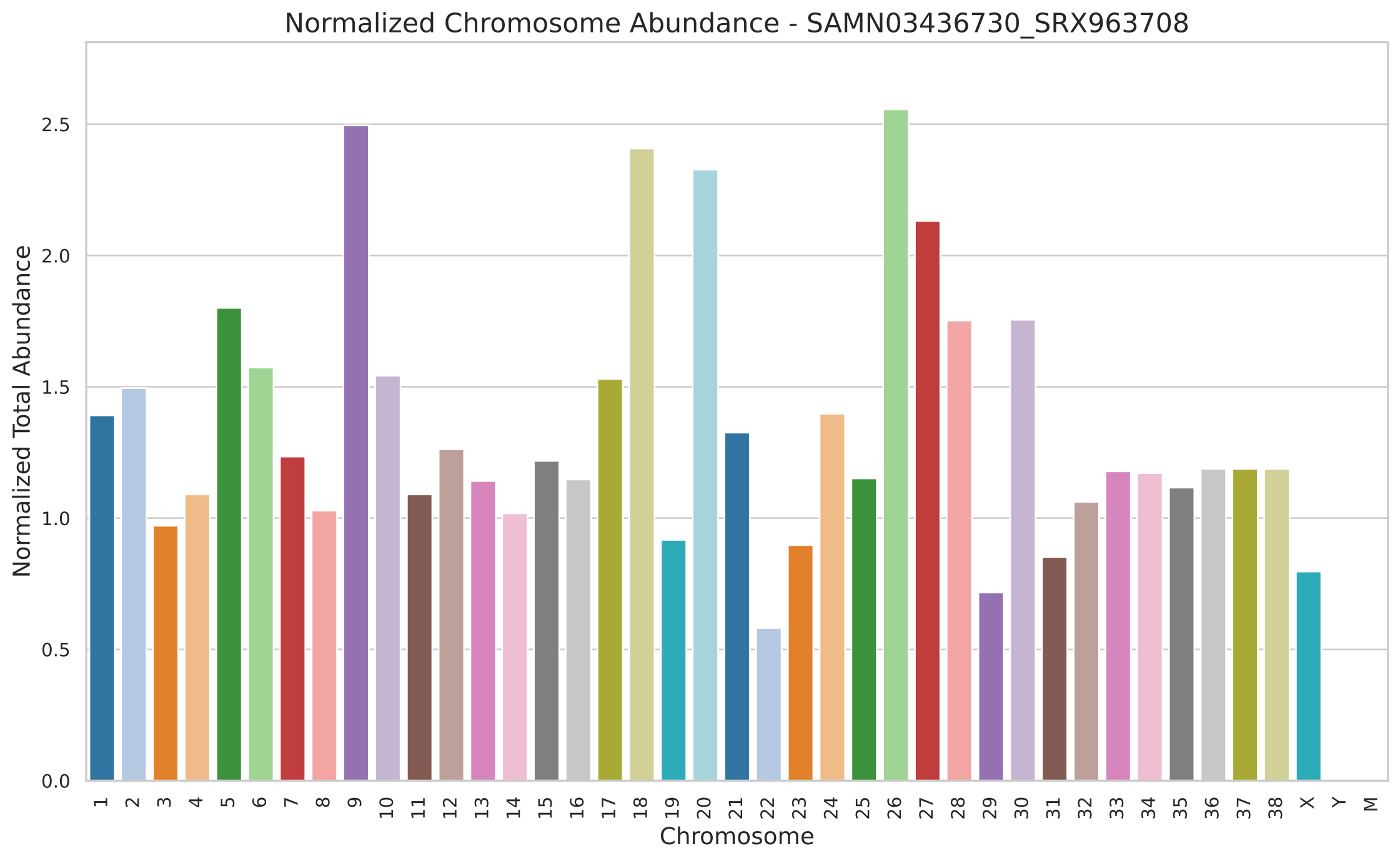

Normalized Chromosome Abundance - SAMN03436711_SRX963671
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

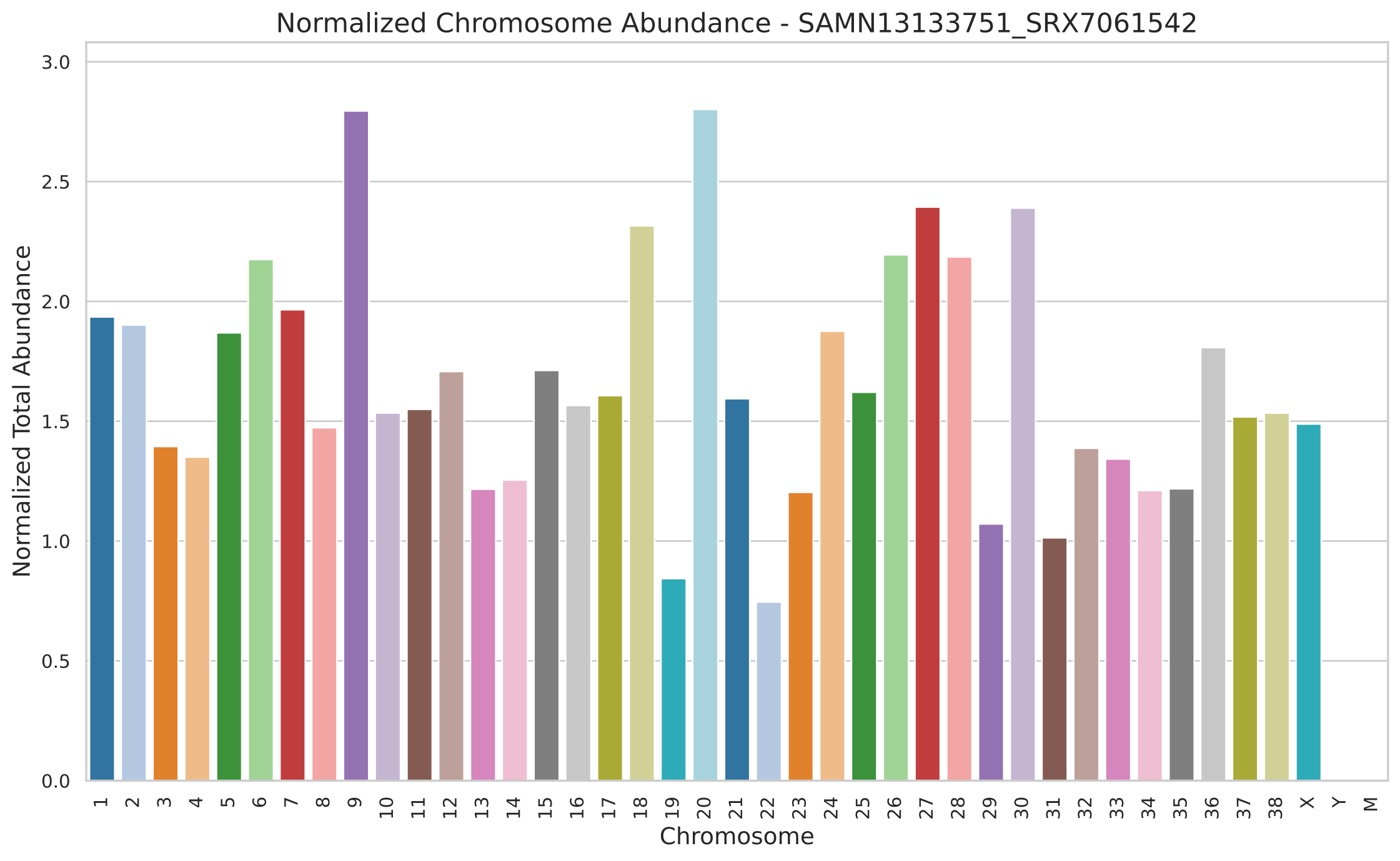

Normalized Chromosome Abundance - SAMN03436704_SRX963663
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

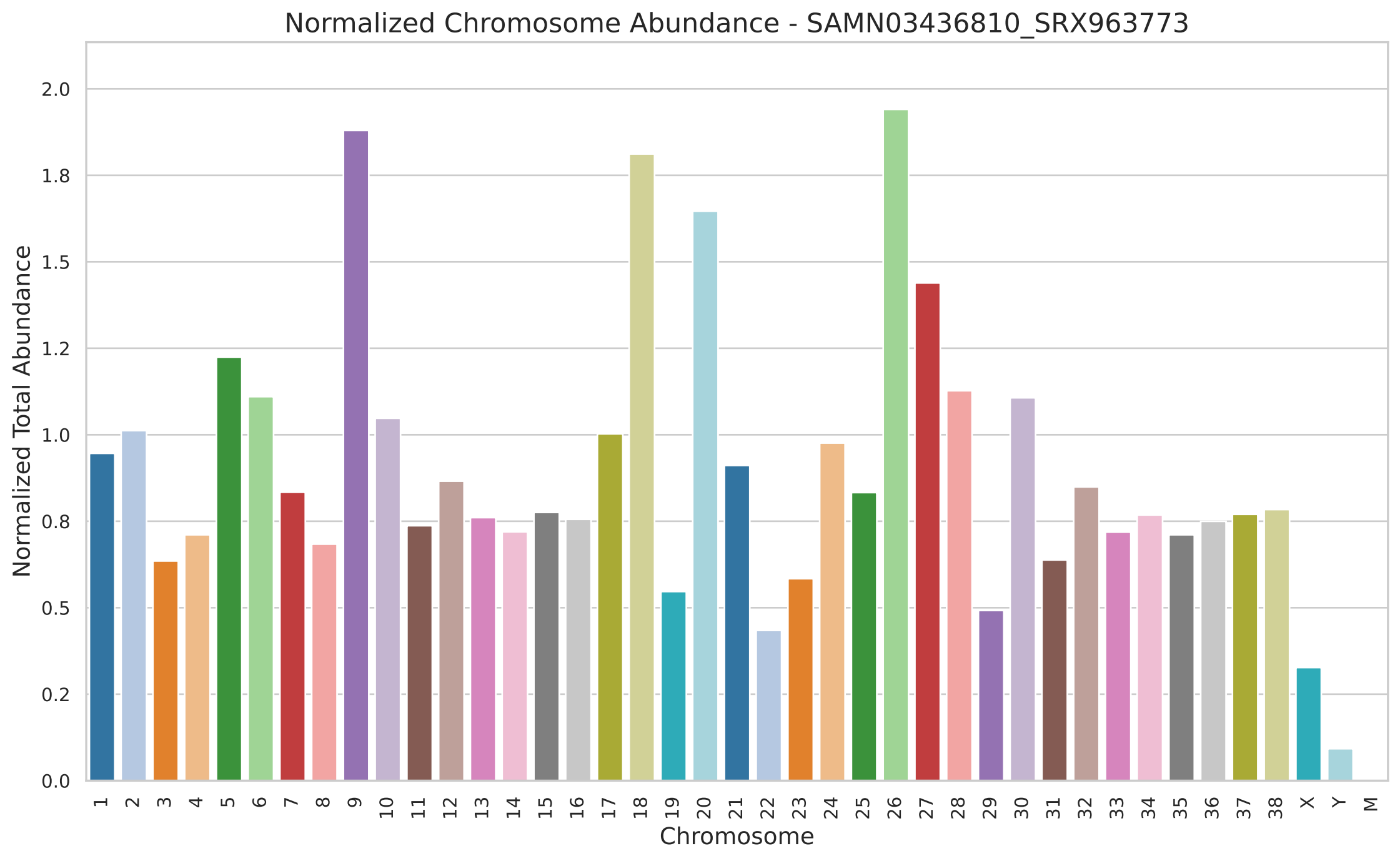

Normalized Chromosome Abundance - SAMN03436744_SRX963714
Normalized Total Abundance
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

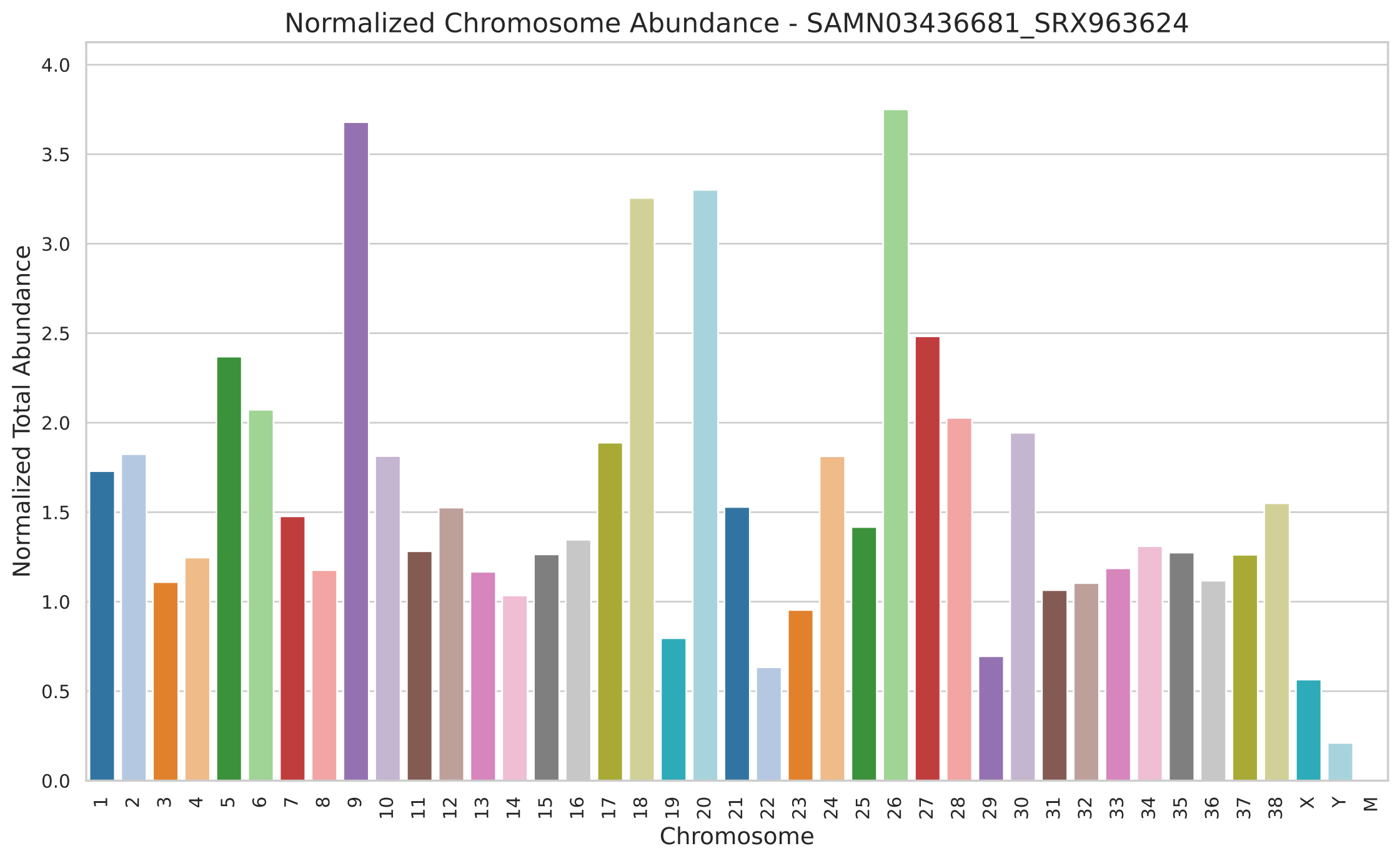

Normalized Chromosome Abundance - SAMN03436685_SRX963627
Normalized Total Abundance
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

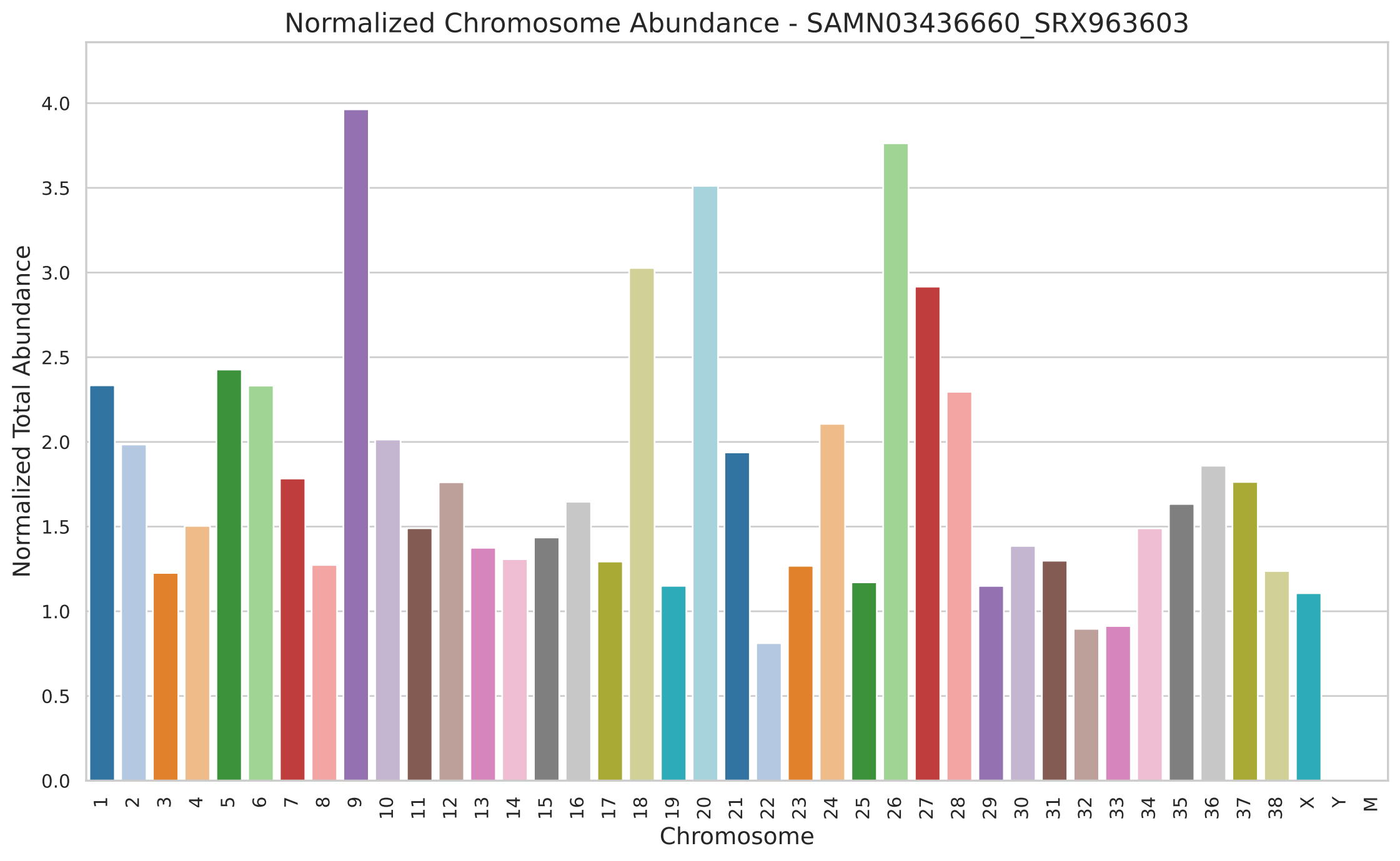

Normalized Chromosome Abundance - SAMN03436684_SRX963628
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

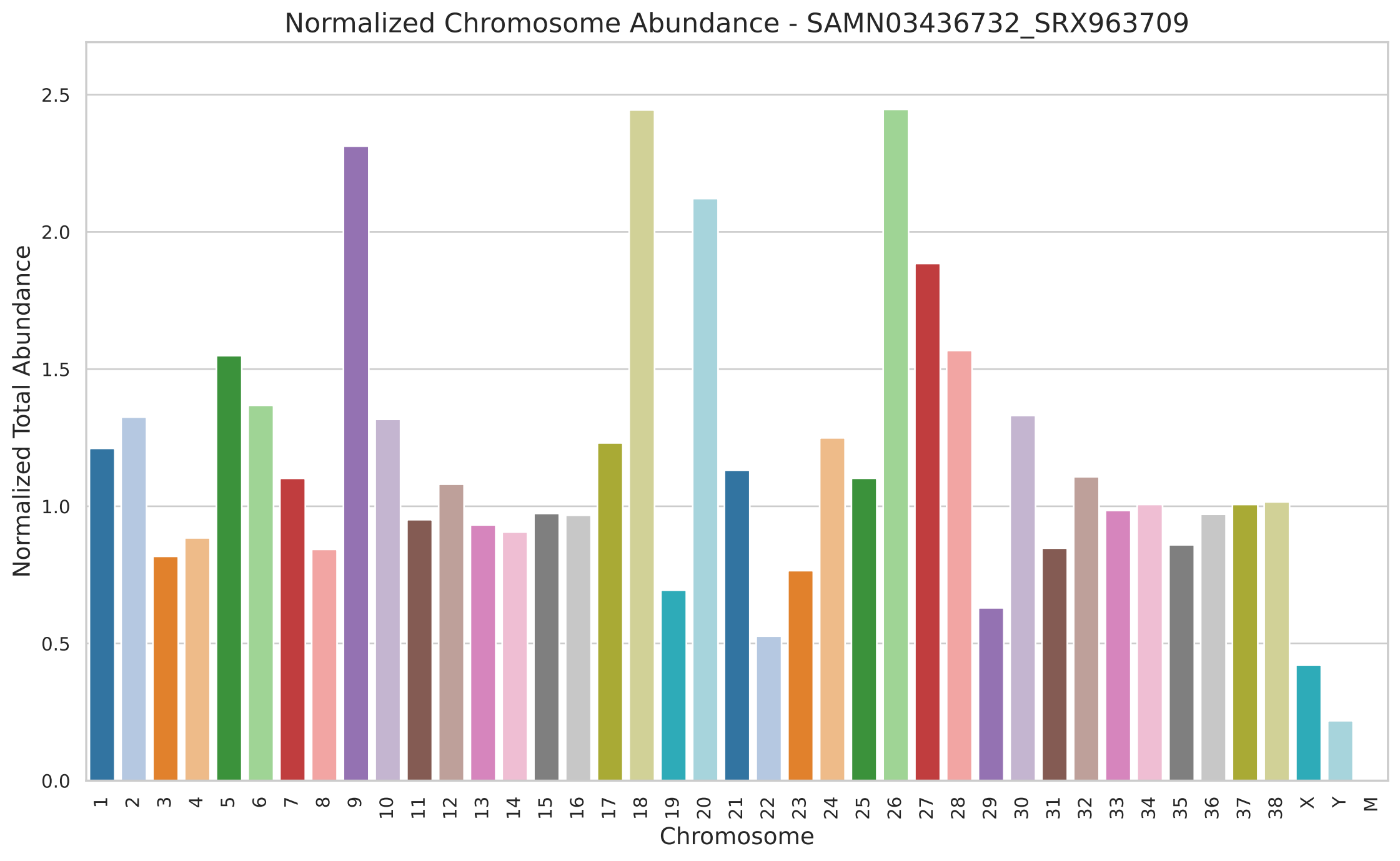

Normalized Chromosome Abundance - SAMN03436730_SRX963708
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

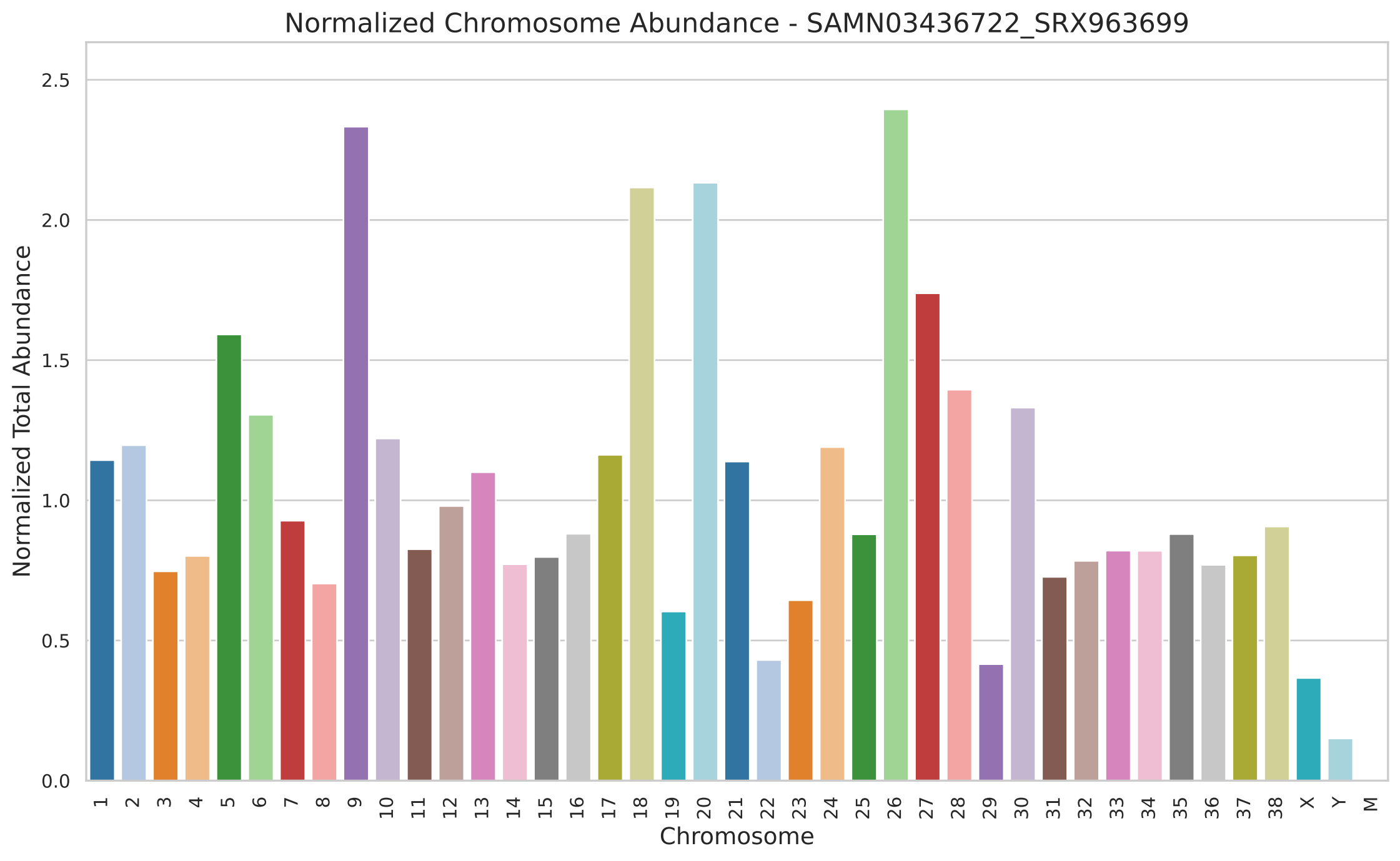

Normalized Chromosome Abundance - SAMN13133751_SRX7061542
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

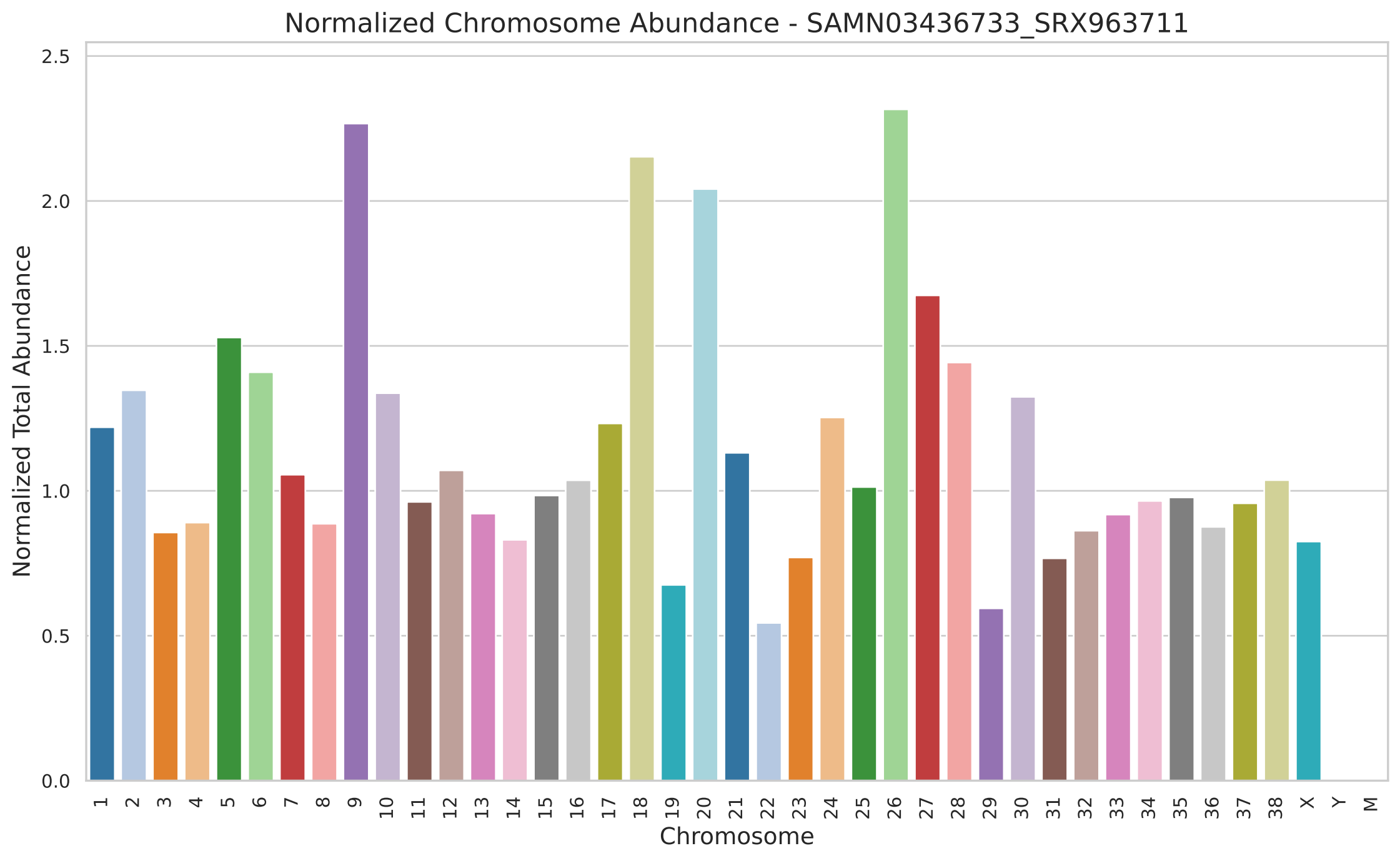

Normalized Chromosome Abundance - SAMN03436810_SRX963773
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

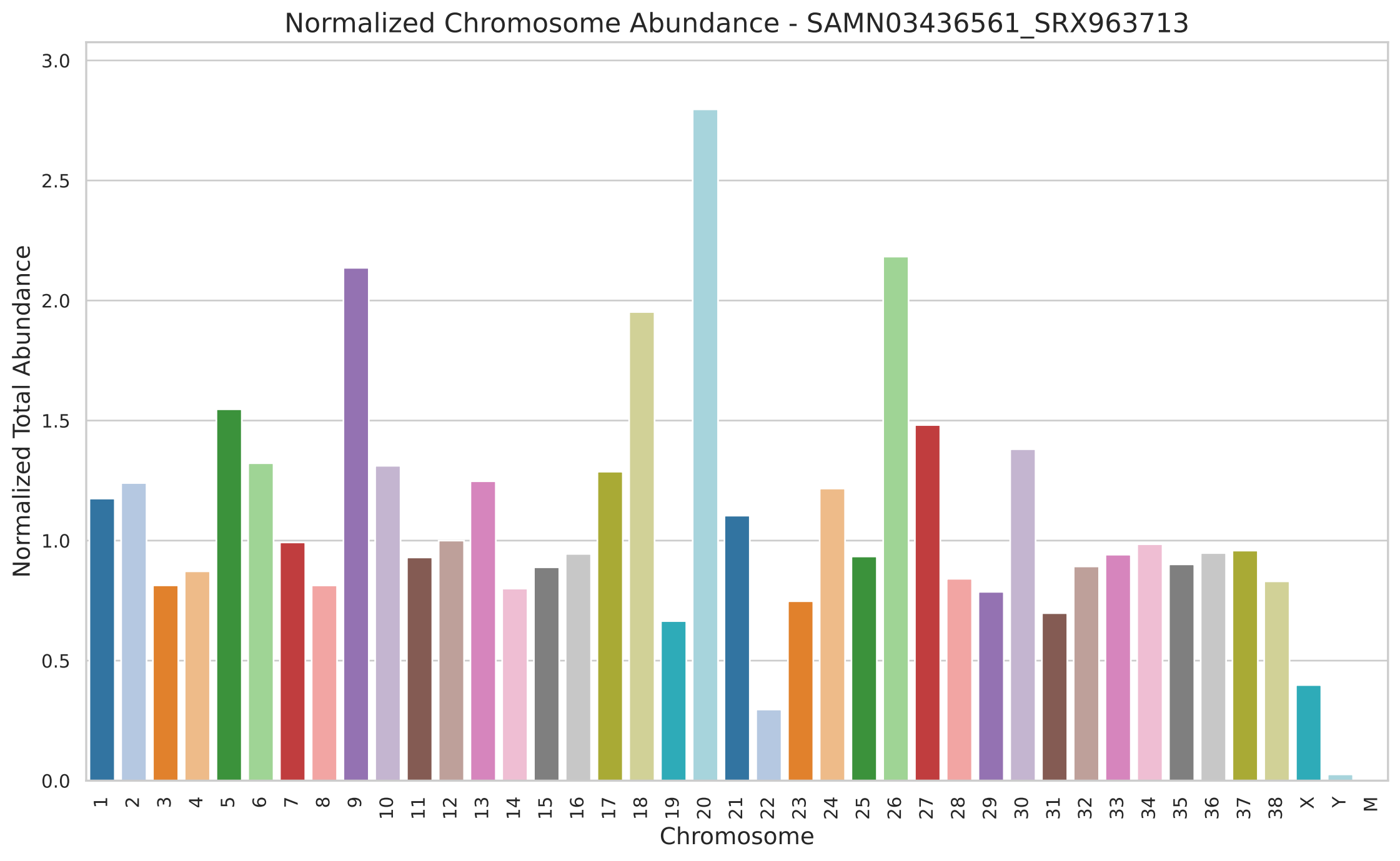

Normalized Chromosome Abundance - SAMN03436681_SRX963624
Normalized Total Abundance
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

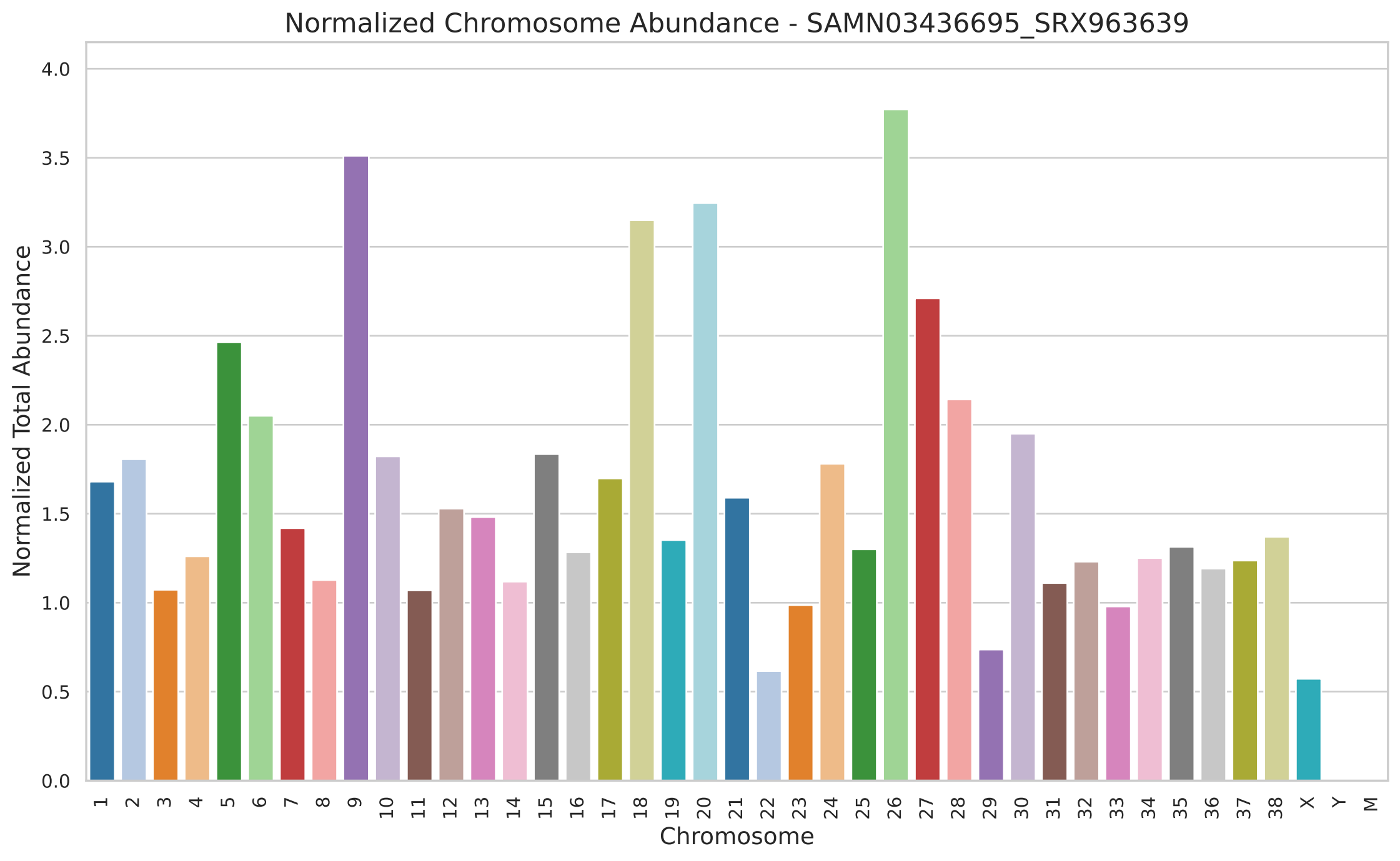

Normalized Chromosome Abundance - SAMN03436660_SRX963603
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

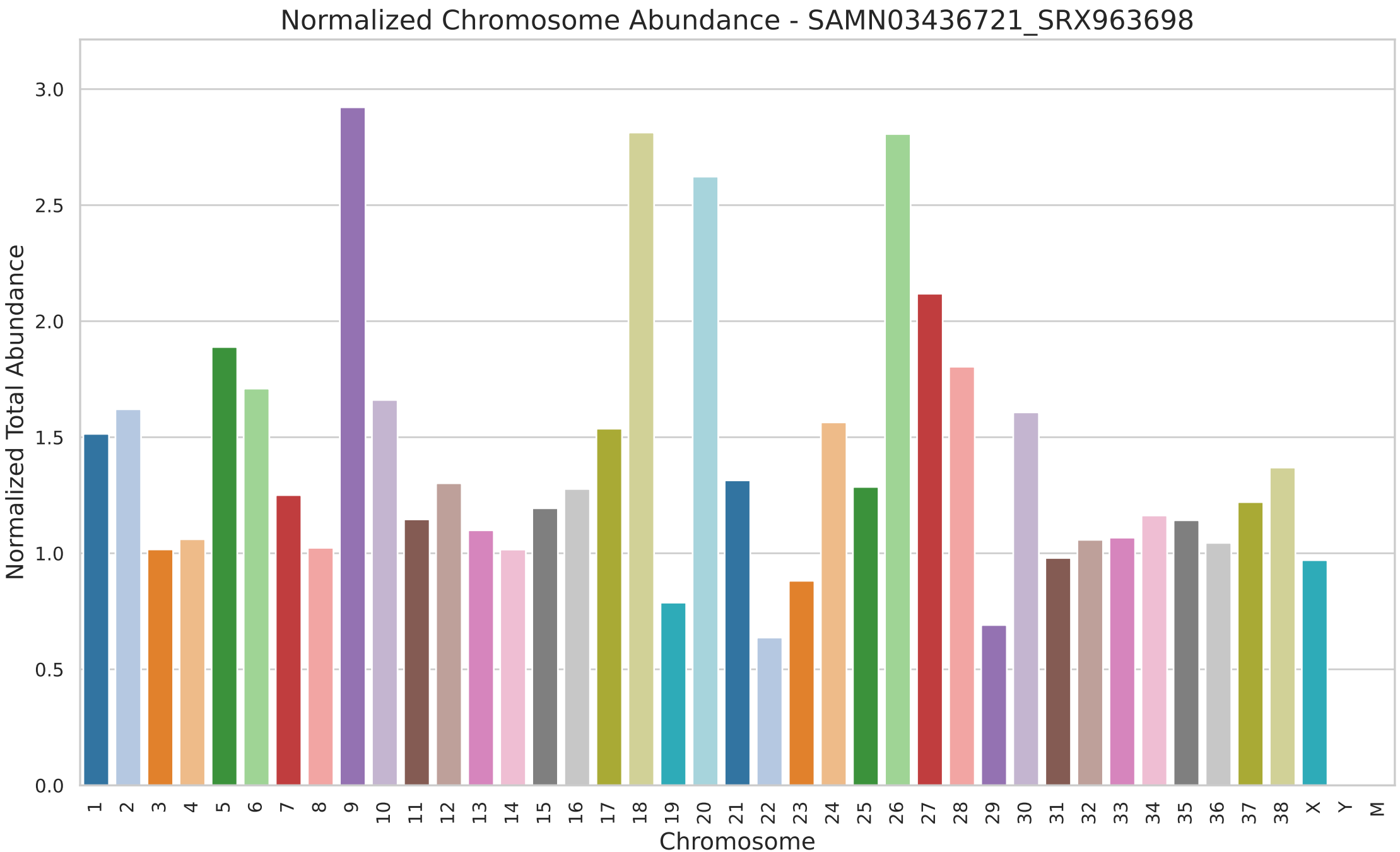

Normalized Chromosome Abundance - SAMN03436732_SRX963709
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

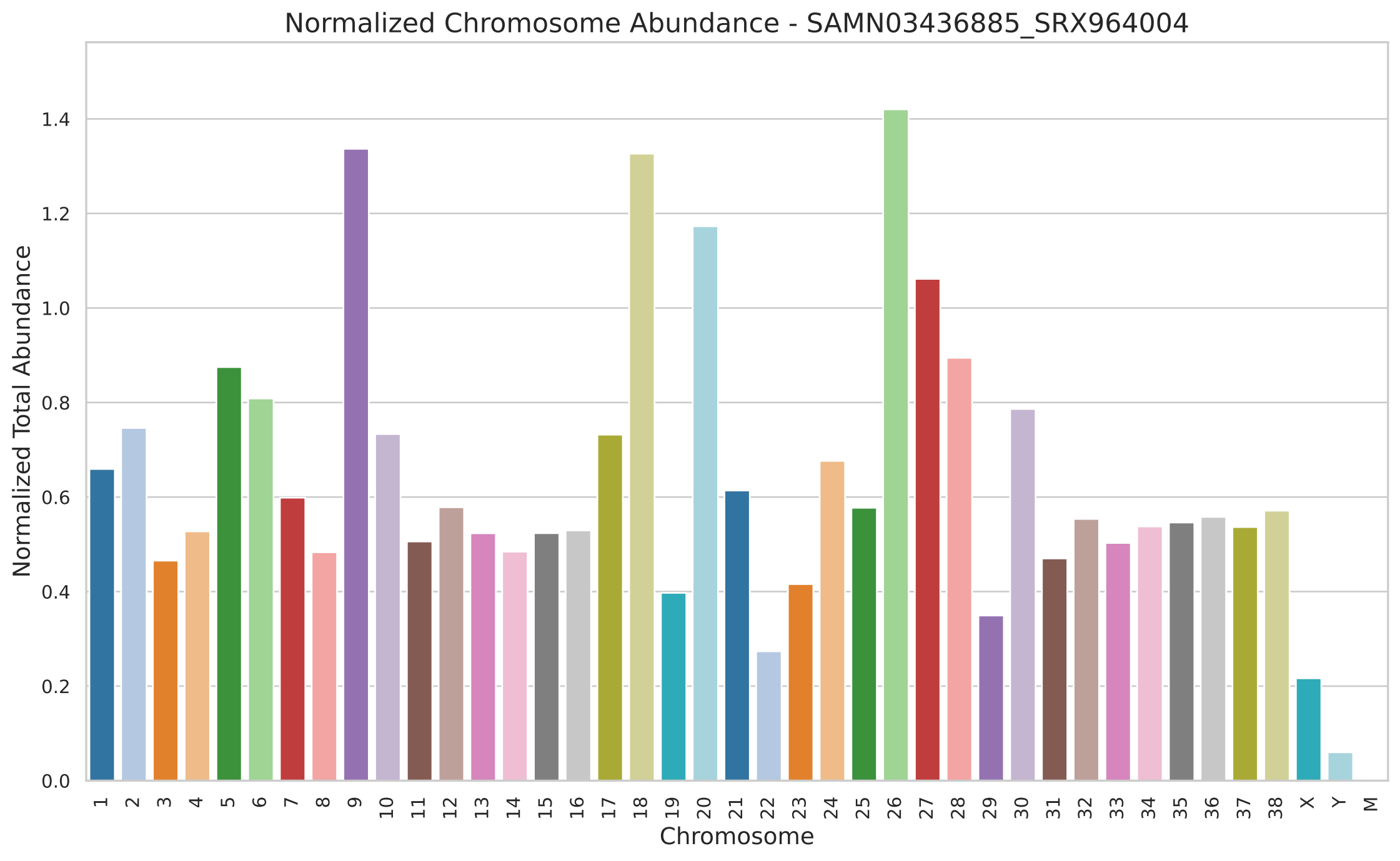

Normalized Chromosome Abundance - SAMN03436722_SRX963699
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

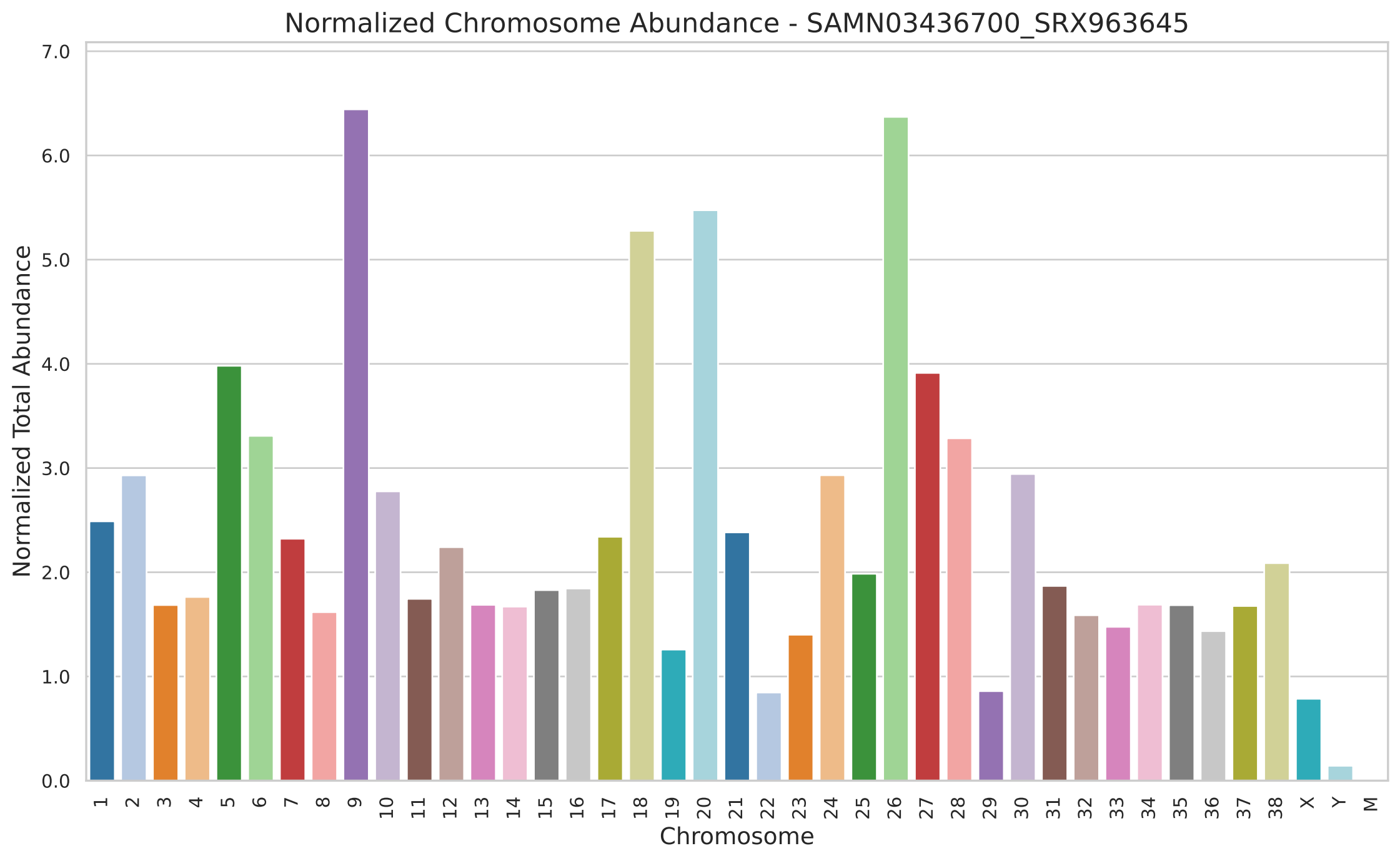

Normalized Chromosome Abundance - SAMN03436733_SRX963711
Normalized Total Abundance
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

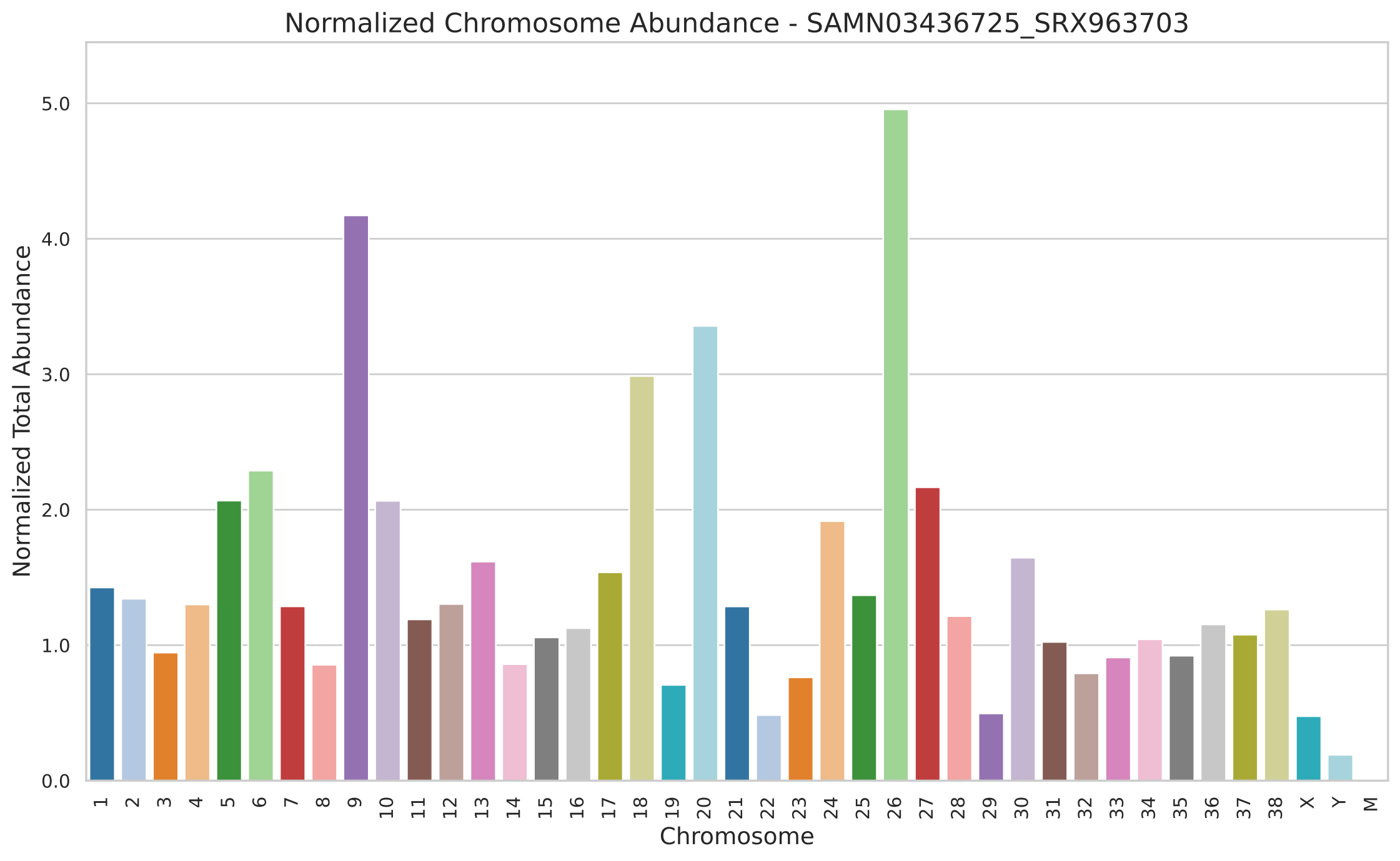

Normalized Chromosome Abundance - SAMN03436561_SRX963713
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

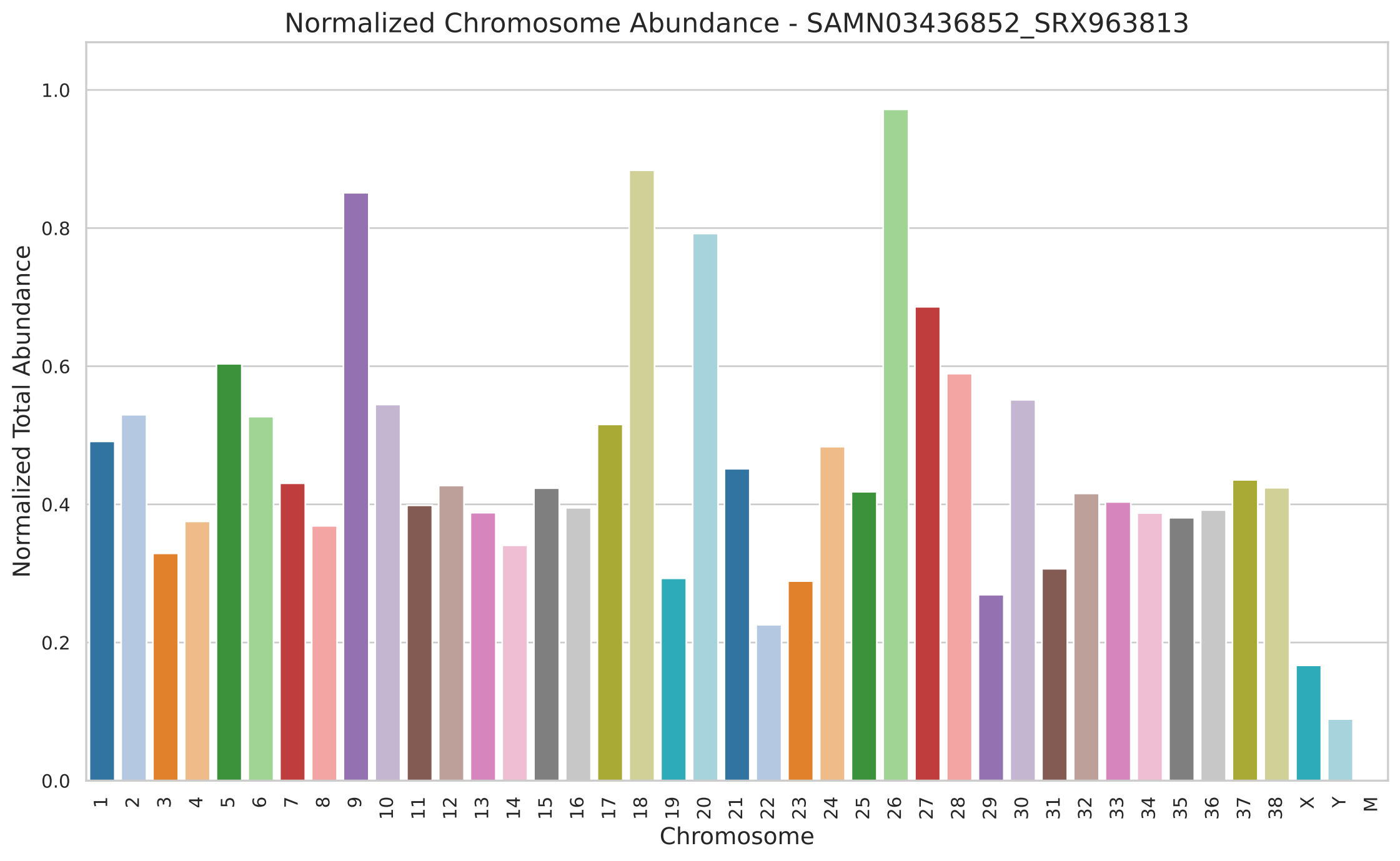

Normalized Chromosome Abundance - SAMN03436695_SRX963639
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

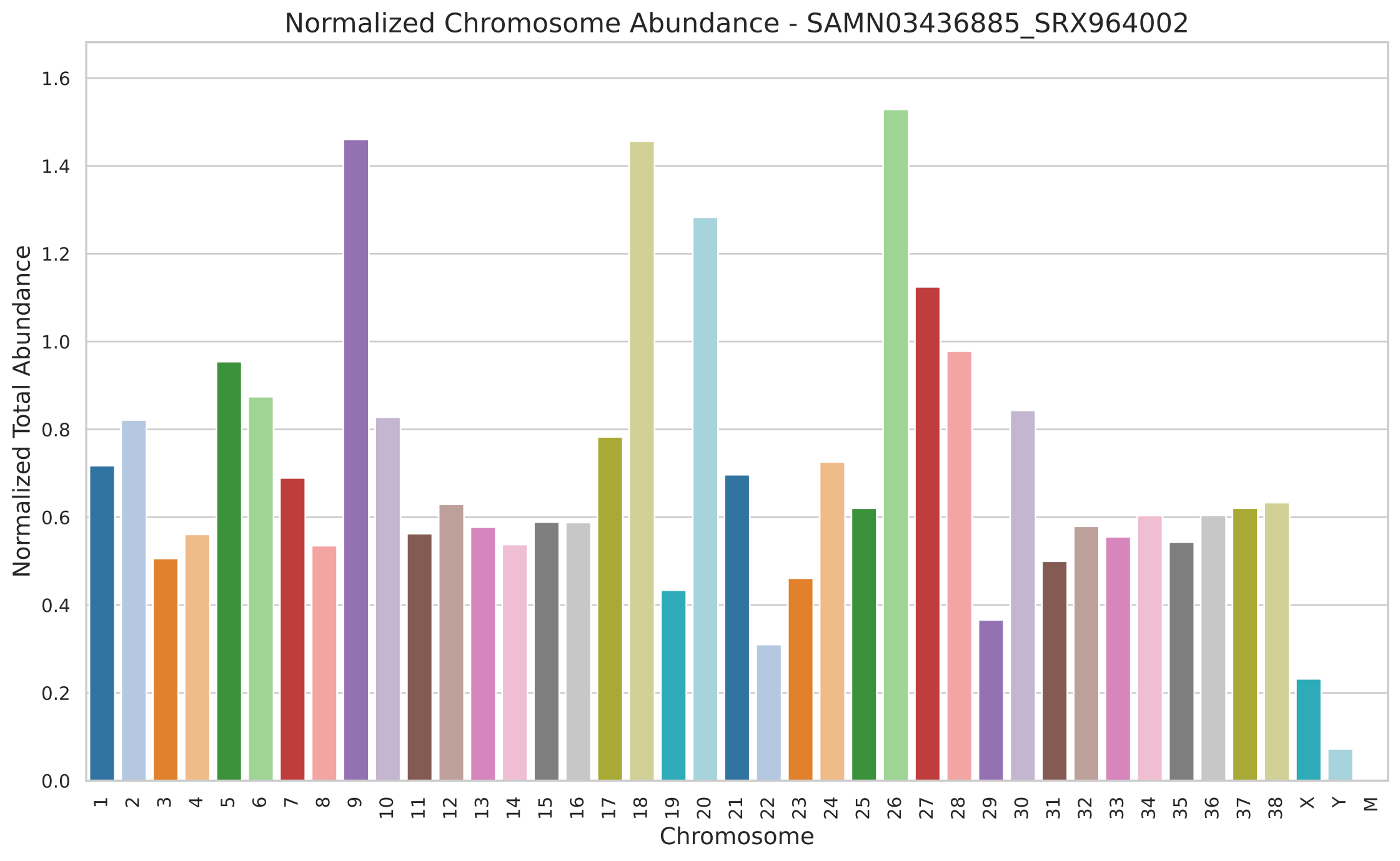

Normalized Chromosome Abundance - SAMN03436721_SRX963698
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

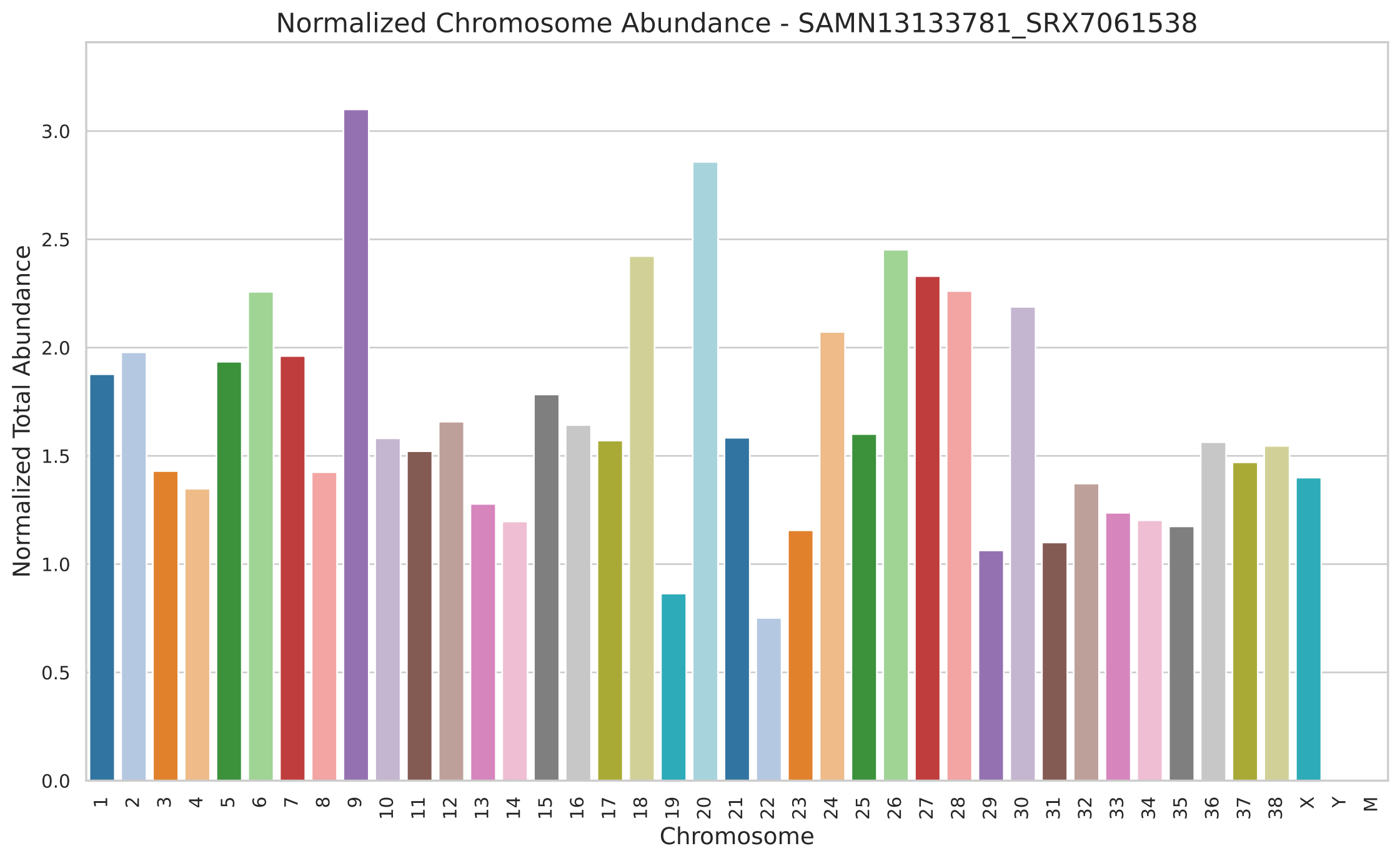

Normalized Chromosome Abundance - SAMN03436885_SRX964004
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

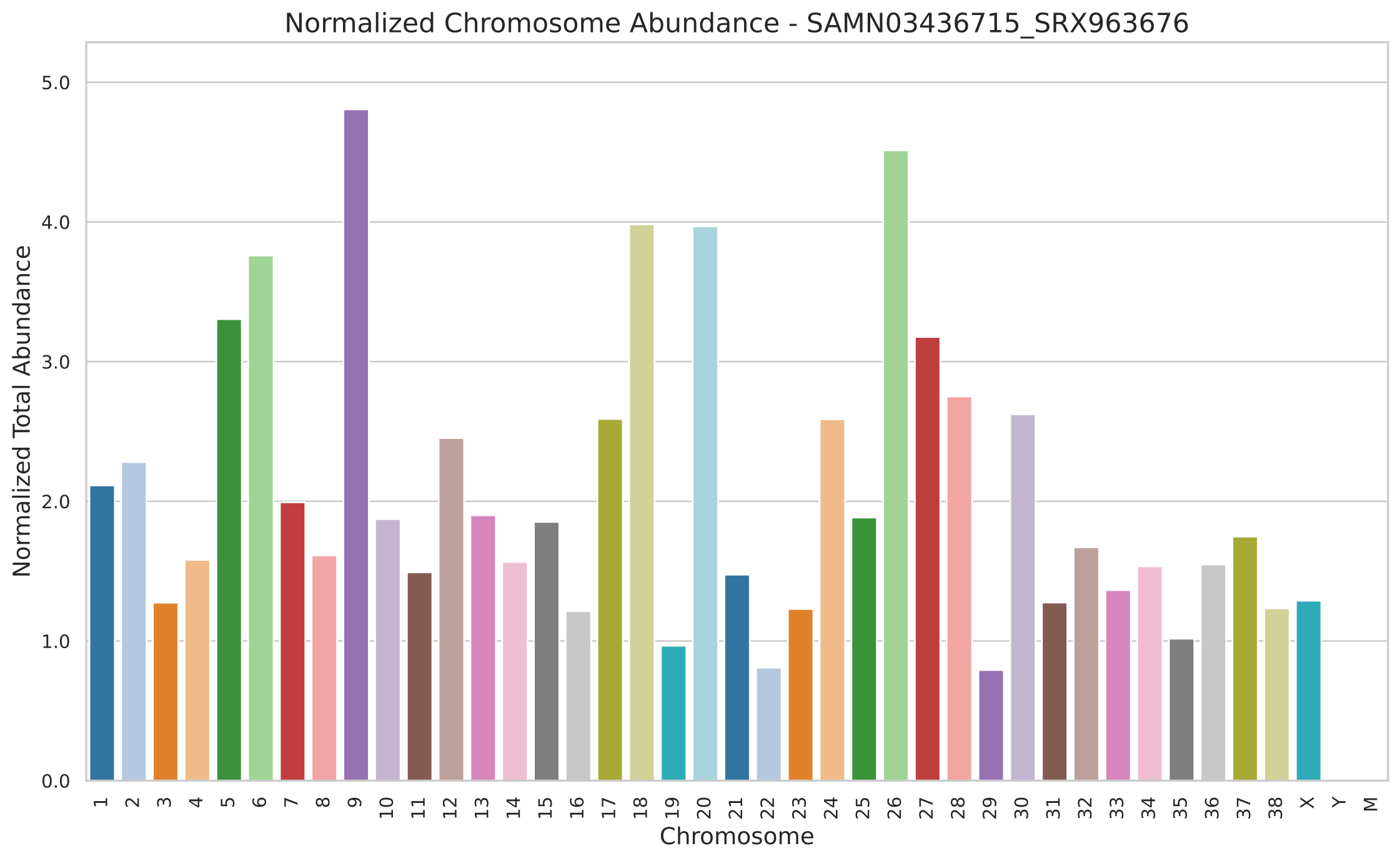

Normalized Chromosome Abundance - SAMN03436700_SRX963645
Normalized Total Abundance
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

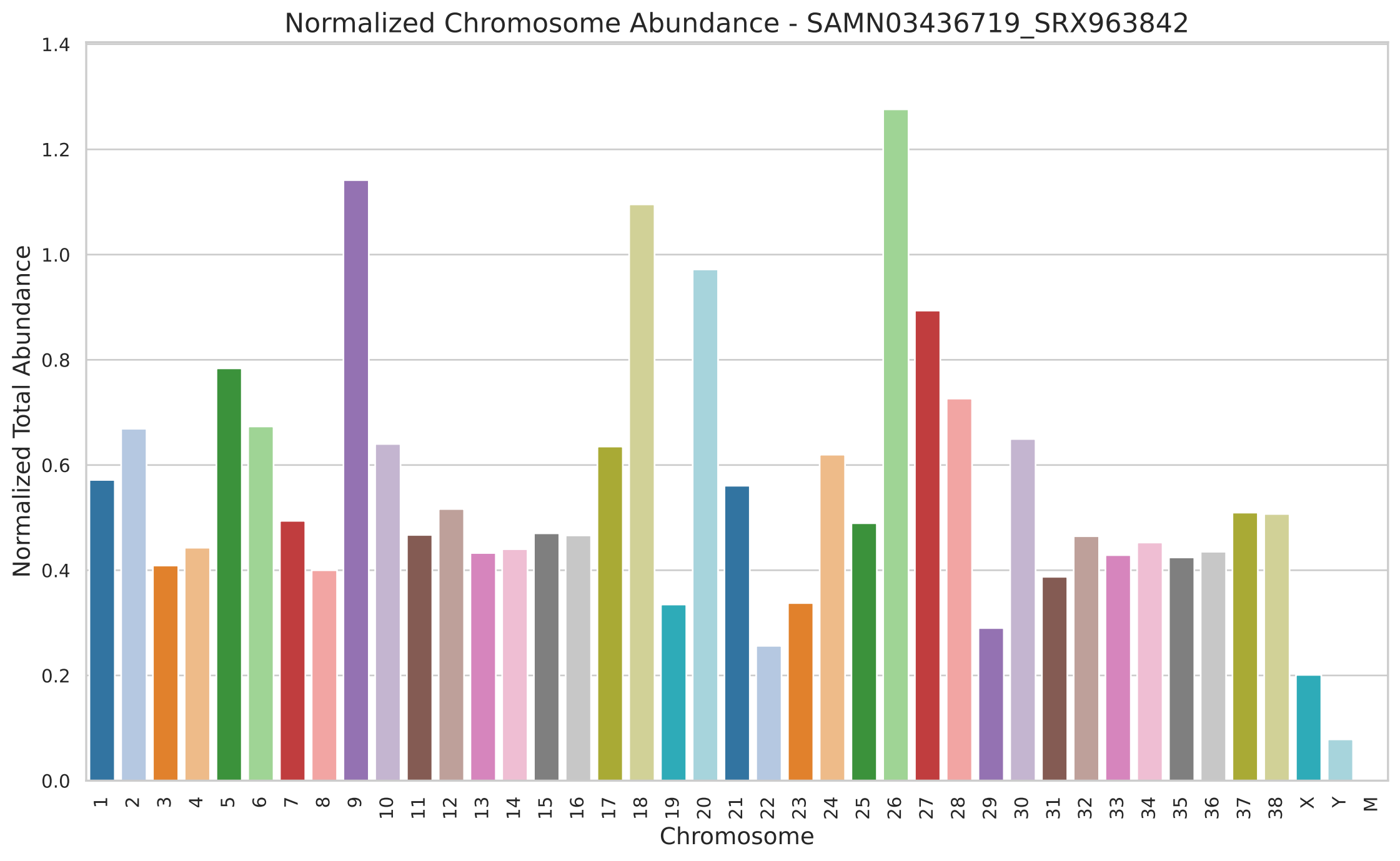

Normalized Chromosome Abundance - SAMN03436725_SRX963703
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

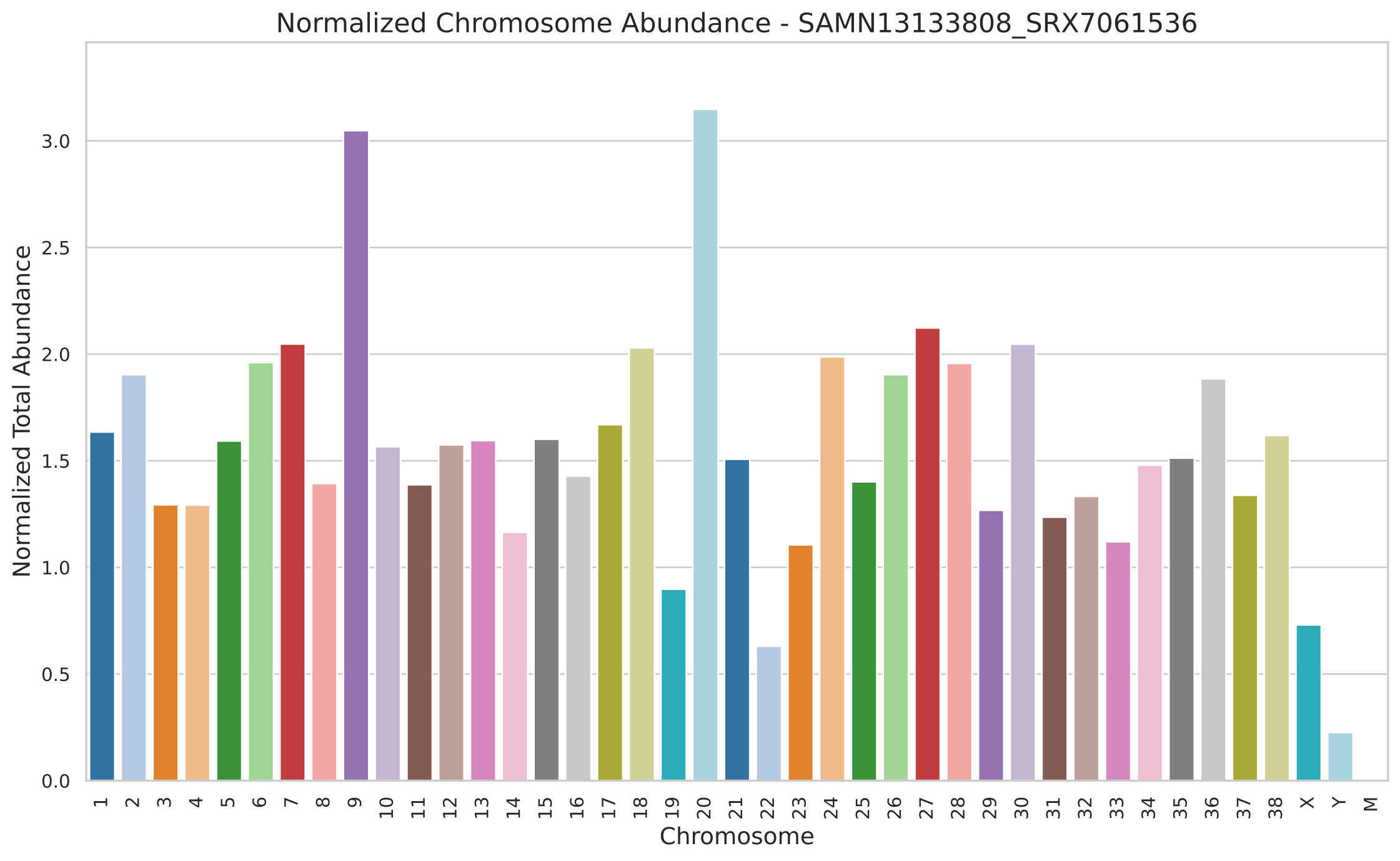

Normalized Chromosome Abundance - SAMN03436852_SRX963813
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

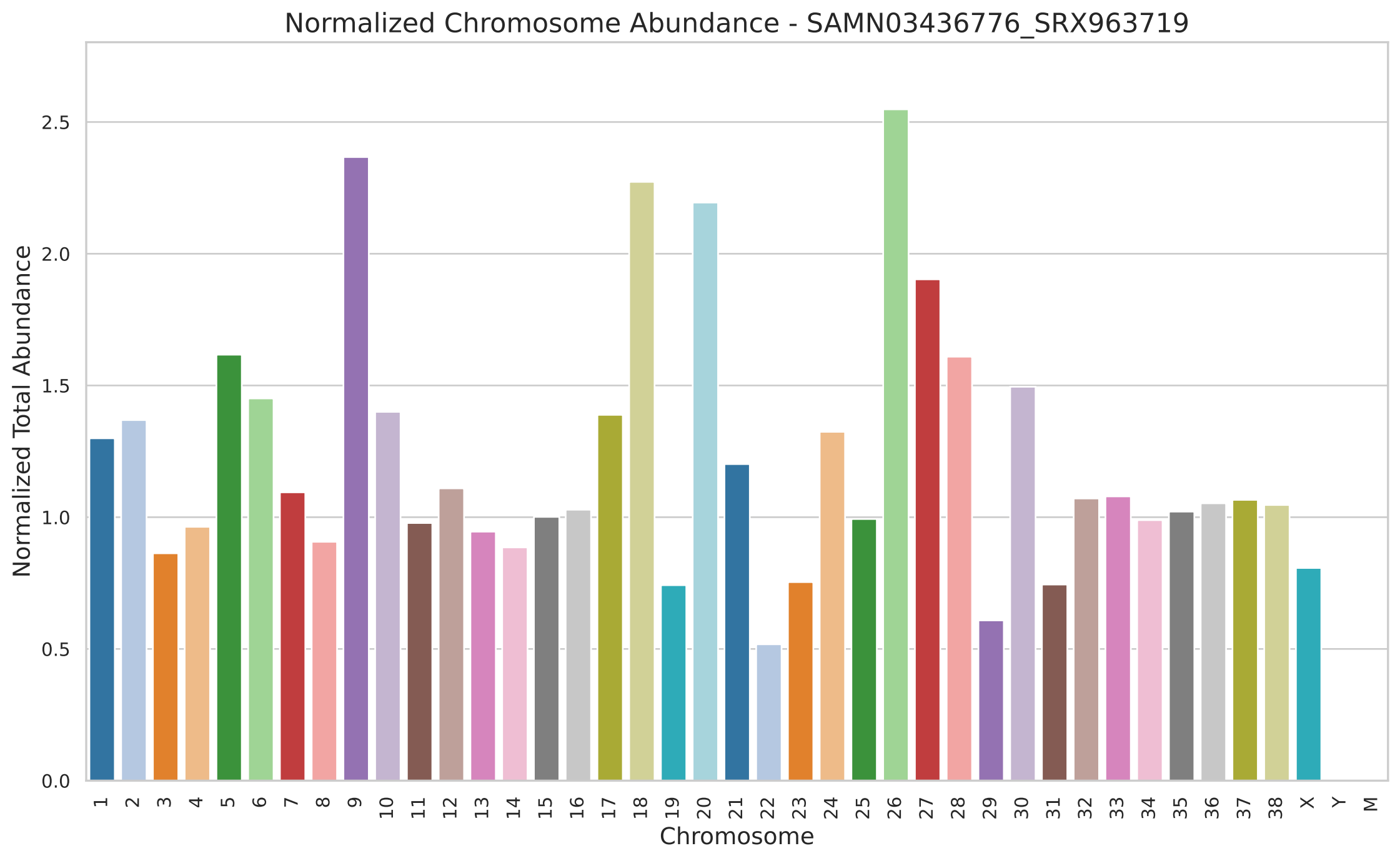

Normalized Chromosome Abundance - SAMN03436885_SRX964002
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

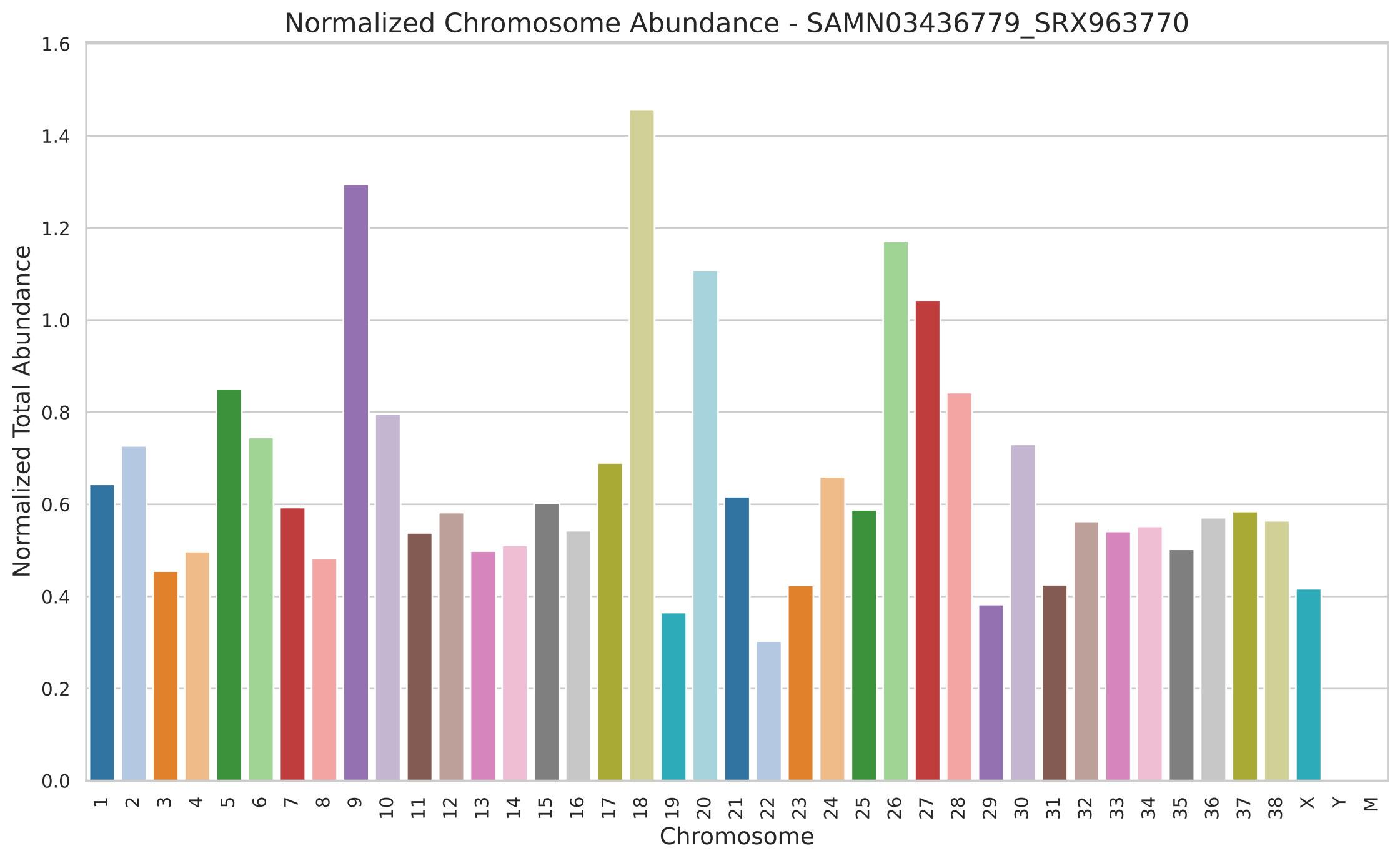

Normalized Chromosome Abundance - SAMN13133781_SRX7061538
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

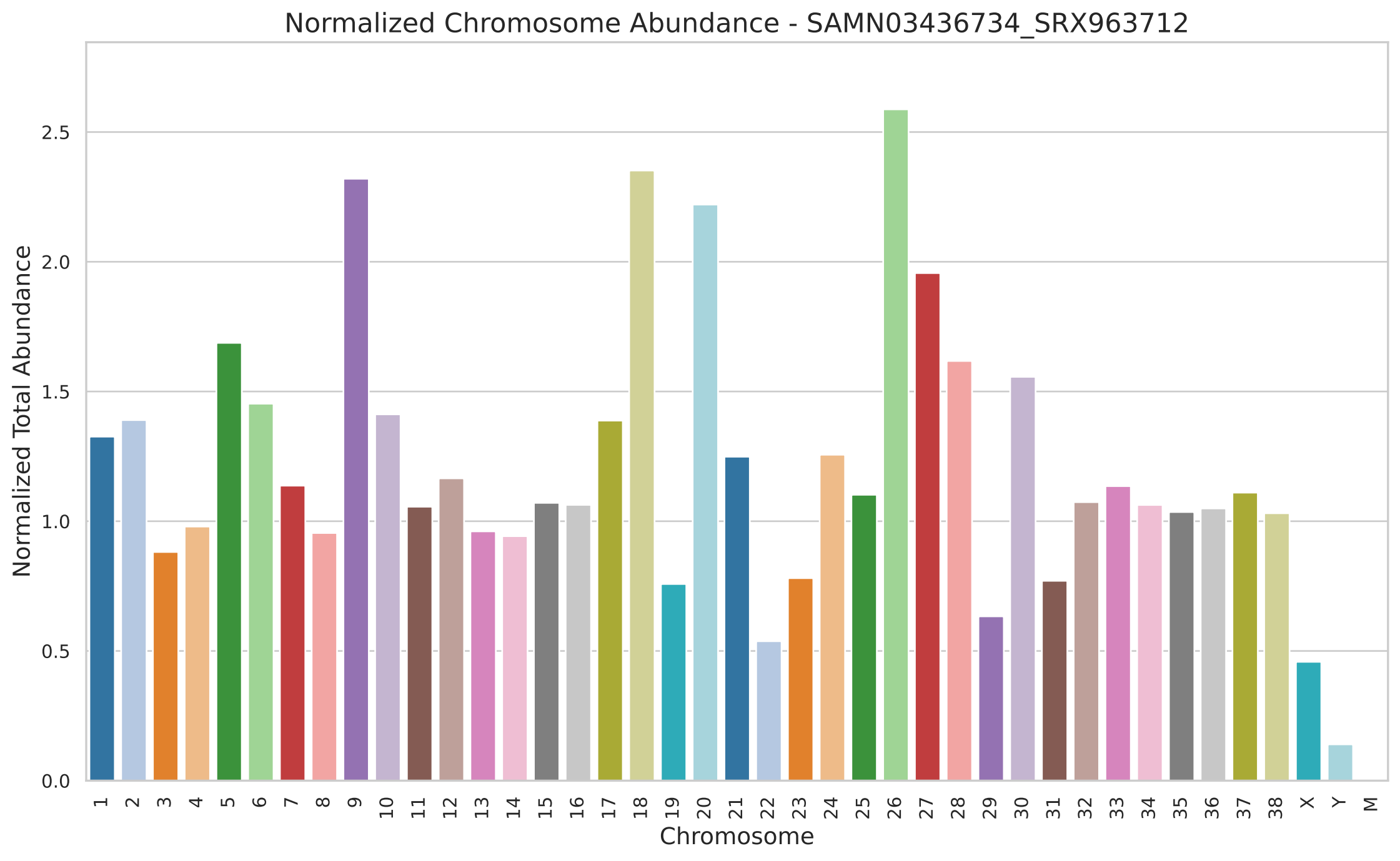

Normalized Chromosome Abundance - SAMN03436715_SRX963676
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

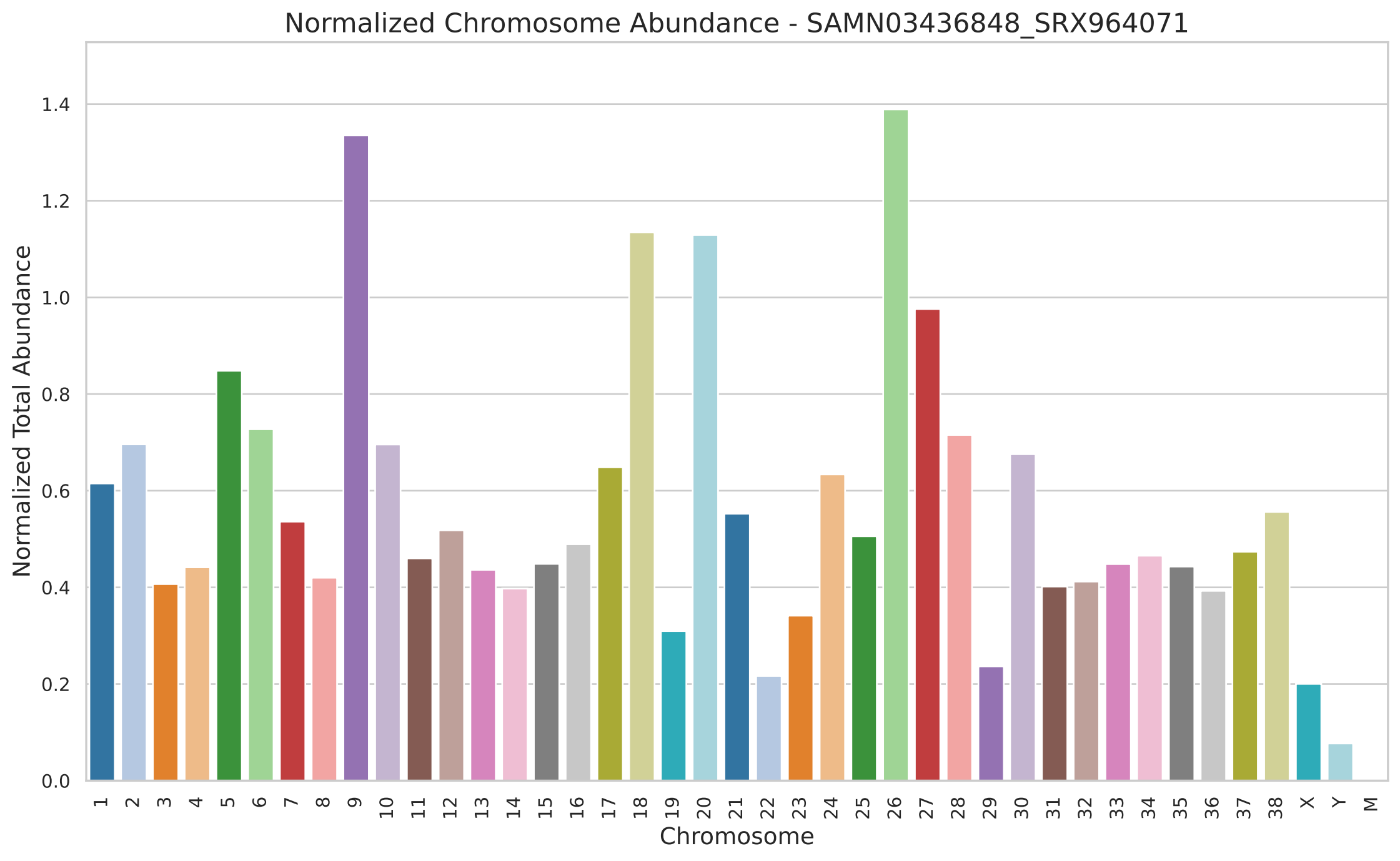

Normalized Chromosome Abundance - SAMN03436719_SRX963842
Normalized Total Abundance
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

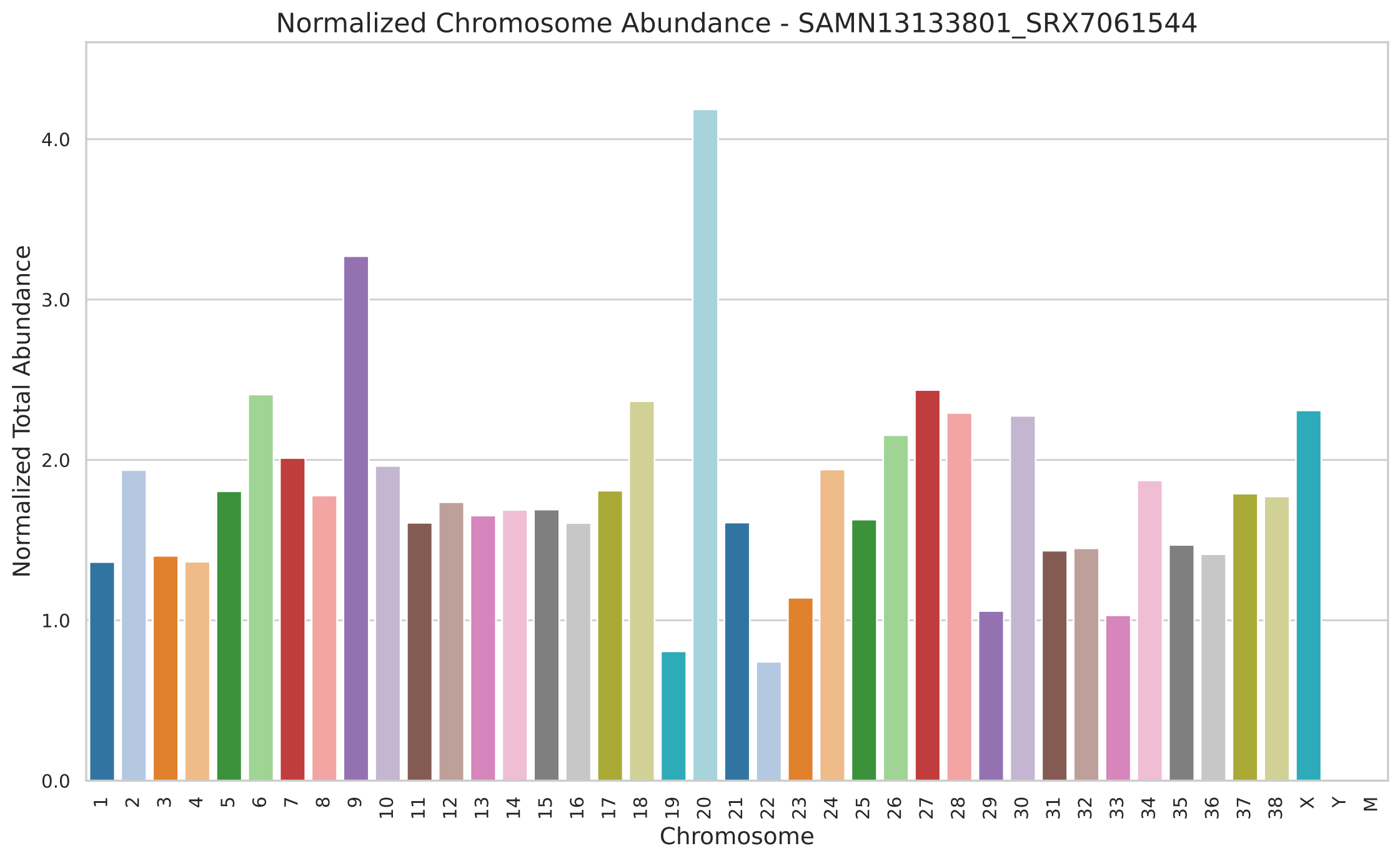

Normalized Chromosome Abundance - SAMN13133808_SRX7061536
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

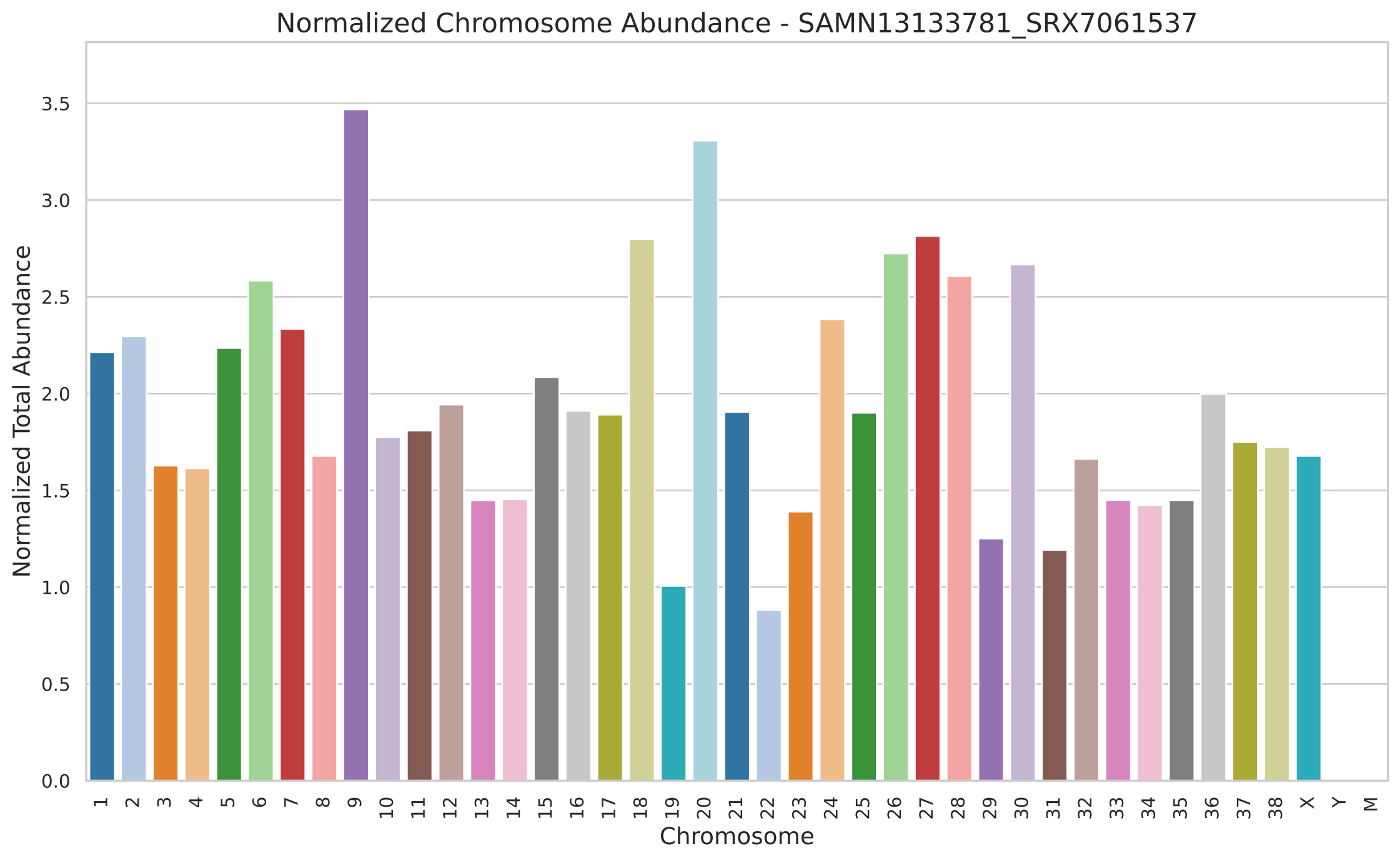

Normalized Chromosome Abundance - SAMN03436776_SRX963719
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

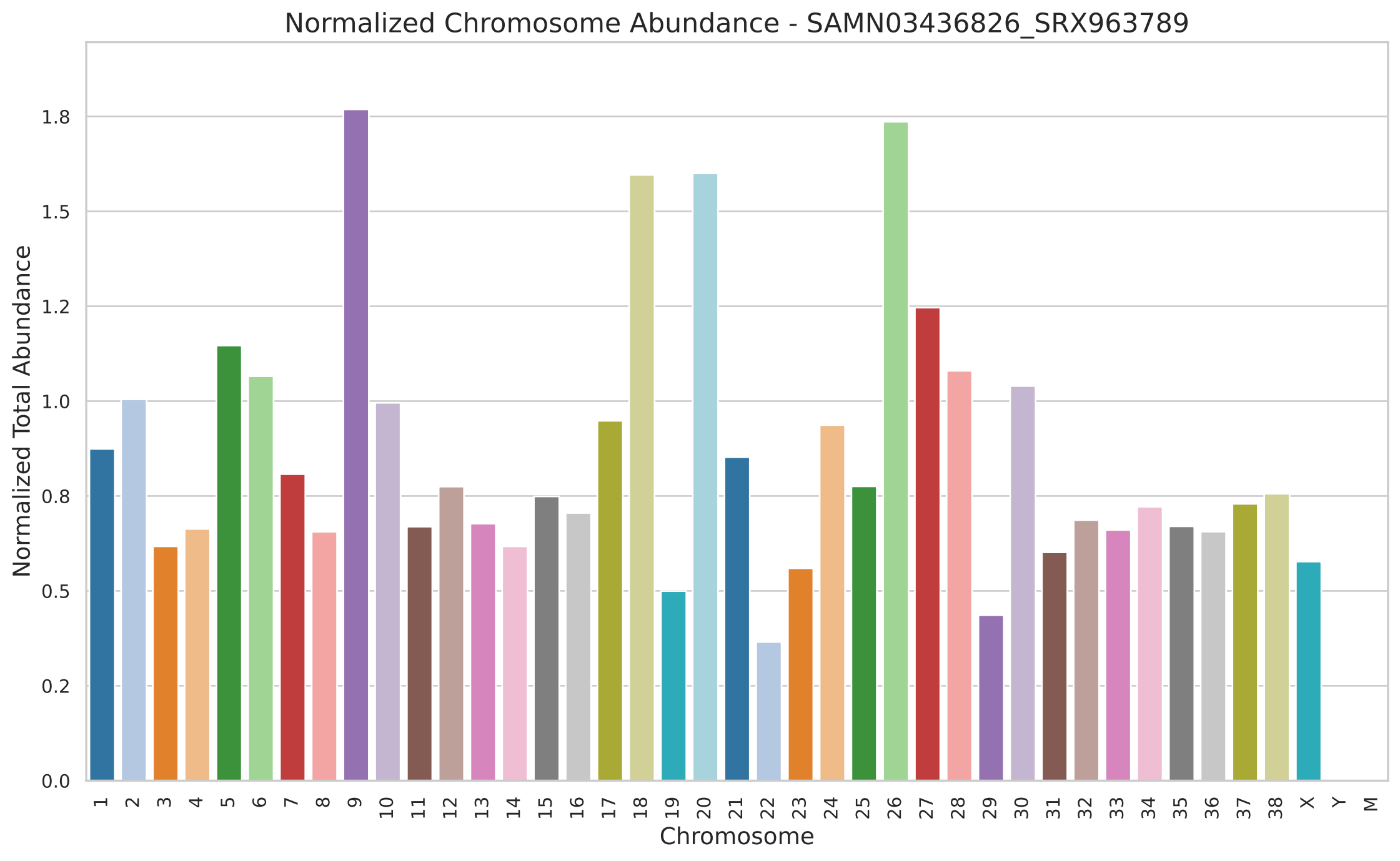

Normalized Chromosome Abundance - SAMN03436779_SRX963770
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

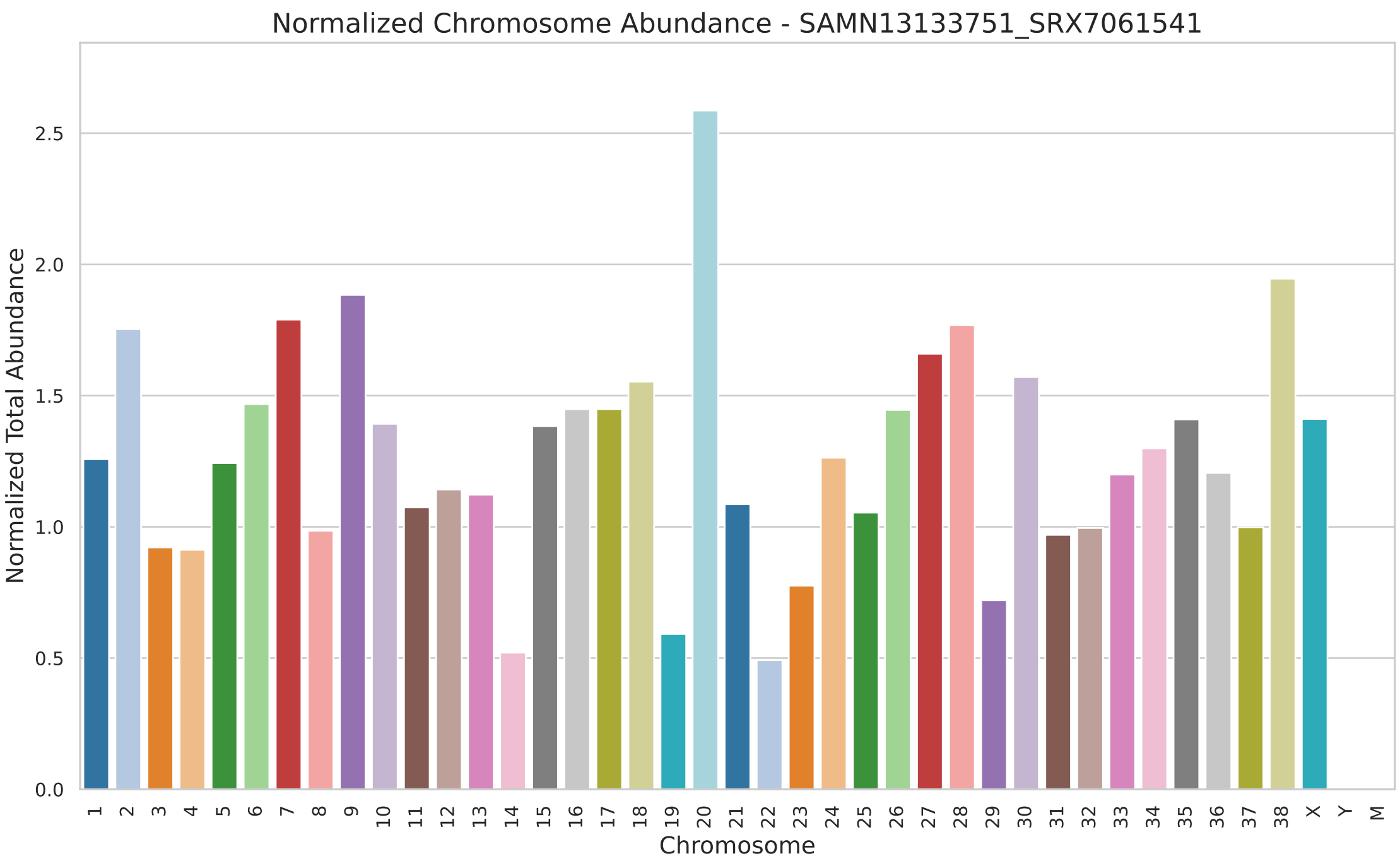

Normalized Chromosome Abundance - SAMN03436734_SRX963712
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

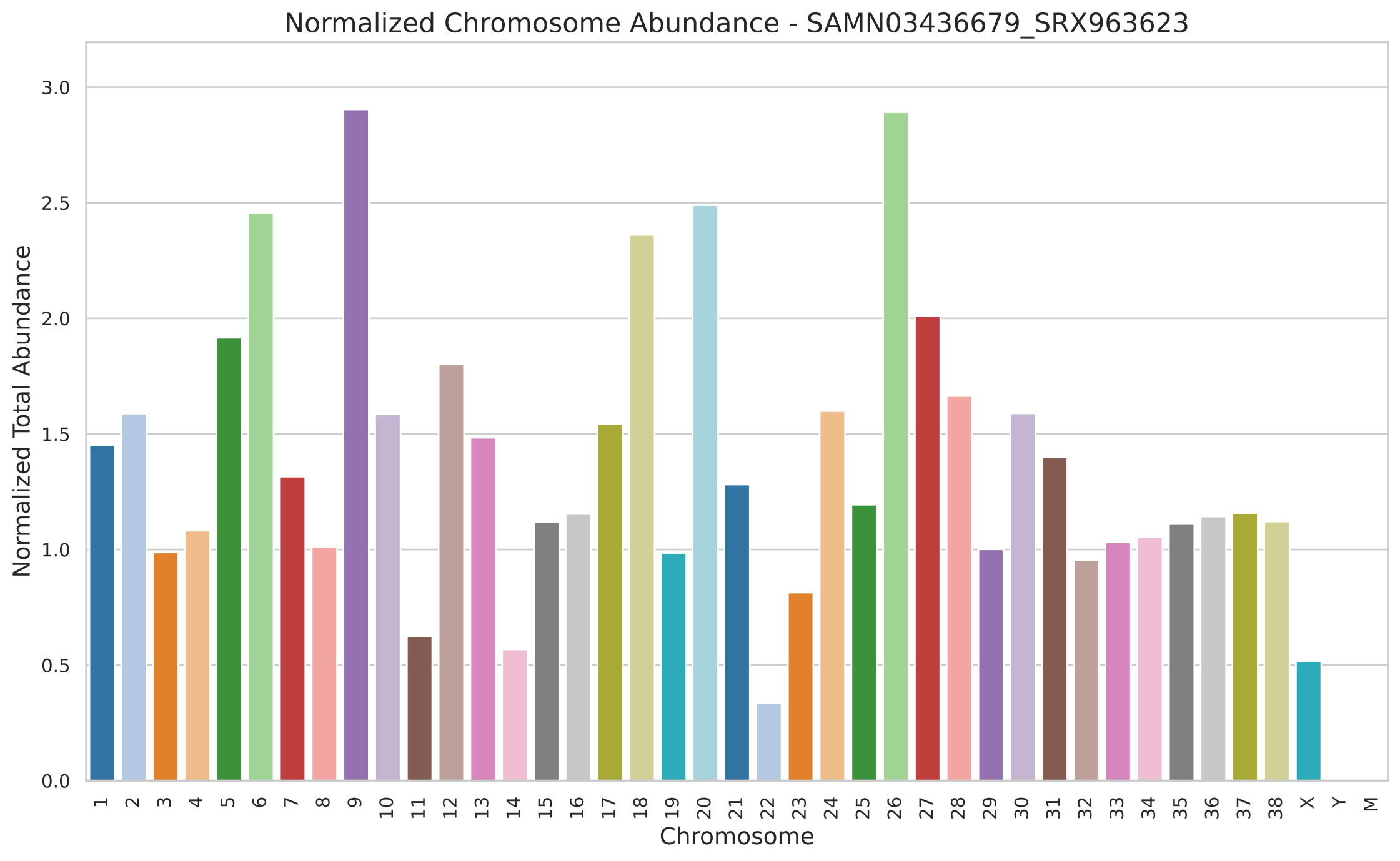

Normalized Chromosome Abundance - SAMN03436848_SRX964071
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

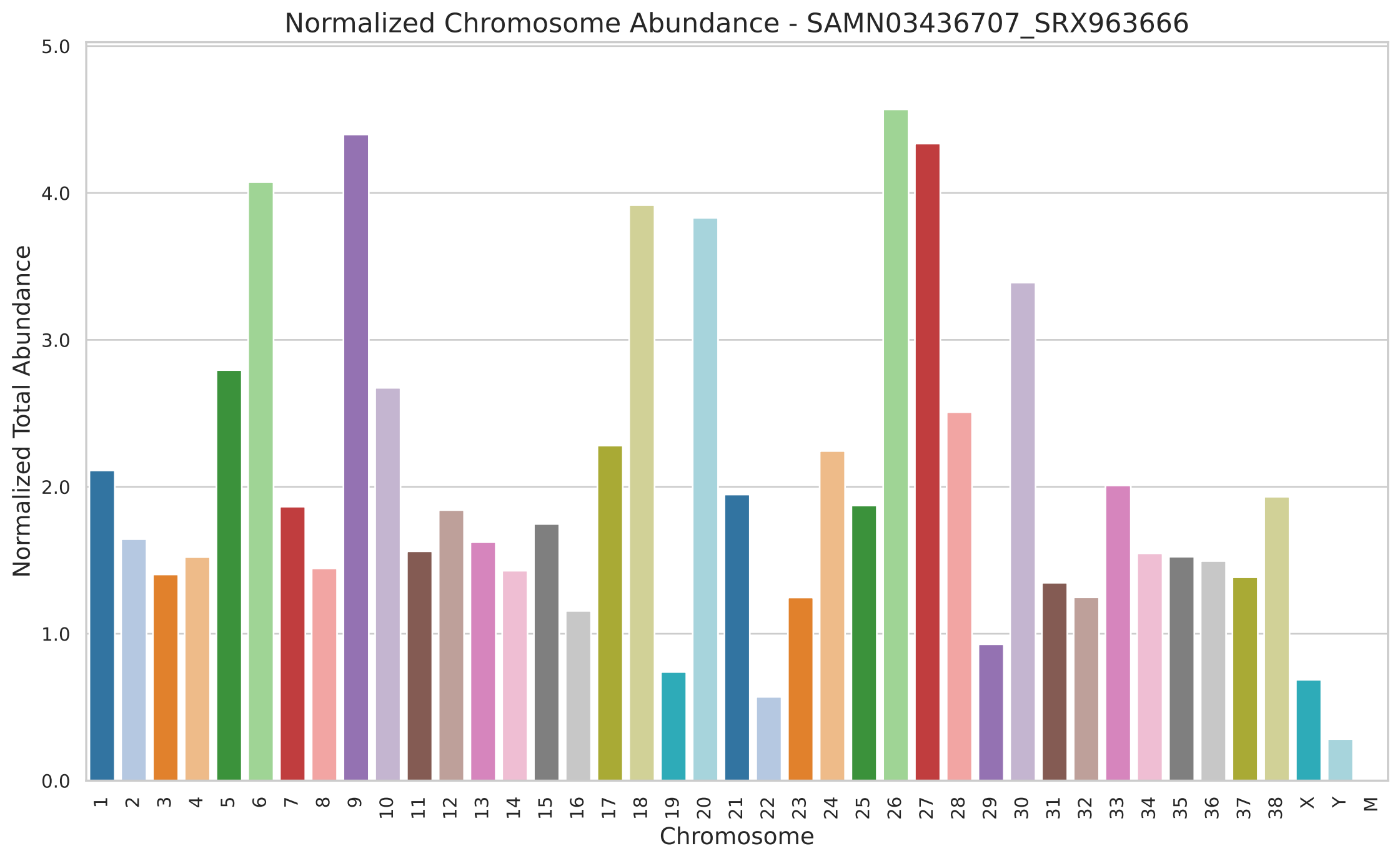

Normalized Chromosome Abundance - SAMN13133801_SRX7061544
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

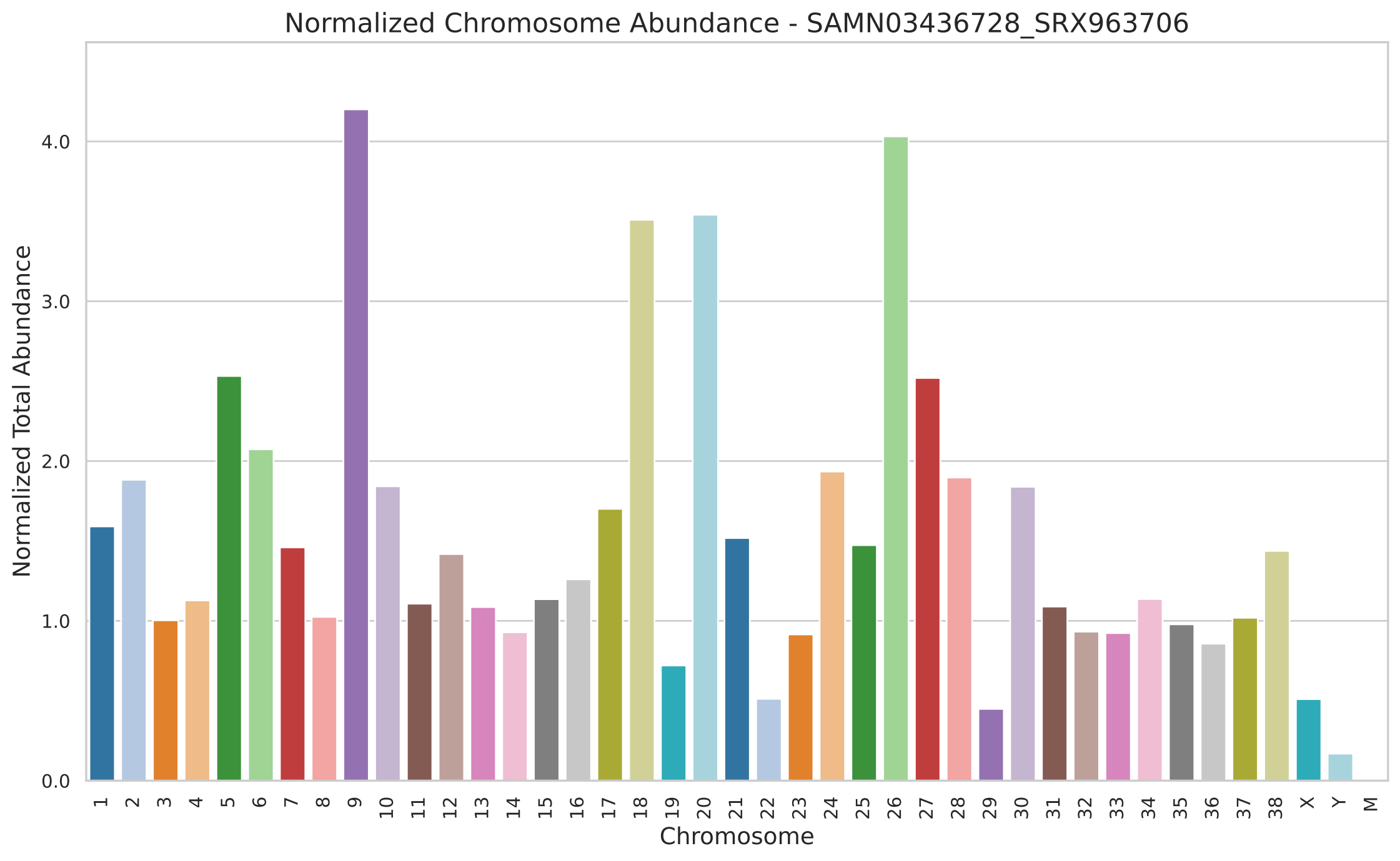

Normalized Chromosome Abundance - SAMN13133781_SRX7061537
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

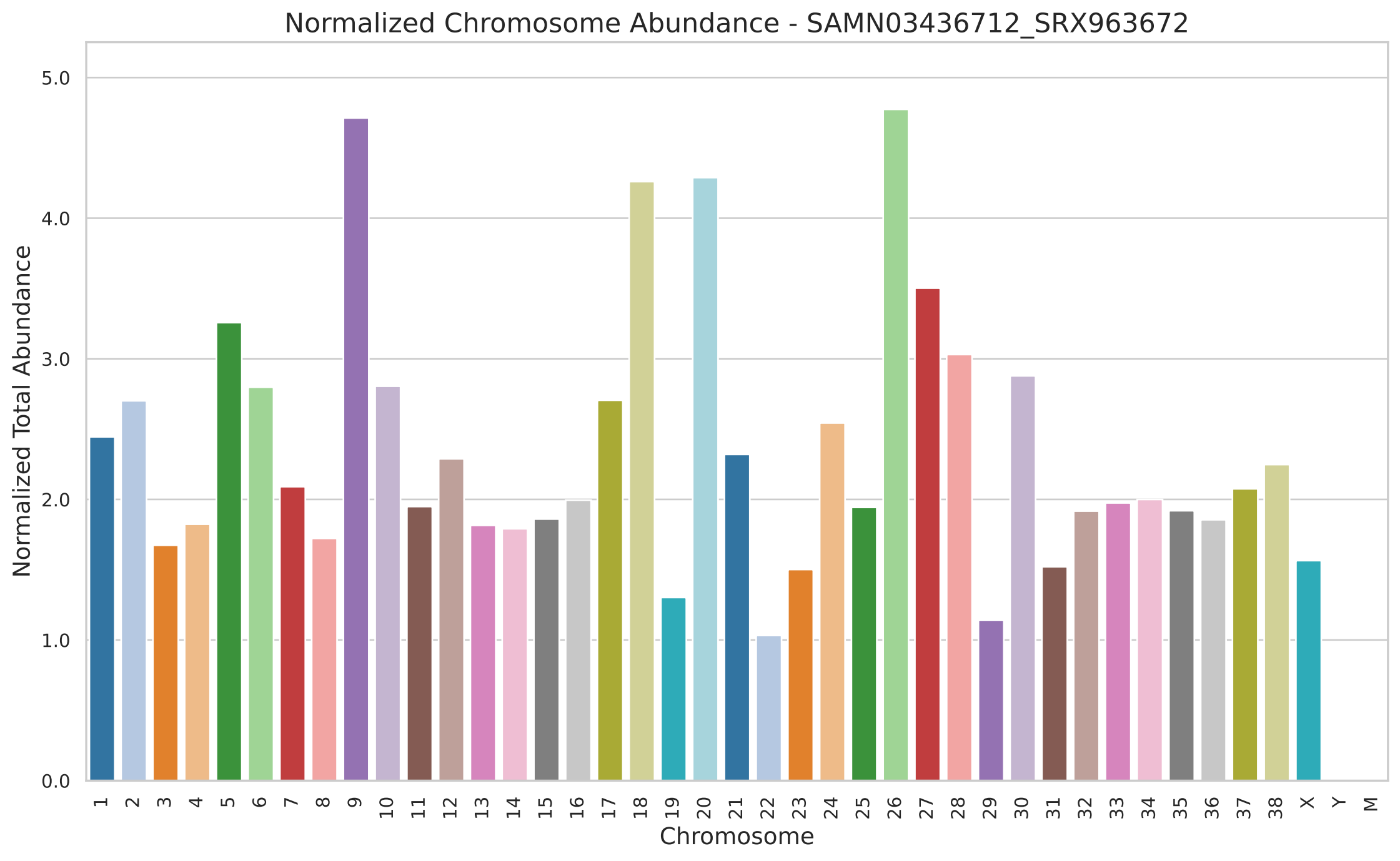

Normalized Chromosome Abundance - SAMN03436826_SRX963789
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

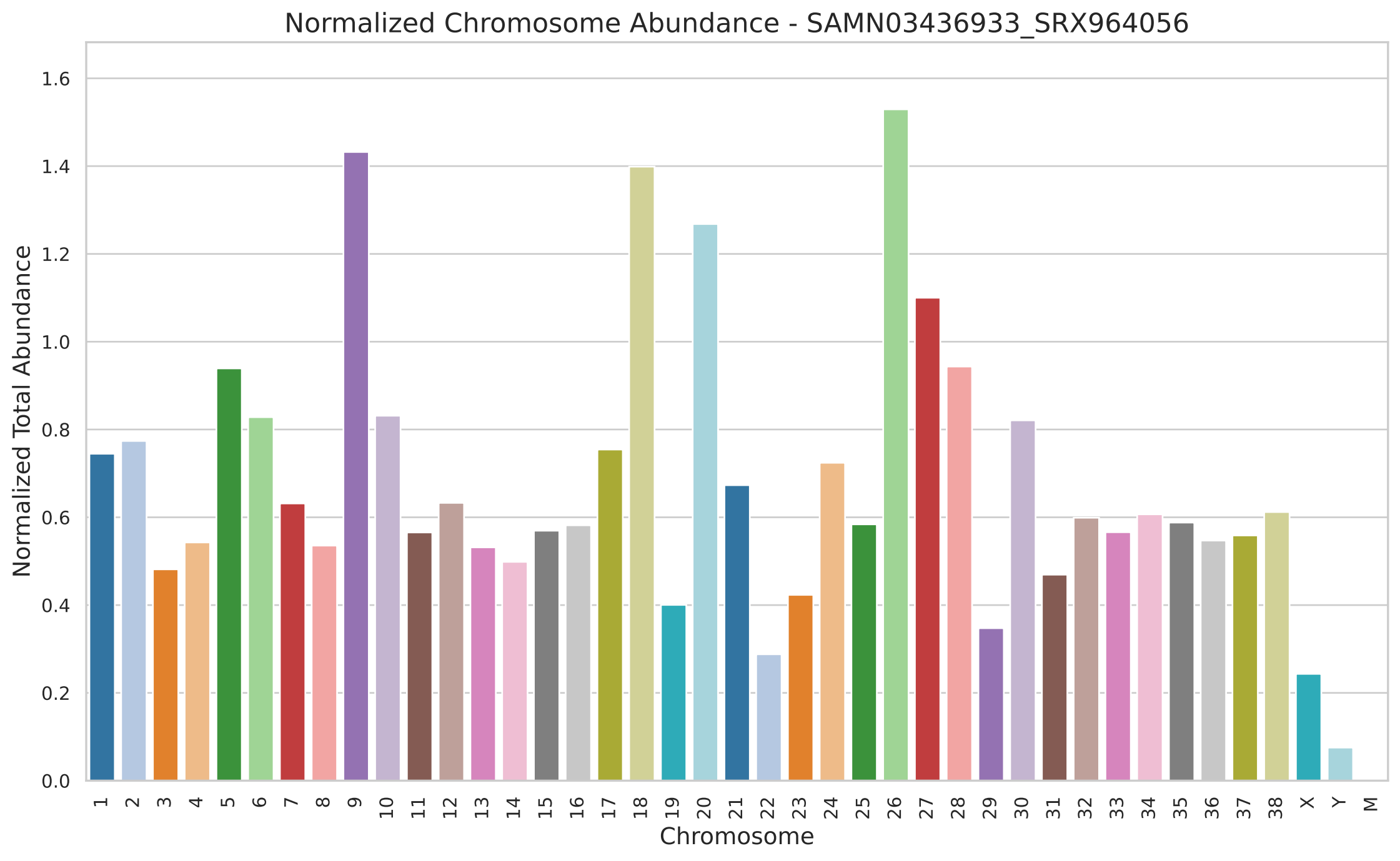

Normalized Chromosome Abundance - SAMN13133751_SRX7061541
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

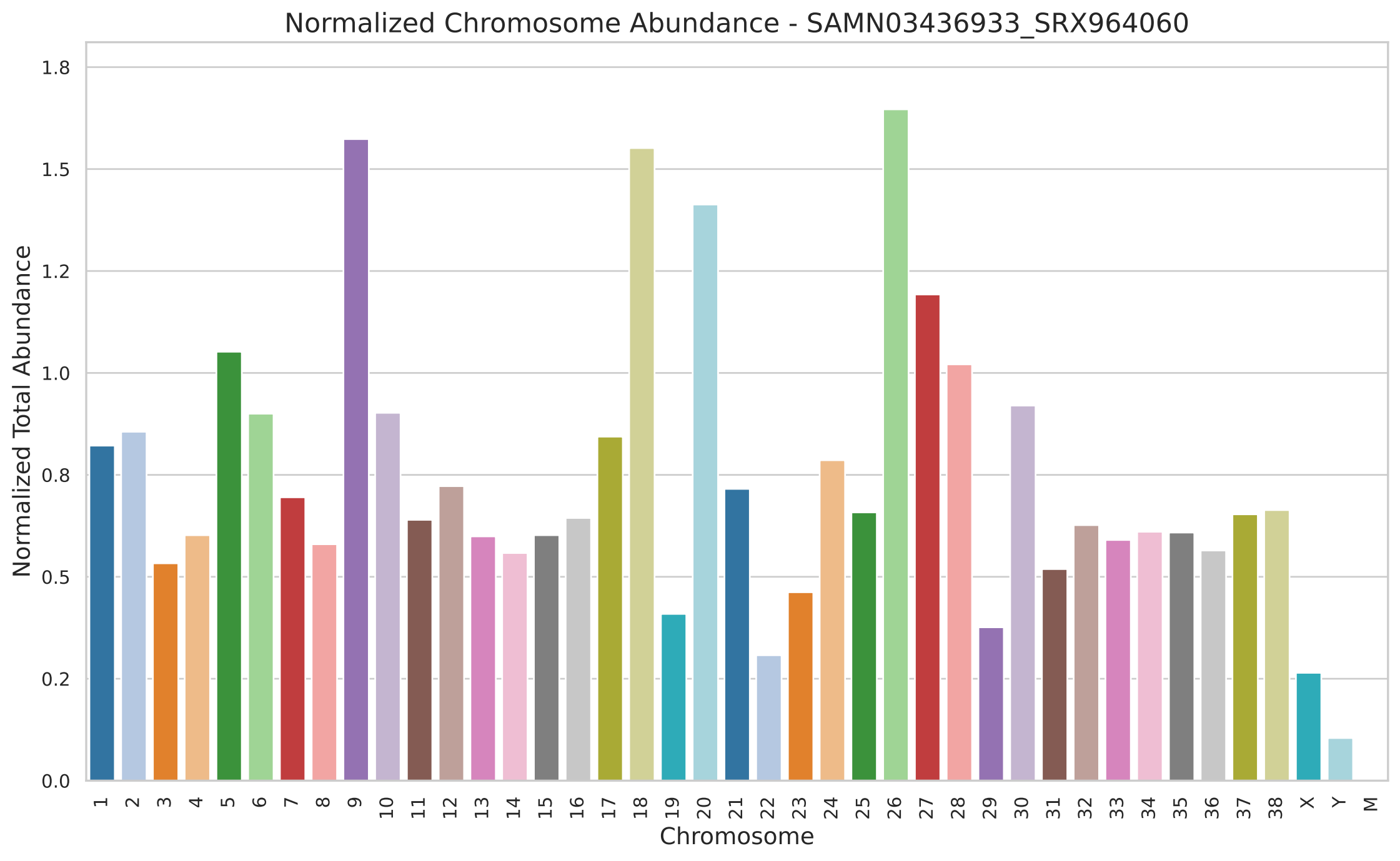

Normalized Chromosome Abundance - SAMN03436679_SRX963623
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

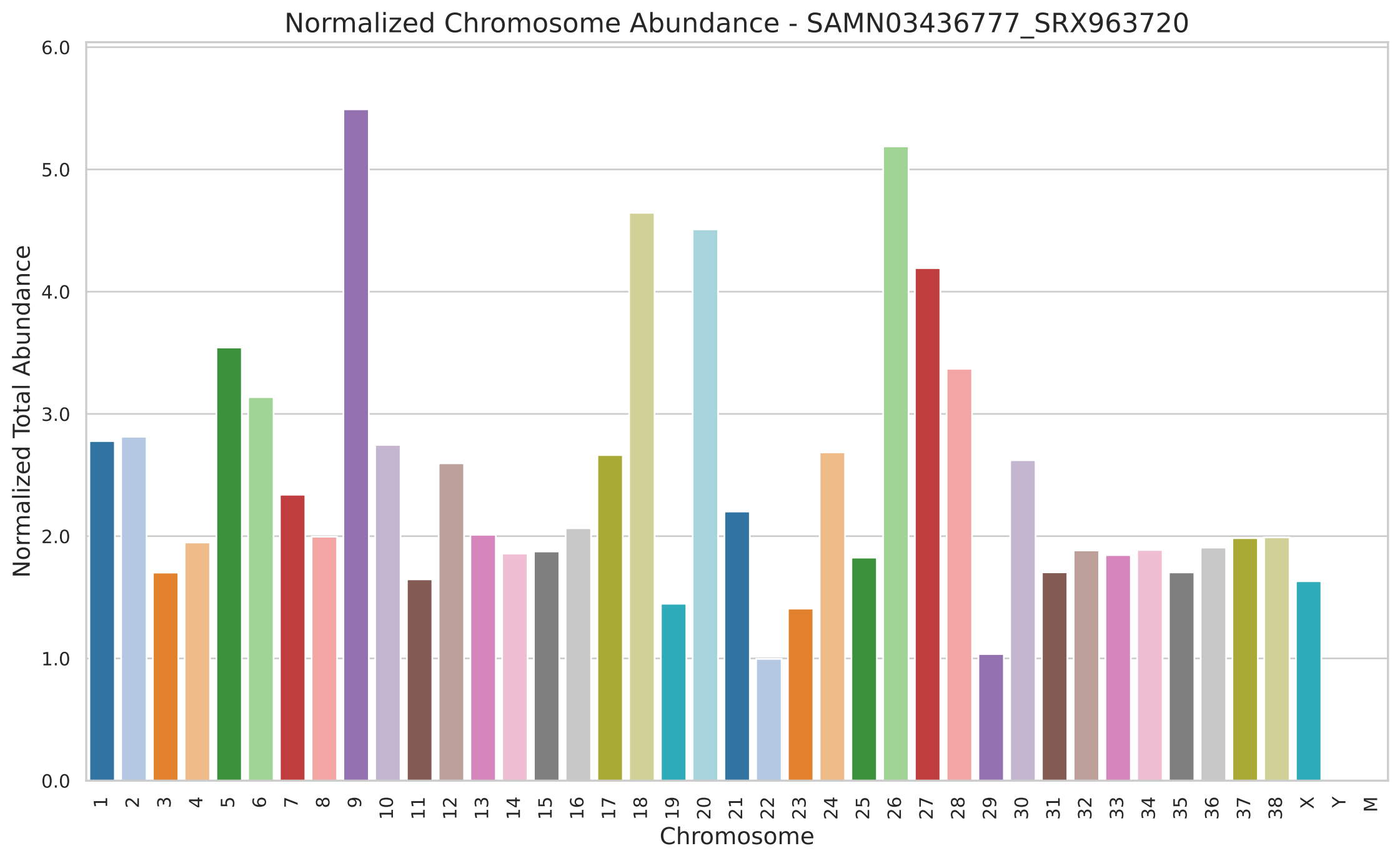

Normalized Chromosome Abundance - SAMN03436707_SRX963666
Normalized Total Abundance
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

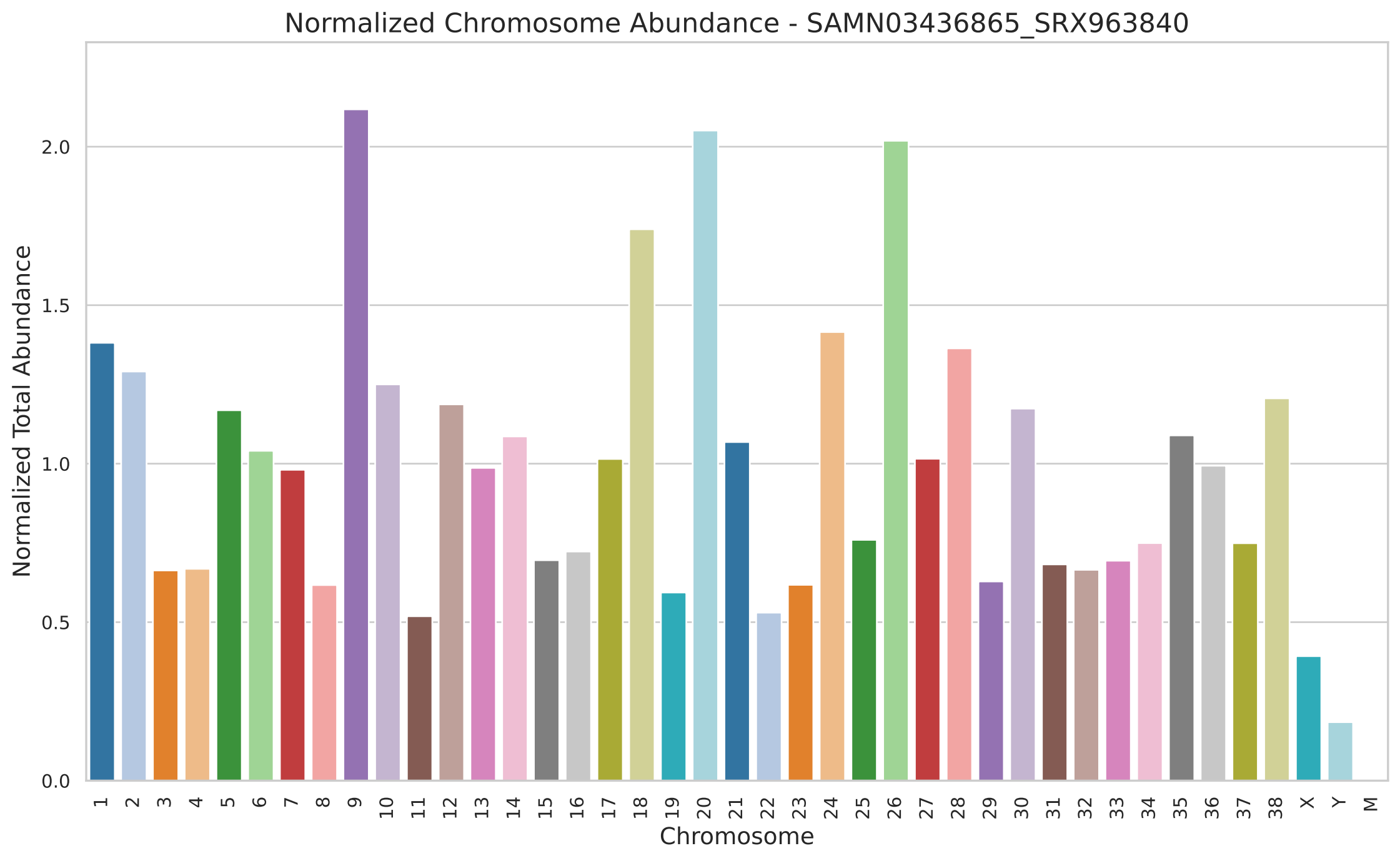

Normalized Chromosome Abundance - SAMN03436728_SRX963706
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

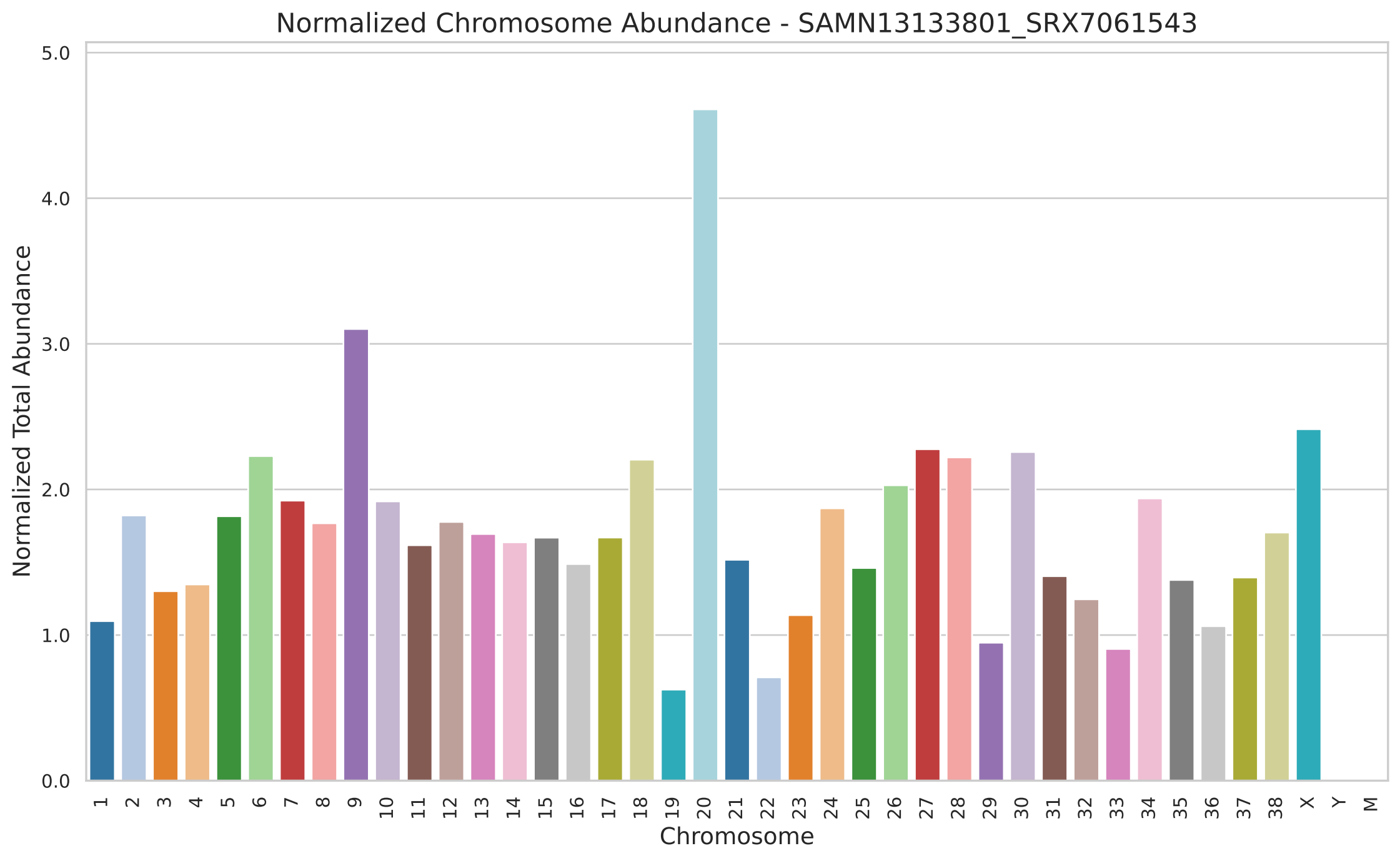

Normalized Chromosome Abundance - SAMN03436712_SRX963672
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

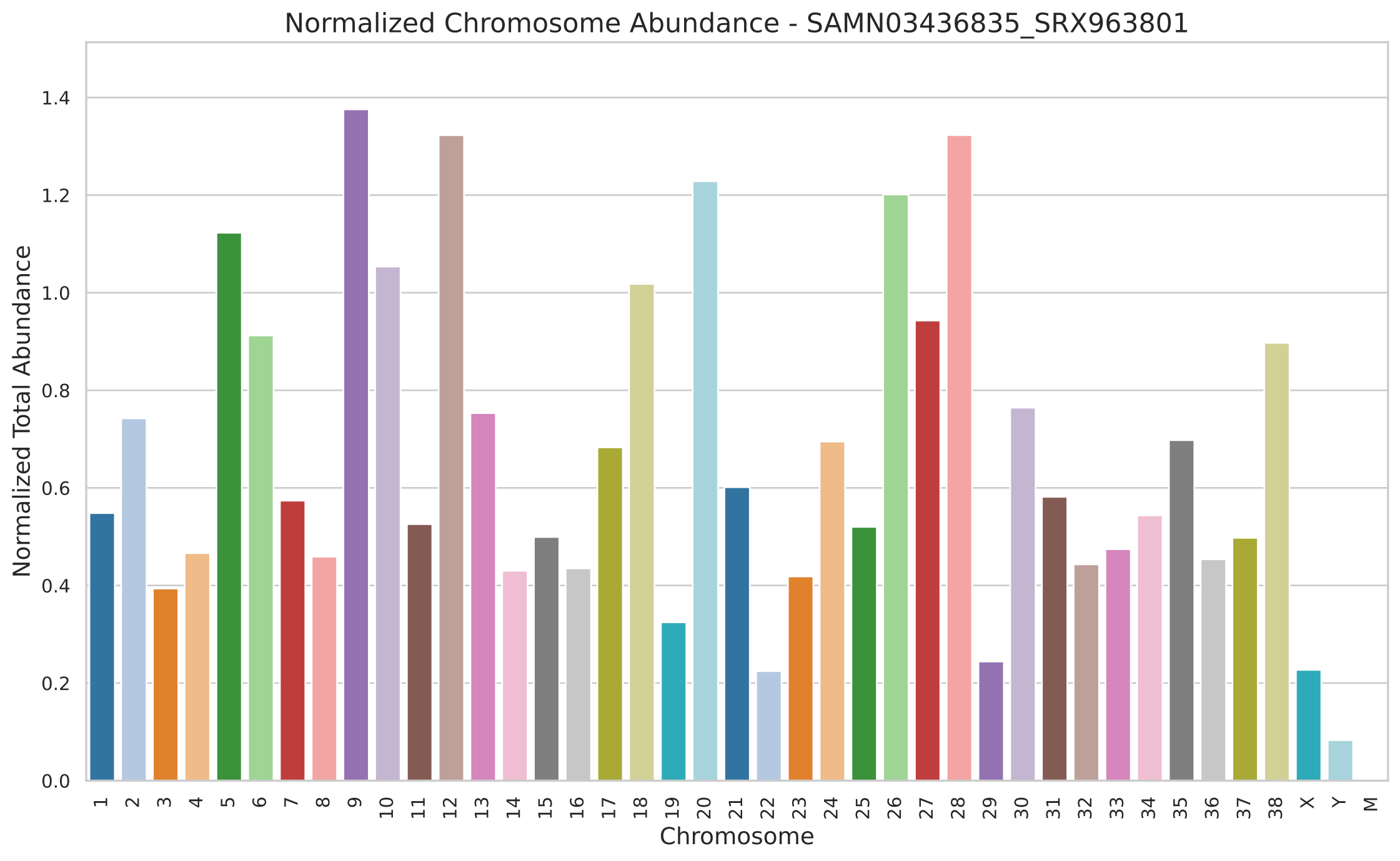

Normalized Chromosome Abundance - SAMN03436933_SRX964056
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

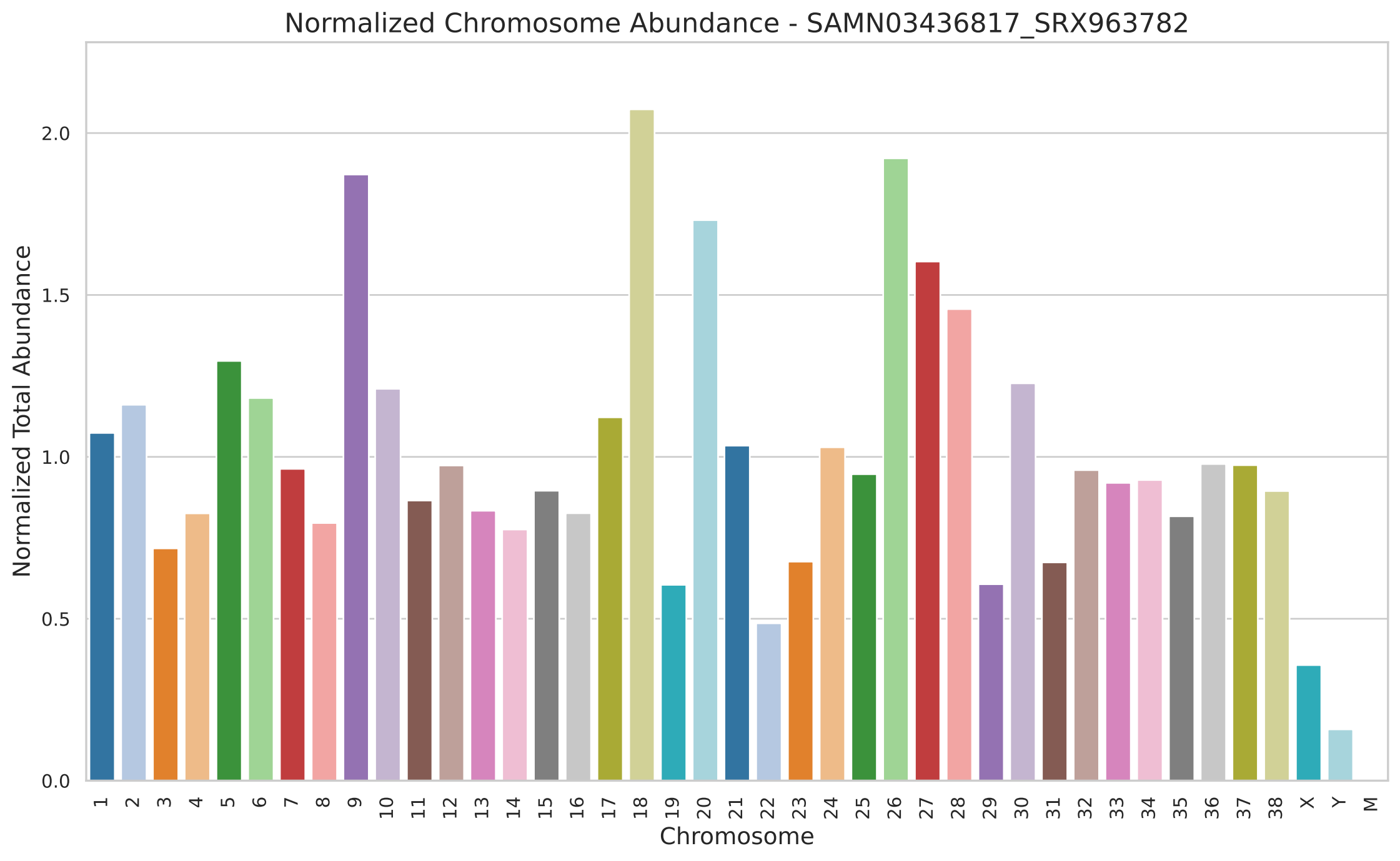

Normalized Chromosome Abundance - SAMN03436933_SRX964060
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

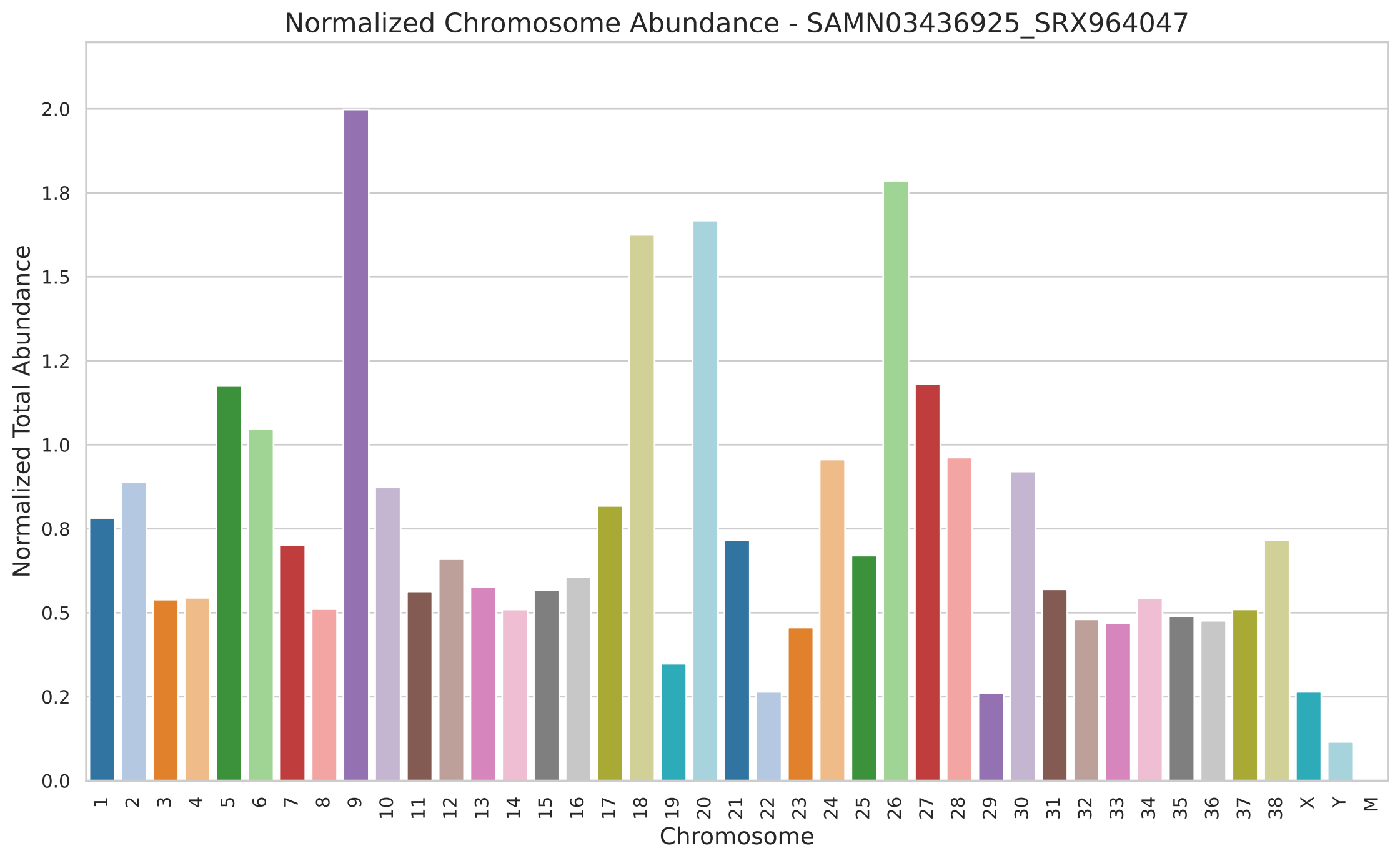

Normalized Chromosome Abundance - SAMN03436777_SRX963720
Normalized Total Abundance
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

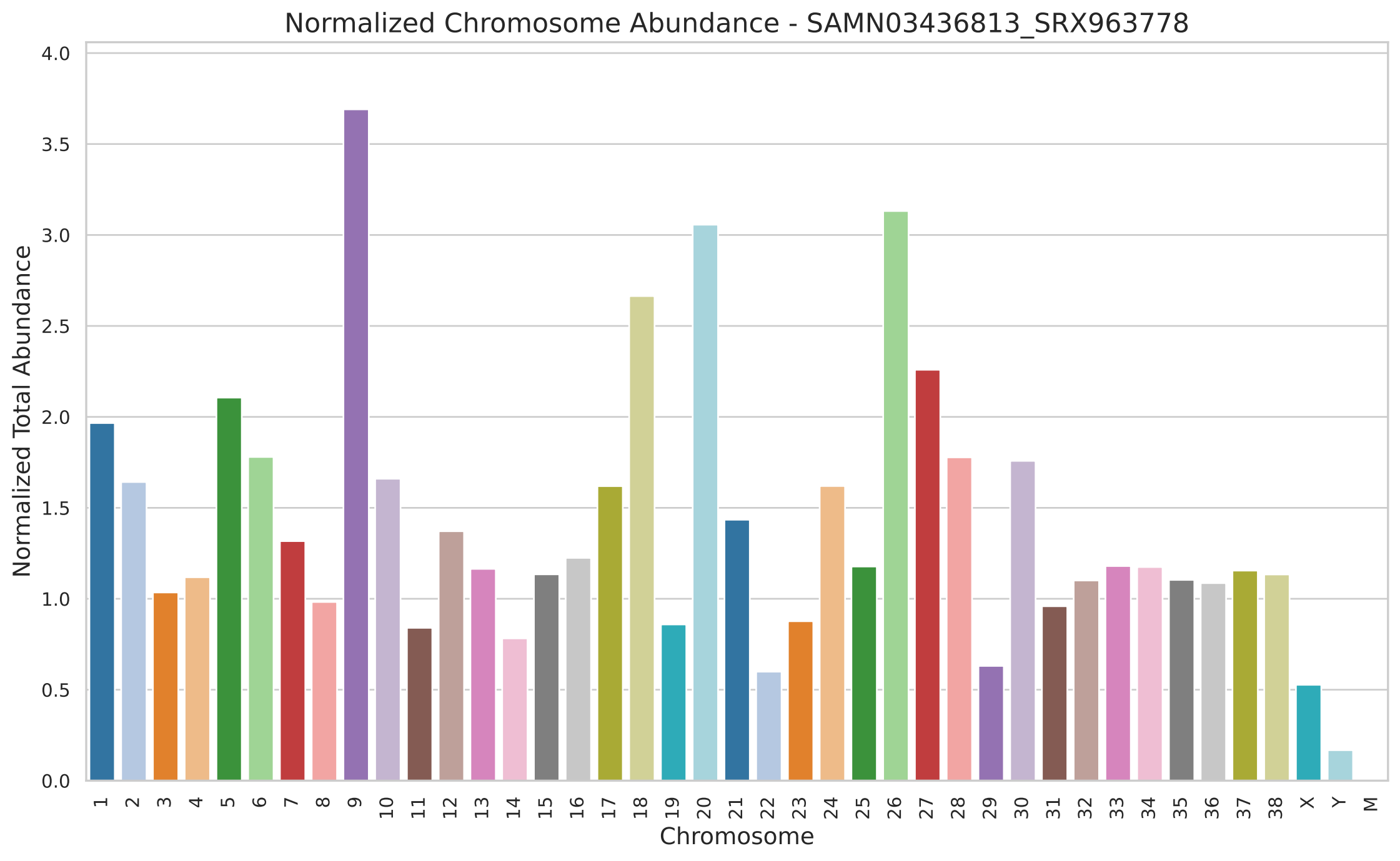

Normalized Chromosome Abundance - SAMN03436865_SRX963840
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

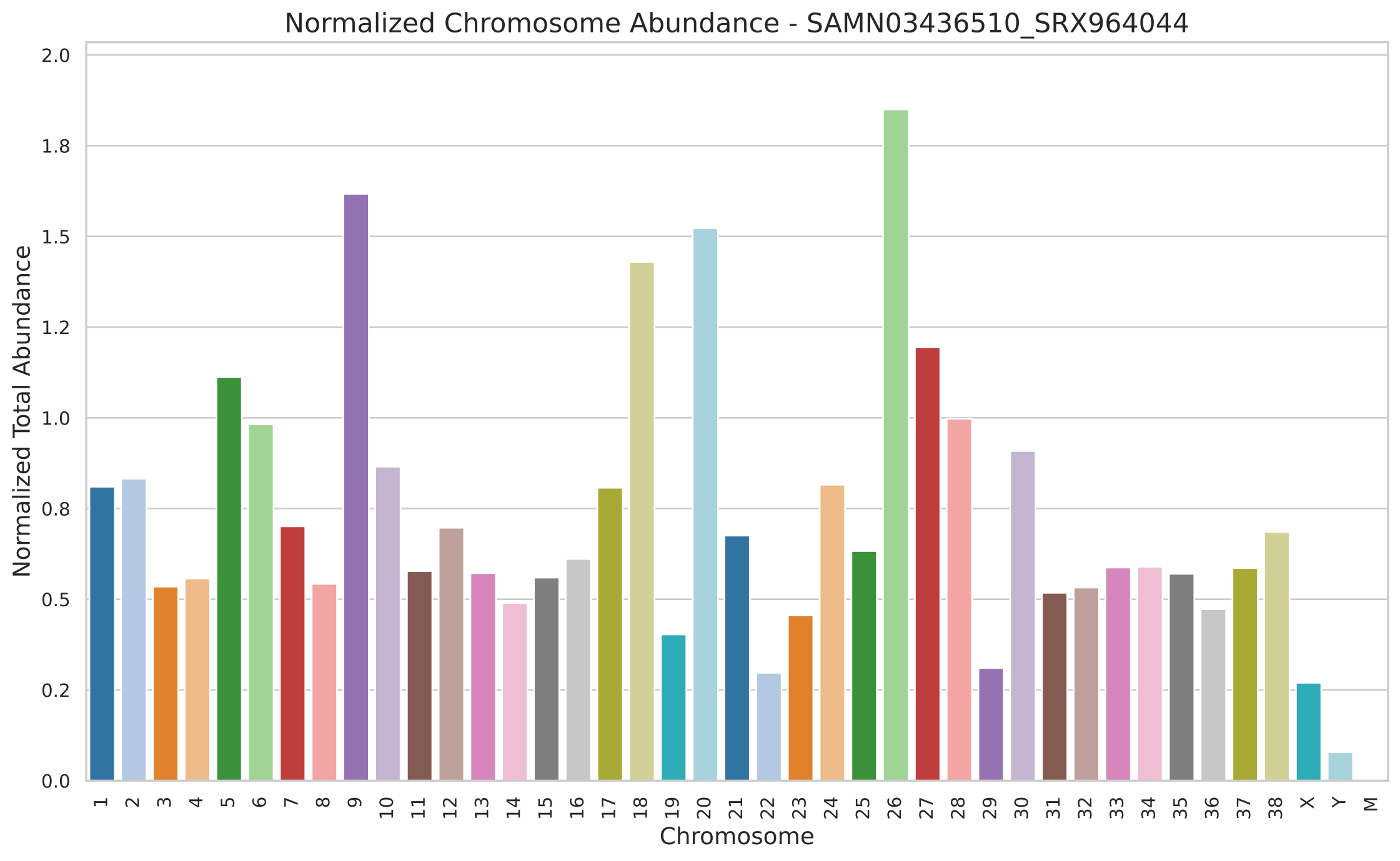

Normalized Chromosome Abundance - SAMN13133801_SRX7061543
Normalized Total Abundance
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

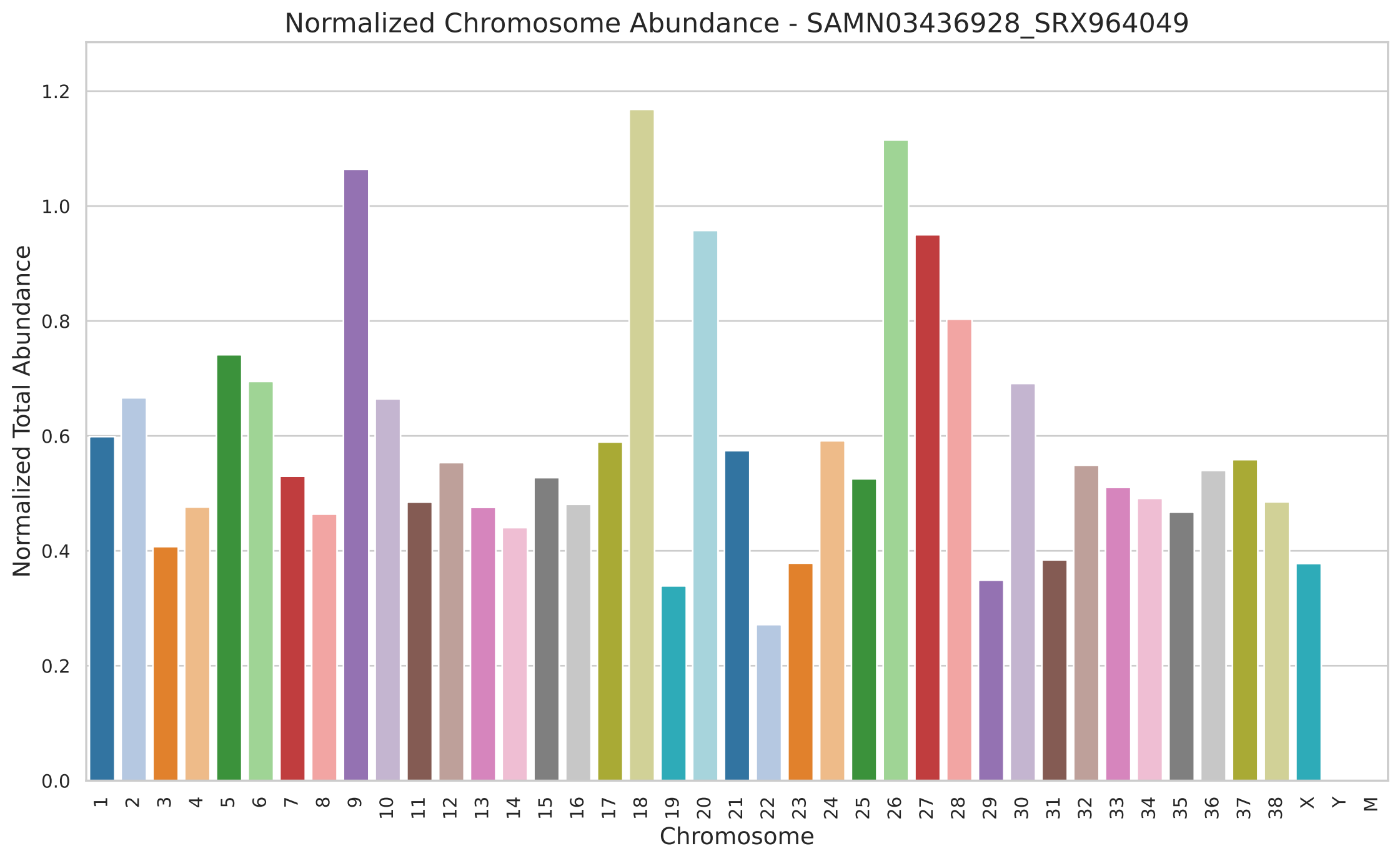

Normalized Chromosome Abundance - SAMN03436835_SRX963801
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

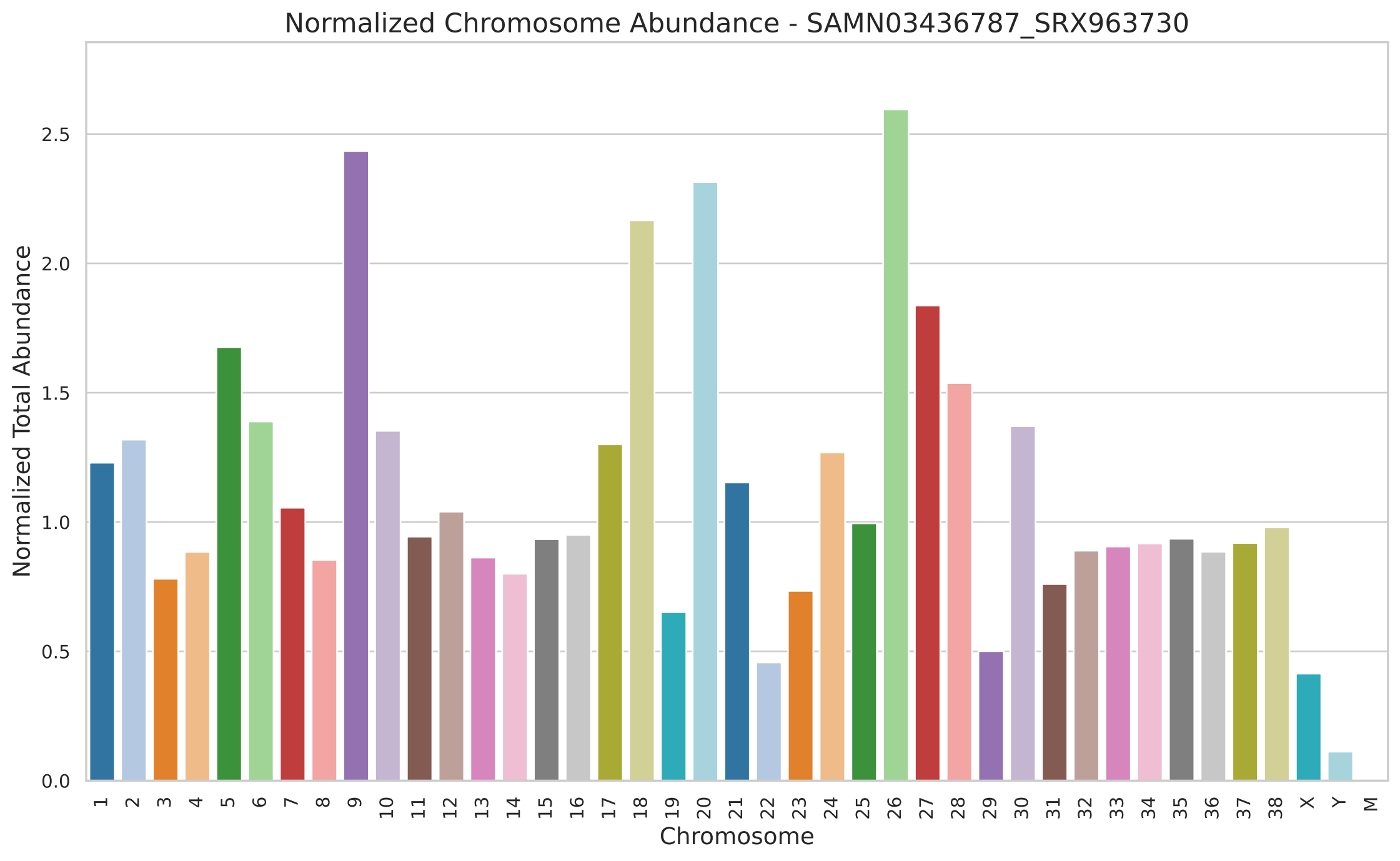

Normalized Chromosome Abundance - SAMN03436817_SRX963782
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

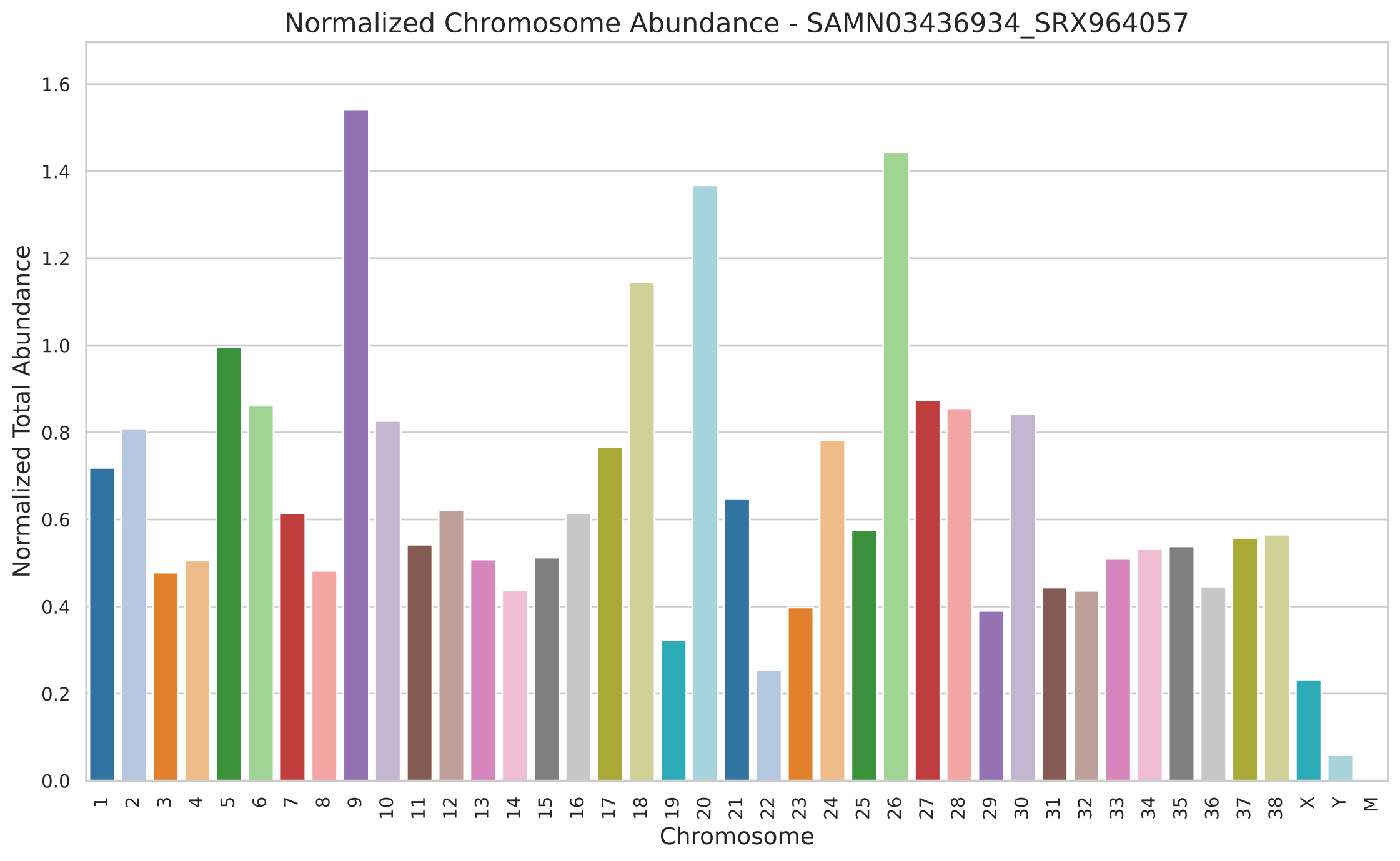

Normalized Chromosome Abundance - SAMN03436925_SRX964047
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

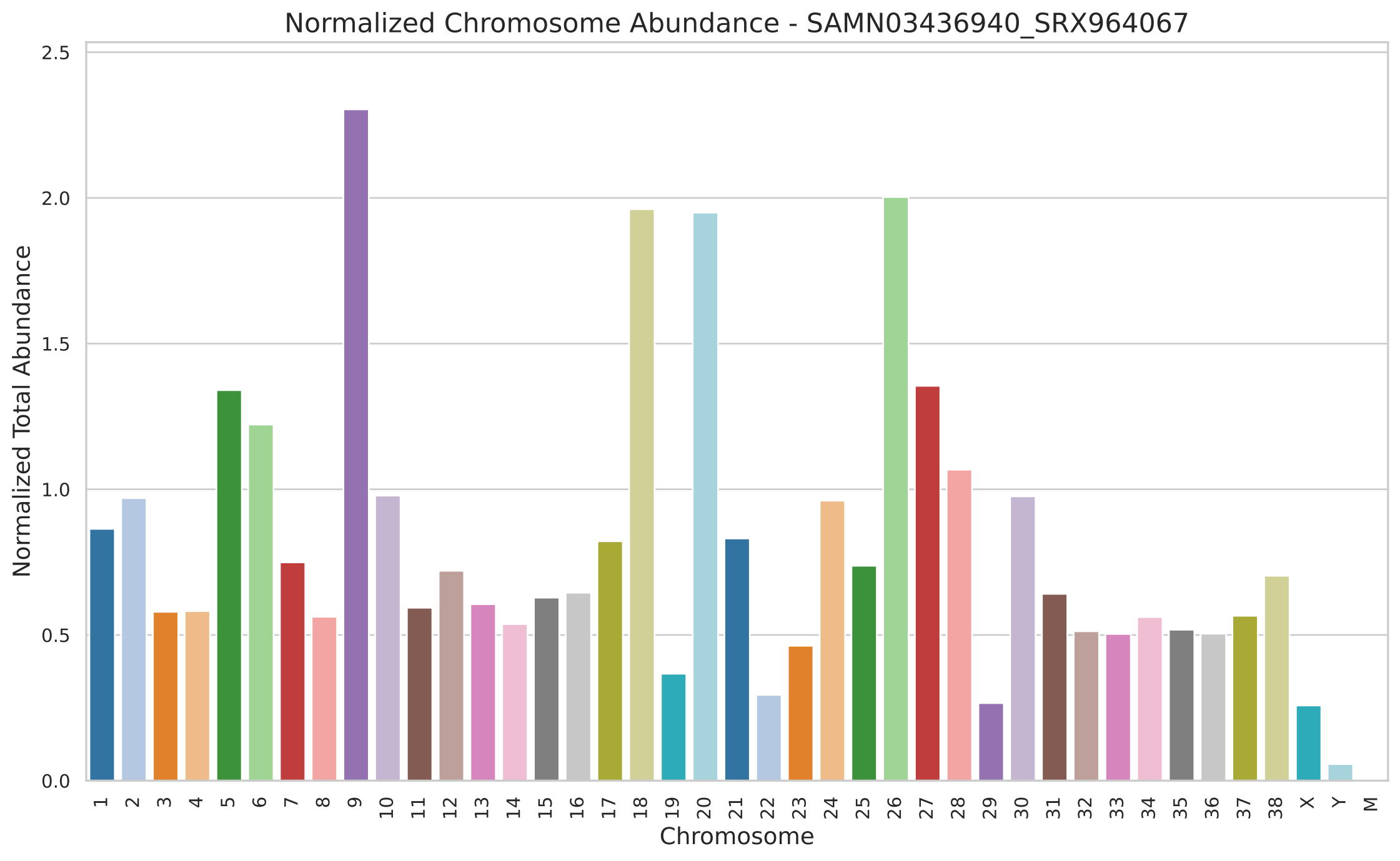

Normalized Chromosome Abundance - SAMN03436813_SRX963778
Normalized Total Abundance
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

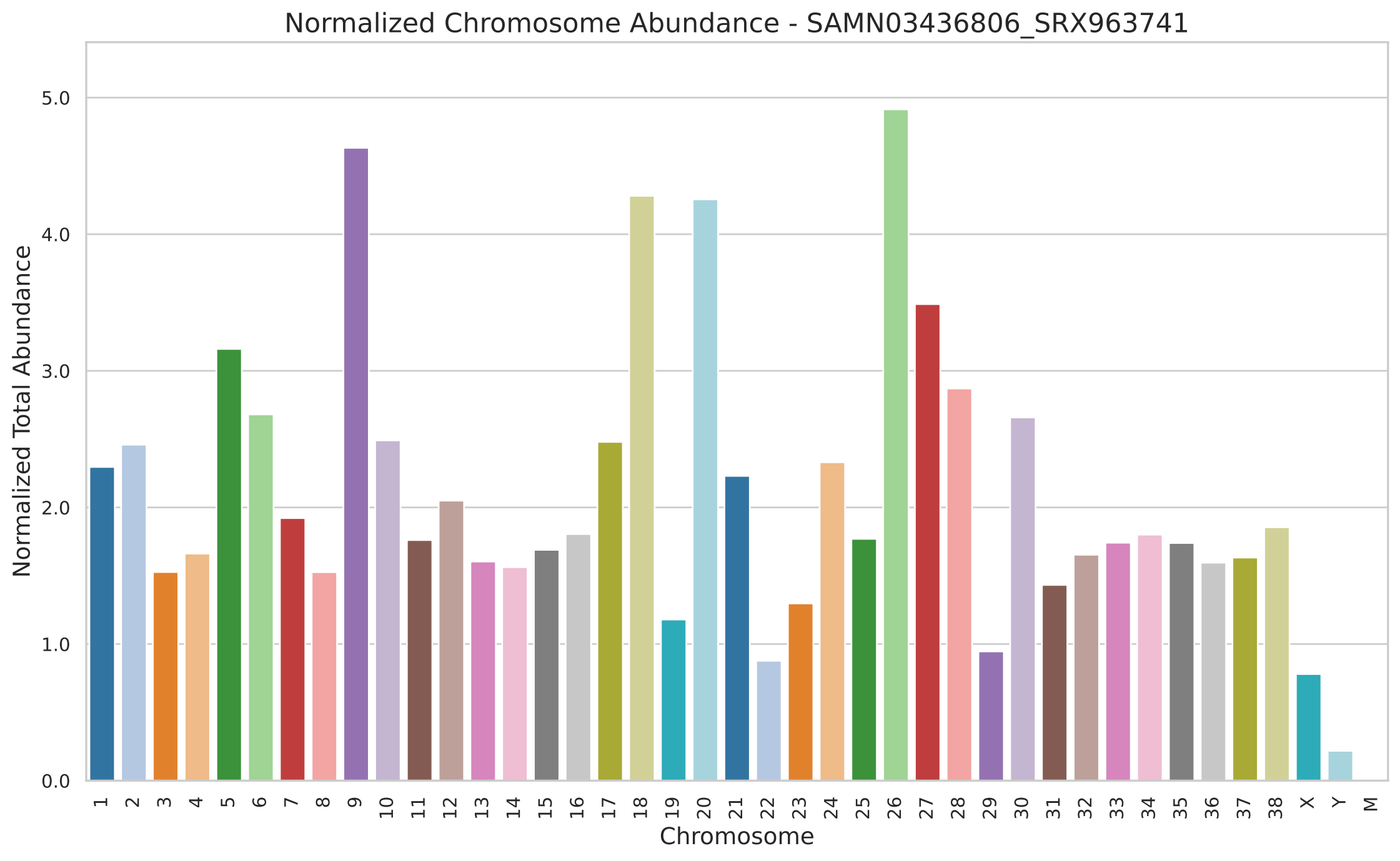

Normalized Chromosome Abundance - SAMN03436510_SRX964044
Normalized Total Abundance
2.0
1.8
1.5
1.2
1.0
0.8
0.5
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

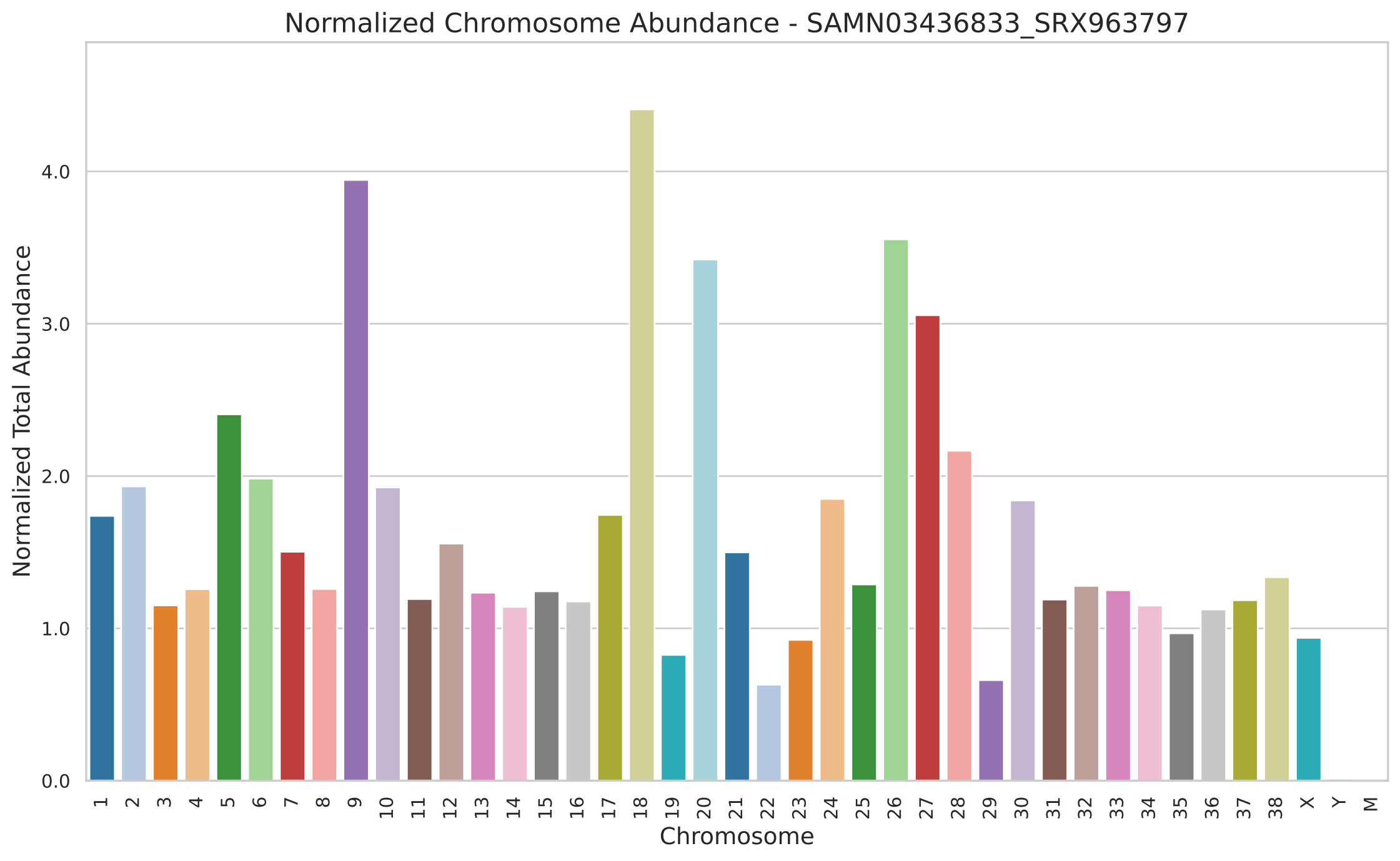

Normalized Chromosome Abundance - SAMN03436928_SRX964049
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

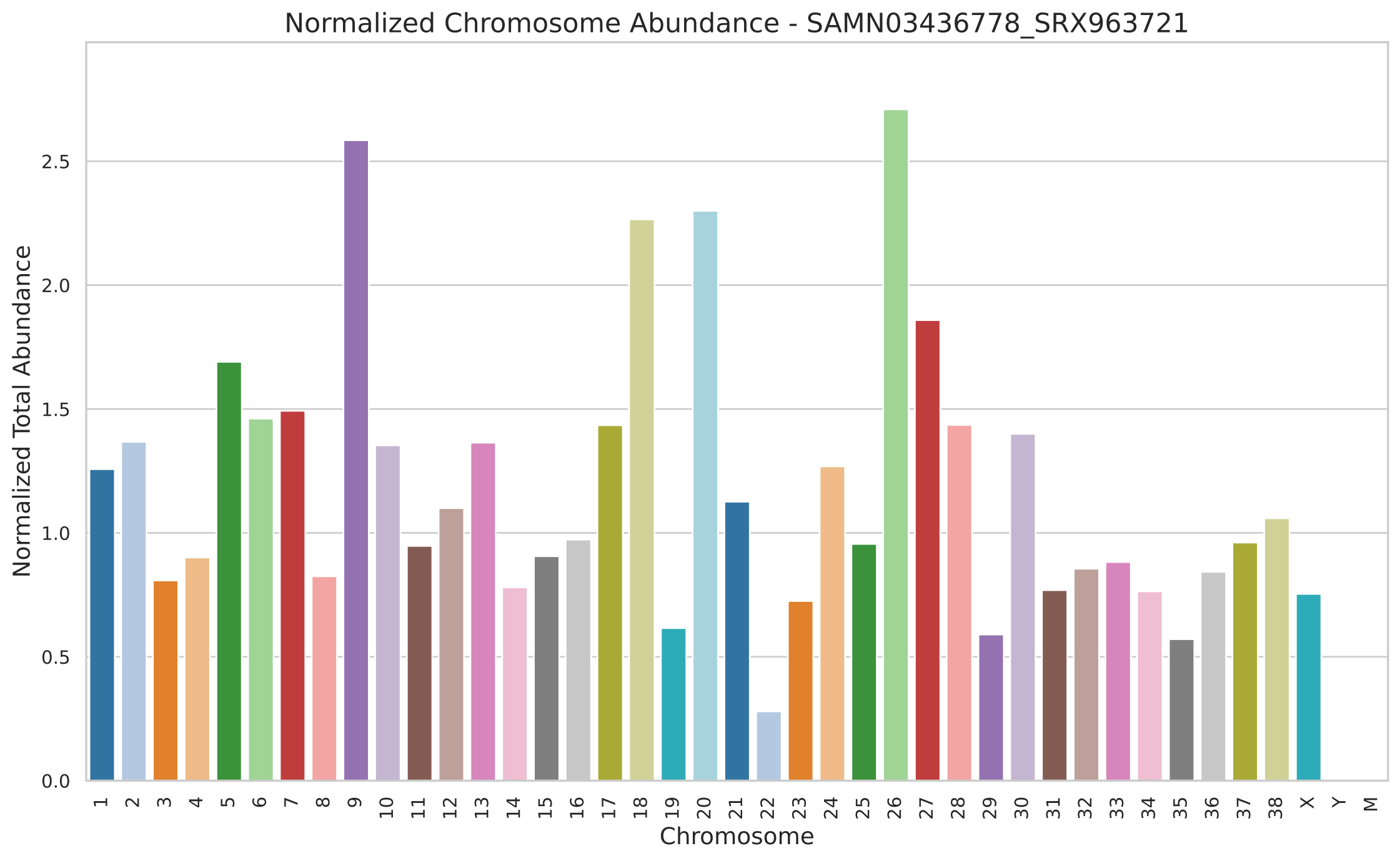

Normalized Chromosome Abundance - SAMN03436787_SRX963730
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

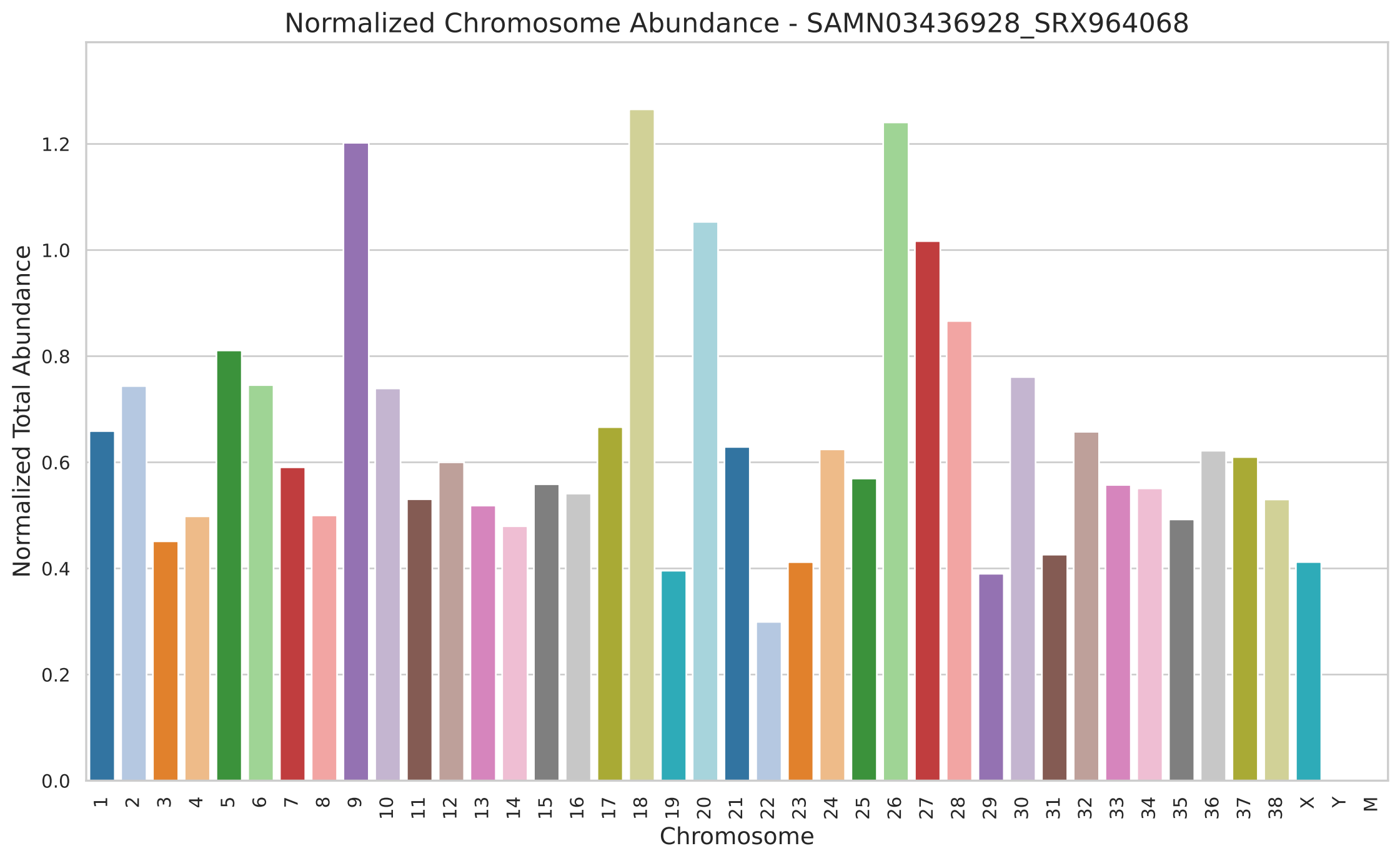

Normalized Chromosome Abundance - SAMN03436934_SRX964057
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

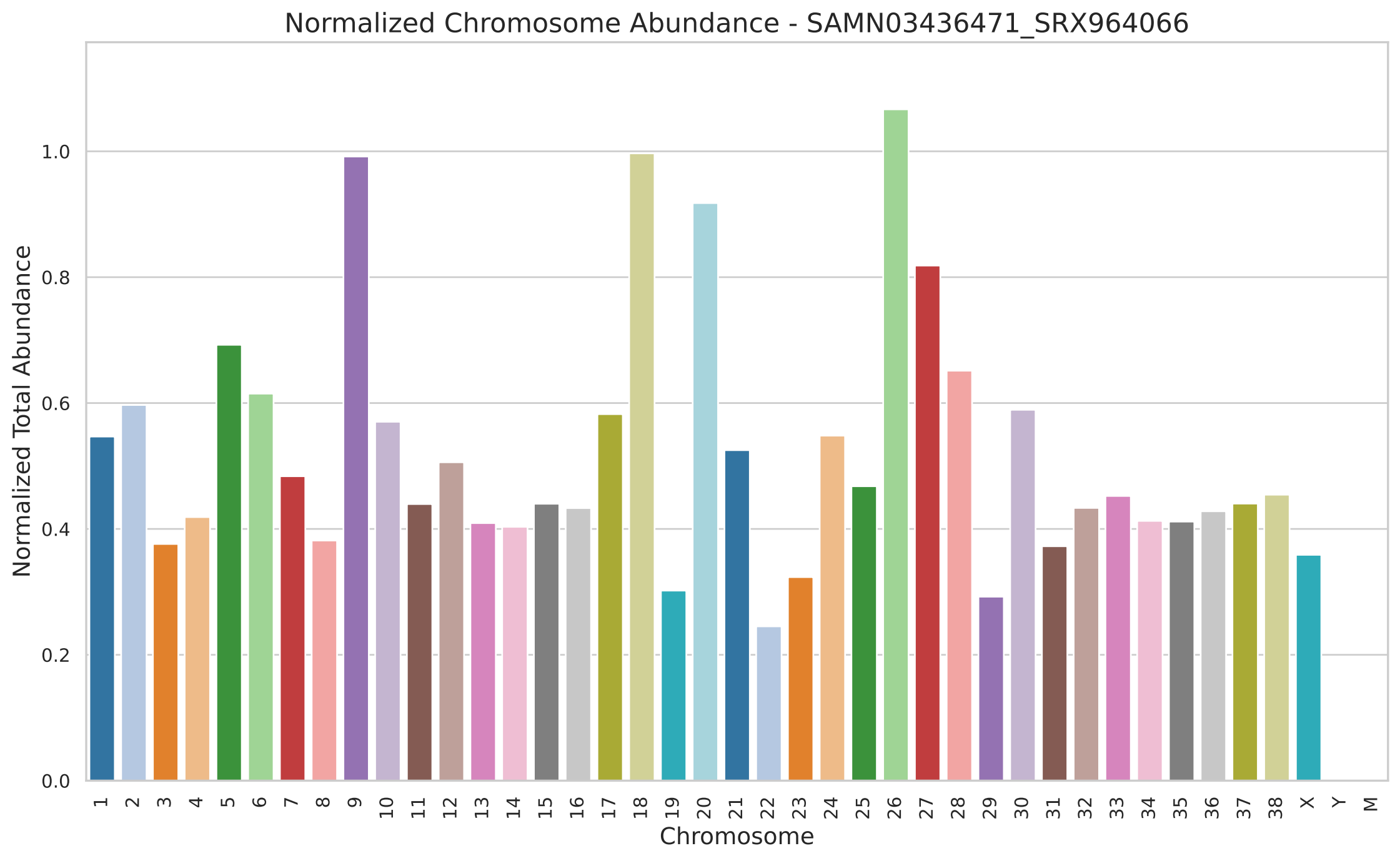

Normalized Chromosome Abundance - SAMN03436940_SRX964067
Normalized Total Abundance
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

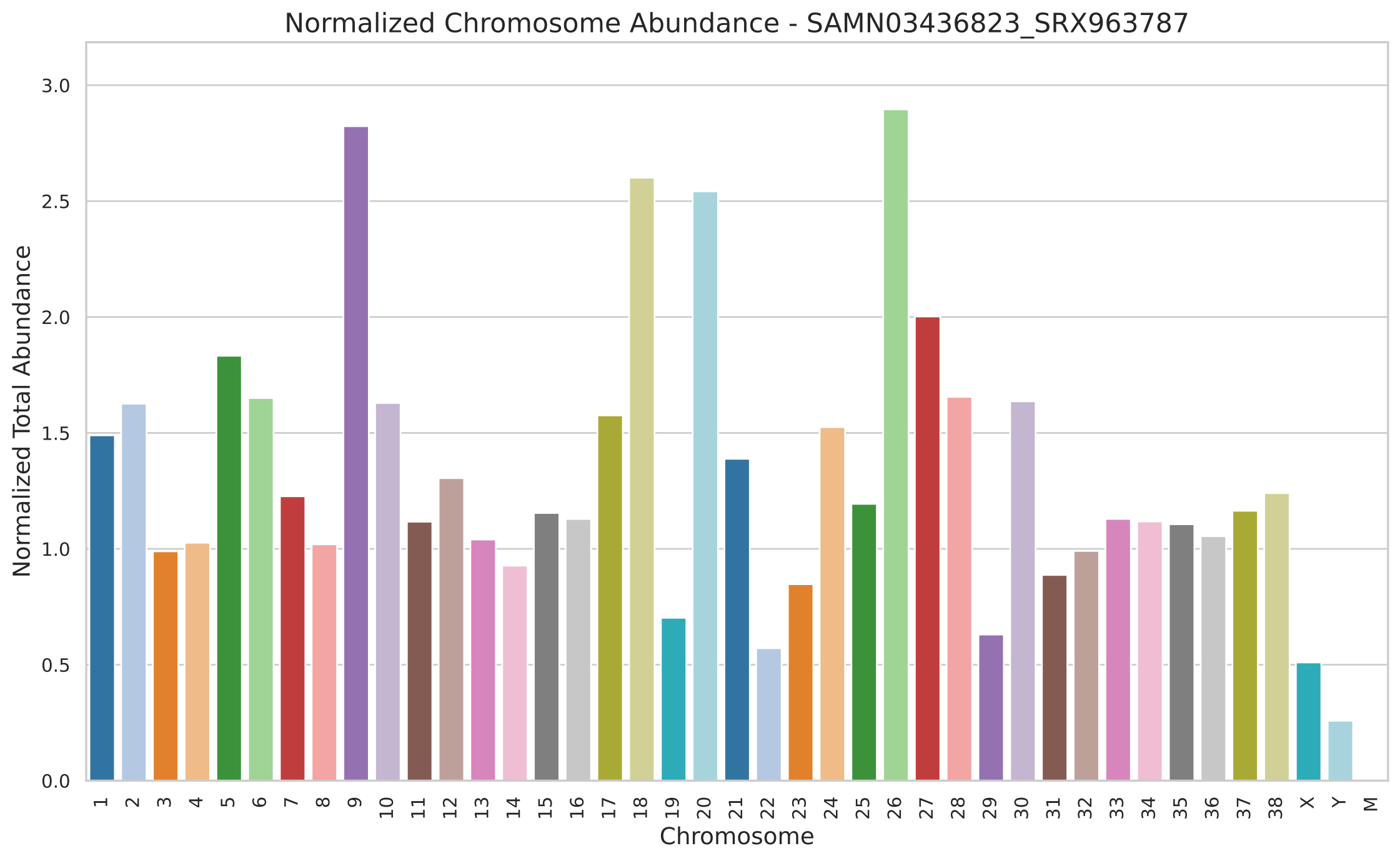

Normalized Chromosome Abundance - SAMN03436806_SRX963741
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

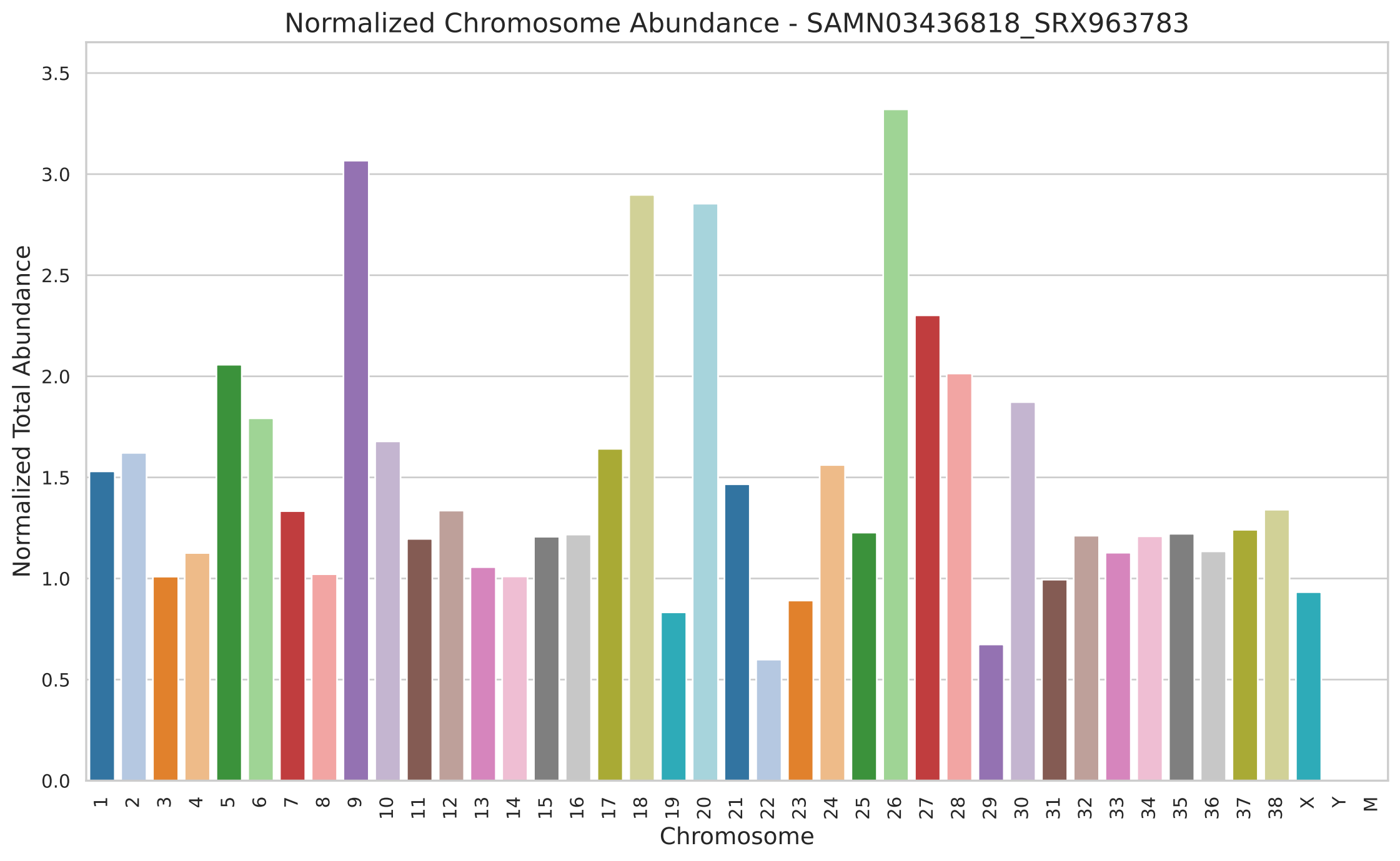

Normalized Chromosome Abundance - SAMN03436833_SRX963797
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

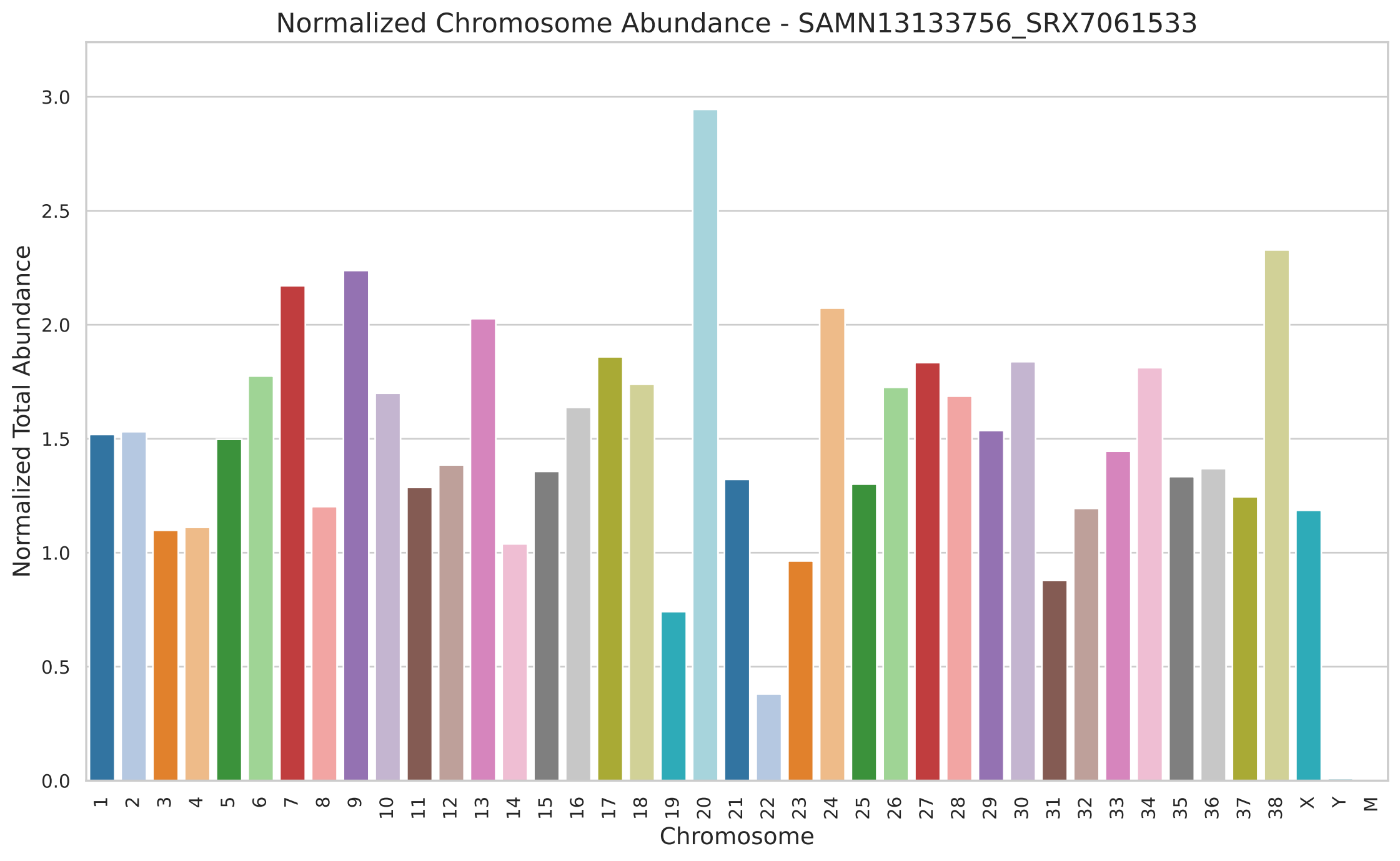

Normalized Chromosome Abundance - SAMN03436778_SRX963721
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

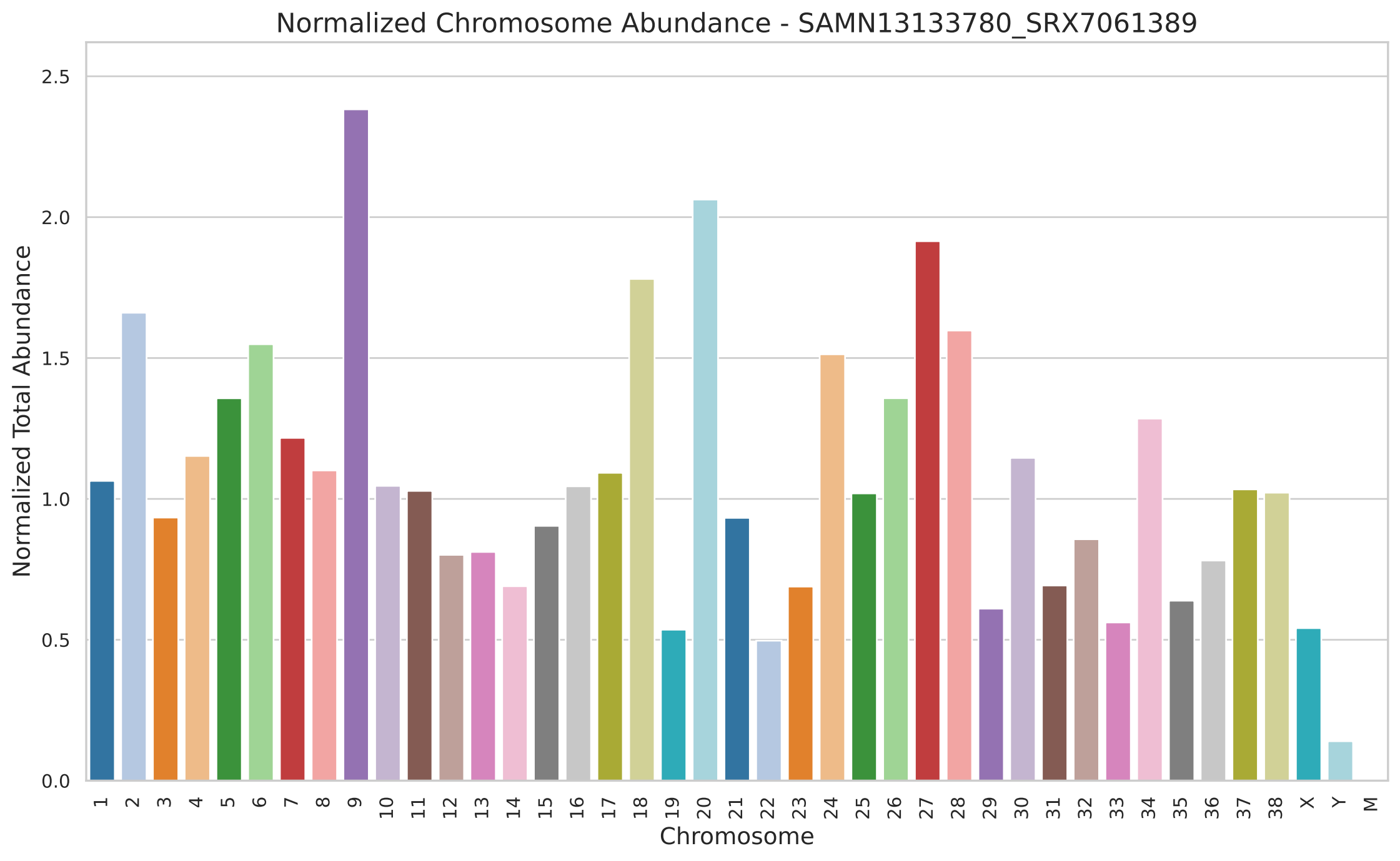

Normalized Chromosome Abundance - SAMN03436928_SRX964068
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

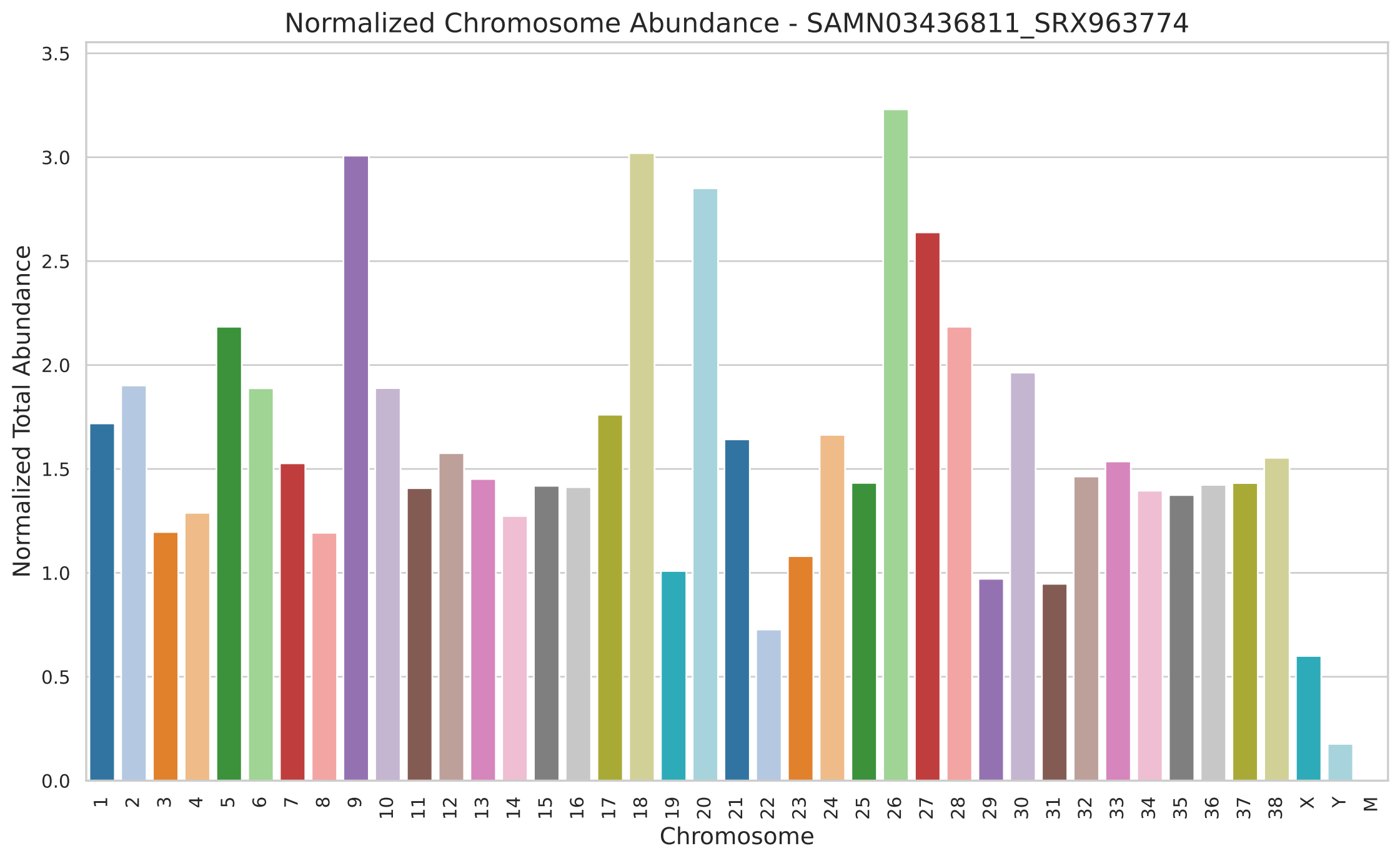

Normalized Chromosome Abundance - SAMN03436471_SRX964066
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

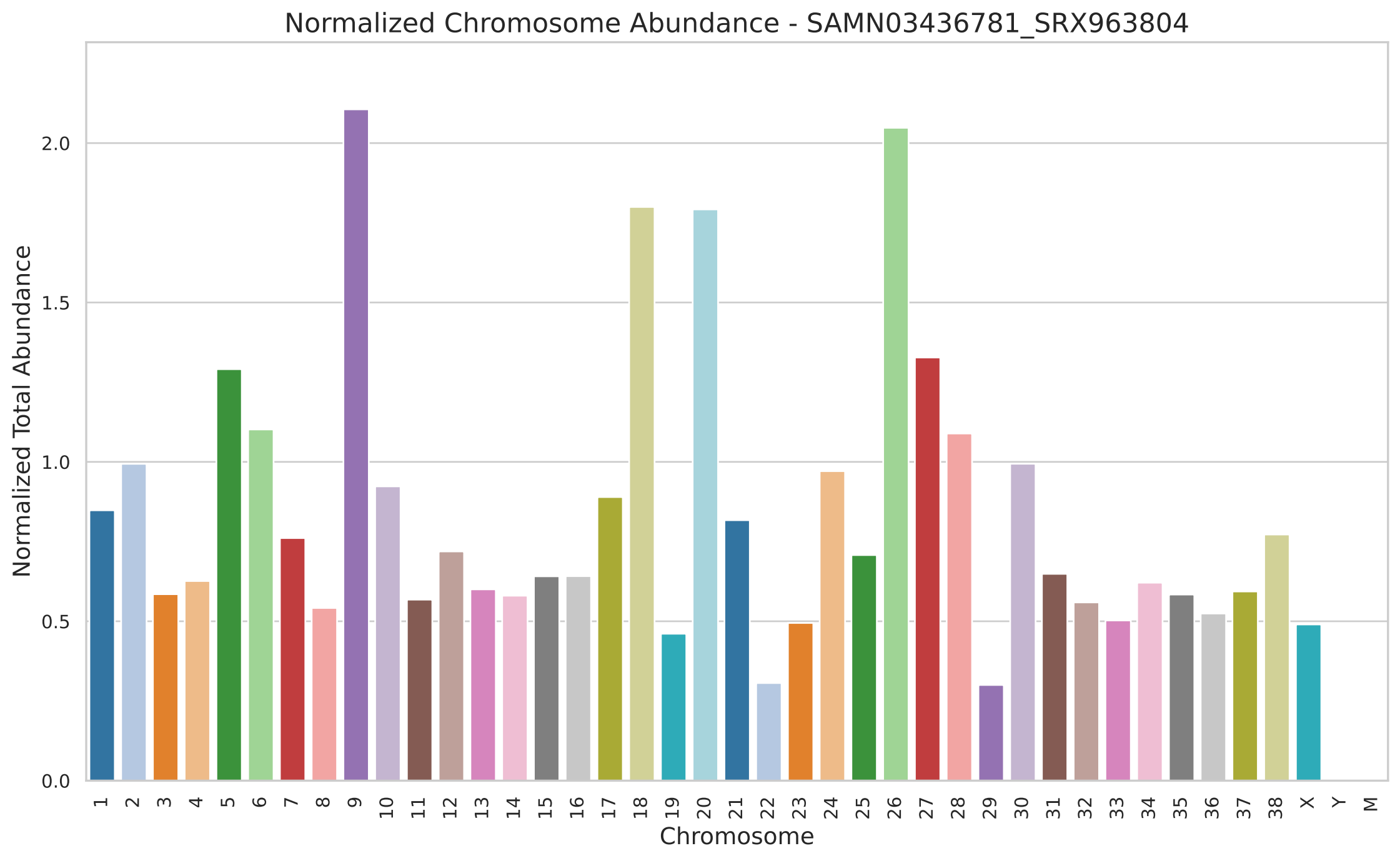

Normalized Chromosome Abundance - SAMN03436823_SRX963787
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

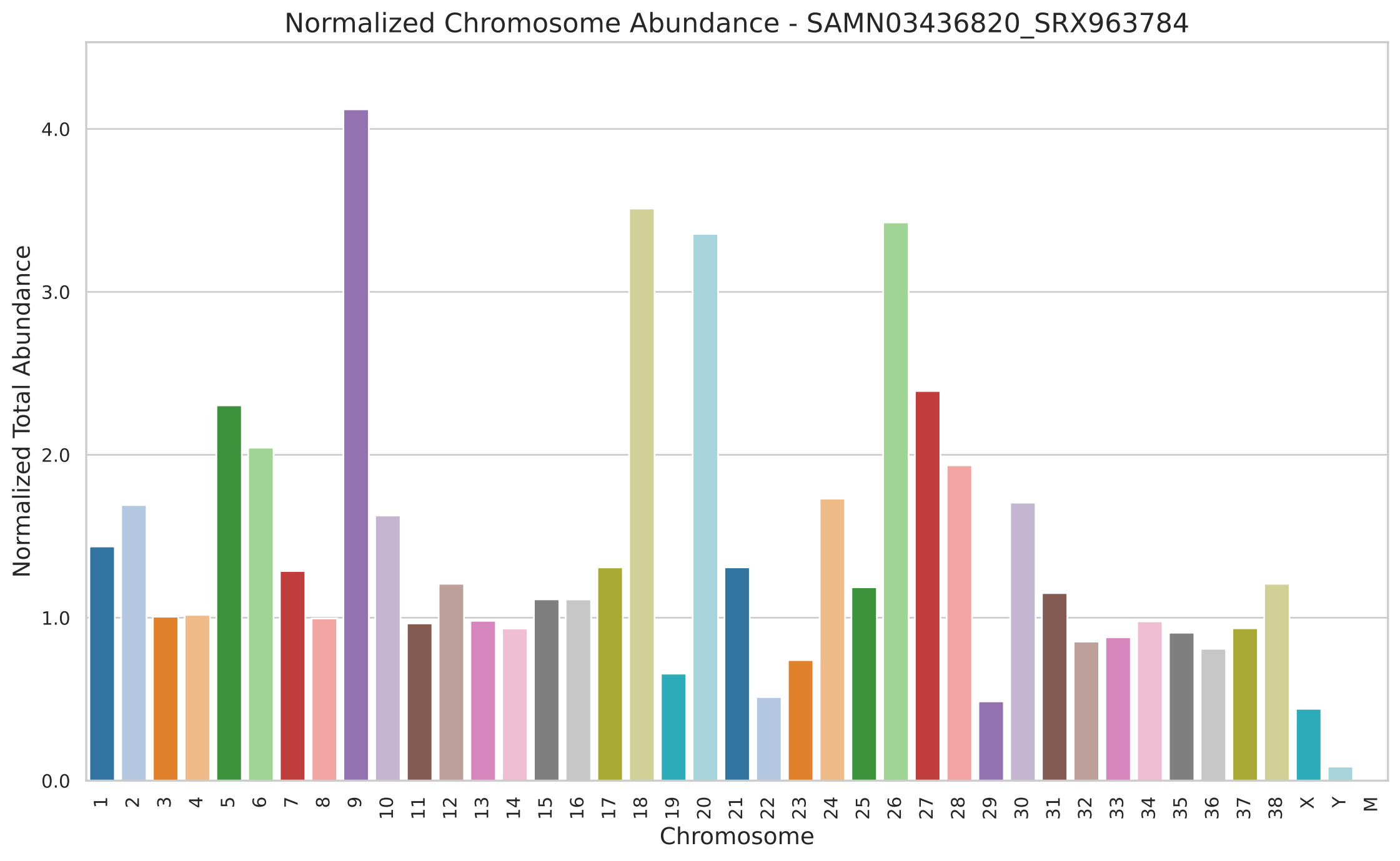

Normalized Chromosome Abundance - SAMN03436818_SRX963783
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

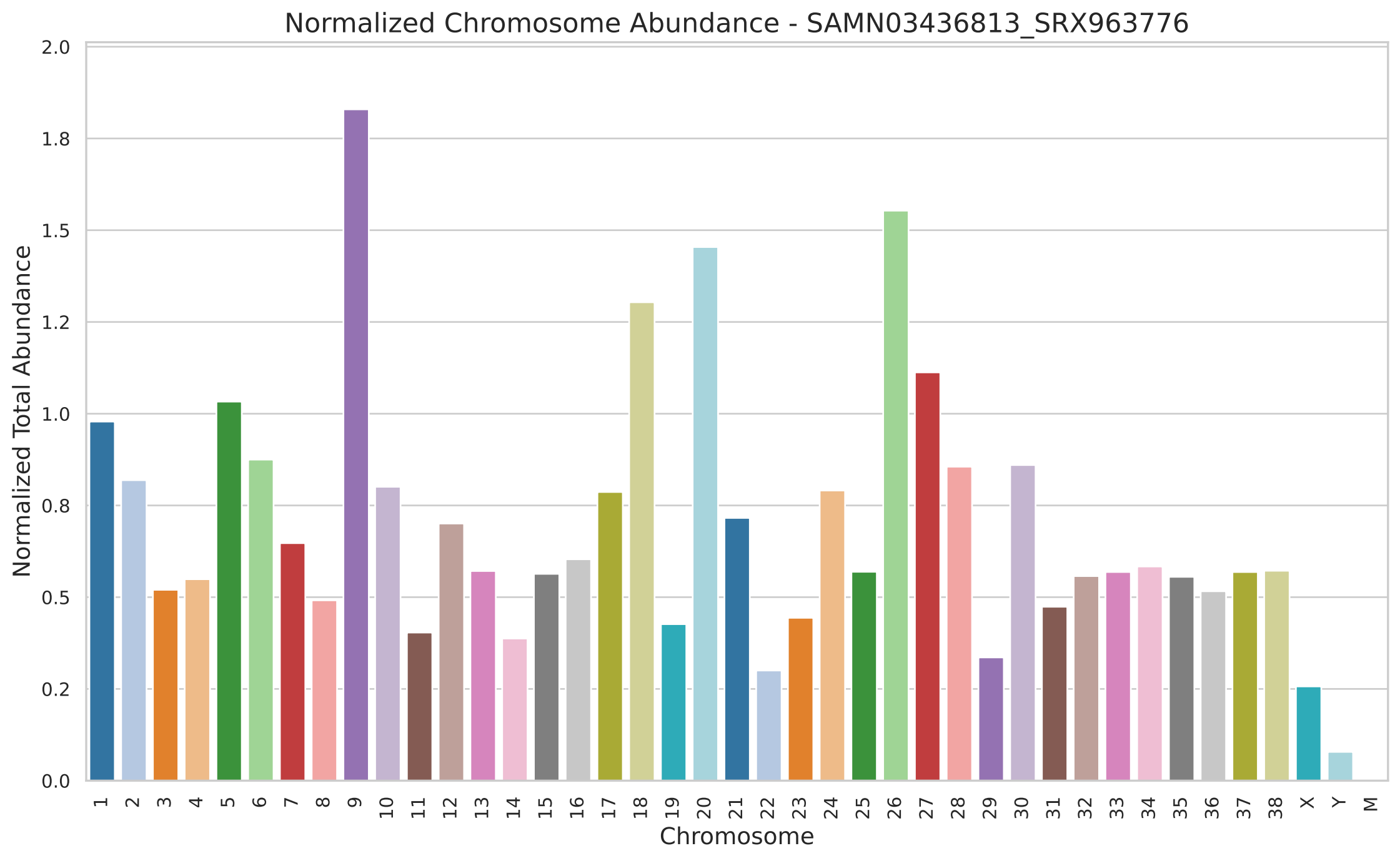

Normalized Chromosome Abundance - SAMN13133756_SRX7061533
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

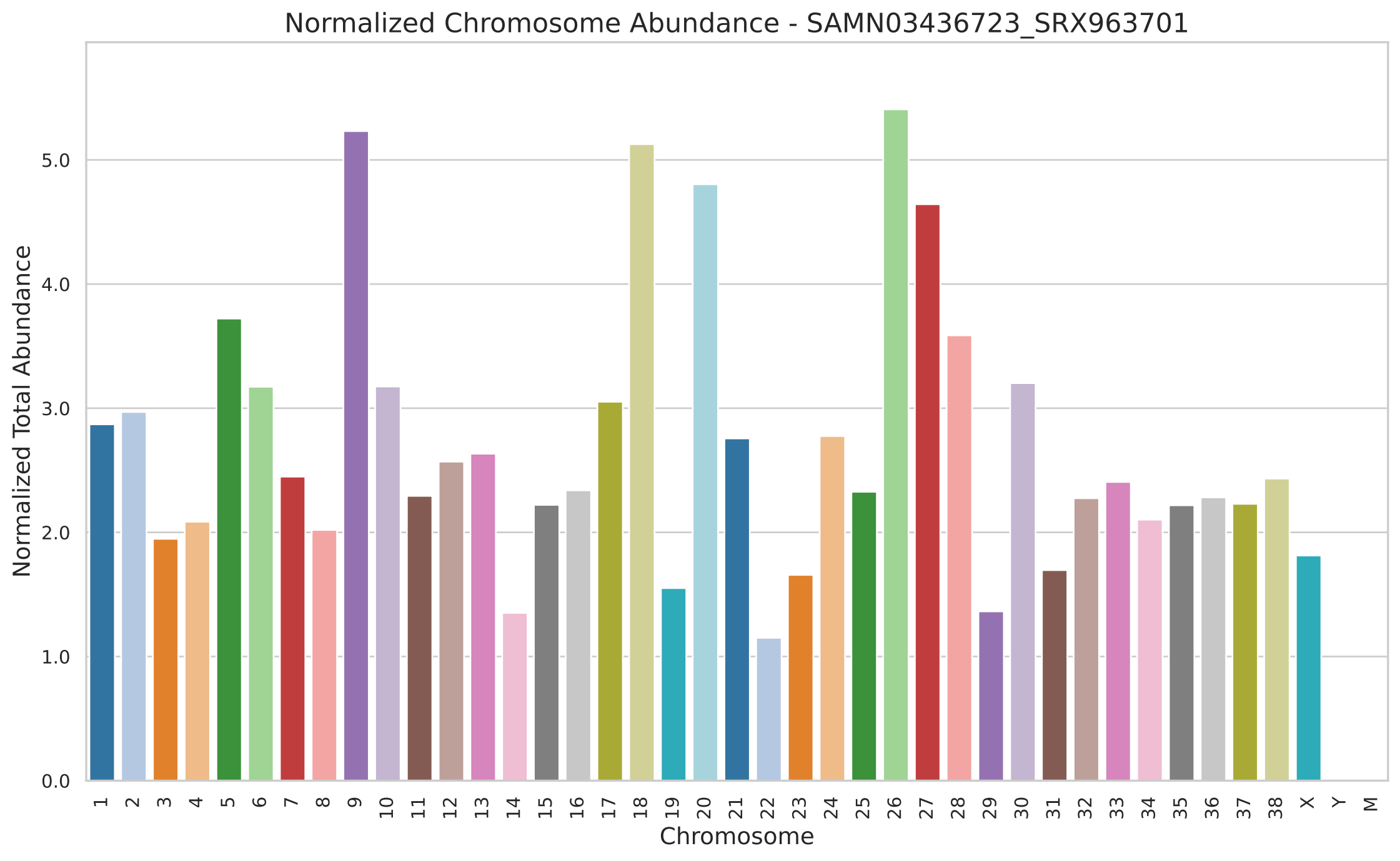

Normalized Chromosome Abundance - SAMN13133780_SRX7061389
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

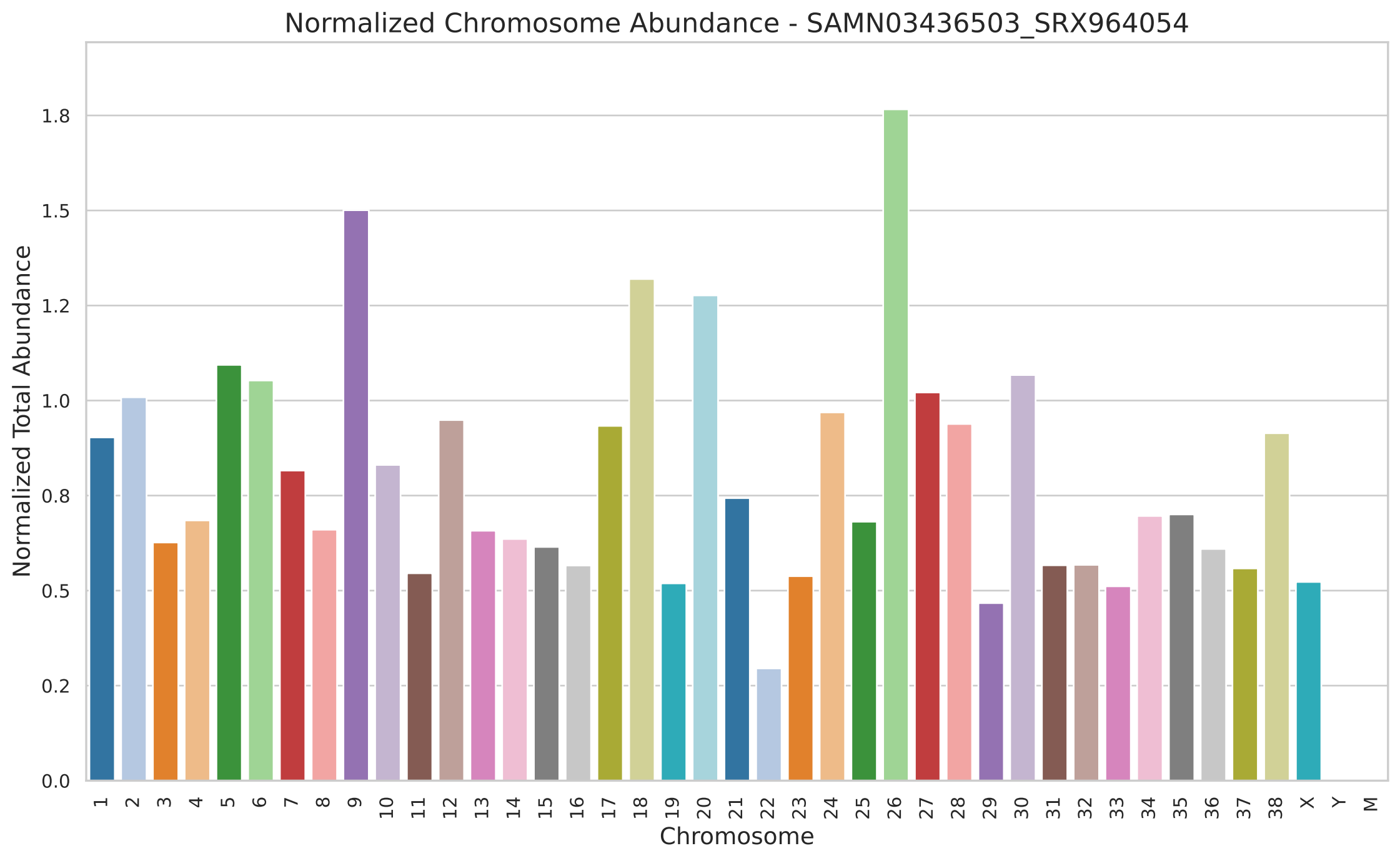

Normalized Chromosome Abundance - SAMN03436811_SRX963774
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

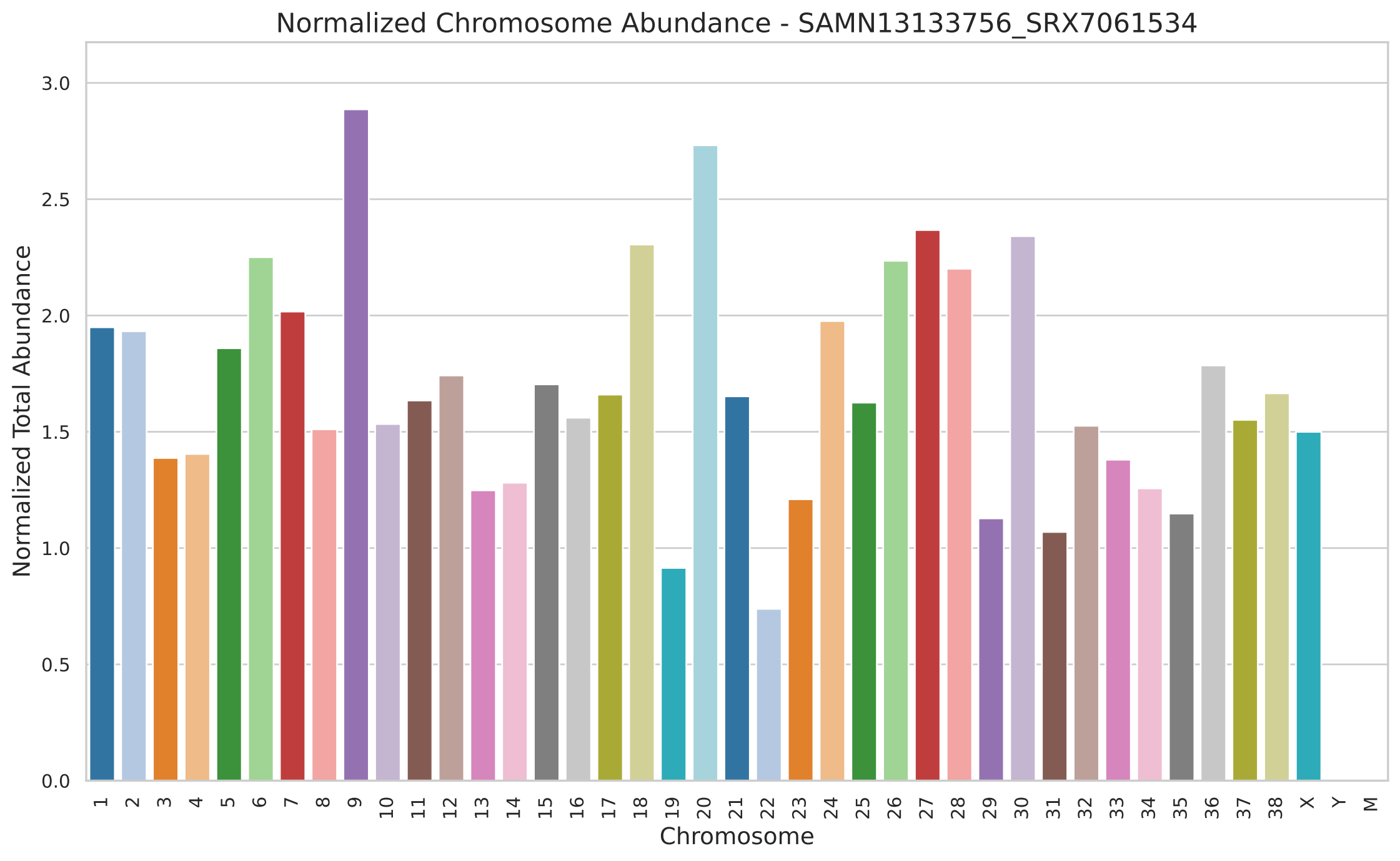

Normalized Chromosome Abundance - SAMN03436781_SRX963804
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

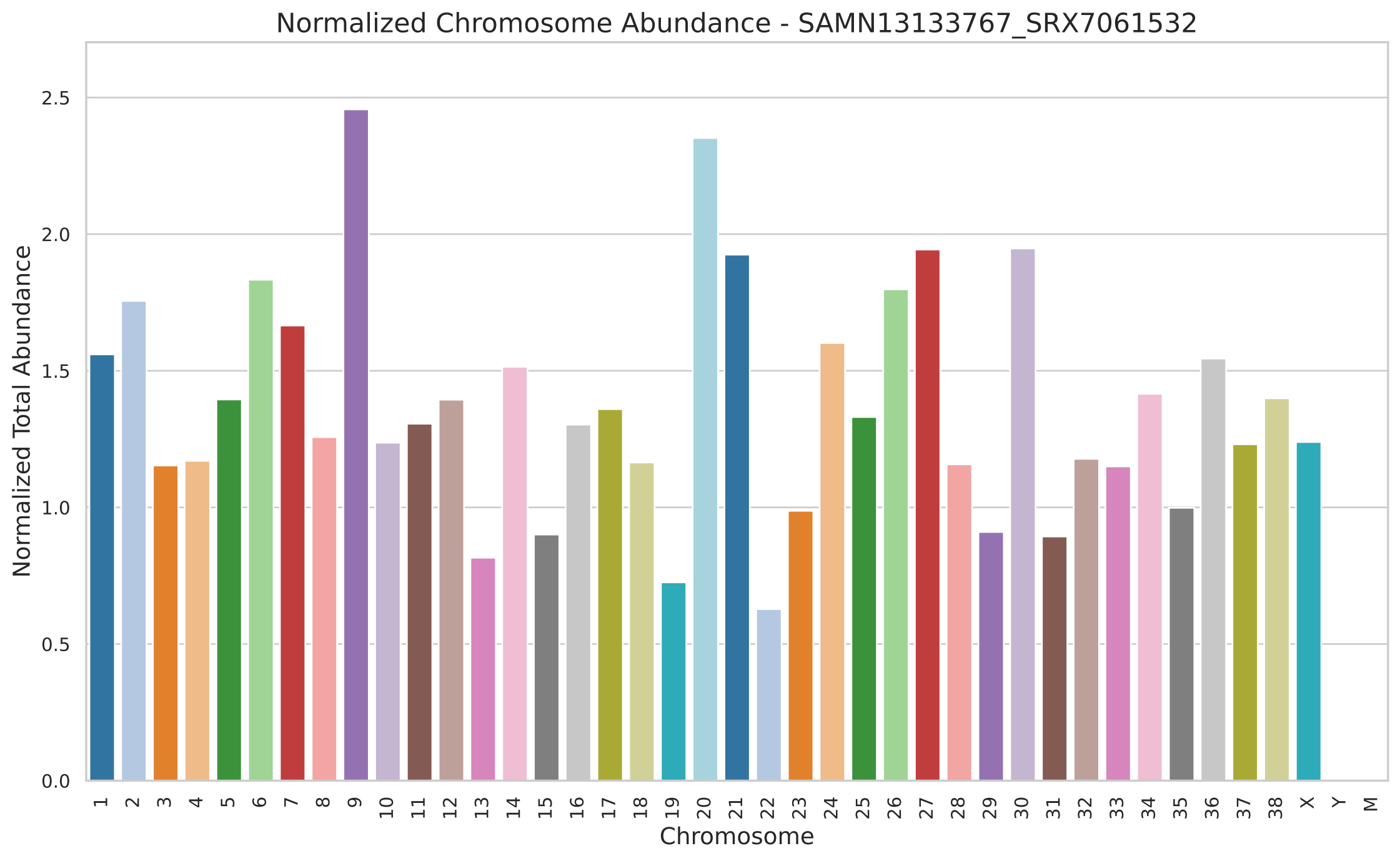

Normalized Chromosome Abundance - SAMN03436820_SRX963784
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

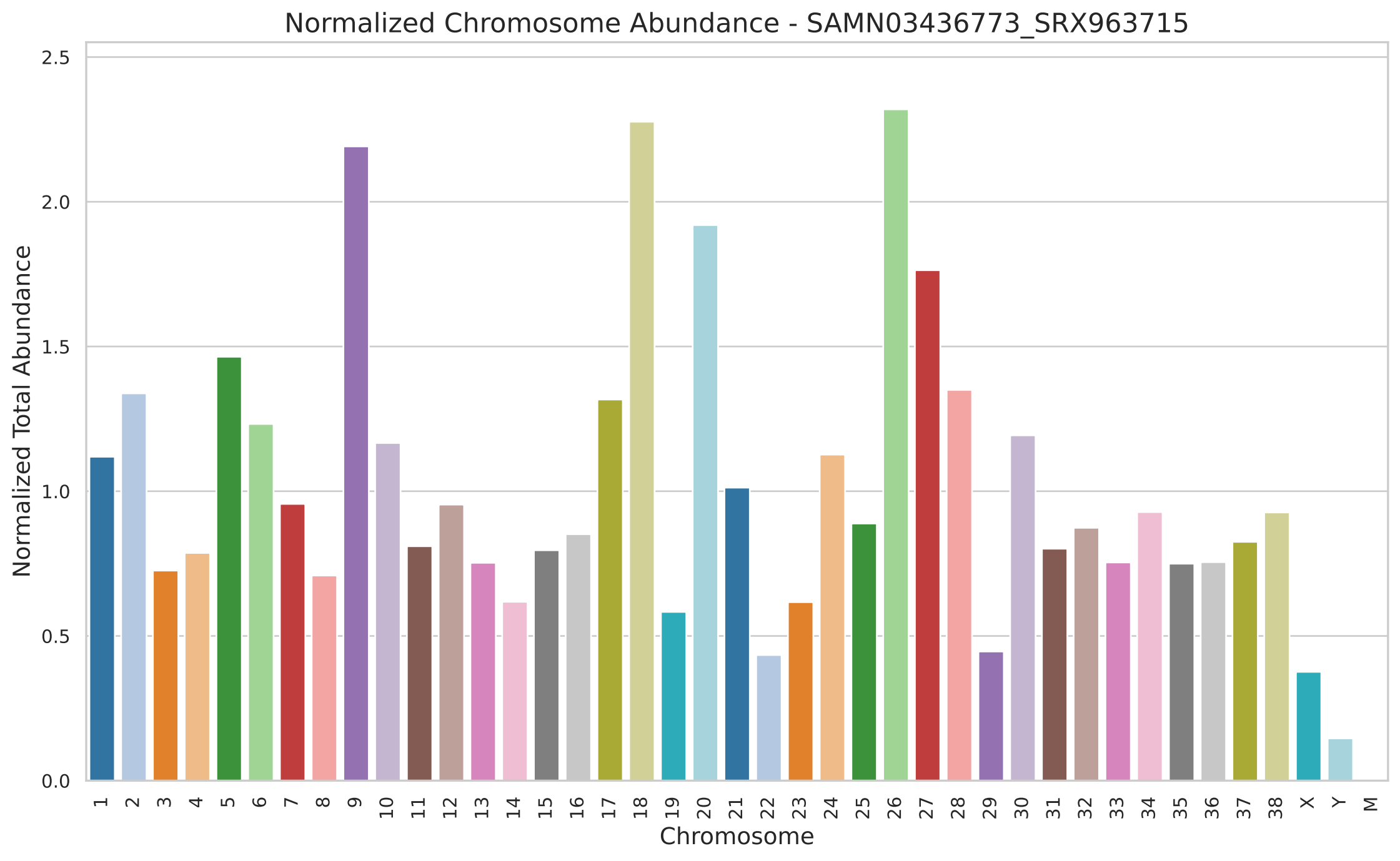

Normalized Chromosome Abundance - SAMN03436813_SRX963776
Normalized Total Abundance
2.0
1.8
1.5
1.2
1.0
0.8
0.5
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

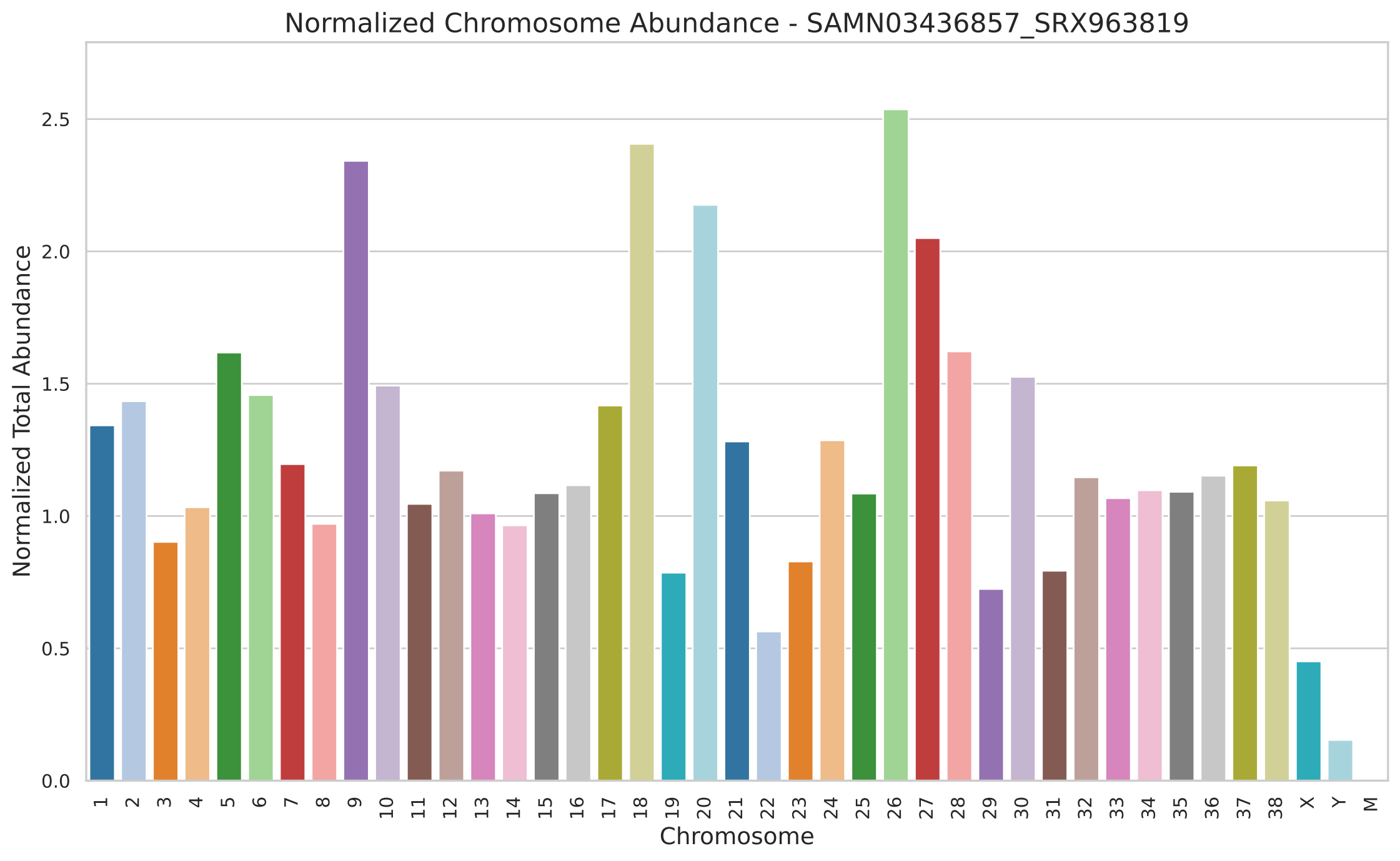

Normalized Chromosome Abundance - SAMN03436723_SRX963701
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

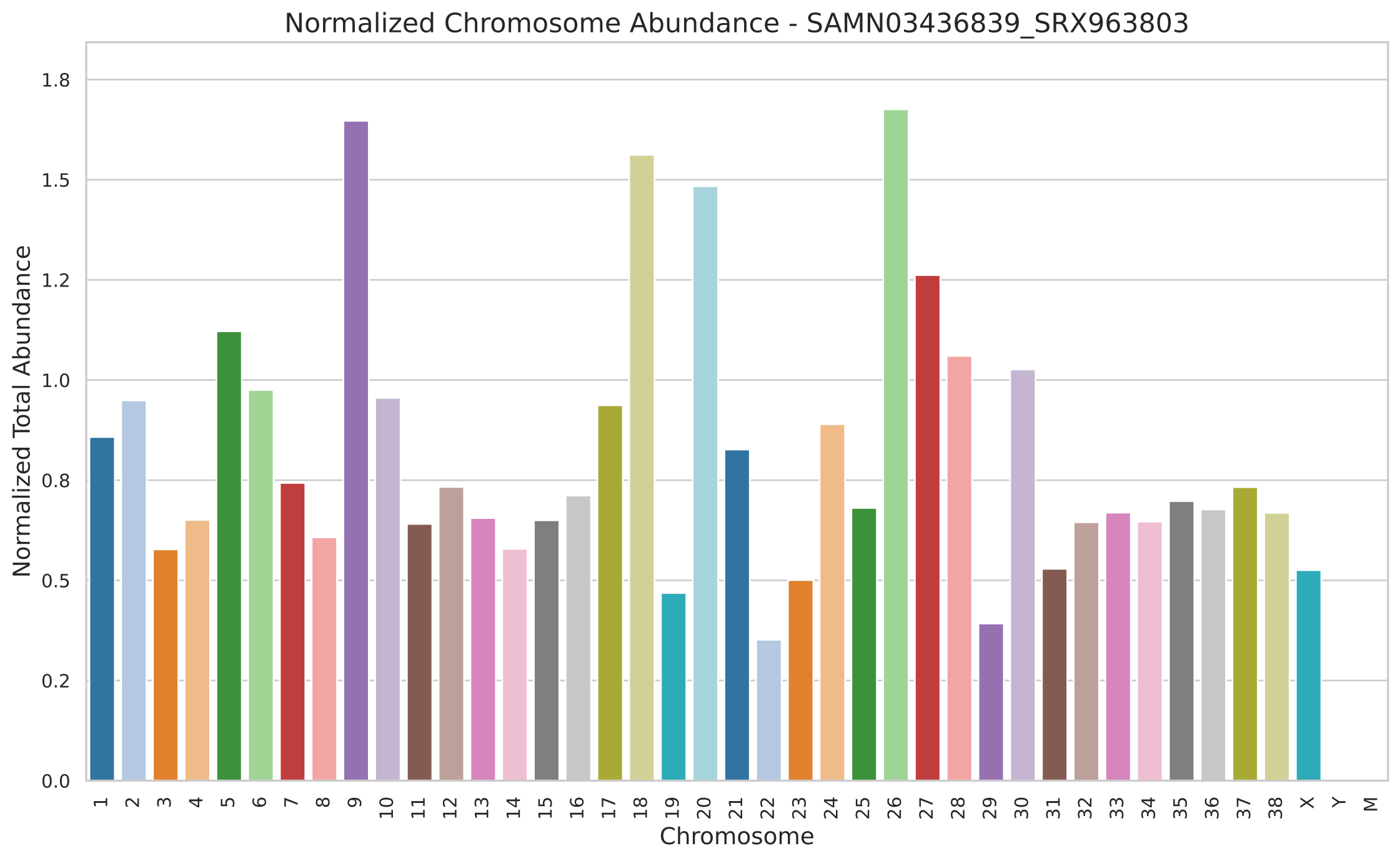

Normalized Chromosome Abundance - SAMN03436503_SRX964054
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

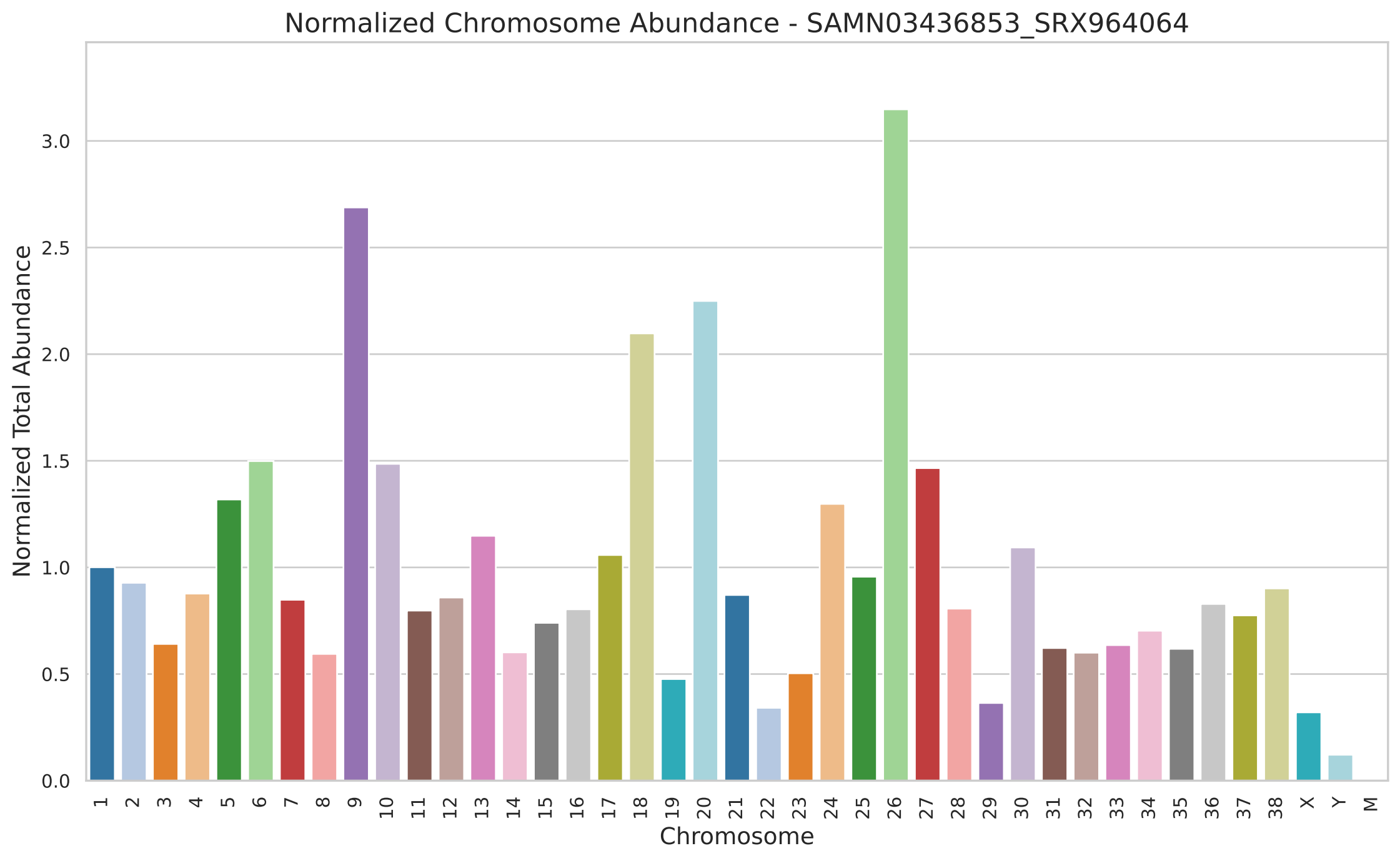

Normalized Chromosome Abundance - SAMN13133756_SRX7061534
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

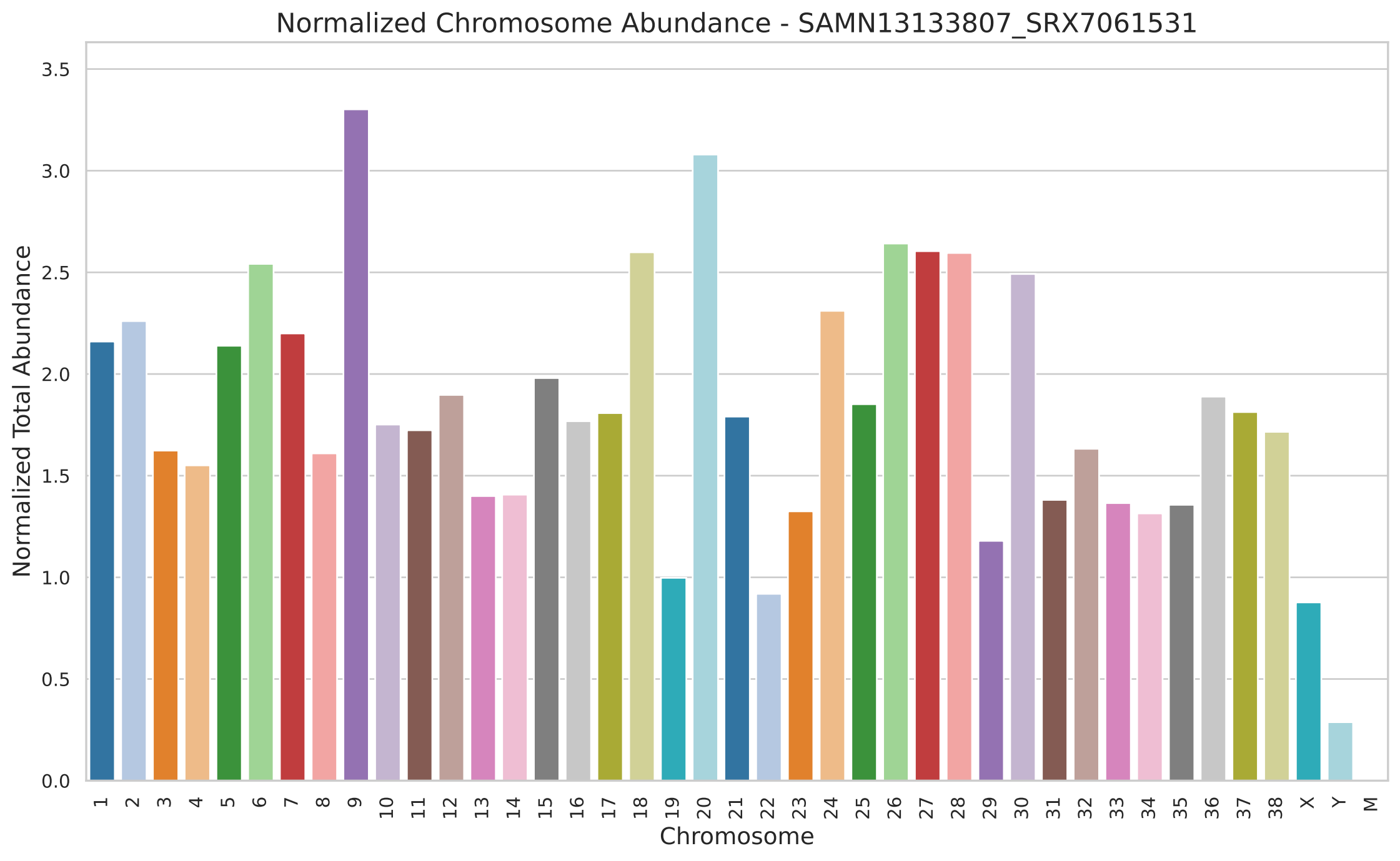

Normalized Chromosome Abundance - SAMN13133767_SRX7061532
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

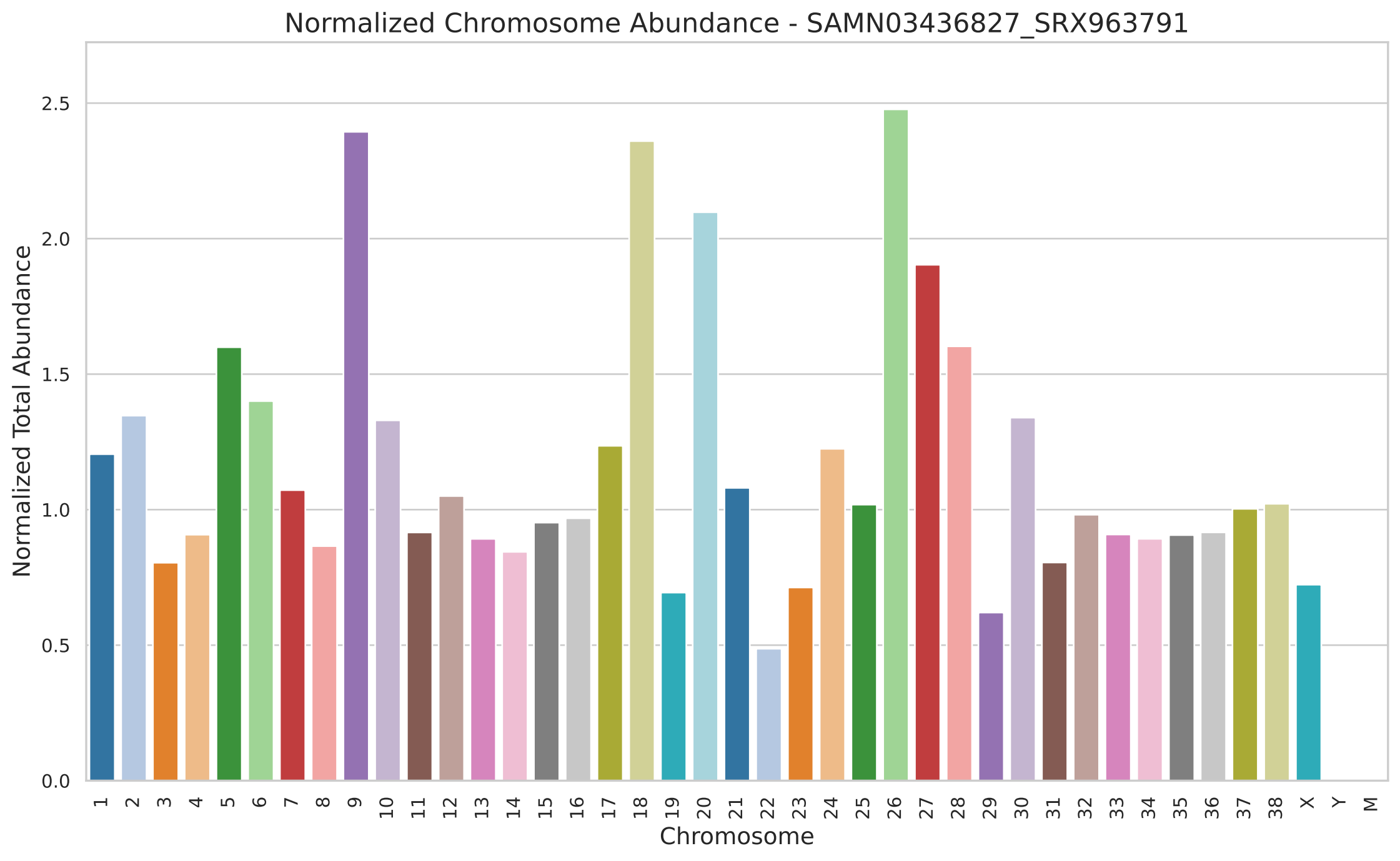

Normalized Chromosome Abundance - SAMN03436773_SRX963715
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

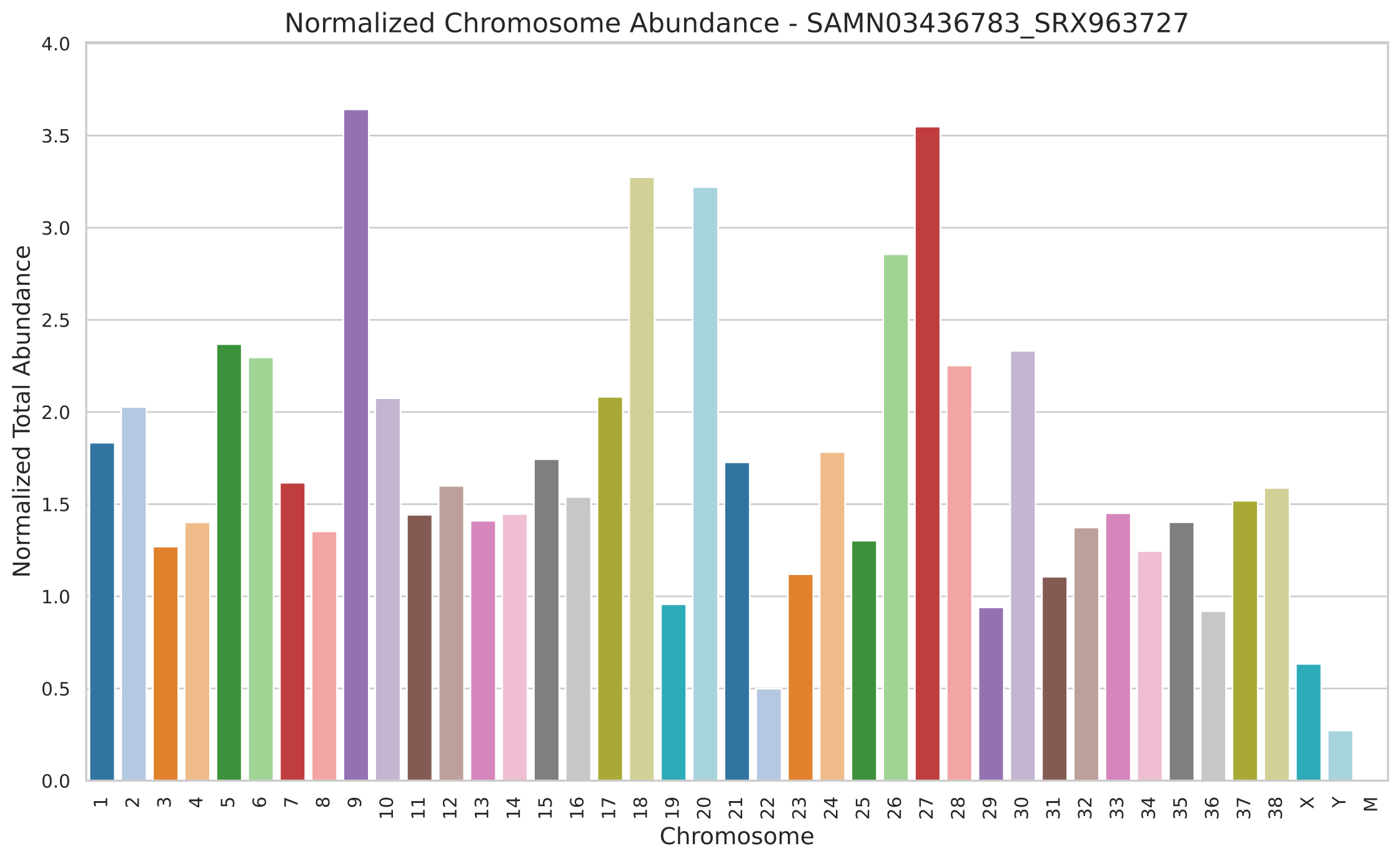

Normalized Chromosome Abundance - SAMN03436857_SRX963819
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

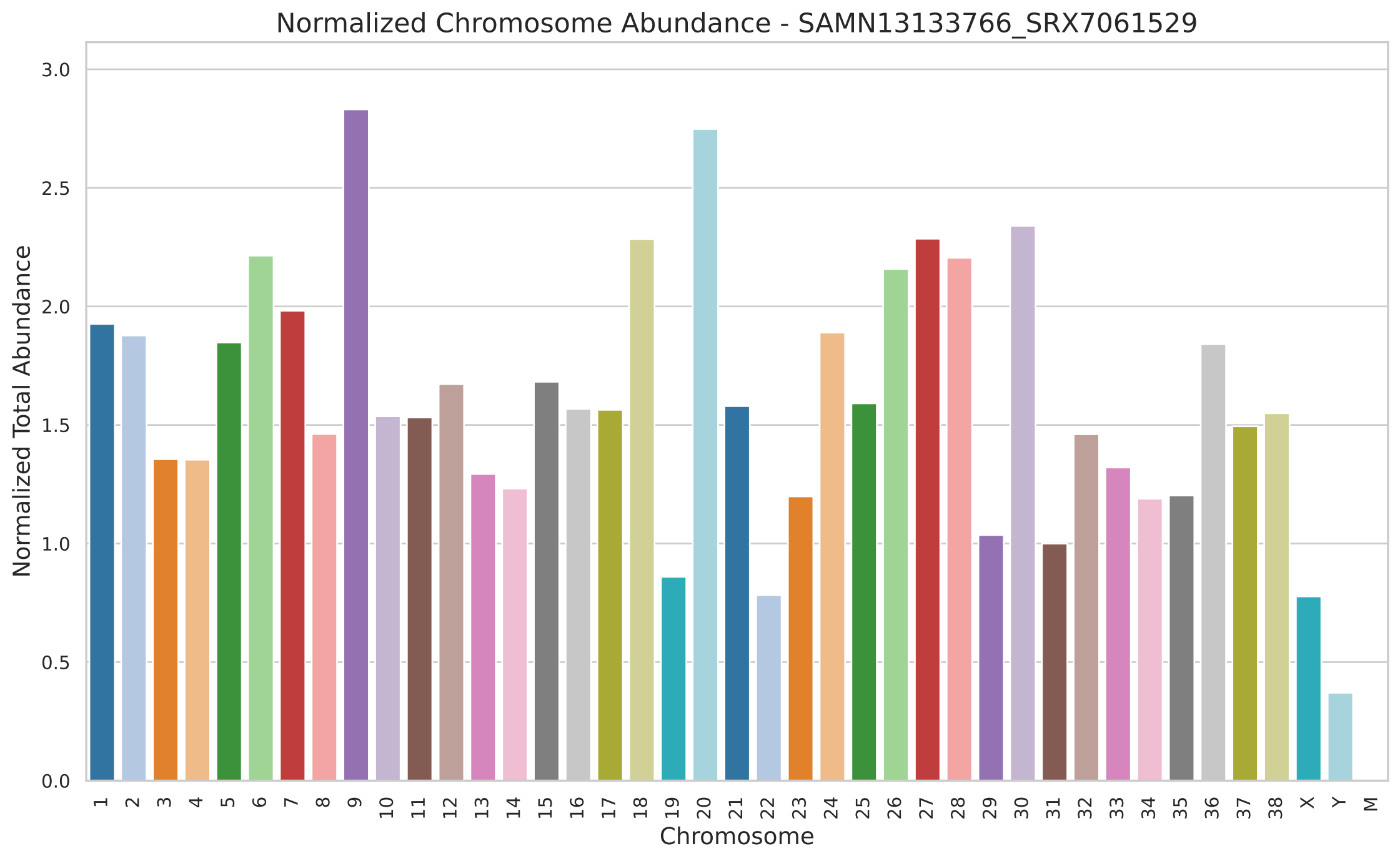

Normalized Chromosome Abundance - SAMN03436839_SRX963803
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

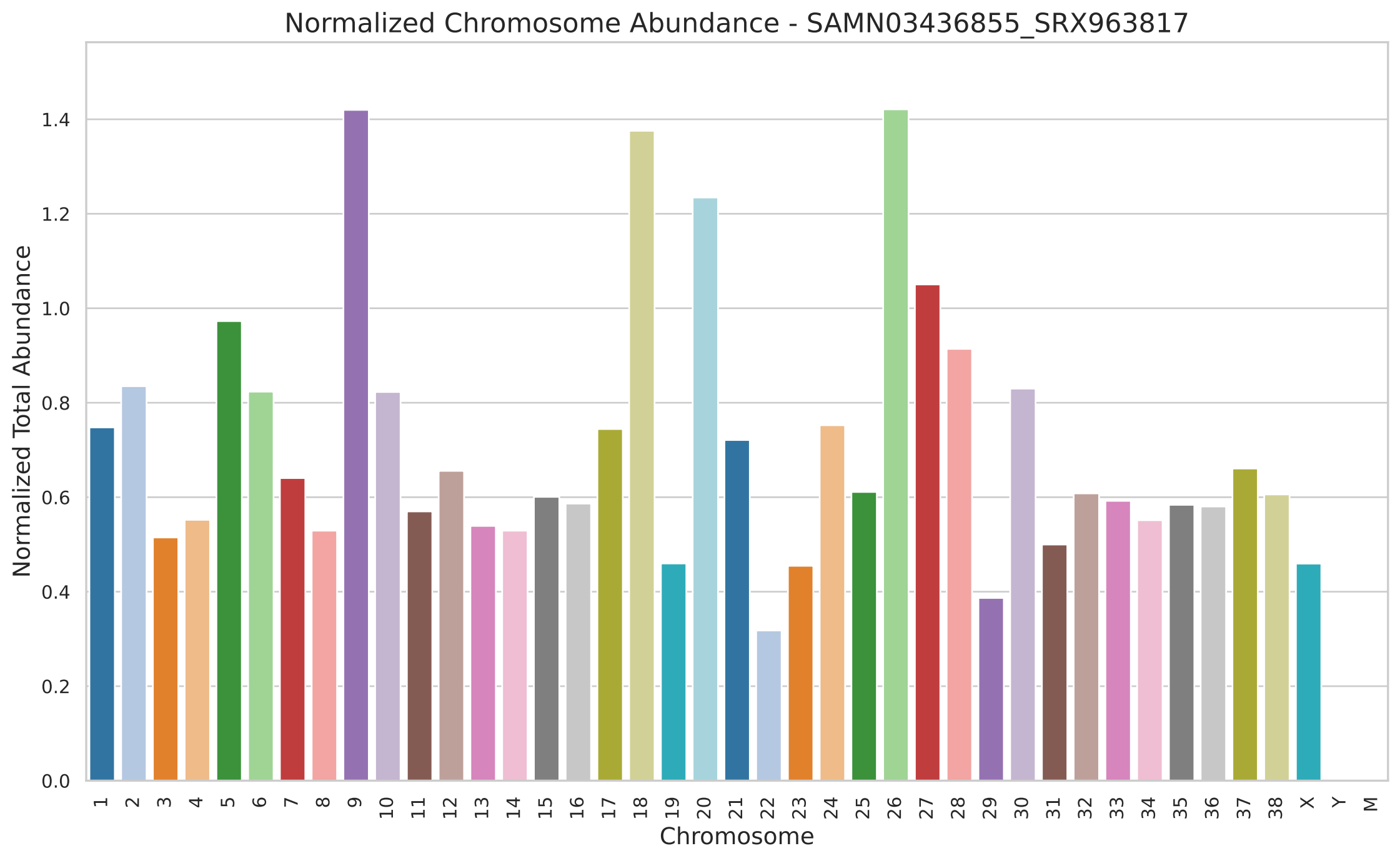

Normalized Chromosome Abundance - SAMN03436853_SRX964064
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

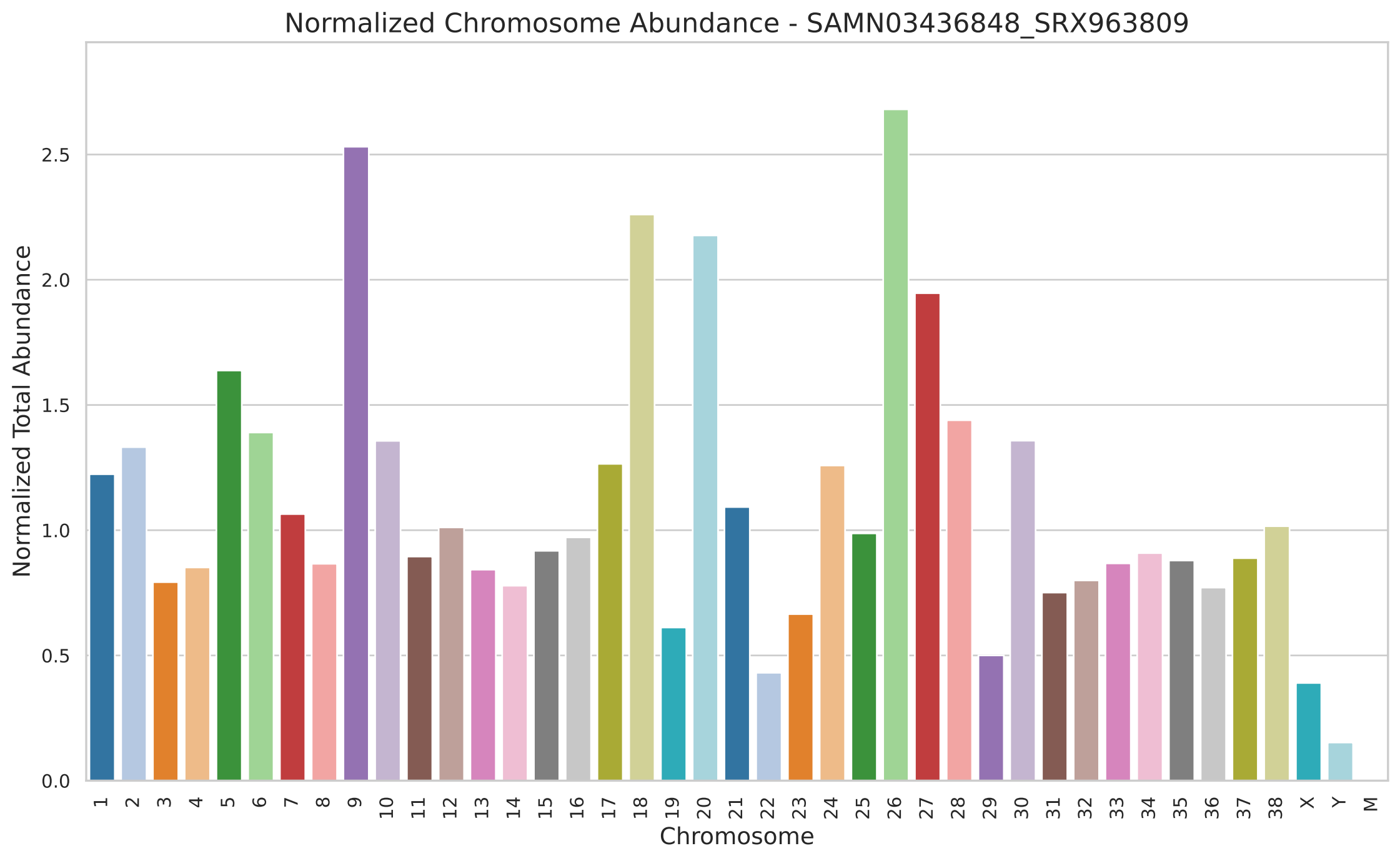

Normalized Chromosome Abundance - SAMN13133807_SRX7061531
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

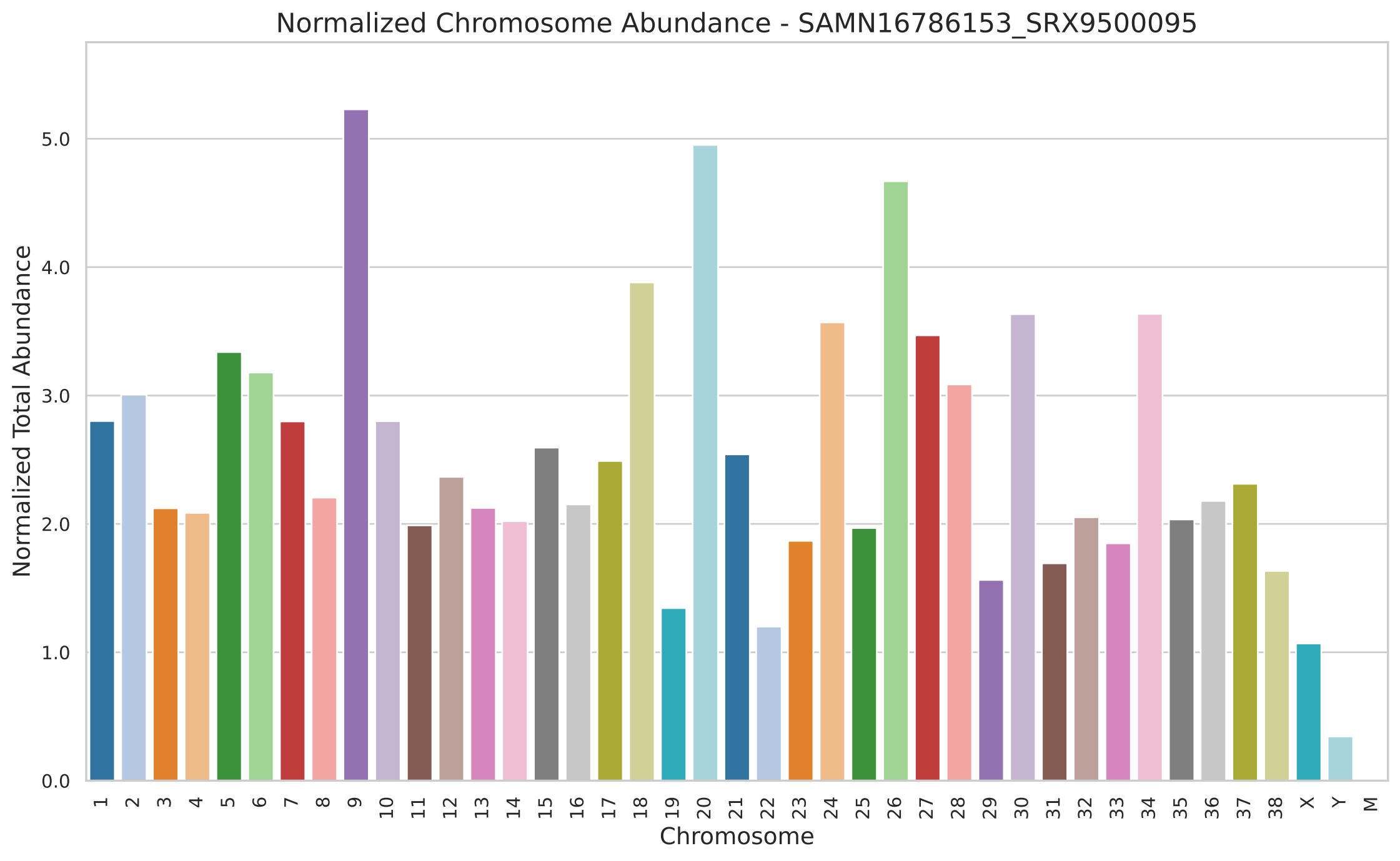

Normalized Chromosome Abundance - SAMN03436827_SRX963791
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

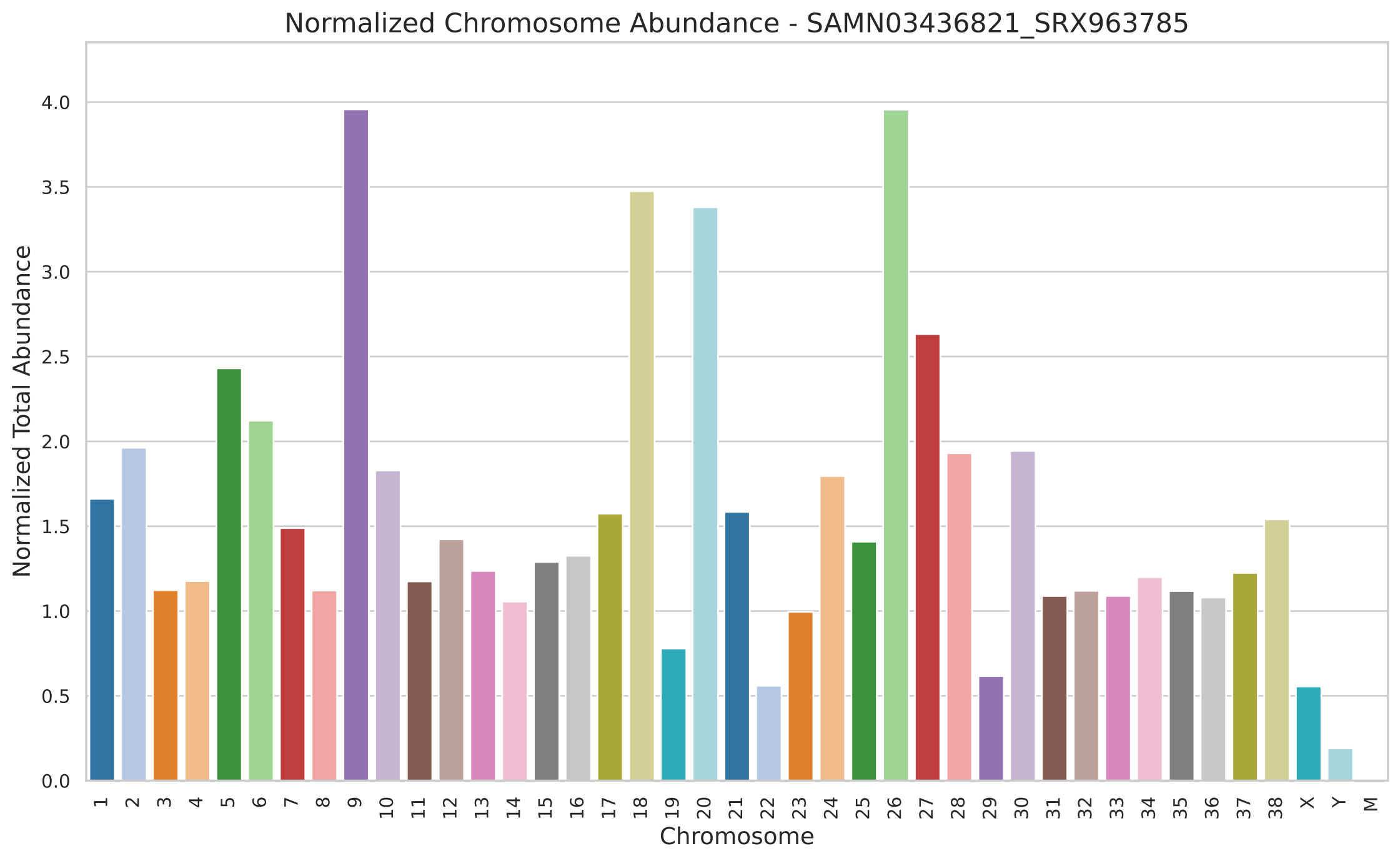

Normalized Chromosome Abundance - SAMN03436783_SRX963727
Normalized Total Abundance
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

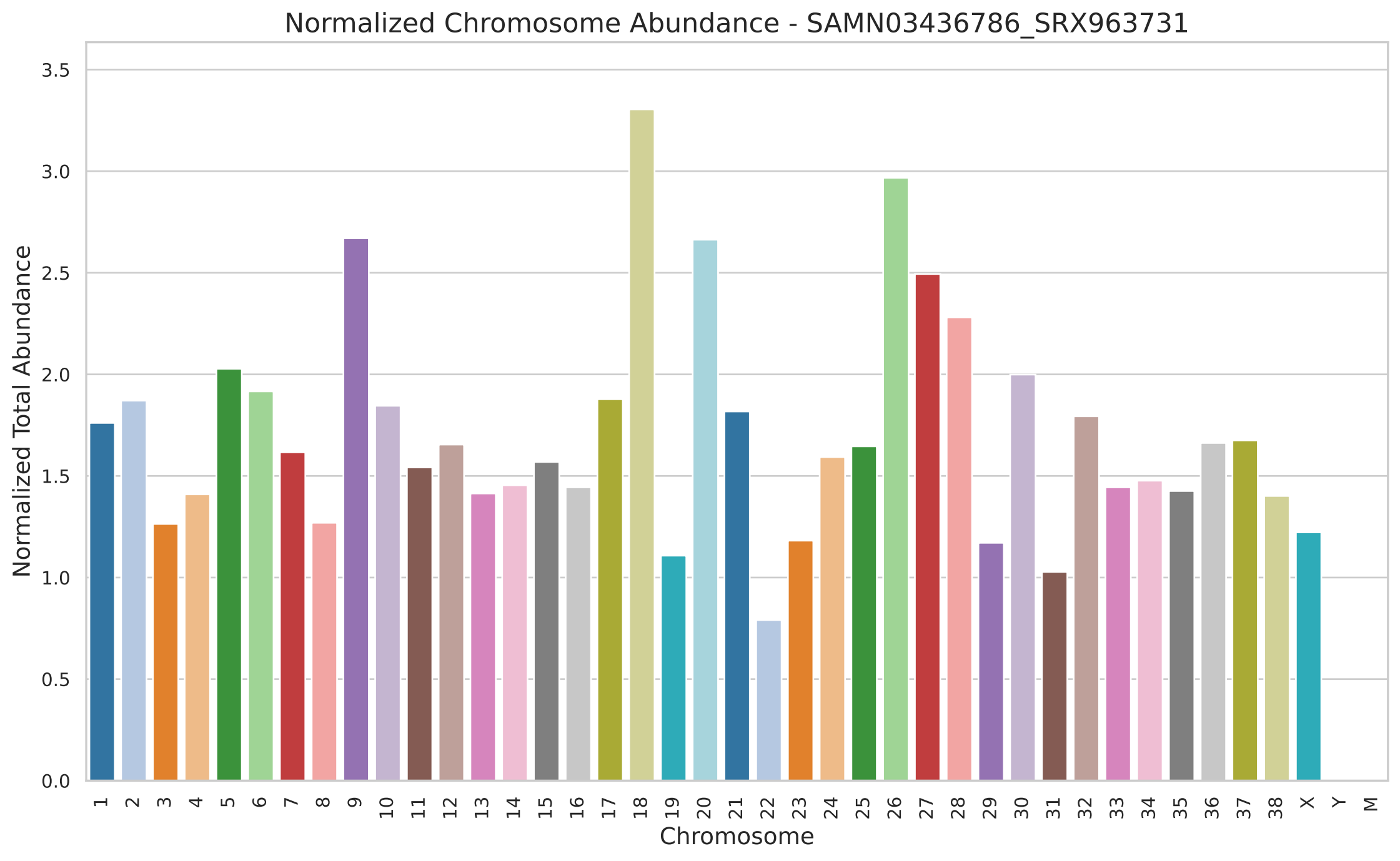

Normalized Chromosome Abundance - SAMN13133766_SRX7061529
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

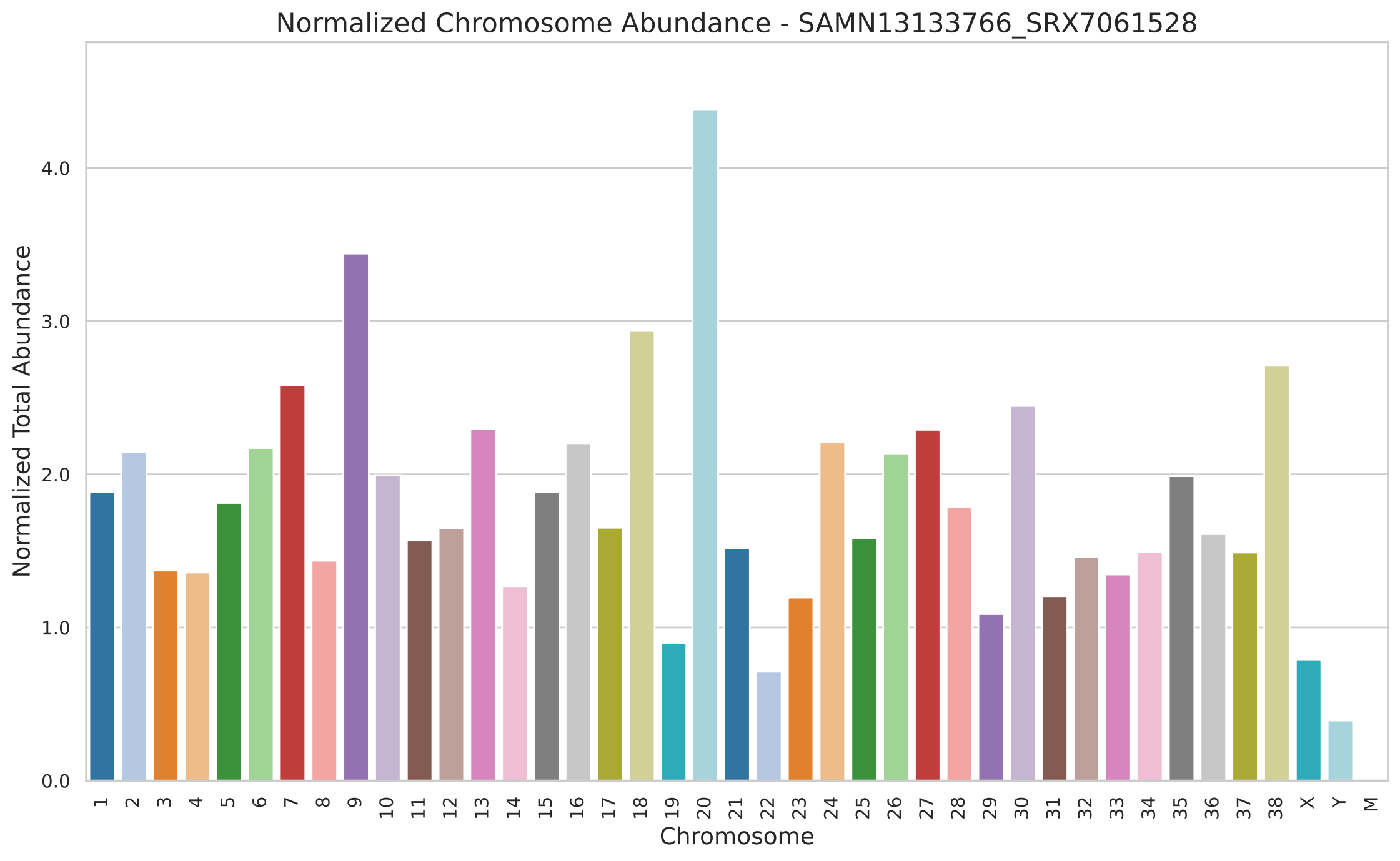

Normalized Chromosome Abundance - SAMN03436855_SRX963817
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

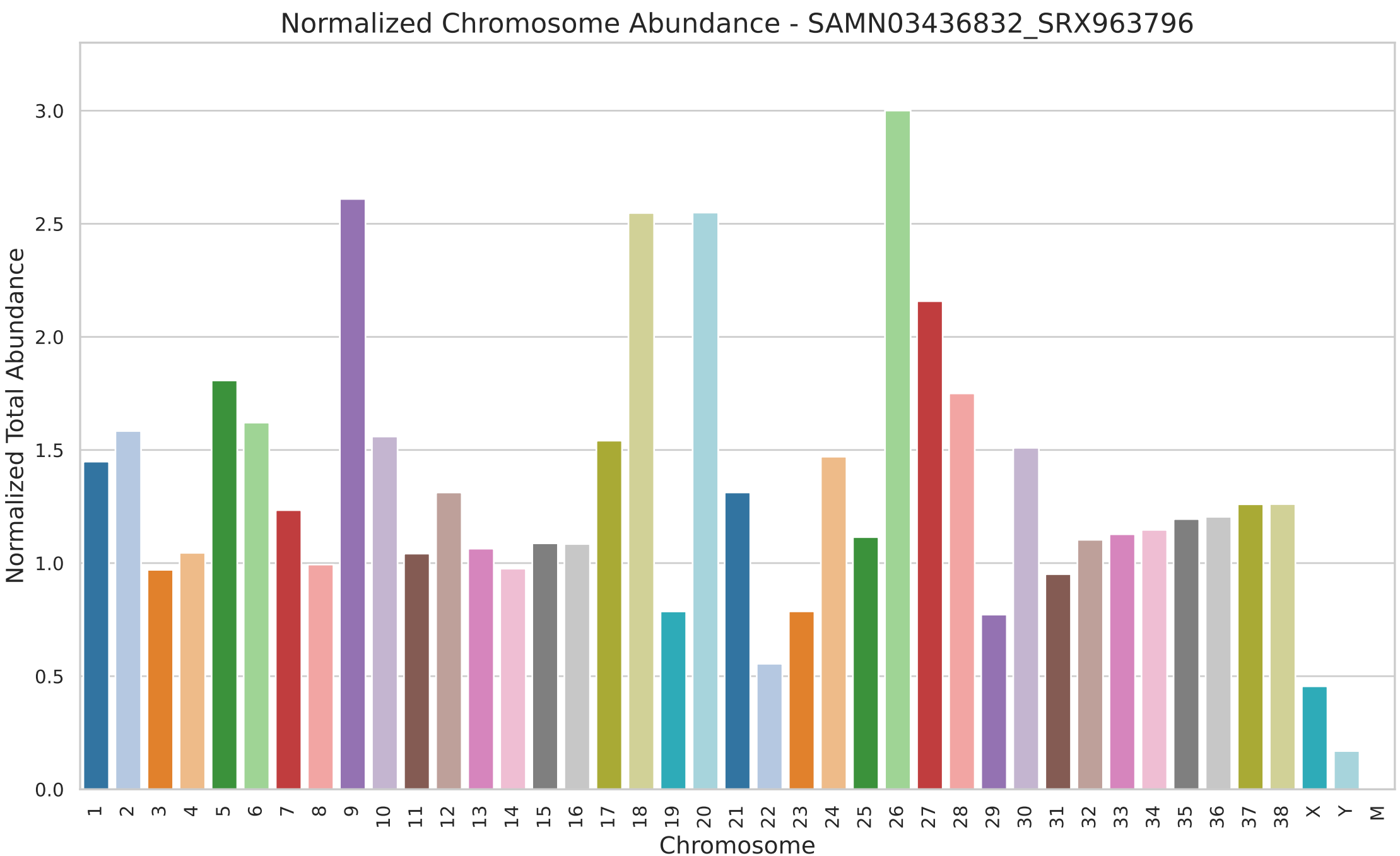

Normalized Chromosome Abundance - SAMN03436848_SRX963809
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

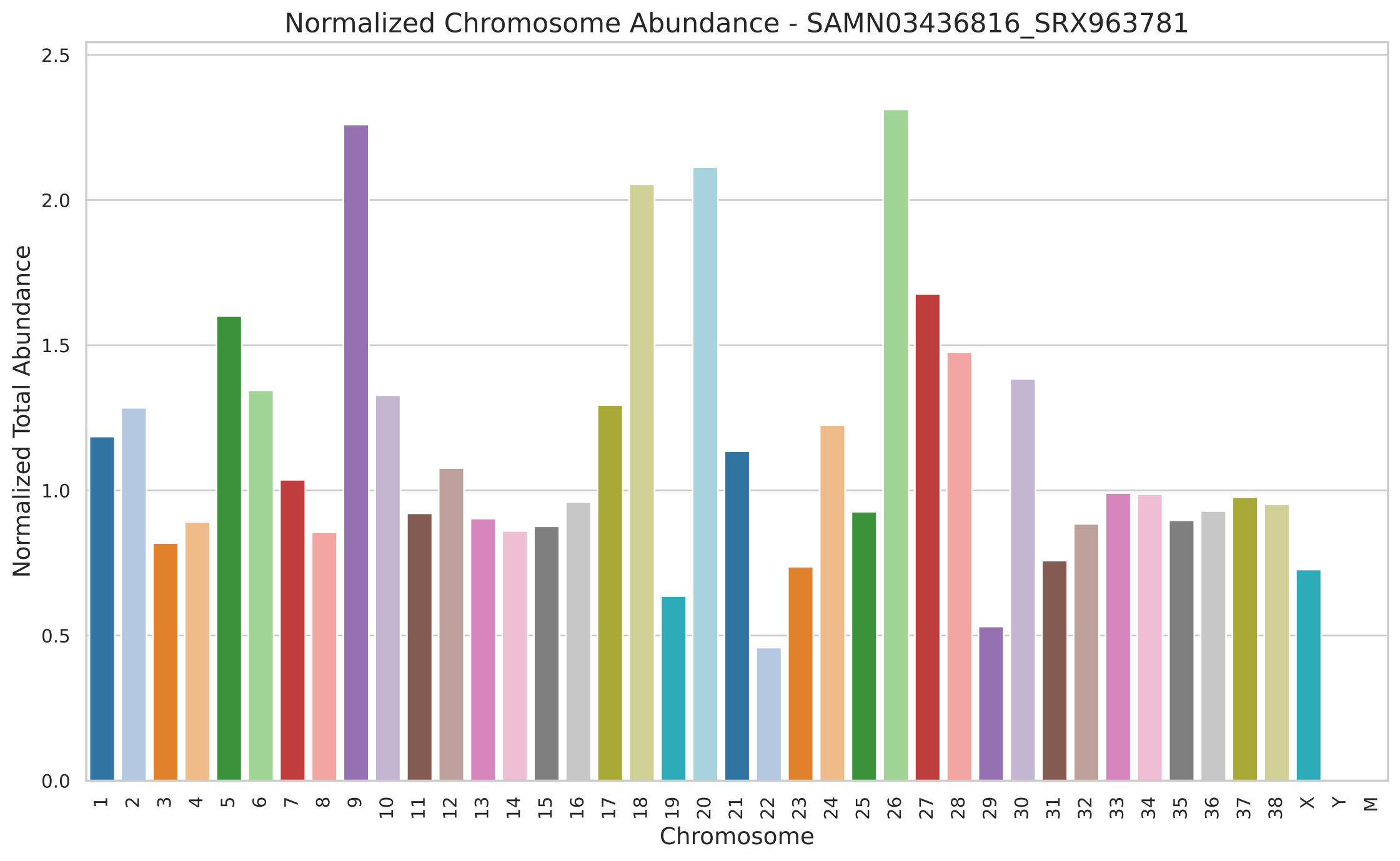

Normalized Chromosome Abundance - SAMN16786153_SRX9500095
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

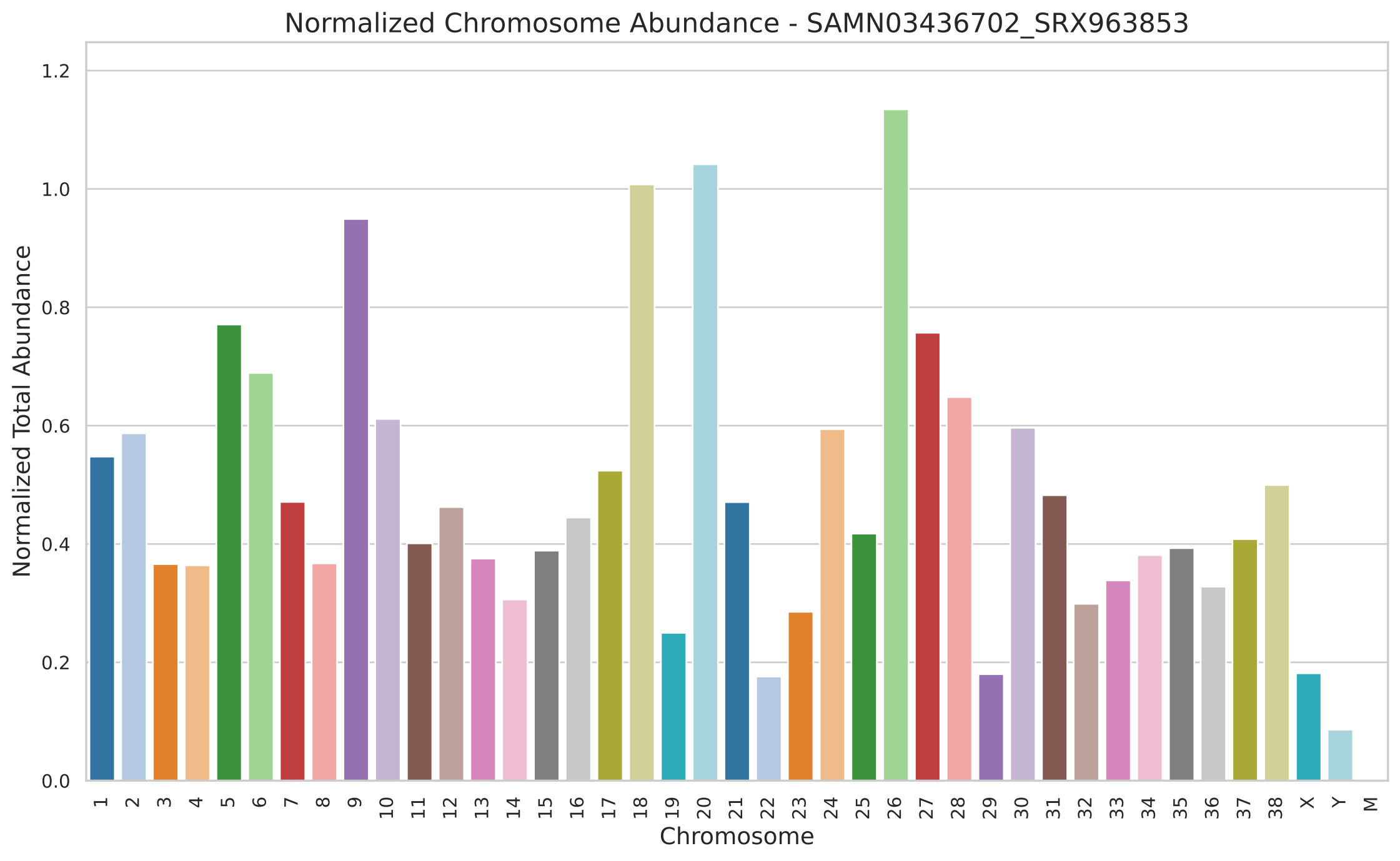

Normalized Chromosome Abundance - SAMN03436821_SRX963785
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

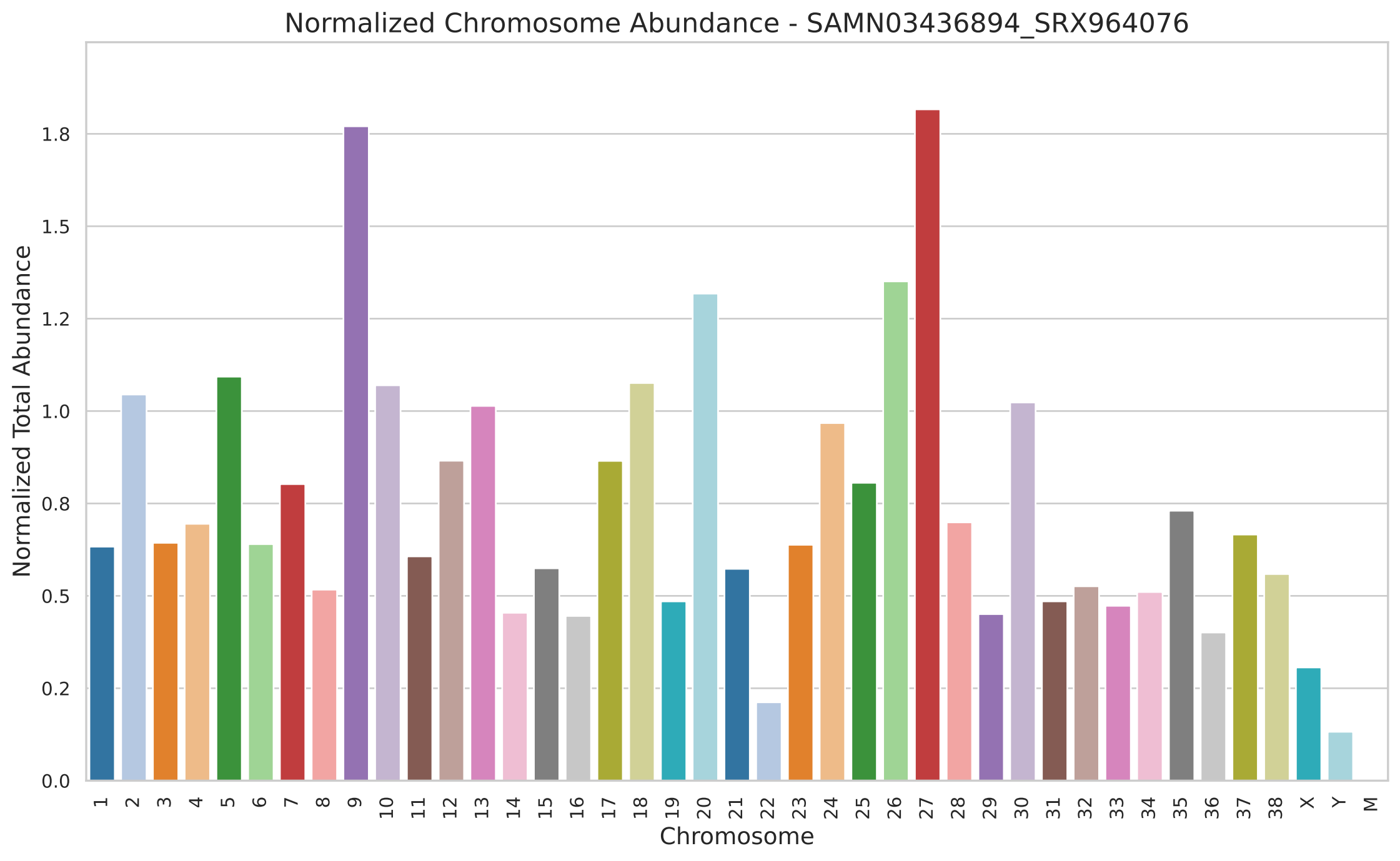

Normalized Chromosome Abundance - SAMN03436786_SRX963731
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

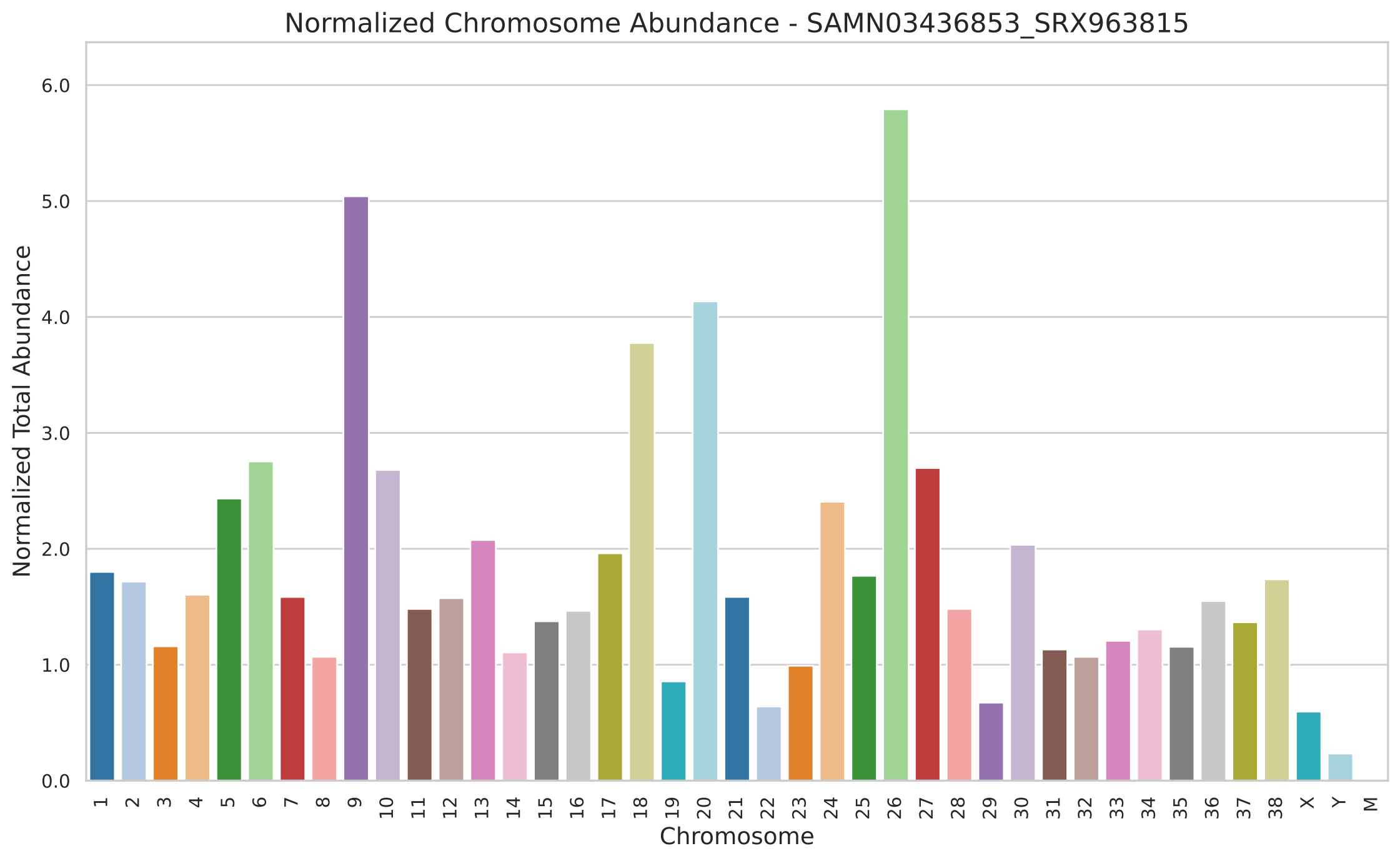

Normalized Chromosome Abundance - SAMN13133766_SRX7061528
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

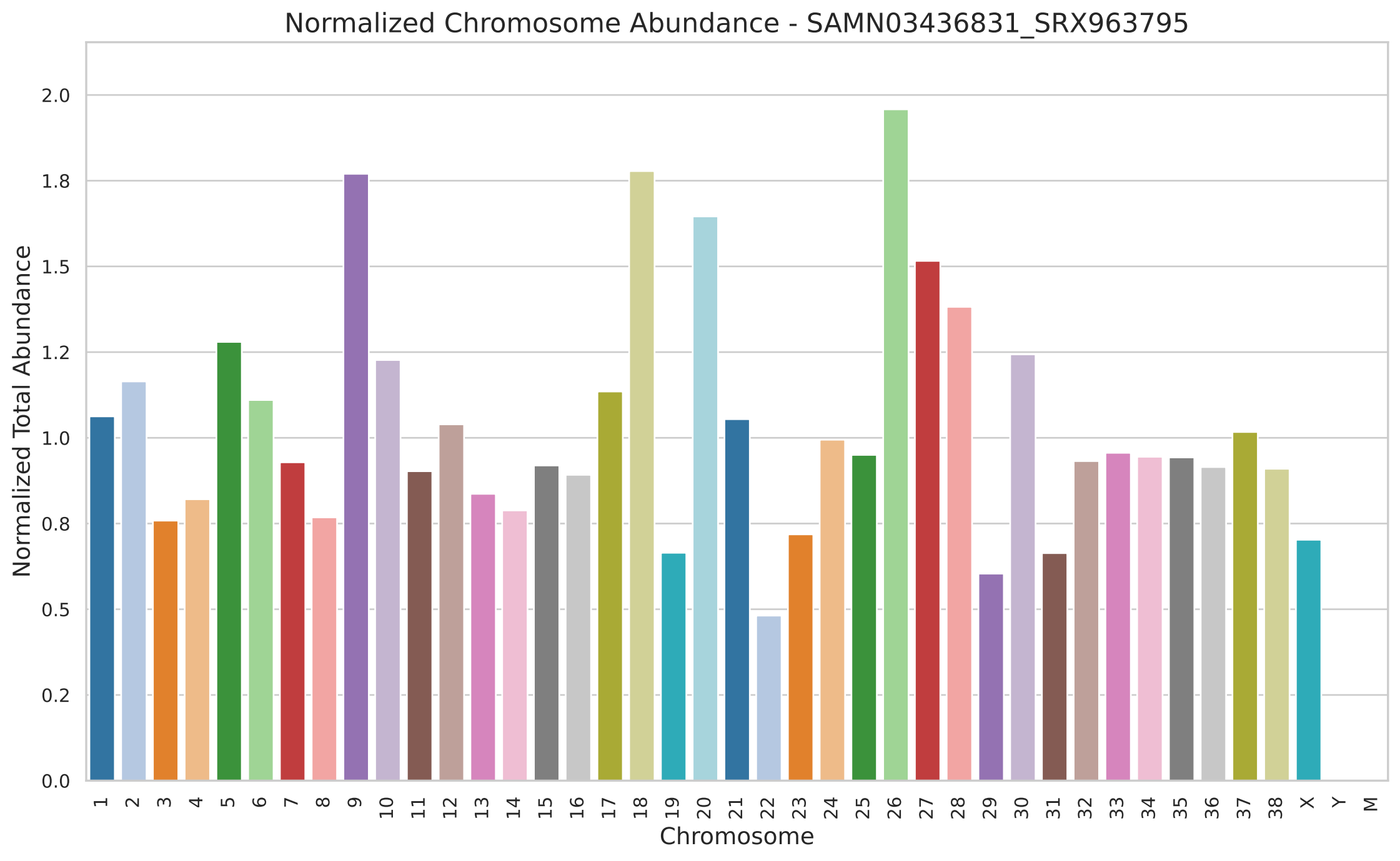

Normalized Chromosome Abundance - SAMN03436832_SRX963796
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

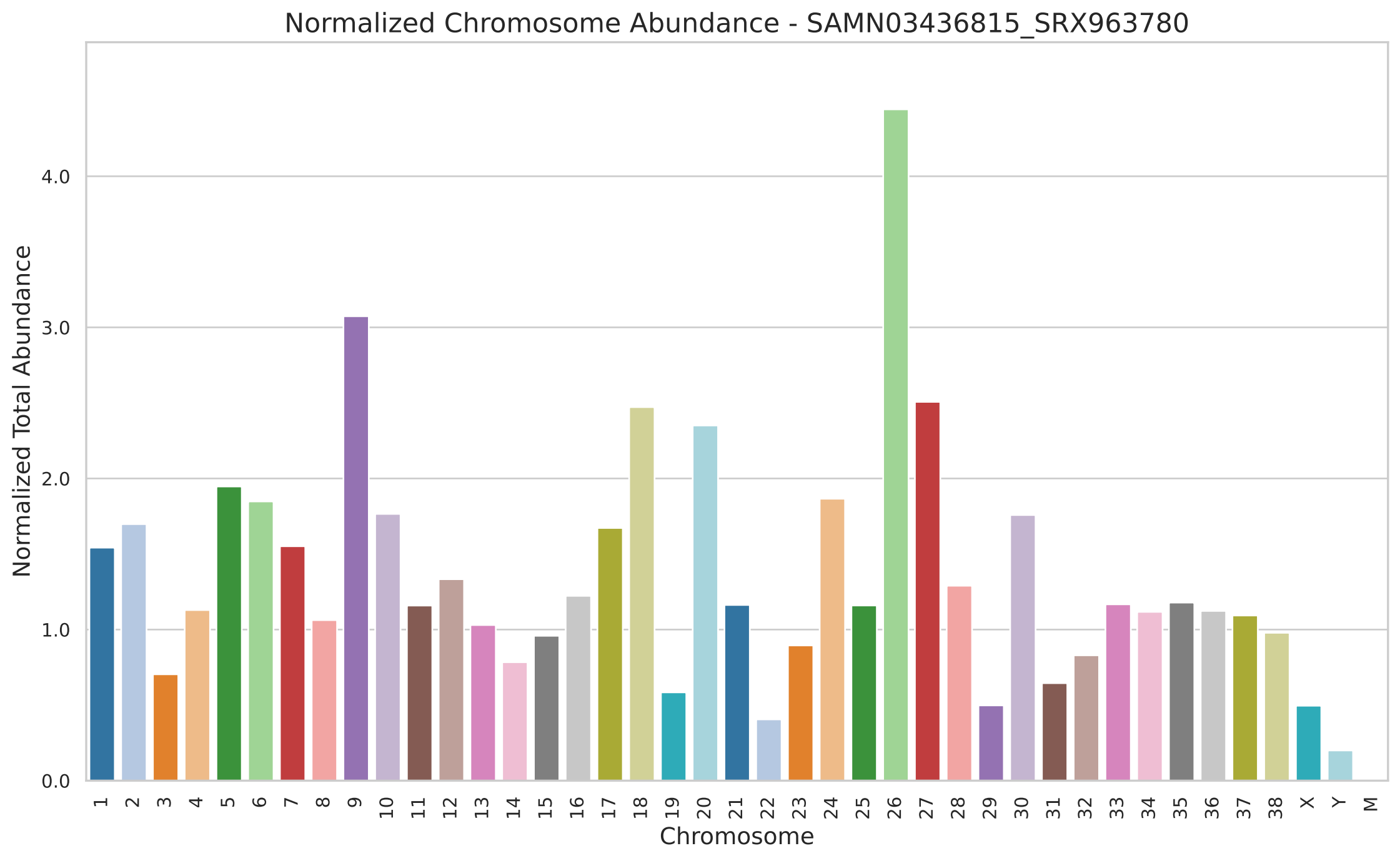

Normalized Chromosome Abundance - SAMN03436816_SRX963781
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

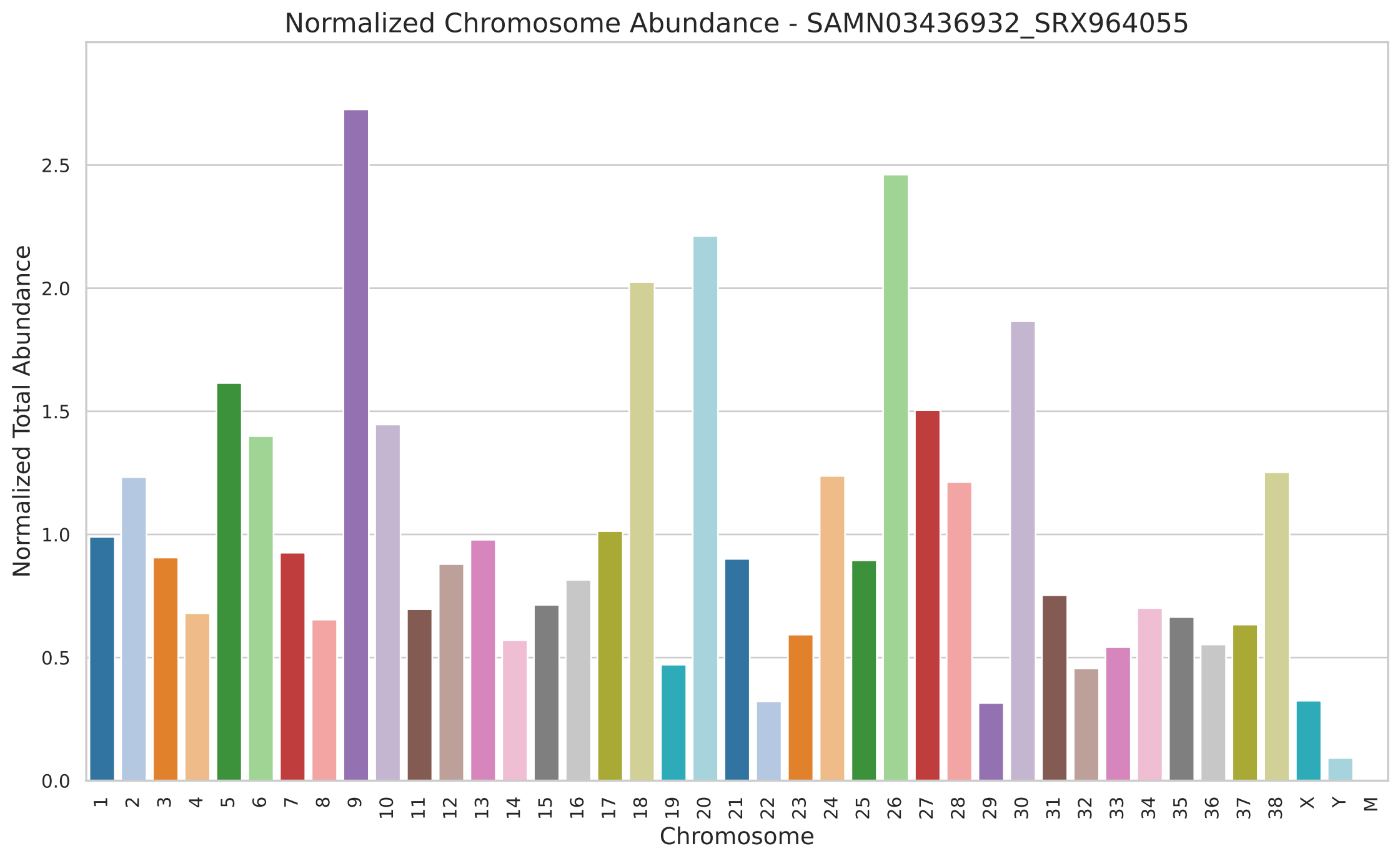

Normalized Chromosome Abundance - SAMN03436702_SRX963853
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

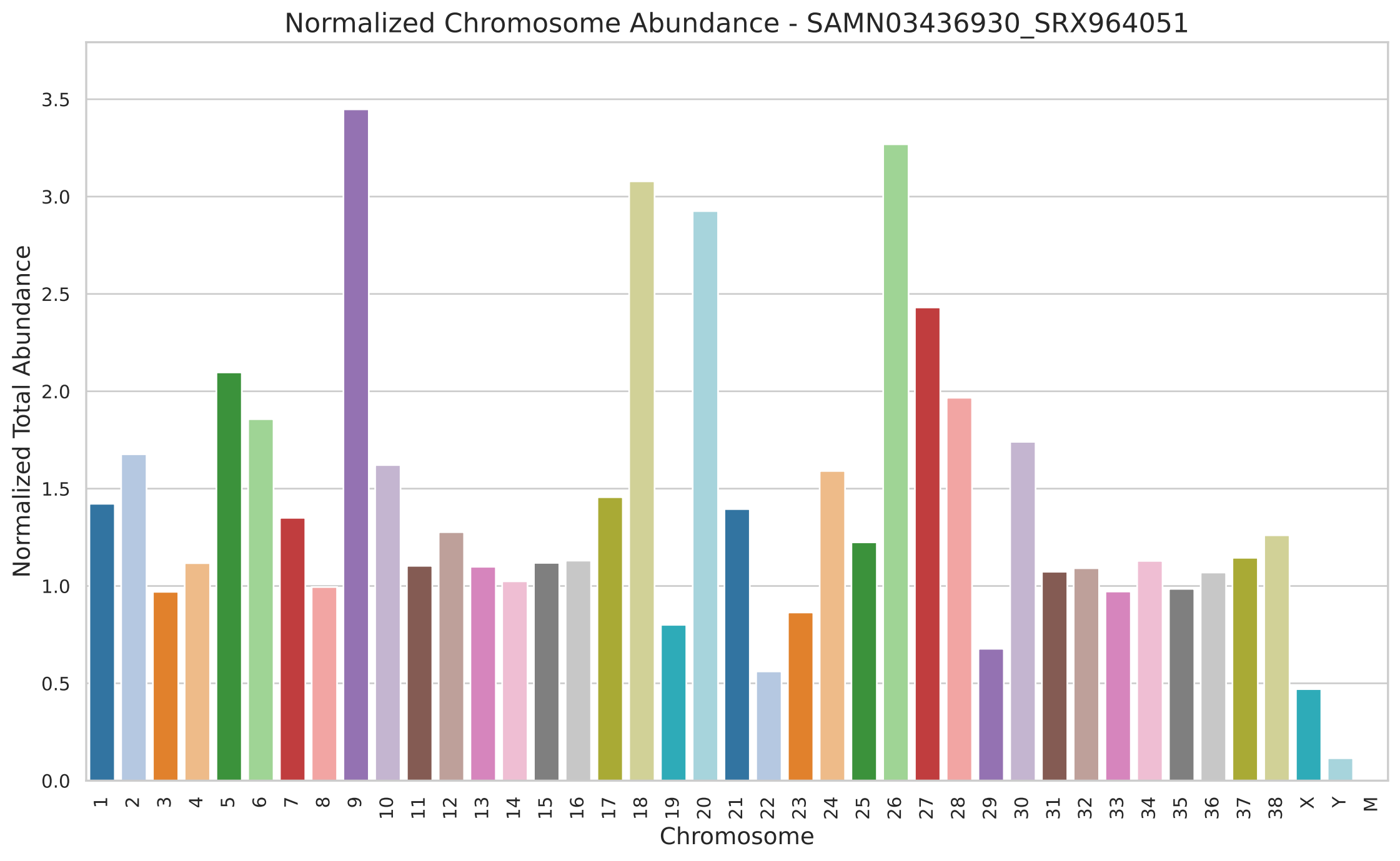

Normalized Chromosome Abundance - SAMN03436894_SRX964076
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

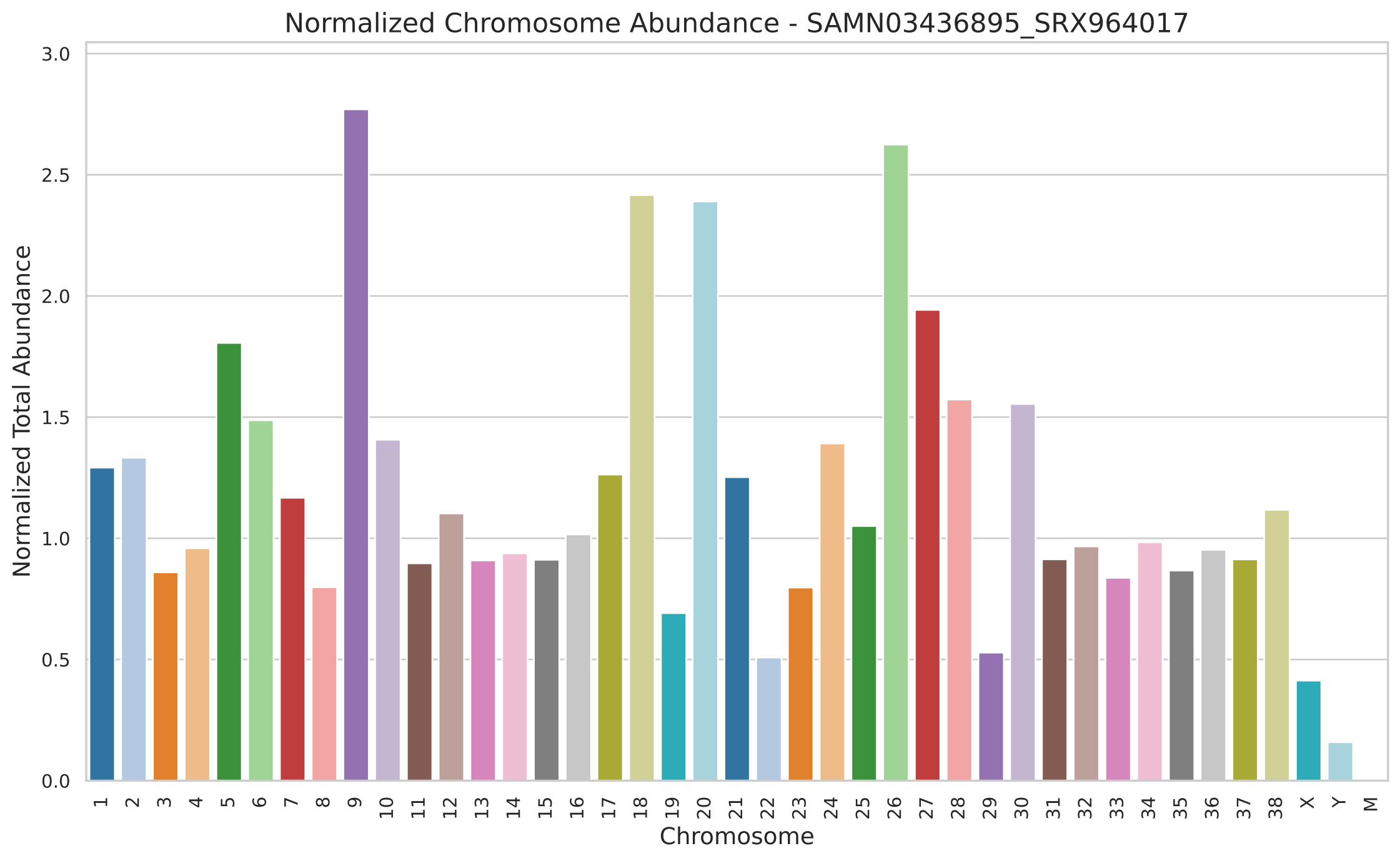

Normalized Chromosome Abundance - SAMN03436853_SRX963815
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

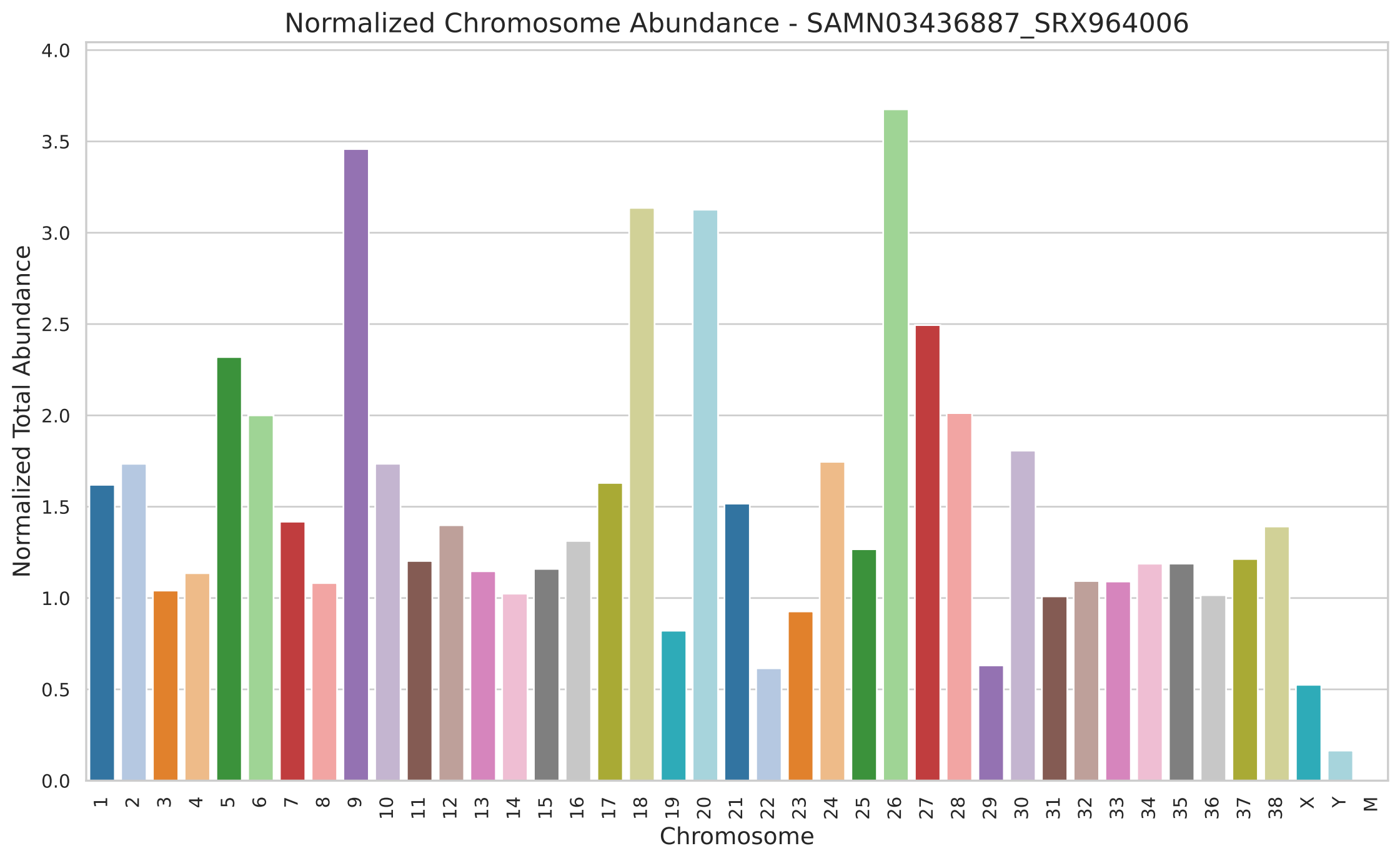

Normalized Chromosome Abundance - SAMN03436831_SRX963795
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

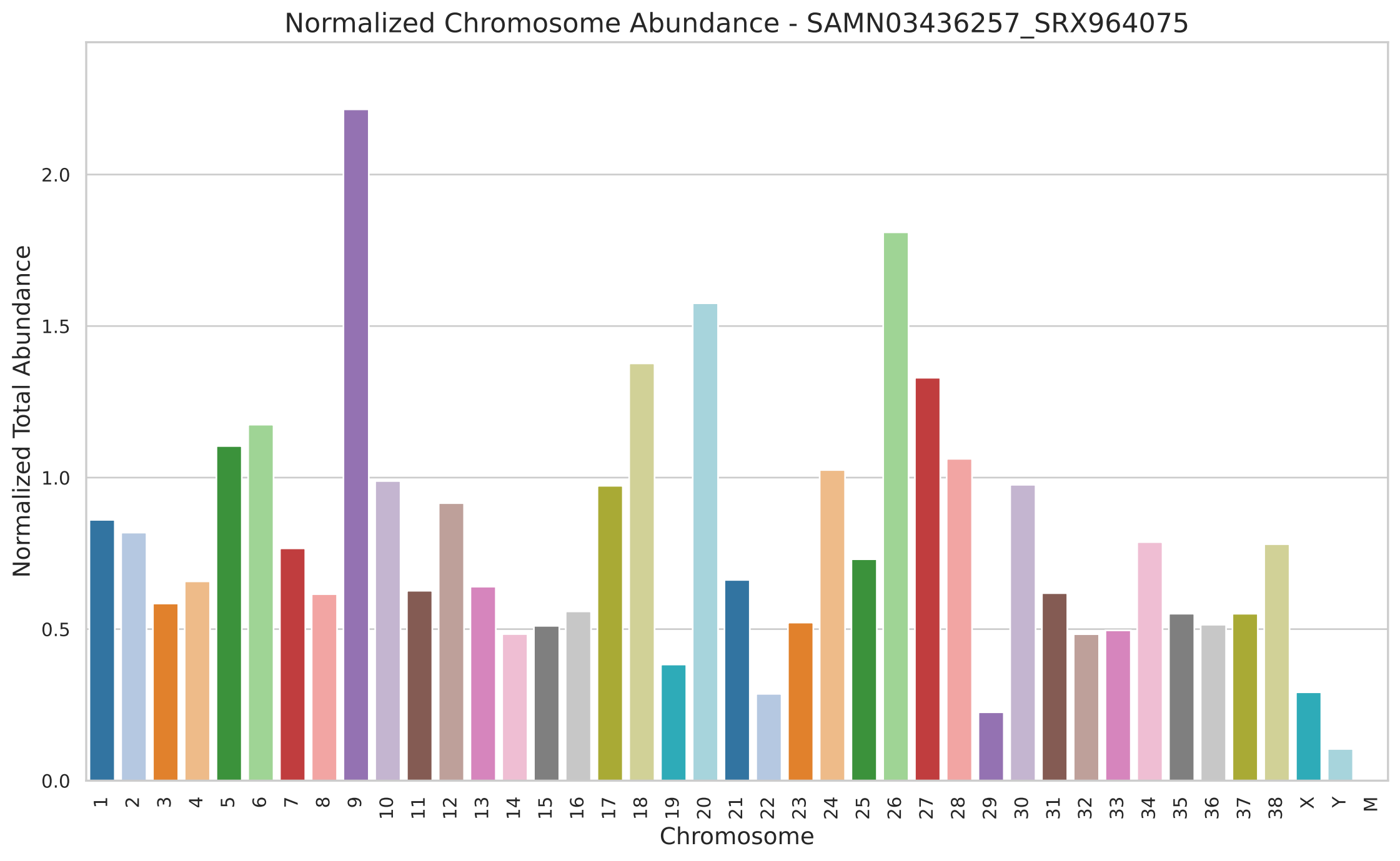

Normalized Chromosome Abundance - SAMN03436815_SRX963780
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

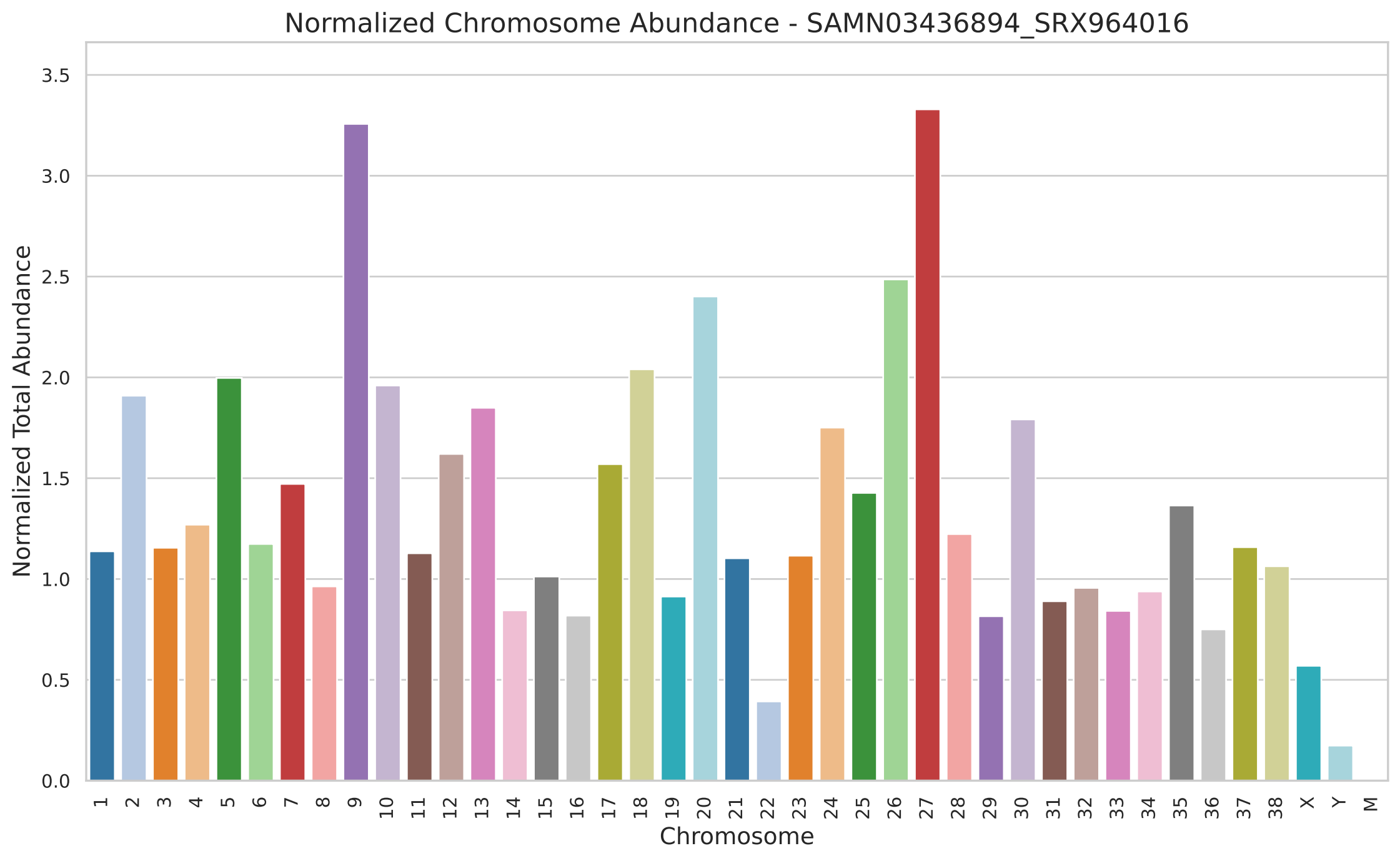

Normalized Chromosome Abundance - SAMN03436932_SRX964055
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

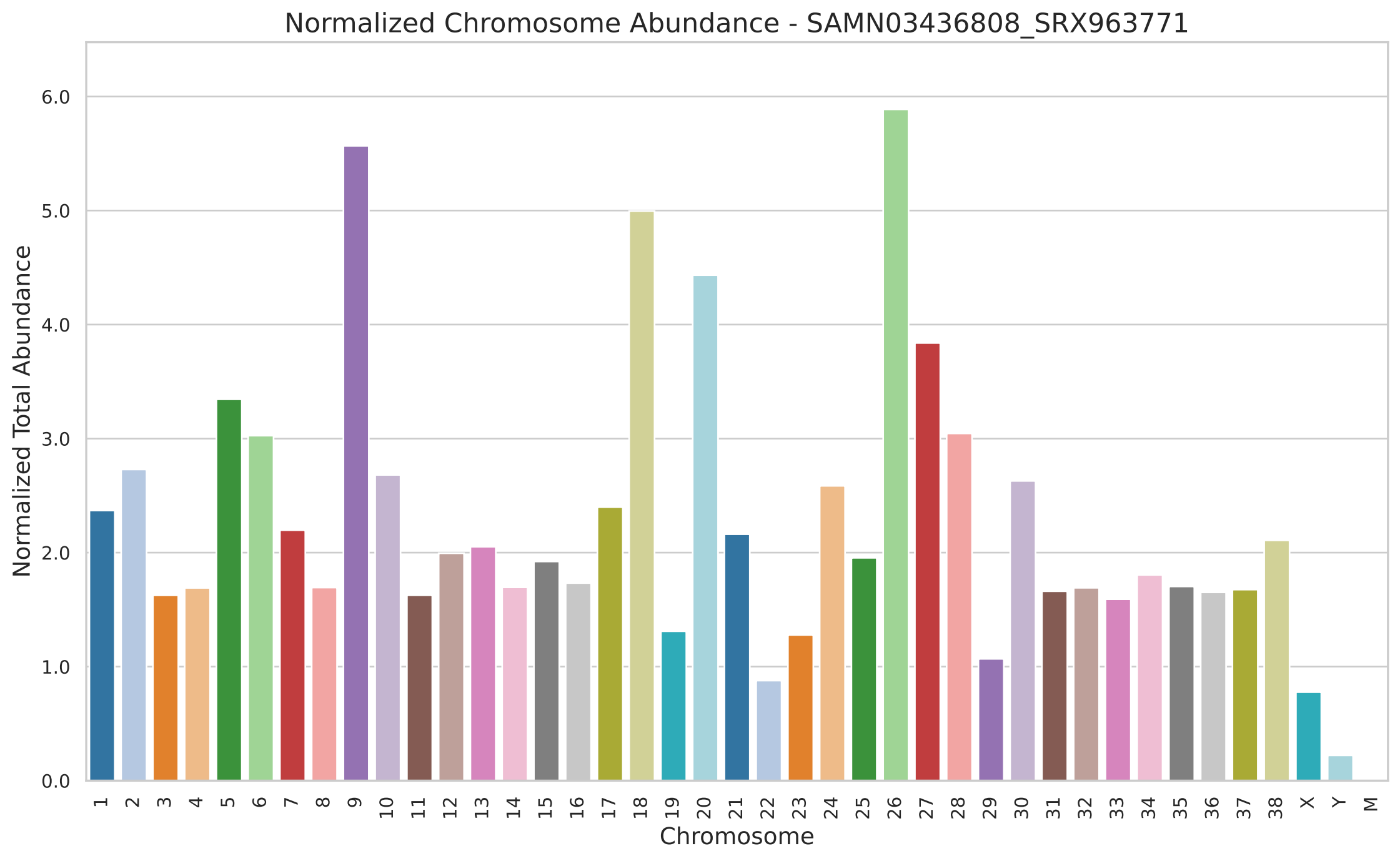

Normalized Chromosome Abundance - SAMN03436930_SRX964051
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

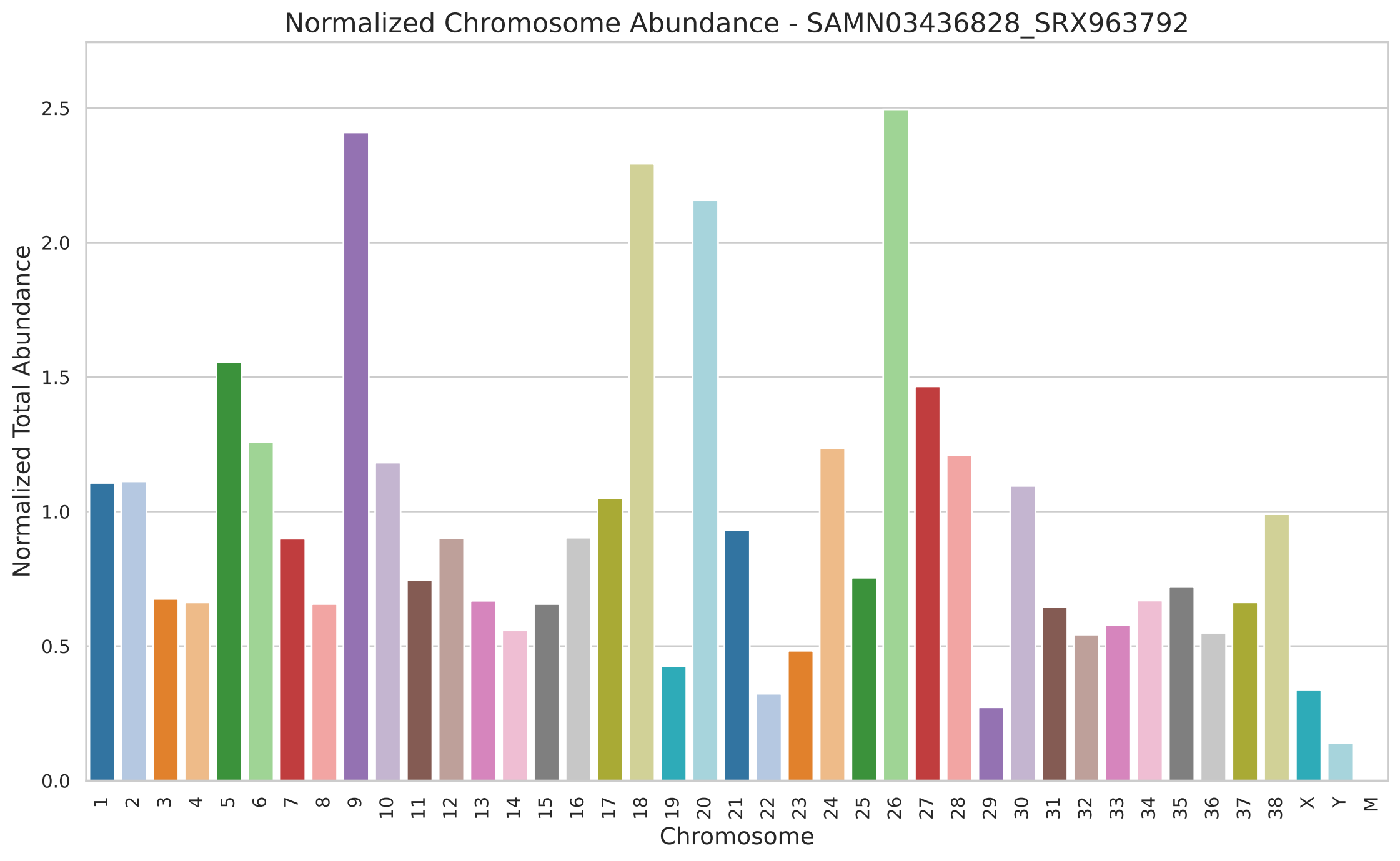

Normalized Chromosome Abundance - SAMN03436895_SRX964017
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

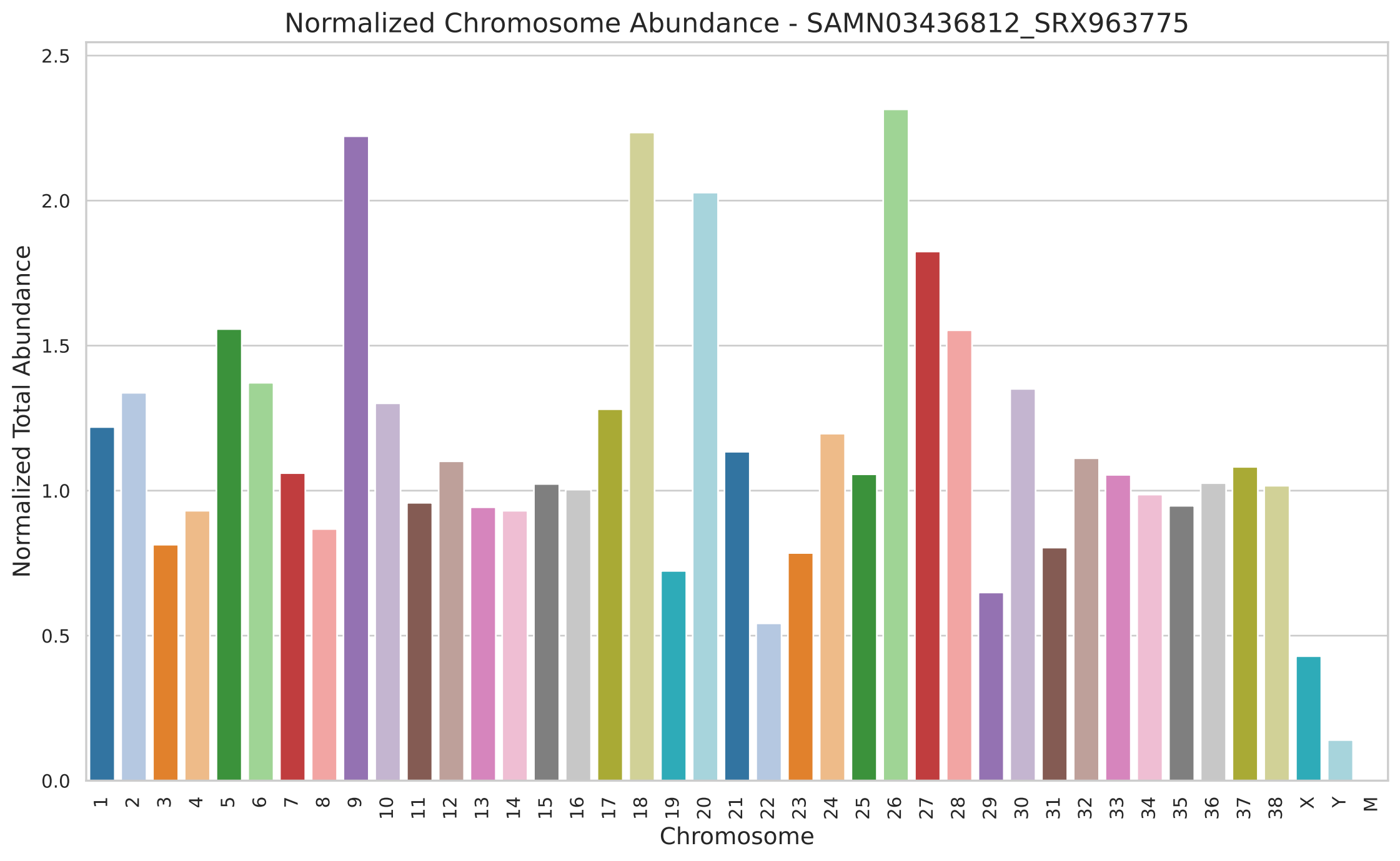

Normalized Chromosome Abundance - SAMN03436887_SRX964006
Normalized Total Abundance
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

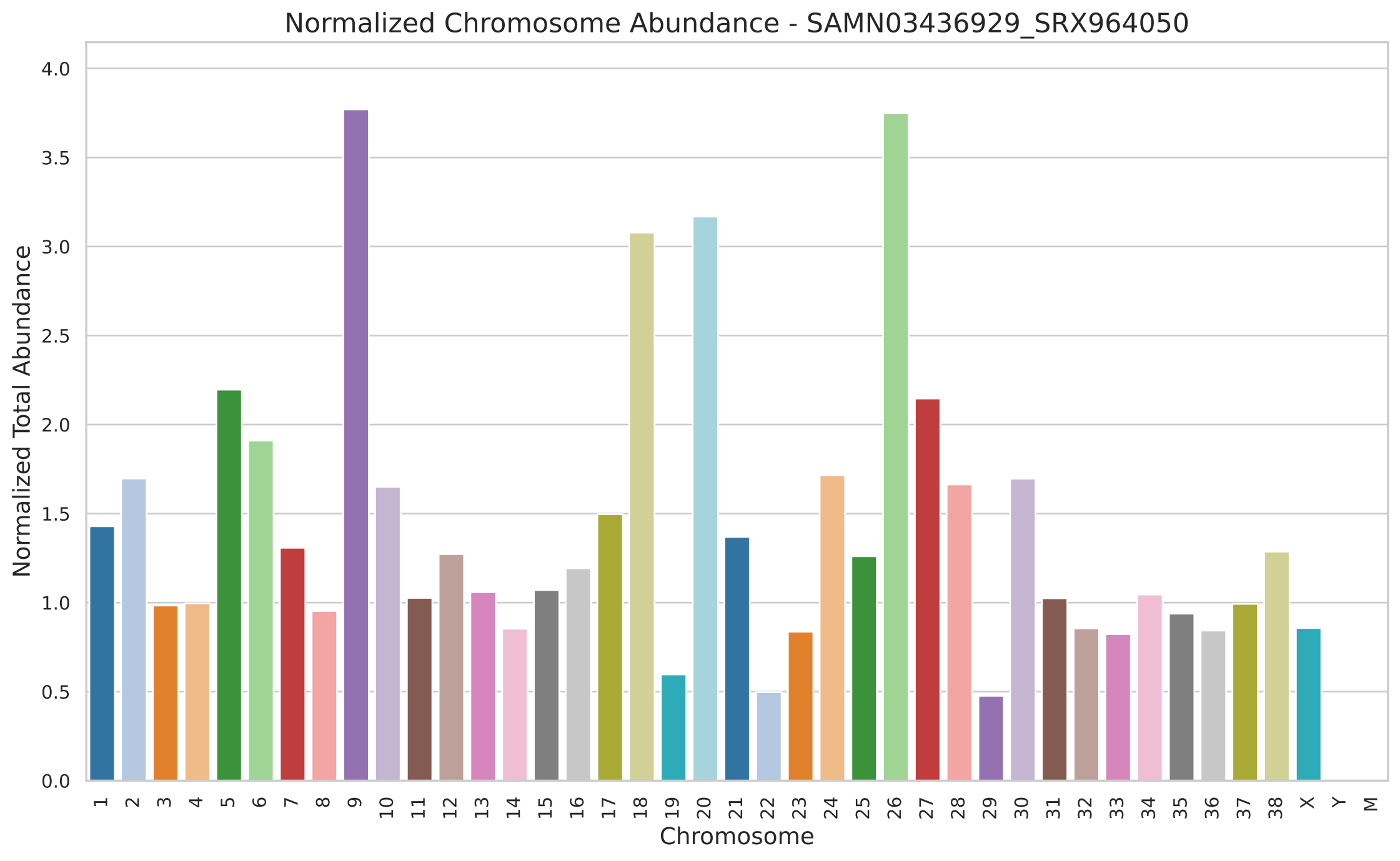

Normalized Chromosome Abundance - SAMN03436257_SRX964075
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

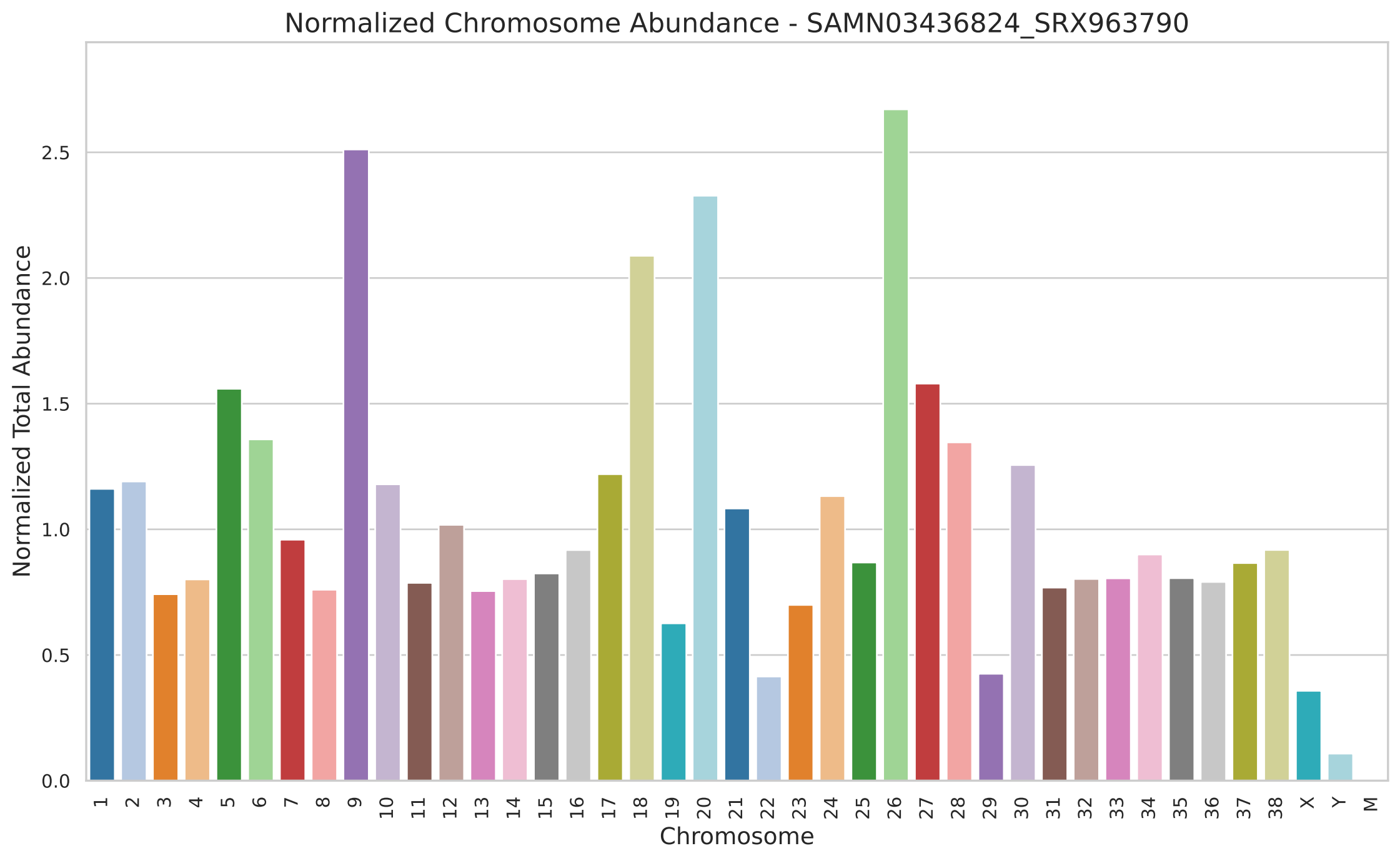

Normalized Chromosome Abundance - SAMN03436894_SRX964016
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

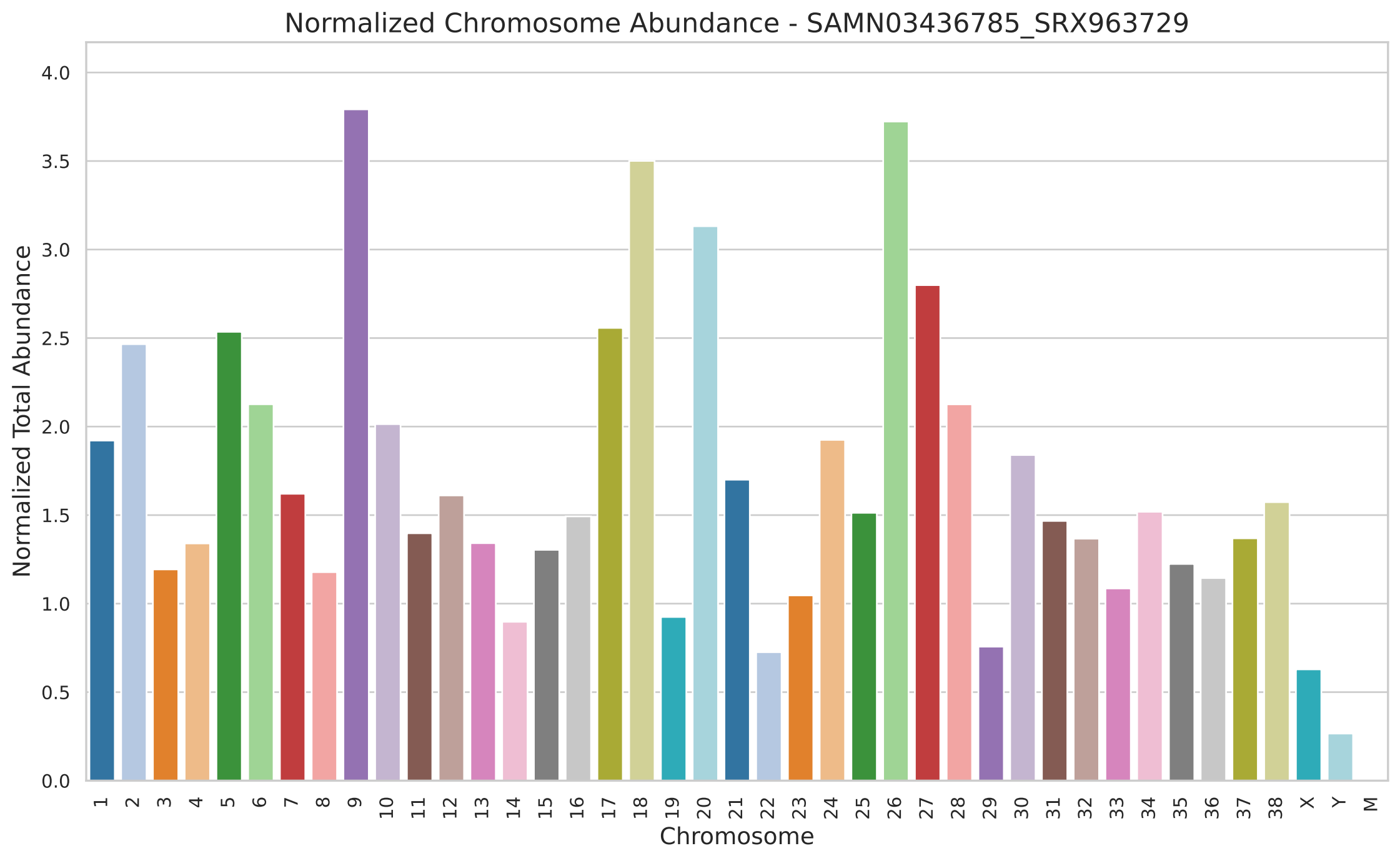

Normalized Chromosome Abundance - SAMN03436808_SRX963771
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

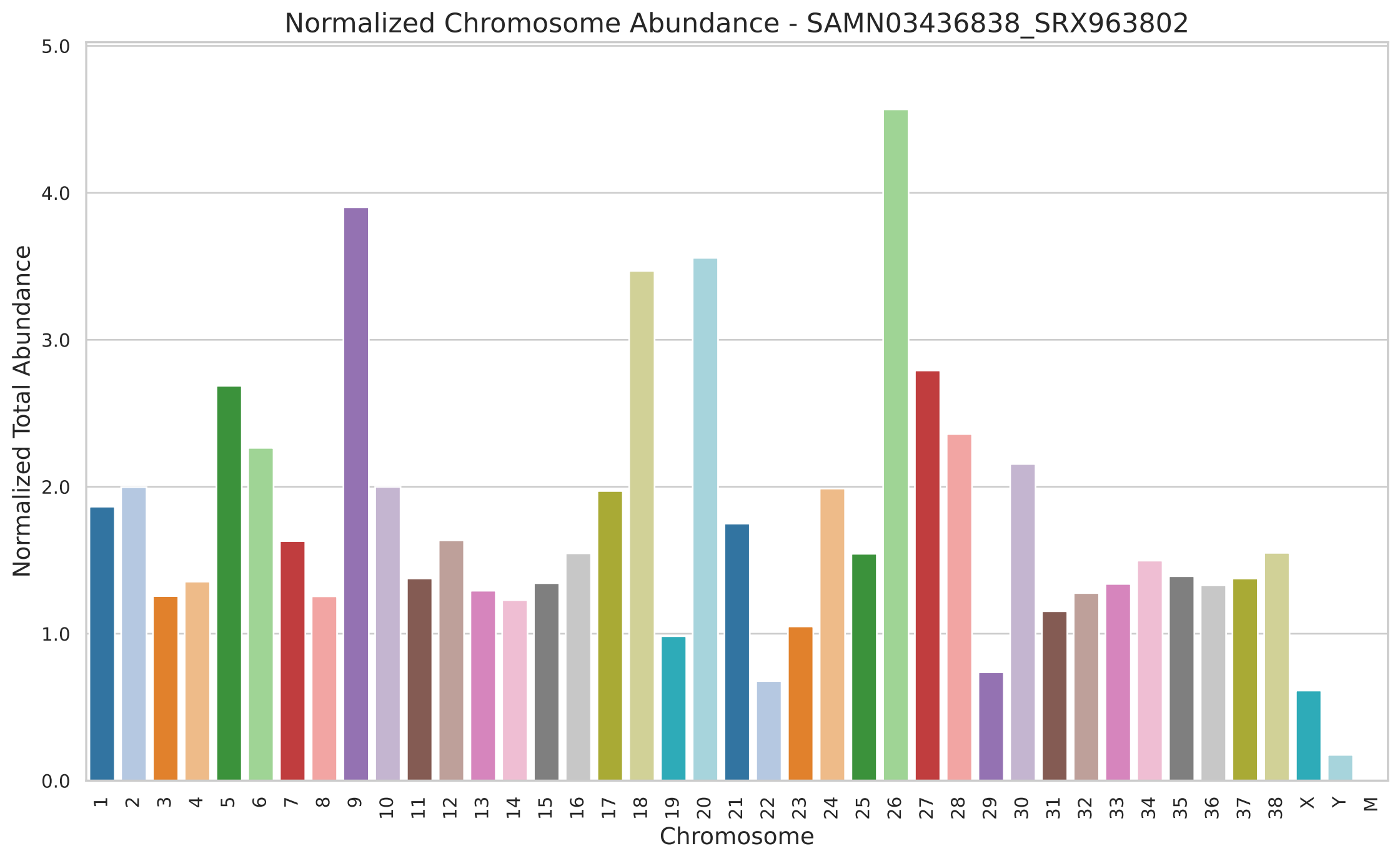

Normalized Chromosome Abundance - SAMN03436828_SRX963792
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

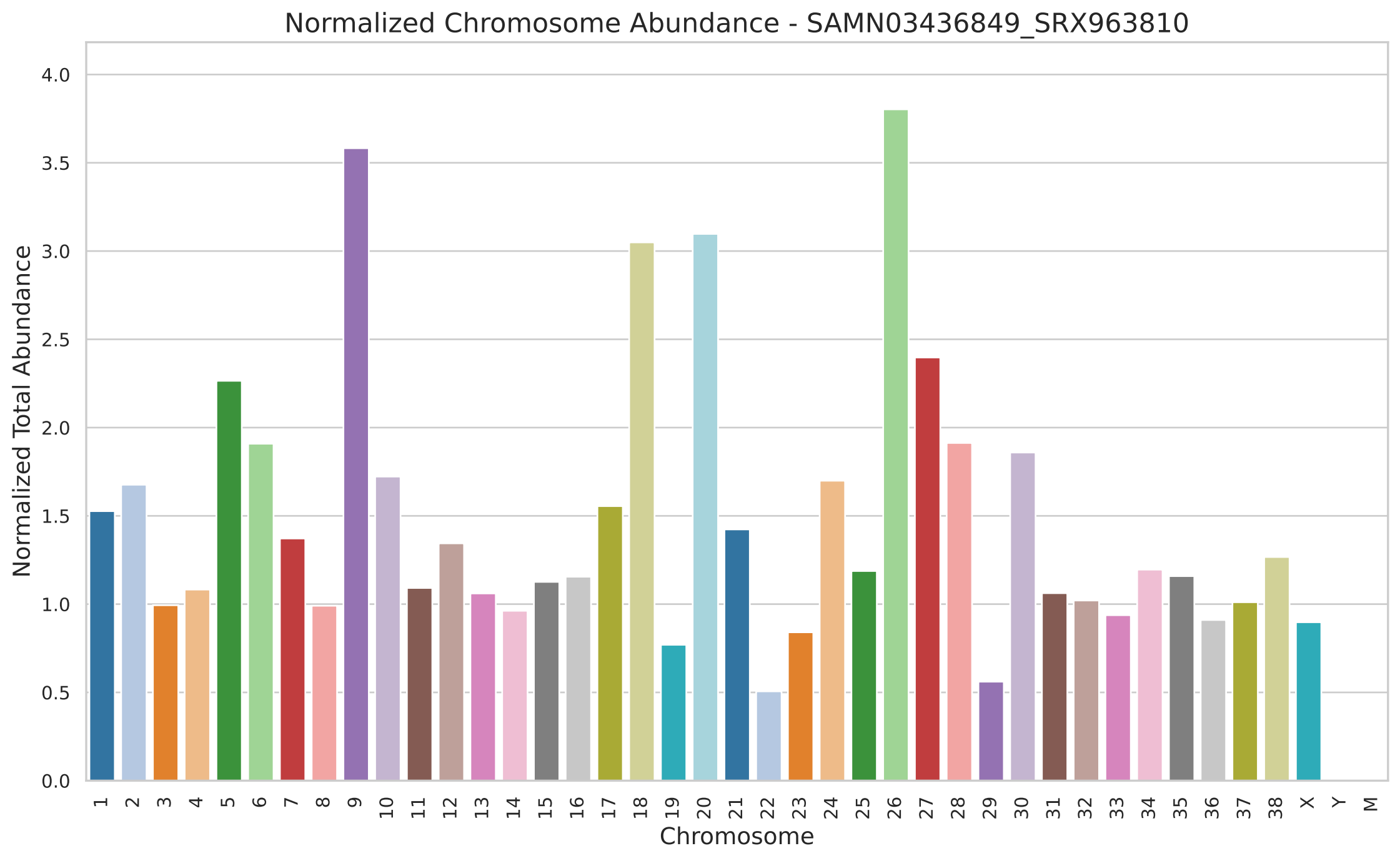

Normalized Chromosome Abundance - SAMN03436812_SRX963775
Normalized Total Abundance
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

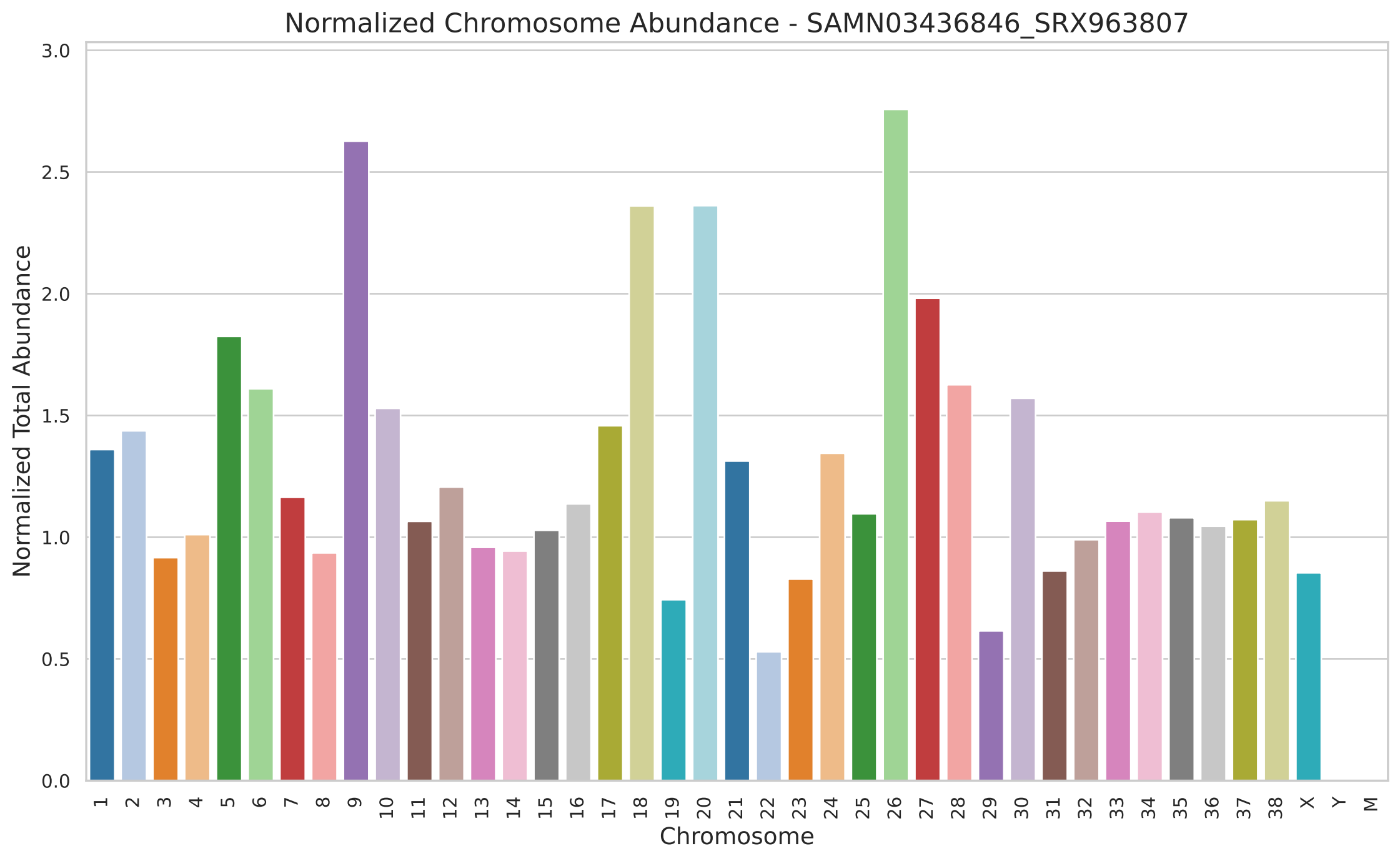

Normalized Chromosome Abundance - SAMN03436929_SRX964050
Normalized Total Abundance
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

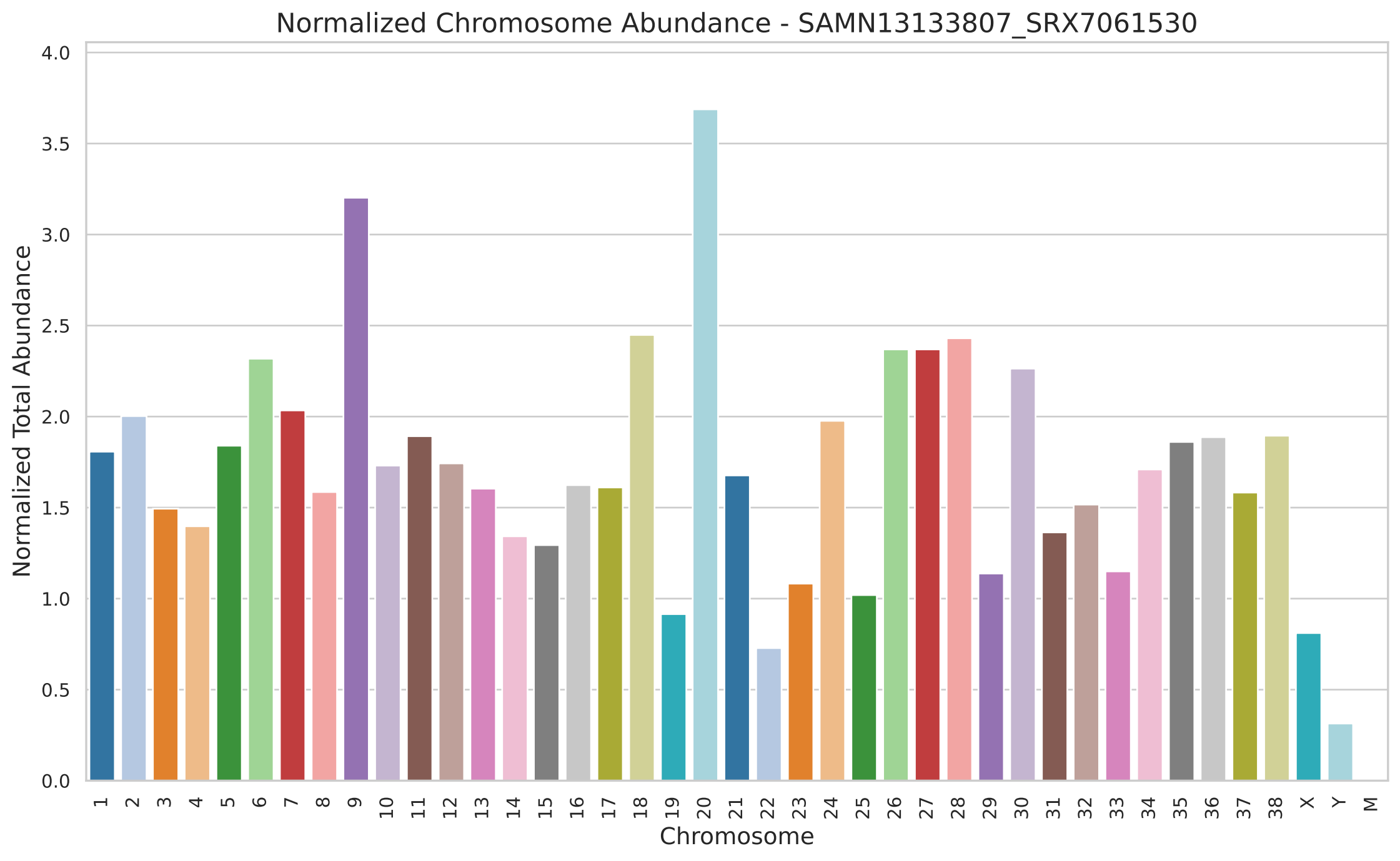

Normalized Chromosome Abundance - SAMN03436824_SRX963790
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

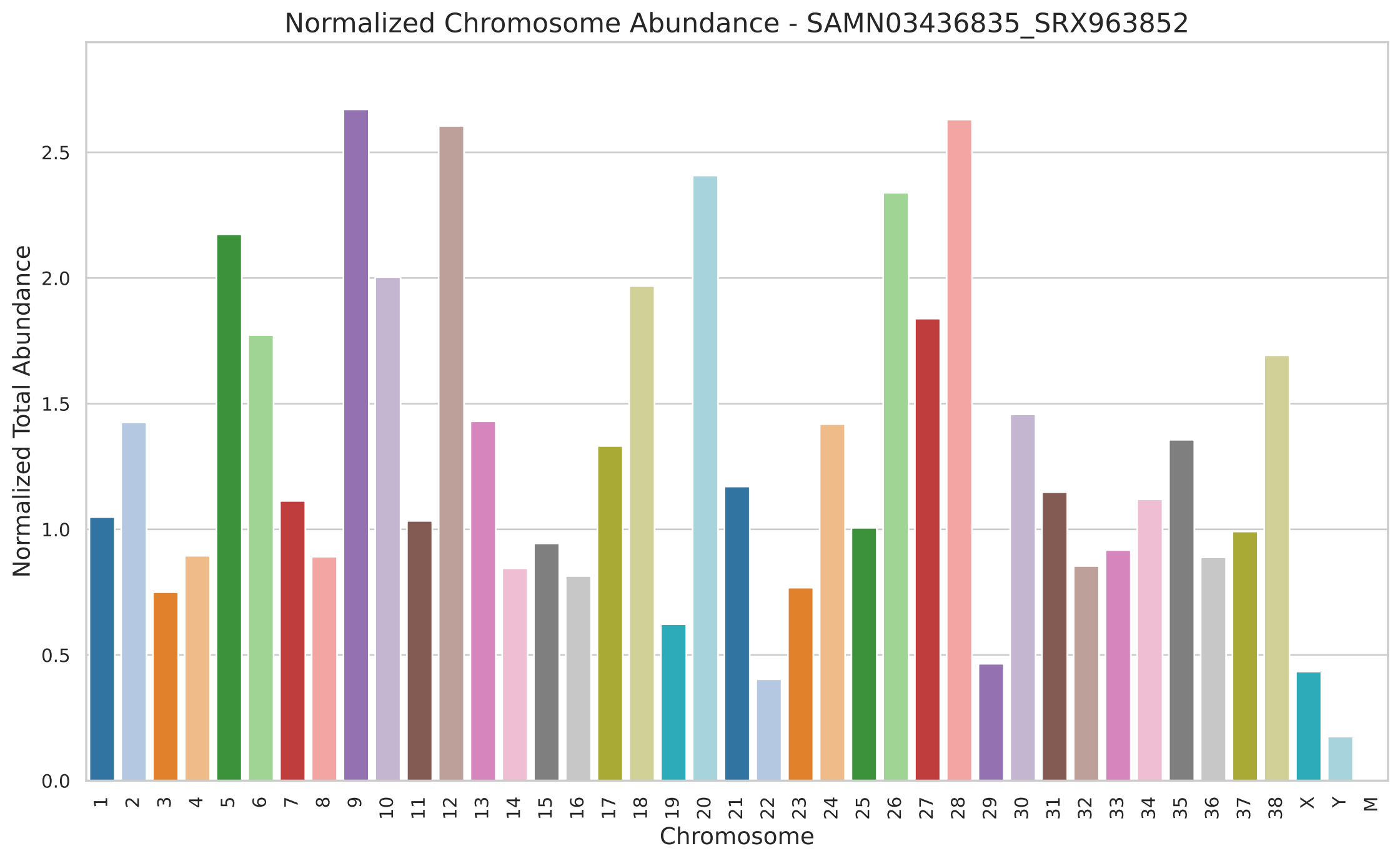

Normalized Chromosome Abundance - SAMN03436785_SRX963729
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

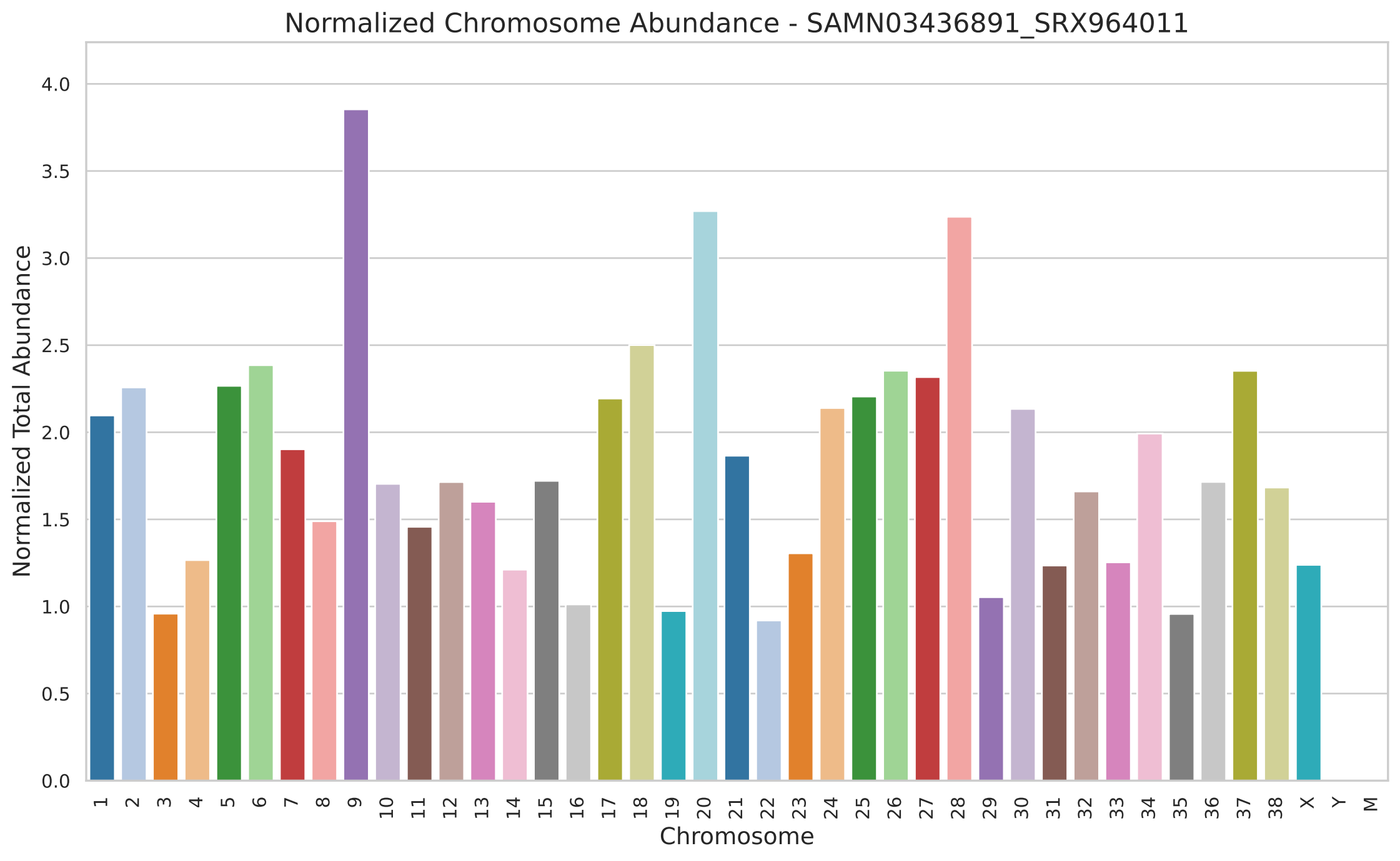

Normalized Chromosome Abundance - SAMN03436838_SRX963802
Normalized Total Abundance
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

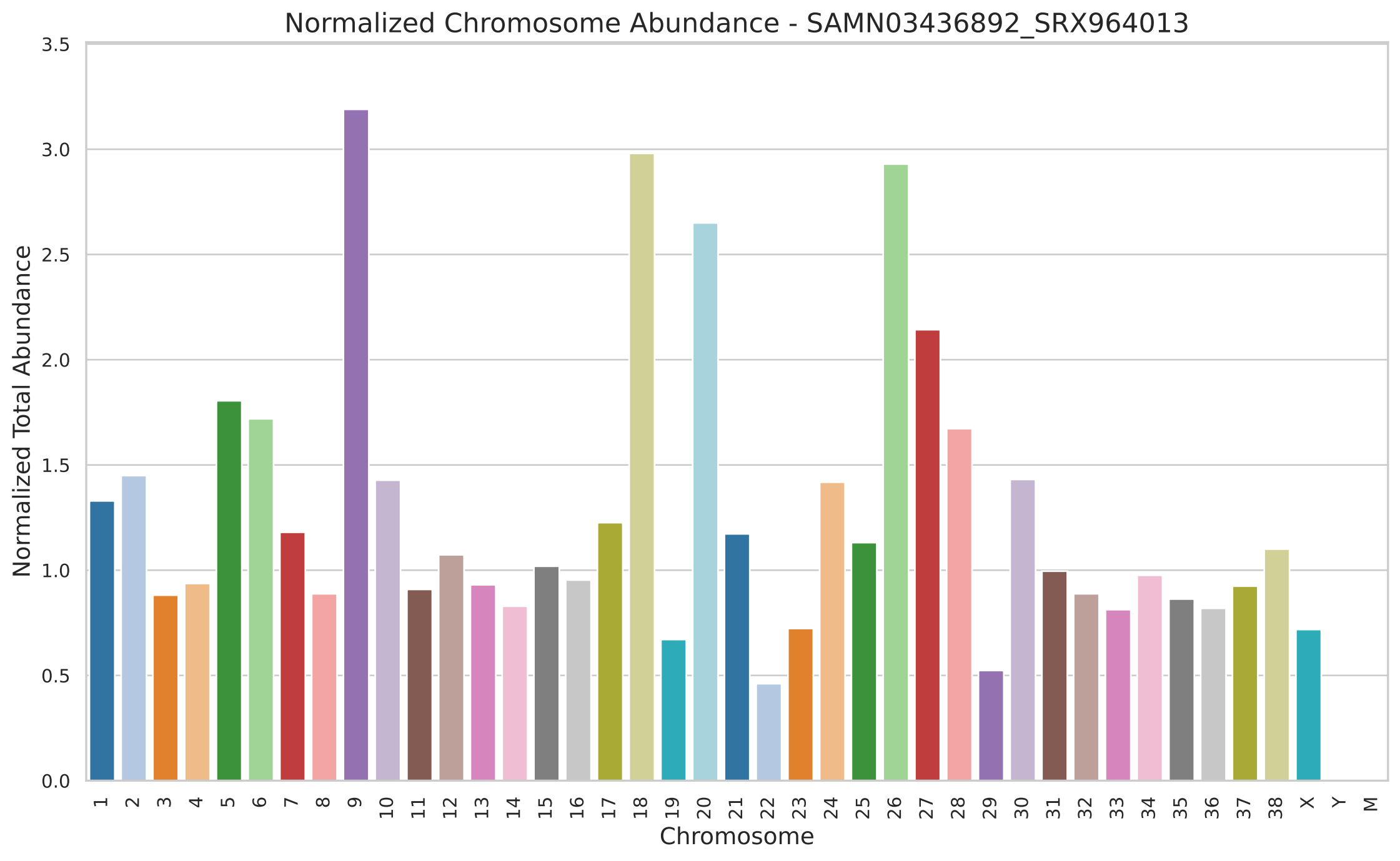

Normalized Chromosome Abundance - SAMN03436849_SRX963810
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

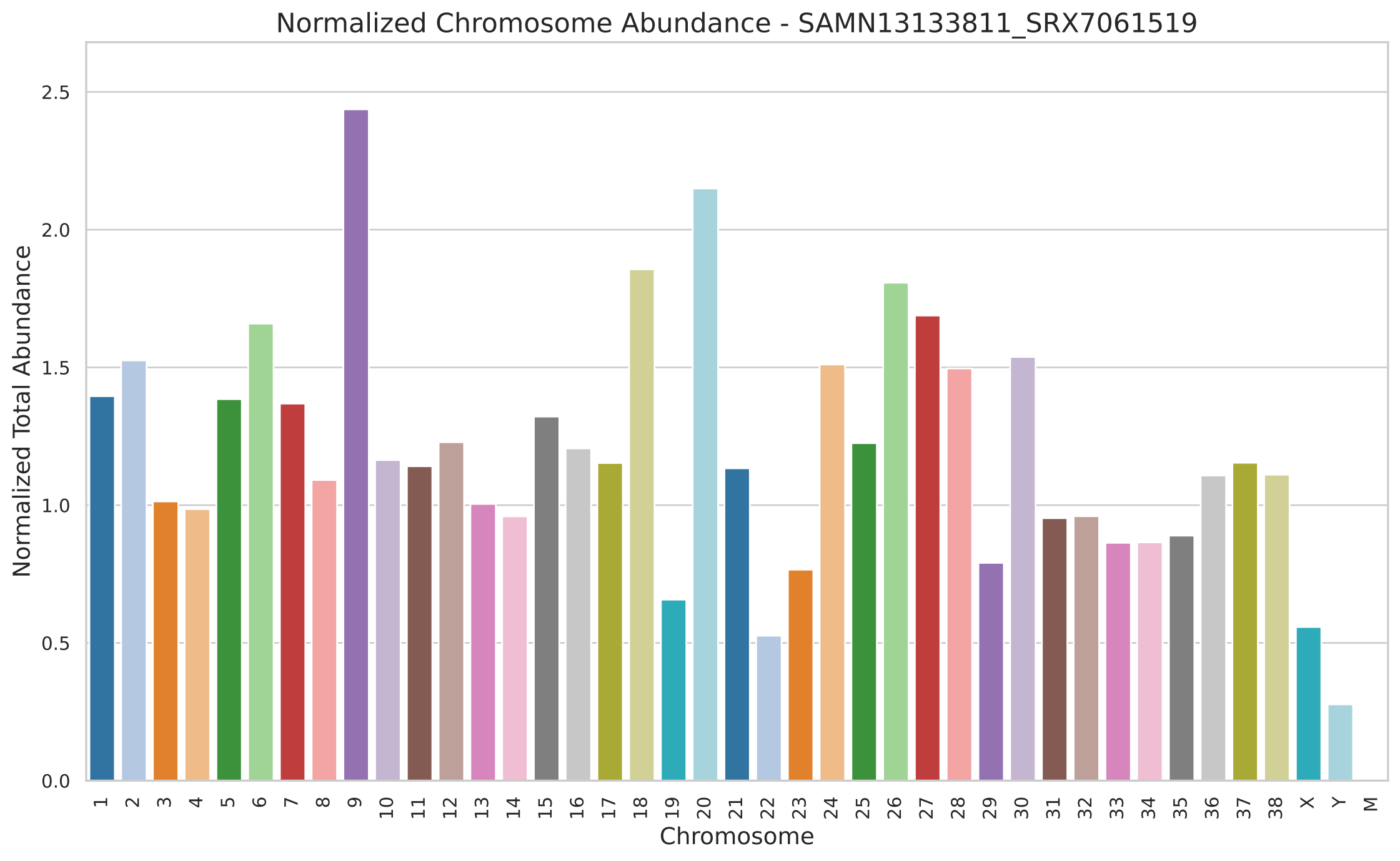

Normalized Chromosome Abundance - SAMN03436846_SRX963807
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

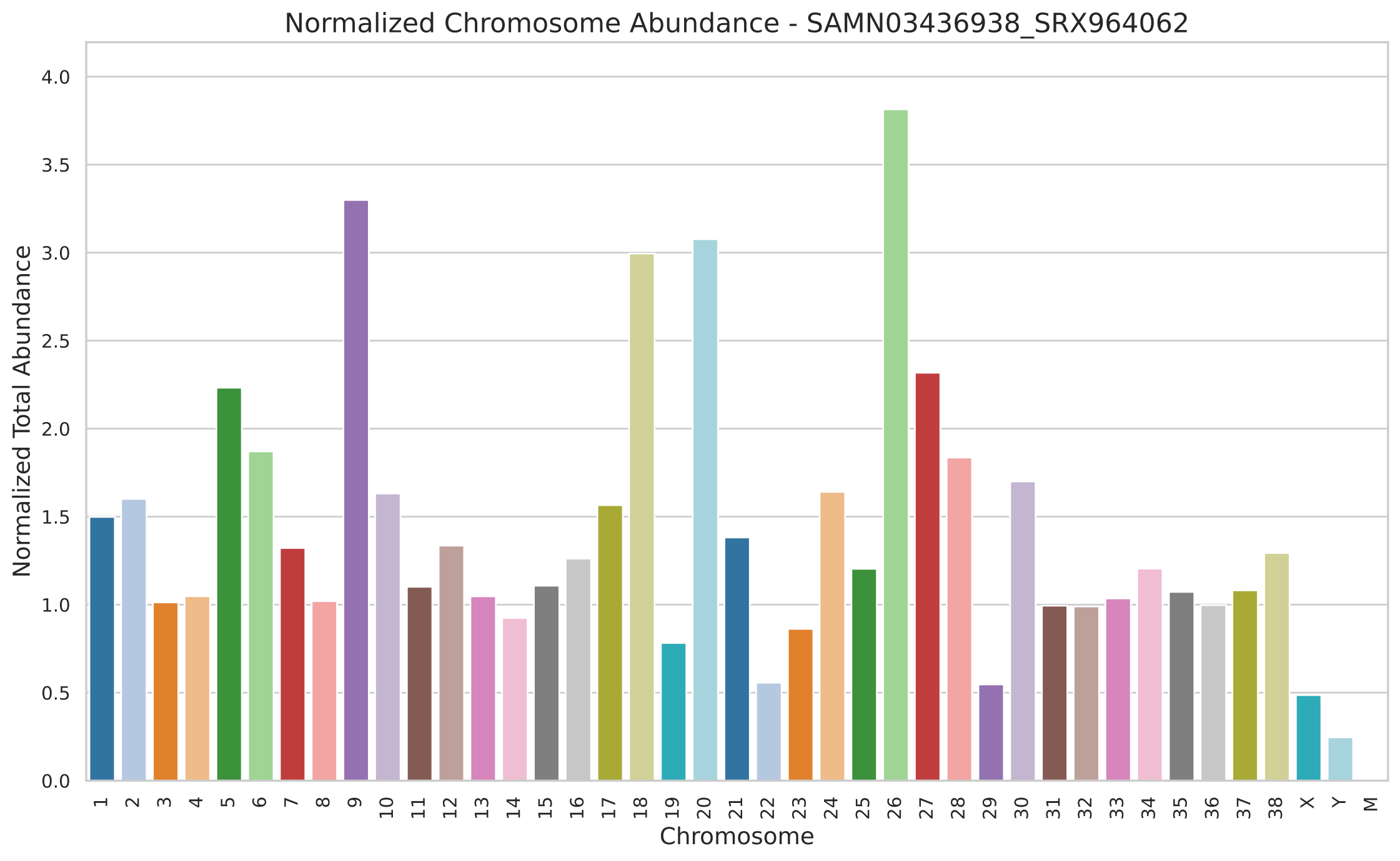

Normalized Chromosome Abundance - SAMN13133807_SRX7061530
Normalized Total Abundance
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

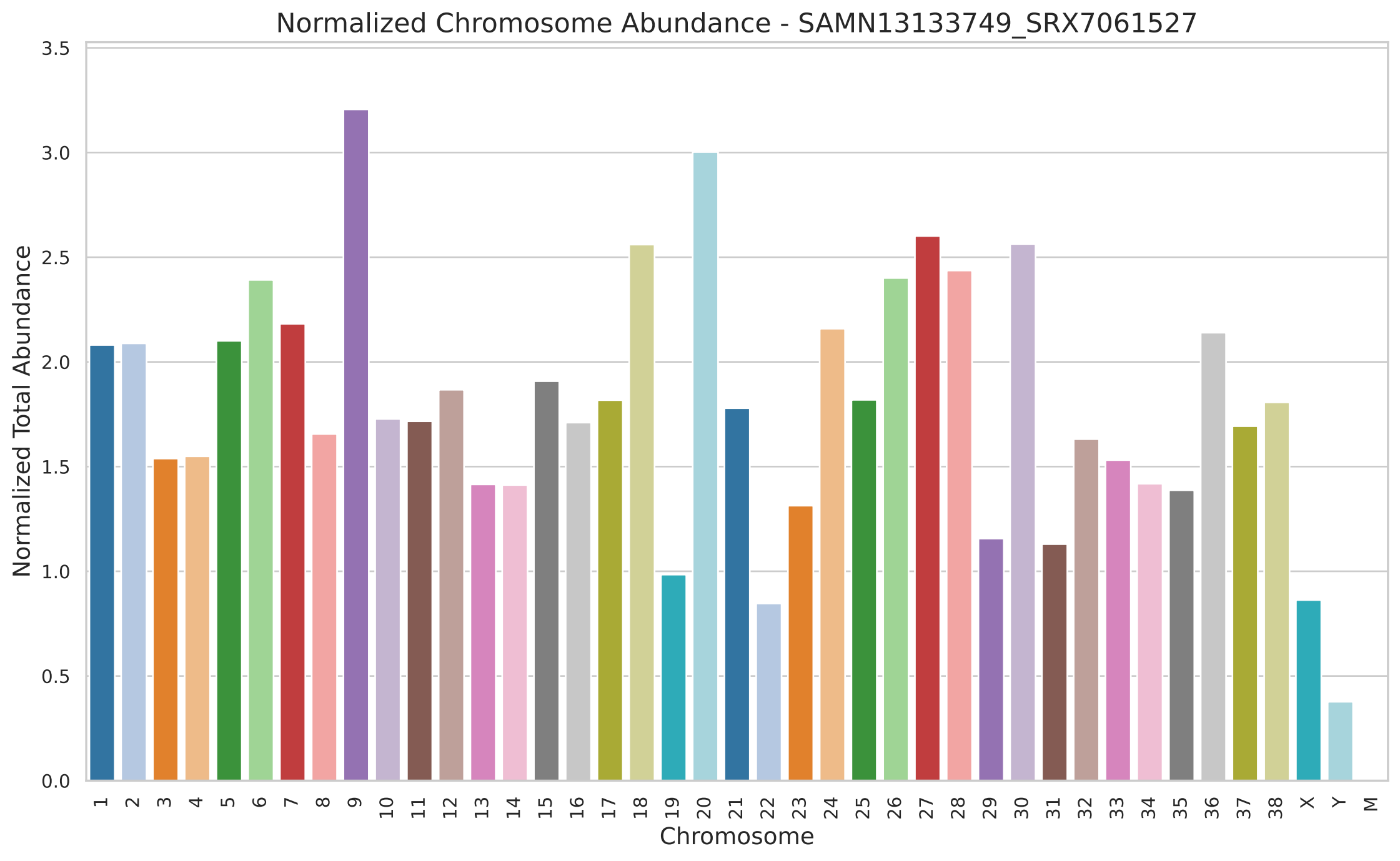

Normalized Chromosome Abundance - SAMN03436835_SRX963852
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

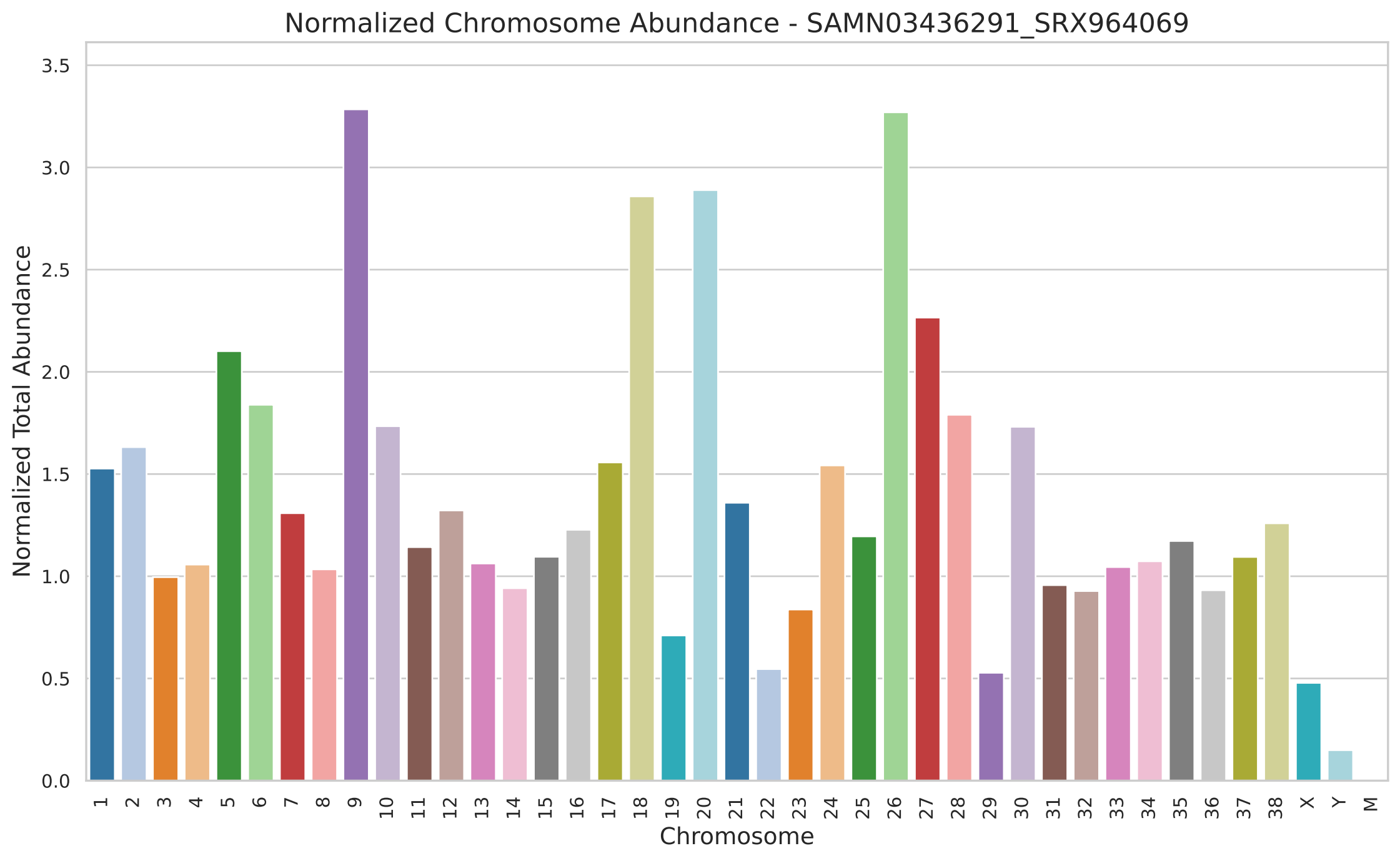

Normalized Chromosome Abundance - SAMN03436891_SRX964011
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

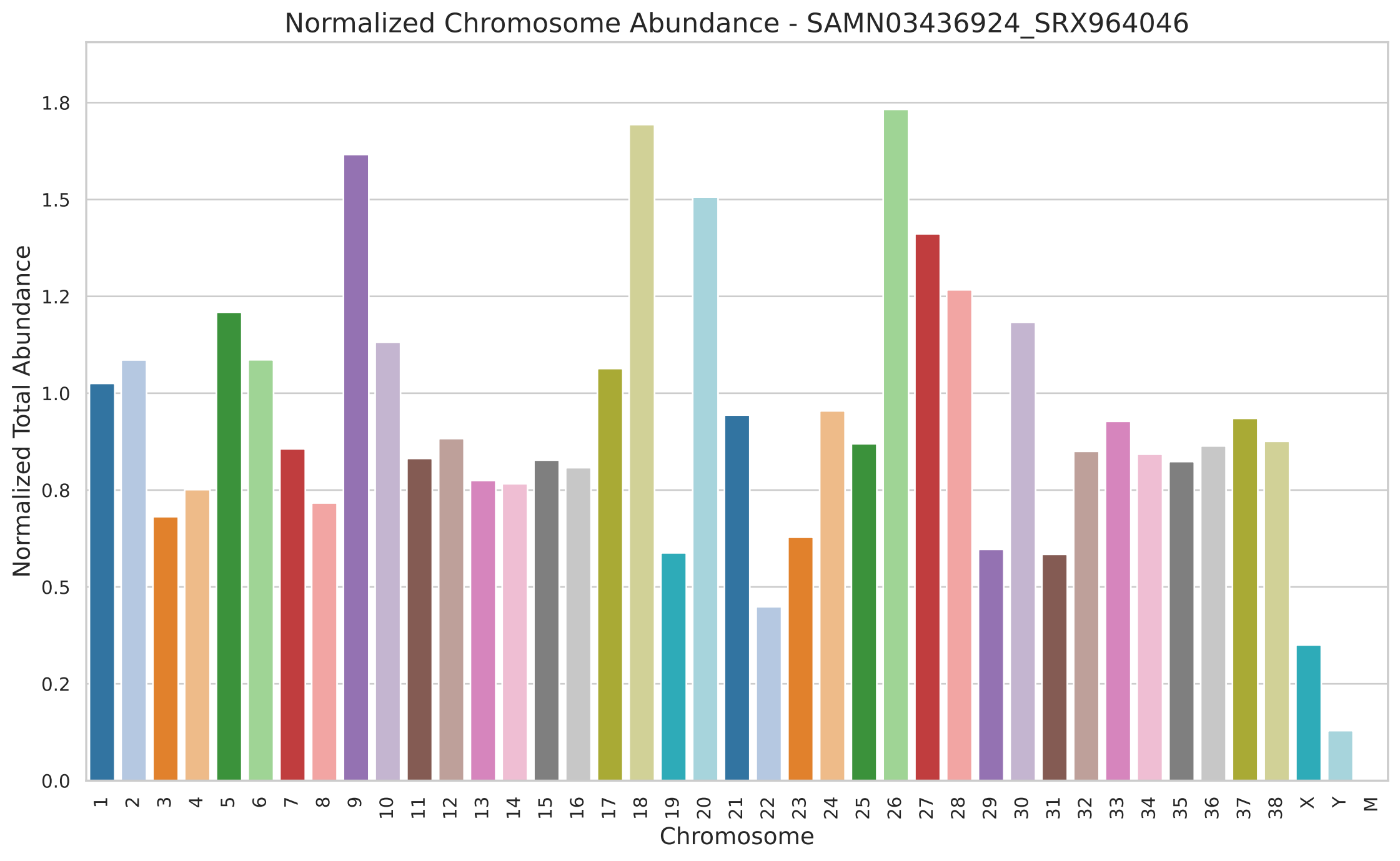

Normalized Chromosome Abundance - SAMN03436892_SRX964013
Normalized Total Abundance
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

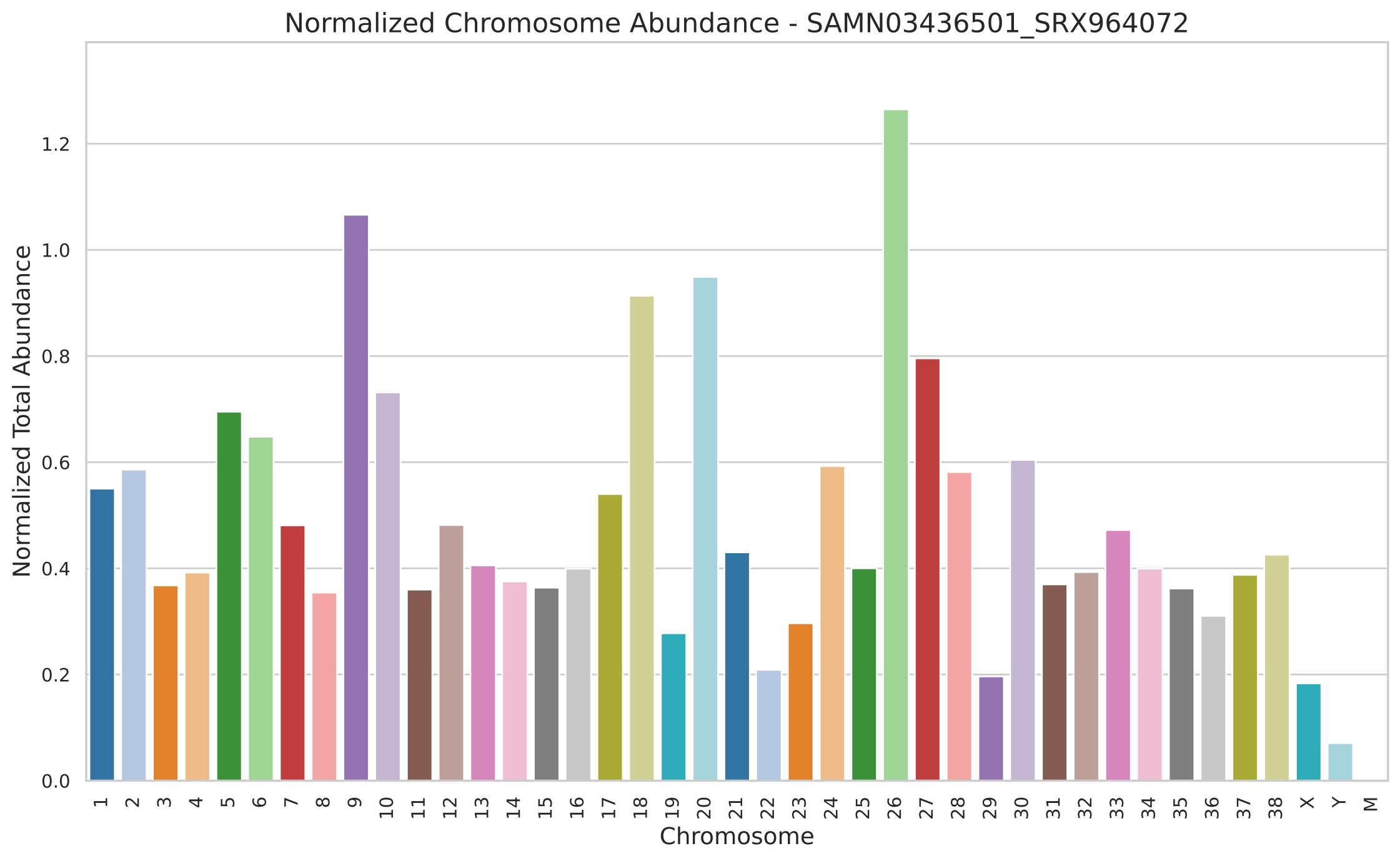

Normalized Chromosome Abundance - SAMN13133811_SRX7061519
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

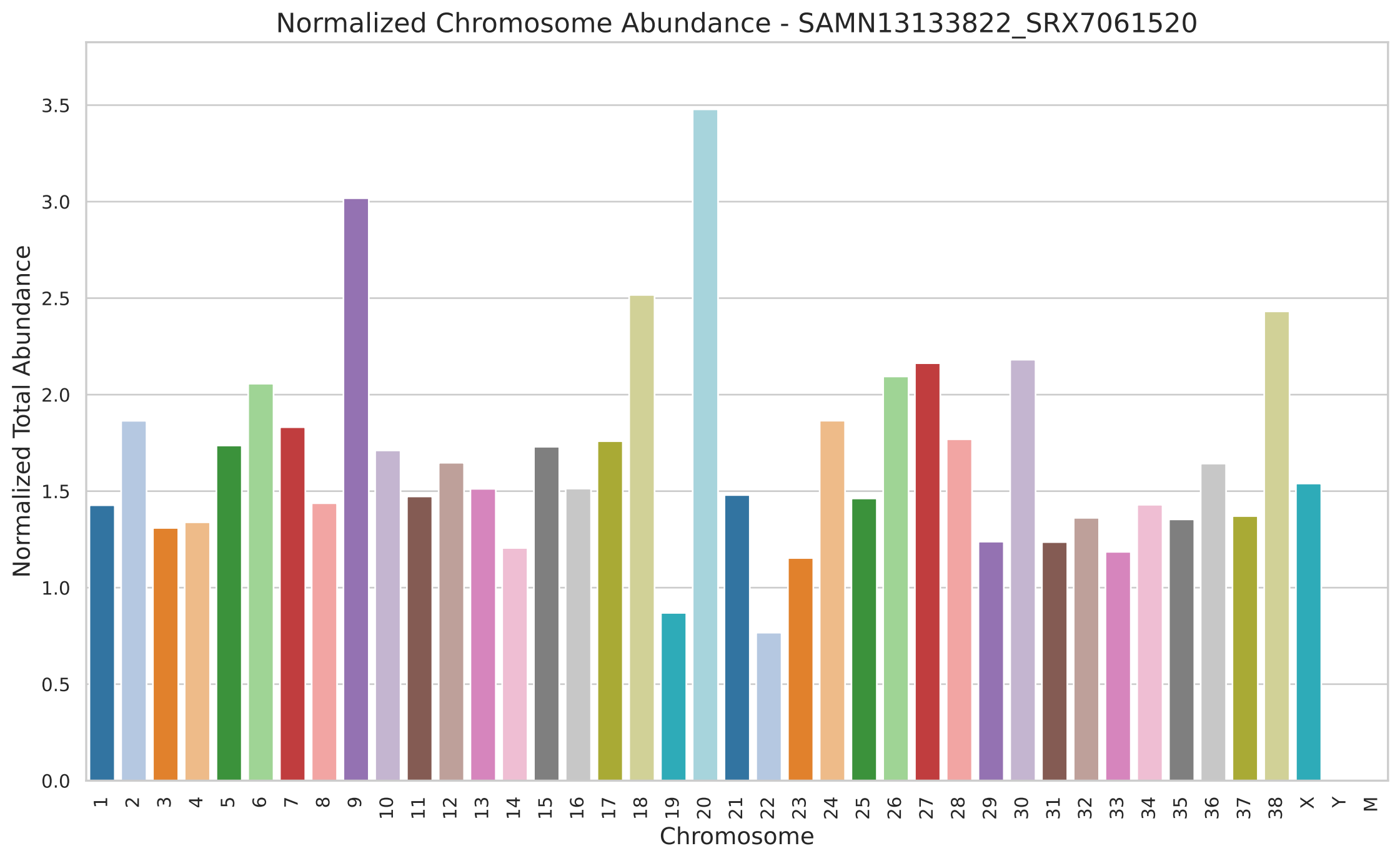

Normalized Chromosome Abundance - SAMN03436938_SRX964062
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

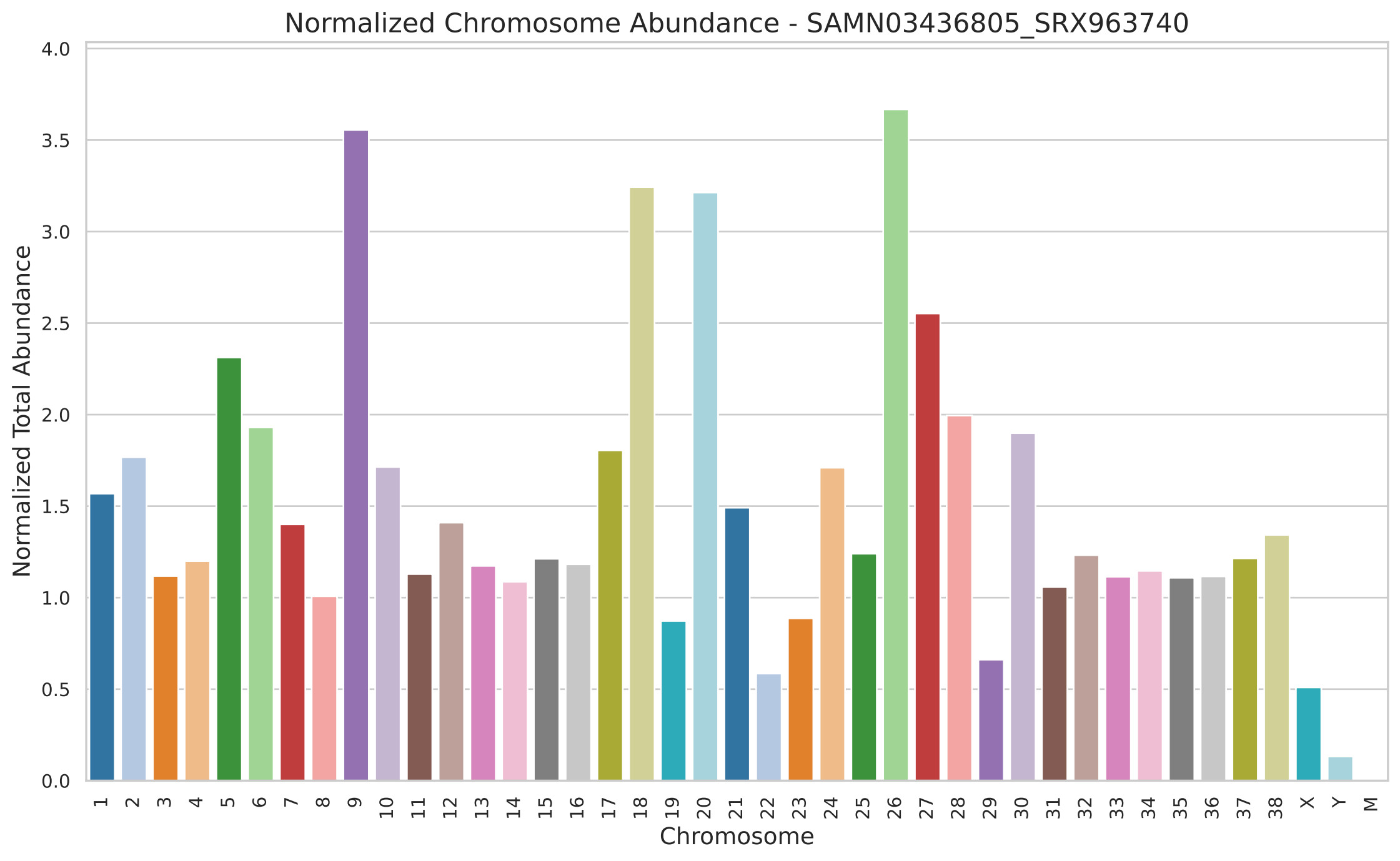

Normalized Chromosome Abundance - SAMN13133749_SRX7061527
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

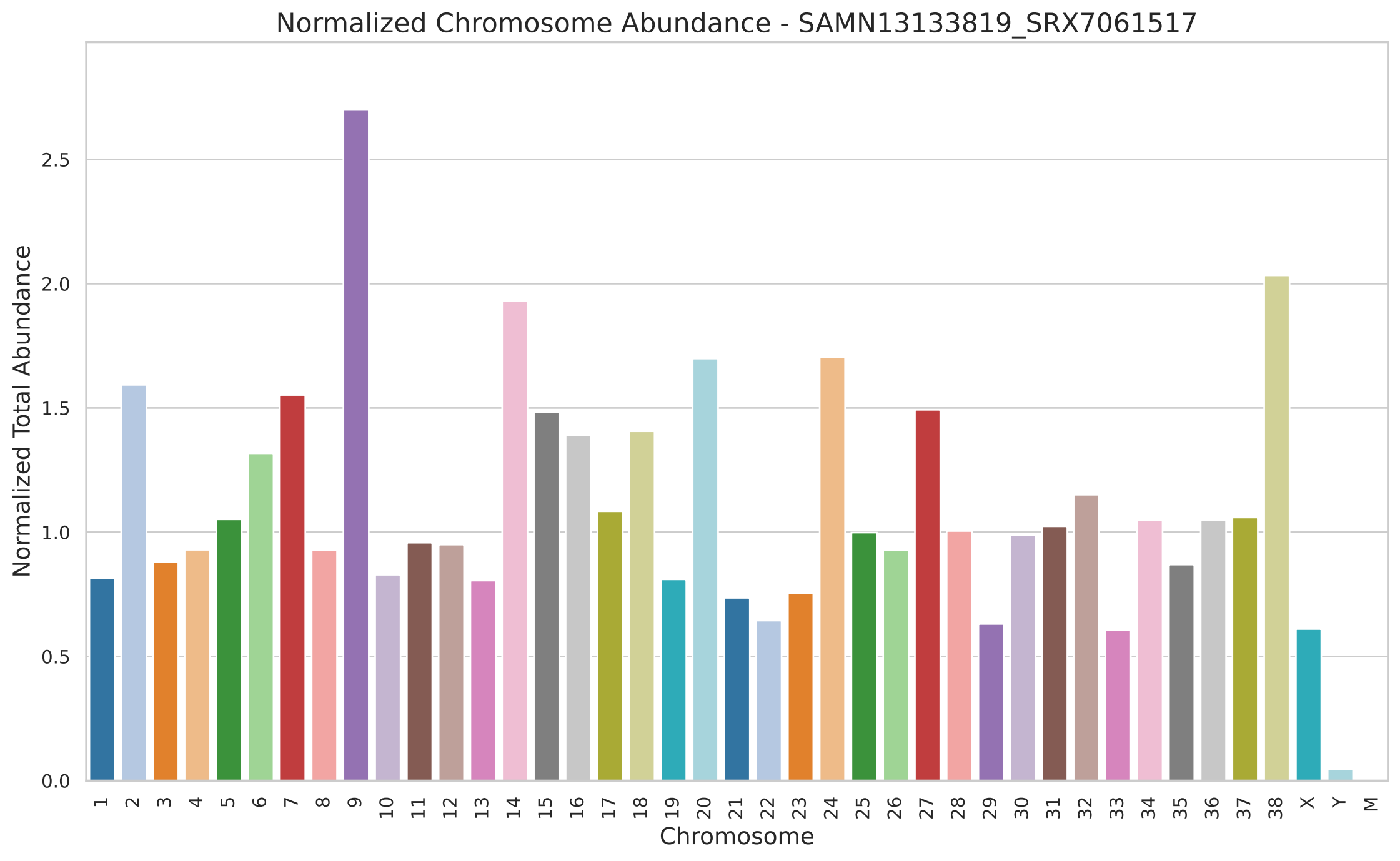

Normalized Chromosome Abundance - SAMN03436291_SRX964069
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

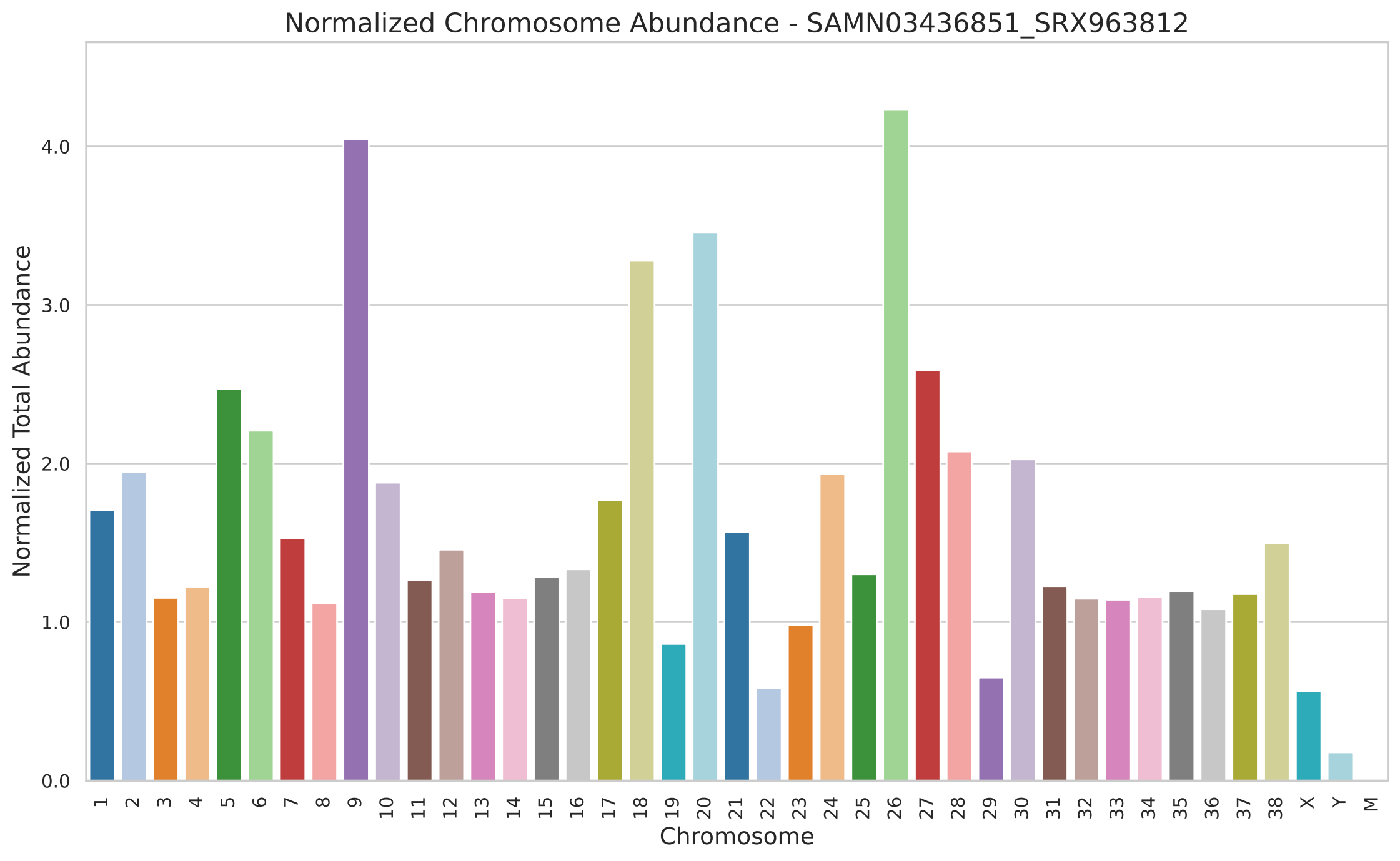

Normalized Chromosome Abundance - SAMN03436924_SRX964046
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

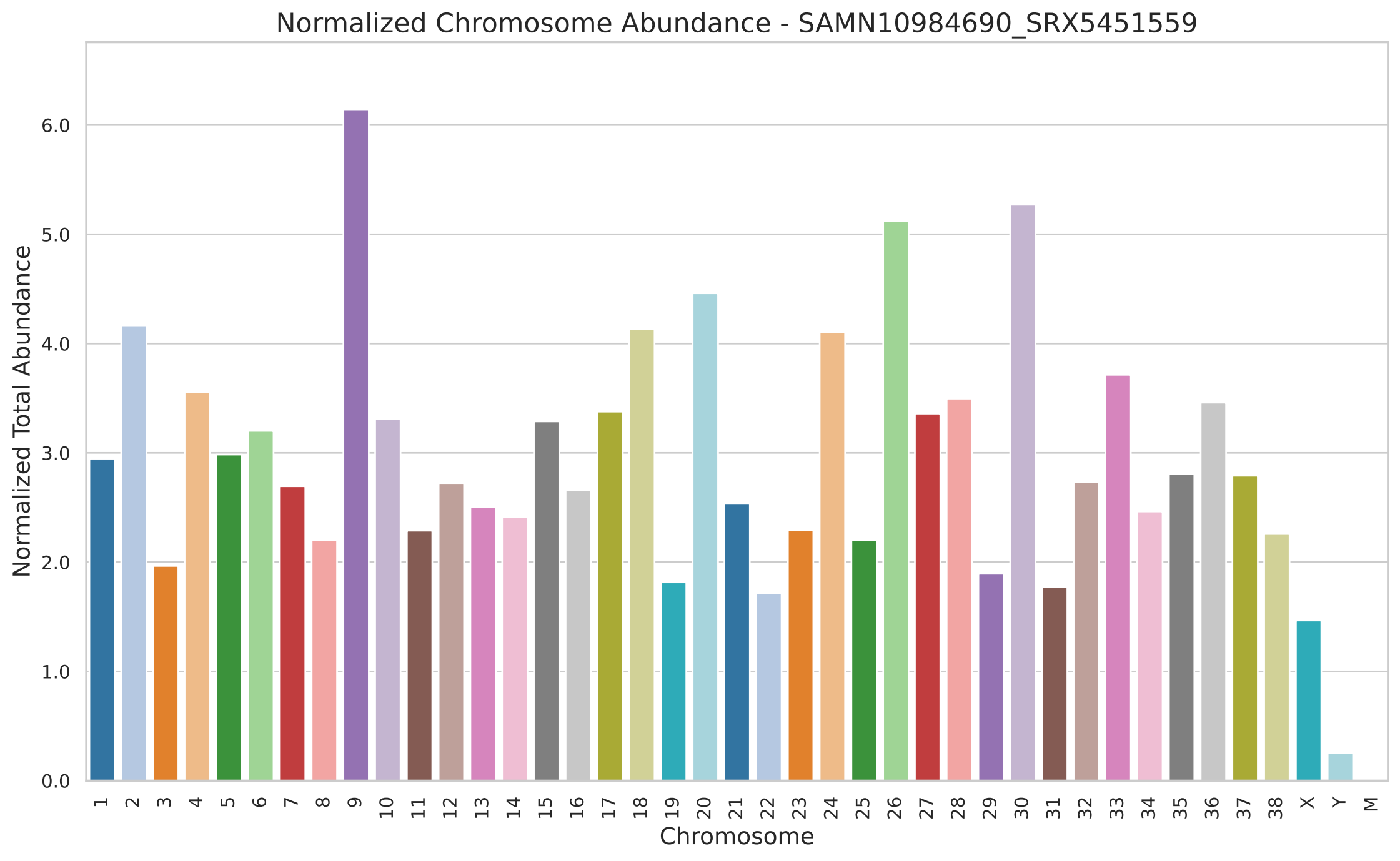

Normalized Chromosome Abundance - SAMN03436501_SRX964072
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

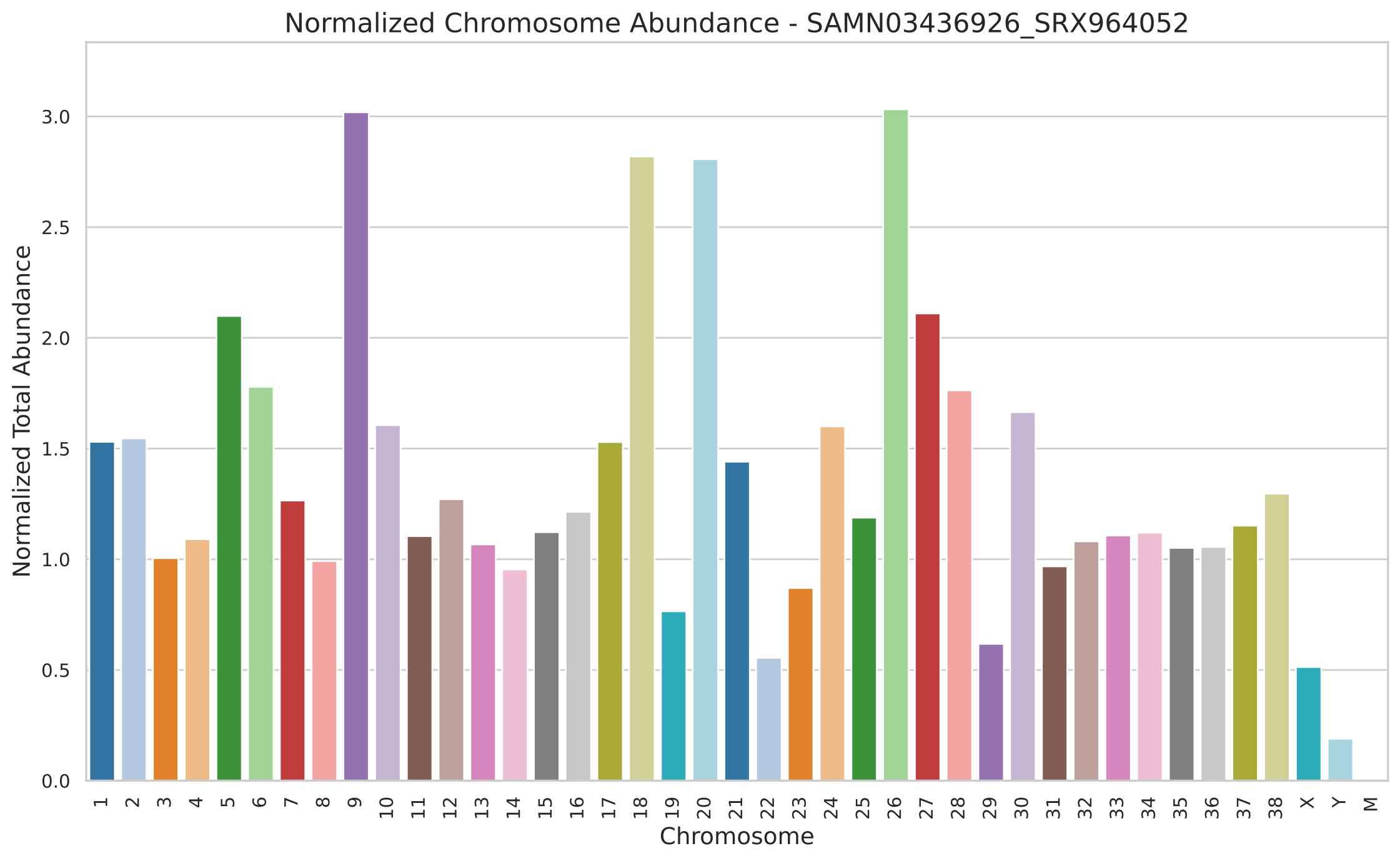

Normalized Chromosome Abundance - SAMN13133822_SRX7061520
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

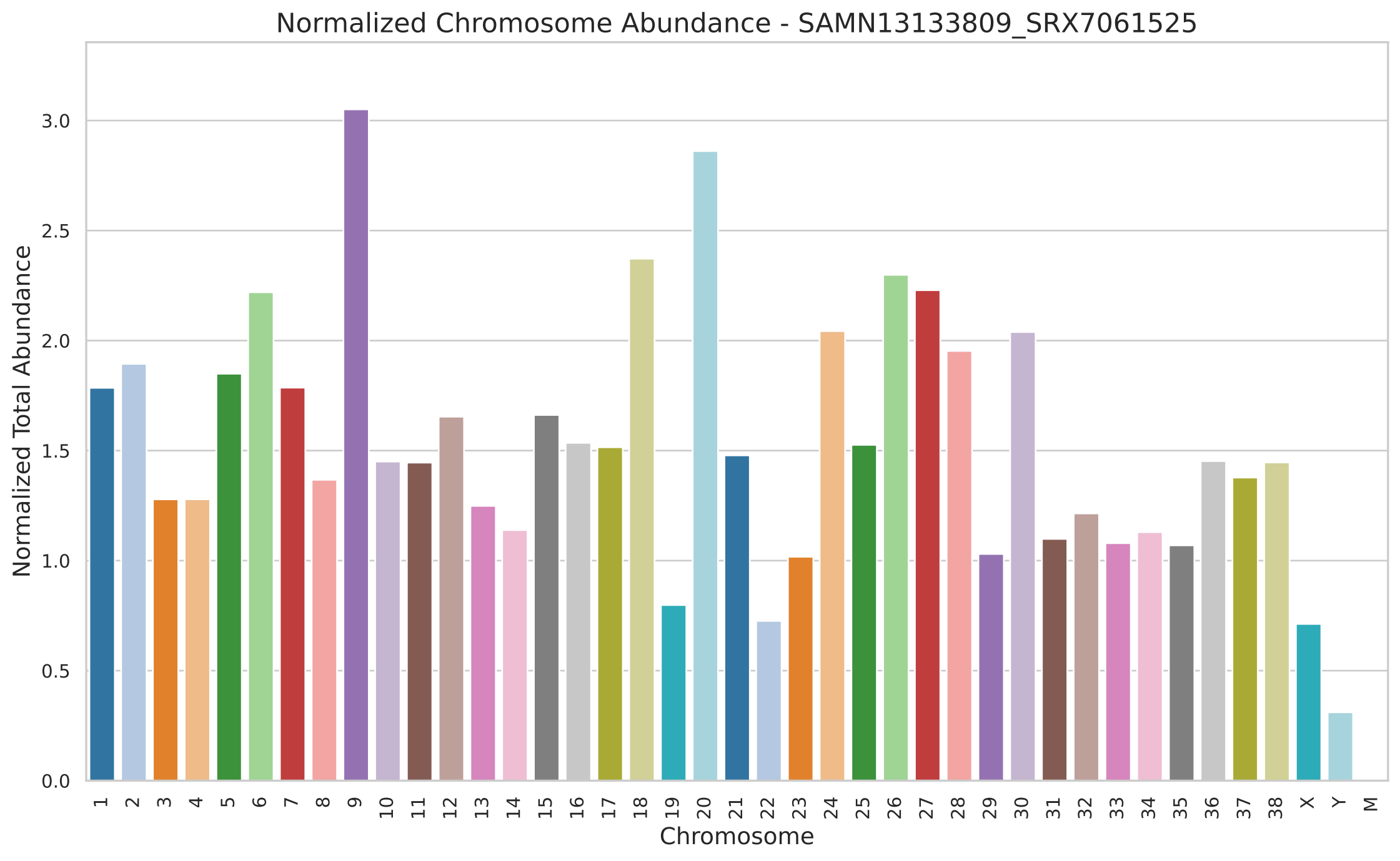

Normalized Chromosome Abundance - SAMN03436805_SRX963740
Normalized Total Abundance
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

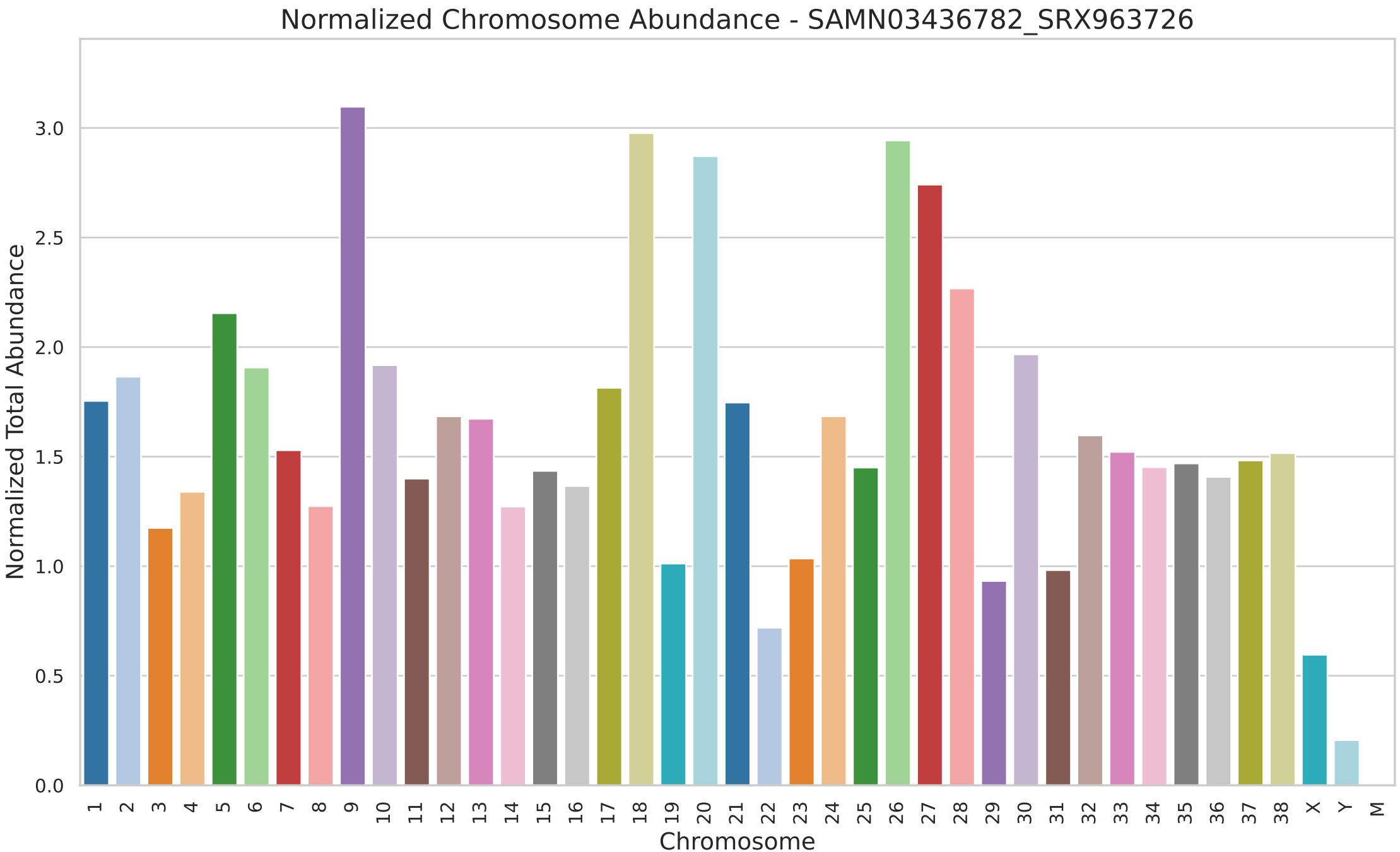

Normalized Chromosome Abundance - SAMN13133819_SRX7061517
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

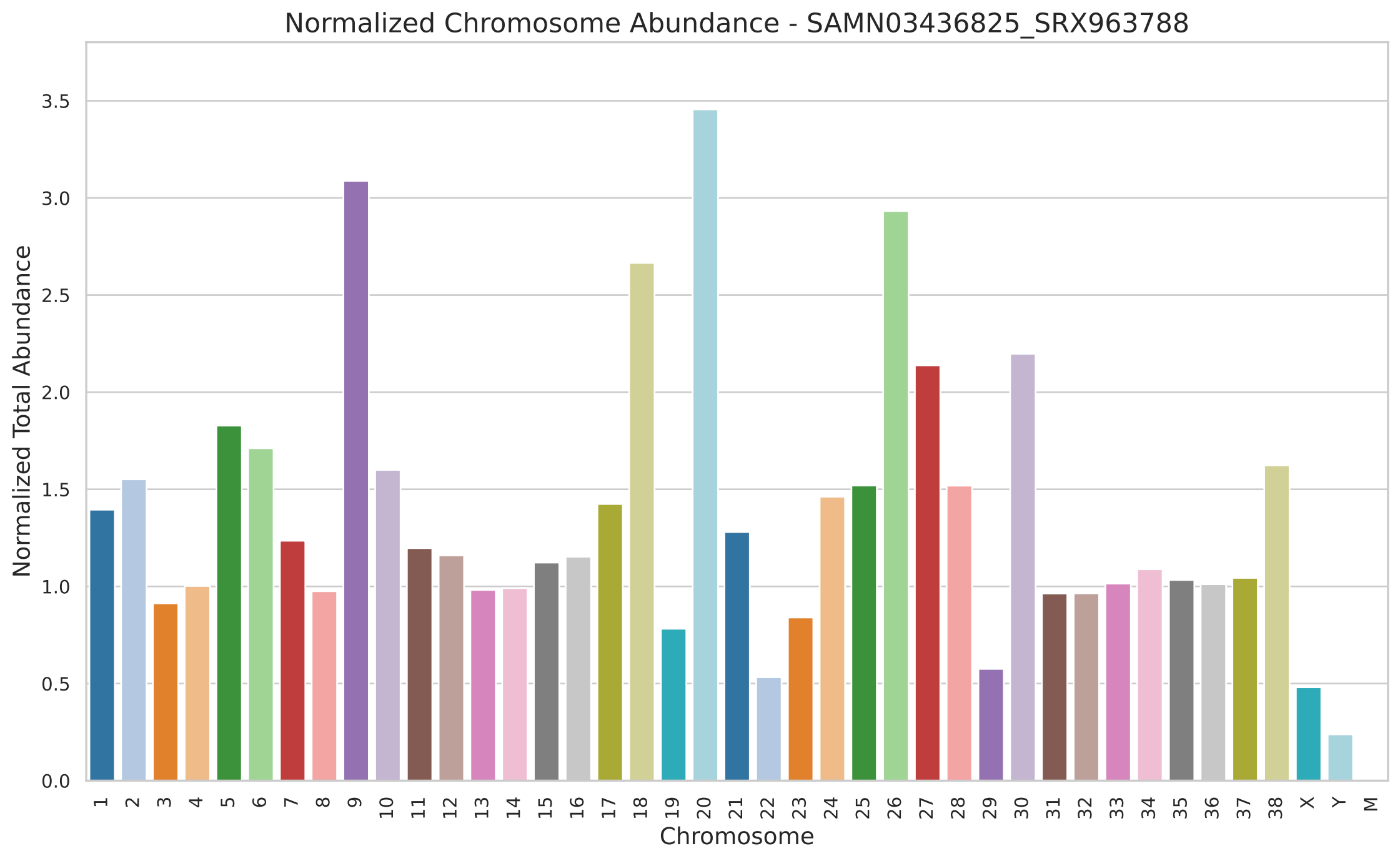

Normalized Chromosome Abundance - SAMN03436851_SRX963812
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

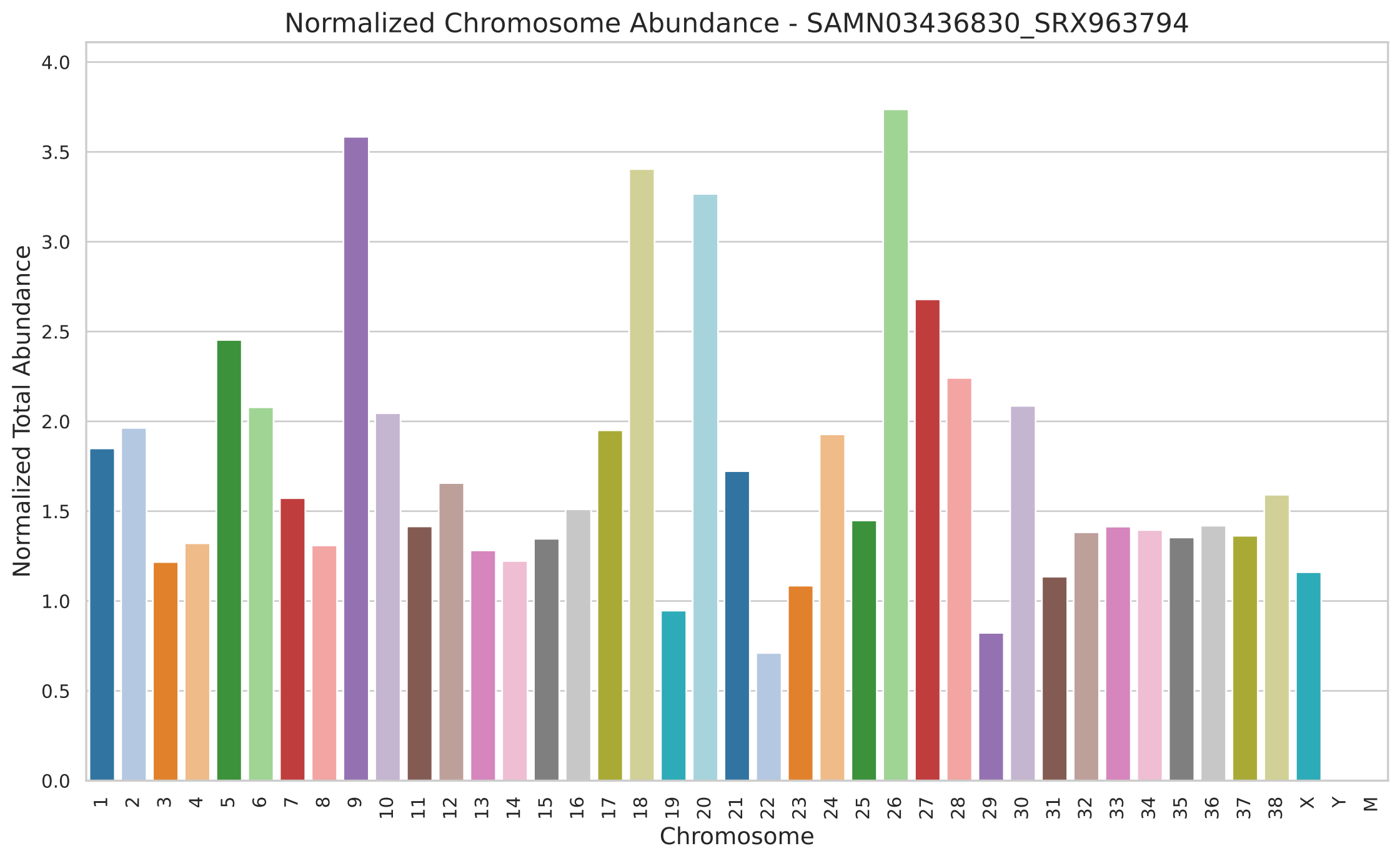

Normalized Chromosome Abundance - SAMN10984690_SRX5451559
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

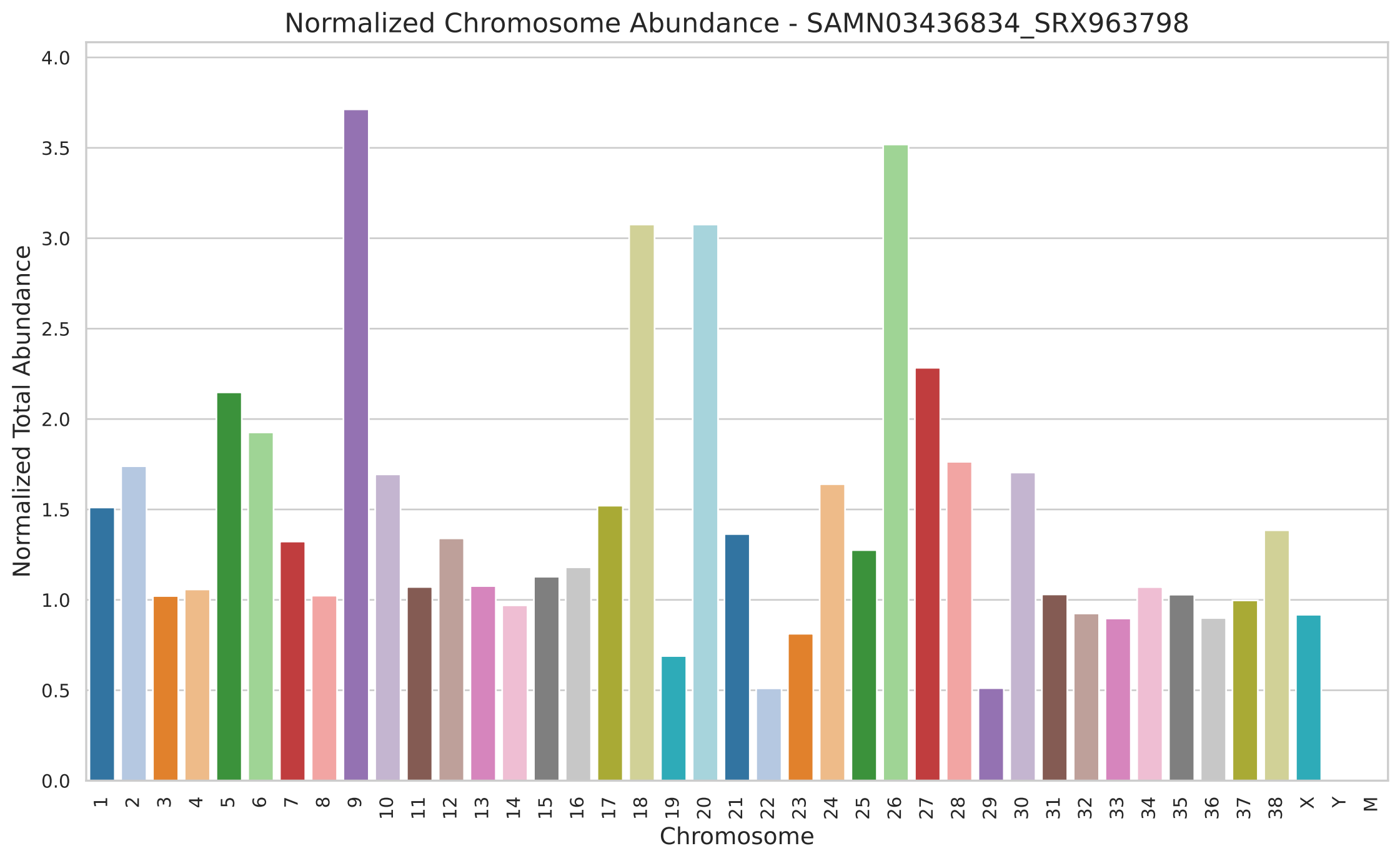

Normalized Chromosome Abundance - SAMN03436926_SRX964052
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

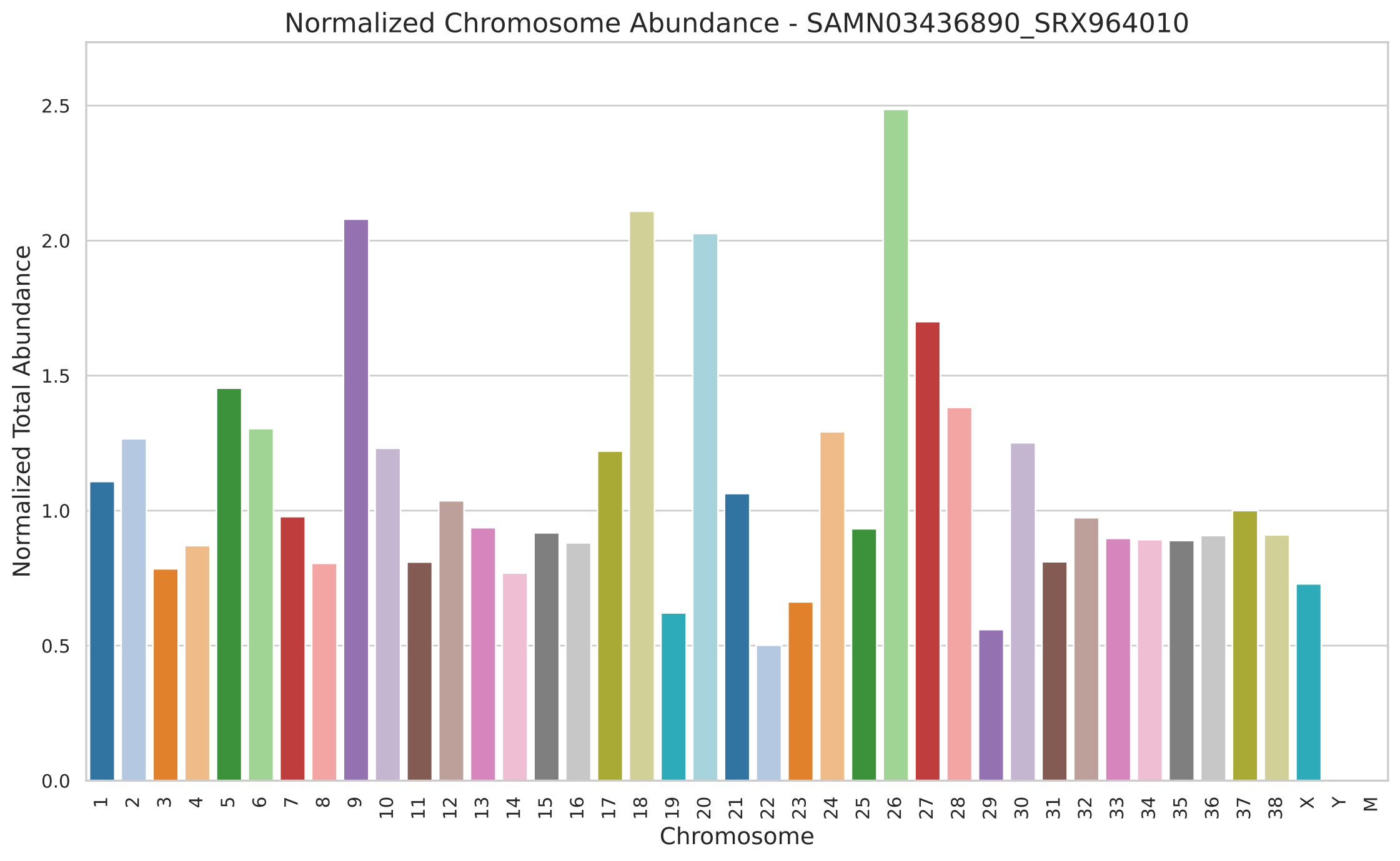

Normalized Chromosome Abundance - SAMN13133809_SRX7061525
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

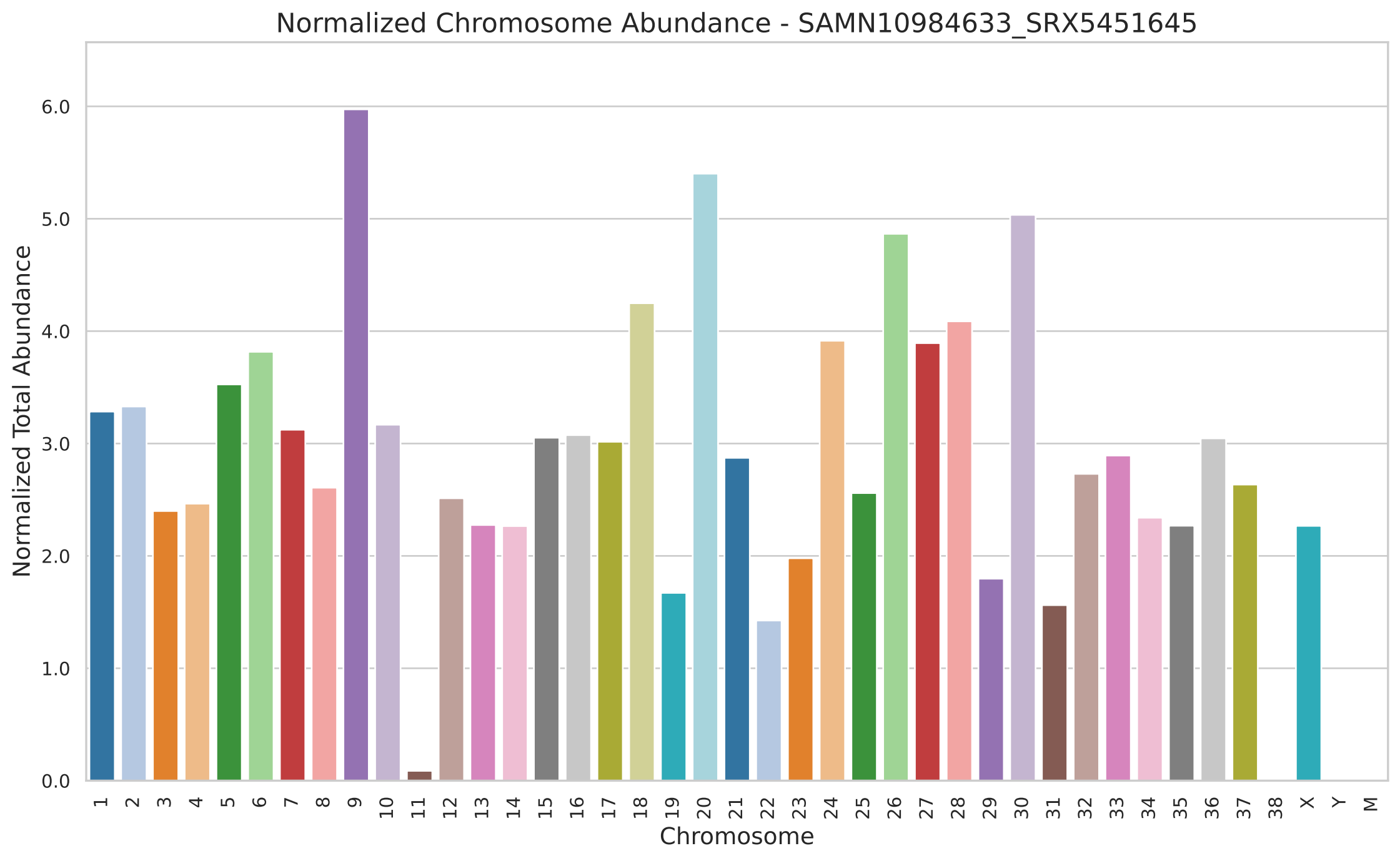

Normalized Chromosome Abundance - SAMN03436782_SRX963726
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

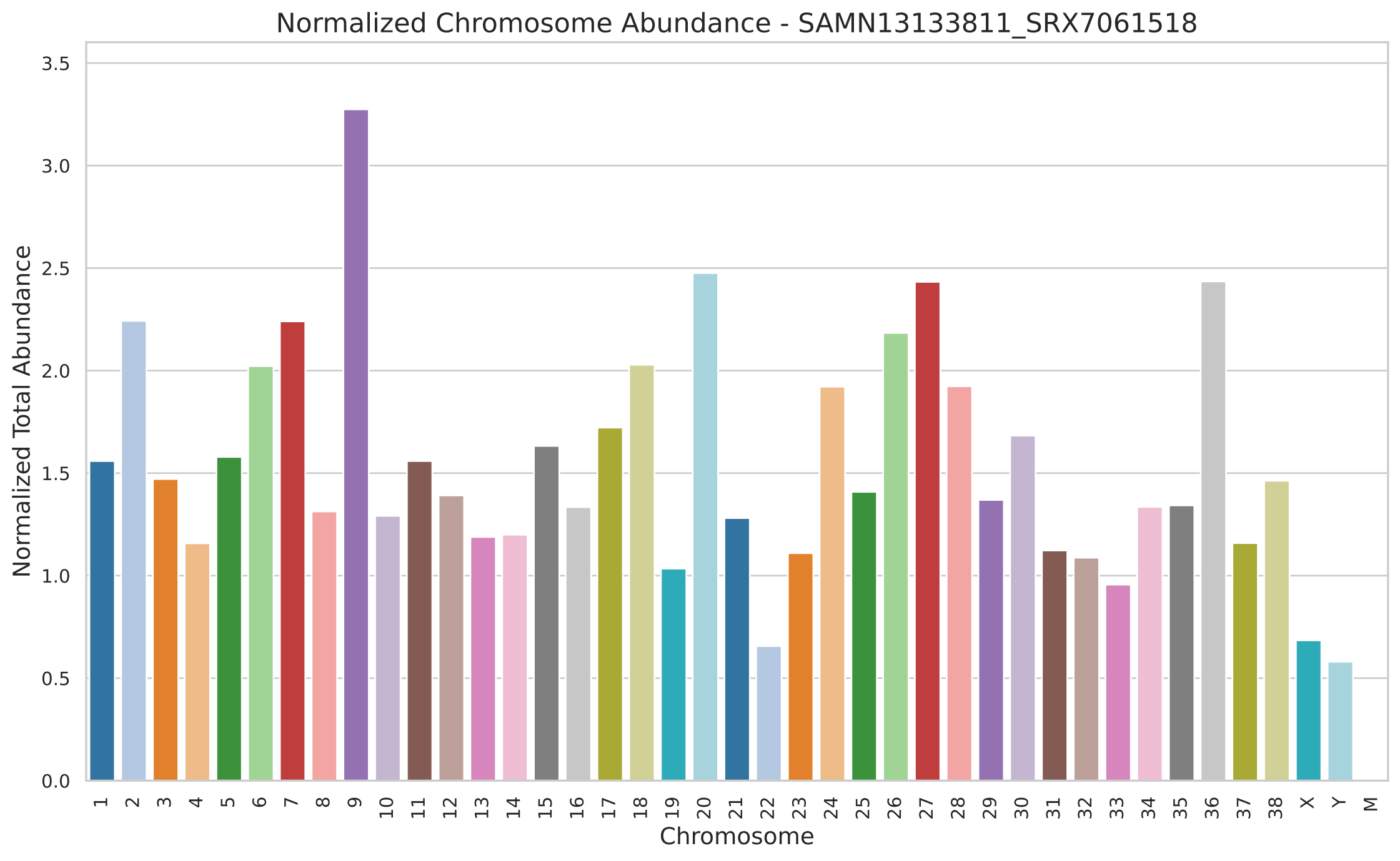

Normalized Chromosome Abundance - SAMN03436825_SRX963788
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

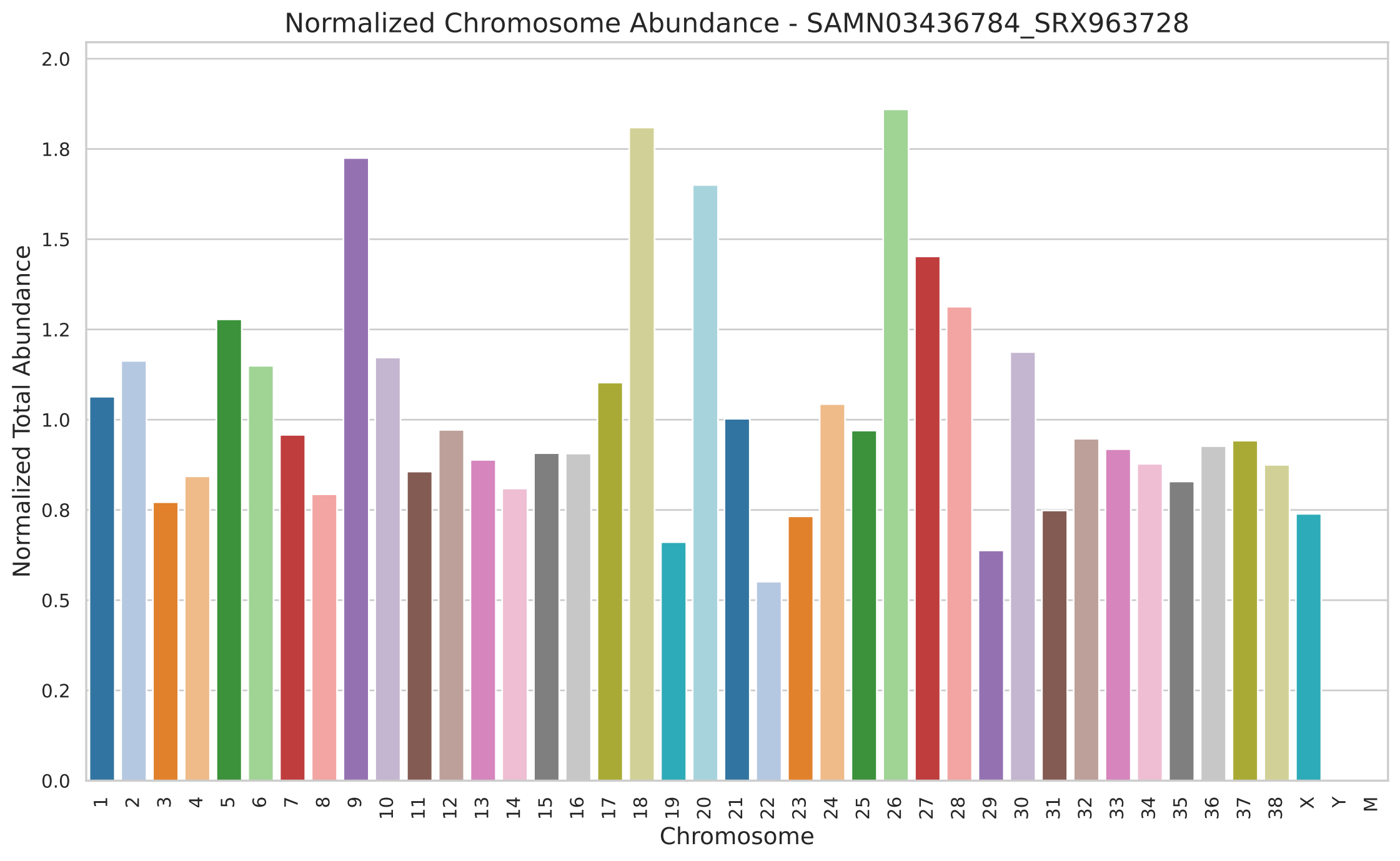

Normalized Chromosome Abundance - SAMN03436830_SRX963794
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

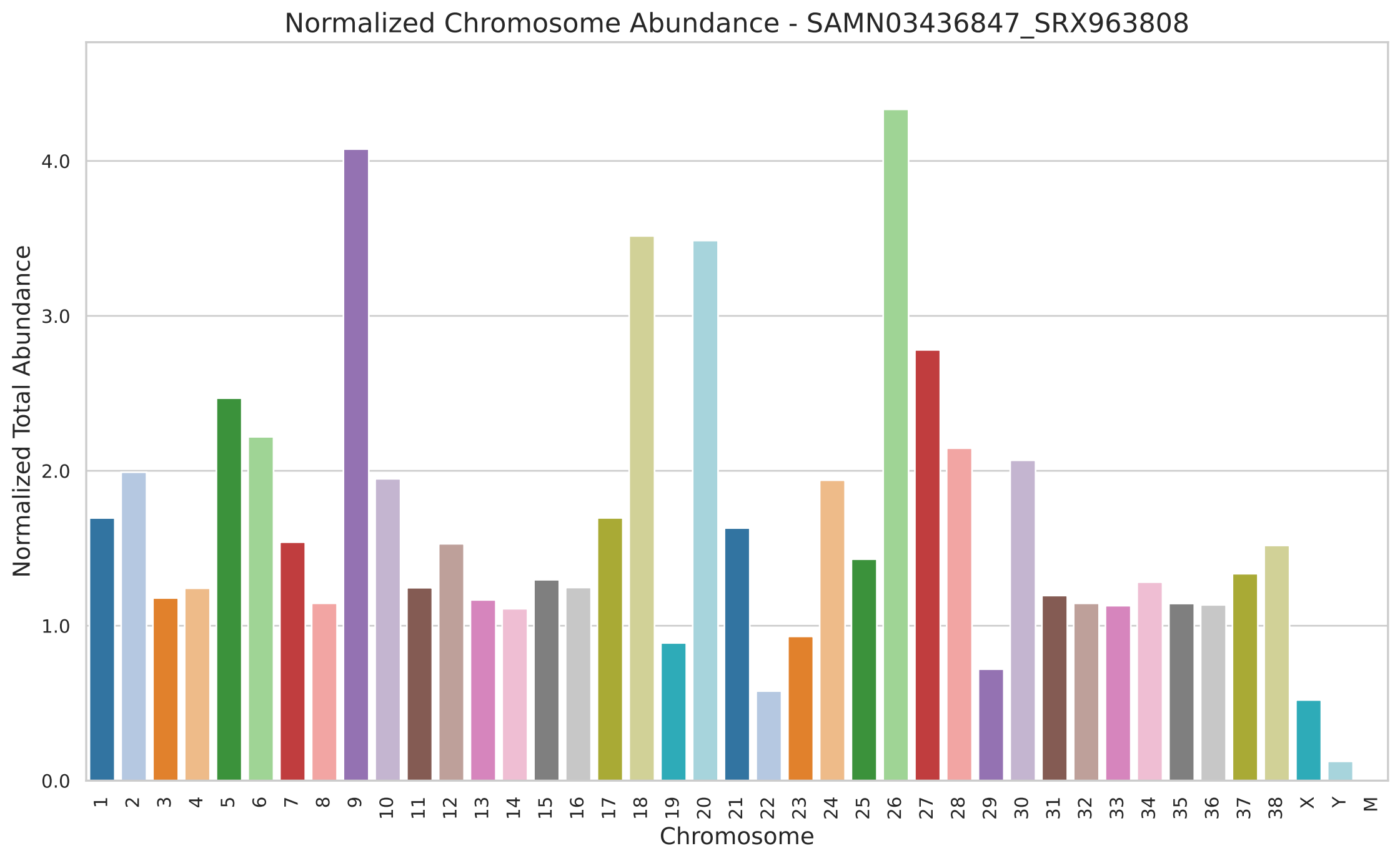

Normalized Chromosome Abundance - SAMN03436834_SRX963798
Normalized Total Abundance
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

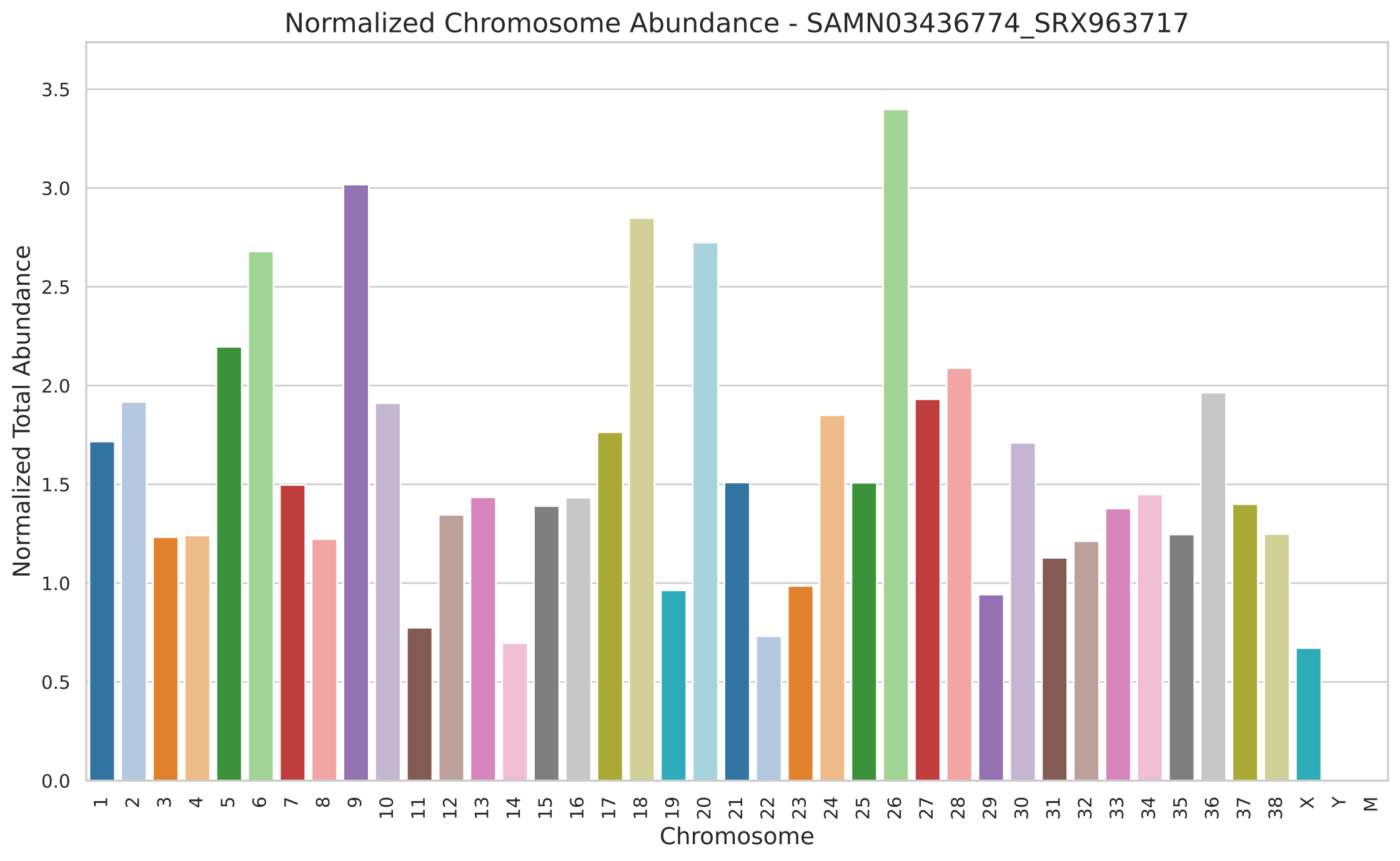

Normalized Chromosome Abundance - SAMN03436890_SRX964010
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

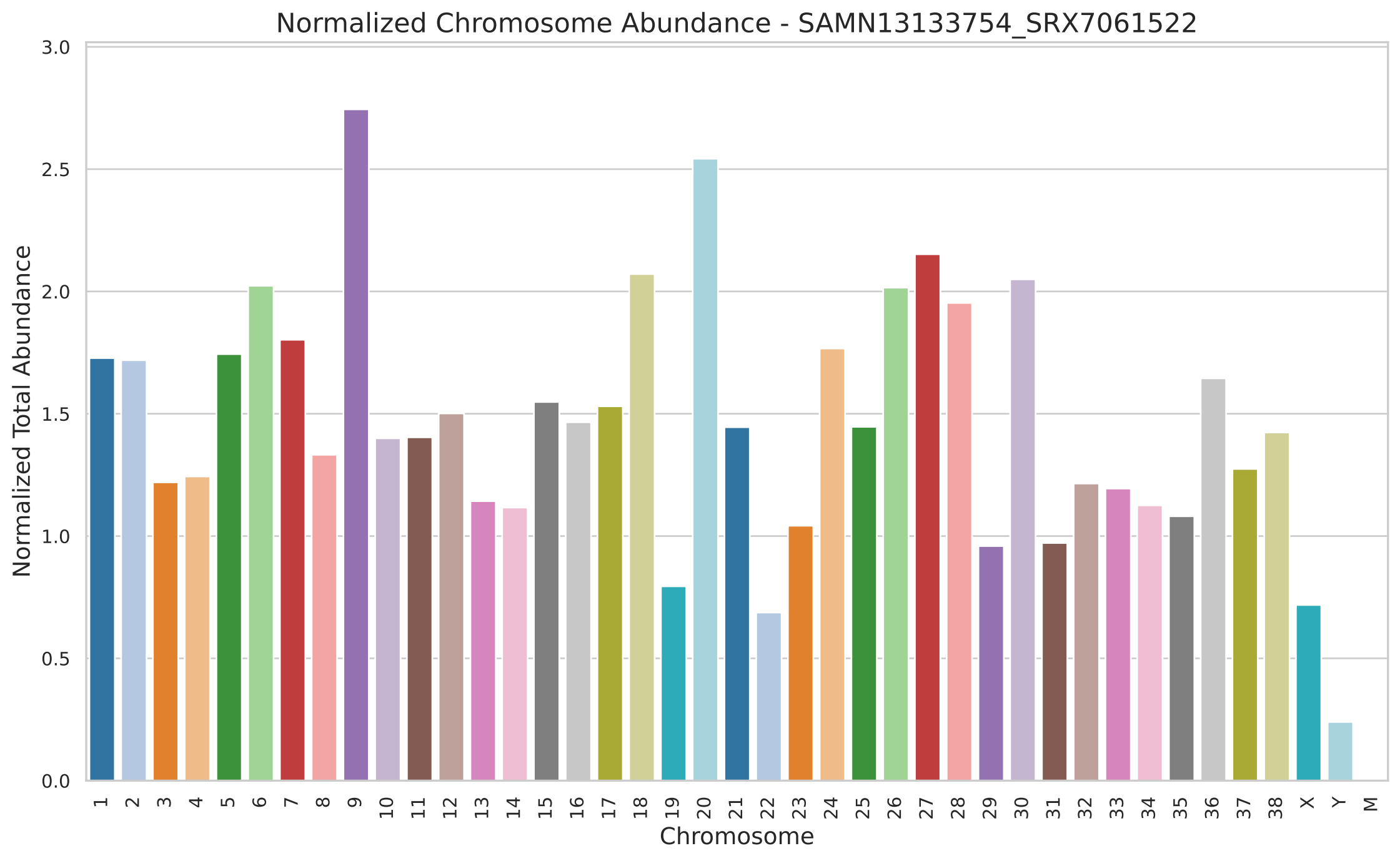

Normalized Chromosome Abundance - SAMN10984633_SRX5451645
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

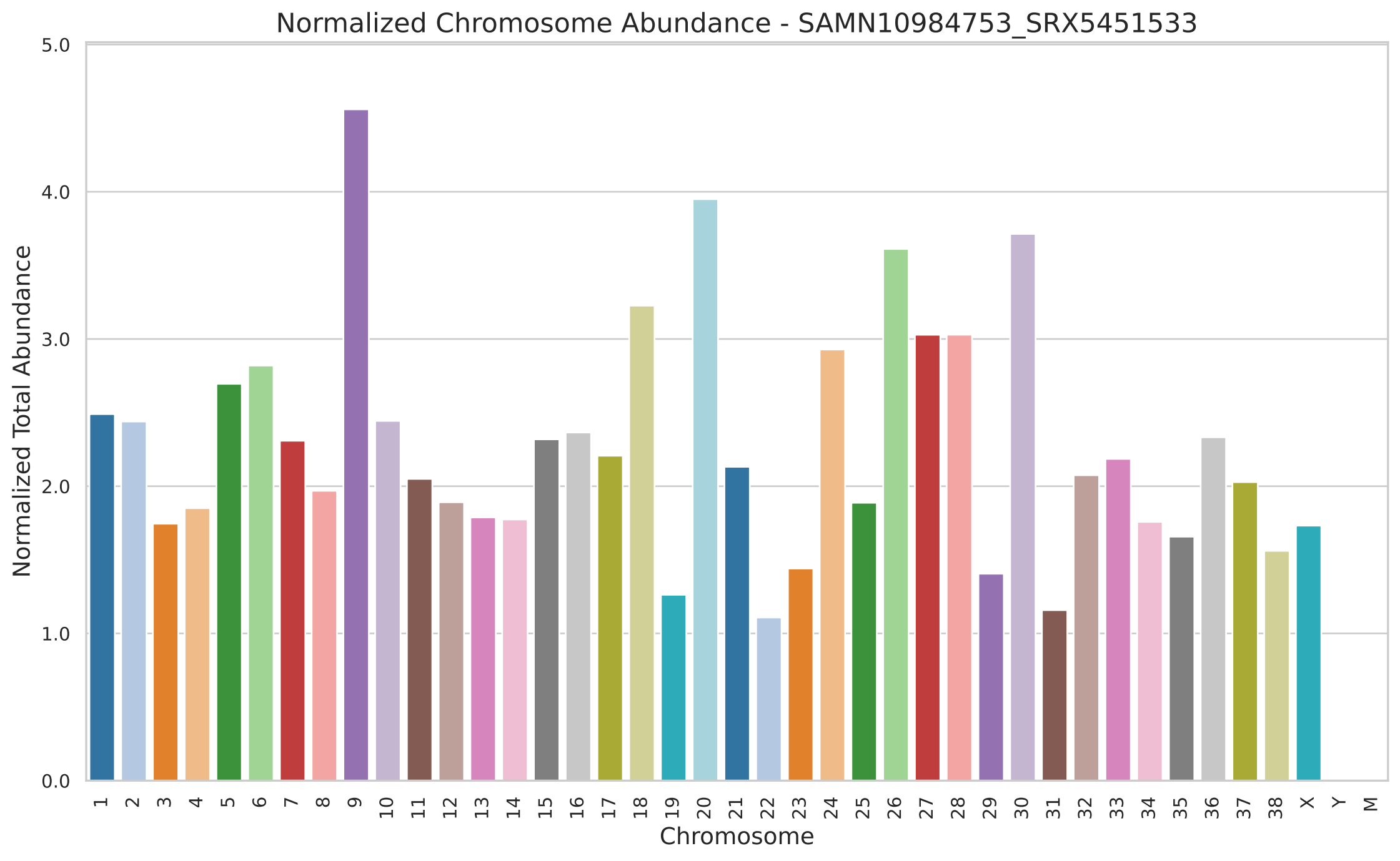

Normalized Chromosome Abundance - SAMN13133811_SRX7061518
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

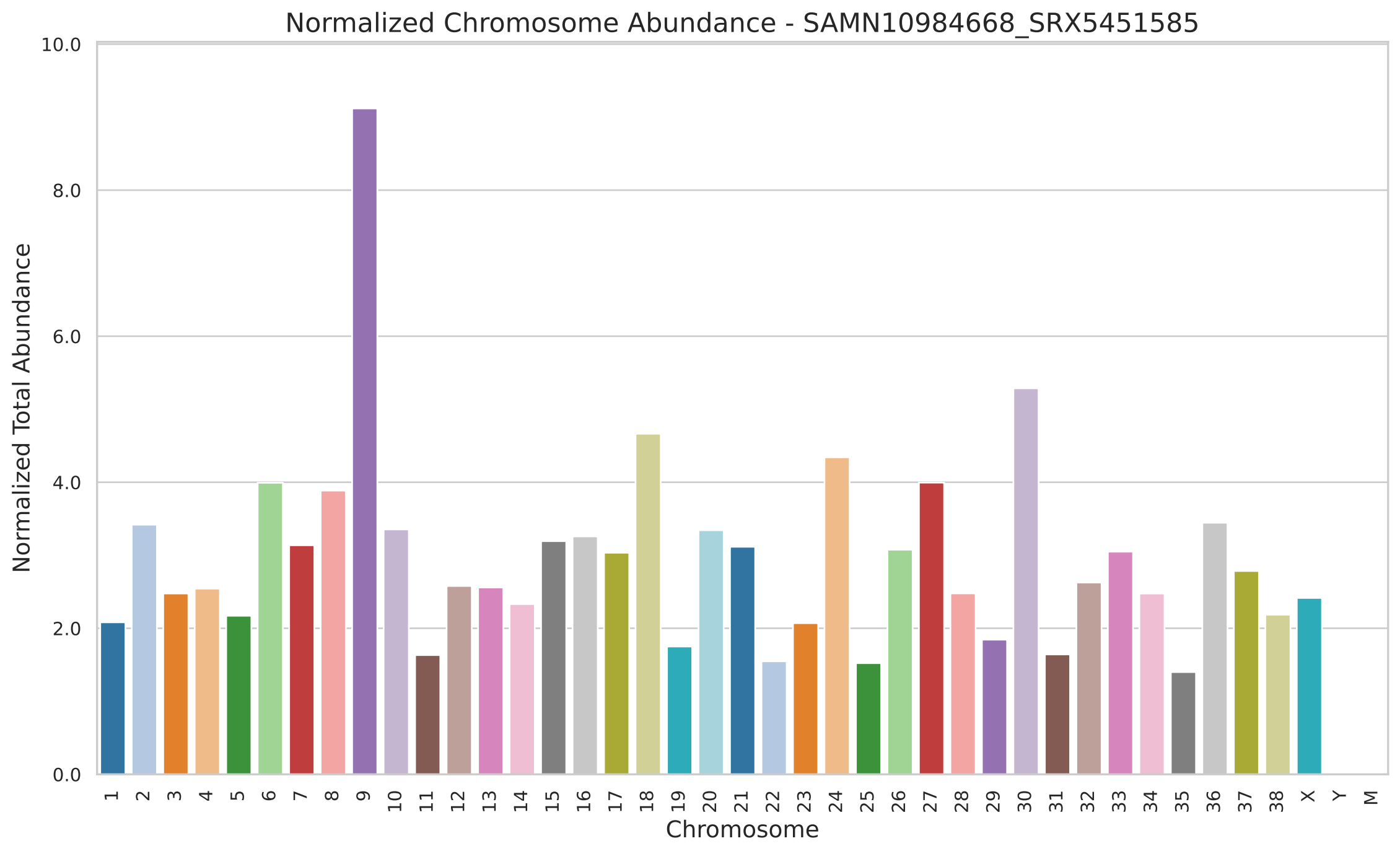

Normalized Chromosome Abundance - SAMN03436784_SRX963728
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

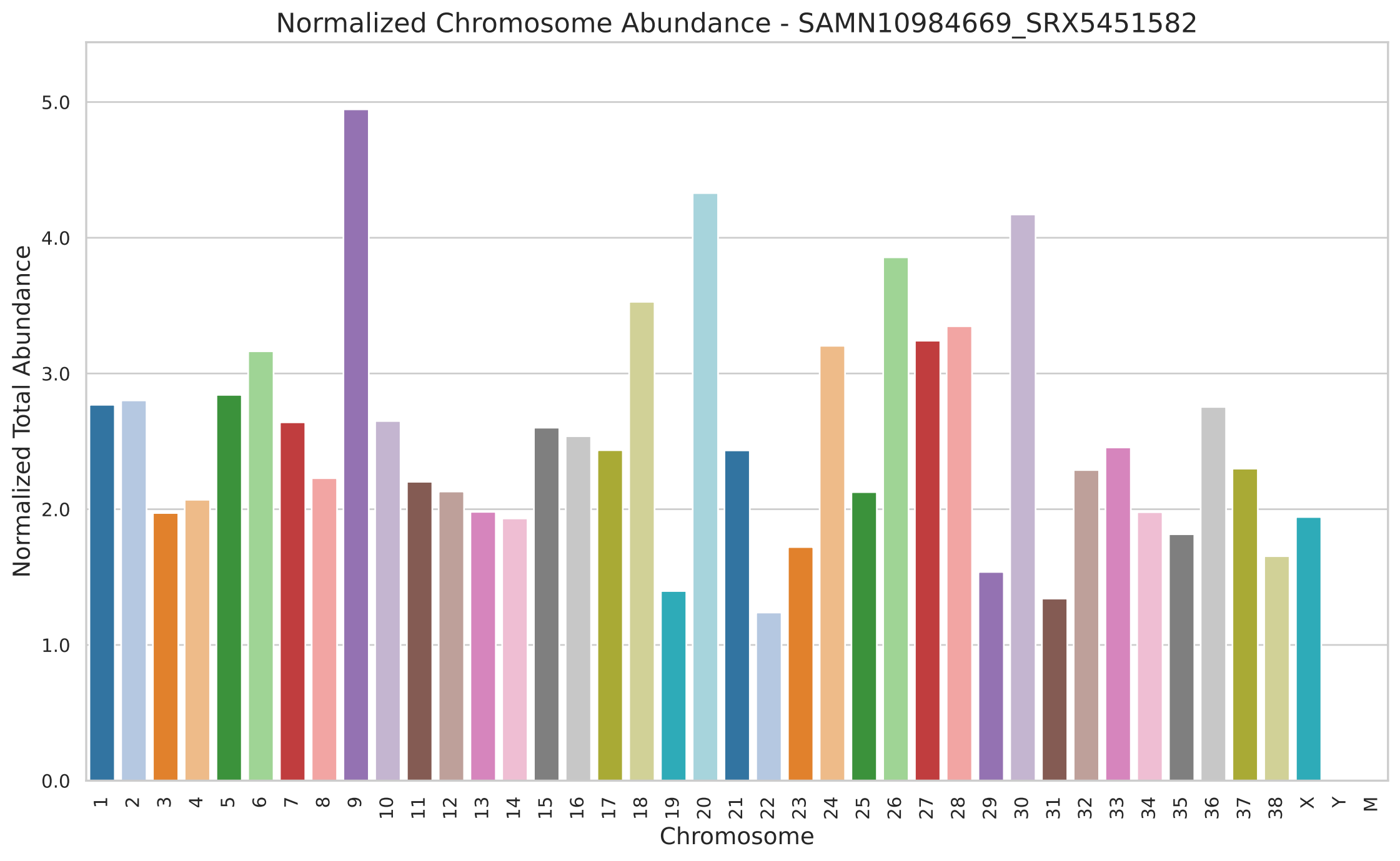

Normalized Chromosome Abundance - SAMN03436847_SRX963808
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

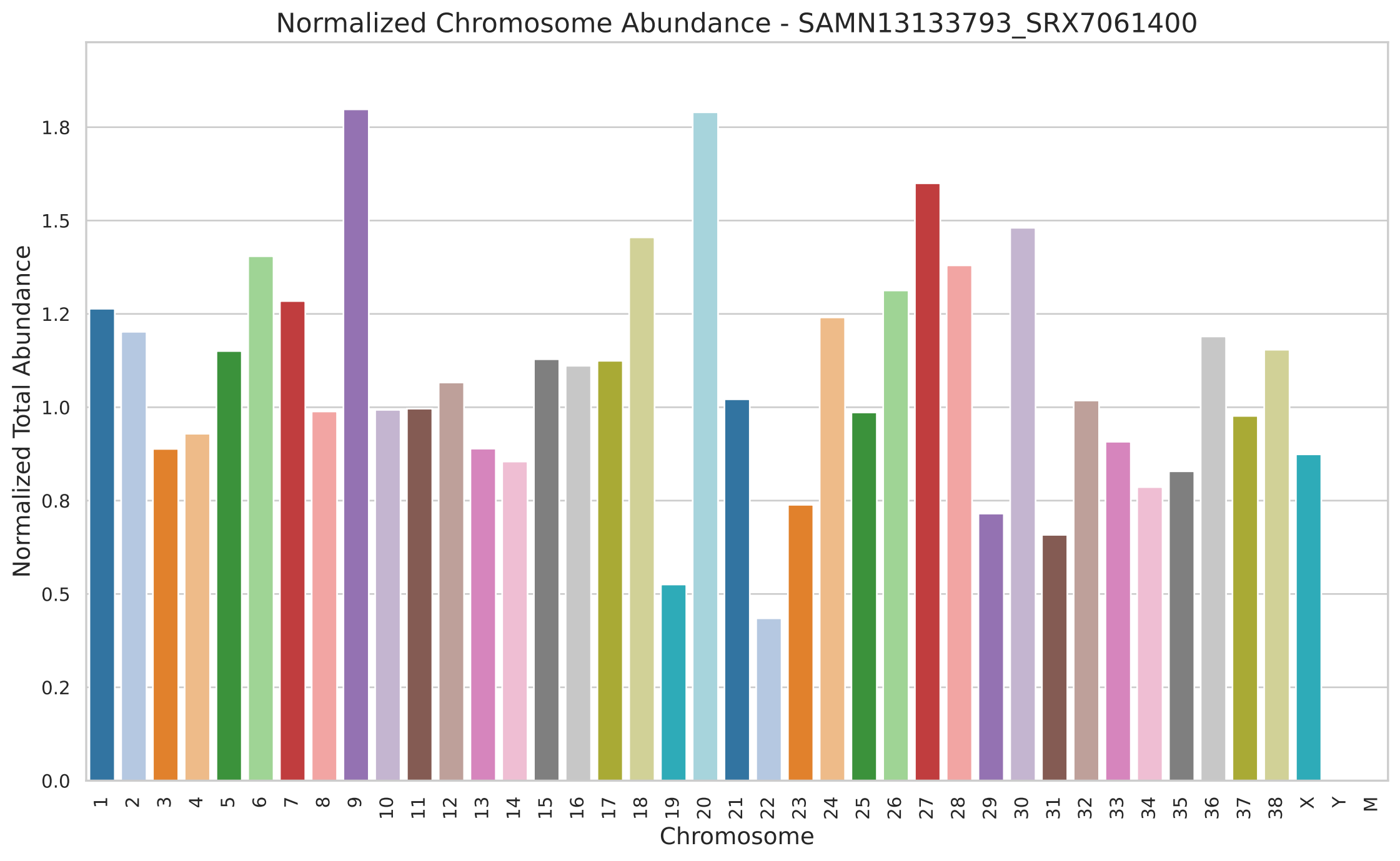

Normalized Chromosome Abundance - SAMN03436774_SRX963717
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

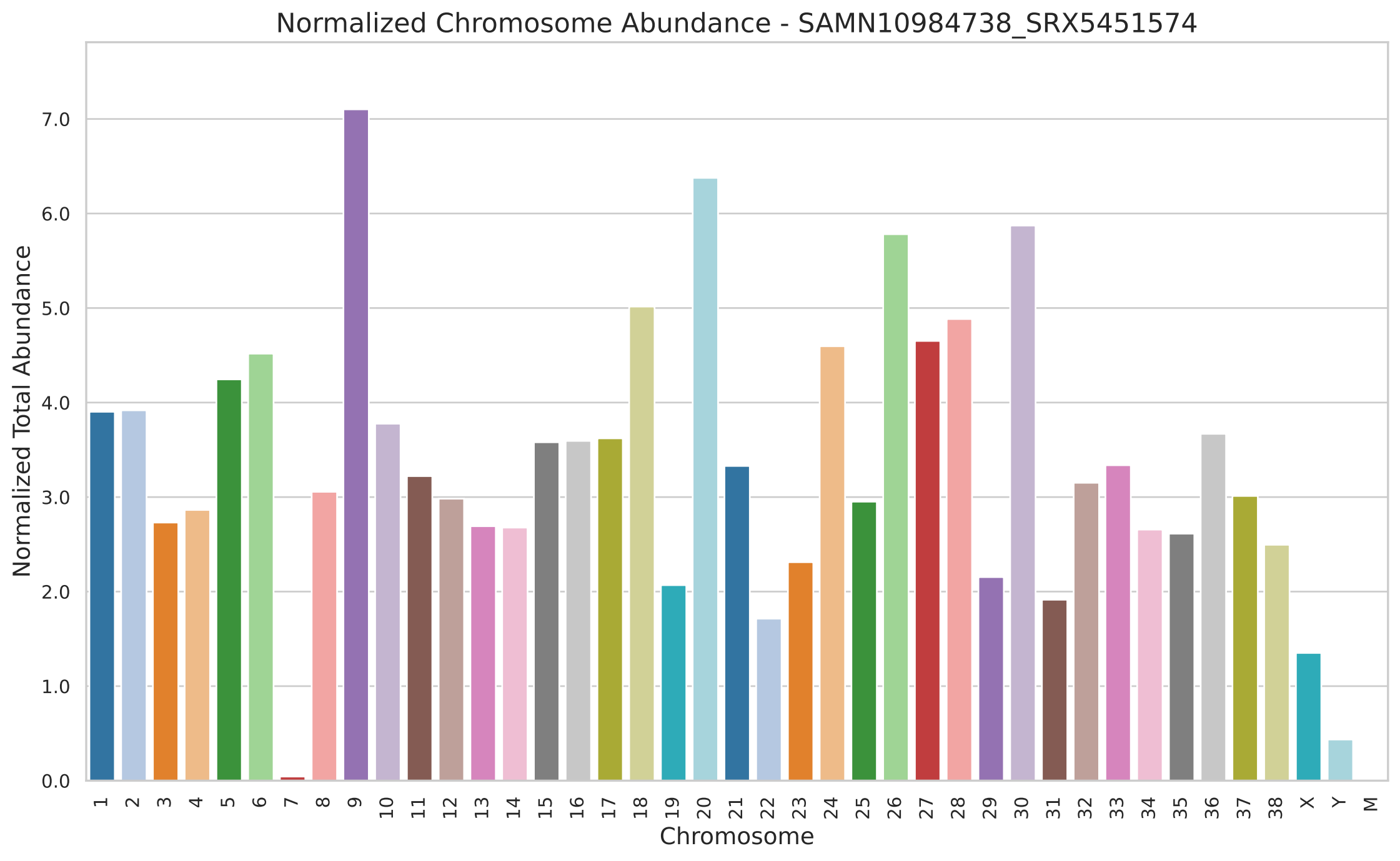

Normalized Chromosome Abundance - SAMN13133754_SRX7061522
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

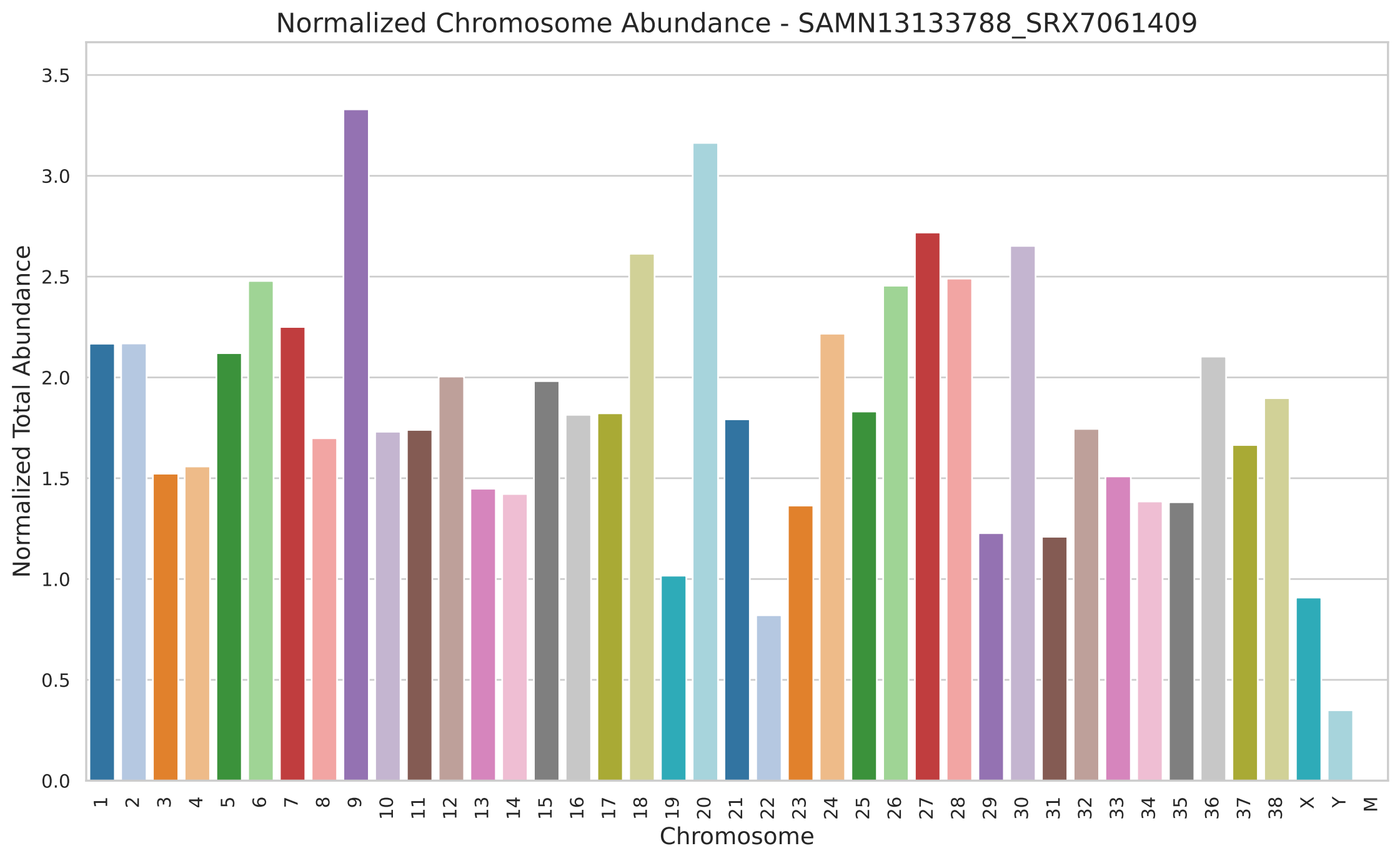

Normalized Chromosome Abundance - SAMN10984753_SRX5451533
Normalized Total Abundance
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

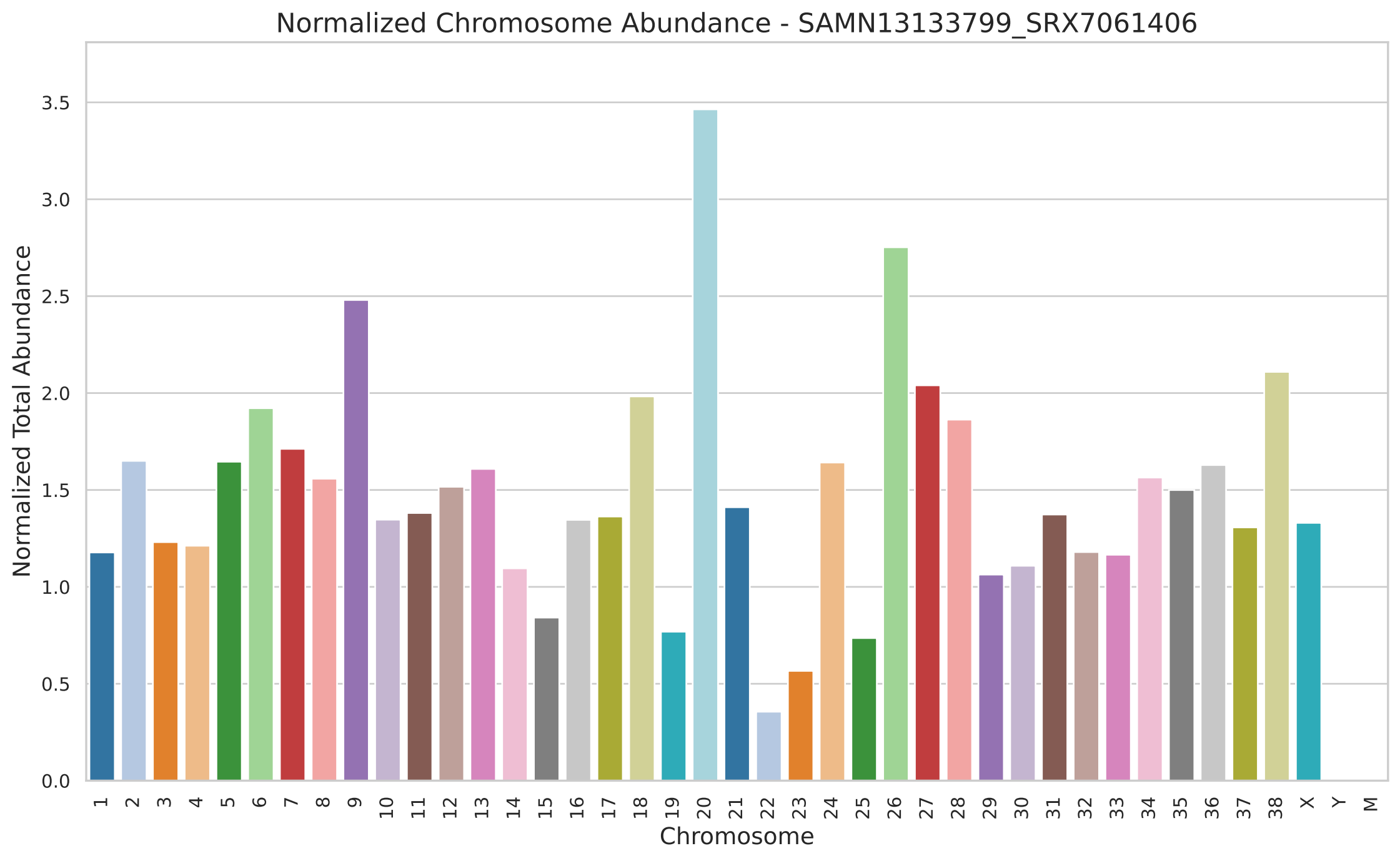

Normalized Chromosome Abundance - SAMN10984668_SRX5451585
Normalized Total Abundance
10.0
8.0
6.0
4.0
2.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

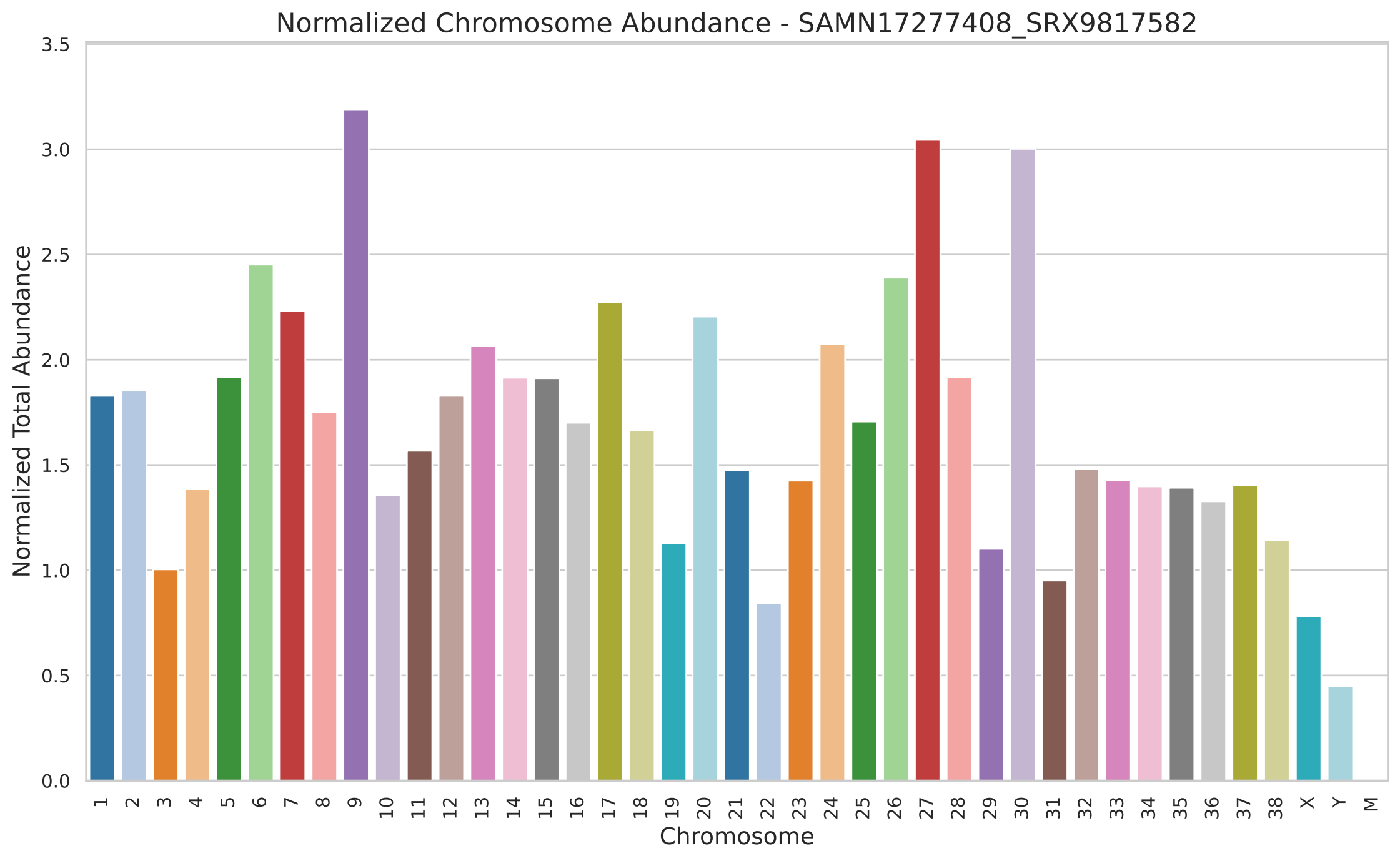

Normalized Chromosome Abundance - SAMN10984669_SRX5451582
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

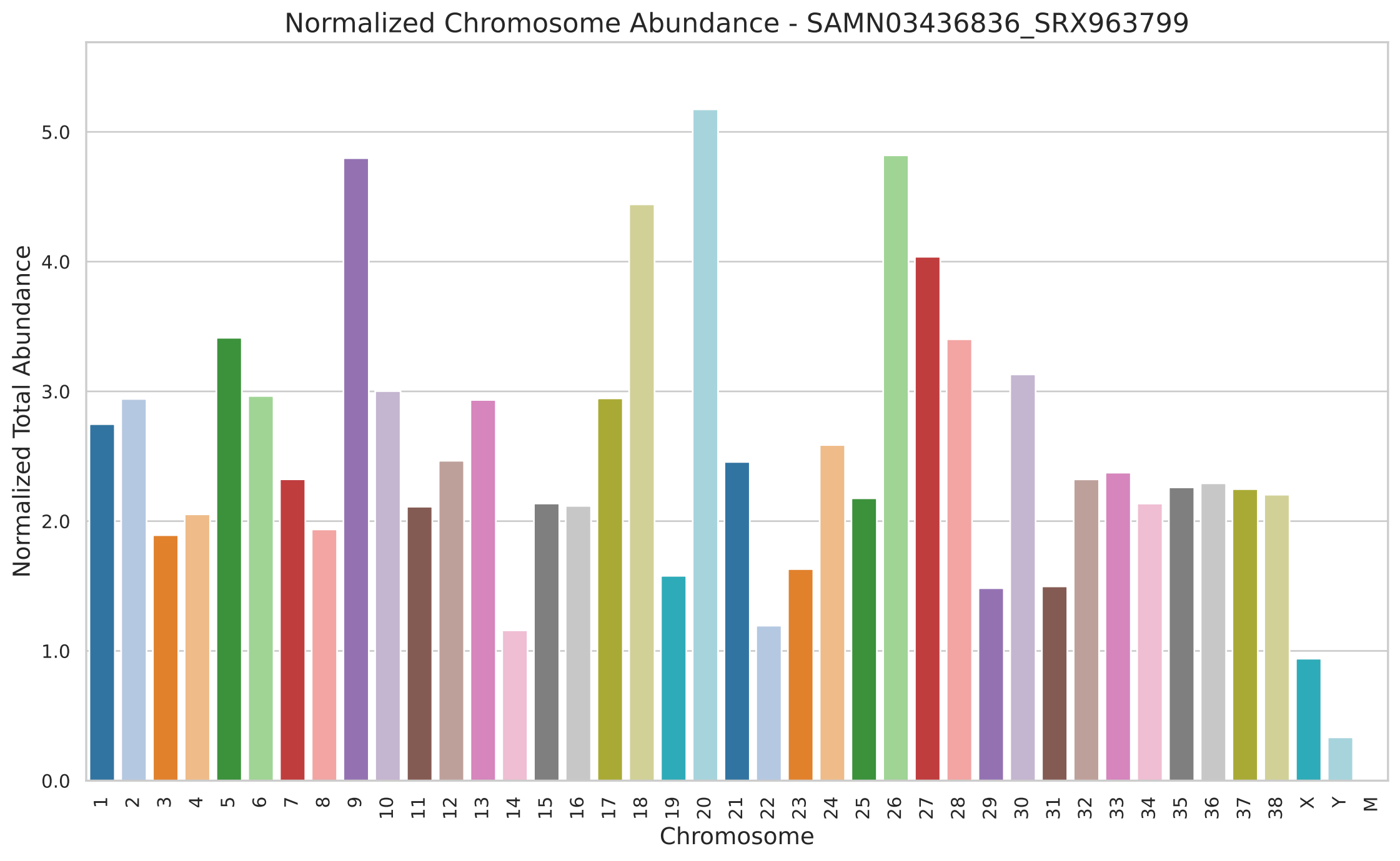

Normalized Chromosome Abundance - SAMN13133793_SRX7061400
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

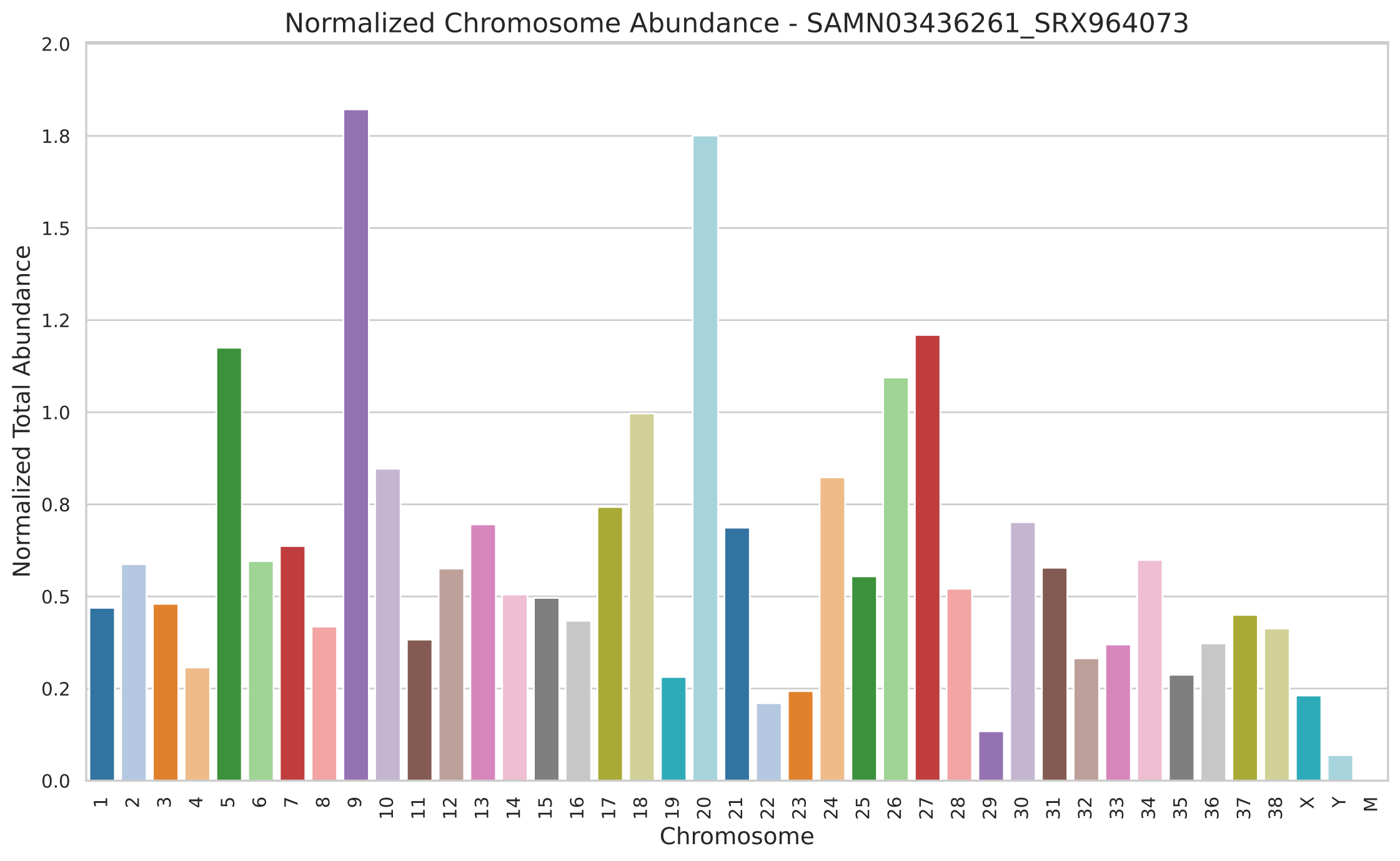

Normalized Chromosome Abundance - SAMN10984738_SRX5451574
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

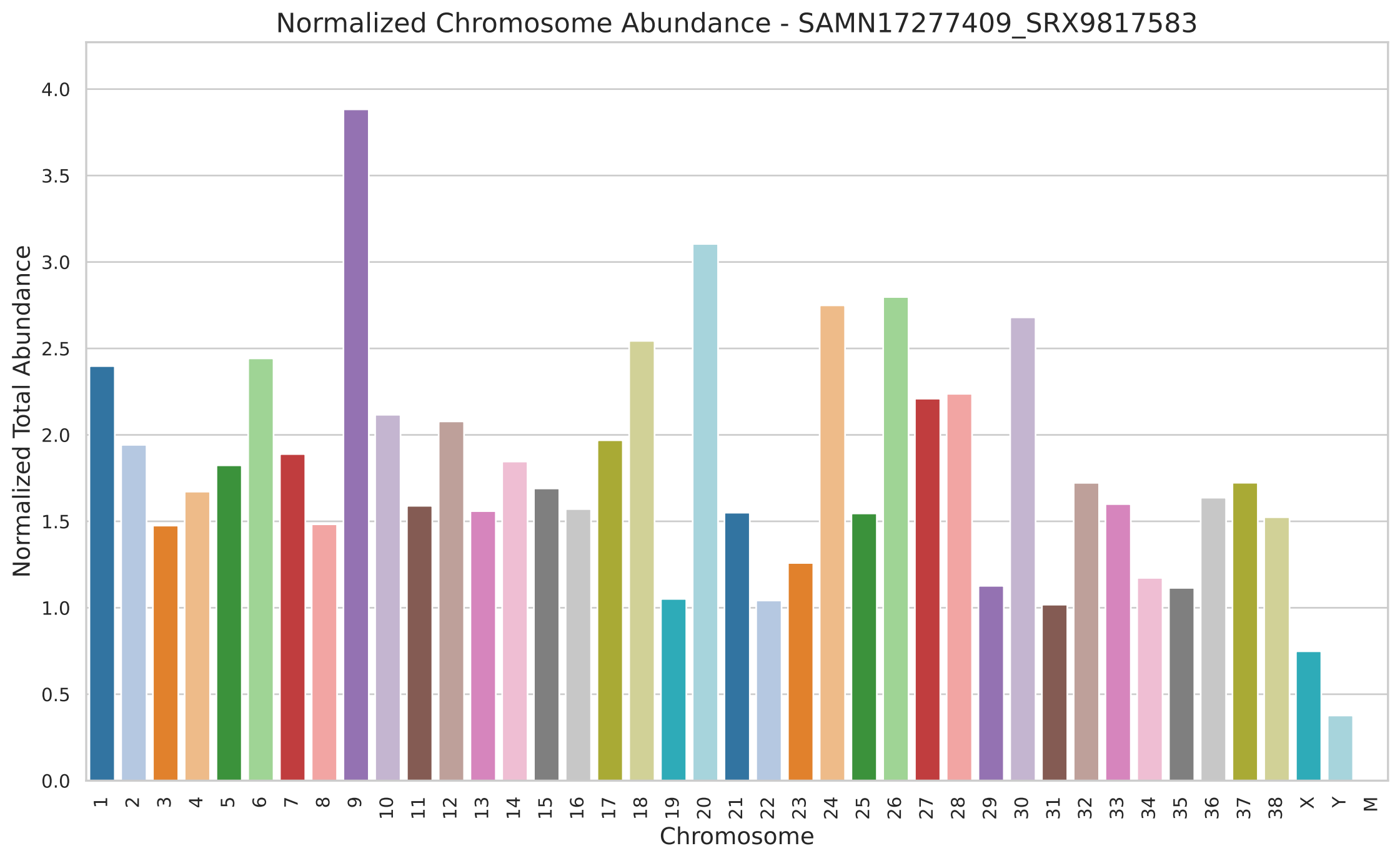

Normalized Chromosome Abundance - SAMN13133788_SRX7061409
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

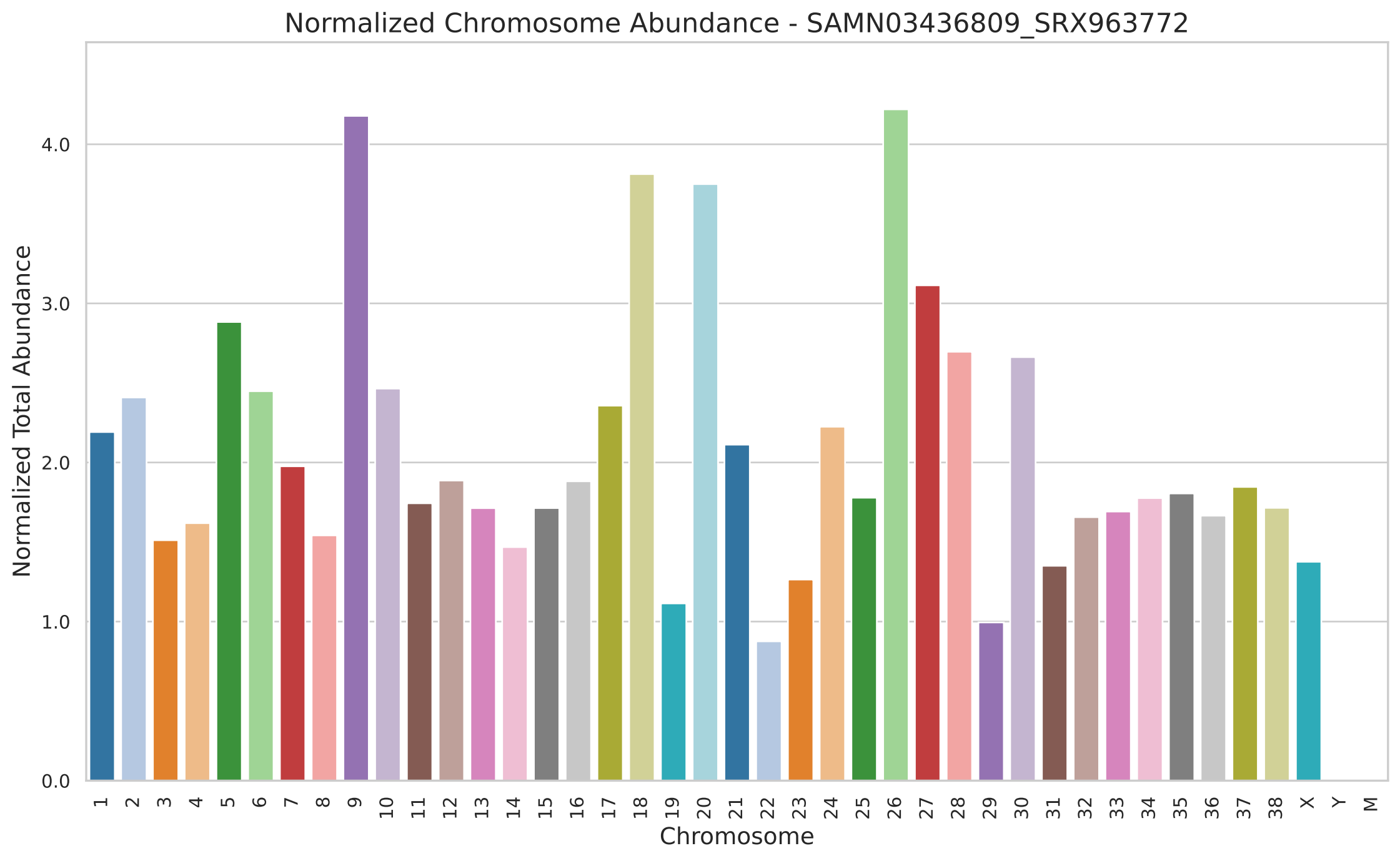

Normalized Chromosome Abundance - SAMN13133799_SRX7061406
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

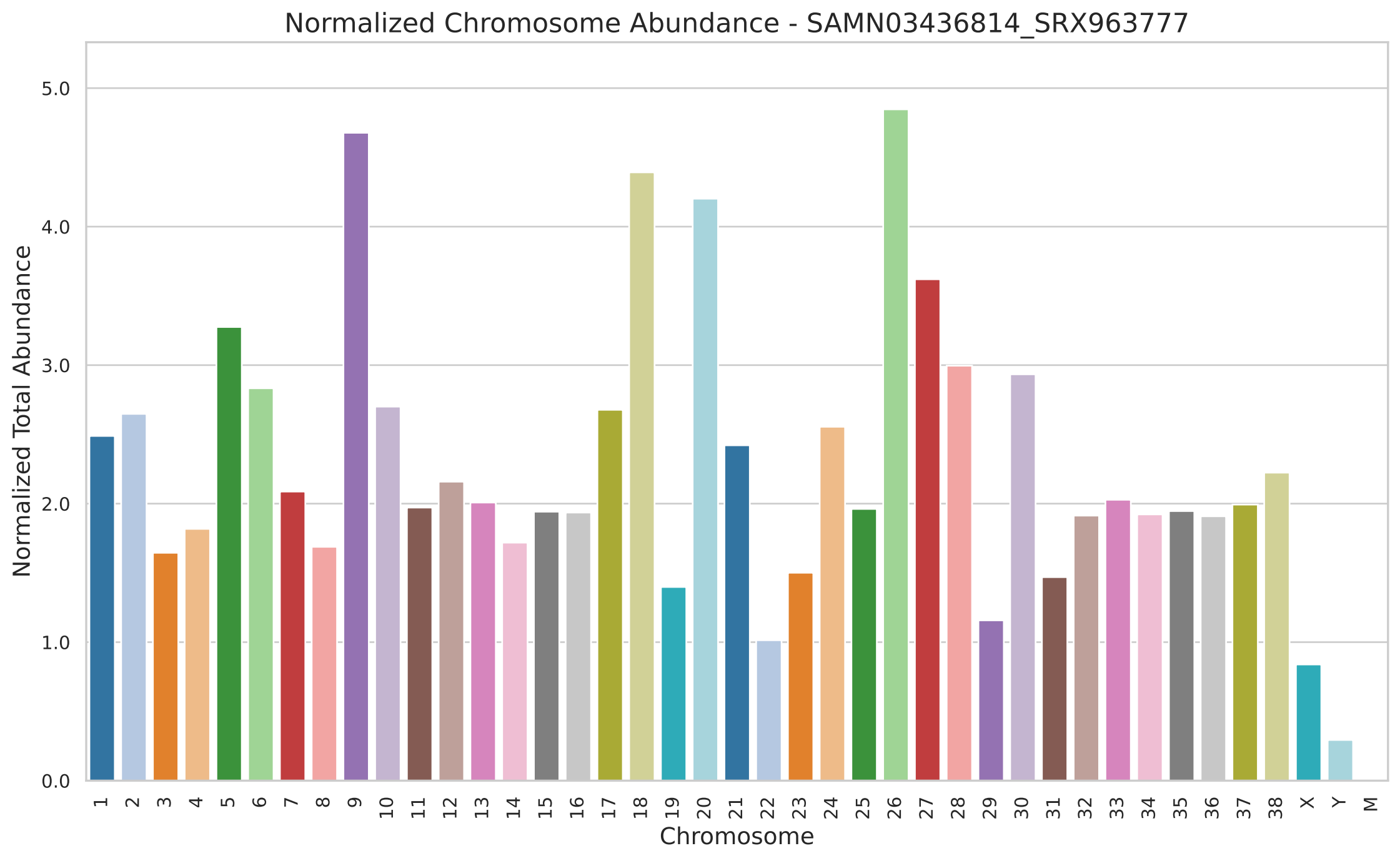

Normalized Chromosome Abundance - SAMN17277408_SRX9817582
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

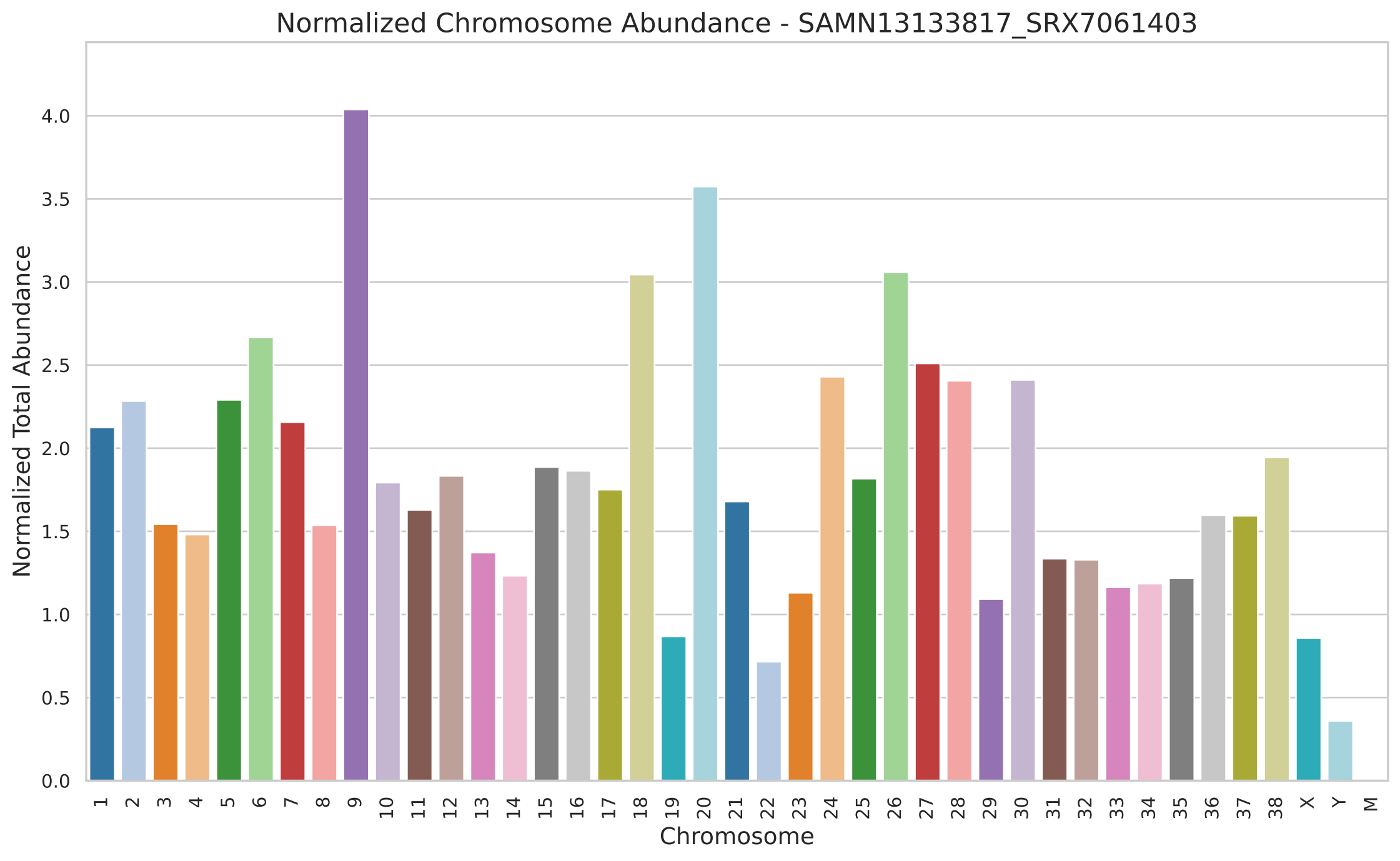

Normalized Chromosome Abundance - SAMN03436836_SRX963799
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

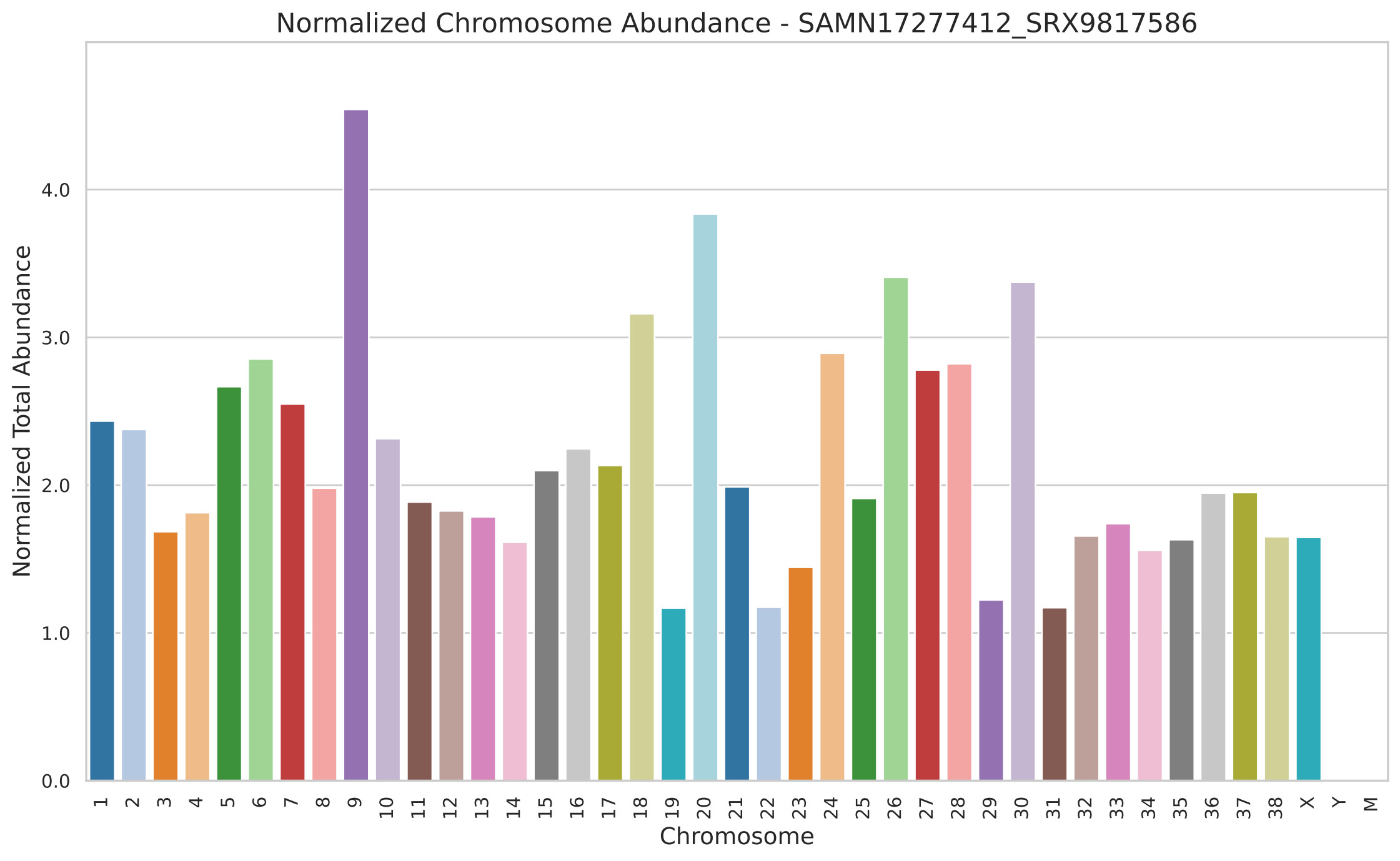

Normalized Chromosome Abundance - SAMN03436261_SRX964073
Normalized Total Abundance
2.0
1.8
1.5
1.2
1.0
0.8
0.5
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

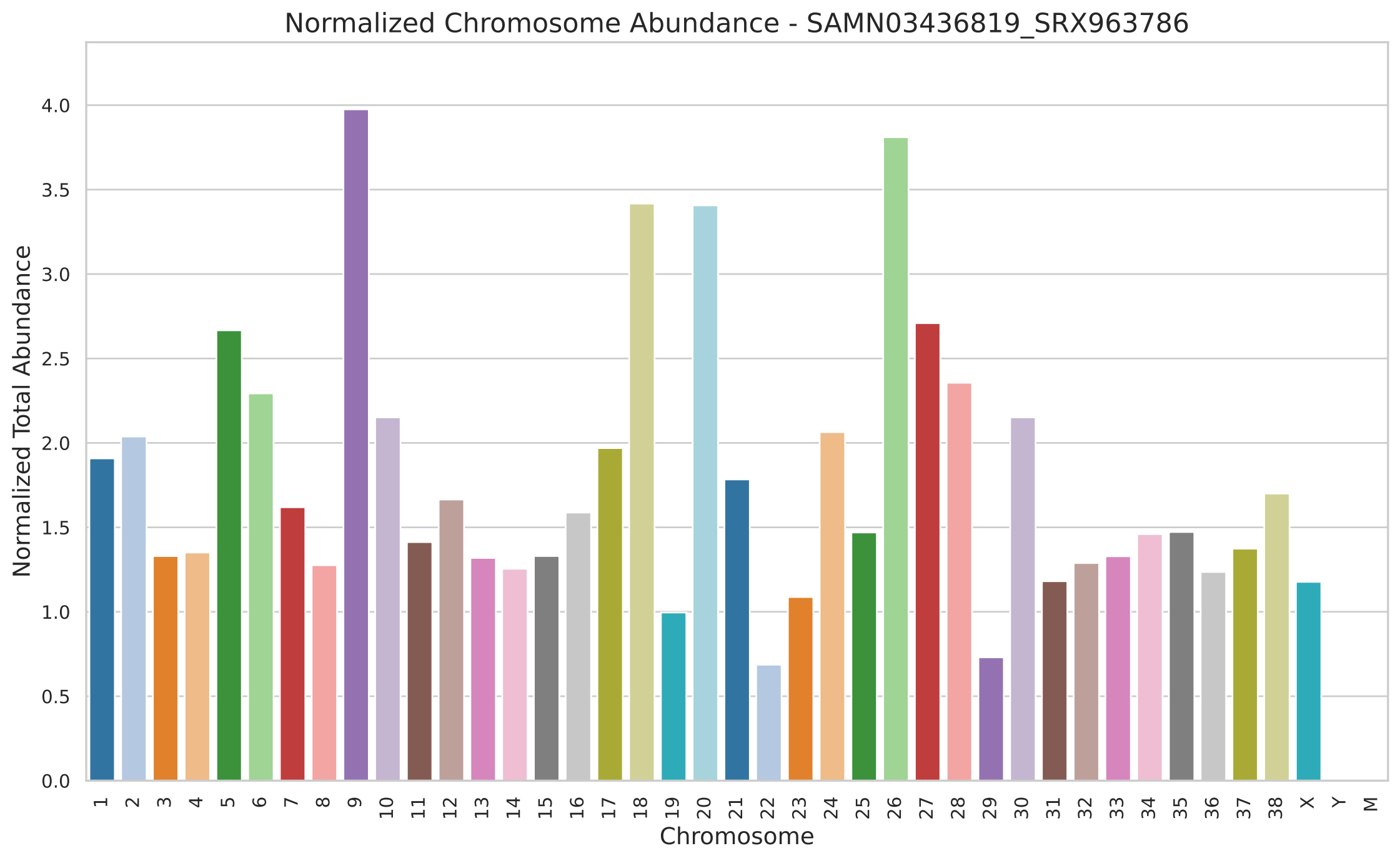

Normalized Chromosome Abundance - SAMN17277409_SRX9817583
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

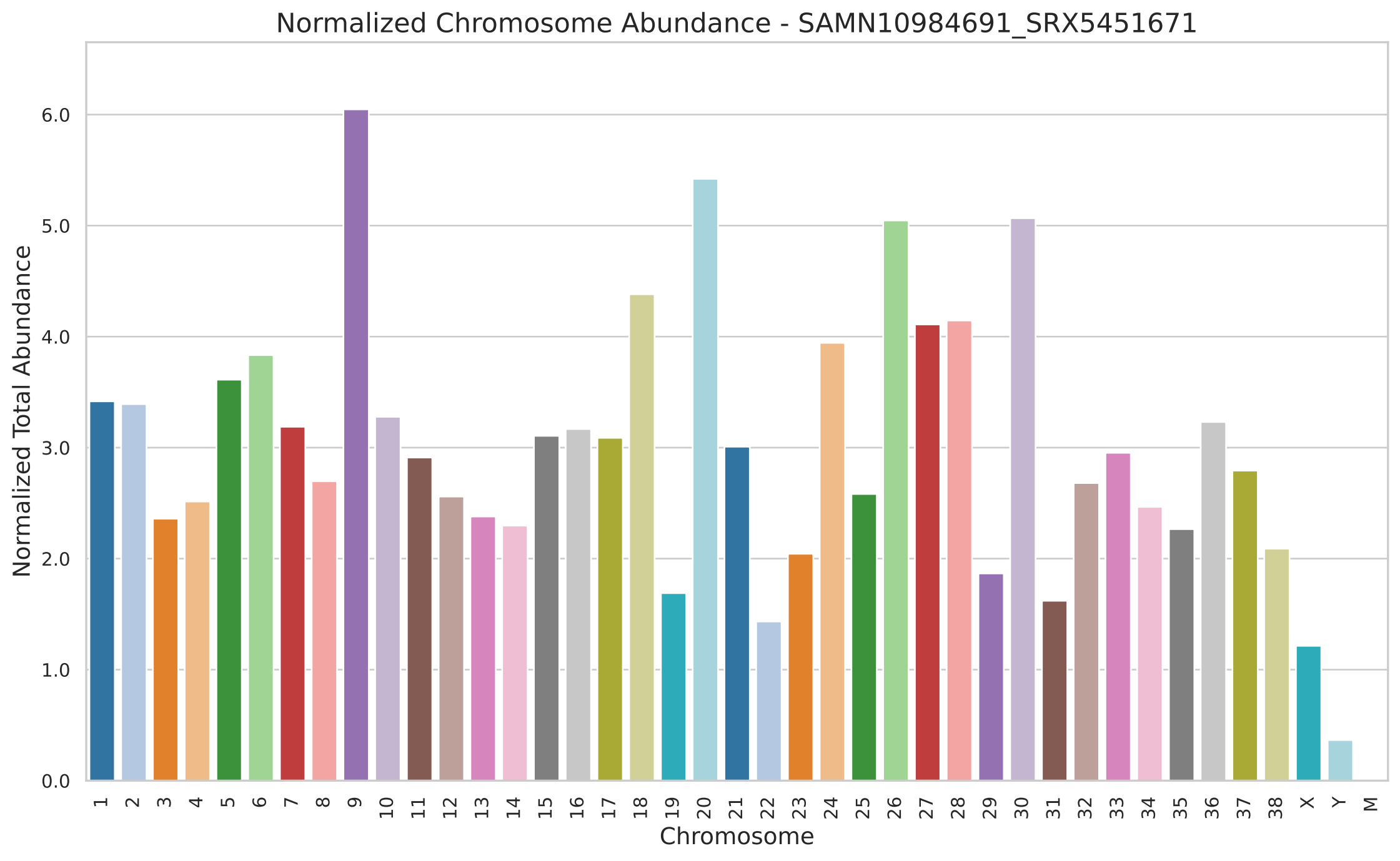

Normalized Chromosome Abundance - SAMN03436809_SRX963772
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

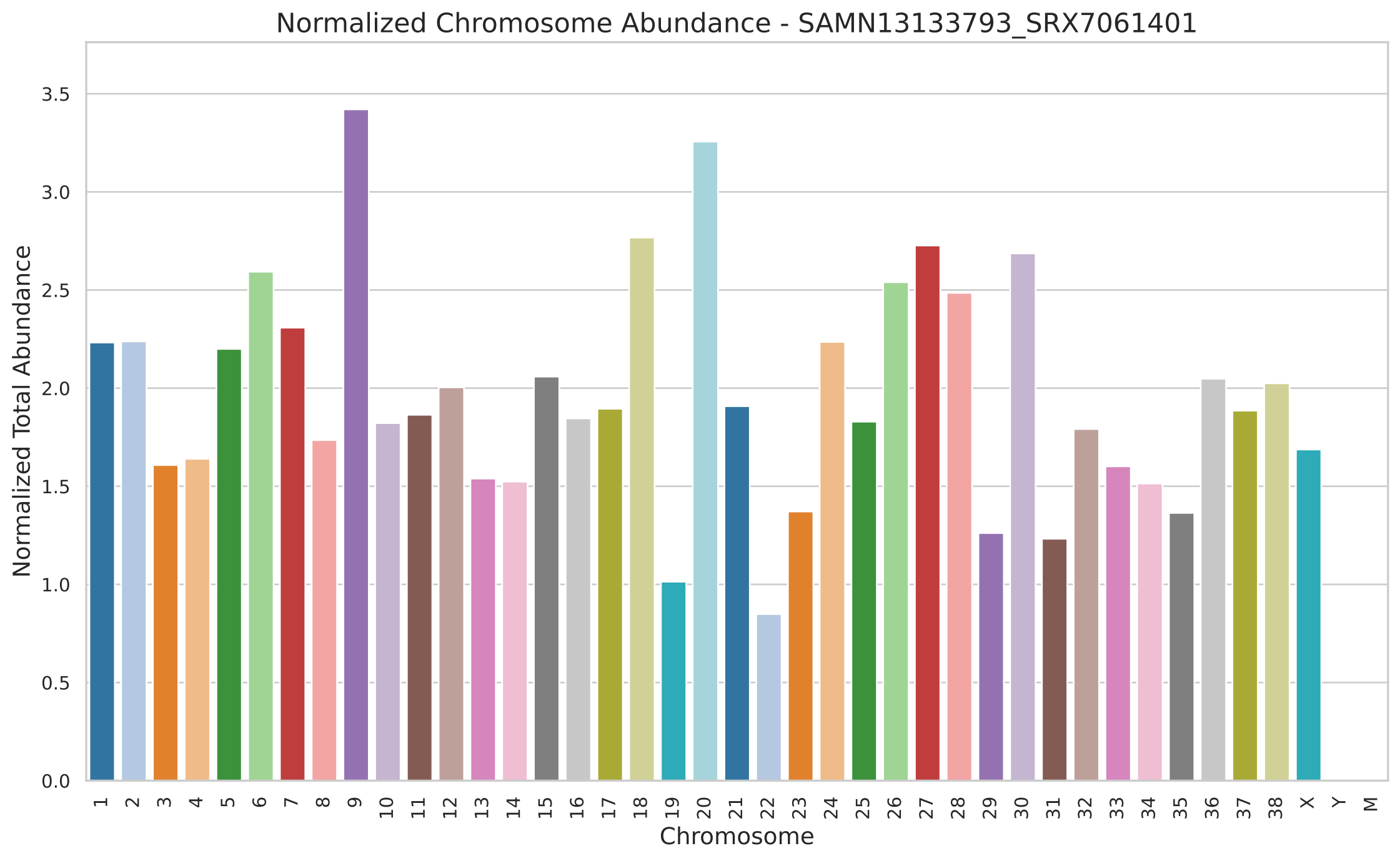

Normalized Chromosome Abundance - SAMN03436814_SRX963777
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

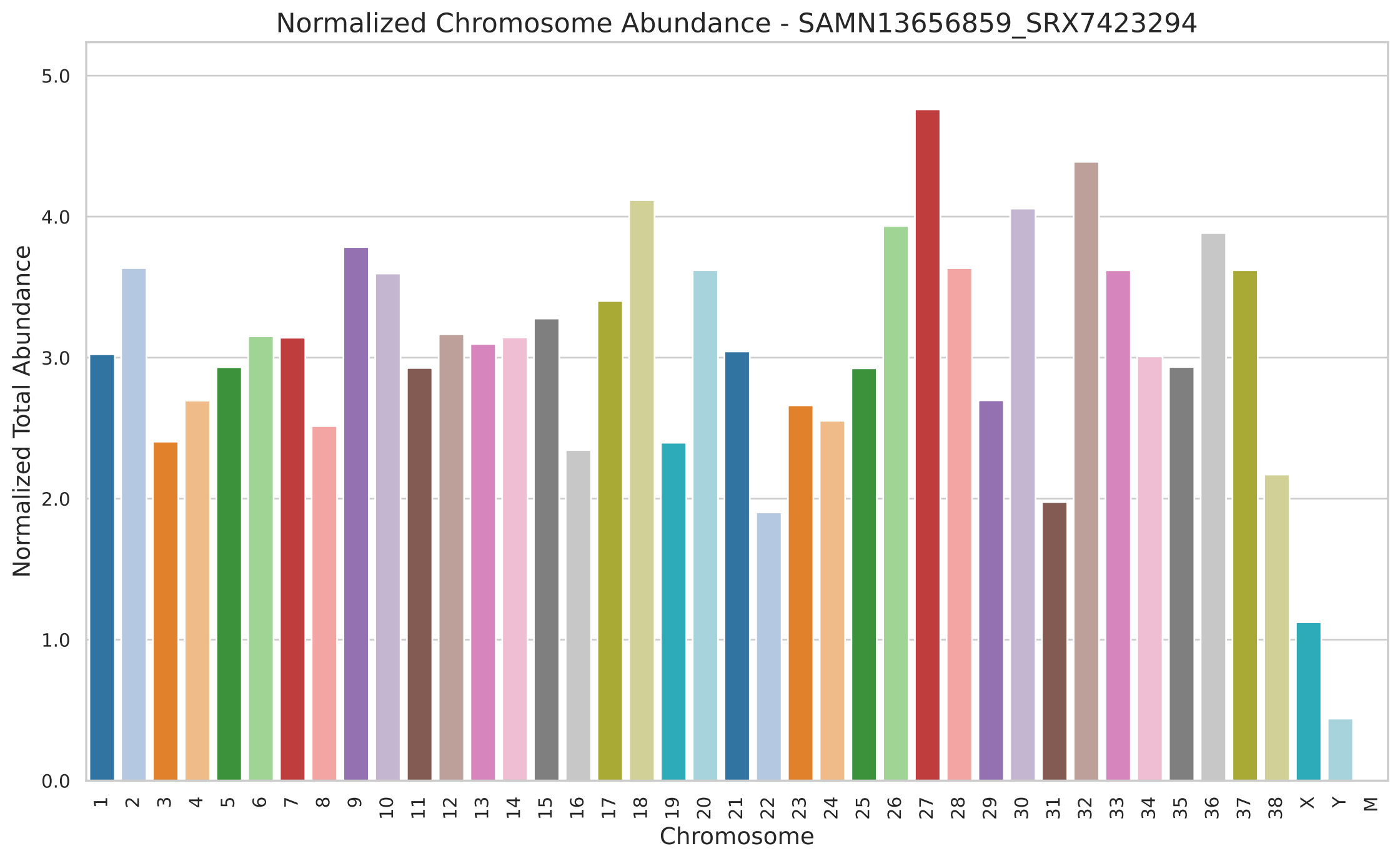

Normalized Chromosome Abundance - SAMN13133817_SRX7061403
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

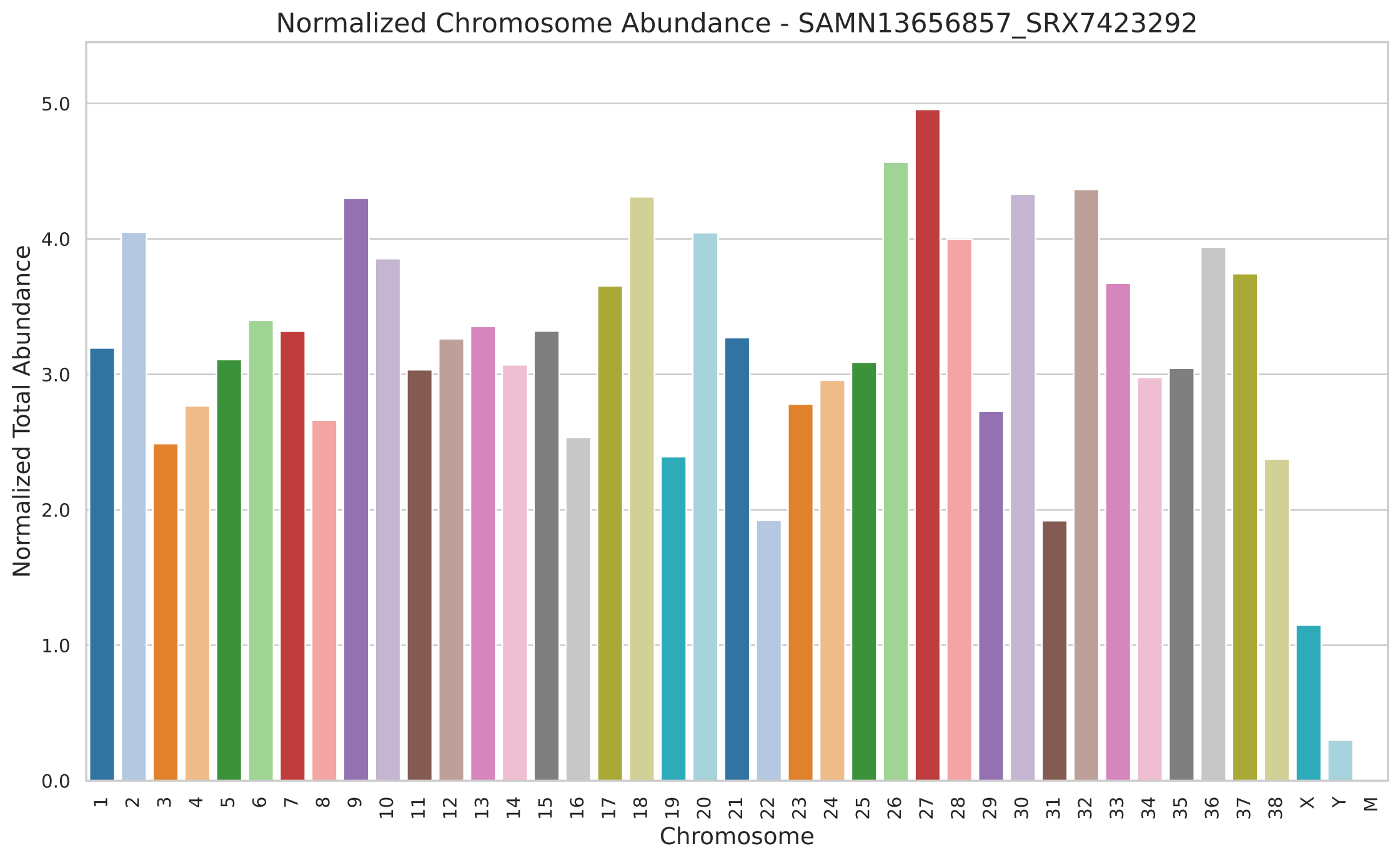

Normalized Chromosome Abundance - SAMN17277412_SRX9817586
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

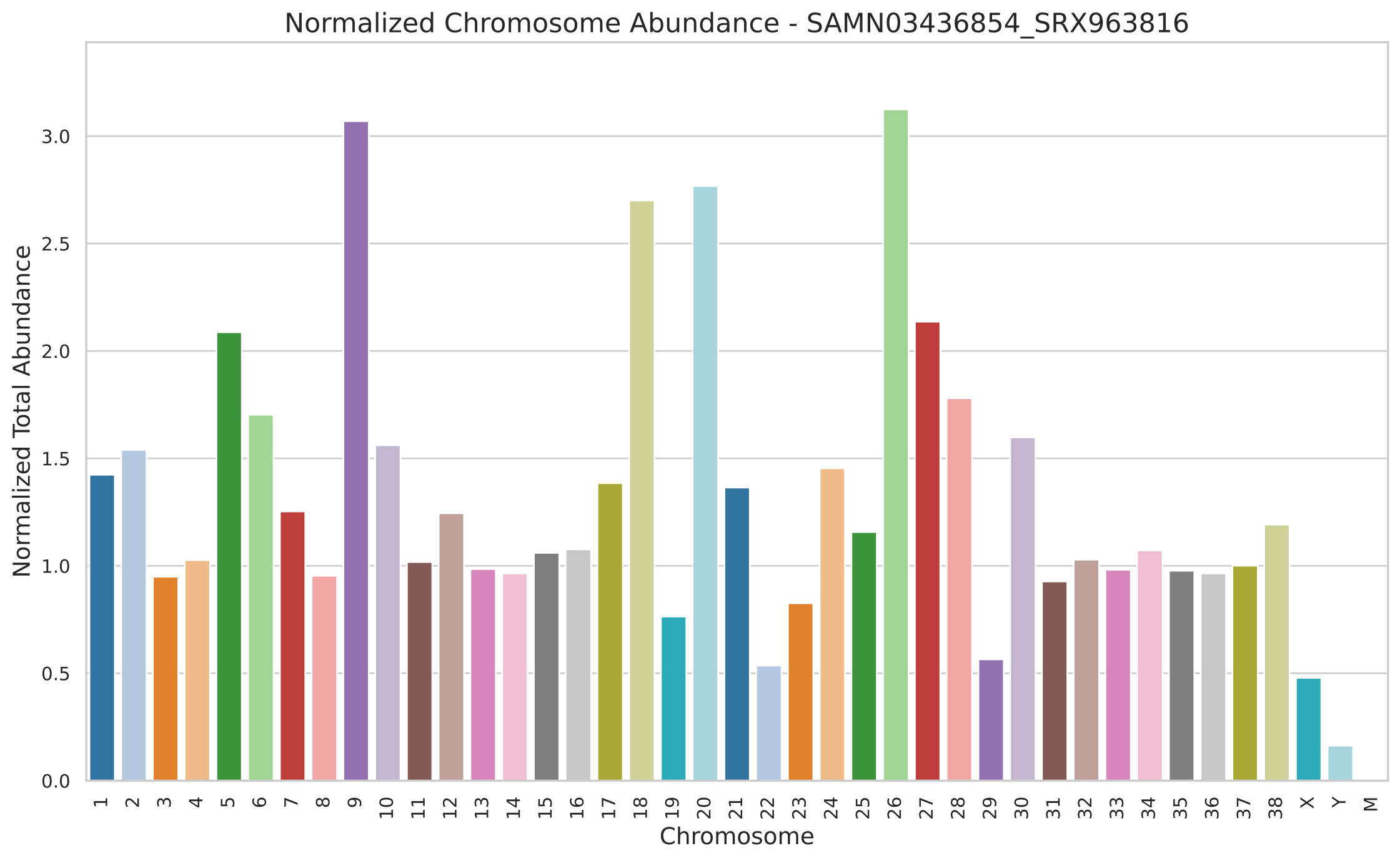

Normalized Chromosome Abundance - SAMN03436819_SRX963786
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

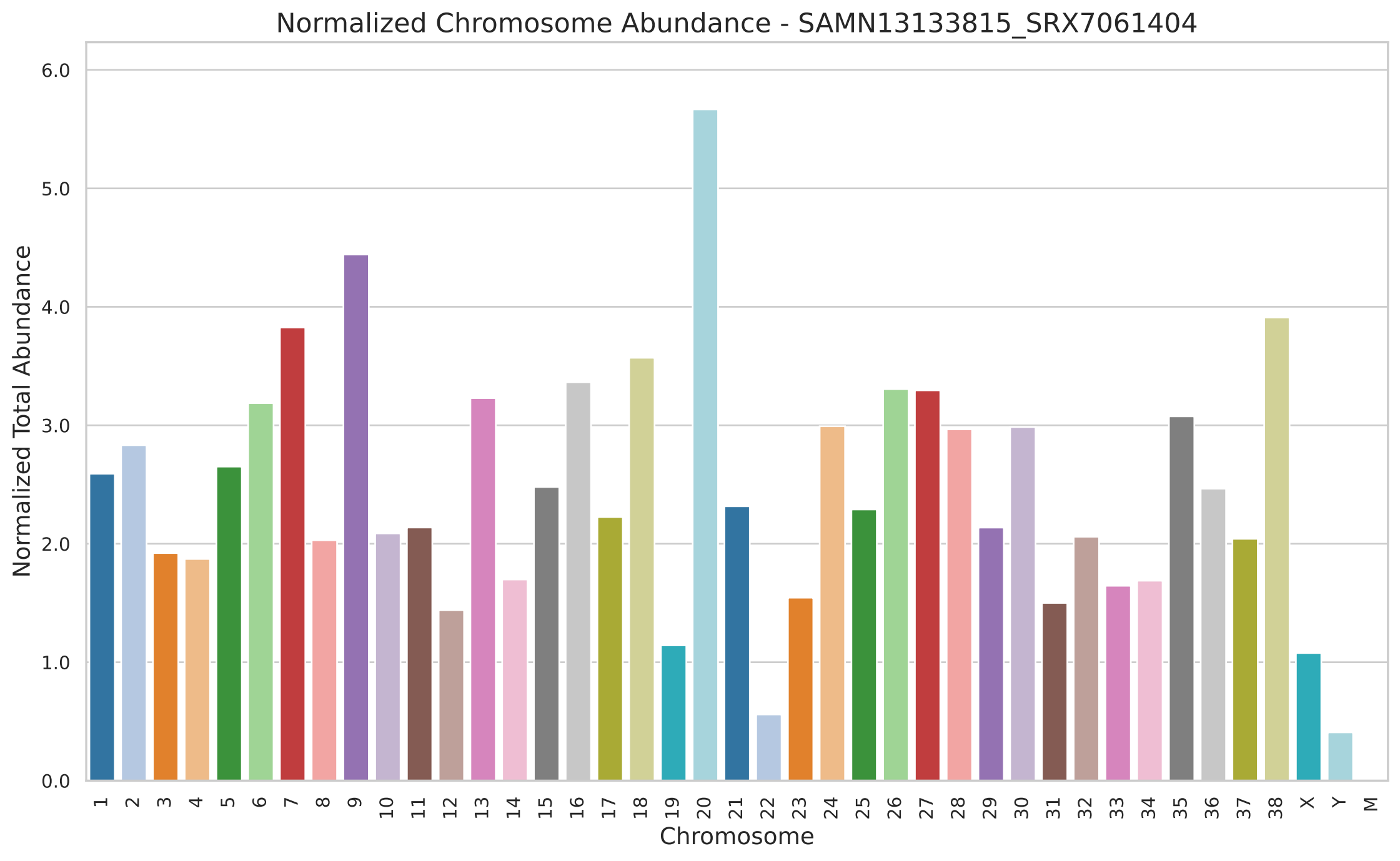

Normalized Chromosome Abundance - SAMN10984691_SRX5451671
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

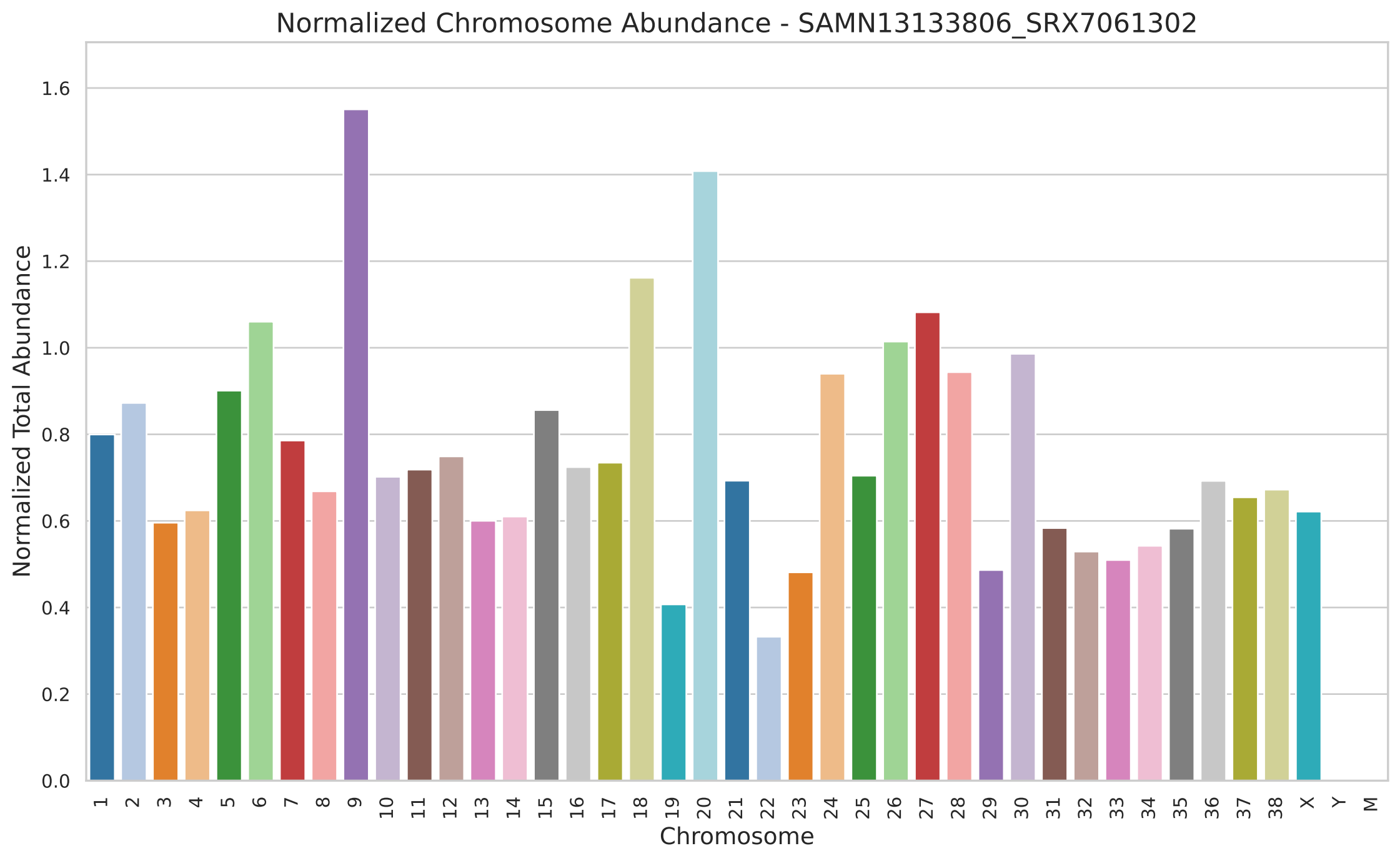

Normalized Chromosome Abundance - SAMN13133793_SRX7061401
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

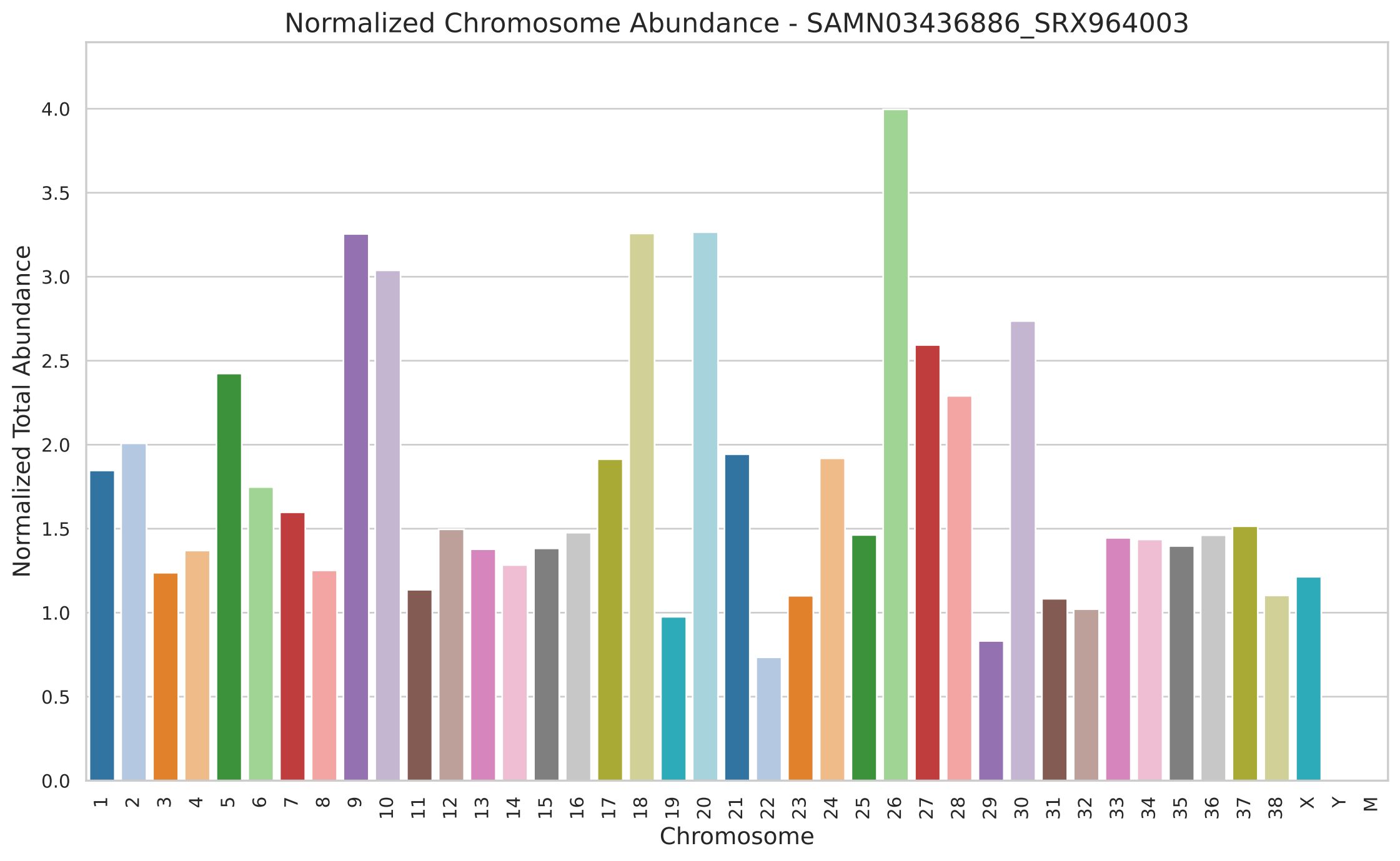

Normalized Chromosome Abundance - SAMN13656859_SRX7423294
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

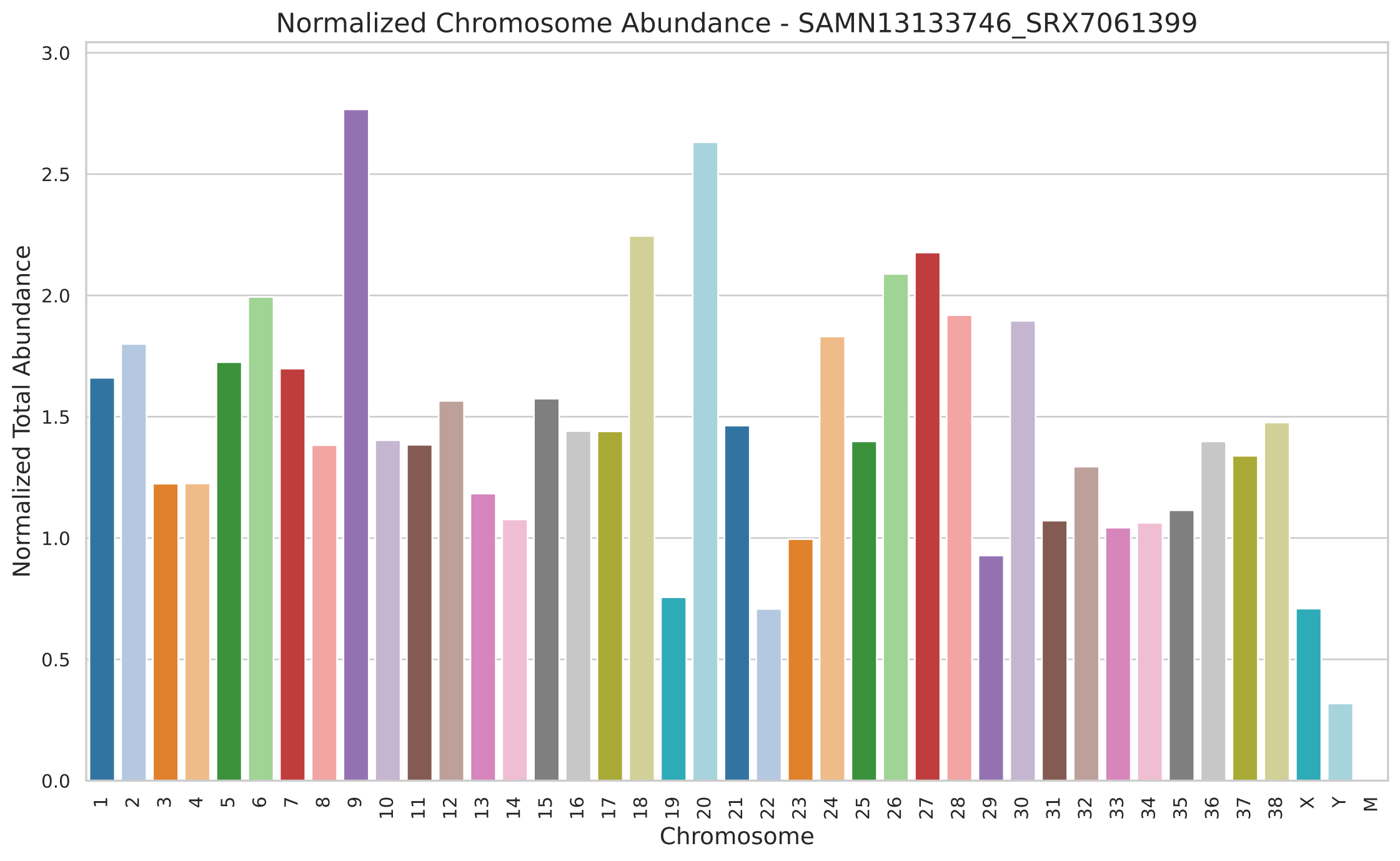

Normalized Chromosome Abundance - SAMN13656857_SRX7423292
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

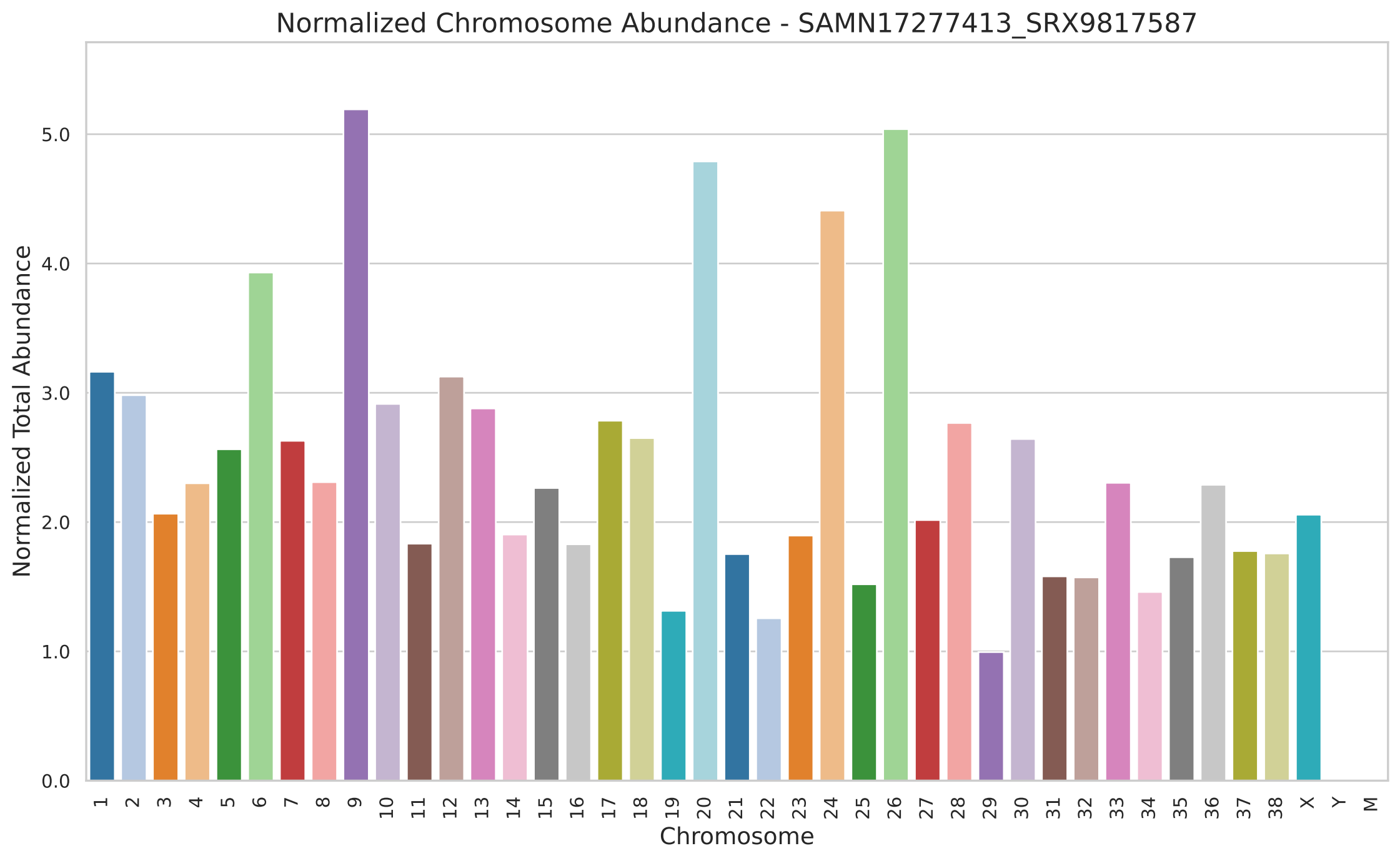

Normalized Chromosome Abundance - SAMN03436854_SRX963816
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

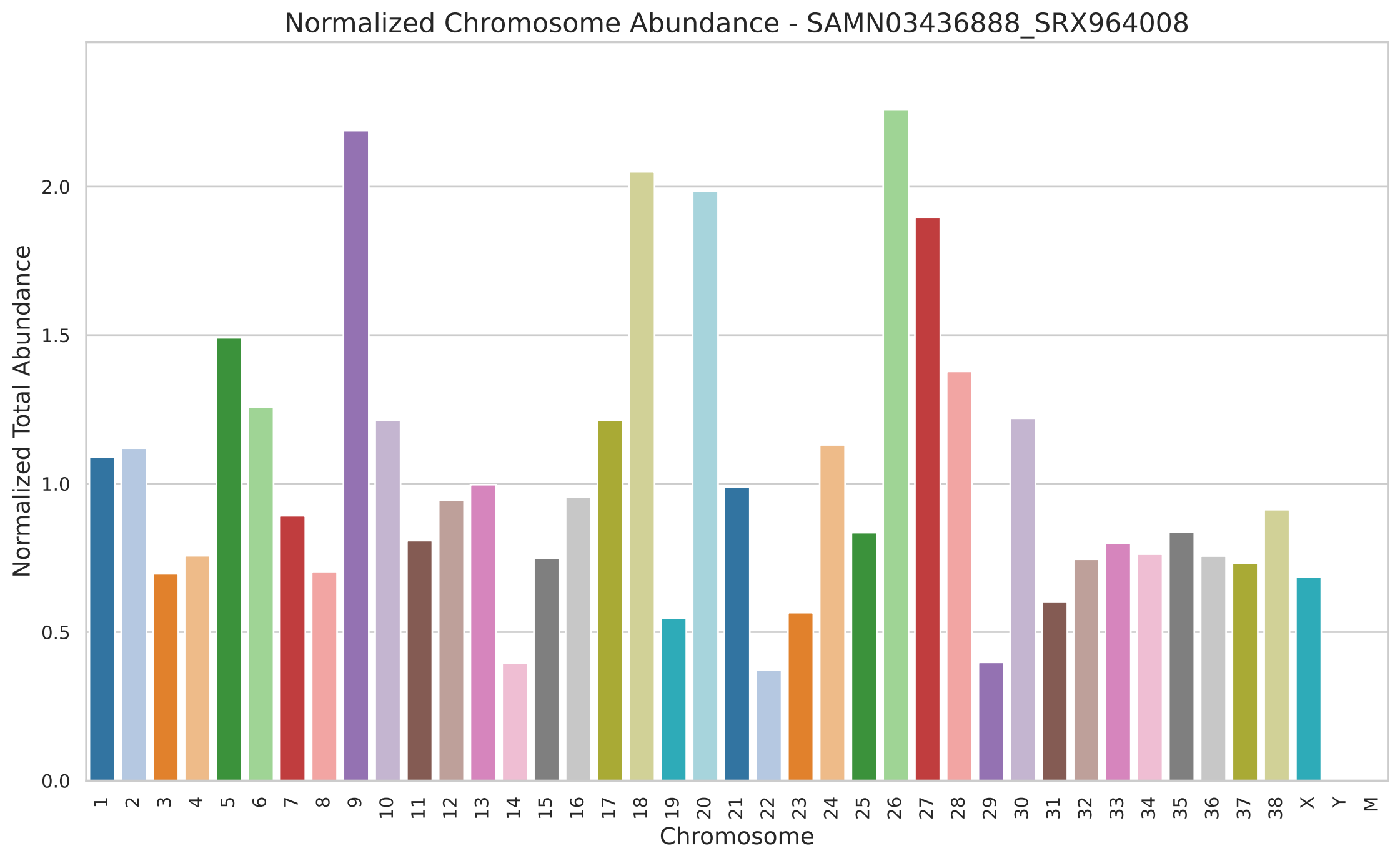

Normalized Chromosome Abundance - SAMN13133815_SRX7061404
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

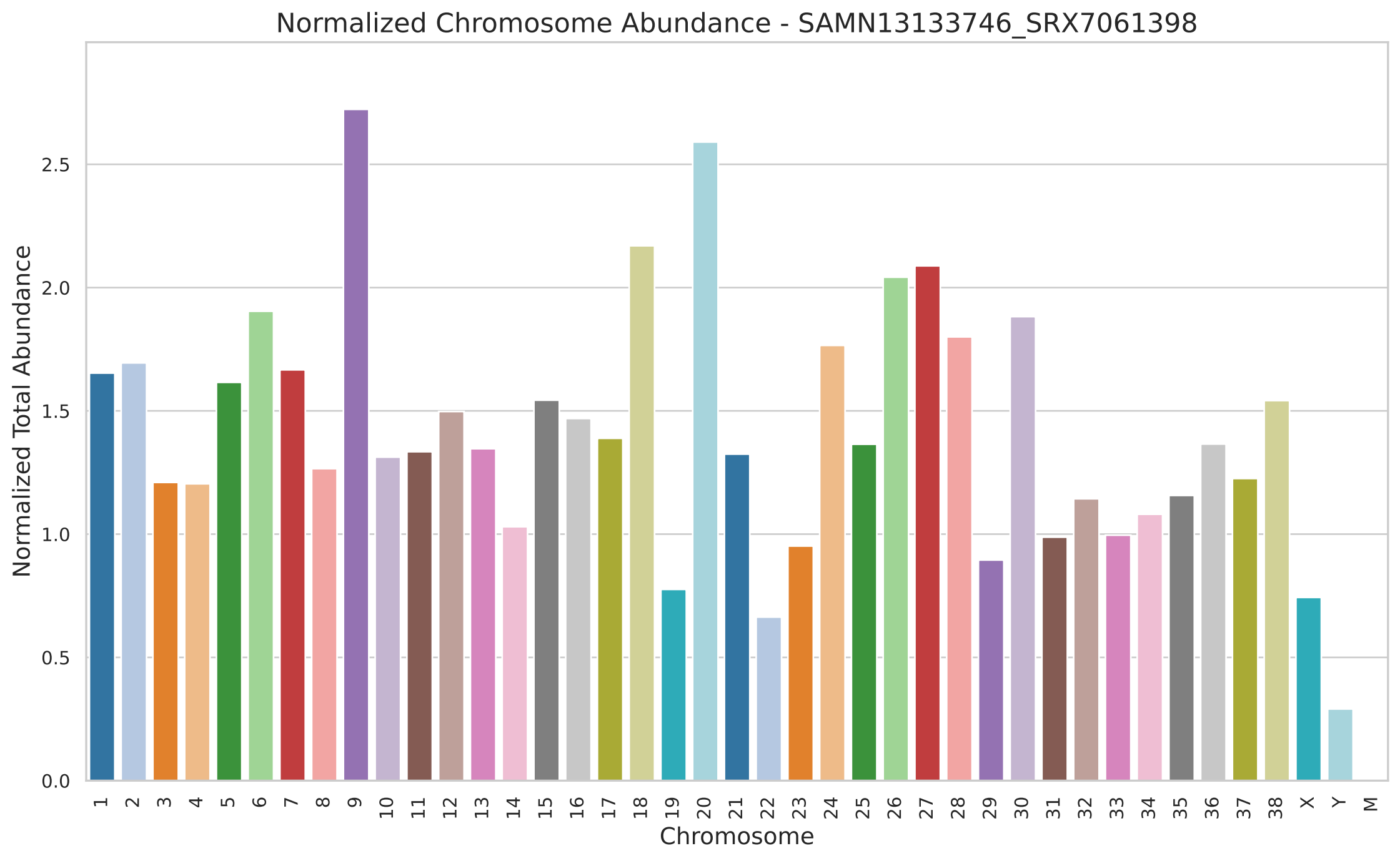

Normalized Chromosome Abundance - SAMN13133806_SRX7061302
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

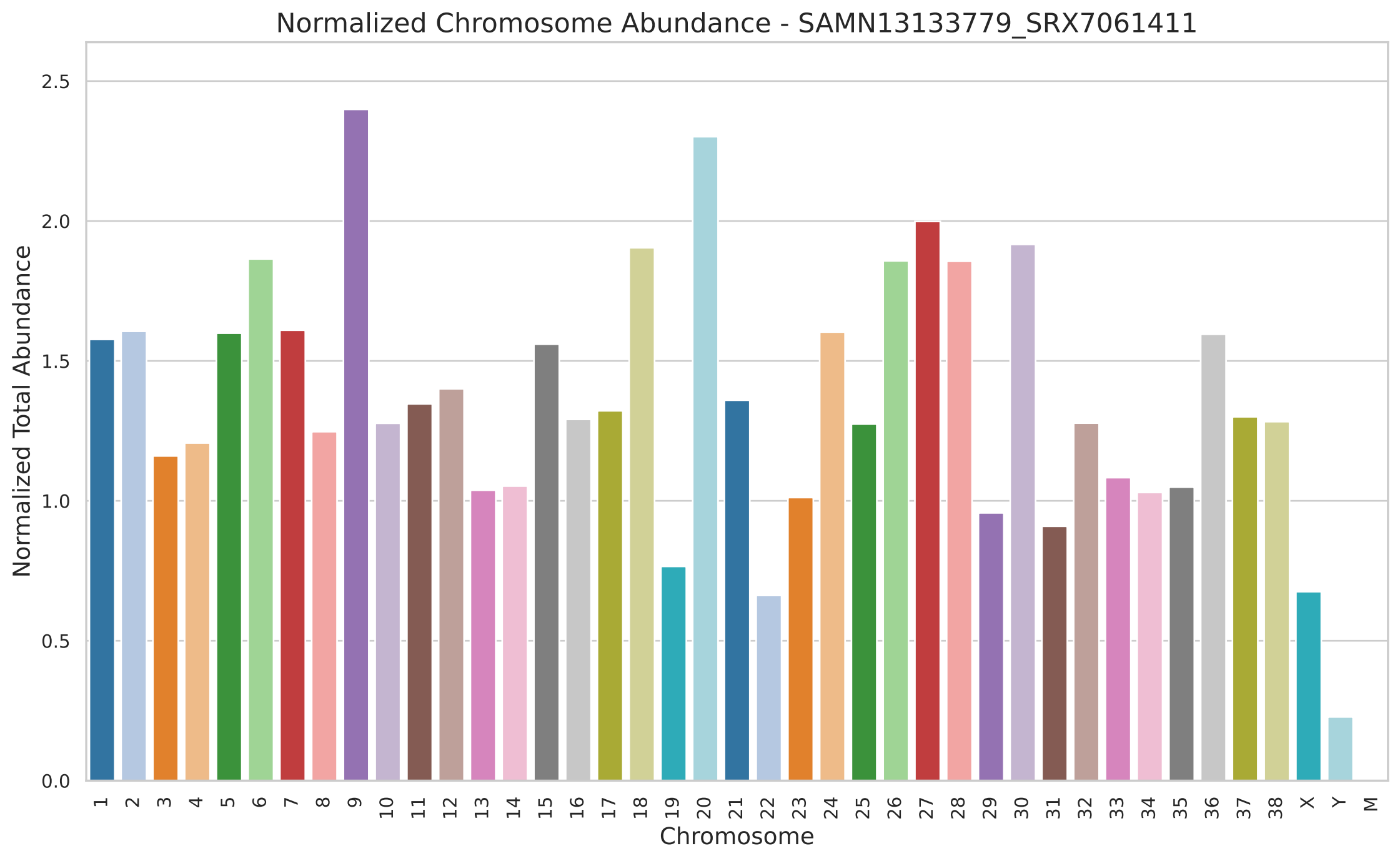

Normalized Chromosome Abundance - SAMN03436886_SRX964003
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

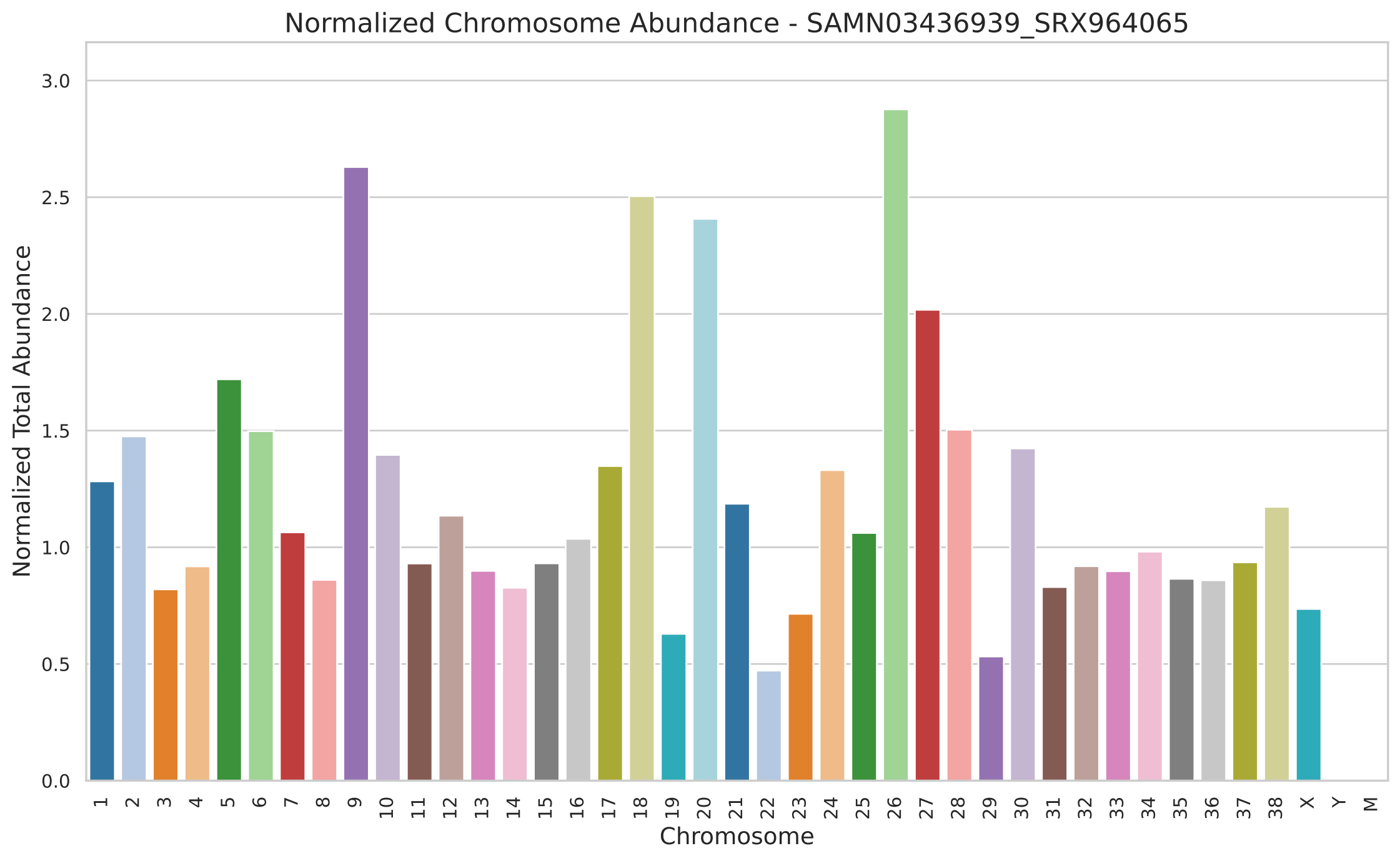

Normalized Chromosome Abundance - SAMN13133746_SRX7061399
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

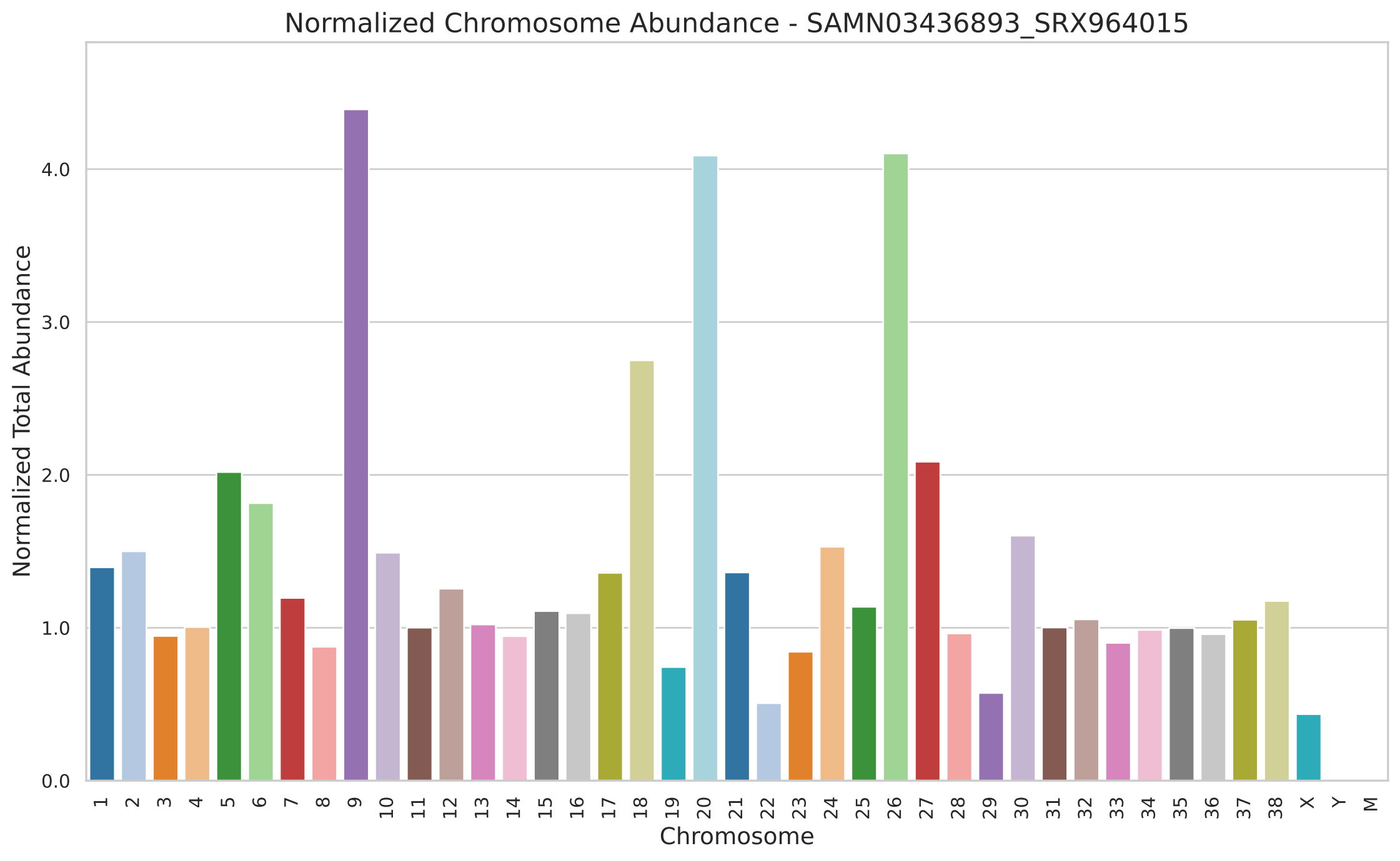

Normalized Chromosome Abundance - SAMN17277413_SRX9817587
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

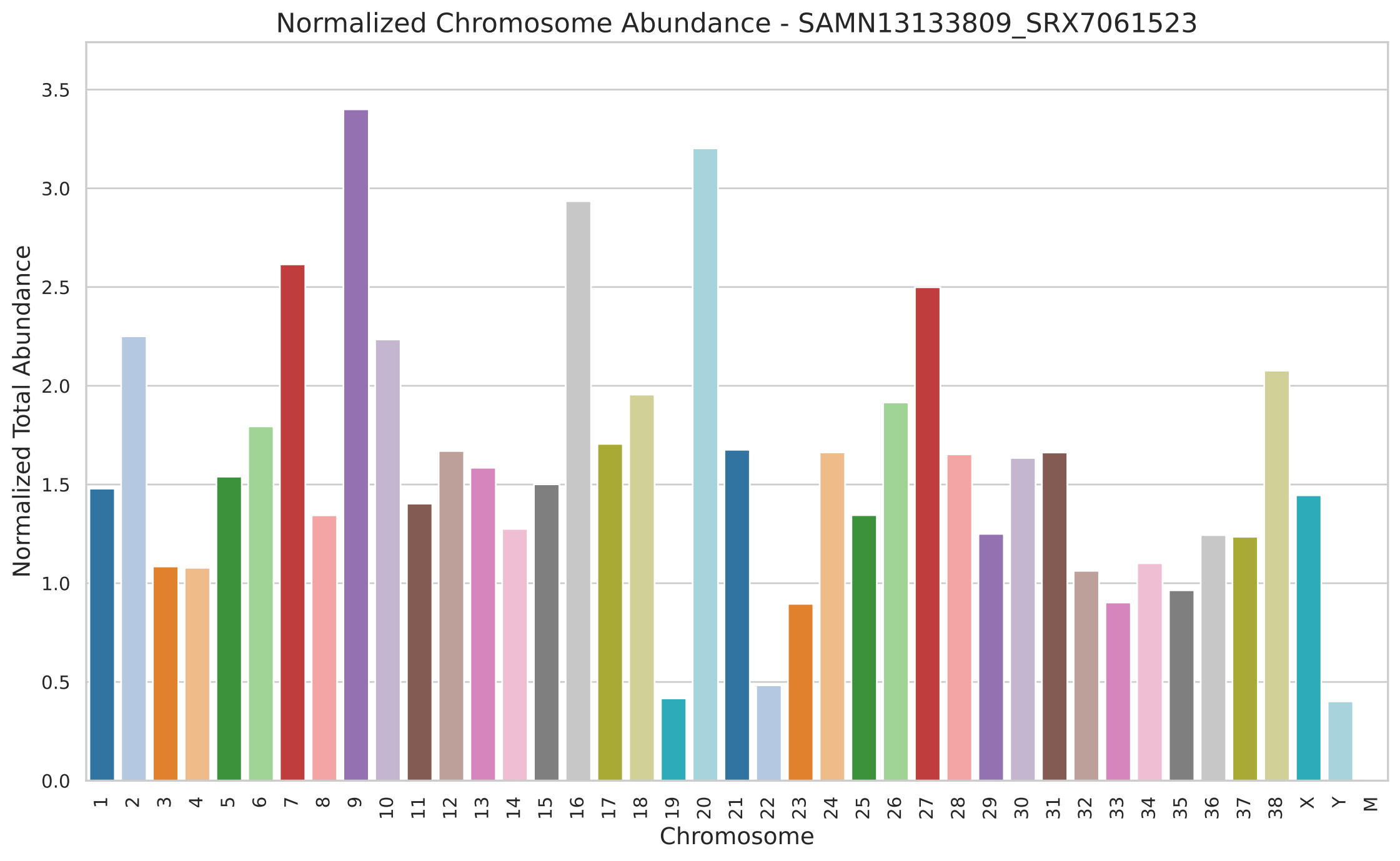

Normalized Chromosome Abundance - SAMN03436888_SRX964008
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

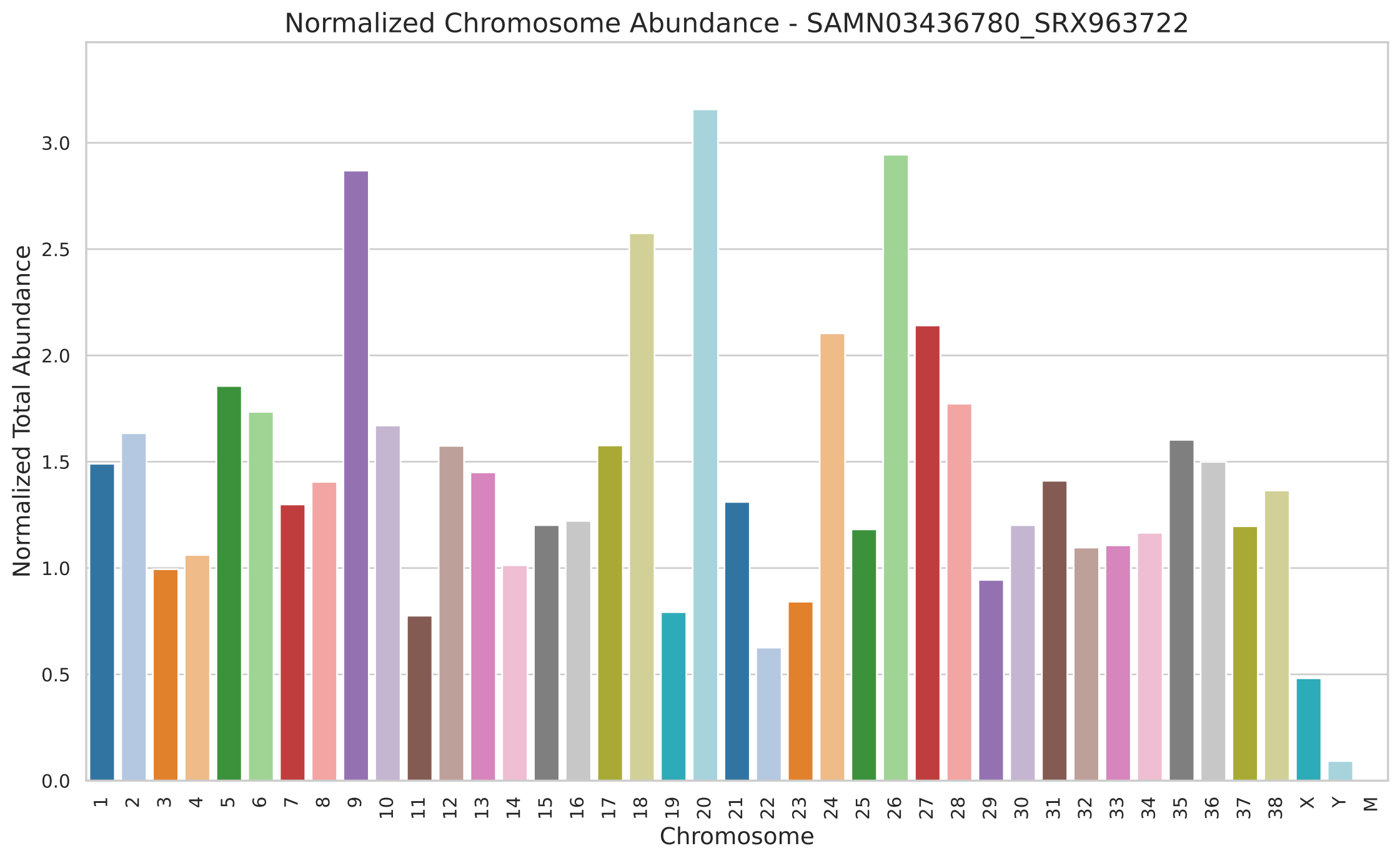

Normalized Chromosome Abundance - SAMN13133746_SRX7061398
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

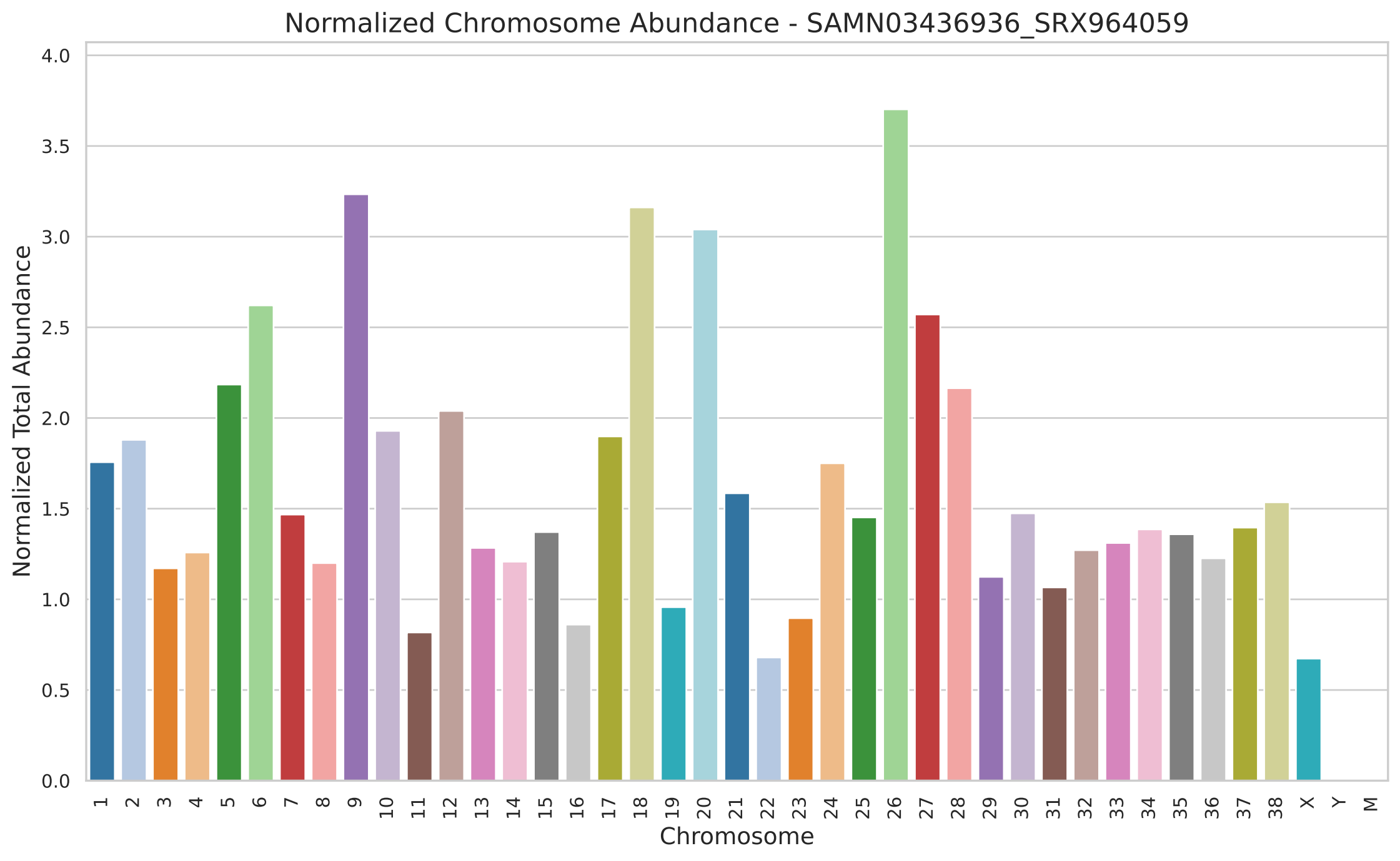

Normalized Chromosome Abundance - SAMN13133779_SRX7061411
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

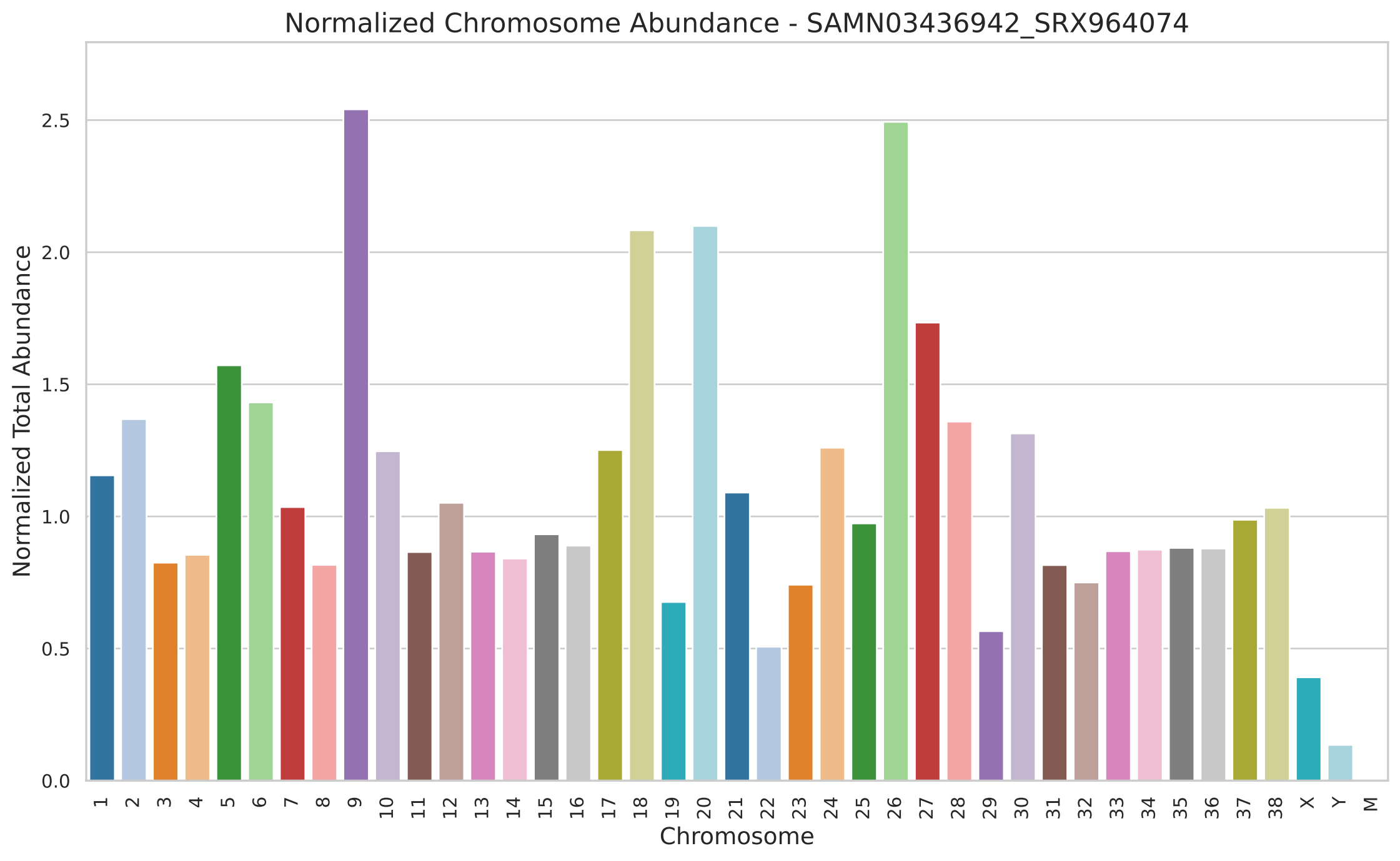

Normalized Chromosome Abundance - SAMN03436939_SRX964065
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

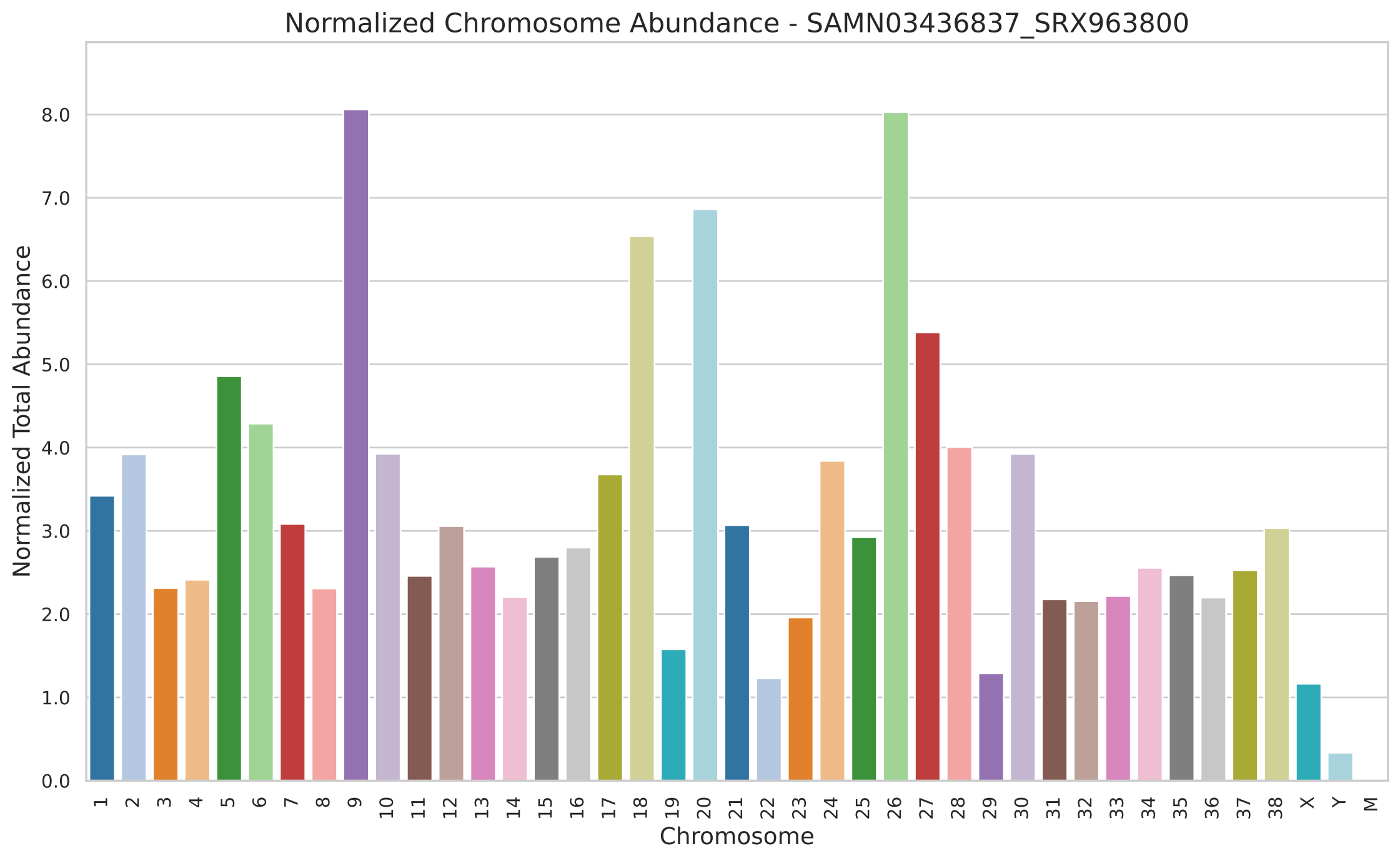

Normalized Chromosome Abundance - SAMN03436893_SRX964015
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

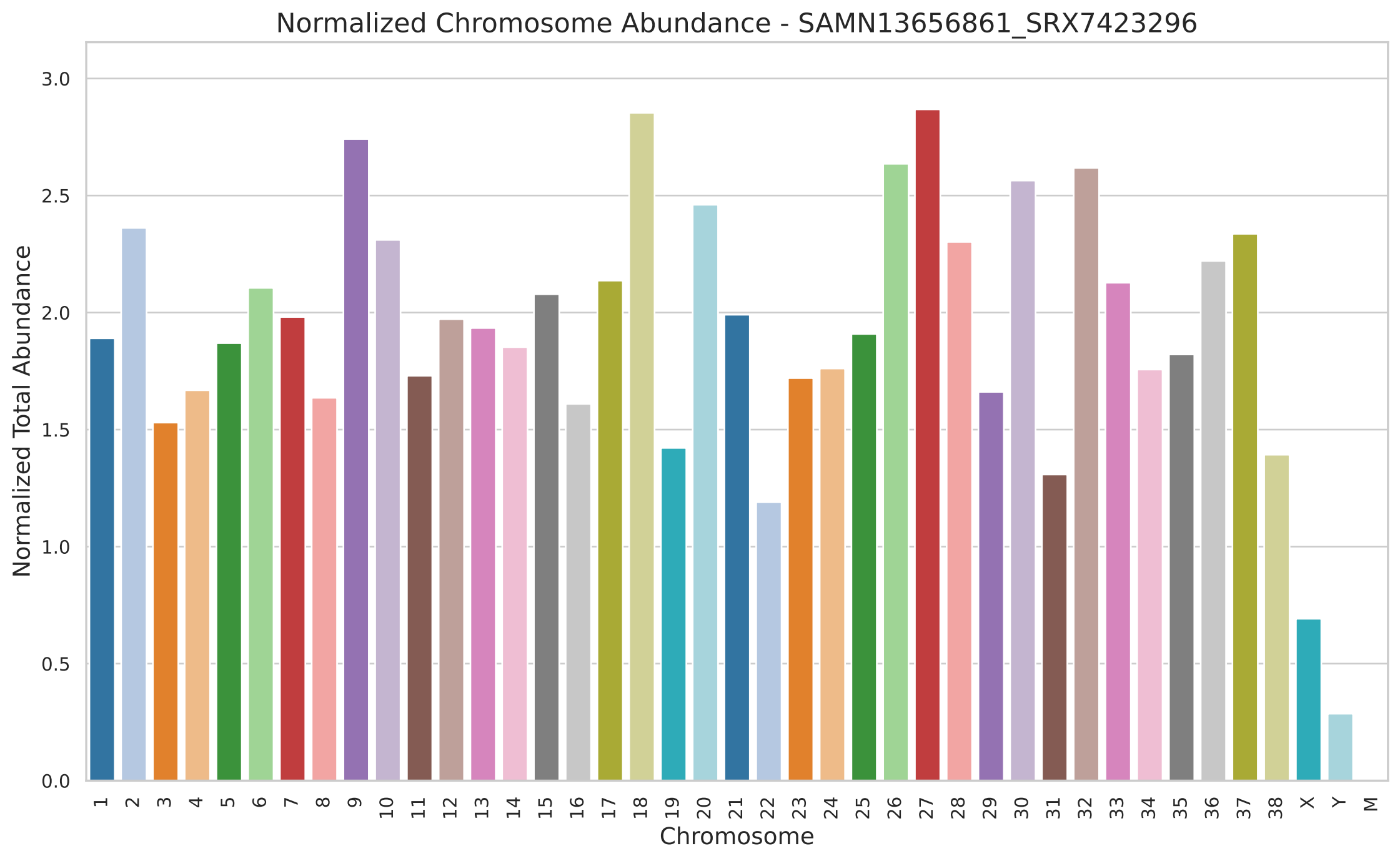

Normalized Chromosome Abundance - SAMN13133809_SRX7061523
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

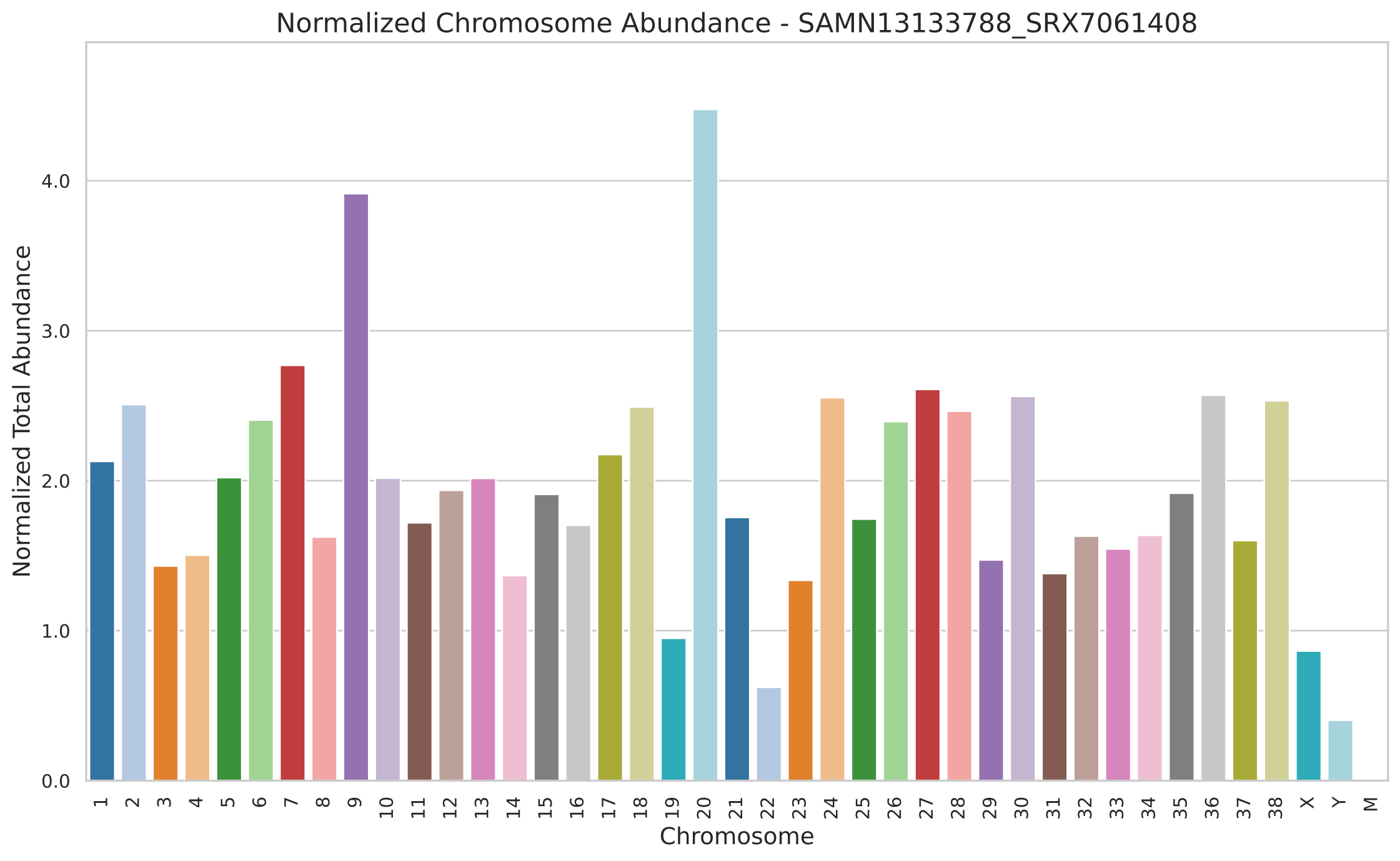

Normalized Chromosome Abundance - SAMN03436780_SRX963722
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

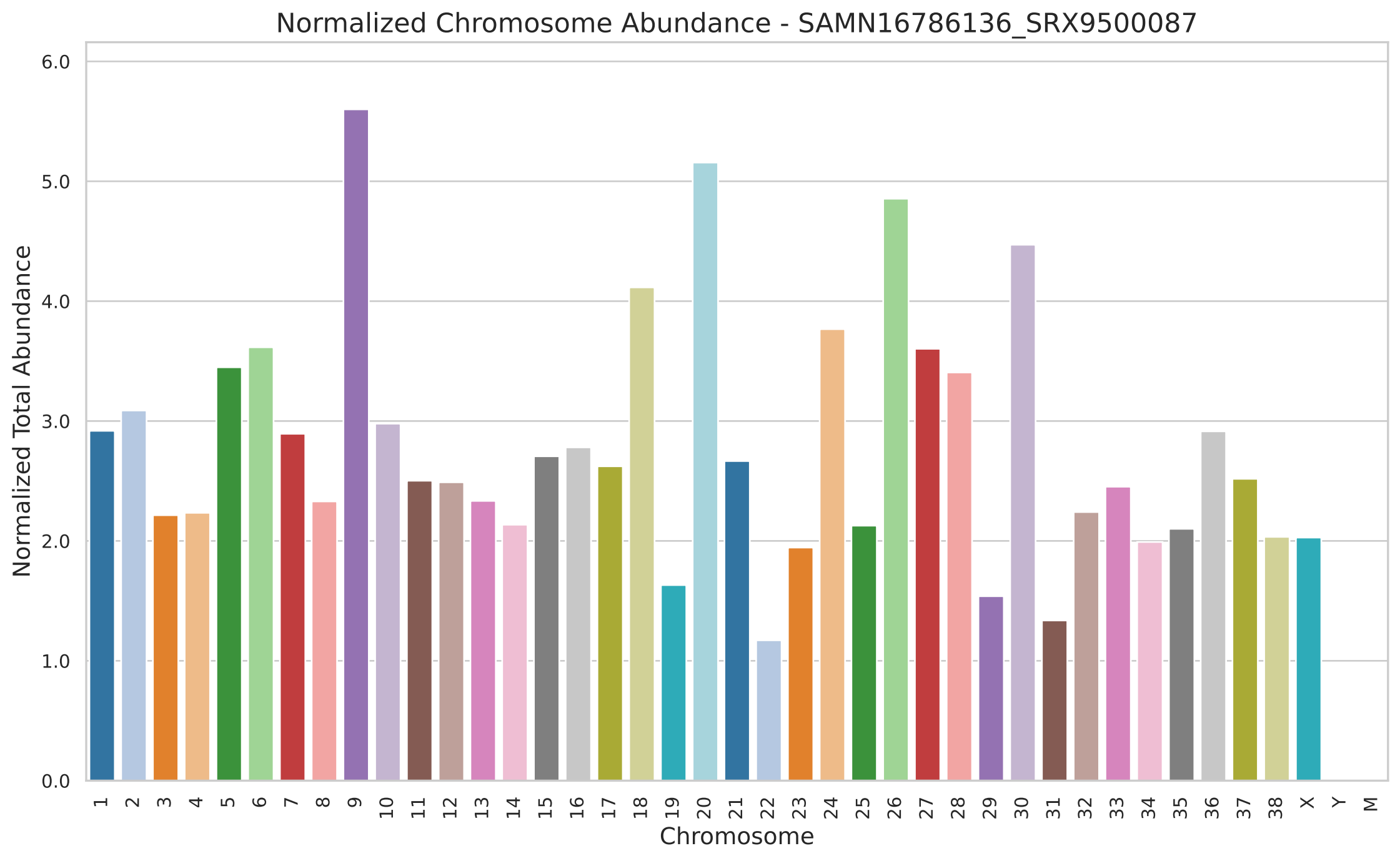

Normalized Chromosome Abundance - SAMN03436936_SRX964059
Normalized Total Abundance
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

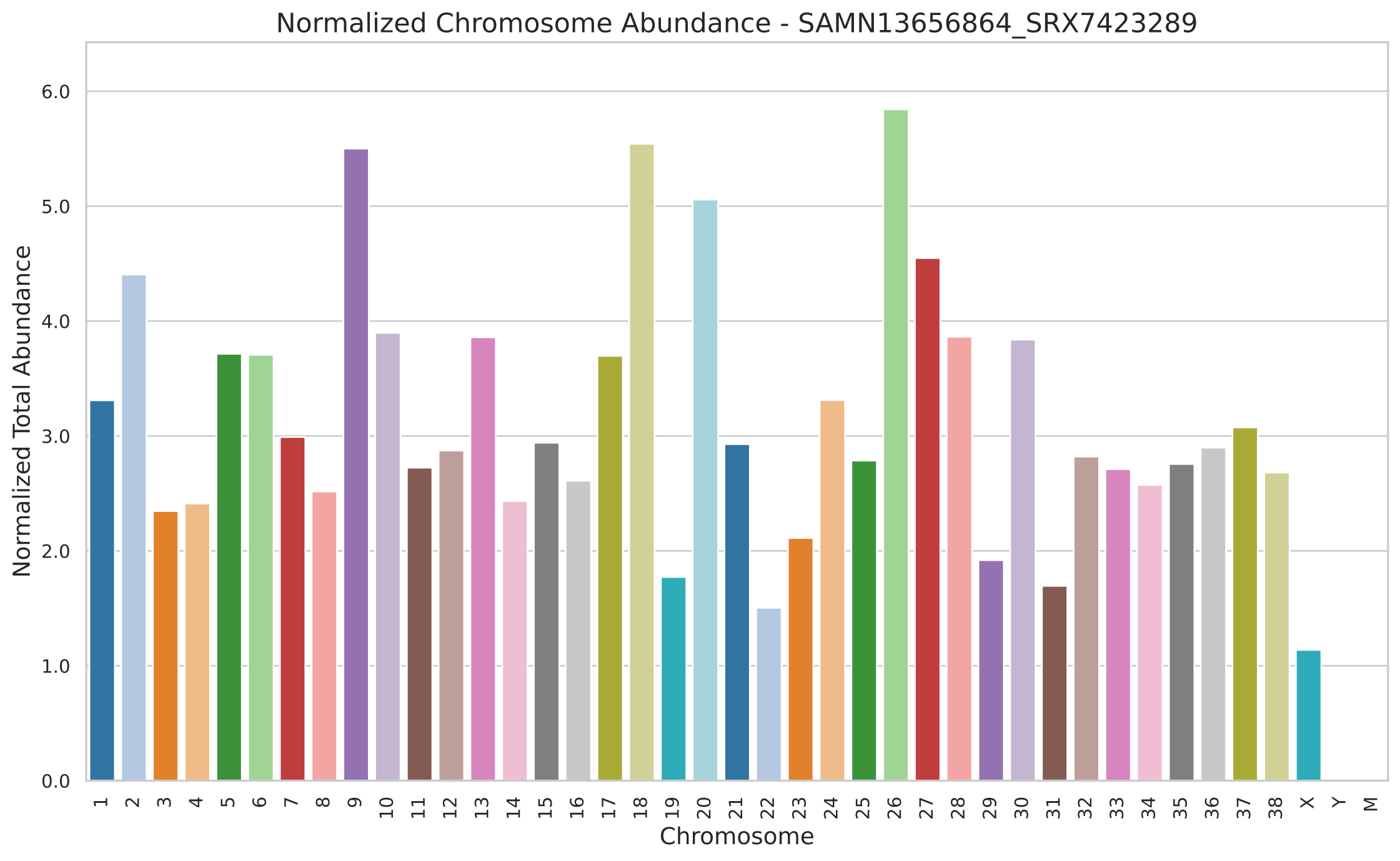

Normalized Chromosome Abundance - SAMN03436942_SRX964074
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

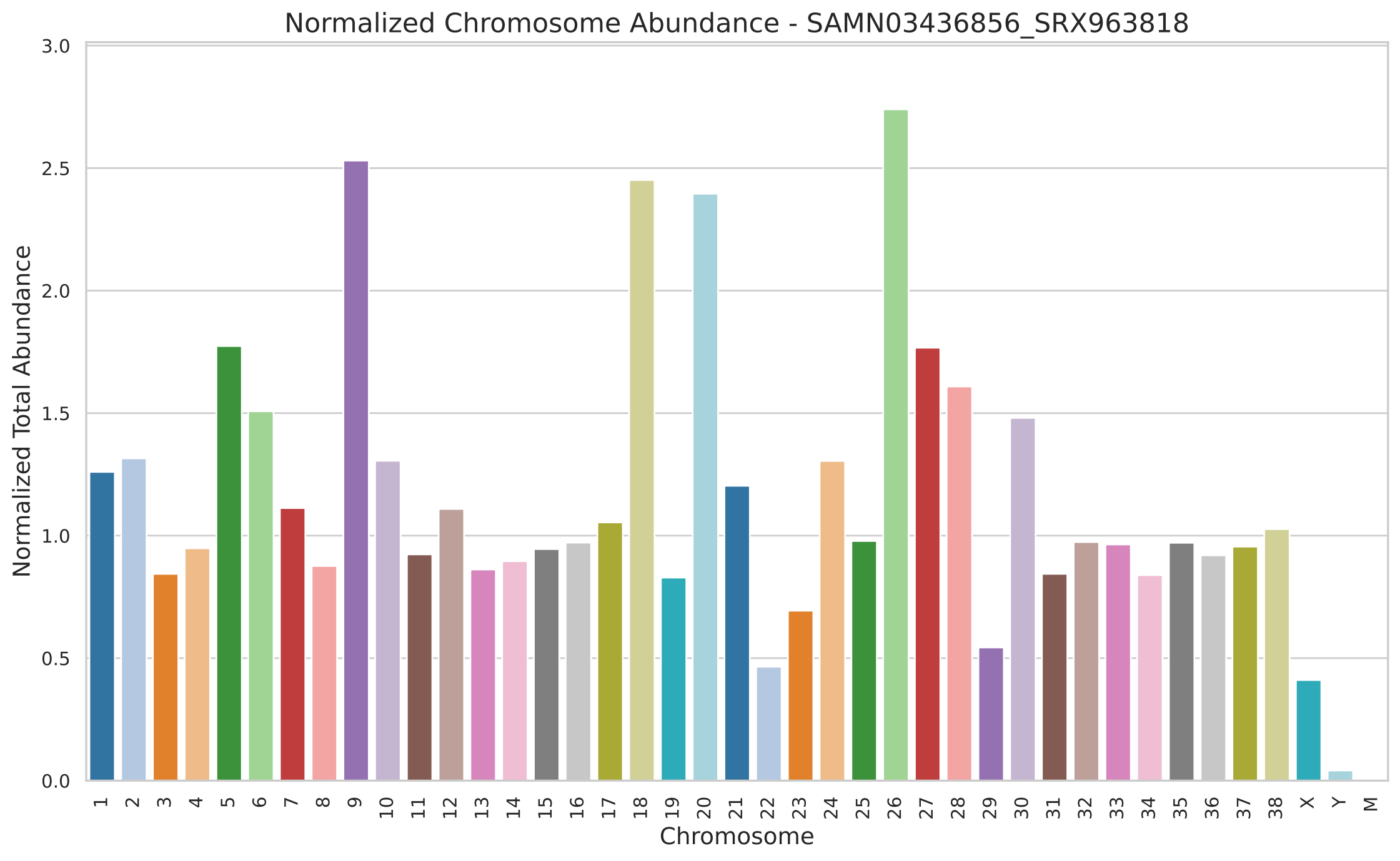

Normalized Chromosome Abundance - SAMN03436837_SRX963800
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

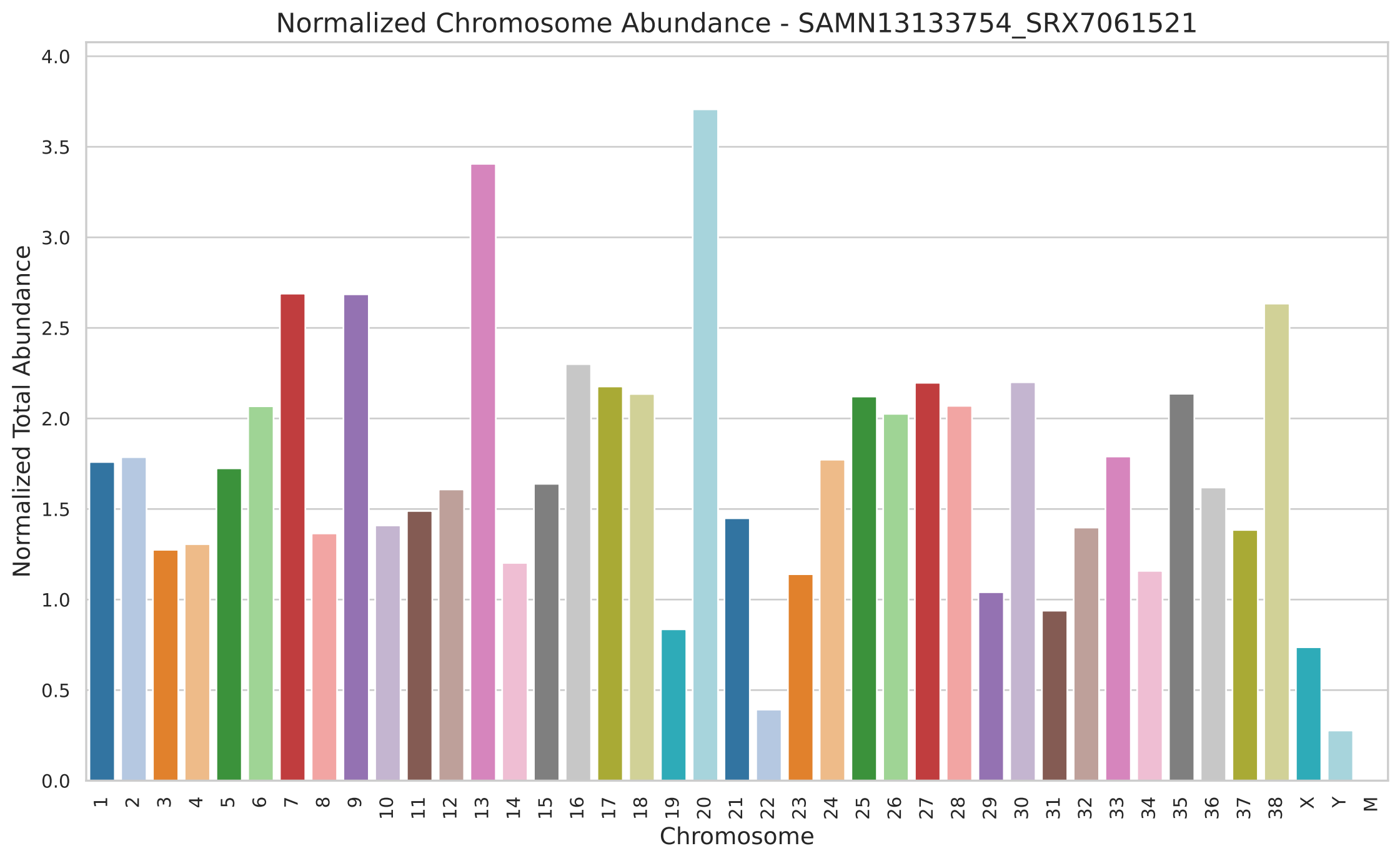

Normalized Chromosome Abundance - SAMN13656861_SRX7423296
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

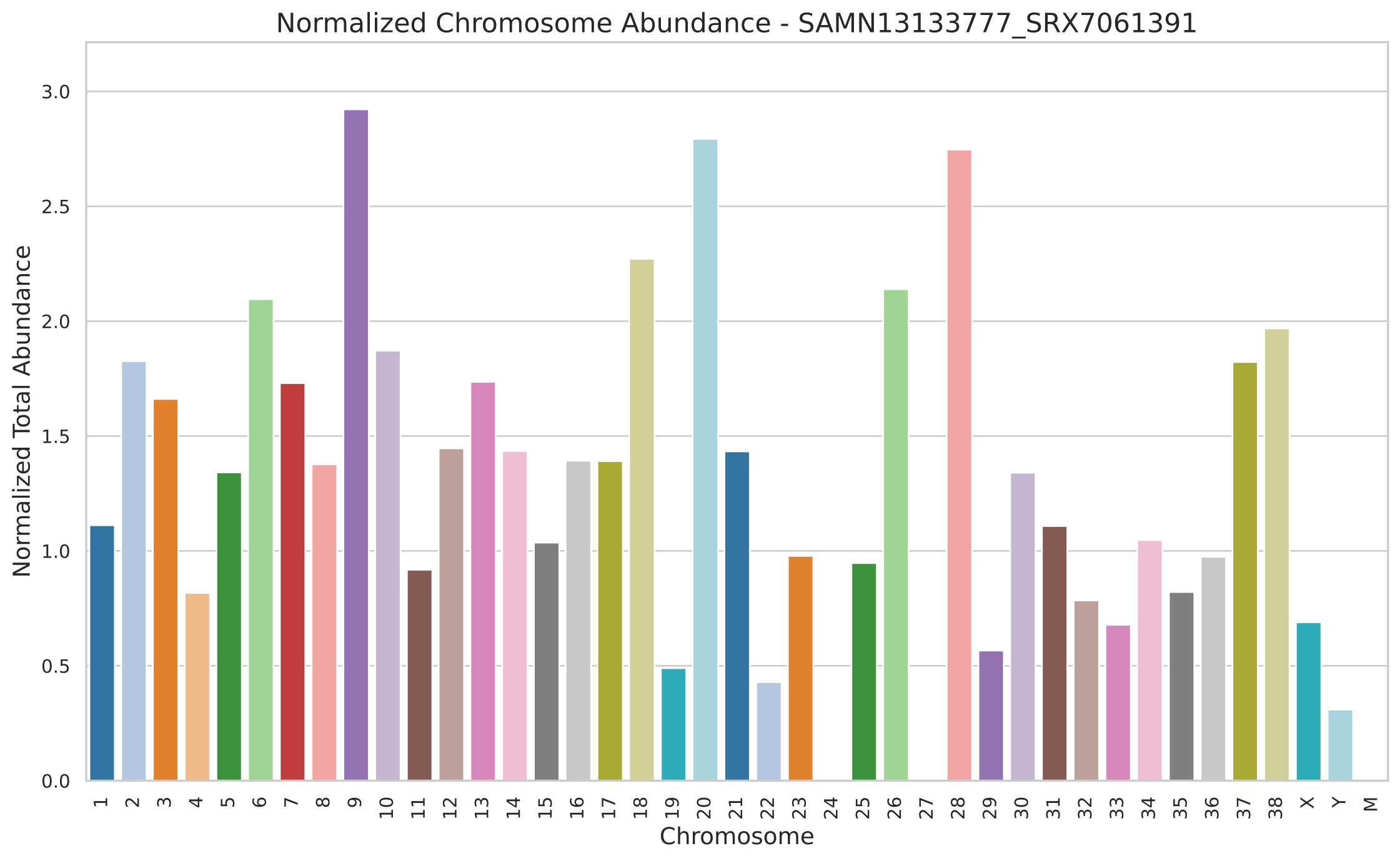

Normalized Chromosome Abundance - SAMN13133788_SRX7061408
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

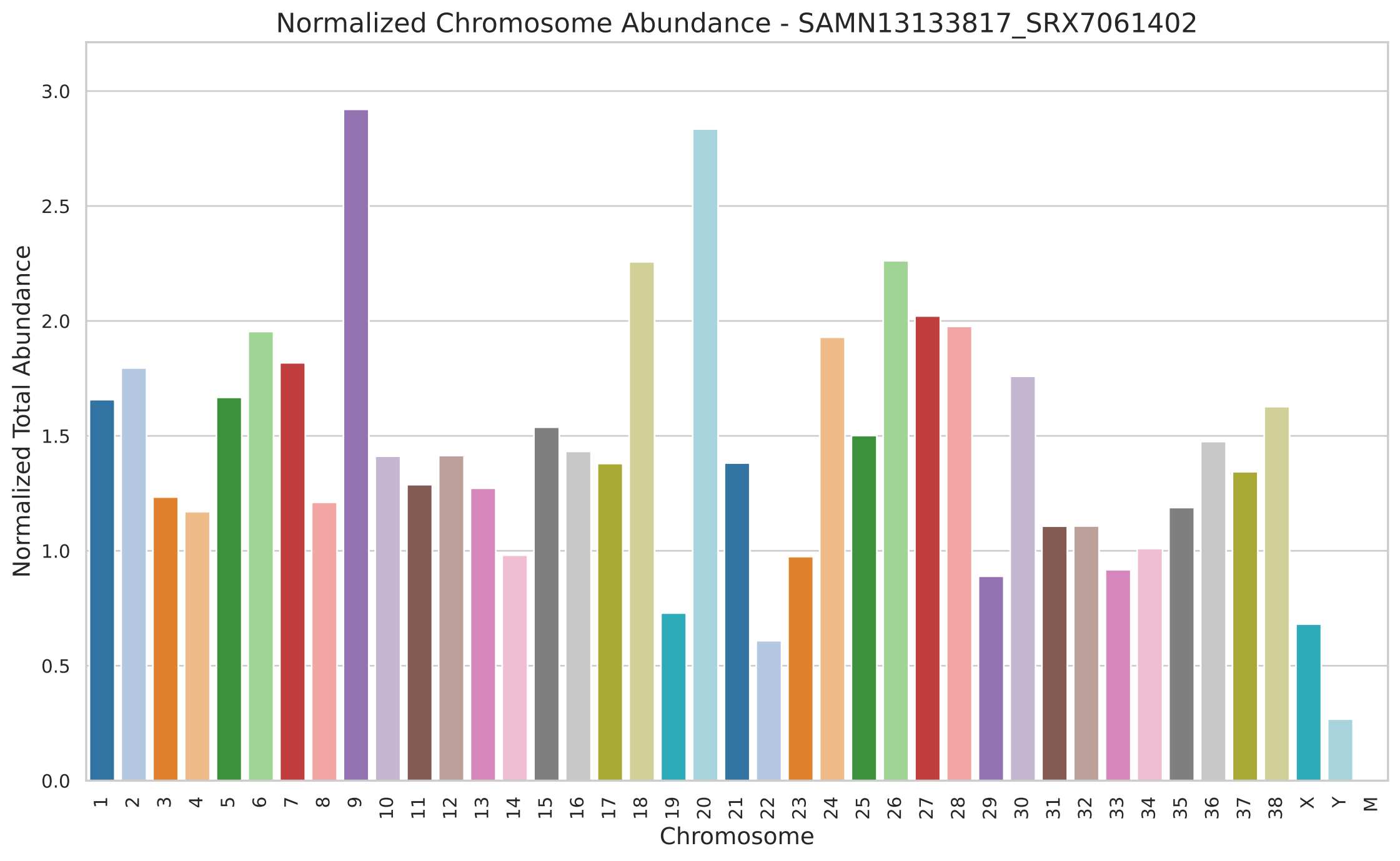

Normalized Chromosome Abundance - SAMN16786136_SRX9500087
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

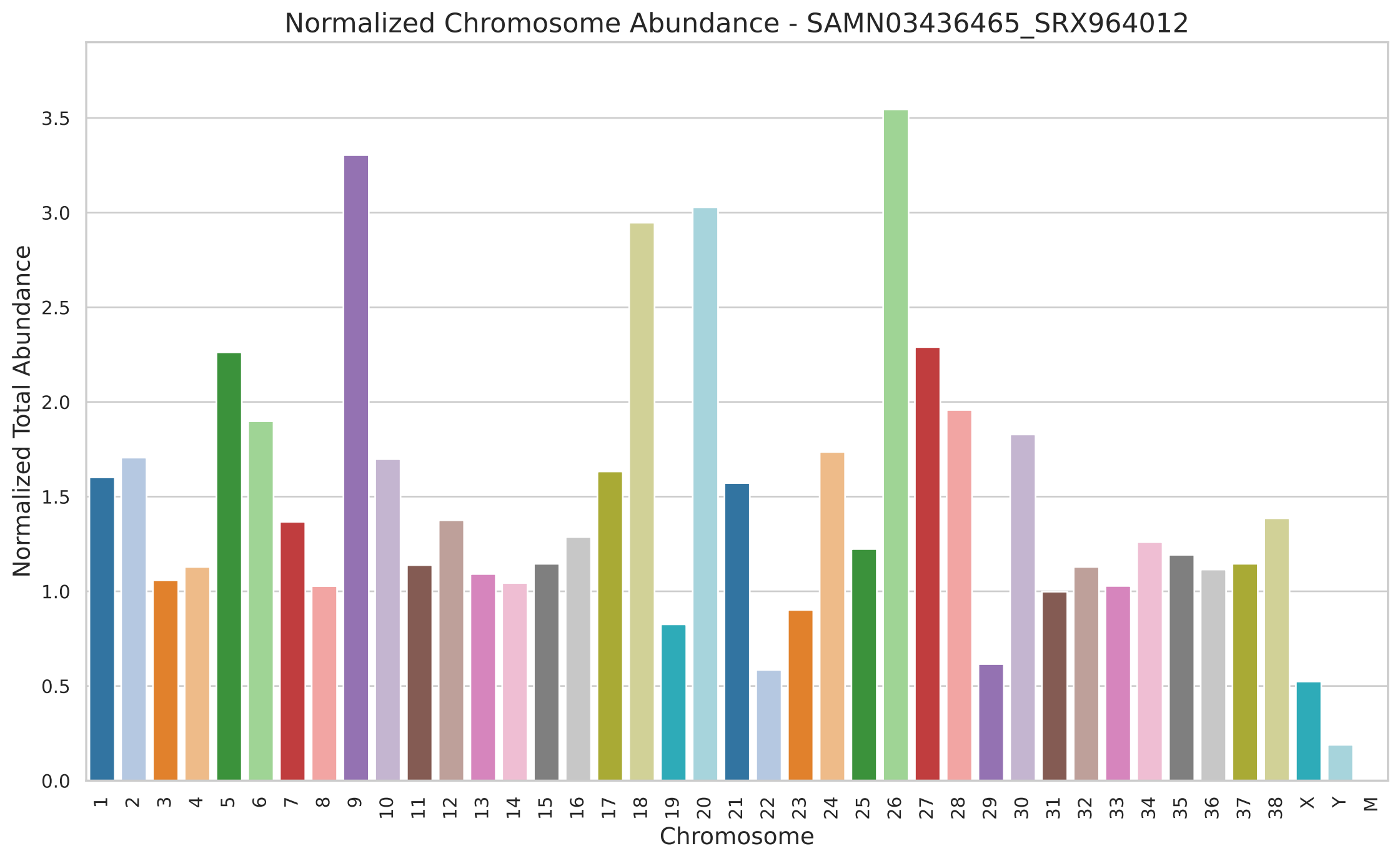

Normalized Chromosome Abundance - SAMN13656864_SRX7423289
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

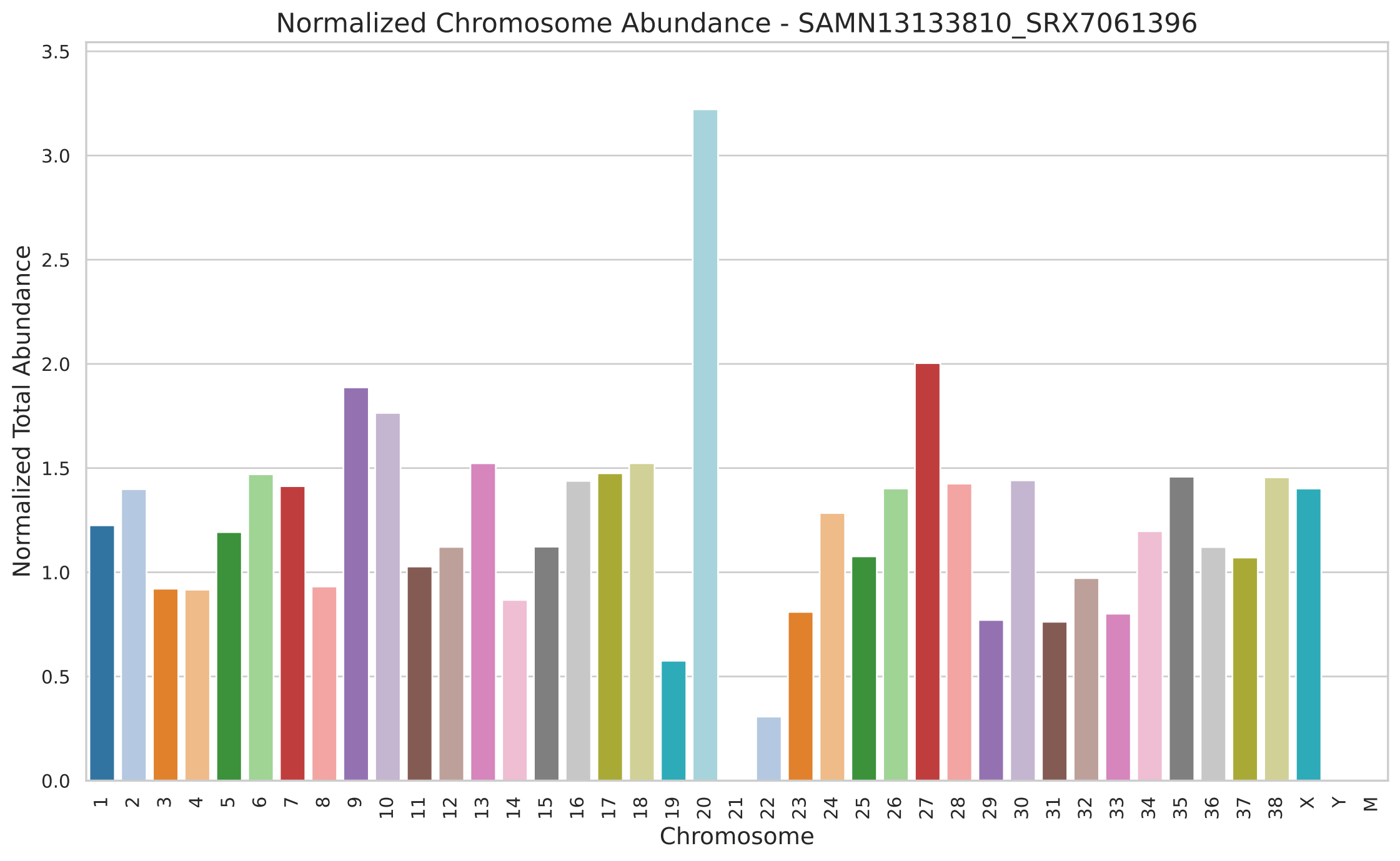

Normalized Chromosome Abundance - SAMN03436856_SRX963818
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

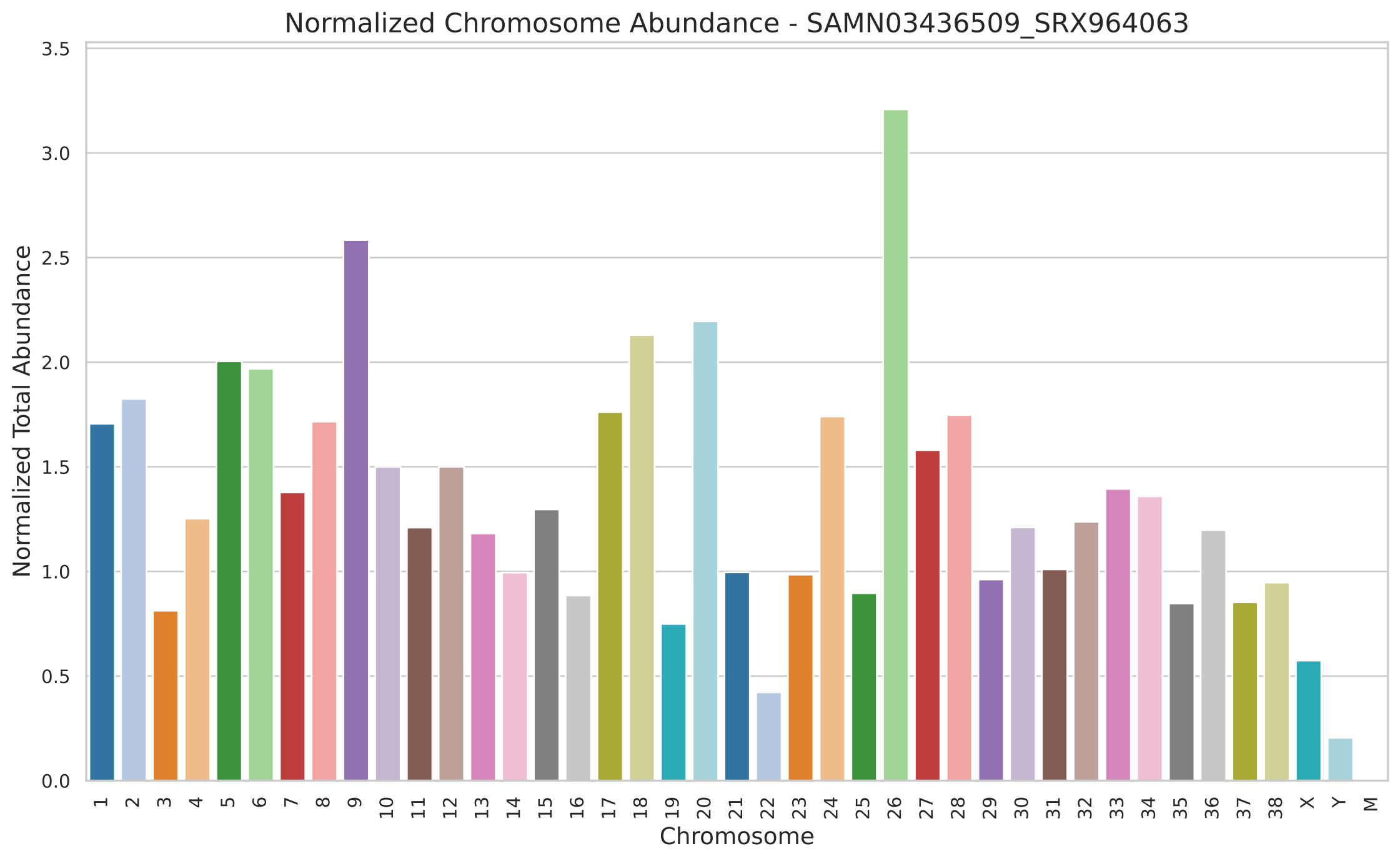

Normalized Chromosome Abundance - SAMN13133754_SRX7061521
Normalized Total Abundance
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

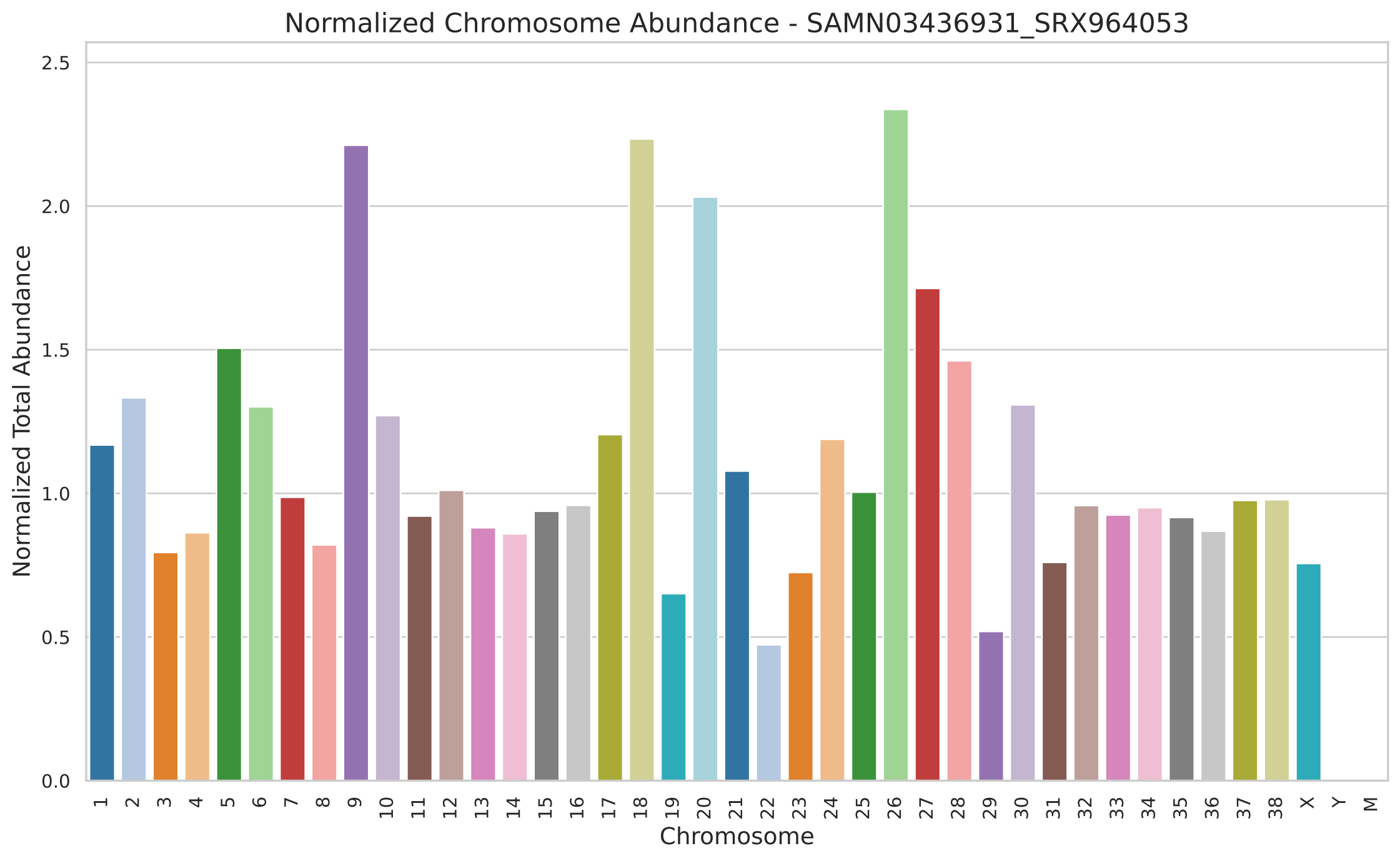

Normalized Chromosome Abundance - SAMN13133777_SRX7061391
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

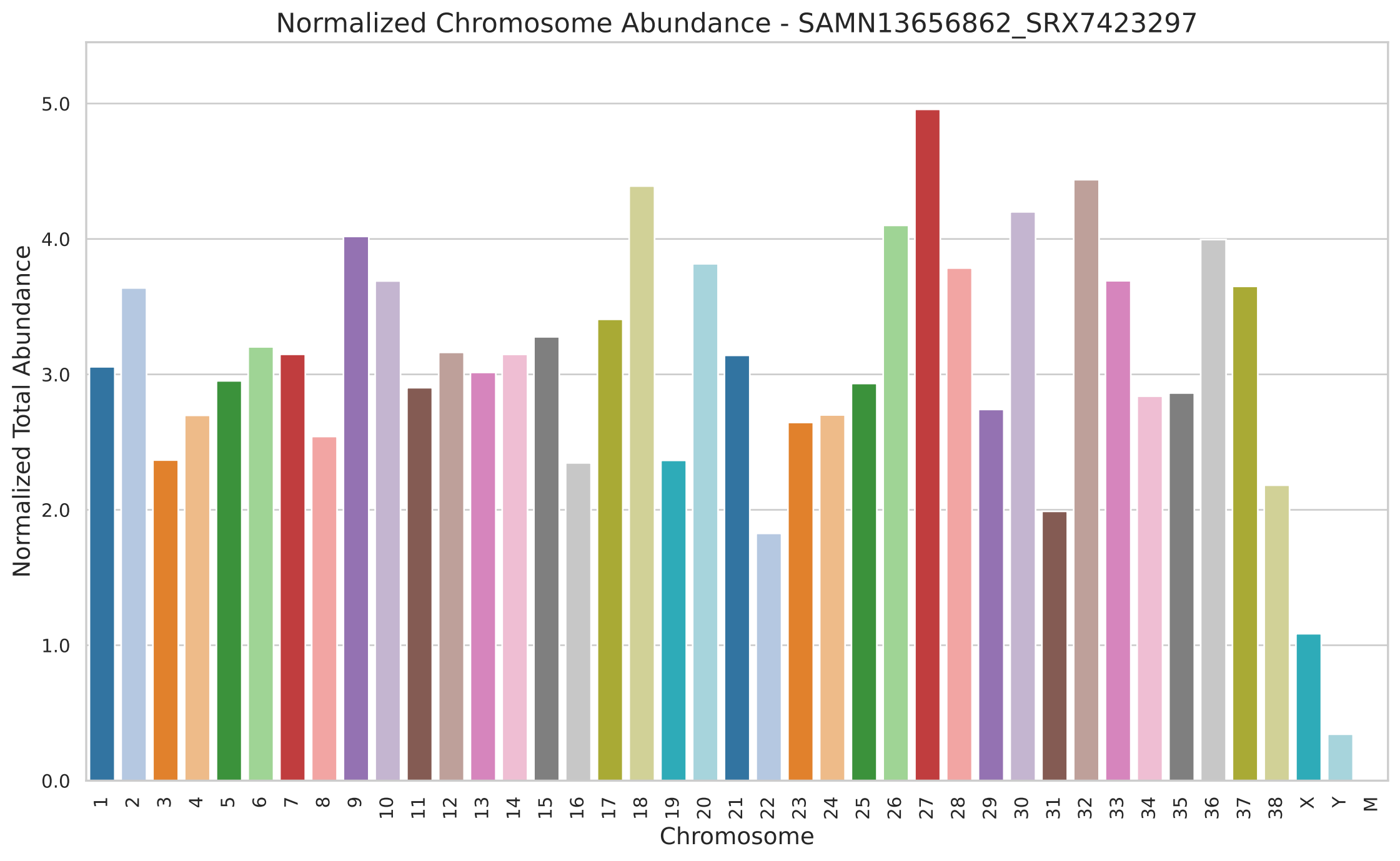

Normalized Chromosome Abundance - SAMN13133817_SRX7061402
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

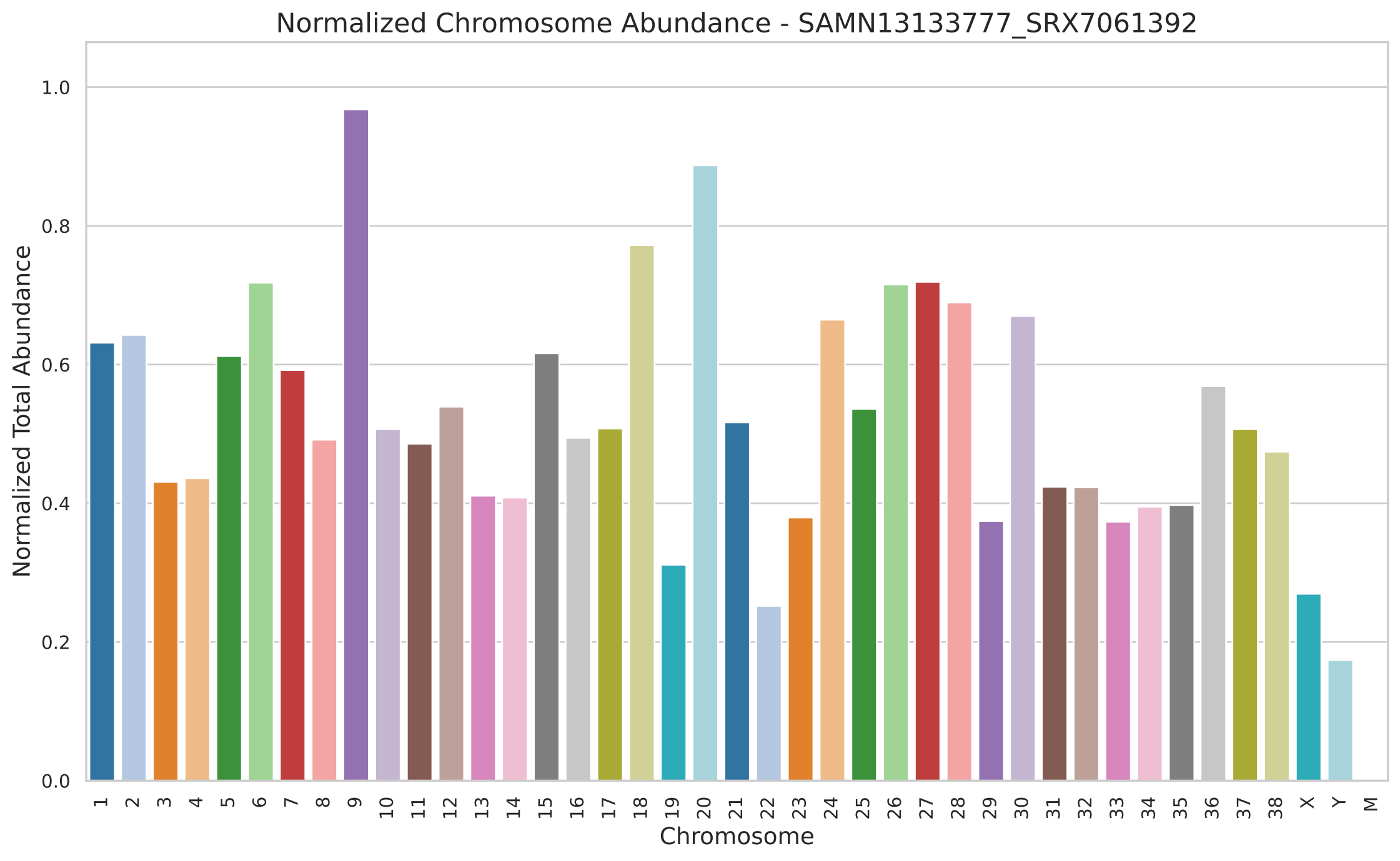

Normalized Chromosome Abundance - SAMN03436465_SRX964012
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

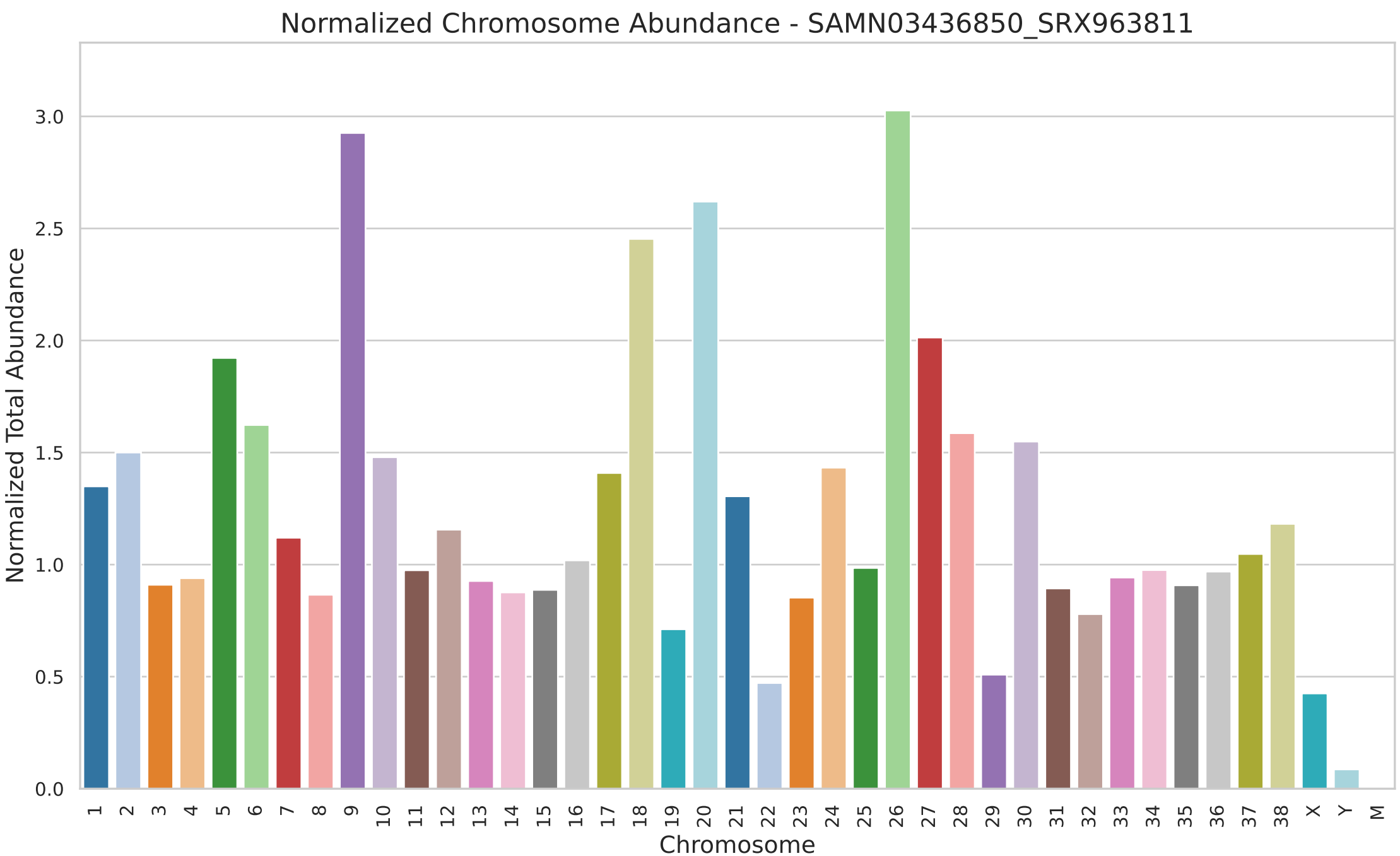

Normalized Chromosome Abundance - SAMN13133810_SRX7061396
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

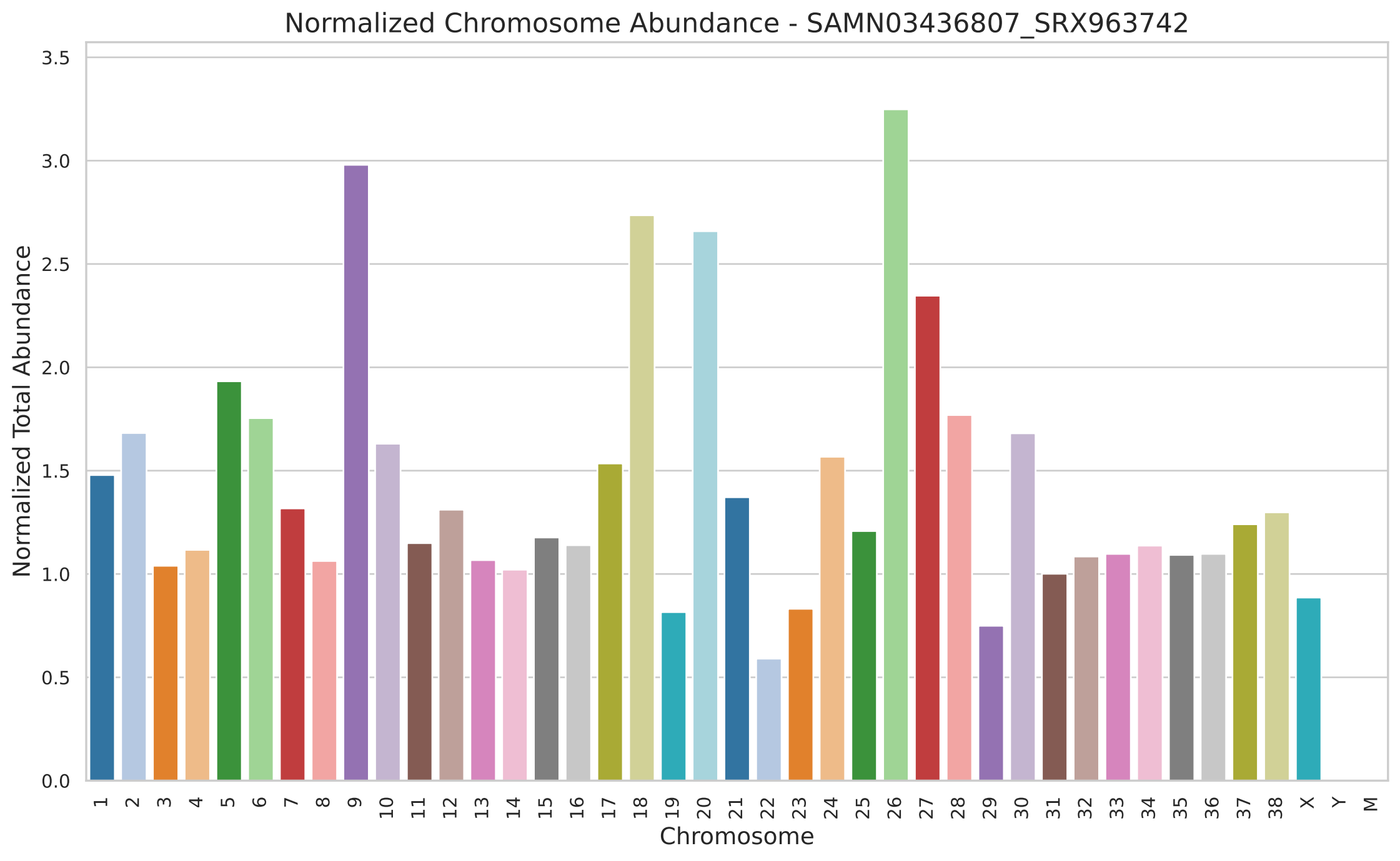

Normalized Chromosome Abundance - SAMN03436509_SRX964063
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

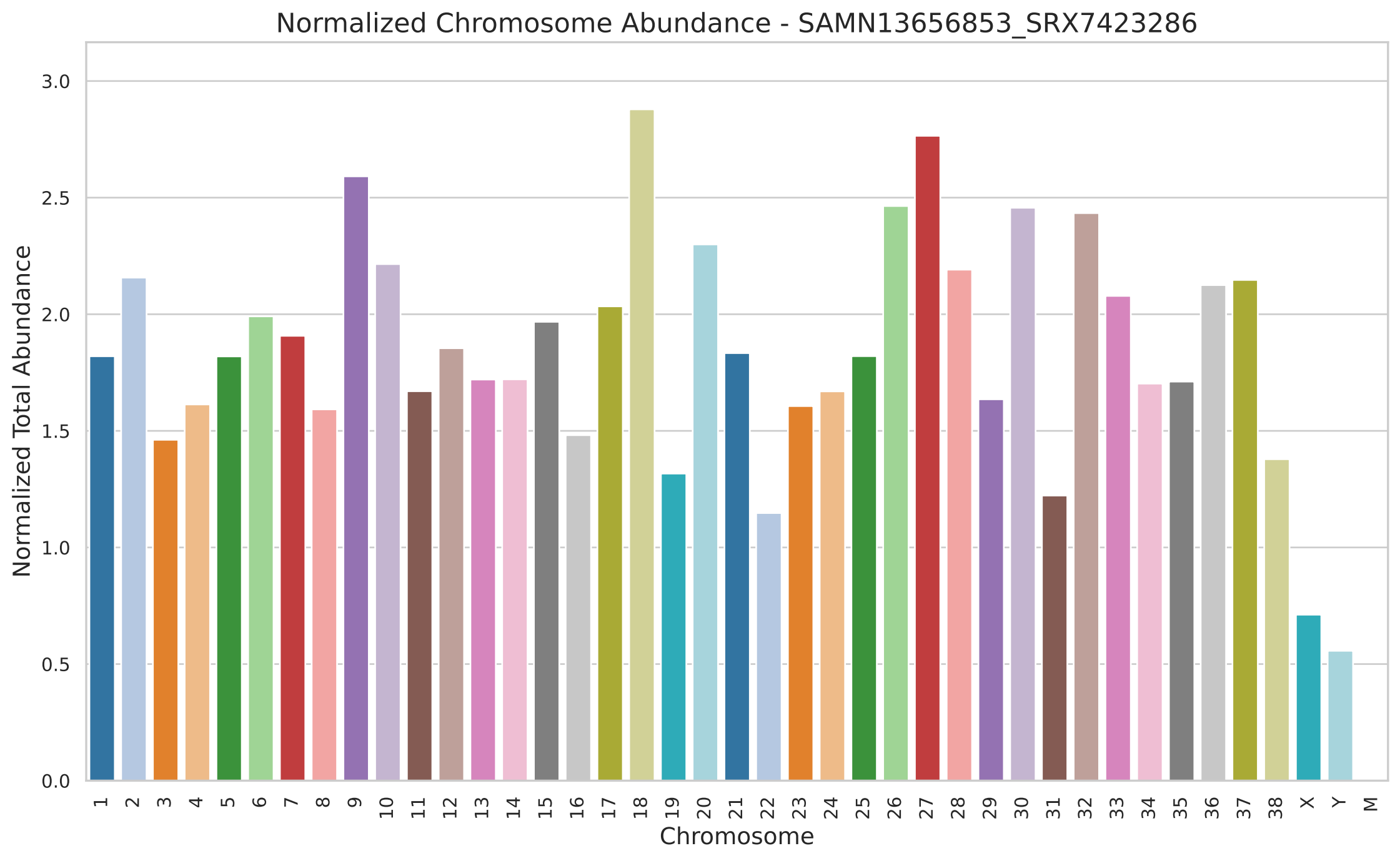

Normalized Chromosome Abundance - SAMN03436931_SRX964053
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

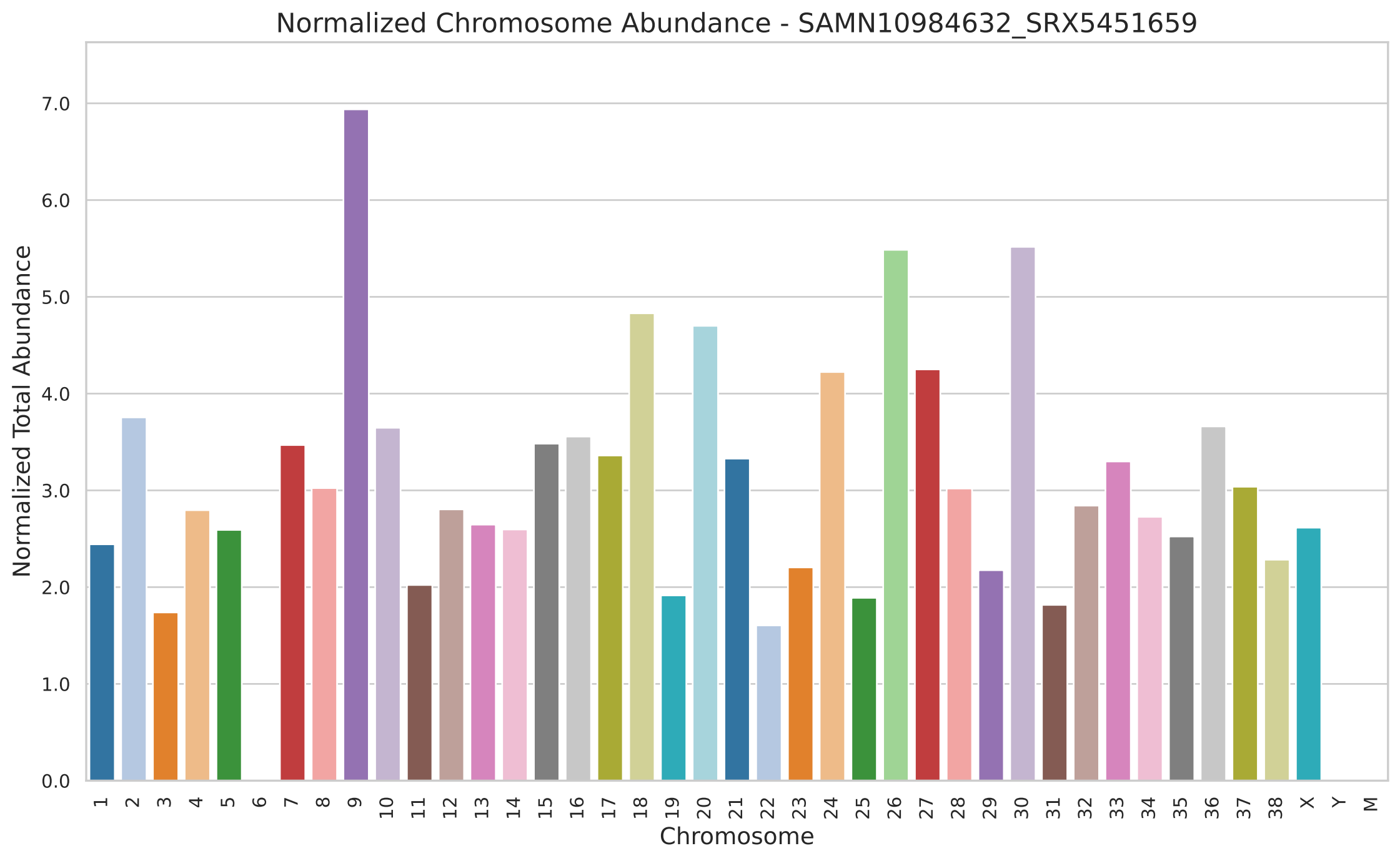

Normalized Chromosome Abundance - SAMN13656862_SRX7423297
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

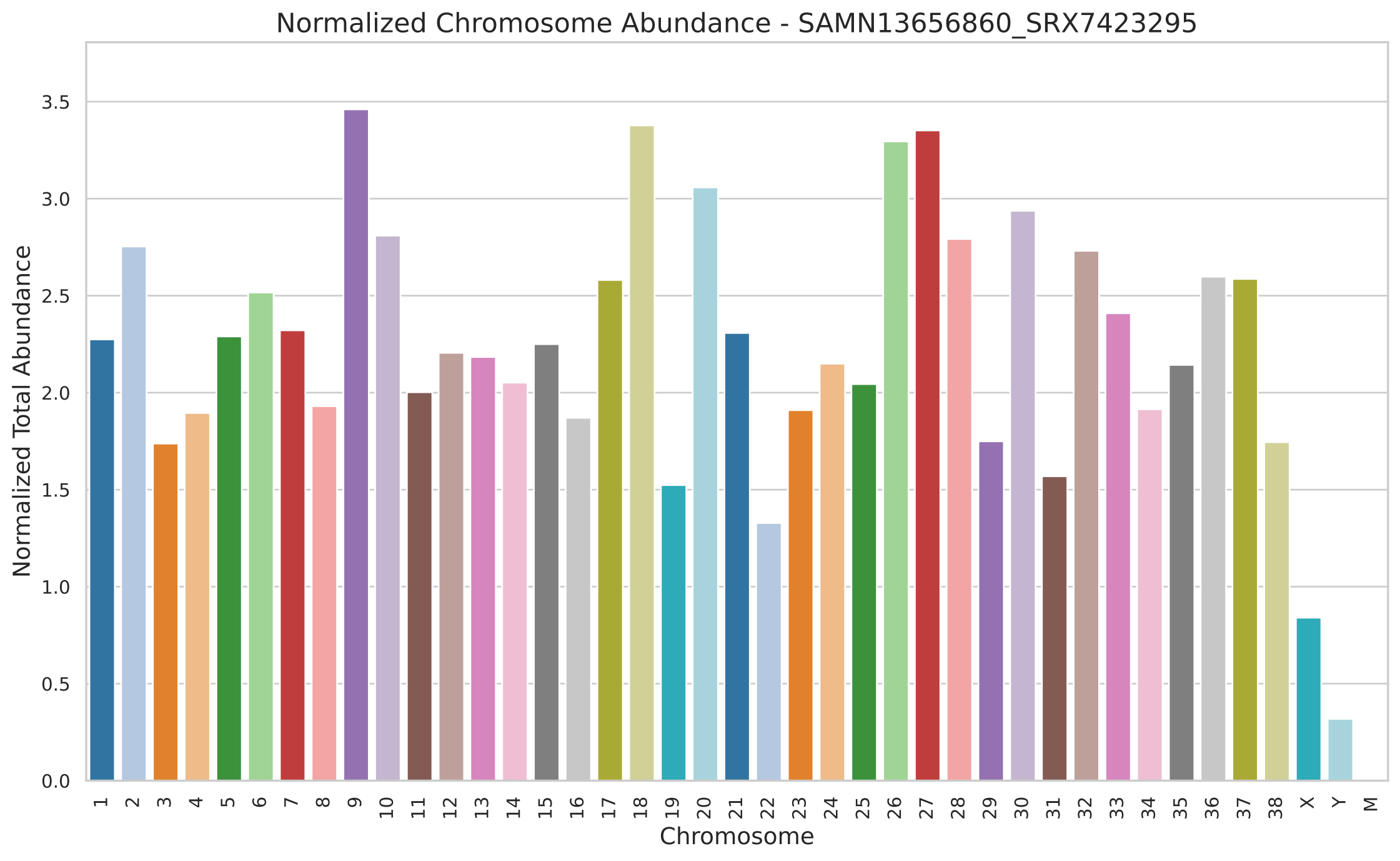

Normalized Chromosome Abundance - SAMN13133777_SRX7061392
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

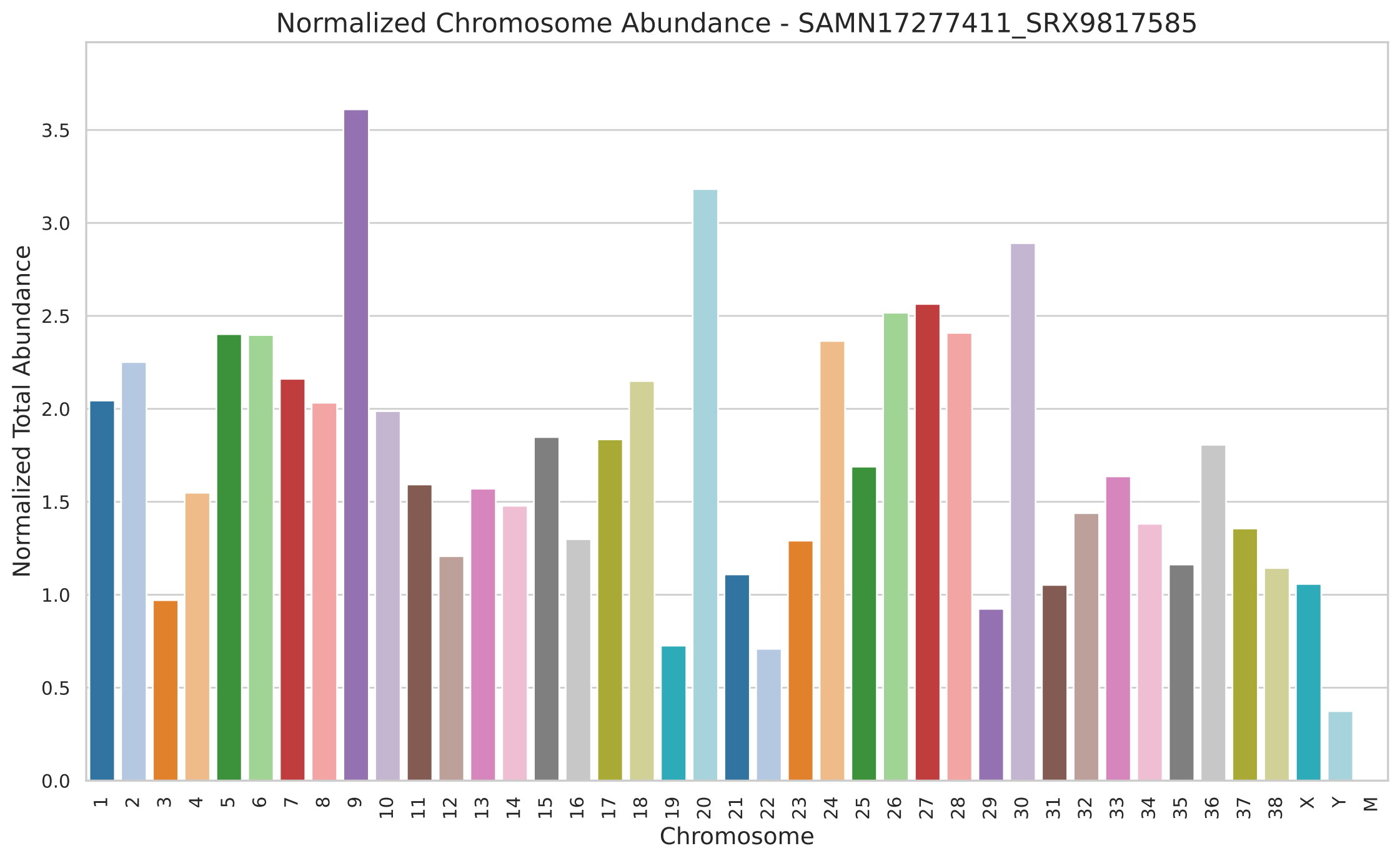

Normalized Chromosome Abundance - SAMN03436850_SRX963811
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

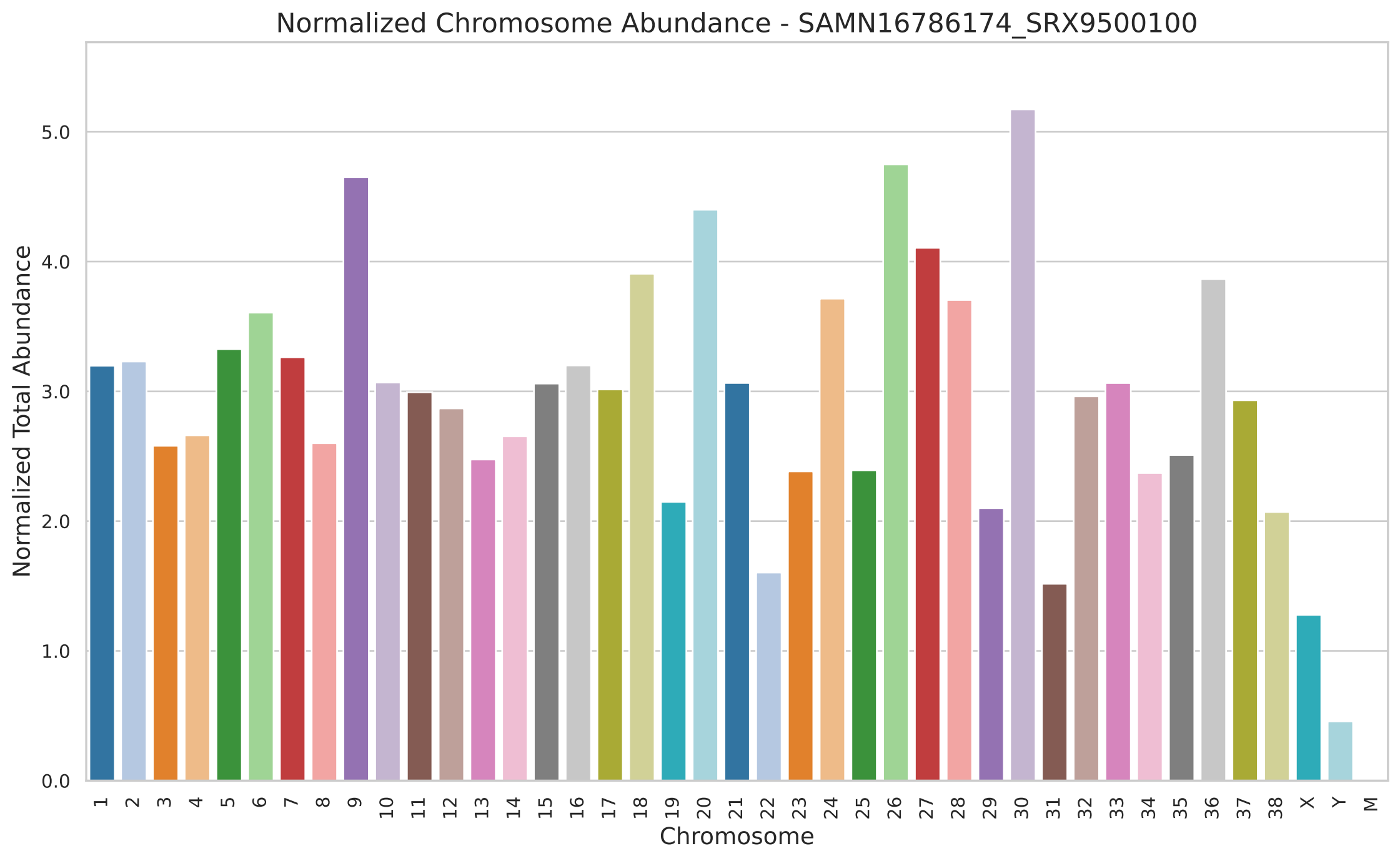

Normalized Chromosome Abundance - SAMN03436807_SRX963742
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

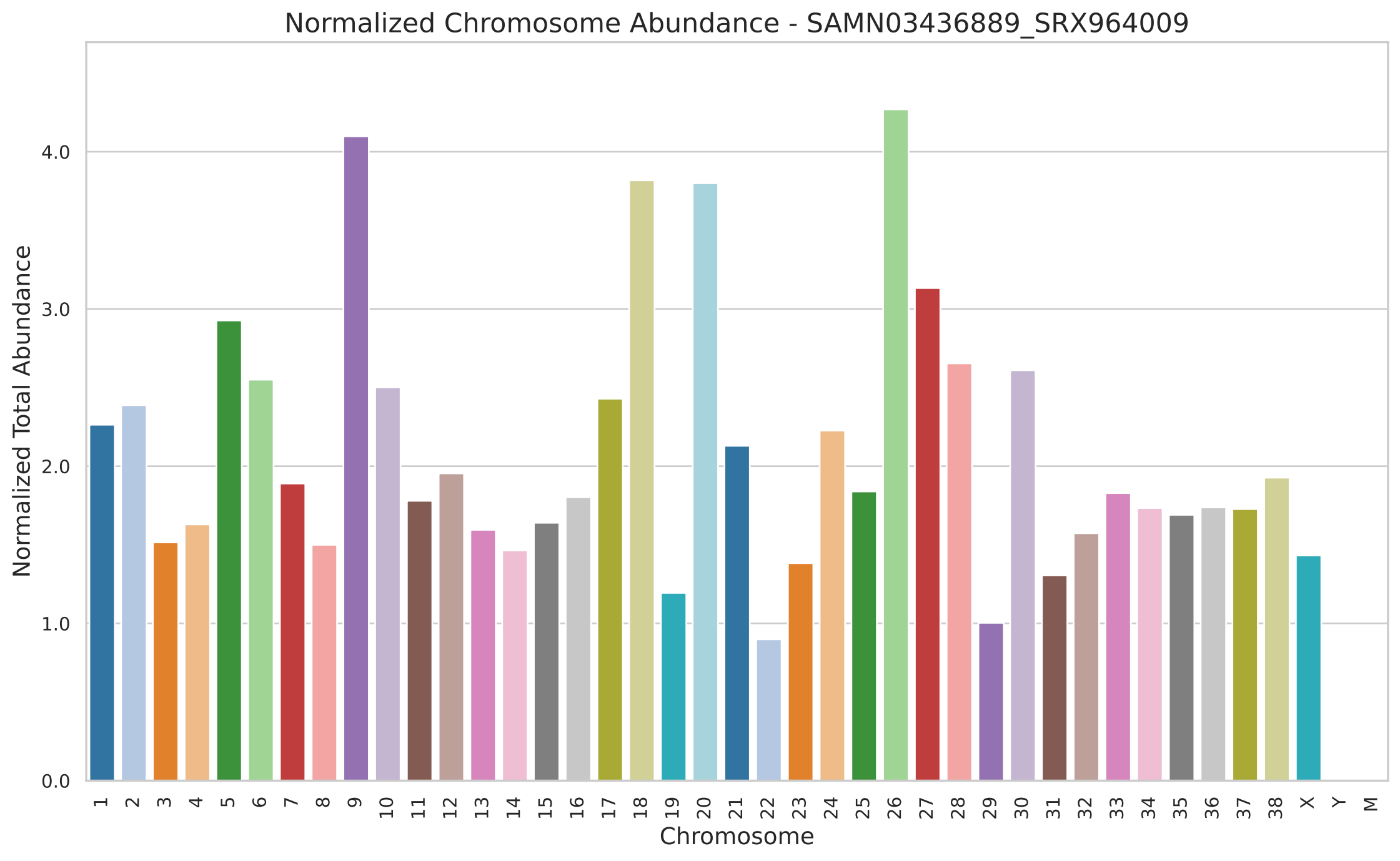

Normalized Chromosome Abundance - SAMN13656853_SRX7423286
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

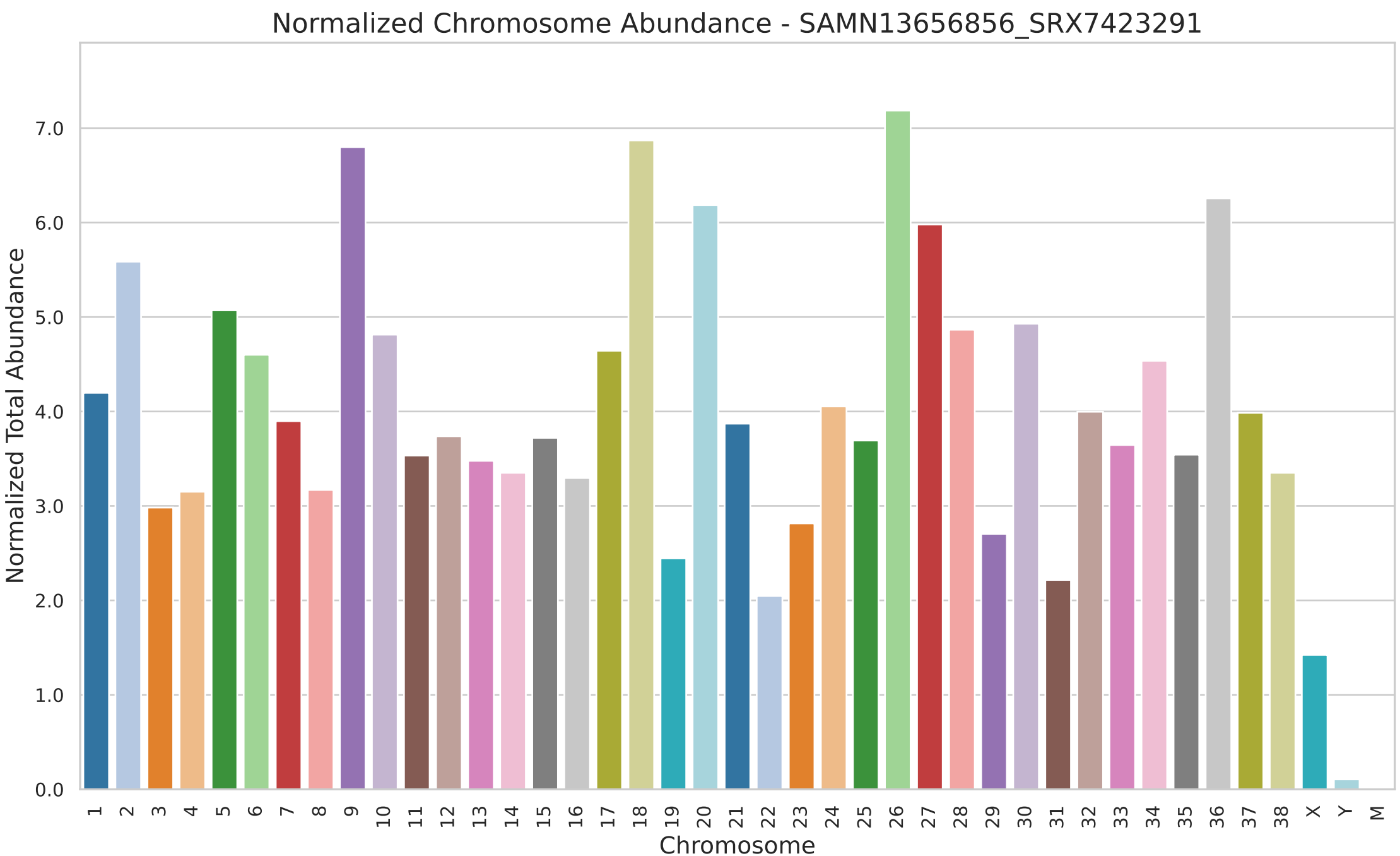

Normalized Chromosome Abundance - SAMN10984632_SRX5451659
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

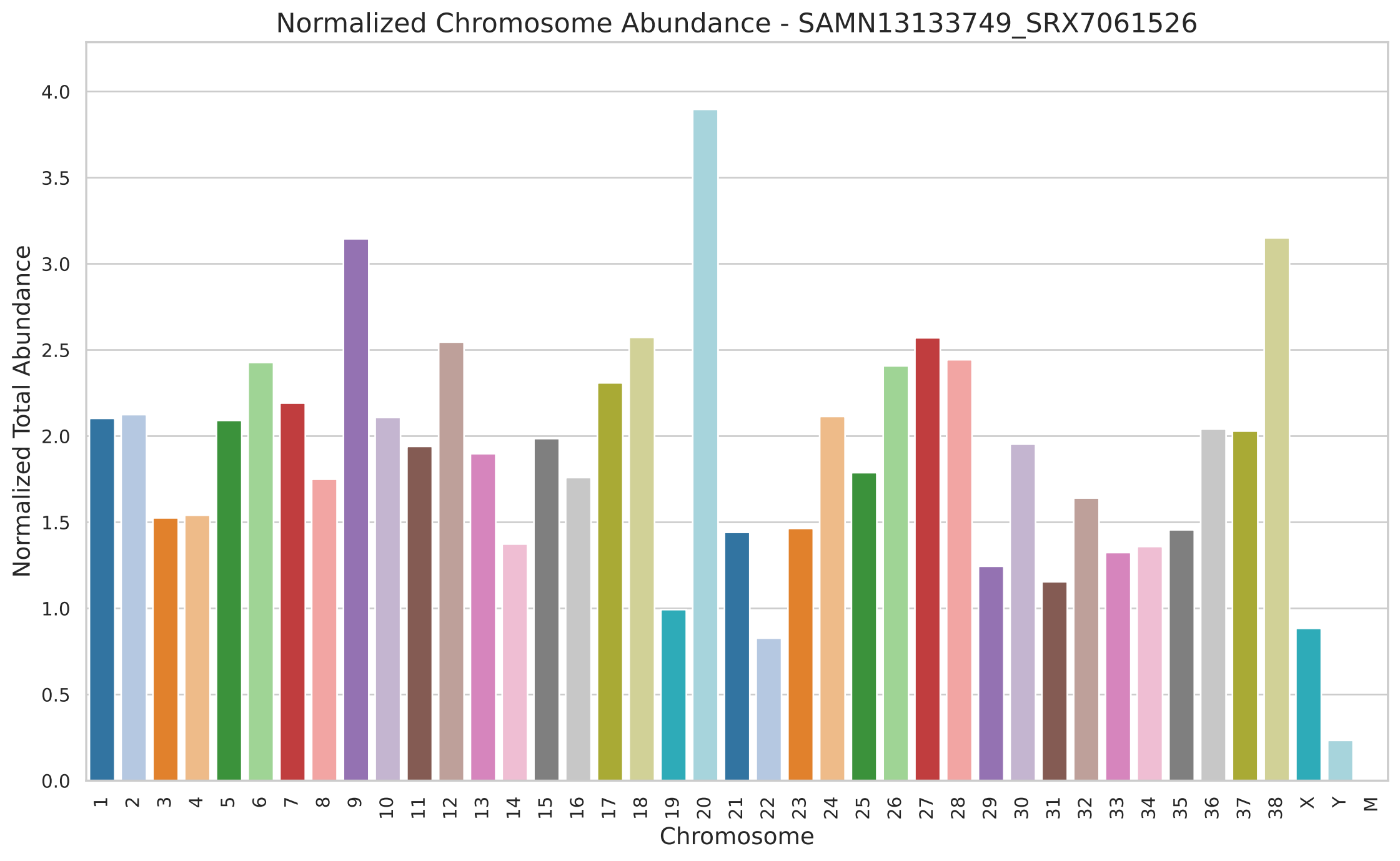

Normalized Chromosome Abundance - SAMN13656860_SRX7423295
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

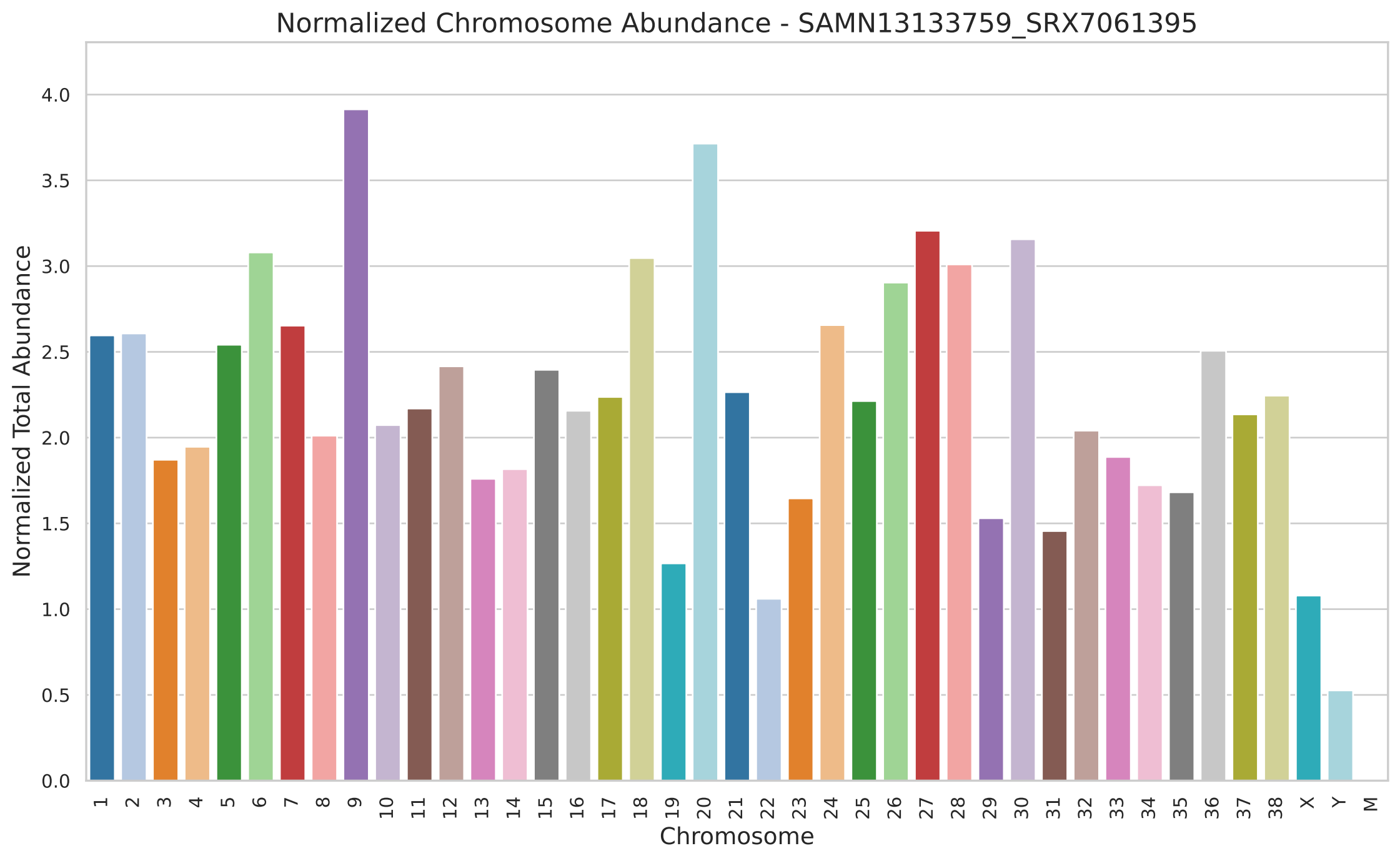

Normalized Chromosome Abundance - SAMN17277411_SRX9817585
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

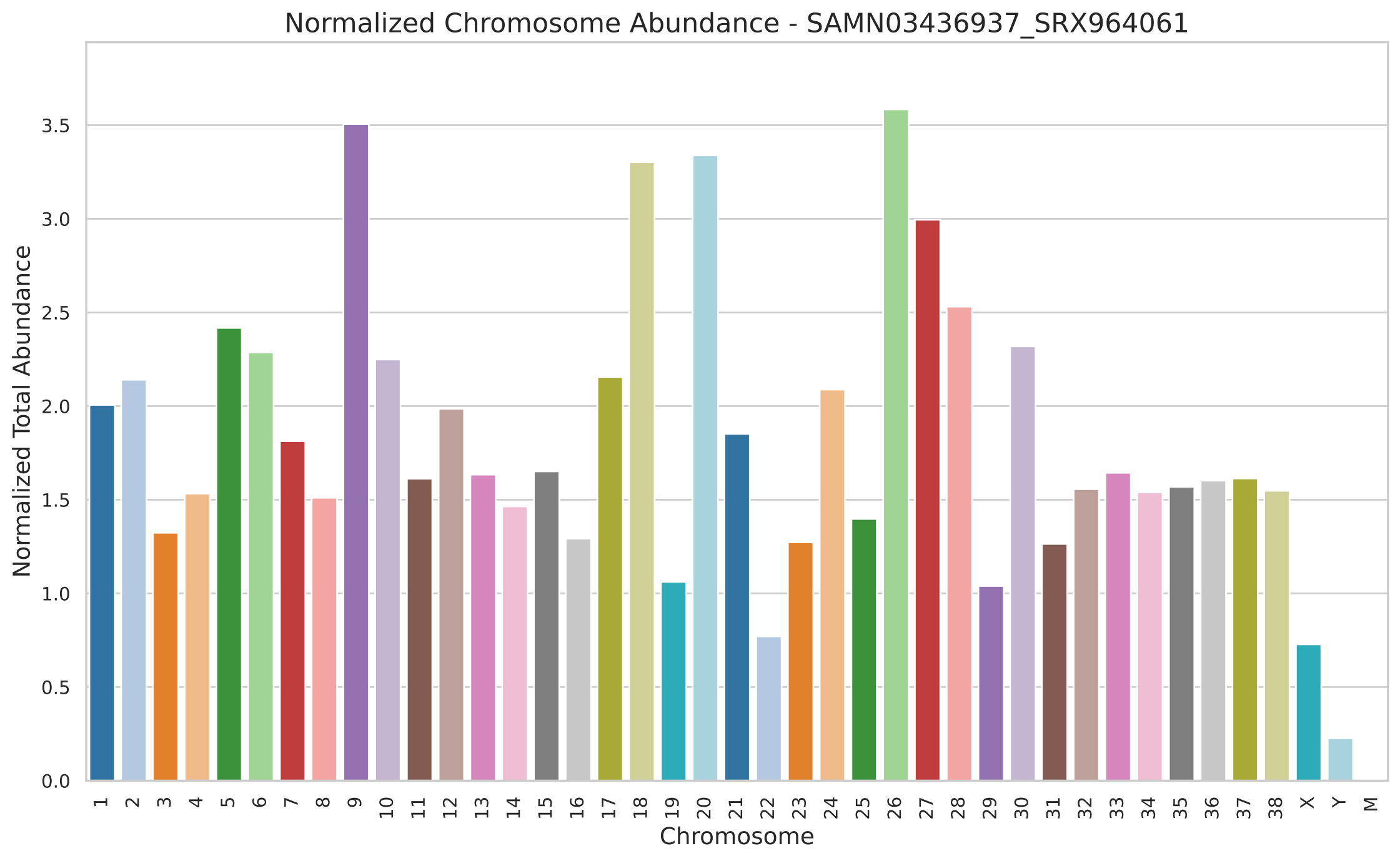

Normalized Chromosome Abundance - SAMN16786174_SRX9500100
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

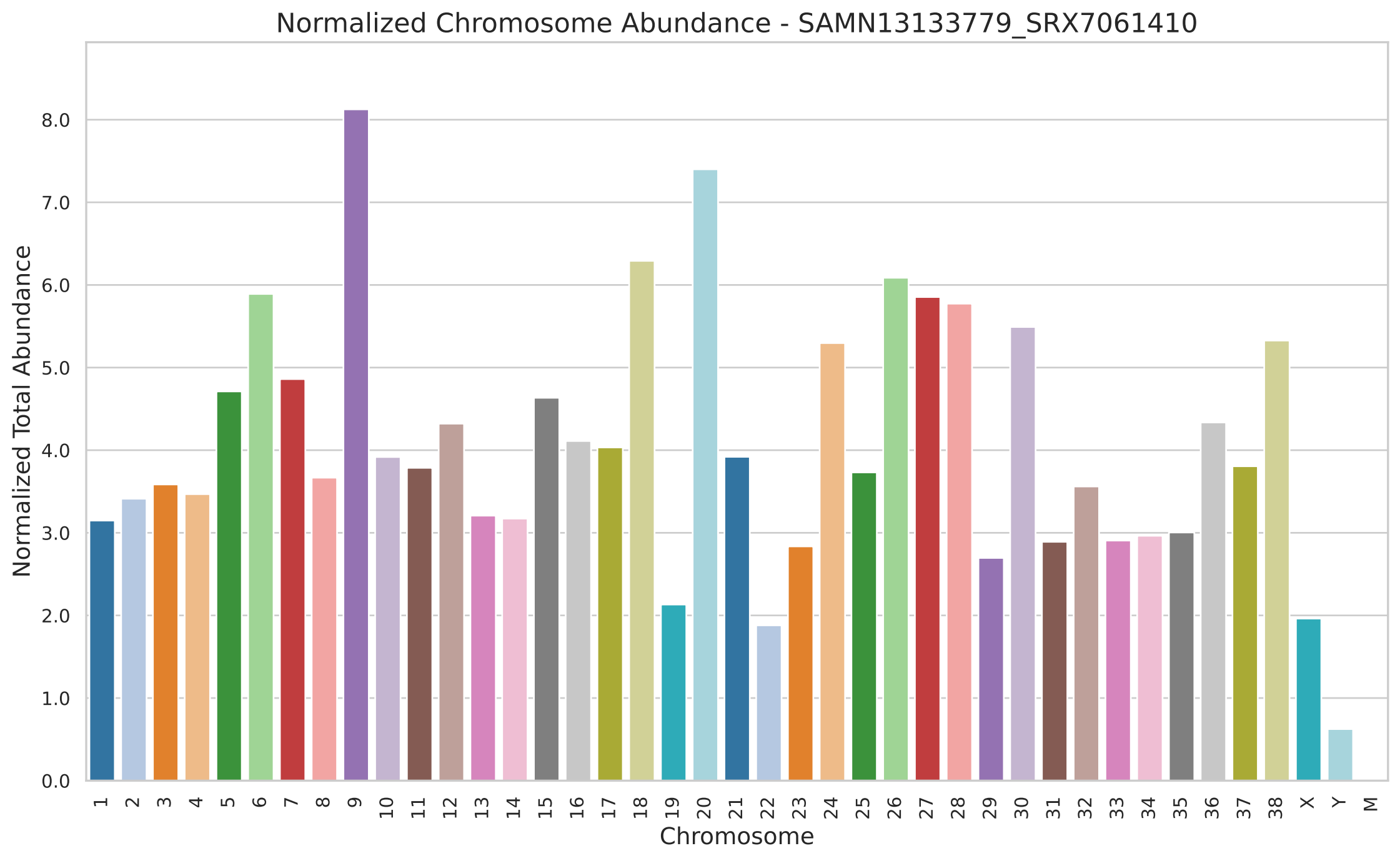

Normalized Chromosome Abundance - SAMN03436889_SRX964009
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

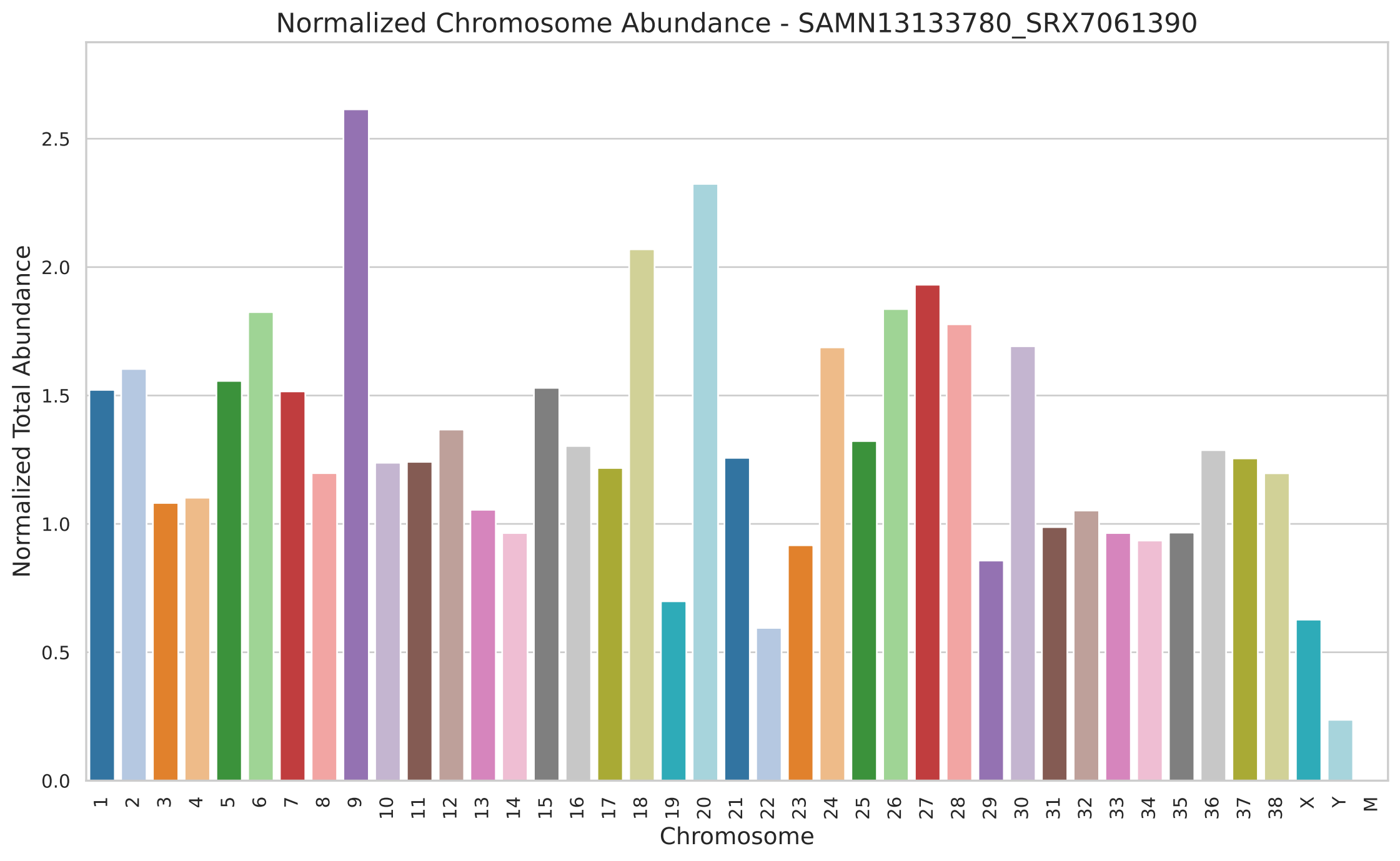

Normalized Chromosome Abundance - SAMN13656856_SRX7423291
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

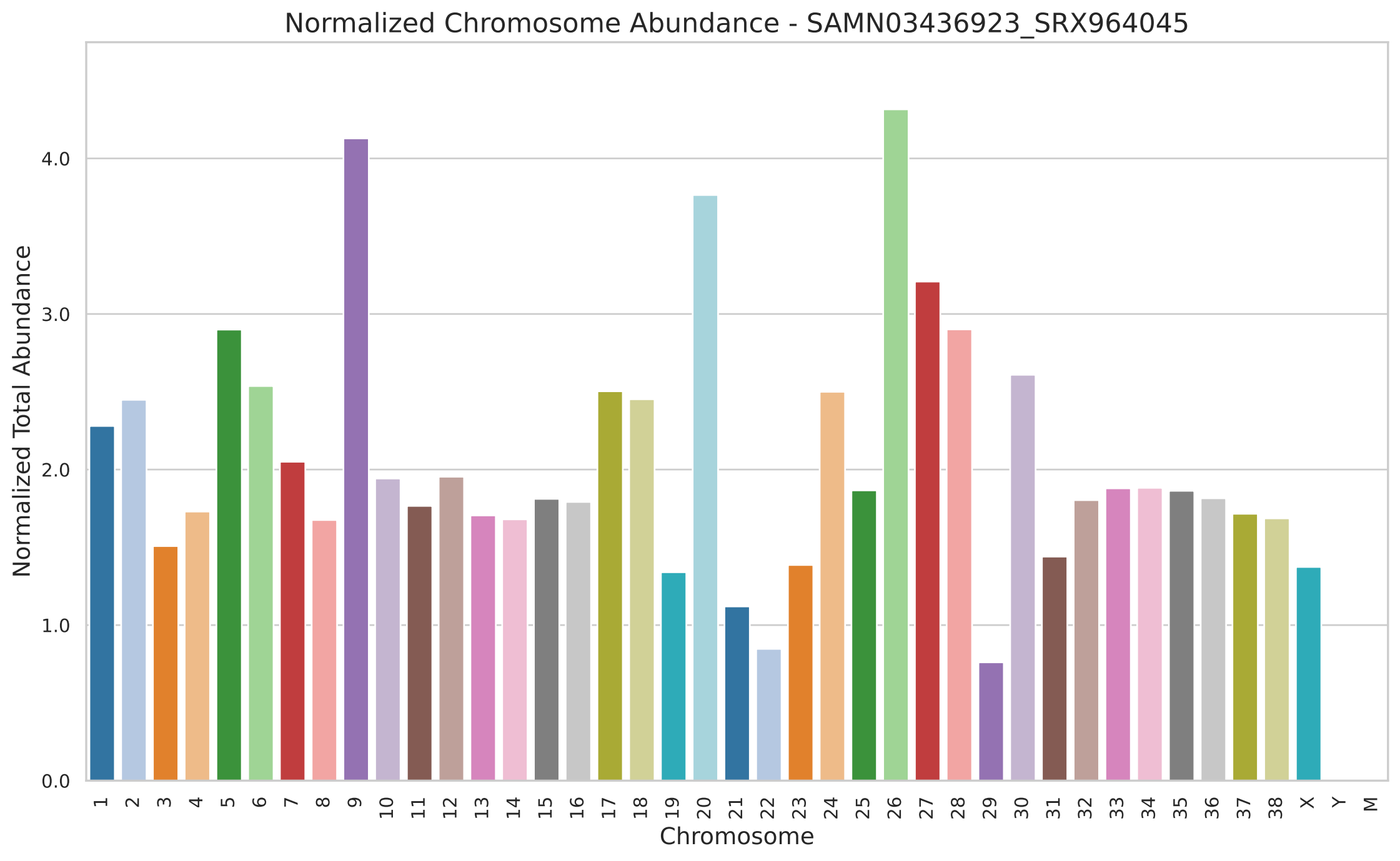

Normalized Chromosome Abundance - SAMN13133749_SRX7061526
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

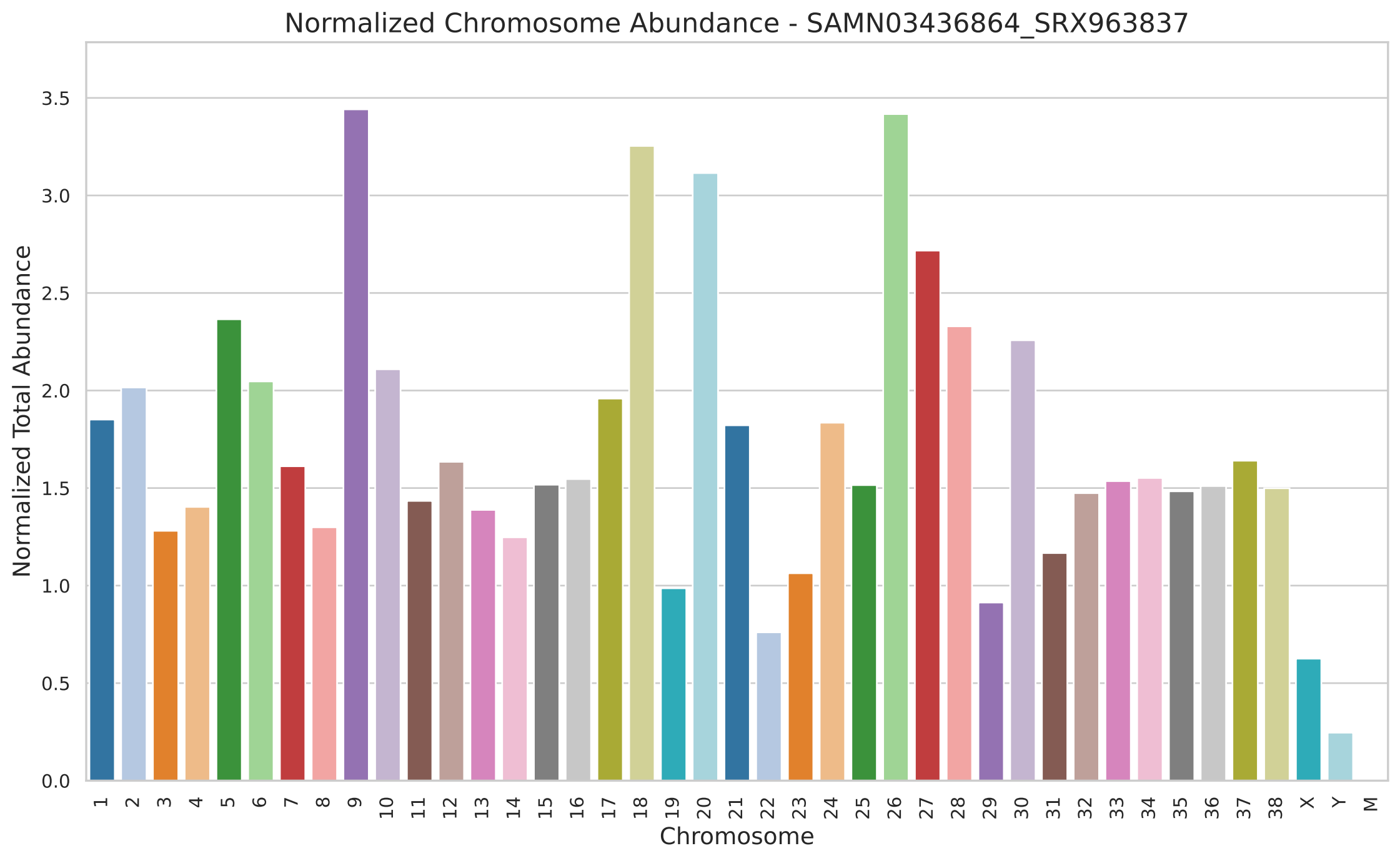

Normalized Chromosome Abundance - SAMN13133759_SRX7061395
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

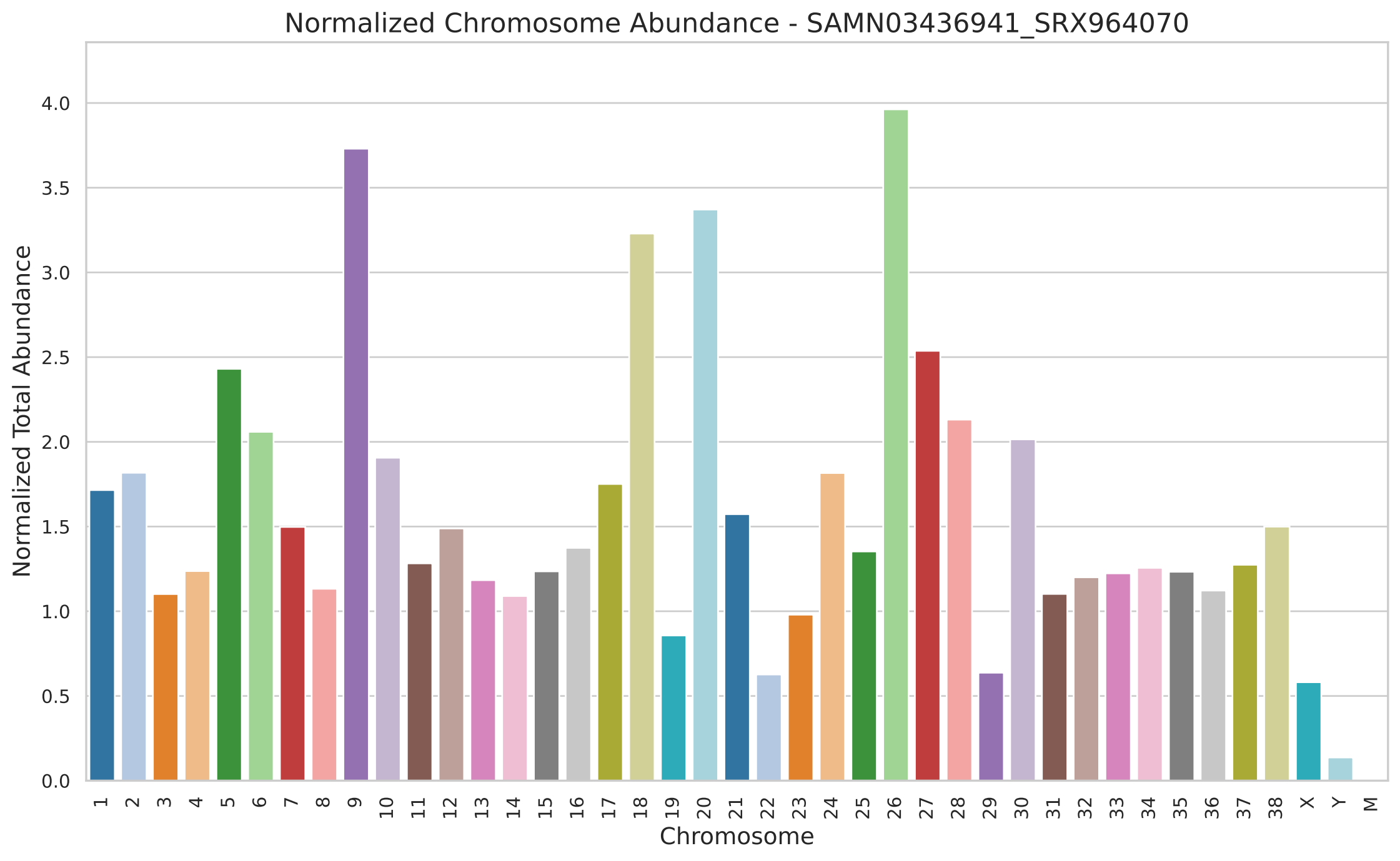

Normalized Chromosome Abundance - SAMN03436937_SRX964061
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

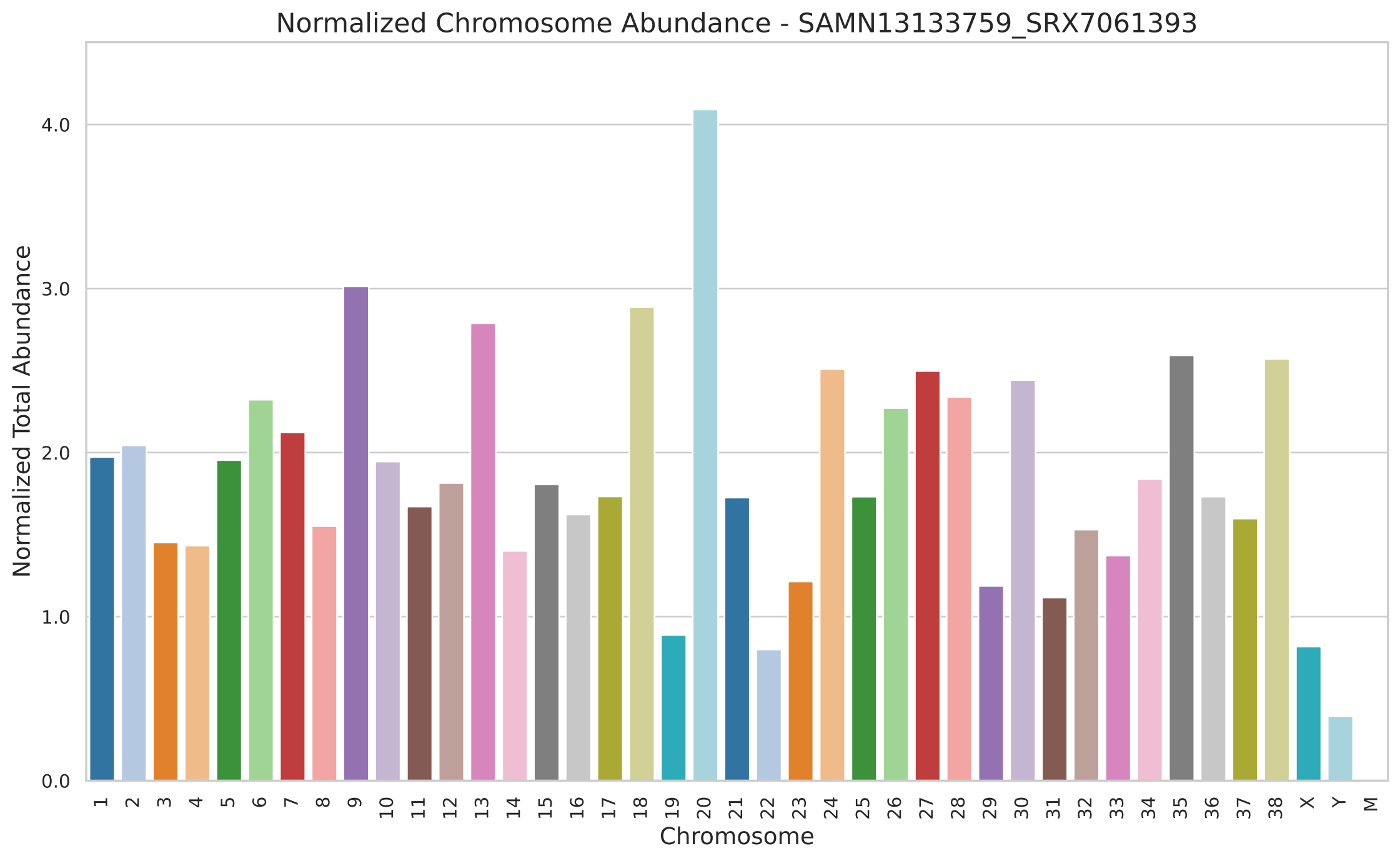

Normalized Chromosome Abundance - SAMN13133779_SRX7061410
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

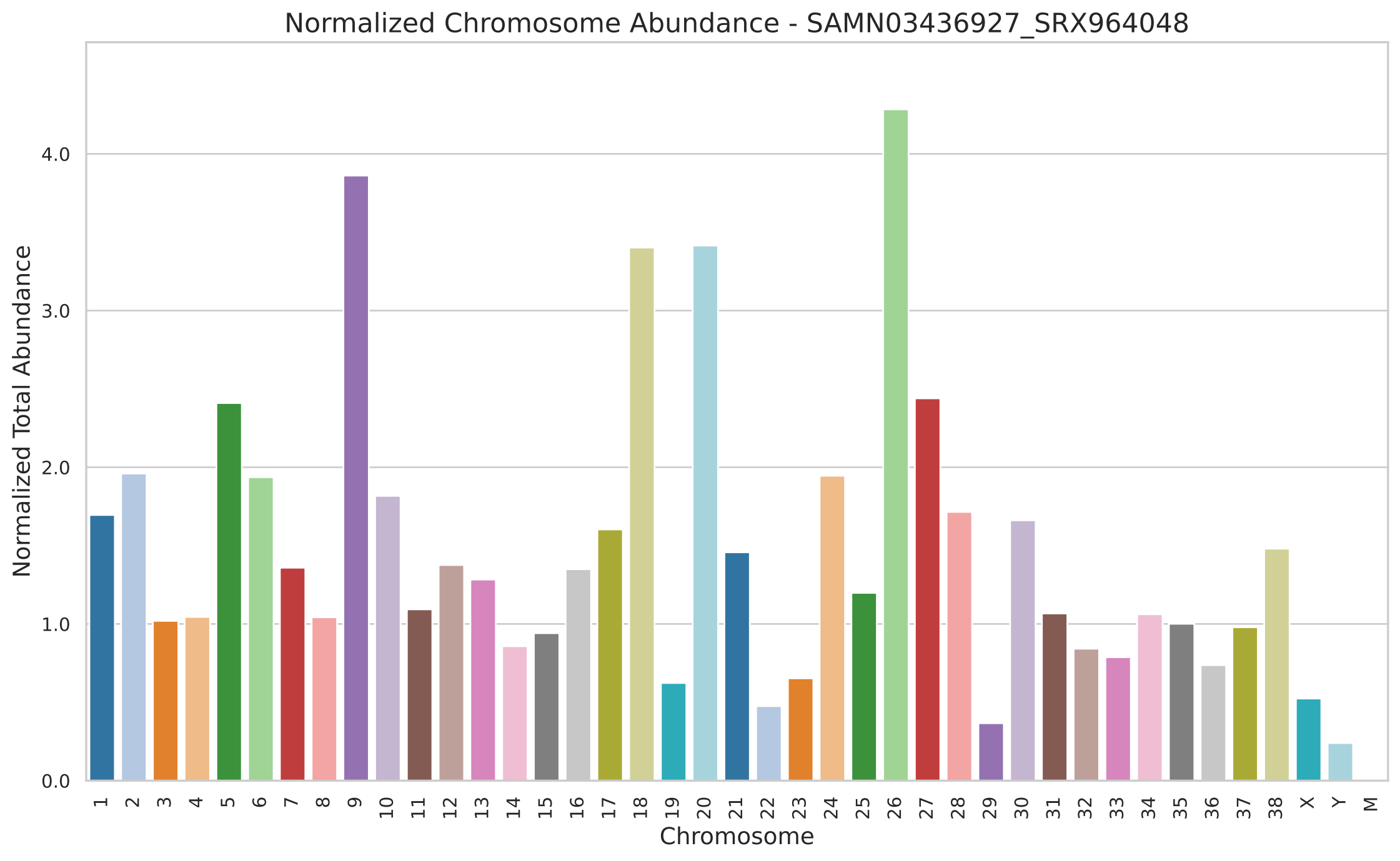

Normalized Chromosome Abundance - SAMN13133780_SRX7061390
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

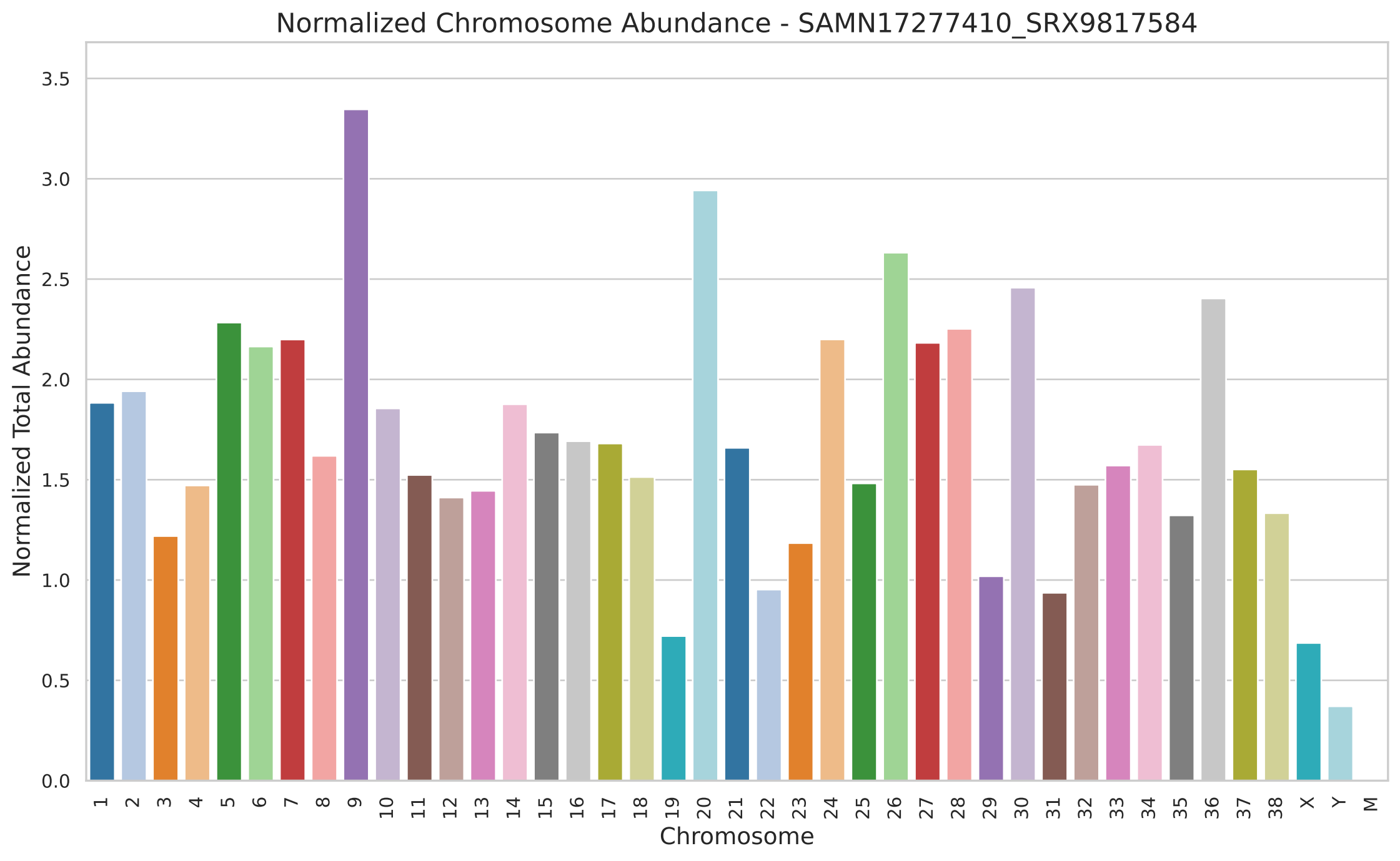

Normalized Chromosome Abundance - SAMN03436923_SRX964045
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

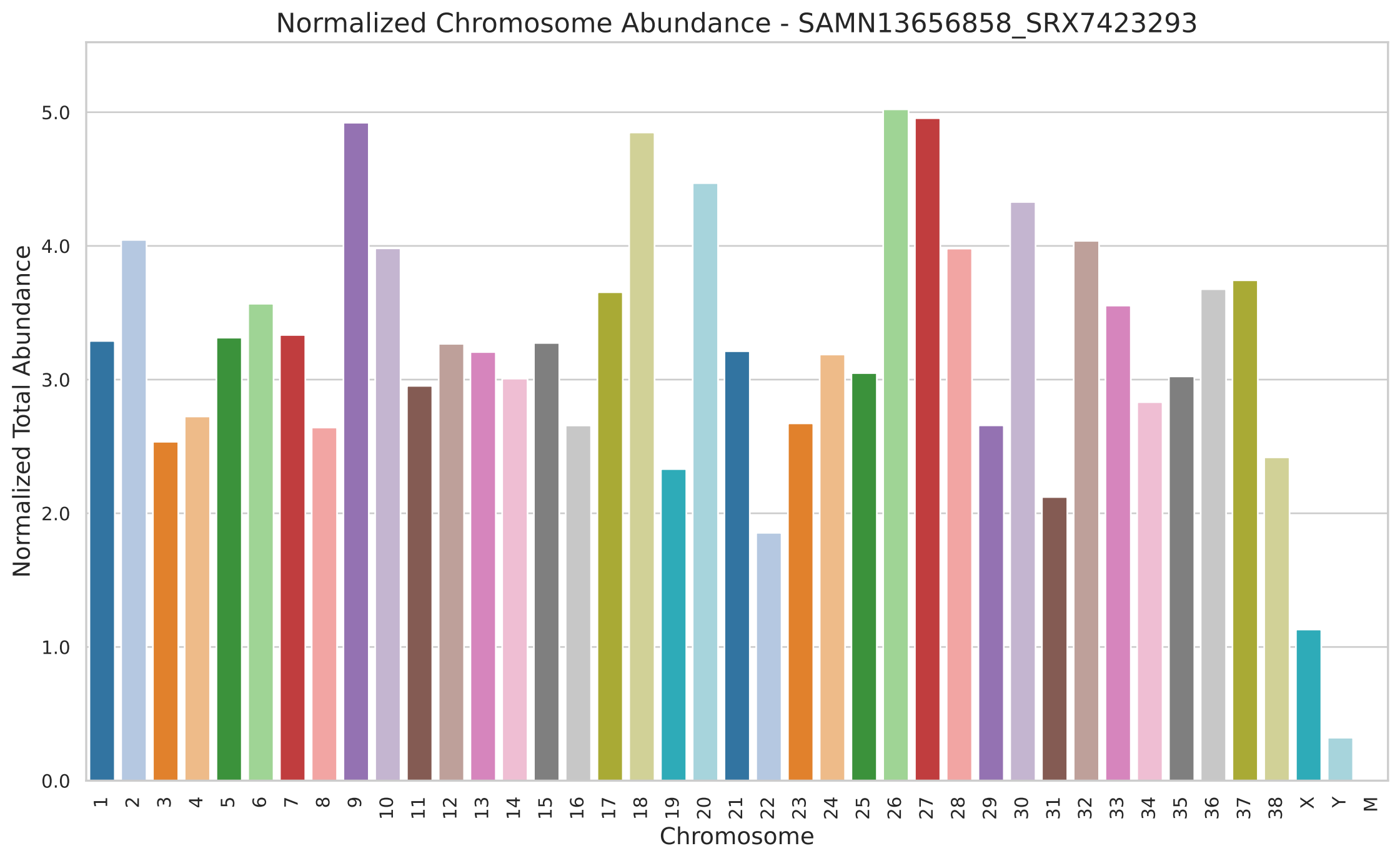

Normalized Chromosome Abundance - SAMN03436864_SRX963837
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

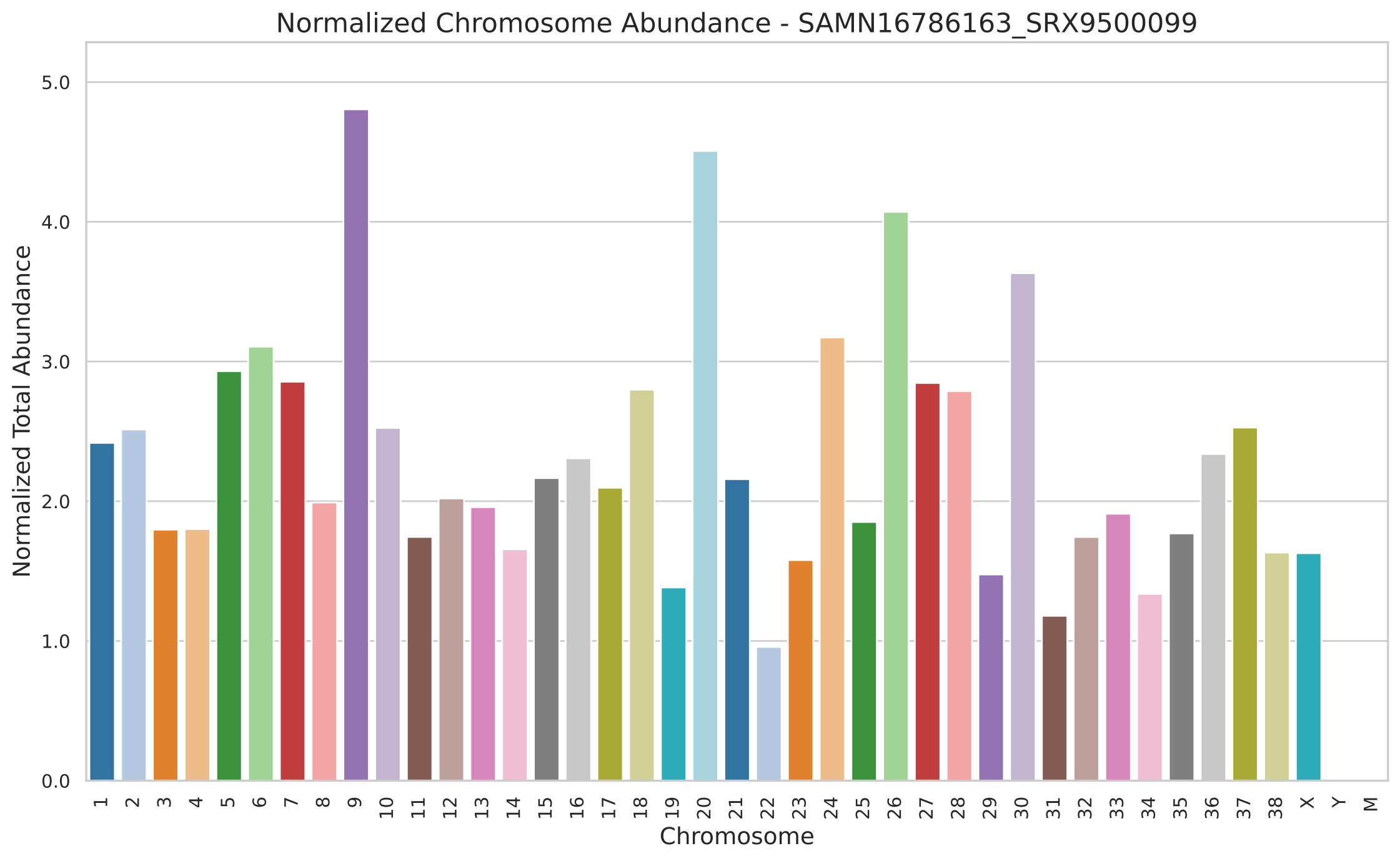

Normalized Chromosome Abundance - SAMN03436941_SRX964070
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

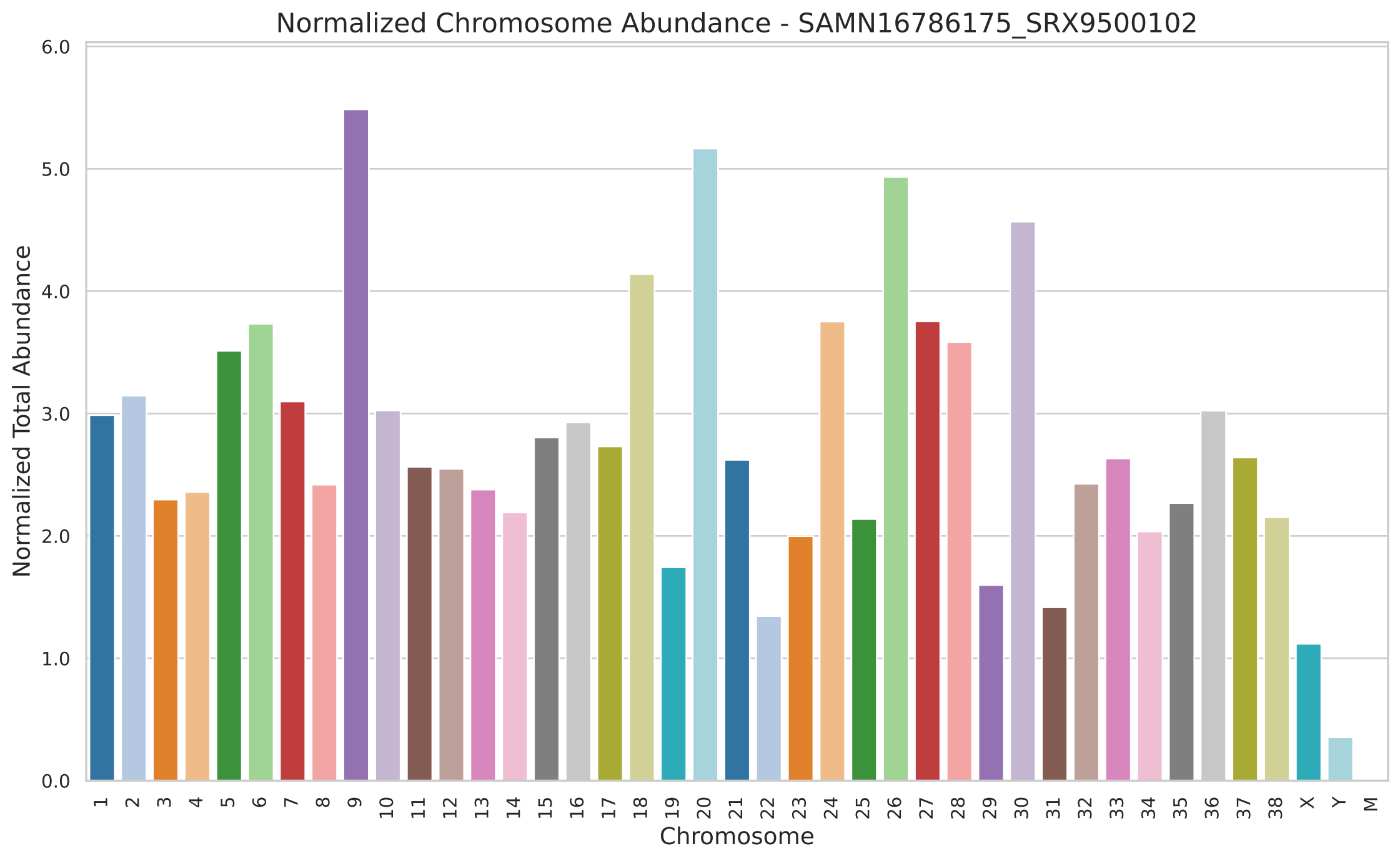

Normalized Chromosome Abundance - SAMN13133759_SRX7061393
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

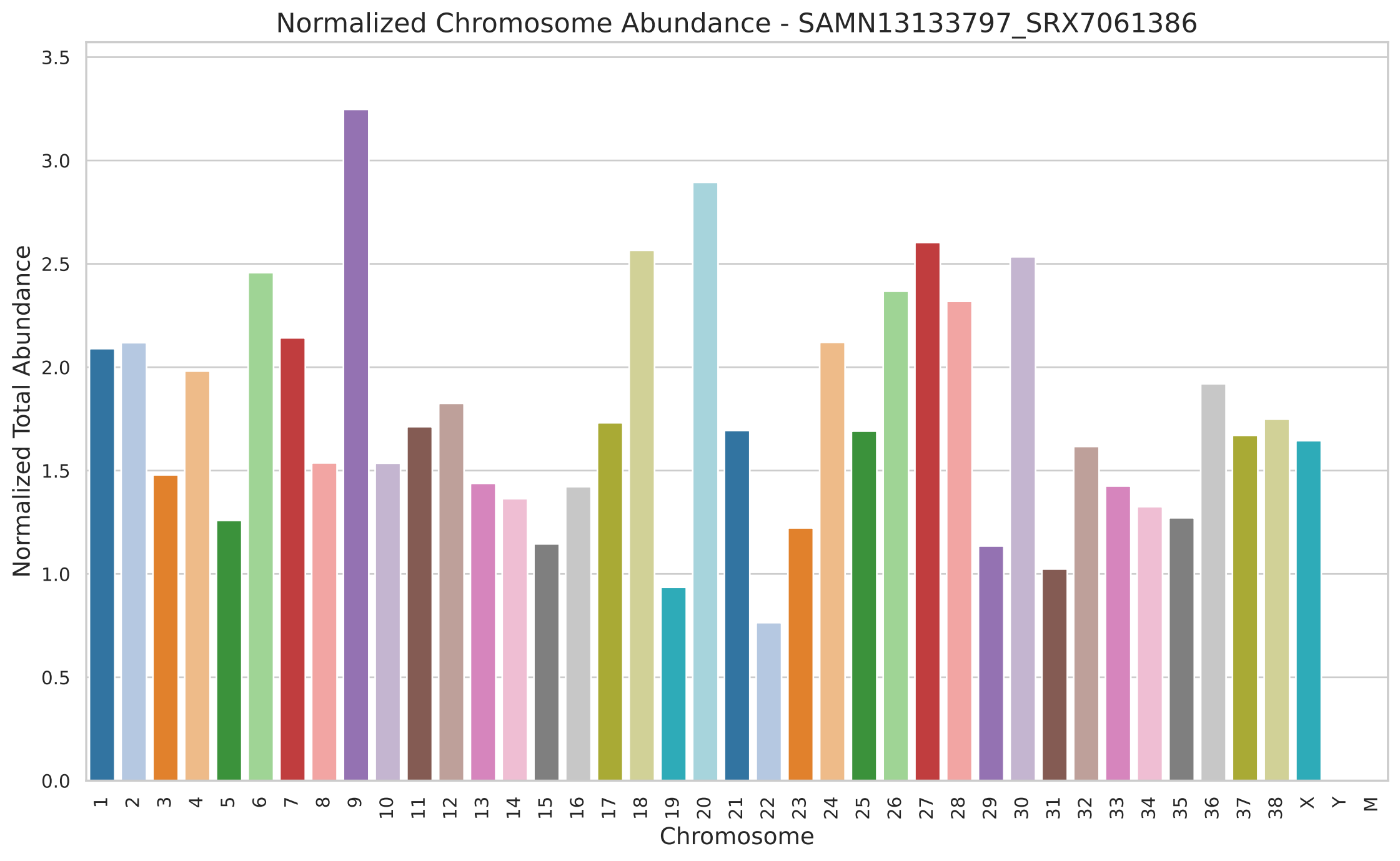

Normalized Chromosome Abundance - SAMN03436927_SRX964048
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

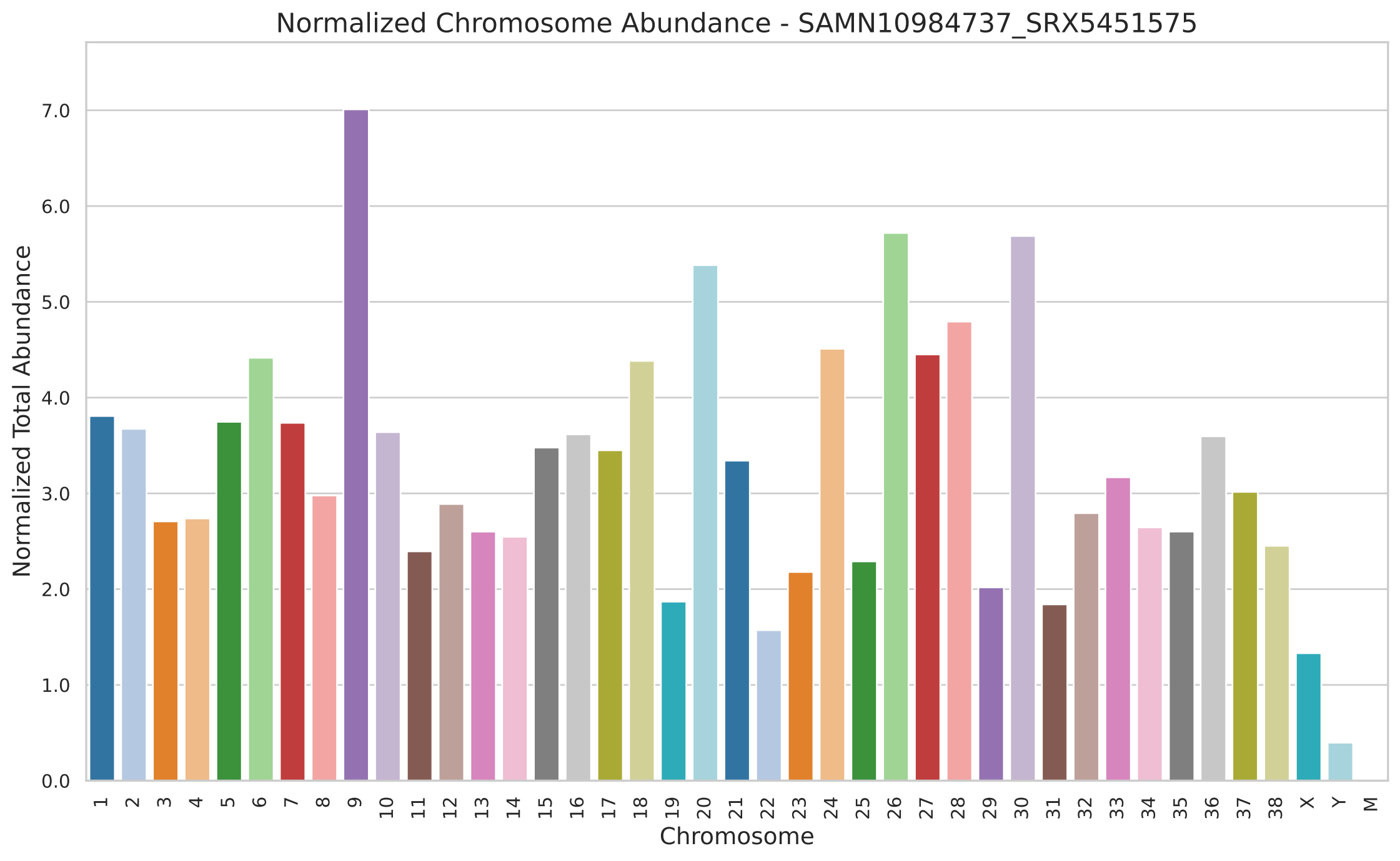

Normalized Chromosome Abundance - SAMN17277410_SRX9817584
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

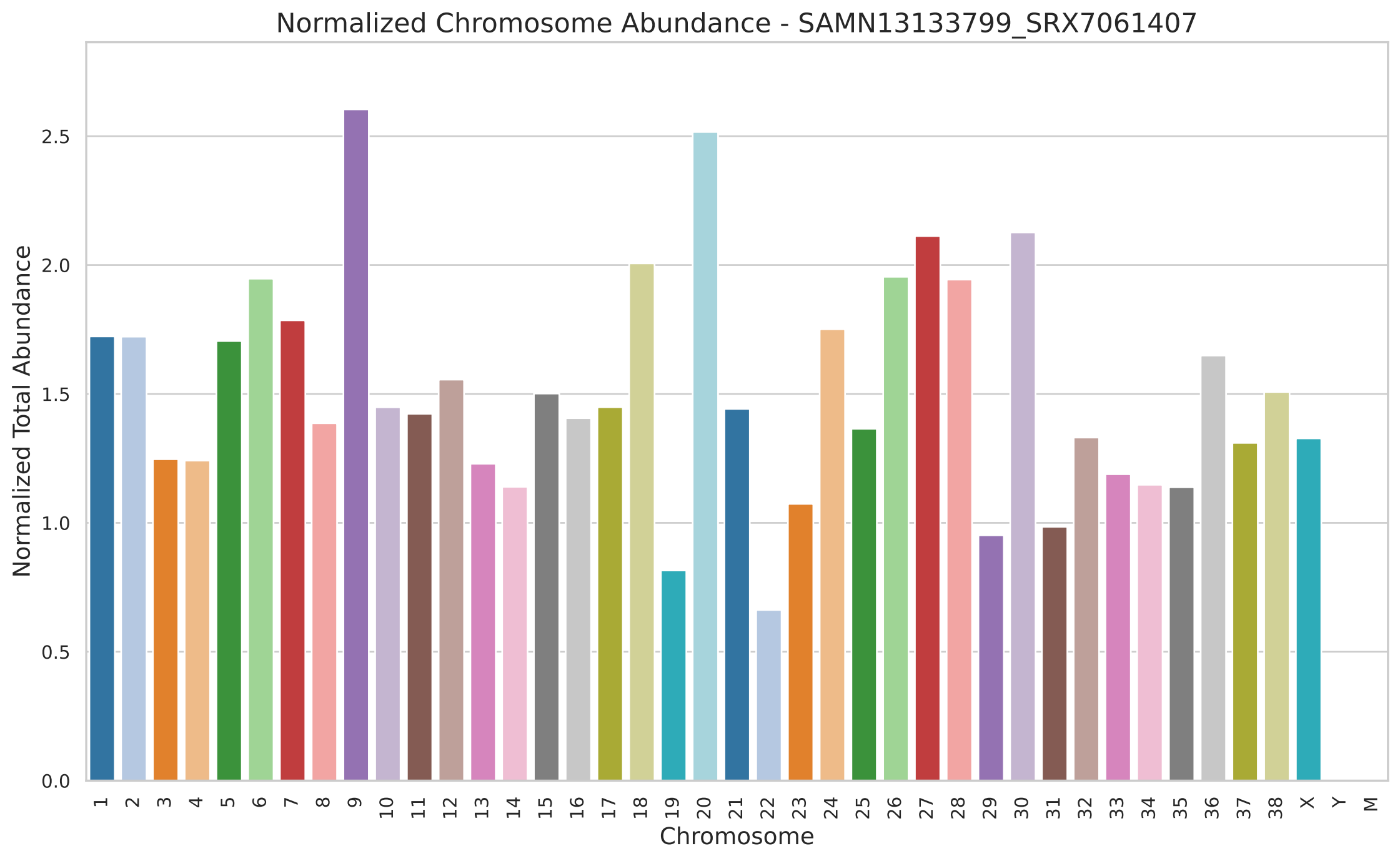

Normalized Chromosome Abundance - SAMN13656858_SRX7423293
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

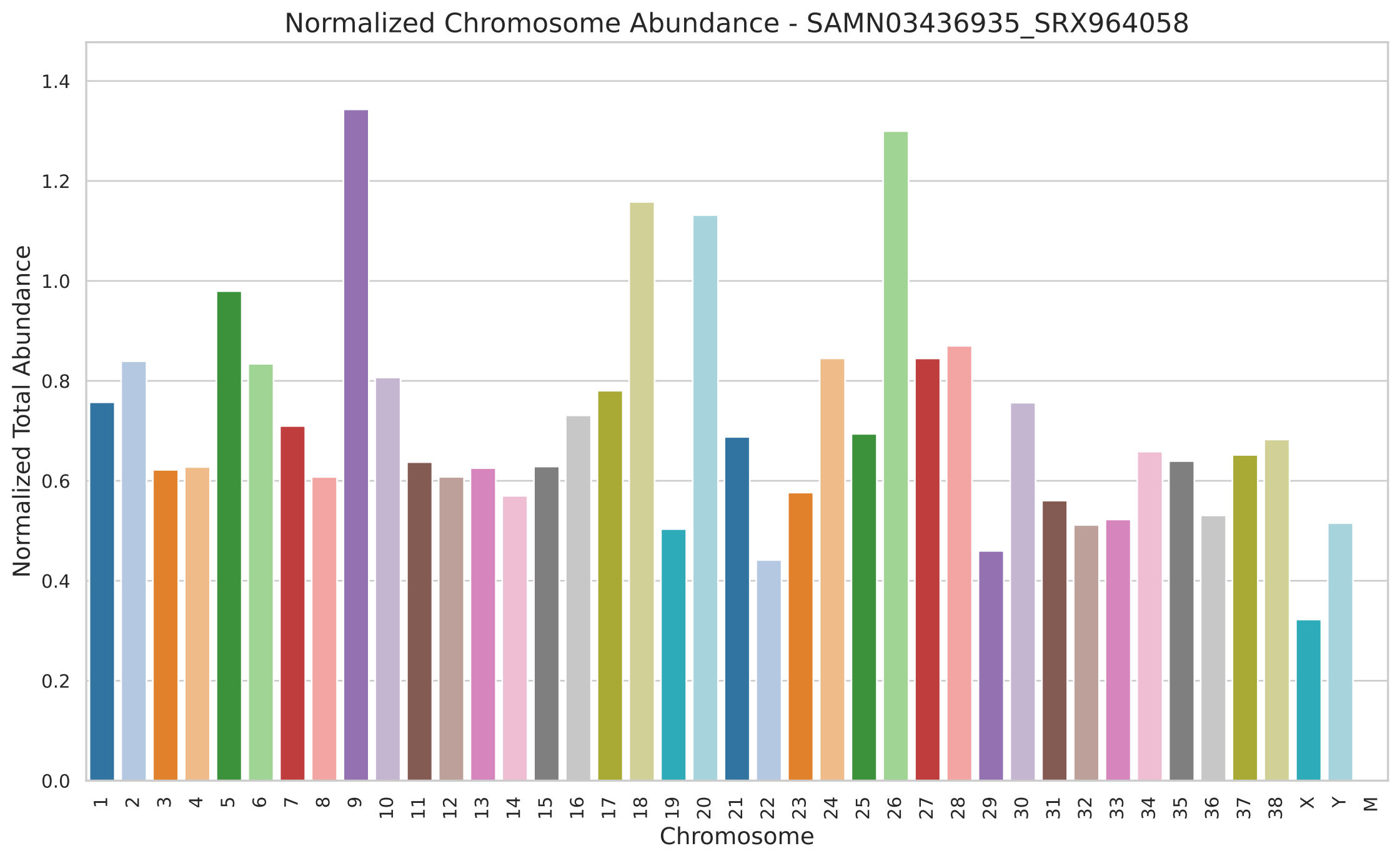

Normalized Chromosome Abundance - SAMN16786163_SRX9500099
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

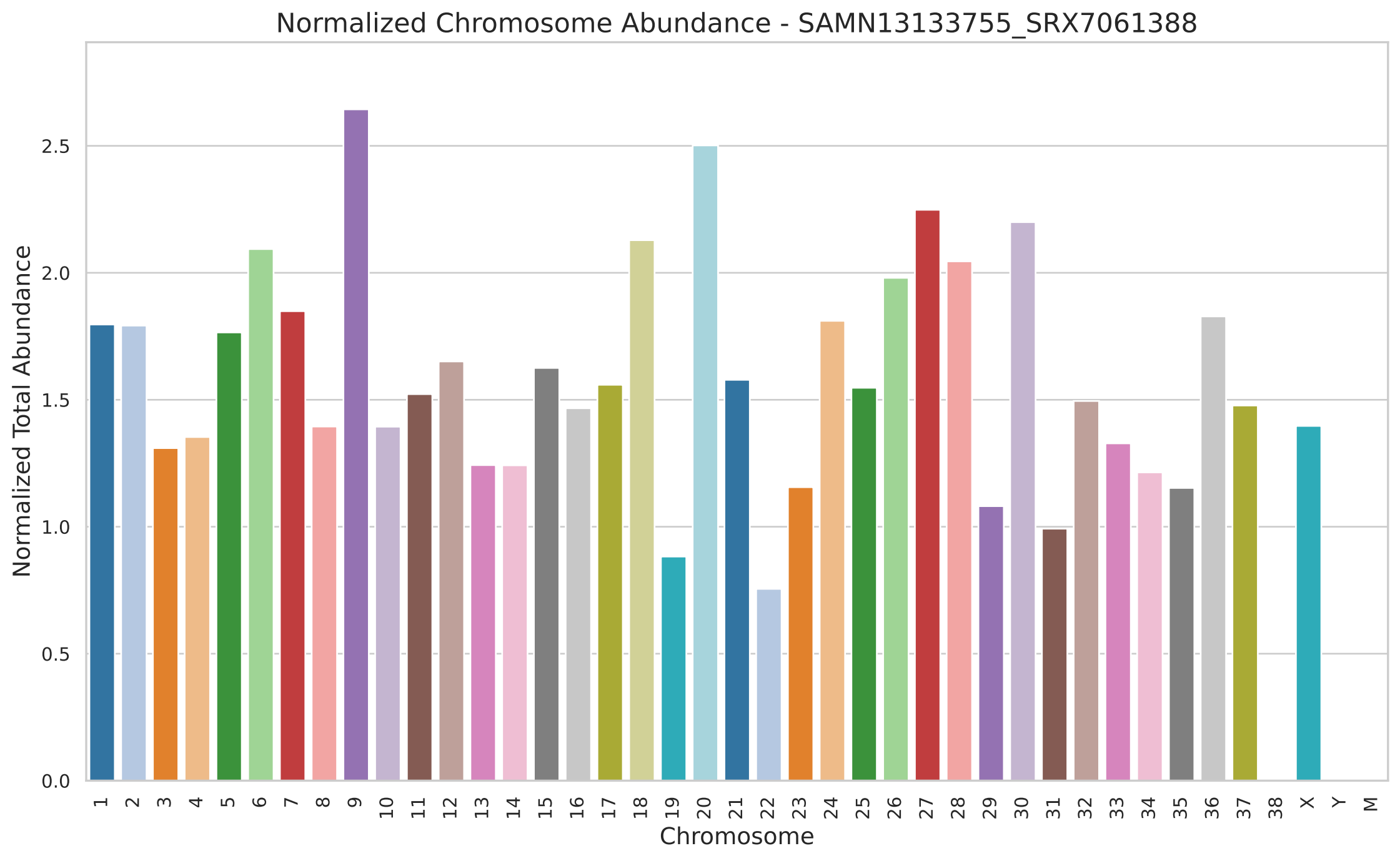

Normalized Chromosome Abundance - SAMN16786175_SRX9500102
Normalized Total Abundance
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

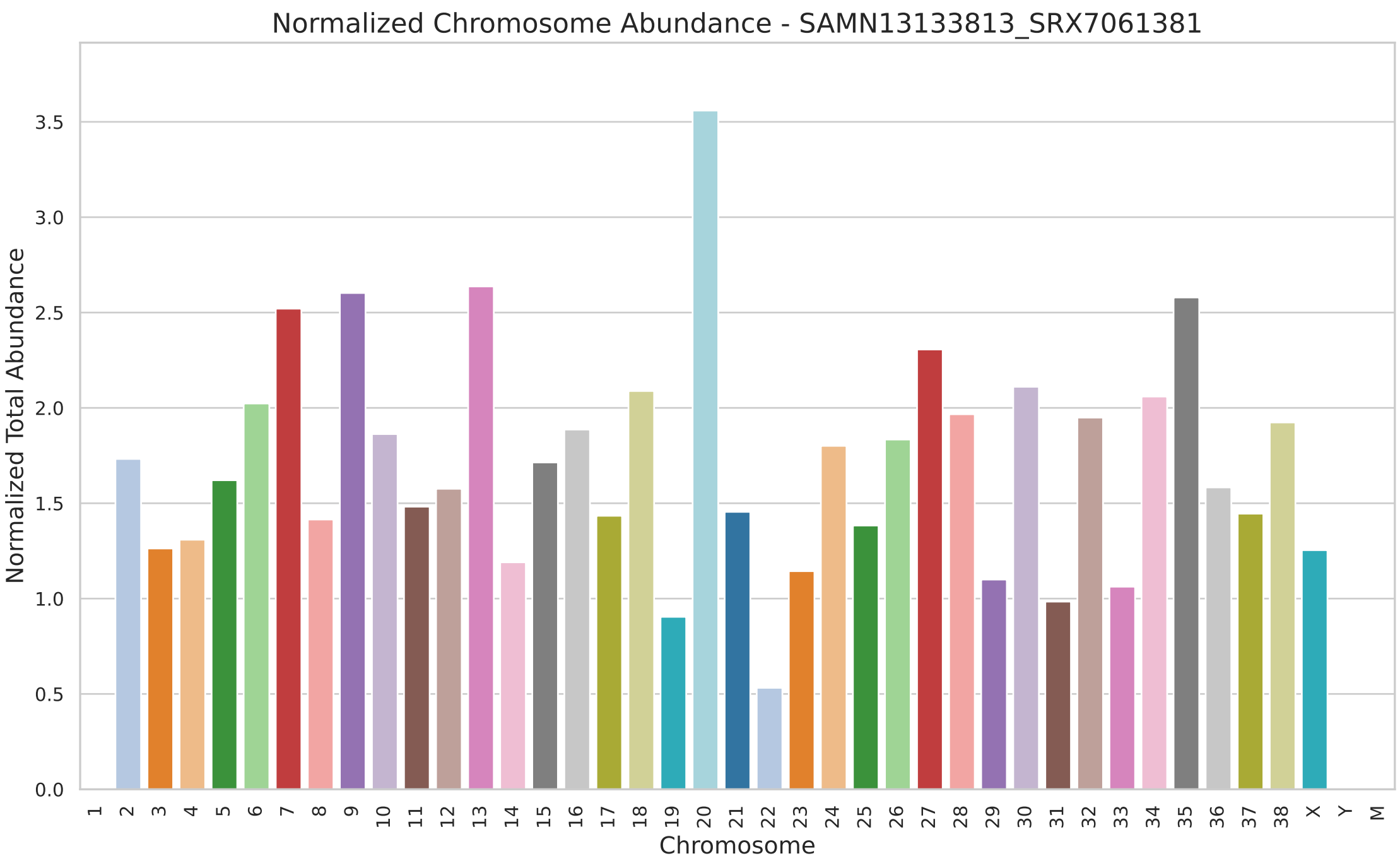

Normalized Chromosome Abundance - SAMN13133797_SRX7061386
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

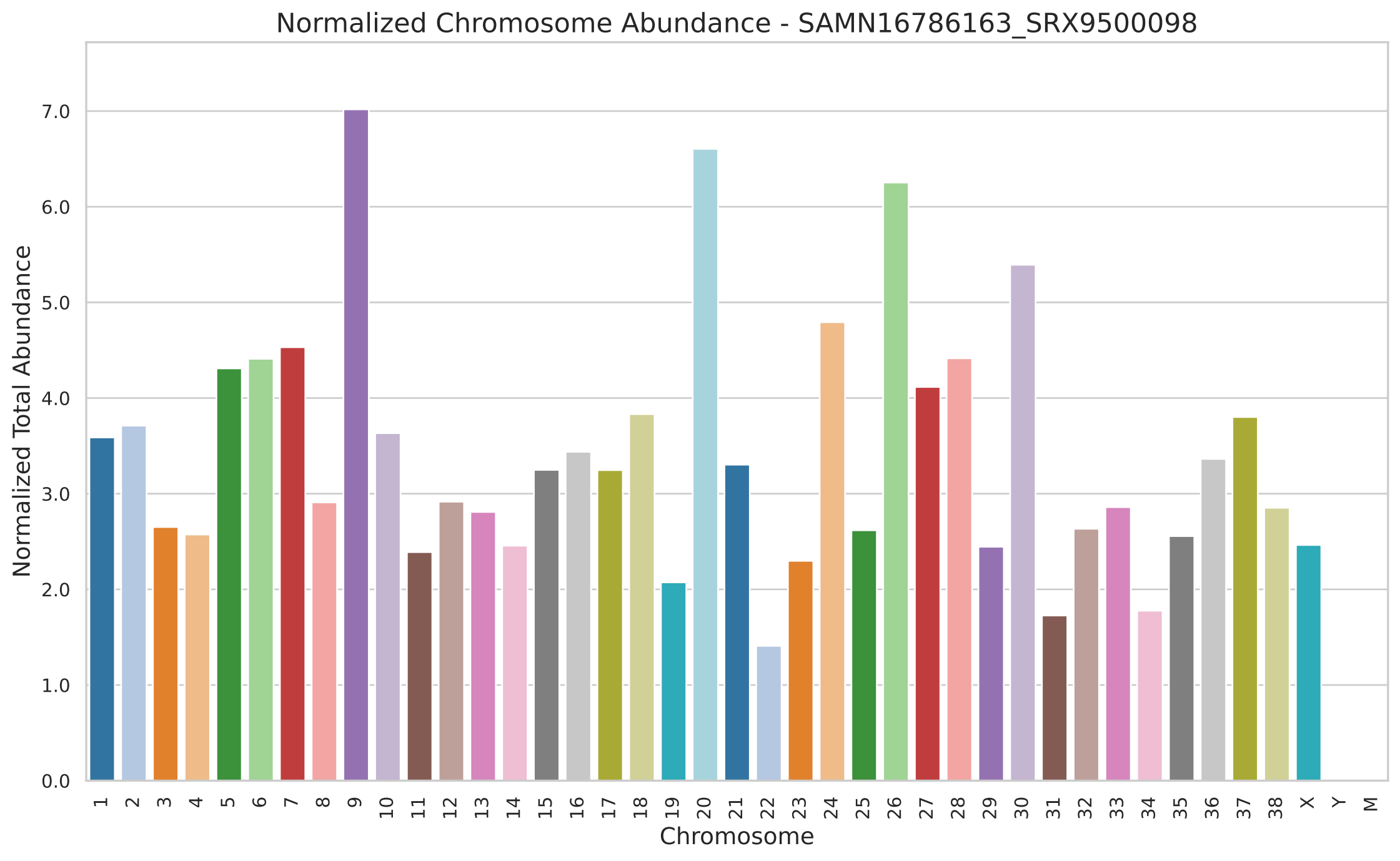

Normalized Chromosome Abundance - SAMN10984737_SRX5451575
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

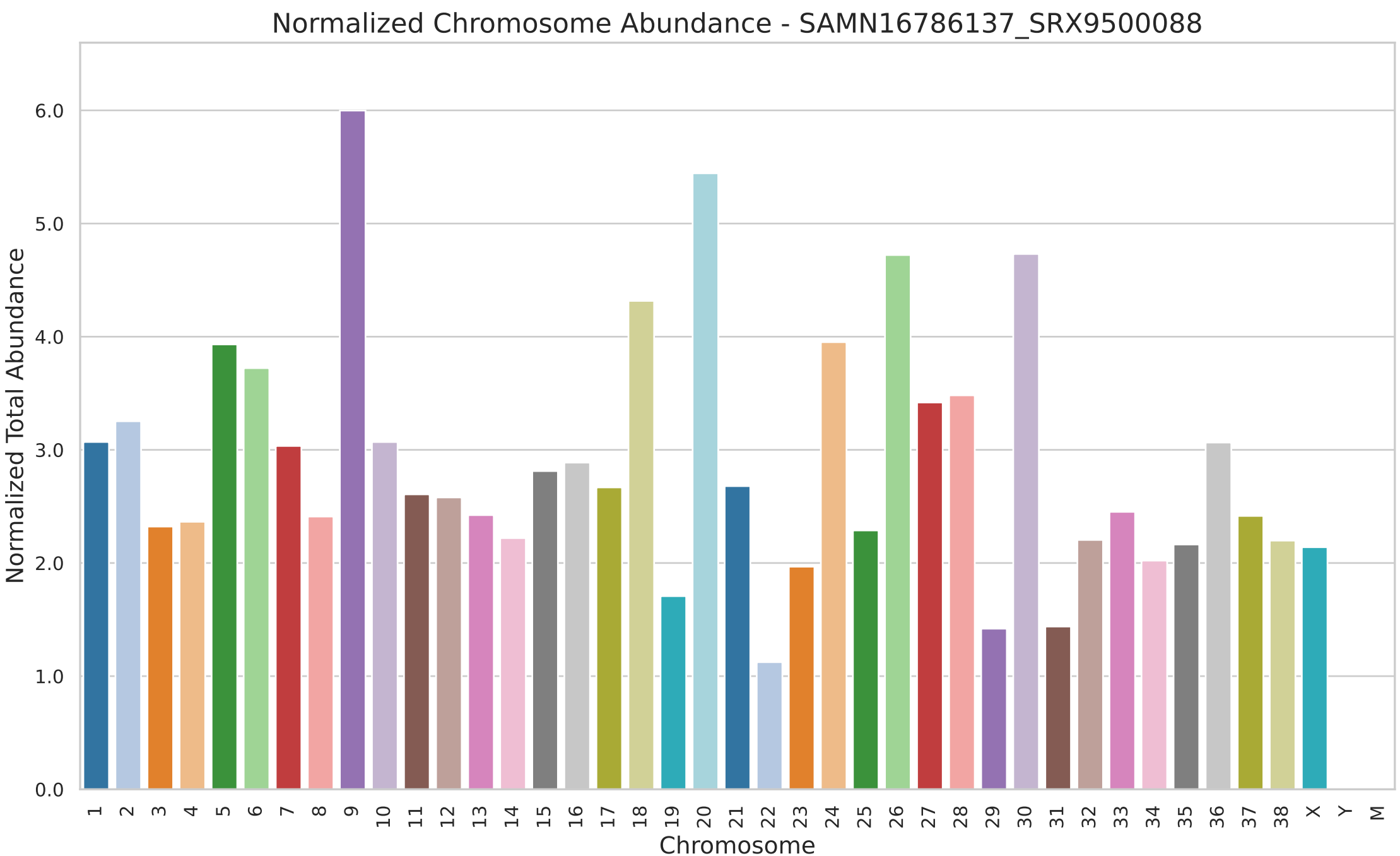

Normalized Chromosome Abundance - SAMN13133799_SRX7061407
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

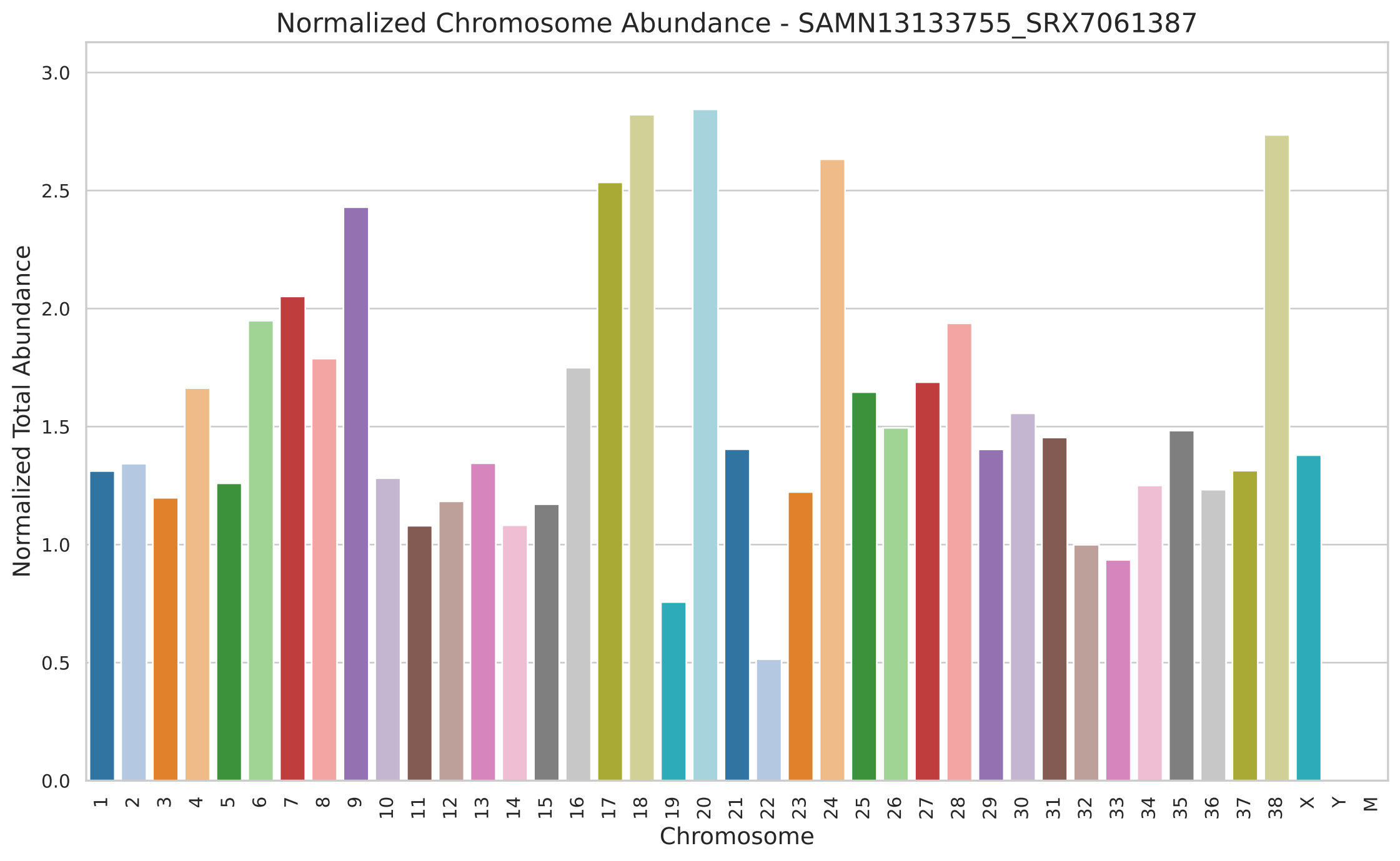

Normalized Chromosome Abundance - SAMN03436935_SRX964058
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

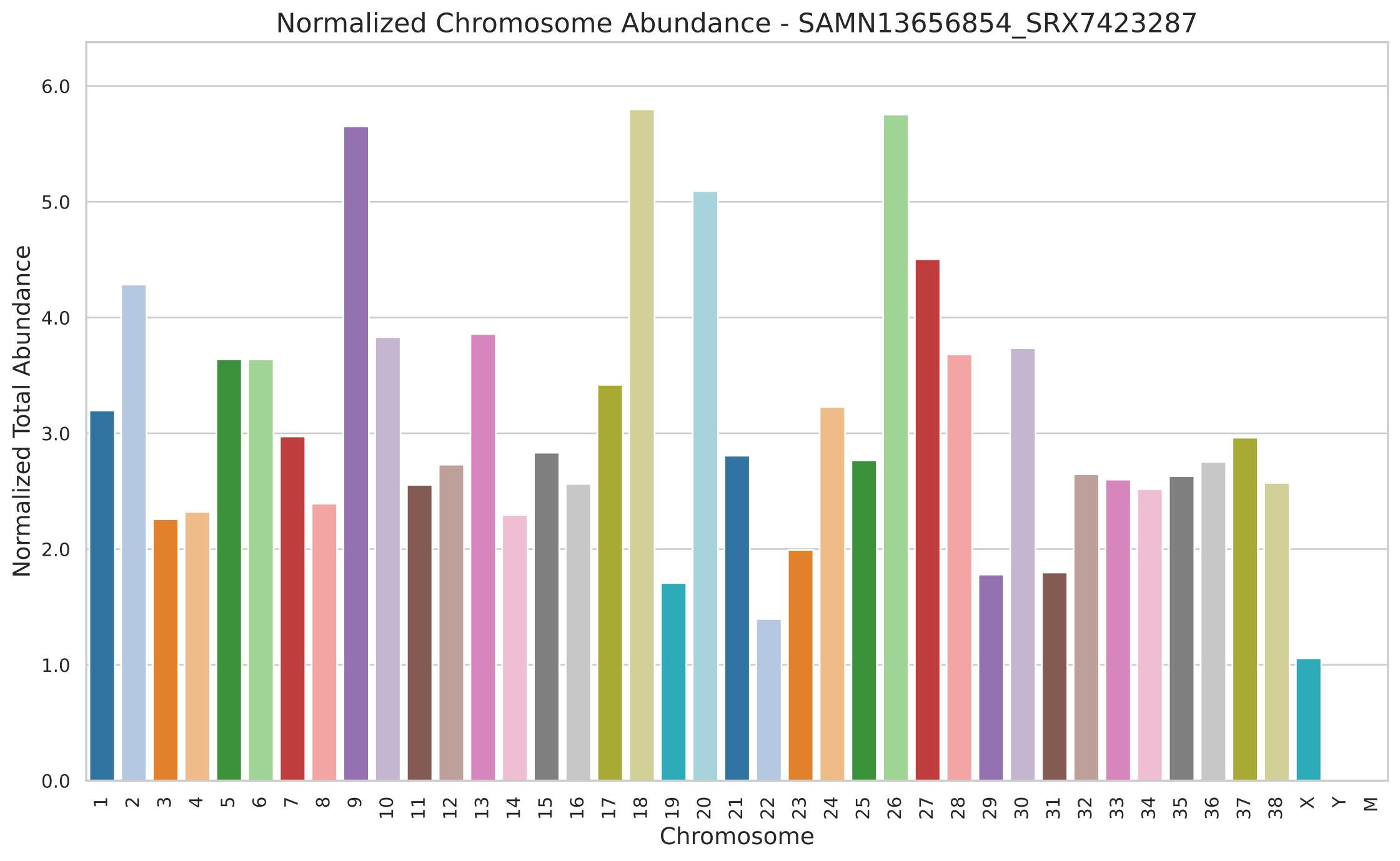

Normalized Chromosome Abundance - SAMN13133755_SRX7061388
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

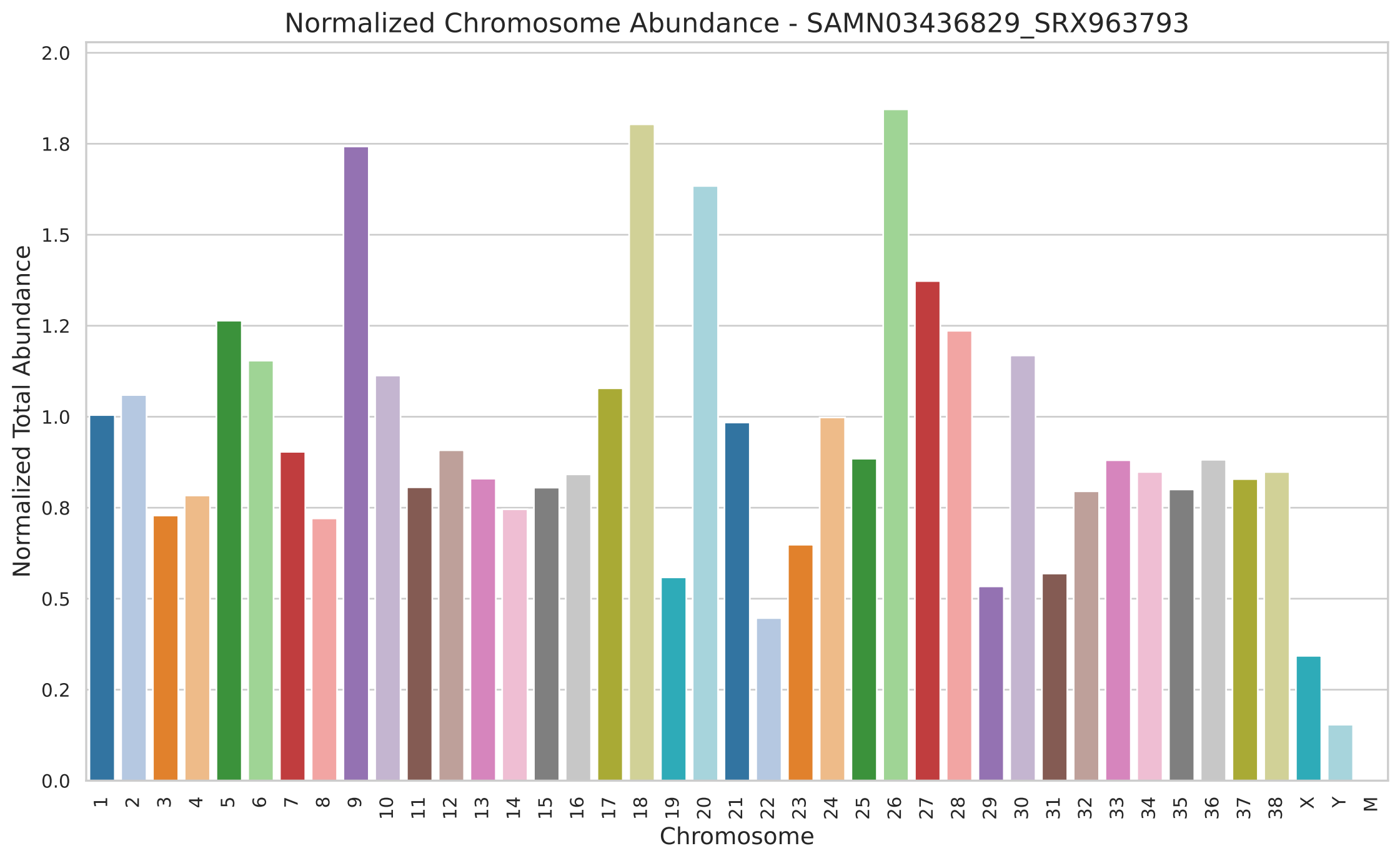

Normalized Chromosome Abundance - SAMN13133813_SRX7061381
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

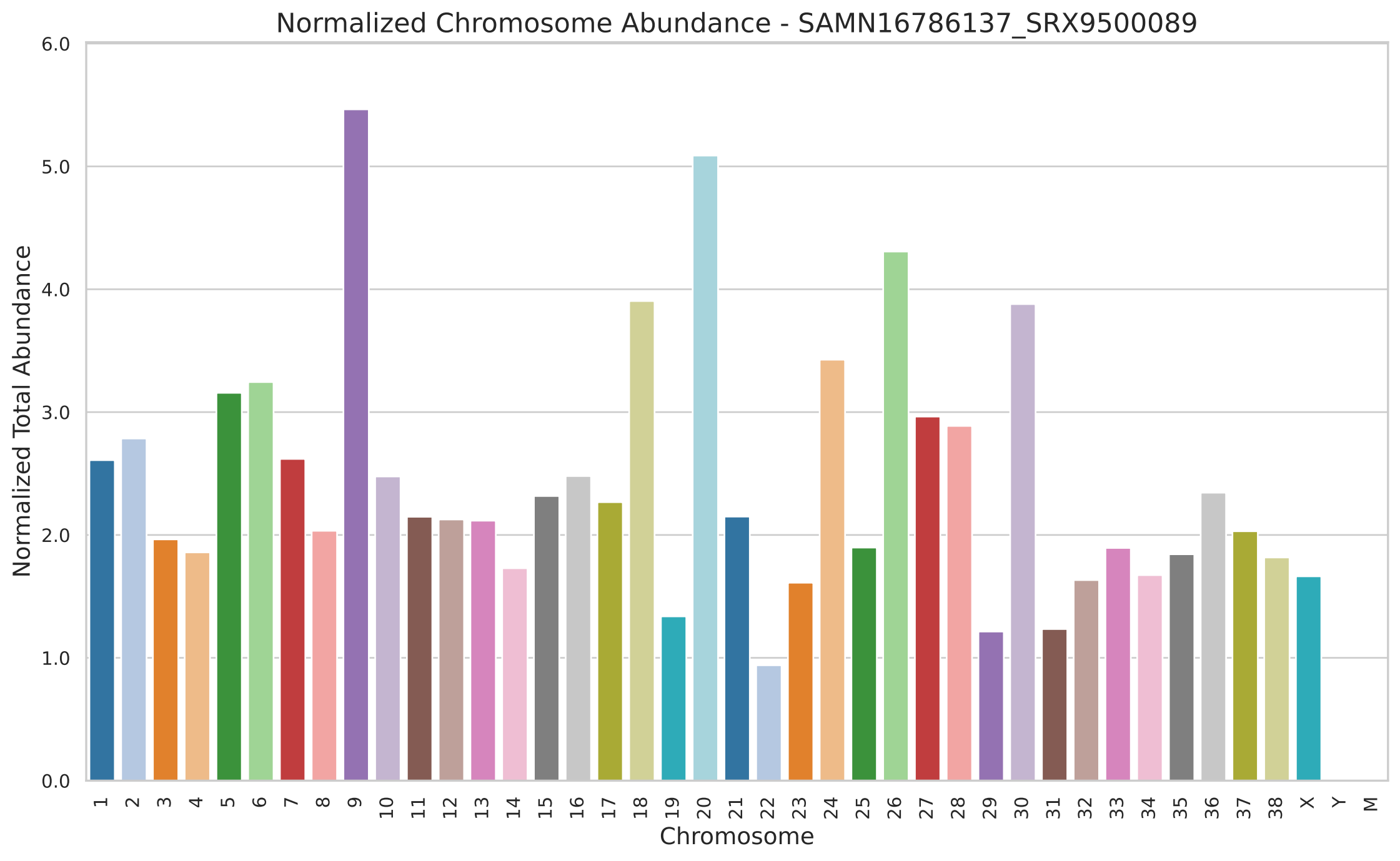

Normalized Chromosome Abundance - SAMN16786163_SRX9500098
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

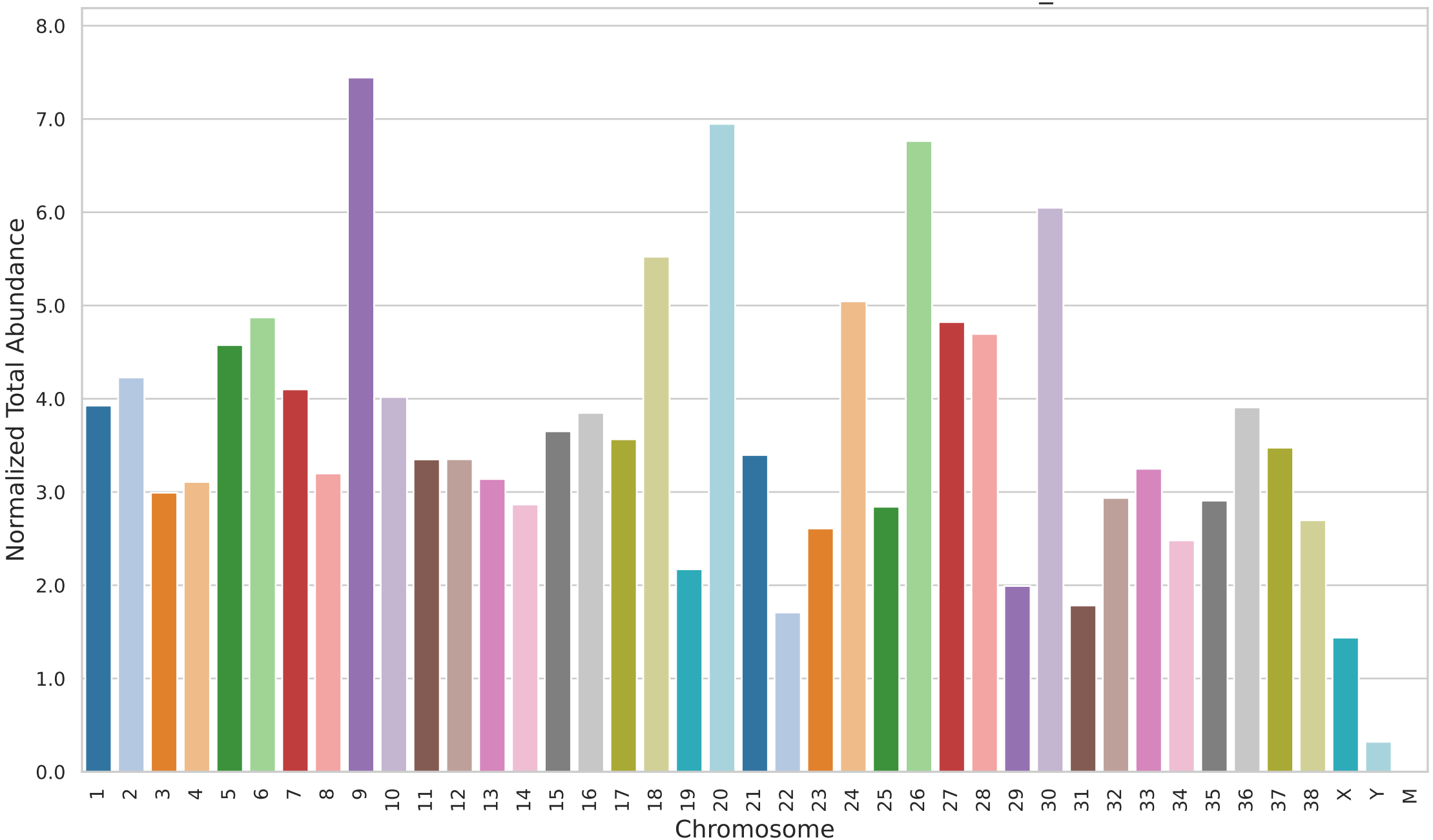

Normalized Chromosome Abundance - SAMN16786137_SRX9500088
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

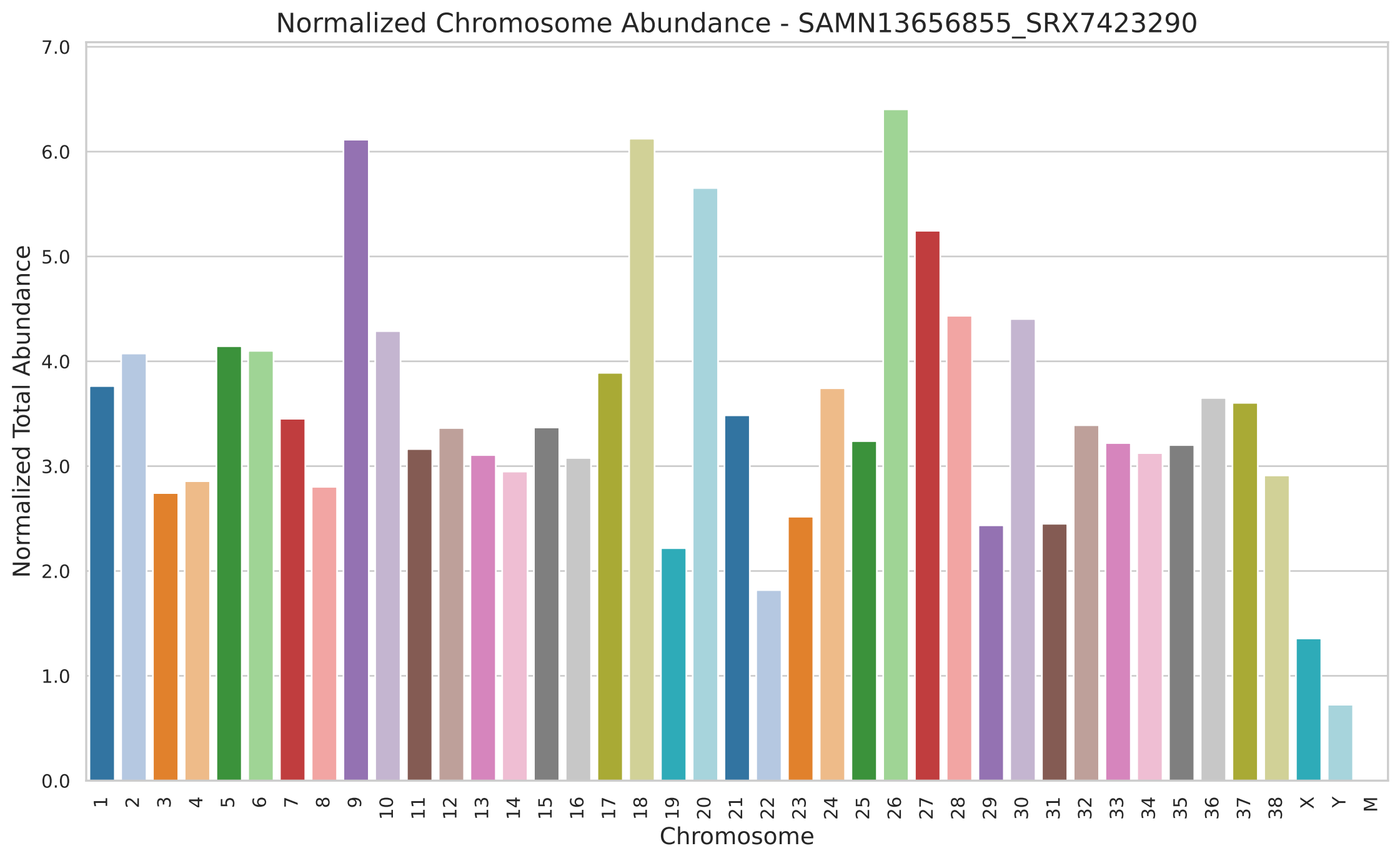

Normalized Chromosome Abundance - SAMN13133755_SRX7061387
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

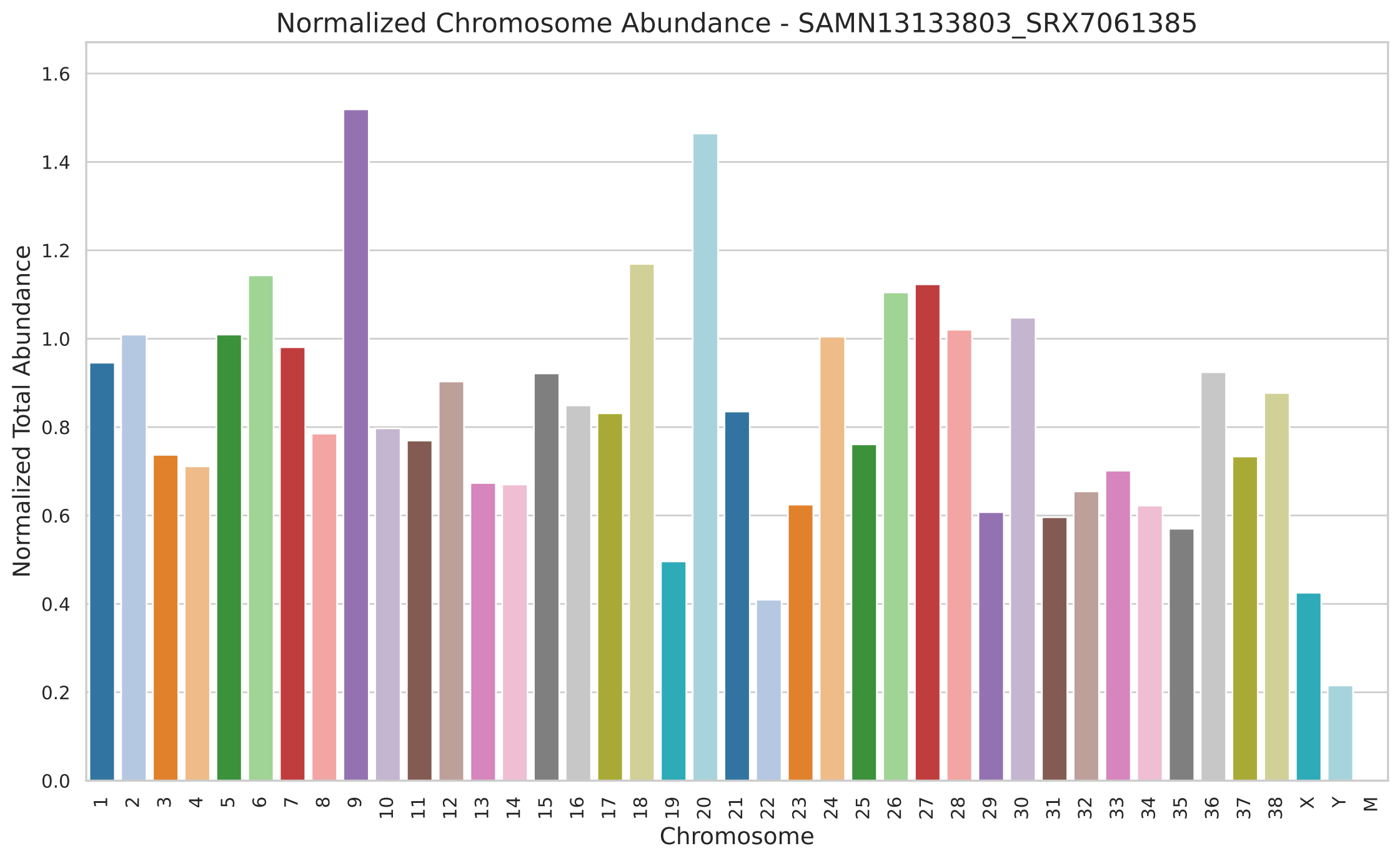

Normalized Chromosome Abundance - SAMN13656854_SRX7423287
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

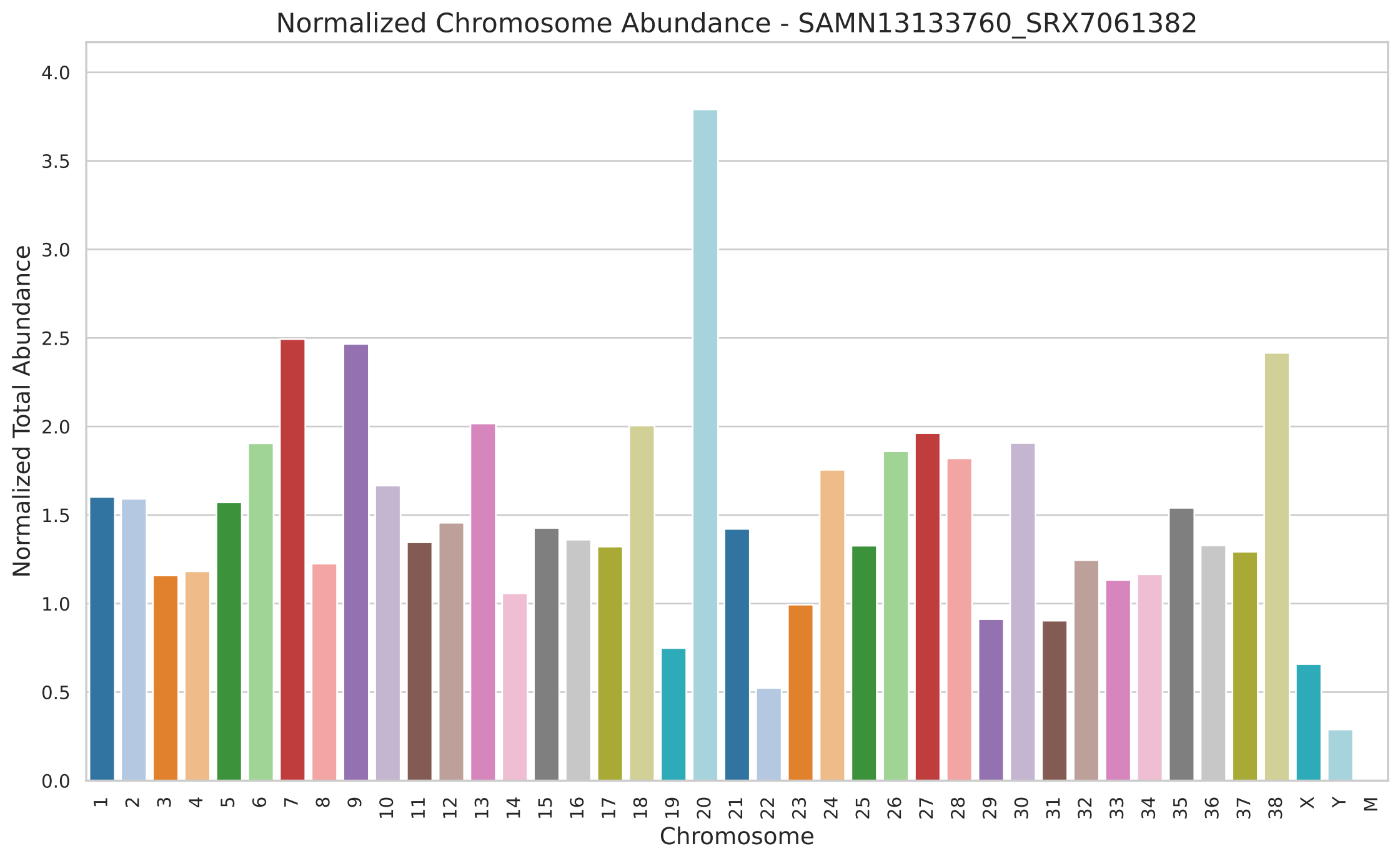

Normalized Chromosome Abundance - SAMN03436829_SRX963793
Normalized Total Abundance
2.0
1.8
1.5
1.2
1.0
0.8
0.5
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

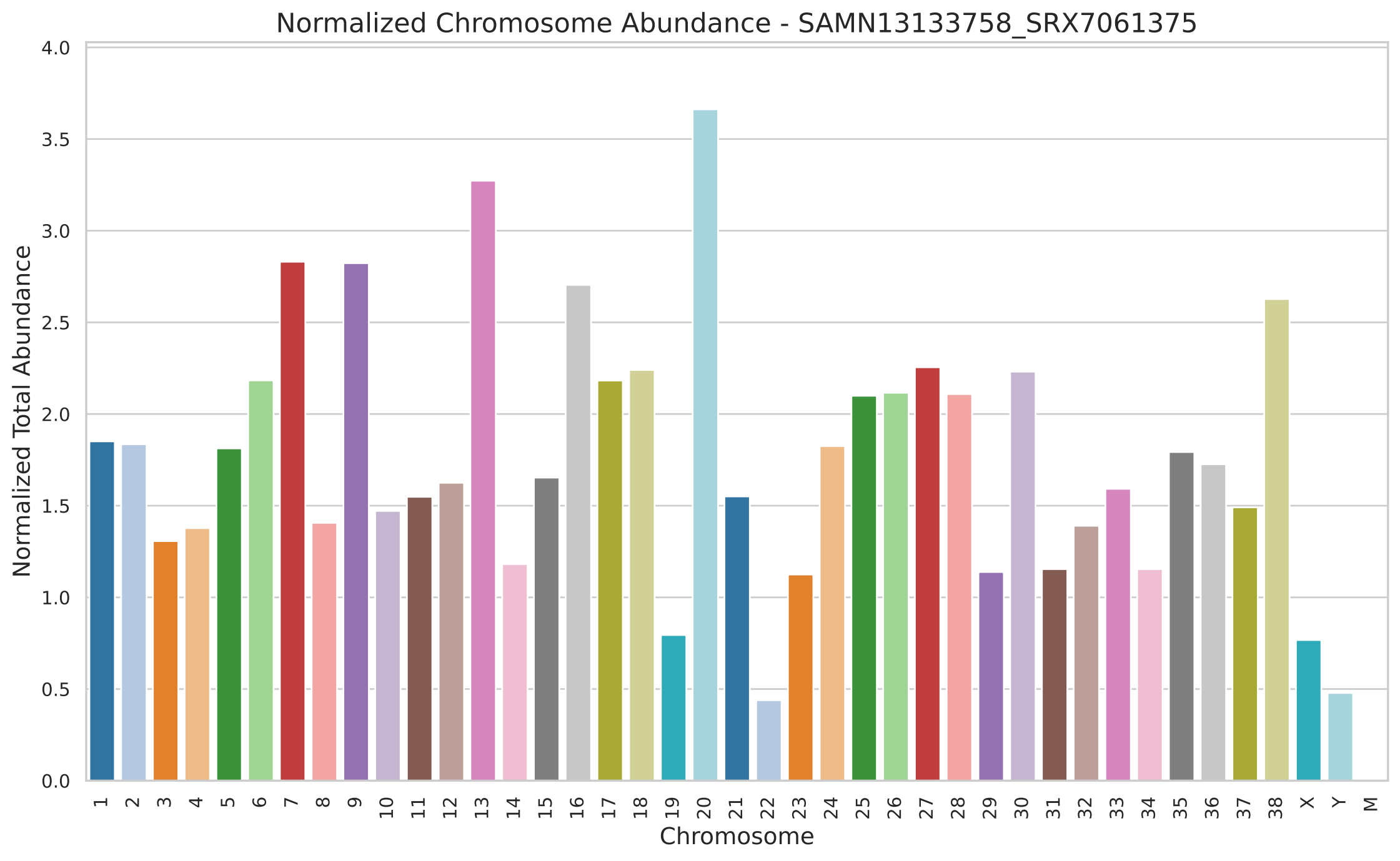

Normalized Chromosome Abundance - SAMN16786137_SRX9500089
Normalized Total Abundance
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

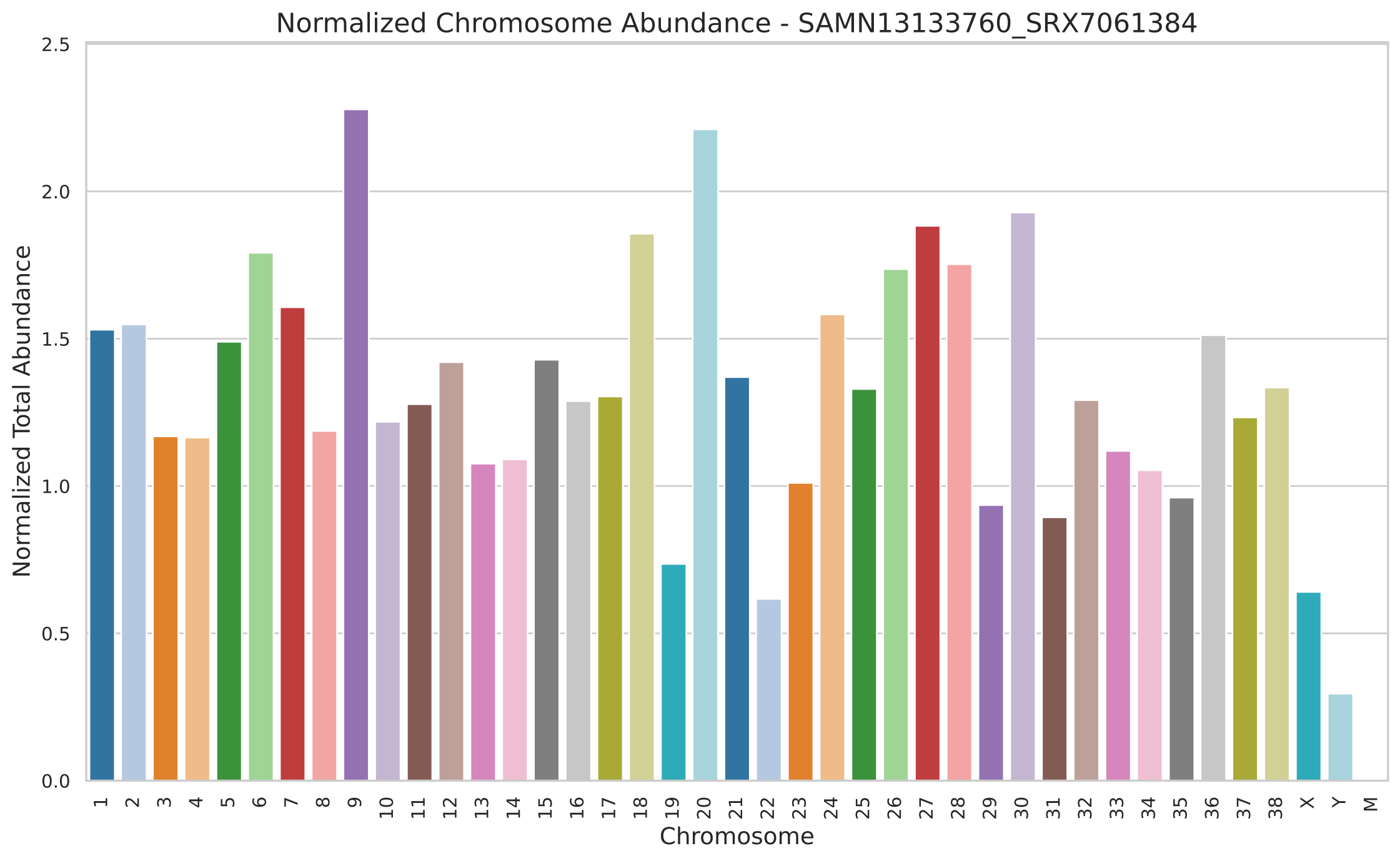

Normalized Chromosome Abundance - SAMN16786175_SRX9500104
Normalized Total Abundance
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 X Y M
Chromosome

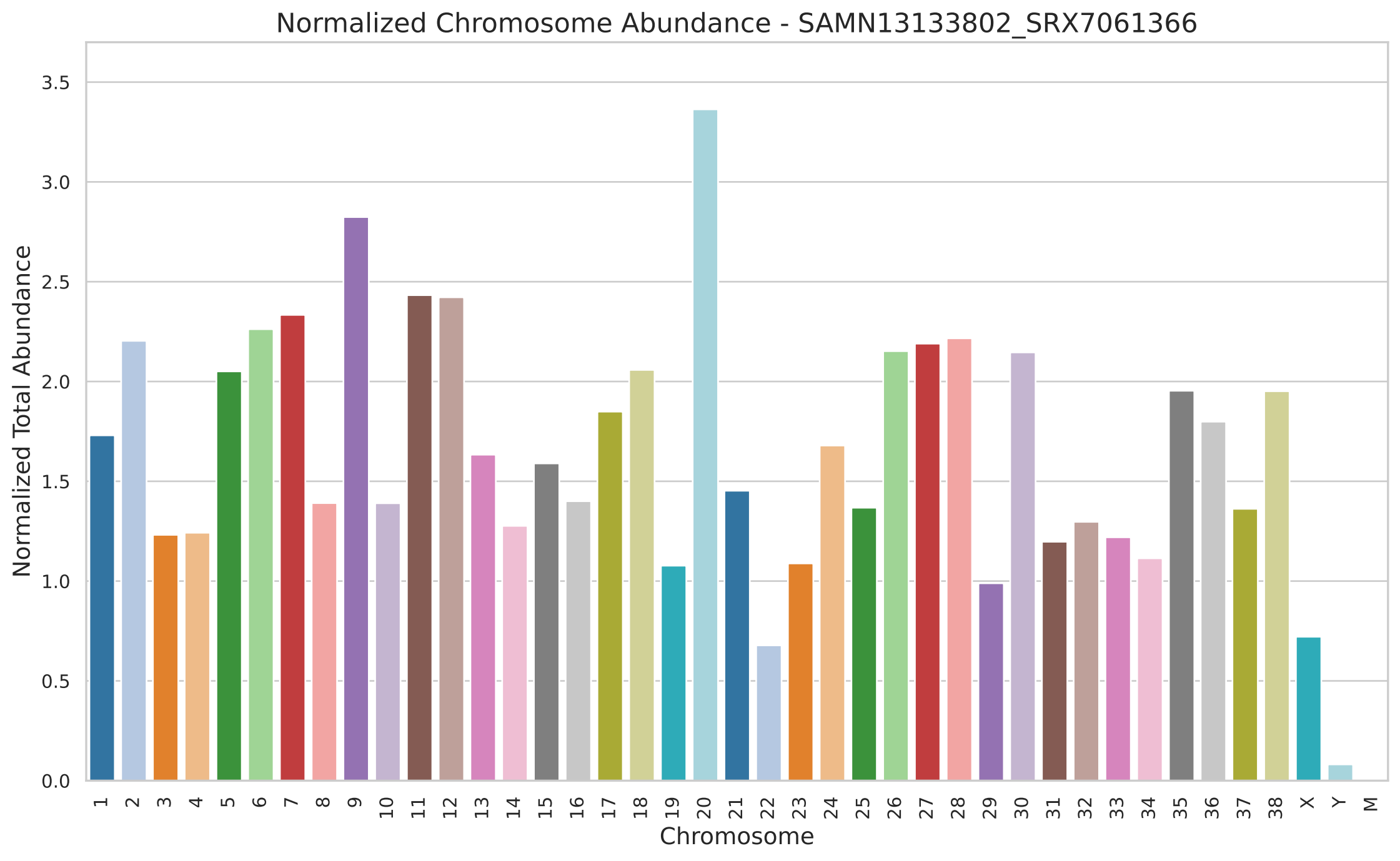

Normalized Chromosome Abundance - SAMN13656855_SRX7423290
Normalized Total Abundance
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

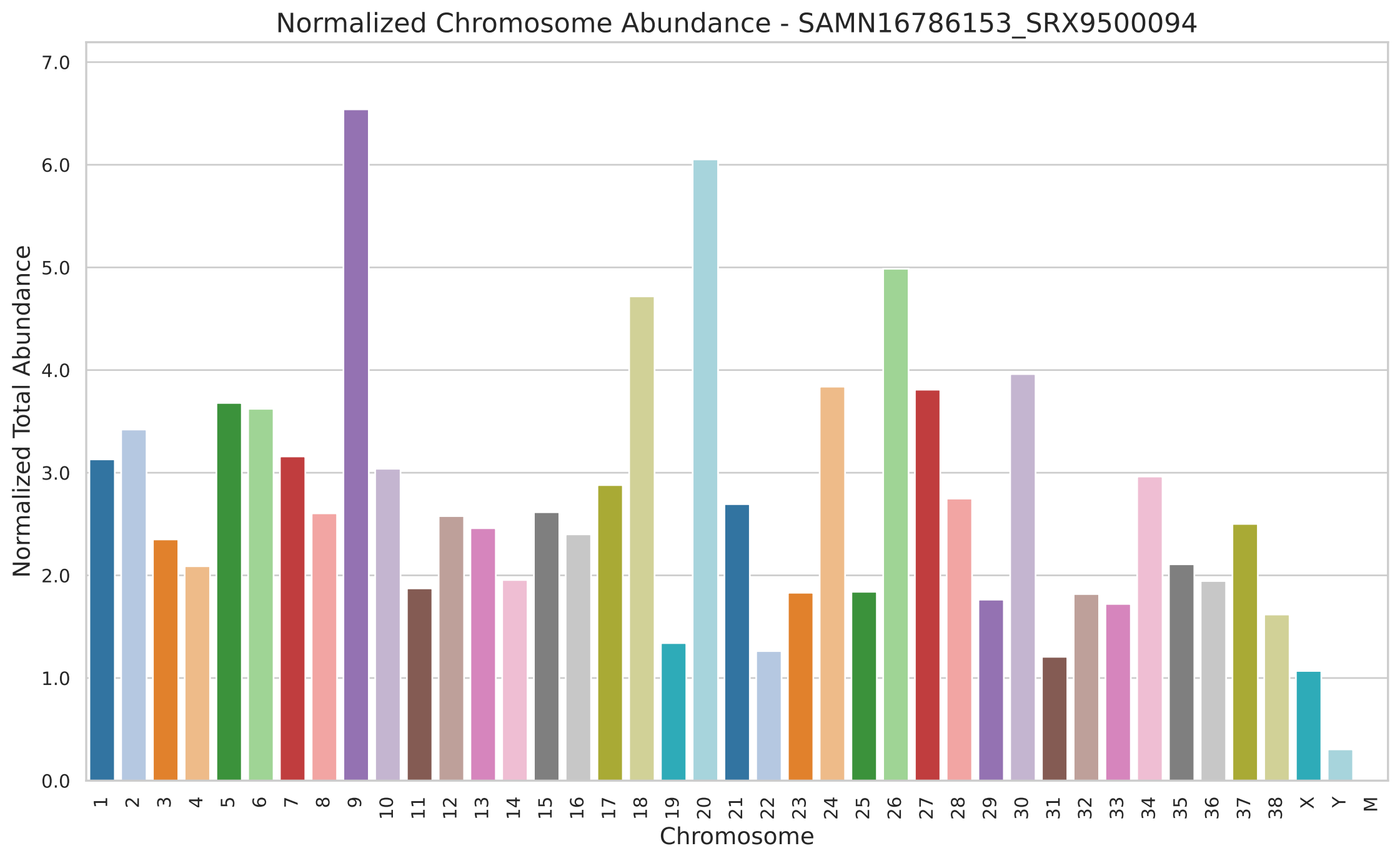

Normalized Chromosome Abundance - SAMN13133803_SRX7061385
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

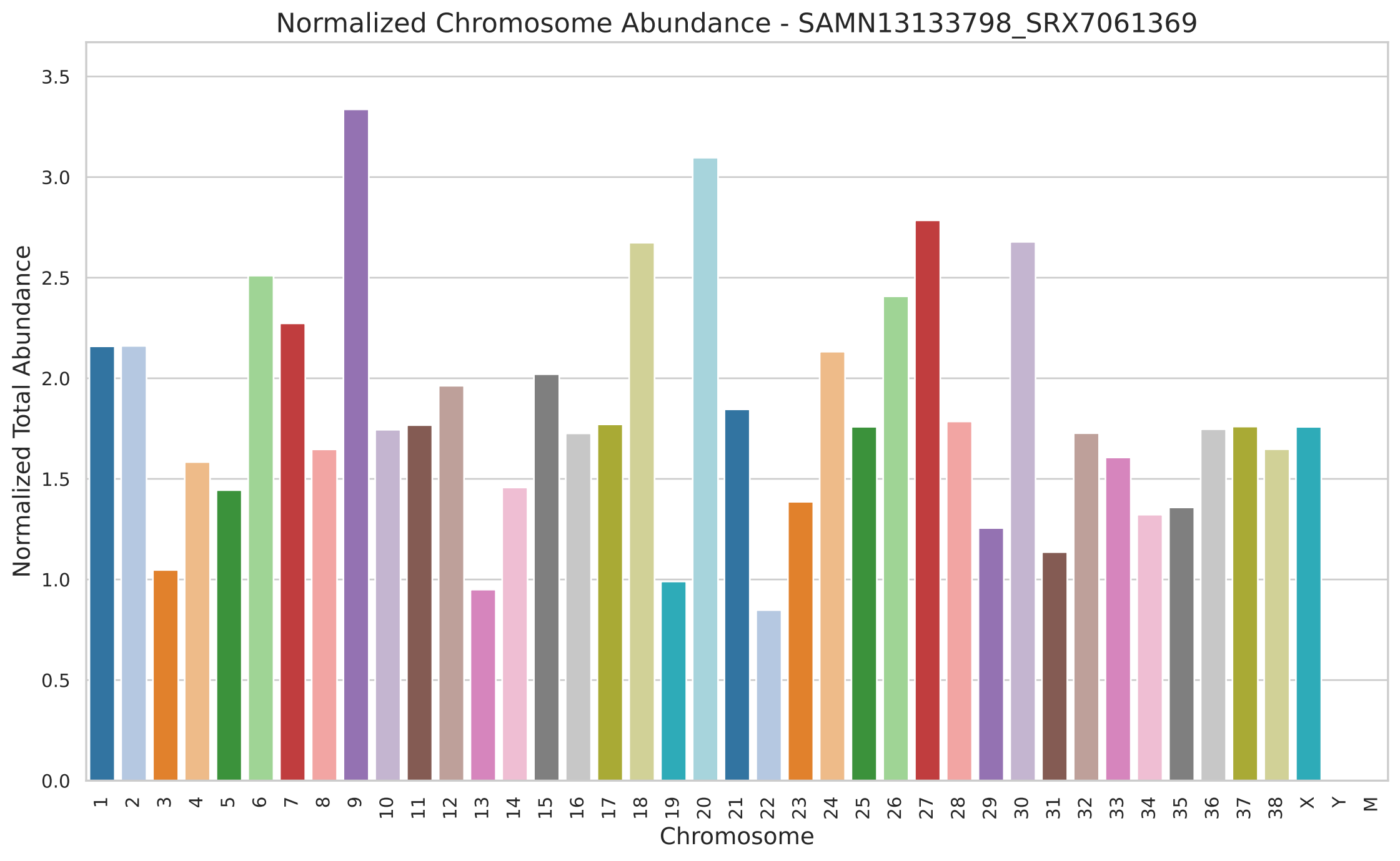

Normalized Chromosome Abundance - SAMN13133760_SRX7061382
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

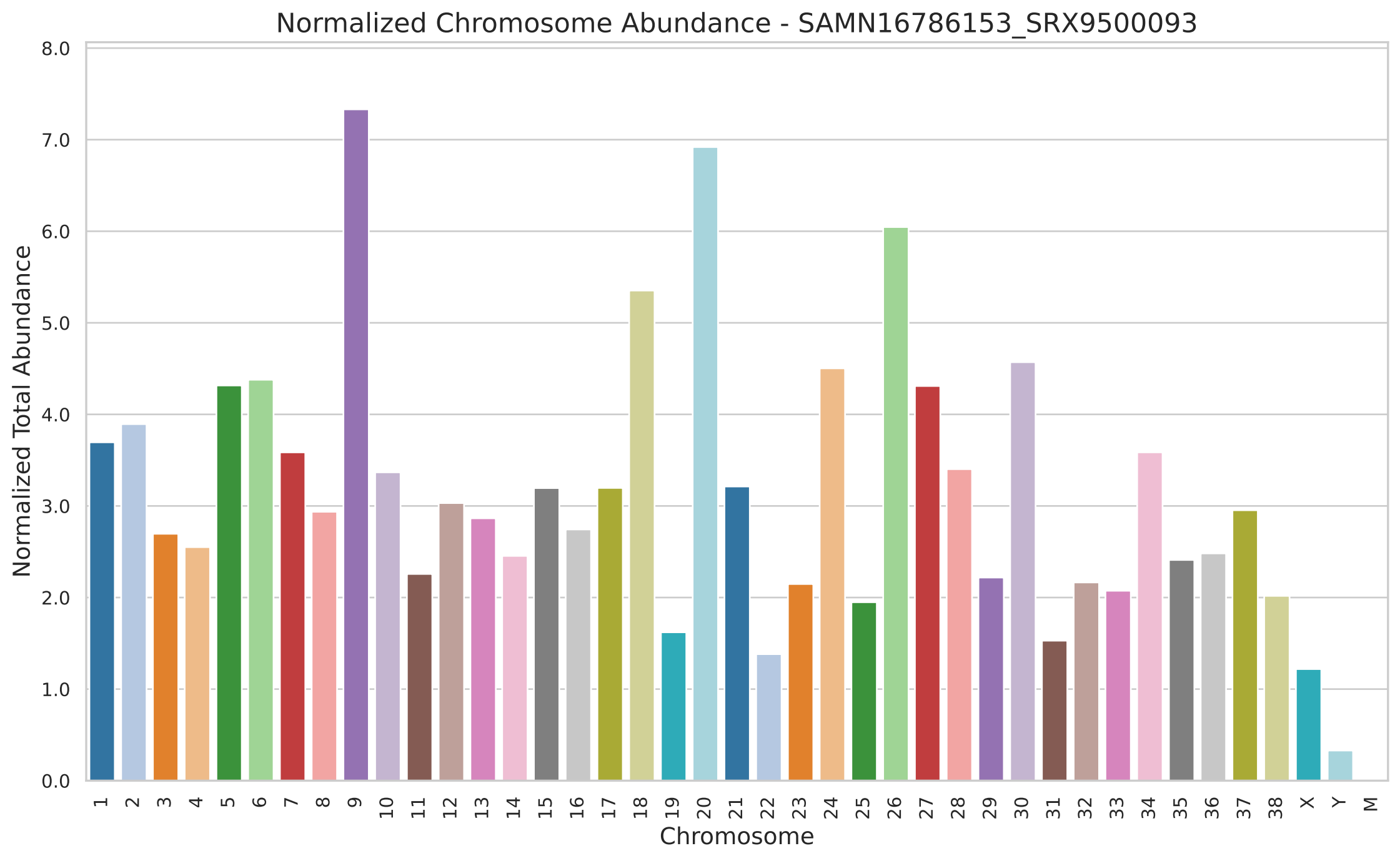

Normalized Chromosome Abundance - SAMN13133758_SRX7061375
Normalized Total Abundance
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

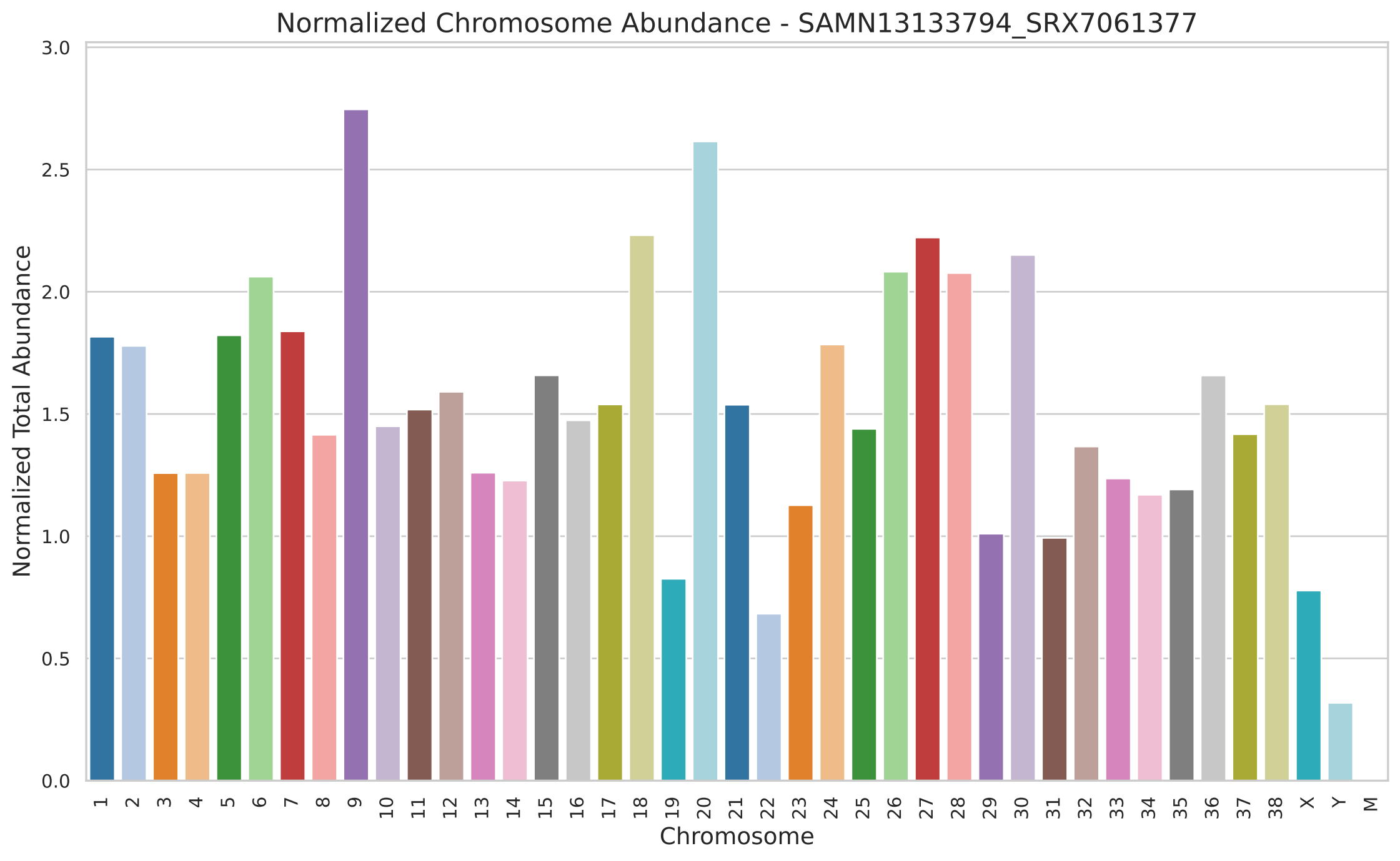

Normalized Chromosome Abundance - SAMN13133760_SRX7061384
Normalized Total Abundance
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

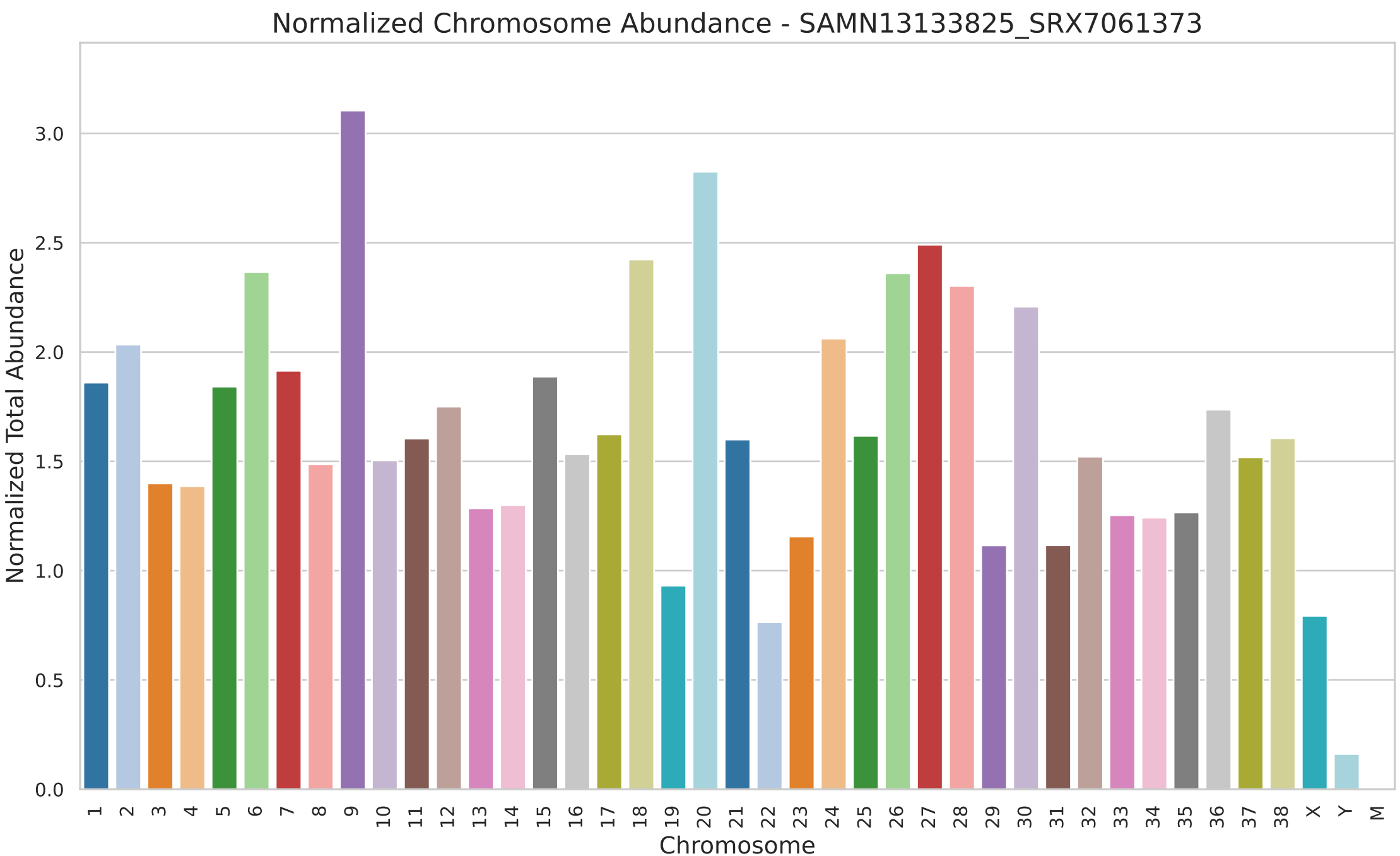

Normalized Chromosome Abundance - SAMN13133802_SRX7061366
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

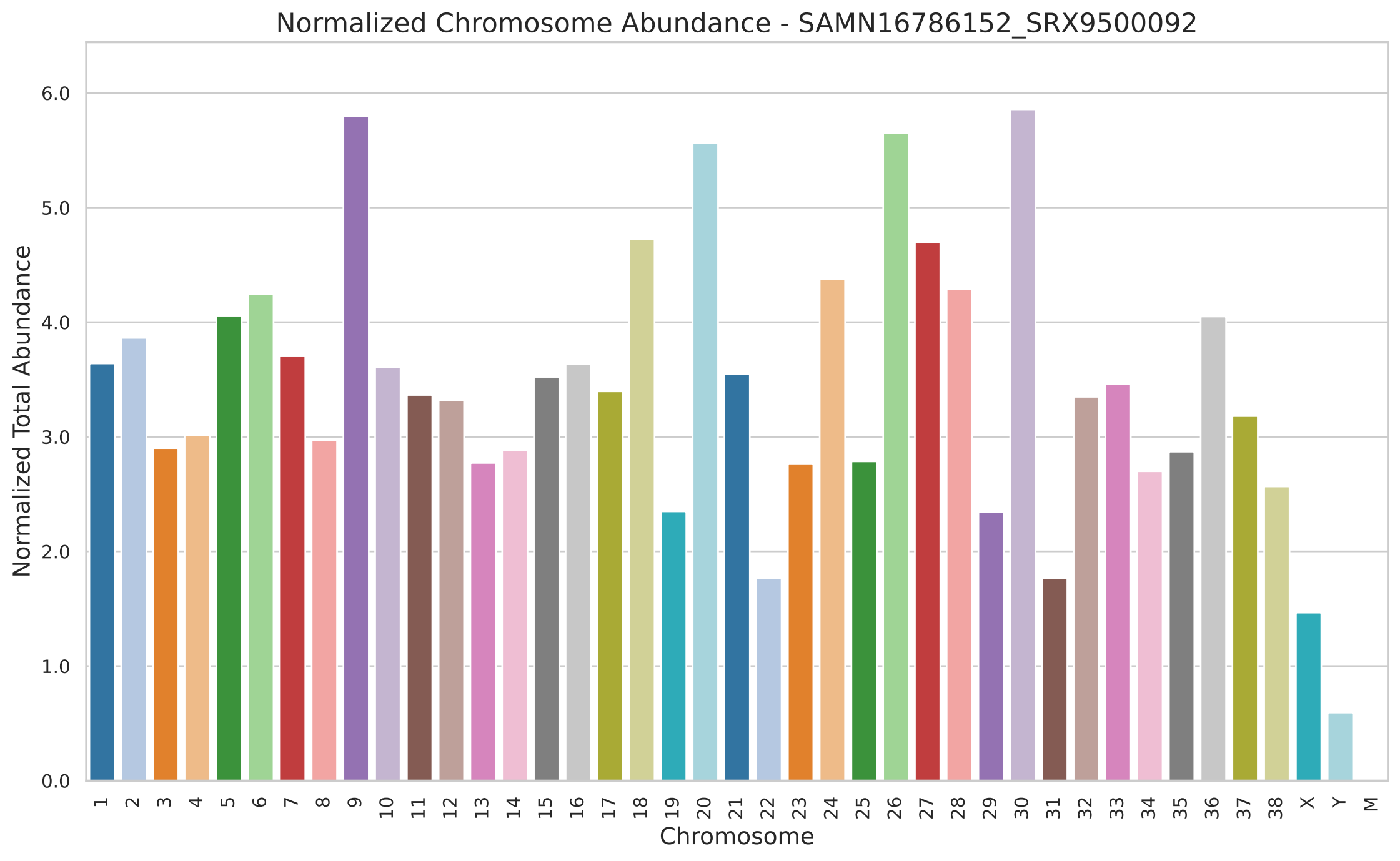

Normalized Chromosome Abundance - SAMN16786153_SRX9500094
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

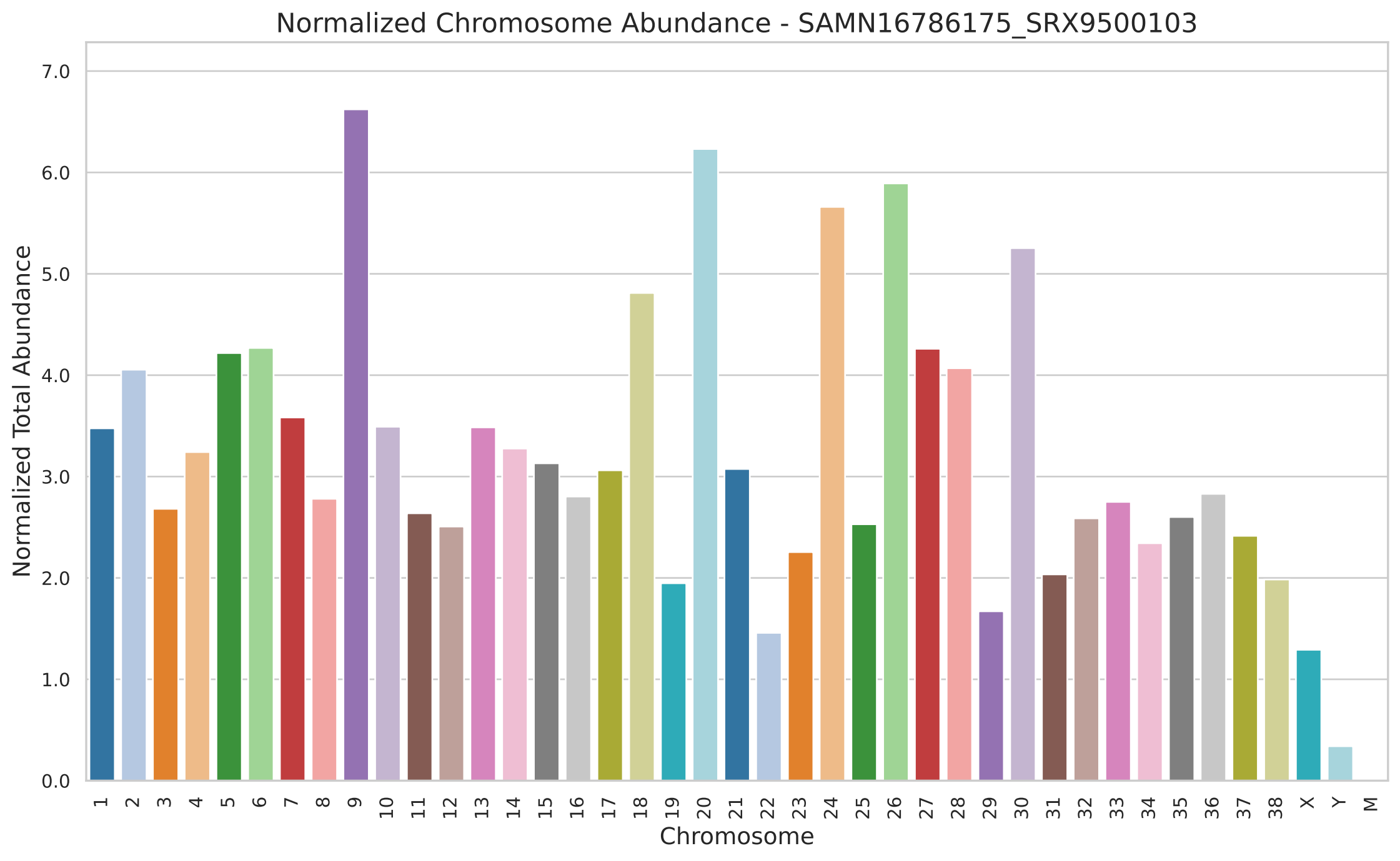

Normalized Chromosome Abundance - SAMN13133798_SRX7061369
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

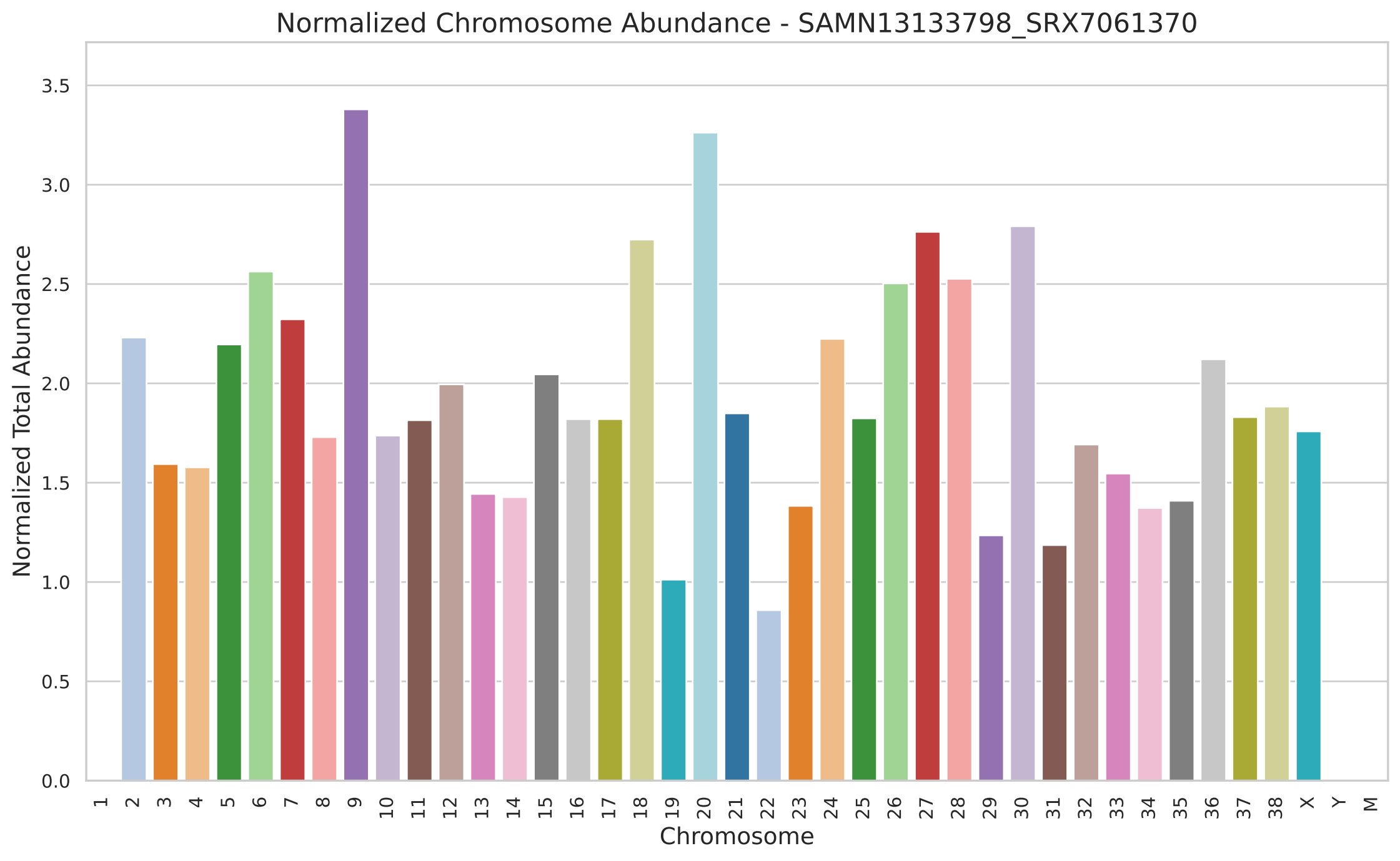

Normalized Chromosome Abundance - SAMN16786153_SRX9500093
Normalized Total Abundance
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

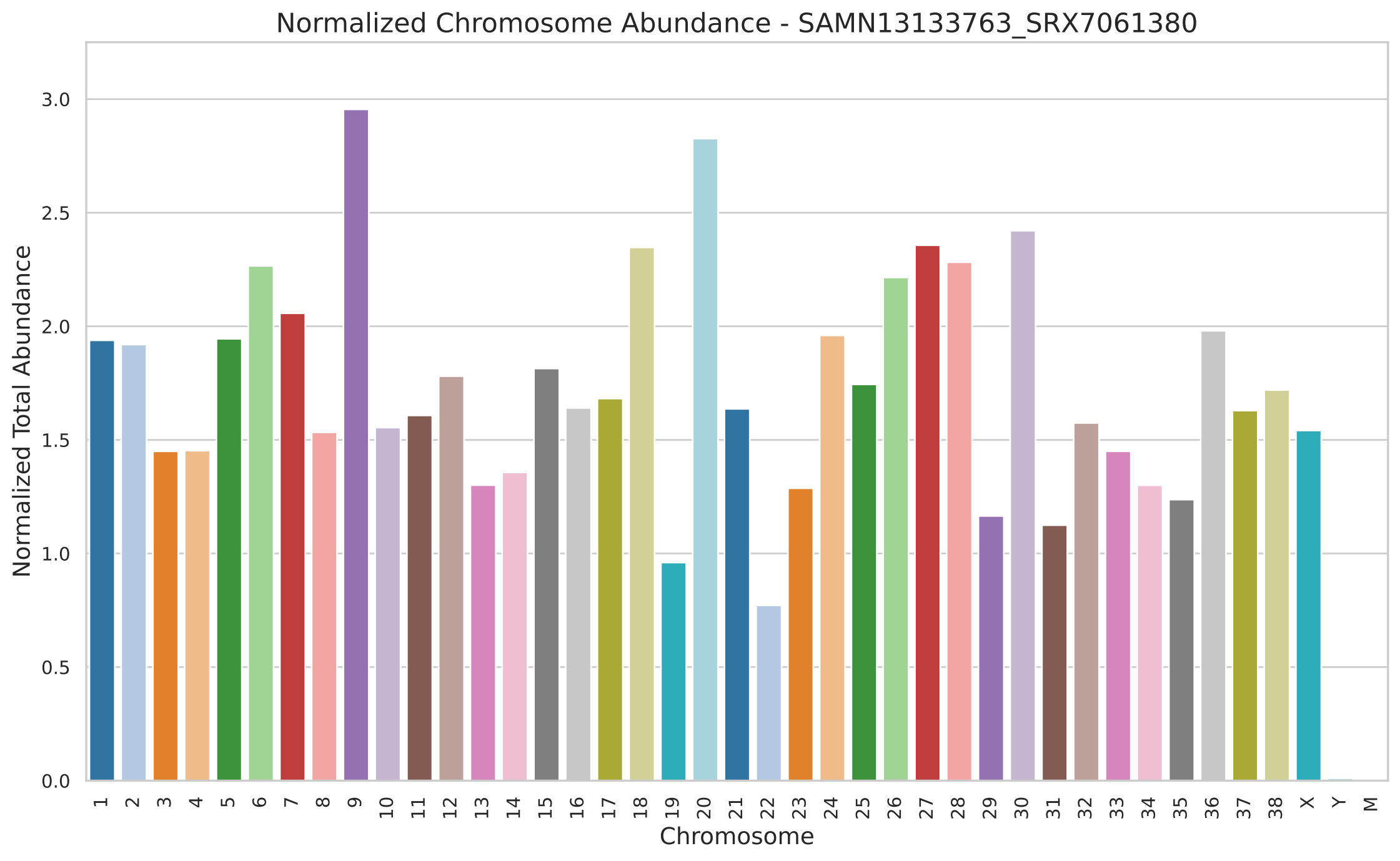

Normalized Chromosome Abundance - SAMN13133794_SRX7061377
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

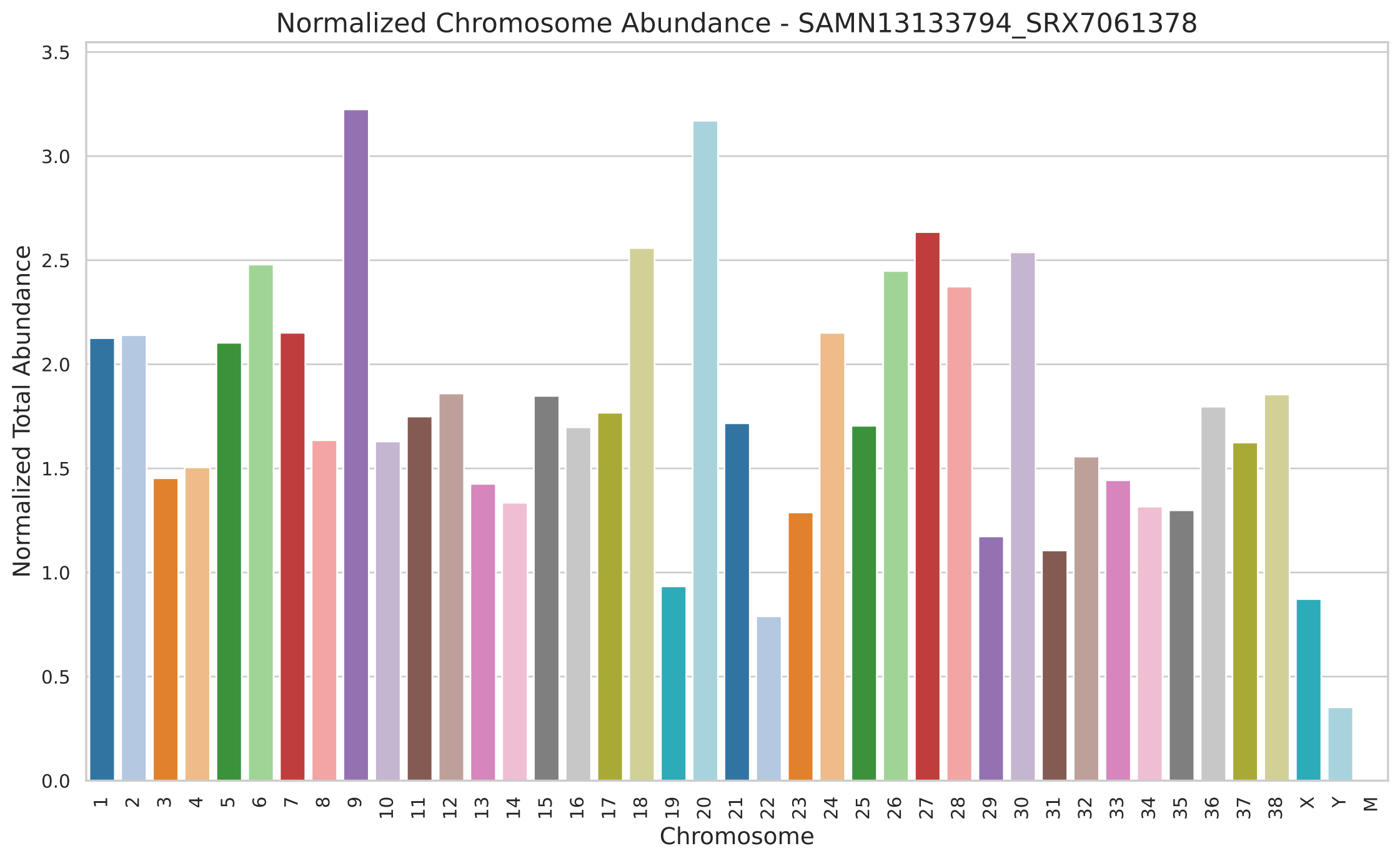

Normalized Chromosome Abundance - SAMN13133825_SRX7061373
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

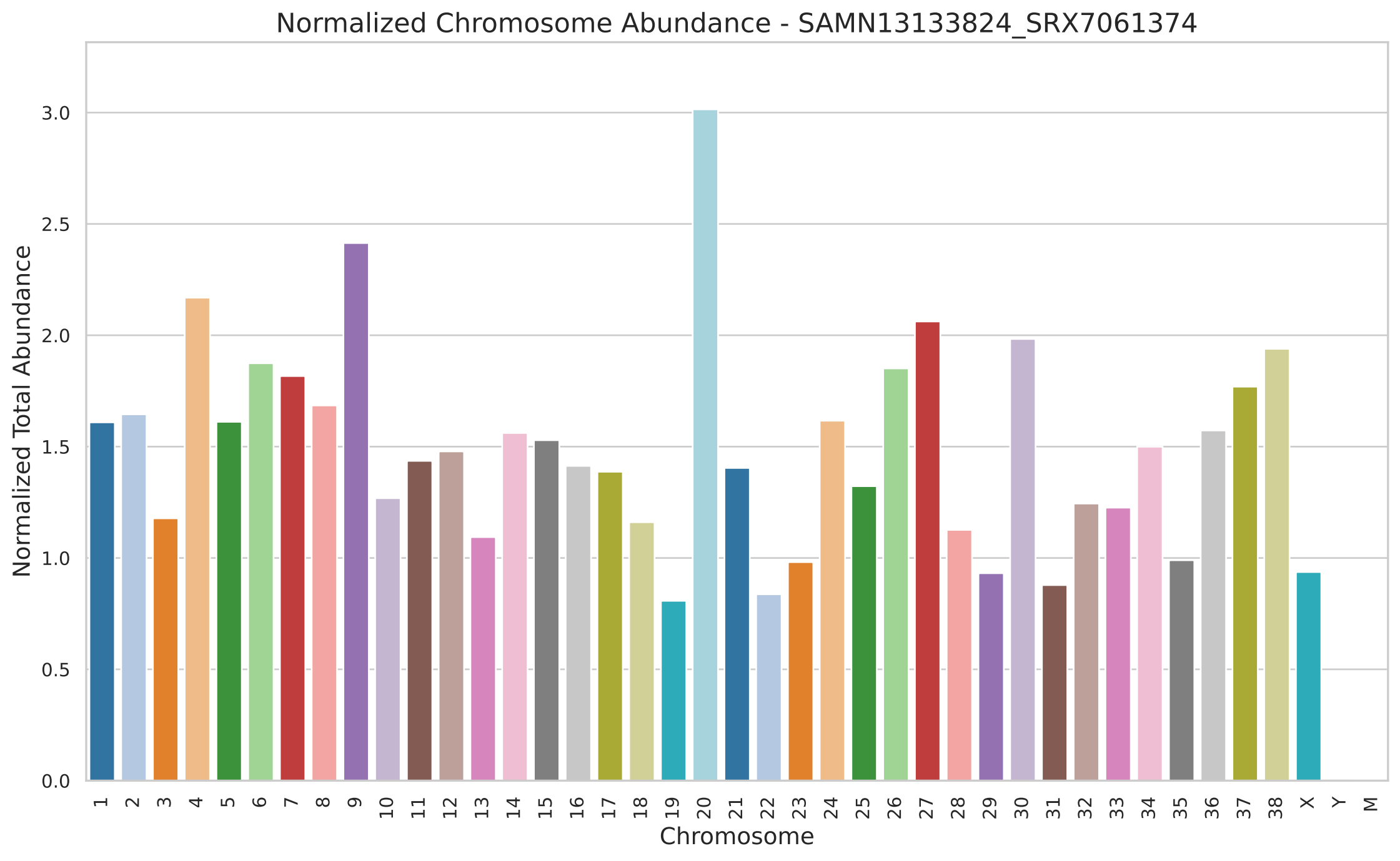

Normalized Chromosome Abundance - SAMN16786152_SRX9500092
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

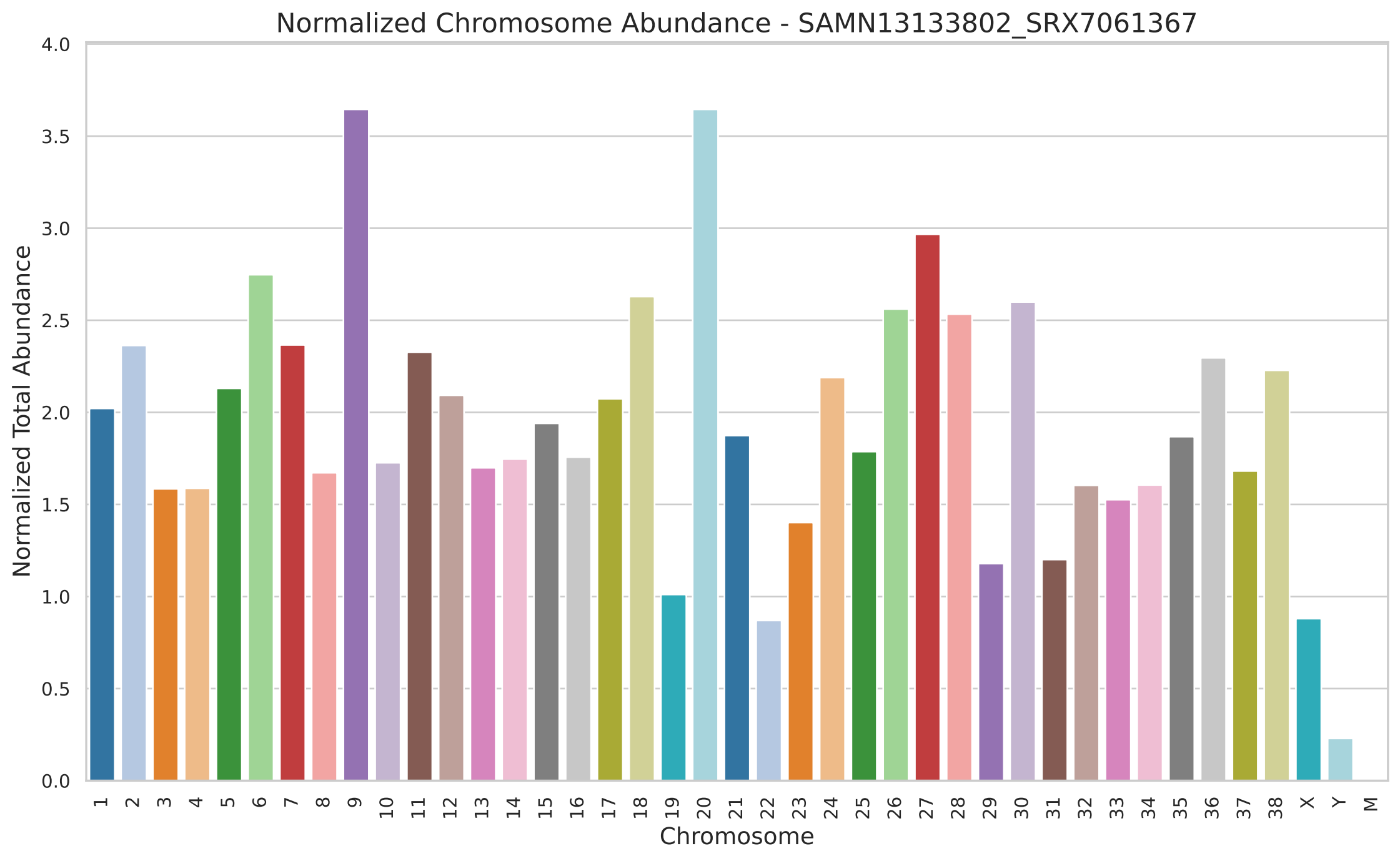

Normalized Chromosome Abundance - SAMN16786175_SRX9500103
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

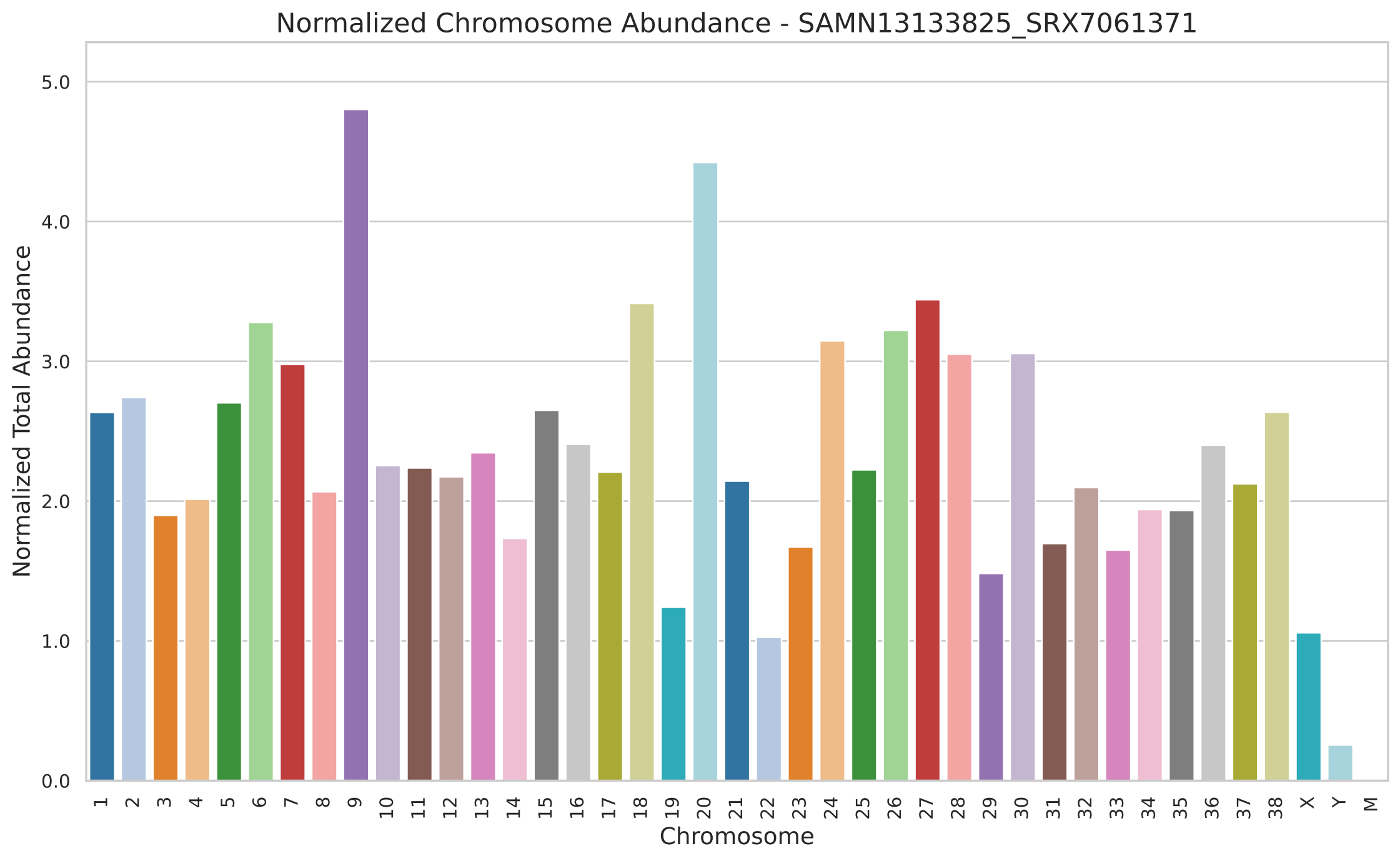

Normalized Chromosome Abundance - SAMN13133798_SRX7061370
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

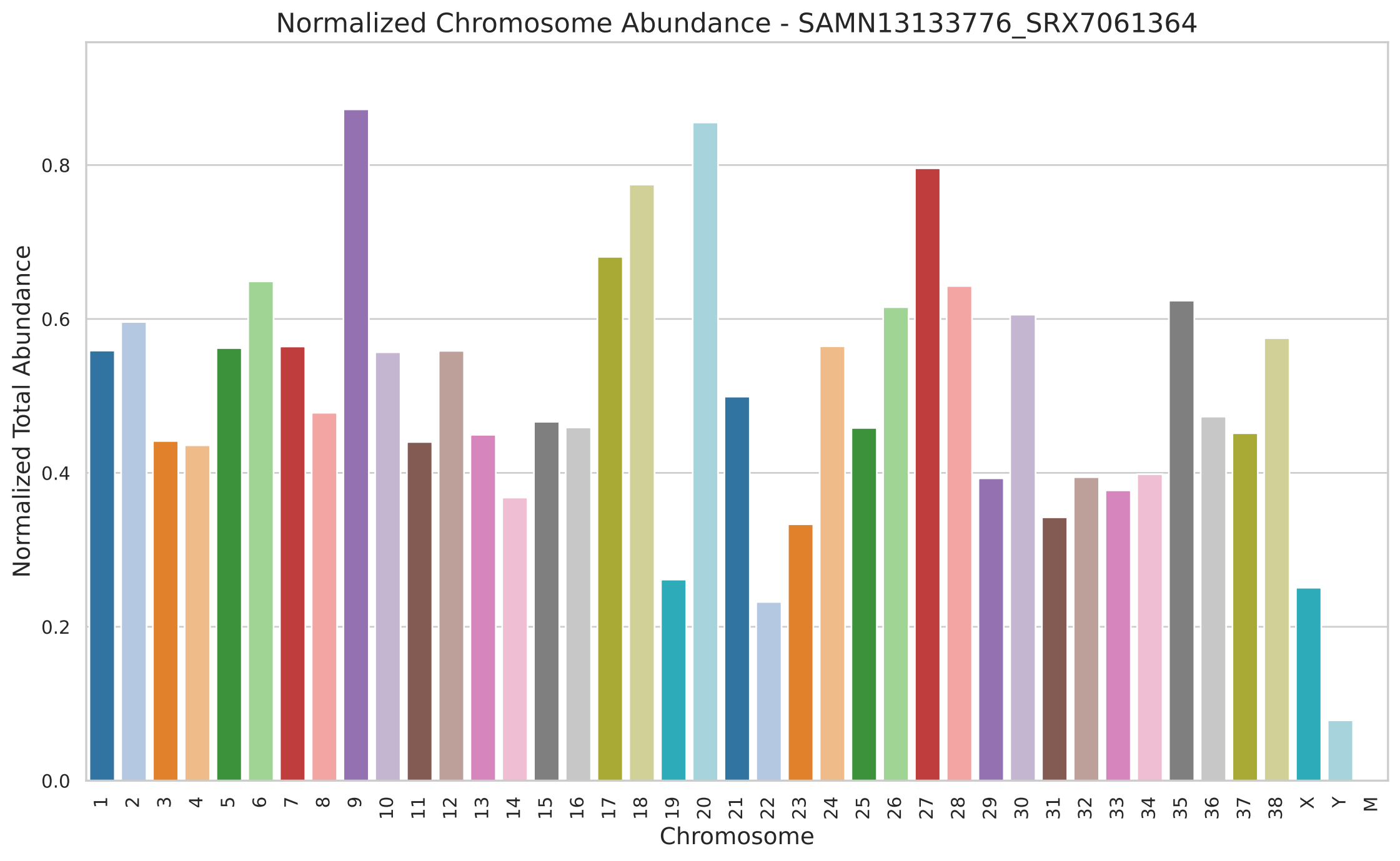

Normalized Chromosome Abundance - SAMN13133763_SRX7061380
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

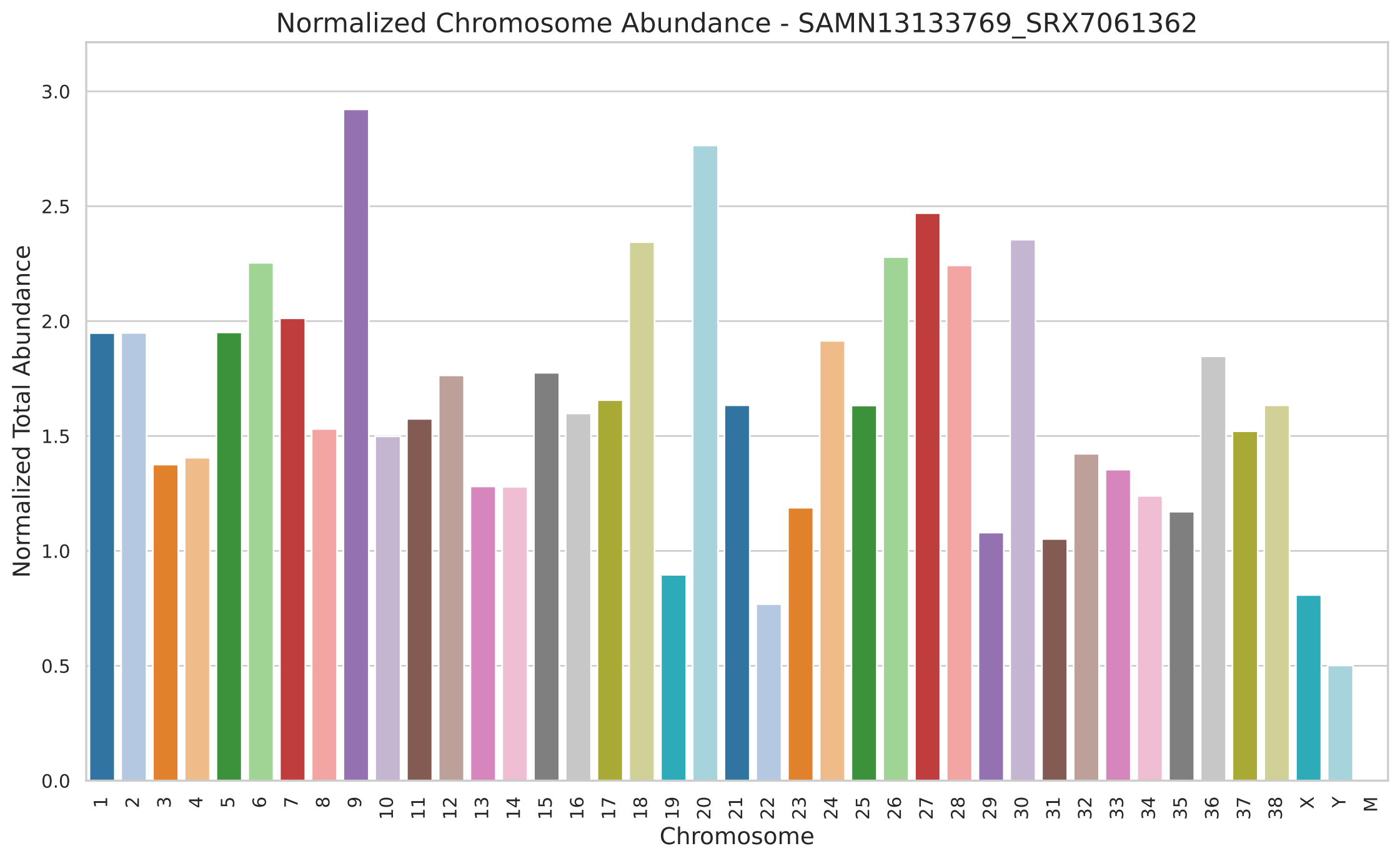

Normalized Chromosome Abundance - SAMN13133794_SRX7061378
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

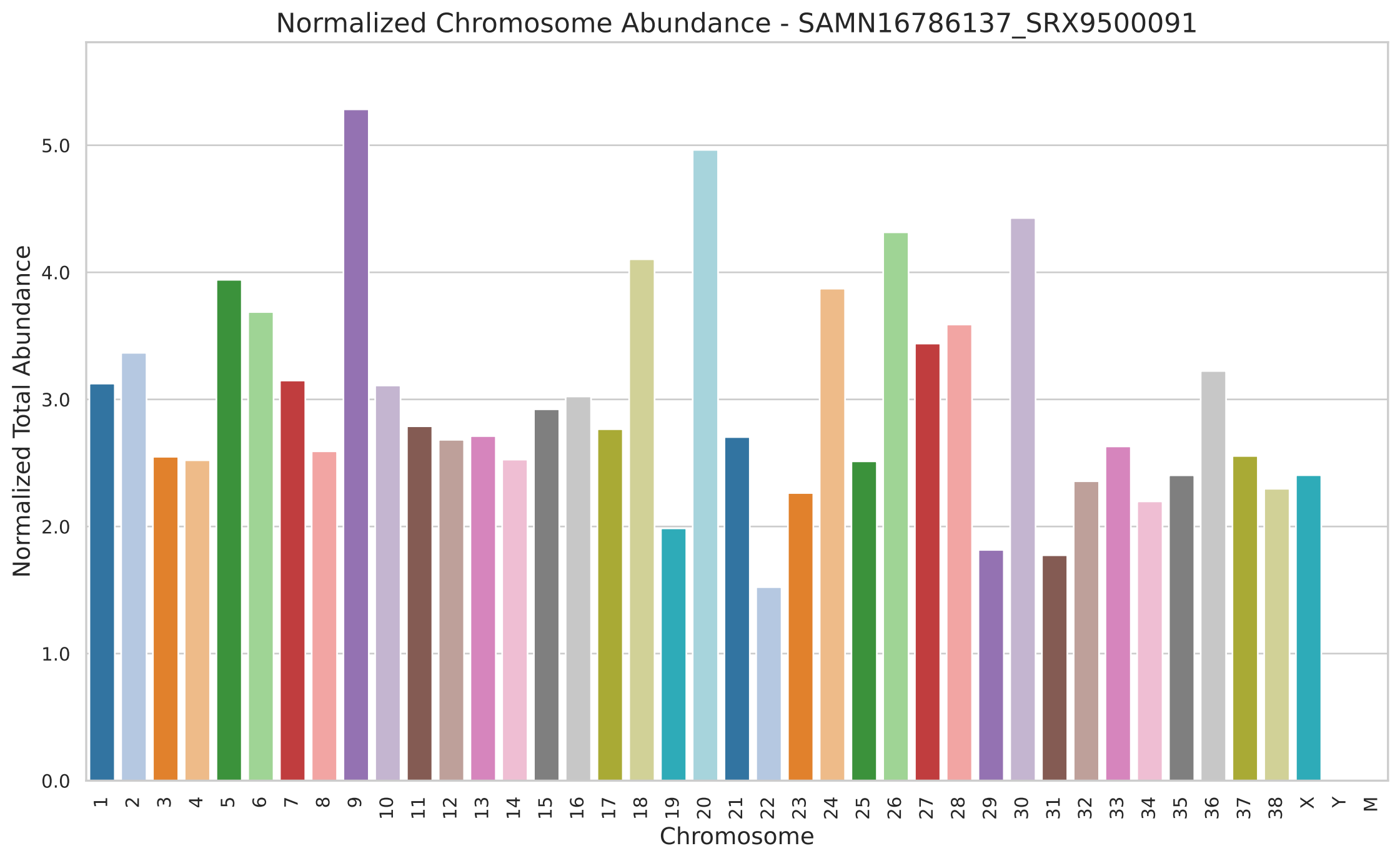

Normalized Chromosome Abundance - SAMN13133824_SRX7061374
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

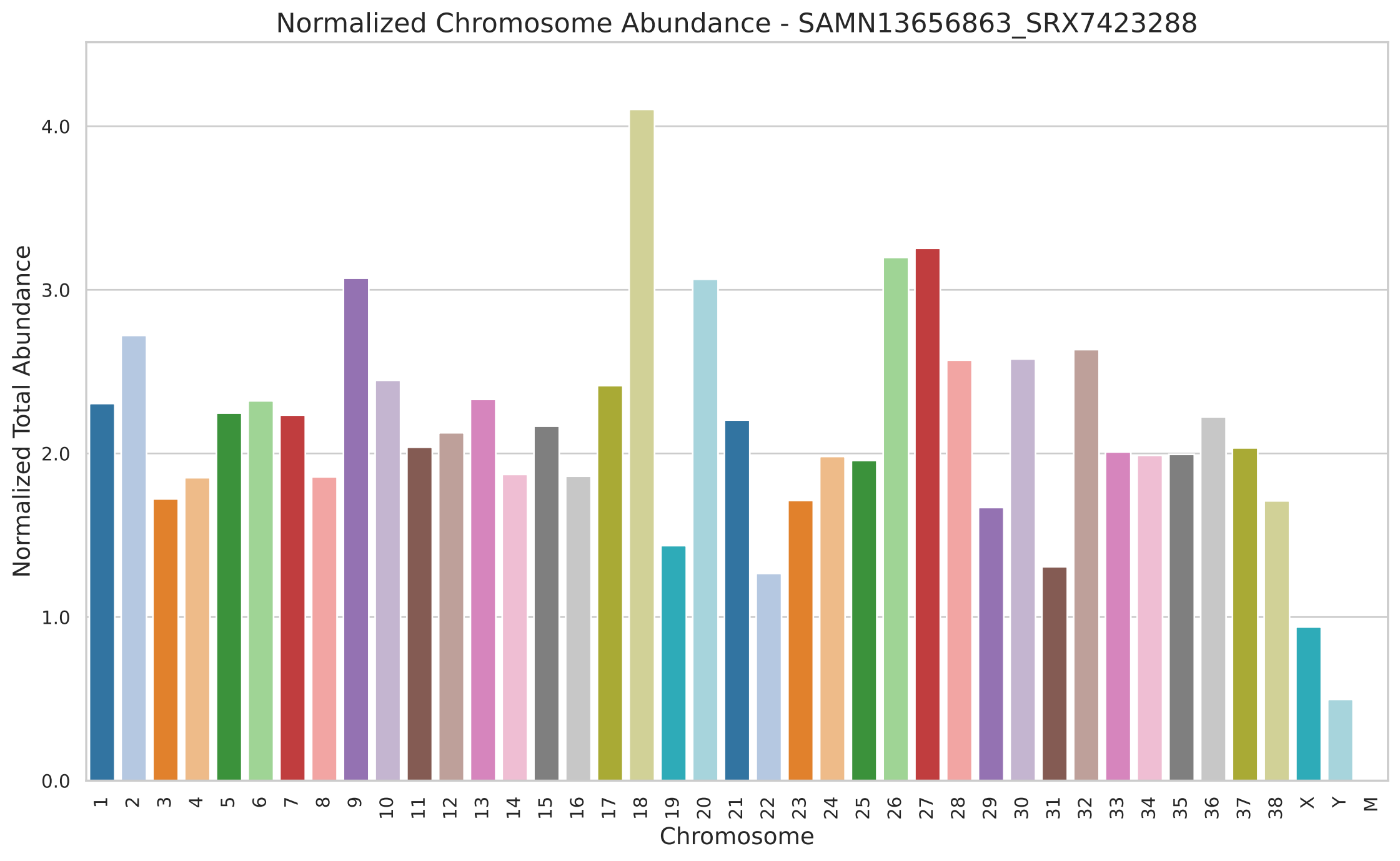

Normalized Chromosome Abundance - SAMN13133802_SRX7061367
Normalized Total Abundance
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

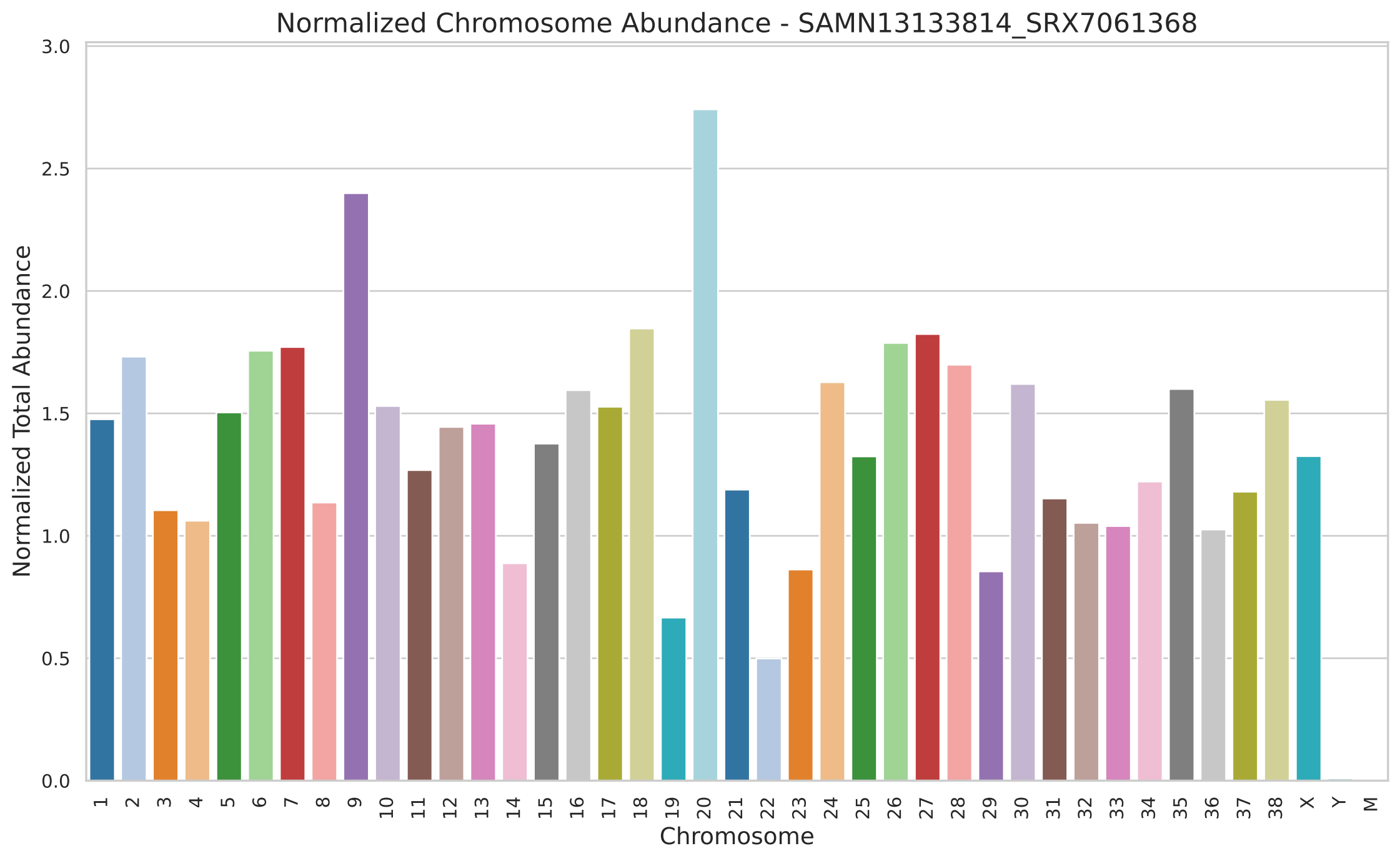

Normalized Chromosome Abundance - SAMN13133825_SRX7061371
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

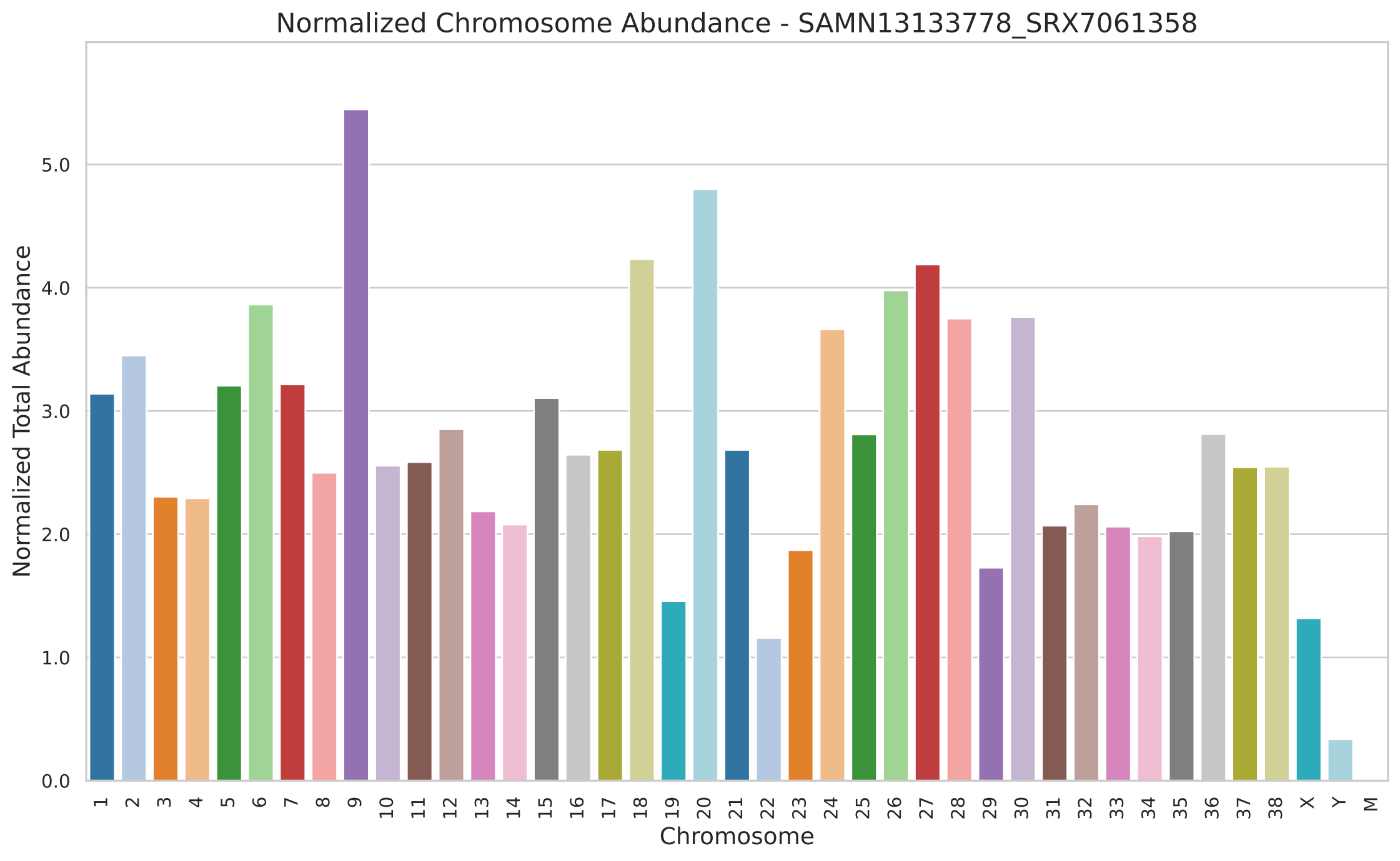

Normalized Chromosome Abundance - SAMN13133776_SRX7061364
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

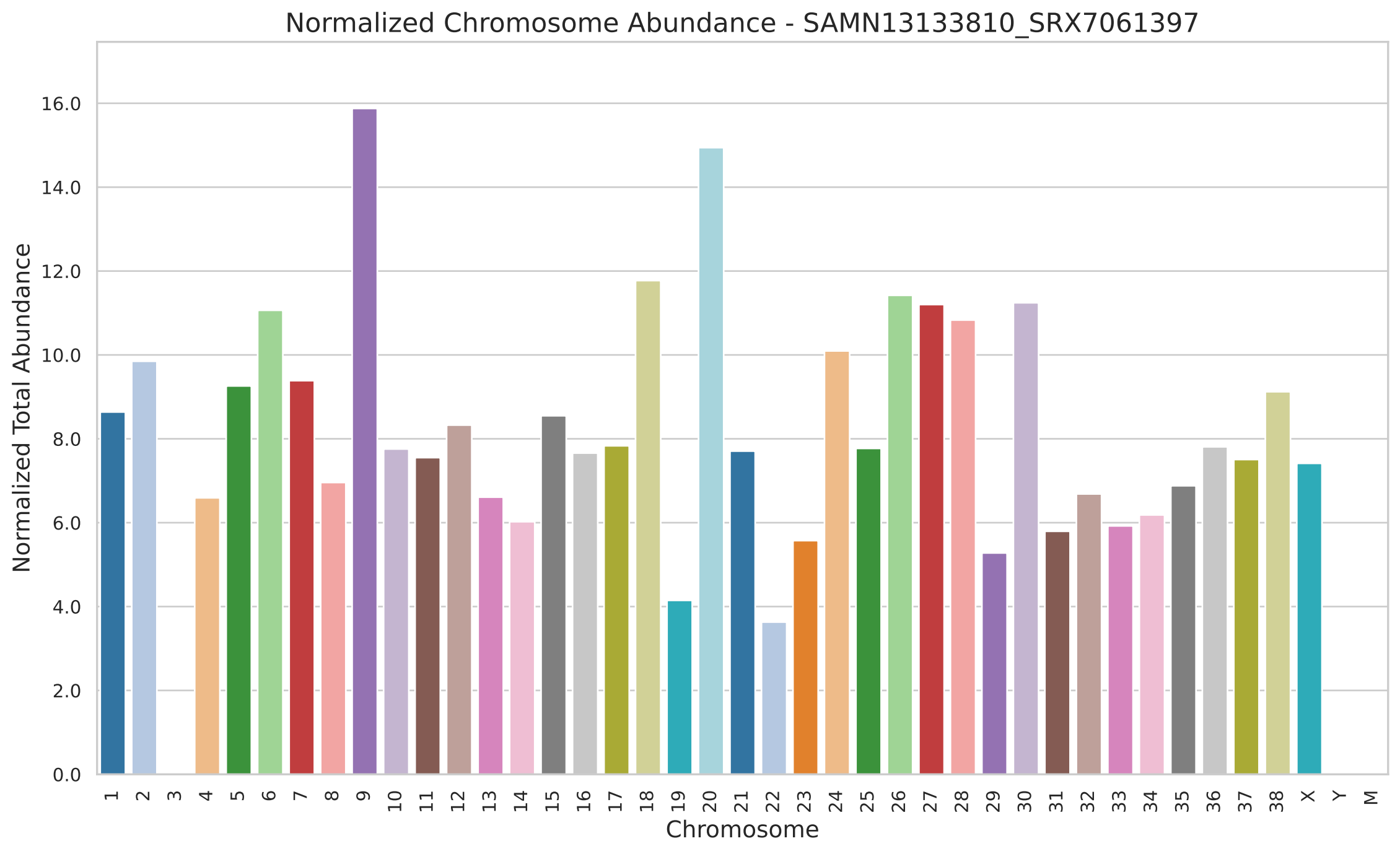

Normalized Chromosome Abundance - SAMN13133769_SRX7061362
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

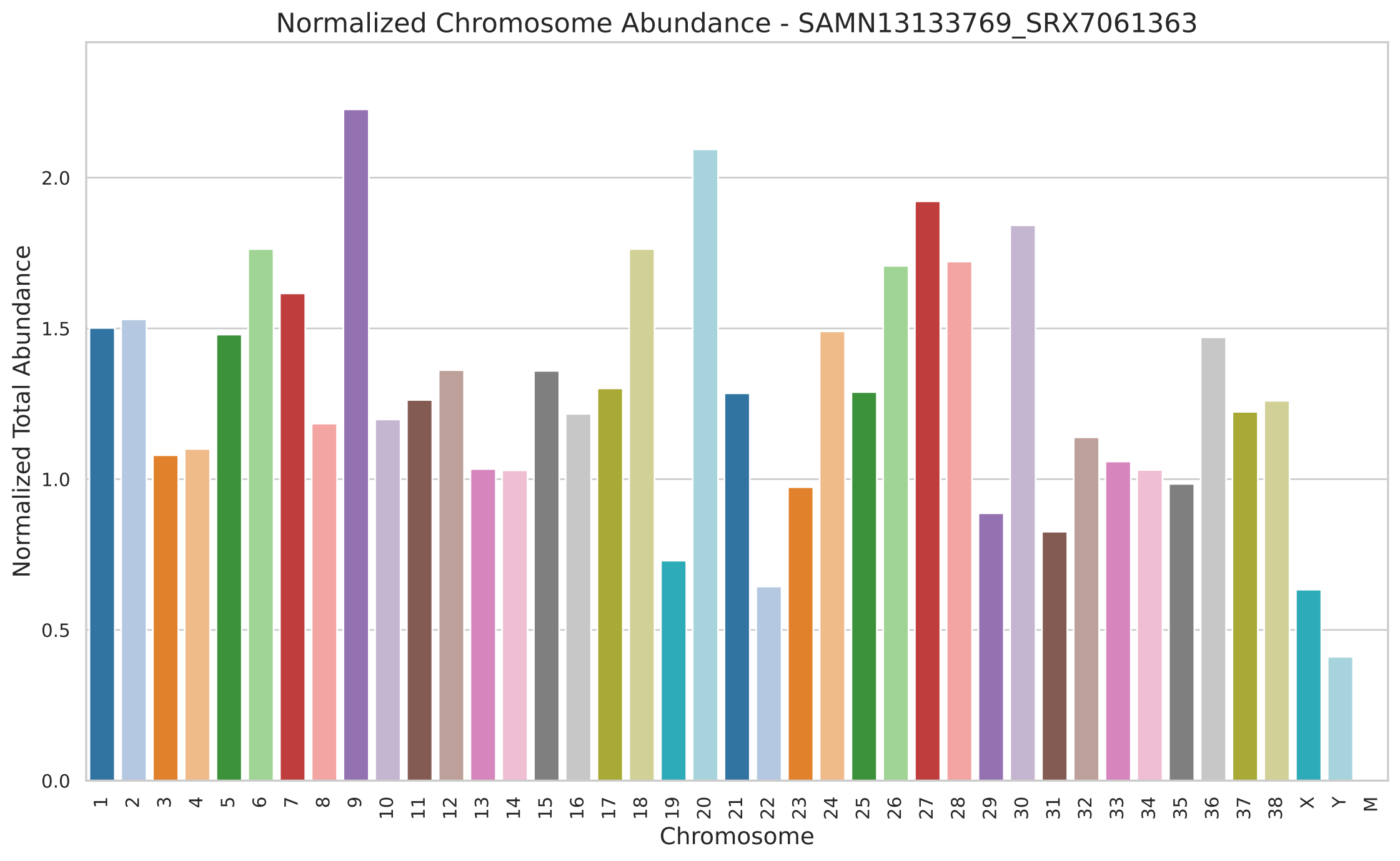

Normalized Chromosome Abundance - SAMN16786137_SRX9500091
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

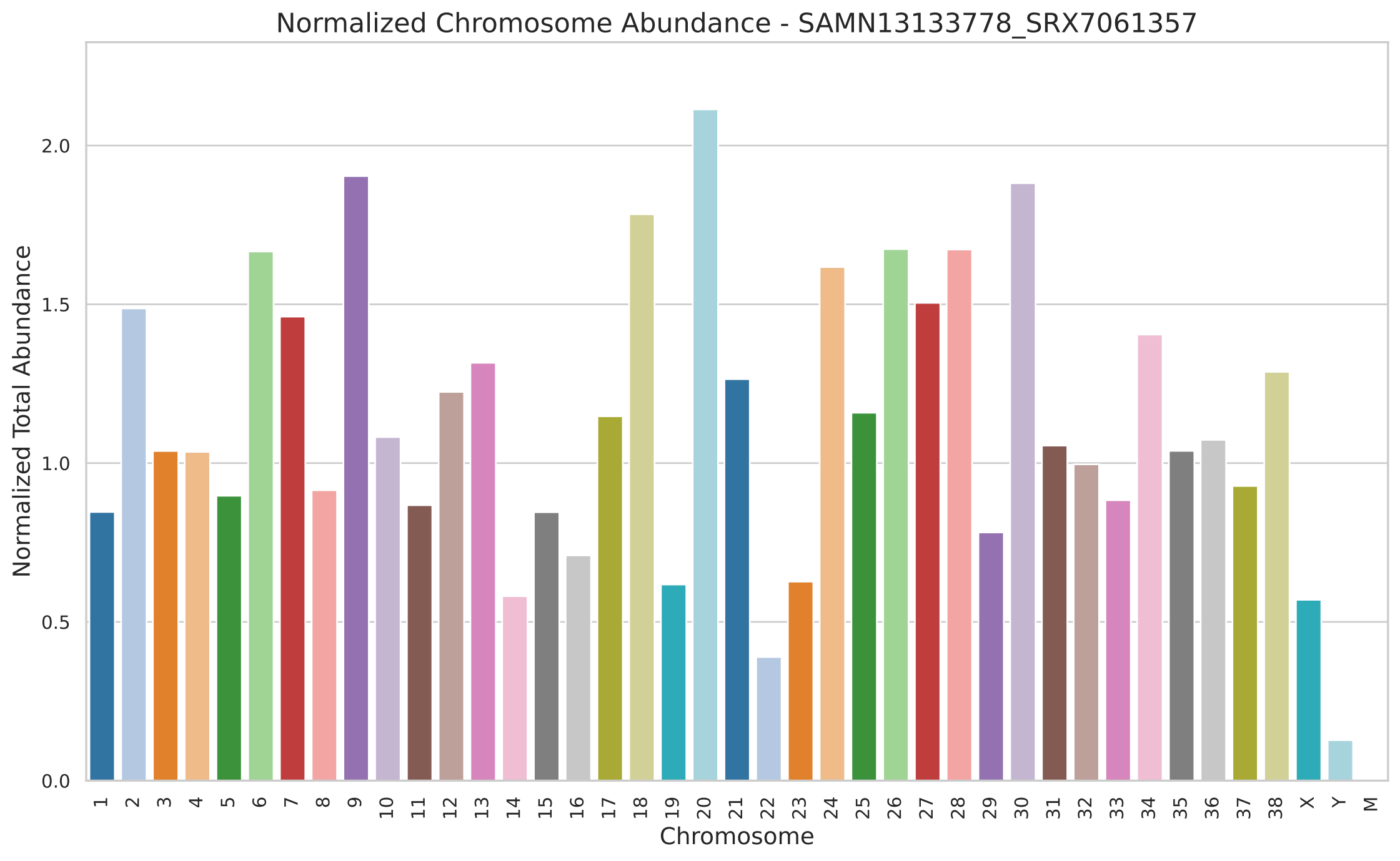

Normalized Chromosome Abundance - SAMN13656863_SRX7423288
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

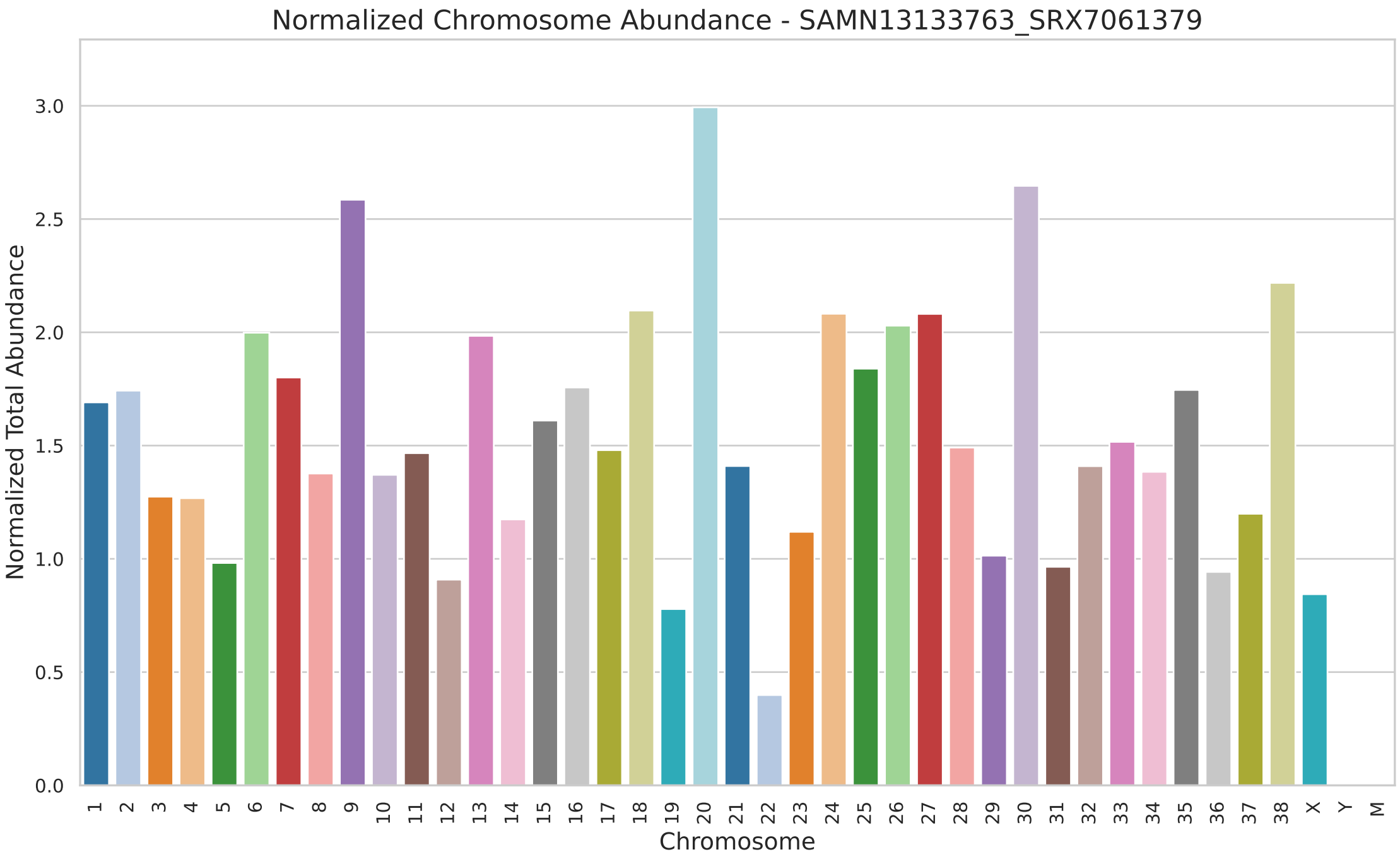

Normalized Chromosome Abundance - SAMN13133814_SRX7061368
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

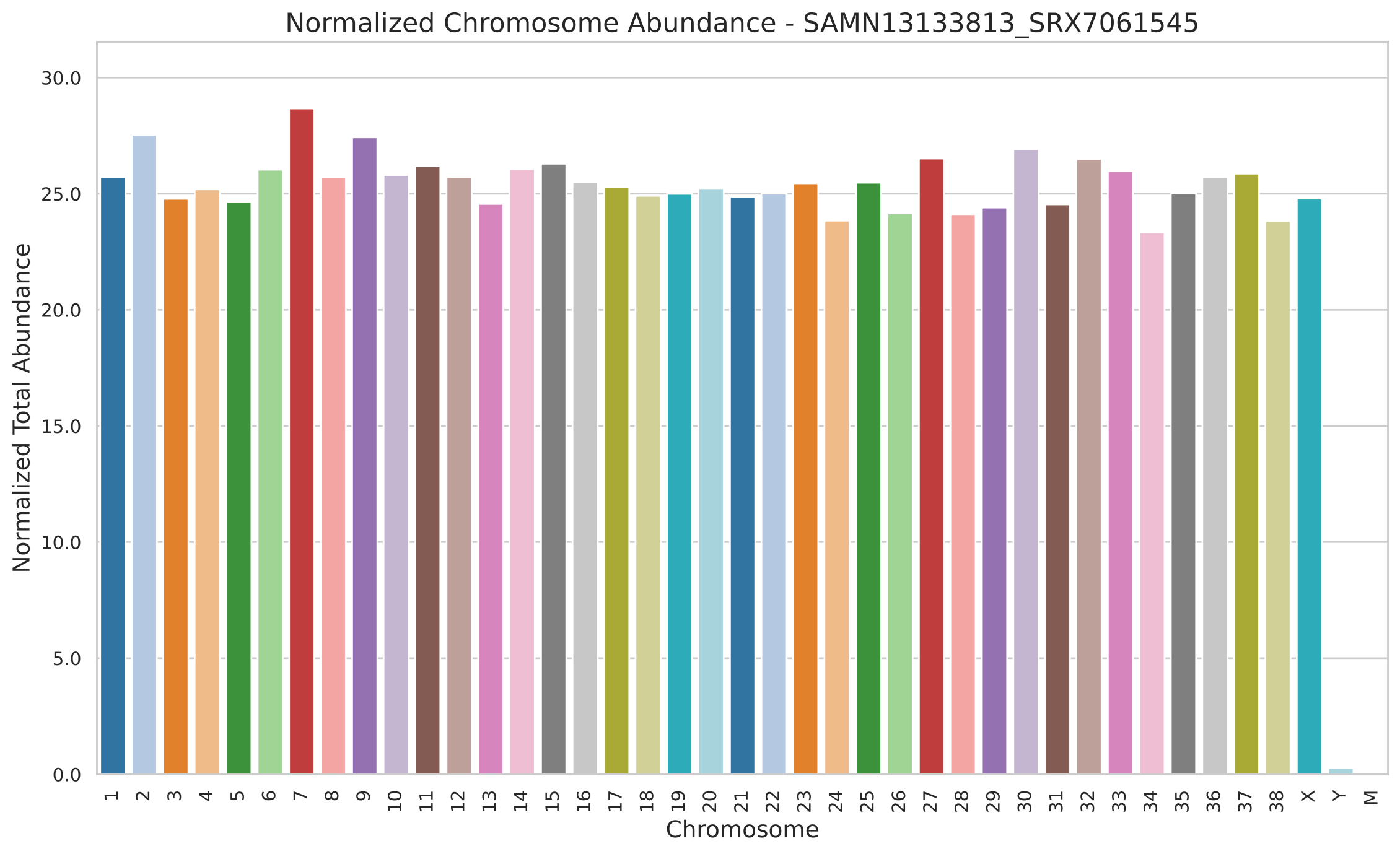

Normalized Chromosome Abundance - SAMN13133778_SRX7061358
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

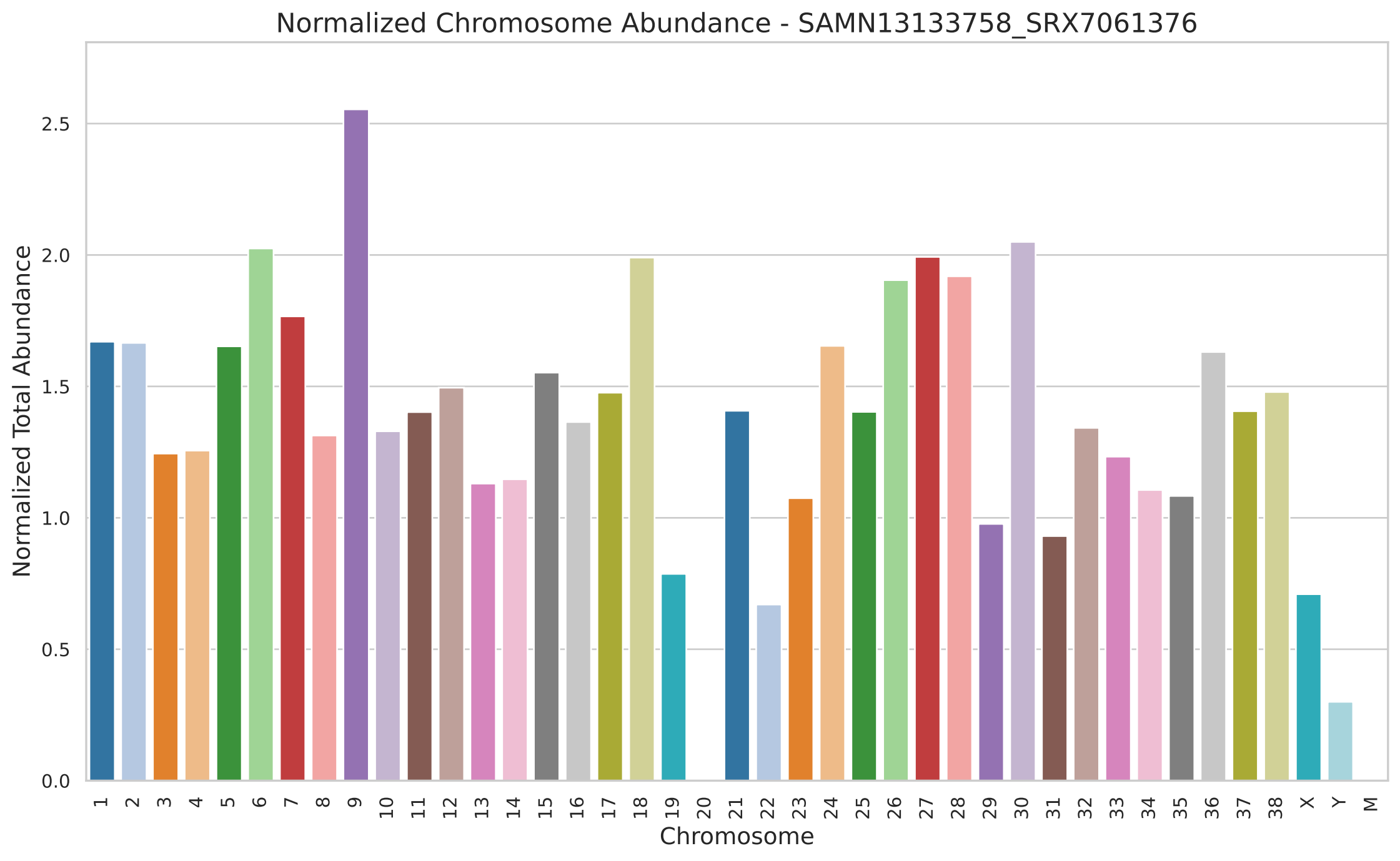

Normalized Chromosome Abundance - SAMN13133810_SRX7061397
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
12.0
14.0
16.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

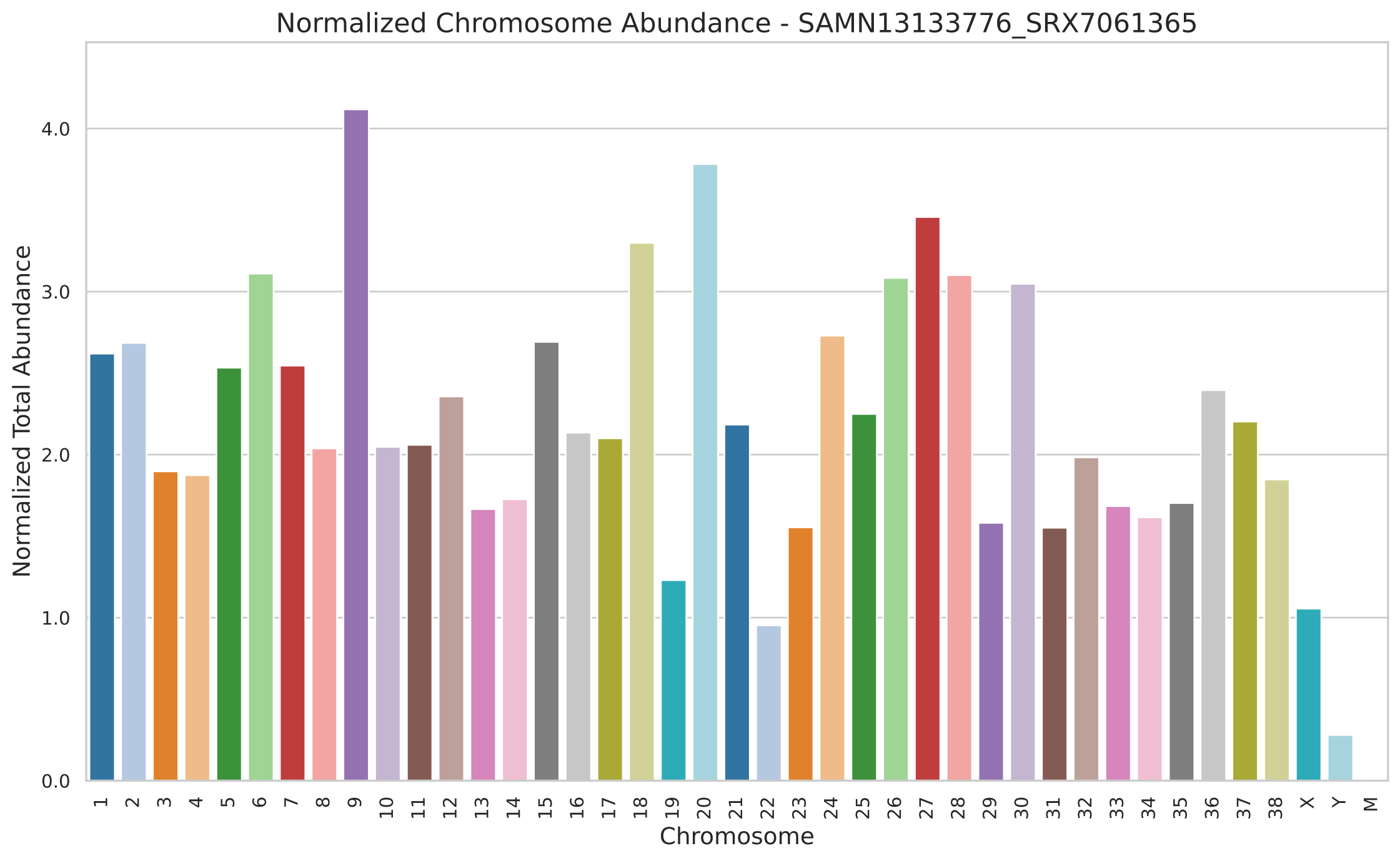

Normalized Chromosome Abundance - SAMN13133769_SRX7061363
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

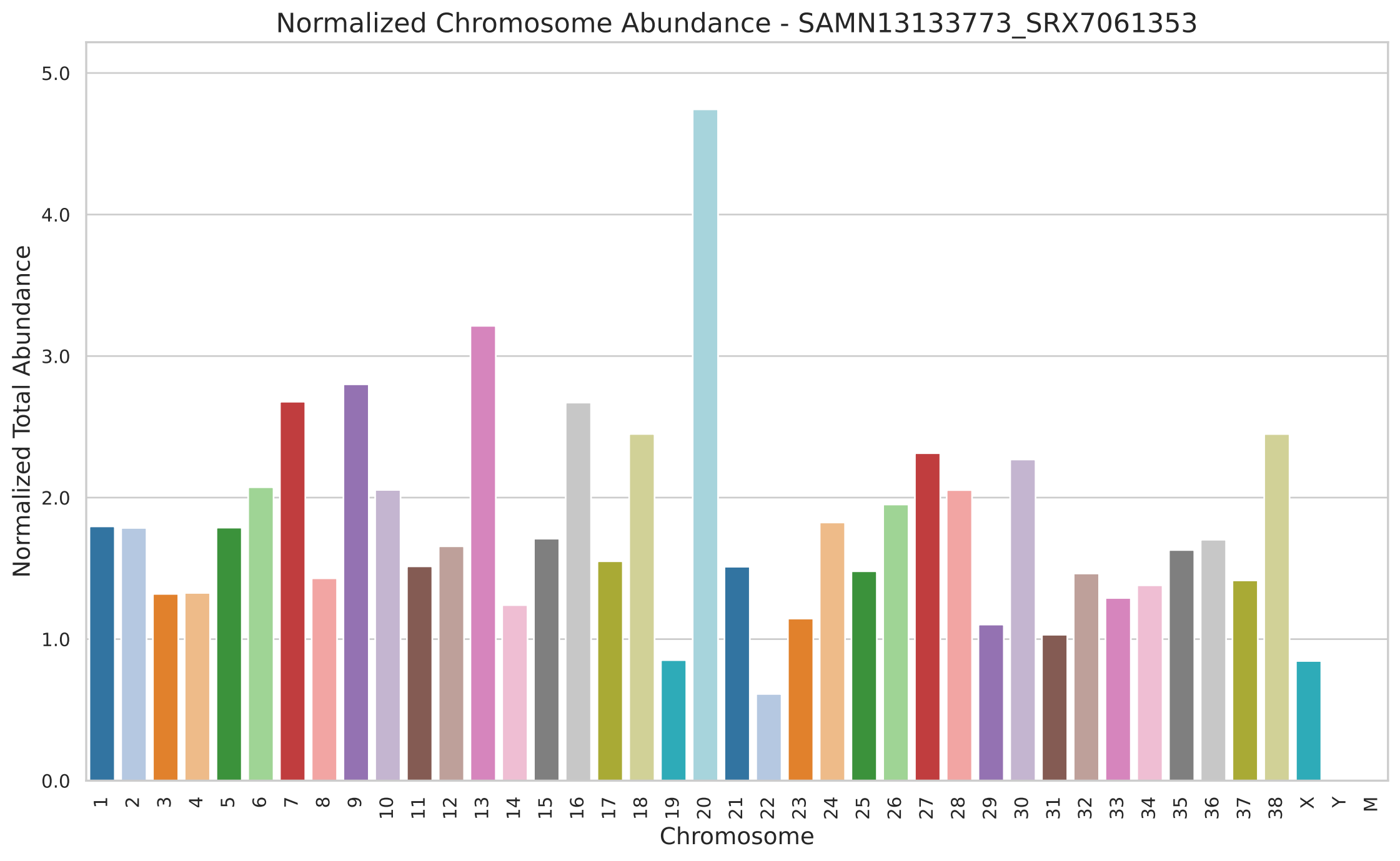

Normalized Chromosome Abundance - SAMN13133778_SRX7061357
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

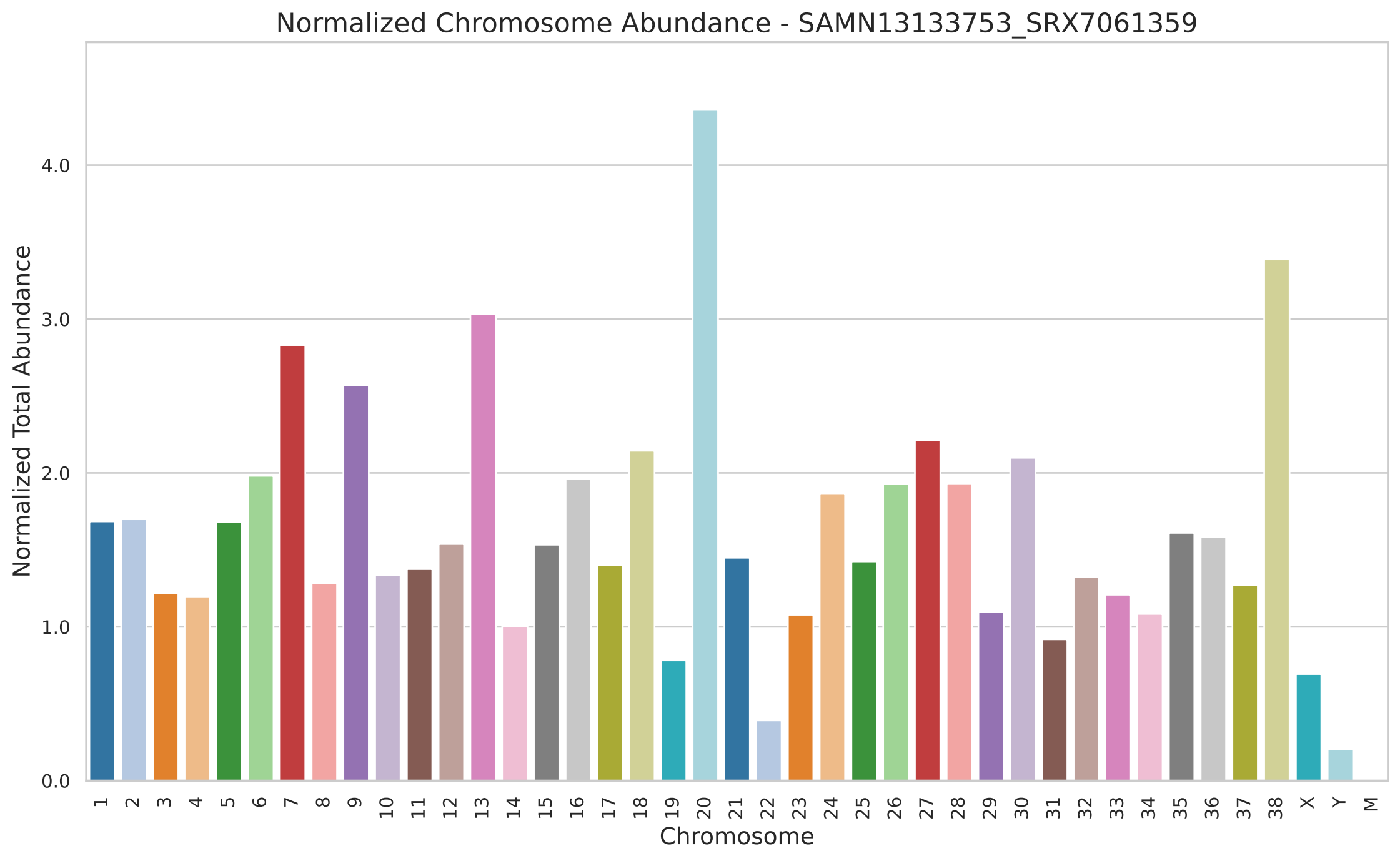

Normalized Chromosome Abundance - SAMN13133763_SRX7061379
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

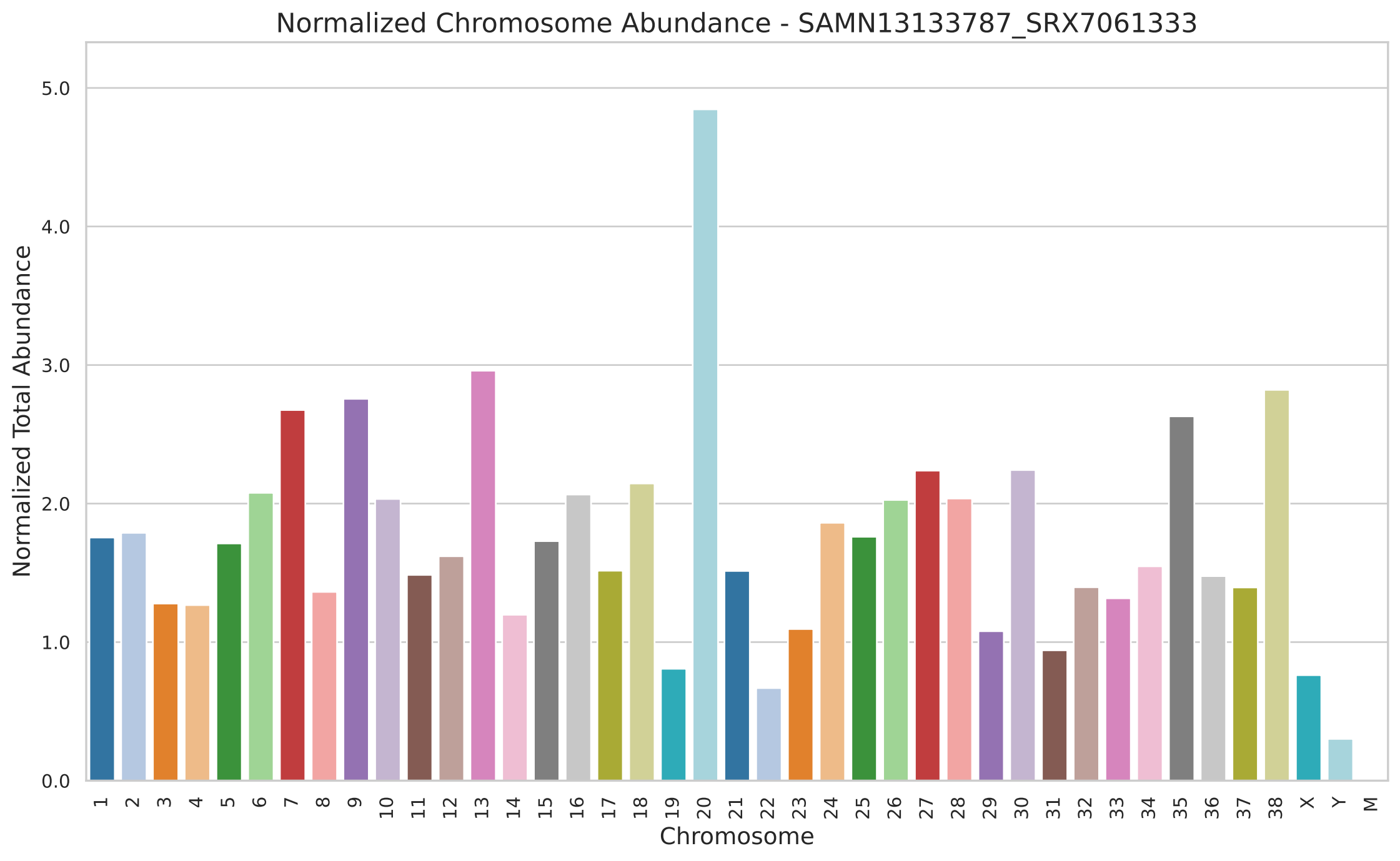

Normalized Chromosome Abundance - SAMN13133813_SRX7061545
Normalized Total Abundance
30.0
25.0
20.0
15.0
10.0
5.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

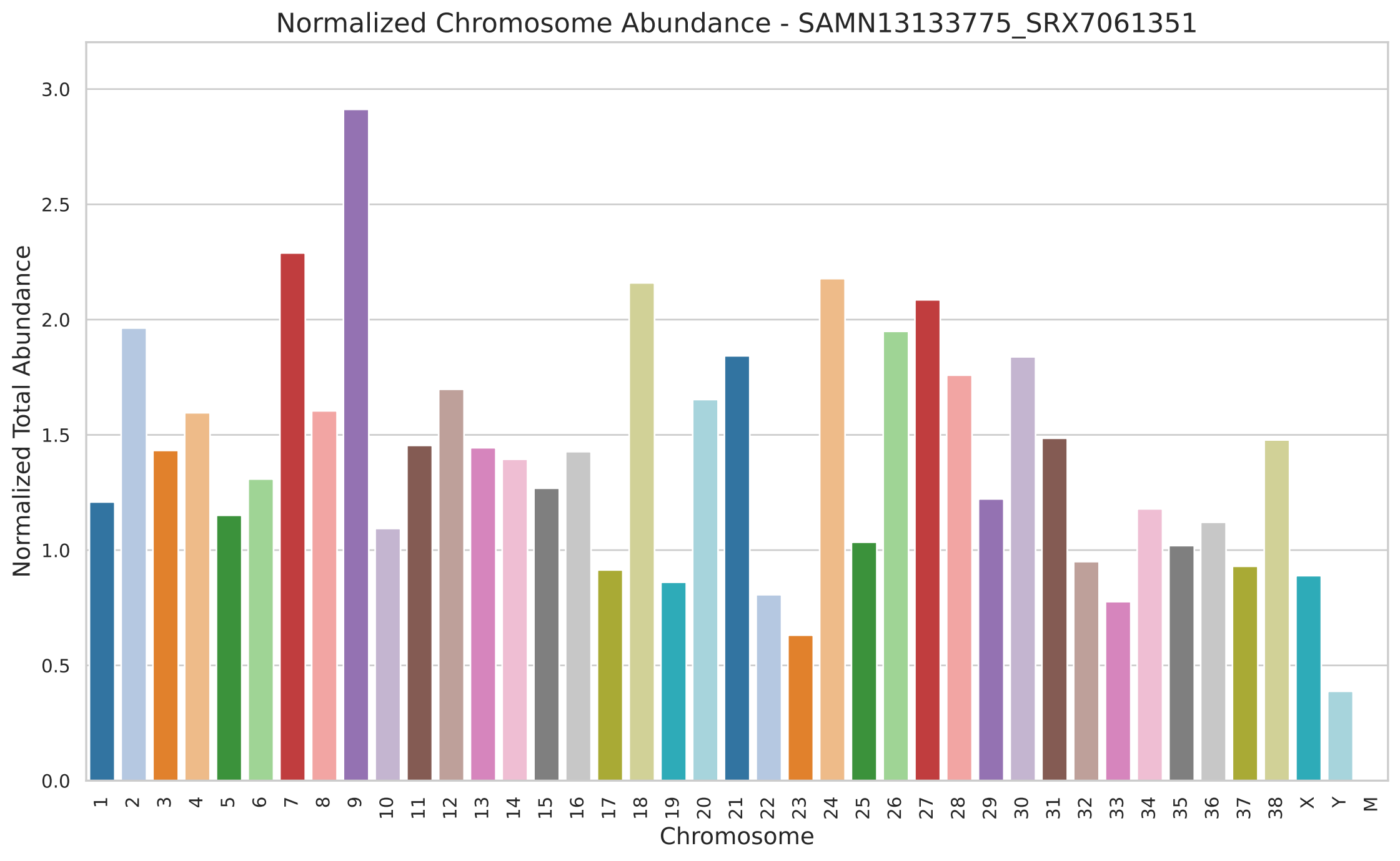

Normalized Chromosome Abundance - SAMN13133758_SRX7061376
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

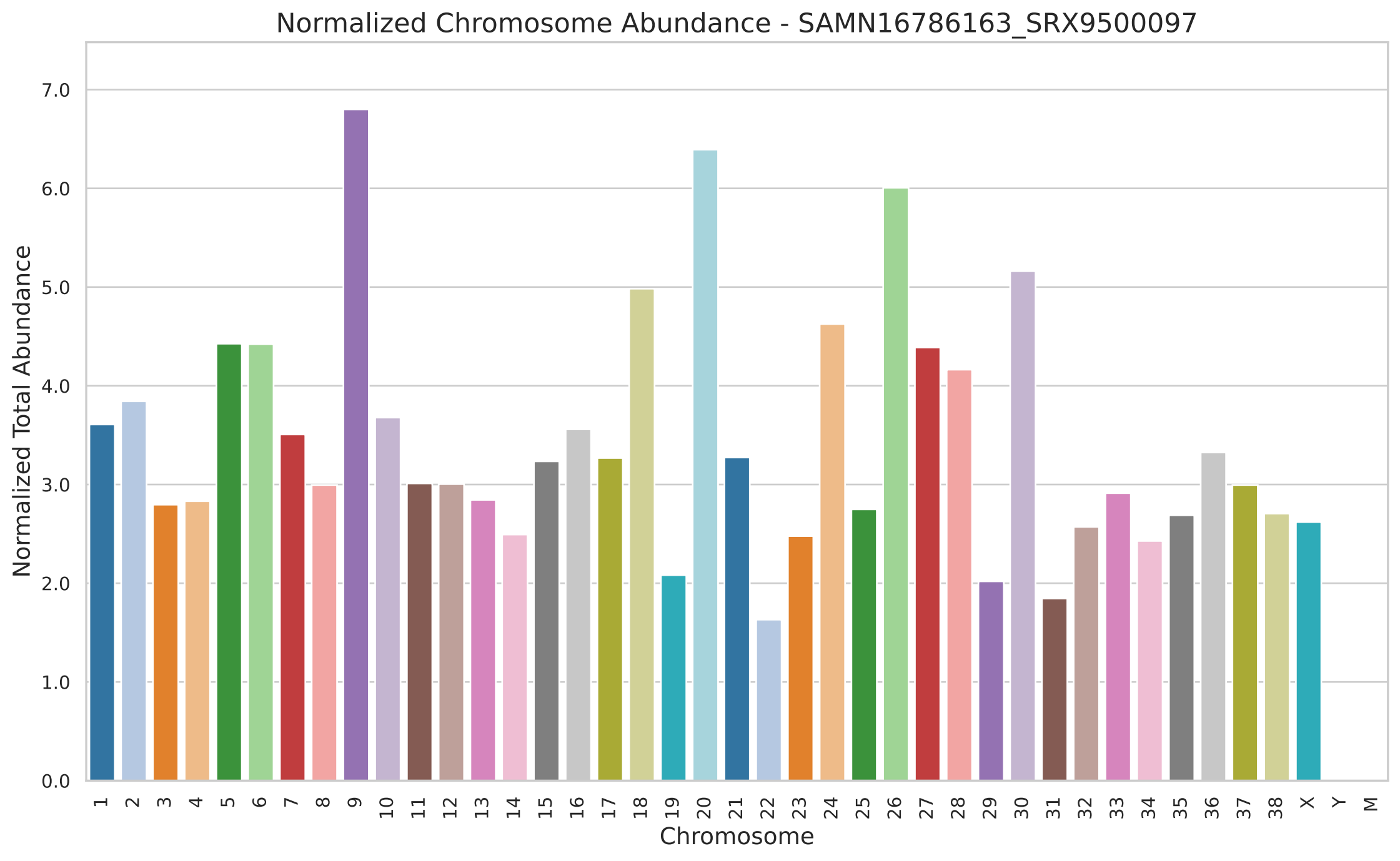

Normalized Chromosome Abundance - SAMN13133776_SRX7061365
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

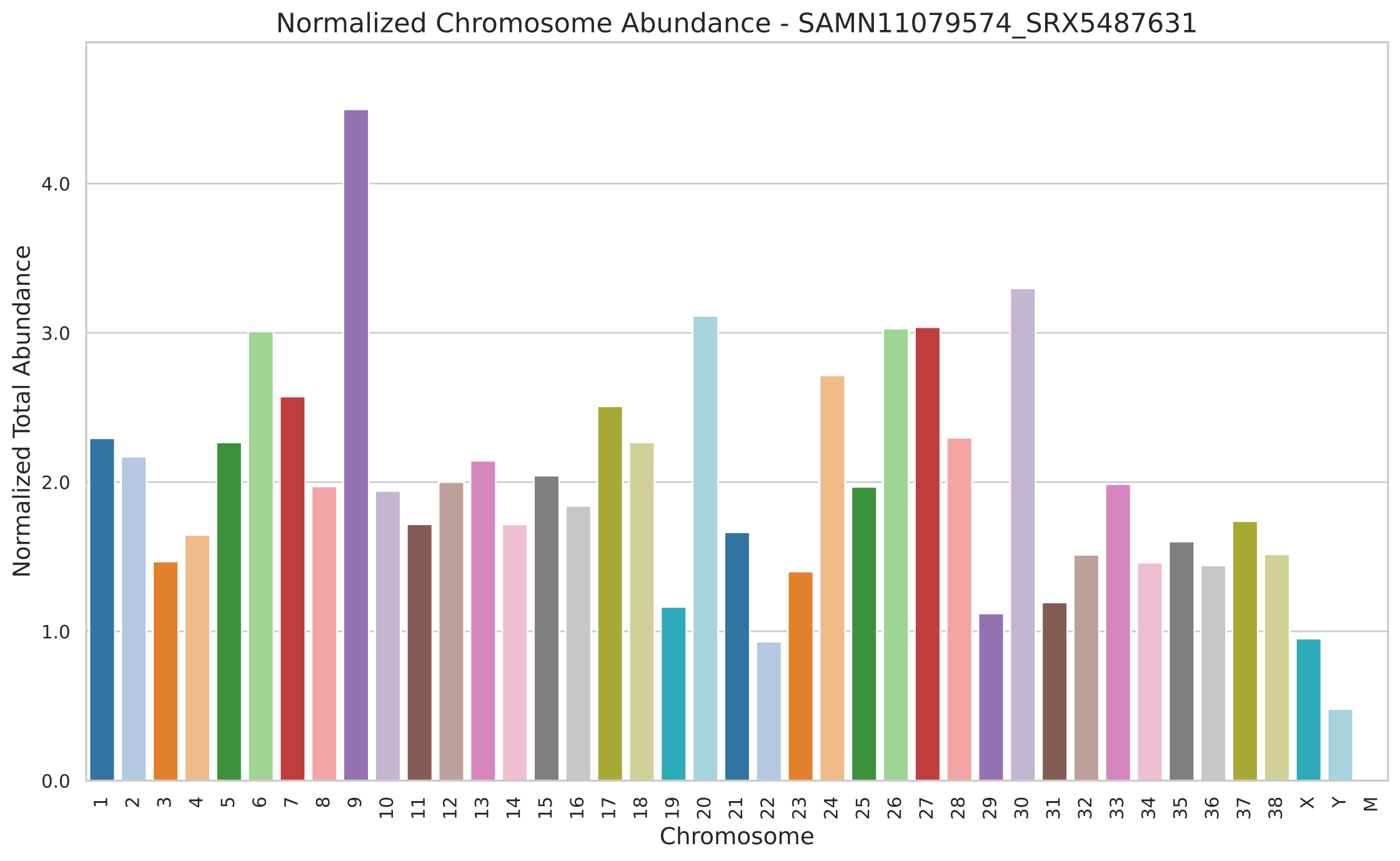

Normalized Chromosome Abundance - SAMN13133773_SRX7061353
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

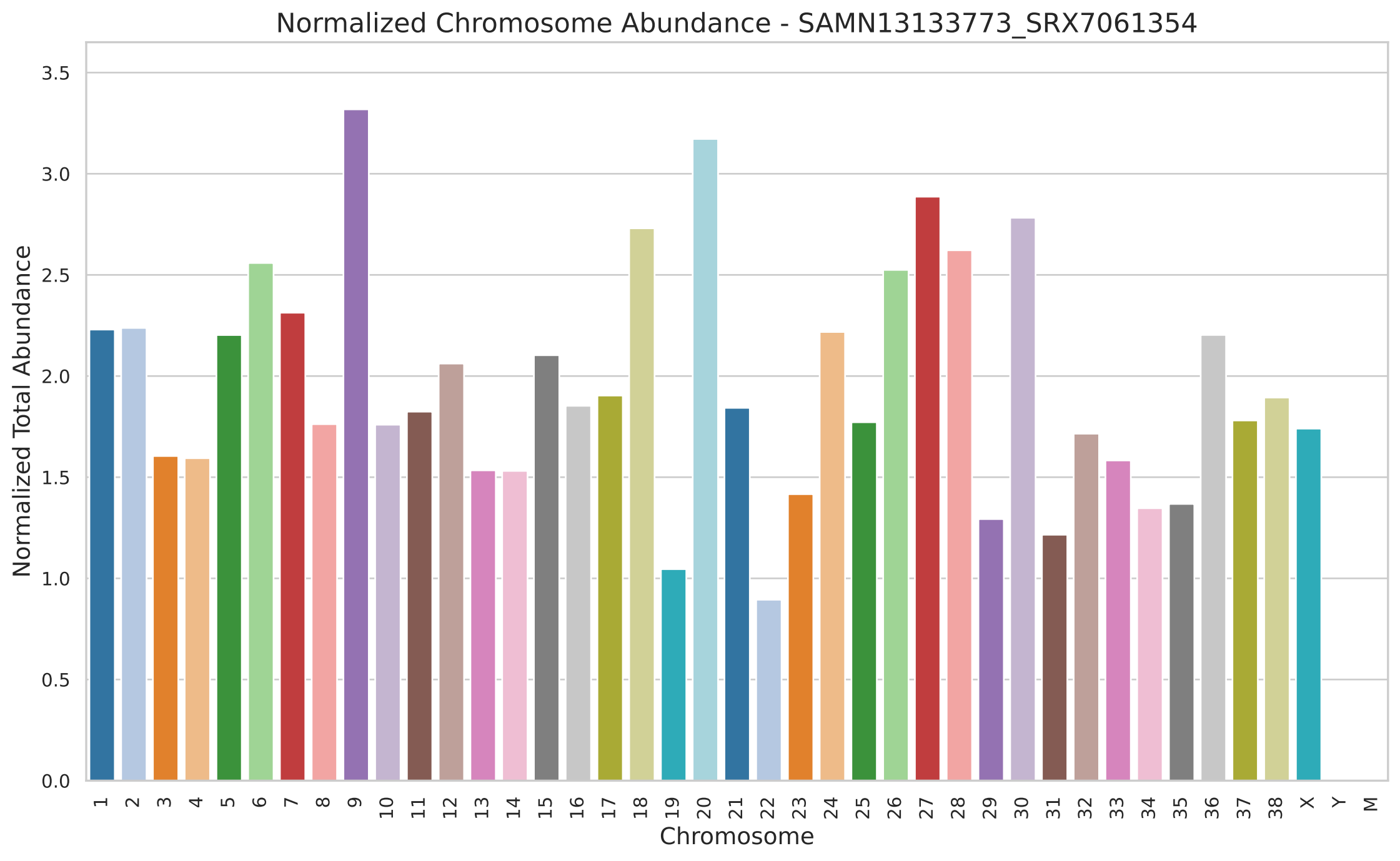

Normalized Chromosome Abundance - SAMN13133753_SRX7061359
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

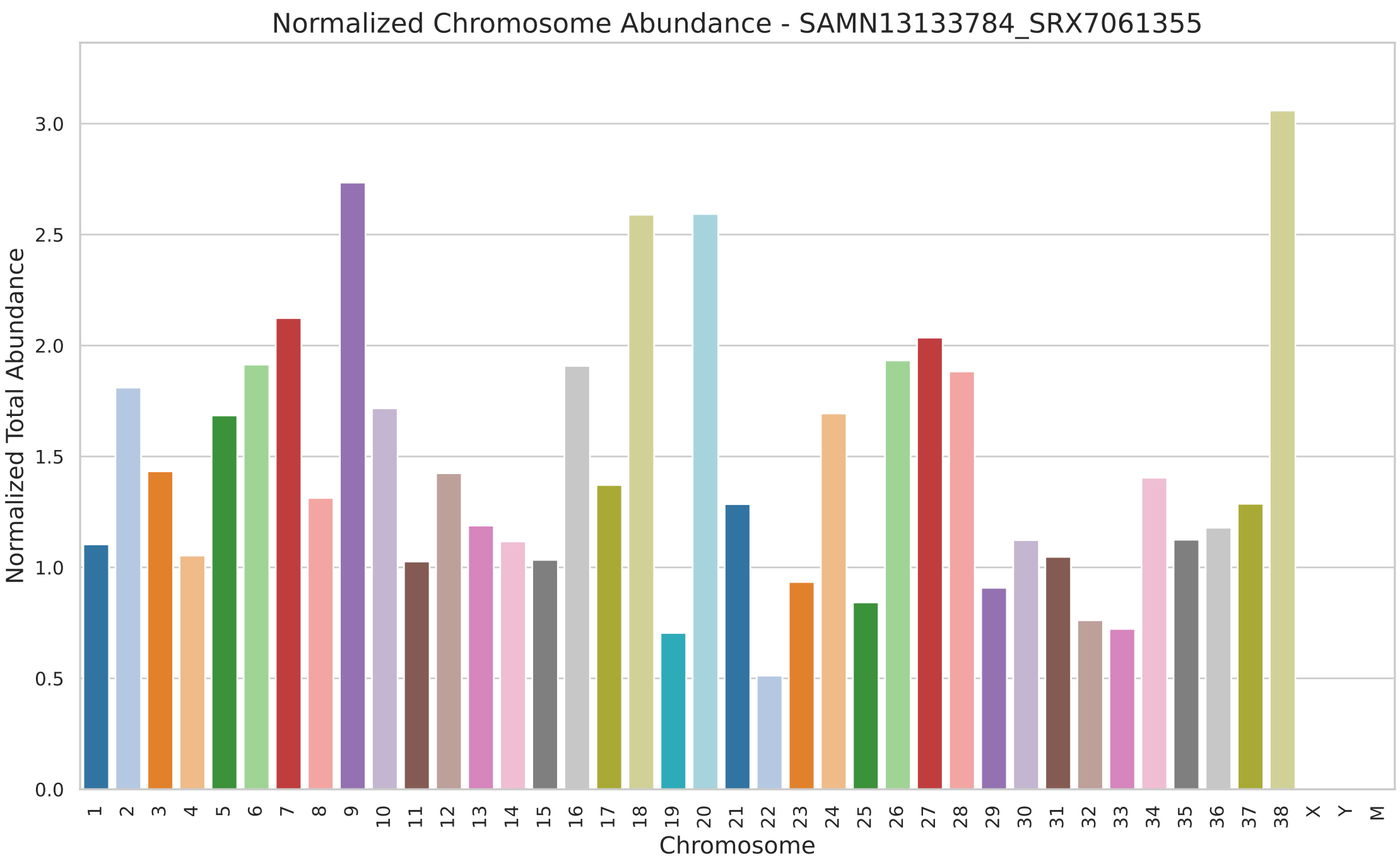

Normalized Chromosome Abundance - SAMN13133787_SRX7061333
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

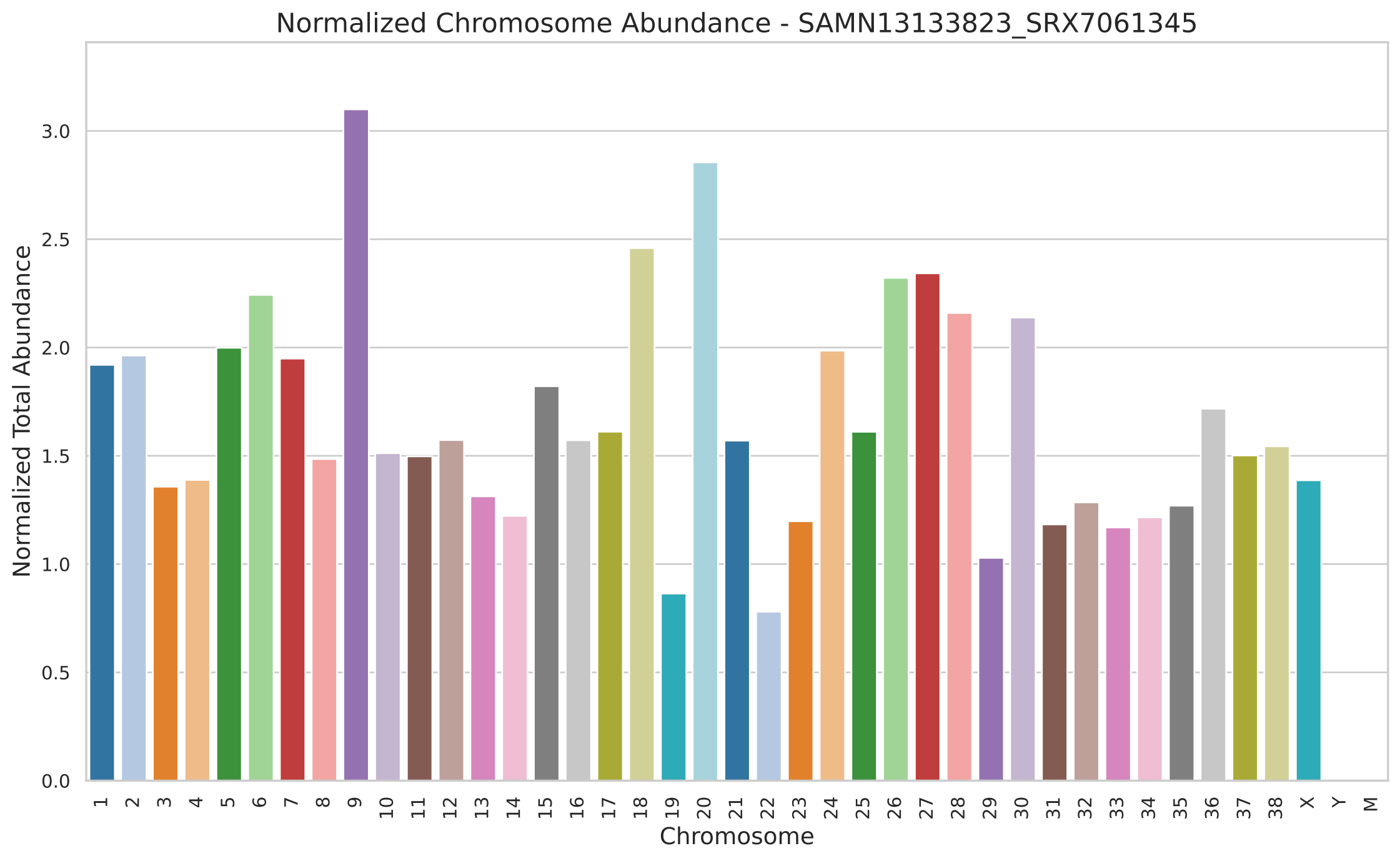

Normalized Chromosome Abundance - SAMN13133775_SRX7061351
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

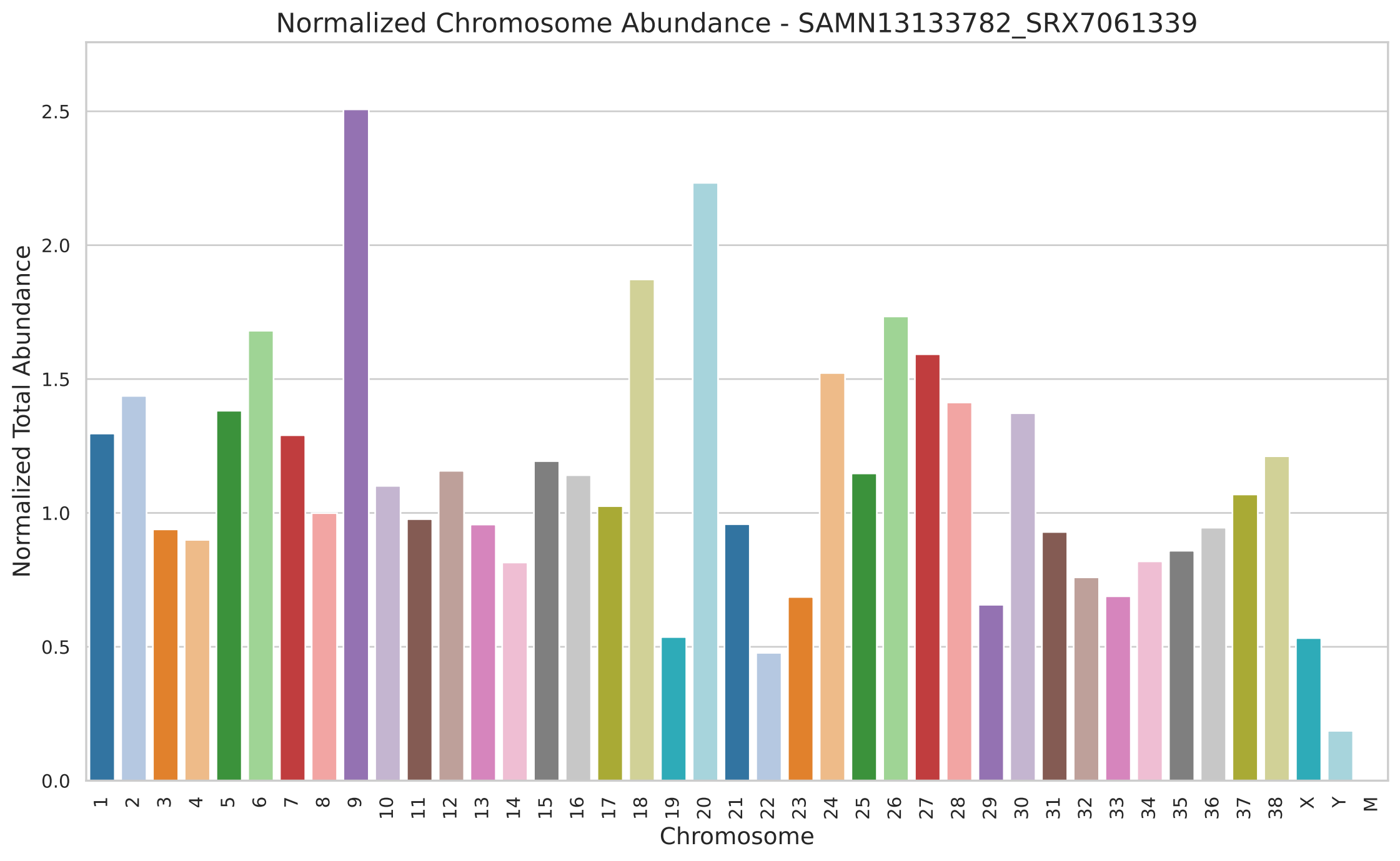

Normalized Chromosome Abundance - SAMN16786163_SRX9500097
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

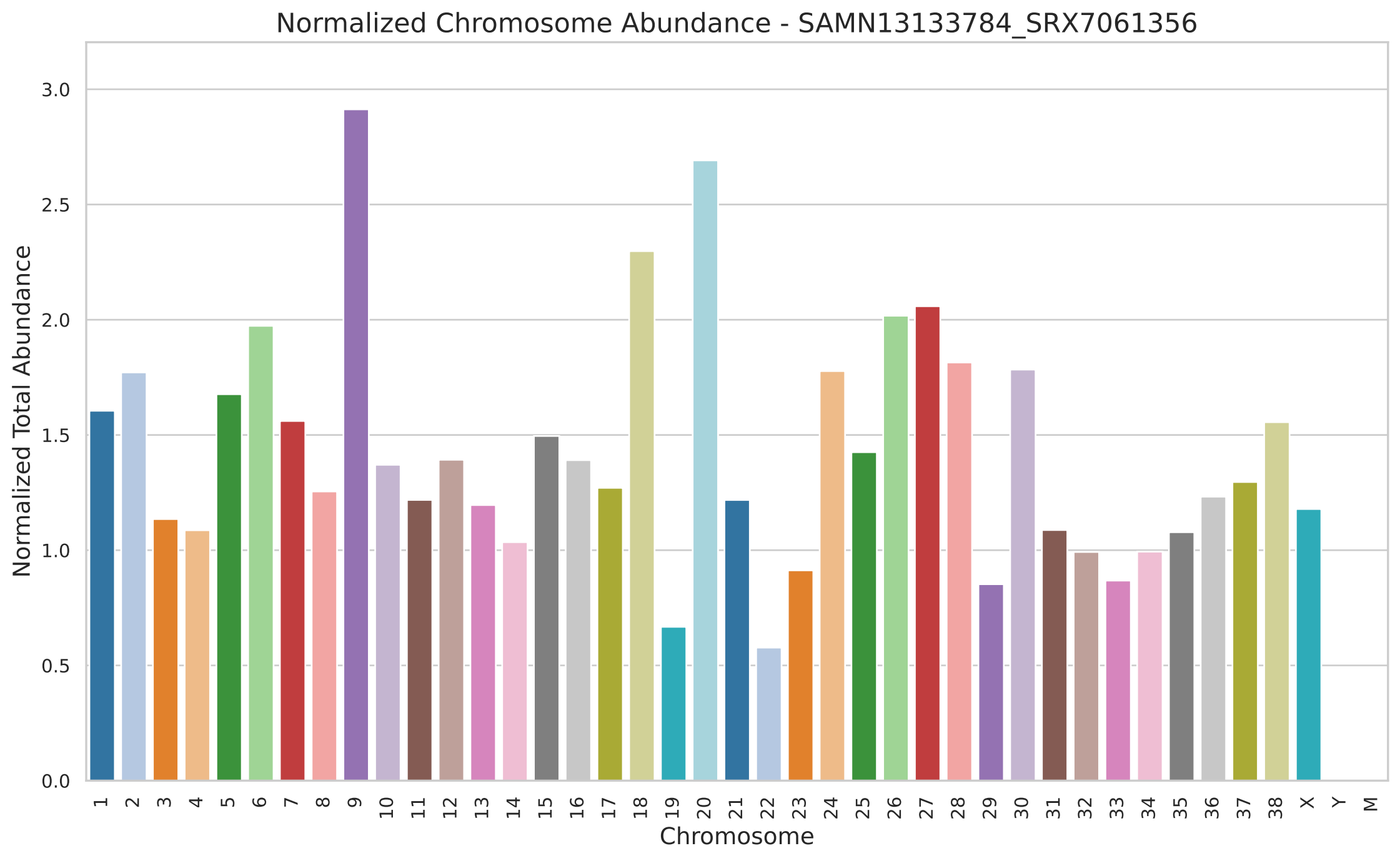

Normalized Chromosome Abundance - SAMN11079574_SRX5487631
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

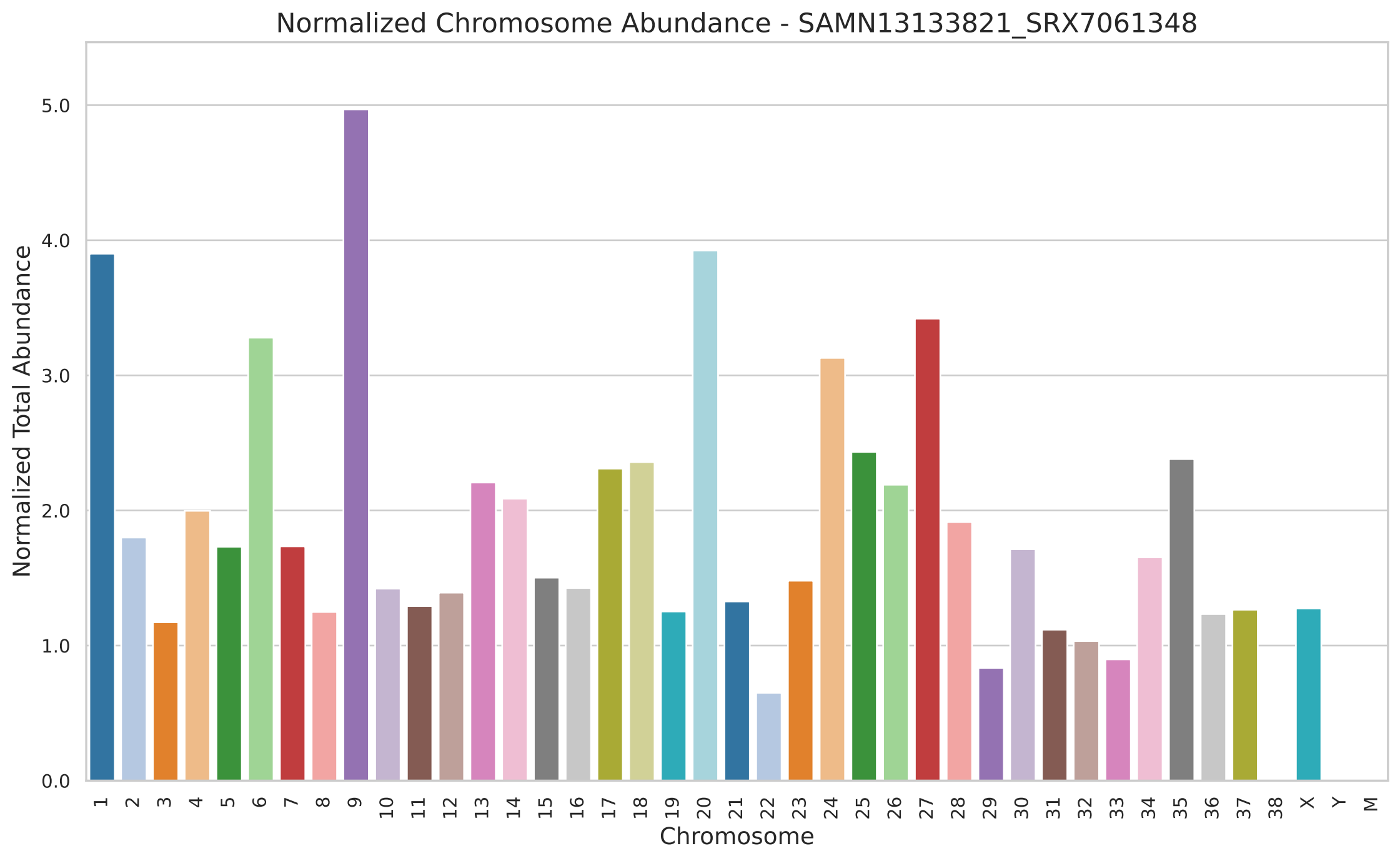

Normalized Chromosome Abundance - SAMN13133773_SRX7061354
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

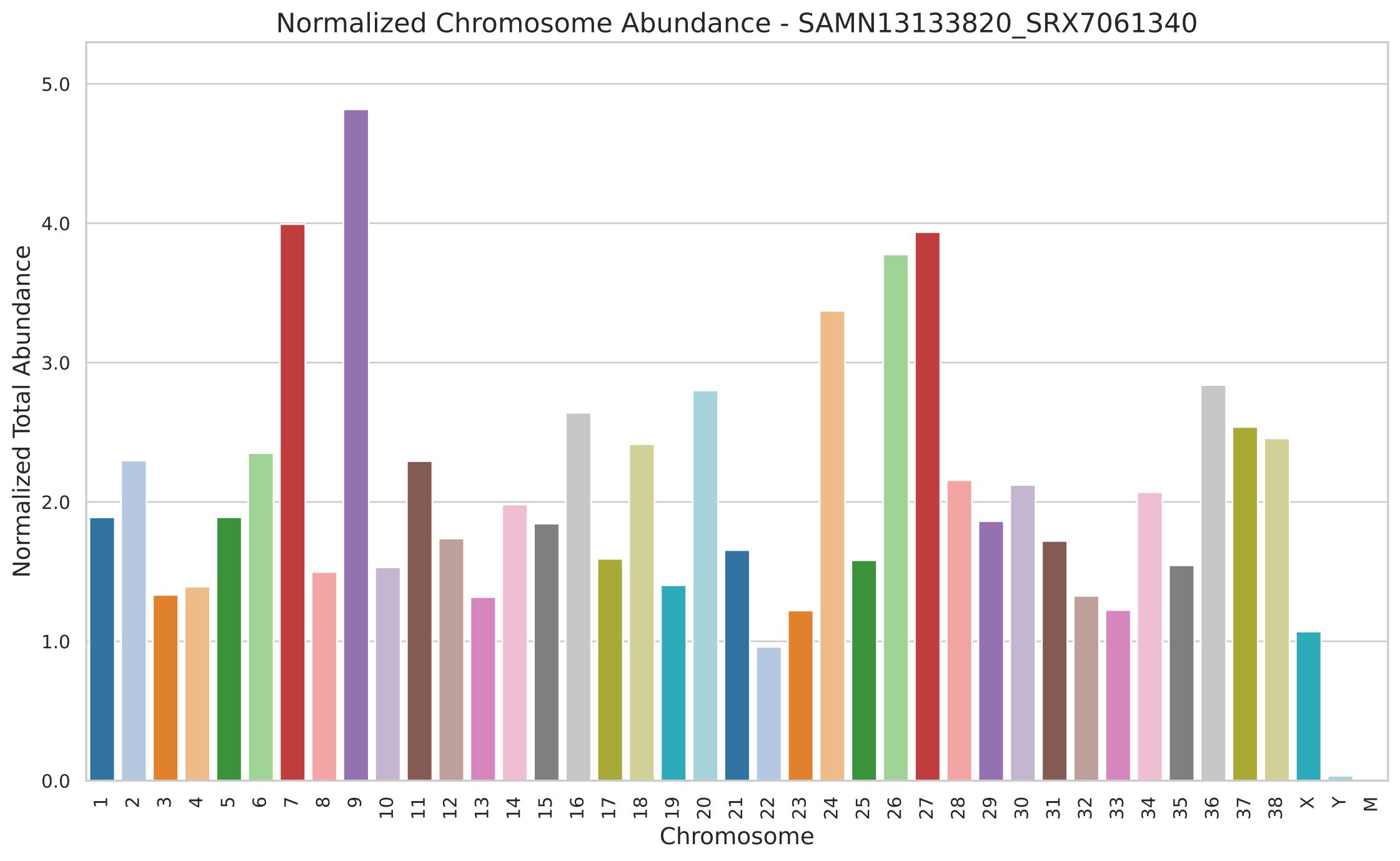

Normalized Chromosome Abundance - SAMN13133784_SRX7061355
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

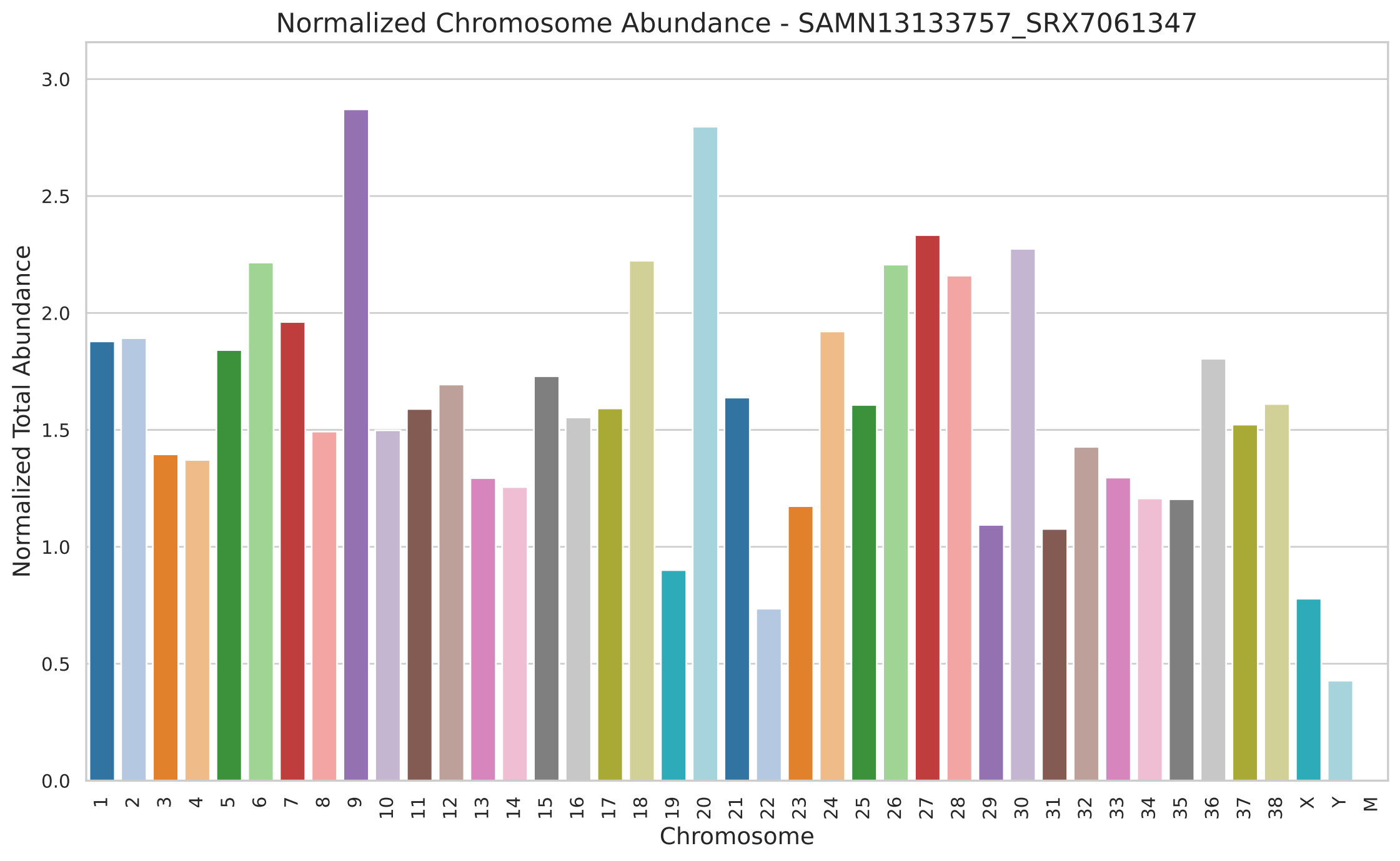

Normalized Chromosome Abundance - SAMN13133823_SRX7061345
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

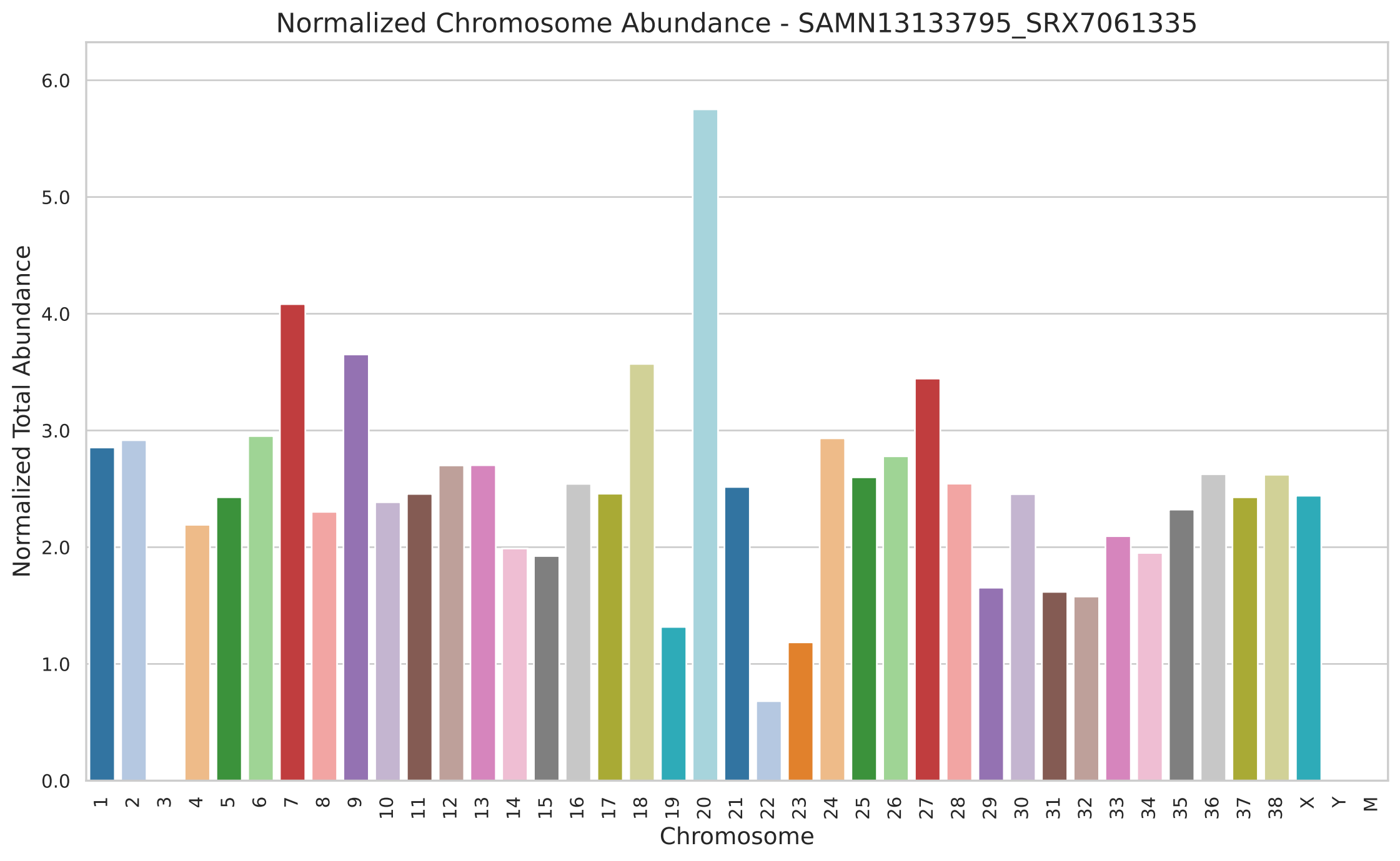

Normalized Chromosome Abundance - SAMN13133782_SRX7061339
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

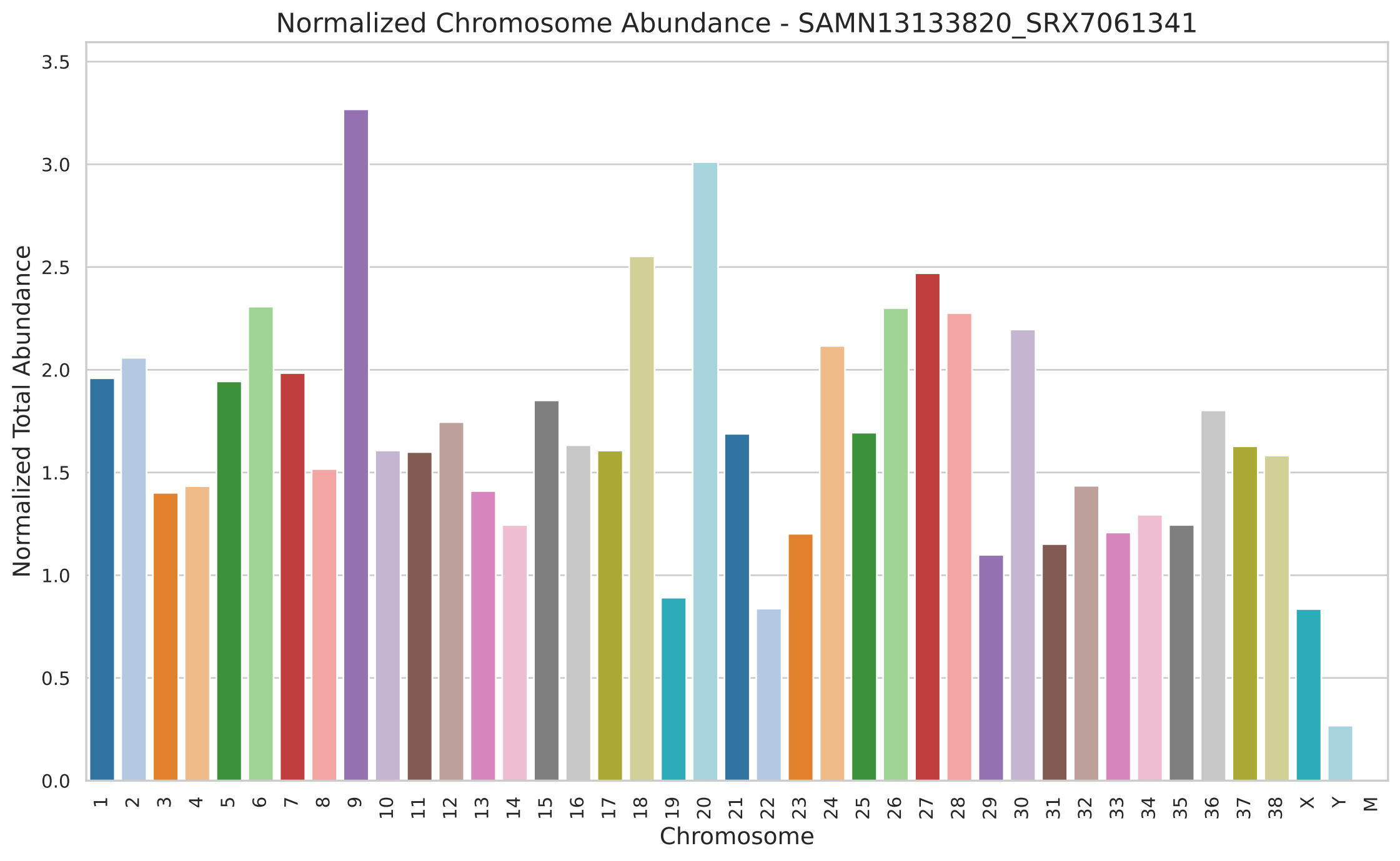

Normalized Chromosome Abundance - SAMN13133784_SRX7061356
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

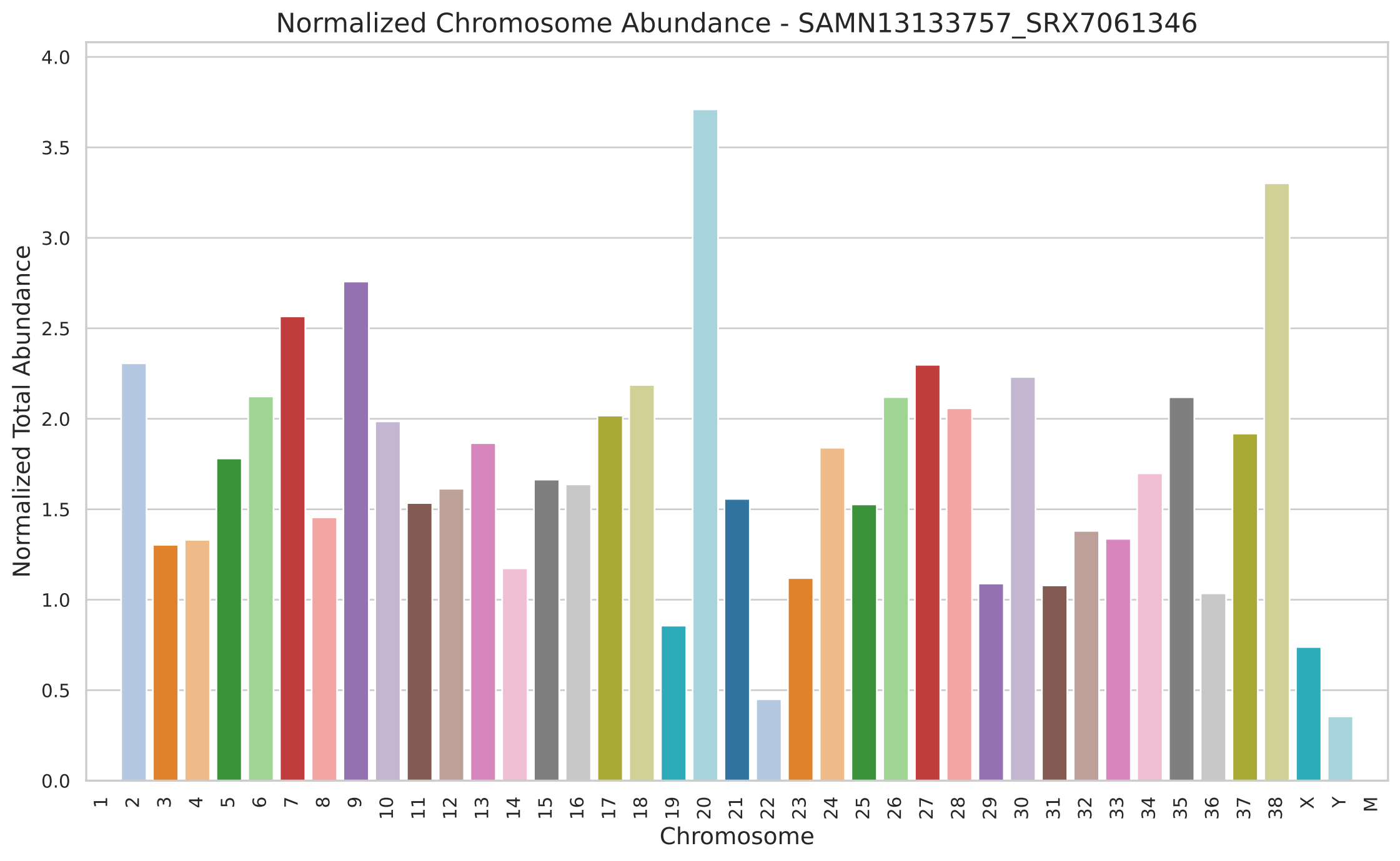

Normalized Chromosome Abundance - SAMN13133821_SRX7061348
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

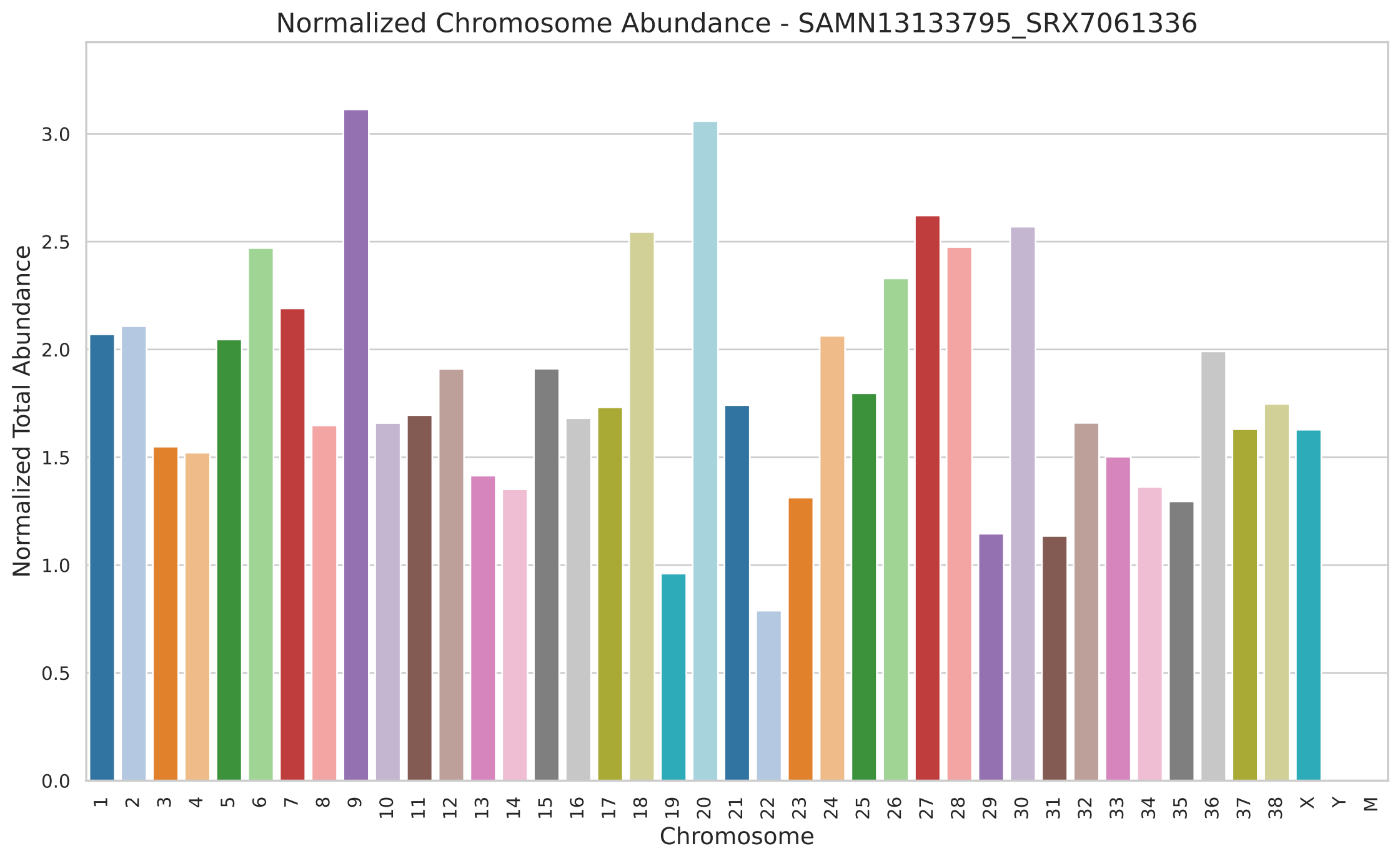

Normalized Chromosome Abundance - SAMN13133820_SRX7061340
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

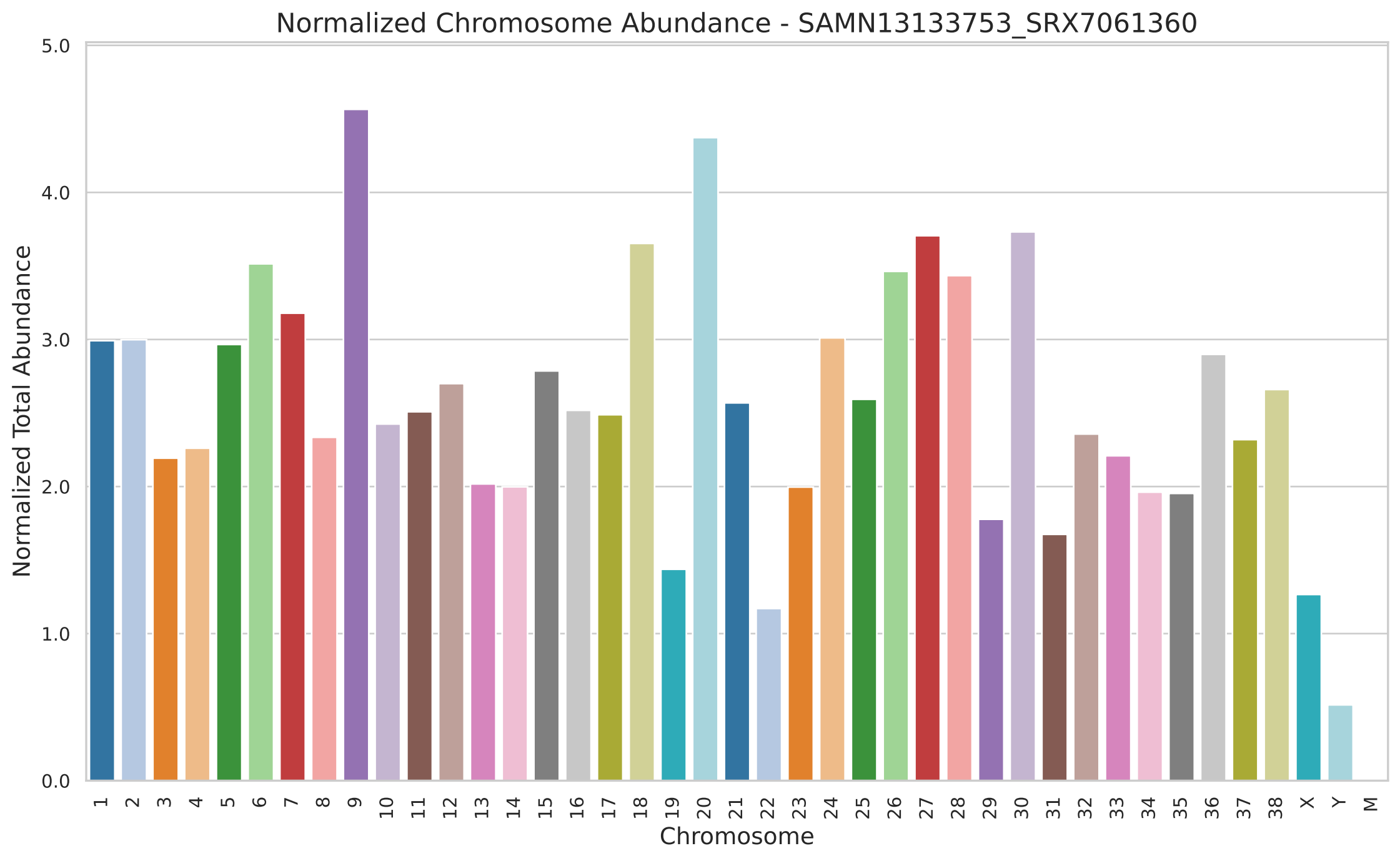

Normalized Chromosome Abundance - SAMN13133757_SRX7061347
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

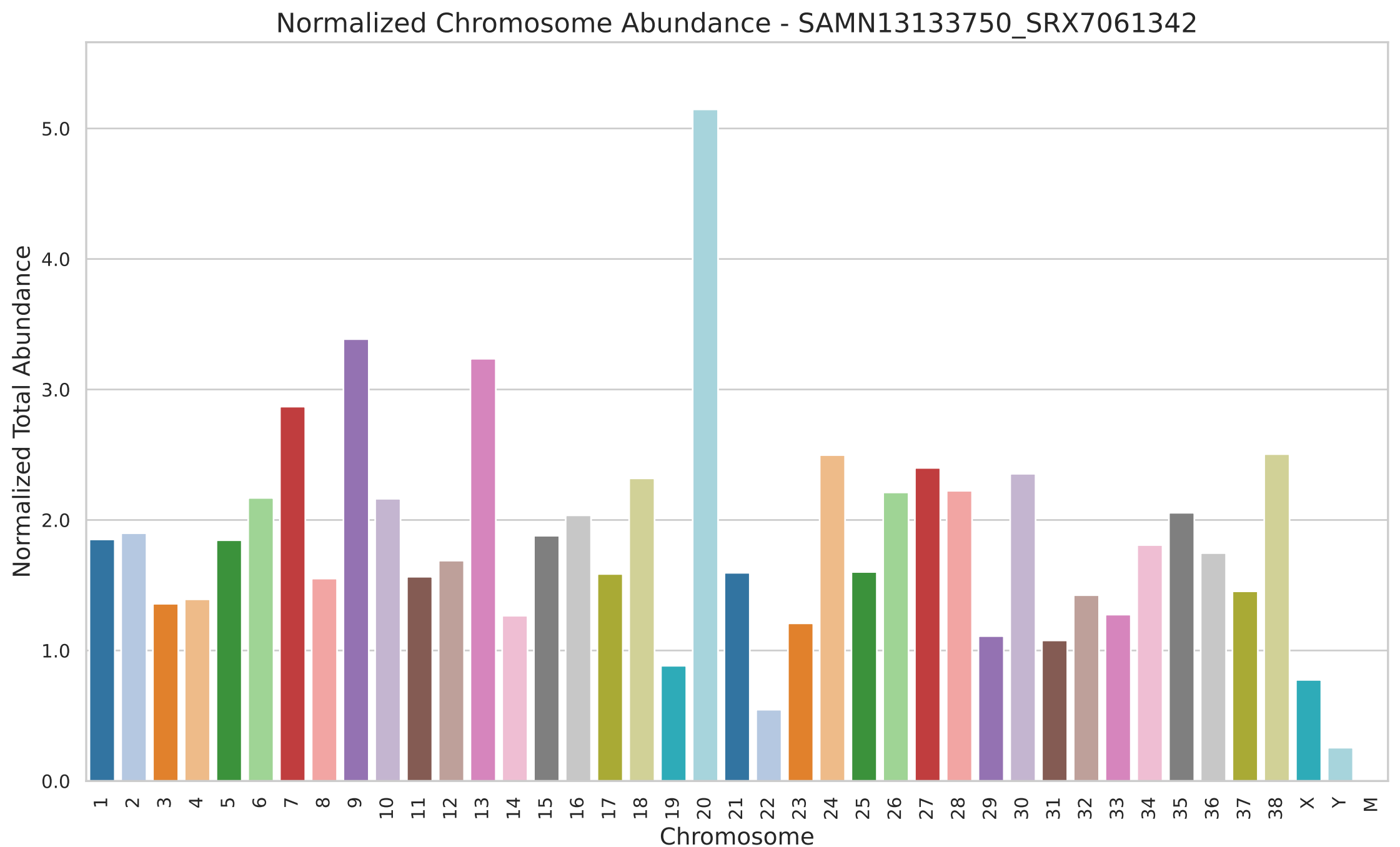

Normalized Chromosome Abundance - SAMN13133795_SRX7061335
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

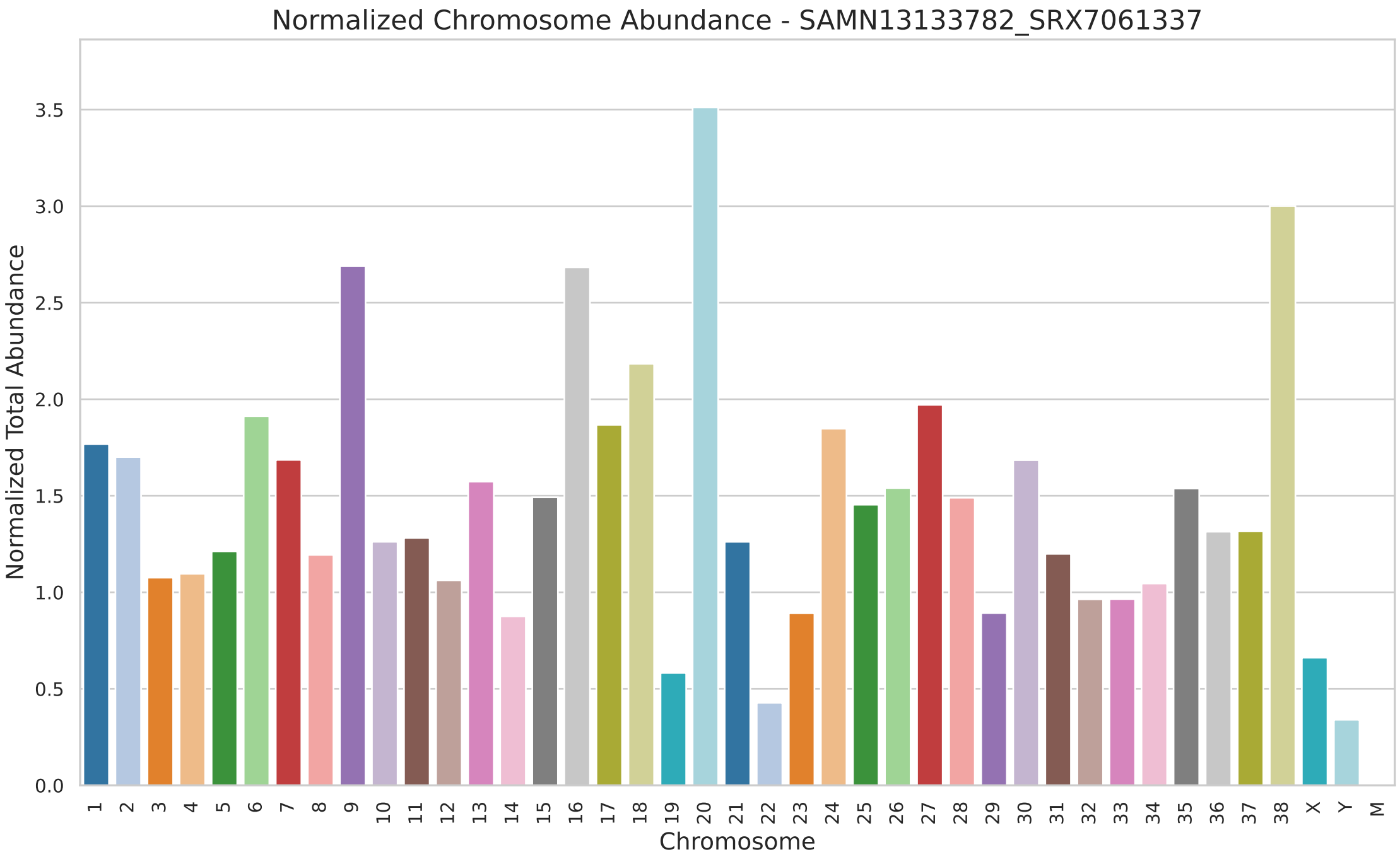

Normalized Chromosome Abundance - SAMN13133820_SRX7061341
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

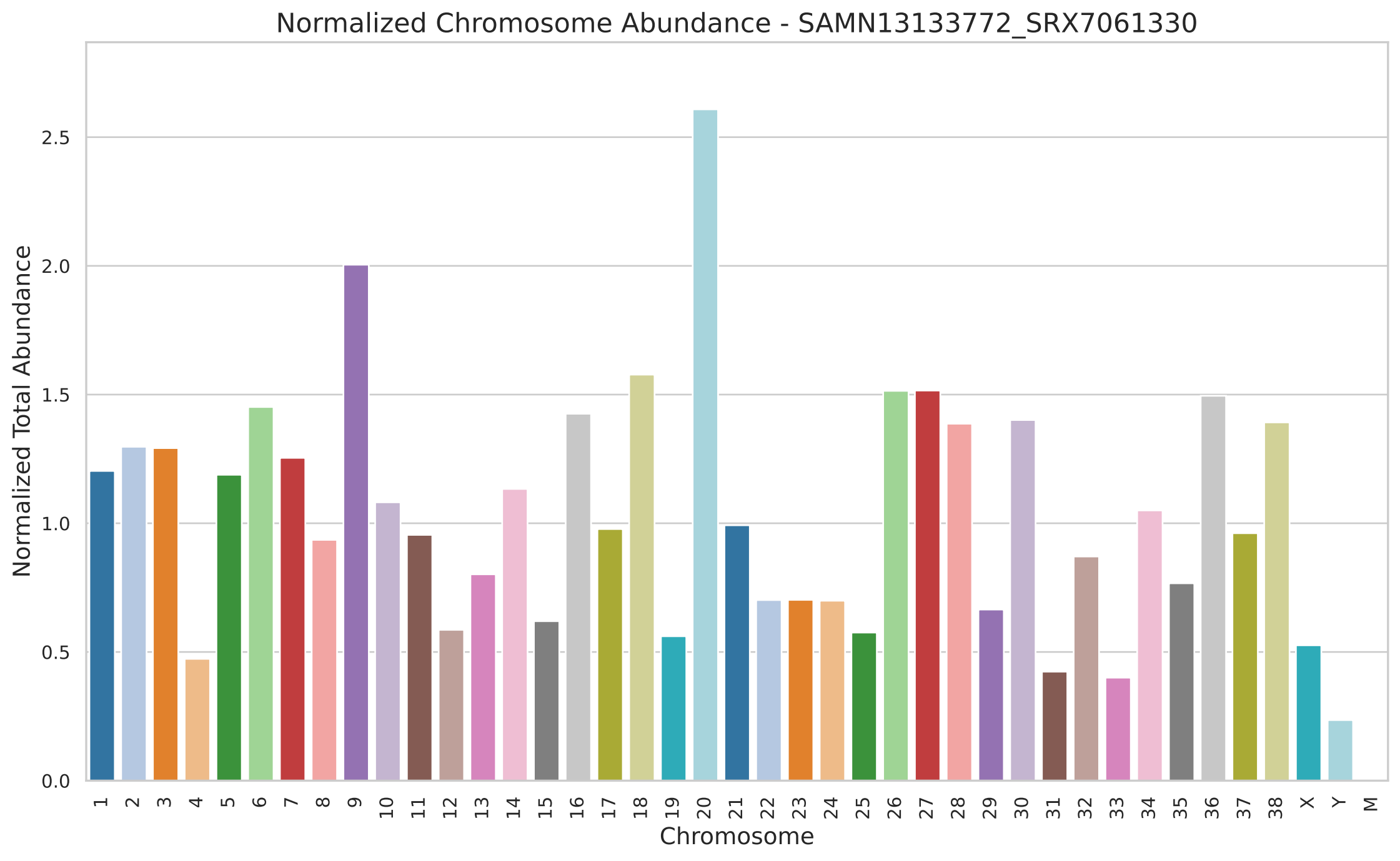

Normalized Chromosome Abundance - SAMN13133757_SRX7061346
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

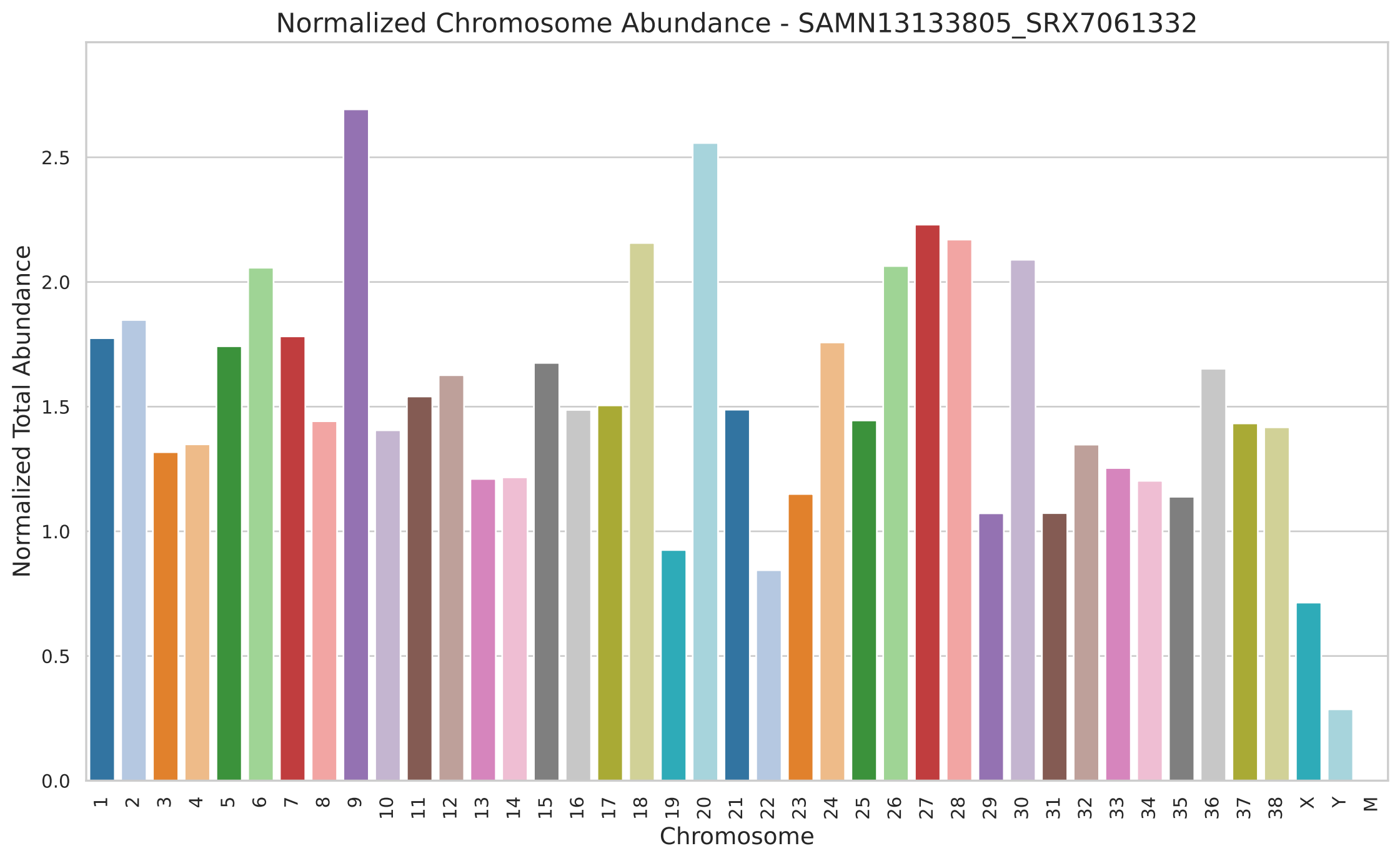

Normalized Chromosome Abundance - SAMN13133795_SRX7061336
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

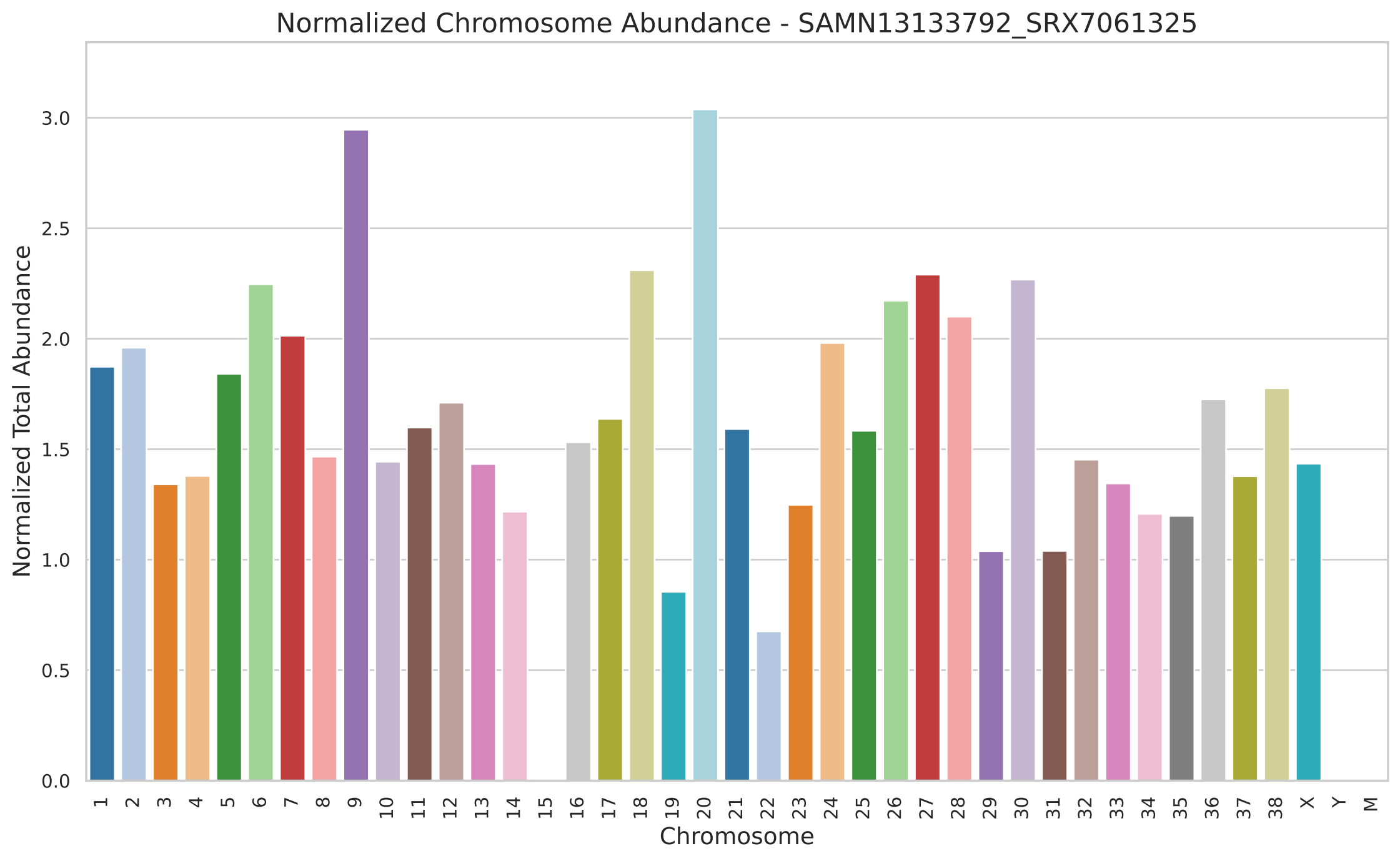

Normalized Chromosome Abundance - SAMN13133753_SRX7061360
Normalized Total Abundance
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

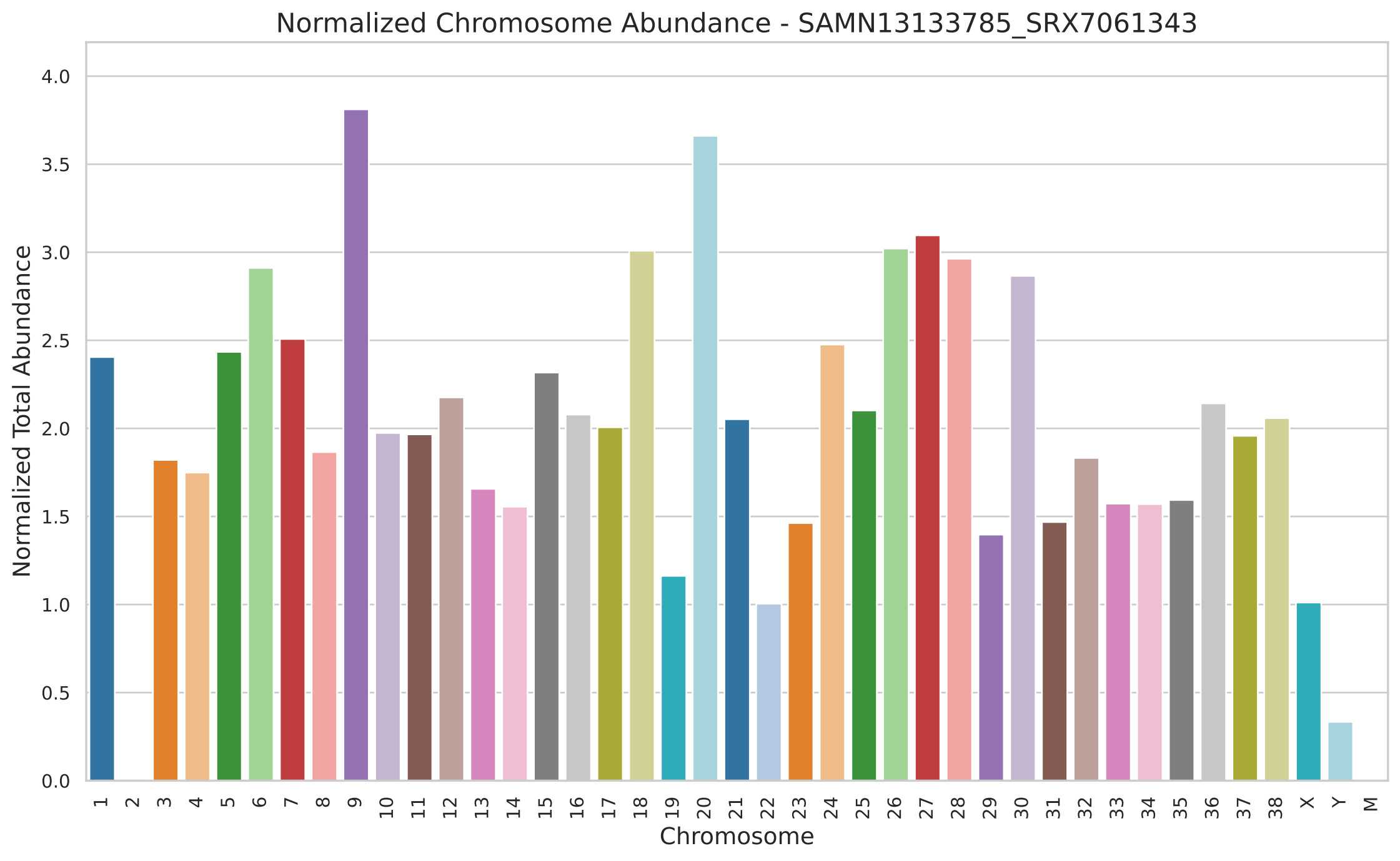

Normalized Chromosome Abundance - SAMN13133750_SRX7061342
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

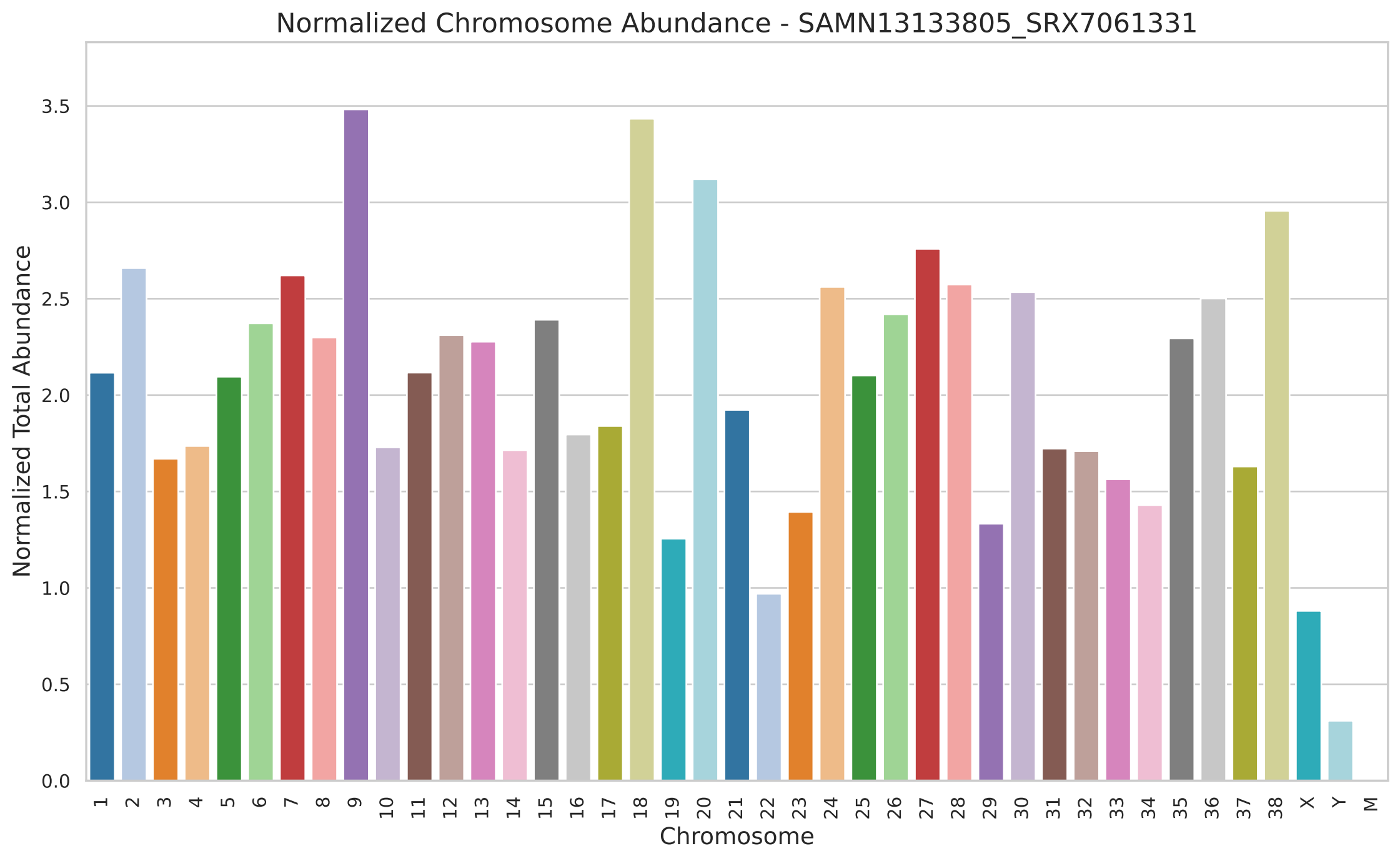

Normalized Chromosome Abundance - SAMN13133782_SRX7061337
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

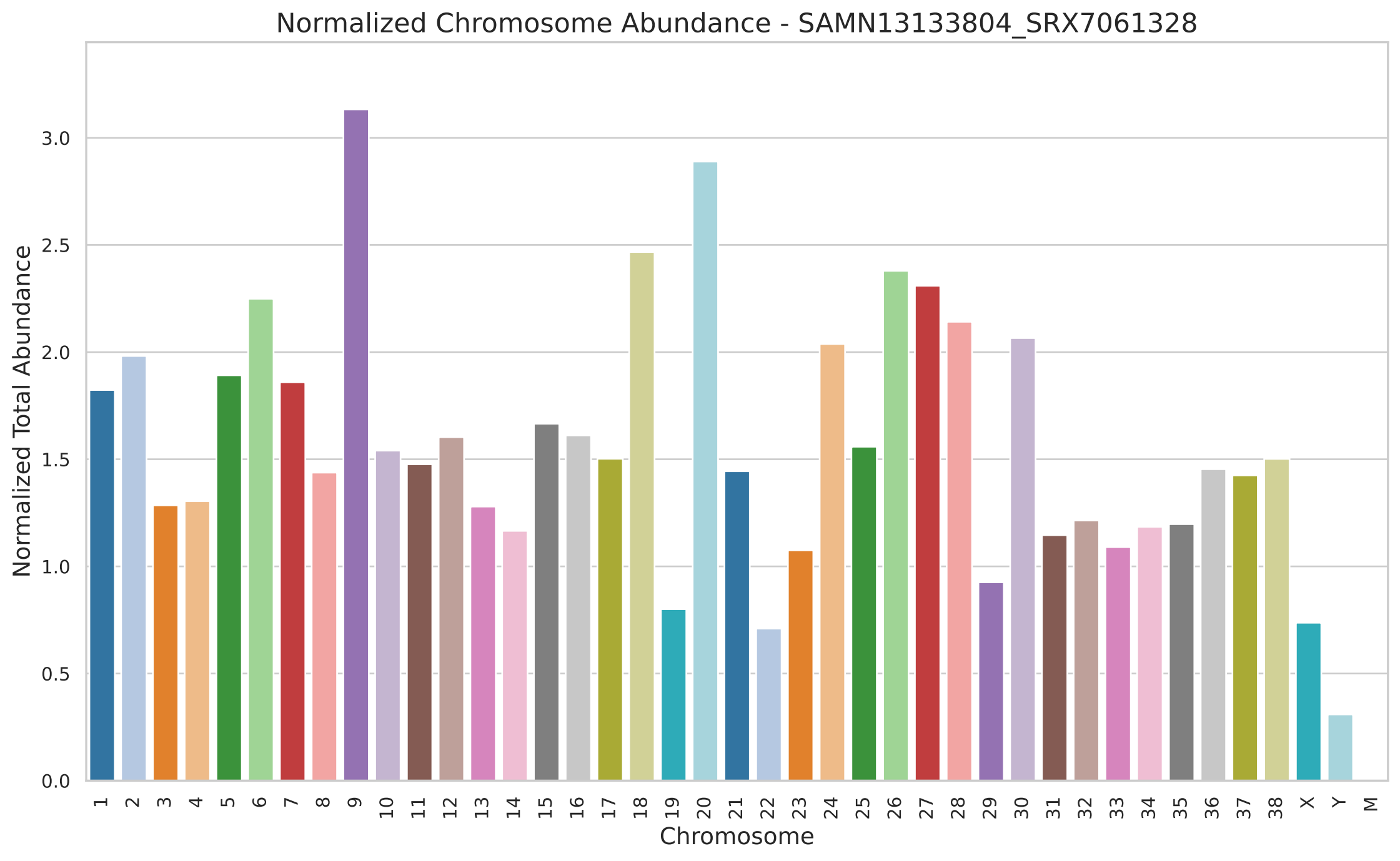

Normalized Chromosome Abundance - SAMN13133772_SRX7061330
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

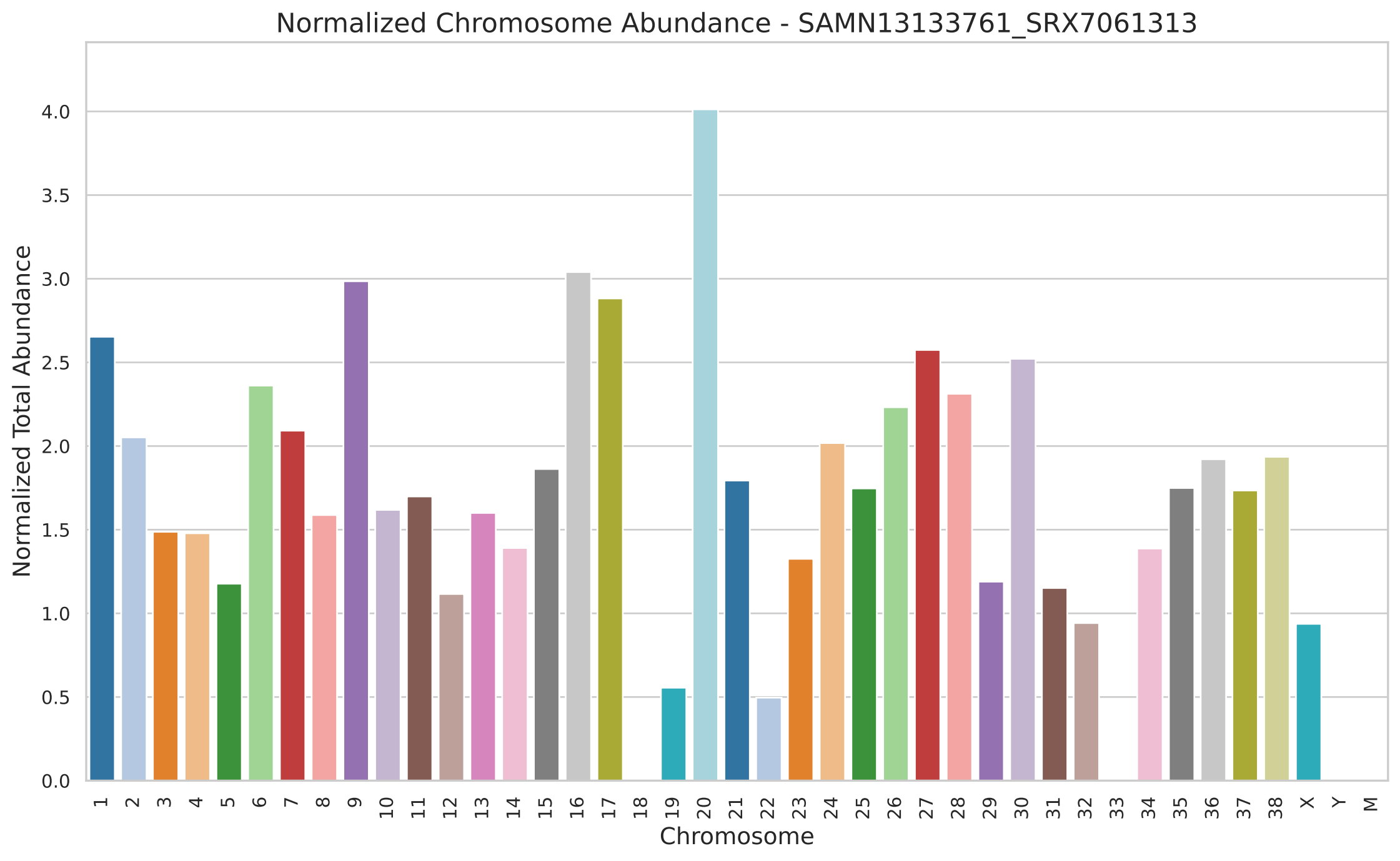

Normalized Chromosome Abundance - SAMN13133805_SRX7061332
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

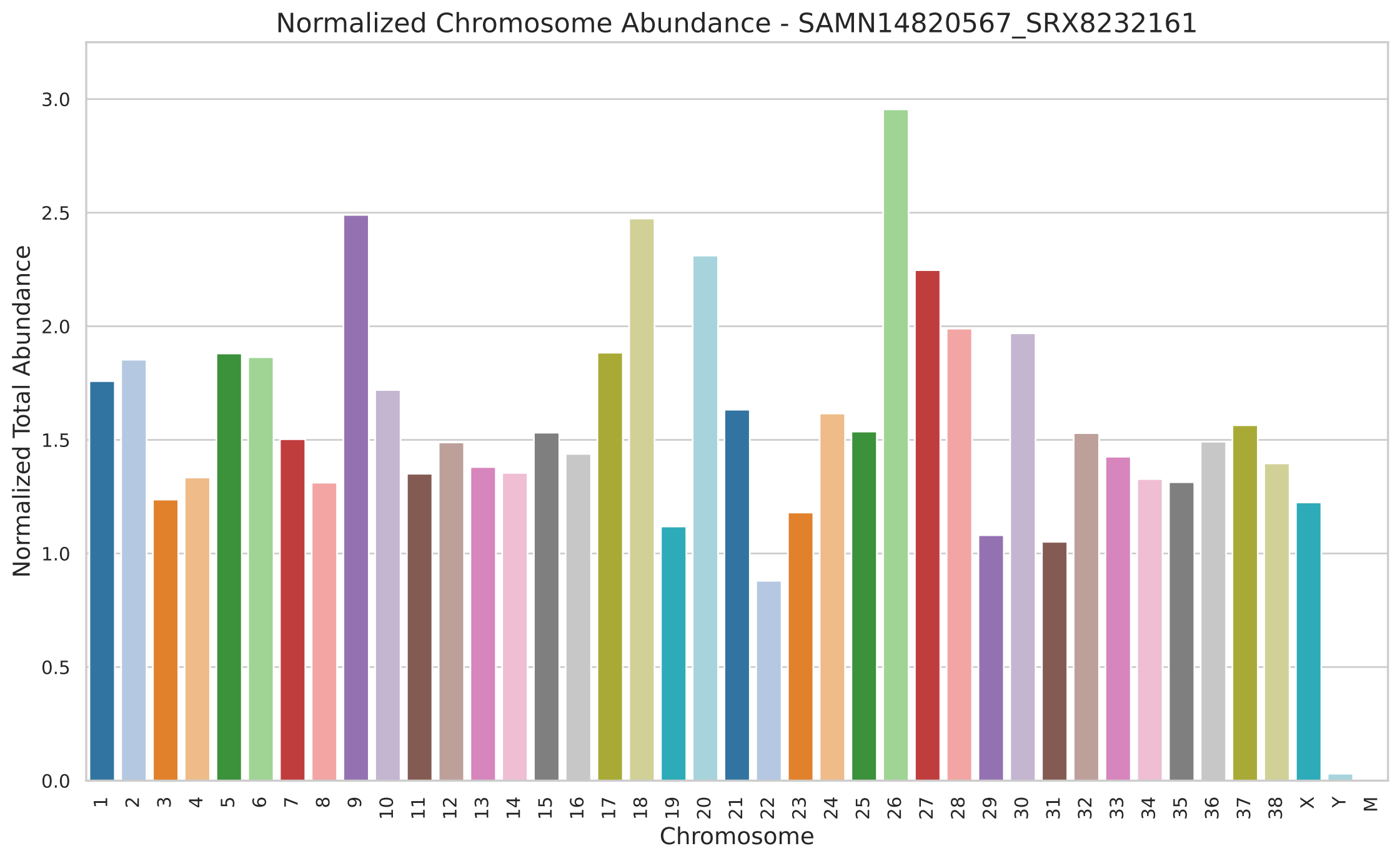

Normalized Chromosome Abundance - SAMN13133792_SRX7061325
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

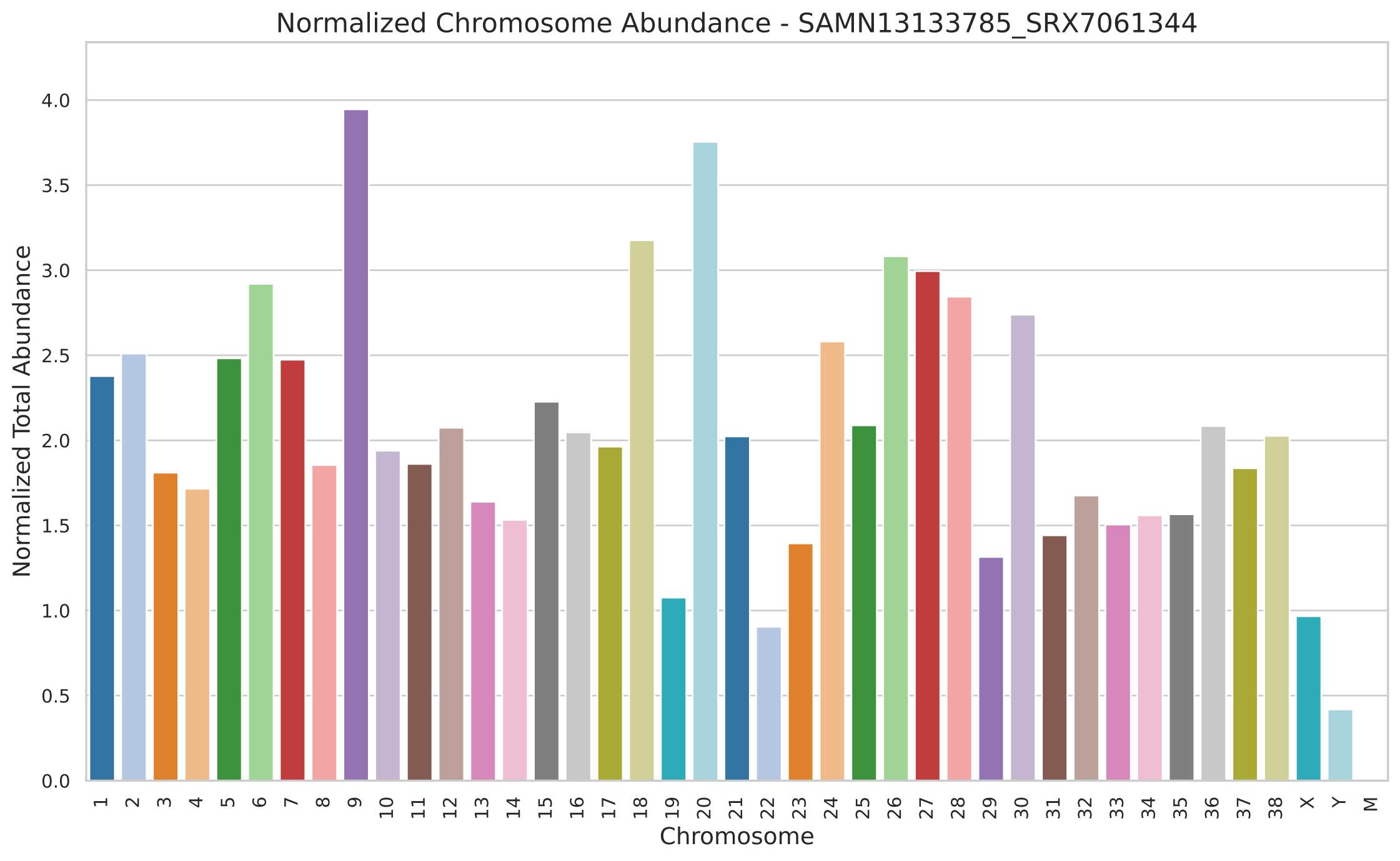

Normalized Chromosome Abundance - SAMN13133785_SRX7061343
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

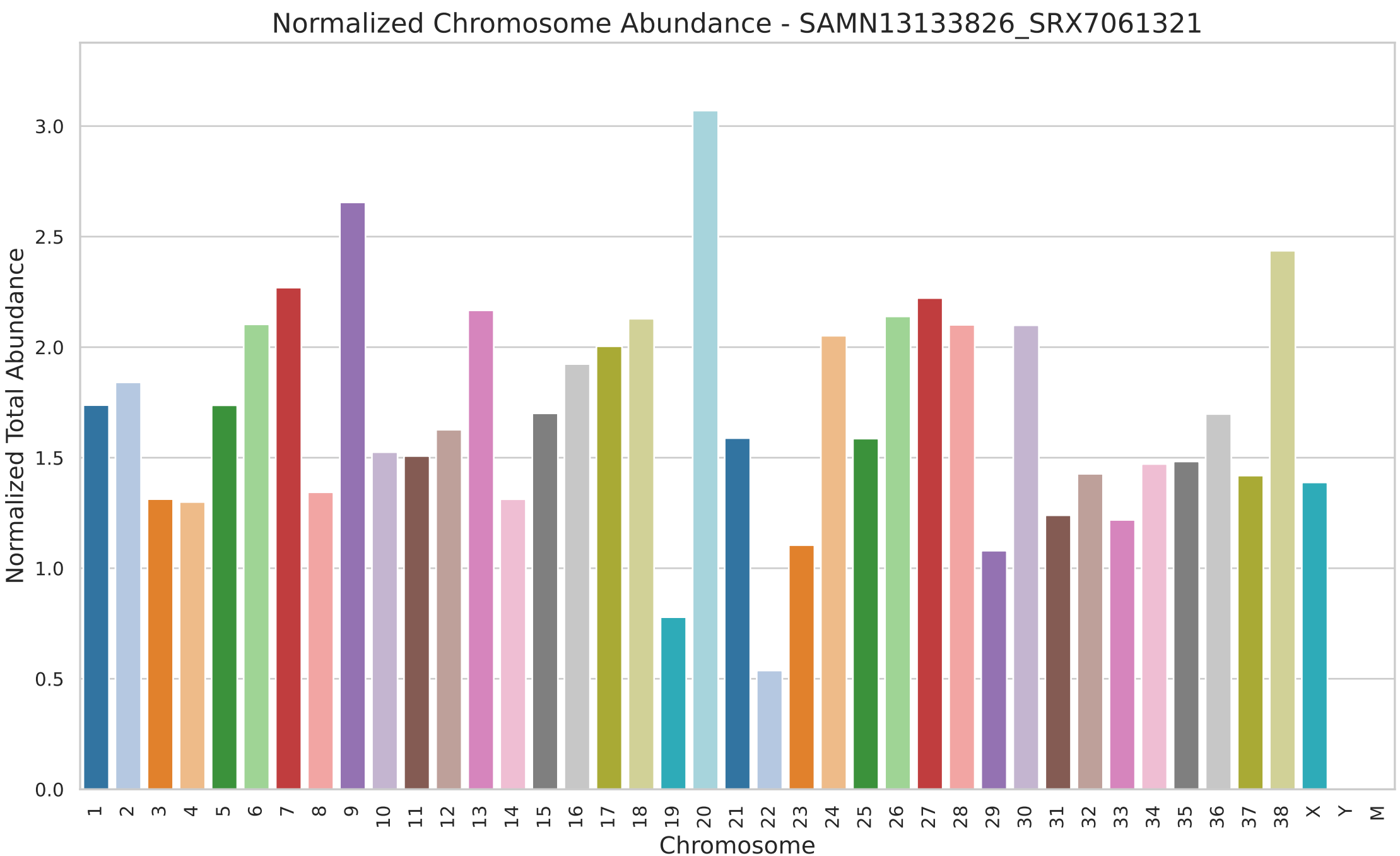

Normalized Chromosome Abundance - SAMN13133805_SRX7061331
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

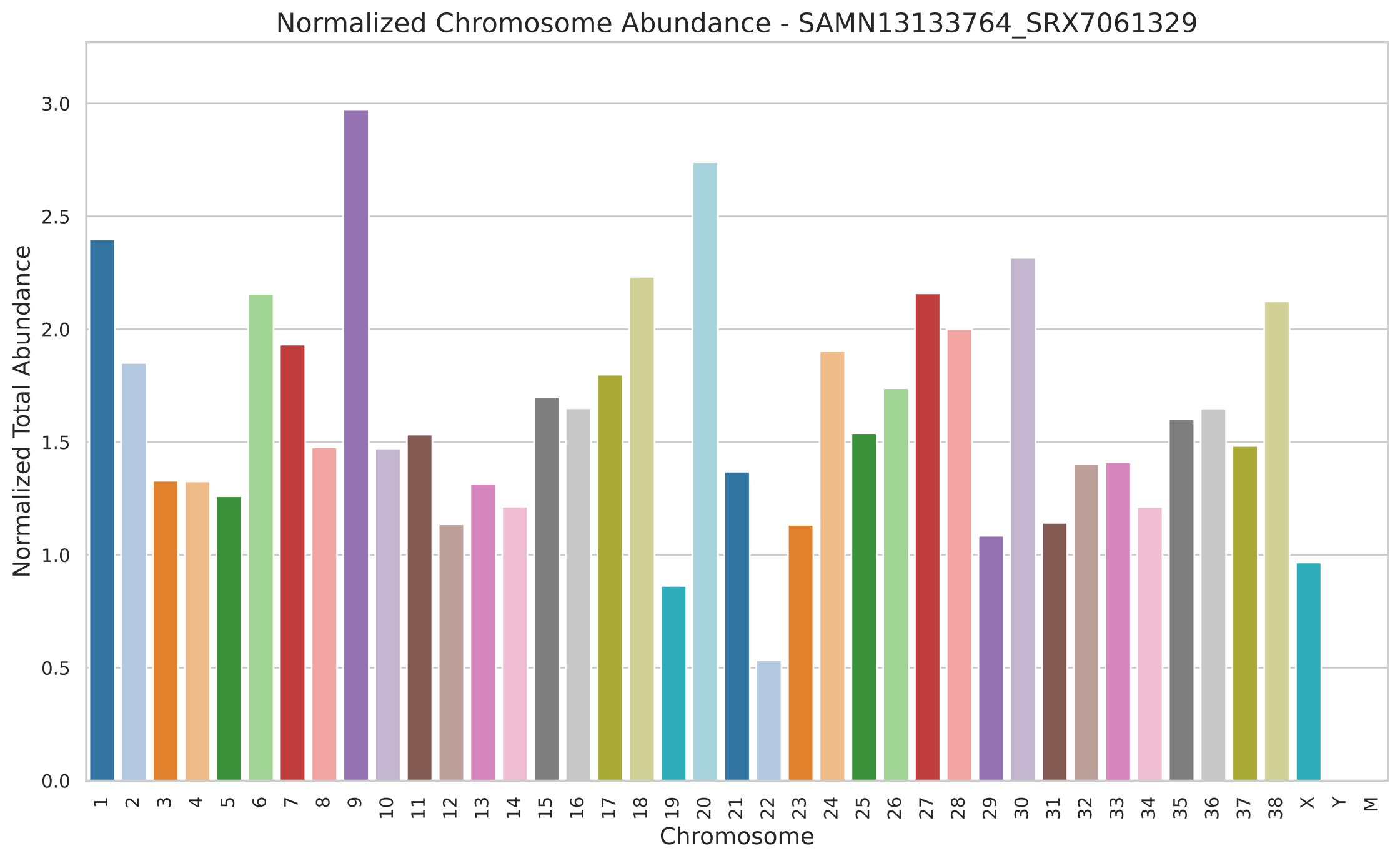

Normalized Chromosome Abundance - SAMN13133804_SRX7061328
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

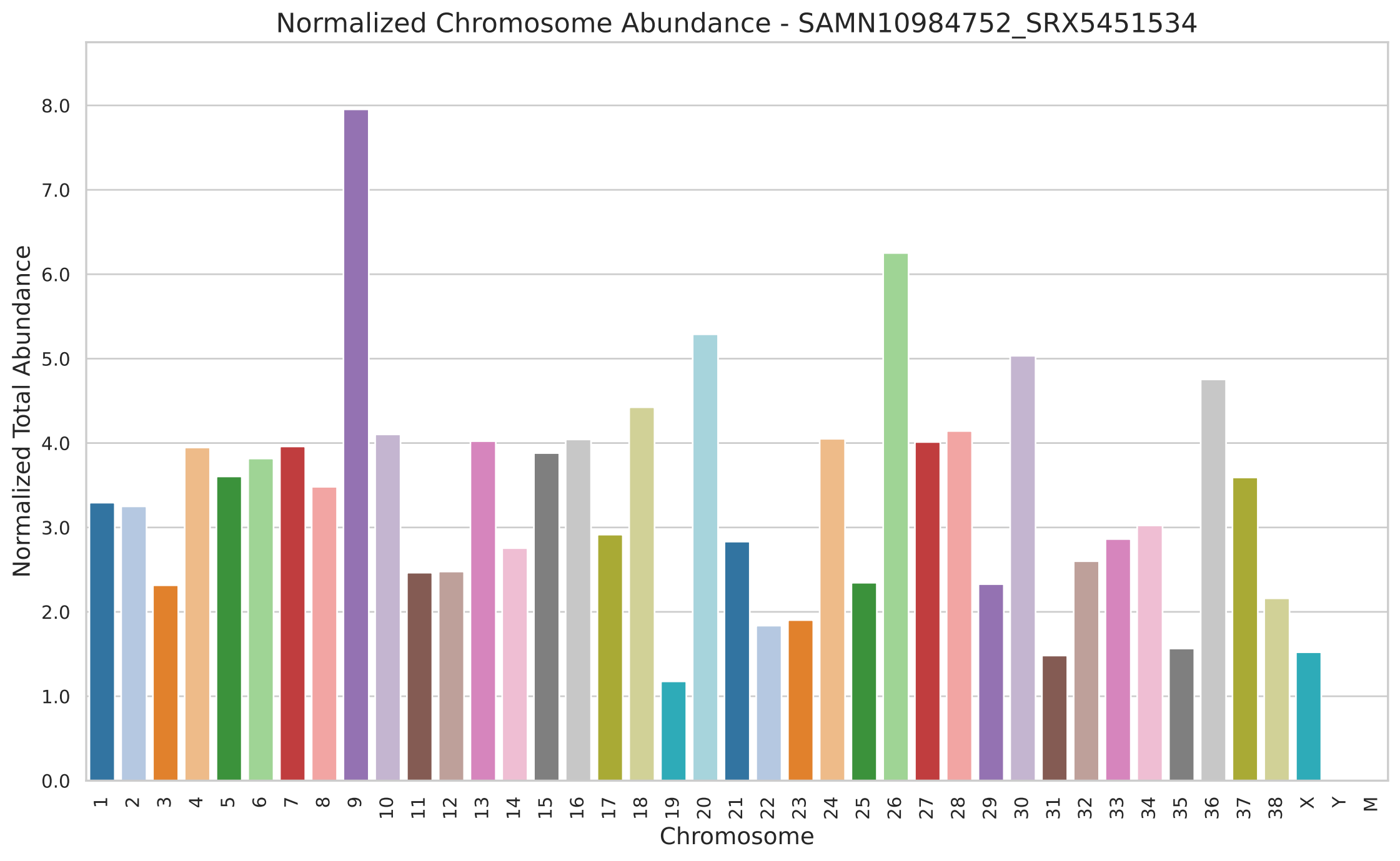

Normalized Chromosome Abundance - SAMN13133761_SRX7061313
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

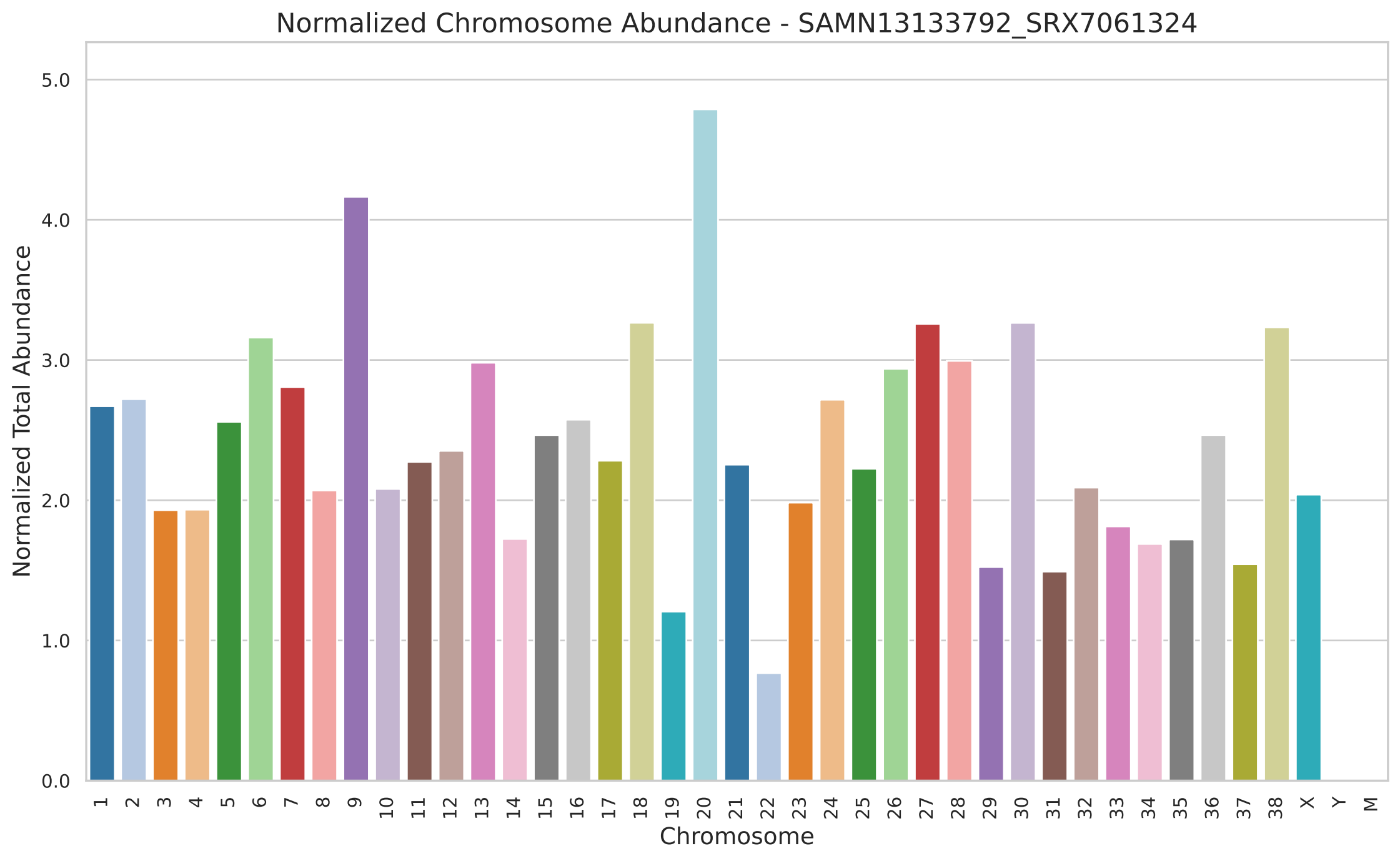

Normalized Chromosome Abundance - SAMN14820567_SRX8232161
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

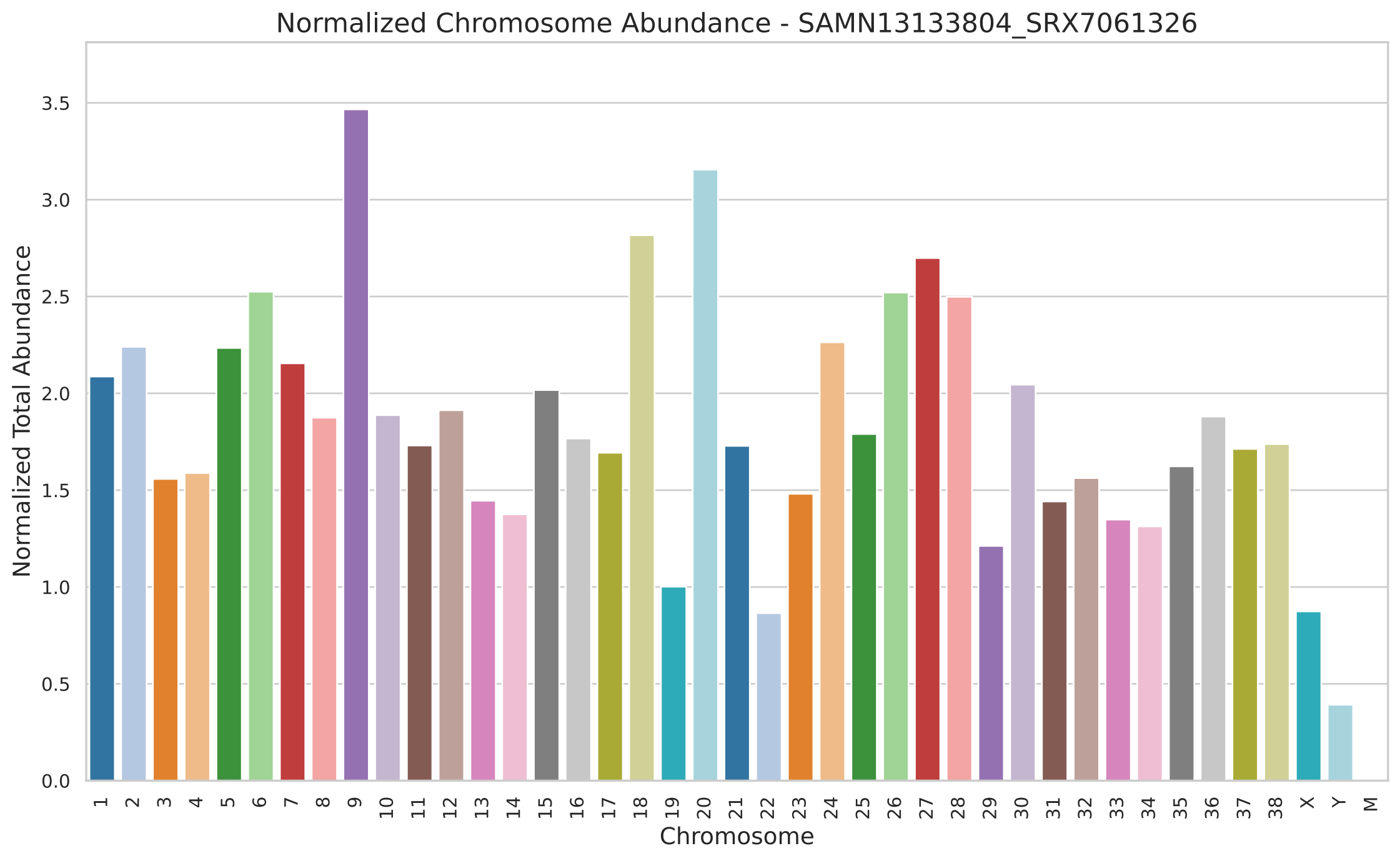

Normalized Chromosome Abundance - SAMN13133785_SRX7061344
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

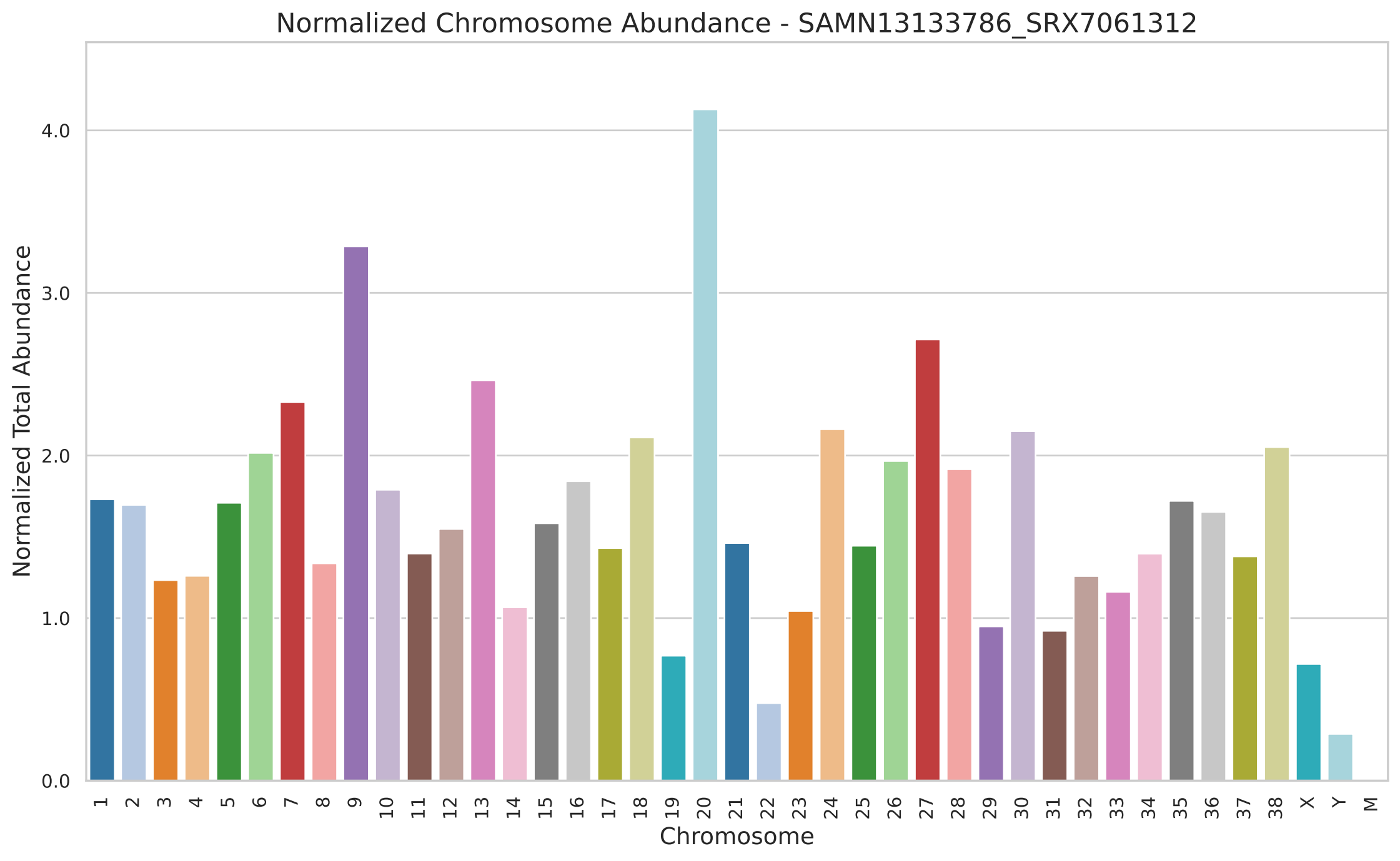

Normalized Chromosome Abundance - SAMN13133826_SRX7061321
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

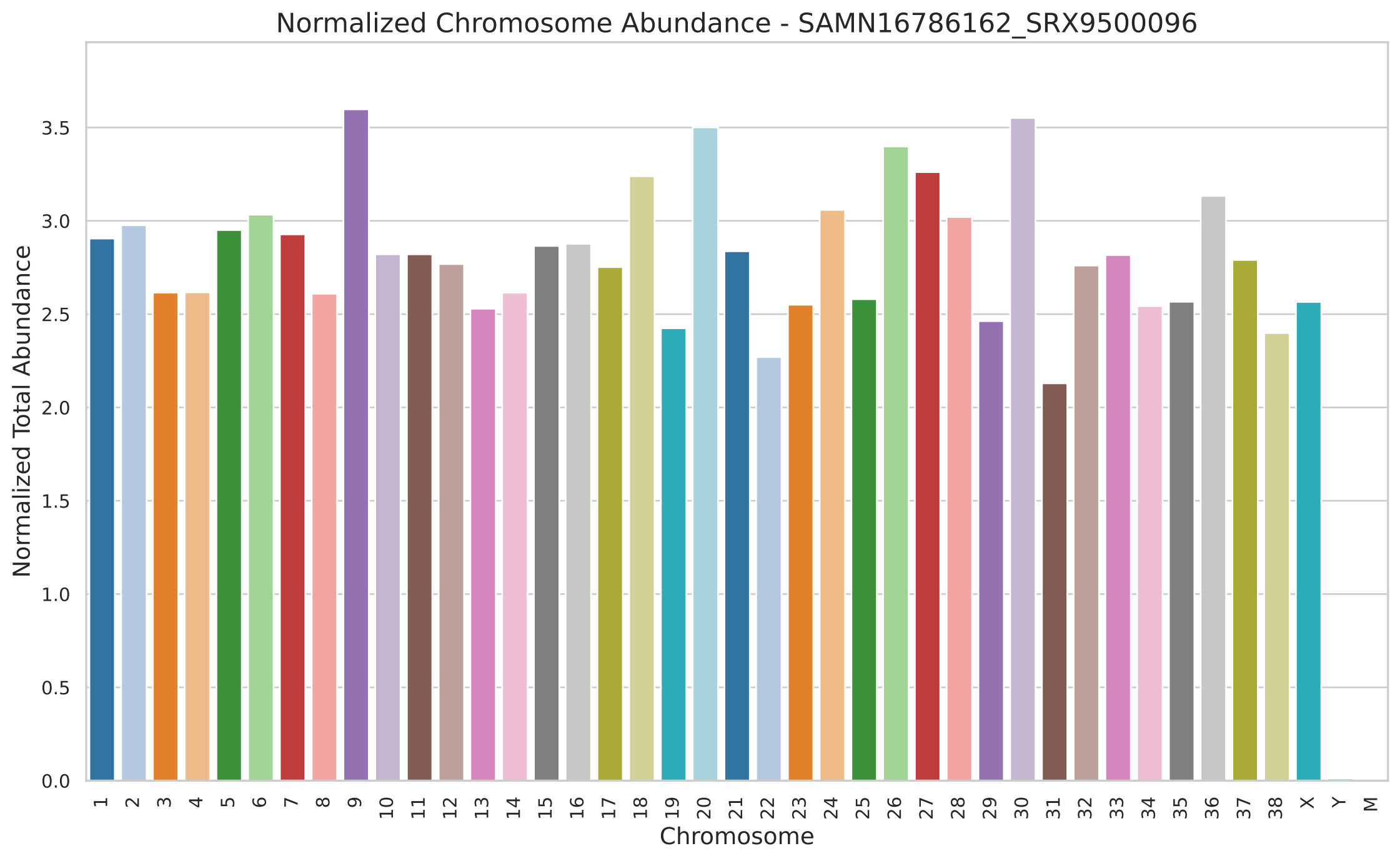

Normalized Chromosome Abundance - SAMN13133764_SRX7061329
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

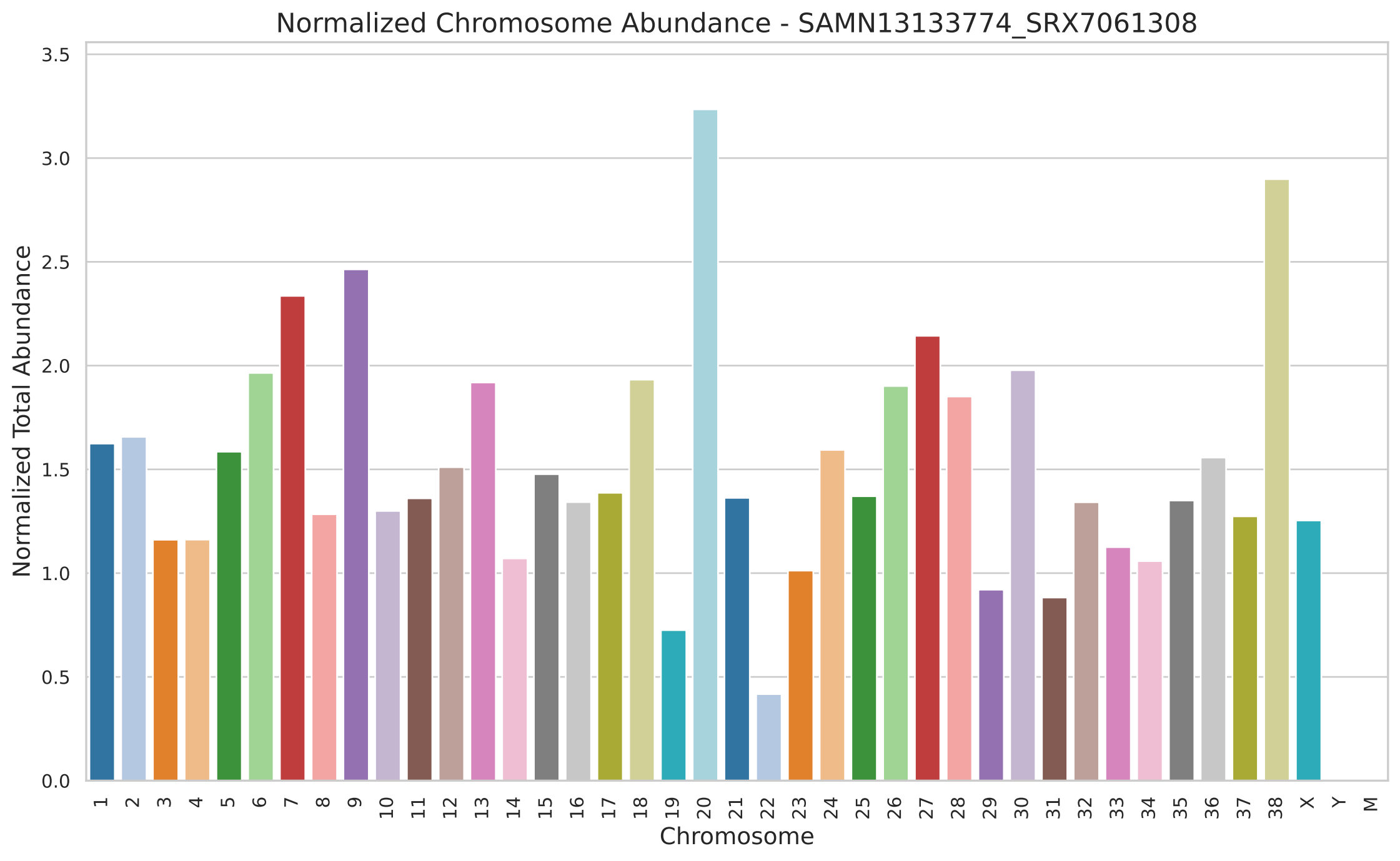

Normalized Chromosome Abundance - SAMN10984752_SRX5451534
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

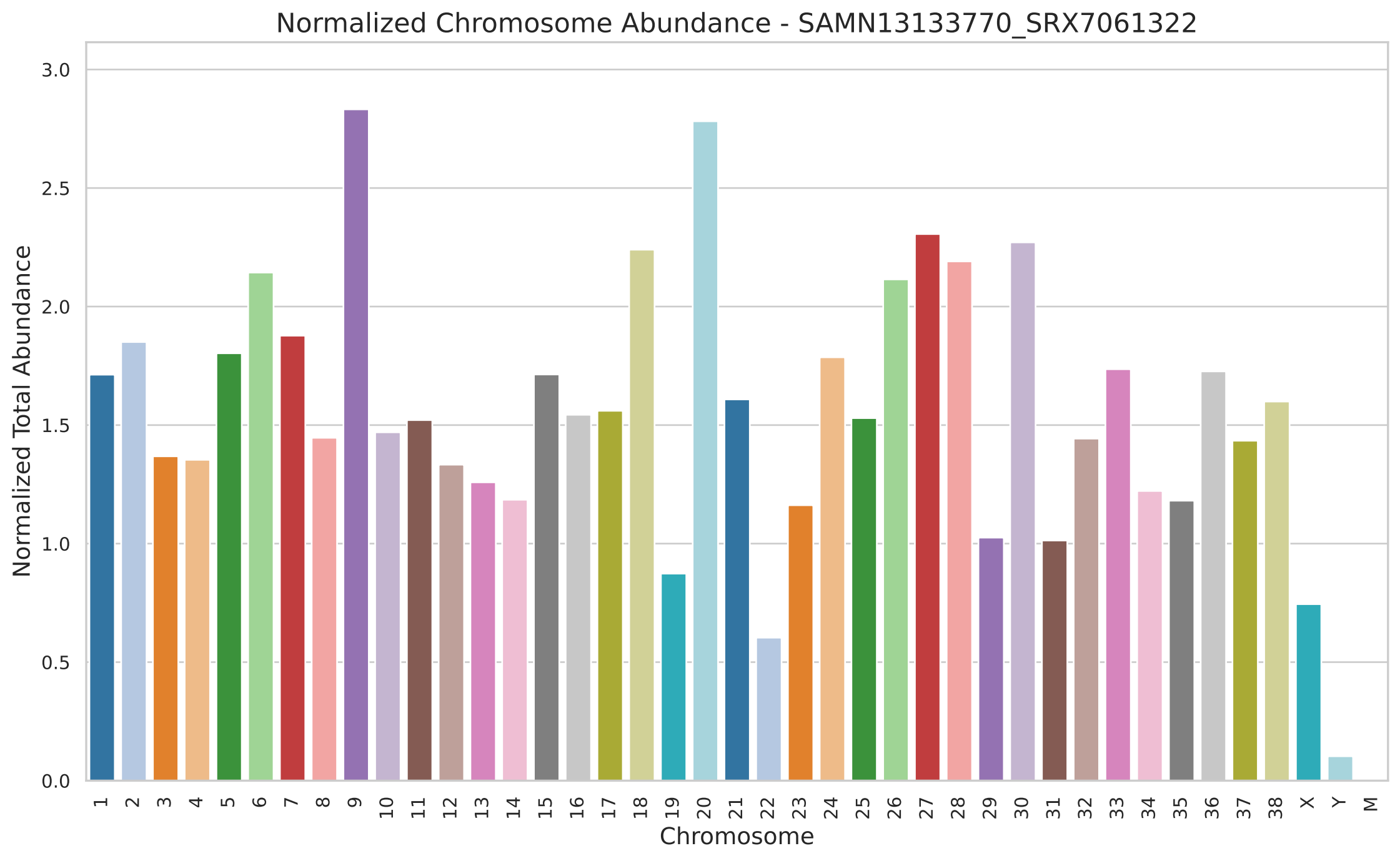

Normalized Chromosome Abundance - SAMN13133792_SRX7061324
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

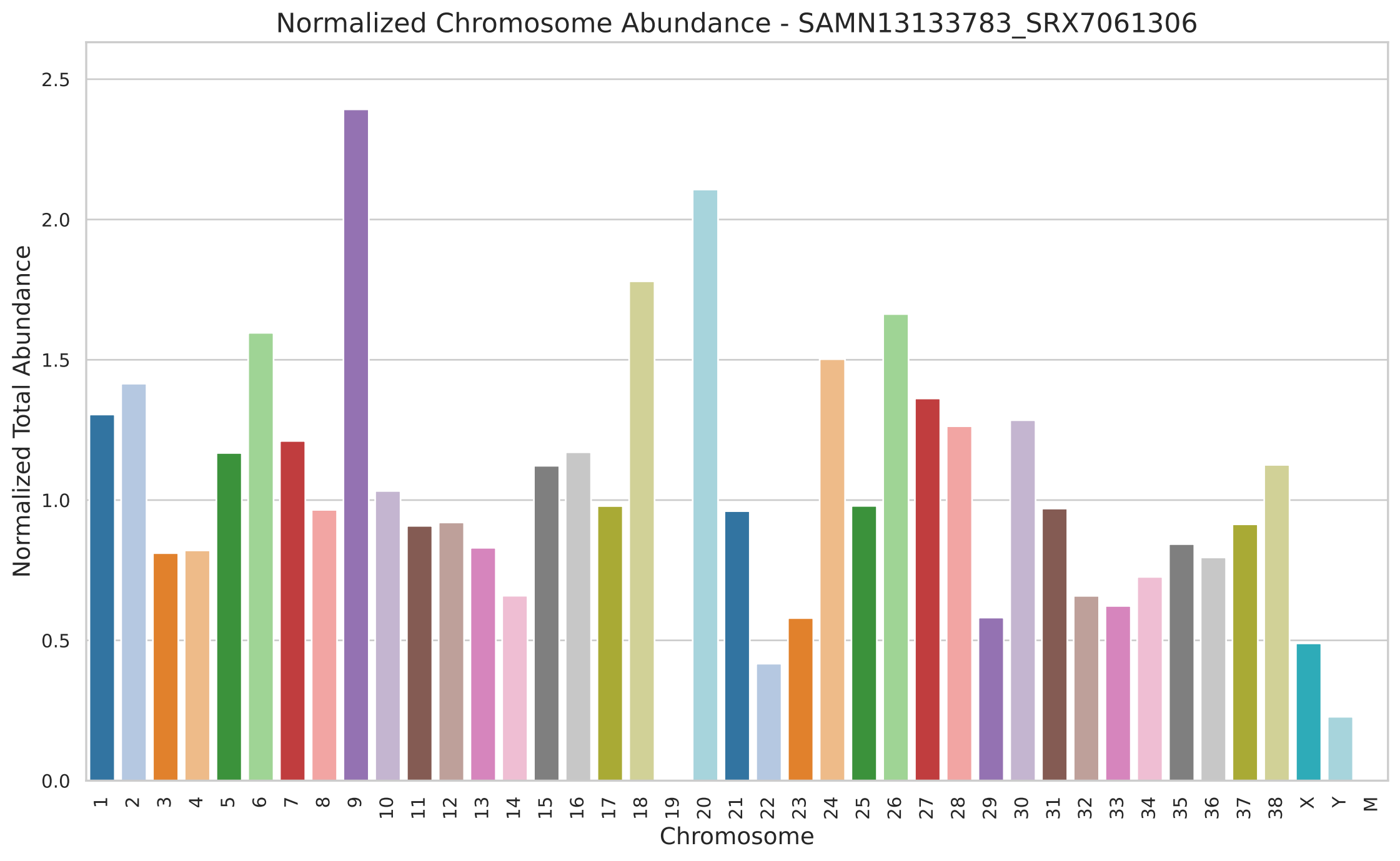

Normalized Chromosome Abundance - SAMN13133804_SRX7061326
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

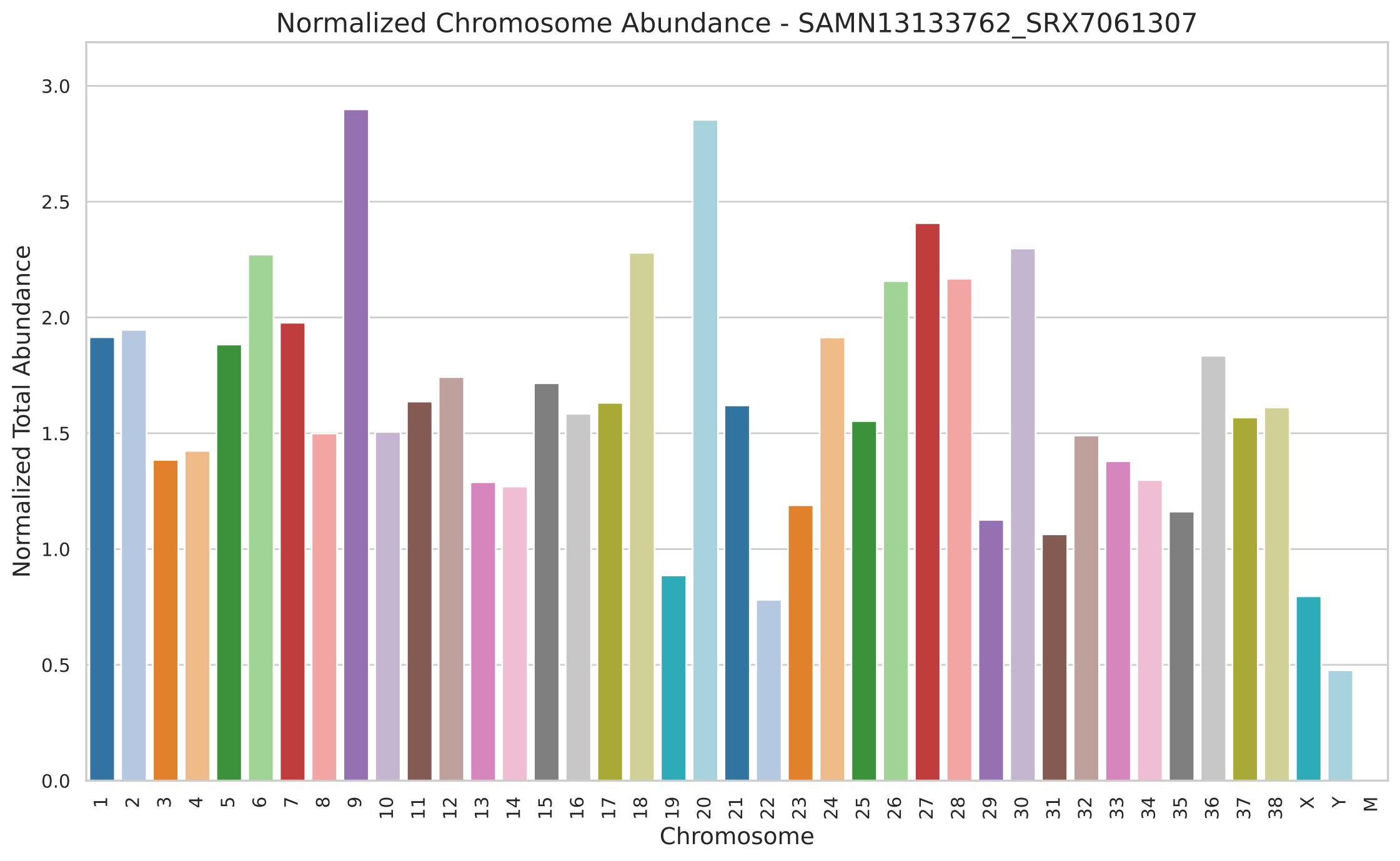

Normalized Chromosome Abundance - SAMN13133786_SRX7061312
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

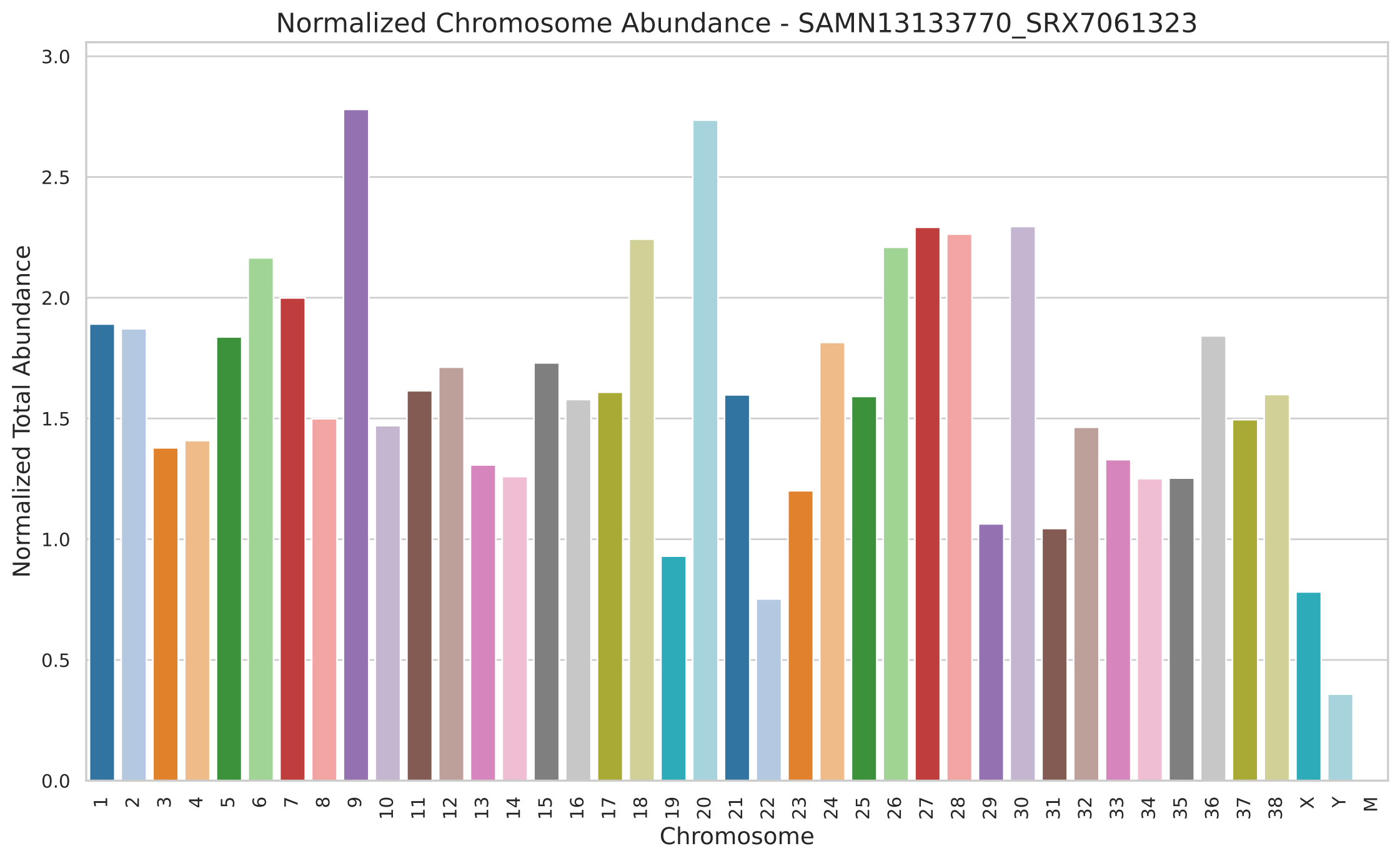

Normalized Chromosome Abundance - SAMN16786162_SRX9500096
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

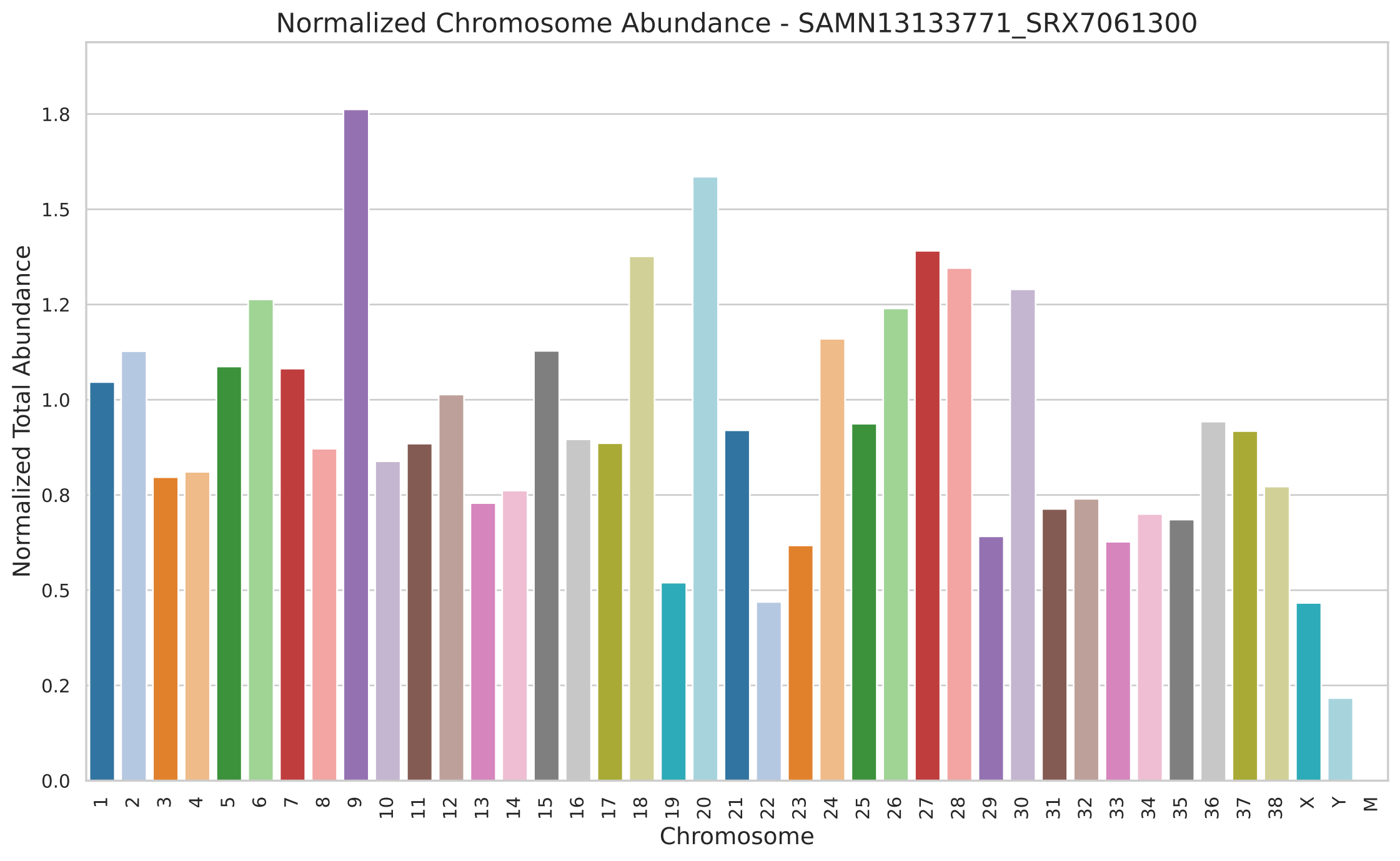

Normalized Chromosome Abundance - SAMN13133774_SRX7061308
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

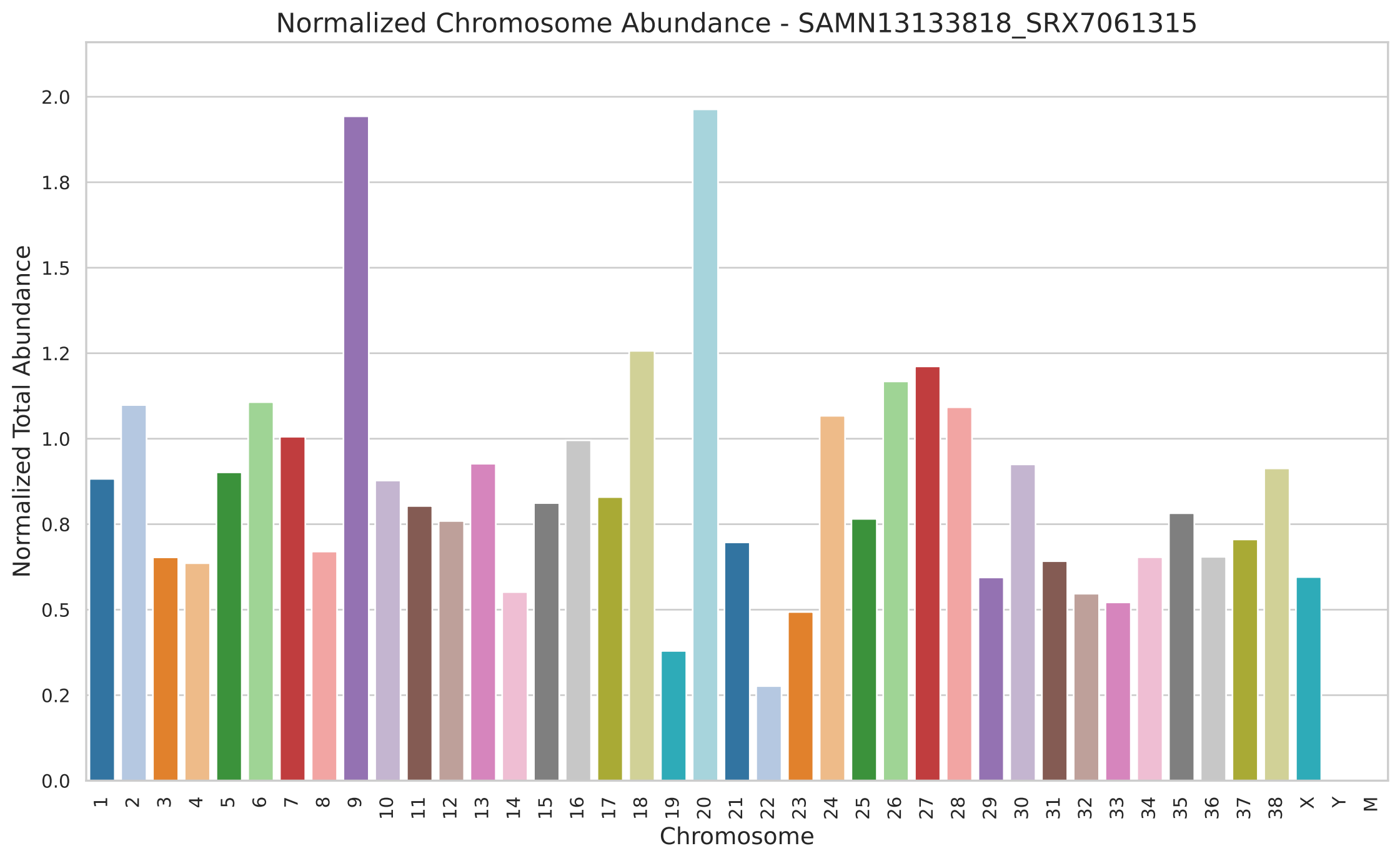

Normalized Chromosome Abundance - SAMN13133770_SRX7061322
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

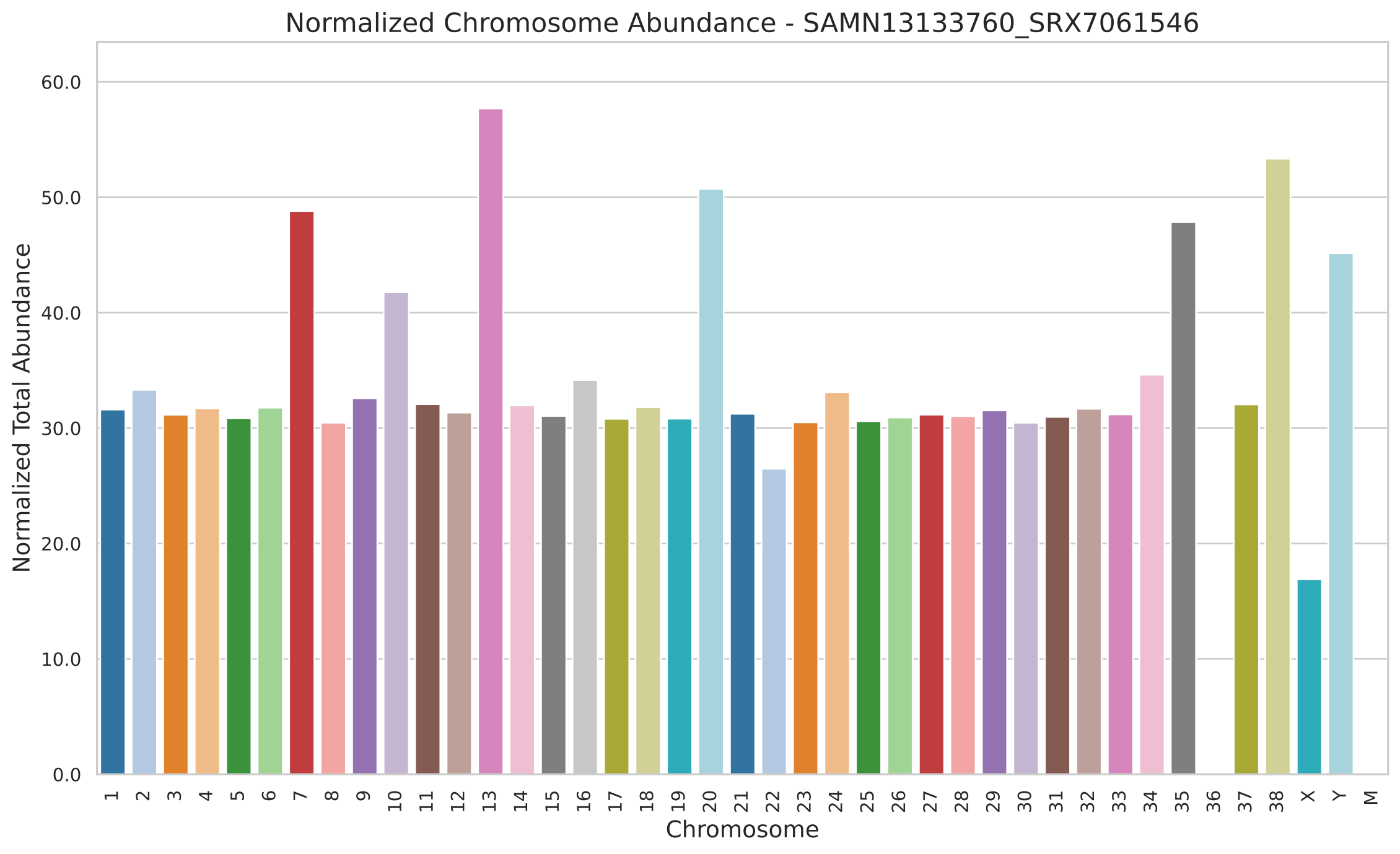

Normalized Chromosome Abundance - SAMN13133783_SRX7061306
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

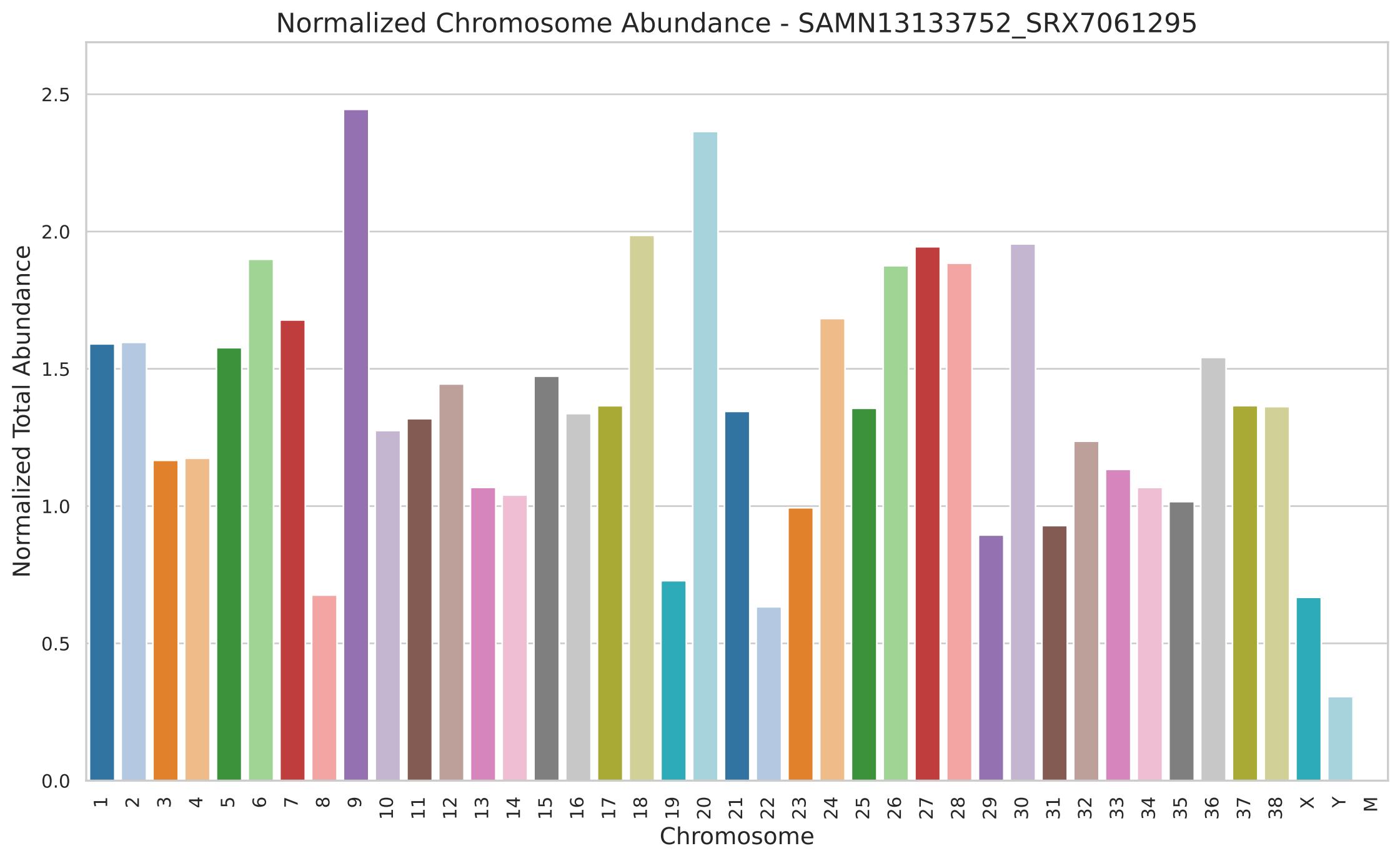

Normalized Chromosome Abundance - SAMN13133762_SRX7061307
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

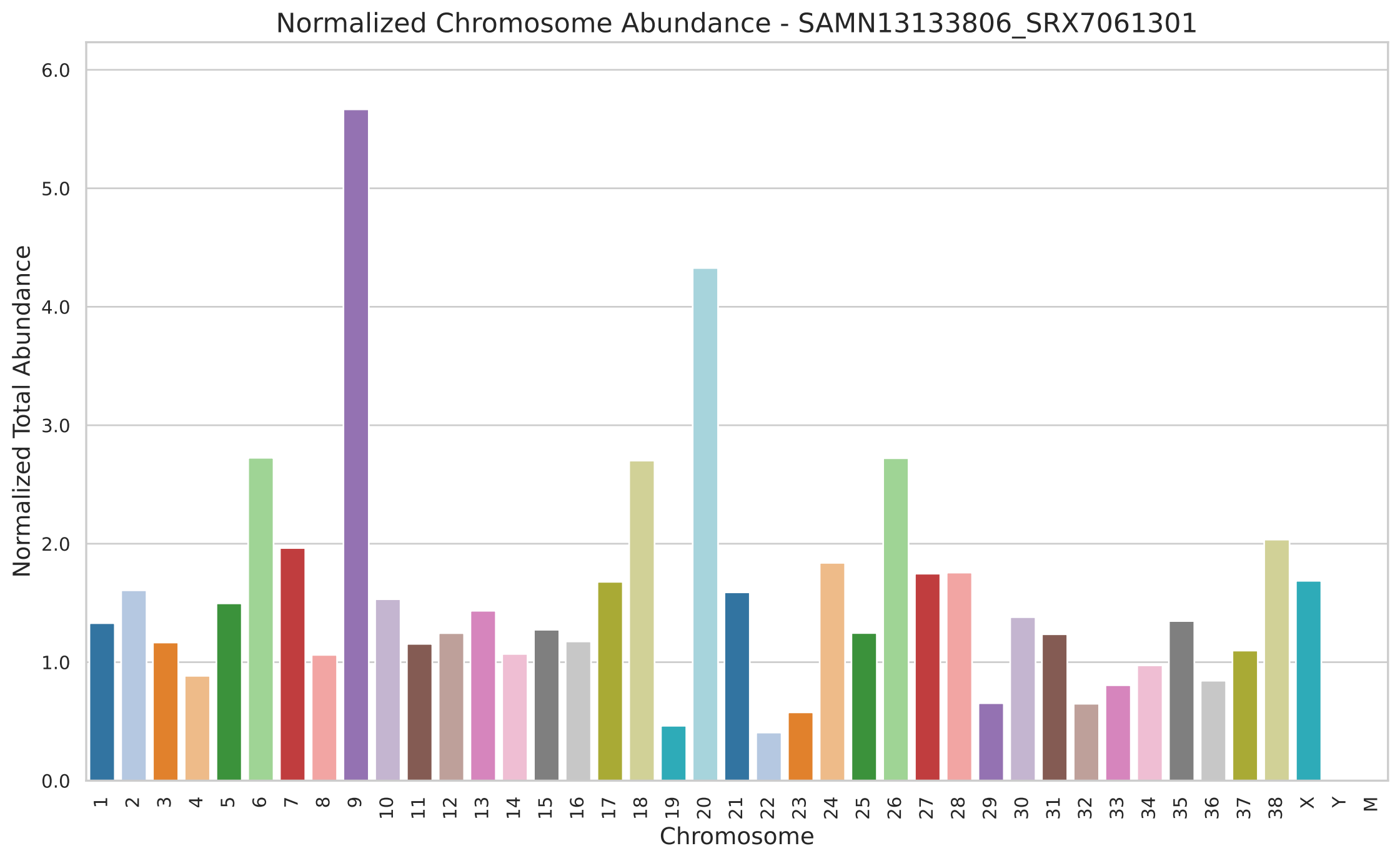

Normalized Chromosome Abundance - SAMN13133770_SRX7061323
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

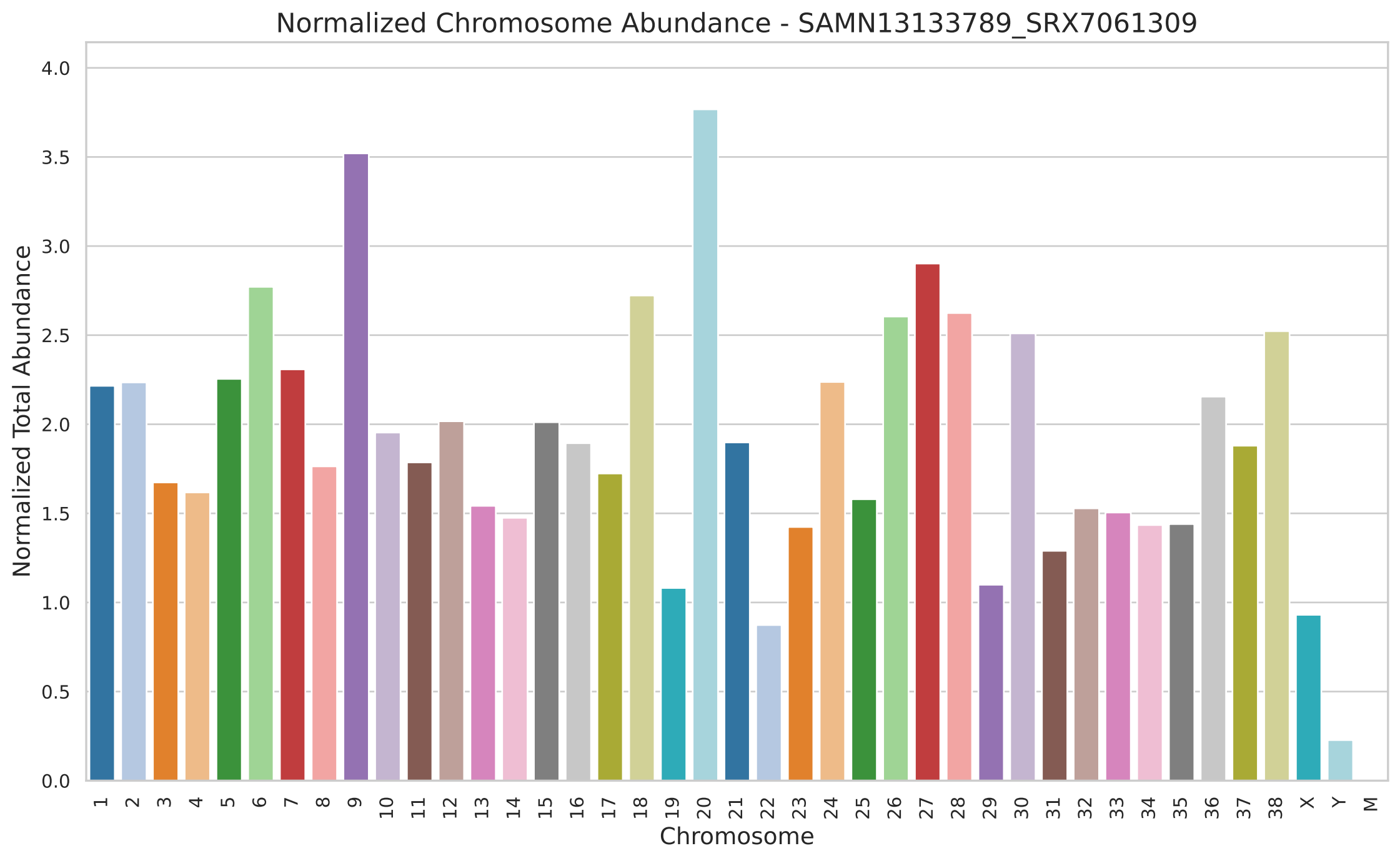

Normalized Chromosome Abundance - SAMN13133771_SRX7061300
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

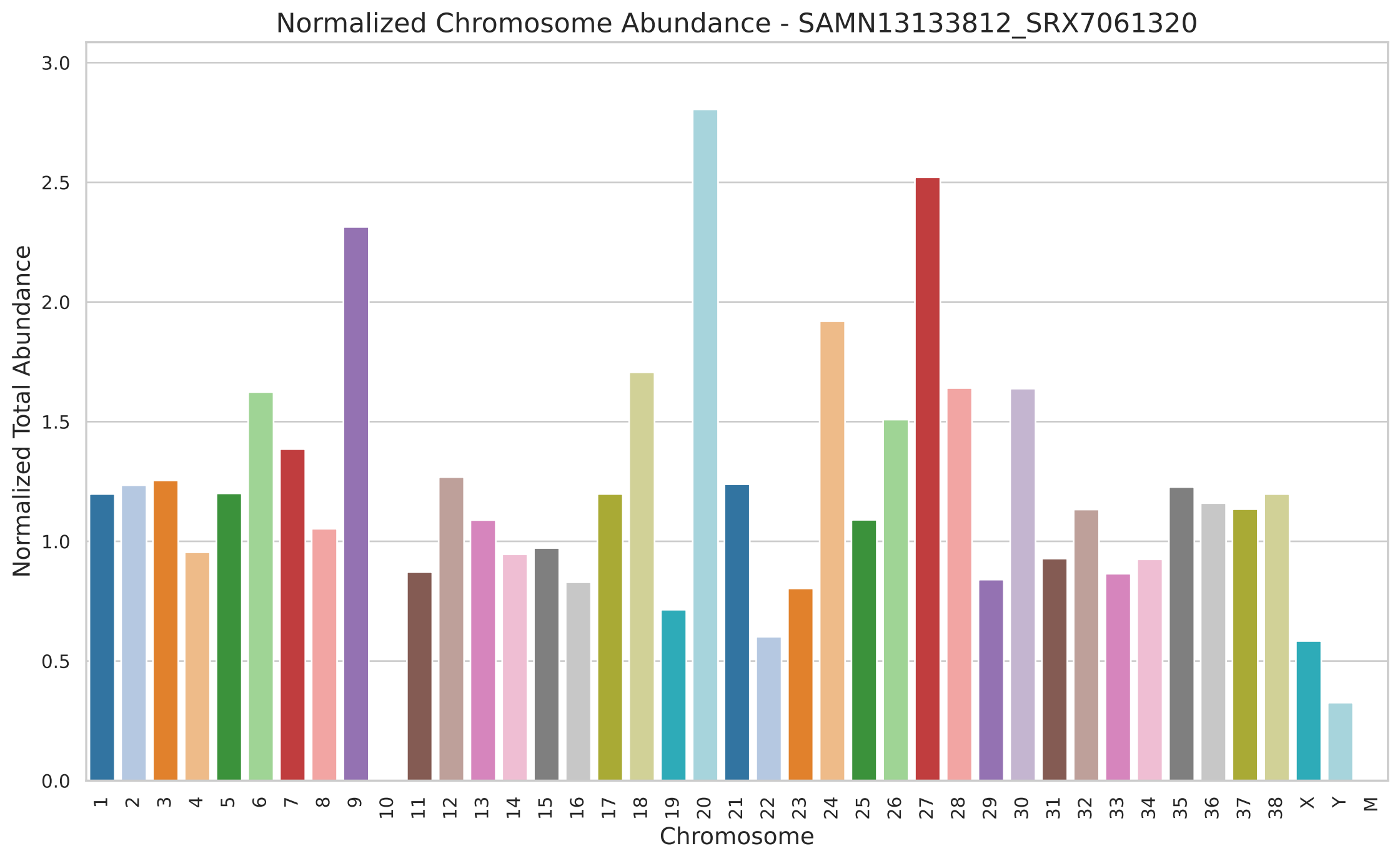

Normalized Chromosome Abundance - SAMN13133818_SRX7061315
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

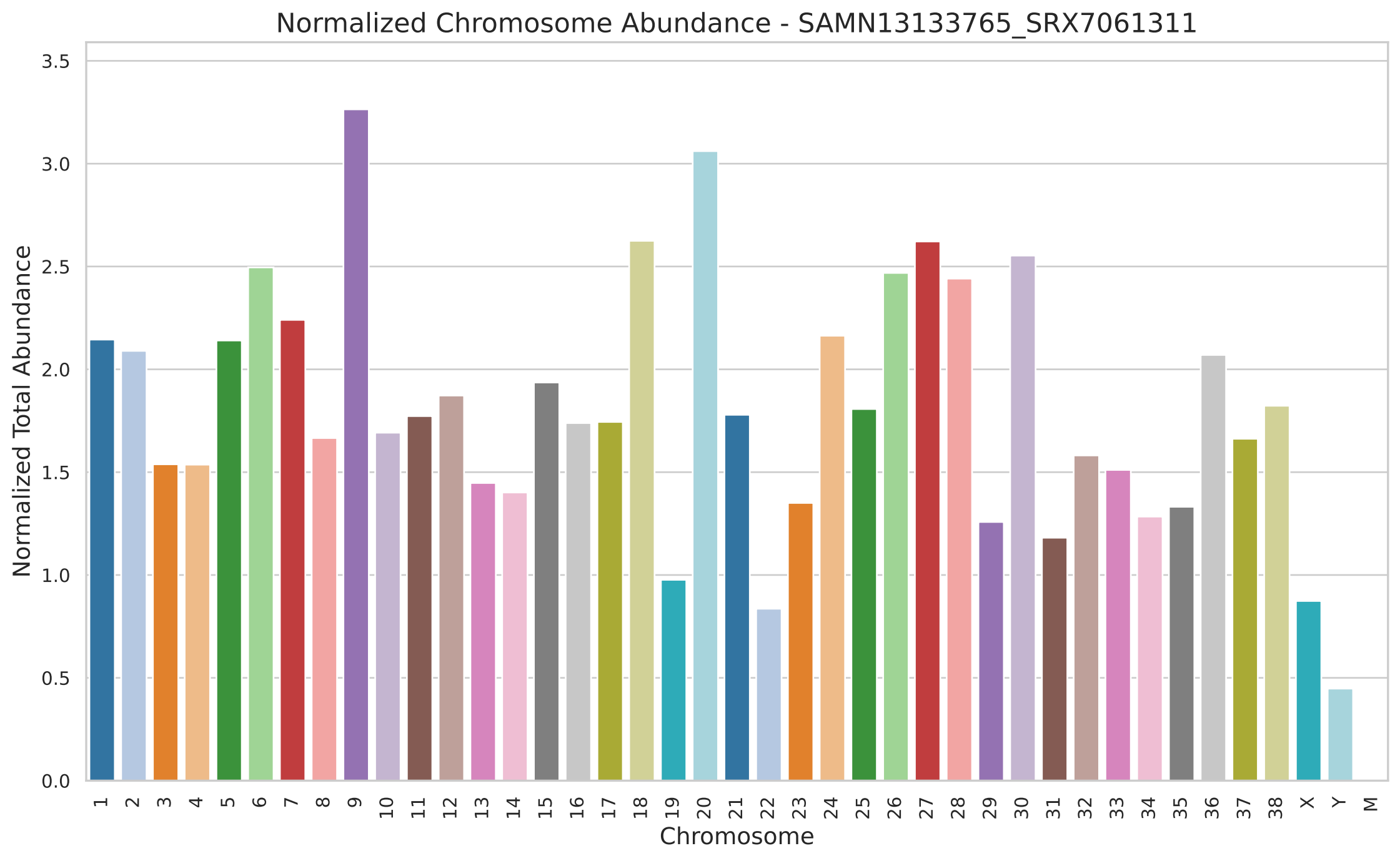

Normalized Chromosome Abundance - SAMN13133760_SRX7061546
Normalized Total Abundance
60.0
50.0
40.0
30.0
20.0
10.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

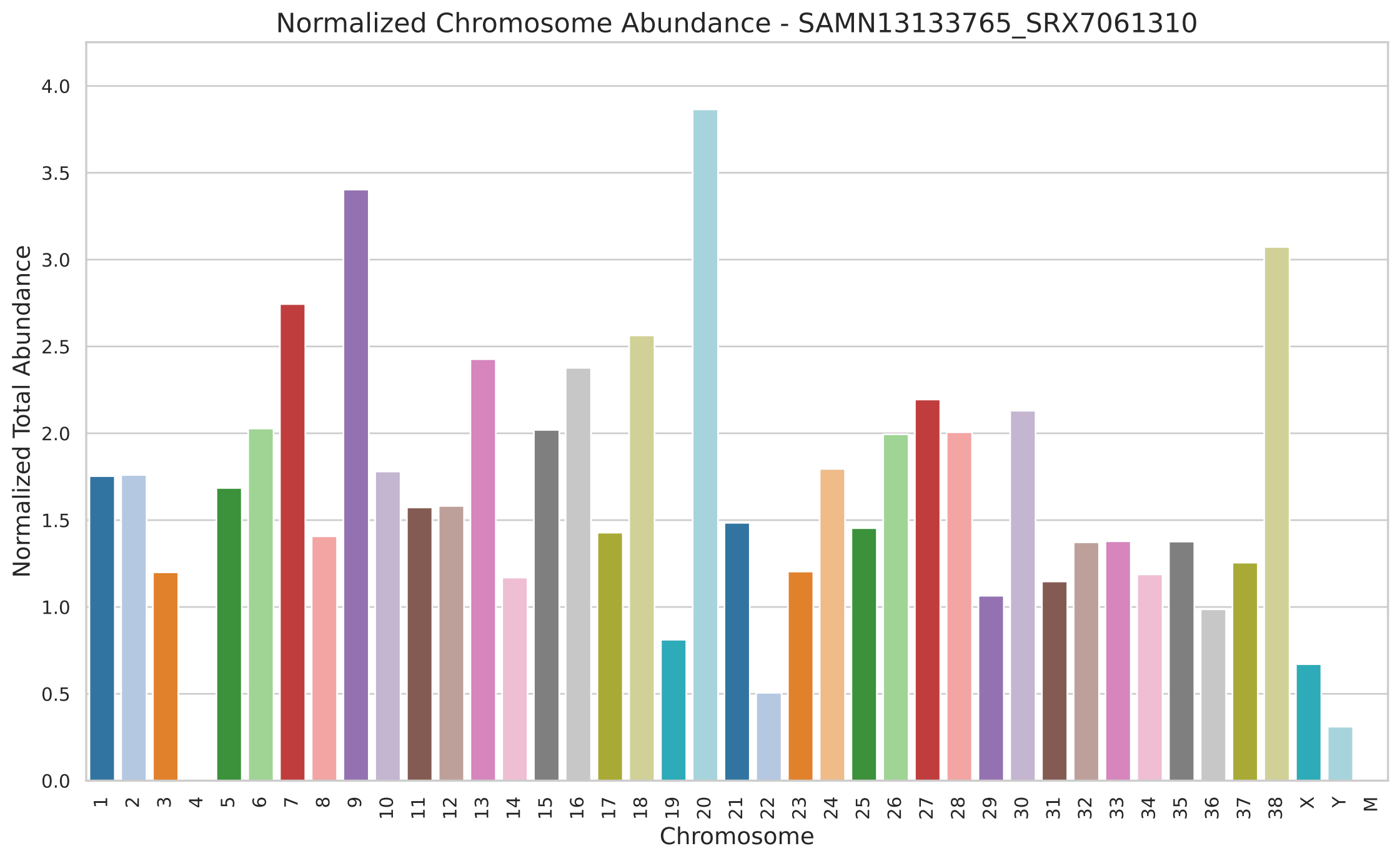

Normalized Chromosome Abundance - SAMN13133752_SRX7061295
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

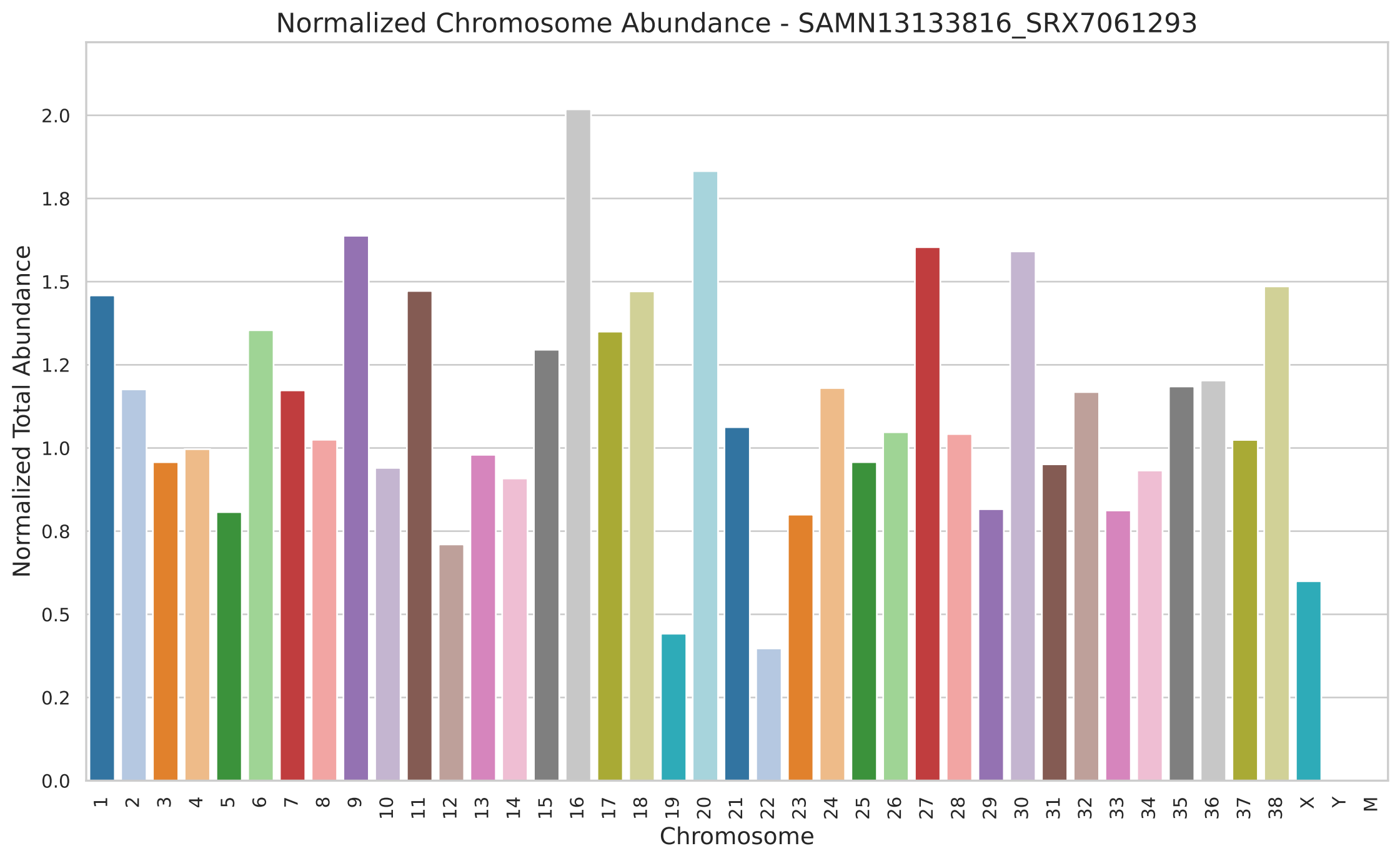

Normalized Chromosome Abundance - SAMN13133806_SRX7061301
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

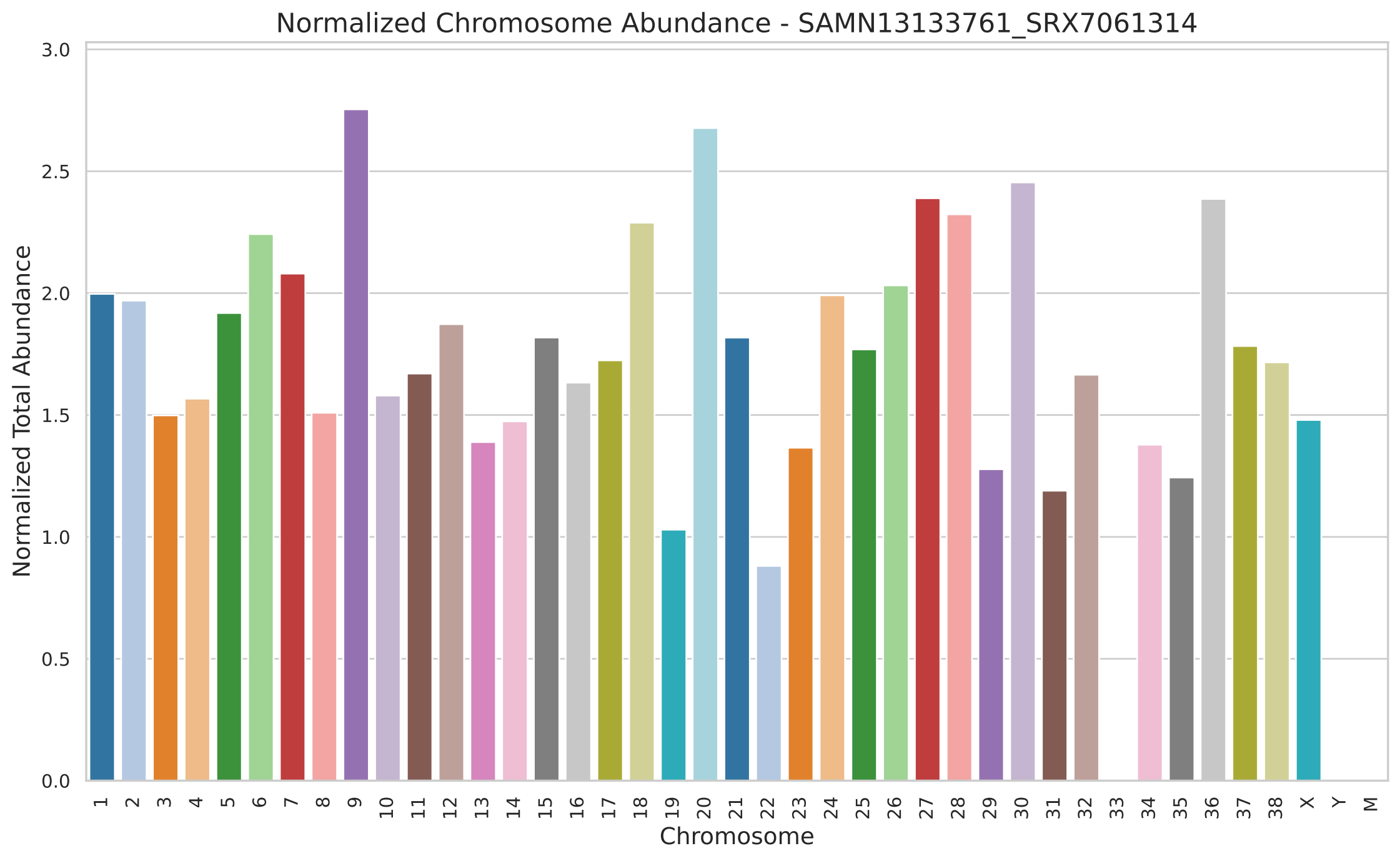

Normalized Chromosome Abundance - SAMN13133789_SRX7061309
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

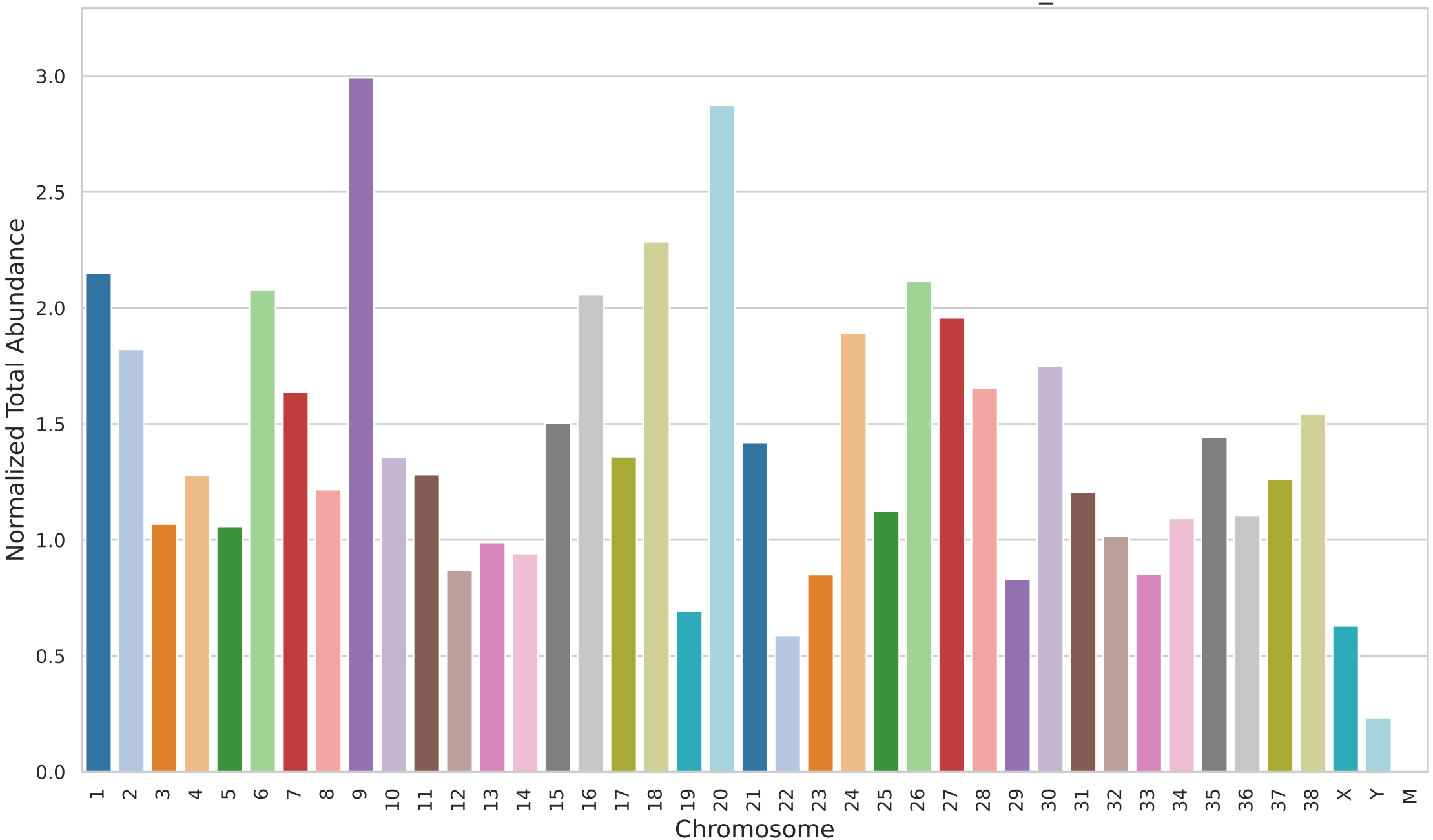

Normalized Chromosome Abundance - SAMN13133812_SRX7061320
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

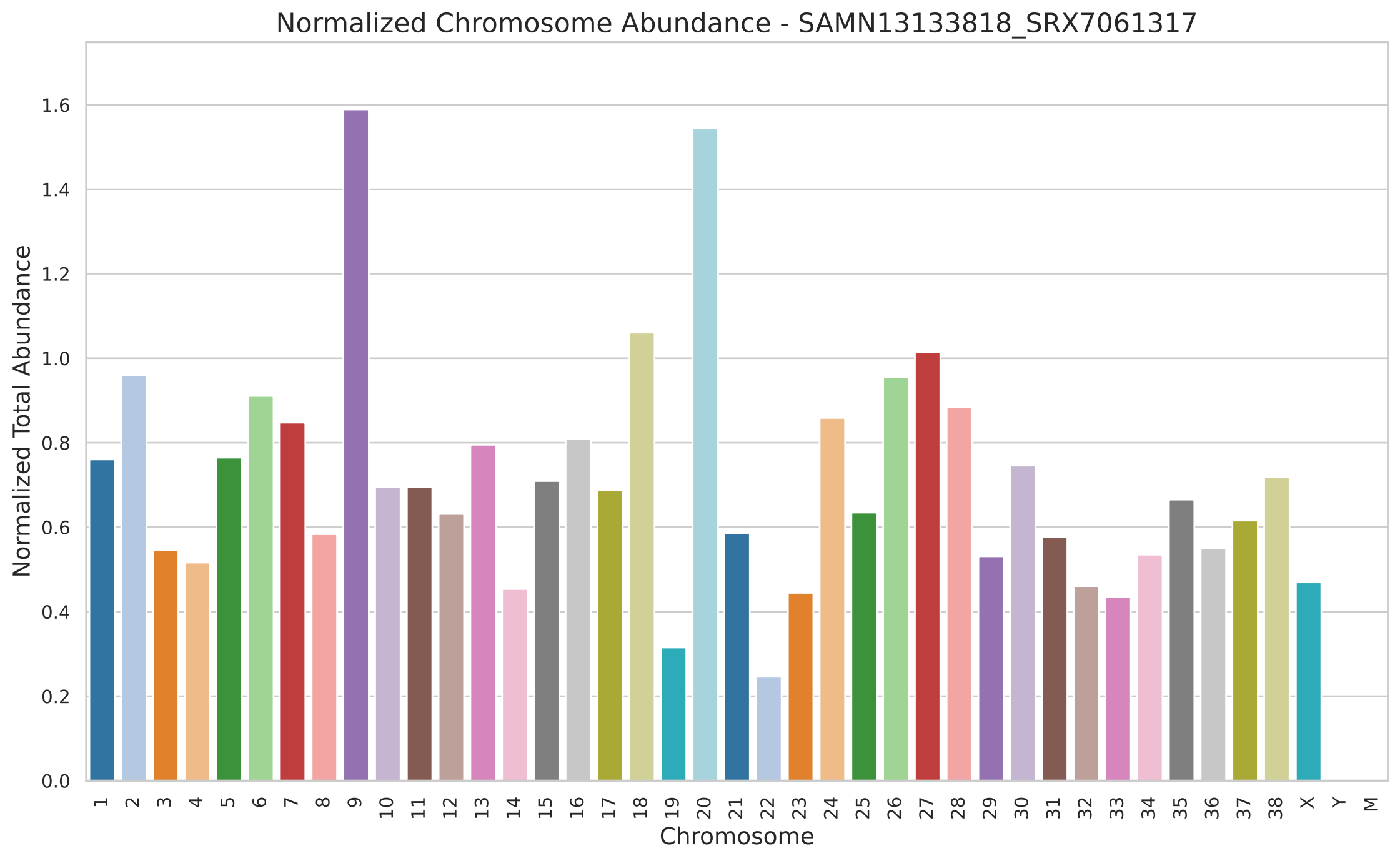

Normalized Chromosome Abundance - SAMN13133765_SRX7061311
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

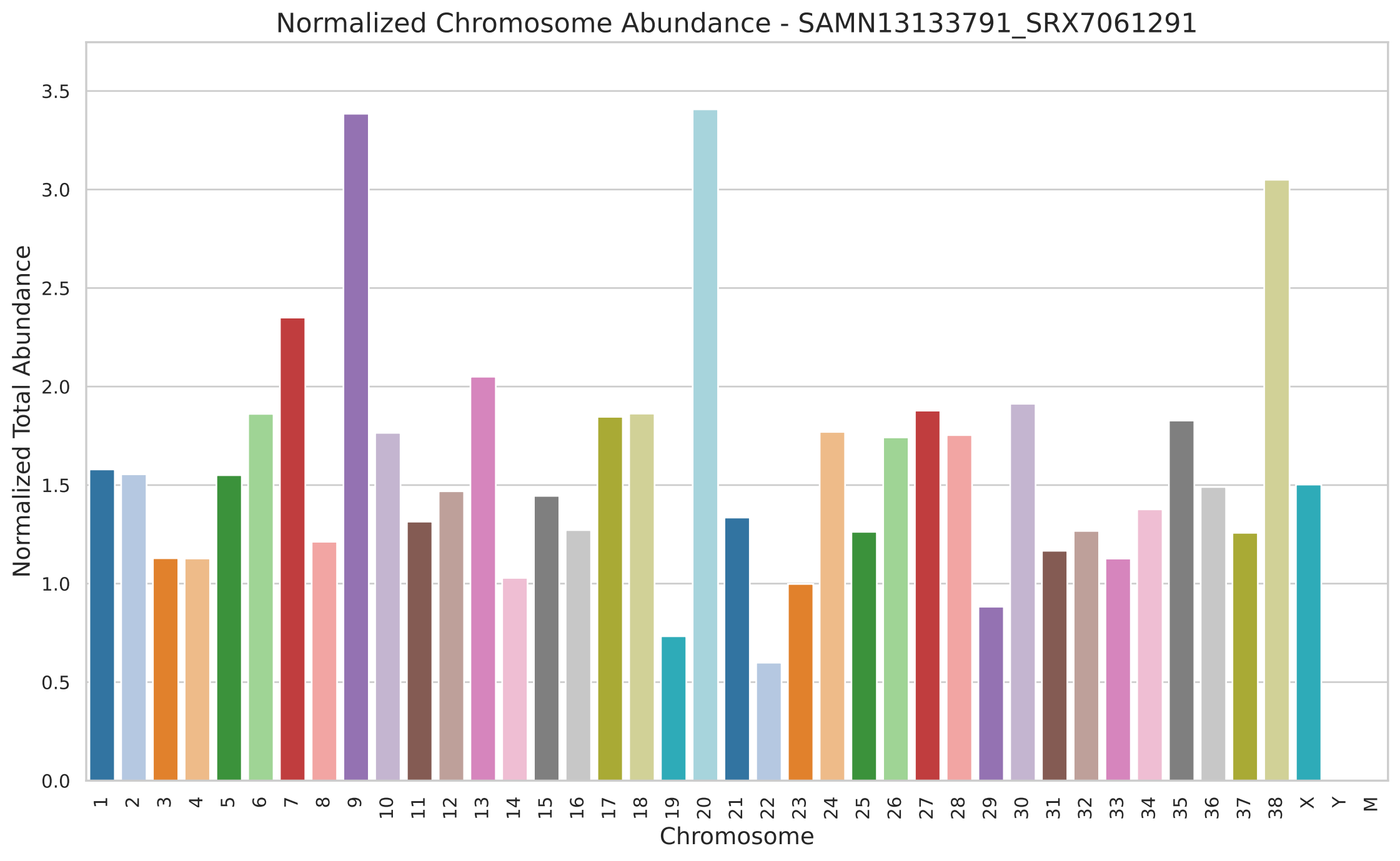

Normalized Chromosome Abundance - SAMN13133765_SRX7061310
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

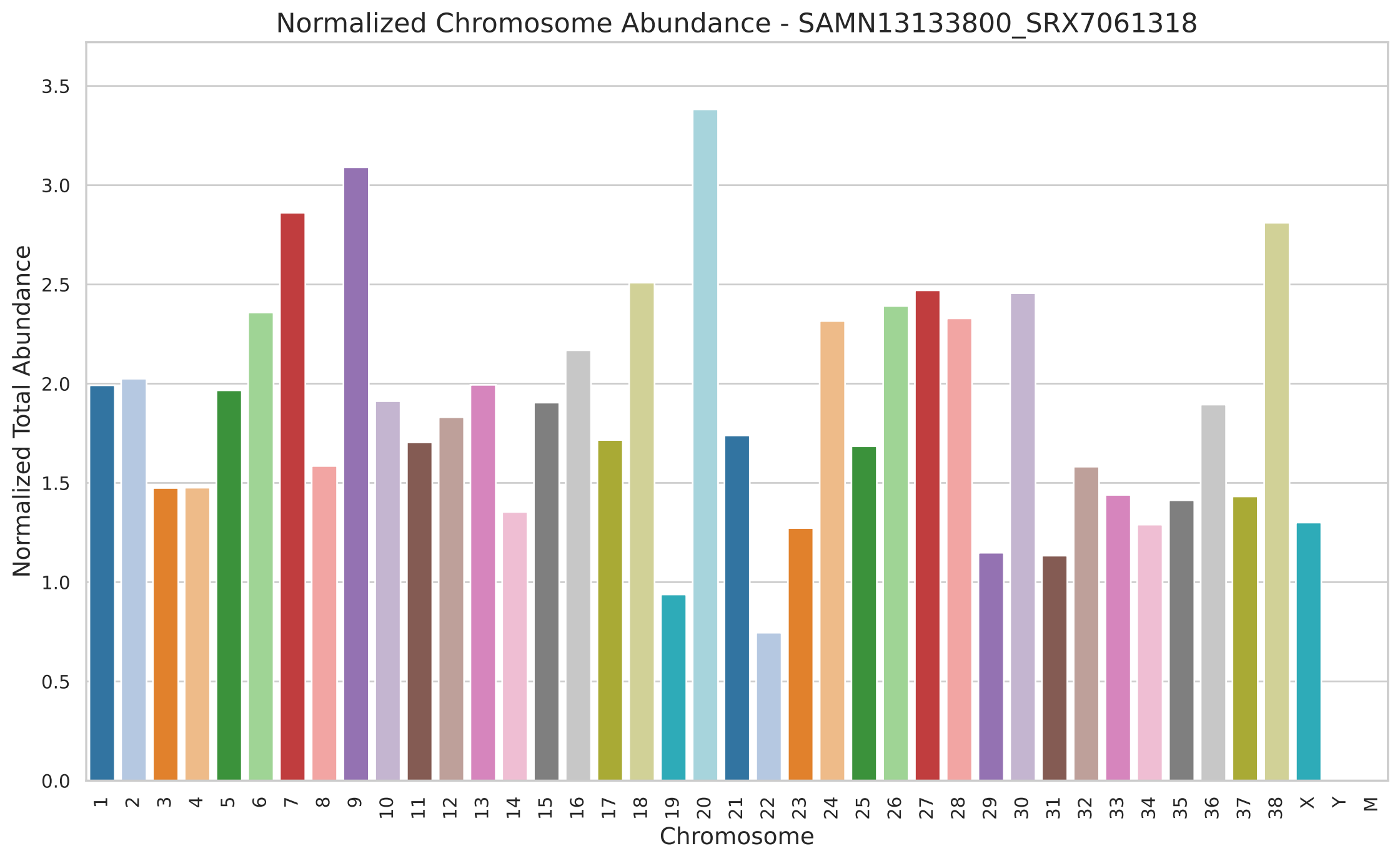

Normalized Chromosome Abundance - SAMN13133816_SRX7061293
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

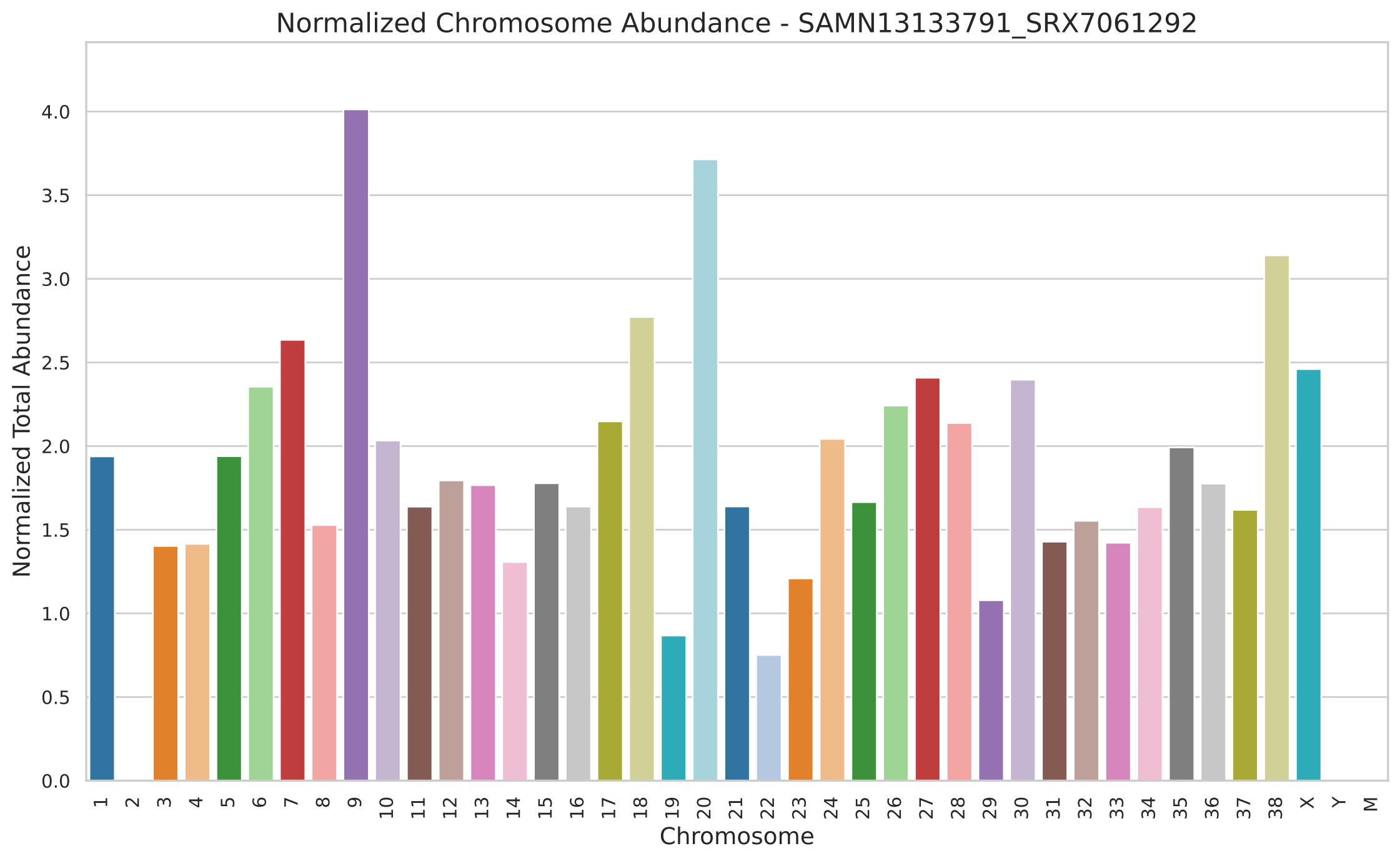

Normalized Chromosome Abundance - SAMN13133761_SRX7061314
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

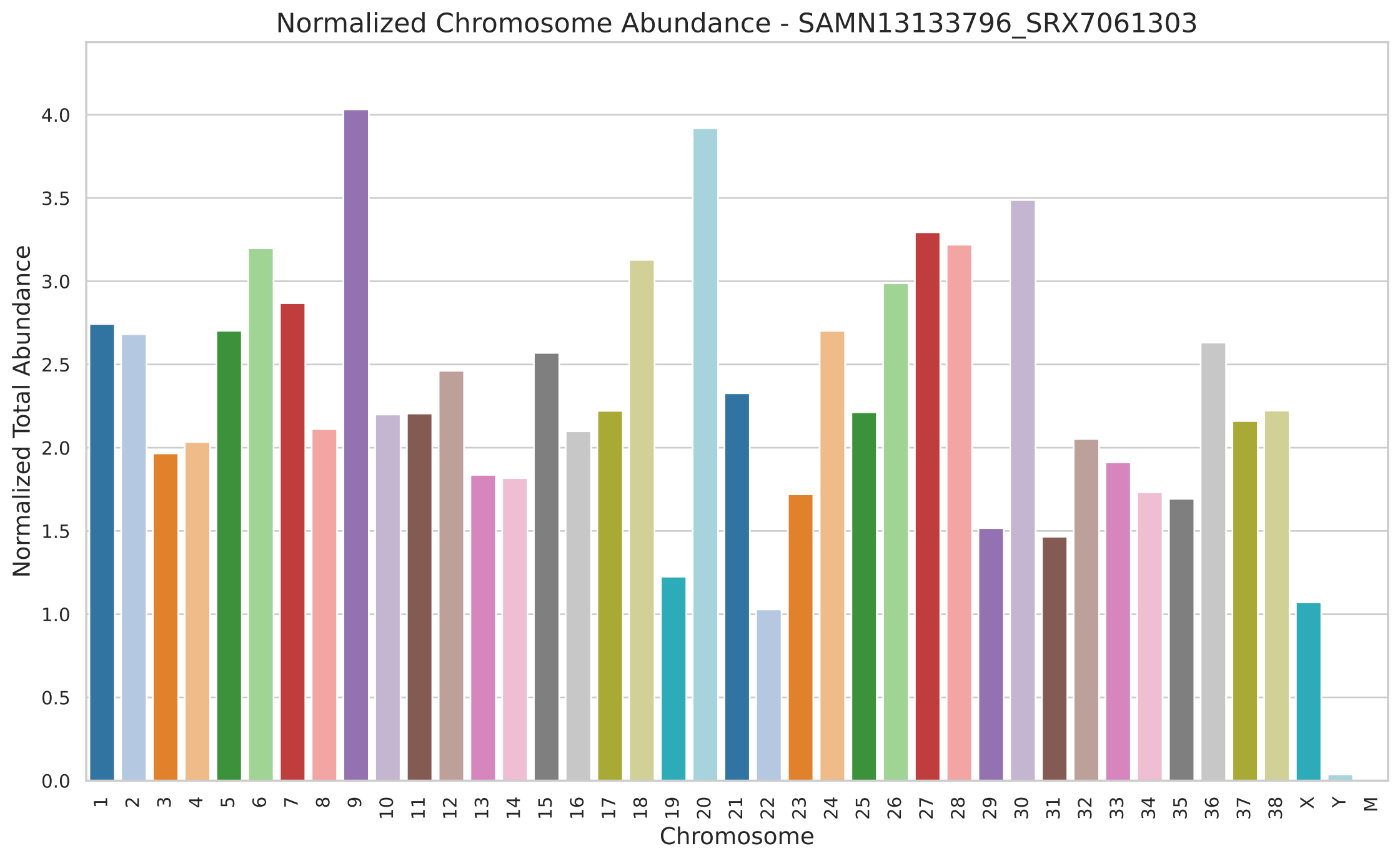

Normalized Chromosome Abundance - SAMN13133783_SRX7061304
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

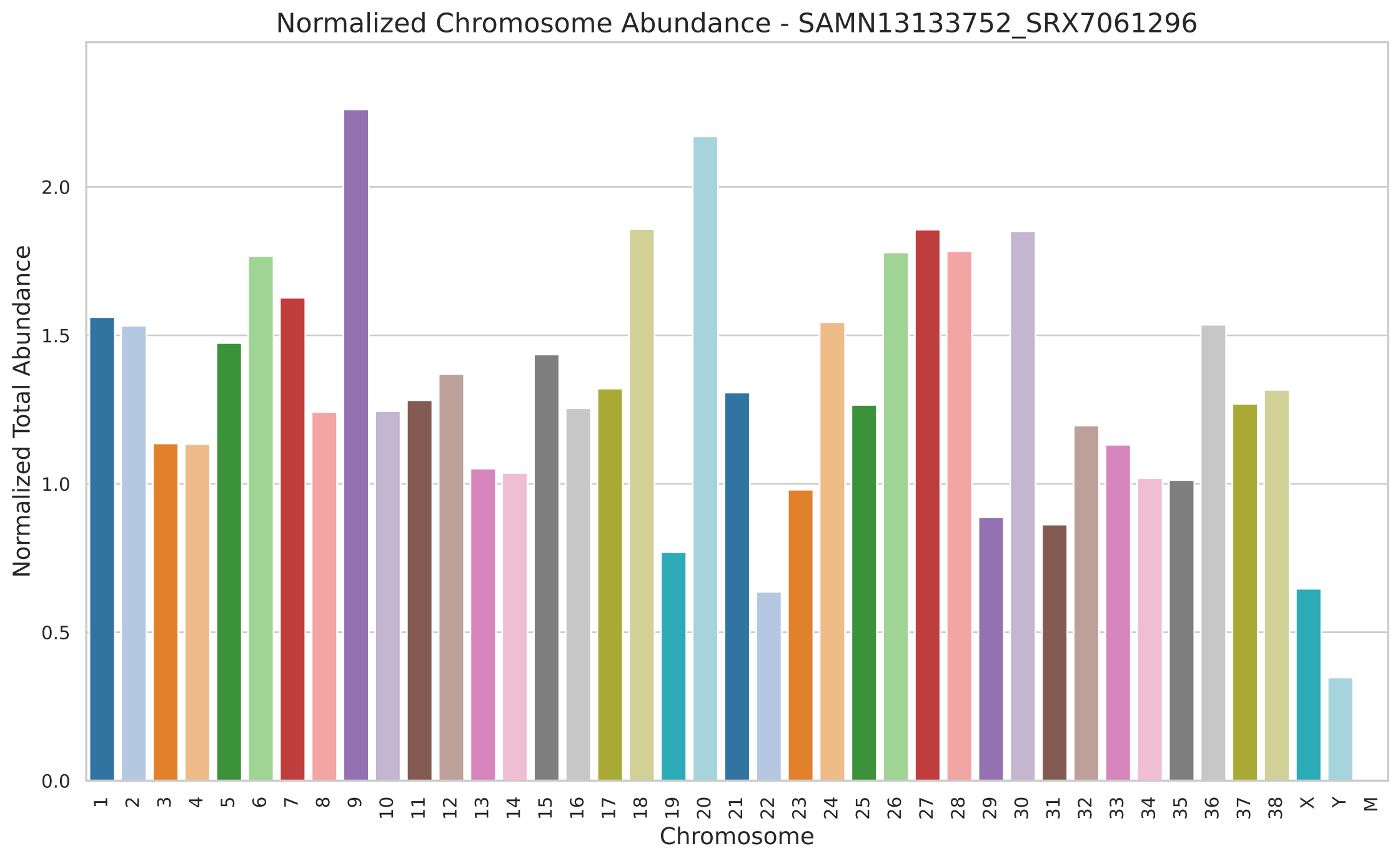

Normalized Chromosome Abundance - SAMN13133818_SRX7061317
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

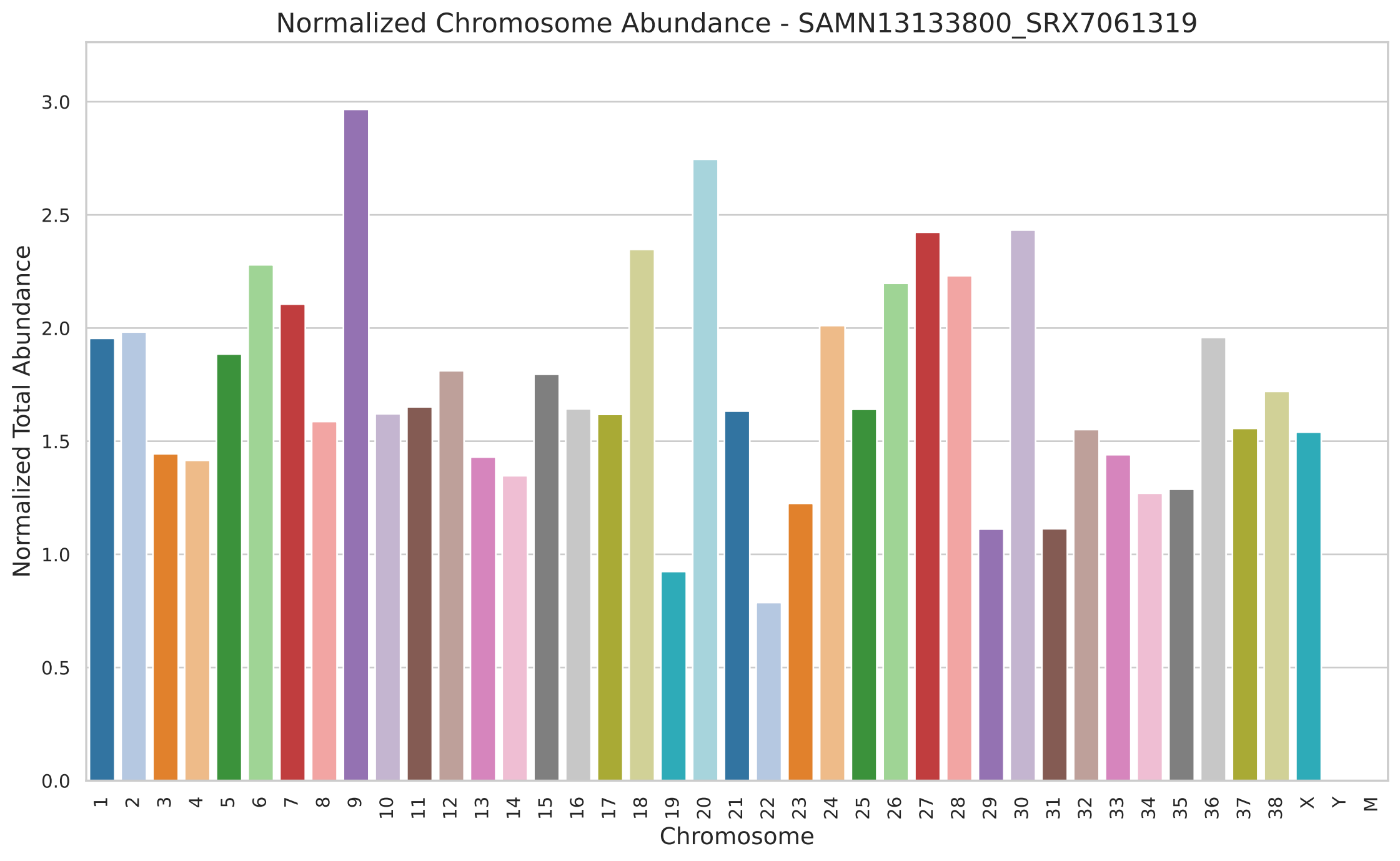

Normalized Chromosome Abundance - SAMN13133791_SRX7061291
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

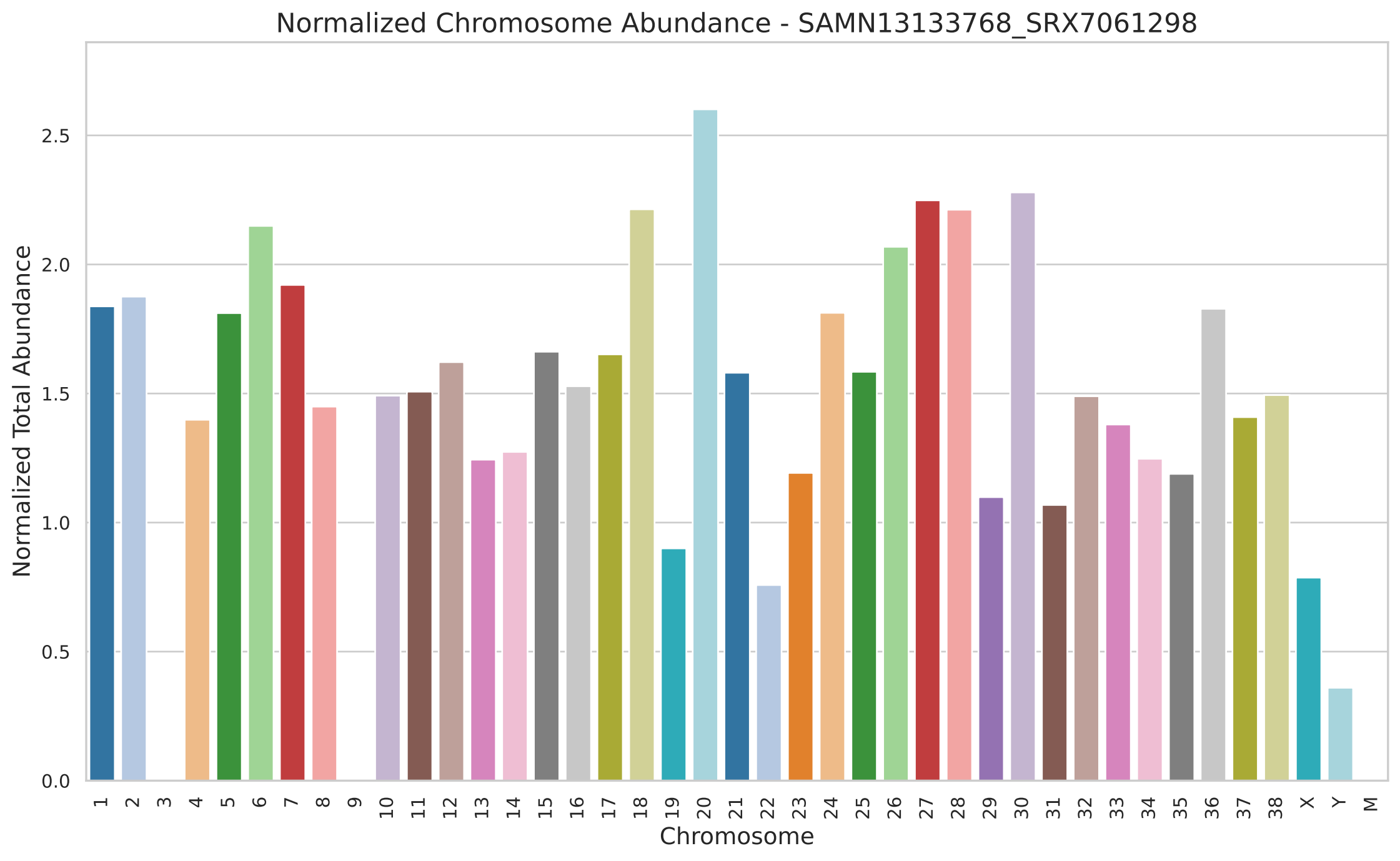

Normalized Chromosome Abundance - SAMN13133800_SRX7061318
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

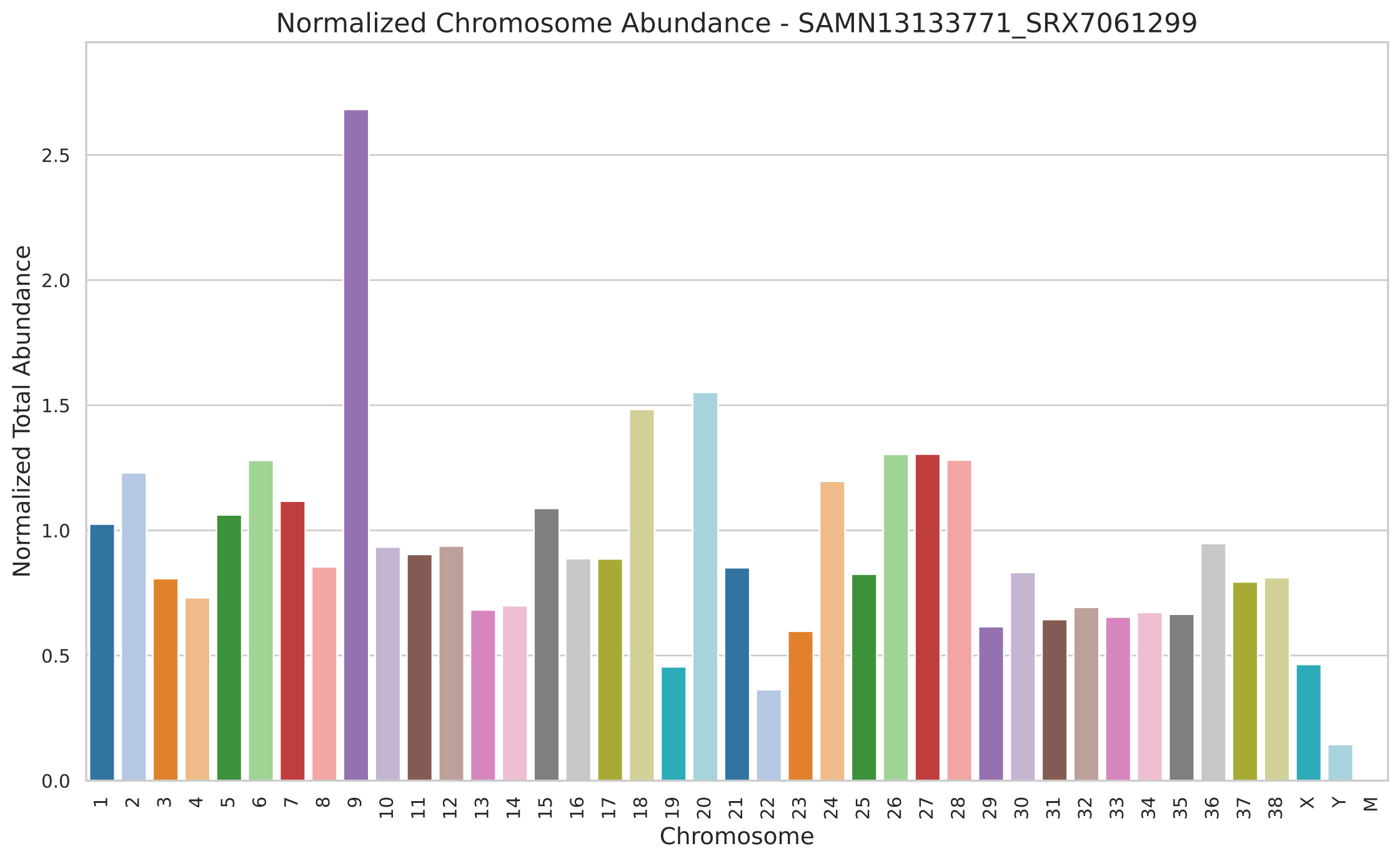

Normalized Chromosome Abundance - SAMN13133791_SRX7061292
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

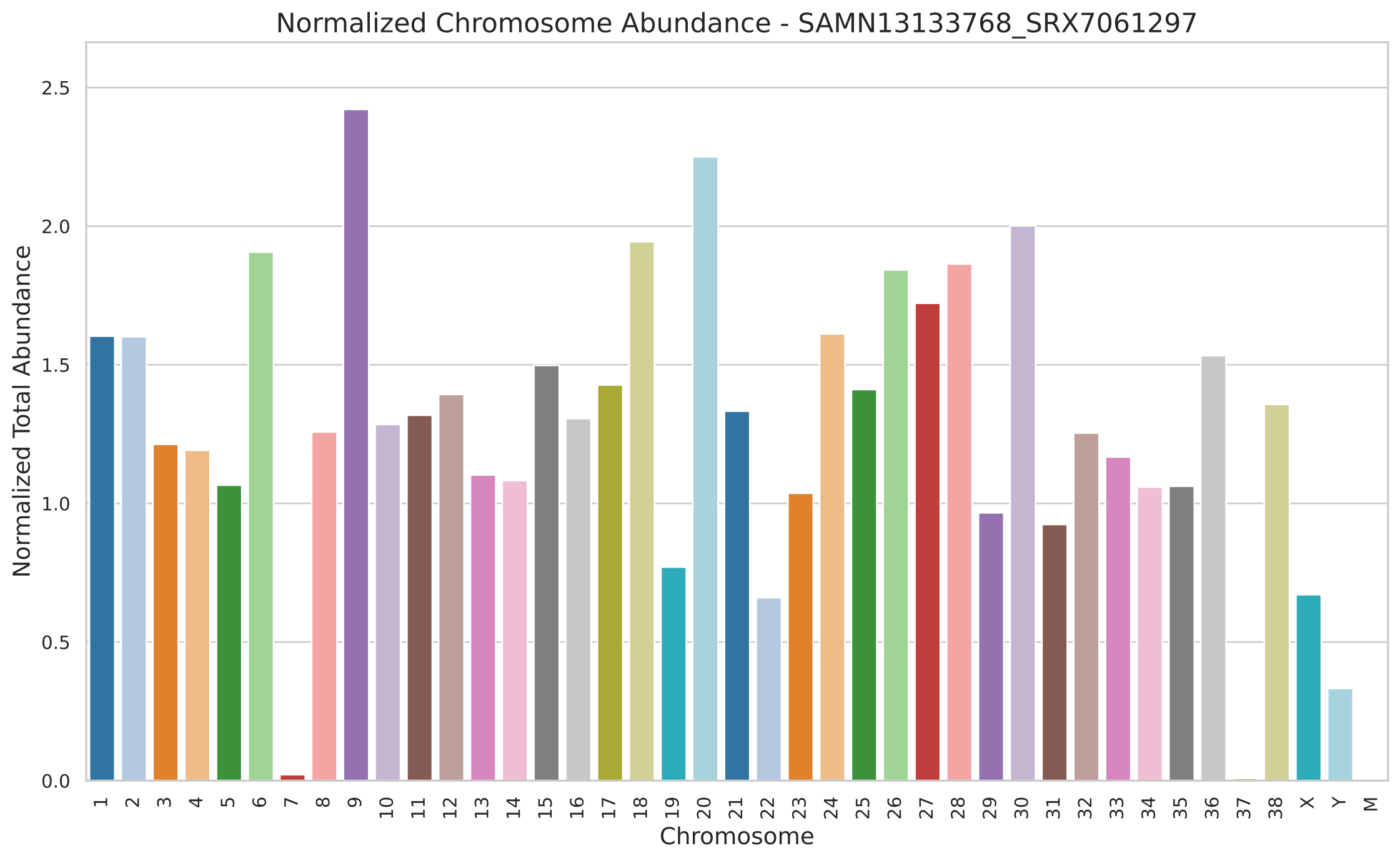

Normalized Chromosome Abundance - SAMN13133796_SRX7061303
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

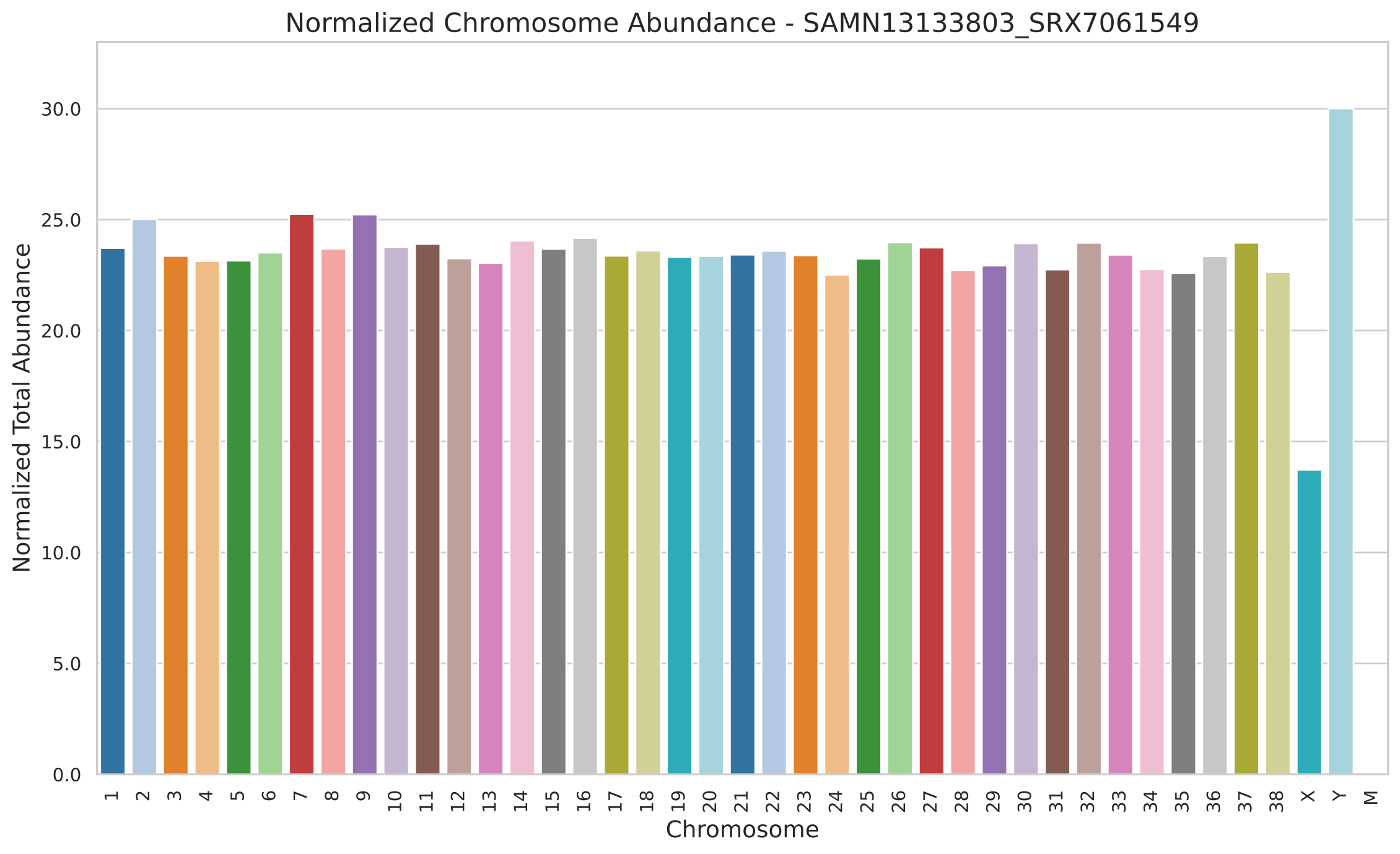

Normalized Chromosome Abundance - SAMN13133752_SRX7061296
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

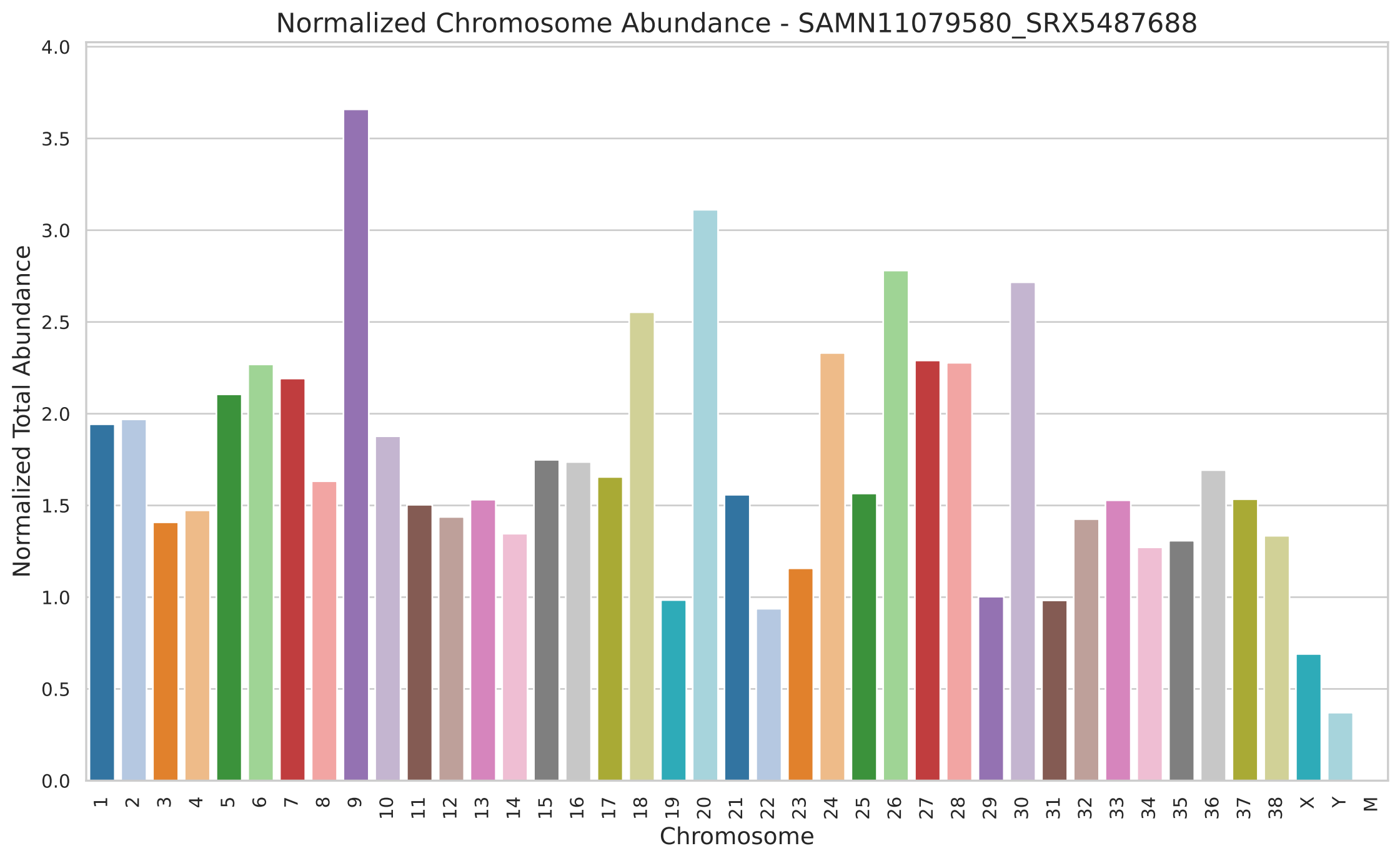

Normalized Chromosome Abundance - SAMN13133800_SRX7061319
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

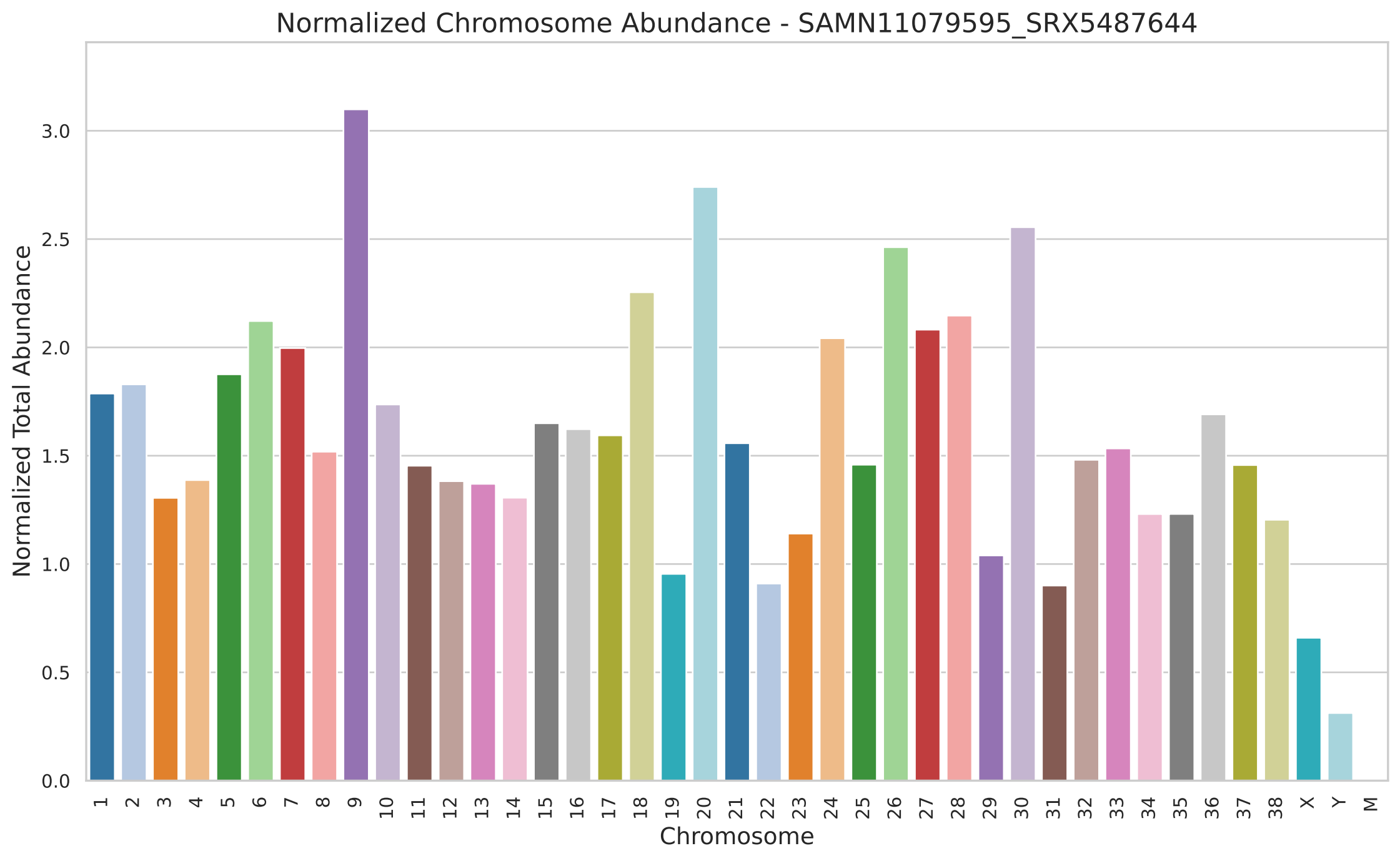

Normalized Chromosome Abundance - SAMN13133768_SRX7061298
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

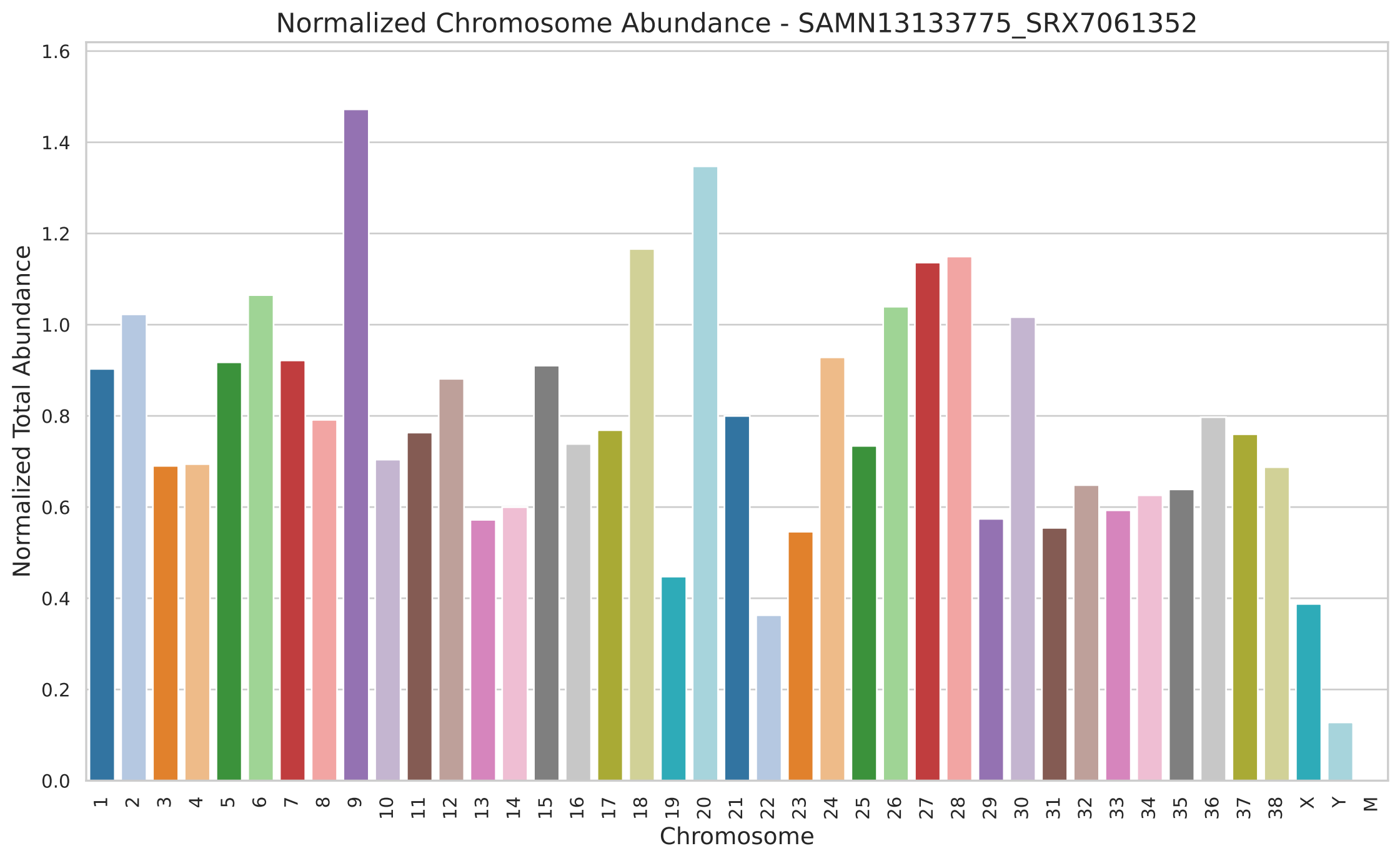

Normalized Chromosome Abundance - SAMN13133771_SRX7061299
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

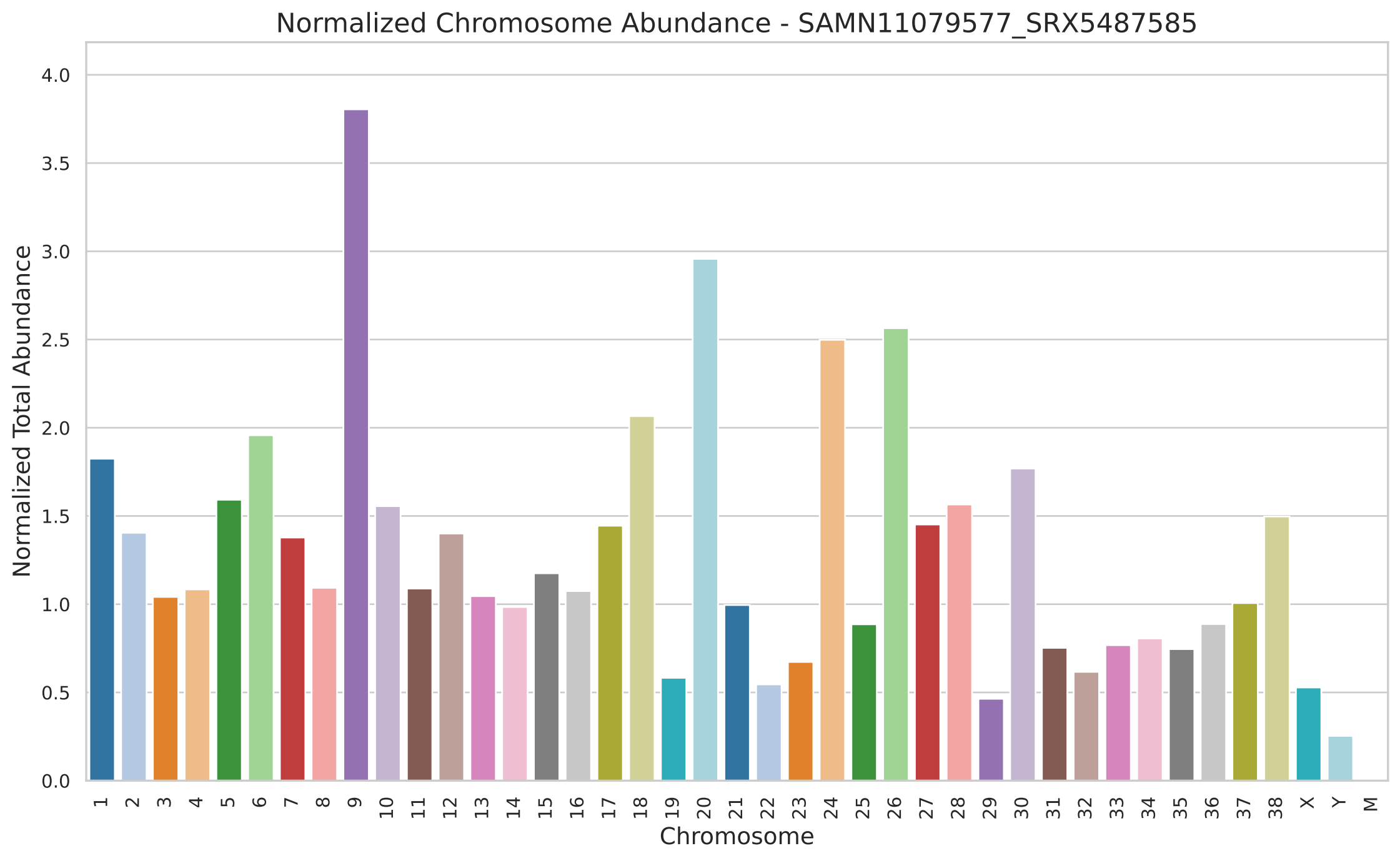

Normalized Chromosome Abundance - SAMN13133768_SRX7061297
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

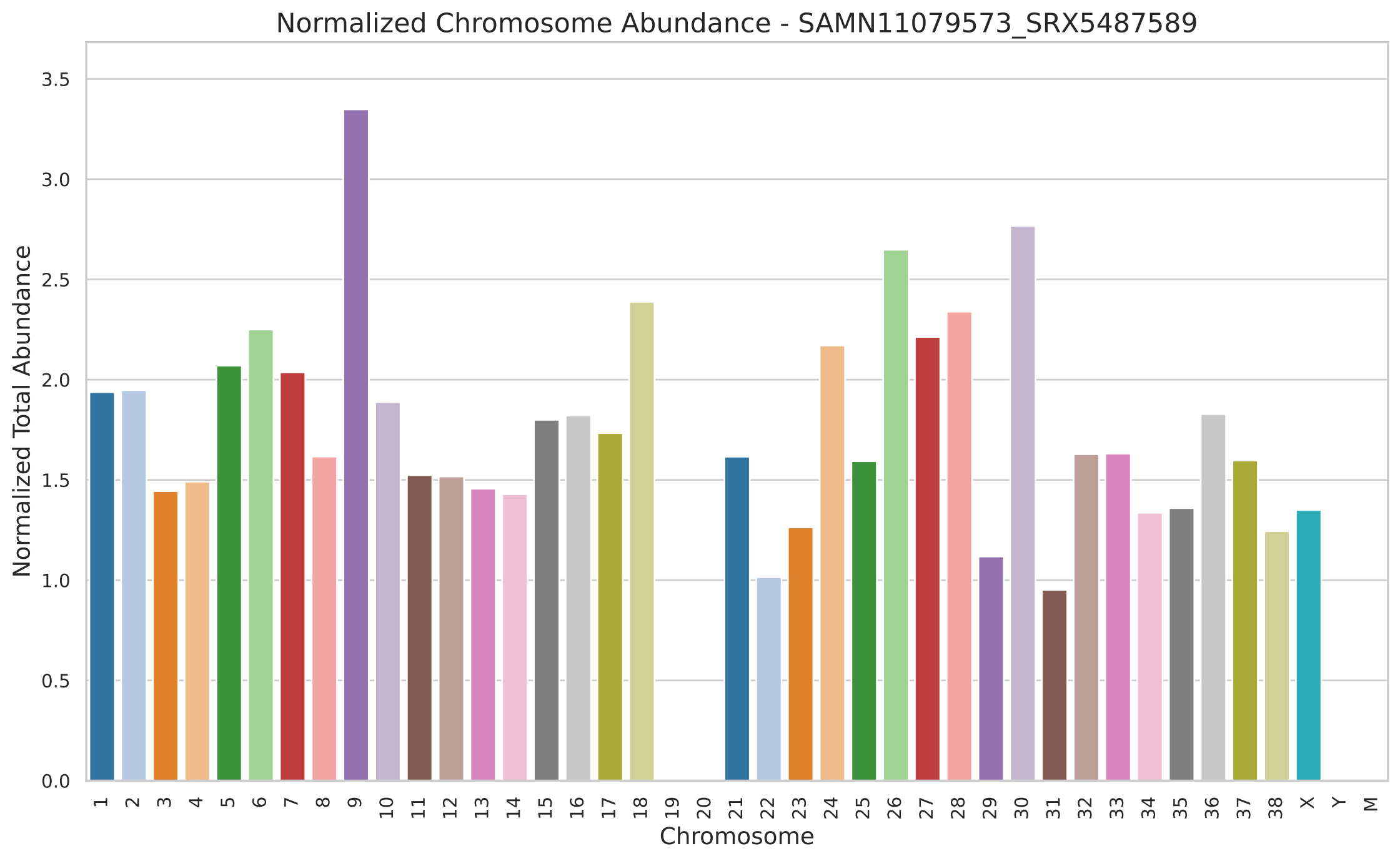

Normalized Chromosome Abundance - SAMN13133803_SRX7061549
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

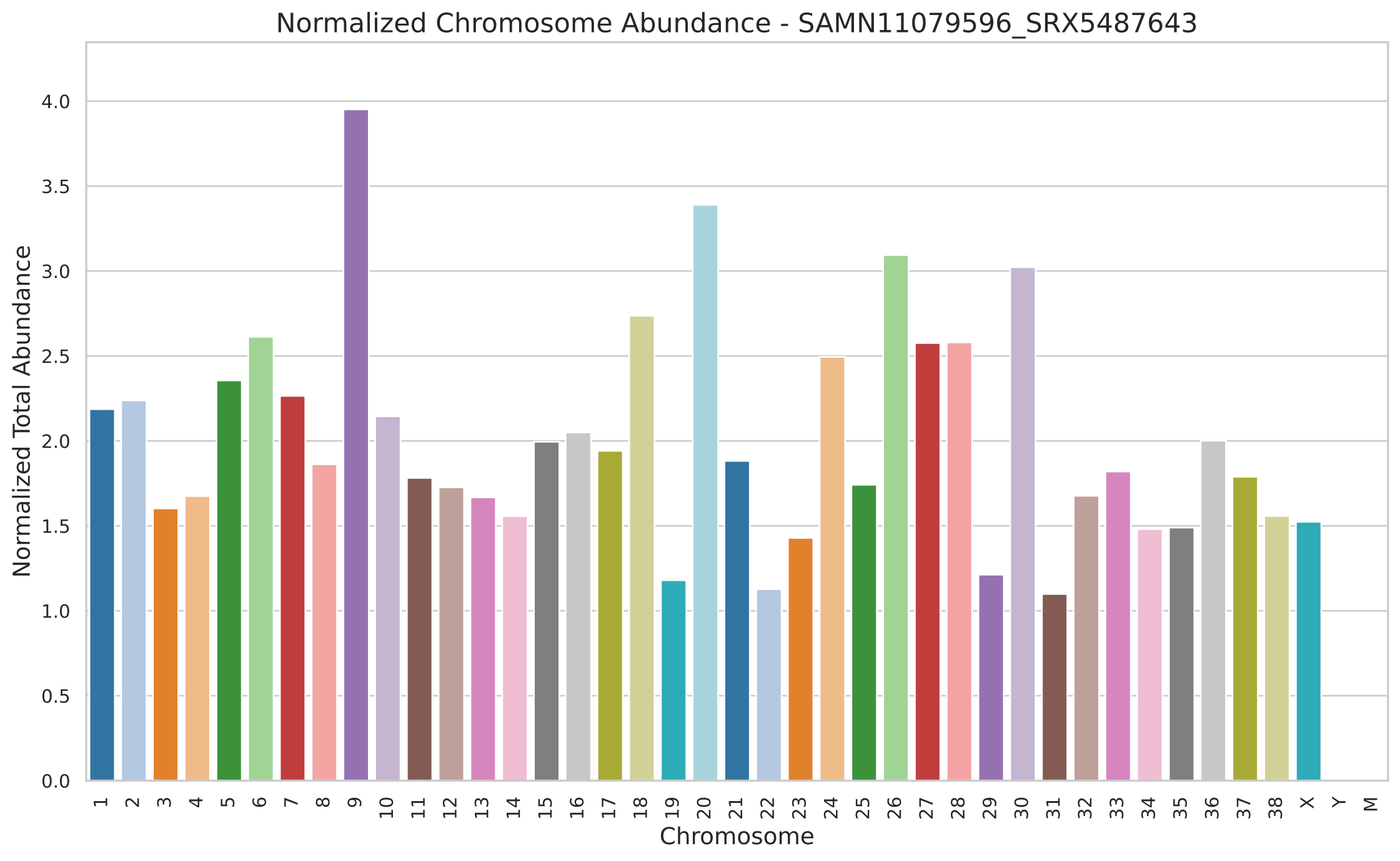

Normalized Chromosome Abundance - SAMN11079580_SRX5487688
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

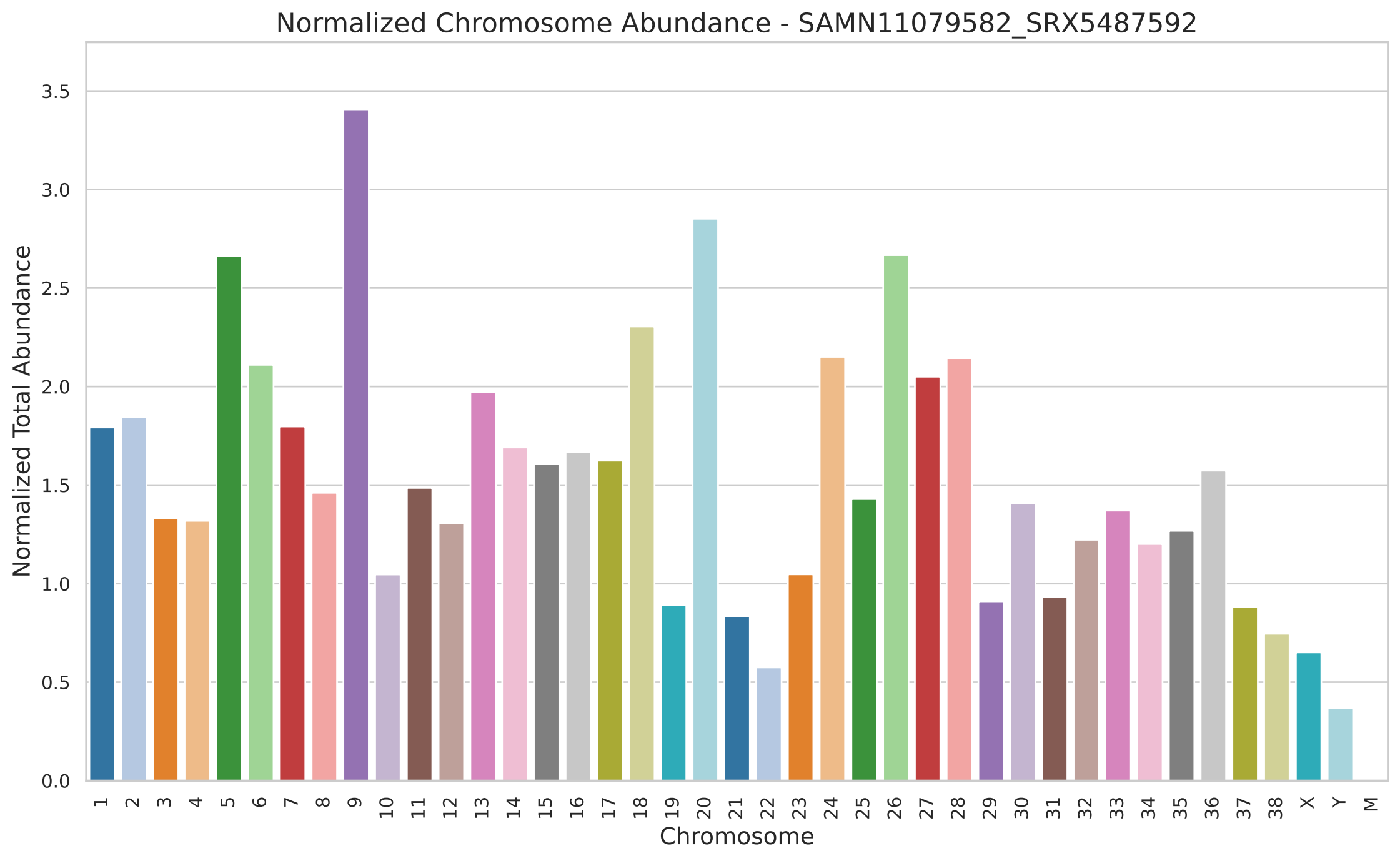

Normalized Chromosome Abundance - SAMN11079595_SRX5487644
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

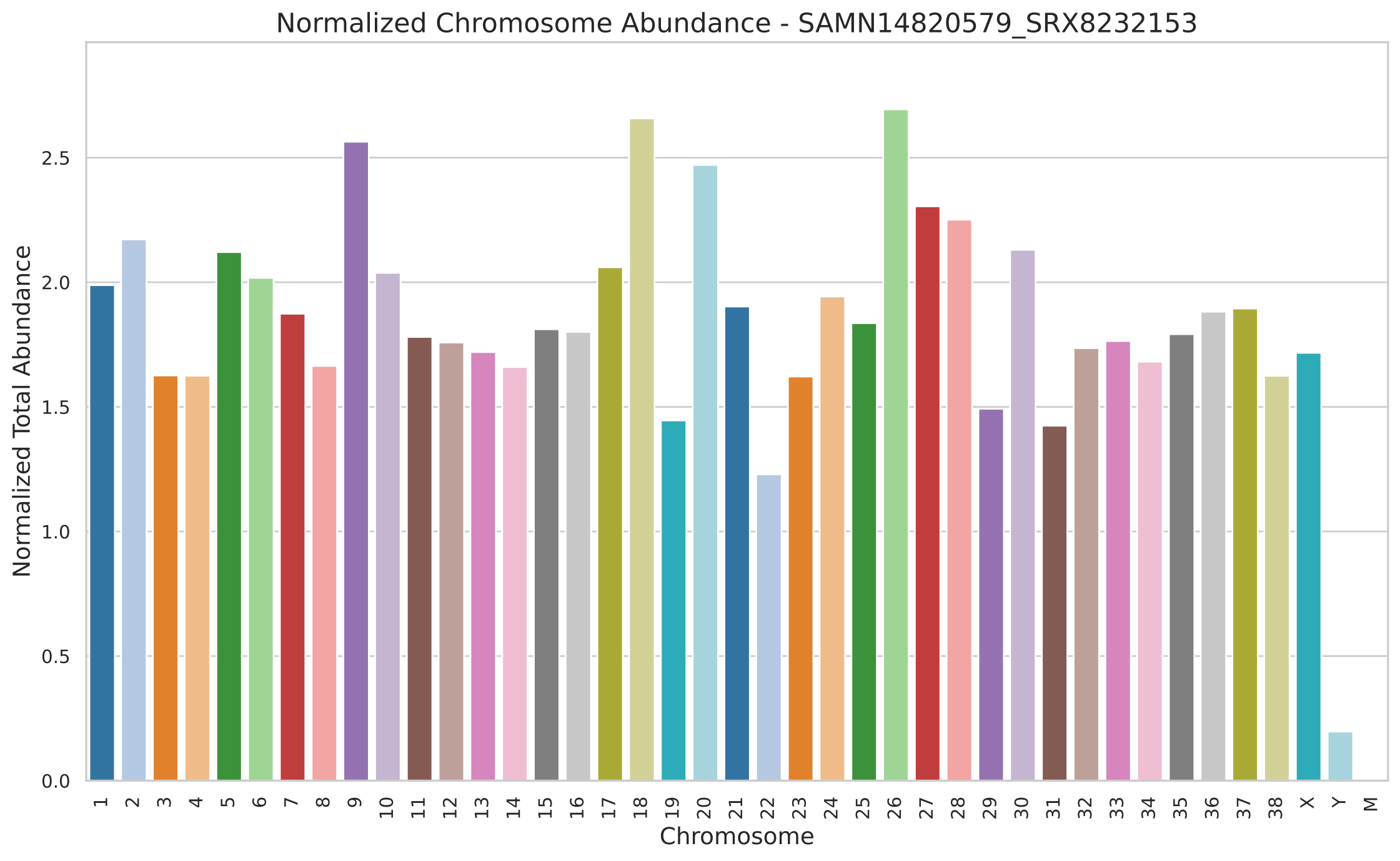

Normalized Chromosome Abundance - SAMN13133775_SRX7061352
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

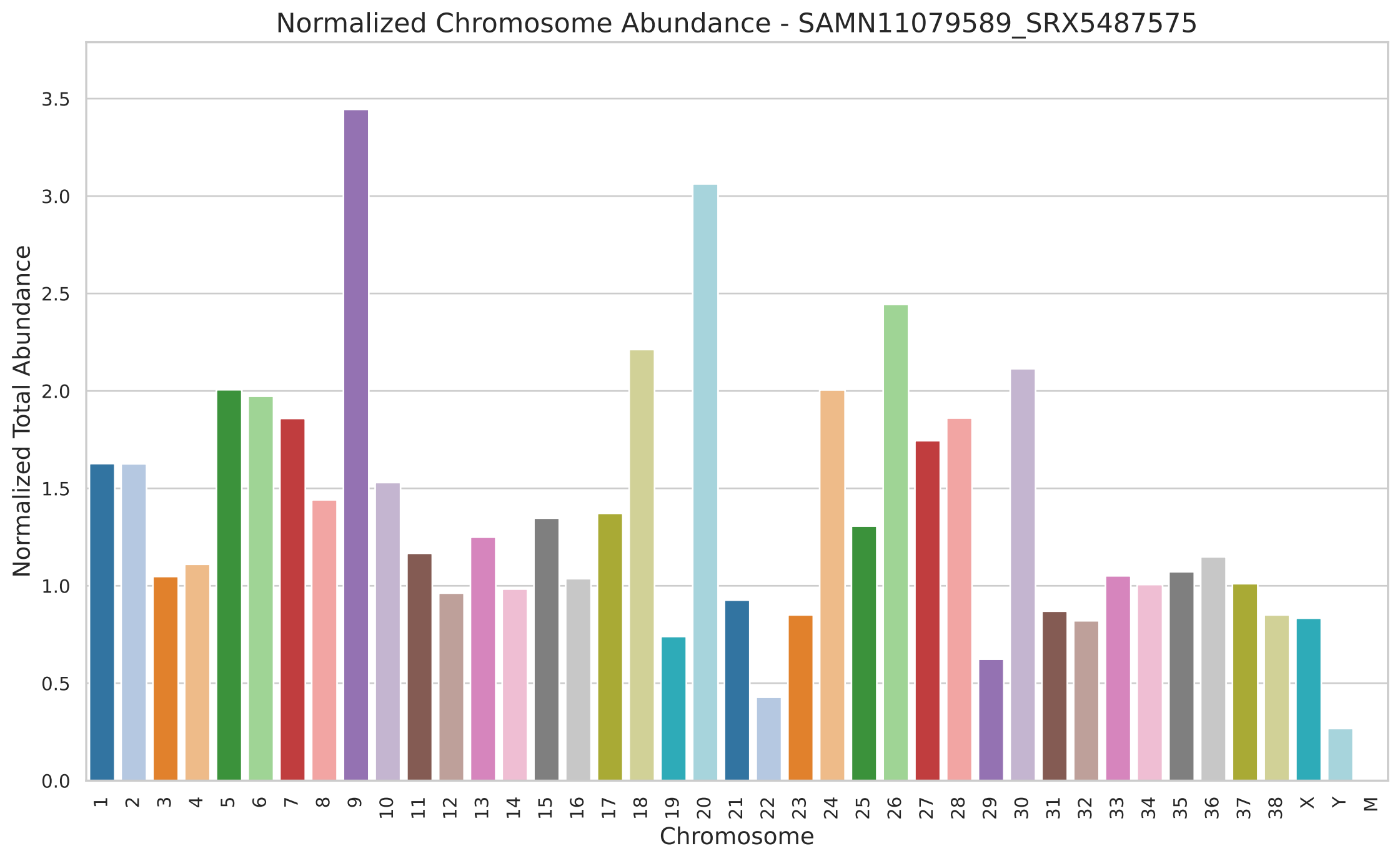

Normalized Chromosome Abundance - SAMN11079577_SRX5487585
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

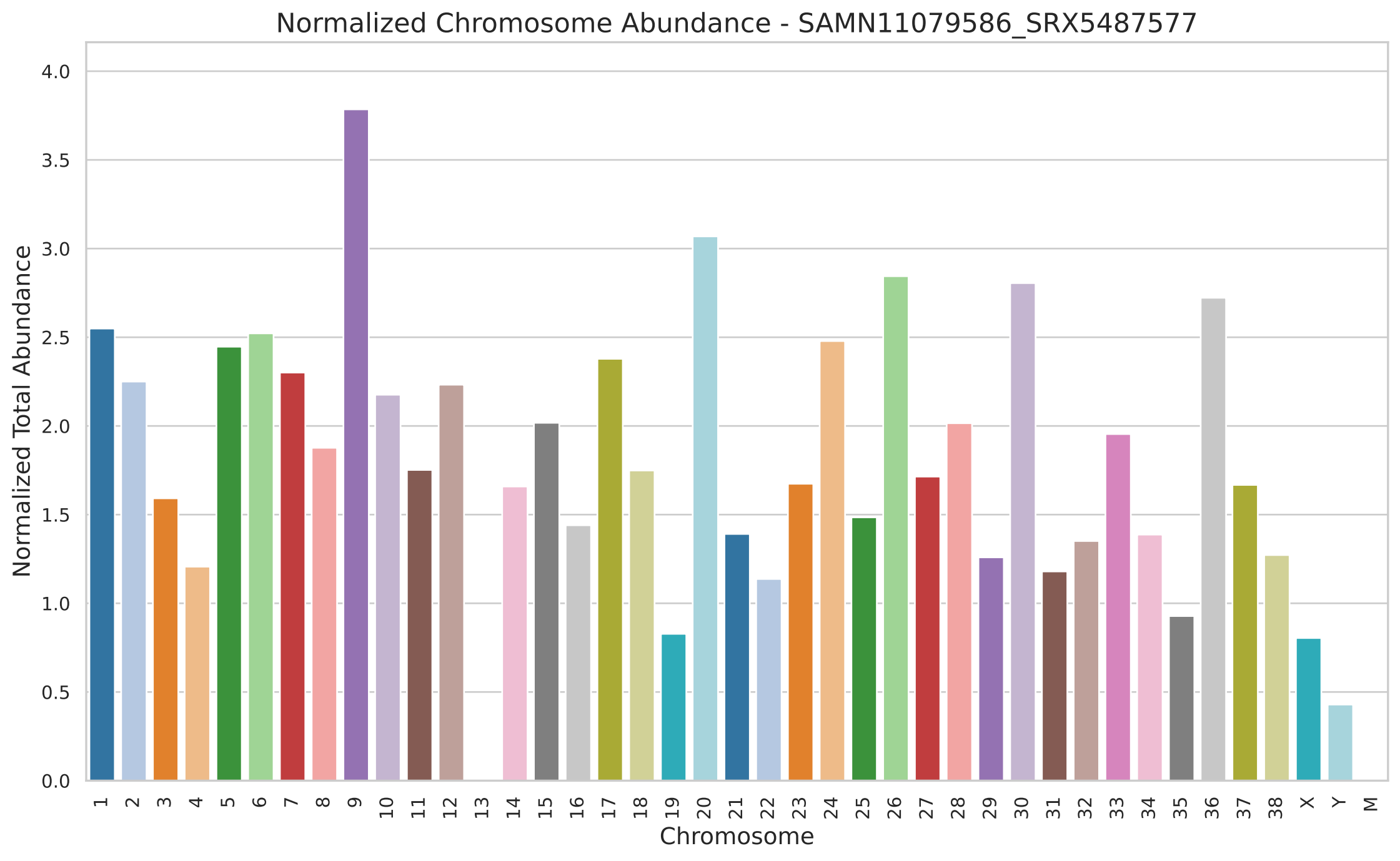

Normalized Chromosome Abundance - SAMN11079573_SRX5487589
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

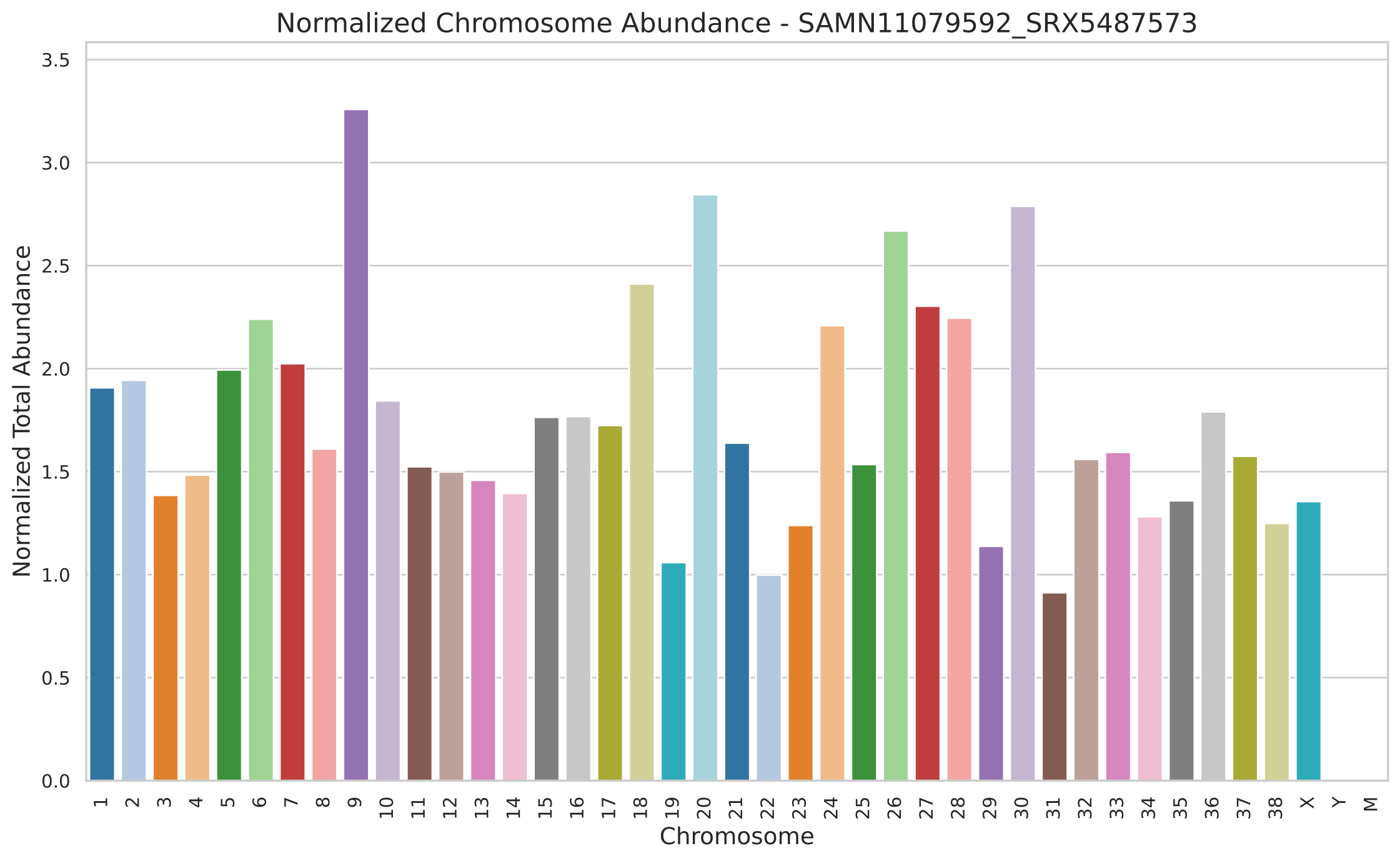

Normalized Chromosome Abundance - SAMN11079596_SRX5487643
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

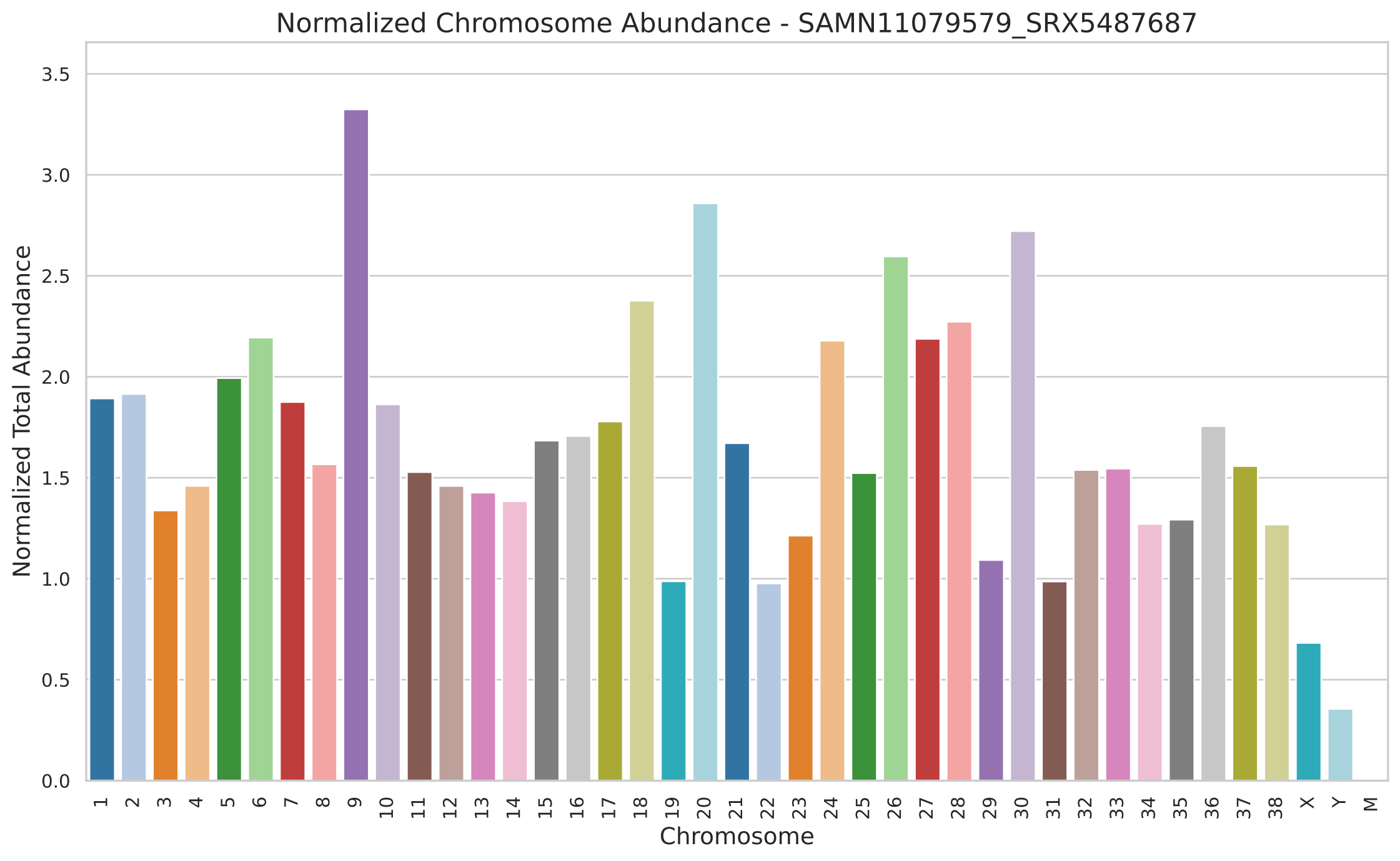

Normalized Chromosome Abundance - SAMN11079582_SRX5487592
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

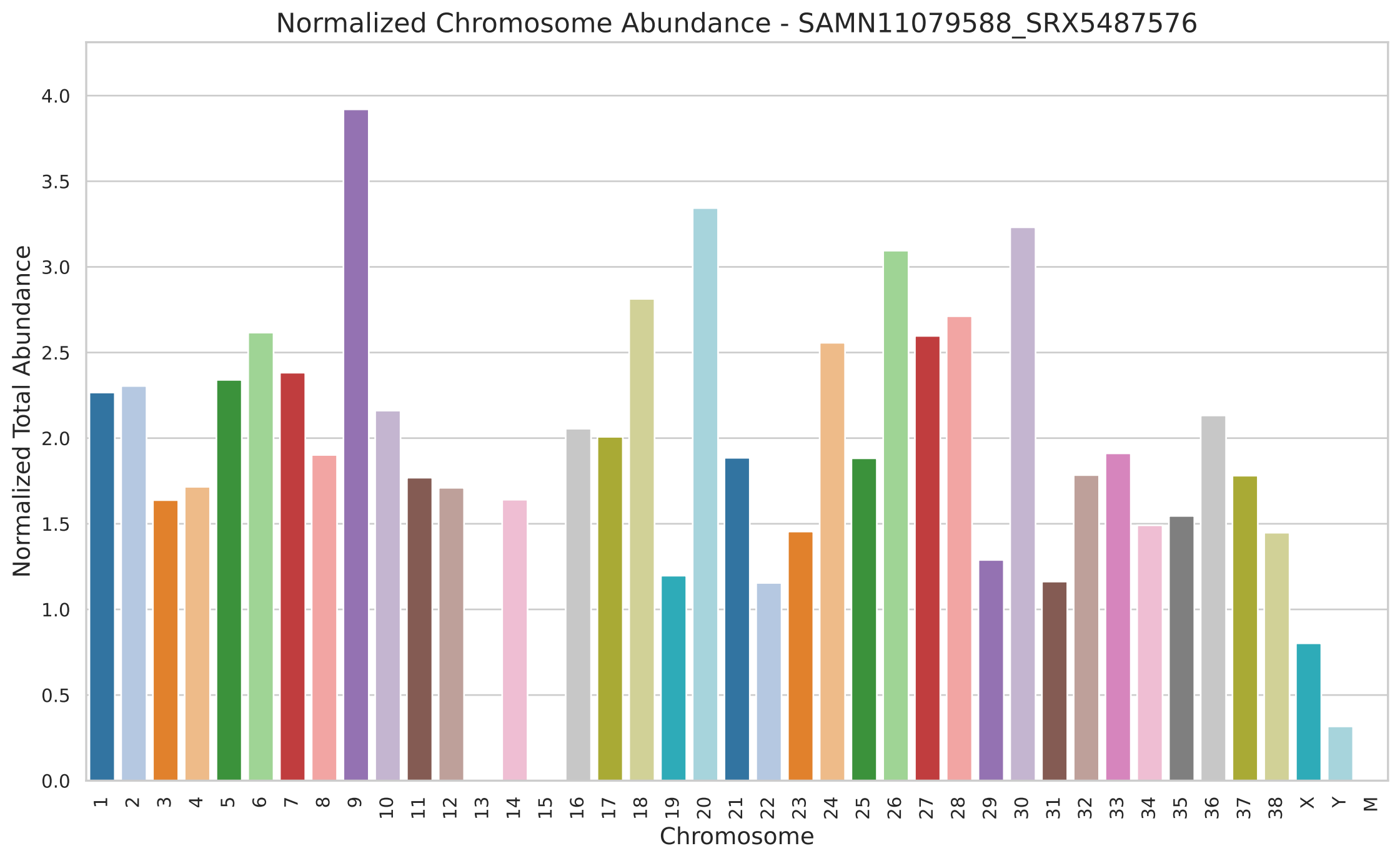

Normalized Chromosome Abundance - SAMN14820579_SRX8232153
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

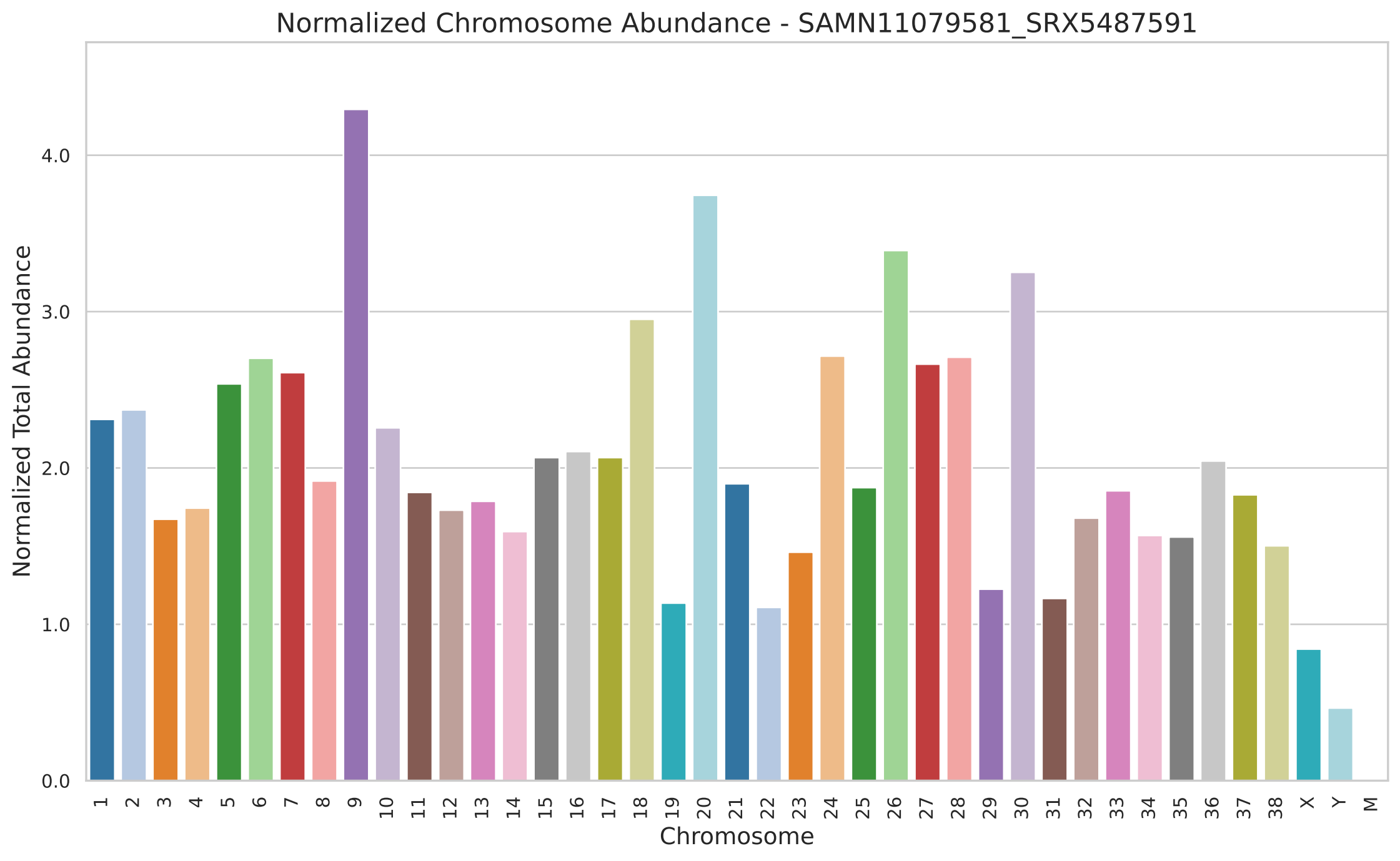

Normalized Chromosome Abundance - SAMN11079589_SRX5487575
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

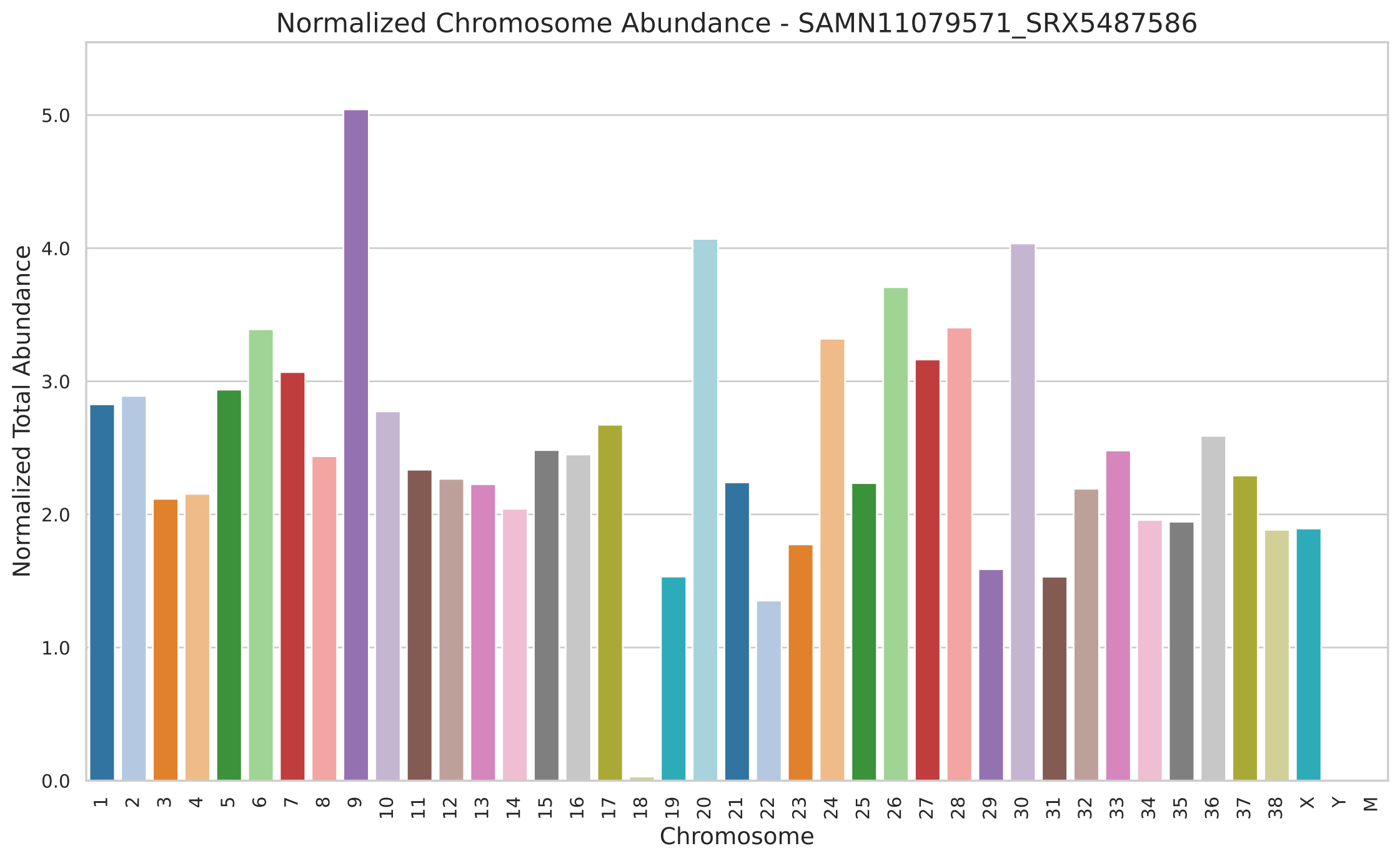

Normalized Chromosome Abundance - SAMN11079586_SRX5487577
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

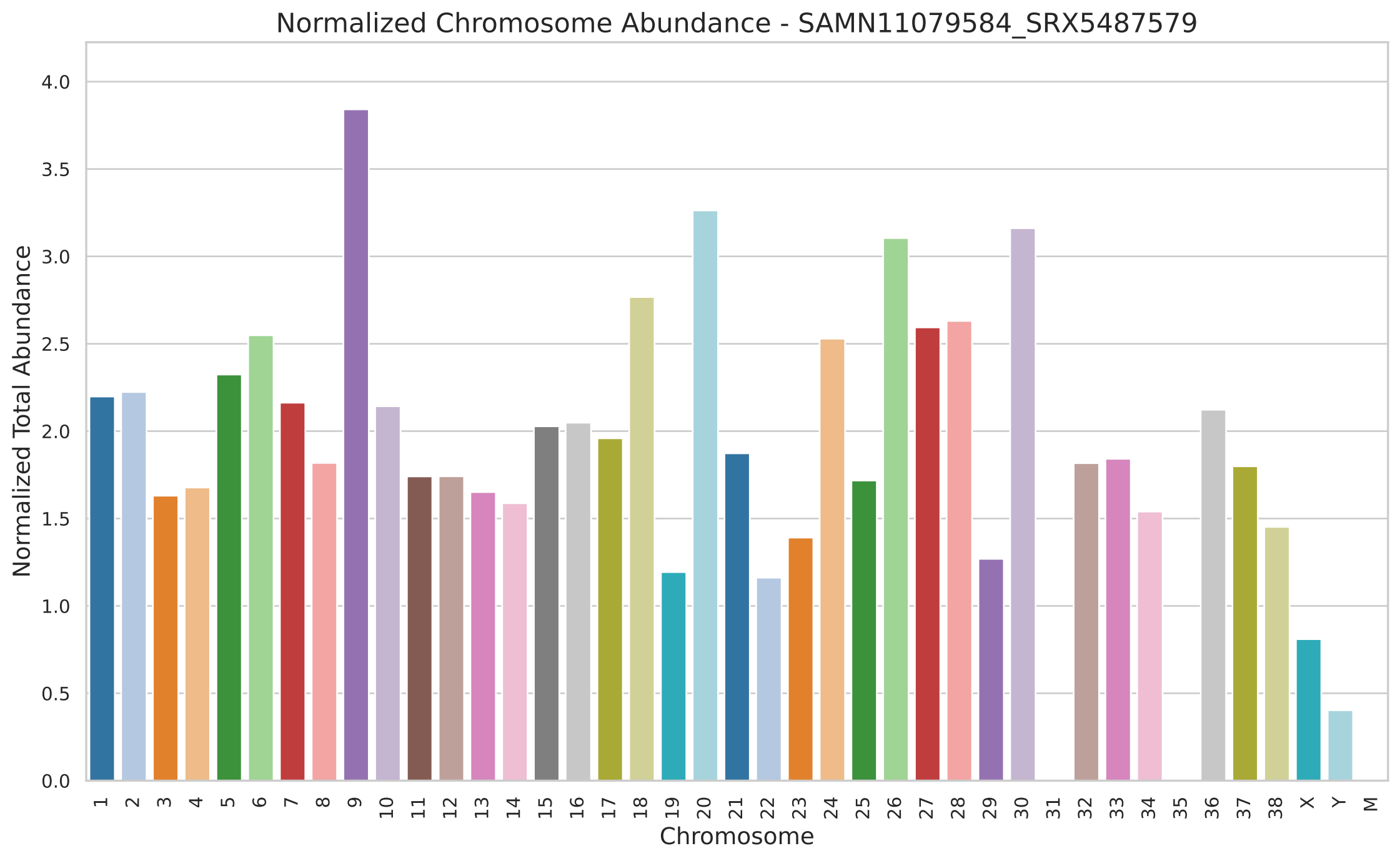

Normalized Chromosome Abundance - SAMN11079592_SRX5487573
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

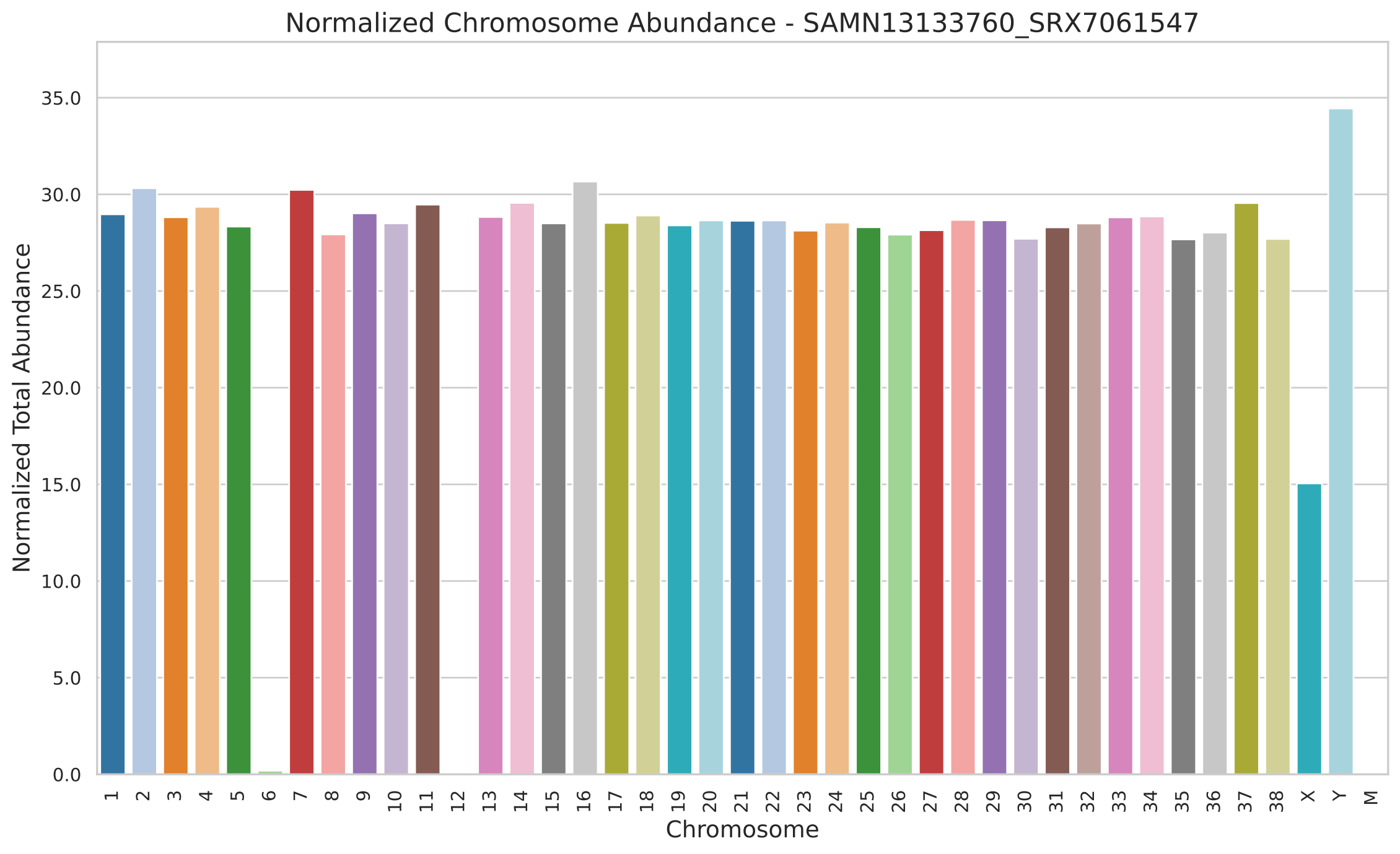

Normalized Chromosome Abundance - SAMN11079579_SRX5487687
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

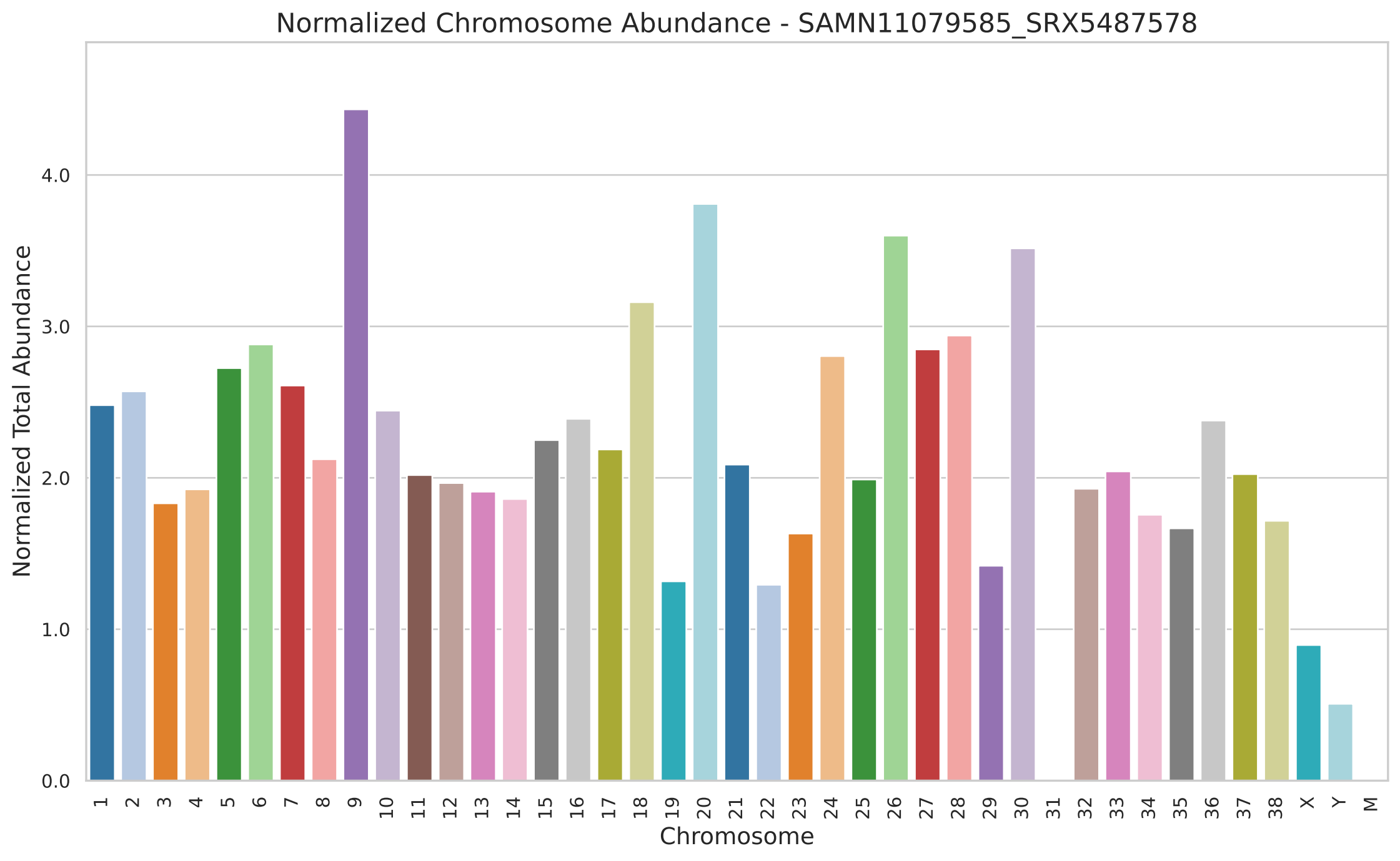

Normalized Chromosome Abundance - SAMN11079588_SRX5487576
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

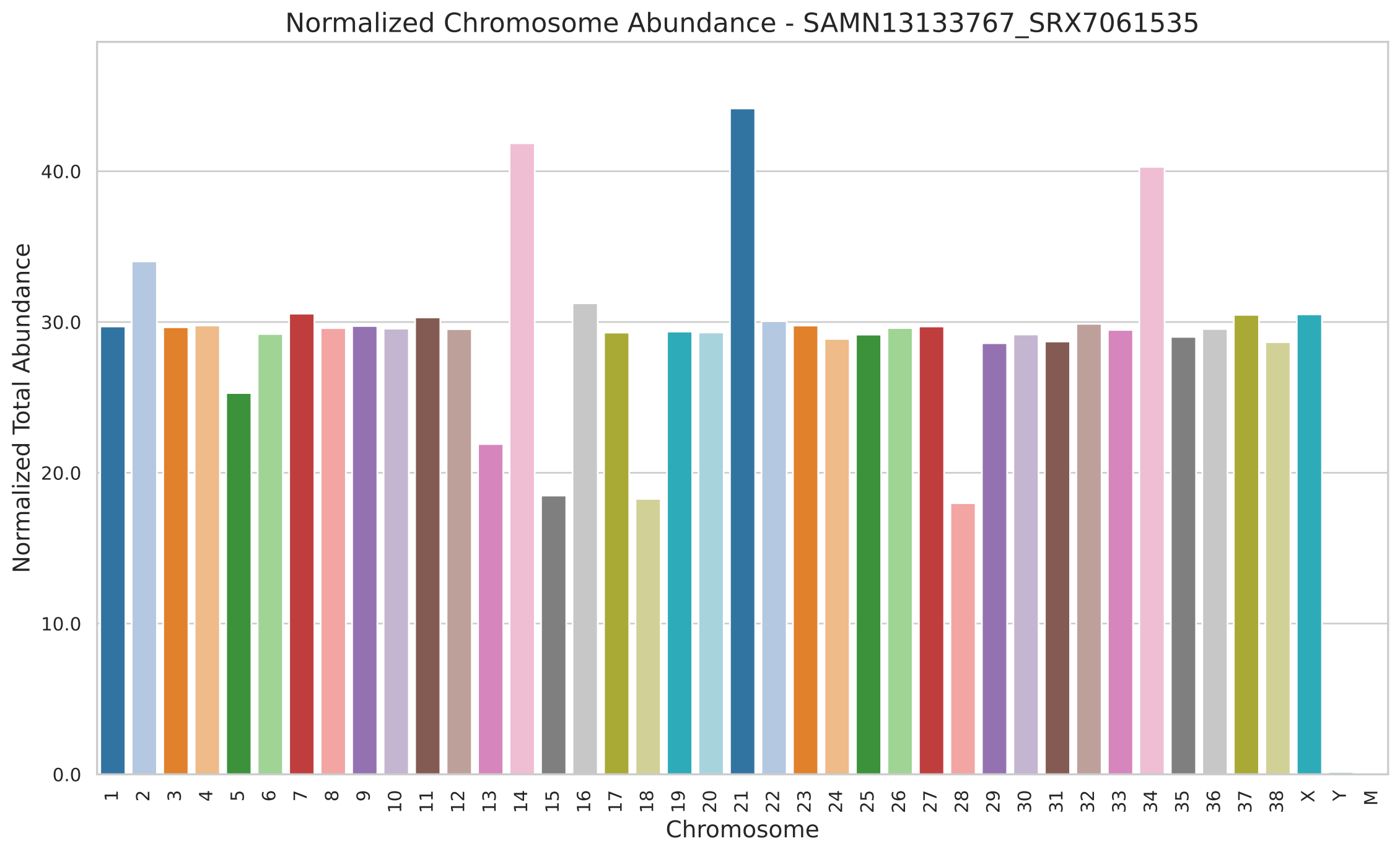

Normalized Chromosome Abundance - SAMN11079581_SRX5487591
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

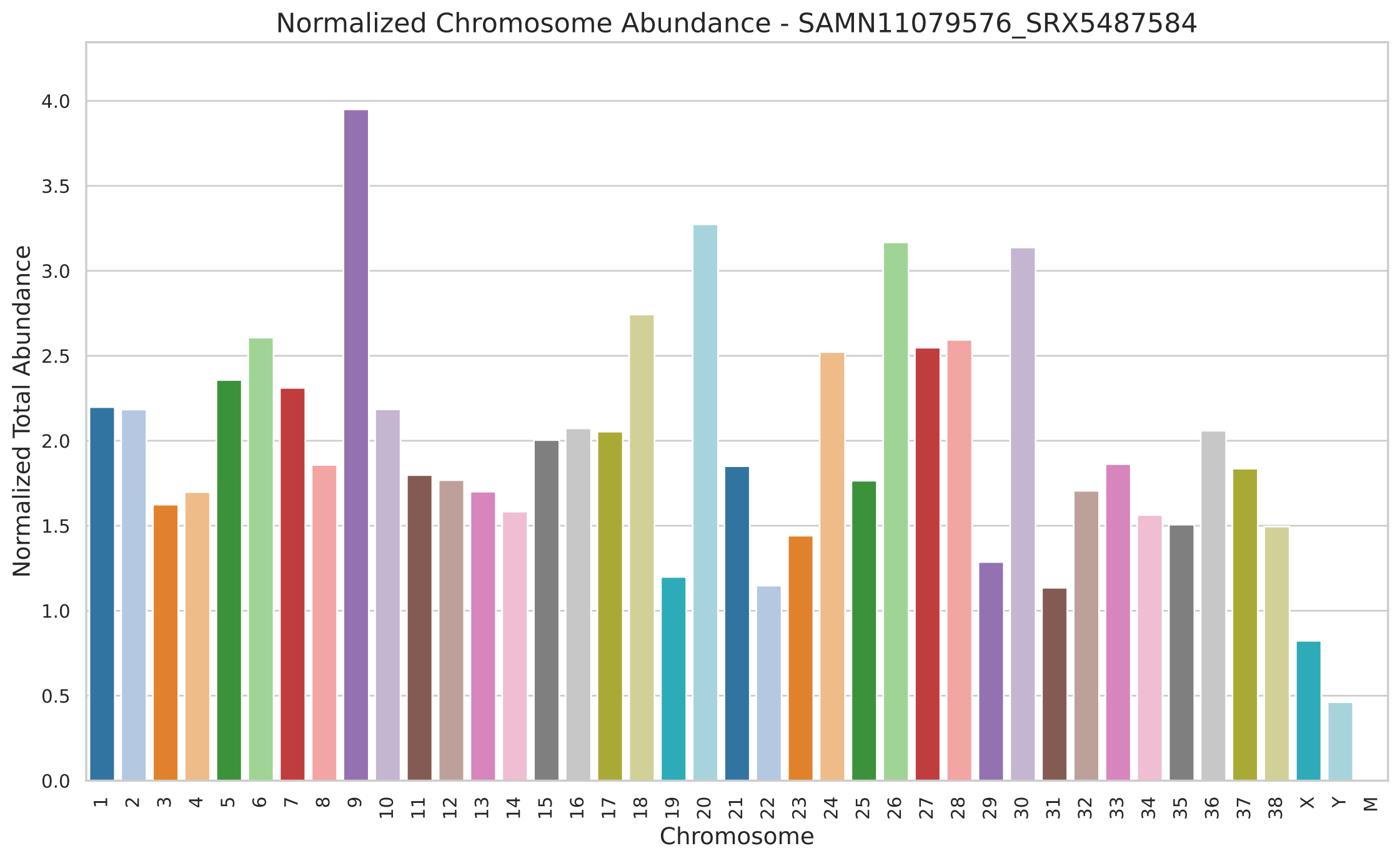

Normalized Chromosome Abundance - SAMN11079571_SRX5487586
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

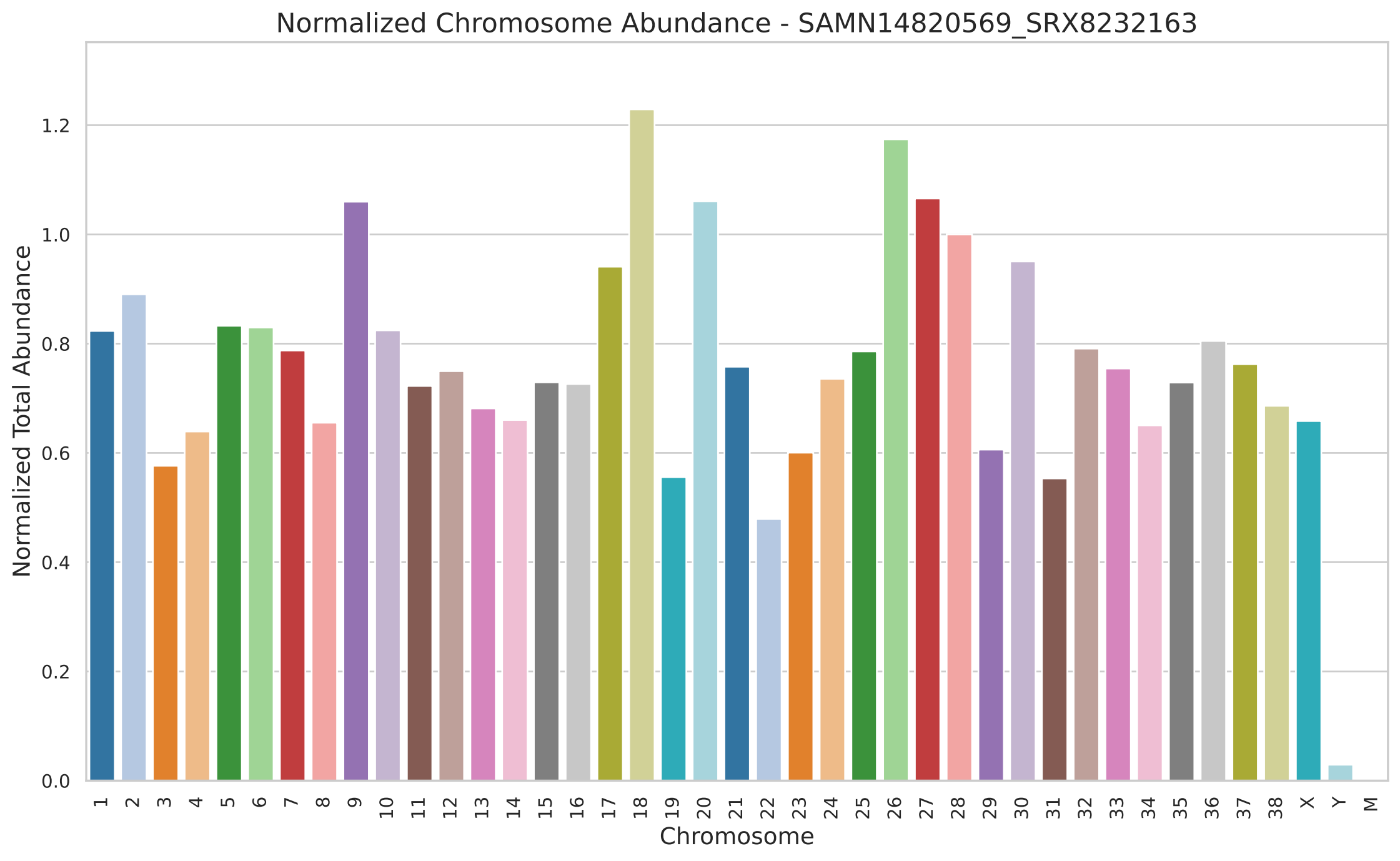

Normalized Chromosome Abundance - SAMN11079584_SRX5487579
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

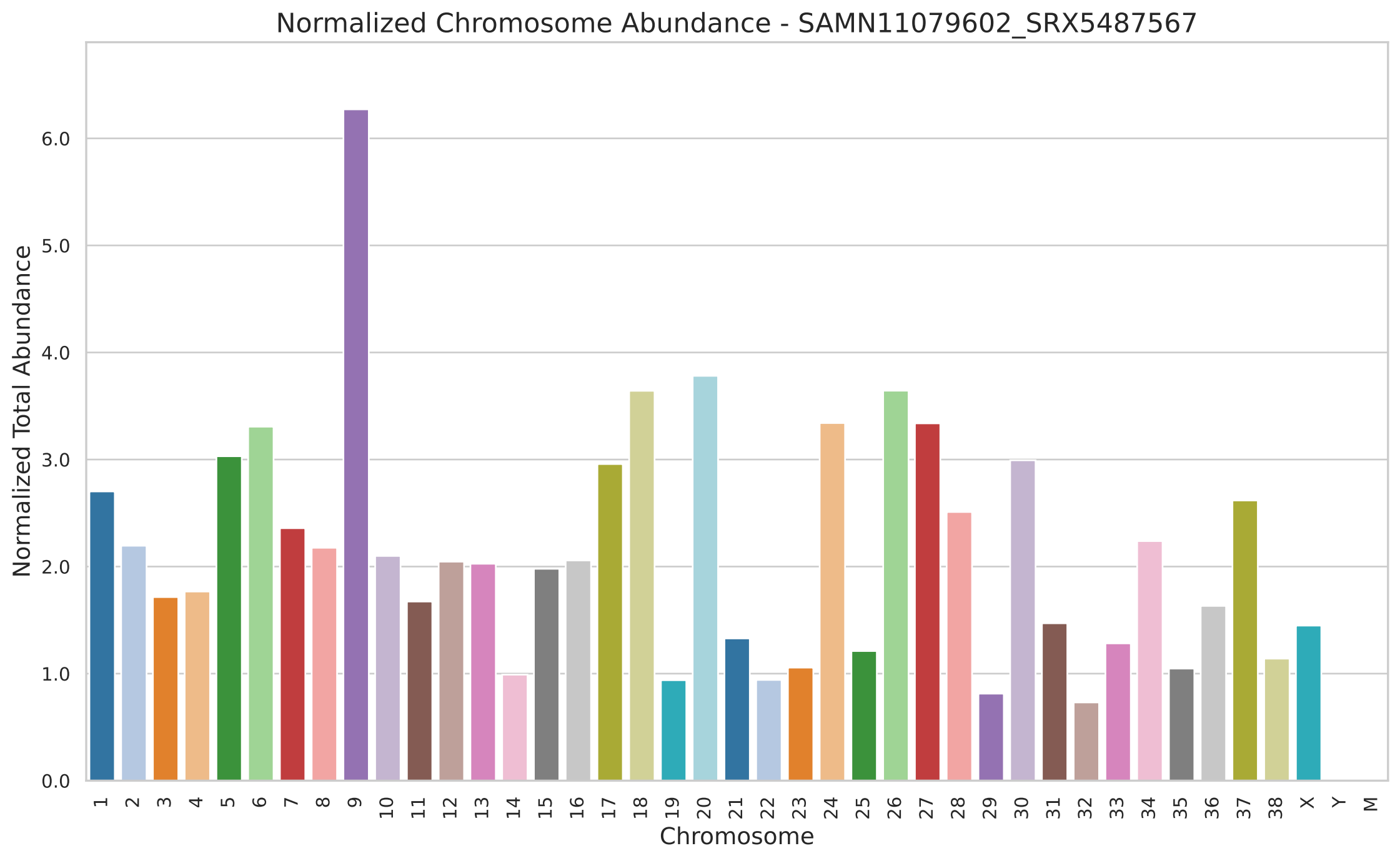

Normalized Chromosome Abundance - SAMN13133760_SRX7061547
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
35.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

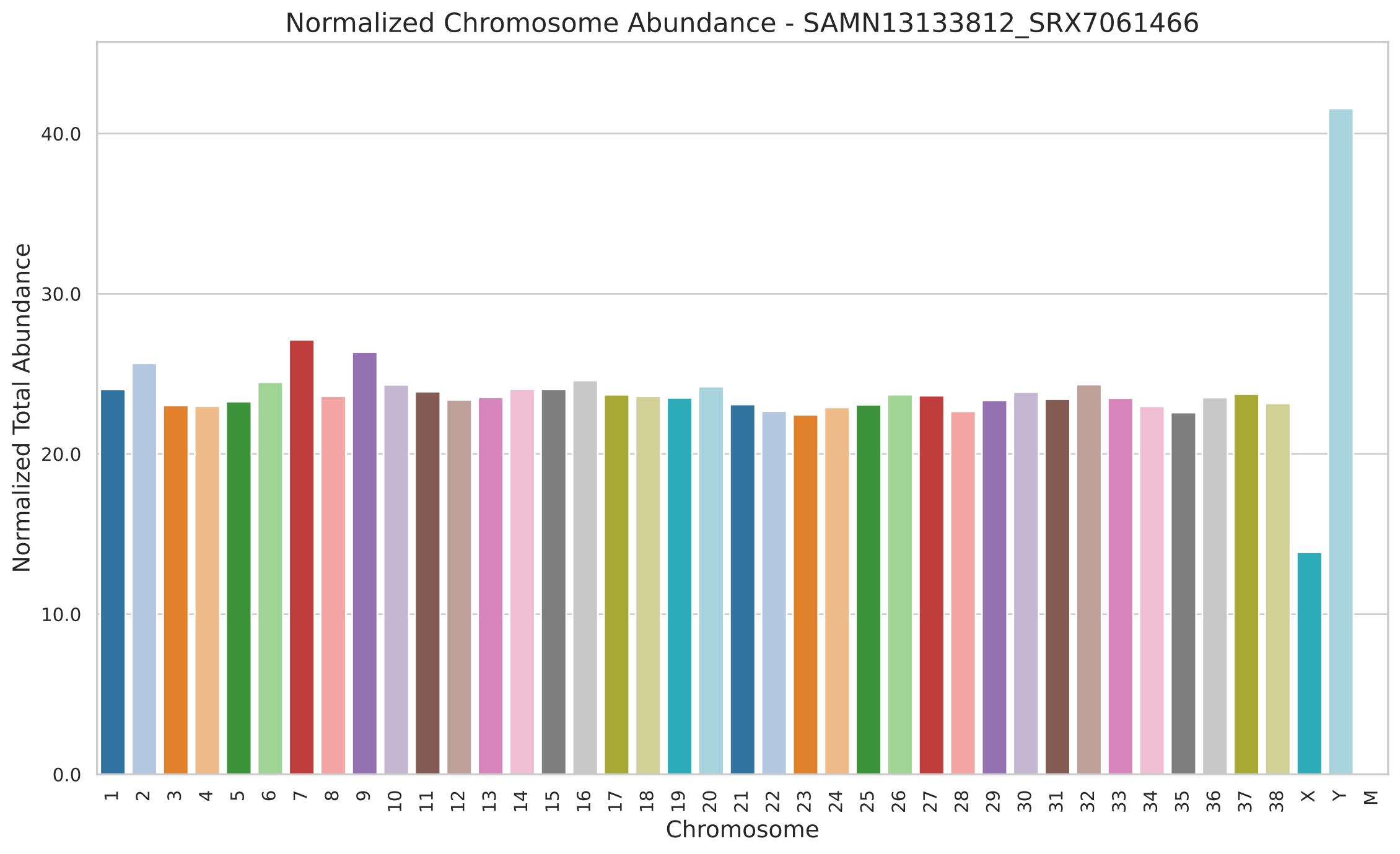

Normalized Chromosome Abundance - SAMN11079585_SRX5487578
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

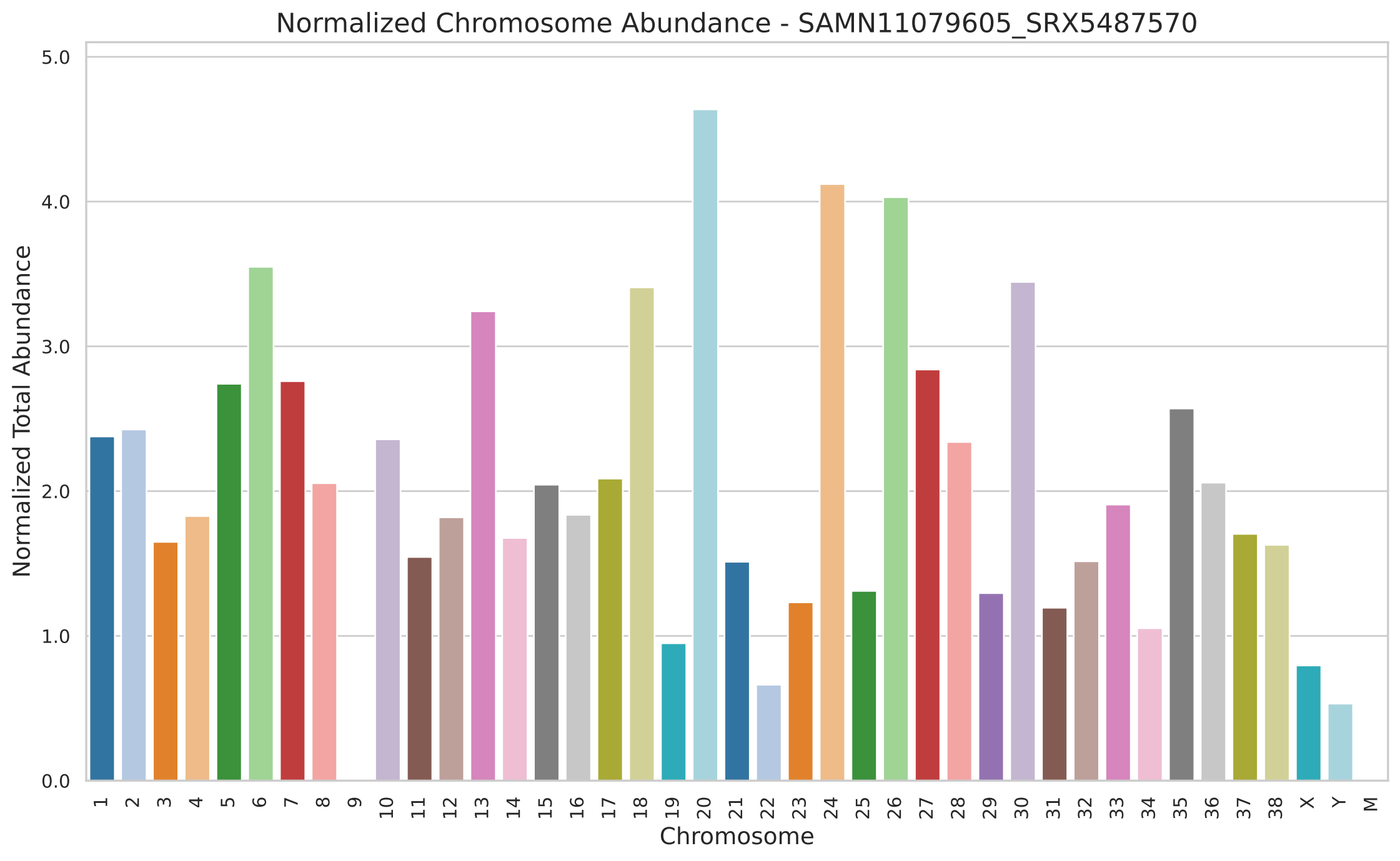

Normalized Chromosome Abundance - SAMN13133767_SRX7061535
Normalized Total Abundance
0.0
10.0
20.0
30.0
40.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

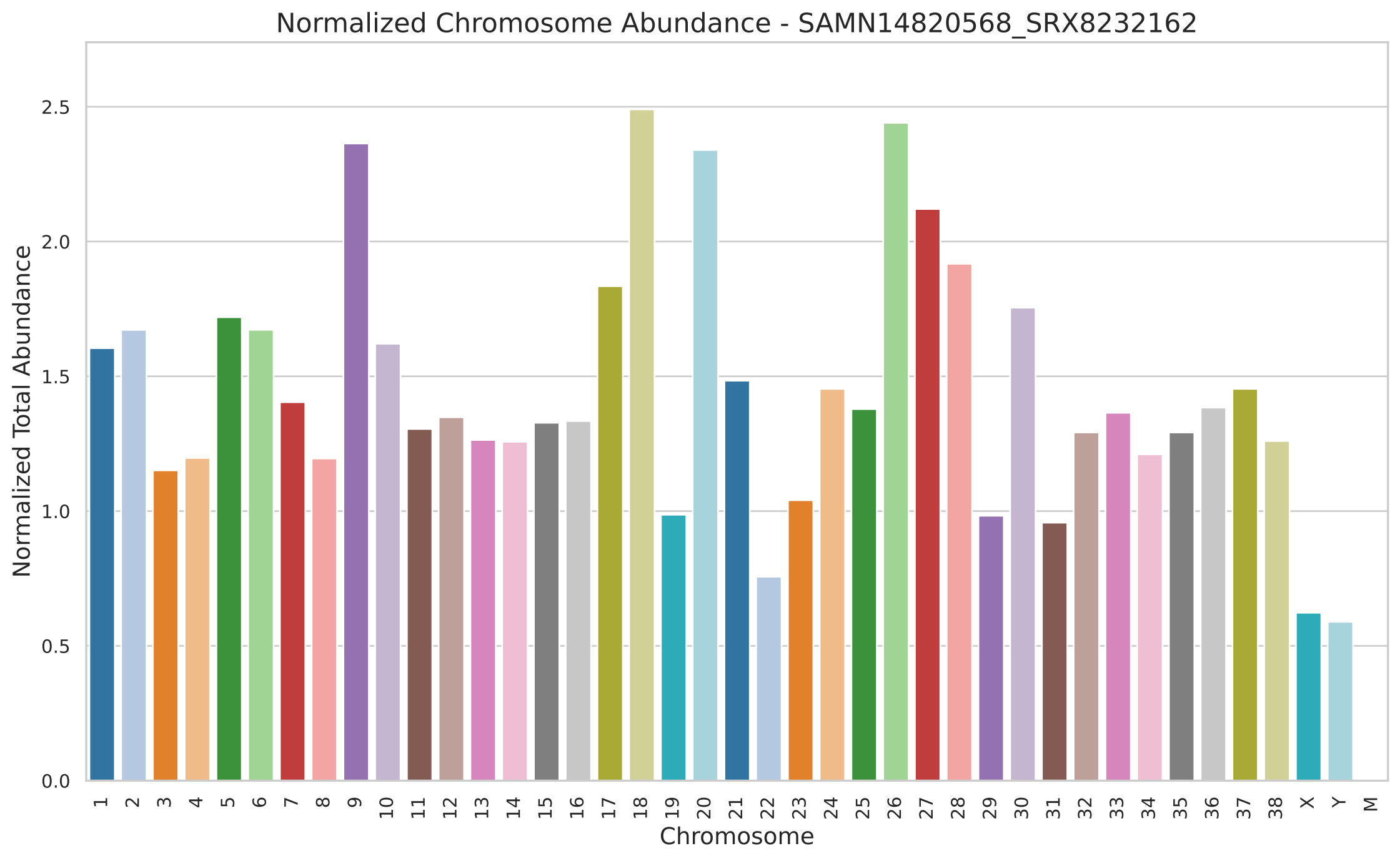

Normalized Chromosome Abundance - SAMN11079576_SRX5487584
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

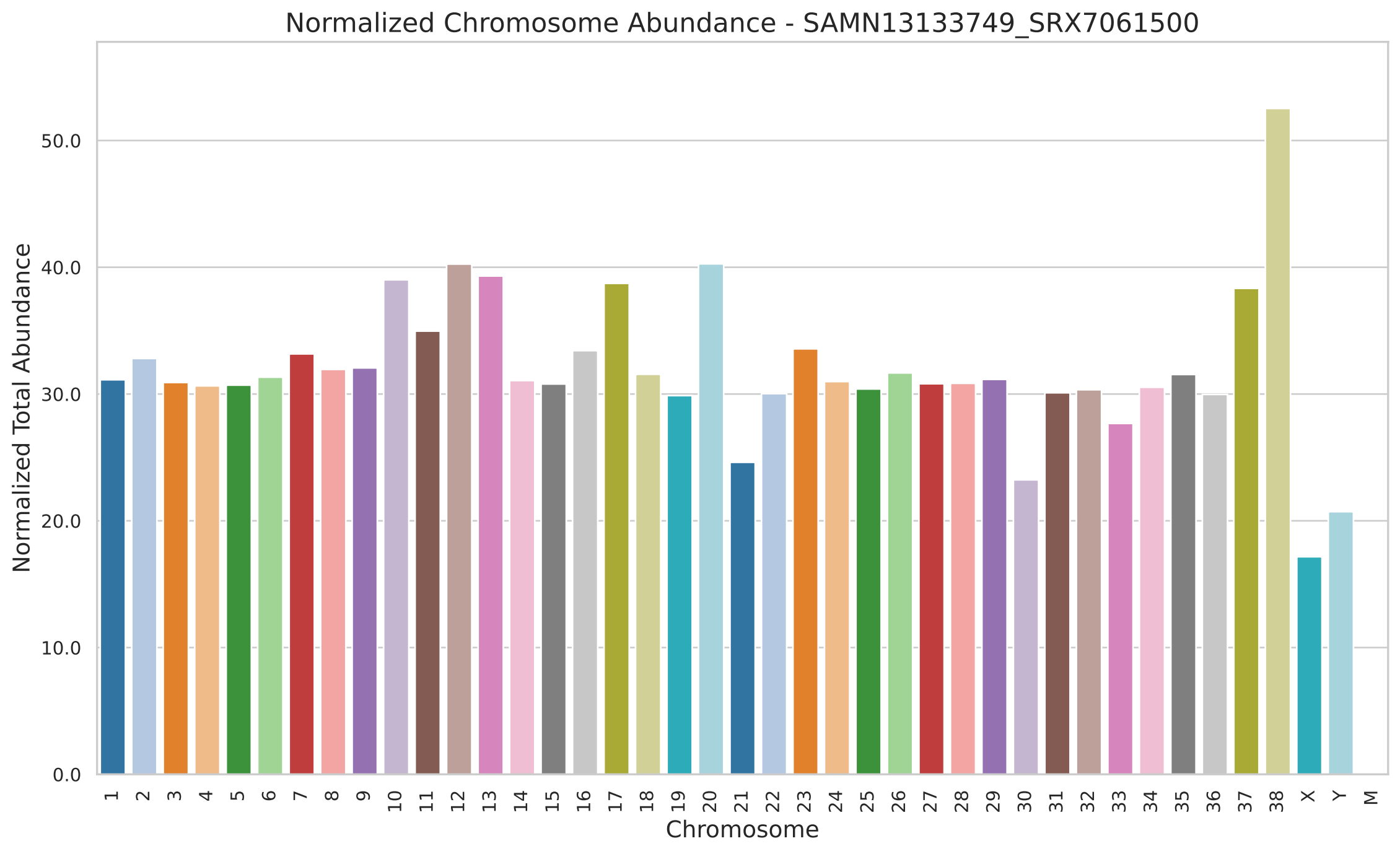

Normalized Chromosome Abundance - SAMN14820569_SRX8232163
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

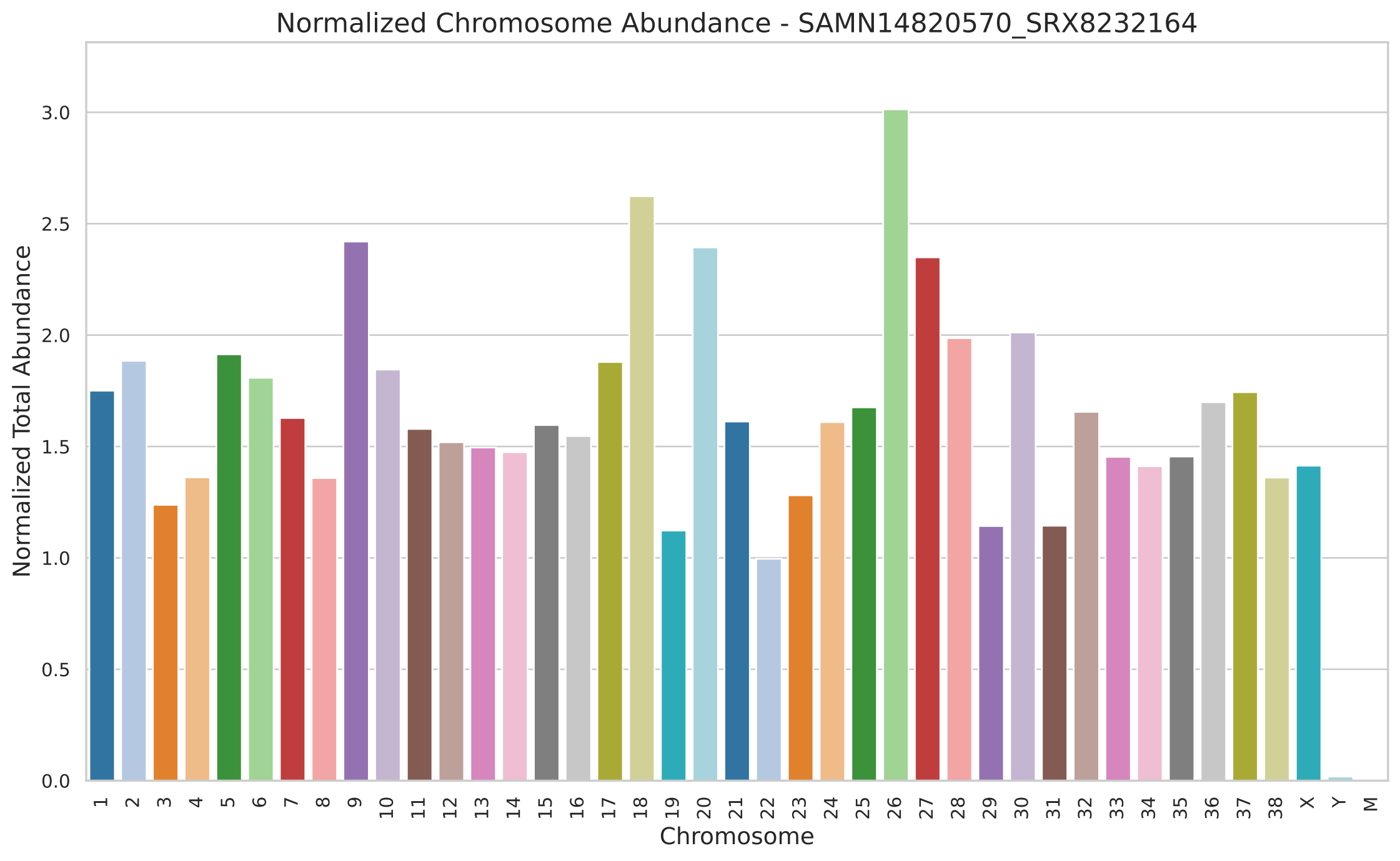

Normalized Chromosome Abundance - SAMN11079602_SRX5487567
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

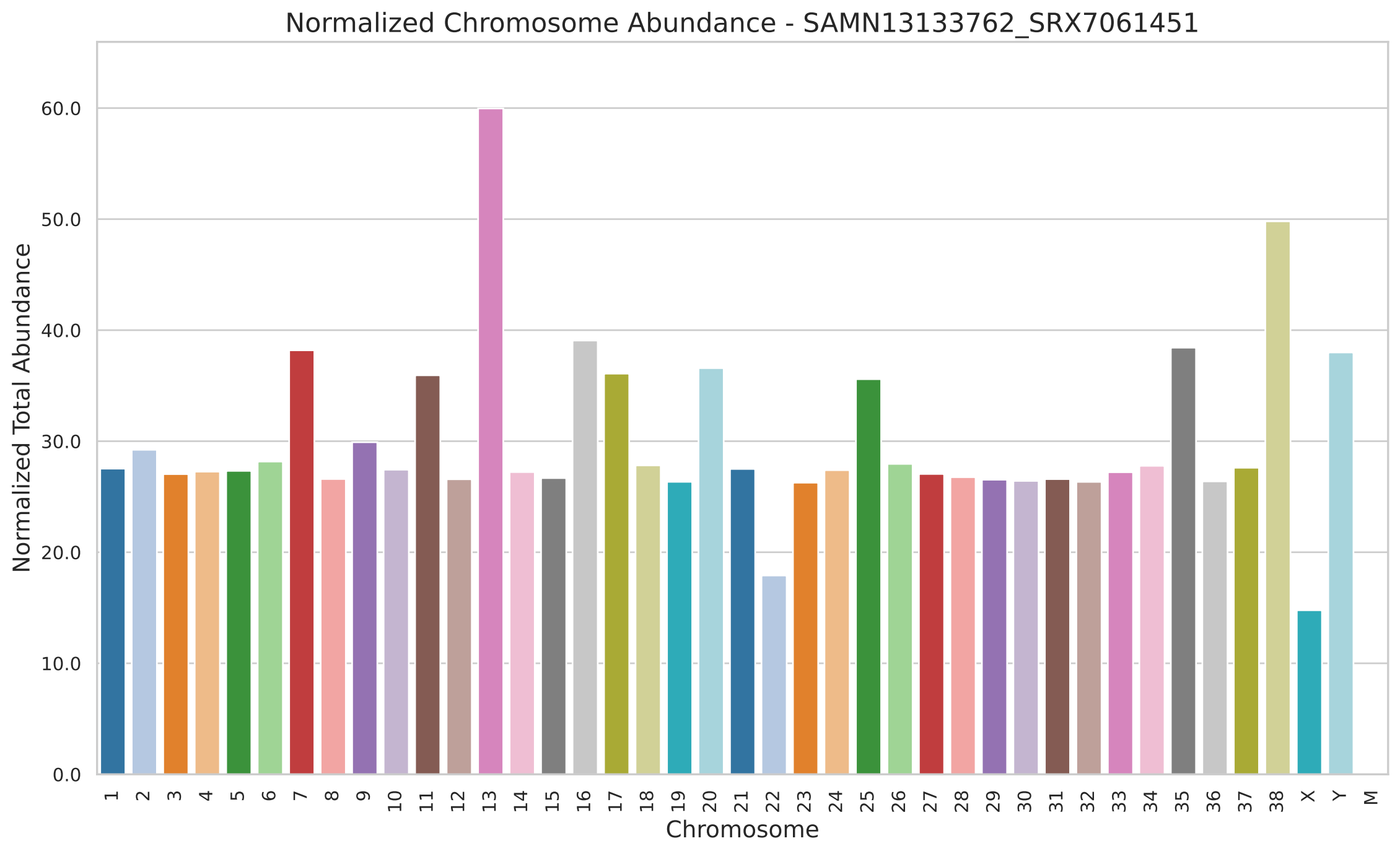

Normalized Chromosome Abundance - SAMN13133812_SRX7061466
Normalized Total Abundance
0.0
10.0
20.0
30.0
40.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

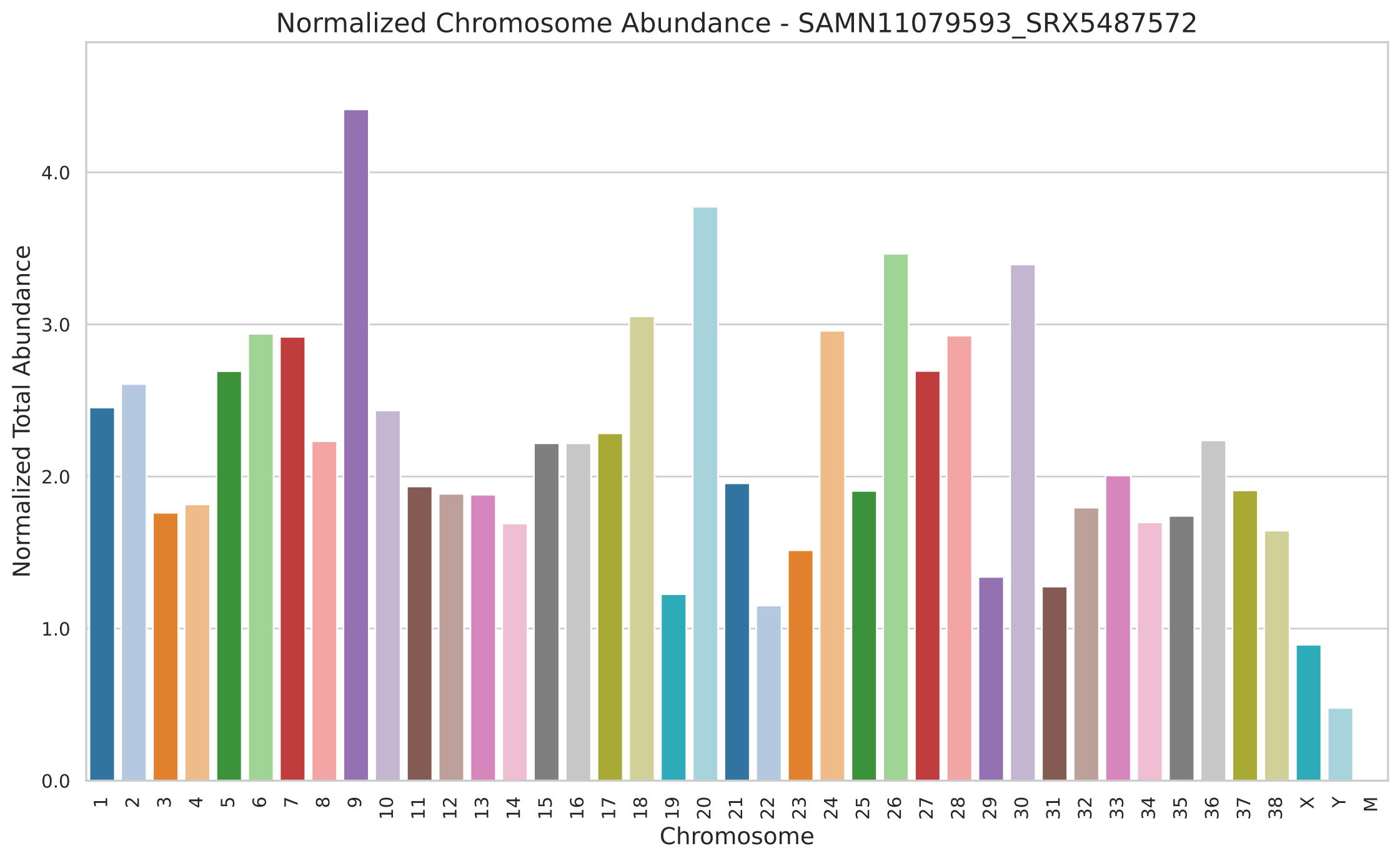

Normalized Chromosome Abundance - SAMN11079605_SRX5487570
Normalized Total Abundance
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

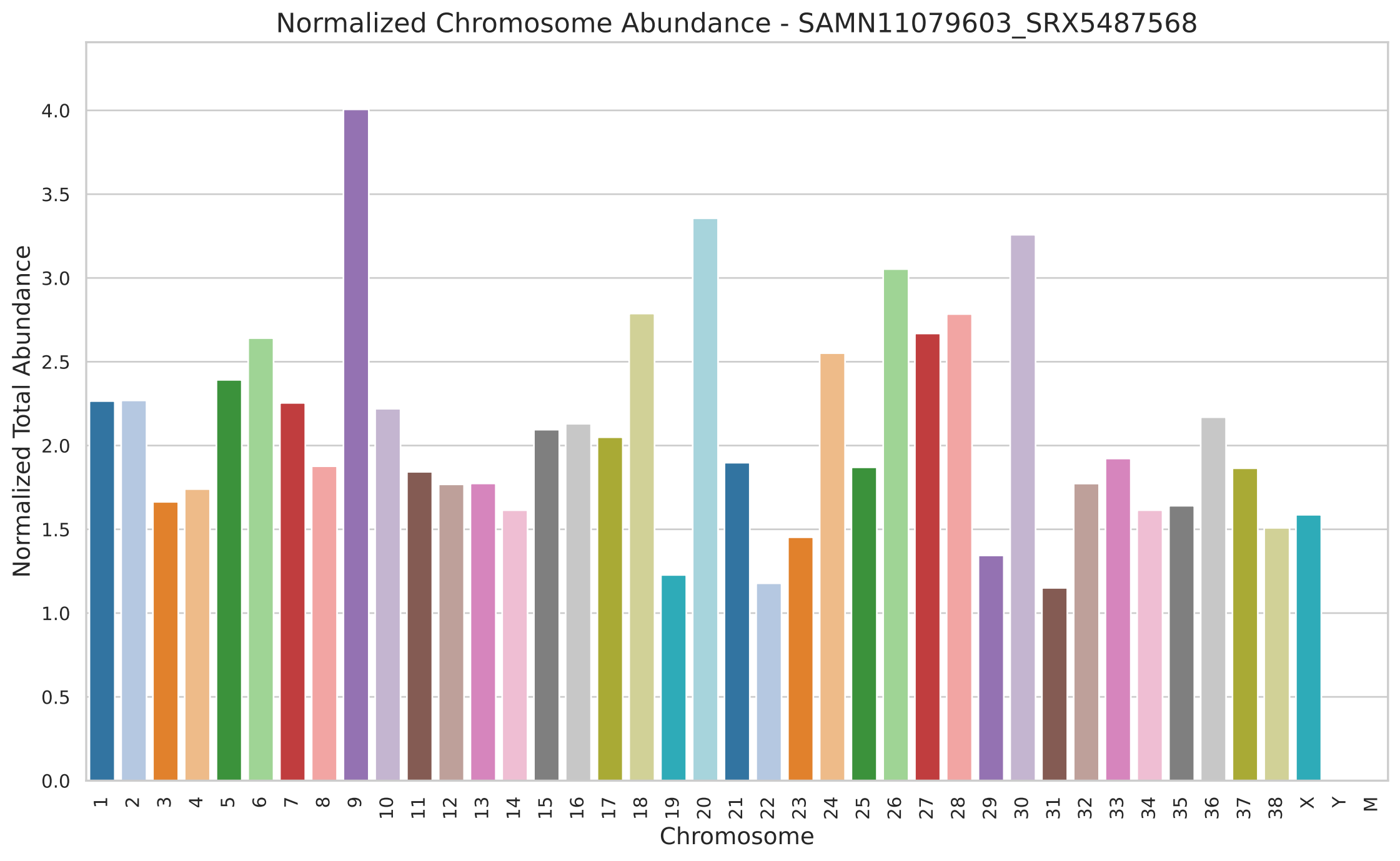

Normalized Chromosome Abundance - SAMN14820568_SRX8232162
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

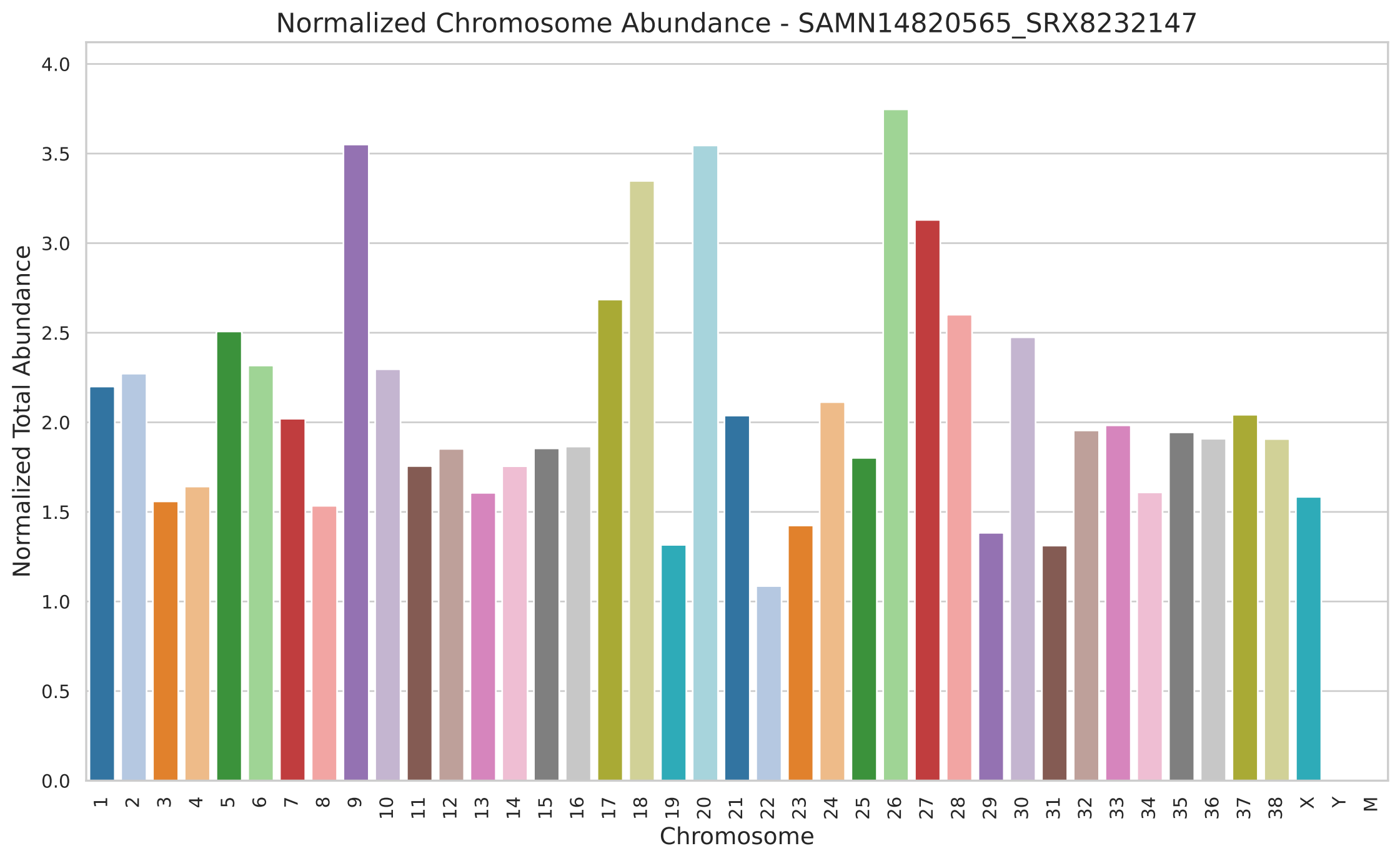

Normalized Chromosome Abundance - SAMN13133749_SRX7061500
Normalized Total Abundance
0.0
10.0
20.0
30.0
40.0
50.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

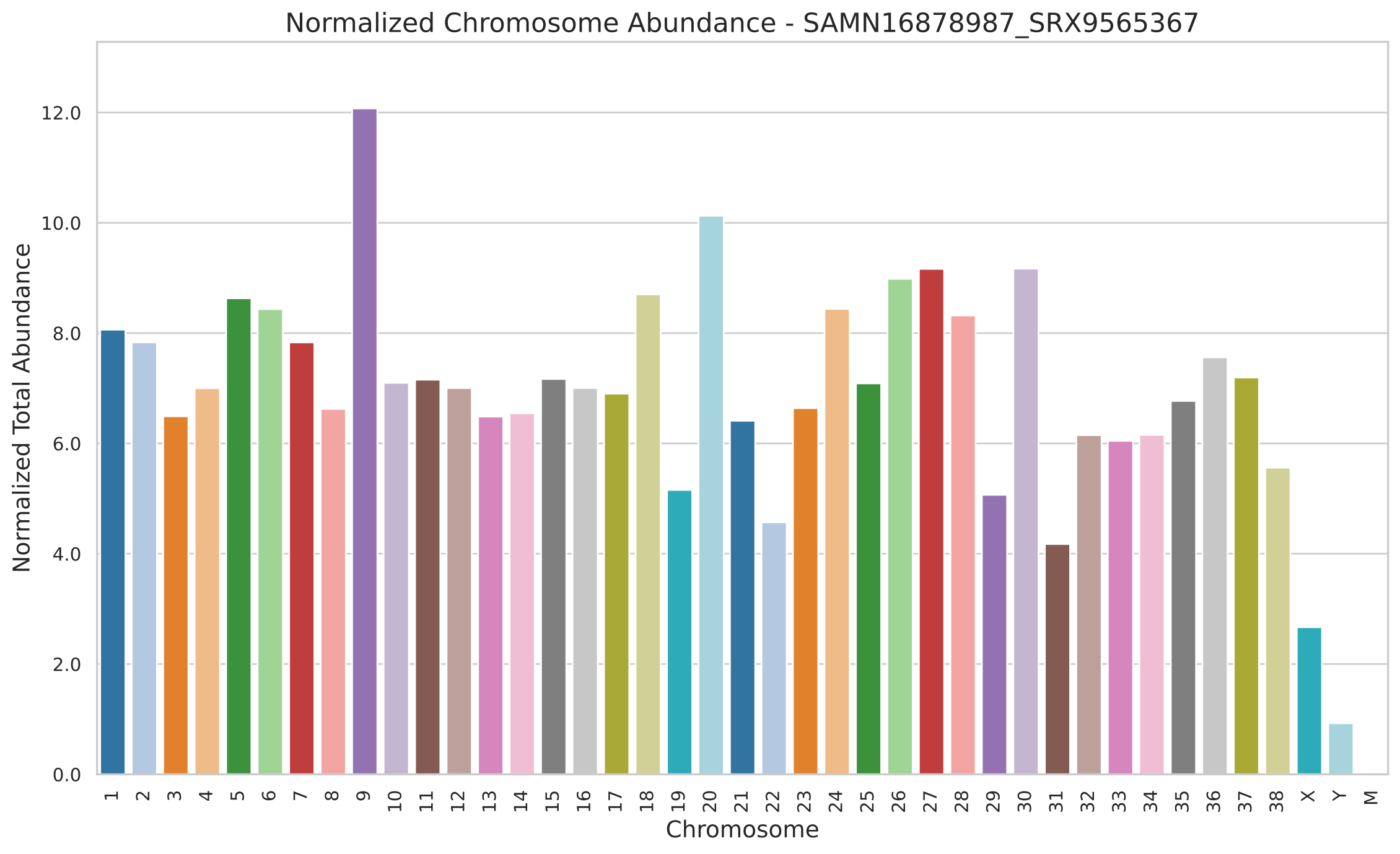

Normalized Chromosome Abundance - SAMN14820570_SRX8232164
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

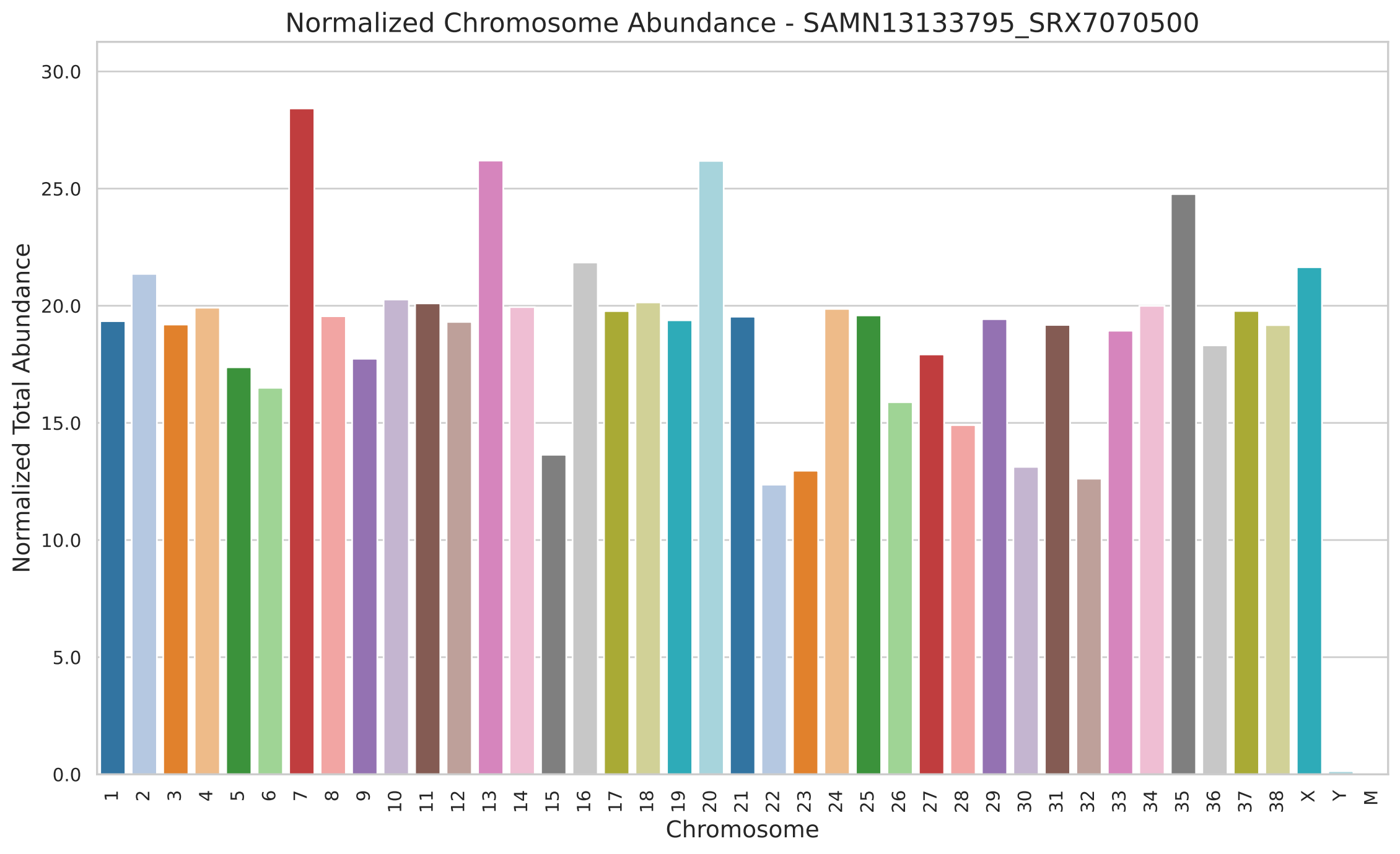

Normalized Chromosome Abundance - SAMN13133762_SRX7061451
Normalized Total Abundance
0.0
10.0
20.0
30.0
40.0
50.0
60.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

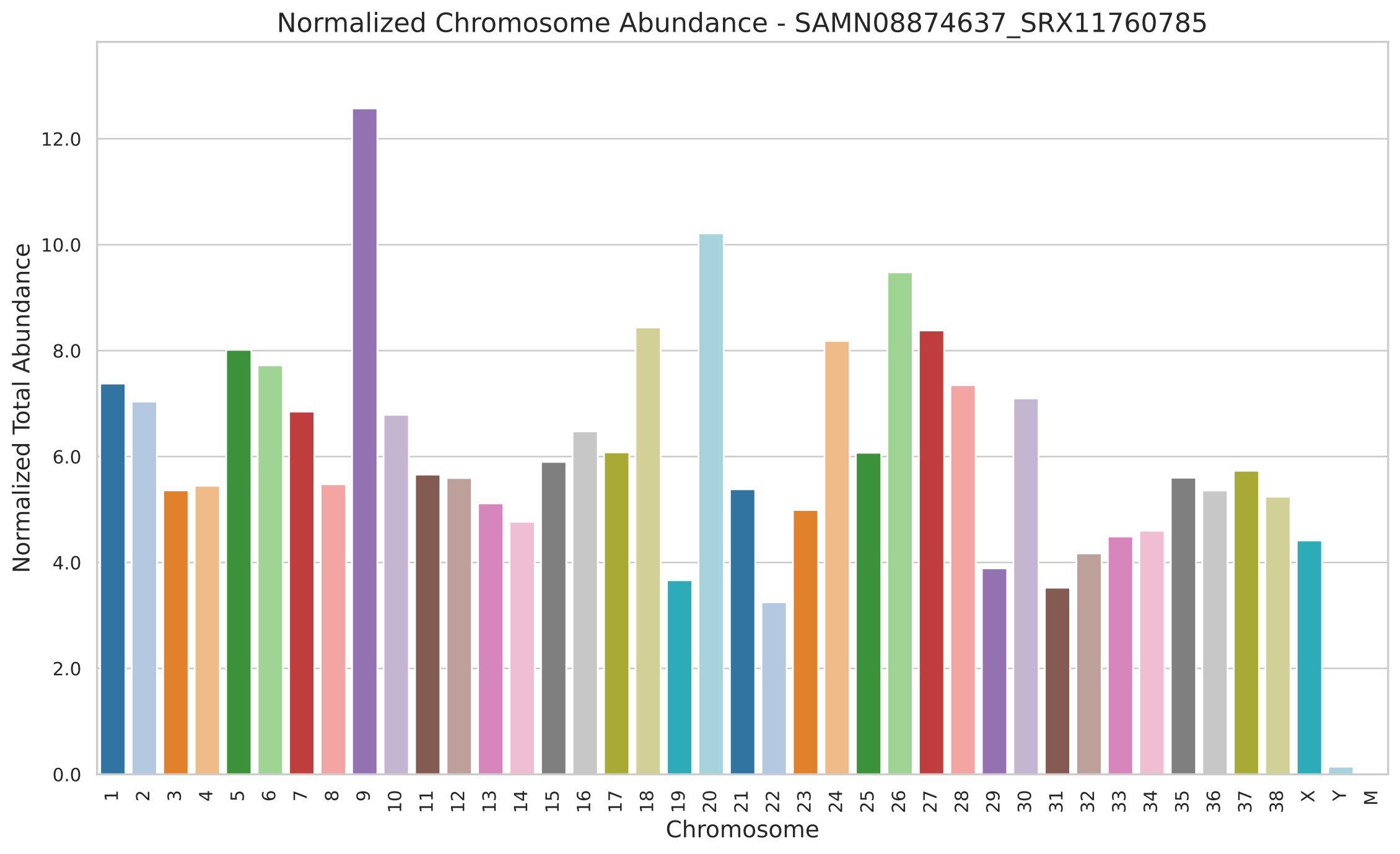

Normalized Chromosome Abundance - SAMN11079593_SRX5487572
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

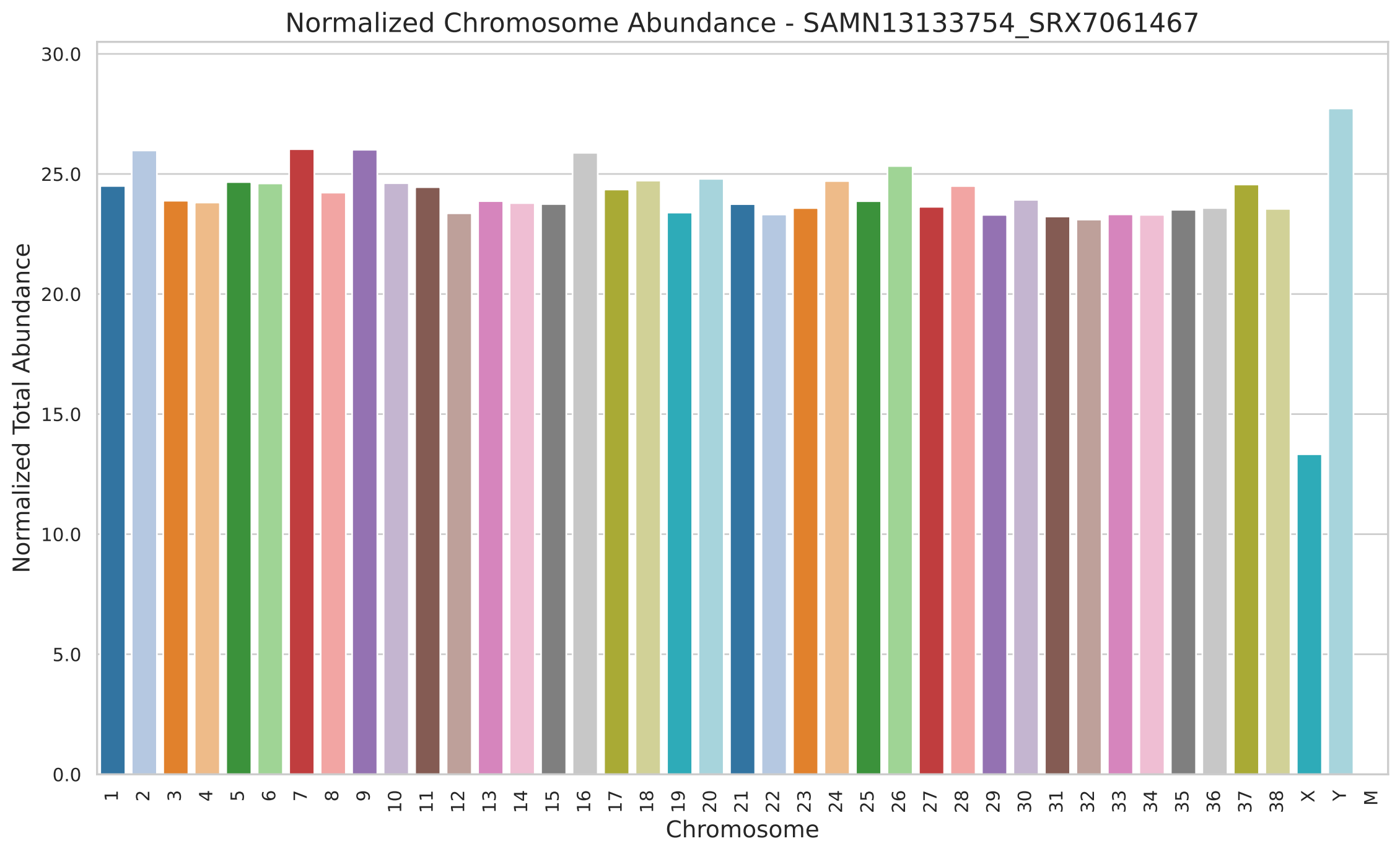

Normalized Chromosome Abundance - SAMN11079603_SRX5487568
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

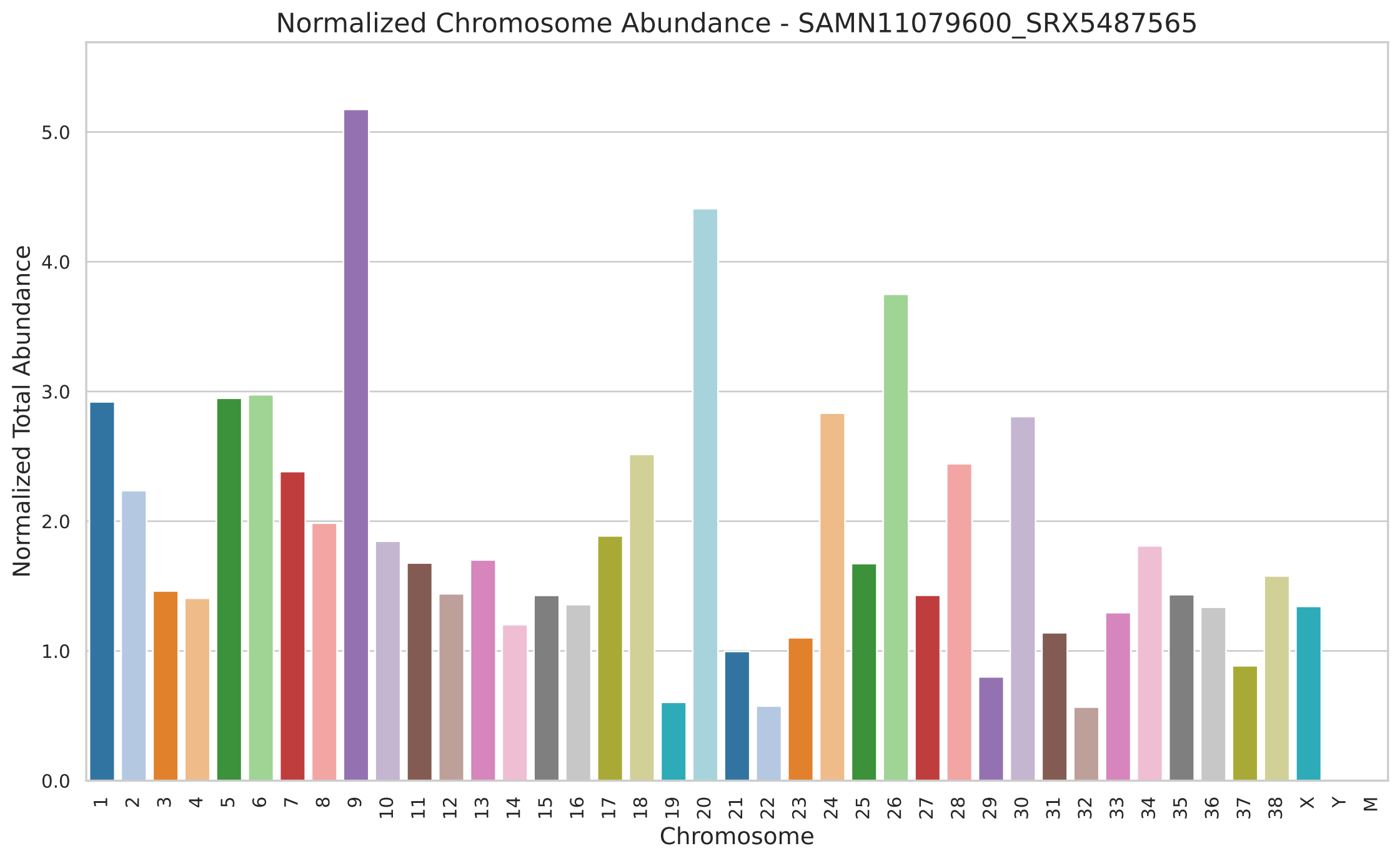

Normalized Chromosome Abundance - SAMN14820565_SRX8232147
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

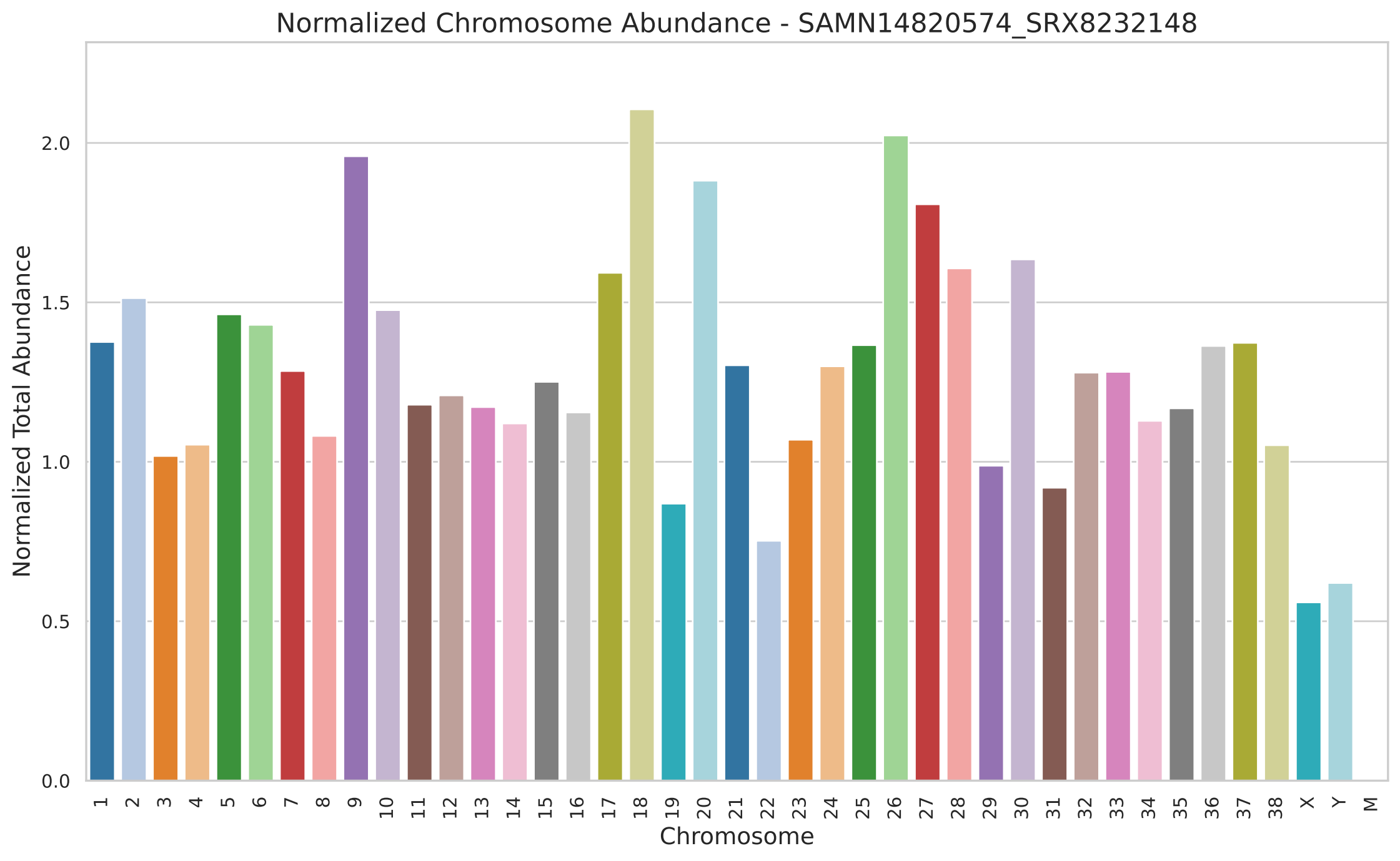

Normalized Chromosome Abundance - SAMN16878987_SRX9565367
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
12.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

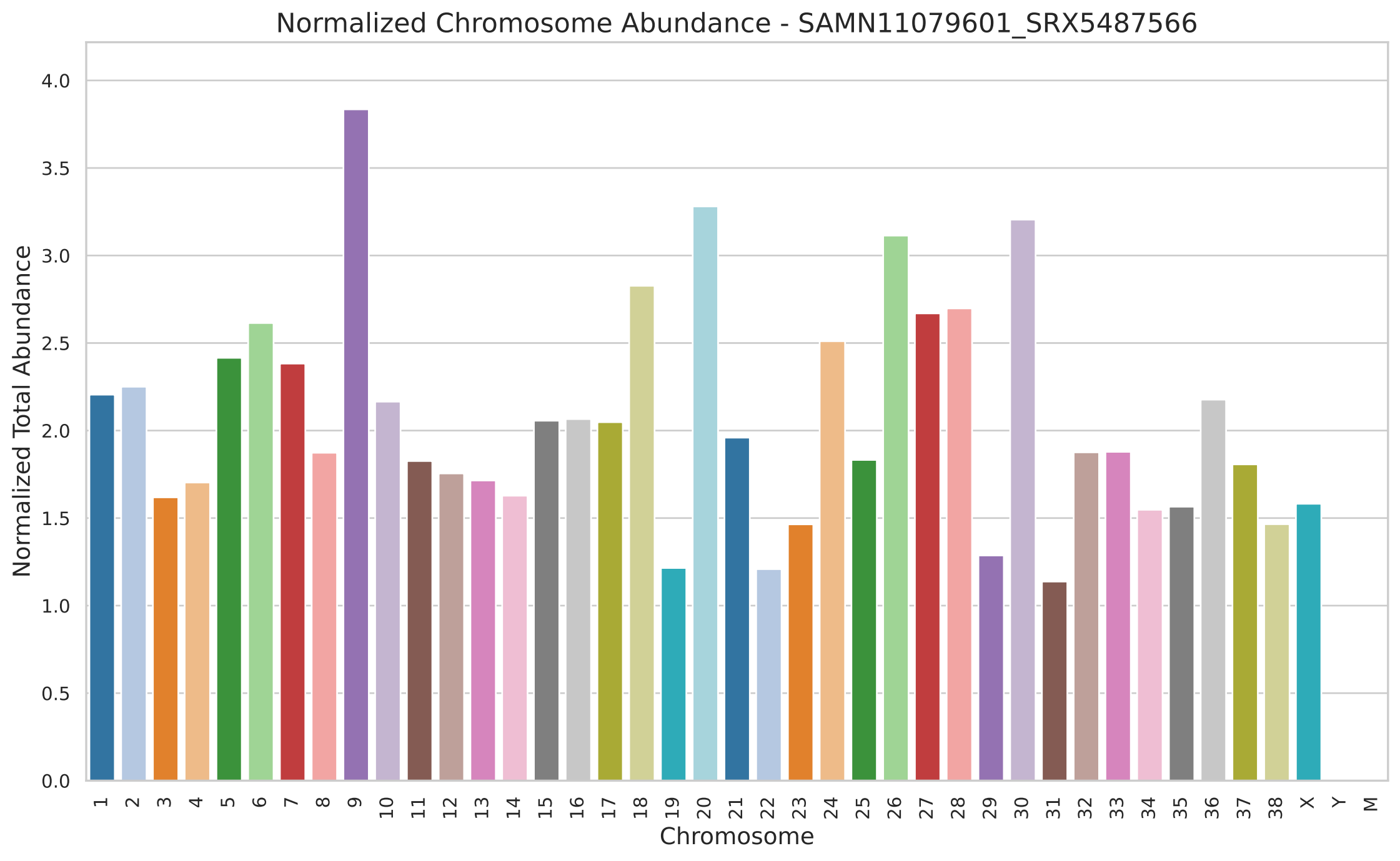

Normalized Chromosome Abundance - SAMN13133795_SRX7070500
Normalized Total Abundance
30.0
25.0
20.0
15.0
10.0
5.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

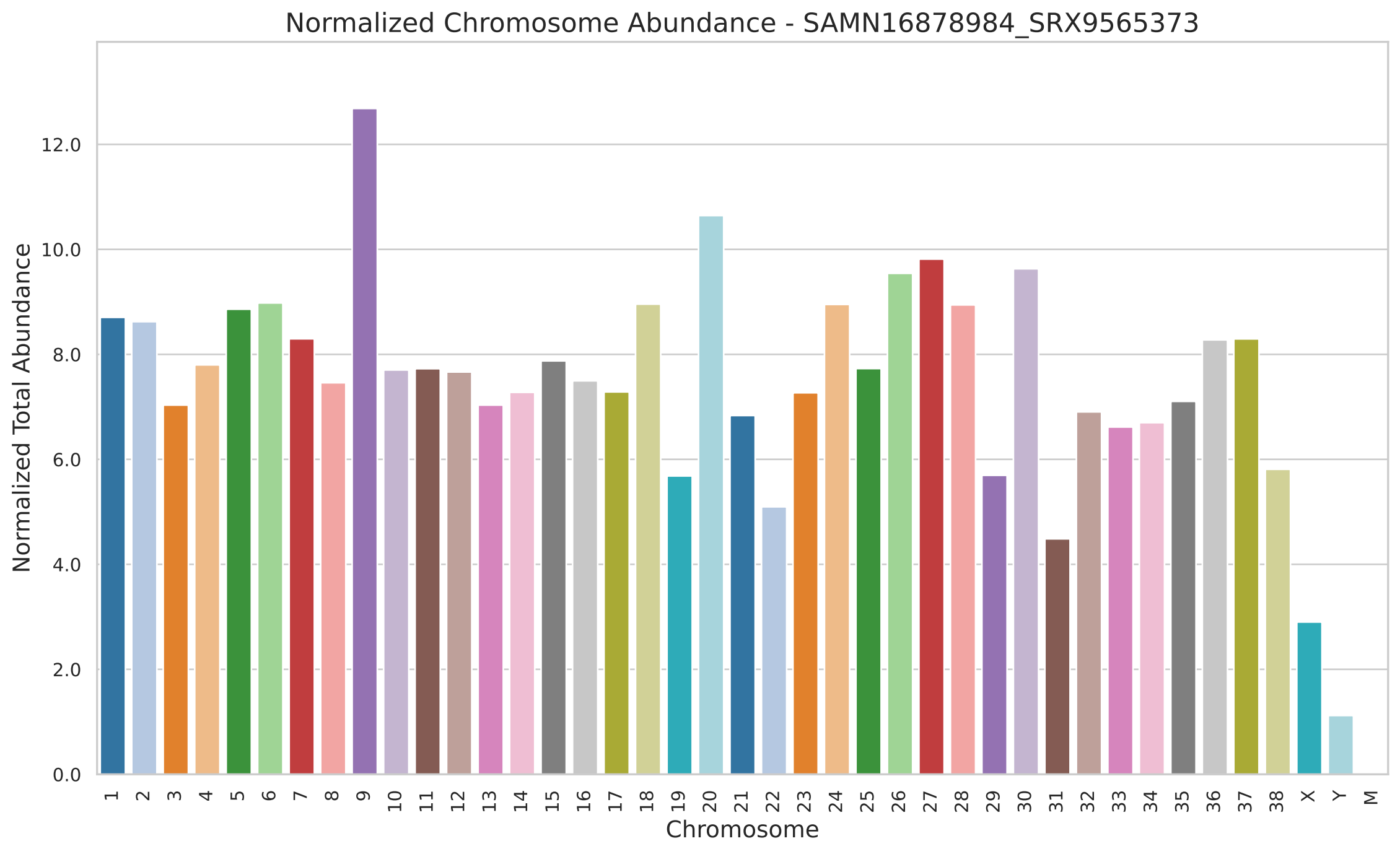

Normalized Chromosome Abundance - SAMN08874637_SRX11760785
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
12.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

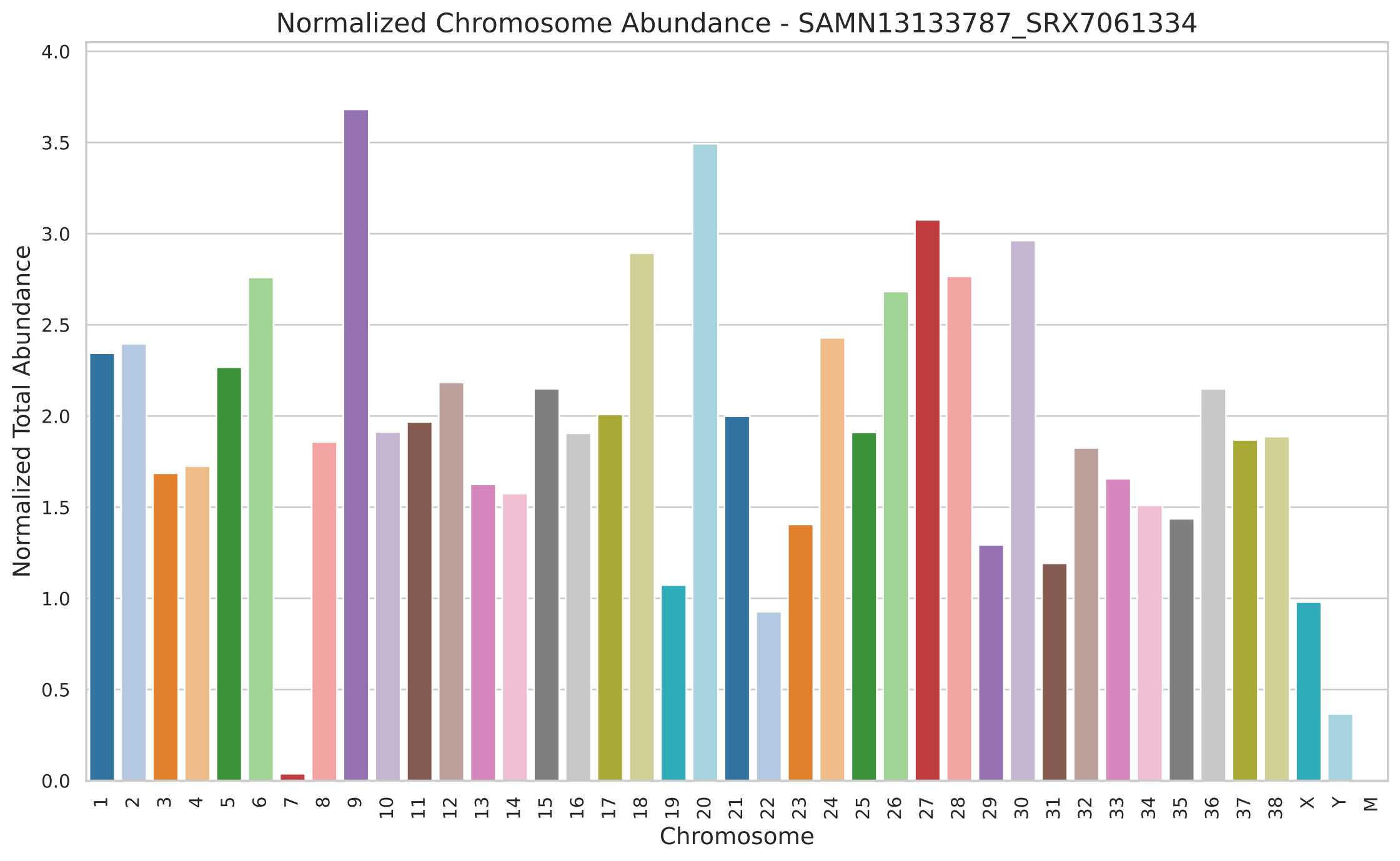

Normalized Chromosome Abundance - SAMN13133754_SRX7061467
Normalized Total Abundance
30.0
25.0
20.0
15.0
10.0
5.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

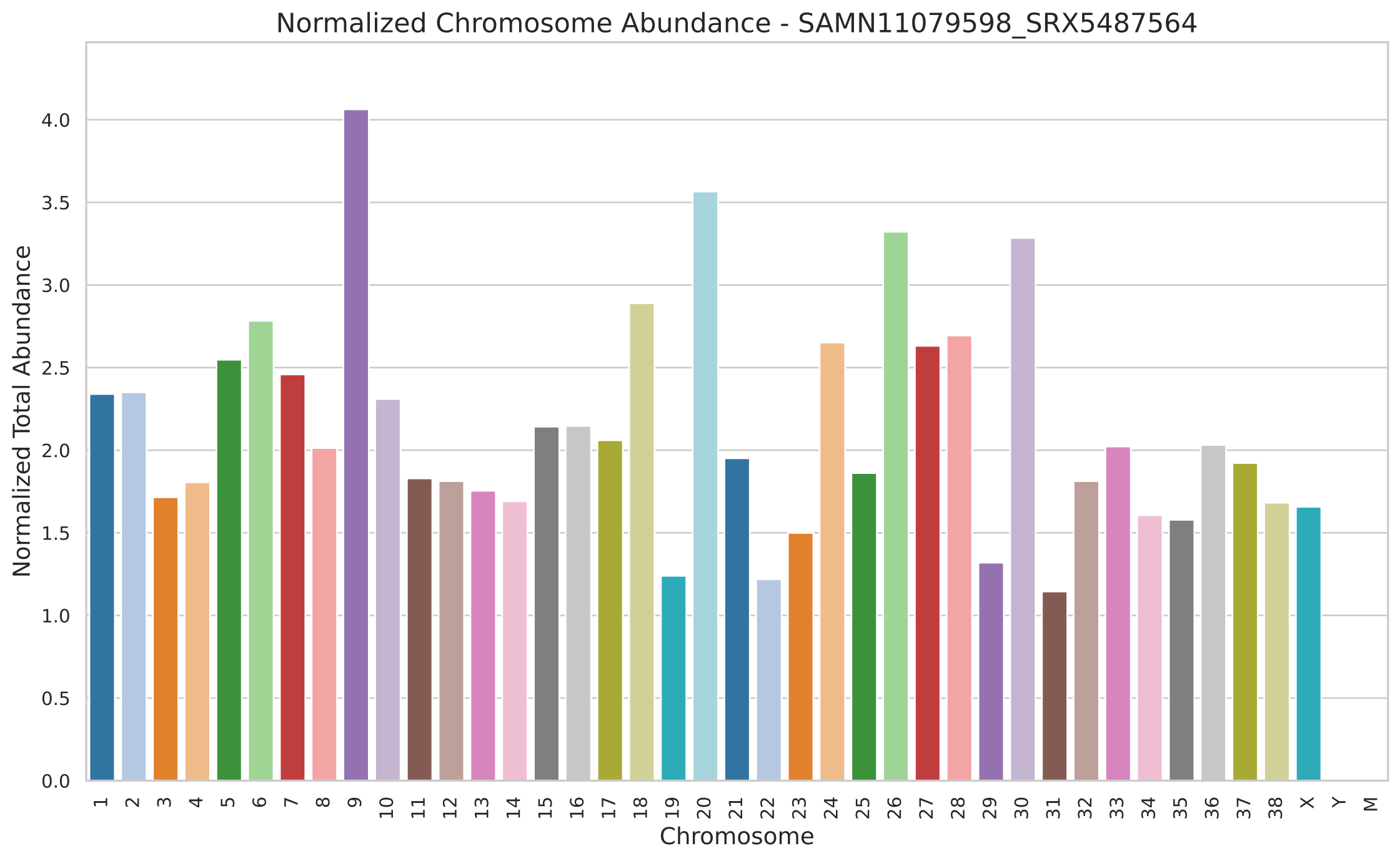

Normalized Chromosome Abundance - SAMN11079600_SRX5487565
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

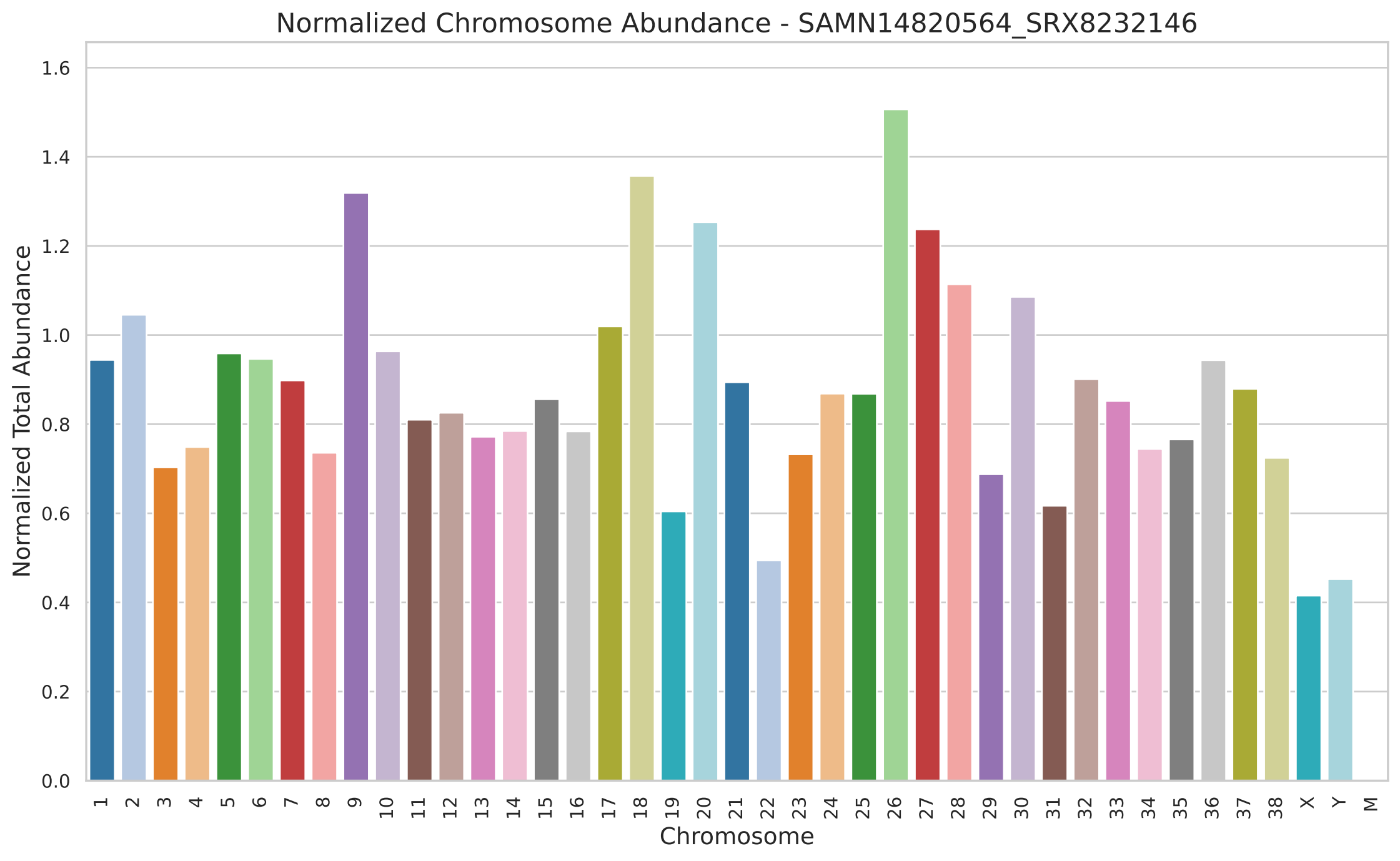

Normalized Chromosome Abundance - SAMN14820574_SRX8232148
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

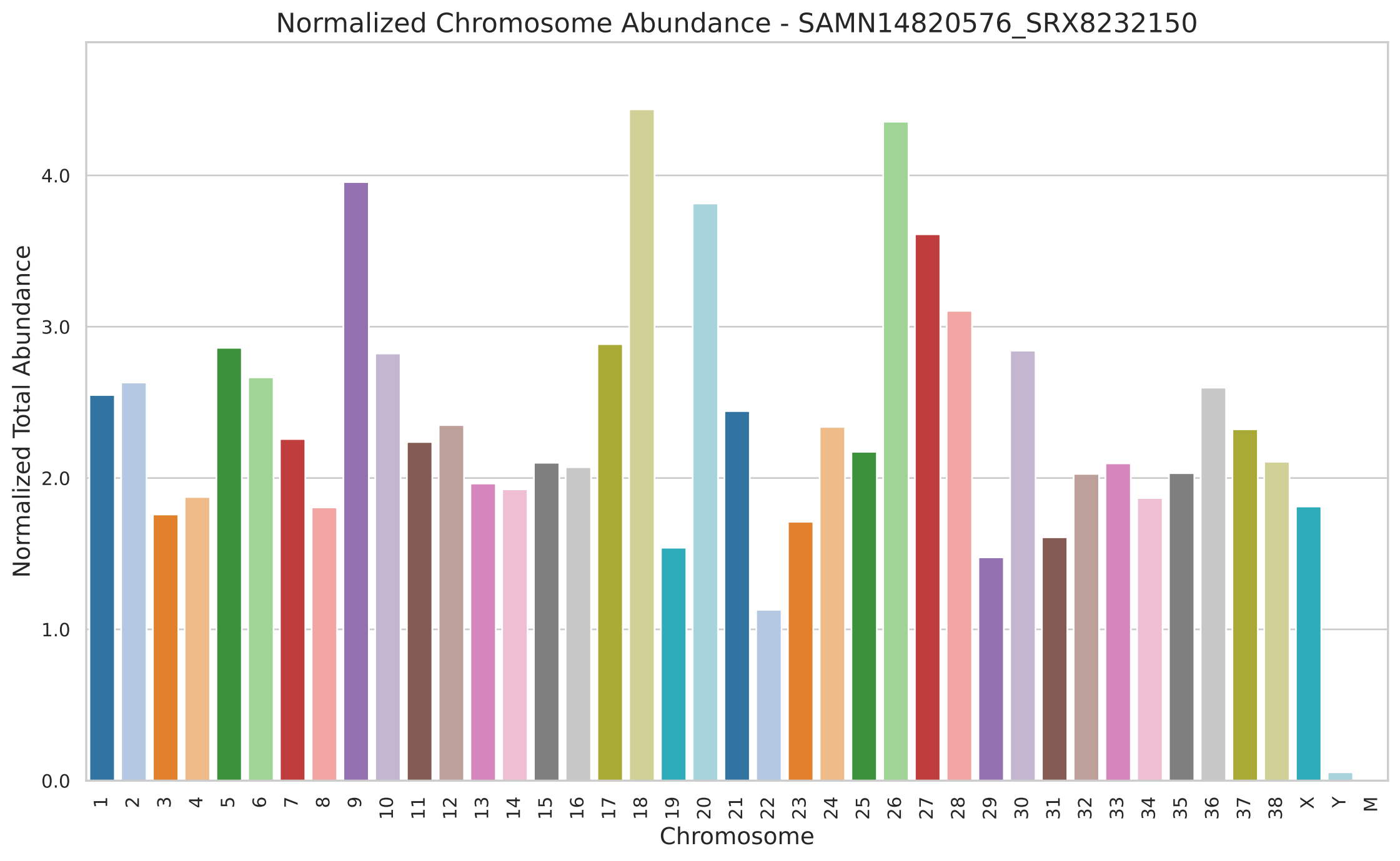

Normalized Chromosome Abundance - SAMN11079601_SRX5487566
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

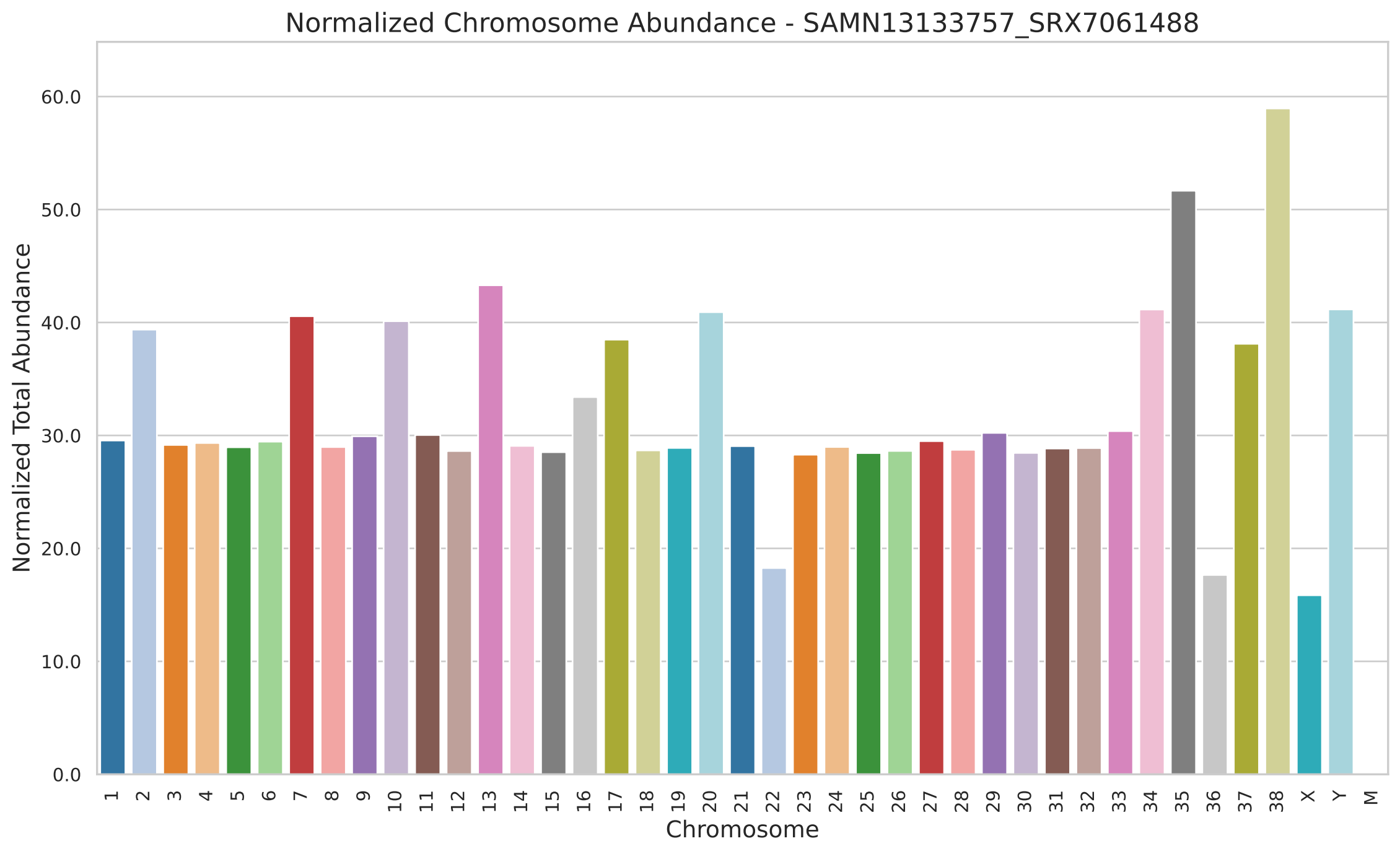

Normalized Chromosome Abundance - SAMN16878984_SRX9565373
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
12.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

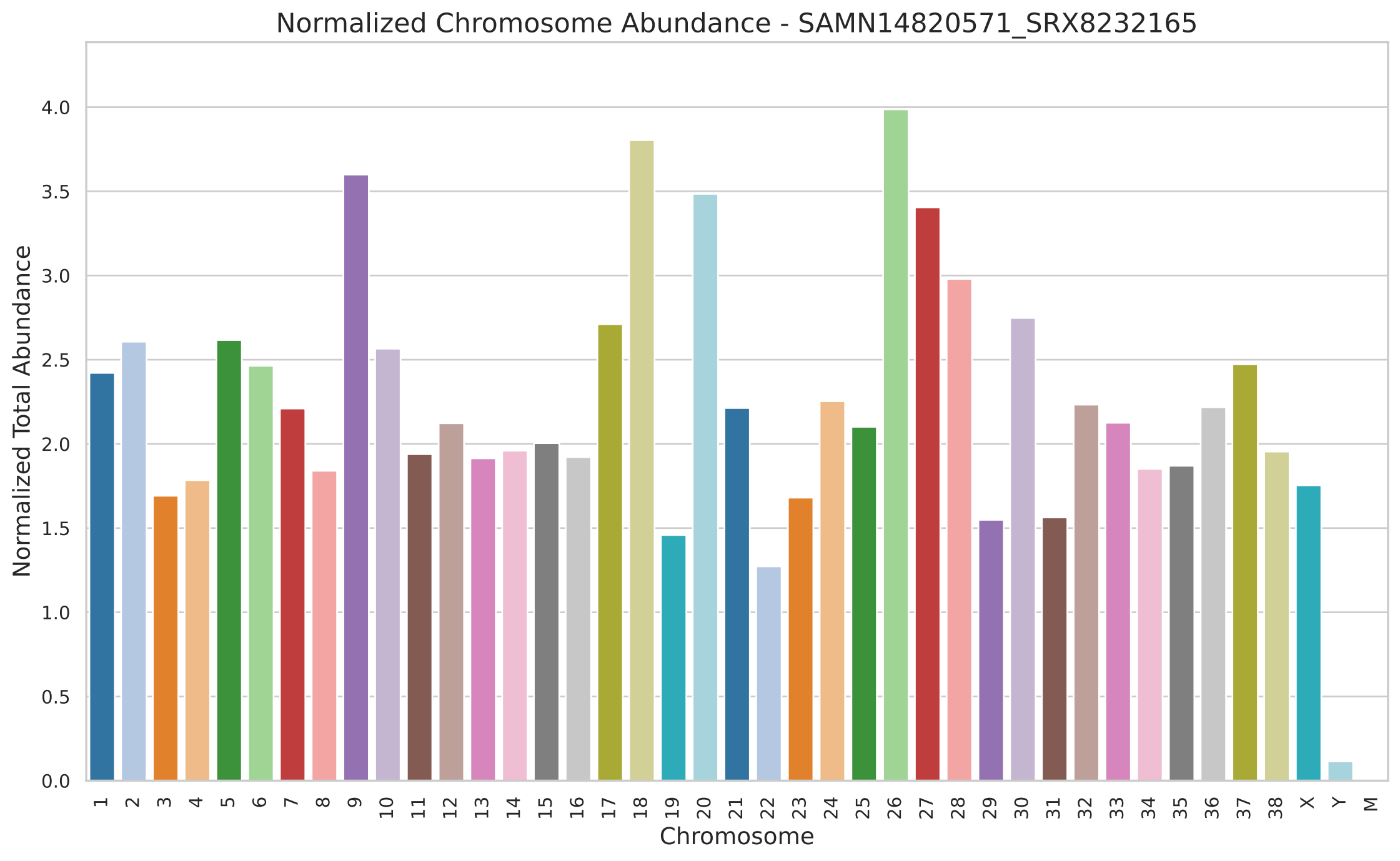

Normalized Chromosome Abundance - SAMN13133787_SRX7061334
Normalized Total Abundance
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

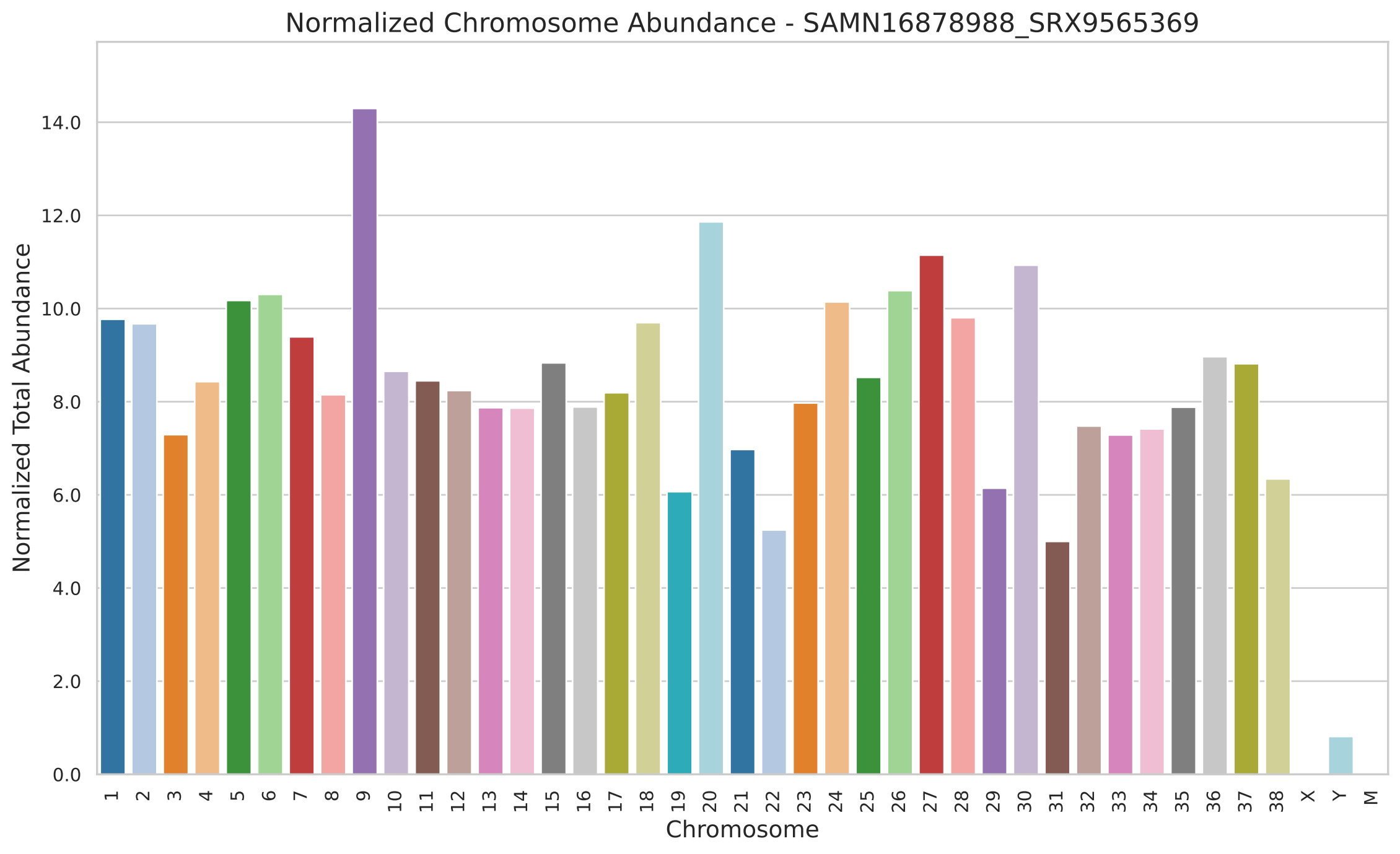

Normalized Chromosome Abundance - SAMN11079598_SRX5487564
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

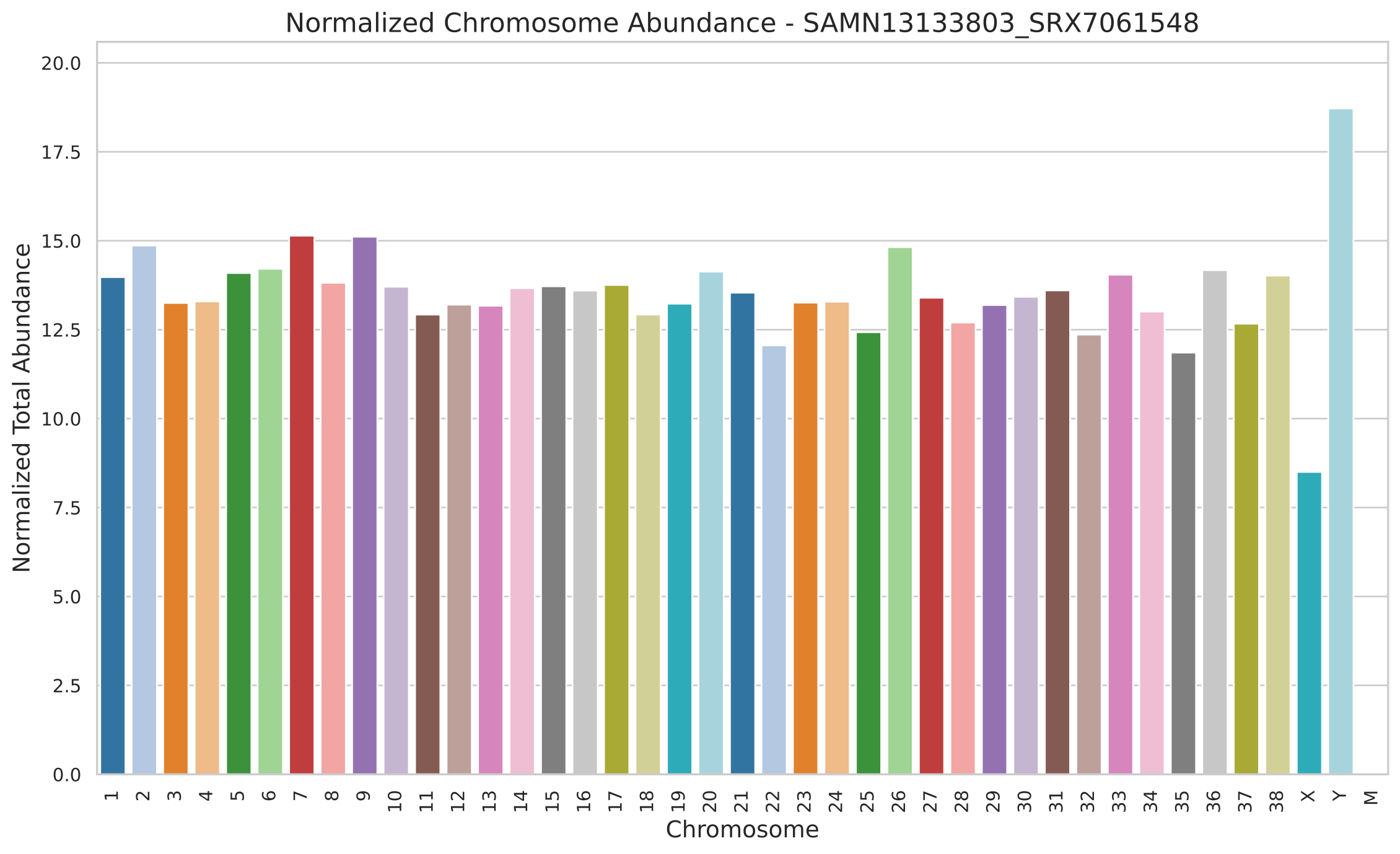

Normalized Chromosome Abundance - SAMN14820564_SRX8232146
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

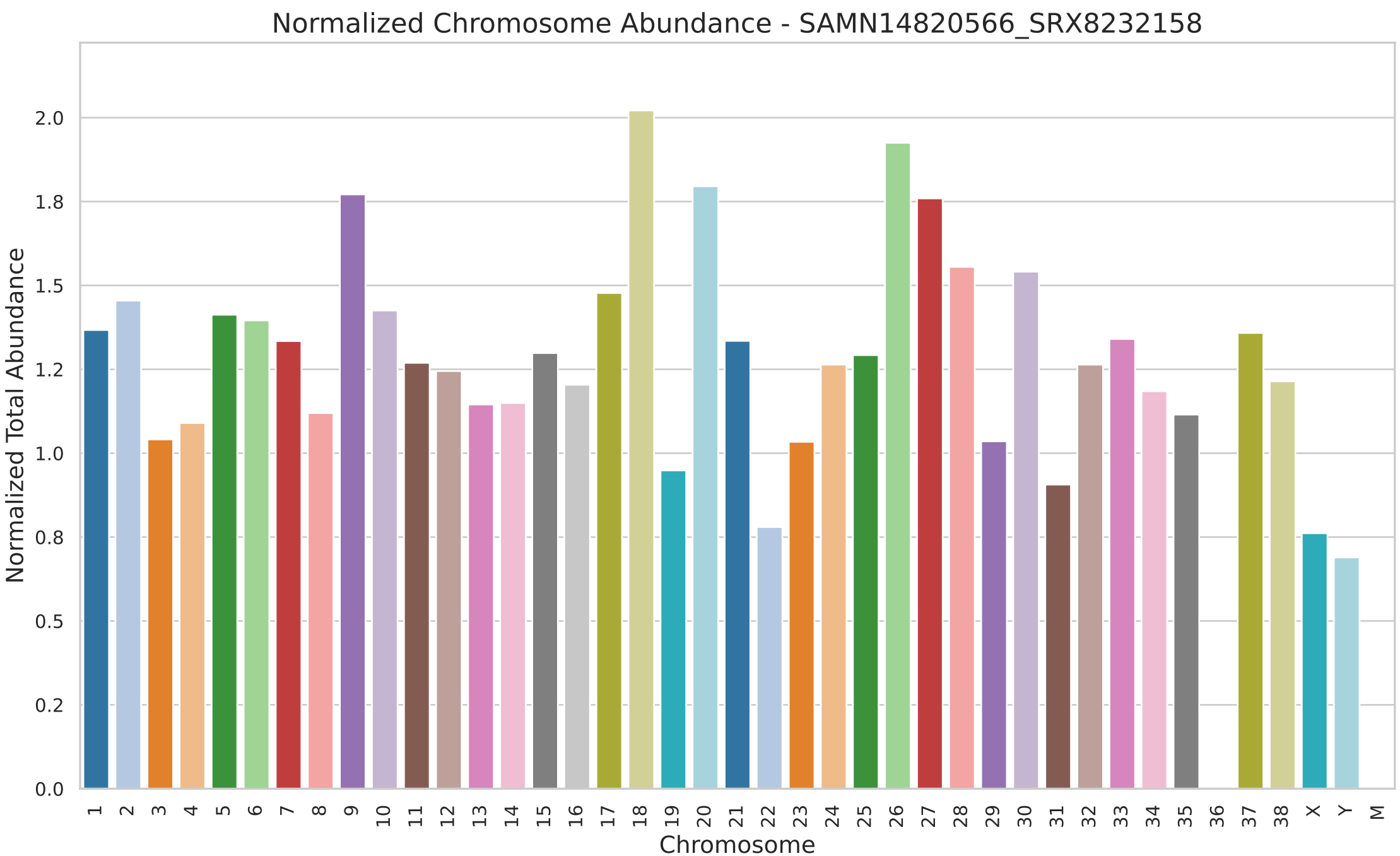

Normalized Chromosome Abundance - SAMN14820576_SRX8232150
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

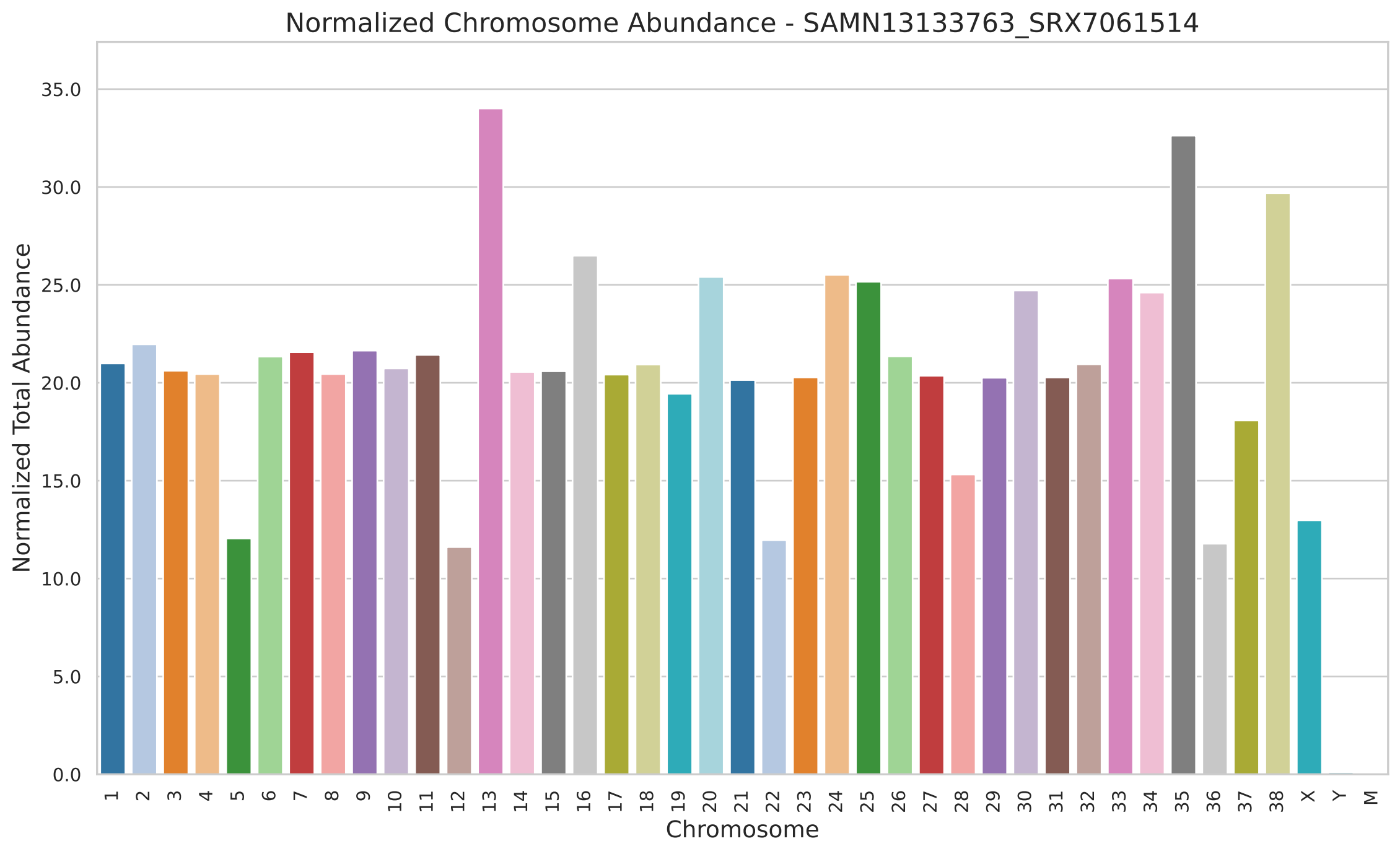

Normalized Chromosome Abundance - SAMN13133757_SRX7061488
Normalized Total Abundance
0.0
10.0
20.0
30.0
40.0
50.0
60.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

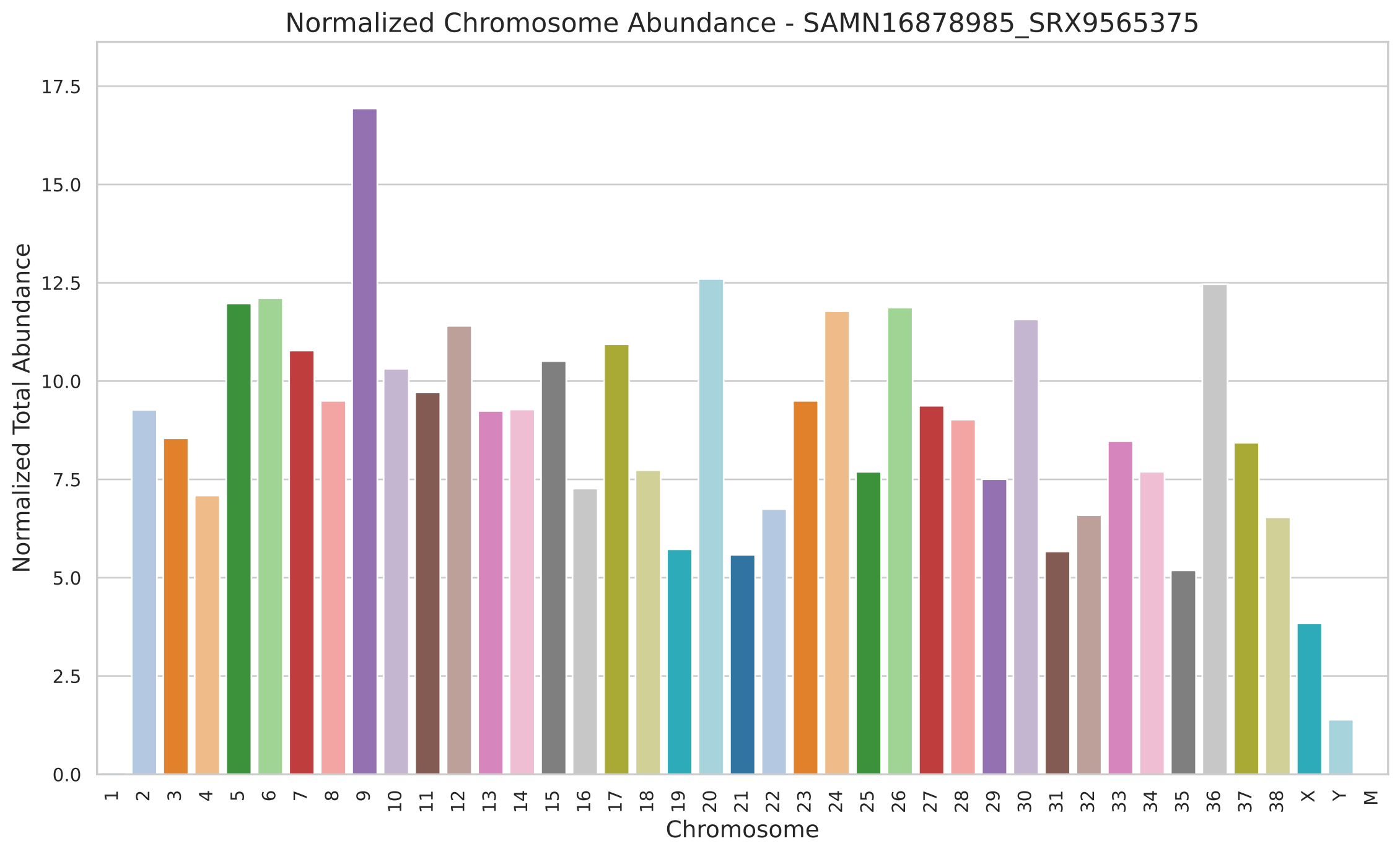

Normalized Chromosome Abundance - SAMN14820571_SRX8232165
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

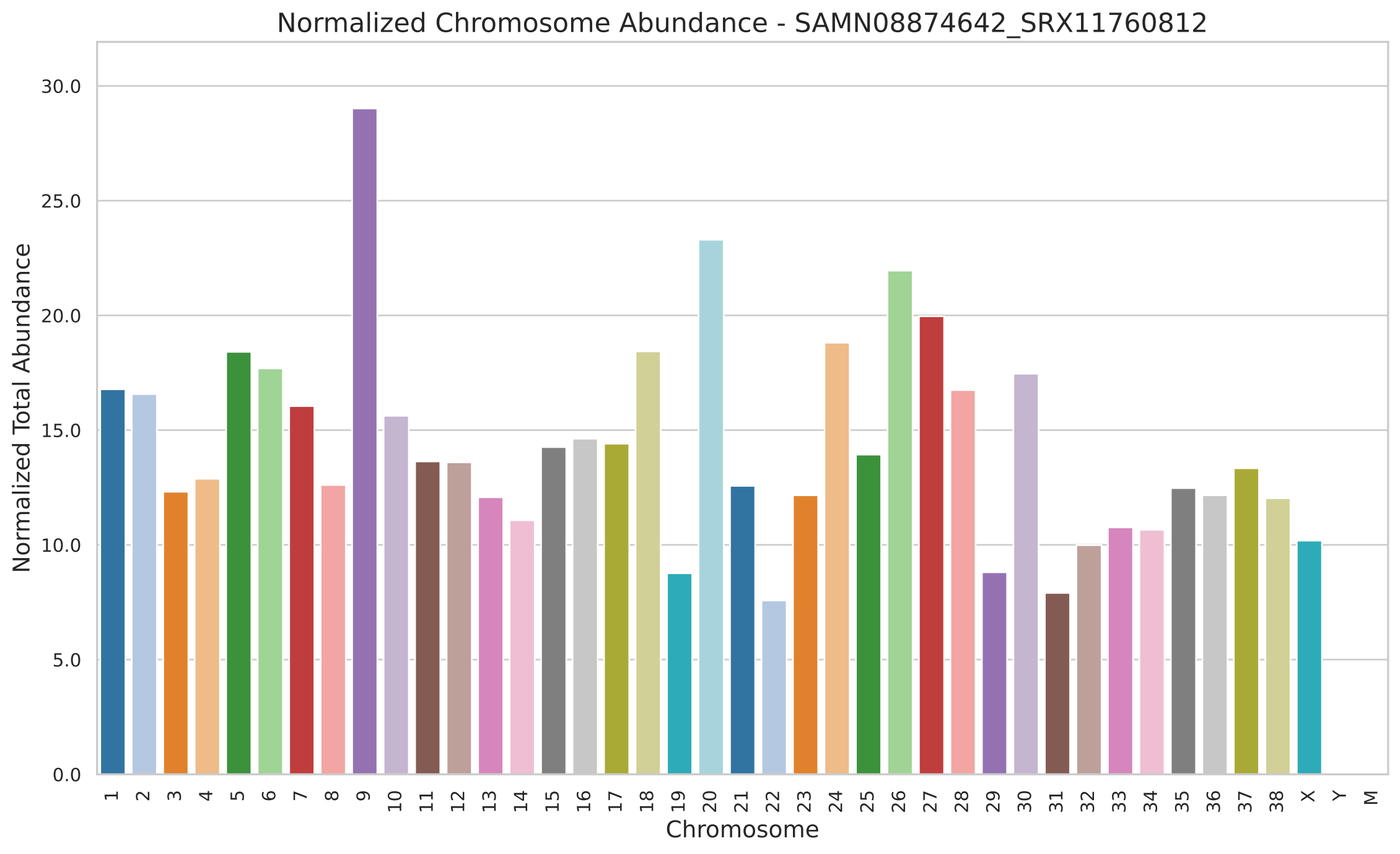

Normalized Chromosome Abundance - SAMN16878988_SRX9565369
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
12.0
14.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

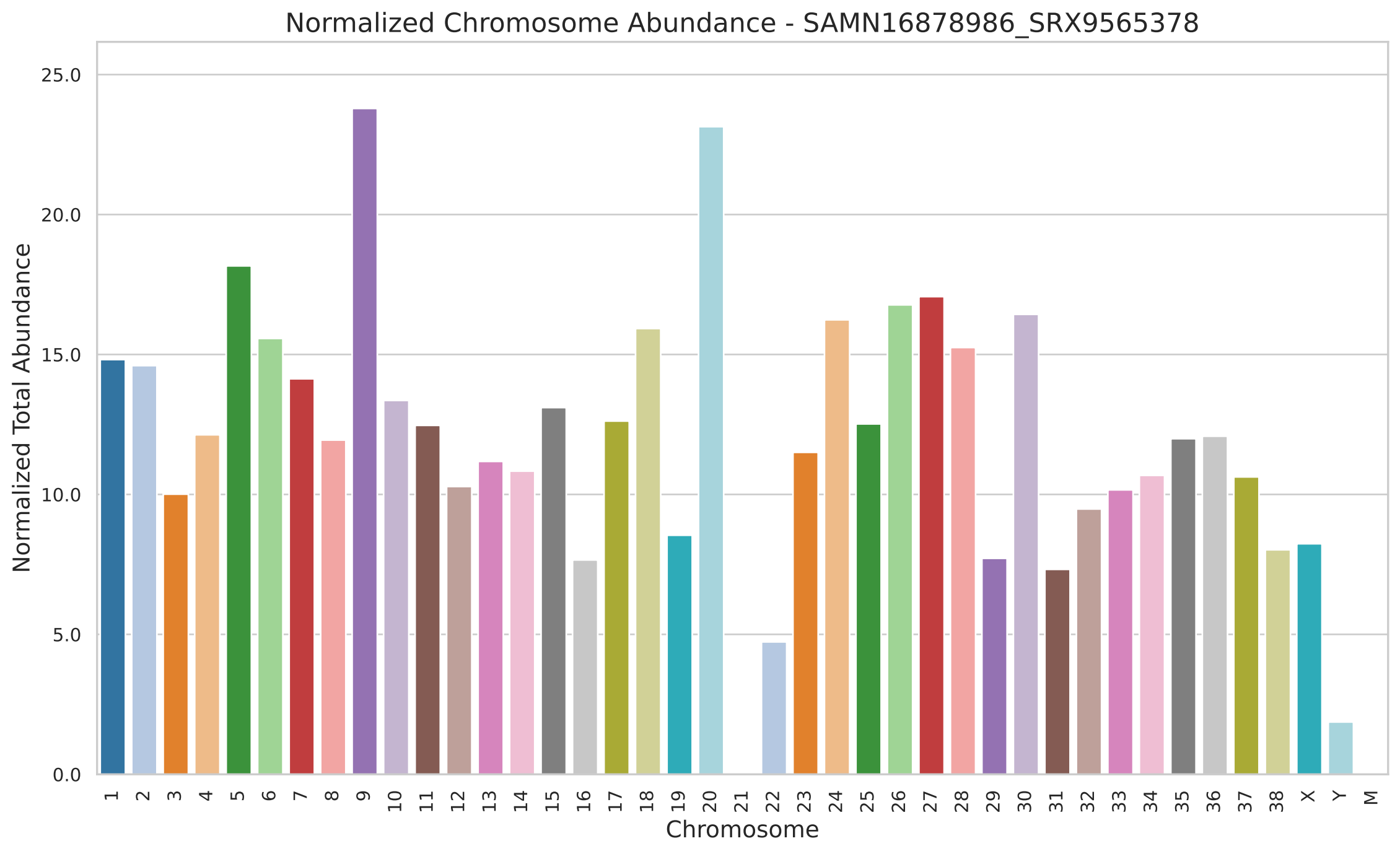

Normalized Chromosome Abundance - SAMN13133803_SRX7061548
Normalized Total Abundance
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5
20.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

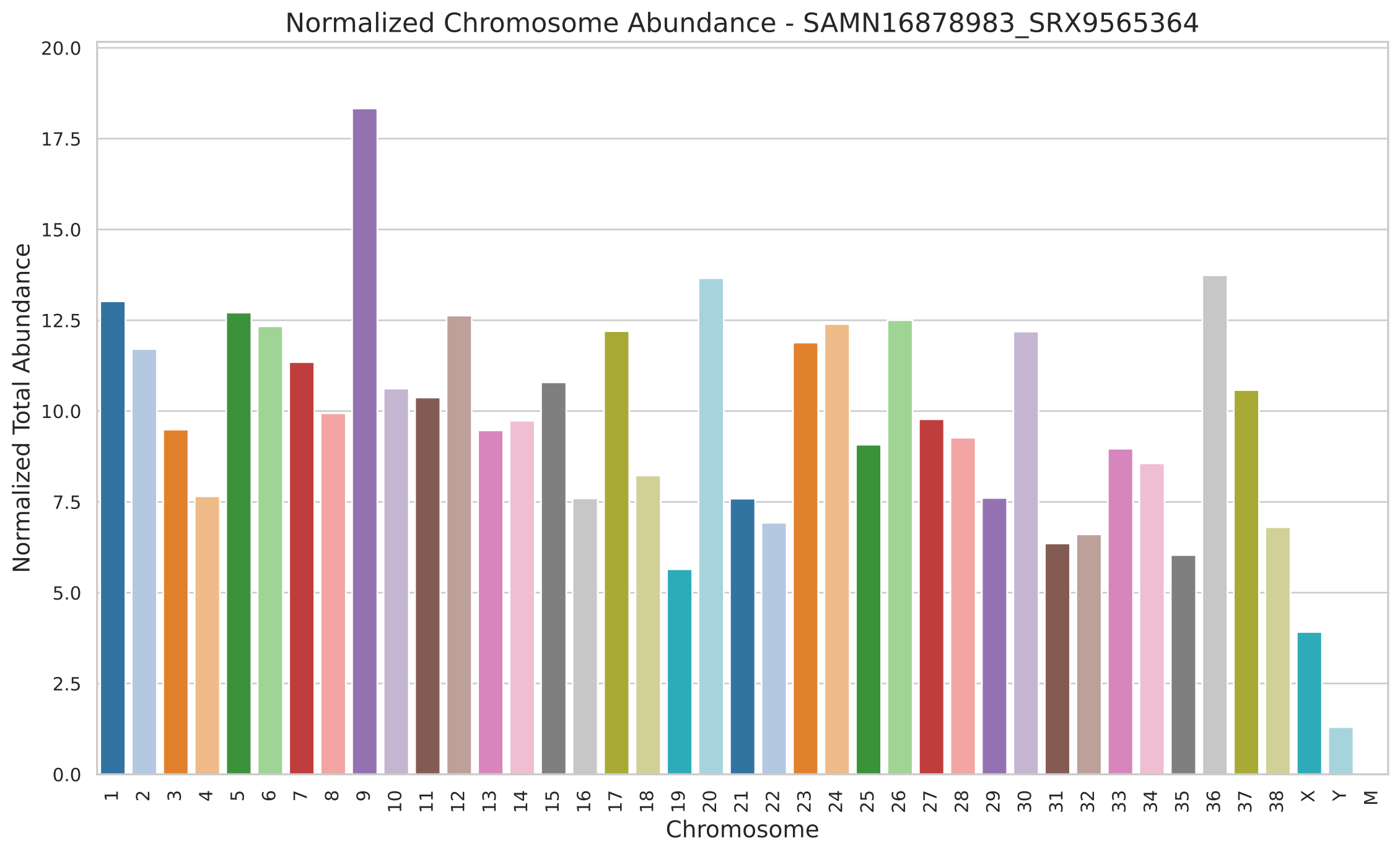

Normalized Chromosome Abundance - SAMN14820566_SRX8232158
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

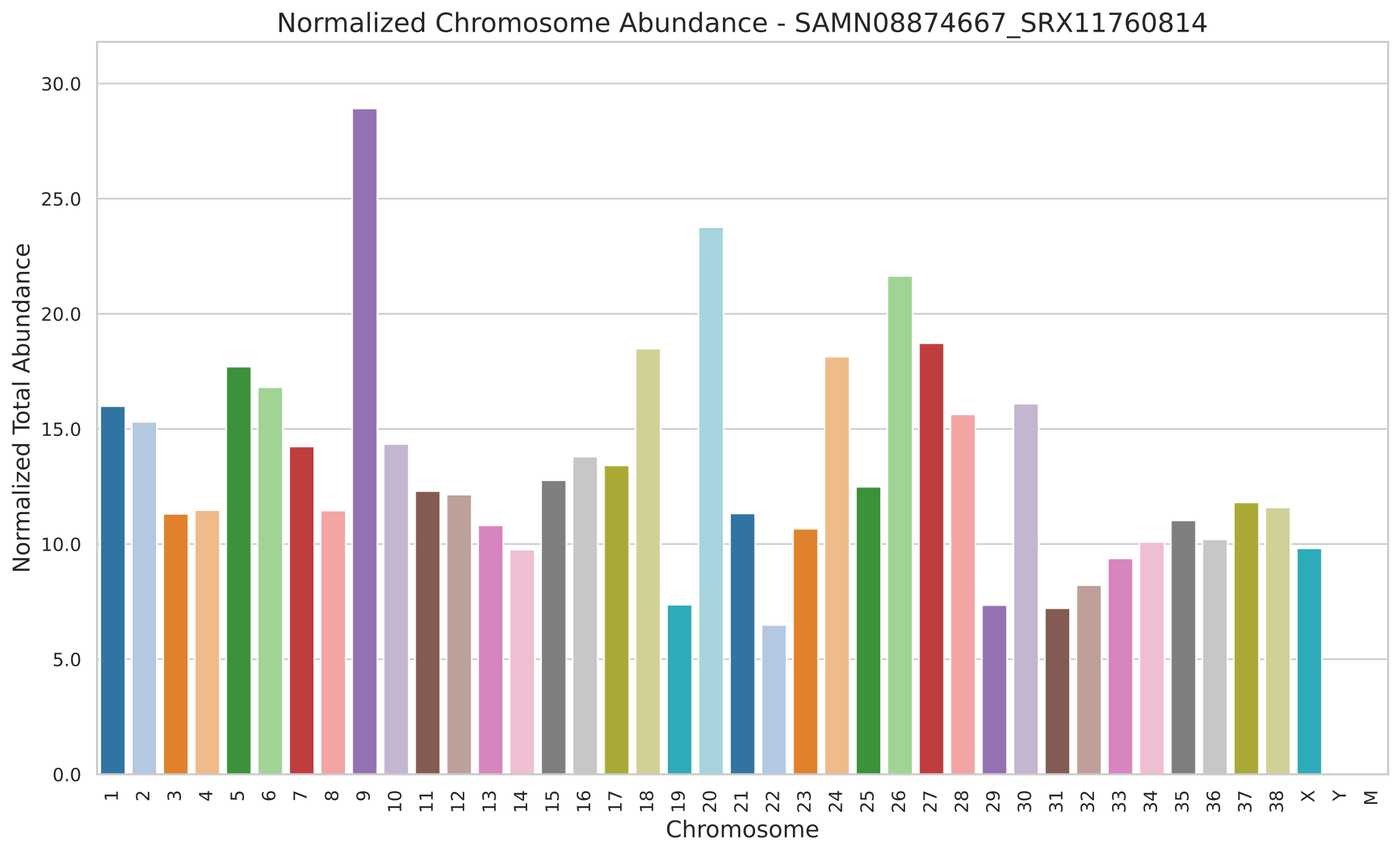

Normalized Chromosome Abundance - SAMN13133763_SRX7061514
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
35.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

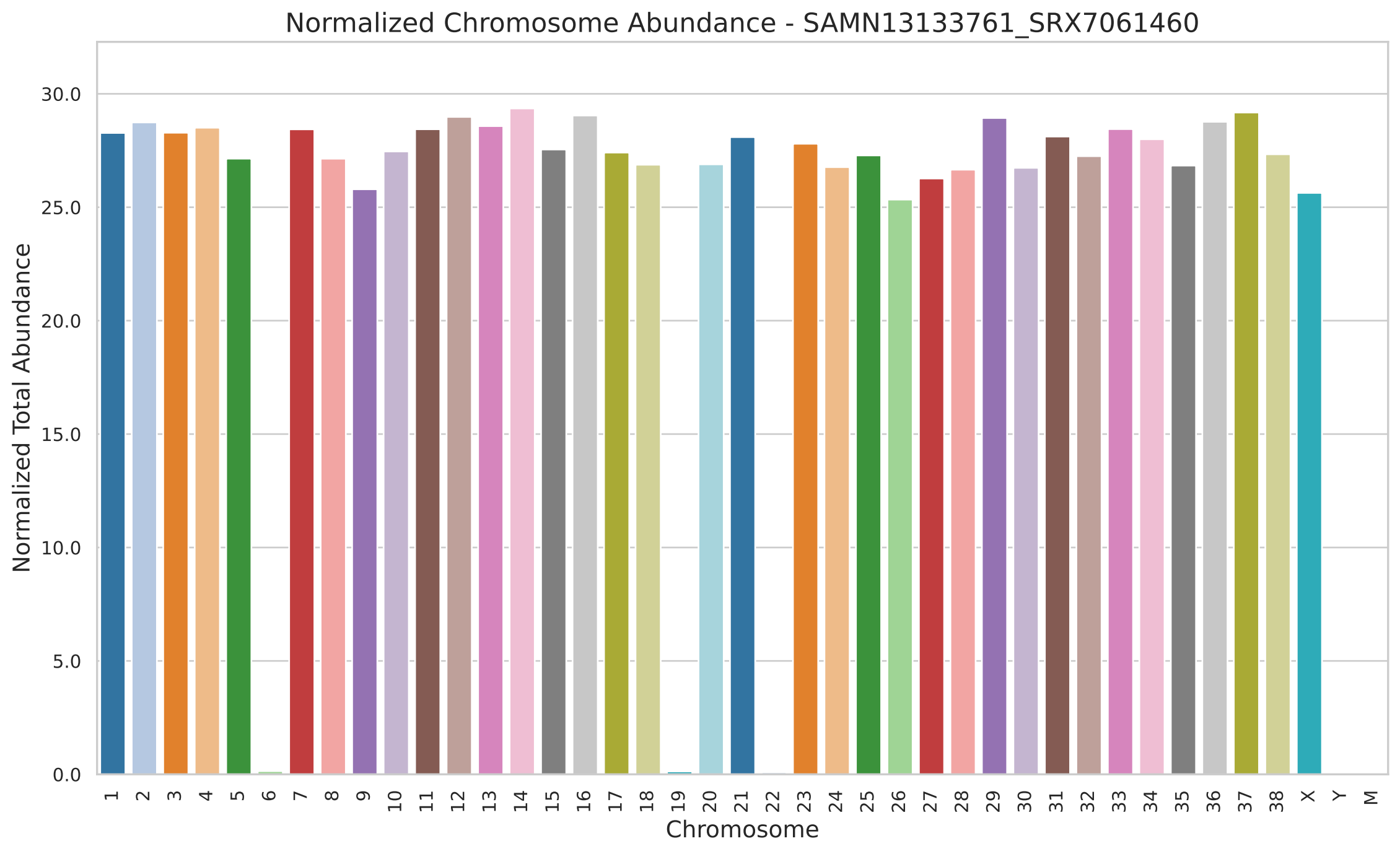

Normalized Chromosome Abundance - SAMN16878985_SRX9565375
Normalized Total Abundance
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

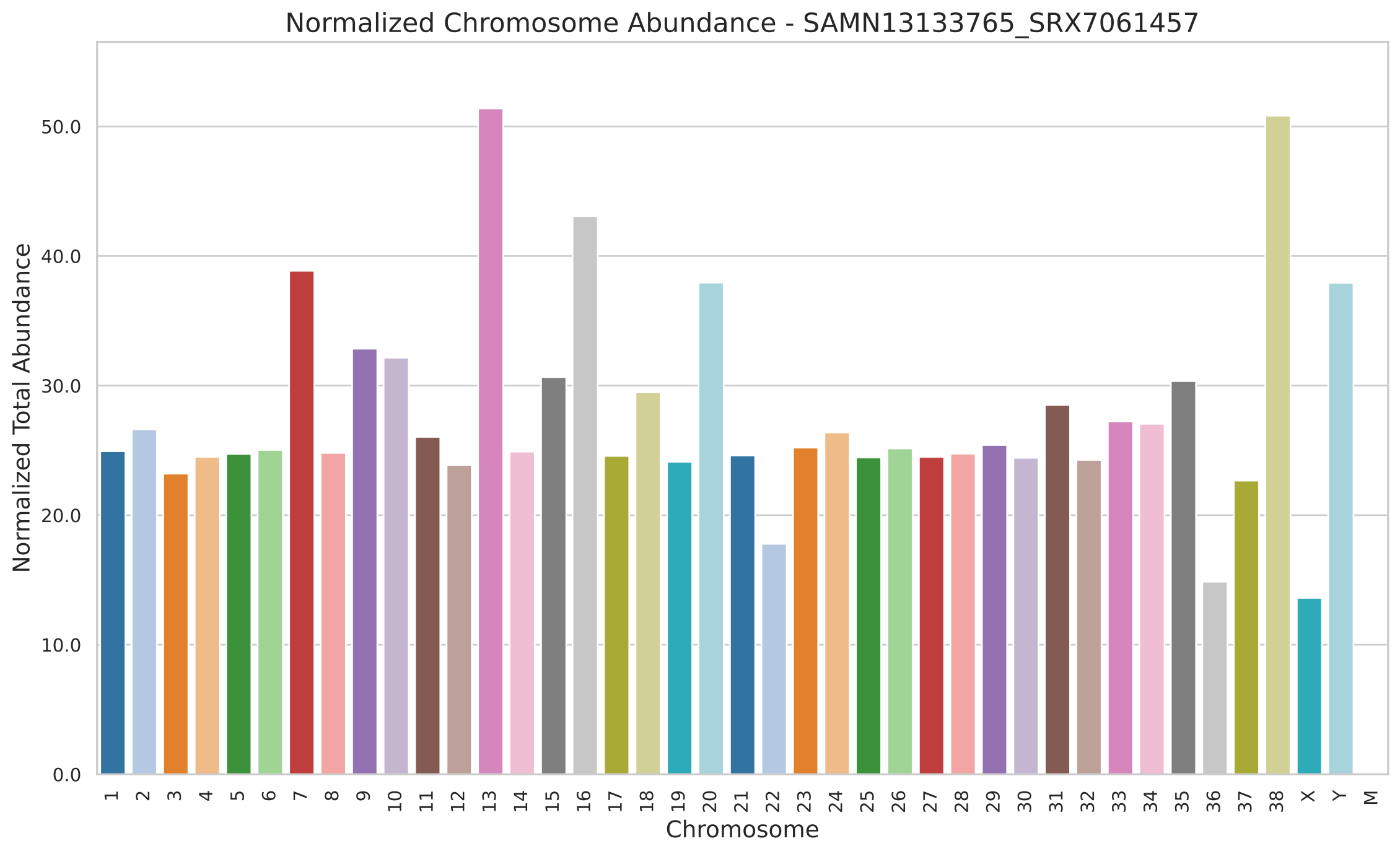

Normalized Chromosome Abundance - SAMN08874642_SRX11760812
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

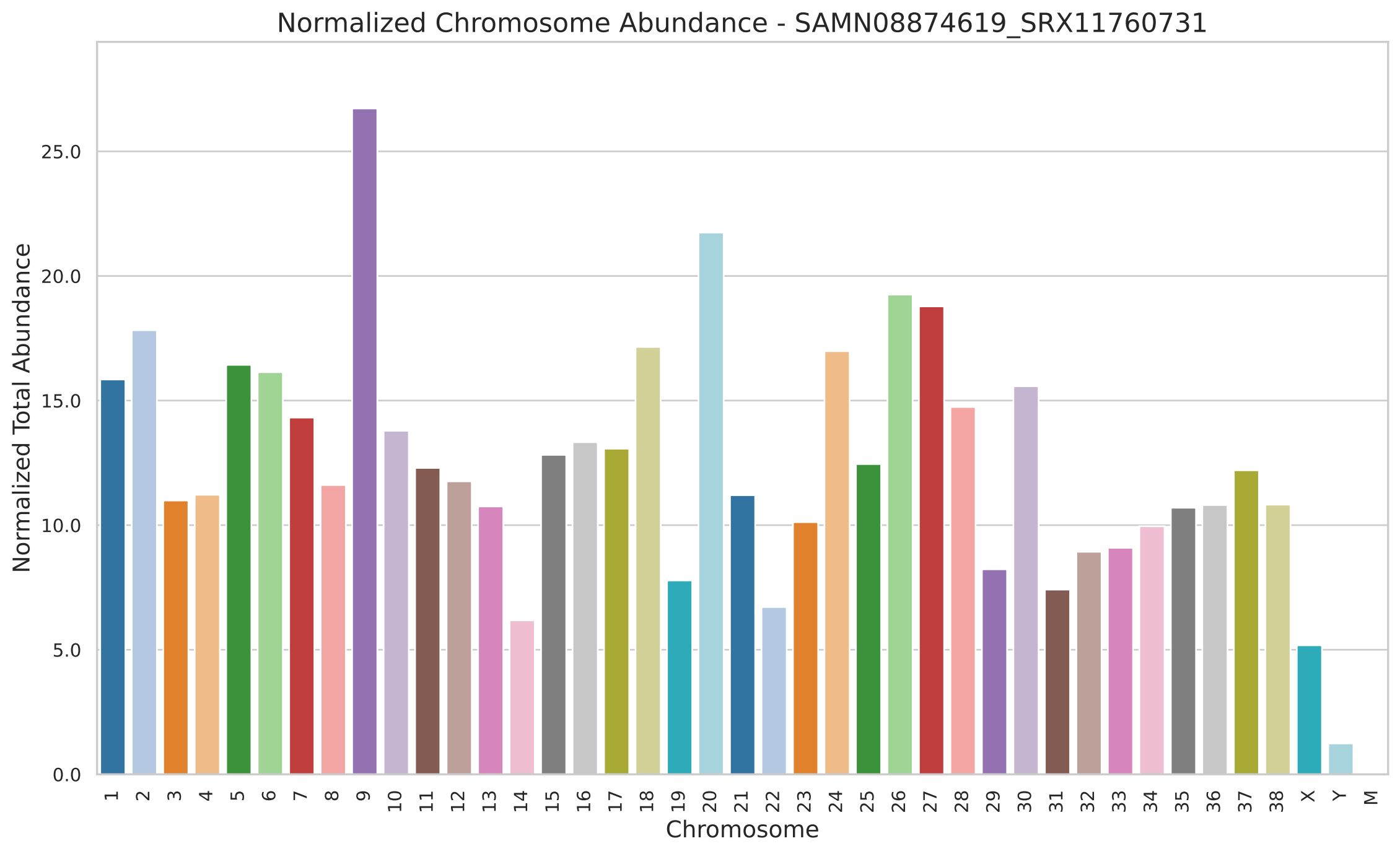

Normalized Chromosome Abundance - SAMN16878986_SRX9565378
Normalized Total Abundance
25.0
20.0
15.0
10.0
5.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

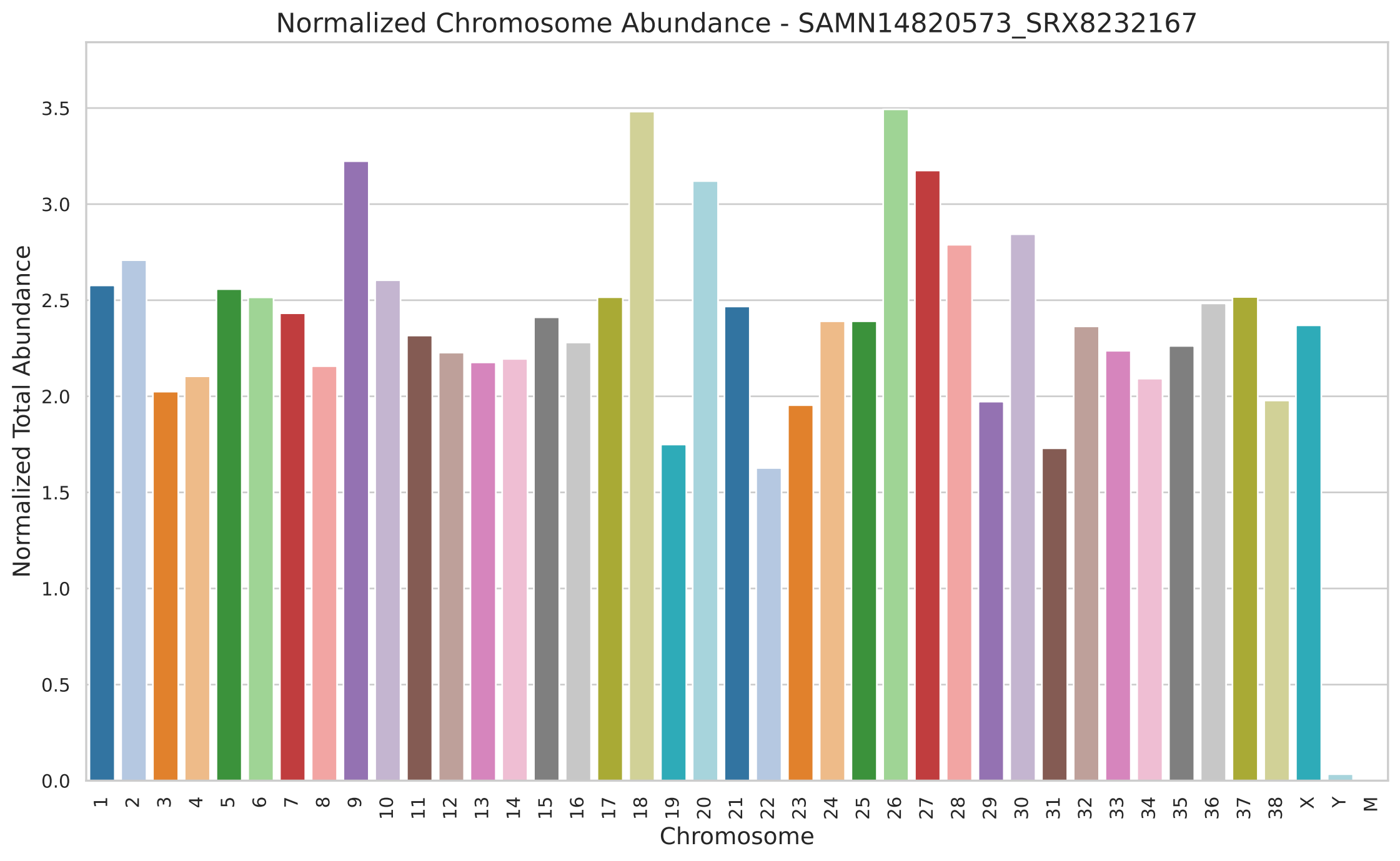

Normalized Chromosome Abundance - SAMN16878983_SRX9565364
Normalized Total Abundance
20.0
17.5
15.0
12.5
10.0
7.5
5.0
2.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

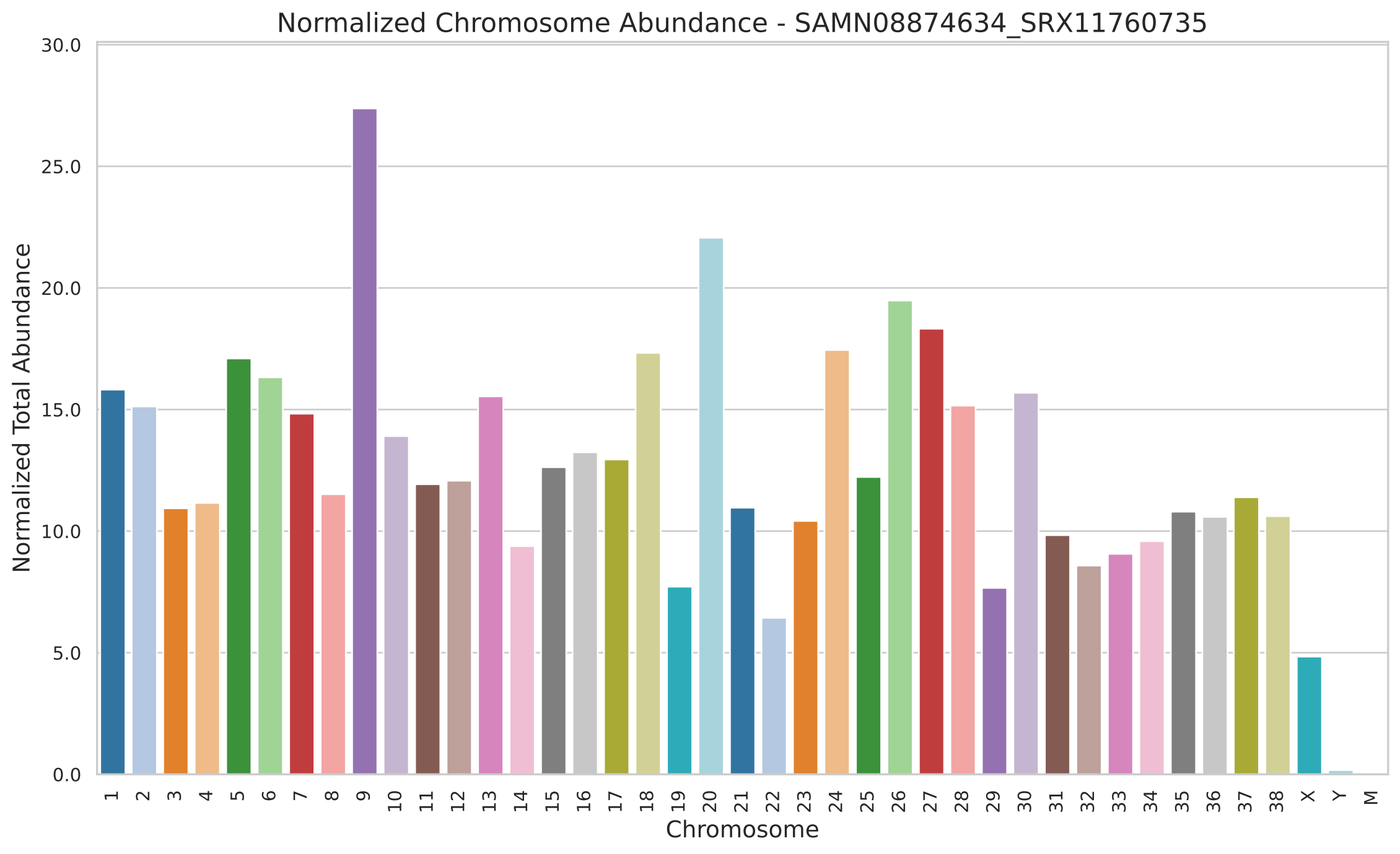

Normalized Chromosome Abundance - SAMN08874667_SRX11760814
Normalized Total Abundance
30.0
25.0
20.0
15.0
10.0
5.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

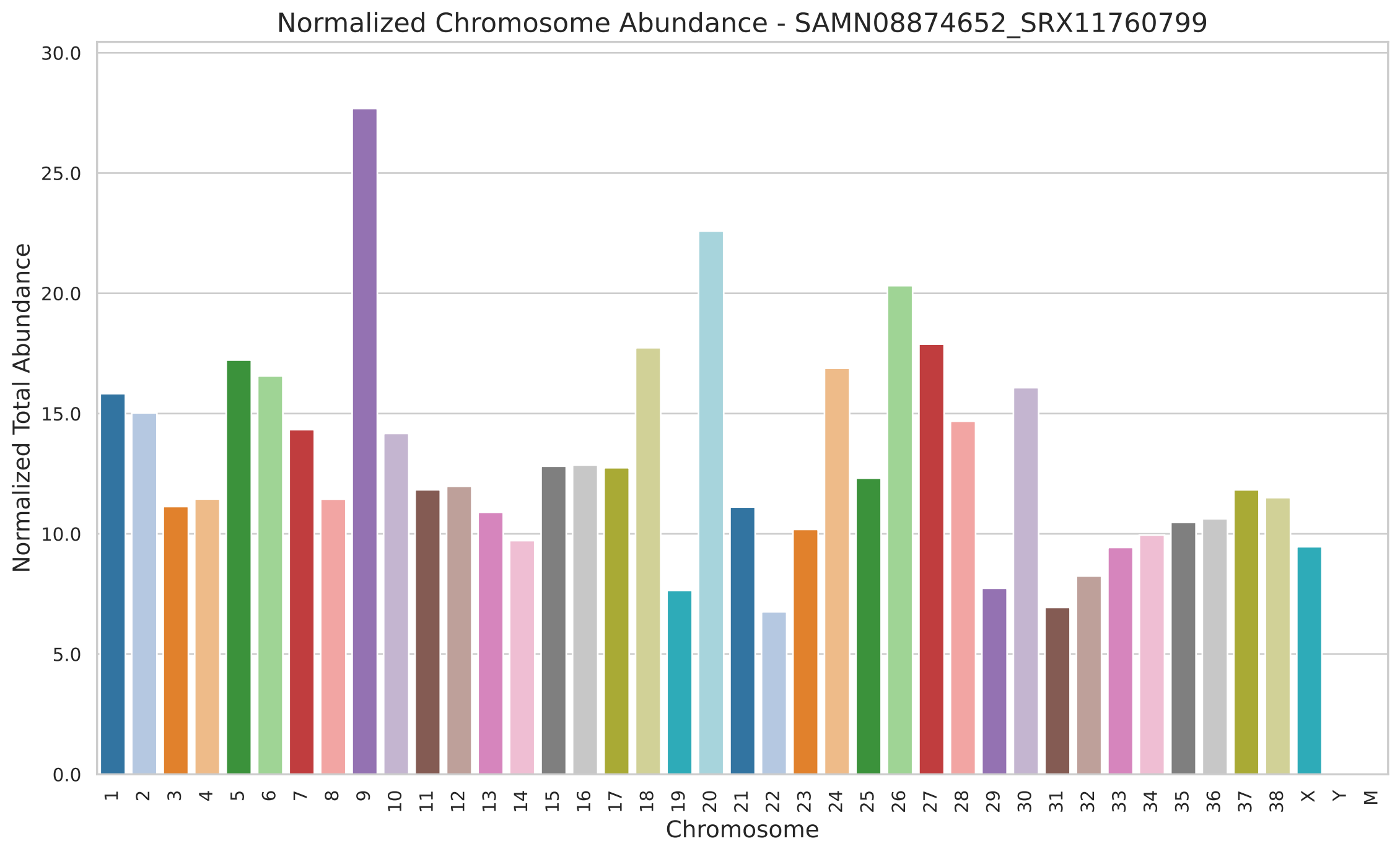

Normalized Chromosome Abundance - SAMN13133761_SRX7061460
Normalized Total Abundance
30.0
25.0
20.0
15.0
10.0
5.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

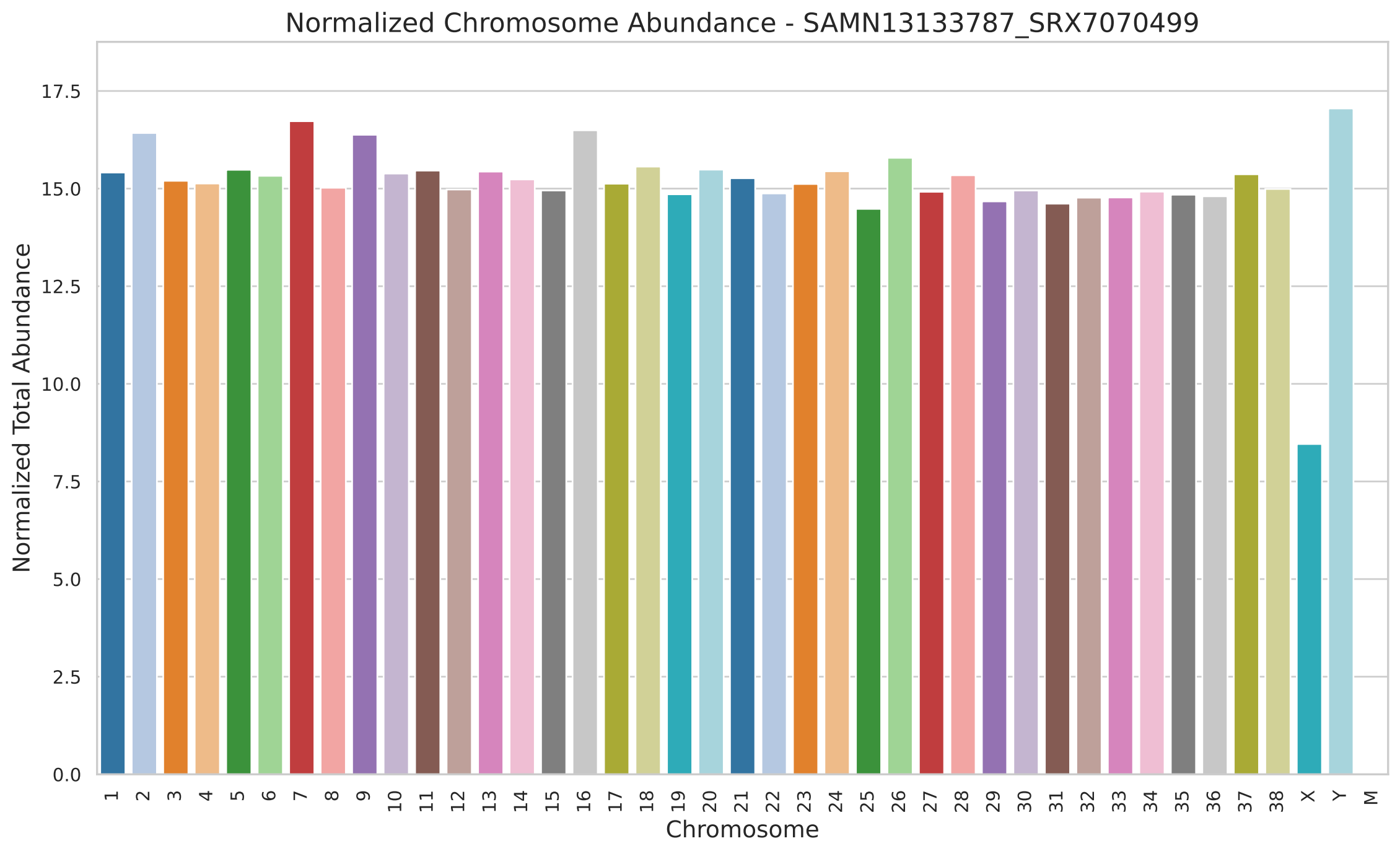

Normalized Chromosome Abundance - SAMN13133765_SRX7061457
Normalized Total Abundance
0.0
10.0
20.0
30.0
40.0
50.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

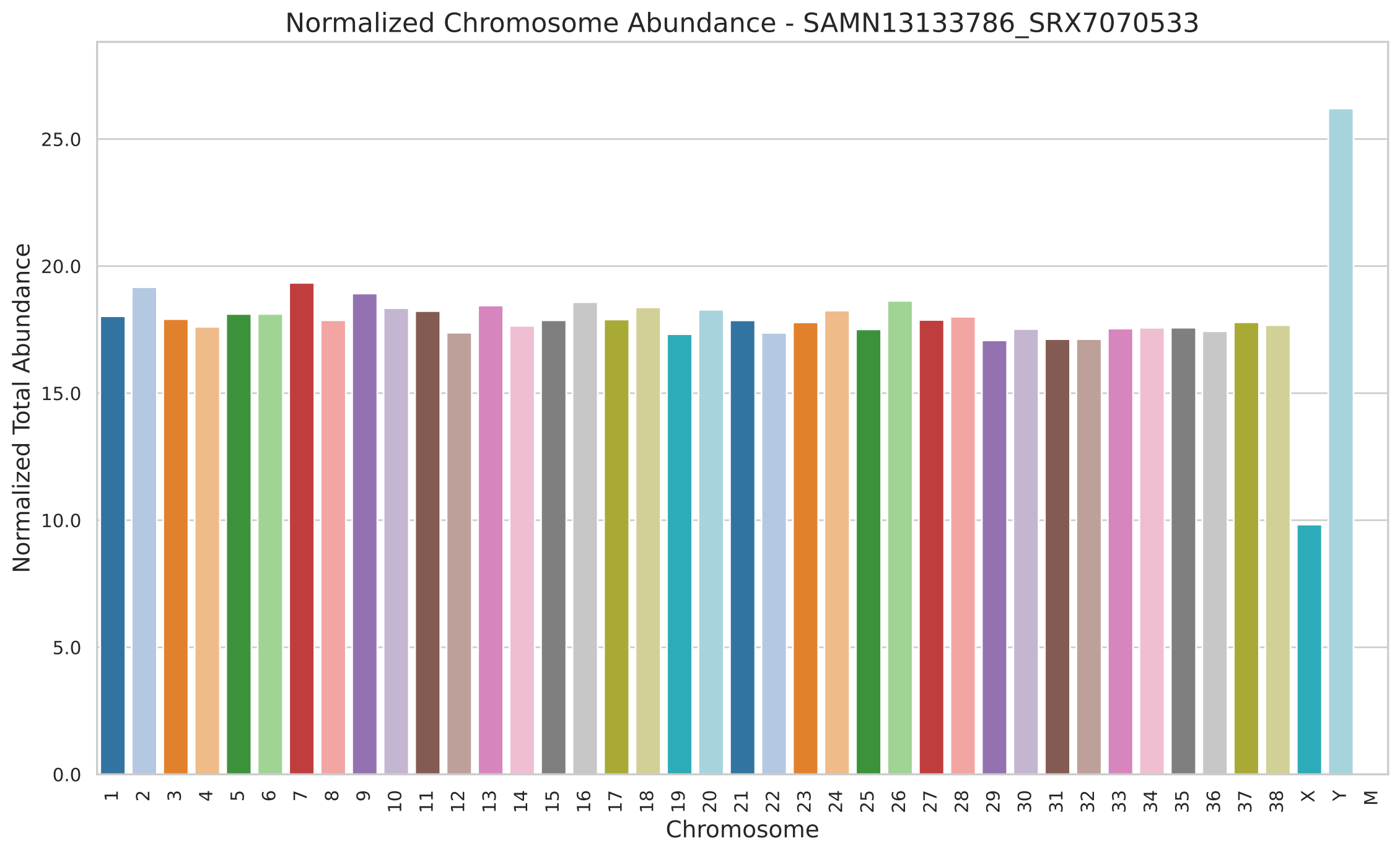

Normalized Chromosome Abundance - SAMN08874619_SRX11760731
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

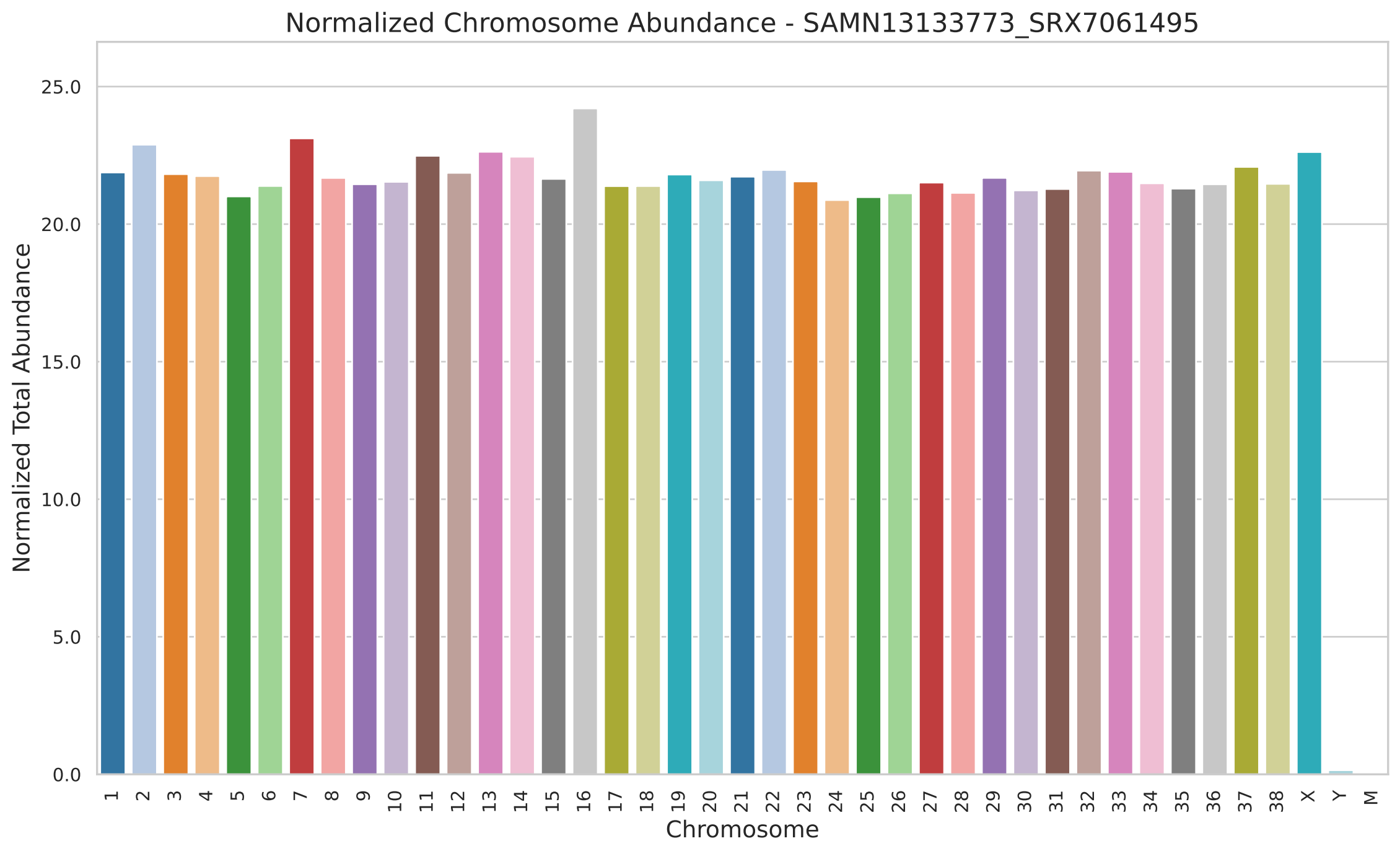

Normalized Chromosome Abundance - SAMN14820573_SRX8232167
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

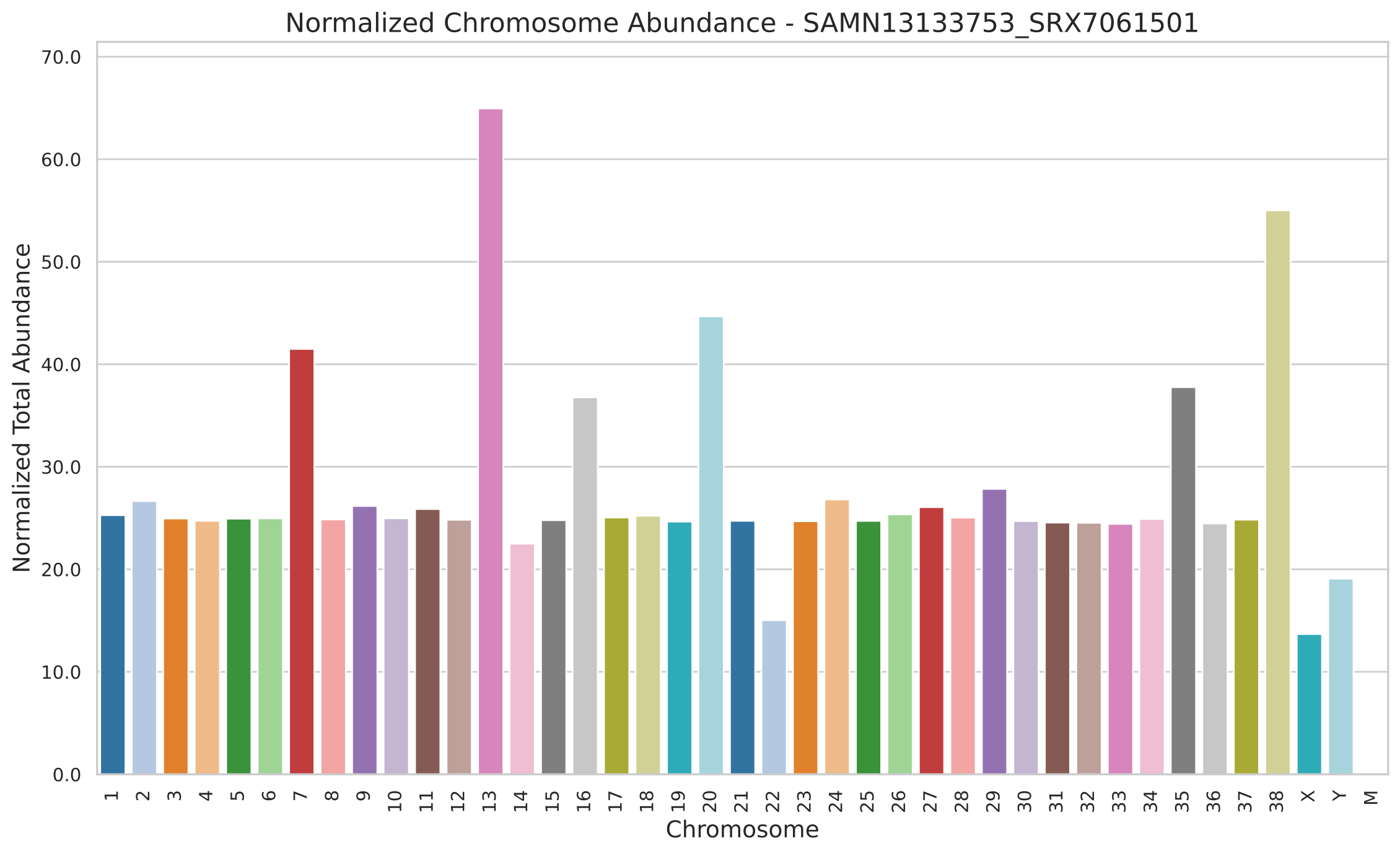

Normalized Chromosome Abundance - SAMN08874634_SRX11760735
Normalized Total Abundance
30.0
25.0
20.0
15.0
10.0
5.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

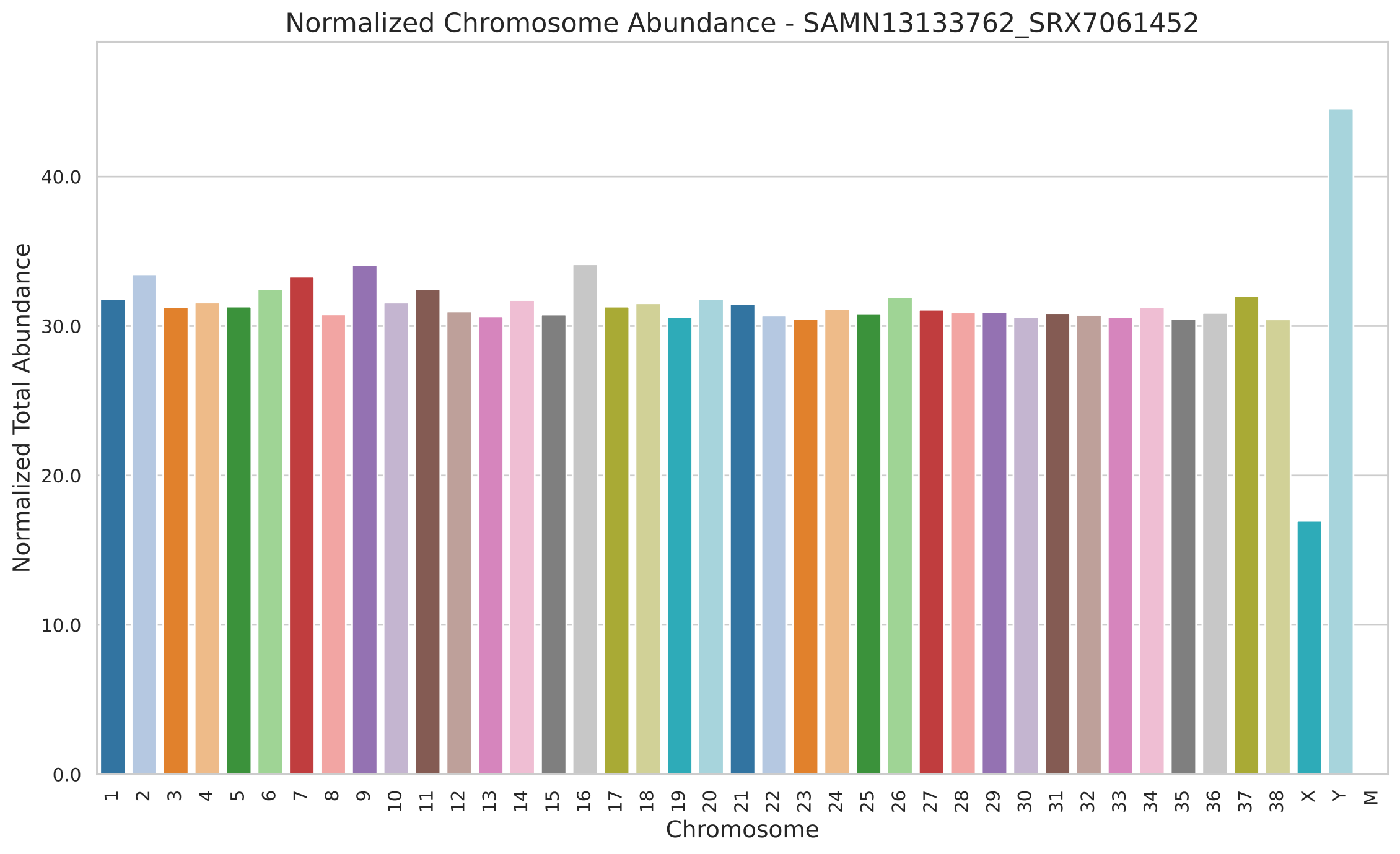

Normalized Chromosome Abundance - SAMN08874652_SRX11760799
Normalized Total Abundance
30.0
25.0
20.0
15.0
10.0
5.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

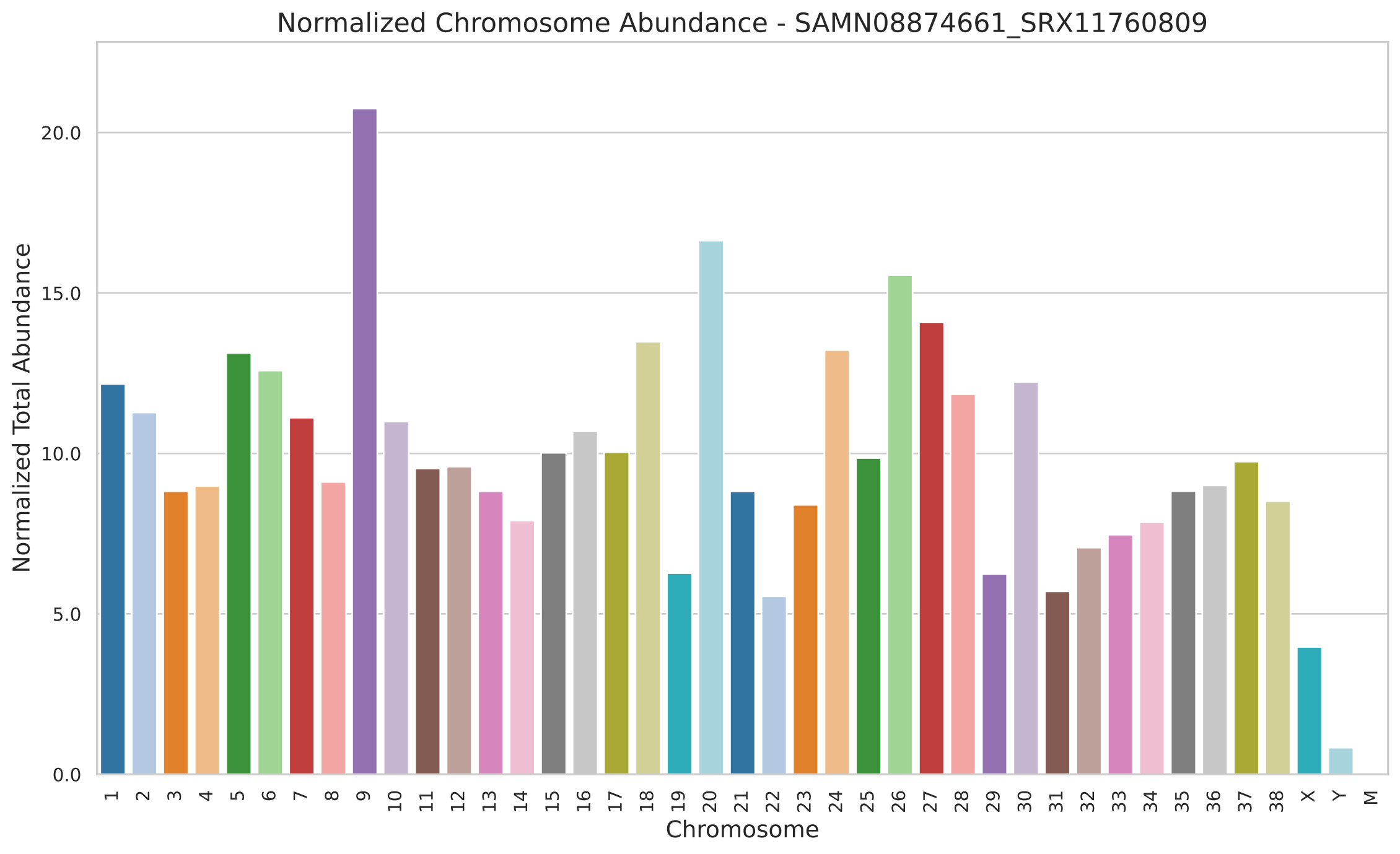

Normalized Chromosome Abundance - SAMN13133787_SRX7070499
Normalized Total Abundance
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

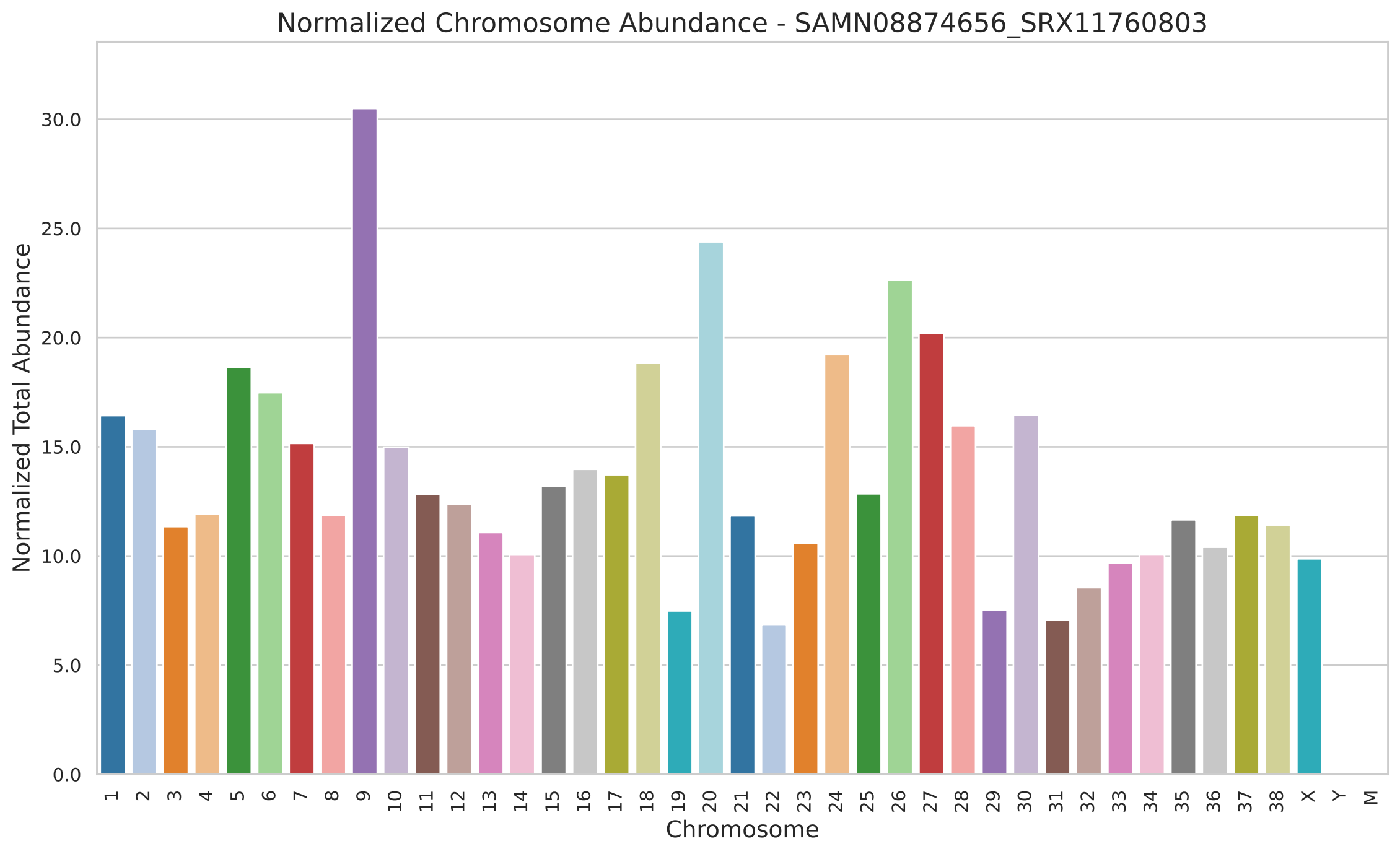

Normalized Chromosome Abundance - SAMN13133786_SRX7070533
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

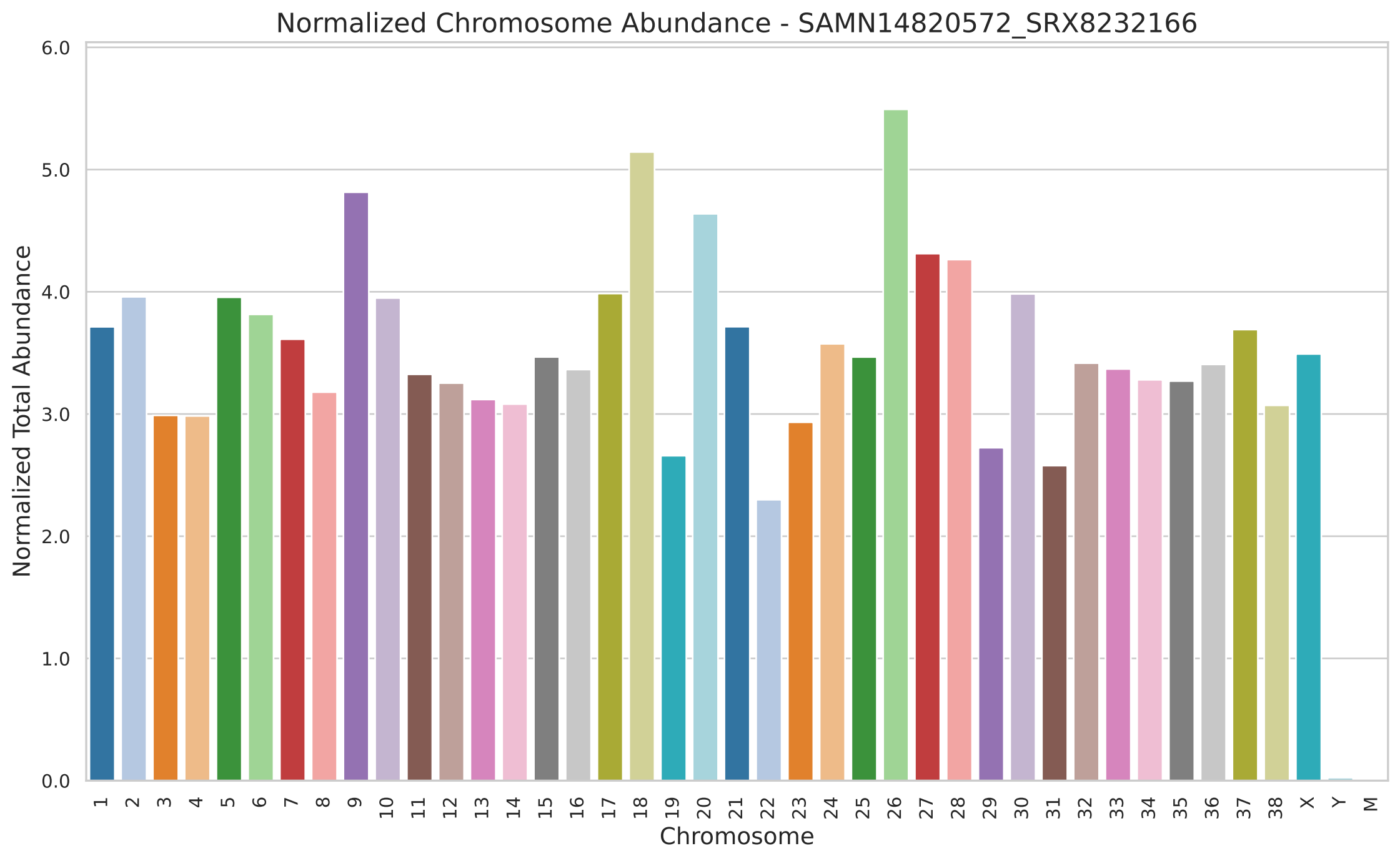

Normalized Chromosome Abundance - SAMN13133773_SRX7061495
Normalized Total Abundance
25.0
20.0
15.0
10.0
5.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

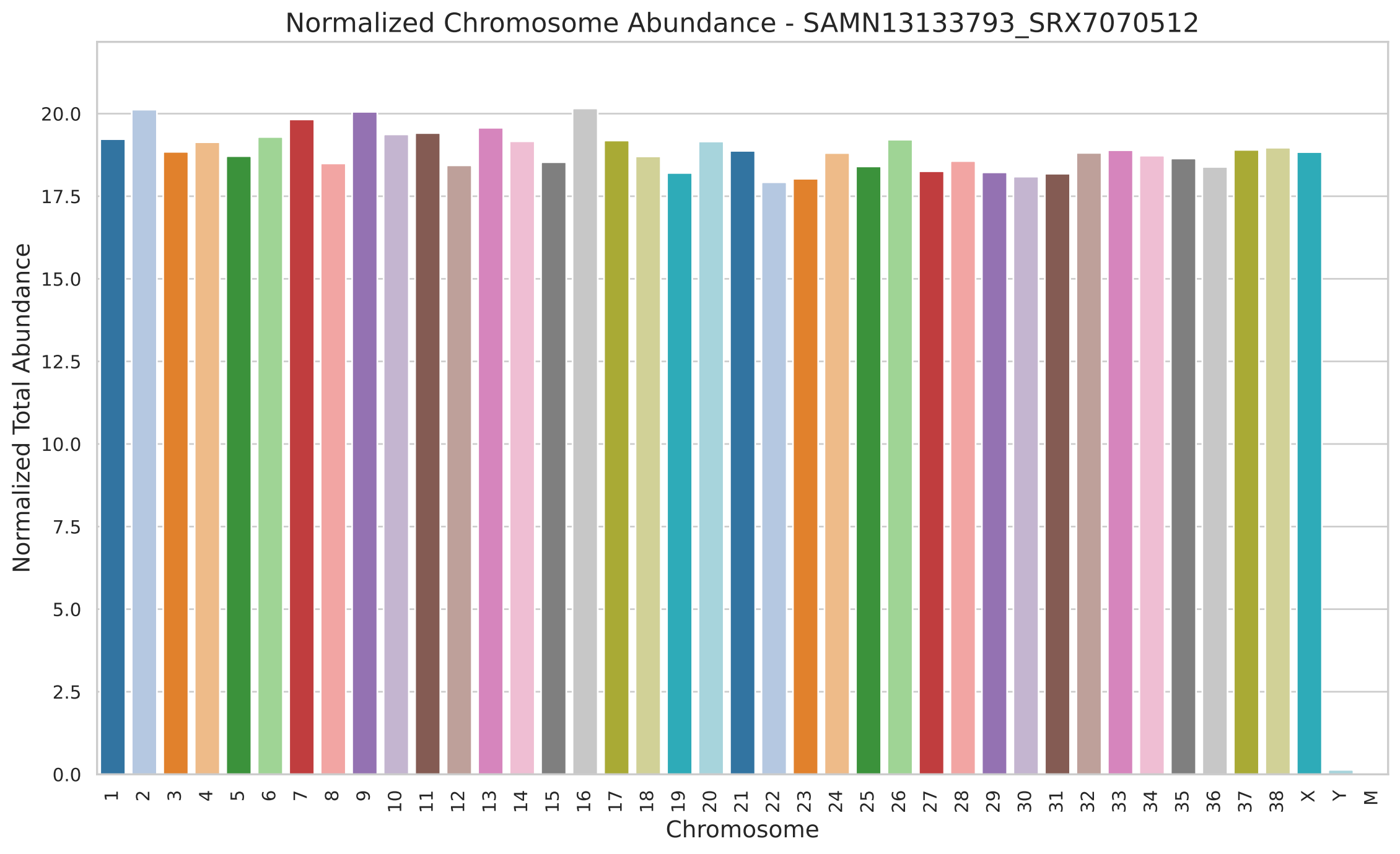

Normalized Chromosome Abundance - SAMN13133753_SRX7061501
Normalized Total Abundance
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

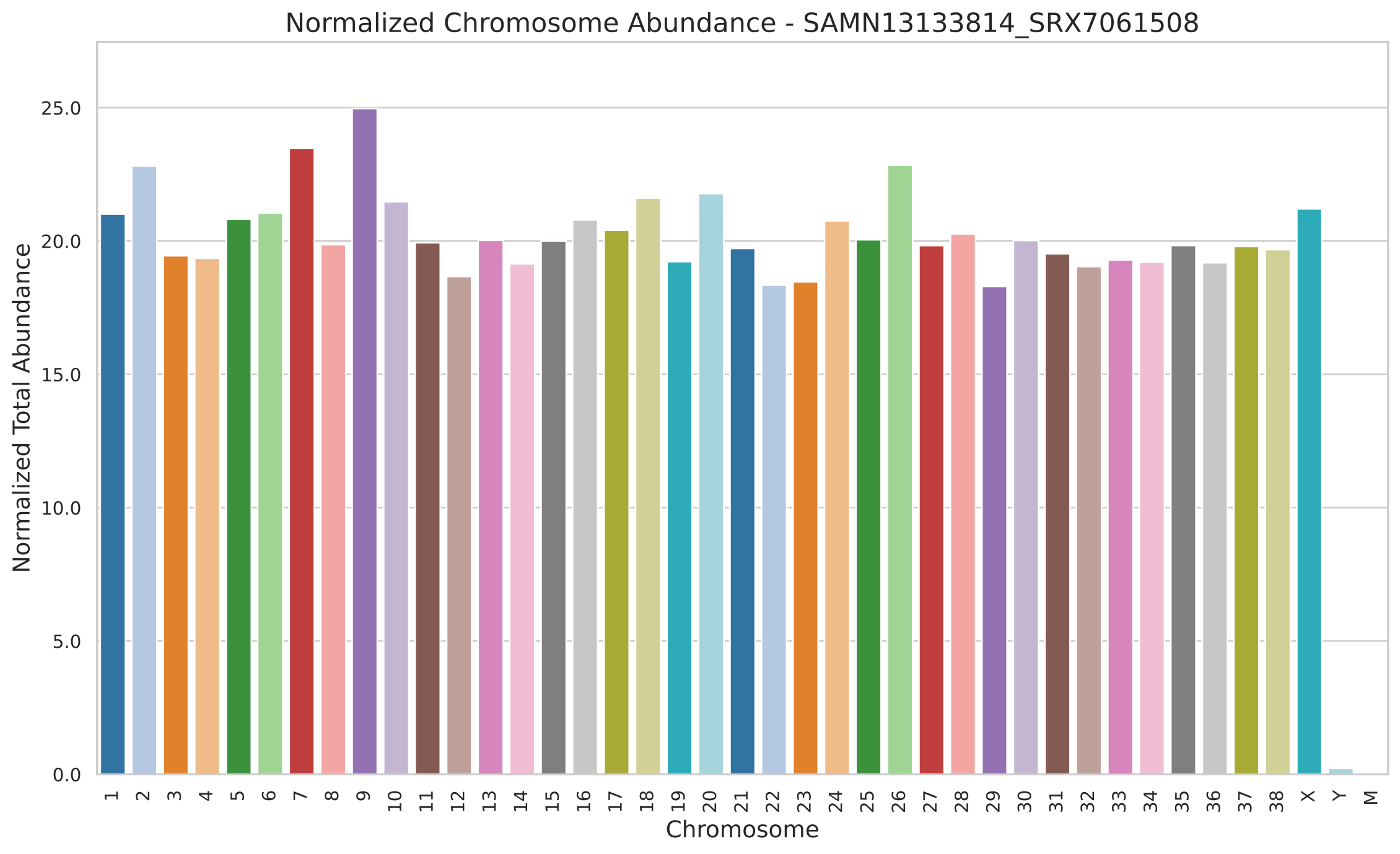

Normalized Chromosome Abundance - SAMN13133762_SRX7061452
Normalized Total Abundance
0.0
10.0
20.0
30.0
40.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

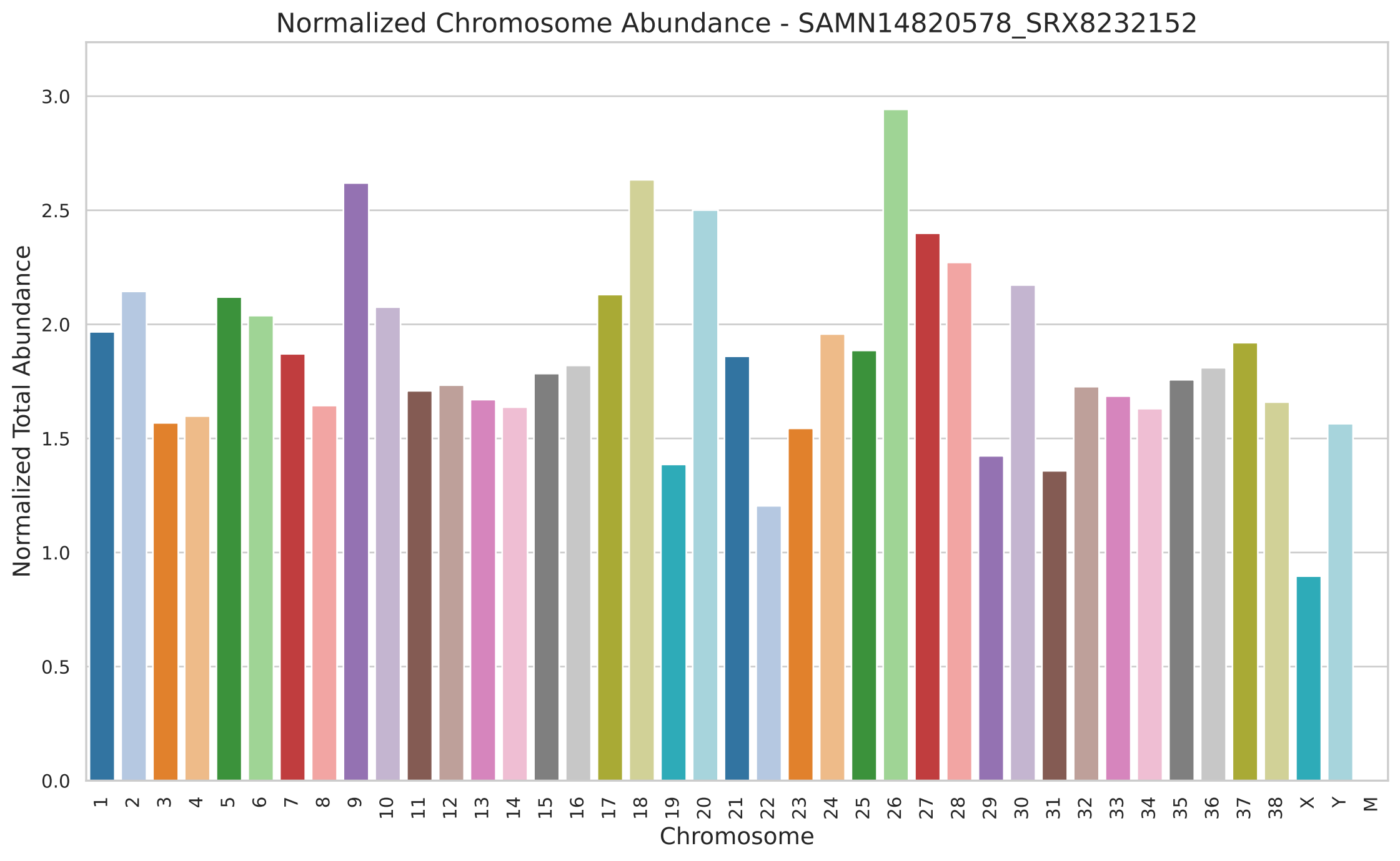

Normalized Chromosome Abundance - SAMN08874661_SRX11760809
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

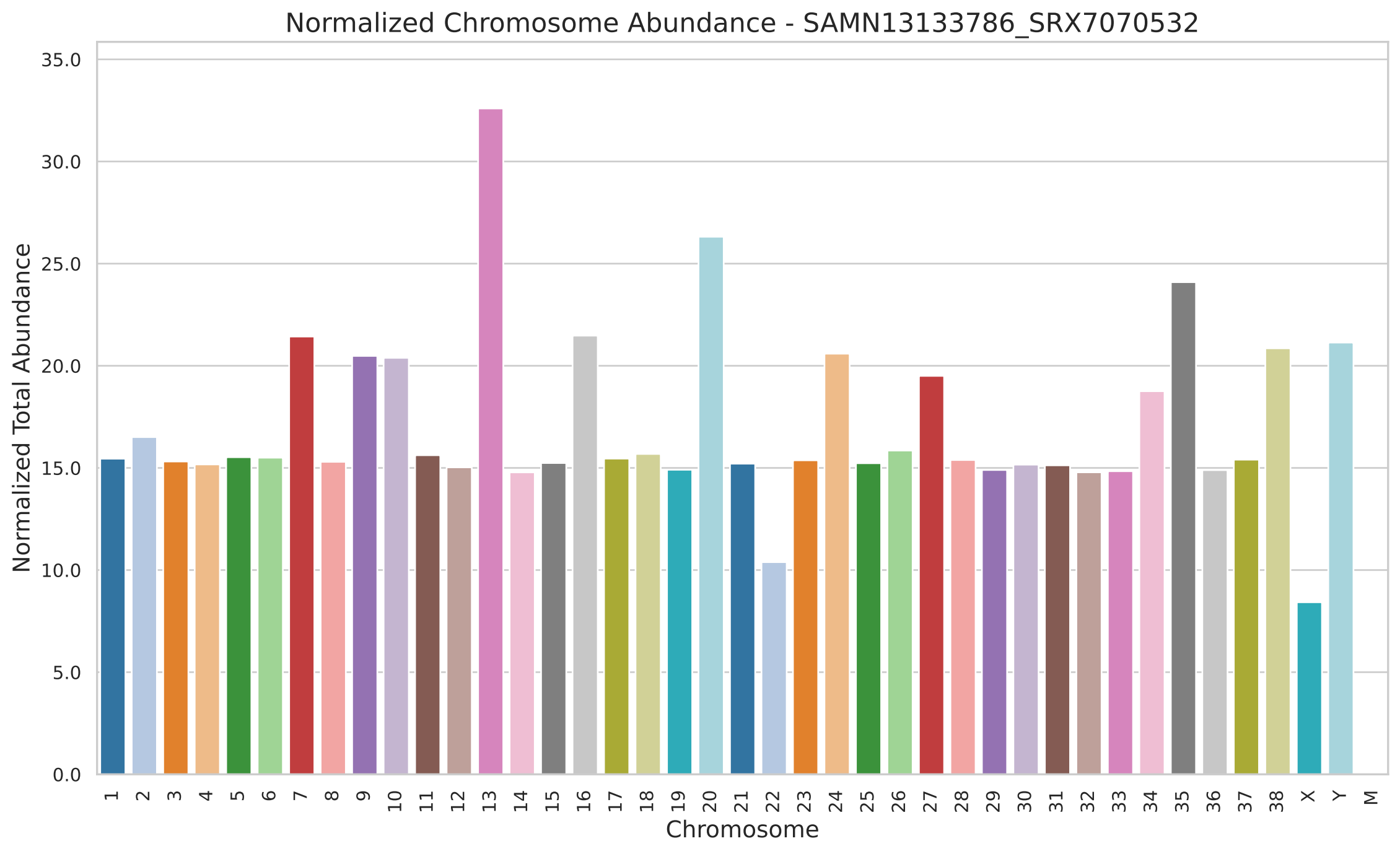

Normalized Chromosome Abundance - SAMN08874656_SRX11760803
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

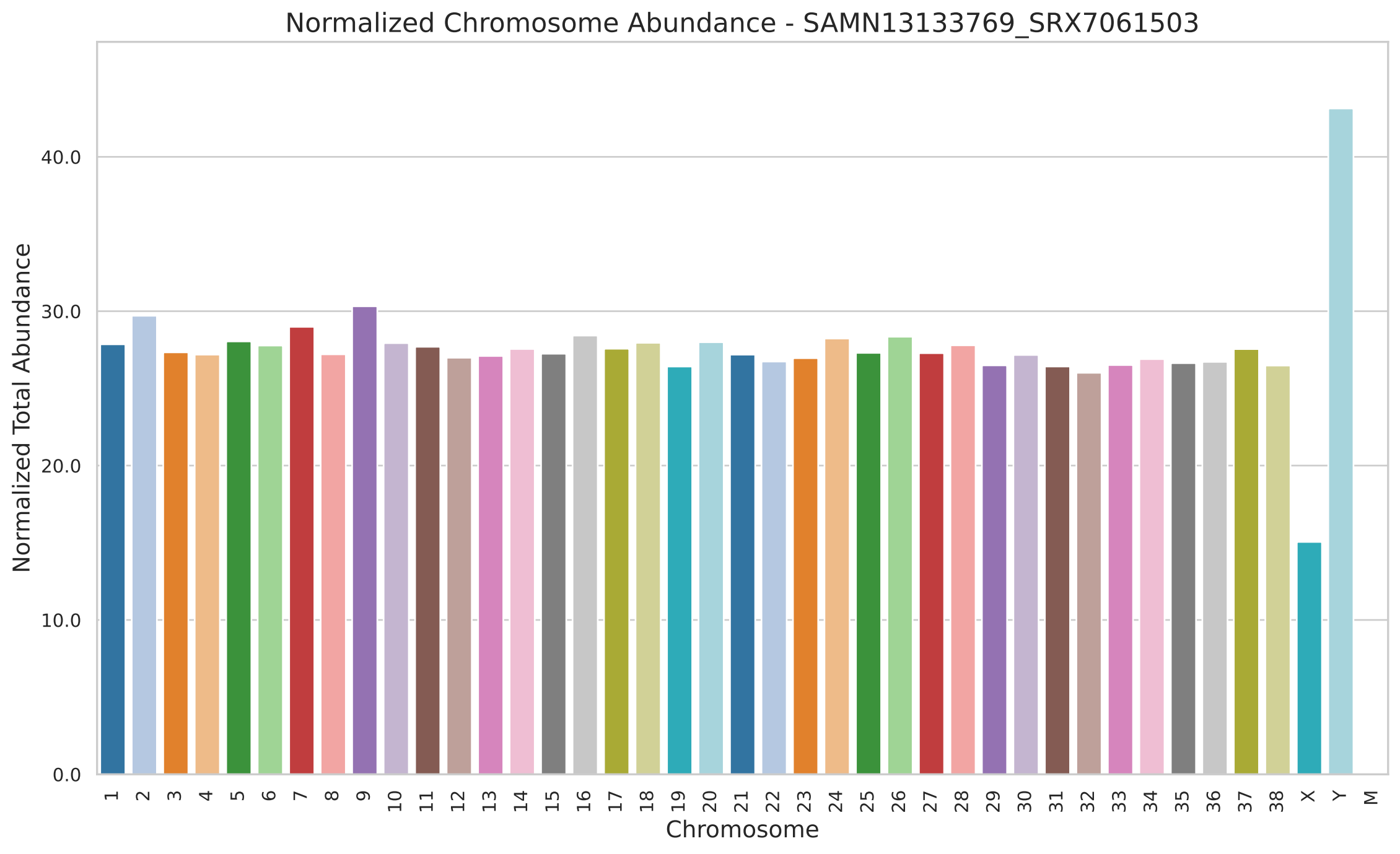

Normalized Chromosome Abundance - SAMN14820572_SRX8232166
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

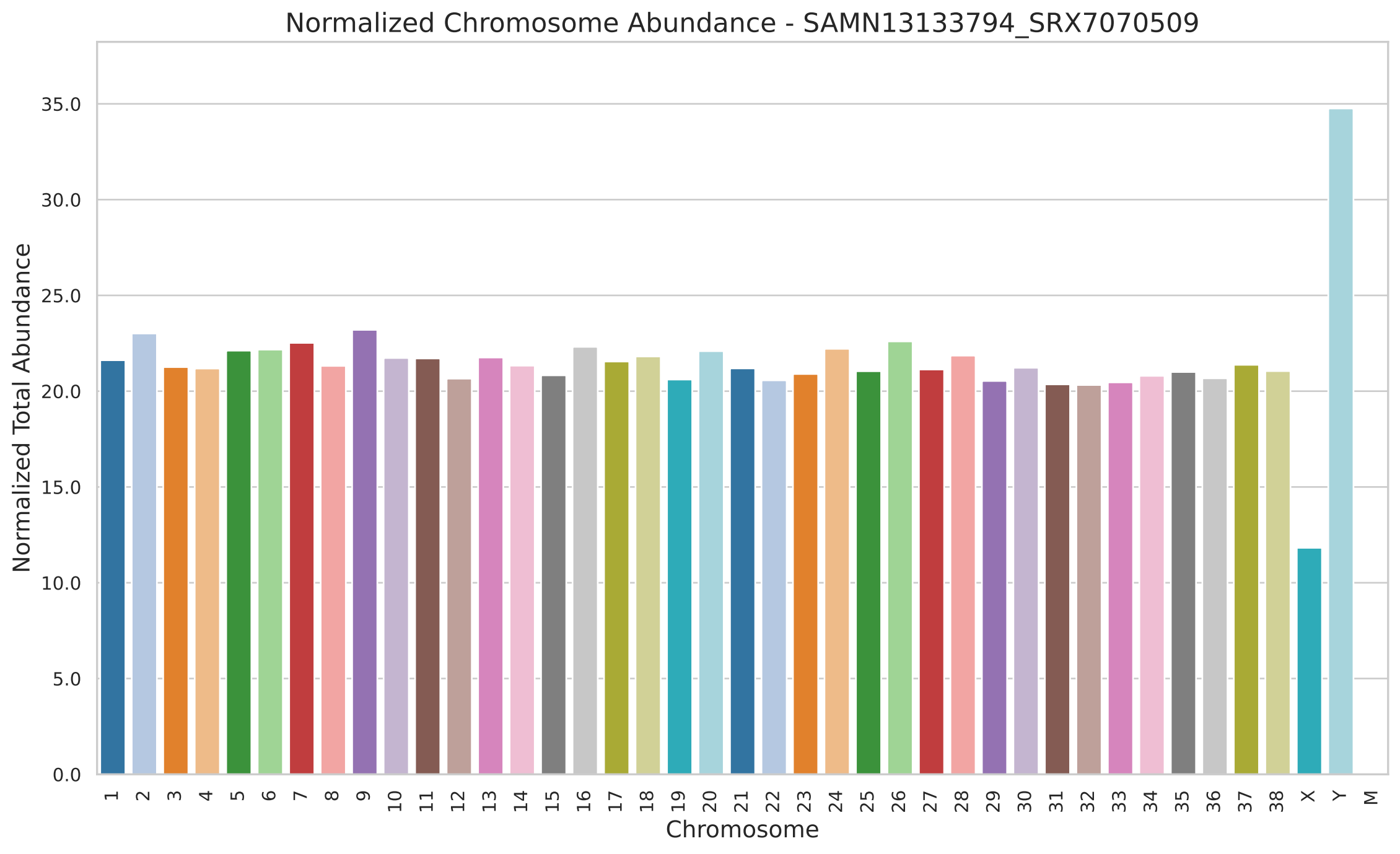

Normalized Chromosome Abundance - SAMN13133793_SRX7070512
Normalized Total Abundance
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5
20.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

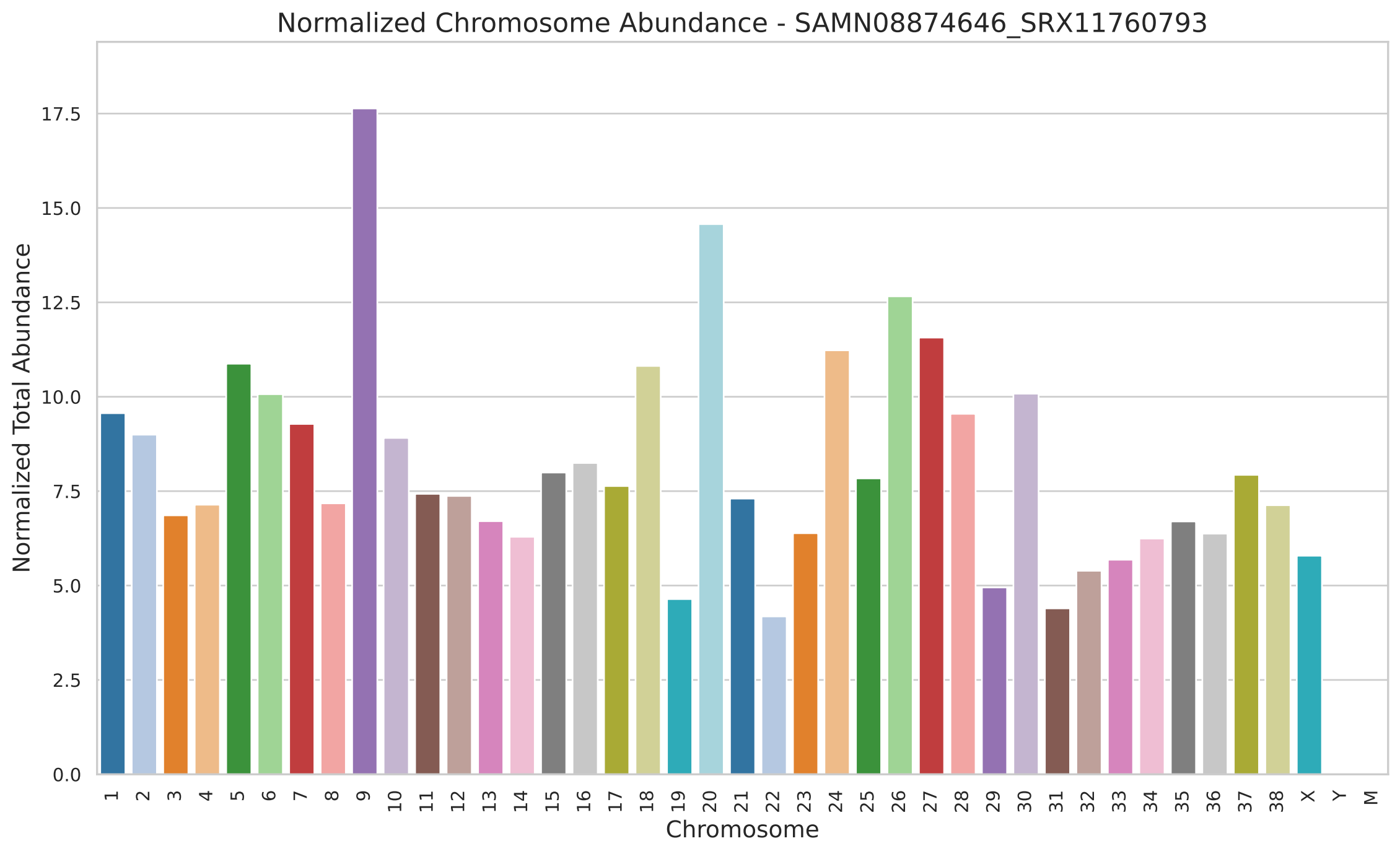

Normalized Chromosome Abundance - SAMN13133814_SRX7061508
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

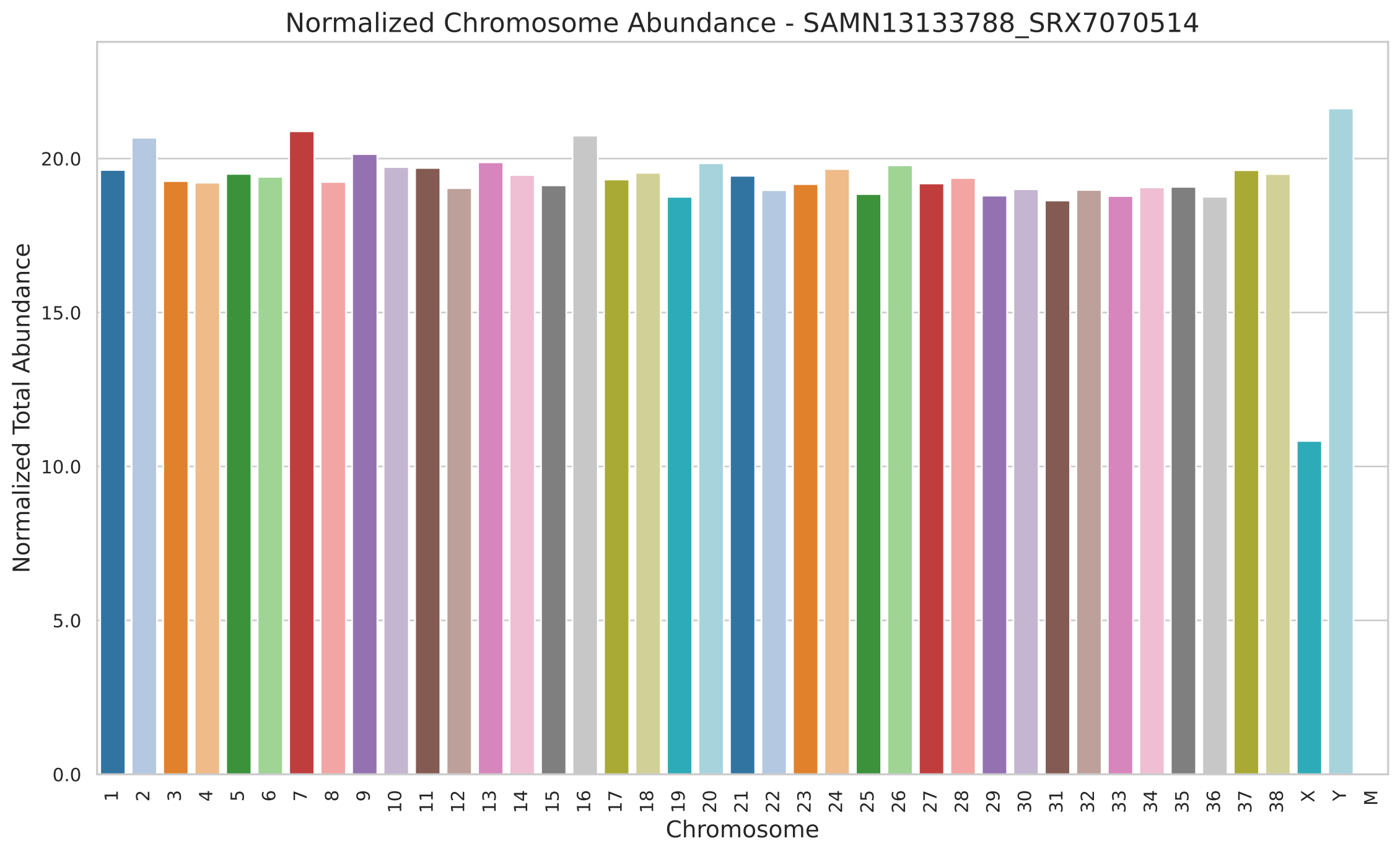

Normalized Chromosome Abundance - SAMN14820578_SRX8232152
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

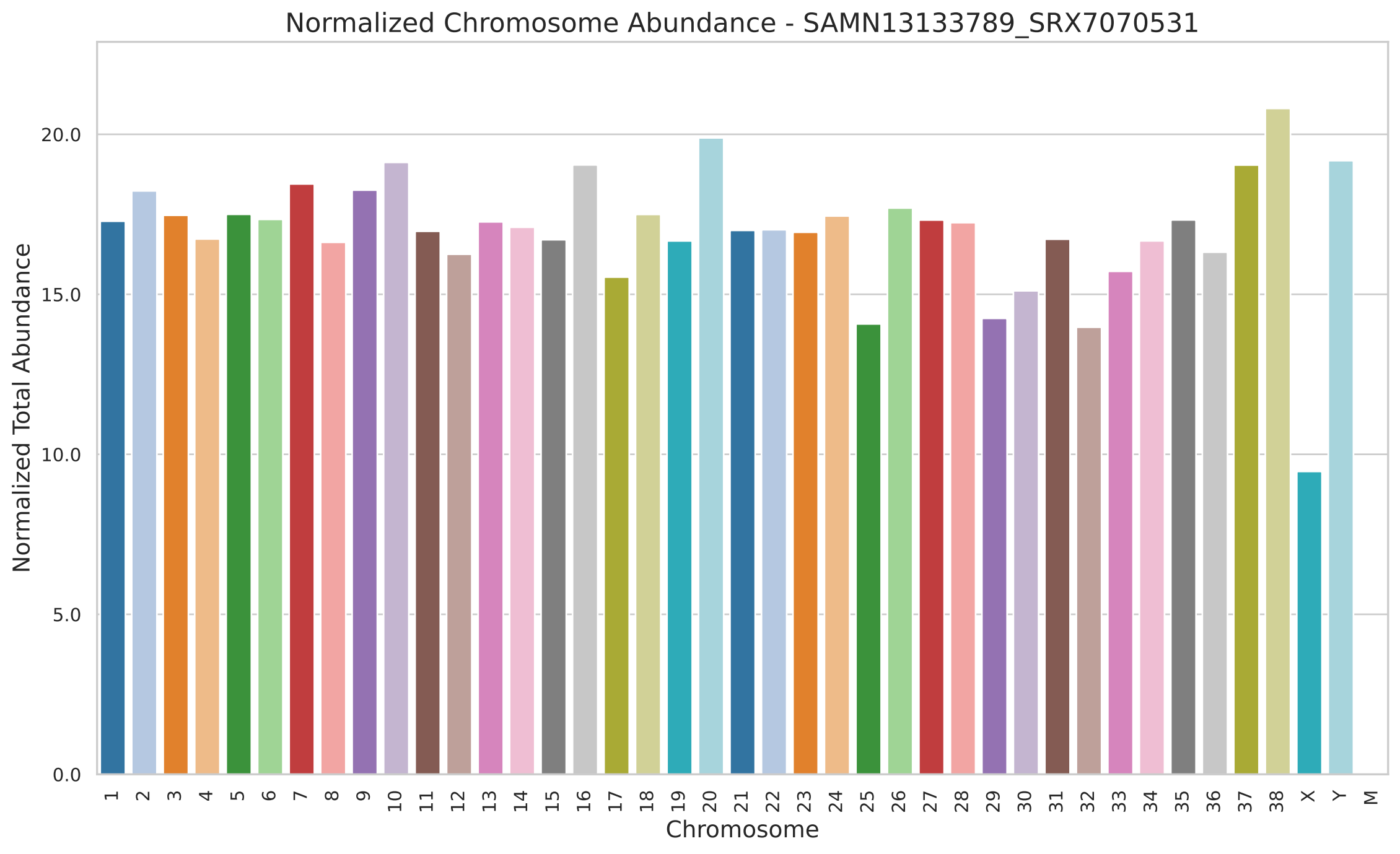

Normalized Chromosome Abundance - SAMN13133786_SRX7070532
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
35.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

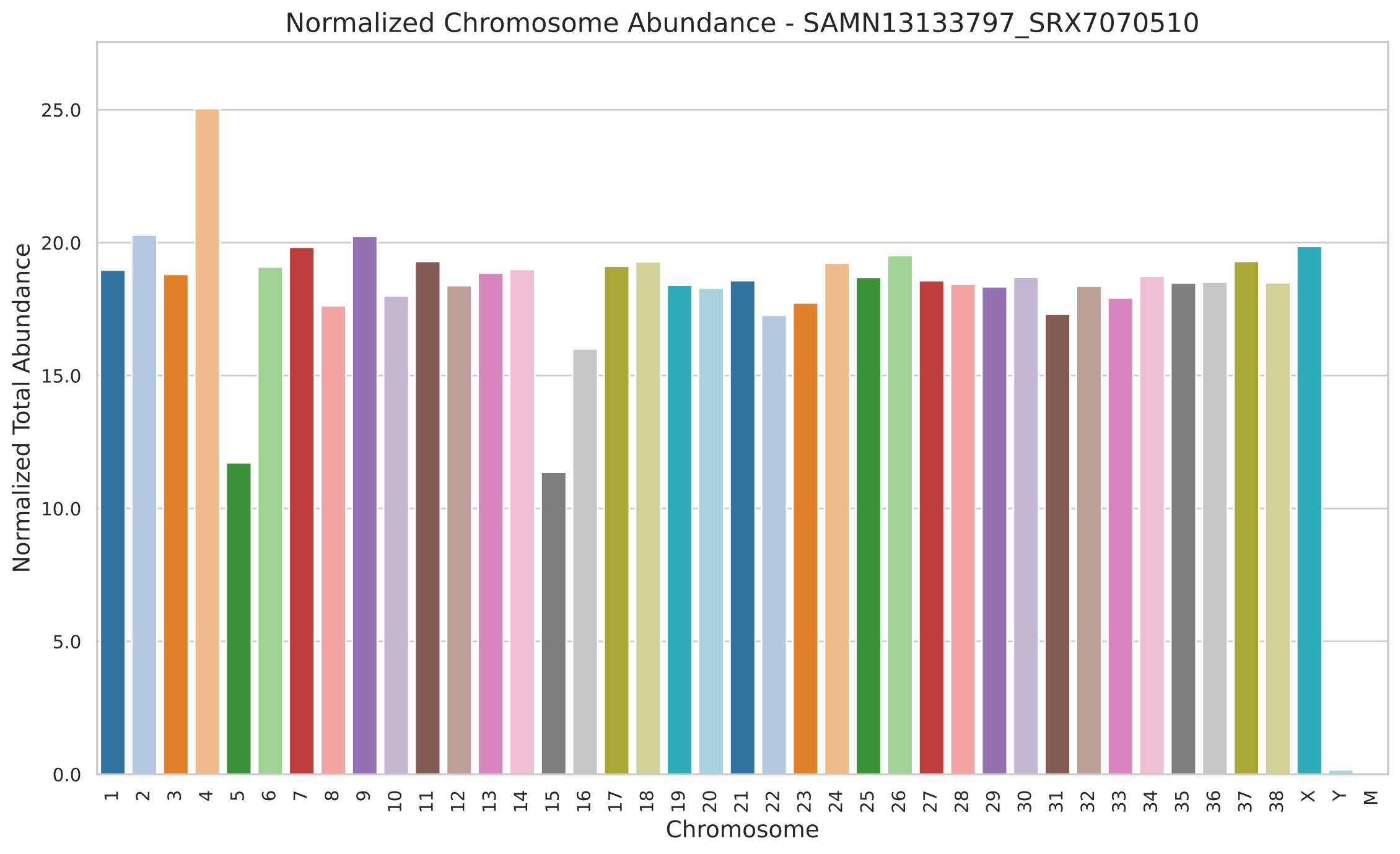

Normalized Chromosome Abundance - SAMN13133769_SRX7061503
Normalized Total Abundance
0.0
10.0
20.0
30.0
40.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

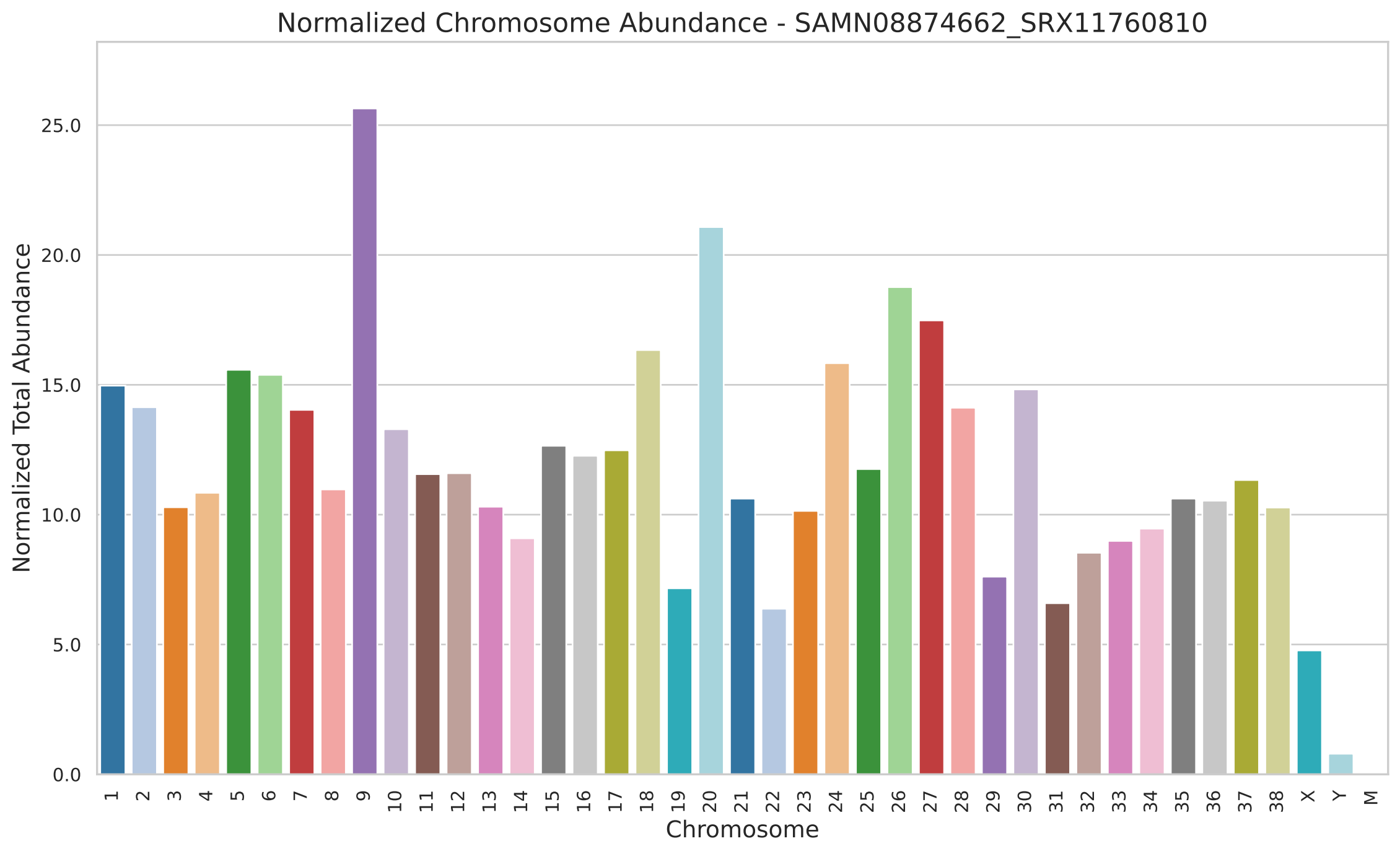

Normalized Chromosome Abundance - SAMN13133794_SRX7070509
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
35.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

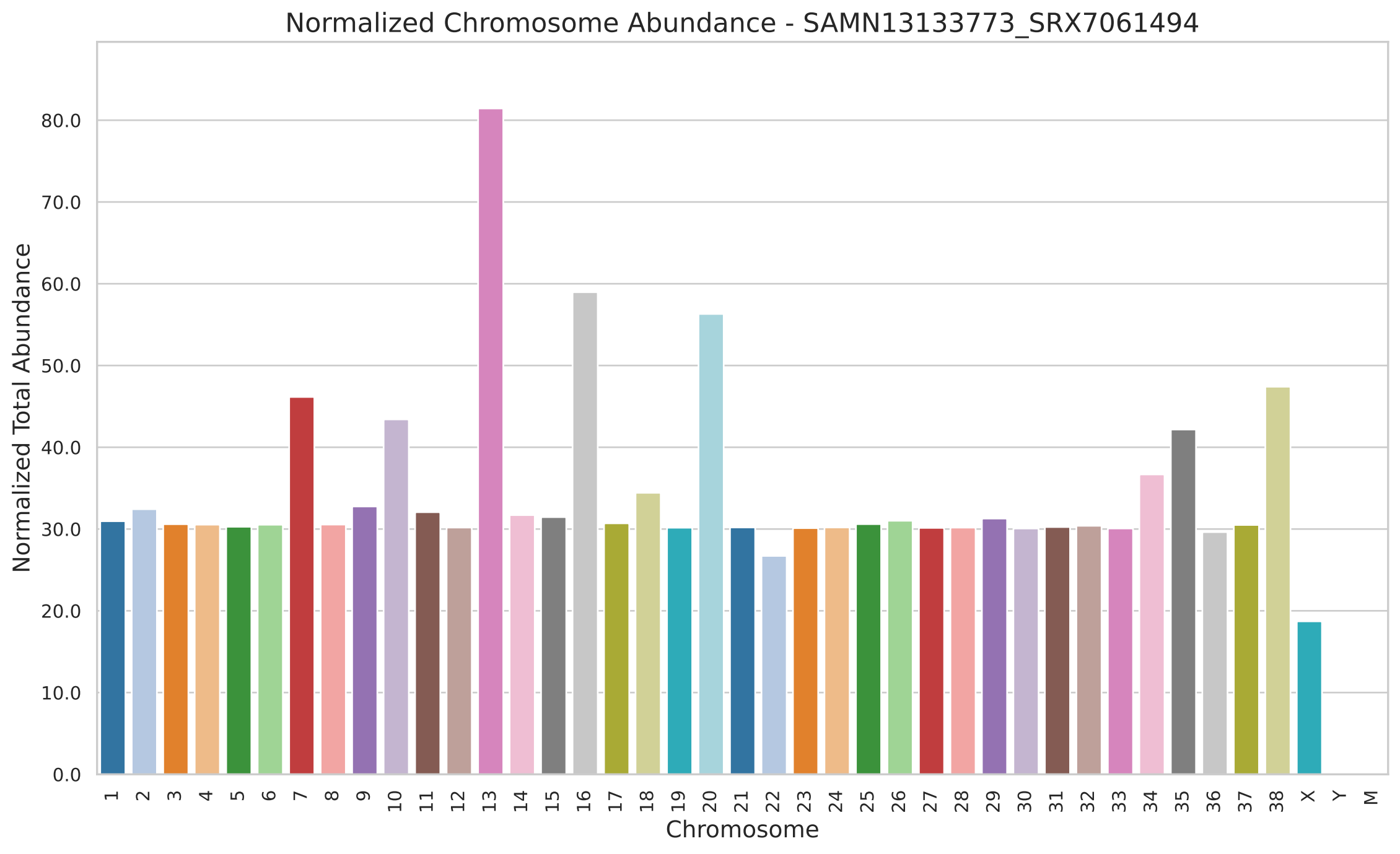

Normalized Chromosome Abundance - SAMN08874646_SRX11760793
Normalized Total Abundance
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

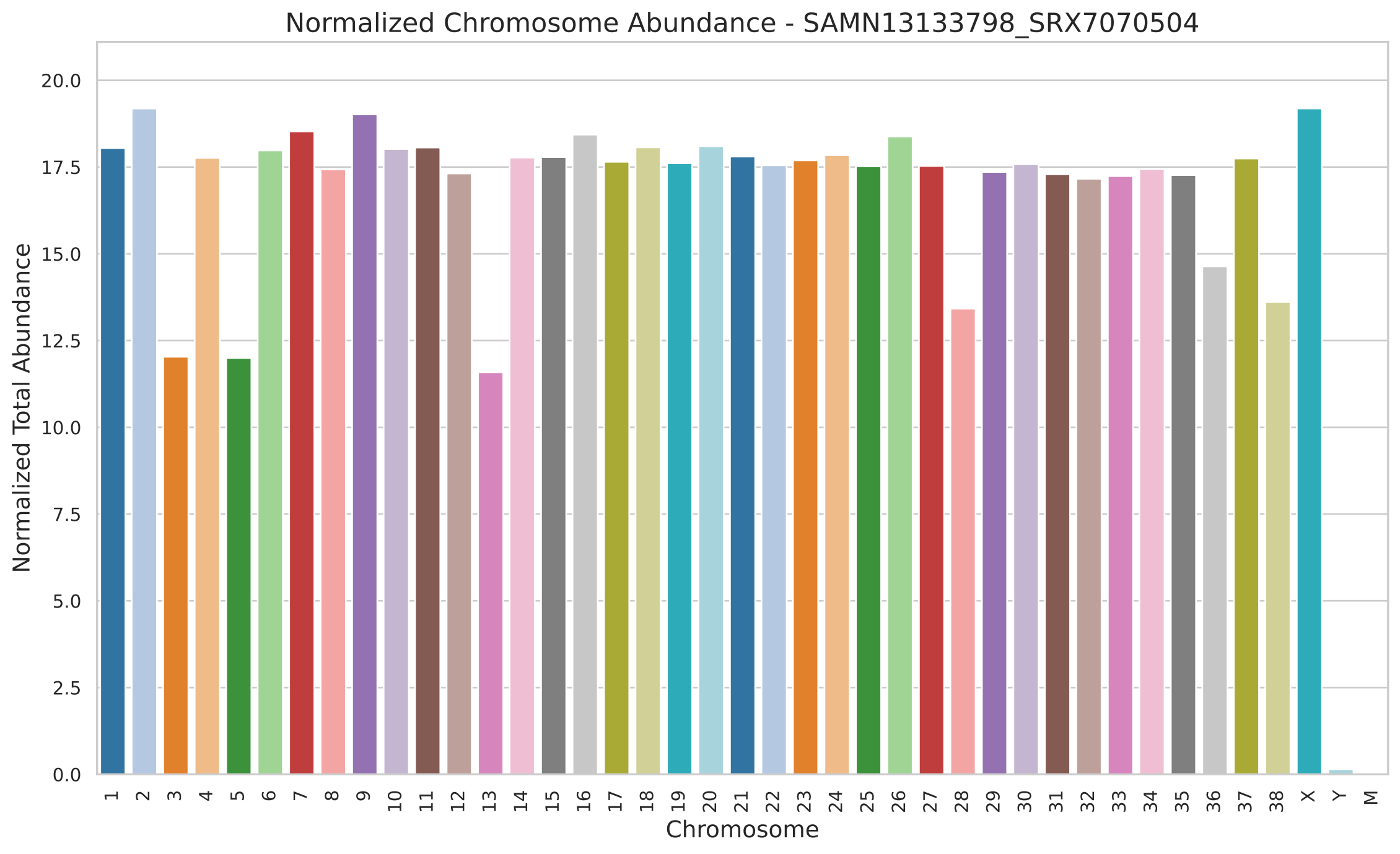

Normalized Chromosome Abundance - SAMN13133788_SRX7070514
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

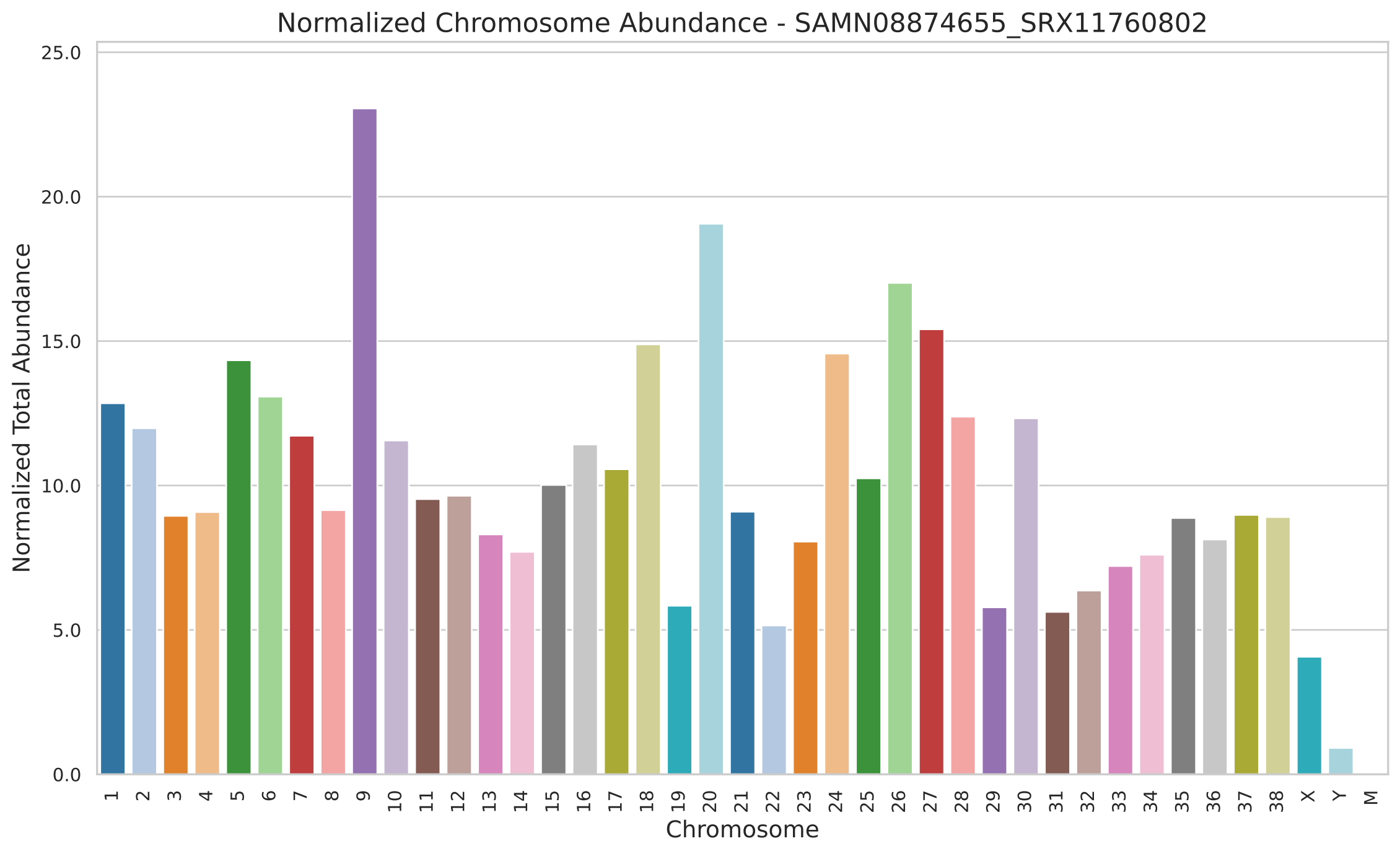

Normalized Chromosome Abundance - SAMN13133789_SRX7070531
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

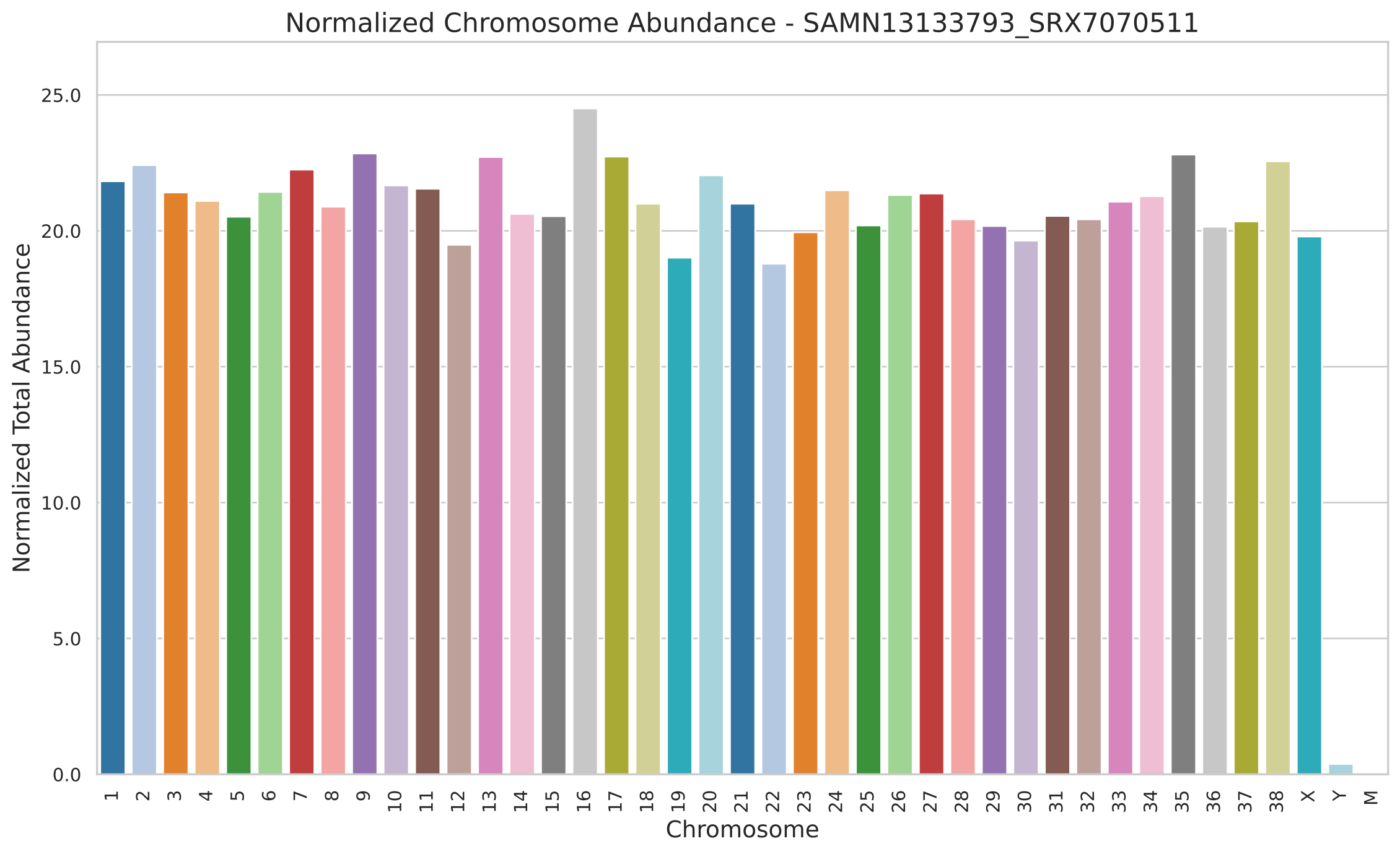

Normalized Chromosome Abundance - SAMN13133797_SRX7070510
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

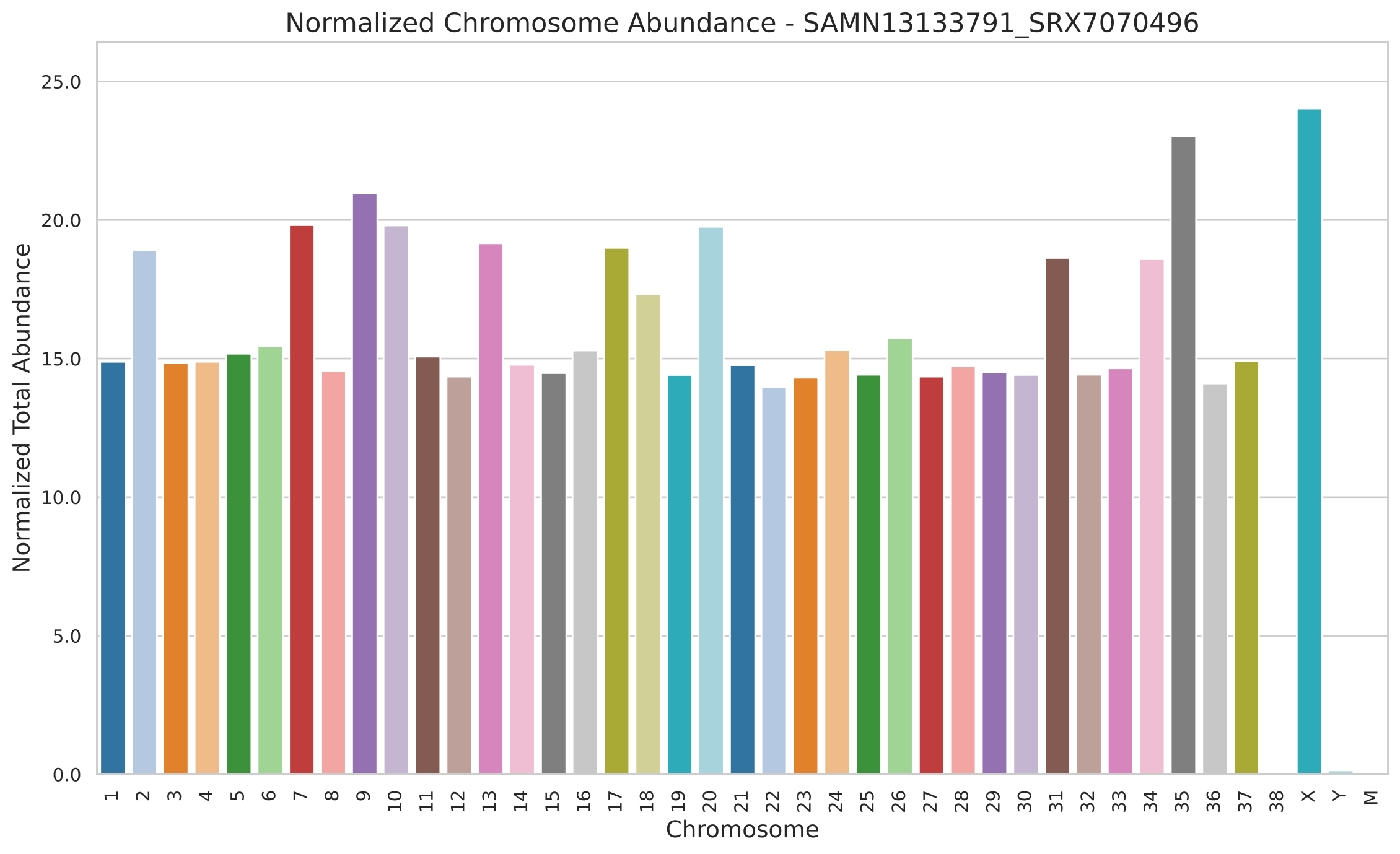

Normalized Chromosome Abundance - SAMN08874662_SRX11760810
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

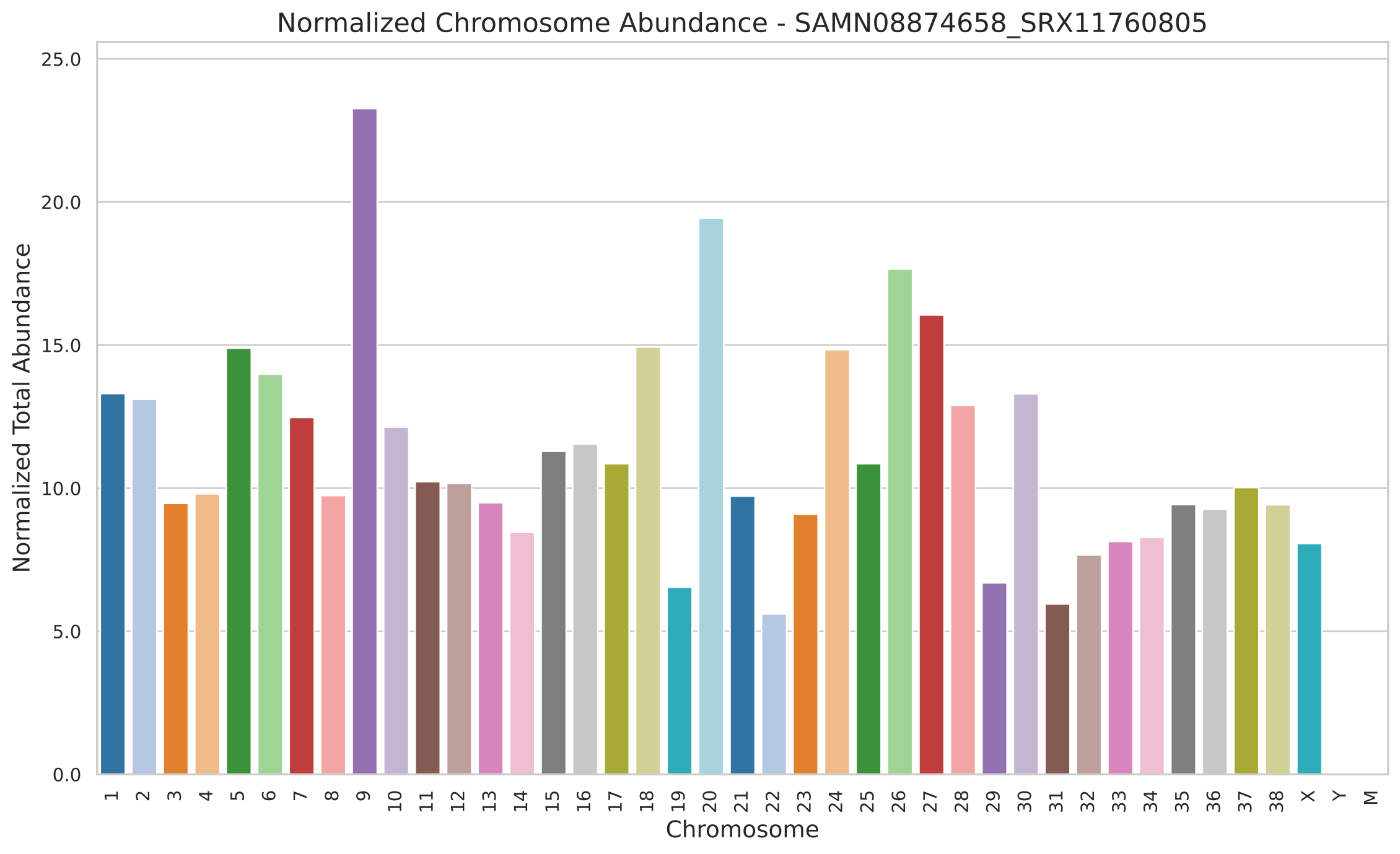

Normalized Chromosome Abundance - SAMN13133773_SRX7061494
Normalized Total Abundance
0.0
10.0
20.0
30.0
40.0
50.0
60.0
70.0
80.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

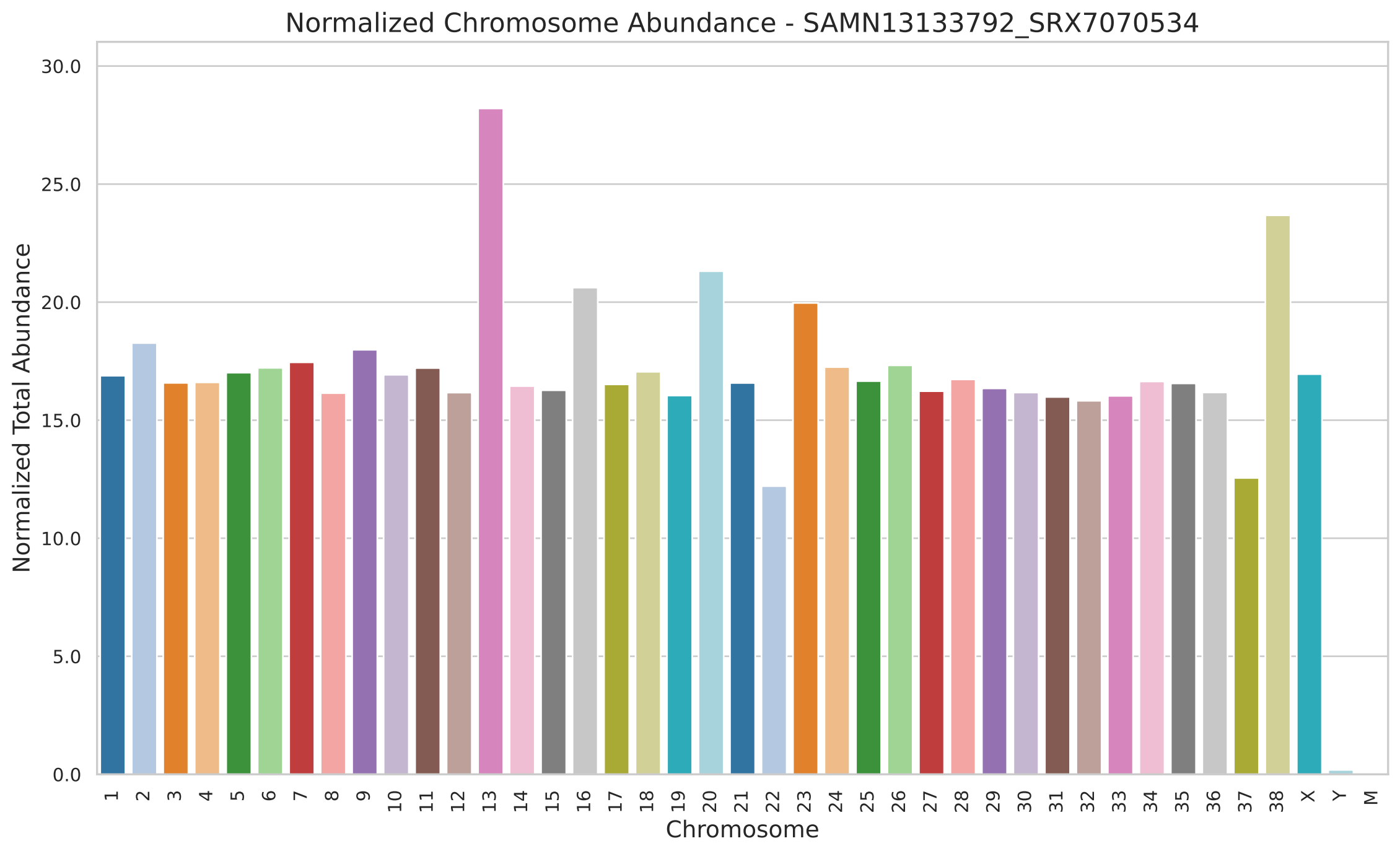

Normalized Chromosome Abundance - SAMN13133798_SRX7070504
Normalized Total Abundance
20.0
17.5
15.0
12.5
10.0
7.5
5.0
2.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

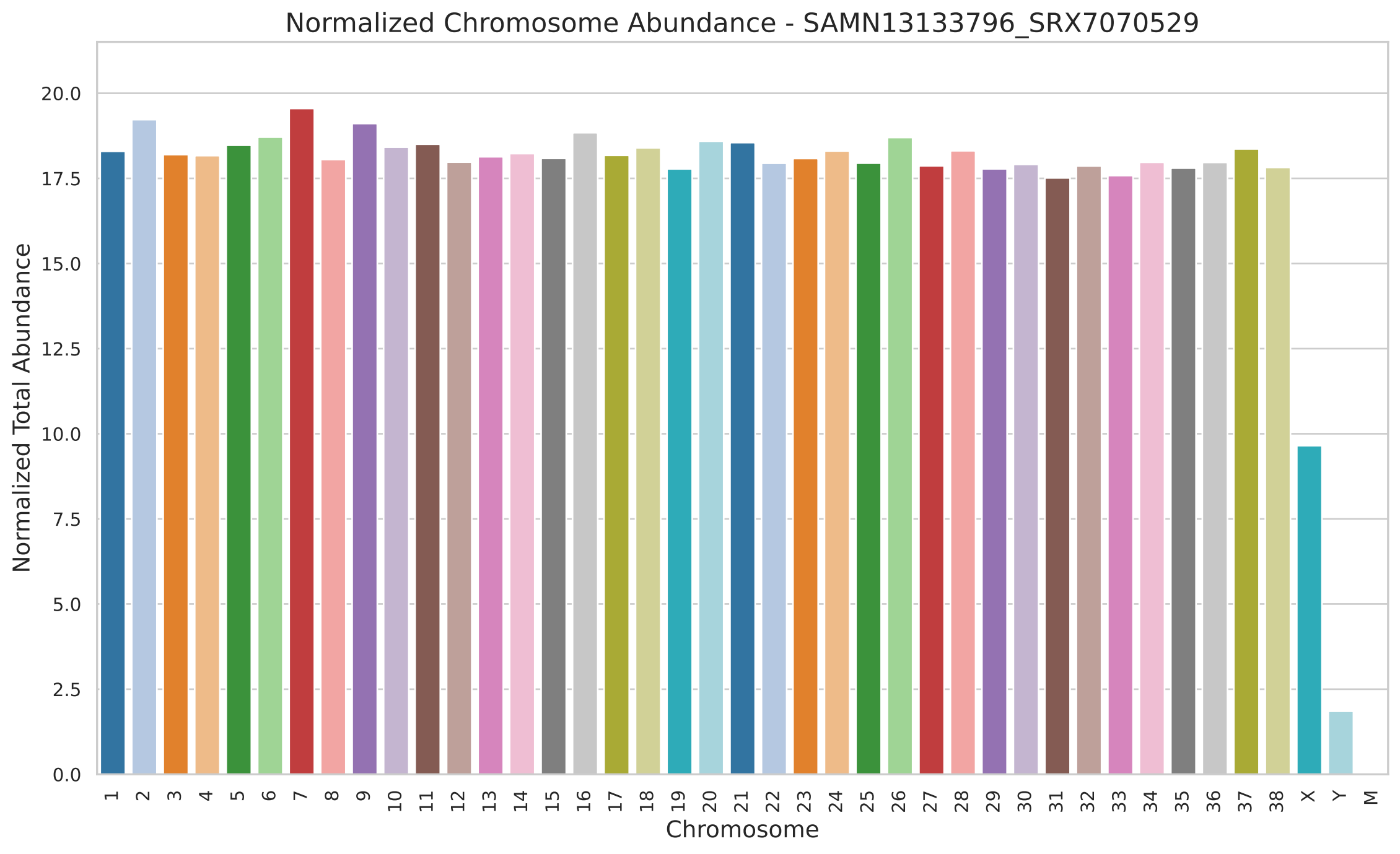

Normalized Chromosome Abundance - SAMN08874655_SRX11760802
Normalized Total Abundance
25.0
20.0
15.0
10.0
5.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

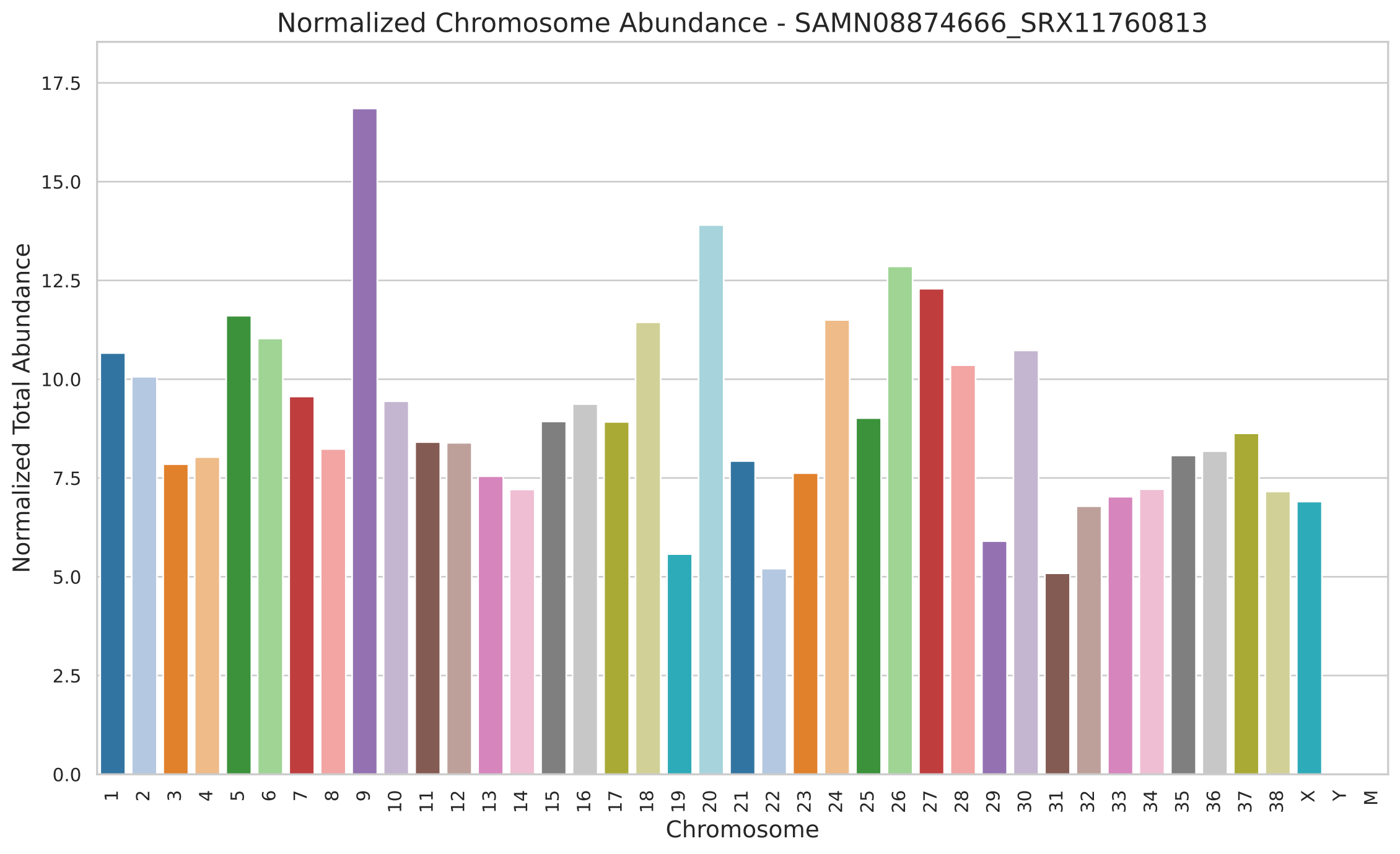

Normalized Chromosome Abundance - SAMN13133793_SRX7070511
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

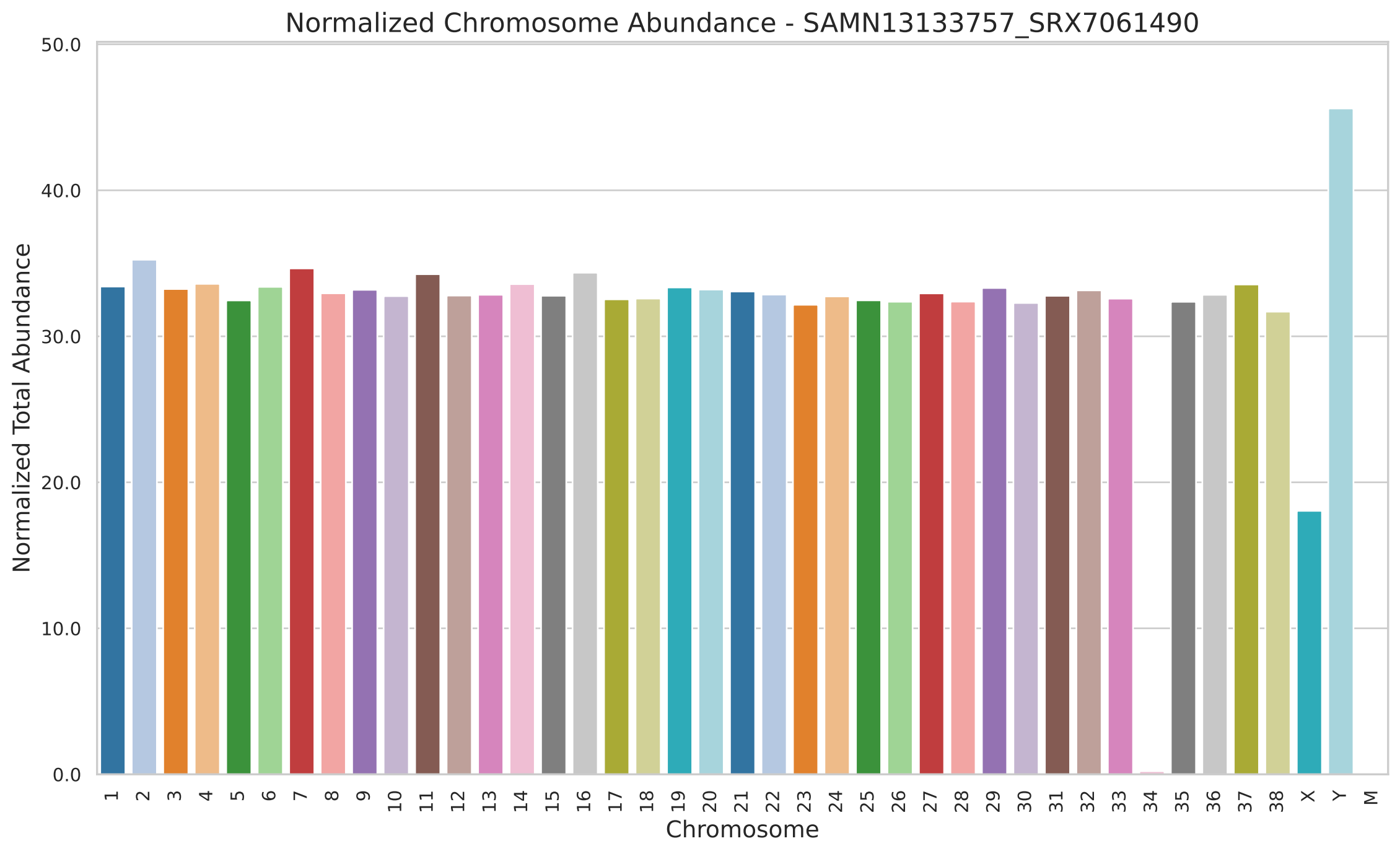

Normalized Chromosome Abundance - SAMN13133791_SRX7070496
Normalized Total Abundance
25.0
20.0
15.0
10.0
5.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

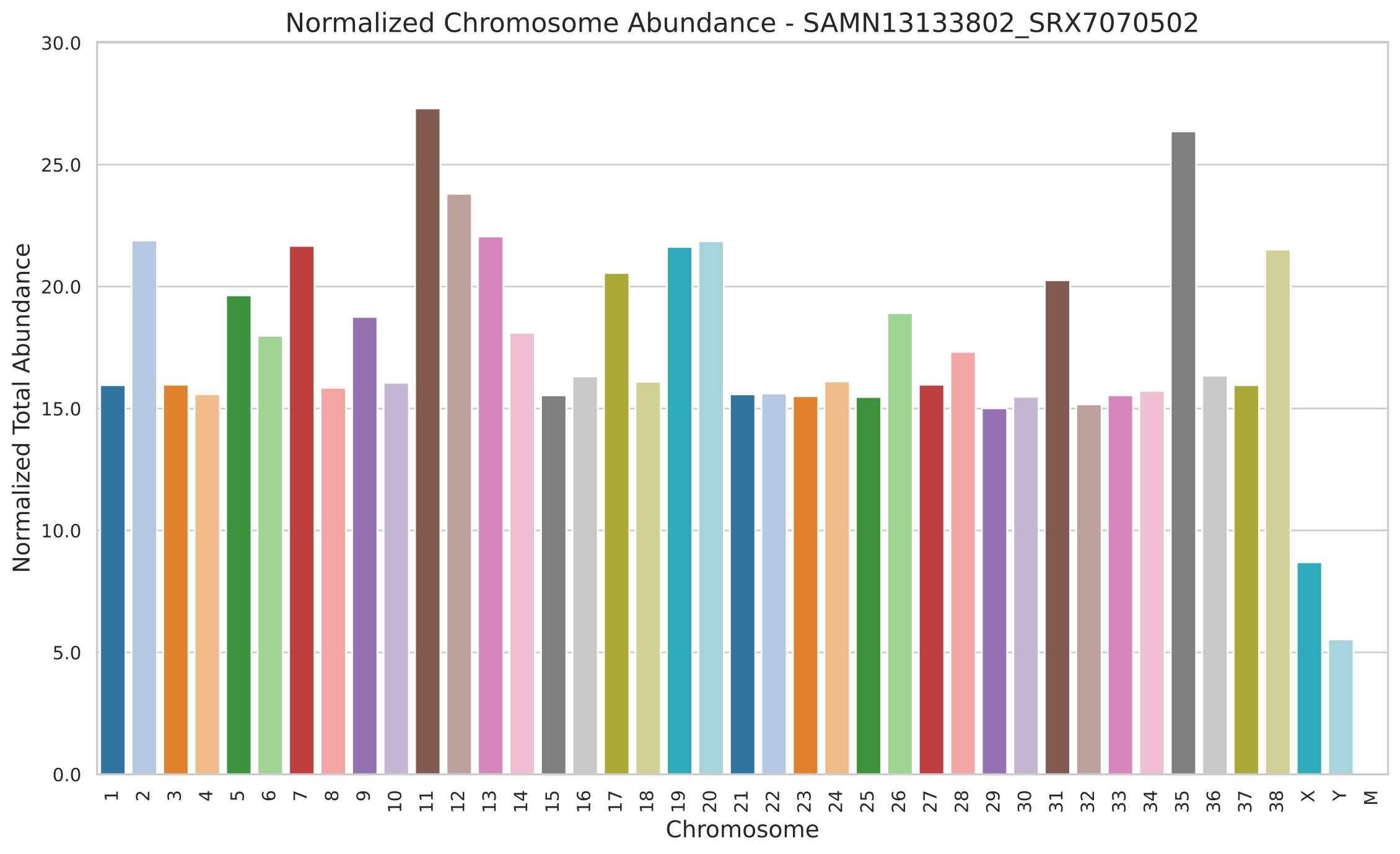

Normalized Chromosome Abundance - SAMN08874658_SRX11760805
Normalized Total Abundance
25.0
20.0
15.0
10.0
5.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

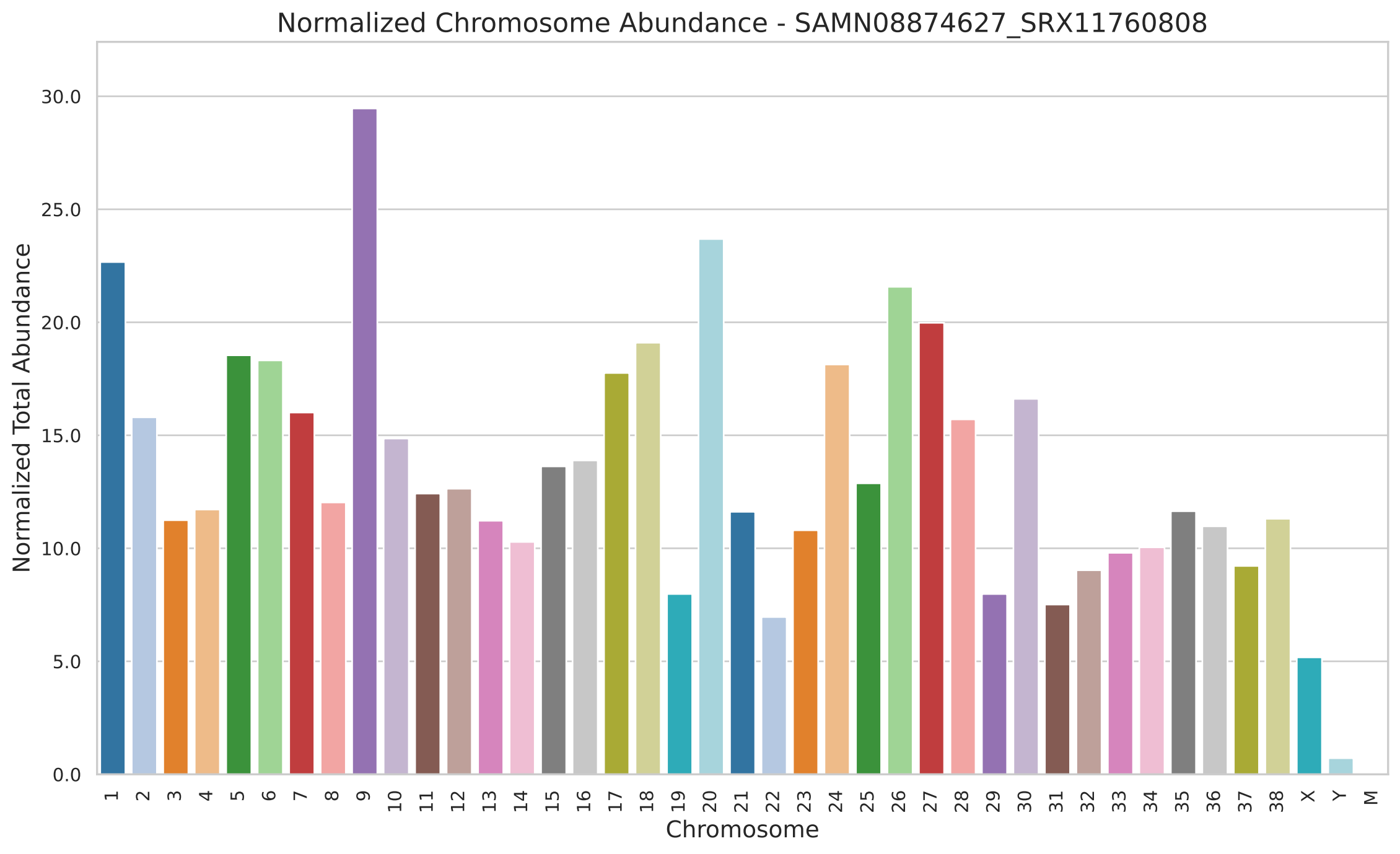

Normalized Chromosome Abundance - SAMN13133792_SRX7070534
Normalized Total Abundance
30.0
25.0
20.0
15.0
10.0
5.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

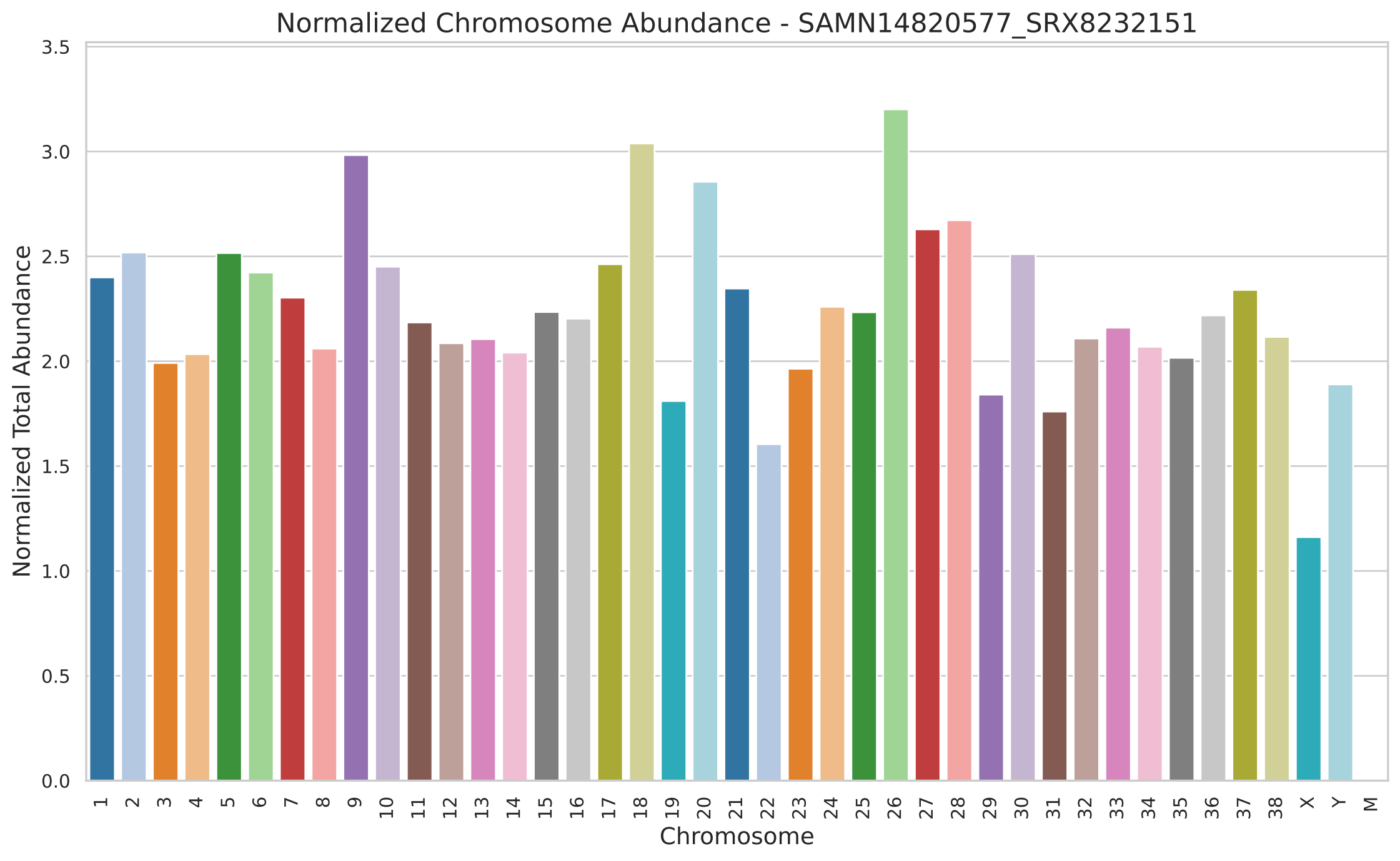

Normalized Chromosome Abundance - SAMN13133796_SRX7070529
Normalized Total Abundance
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5
20.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

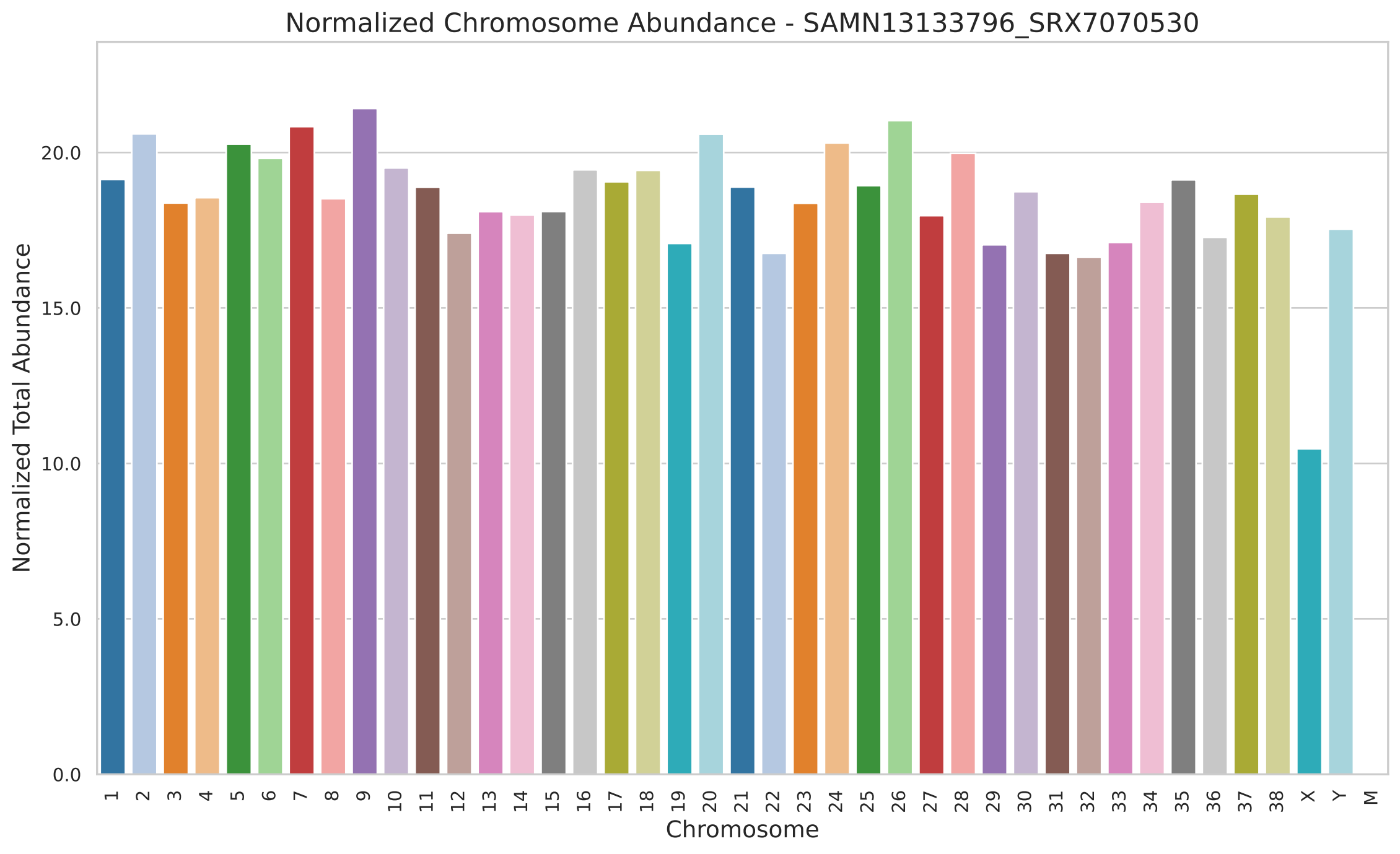

Normalized Chromosome Abundance - SAMN08874666_SRX11760813
Normalized Total Abundance
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

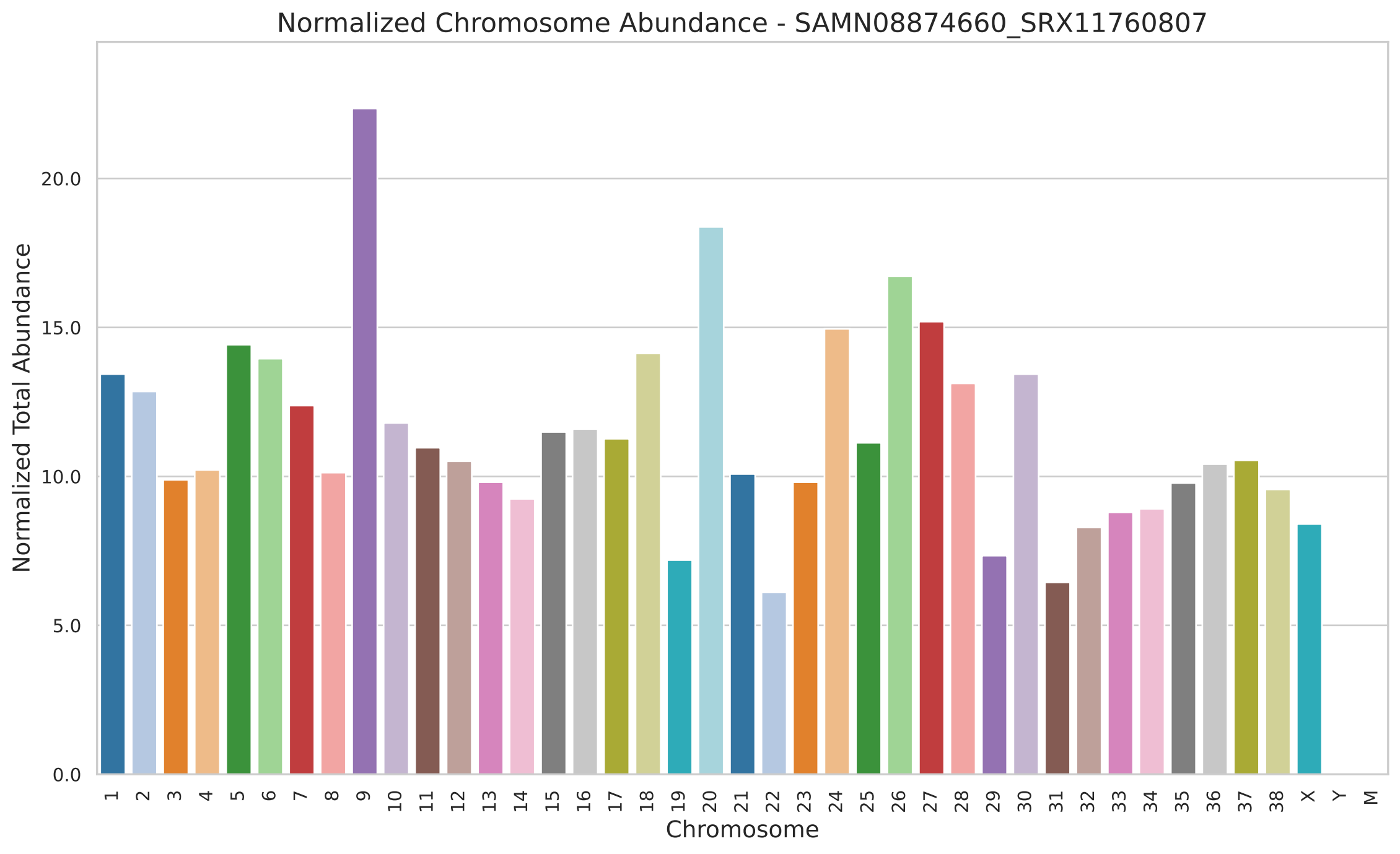

Normalized Chromosome Abundance - SAMN13133757_SRX7061490
Normalized Total Abundance
50.0
40.0
30.0
20.0
10.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

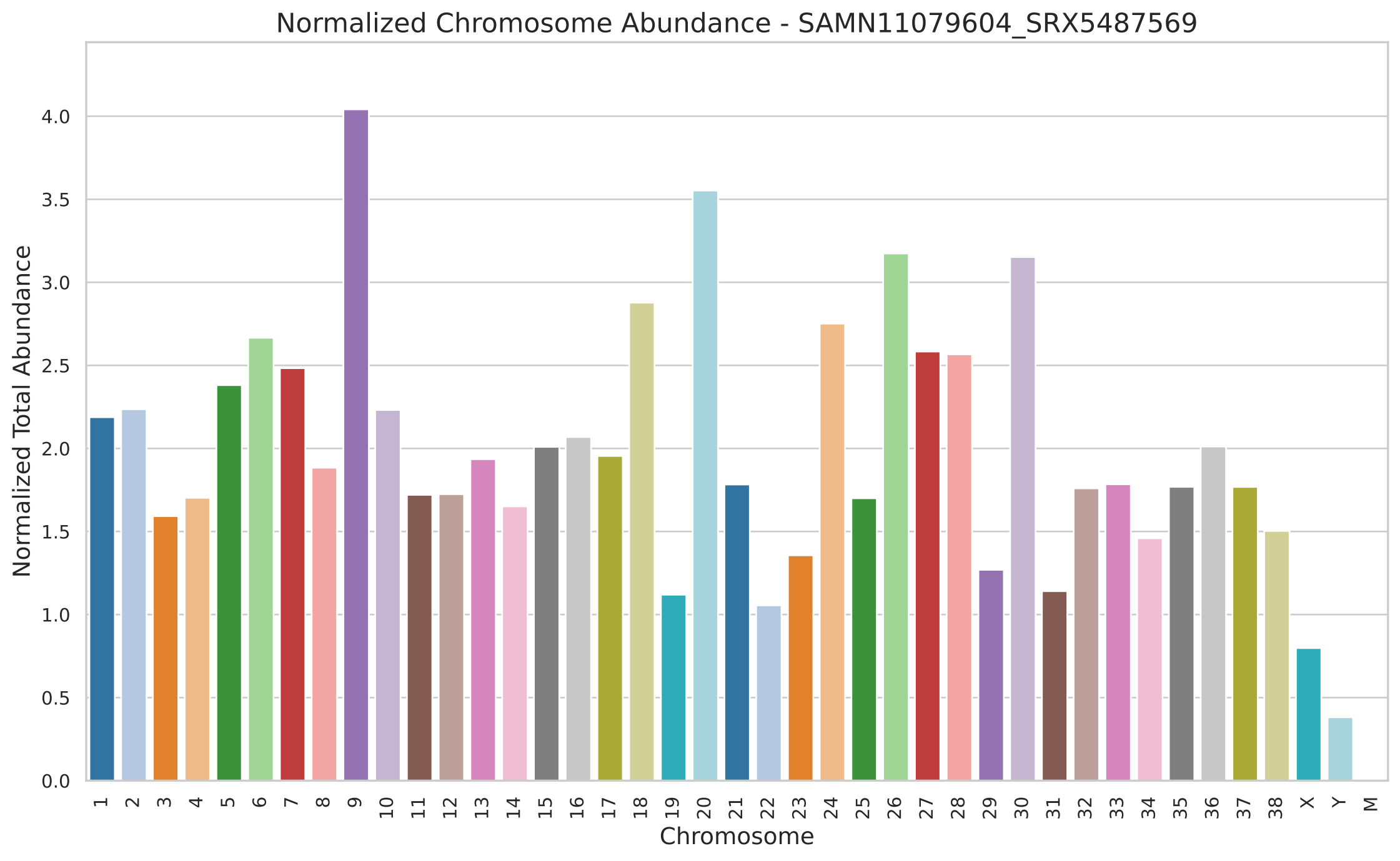

Normalized Chromosome Abundance - SAMN13133802_SRX7070502
Normalized Total Abundance
30.0
25.0
20.0
15.0
10.0
5.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

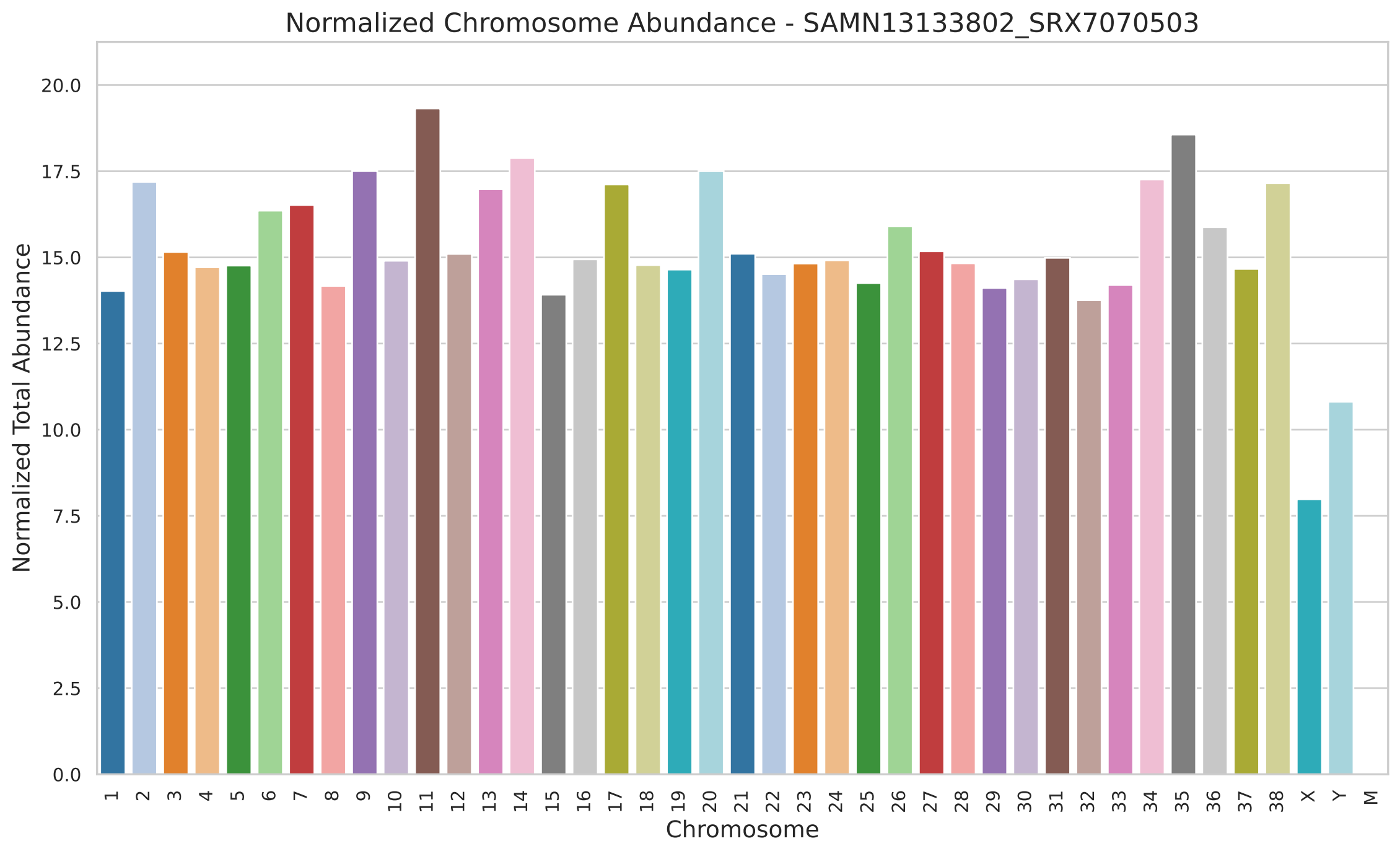

Normalized Chromosome Abundance - SAMN08874627_SRX11760808
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

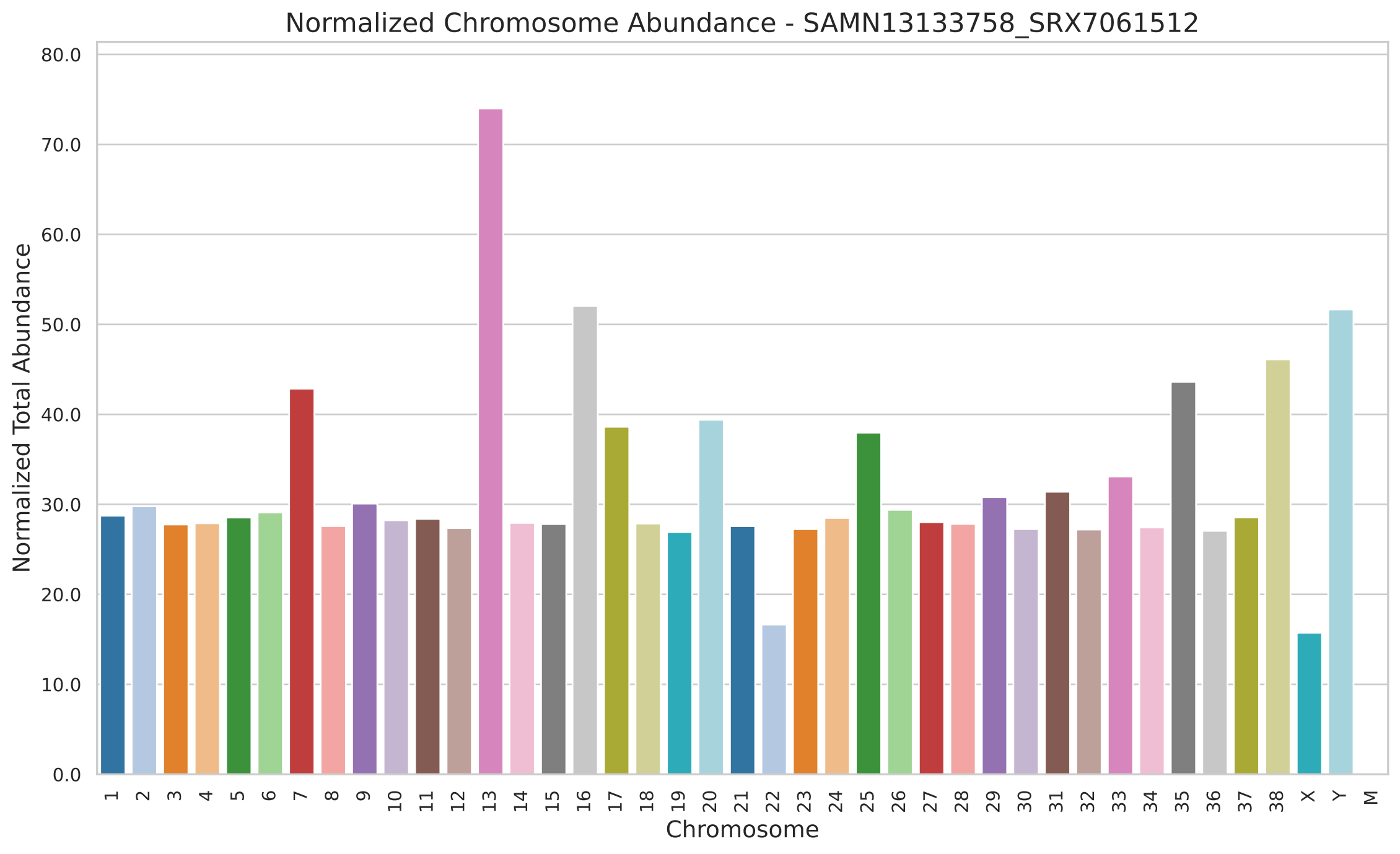

Normalized Chromosome Abundance - SAMN14820577_SRX8232151
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

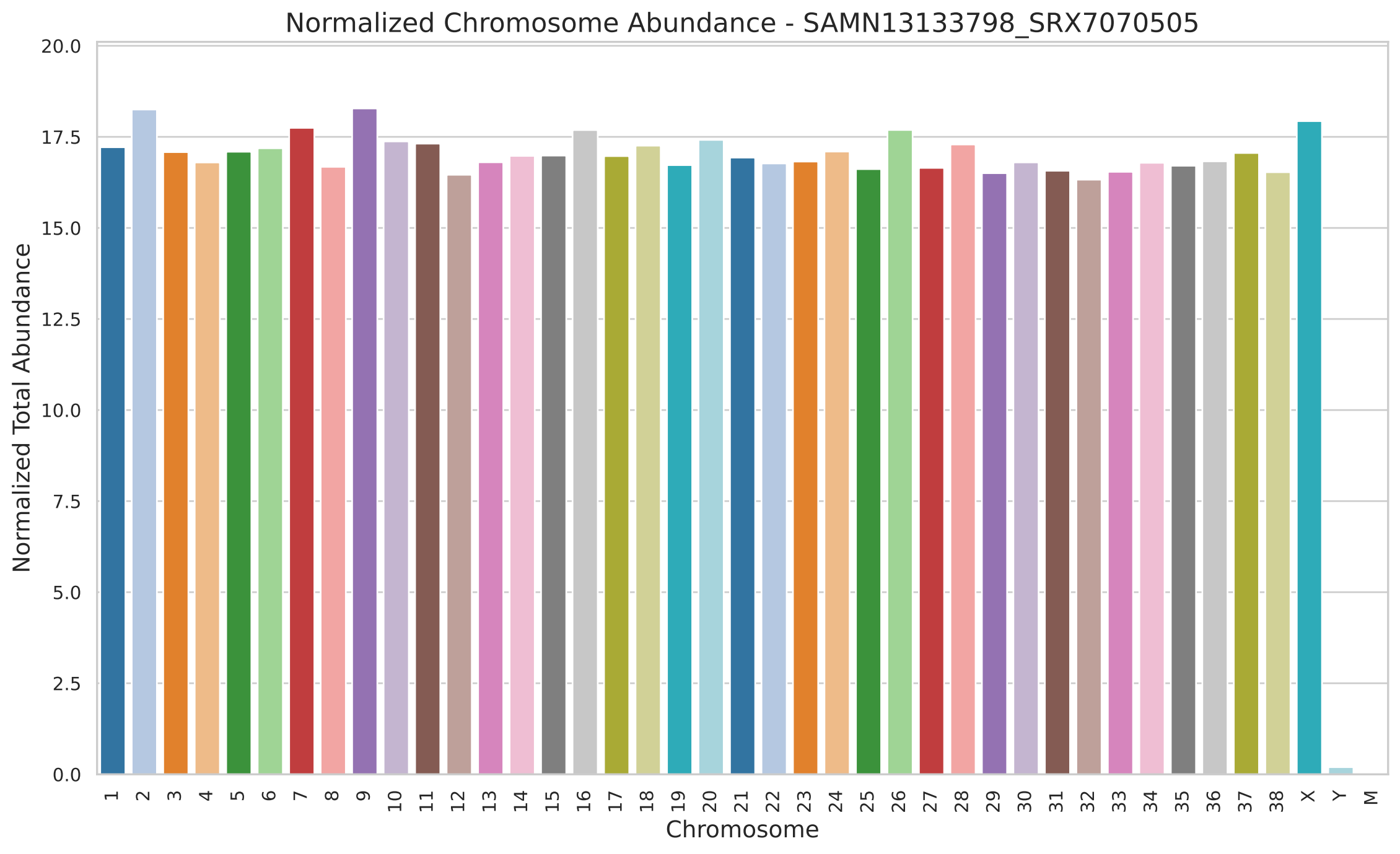

Normalized Chromosome Abundance - SAMN13133796_SRX7070530
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

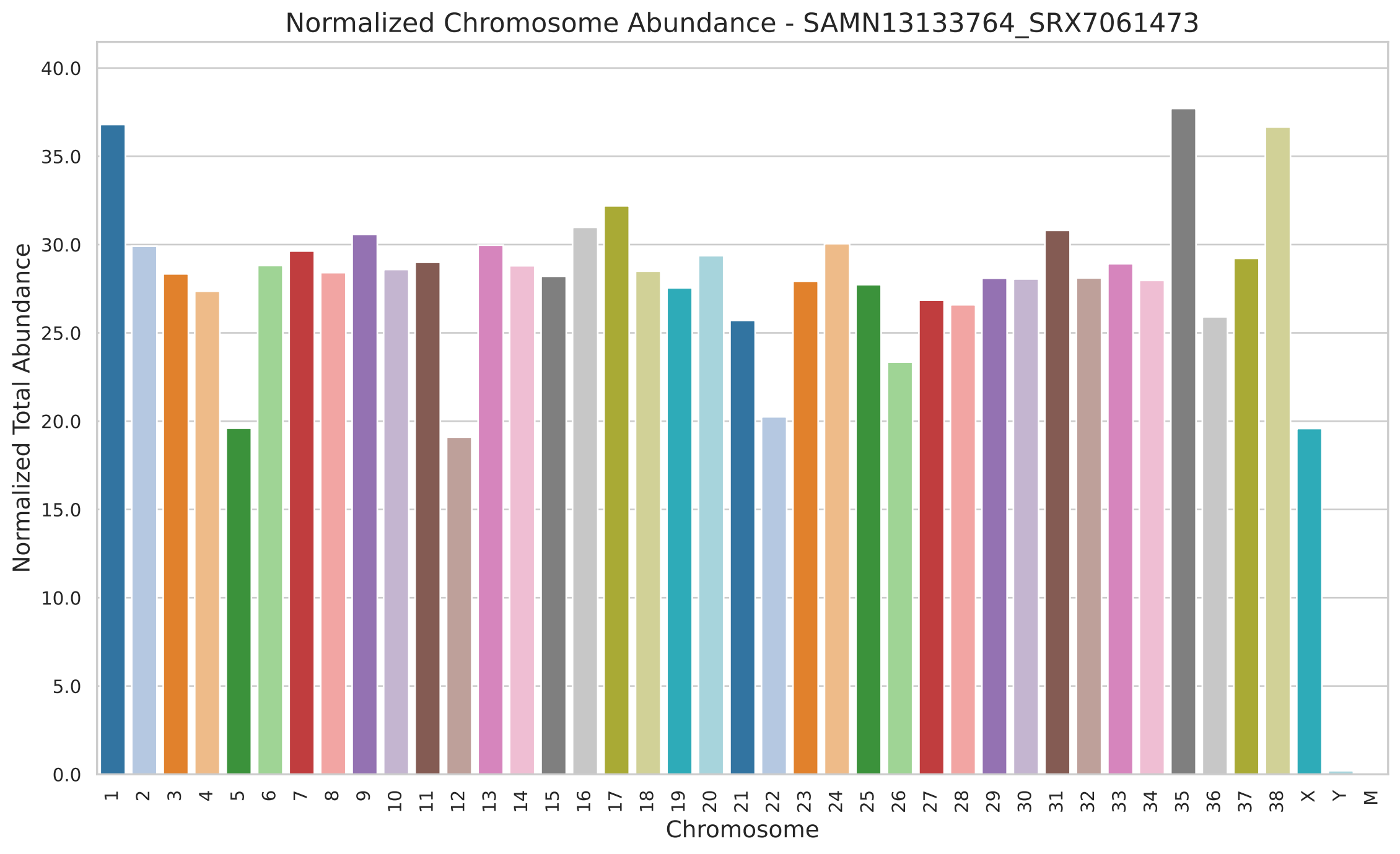

Normalized Chromosome Abundance - SAMN08874660_SRX11760807
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

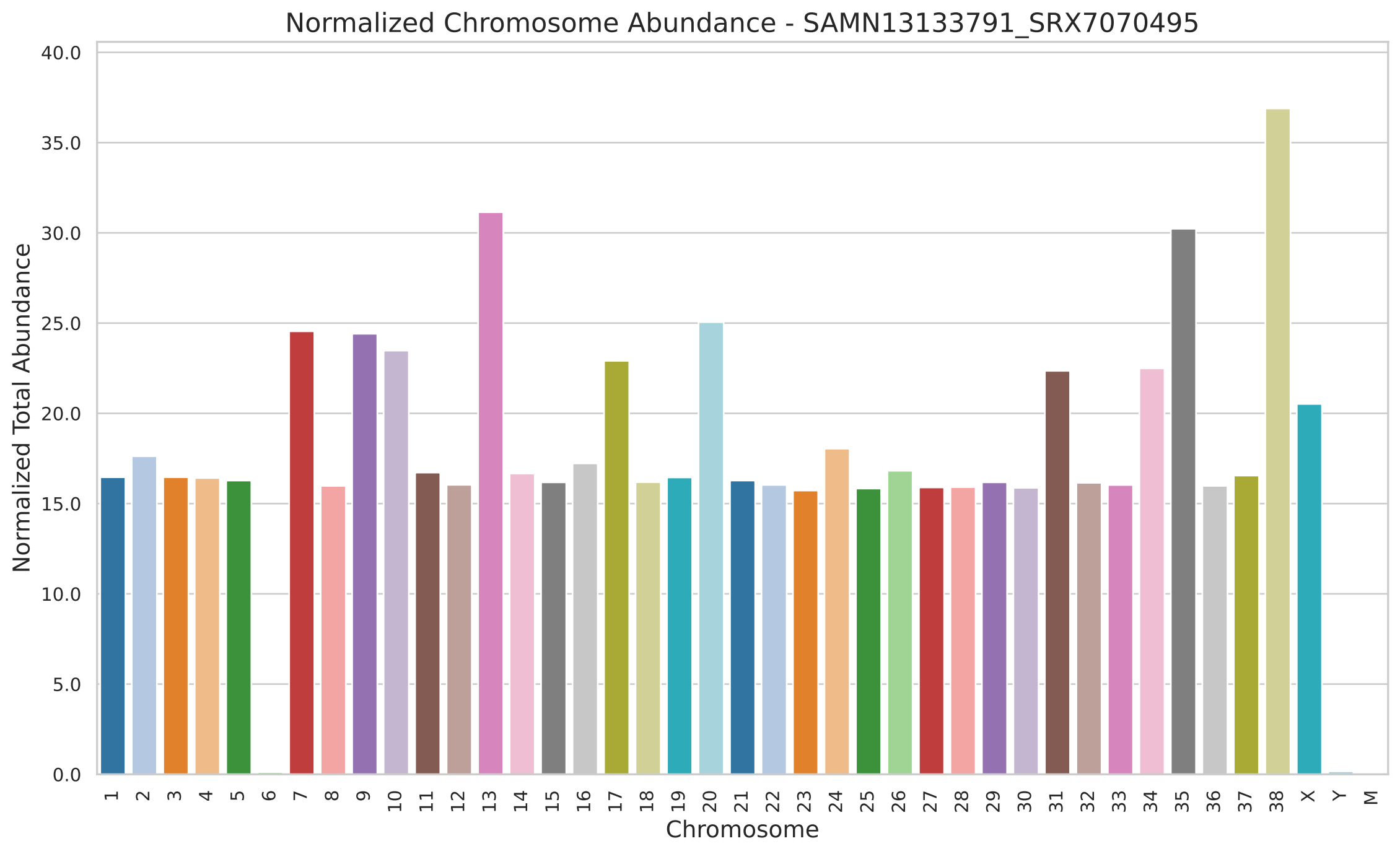

Normalized Chromosome Abundance - SAMN11079604_SRX5487569
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

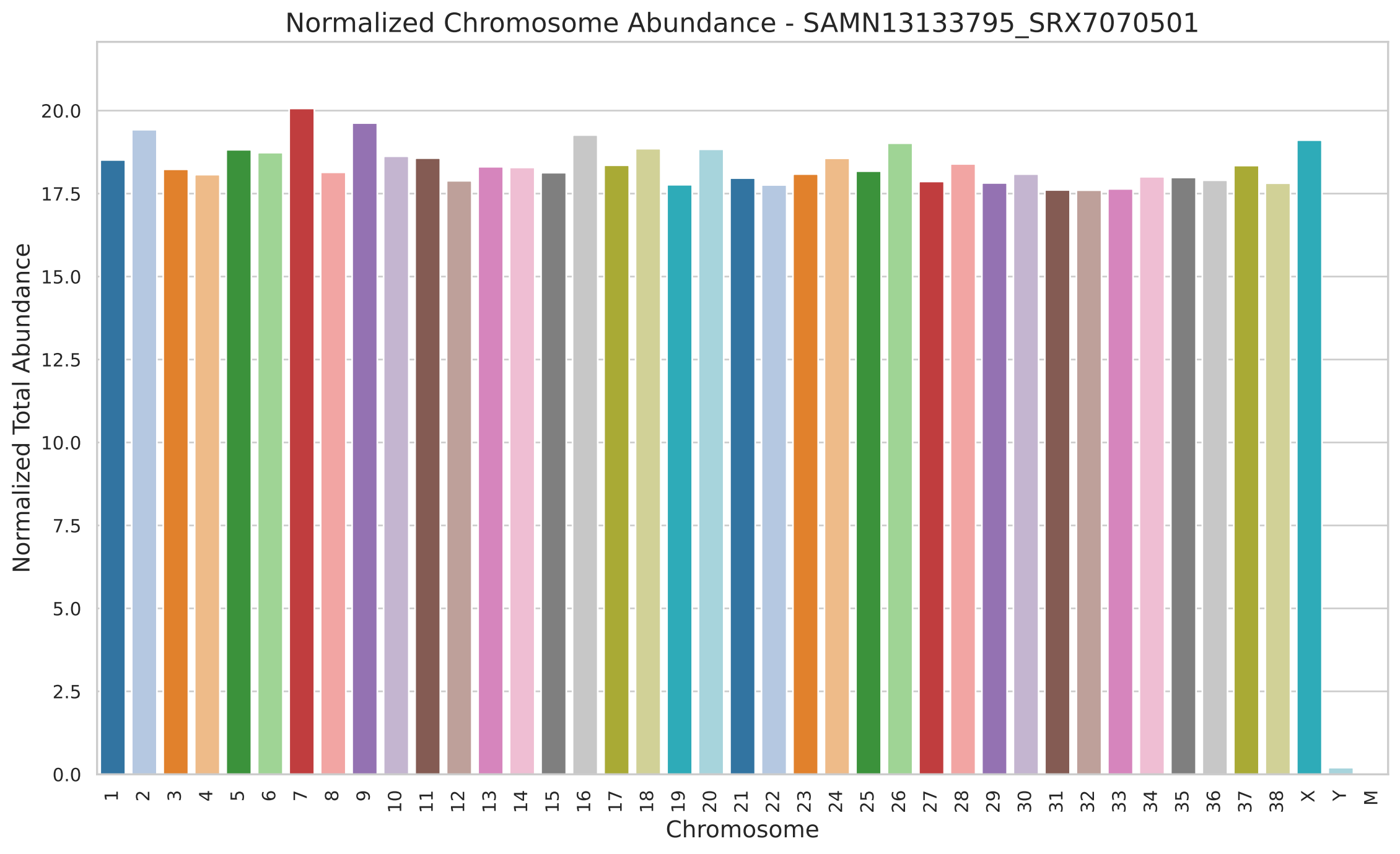

Normalized Chromosome Abundance - SAMN13133802_SRX7070503
Normalized Total Abundance
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5
20.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

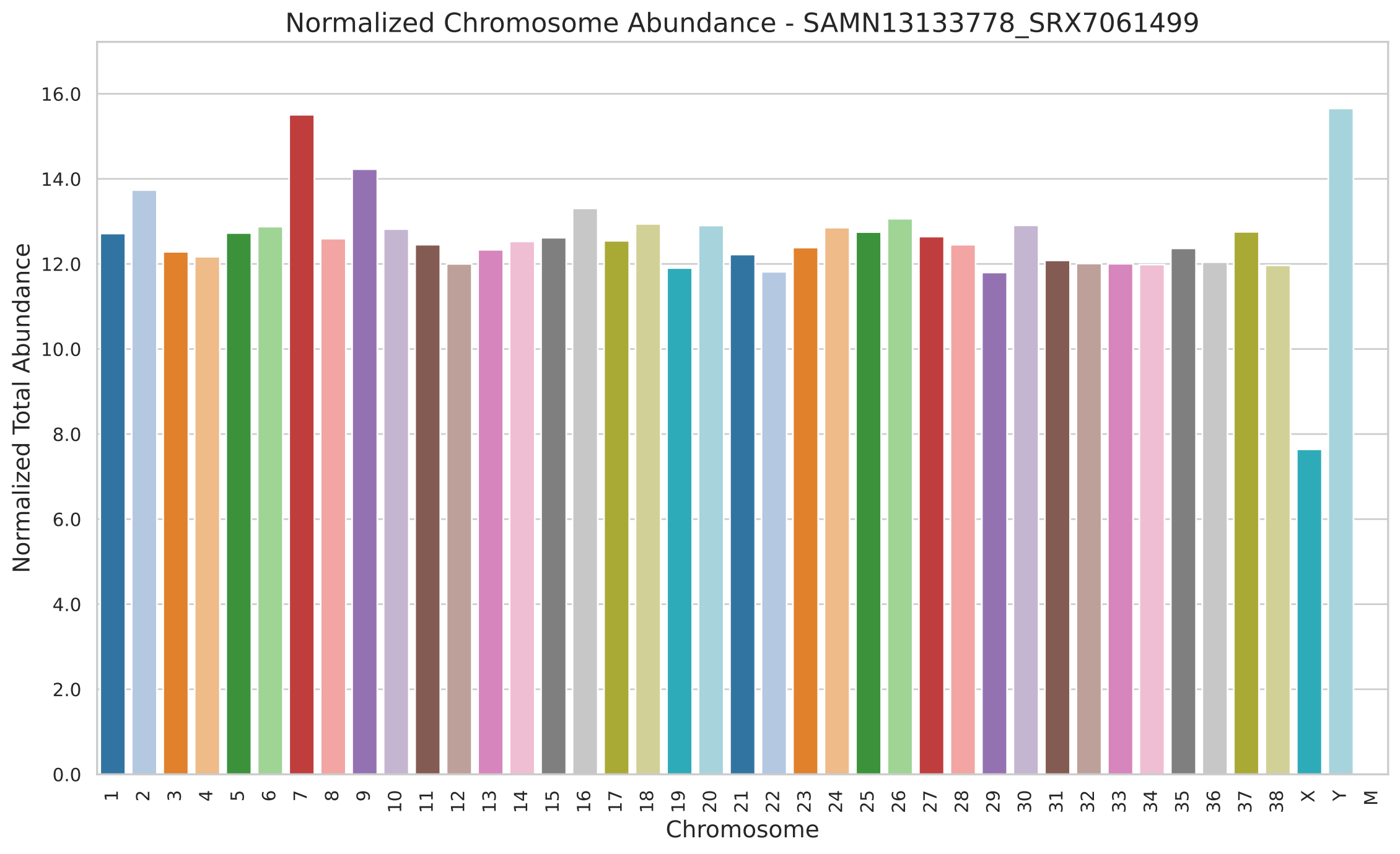

Normalized Chromosome Abundance - SAMN13133758_SRX7061512
Normalized Total Abundance
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

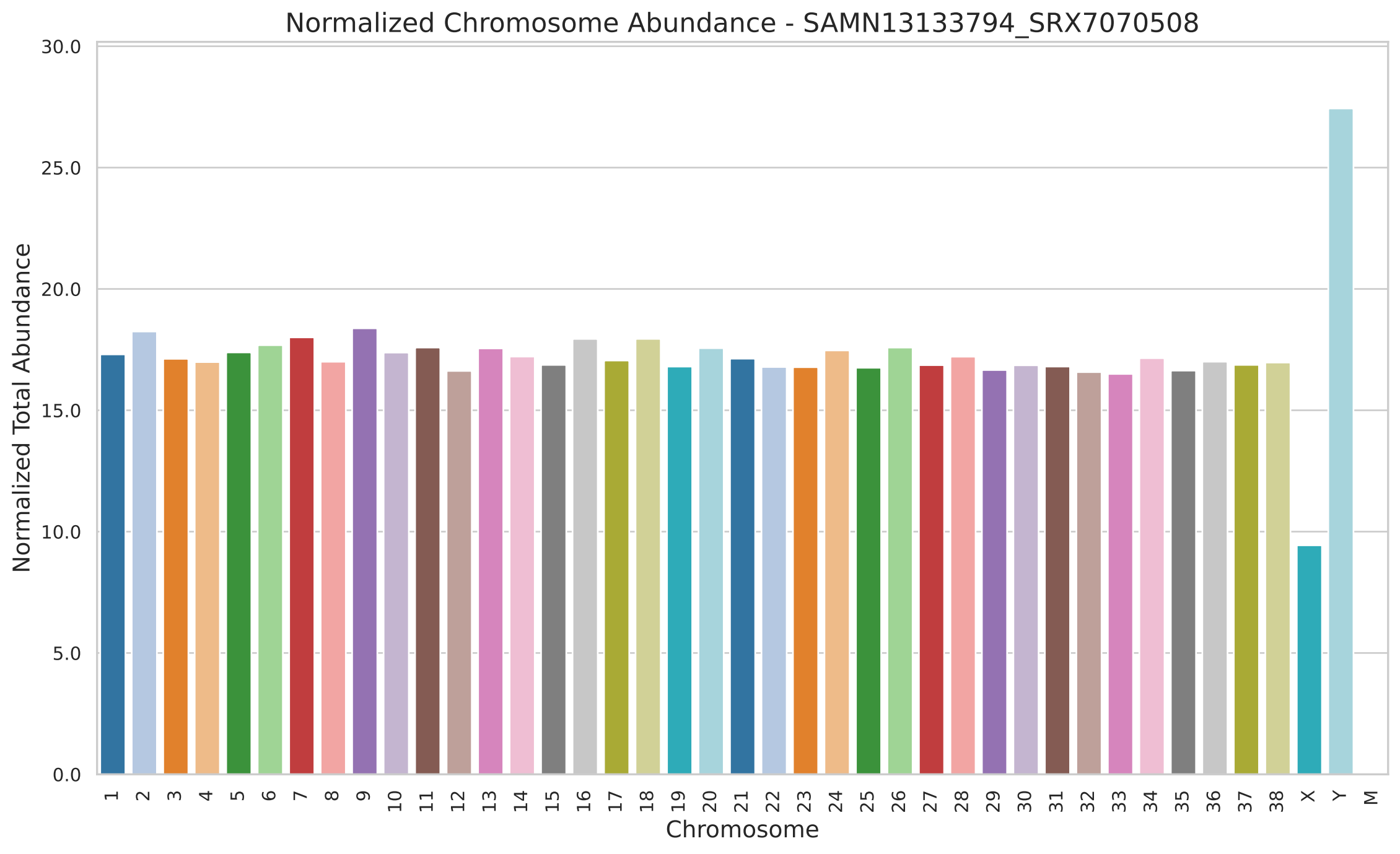

Normalized Chromosome Abundance - SAMN13133798_SRX7070505
Normalized Total Abundance
20.0
17.5
15.0
12.5
10.0
7.5
5.0
2.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

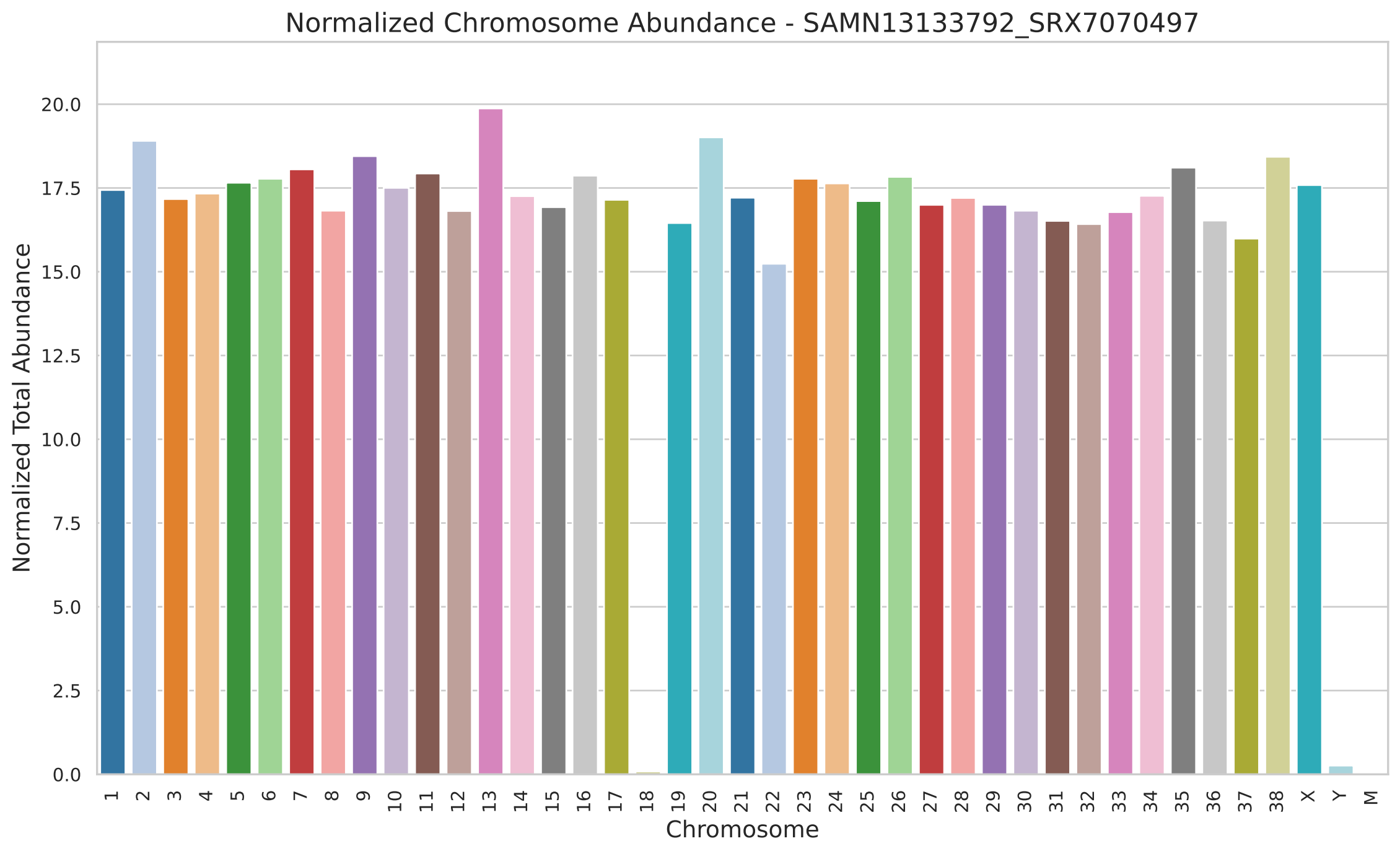

Normalized Chromosome Abundance - SAMN13133764_SRX7061473
Normalized Total Abundance
40.0
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

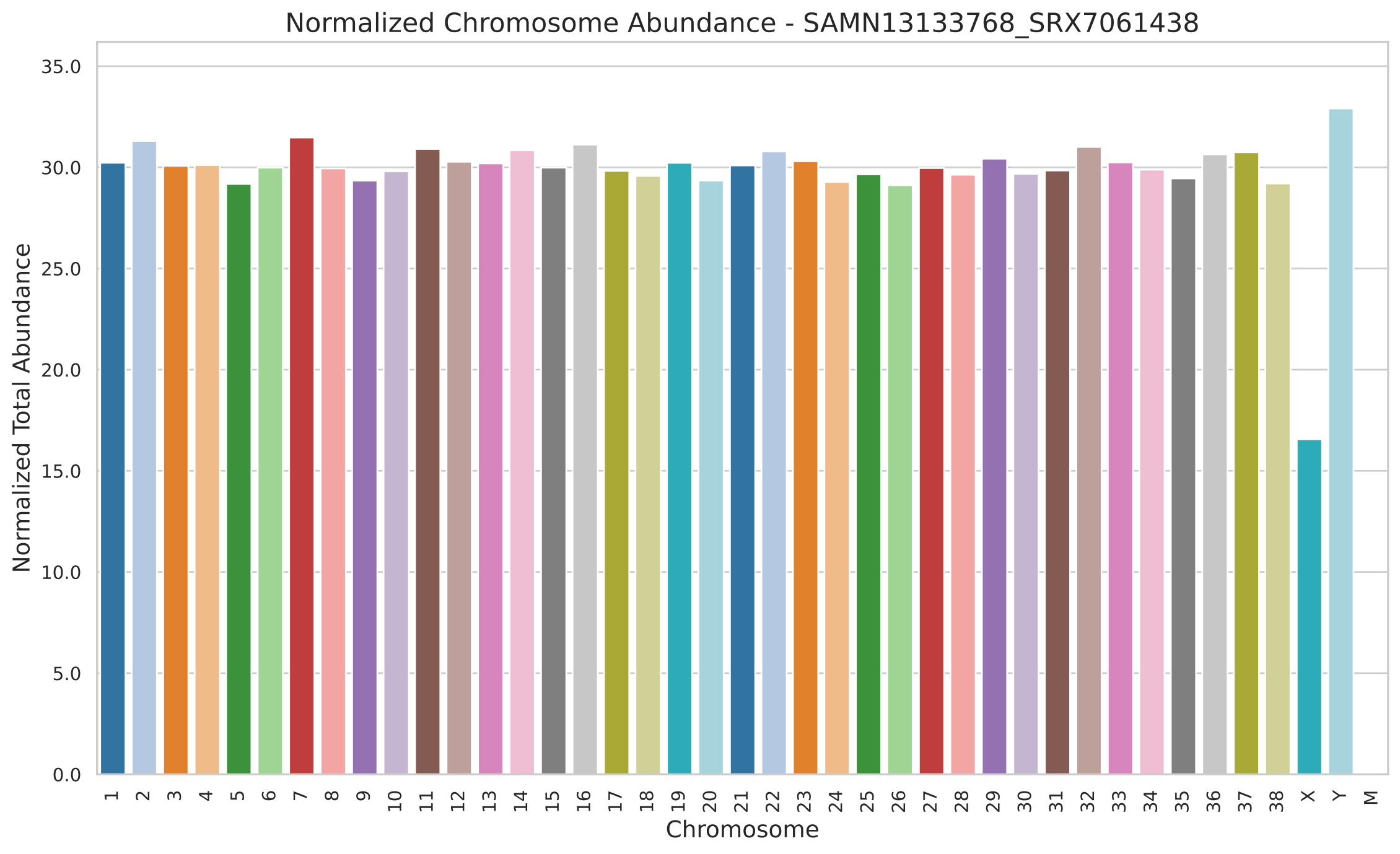

Normalized Chromosome Abundance - SAMN13133791_SRX7070495
Normalized Total Abundance
40.0
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

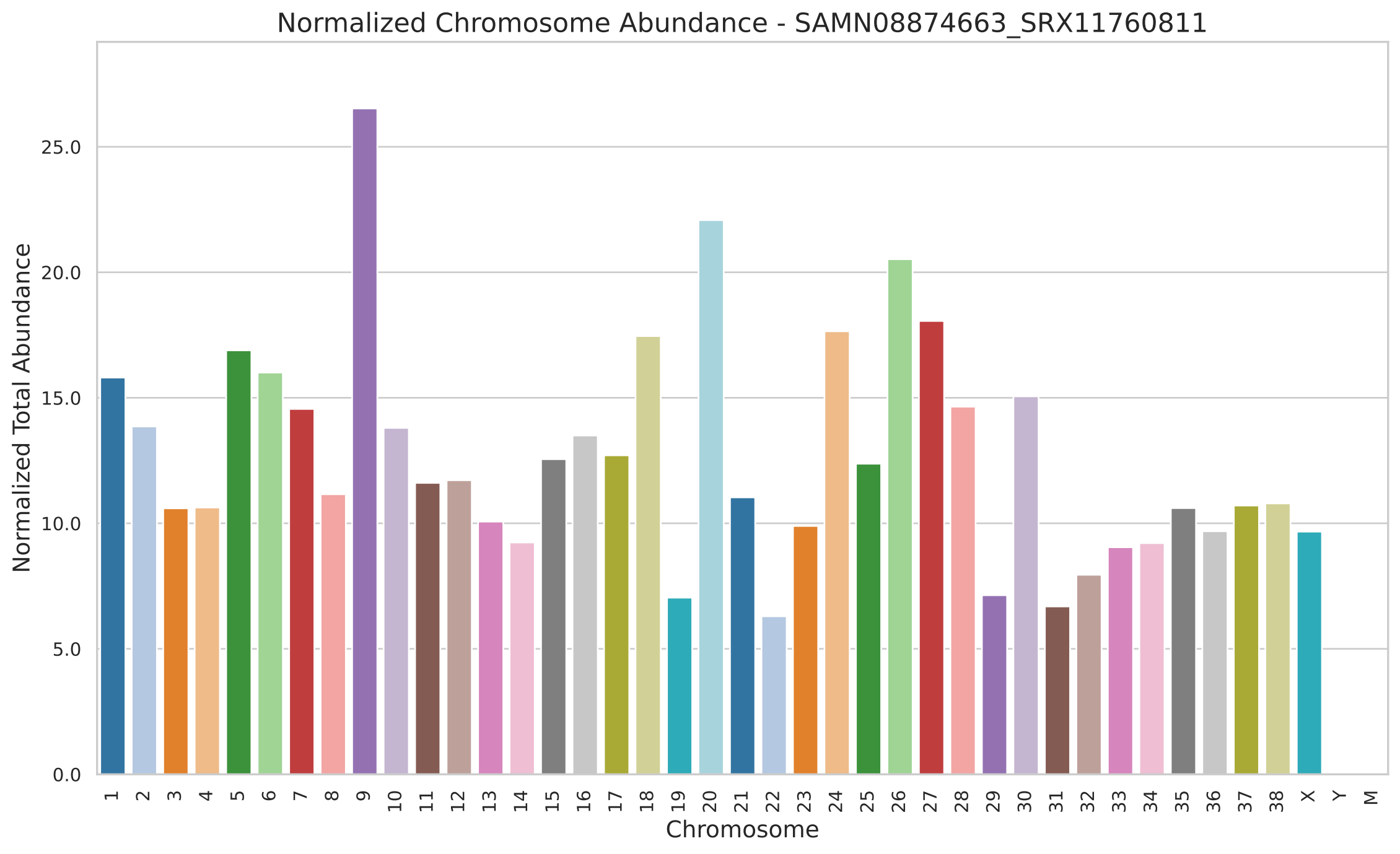

Normalized Chromosome Abundance - SAMN13133795_SRX7070501
Normalized Total Abundance
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5
20.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

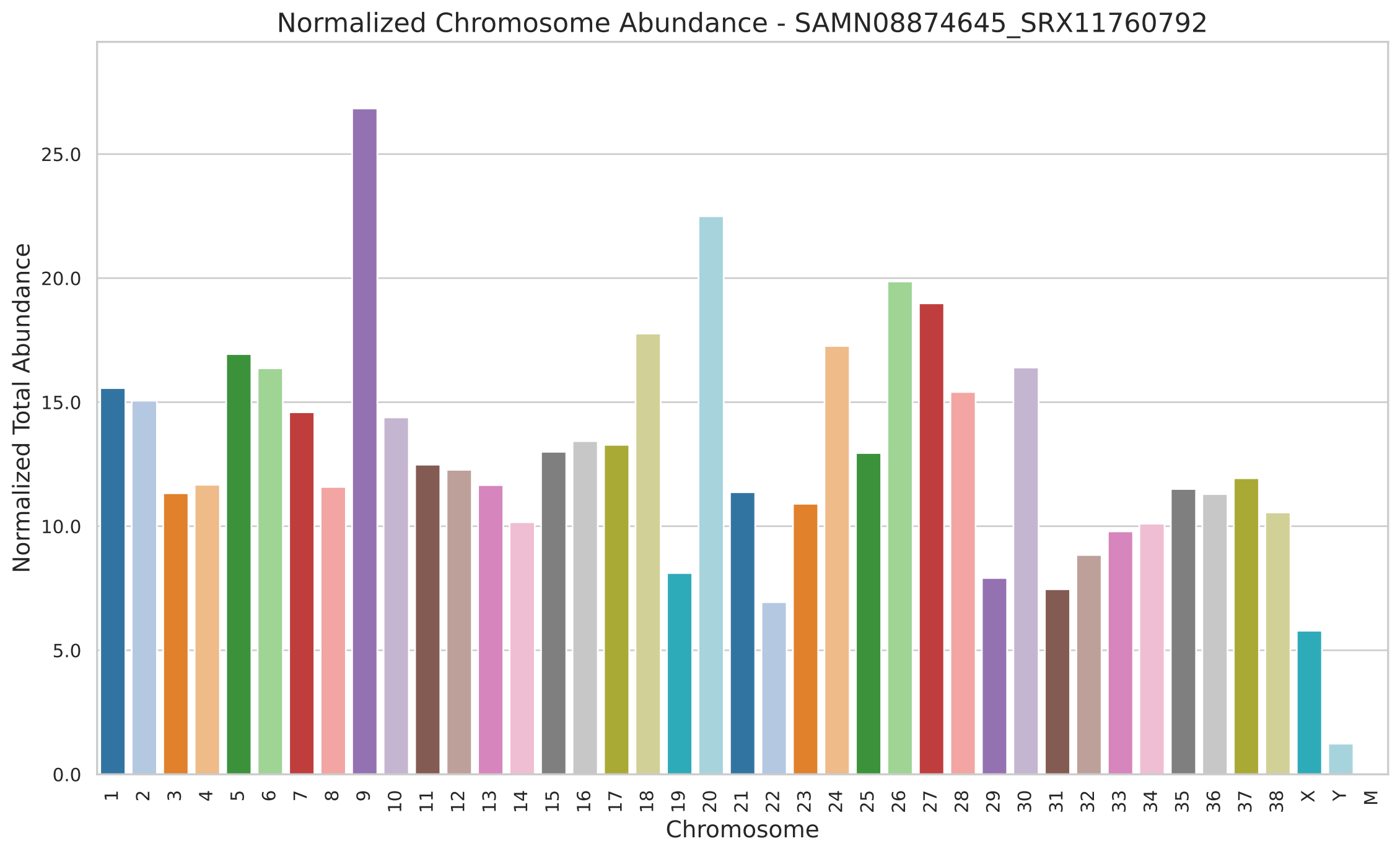

Normalized Chromosome Abundance - SAMN13133778_SRX7061499
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
12.0
14.0
16.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

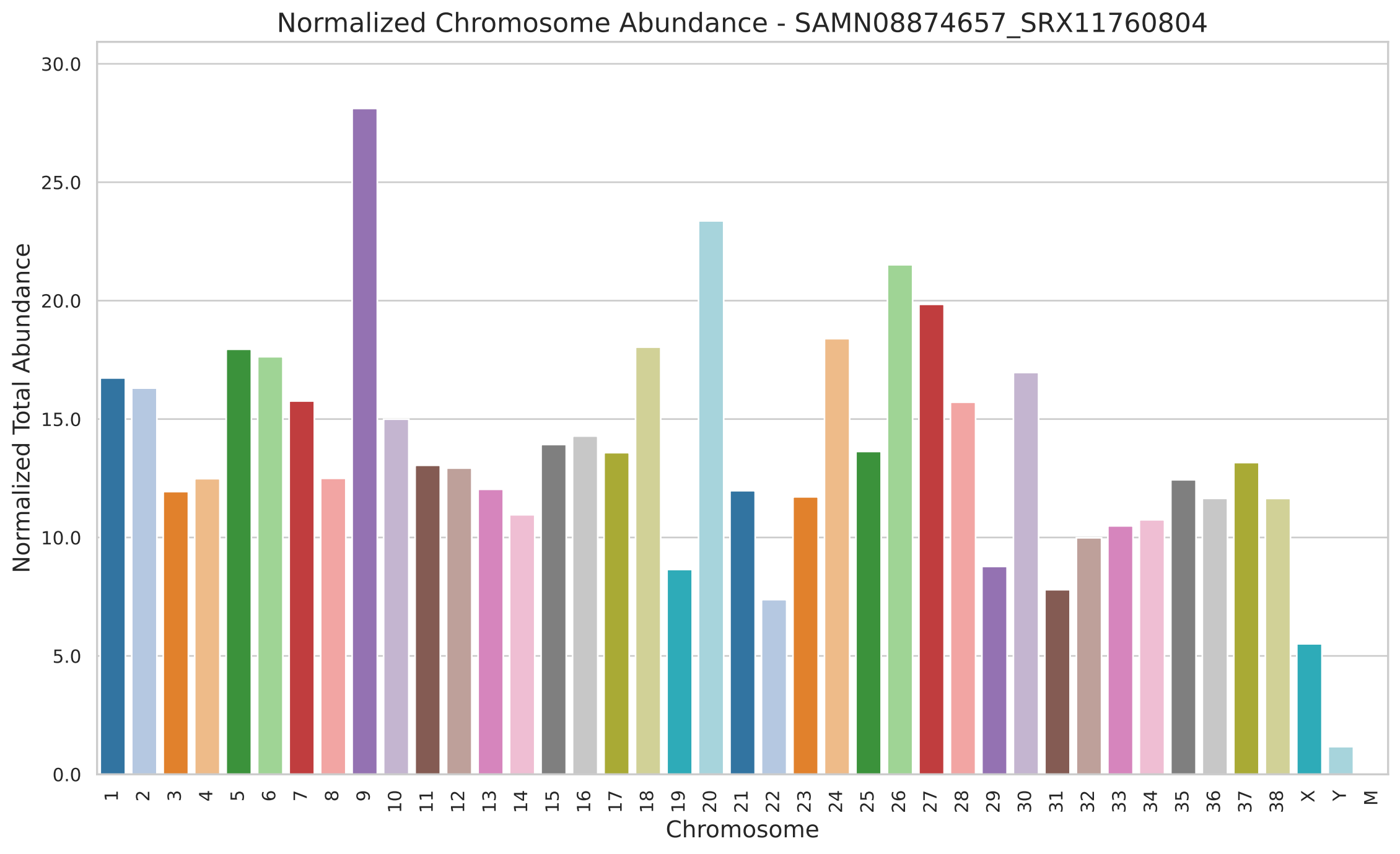

Normalized Chromosome Abundance - SAMN13133794_SRX7070508
Normalized Total Abundance
30.0
25.0
20.0
15.0
10.0
5.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

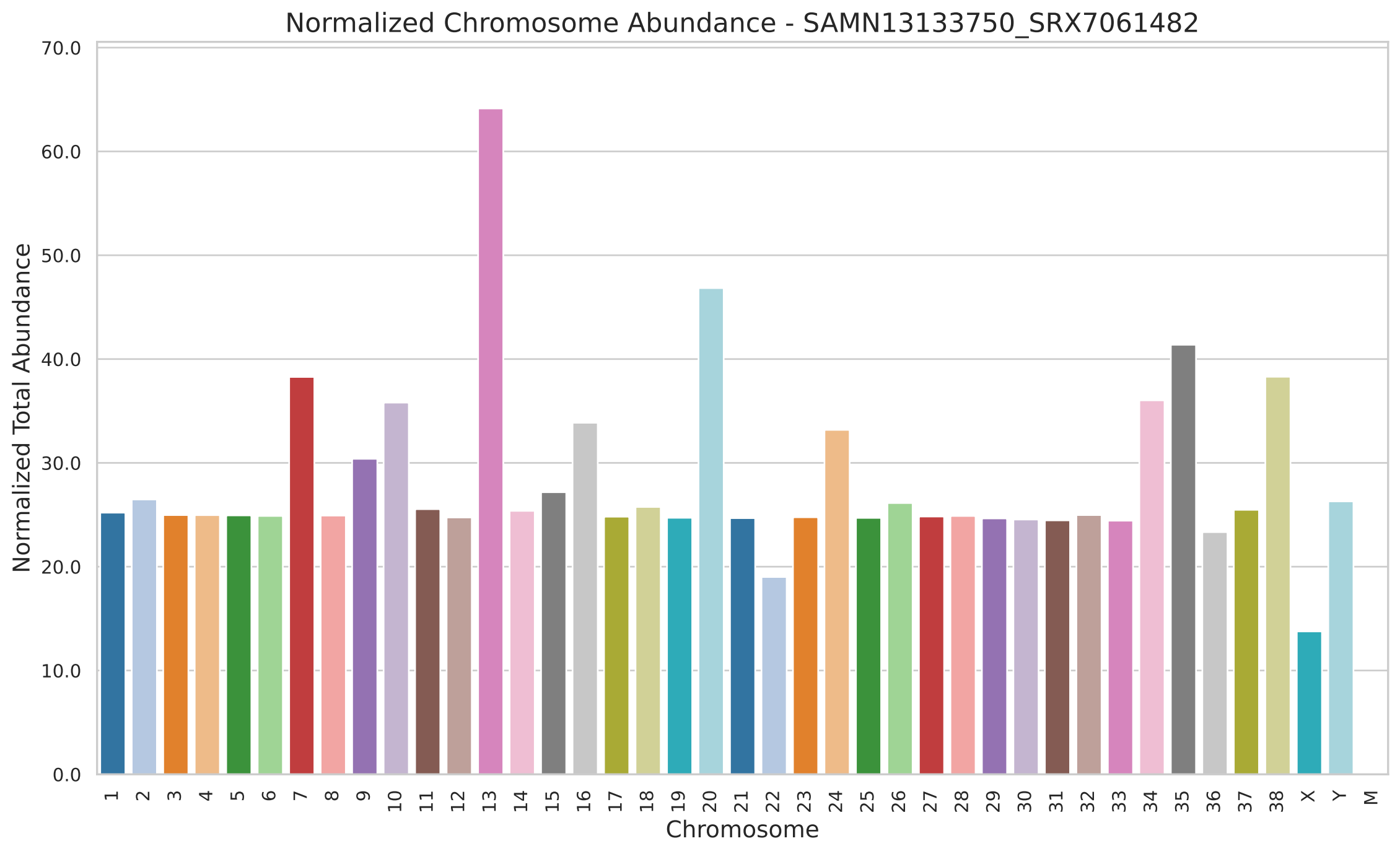

Normalized Chromosome Abundance - SAMN13133792_SRX7070497
Normalized Total Abundance
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5
20.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

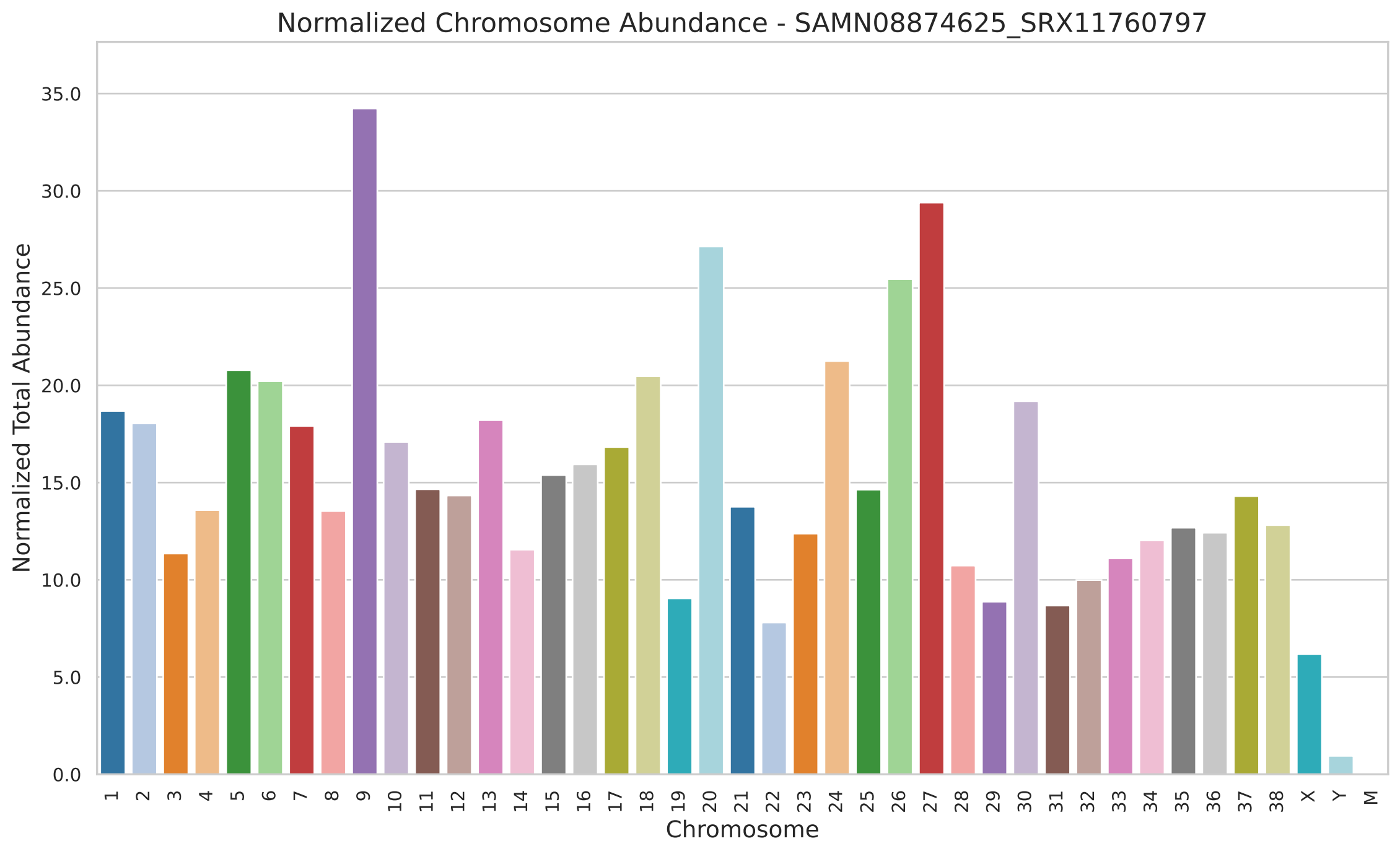

Normalized Chromosome Abundance - SAMN13133768_SRX7061438
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
35.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

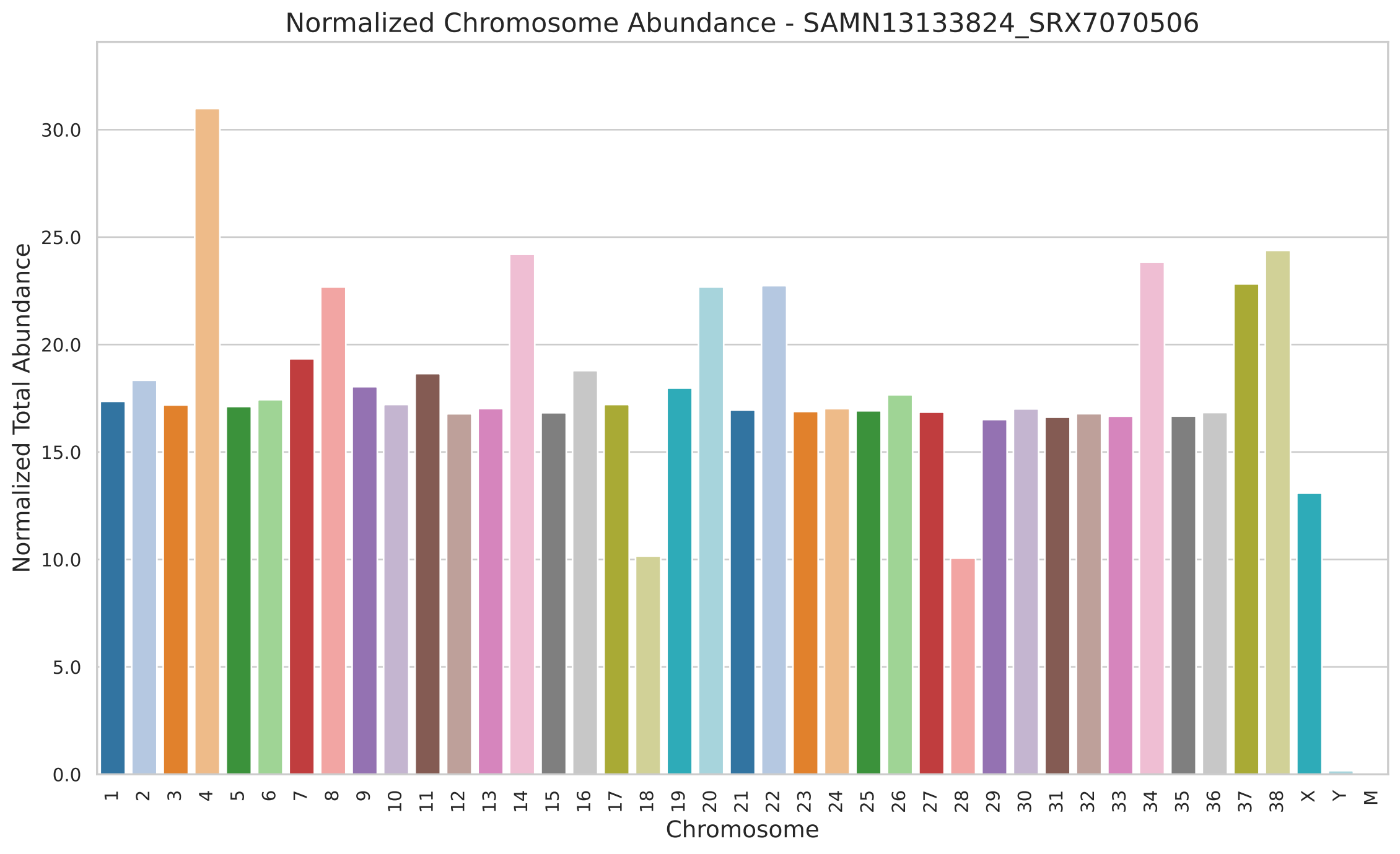

Normalized Chromosome Abundance - SAMN08874663_SRX11760811
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

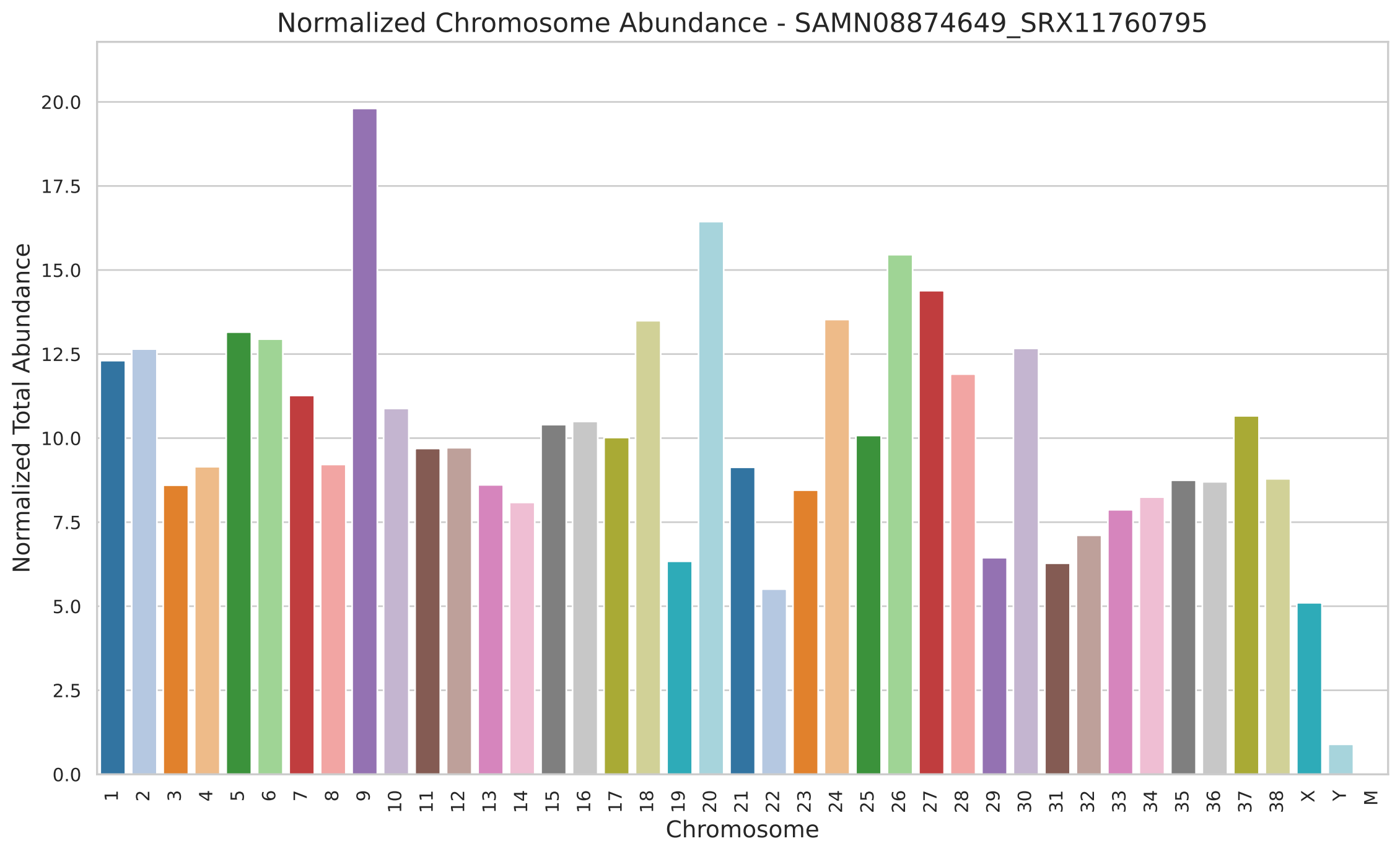

Normalized Chromosome Abundance - SAMN08874645_SRX11760792
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

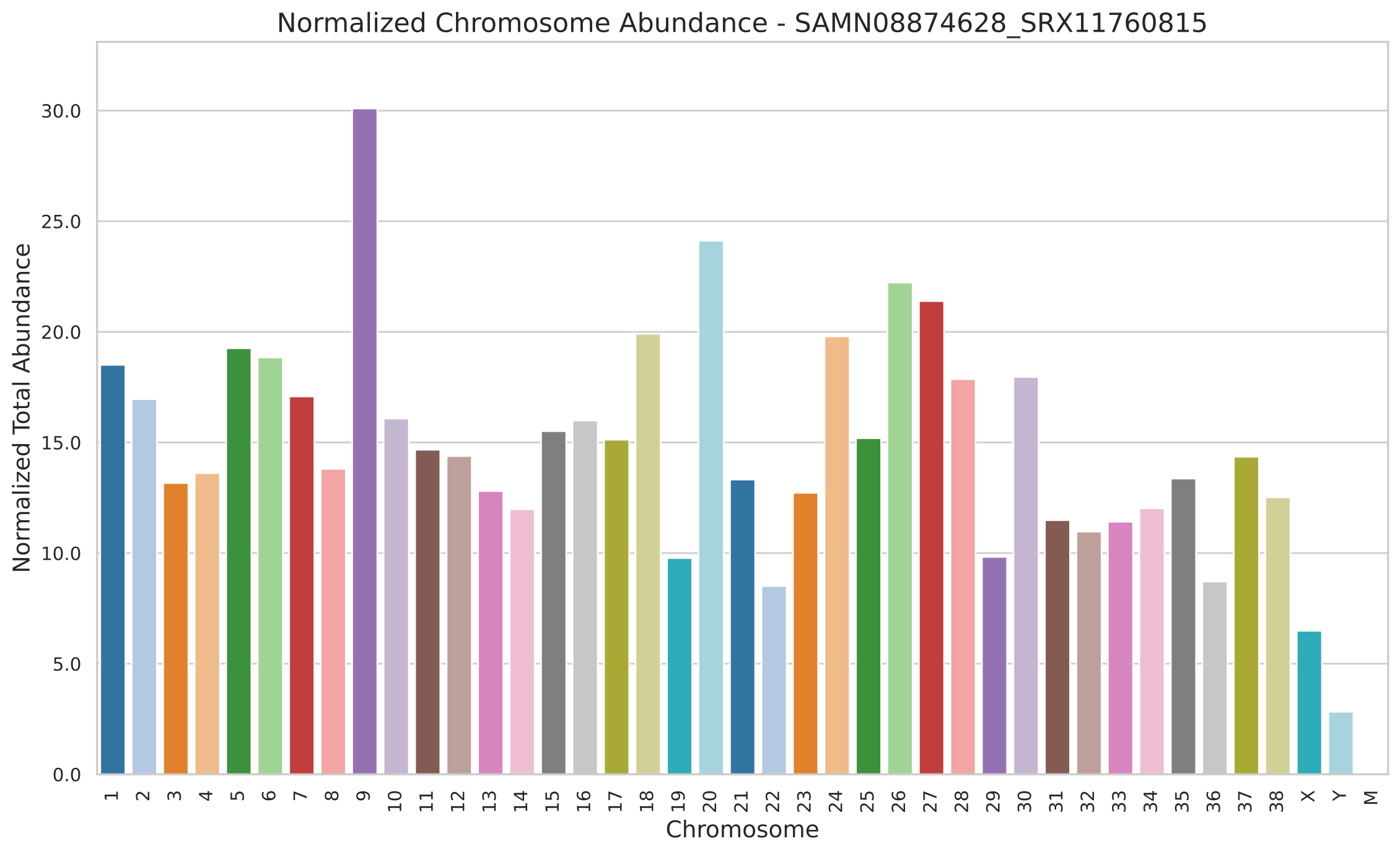

Normalized Chromosome Abundance - SAMN08874657_SRX11760804
Normalized Total Abundance
30.0
25.0
20.0
15.0
10.0
5.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

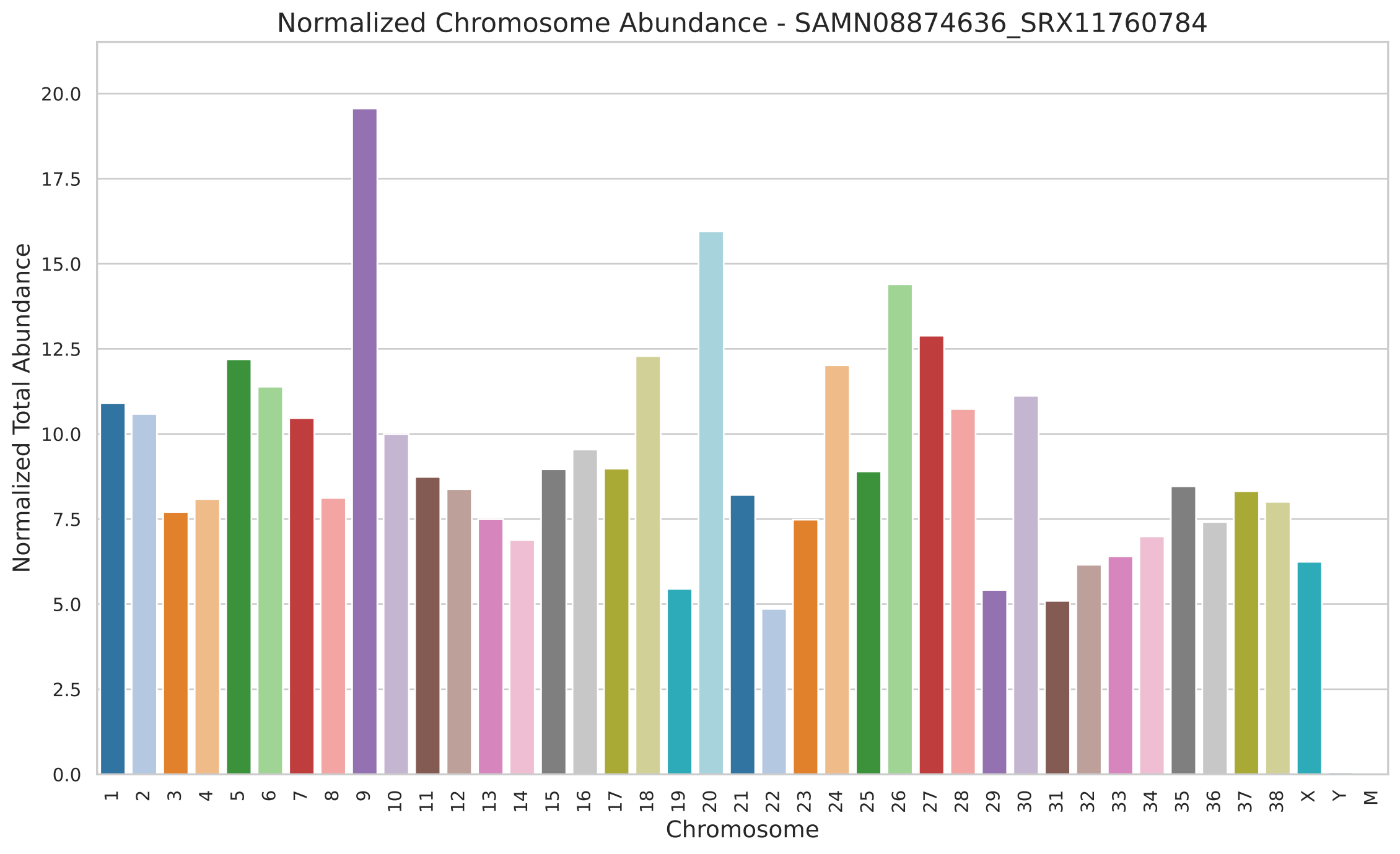

Normalized Chromosome Abundance - SAMN13133750_SRX7061482
Normalized Total Abundance
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

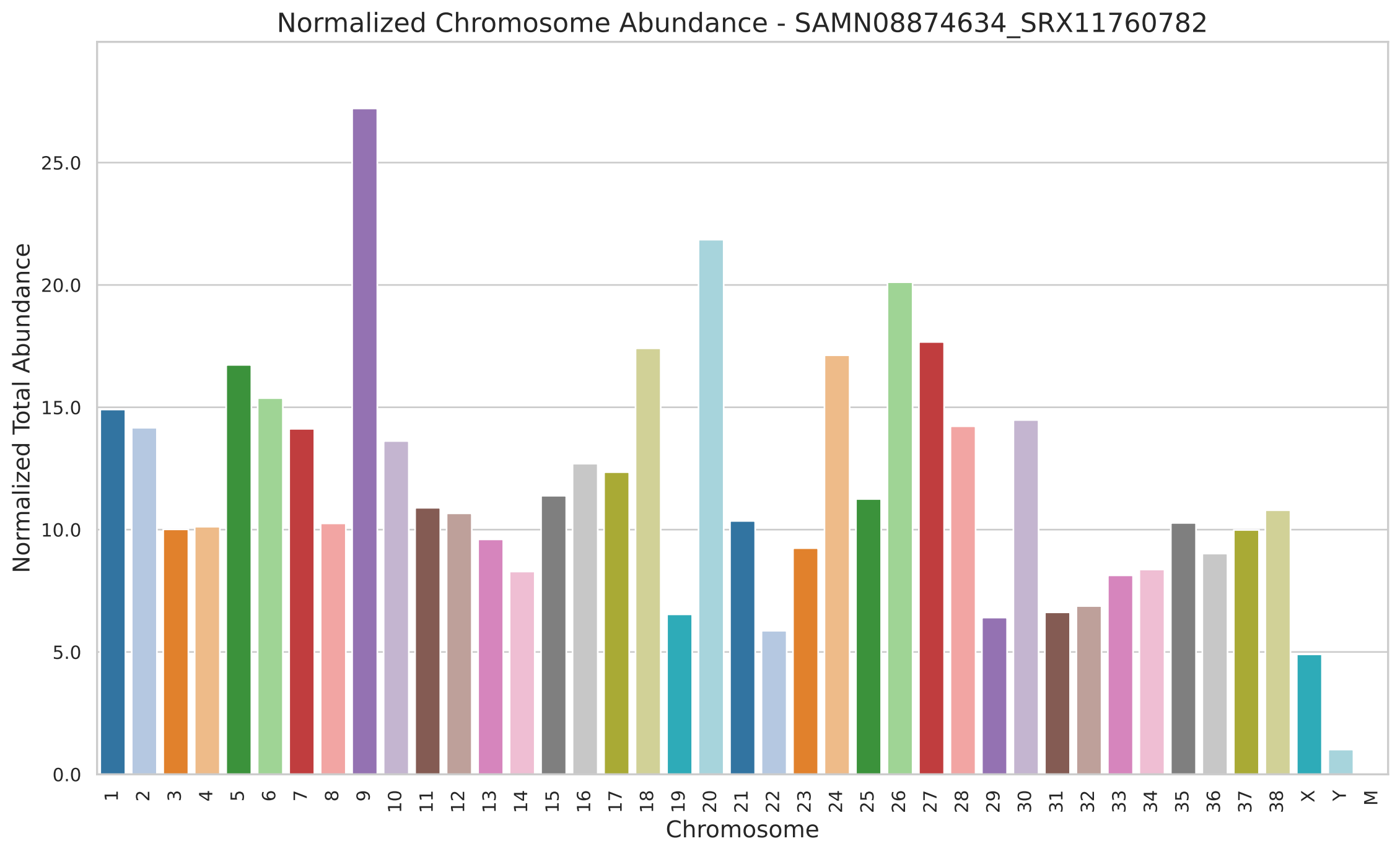

Normalized Chromosome Abundance - SAMN08874625_SRX11760797
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
35.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

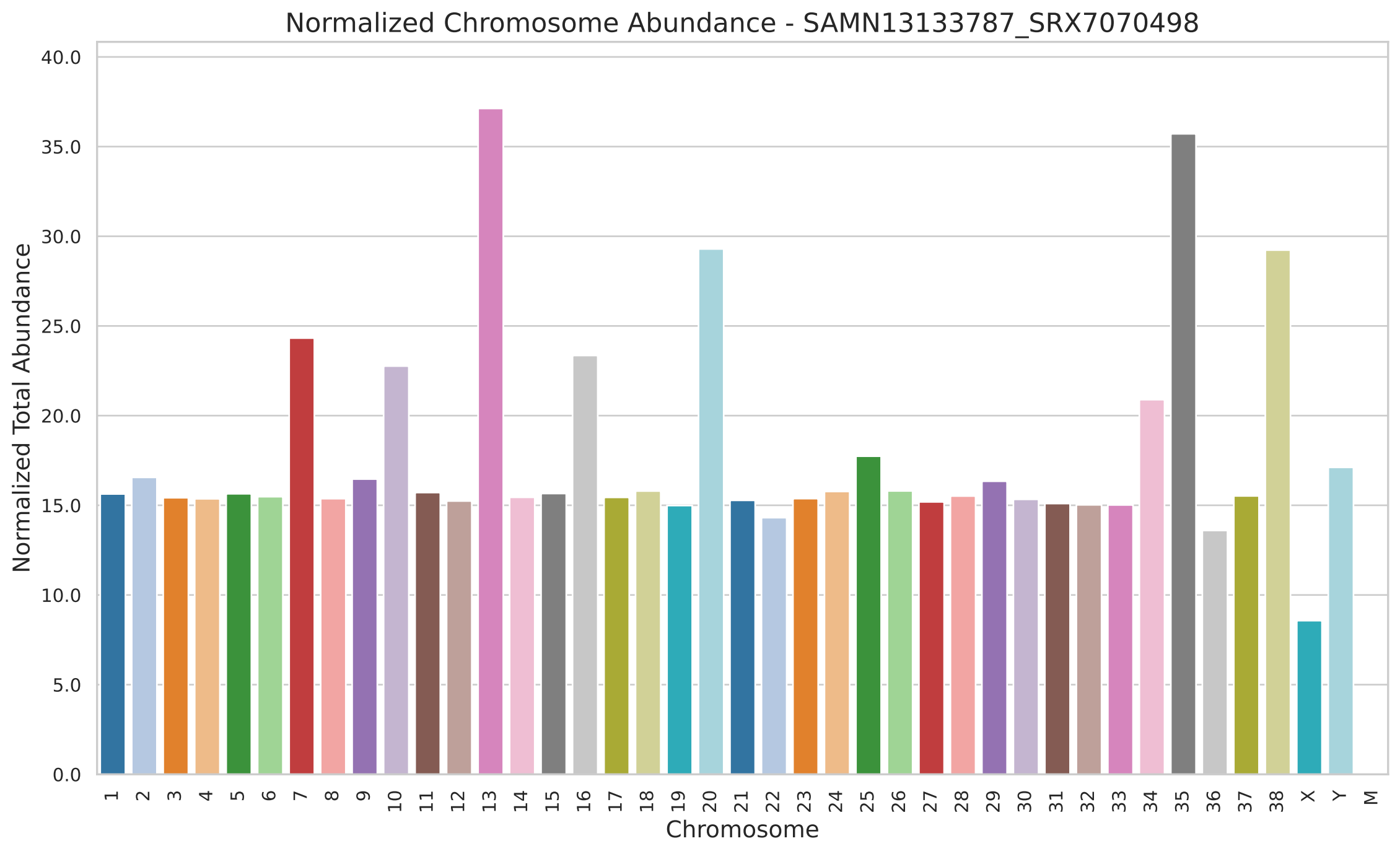

Normalized Chromosome Abundance - SAMN13133824_SRX7070506
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

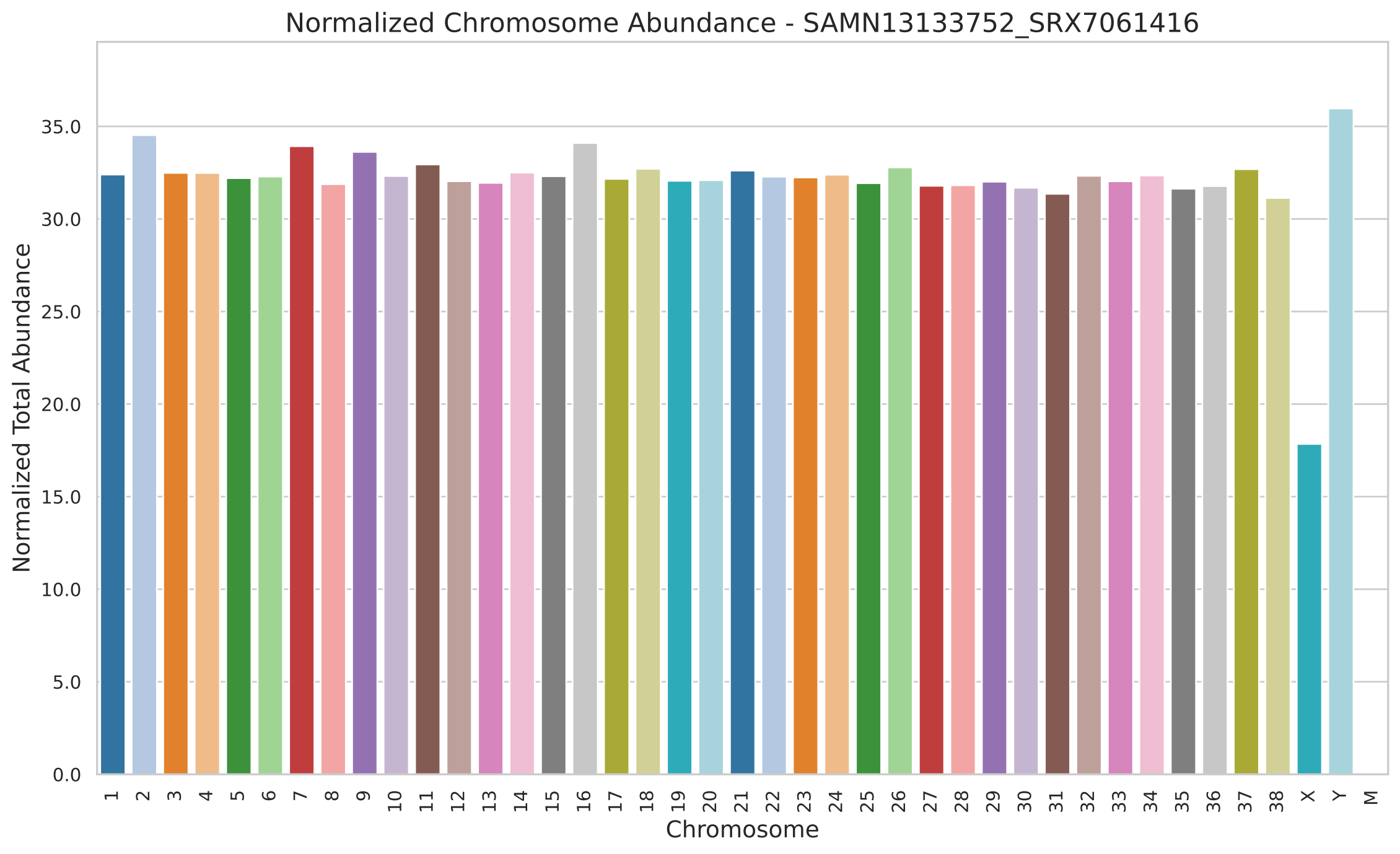

Normalized Chromosome Abundance - SAMN08874649_SRX11760795
Normalized Total Abundance
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5
20.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

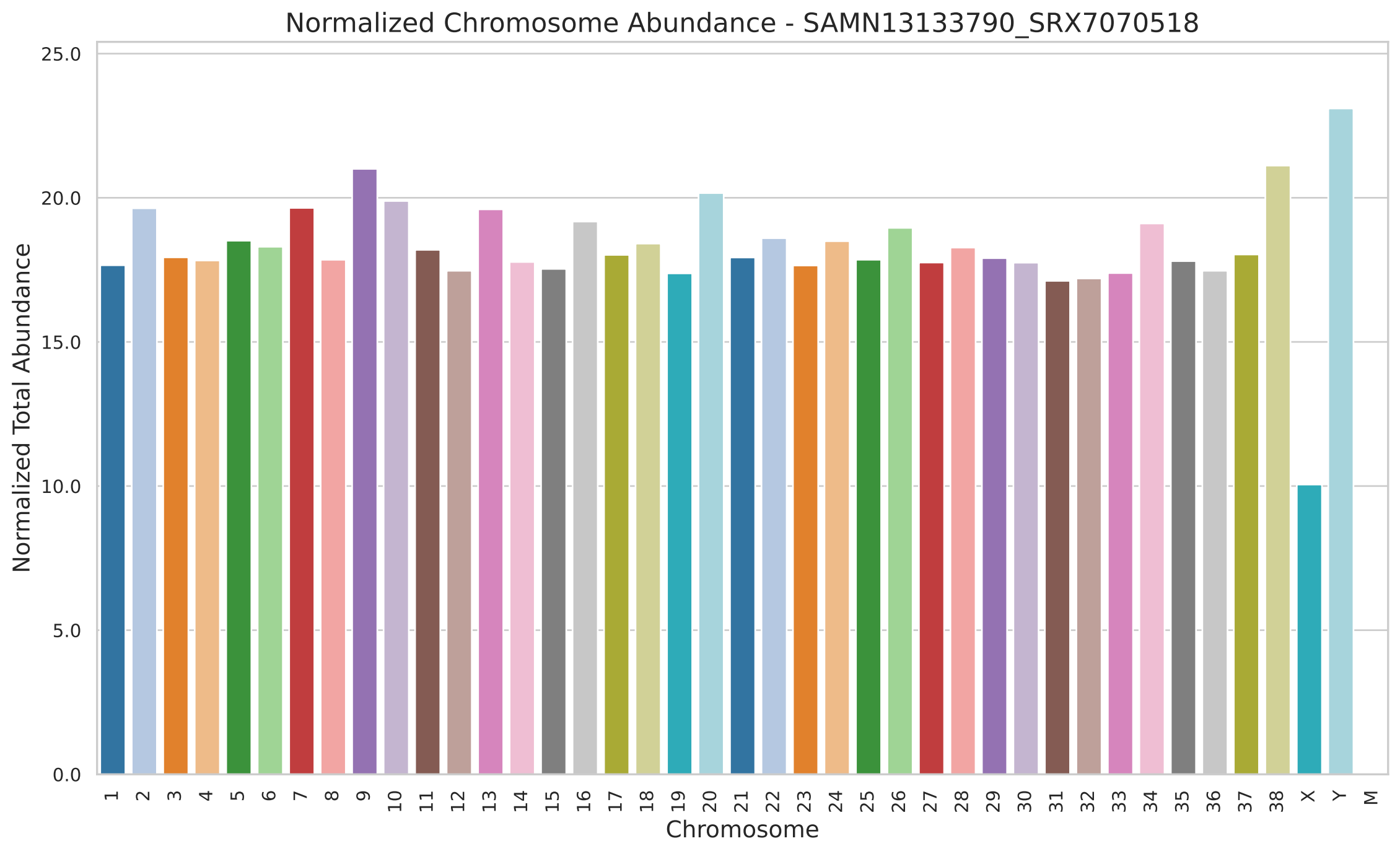

Normalized Chromosome Abundance - SAMN08874628_SRX11760815
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

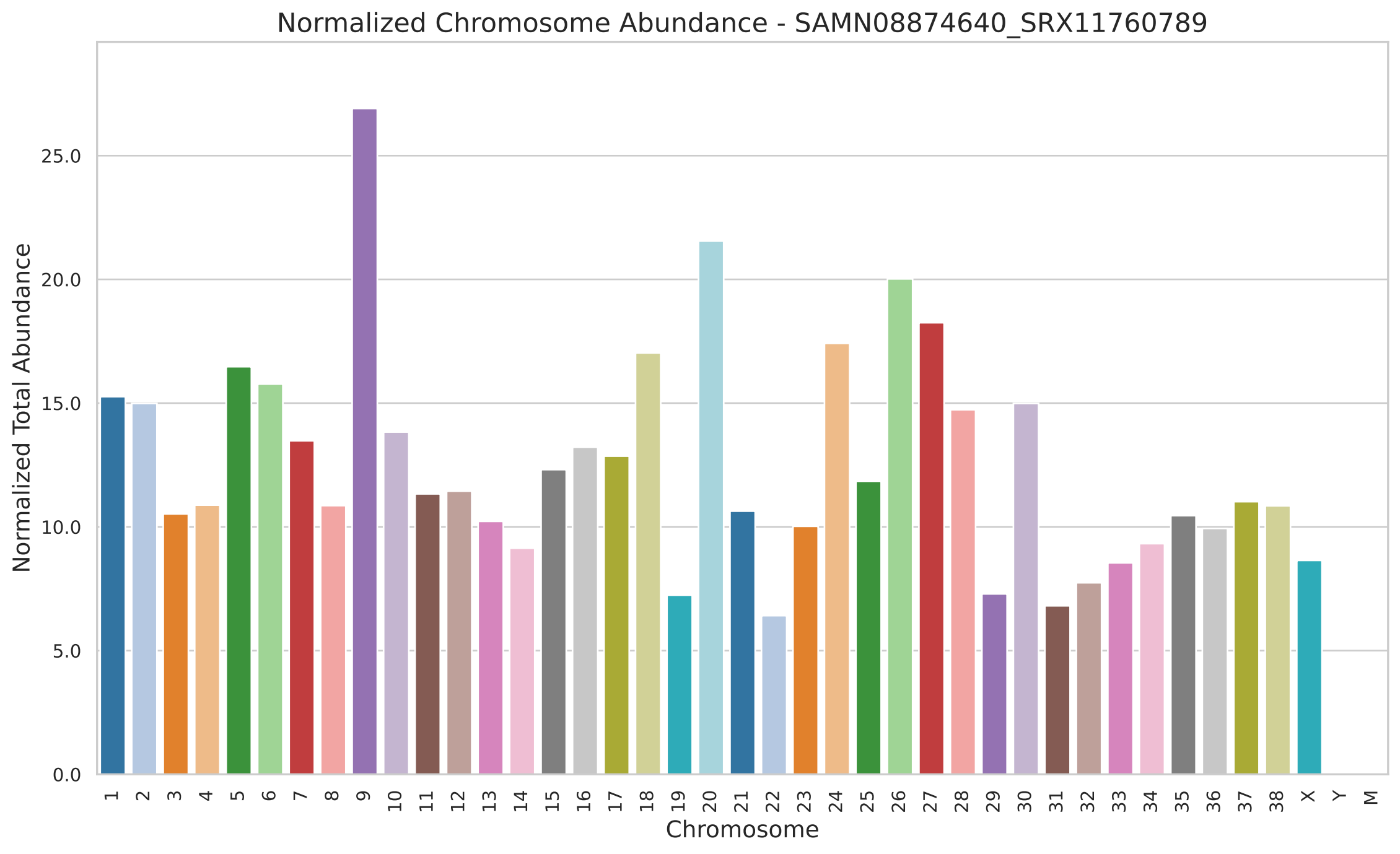

Normalized Chromosome Abundance - SAMN08874636_SRX11760784
Normalized Total Abundance
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5
20.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

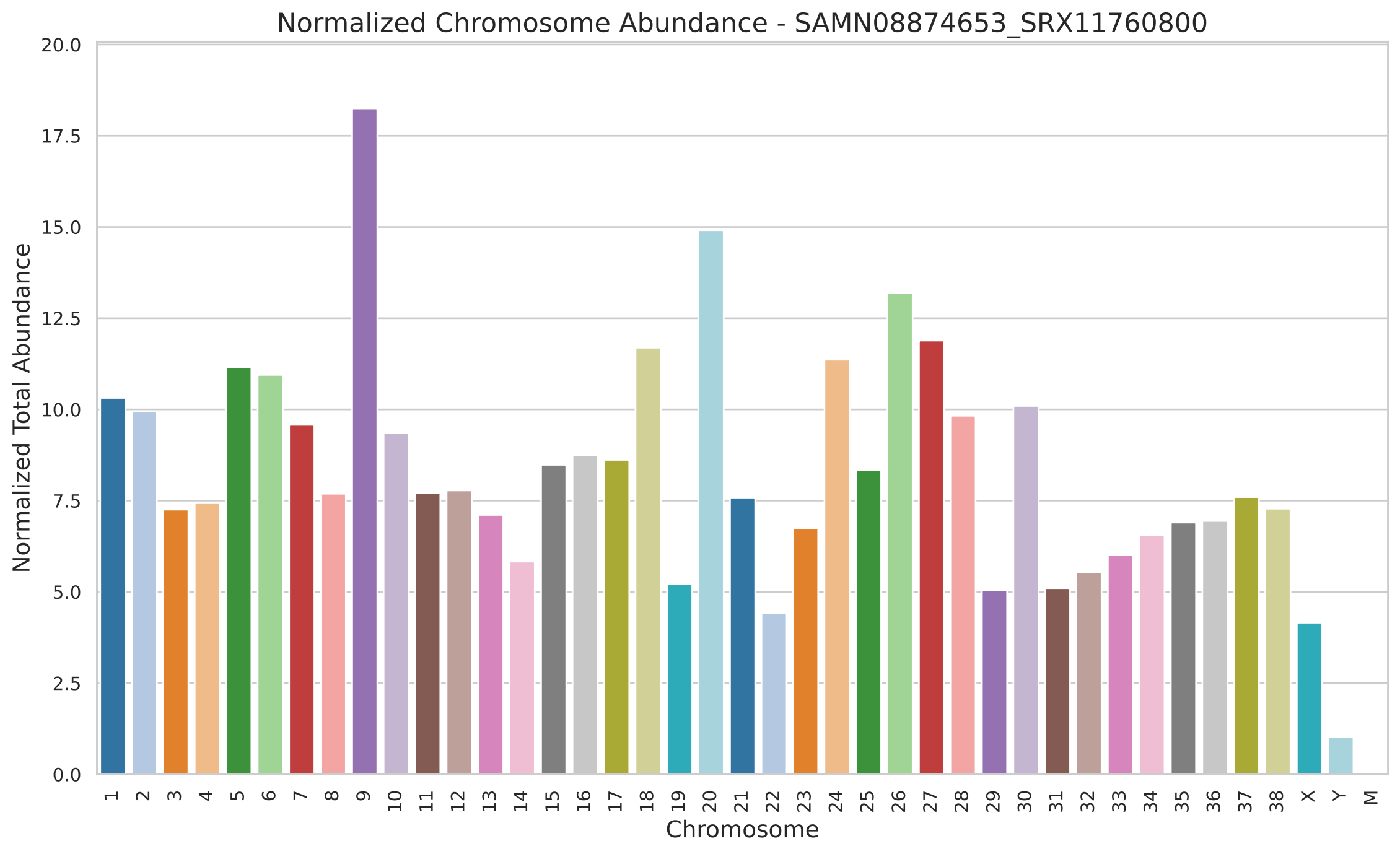

Normalized Chromosome Abundance - SAMN08874634_SRX11760782
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

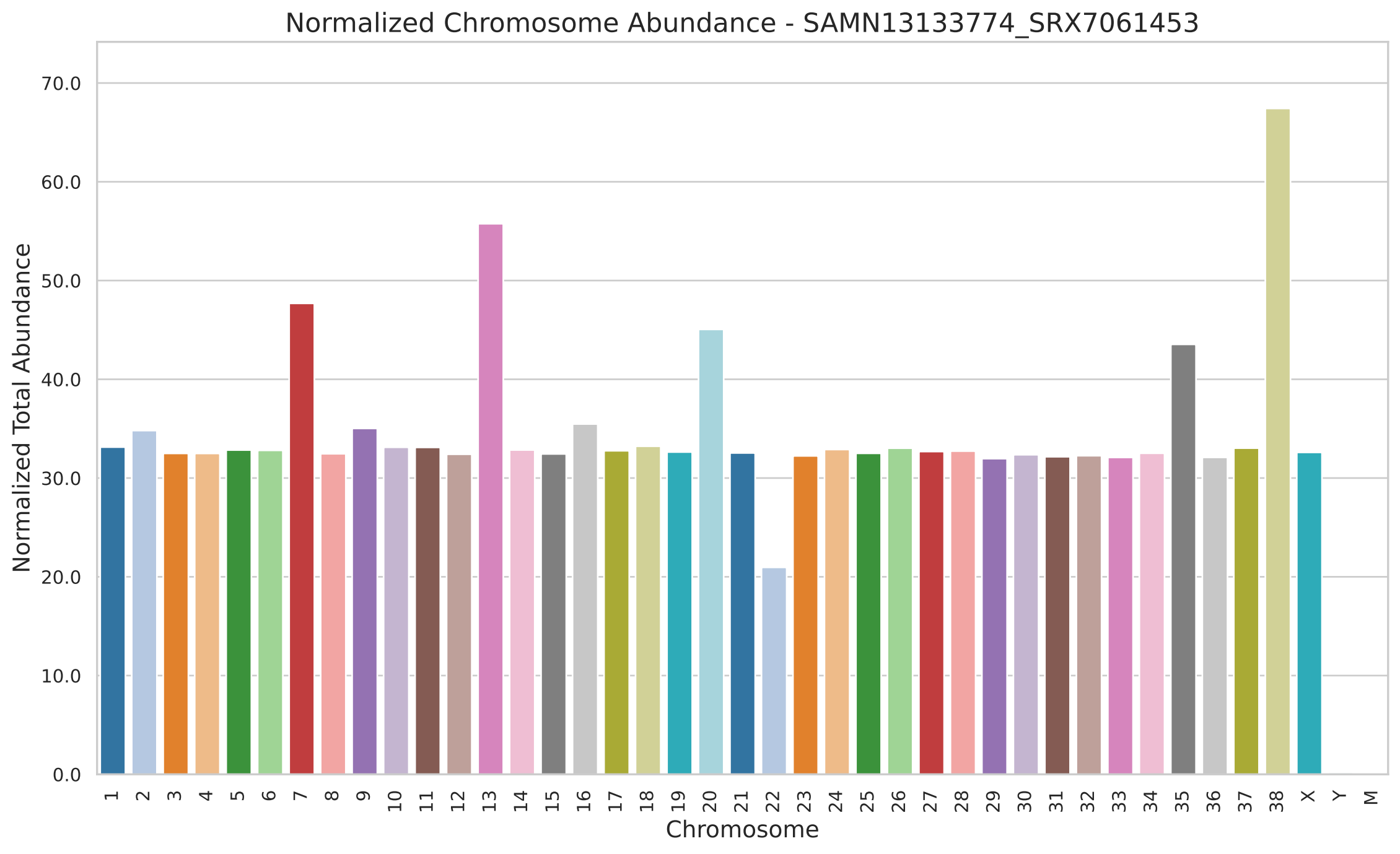

Normalized Chromosome Abundance - SAMN13133787_SRX7070498
Normalized Total Abundance
40.0
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

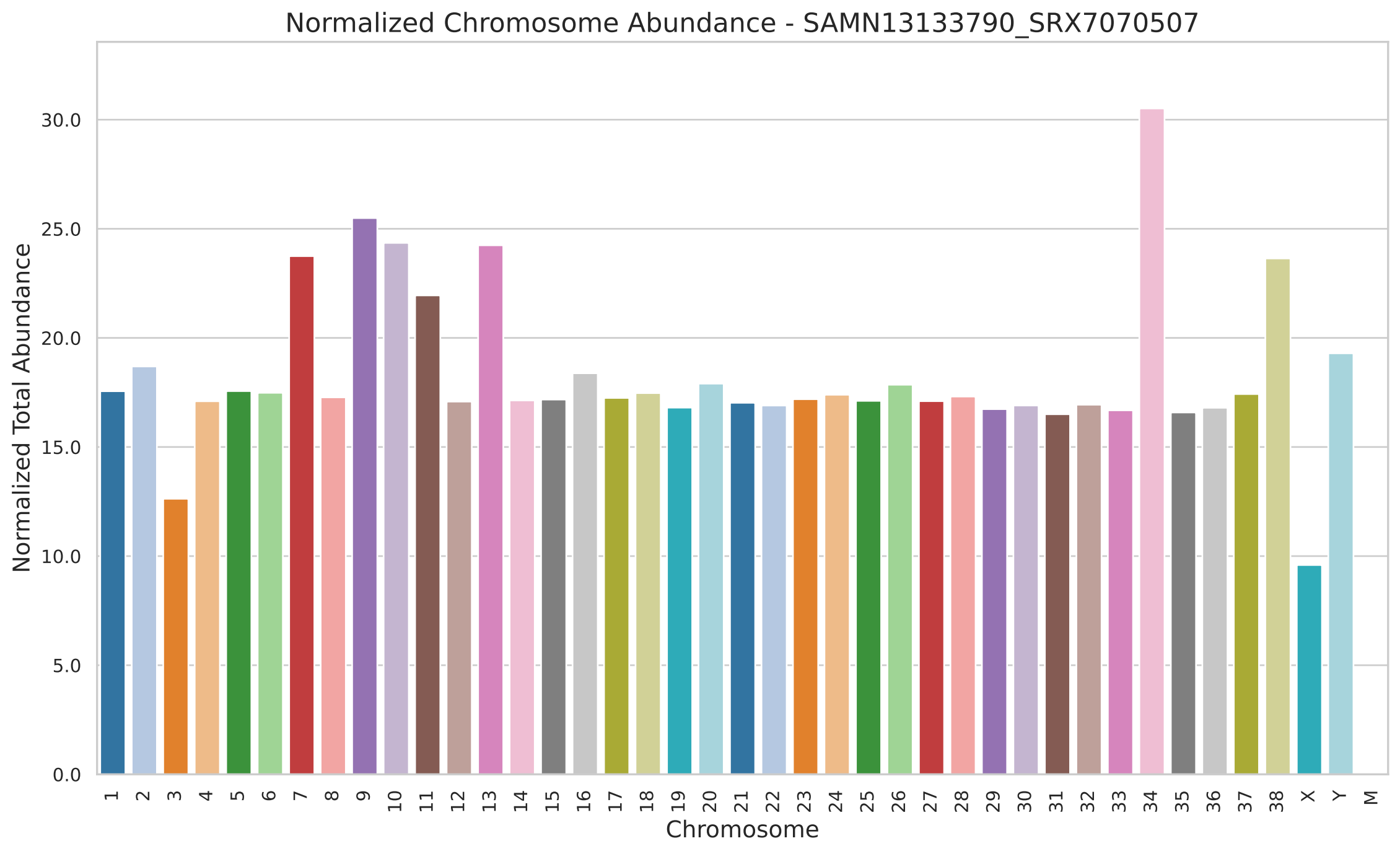

Normalized Chromosome Abundance - SAMN13133752_SRX7061416
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
35.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

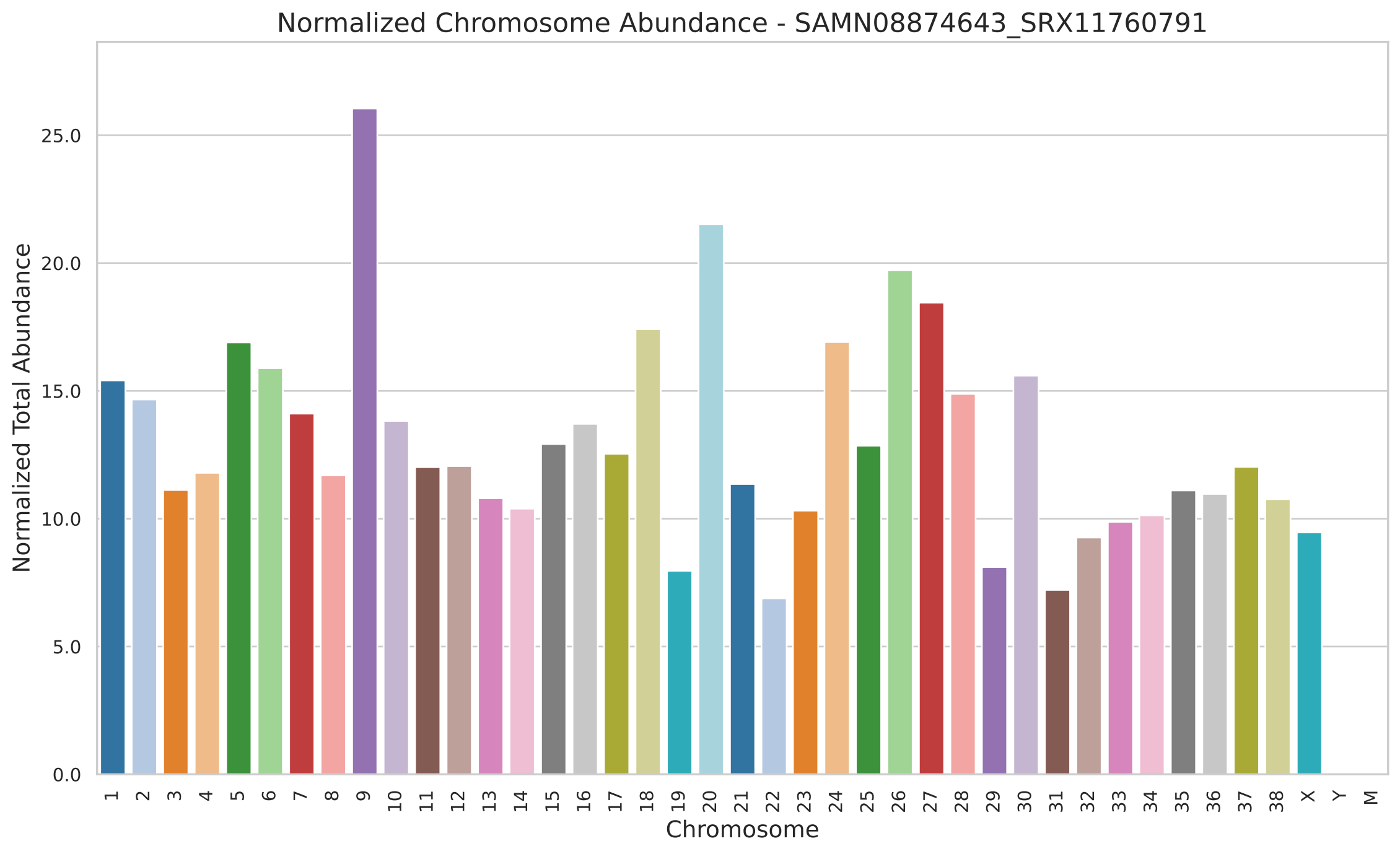

Normalized Chromosome Abundance - SAMN13133790_SRX7070518
Normalized Total Abundance
25.0
20.0
15.0
10.0
5.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

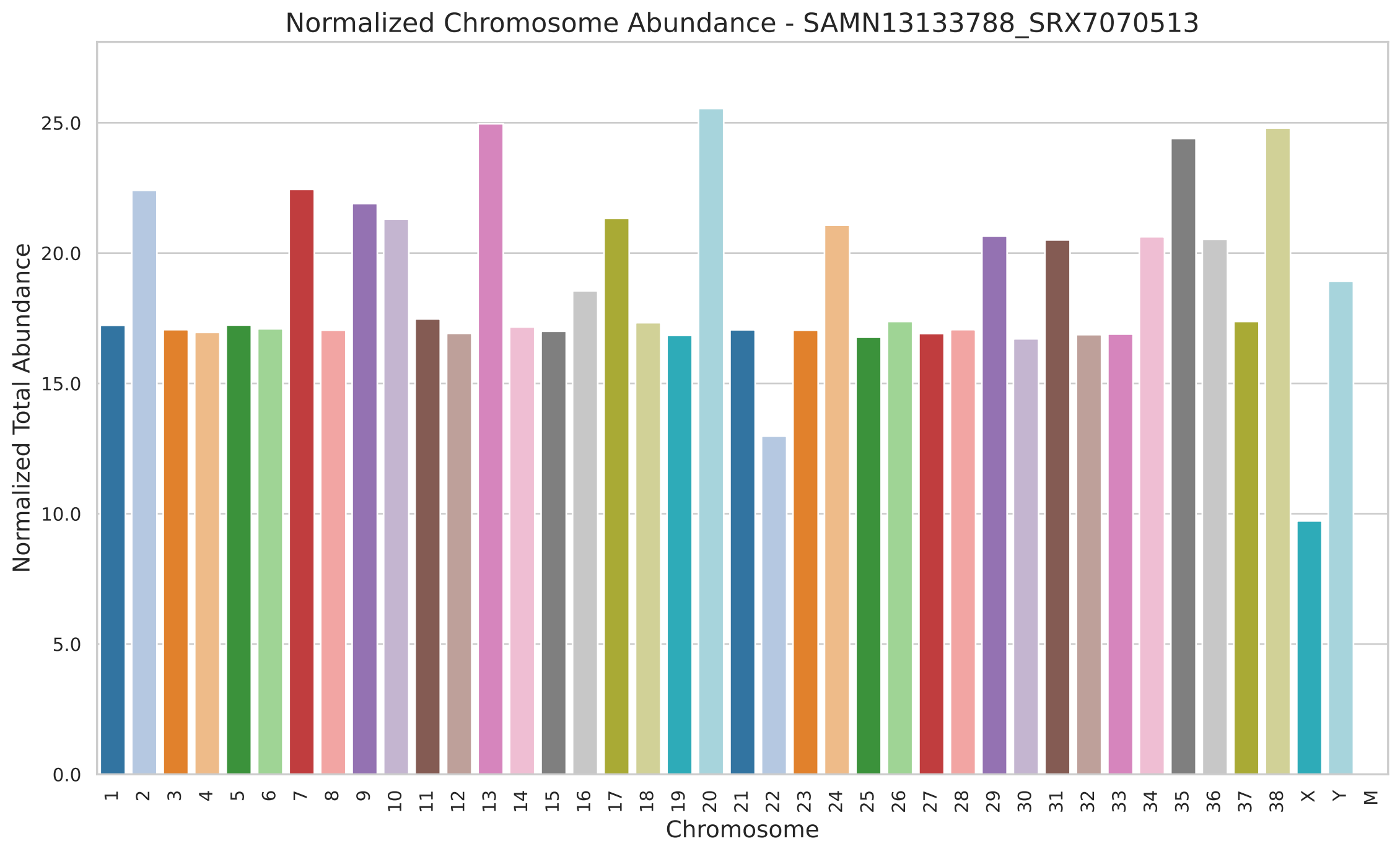

Normalized Chromosome Abundance - SAMN08874640_SRX11760789
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

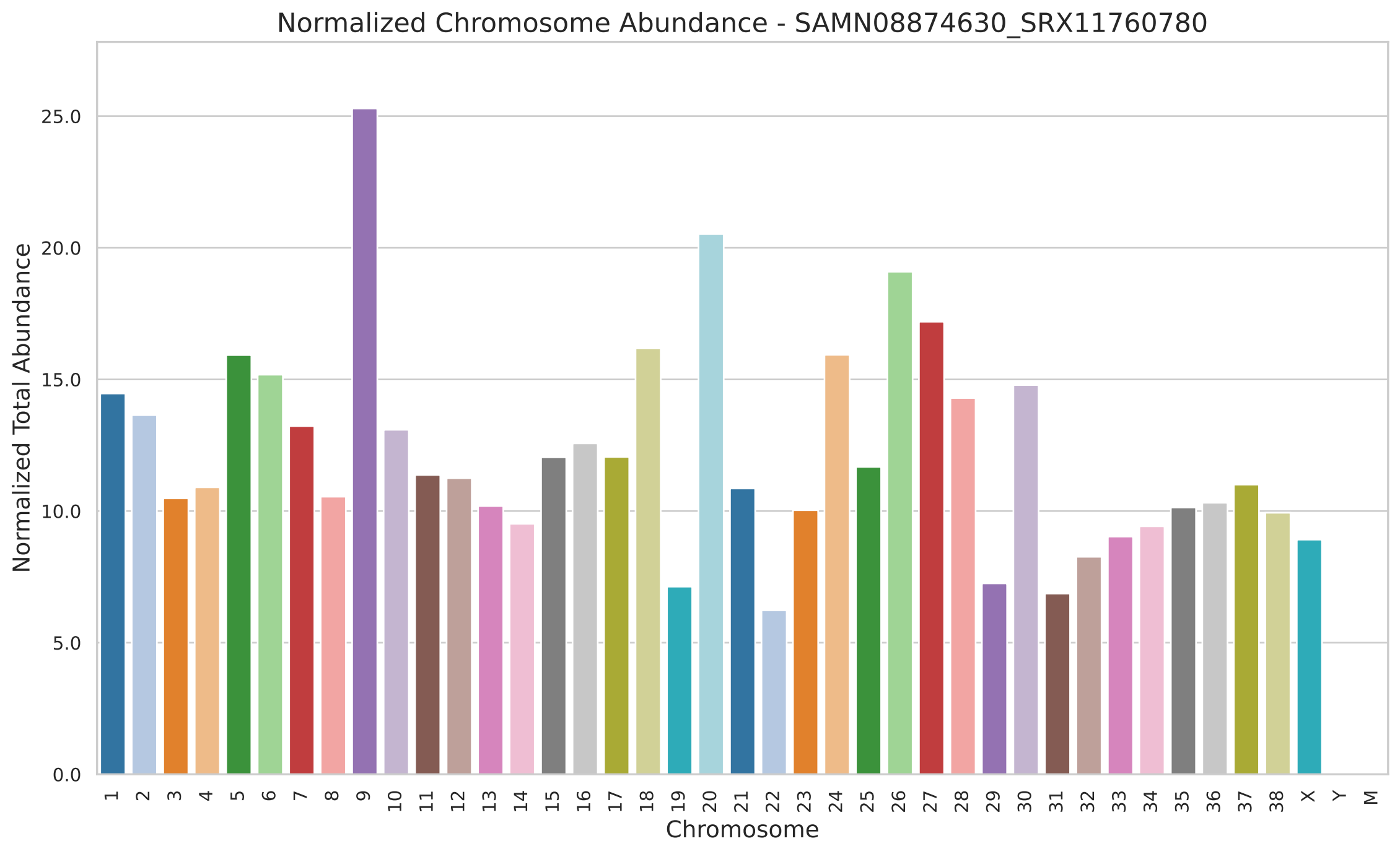

Normalized Chromosome Abundance - SAMN08874653_SRX11760800
Normalized Total Abundance
20.0
17.5
15.0
12.5
10.0
7.5
5.0
2.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

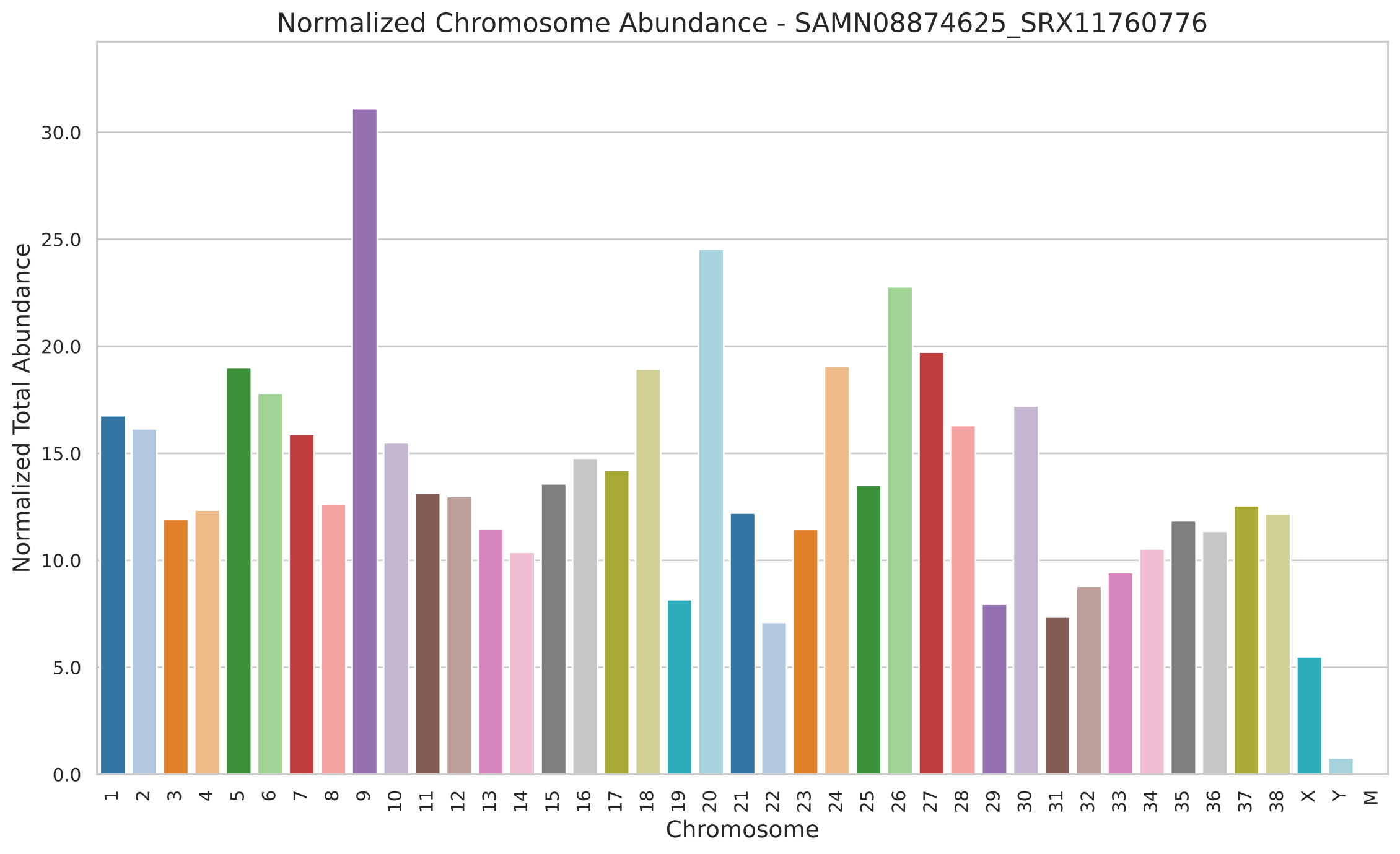

Normalized Chromosome Abundance - SAMN13133774_SRX7061453
Normalized Total Abundance
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

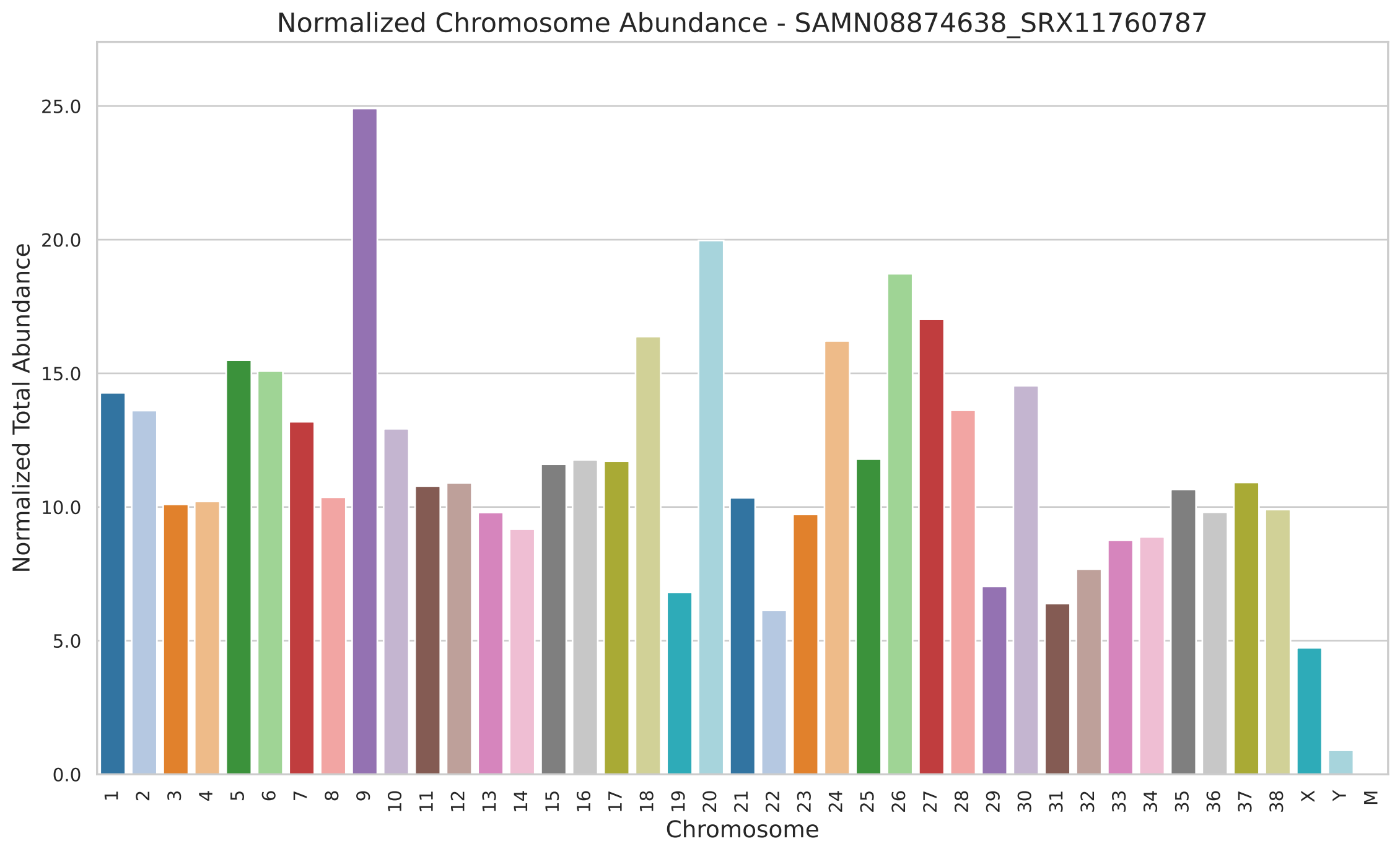

Normalized Chromosome Abundance - SAMN13133790_SRX7070507
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

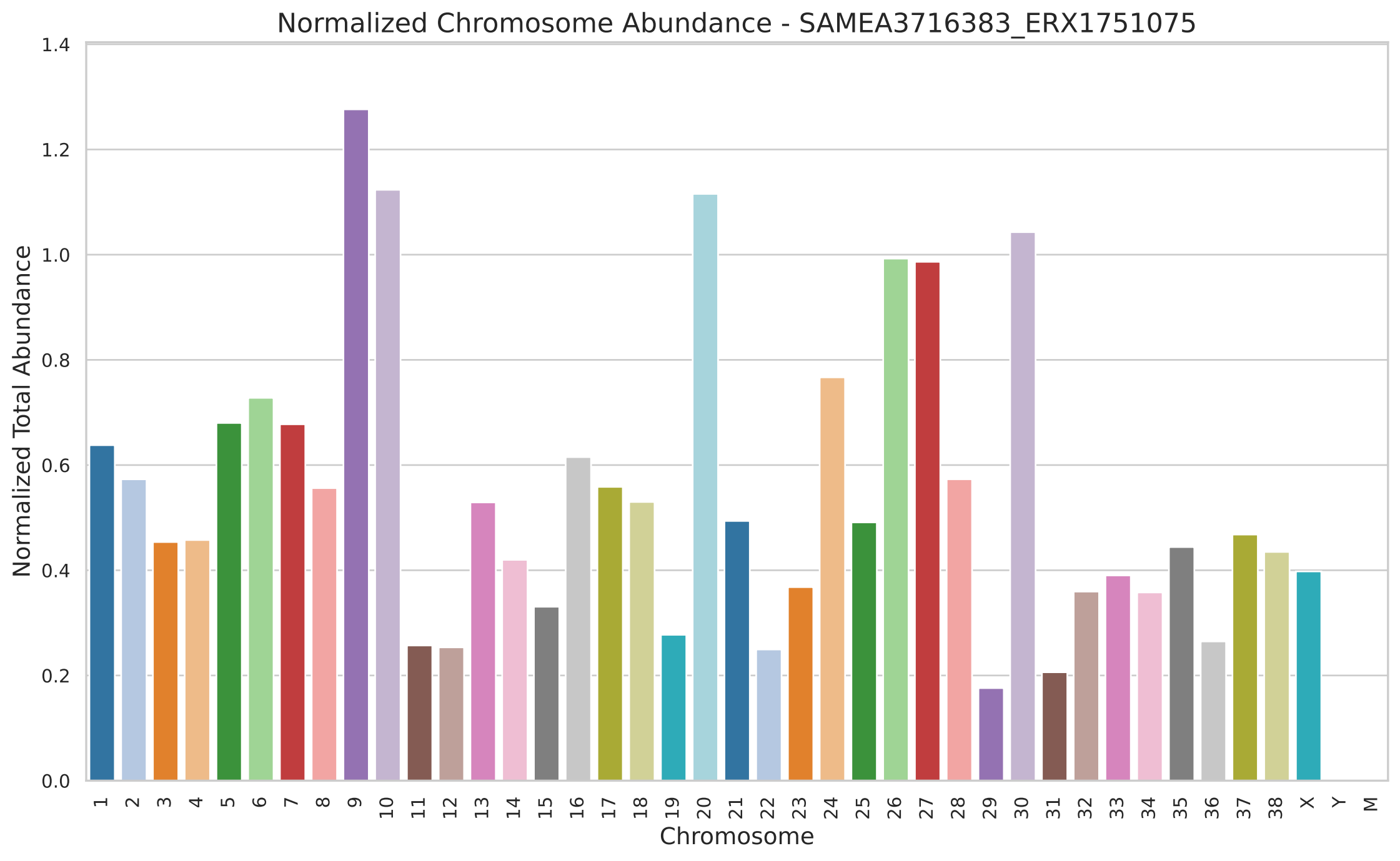

Normalized Chromosome Abundance - SAMN08874643_SRX11760791
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

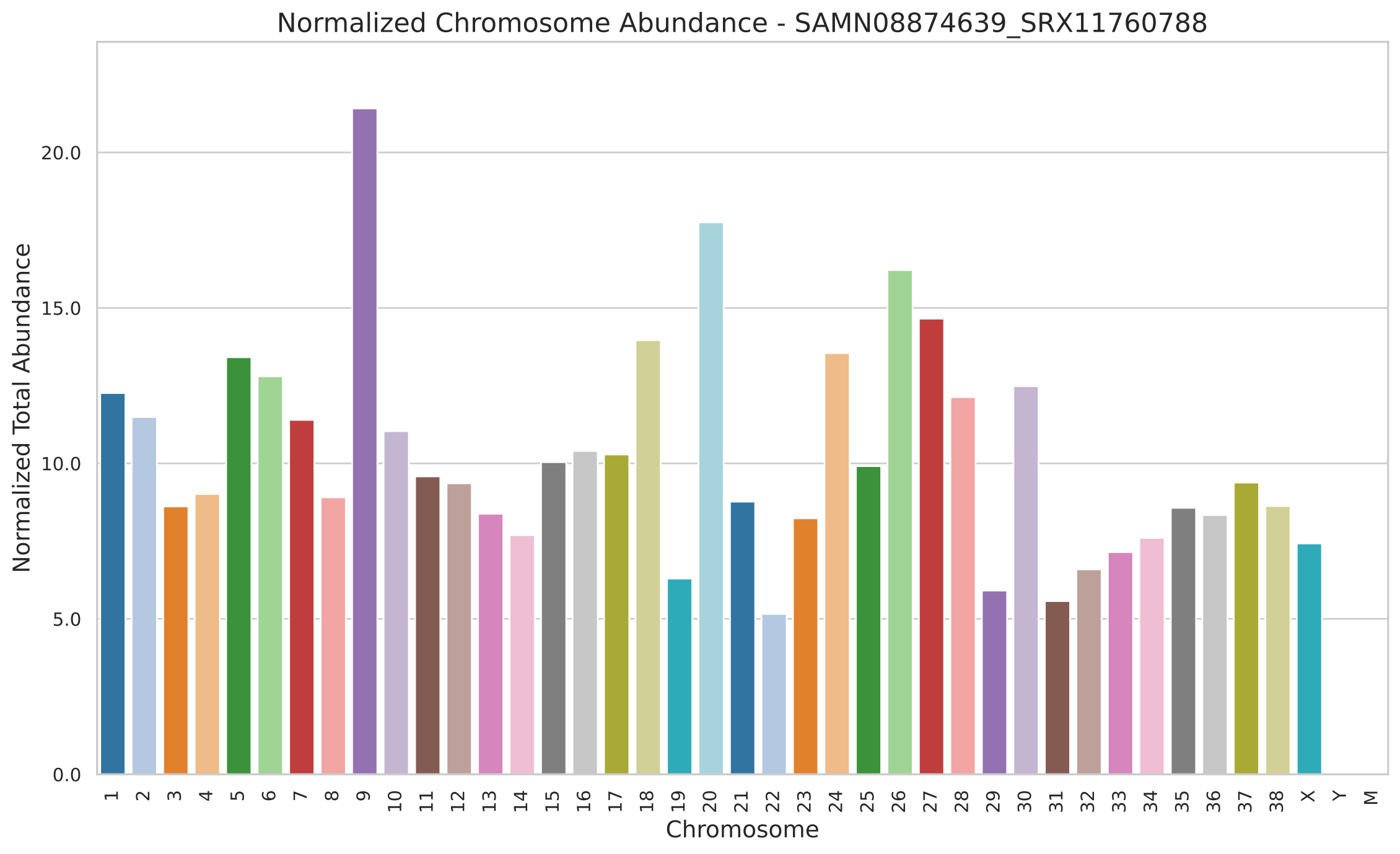

Normalized Chromosome Abundance - SAMN13133788_SRX7070513
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

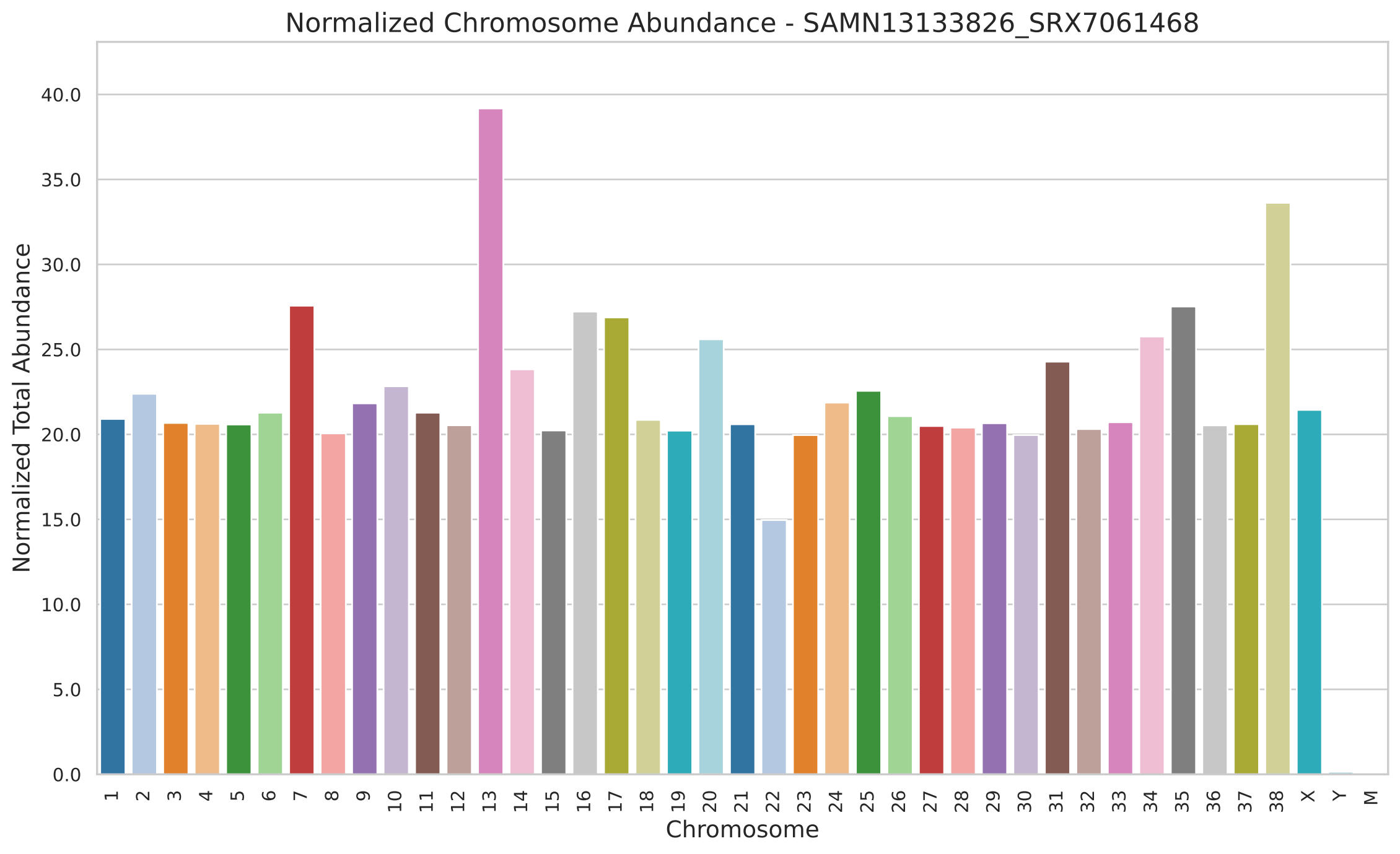

Normalized Chromosome Abundance - SAMN08874630_SRX11760780
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

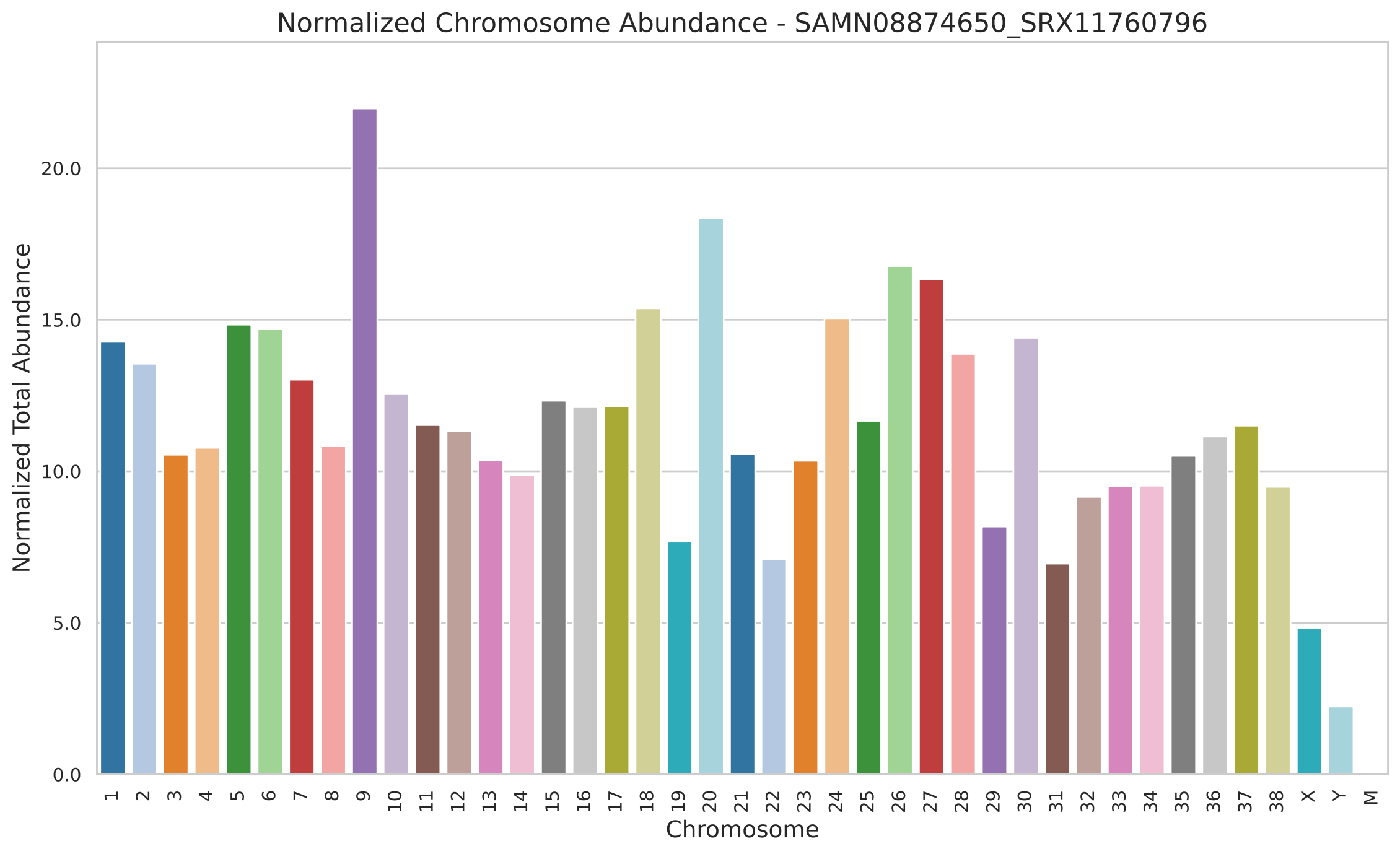

Normalized Chromosome Abundance - SAMN08874625_SRX11760776
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

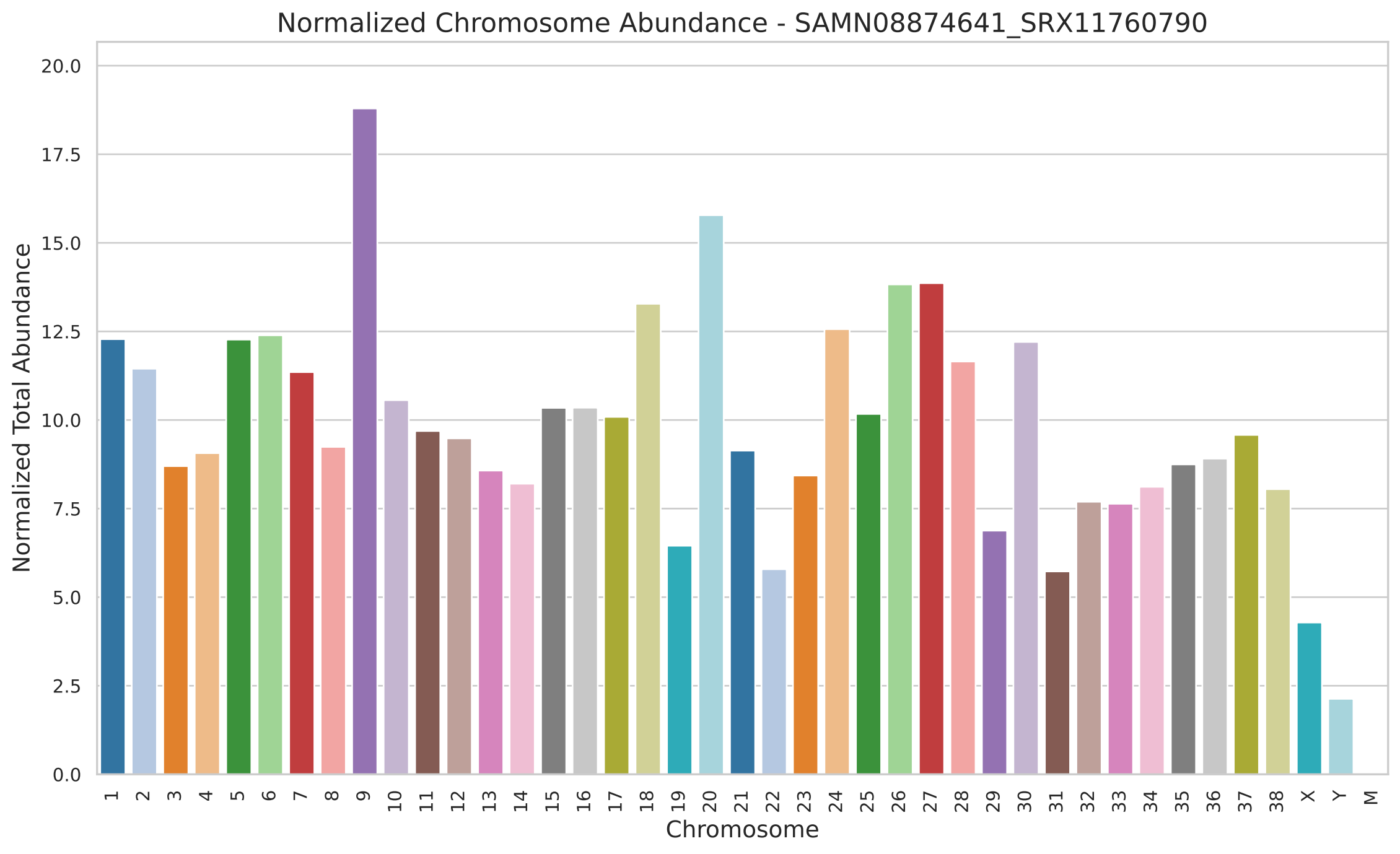

Normalized Chromosome Abundance - SAMN08874638_SRX11760787
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

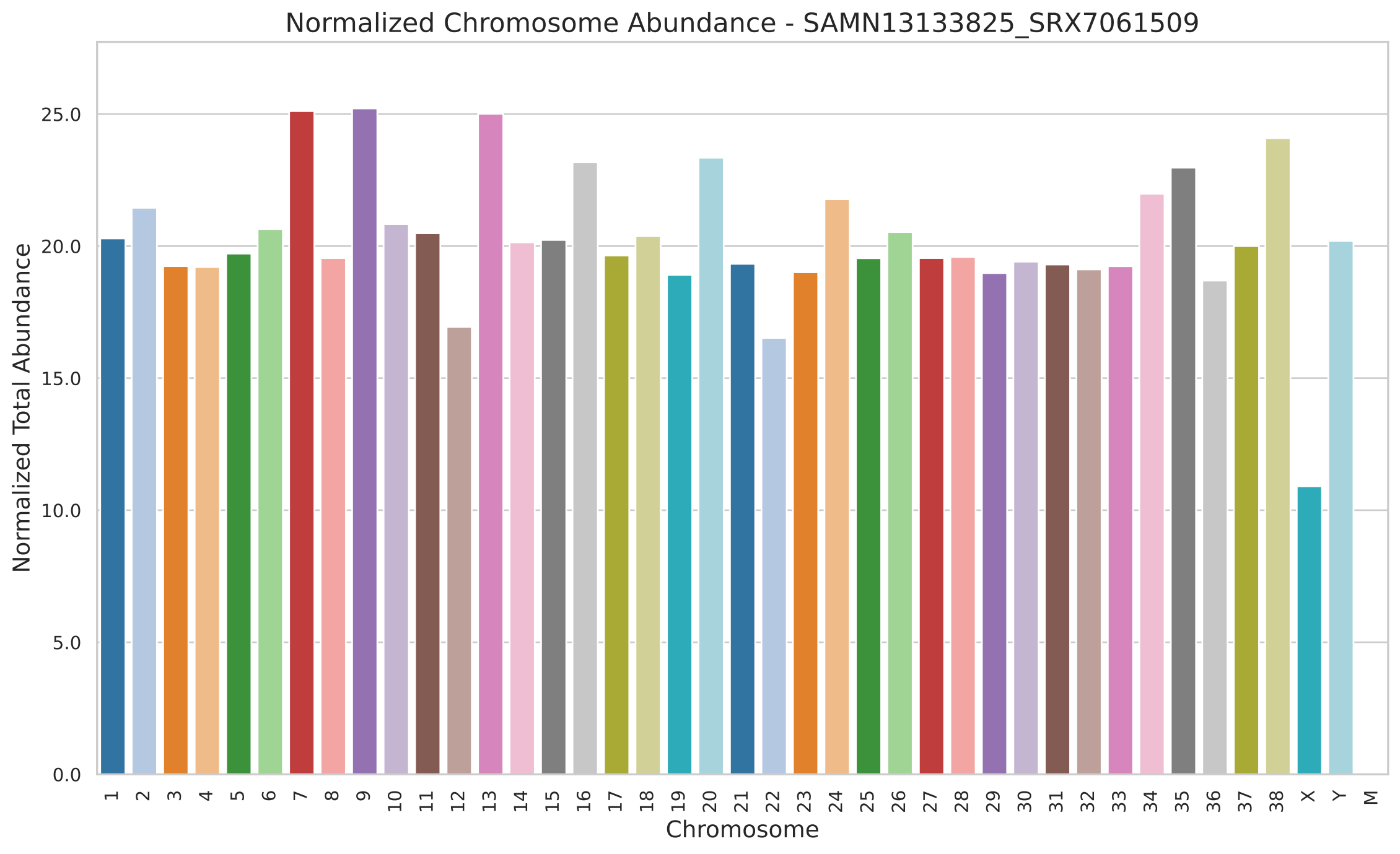

Normalized Chromosome Abundance - SAMEA3716383_ERX1751075
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

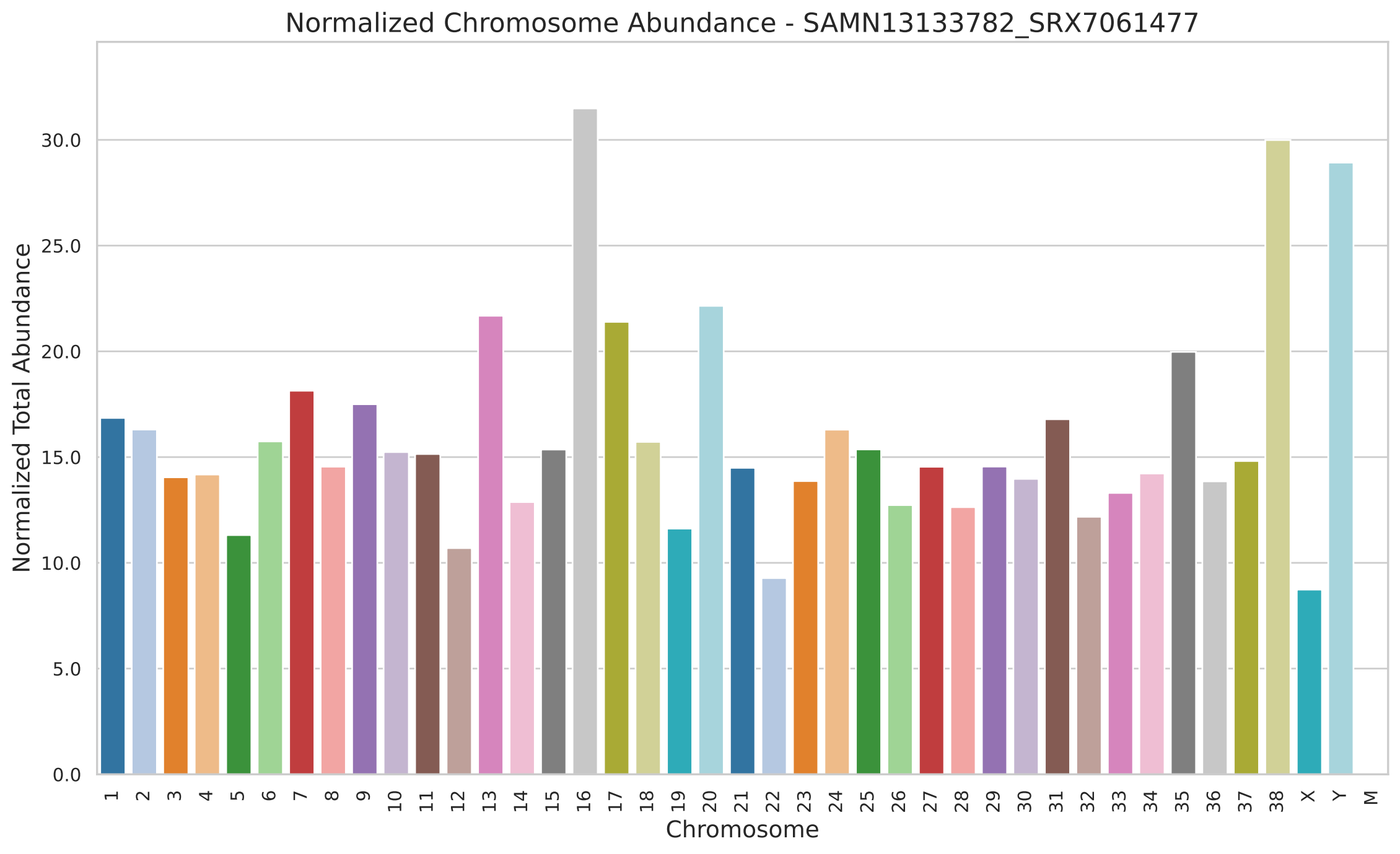

Normalized Chromosome Abundance - SAMN08874639_SRX11760788
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

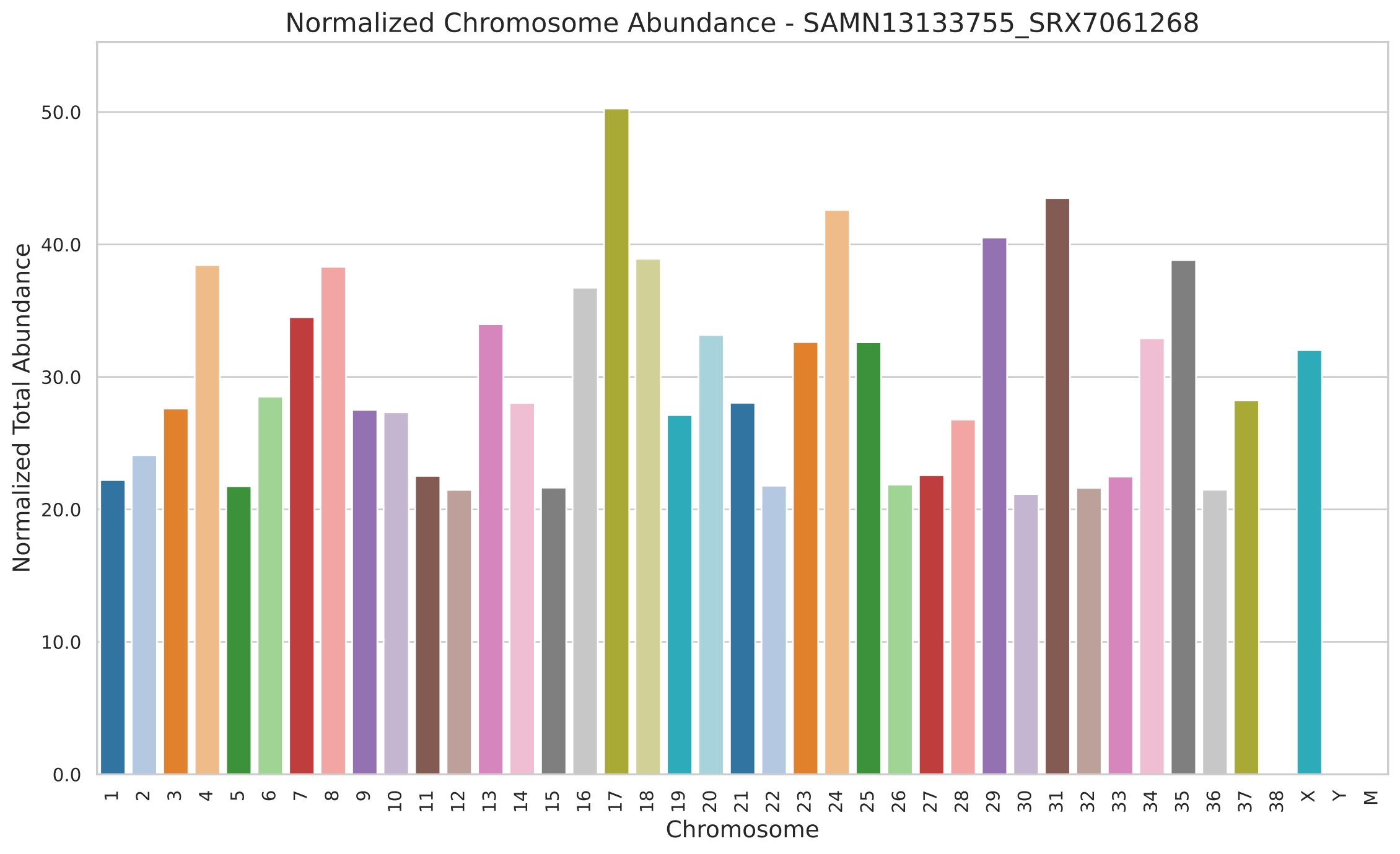

Normalized Chromosome Abundance - SAMN13133826_SRX7061468
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
35.0
40.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

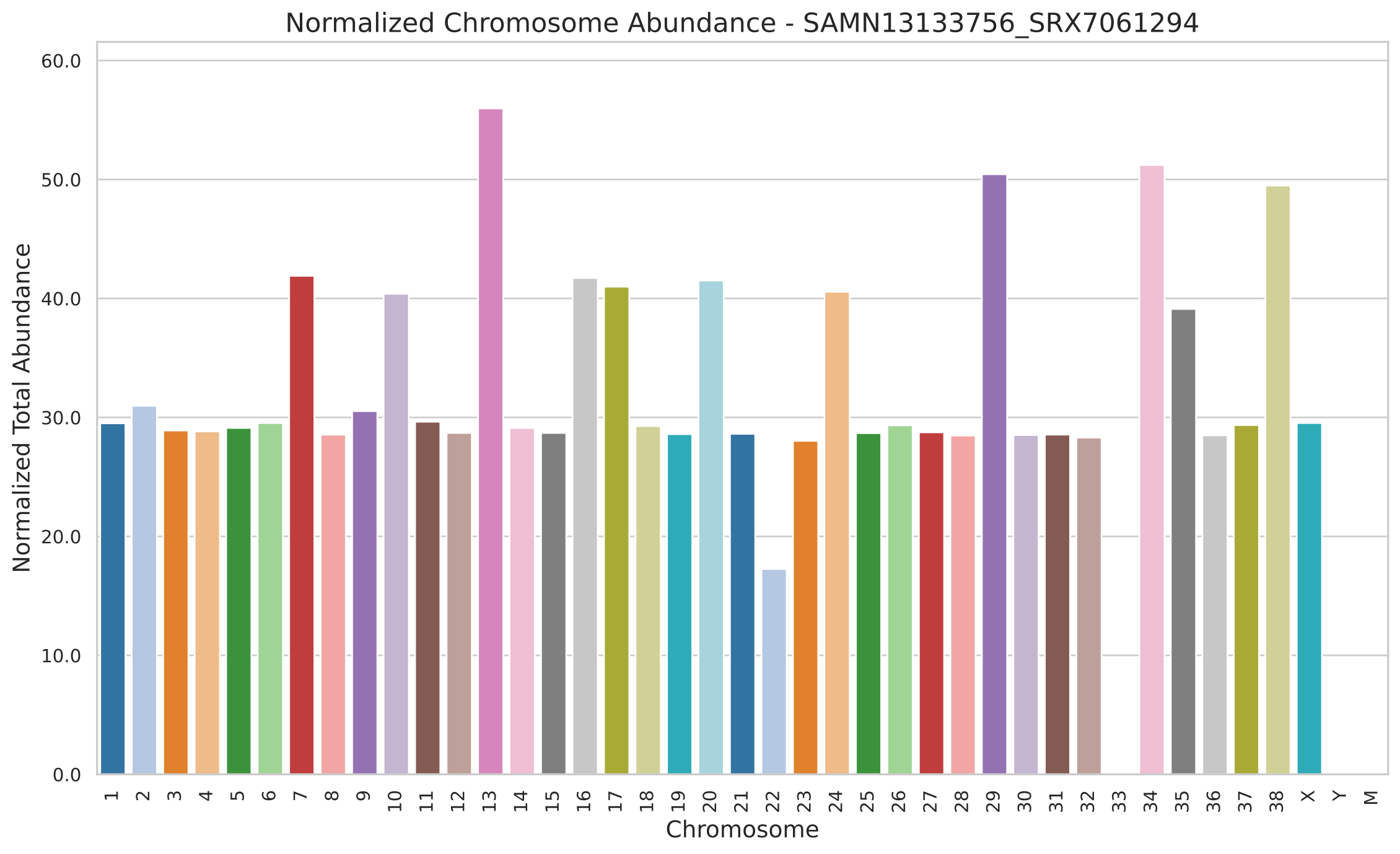

Normalized Chromosome Abundance - SAMN08874650_SRX11760796
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

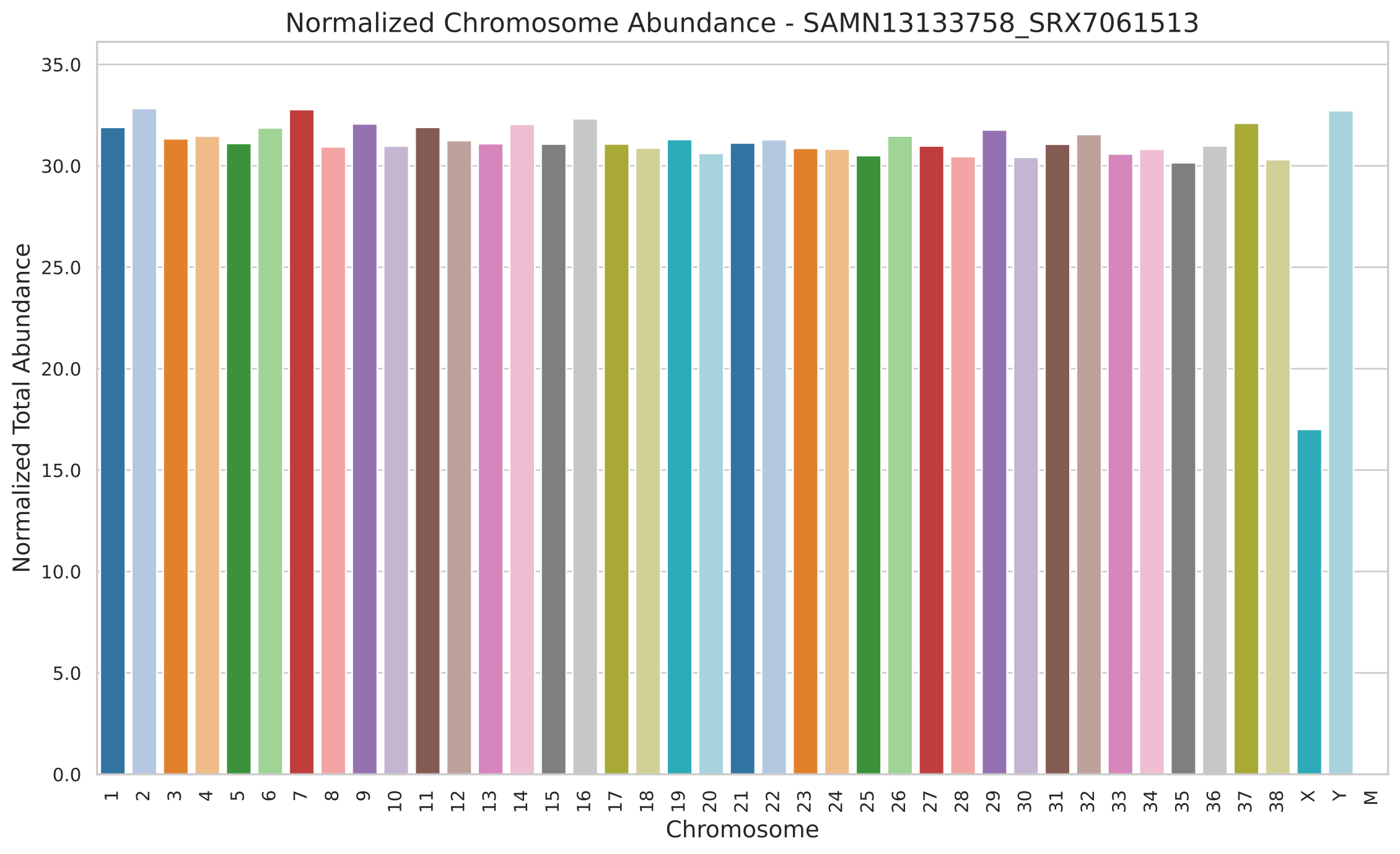

Normalized Chromosome Abundance - SAMN08874641_SRX11760790
Normalized Total Abundance
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5
20.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

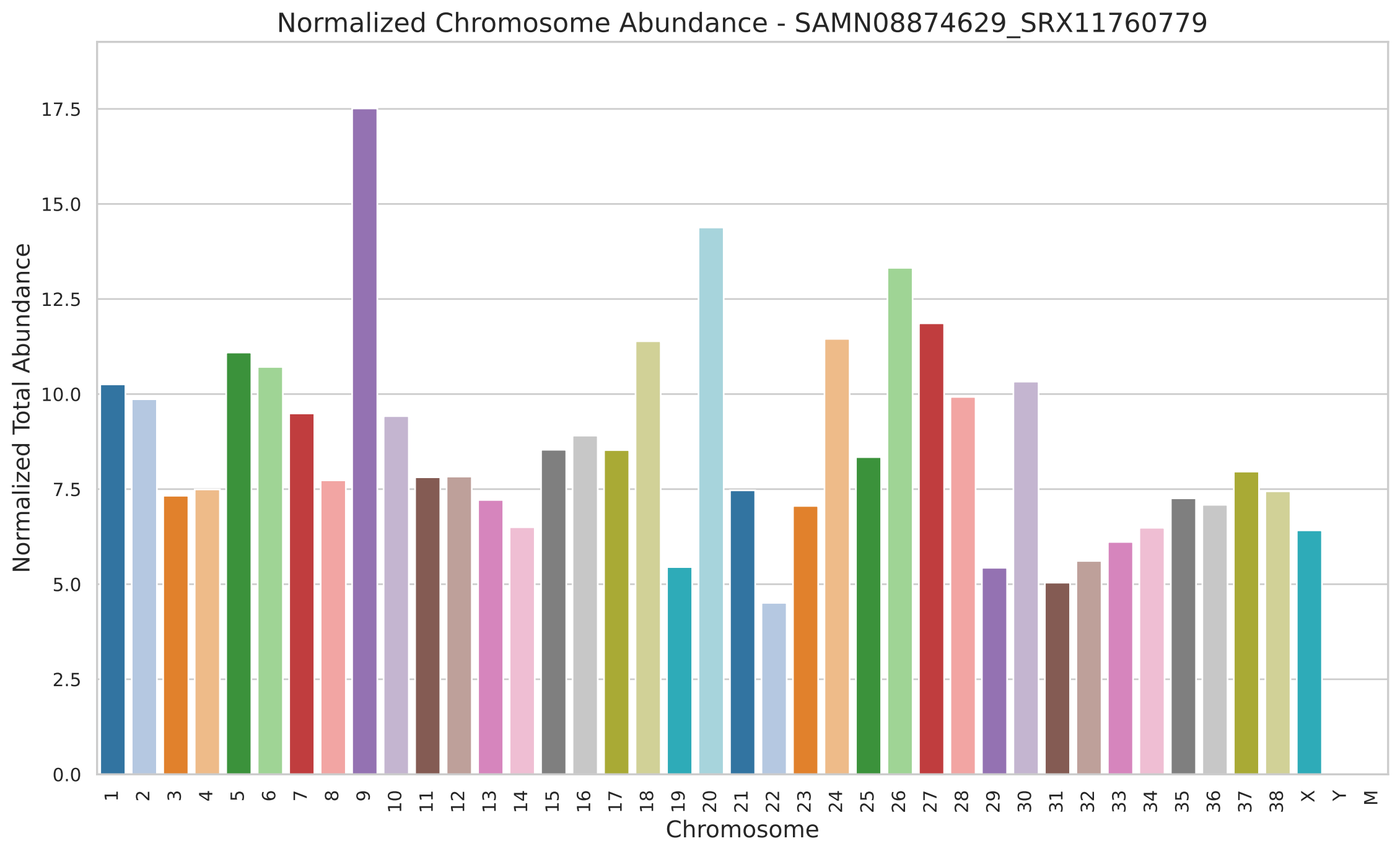

Normalized Chromosome Abundance - SAMN13133825_SRX7061509
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

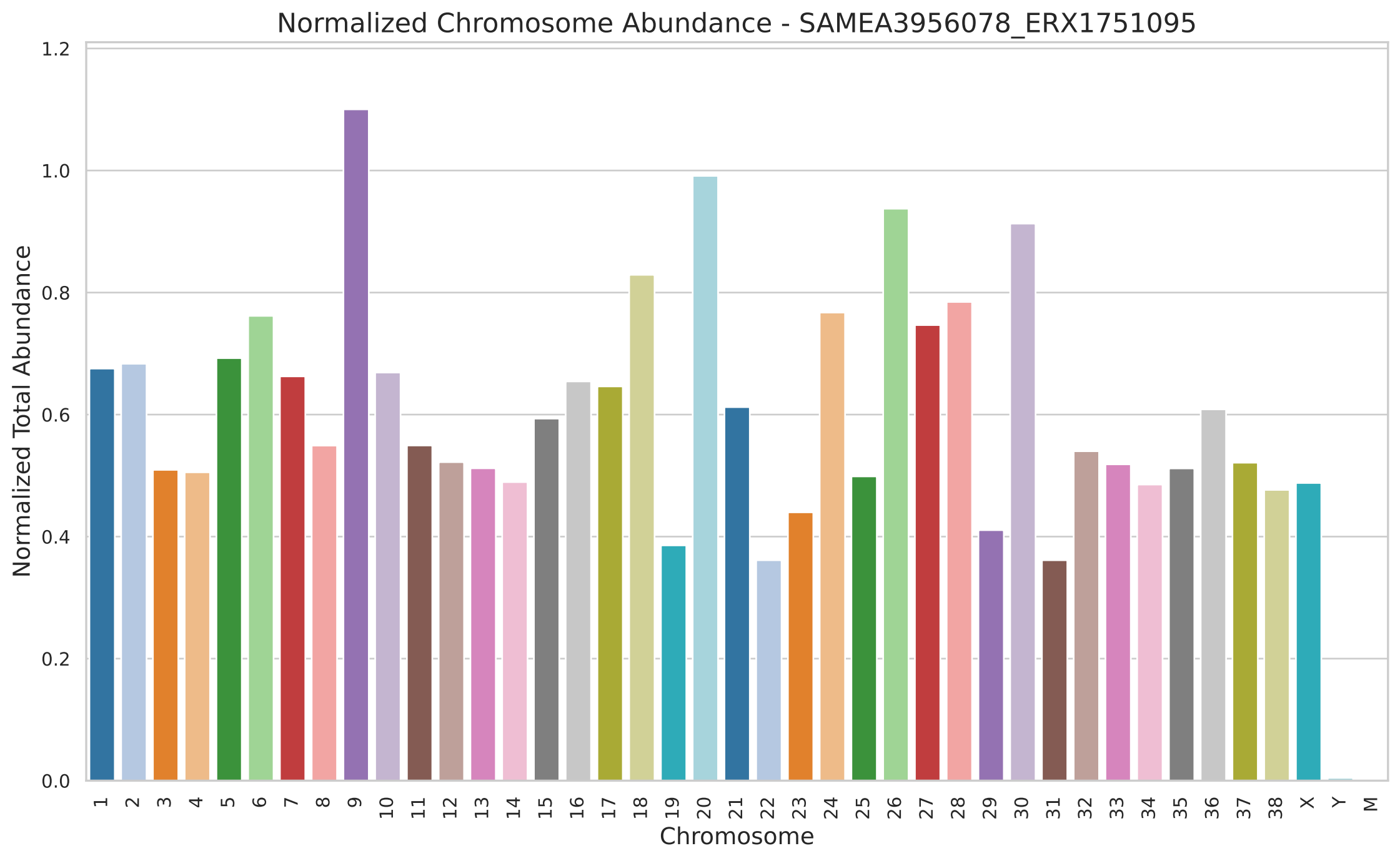

Normalized Chromosome Abundance - SAMN13133782_SRX7061477
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

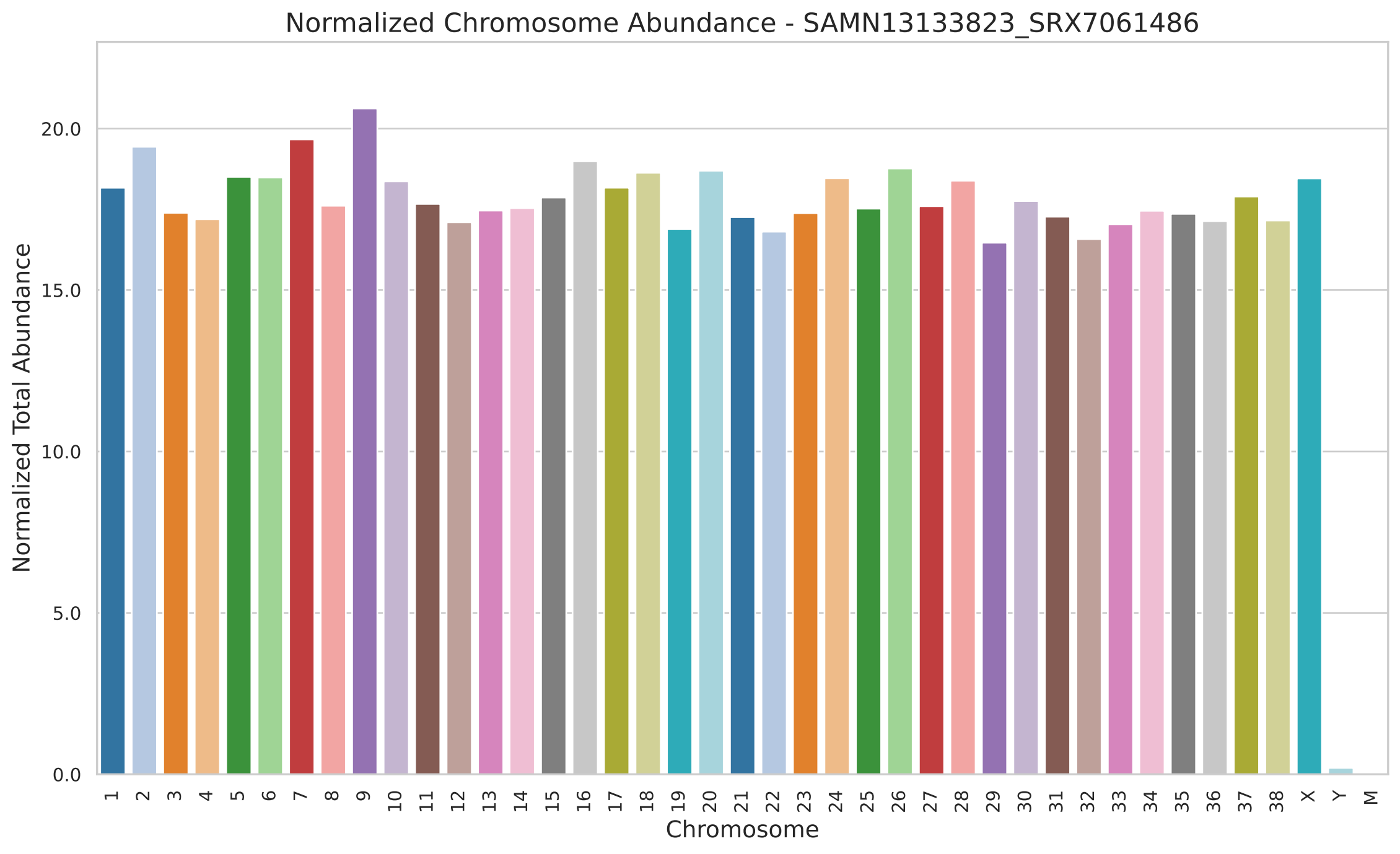

Normalized Chromosome Abundance - SAMN13133755_SRX7061268
Normalized Total Abundance
0.0
10.0
20.0
30.0
40.0
50.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

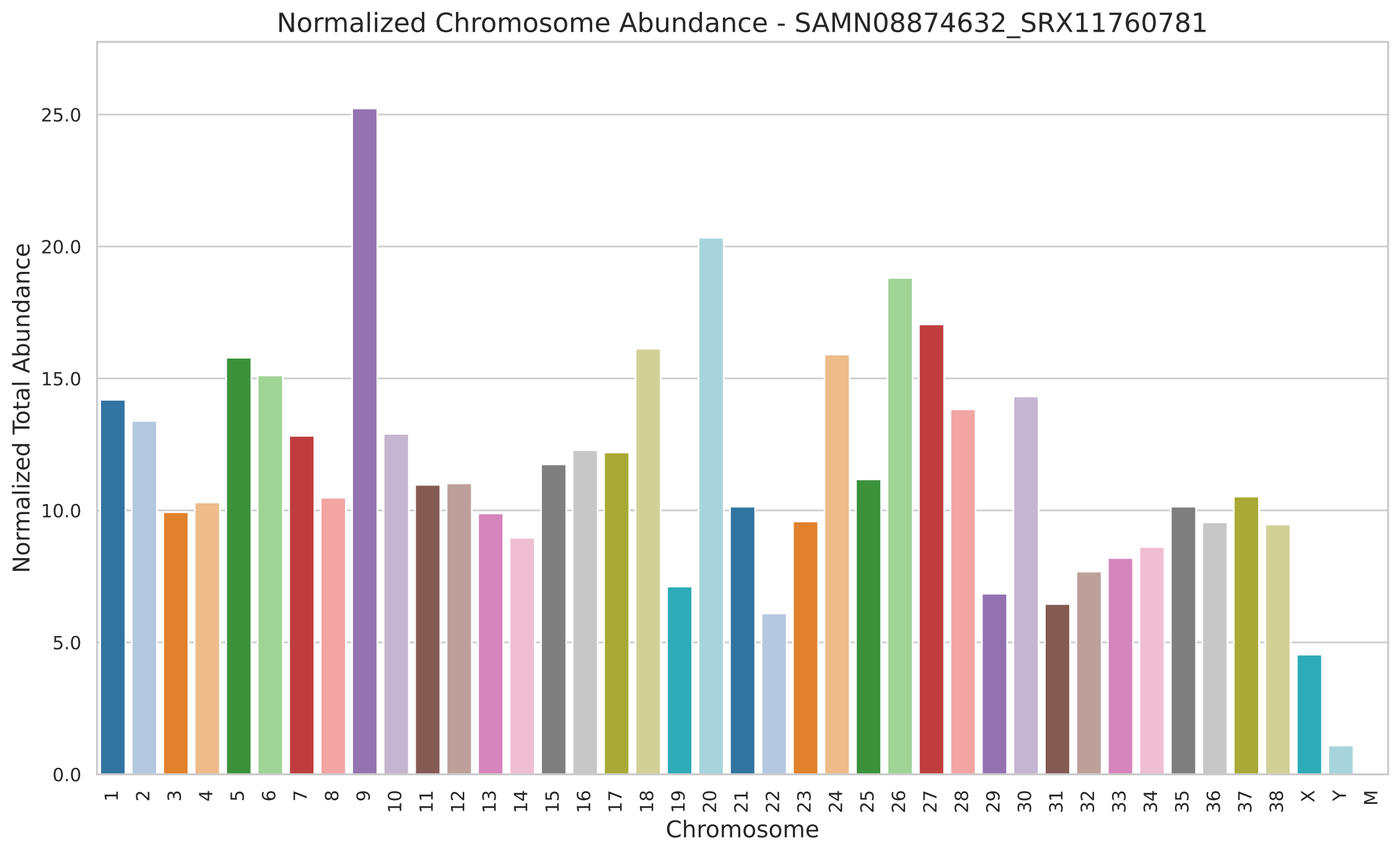

Normalized Chromosome Abundance - SAMN13133756_SRX7061294
Normalized Total Abundance
60.0
50.0
40.0
30.0
20.0
10.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

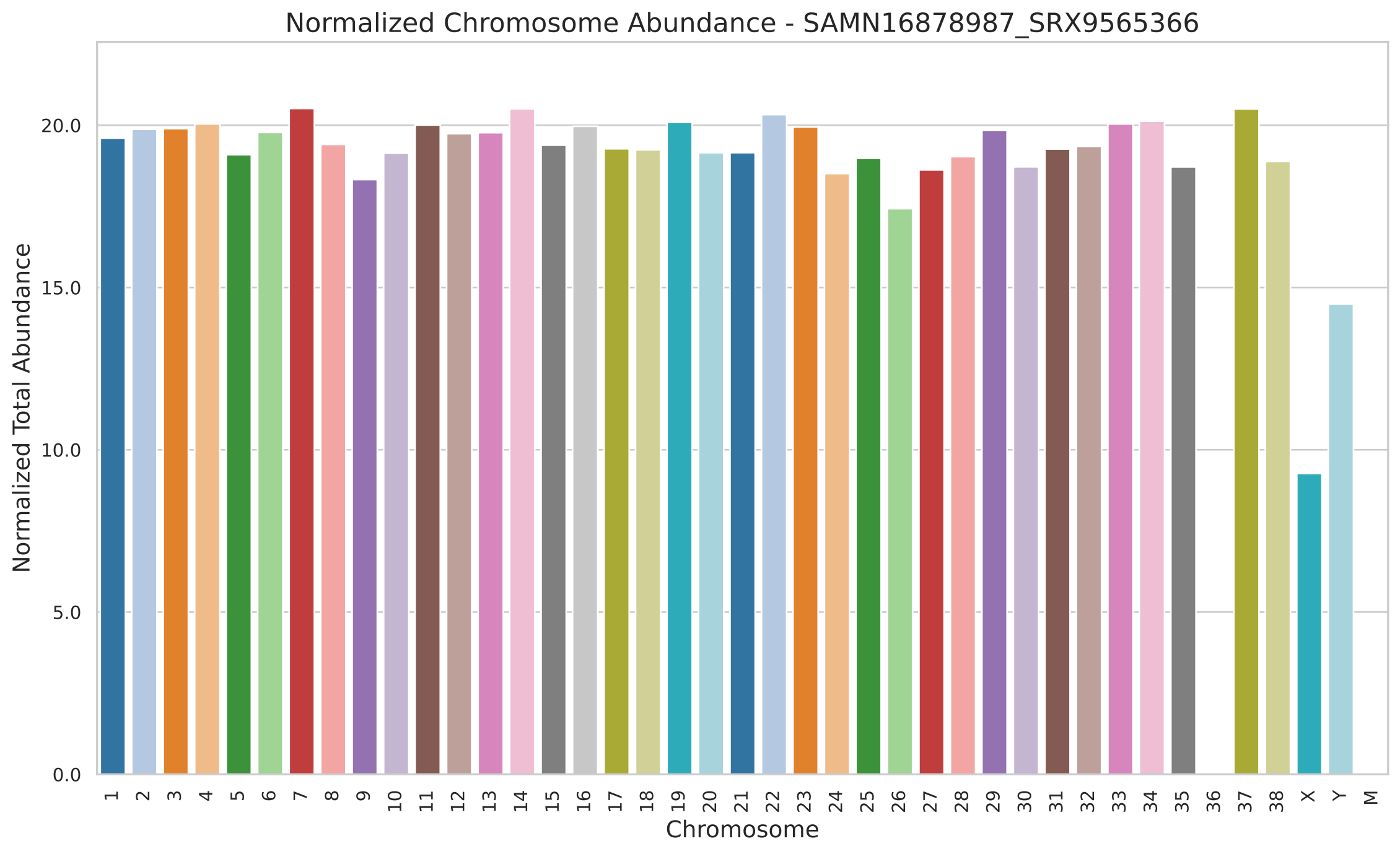

Normalized Chromosome Abundance - SAMN13133758_SRX7061513
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
35.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

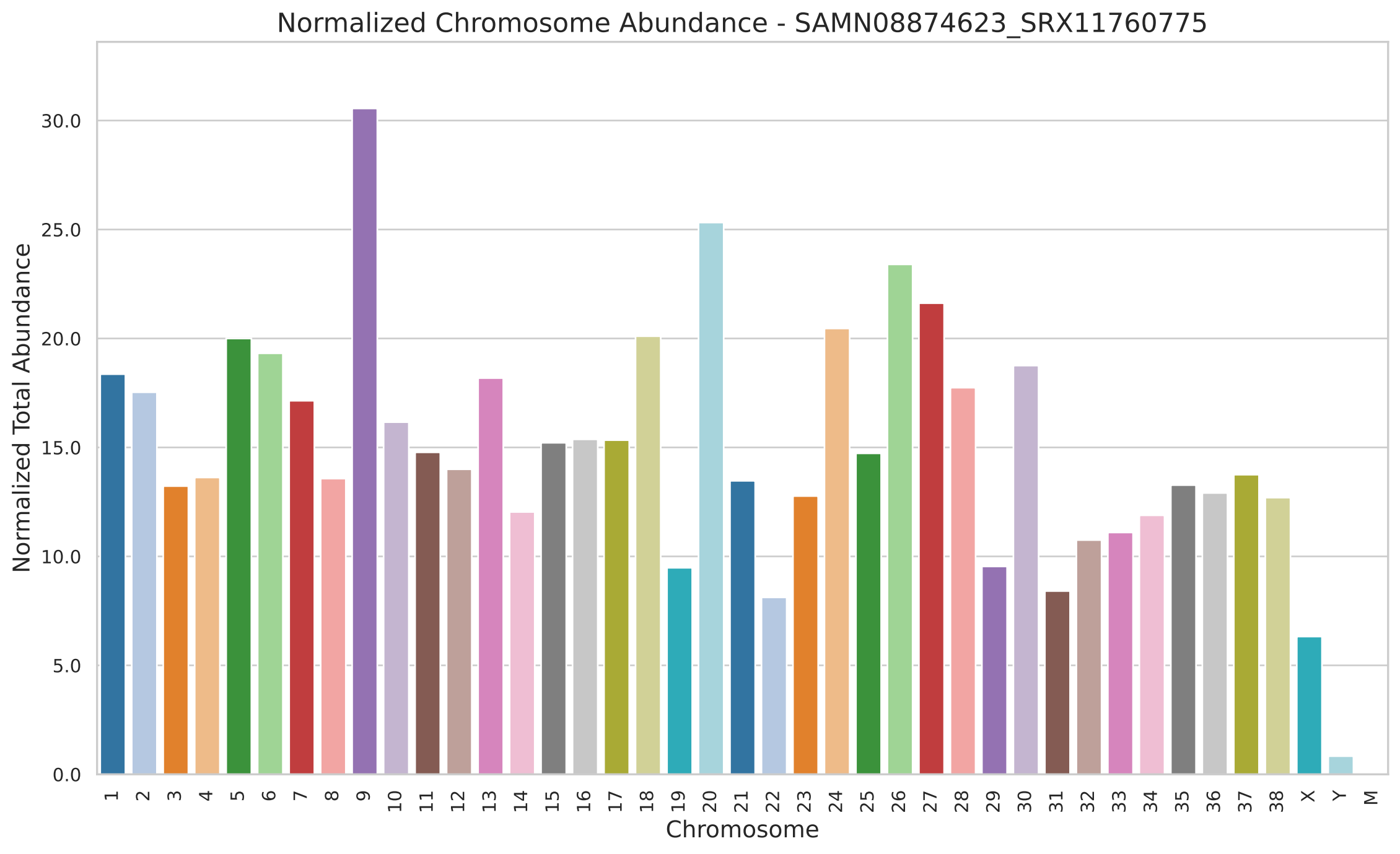

Normalized Chromosome Abundance - SAMN08874629_SRX11760779
Normalized Total Abundance
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

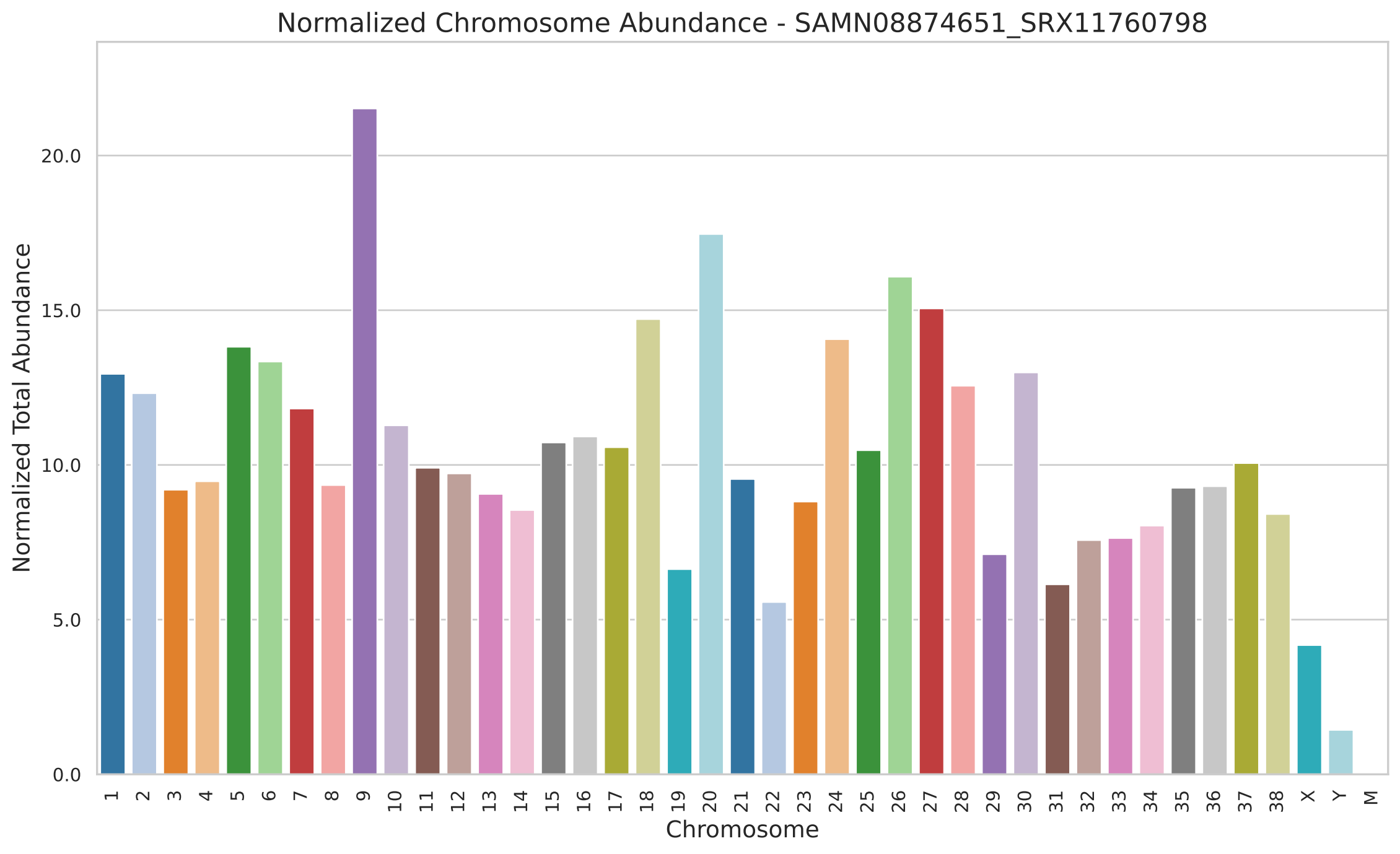

Normalized Chromosome Abundance - SAMEA3956078_ERX1751095
Normalized Total Abundance
1.2
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

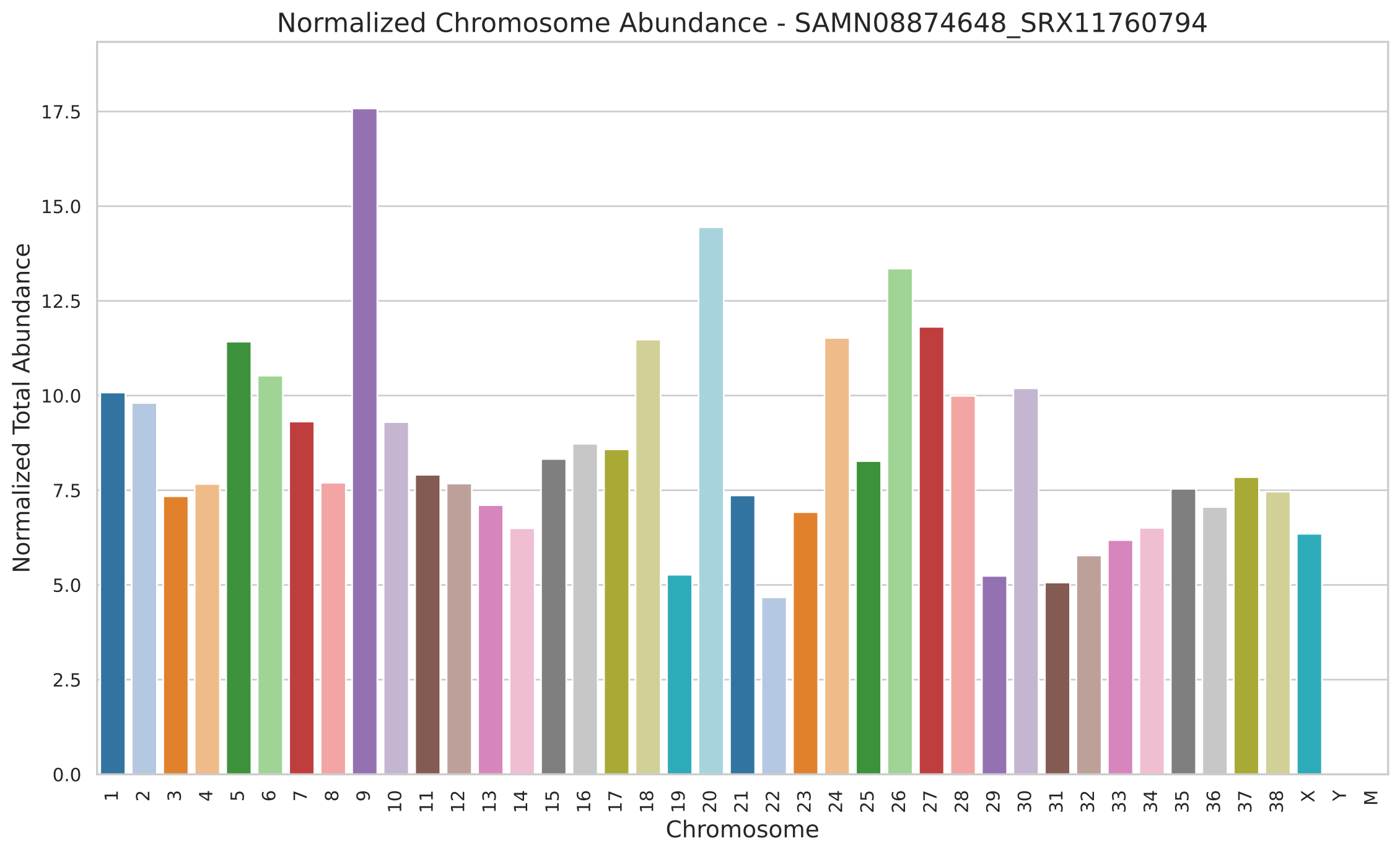

Normalized Chromosome Abundance - SAMN13133823_SRX7061486
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

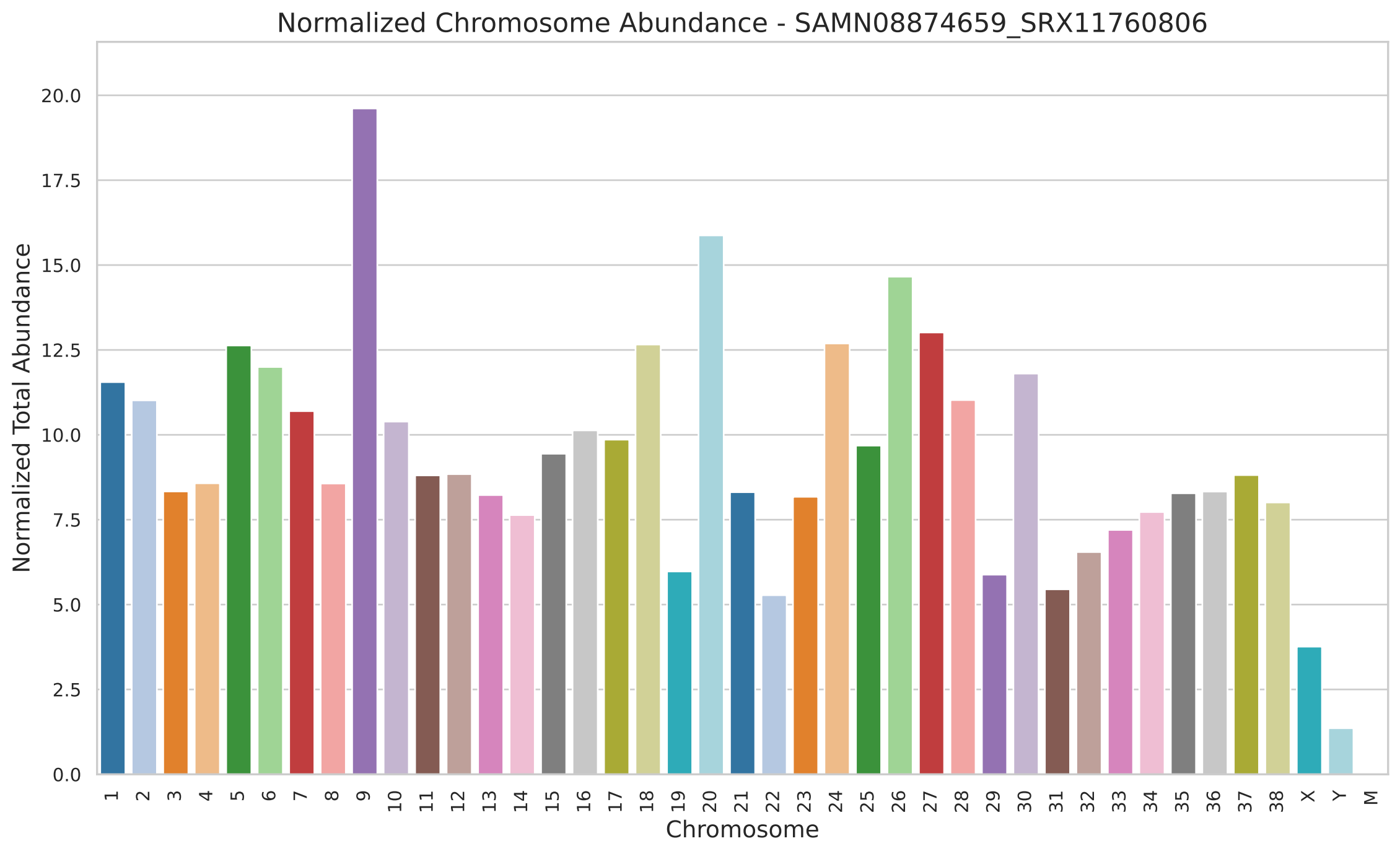

Normalized Chromosome Abundance - SAMN08874632_SRX11760781
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

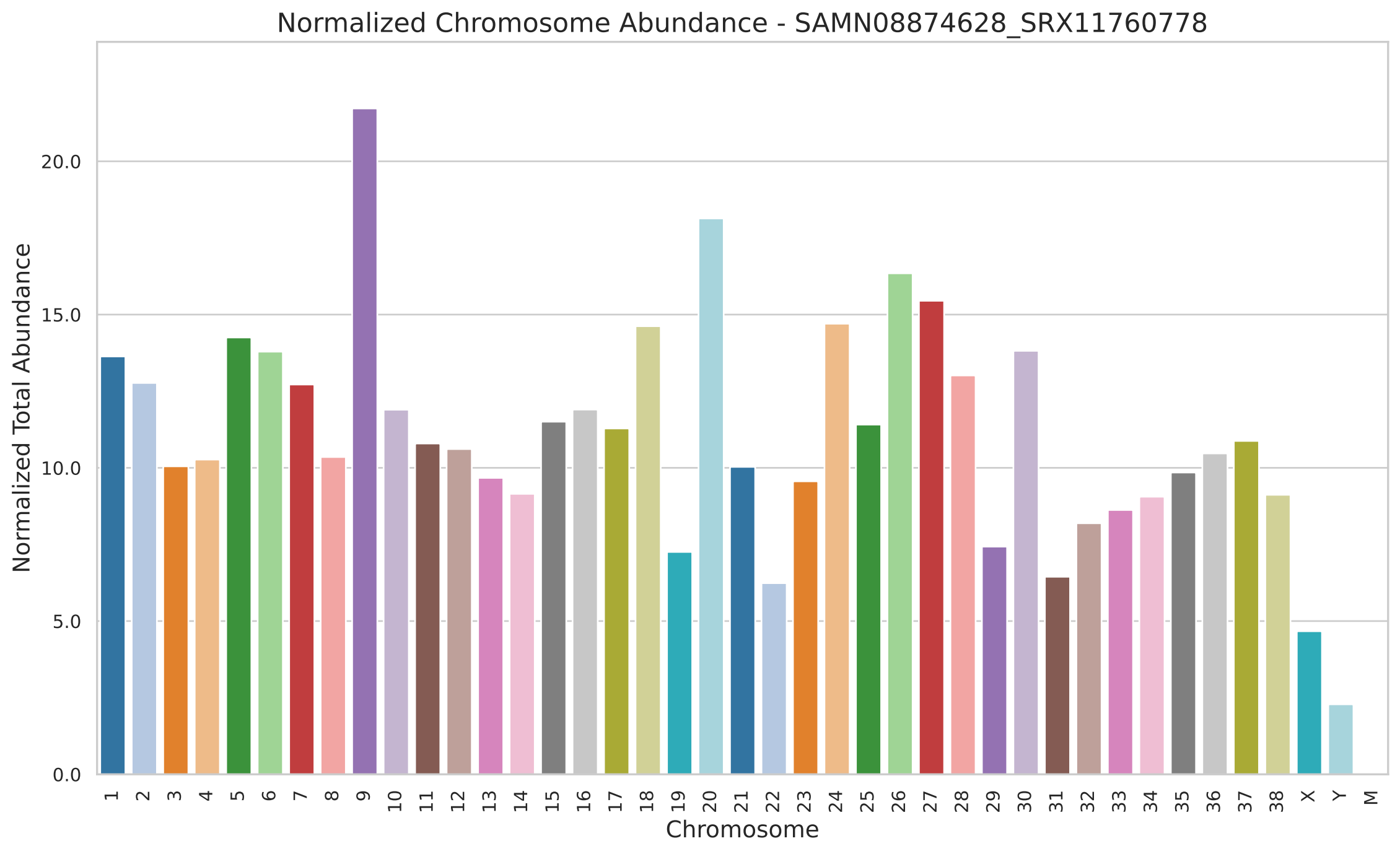

Normalized Chromosome Abundance - SAMN16878987_SRX9565366
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

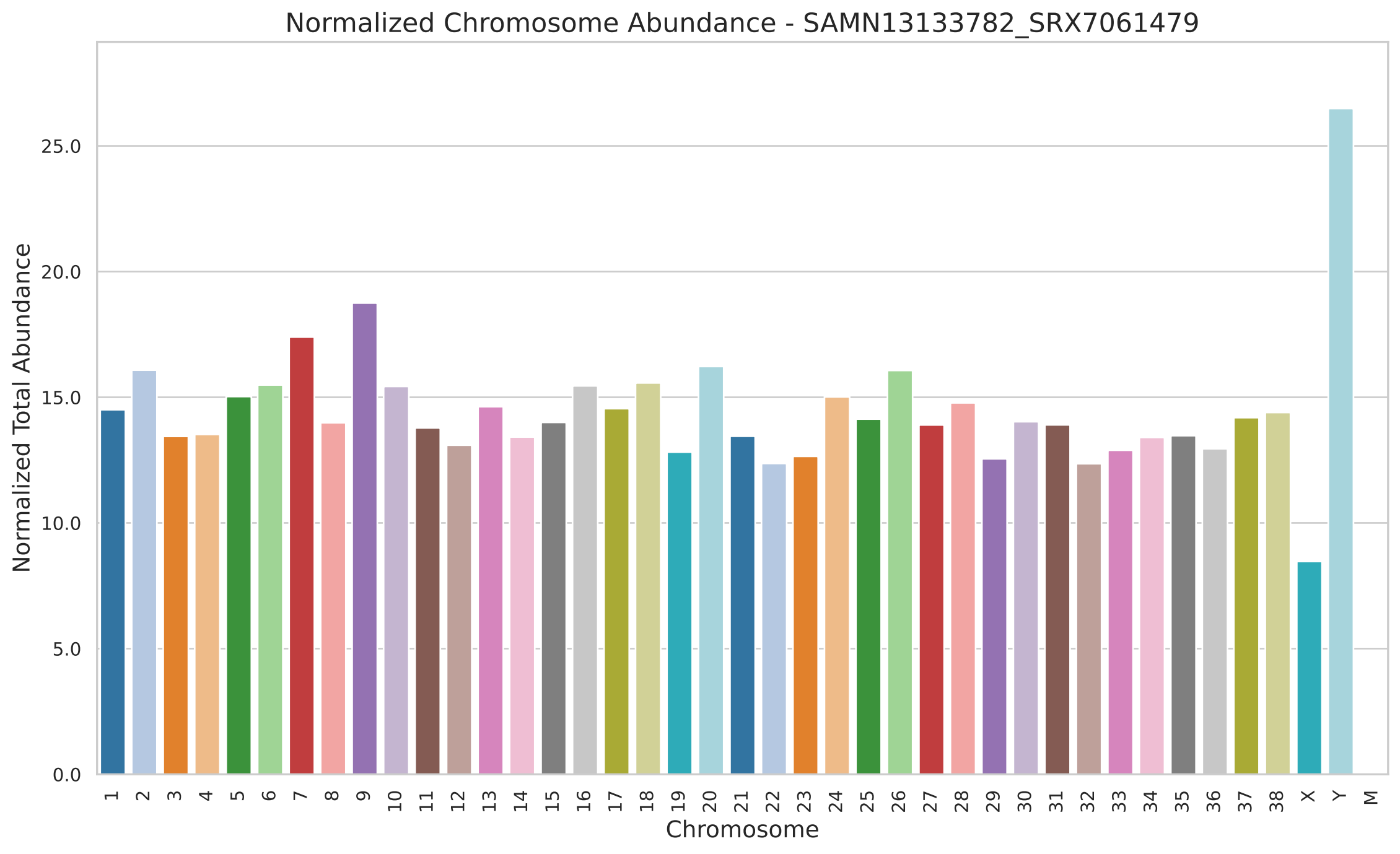

Normalized Chromosome Abundance - SAMN08874623_SRX11760775
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

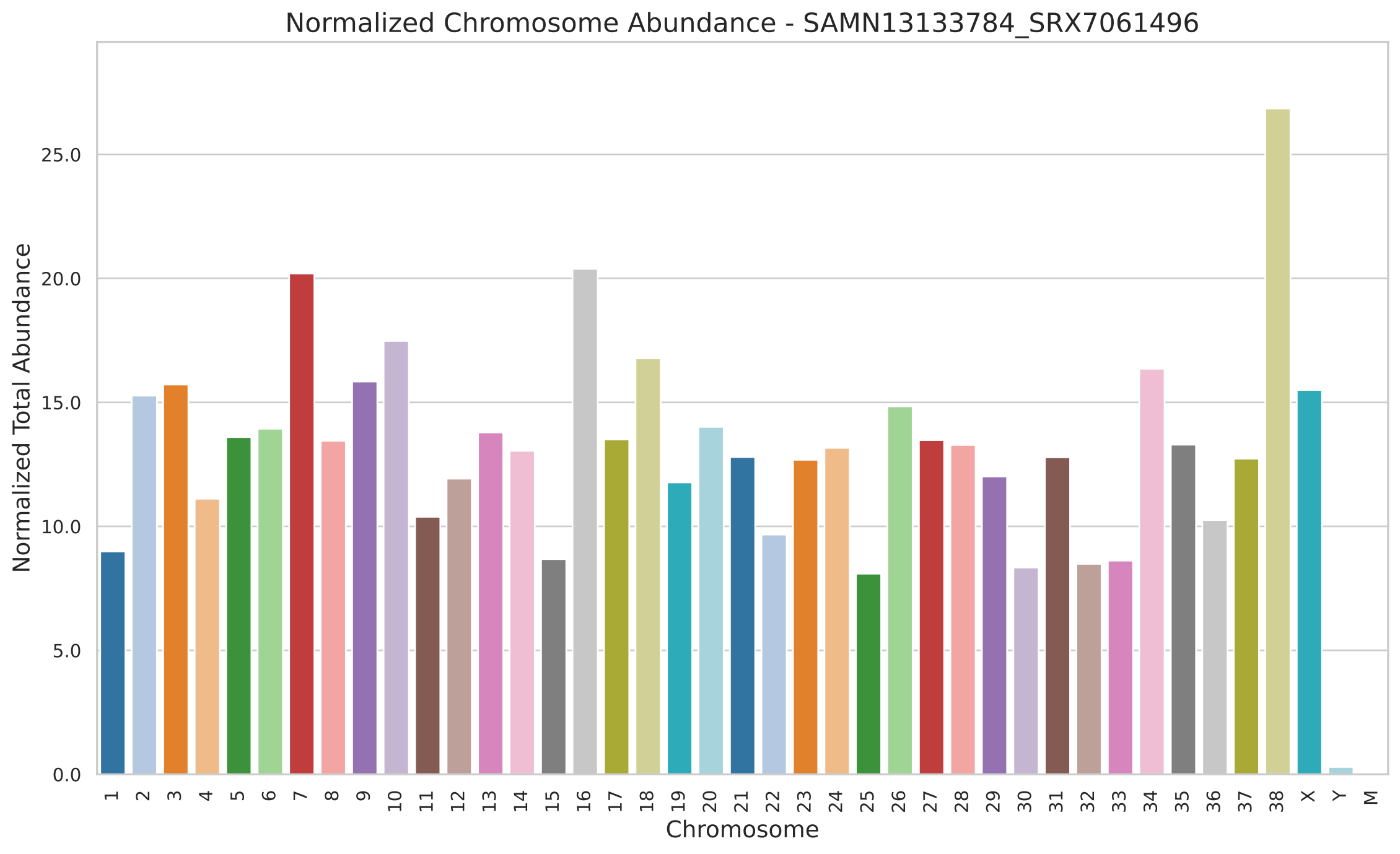

Normalized Chromosome Abundance - SAMN08874651_SRX11760798
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

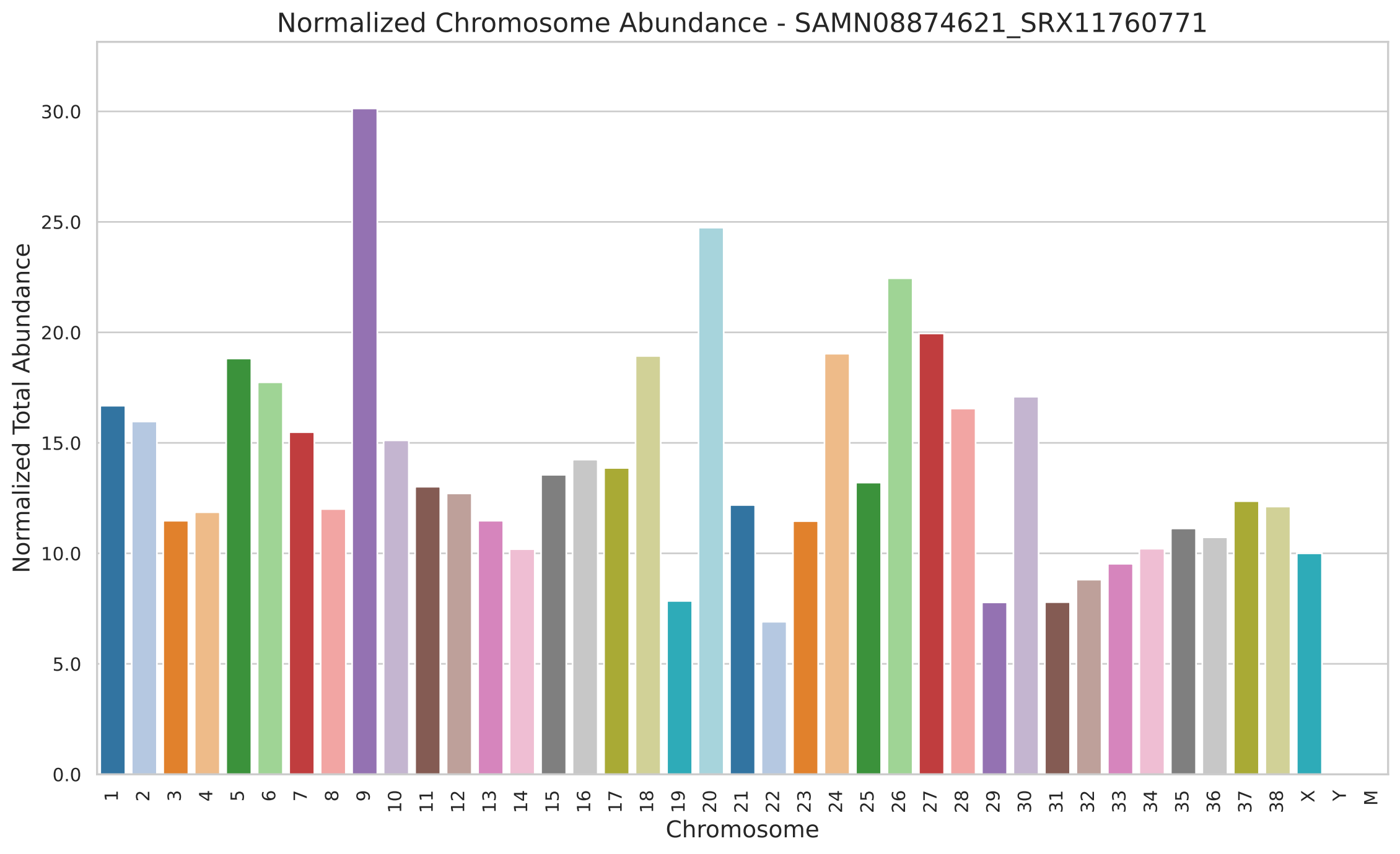

Normalized Chromosome Abundance - SAMN08874648_SRX11760794
Normalized Total Abundance
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

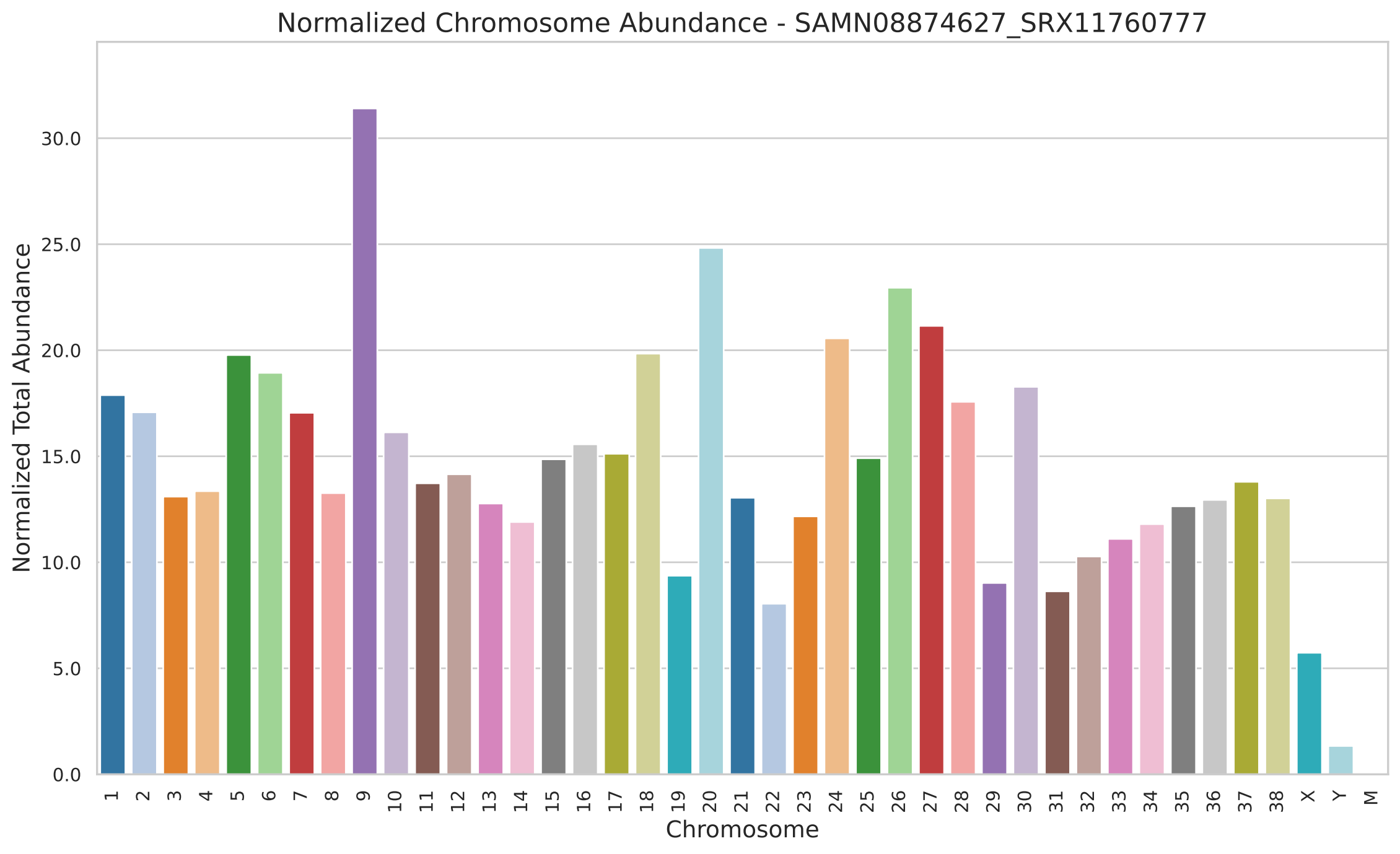

Normalized Chromosome Abundance - SAMN08874659_SRX11760806
Normalized Total Abundance
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5
20.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

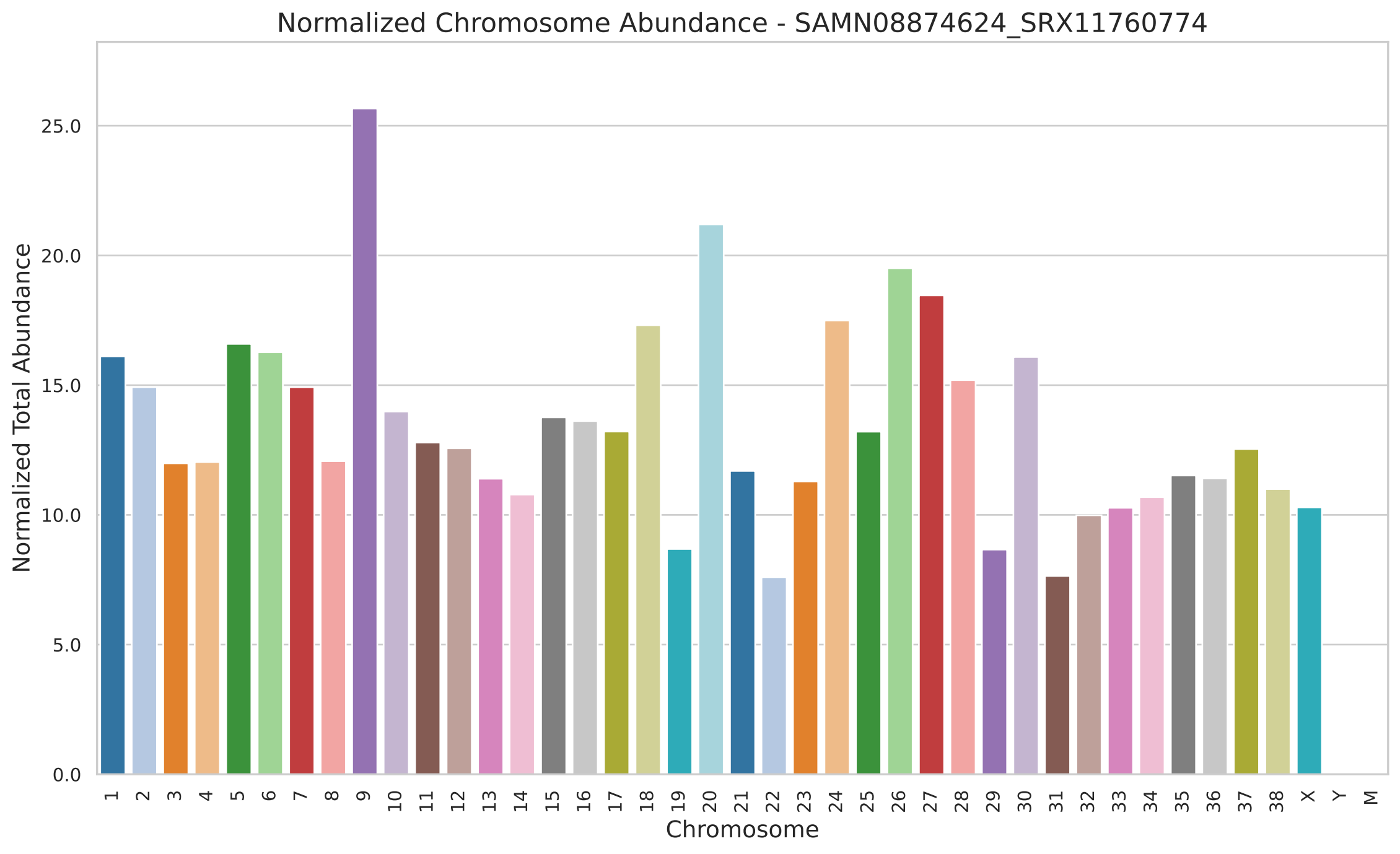

Normalized Chromosome Abundance - SAMN08874628_SRX11760778
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

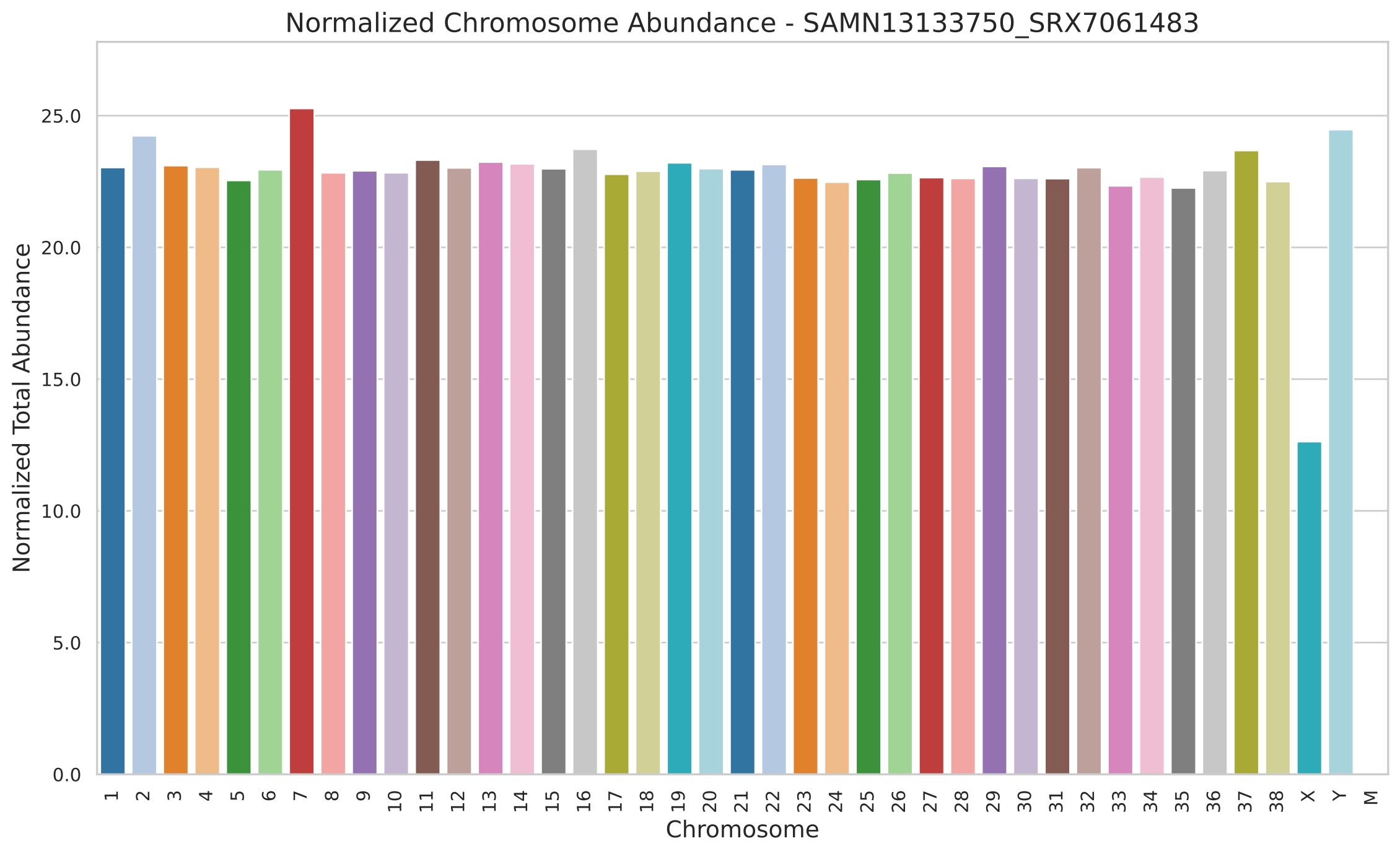

Normalized Chromosome Abundance - SAMN13133782_SRX7061479
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

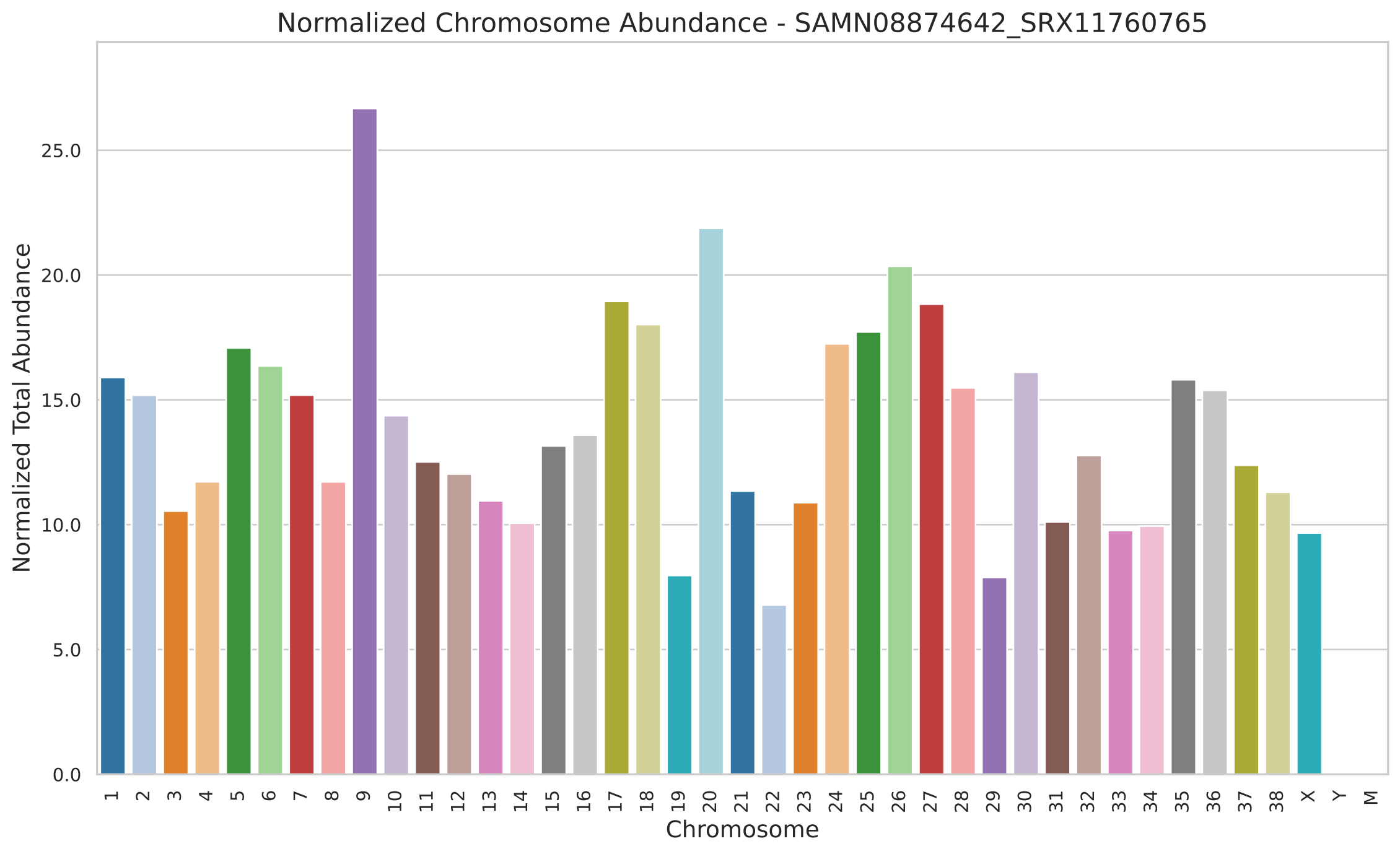

Normalized Chromosome Abundance - SAMN13133784_SRX7061496
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

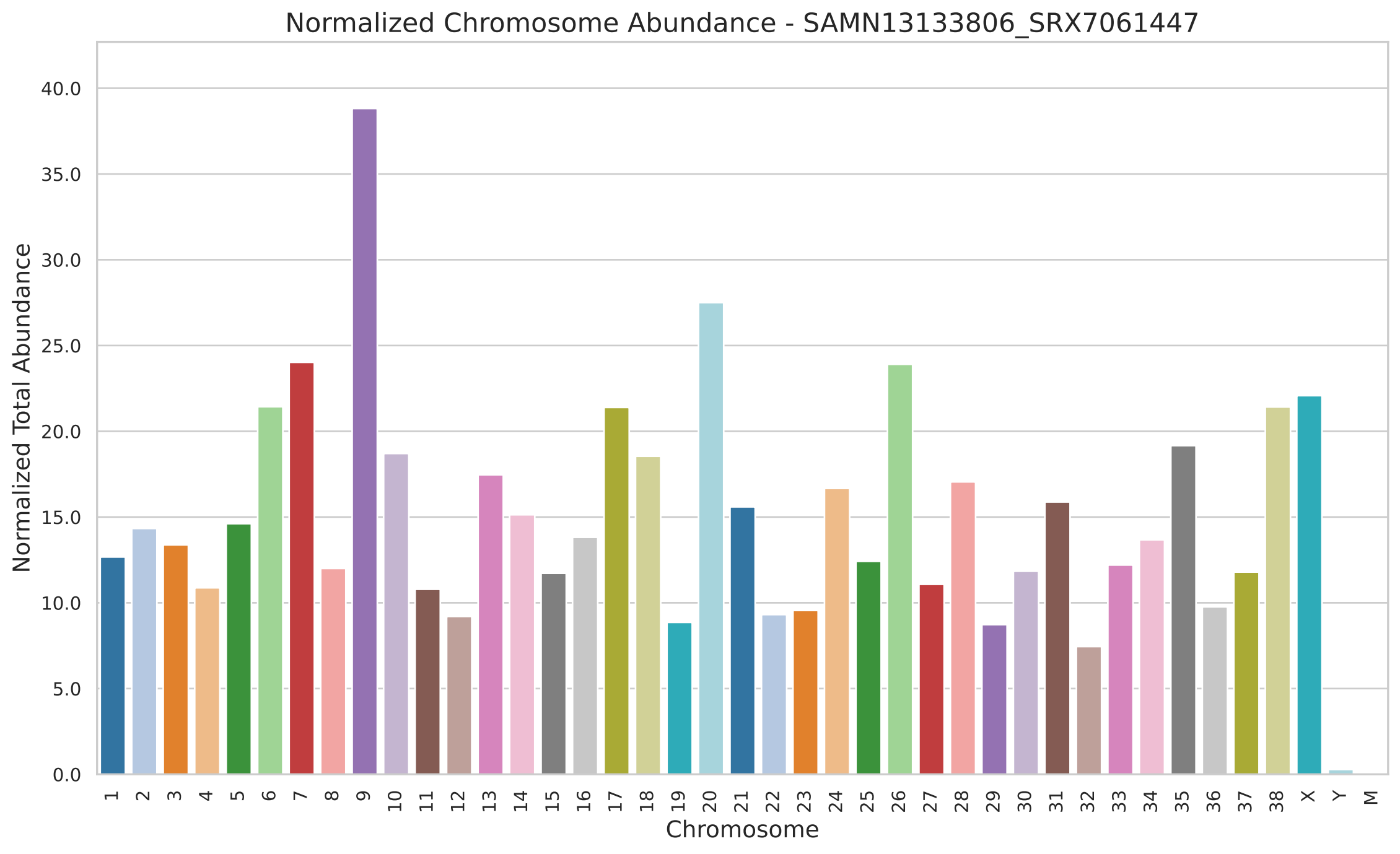

Normalized Chromosome Abundance - SAMN08874621_SRX11760771
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

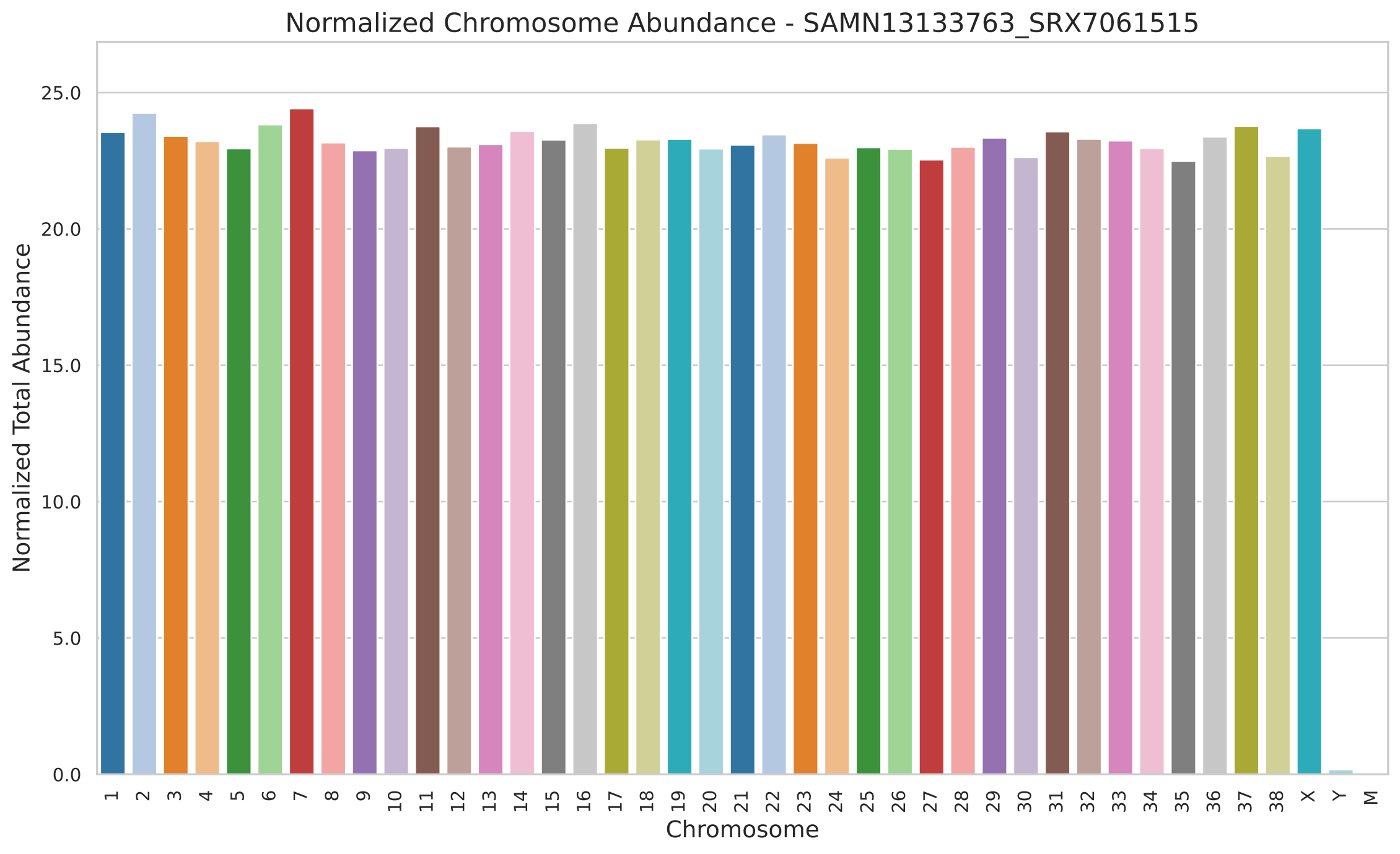

Normalized Chromosome Abundance - SAMN08874627_SRX11760777
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

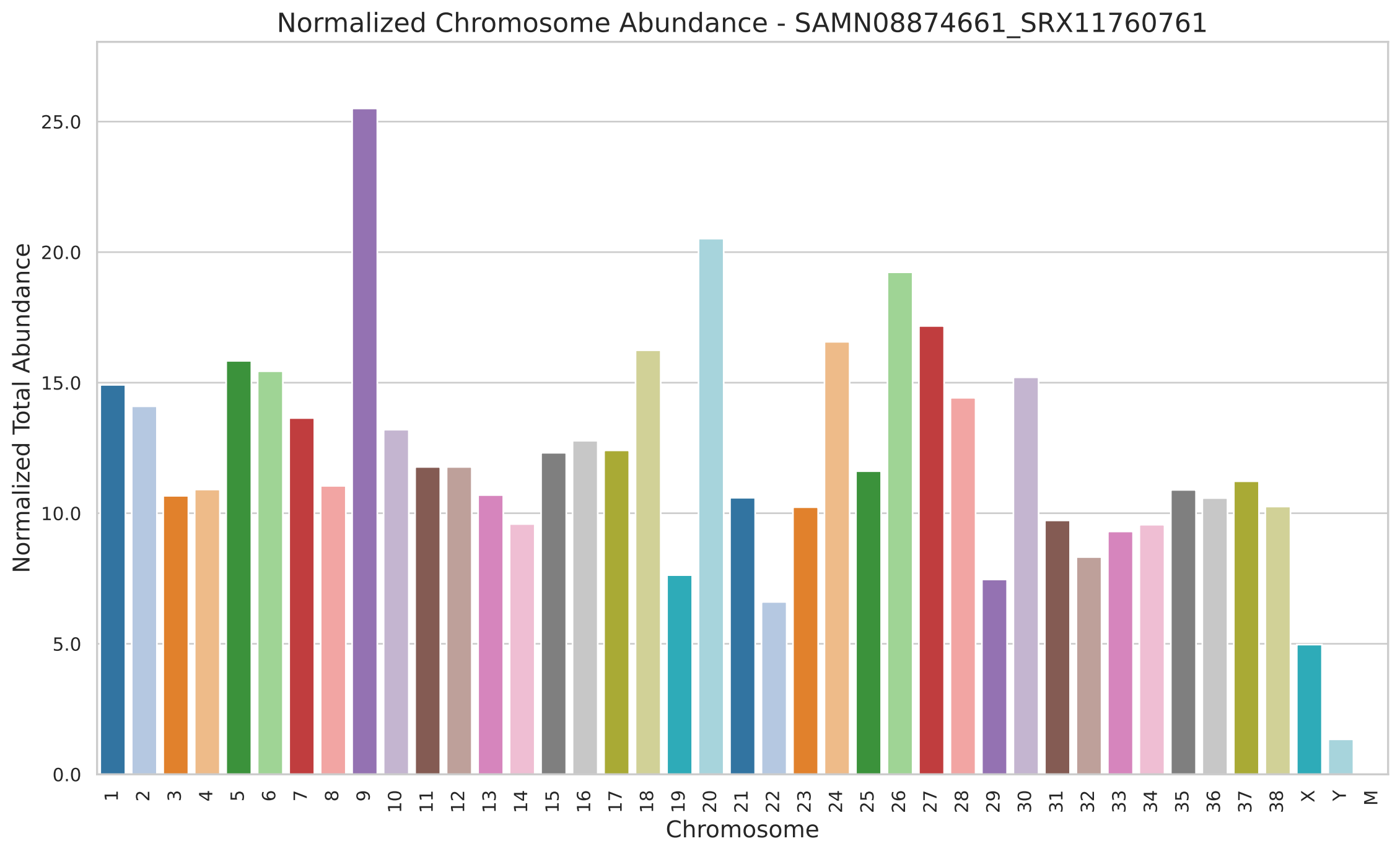

Normalized Chromosome Abundance - SAMN08874624_SRX11760774
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

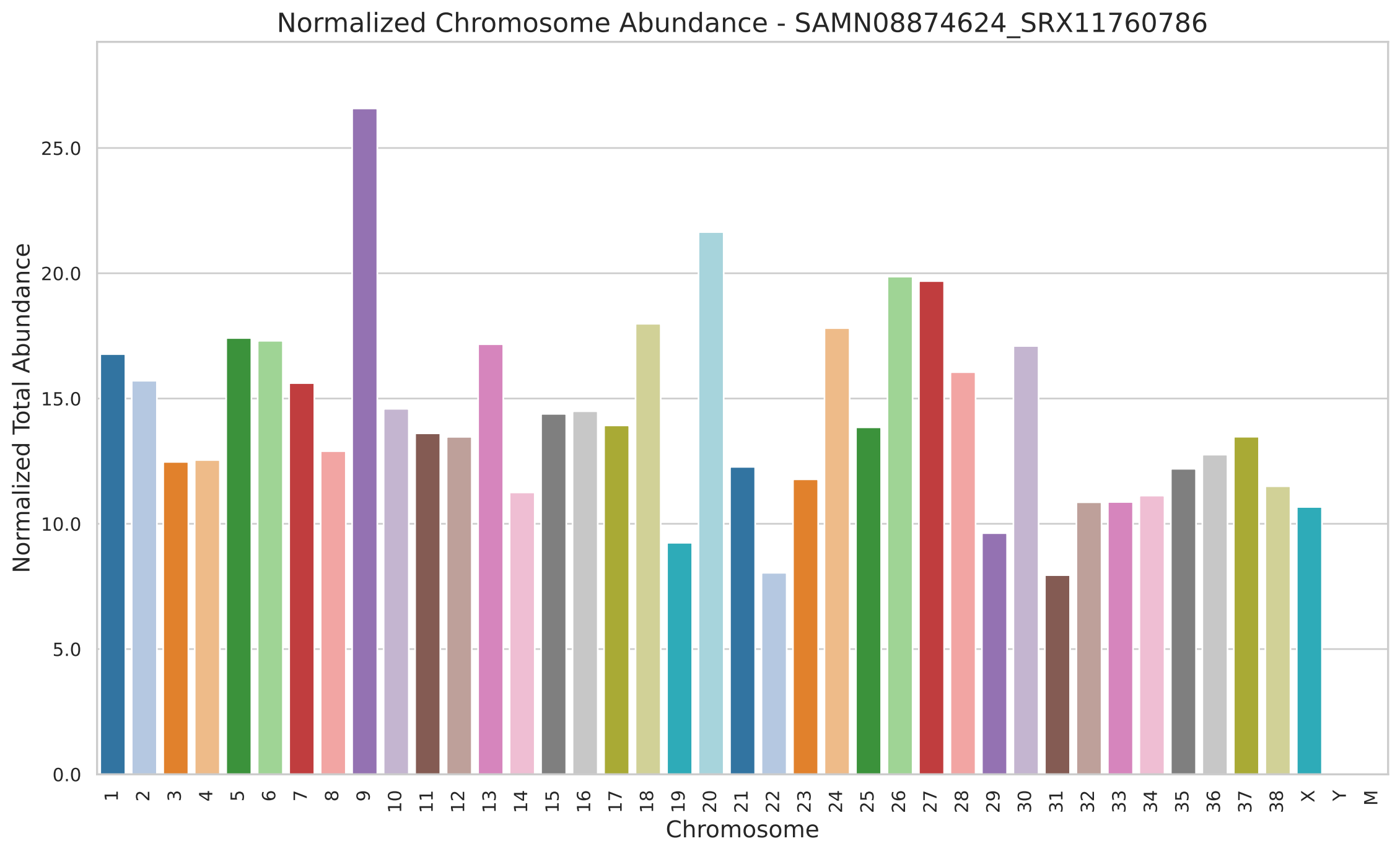

Normalized Chromosome Abundance - SAMN13133750_SRX7061483
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

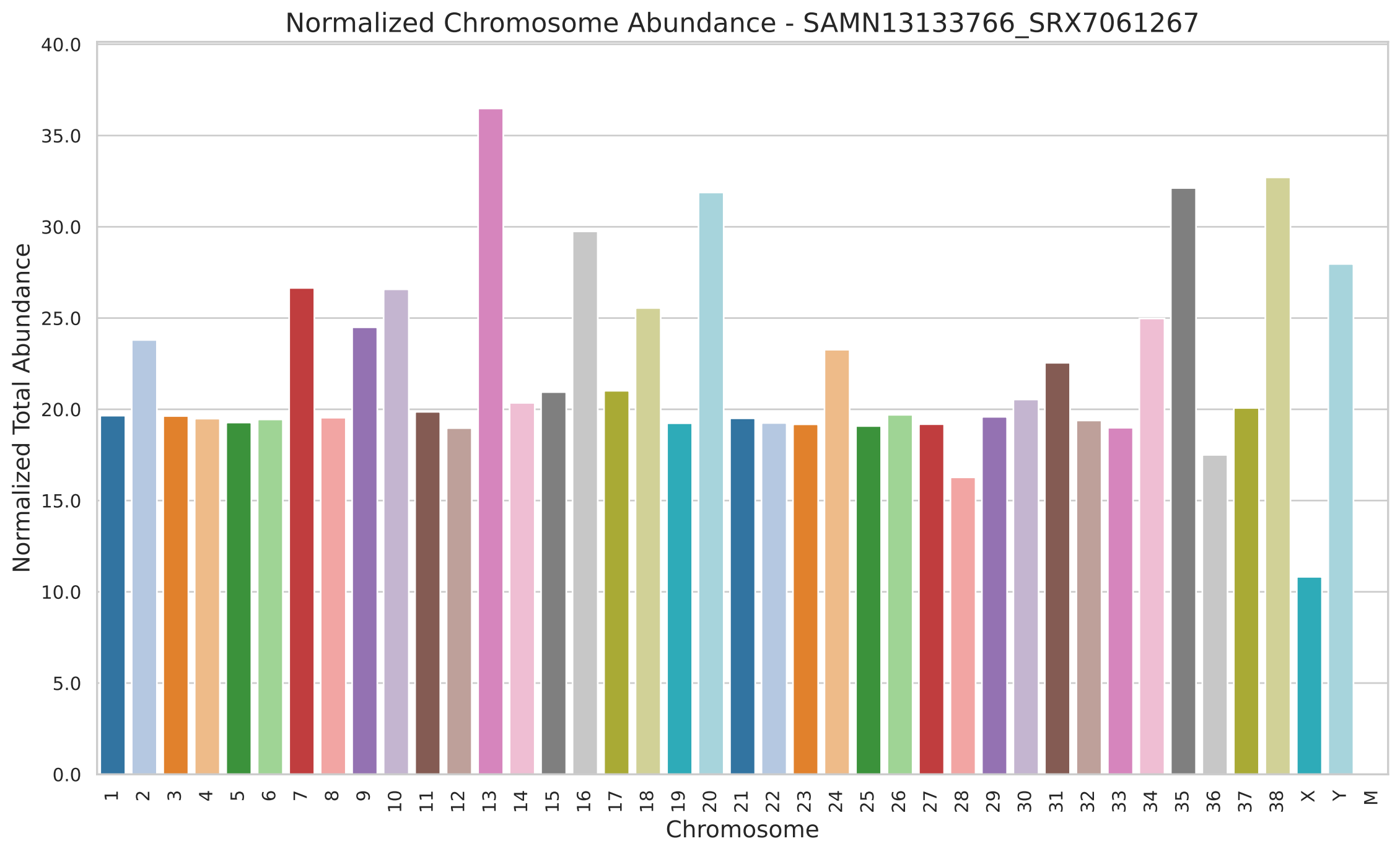

Normalized Chromosome Abundance - SAMN08874642_SRX11760765
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

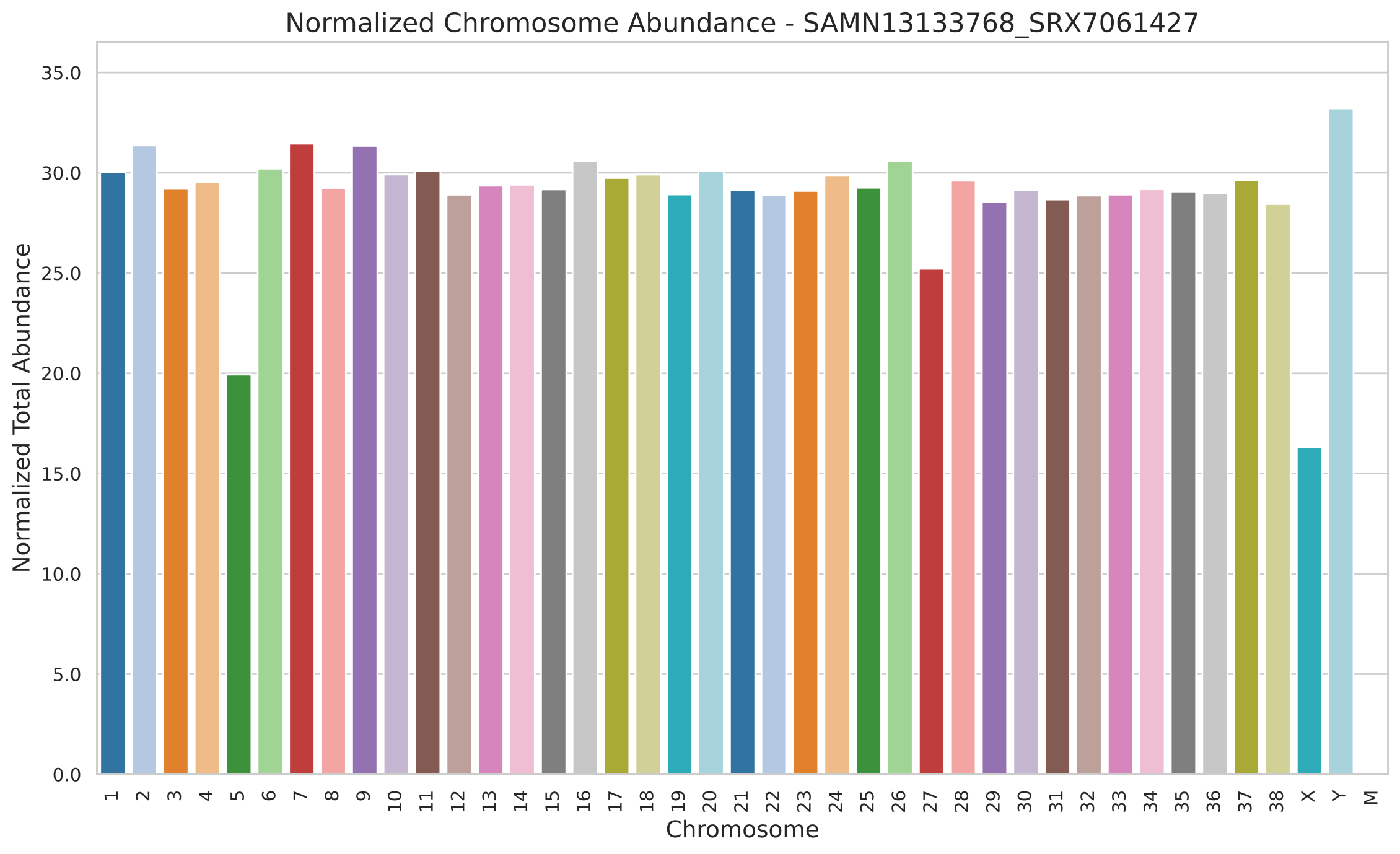

Normalized Chromosome Abundance - SAMN13133806_SRX7061447
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
35.0
40.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

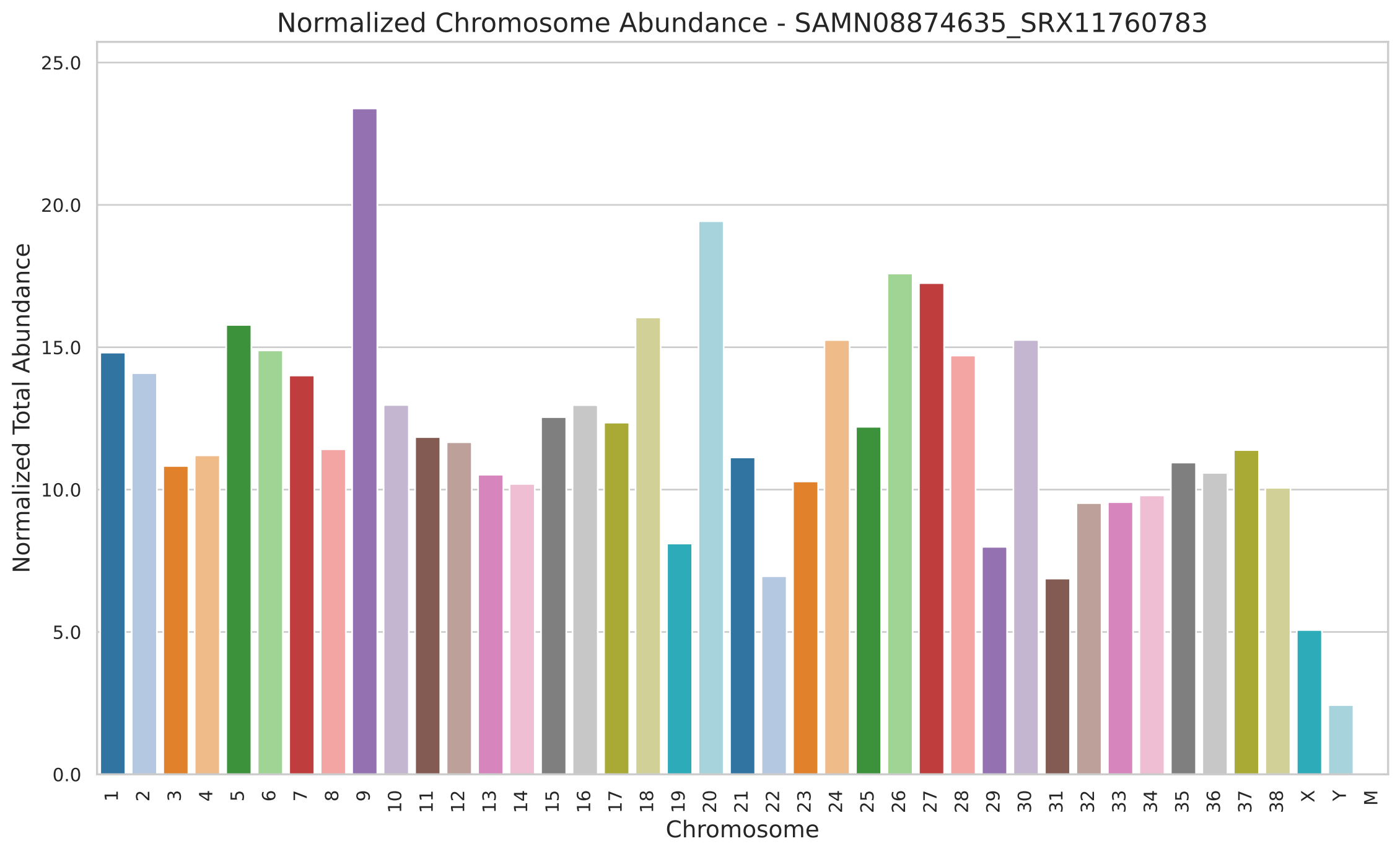

Normalized Chromosome Abundance - SAMN13133763_SRX7061515
Normalized Total Abundance
25.0
20.0
15.0
10.0
5.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

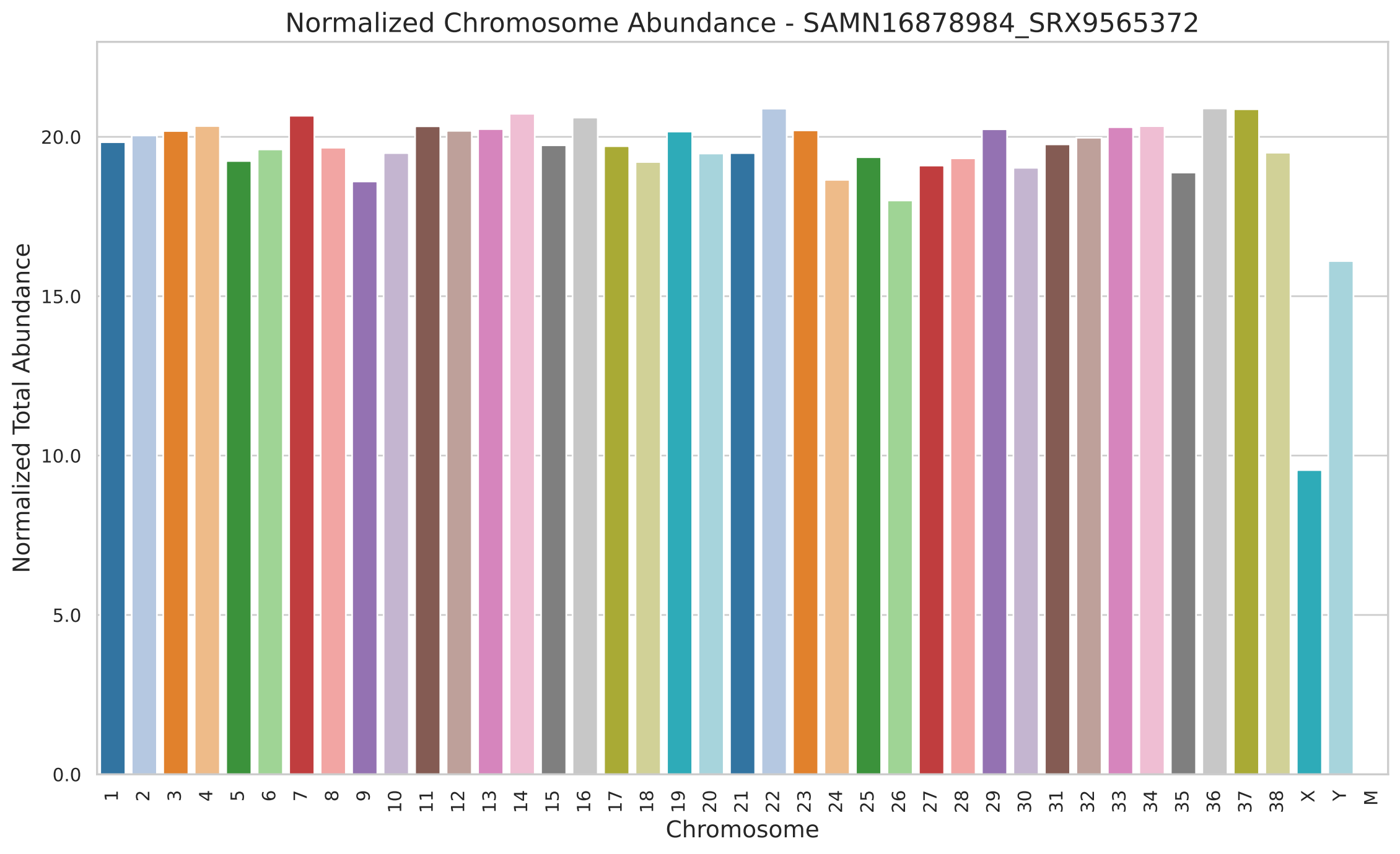

Normalized Chromosome Abundance - SAMN08874661_SRX11760761
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

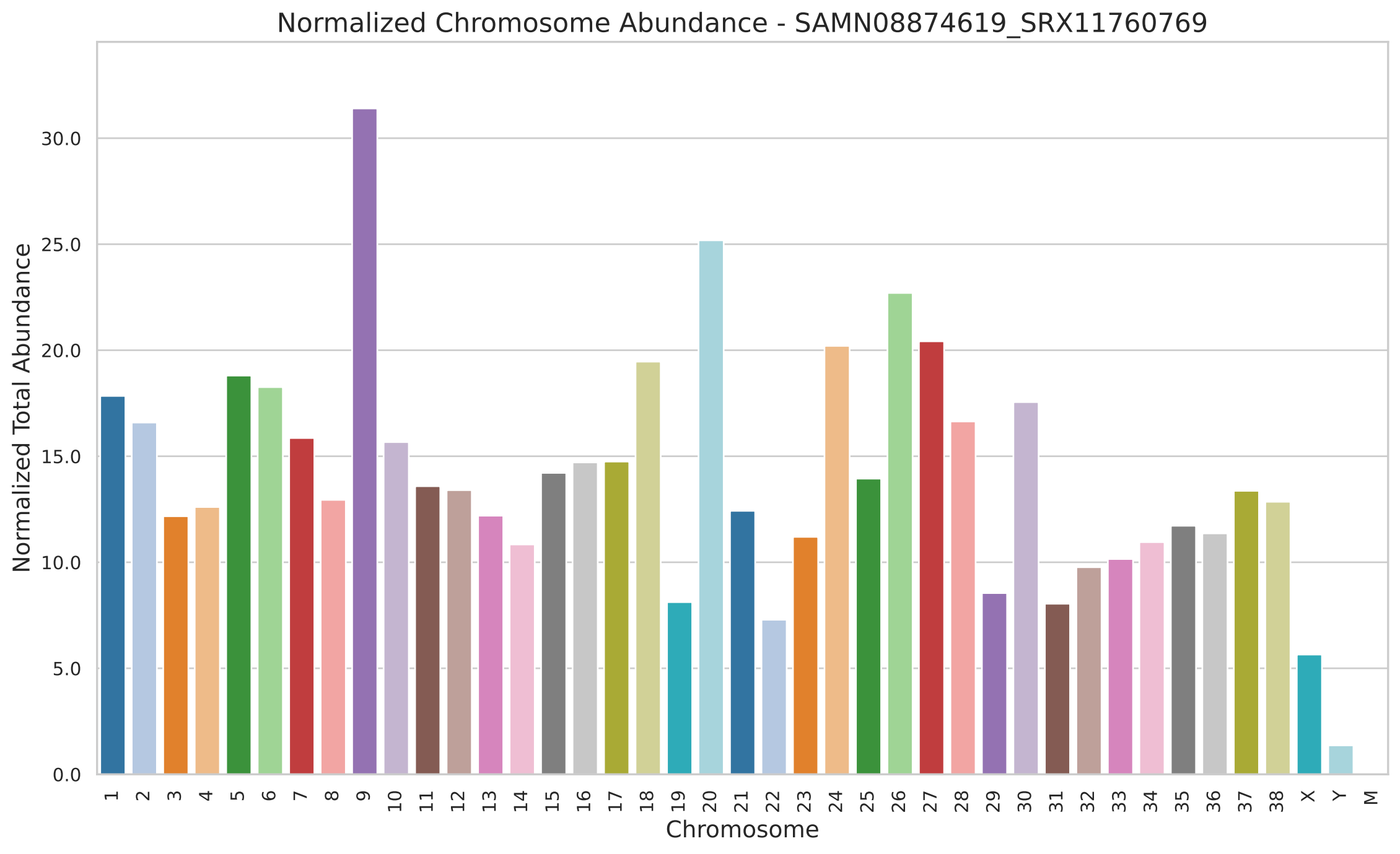

Normalized Chromosome Abundance - SAMN08874624_SRX11760786
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

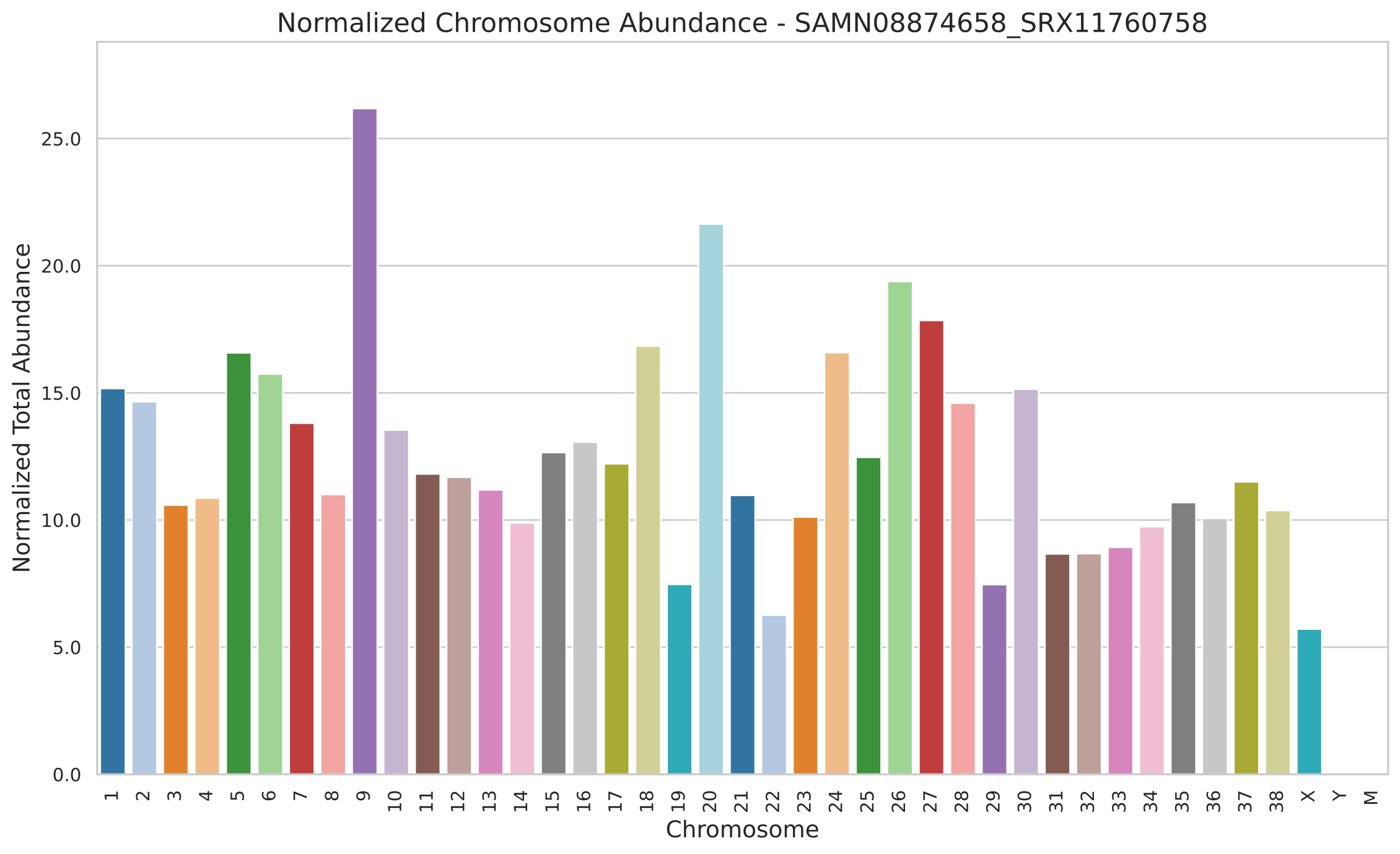

Normalized Chromosome Abundance - SAMN13133766_SRX7061267
Normalized Total Abundance
40.0
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

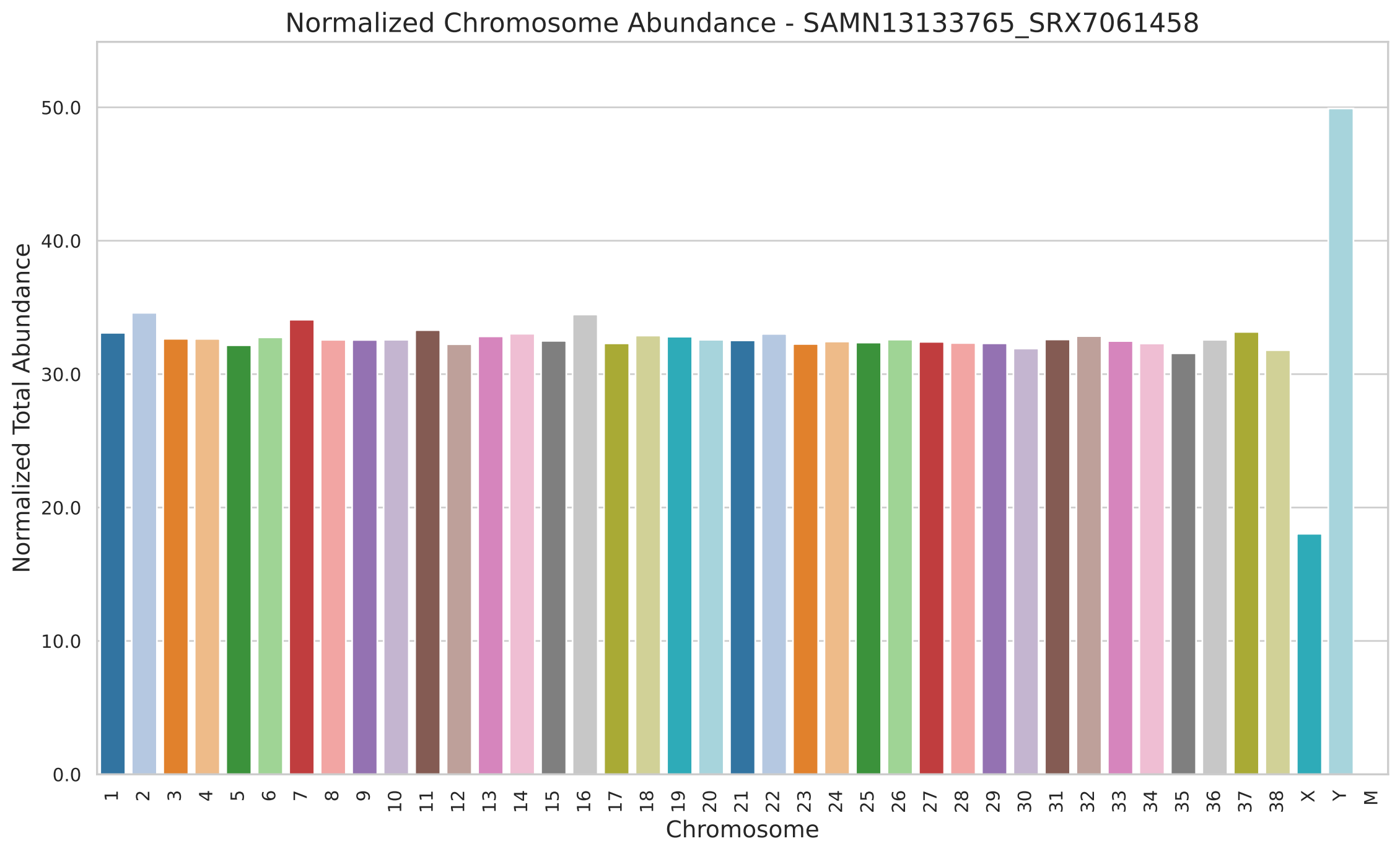

Normalized Chromosome Abundance - SAMN13133768_SRX7061427
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
35.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

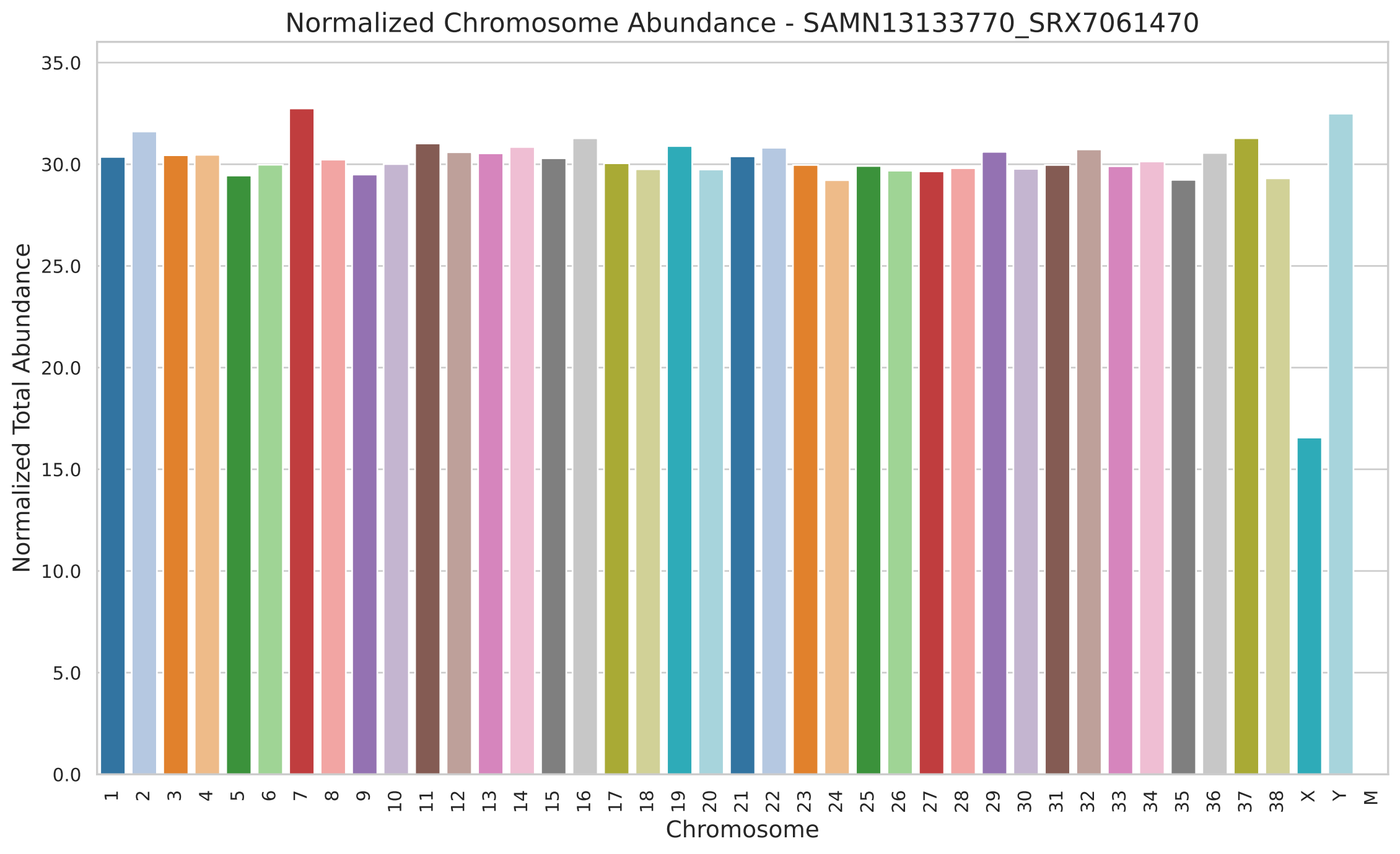

Normalized Chromosome Abundance - SAMN08874635_SRX11760783
Normalized Total Abundance
25.0
20.0
15.0
10.0
5.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

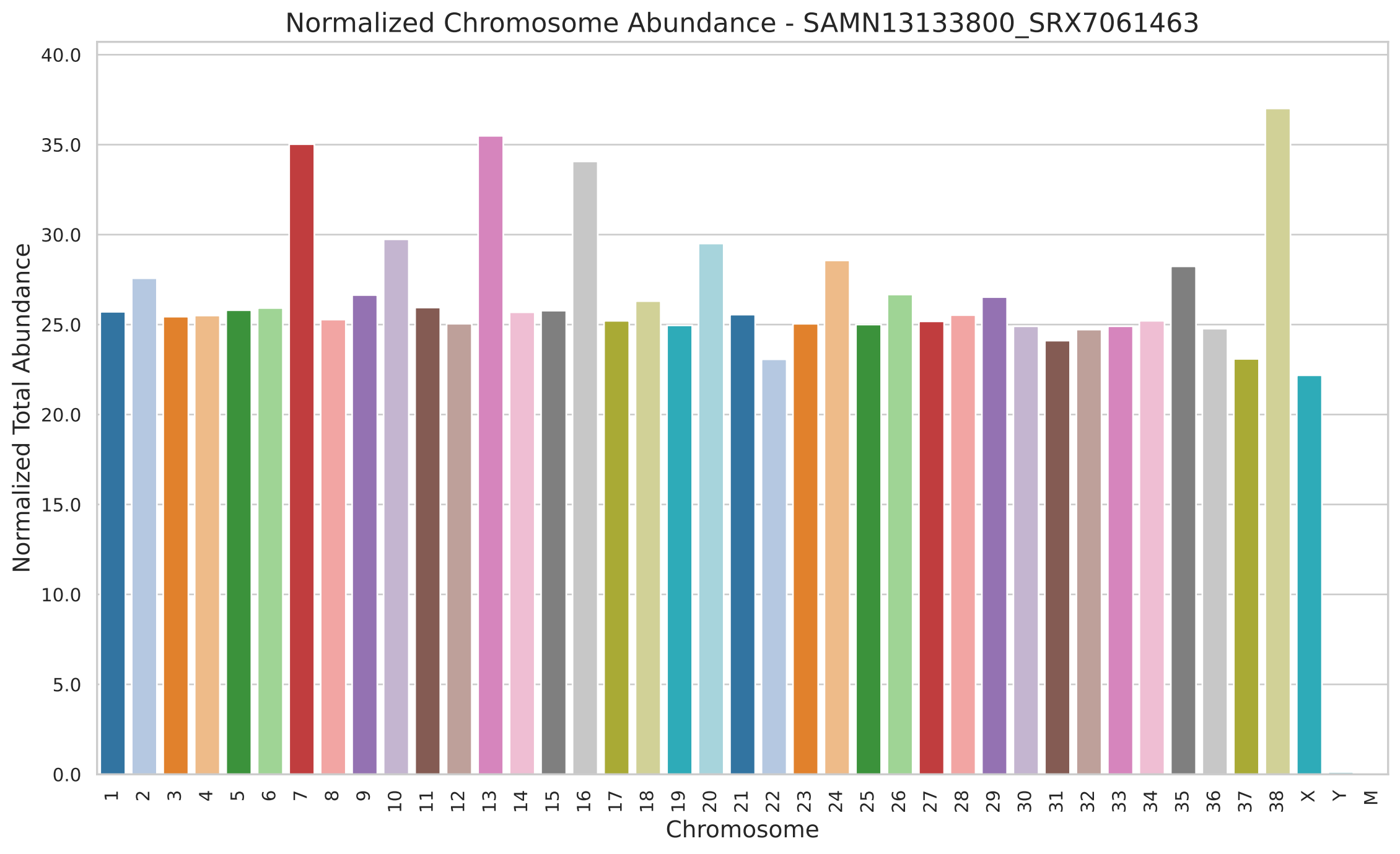

Normalized Chromosome Abundance - SAMN16878984_SRX9565372
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

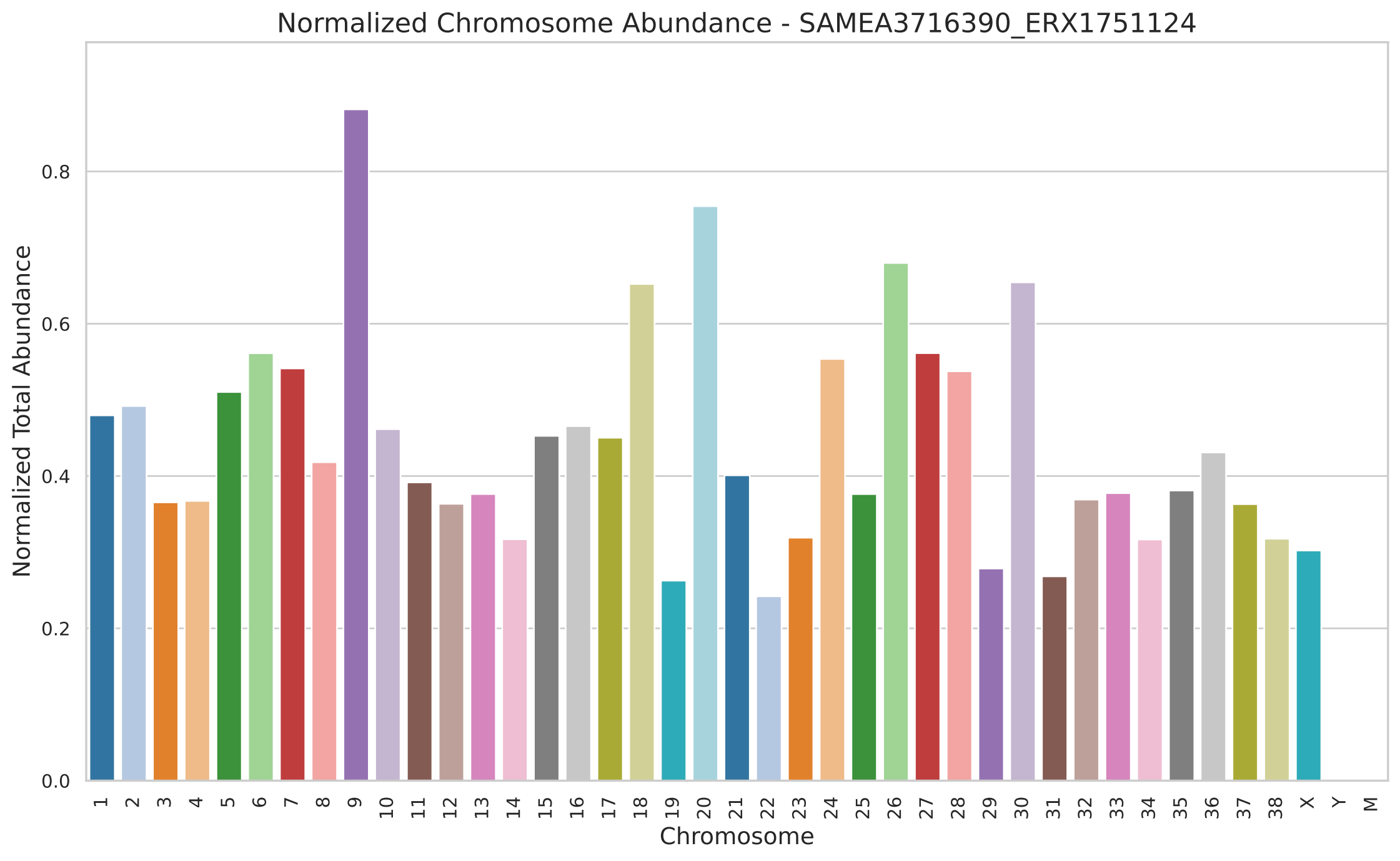

Normalized Chromosome Abundance - SAMN08874619_SRX11760769
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

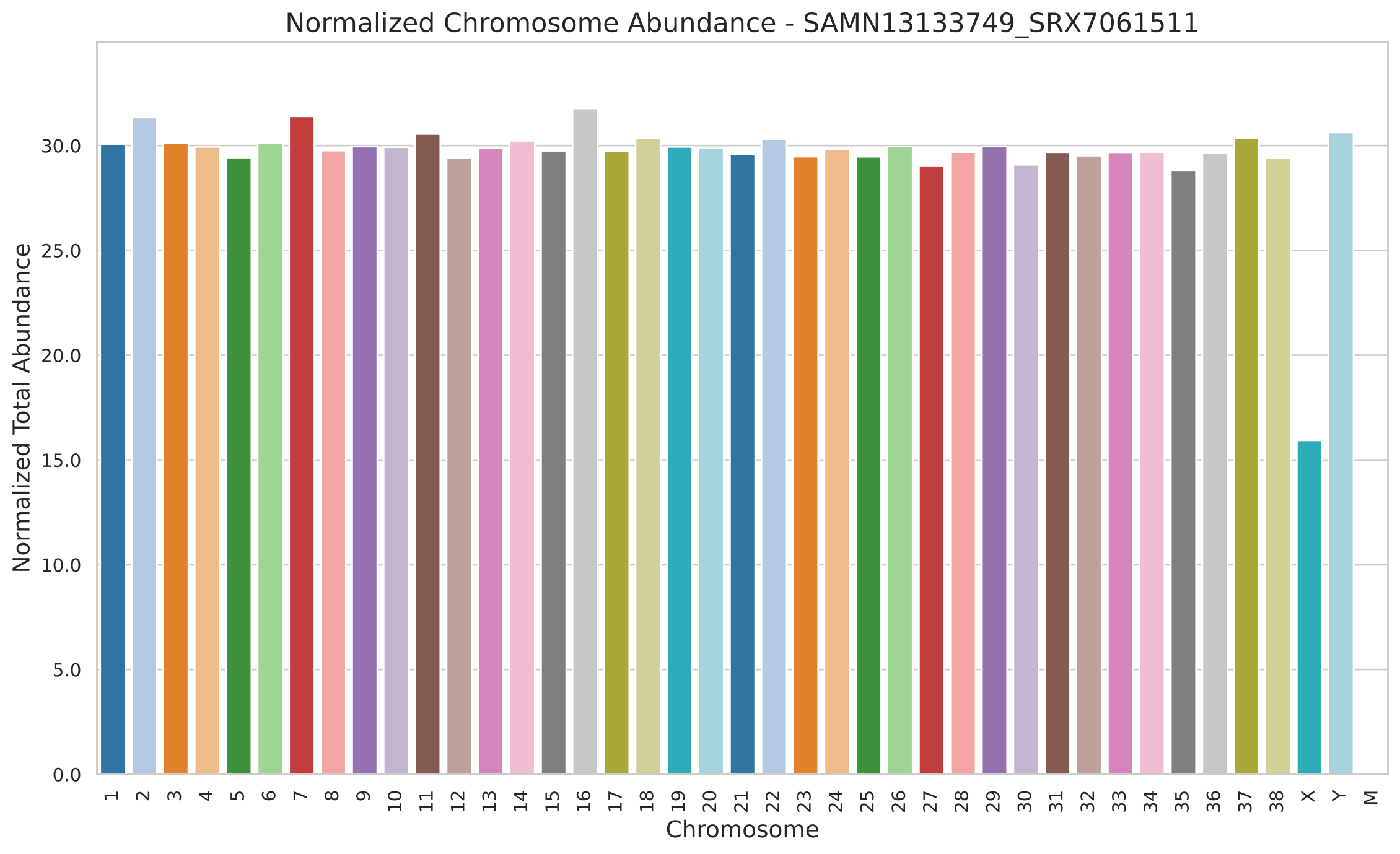

Normalized Chromosome Abundance - SAMN08874658_SRX11760758
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

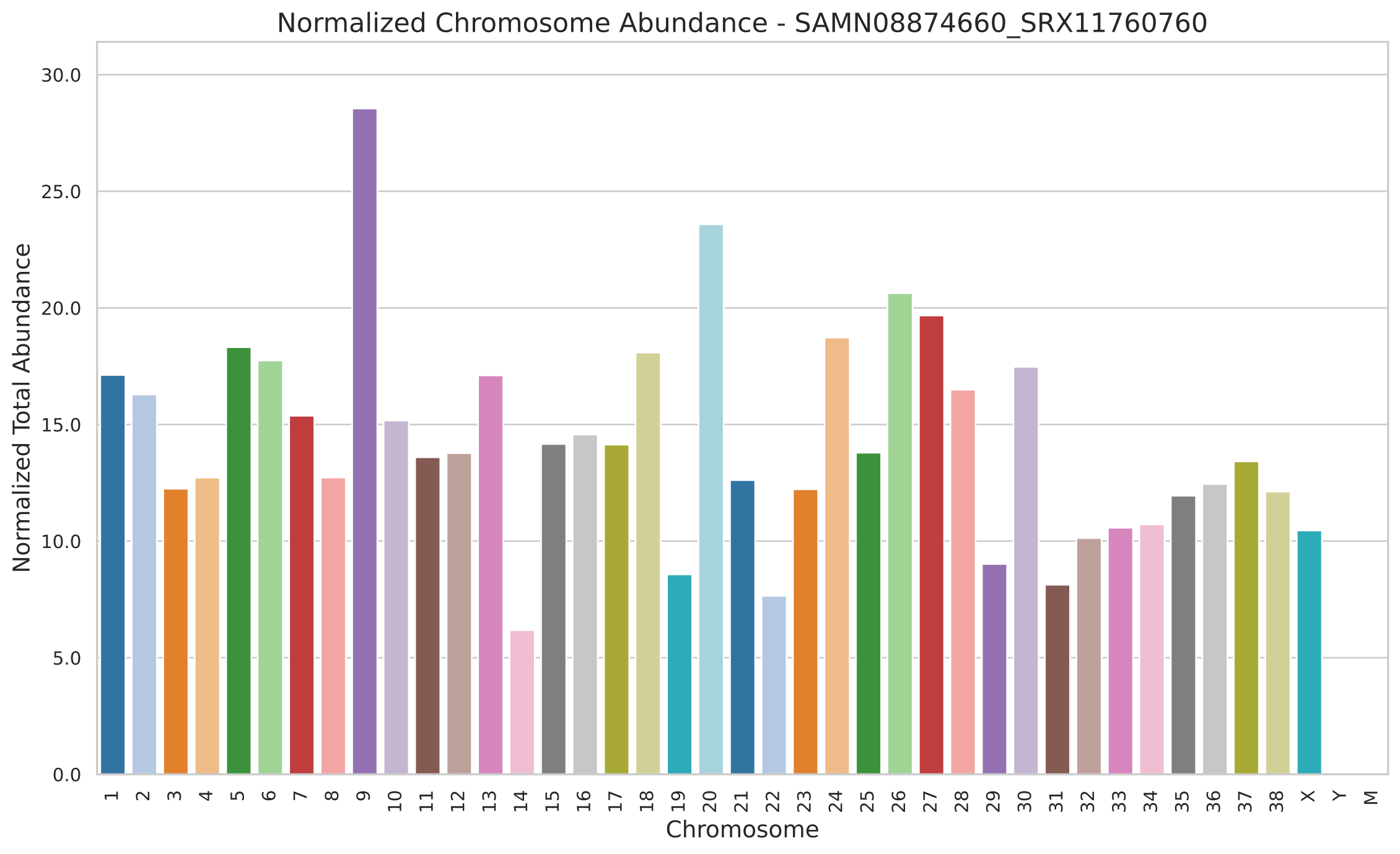

Normalized Chromosome Abundance - SAMN13133765_SRX7061458
Normalized Total Abundance
0.0
10.0
20.0
30.0
40.0
50.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

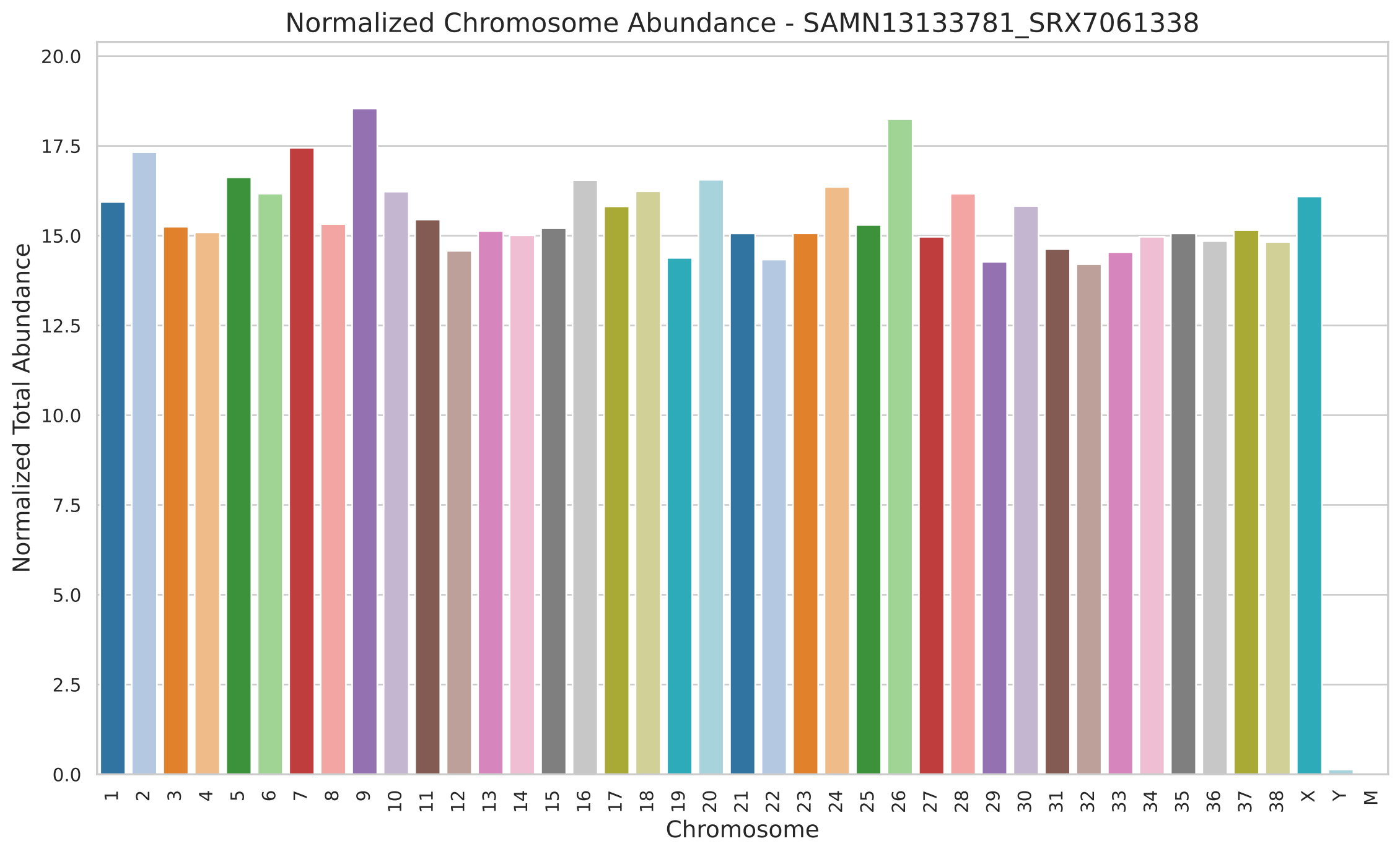

Normalized Chromosome Abundance - SAMN13133770_SRX7061470
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
35.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

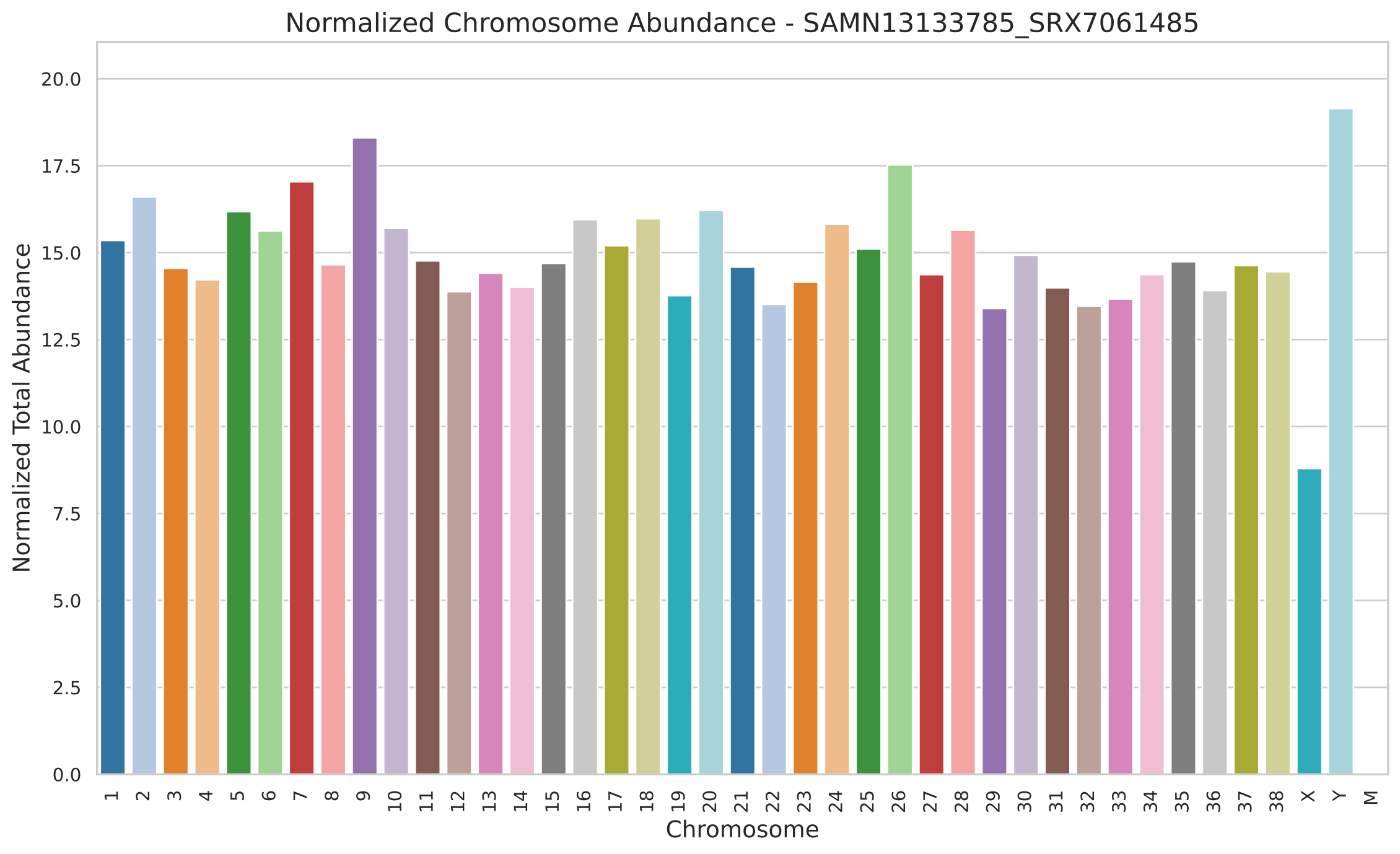

Normalized Chromosome Abundance - SAMN13133800_SRX7061463
Normalized Total Abundance
40.0
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

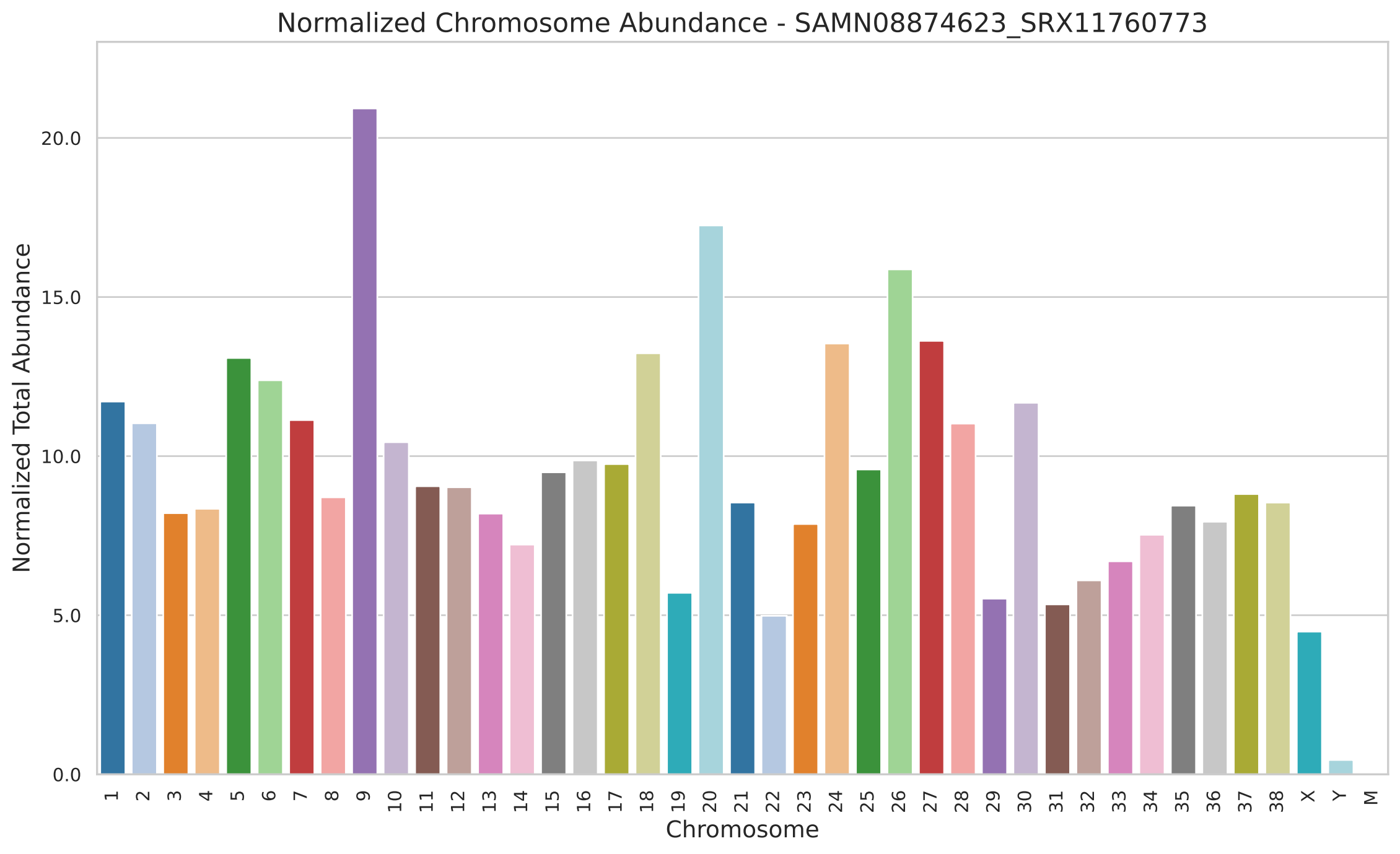

Normalized Chromosome Abundance - SAMEA3716390_ERX1751124
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

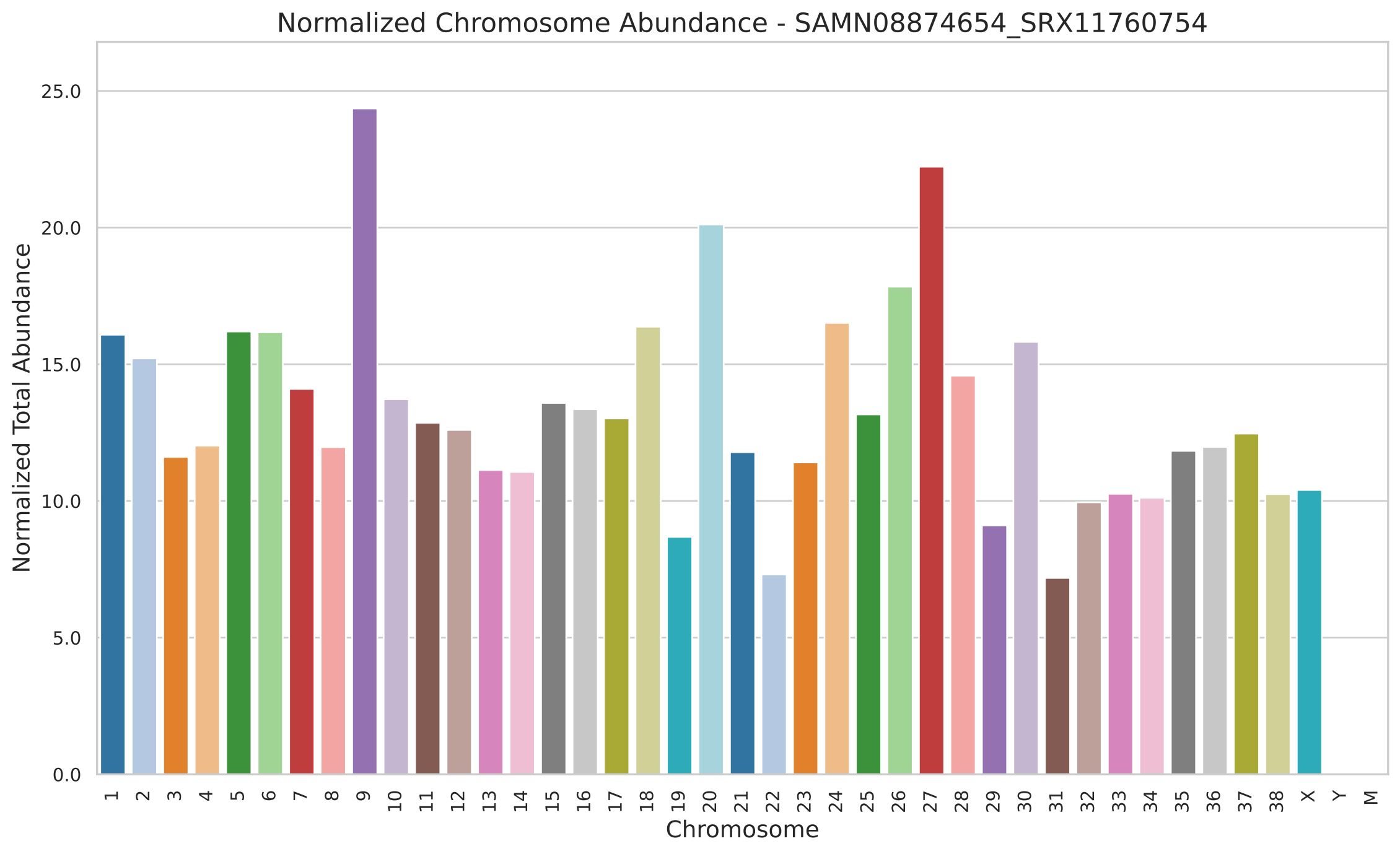

Normalized Chromosome Abundance - SAMN13133749_SRX7061511
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

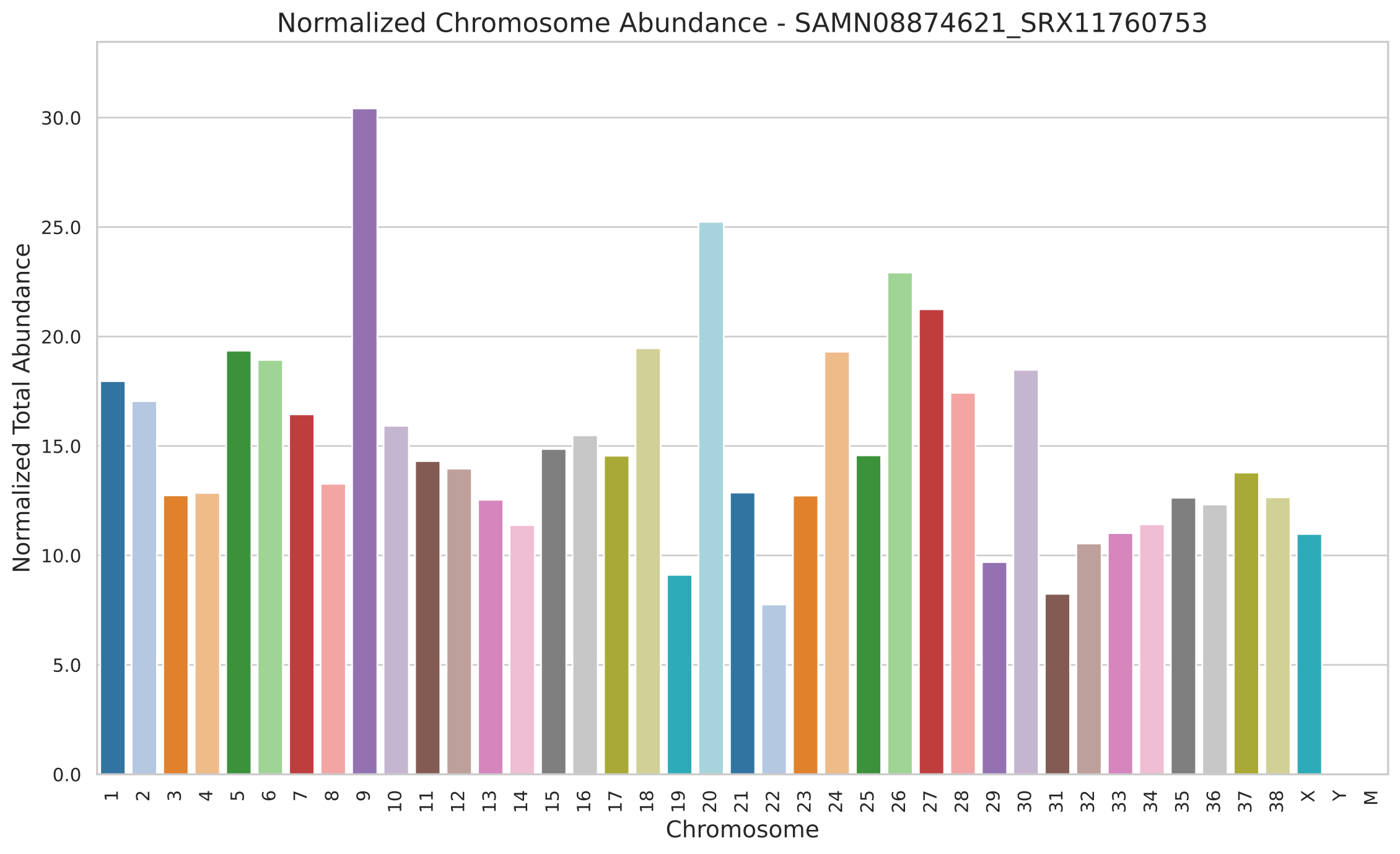

Normalized Chromosome Abundance - SAMN08874660_SRX11760760
Normalized Total Abundance
30.0
25.0
20.0
15.0
10.0
5.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

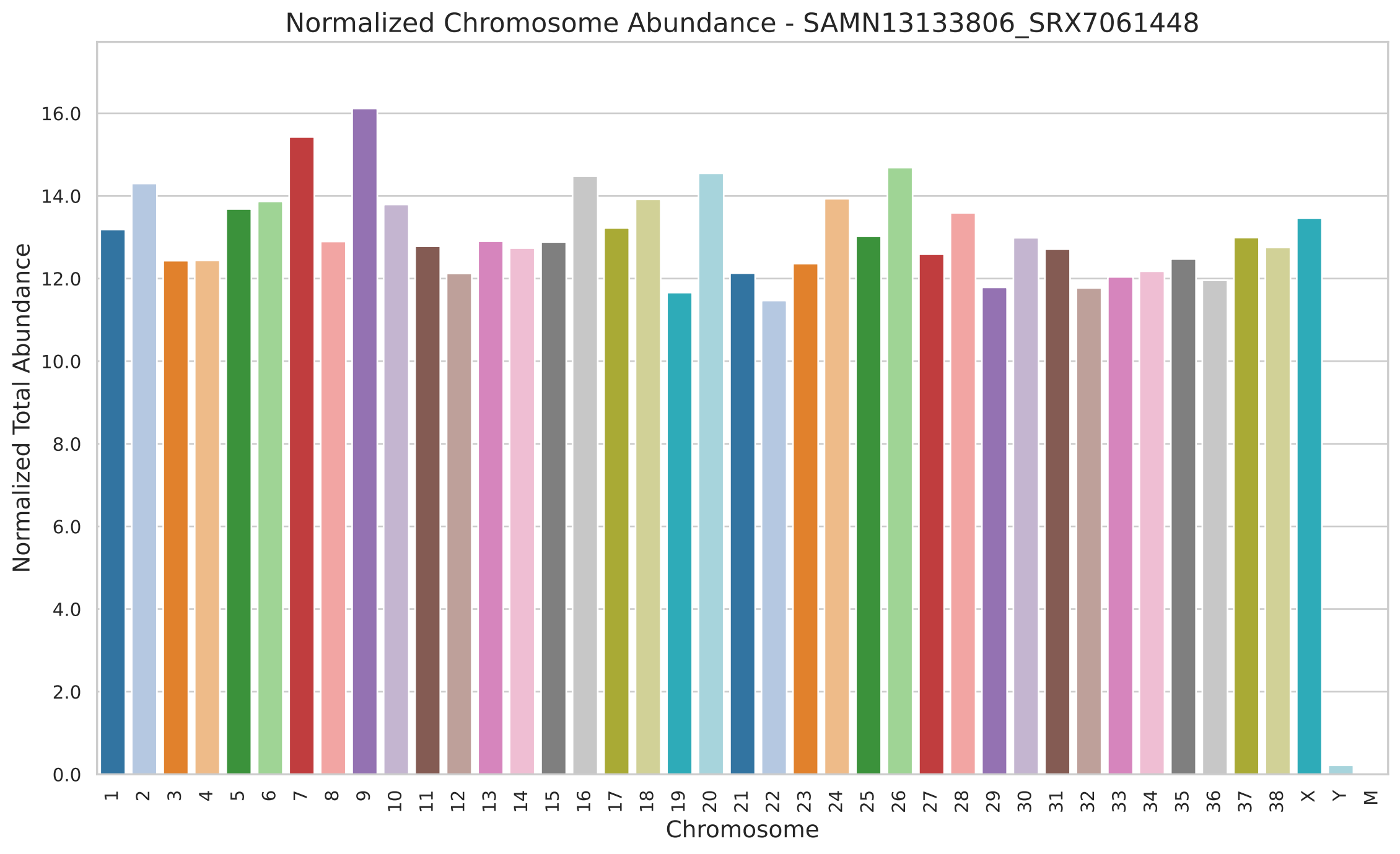

Normalized Chromosome Abundance - SAMN13133781_SRX7061338
Normalized Total Abundance
20.0
17.5
15.0
12.5
10.0
7.5
5.0
2.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

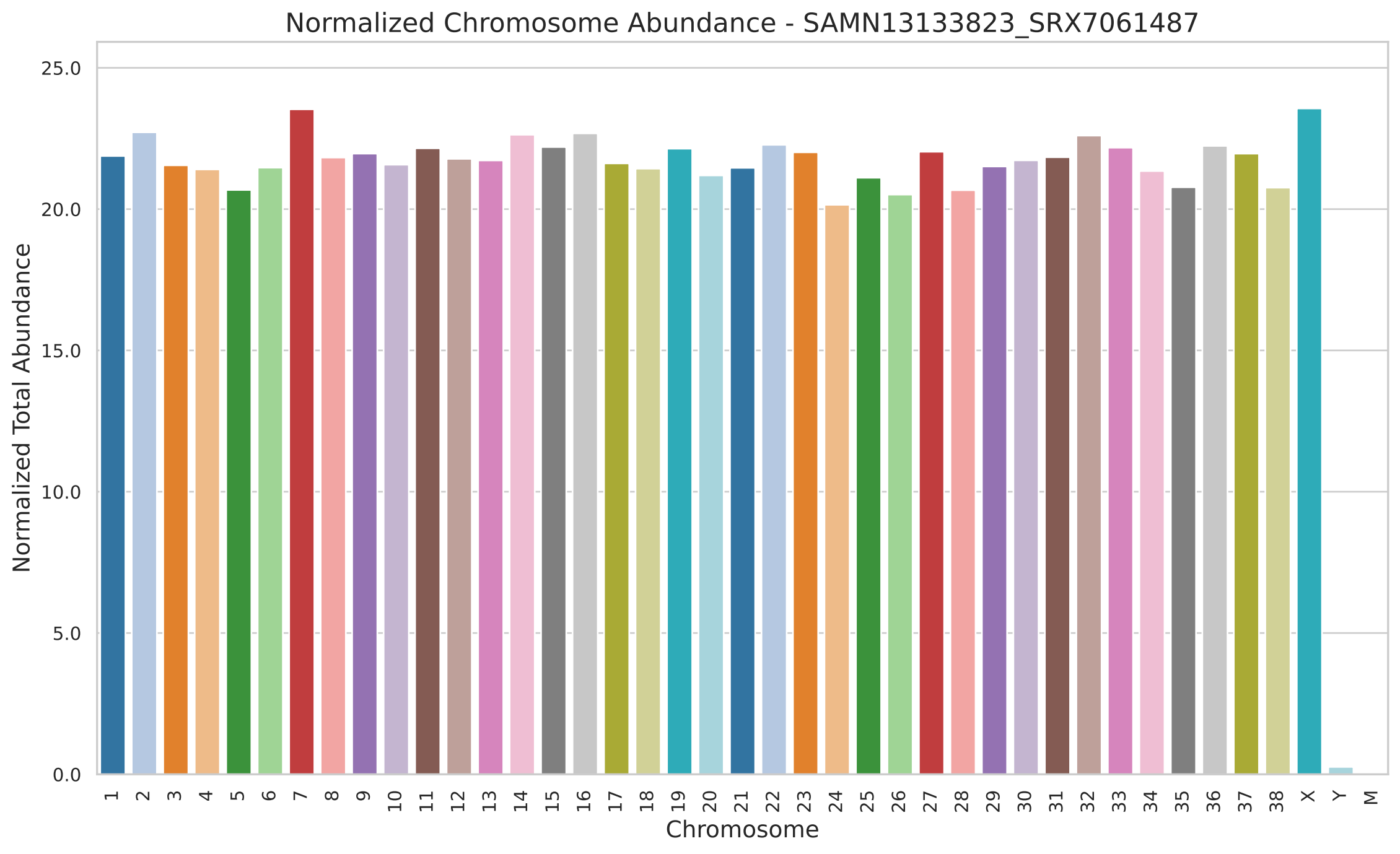

Normalized Chromosome Abundance - SAMN13133785_SRX7061485
Normalized Total Abundance
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5
20.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

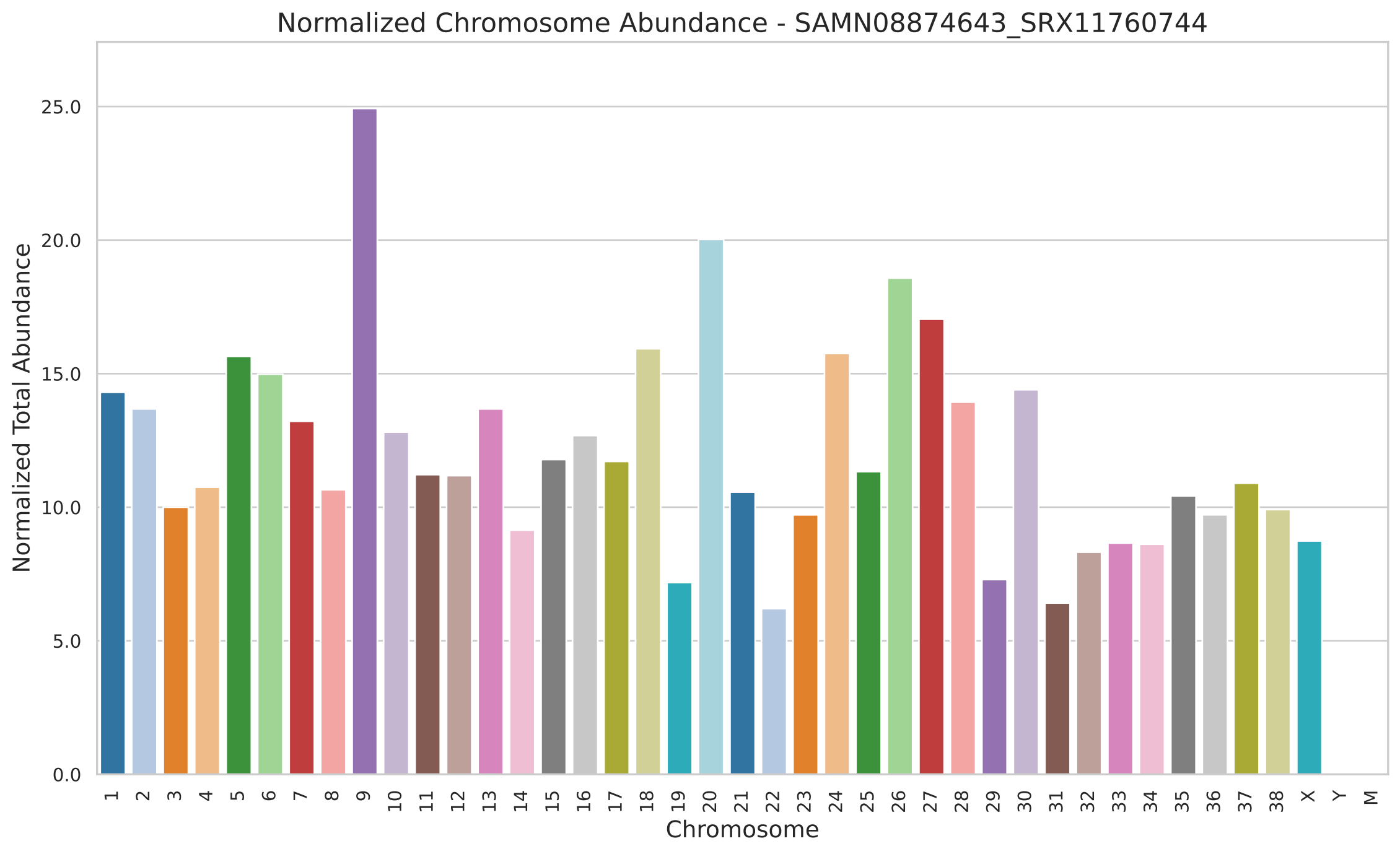

Normalized Chromosome Abundance - SAMN08874623_SRX11760773
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

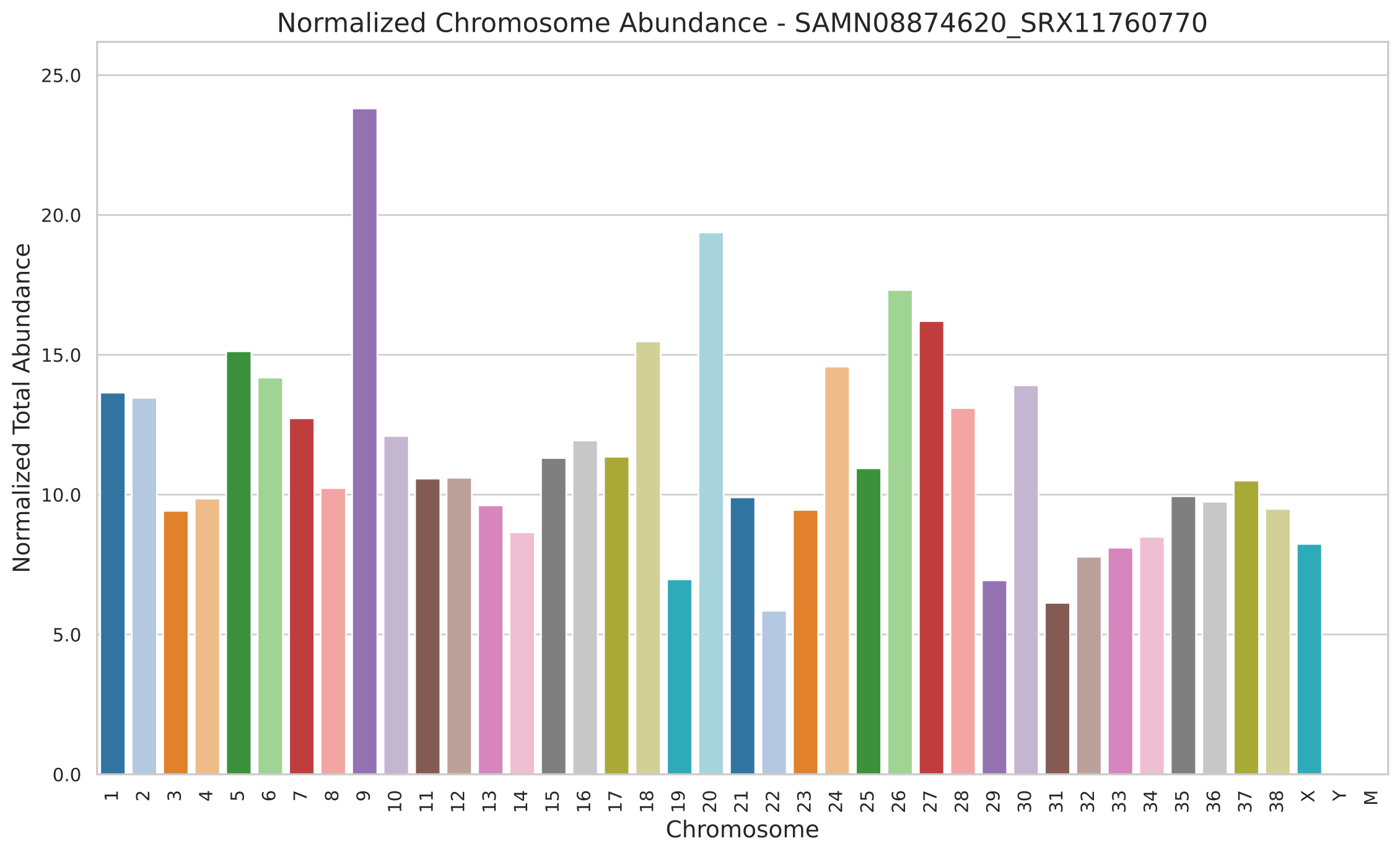

Normalized Chromosome Abundance - SAMN08874654_SRX11760754
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

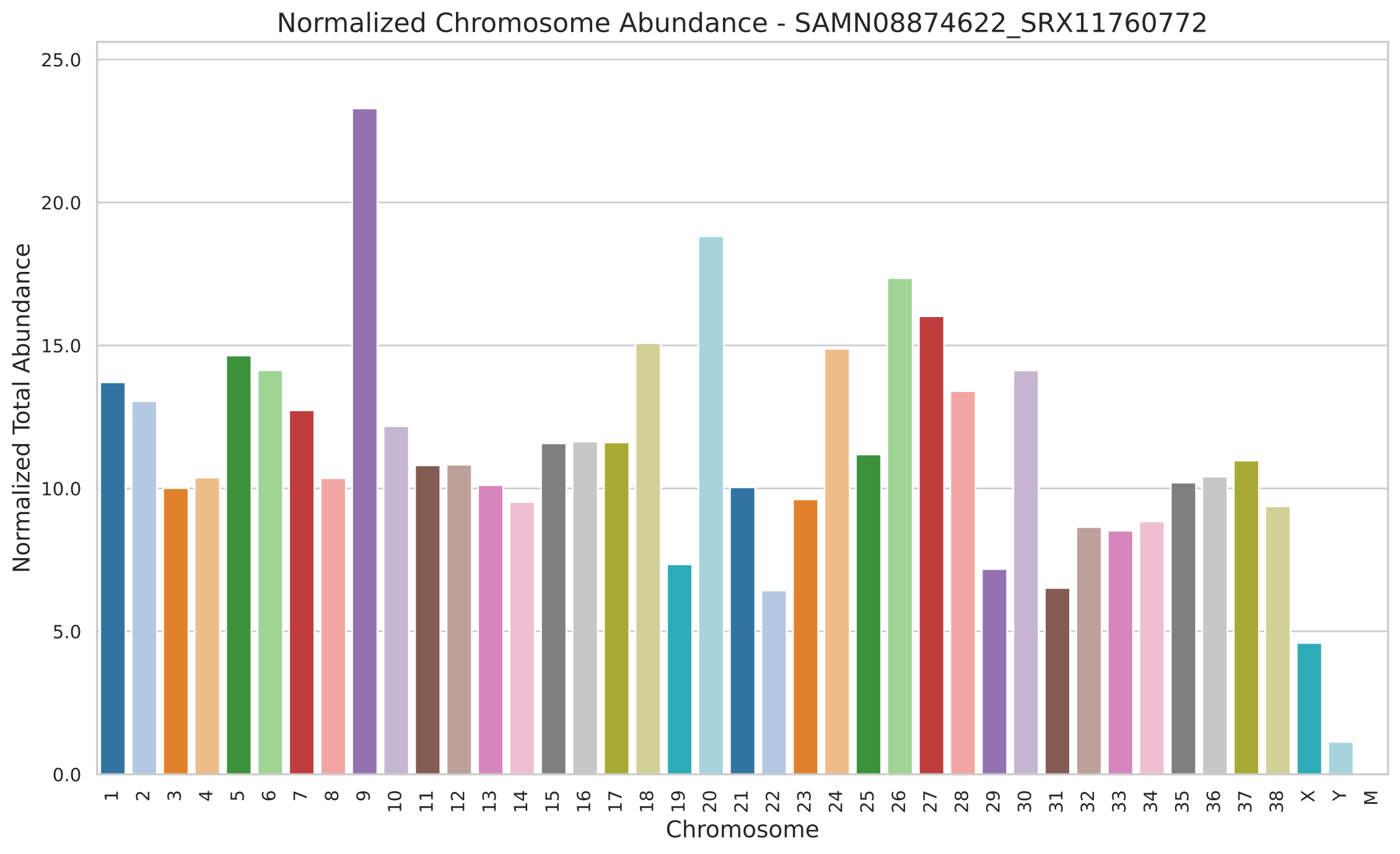

Normalized Chromosome Abundance - SAMN08874621_SRX11760753
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

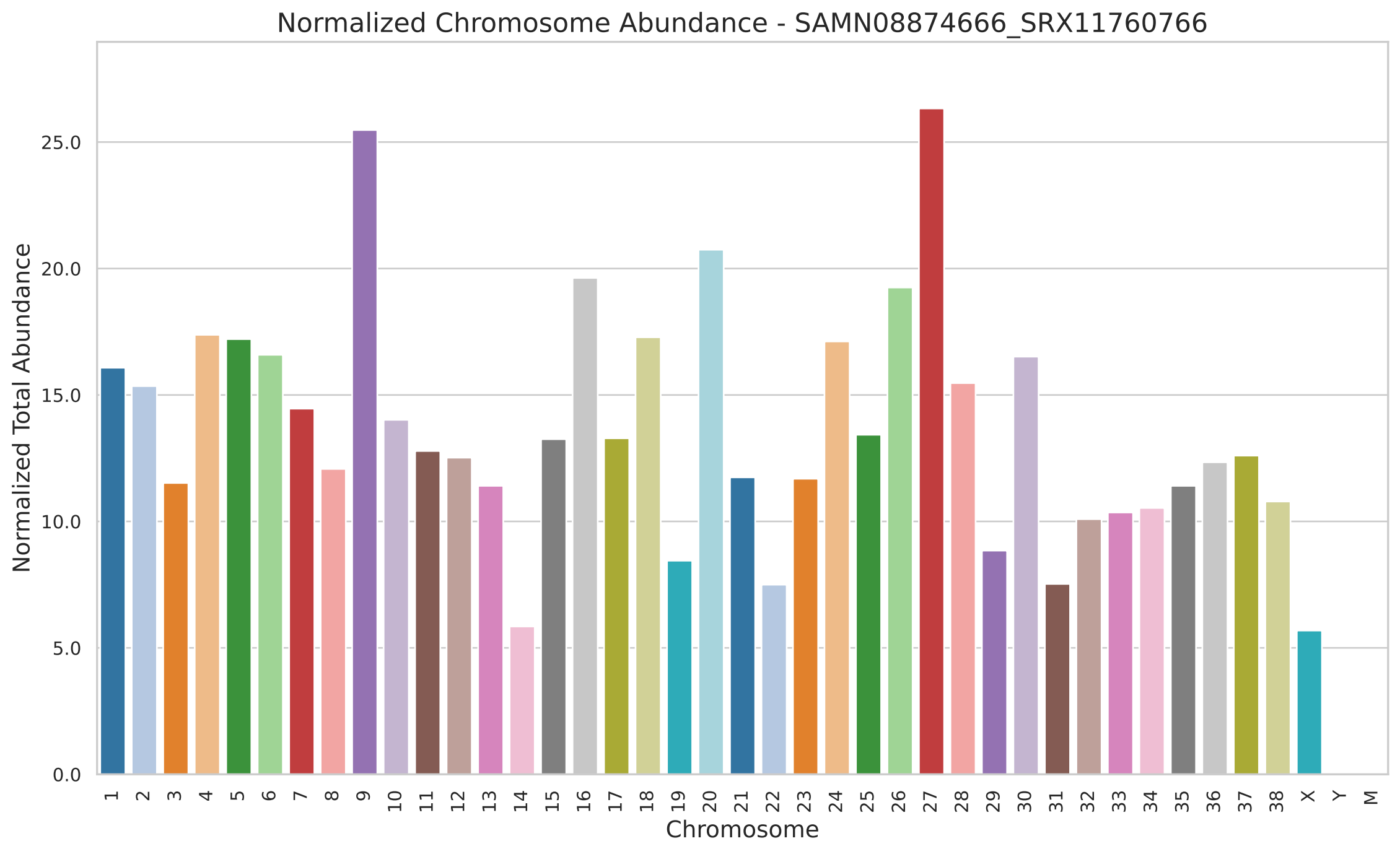

Normalized Chromosome Abundance - SAMN13133806_SRX7061448
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
12.0
14.0
16.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

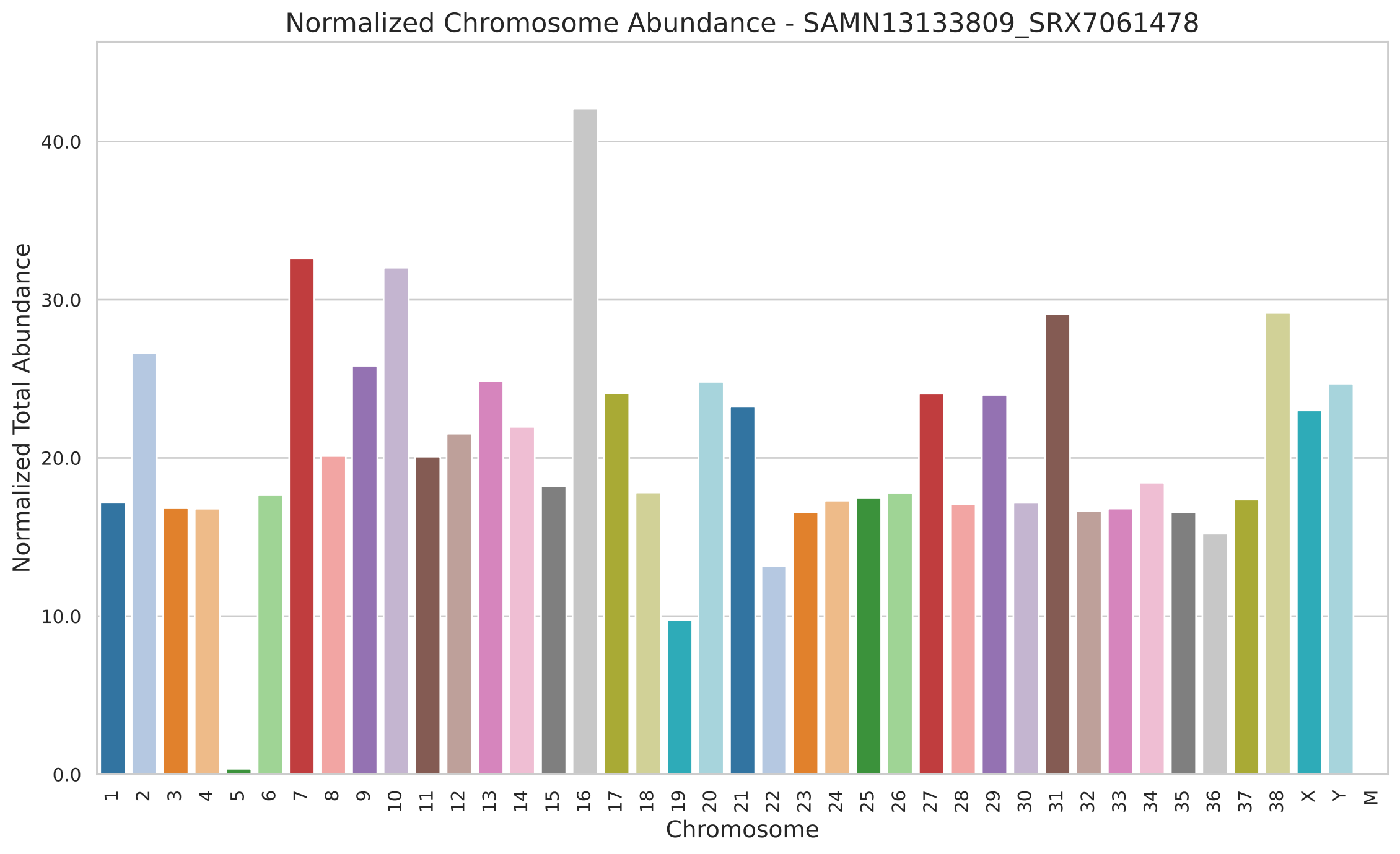

Normalized Chromosome Abundance - SAMN13133823_SRX7061487
Normalized Total Abundance
25.0
20.0
15.0
10.0
5.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

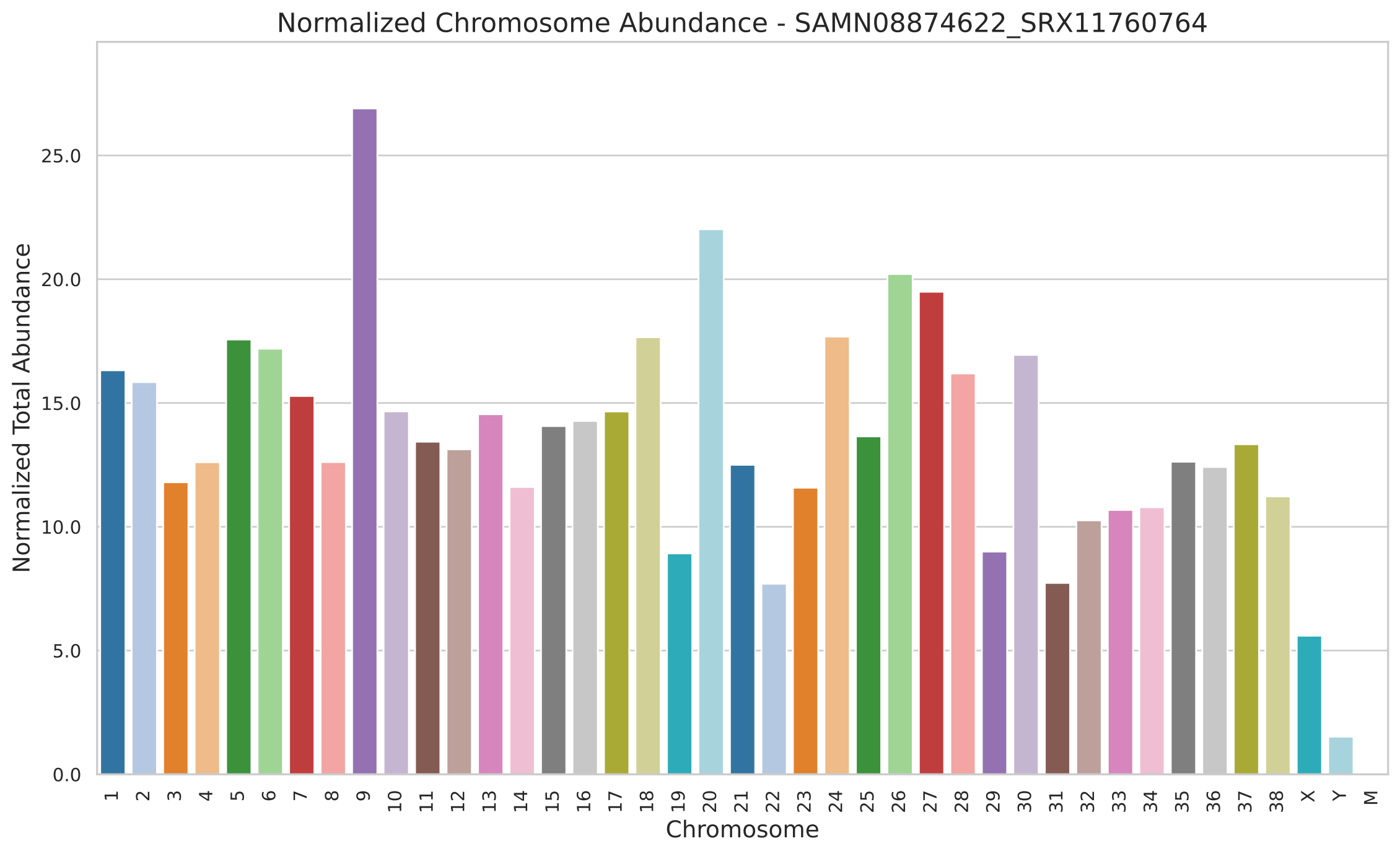

Normalized Chromosome Abundance - SAMN08874643_SRX11760744
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

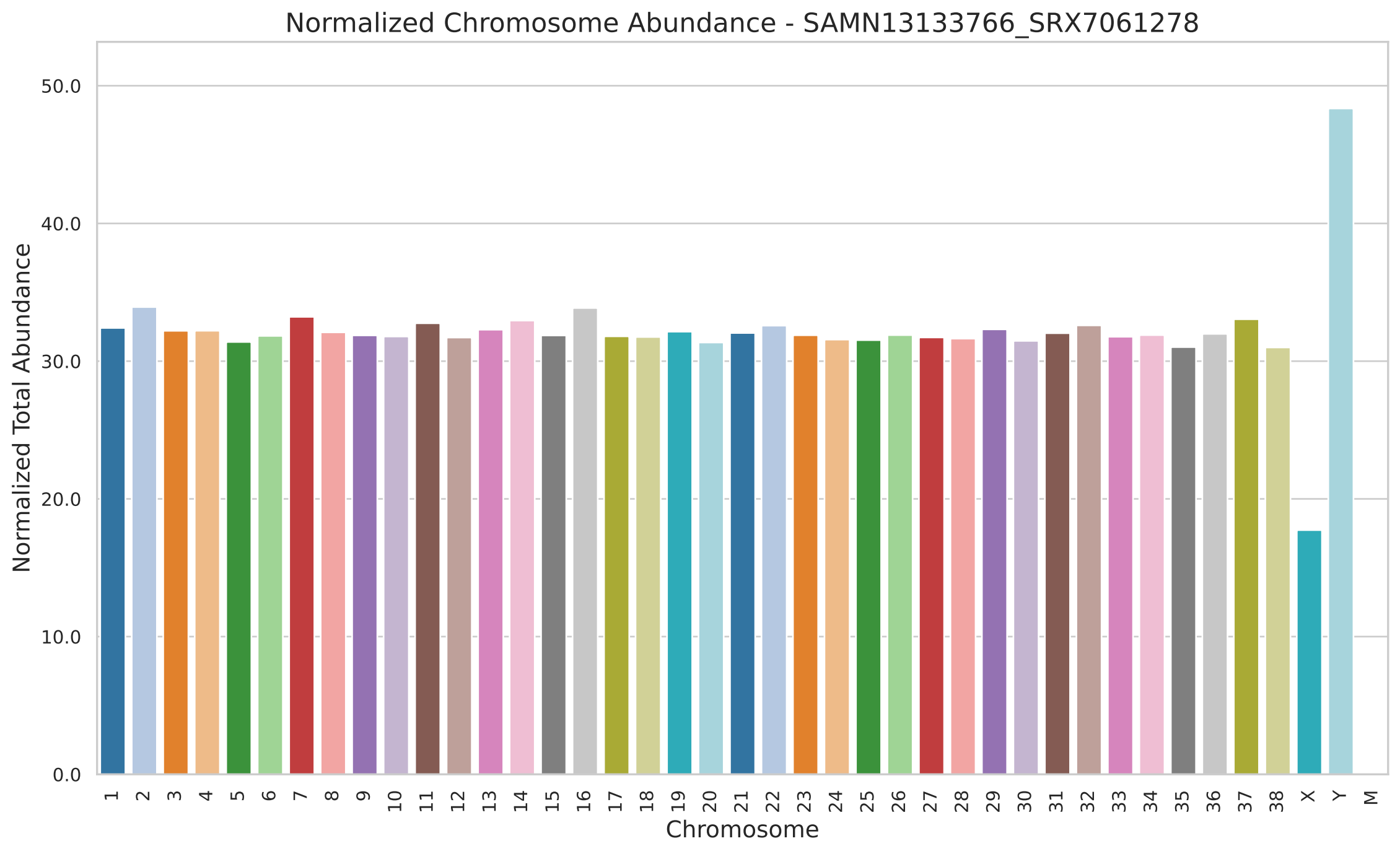

Normalized Chromosome Abundance - SAMN08874620_SRX11760770
Normalized Total Abundance
25.0
20.0
15.0
10.0
5.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

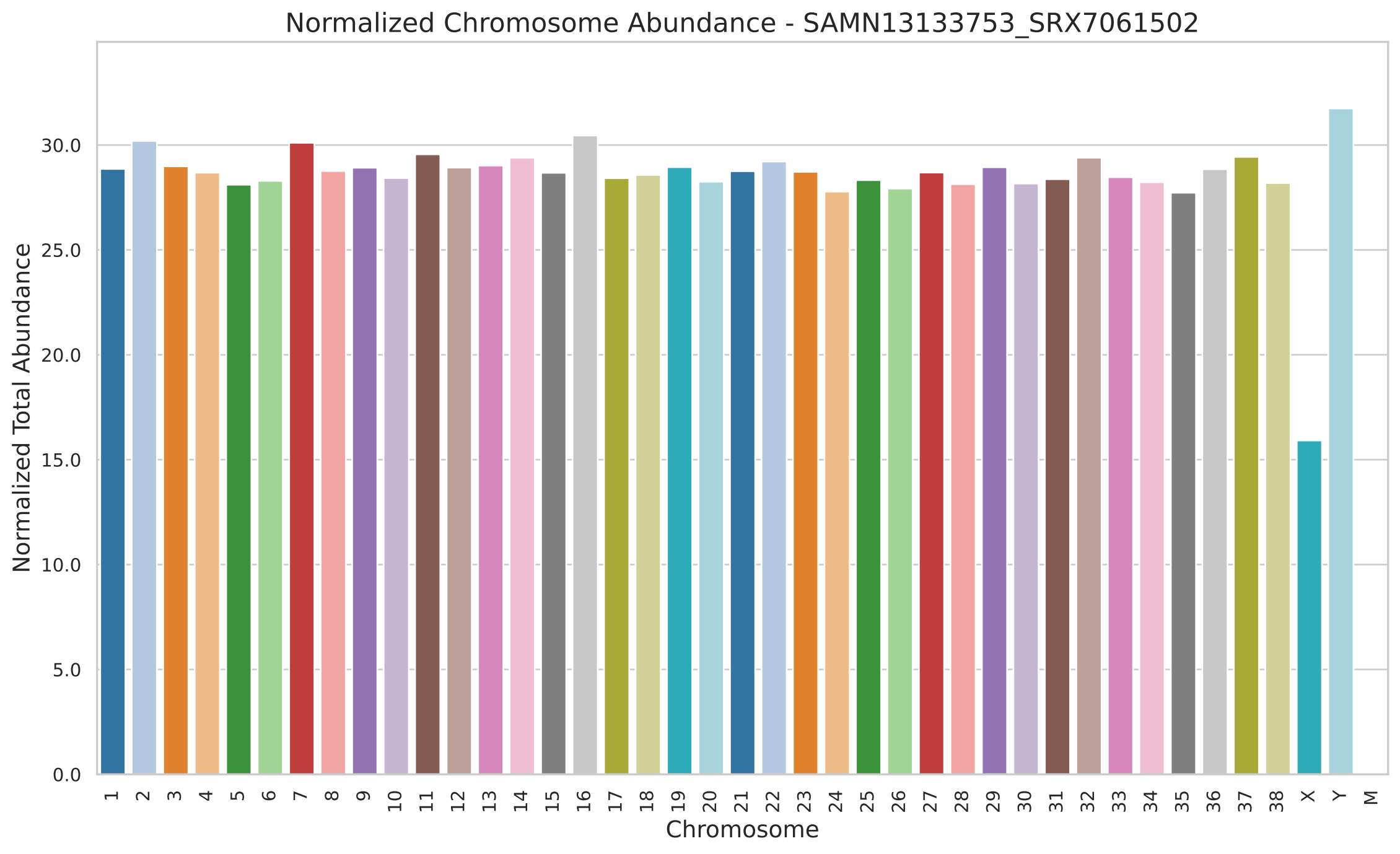

Normalized Chromosome Abundance - SAMN08874622_SRX11760772
Normalized Total Abundance
25.0
20.0
15.0
10.0
5.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

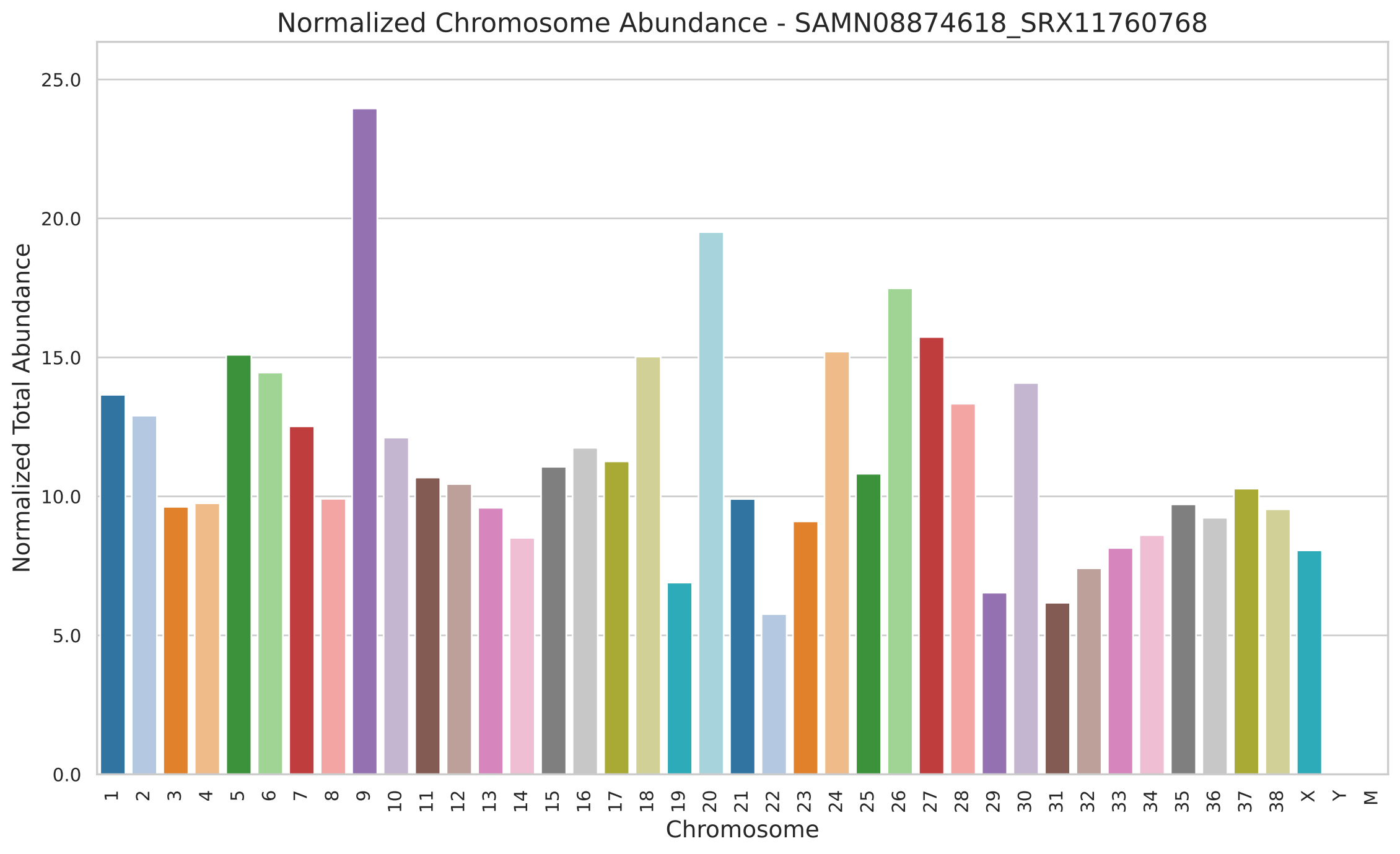

Normalized Chromosome Abundance - SAMN08874666_SRX11760766
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

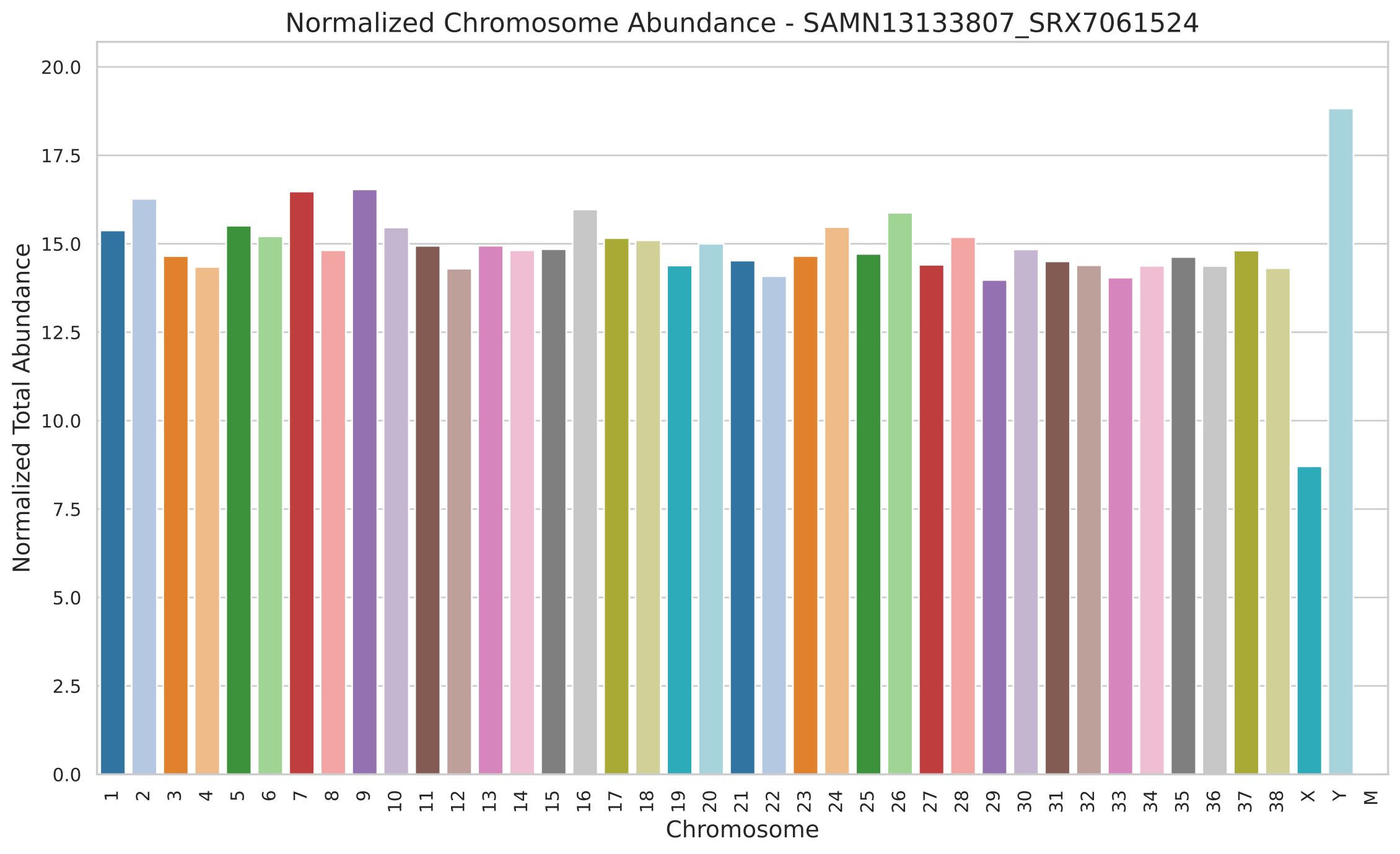

Normalized Chromosome Abundance - SAMN13133809_SRX7061478
Normalized Total Abundance
0.0
10.0
20.0
30.0
40.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

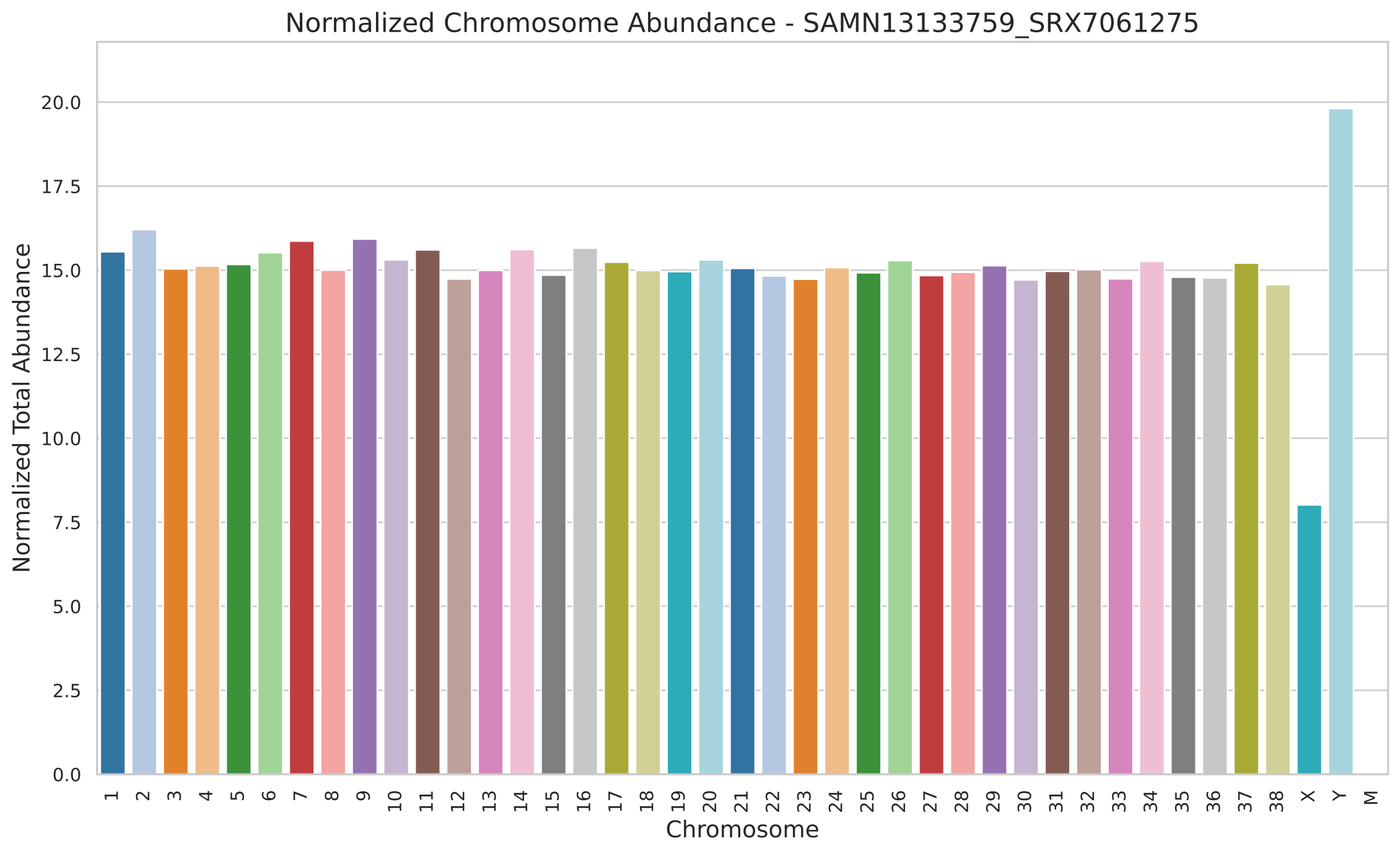

Normalized Chromosome Abundance - SAMN08874622_SRX11760764
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

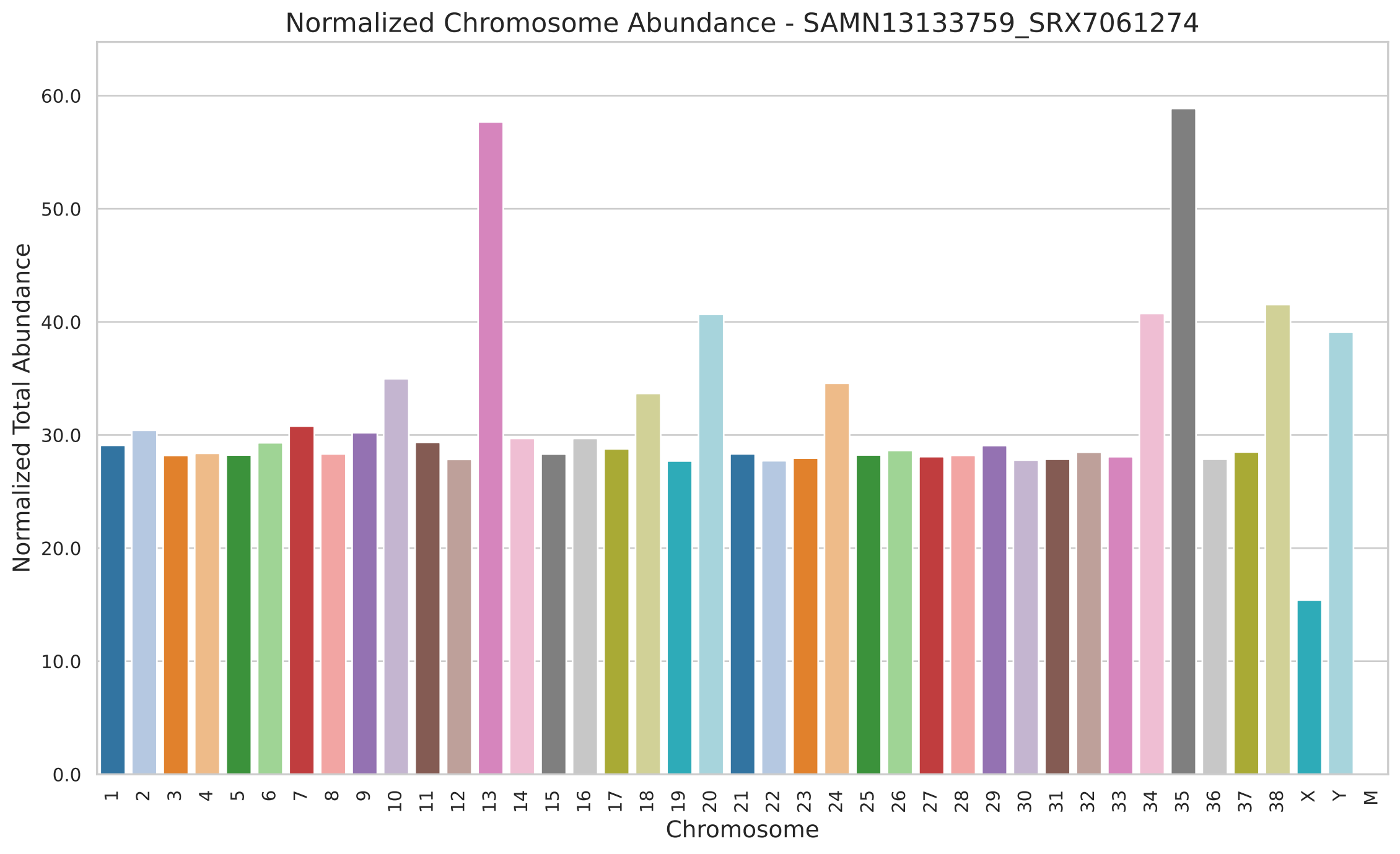

Normalized Chromosome Abundance - SAMN13133766_SRX7061278
Normalized Total Abundance
0.0
10.0
20.0
30.0
40.0
50.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

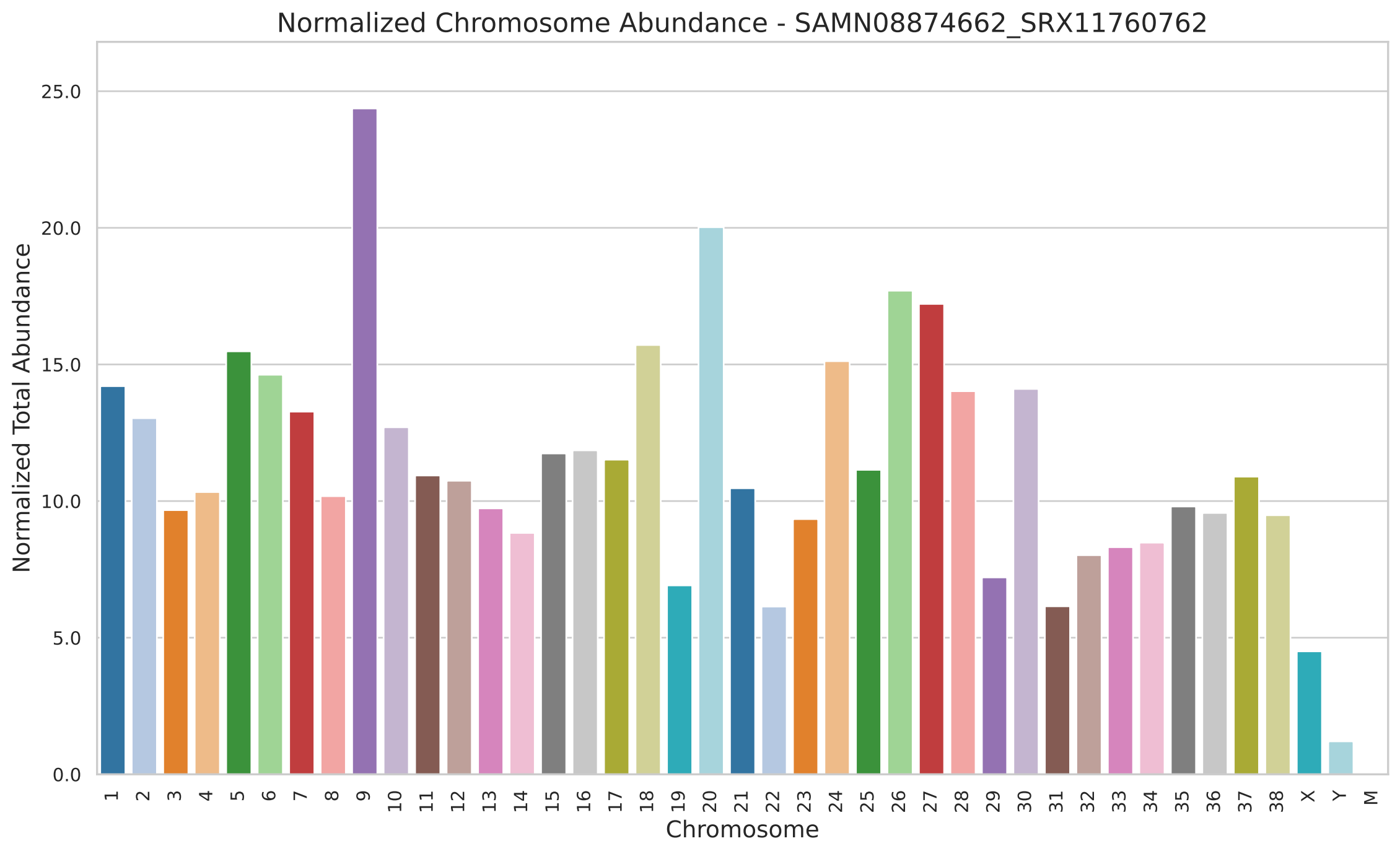

Normalized Chromosome Abundance - SAMN13133753_SRX7061502
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

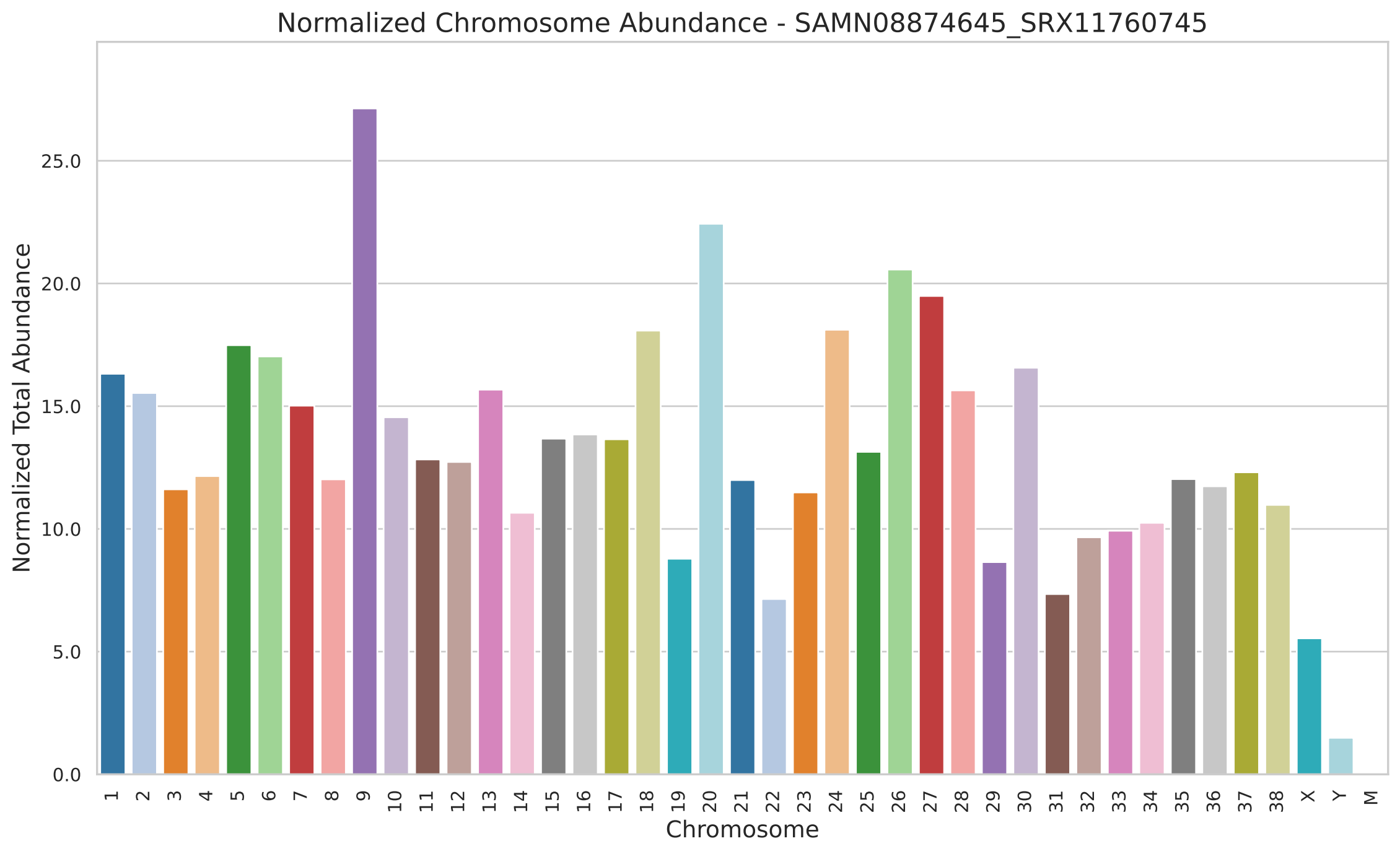

Normalized Chromosome Abundance - SAMN08874618_SRX11760768
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

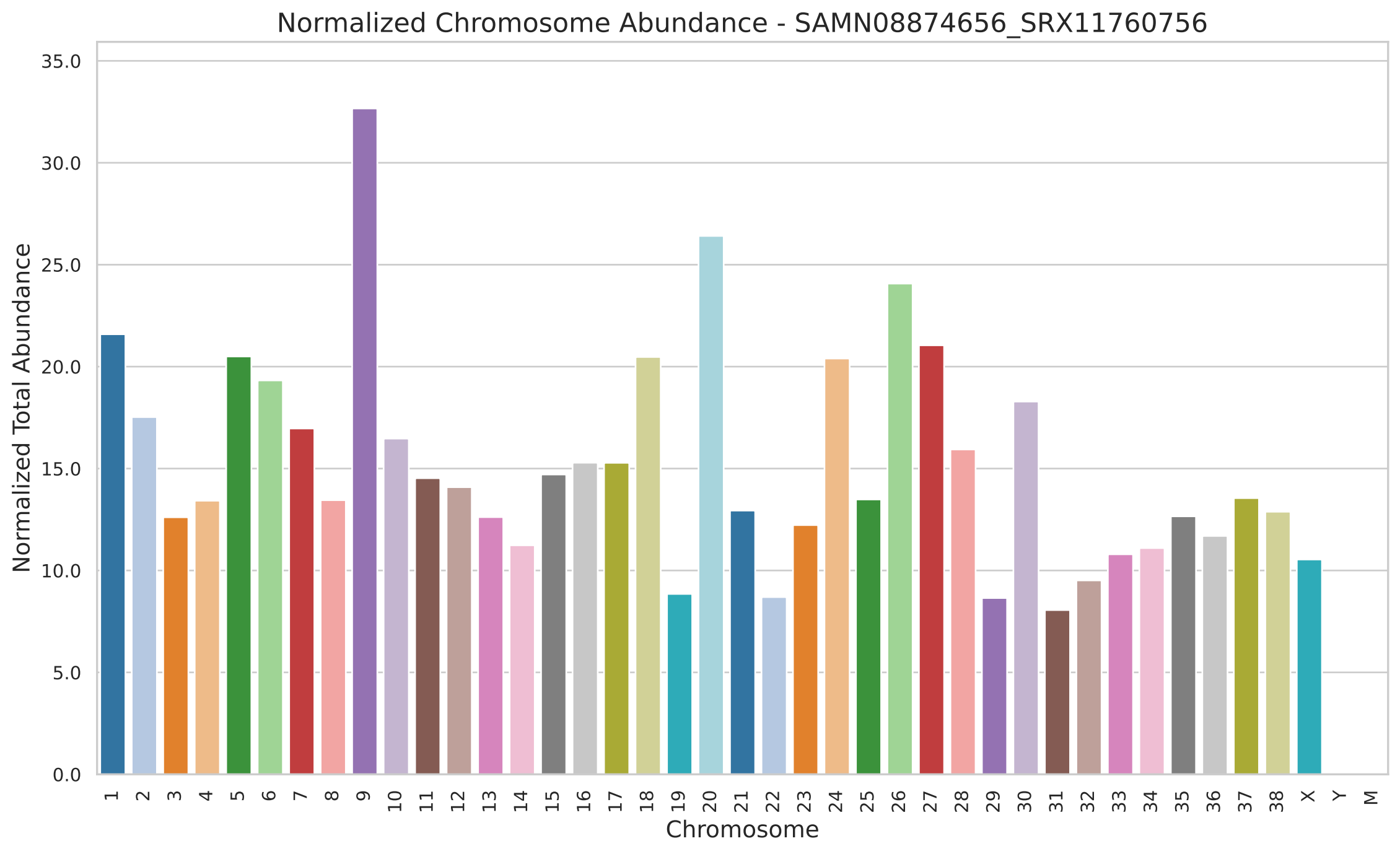

Normalized Chromosome Abundance - SAMN13133807_SRX7061524
Normalized Total Abundance
20.0
17.5
15.0
12.5
10.0
7.5
5.0
2.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

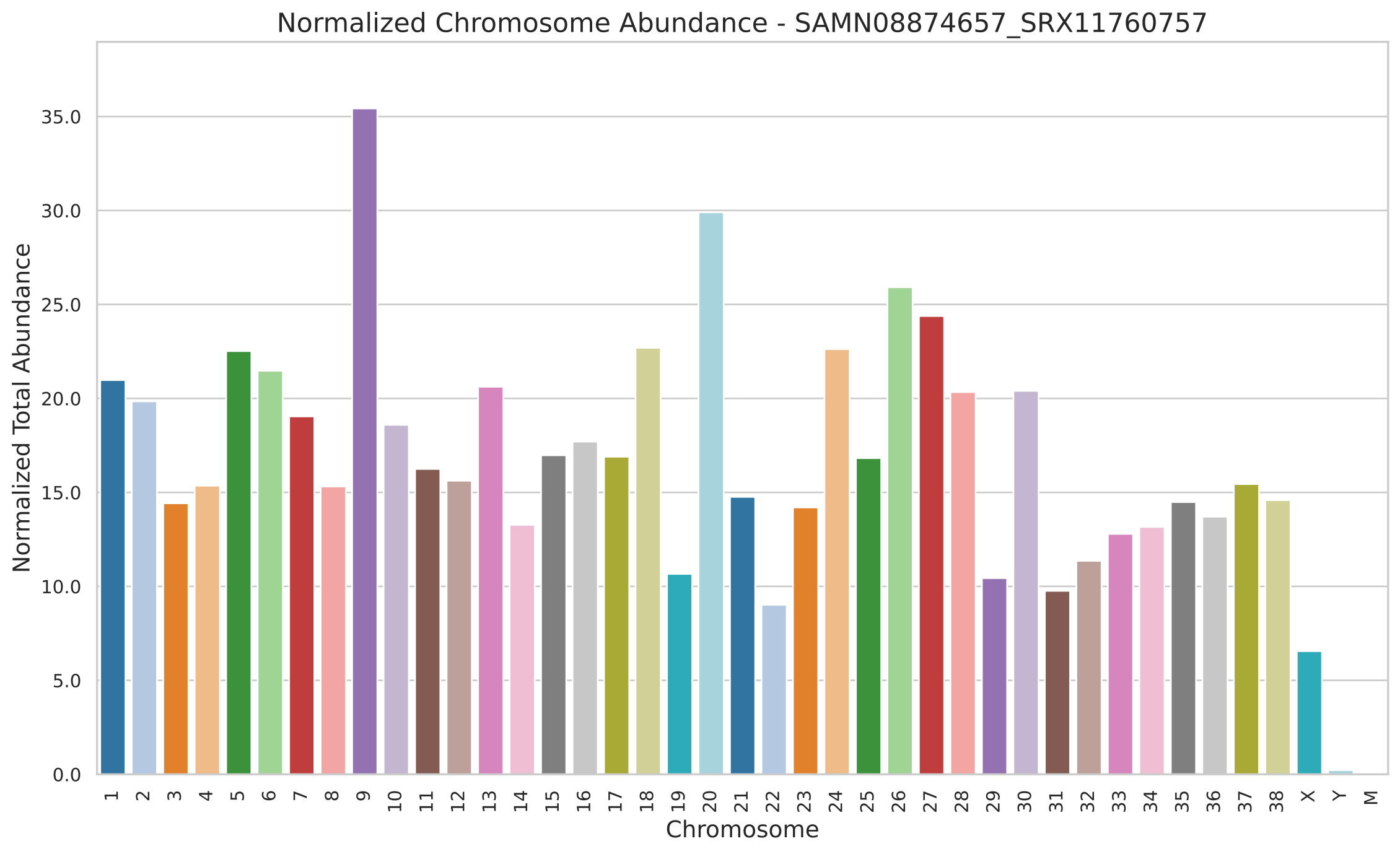

Normalized Chromosome Abundance - SAMN13133759_SRX7061275
Normalized Total Abundance
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5
20.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

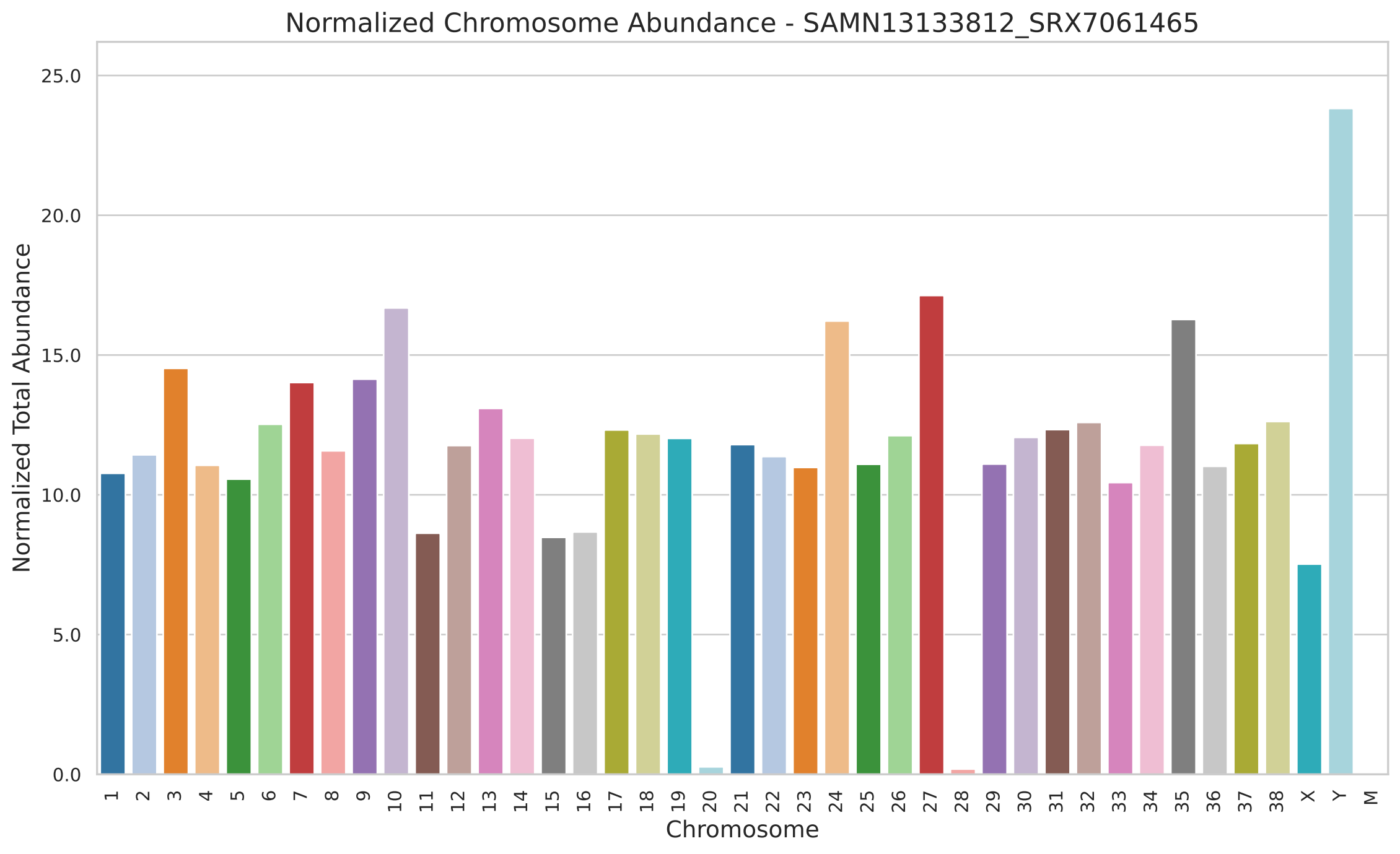

Normalized Chromosome Abundance - SAMN13133759_SRX7061274
Normalized Total Abundance
0.0
10.0
20.0
30.0
40.0
50.0
60.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

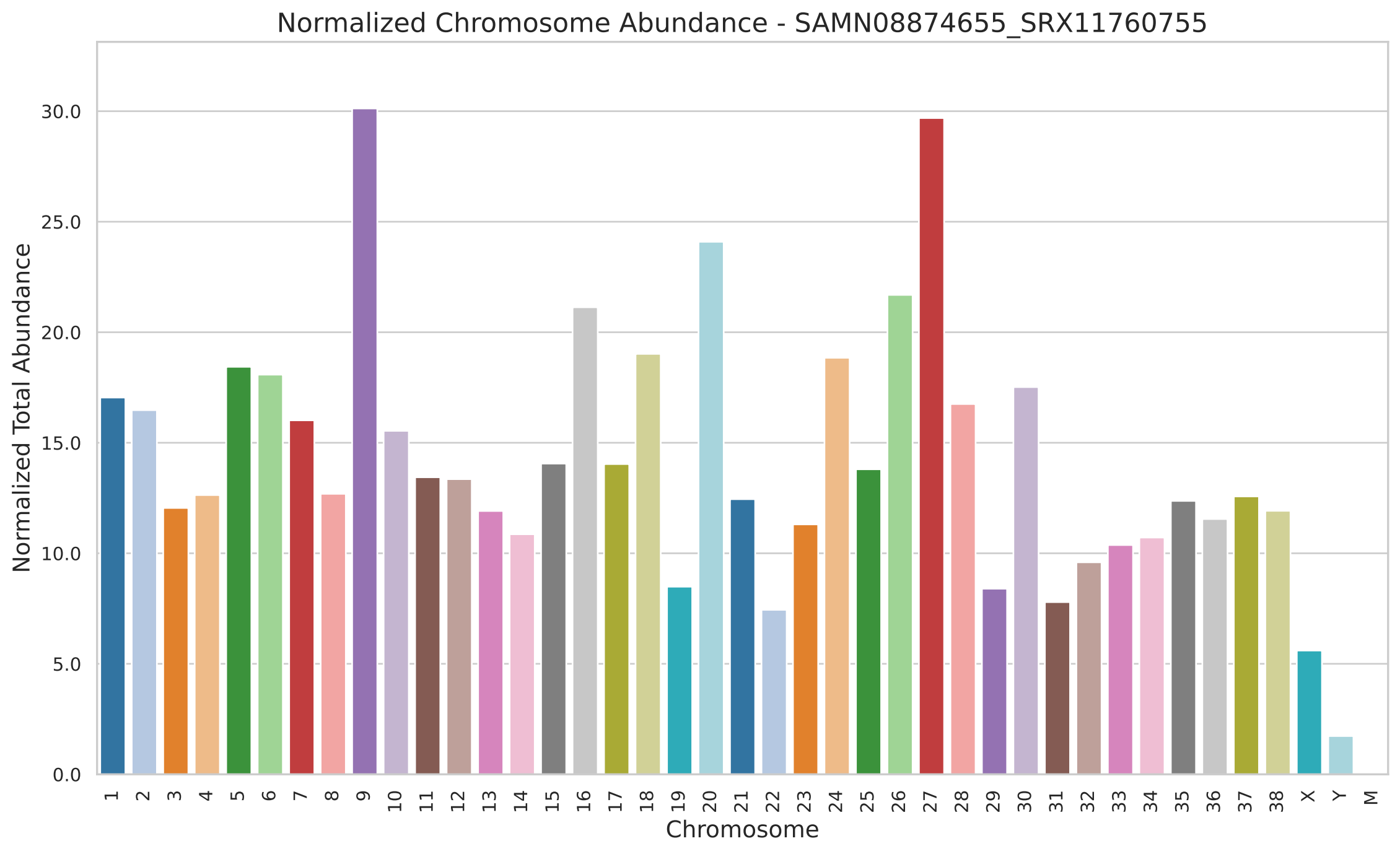

Normalized Chromosome Abundance - SAMN08874662_SRX11760762
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

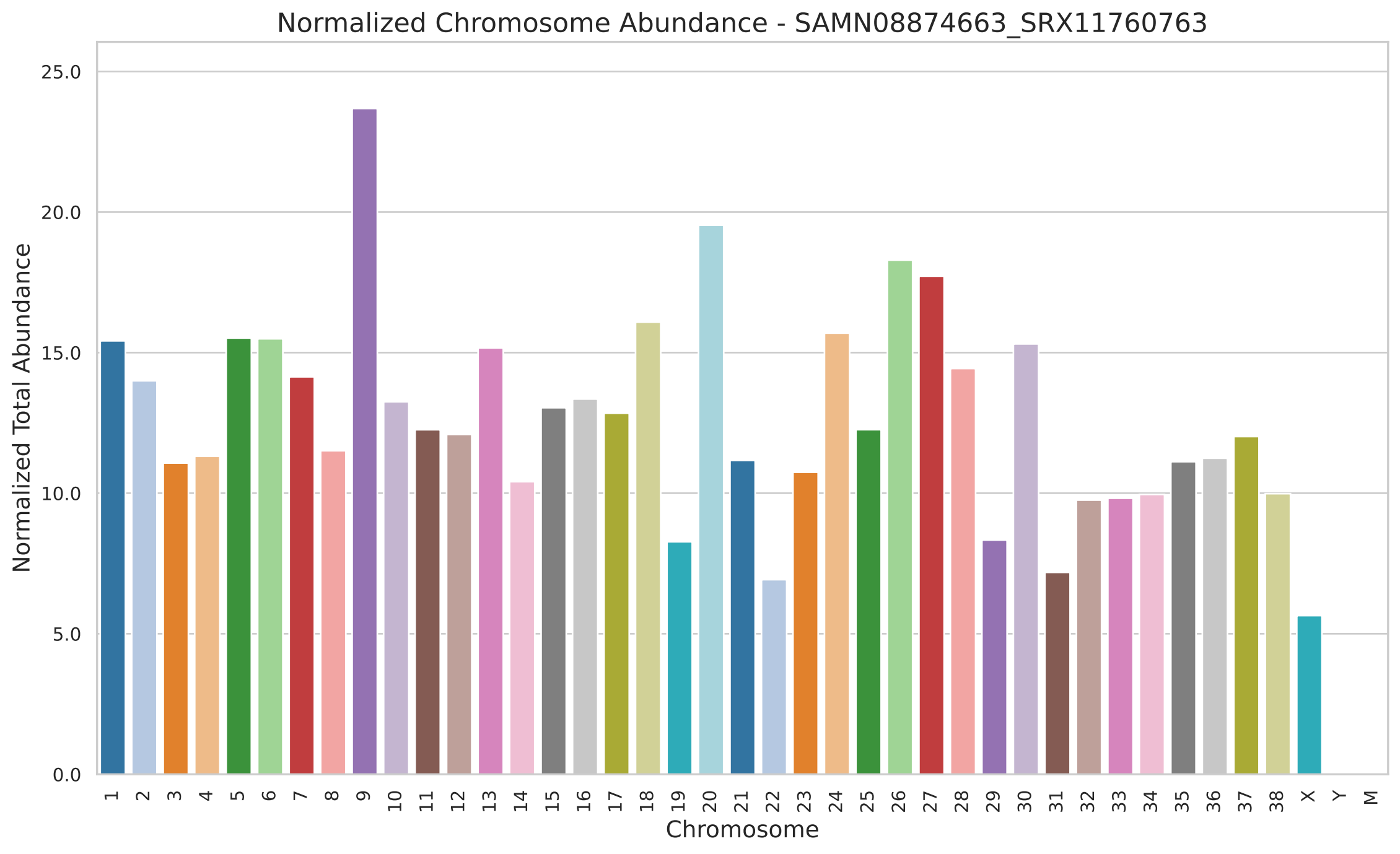

Normalized Chromosome Abundance - SAMN08874645_SRX11760745
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

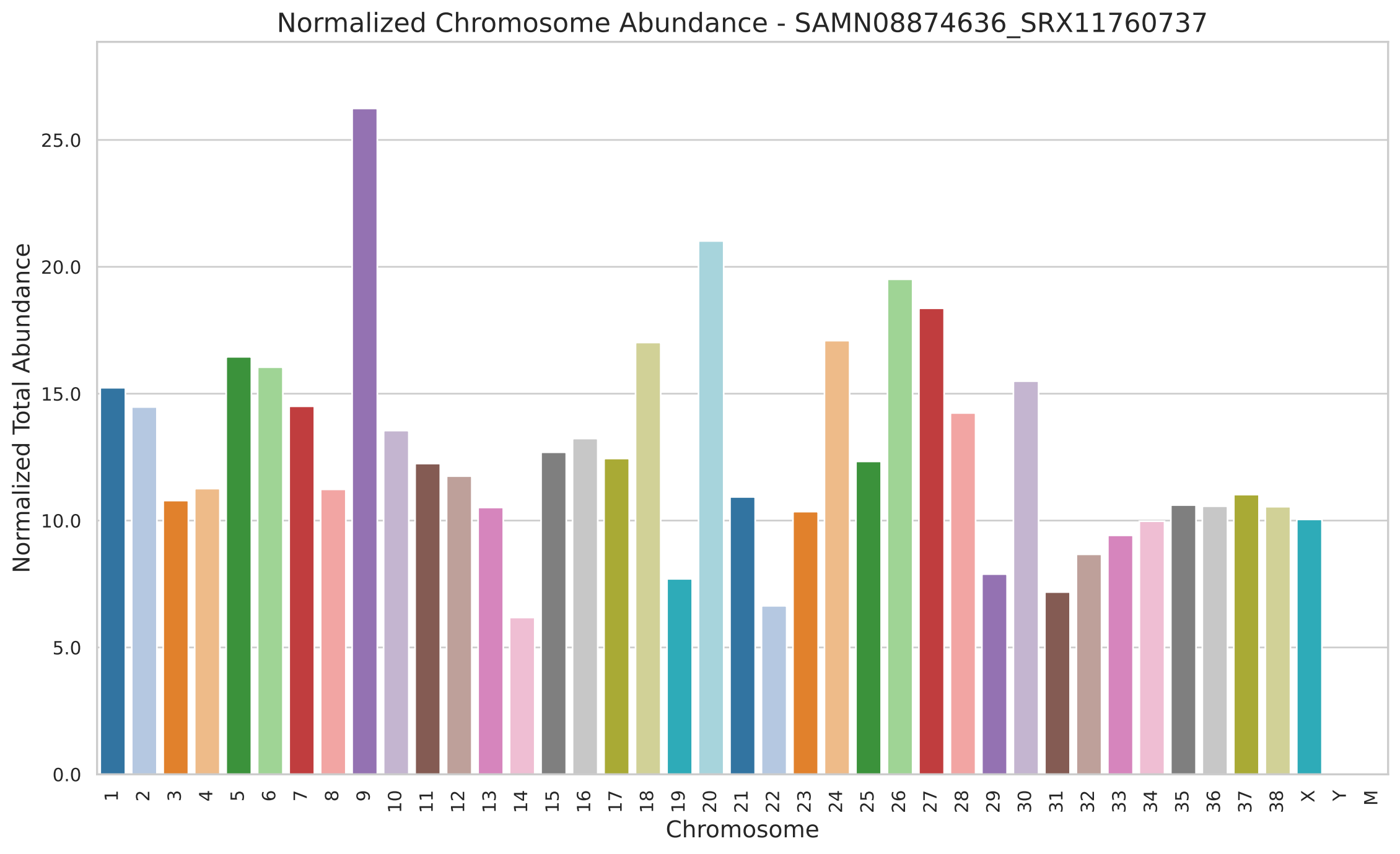

Normalized Chromosome Abundance - SAMN08874656_SRX11760756
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
35.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

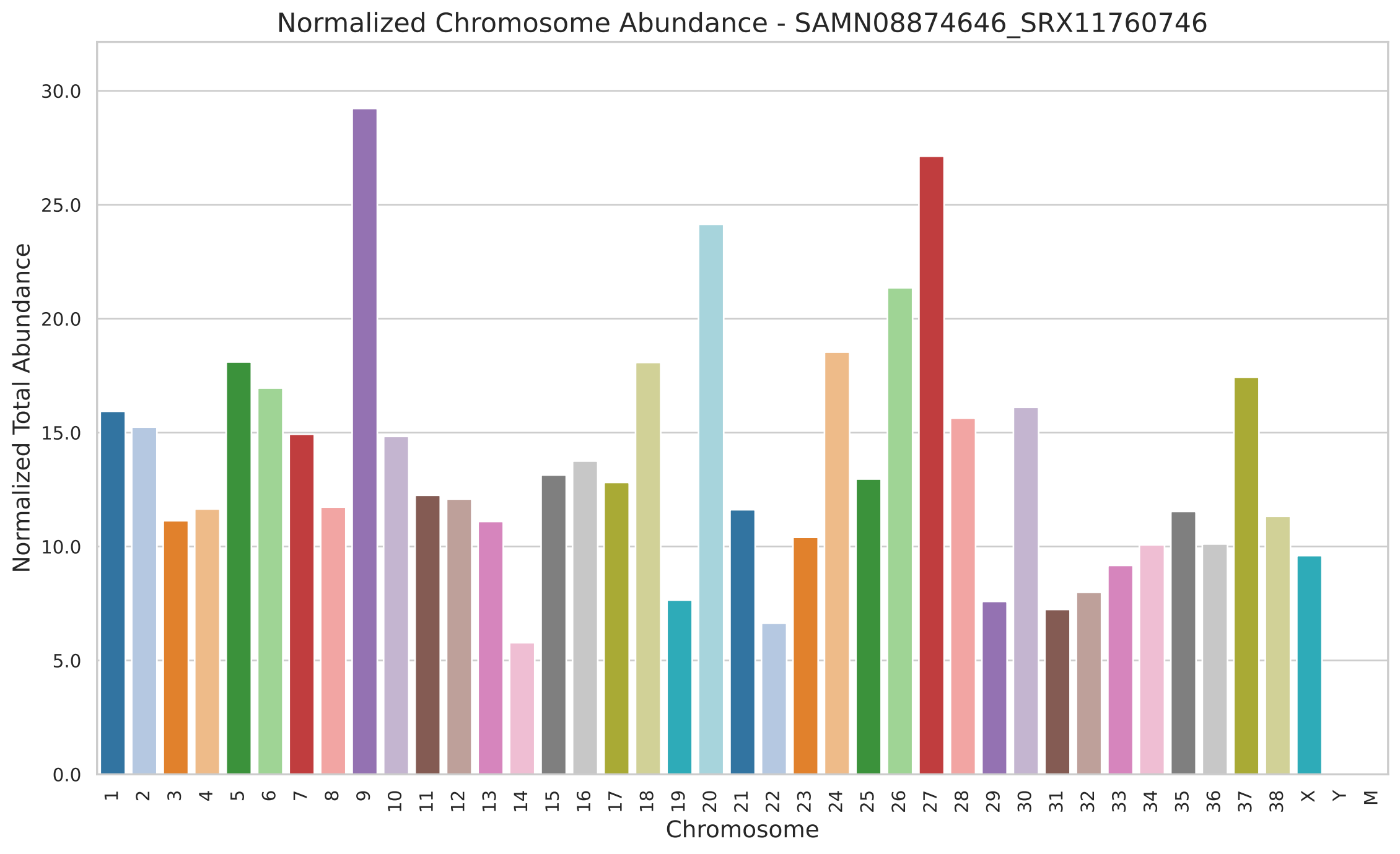

Normalized Chromosome Abundance - SAMN08874657_SRX11760757
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
35.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

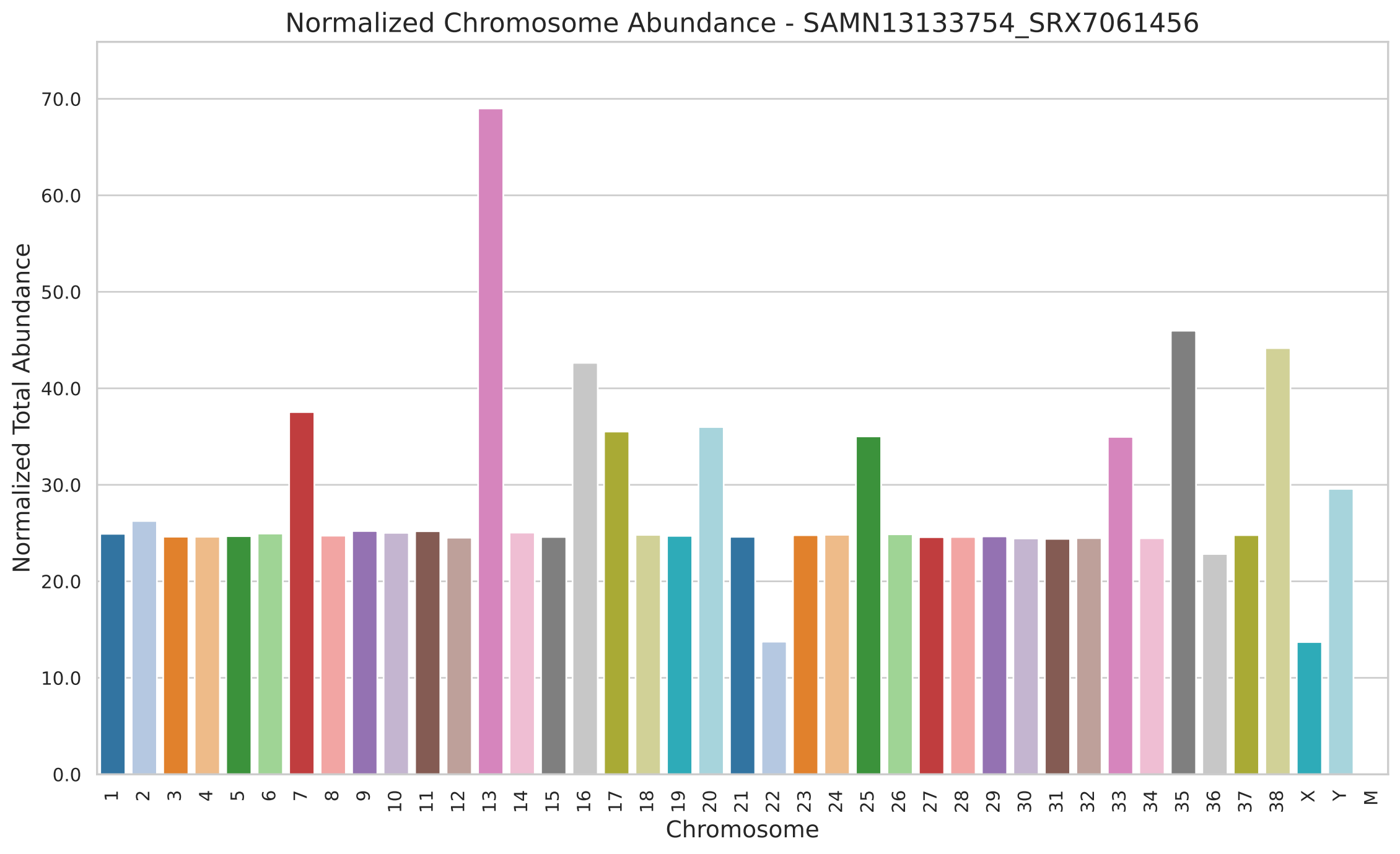

Normalized Chromosome Abundance - SAMN13133812_SRX7061465
Normalized Total Abundance
25.0
20.0
15.0
10.0
5.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

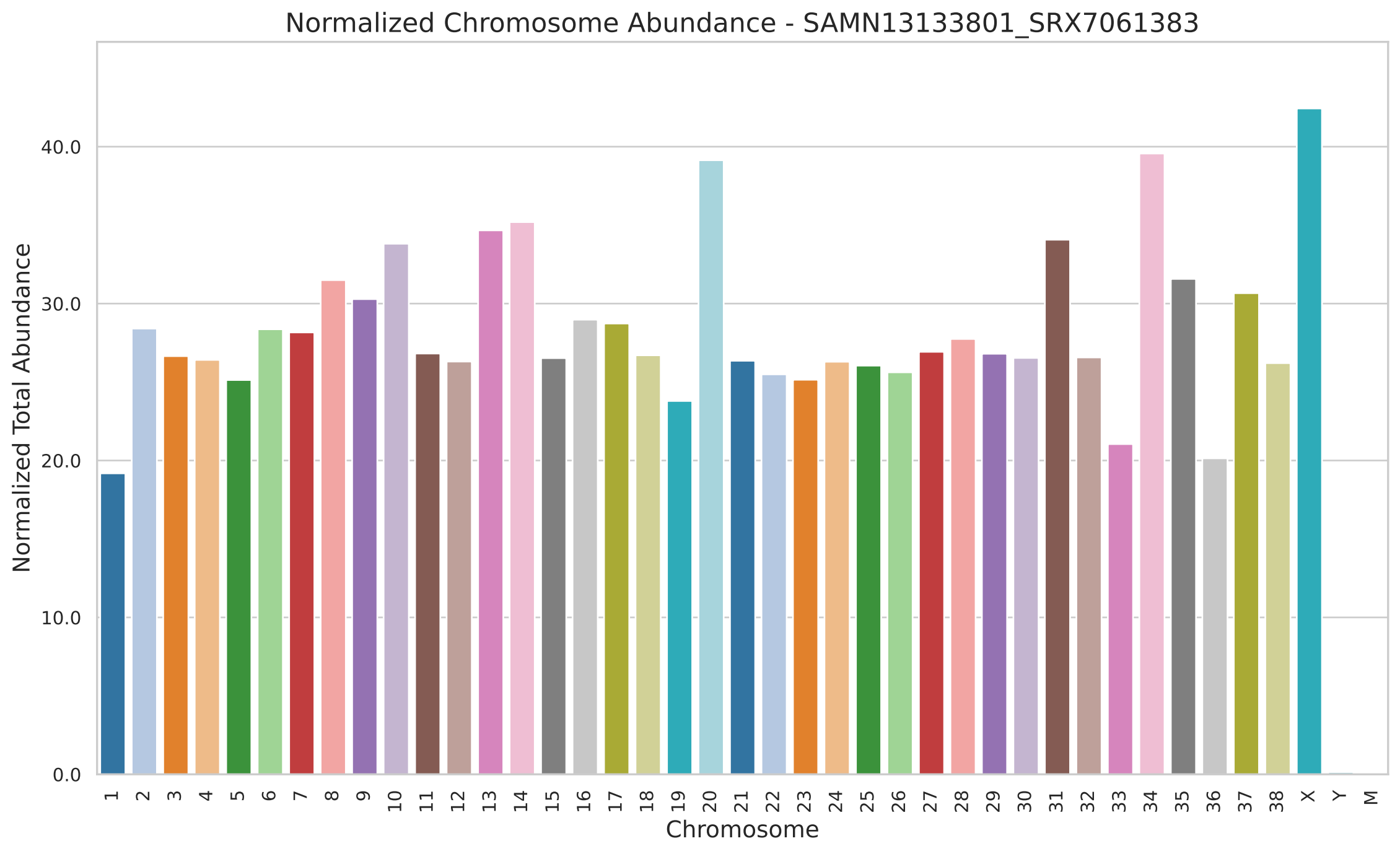

Normalized Chromosome Abundance - SAMN08874655_SRX11760755
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

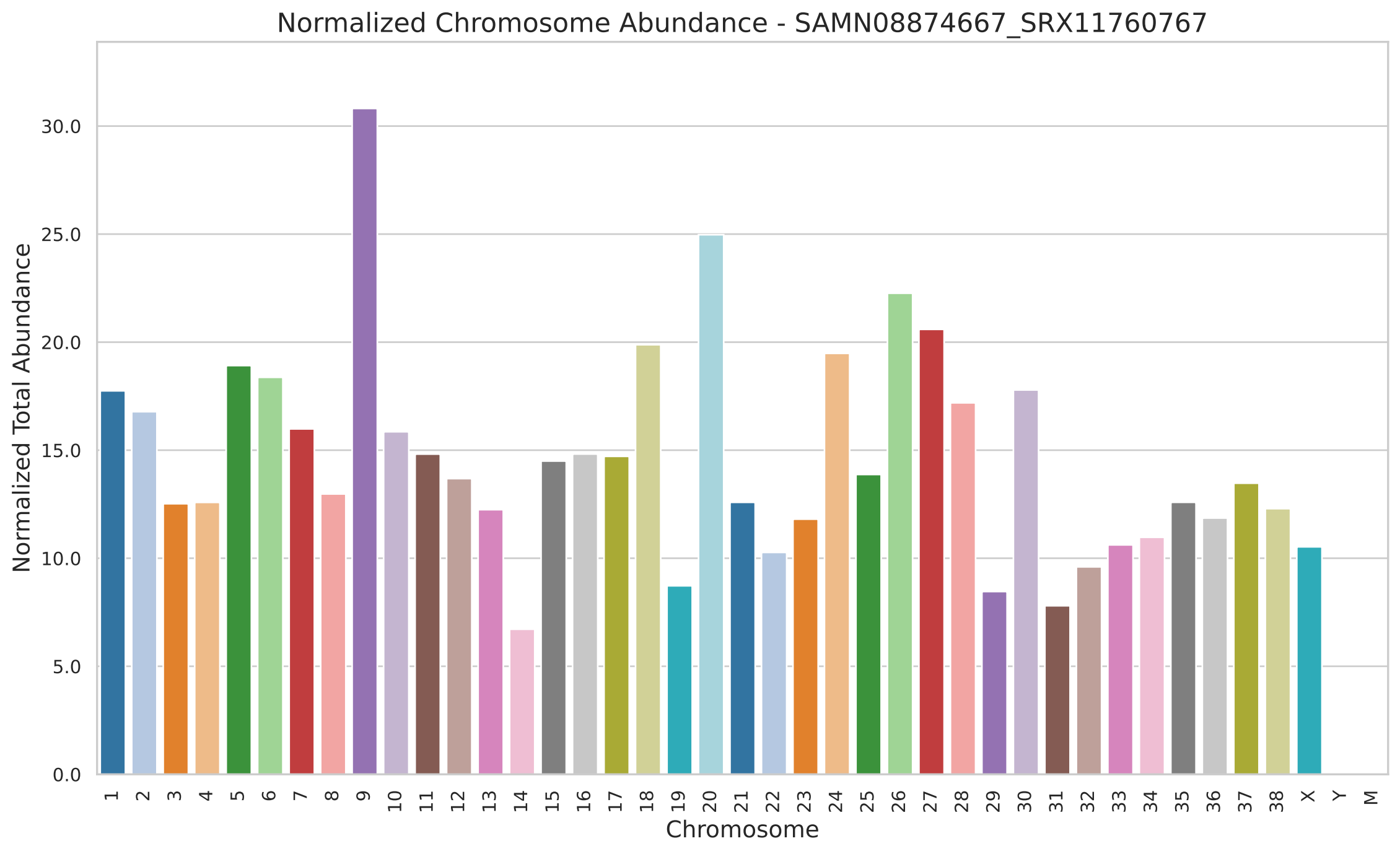

Normalized Chromosome Abundance - SAMN08874663_SRX11760763
Normalized Total Abundance
25.0
20.0
15.0
10.0
5.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

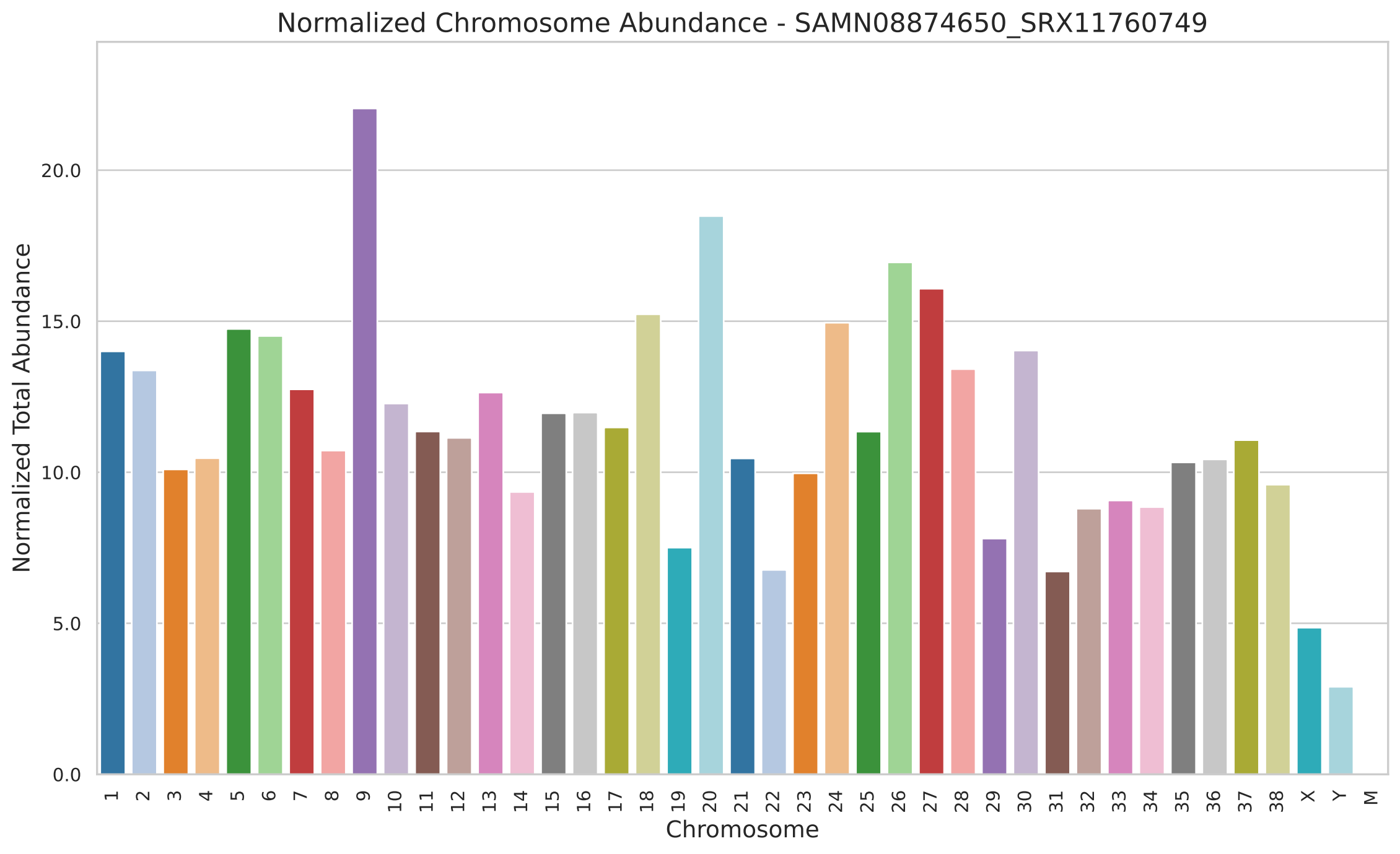

Normalized Chromosome Abundance - SAMN08874636_SRX11760737
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

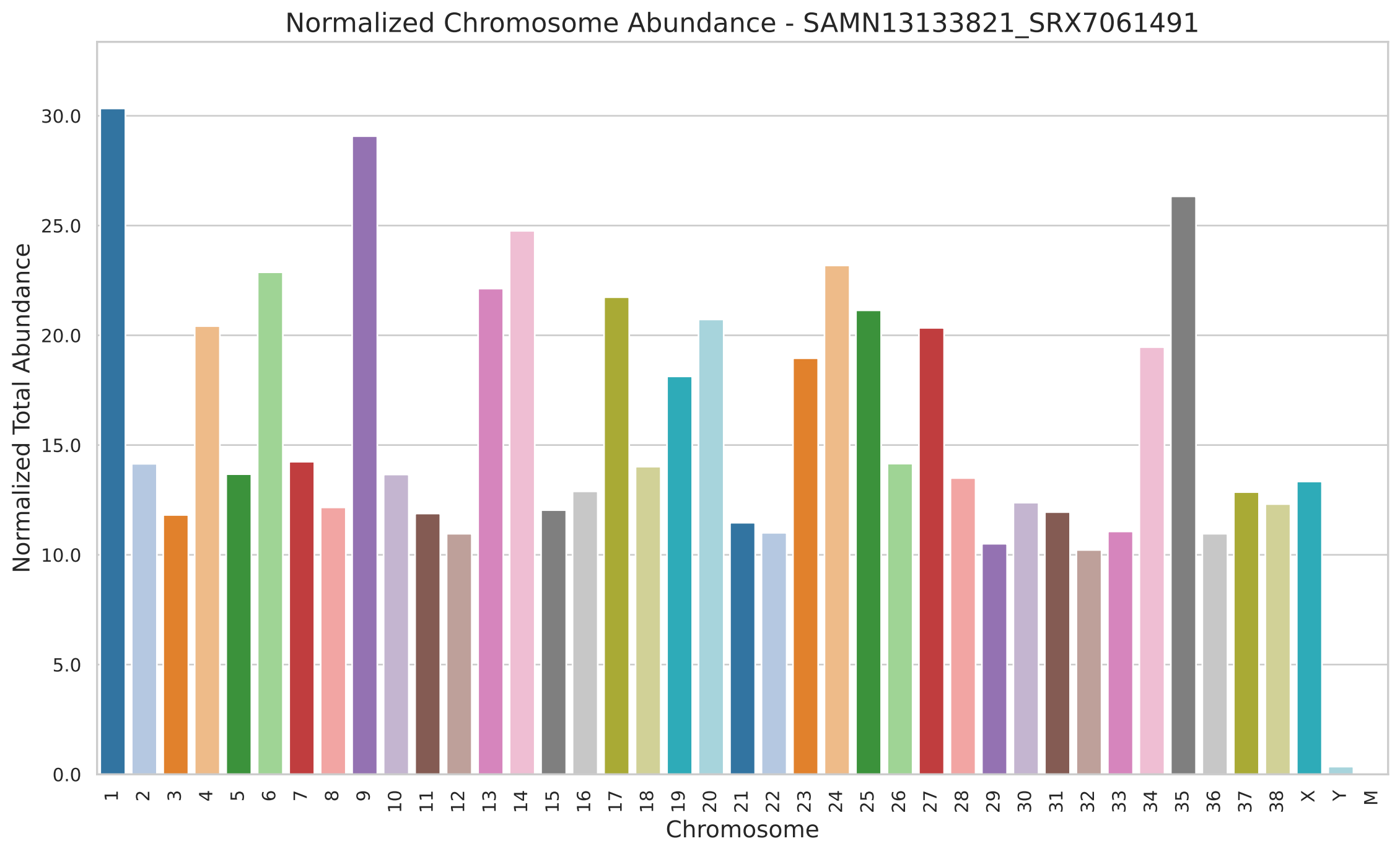

Normalized Chromosome Abundance - SAMN08874646_SRX11760746
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

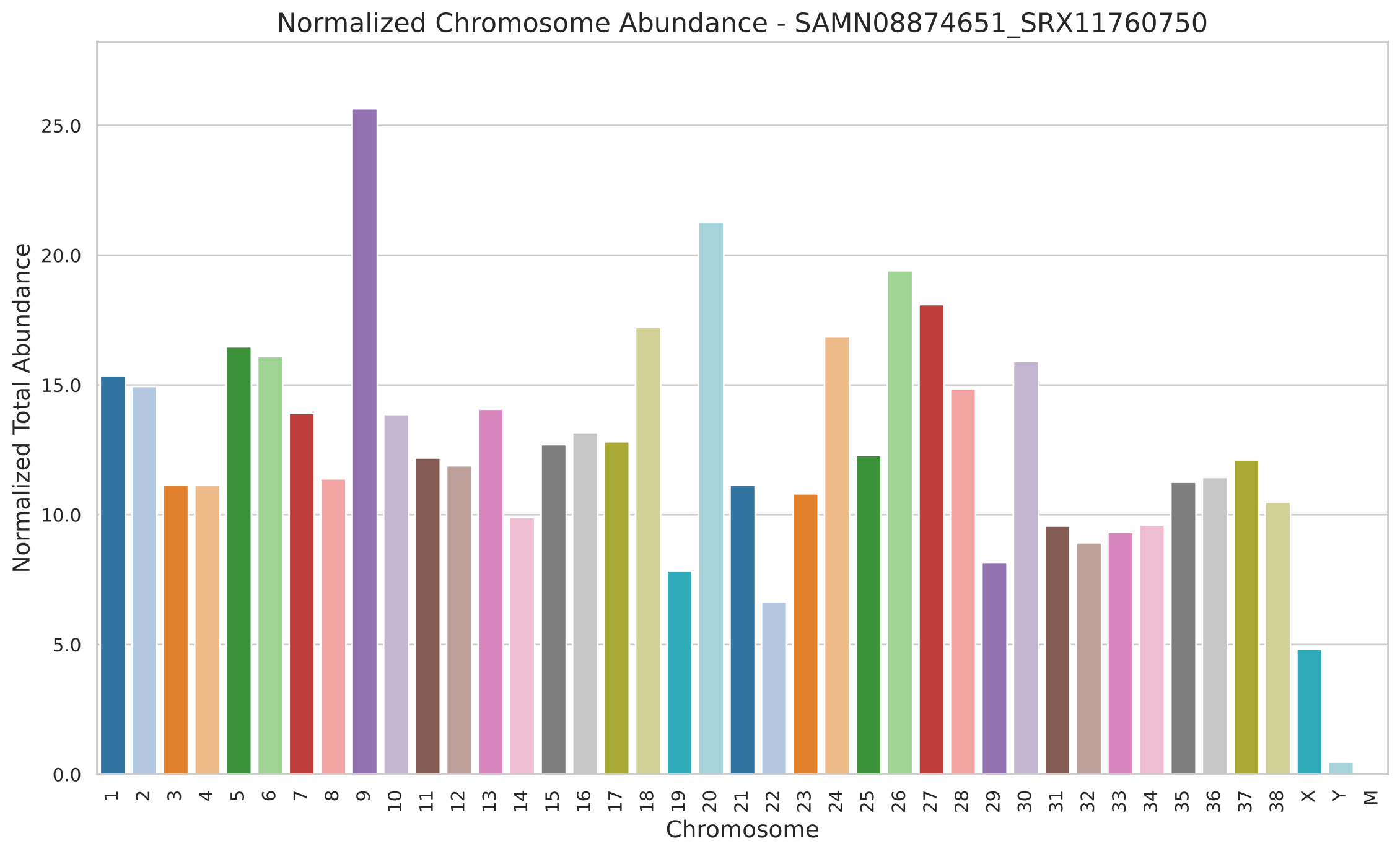

Normalized Chromosome Abundance - SAMN13133754_SRX7061456
Normalized Total Abundance
0.0
10.0
20.0
30.0
40.0
50.0
60.0
70.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

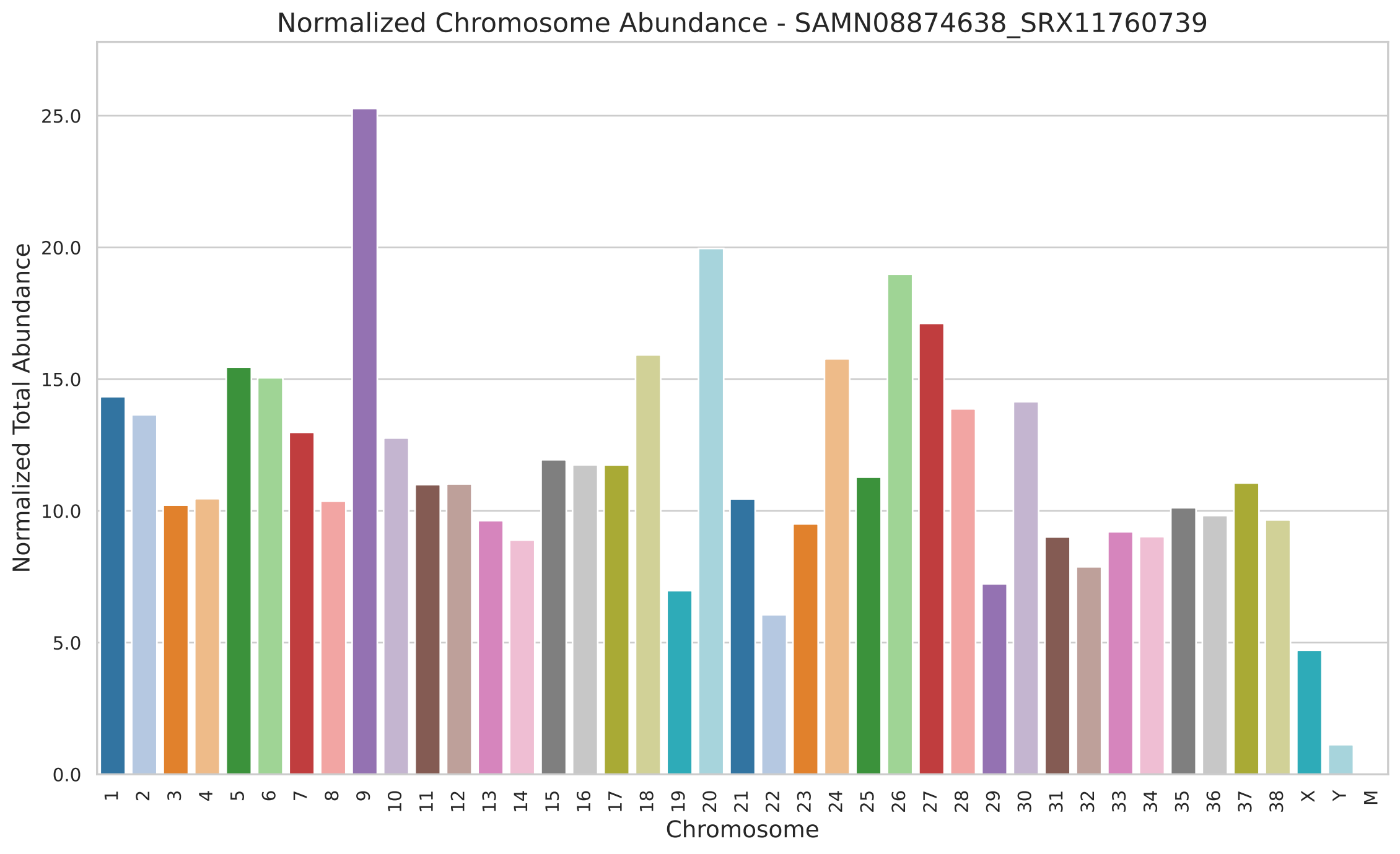

Normalized Chromosome Abundance - SAMN13133801_SRX7061383
Normalized Total Abundance
0.0
10.0
20.0
30.0
40.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

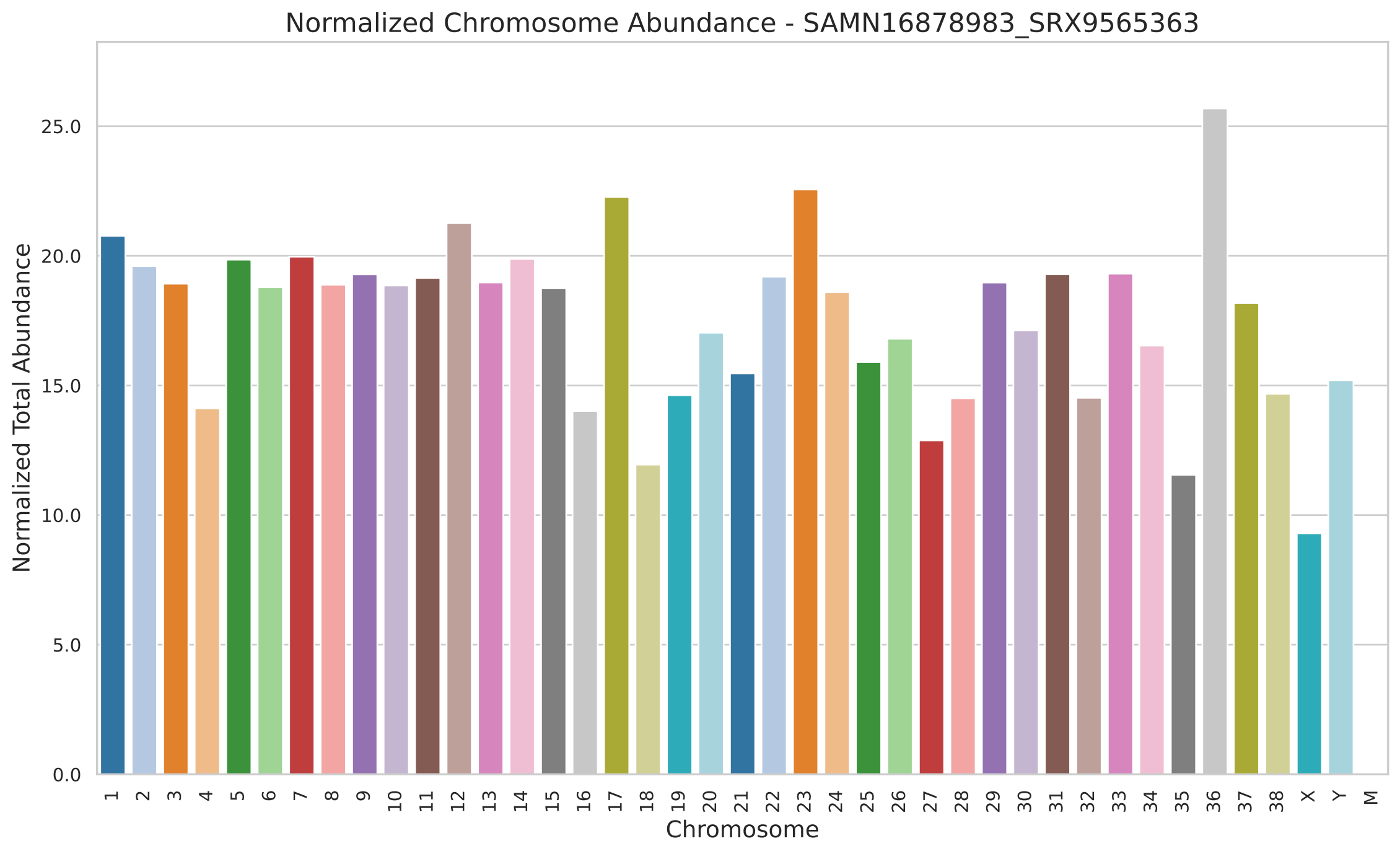

Normalized Chromosome Abundance - SAMN08874667_SRX11760767
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

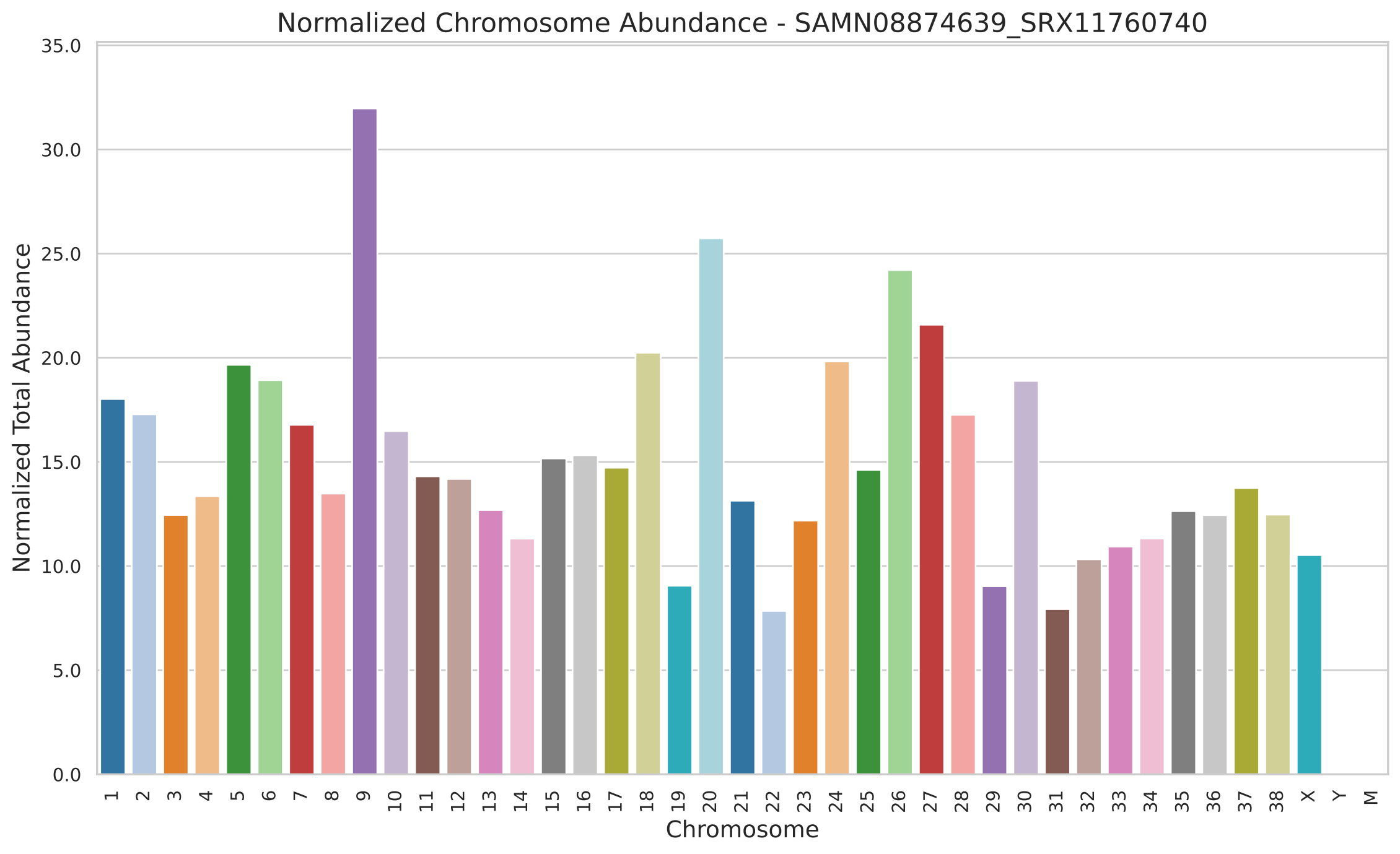

Normalized Chromosome Abundance - SAMN08874650_SRX11760749
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

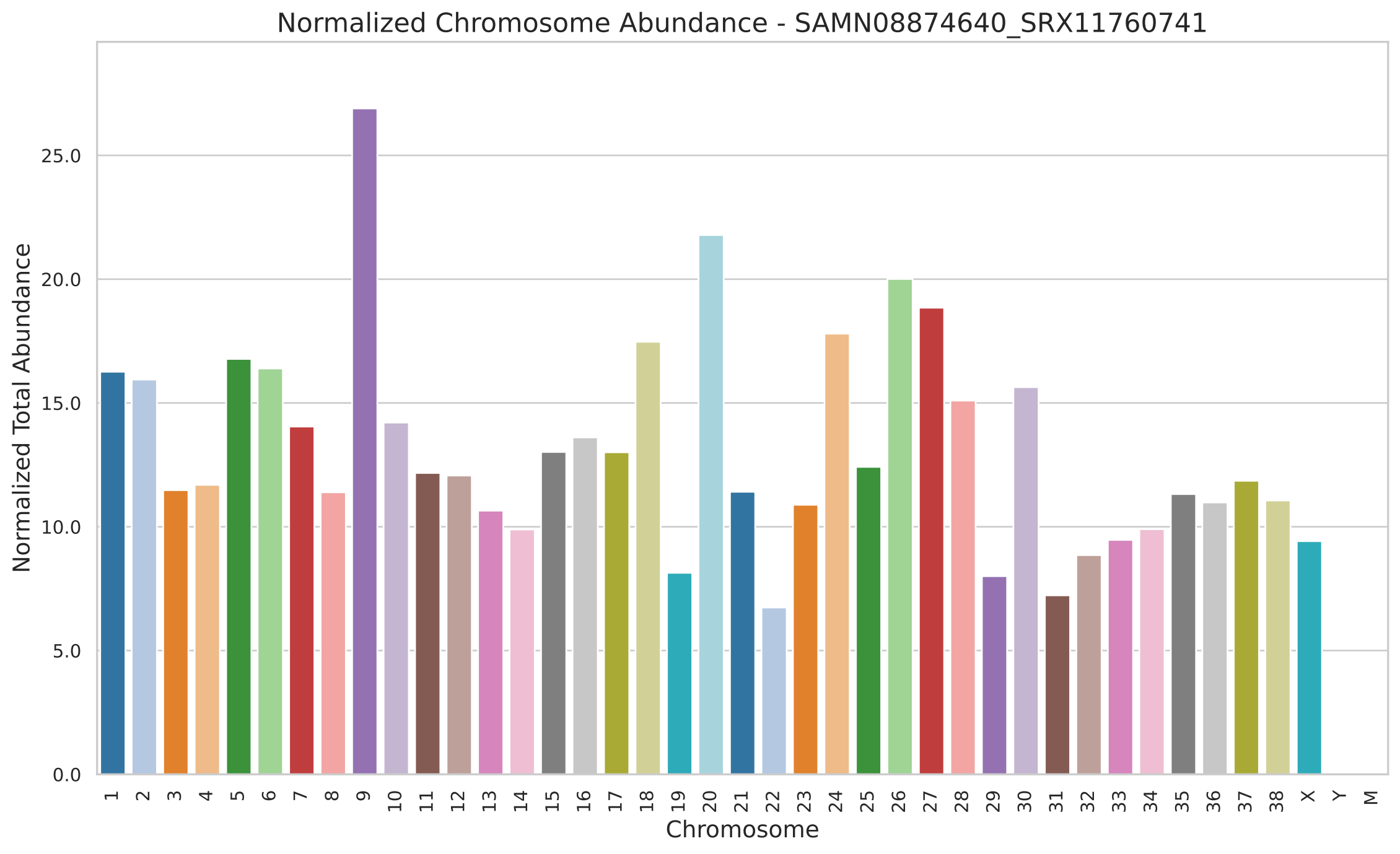

Normalized Chromosome Abundance - SAMN13133821_SRX7061491
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

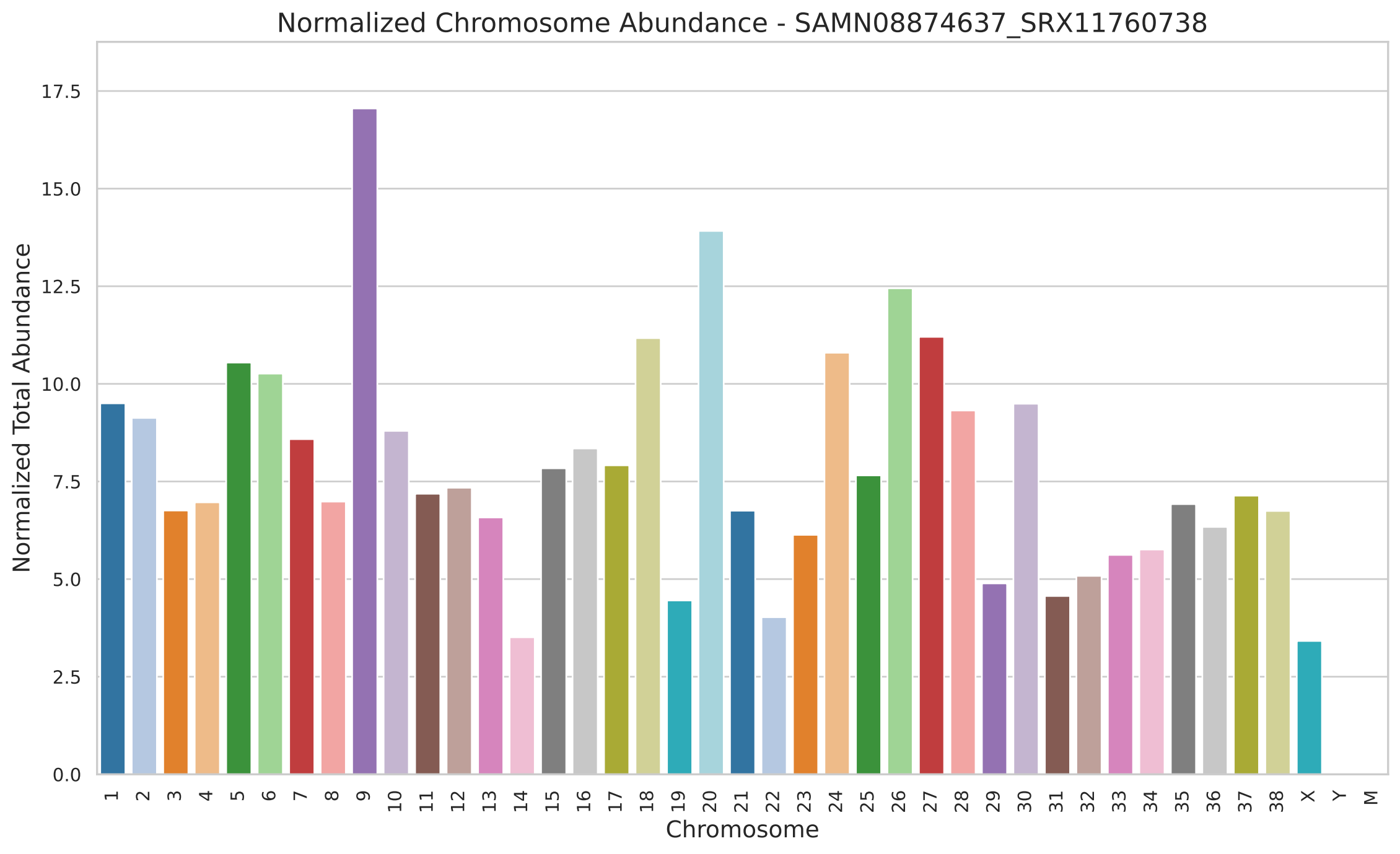

Normalized Chromosome Abundance - SAMN08874651_SRX11760750
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

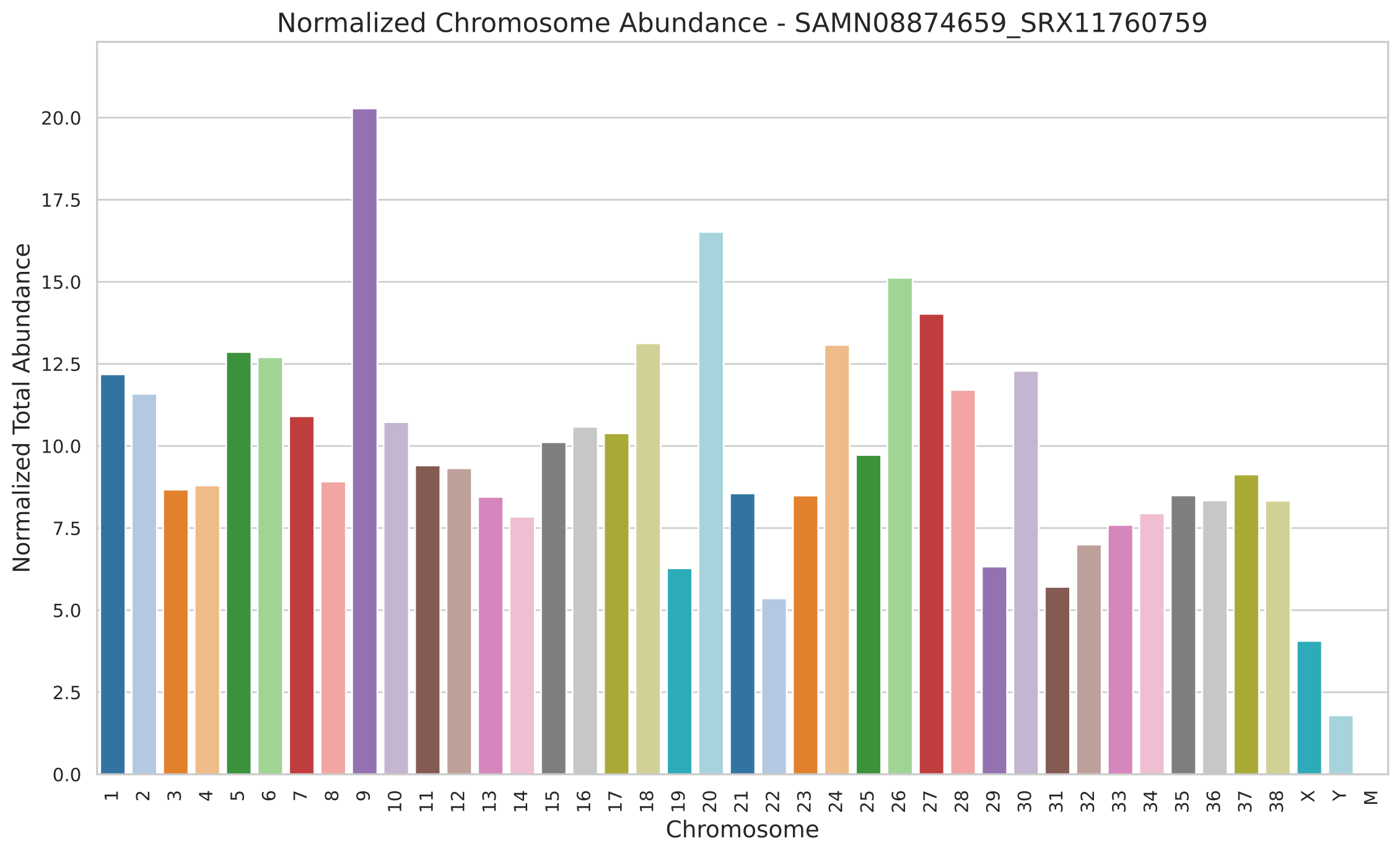

Normalized Chromosome Abundance - SAMN08874638_SRX11760739
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

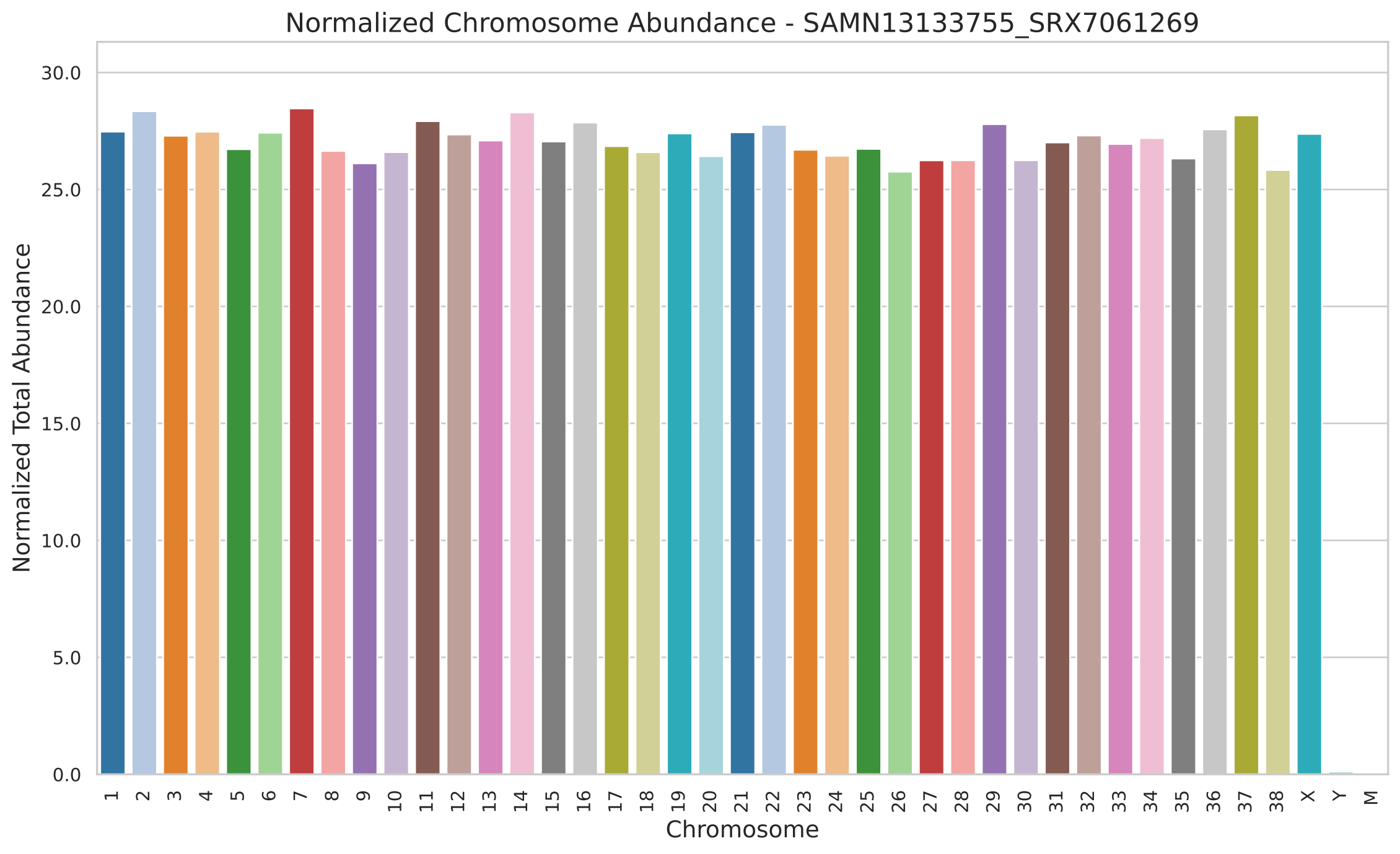

Normalized Chromosome Abundance - SAMN16878983_SRX9565363
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

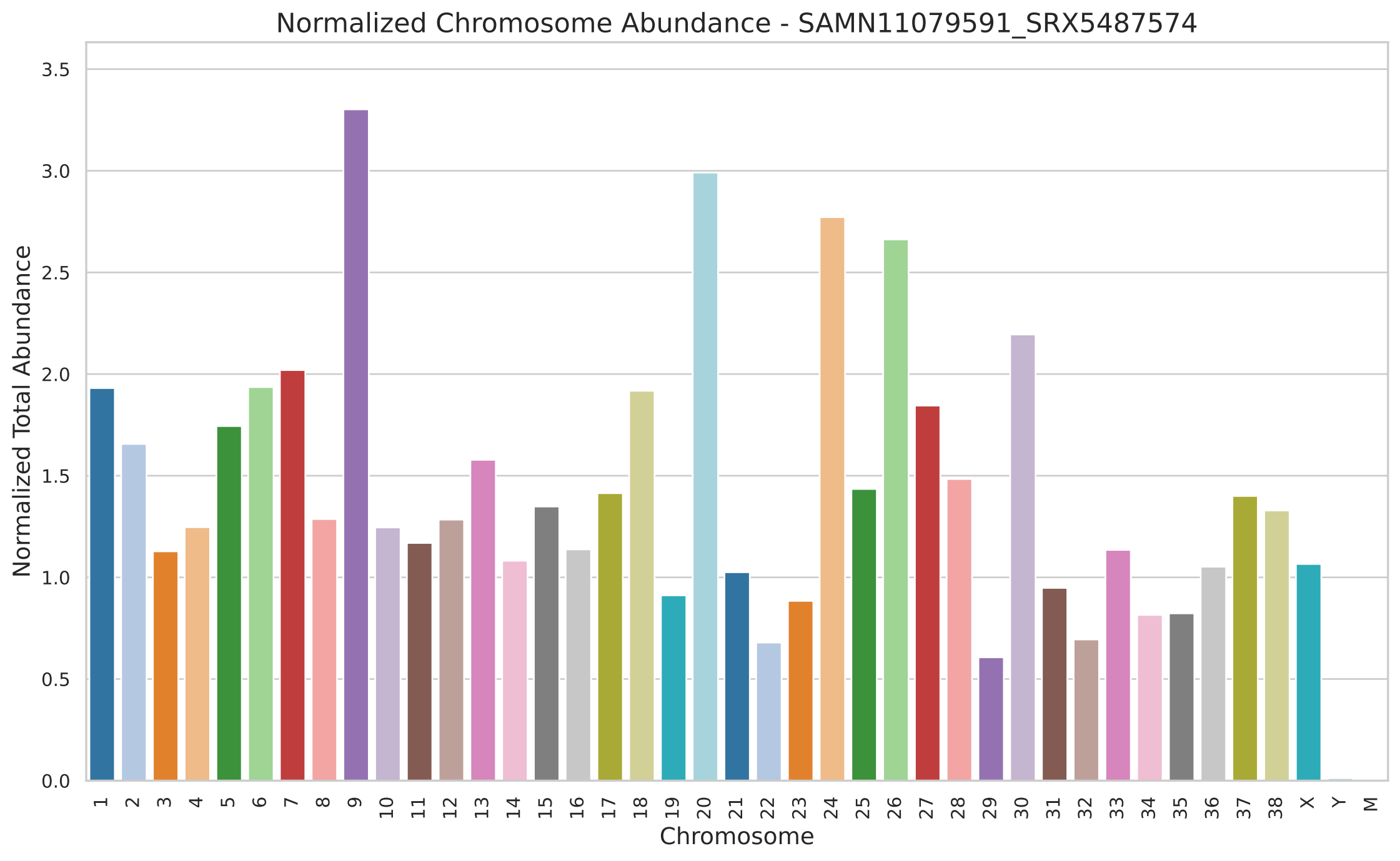

Normalized Chromosome Abundance - SAMN08874639_SRX11760740
Normalized Total Abundance
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

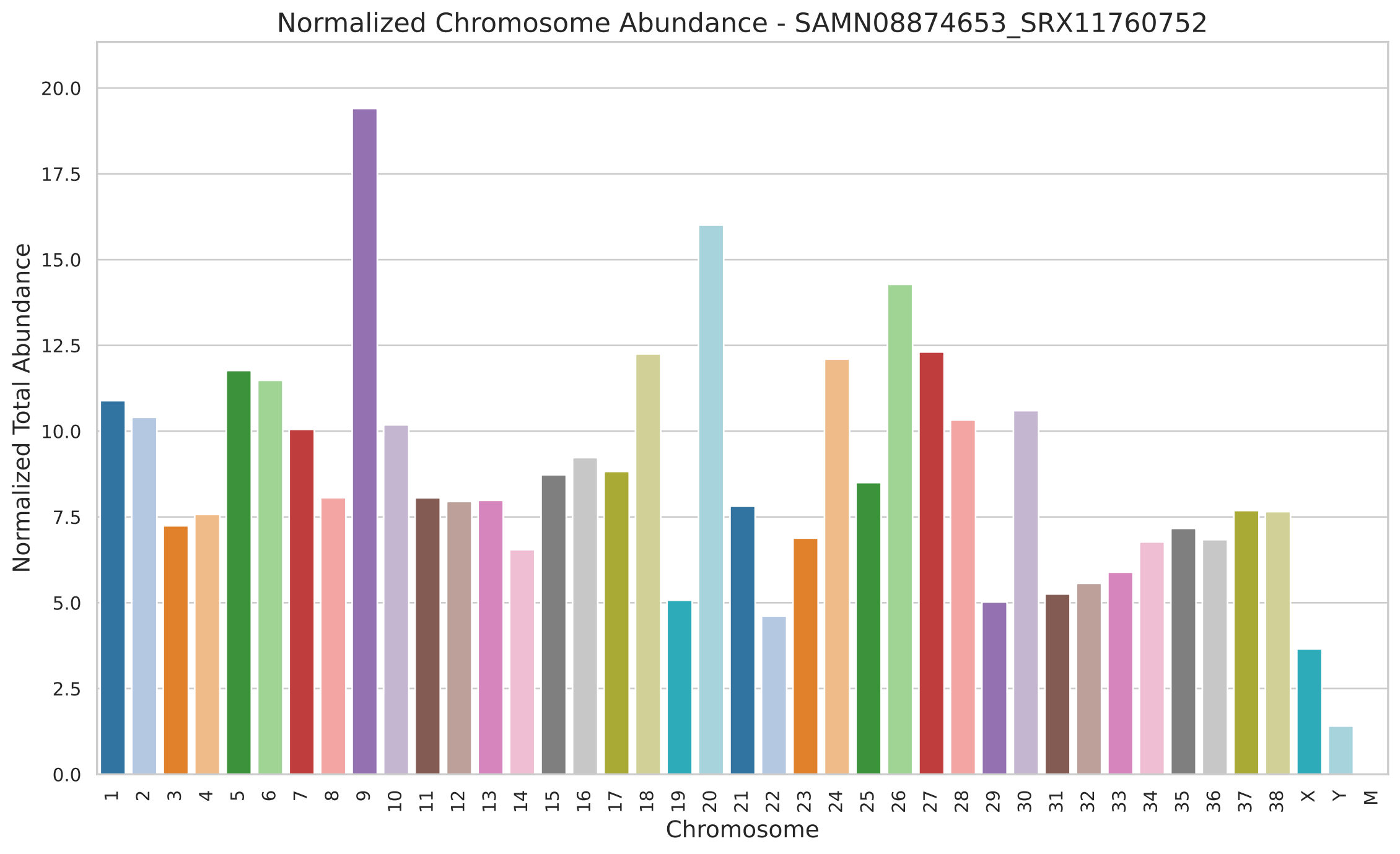

Normalized Chromosome Abundance - SAMN08874640_SRX11760741
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

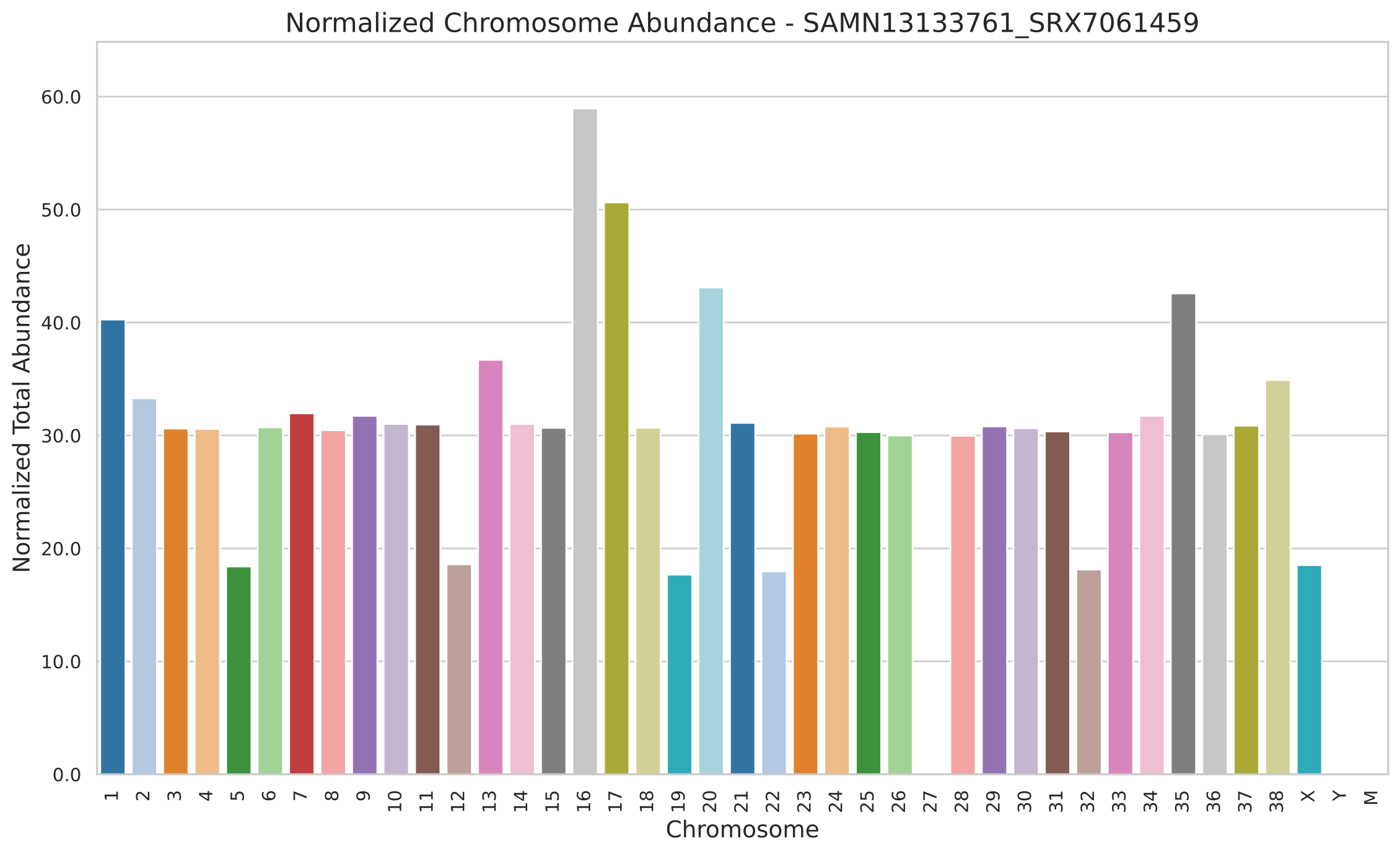

Normalized Chromosome Abundance - SAMN08874637_SRX11760738
Normalized Total Abundance
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

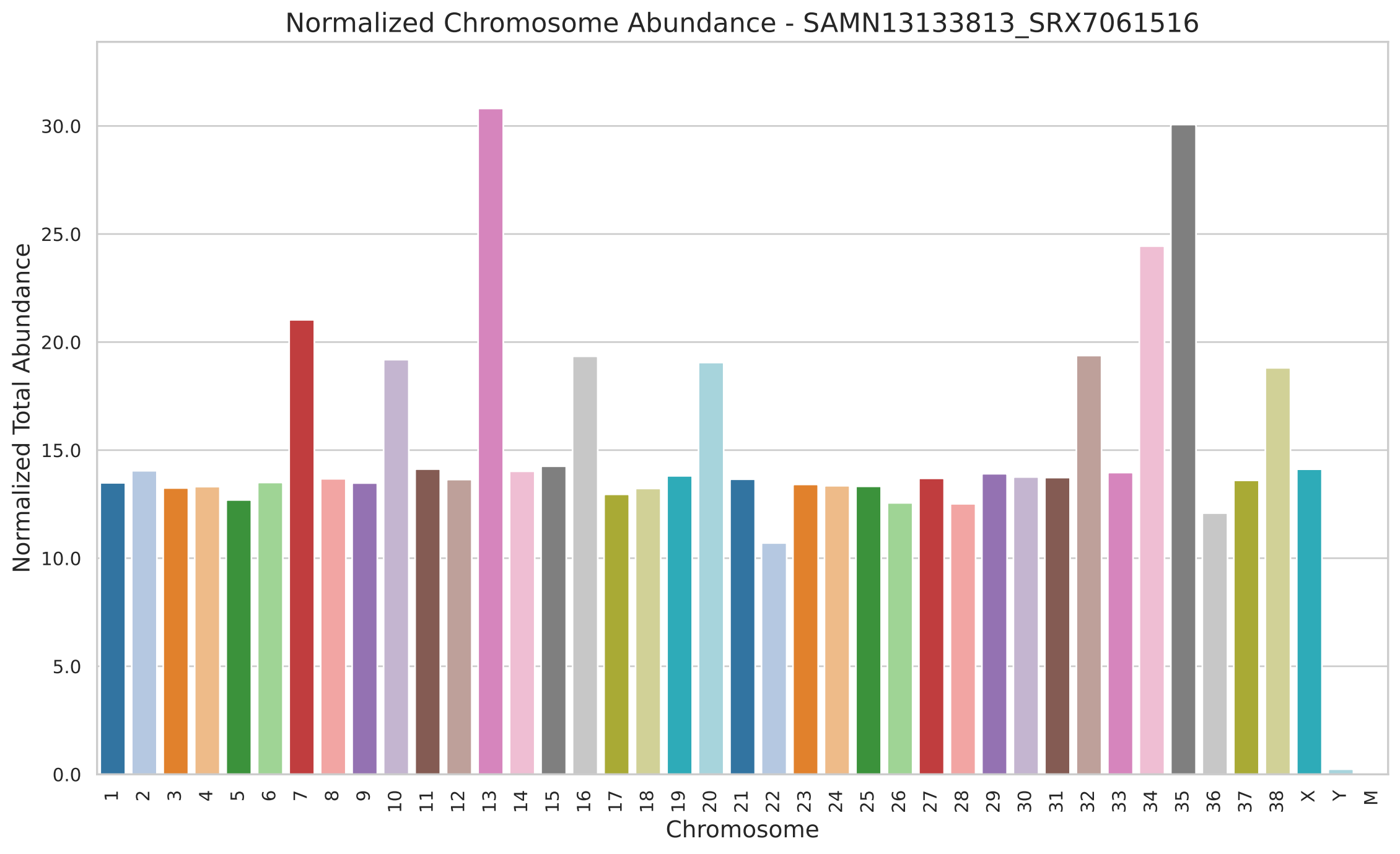

Normalized Chromosome Abundance - SAMN08874659_SRX11760759
Normalized Total Abundance
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5
20.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

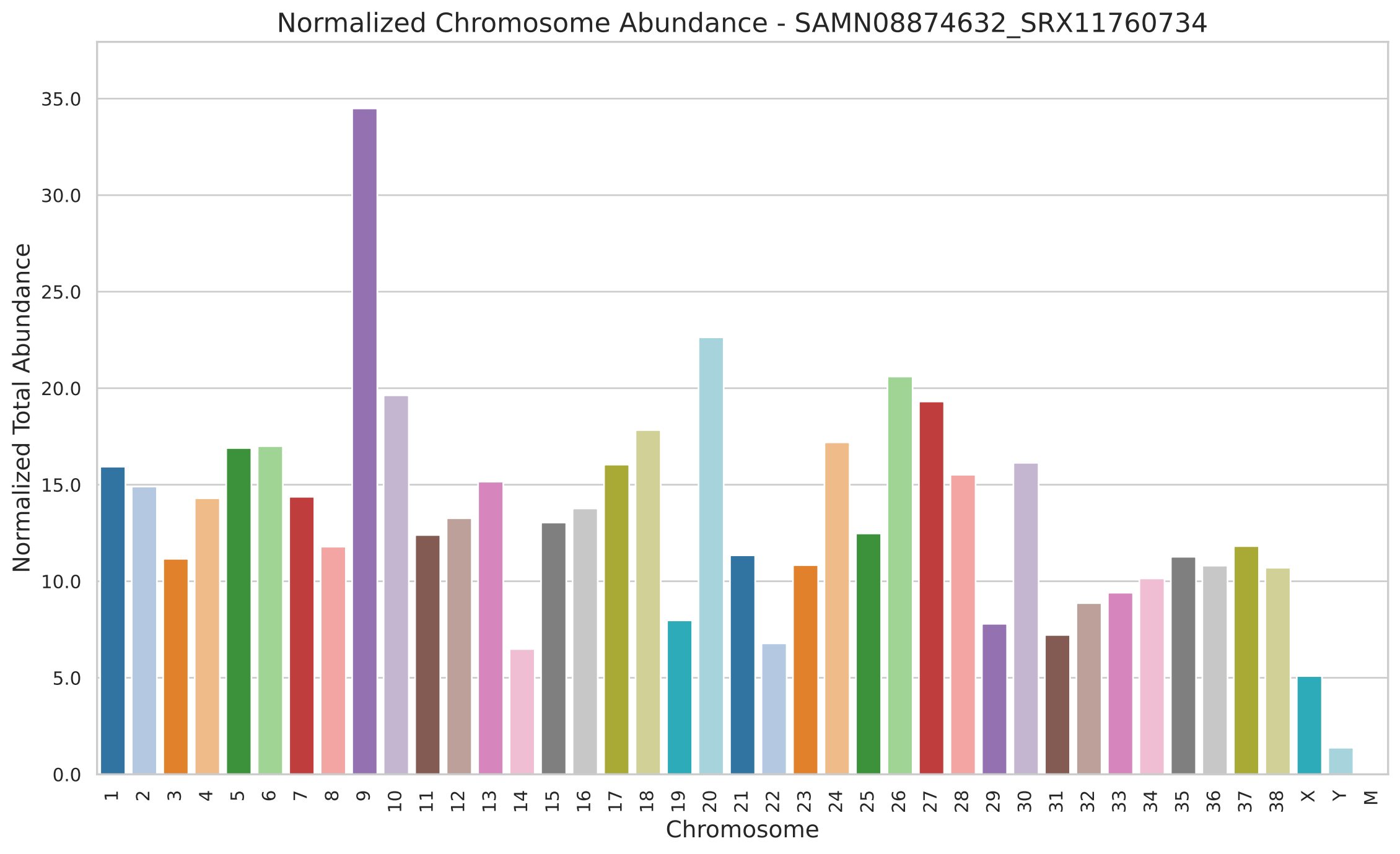

Normalized Chromosome Abundance - SAMN13133755_SRX7061269
Normalized Total Abundance
30.0
25.0
20.0
15.0
10.0
5.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

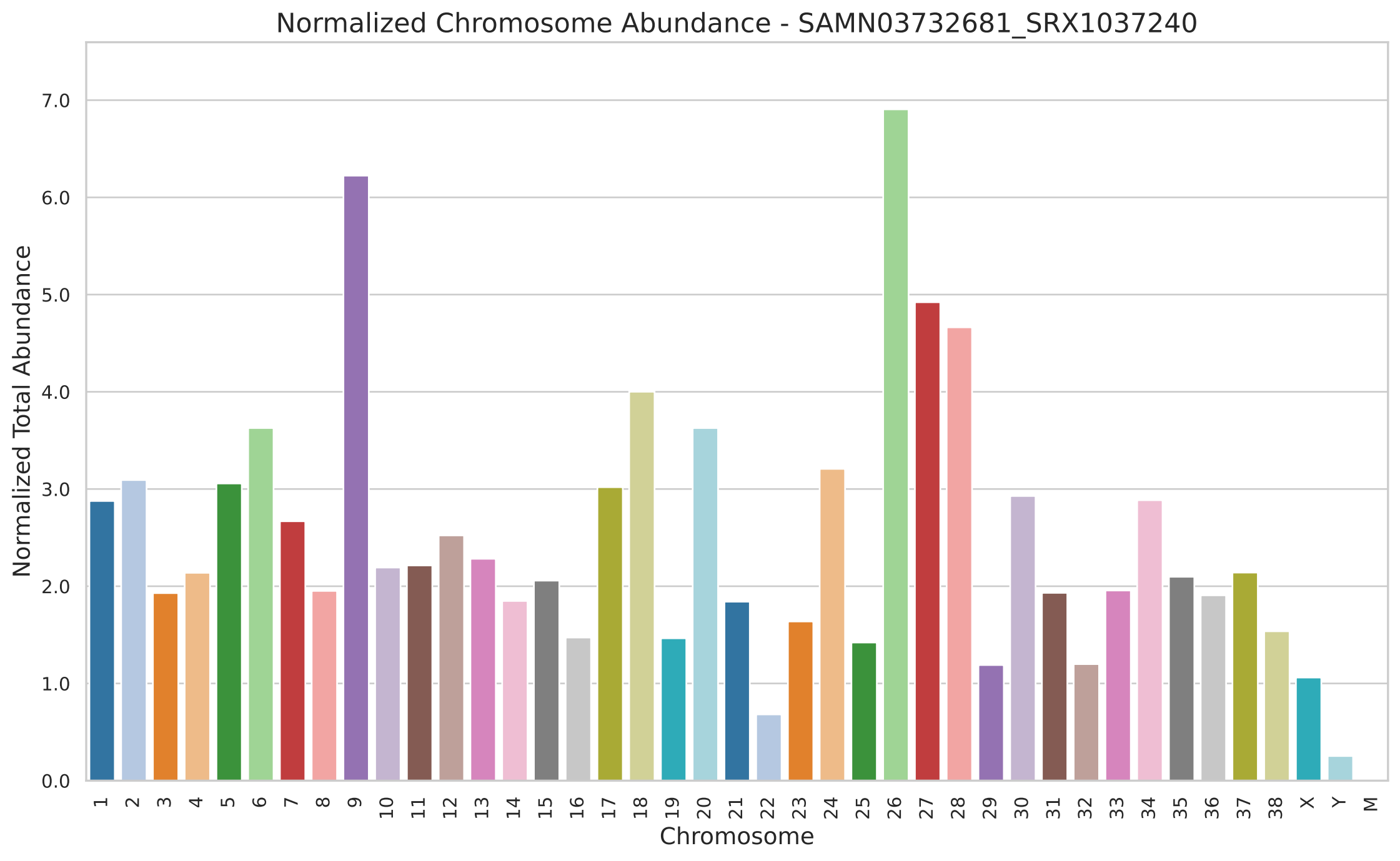

Normalized Chromosome Abundance - SAMN11079591_SRX5487574
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

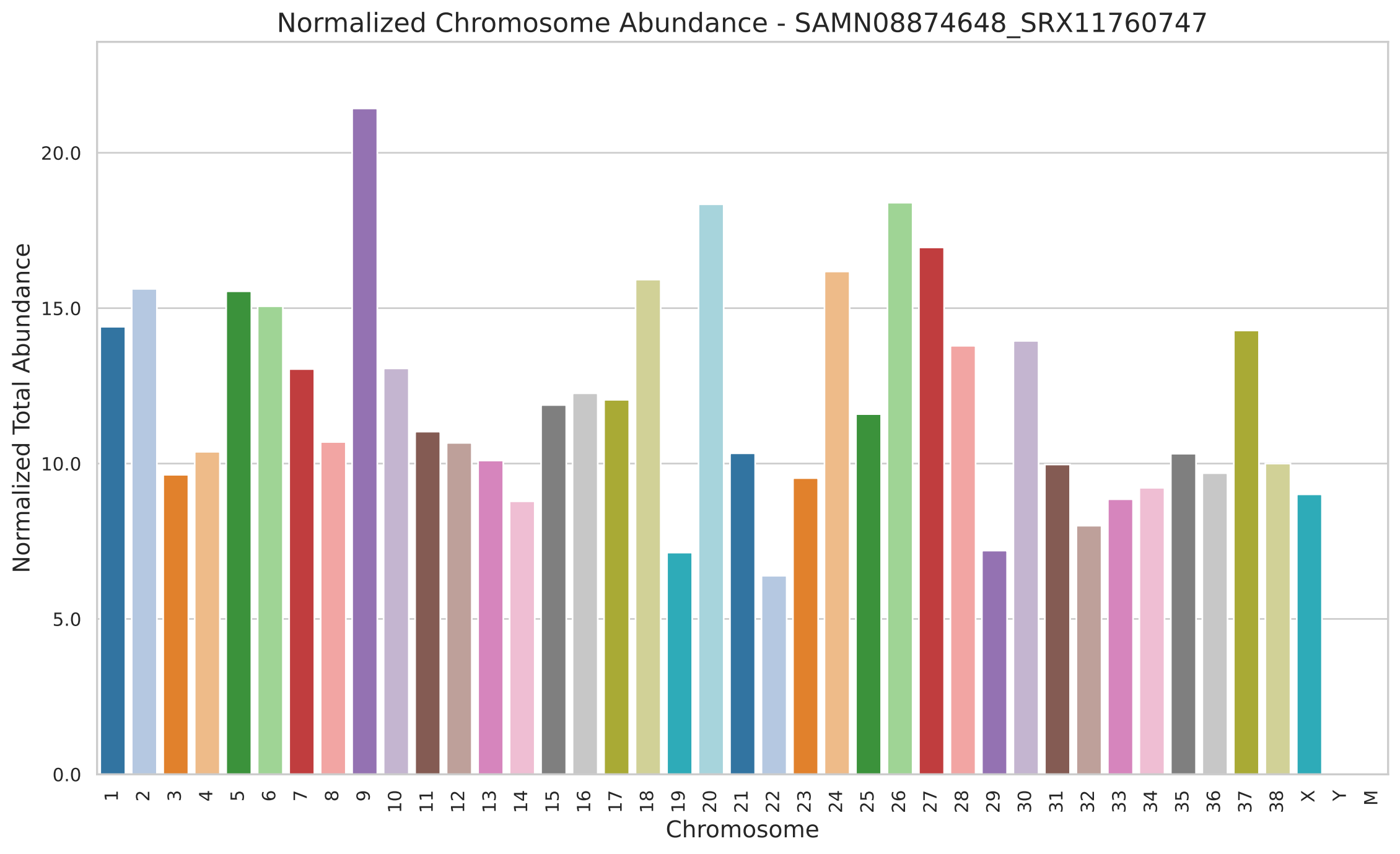

Normalized Chromosome Abundance - SAMN08874653_SRX11760752
Normalized Total Abundance
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5
20.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

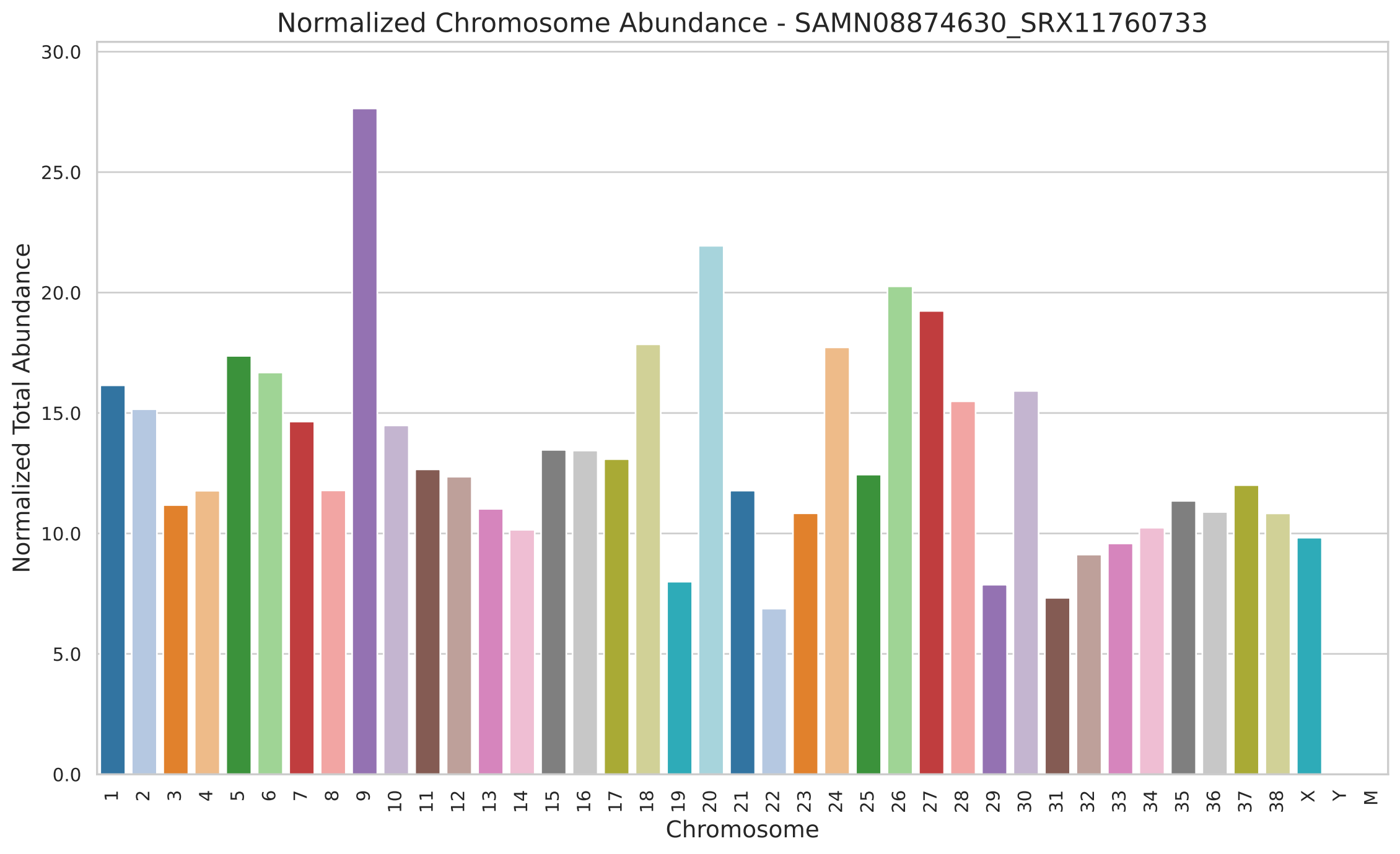

Normalized Chromosome Abundance - SAMN13133761_SRX7061459
Normalized Total Abundance
0.0
10.0
20.0
30.0
40.0
50.0
60.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

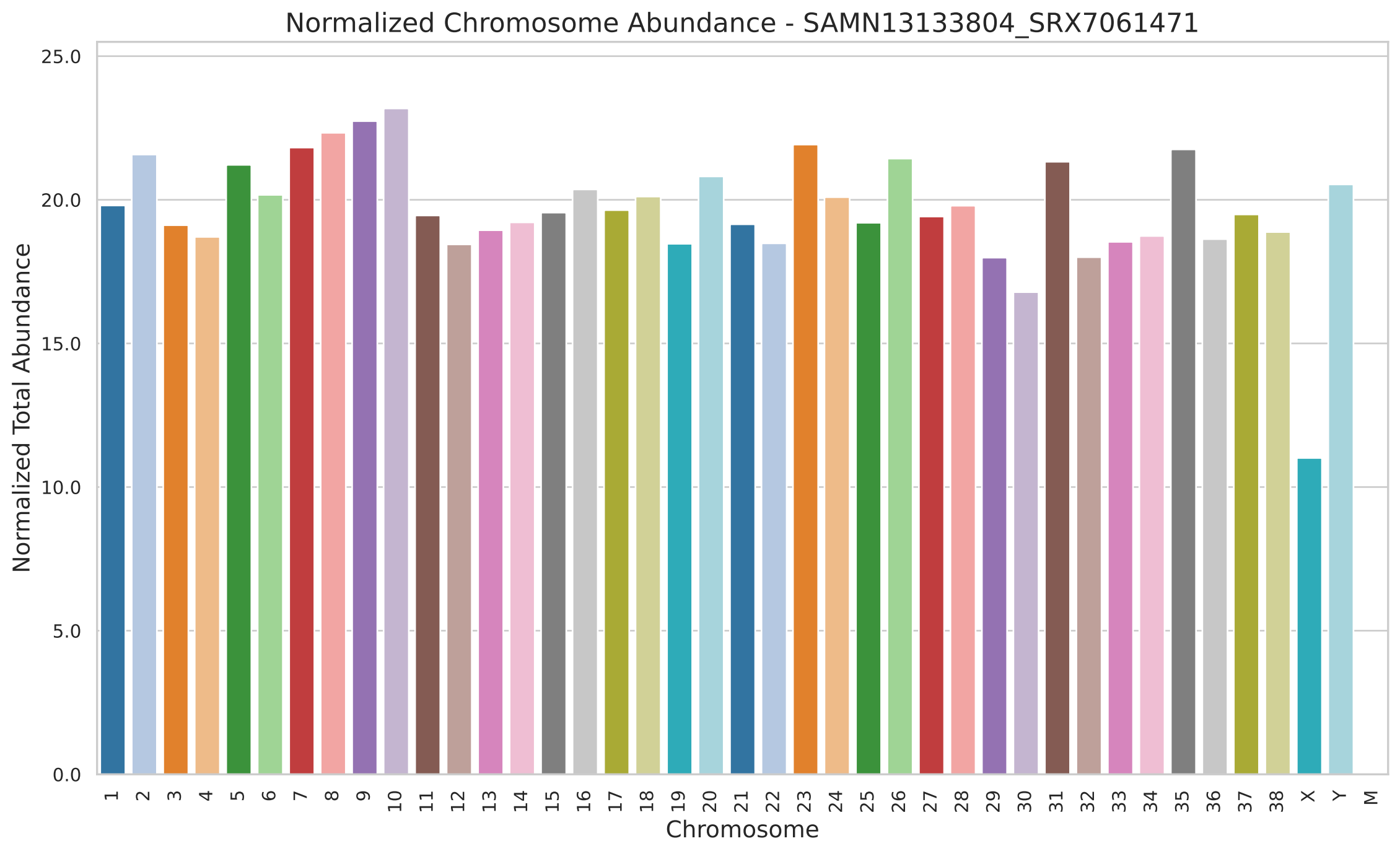

Normalized Chromosome Abundance - SAMN13133813_SRX7061516
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

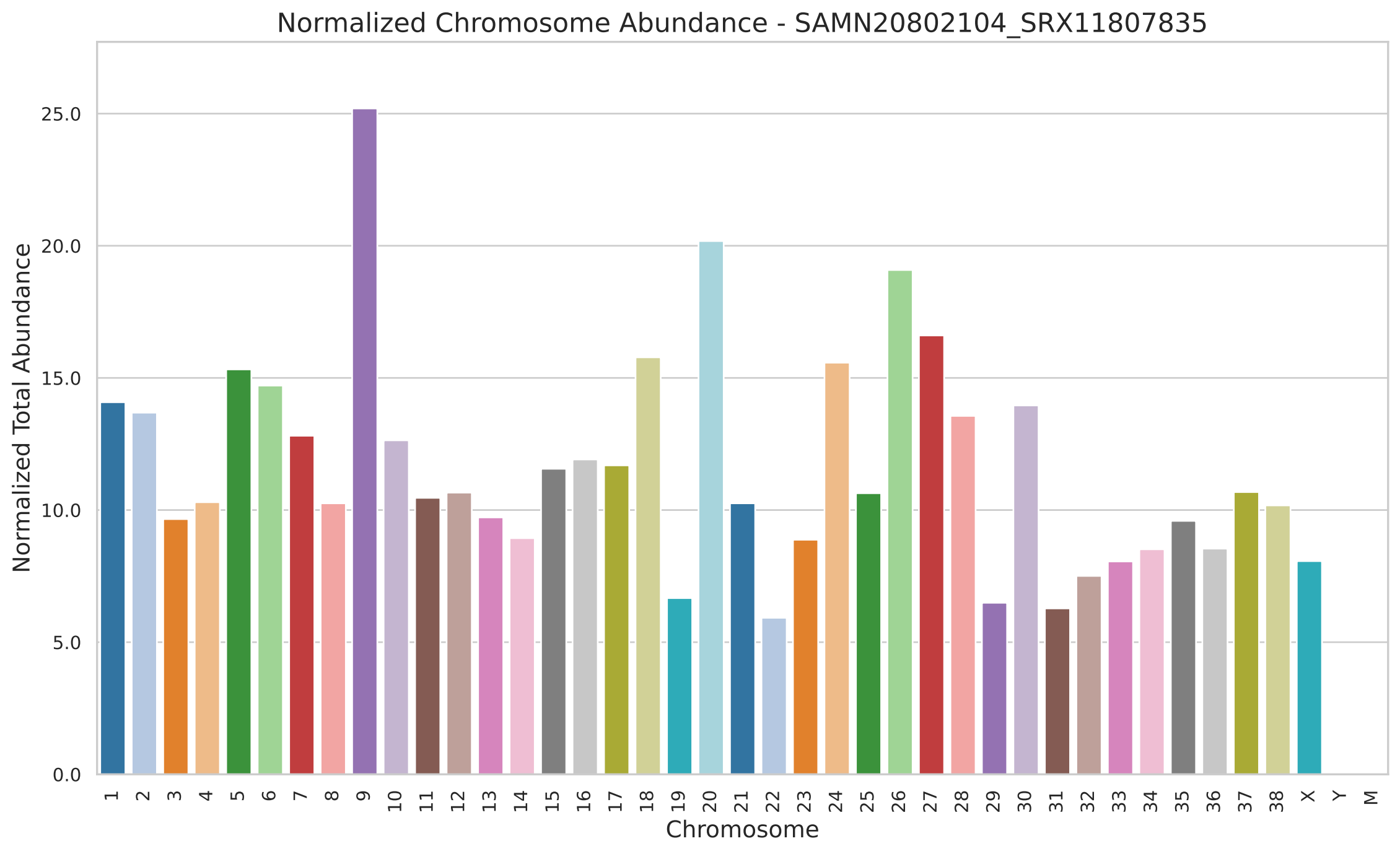

Normalized Chromosome Abundance - SAMN08874632_SRX11760734
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
35.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

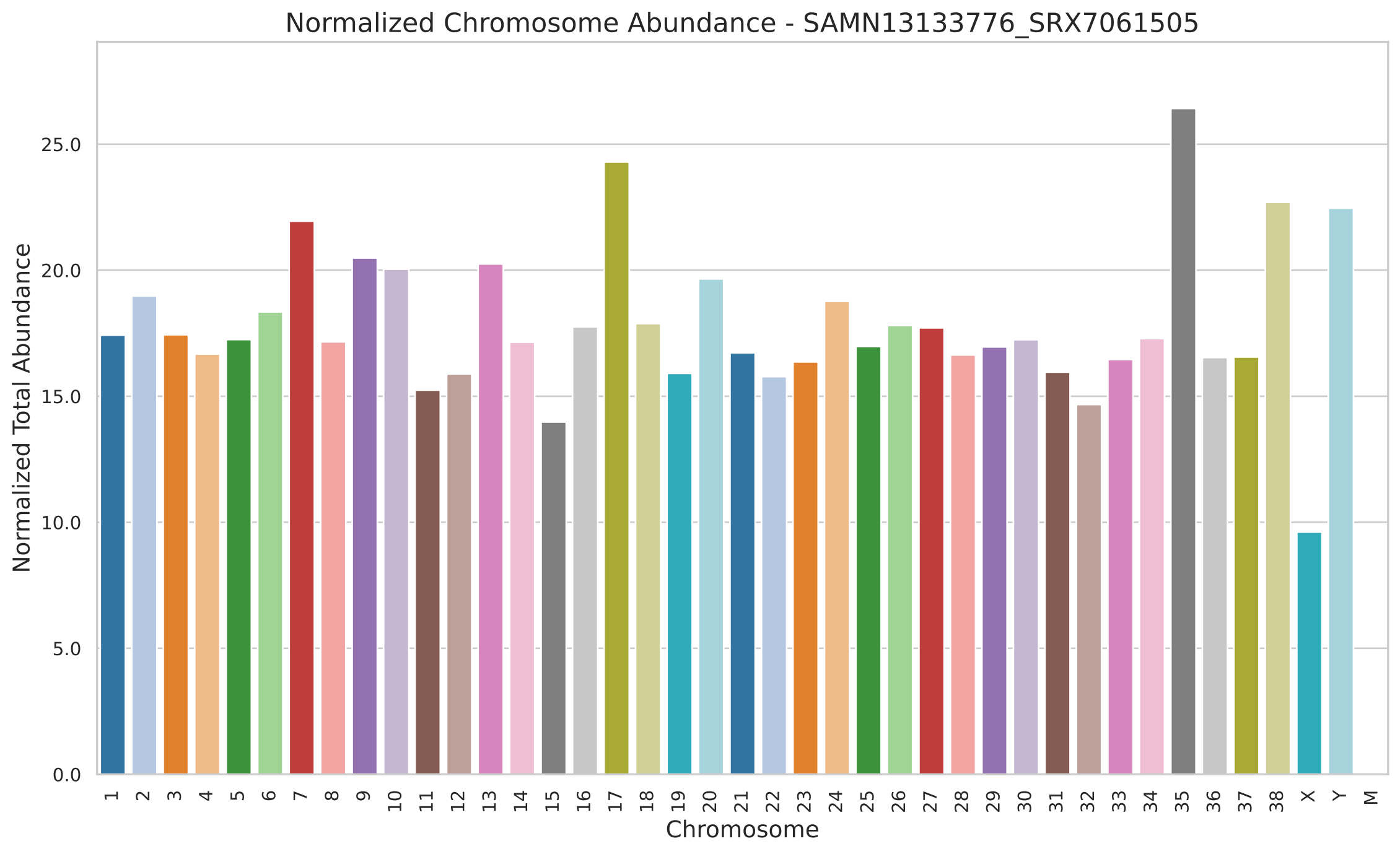

Normalized Chromosome Abundance - SAMN03732681_SRX1037240
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

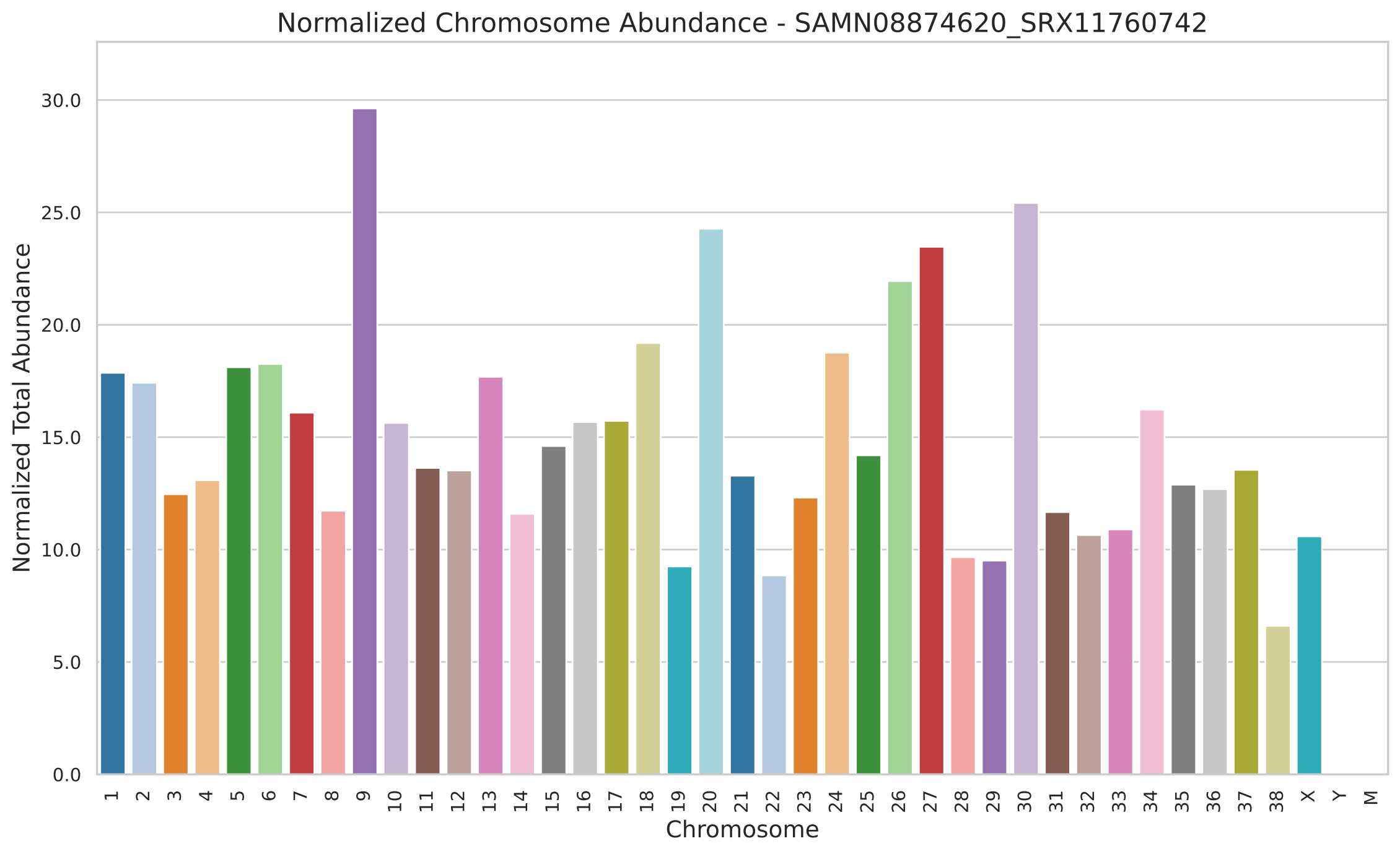

Normalized Chromosome Abundance - SAMN08874648_SRX11760747
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

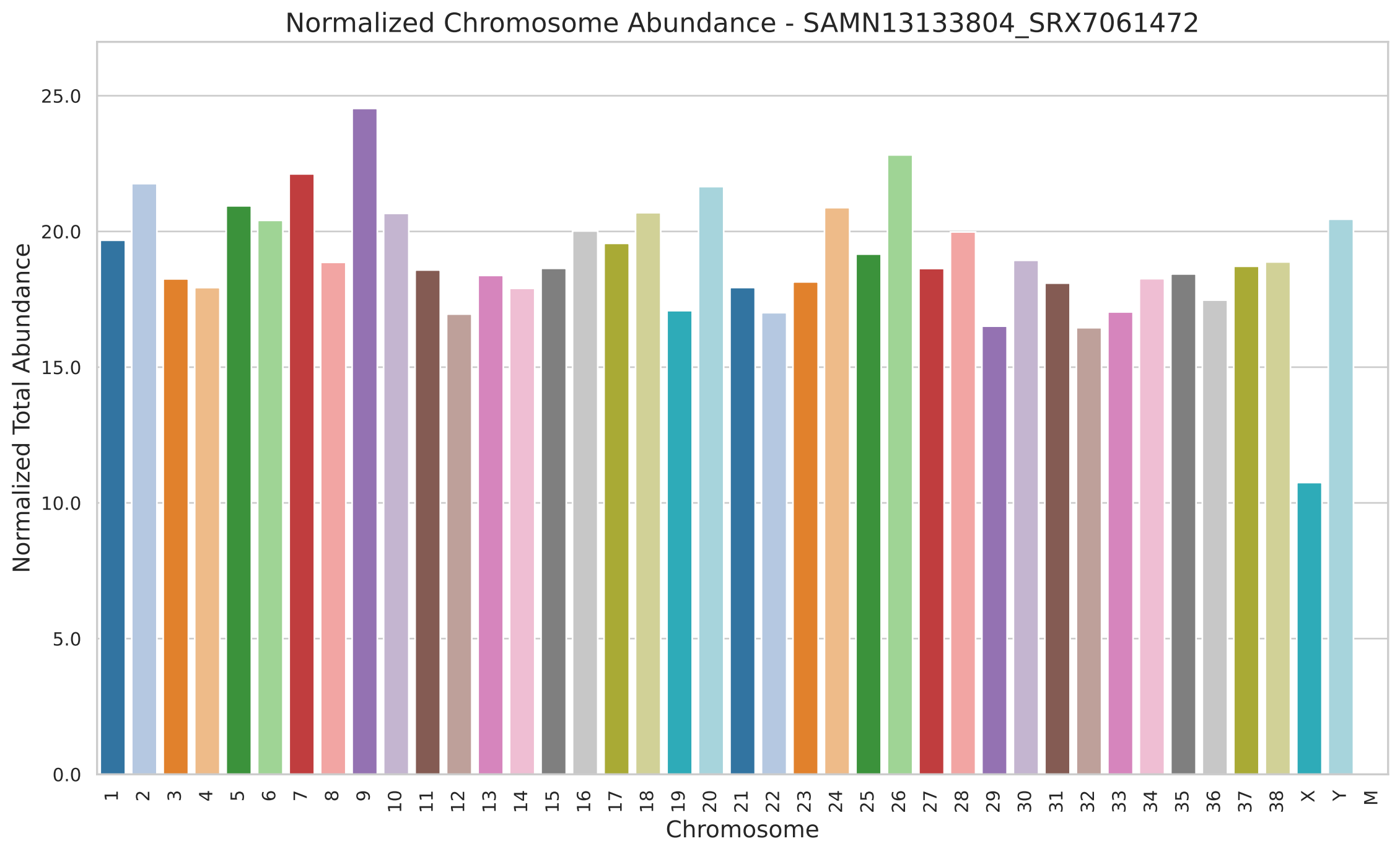

Normalized Chromosome Abundance - SAMN08874630_SRX11760733
Normalized Total Abundance
30.0
25.0
20.0
15.0
10.0
5.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

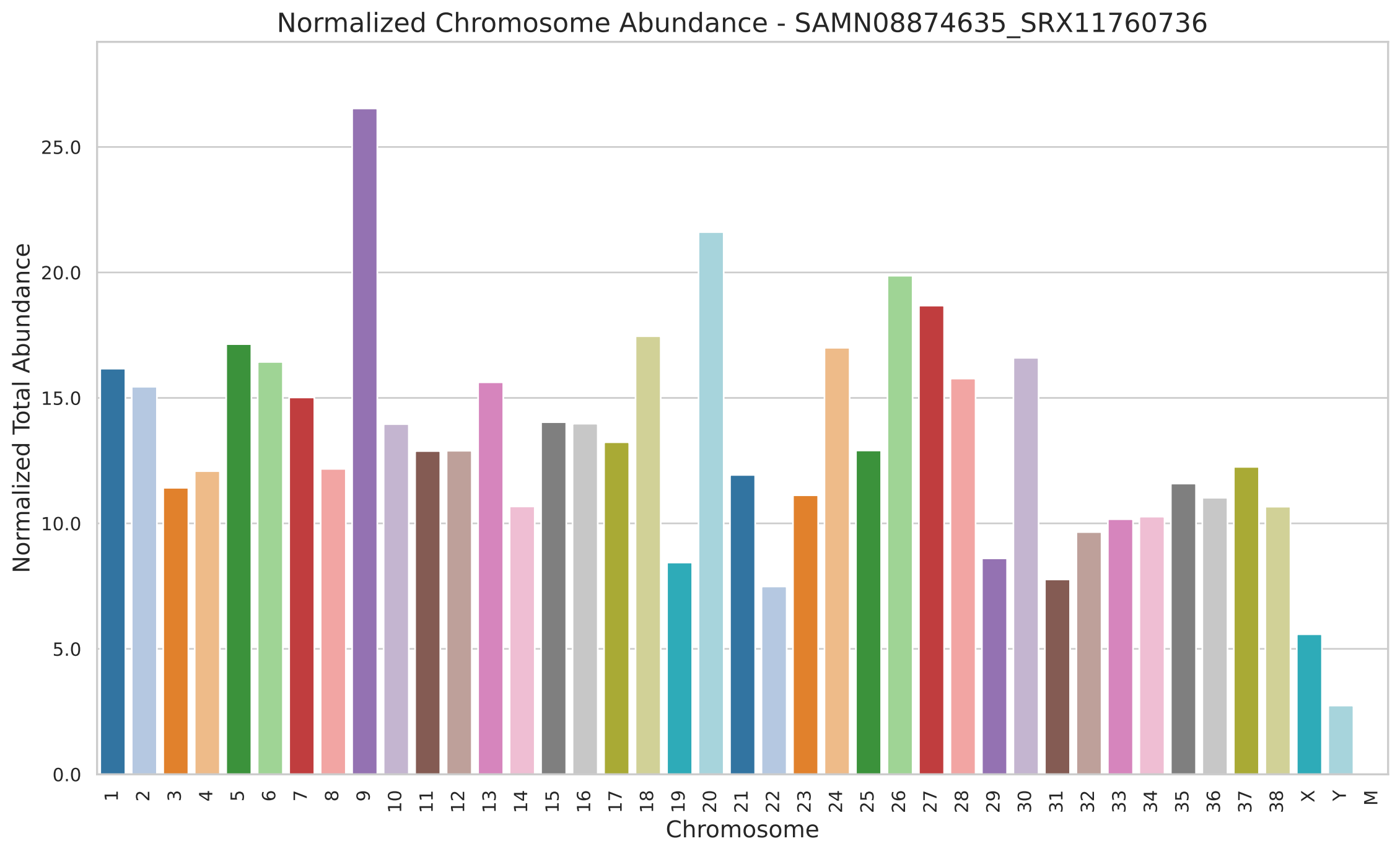

Normalized Chromosome Abundance - SAMN13133804_SRX7061471
Normalized Total Abundance
25.0
20.0
15.0
10.0
5.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

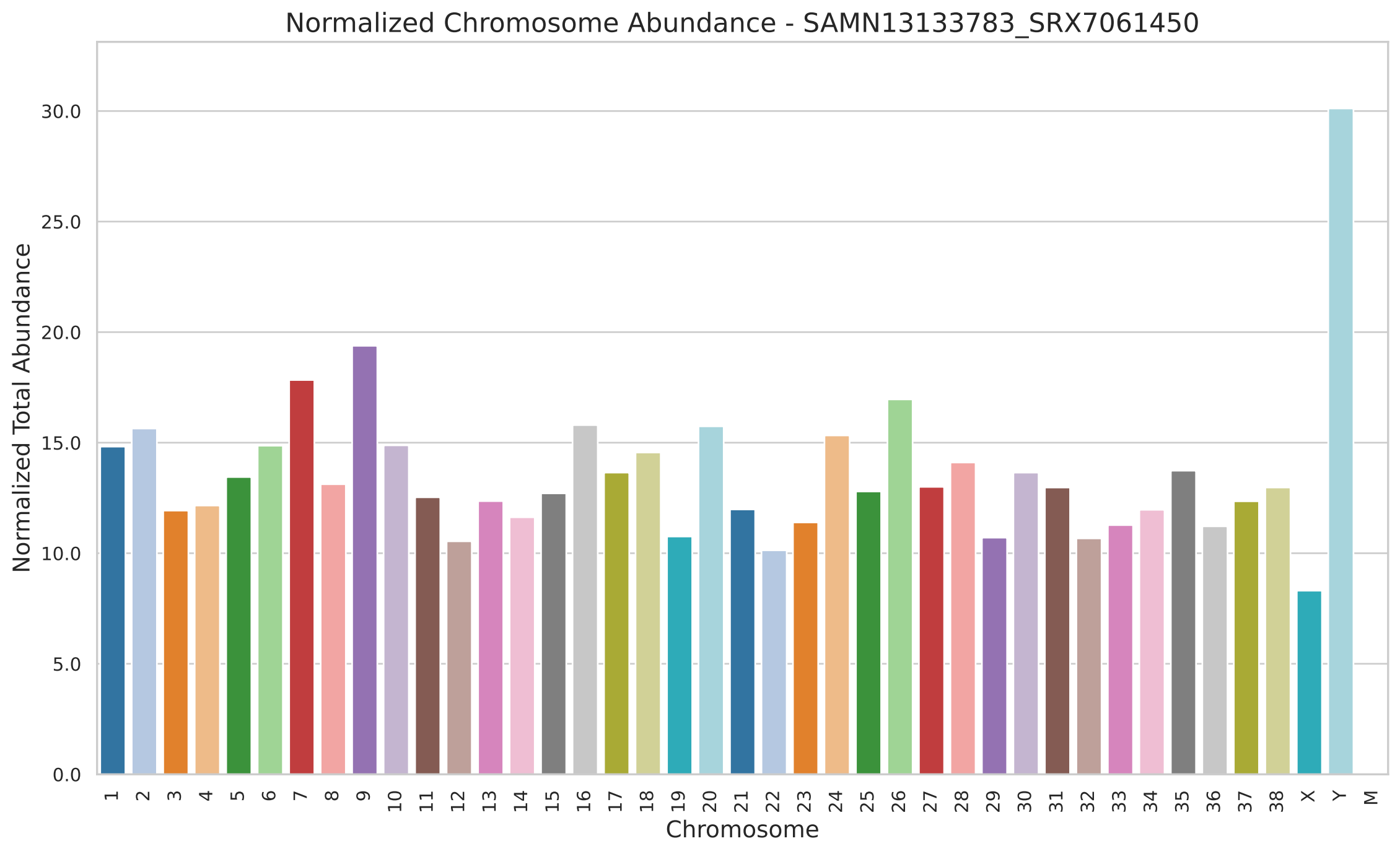

Normalized Chromosome Abundance - SAMN20802104_SRX11807835
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

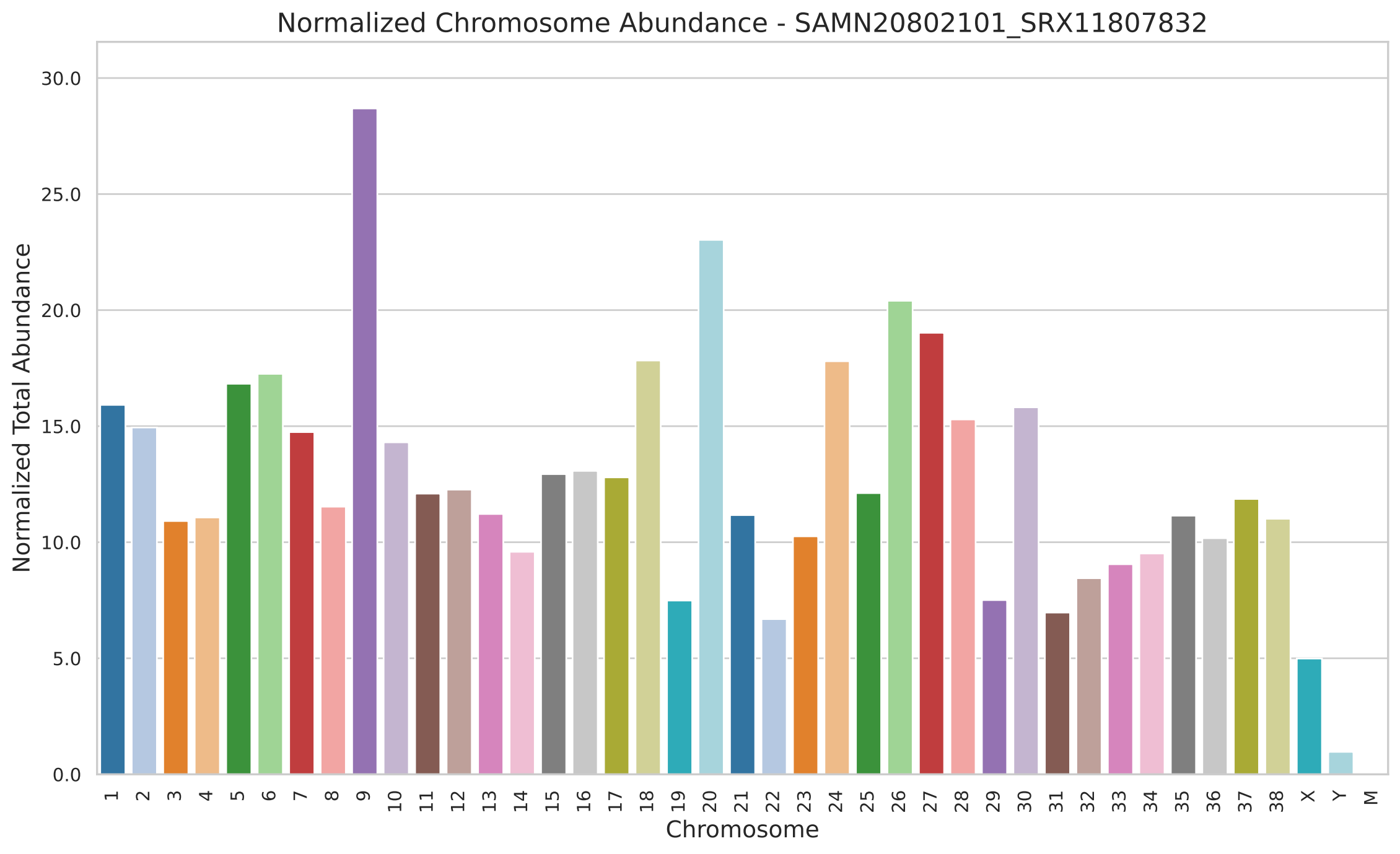

Normalized Chromosome Abundance - SAMN13133776_SRX7061505
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

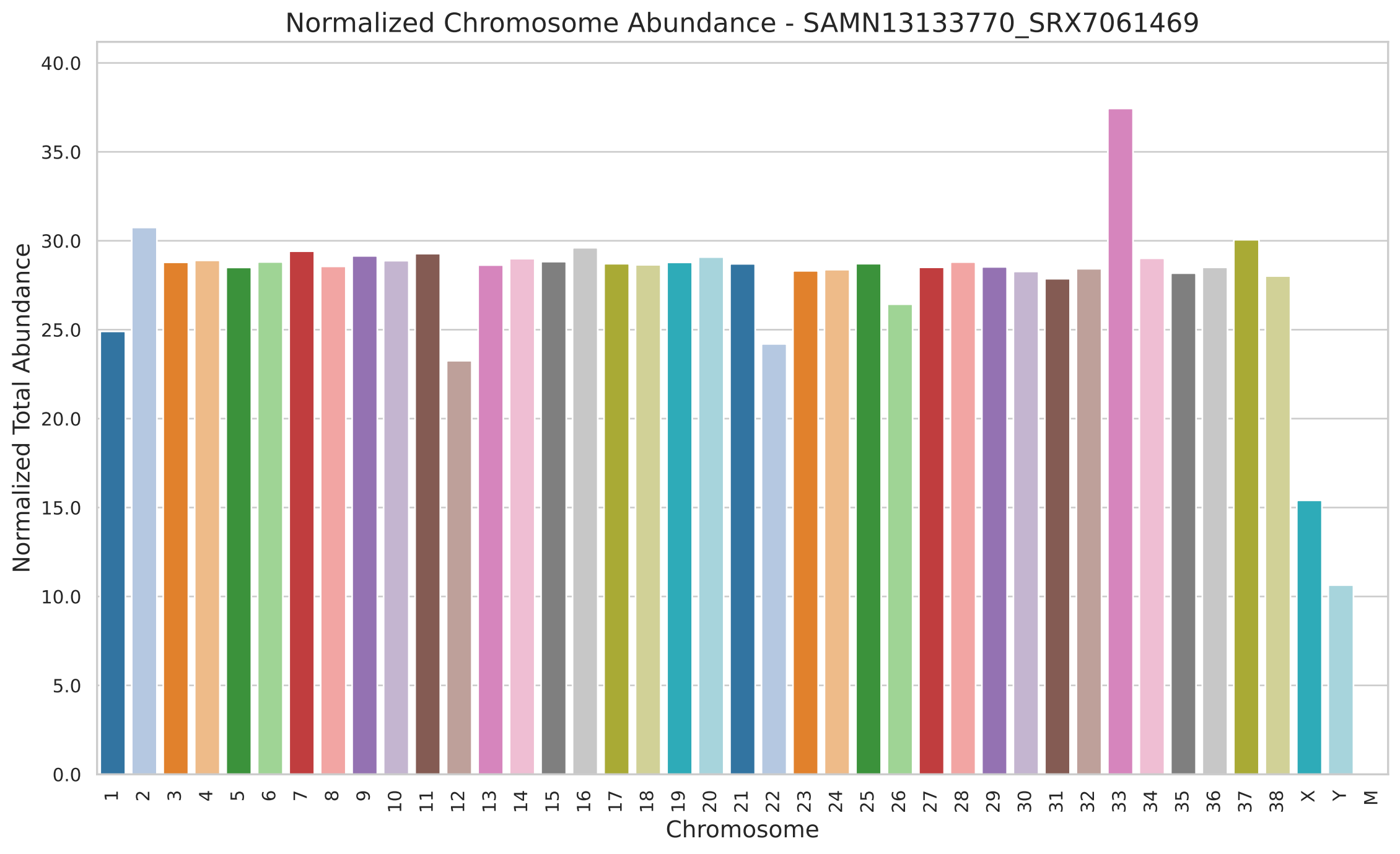

Normalized Chromosome Abundance - SAMN08874620_SRX11760742
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

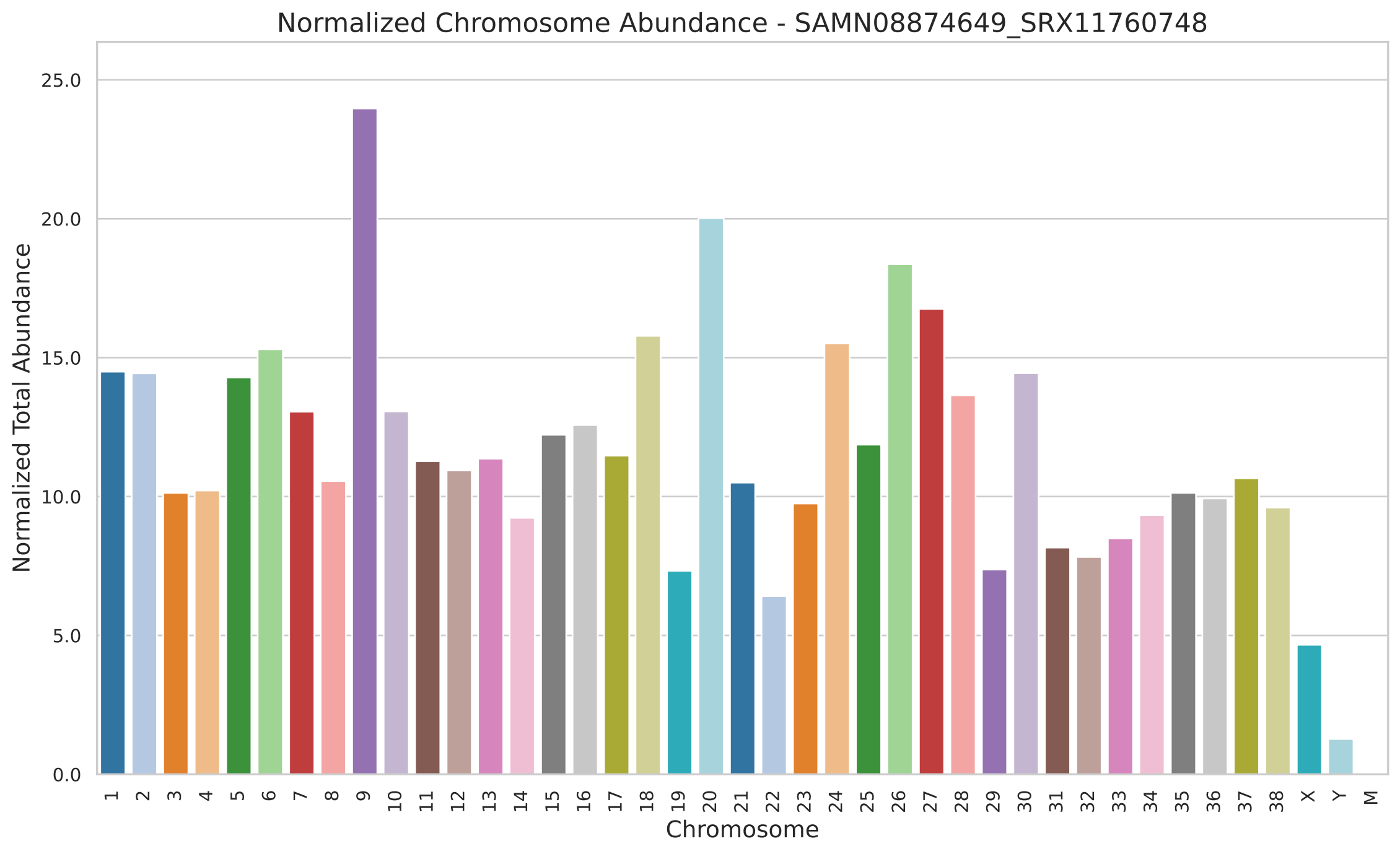

Normalized Chromosome Abundance - SAMN13133804_SRX7061472
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

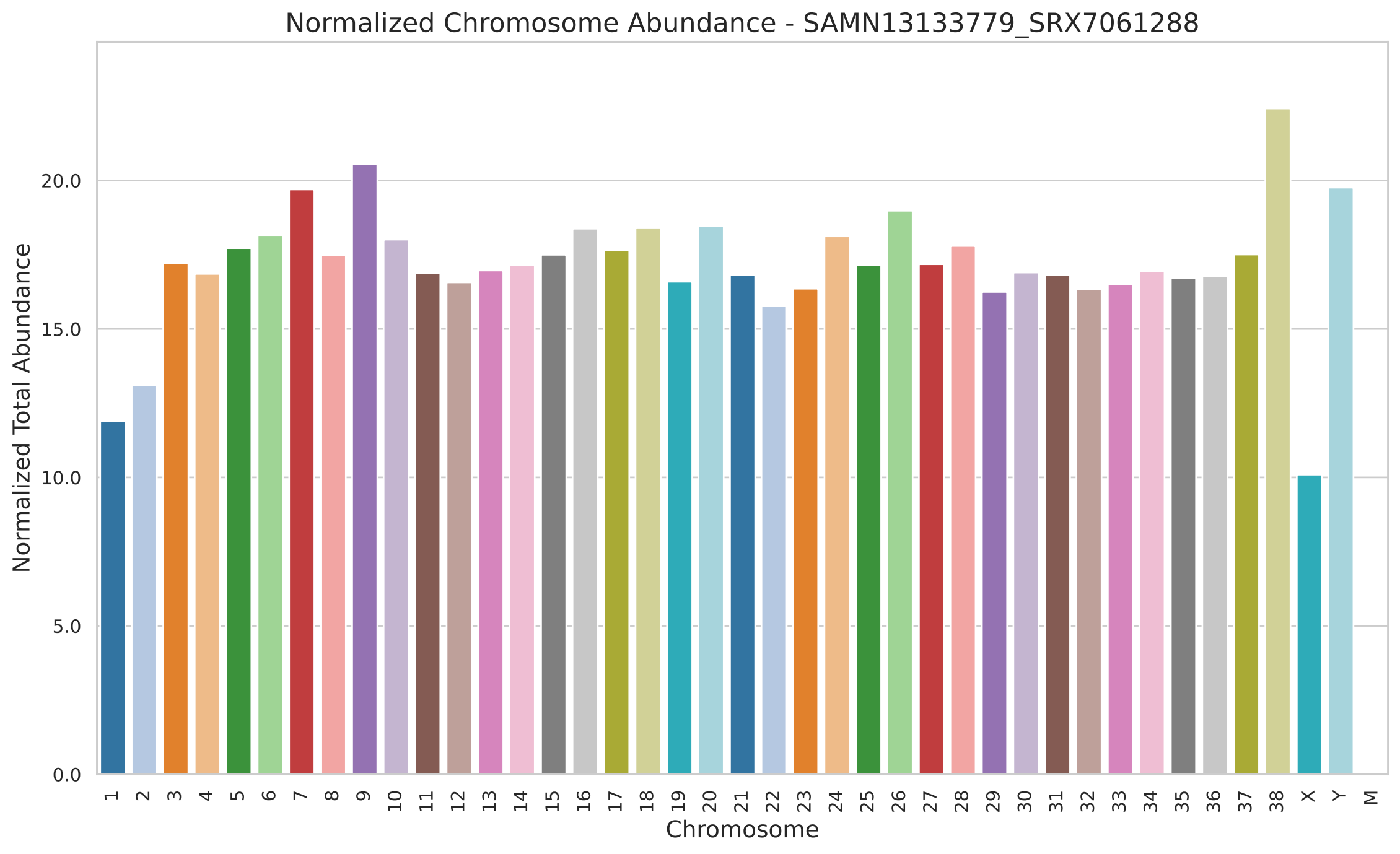

Normalized Chromosome Abundance - SAMN08874635_SRX11760736
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

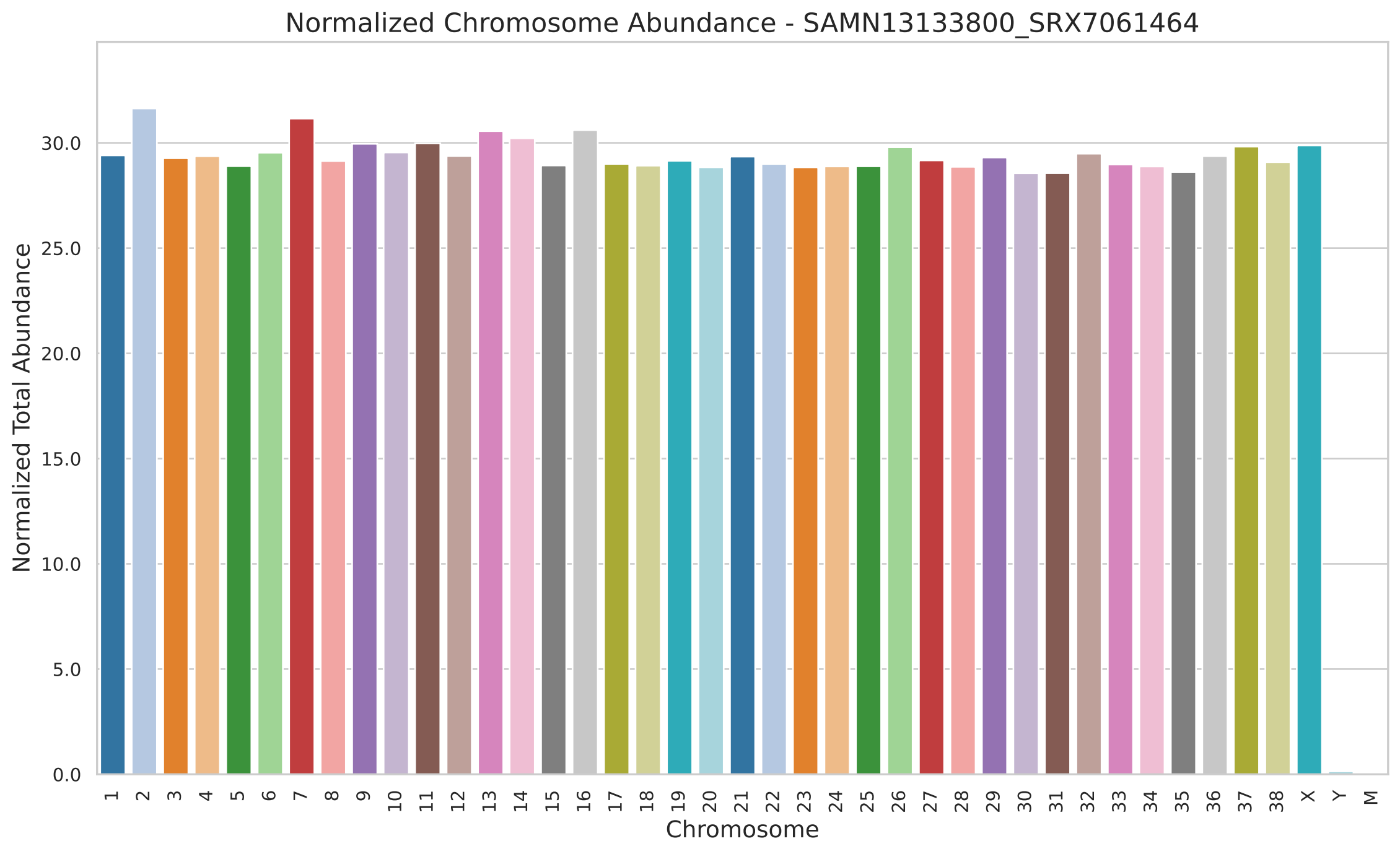

Normalized Chromosome Abundance - SAMN13133783_SRX7061450
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

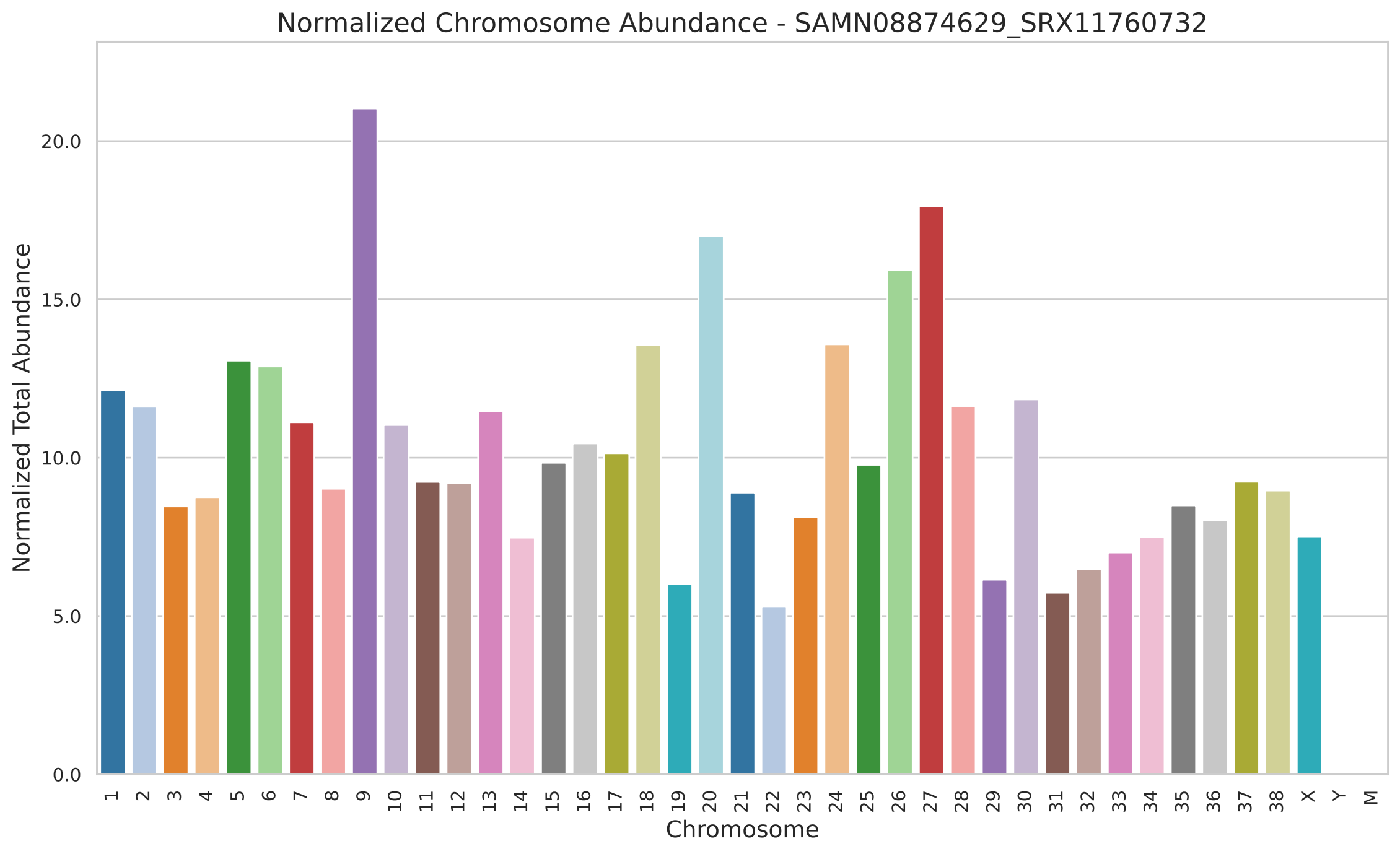

Normalized Chromosome Abundance - SAMN20802101_SRX11807832
Normalized Total Abundance
30.0
25.0
20.0
15.0
10.0
5.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

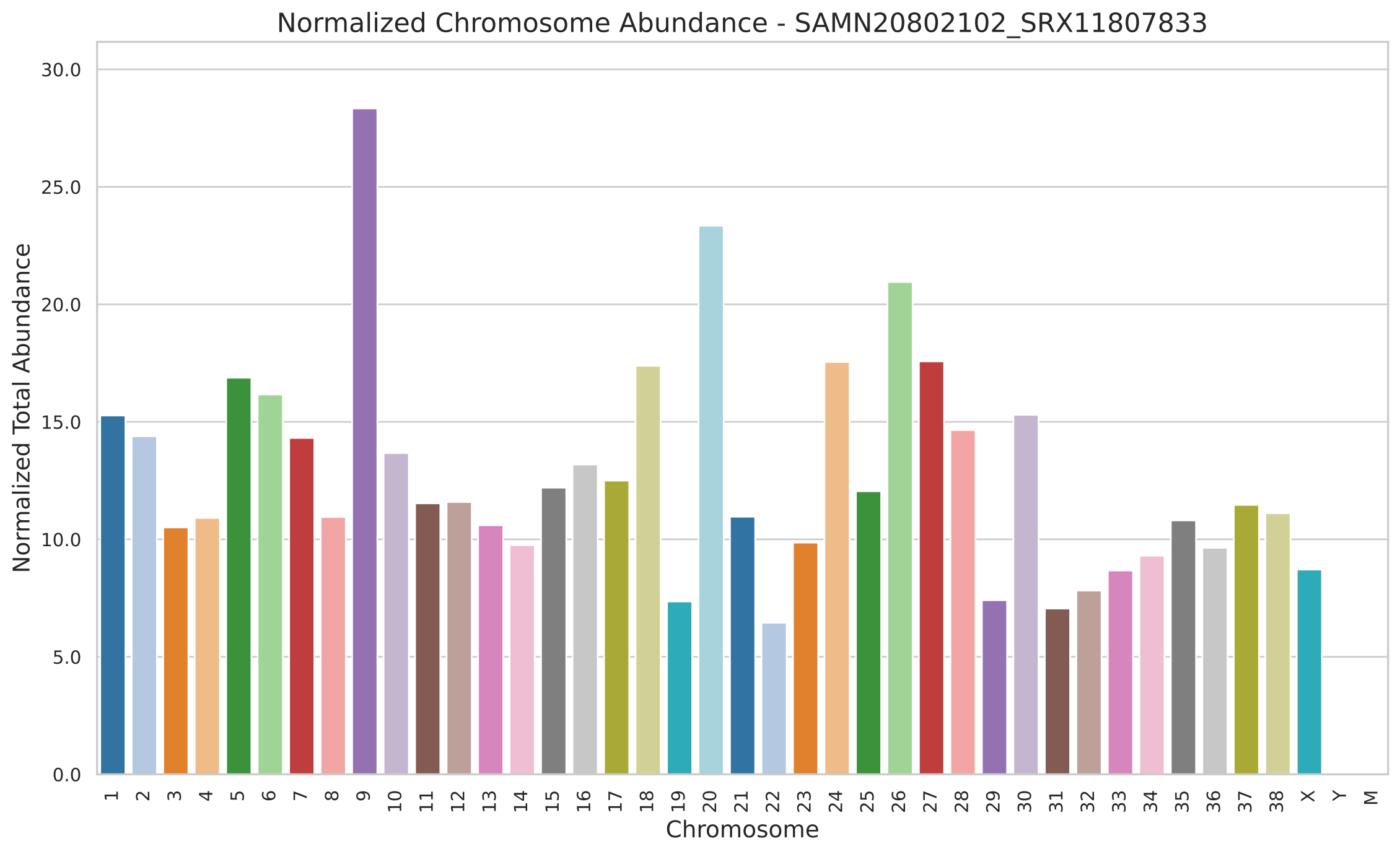

Normalized Chromosome Abundance - SAMN13133770_SRX7061469
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
35.0
40.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

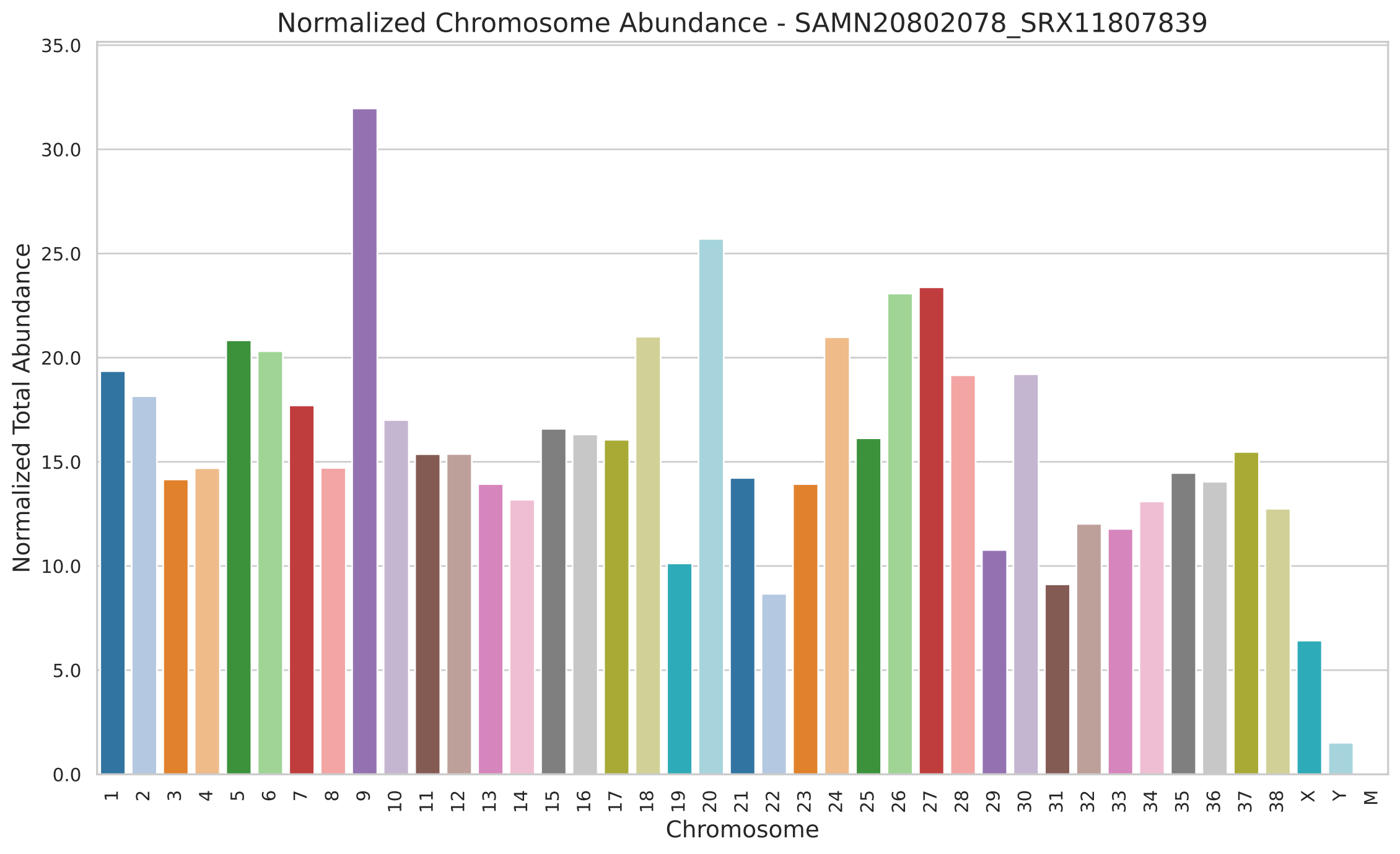

Normalized Chromosome Abundance - SAMN08874649_SRX11760748
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

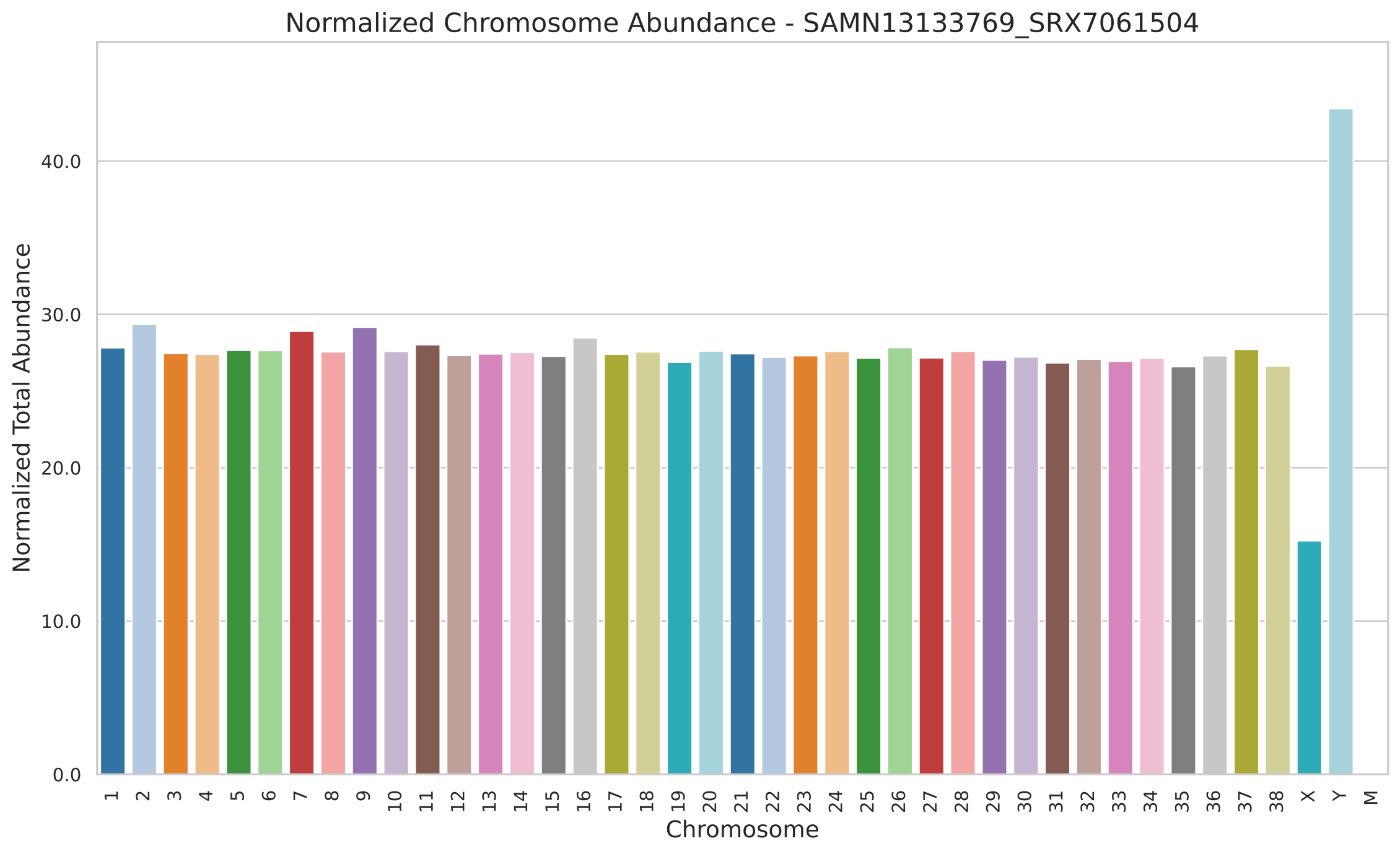

Normalized Chromosome Abundance - SAMN13133779_SRX7061288
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

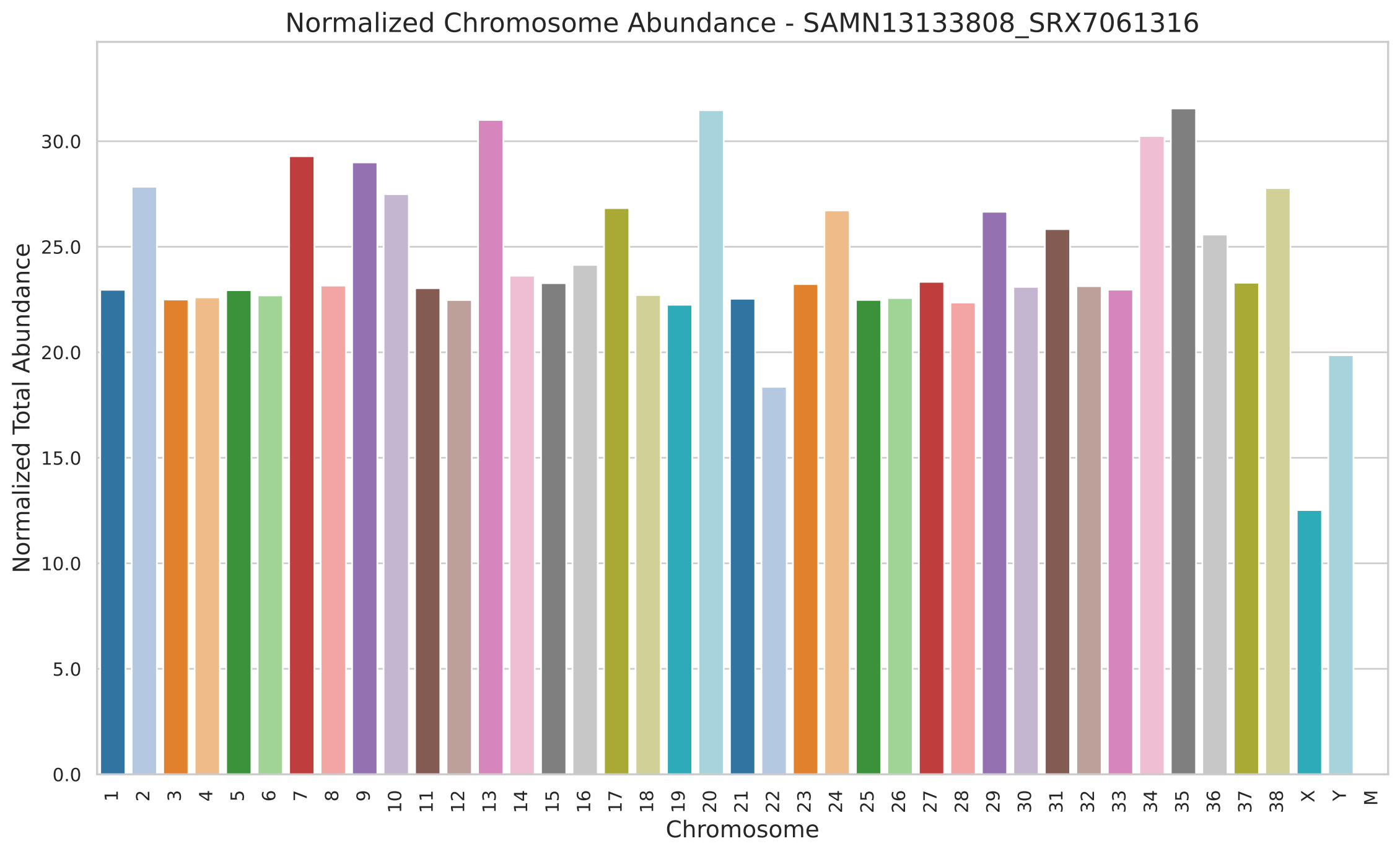

Normalized Chromosome Abundance - SAMN13133800_SRX7061464
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

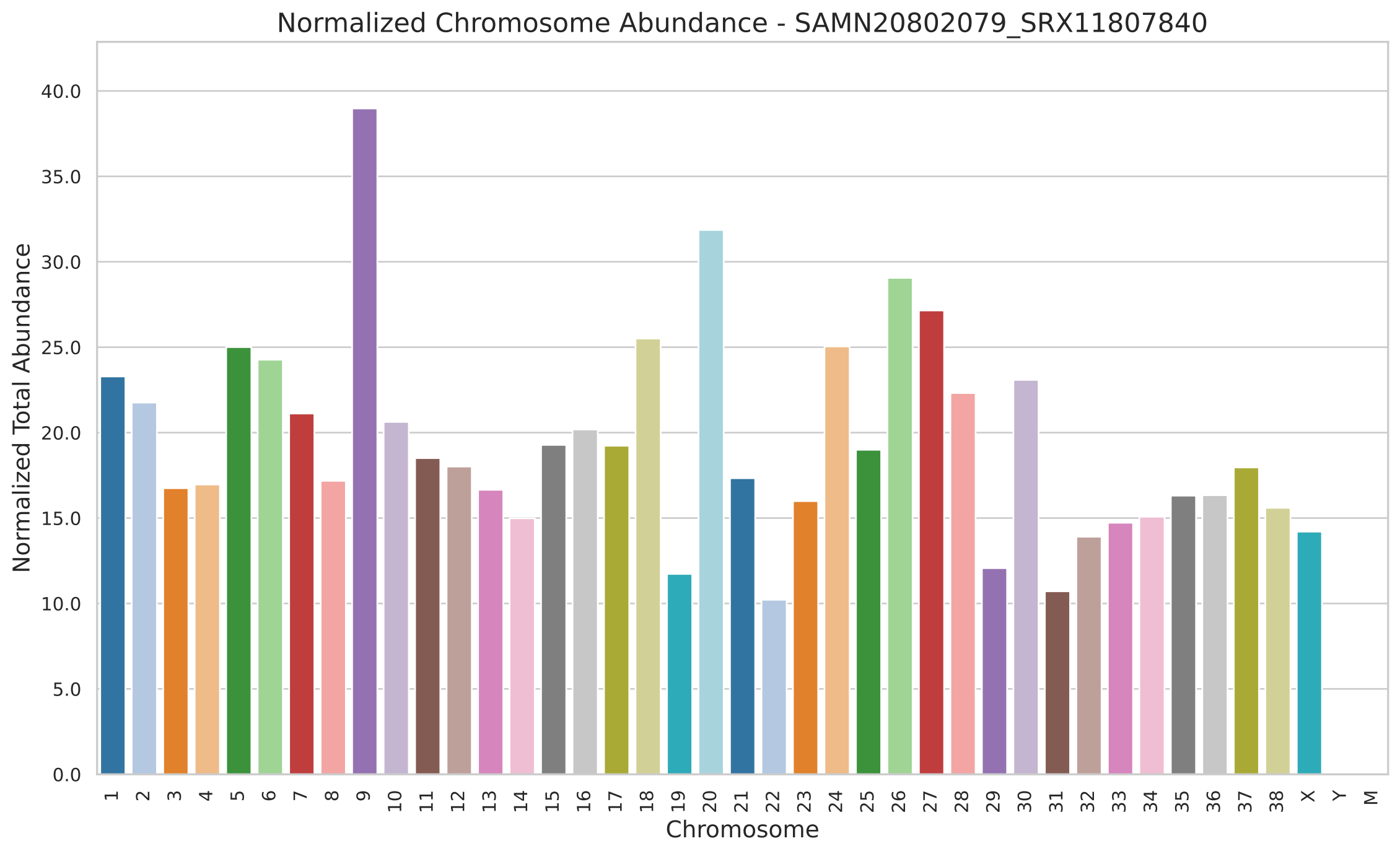

Normalized Chromosome Abundance - SAMN08874629_SRX11760732
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

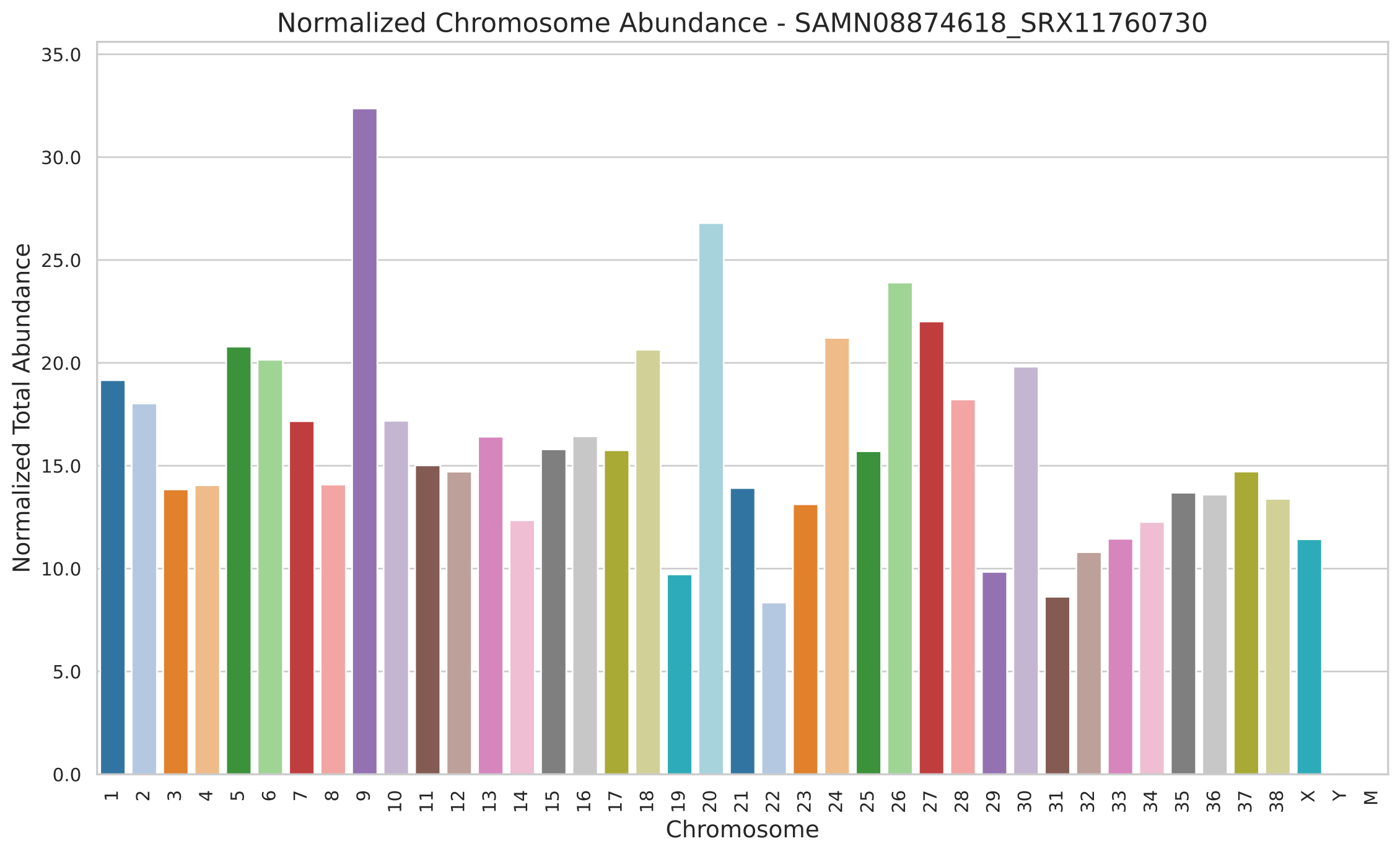

Normalized Chromosome Abundance - SAMN20802102_SRX11807833
Normalized Total Abundance
30.0
25.0
20.0
15.0
10.0
5.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

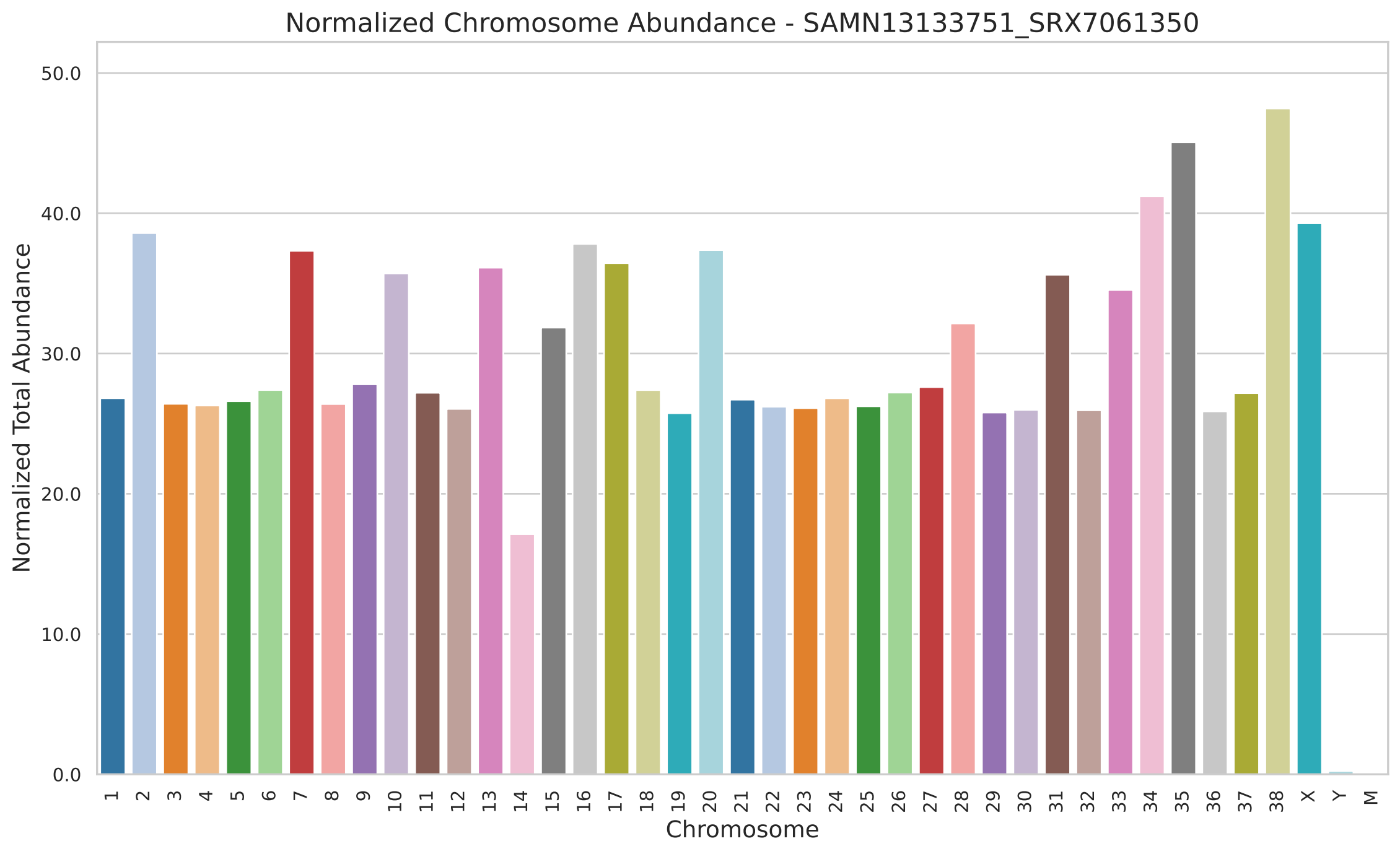

Normalized Chromosome Abundance - SAMN20802078_SRX11807839
Normalized Total Abundance
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

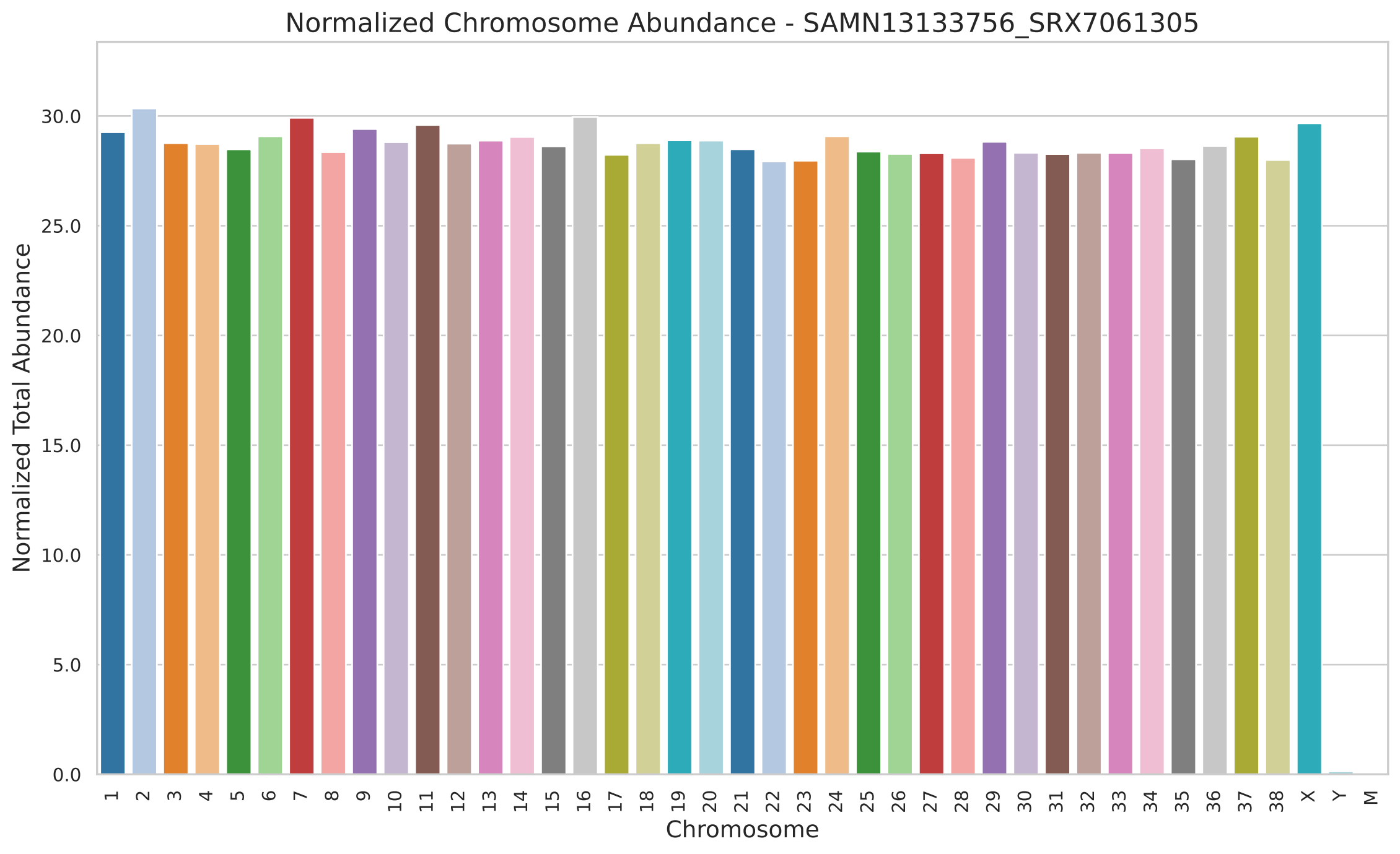

Normalized Chromosome Abundance - SAMN13133769_SRX7061504
Normalized Total Abundance
0.0
10.0
20.0
30.0
40.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

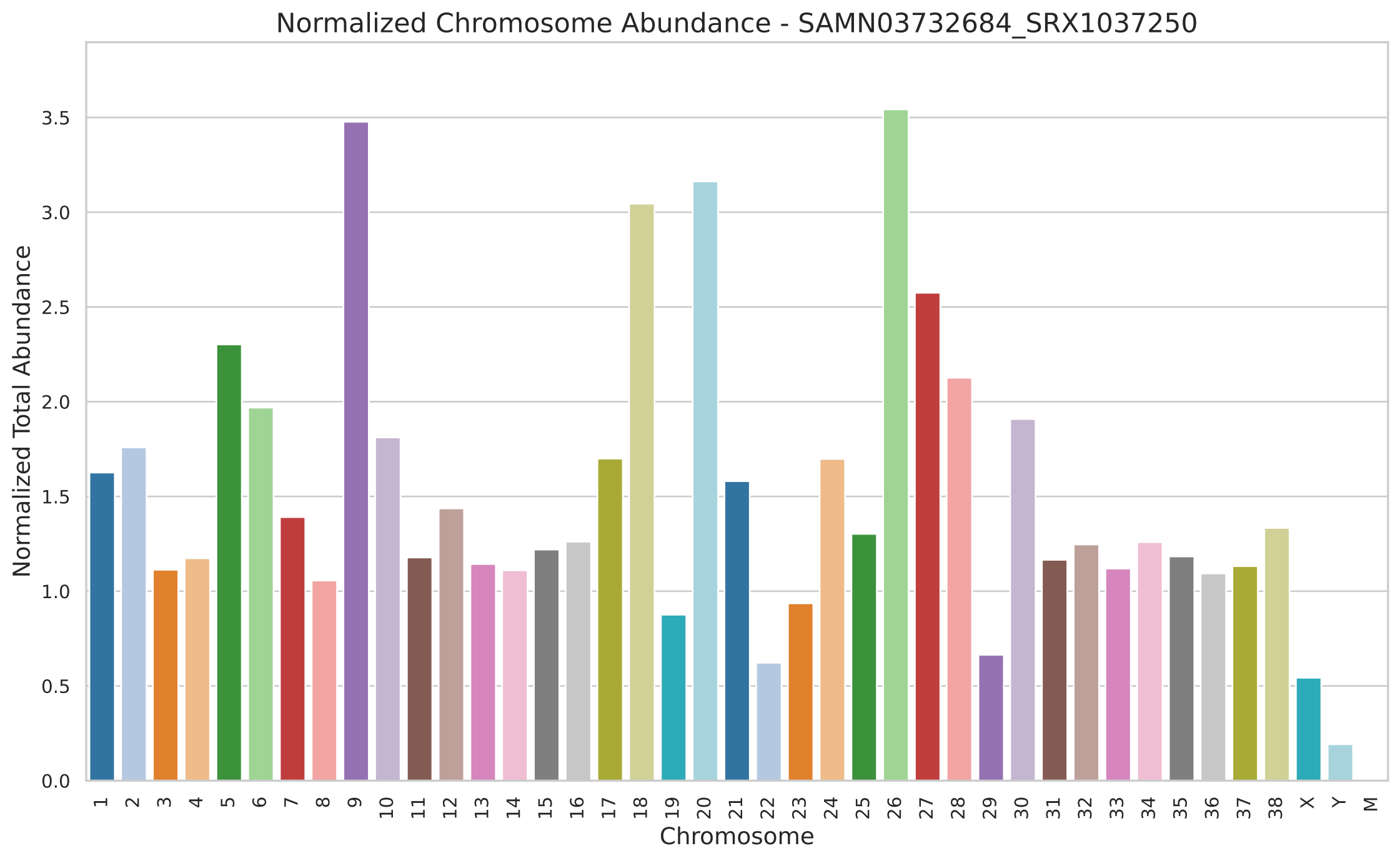

Normalized Chromosome Abundance - SAMN13133808_SRX7061316
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

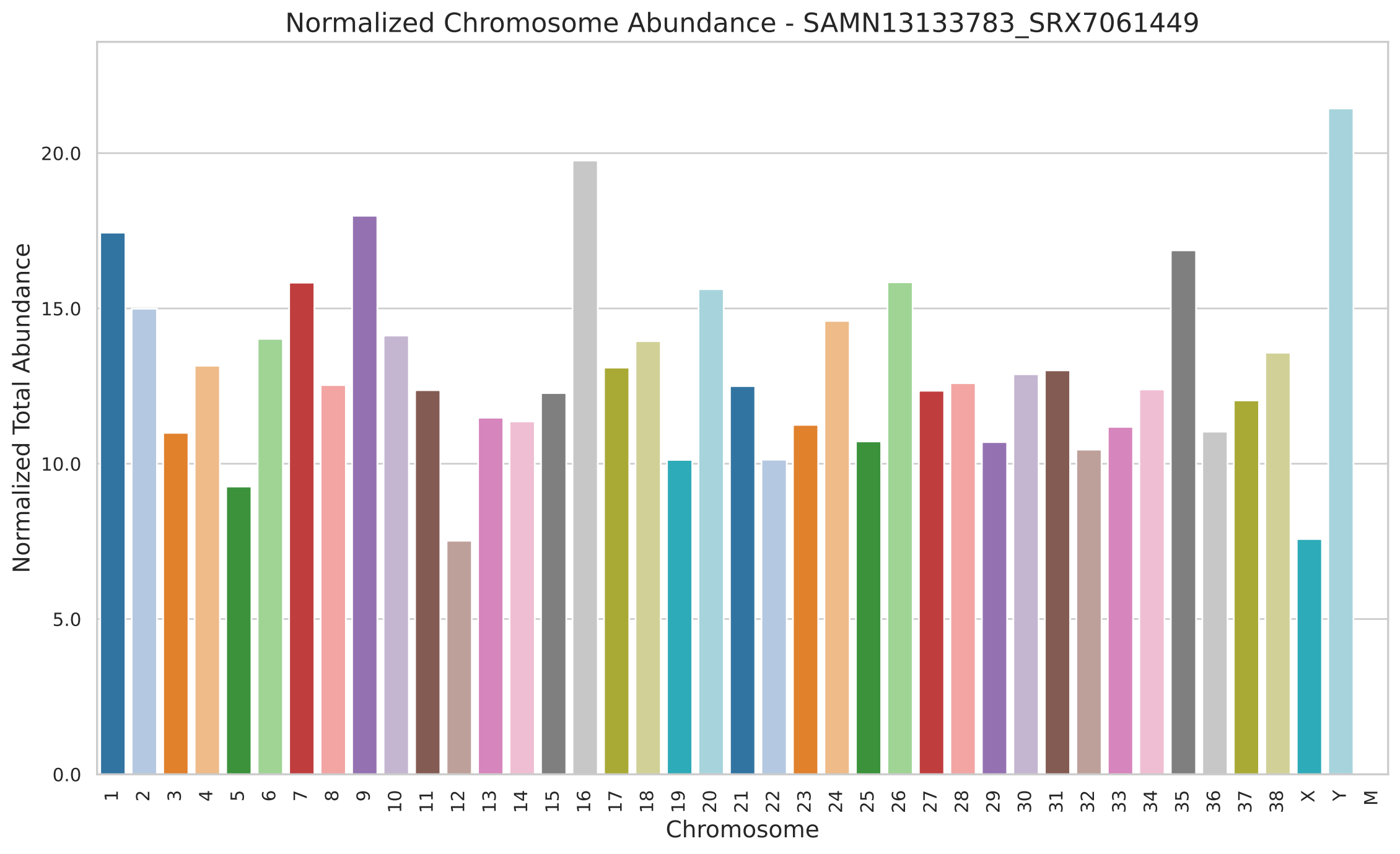

Normalized Chromosome Abundance - SAMN20802079_SRX11807840
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
35.0
40.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

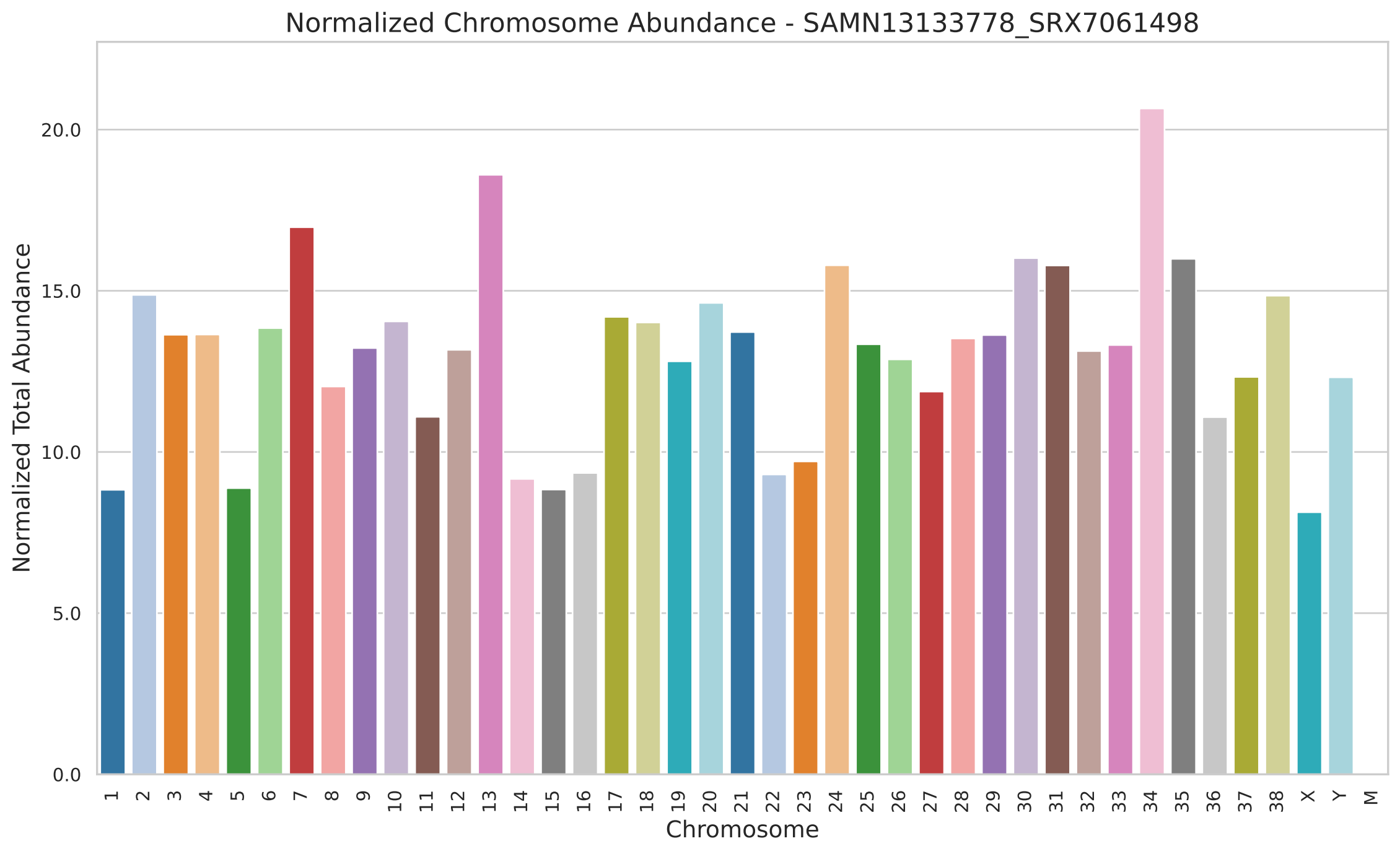

Normalized Chromosome Abundance - SAMN08874618_SRX11760730
Normalized Total Abundance
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

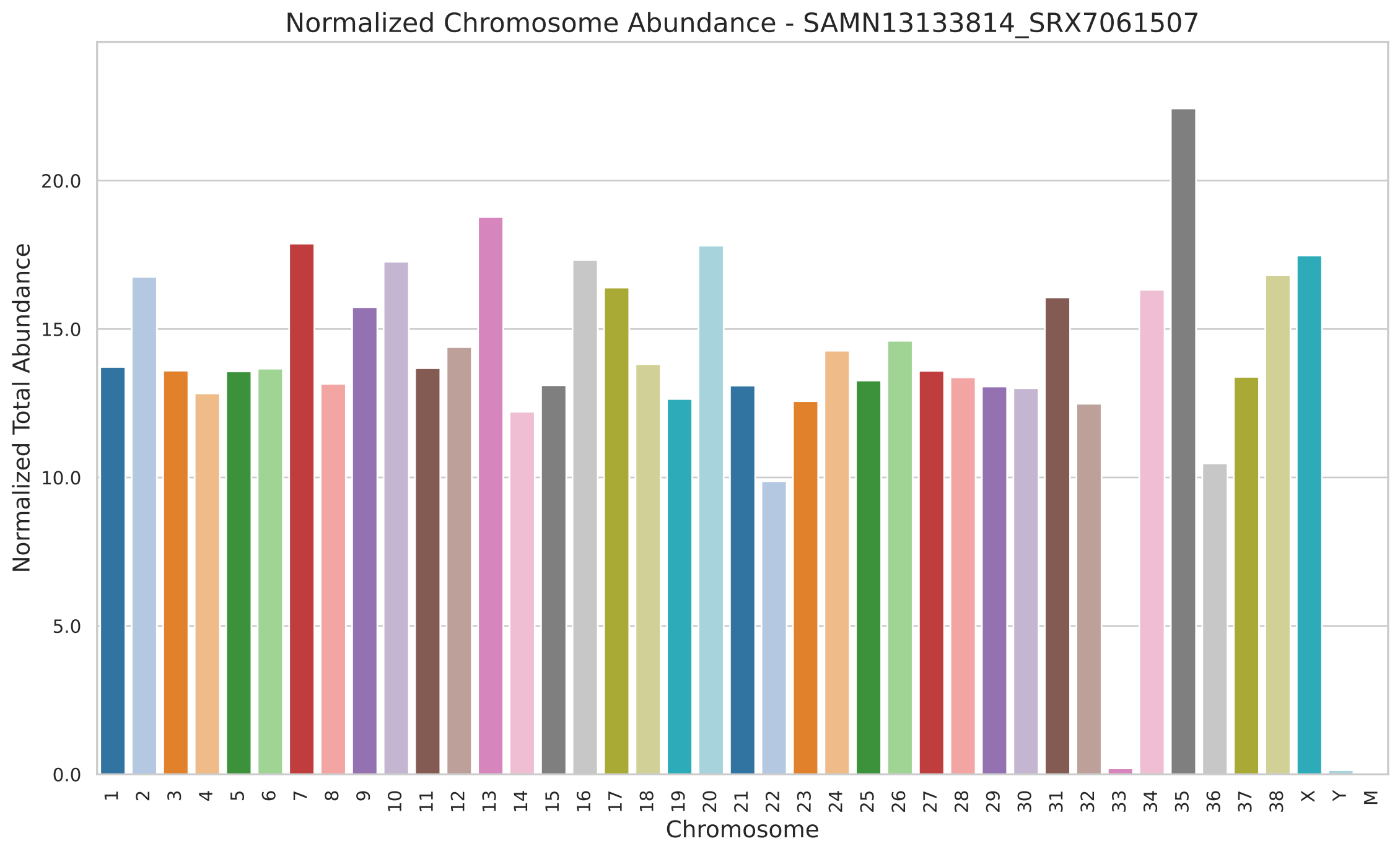

Normalized Chromosome Abundance - SAMN13133751_SRX7061350
Normalized Total Abundance
50.0
40.0
30.0
20.0
10.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

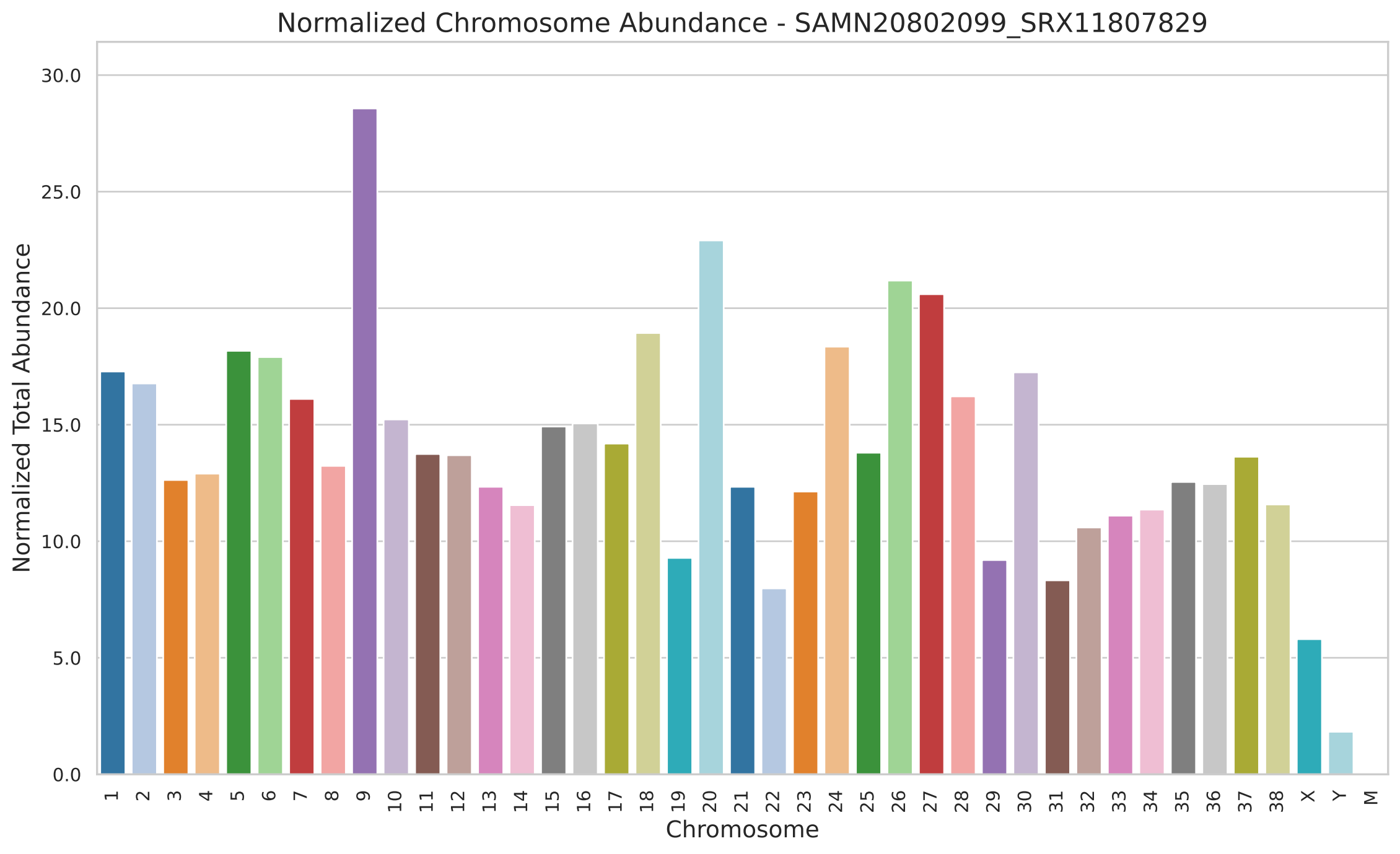

Normalized Chromosome Abundance - SAMN13133756_SRX7061305
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

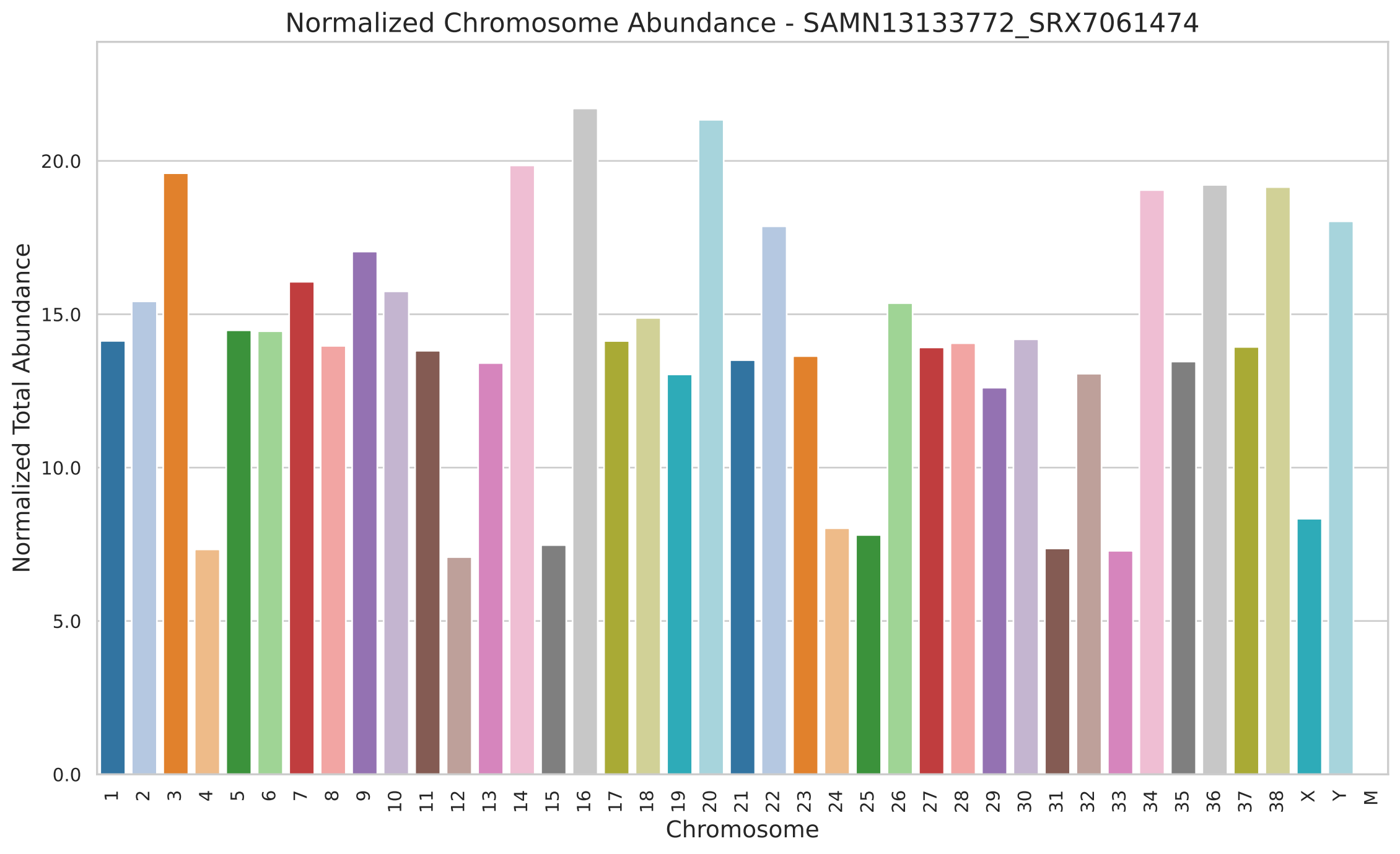

Normalized Chromosome Abundance - SAMN03732684_SRX1037250
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

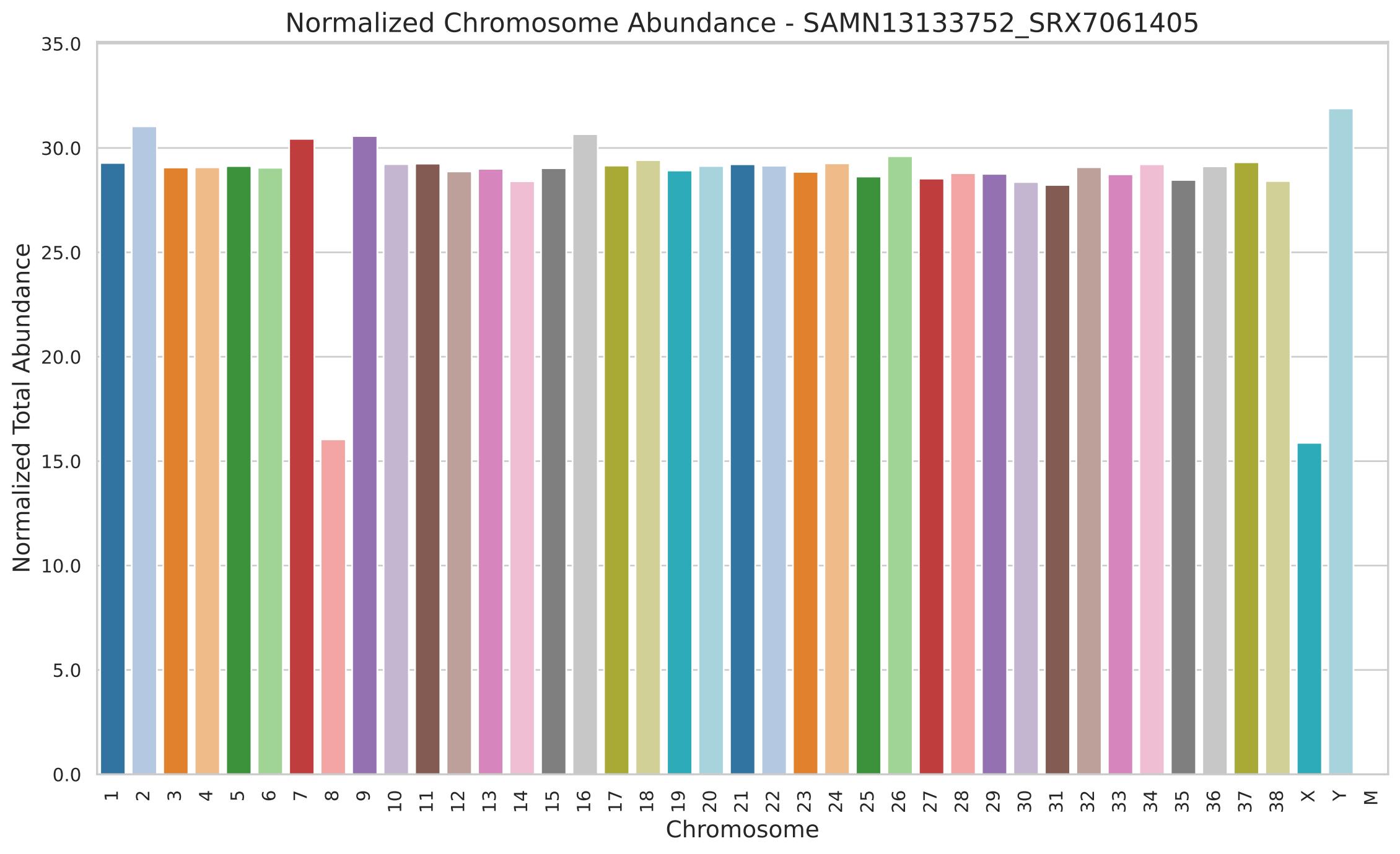

Normalized Chromosome Abundance - SAMN13133783_SRX7061449
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

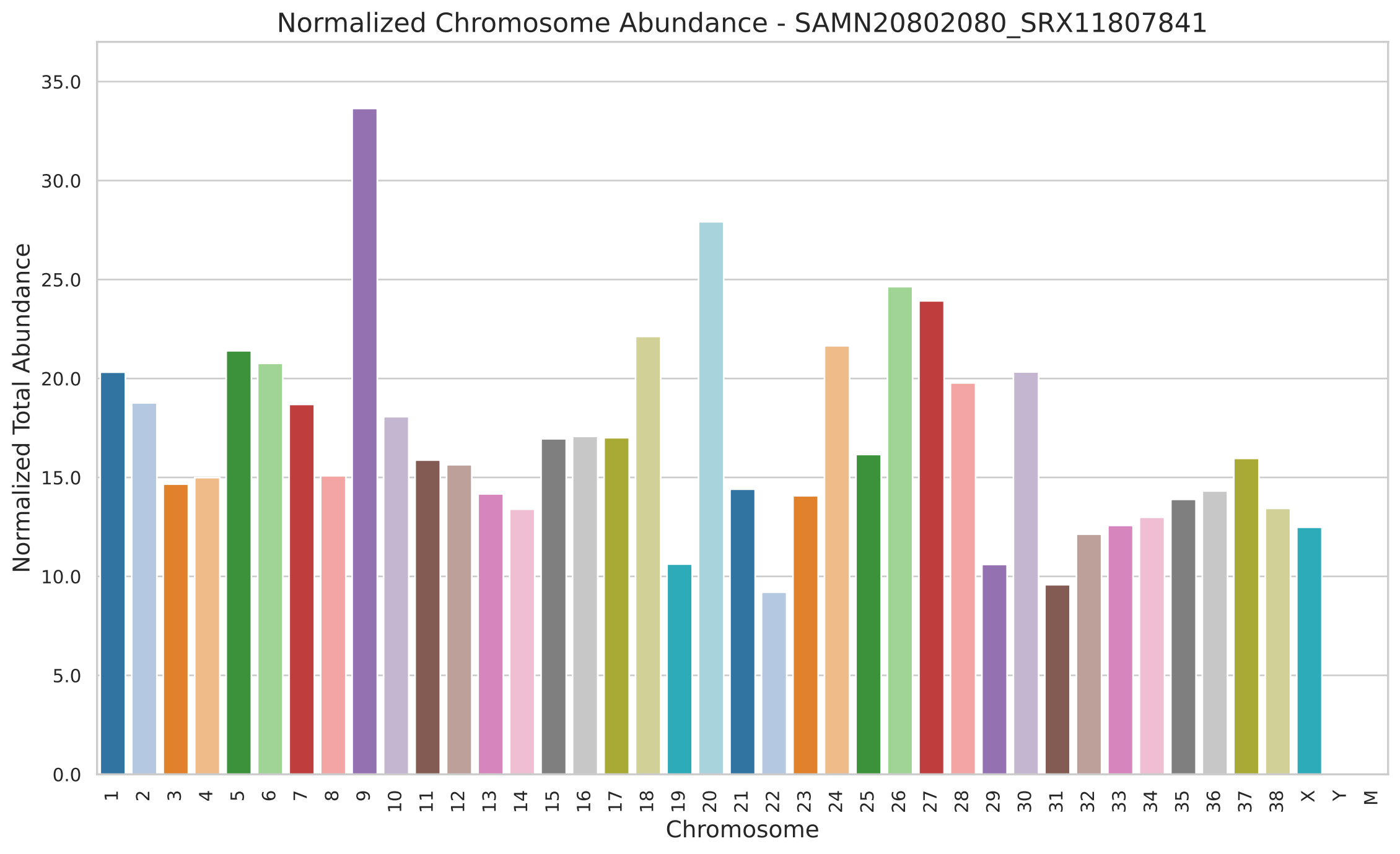

Normalized Chromosome Abundance - SAMN13133778_SRX7061498
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

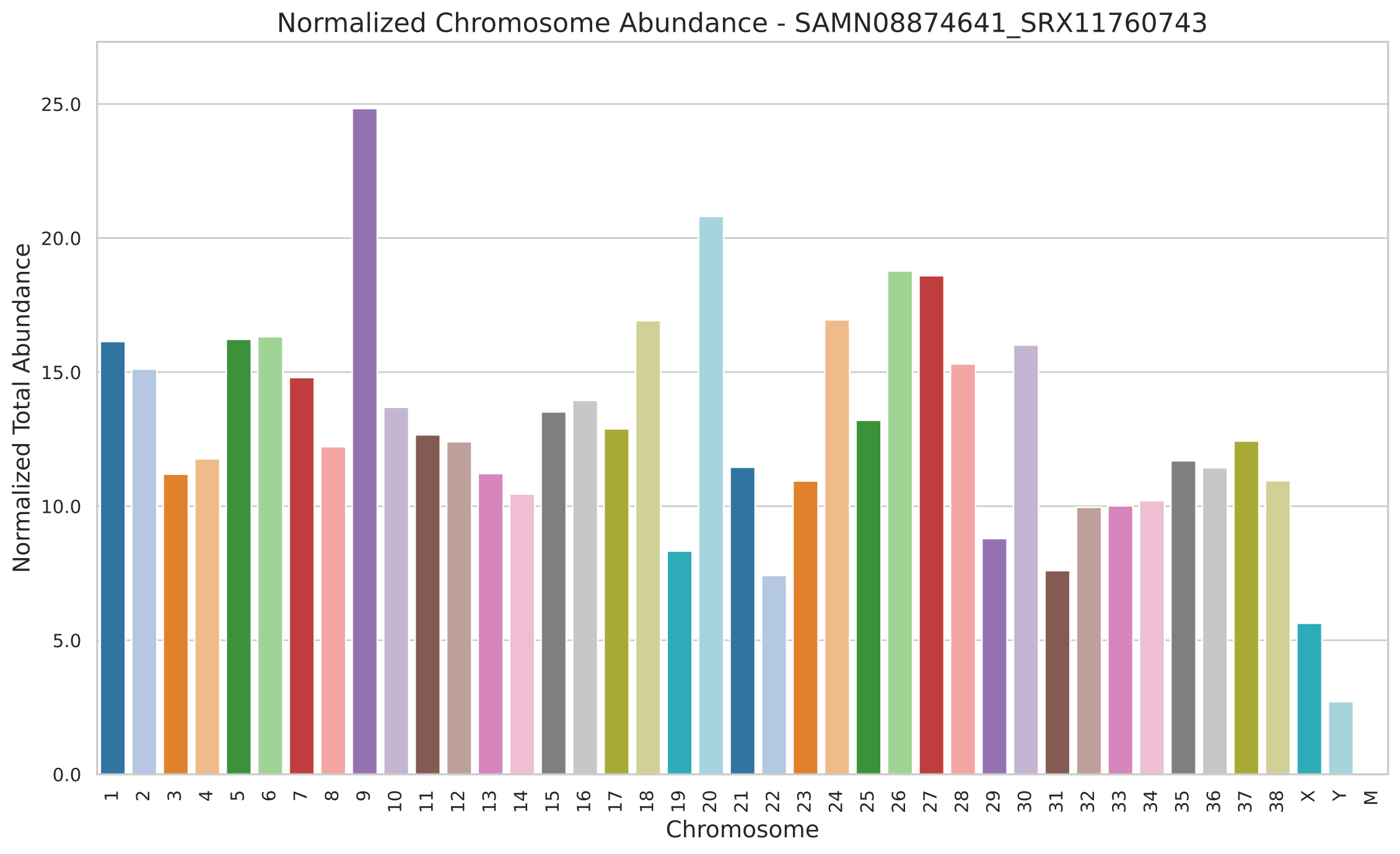

Normalized Chromosome Abundance - SAMN13133814_SRX7061507
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

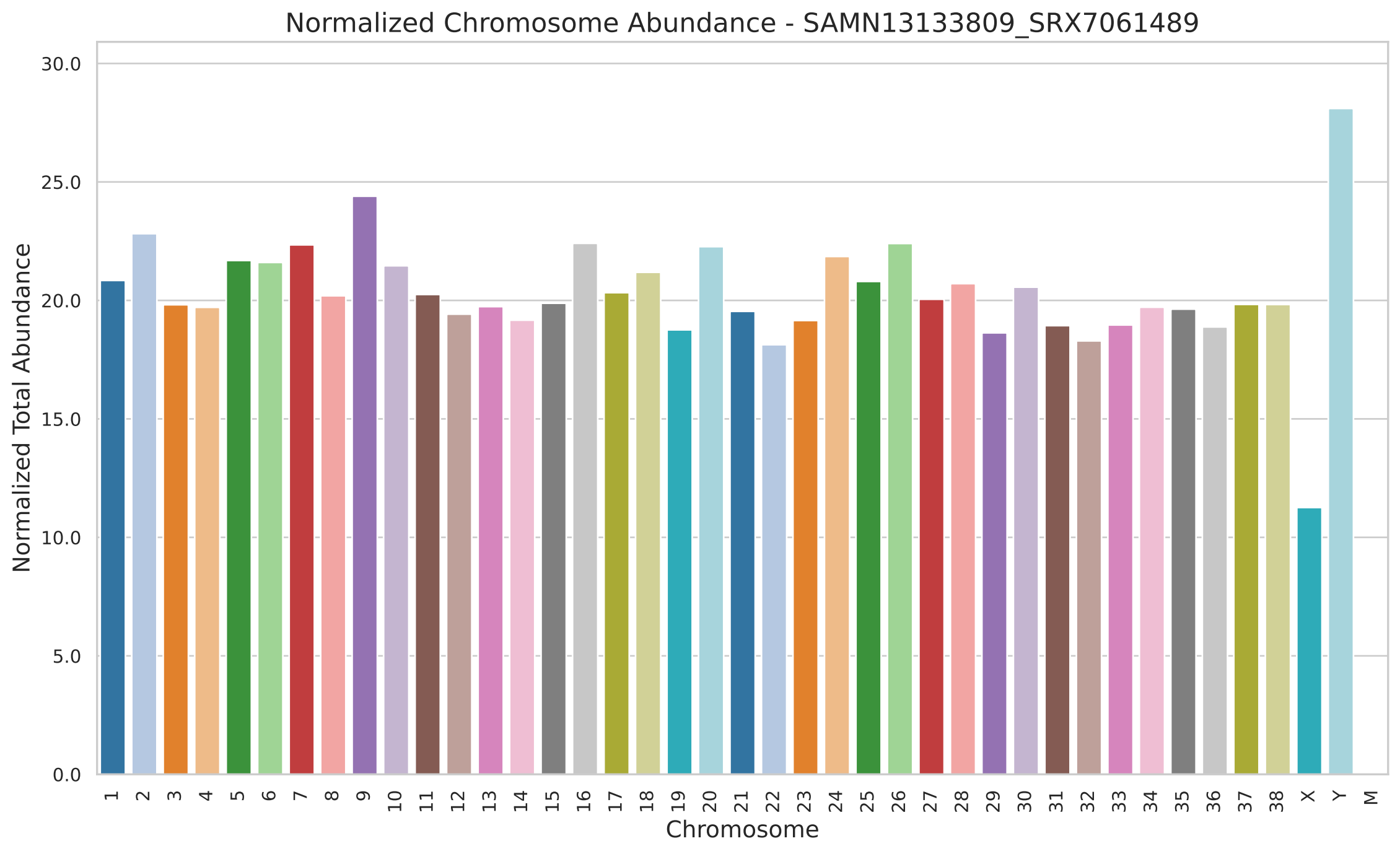

Normalized Chromosome Abundance - SAMN20802099_SRX11807829
Normalized Total Abundance
30.0
25.0
20.0
15.0
10.0
5.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

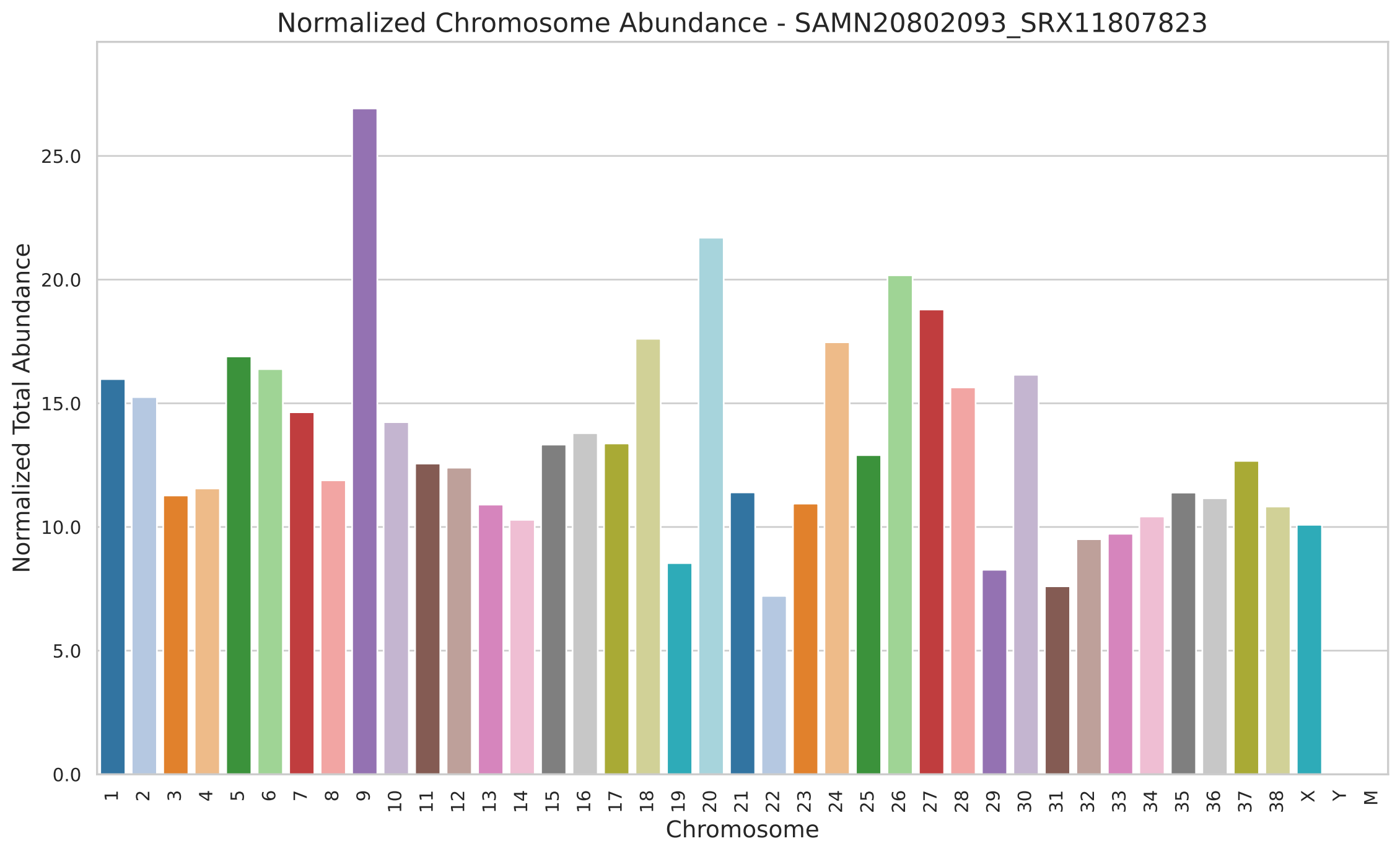

Normalized Chromosome Abundance - SAMN13133772_SRX7061474
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

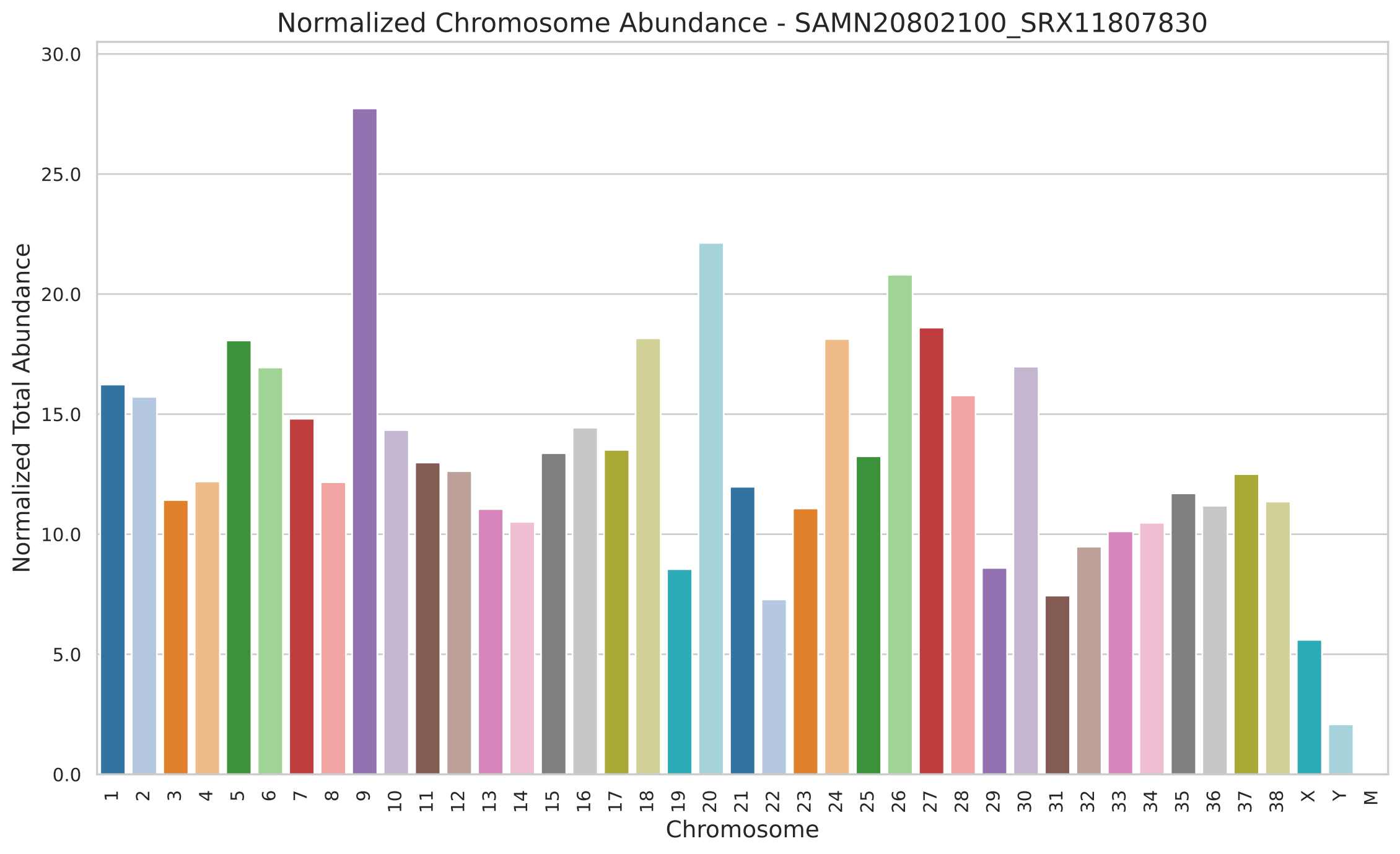

Normalized Chromosome Abundance - SAMN13133752_SRX7061405
Normalized Total Abundance
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

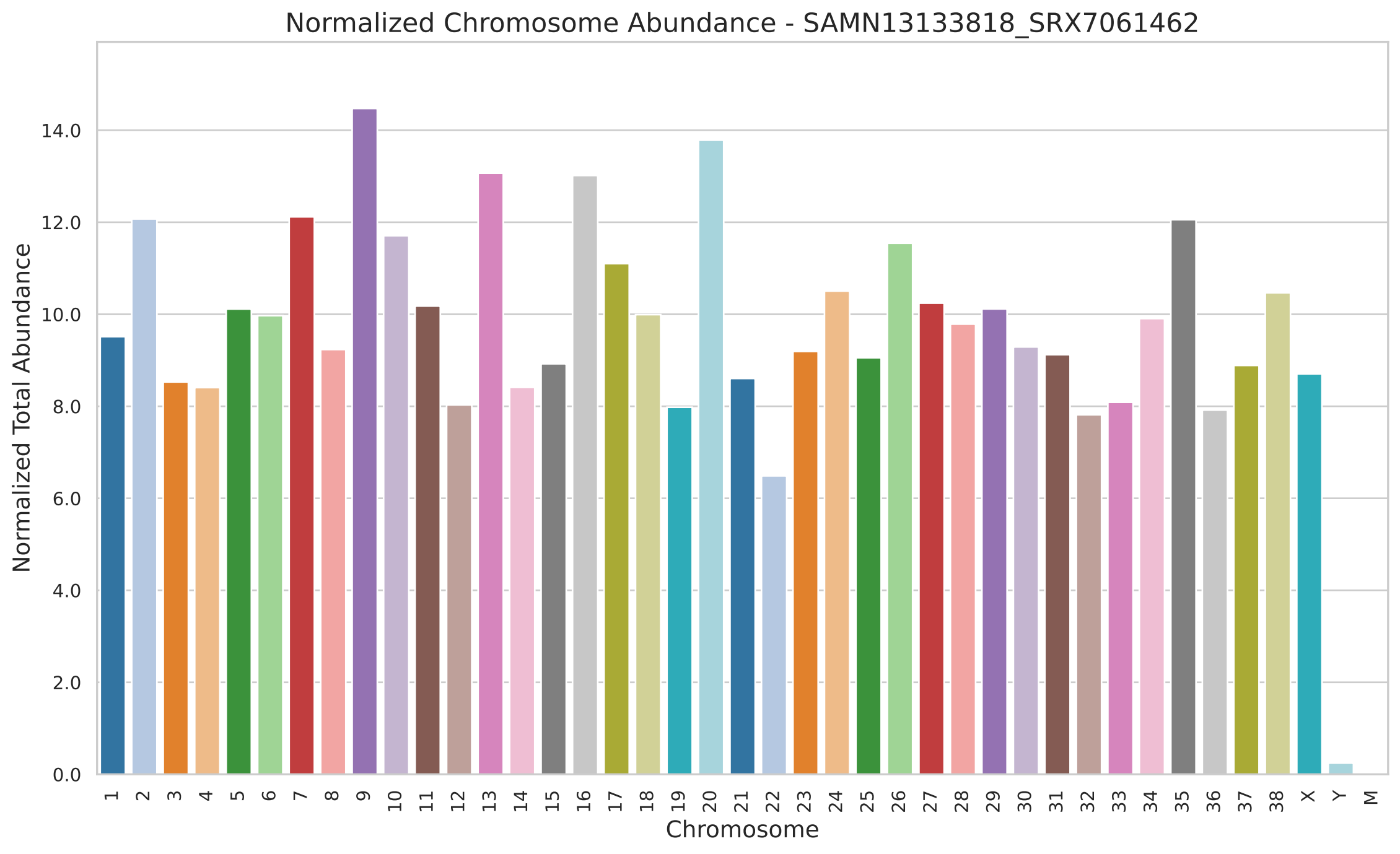

Normalized Chromosome Abundance - SAMN20802080_SRX11807841
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
35.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

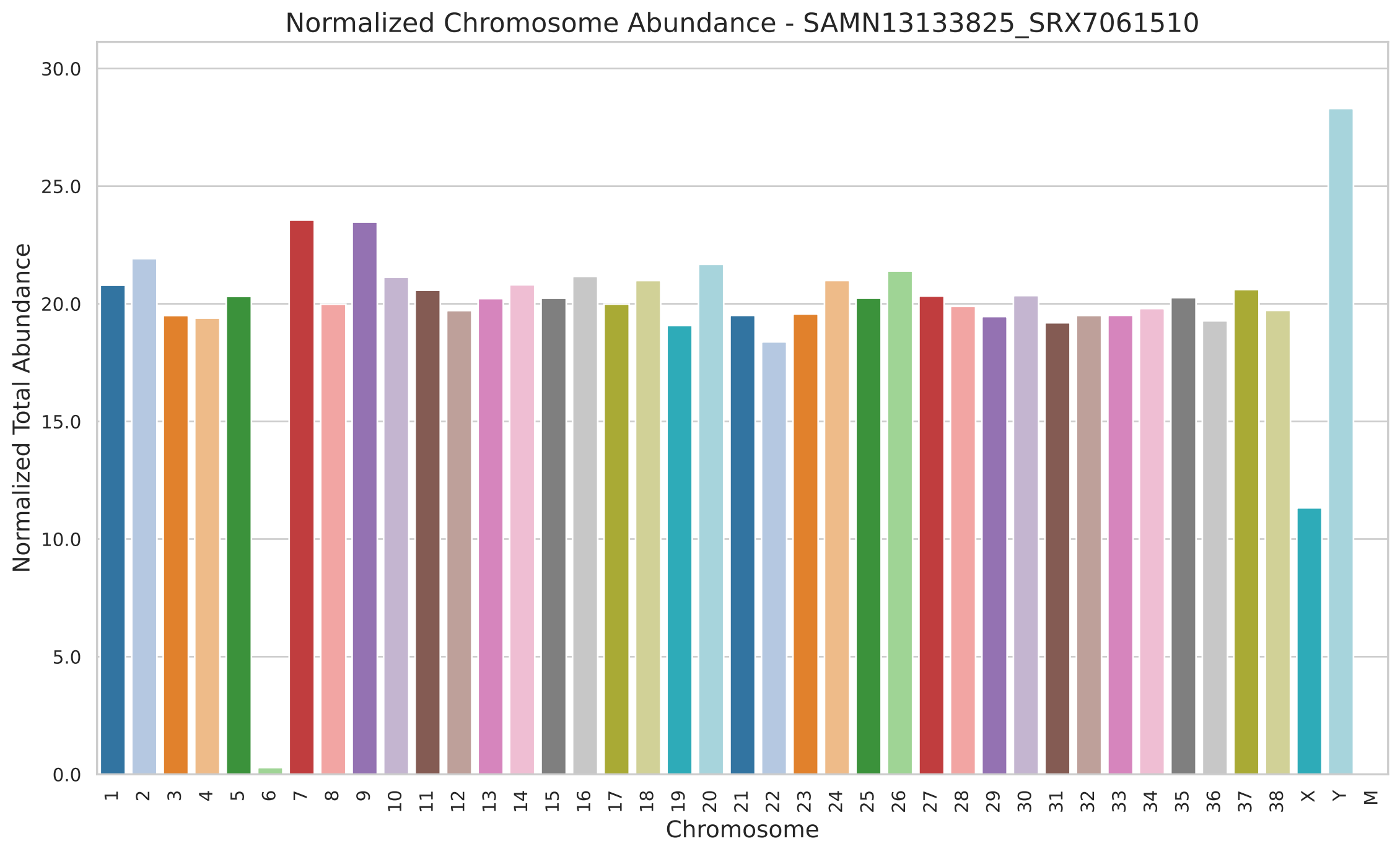

Normalized Chromosome Abundance - SAMN08874641_SRX11760743
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

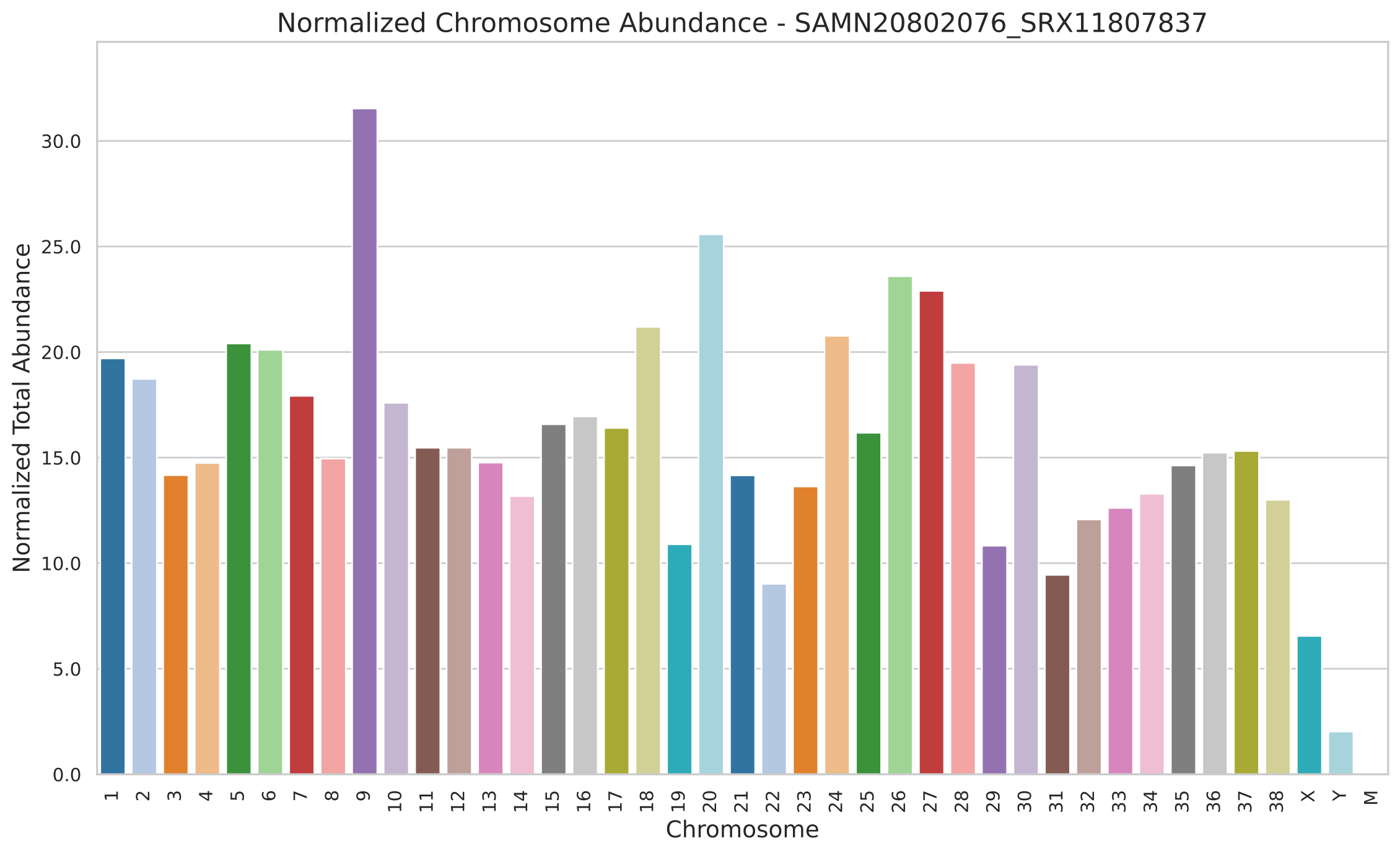

Normalized Chromosome Abundance - SAMN13133809_SRX7061489
Normalized Total Abundance
30.0
25.0
20.0
15.0
10.0
5.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

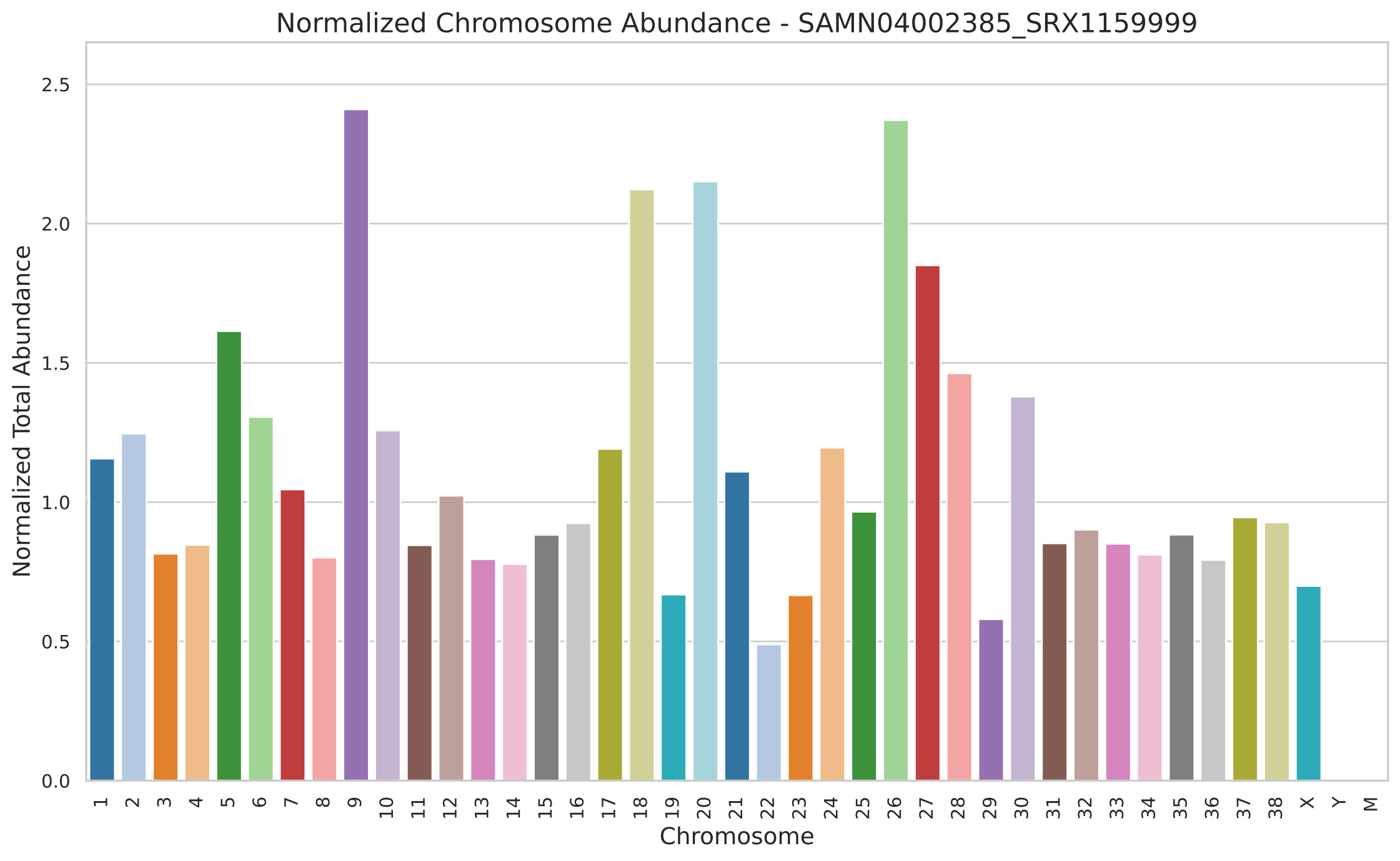

Normalized Chromosome Abundance - SAMN20802093_SRX11807823
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

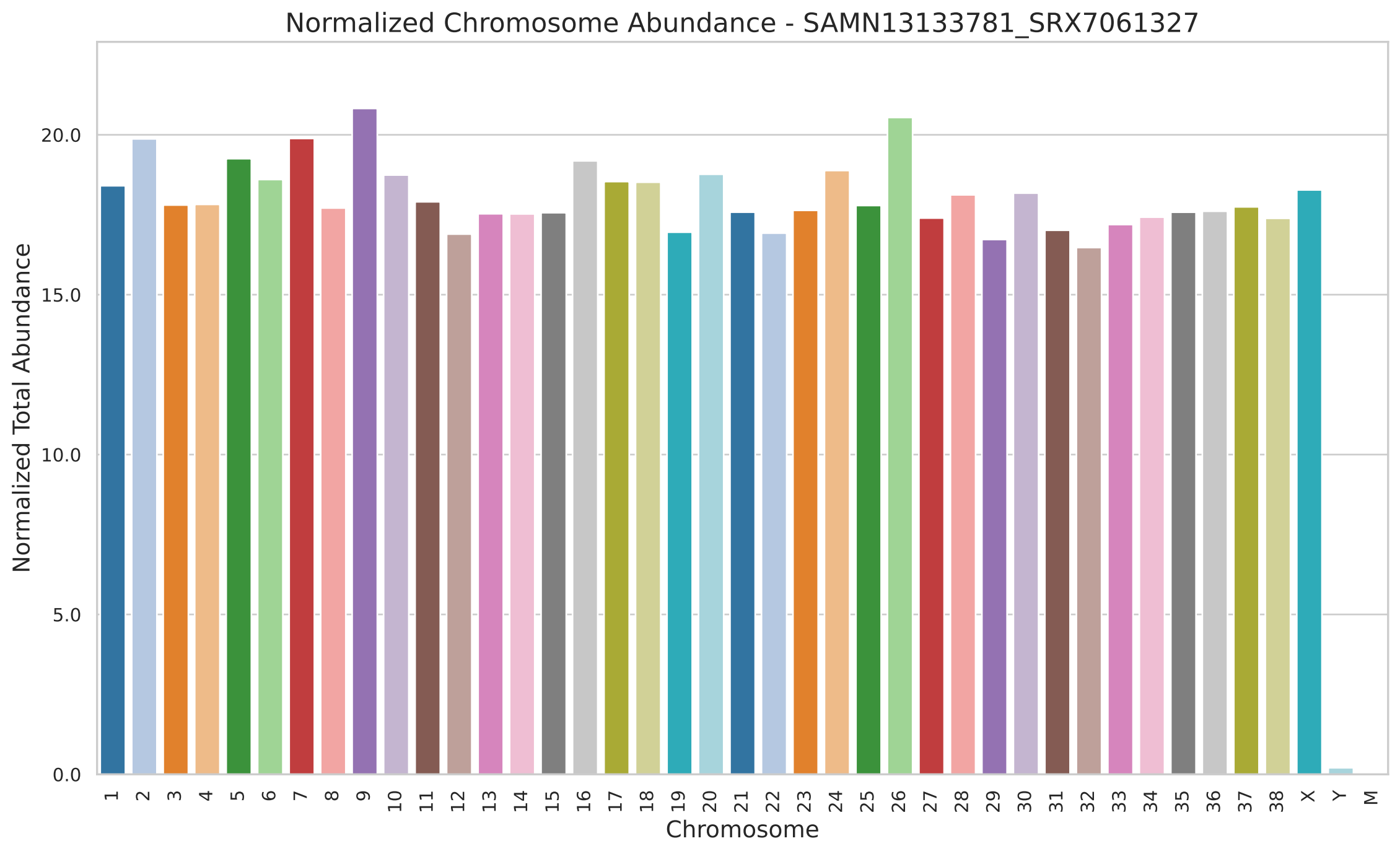

Normalized Chromosome Abundance - SAMN20802100_SRX11807830
Normalized Total Abundance
30.0
25.0
20.0
15.0
10.0
5.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

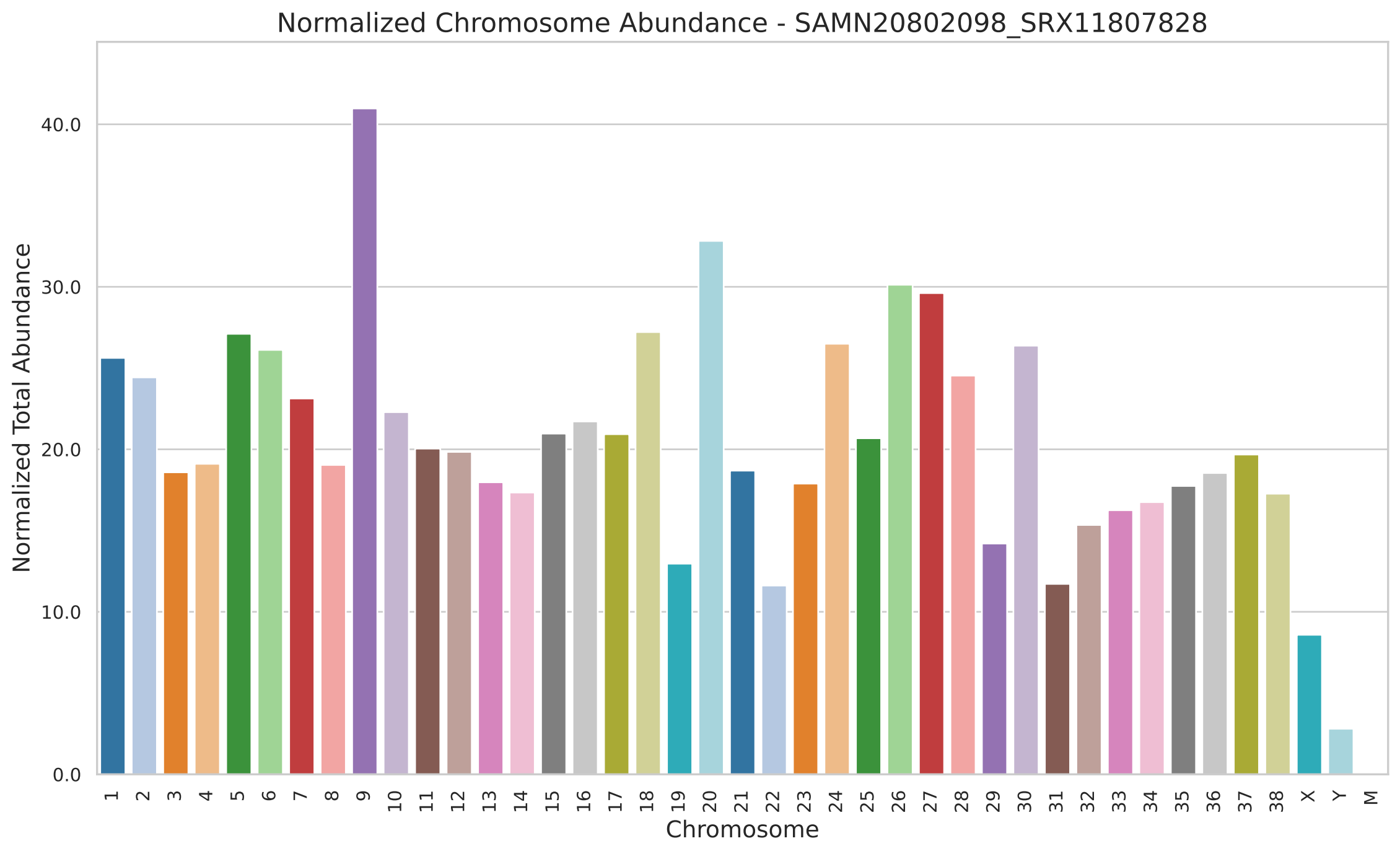

Normalized Chromosome Abundance - SAMN13133818_SRX7061462
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
12.0
14.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

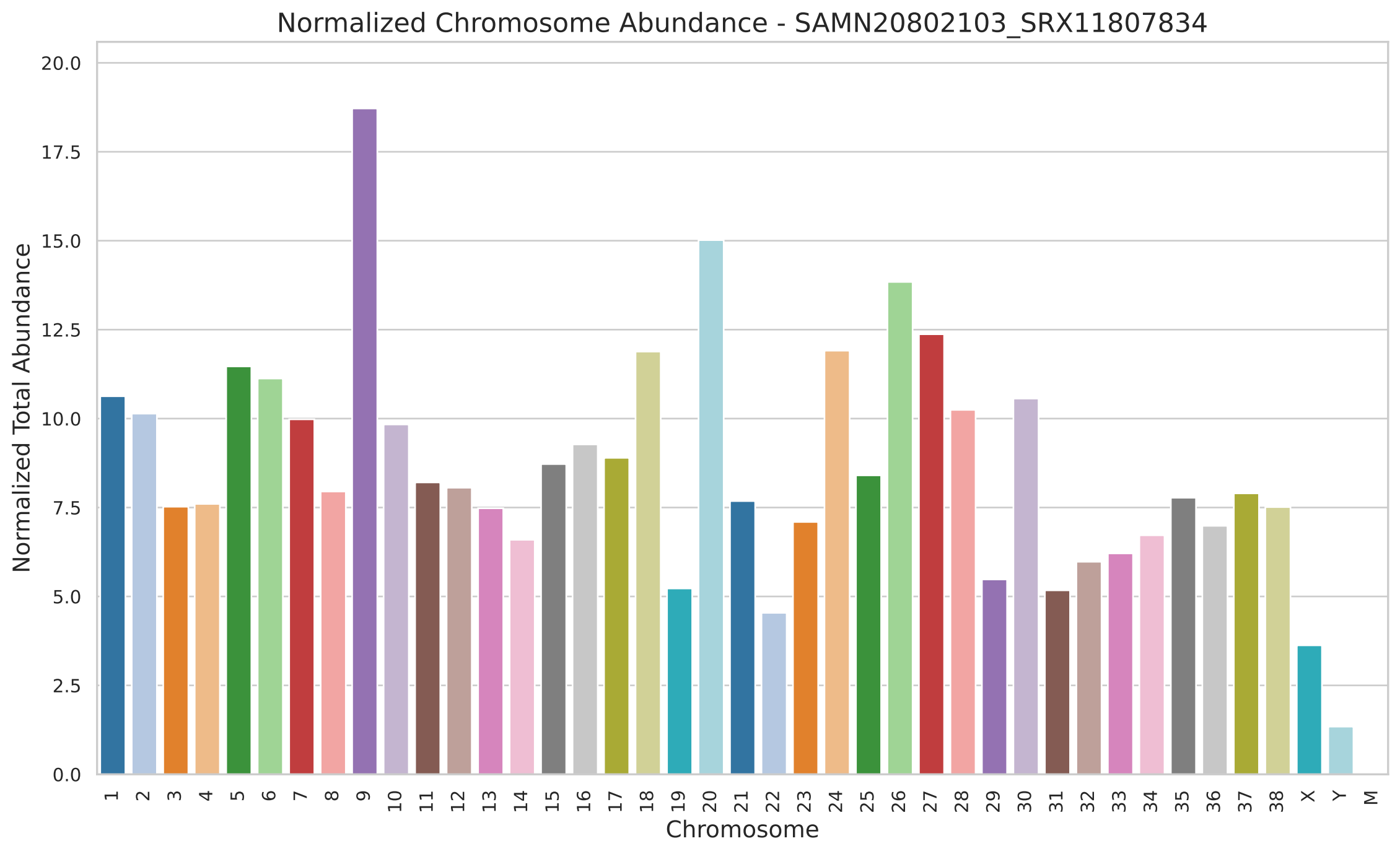

Normalized Chromosome Abundance - SAMN13133825_SRX7061510
Normalized Total Abundance
30.0
25.0
20.0
15.0
10.0
5.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

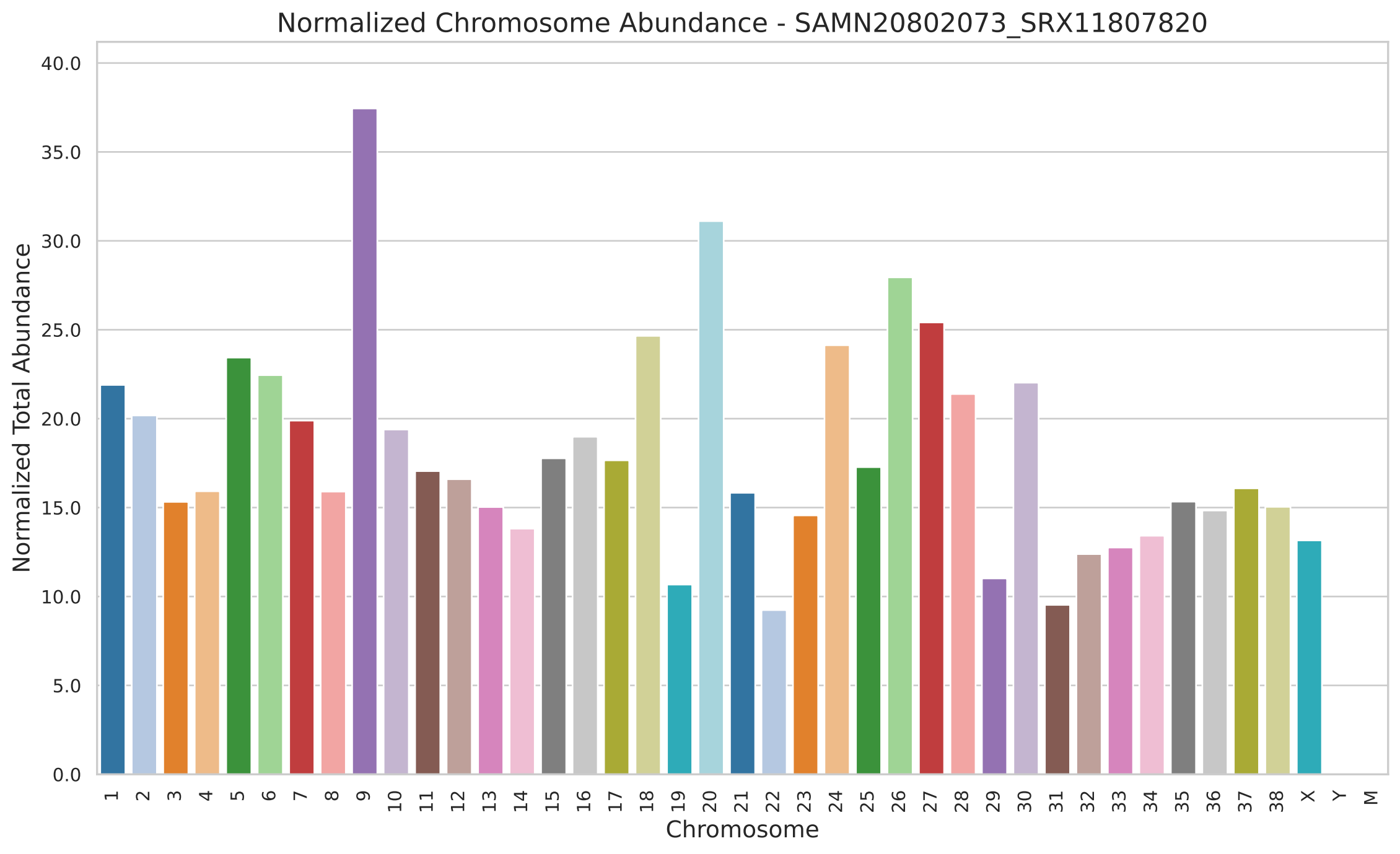

Normalized Chromosome Abundance - SAMN20802076_SRX11807837
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

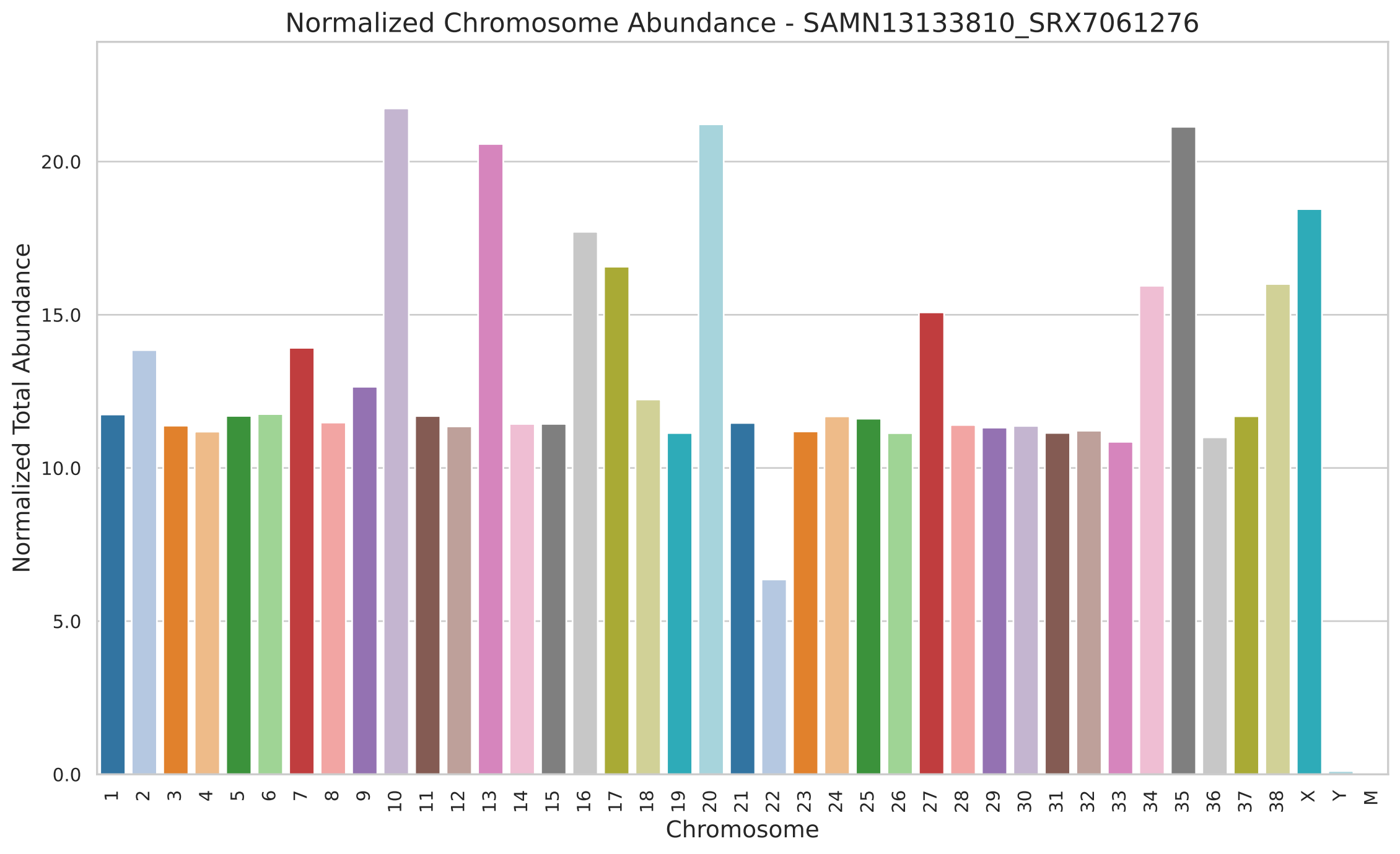

Normalized Chromosome Abundance - SAMN04002385_SRX1159999
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

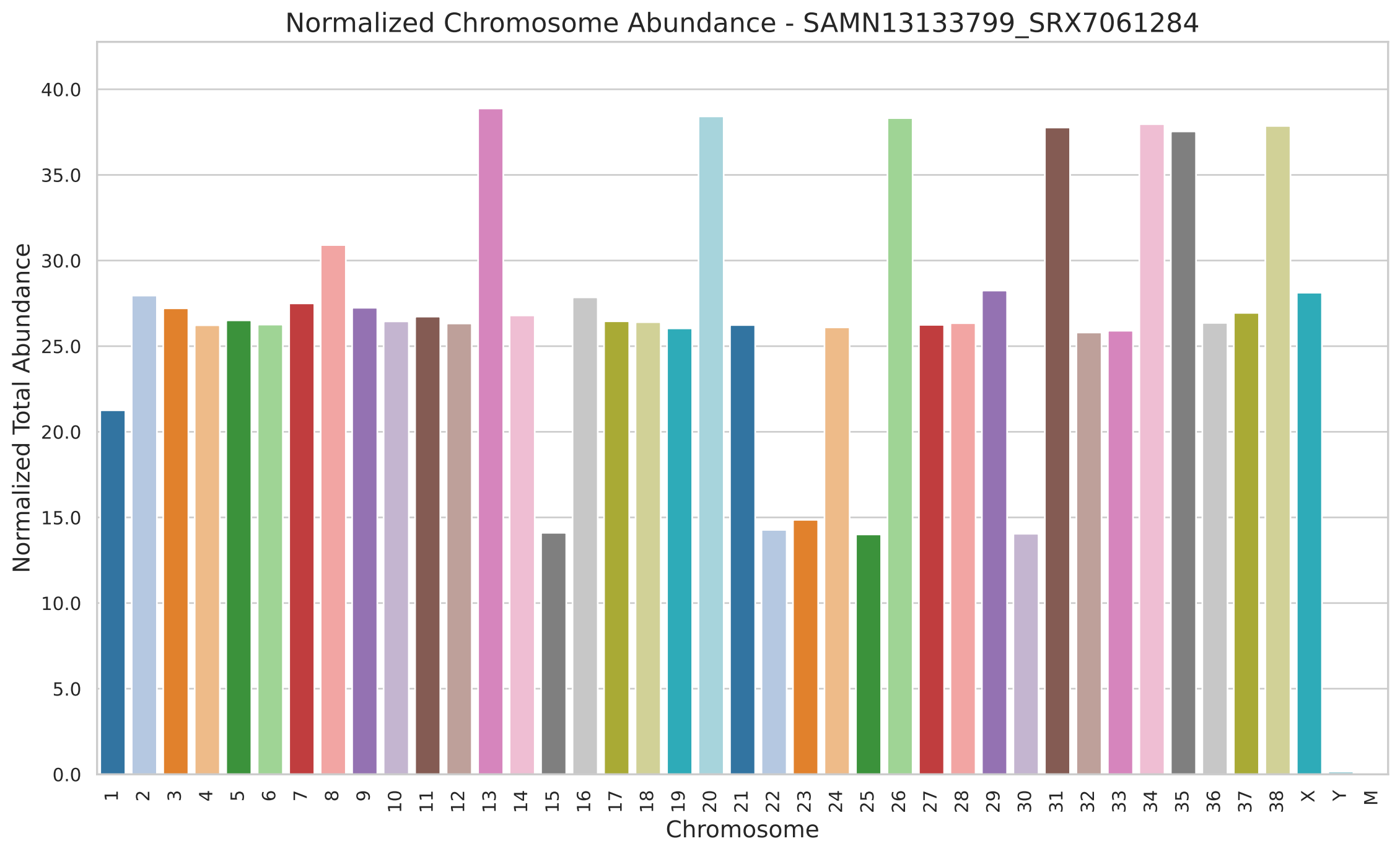

Normalized Chromosome Abundance - SAMN13133781_SRX7061327
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

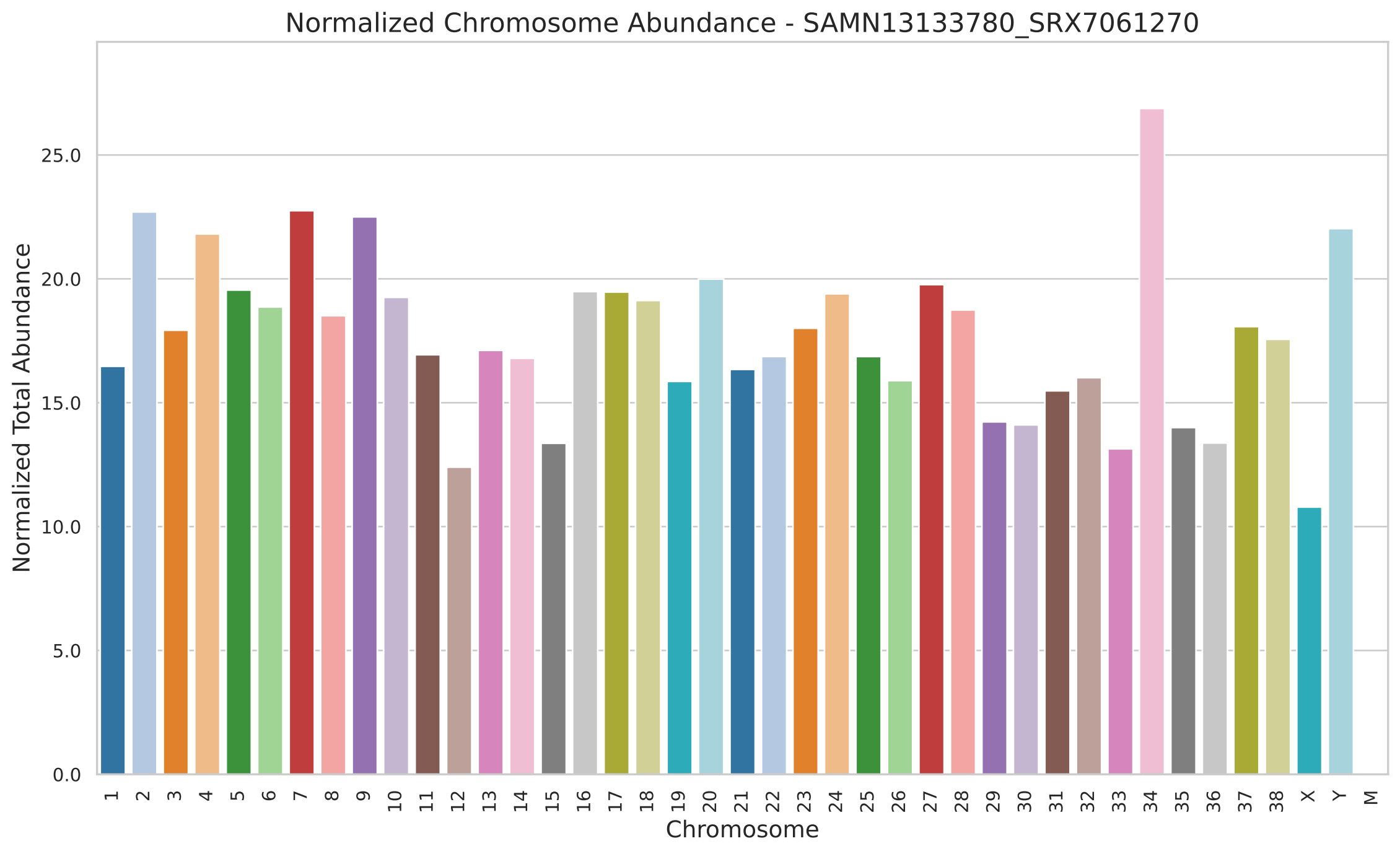

Normalized Chromosome Abundance - SAMN20802098_SRX11807828
Normalized Total Abundance
0.0
10.0
20.0
30.0
40.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

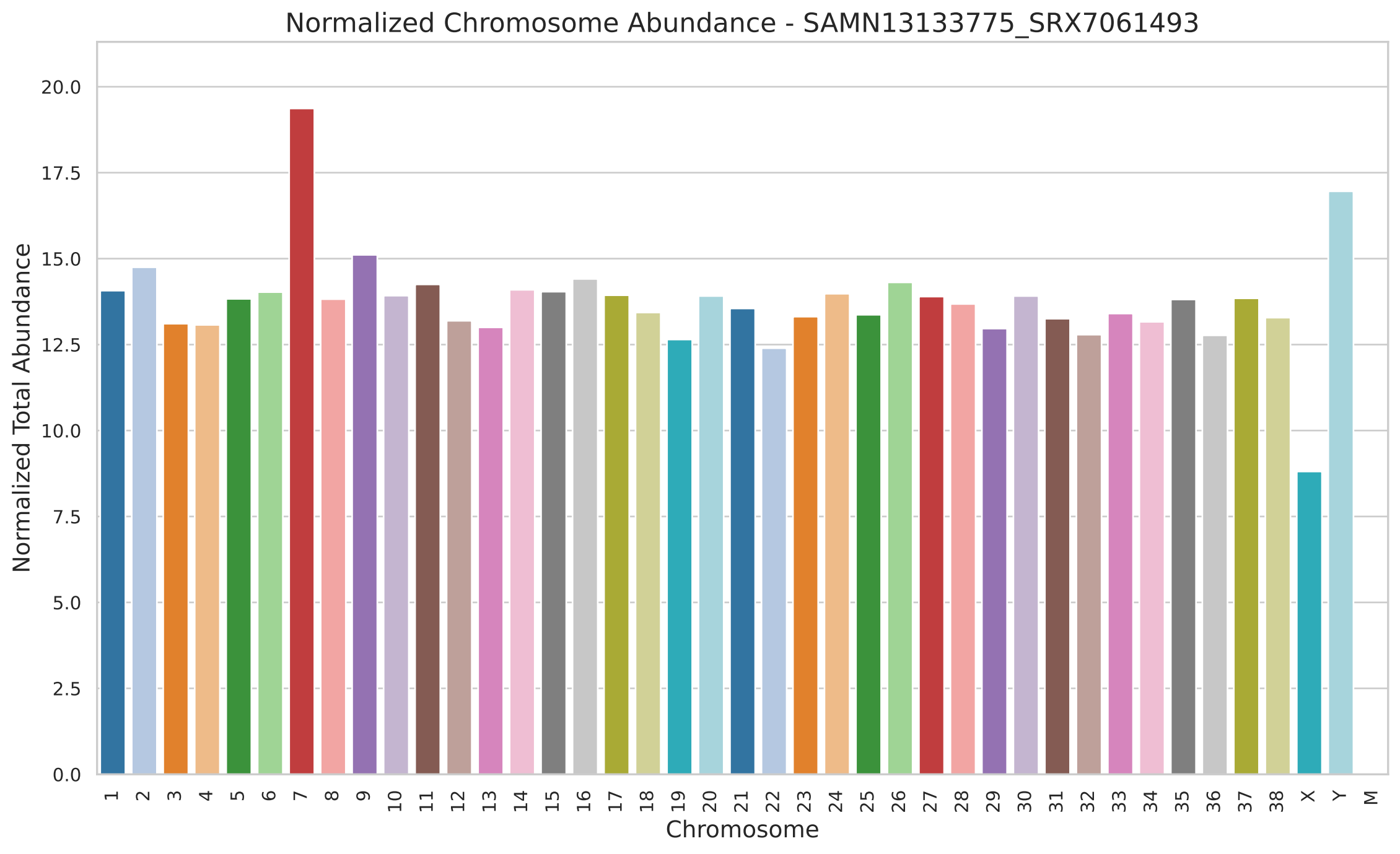

Normalized Chromosome Abundance - SAMN20802103_SRX11807834
Normalized Total Abundance
20.0
17.5
15.0
12.5
10.0
7.5
5.0
2.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

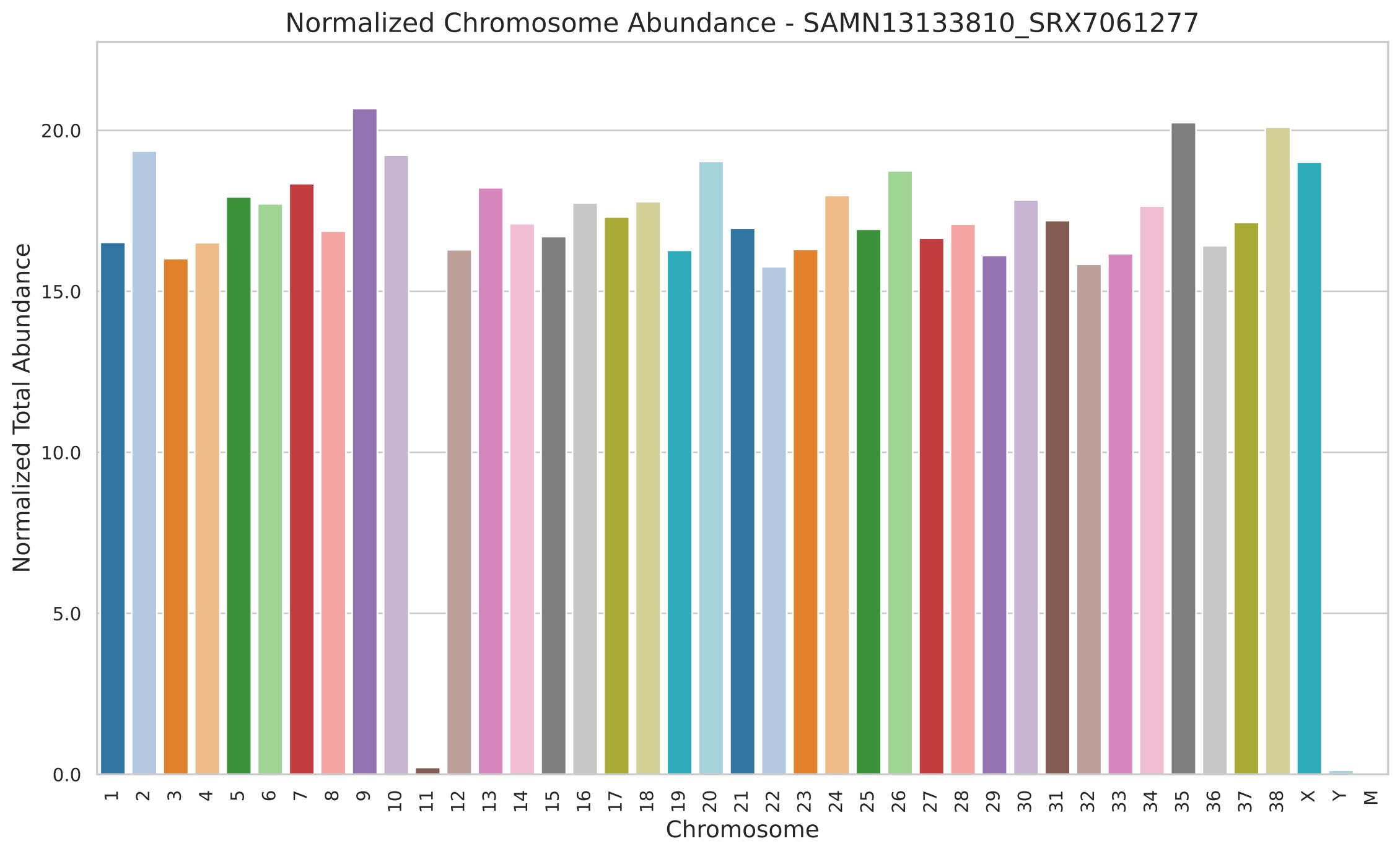

Normalized Chromosome Abundance - SAMN20802073_SRX11807820
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
35.0
40.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

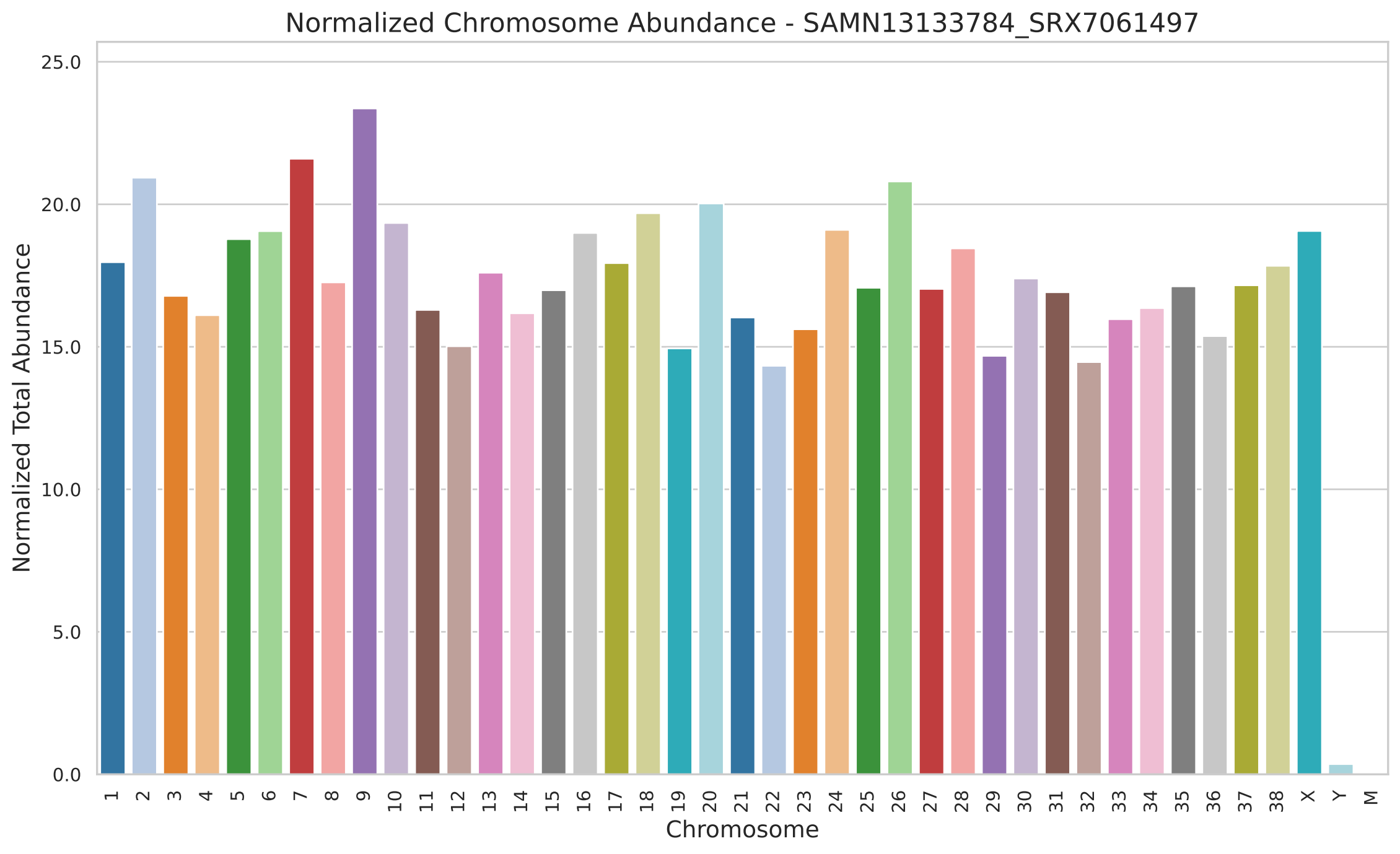

Normalized Chromosome Abundance - SAMN13133810_SRX7061276
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

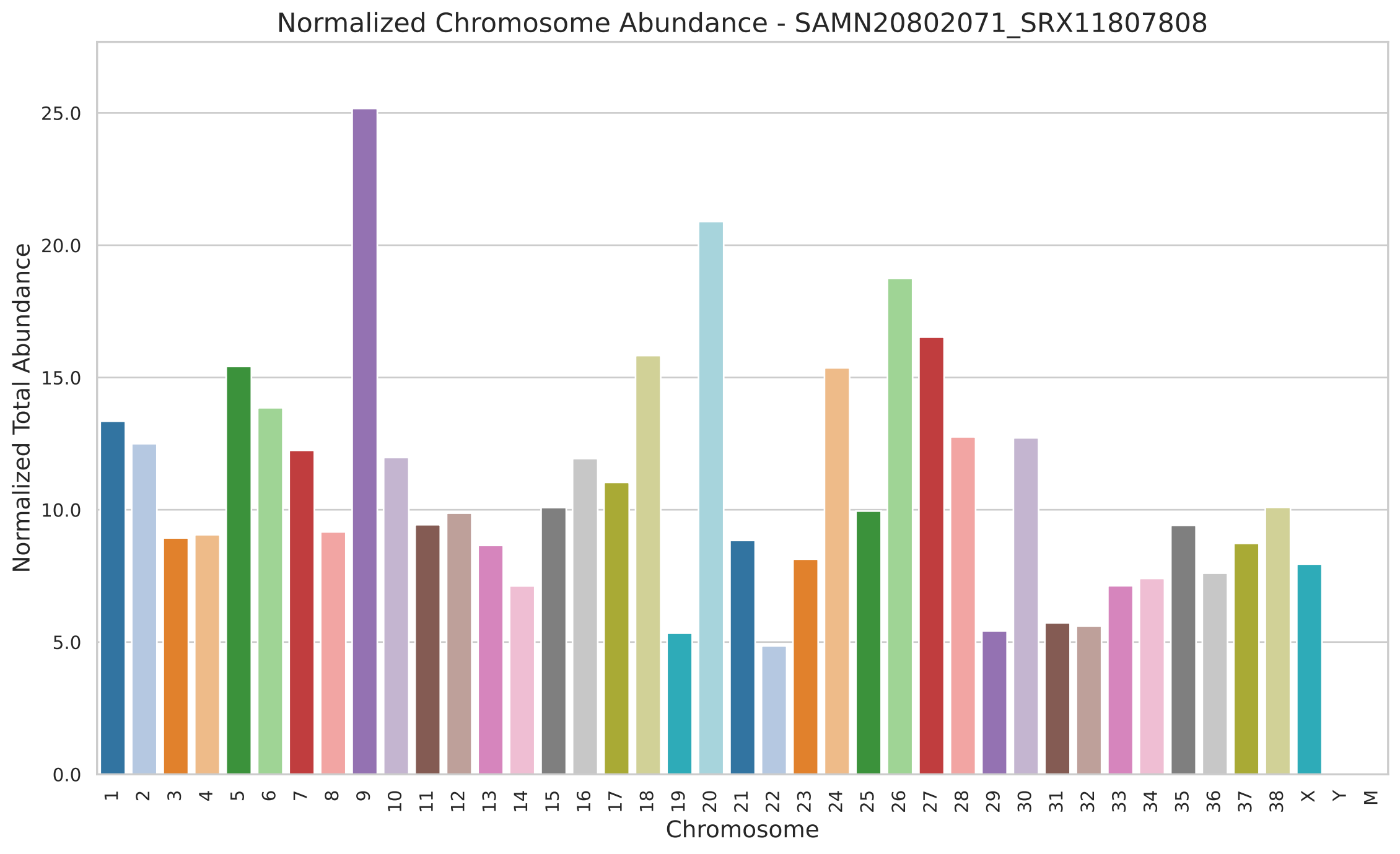

Normalized Chromosome Abundance - SAMN13133799_SRX7061284
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
35.0
40.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

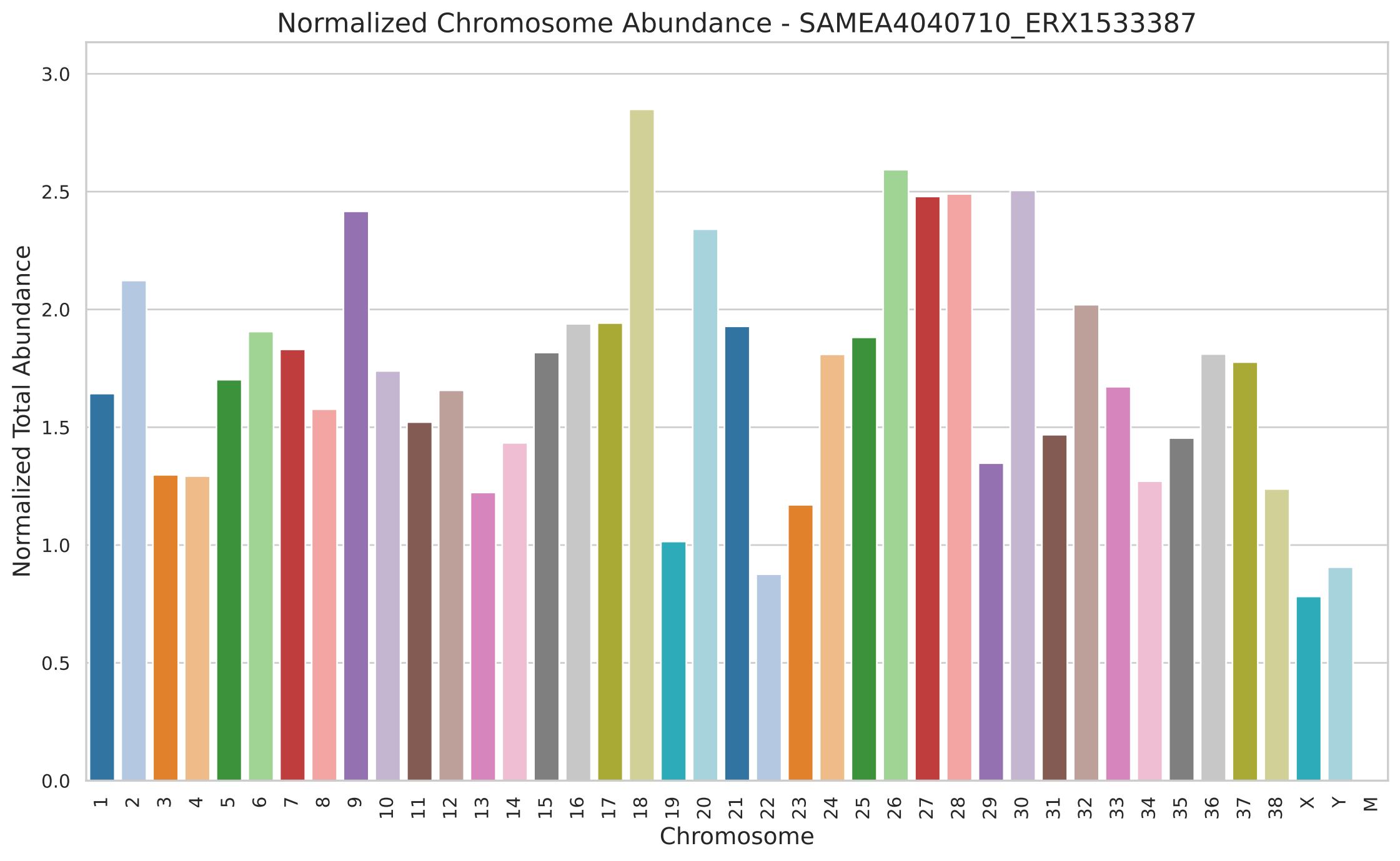

Normalized Chromosome Abundance - SAMN13133780_SRX7061270
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

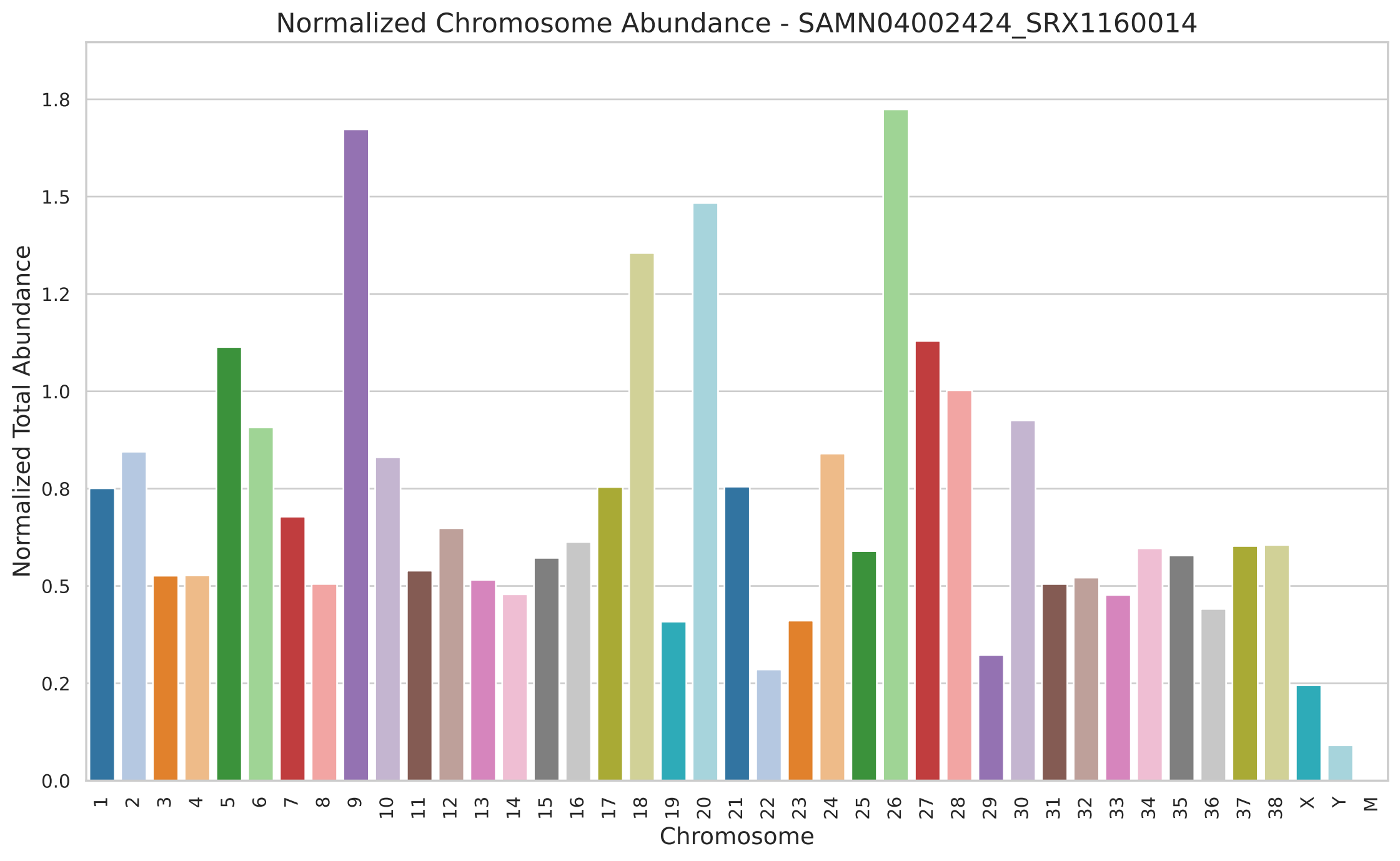

Normalized Chromosome Abundance - SAMN13133775_SRX7061493
Normalized Total Abundance
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5
20.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

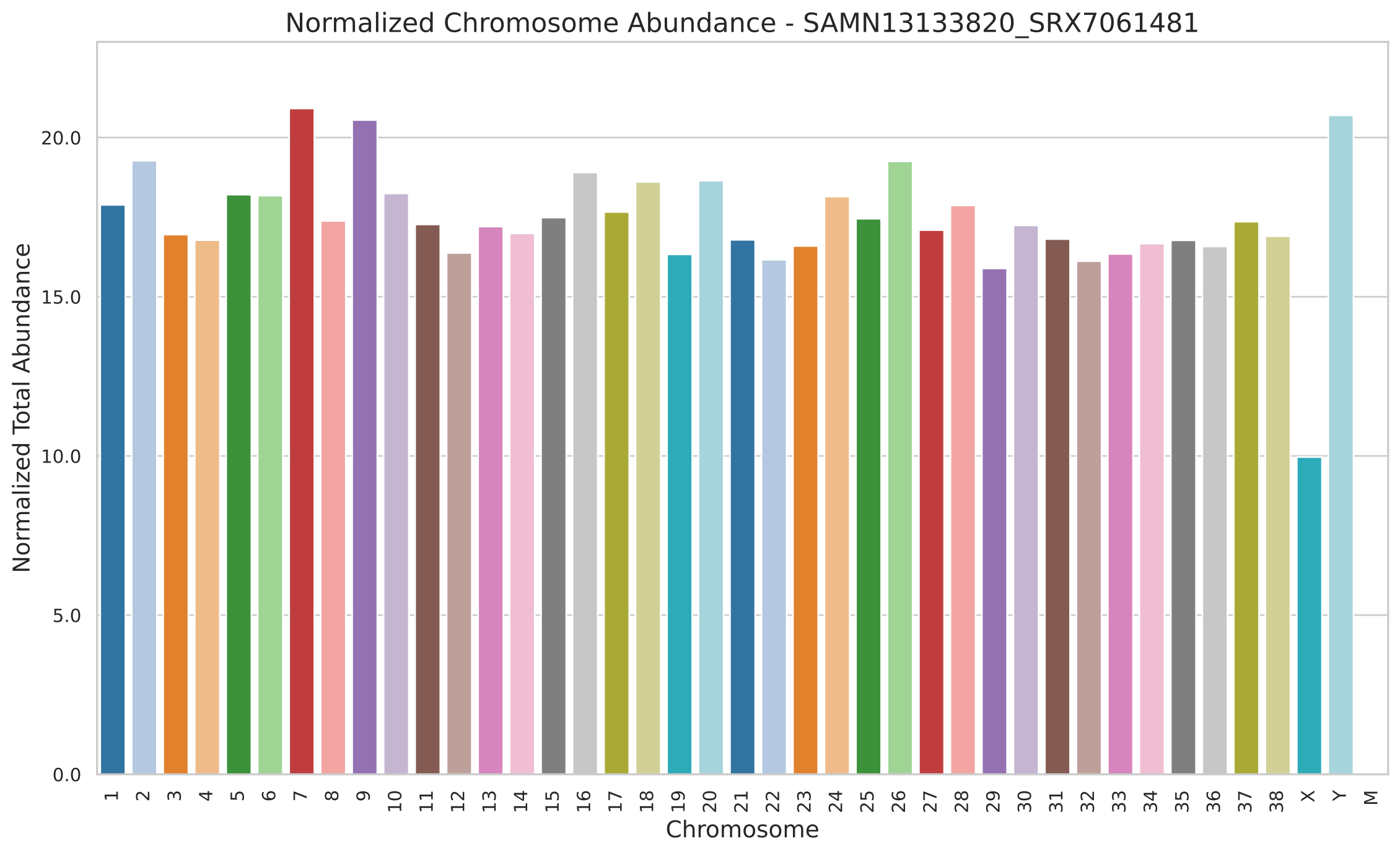

Normalized Chromosome Abundance - SAMN13133810_SRX7061277
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

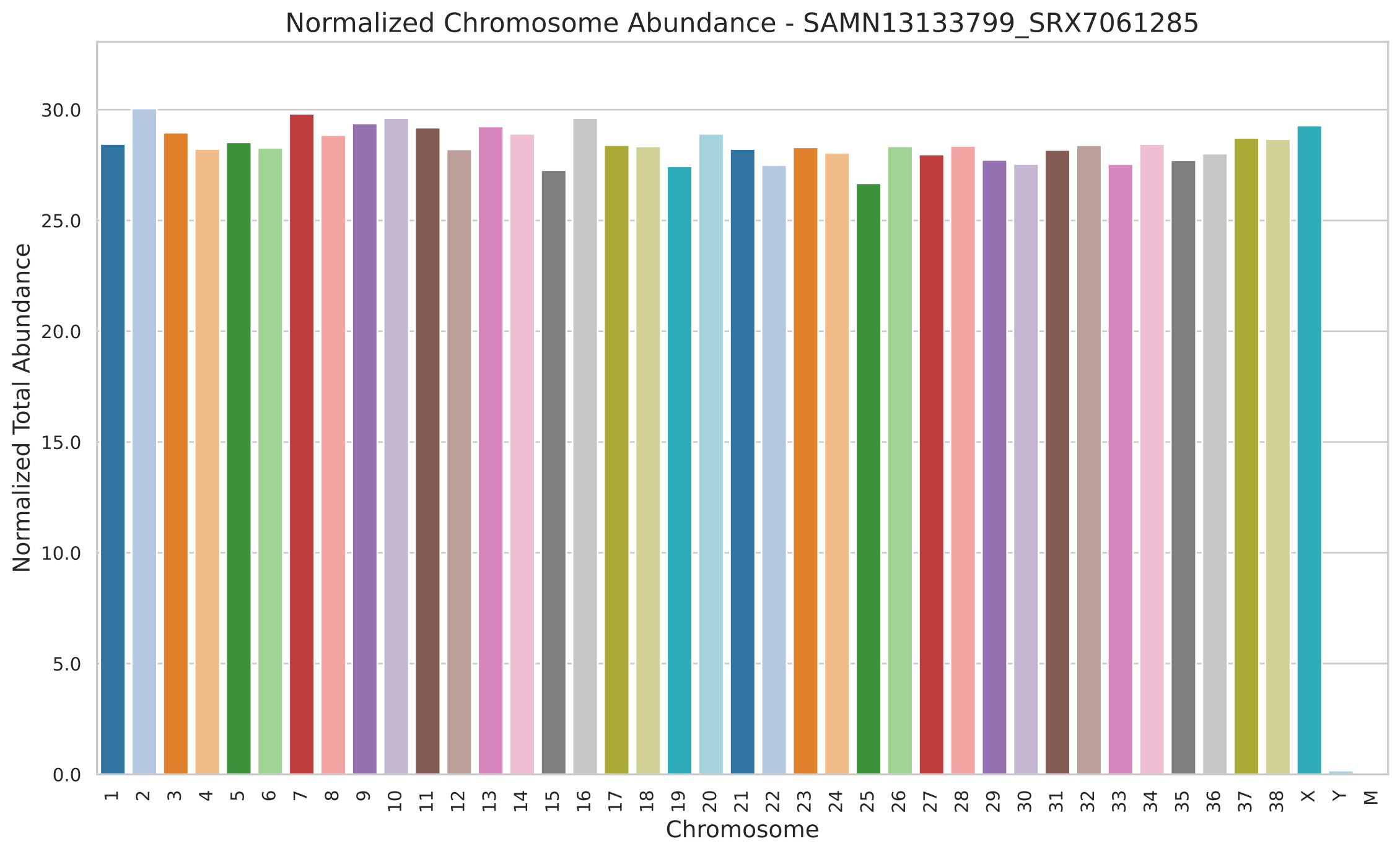

Normalized Chromosome Abundance - SAMN13133784_SRX7061497
Normalized Total Abundance
25.0
20.0
15.0
10.0
5.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

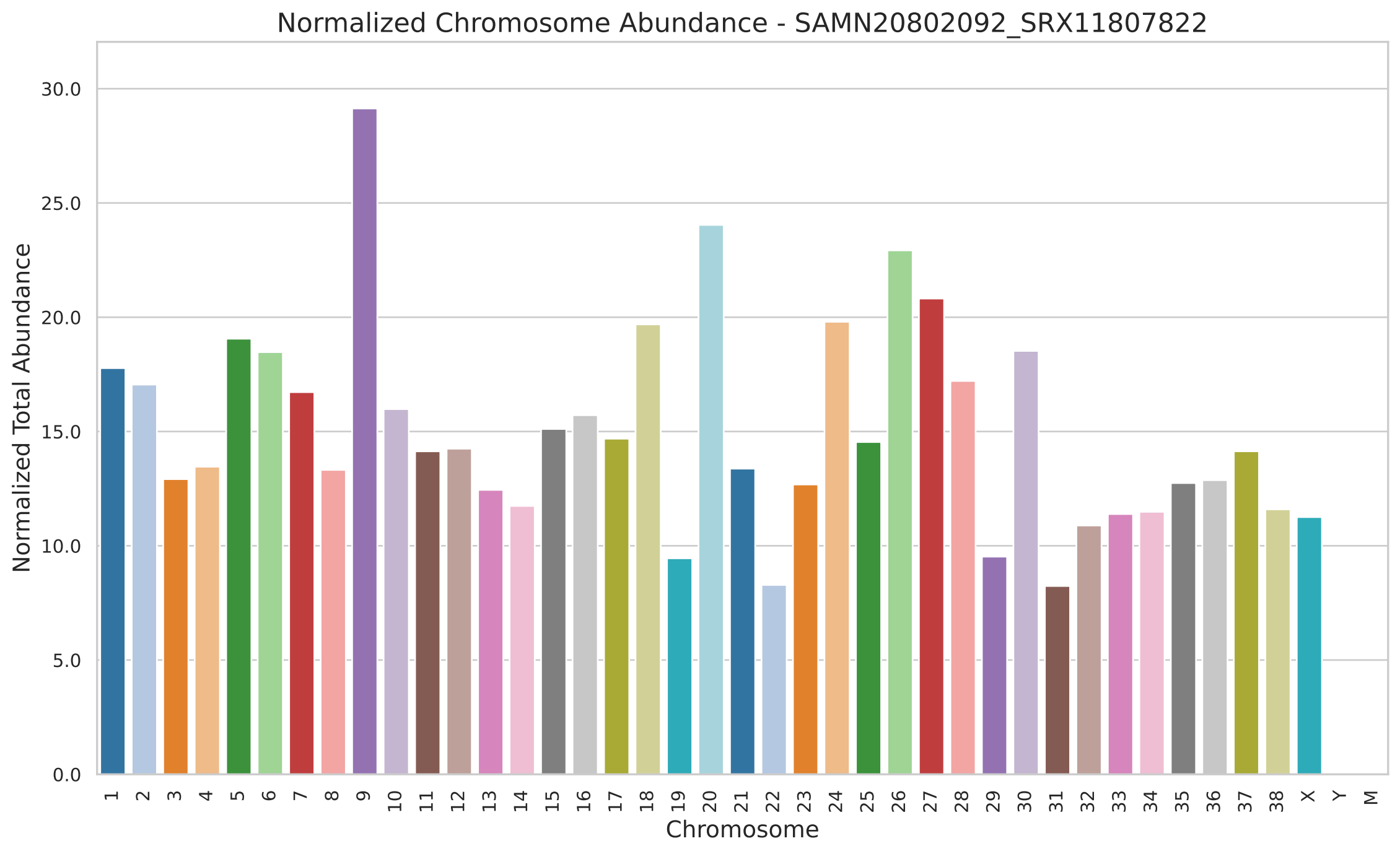

Normalized Chromosome Abundance - SAMN20802071_SRX11807808
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

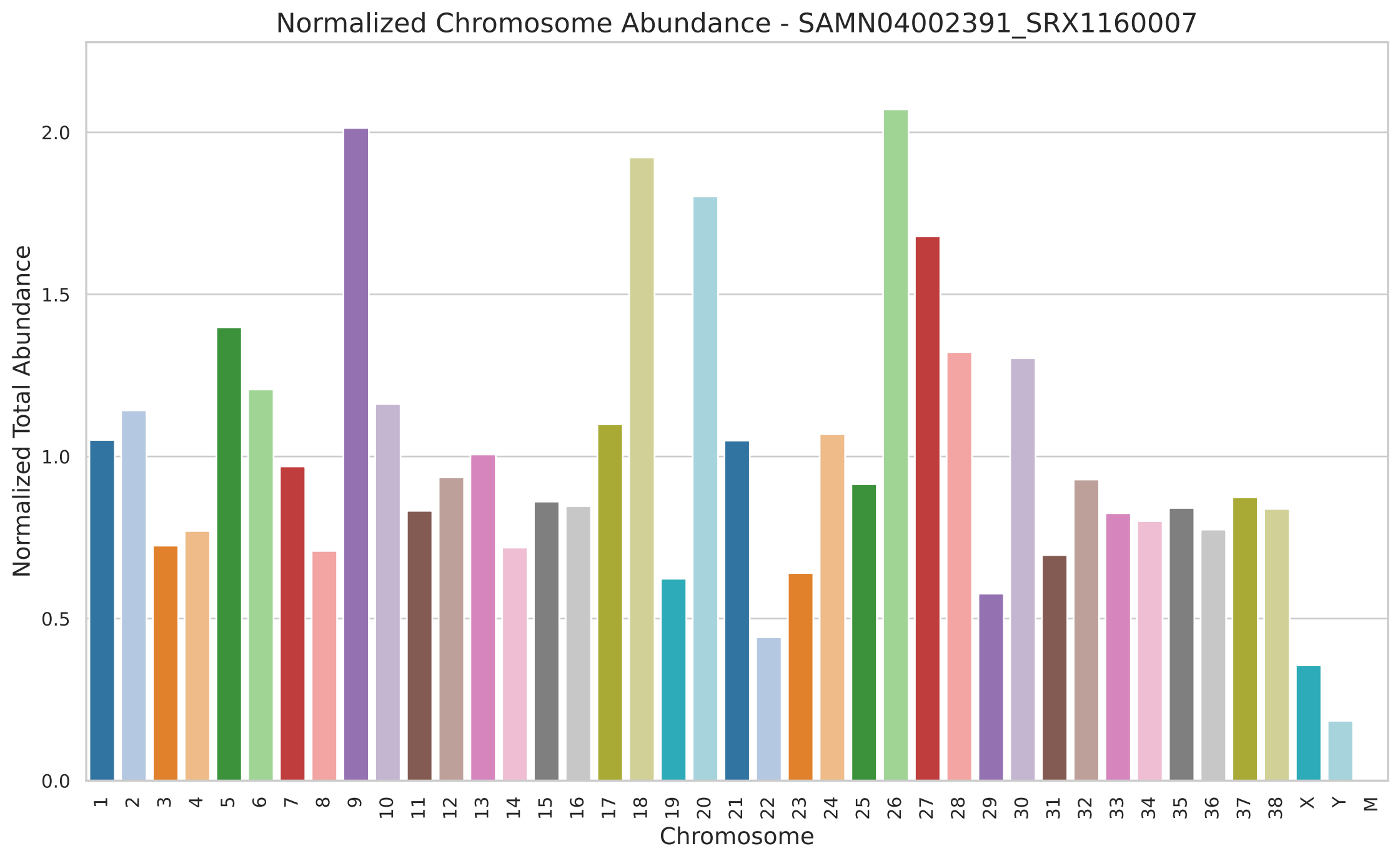

Normalized Chromosome Abundance - SAMEA4040710_ERX1533387
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

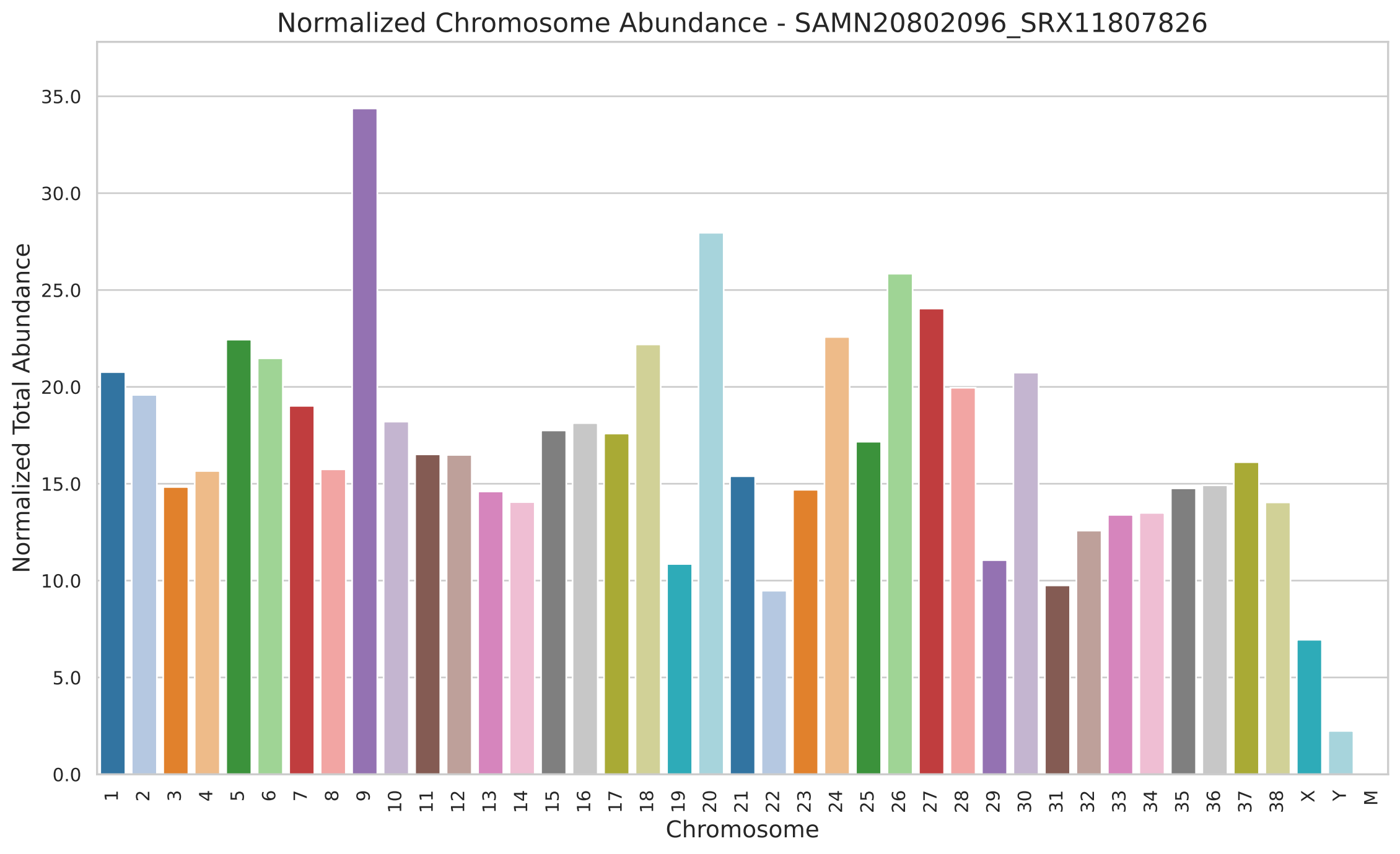

Normalized Chromosome Abundance - SAMN04002424_SRX1160014
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

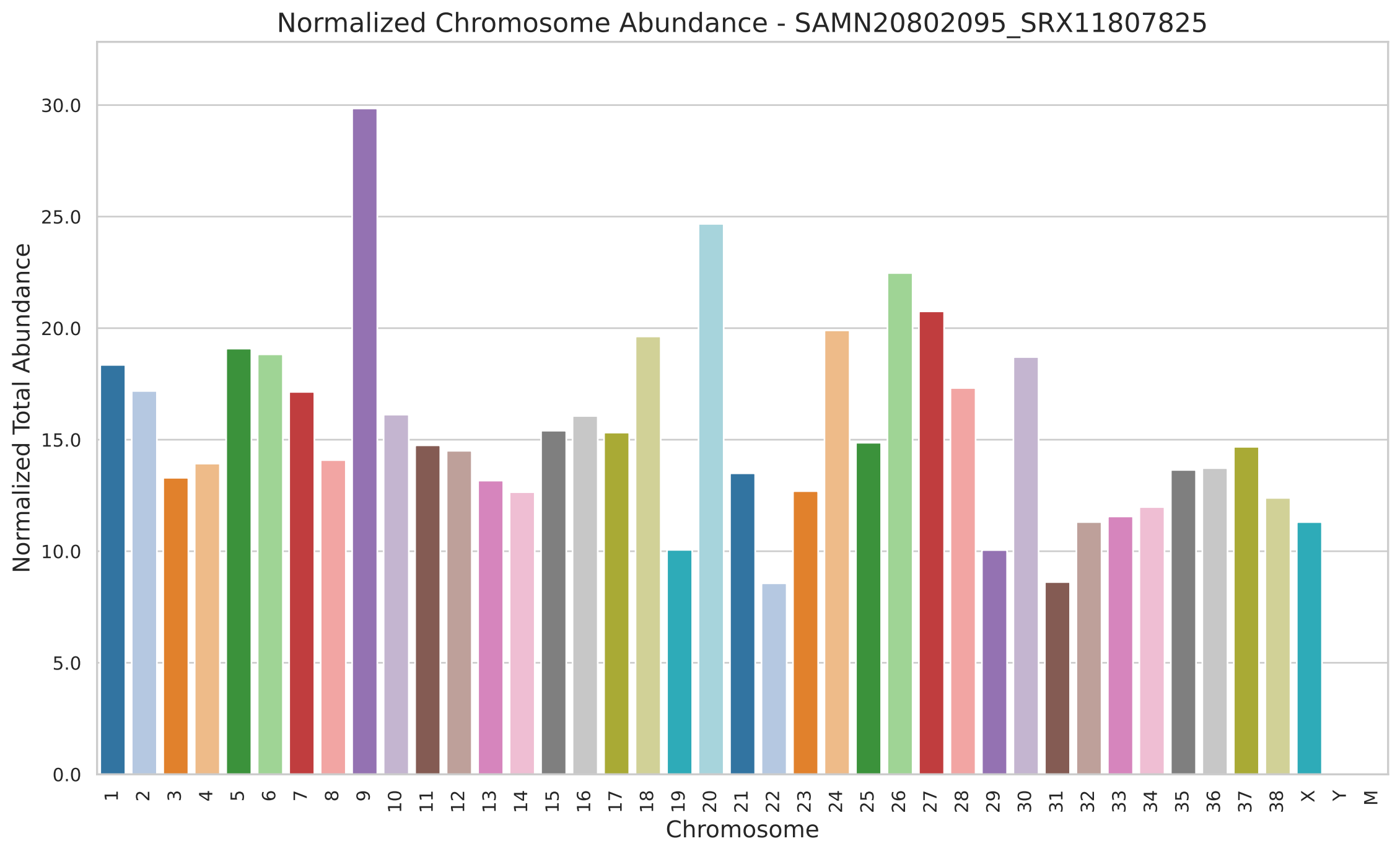

Normalized Chromosome Abundance - SAMN13133820_SRX7061481
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

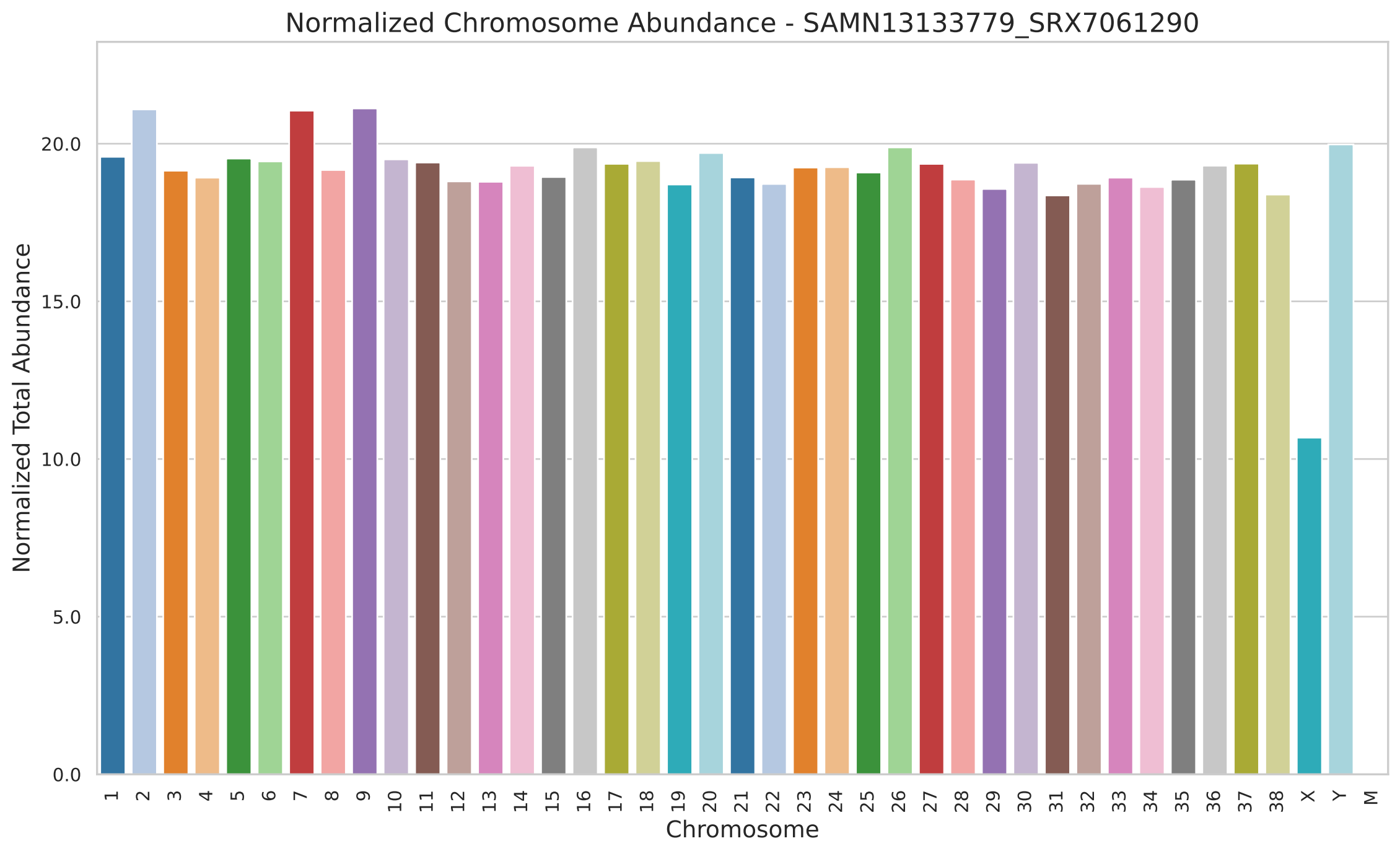

Normalized Chromosome Abundance - SAMN13133799_SRX7061285
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

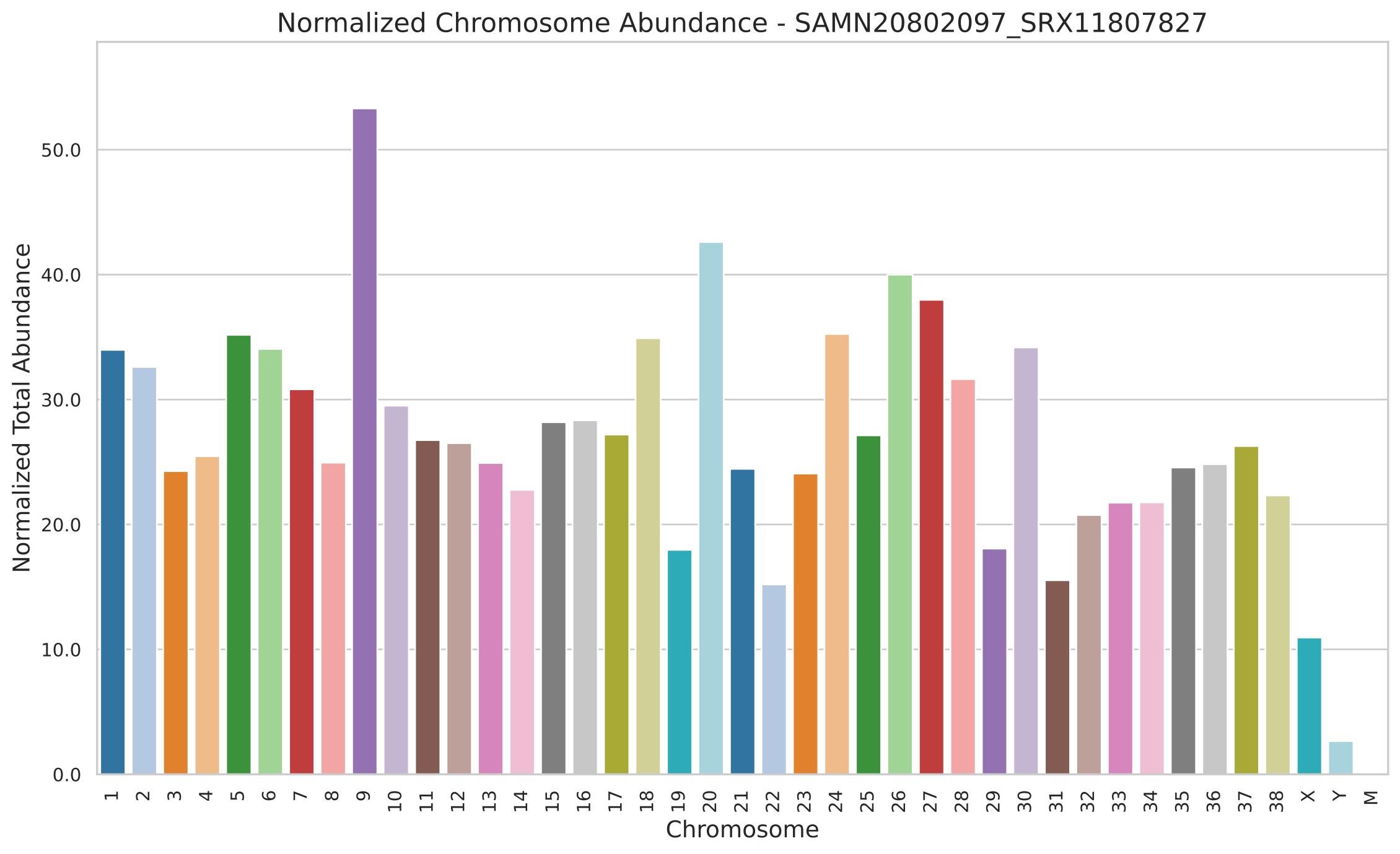

Normalized Chromosome Abundance - SAMN20802092_SRX11807822
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

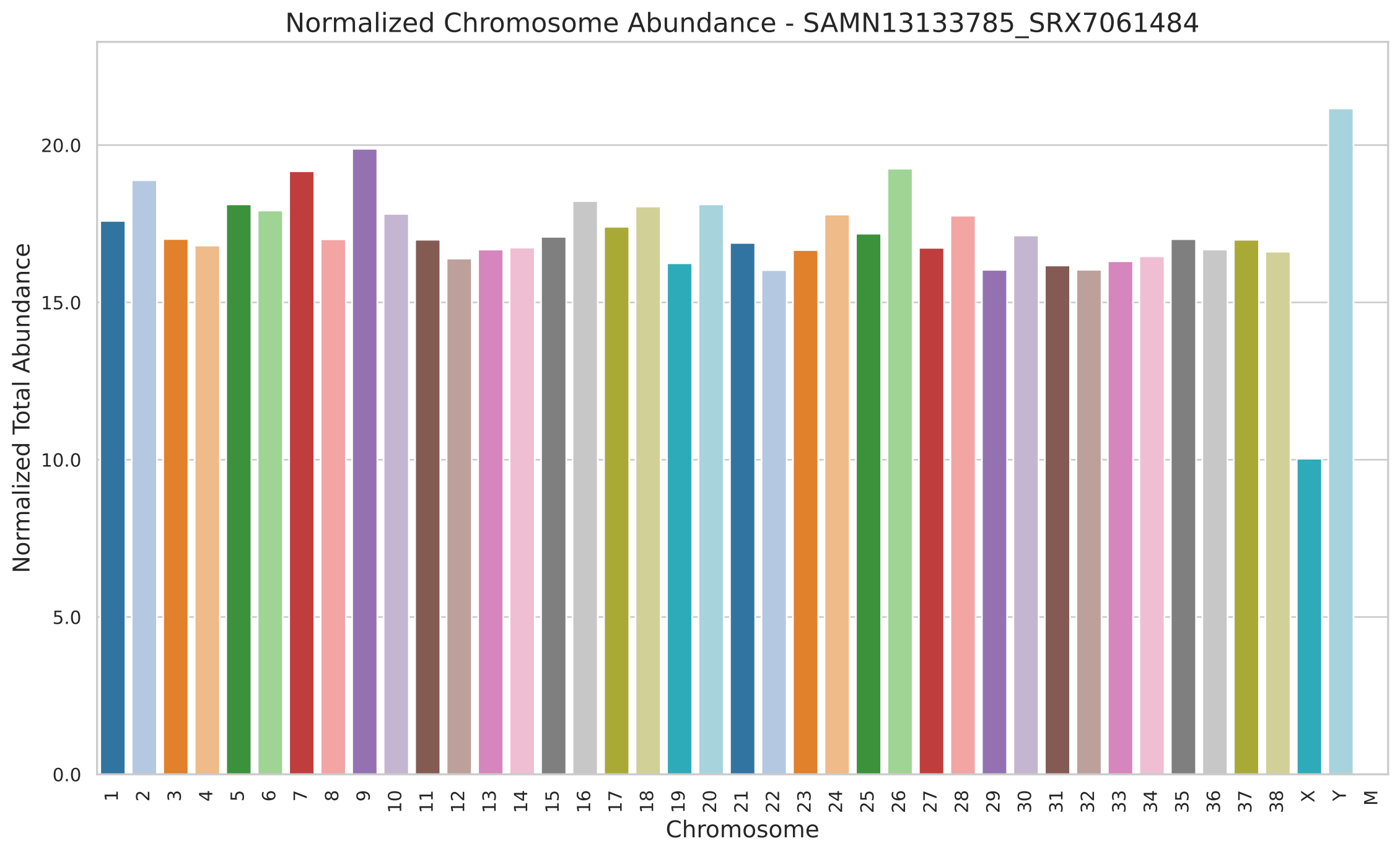

Normalized Chromosome Abundance - SAMN04002391_SRX1160007
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

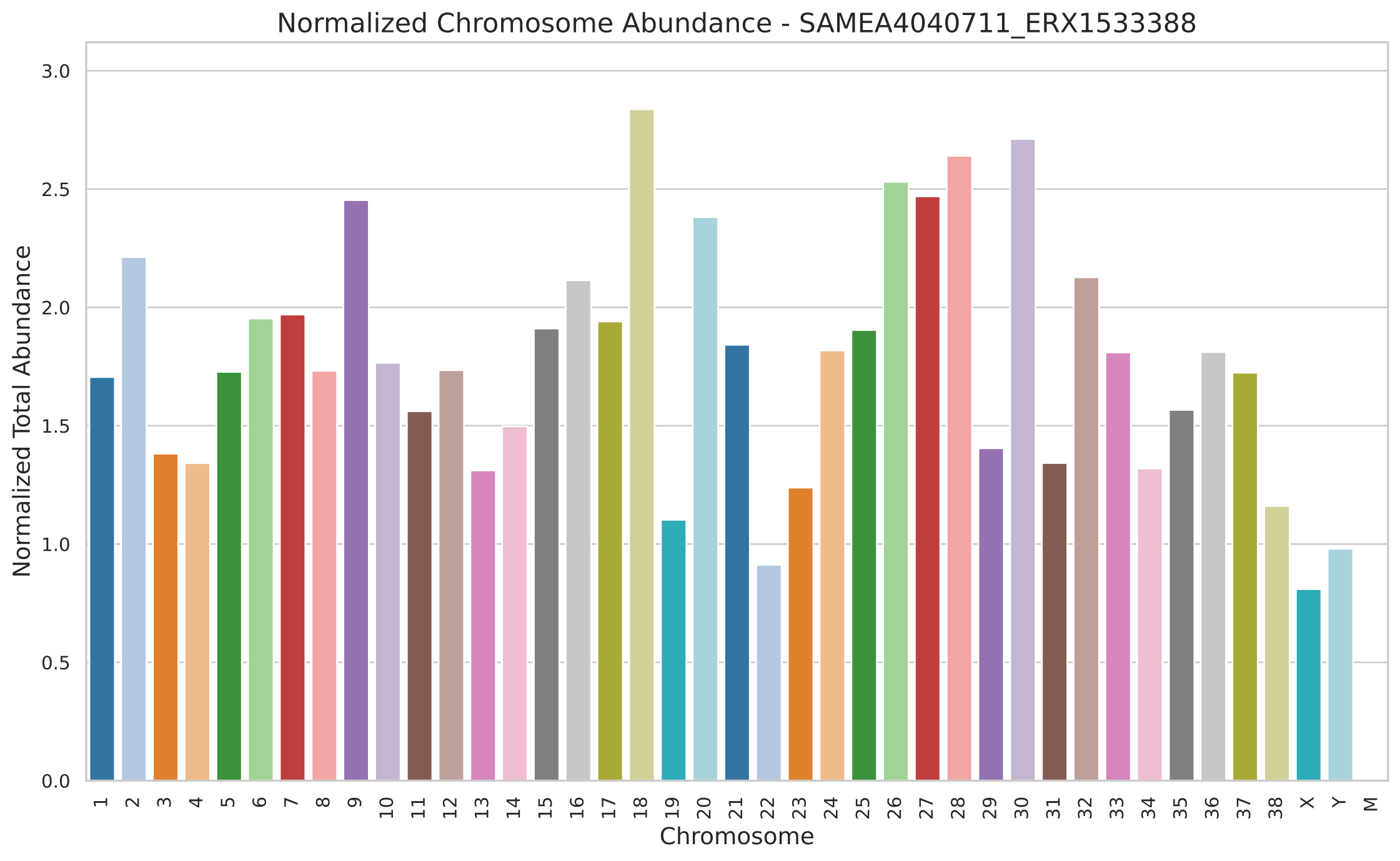

Normalized Chromosome Abundance - SAMN20802096_SRX11807826
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
35.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

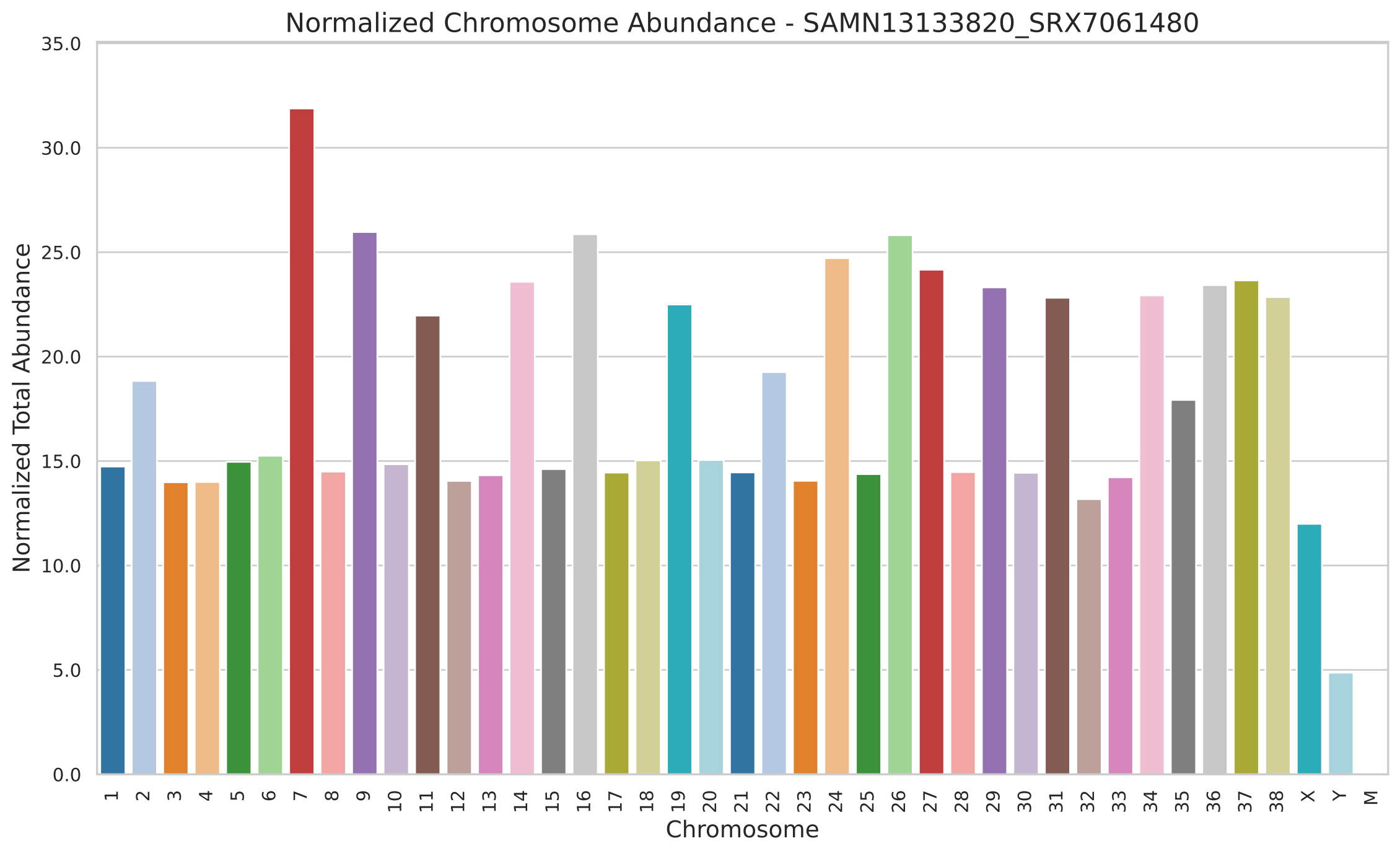

Normalized Chromosome Abundance - SAMN20802095_SRX11807825
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

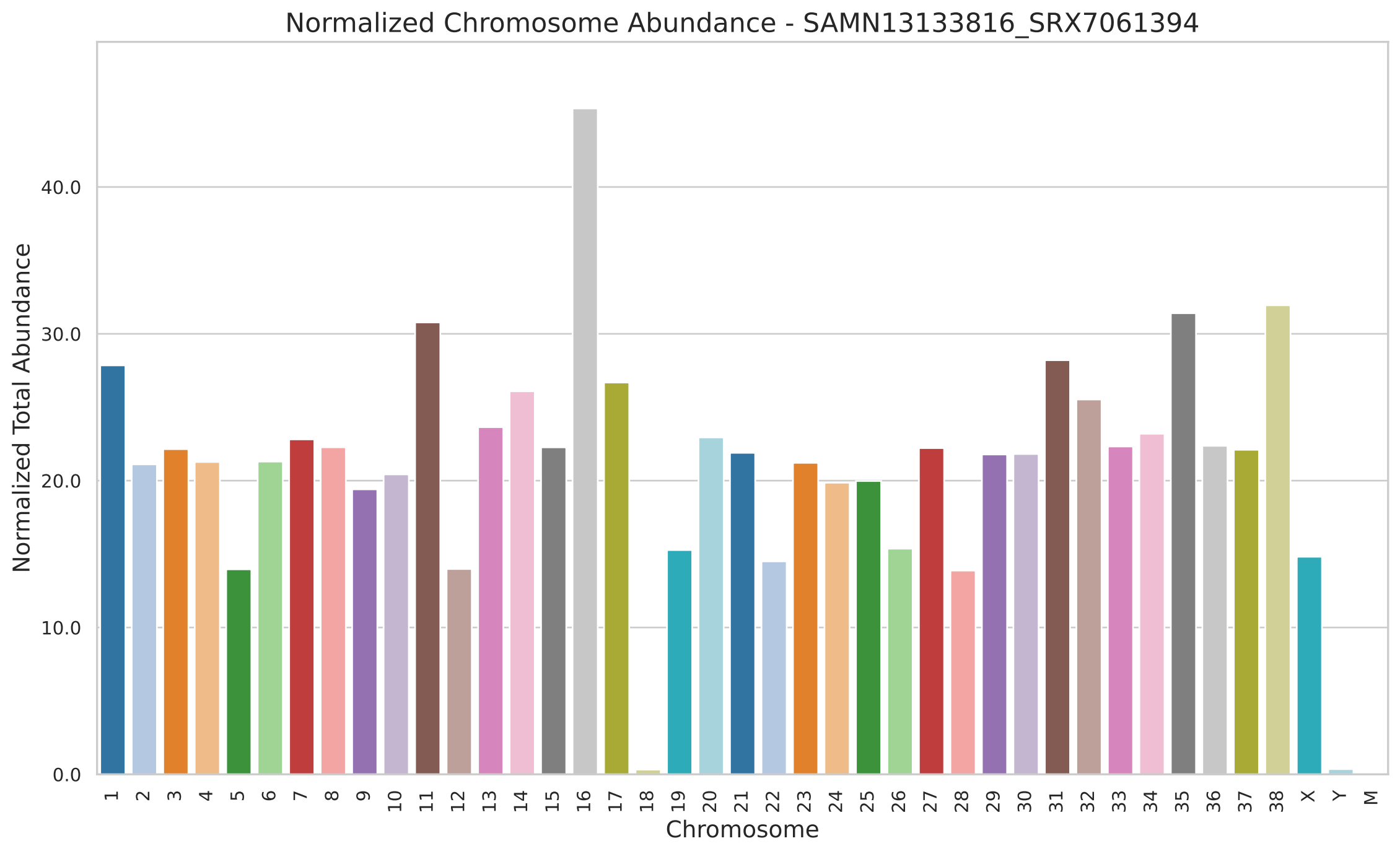

Normalized Chromosome Abundance - SAMN13133779_SRX7061290
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

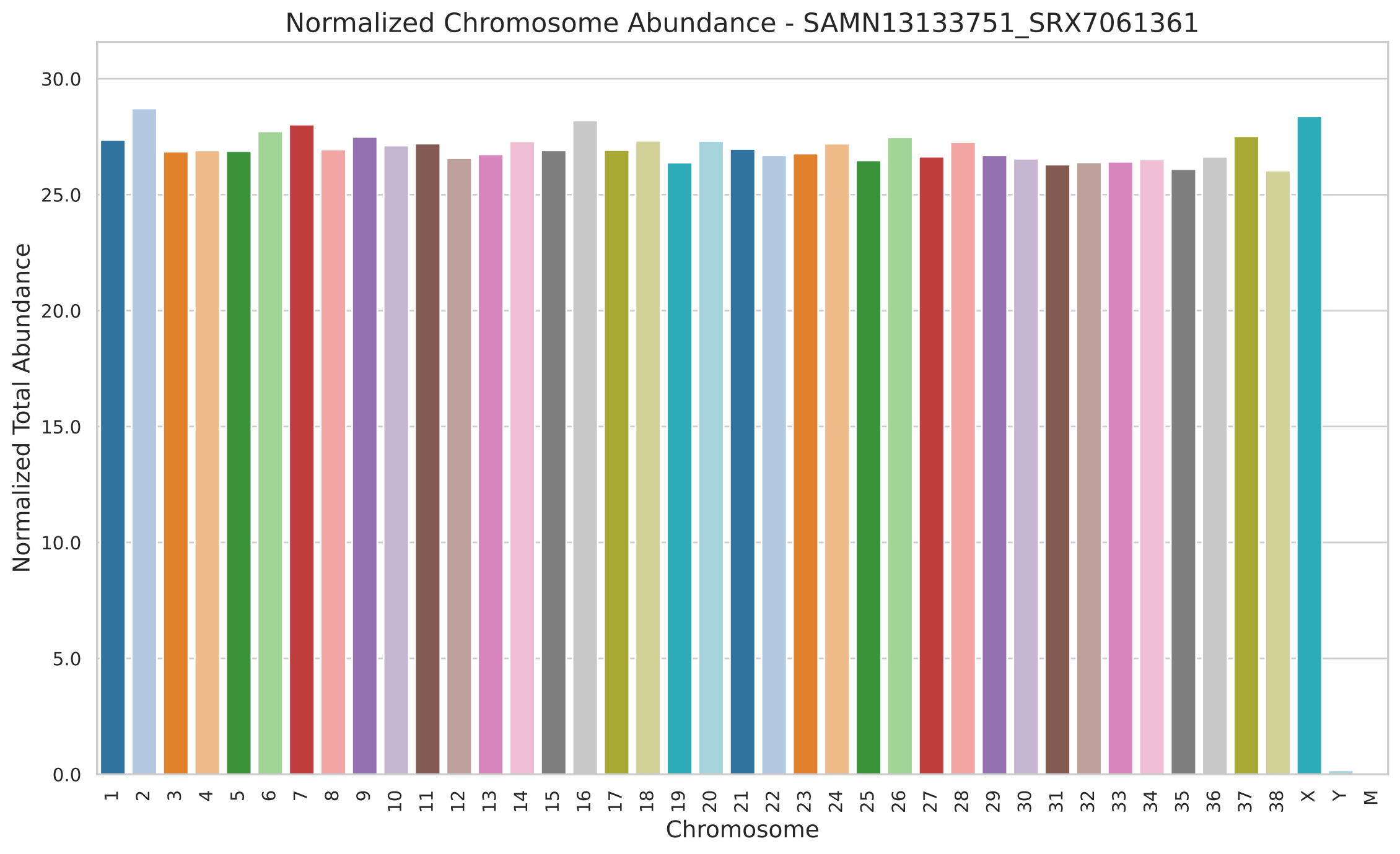

Normalized Chromosome Abundance - SAMN20802097_SRX11807827
Normalized Total Abundance
0.0
10.0
20.0
30.0
40.0
50.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

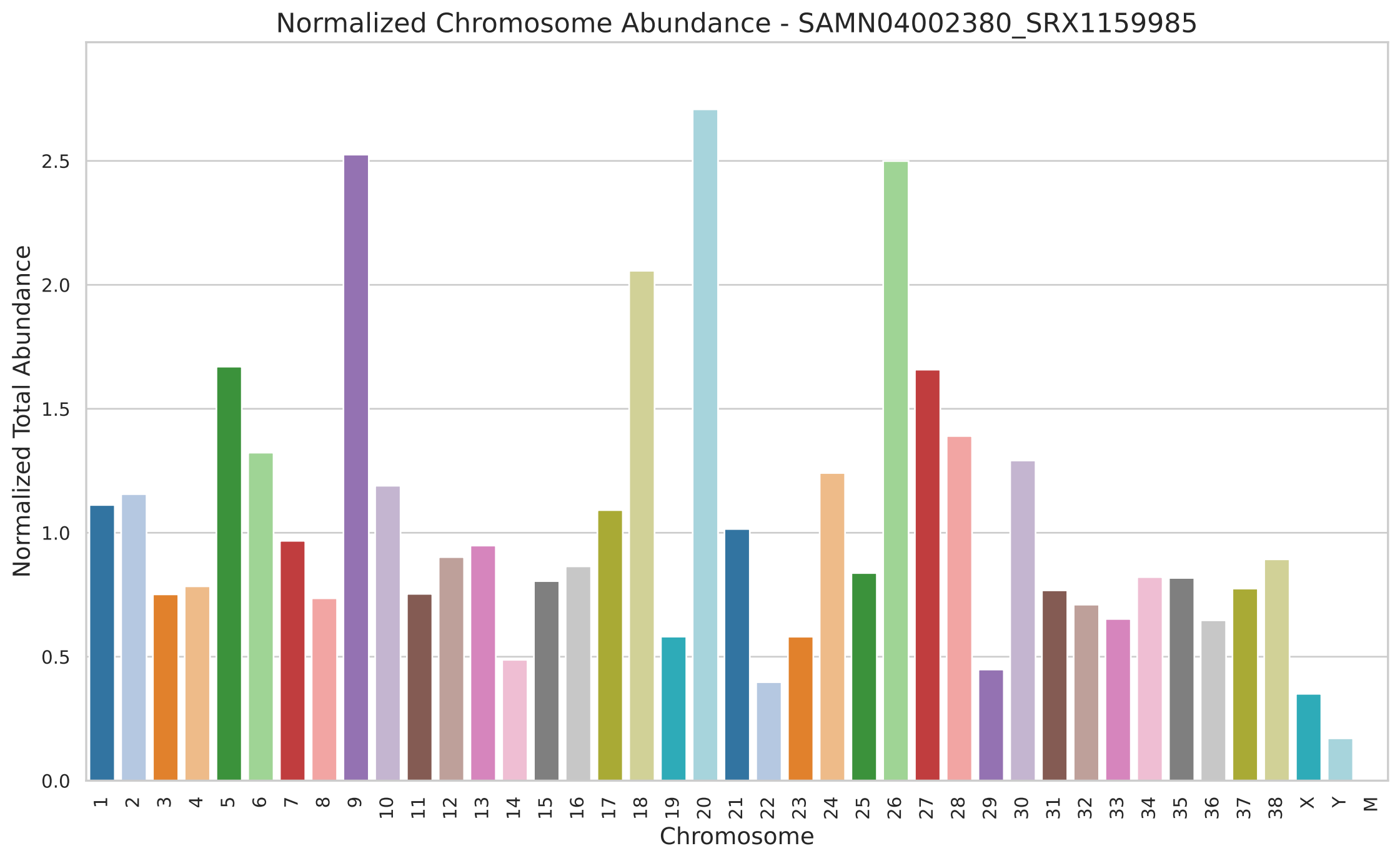

Normalized Chromosome Abundance - SAMN13133785_SRX7061484
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

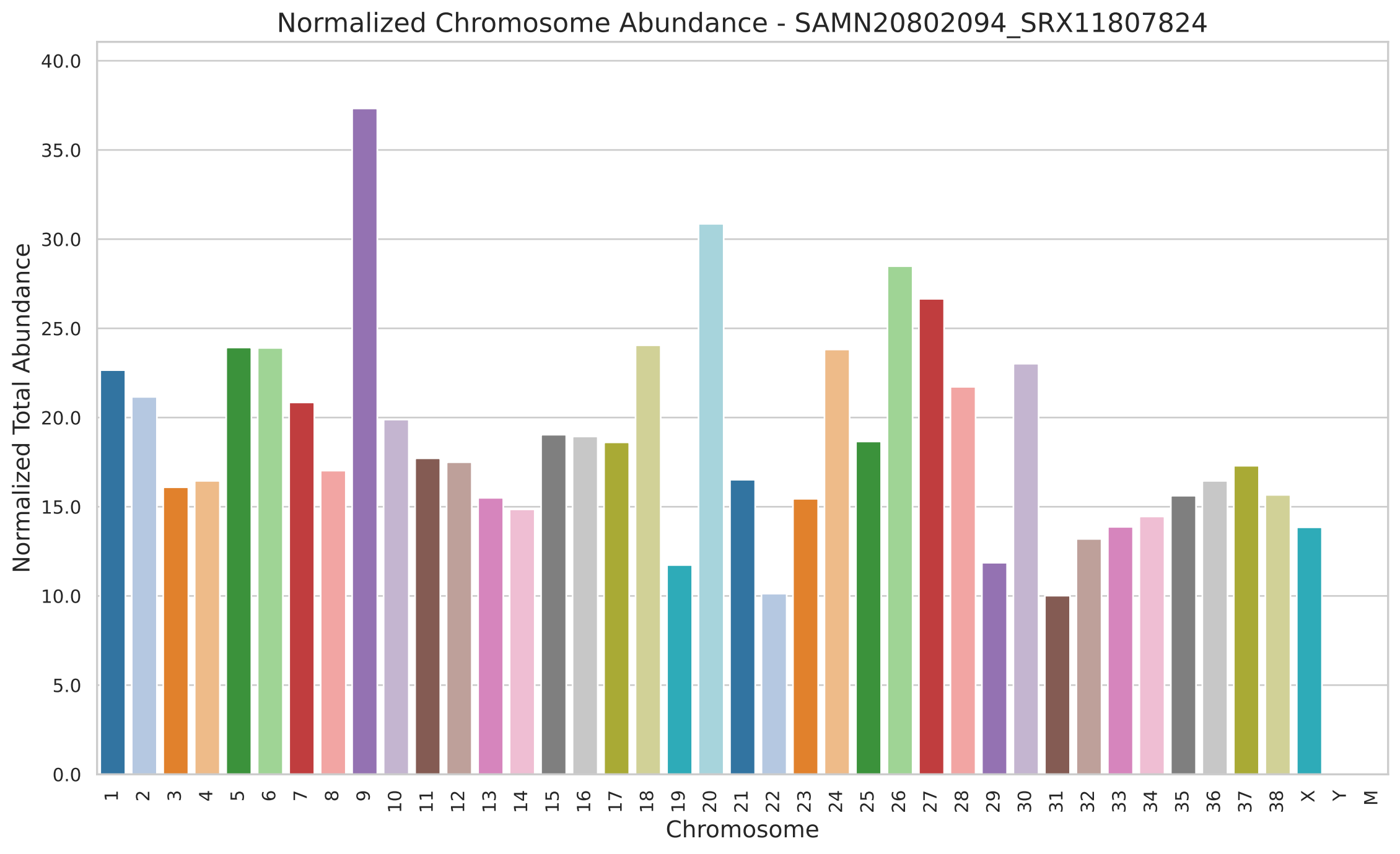

Normalized Chromosome Abundance - SAMEA4040711_ERX1533388
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

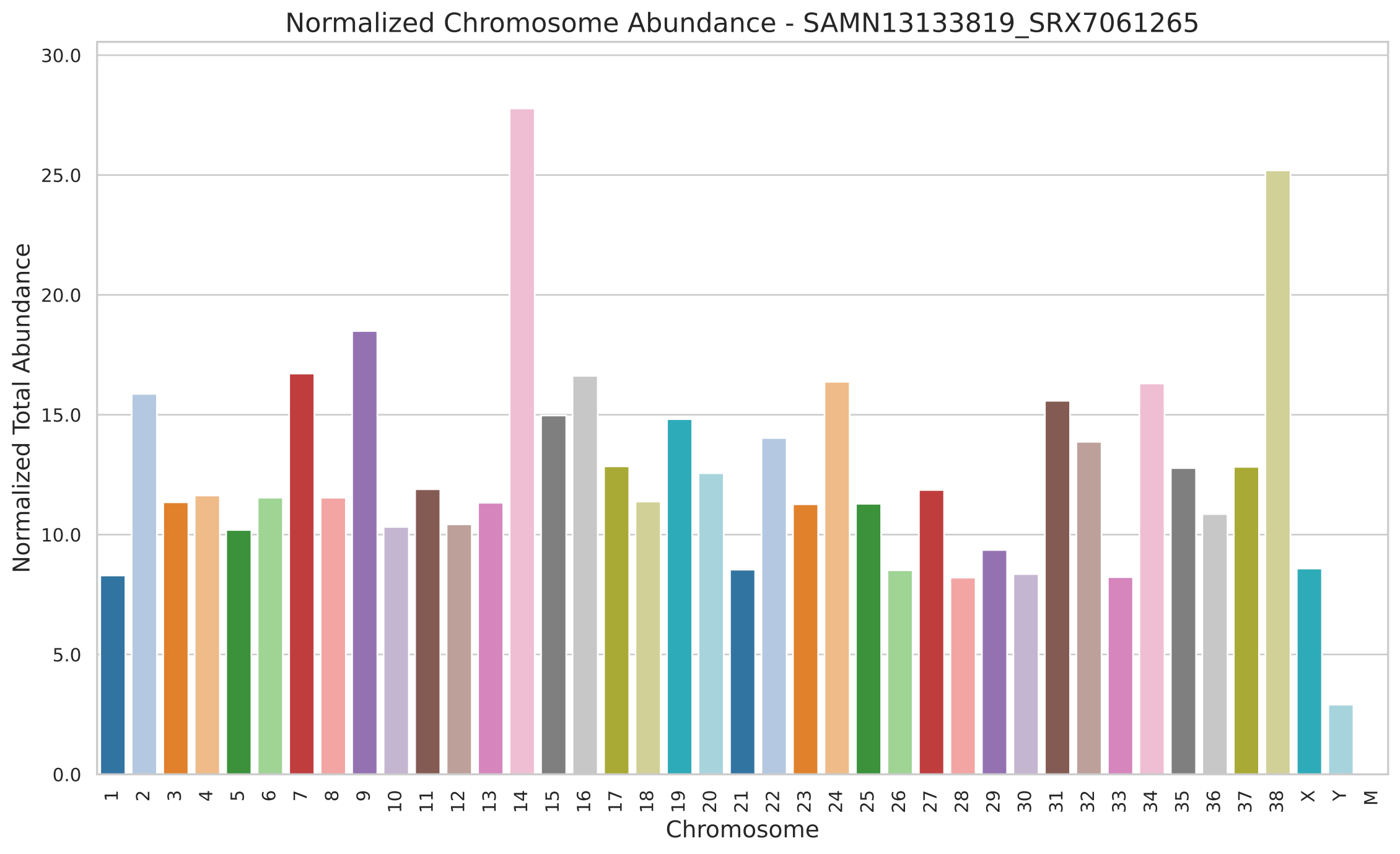

Normalized Chromosome Abundance - SAMN13133820_SRX7061480
Normalized Total Abundance
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

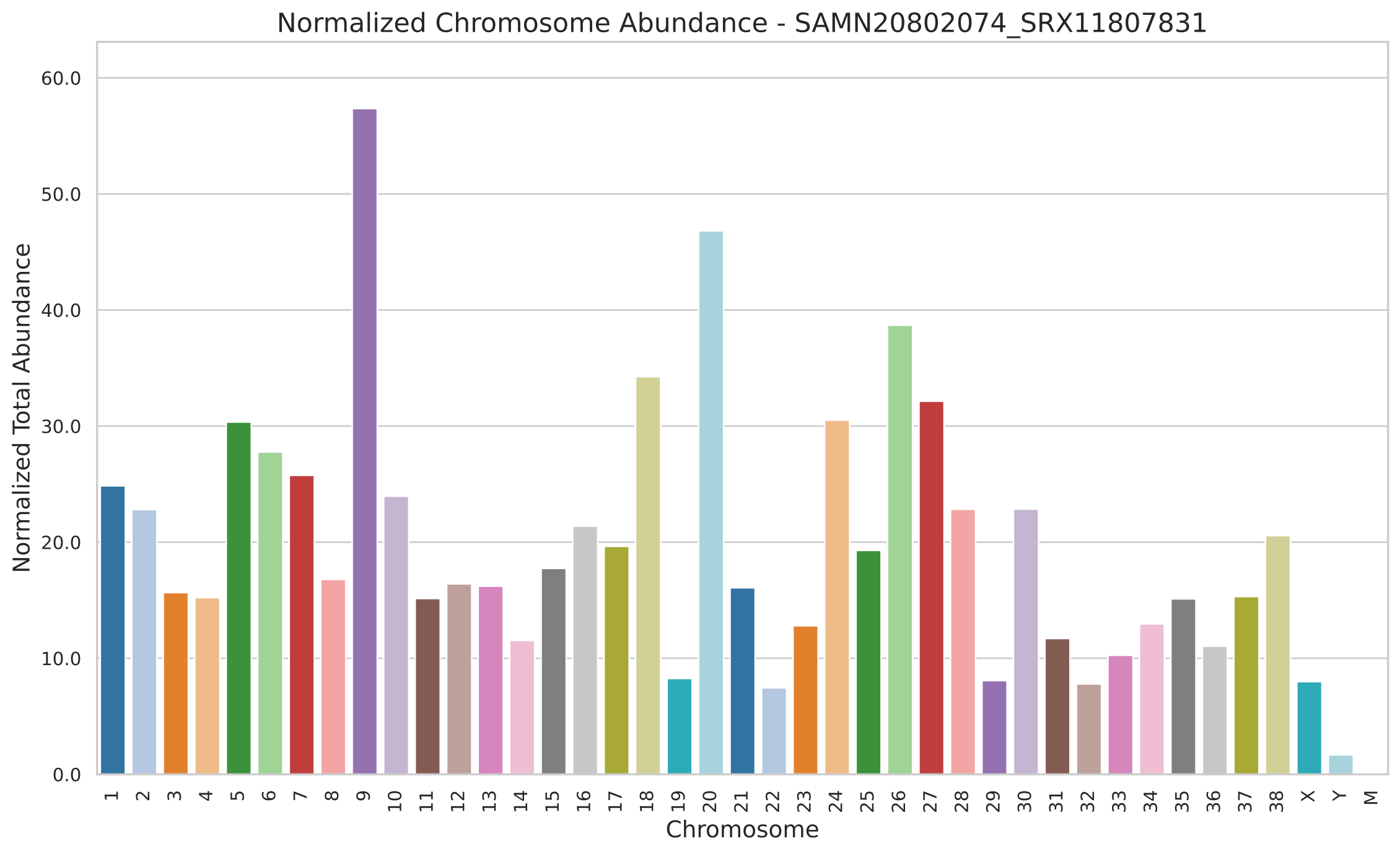

Normalized Chromosome Abundance - SAMN13133816_SRX7061394
Normalized Total Abundance
0.0
10.0
20.0
30.0
40.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

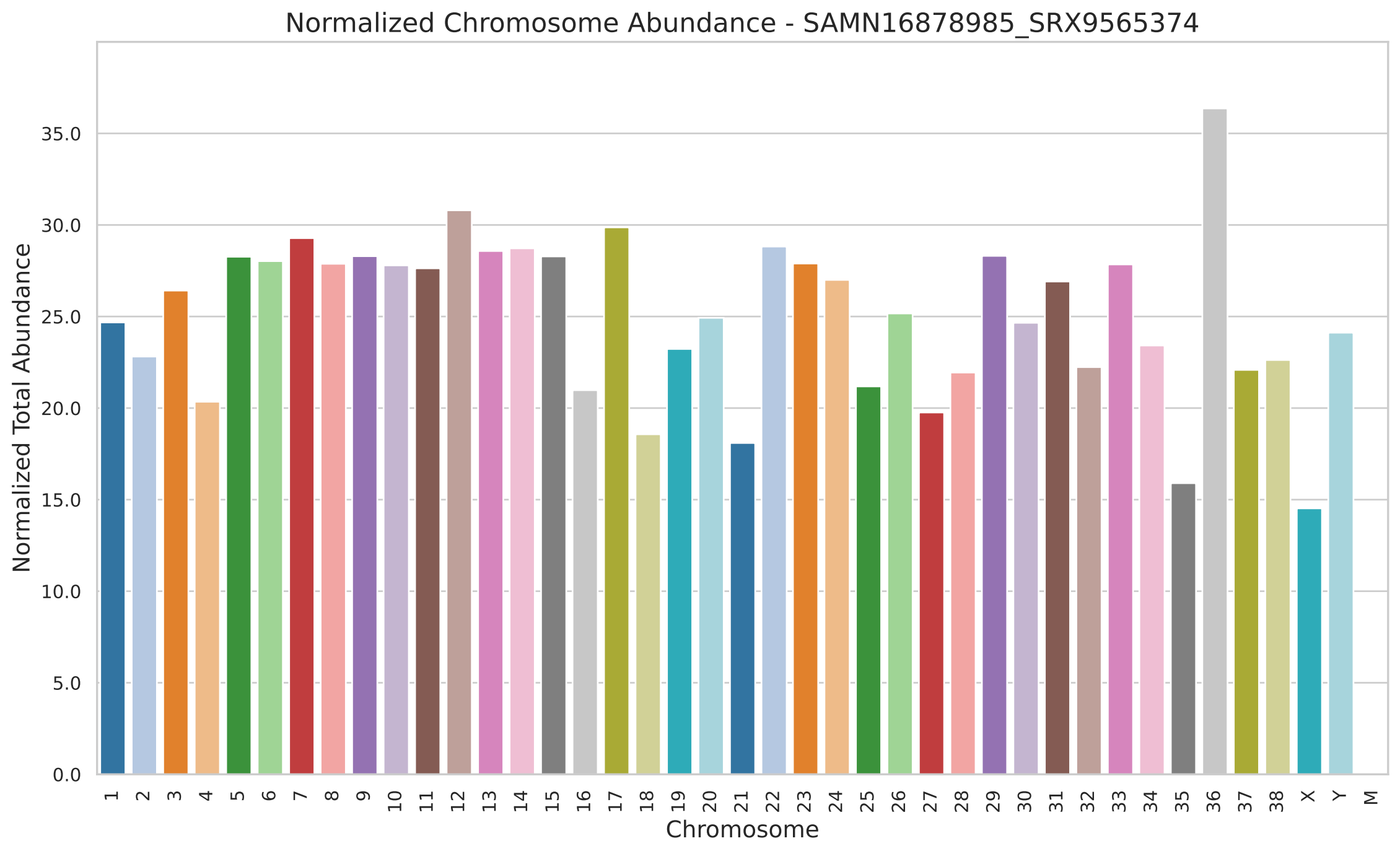

Normalized Chromosome Abundance - SAMN13133751_SRX7061361
Normalized Total Abundance
30.0
25.0
20.0
15.0
10.0
5.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

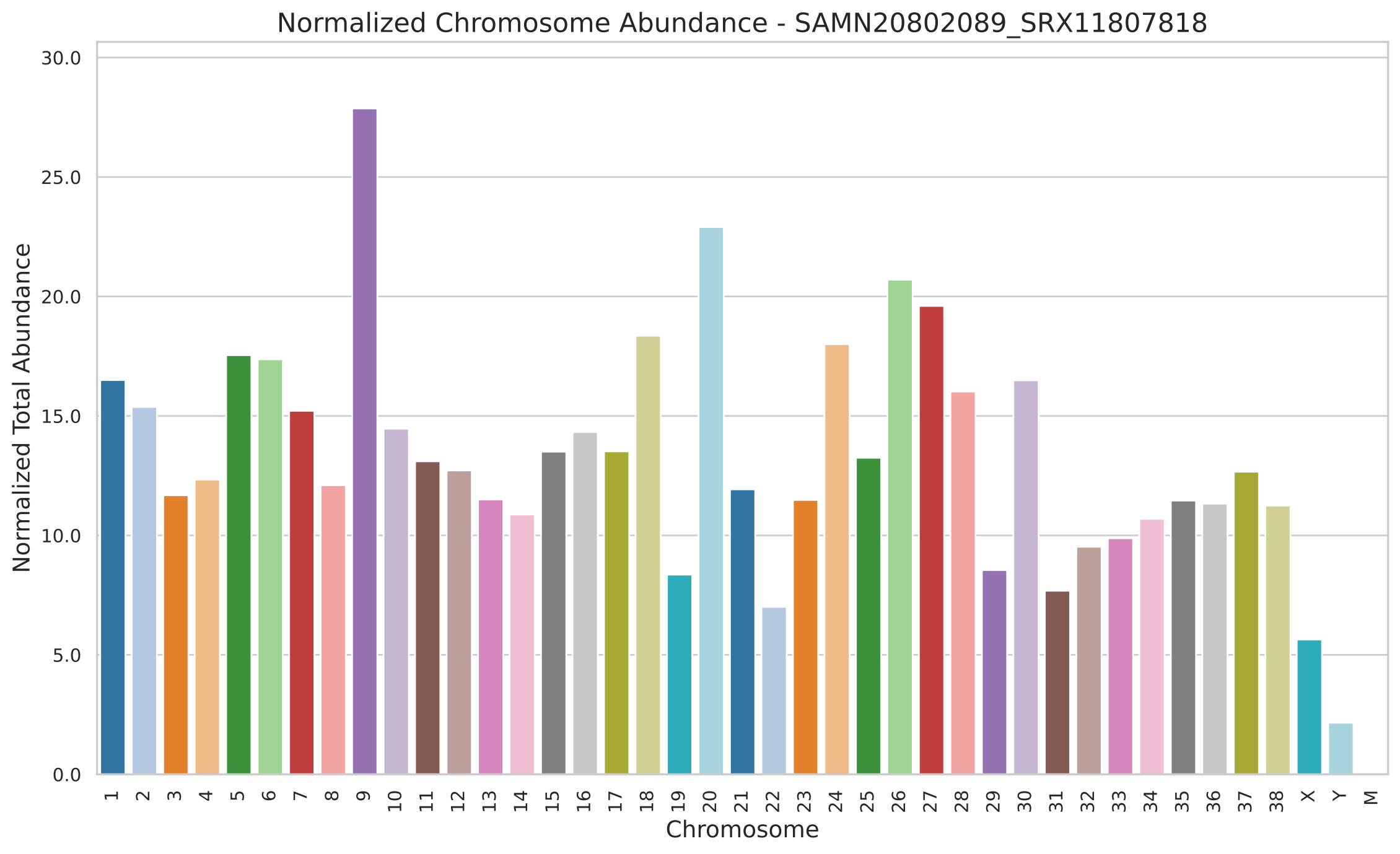

Normalized Chromosome Abundance - SAMN04002380_SRX1159985
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

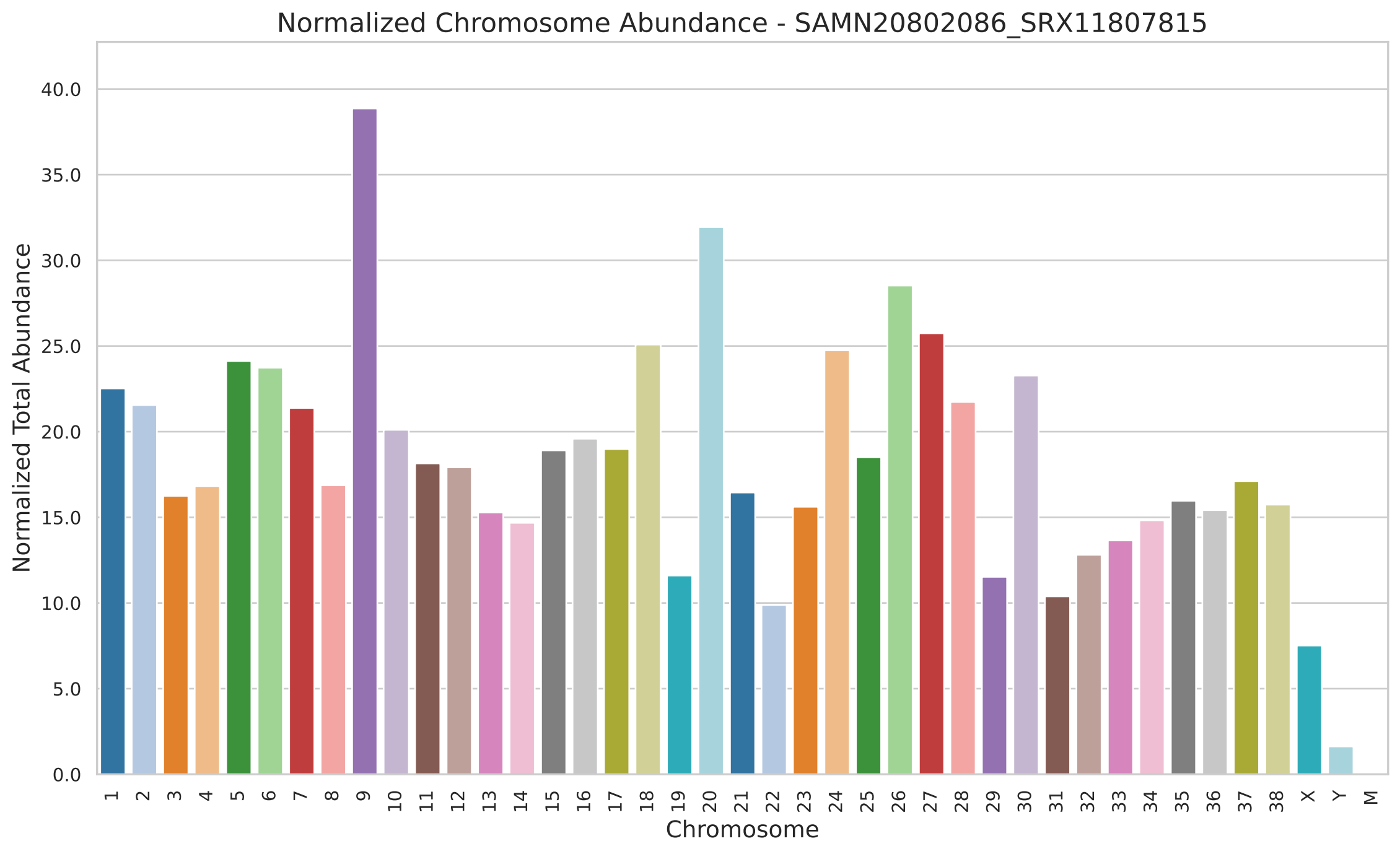

Normalized Chromosome Abundance - SAMN20802094_SRX11807824
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
35.0
40.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

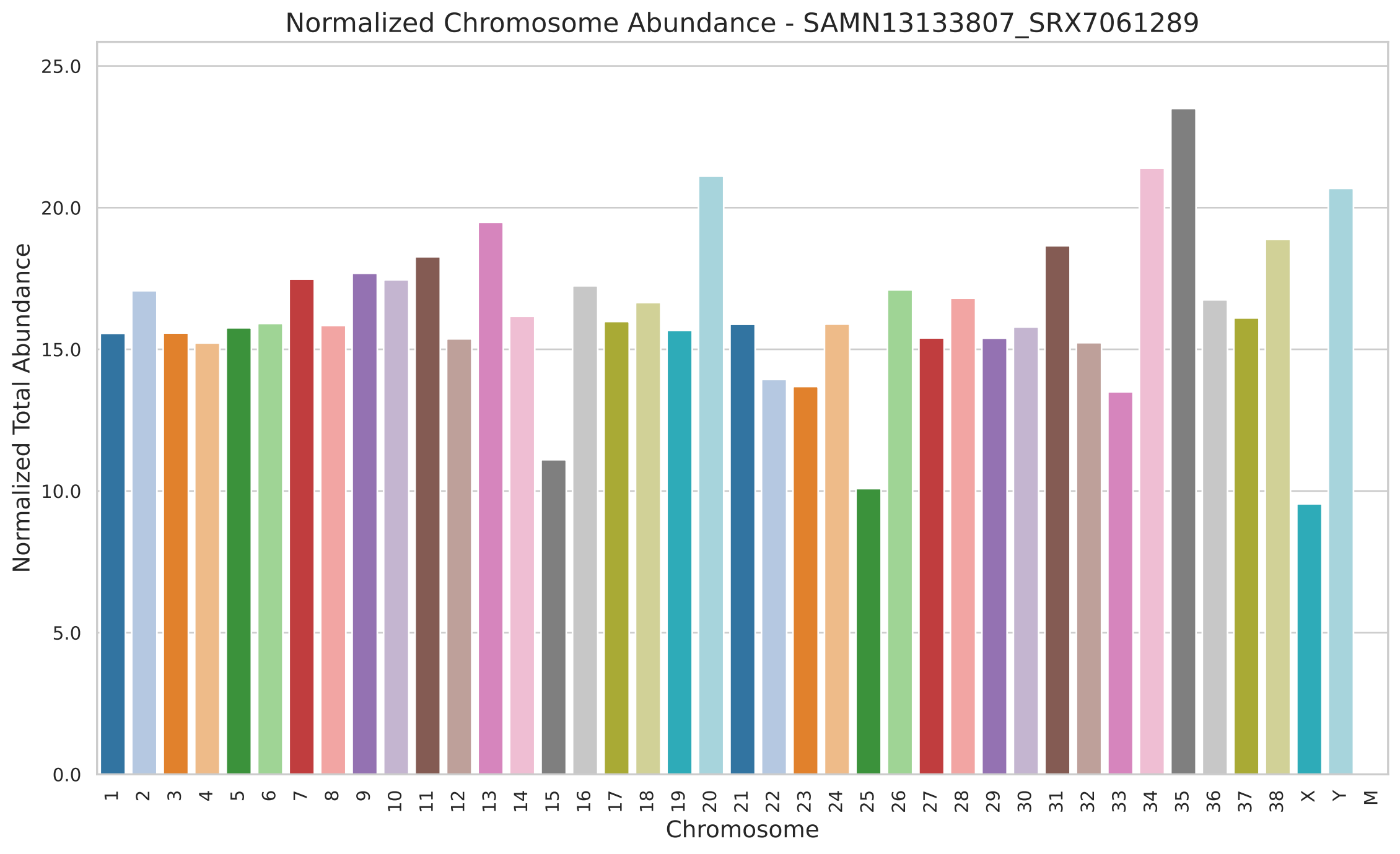

Normalized Chromosome Abundance - SAMN13133819_SRX7061265
Normalized Total Abundance
30.0
25.0
20.0
15.0
10.0
5.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

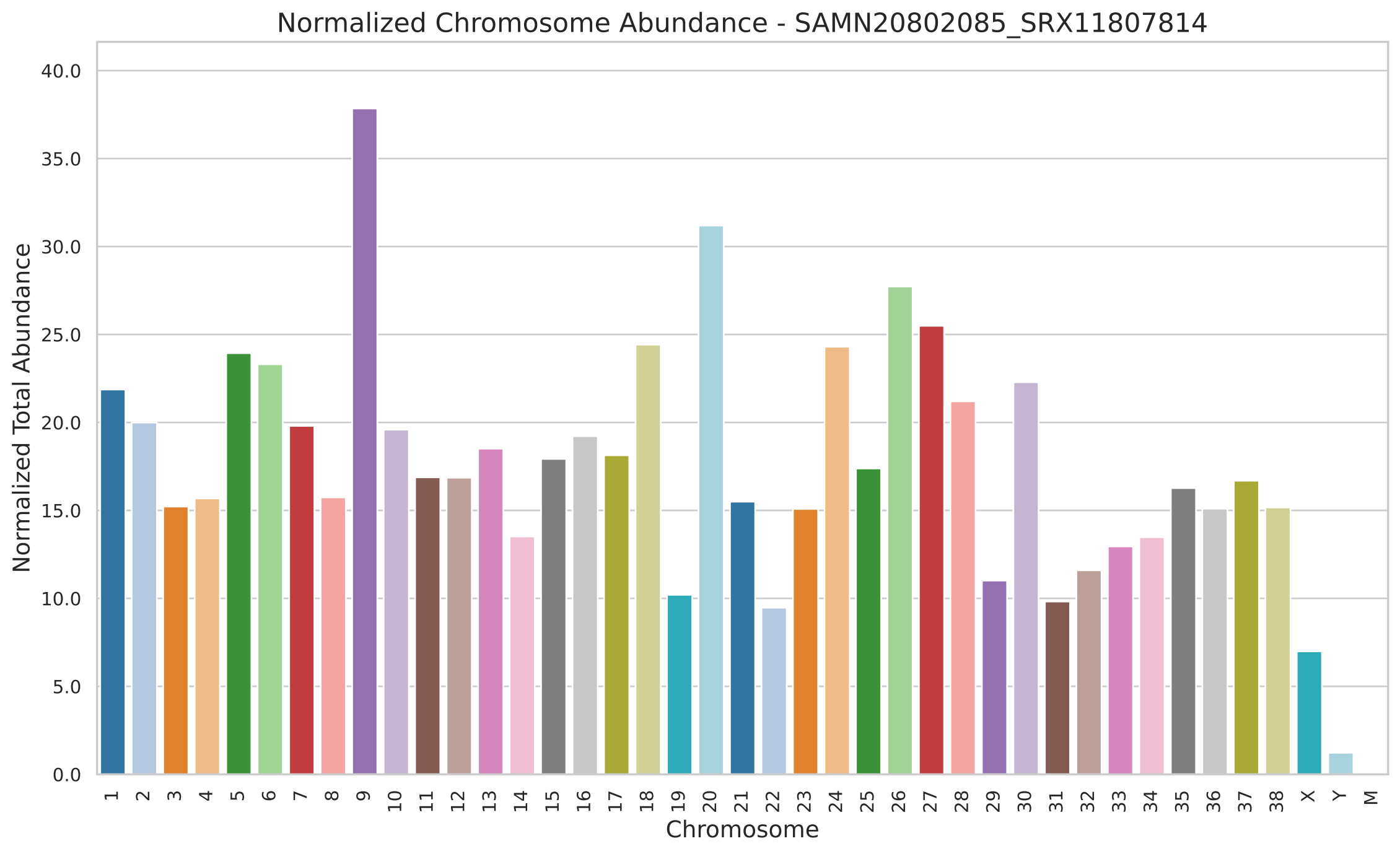

Normalized Chromosome Abundance - SAMN20802074_SRX11807831
Normalized Total Abundance
0.0
10.0
20.0
30.0
40.0
50.0
60.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

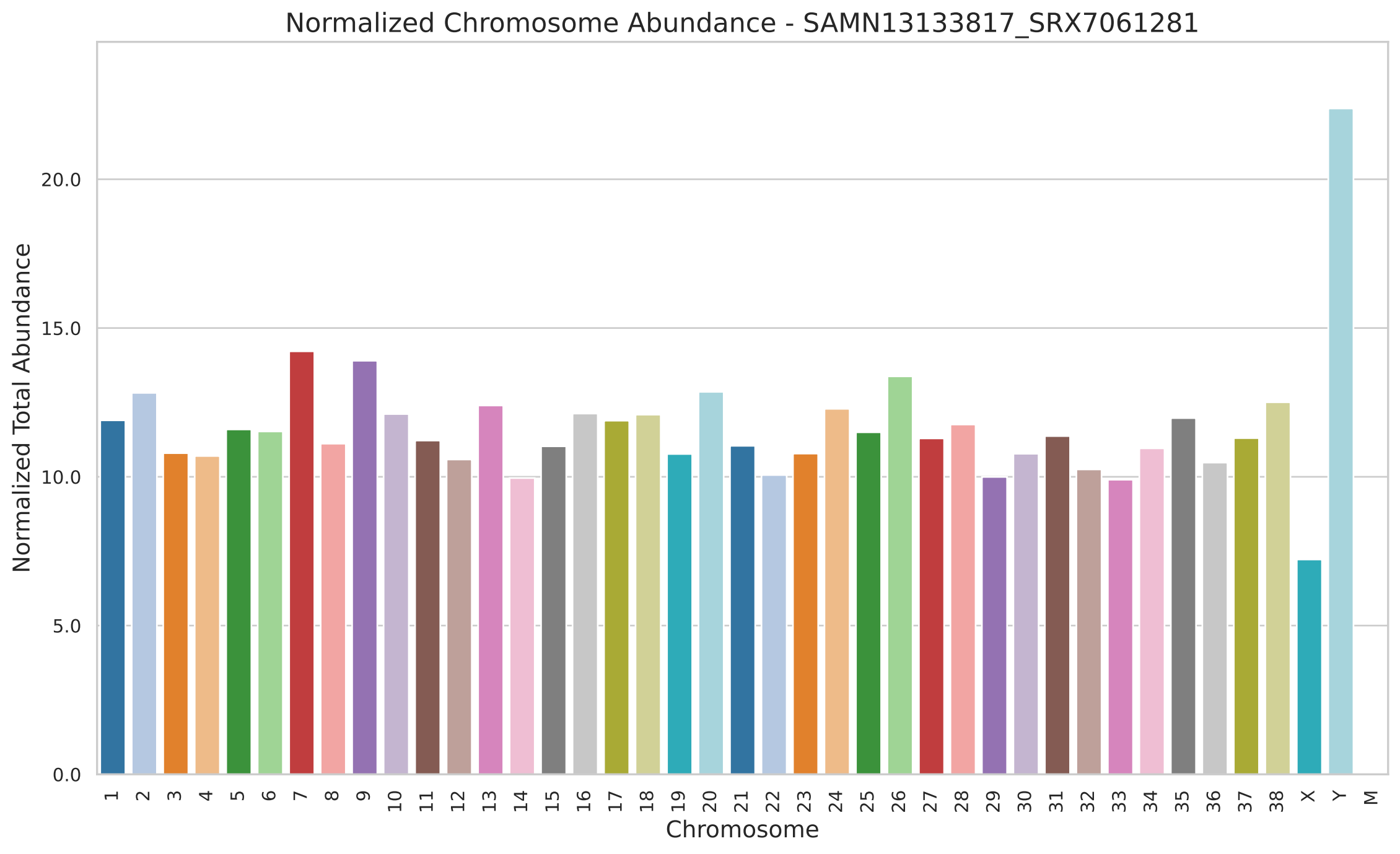

Normalized Chromosome Abundance - SAMN16878985_SRX9565374
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
35.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

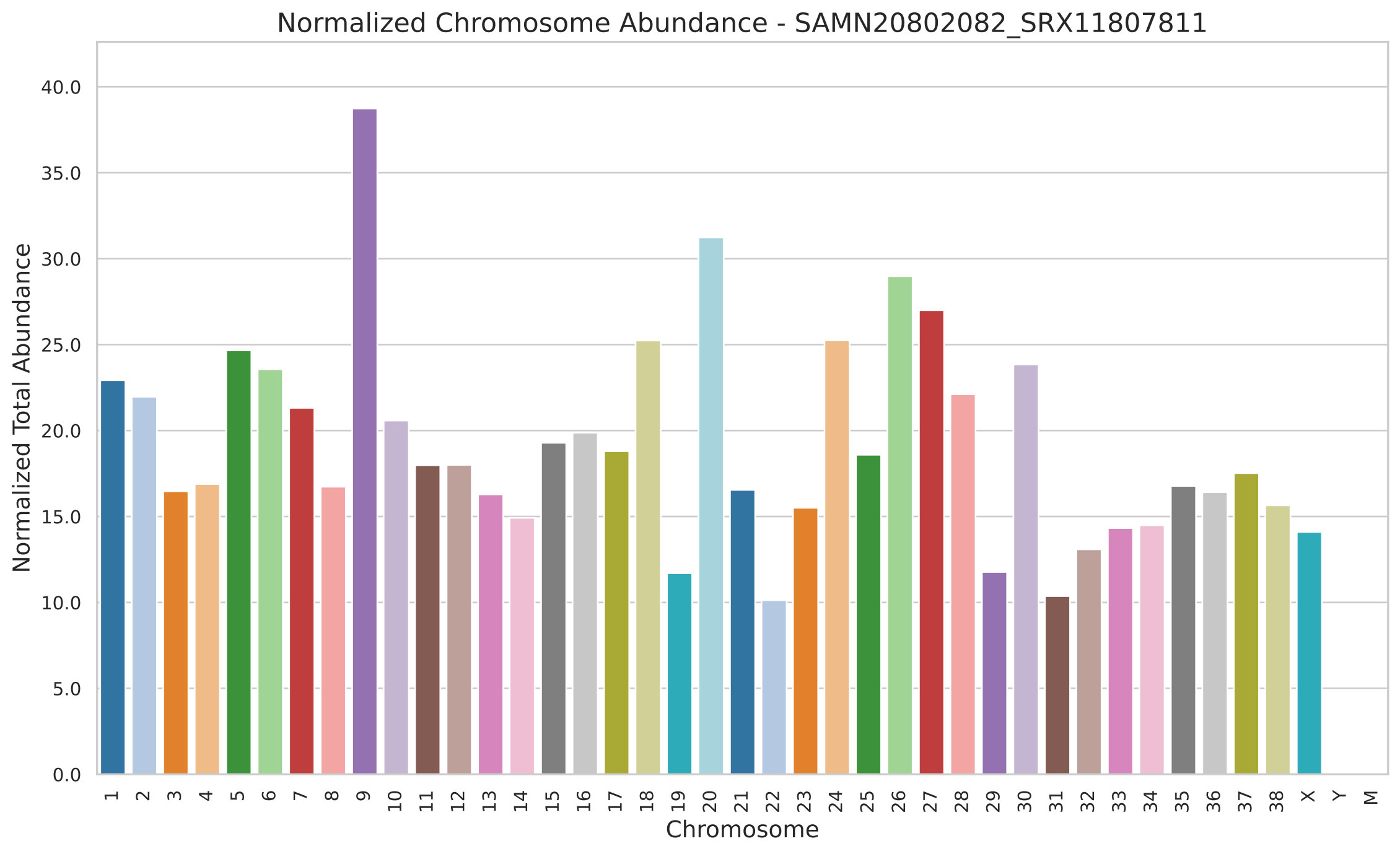

Normalized Chromosome Abundance - SAMN20802089_SRX11807818
Normalized Total Abundance
30.0
25.0
20.0
15.0
10.0
5.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

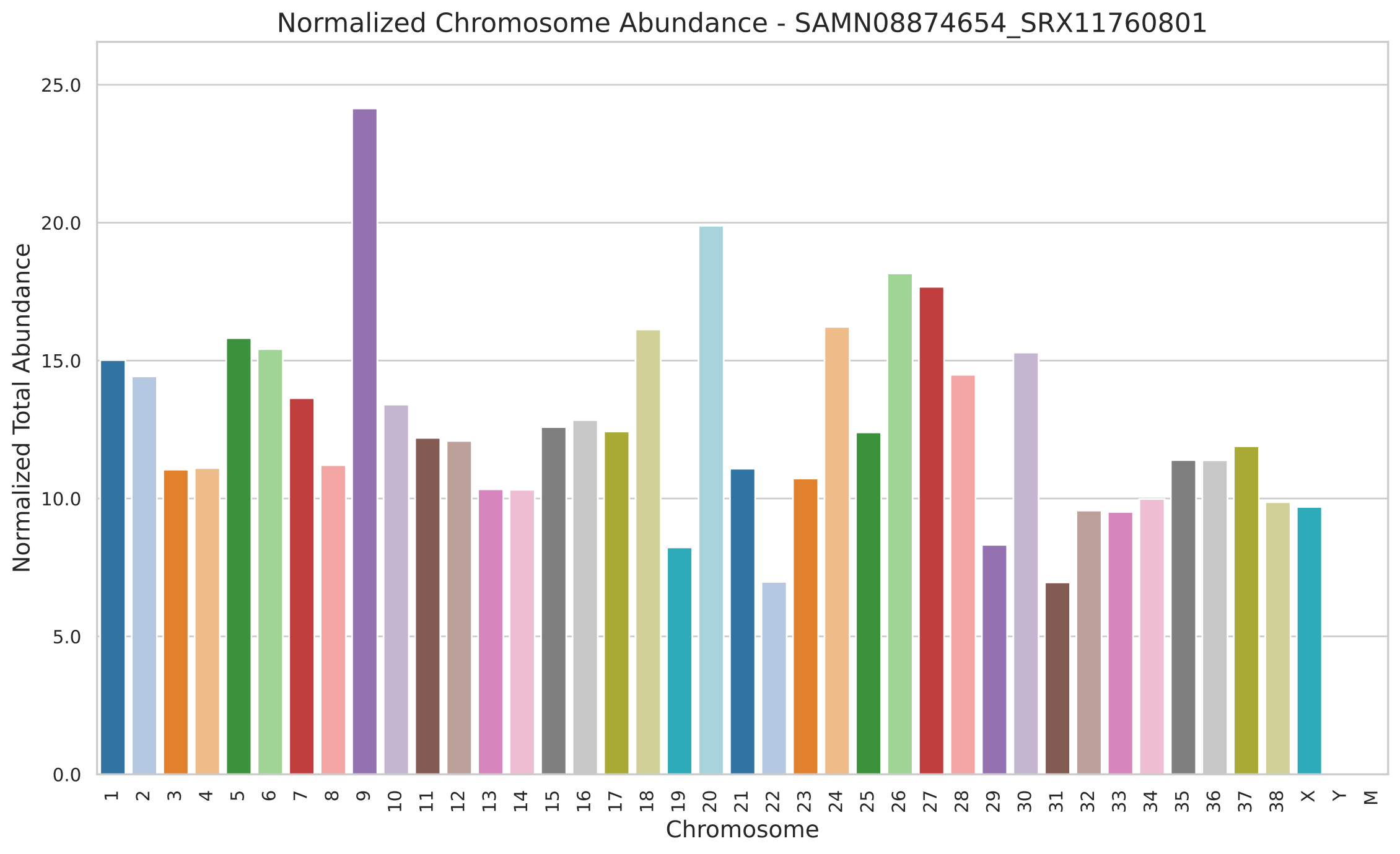

Normalized Chromosome Abundance - SAMN20802086_SRX11807815
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
35.0
40.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

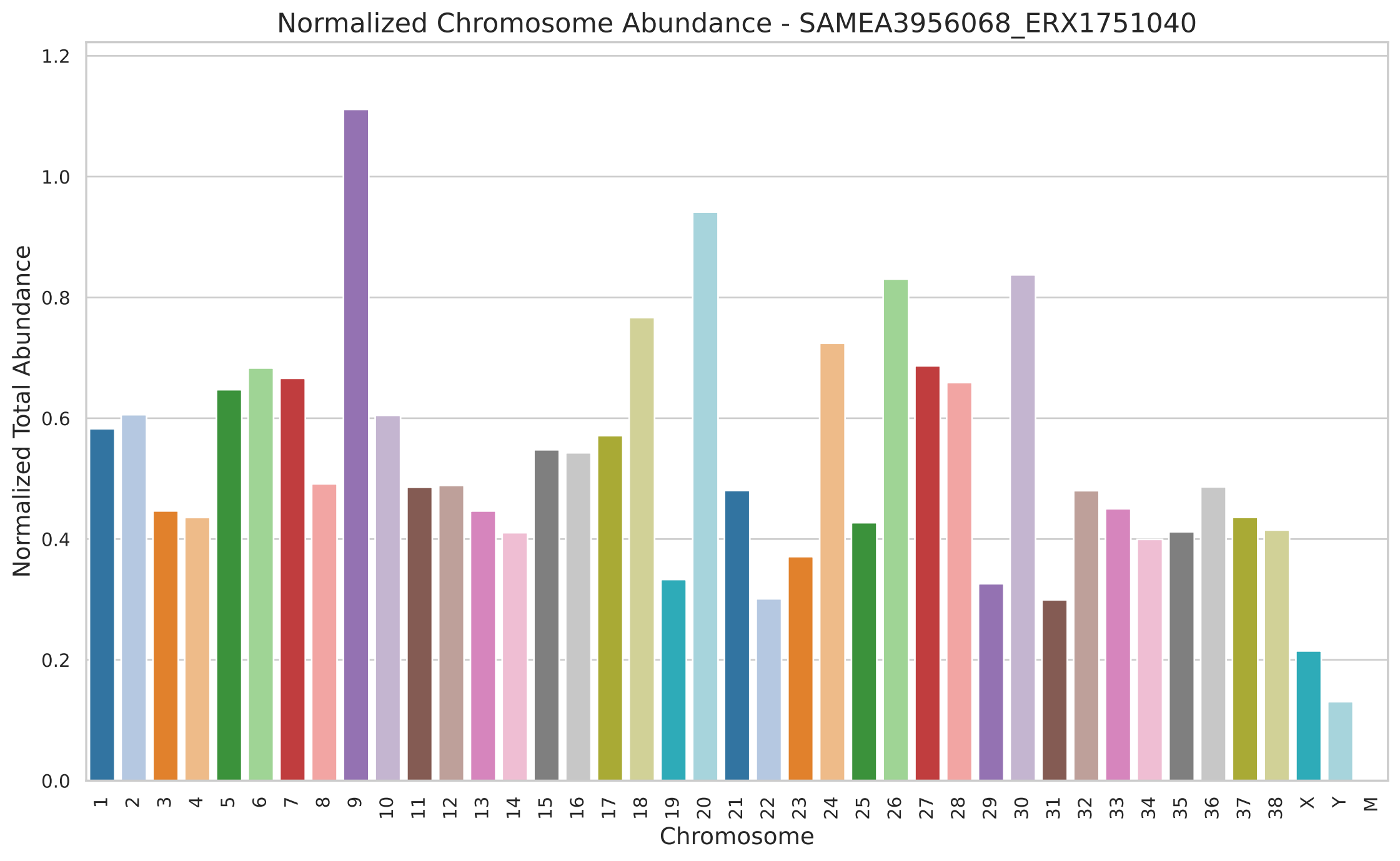

Normalized Chromosome Abundance - SAMN13133807_SRX7061289
Normalized Total Abundance
25.0
20.0
15.0
10.0
5.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

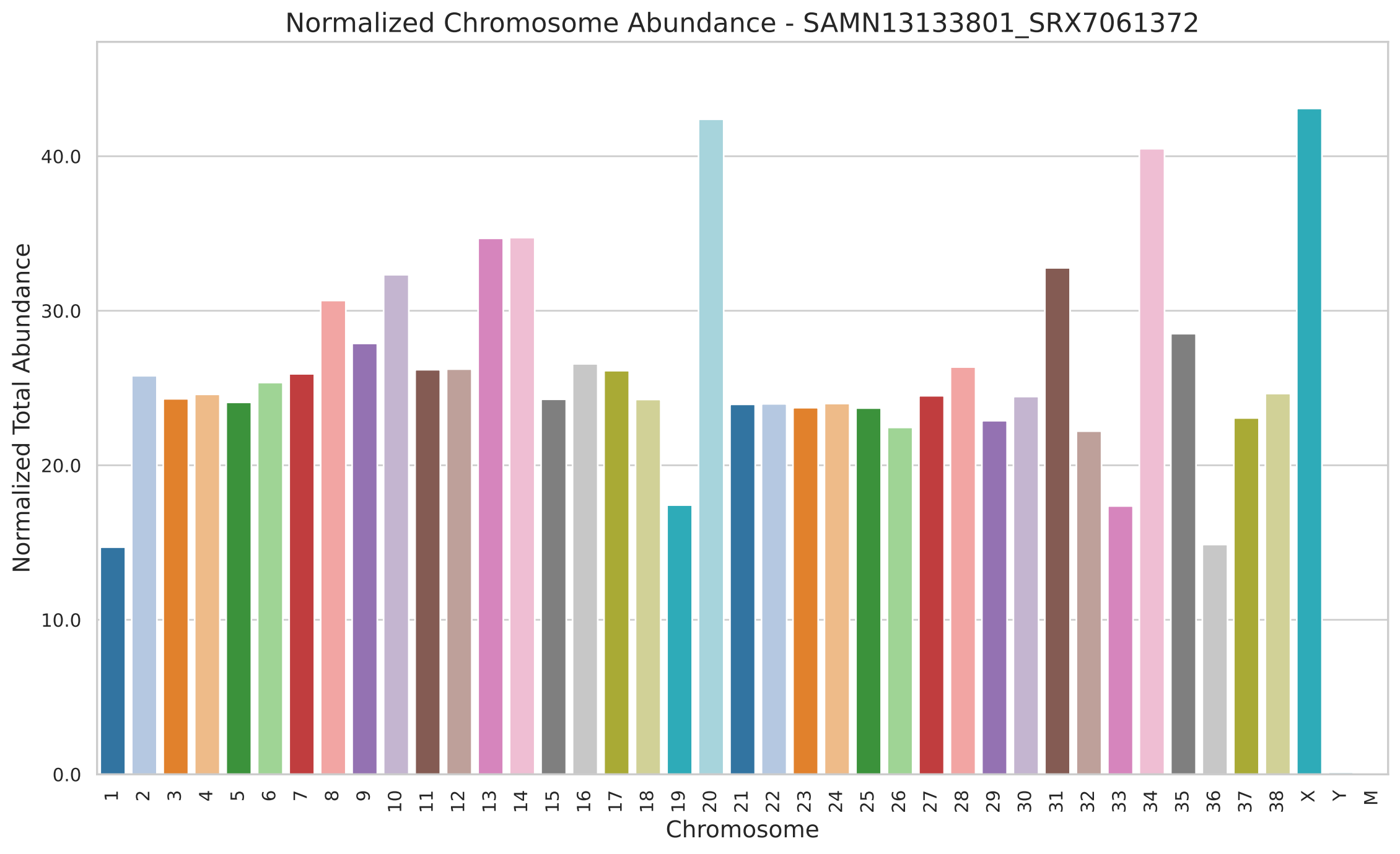

Normalized Chromosome Abundance - SAMN20802085_SRX11807814
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
35.0
40.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

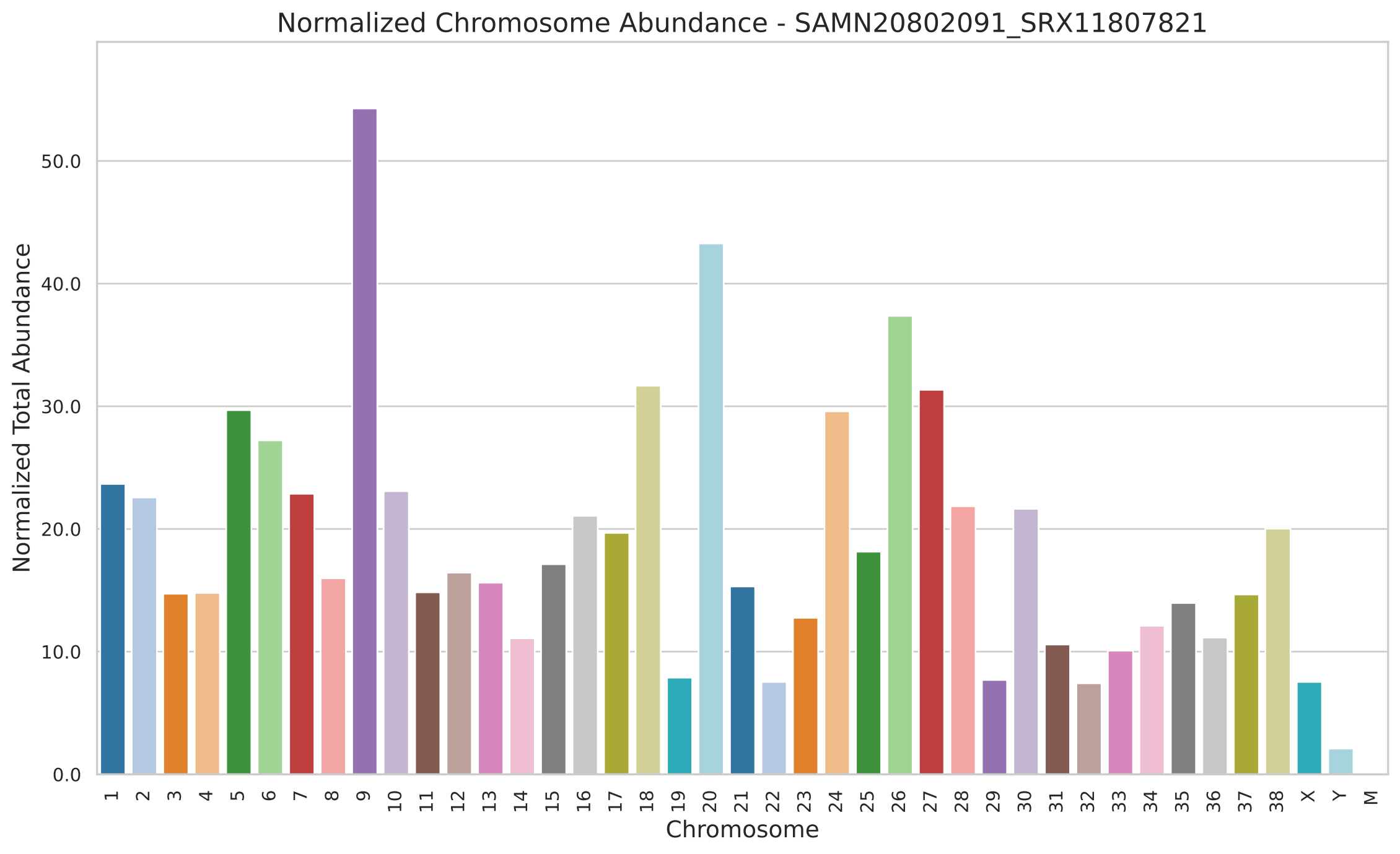

Normalized Chromosome Abundance - SAMN13133817_SRX7061281
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

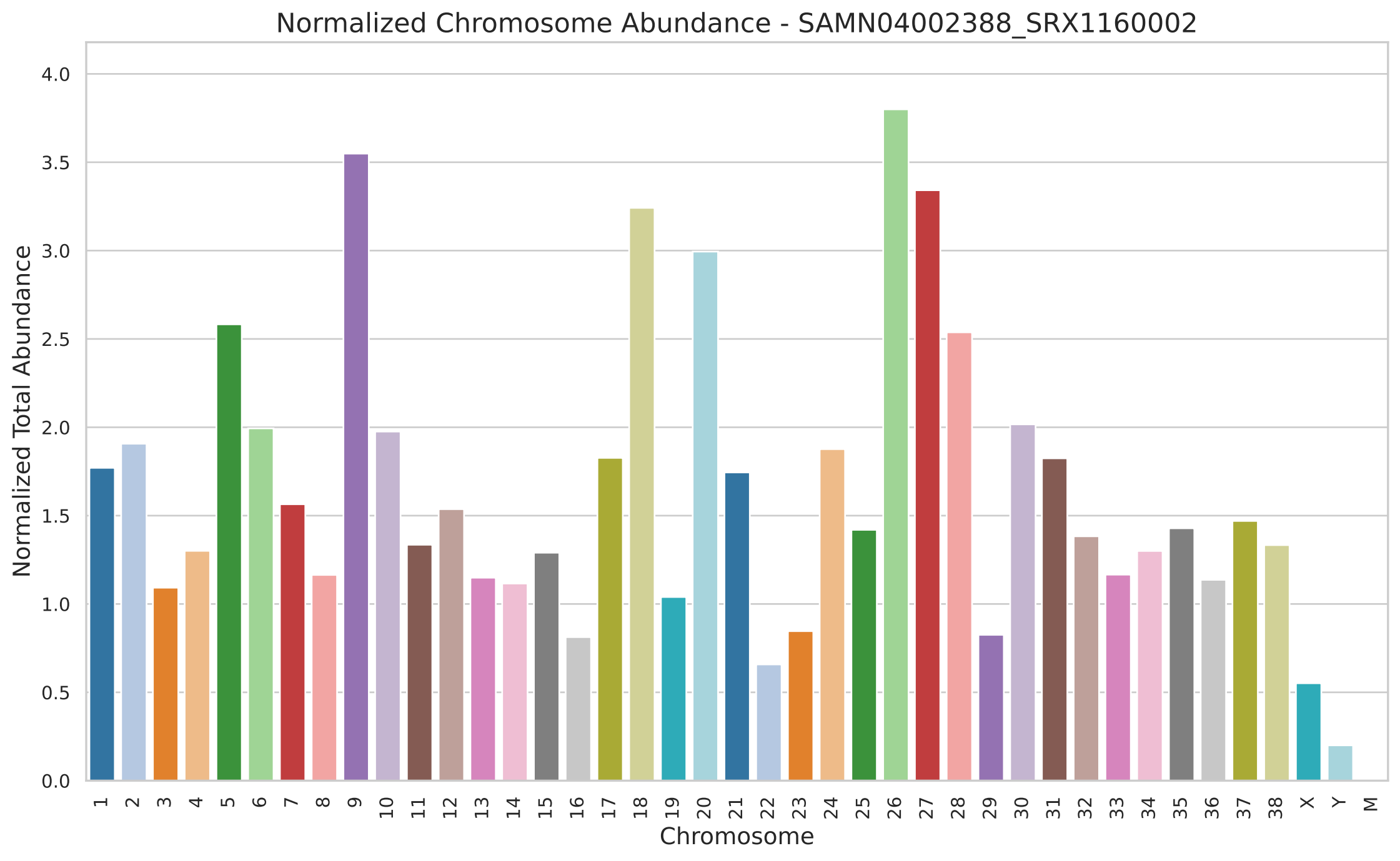

Normalized Chromosome Abundance - SAMN20802082_SRX11807811
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
35.0
40.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

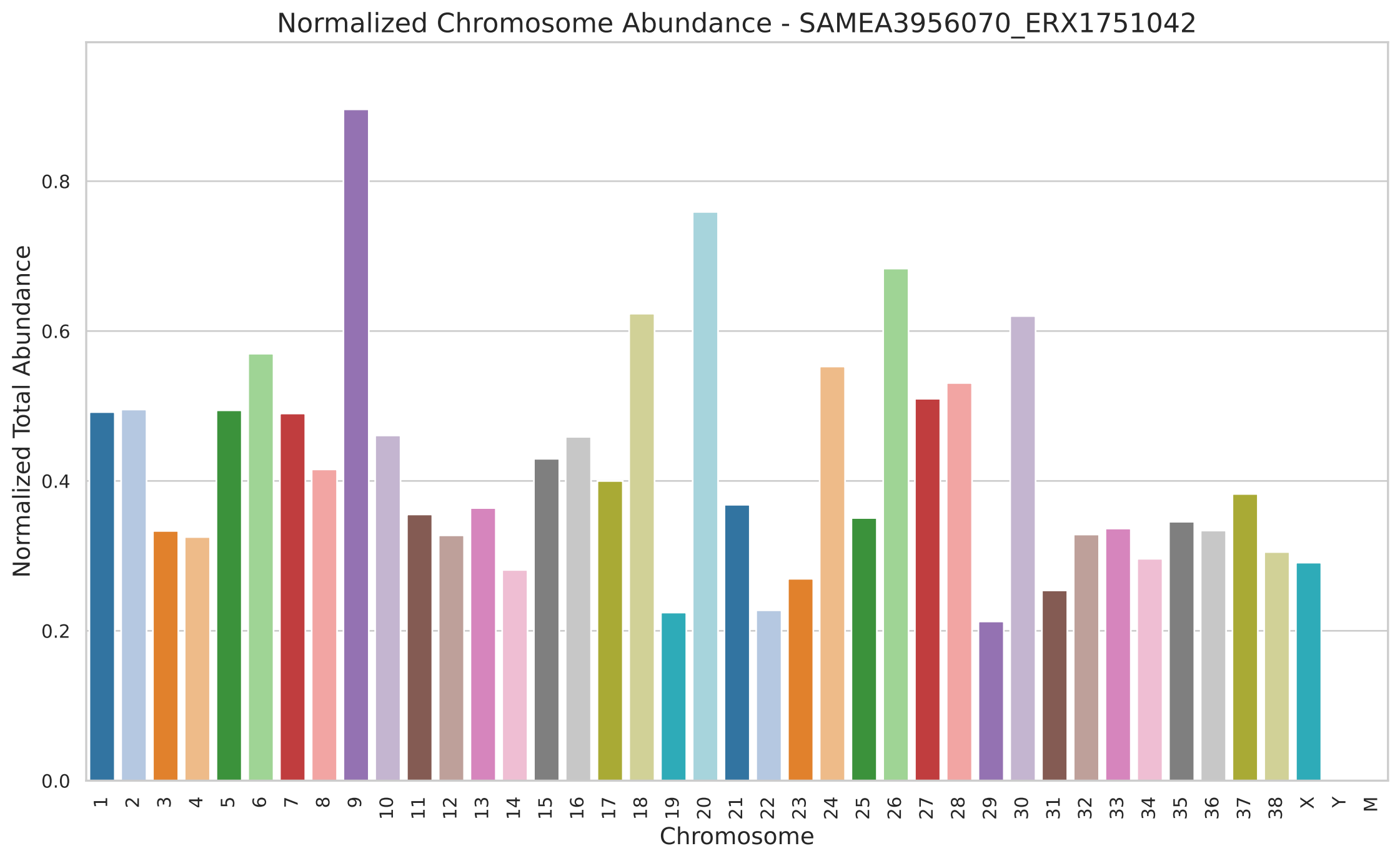

Normalized Chromosome Abundance - SAMN08874654_SRX11760801
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

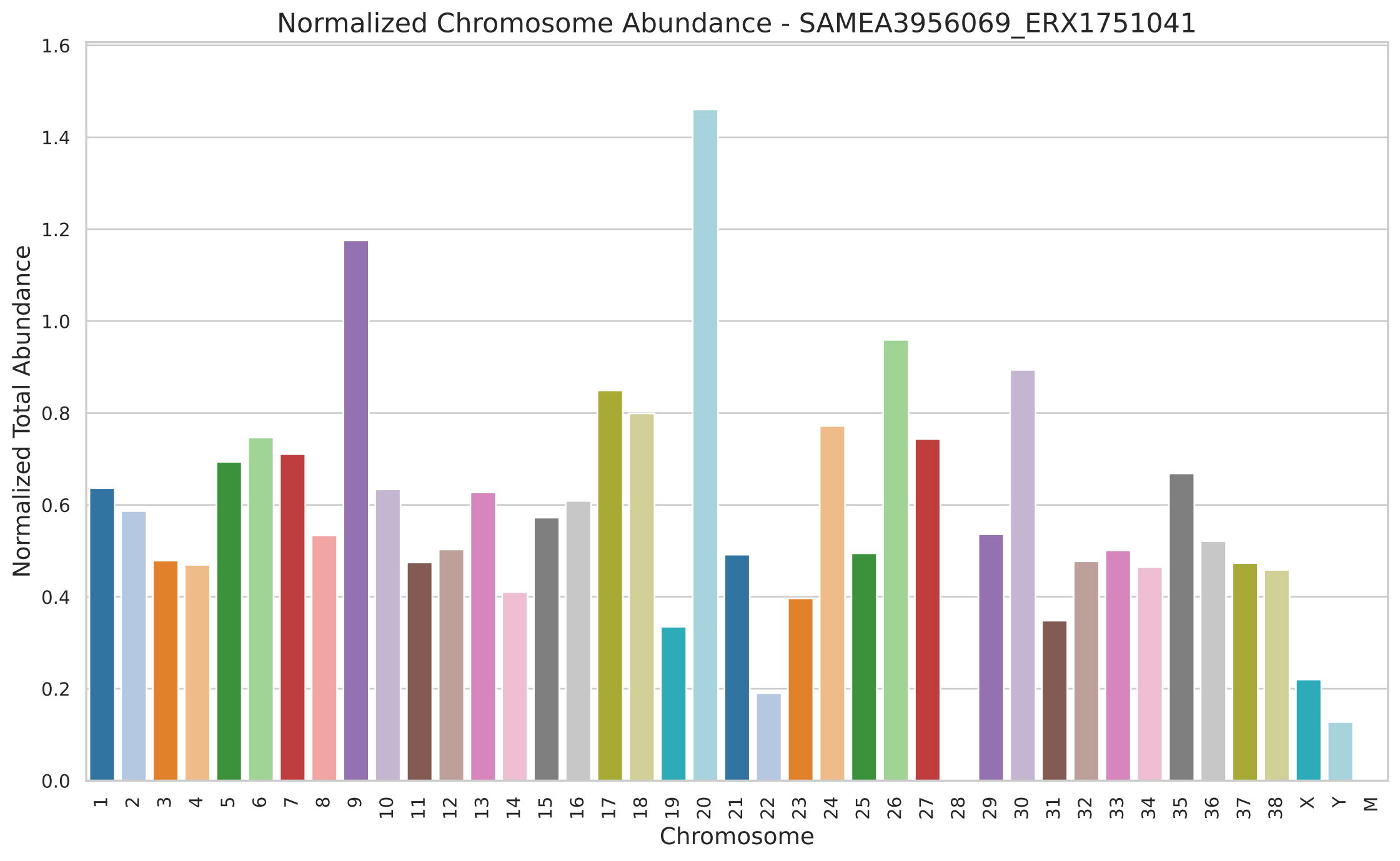

Normalized Chromosome Abundance - SAMEA3956068_ERX1751040
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

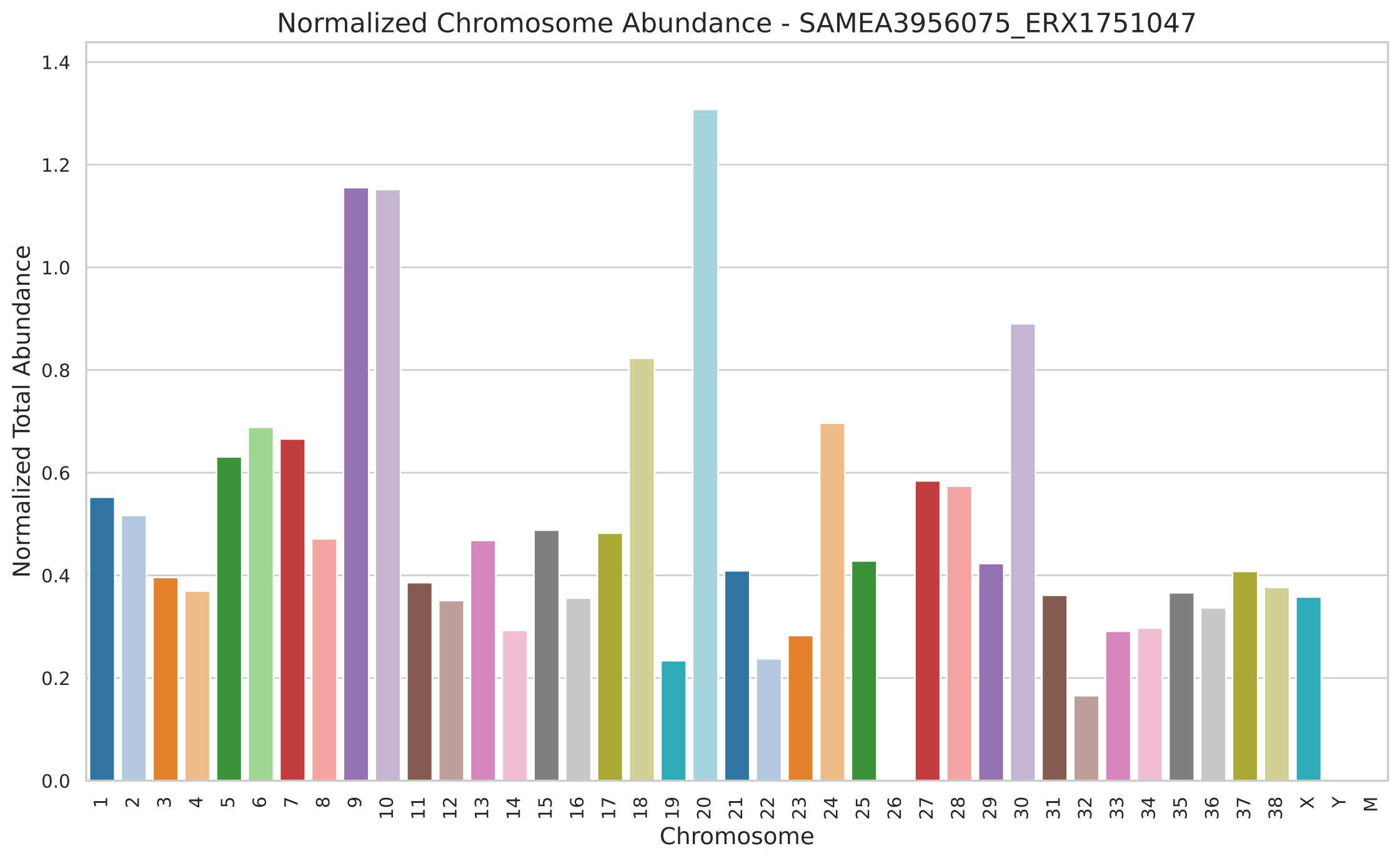

Normalized Chromosome Abundance - SAMN13133801_SRX7061372
Normalized Total Abundance
0.0
10.0
20.0
30.0
40.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

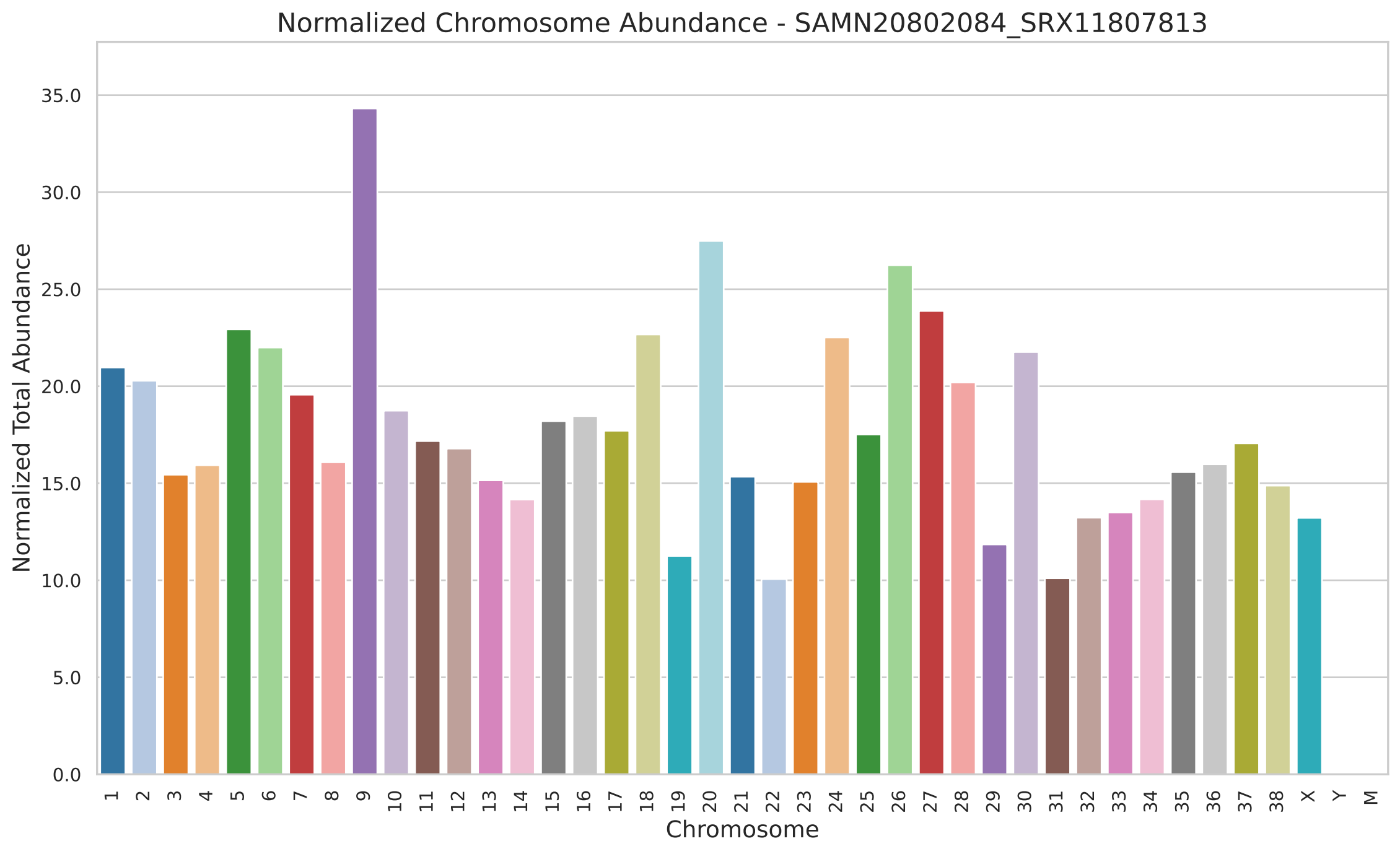

Normalized Chromosome Abundance - SAMN20802091_SRX11807821
Normalized Total Abundance
0.0
10.0
20.0
30.0
40.0
50.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

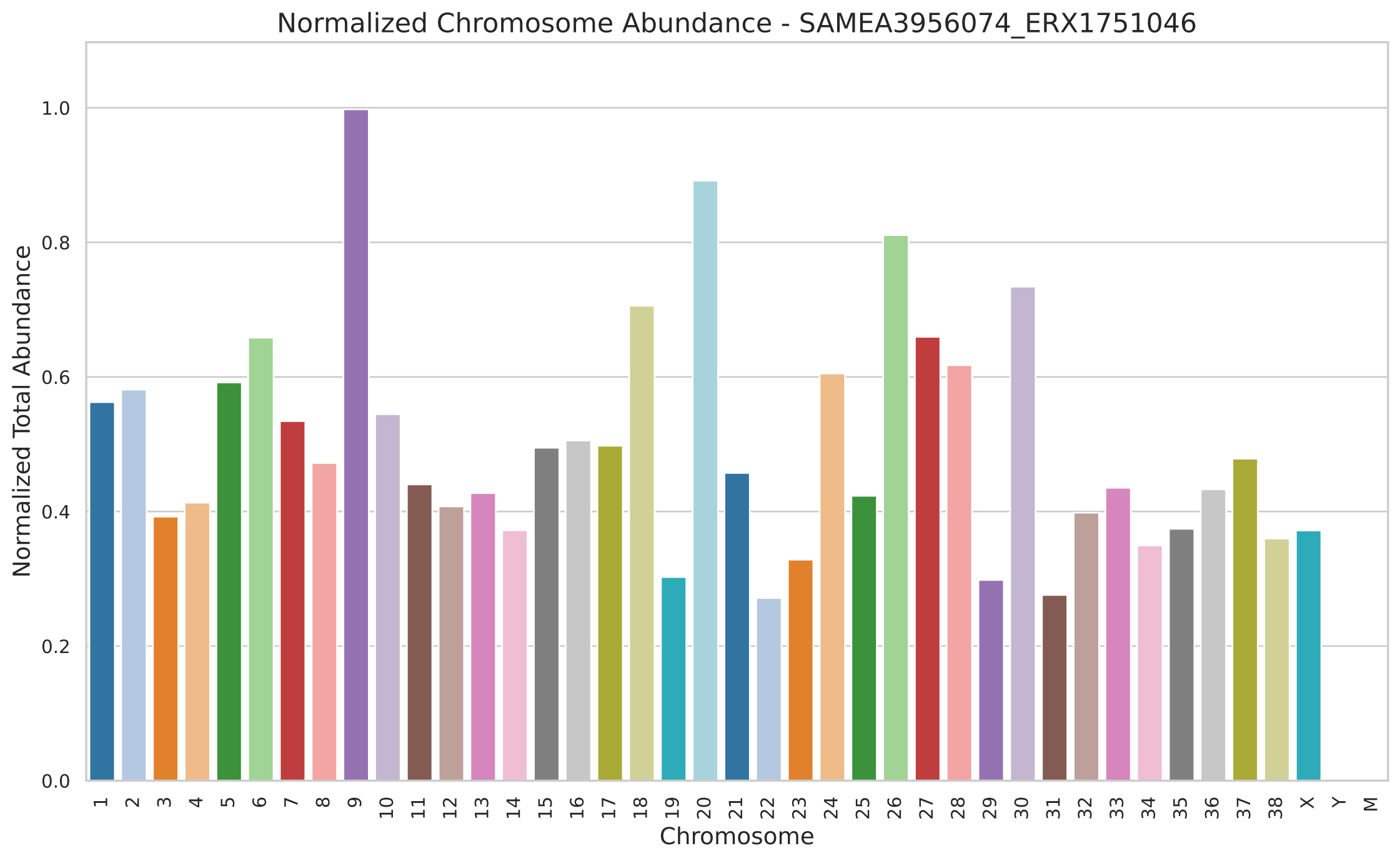

Normalized Chromosome Abundance - SAMN04002388_SRX1160002
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

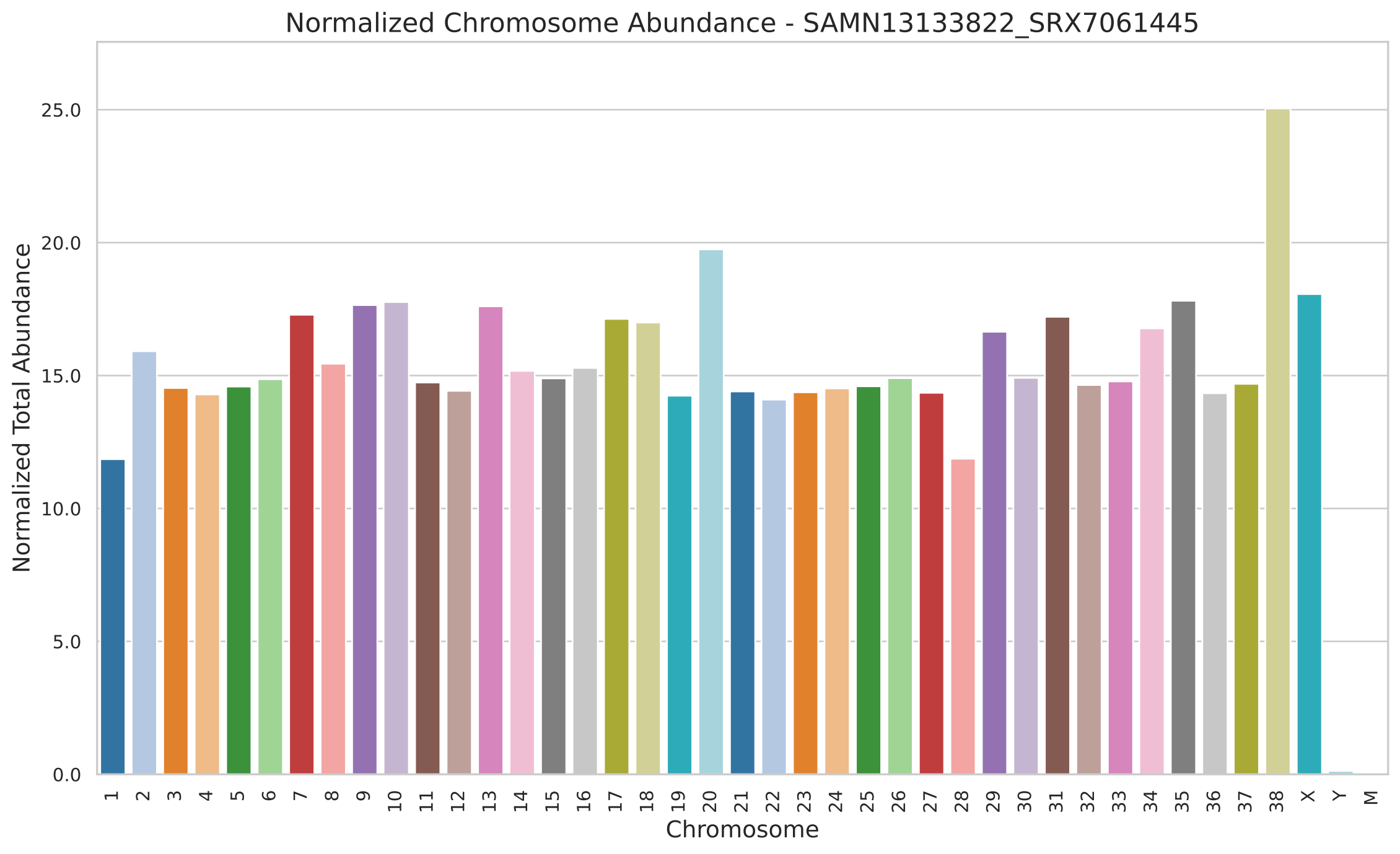

Normalized Chromosome Abundance - SAMEA3956070_ERX1751042
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

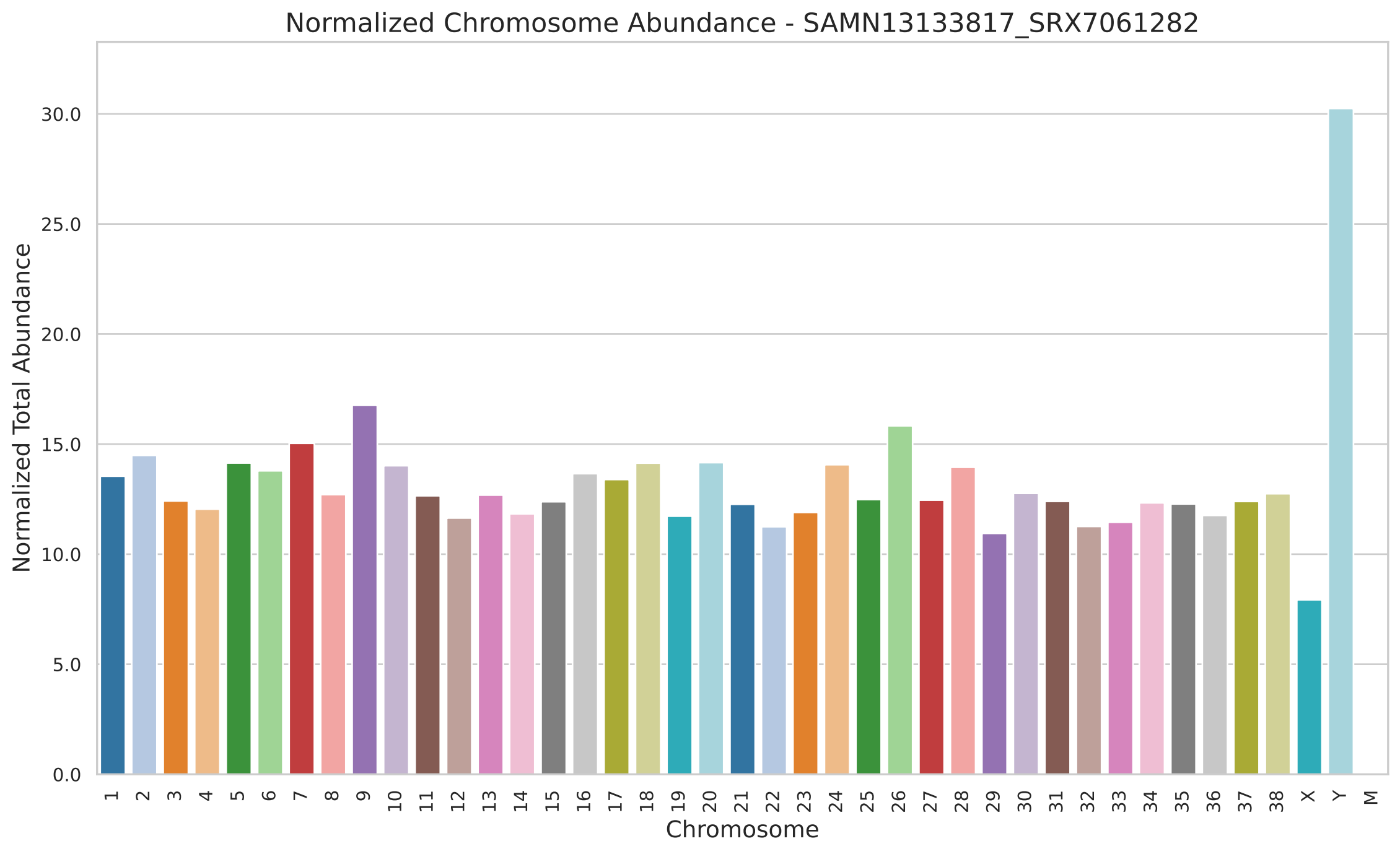

Normalized Chromosome Abundance - SAMEA3956069_ERX1751041
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

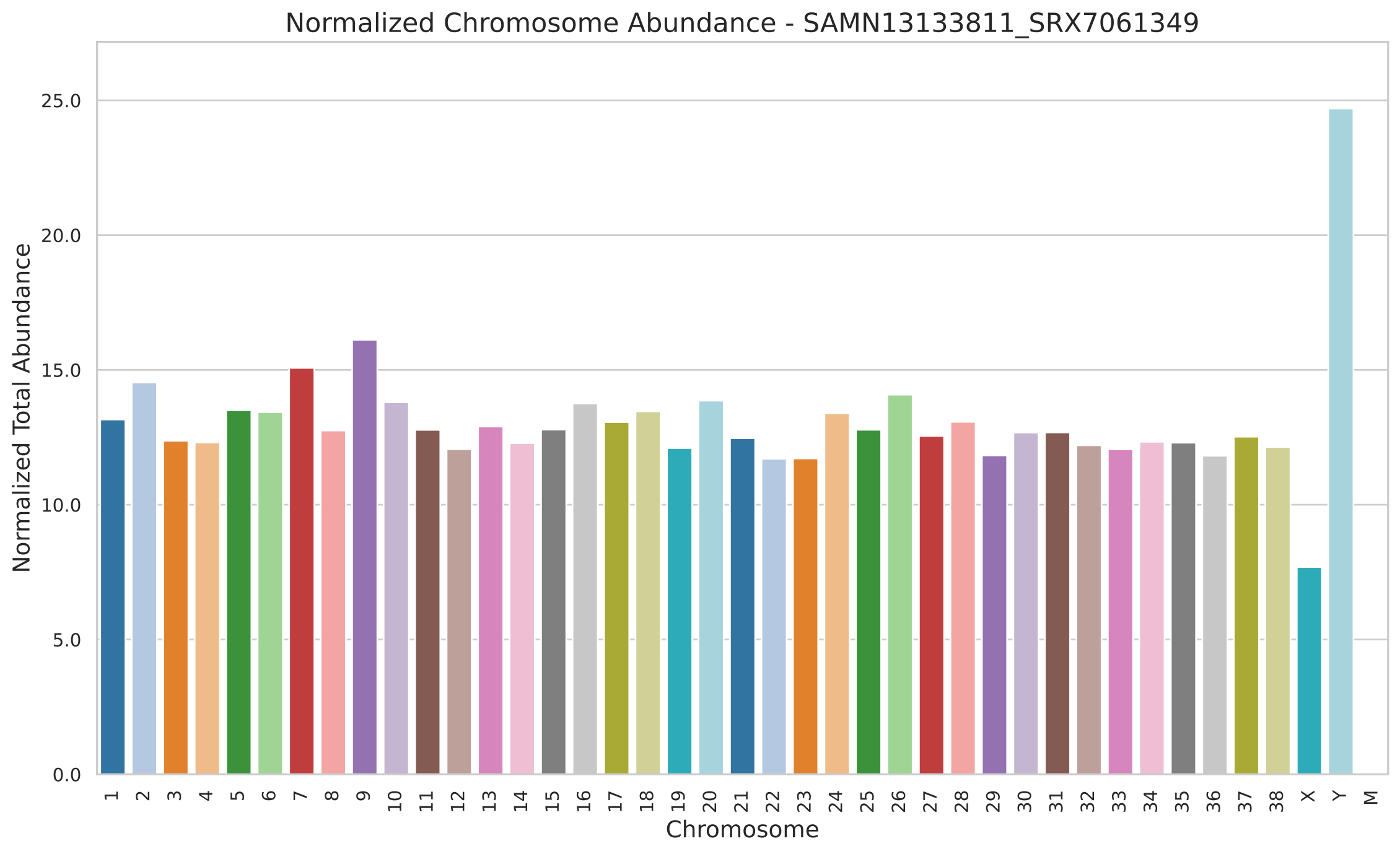

Normalized Chromosome Abundance - SAMEA3956075_ERX1751047
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

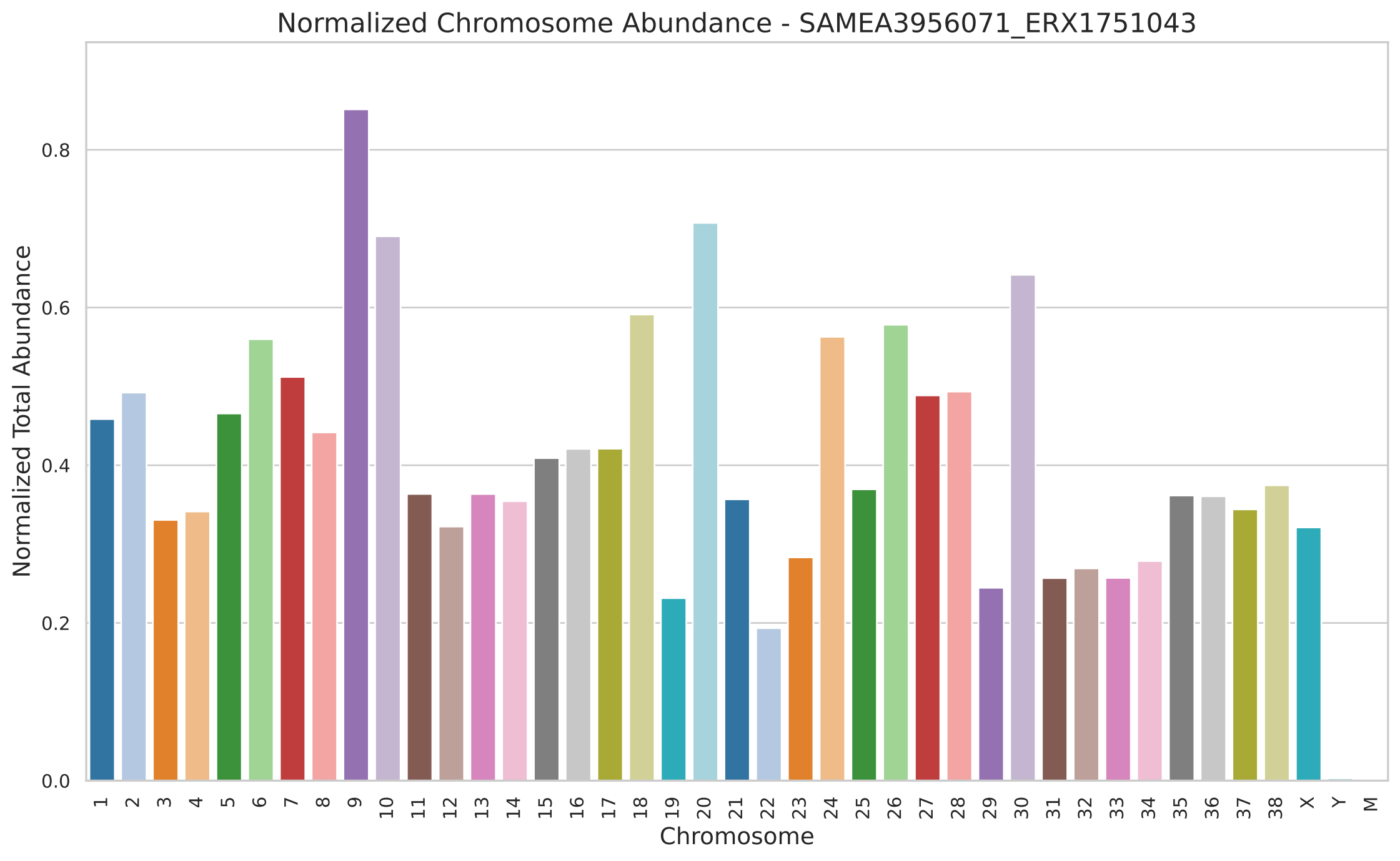

Normalized Chromosome Abundance - SAMN20802084_SRX11807813
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
35.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

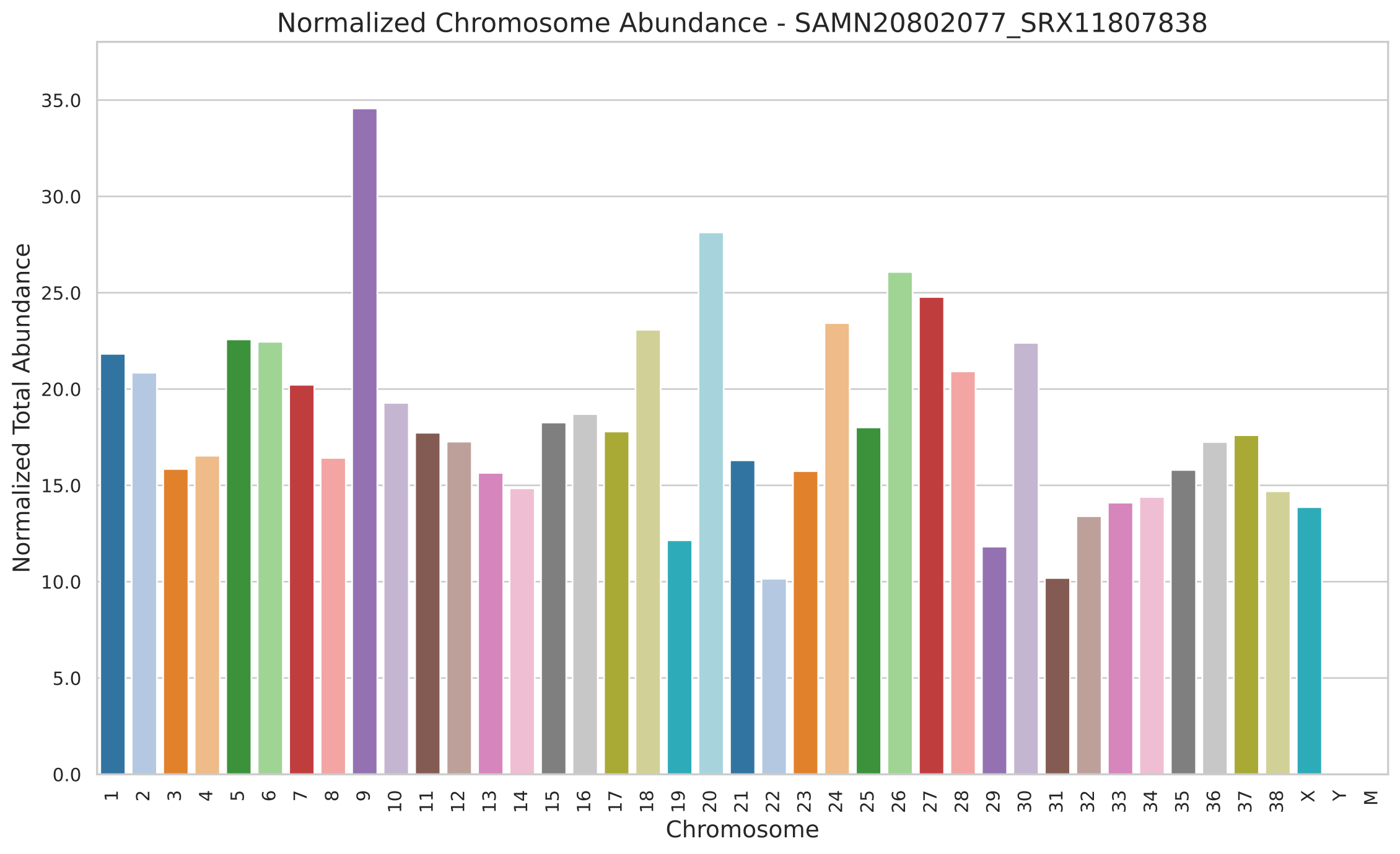

Normalized Chromosome Abundance - SAMEA3956074_ERX1751046
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

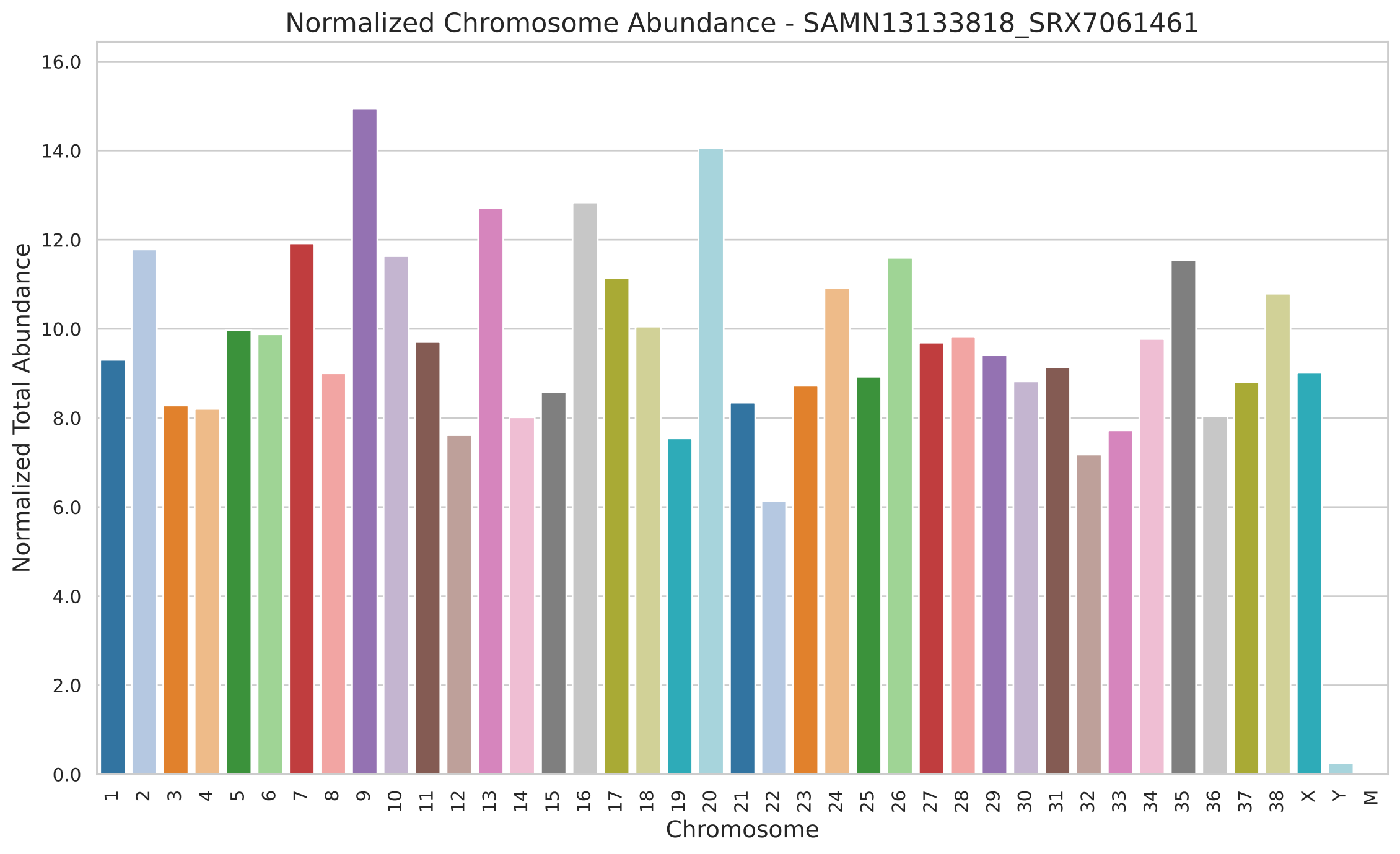

Normalized Chromosome Abundance - SAMN13133822_SRX7061445
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

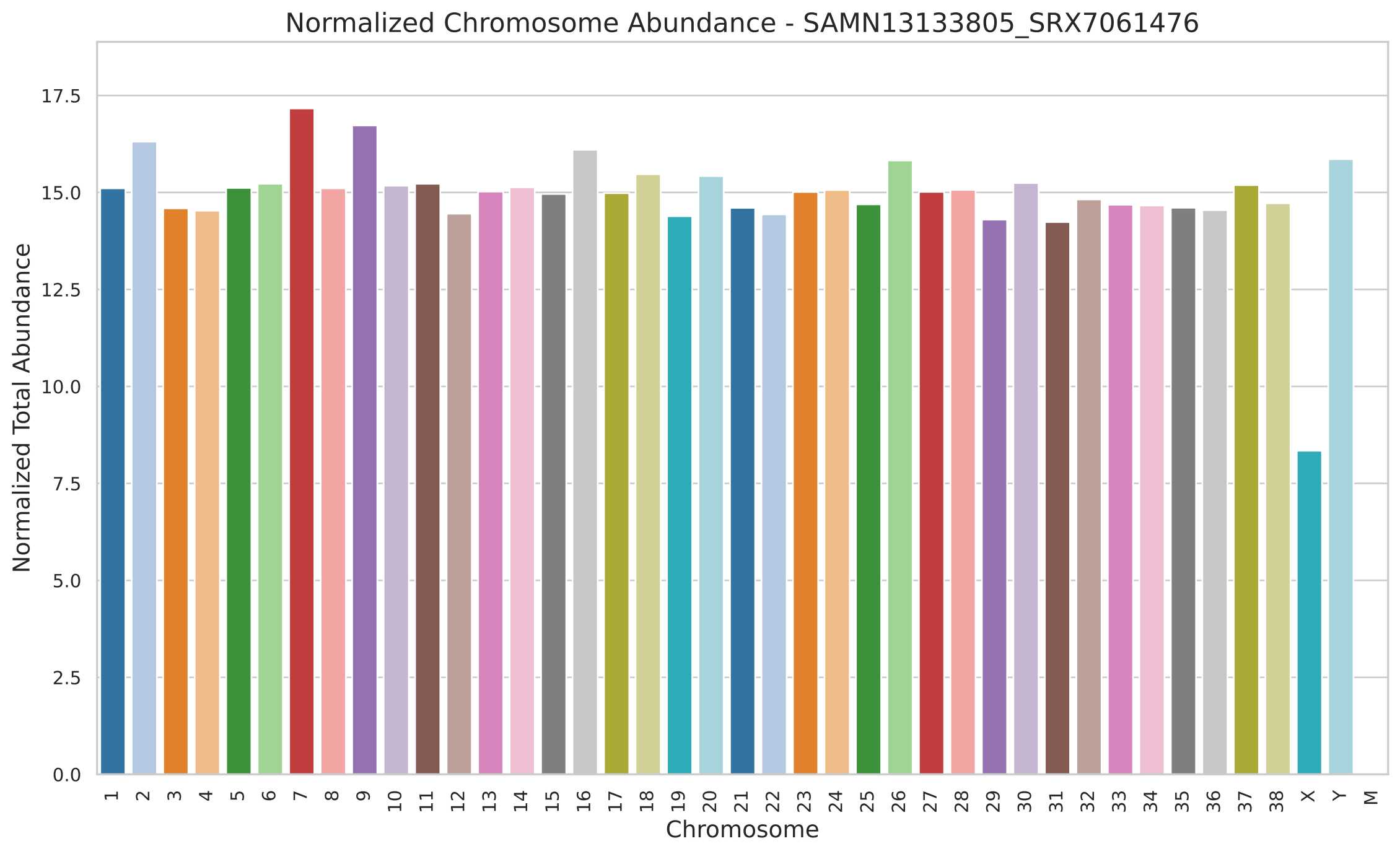

Normalized Chromosome Abundance - SAMN13133817_SRX7061282
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

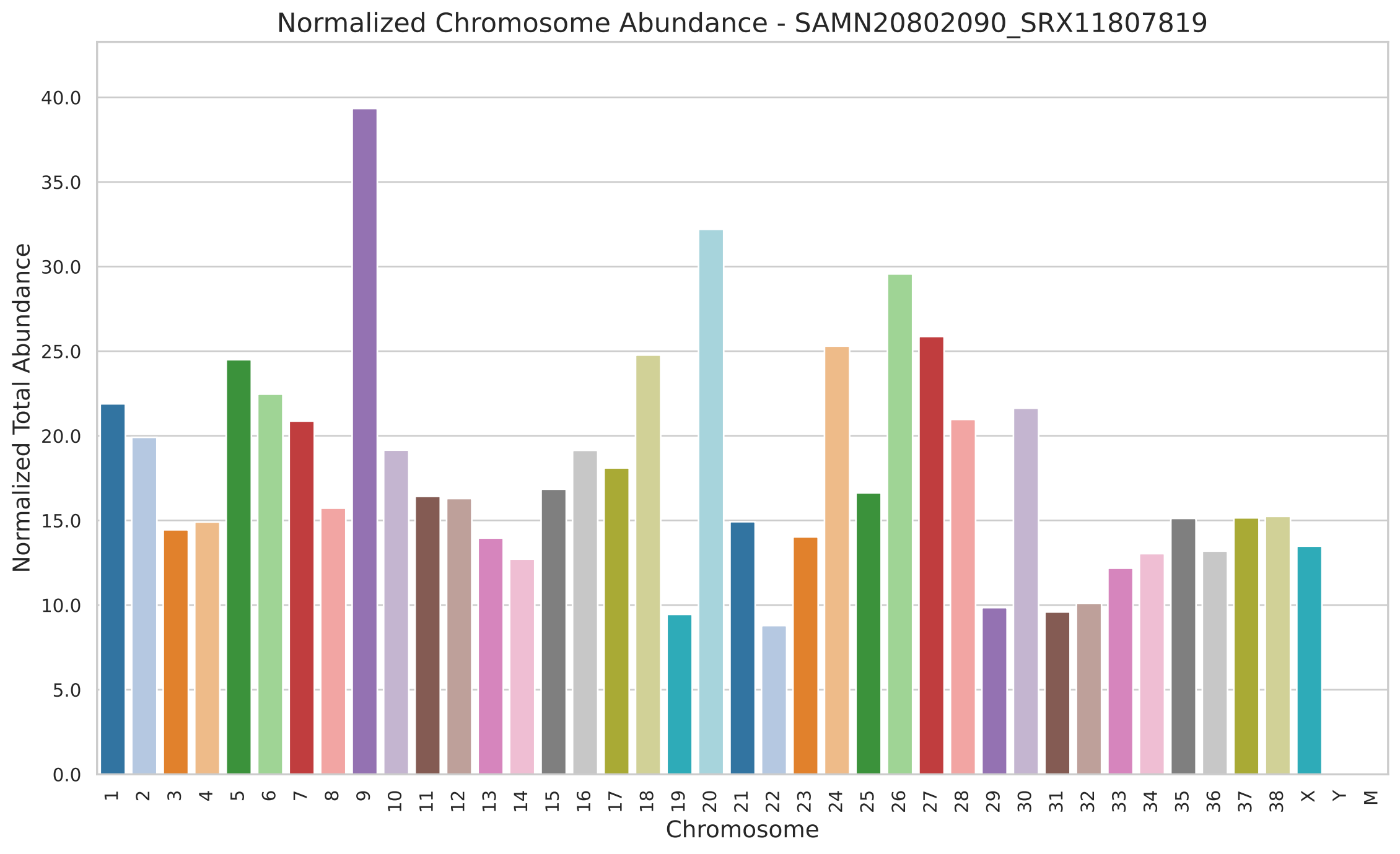

Normalized Chromosome Abundance - SAMN13133811_SRX7061349
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

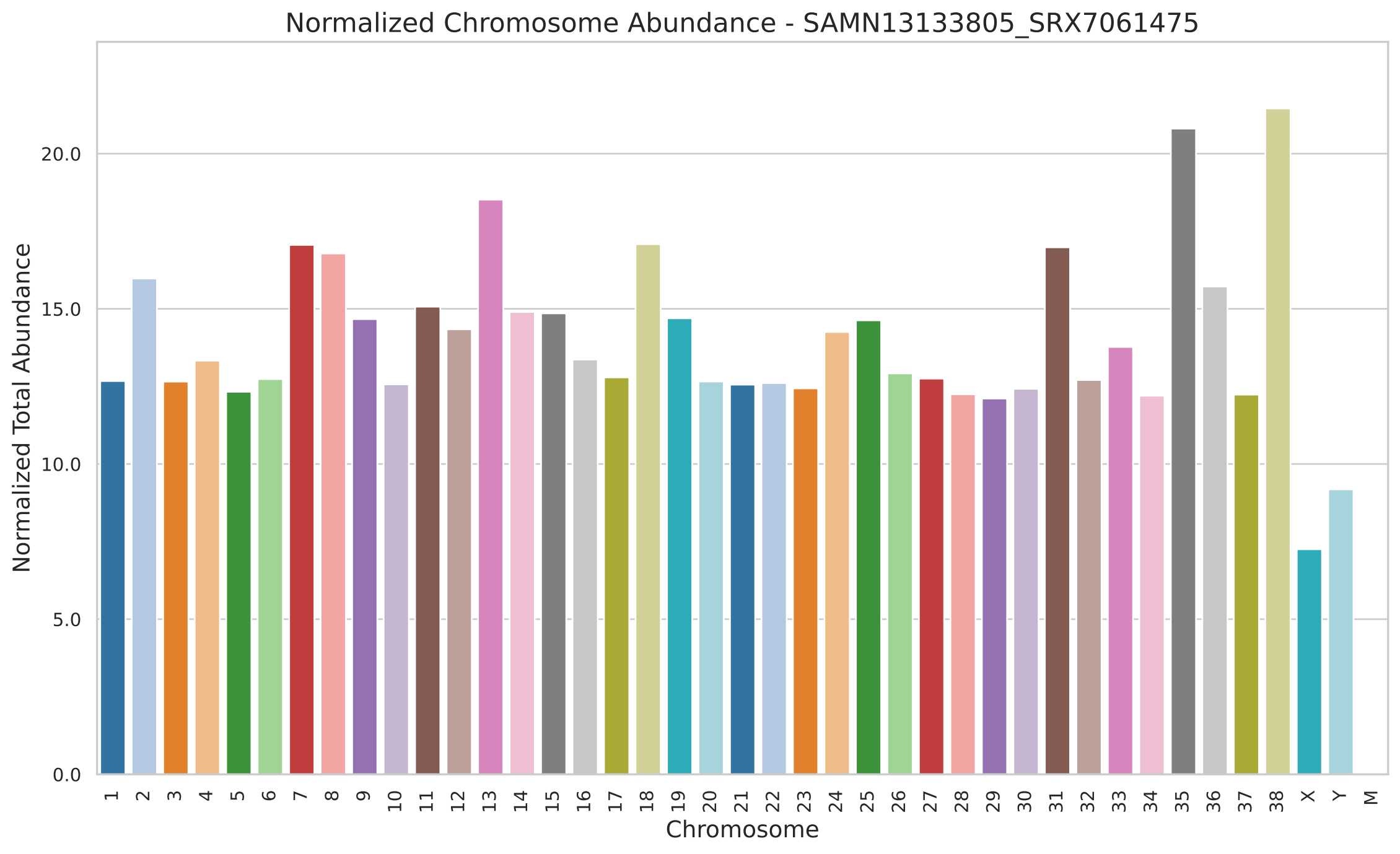

Normalized Chromosome Abundance - SAMEA3956071_ERX1751043
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

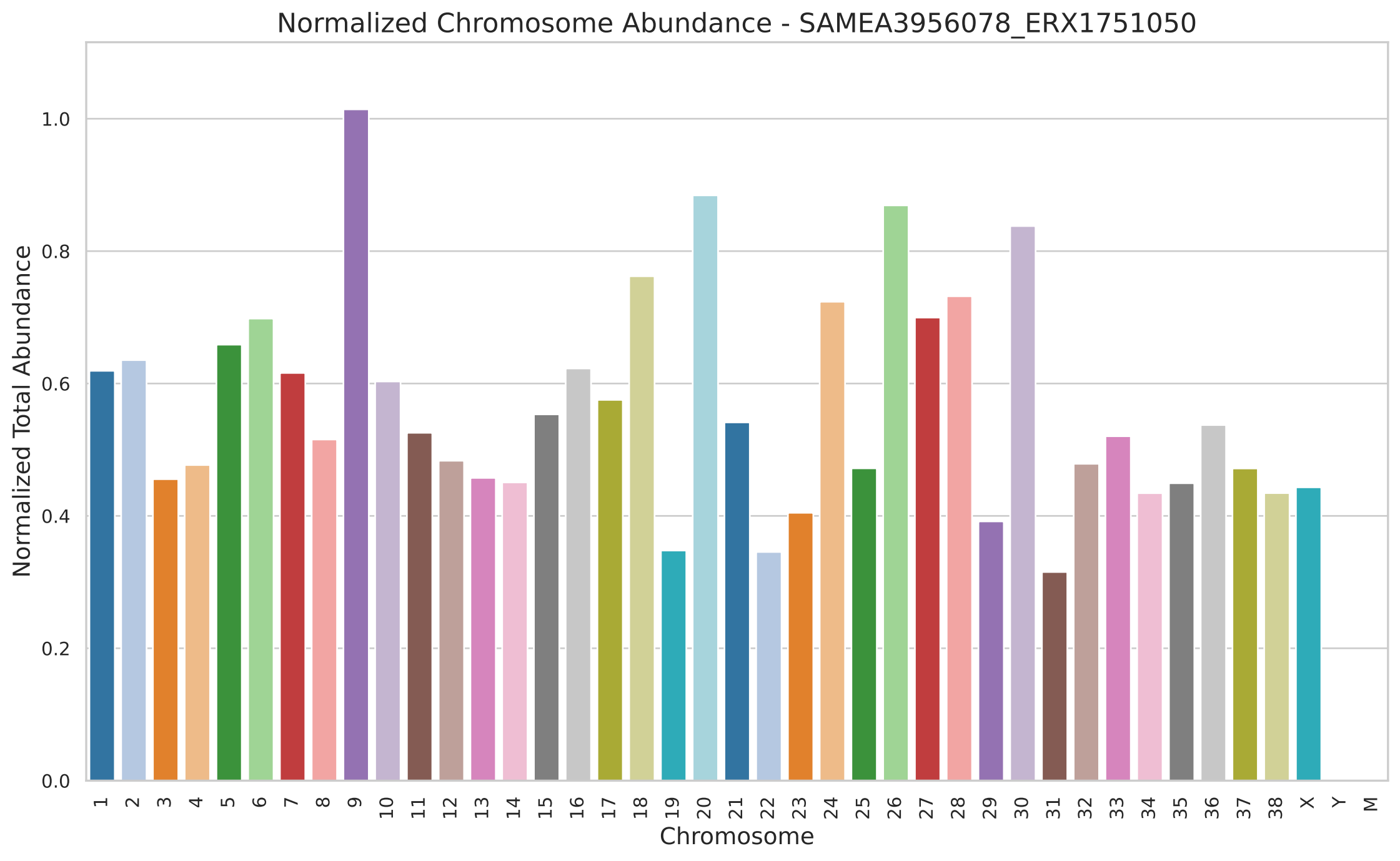

Normalized Chromosome Abundance - SAMN20802077_SRX11807838
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
35.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

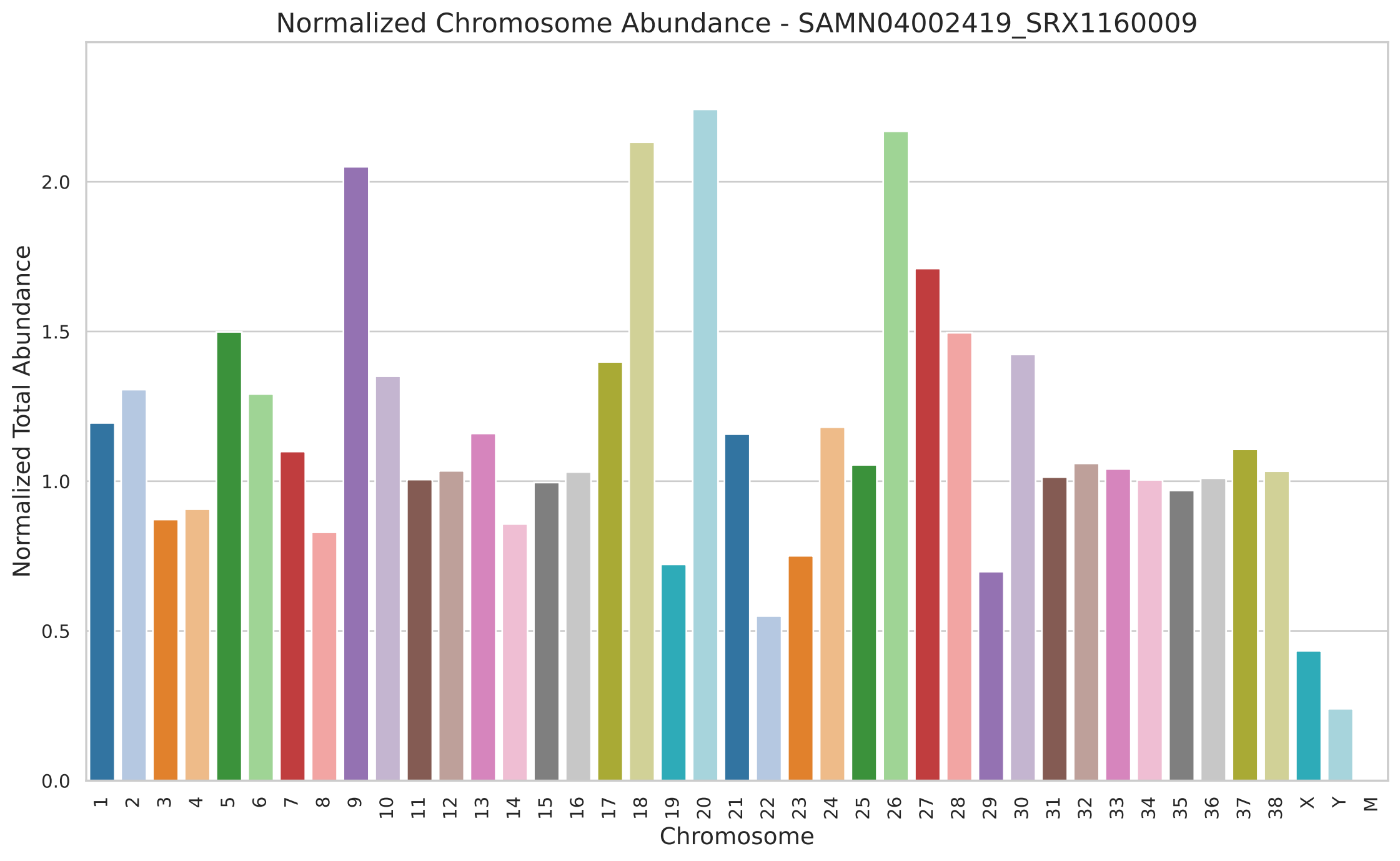

Normalized Chromosome Abundance - SAMN13133818_SRX7061461
Normalized Total Abundance
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

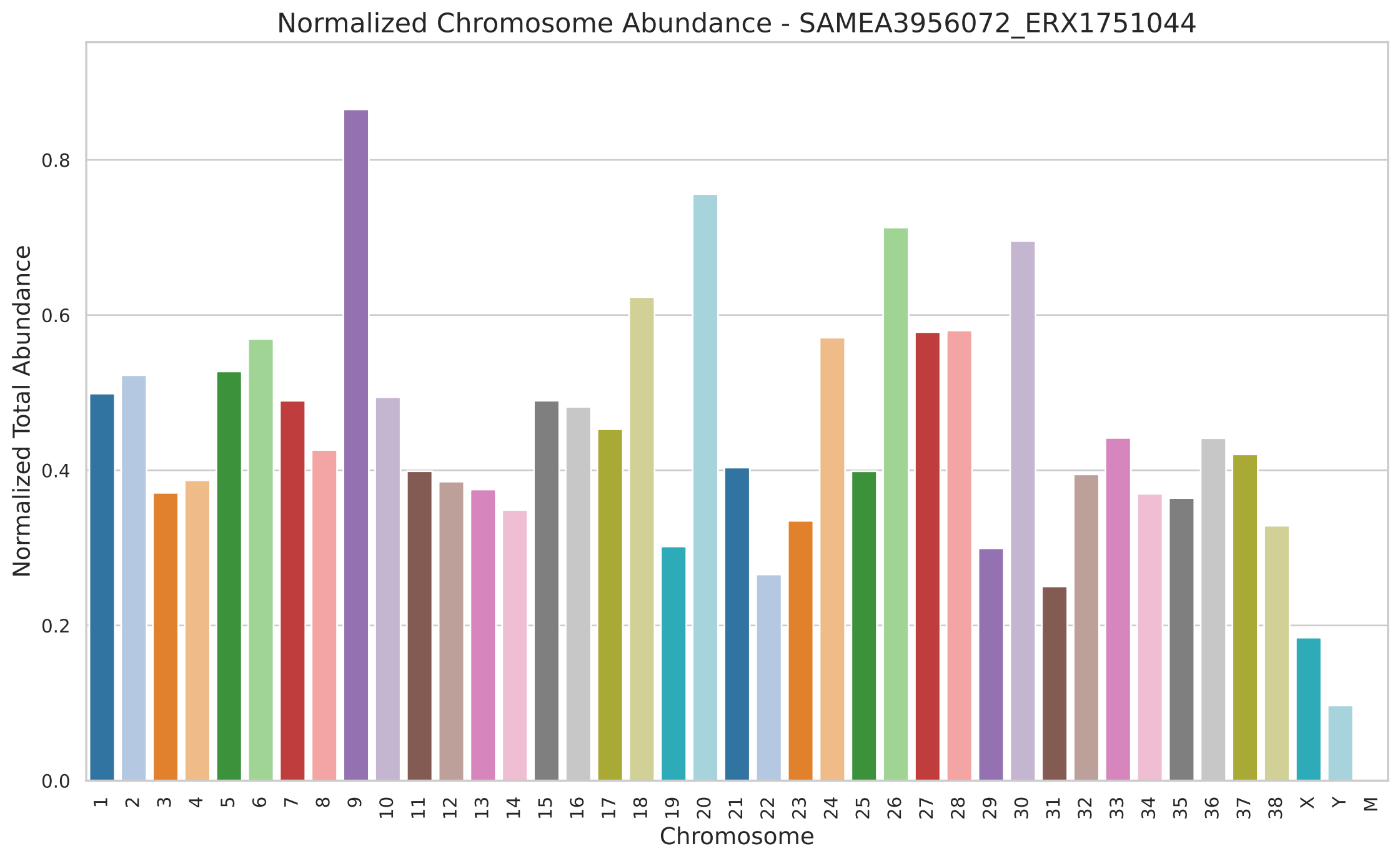

Normalized Chromosome Abundance - SAMN13133805_SRX7061476
Normalized Total Abundance
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

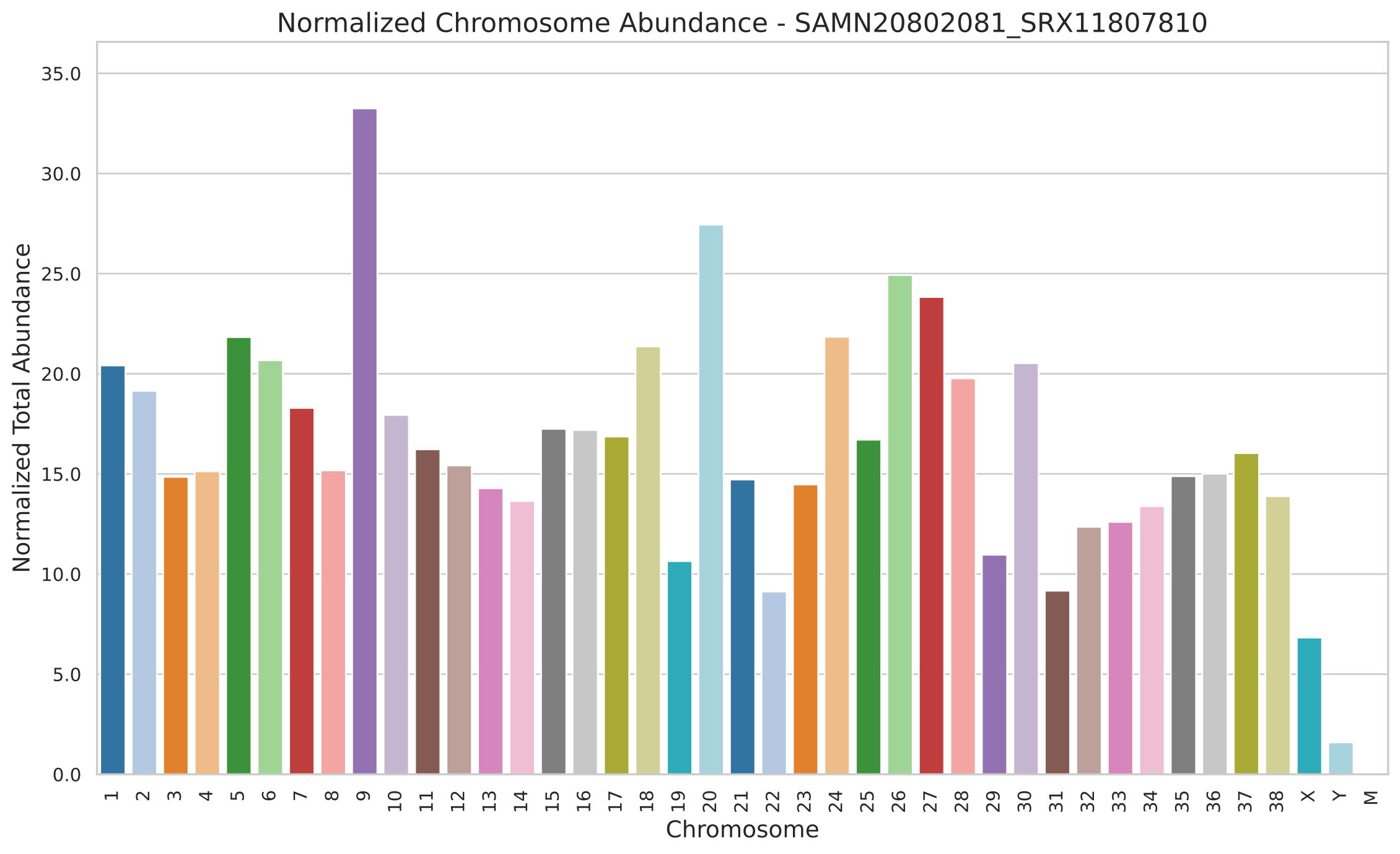

Normalized Chromosome Abundance - SAMN20802090_SRX11807819
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
35.0
40.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

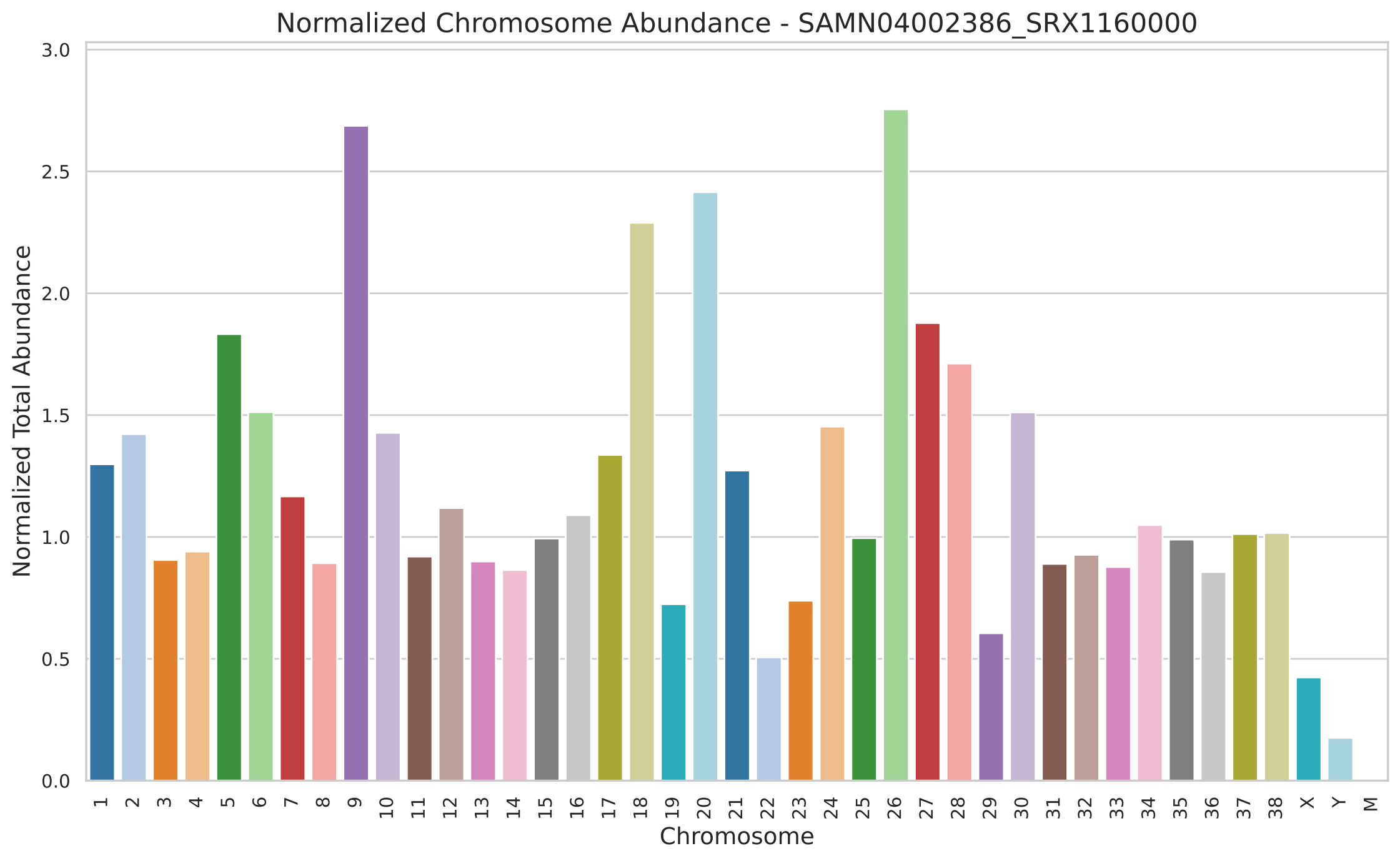

Normalized Chromosome Abundance - SAMN13133805_SRX7061475
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

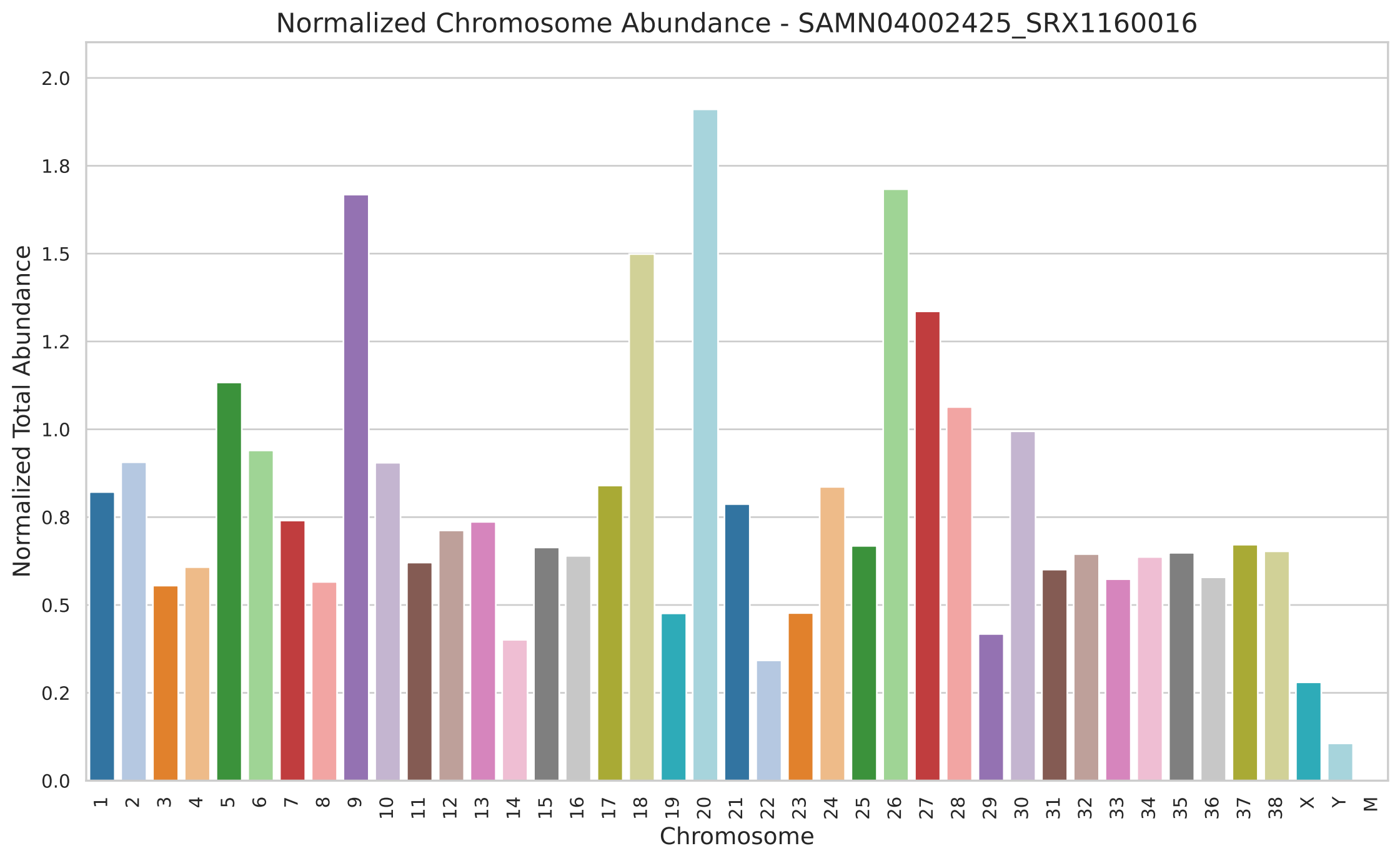

Normalized Chromosome Abundance - SAMEA3956078_ERX1751050
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

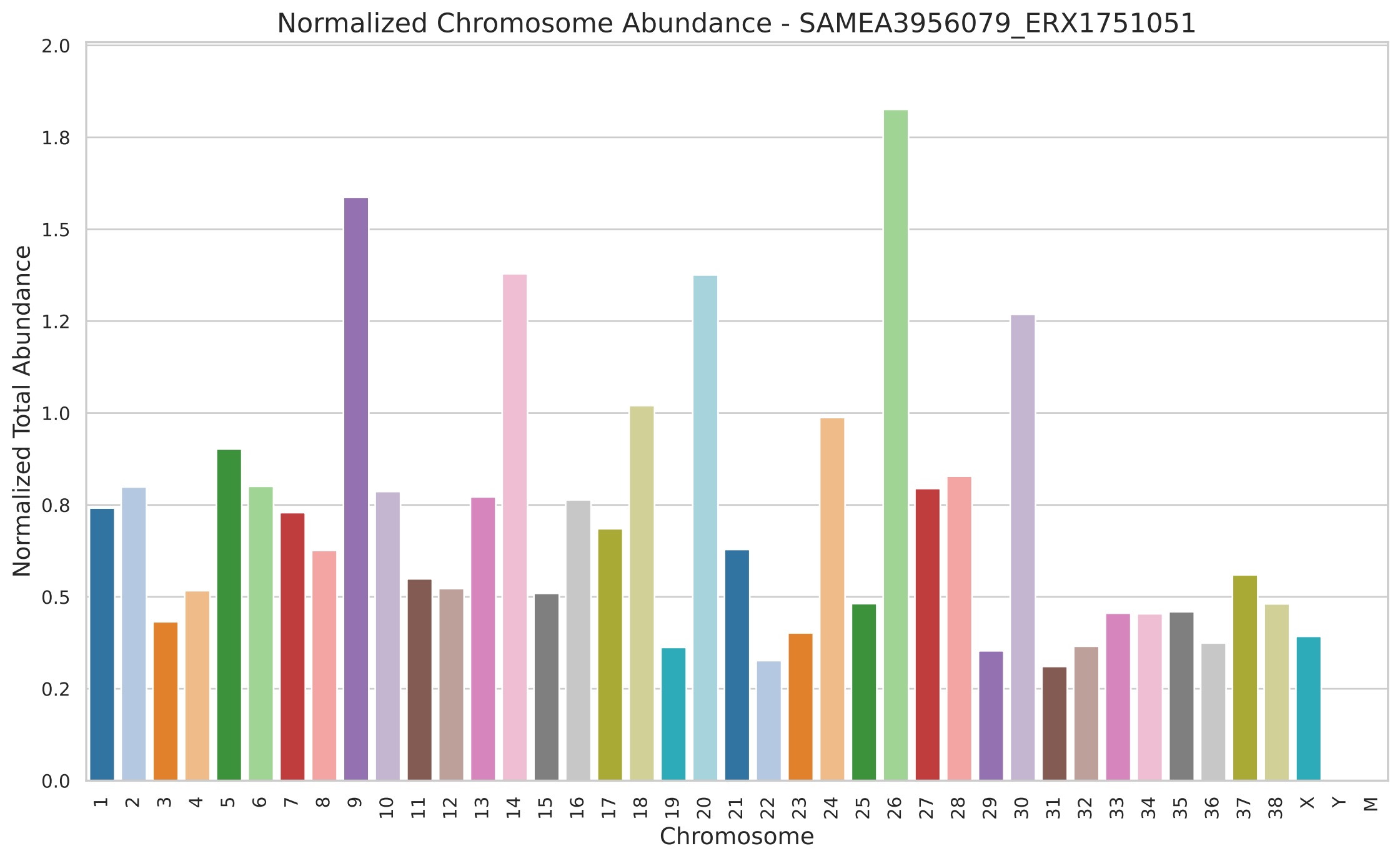

Normalized Chromosome Abundance - SAMN04002419_SRX1160009
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

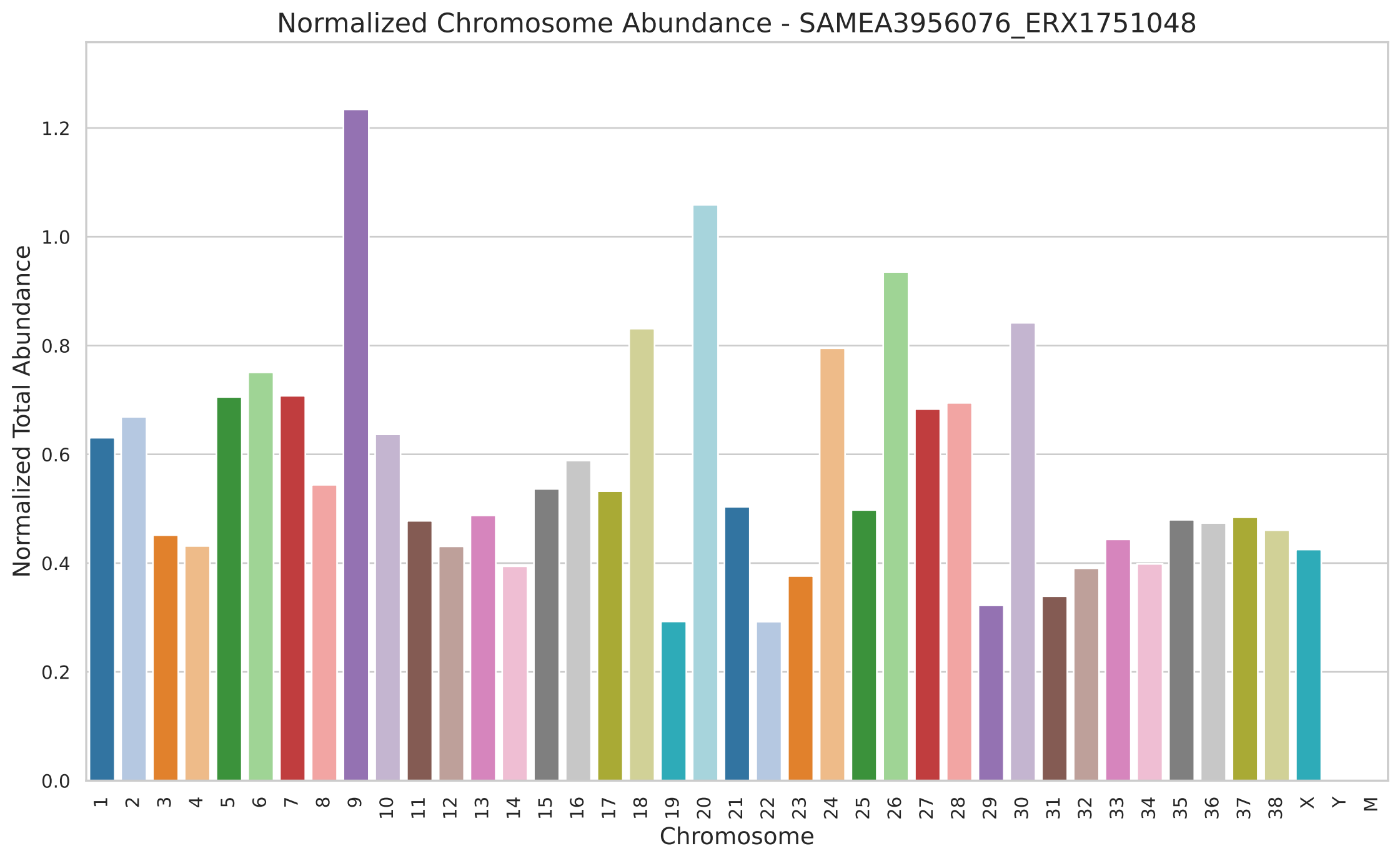

Normalized Chromosome Abundance - SAMEA3956072_ERX1751044
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

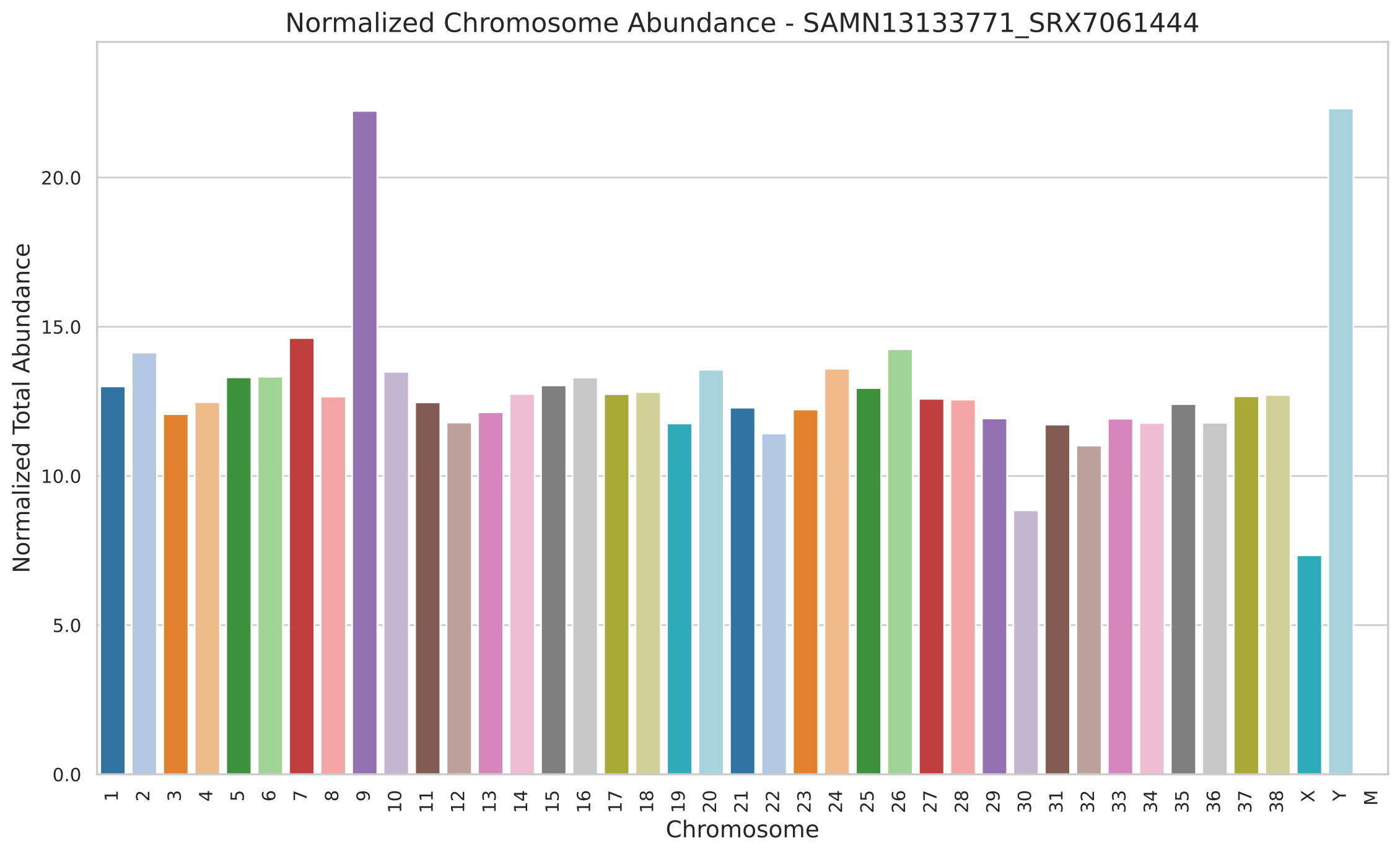

Normalized Chromosome Abundance - SAMN20802081_SRX11807810
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
35.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

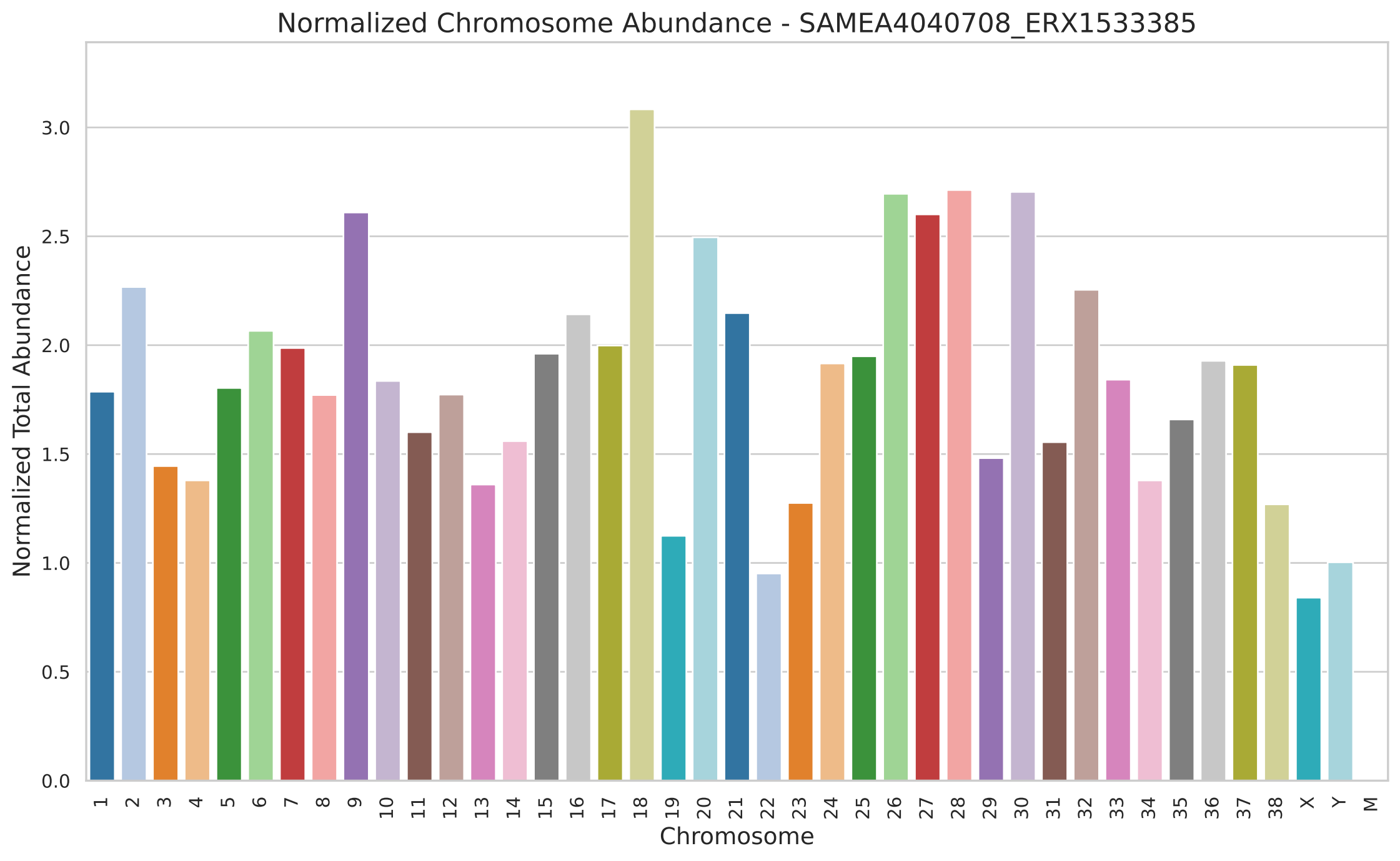

Normalized Chromosome Abundance - SAMN04002386_SRX1160000
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

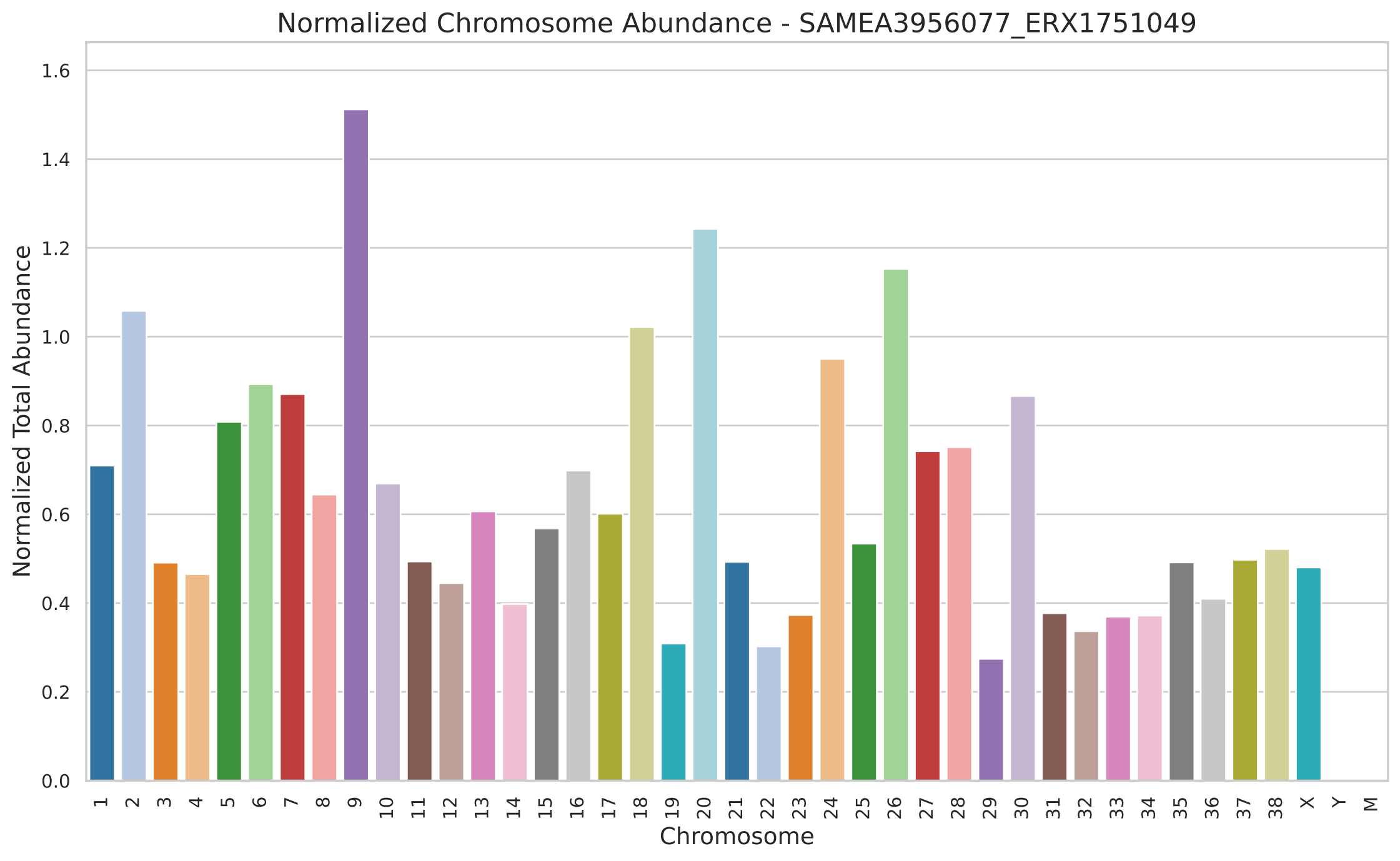

Normalized Chromosome Abundance - SAMN04002425_SRX1160016
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

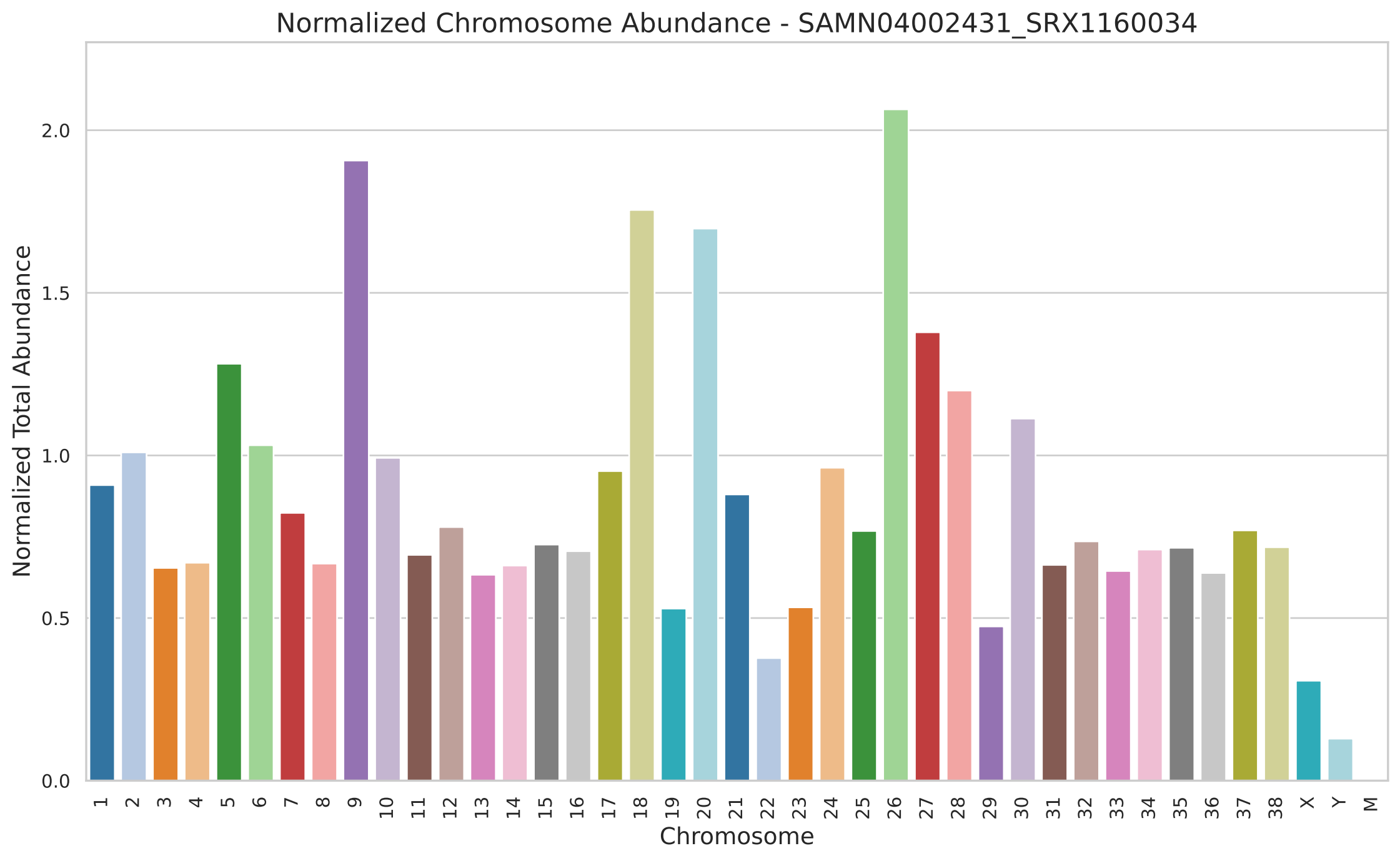

Normalized Chromosome Abundance - SAMEA3956079_ERX1751051
Normalized Total Abundance
2.0
1.8
1.5
1.2
1.0
0.8
0.5
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

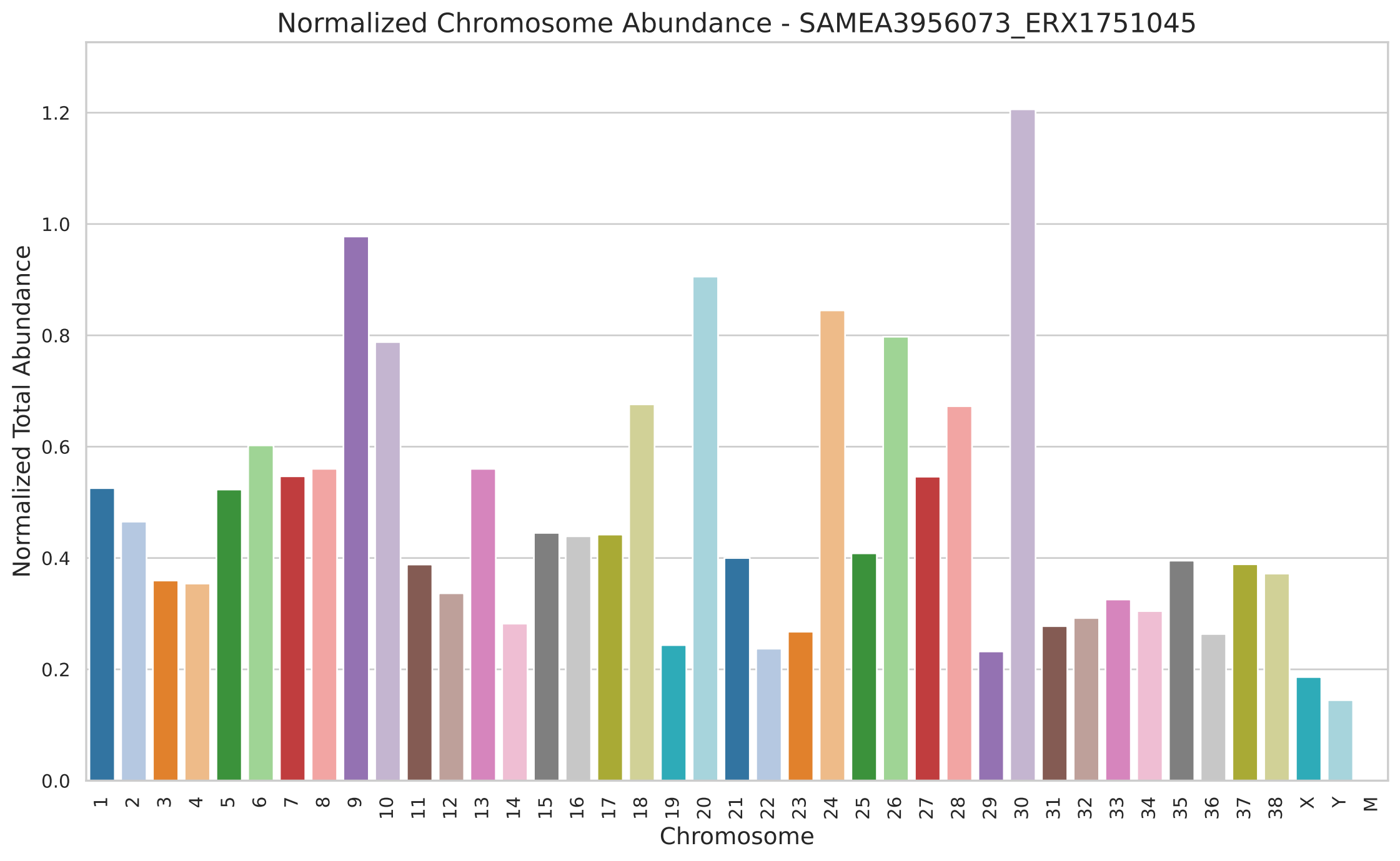

Normalized Chromosome Abundance - SAMEA3956076_ERX1751048
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

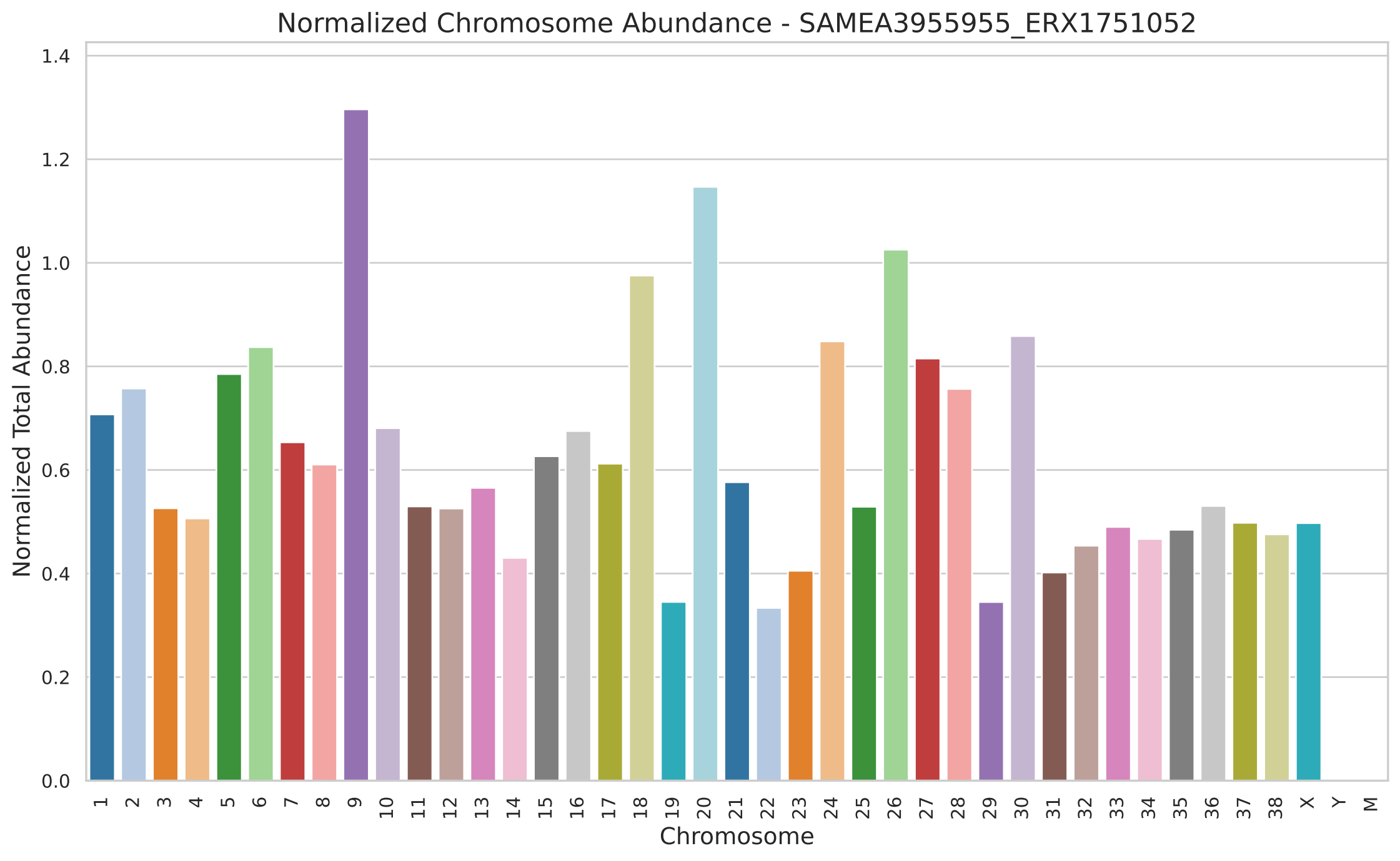

Normalized Chromosome Abundance - SAMN13133771_SRX7061444
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

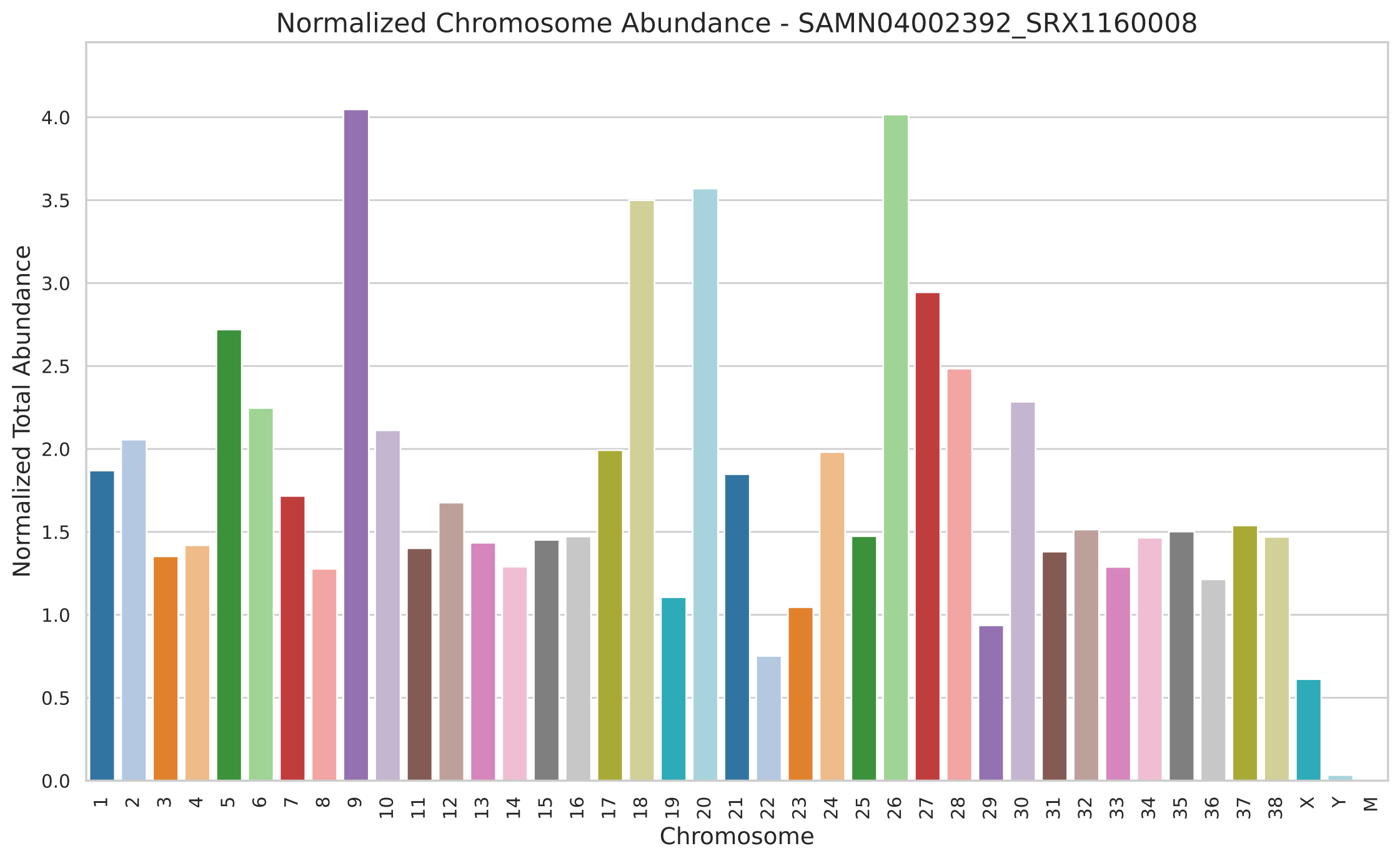

Normalized Chromosome Abundance - SAMEA4040708_ERX1533385
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

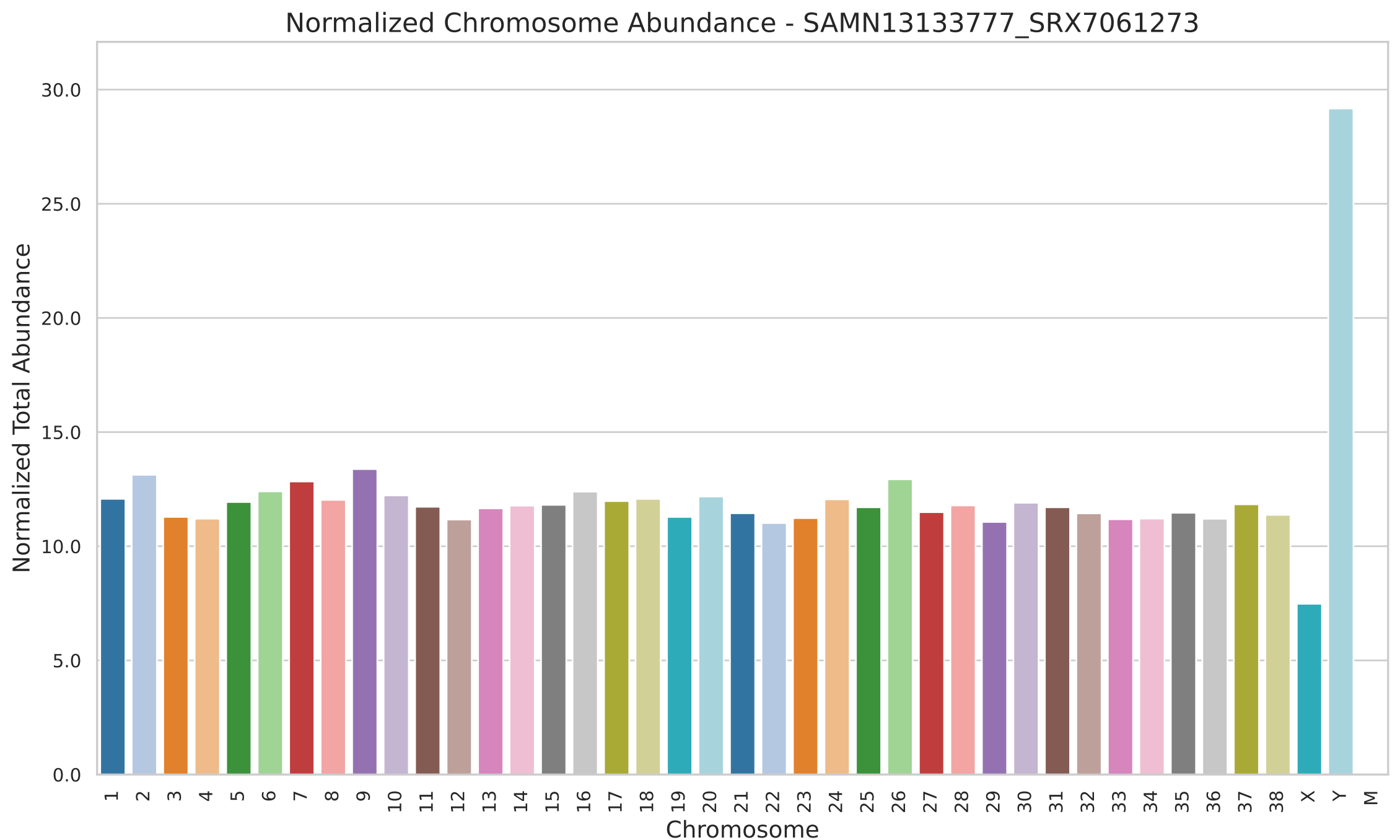

Normalized Chromosome Abundance - SAMEA3956077_ERX1751049
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

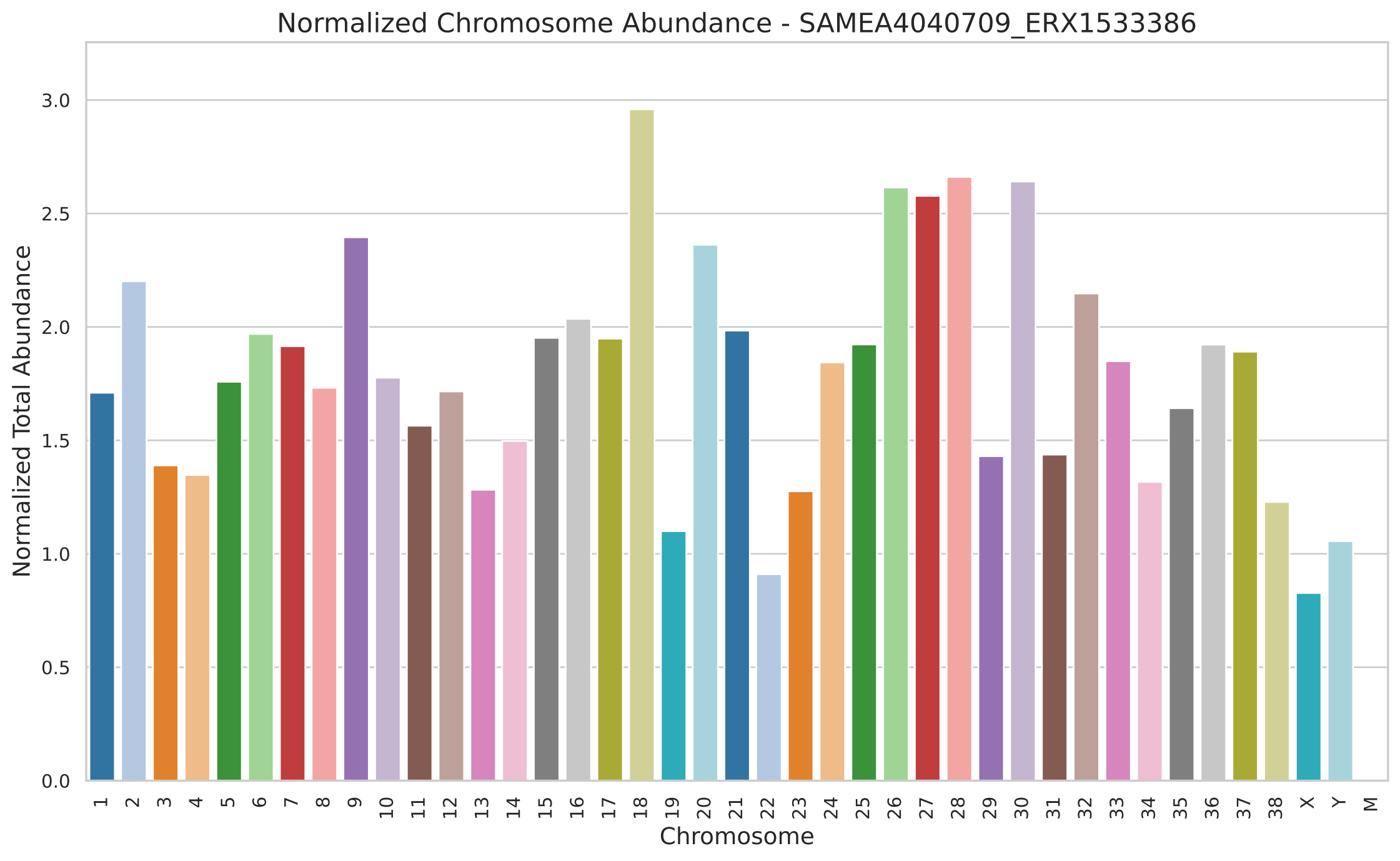

Normalized Chromosome Abundance - SAMN04002431_SRX1160034
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

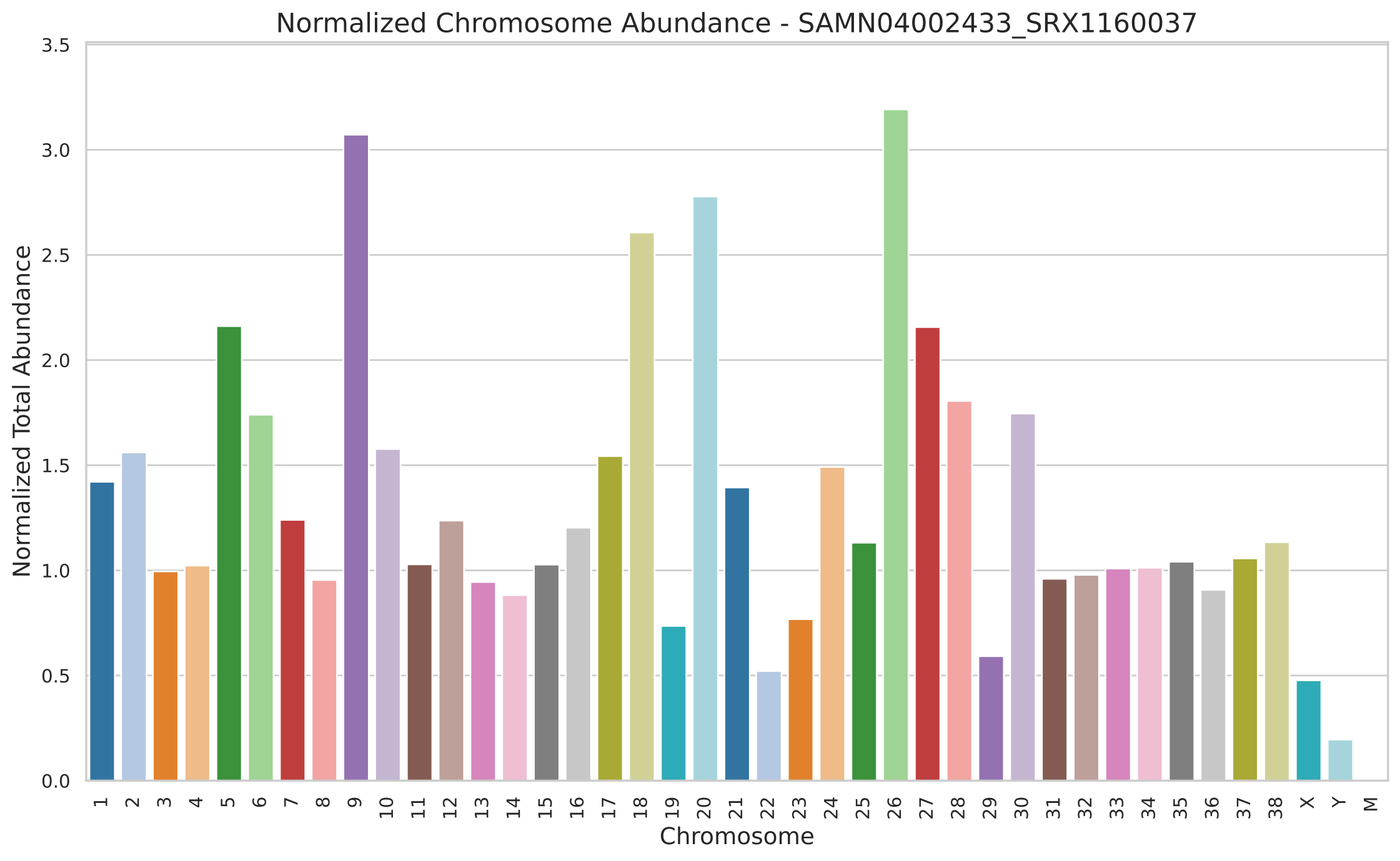

Normalized Chromosome Abundance - SAMEA3956073_ERX1751045
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

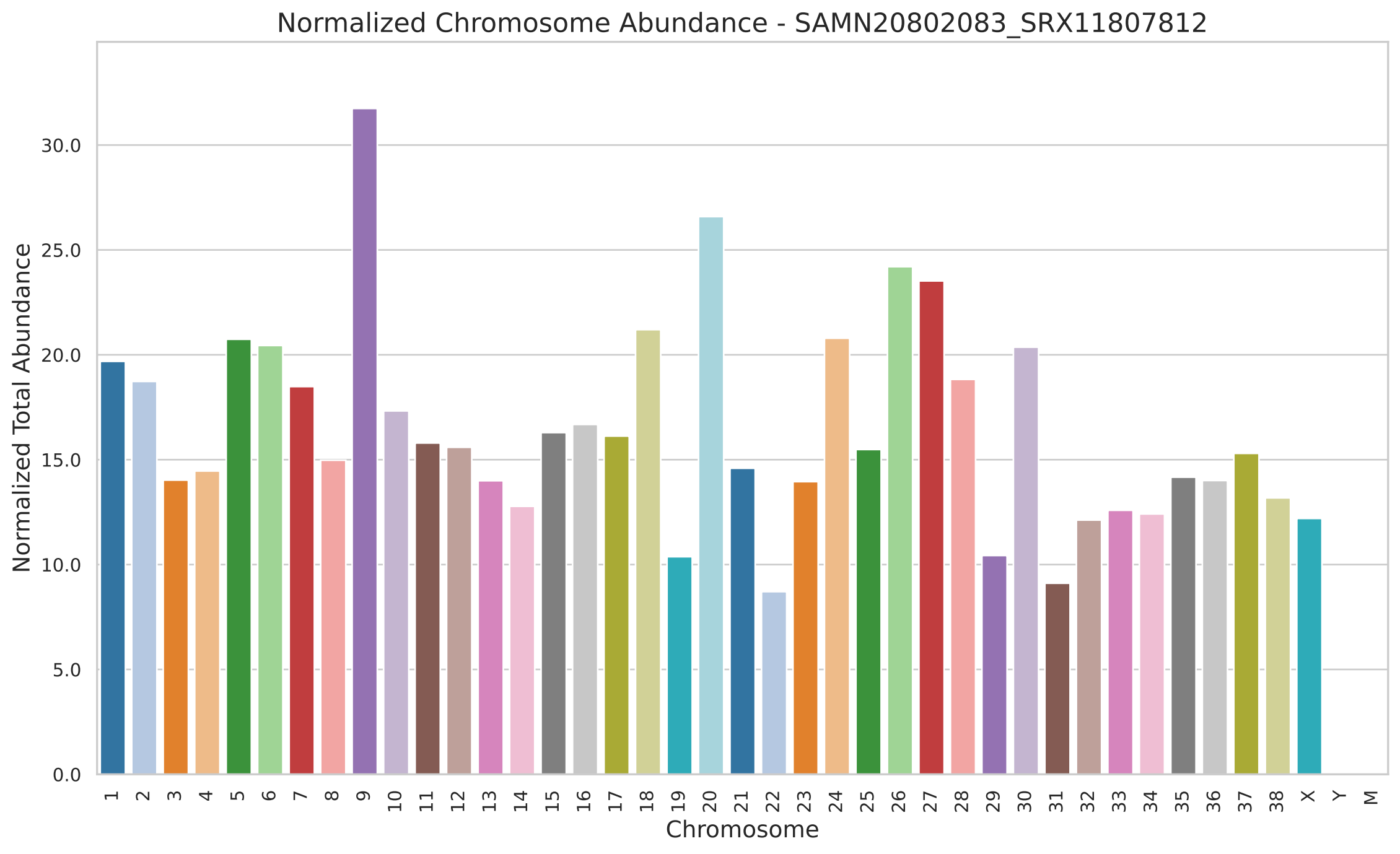

Normalized Chromosome Abundance - SAMEA3955955_ERX1751052
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

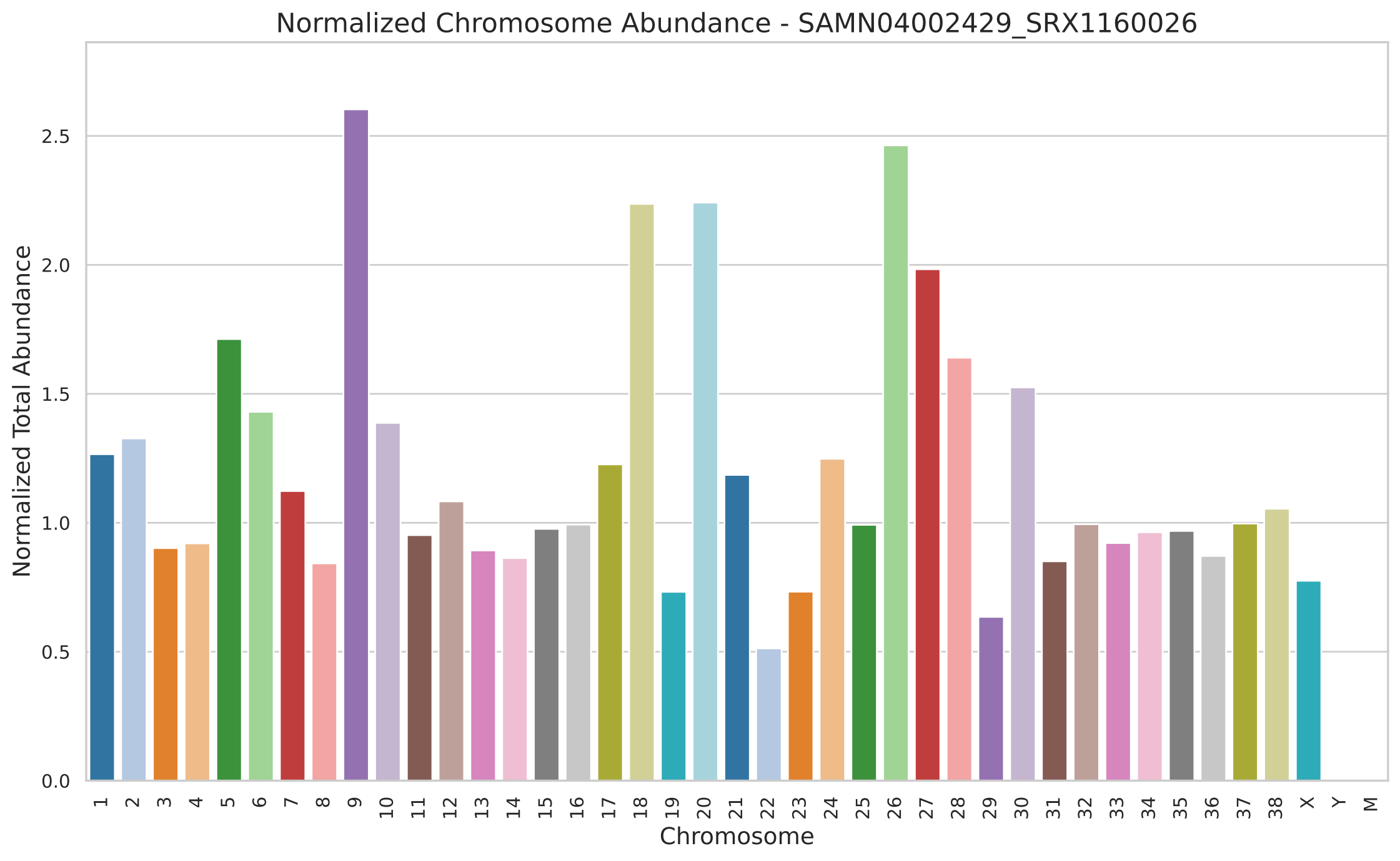

Normalized Chromosome Abundance - SAMN04002392_SRX1160008
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

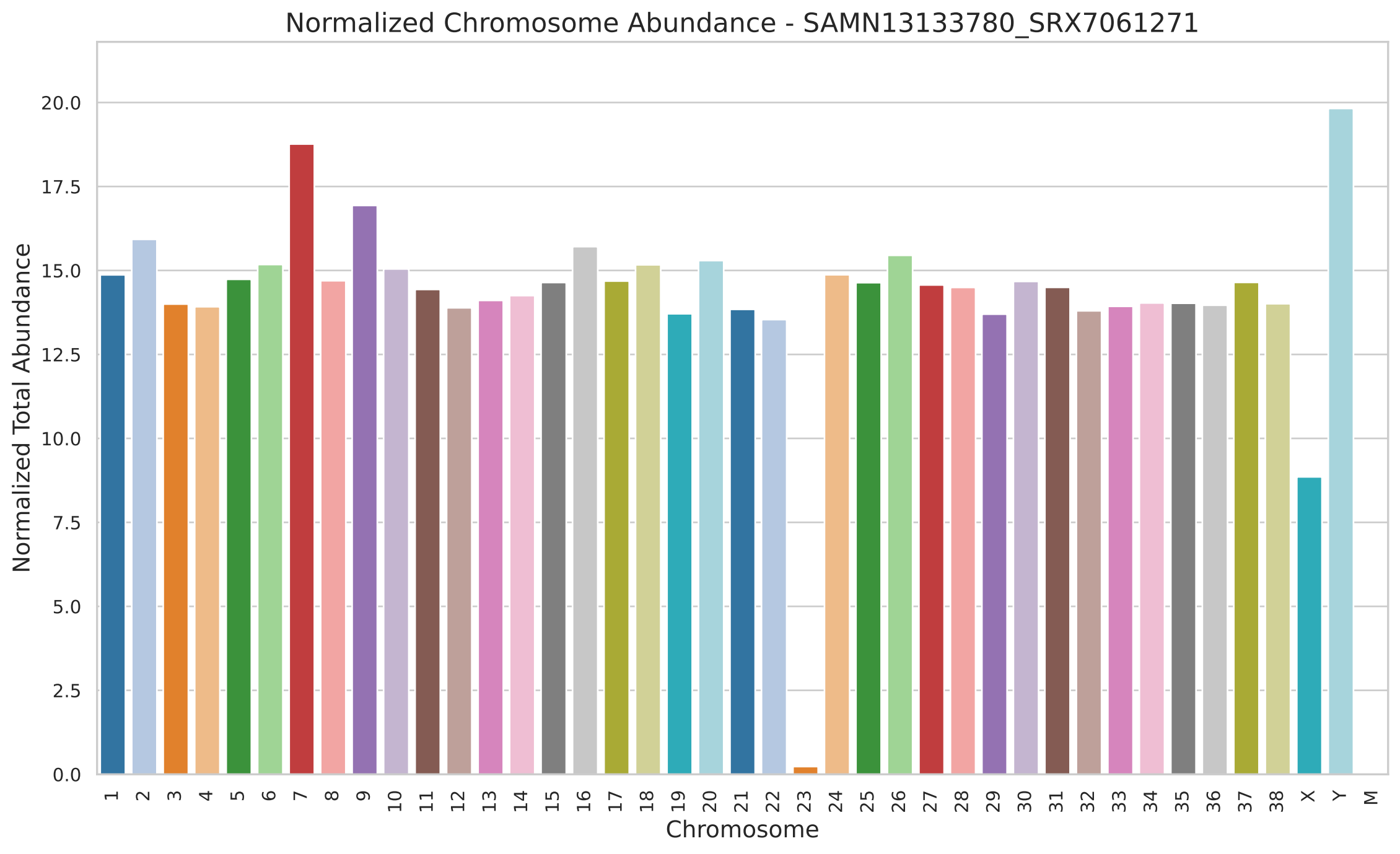

Normalized Chromosome Abundance - SAMN13133777_SRX7061273
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

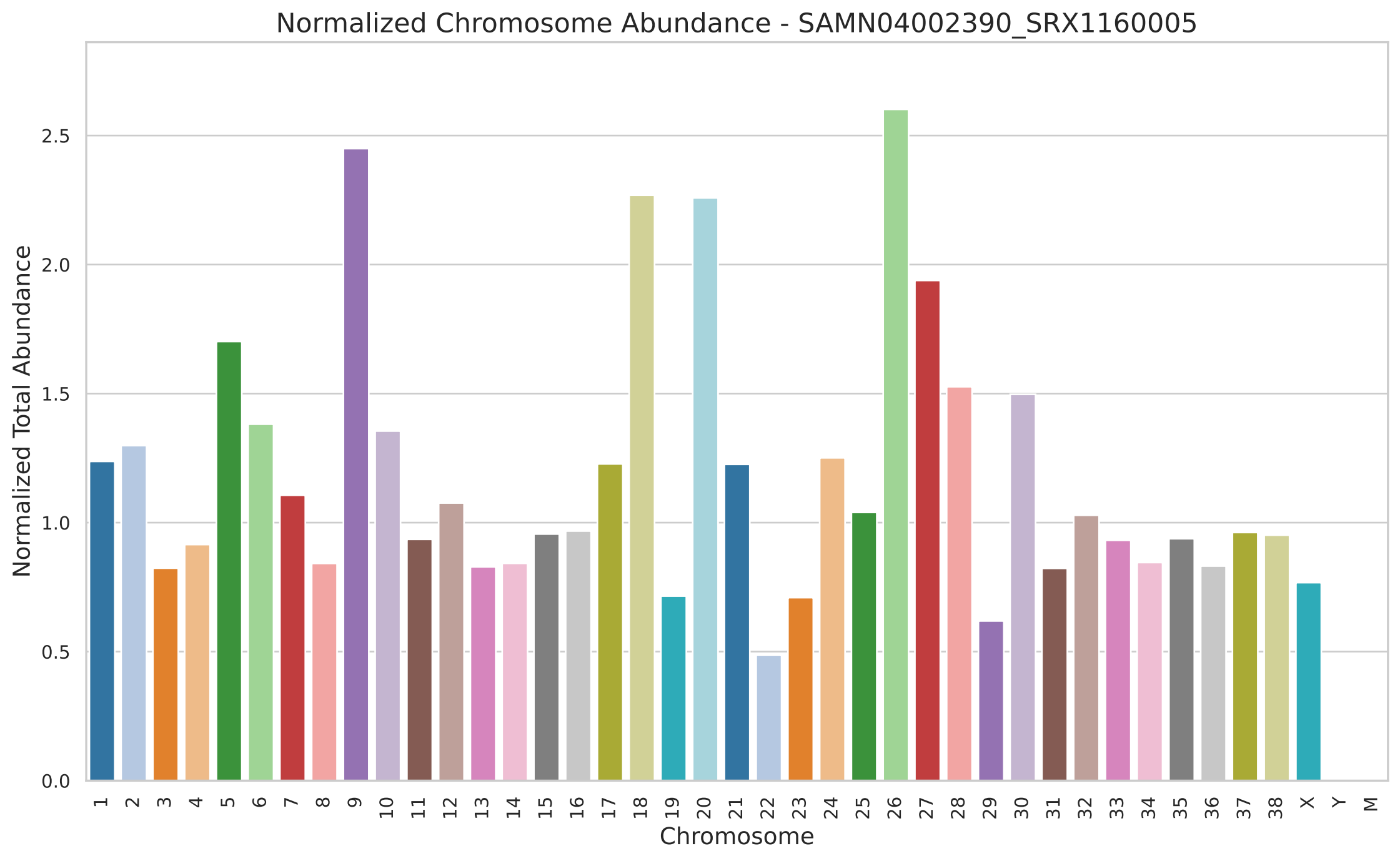

Normalized Chromosome Abundance - SAMEA4040709_ERX1533386
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

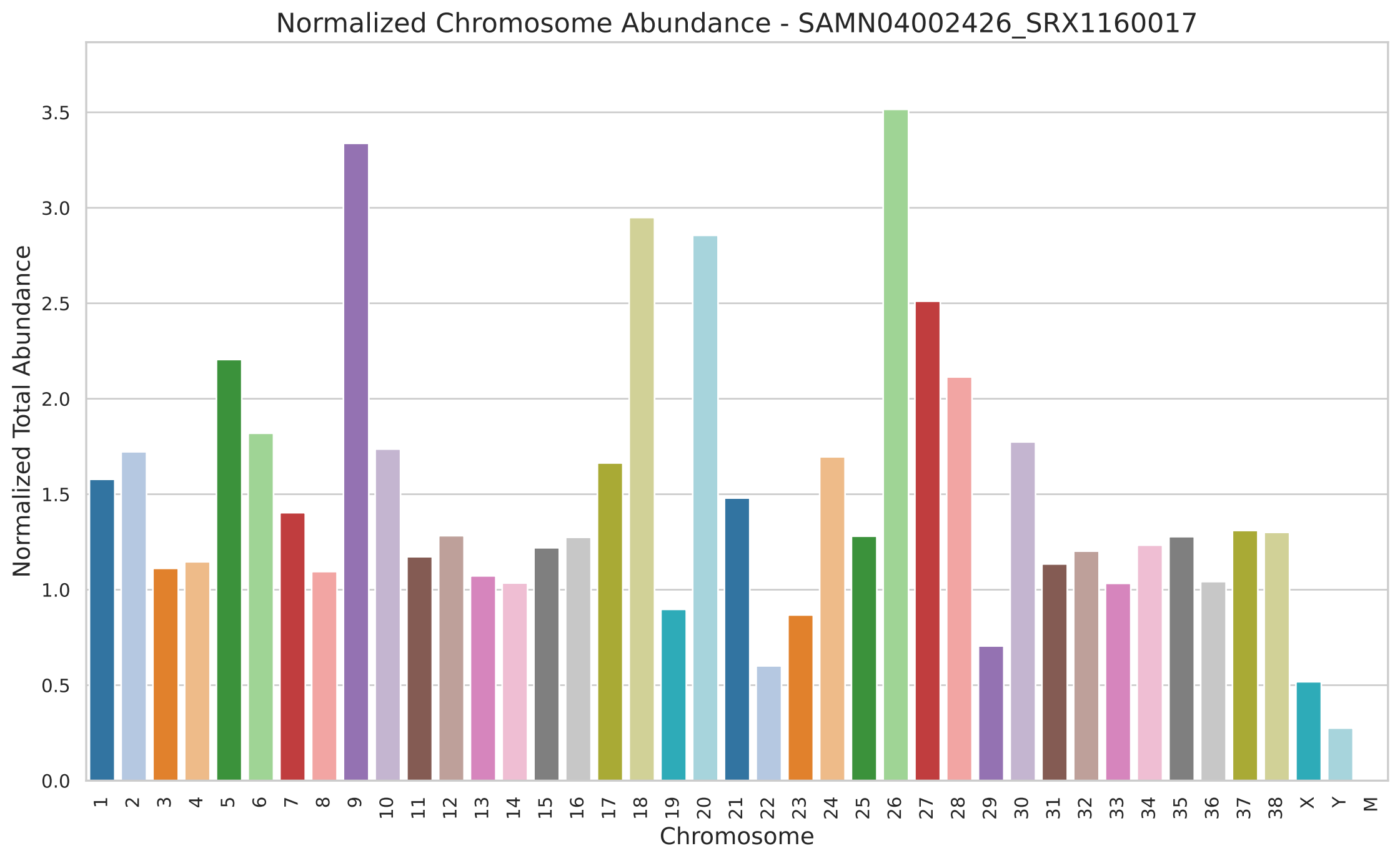

Normalized Chromosome Abundance - SAMN04002433_SRX1160037
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

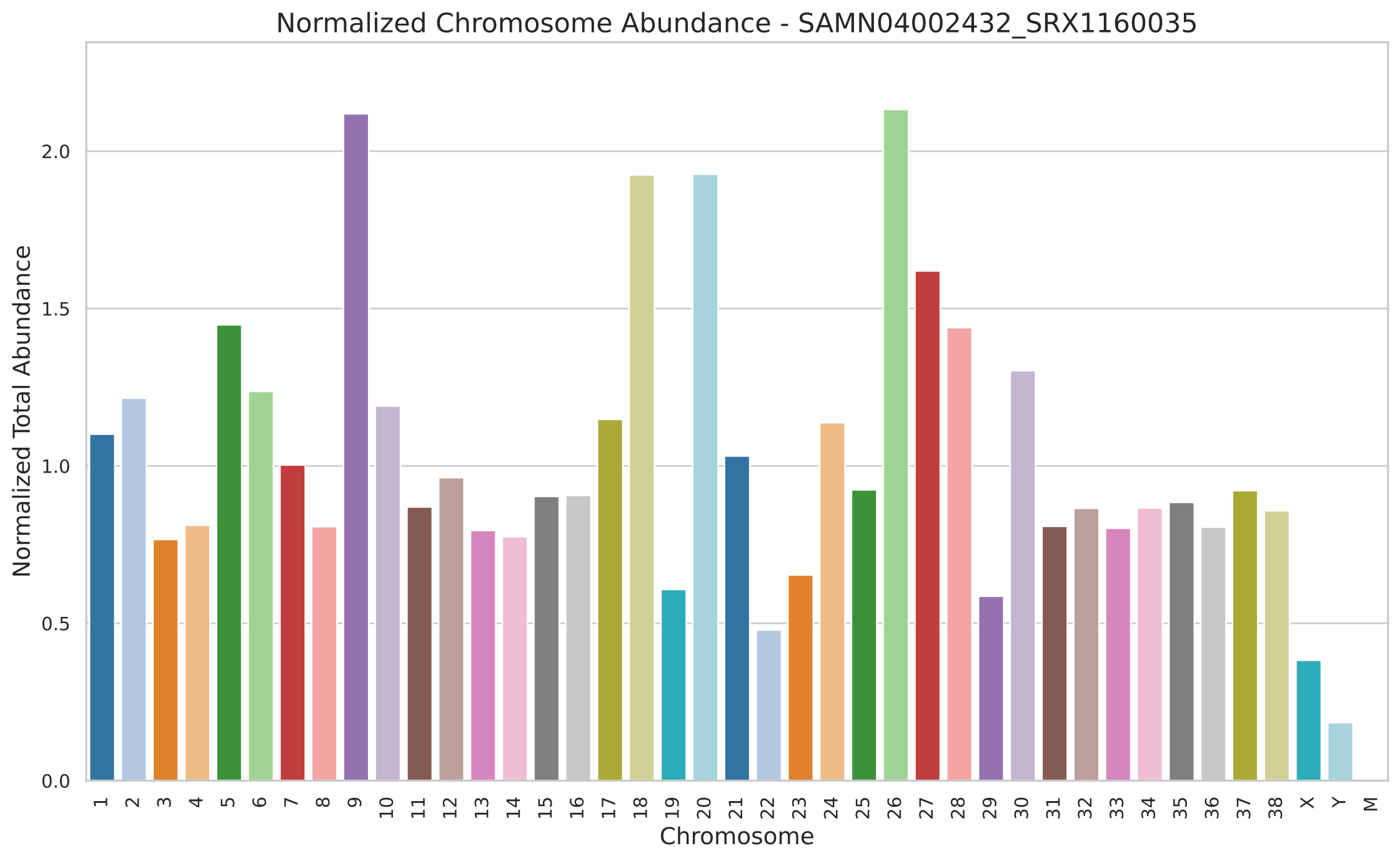

Normalized Chromosome Abundance - SAMN20802083_SRX11807812
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

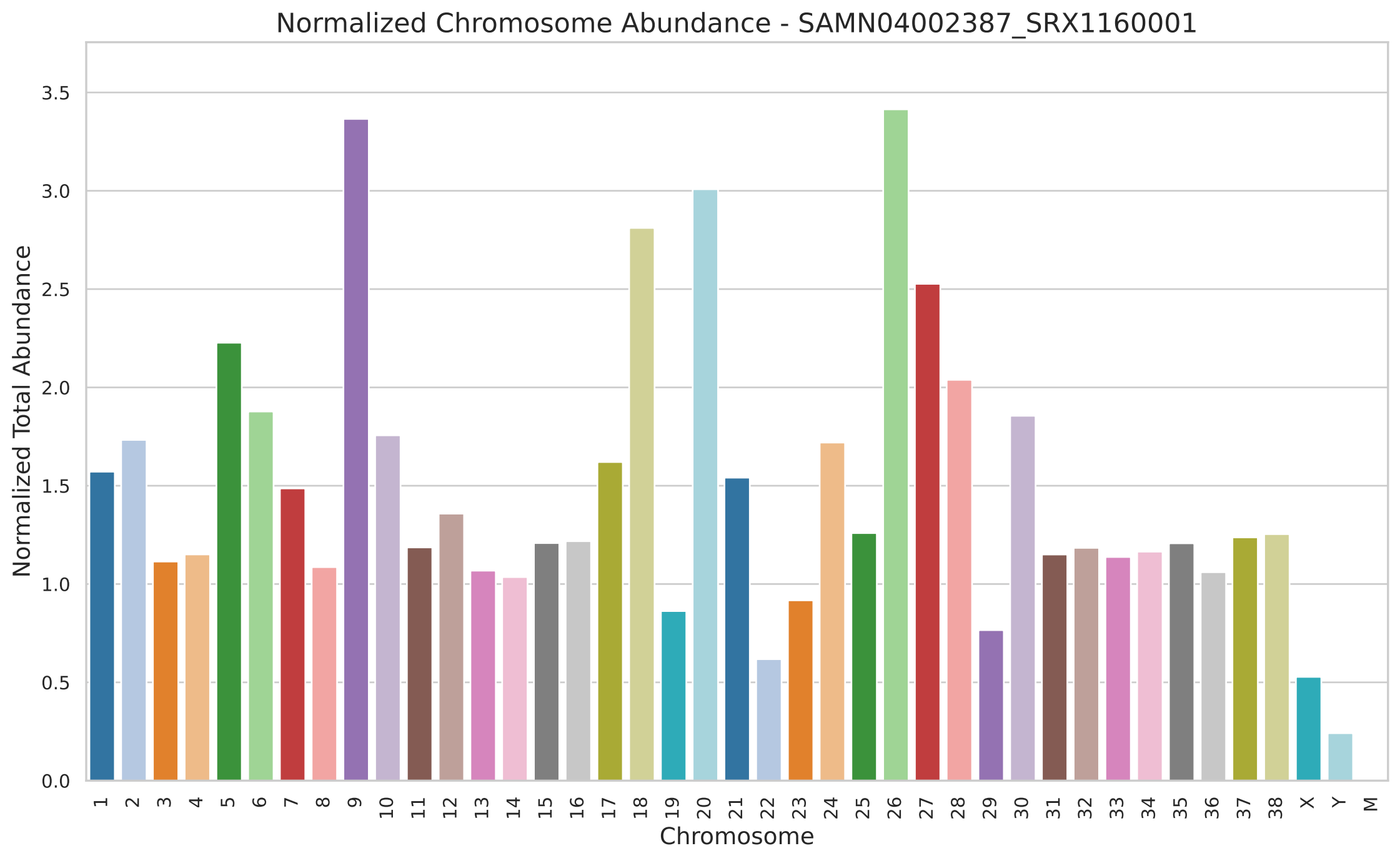

Normalized Chromosome Abundance - SAMN04002429_SRX1160026
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

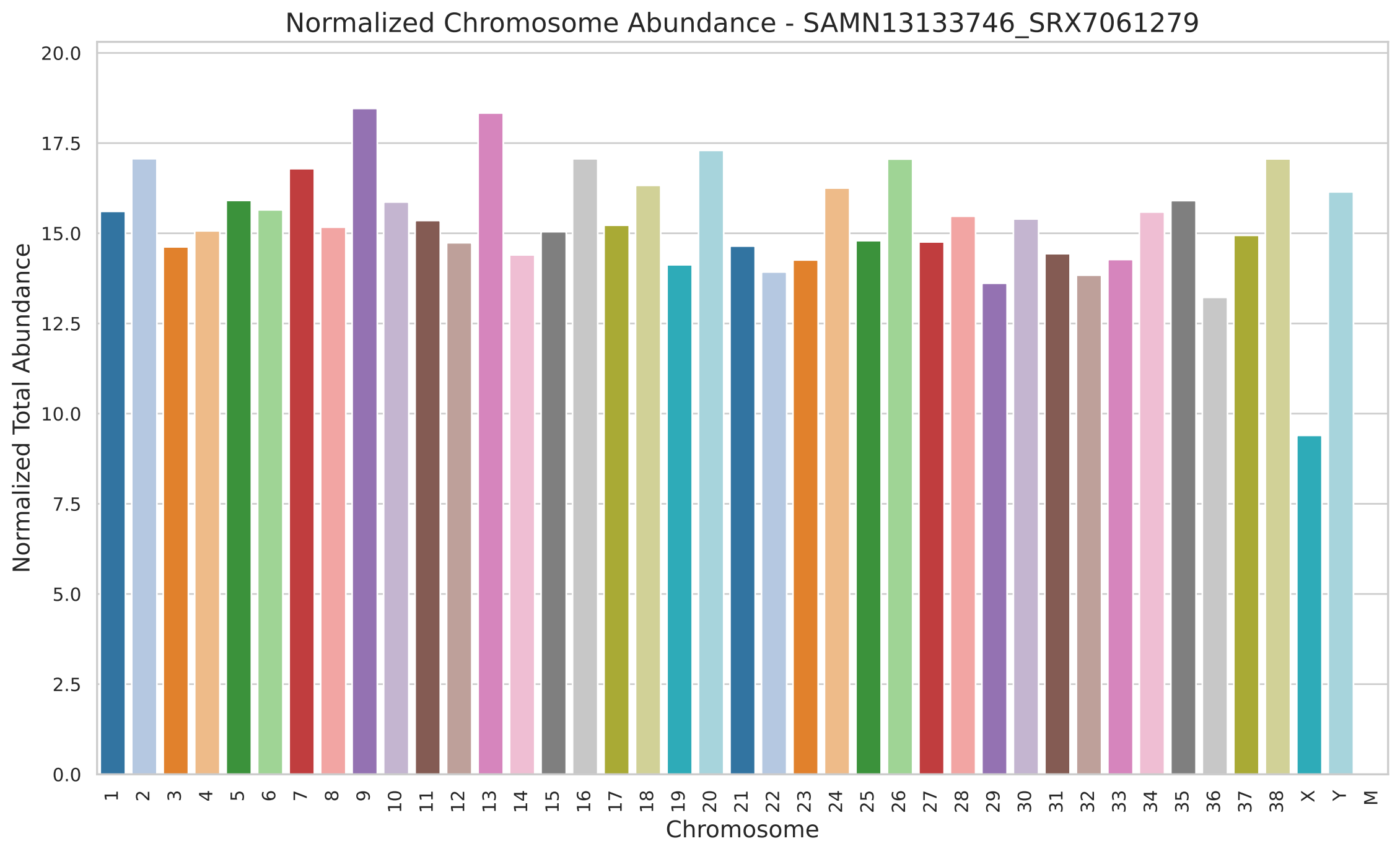

Normalized Chromosome Abundance - SAMN13133780_SRX7061271
Normalized Total Abundance
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5
20.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

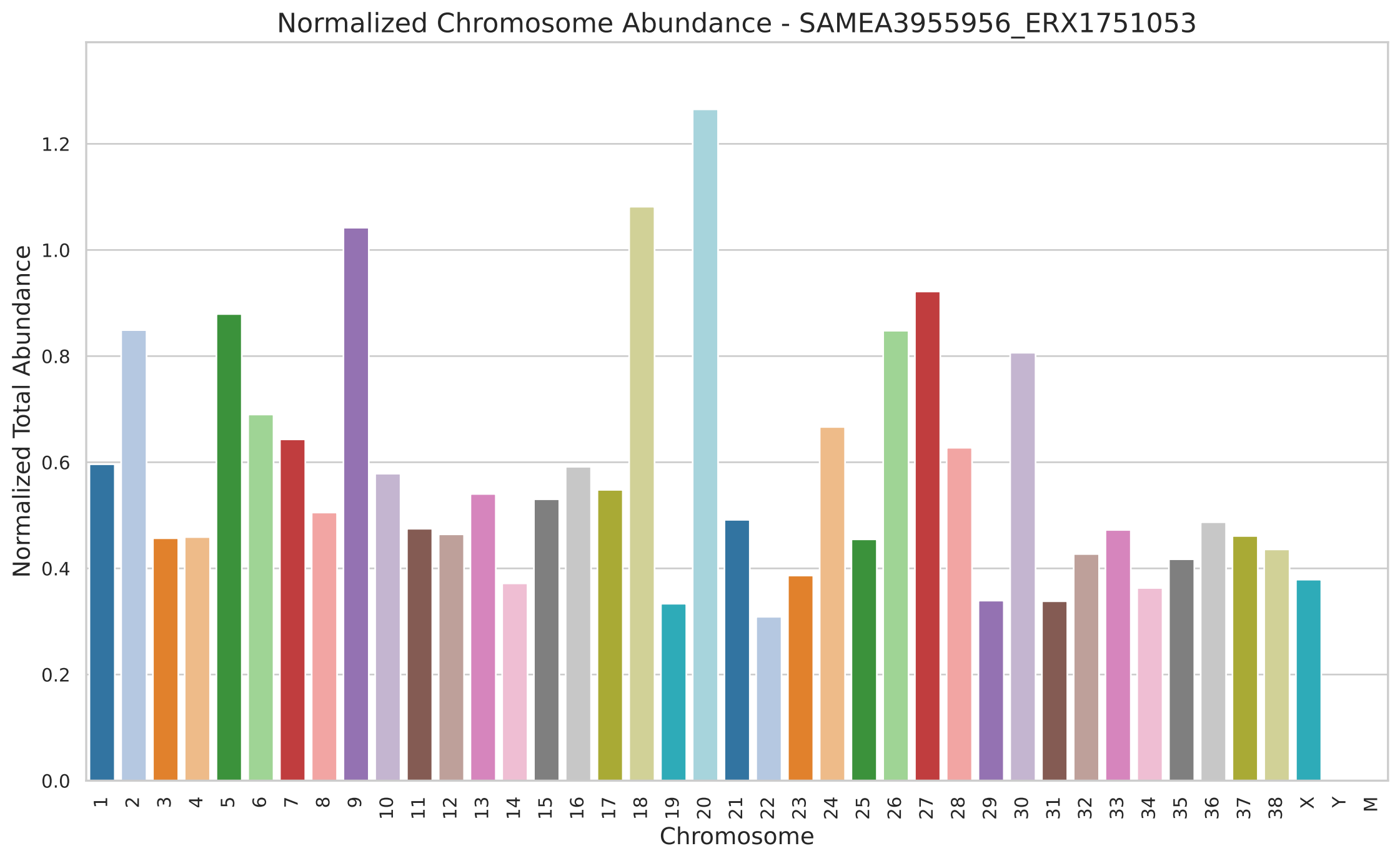

Normalized Chromosome Abundance - SAMN04002390_SRX1160005
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

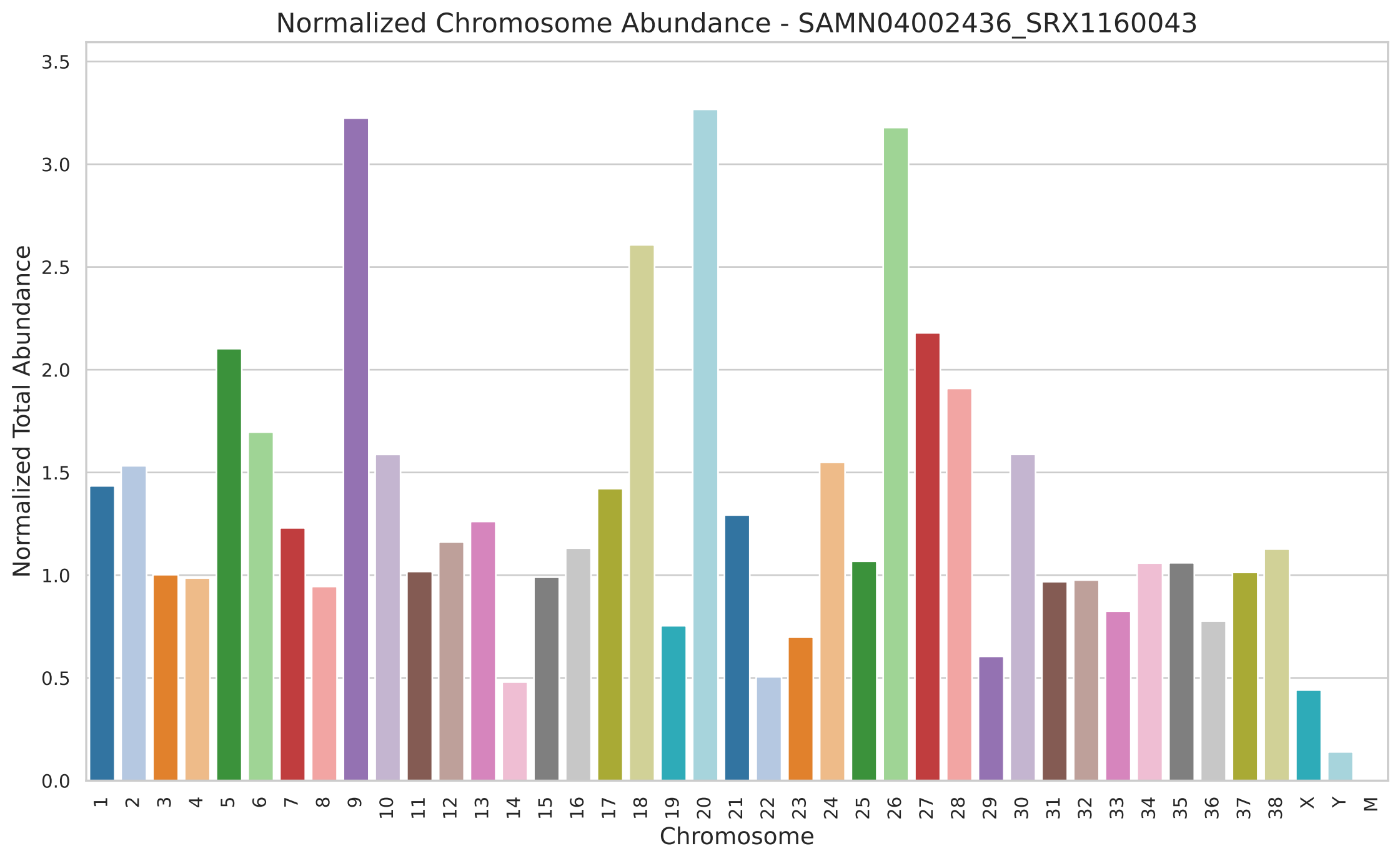

Normalized Chromosome Abundance - SAMN04002426_SRX1160017
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

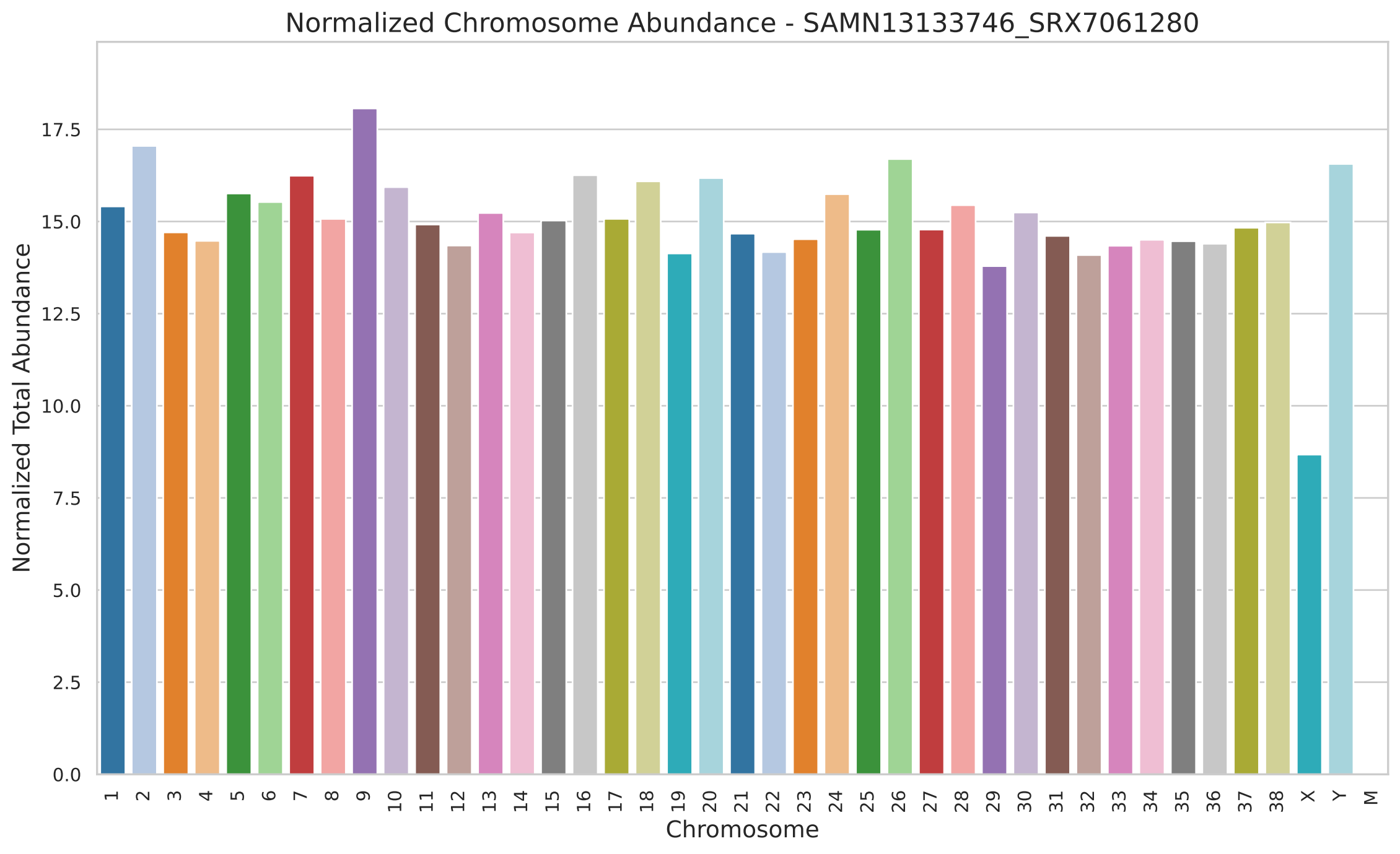

Normalized Chromosome Abundance - SAMN04002432_SRX1160035
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

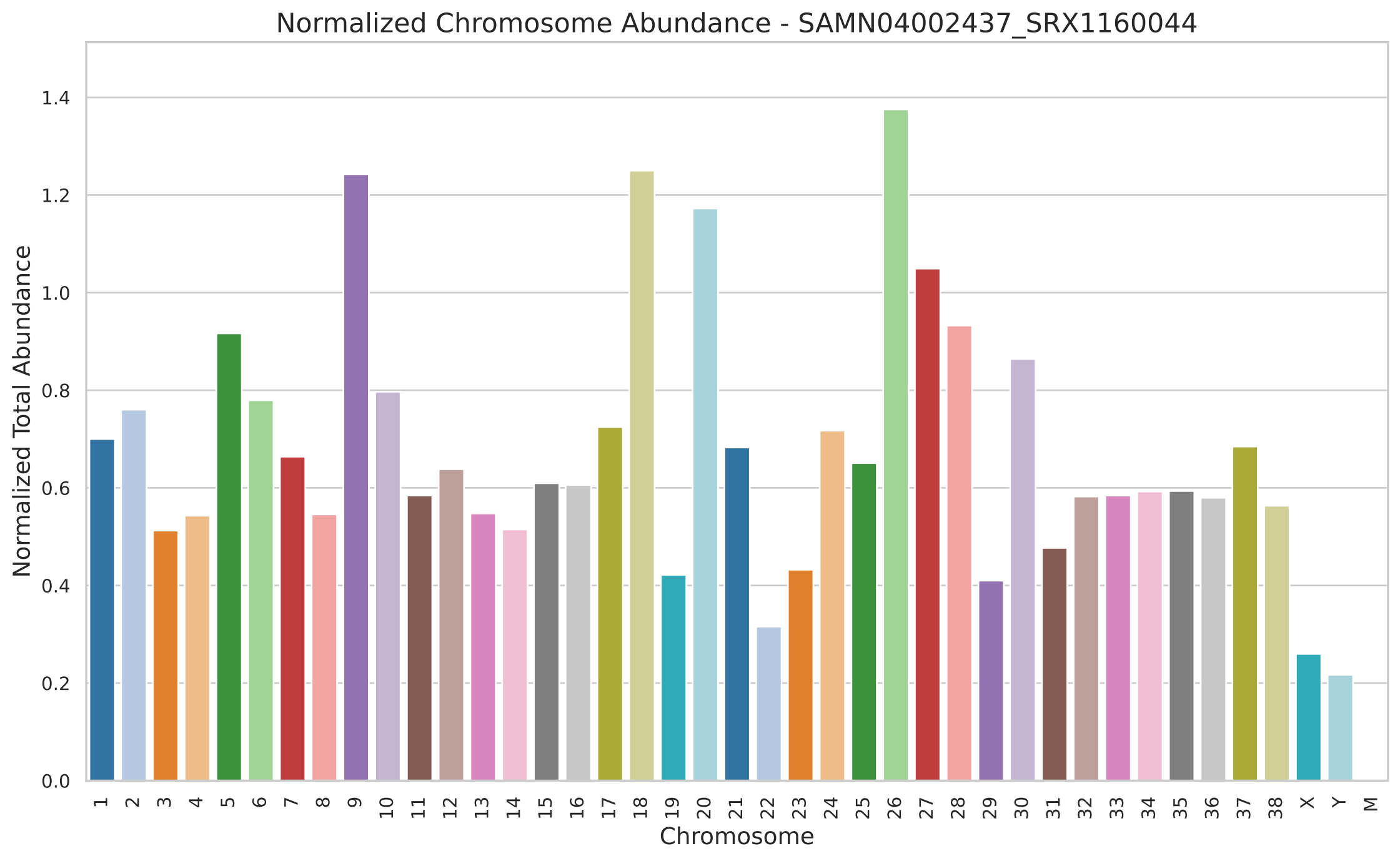

Normalized Chromosome Abundance - SAMN04002387_SRX1160001
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

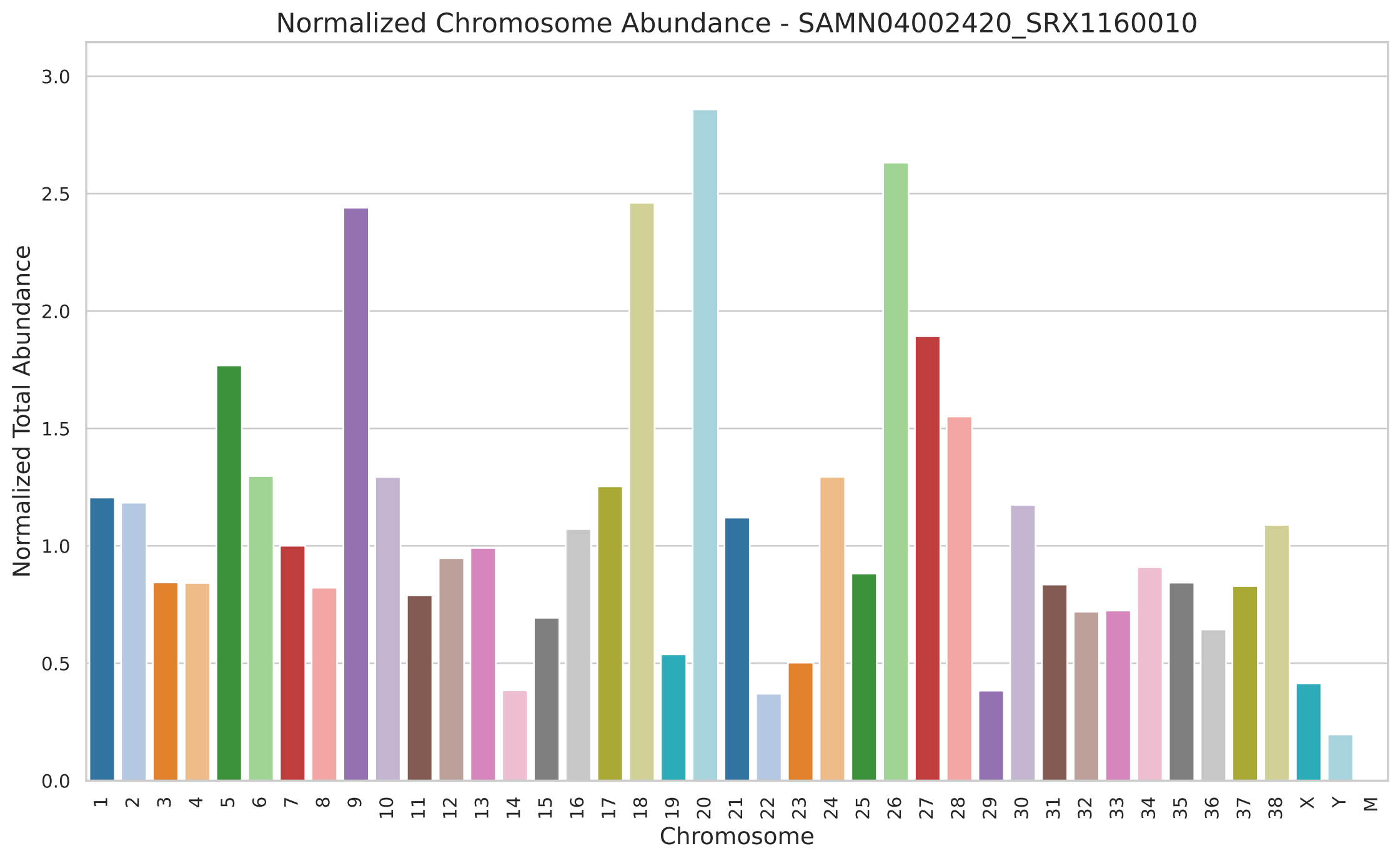

Normalized Chromosome Abundance - SAMN13133746_SRX7061279
Normalized Total Abundance
20.0
17.5
15.0
12.5
10.0
7.5
5.0
2.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

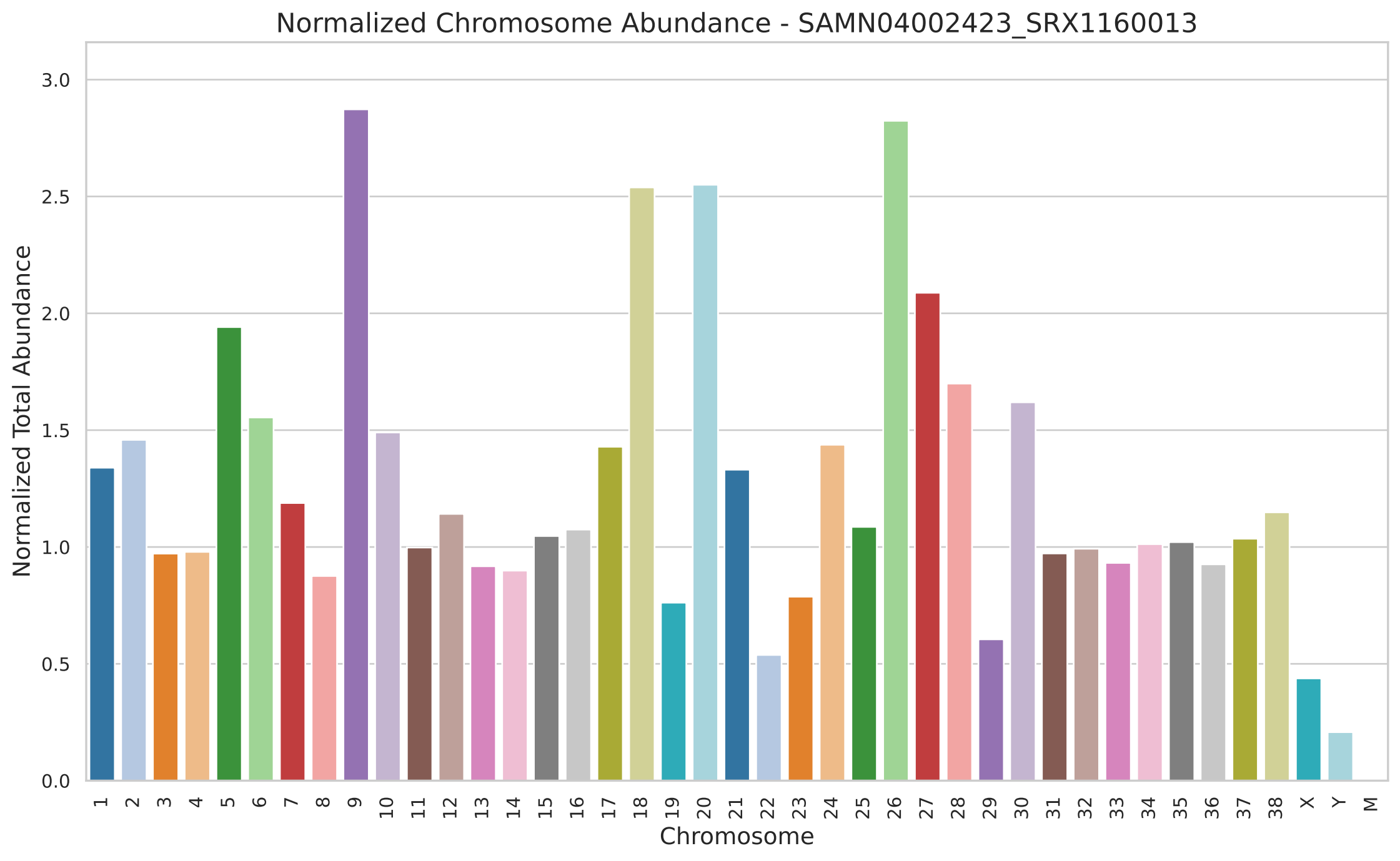

Normalized Chromosome Abundance - SAMEA3955956_ERX1751053
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

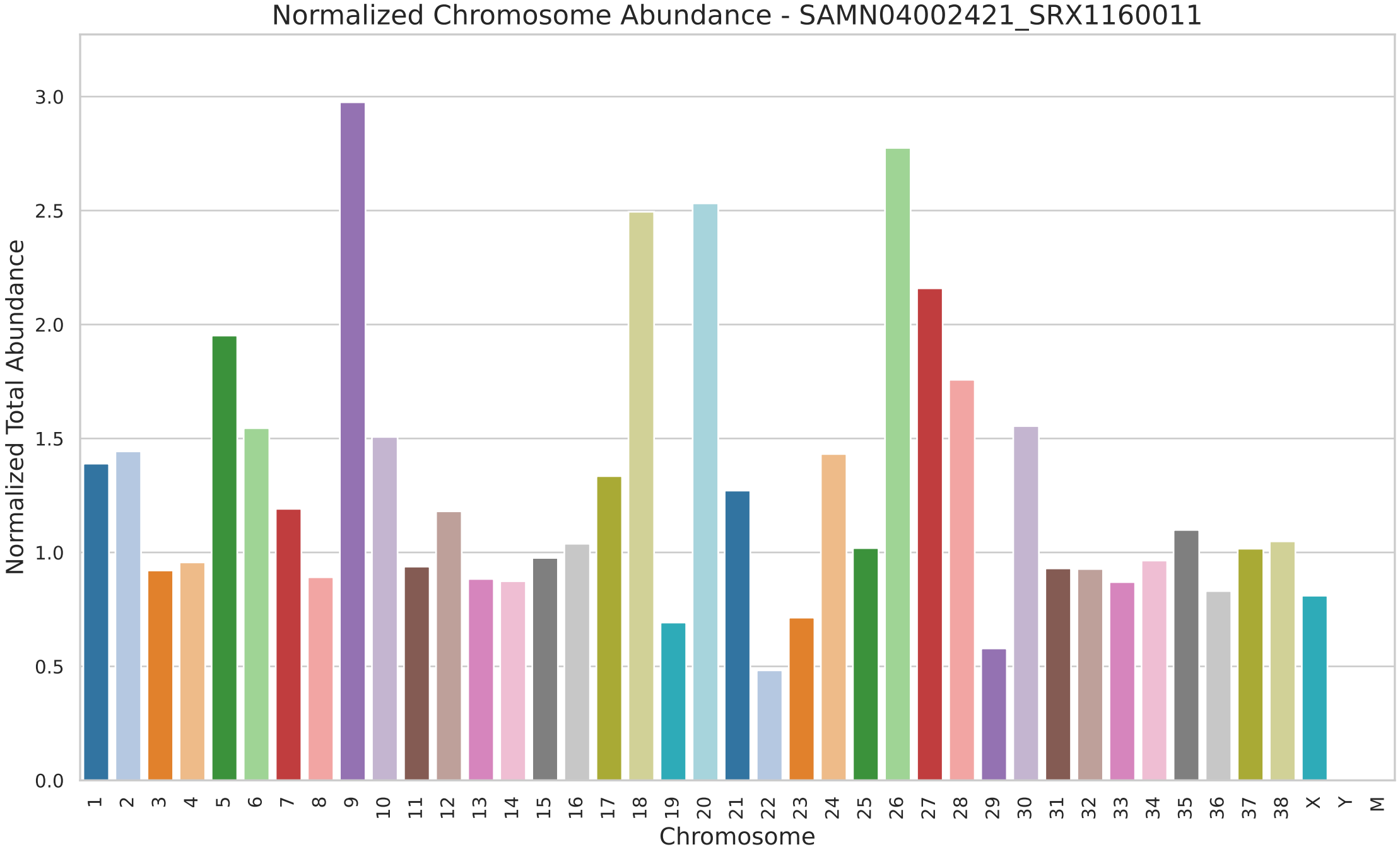

Normalized Chromosome Abundance - SAMN04002436_SRX1160043
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

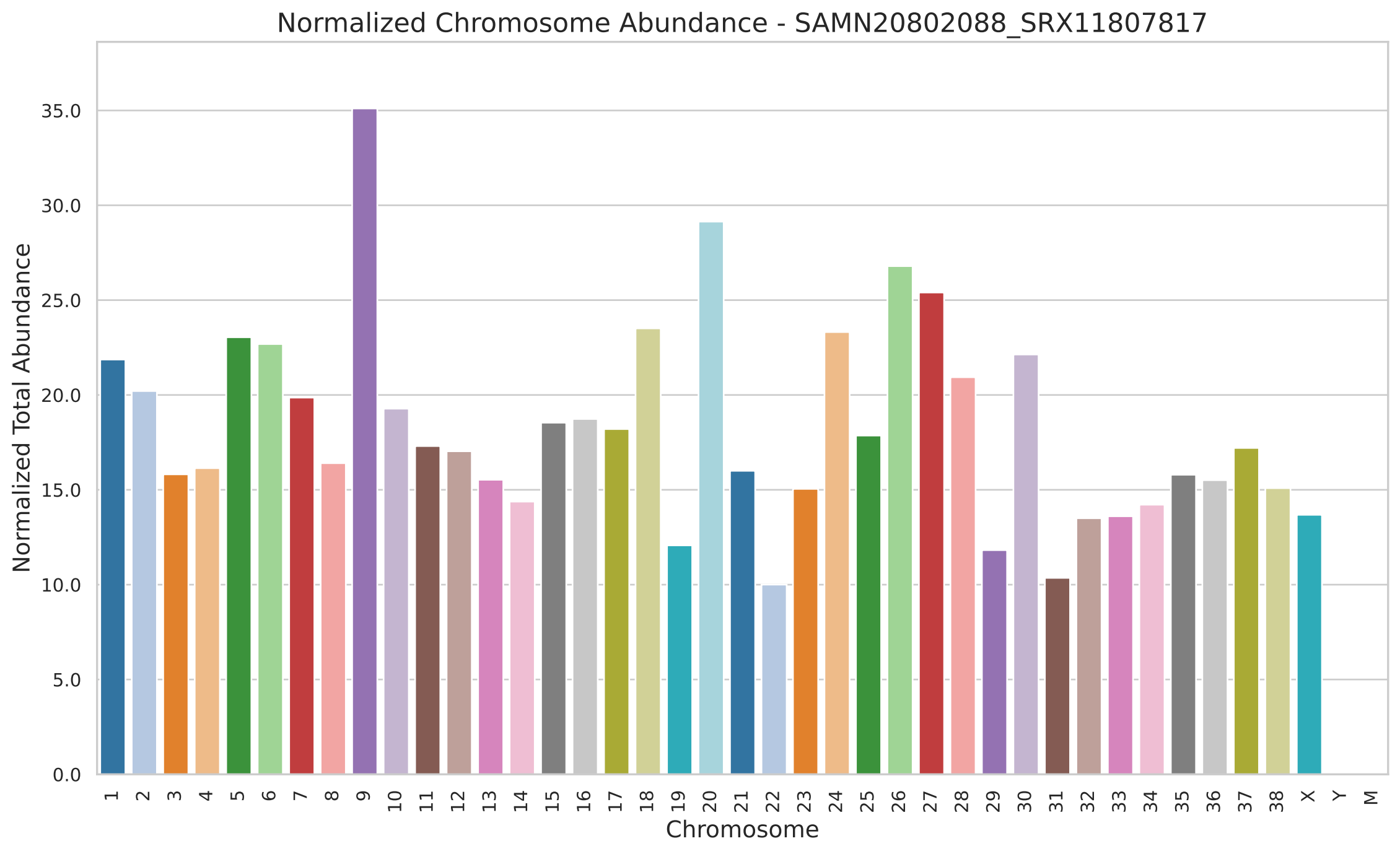

Normalized Chromosome Abundance - SAMN13133746_SRX7061280
Normalized Total Abundance
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

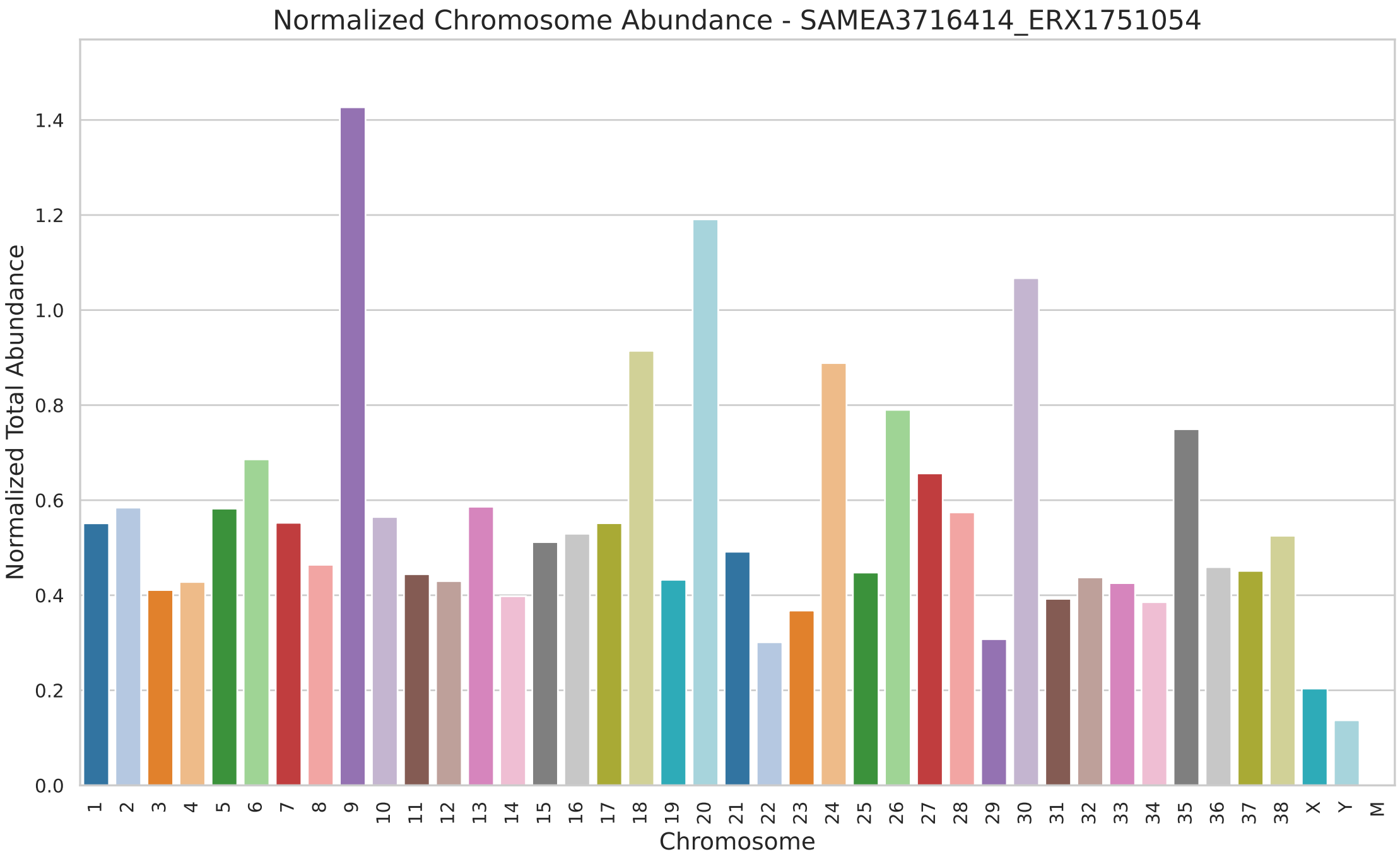

Normalized Chromosome Abundance - SAMN04002437_SRX1160044
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 X Y M
Chromosome

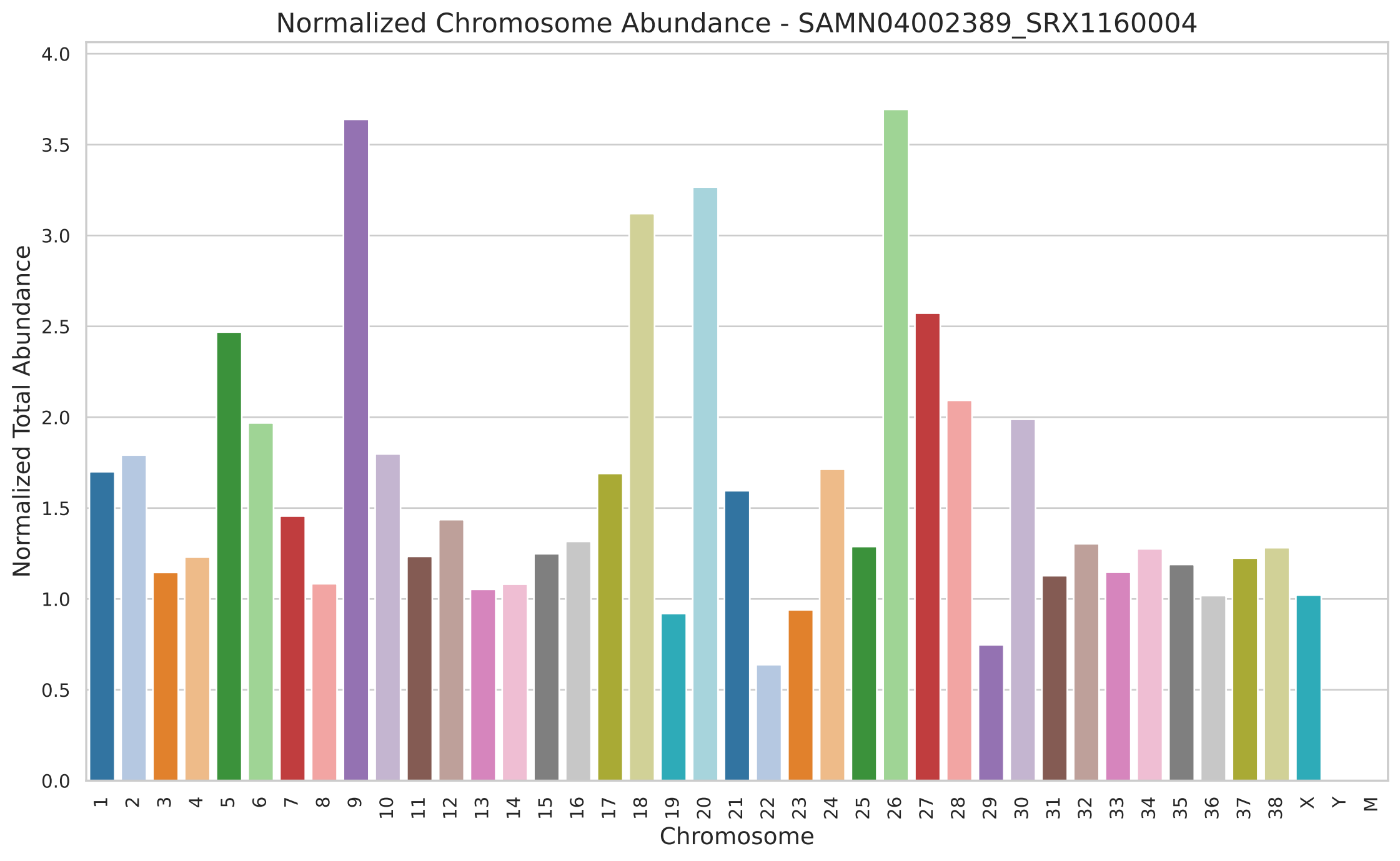

Normalized Chromosome Abundance - SAMN04002420_SRX1160010
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

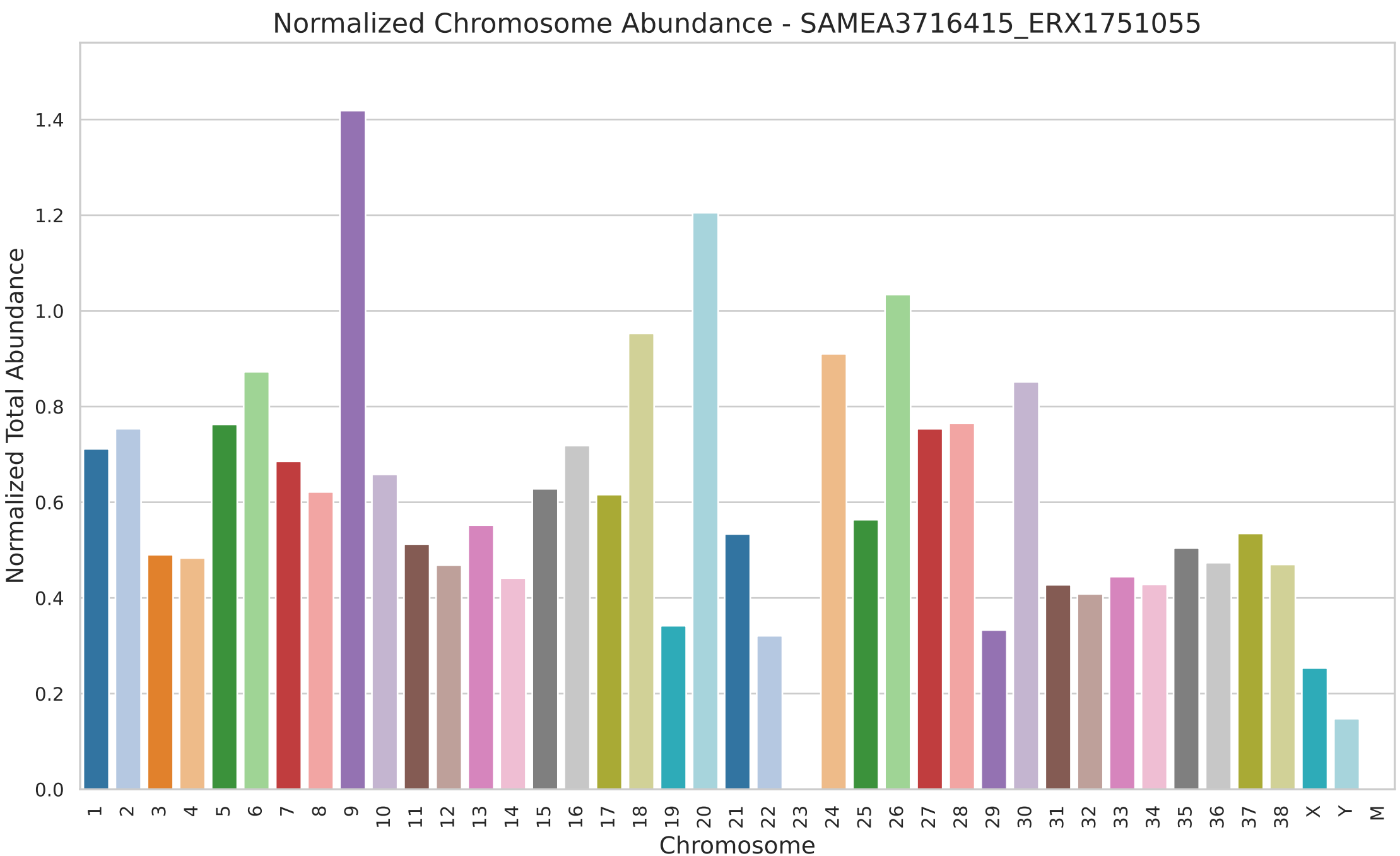

Normalized Chromosome Abundance - SAMN04002423_SRX1160013
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

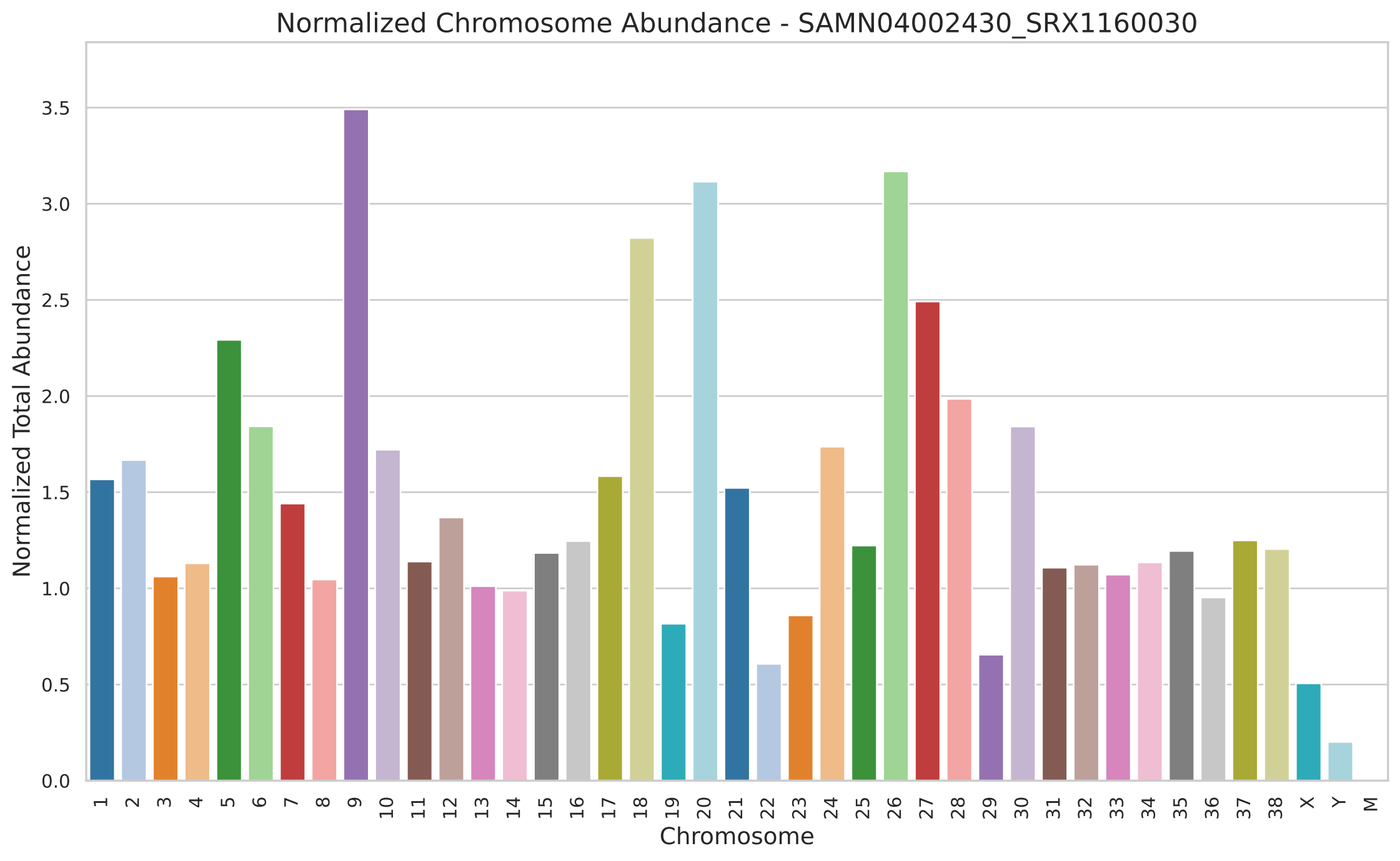

Normalized Chromosome Abundance - SAMN04002421_SRX1160011
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

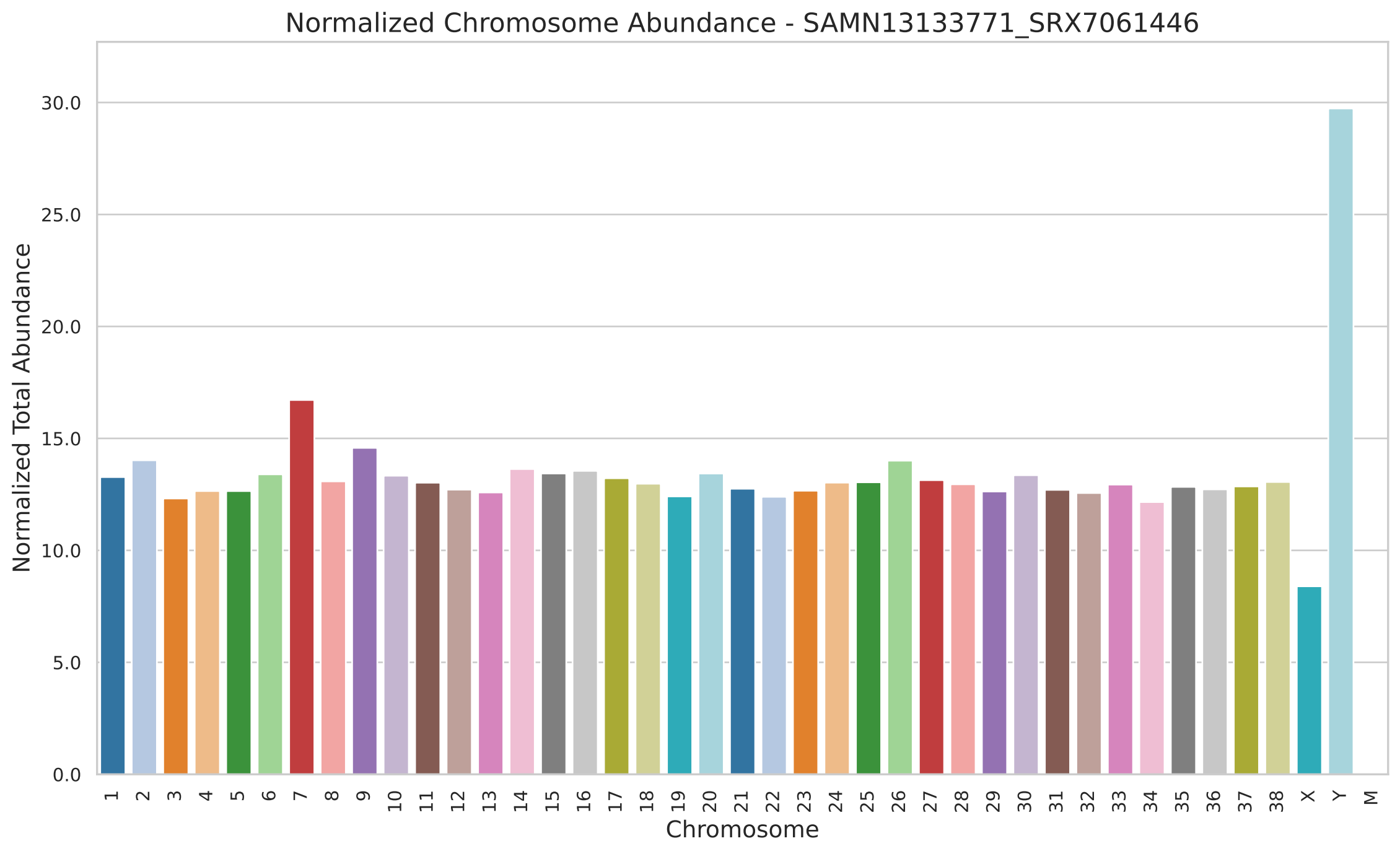

Normalized Chromosome Abundance - SAMN20802088_SRX11807817
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
35.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

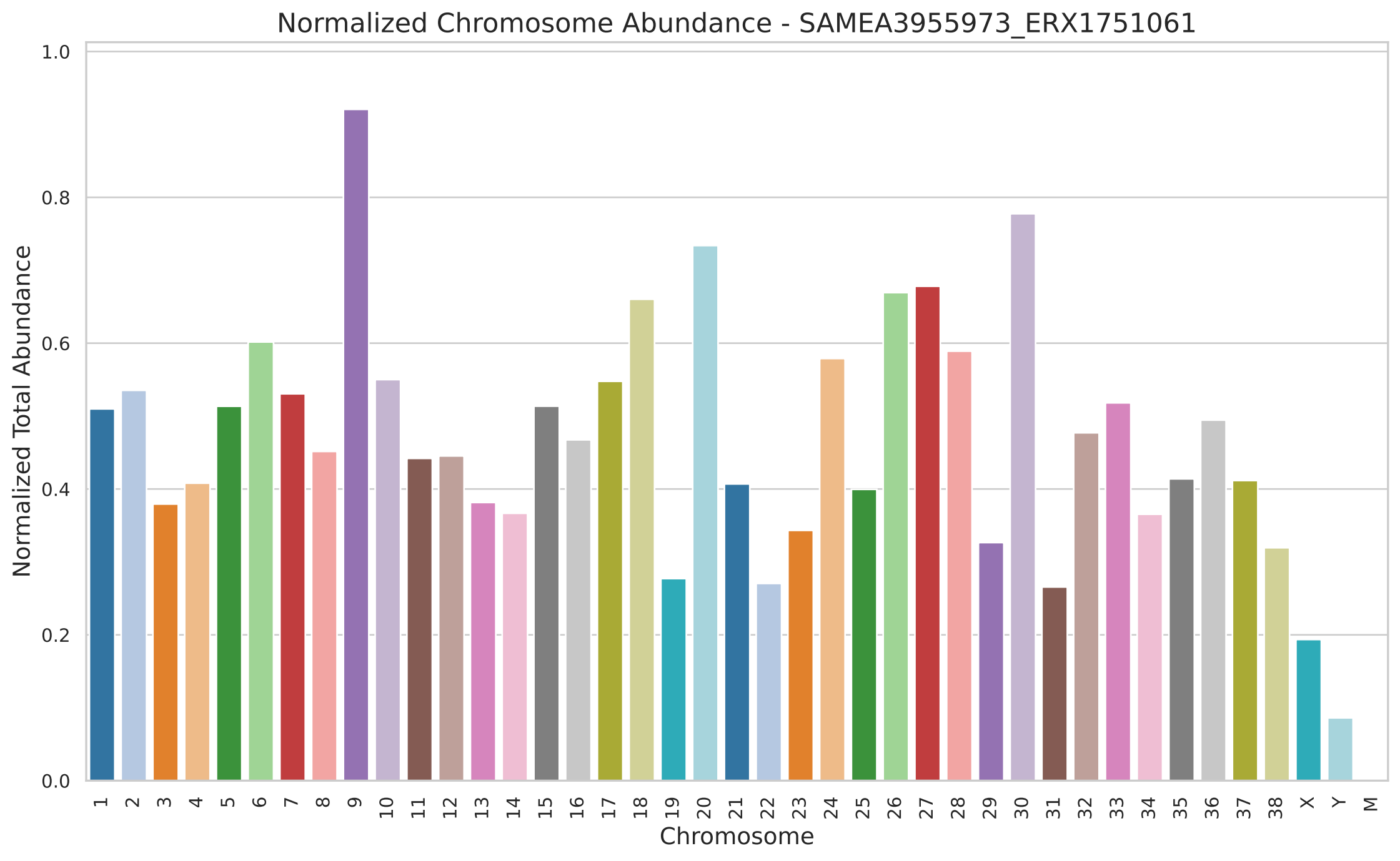

Normalized Chromosome Abundance - SAMEA3716414_ERX1751054
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 X Y M
Chromosome

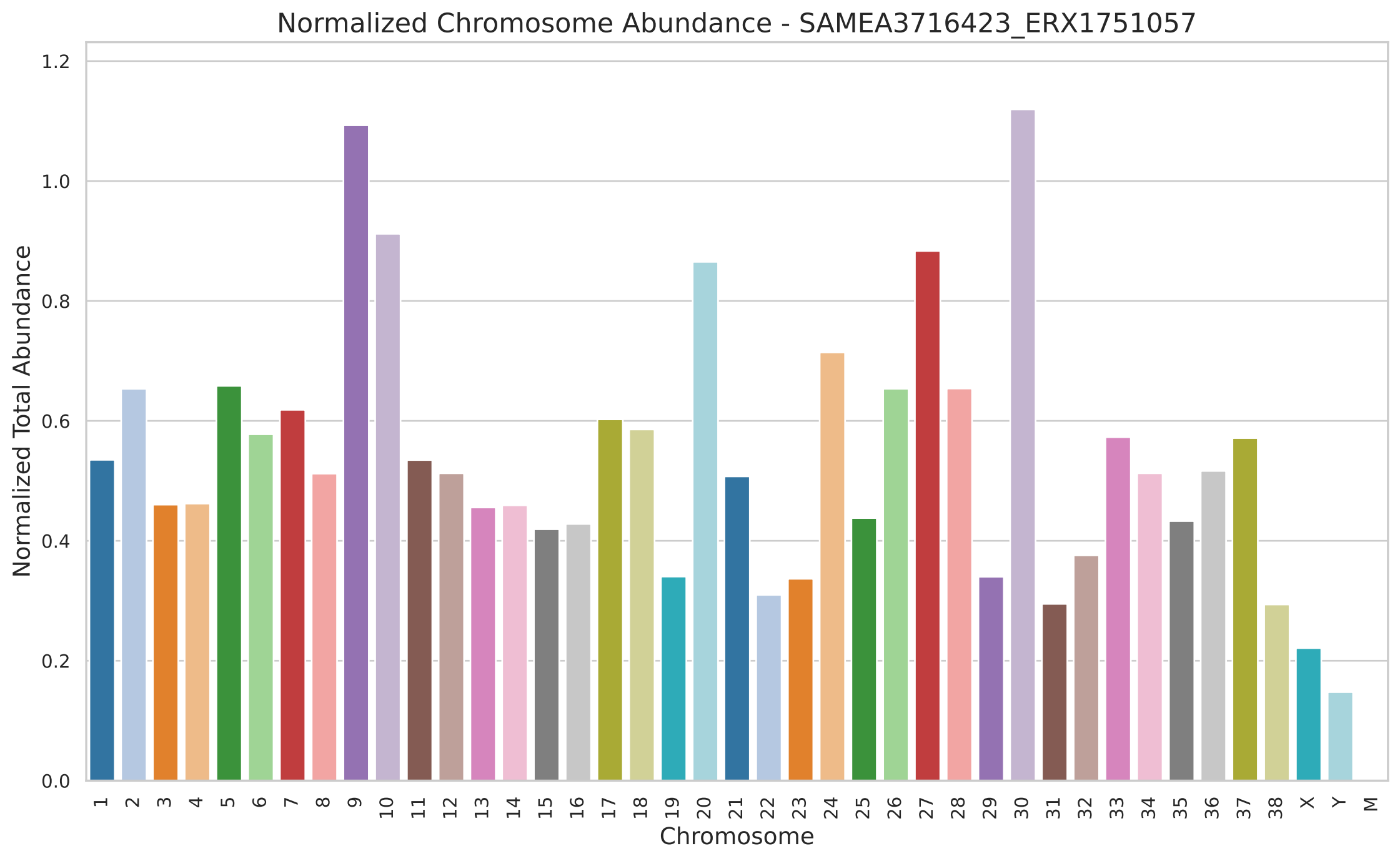

Normalized Chromosome Abundance - SAMN04002389_SRX1160004
Normalized Total Abundance
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

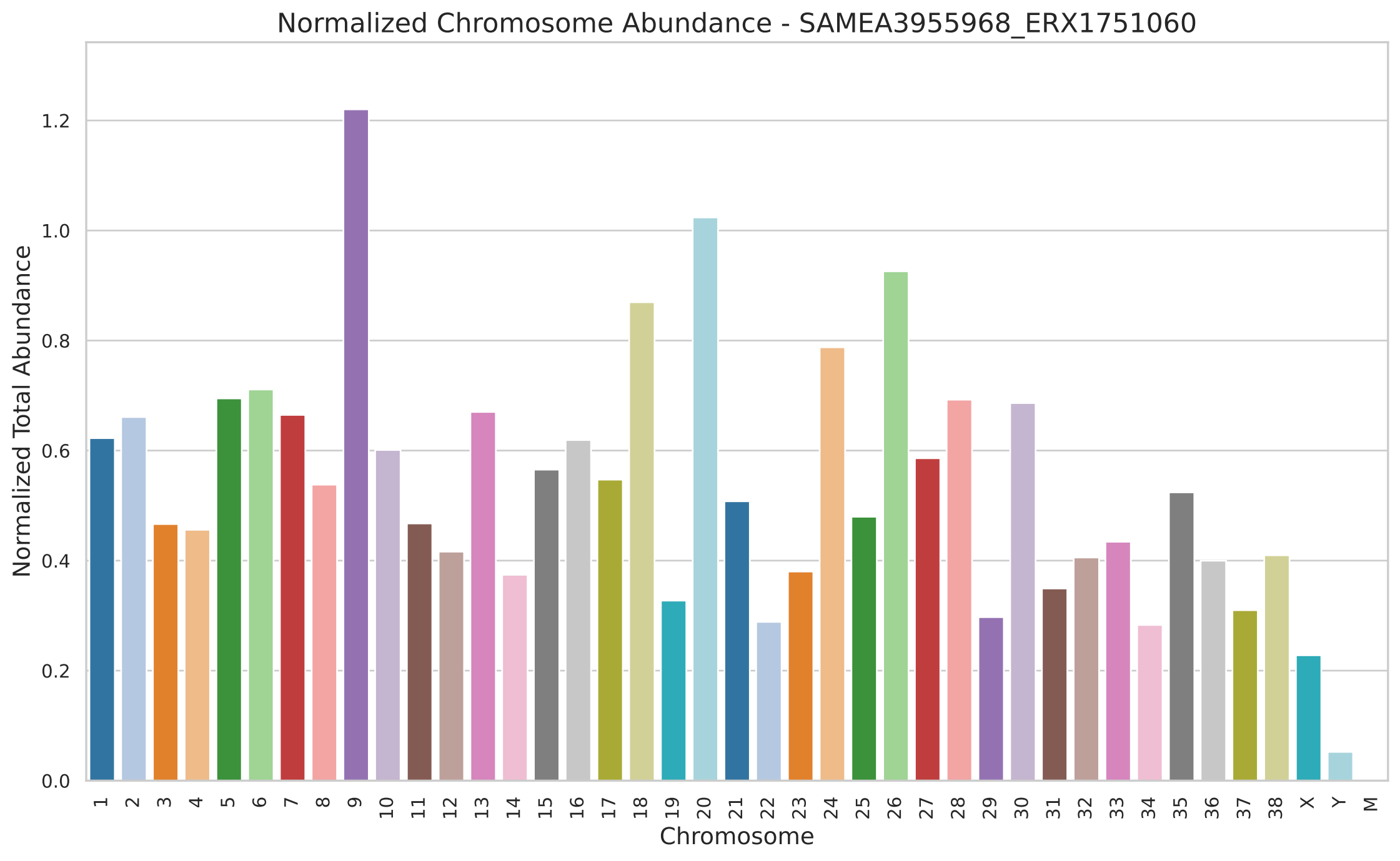

Normalized Chromosome Abundance - SAMEA3716415_ERX1751055
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 X Y M
Chromosome

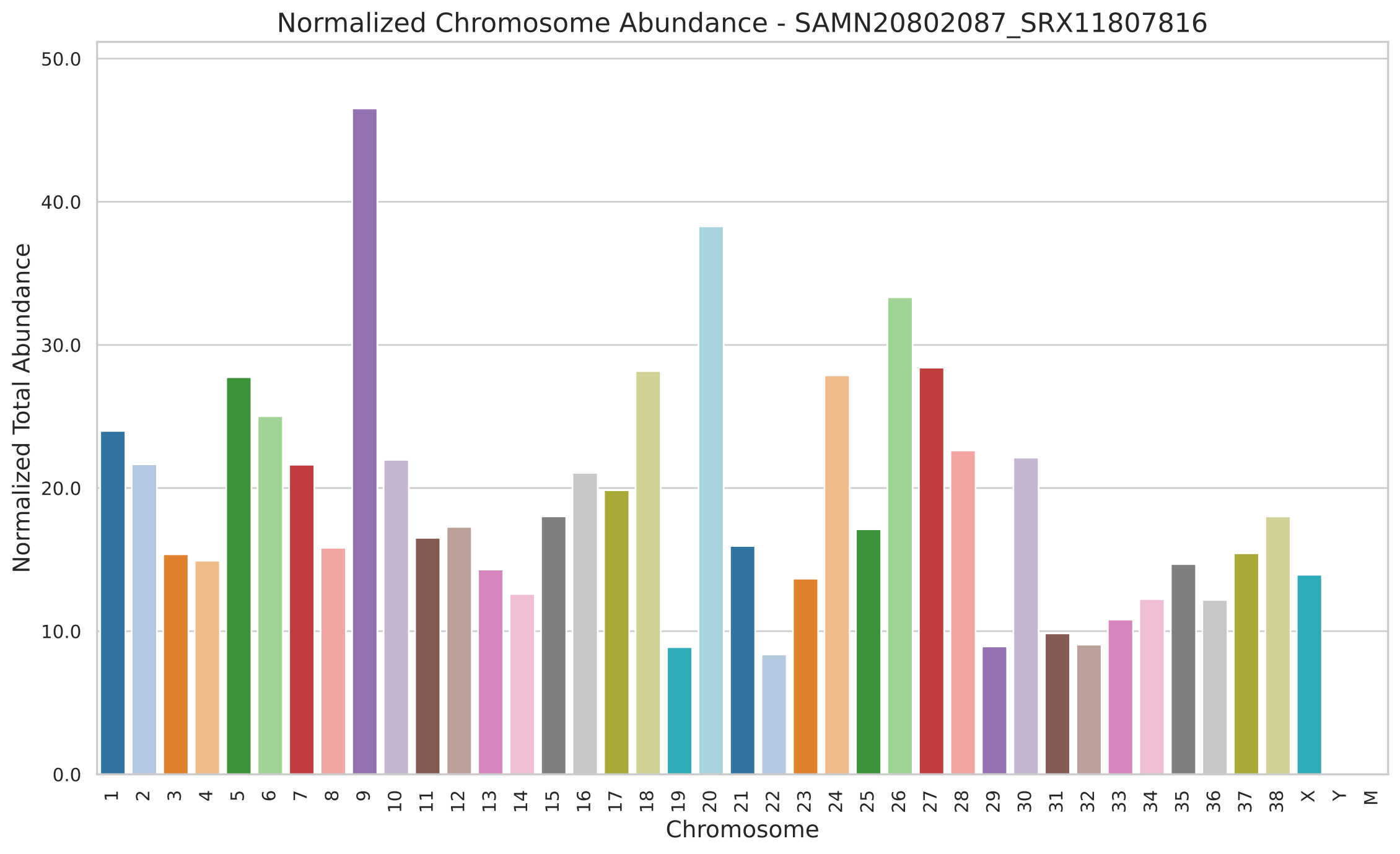

Normalized Chromosome Abundance - SAMN04002430_SRX1160030
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

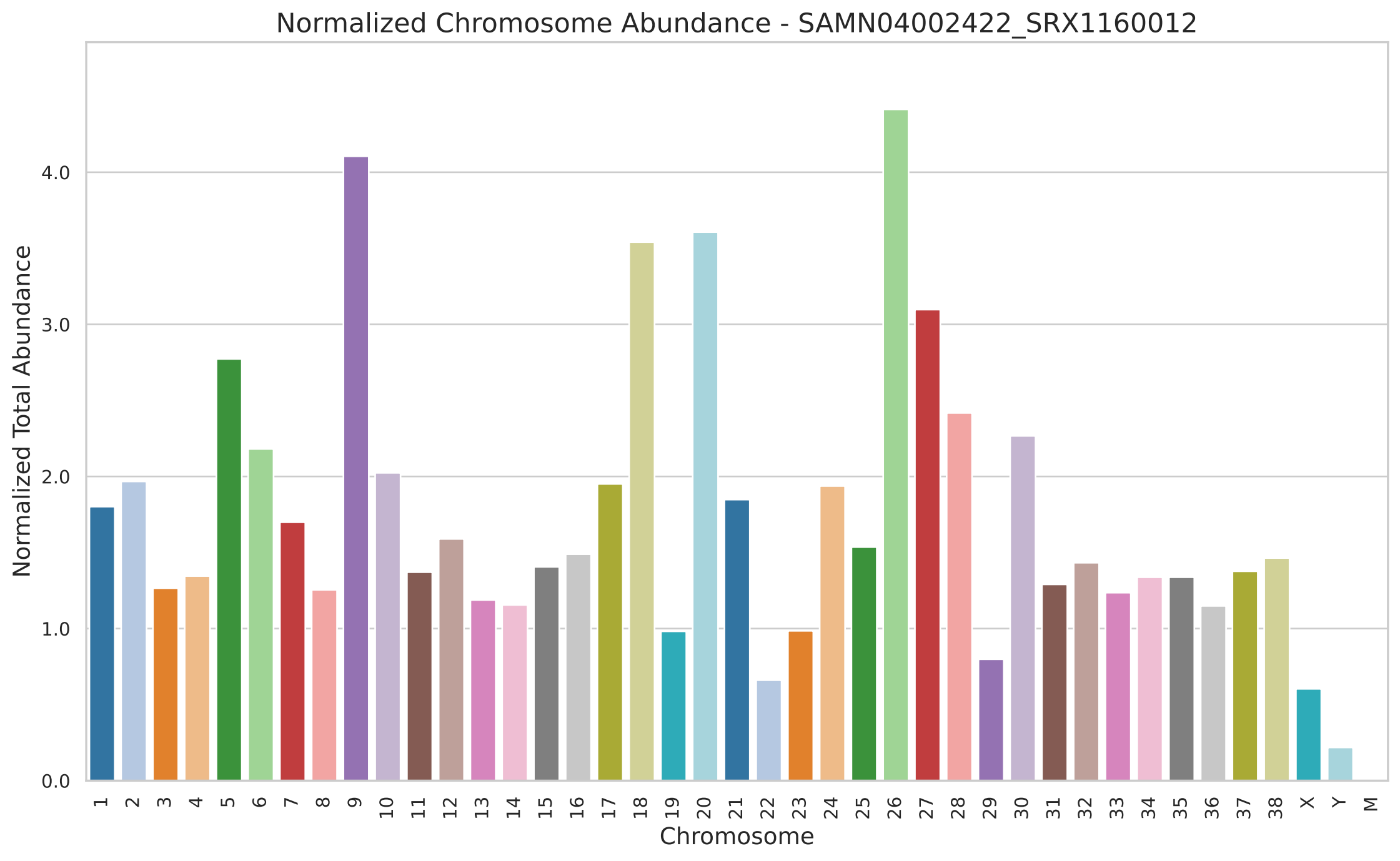

Normalized Chromosome Abundance - SAMN13133771_SRX7061446
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

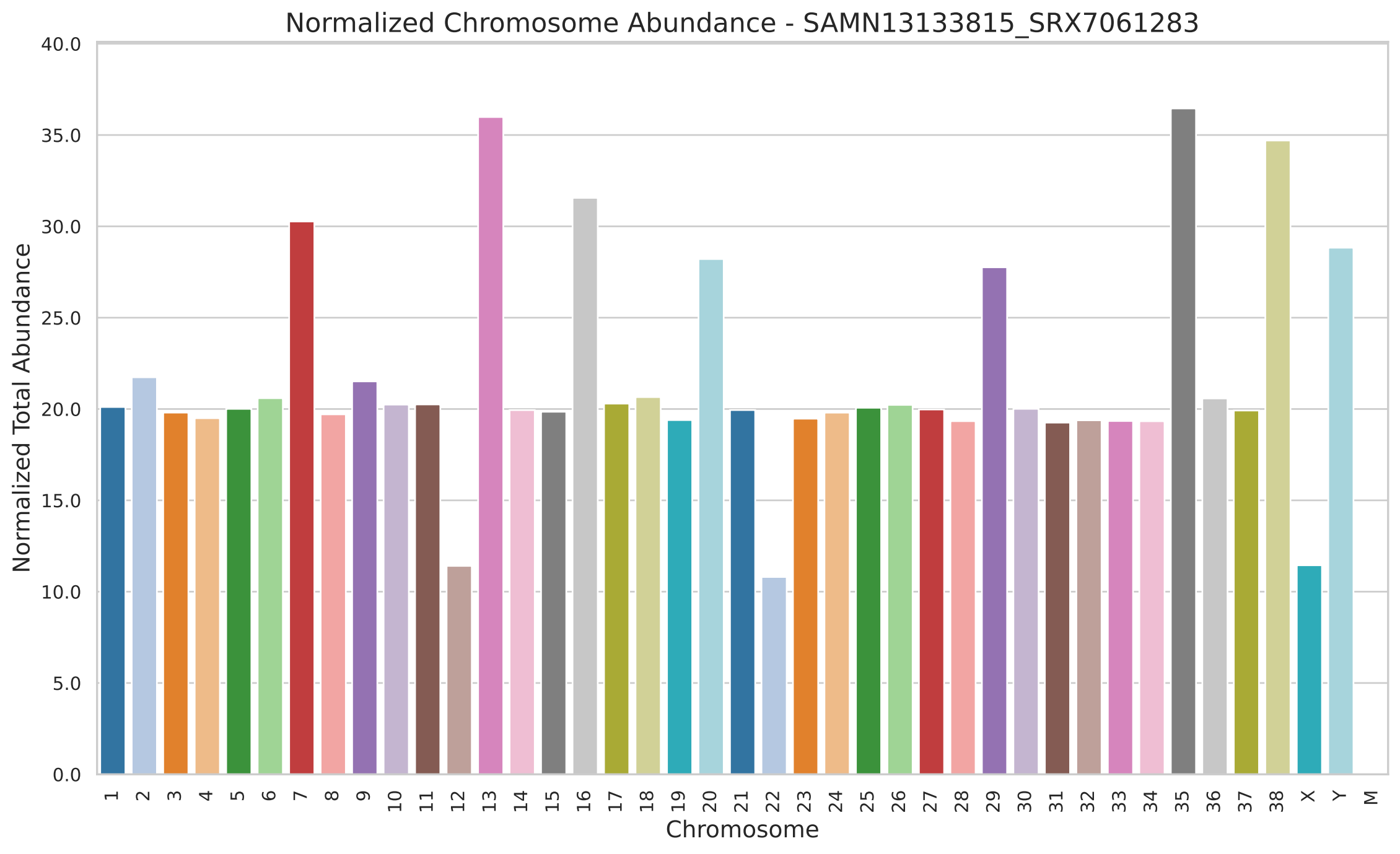

Normalized Chromosome Abundance - SAMEA3955973_ERX1751061
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

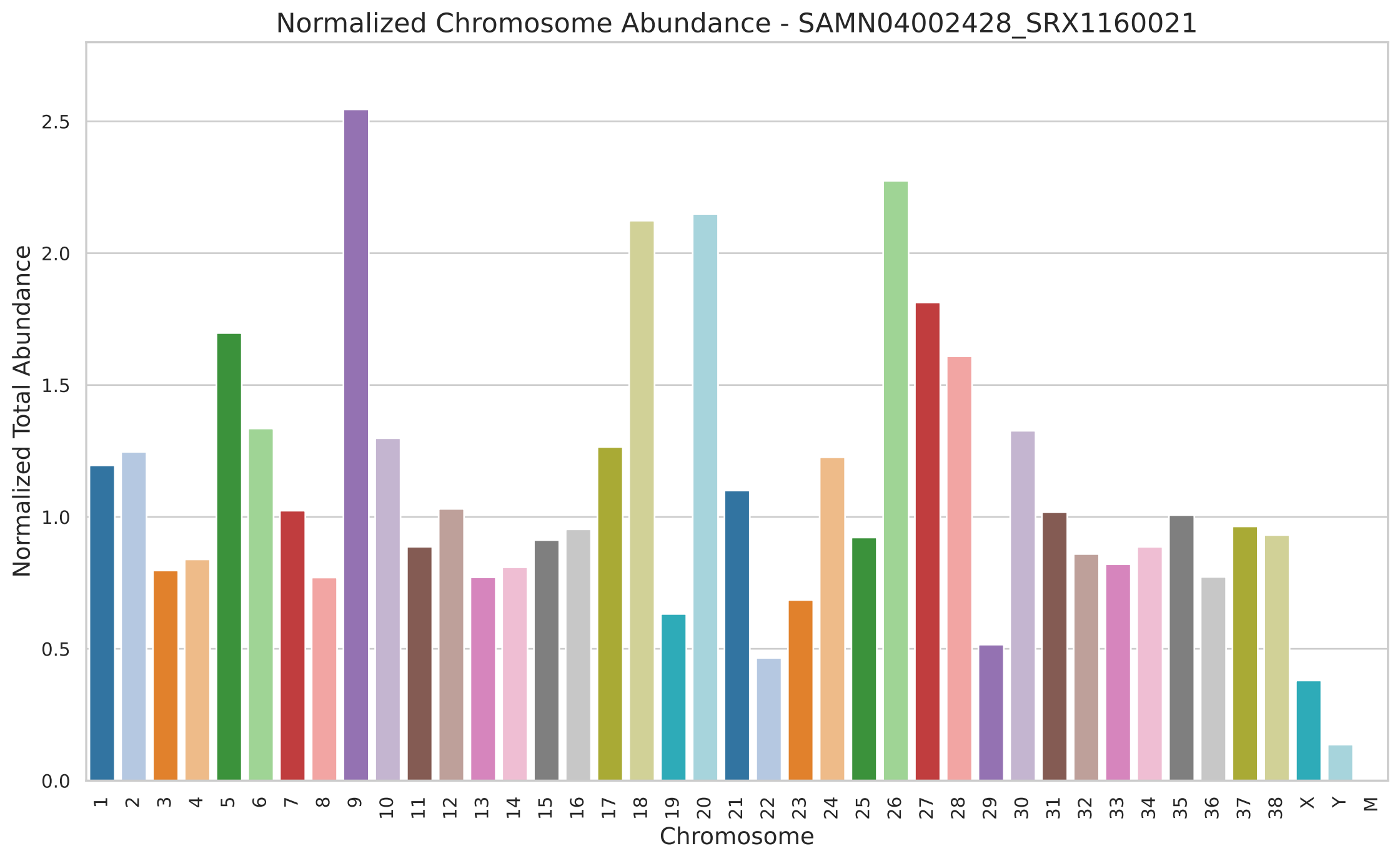

Normalized Chromosome Abundance - SAMEA3716423_ERX1751057
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

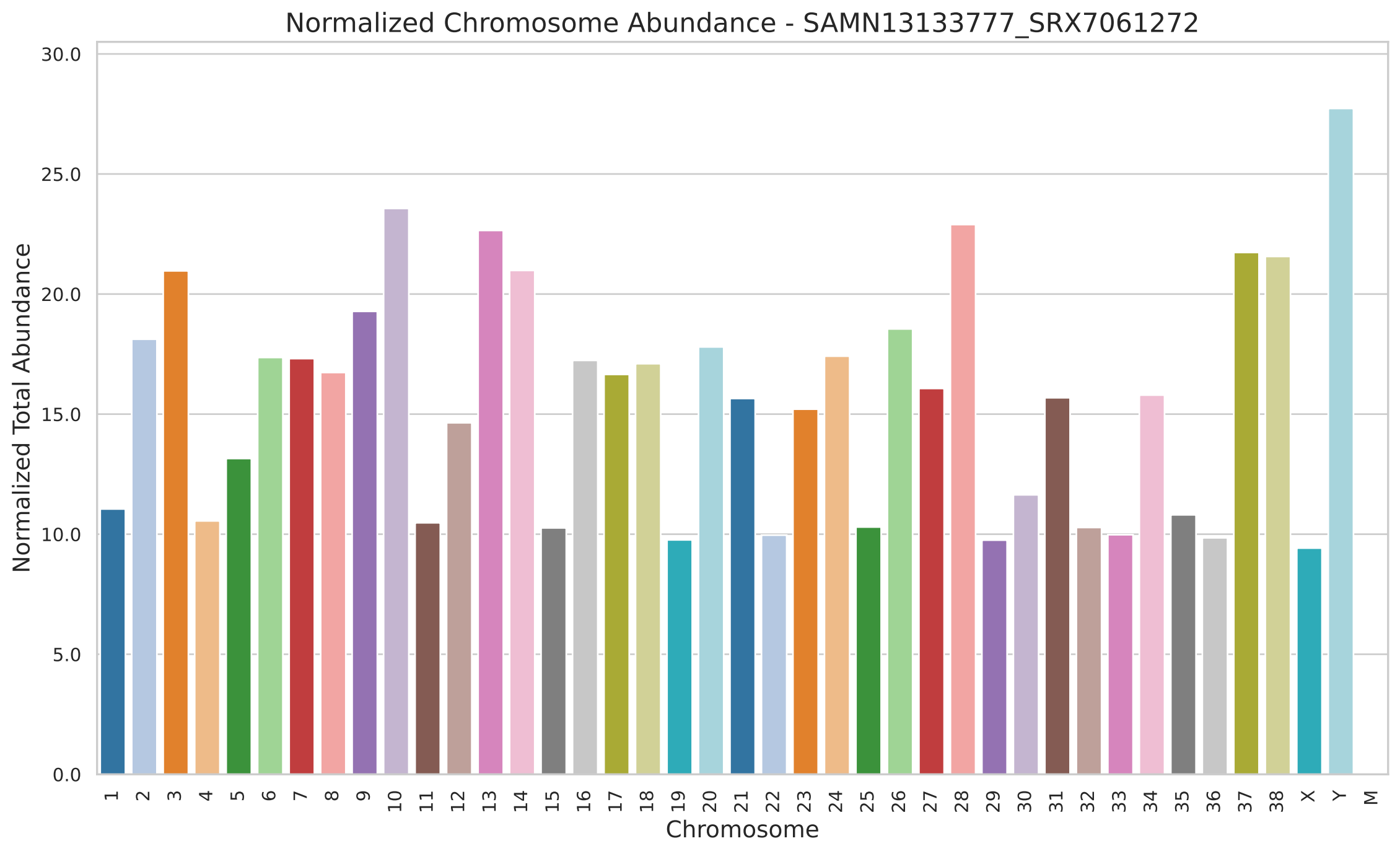

Normalized Chromosome Abundance - SAMEA3955968_ERX1751060
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

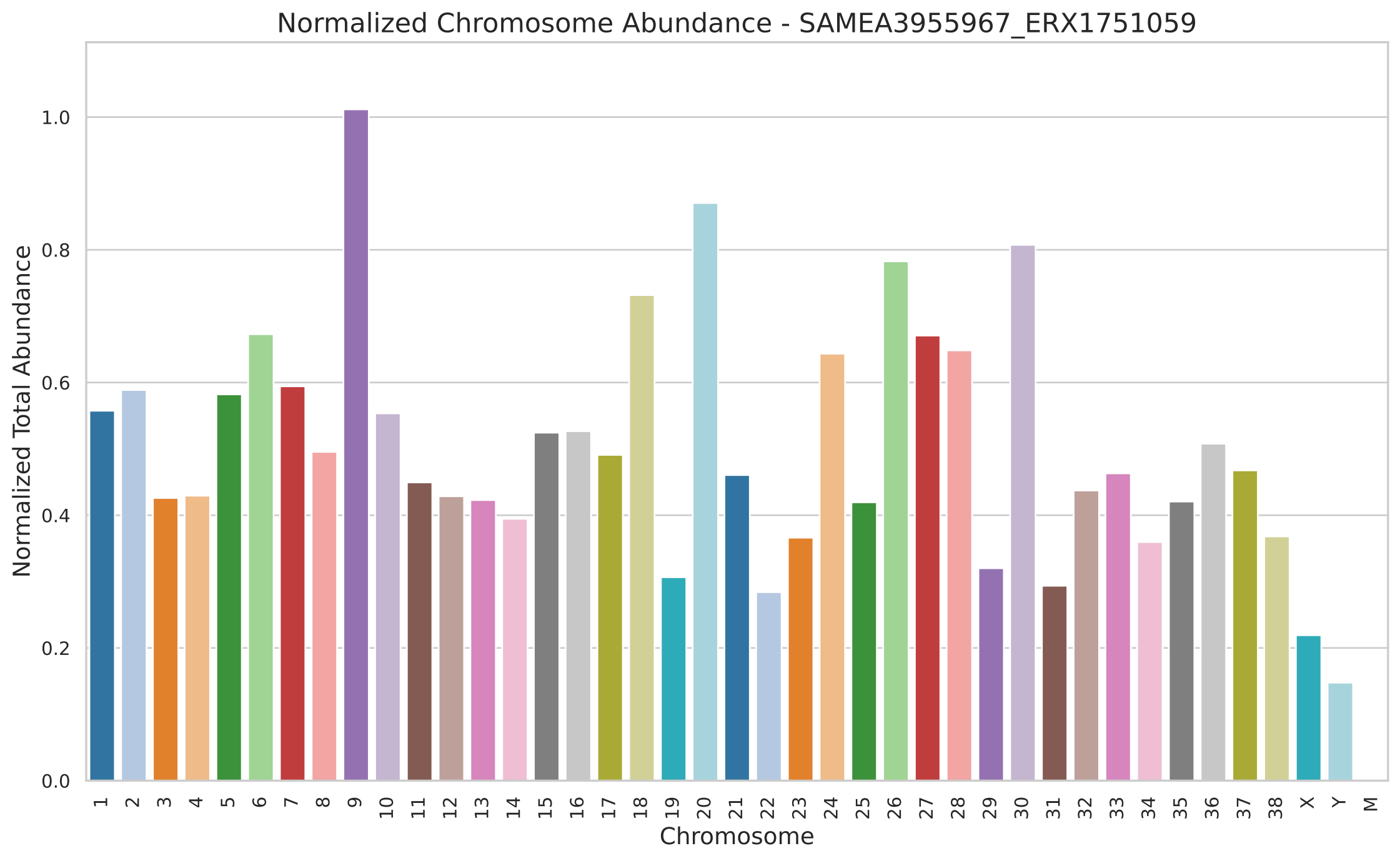

Normalized Chromosome Abundance - SAMN20802087_SRX11807816
Normalized Total Abundance
50.0
40.0
30.0
20.0
10.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

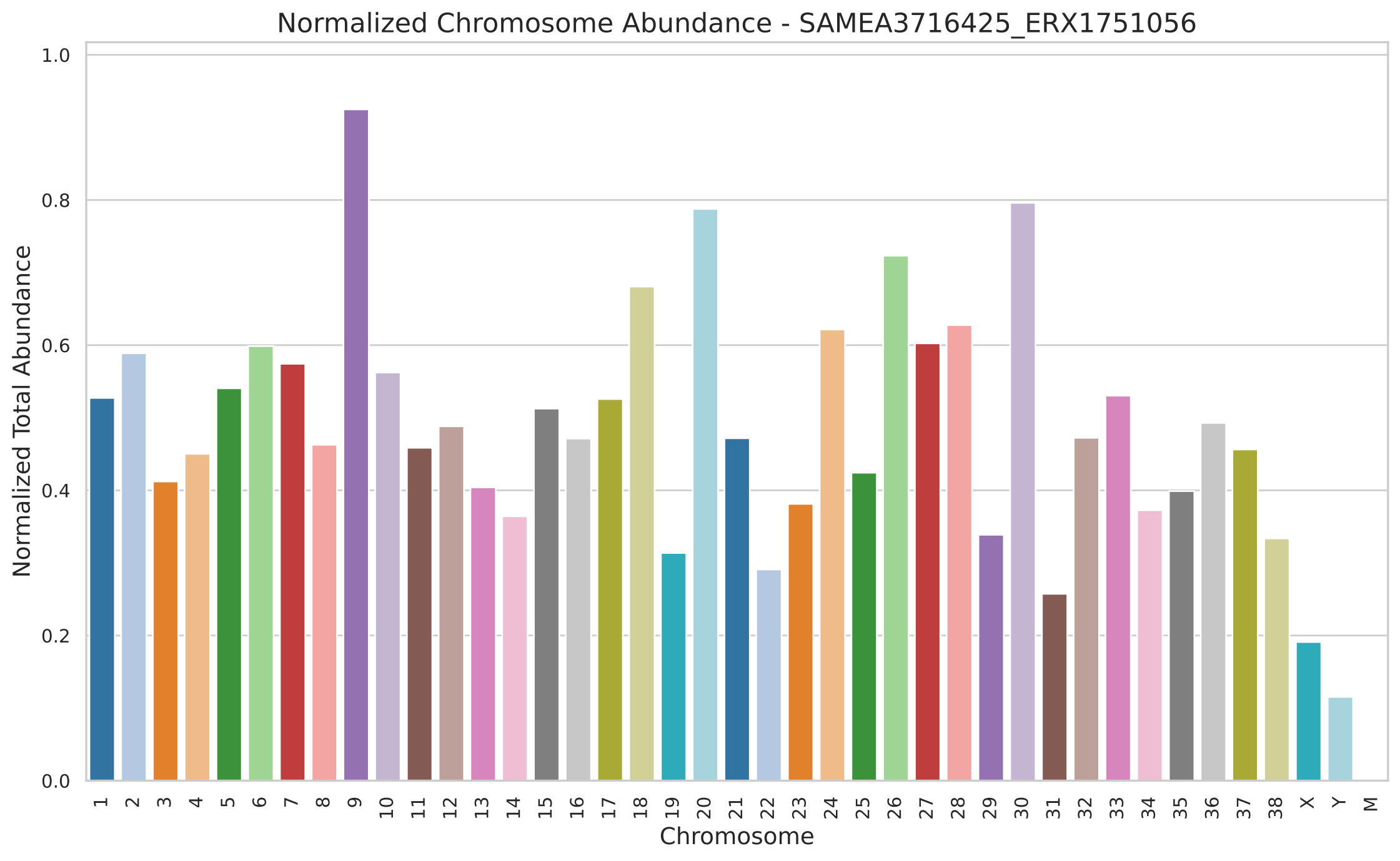

Normalized Chromosome Abundance - SAMN04002422_SRX1160012
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

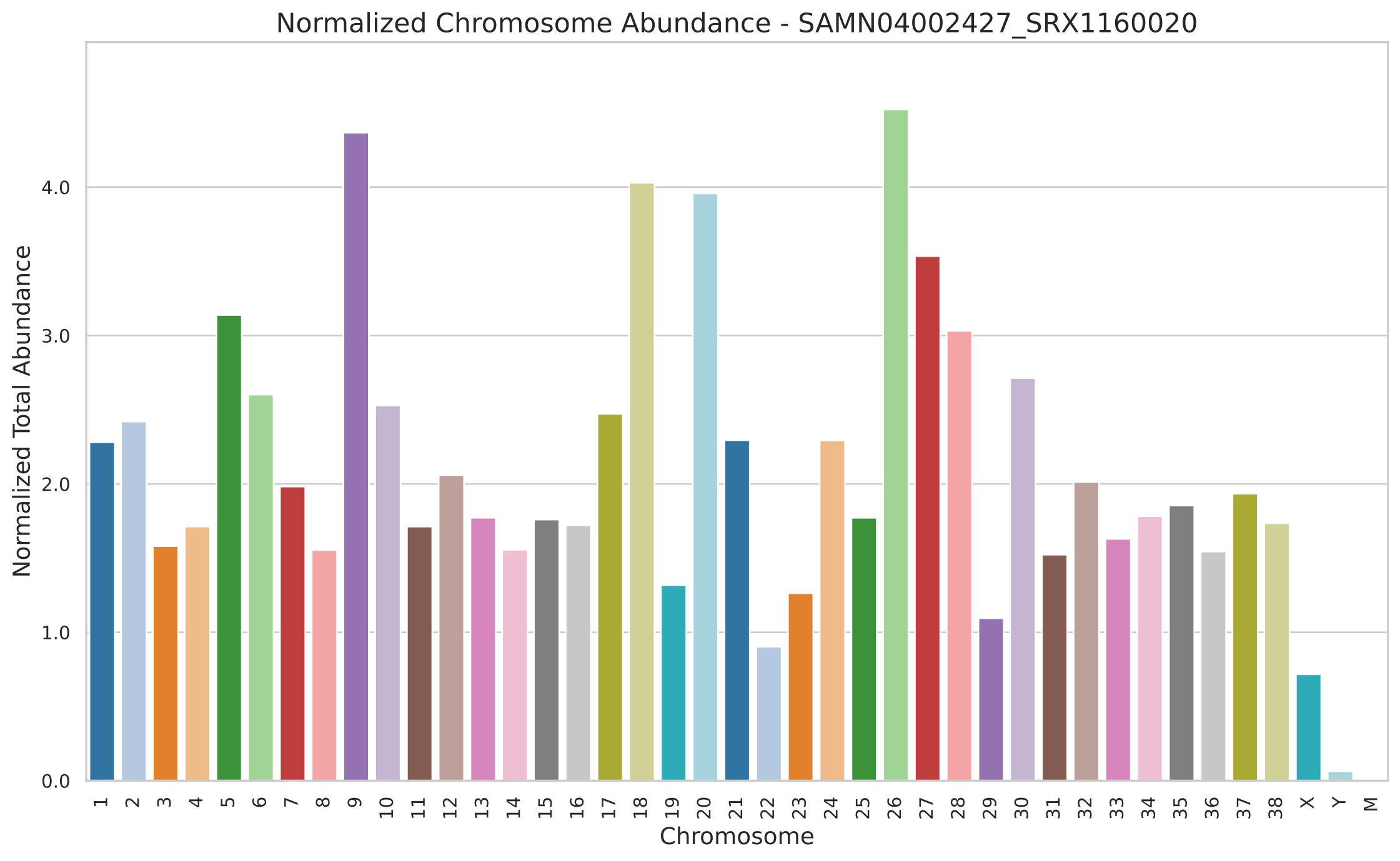

Normalized Chromosome Abundance - SAMN13133815_SRX7061283
Normalized Total Abundance
40.0
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

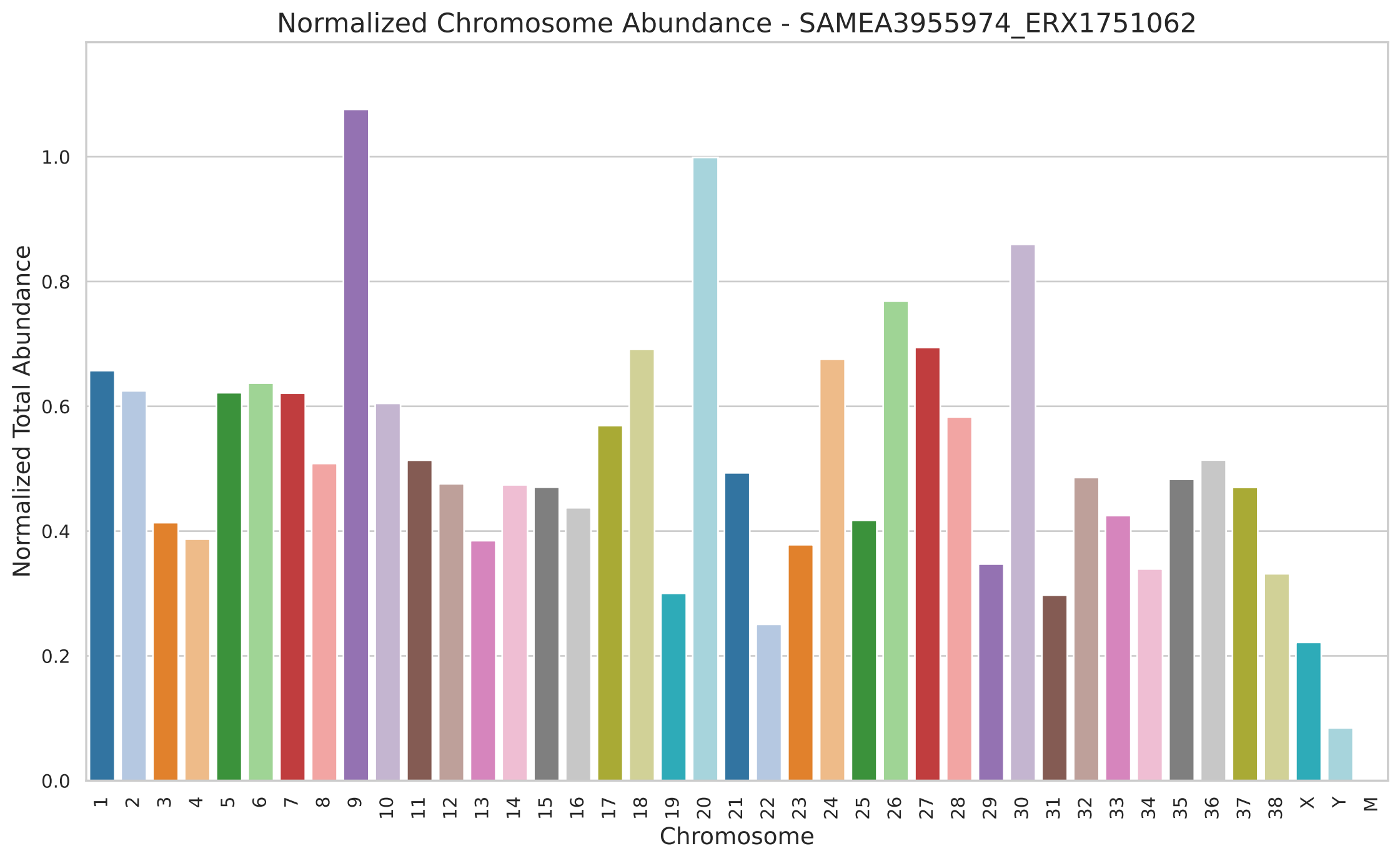

Normalized Chromosome Abundance - SAMN04002428_SRX1160021
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

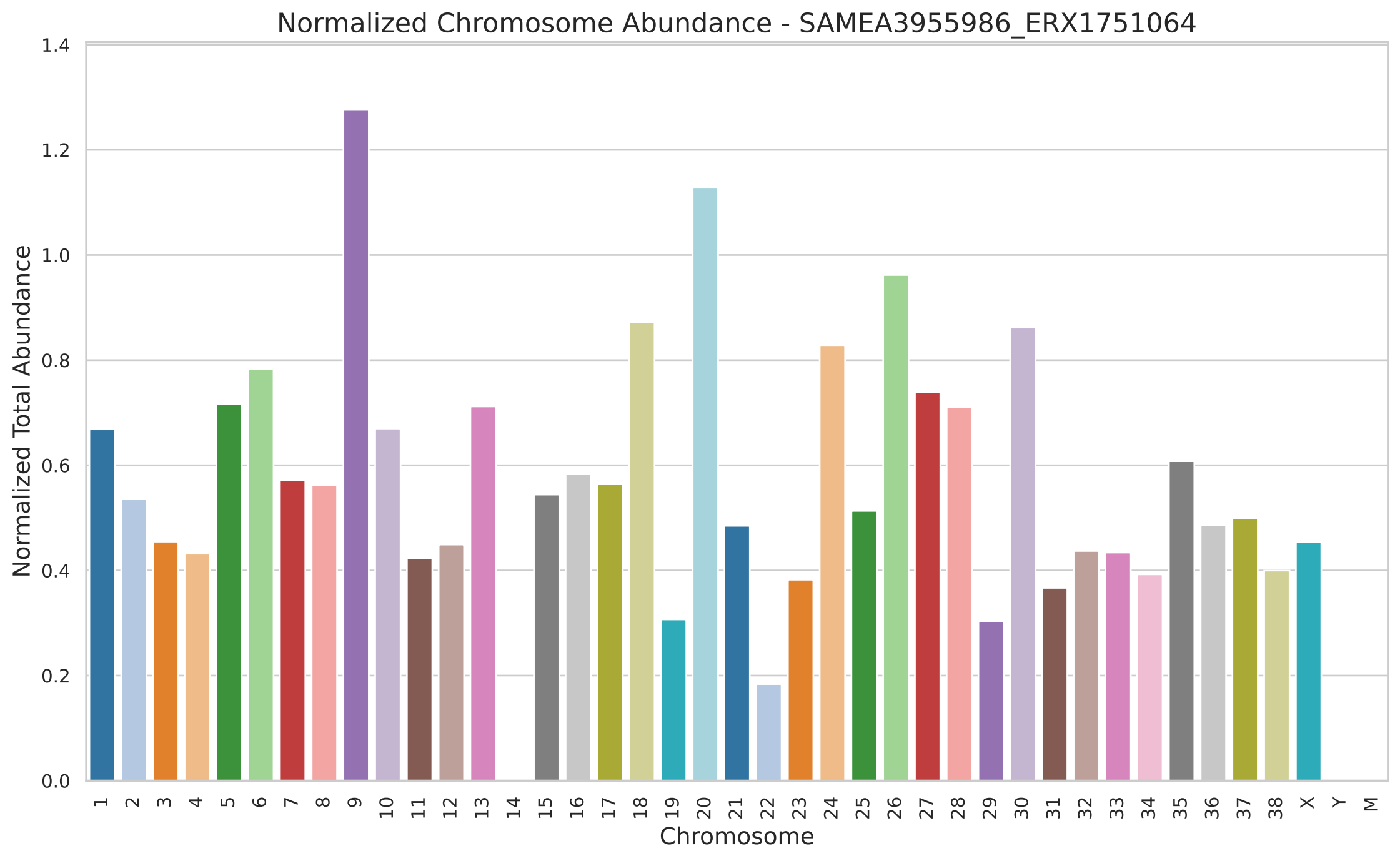

Normalized Chromosome Abundance - SAMN13133777_SRX7061272
Normalized Total Abundance
30.0
25.0
20.0
15.0
10.0
5.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

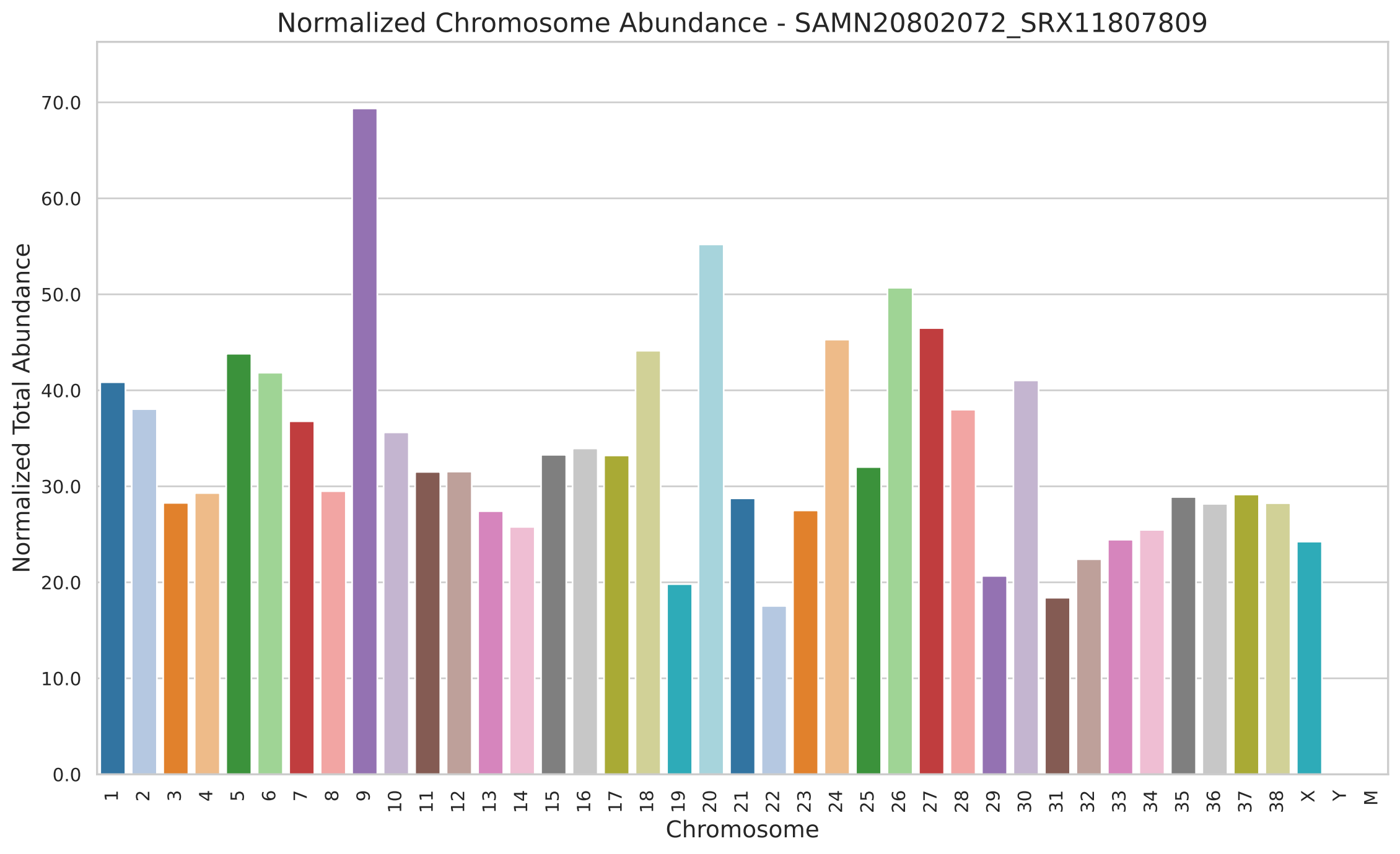

Normalized Chromosome Abundance - SAMEA3955967_ERX1751059
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

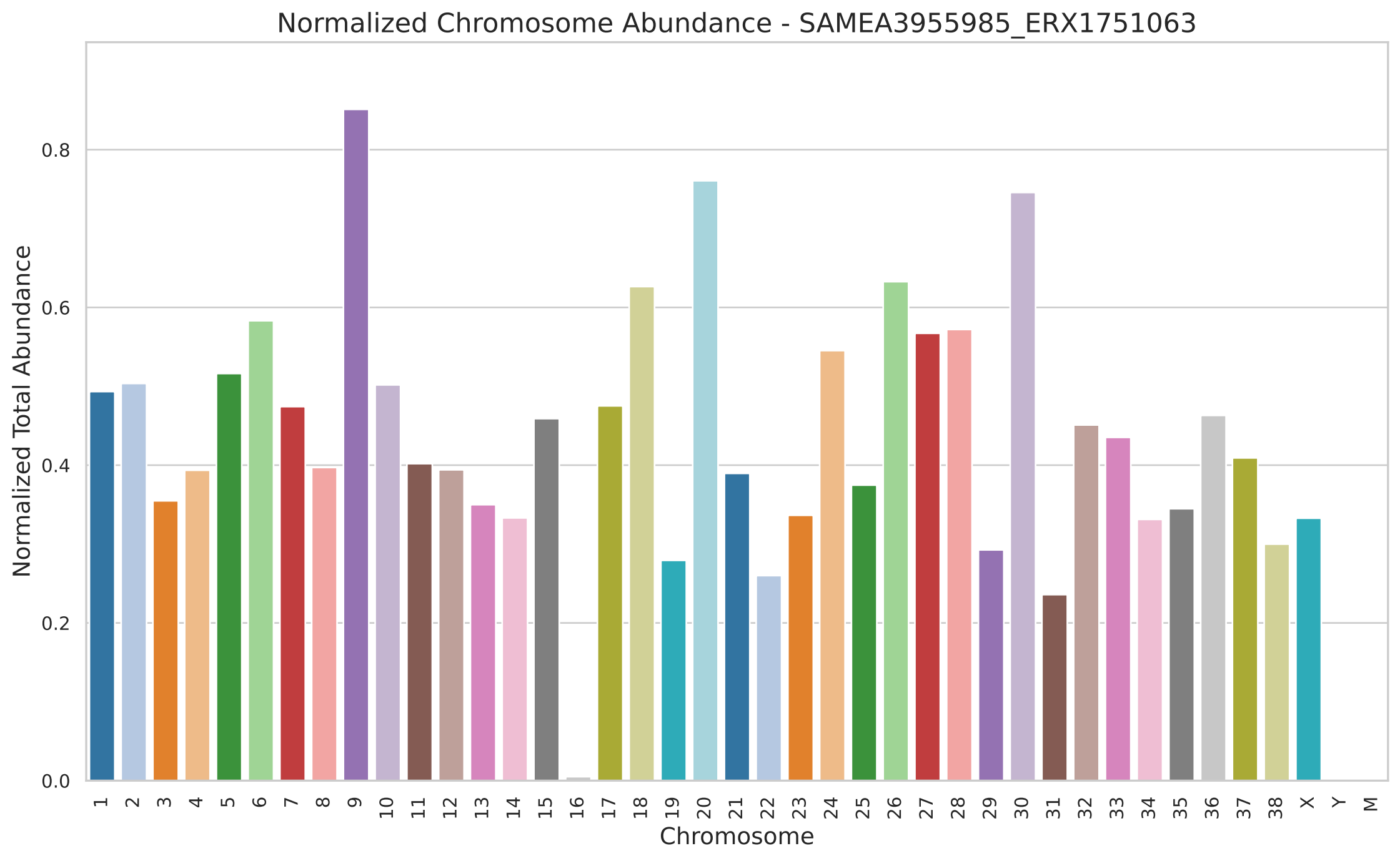

Normalized Chromosome Abundance - SAMEA3716425_ERX1751056
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

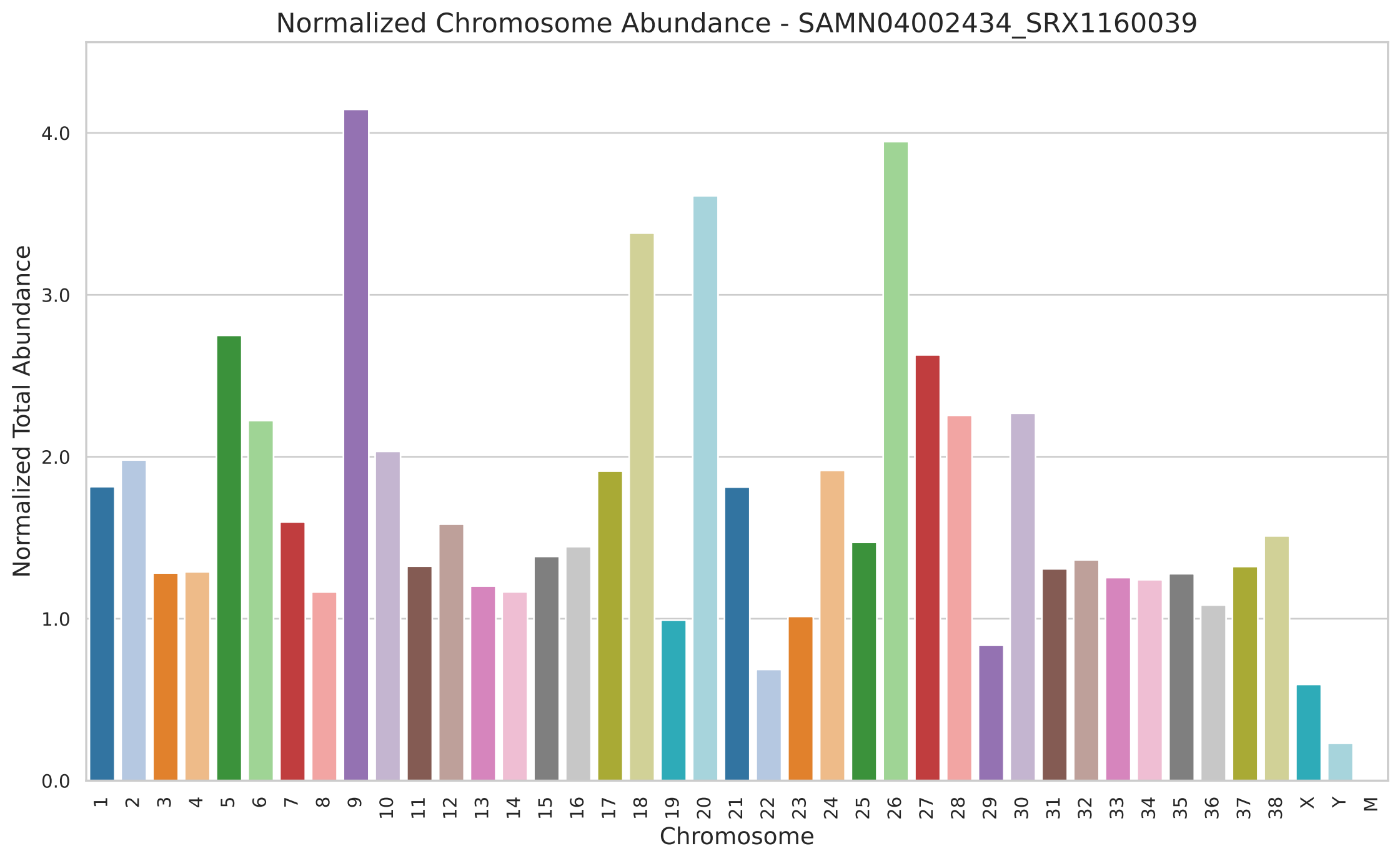

Normalized Chromosome Abundance - SAMN04002427_SRX1160020
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

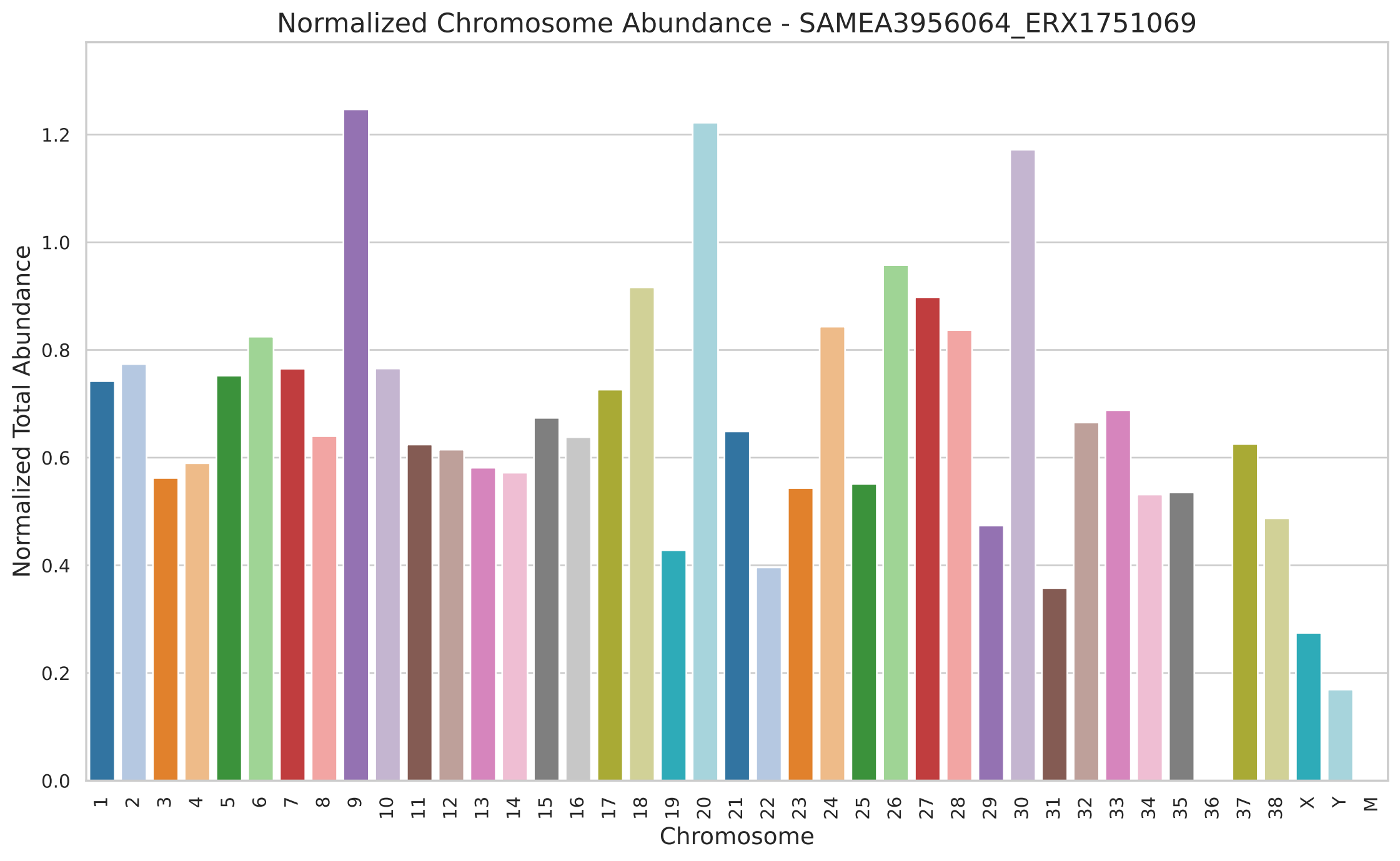

Normalized Chromosome Abundance - SAMEA3955974_ERX1751062
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

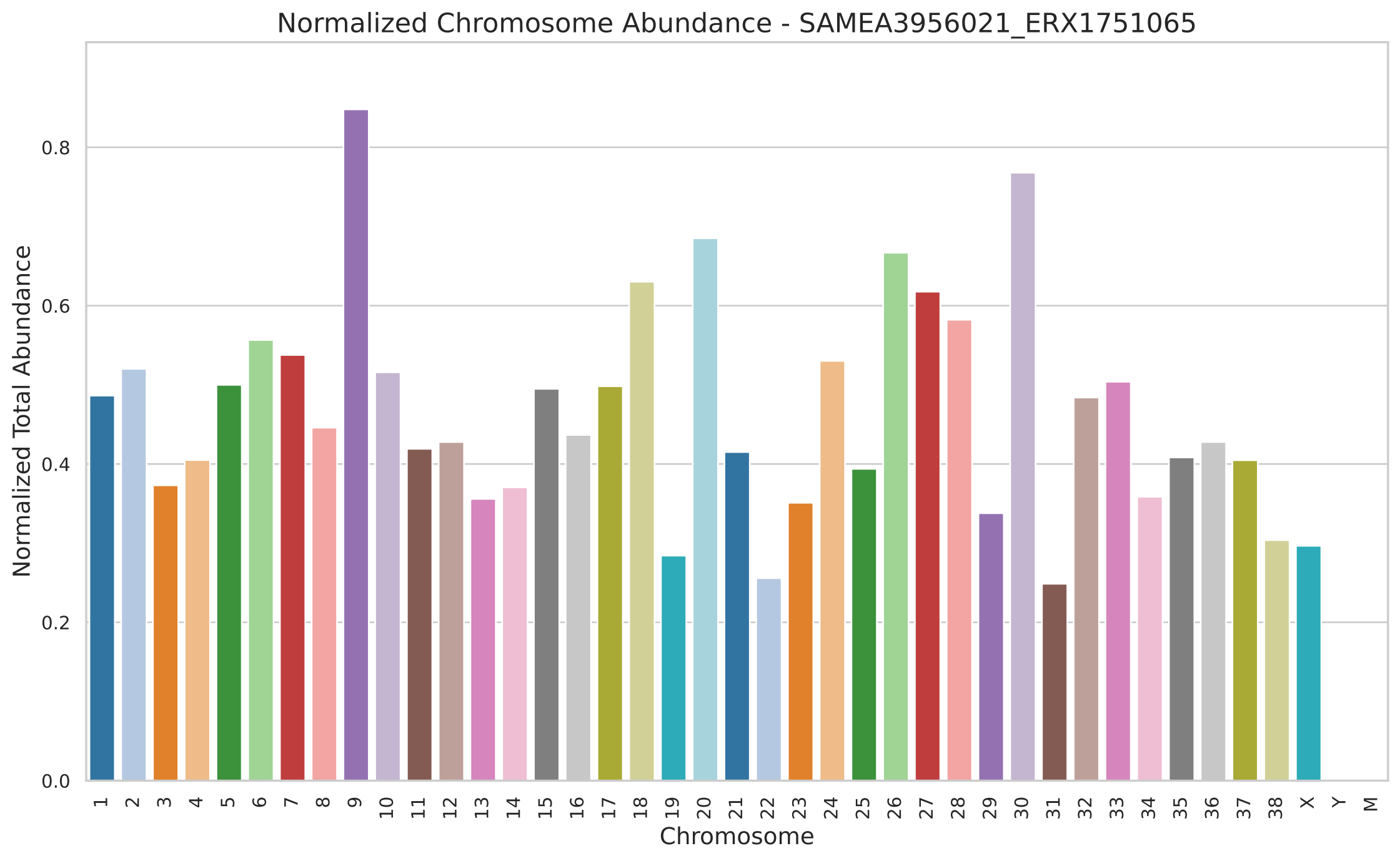

Normalized Chromosome Abundance - SAMEA3955986_ERX1751064
Normalized Total Abundance
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

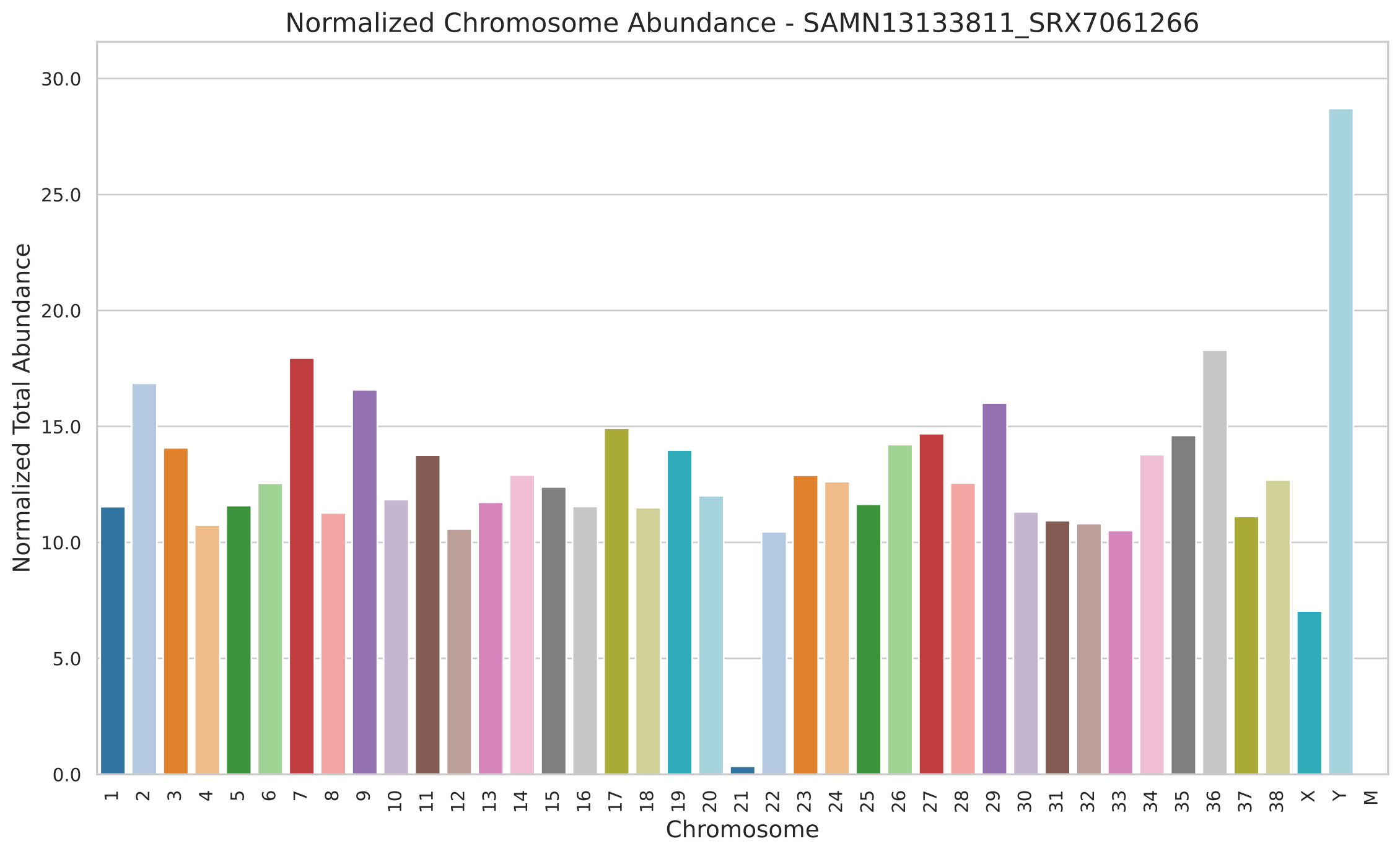

Normalized Chromosome Abundance - SAMN20802072_SRX11807809
Normalized Total Abundance
0.0
10.0
20.0
30.0
40.0
50.0
60.0
70.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

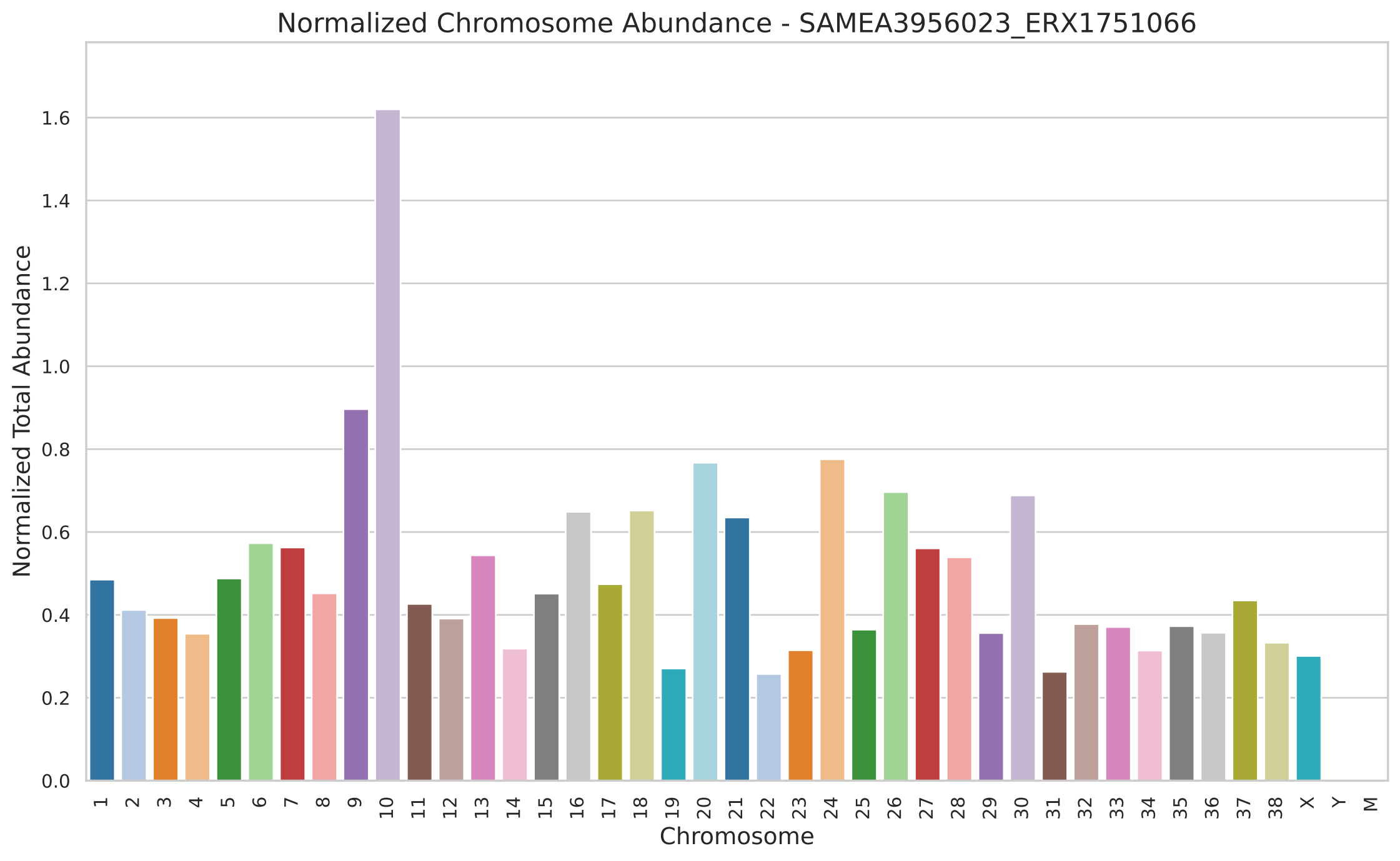

Normalized Chromosome Abundance - SAMEA3955985_ERX1751063
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

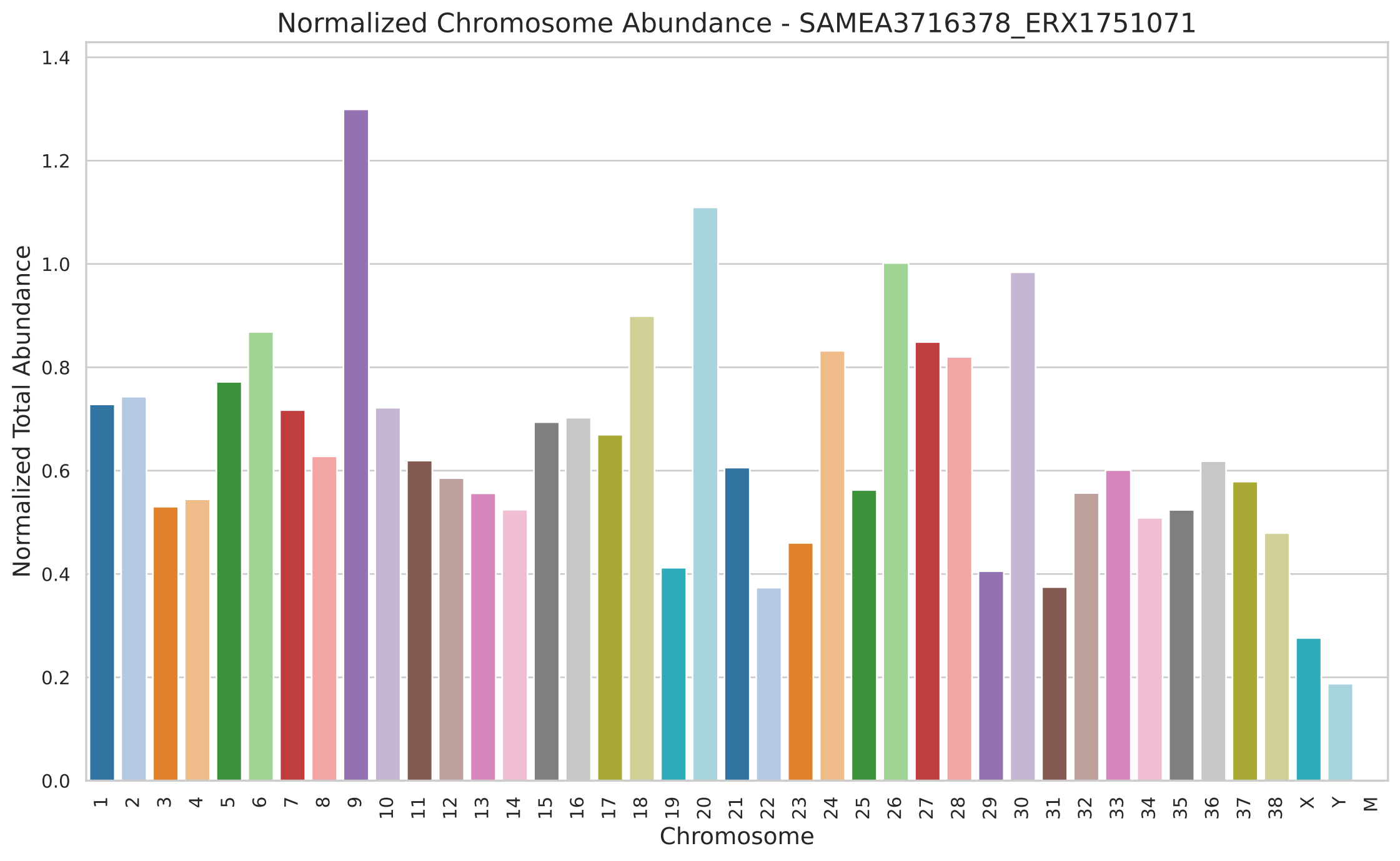

Normalized Chromosome Abundance - SAMN04002434_SRX1160039
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

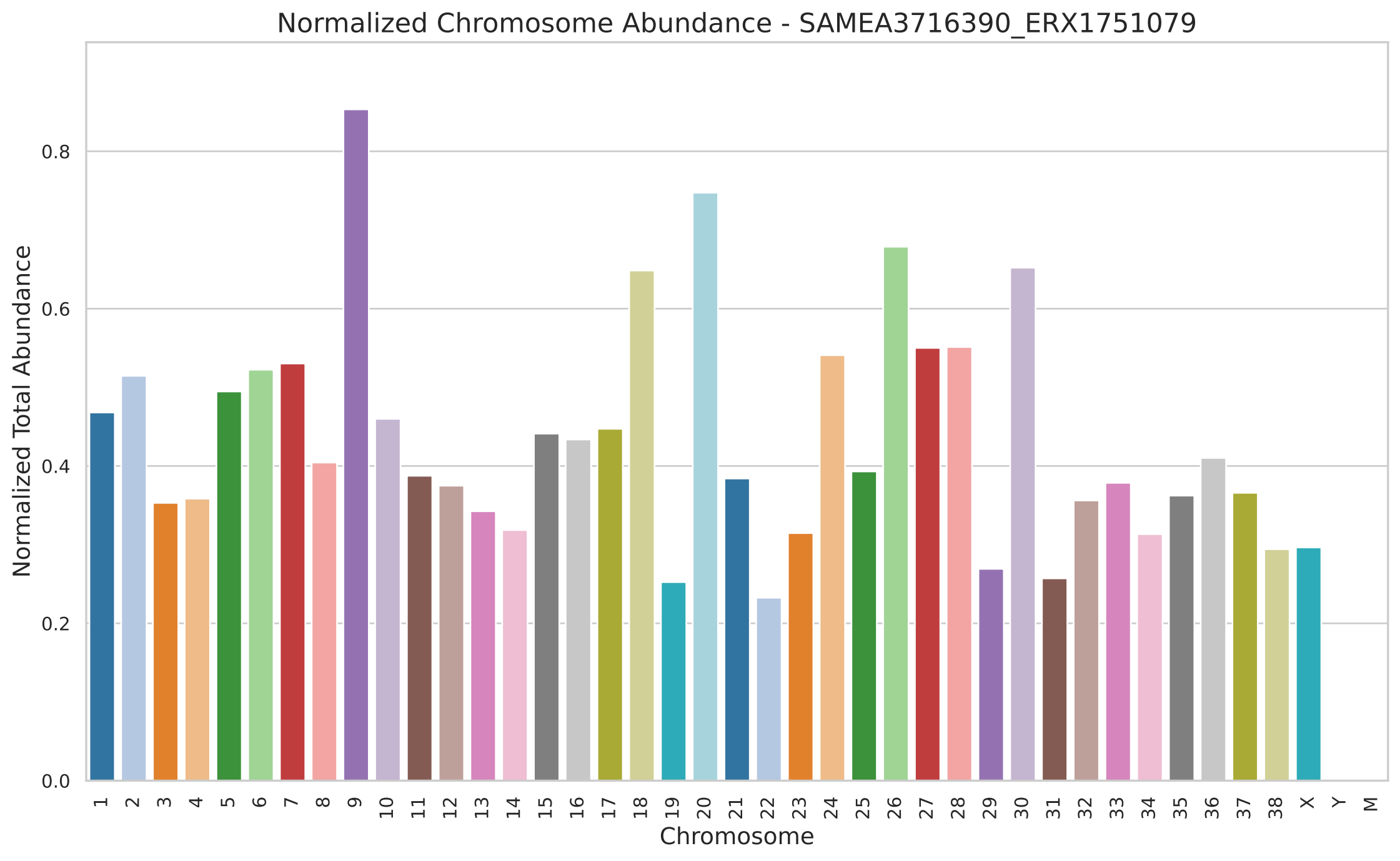

Normalized Chromosome Abundance - SAMEA3956064_ERX1751069
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

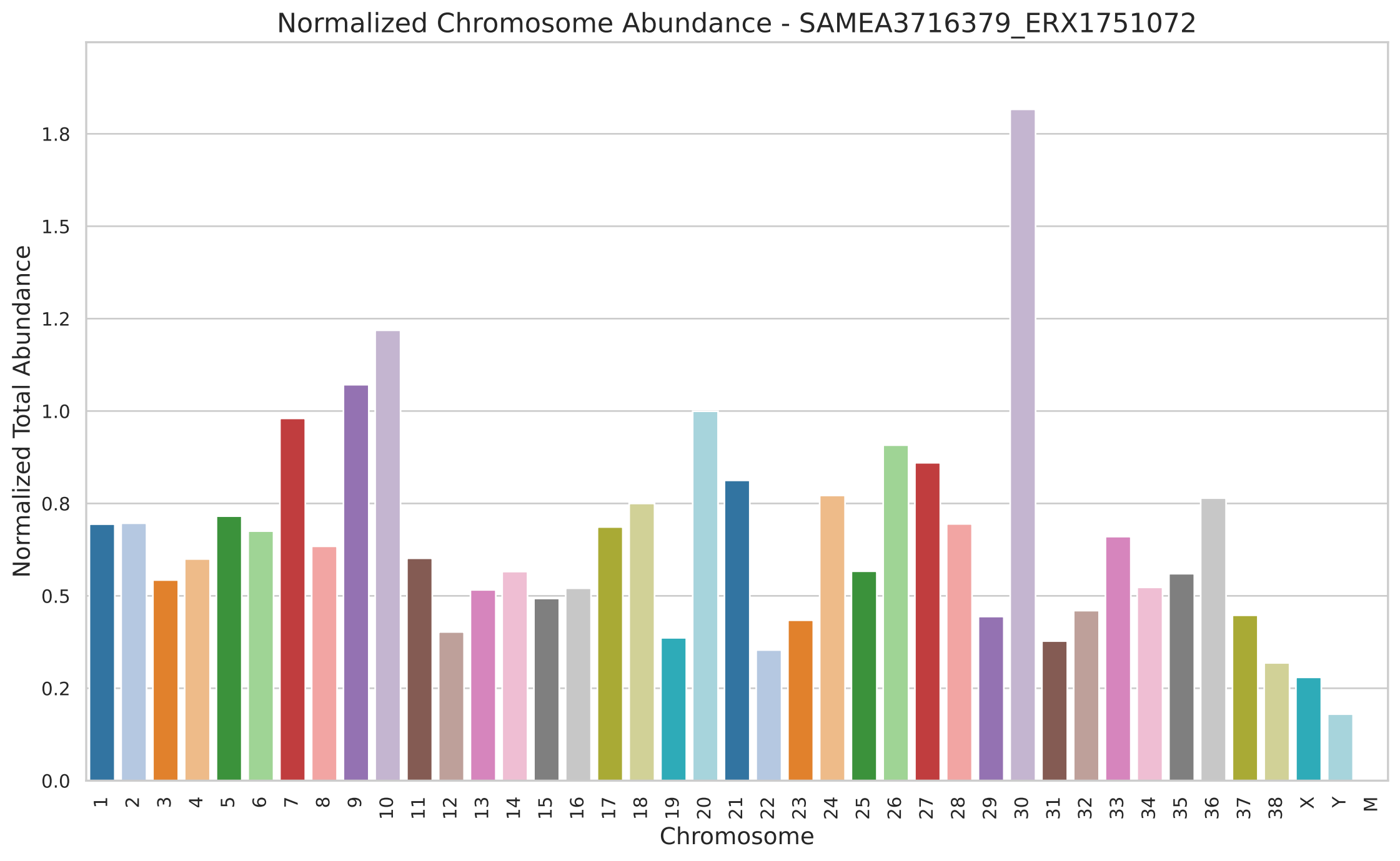

Normalized Chromosome Abundance - SAMEA3956021_ERX1751065
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

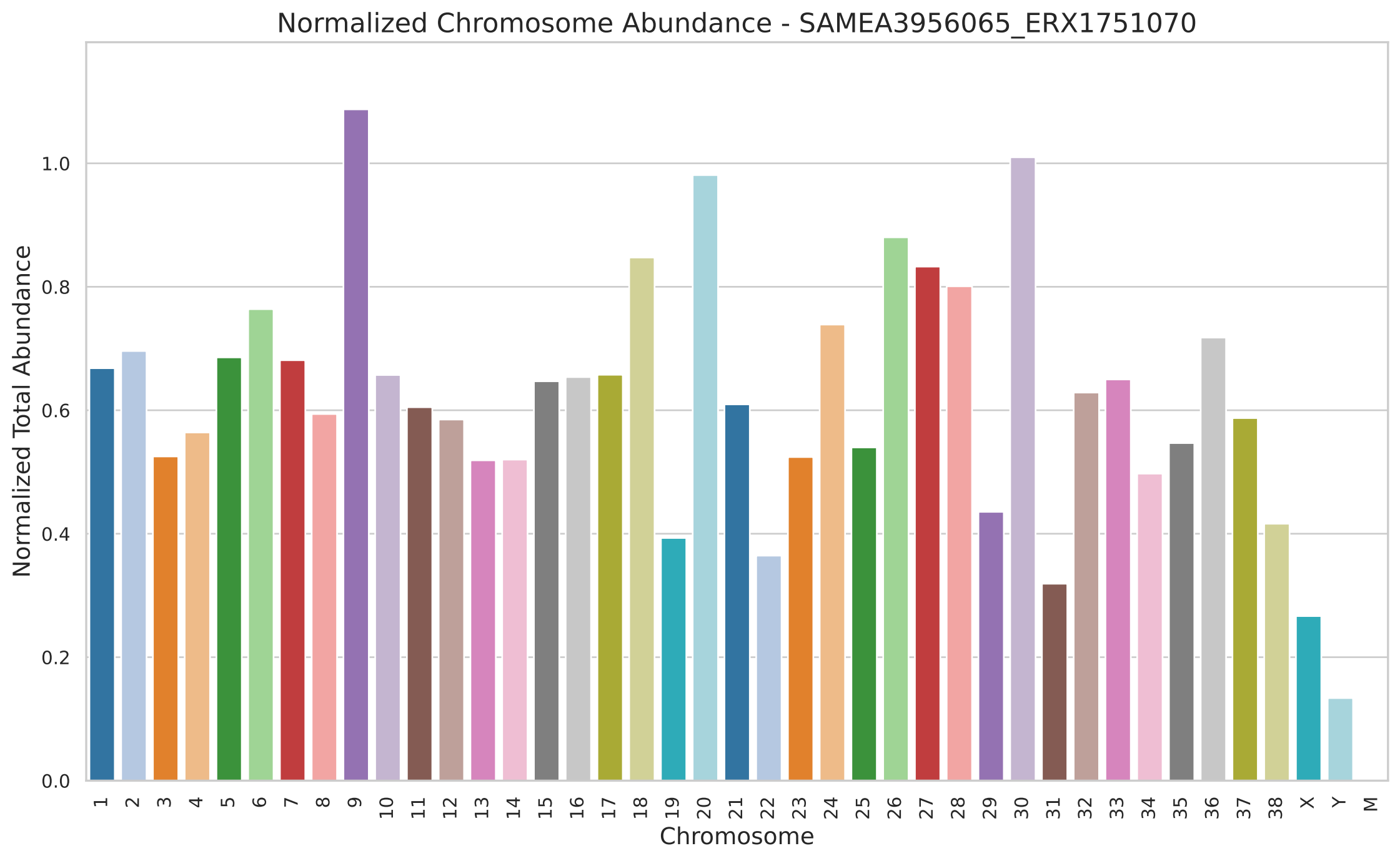

Normalized Chromosome Abundance - SAMN13133811_SRX7061266
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

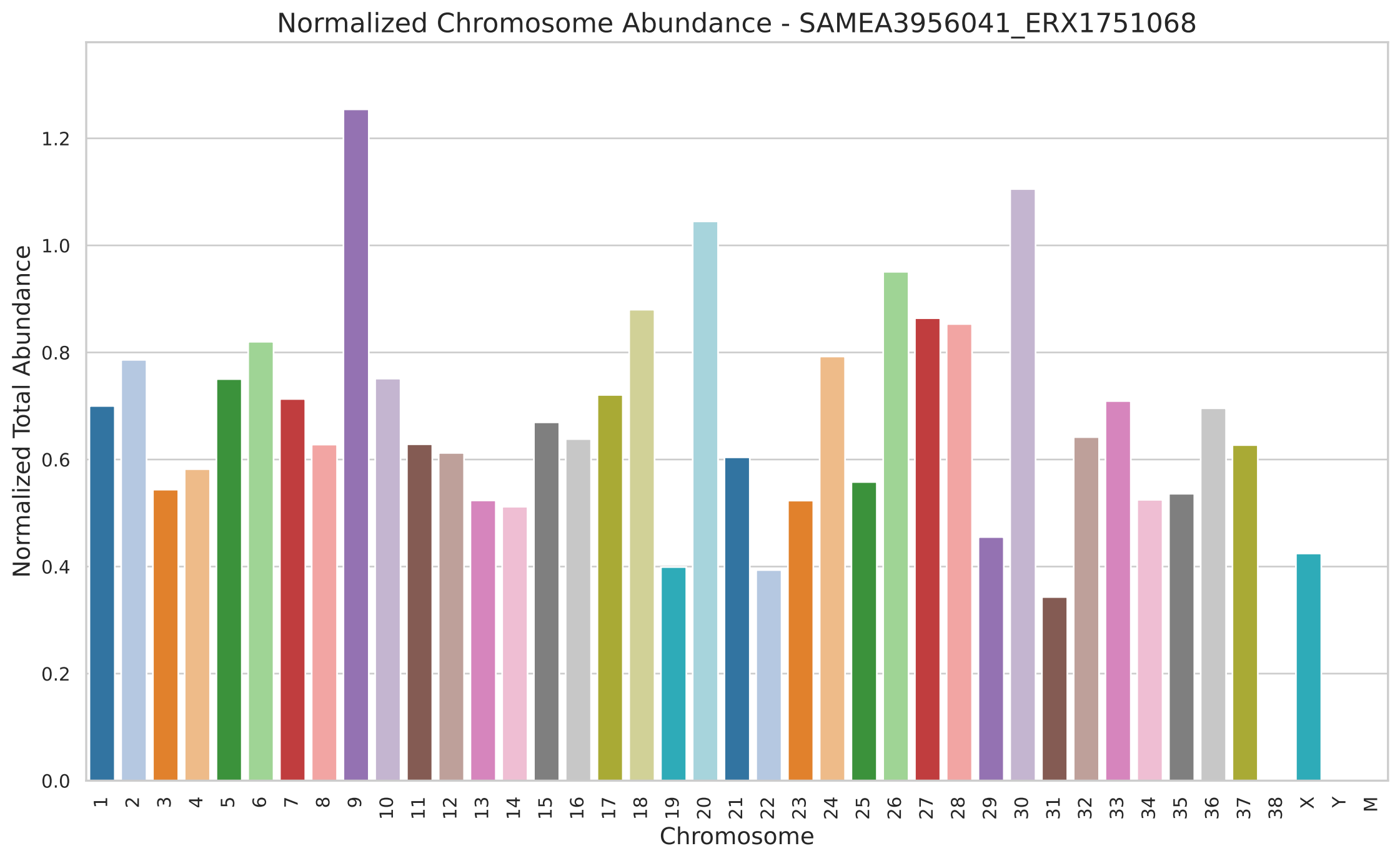

Normalized Chromosome Abundance - SAMEA3956023_ERX1751066
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

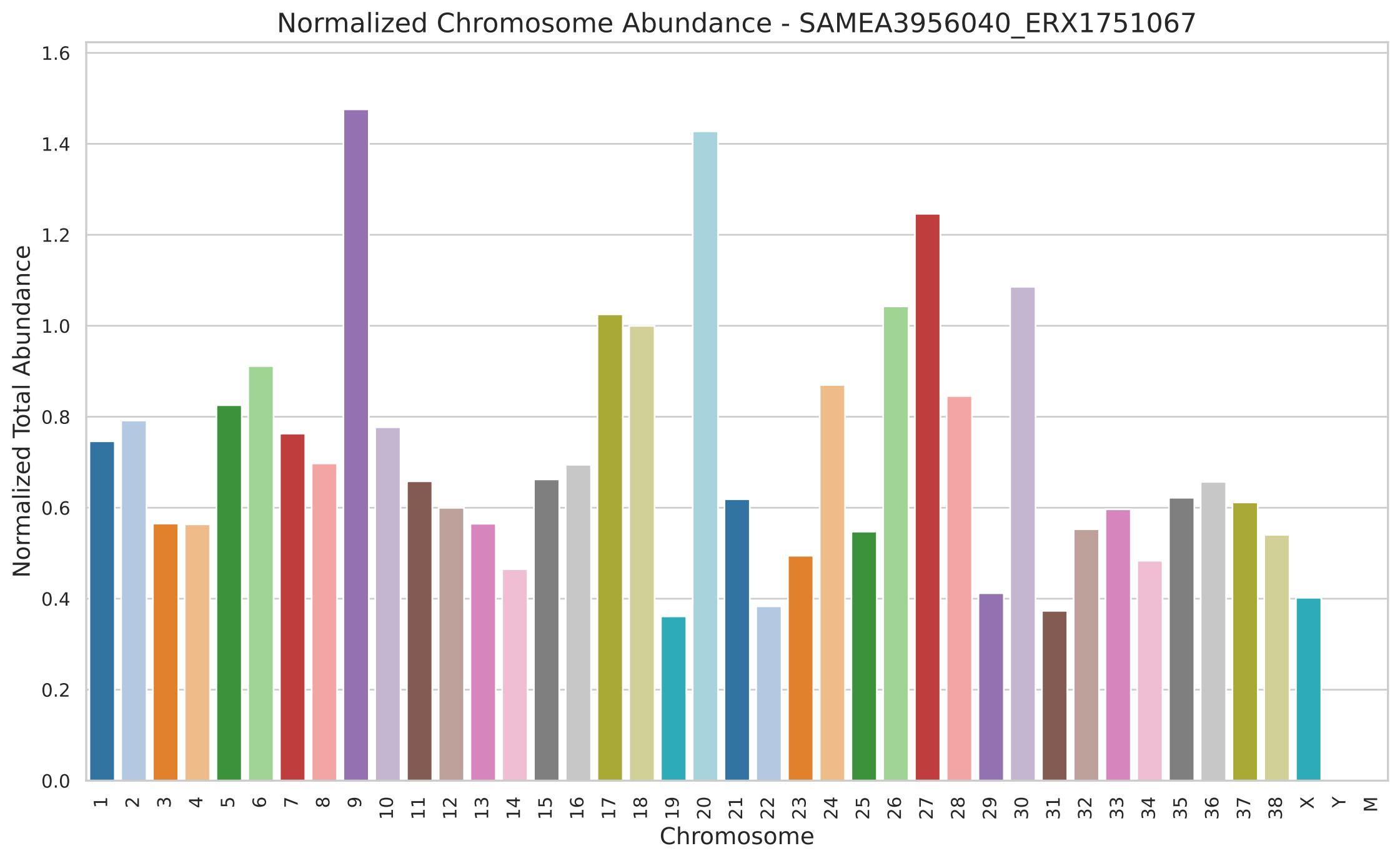

Normalized Chromosome Abundance - SAMEA3716378_ERX1751071
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

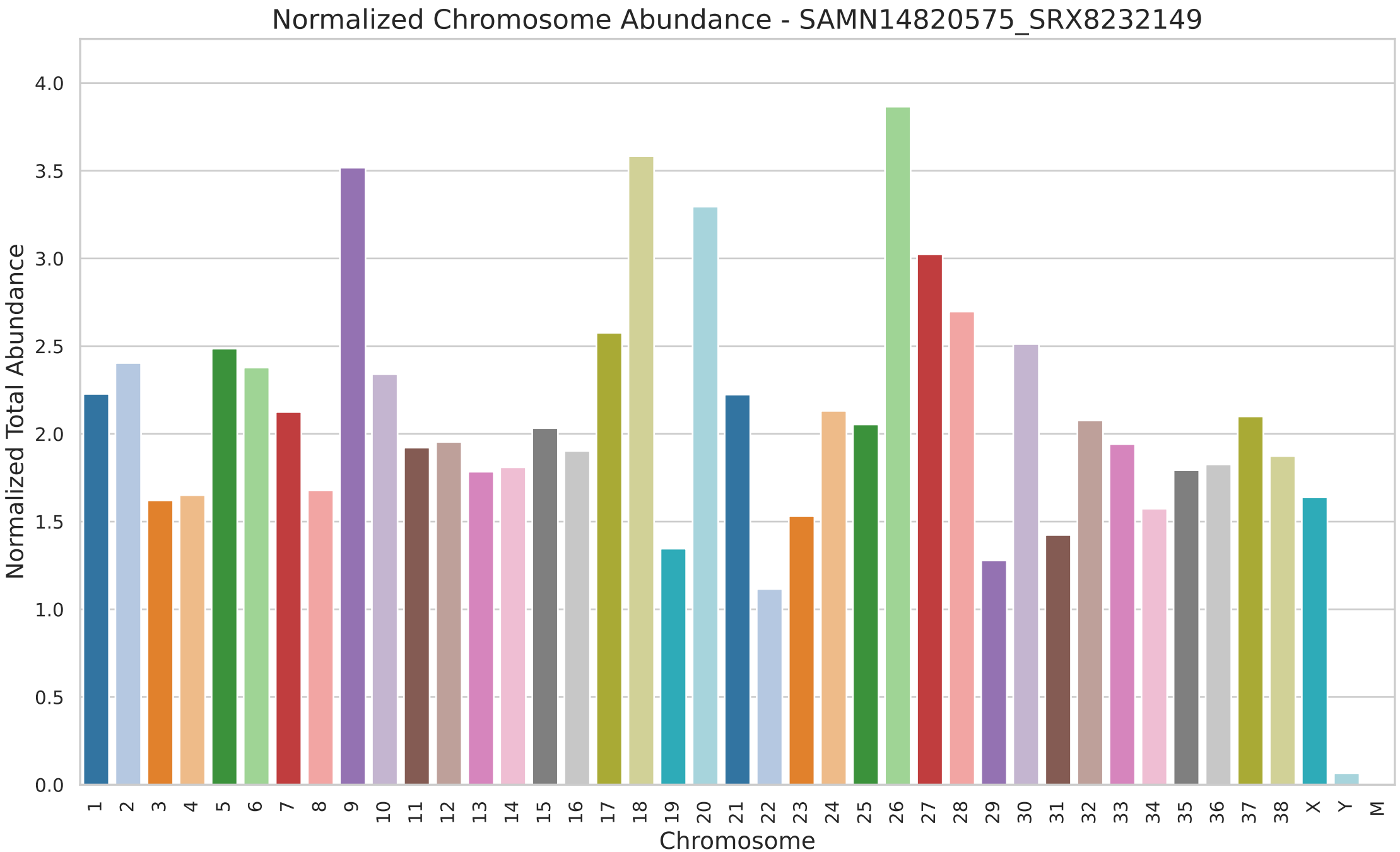

Normalized Chromosome Abundance - SAMEA3716390_ERX1751079
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

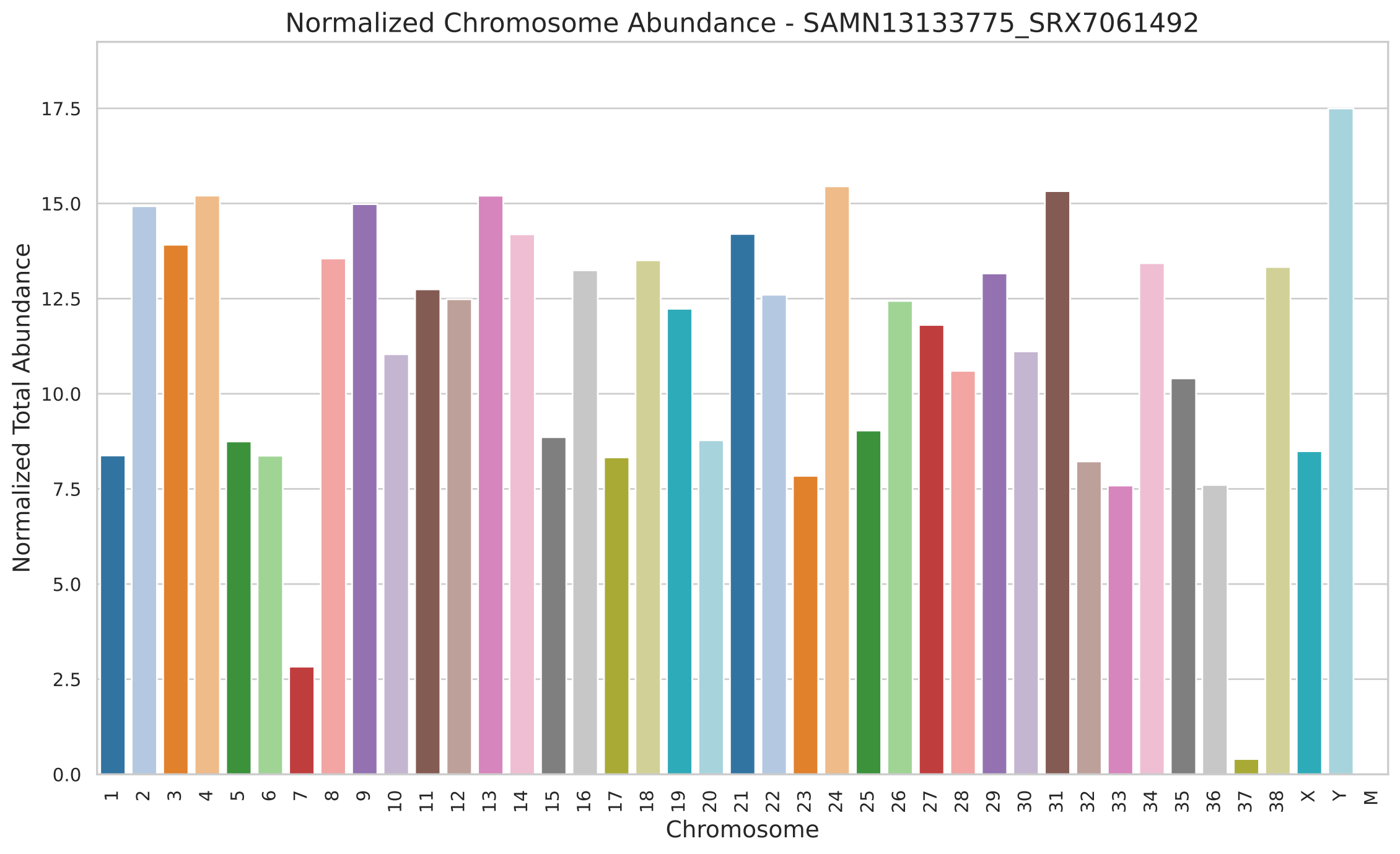

Normalized Chromosome Abundance - SAMEA3716379_ERX1751072
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

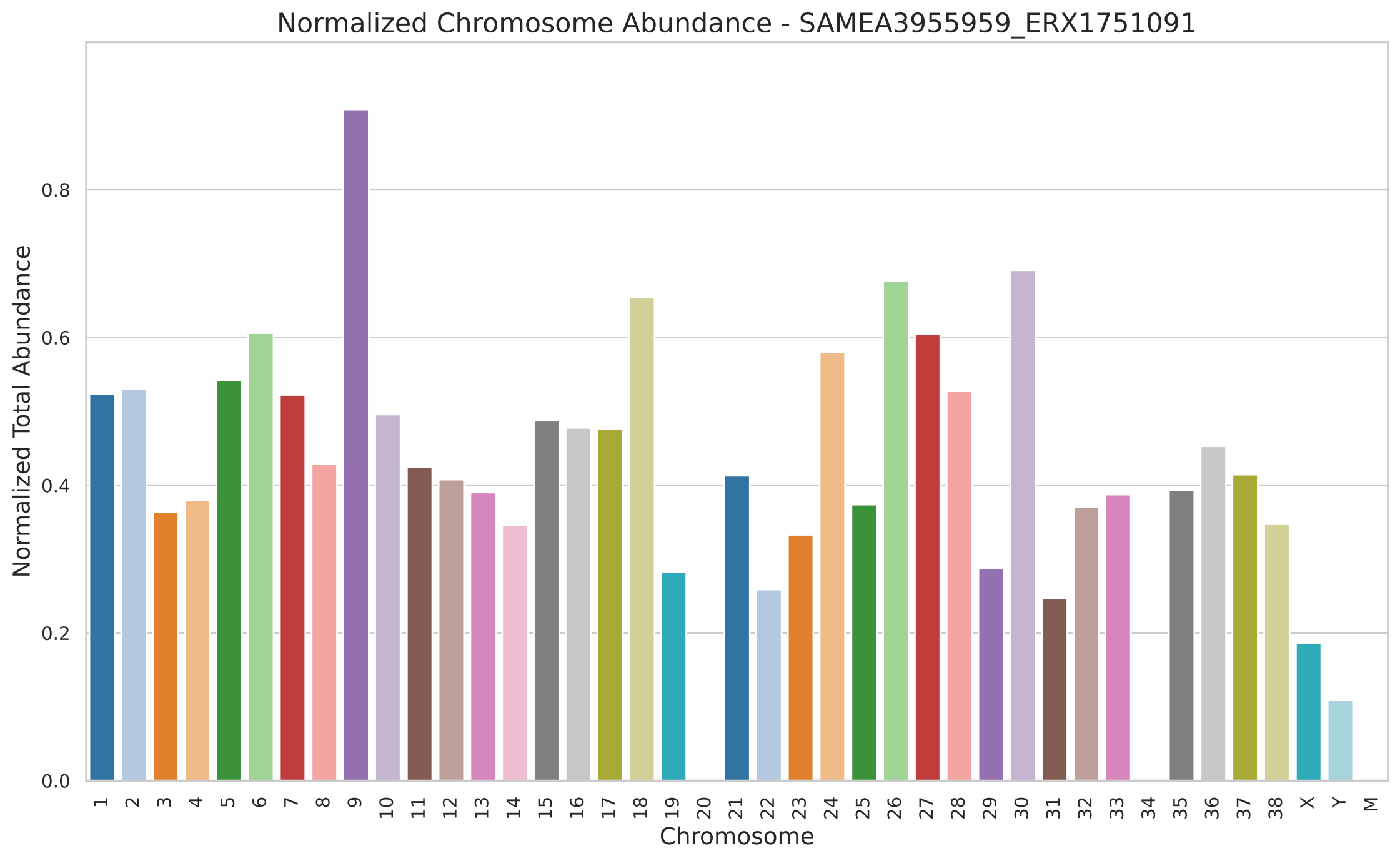

Normalized Chromosome Abundance - SAMEA3956065_ERX1751070
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

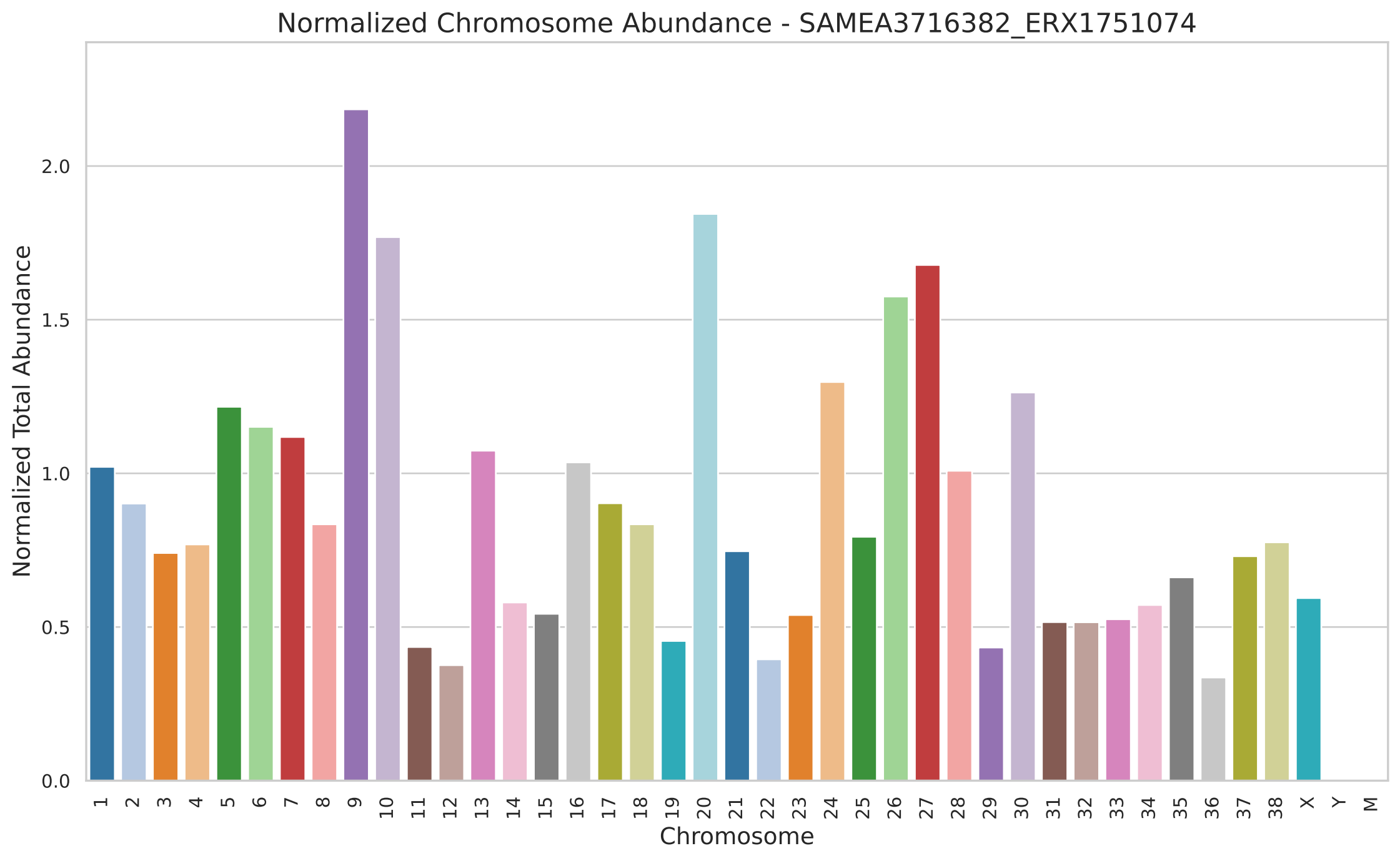

Normalized Chromosome Abundance - SAMEA3956041_ERX1751068
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

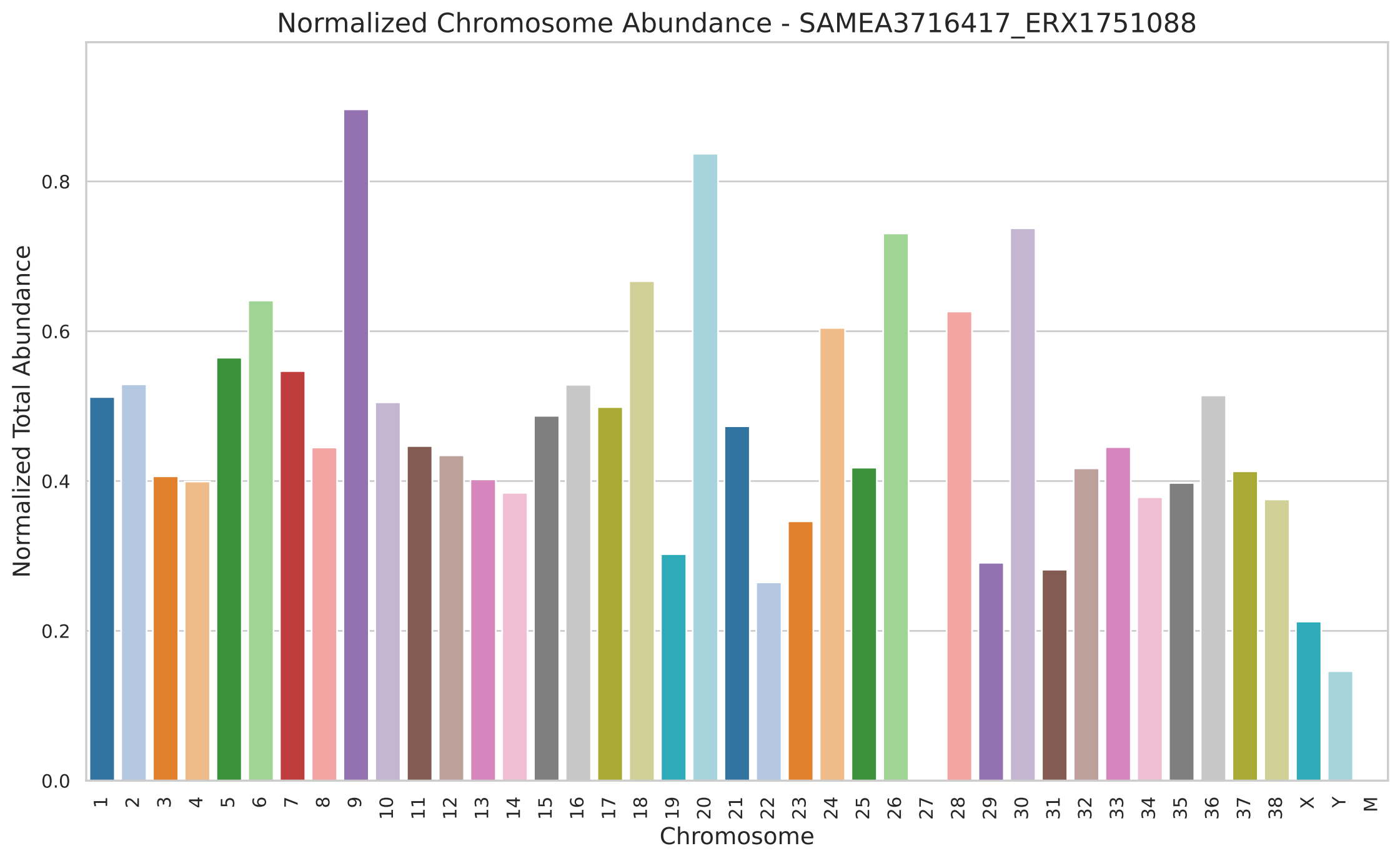

Normalized Chromosome Abundance - SAMEA3956040_ERX1751067
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

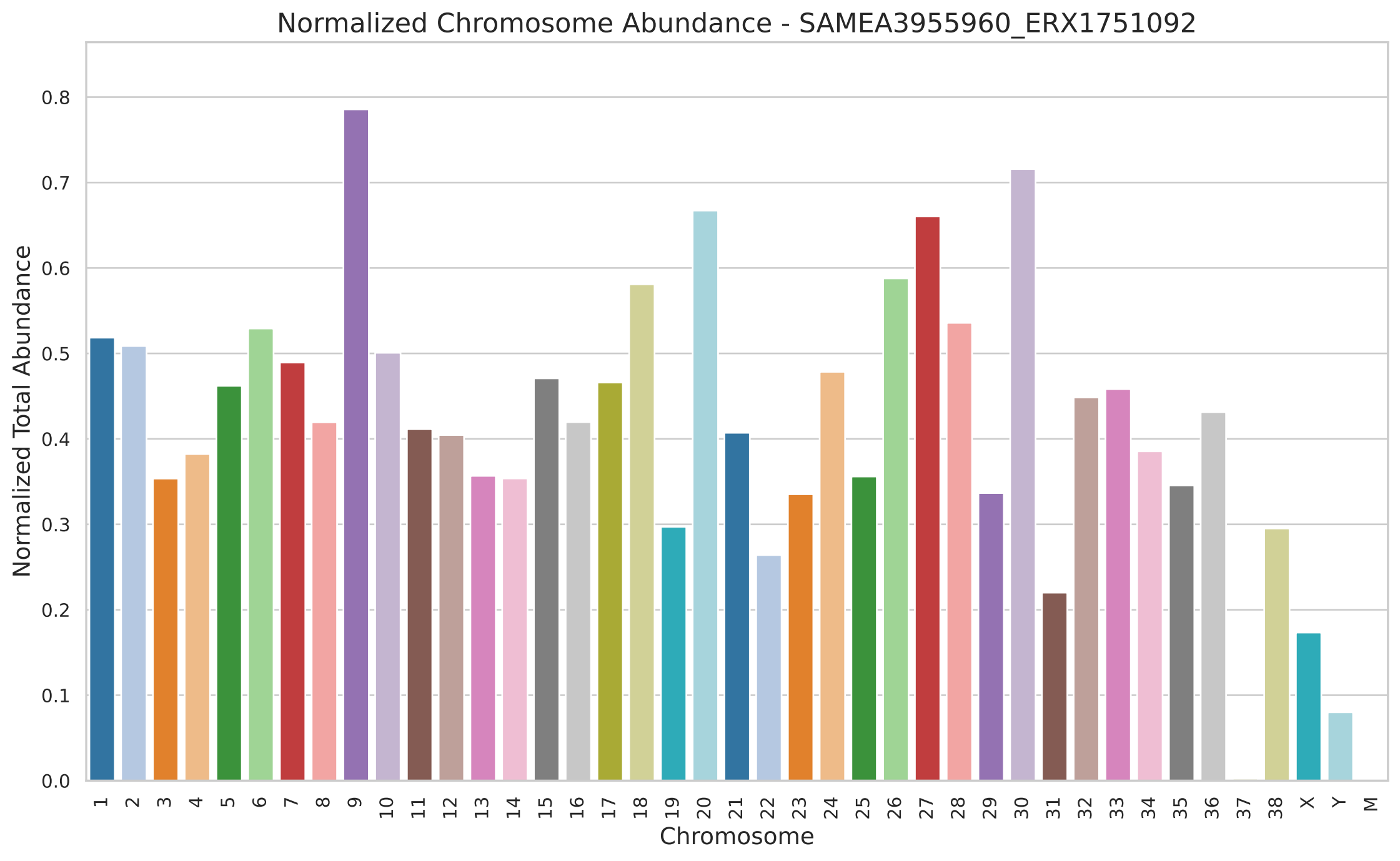

Normalized Chromosome Abundance - SAMN14820575_SRX8232149
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

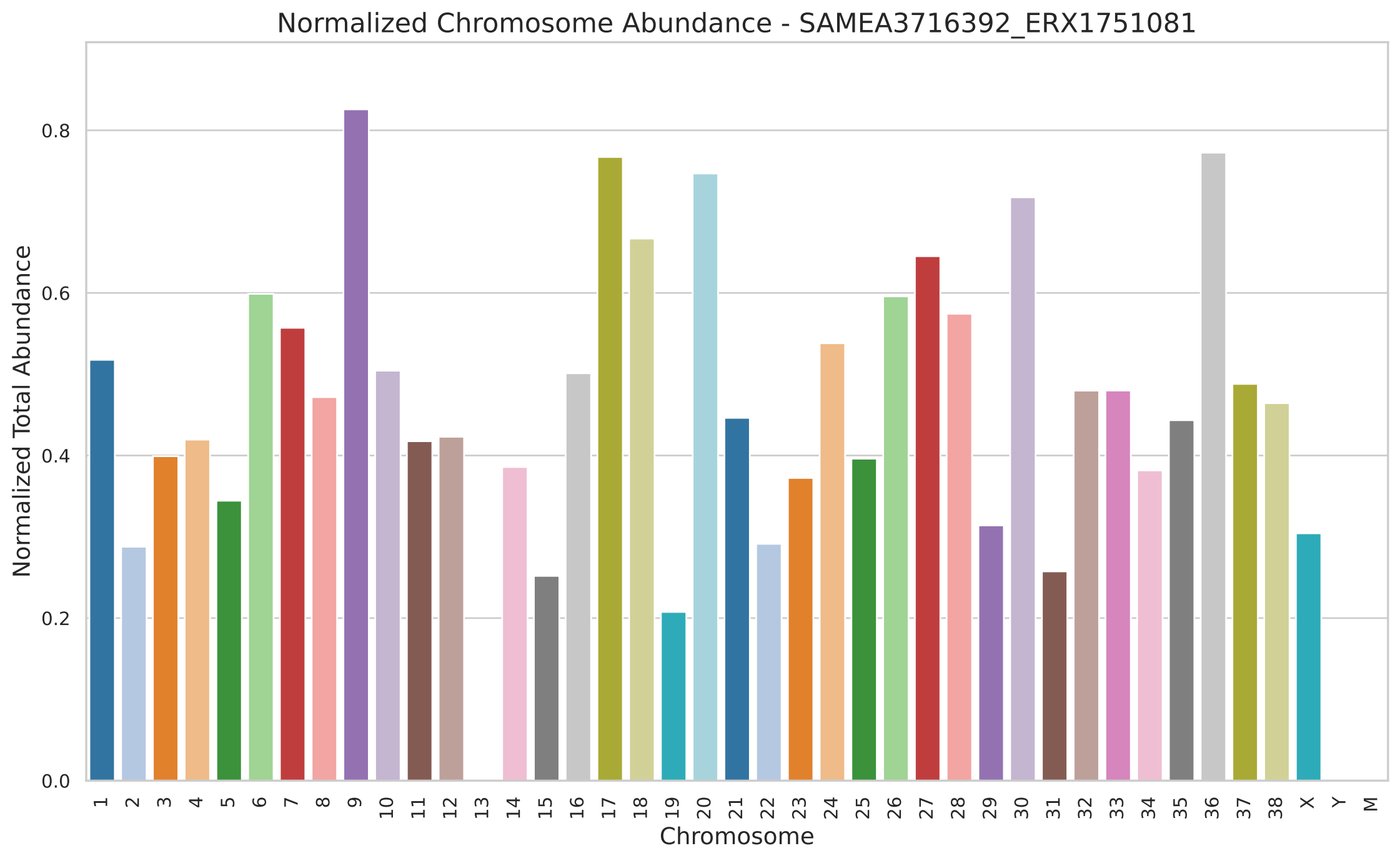

Normalized Chromosome Abundance - SAMN13133775_SRX7061492
Normalized Total Abundance
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

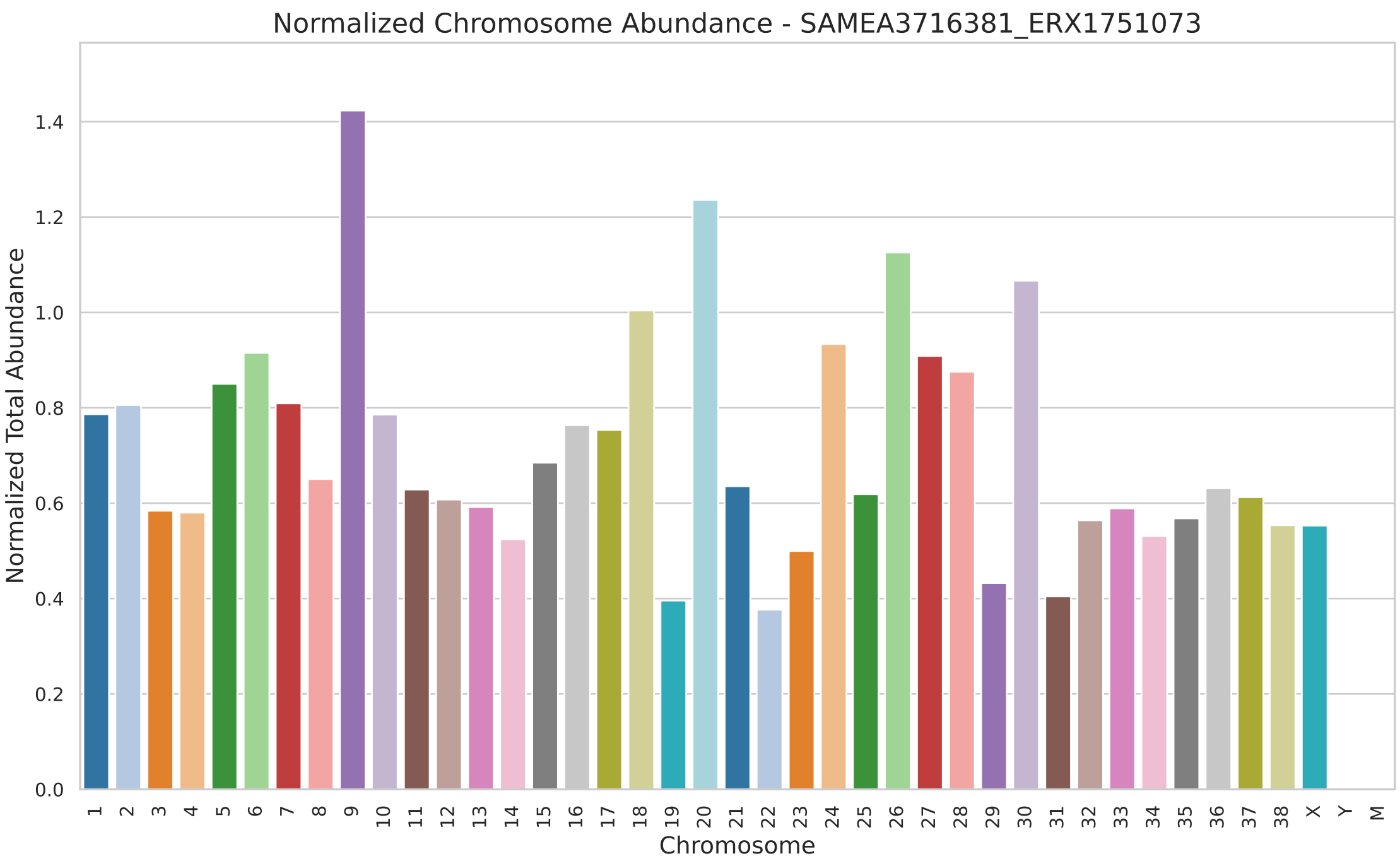

Normalized Chromosome Abundance - SAMEA3955959_ERX1751091
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

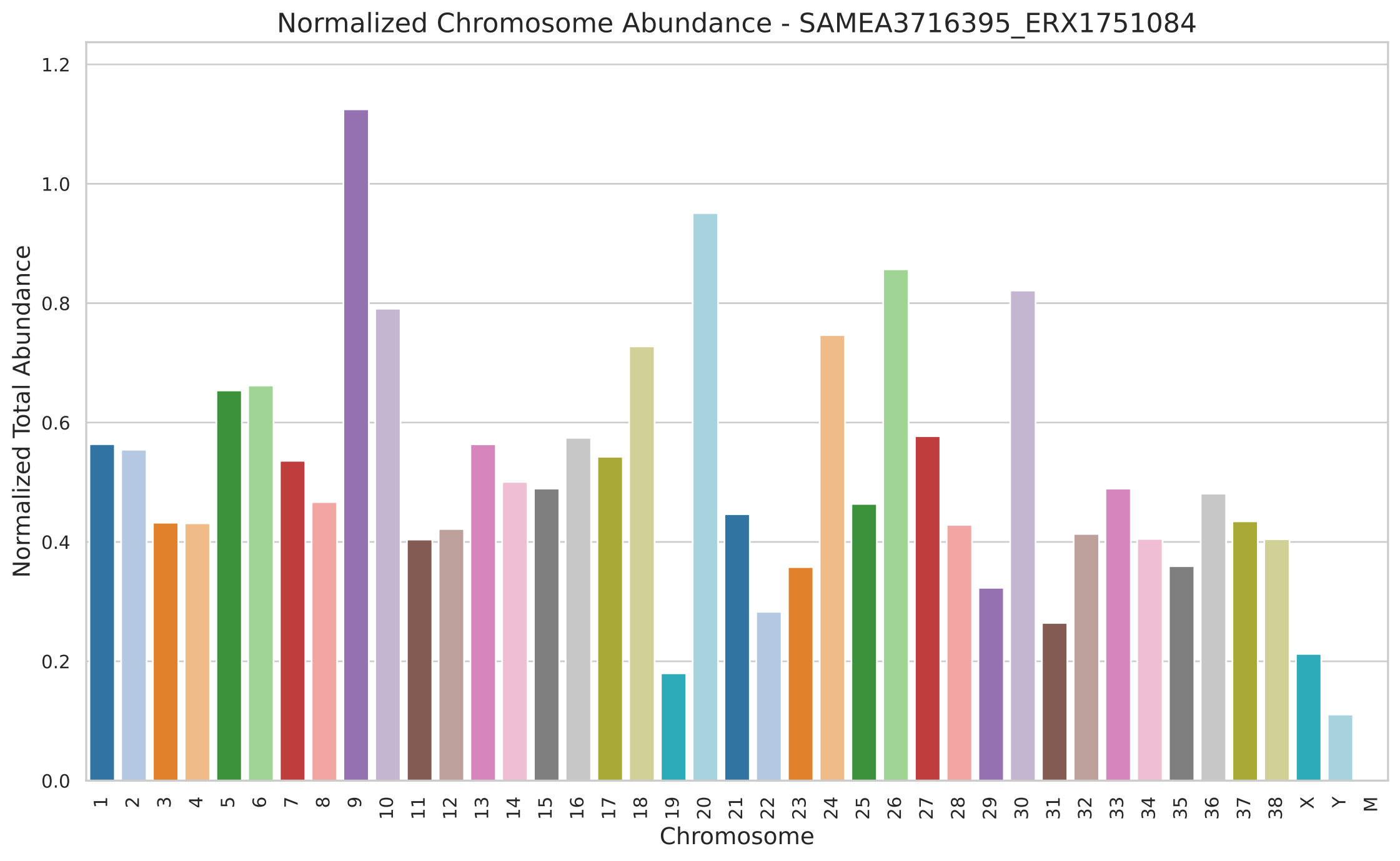

Normalized Chromosome Abundance - SAMEA3716382_ERX1751074
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

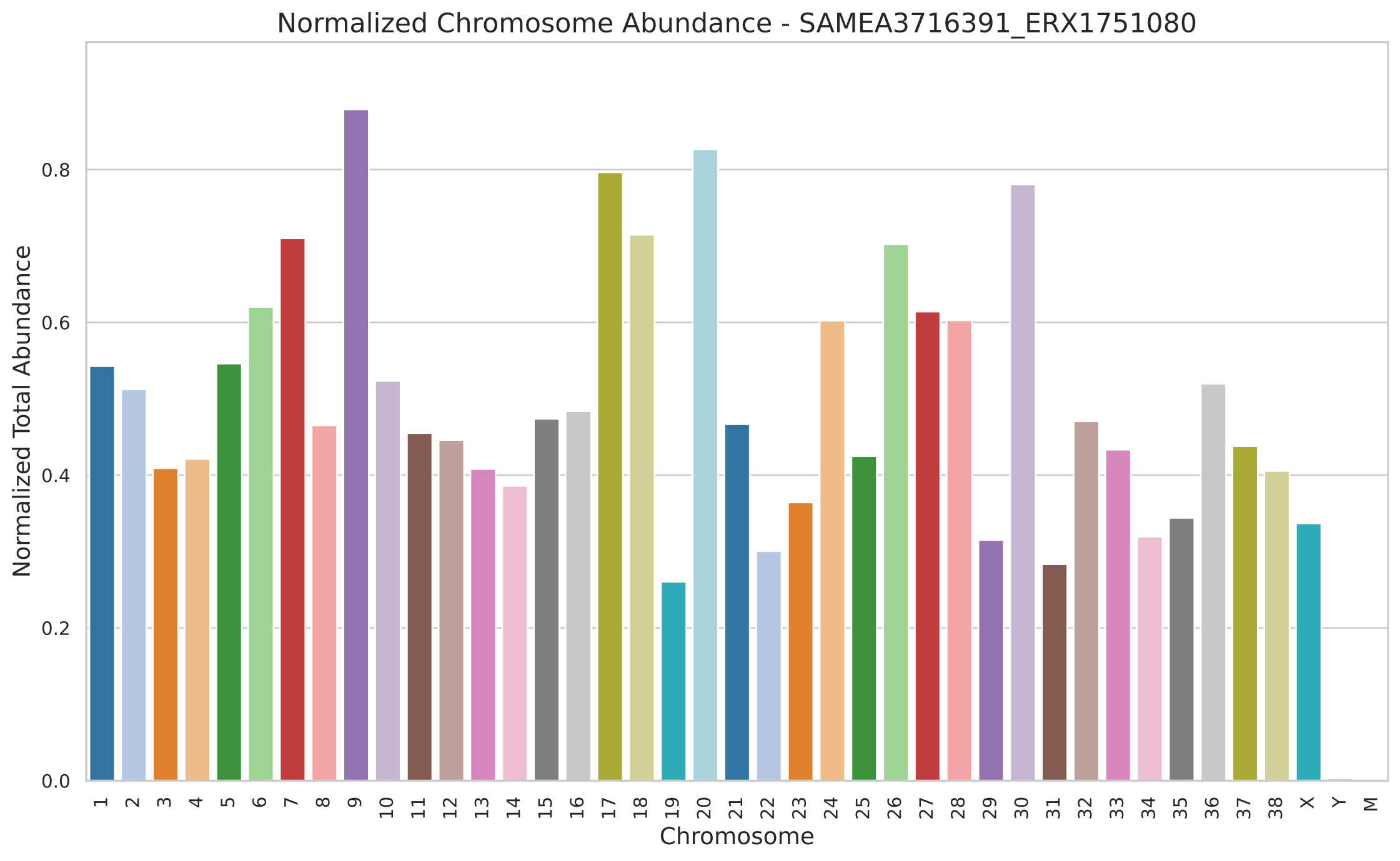

Normalized Chromosome Abundance - SAMEA3716417_ERX1751088
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

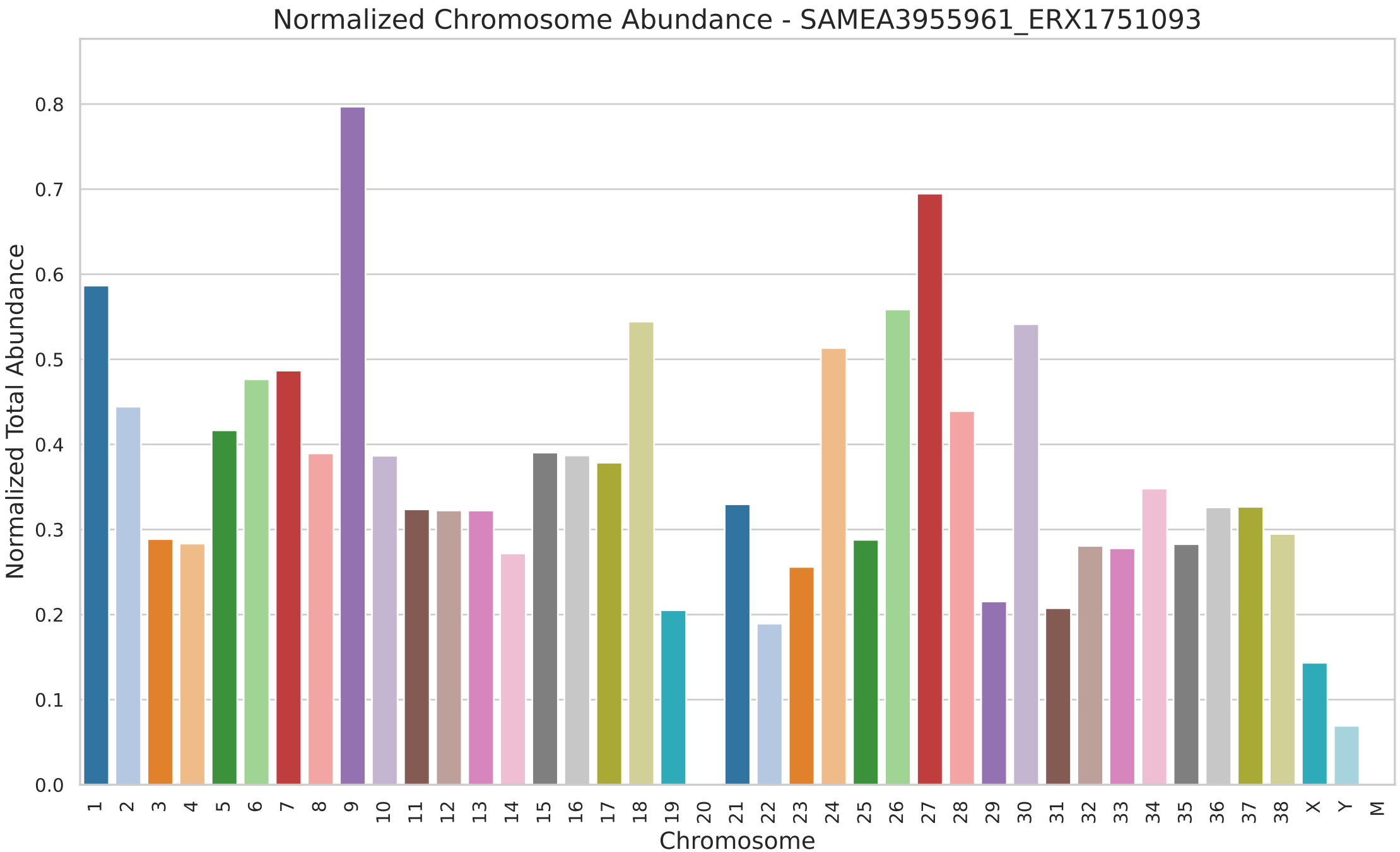

Normalized Chromosome Abundance - SAMEA3955960_ERX1751092
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

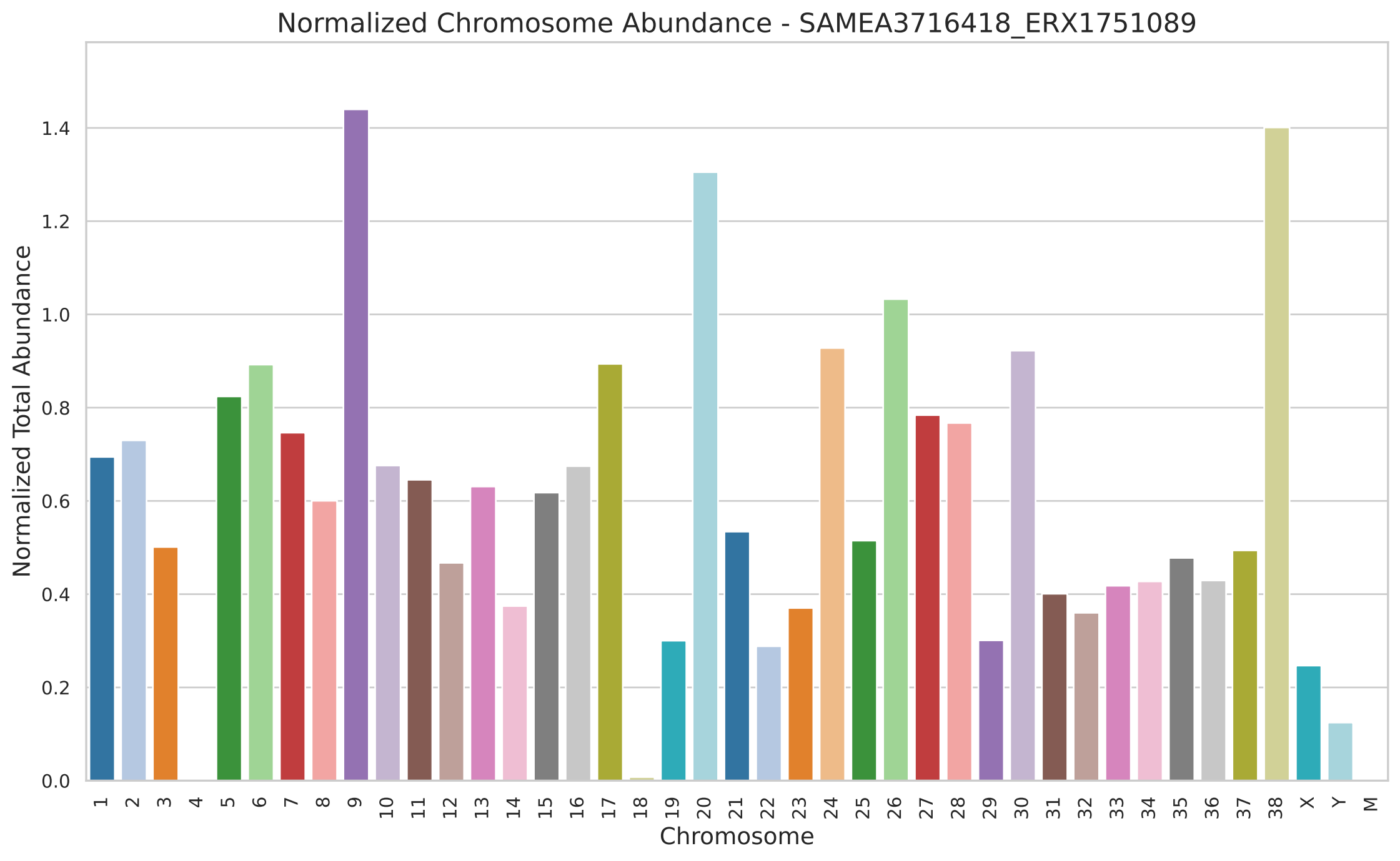

Normalized Chromosome Abundance - SAMEA3716392_ERX1751081
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

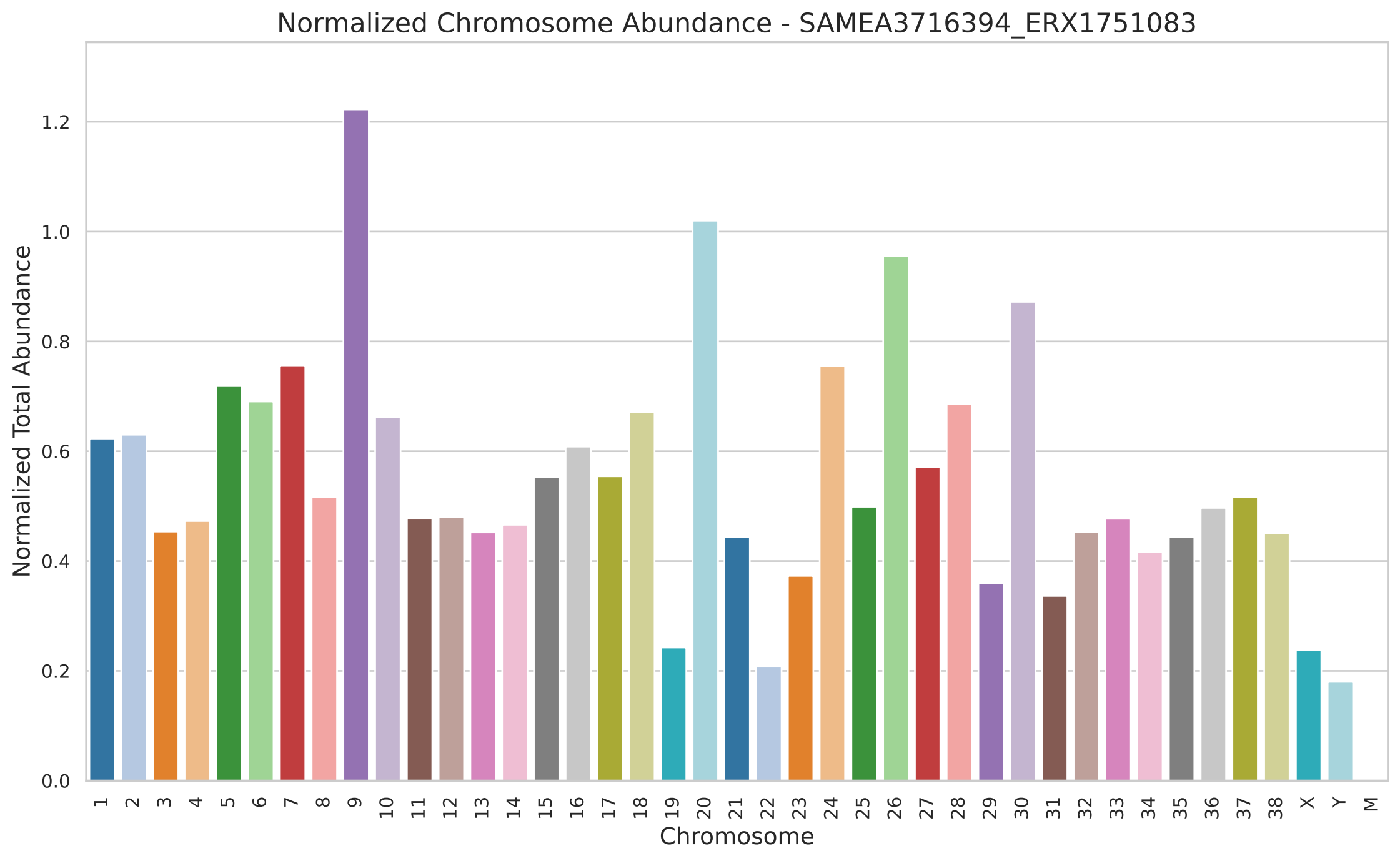

Normalized Chromosome Abundance - SAMEA3716381_ERX1751073
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 X Y M
Chromosome

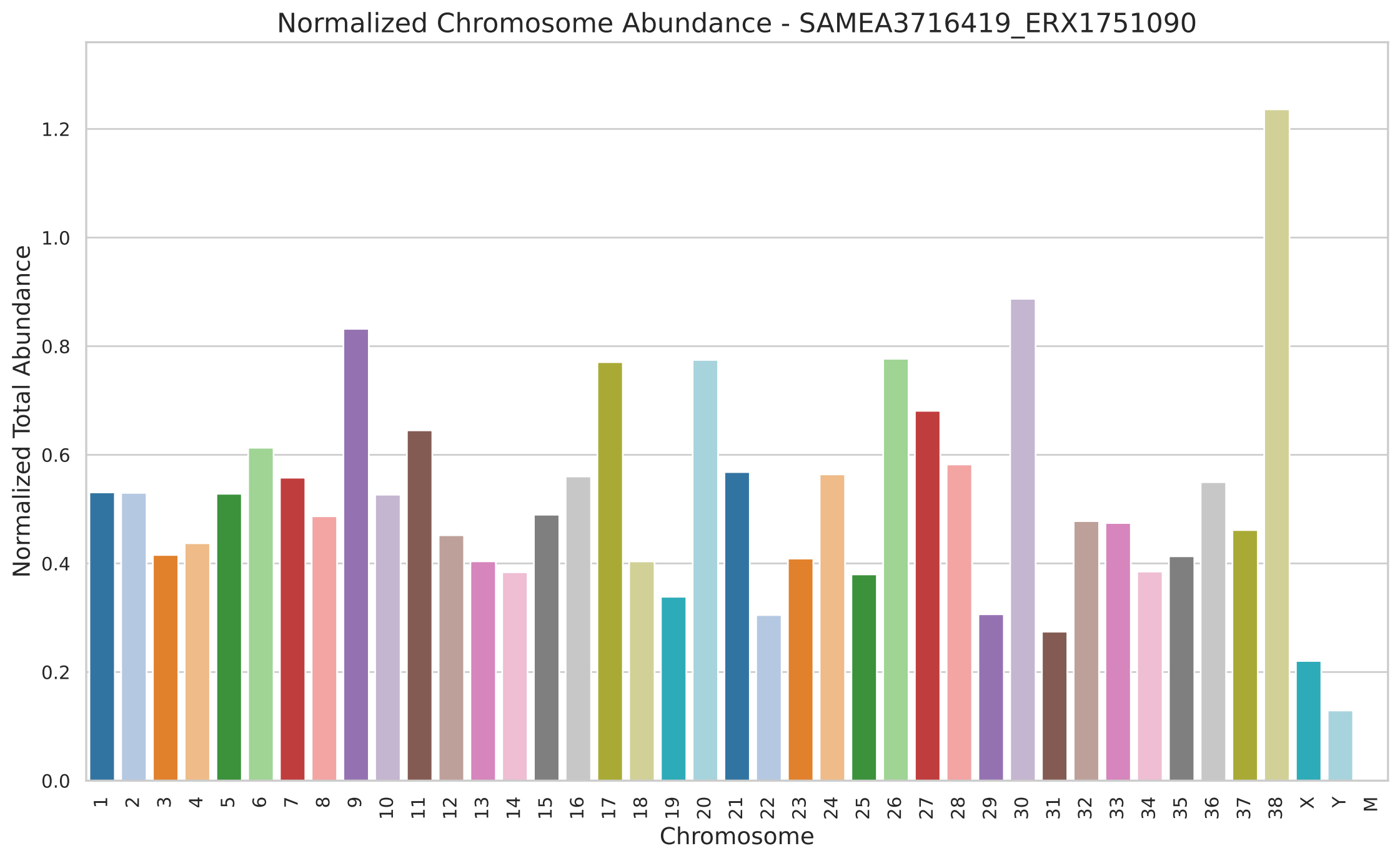

Normalized Chromosome Abundance - SAMEA3716395_ERX1751084
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

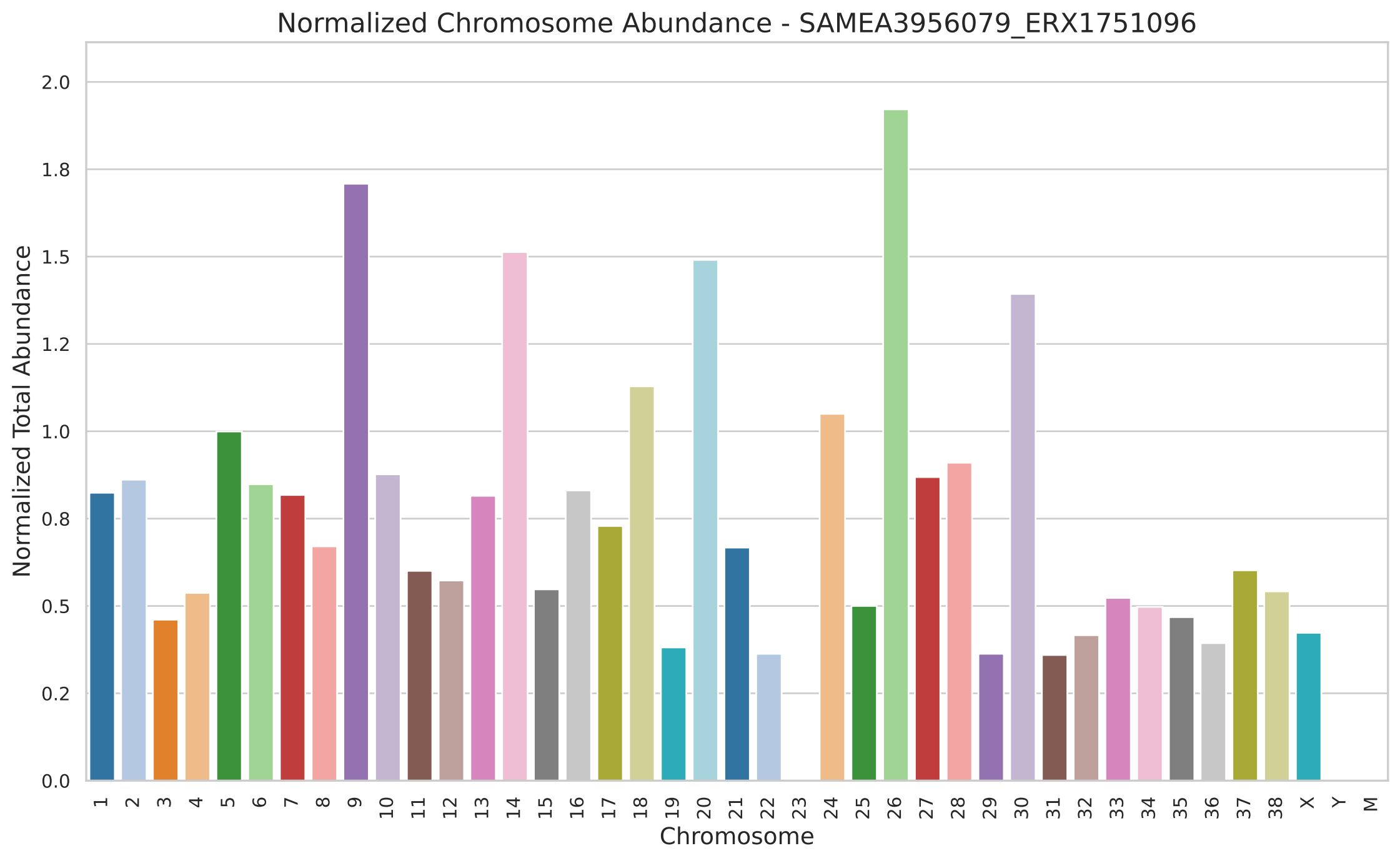

Normalized Chromosome Abundance - SAMEA3716391_ERX1751080
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

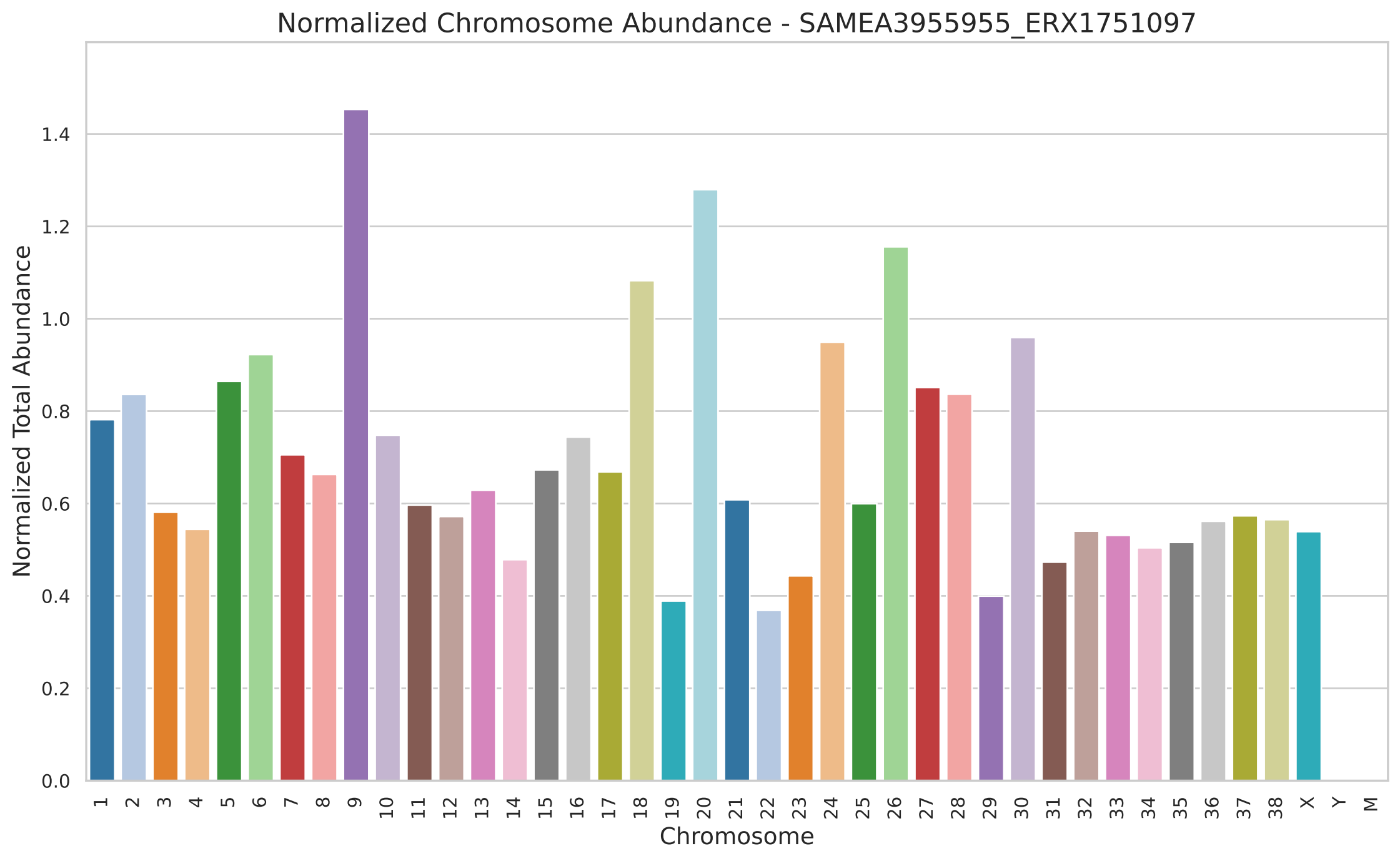

Normalized Chromosome Abundance - SAMEA3955961_ERX1751093
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

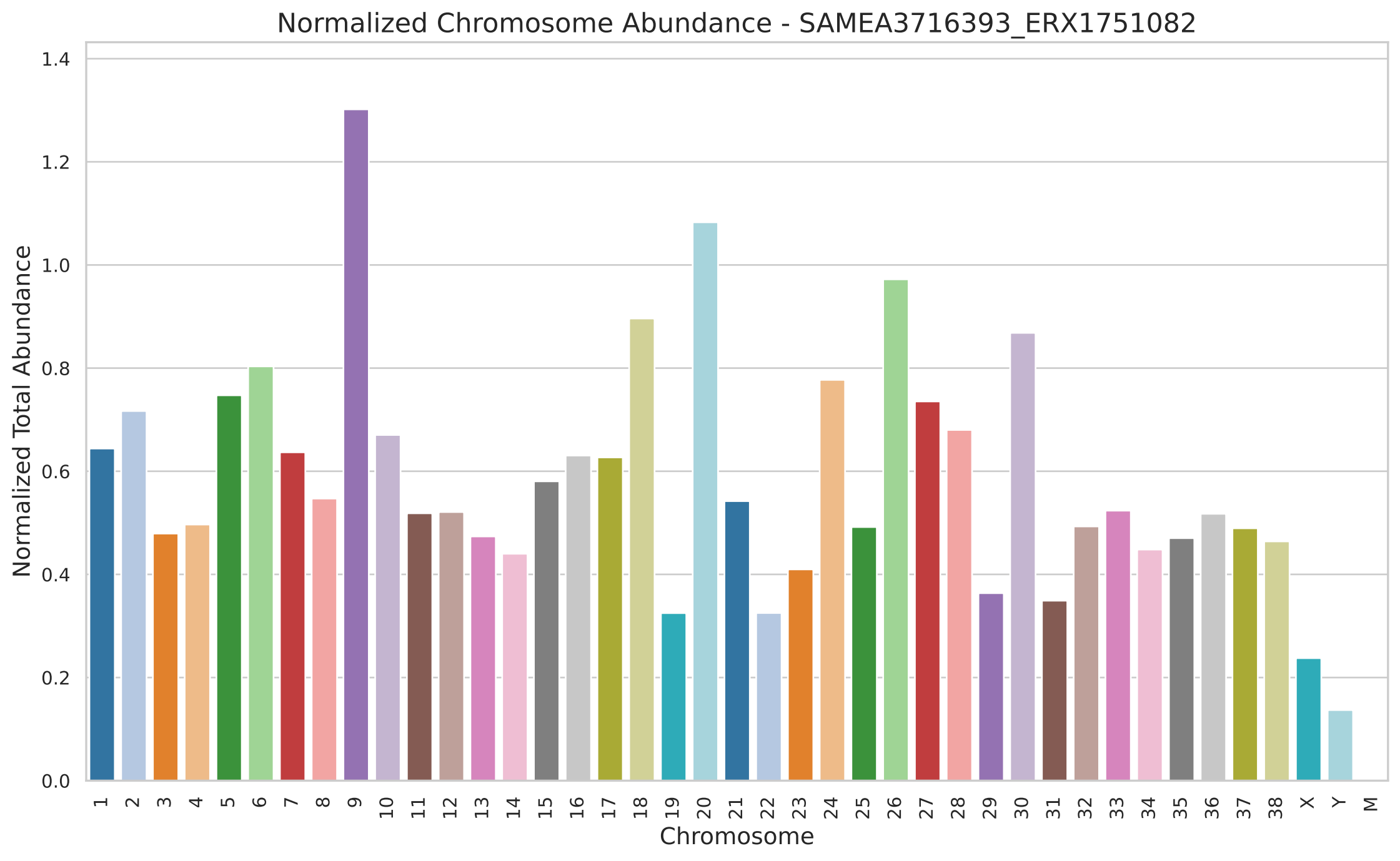

Normalized Chromosome Abundance - SAMEA3716418_ERX1751089
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

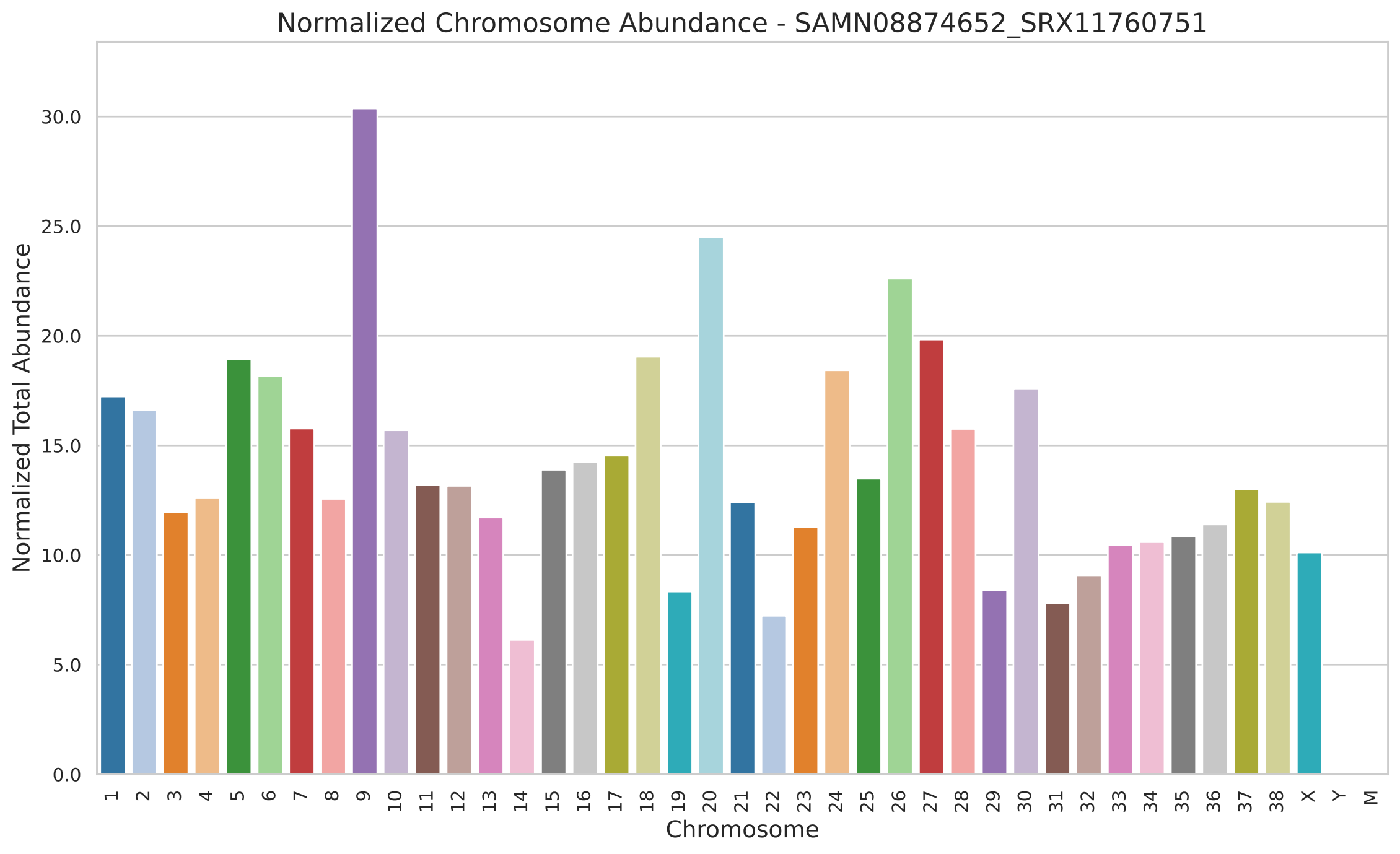

Normalized Chromosome Abundance - SAMEA3716394_ERX1751083
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

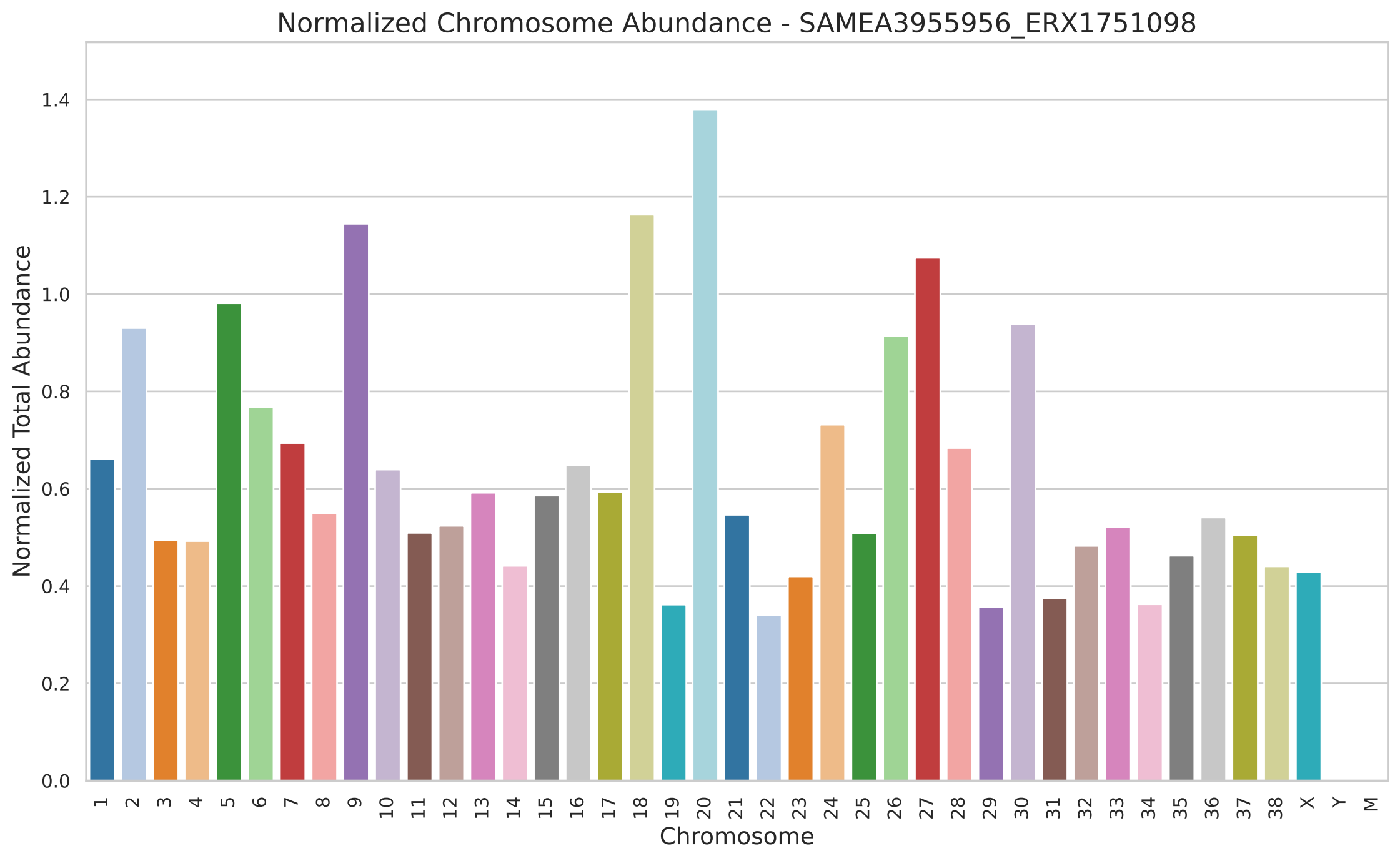

Normalized Chromosome Abundance - SAMEA3716419_ERX1751090
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

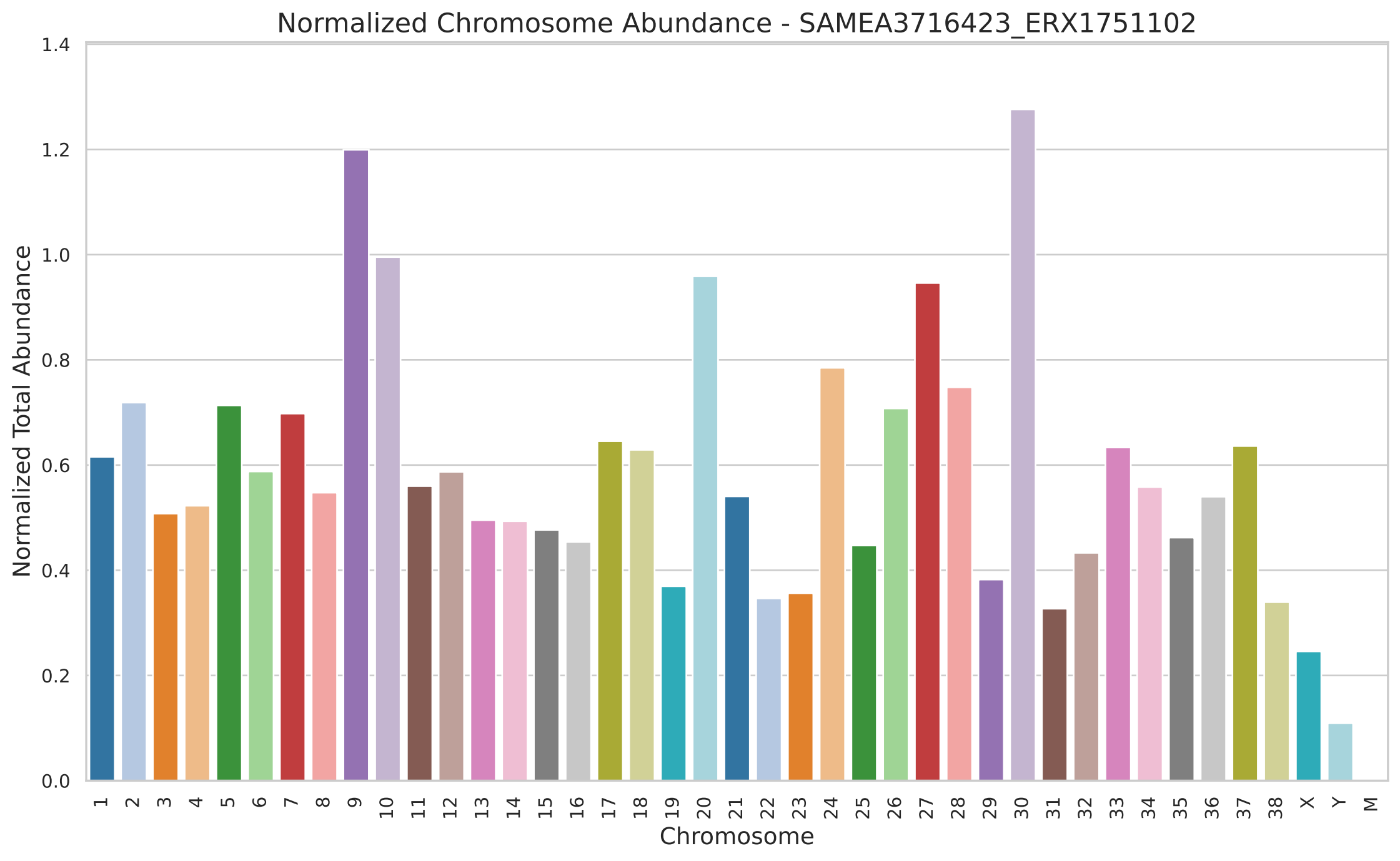

Normalized Chromosome Abundance - SAMEA3956079_ERX1751096
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

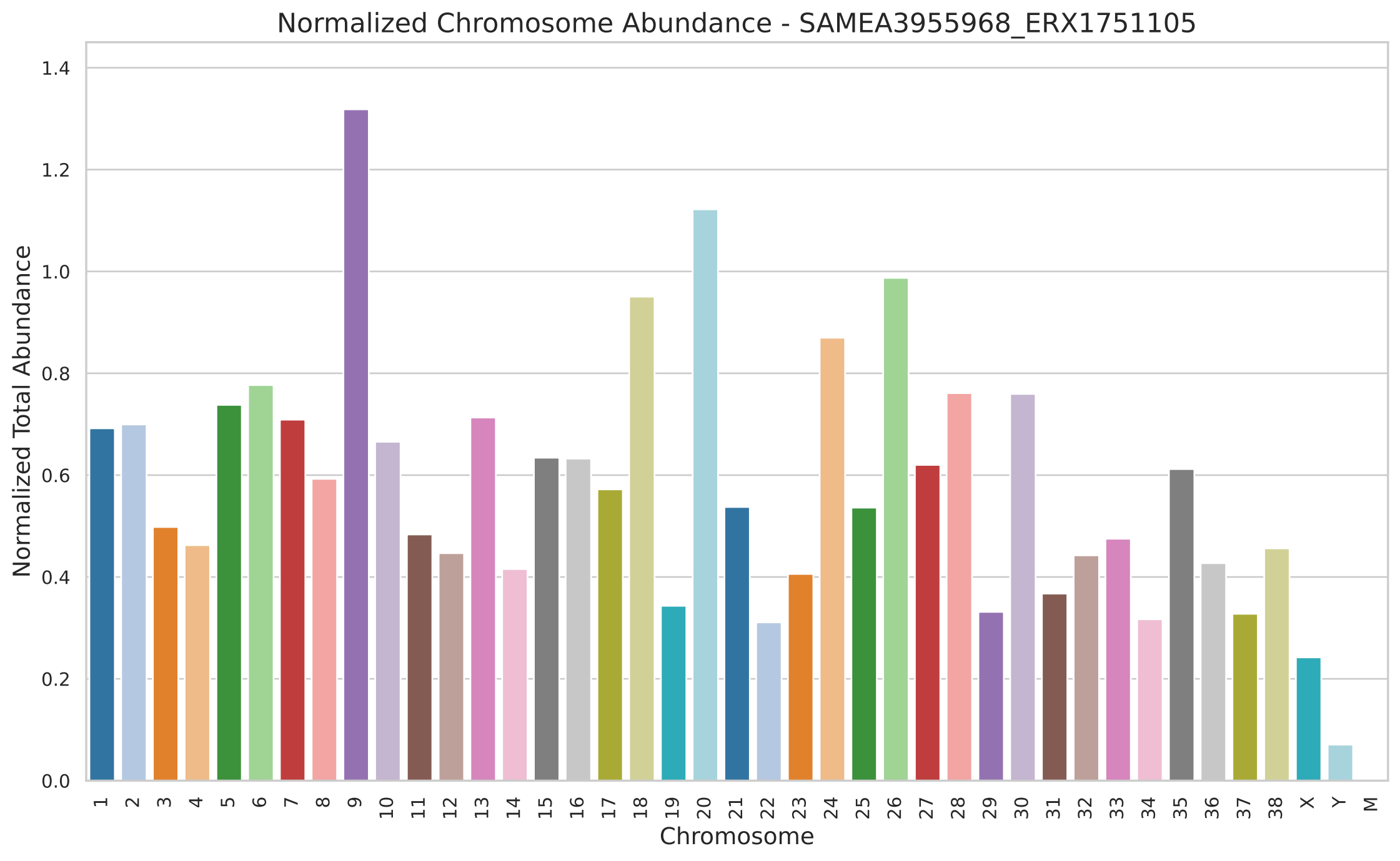

Normalized Chromosome Abundance - SAMEA3955955_ERX1751097
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

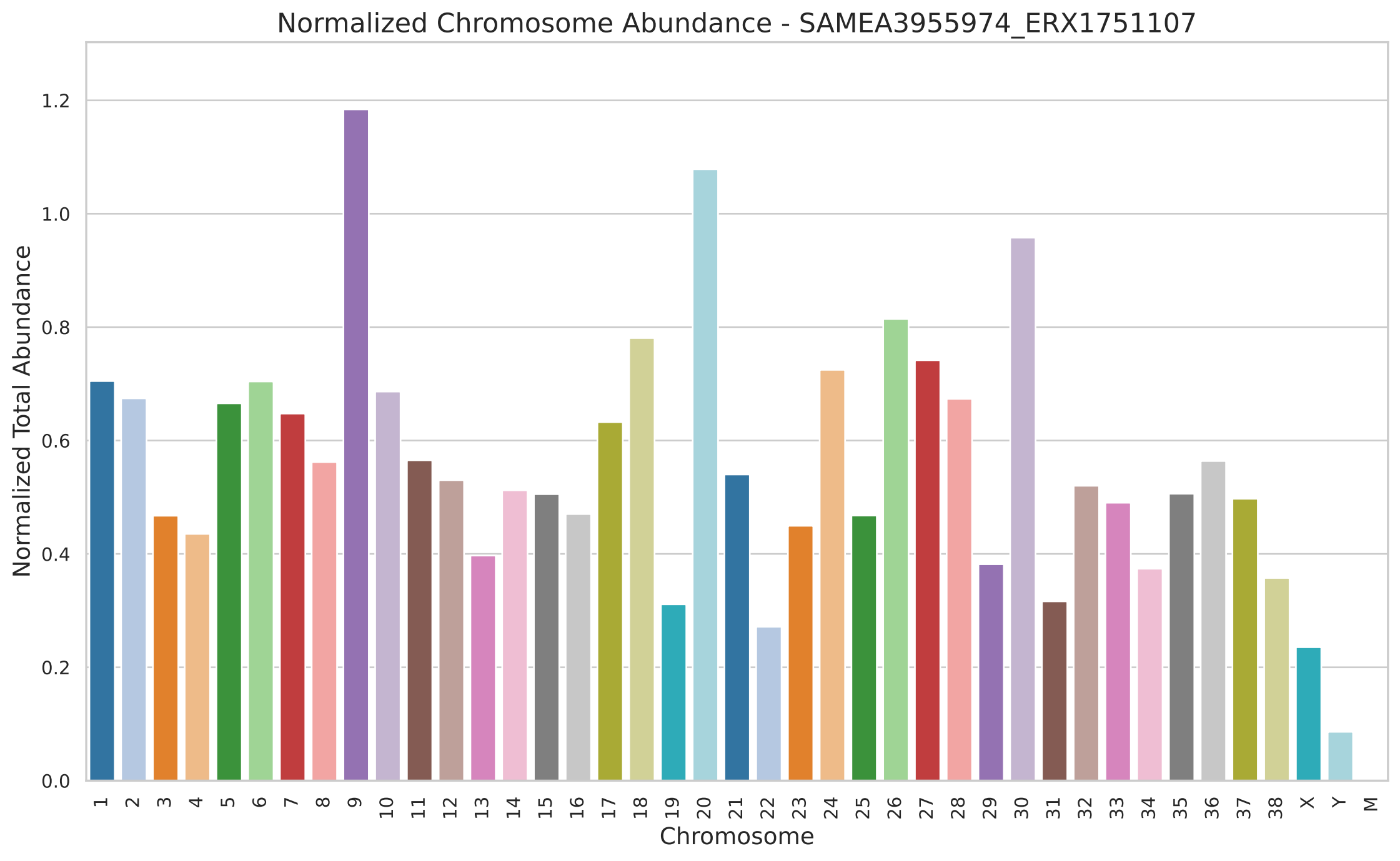

Normalized Chromosome Abundance - SAMEA3716393_ERX1751082
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

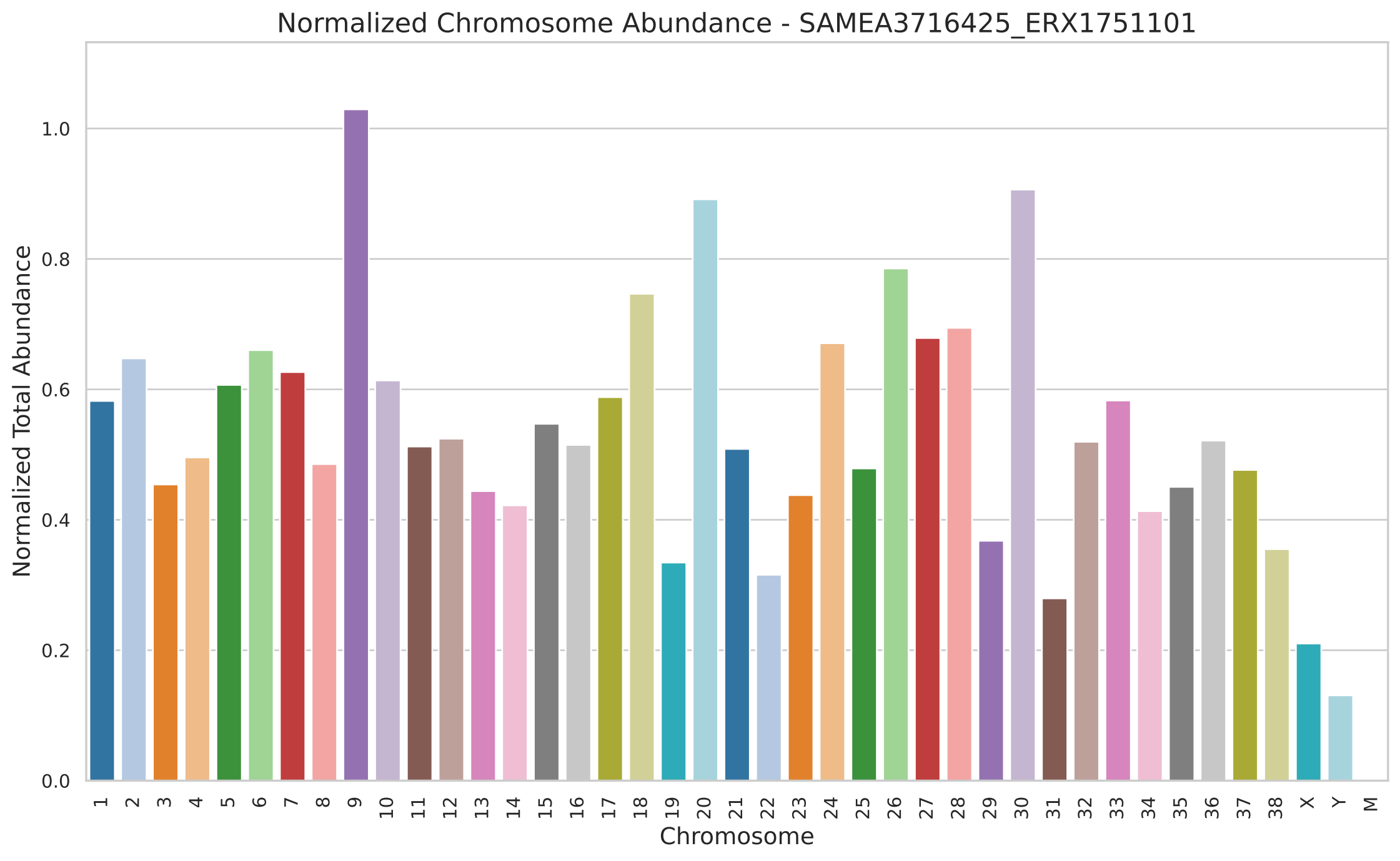

Normalized Chromosome Abundance - SAMN08874652_SRX11760751
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

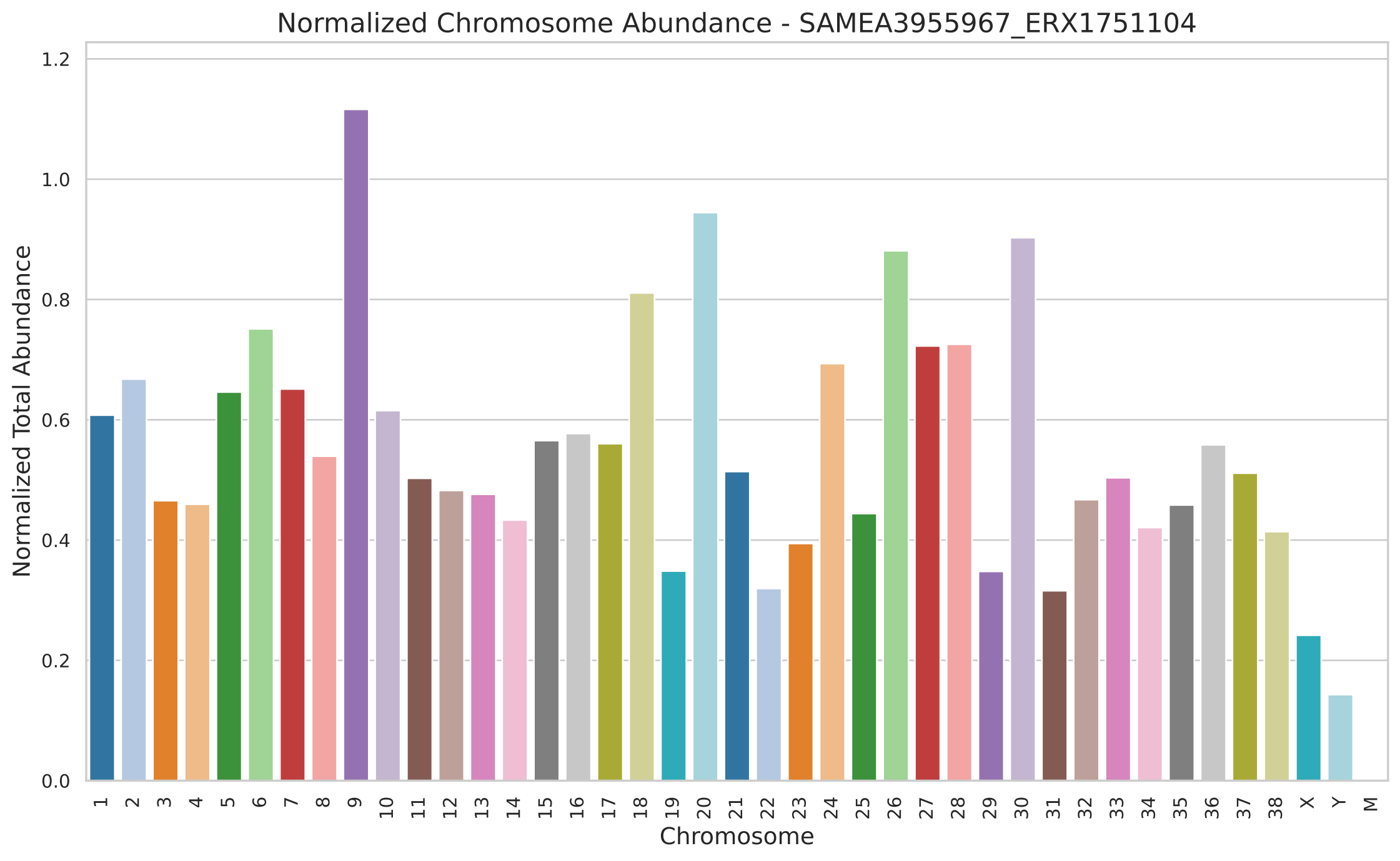

Normalized Chromosome Abundance - SAMEA3955956_ERX1751098
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

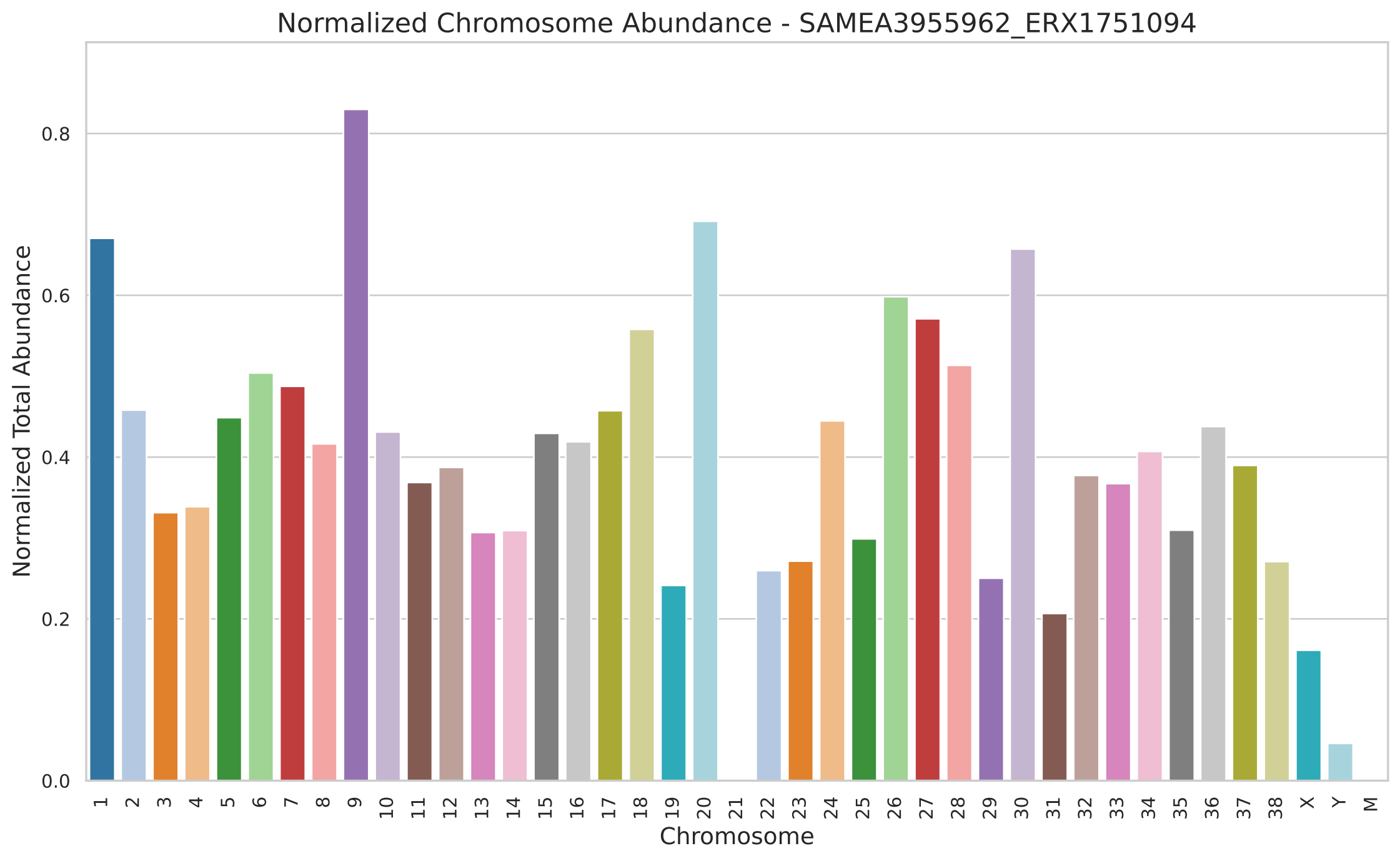

Normalized Chromosome Abundance - SAMEA3716423_ERX1751102
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

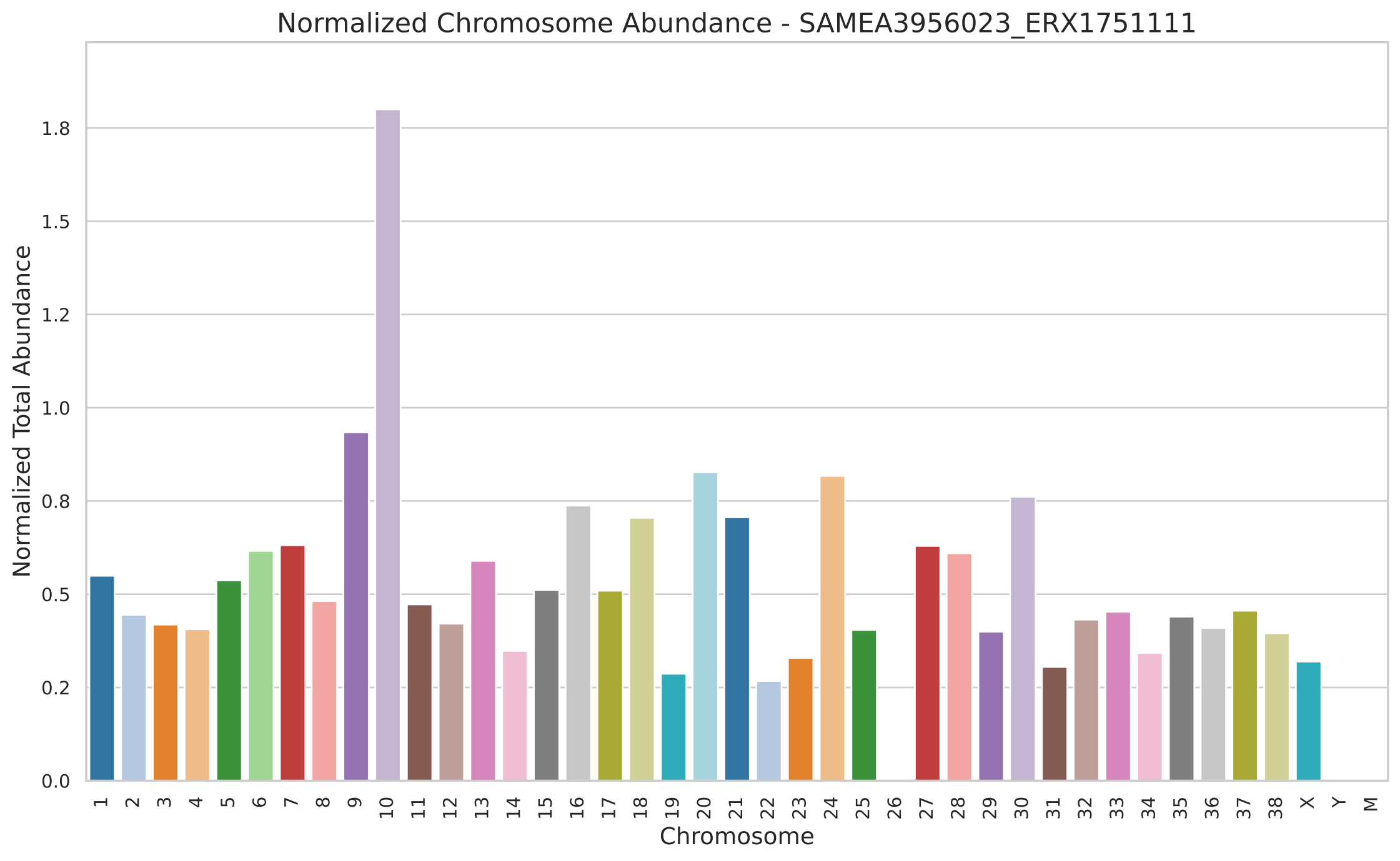

Normalized Chromosome Abundance - SAMEA3955968_ERX1751105
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

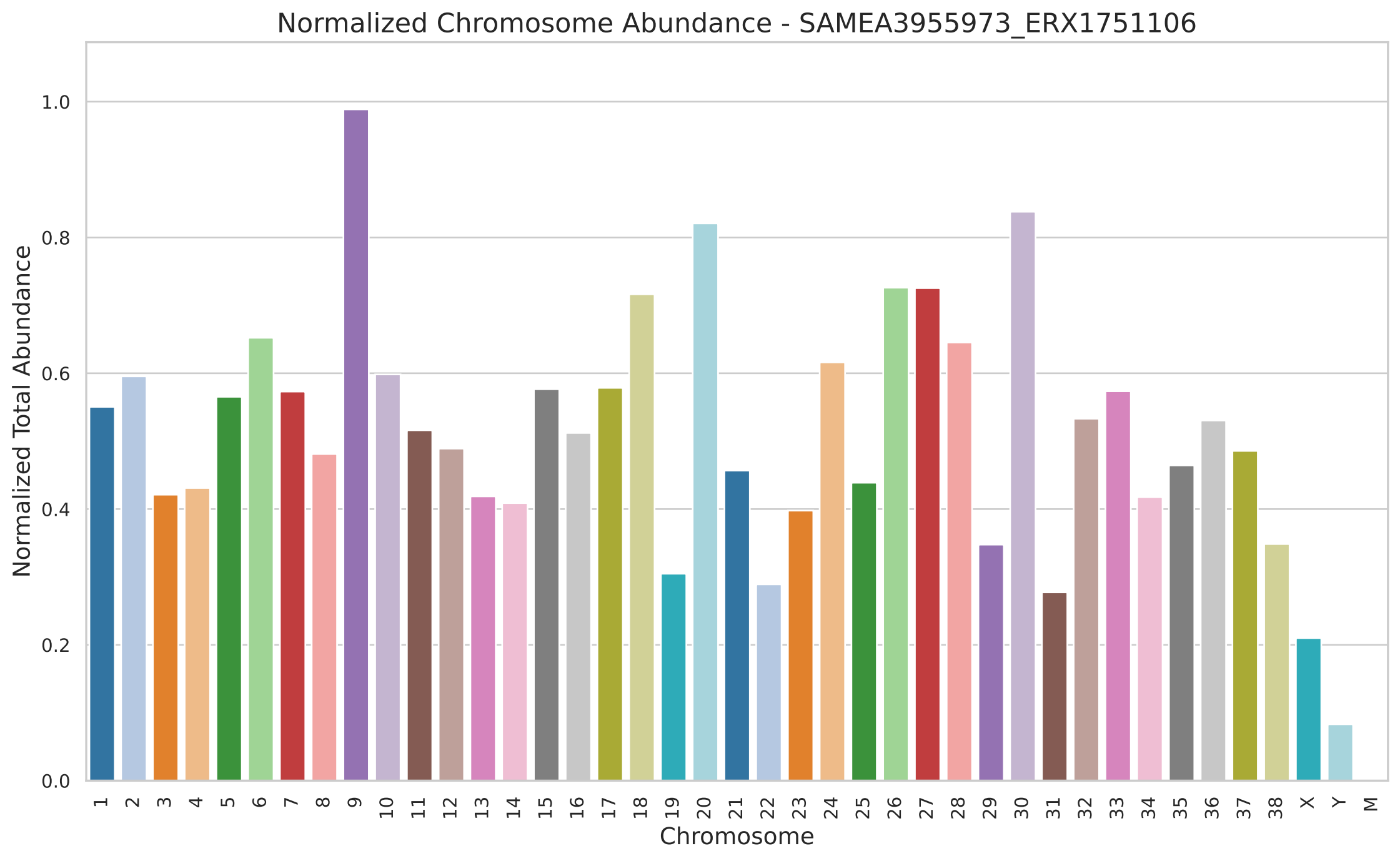

Normalized Chromosome Abundance - SAMEA3955974_ERX1751107
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

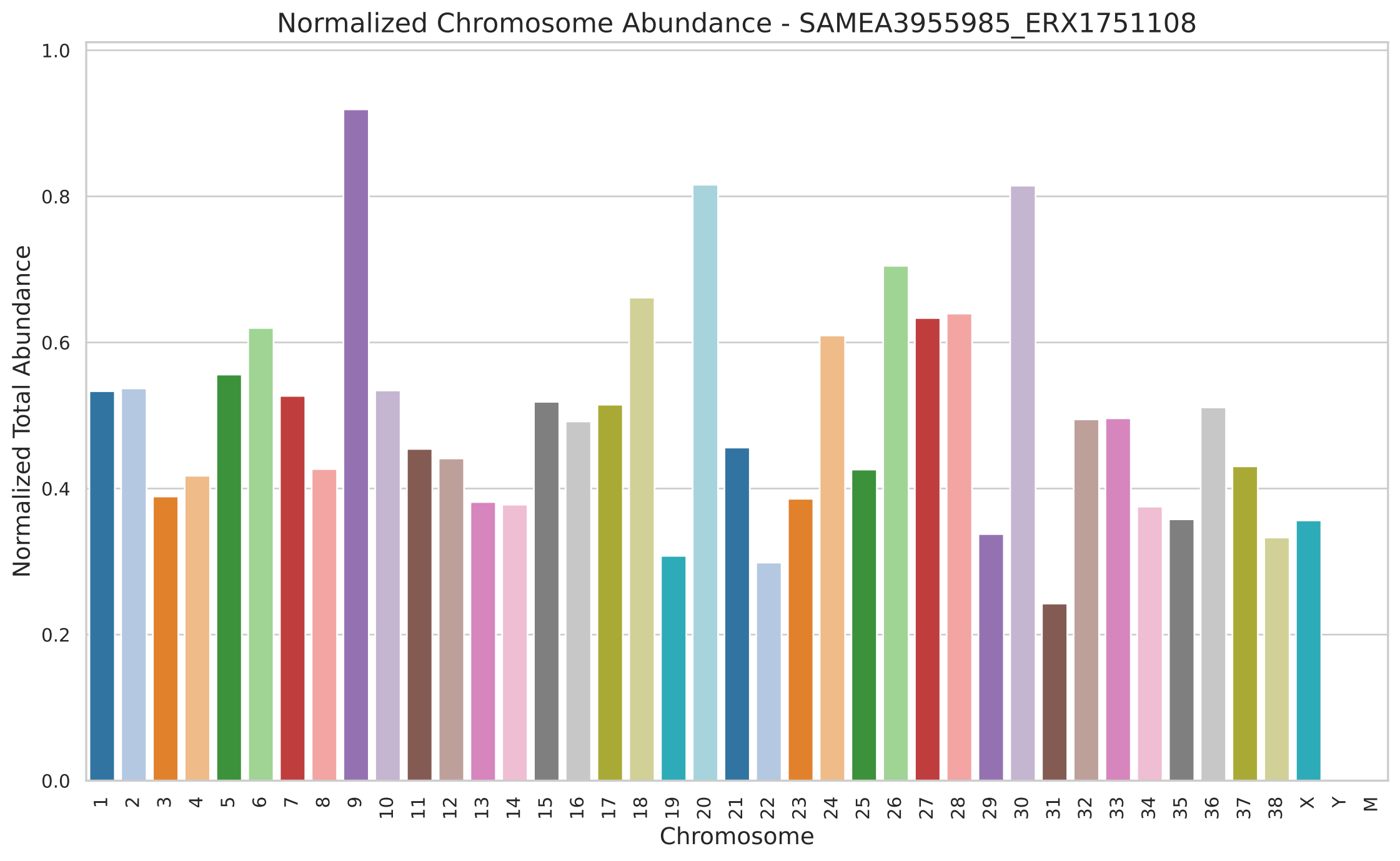

Normalized Chromosome Abundance - SAMEA3716425_ERX1751101
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

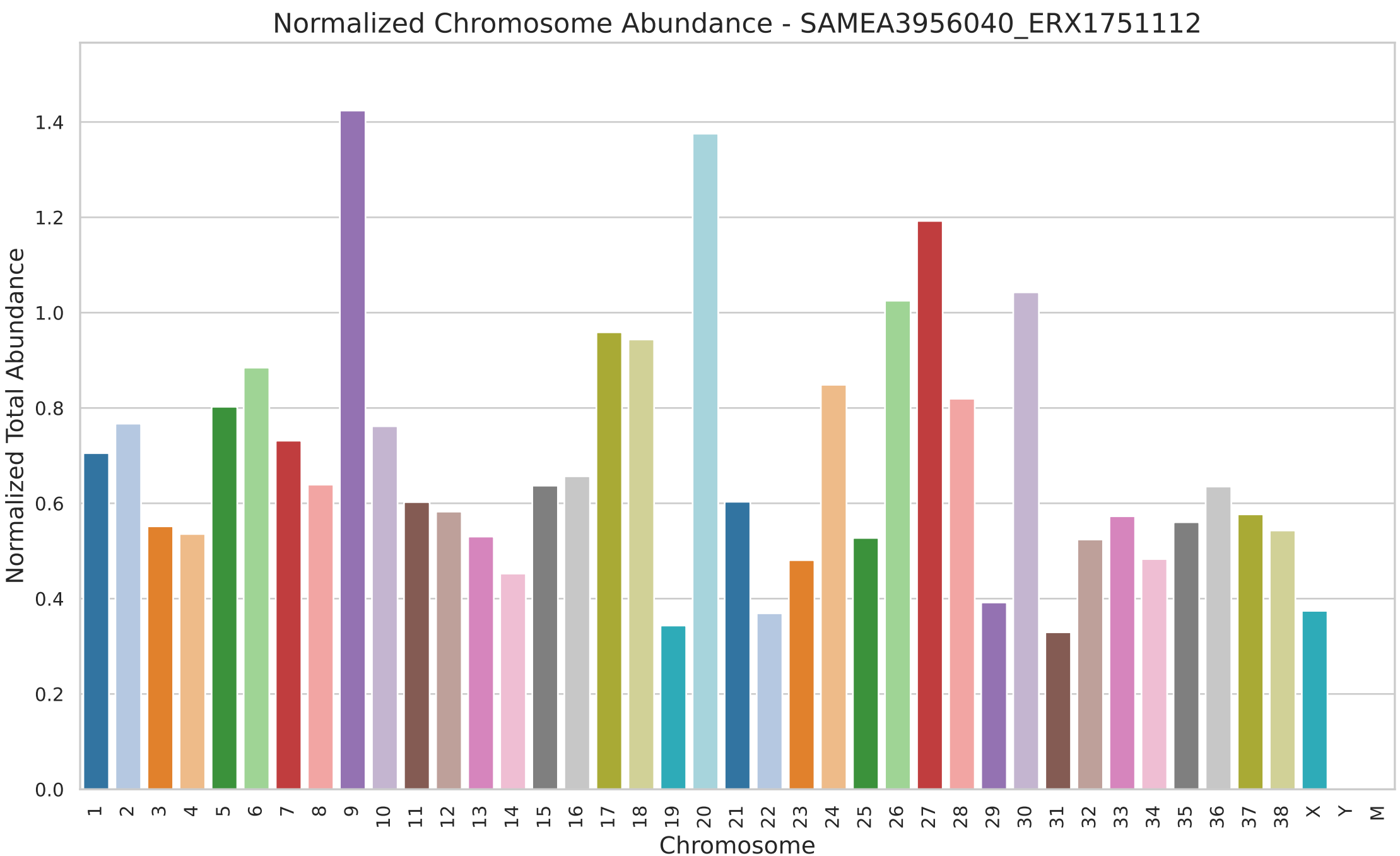

Normalized Chromosome Abundance - SAMEA3955967_ERX1751104
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

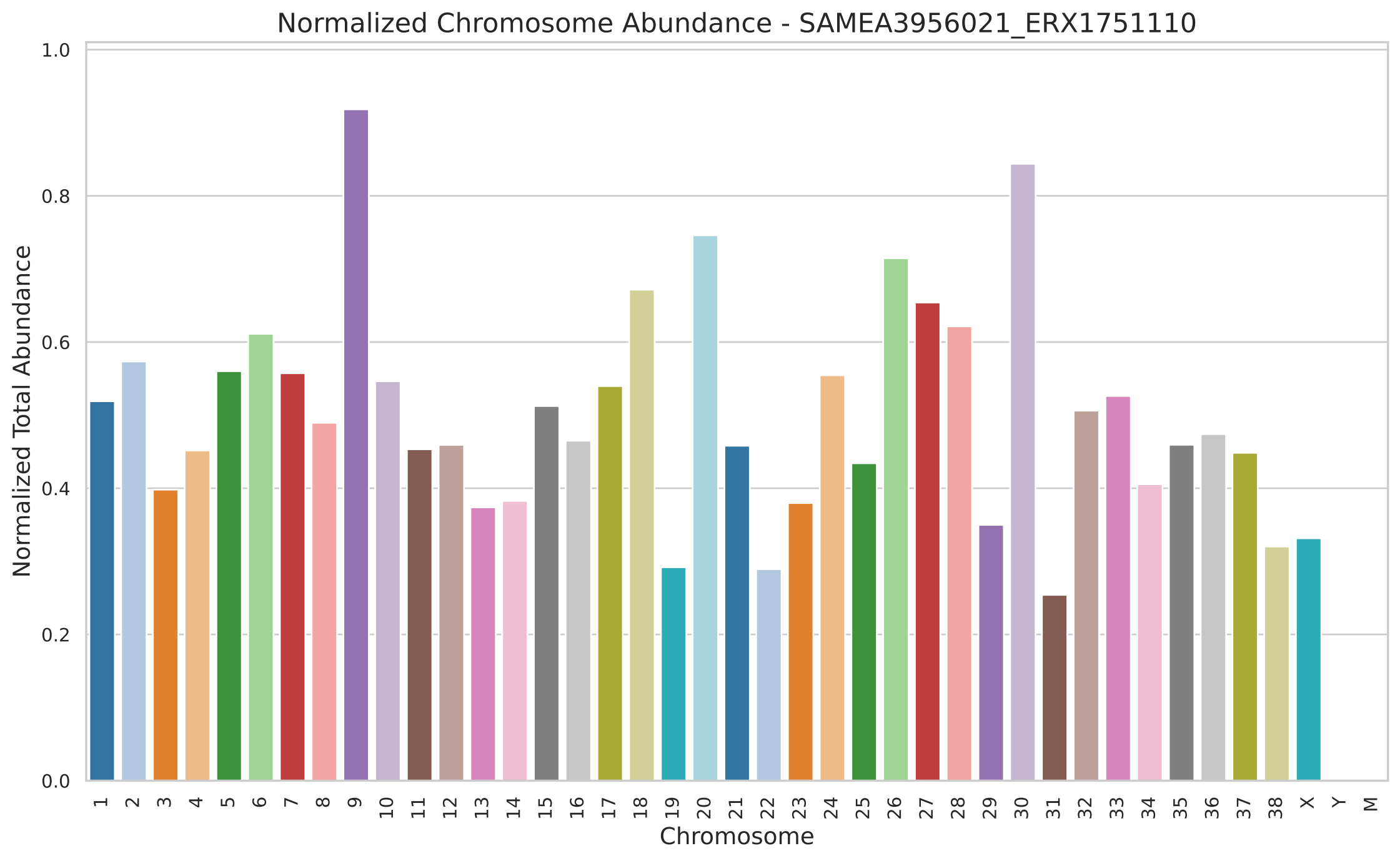

Normalized Chromosome Abundance - SAMEA3955962_ERX1751094
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

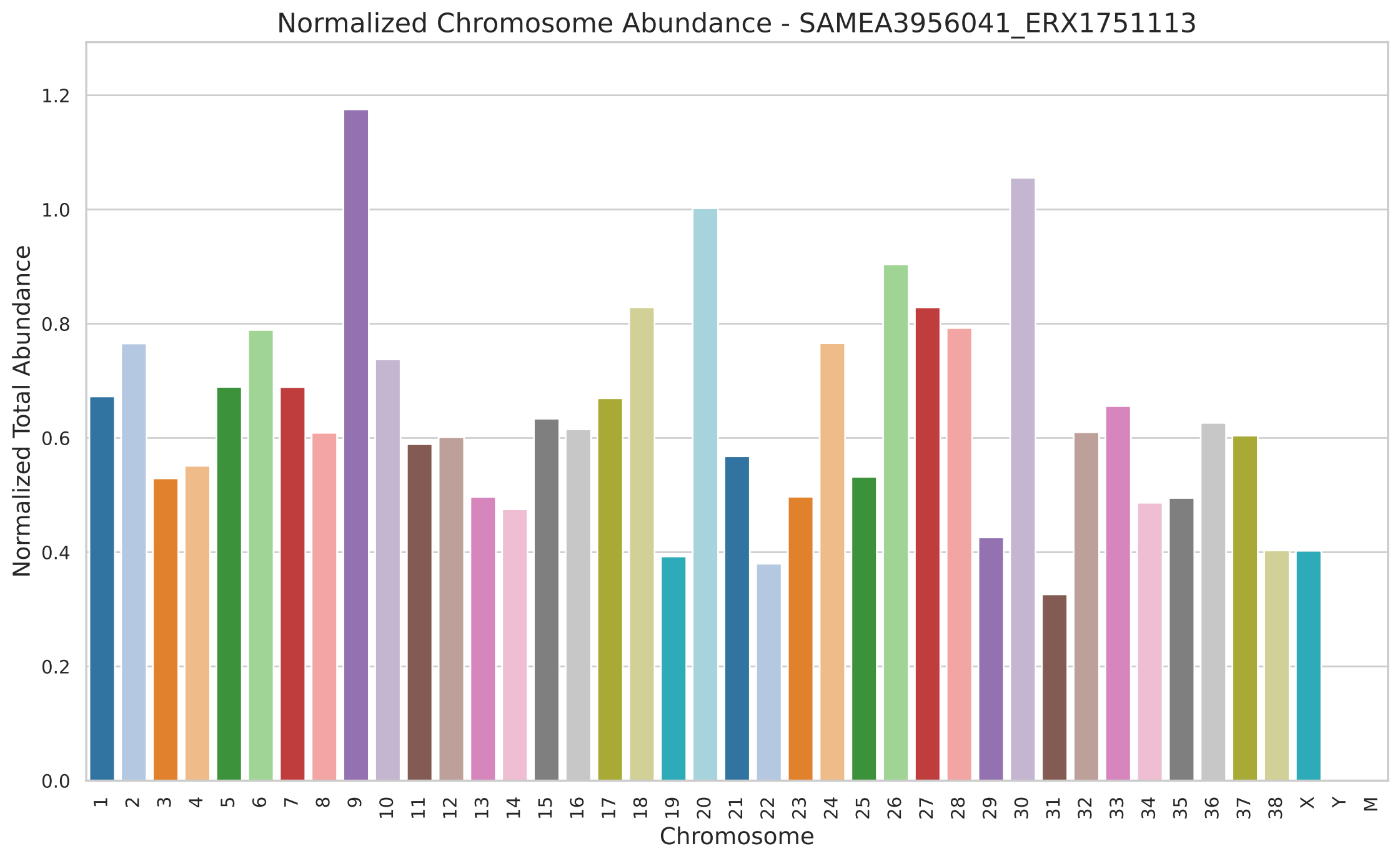

Normalized Chromosome Abundance - SAMEA3956023_ERX1751111
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

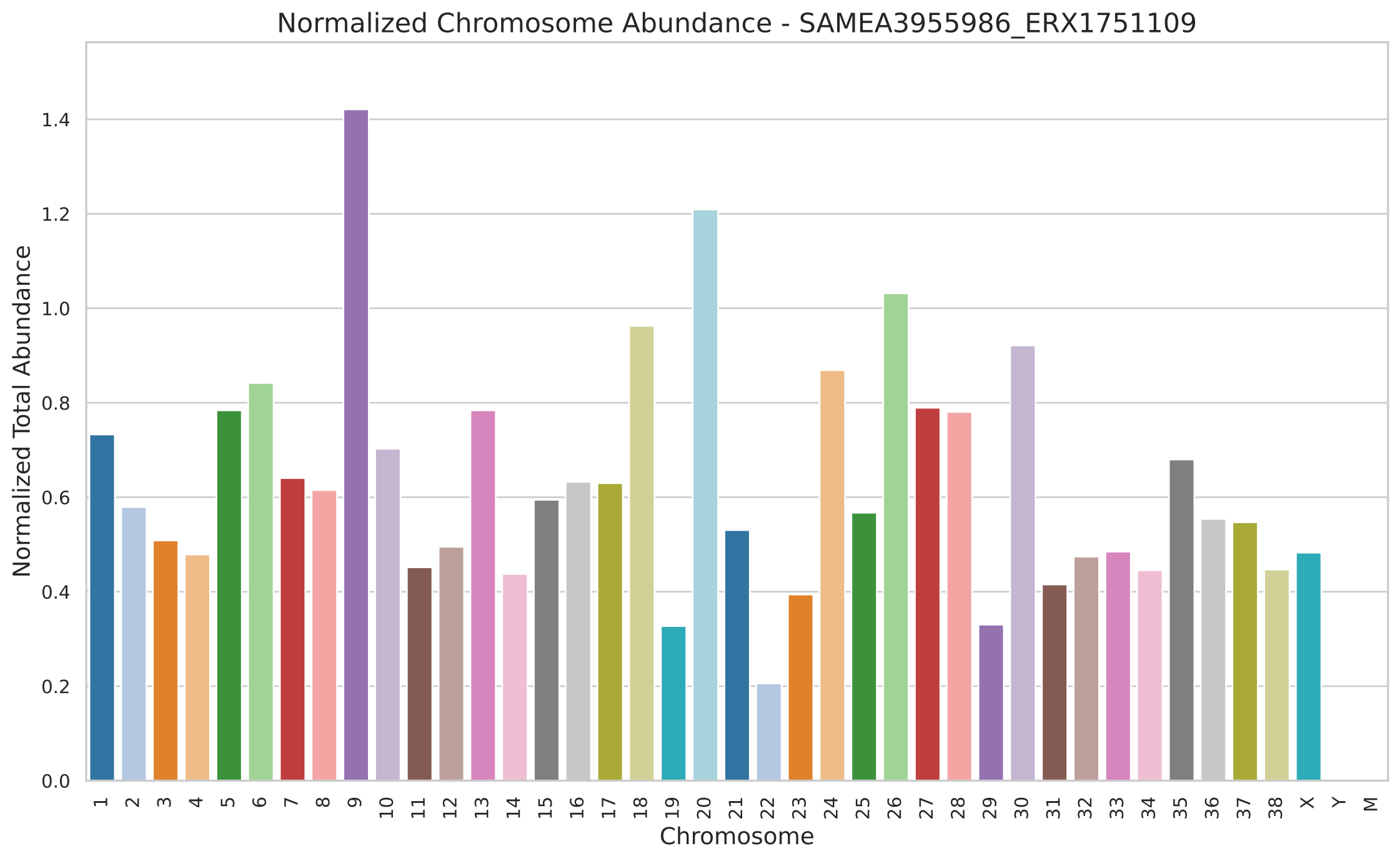

Normalized Chromosome Abundance - SAMEA3955973_ERX1751106
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

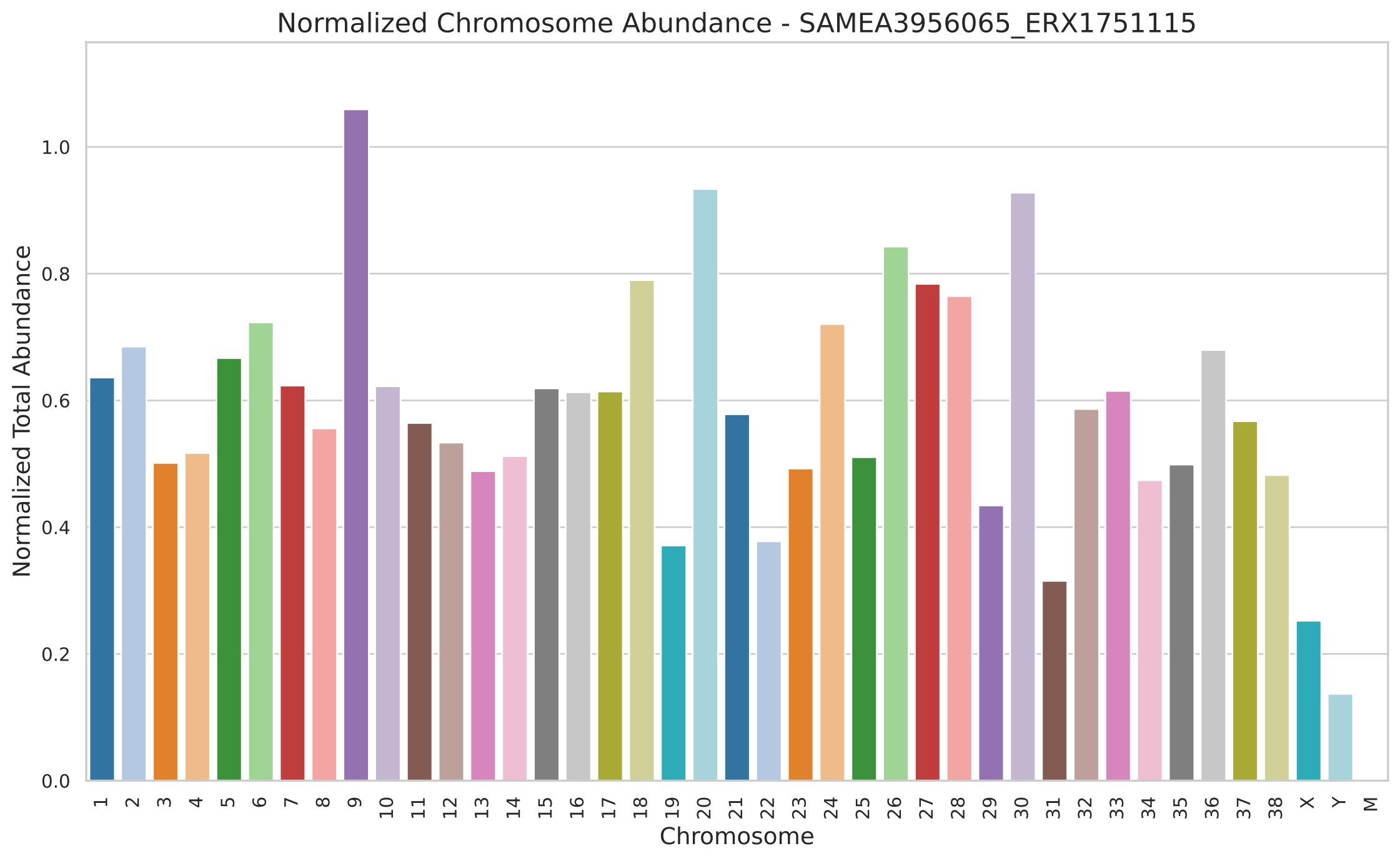

Normalized Chromosome Abundance - SAMEA3955985_ERX1751108
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

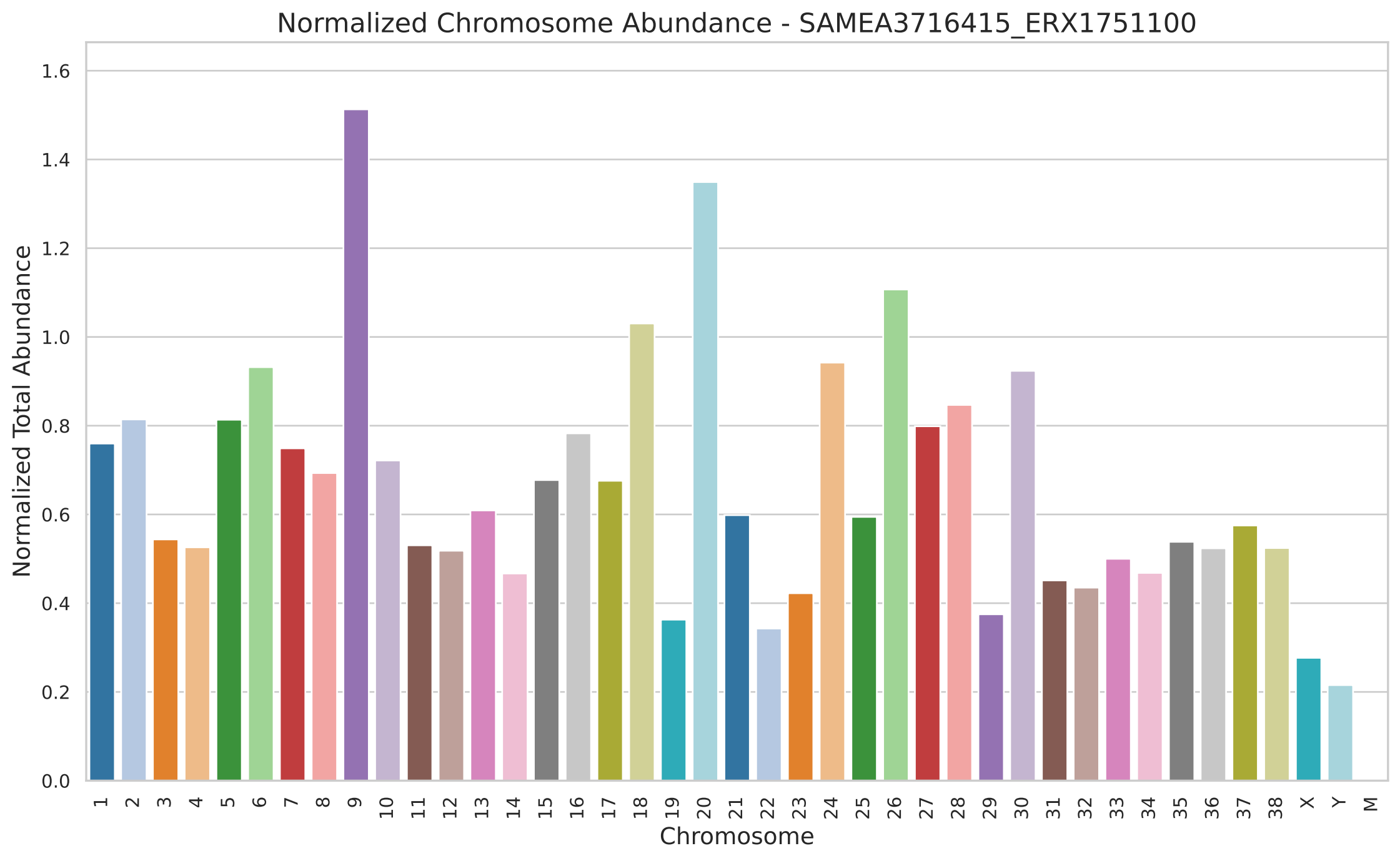

Normalized Chromosome Abundance - SAMEA3956040_ERX1751112
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

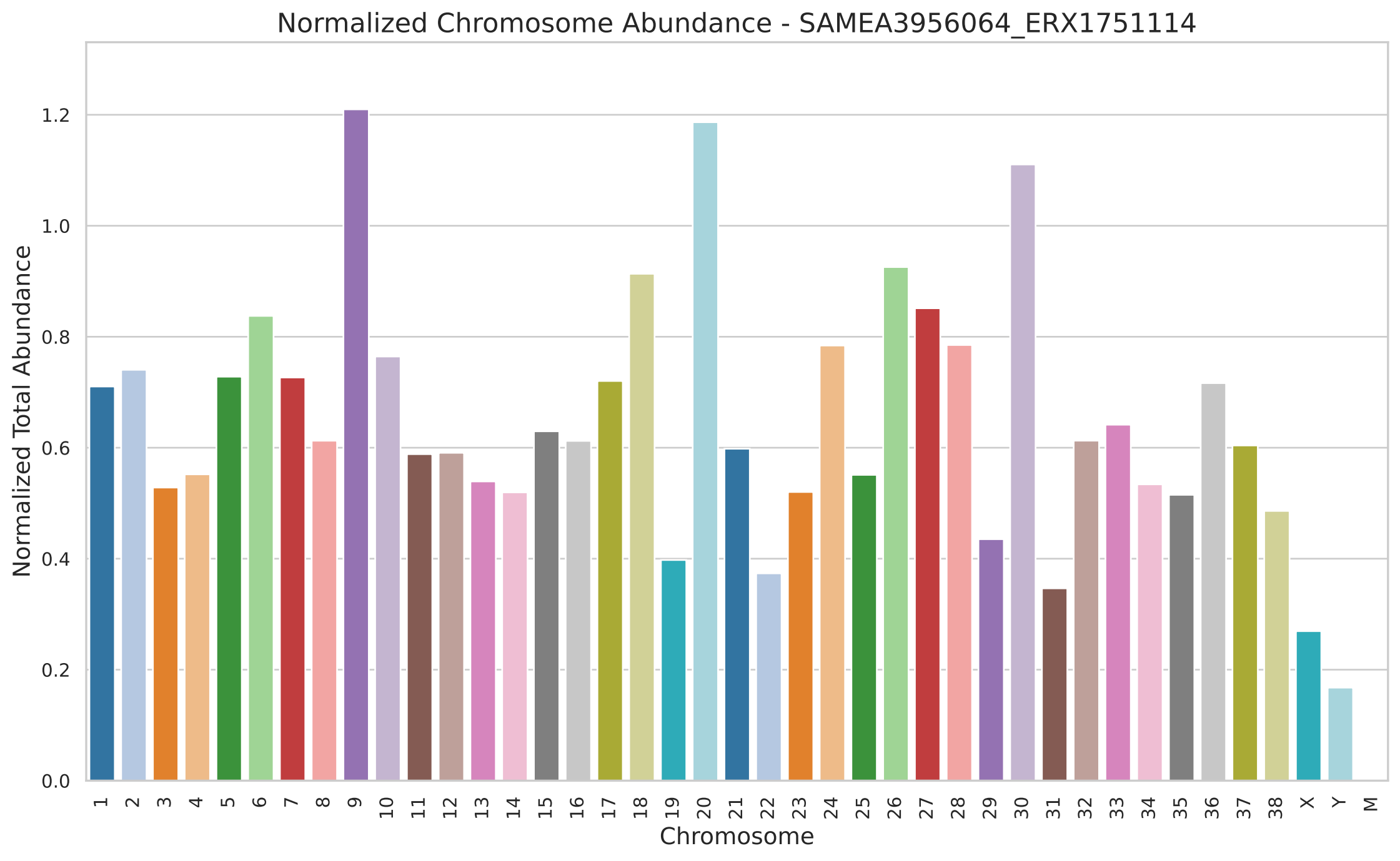

Normalized Chromosome Abundance - SAMEA3956021_ERX1751110
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

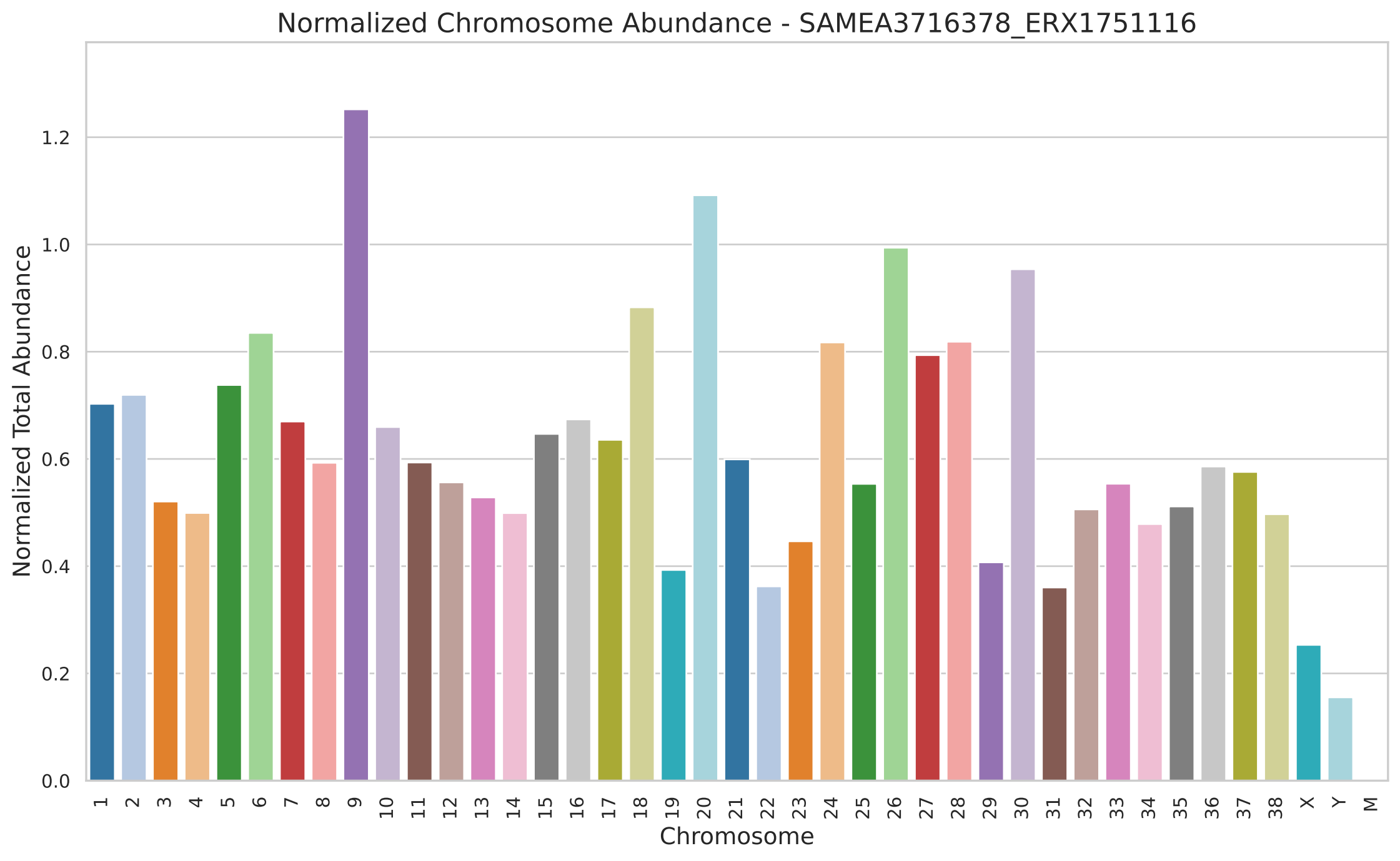

Normalized Chromosome Abundance - SAMEA3956041_ERX1751113
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

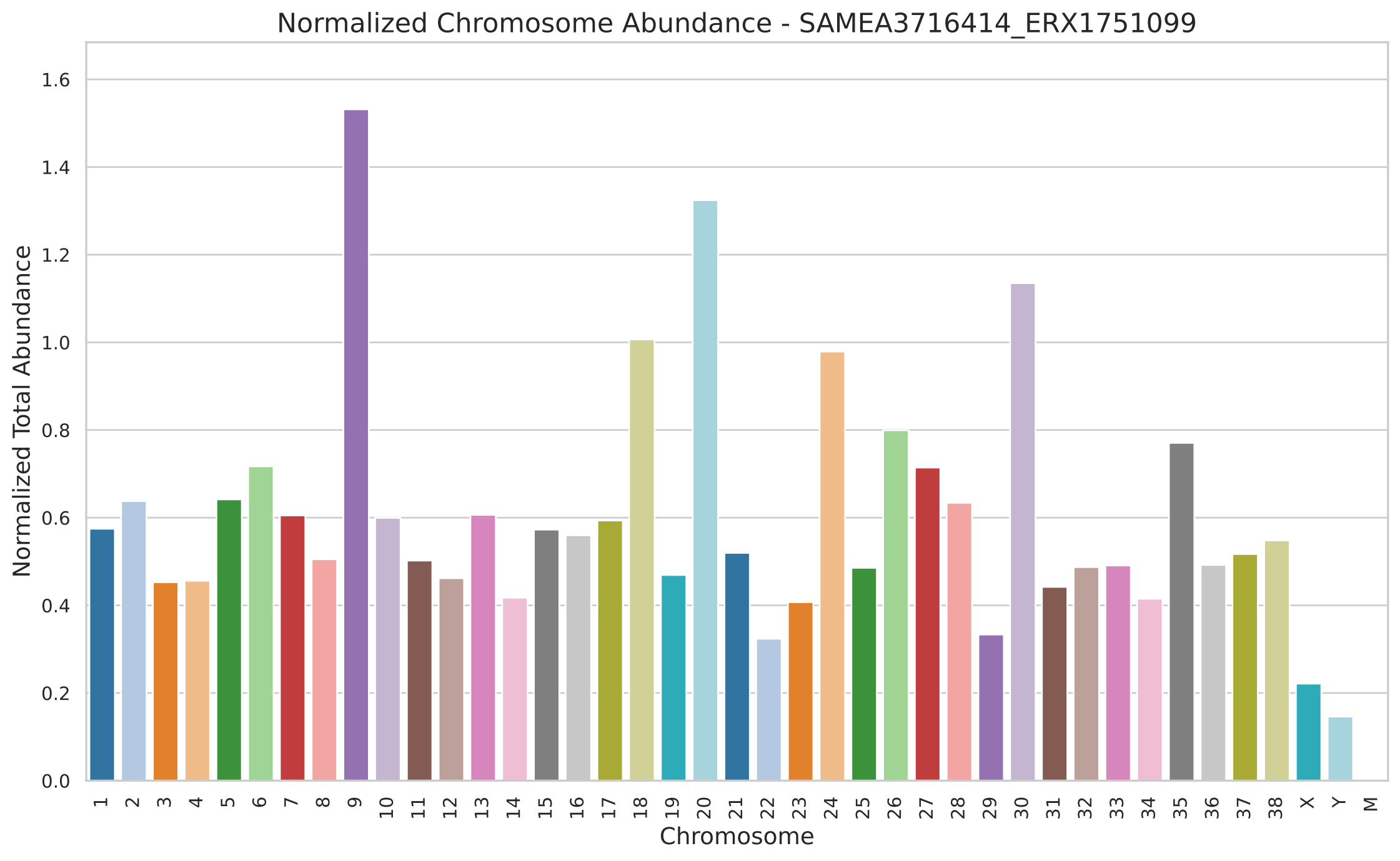

Normalized Chromosome Abundance - SAMEA3955986_ERX1751109
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

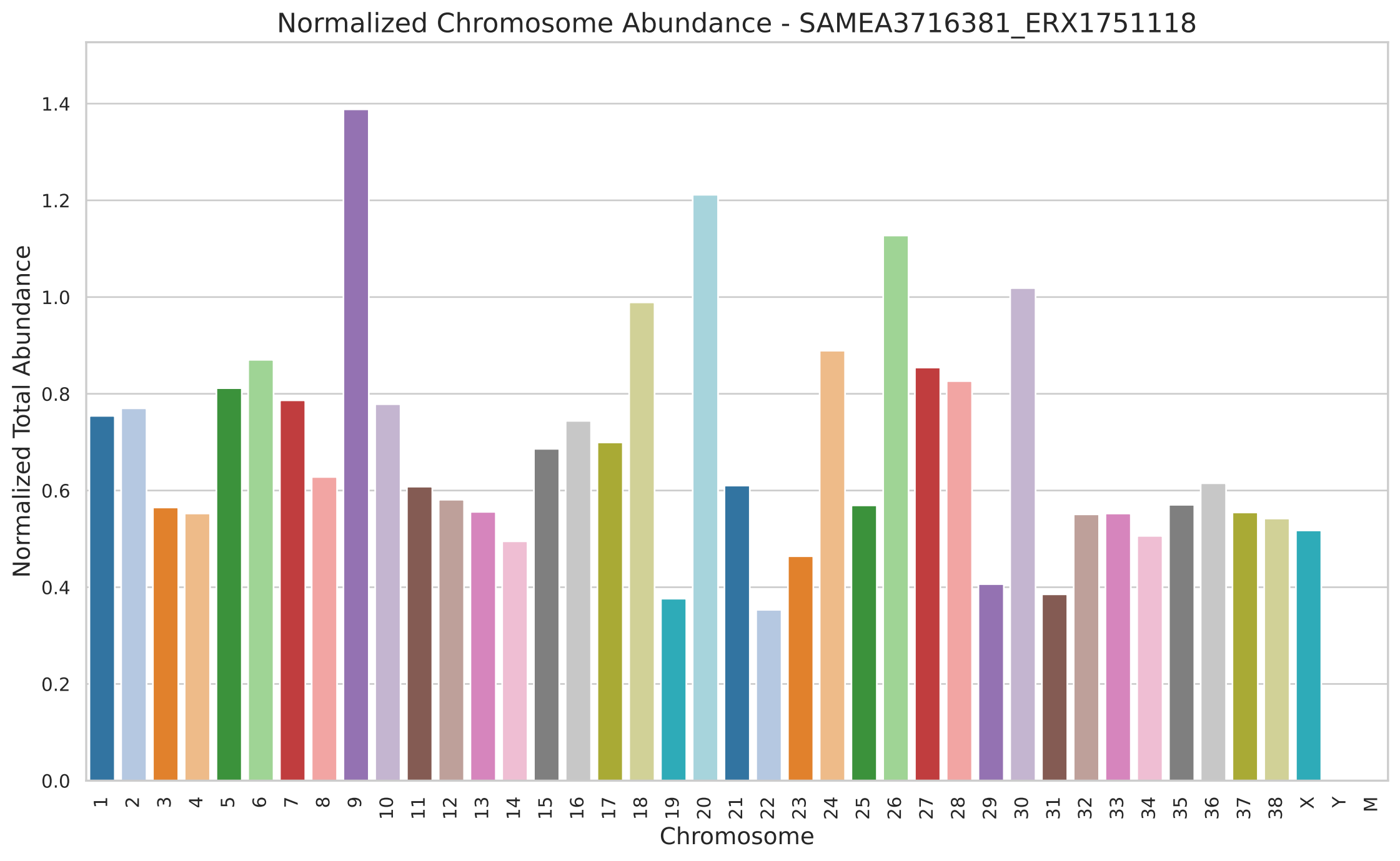

Normalized Chromosome Abundance - SAMEA3956065_ERX1751115
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

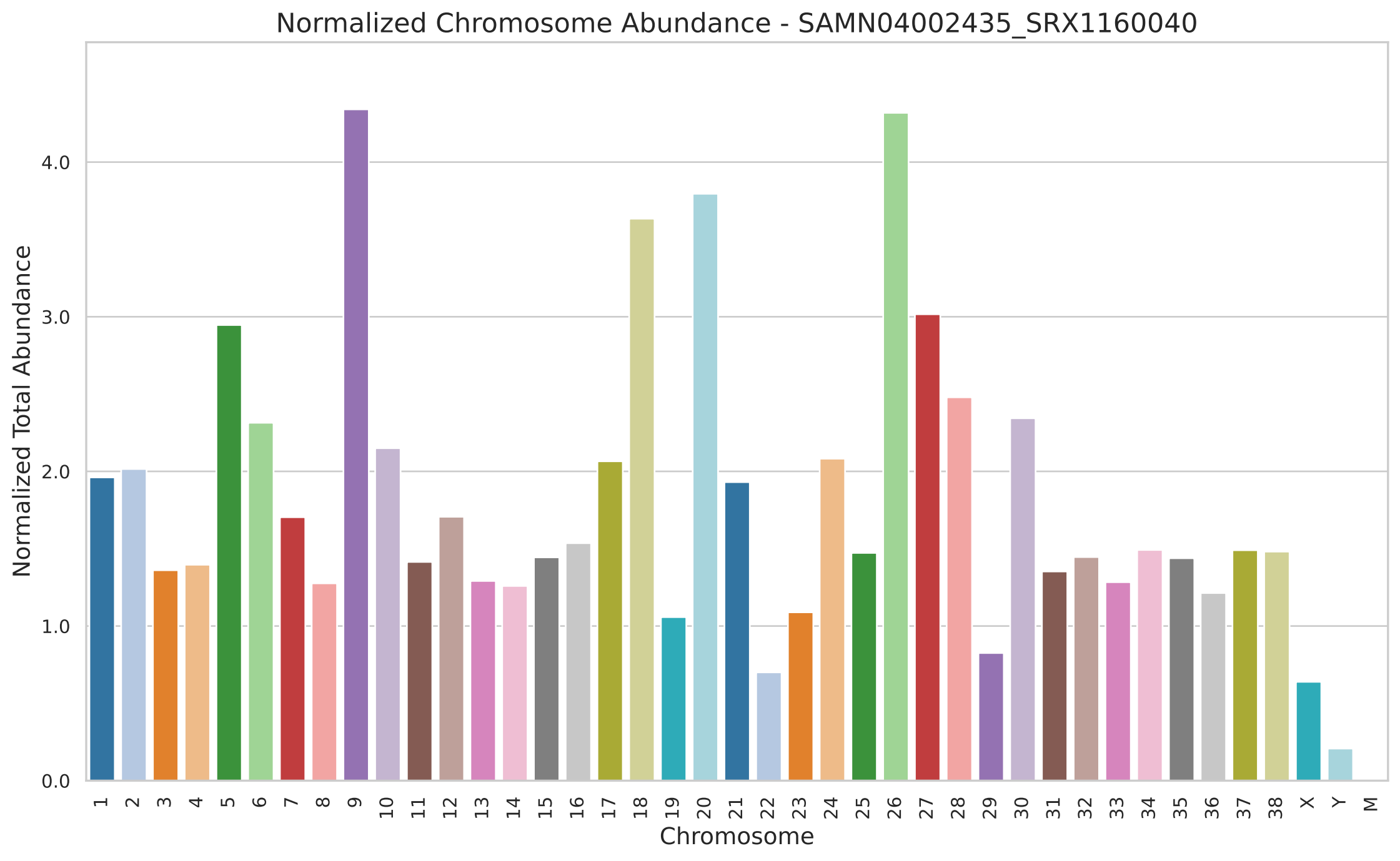

Normalized Chromosome Abundance - SAMEA3716415_ERX1751100
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

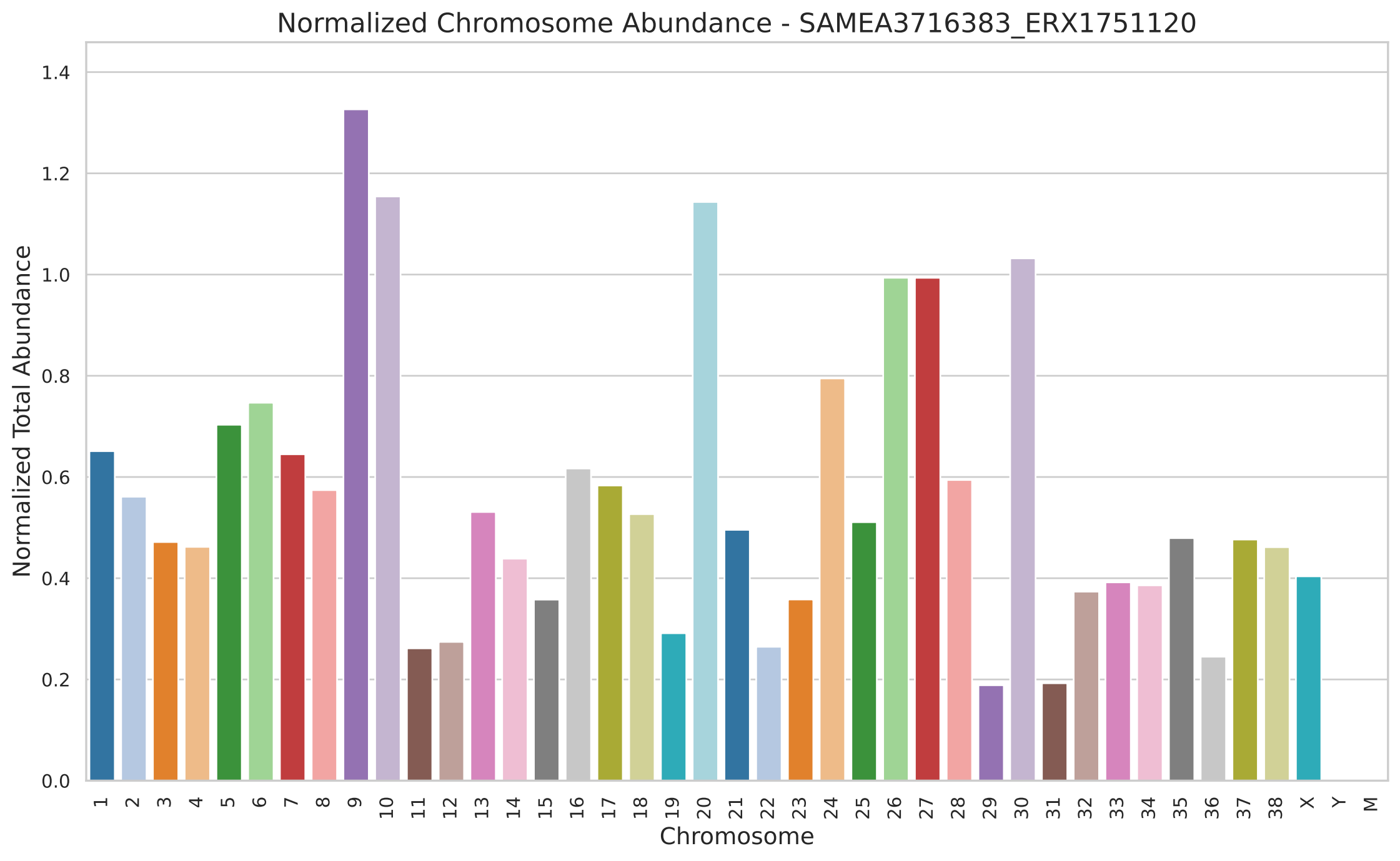

Normalized Chromosome Abundance - SAMEA3956064_ERX1751114
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

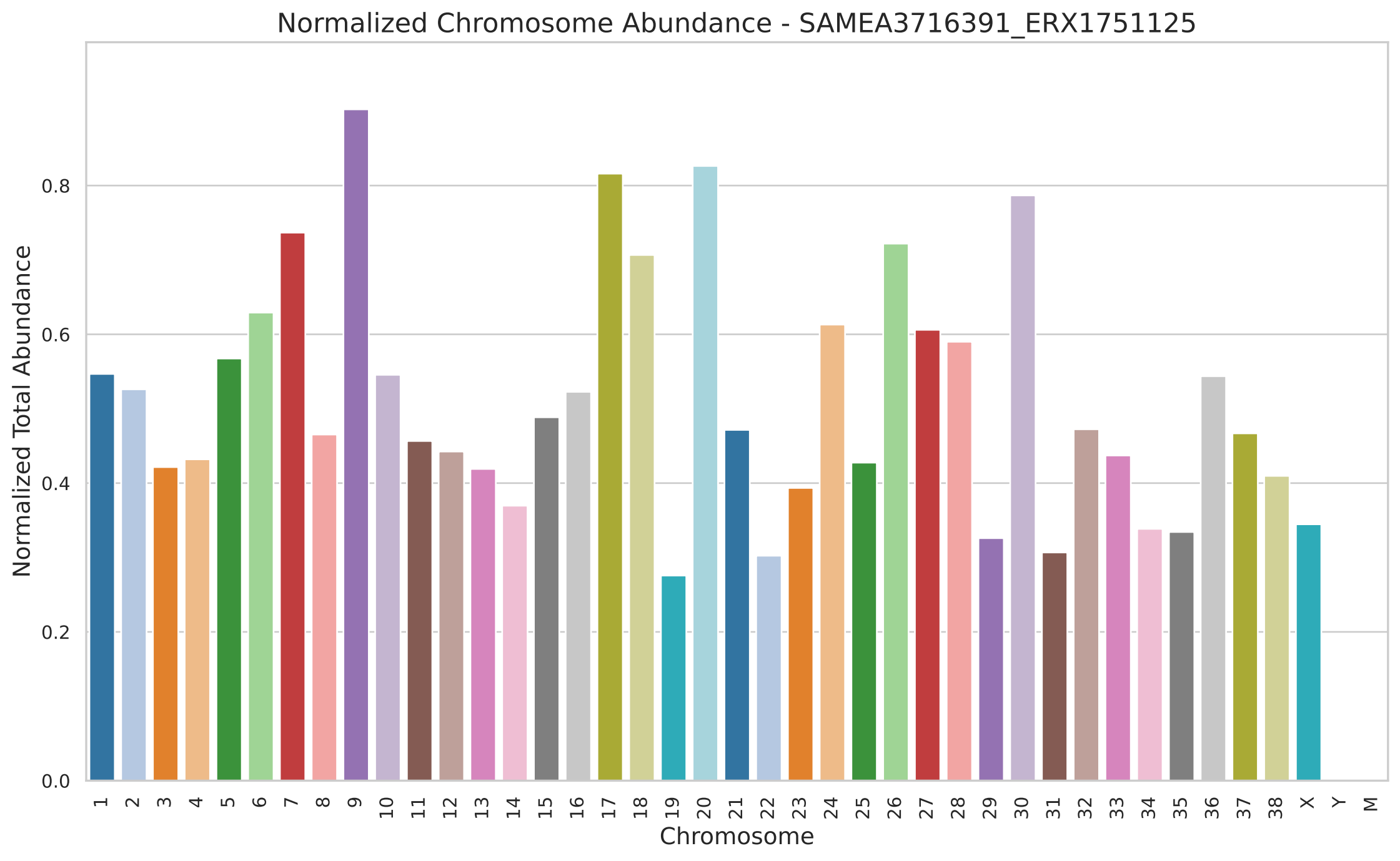

Normalized Chromosome Abundance - SAMEA3716378_ERX1751116
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

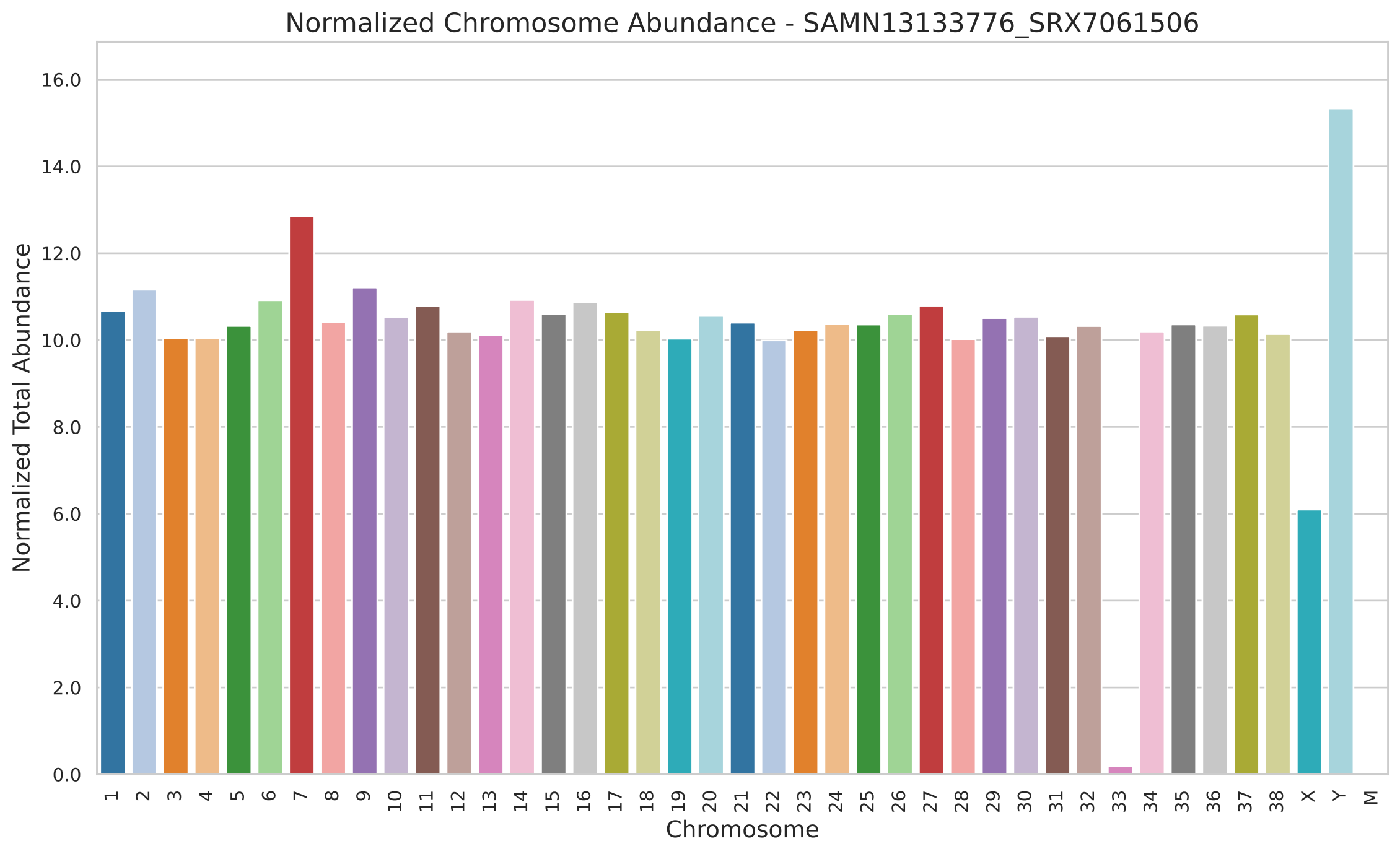

Normalized Chromosome Abundance - SAMEA3716414_ERX1751099
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

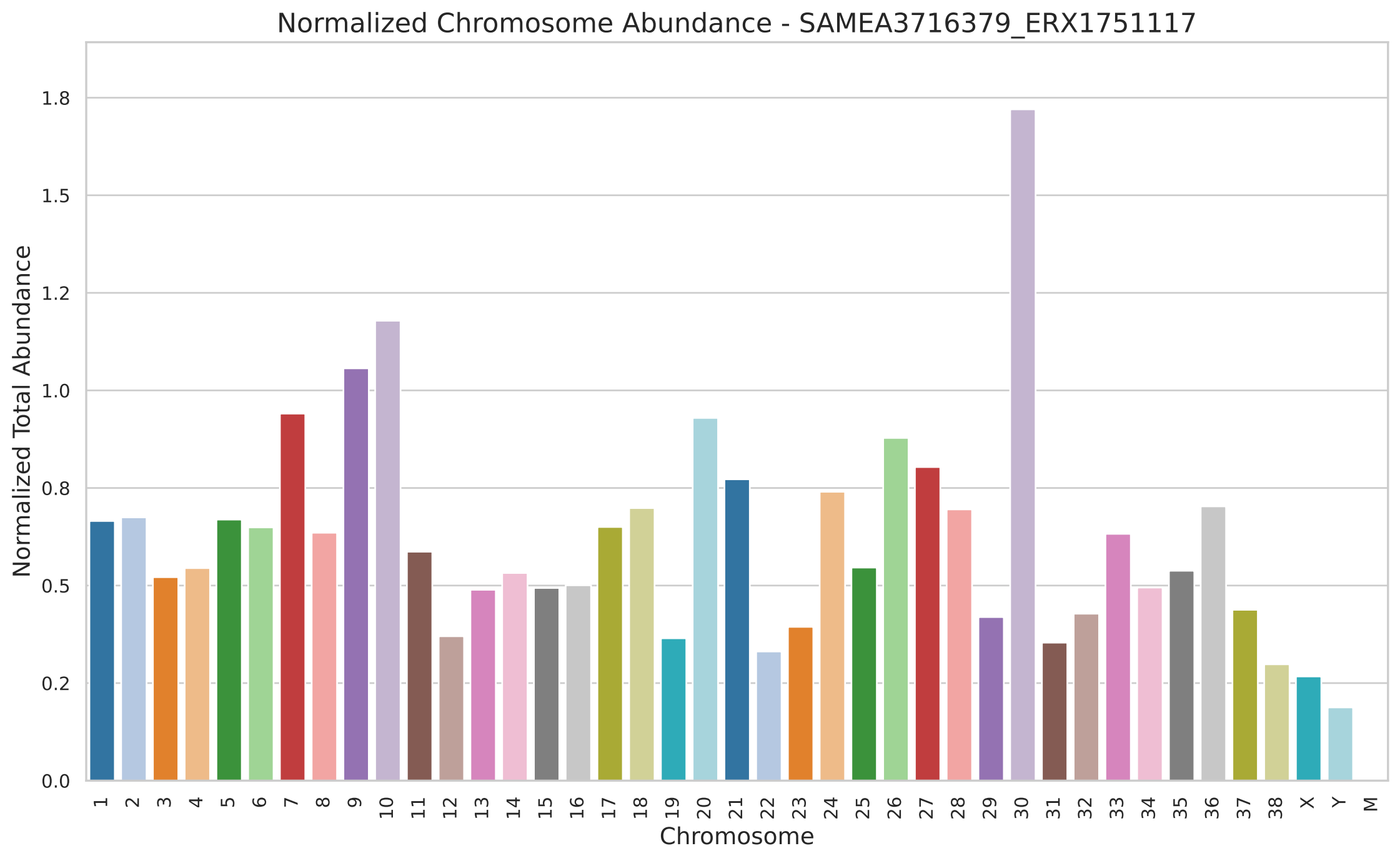

Normalized Chromosome Abundance - SAMEA3716381_ERX1751118
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

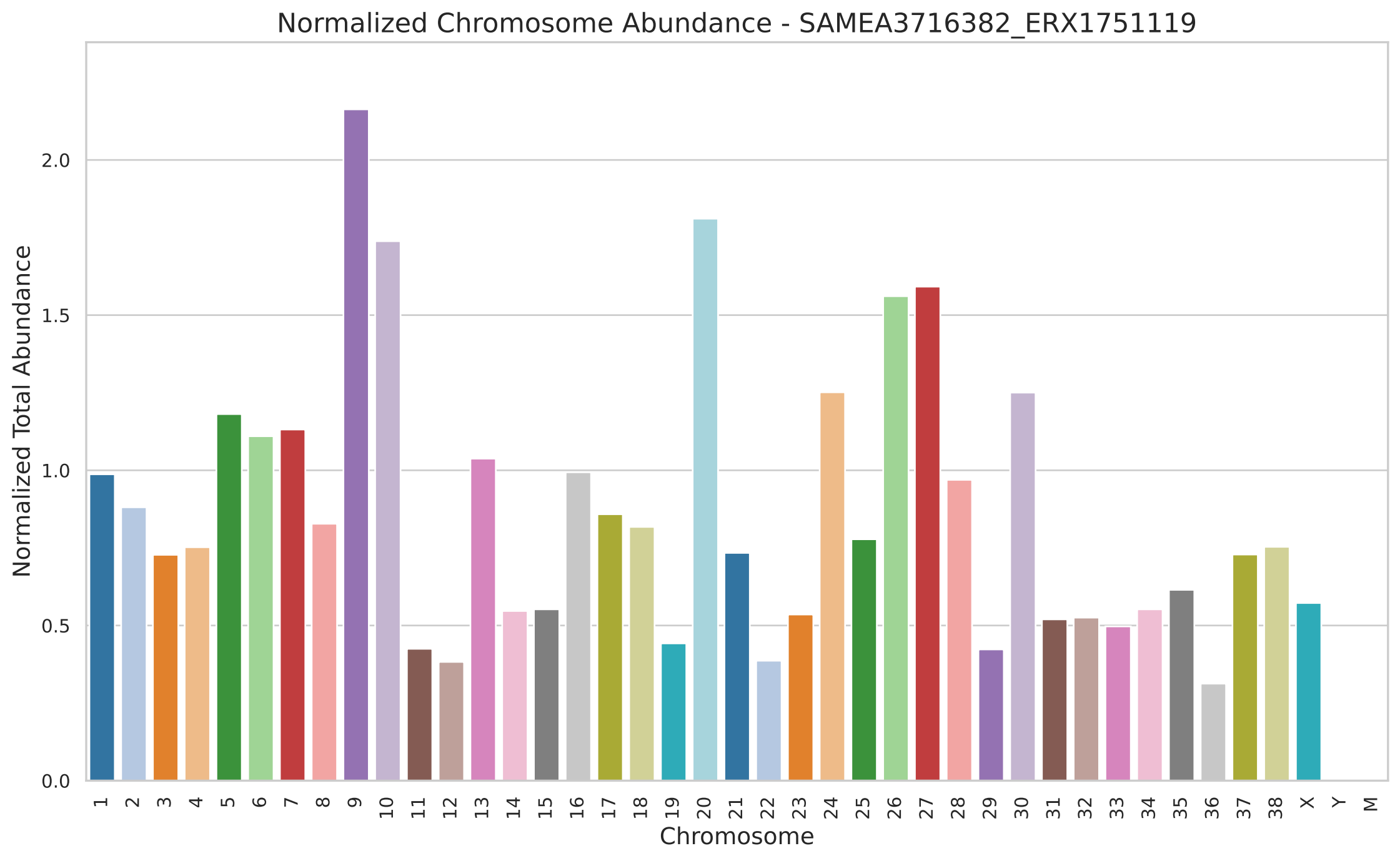

Normalized Chromosome Abundance - SAMN04002435_SRX1160040
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

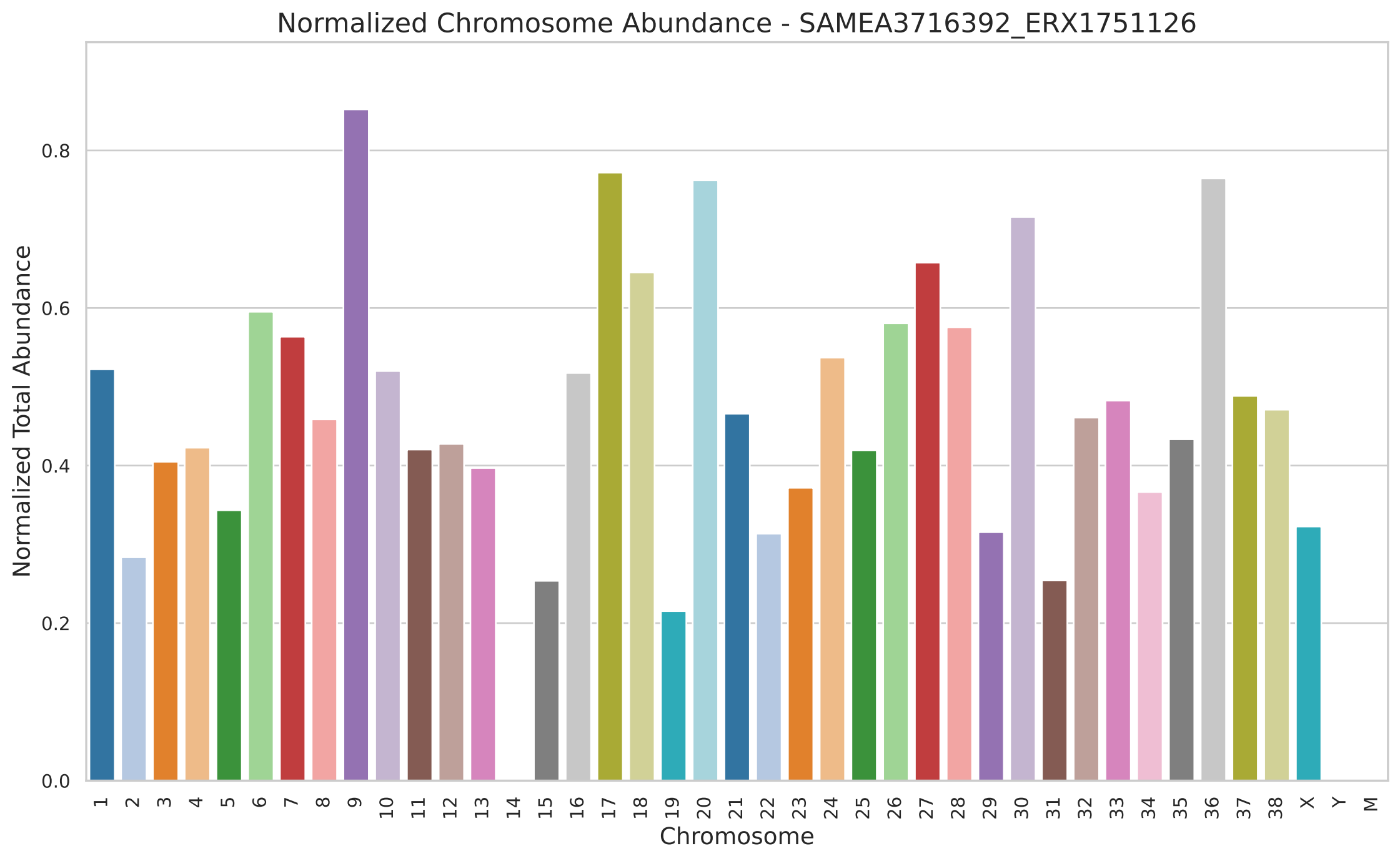

Normalized Chromosome Abundance - SAMEA3716383_ERX1751120
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

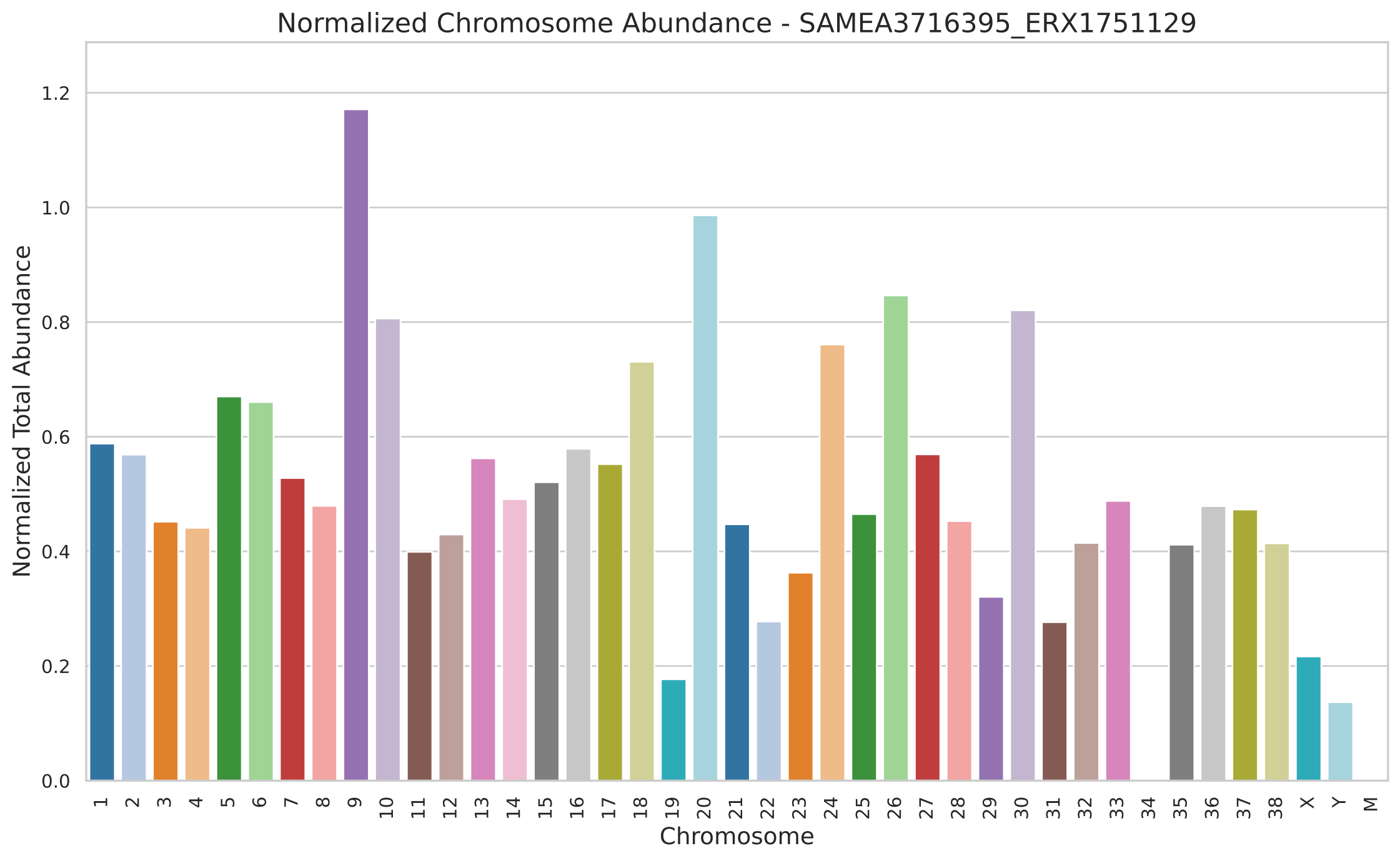

Normalized Chromosome Abundance - SAMEA3716391_ERX1751125
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

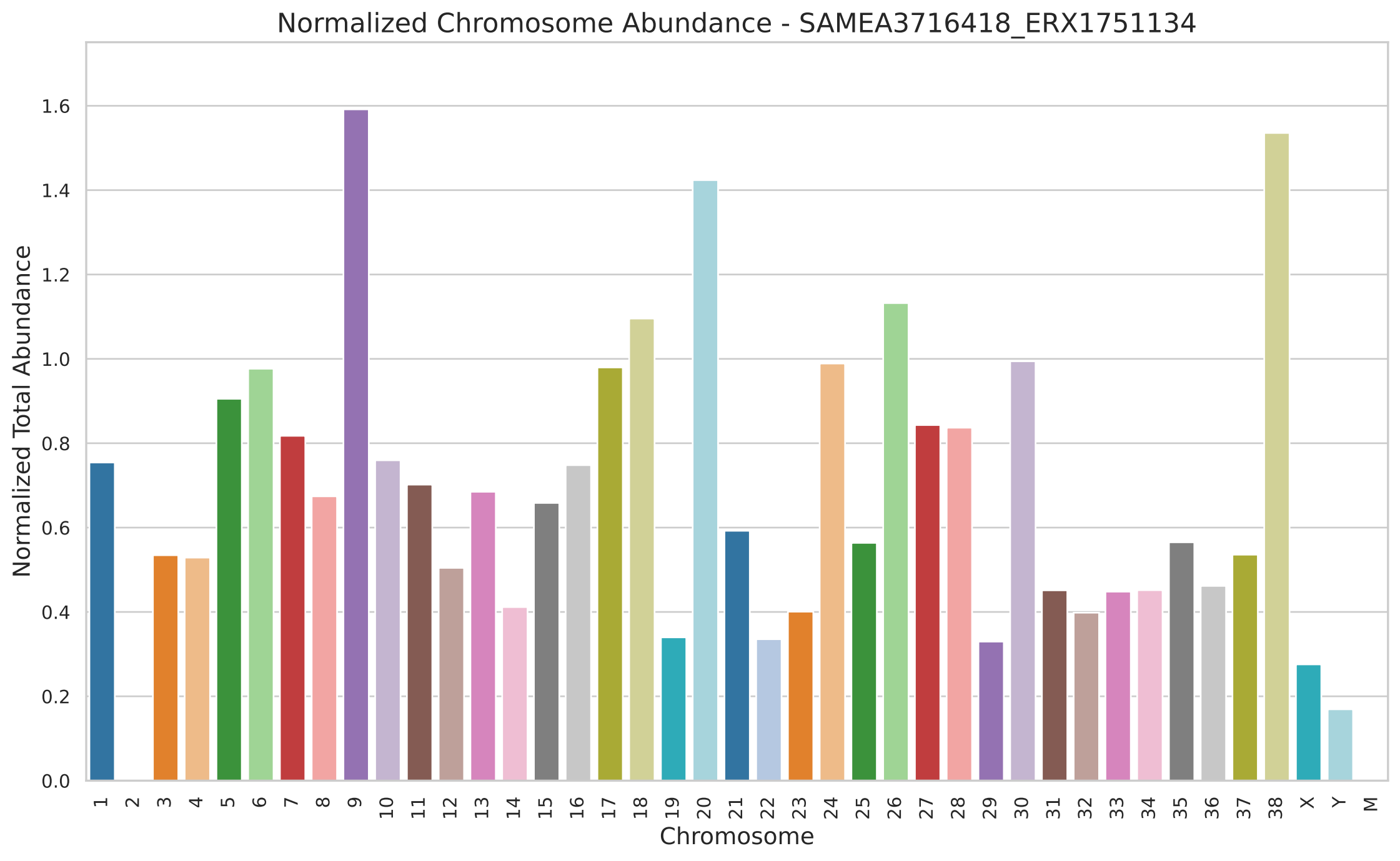

Normalized Chromosome Abundance - SAMN13133776_SRX7061506
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
12.0
14.0
16.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

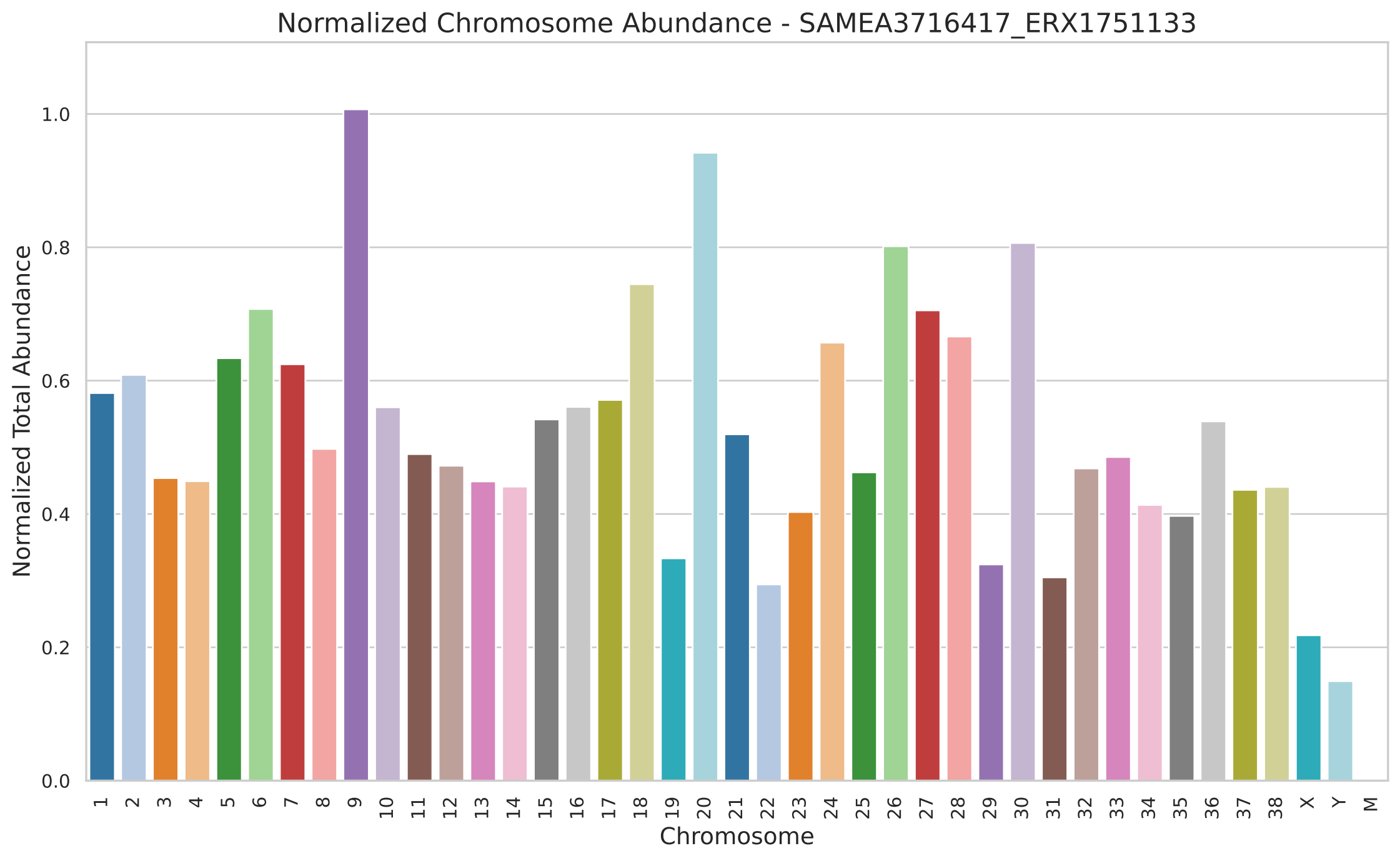

Normalized Chromosome Abundance - SAMEA3716379_ERX1751117
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

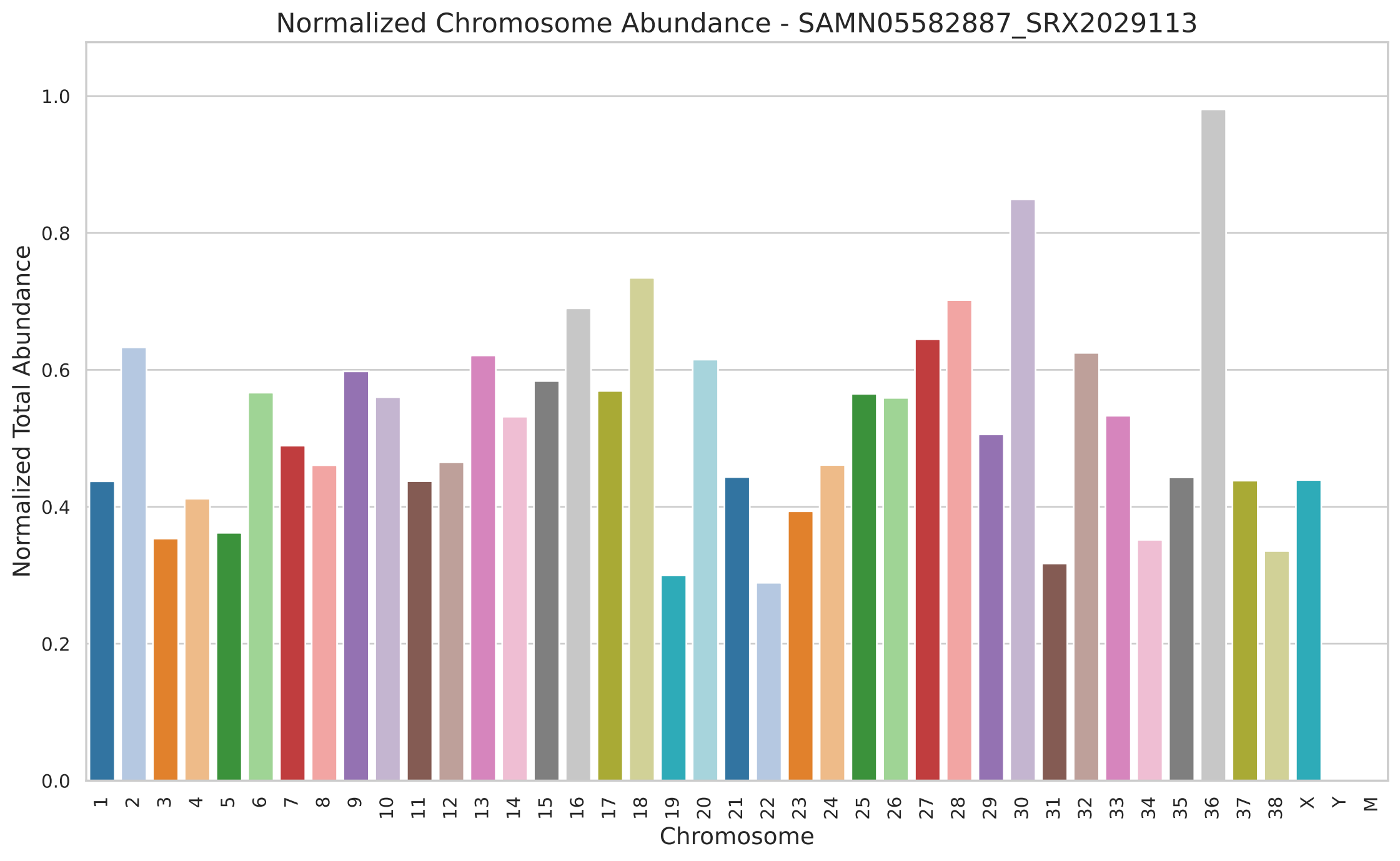

Normalized Chromosome Abundance - SAMEA3716382_ERX1751119
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

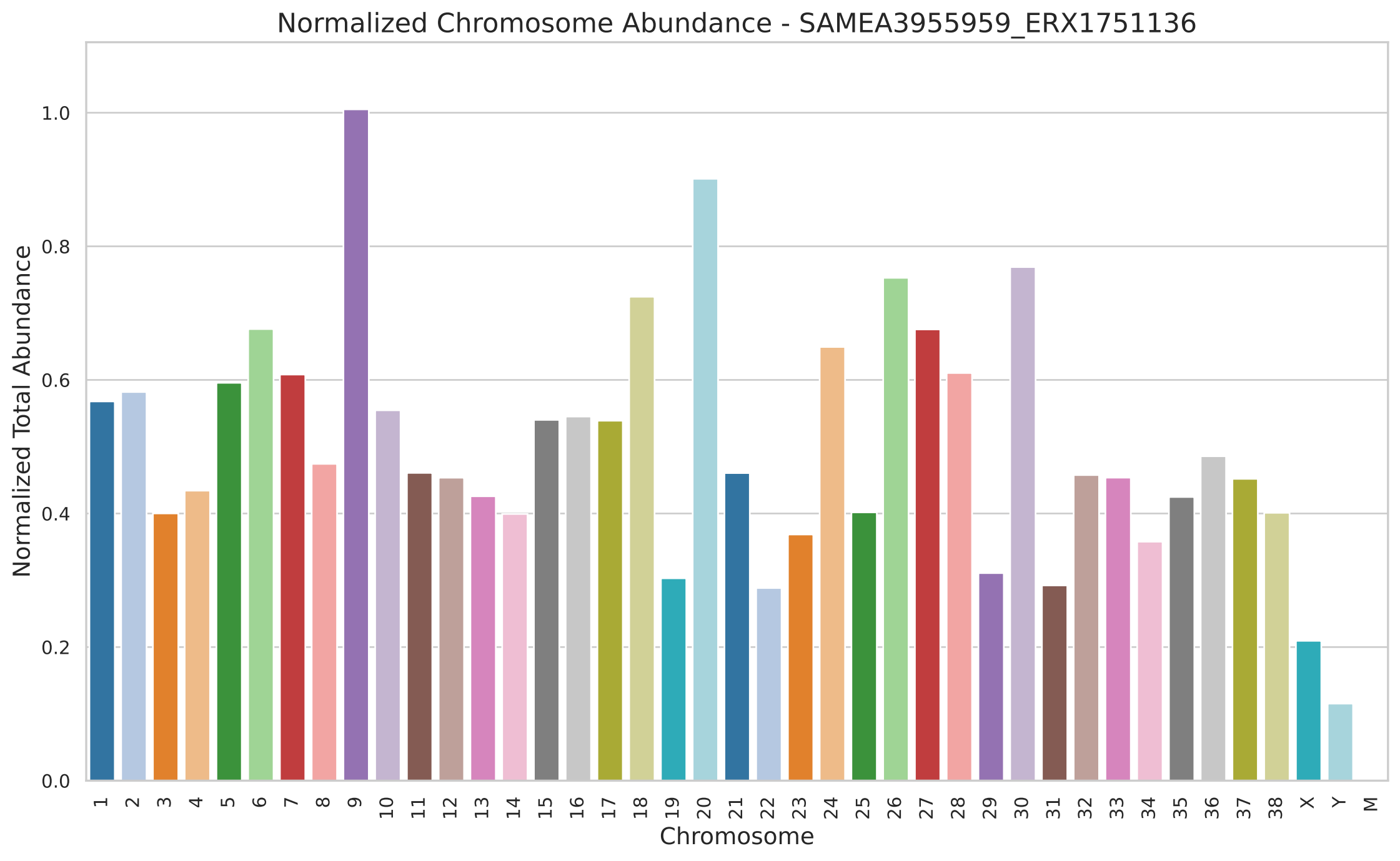

Normalized Chromosome Abundance - SAMEA3716392_ERX1751126
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

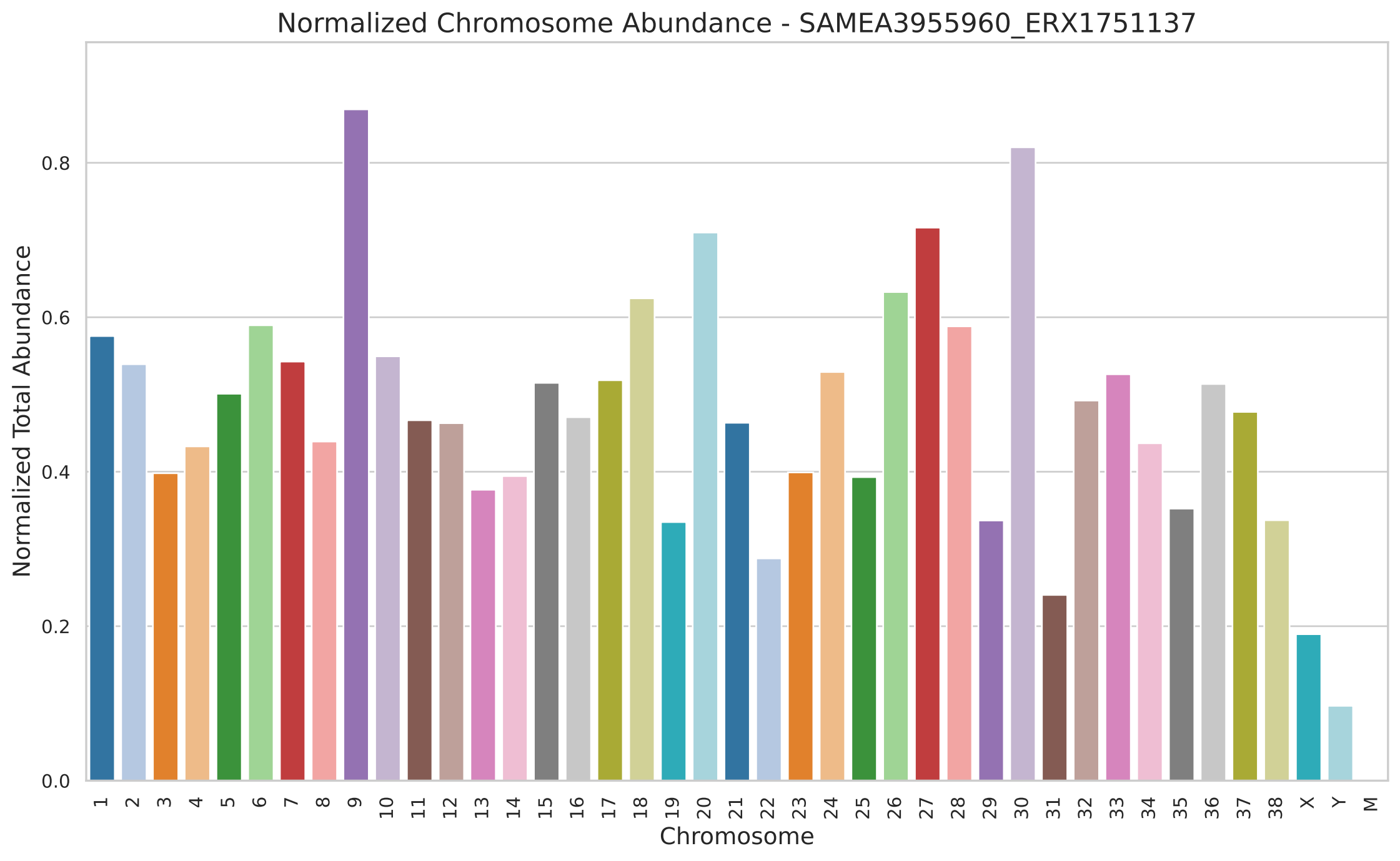

Normalized Chromosome Abundance - SAMEA3716395_ERX1751129
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

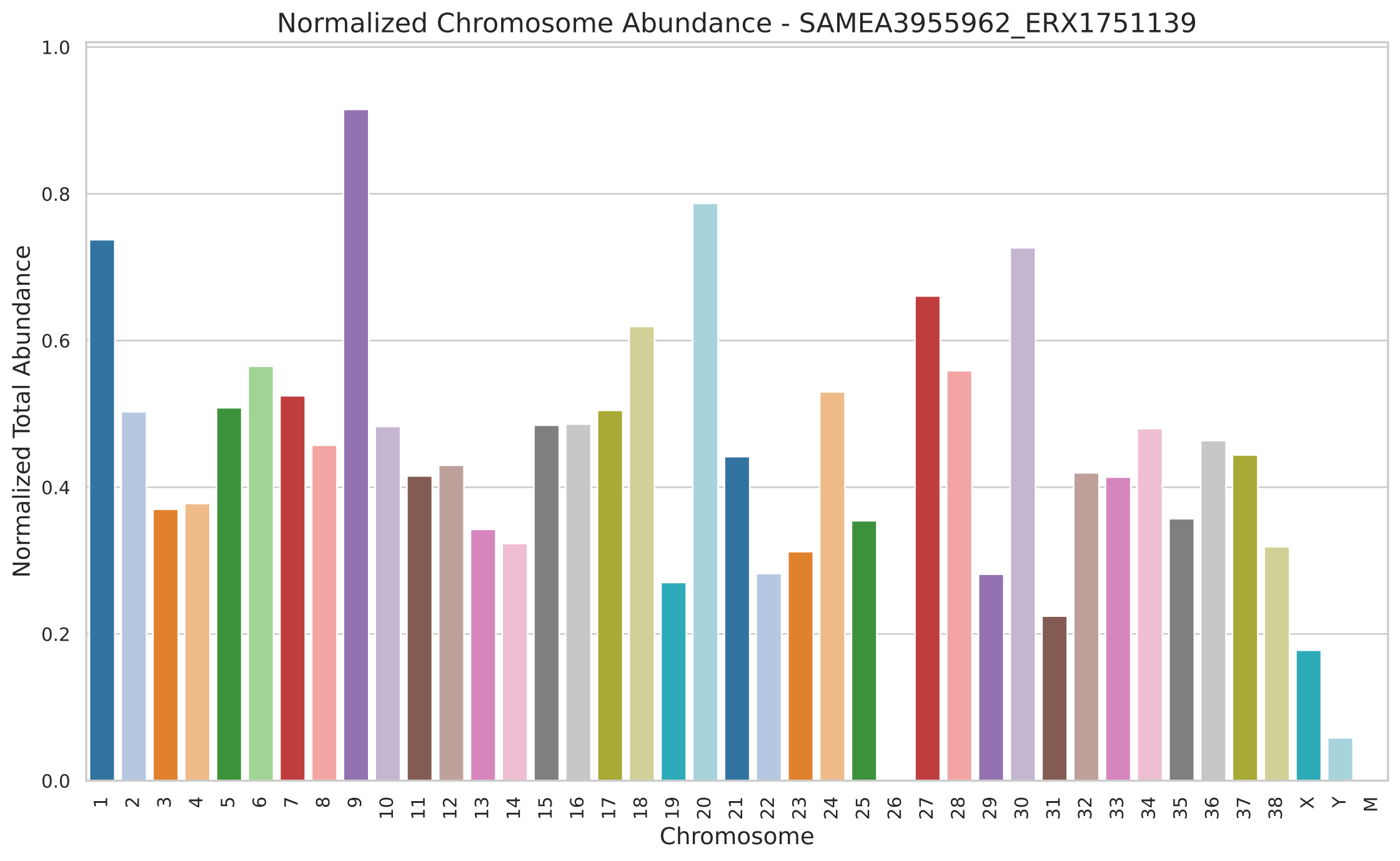

Normalized Chromosome Abundance - SAMEA3716418_ERX1751134
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

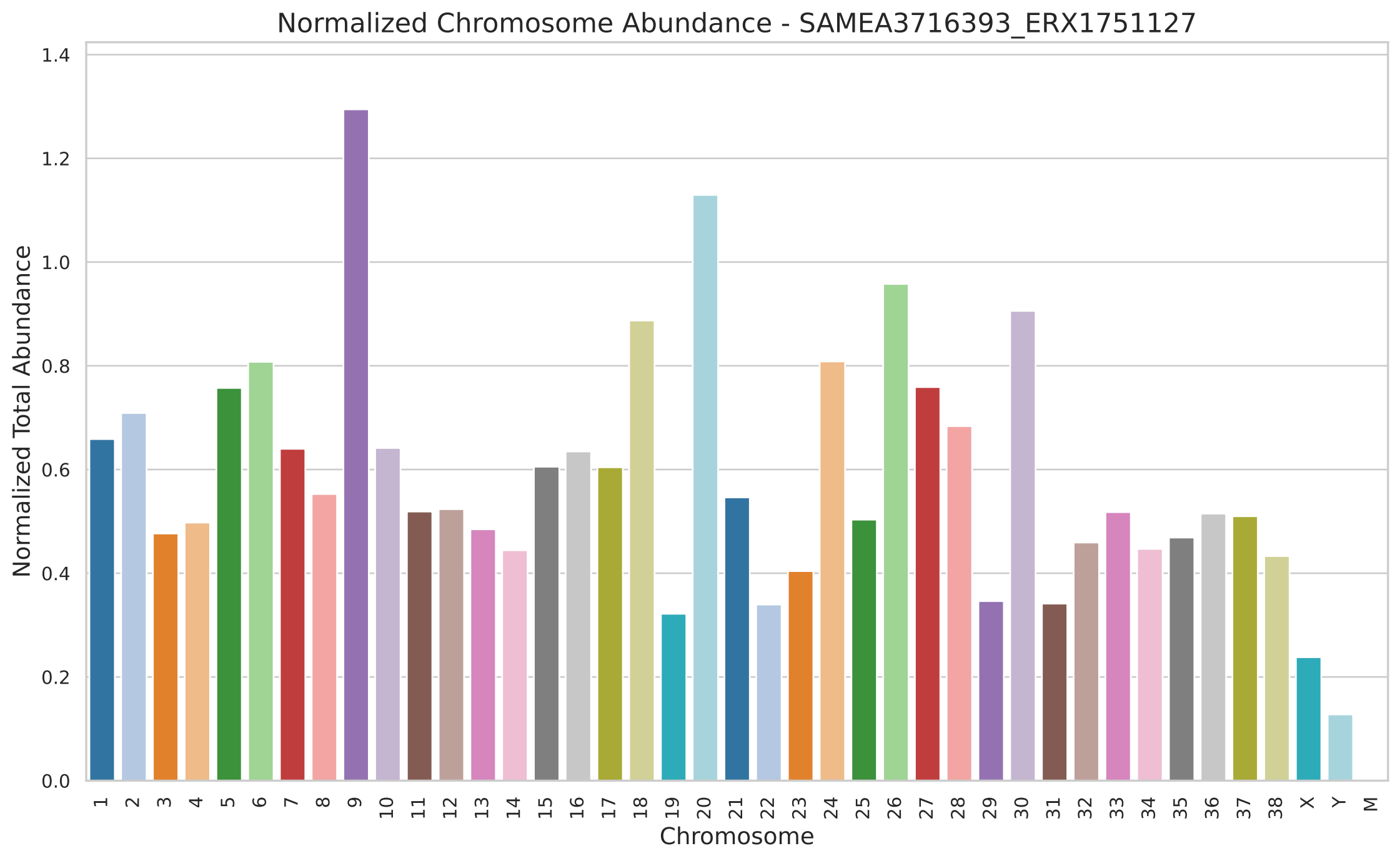

Normalized Chromosome Abundance - SAMEA3716417_ERX1751133
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

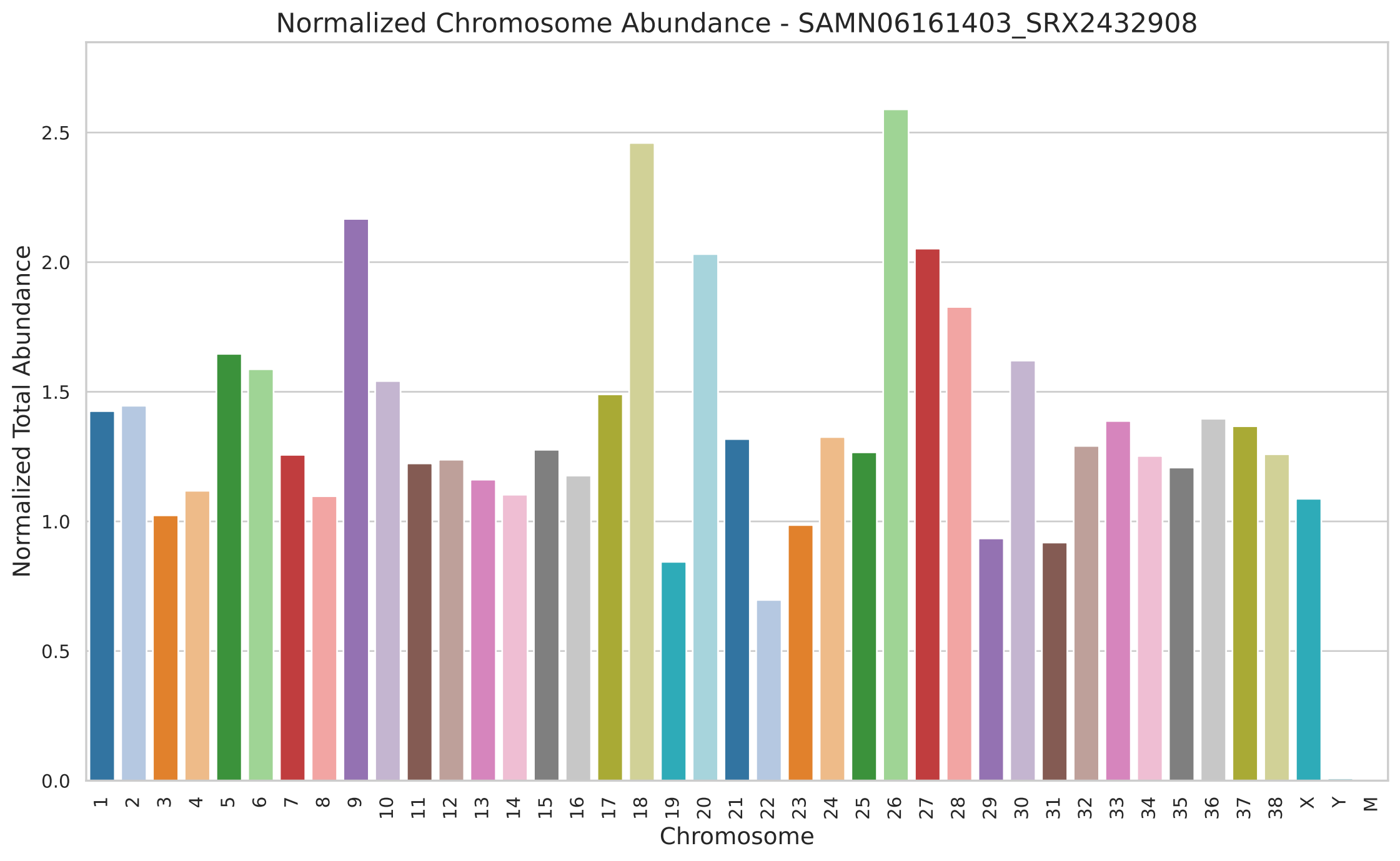

Normalized Chromosome Abundance - SAMN05582887_SRX2029113
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

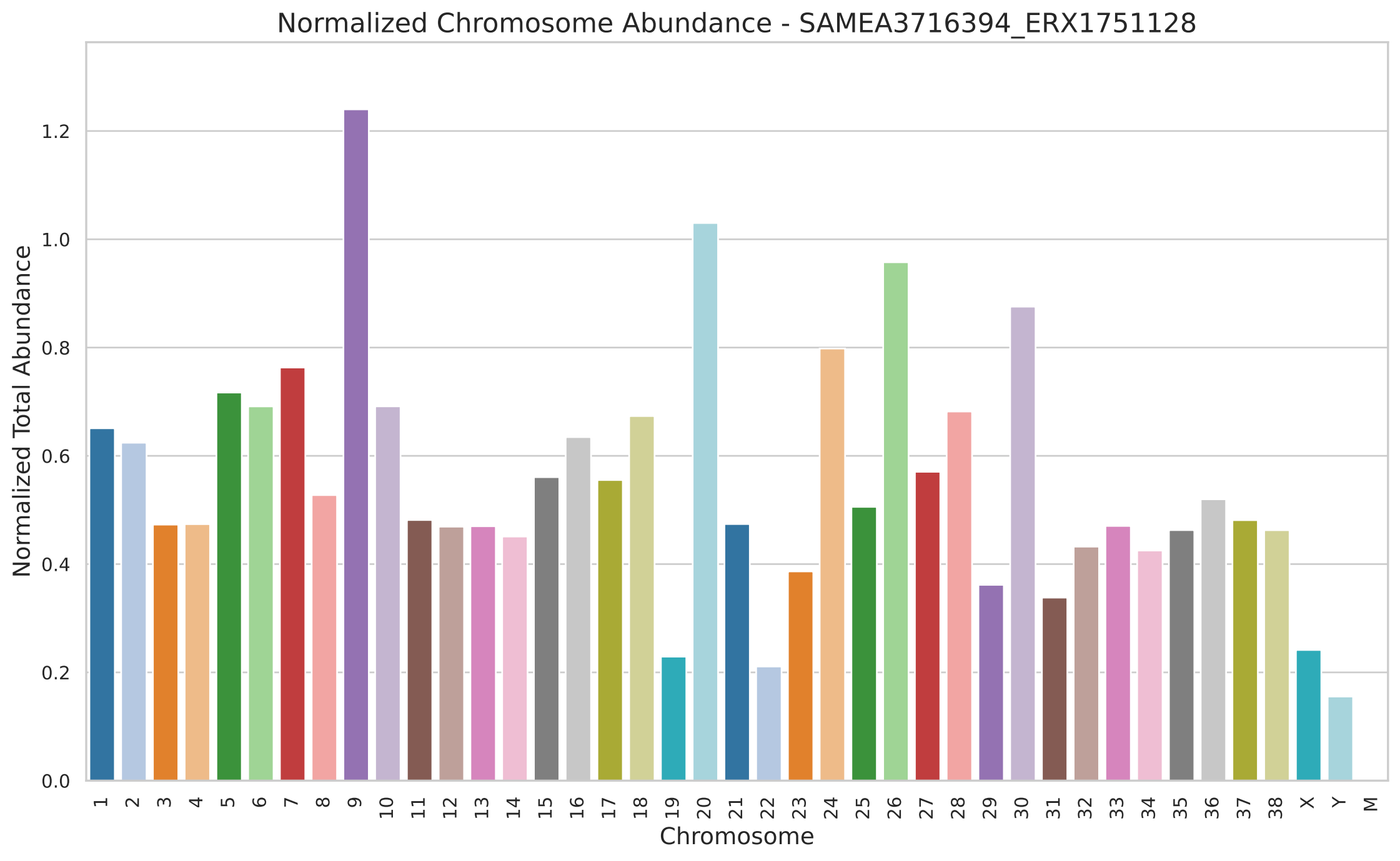

Normalized Chromosome Abundance - SAMEA3955959_ERX1751136
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

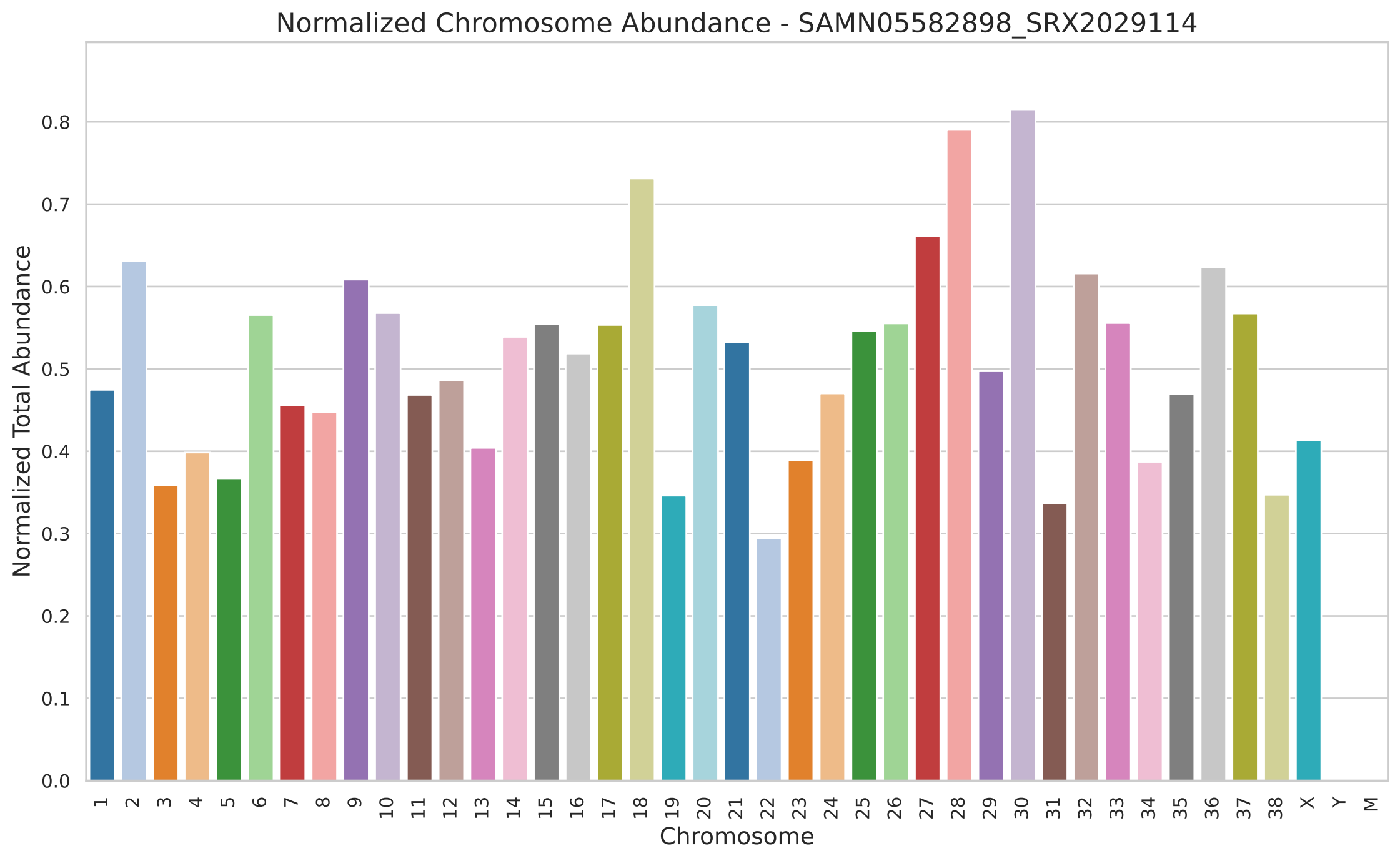

Normalized Chromosome Abundance - SAMEA3955960_ERX1751137
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

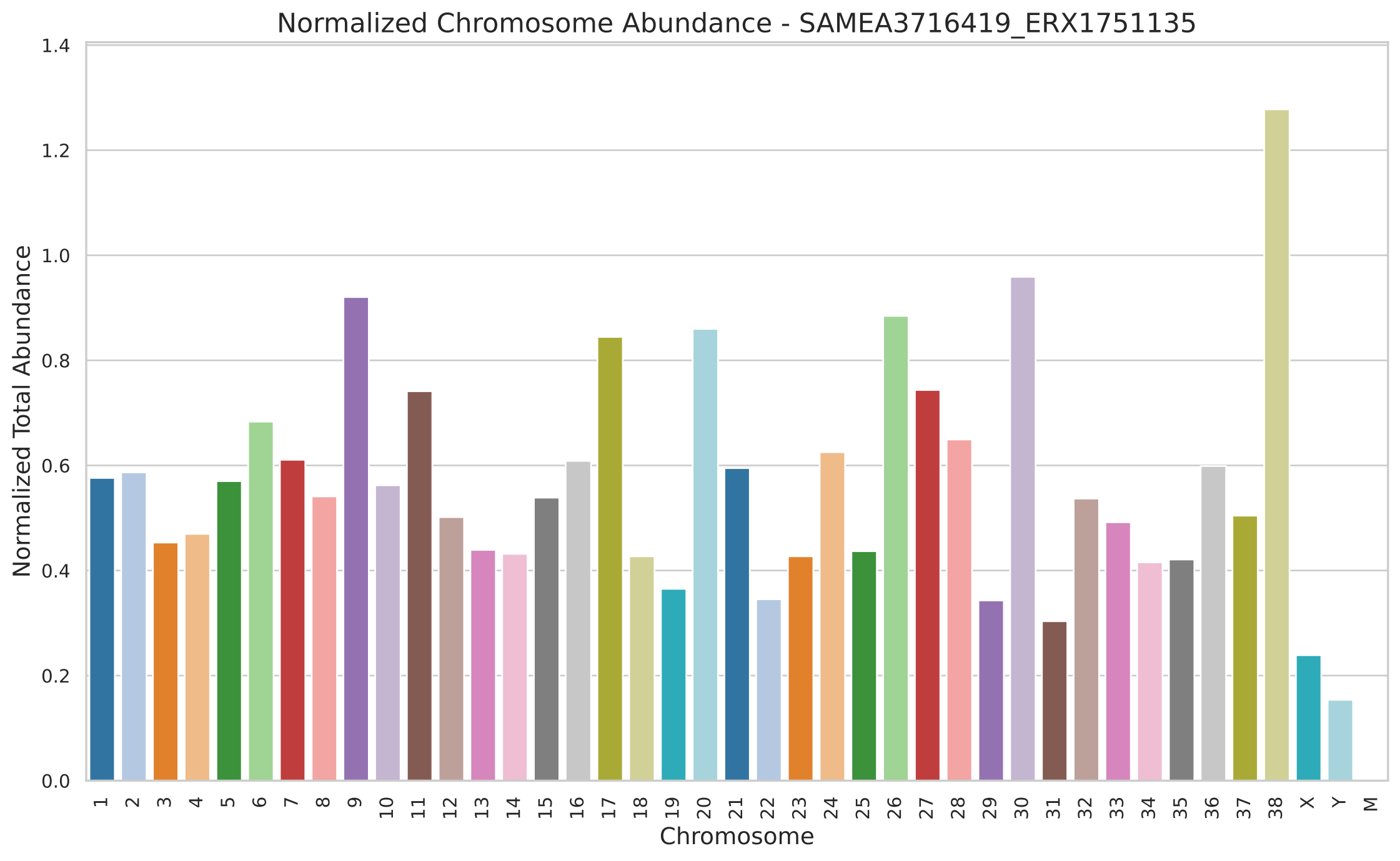

Normalized Chromosome Abundance - SAMEA3955962_ERX1751139
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

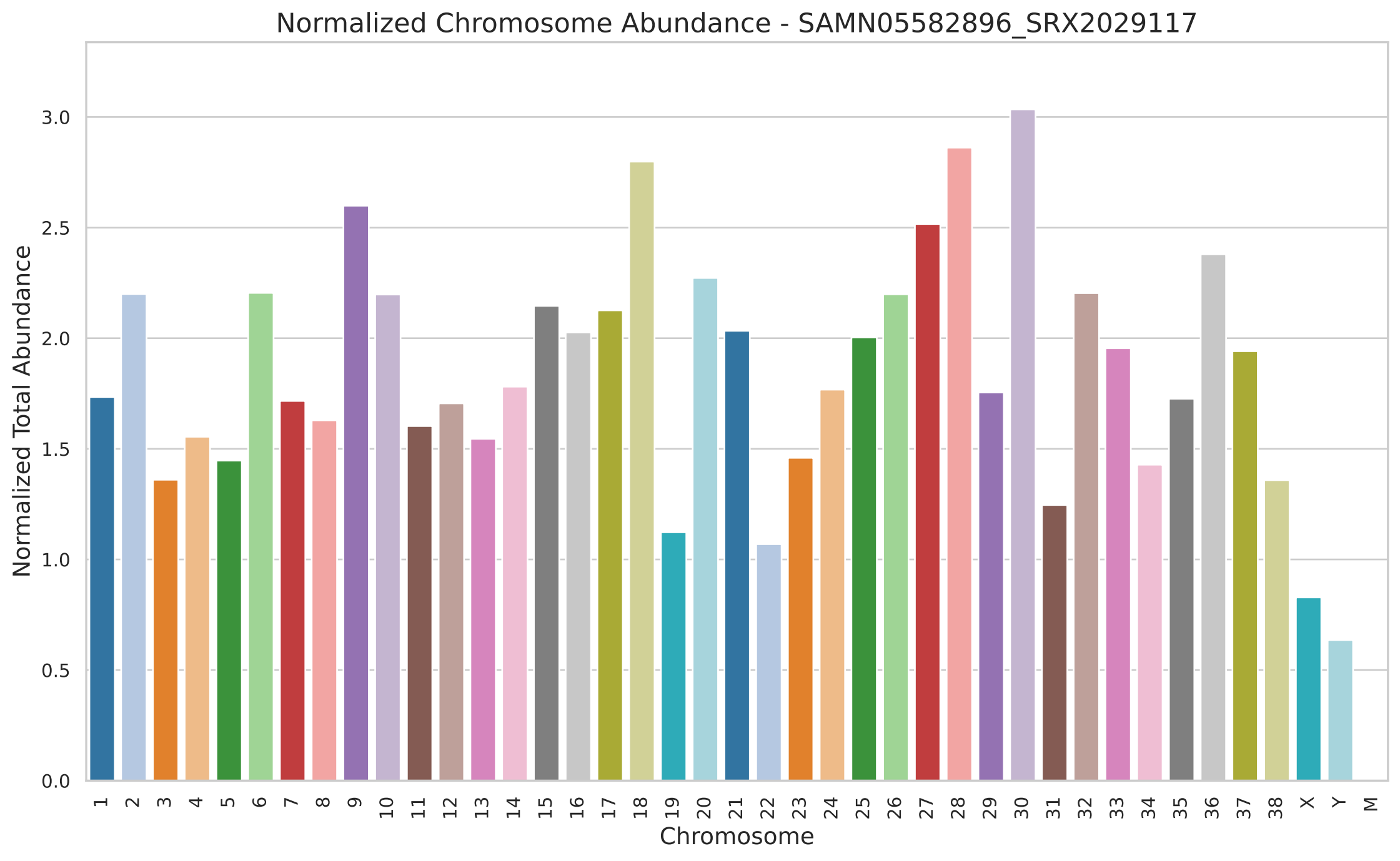

Normalized Chromosome Abundance - SAMEA3716393_ERX1751127
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

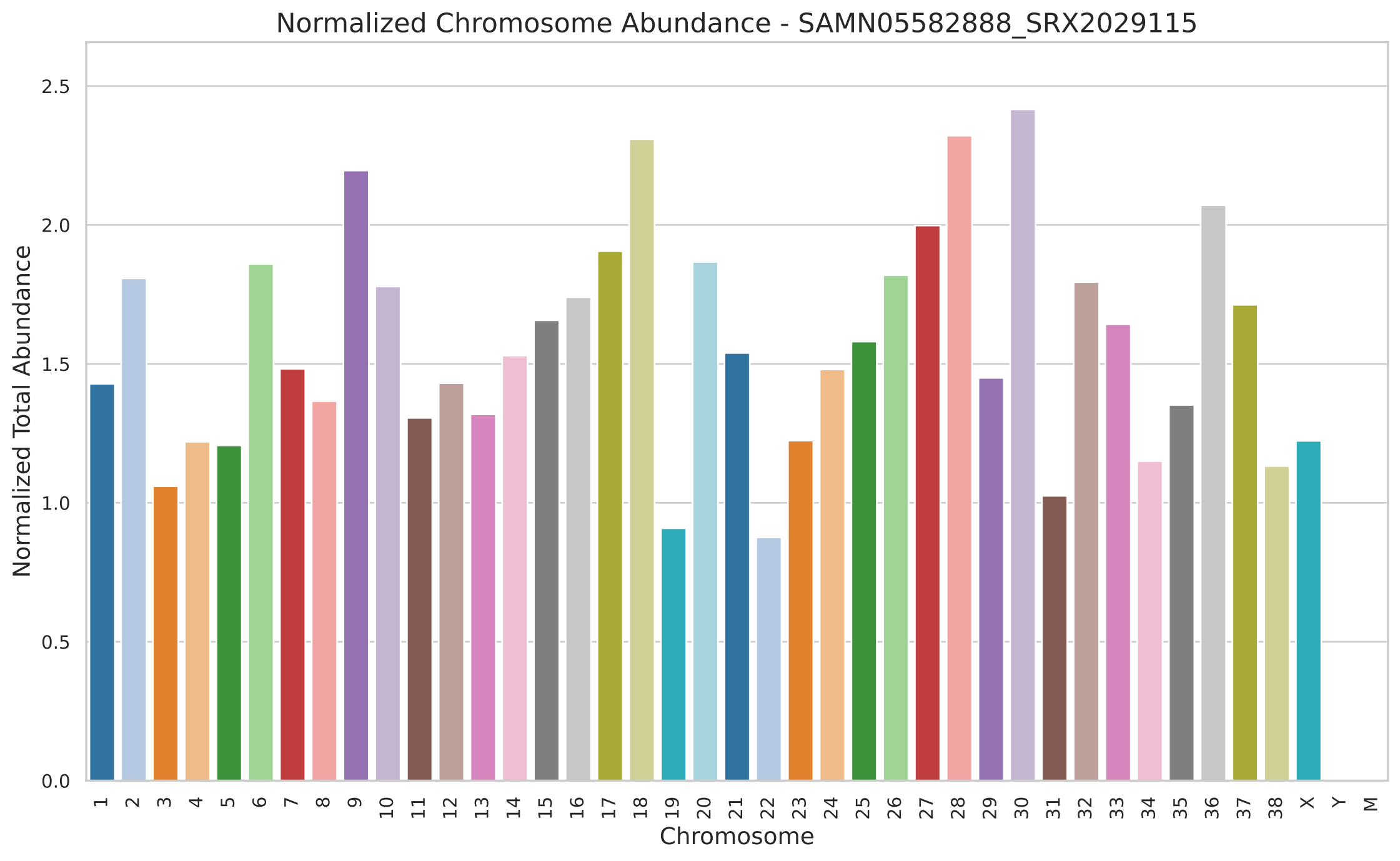

Normalized Chromosome Abundance - SAMN06161403_SRX2432908
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

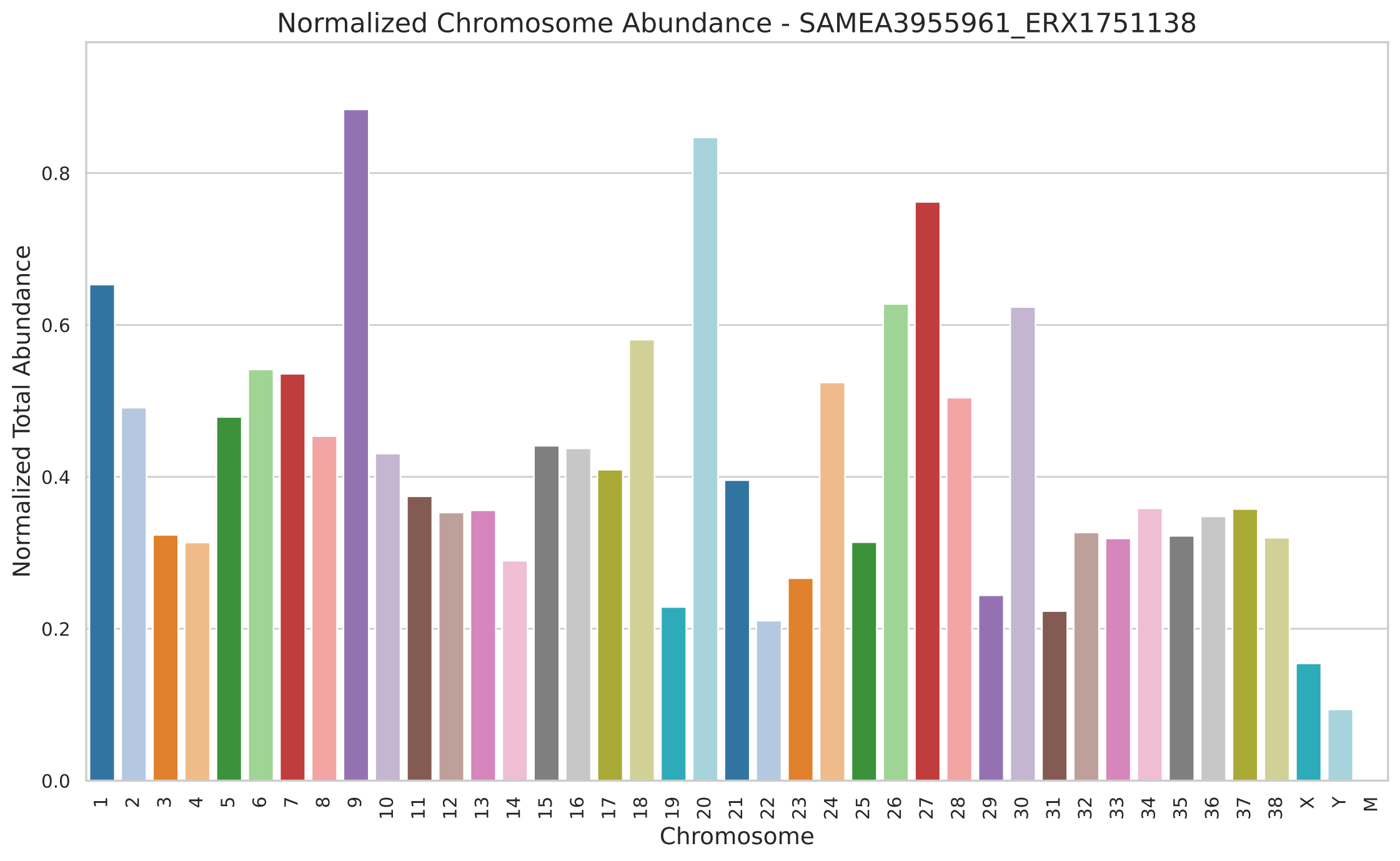

Normalized Chromosome Abundance - SAMEA3716394_ERX1751128
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

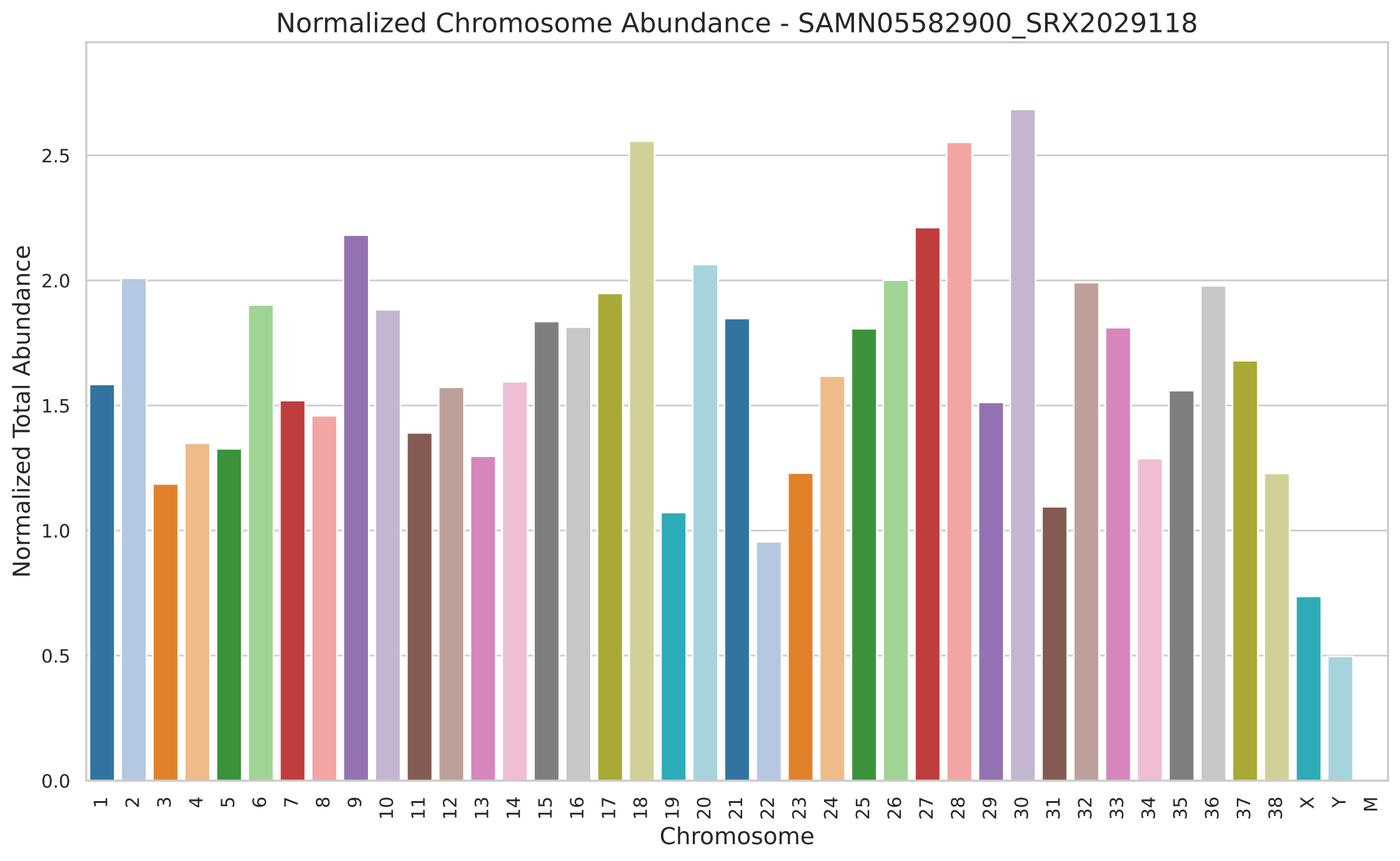

Normalized Chromosome Abundance - SAMN05582898_SRX2029114
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

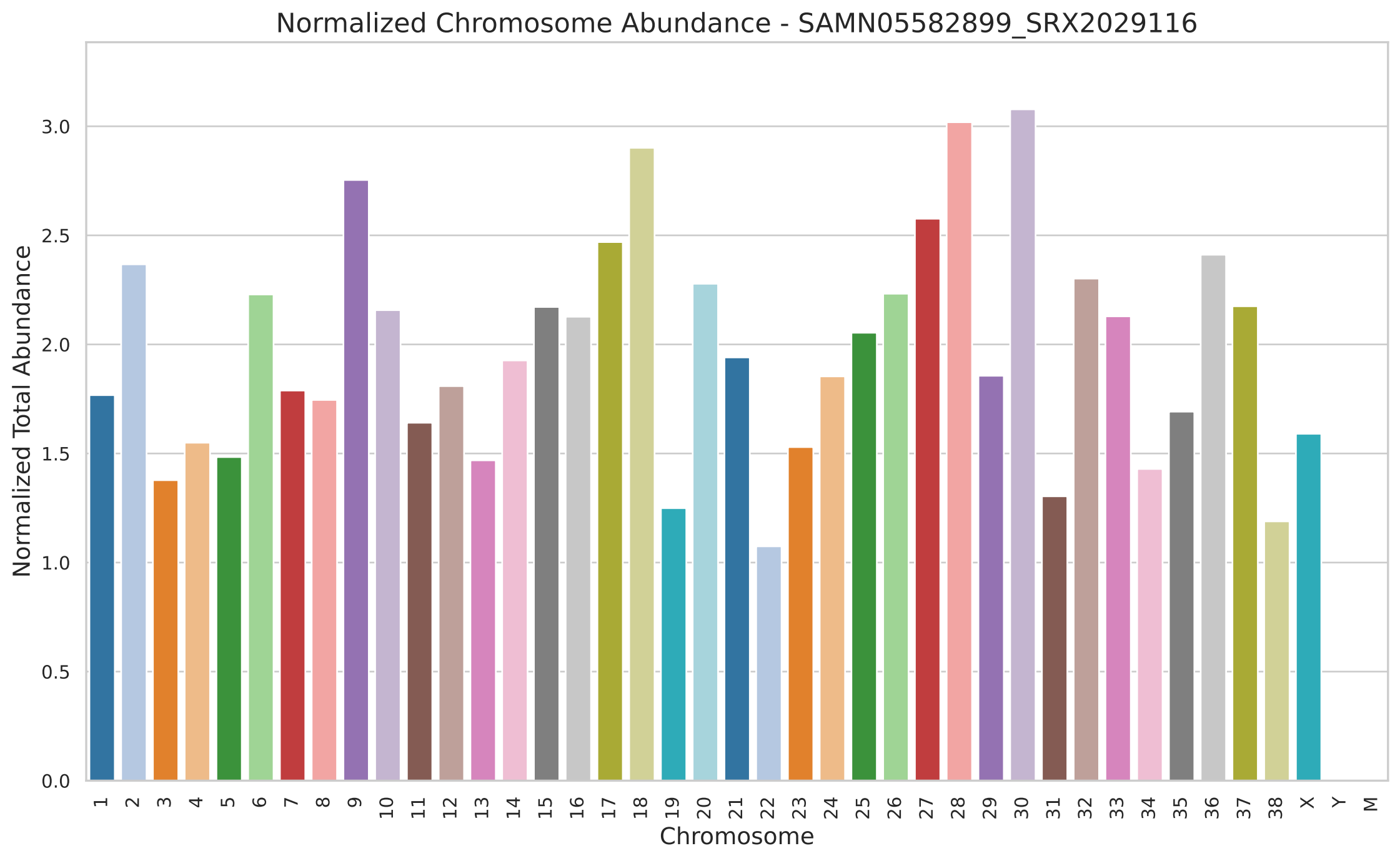

Normalized Chromosome Abundance - SAMEA3716419_ERX1751135
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

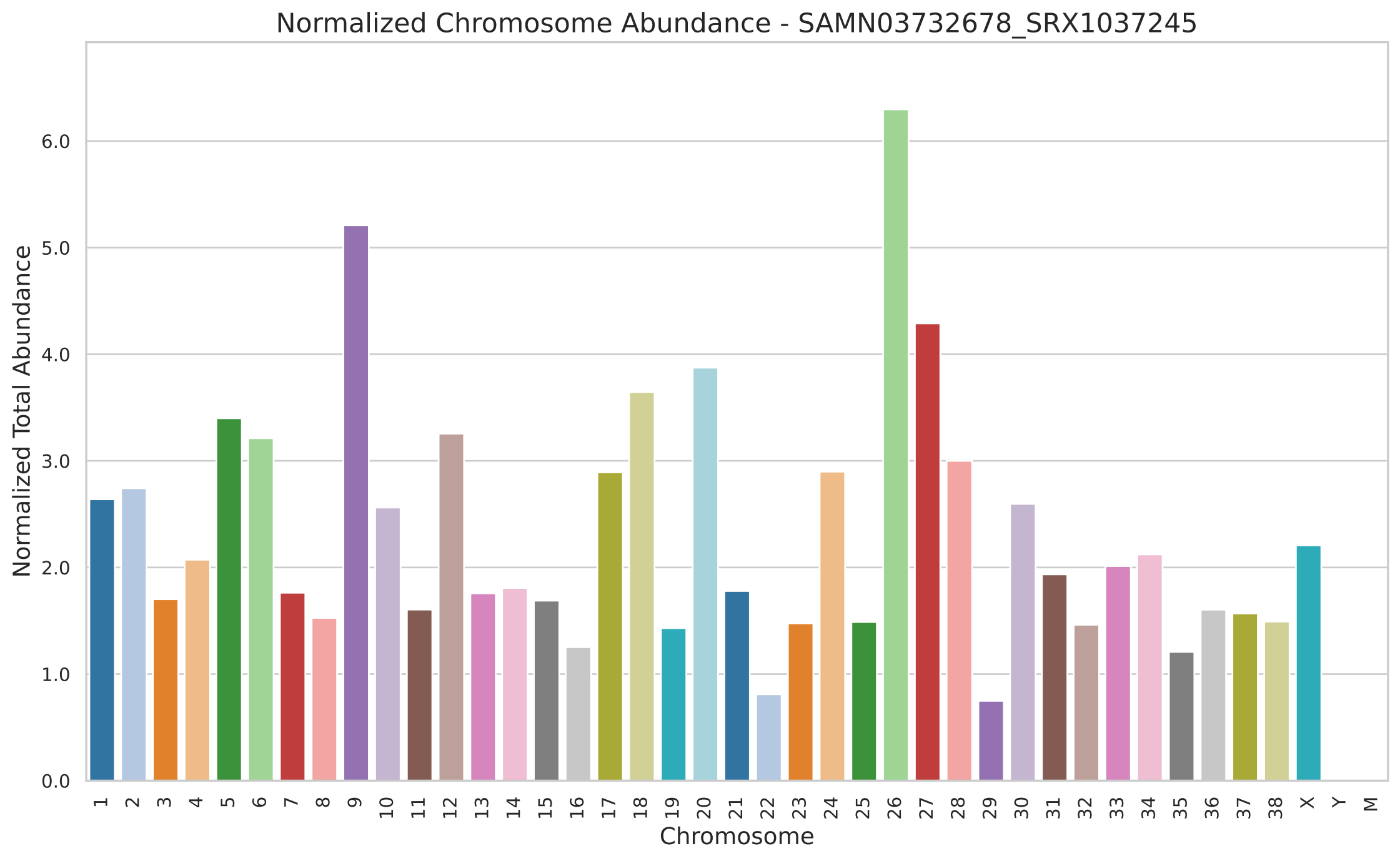

Normalized Chromosome Abundance - SAMN05582896_SRX2029117
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

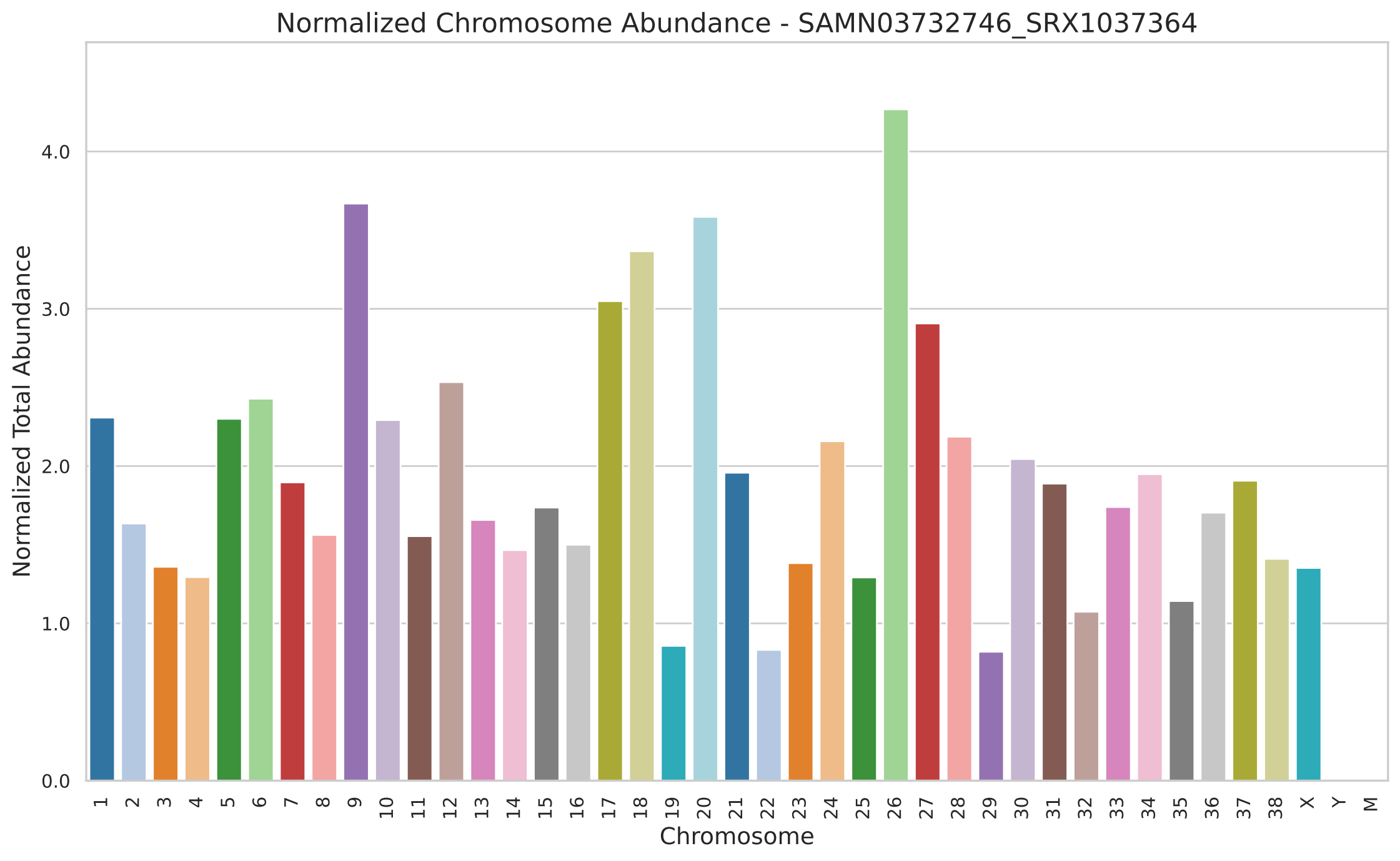

Normalized Chromosome Abundance - SAMN05582888_SRX2029115
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

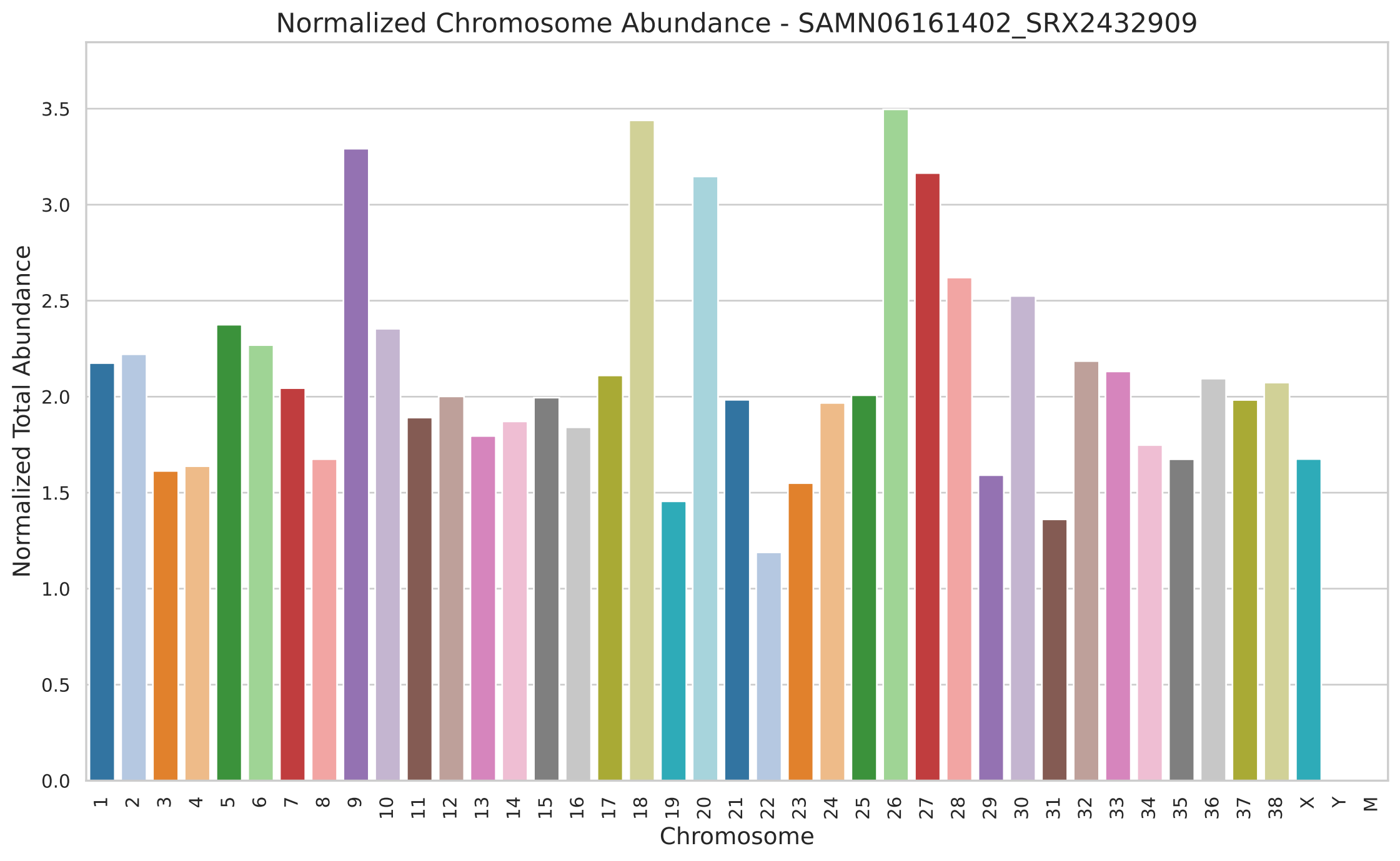

Normalized Chromosome Abundance - SAMEA3955961_ERX1751138
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

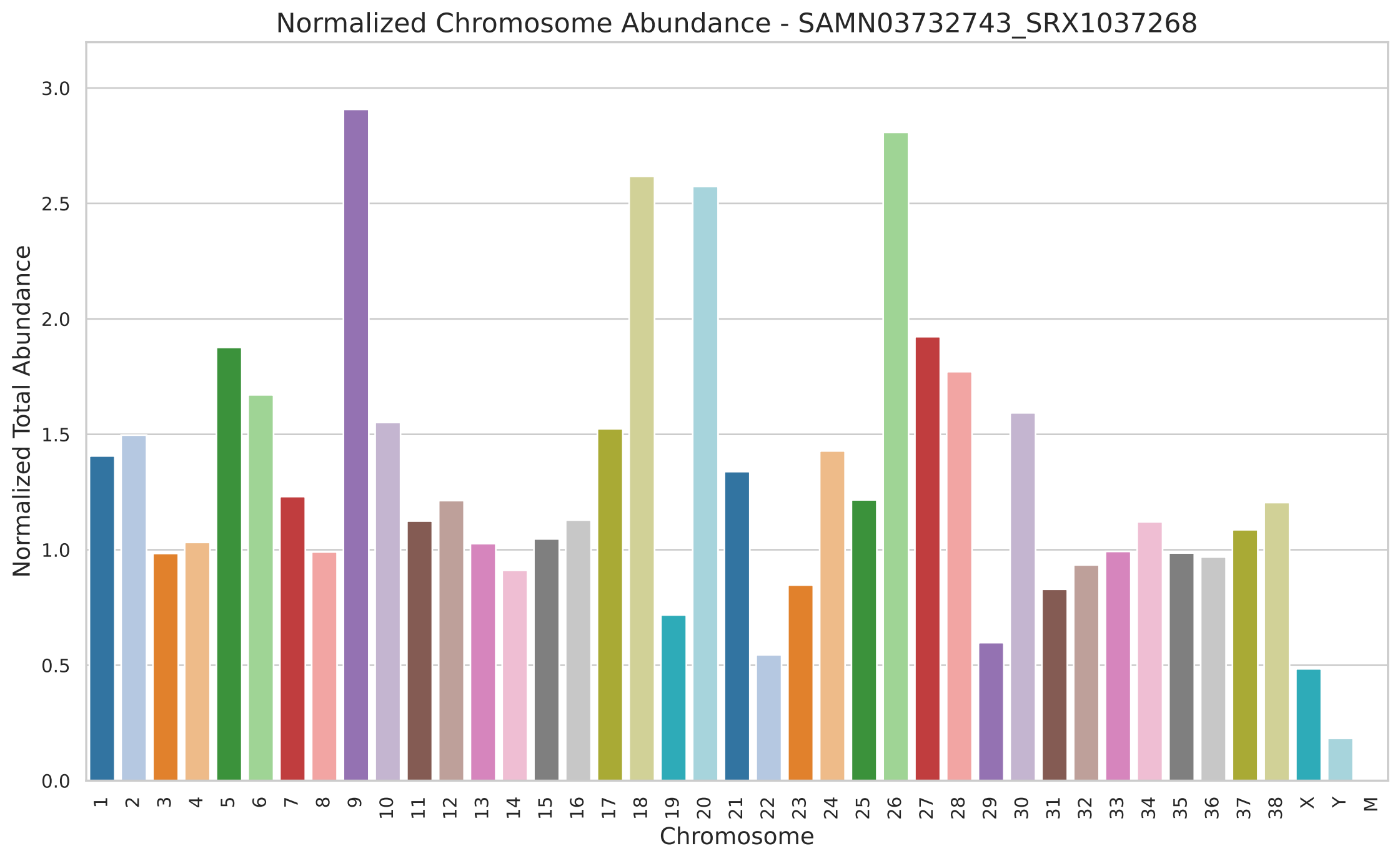

Normalized Chromosome Abundance - SAMN05582900_SRX2029118
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

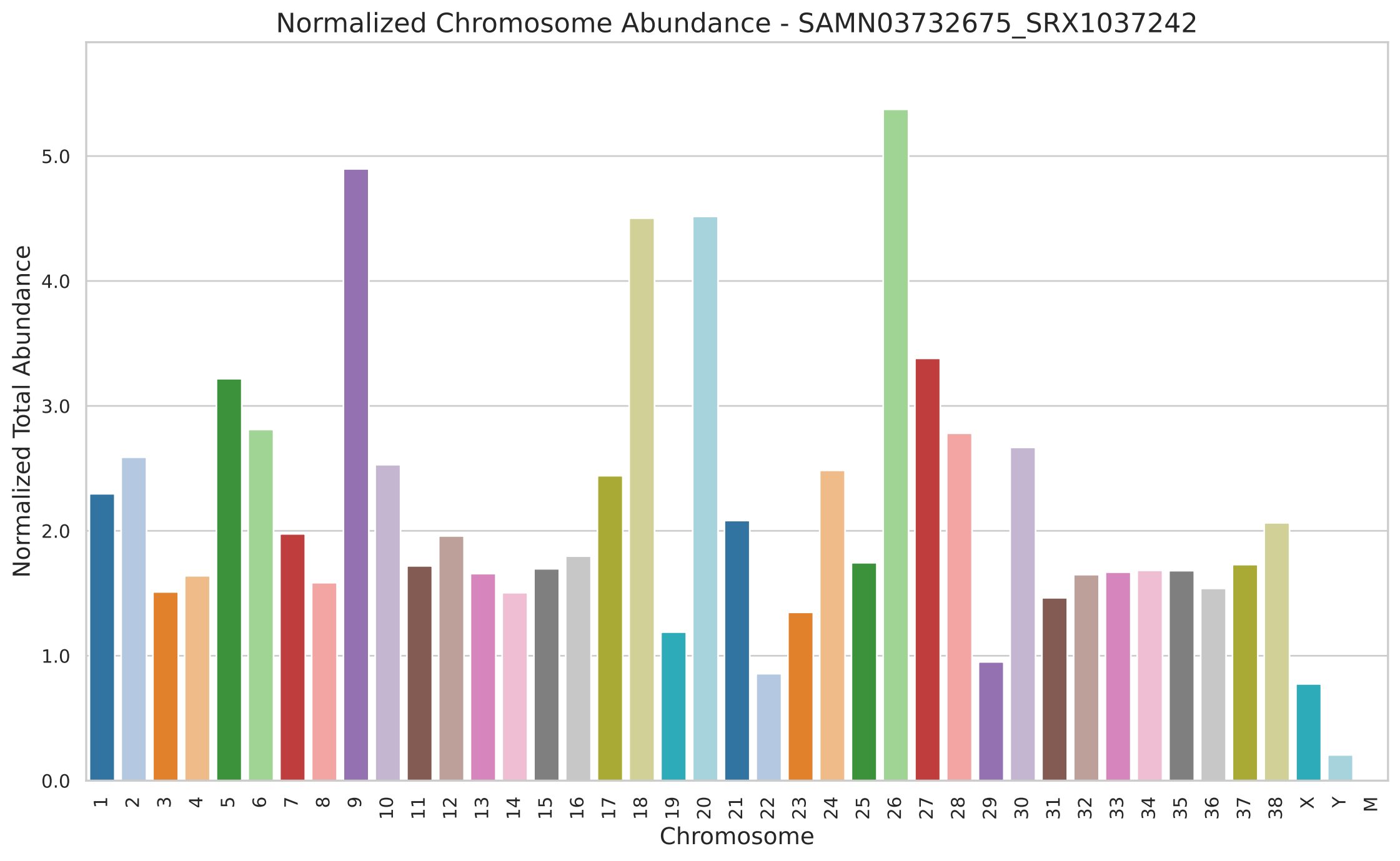

Normalized Chromosome Abundance - SAMN05582899_SRX2029116
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

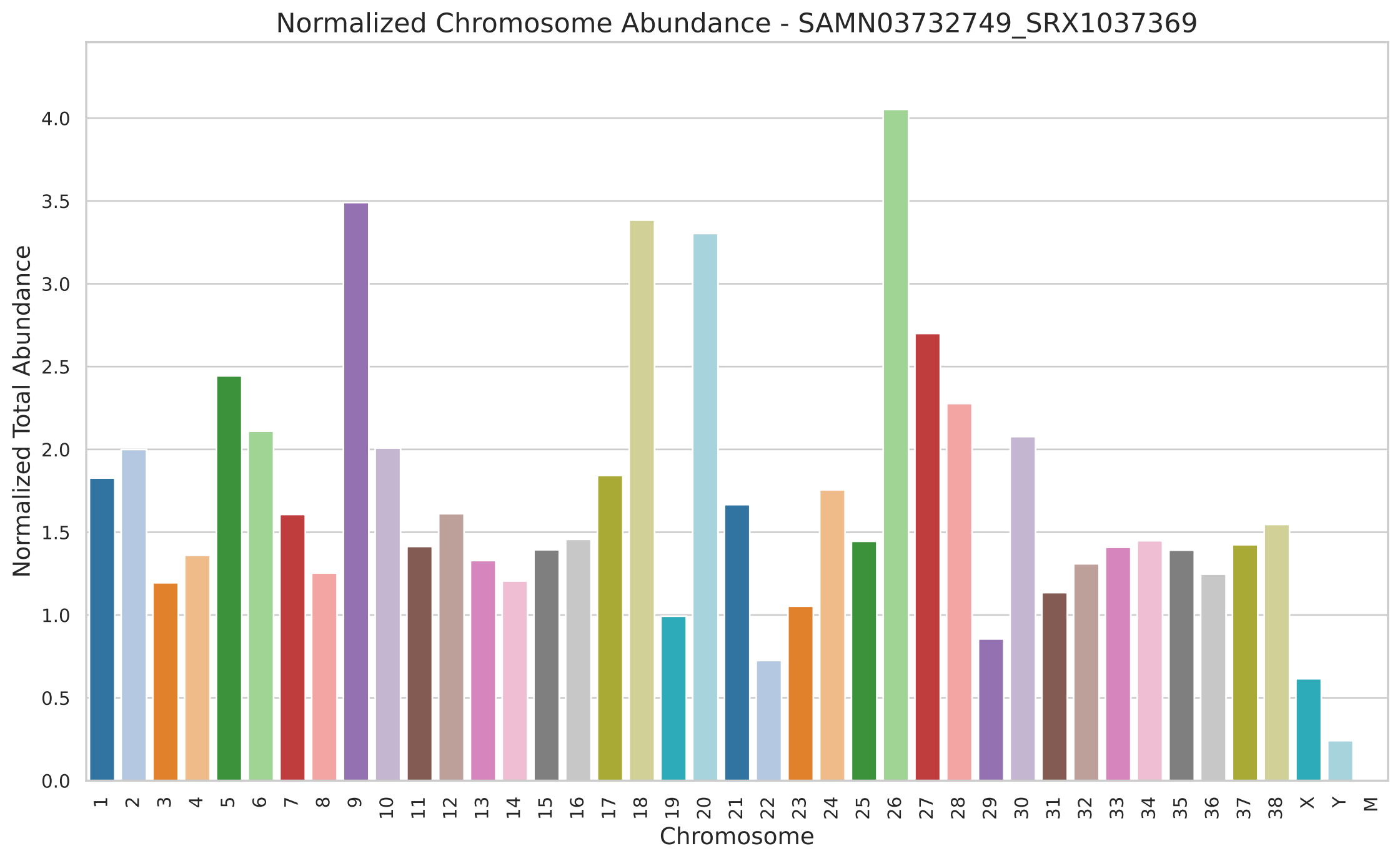

Normalized Chromosome Abundance - SAMN03732678_SRX1037245
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

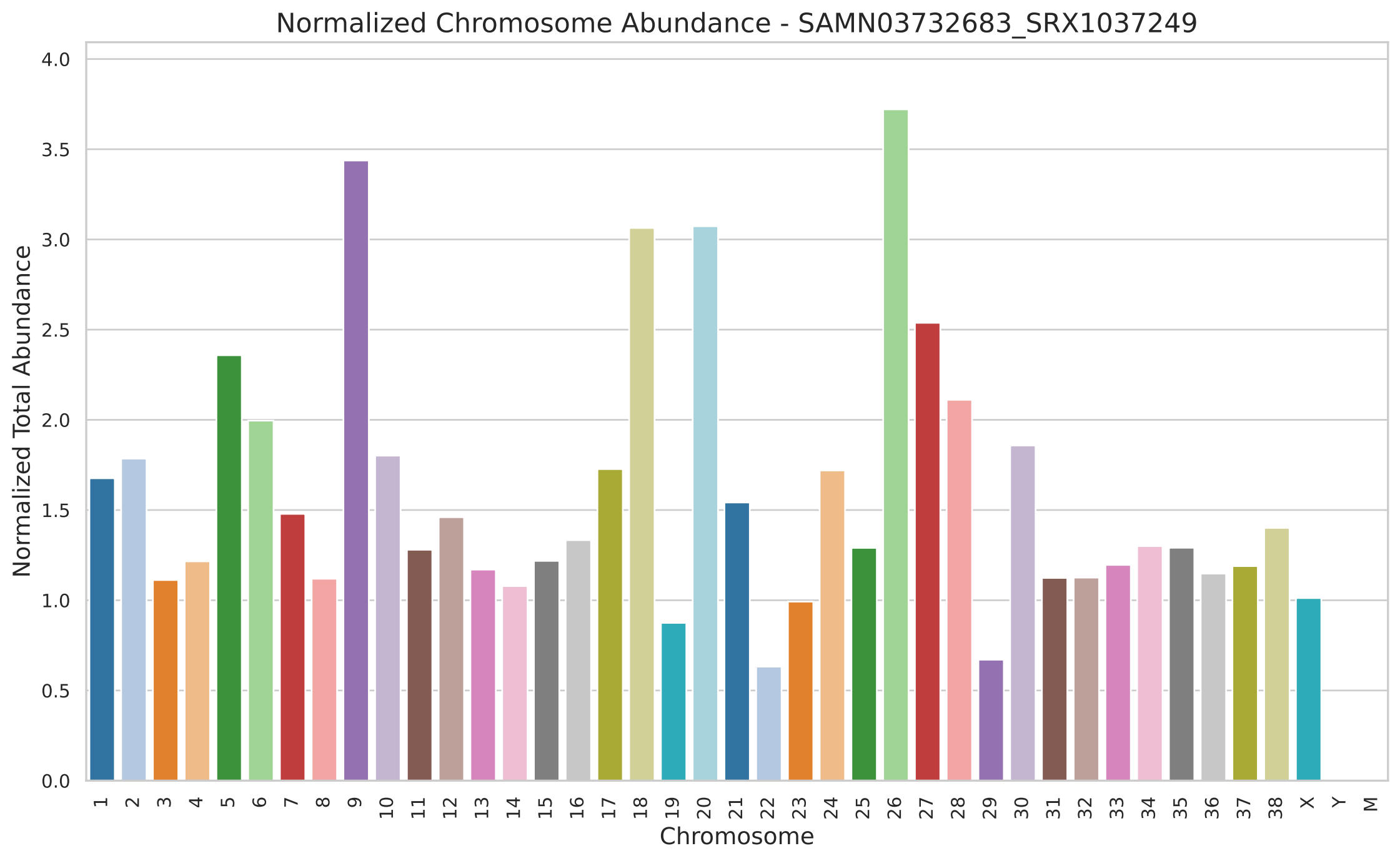

Normalized Chromosome Abundance - SAMN03732746_SRX1037364
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

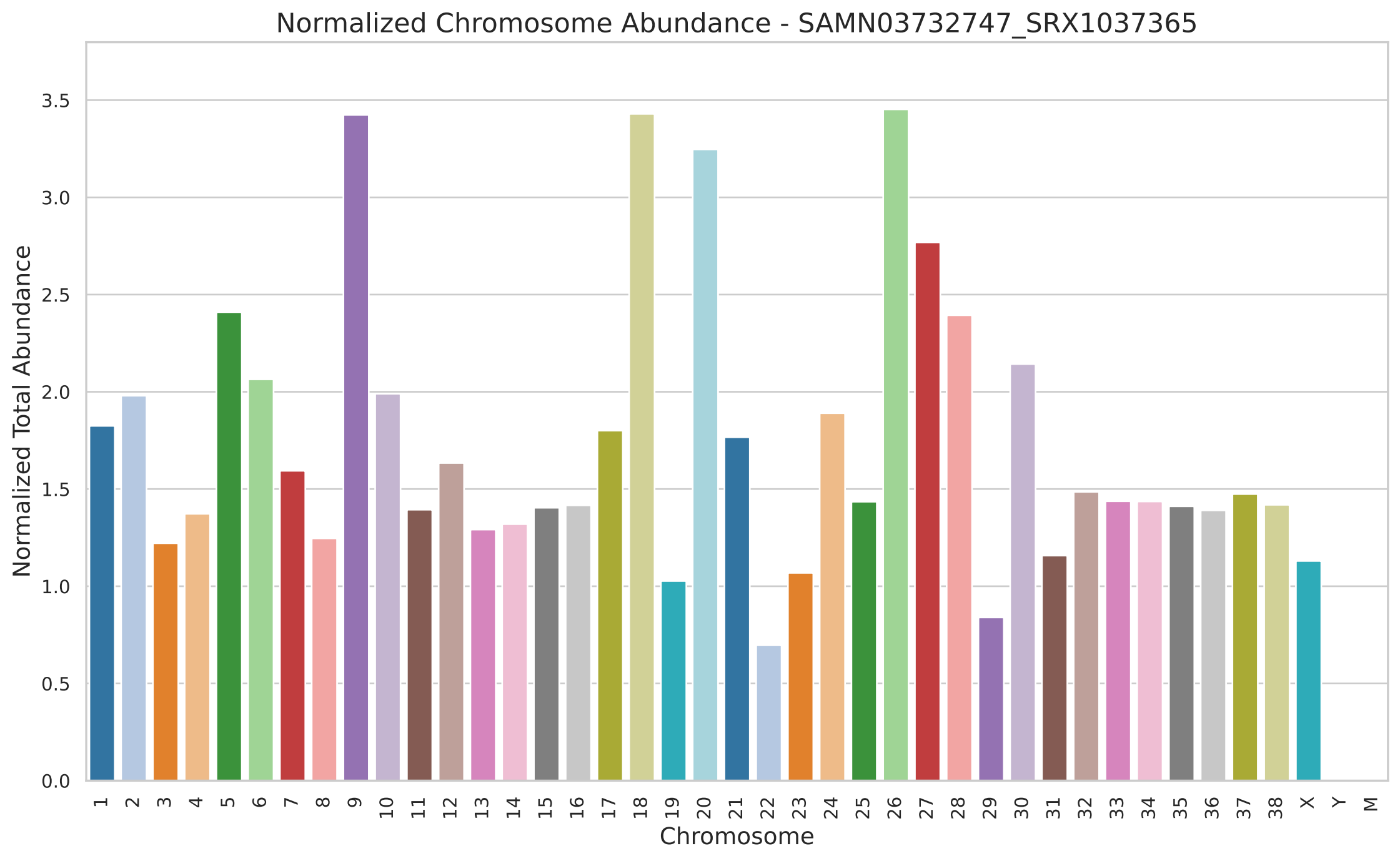

Normalized Chromosome Abundance - SAMN06161402_SRX2432909
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

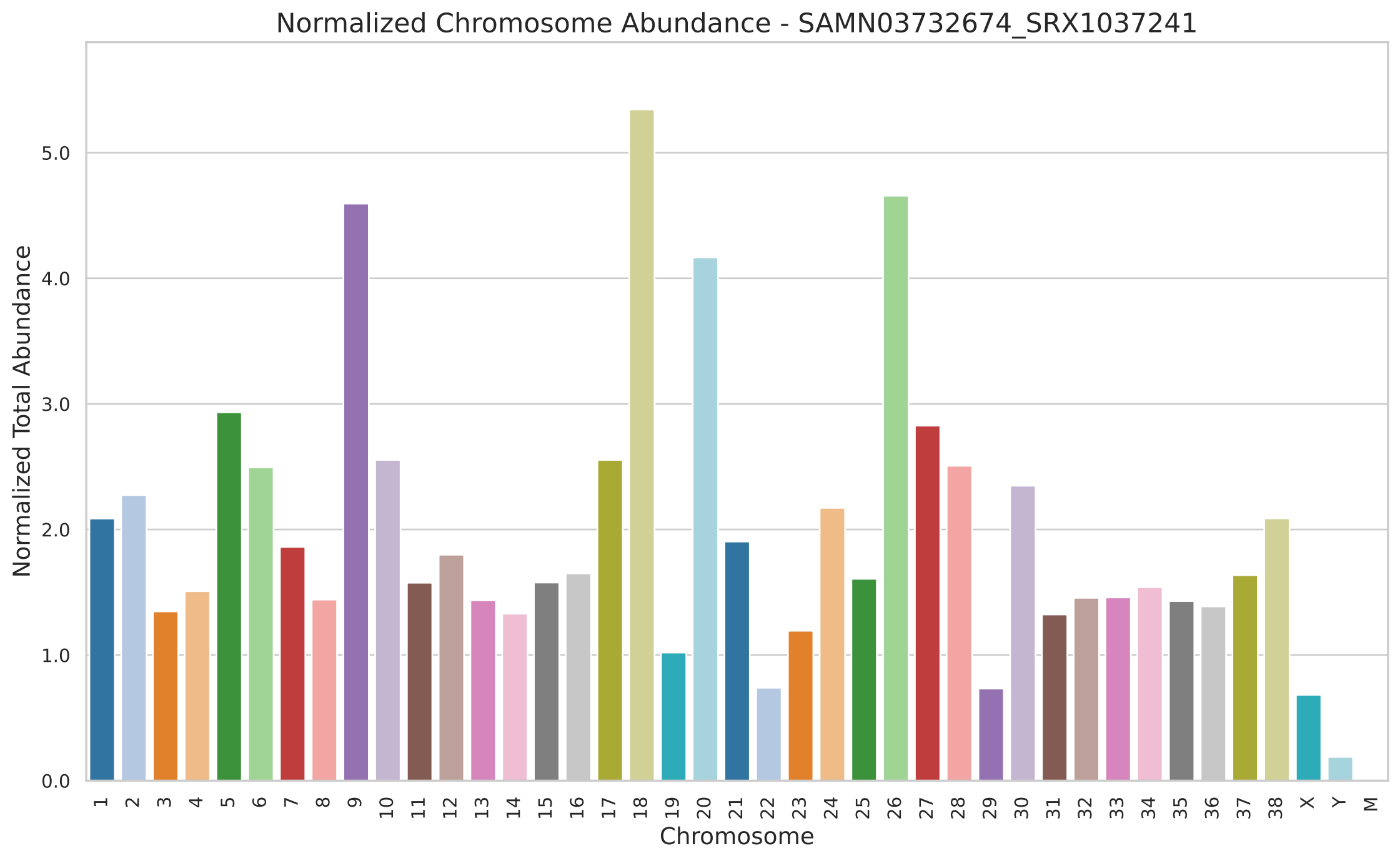

Normalized Chromosome Abundance - SAMN03732743_SRX1037268
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

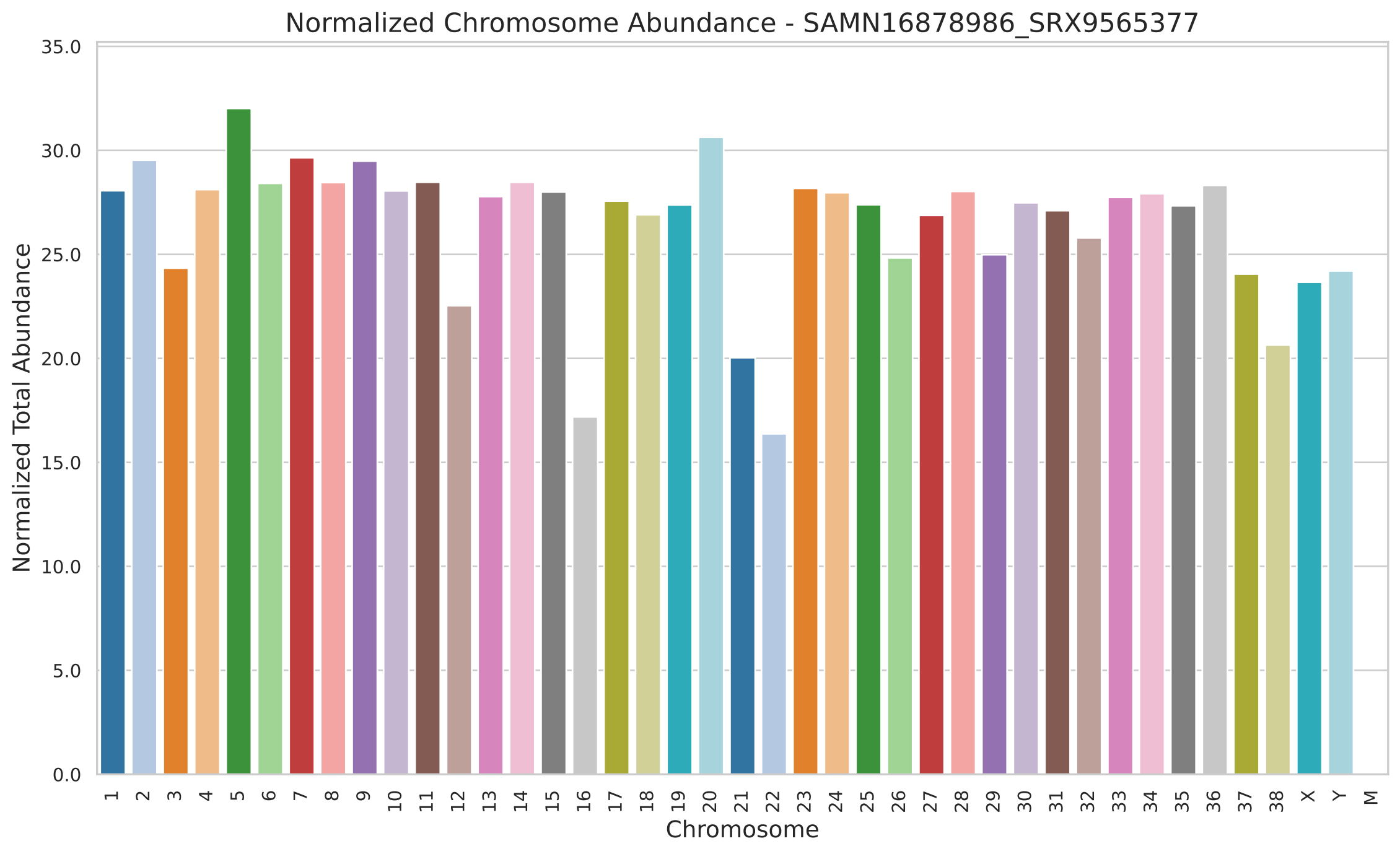

Normalized Chromosome Abundance - SAMN03732675_SRX1037242
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

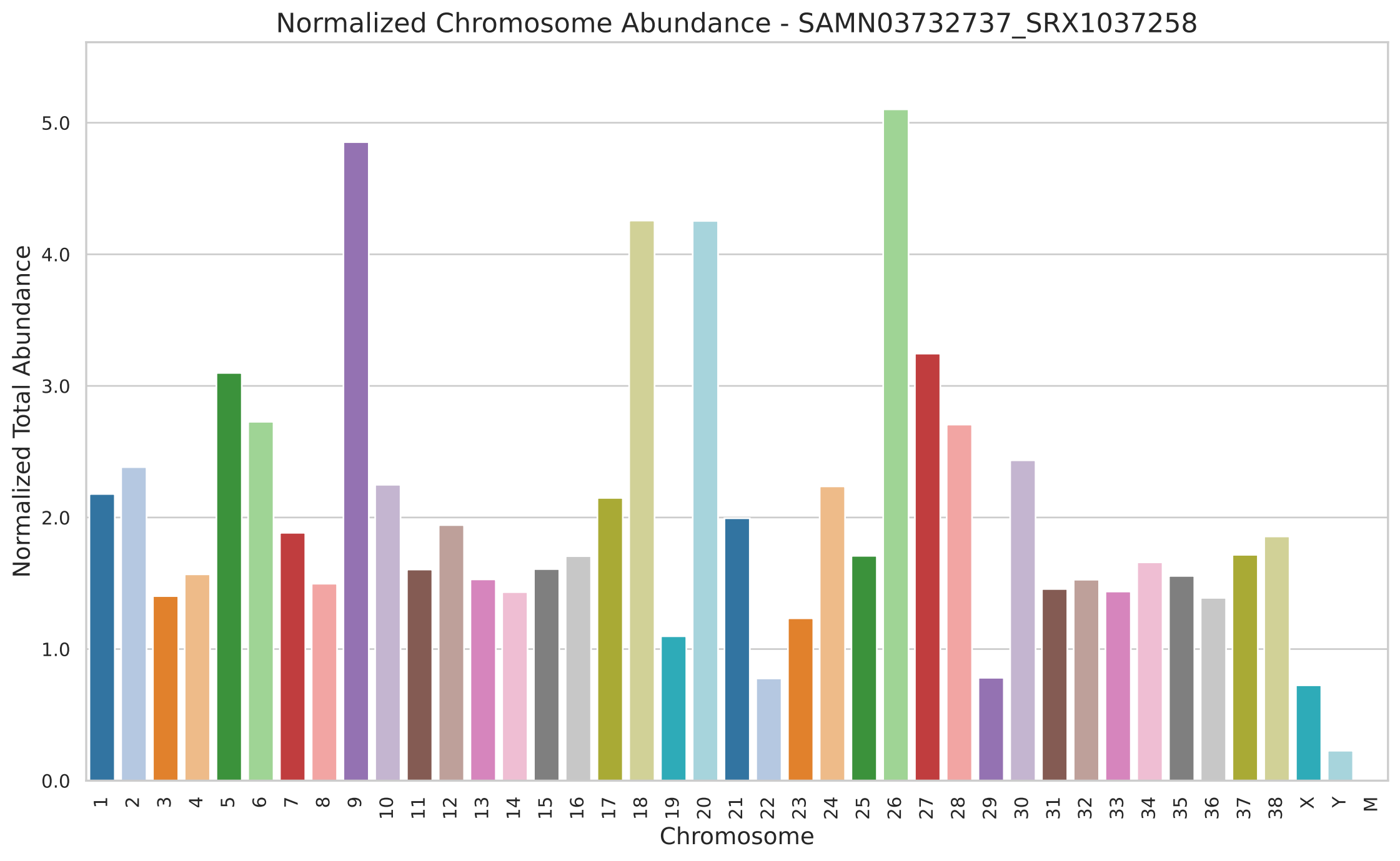

Normalized Chromosome Abundance - SAMN03732749_SRX1037369
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

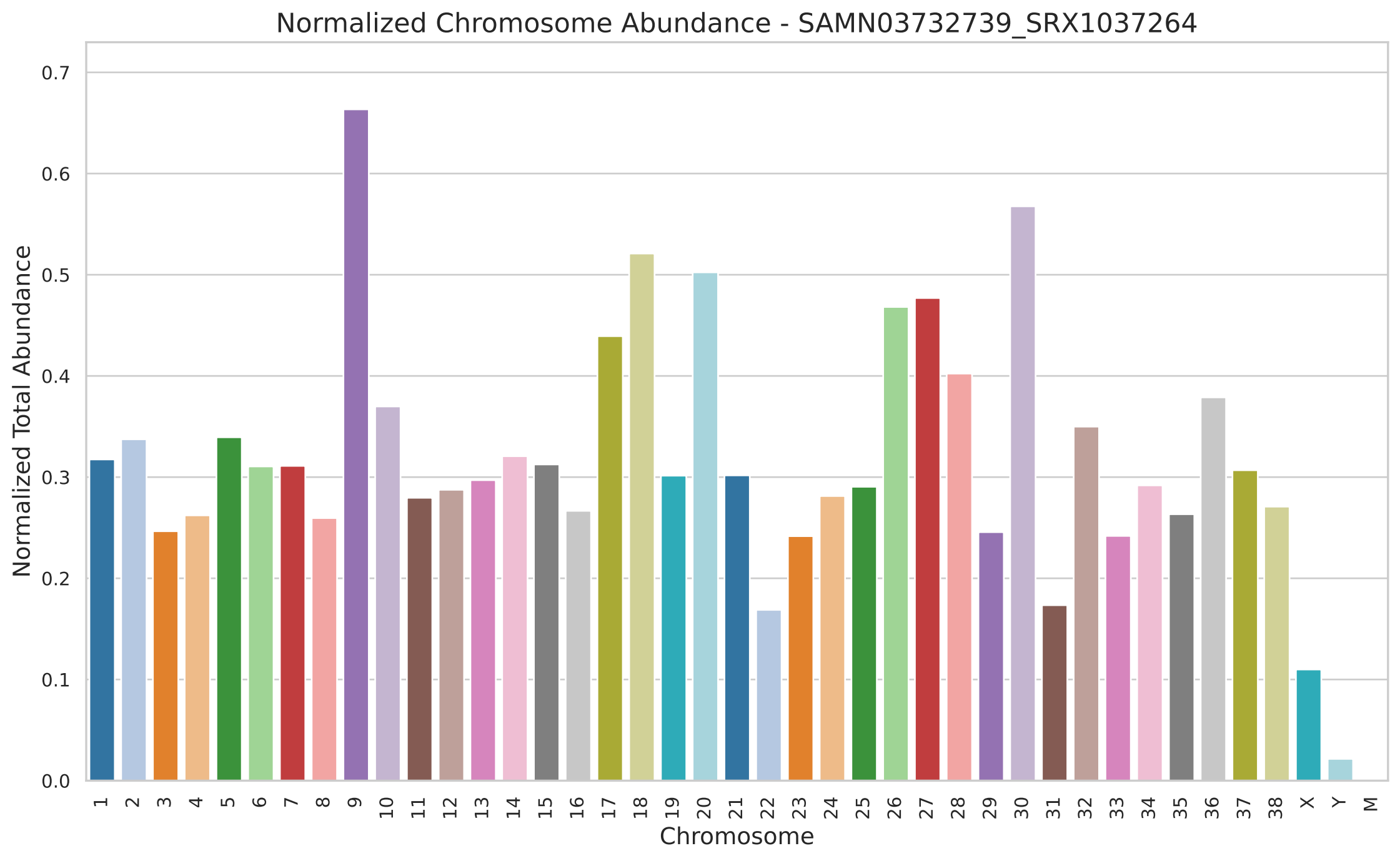

Normalized Chromosome Abundance - SAMN03732683_SRX1037249
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

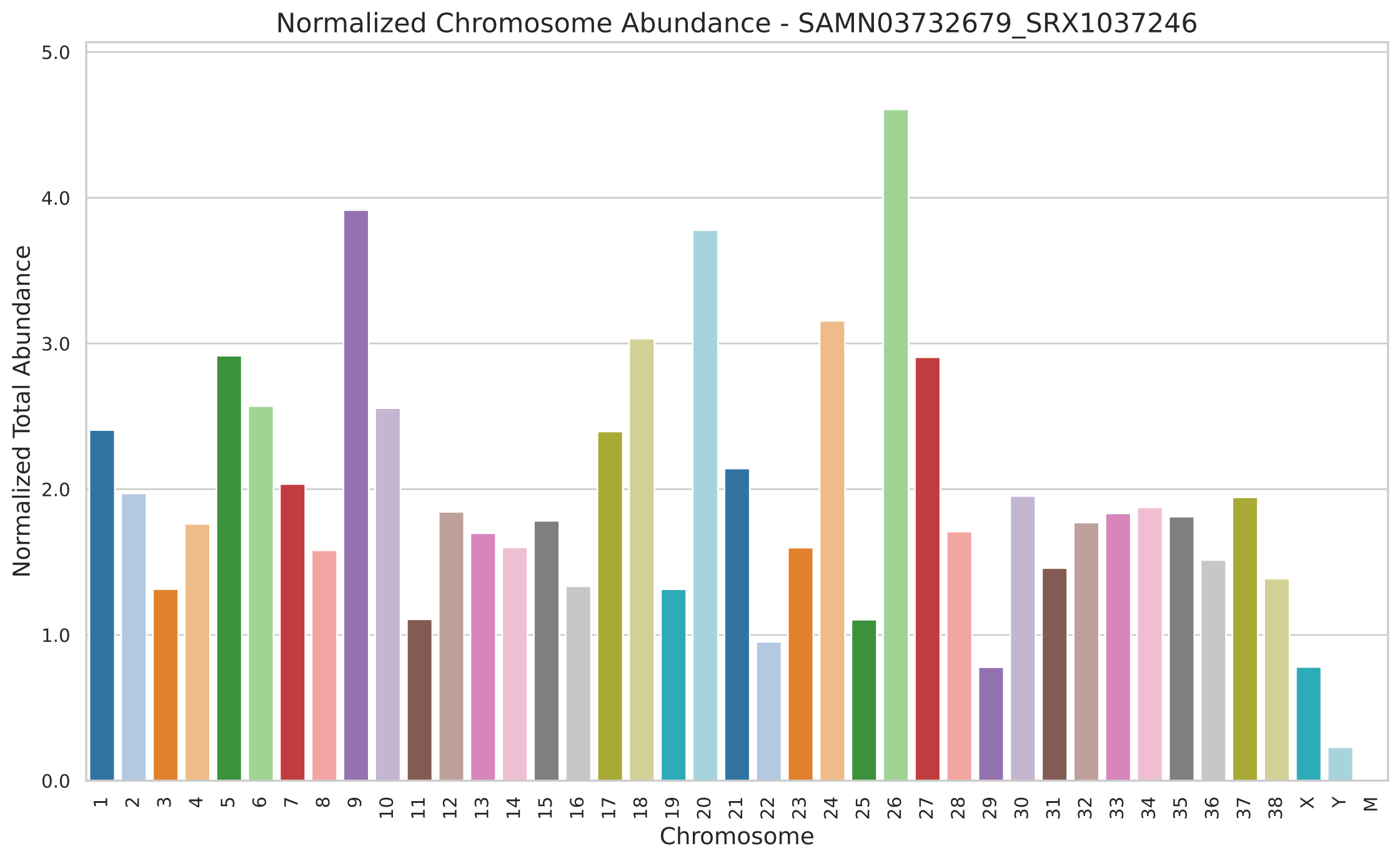

Normalized Chromosome Abundance - SAMN03732747_SRX1037365
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

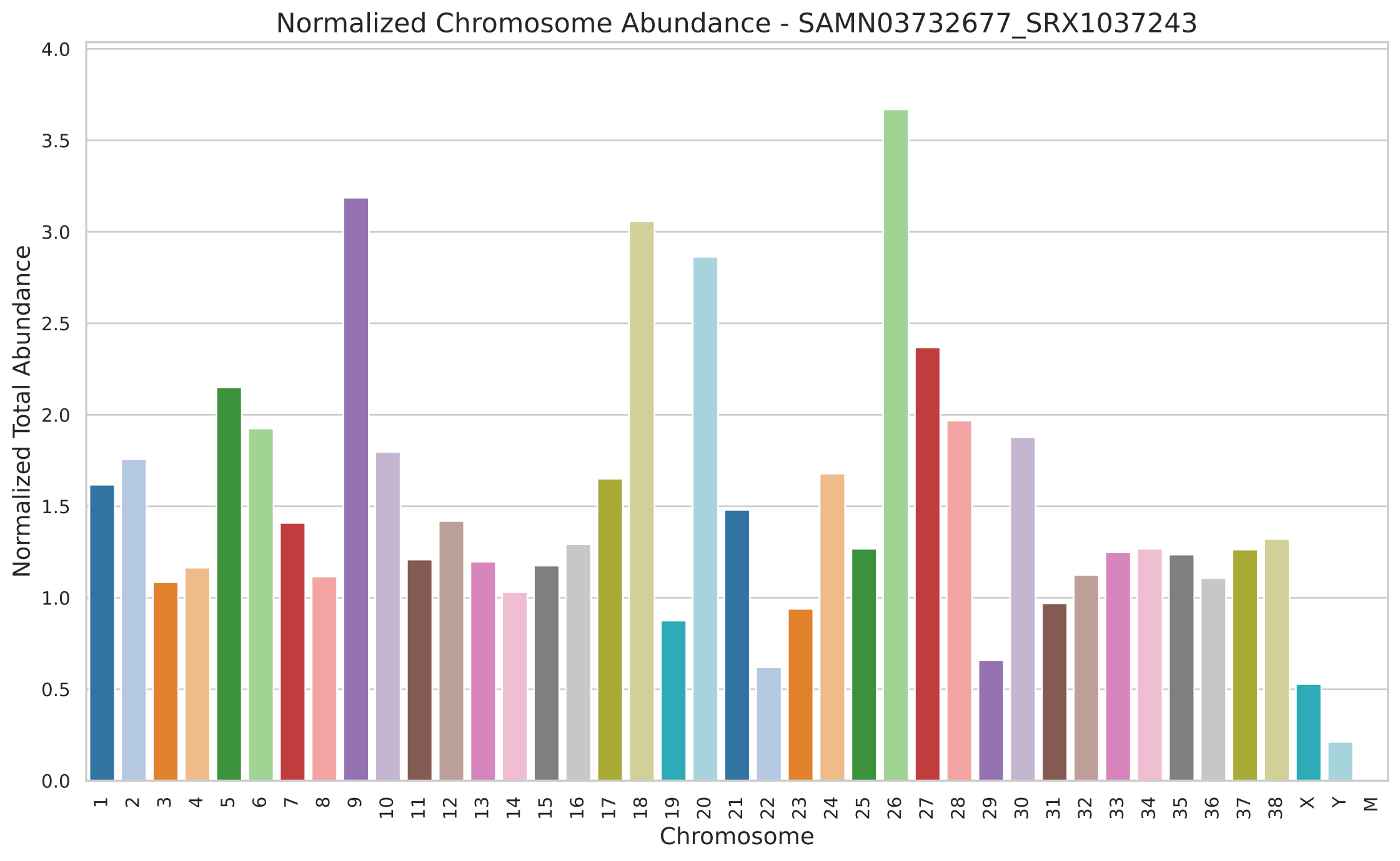

Normalized Chromosome Abundance - SAMN03732674_SRX1037241
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

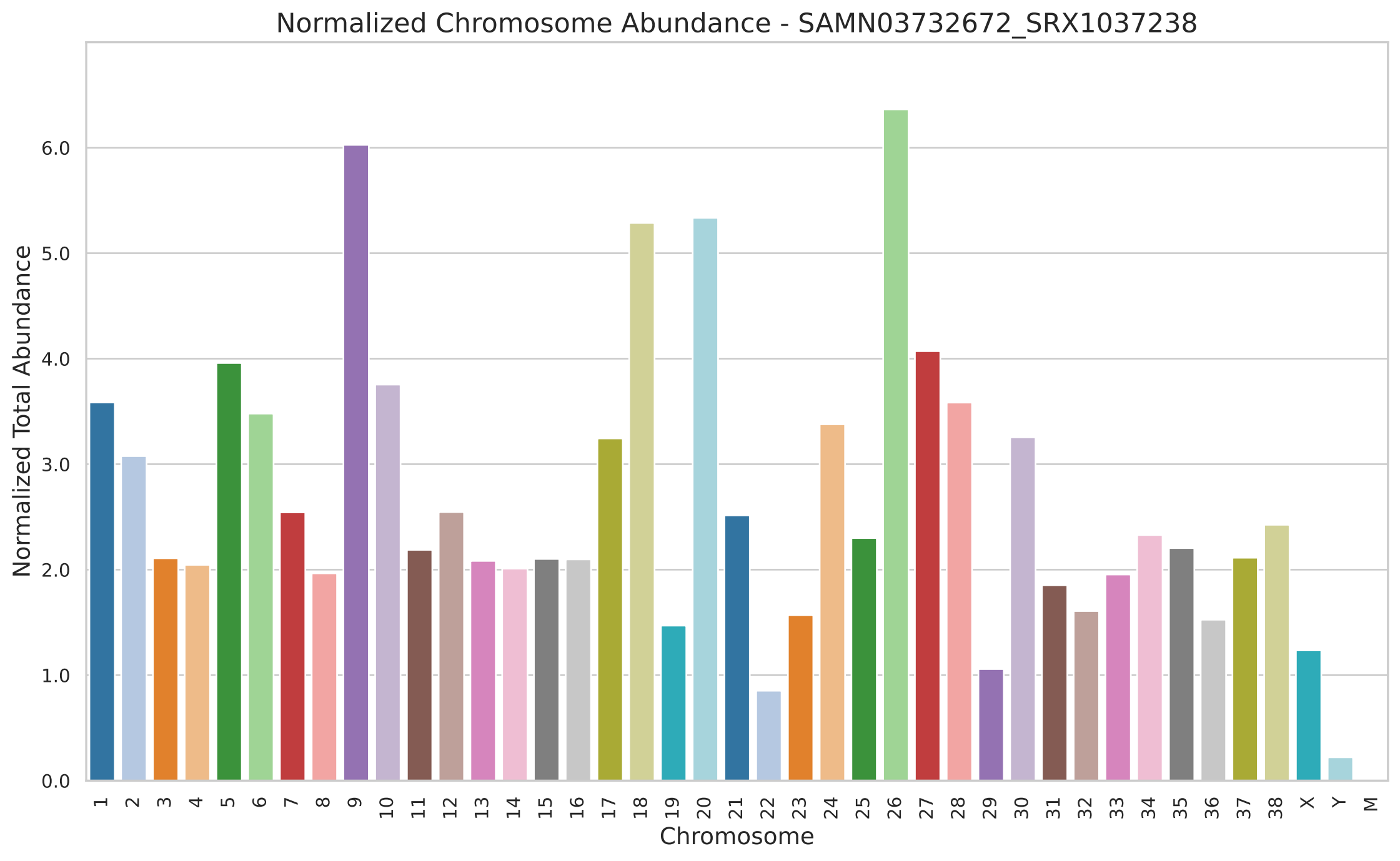

Normalized Chromosome Abundance - SAMN16878986_SRX9565377
Normalized Total Abundance
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

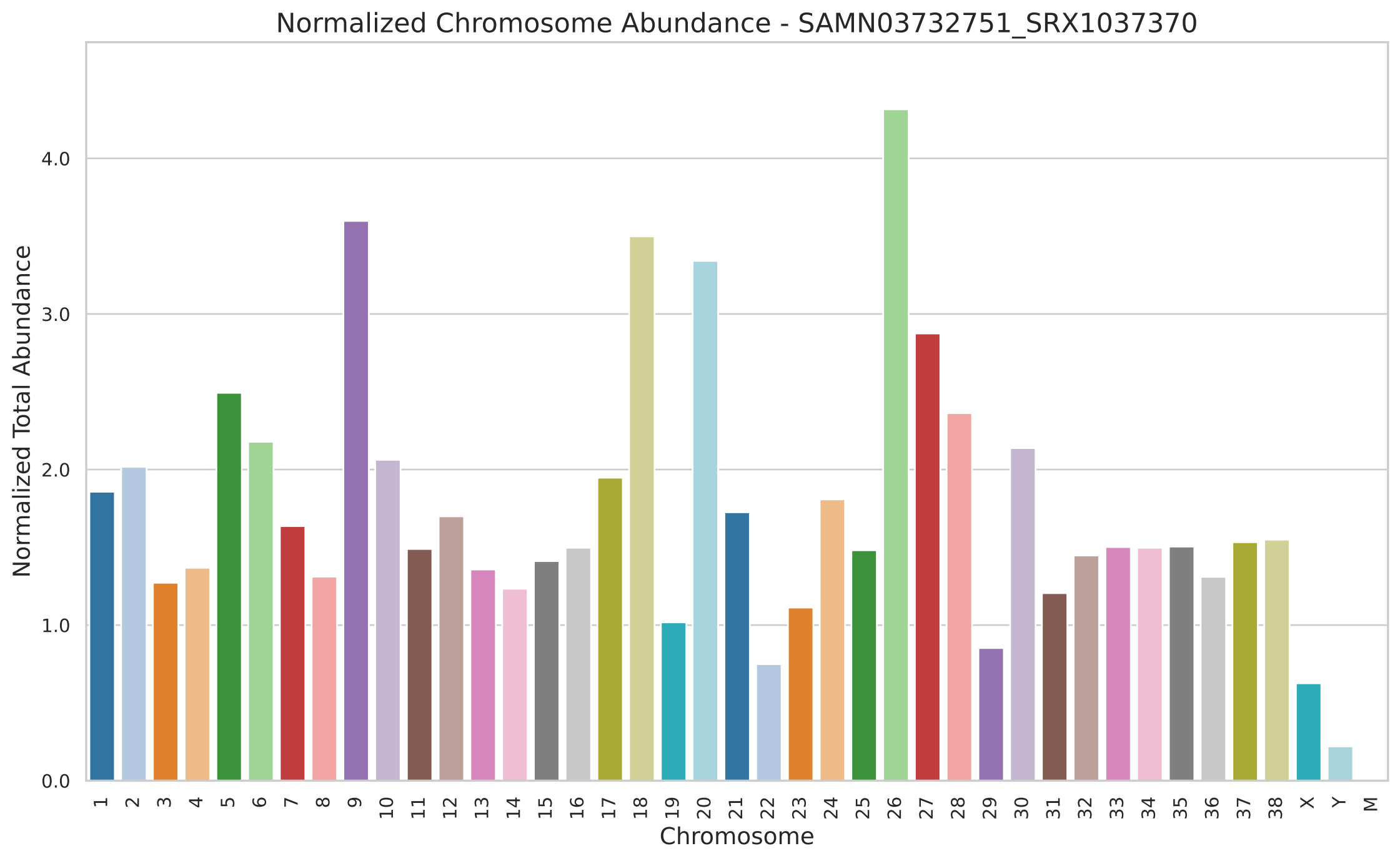

Normalized Chromosome Abundance - SAMN03732737_SRX1037258
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

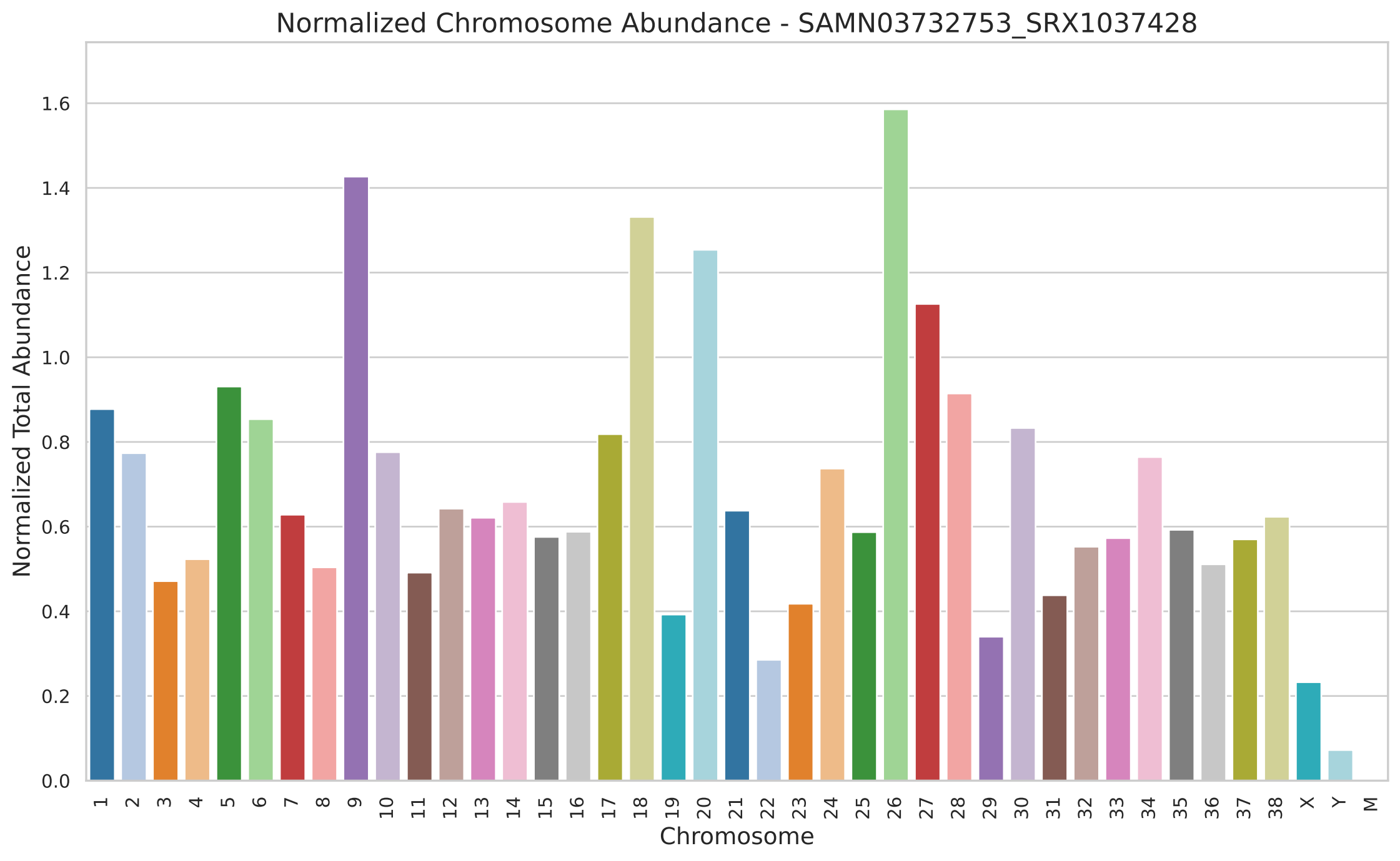

Normalized Chromosome Abundance - SAMN03732739_SRX1037264
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

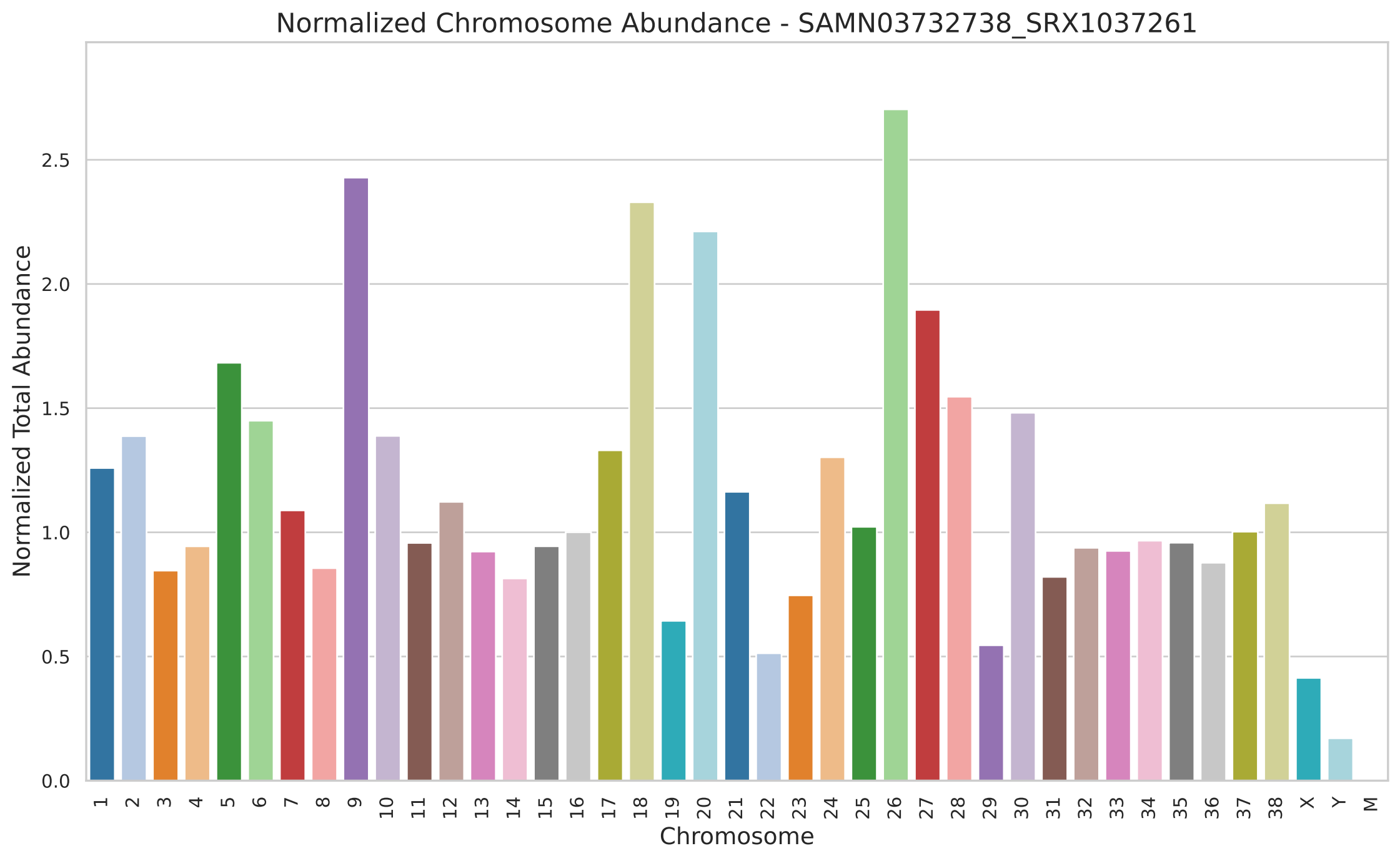

Normalized Chromosome Abundance - SAMN03732679_SRX1037246
Normalized Total Abundance
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

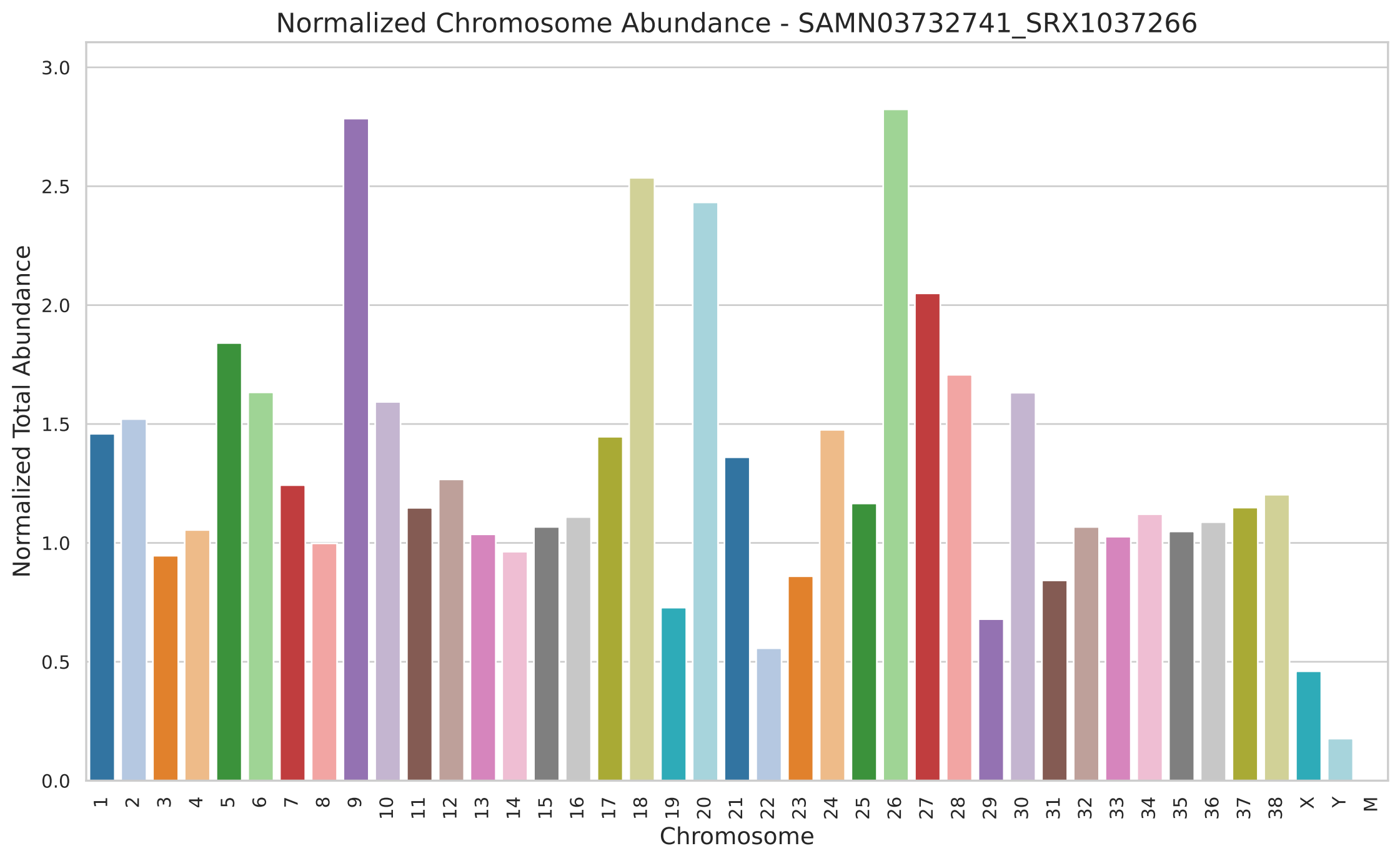

Normalized Chromosome Abundance - SAMN03732677_SRX1037243
Normalized Total Abundance
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

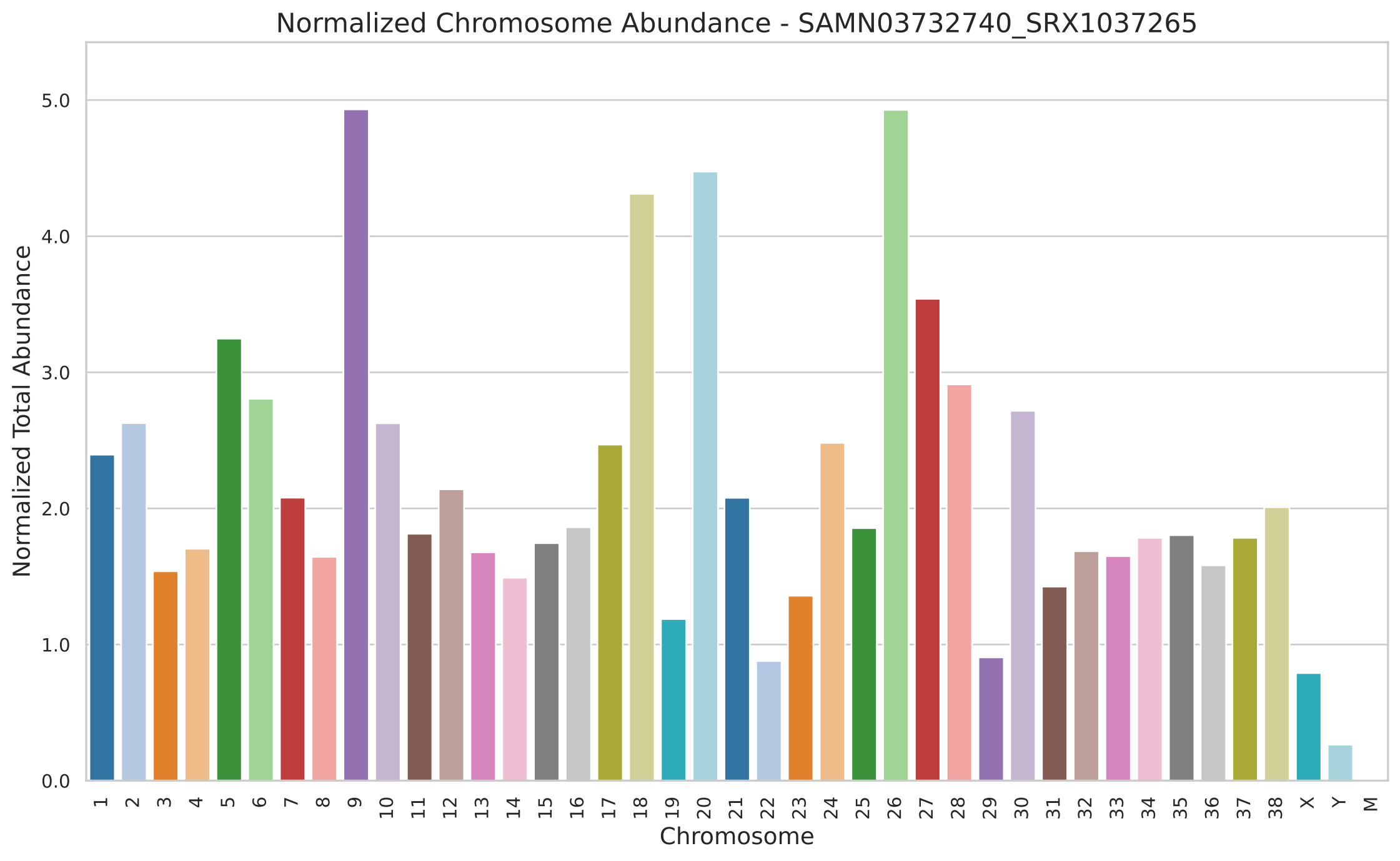

Normalized Chromosome Abundance - SAMN03732672_SRX1037238
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

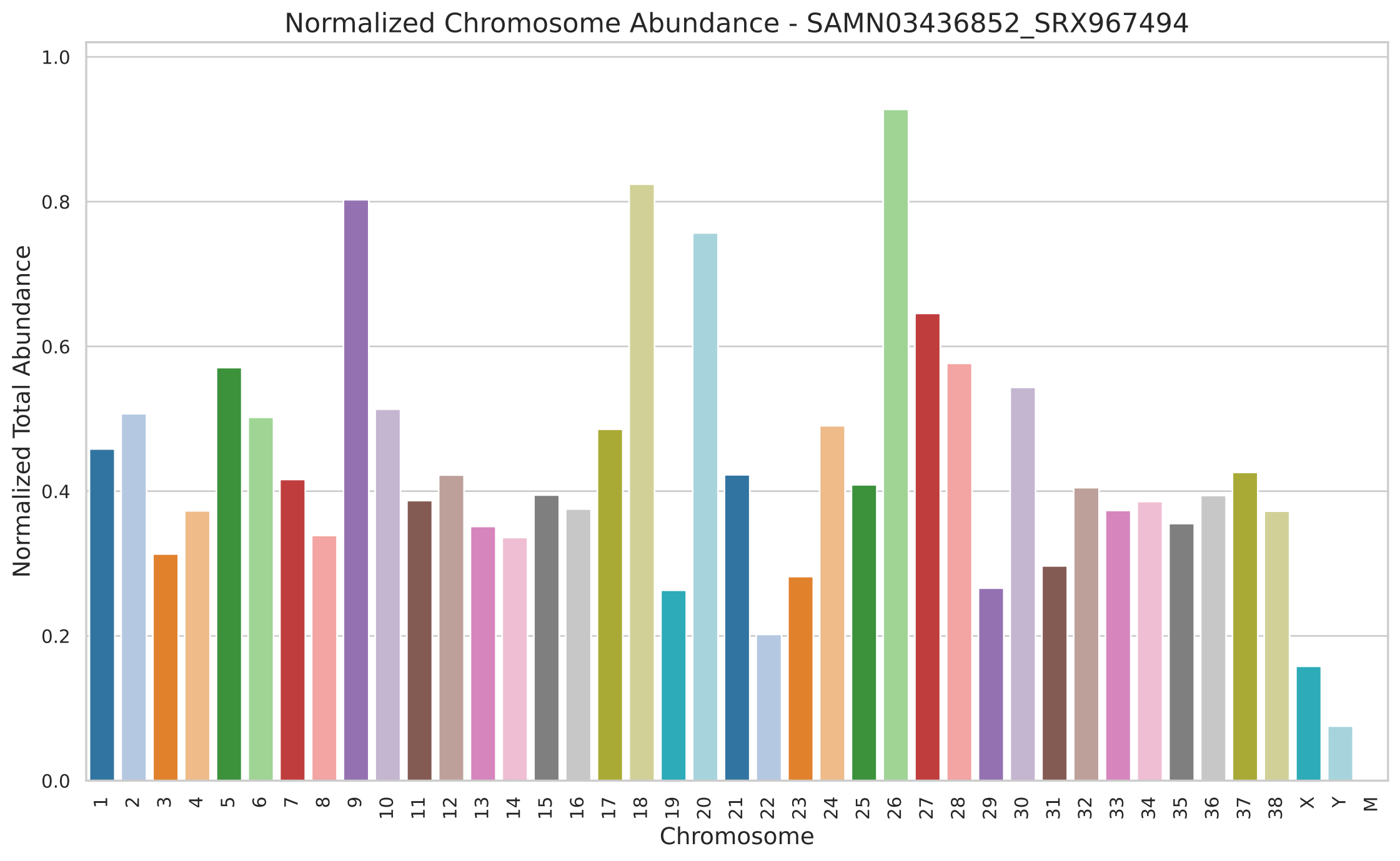

Normalized Chromosome Abundance - SAMN03732751_SRX1037370
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

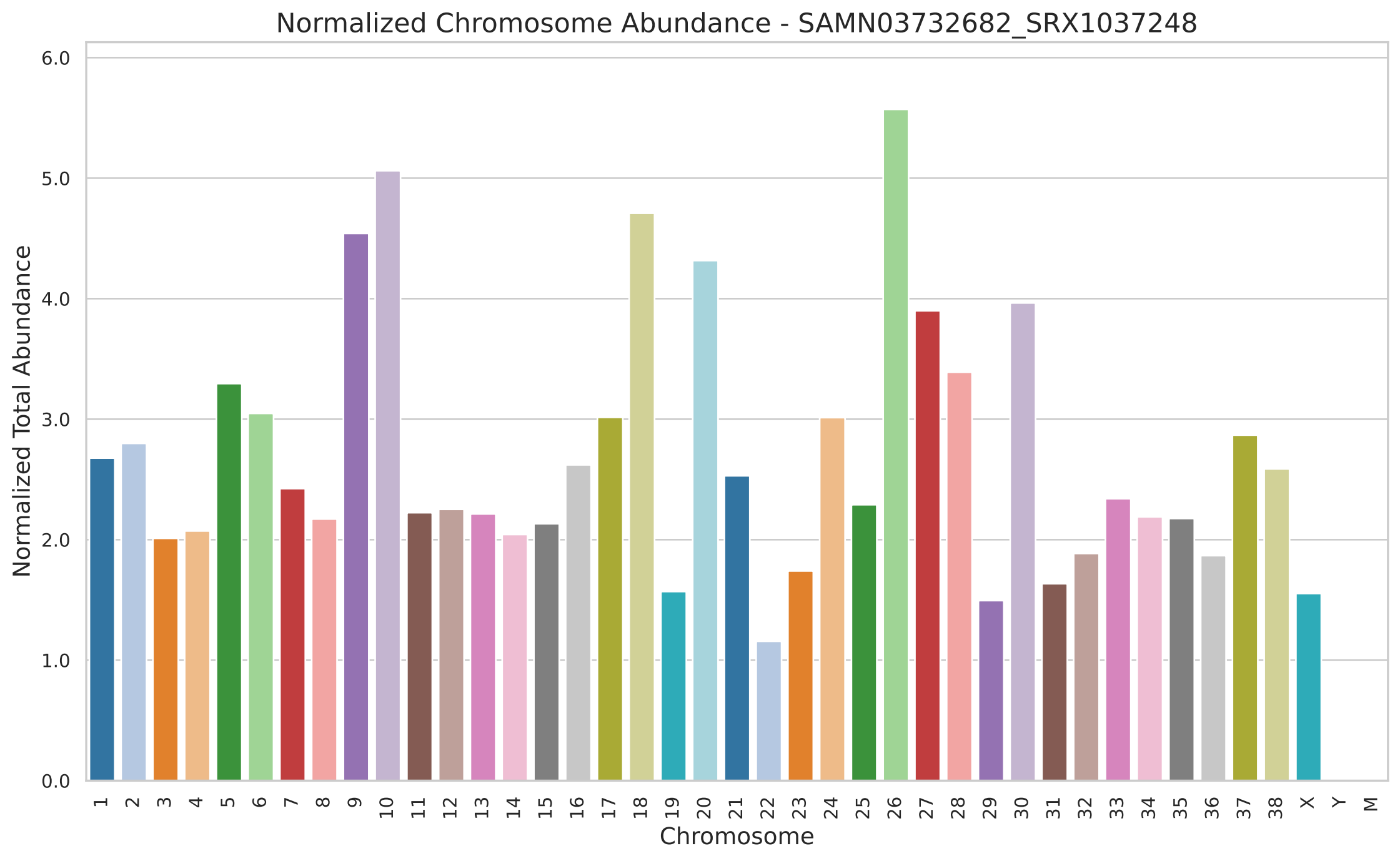

Normalized Chromosome Abundance - SAMN03732753_SRX1037428
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

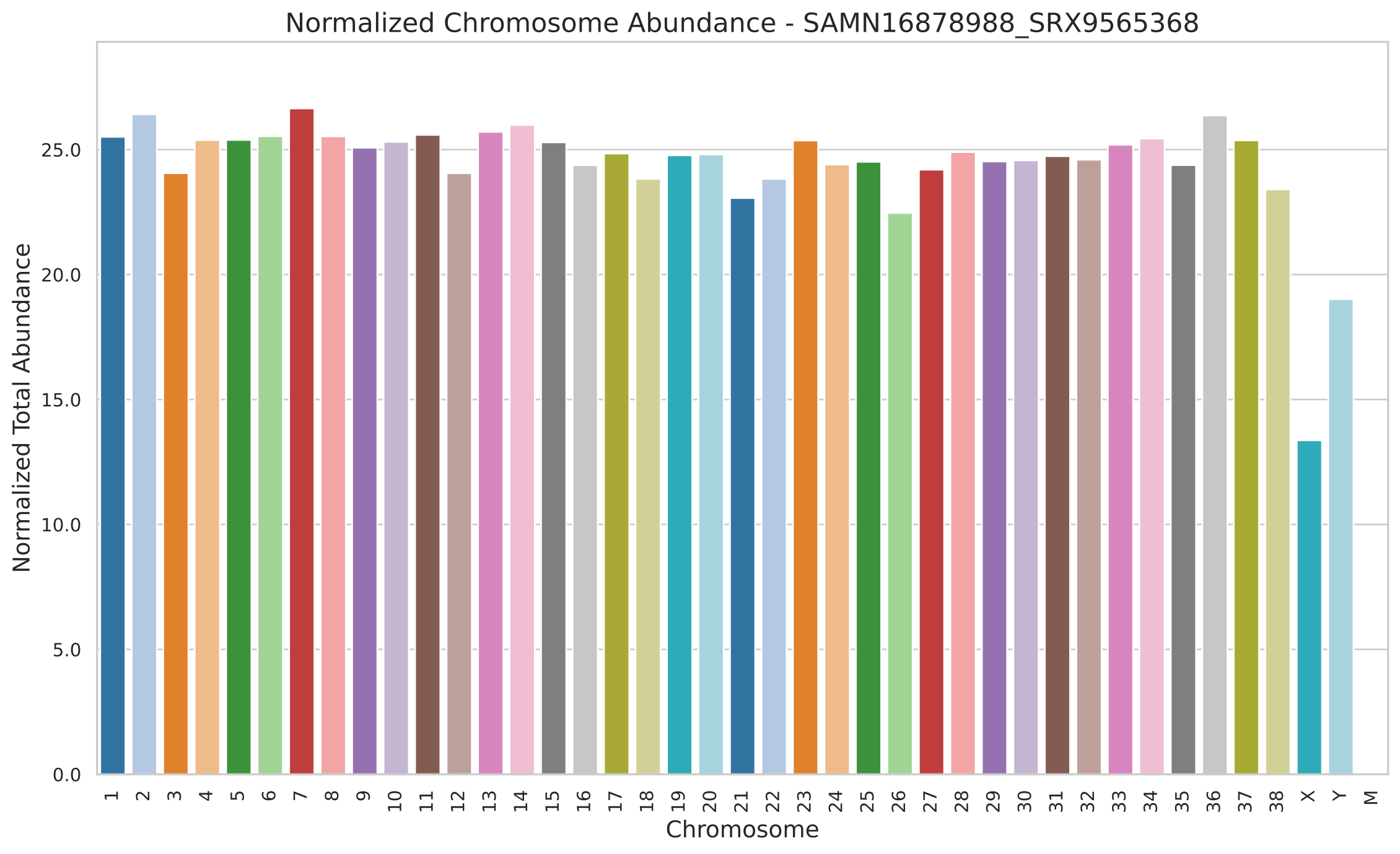

Normalized Chromosome Abundance - SAMN03732738_SRX1037261
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

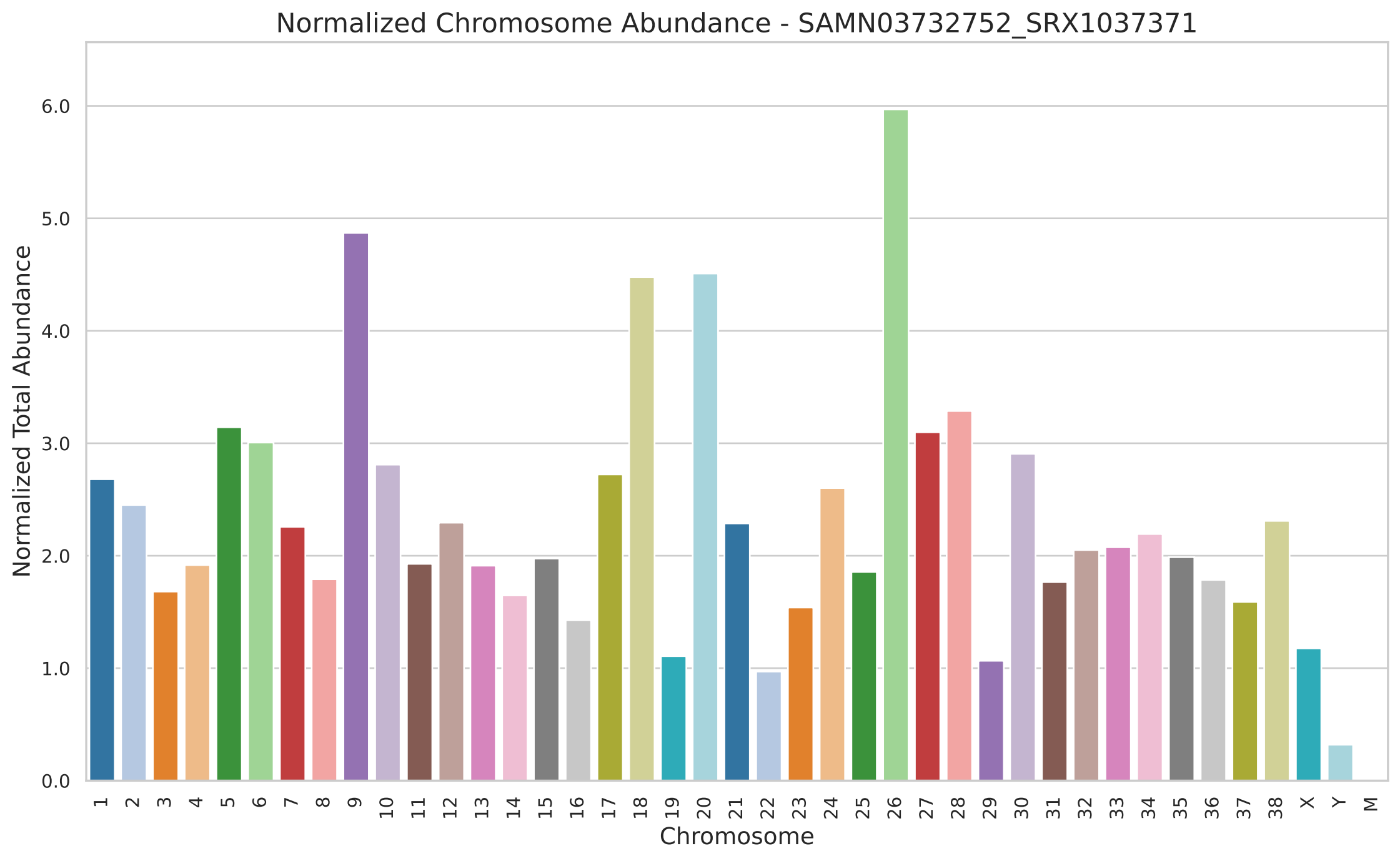

Normalized Chromosome Abundance - SAMN03732741_SRX1037266
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

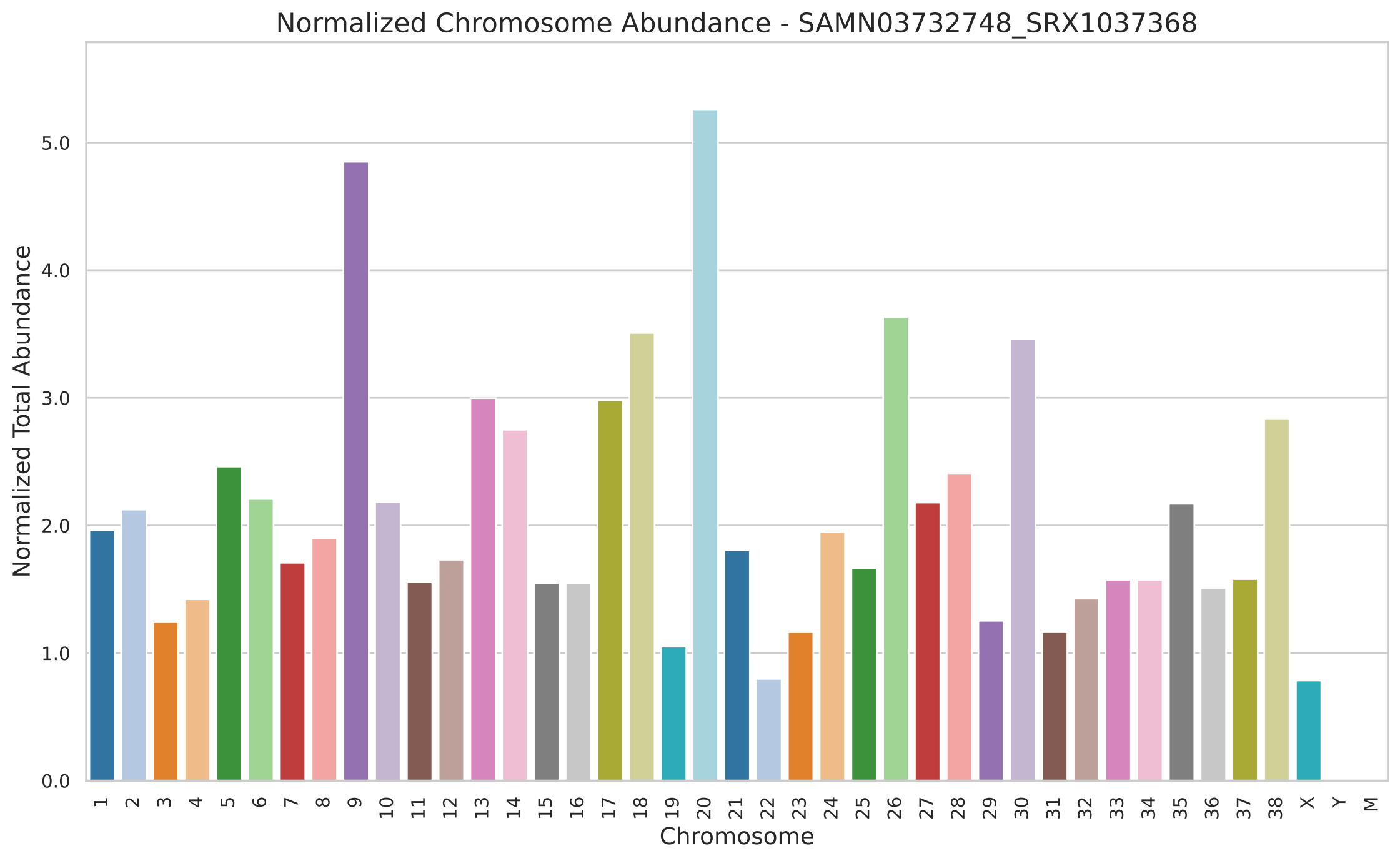

Normalized Chromosome Abundance - SAMN03732740_SRX1037265
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

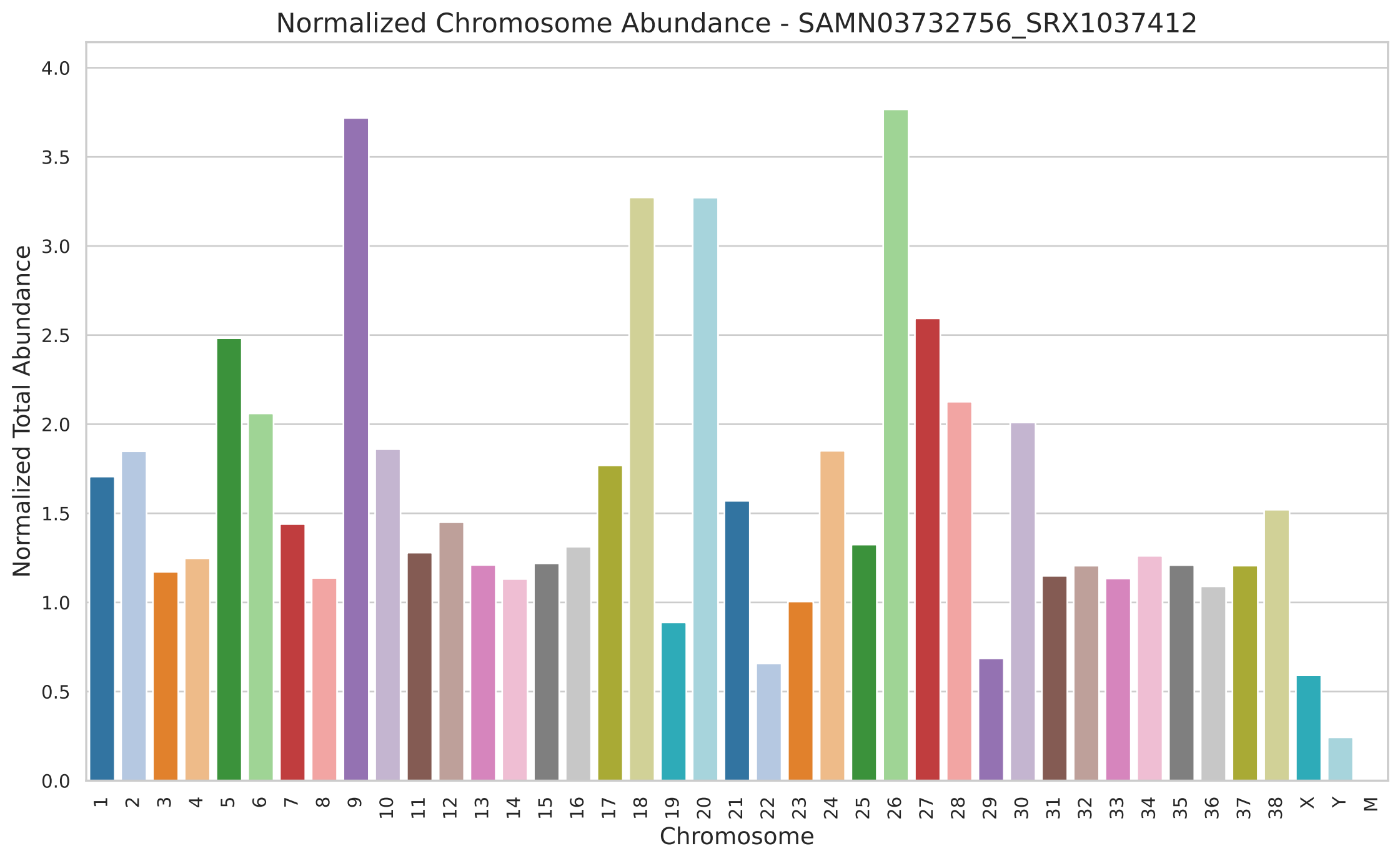

Normalized Chromosome Abundance - SAMN03436852_SRX967494
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

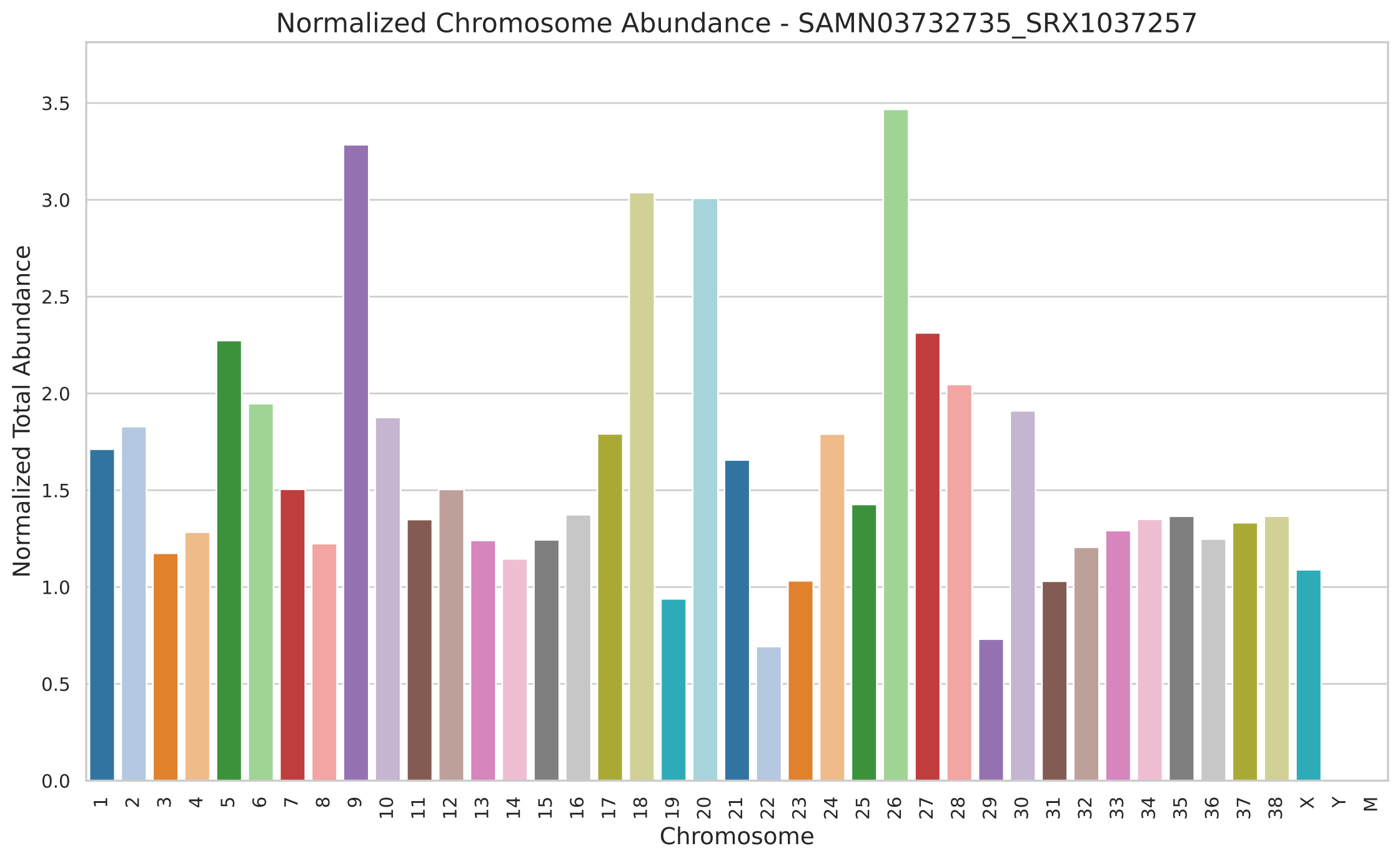

Normalized Chromosome Abundance - SAMN03732682_SRX1037248
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

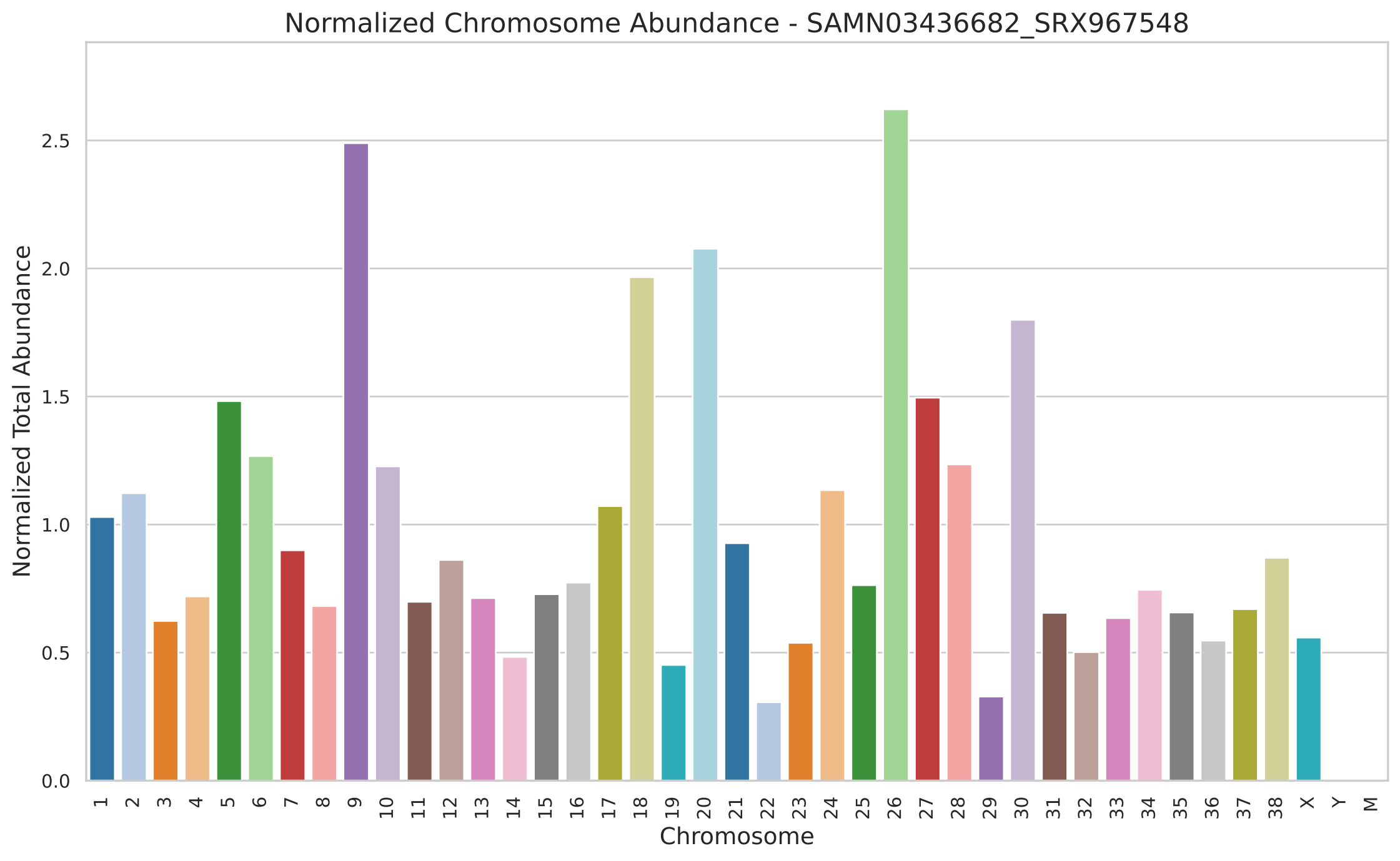

Normalized Chromosome Abundance - SAMN16878988_SRX9565368
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

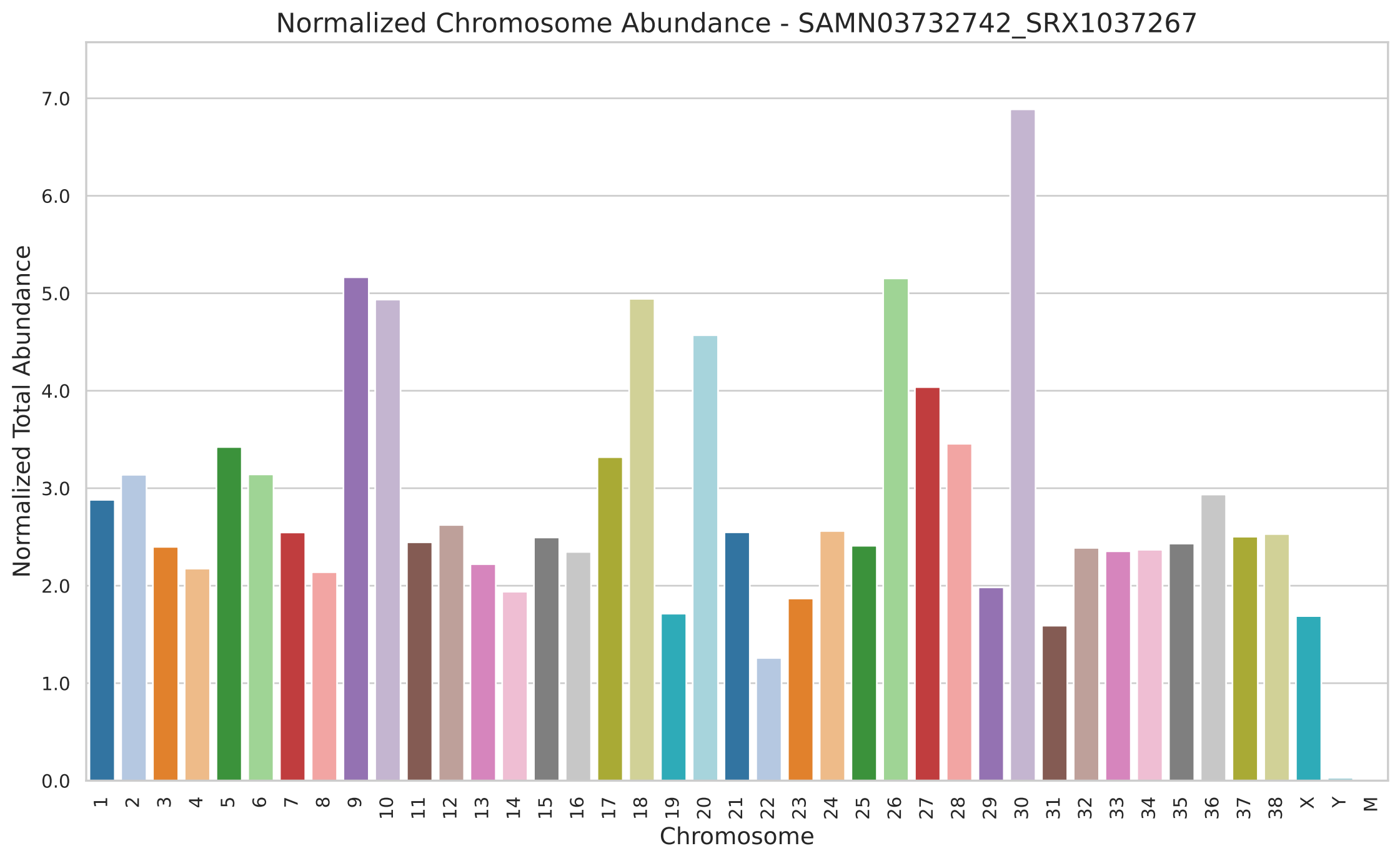

Normalized Chromosome Abundance - SAMN03732752_SRX1037371
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

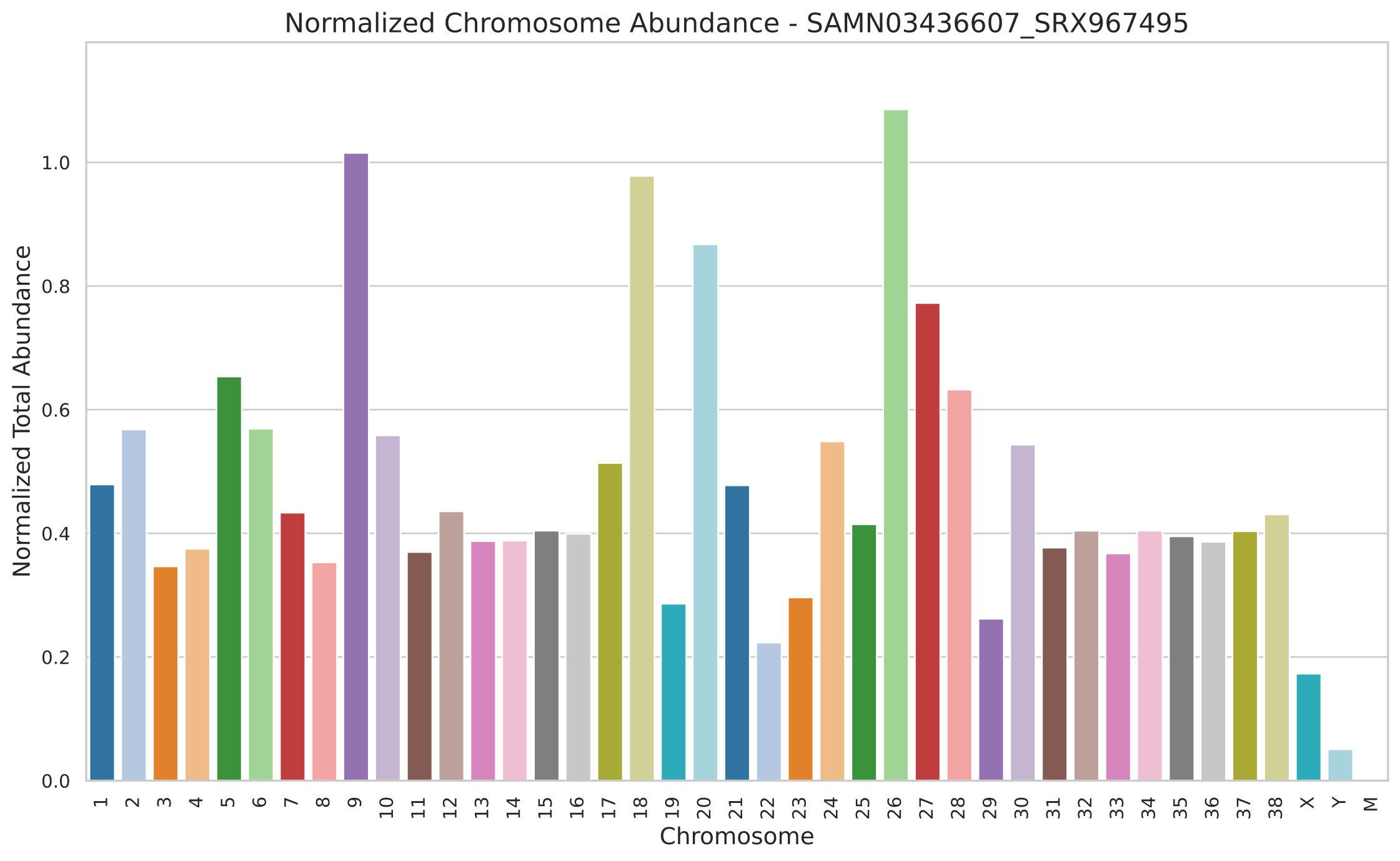

Normalized Chromosome Abundance - SAMN03732748_SRX1037368
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

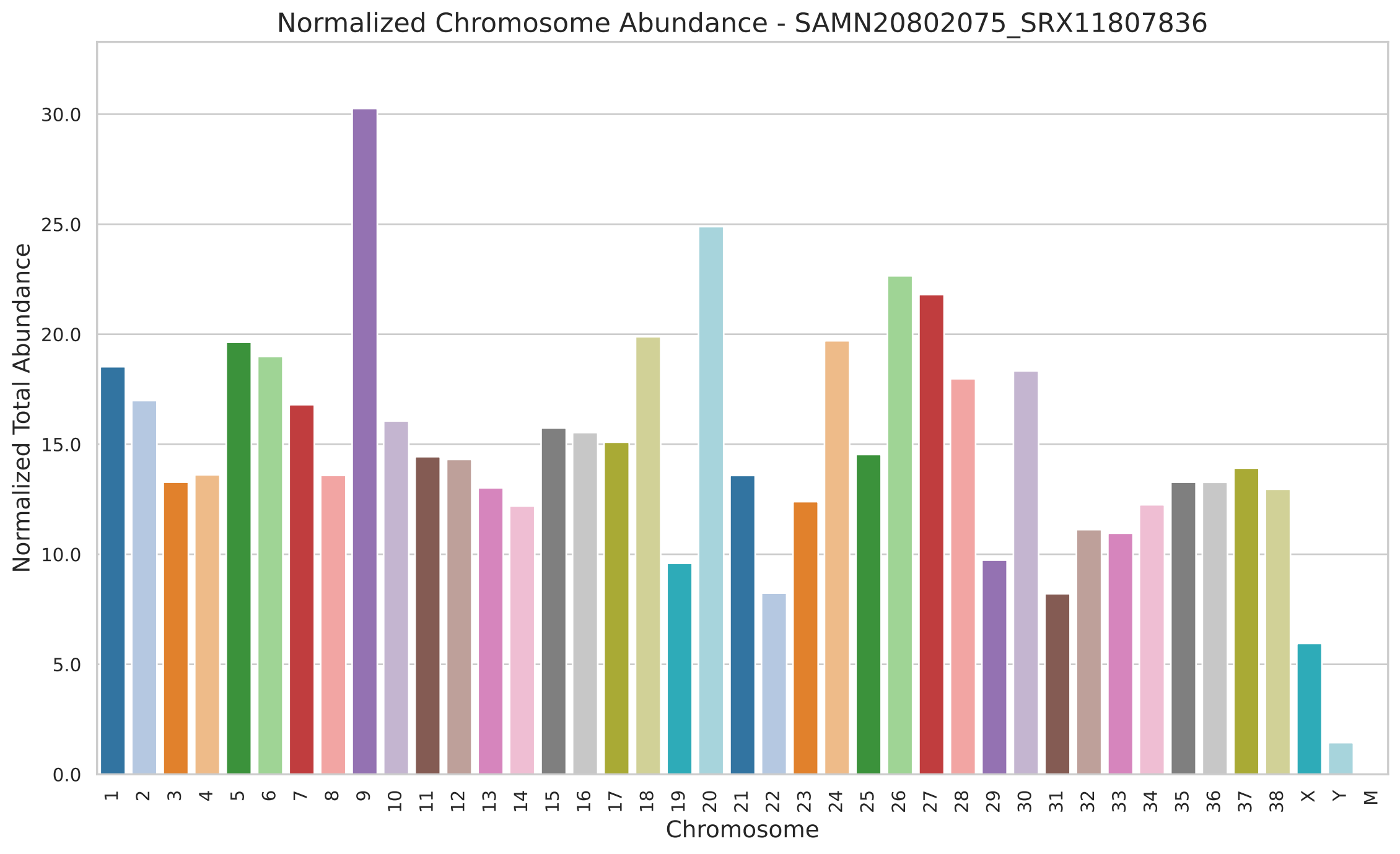

Normalized Chromosome Abundance - SAMN03732756_SRX1037412
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

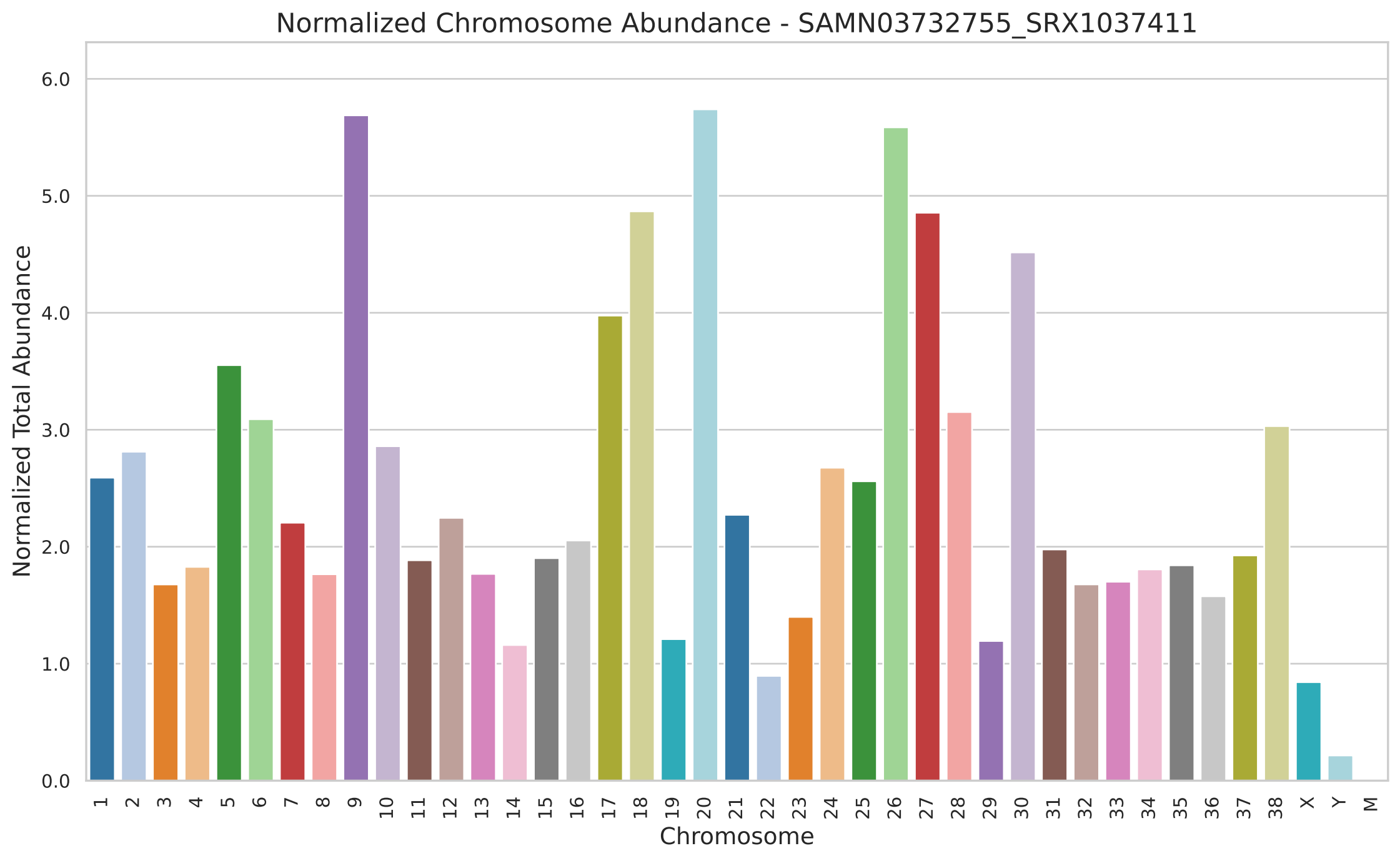

Normalized Chromosome Abundance - SAMN03732735_SRX1037257
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

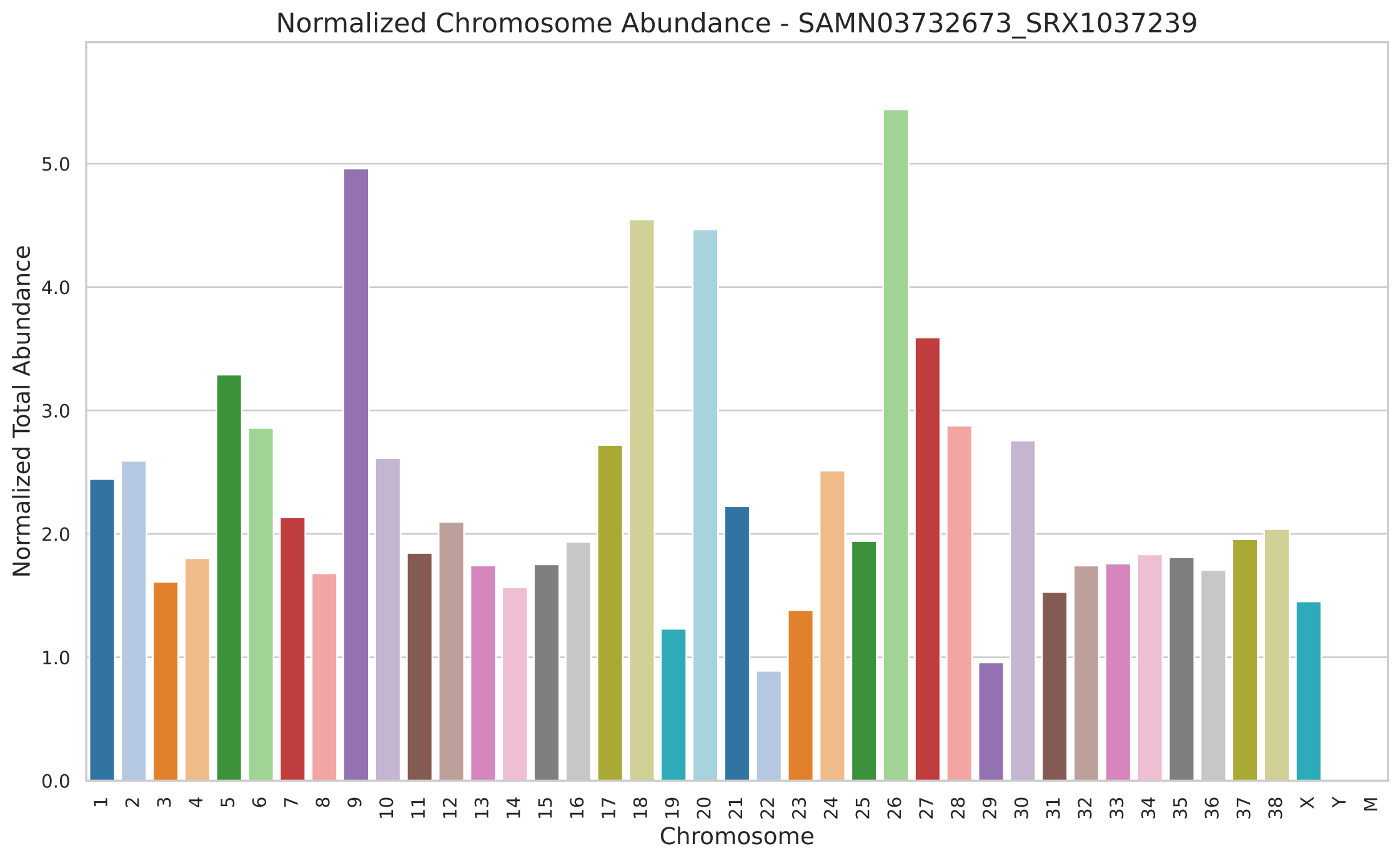

Normalized Chromosome Abundance - SAMN03436682_SRX967548
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

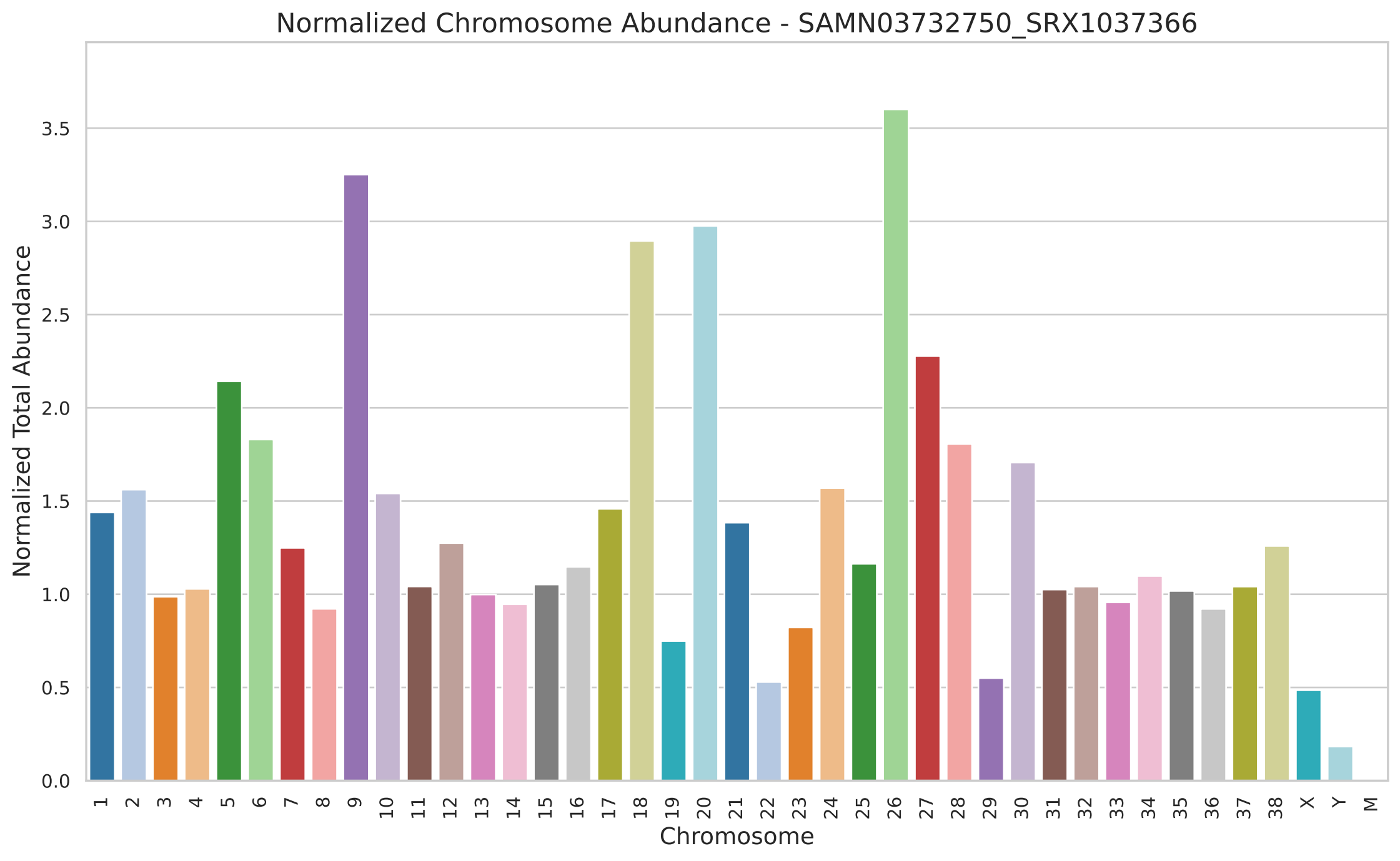

Normalized Chromosome Abundance - SAMN03732742_SRX1037267
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

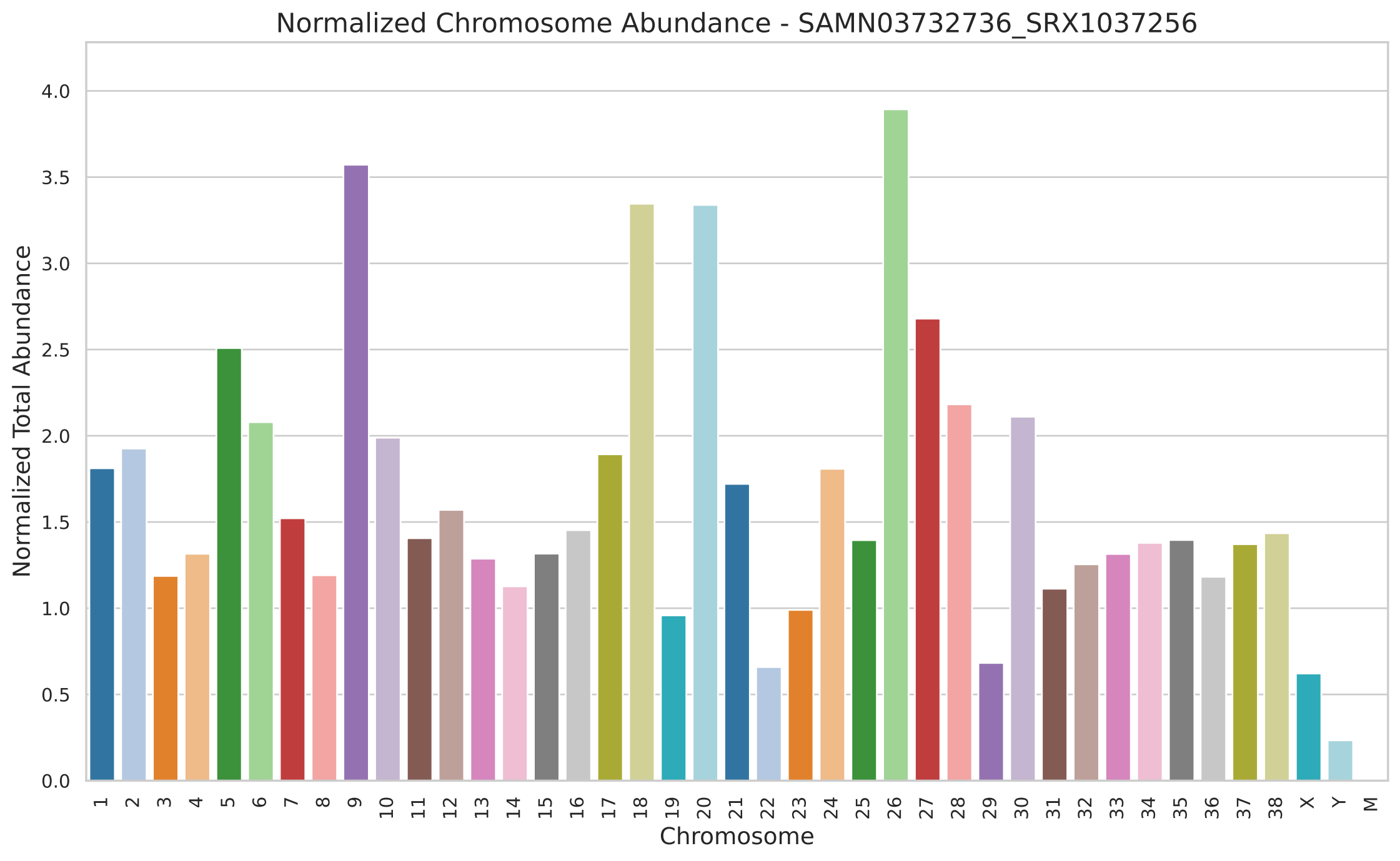

Normalized Chromosome Abundance - SAMN03436607_SRX967495
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

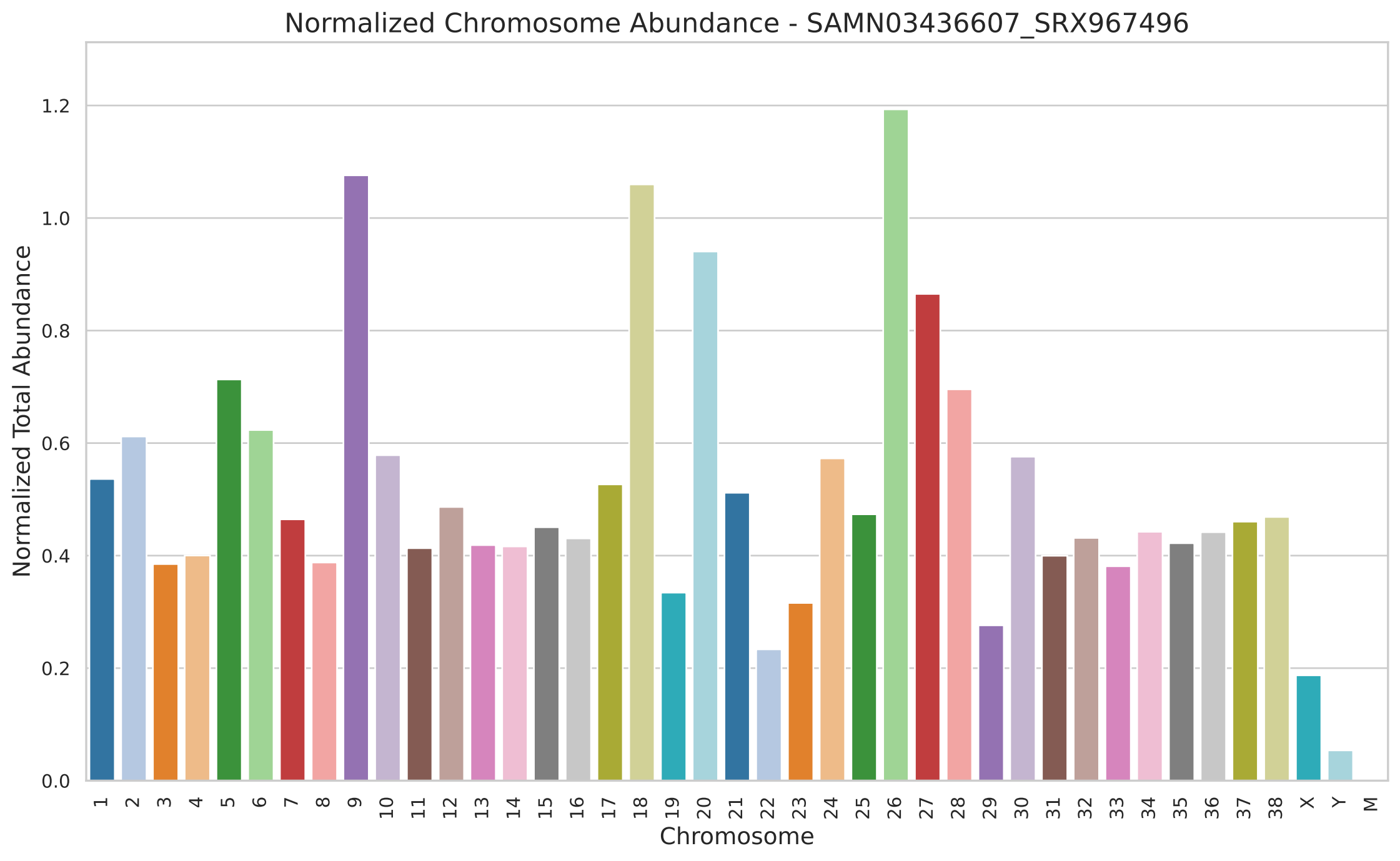

Normalized Chromosome Abundance - SAMN20802075_SRX11807836
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

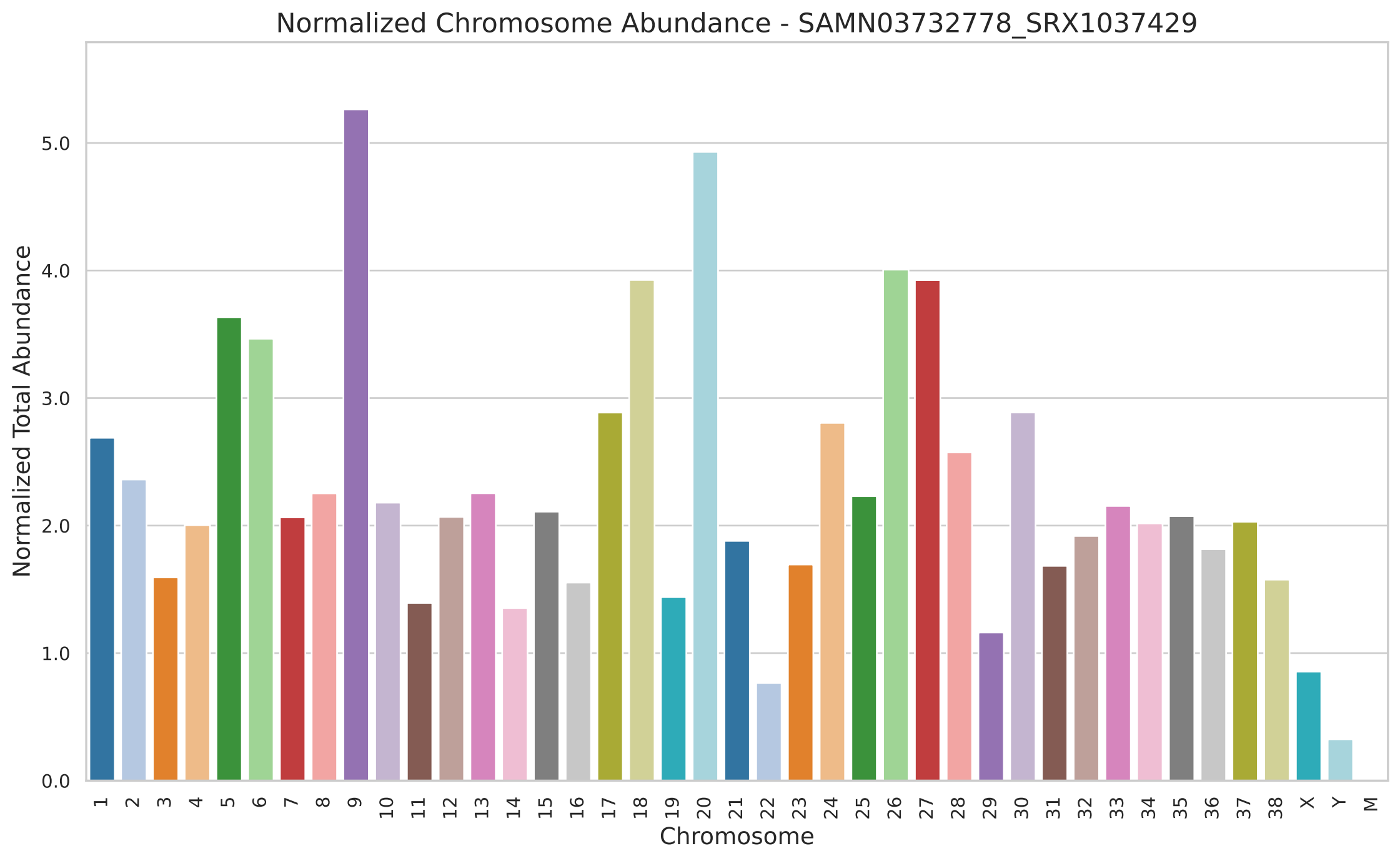

Normalized Chromosome Abundance - SAMN03732755_SRX1037411
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

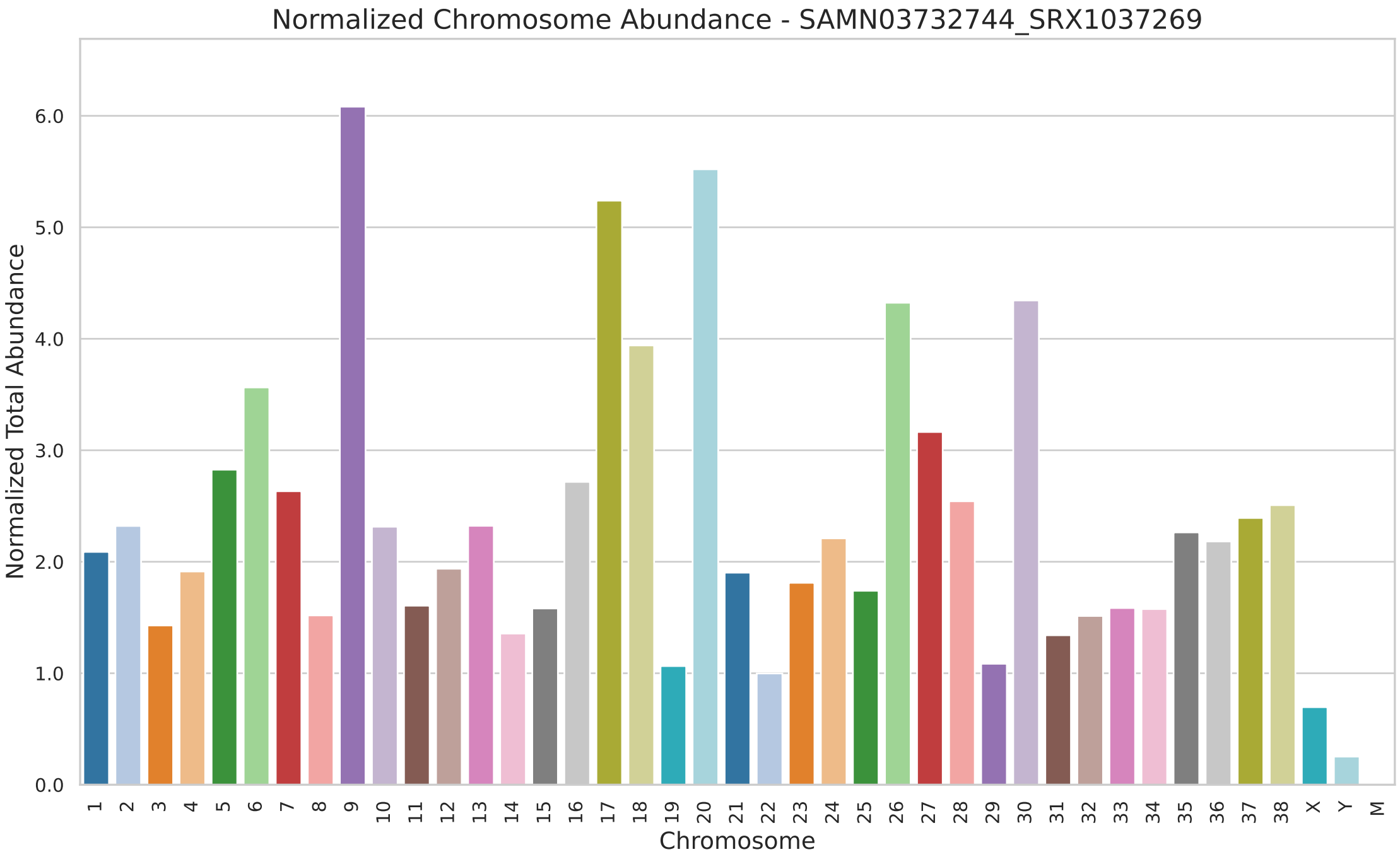

Normalized Chromosome Abundance - SAMN03732673_SRX1037239
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

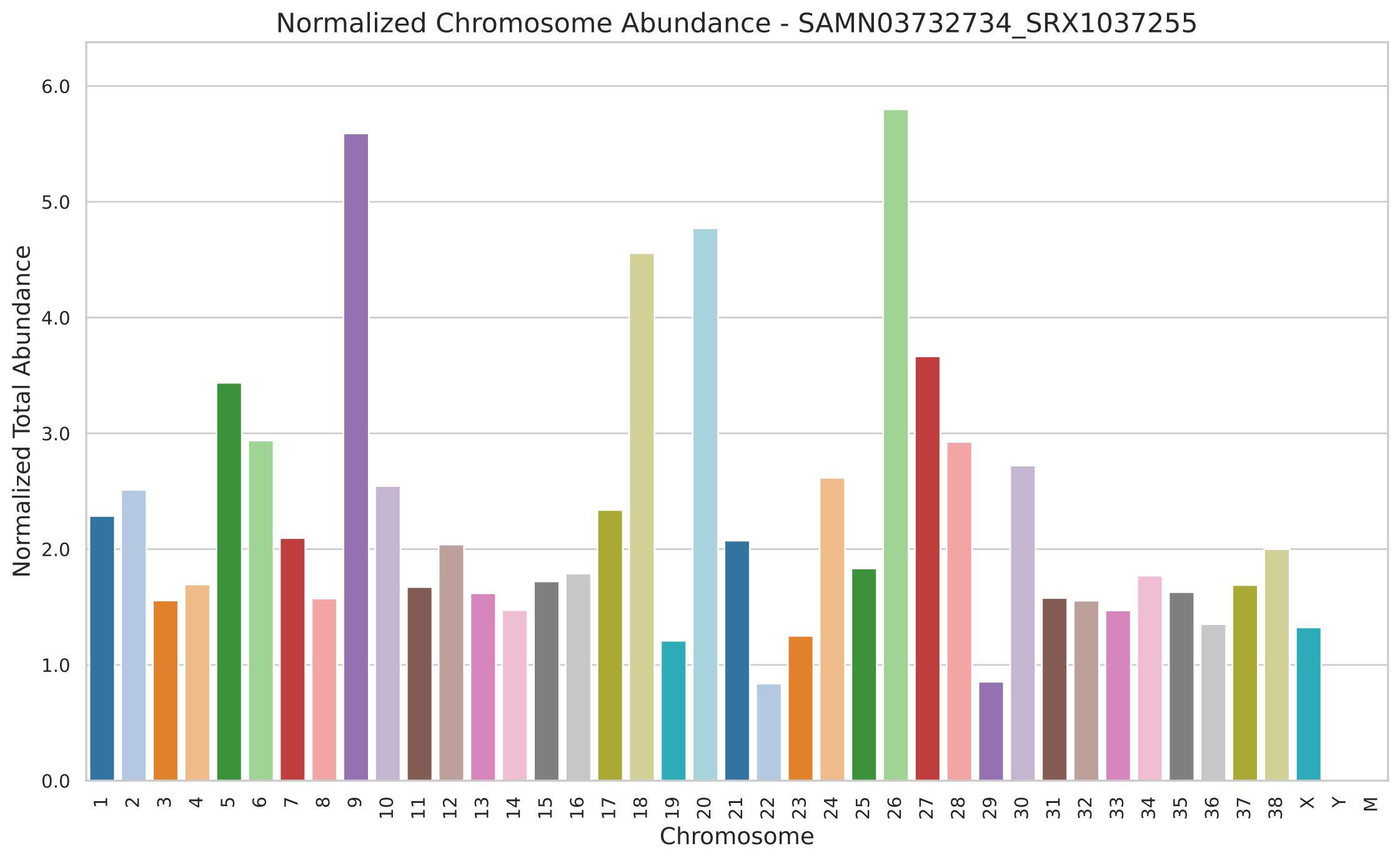

Normalized Chromosome Abundance - SAMN03732750_SRX1037366
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

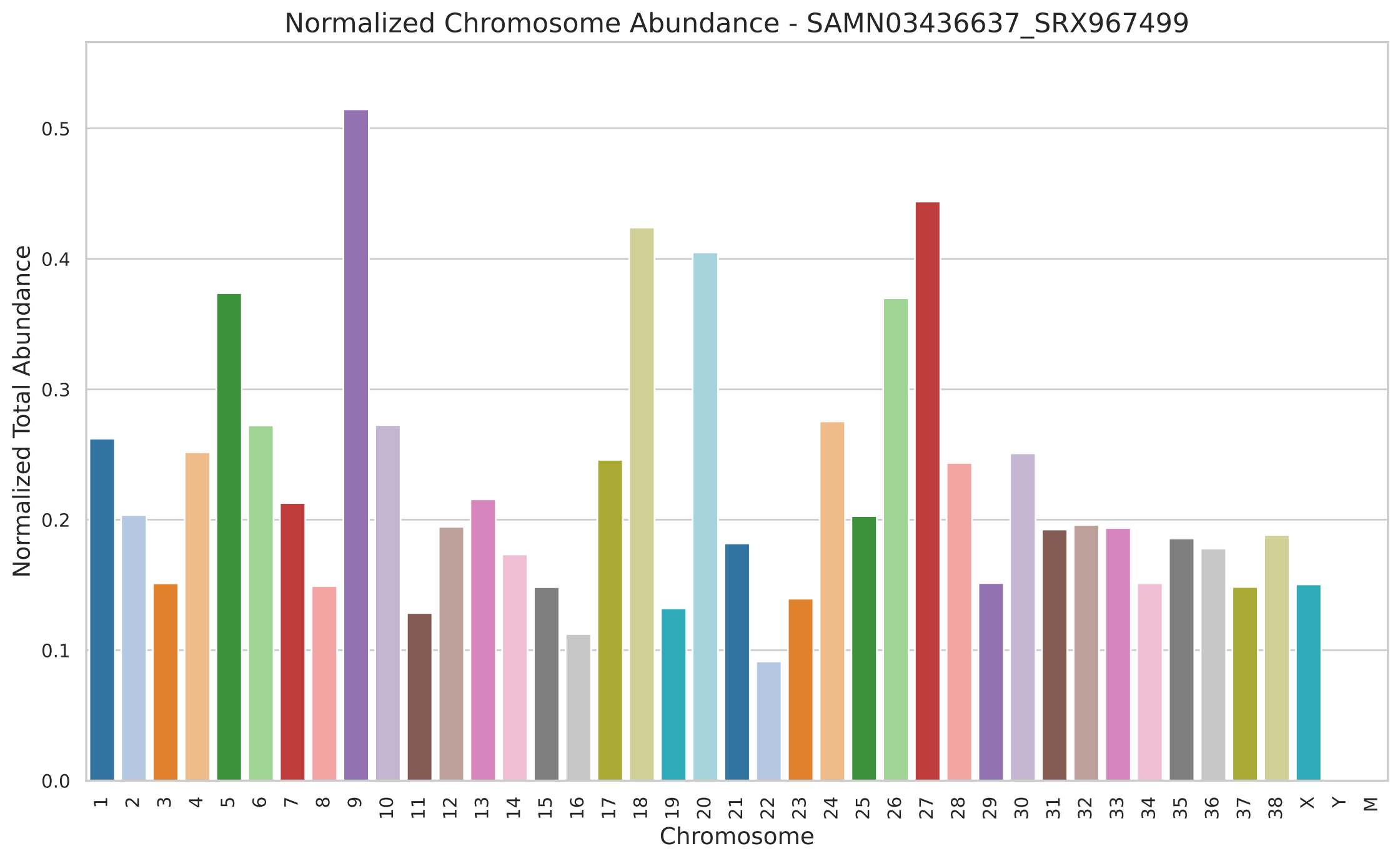

Normalized Chromosome Abundance - SAMN03732736_SRX1037256
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

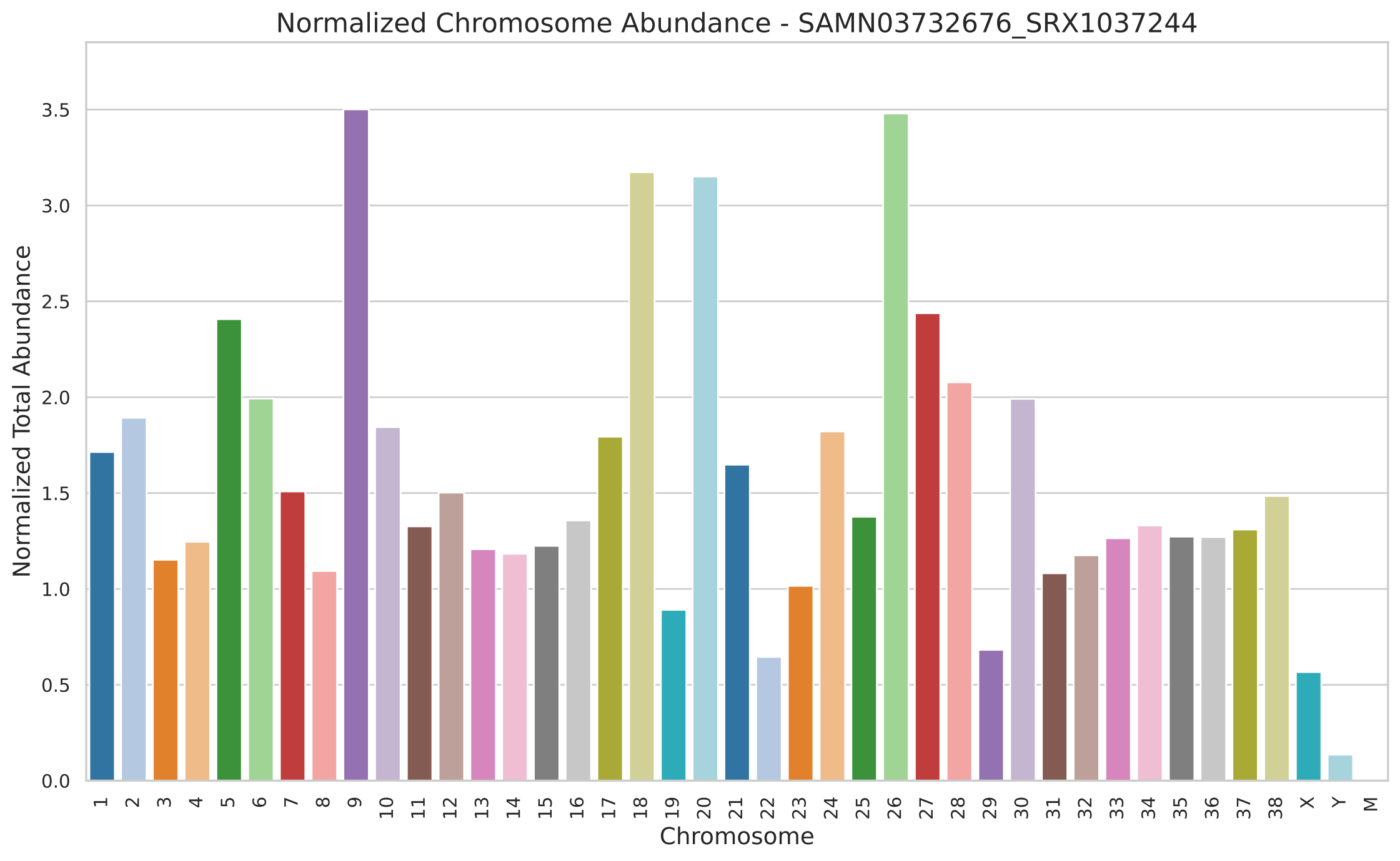

Normalized Chromosome Abundance - SAMN03436607_SRX967496
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

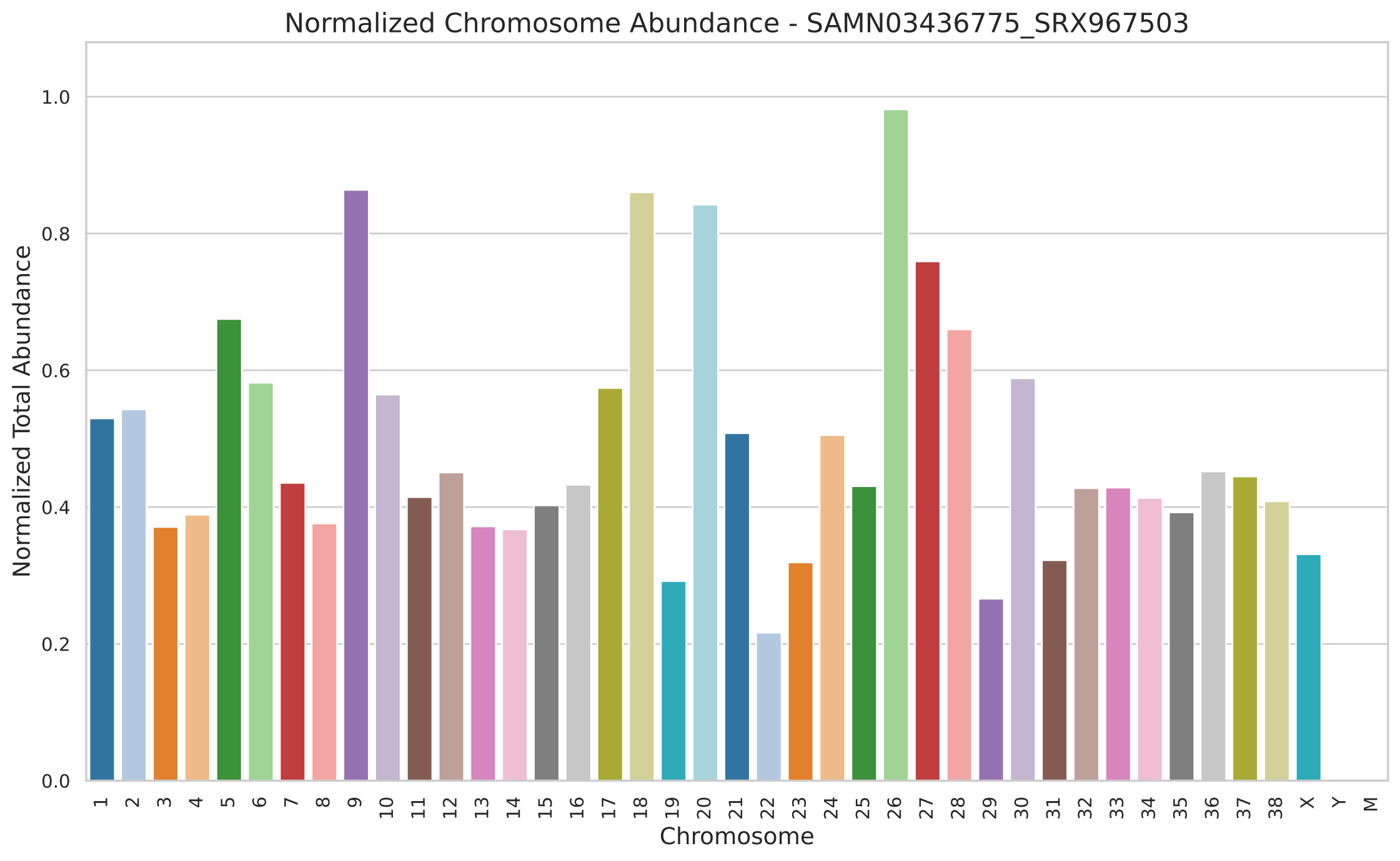

Normalized Chromosome Abundance - SAMN03732778_SRX1037429
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

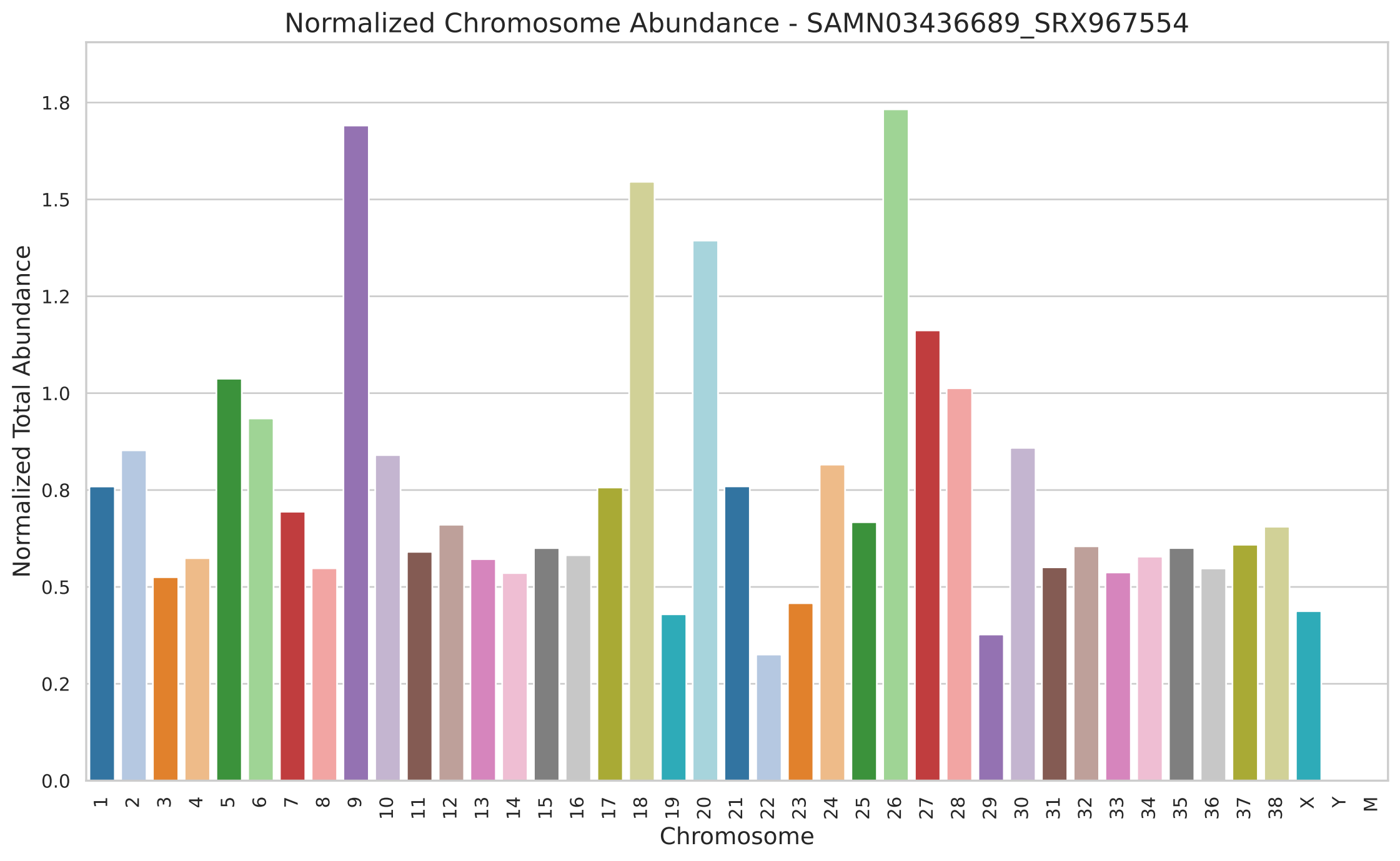

Normalized Chromosome Abundance - SAMN03732744_SRX1037269
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

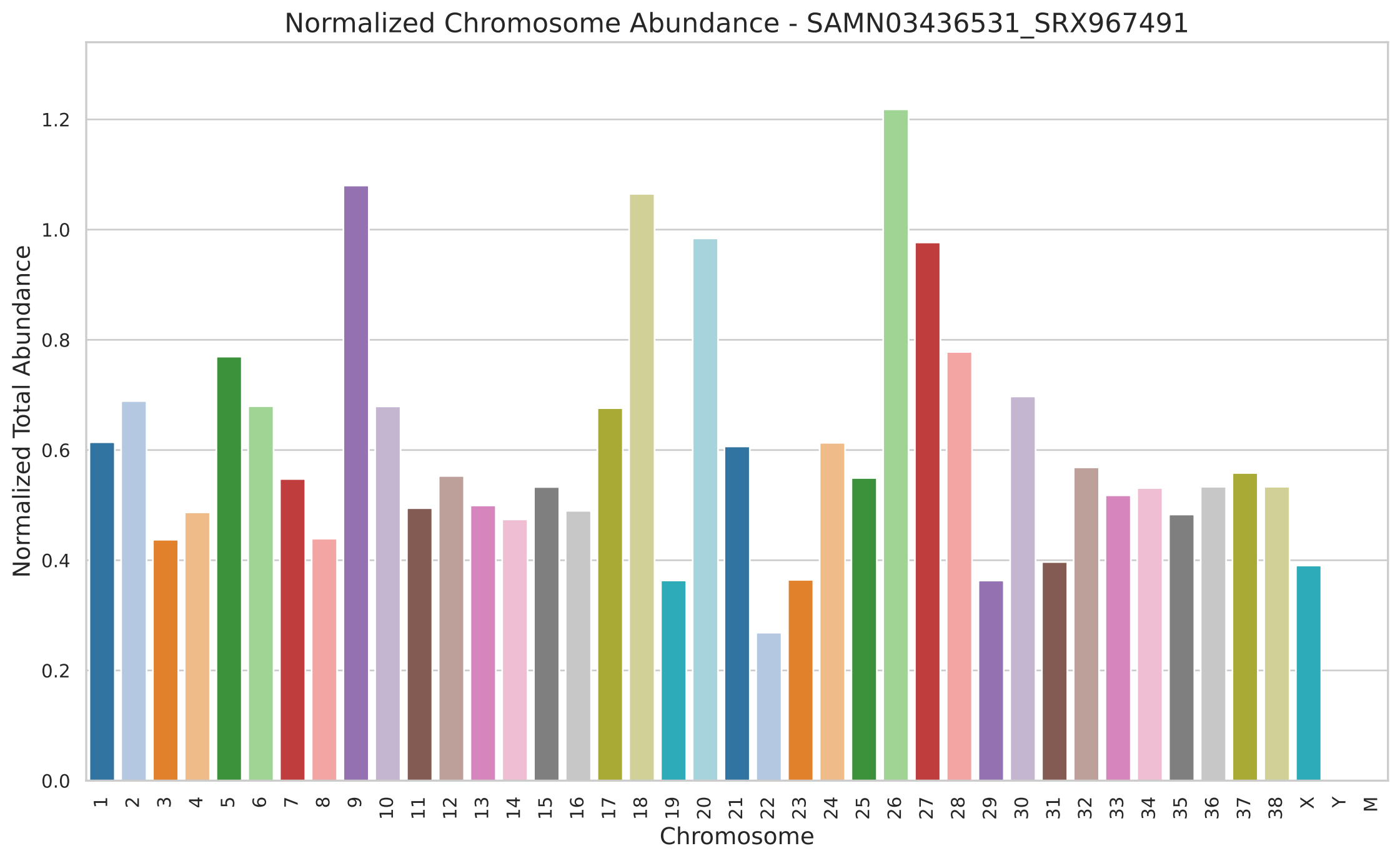

Normalized Chromosome Abundance - SAMN03732734_SRX1037255
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

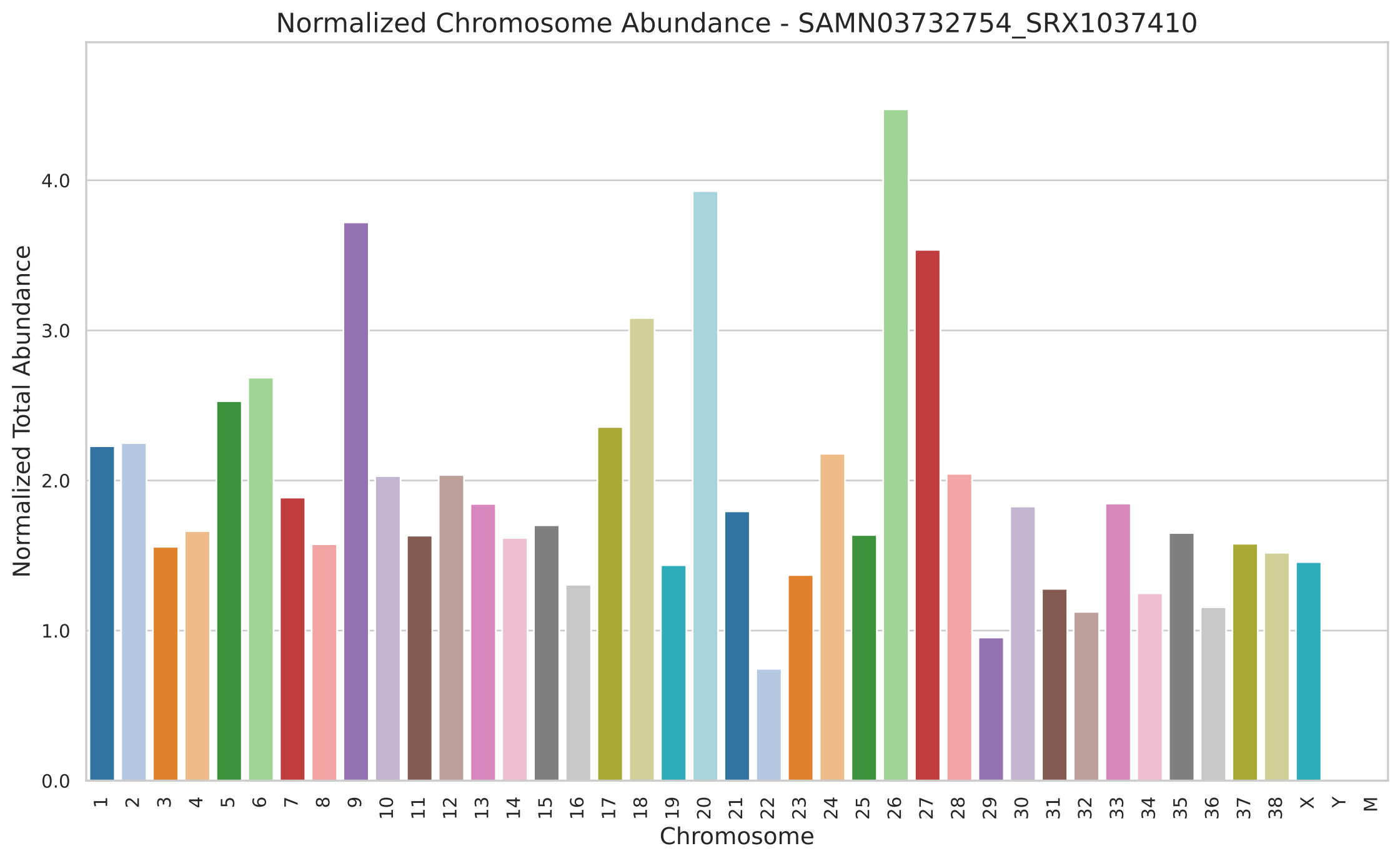

Normalized Chromosome Abundance - SAMN03436637_SRX967499
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

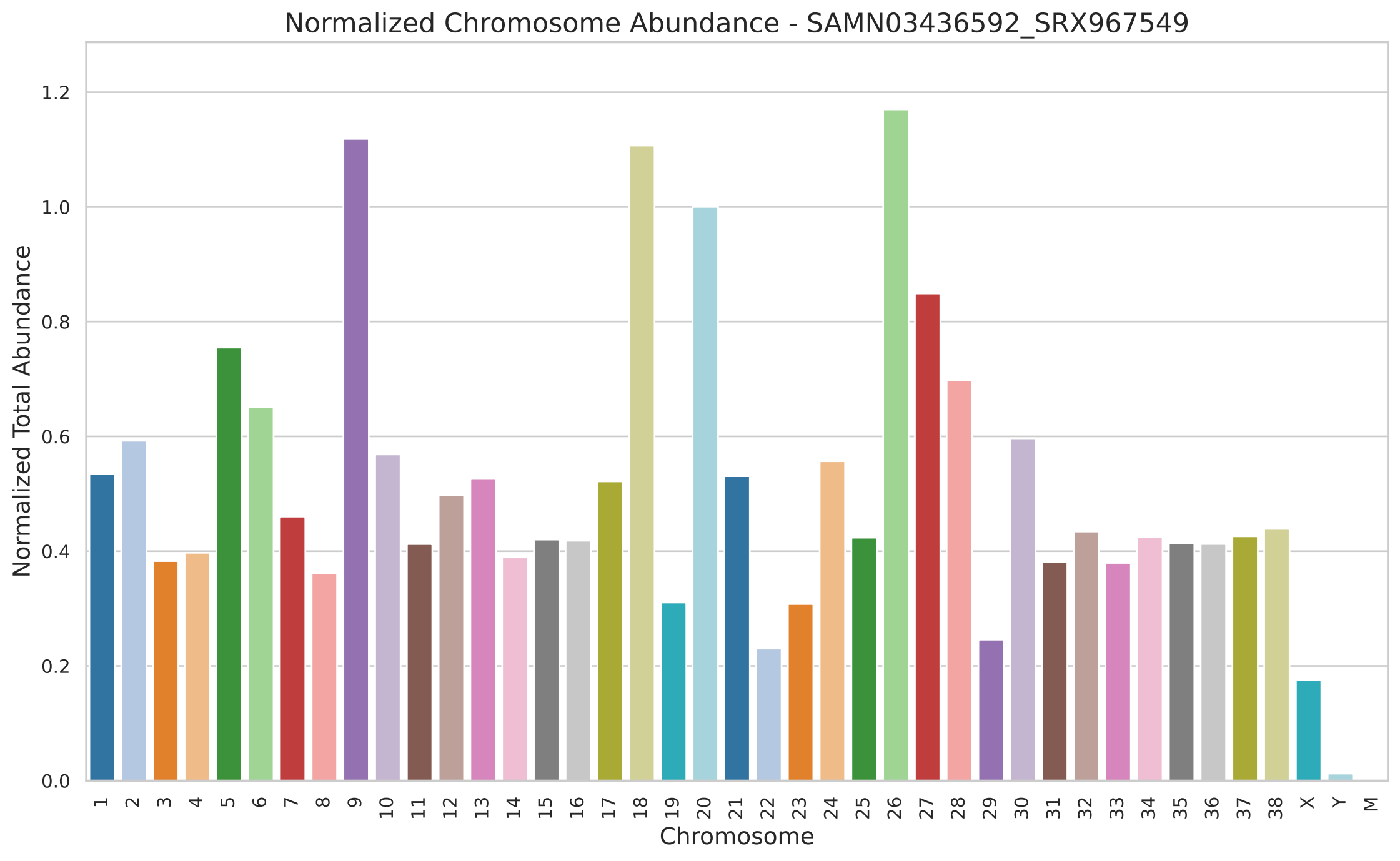

Normalized Chromosome Abundance - SAMN03732676_SRX1037244
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

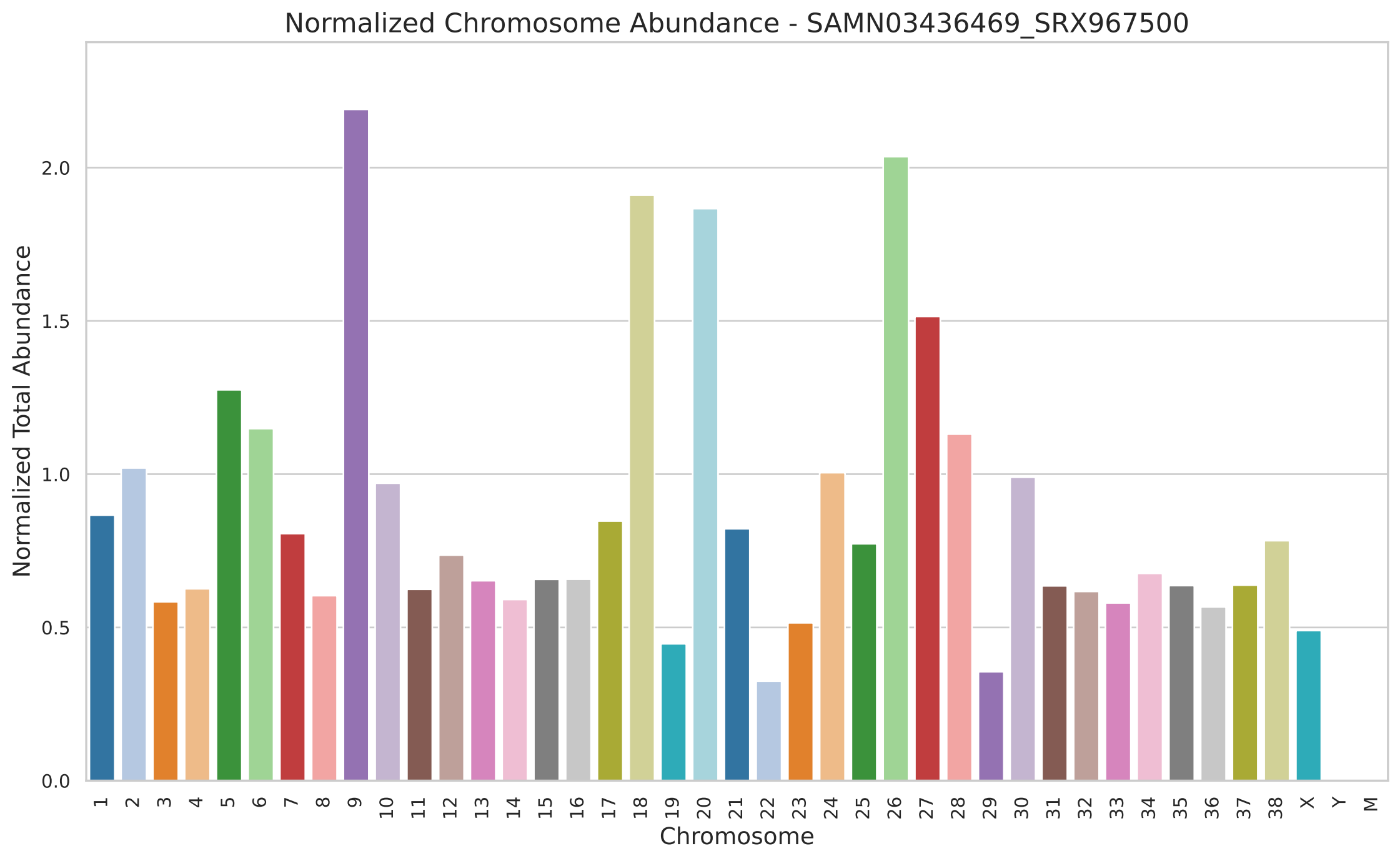

Normalized Chromosome Abundance - SAMN03436775_SRX967503
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

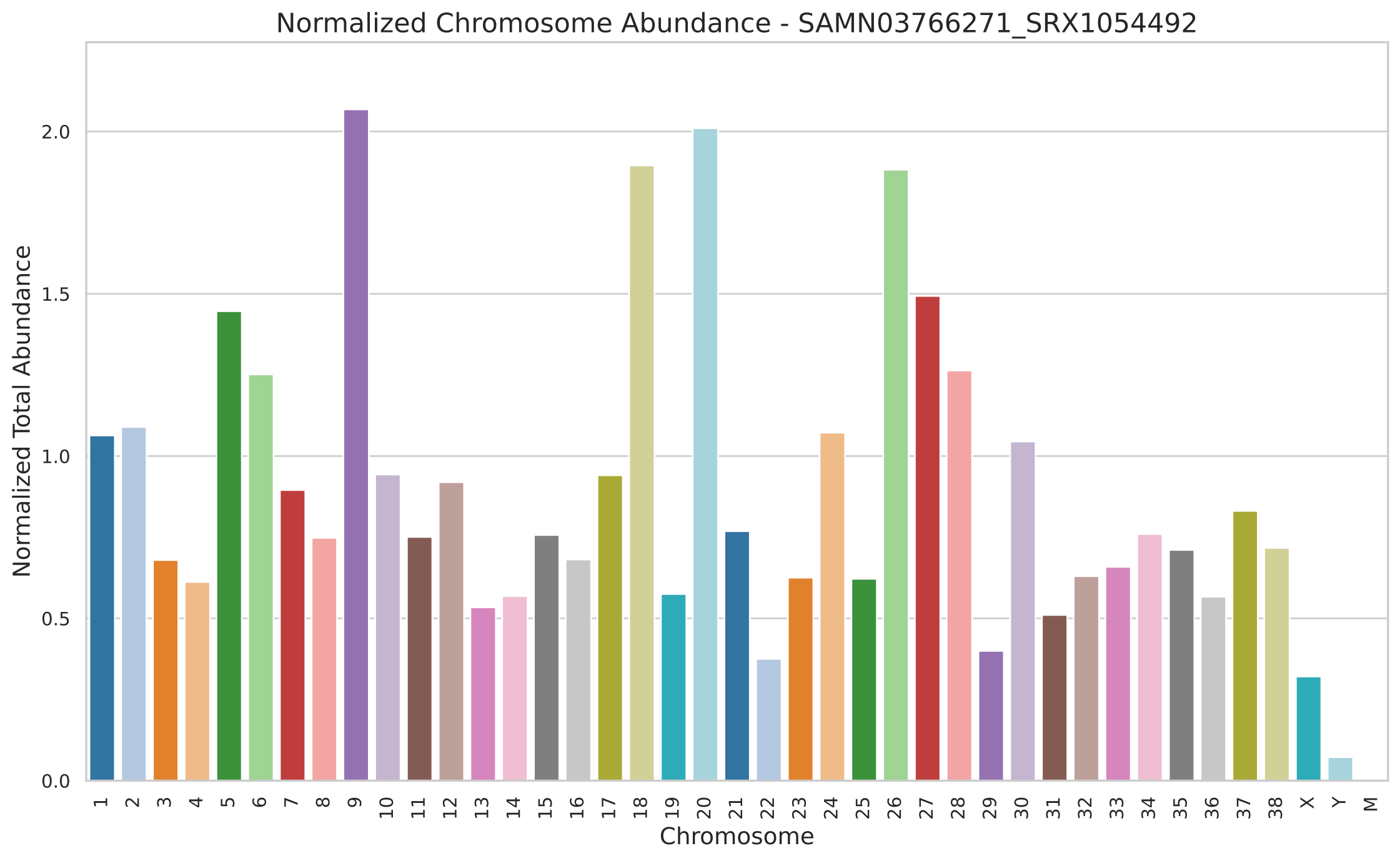

Normalized Chromosome Abundance - SAMN03436689_SRX967554
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

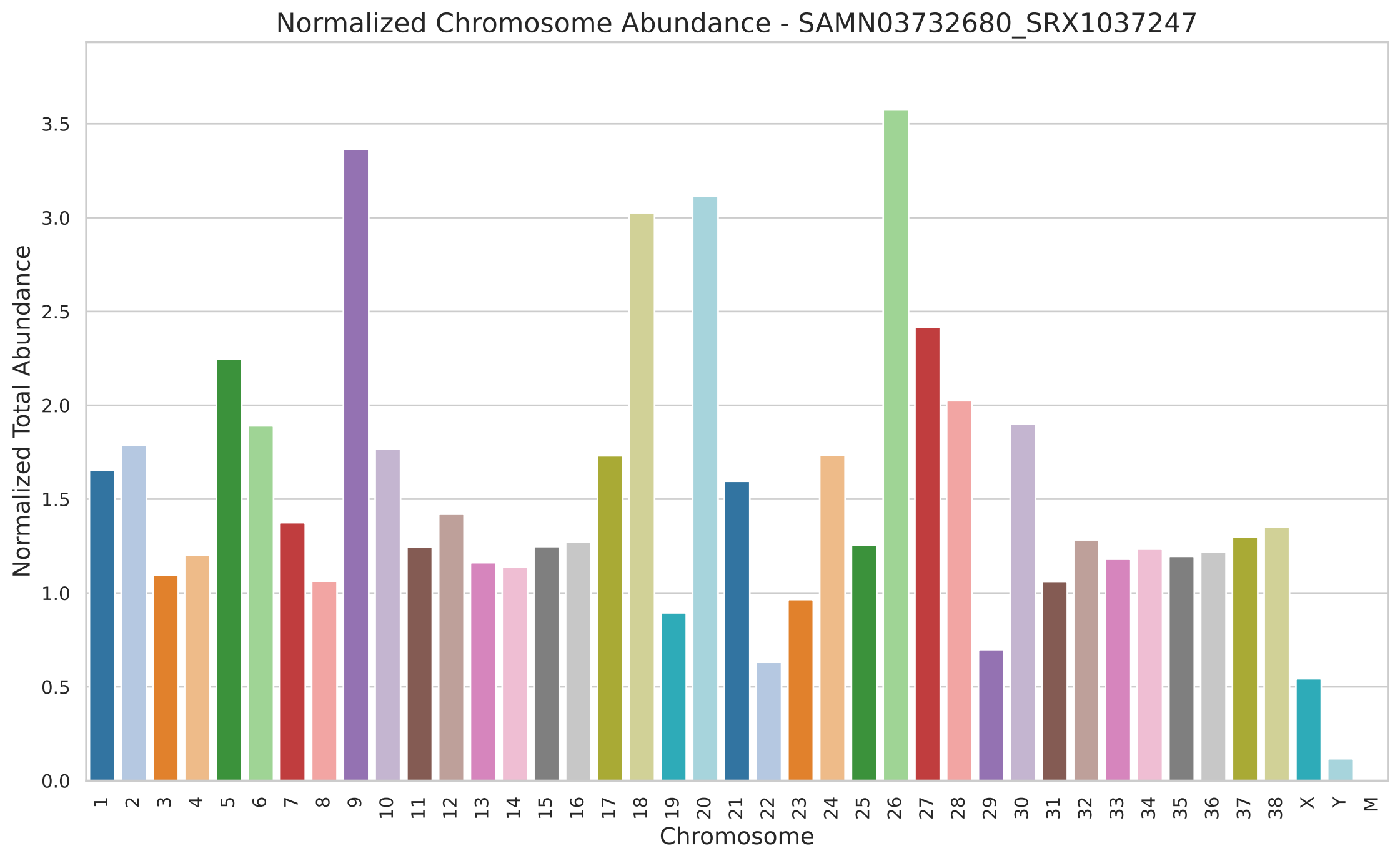

Normalized Chromosome Abundance - SAMN03436531_SRX967491
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

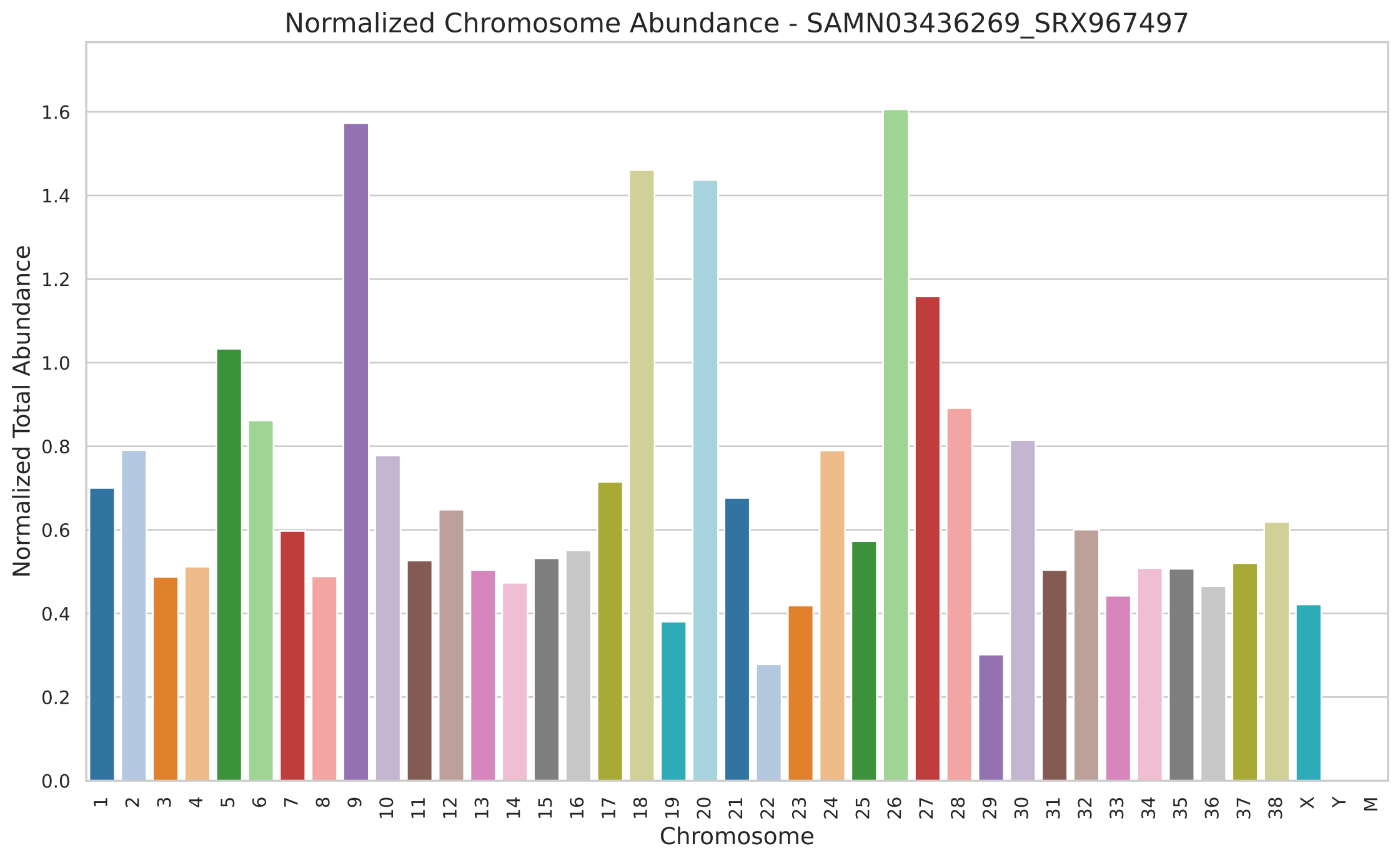

Normalized Chromosome Abundance - SAMN03732754_SRX1037410
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

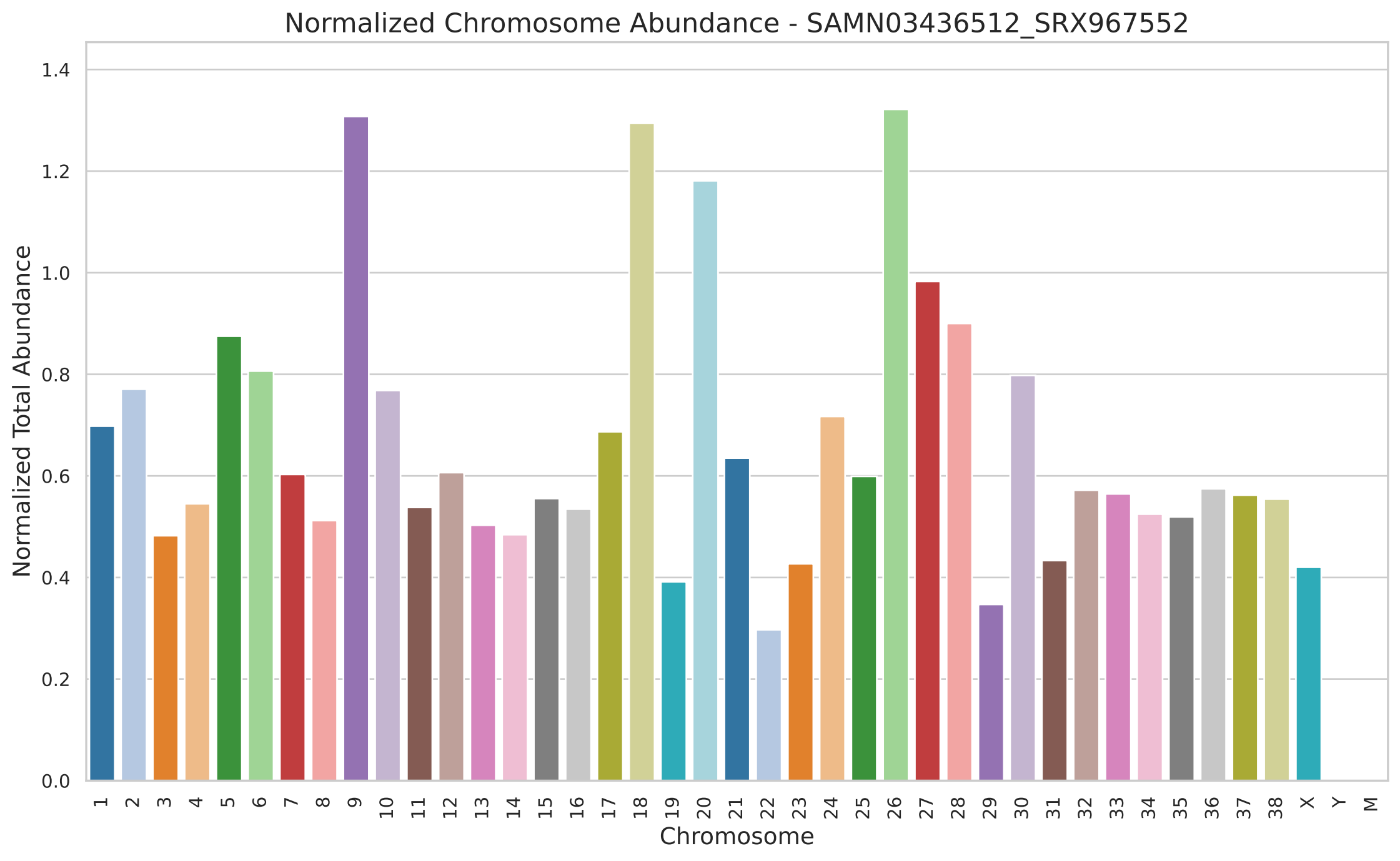

Normalized Chromosome Abundance - SAMN03436592_SRX967549
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

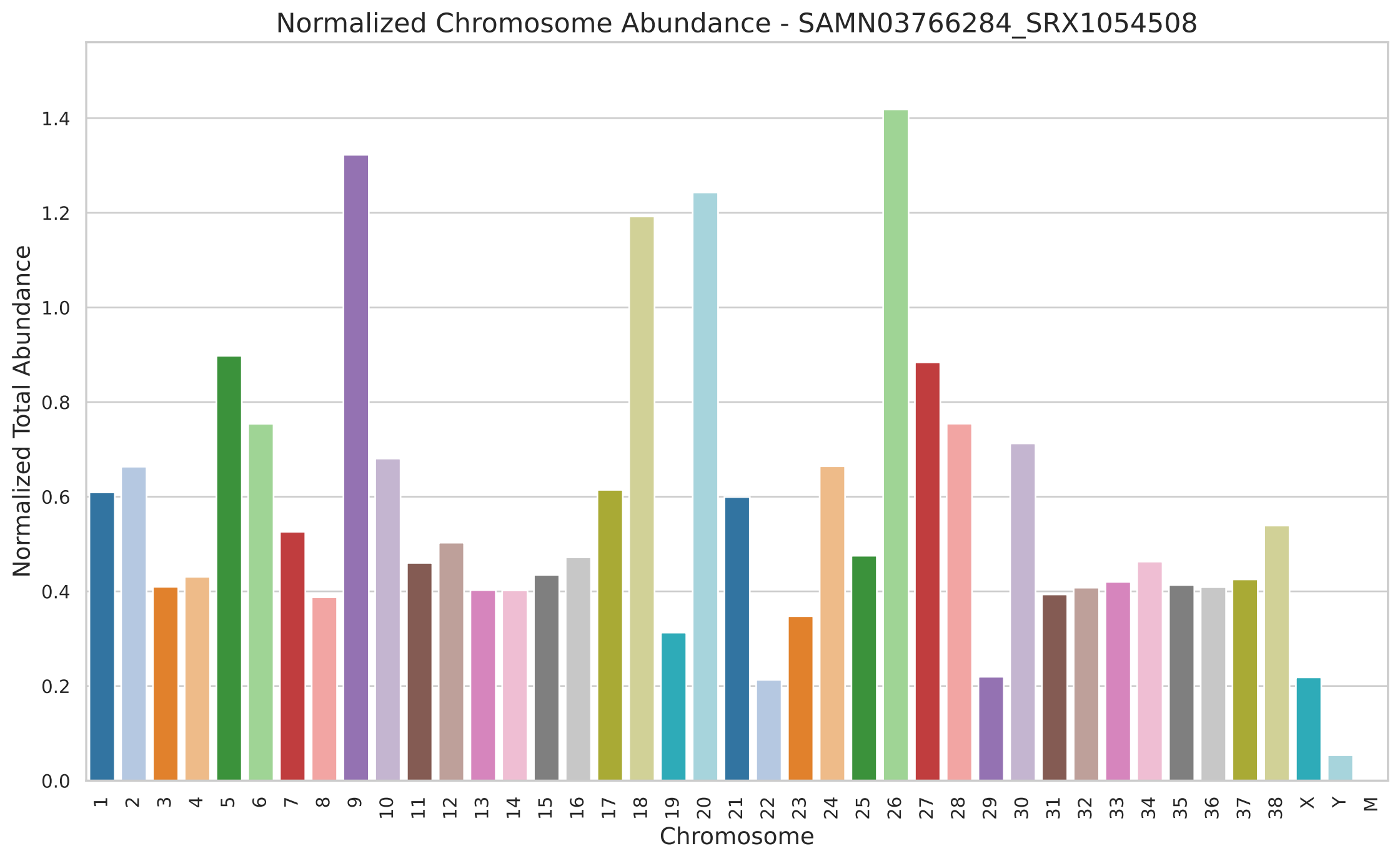

Normalized Chromosome Abundance - SAMN03436469_SRX967500
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

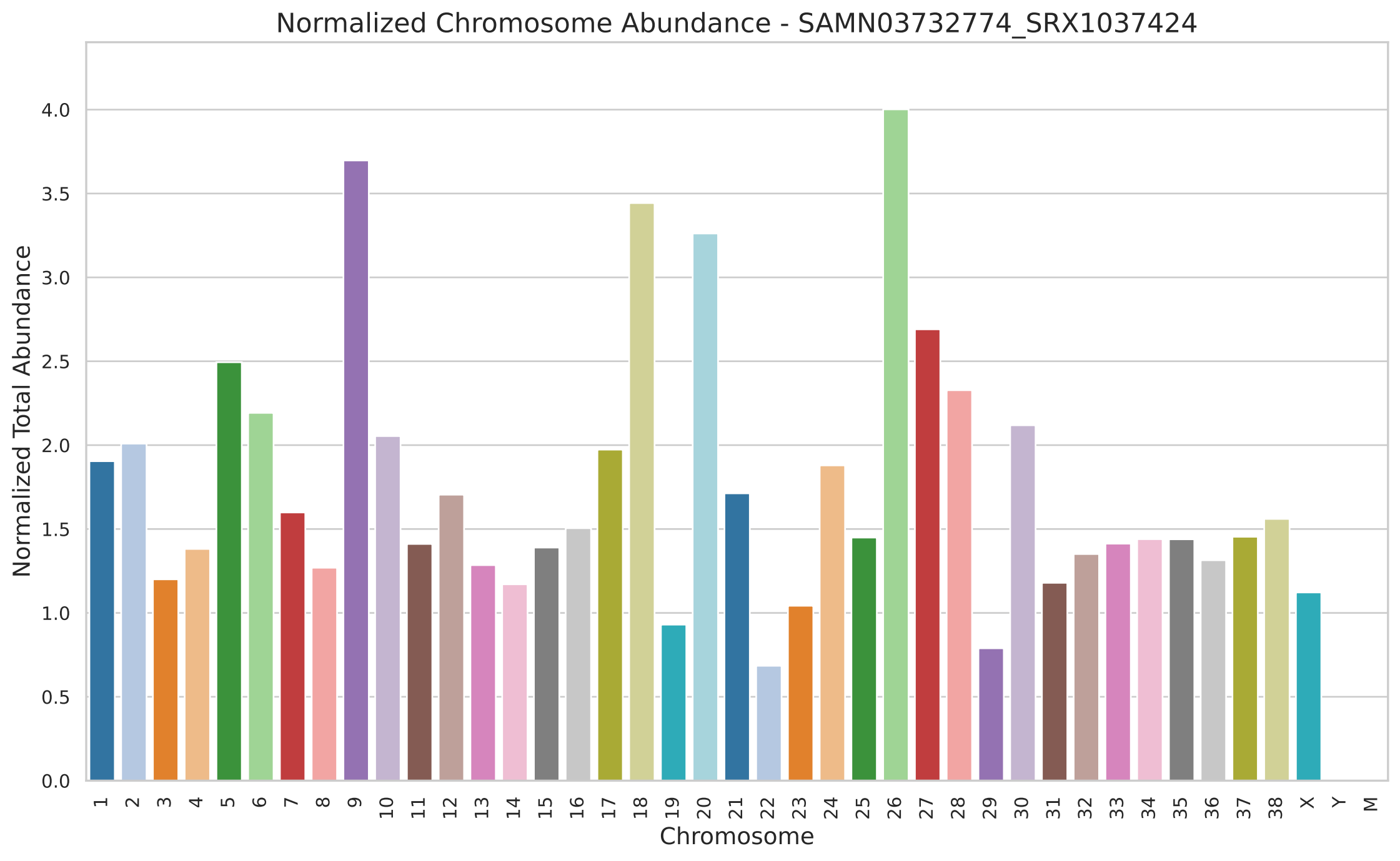

Normalized Chromosome Abundance - SAMN03766271_SRX1054492
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

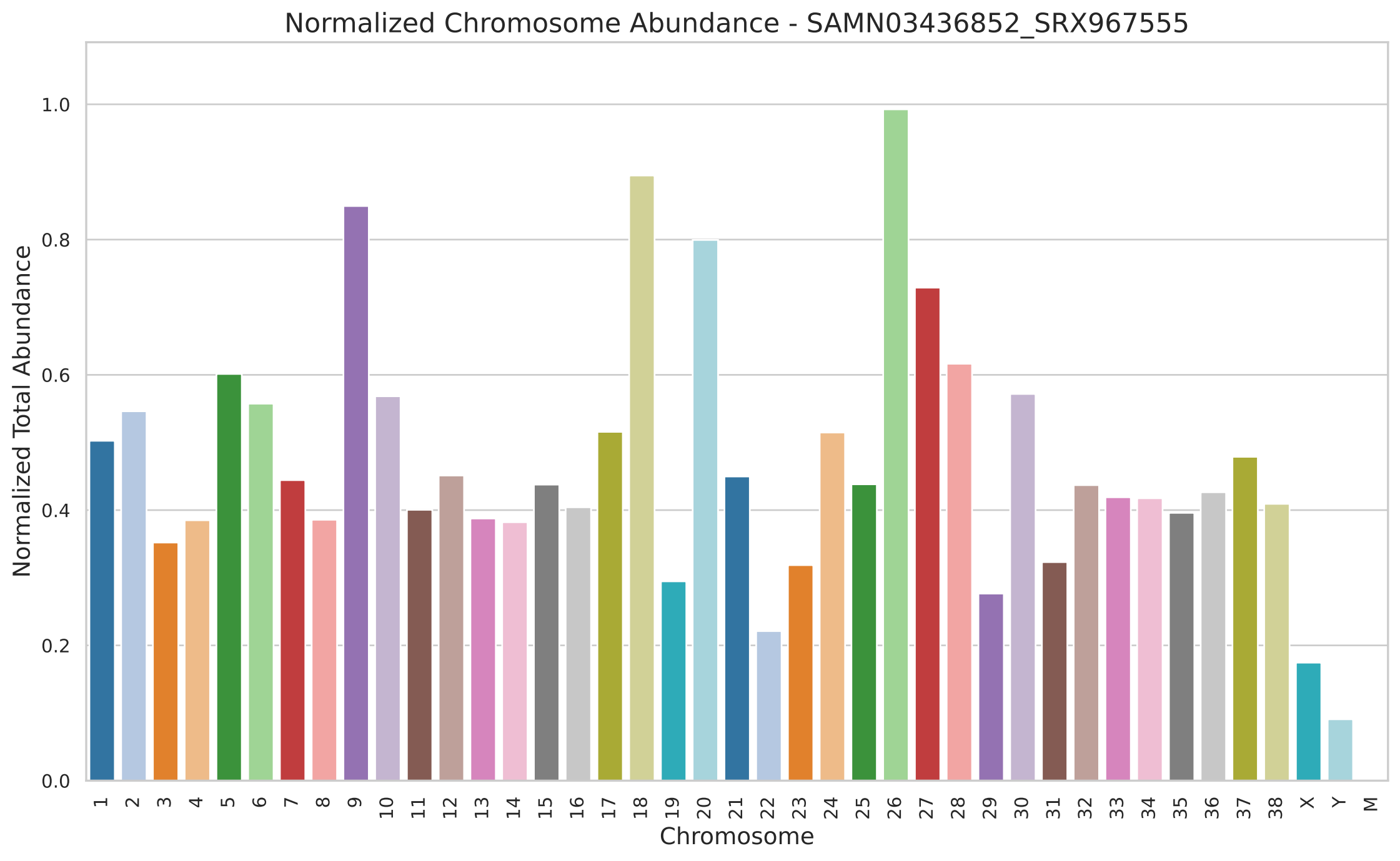

Normalized Chromosome Abundance - SAMN03732680_SRX1037247
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

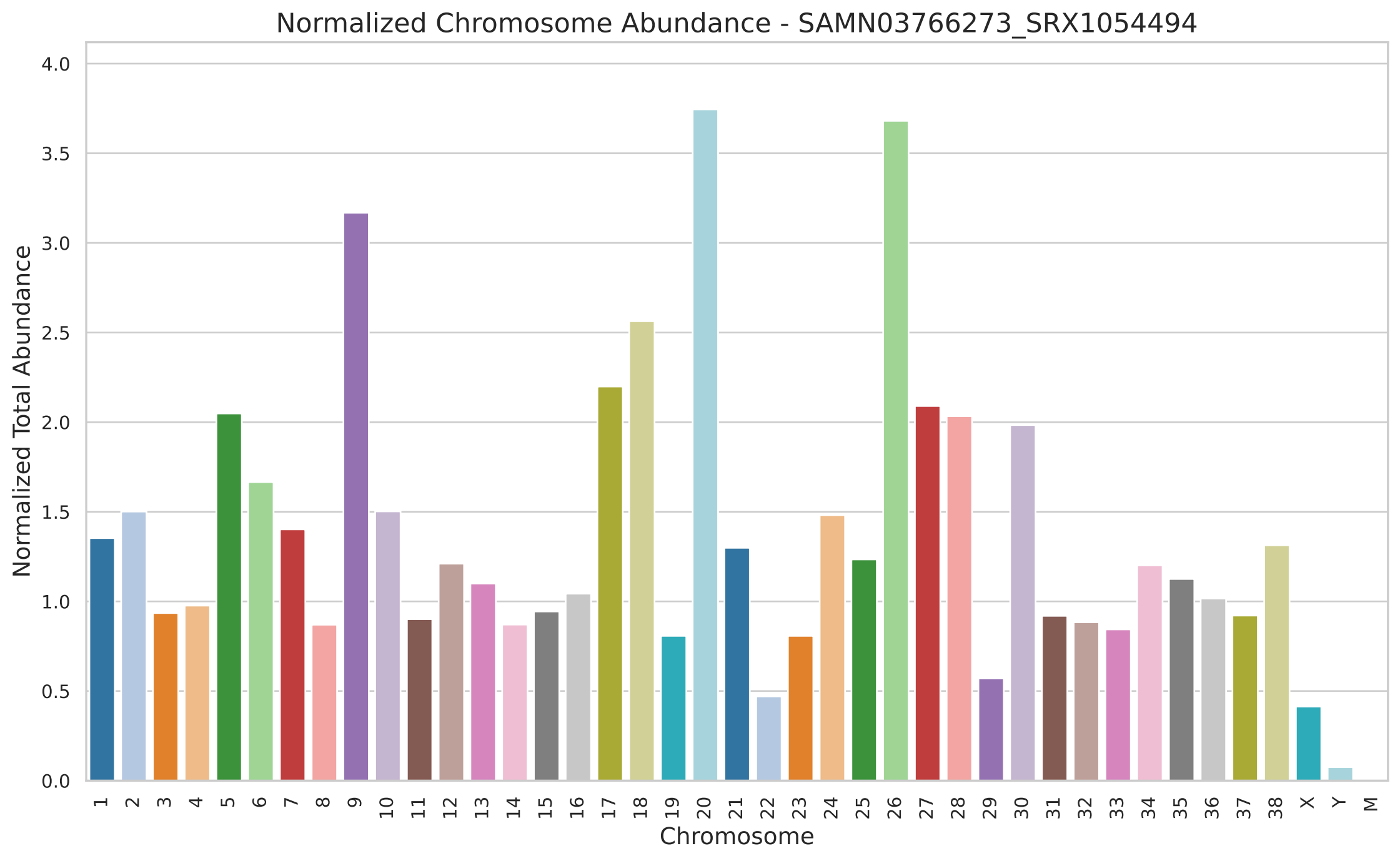

Normalized Chromosome Abundance - SAMN03436269_SRX967497
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

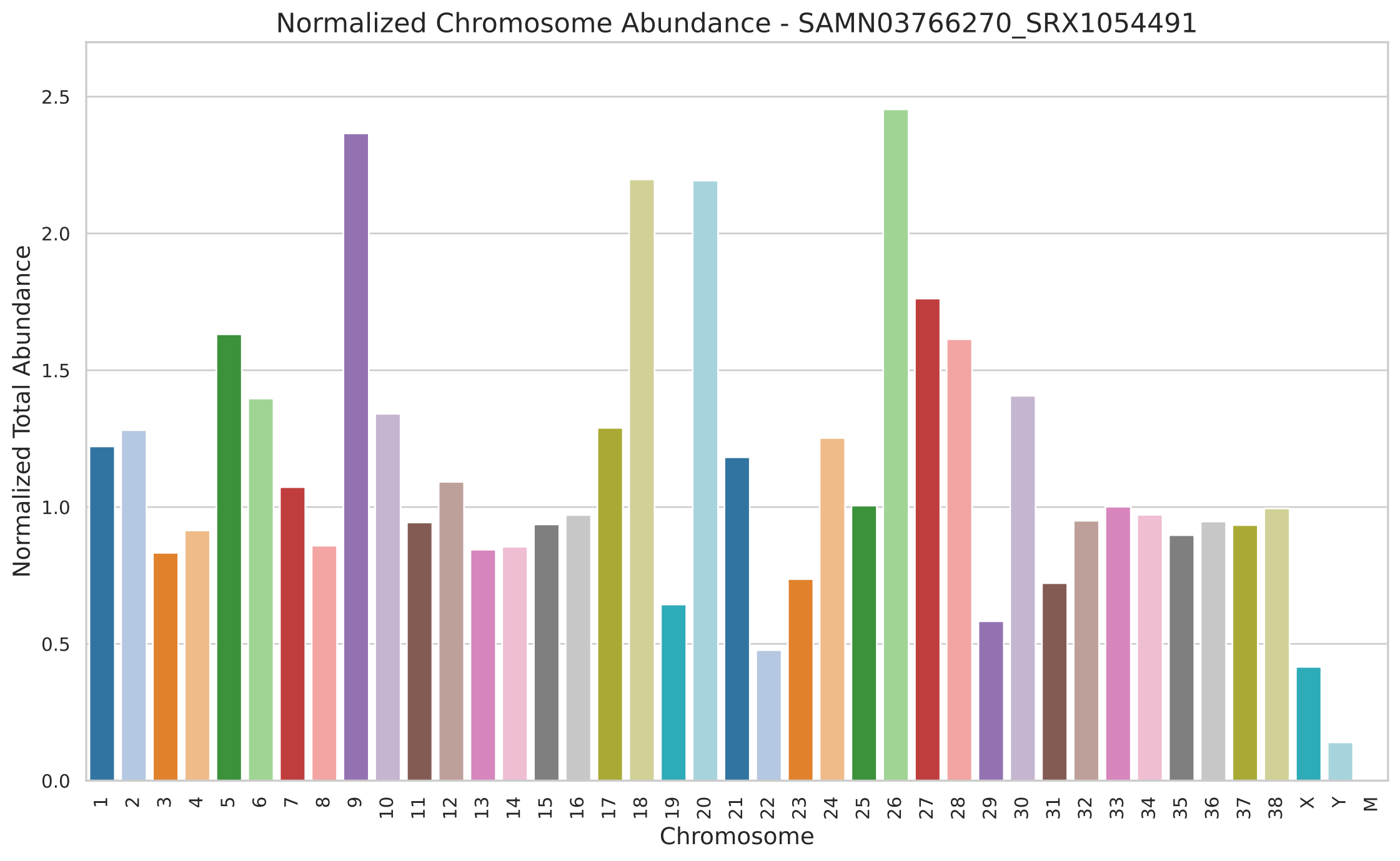

Normalized Chromosome Abundance - SAMN03436512_SRX967552
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

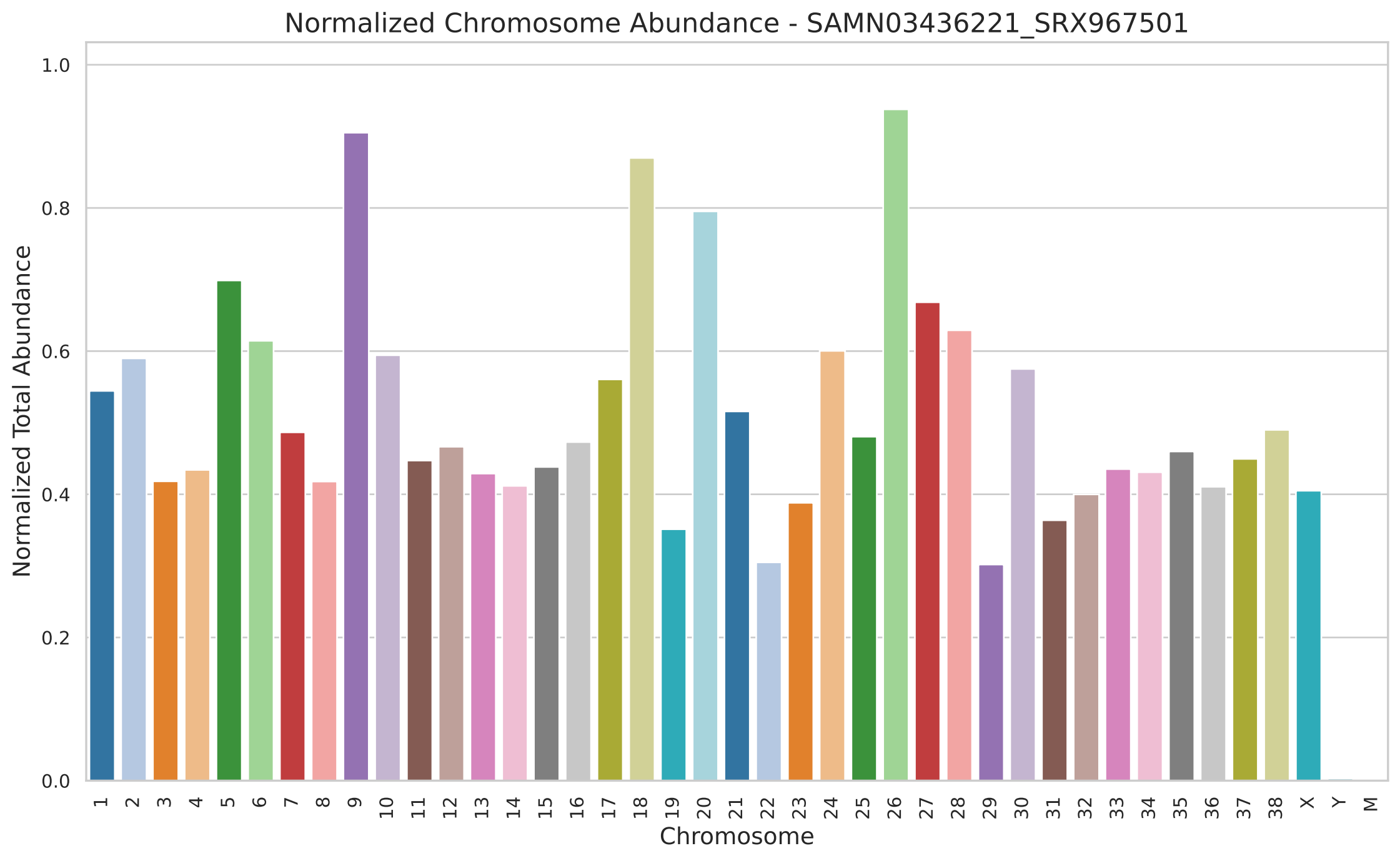

Normalized Chromosome Abundance - SAMN03766284_SRX1054508
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

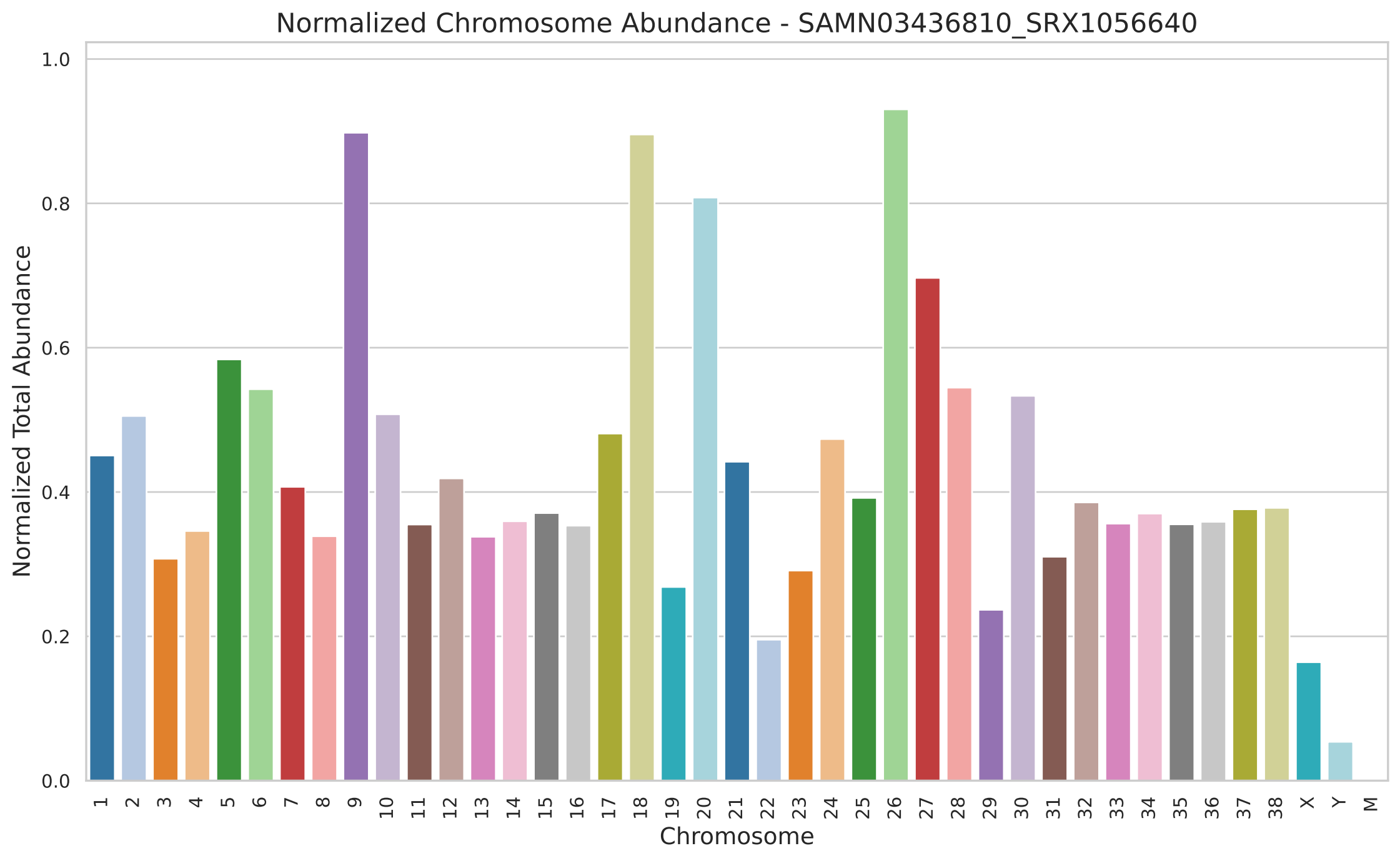

Normalized Chromosome Abundance - SAMN03732774_SRX1037424
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

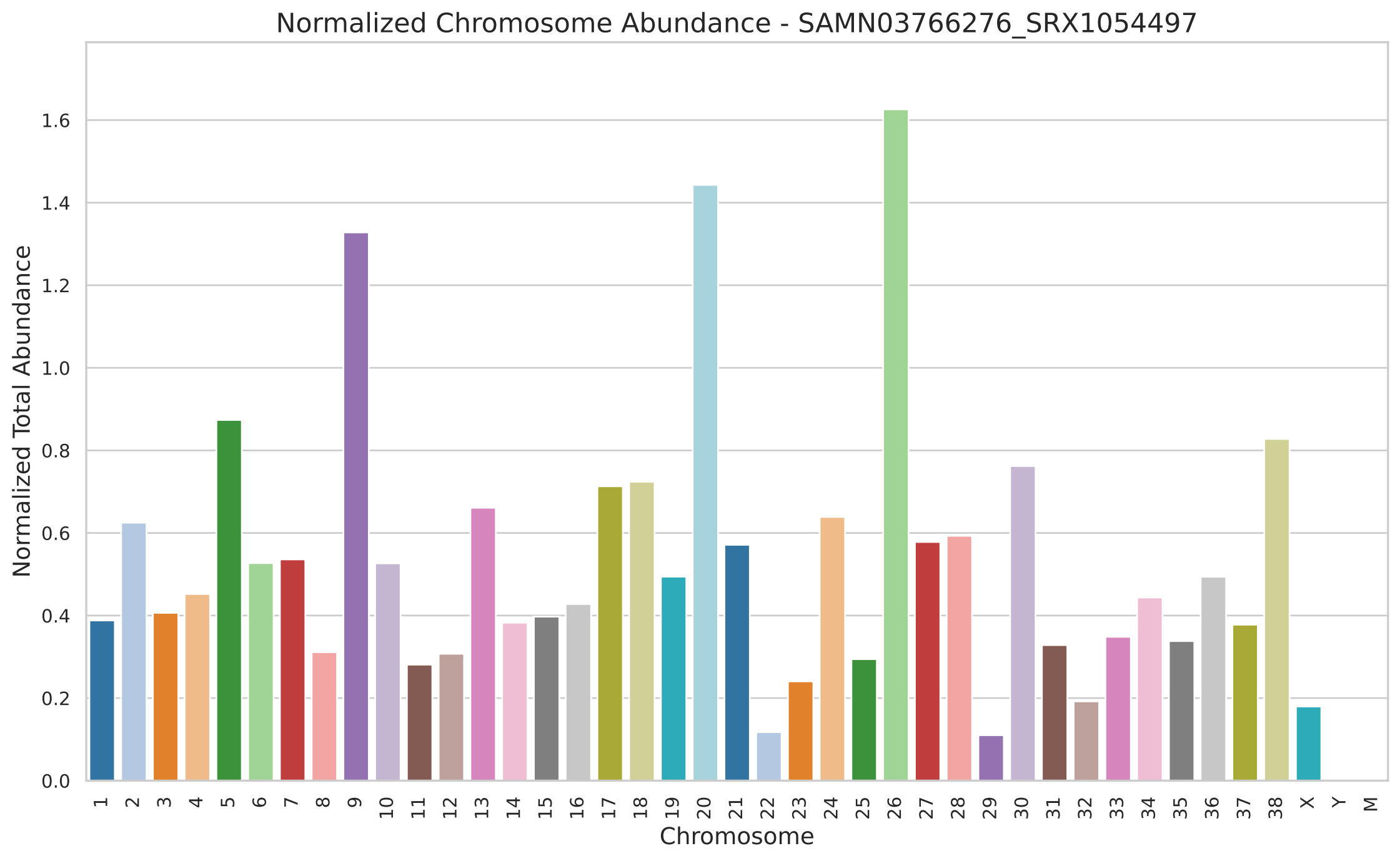

Normalized Chromosome Abundance - SAMN03436852_SRX967555
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

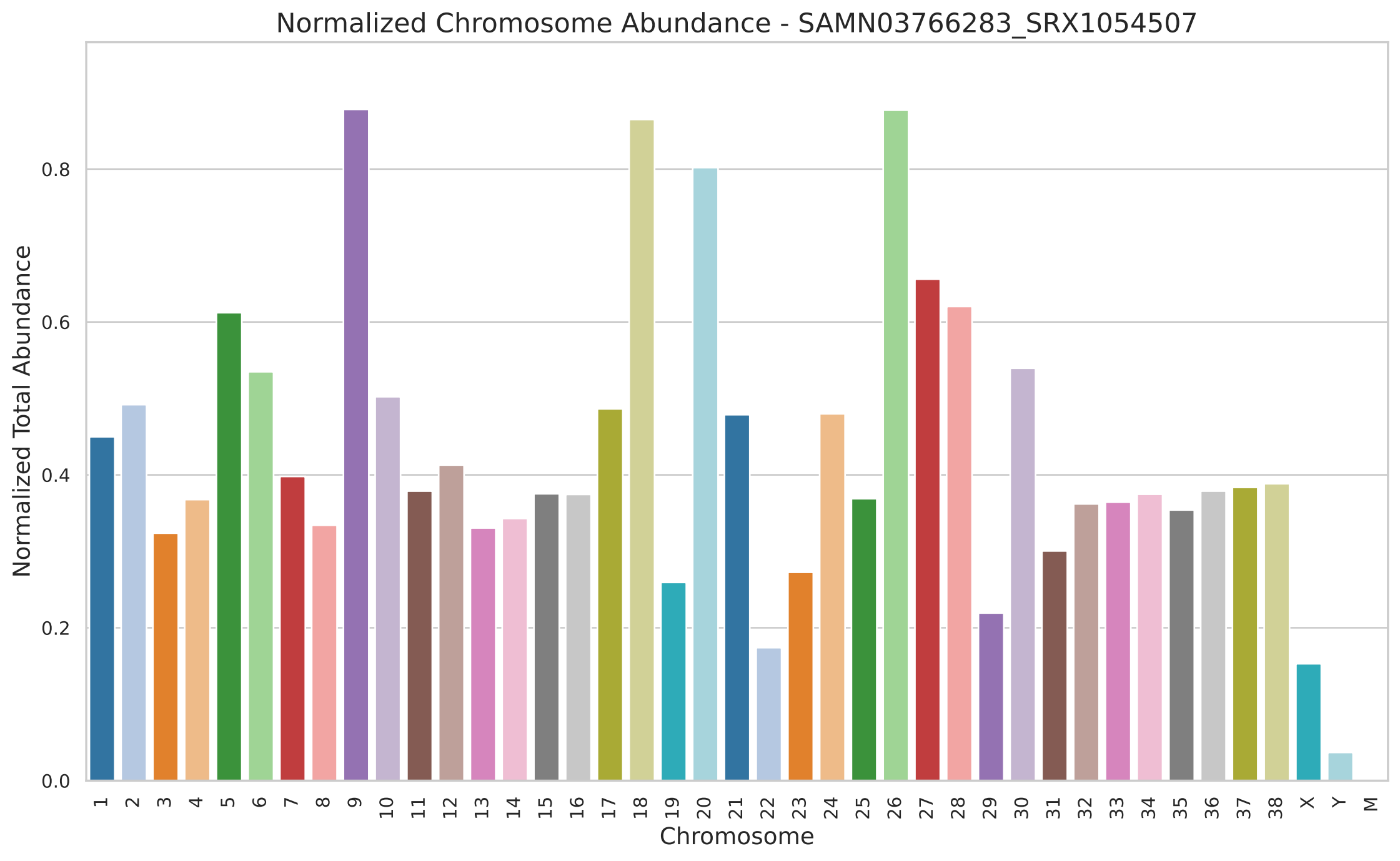

Normalized Chromosome Abundance - SAMN03766273_SRX1054494
Normalized Total Abundance
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

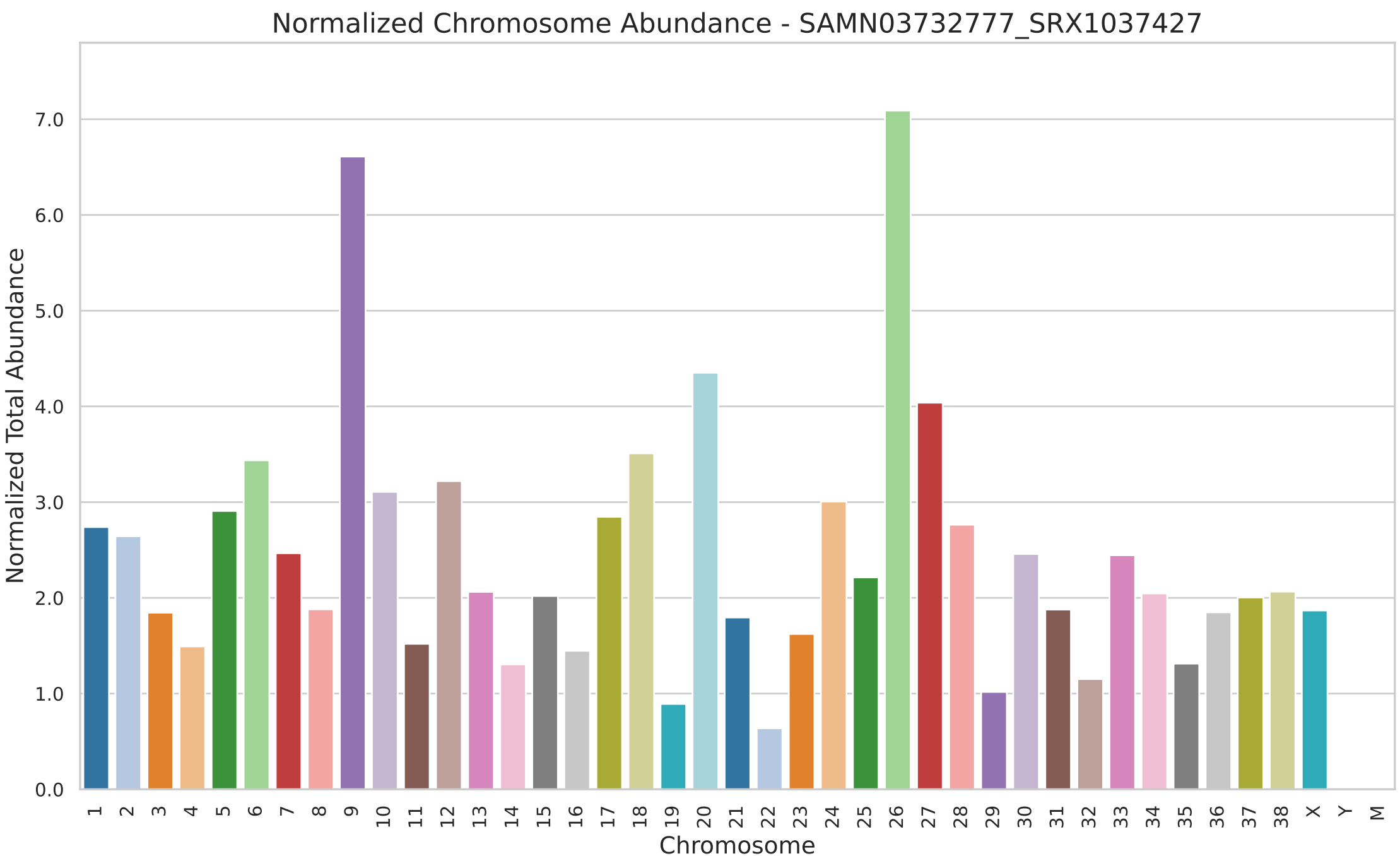

Normalized Chromosome Abundance - SAMN03766270_SRX1054491
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

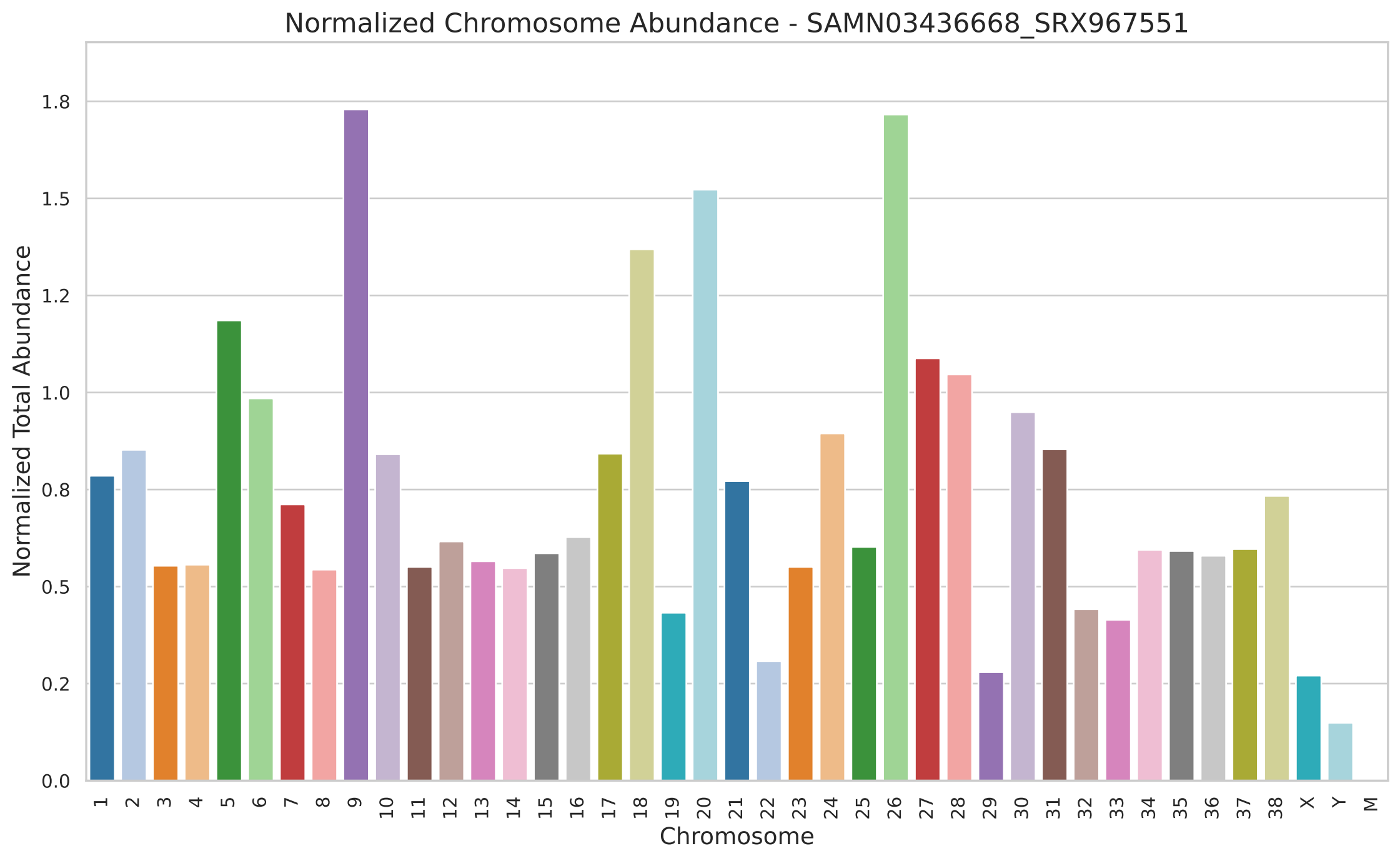

Normalized Chromosome Abundance - SAMN03436221_SRX967501
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

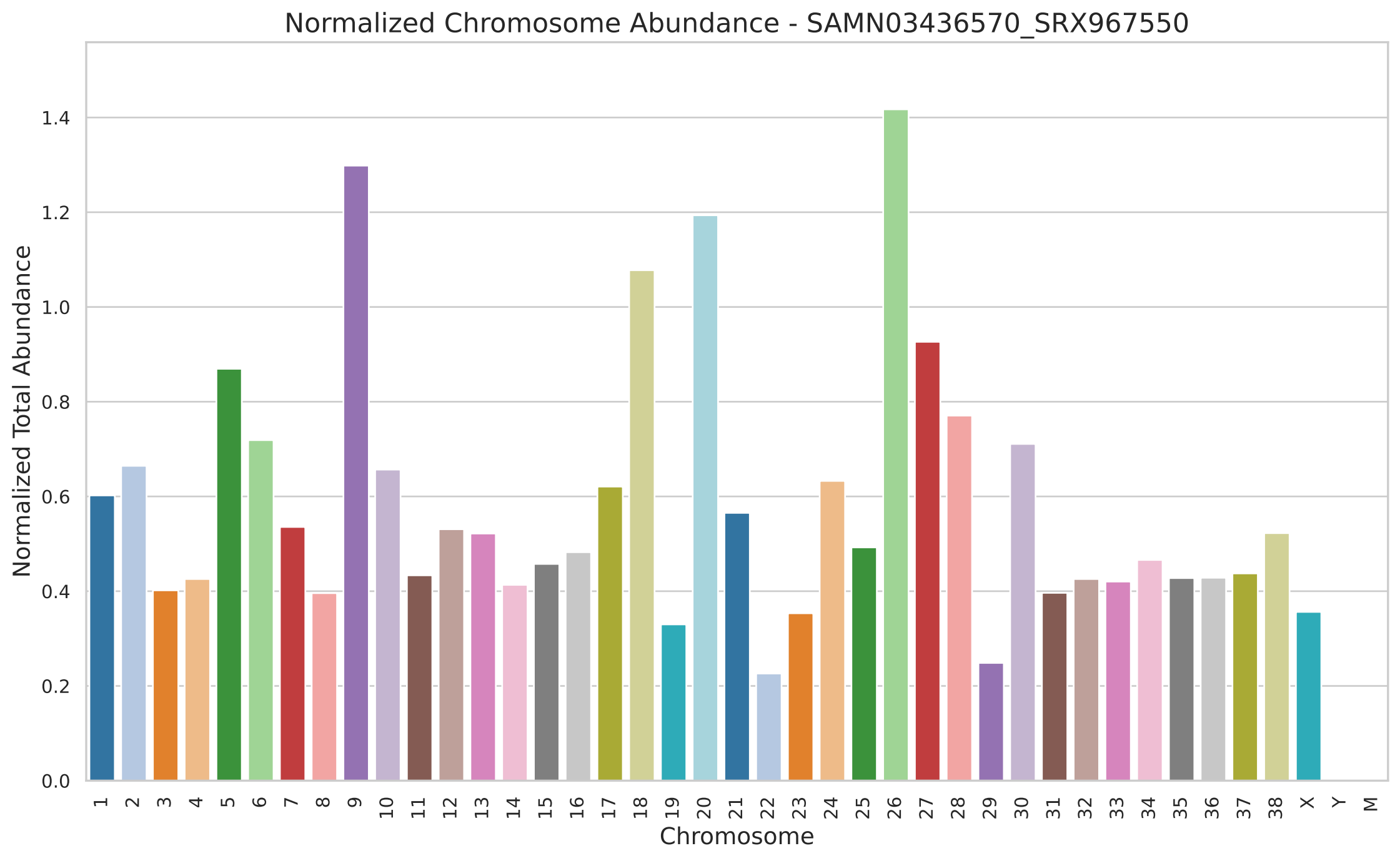

Normalized Chromosome Abundance - SAMN03436810_SRX1056640
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

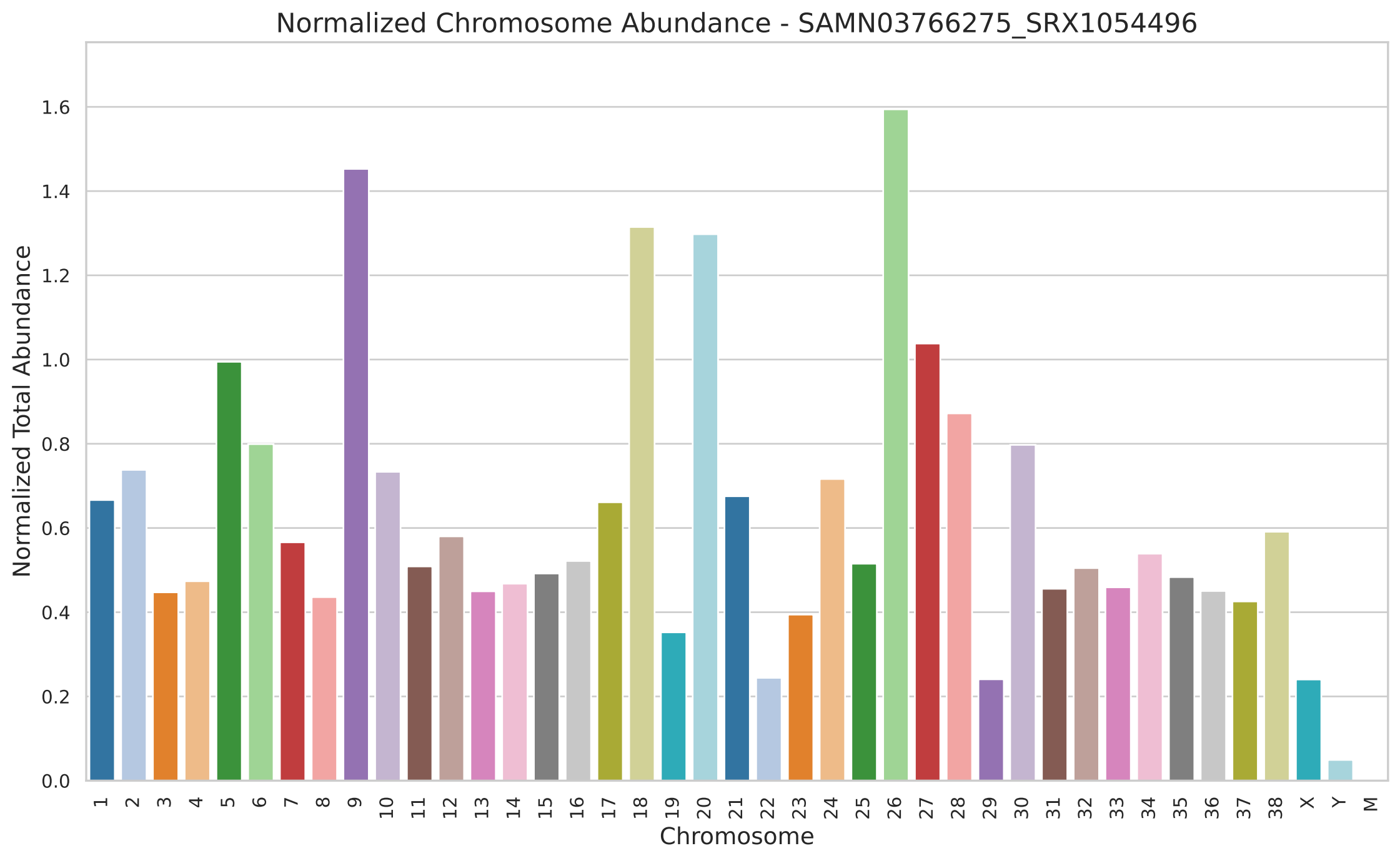

Normalized Chromosome Abundance - SAMN03766276_SRX1054497
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

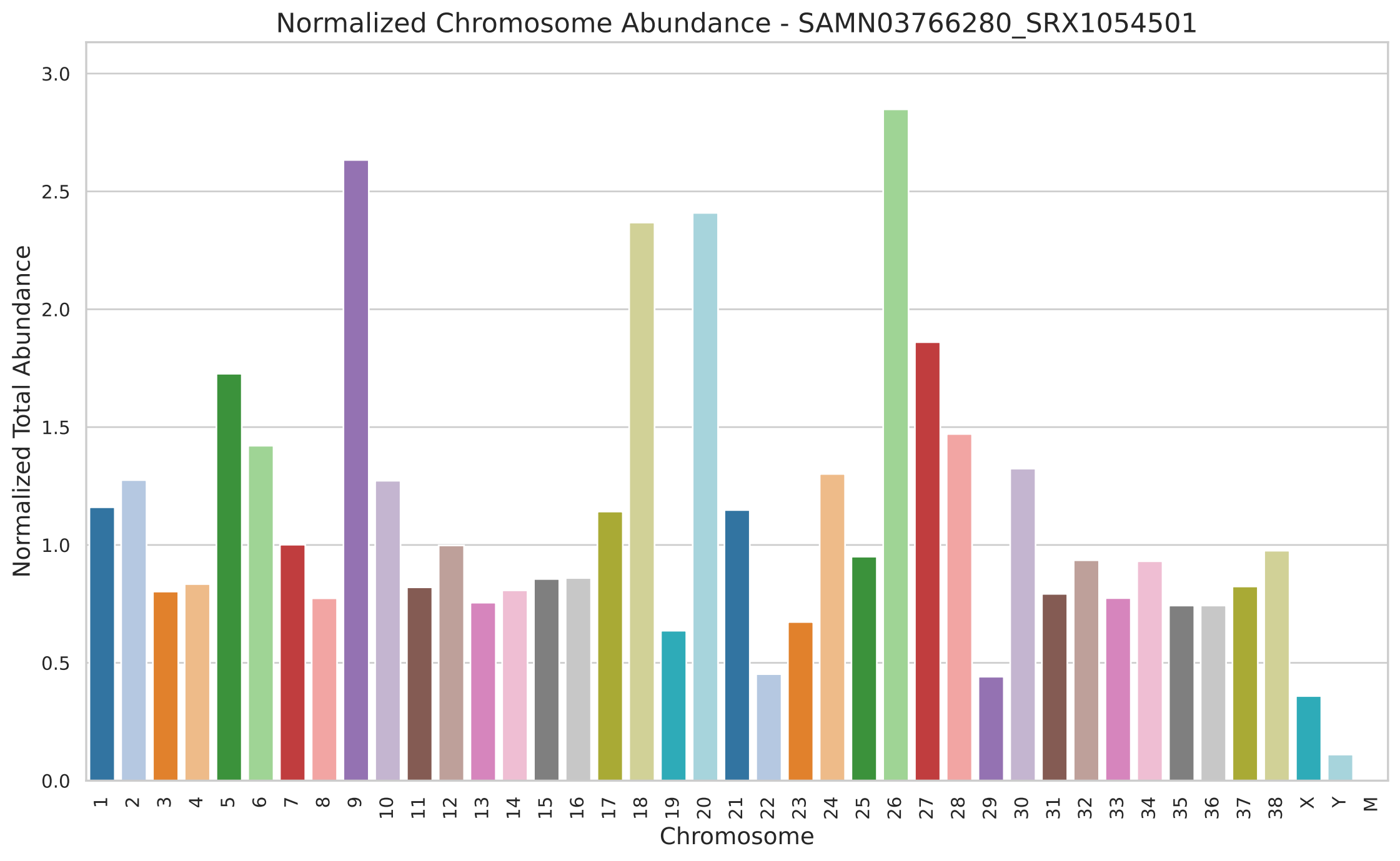

Normalized Chromosome Abundance - SAMN03766283_SRX1054507
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

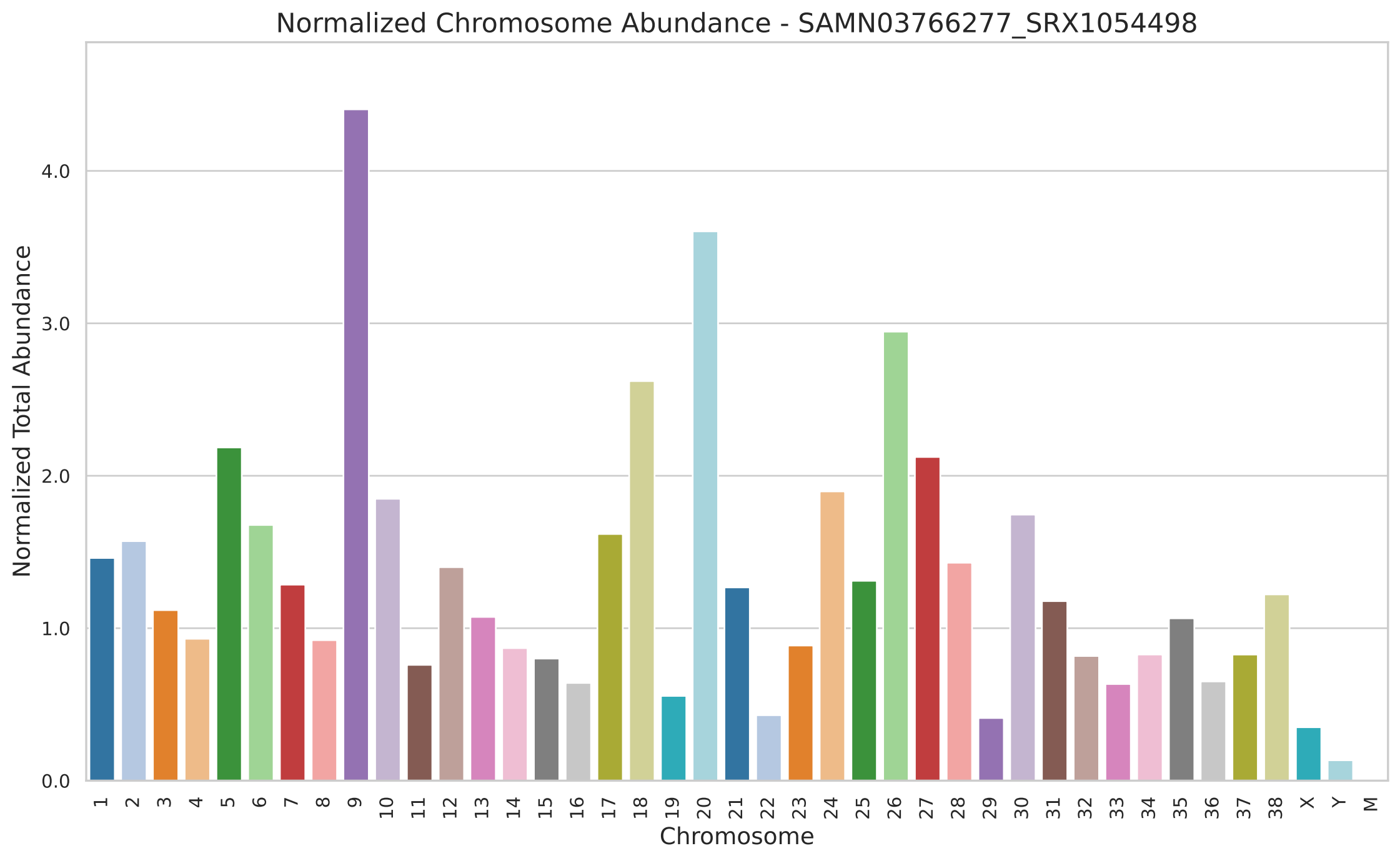

Normalized Chromosome Abundance - SAMN03732777_SRX1037427
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

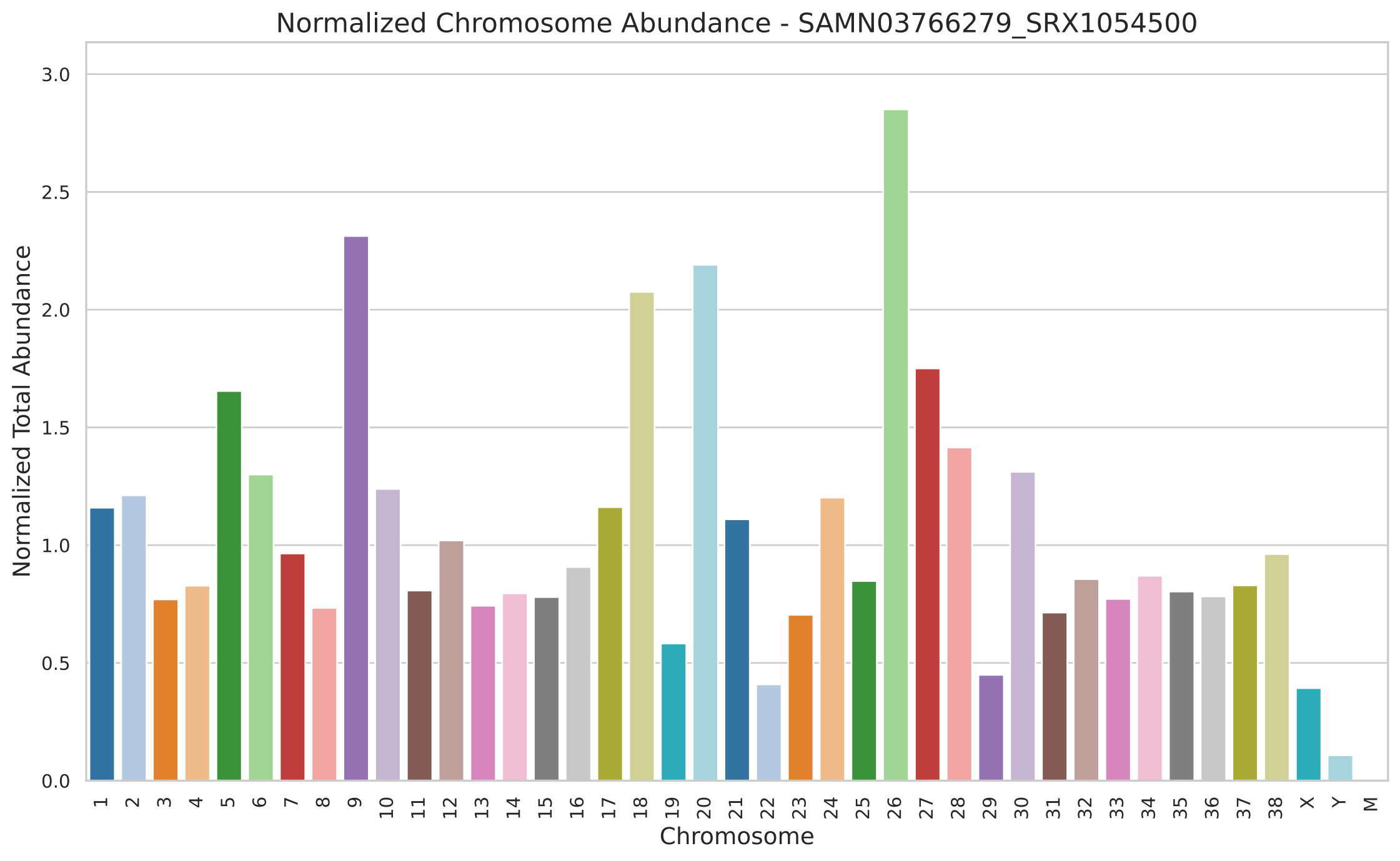

Normalized Chromosome Abundance - SAMN03436668_SRX967551
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

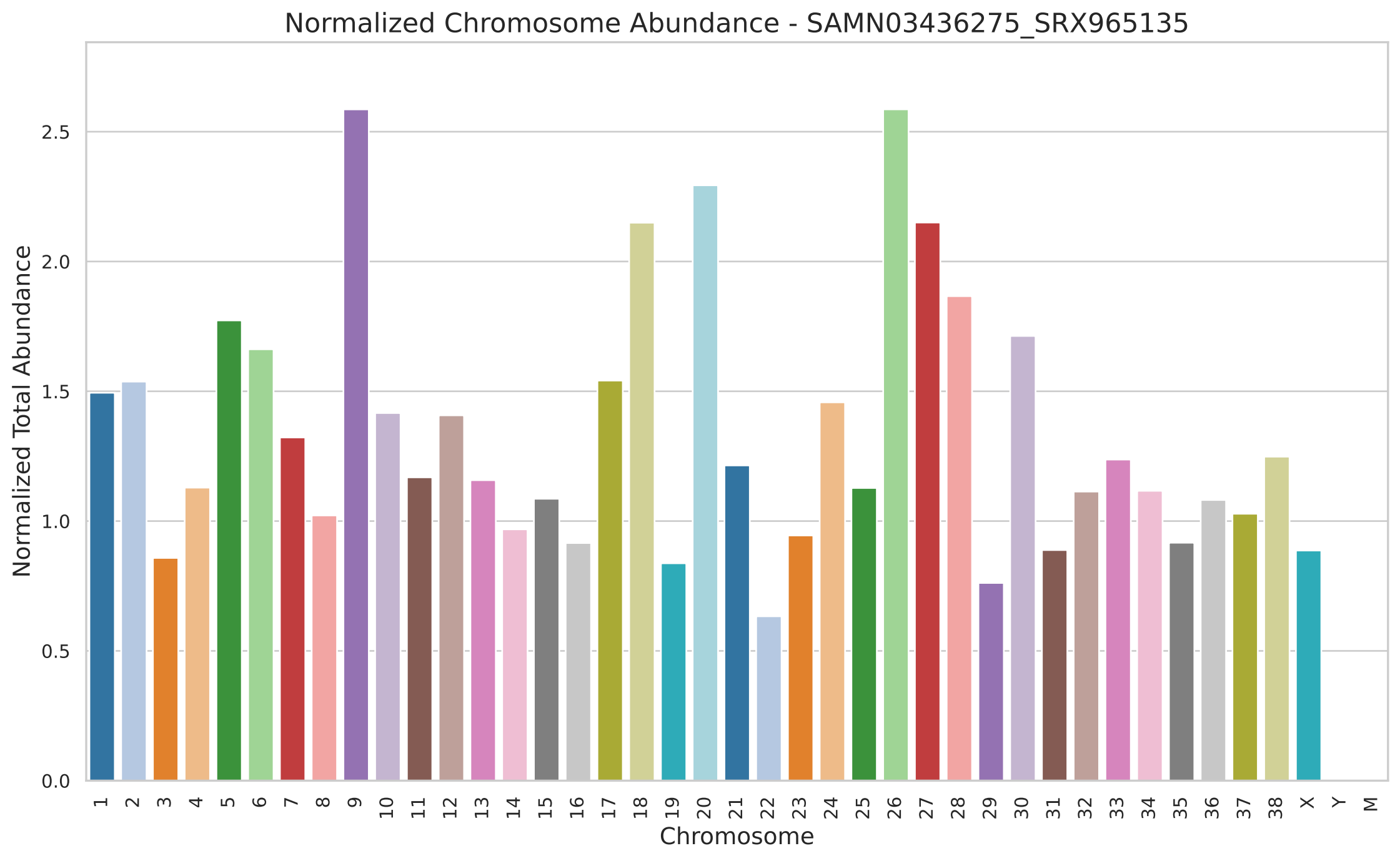

Normalized Chromosome Abundance - SAMN03436570_SRX967550
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

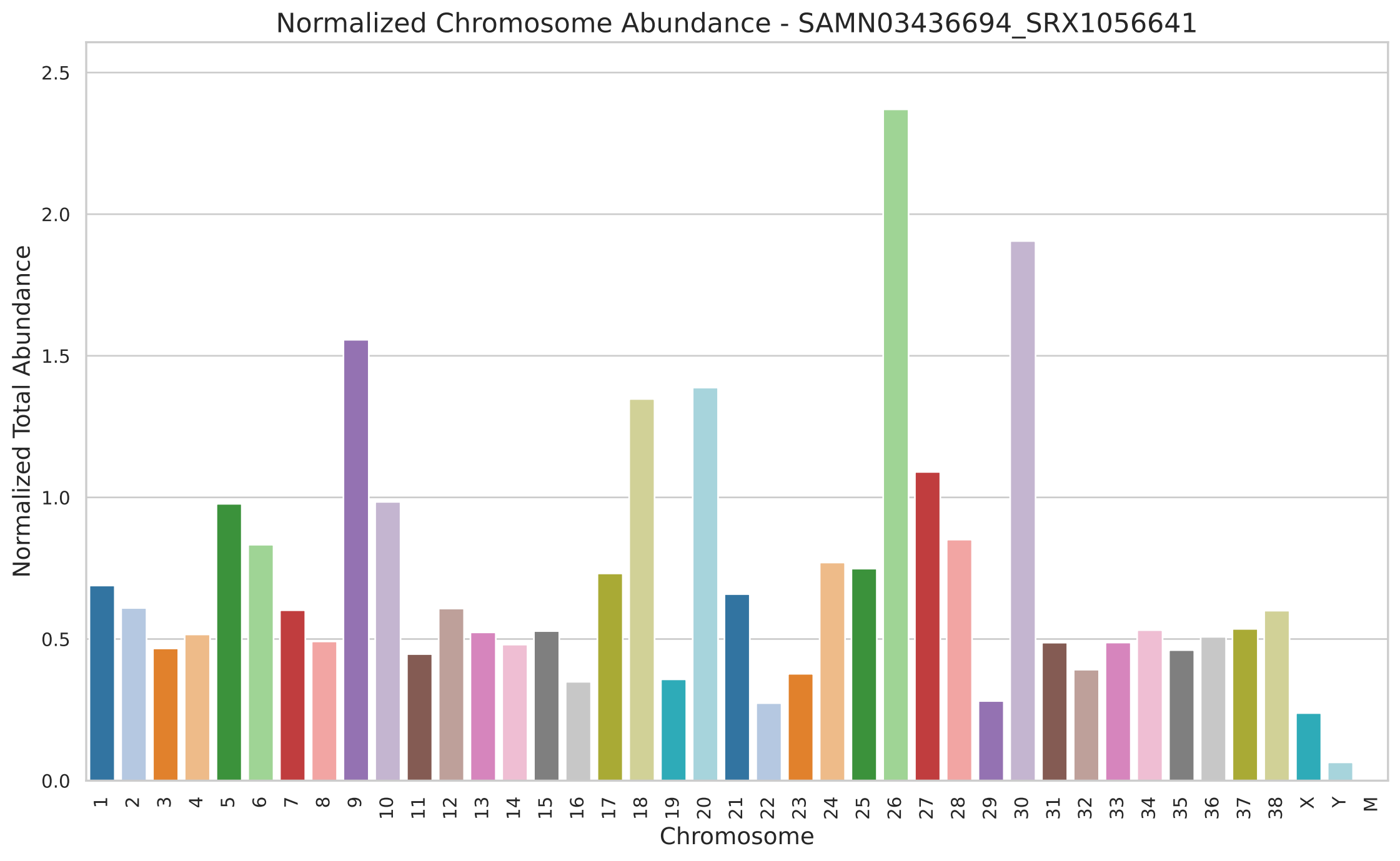

Normalized Chromosome Abundance - SAMN03766275_SRX1054496
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

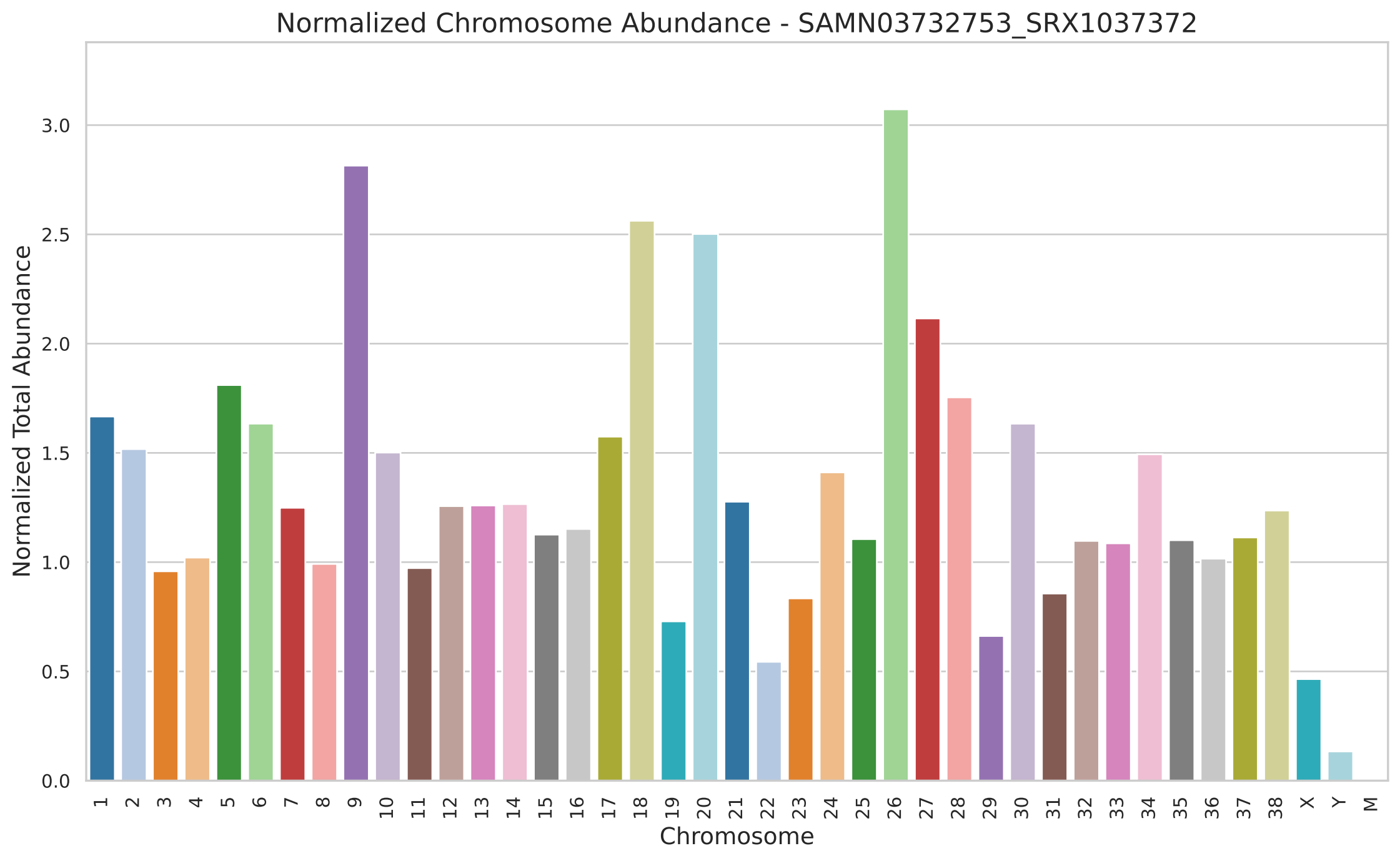

Normalized Chromosome Abundance - SAMN03766280_SRX1054501
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

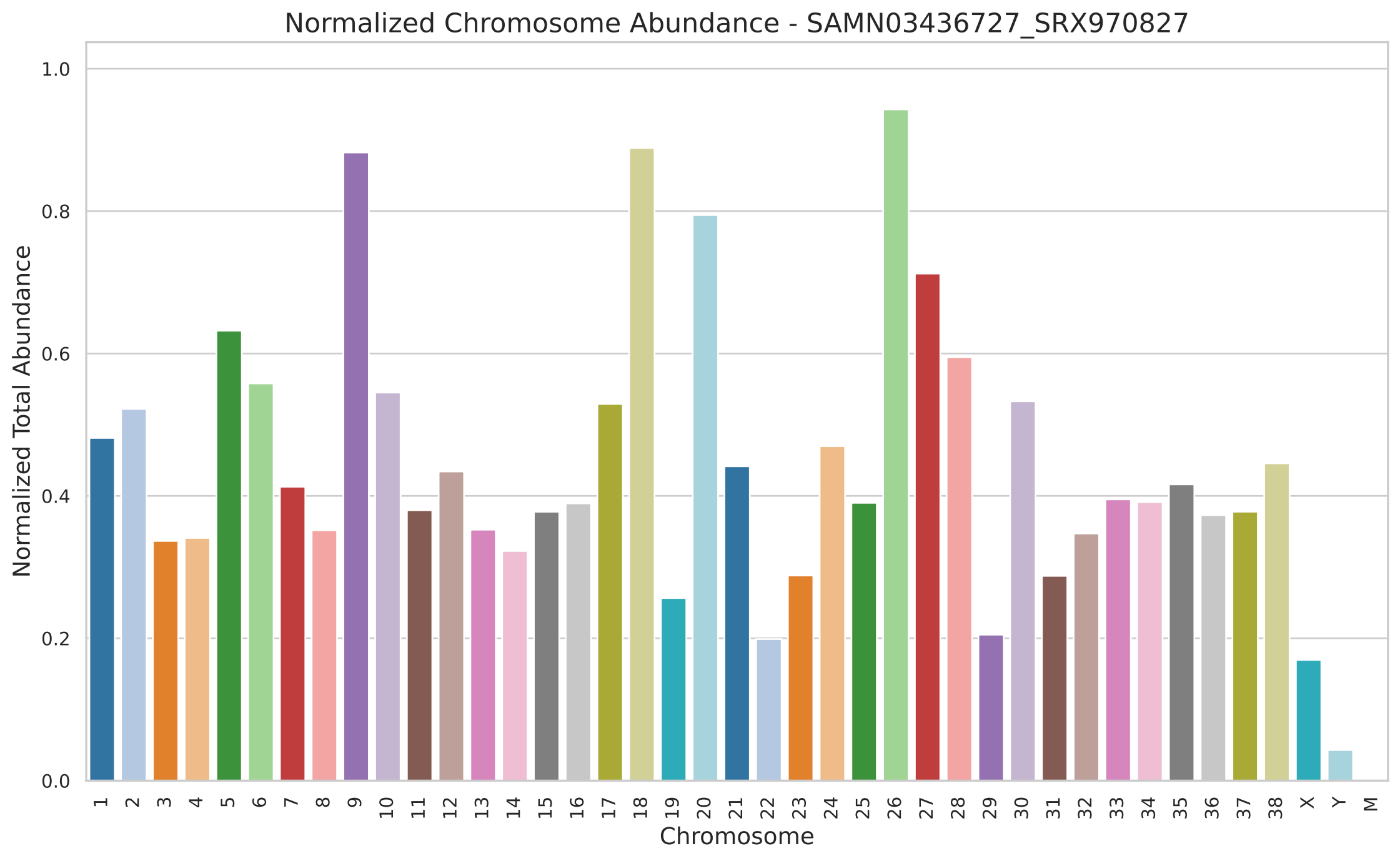

Normalized Chromosome Abundance - SAMN03766277_SRX1054498
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

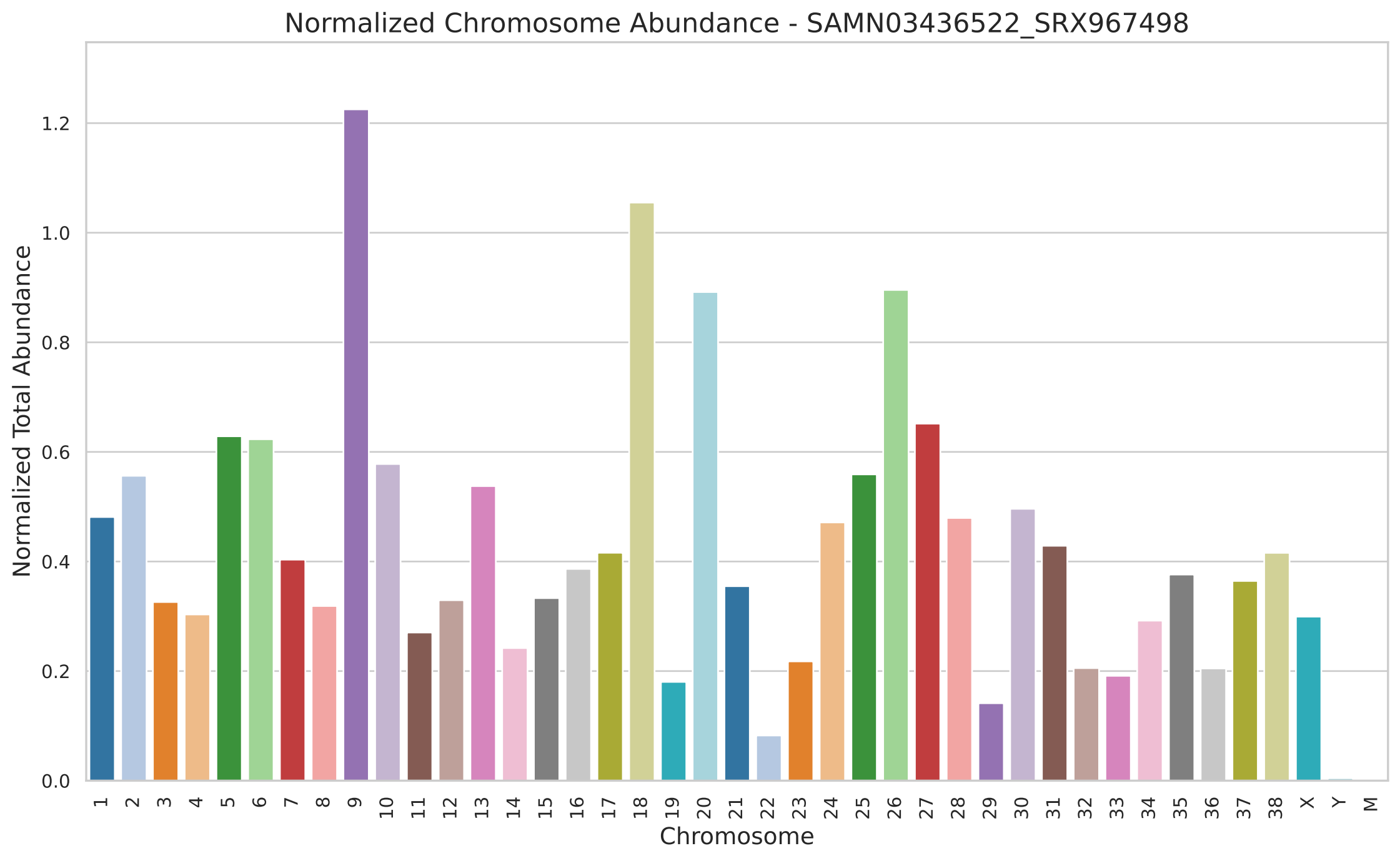

Normalized Chromosome Abundance - SAMN03766279_SRX1054500
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

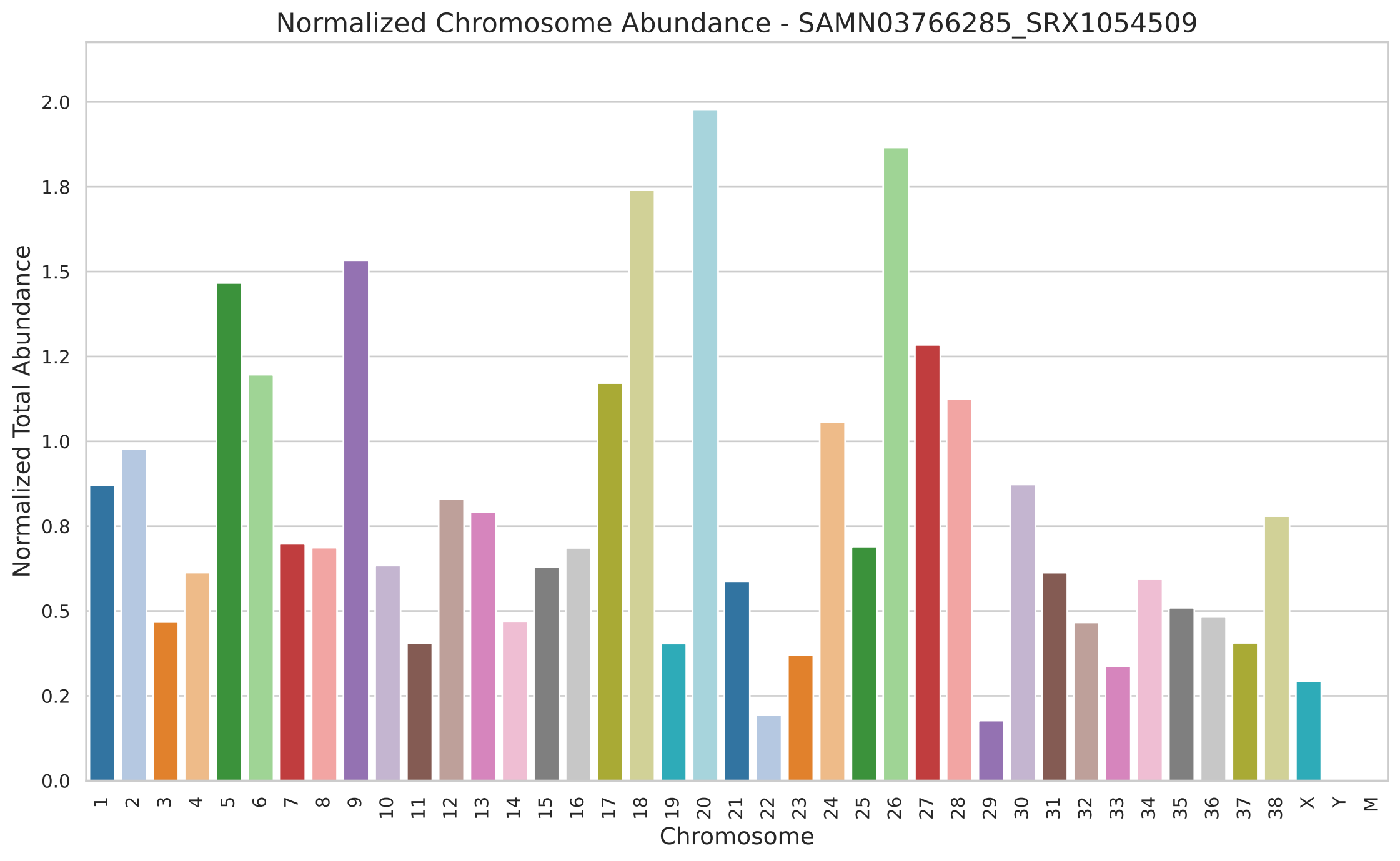

Normalized Chromosome Abundance - SAMN03436275_SRX965135
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

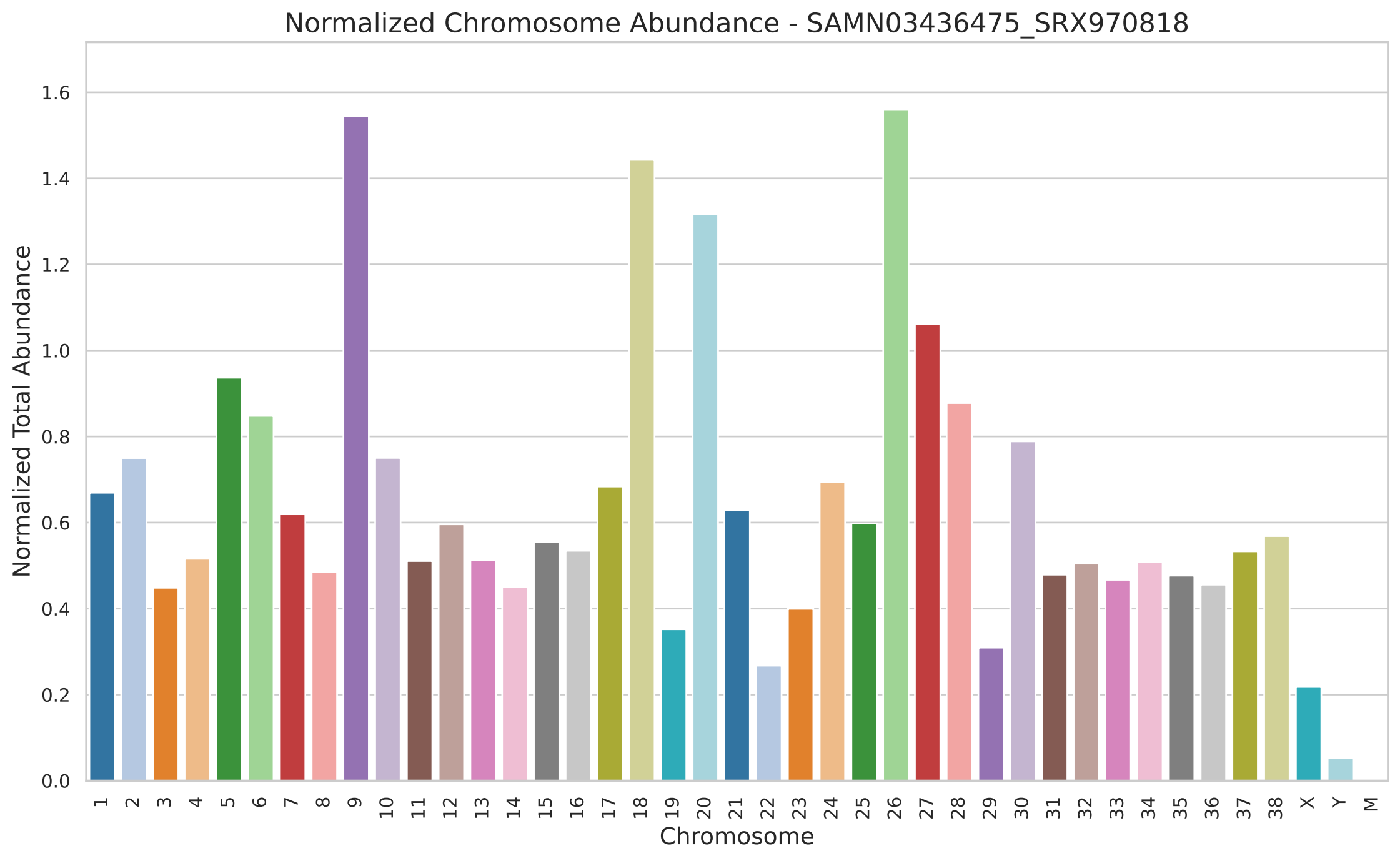

Normalized Chromosome Abundance - SAMN03436694_SRX1056641
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

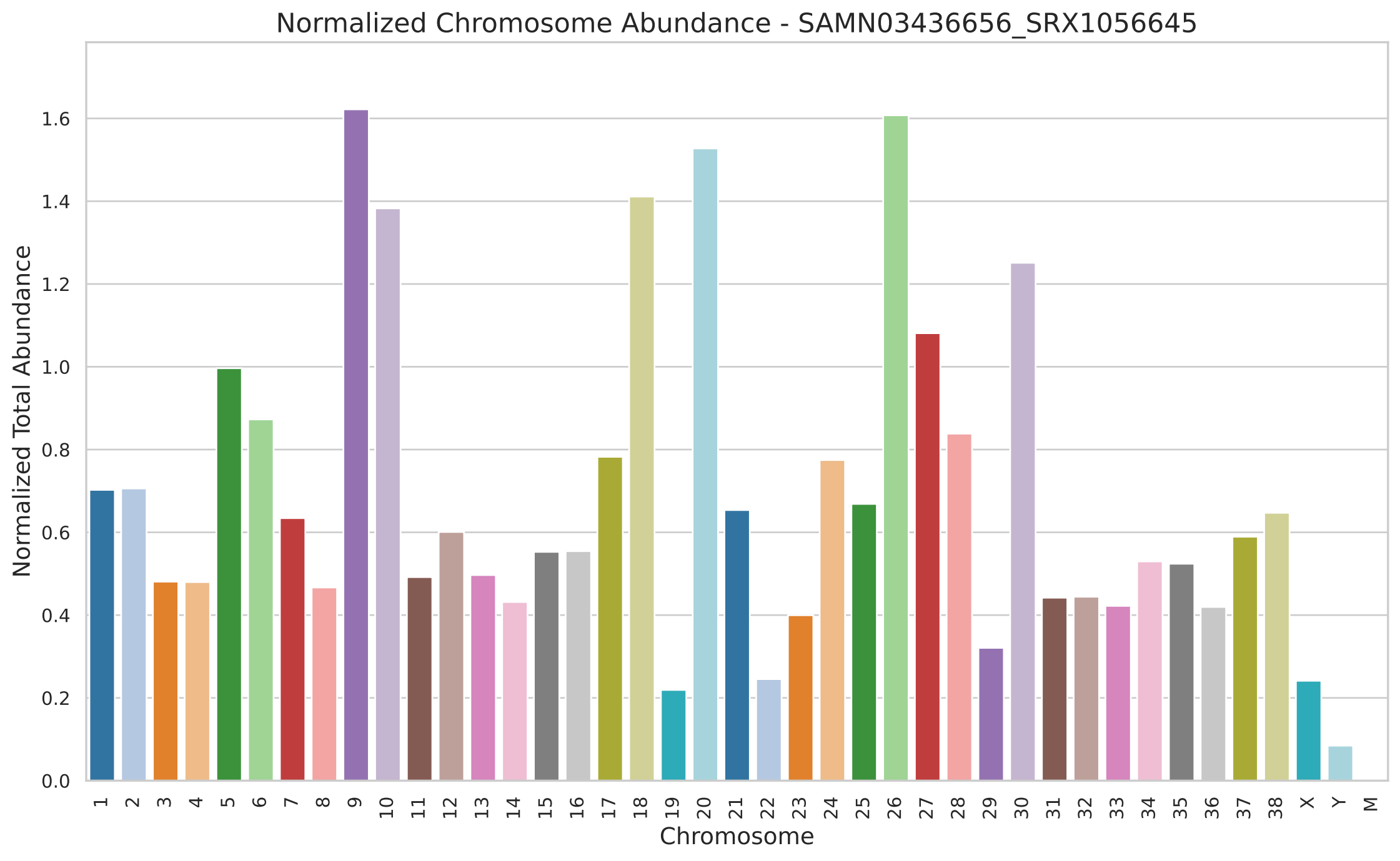

Normalized Chromosome Abundance - SAMN03732753_SRX1037372
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

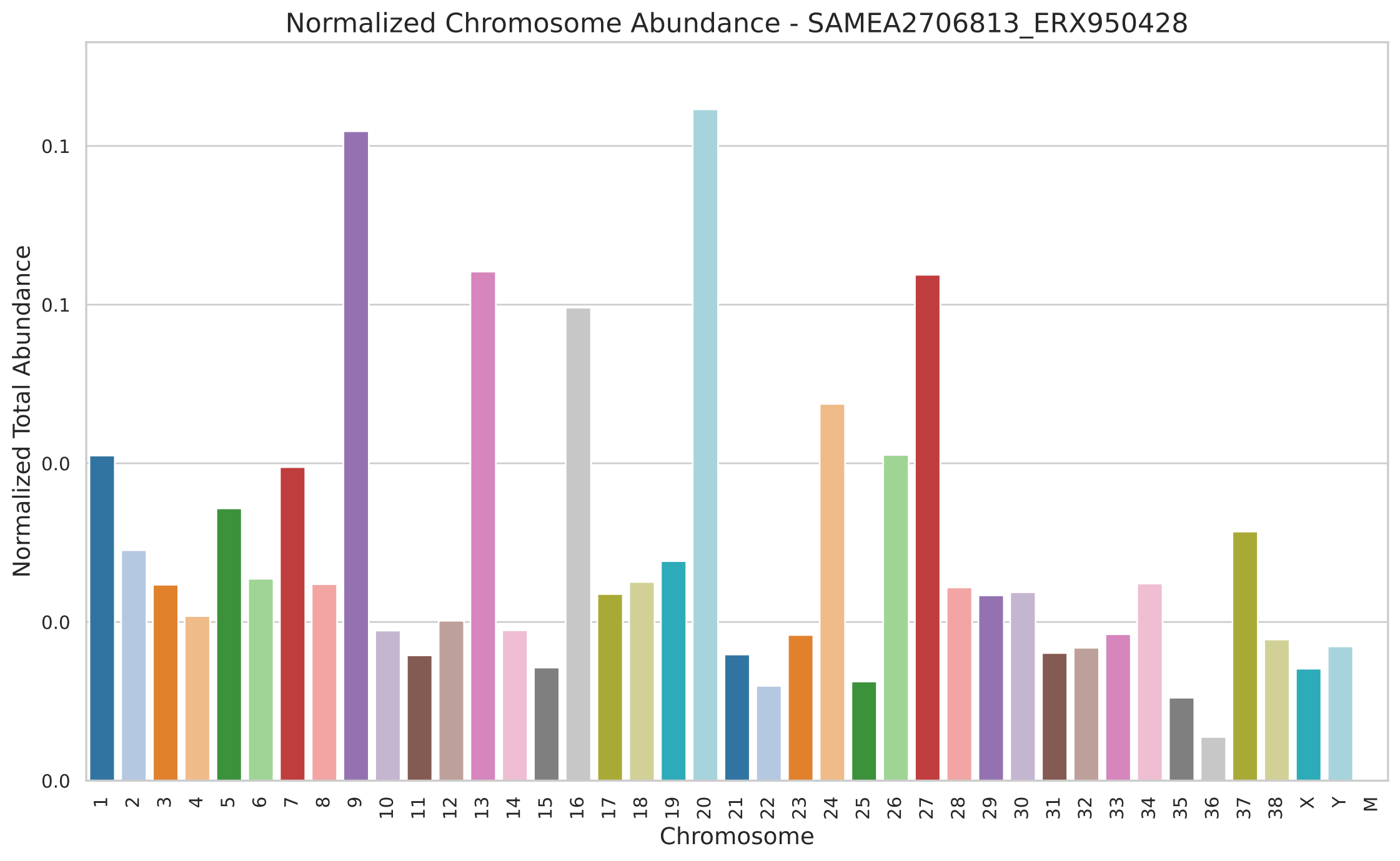

Normalized Chromosome Abundance - SAMN03436727_SRX970827
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

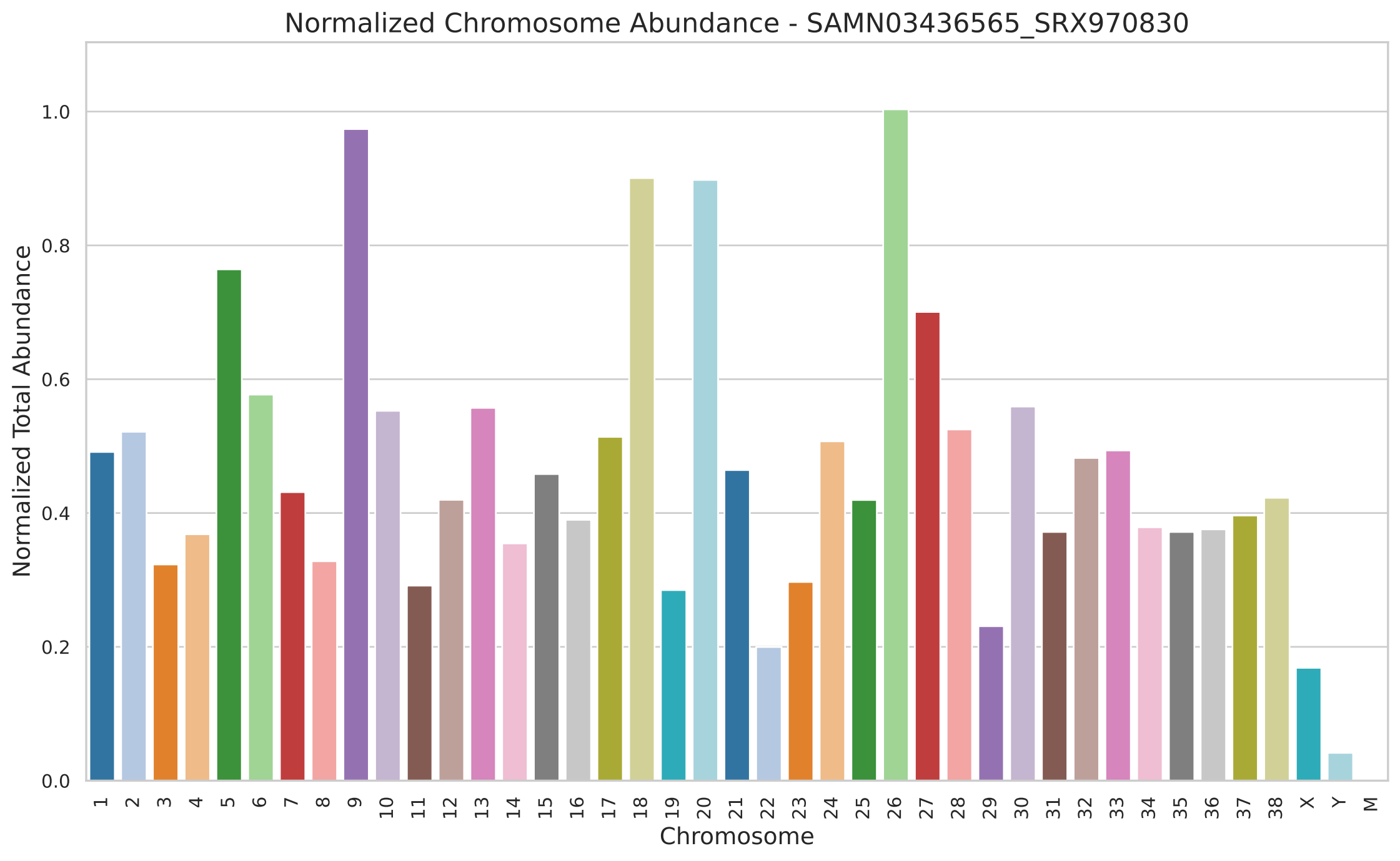

Normalized Chromosome Abundance - SAMN03436522_SRX967498
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

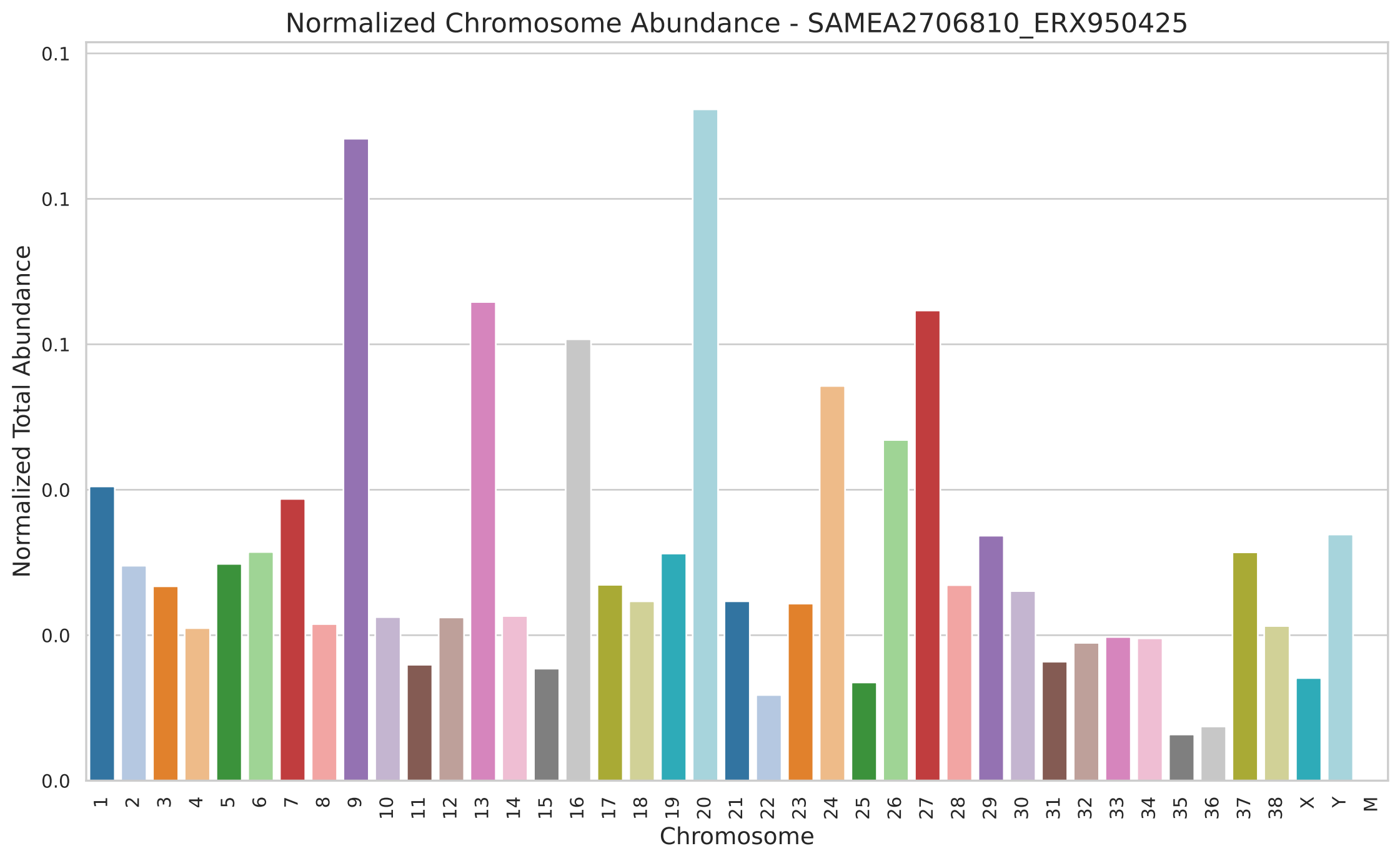

Normalized Chromosome Abundance - SAMN03766285_SRX1054509
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

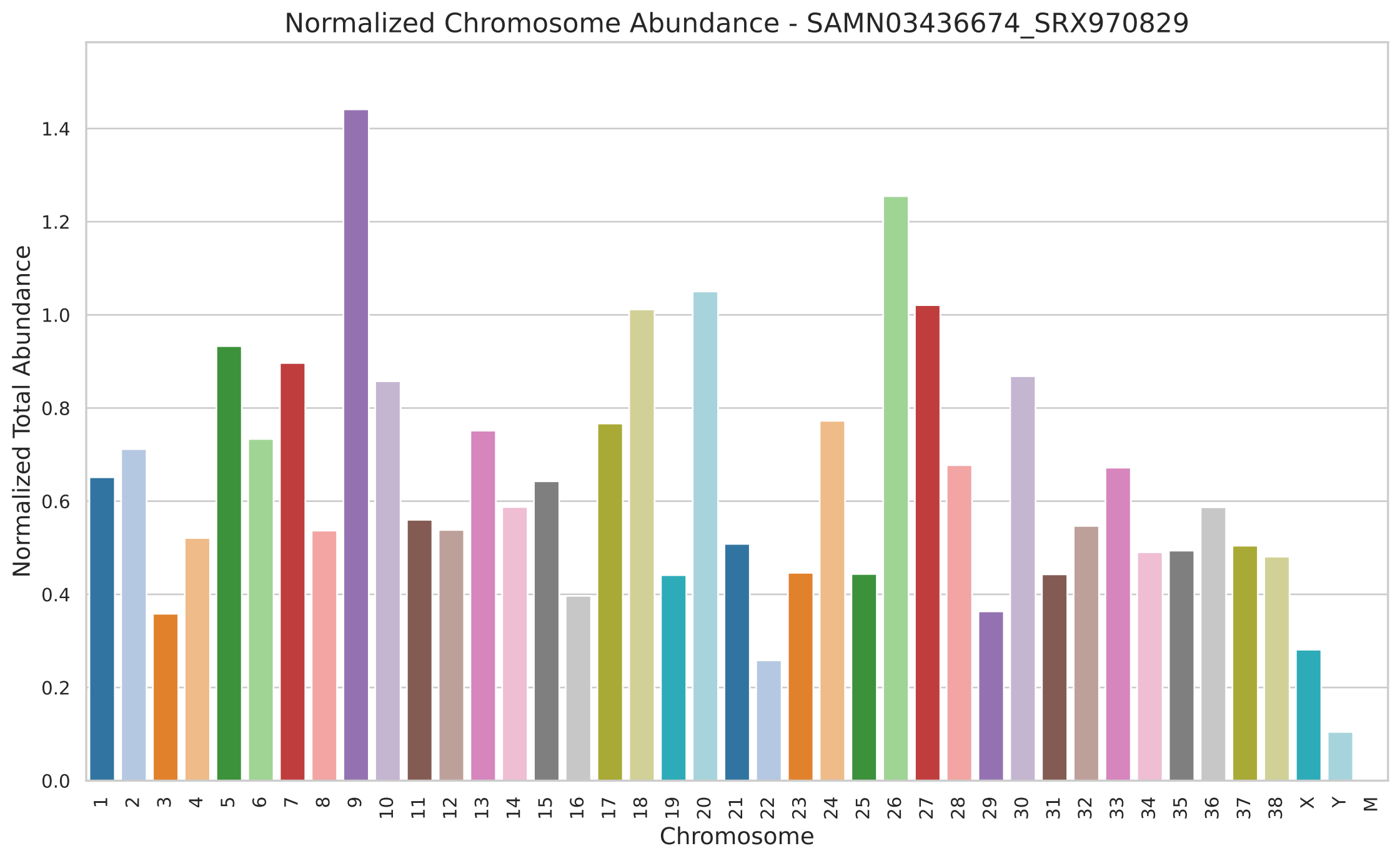

Normalized Chromosome Abundance - SAMN03436475_SRX970818
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

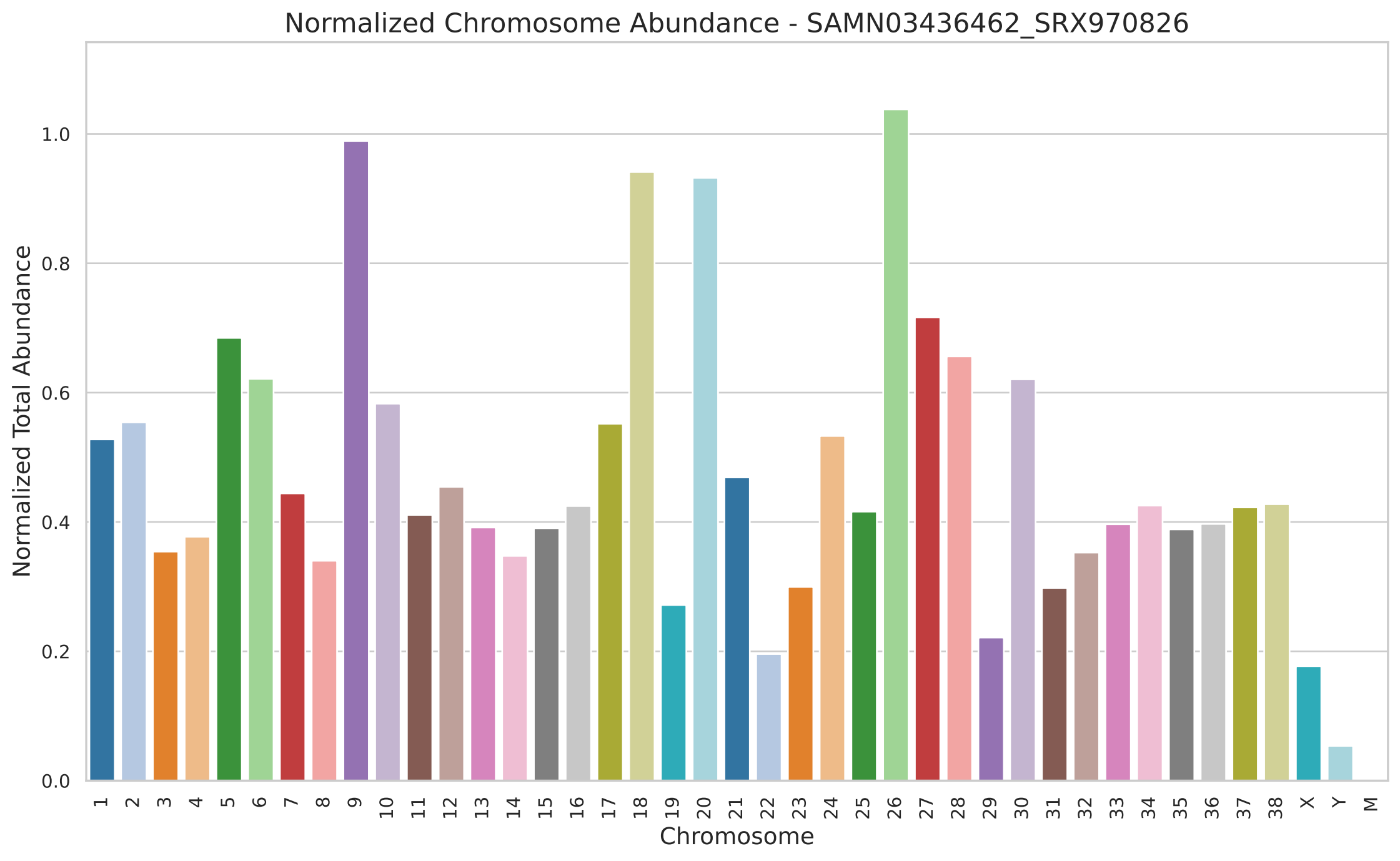

Normalized Chromosome Abundance - SAMN03436656_SRX1056645
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

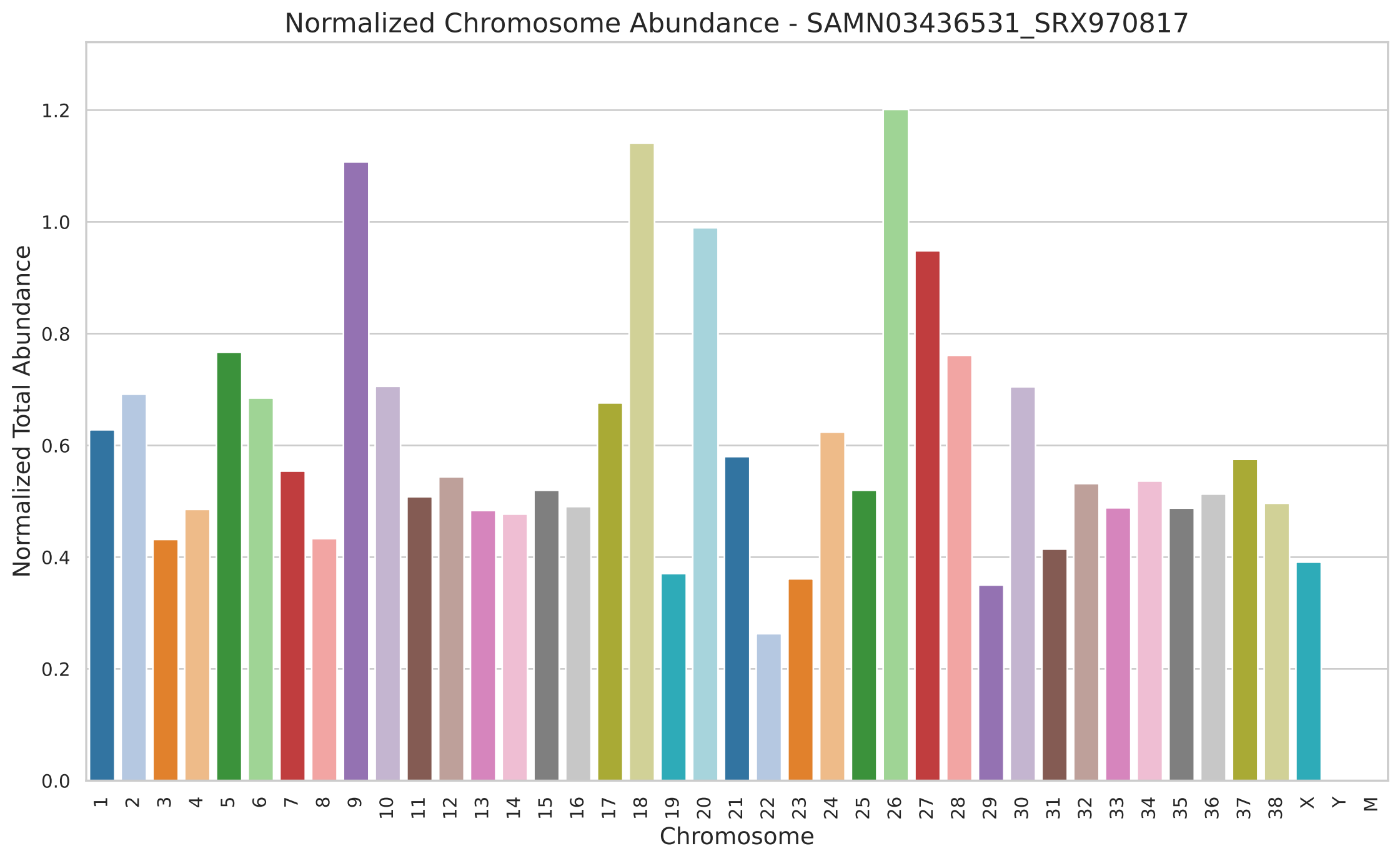

Normalized Chromosome Abundance - SAMEA2706813_ERX950428
Normalized Total Abundance
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

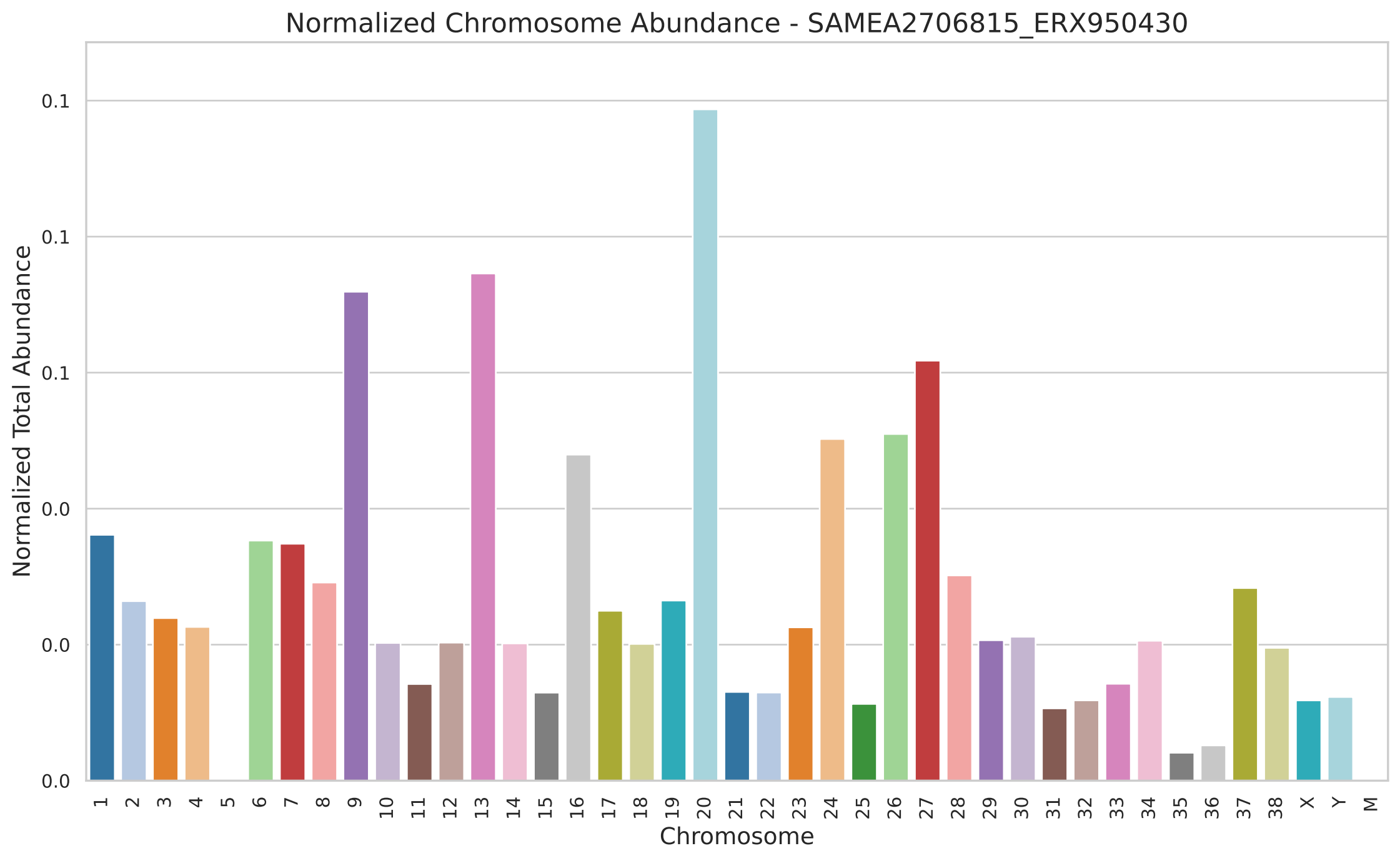

Normalized Chromosome Abundance - SAMN03436565_SRX970830
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

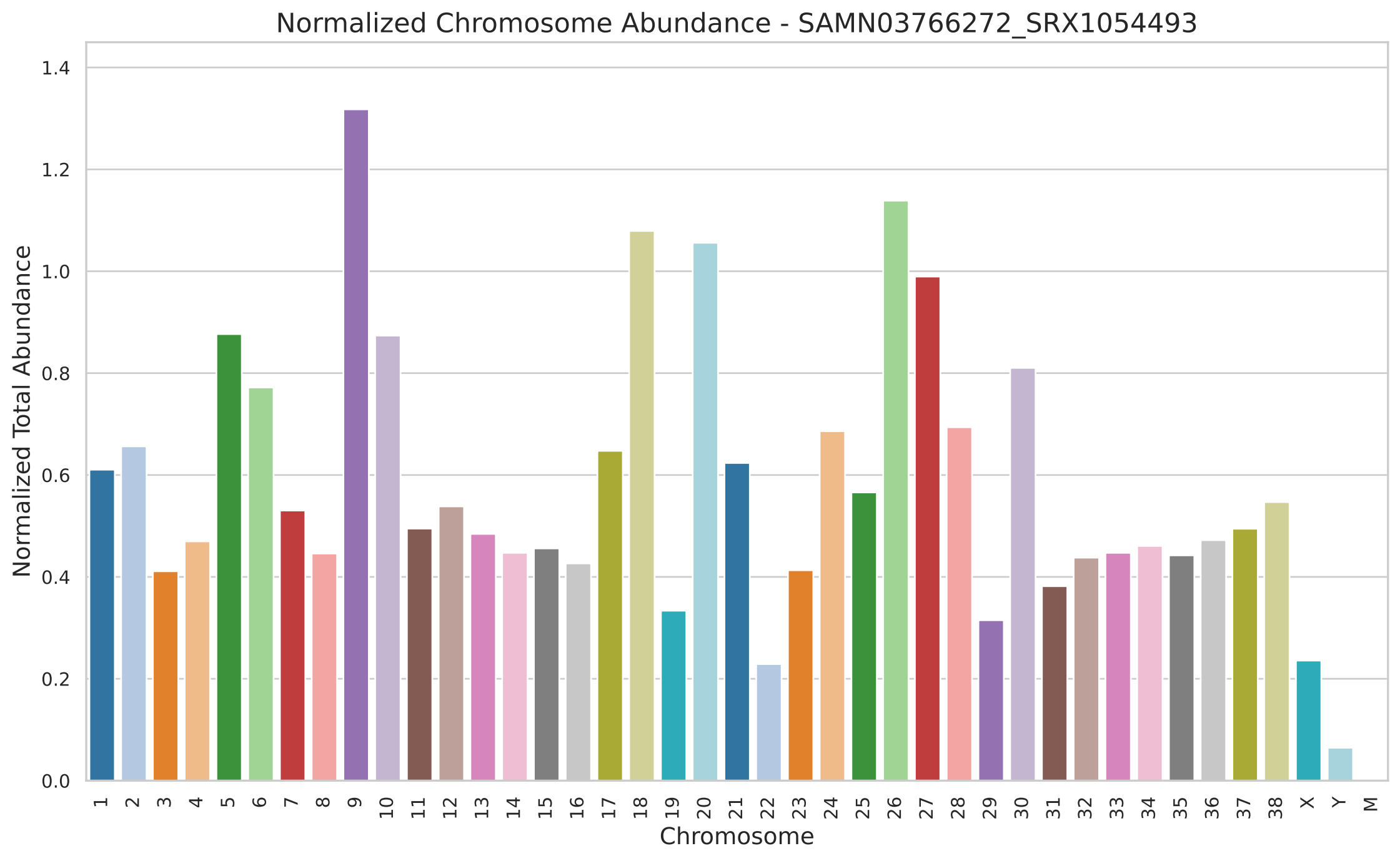

Normalized Chromosome Abundance - SAMEA2706810_ERX950425
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

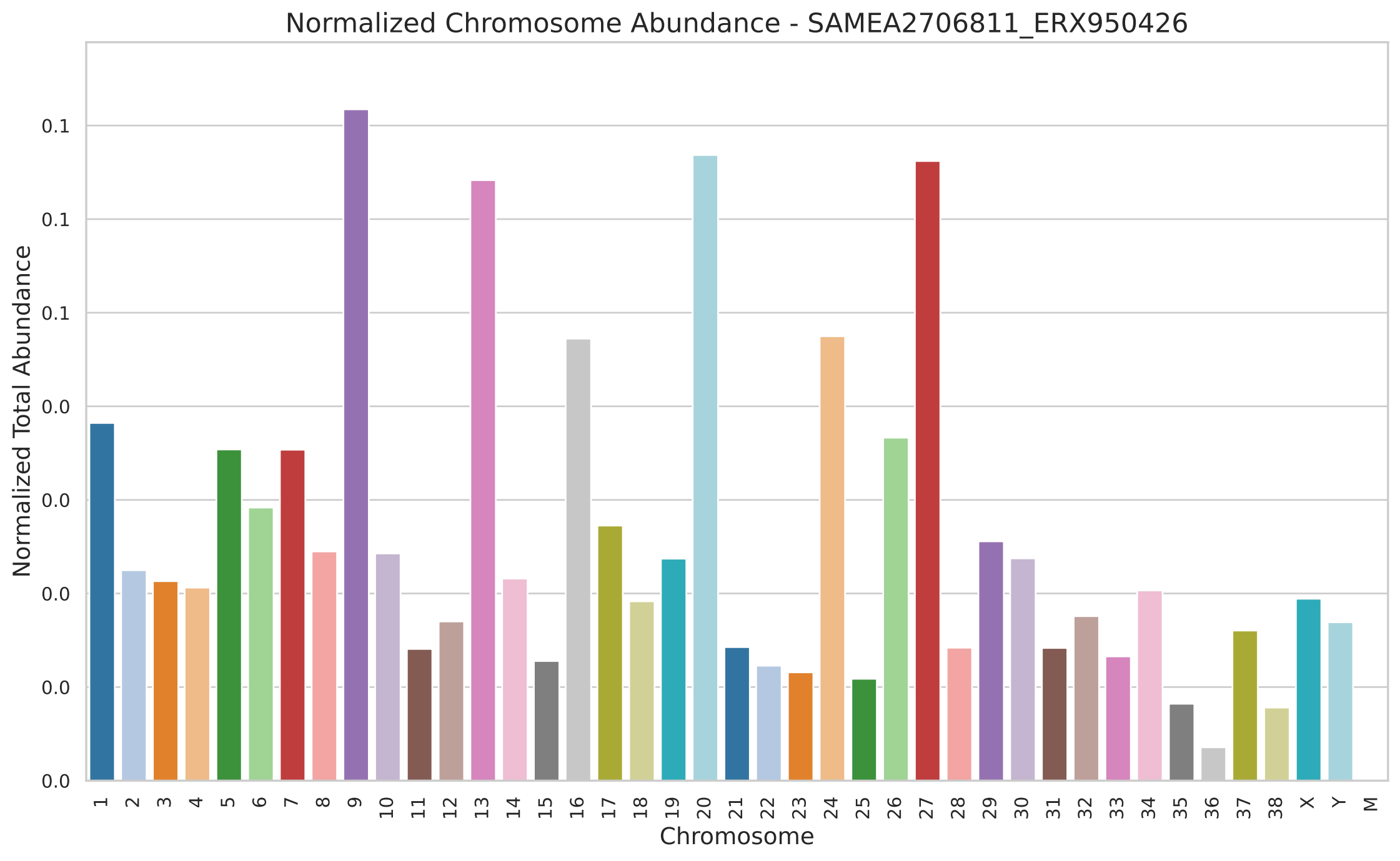

Normalized Chromosome Abundance - SAMN03436674_SRX970829
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

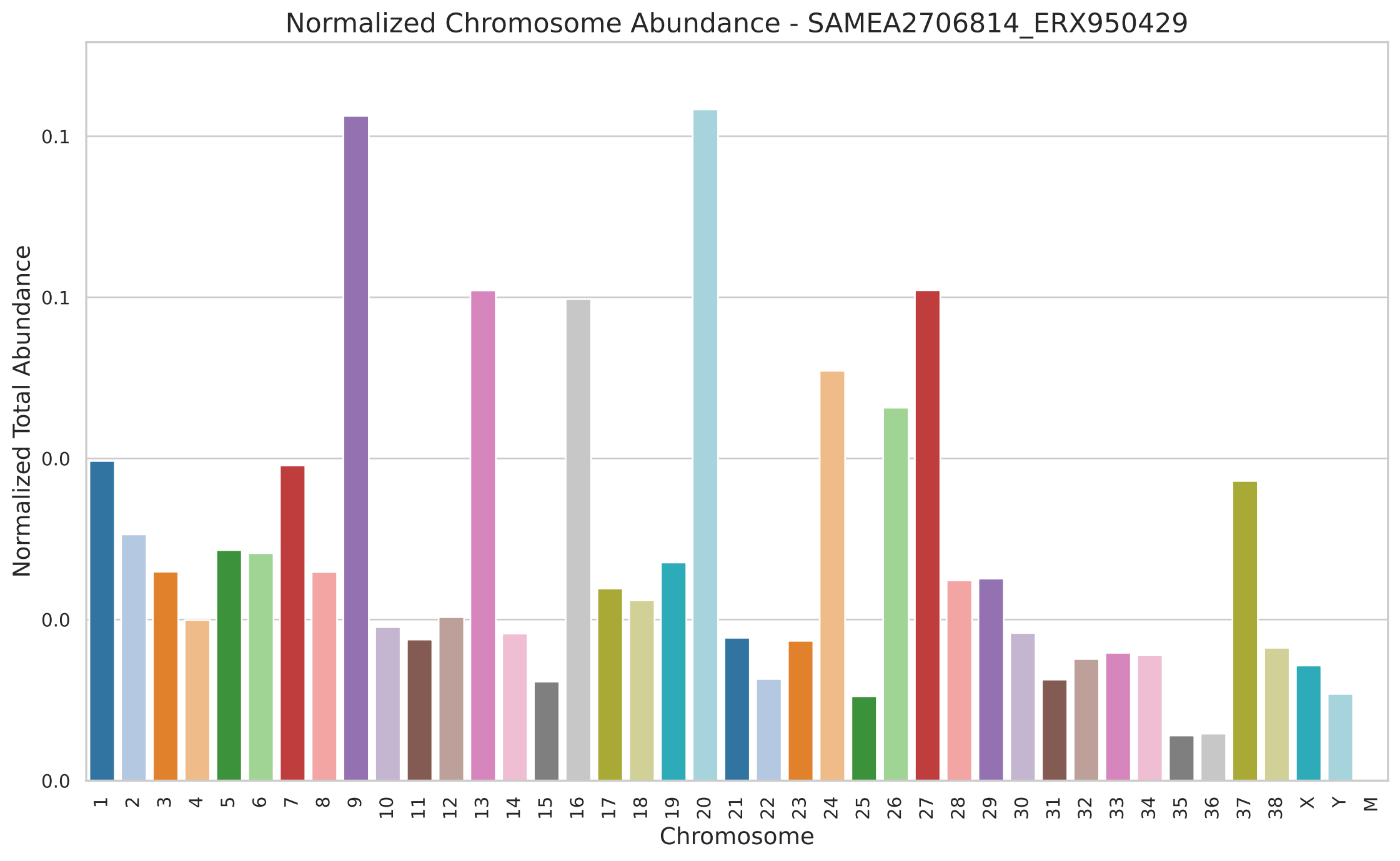

Normalized Chromosome Abundance - SAMN03436462_SRX970826
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

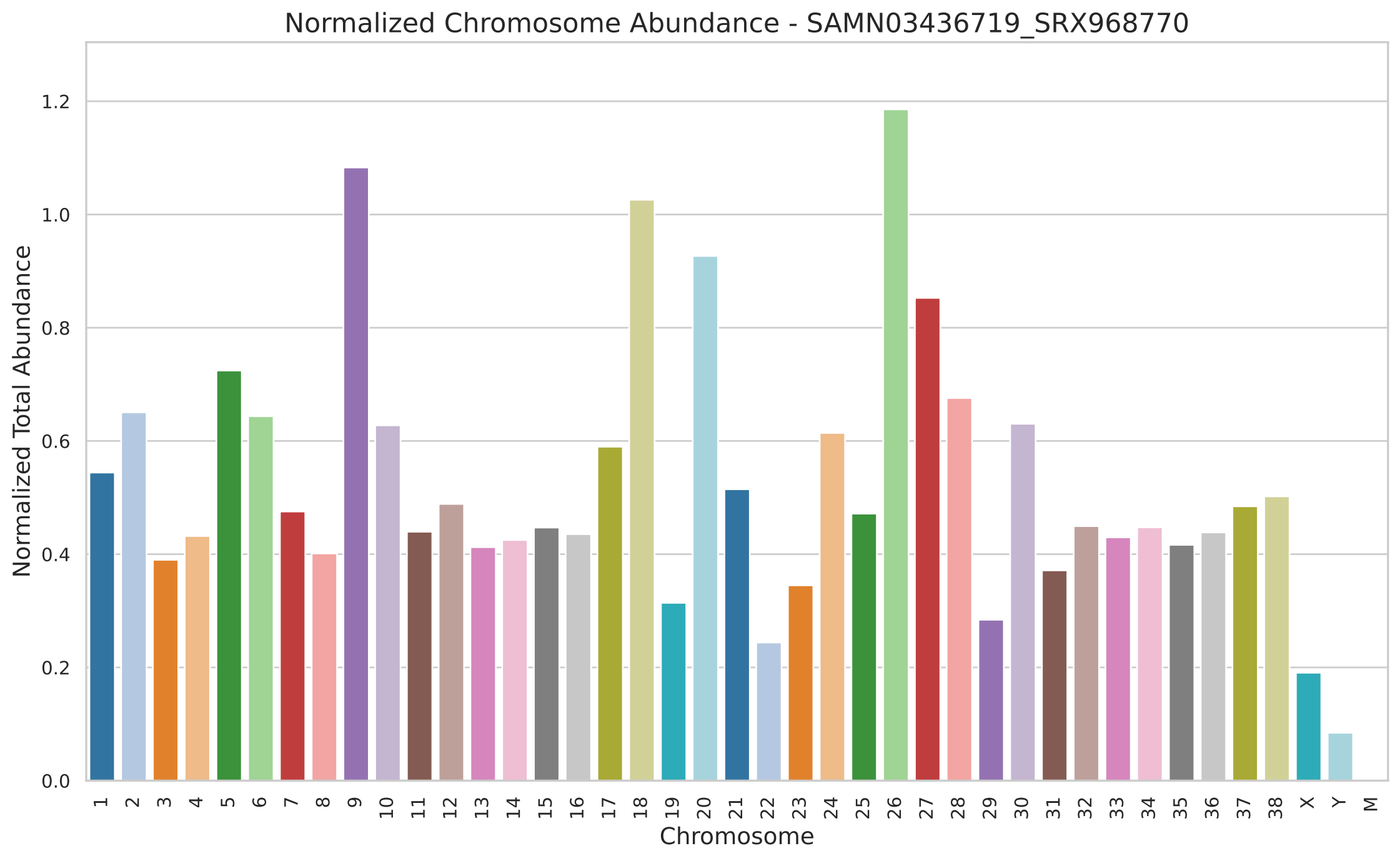

Normalized Chromosome Abundance - SAMN03436531_SRX970817
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

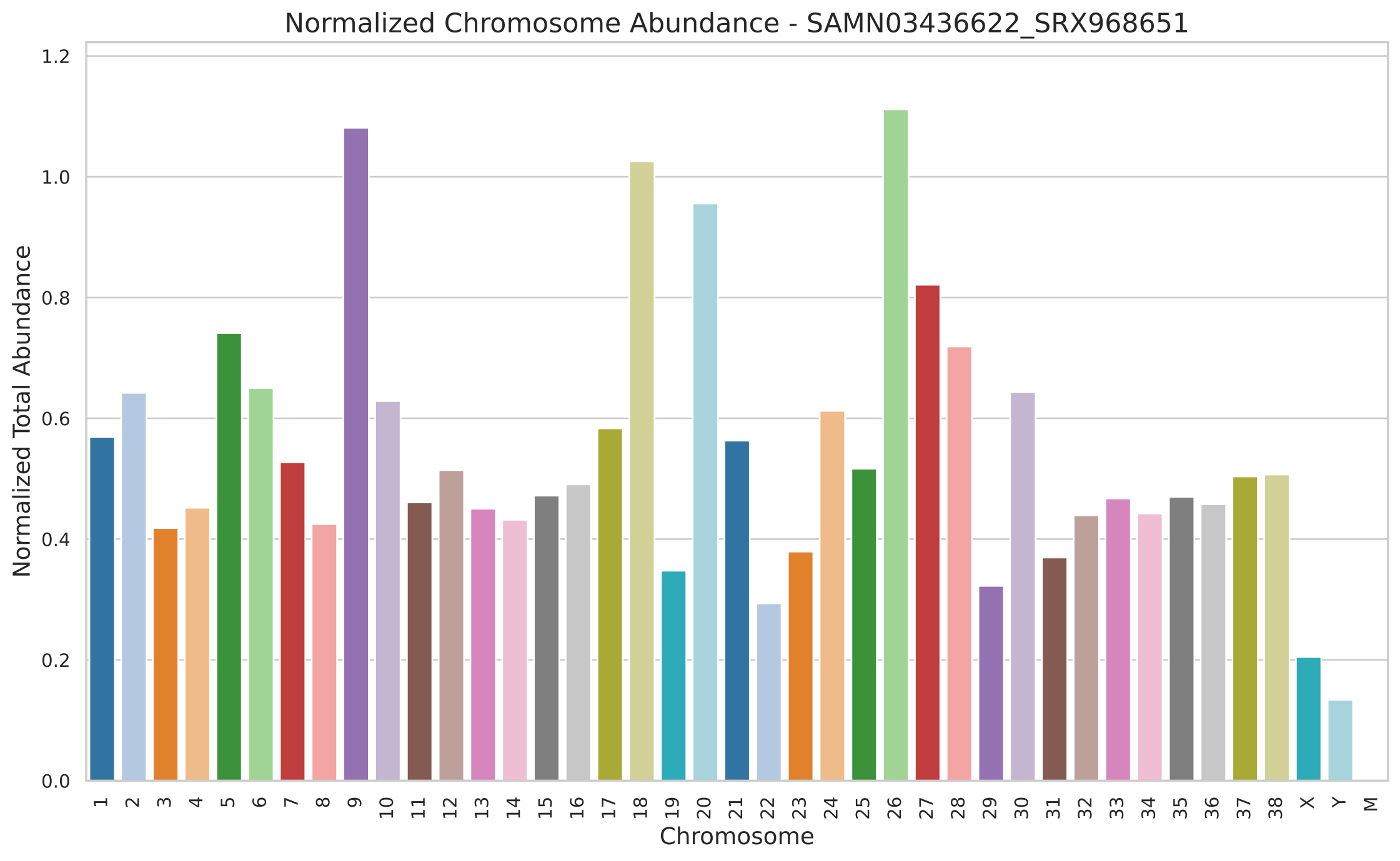

Normalized Chromosome Abundance - SAMEA2706815_ERX950430
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

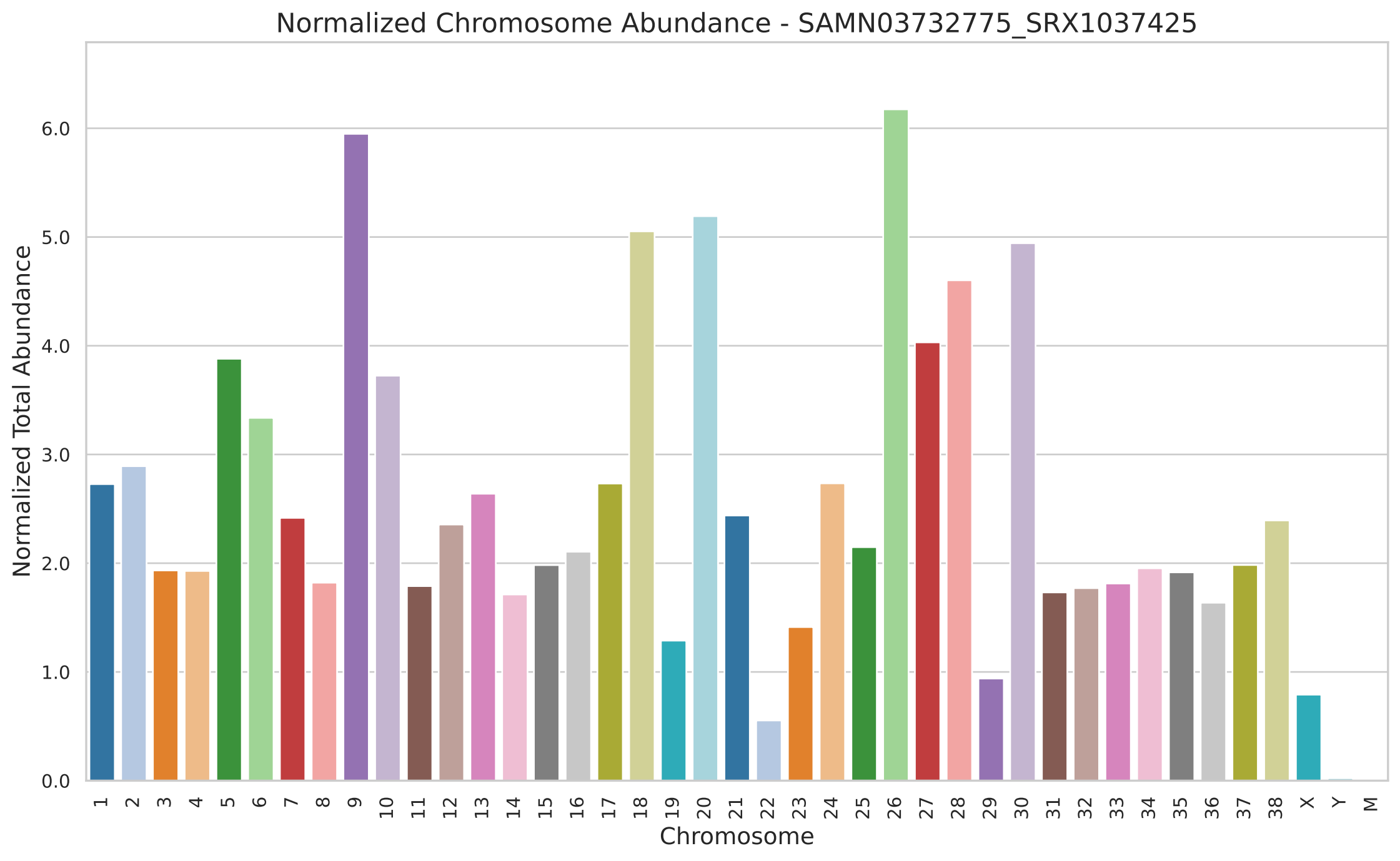

Normalized Chromosome Abundance - SAMN03766272_SRX1054493
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

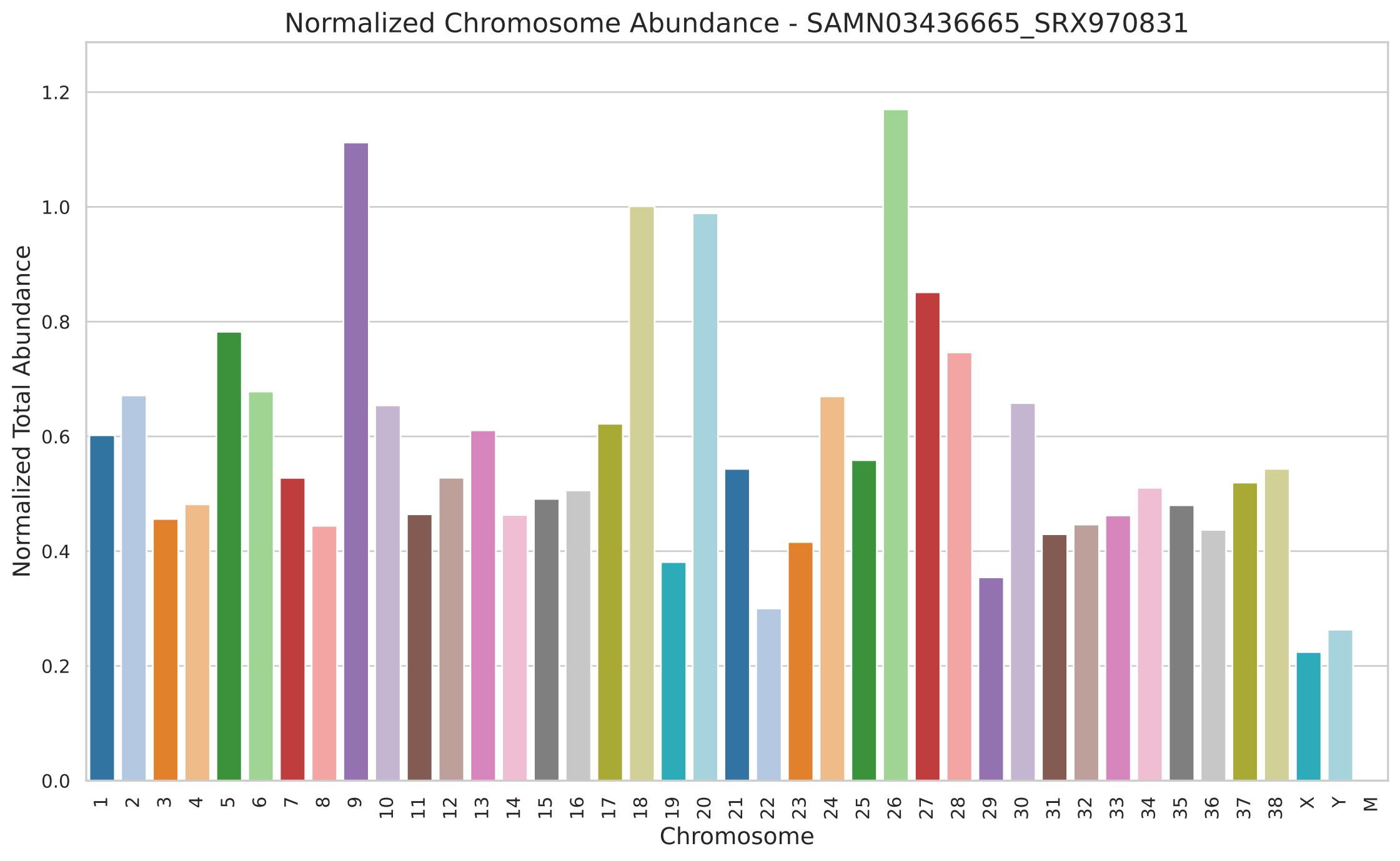

Normalized Chromosome Abundance - SAMEA2706811_ERX950426
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

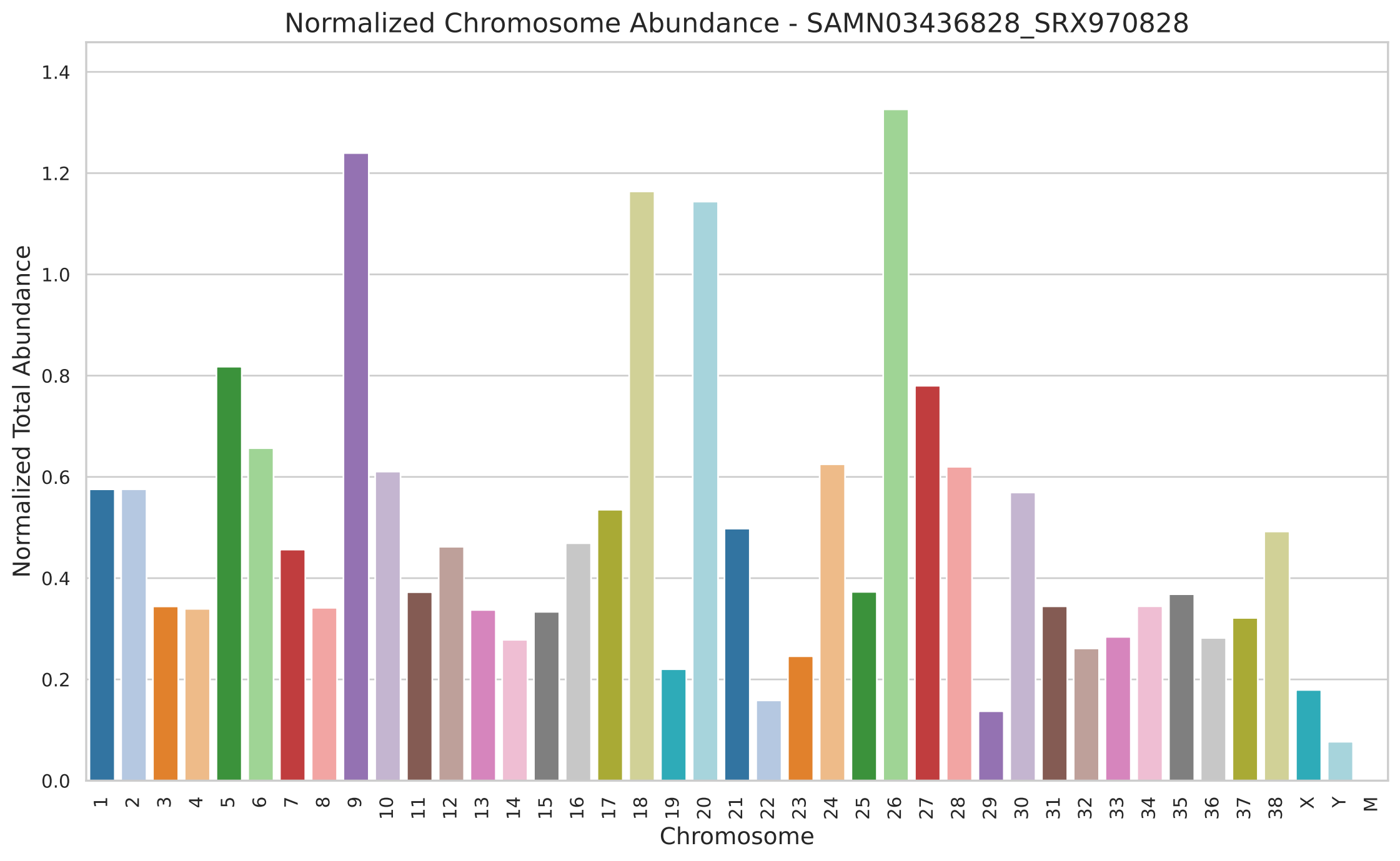

Normalized Chromosome Abundance - SAMEA2706814_ERX950429
Normalized Total Abundance
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

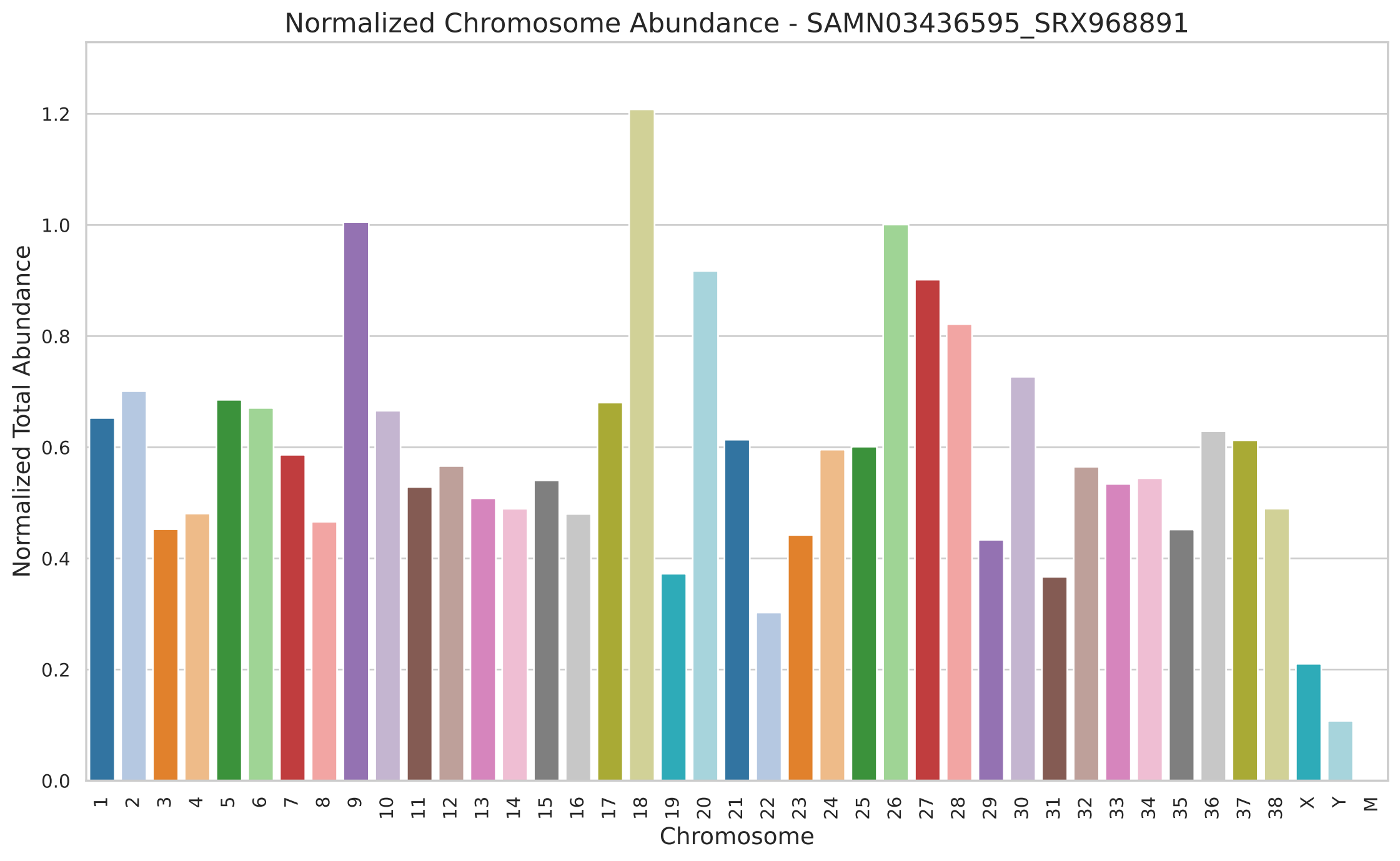

Normalized Chromosome Abundance - SAMN03436719_SRX968770
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

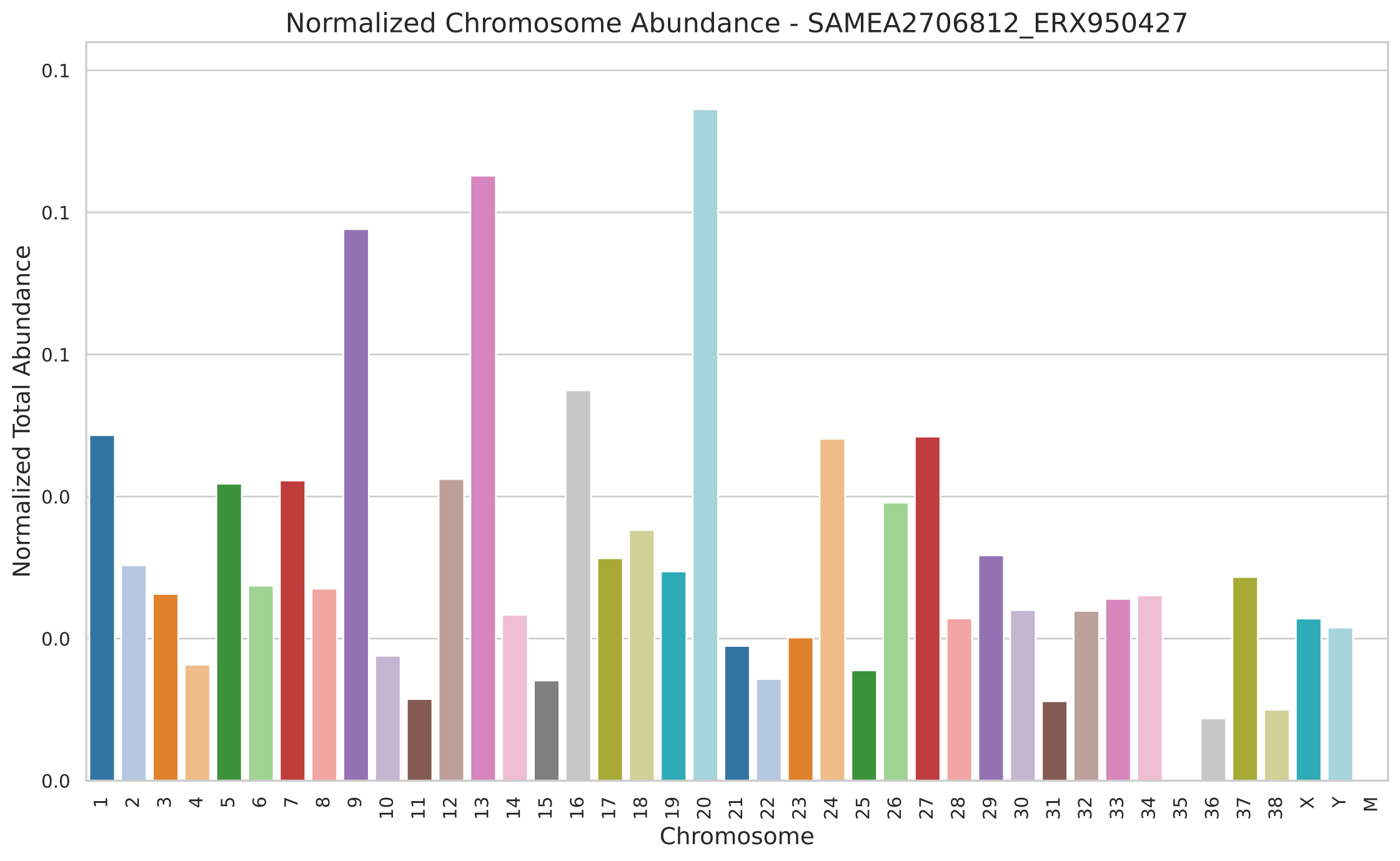

Normalized Chromosome Abundance - SAMN03436622_SRX968651
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

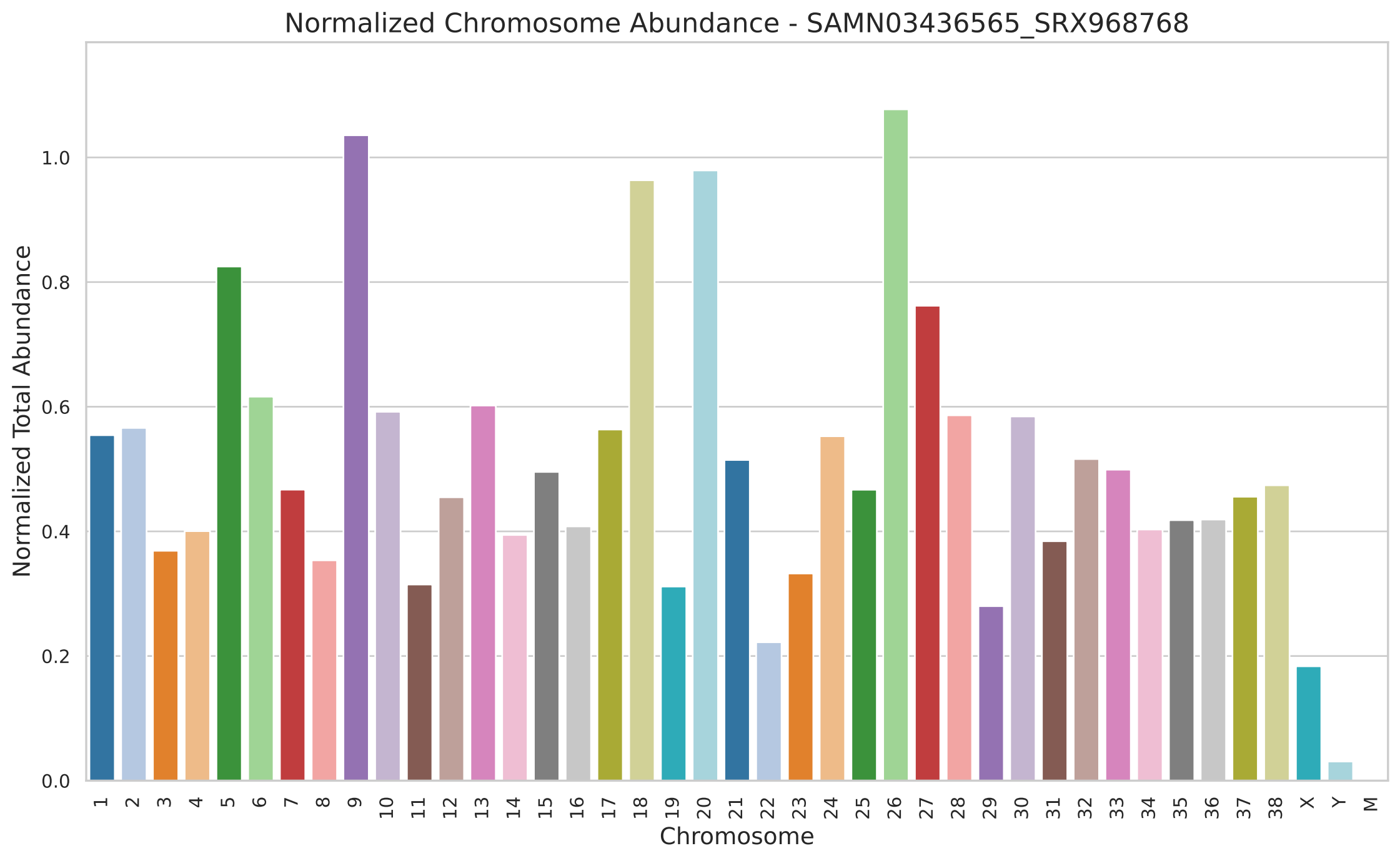

Normalized Chromosome Abundance - SAMN03732775_SRX1037425
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

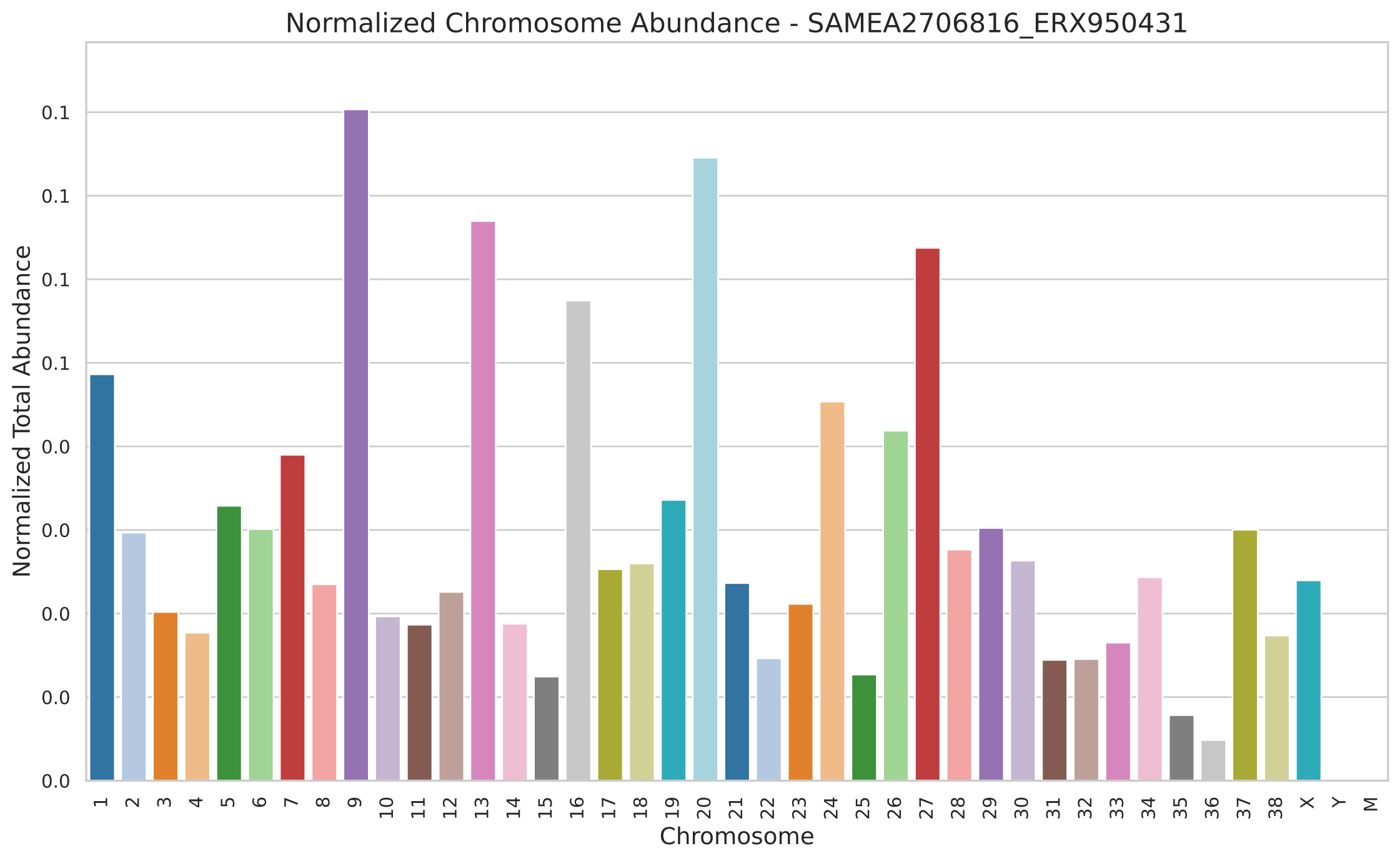

Normalized Chromosome Abundance - SAMN03436665_SRX970831
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

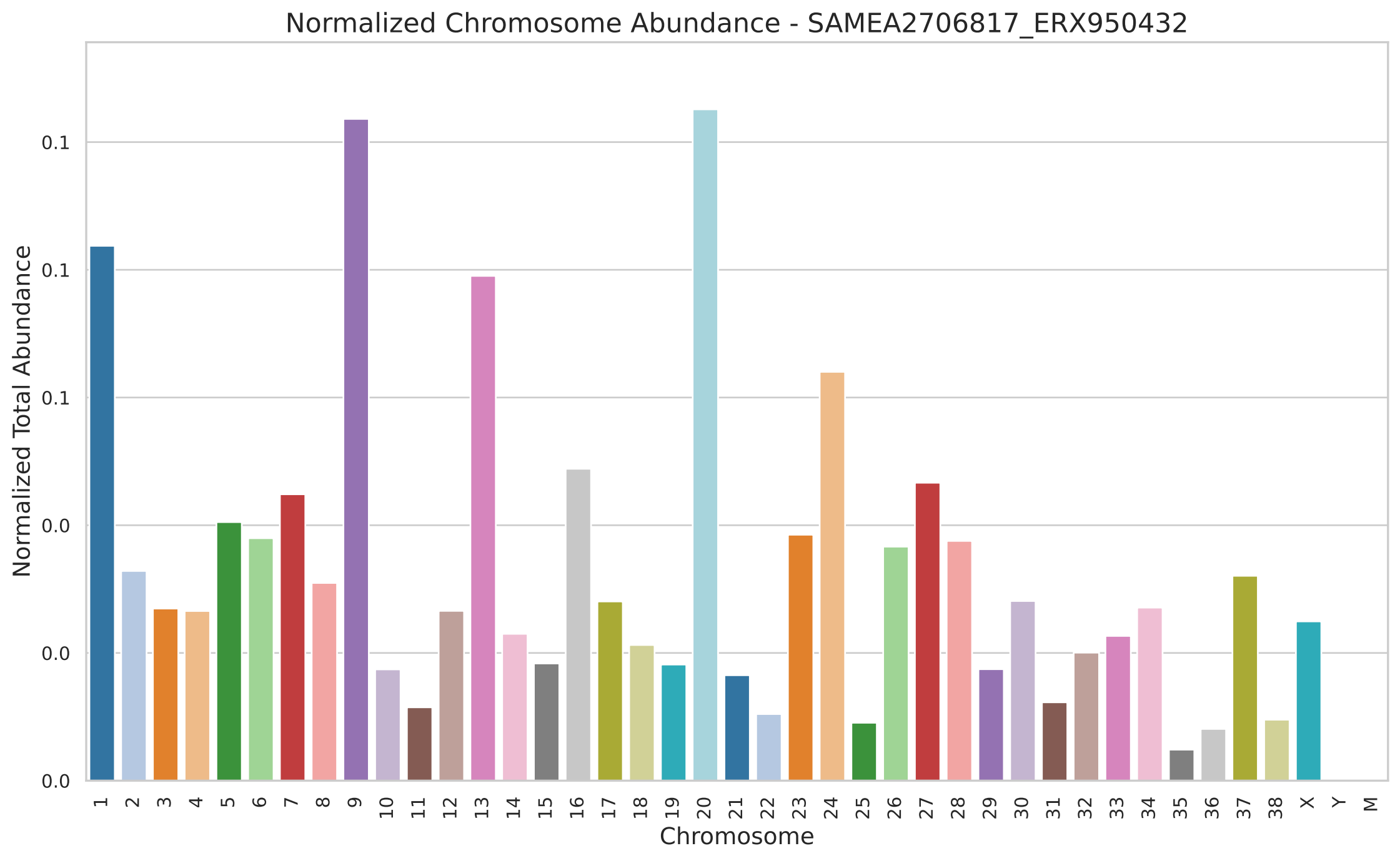

Normalized Chromosome Abundance - SAMN03436828_SRX970828
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

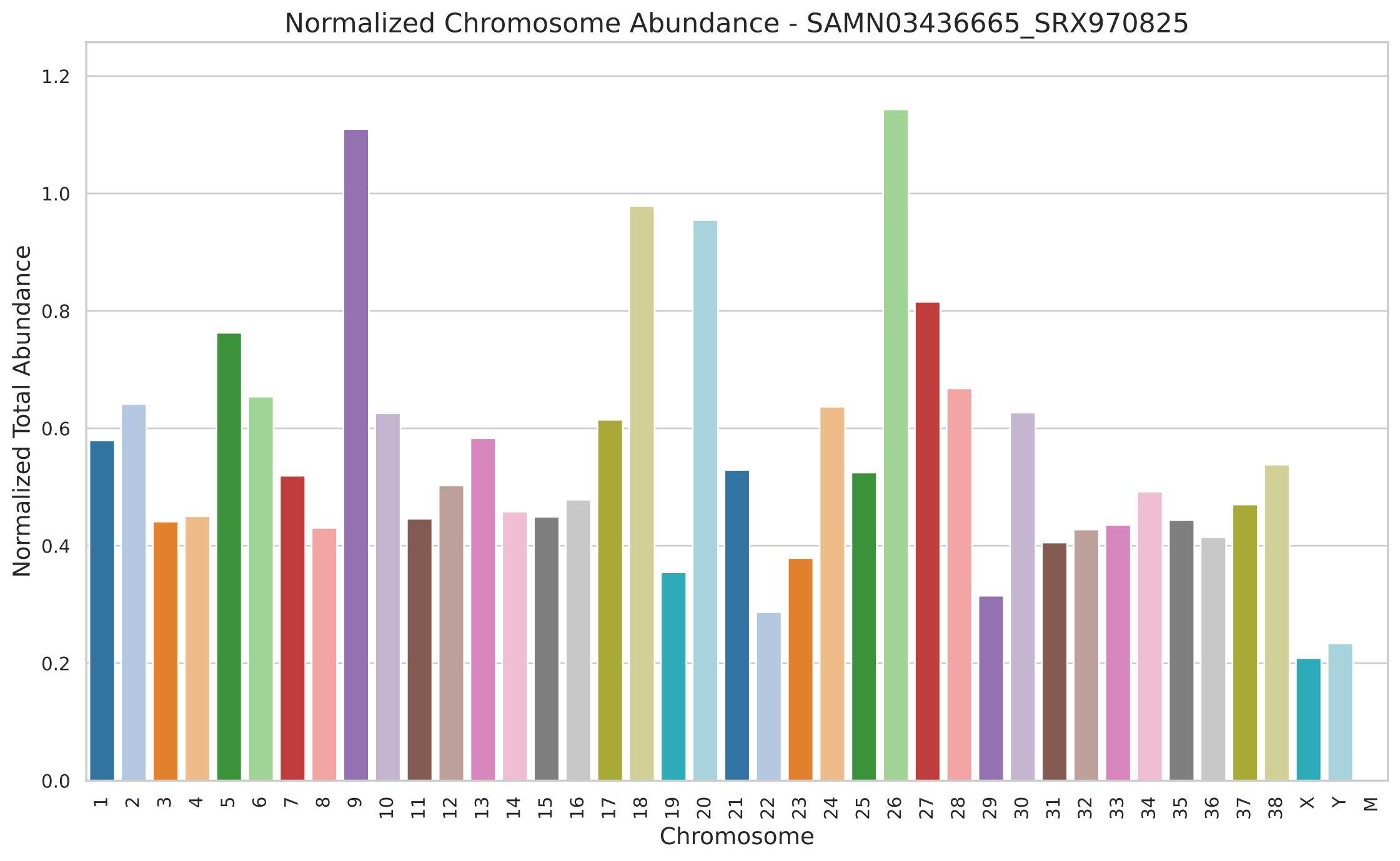

Normalized Chromosome Abundance - SAMN03436595_SRX968891
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

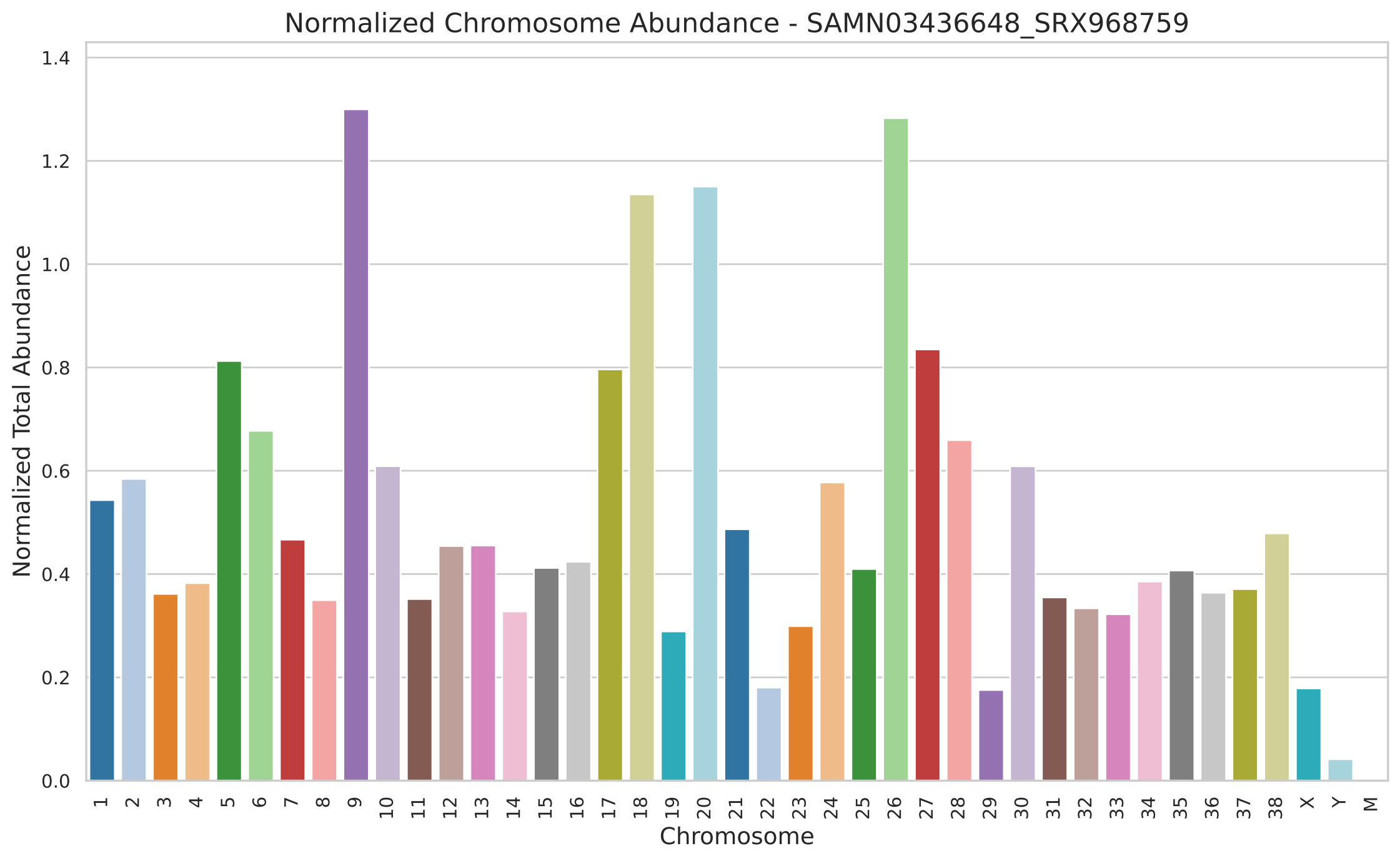

Normalized Chromosome Abundance - SAMEA2706812_ERX950427
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

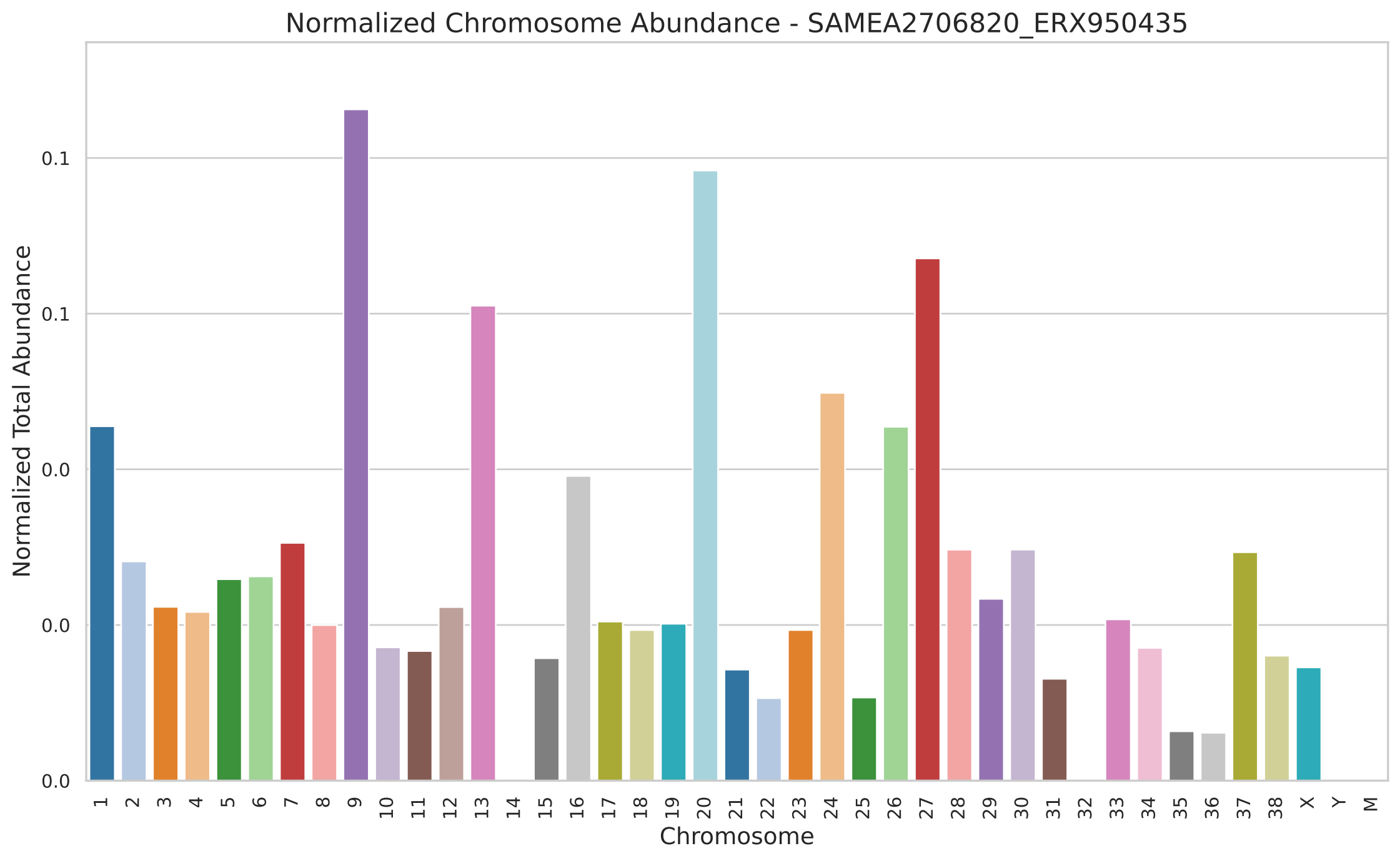

Normalized Chromosome Abundance - SAMN03436565_SRX968768
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

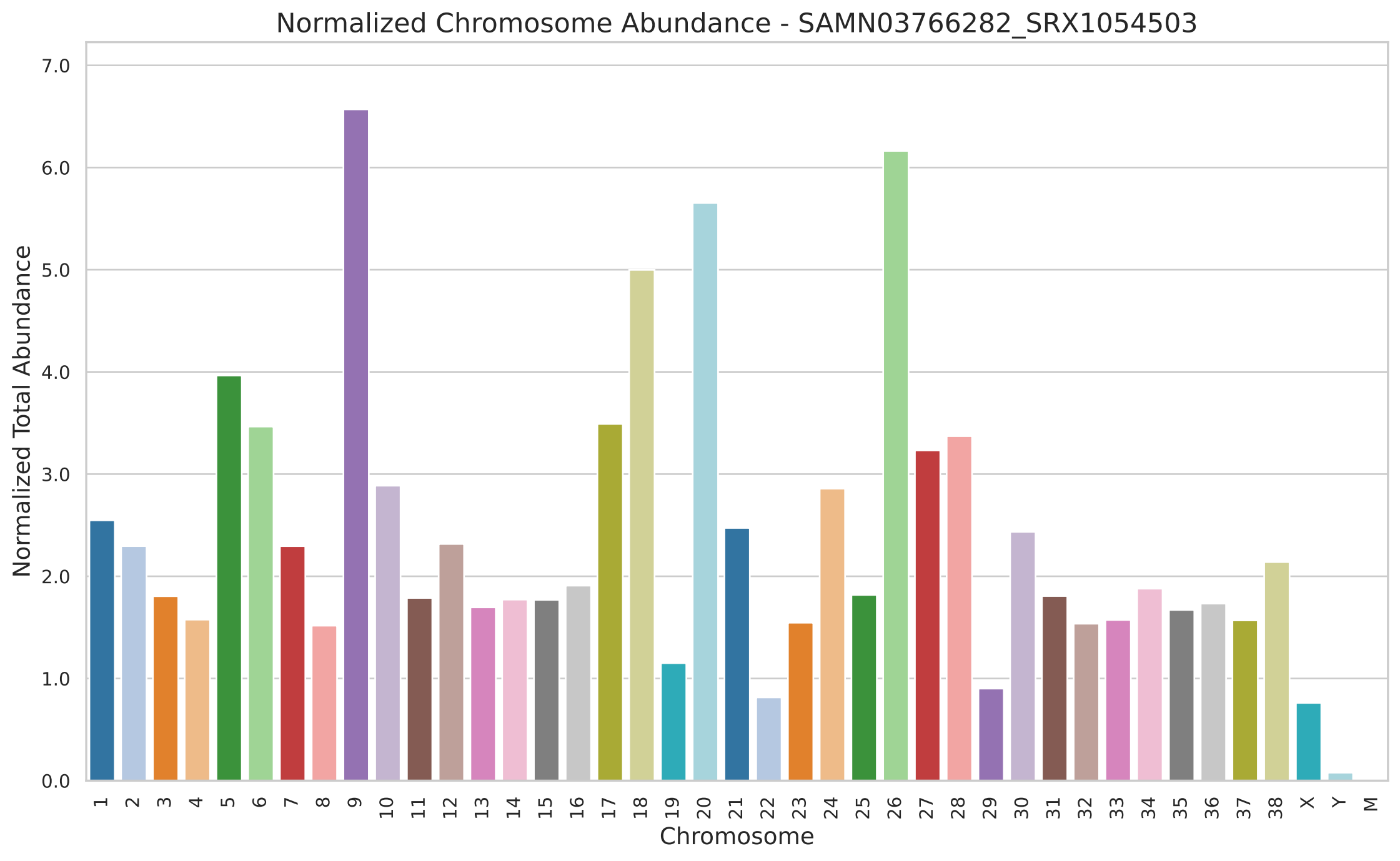

Normalized Chromosome Abundance - SAMEA2706816_ERX950431
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

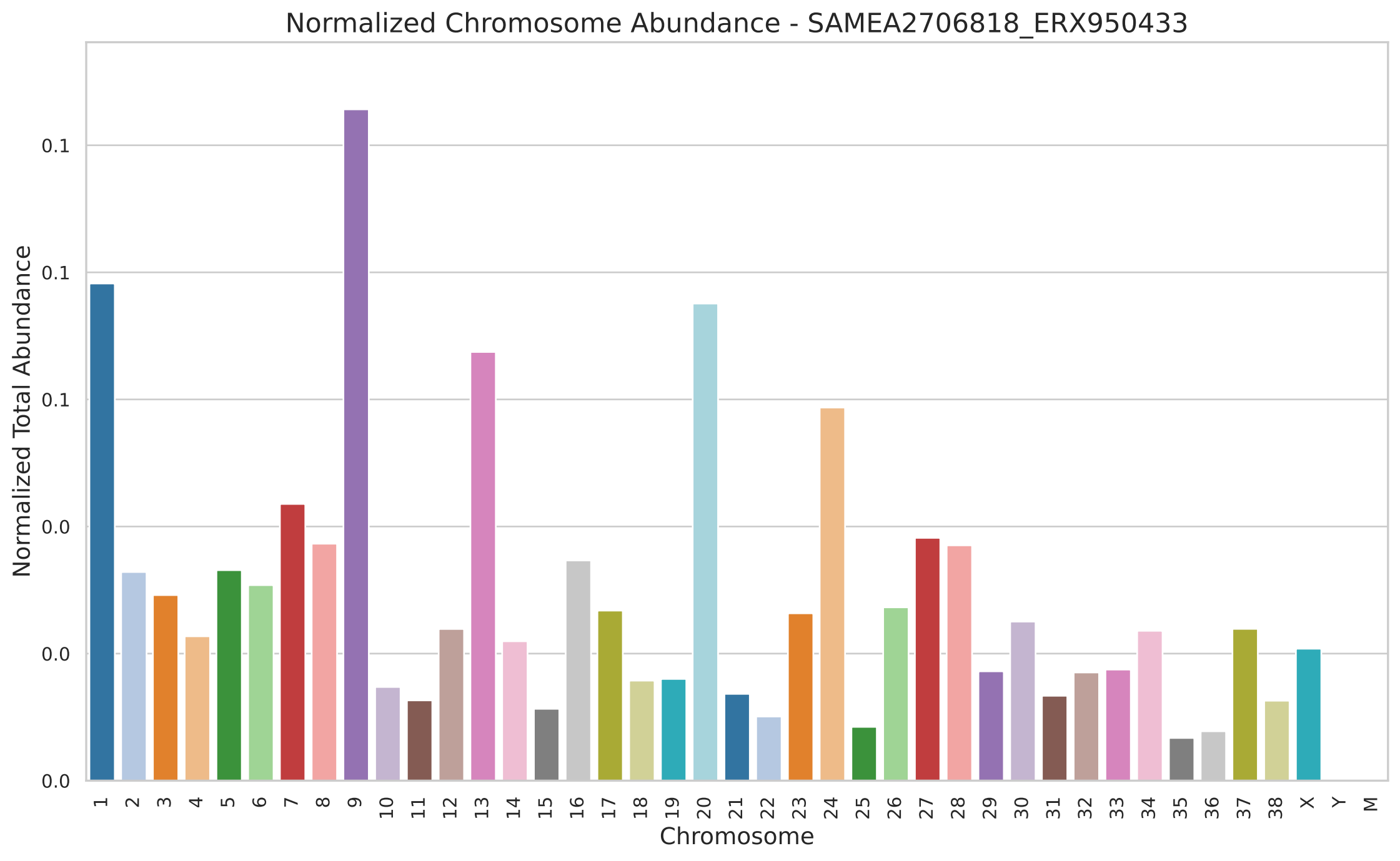

Normalized Chromosome Abundance - SAMEA2706817_ERX950432
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

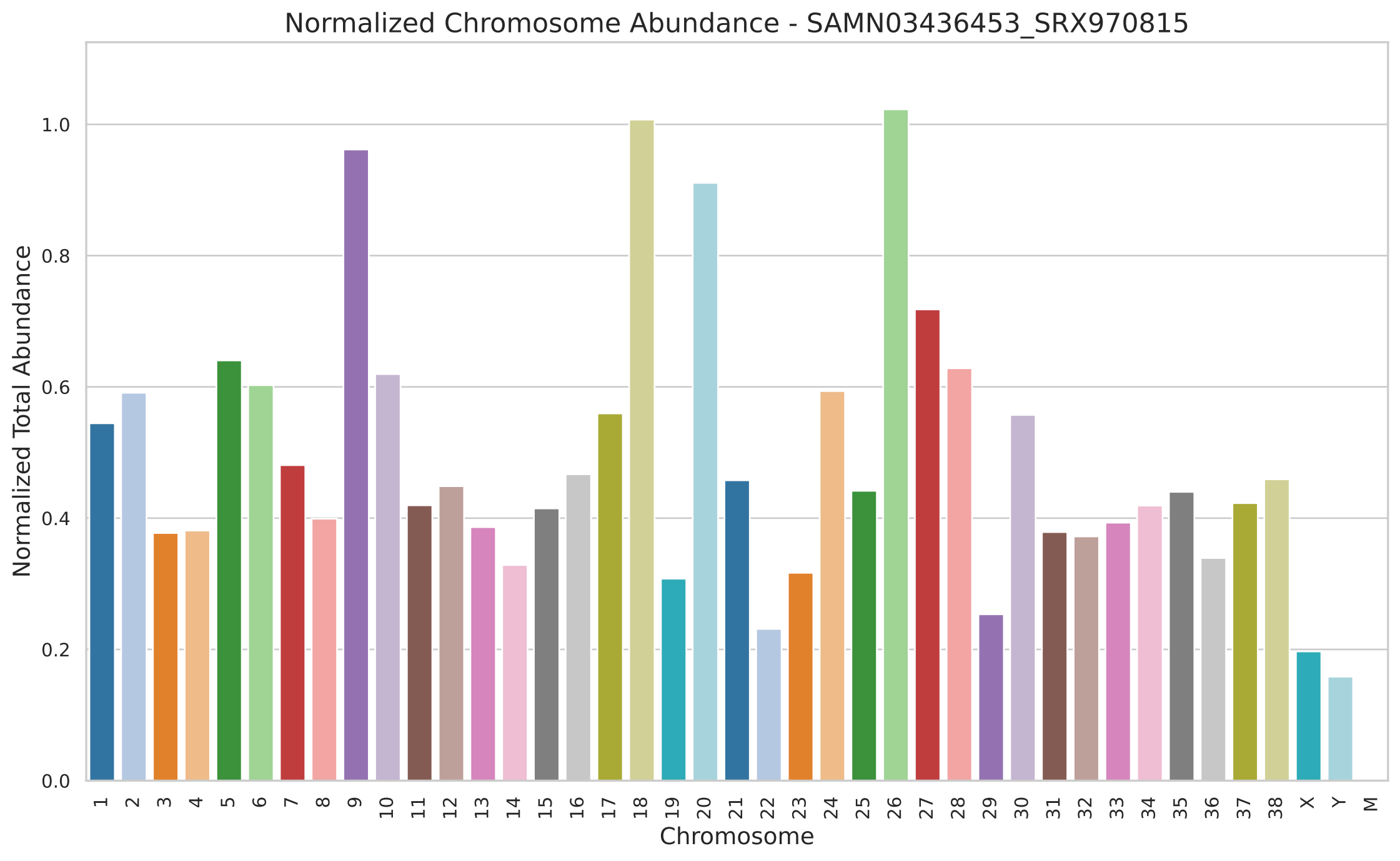

Normalized Chromosome Abundance - SAMN03436665_SRX970825
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

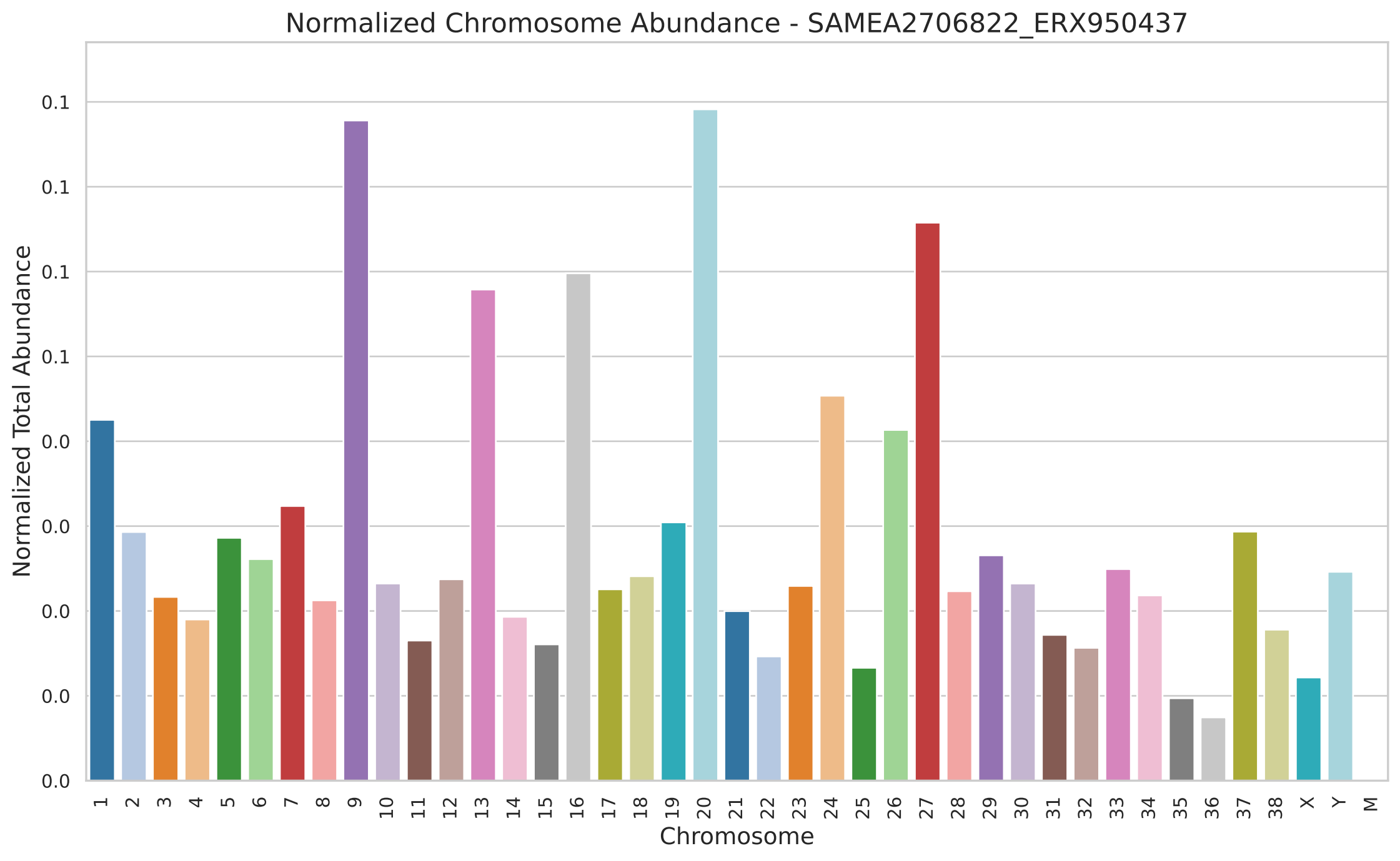

Normalized Chromosome Abundance - SAMN03436648_SRX968759
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

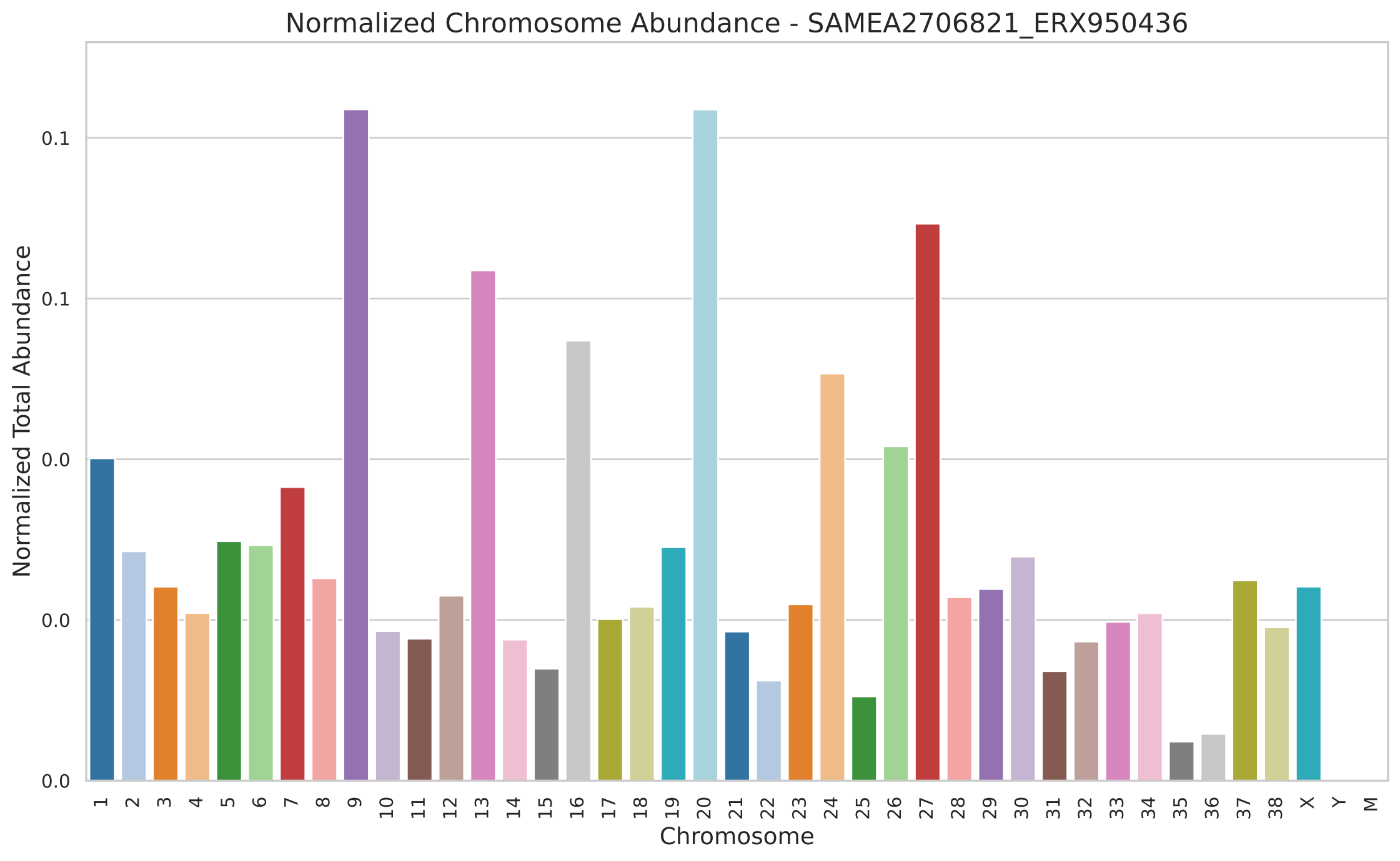

Normalized Chromosome Abundance - SAMEA2706820_ERX950435
Normalized Total Abundance
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

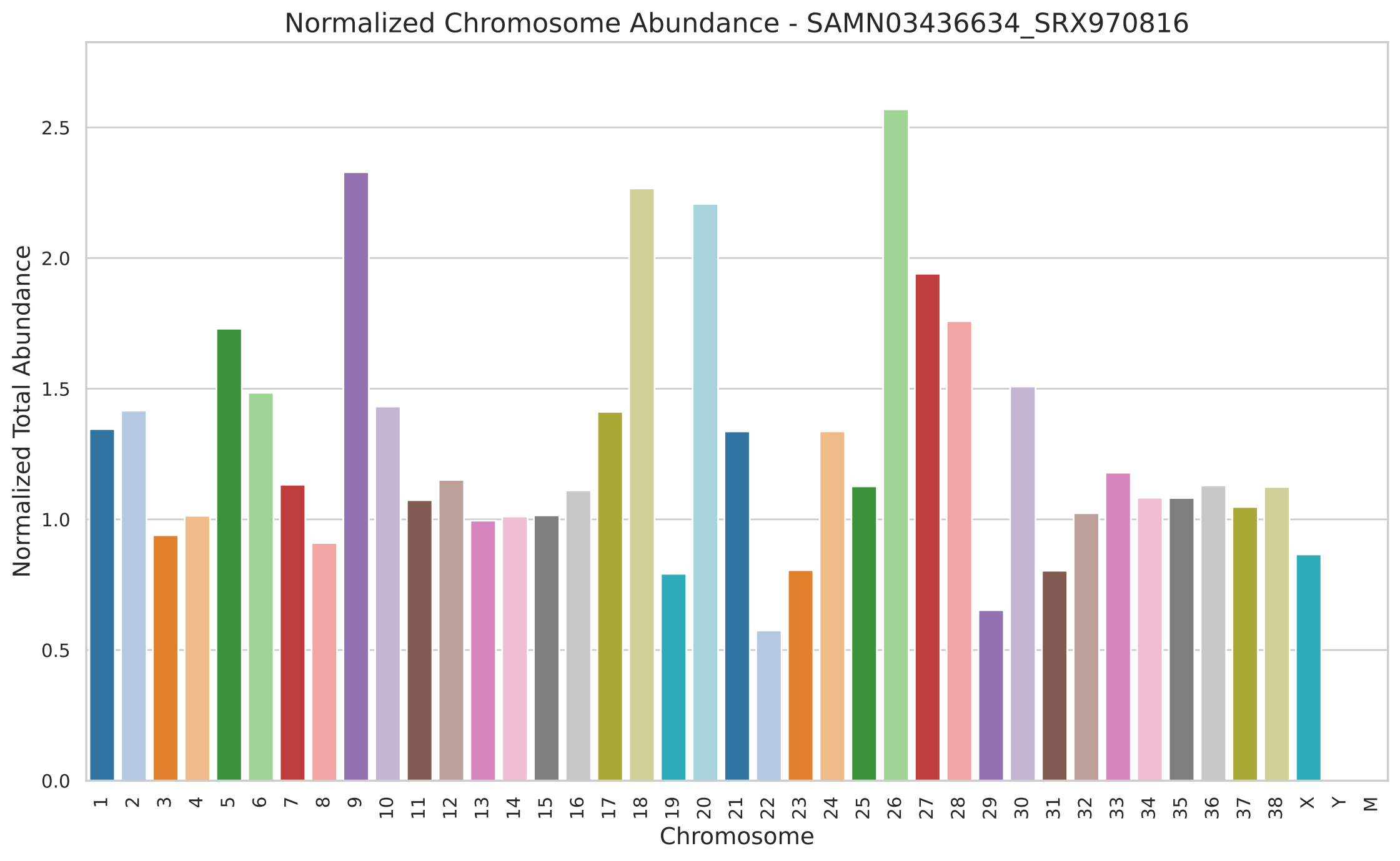

Normalized Chromosome Abundance - SAMN03766282_SRX1054503
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

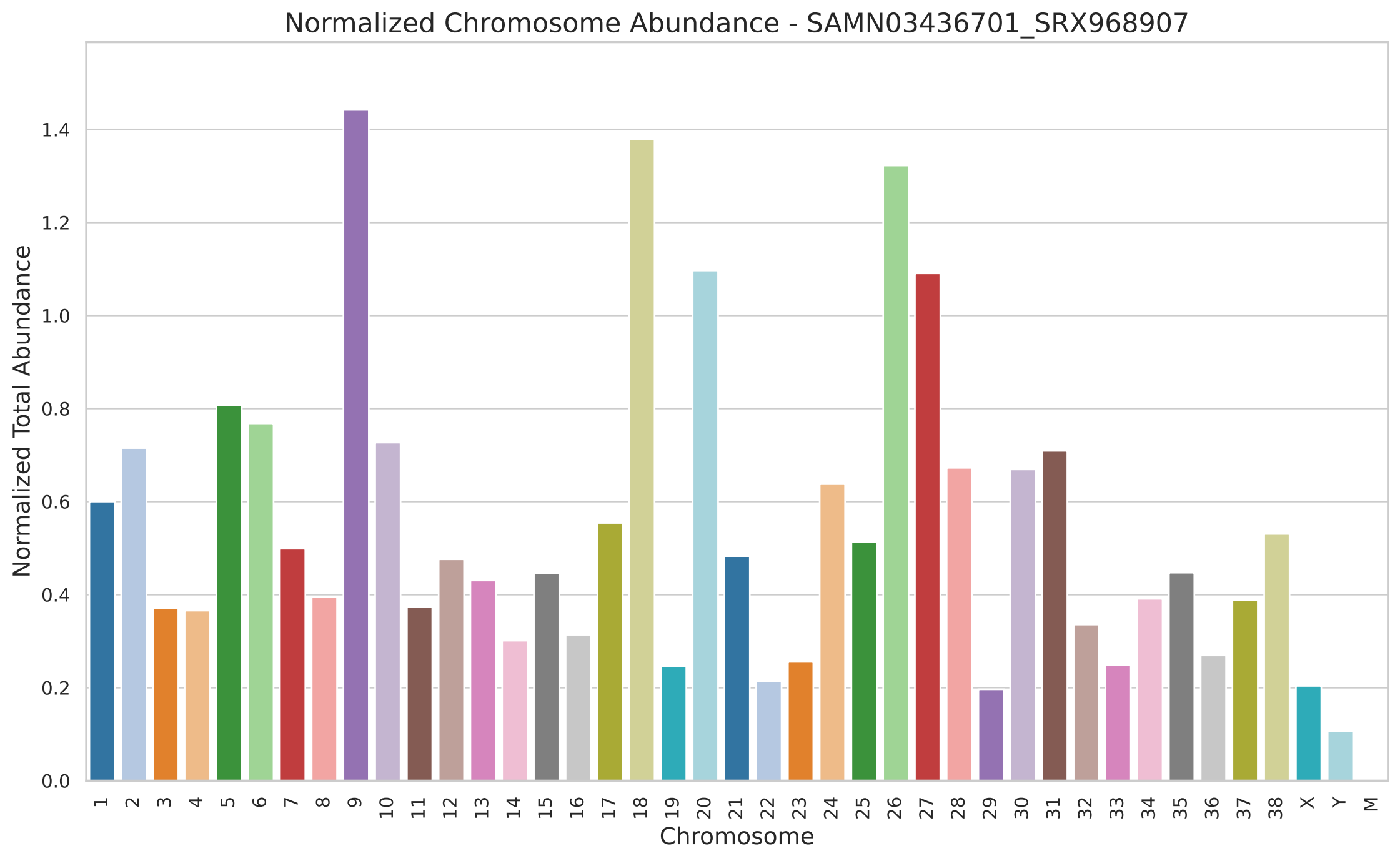

Normalized Chromosome Abundance - SAMEA2706818_ERX950433
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

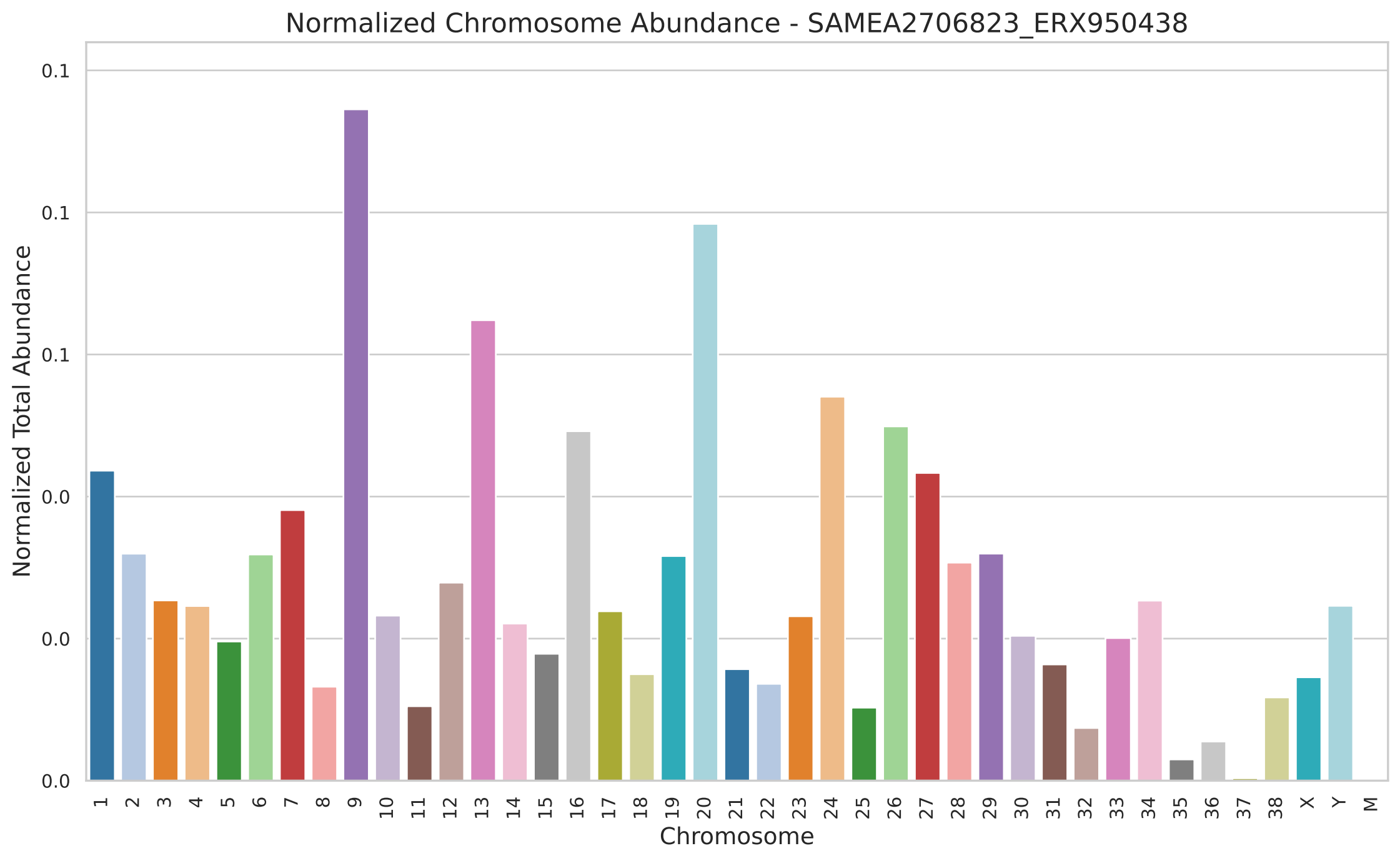

Normalized Chromosome Abundance - SAMN03436453_SRX970815
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

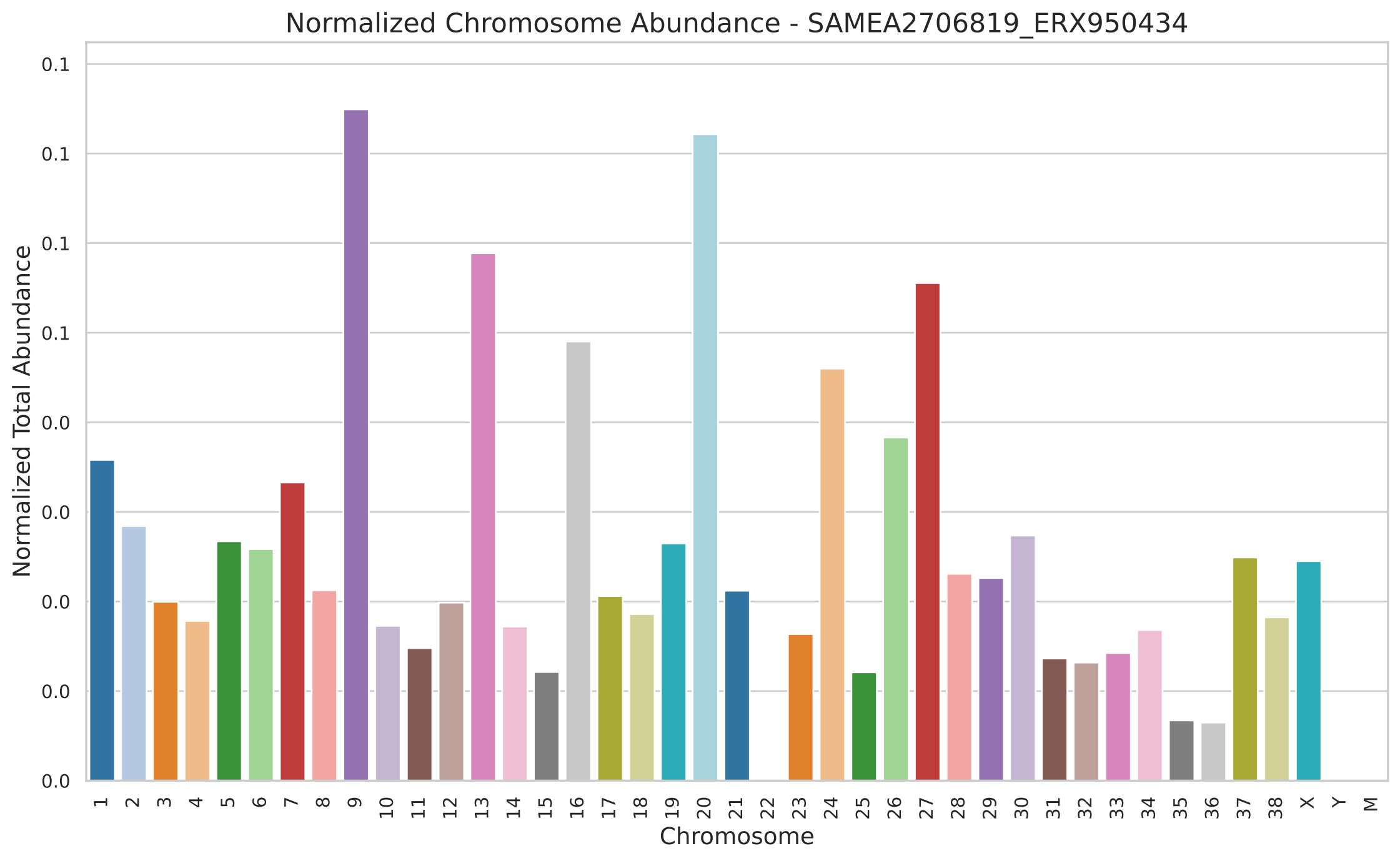

Normalized Chromosome Abundance - SAMEA2706822_ERX950437
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

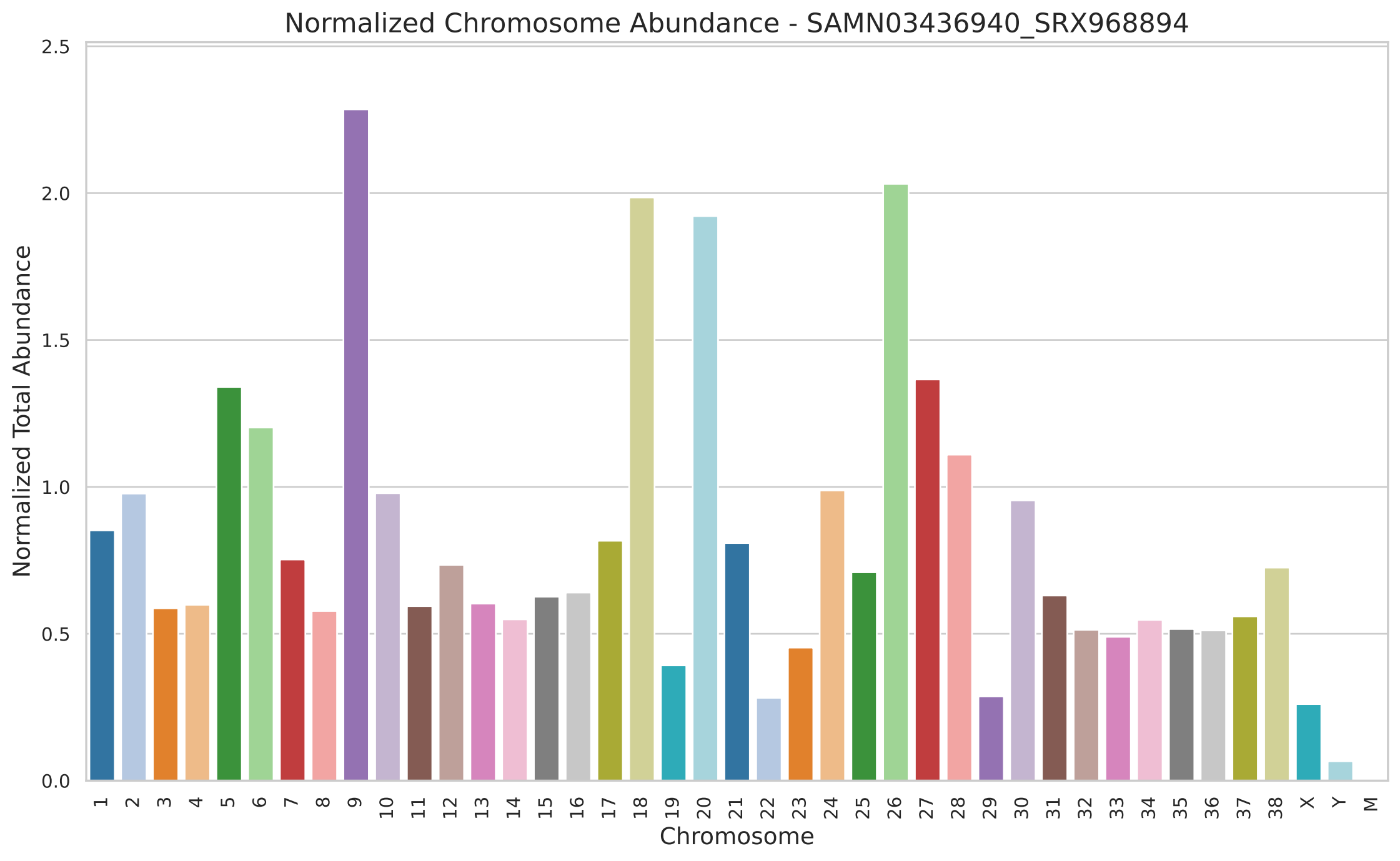

Normalized Chromosome Abundance - SAMEA2706821_ERX950436
Normalized Total Abundance
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

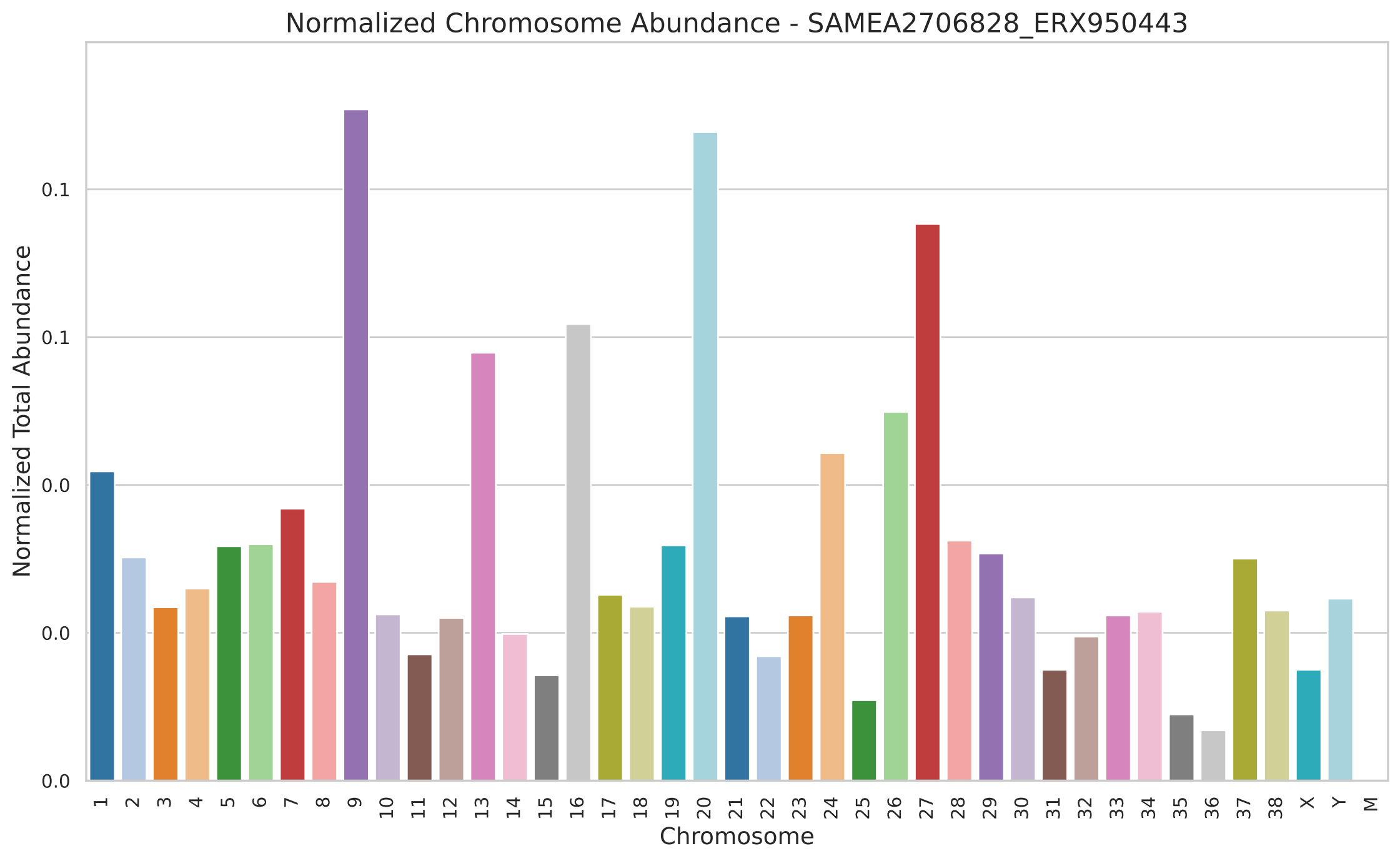

Normalized Chromosome Abundance - SAMN03436634_SRX970816
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

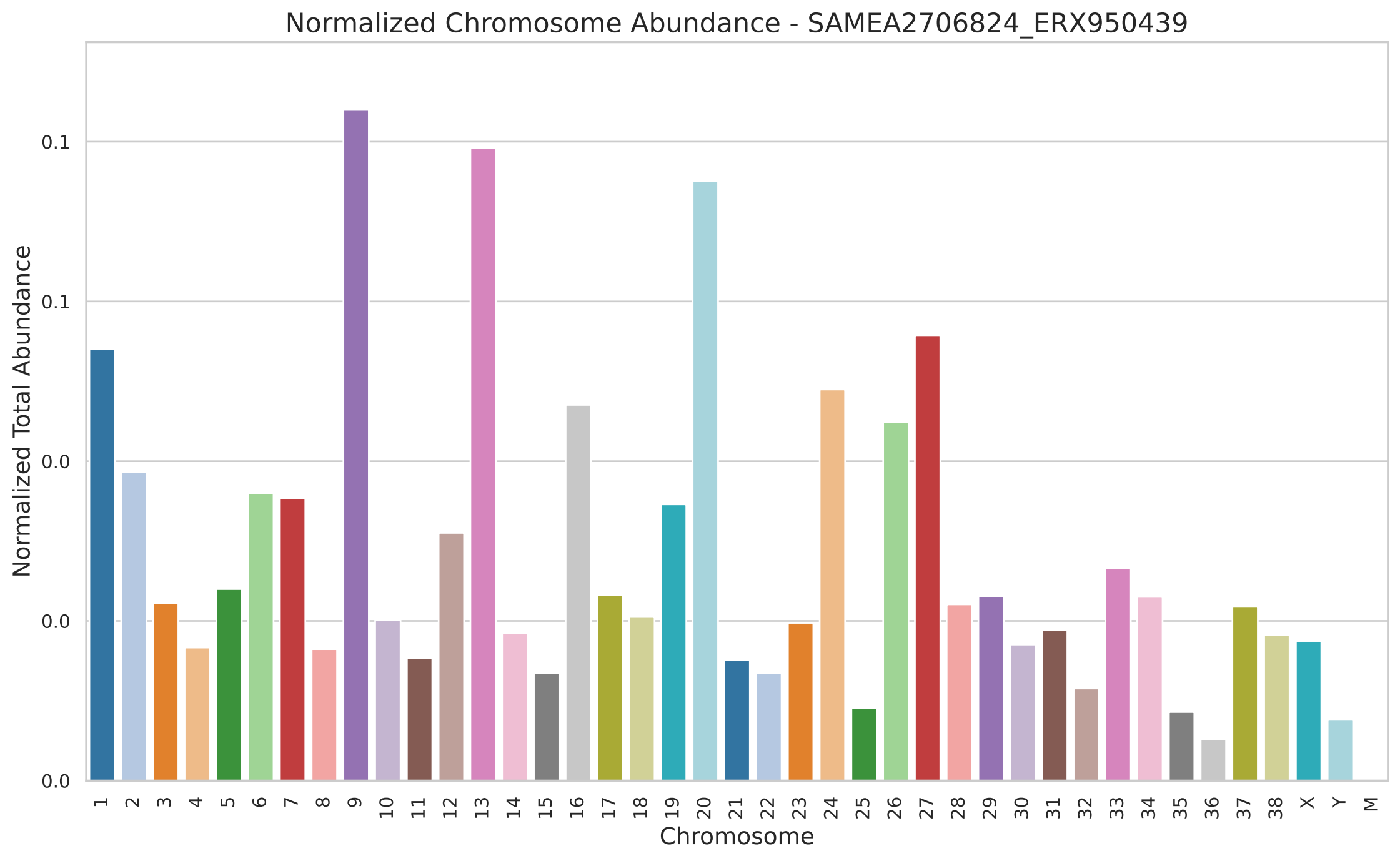

Normalized Chromosome Abundance - SAMN03436701_SRX968907
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

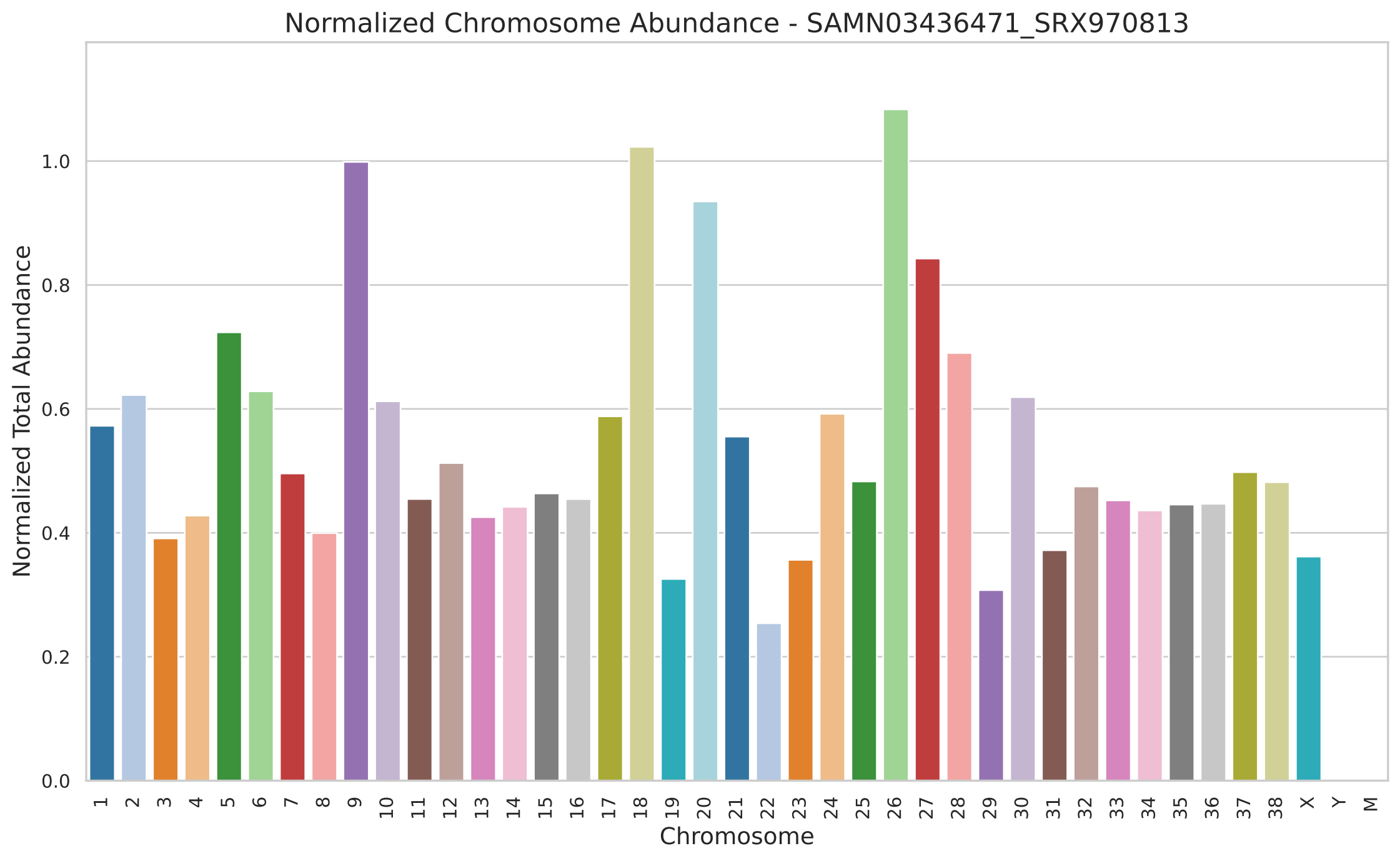

Normalized Chromosome Abundance - SAMEA2706823_ERX950438
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

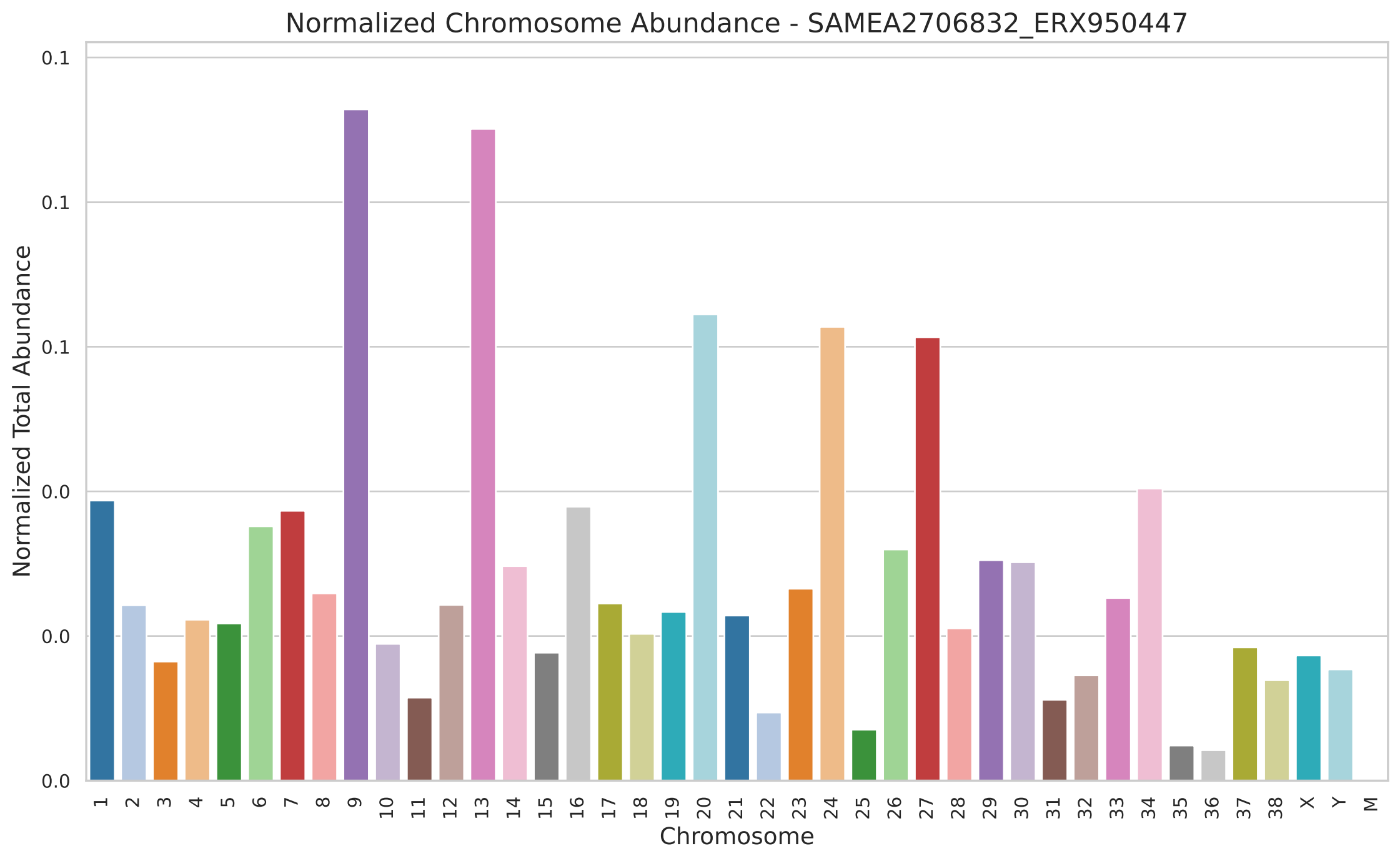

Normalized Chromosome Abundance - SAMEA2706819_ERX950434
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

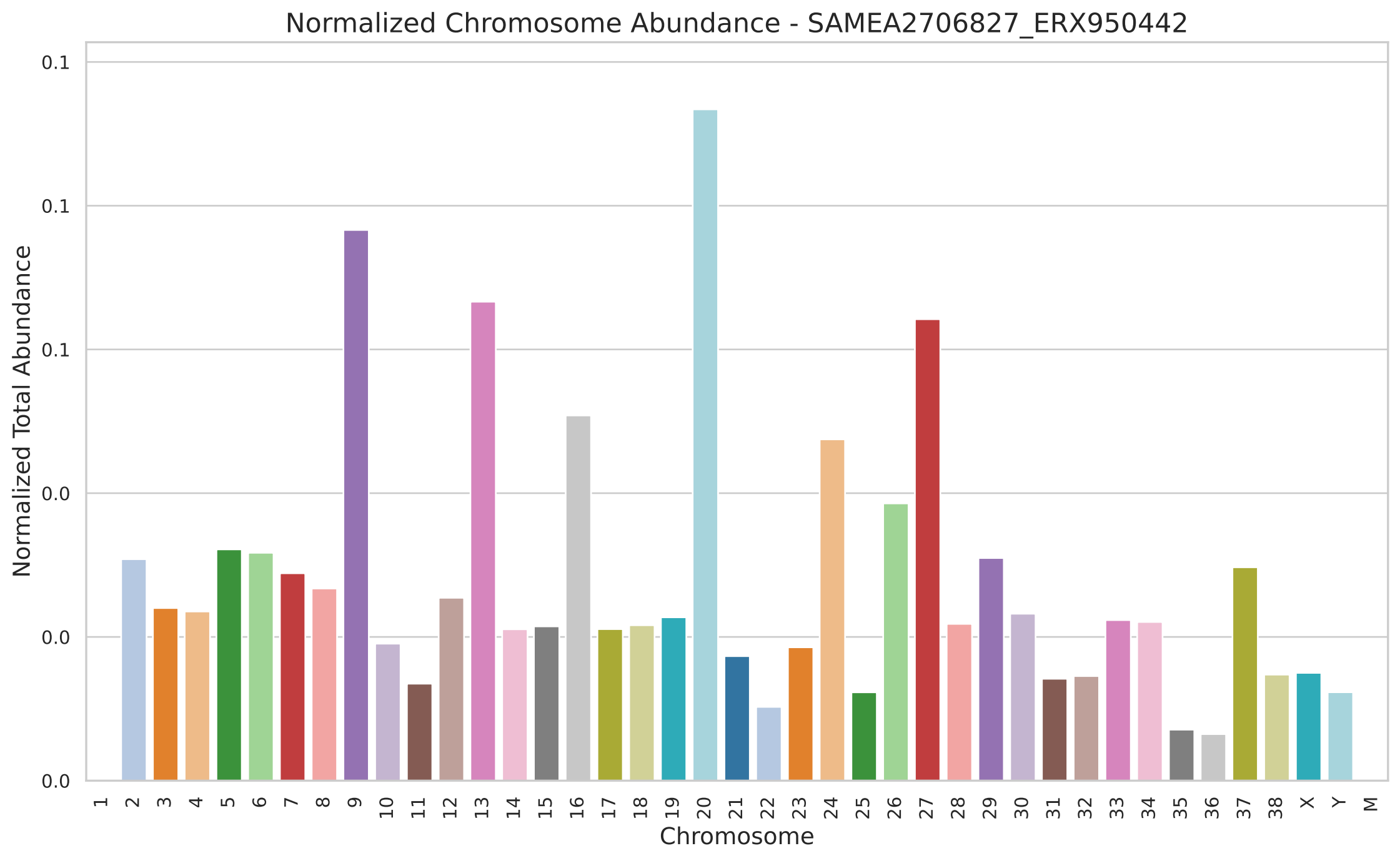

Normalized Chromosome Abundance - SAMN03436940_SRX968894
Normalized Total Abundance
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

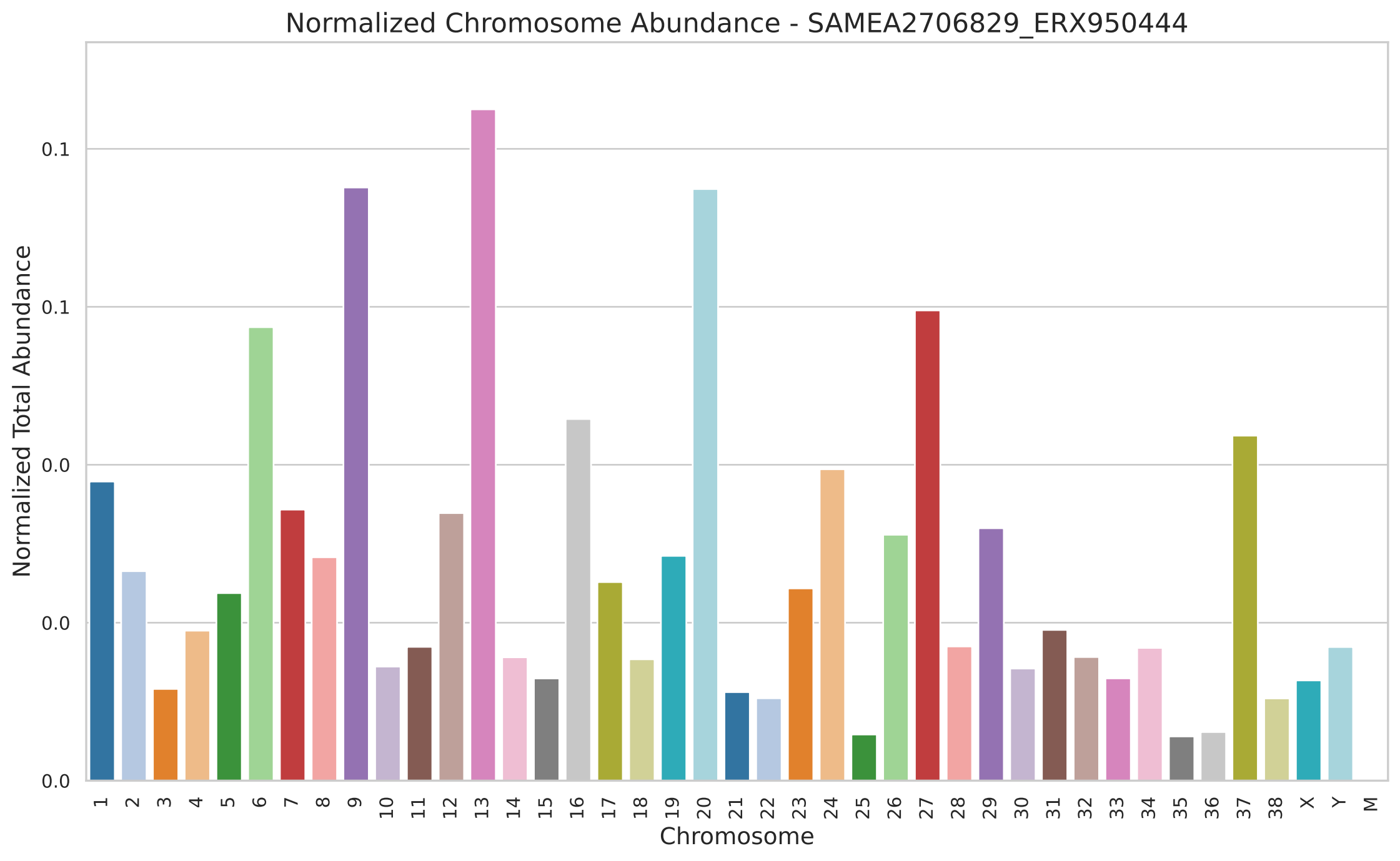

Normalized Chromosome Abundance - SAMEA2706828_ERX950443
Normalized Total Abundance
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

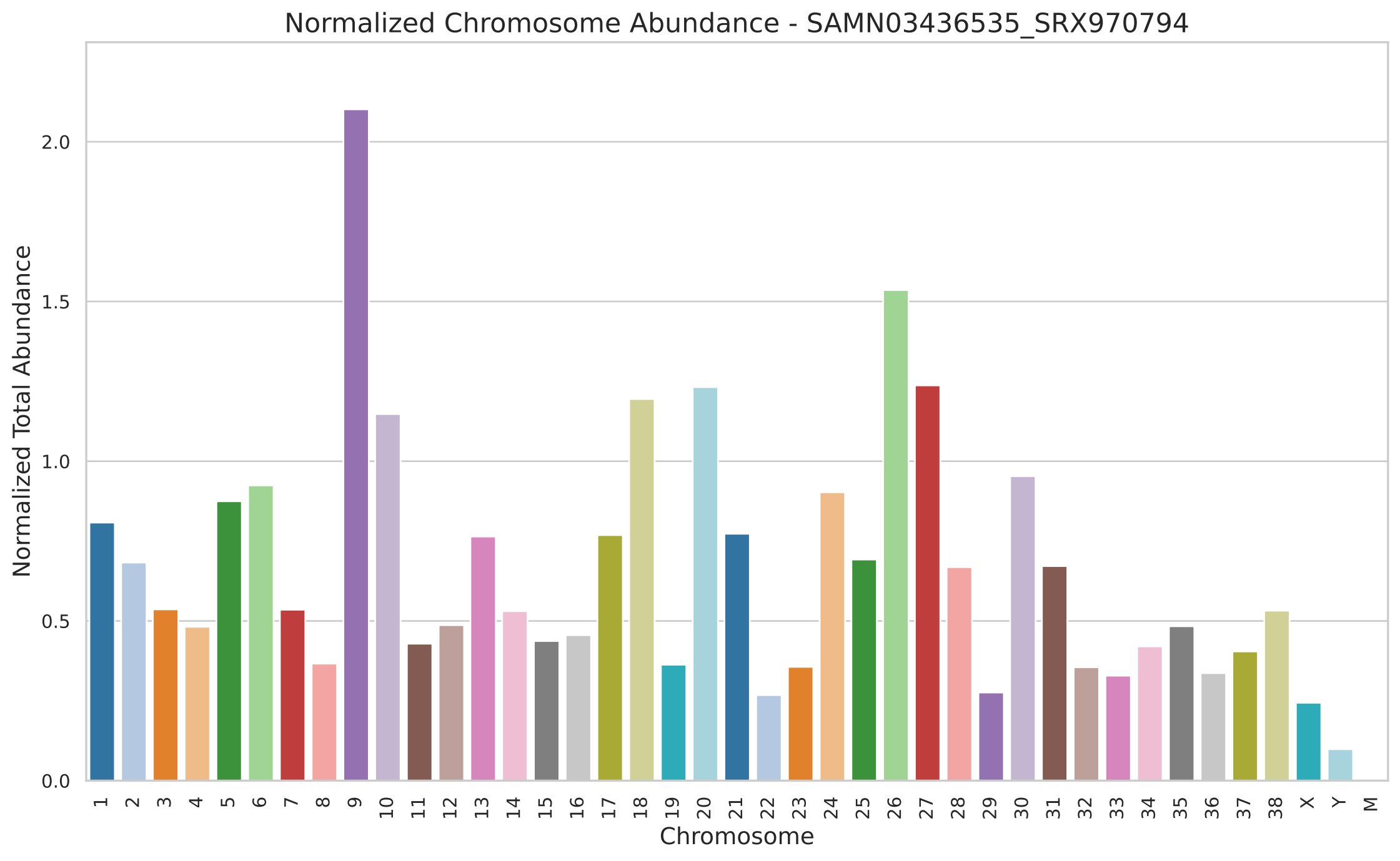

Normalized Chromosome Abundance - SAMEA2706824_ERX950439
Normalized Total Abundance
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

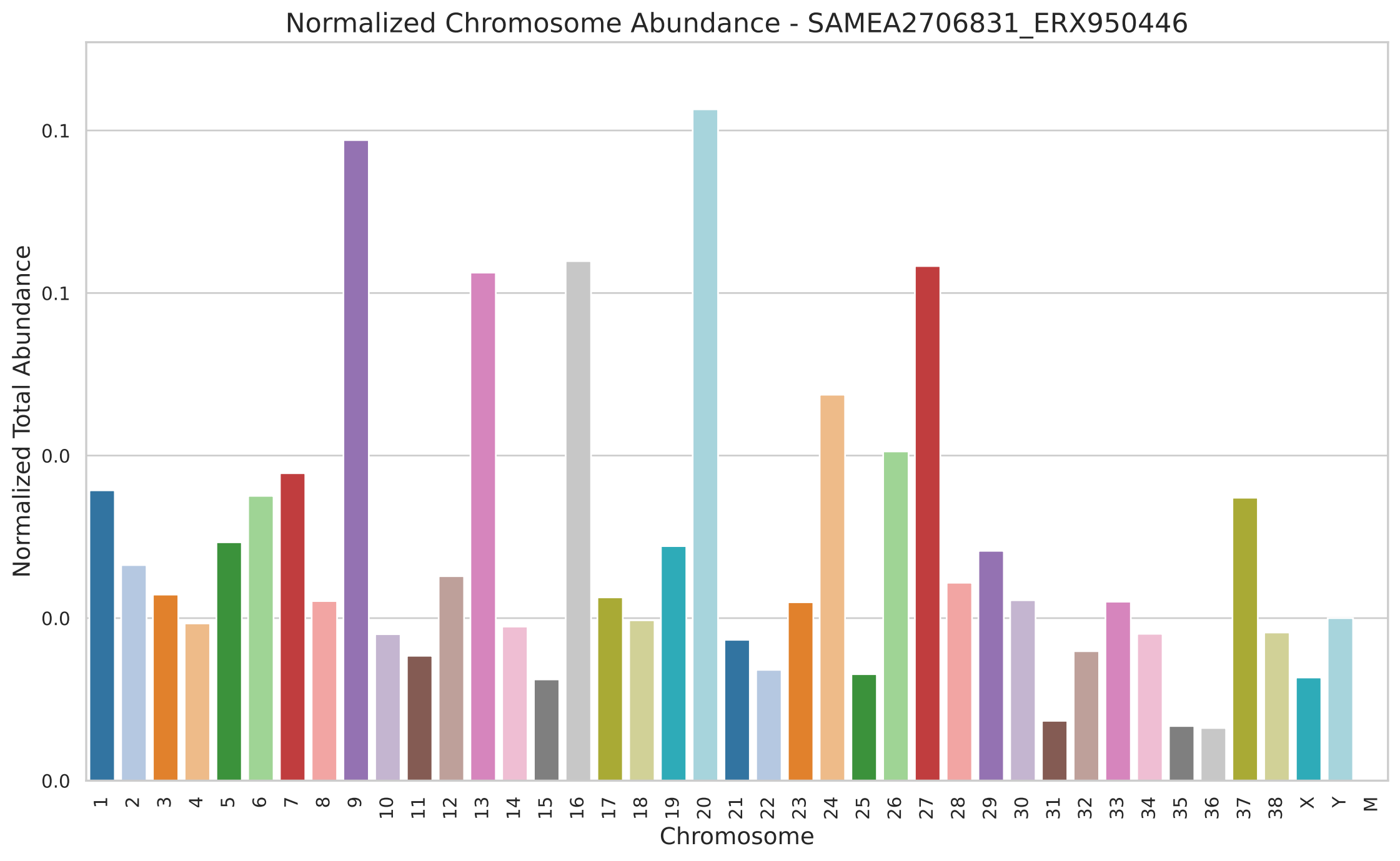

Normalized Chromosome Abundance - SAMN03436471_SRX970813
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

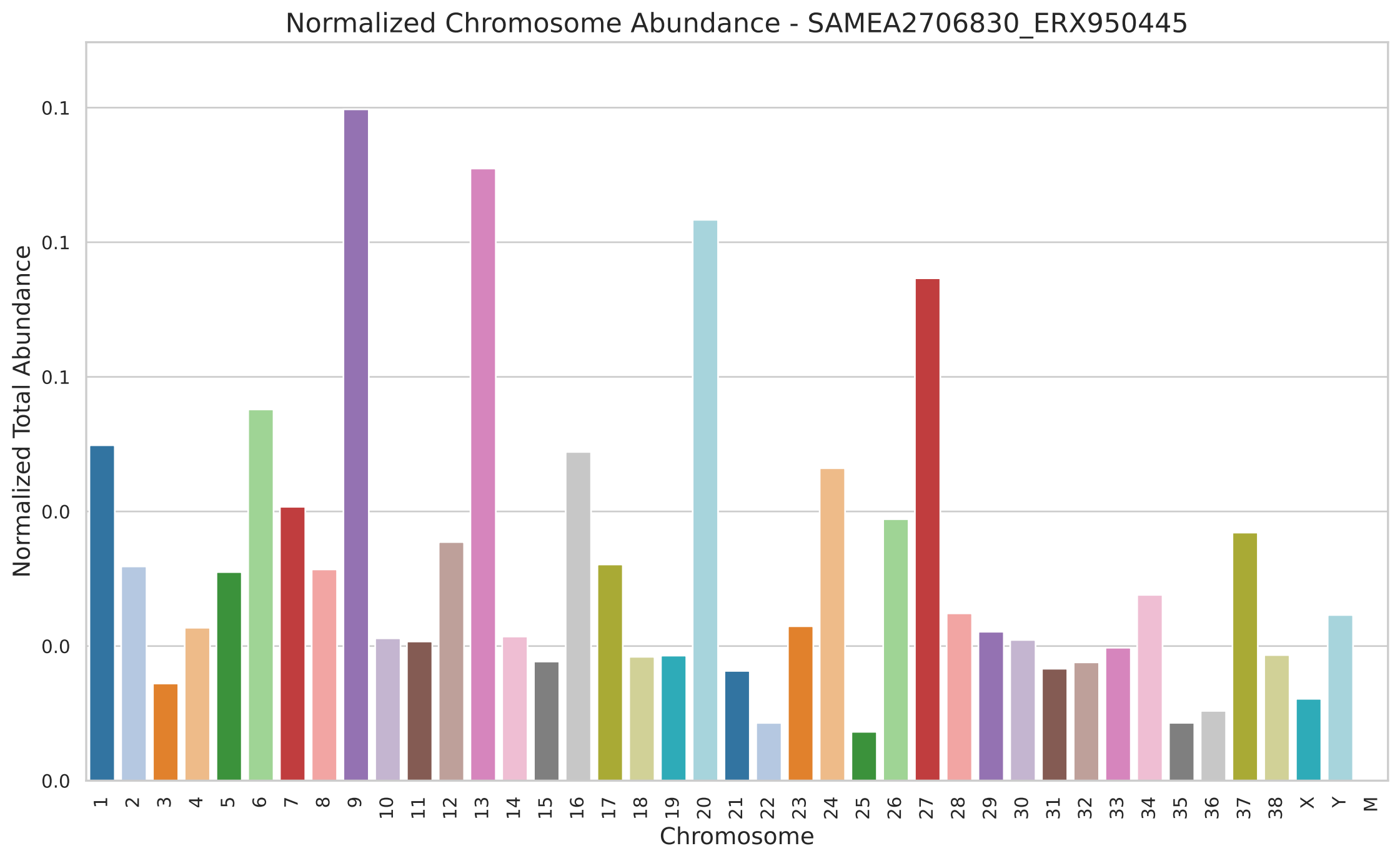

Normalized Chromosome Abundance - SAMEA2706832_ERX950447
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

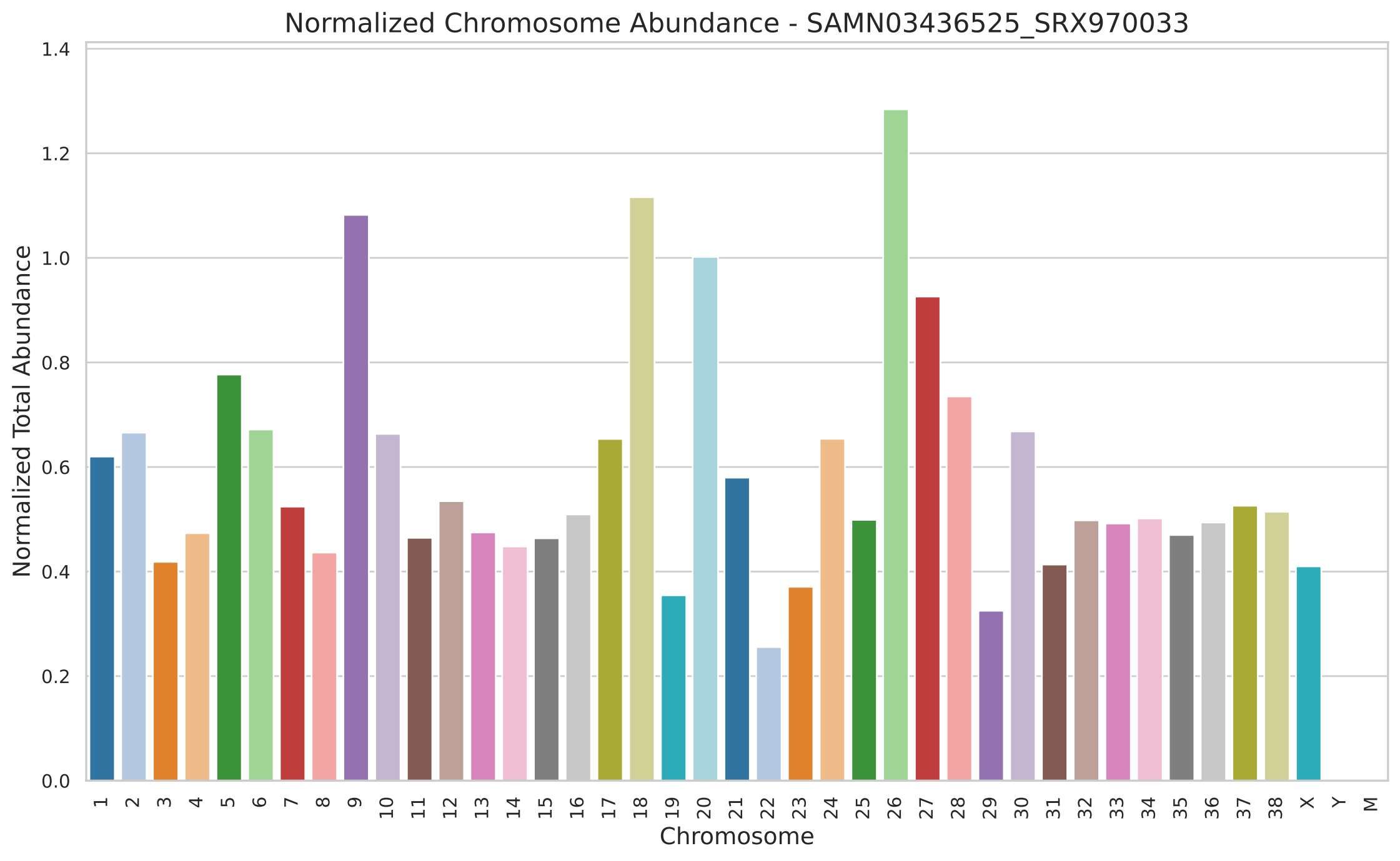

Normalized Chromosome Abundance - SAMEA2706827_ERX950442
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

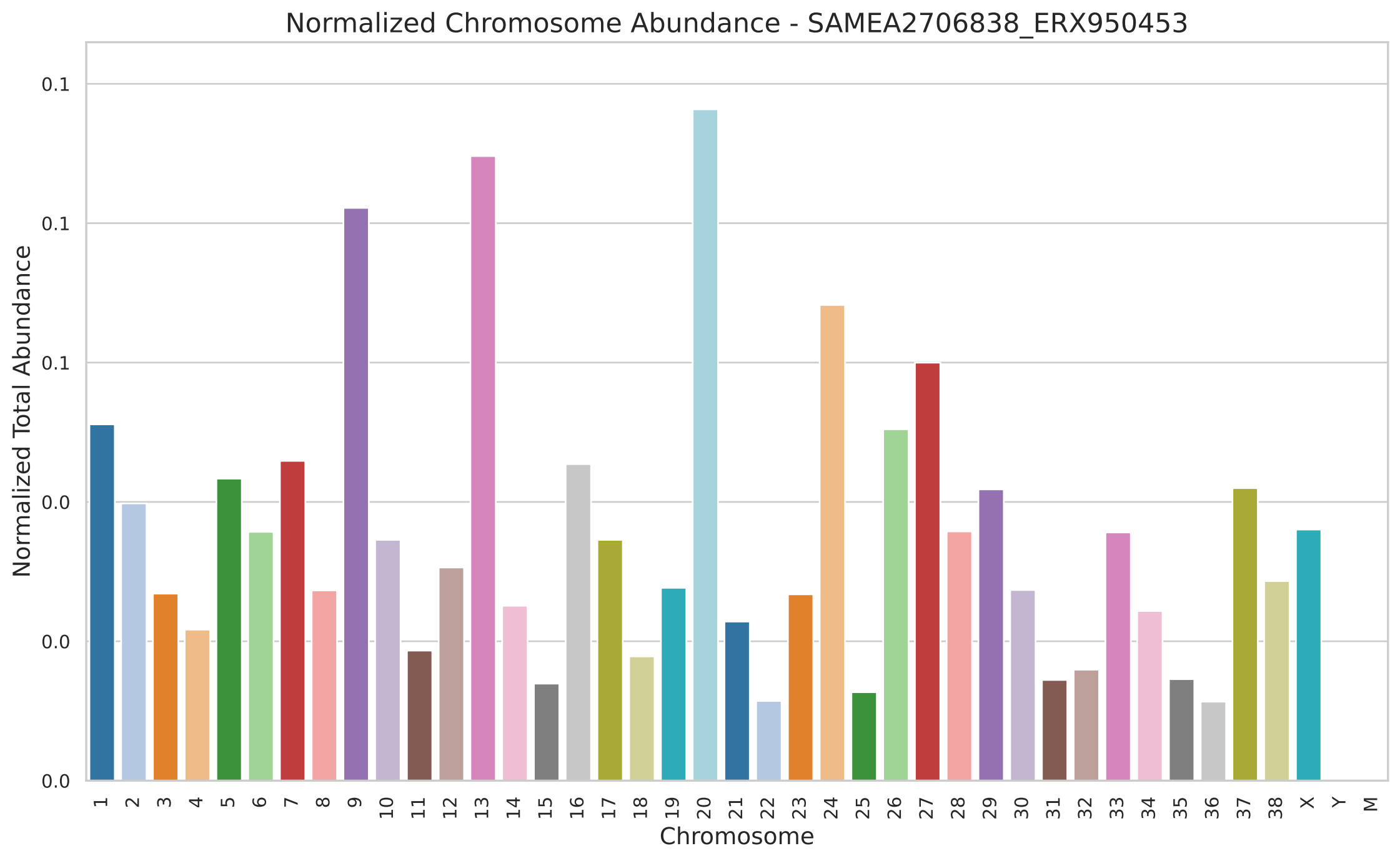

Normalized Chromosome Abundance - SAMEA2706829_ERX950444
Normalized Total Abundance
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

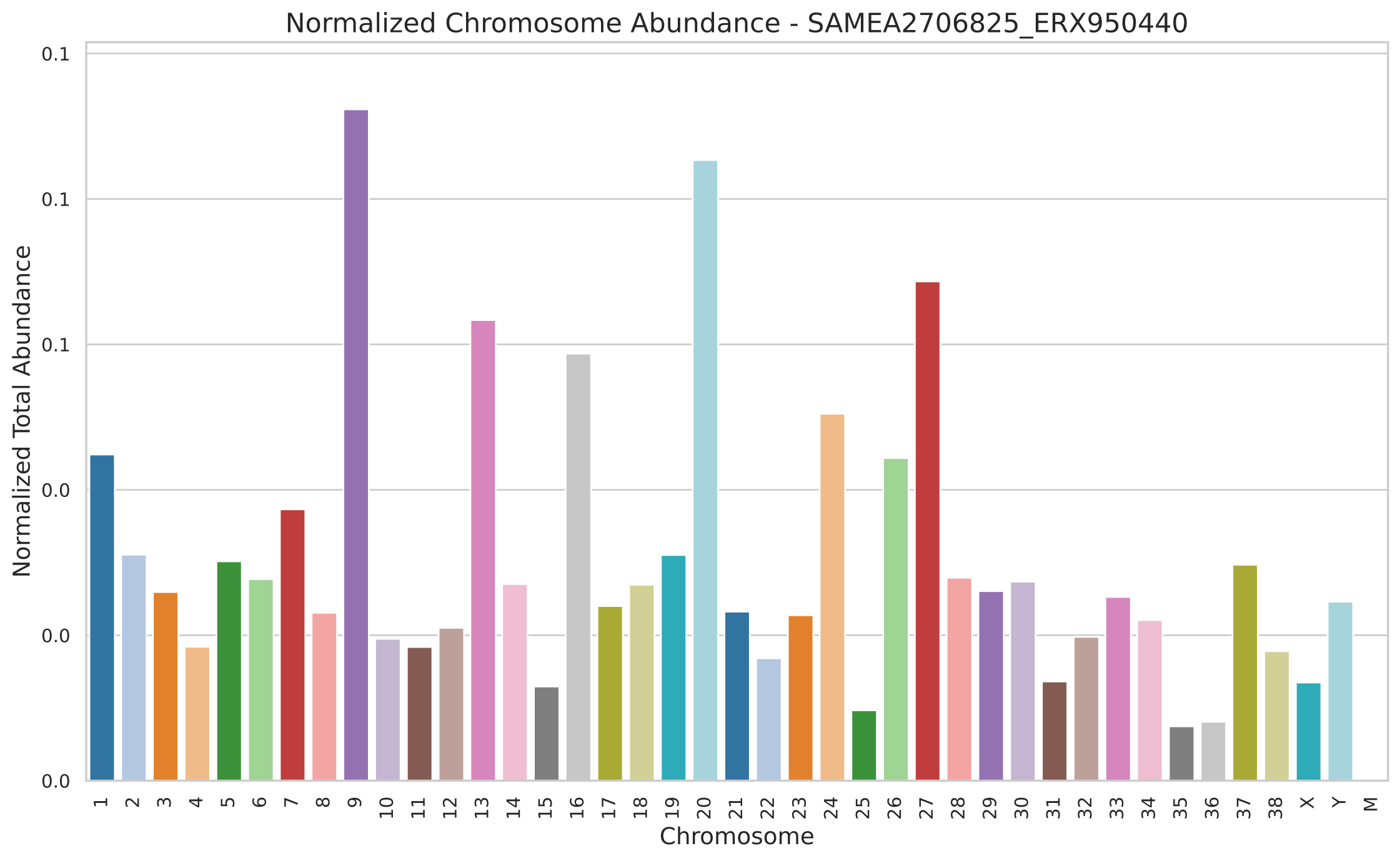

Normalized Chromosome Abundance - SAMN03436535_SRX970794
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

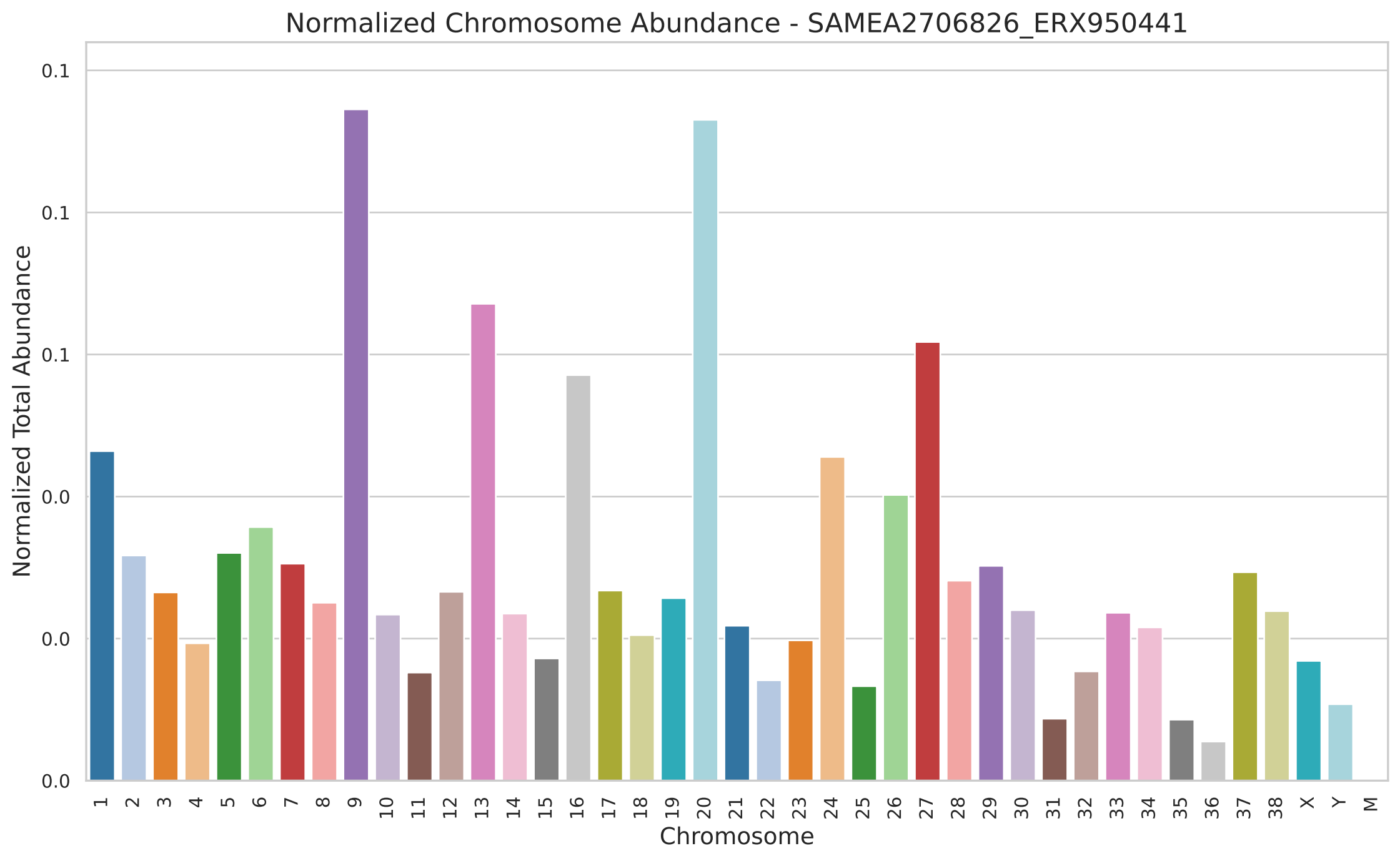

Normalized Chromosome Abundance - SAMEA2706831_ERX950446
Normalized Total Abundance
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

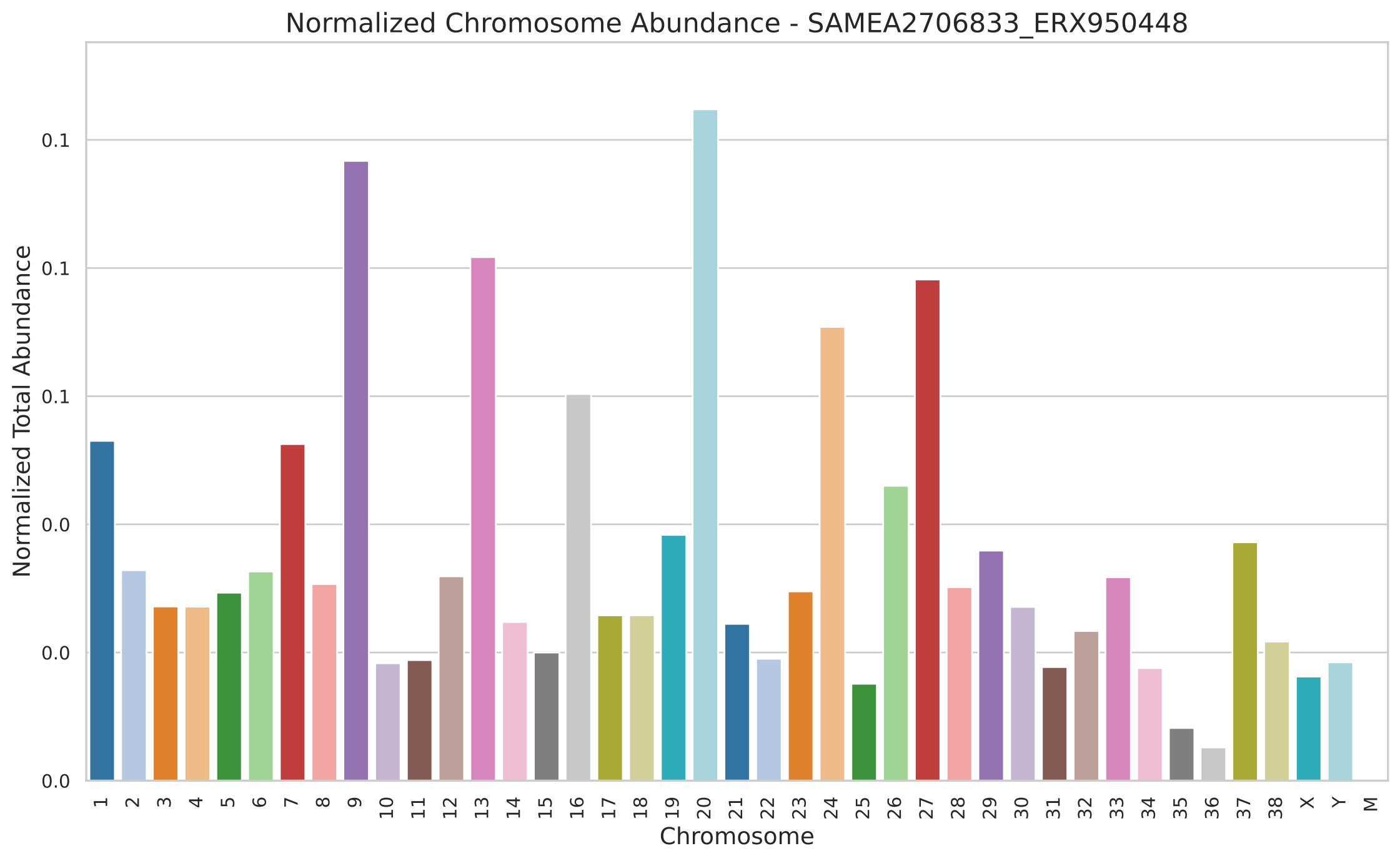

Normalized Chromosome Abundance - SAMEA2706830_ERX950445
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

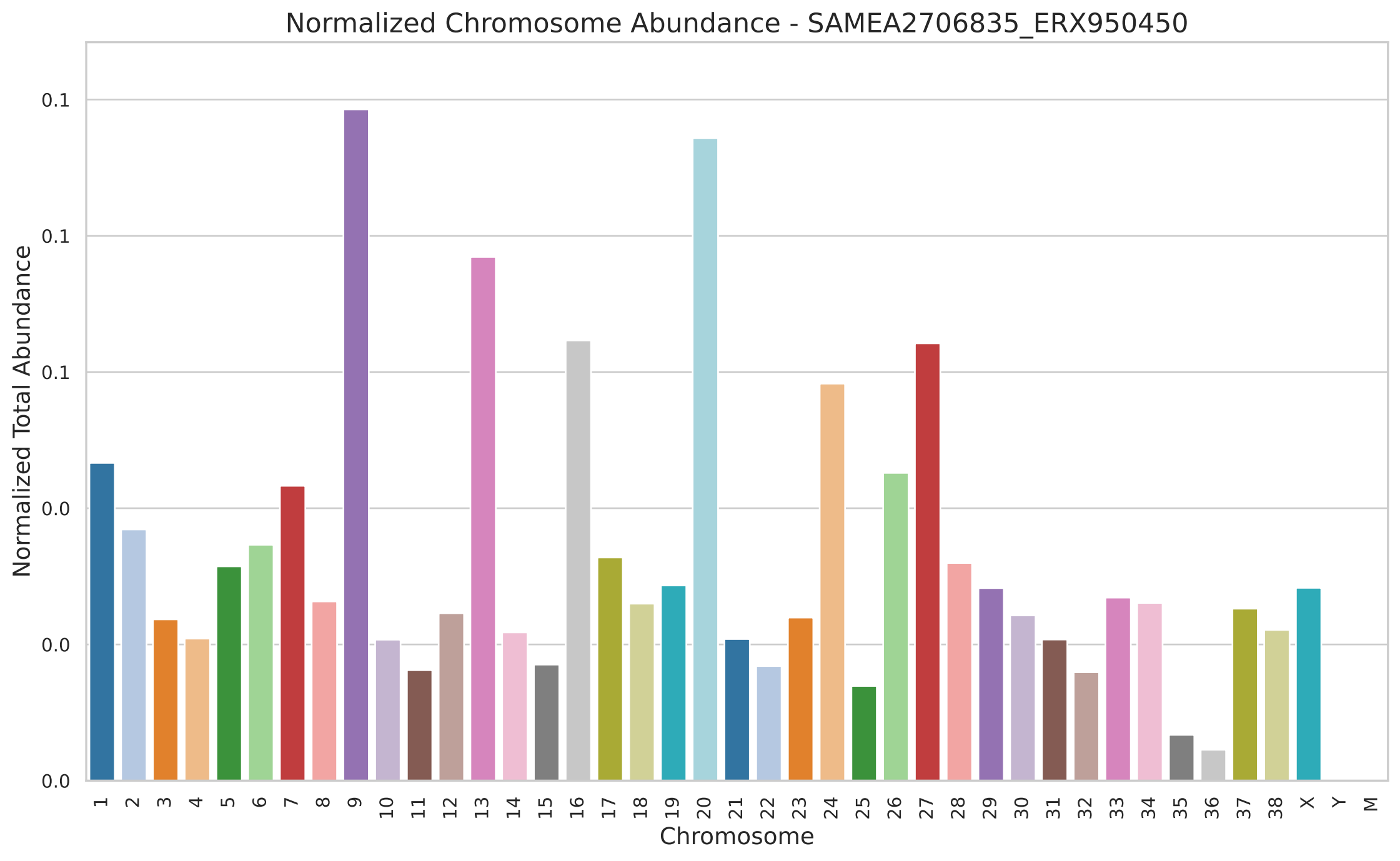

Normalized Chromosome Abundance - SAMN03436525_SRX970033
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

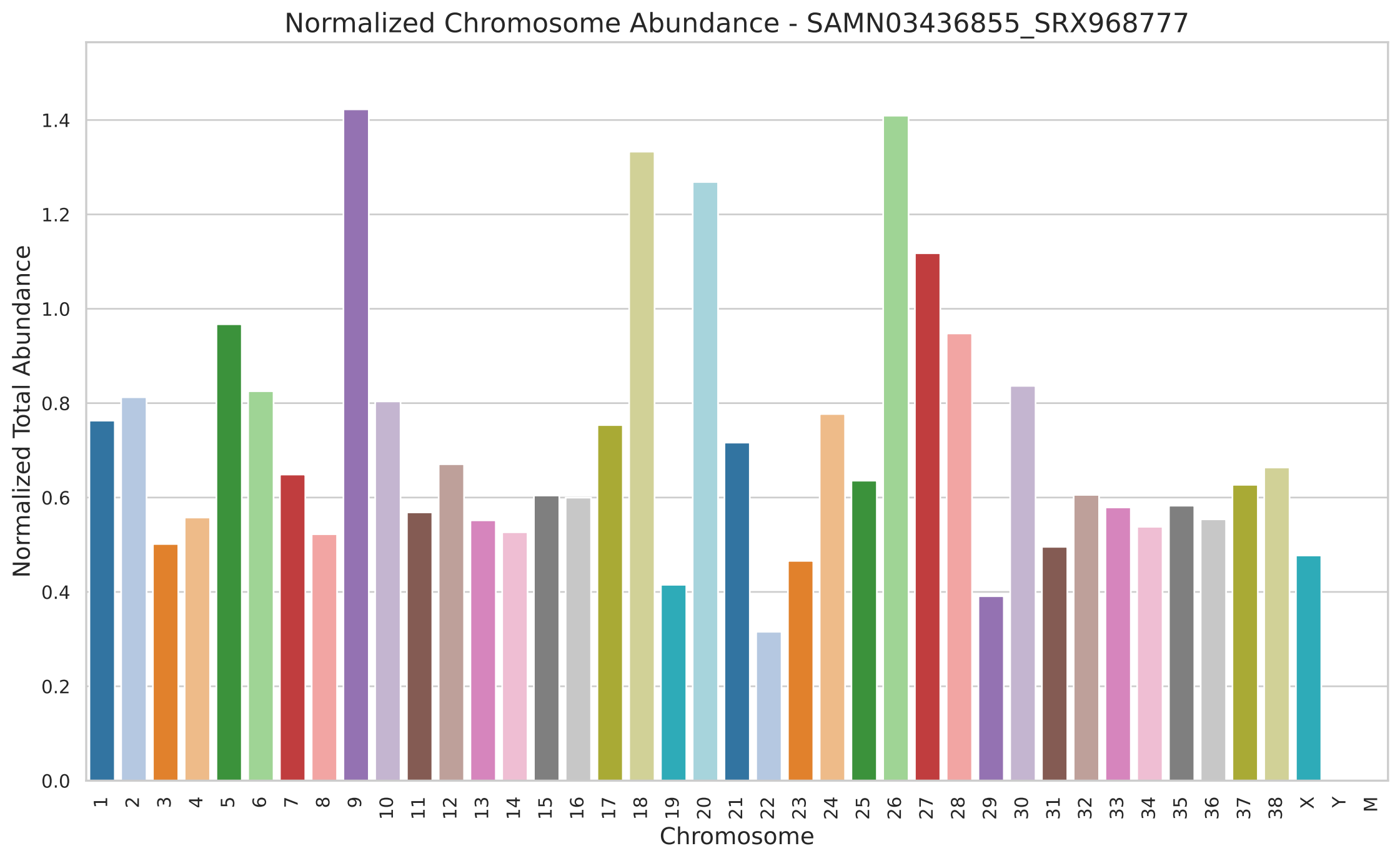

Normalized Chromosome Abundance - SAMEA2706838_ERX950453
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

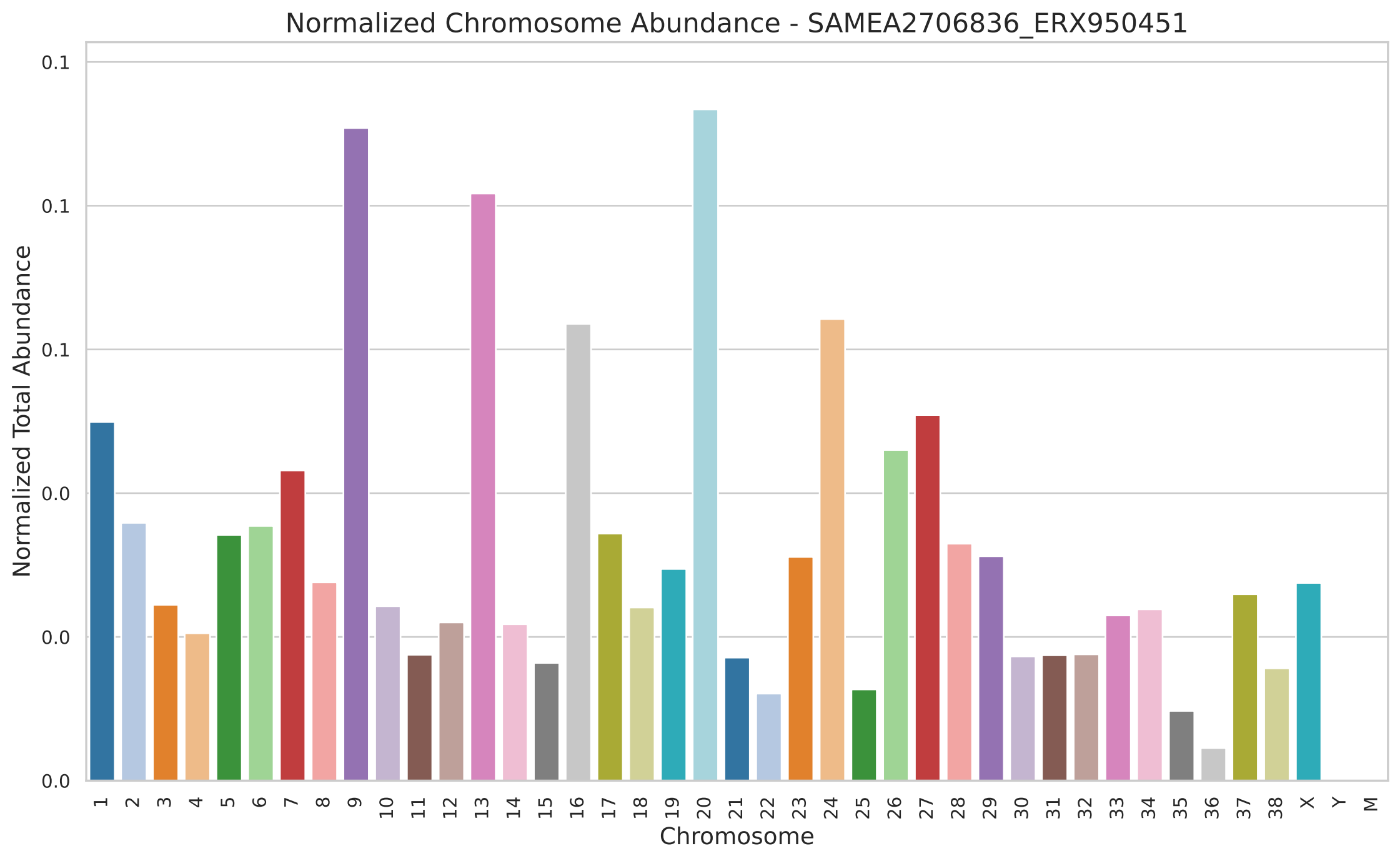

Normalized Chromosome Abundance - SAMEA2706825_ERX950440
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

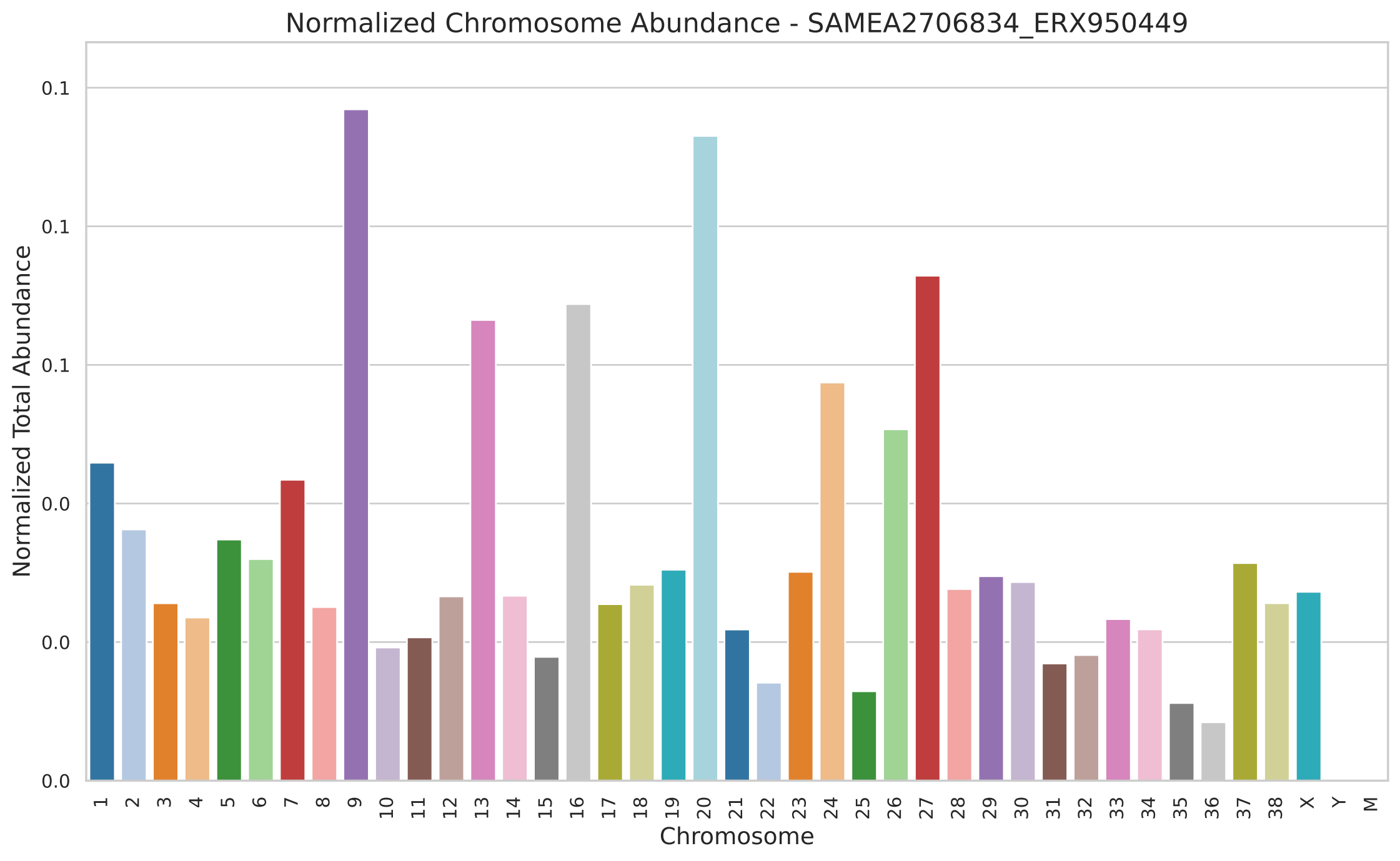

Normalized Chromosome Abundance - SAMEA2706826_ERX950441
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

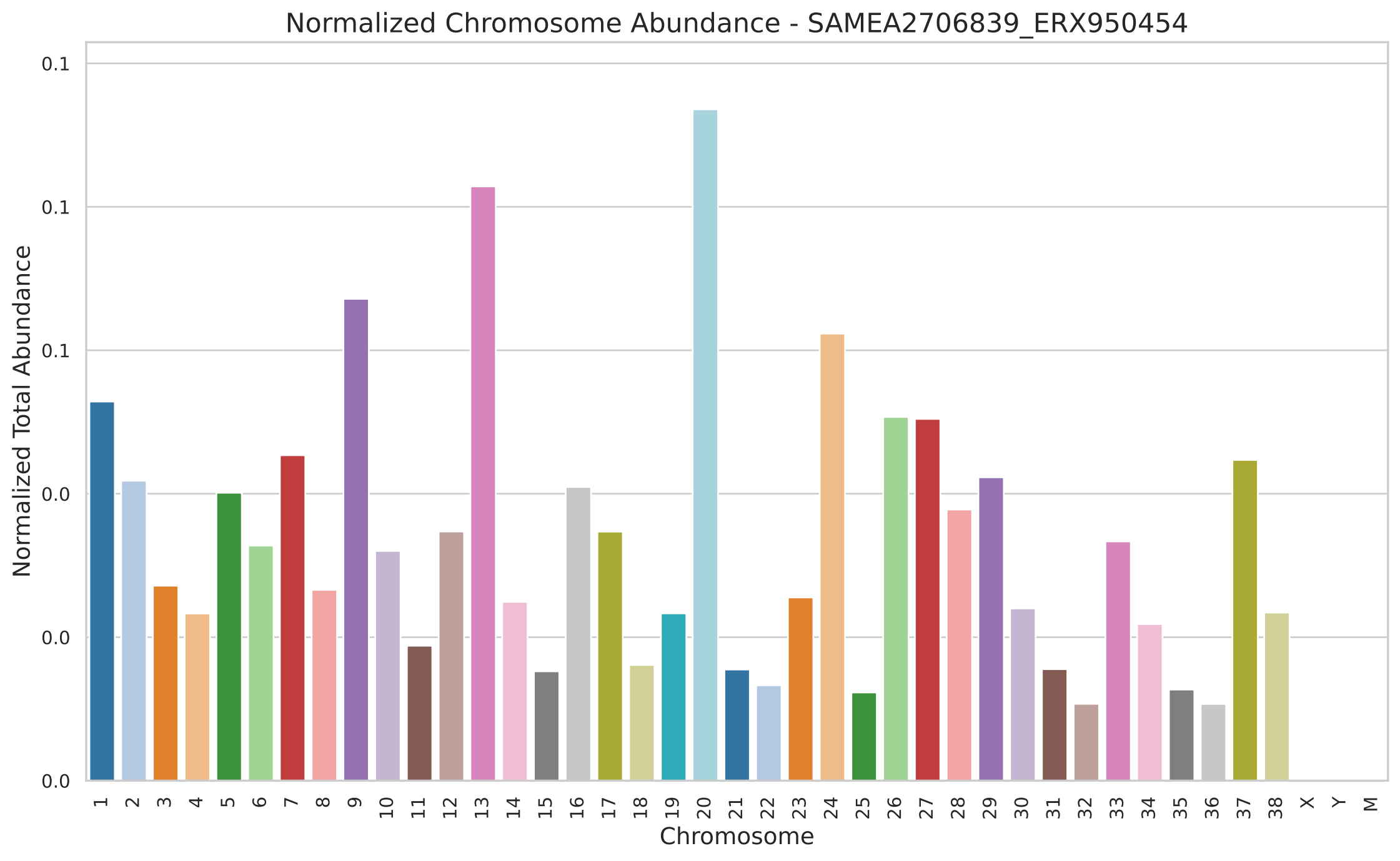

Normalized Chromosome Abundance - SAMEA2706833_ERX950448
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

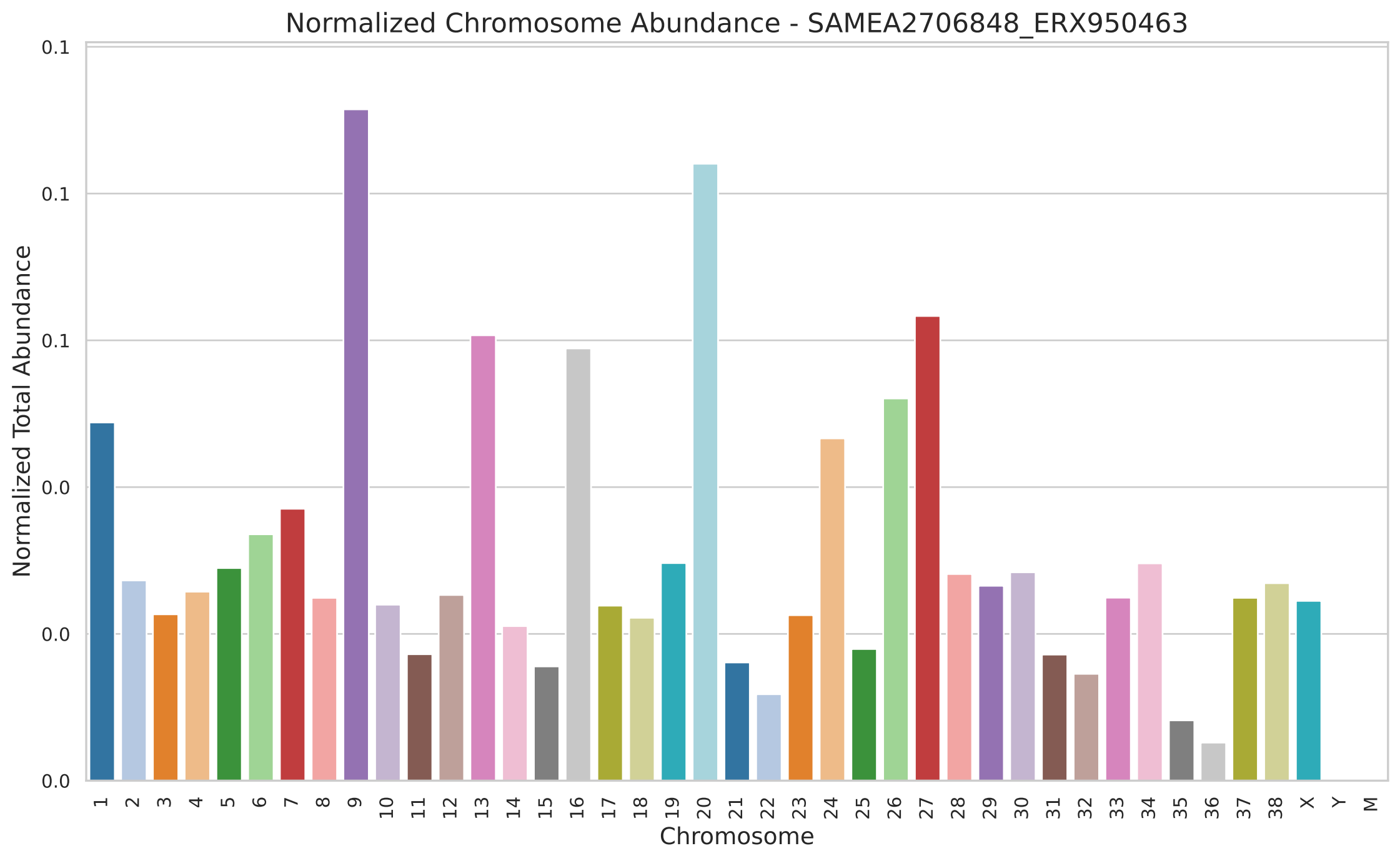

Normalized Chromosome Abundance - SAMEA2706835_ERX950450
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

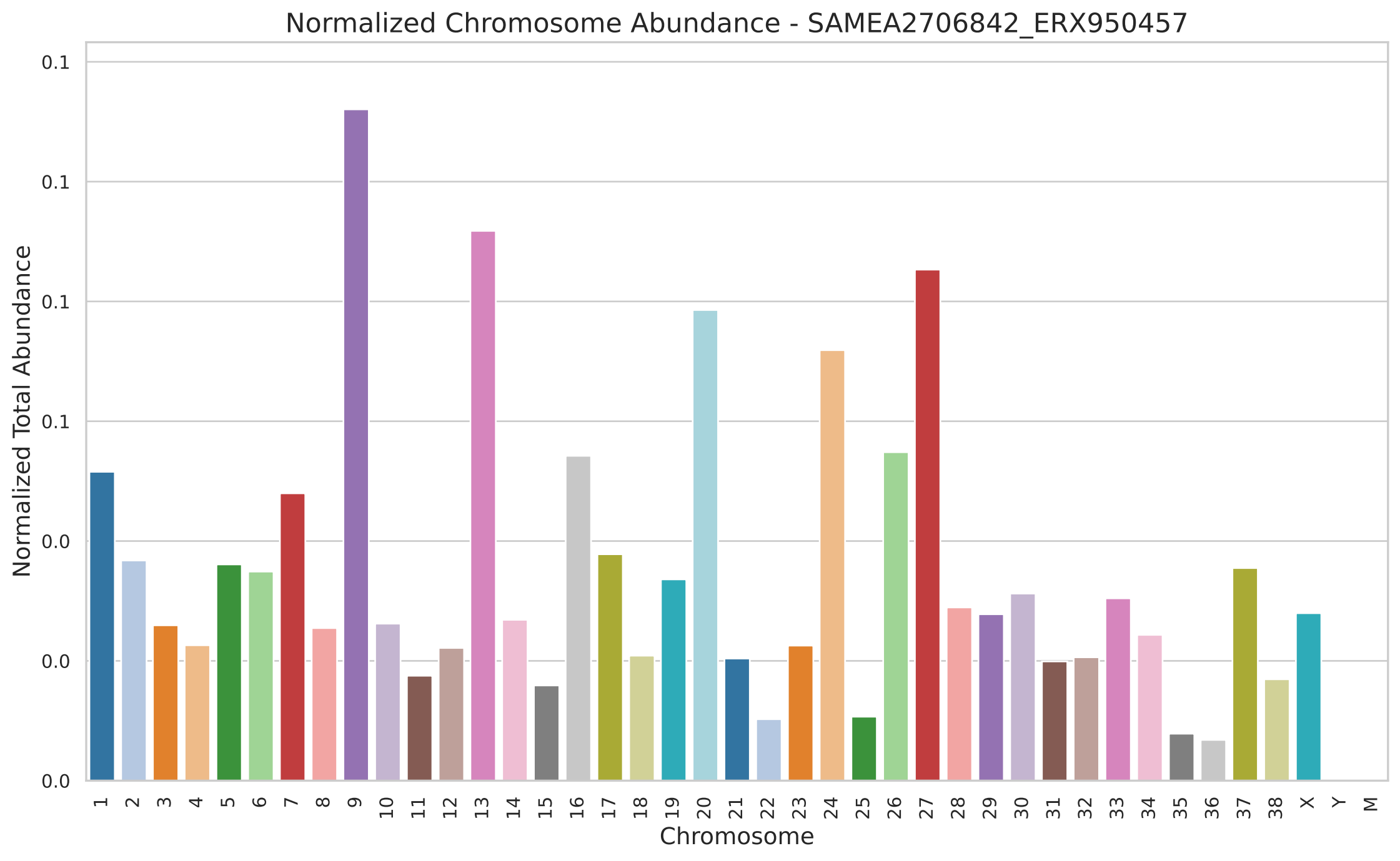

Normalized Chromosome Abundance - SAMN03436855_SRX968777
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

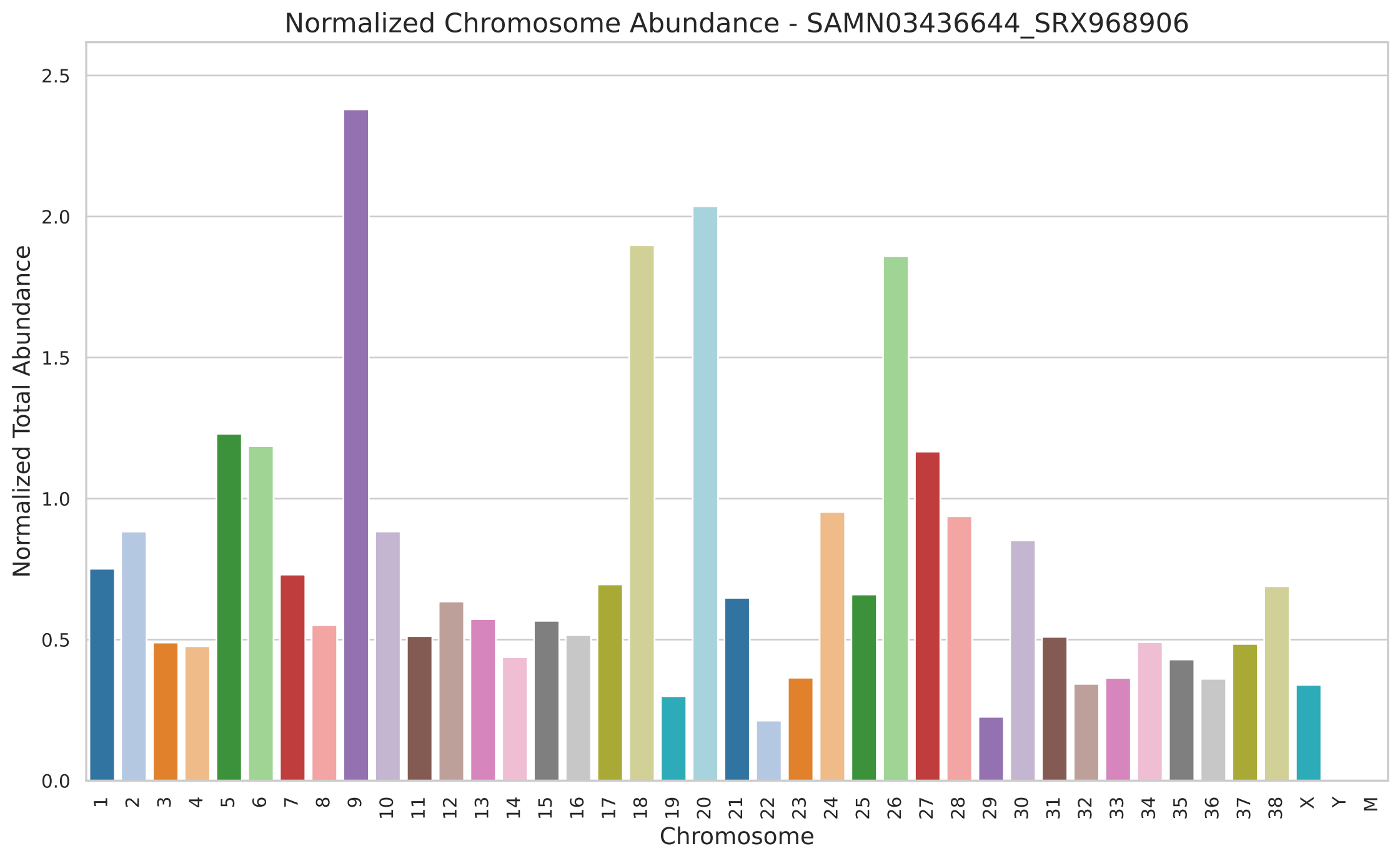

Normalized Chromosome Abundance - SAMEA2706836_ERX950451
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

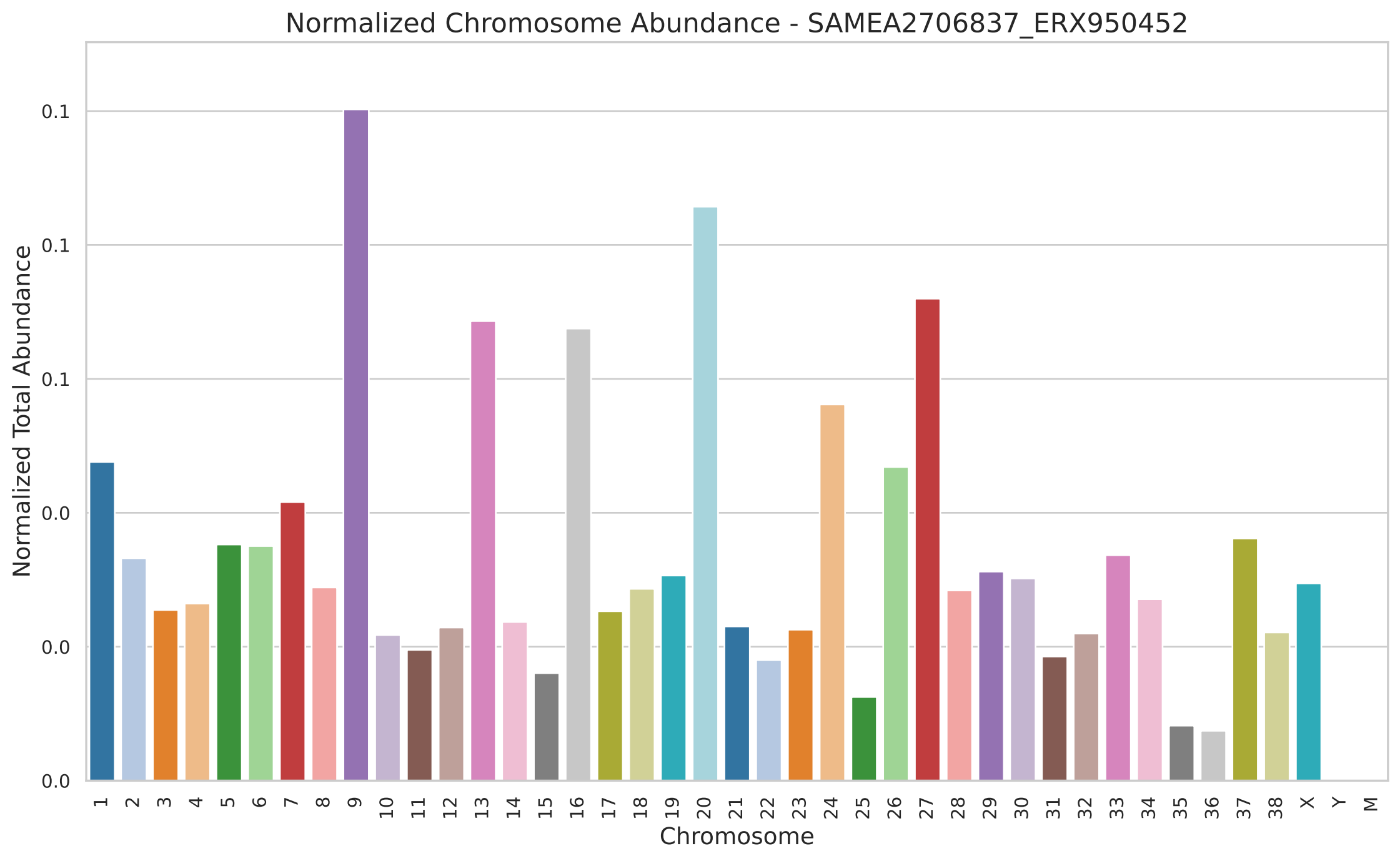

Normalized Chromosome Abundance - SAMEA2706834_ERX950449
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

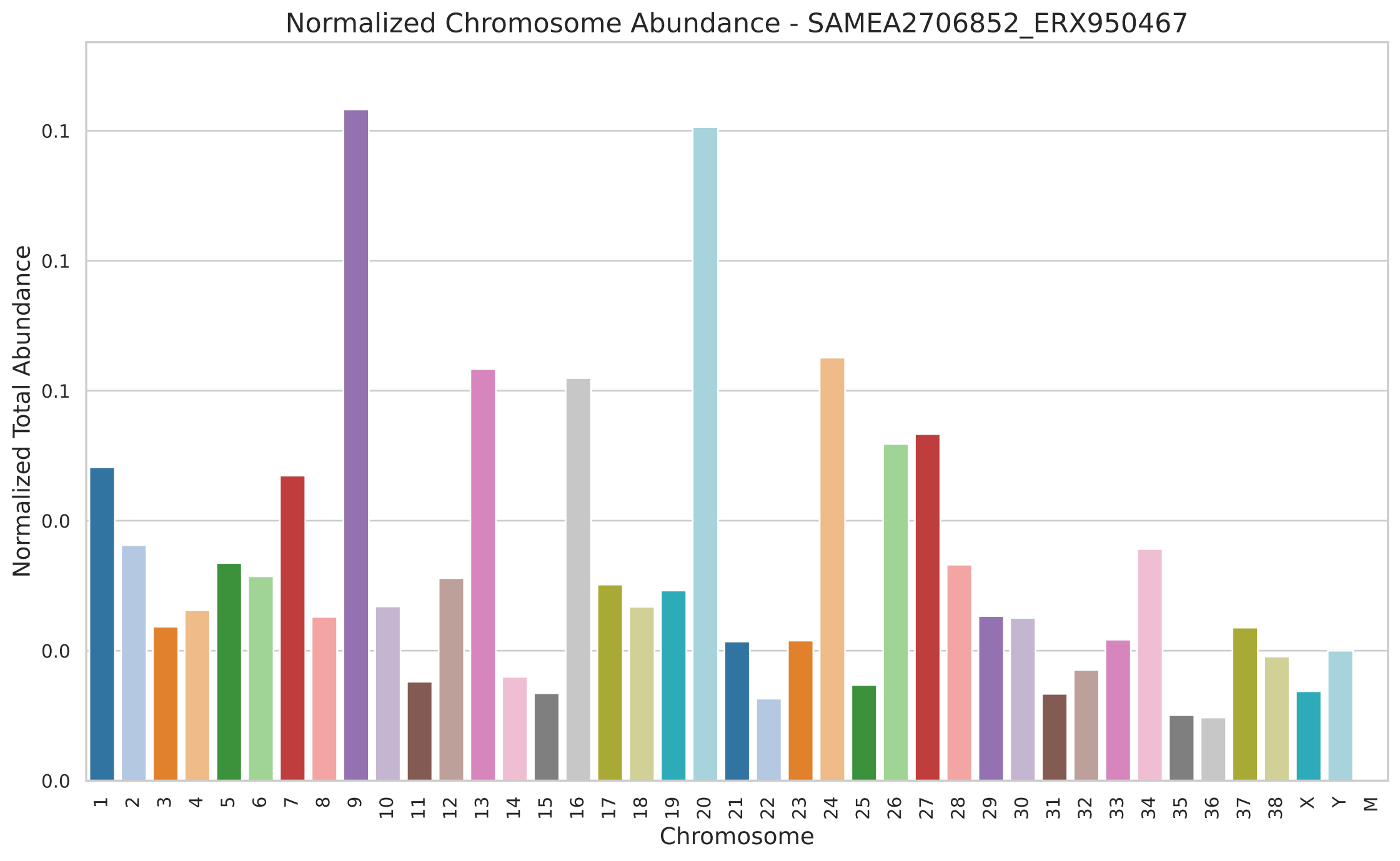

Normalized Chromosome Abundance - SAMEA2706839_ERX950454
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

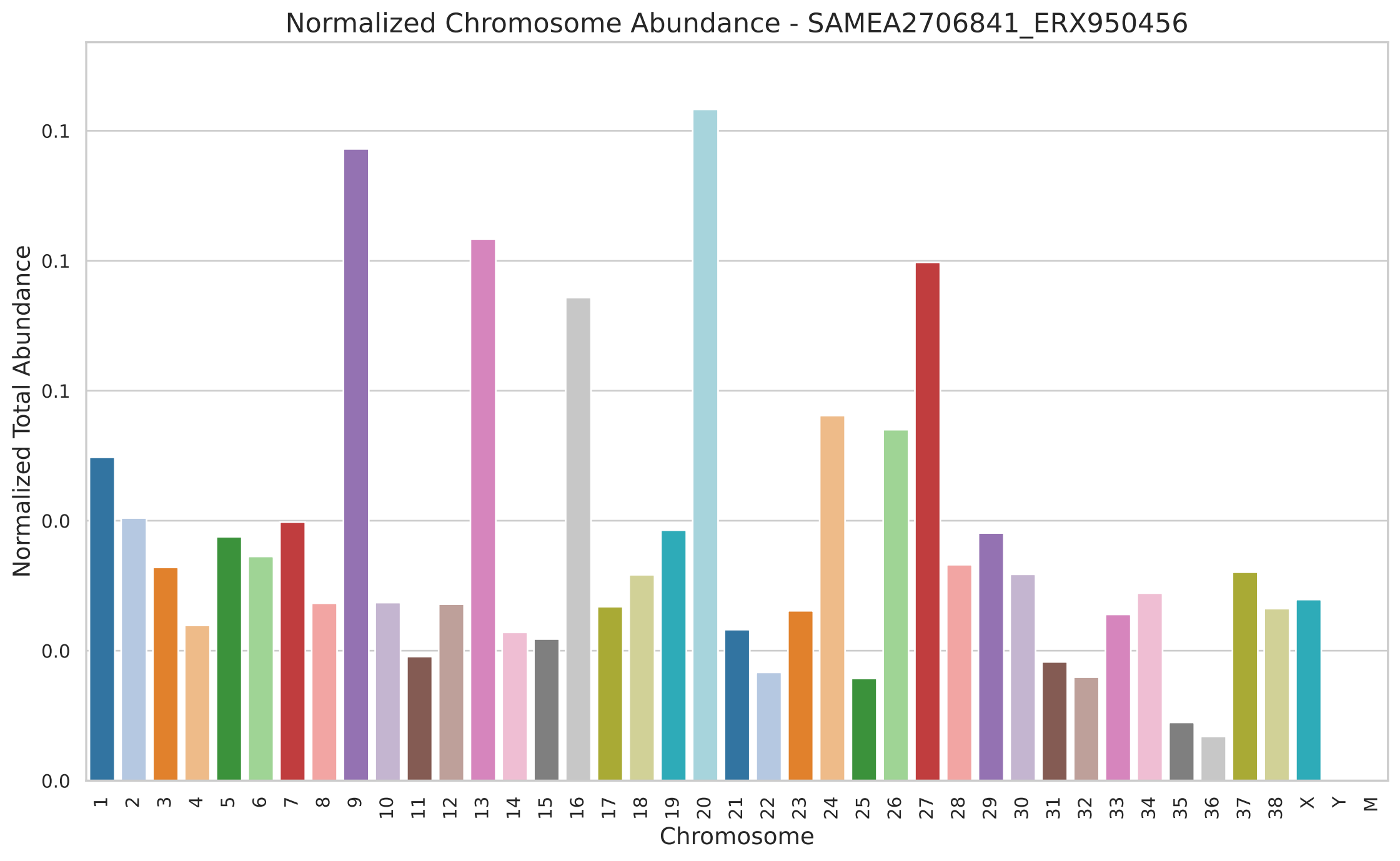

Normalized Chromosome Abundance - SAMEA2706848_ERX950463
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

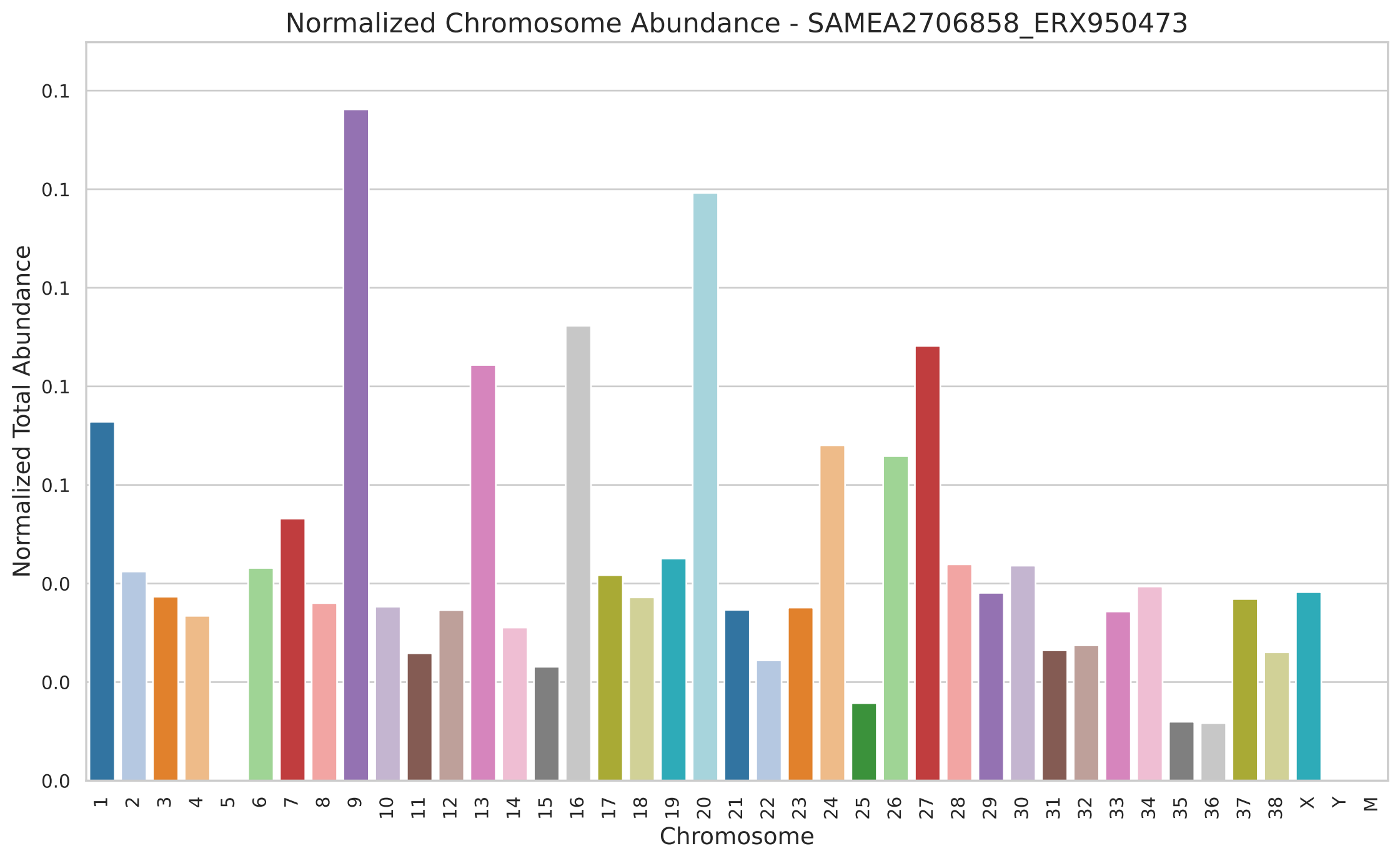

Normalized Chromosome Abundance - SAMEA2706842_ERX950457
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

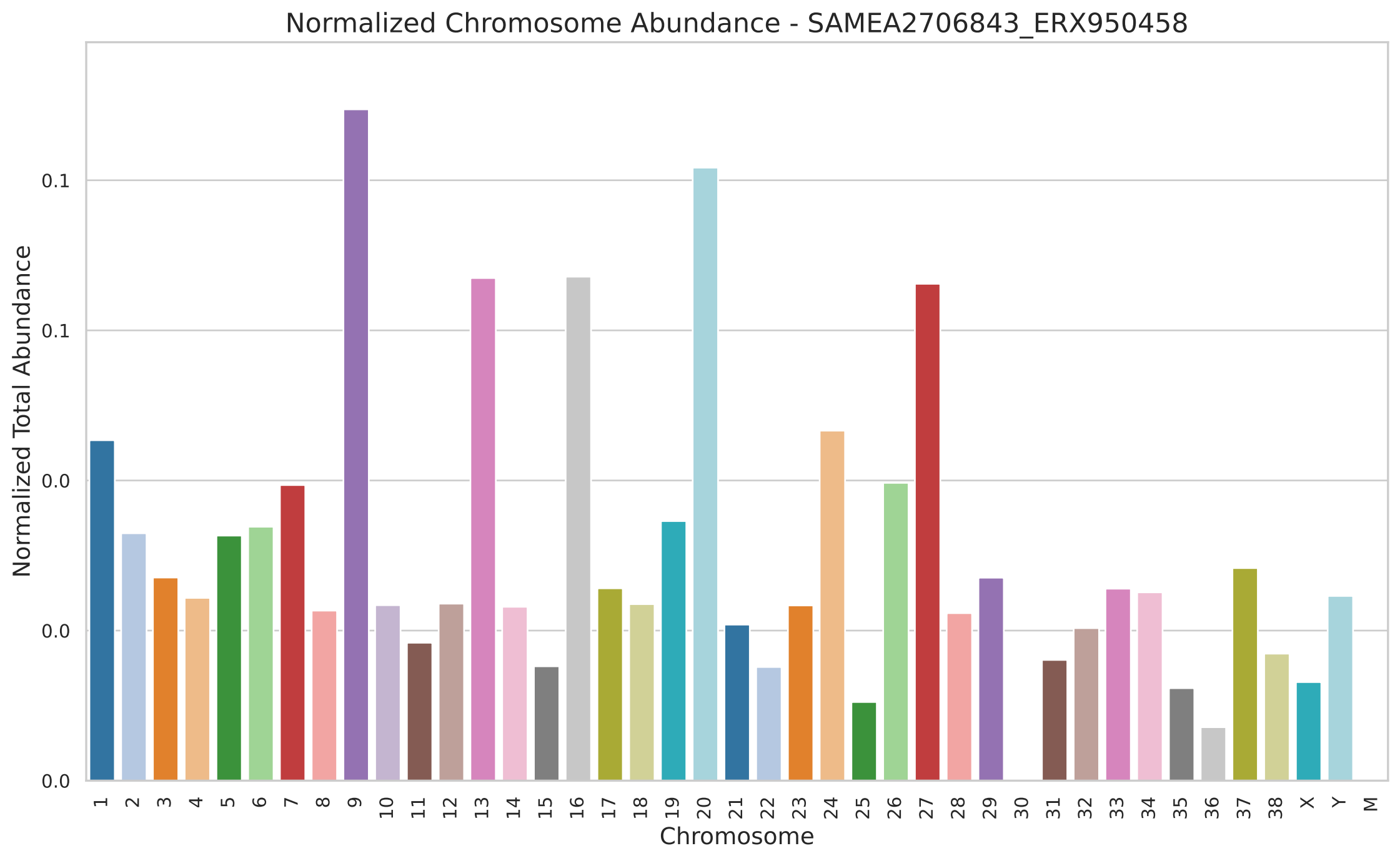

Normalized Chromosome Abundance - SAMN03436644_SRX968906
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

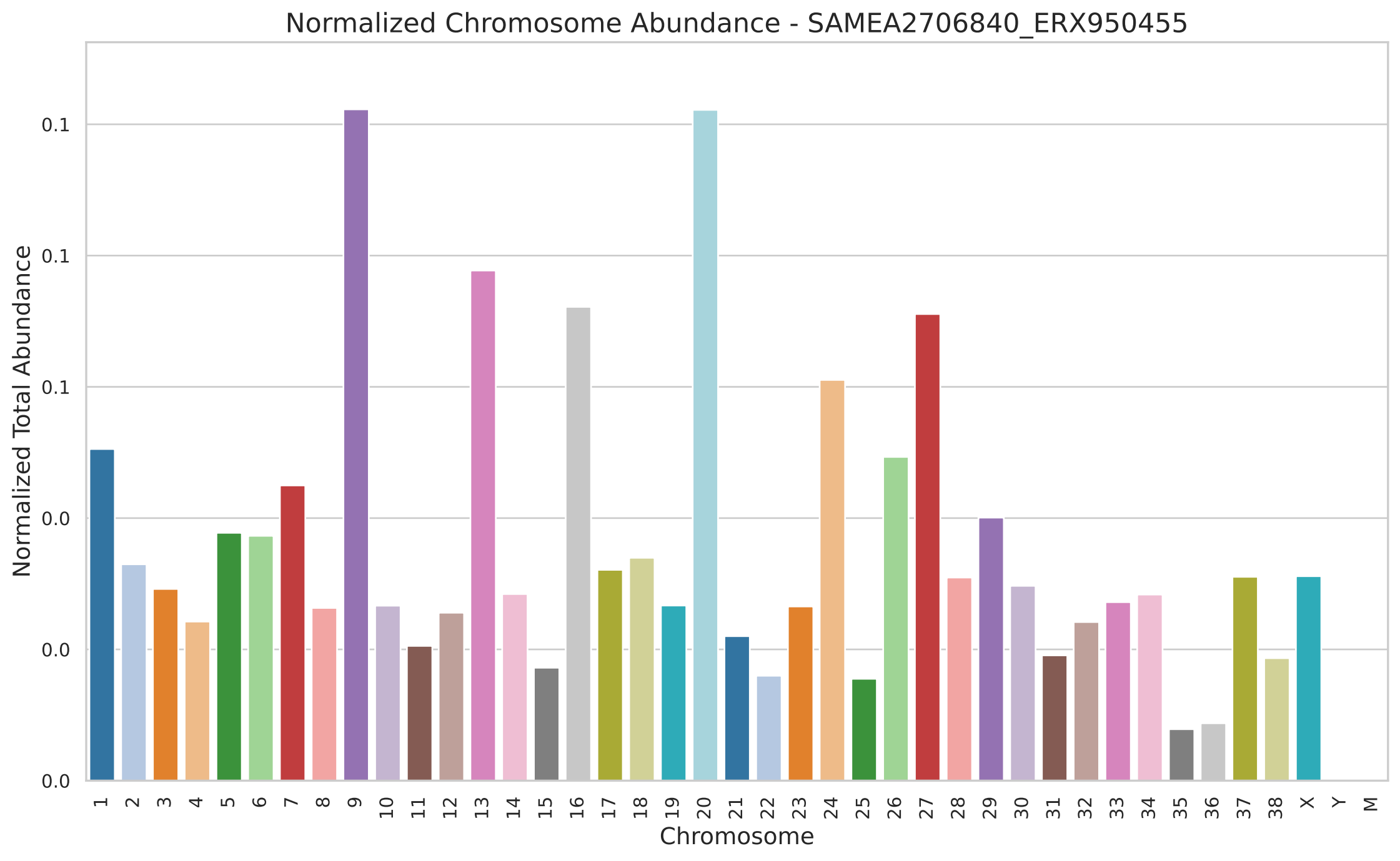

Normalized Chromosome Abundance - SAMEA2706837_ERX950452
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

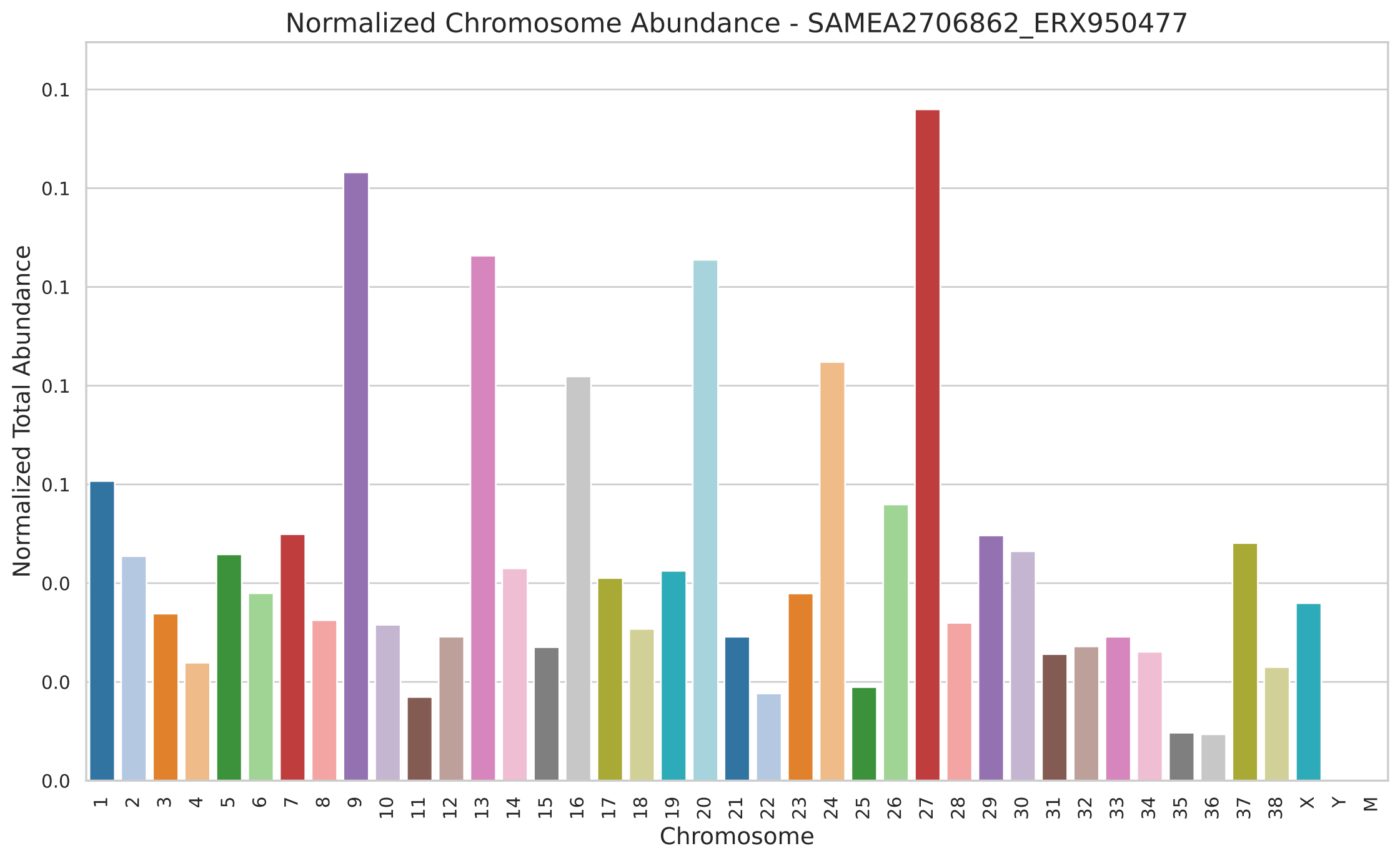

Normalized Chromosome Abundance - SAMEA2706852_ERX950467
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

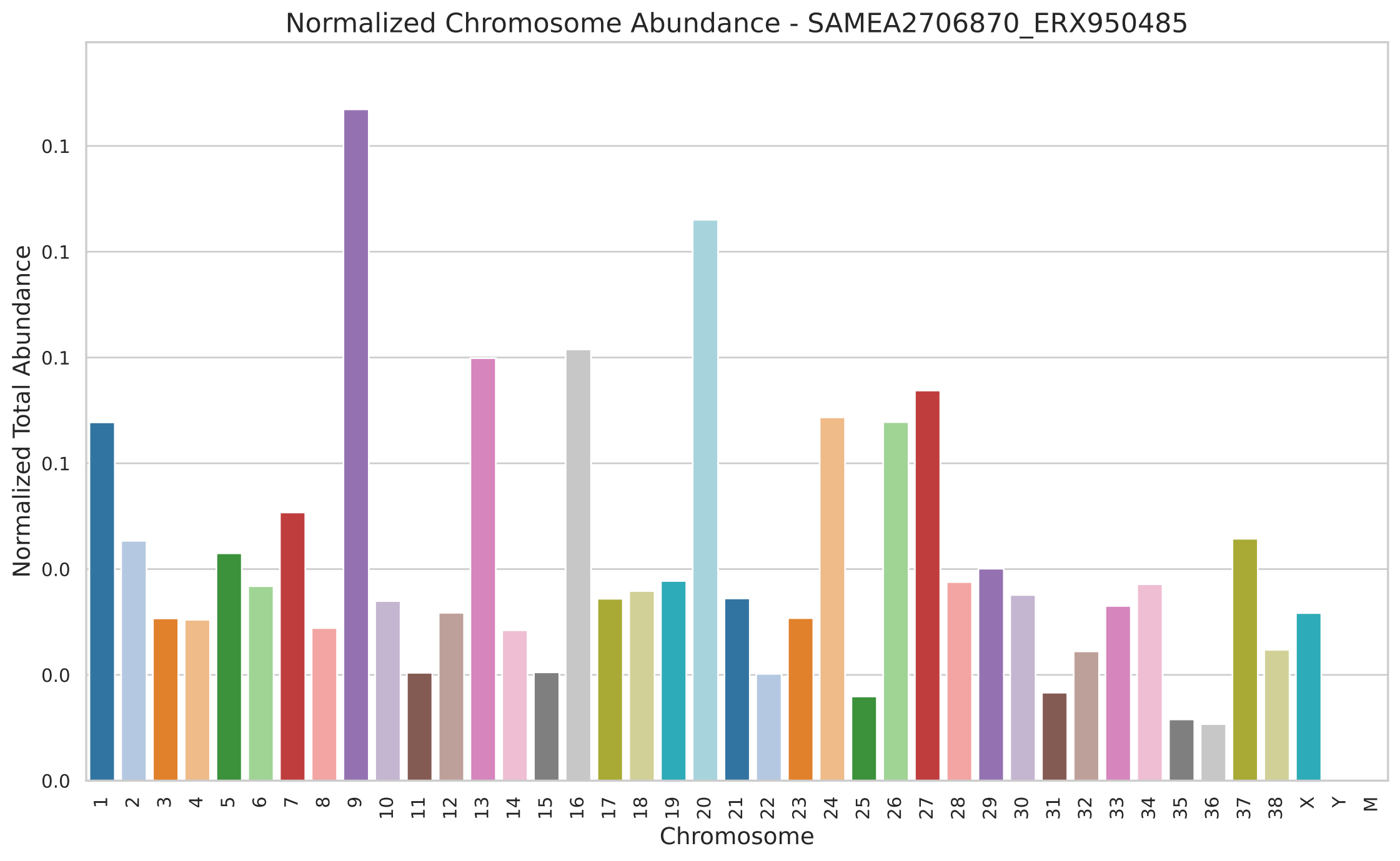

Normalized Chromosome Abundance - SAMEA2706841_ERX950456
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

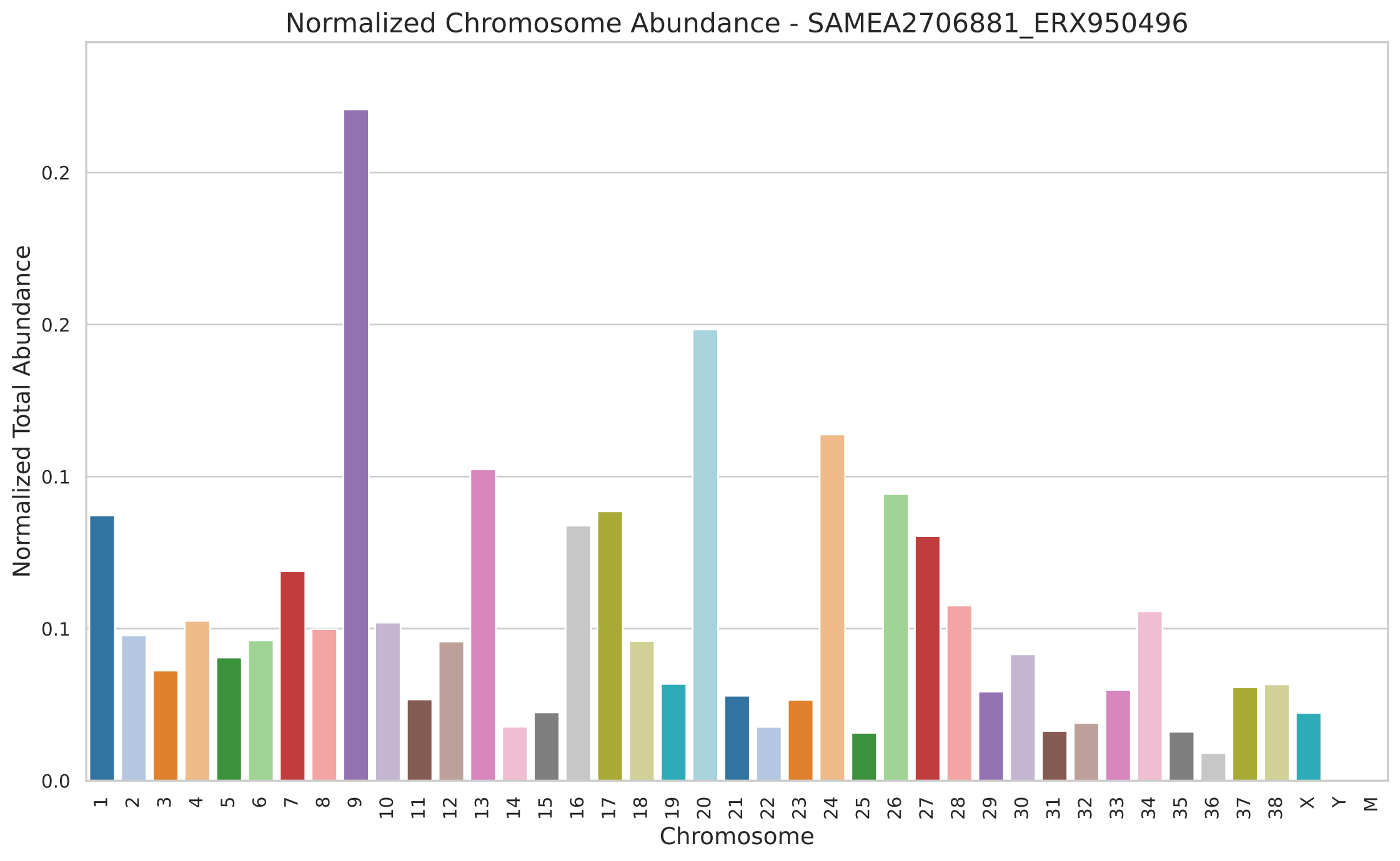

Normalized Chromosome Abundance - SAMEA2706858_ERX950473
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

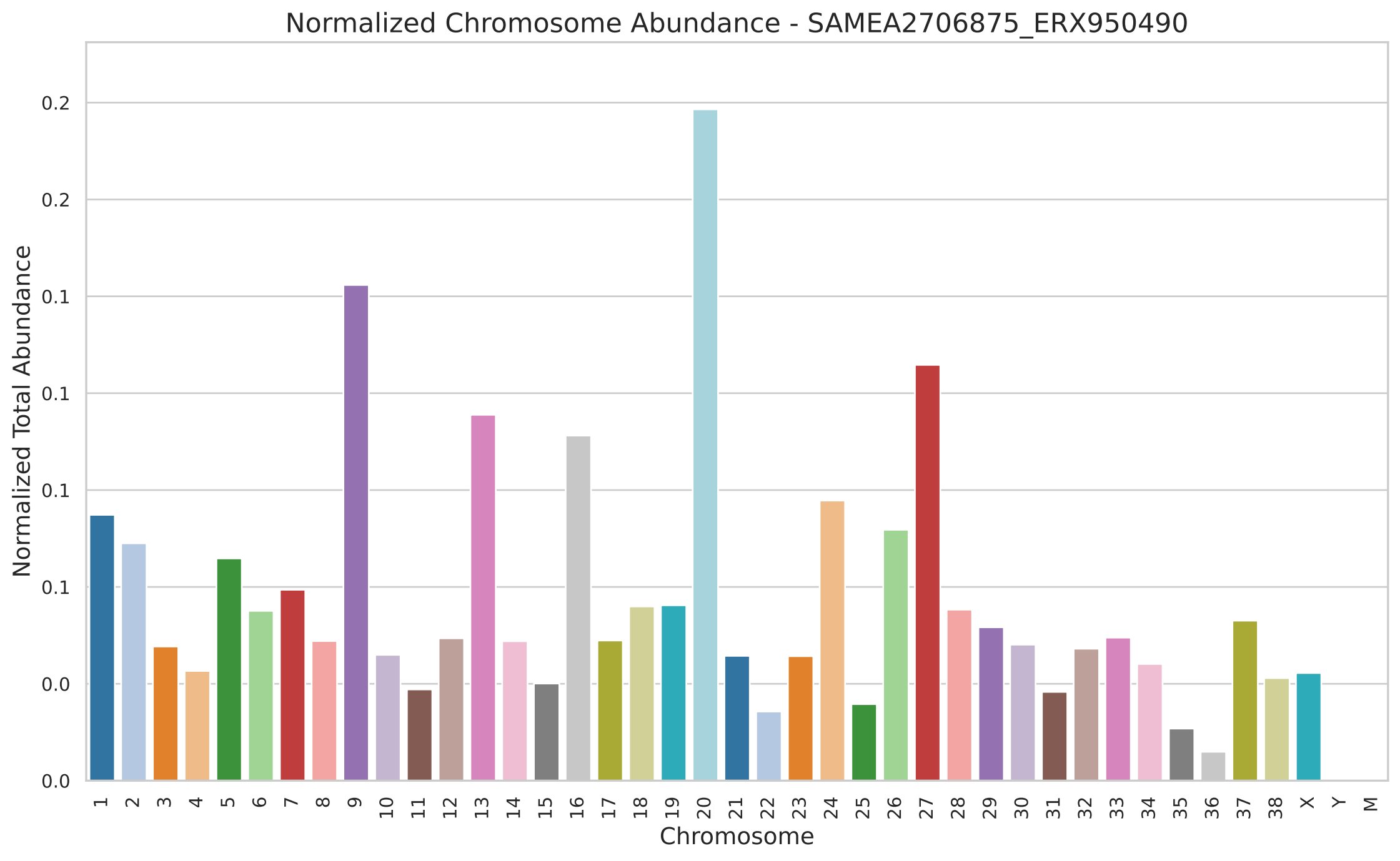

Normalized Chromosome Abundance - SAMEA2706843_ERX950458
Normalized Total Abundance
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

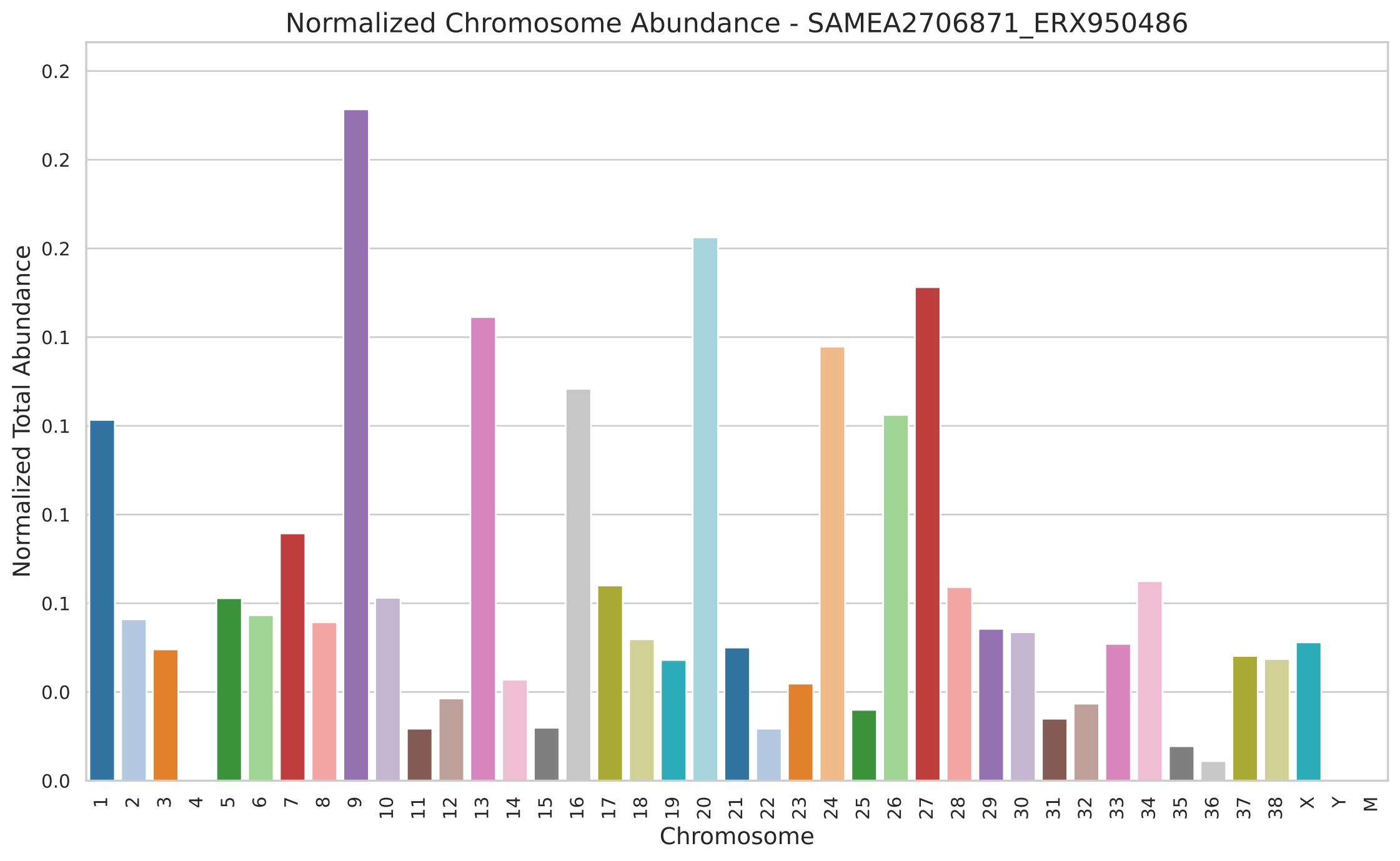

Normalized Chromosome Abundance - SAMEA2706840_ERX950455
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

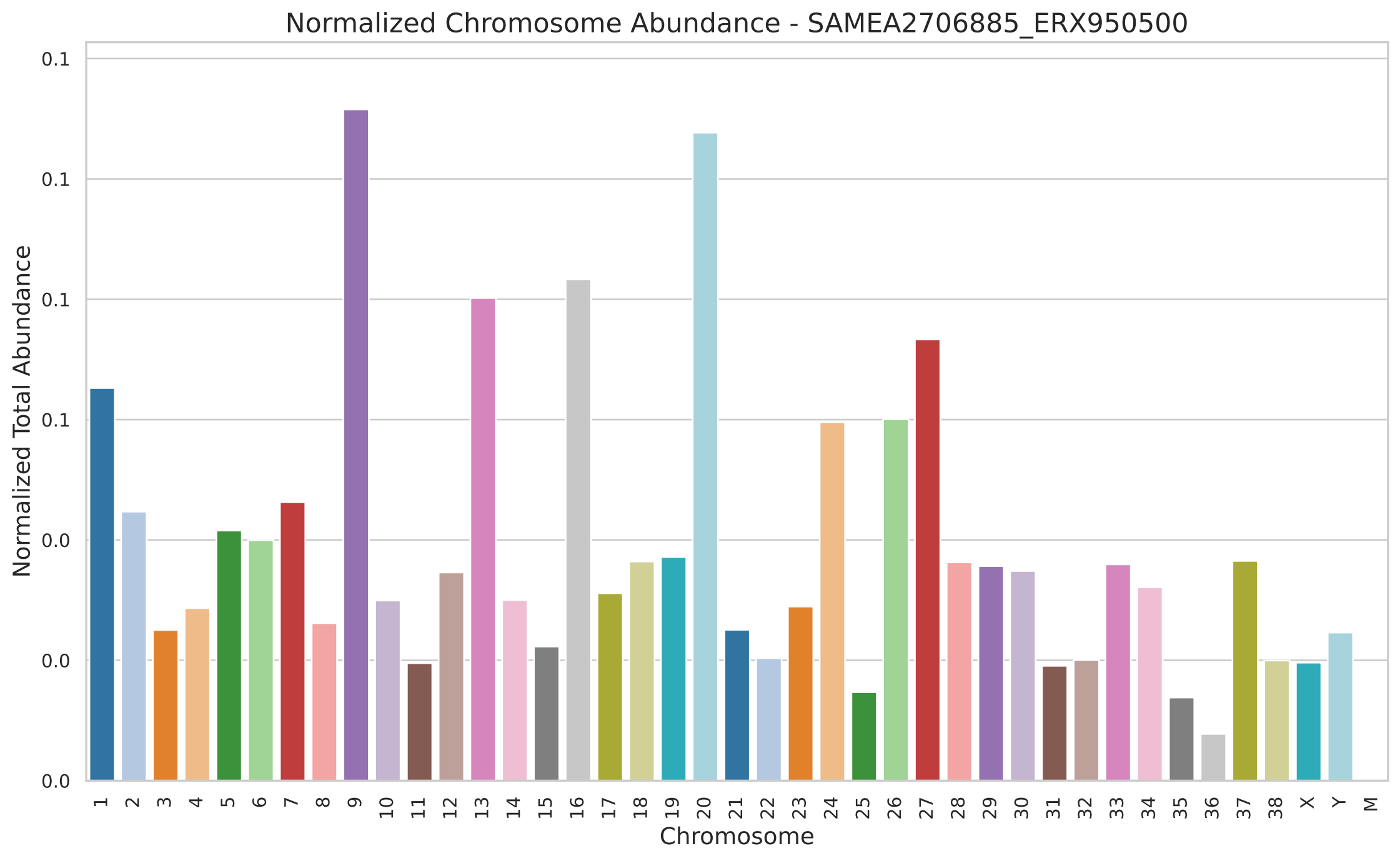

Normalized Chromosome Abundance - SAMEA2706862_ERX950477
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

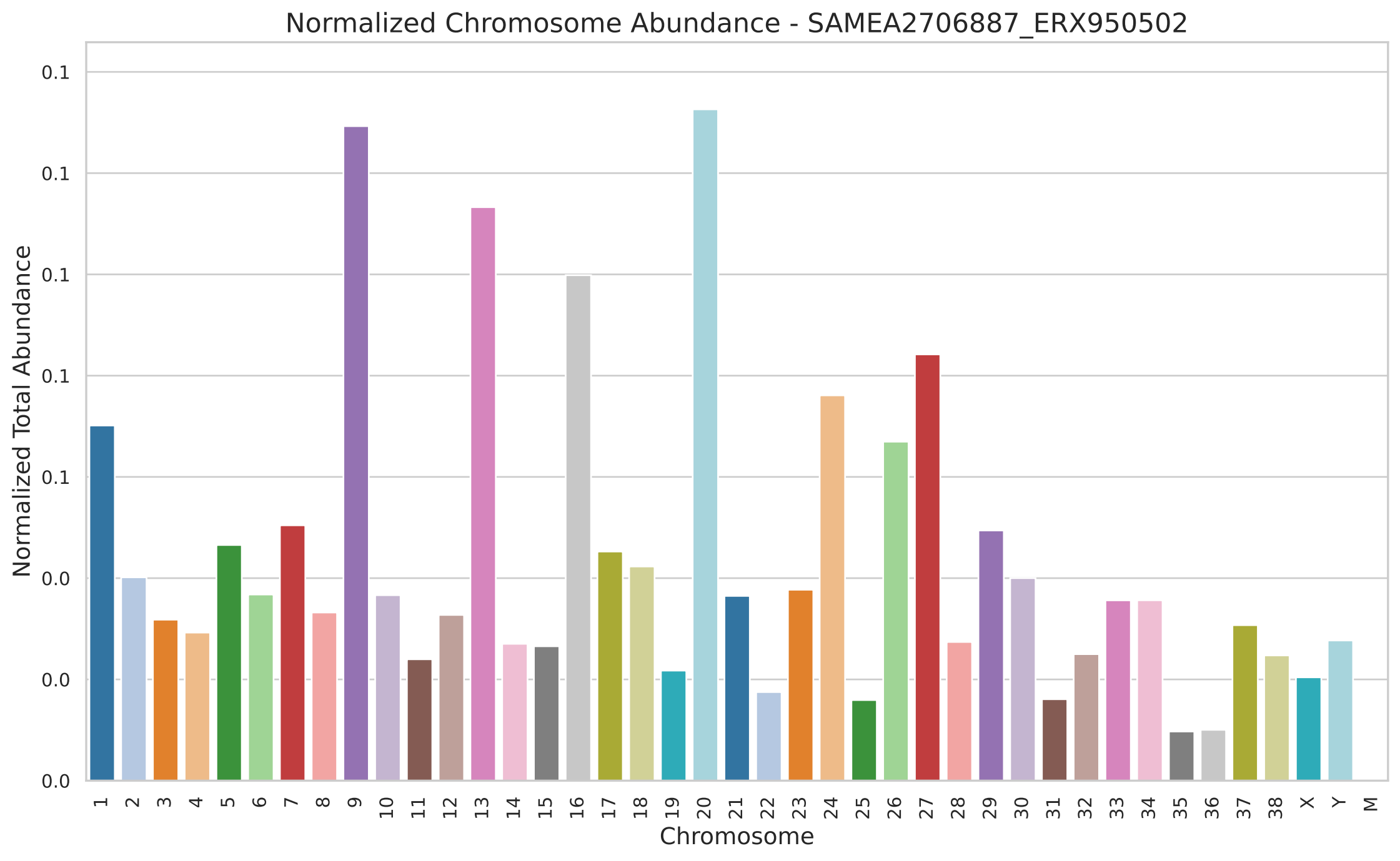

Normalized Chromosome Abundance - SAMEA2706870_ERX950485
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

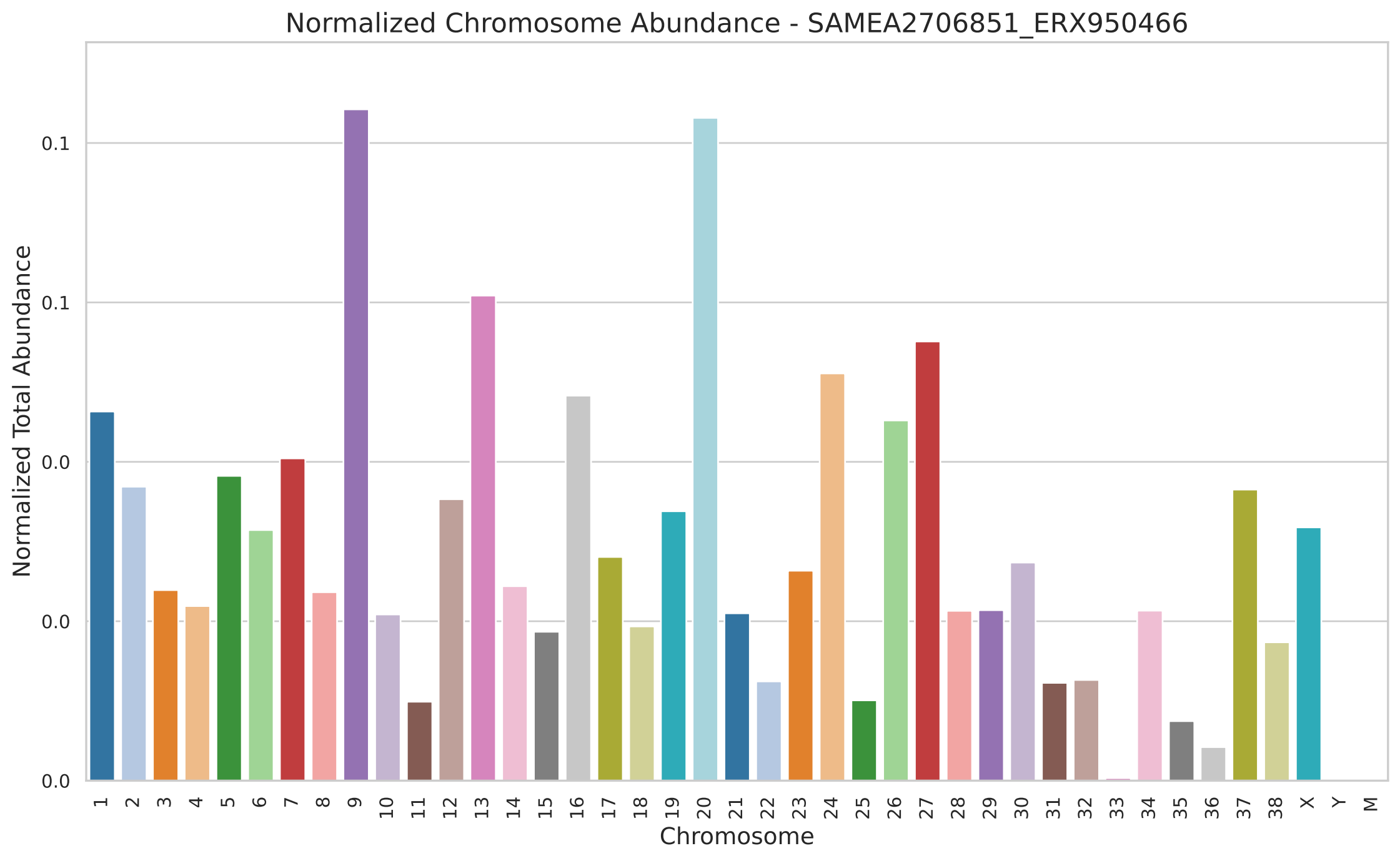

Normalized Chromosome Abundance - SAMEA2706881_ERX950496
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

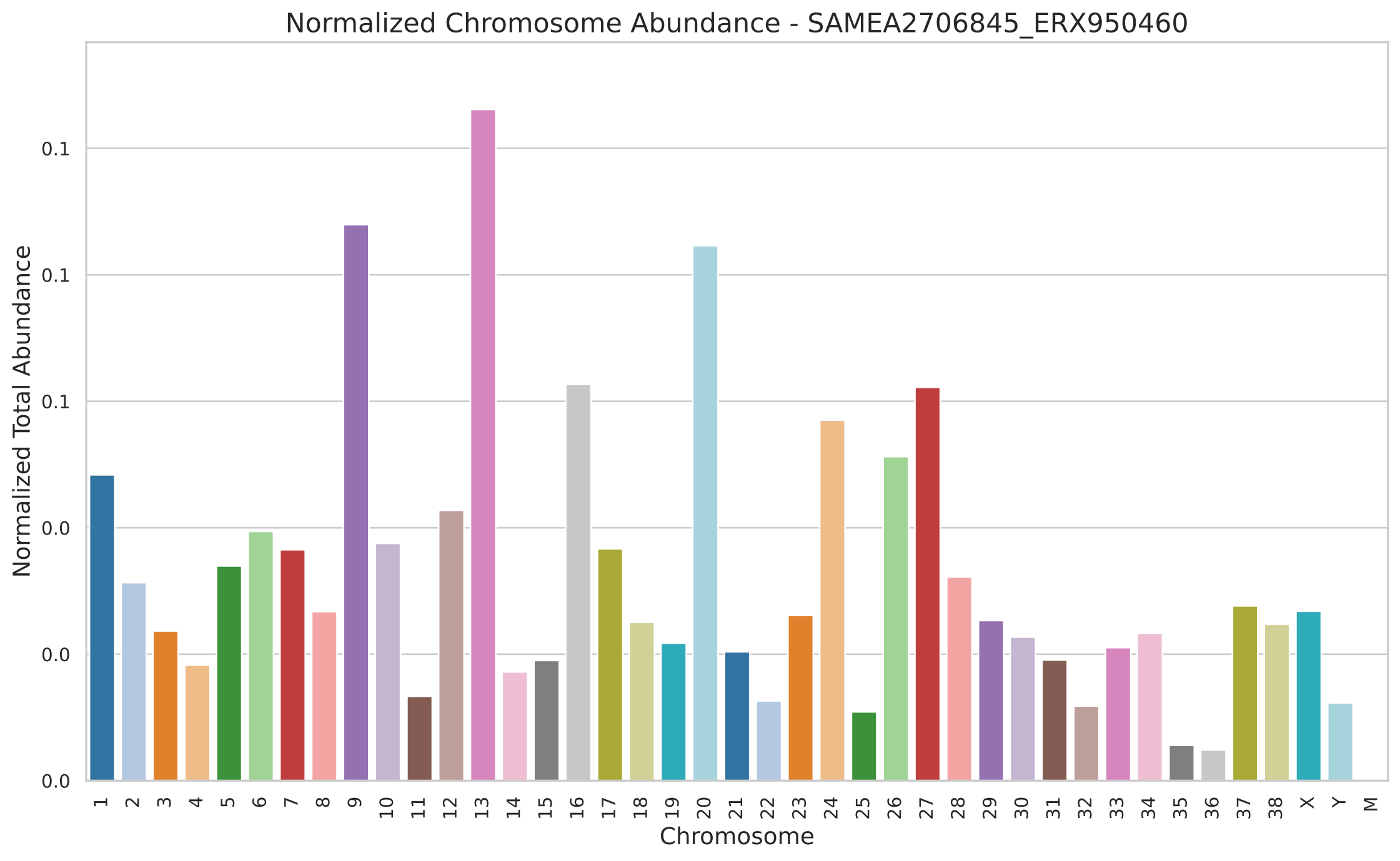

Normalized Chromosome Abundance - SAMEA2706875_ERX950490
Normalized Total Abundance
0.2
0.2
0.1
0.1
0.1
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

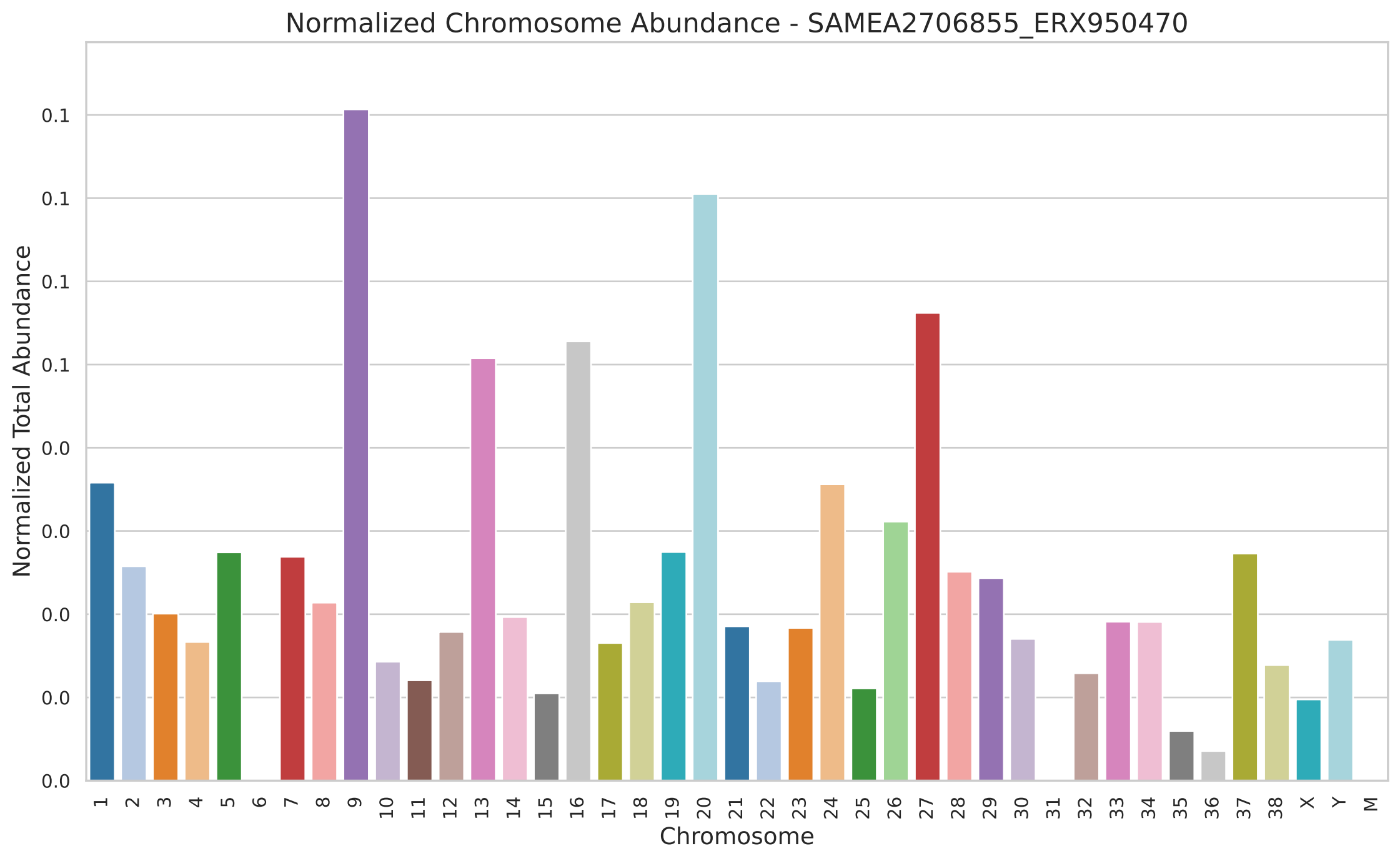

Normalized Chromosome Abundance - SAMEA2706871_ERX950486
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

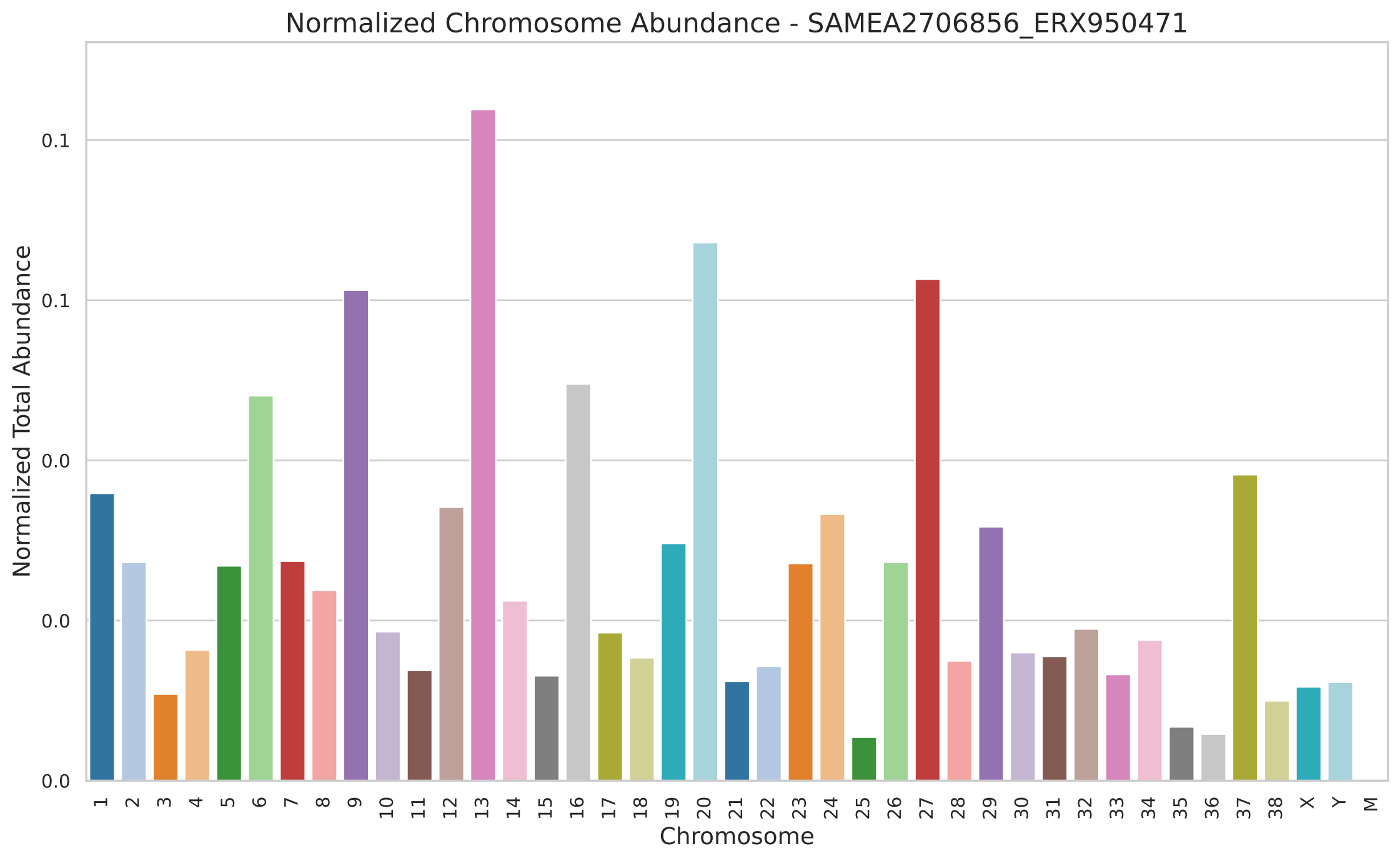

Normalized Chromosome Abundance - SAMEA2706885_ERX950500
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

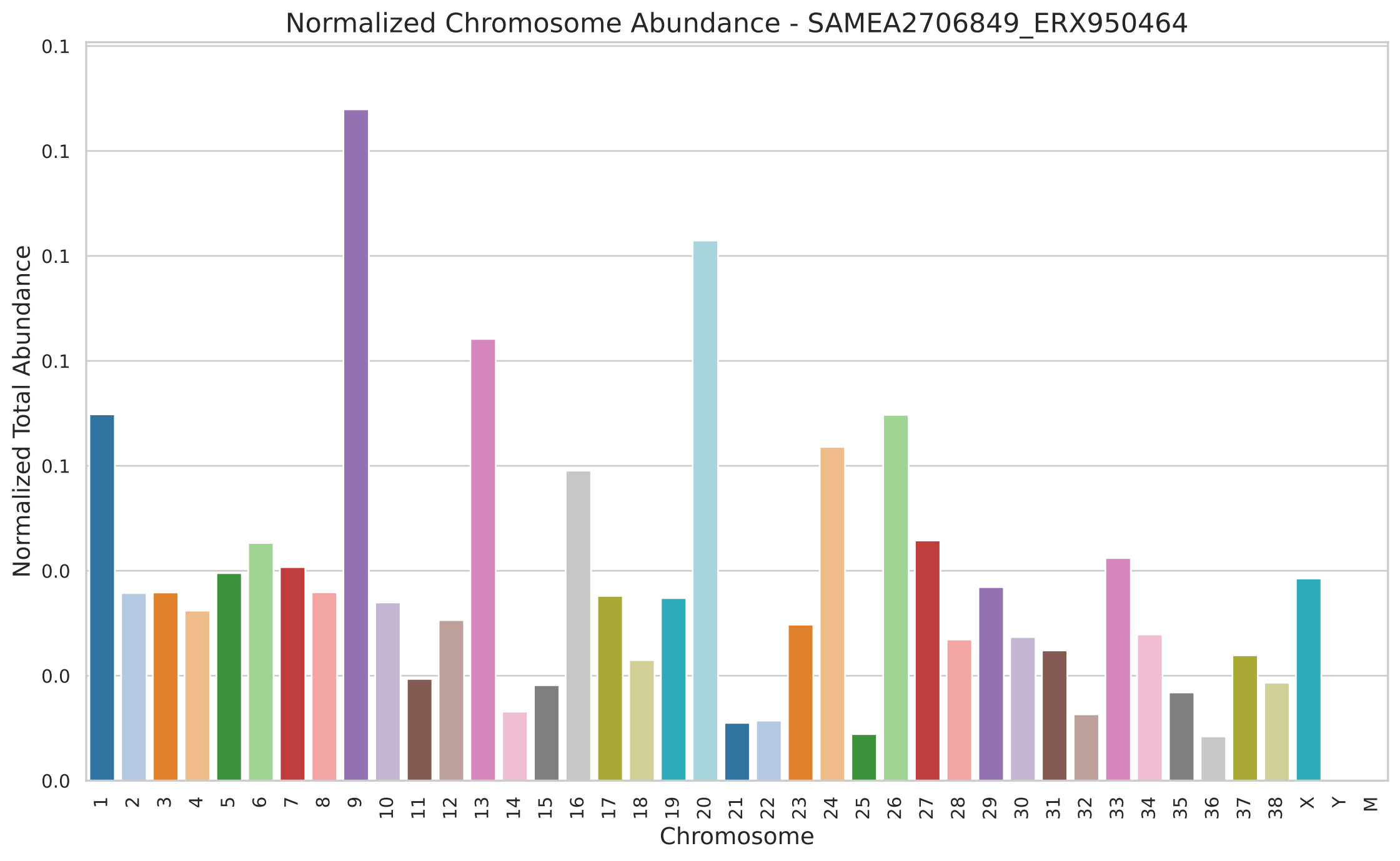

Normalized Chromosome Abundance - SAMEA2706887_ERX950502
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

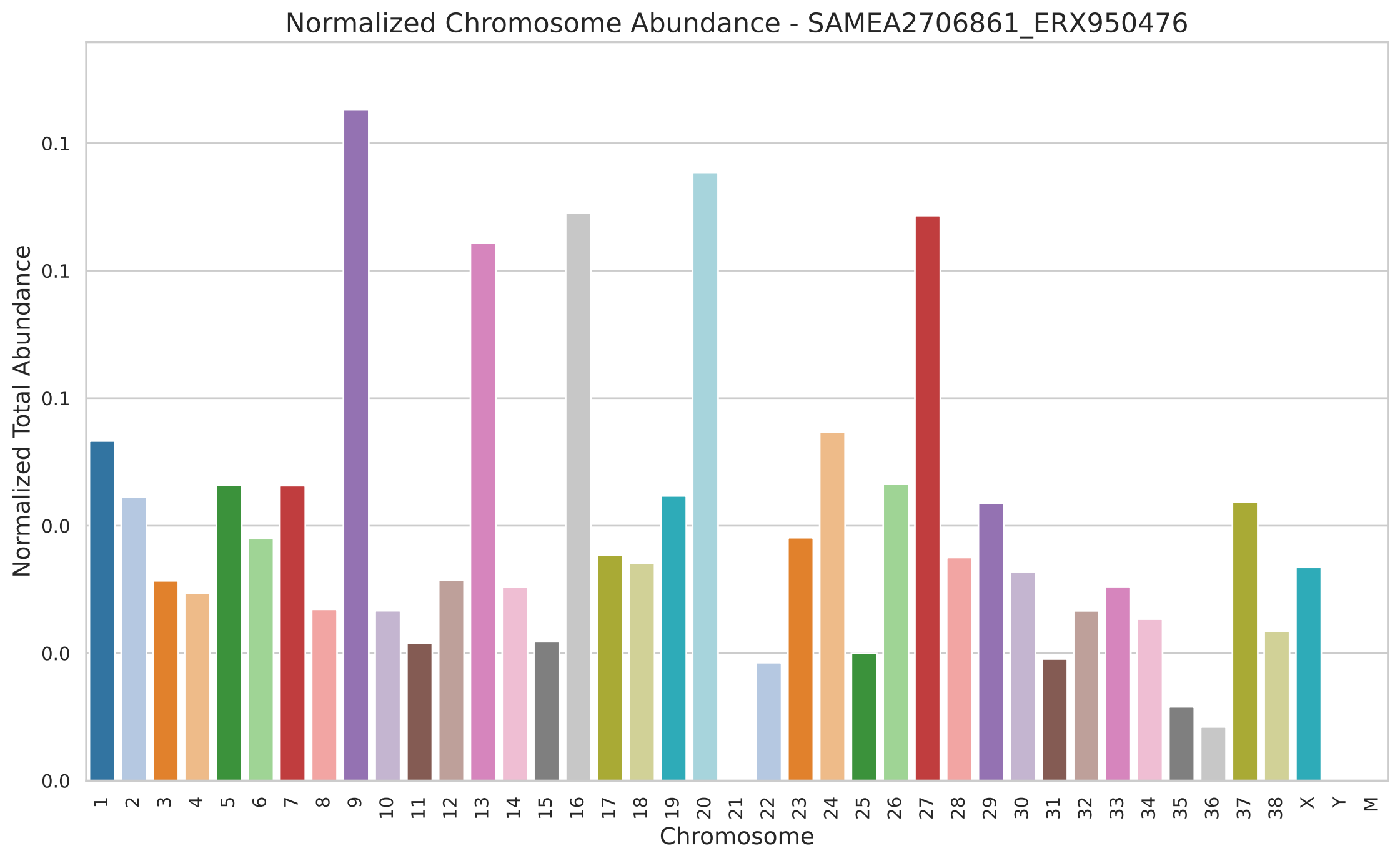

Normalized Chromosome Abundance - SAMEA2706851_ERX950466
Normalized Total Abundance
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

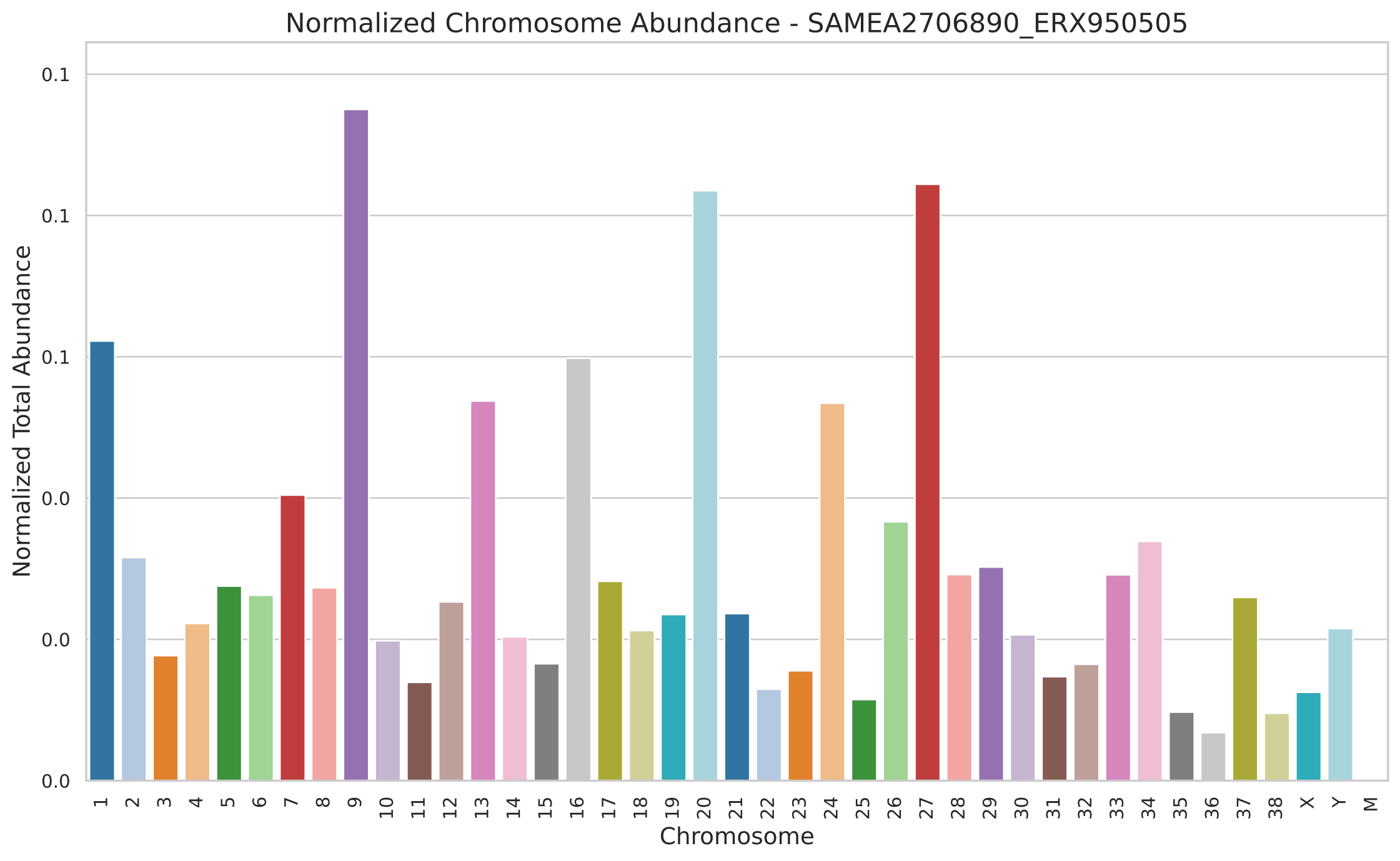

Normalized Chromosome Abundance - SAMEA2706845_ERX950460
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

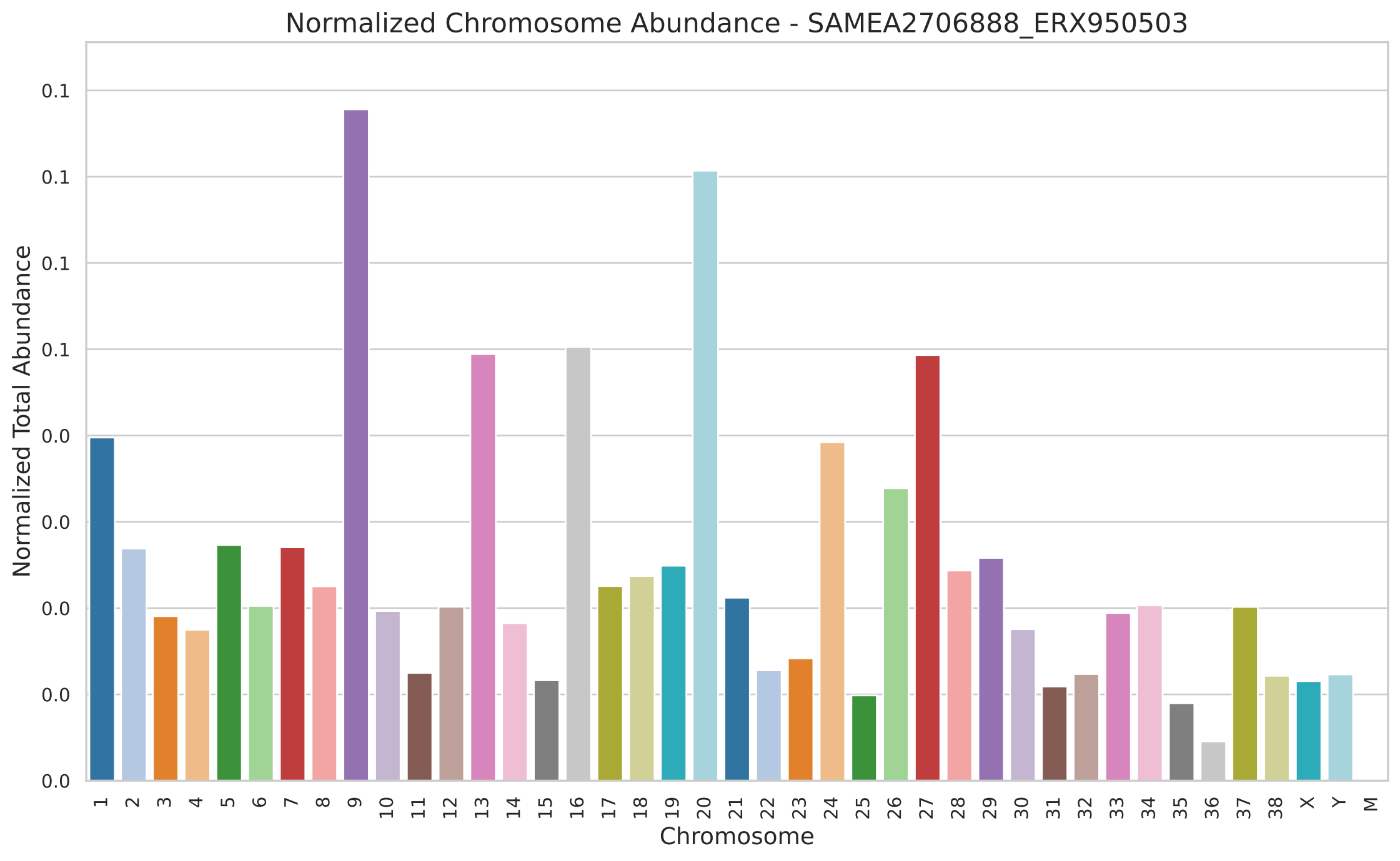

Normalized Chromosome Abundance - SAMEA2706855_ERX950470
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

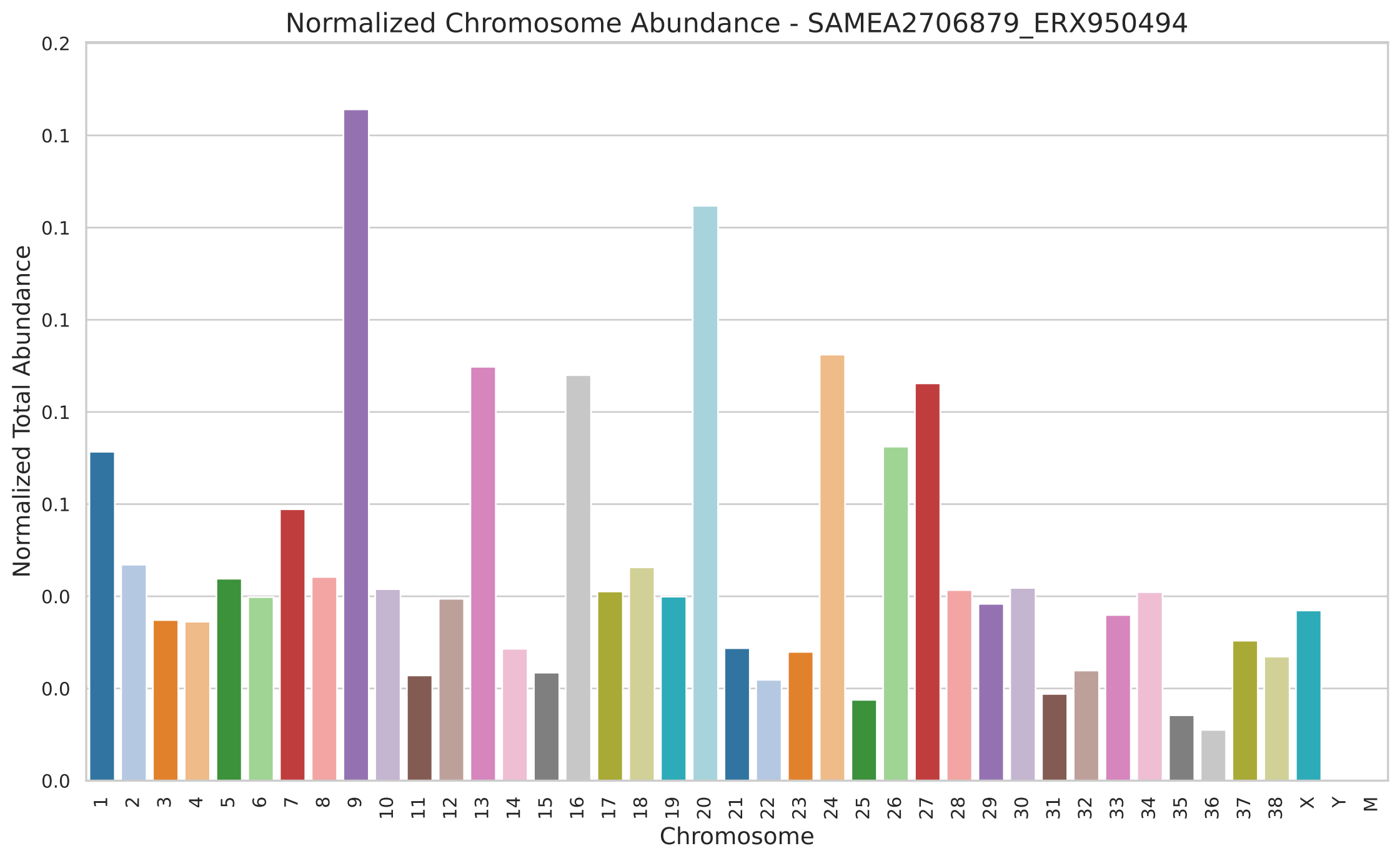

Normalized Chromosome Abundance - SAMEA2706856_ERX950471
Normalized Total Abundance
0.1
0.1
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

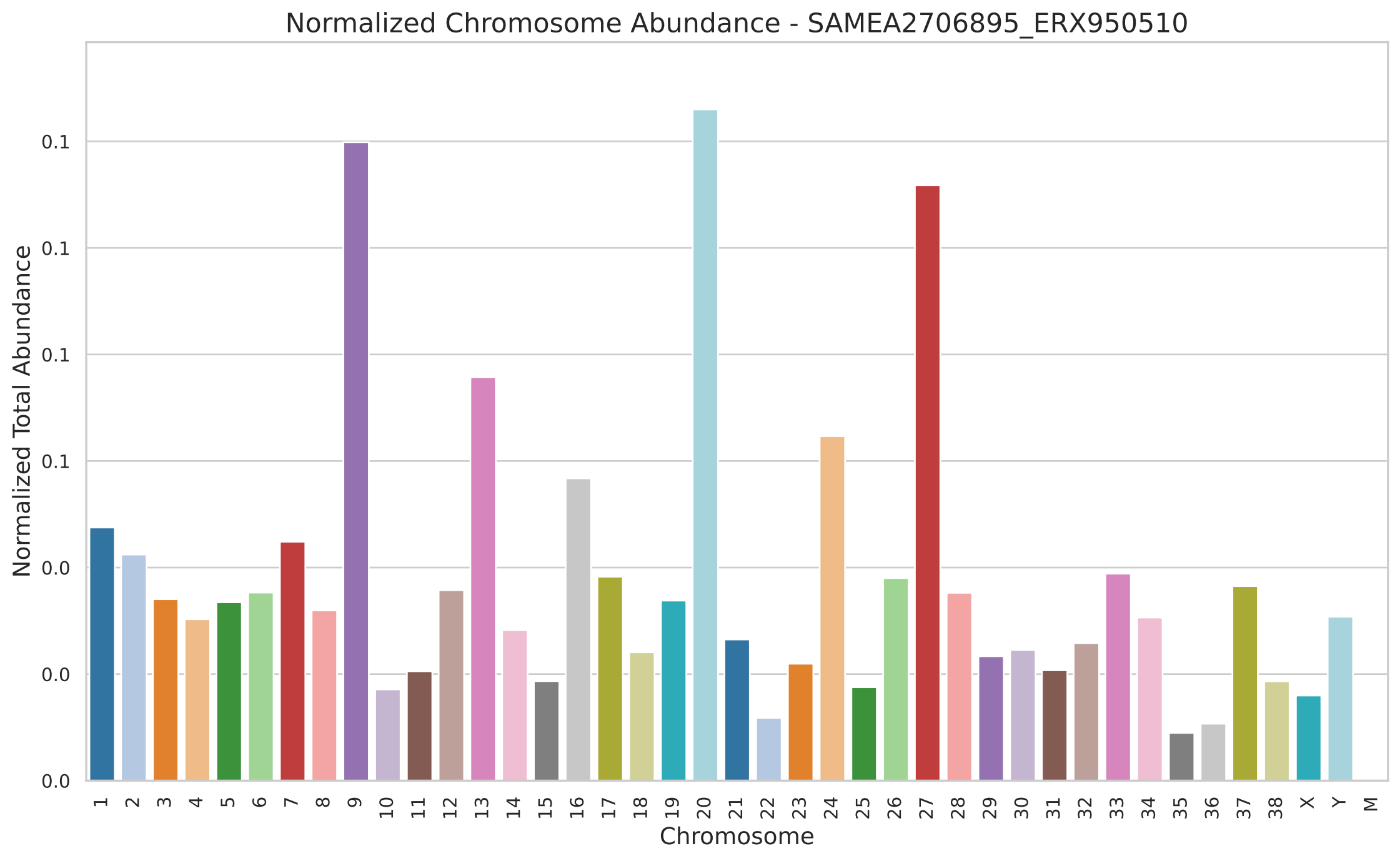

Normalized Chromosome Abundance - SAMEA2706849_ERX950464
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

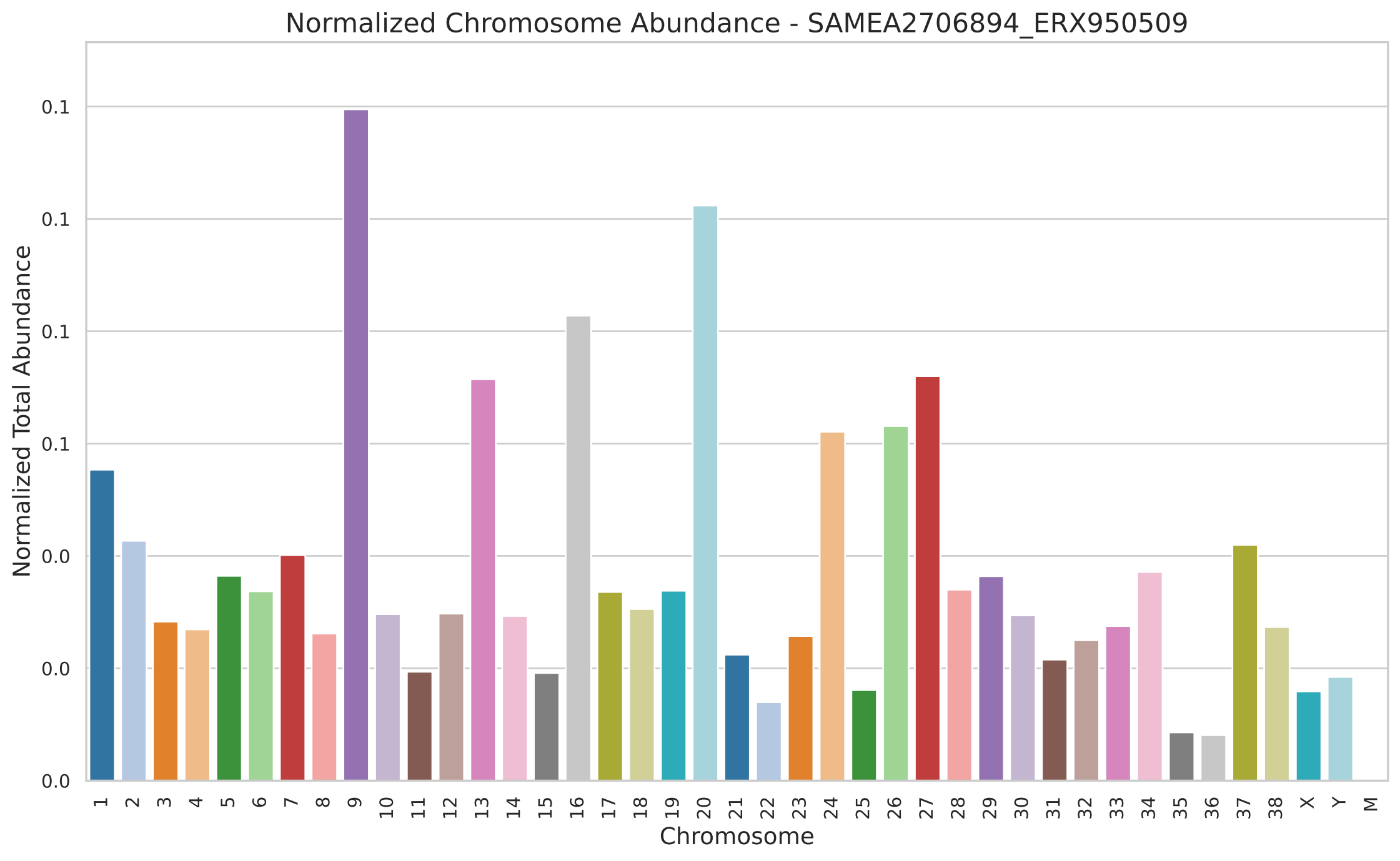

Normalized Chromosome Abundance - SAMEA2706861_ERX950476
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

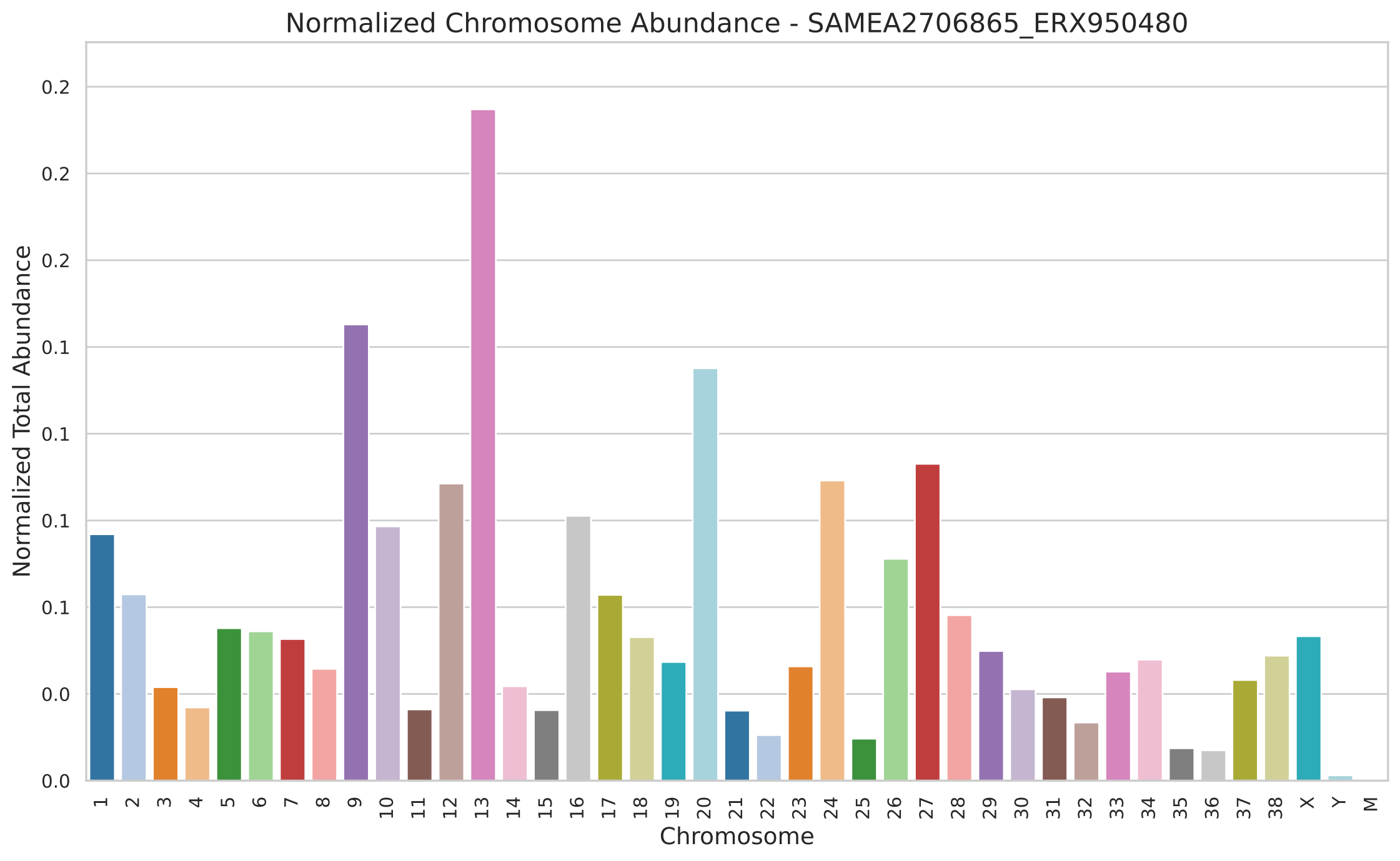

Normalized Chromosome Abundance - SAMEA2706890_ERX950505
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

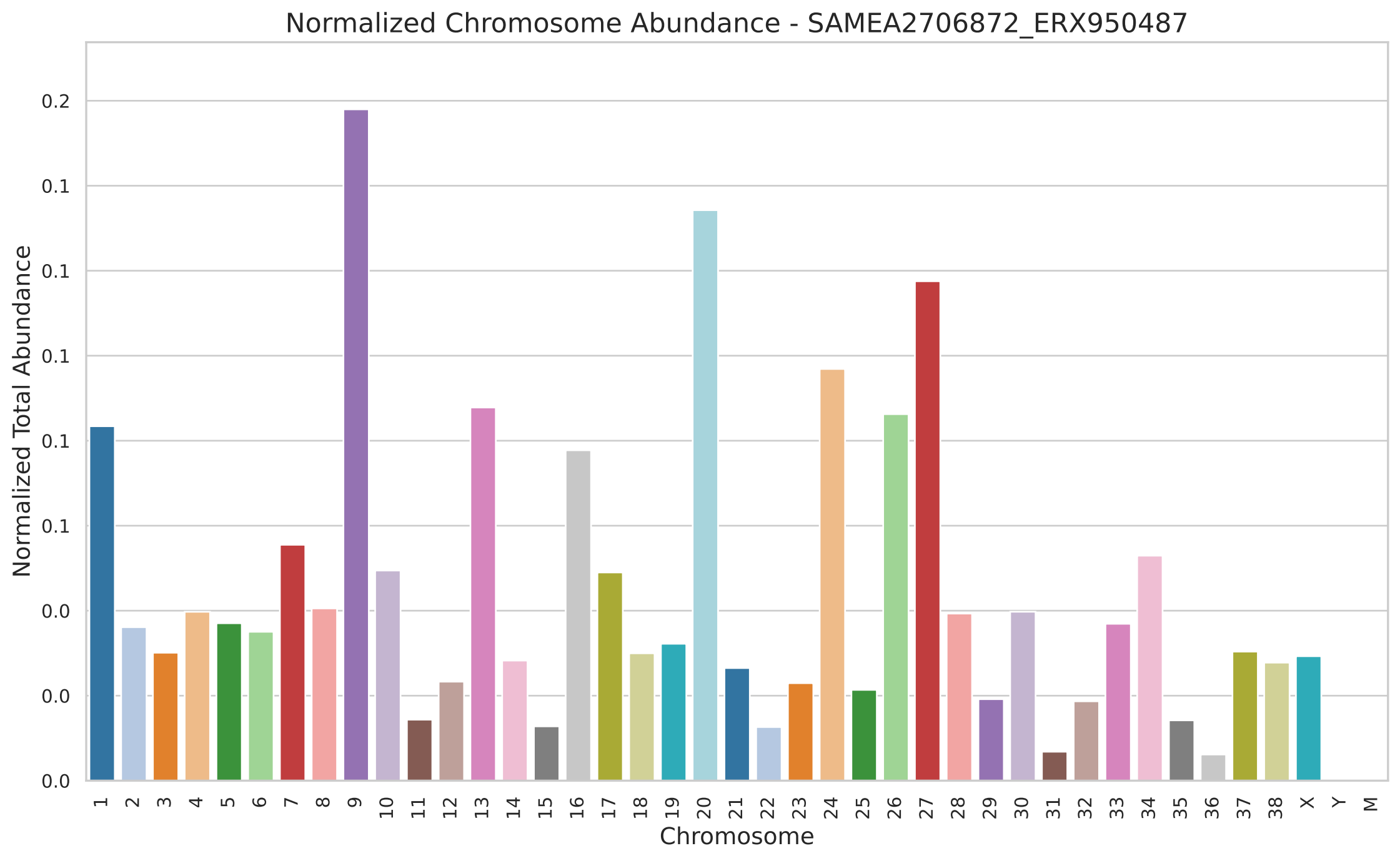

Normalized Chromosome Abundance - SAMEA2706888_ERX950503
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

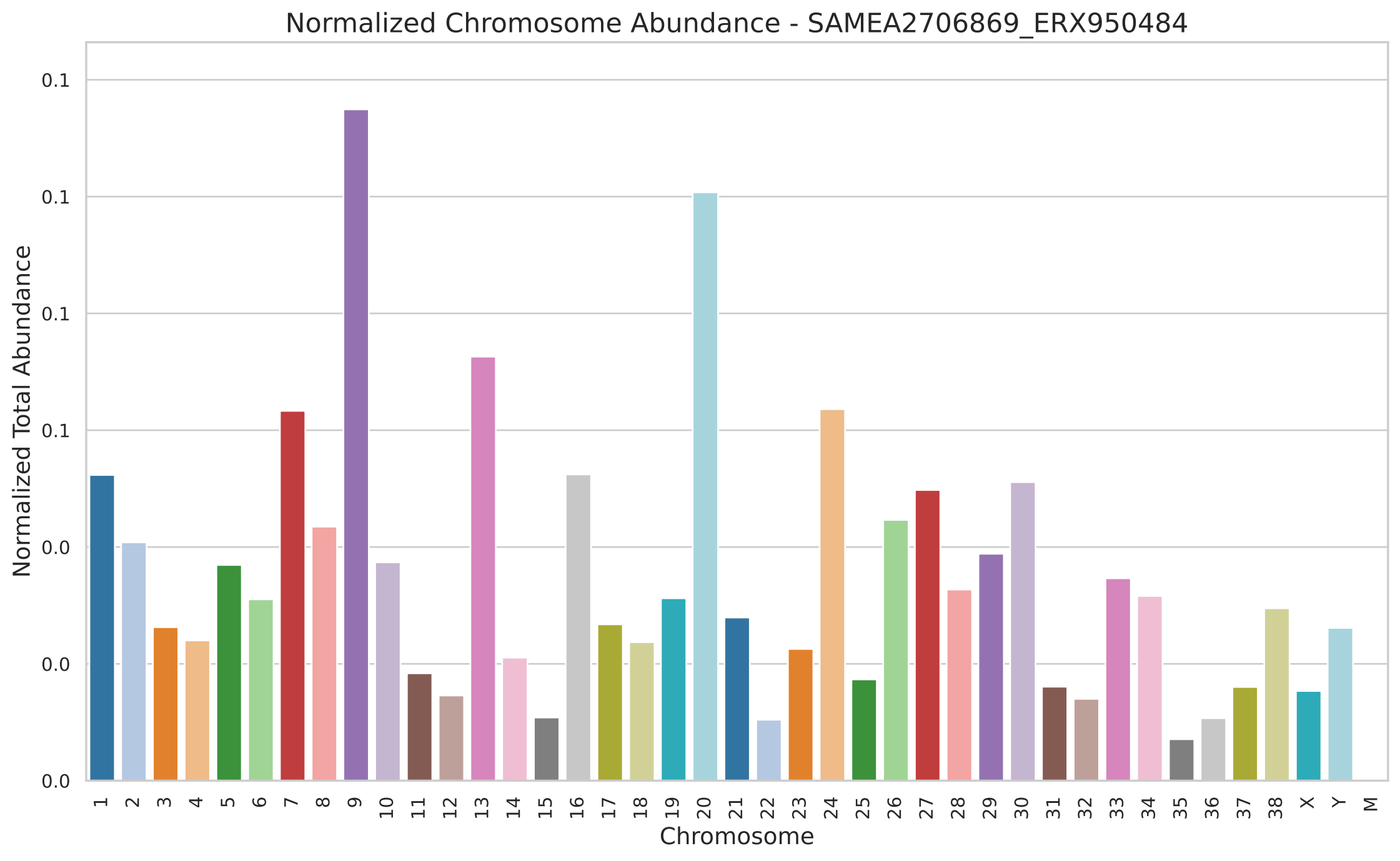

Normalized Chromosome Abundance - SAMEA2706879_ERX950494
Normalized Total Abundance
0.2
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

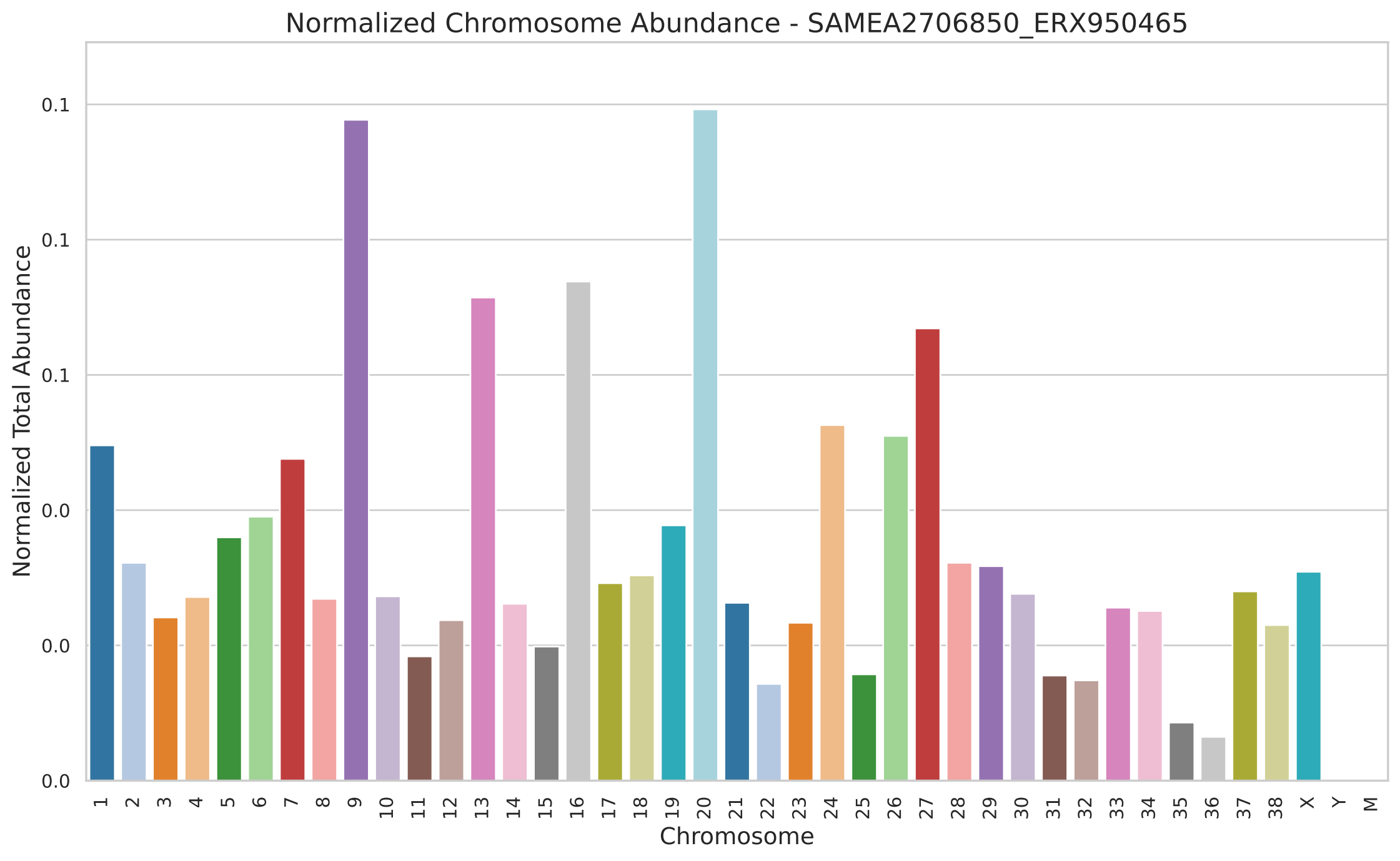

Normalized Chromosome Abundance - SAMEA2706895_ERX950510
Normalized Total Abundance
0.0
0.0
0.1
0.1
0.1
0.1
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

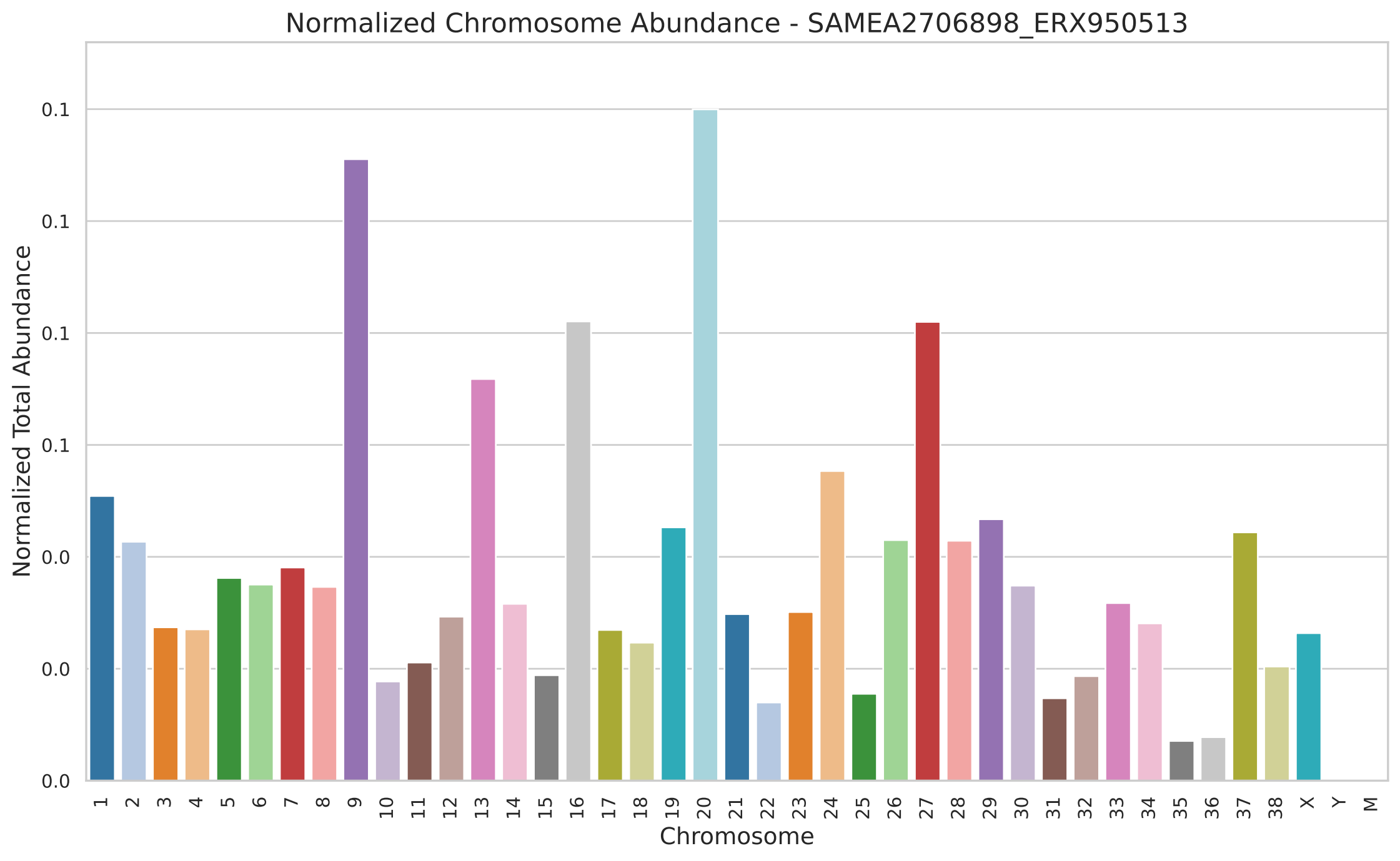

Normalized Chromosome Abundance - SAMEA2706894_ERX950509
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

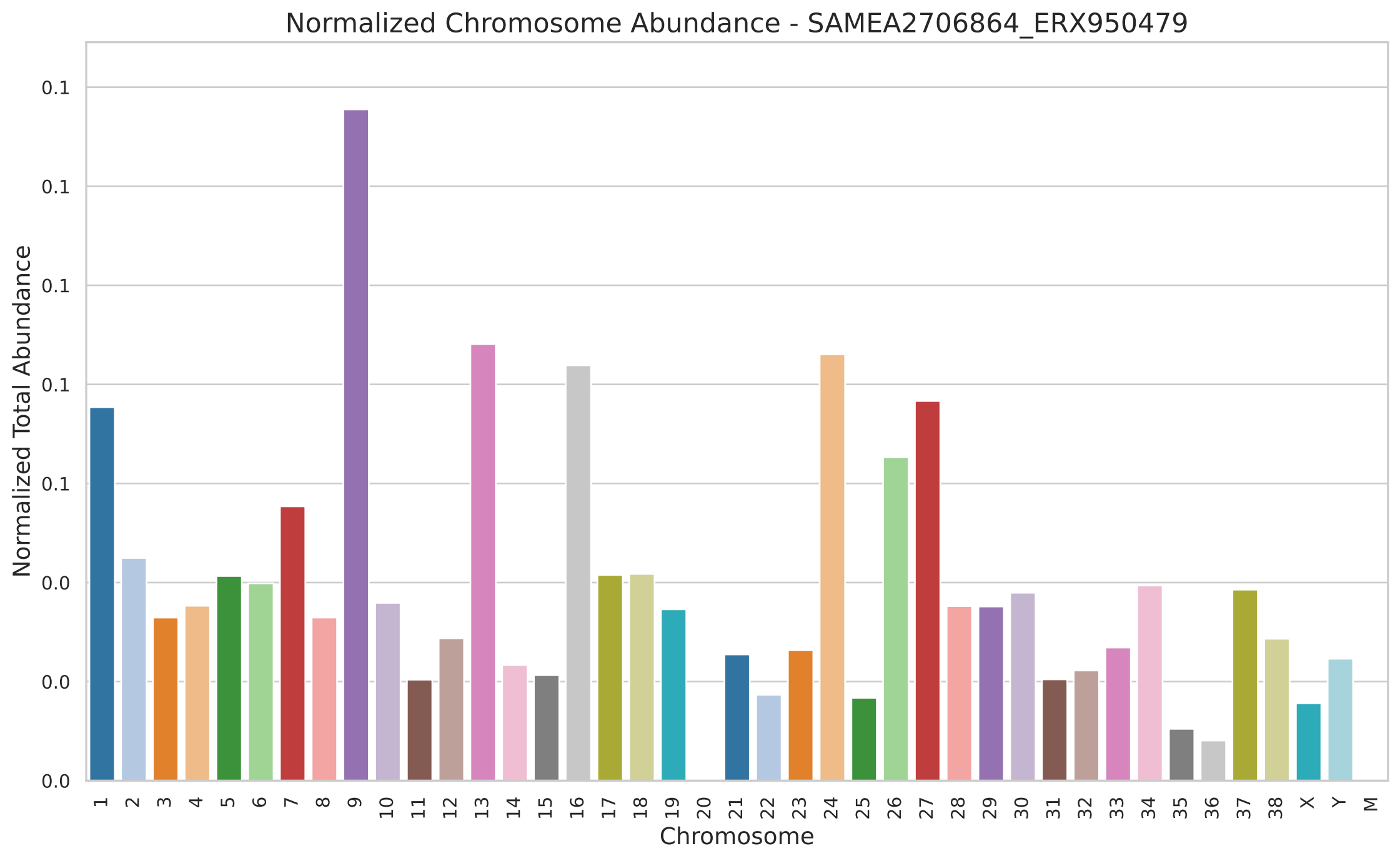

Normalized Chromosome Abundance - SAMEA2706865_ERX950480
Normalized Total Abundance
0.2
0.2
0.2
0.1
0.1
0.1
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

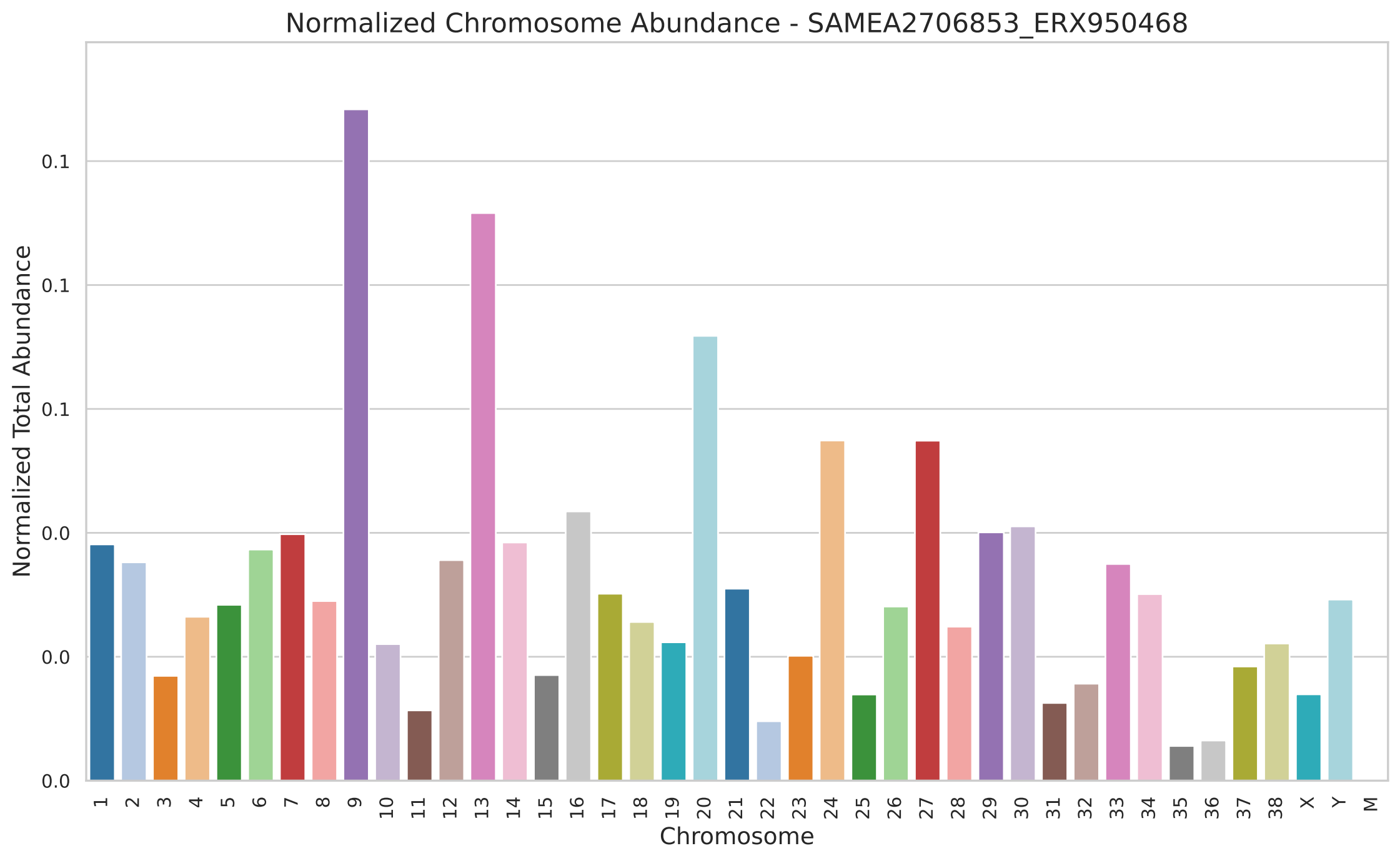

Normalized Chromosome Abundance - SAMEA2706872_ERX950487
Normalized Total Abundance
0.2
0.1
0.1
0.1
0.1
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

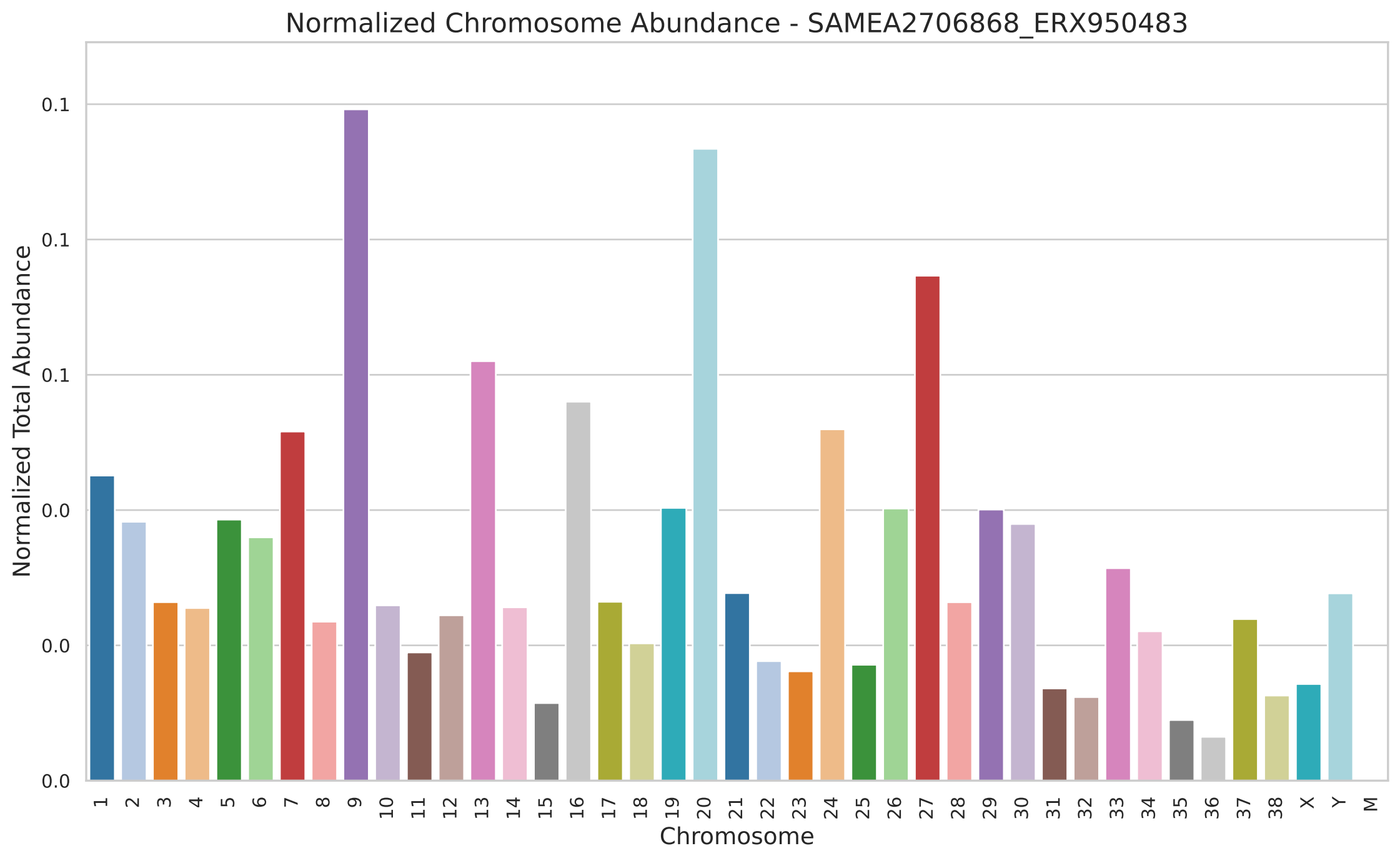

Normalized Chromosome Abundance - SAMEA2706869_ERX950484
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

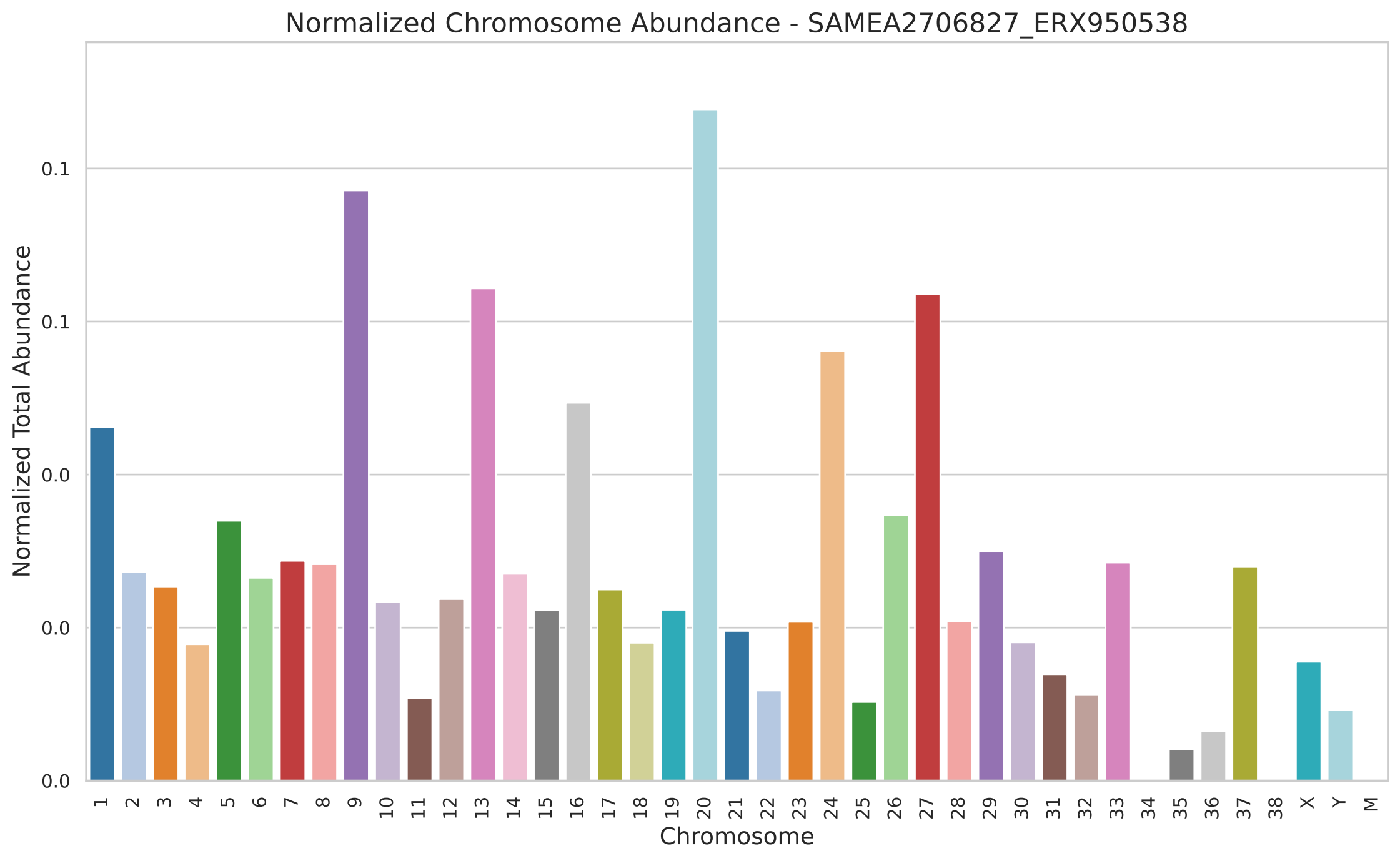

Normalized Chromosome Abundance - SAMEA2706850_ERX950465
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

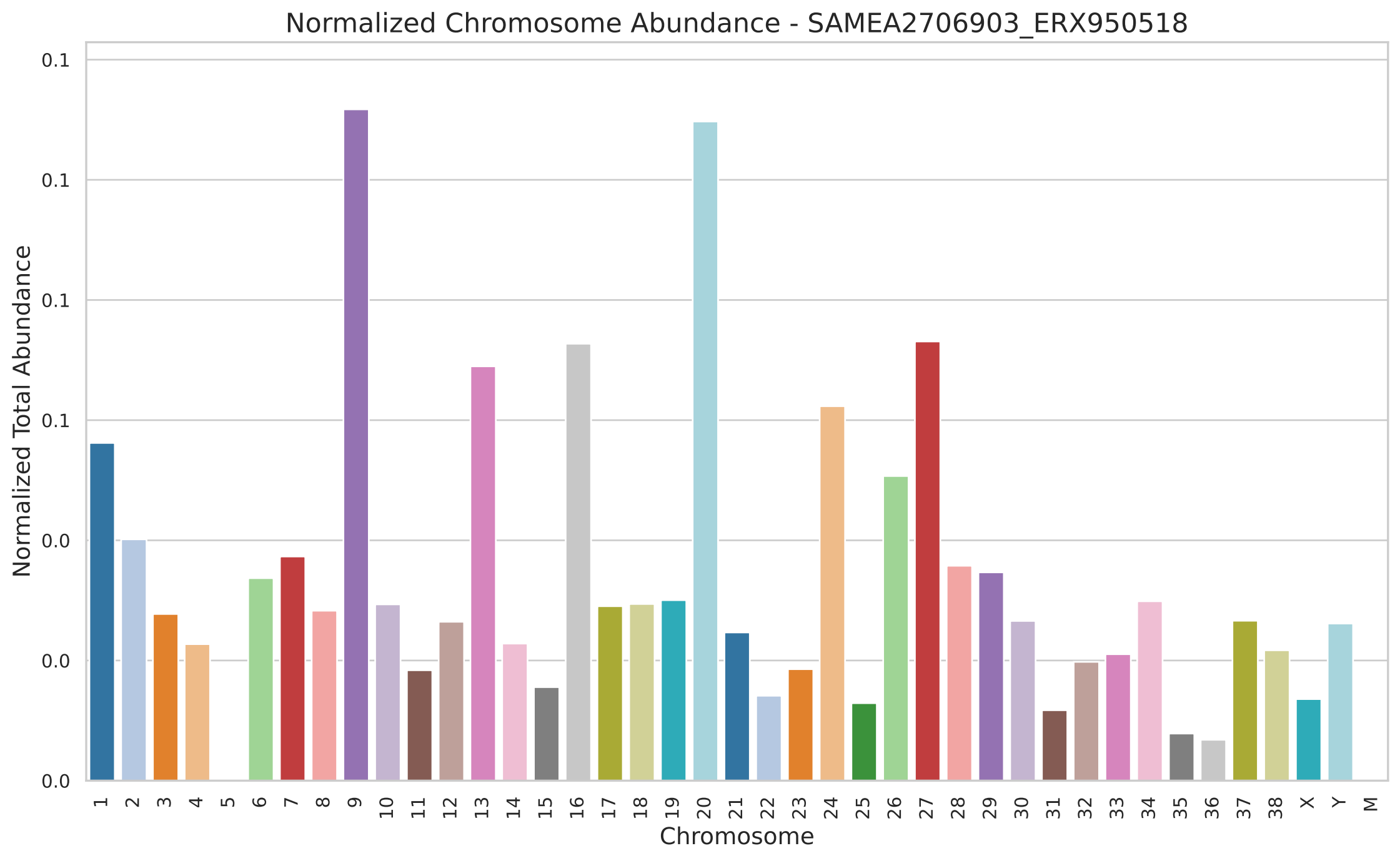

Normalized Chromosome Abundance - SAMEA2706898_ERX950513
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

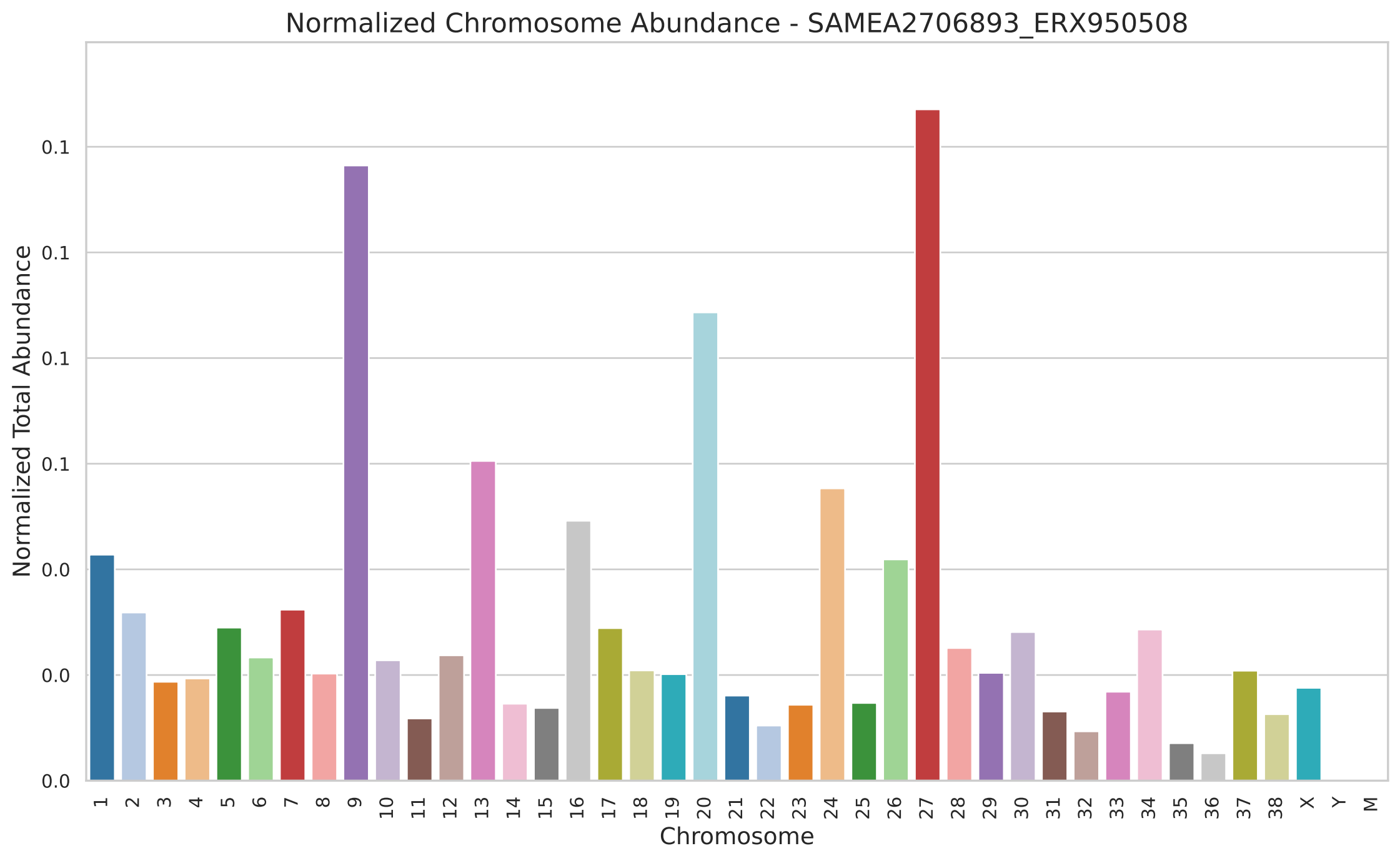

Normalized Chromosome Abundance - SAMEA2706864_ERX950479
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

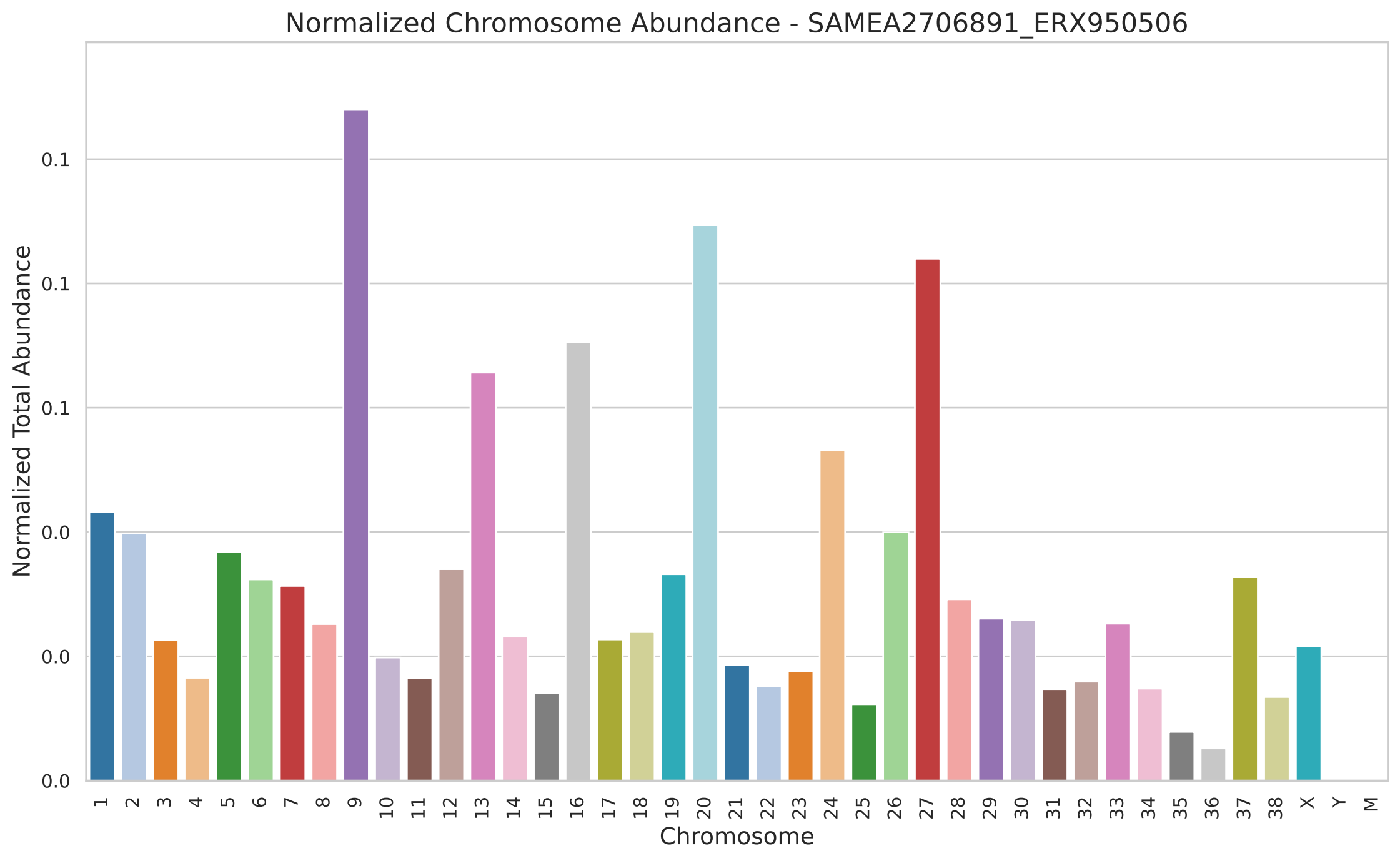

Normalized Chromosome Abundance - SAMEA2706853_ERX950468
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

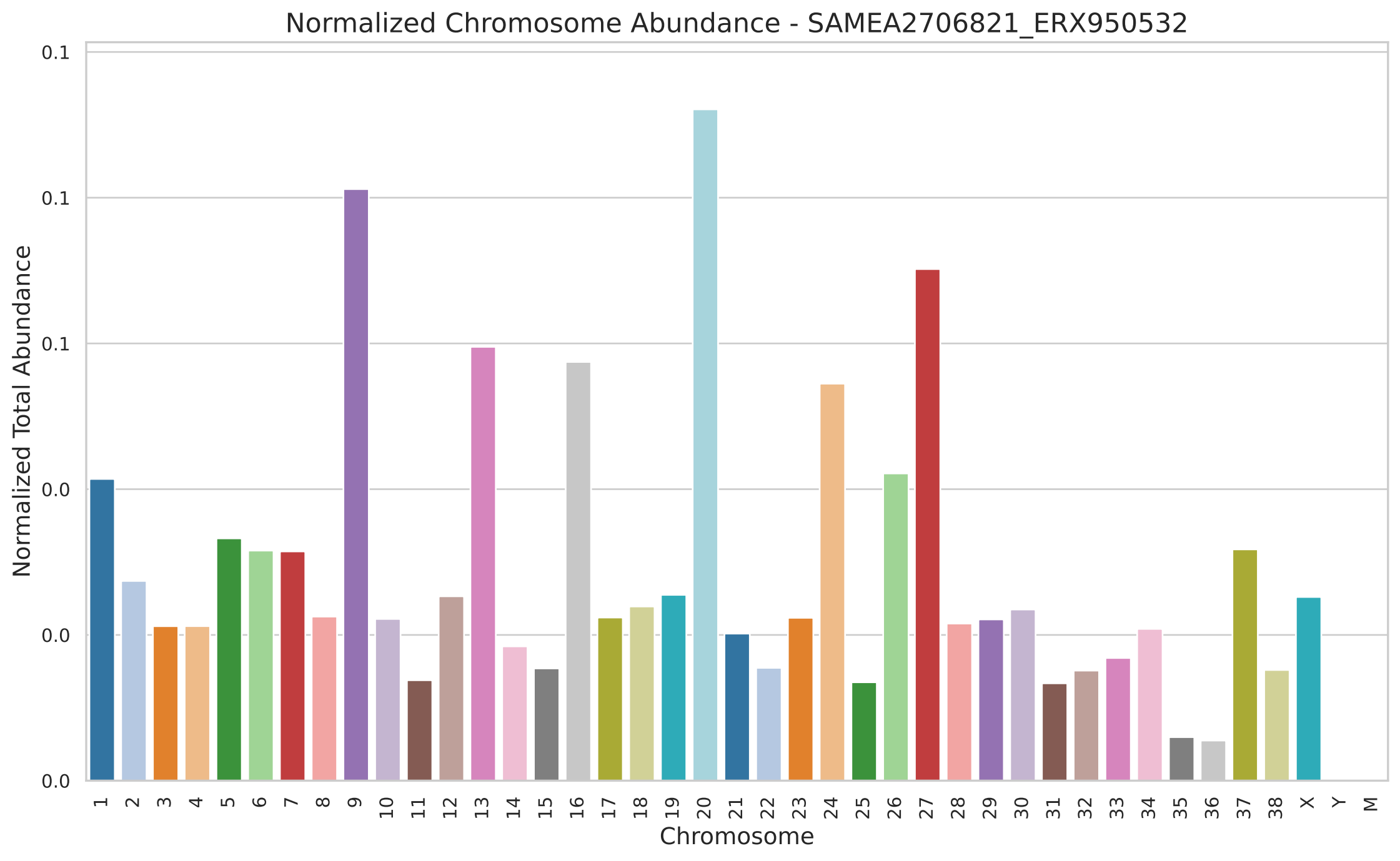

Normalized Chromosome Abundance - SAMEA2706868_ERX950483
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

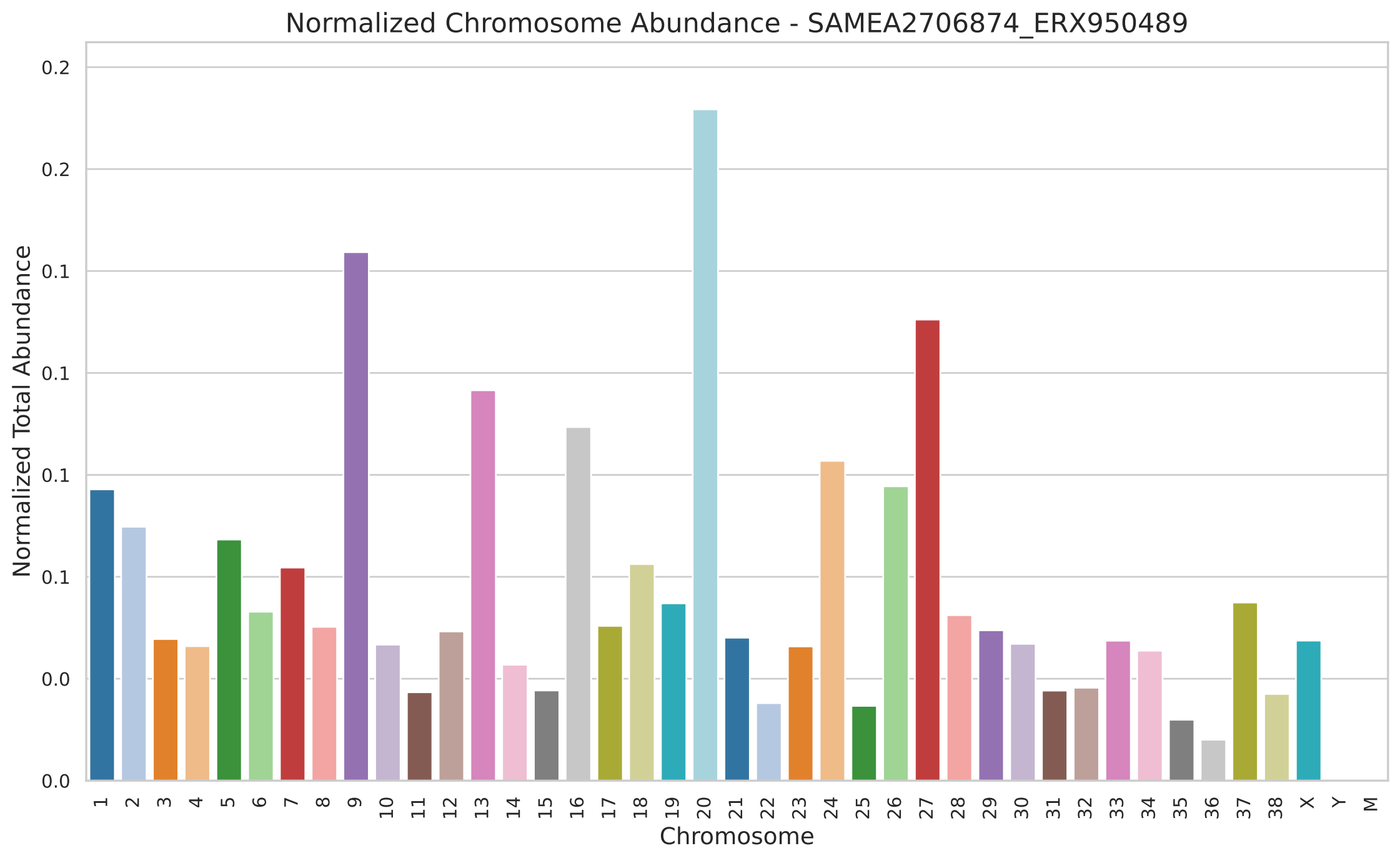

Normalized Chromosome Abundance - SAMEA2706827_ERX950538
Normalized Total Abundance
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

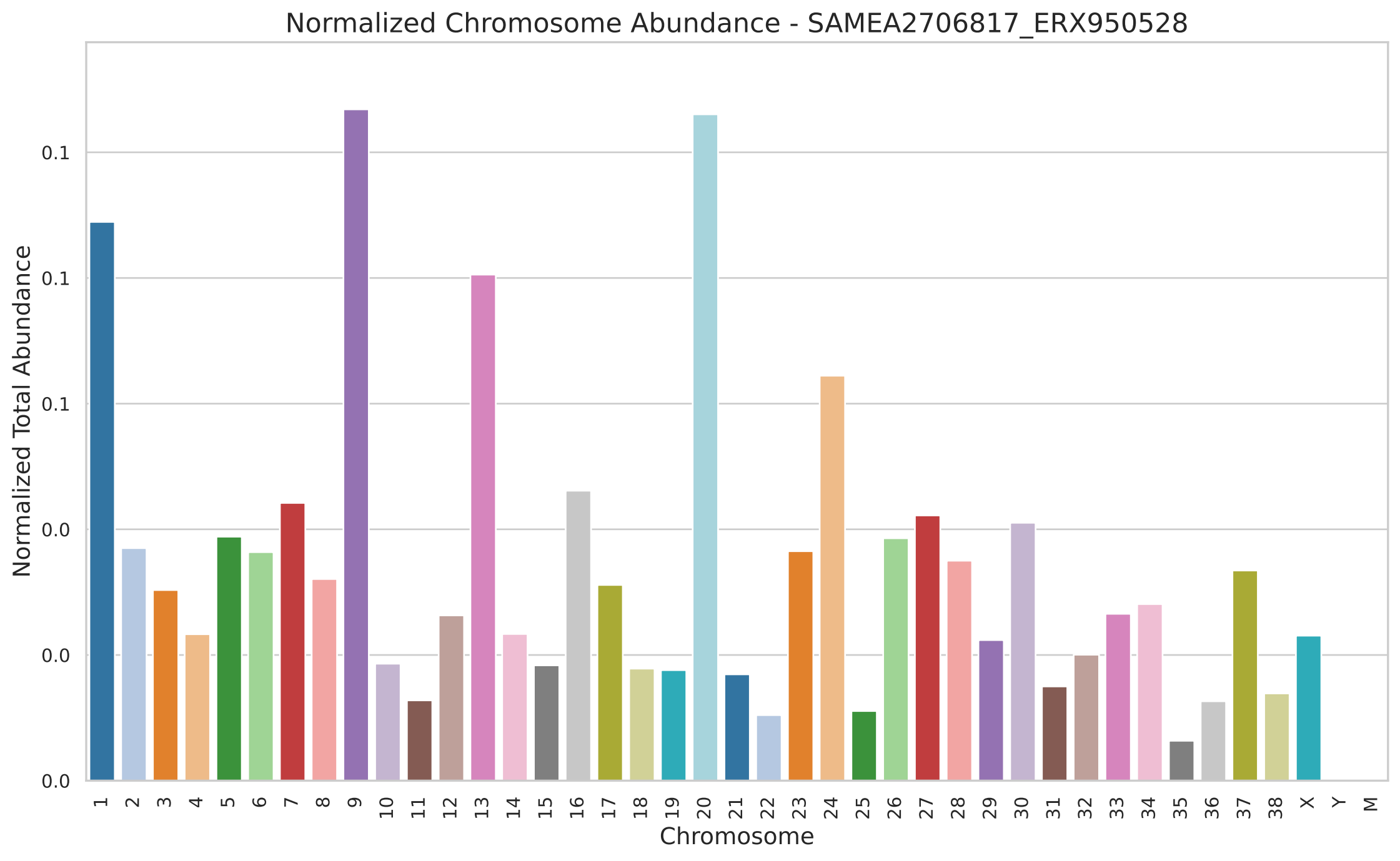

Normalized Chromosome Abundance - SAMEA2706903_ERX950518
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

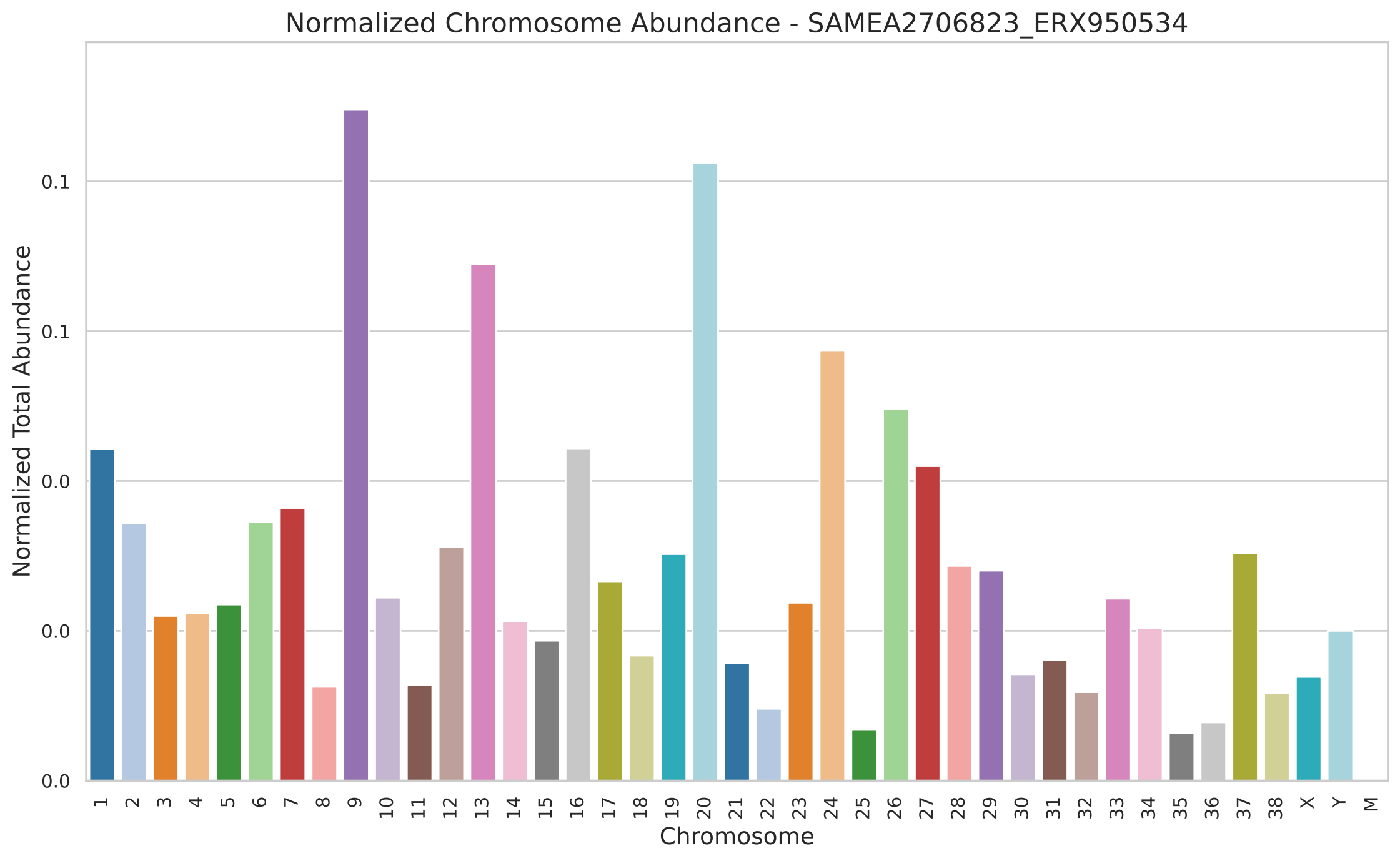

Normalized Chromosome Abundance - SAMEA2706893_ERX950508
Normalized Total Abundance
0.0
0.0
0.1
0.1
0.1
0.1
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

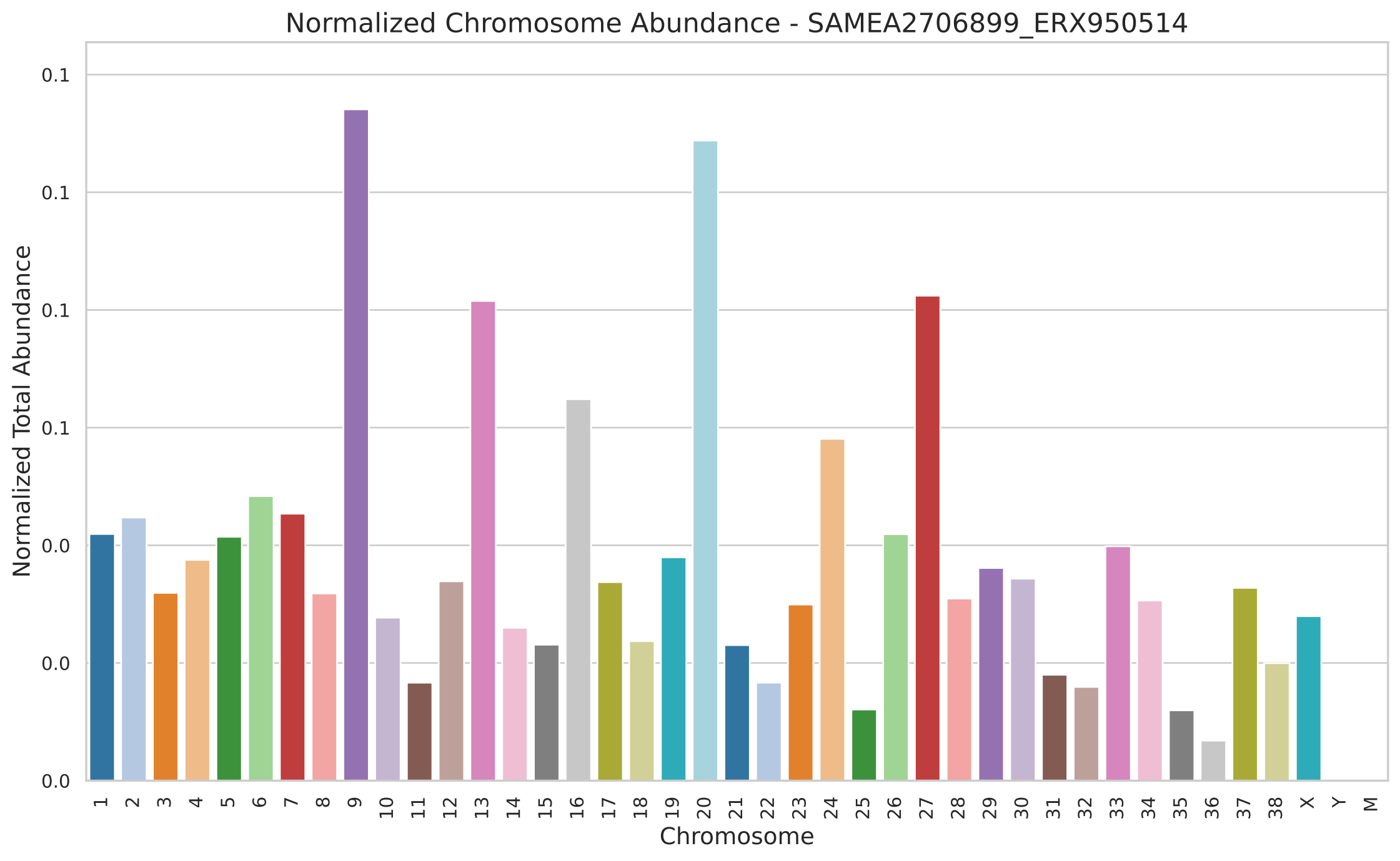

Normalized Chromosome Abundance - SAMEA2706891_ERX950506
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

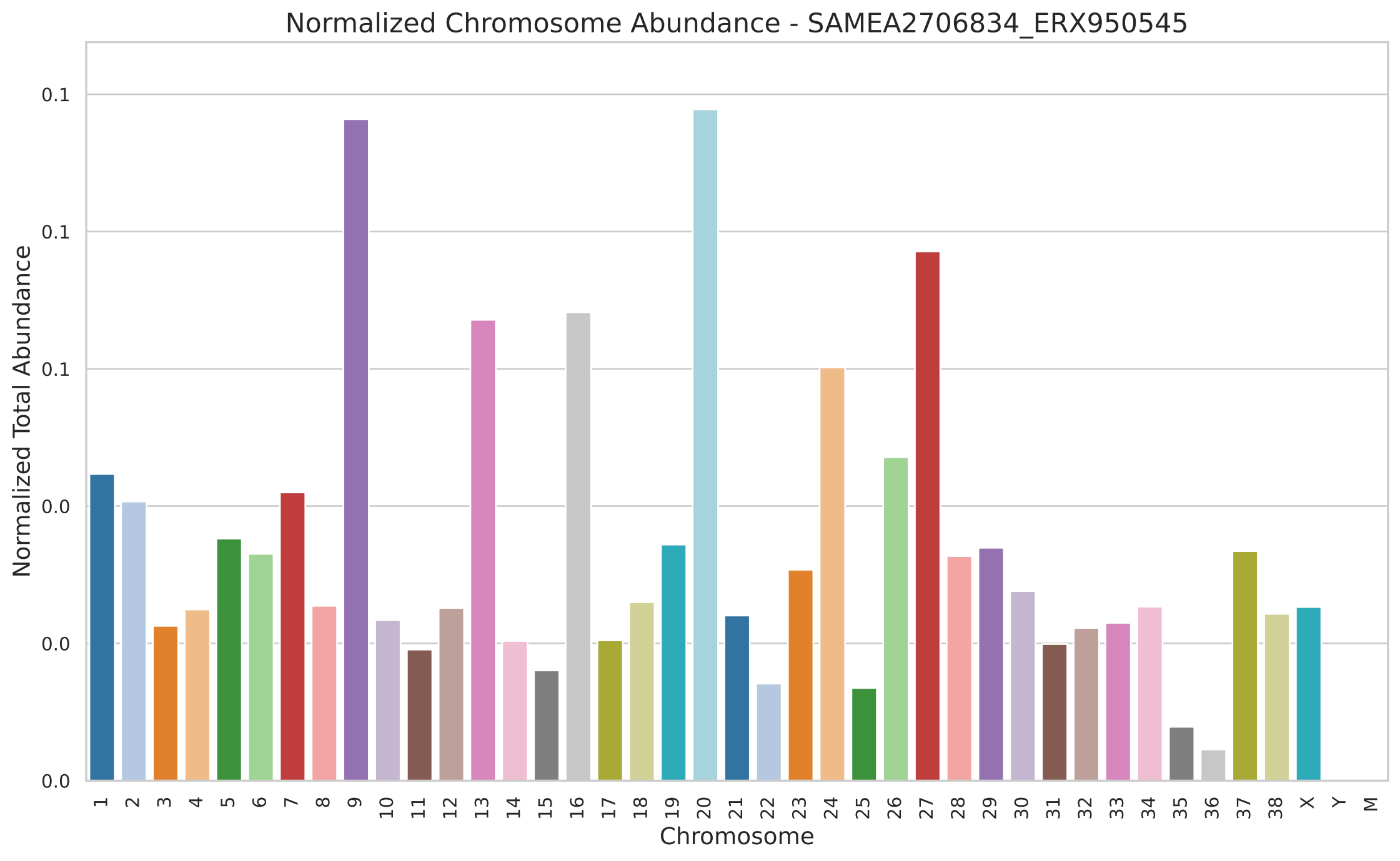

Normalized Chromosome Abundance - SAMEA2706821_ERX950532
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

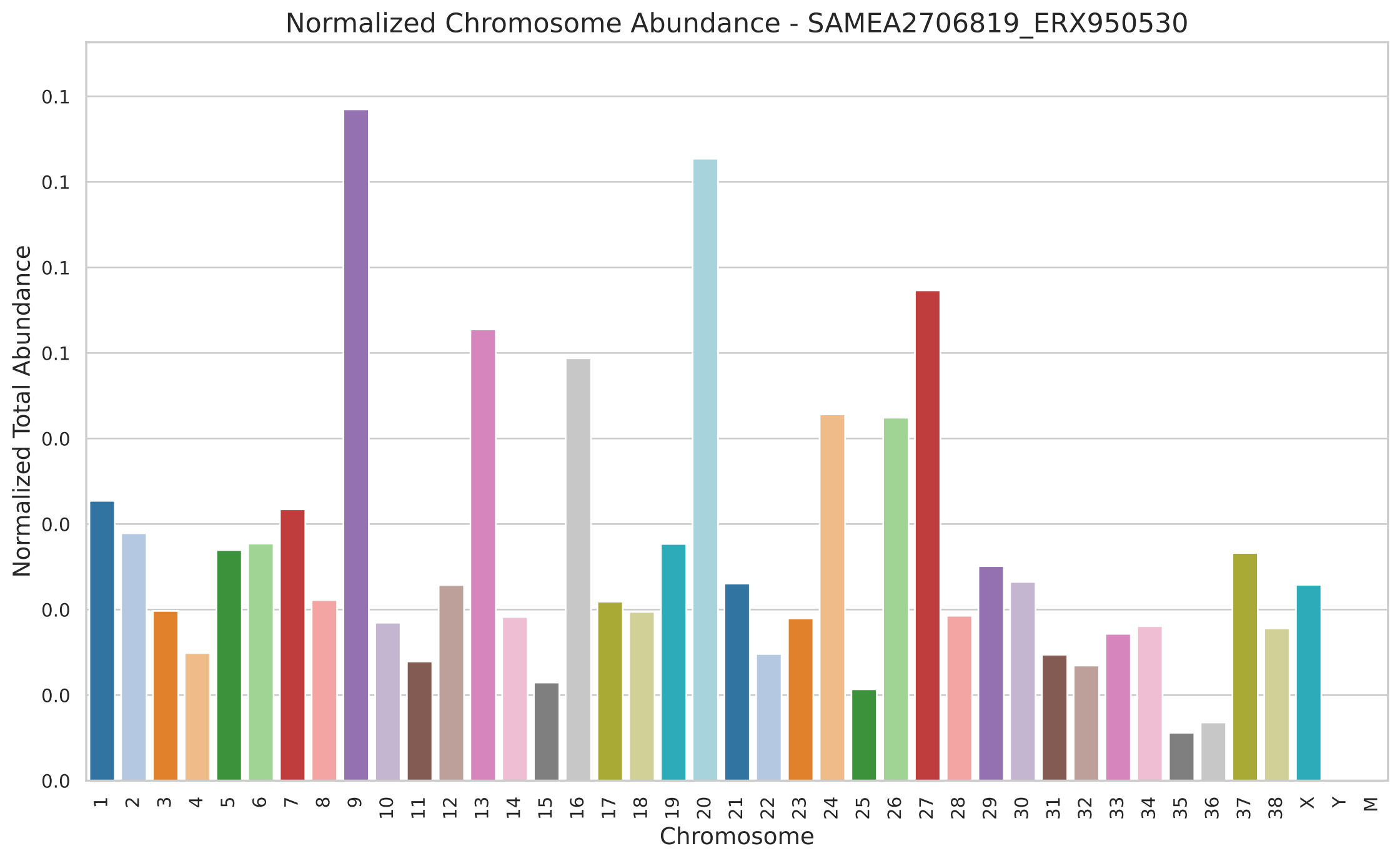

Normalized Chromosome Abundance - SAMEA2706874_ERX950489
Normalized Total Abundance
0.2
0.2
0.1
0.1
0.1
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

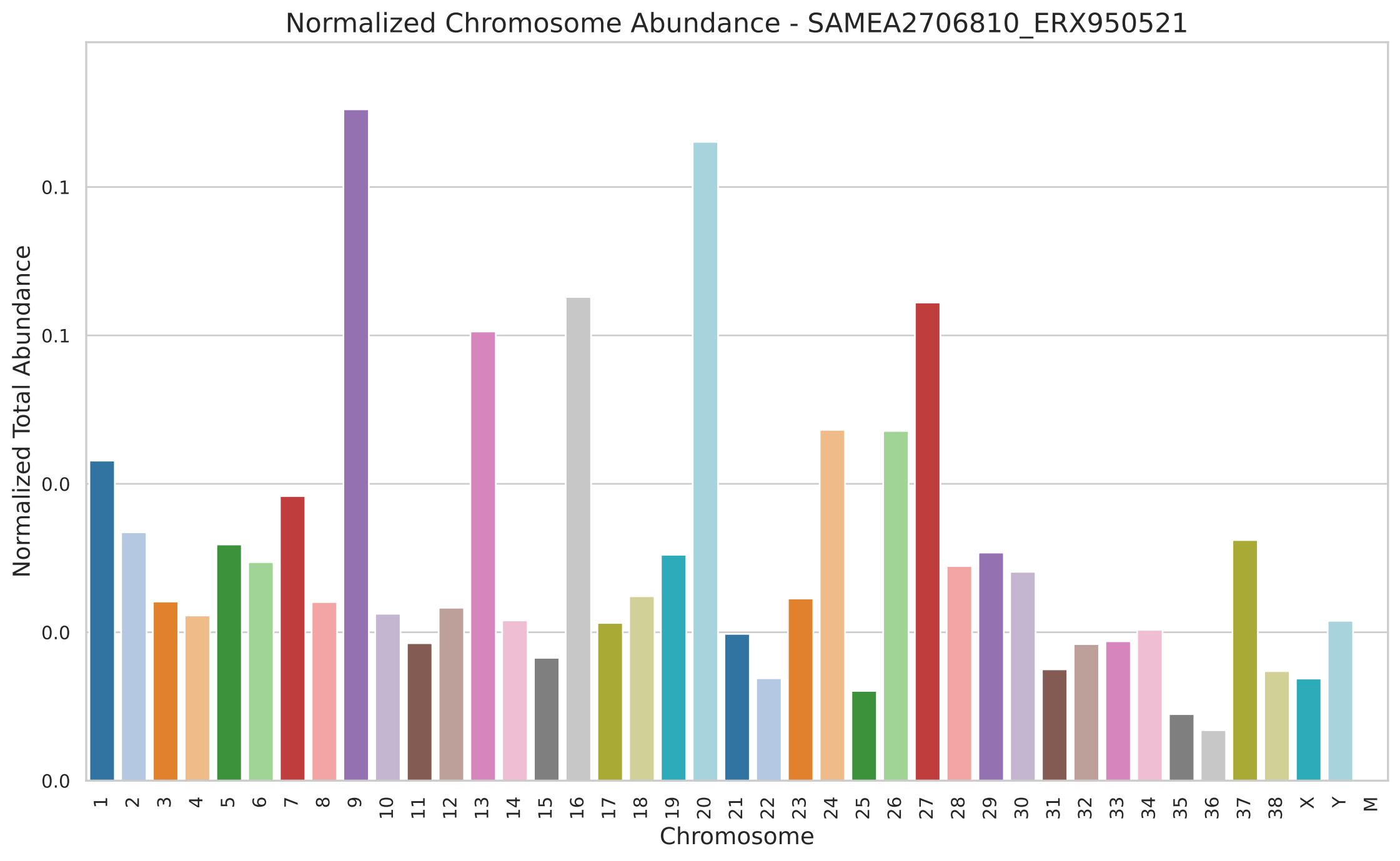

Normalized Chromosome Abundance - SAMEA2706817_ERX950528
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

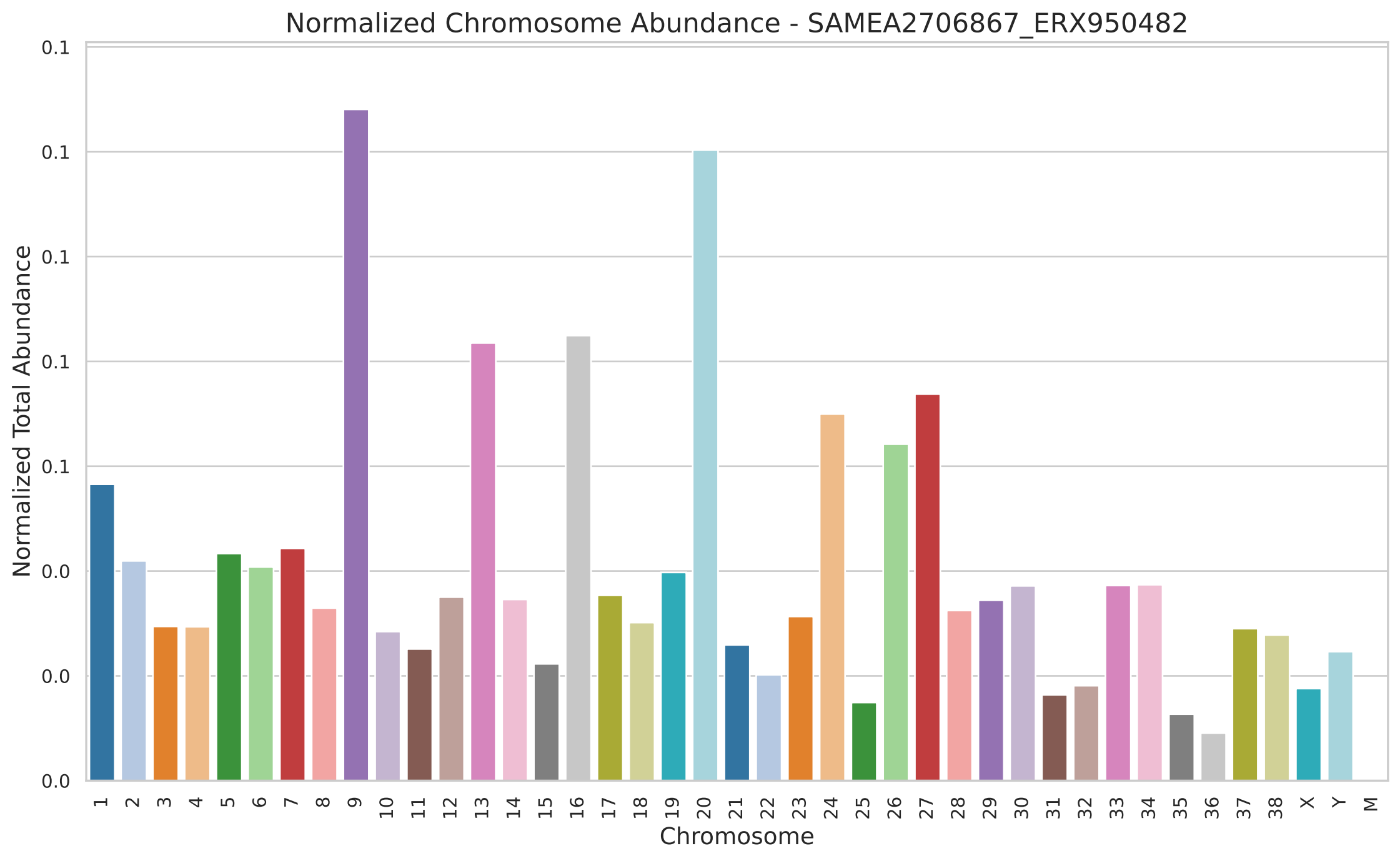

Normalized Chromosome Abundance - SAMEA2706823_ERX950534
Normalized Total Abundance
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

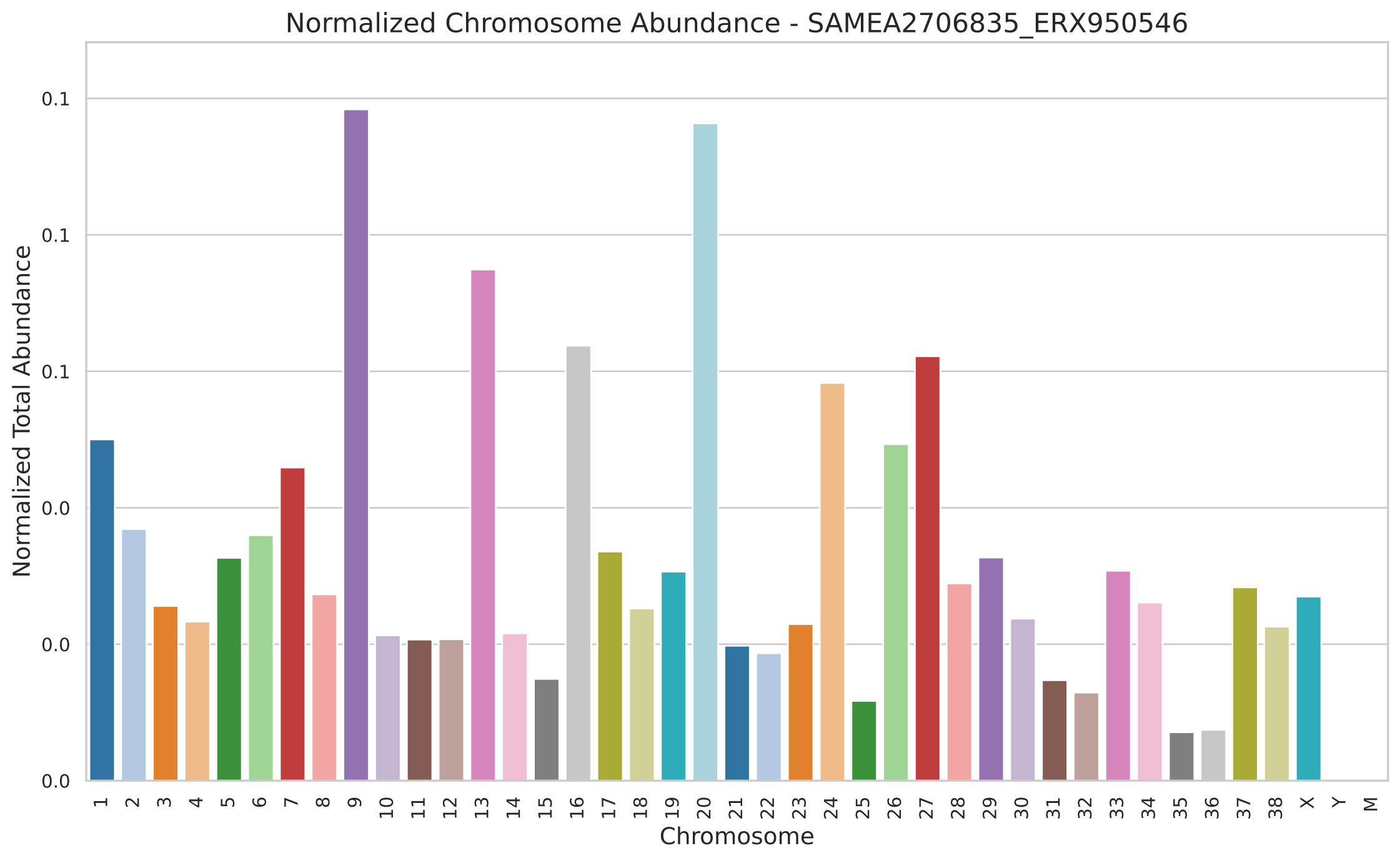

Normalized Chromosome Abundance - SAMEA2706899_ERX950514
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

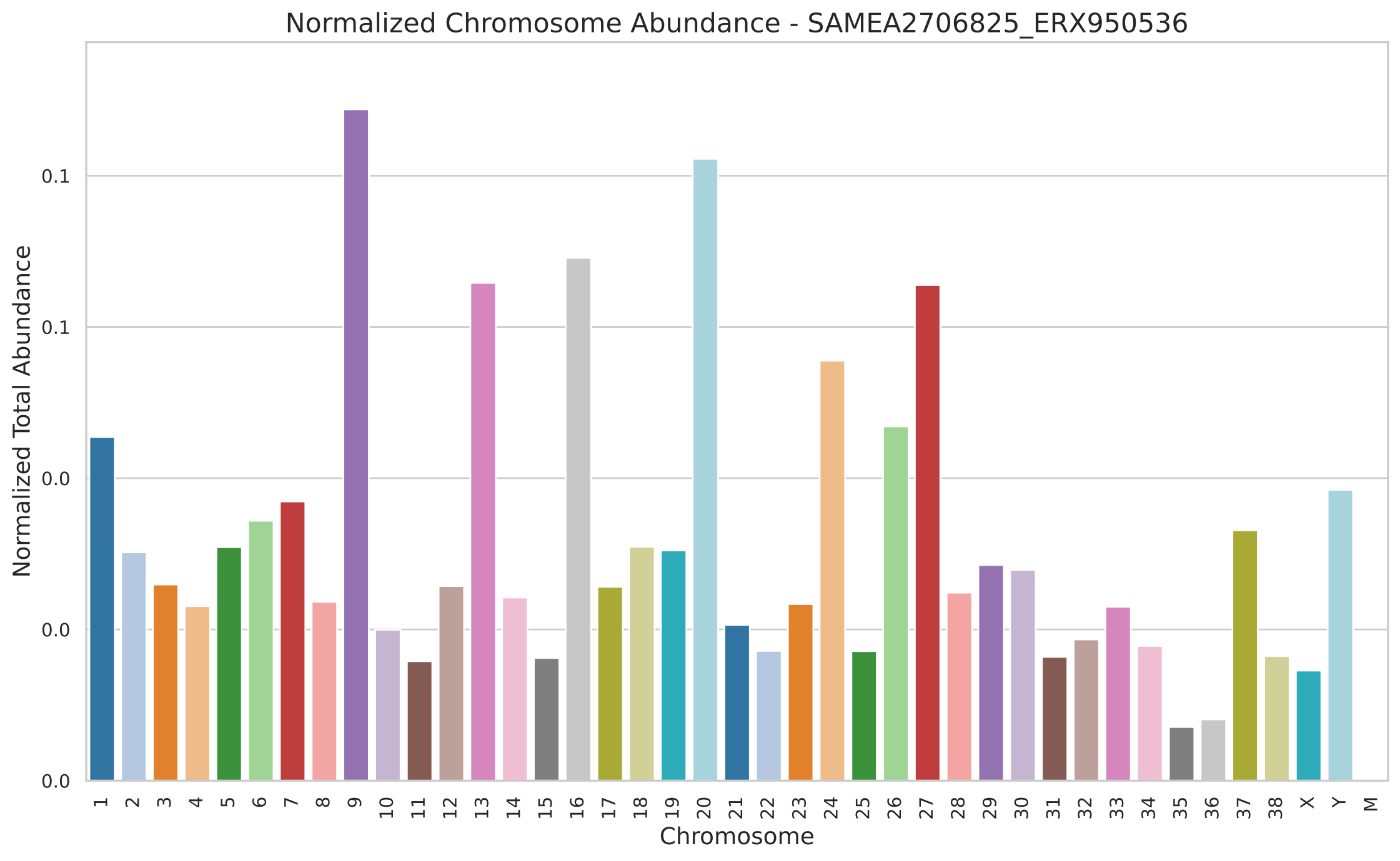

Normalized Chromosome Abundance - SAMEA2706834_ERX950545
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

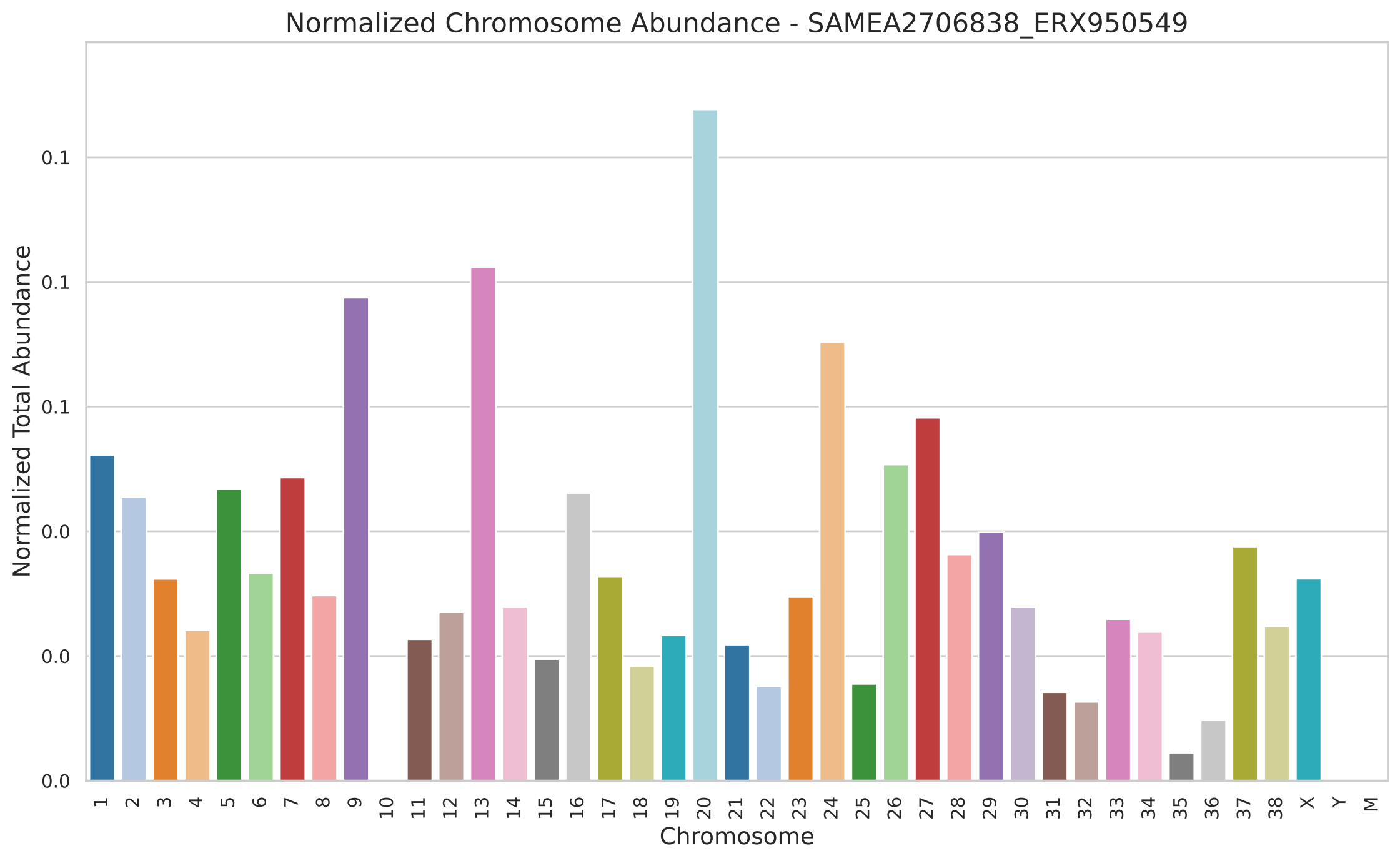

Normalized Chromosome Abundance - SAMEA2706819_ERX950530
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

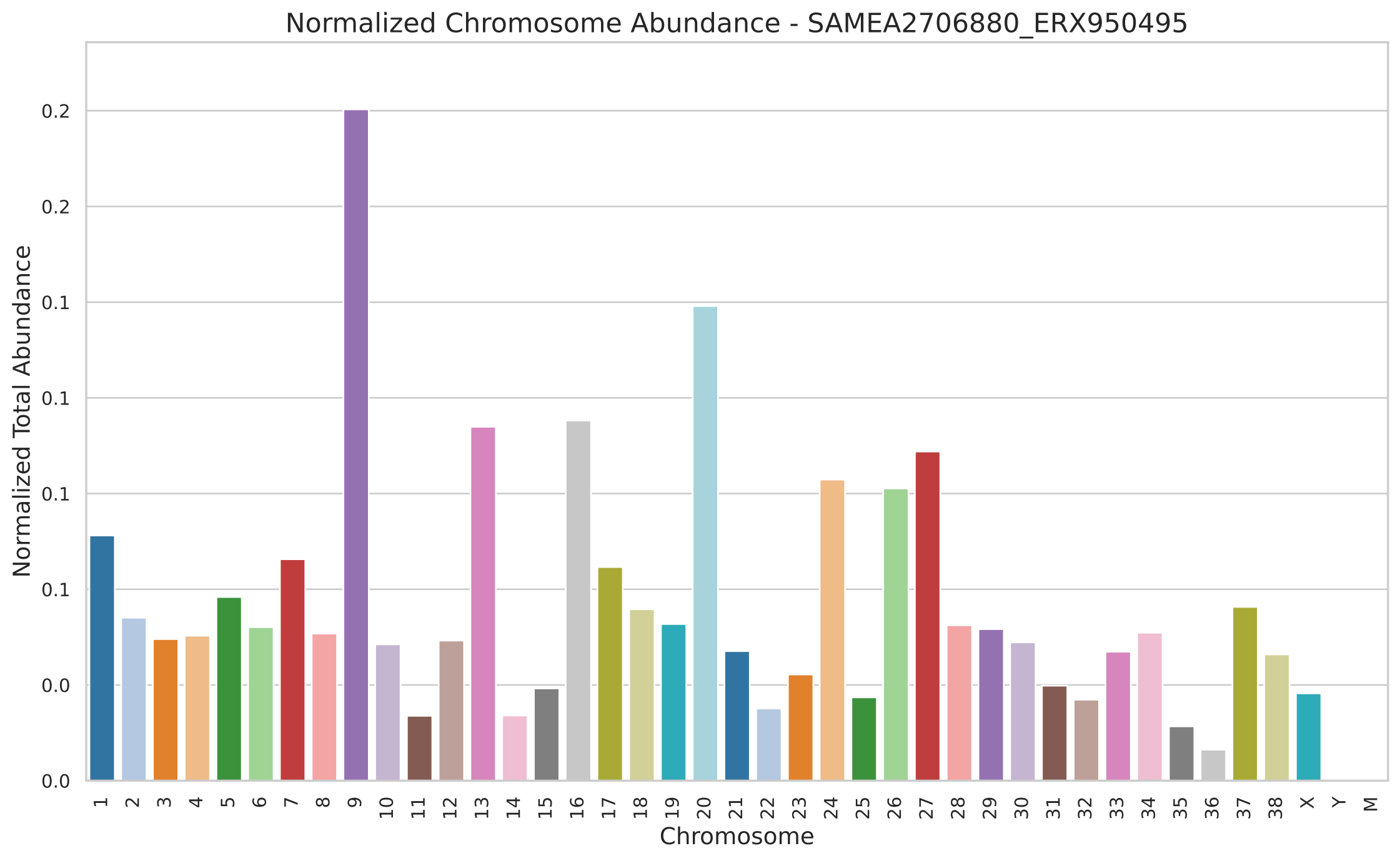

Normalized Chromosome Abundance - SAMEA2706810_ERX950521
Normalized Total Abundance
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

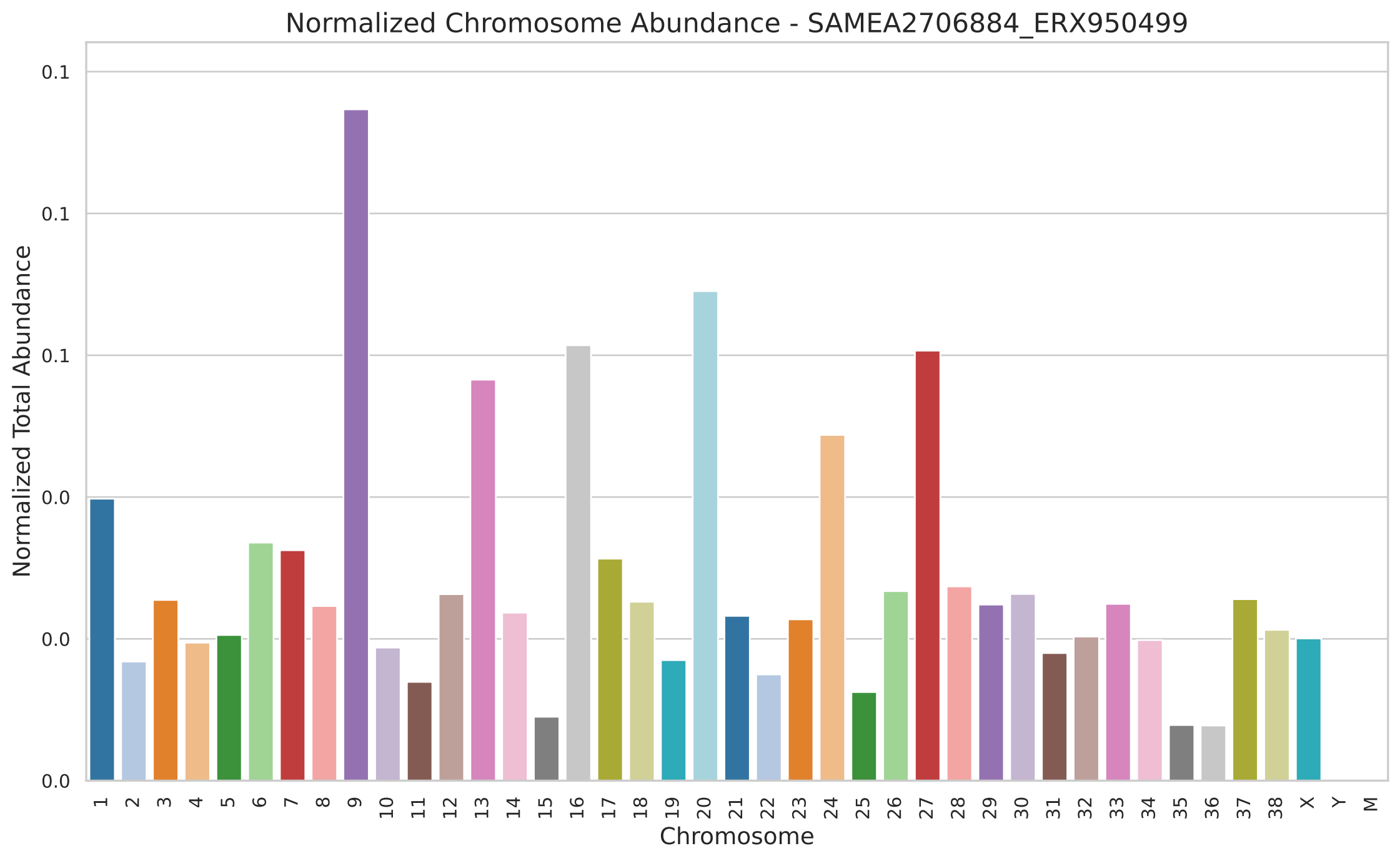

Normalized Chromosome Abundance - SAMEA2706867_ERX950482
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

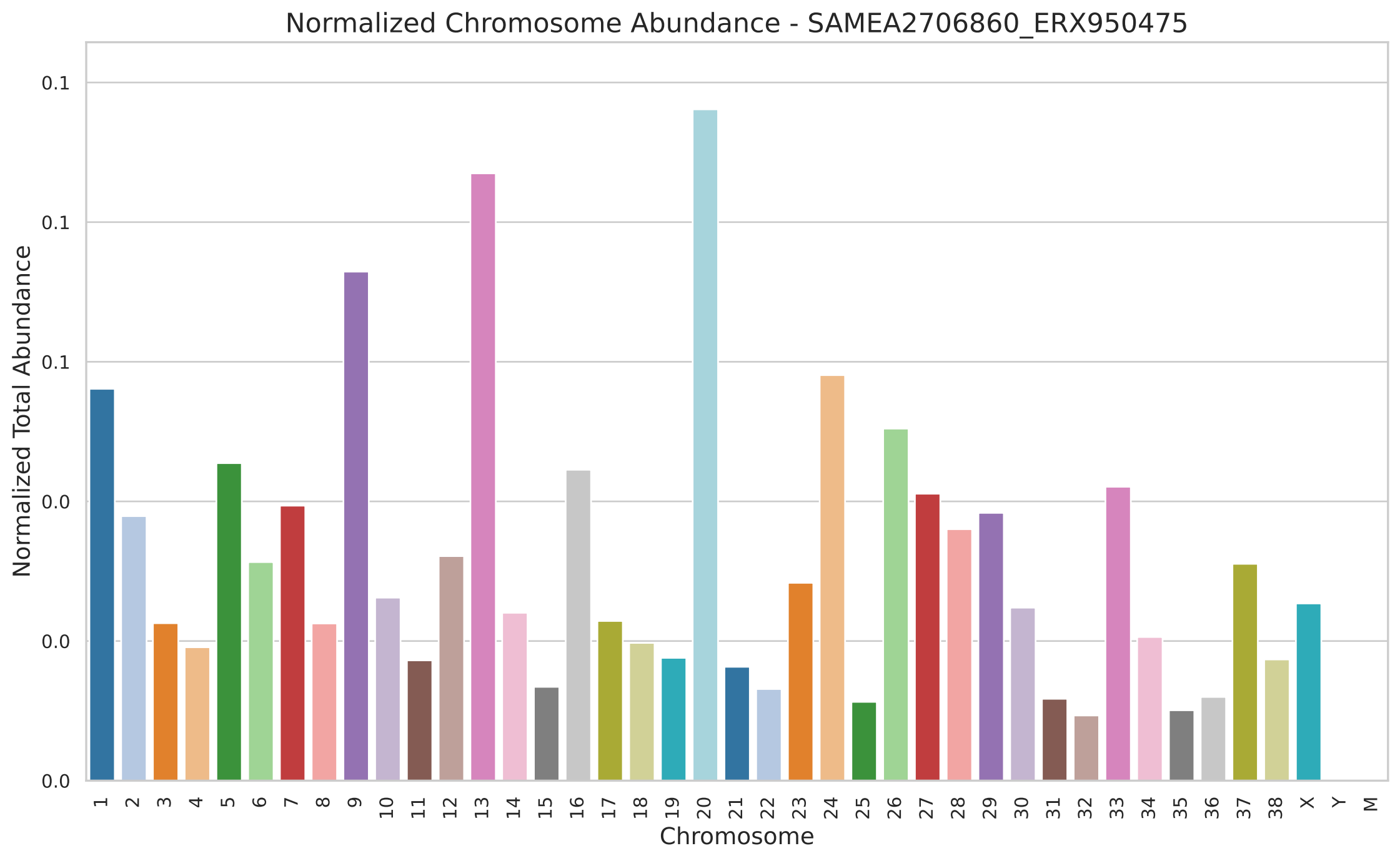

Normalized Chromosome Abundance - SAMEA2706835_ERX950546
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

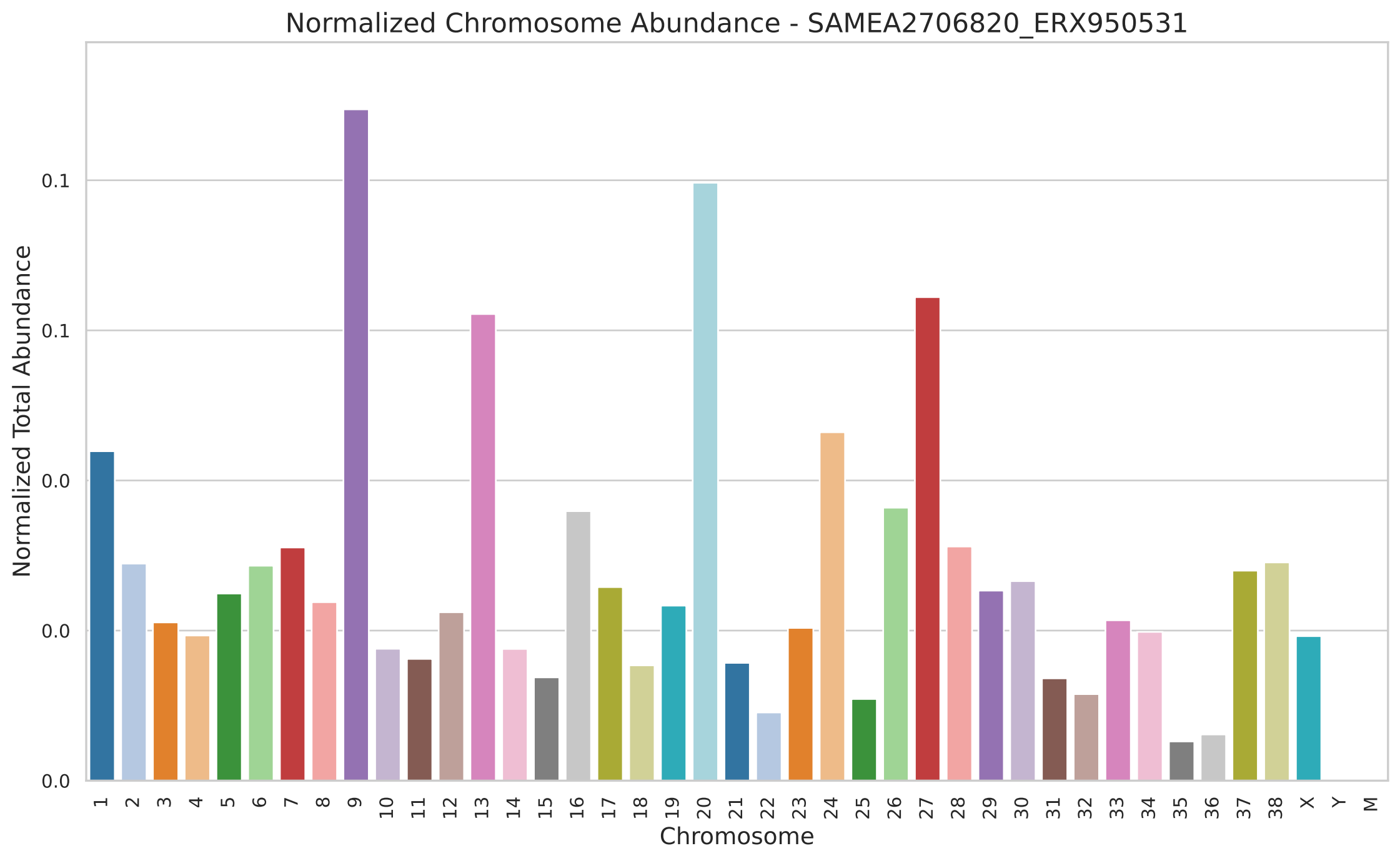

Normalized Chromosome Abundance - SAMEA2706825_ERX950536
Normalized Total Abundance
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

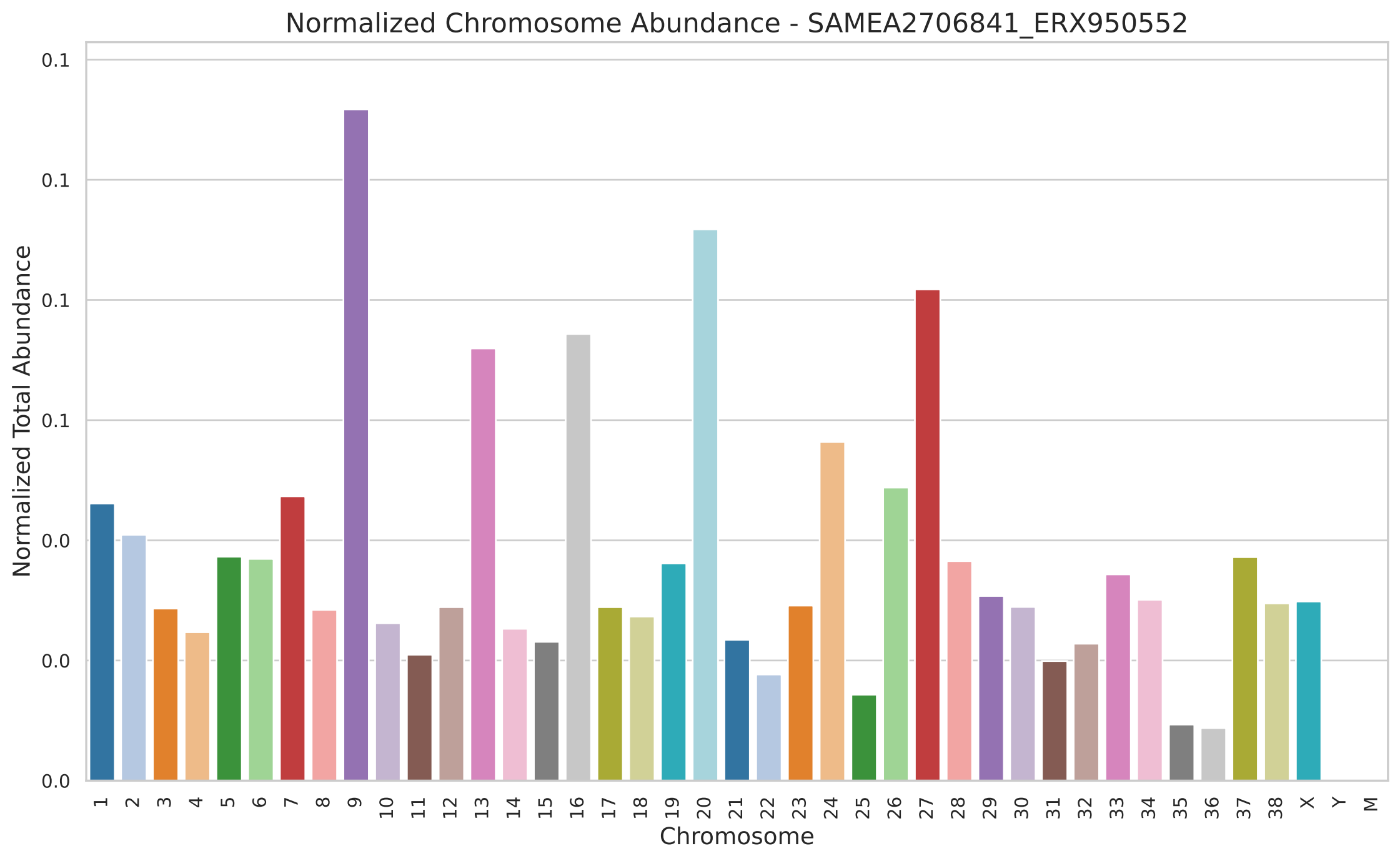

Normalized Chromosome Abundance - SAMEA2706838_ERX950549
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

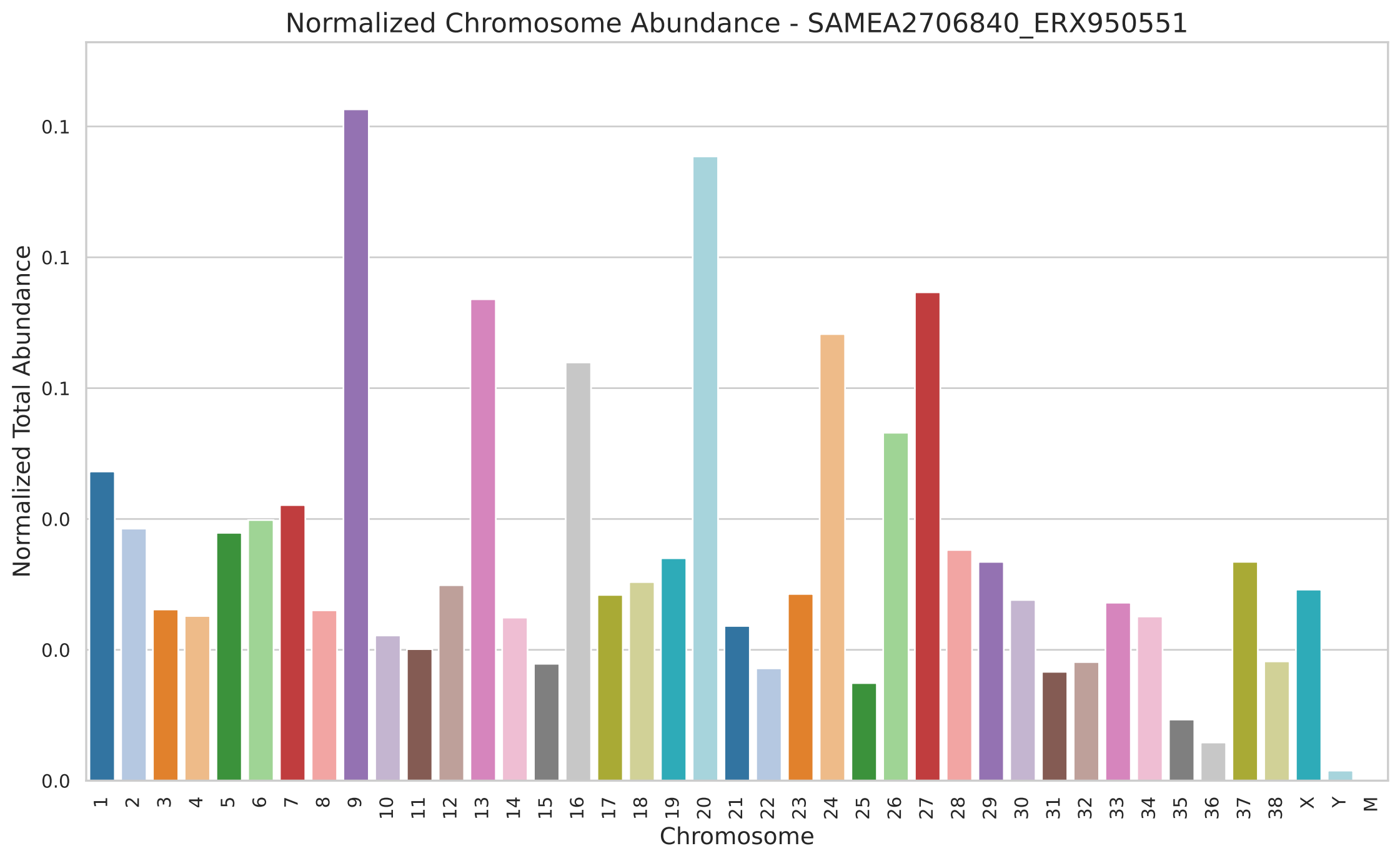

Normalized Chromosome Abundance - SAMEA2706880_ERX950495
Normalized Total Abundance
0.2
0.2
0.1
0.1
0.1
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

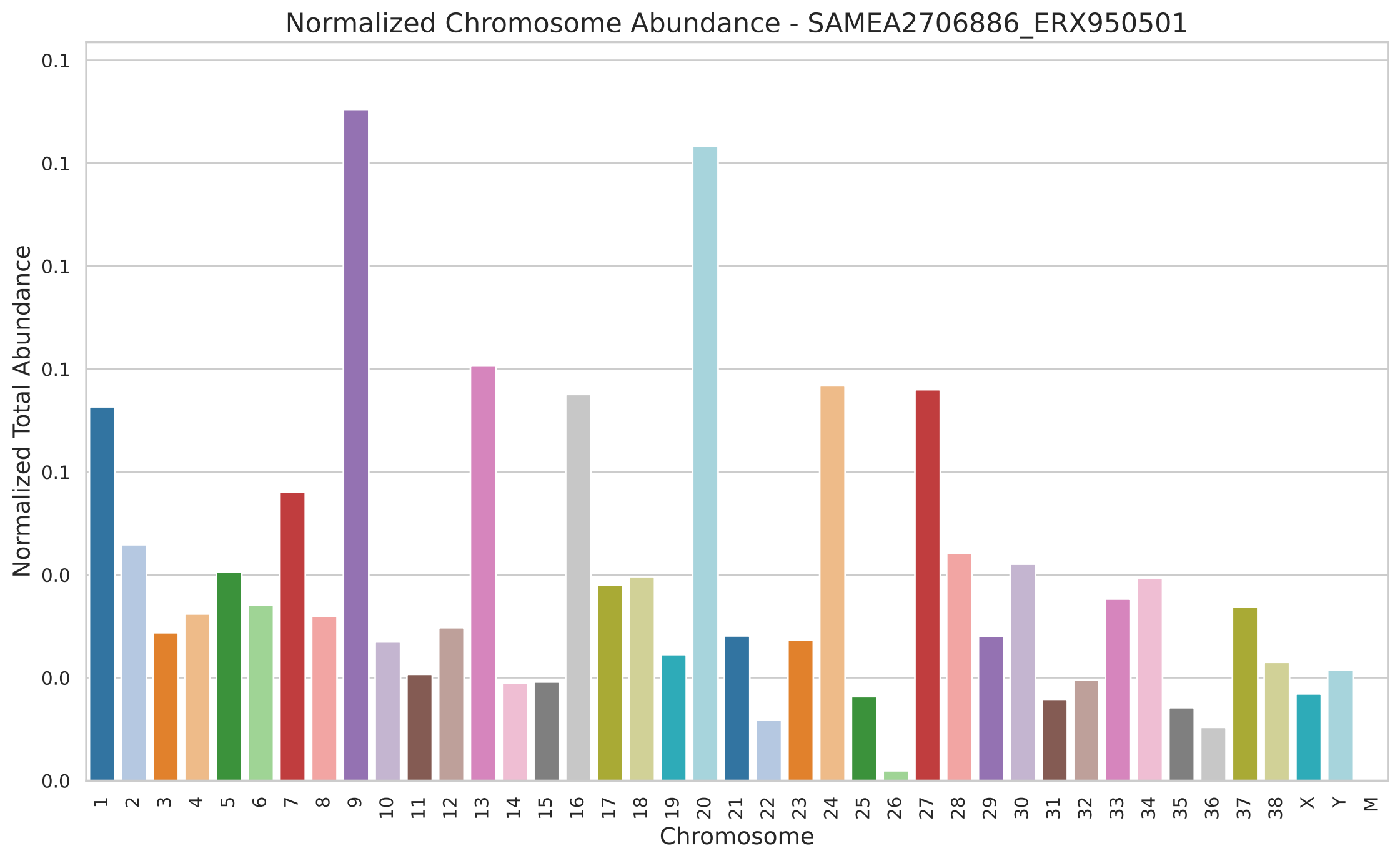

Normalized Chromosome Abundance - SAMEA2706884_ERX950499
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

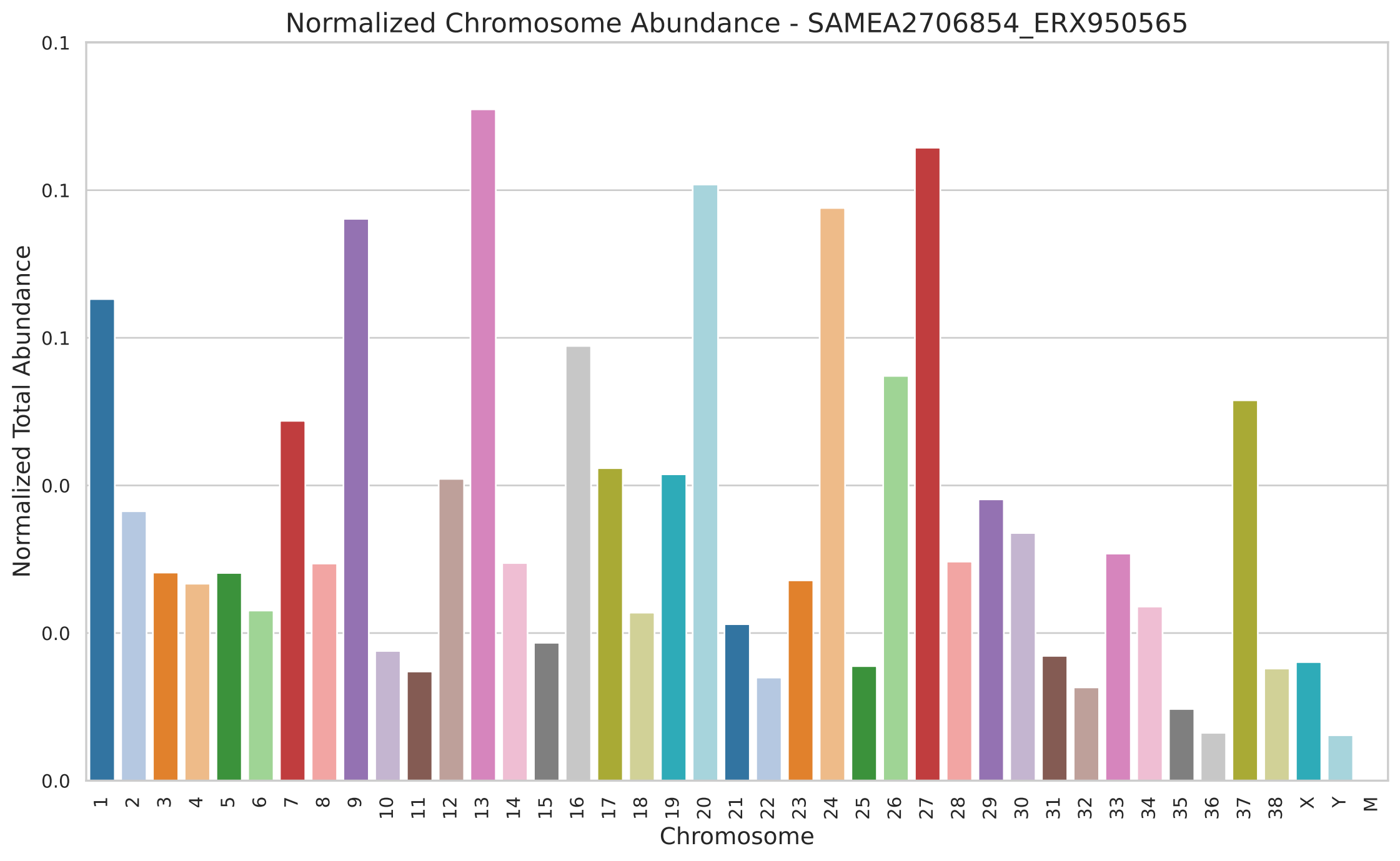

Normalized Chromosome Abundance - SAMEA2706860_ERX950475
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

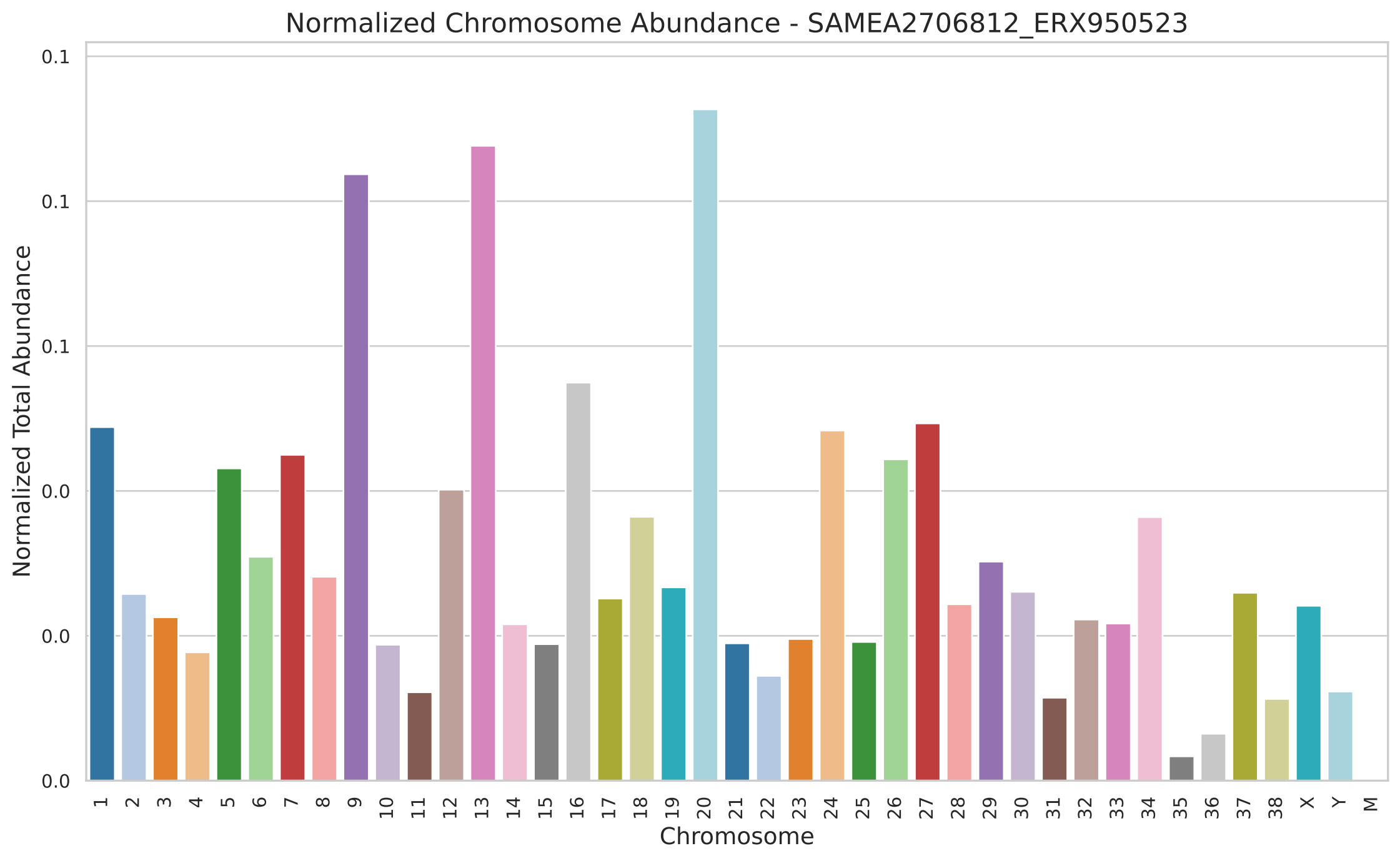

Normalized Chromosome Abundance - SAMEA2706820_ERX950531
Normalized Total Abundance
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

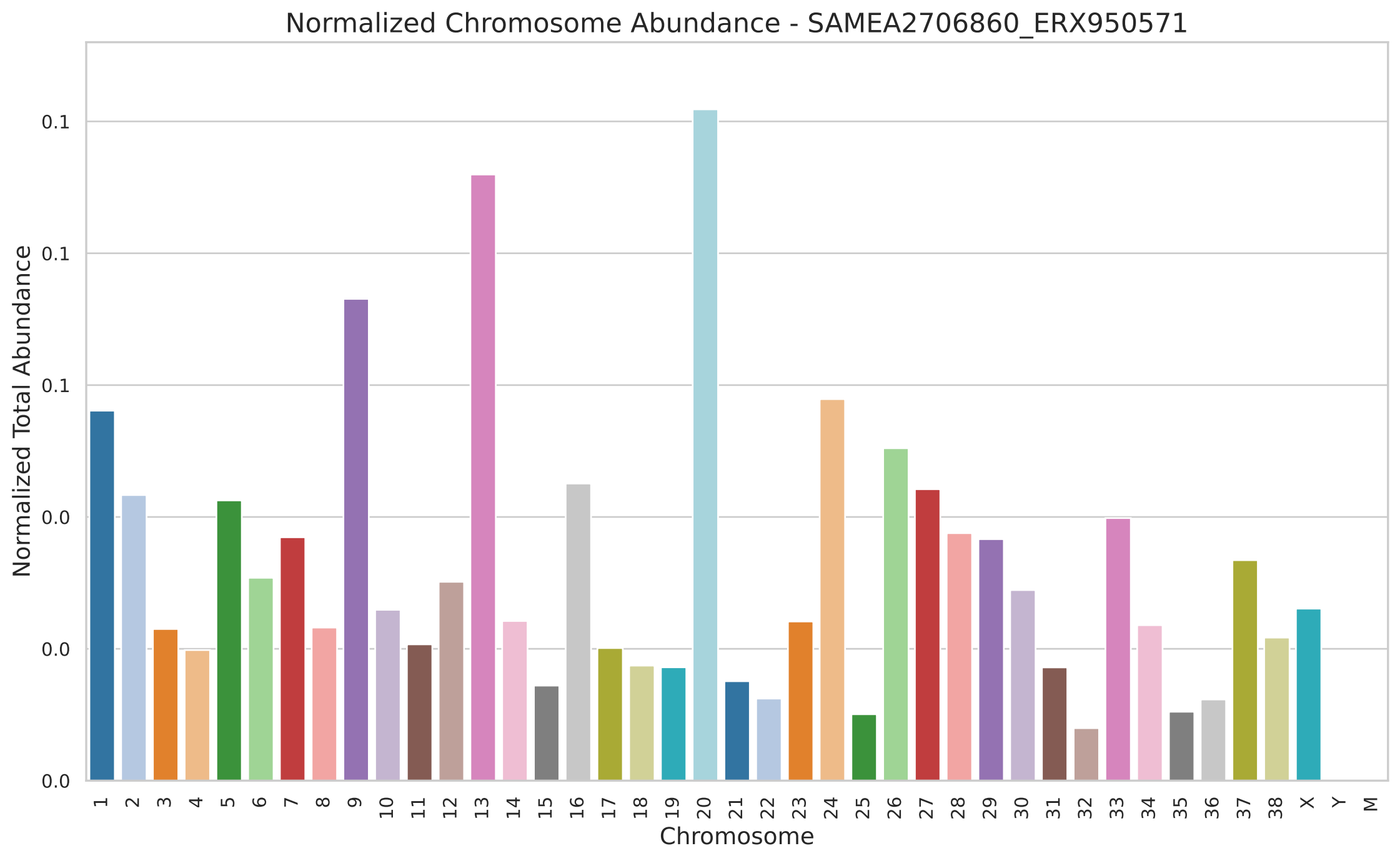

Normalized Chromosome Abundance - SAMEA2706841_ERX950552
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

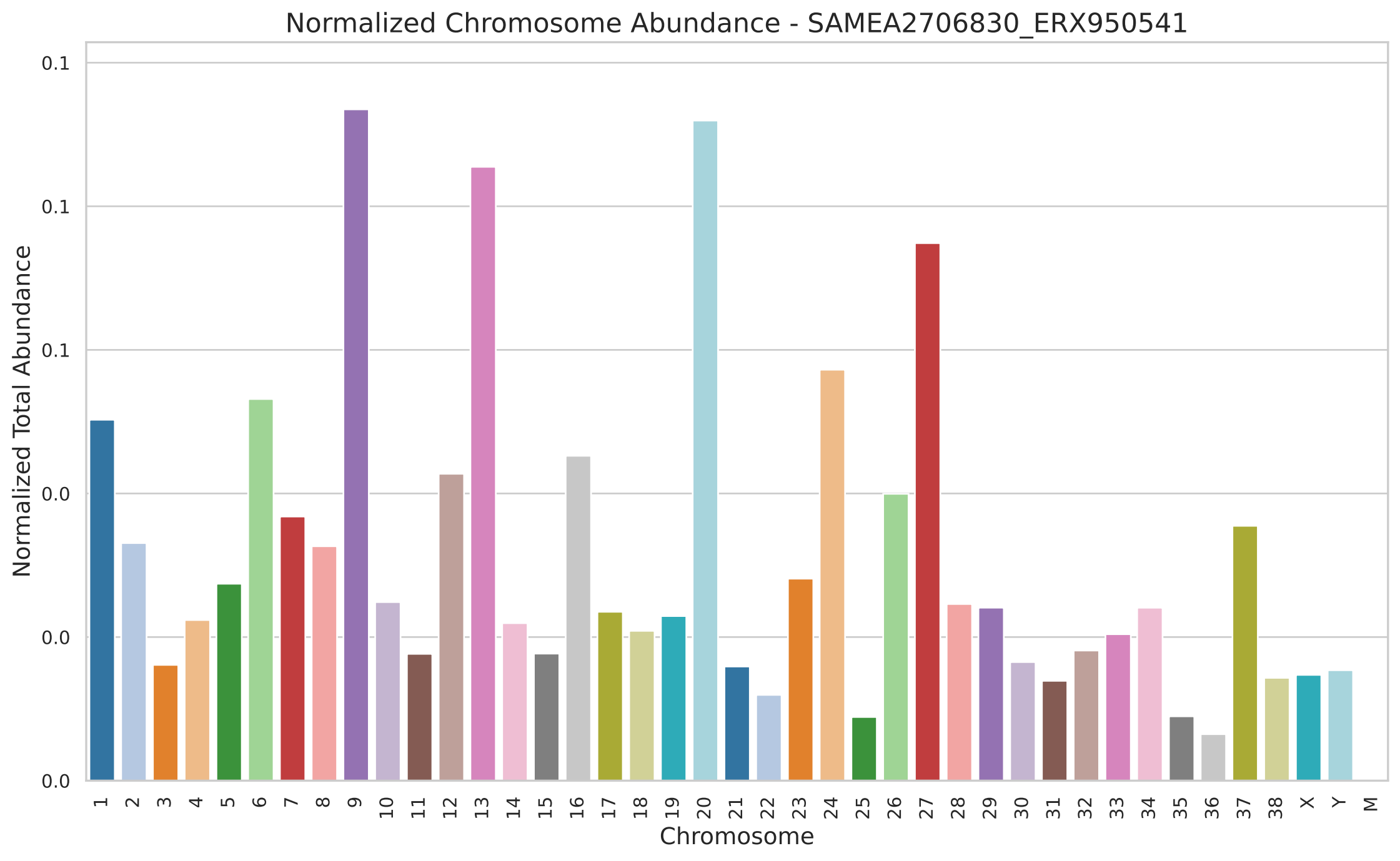

Normalized Chromosome Abundance - SAMEA2706840_ERX950551
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

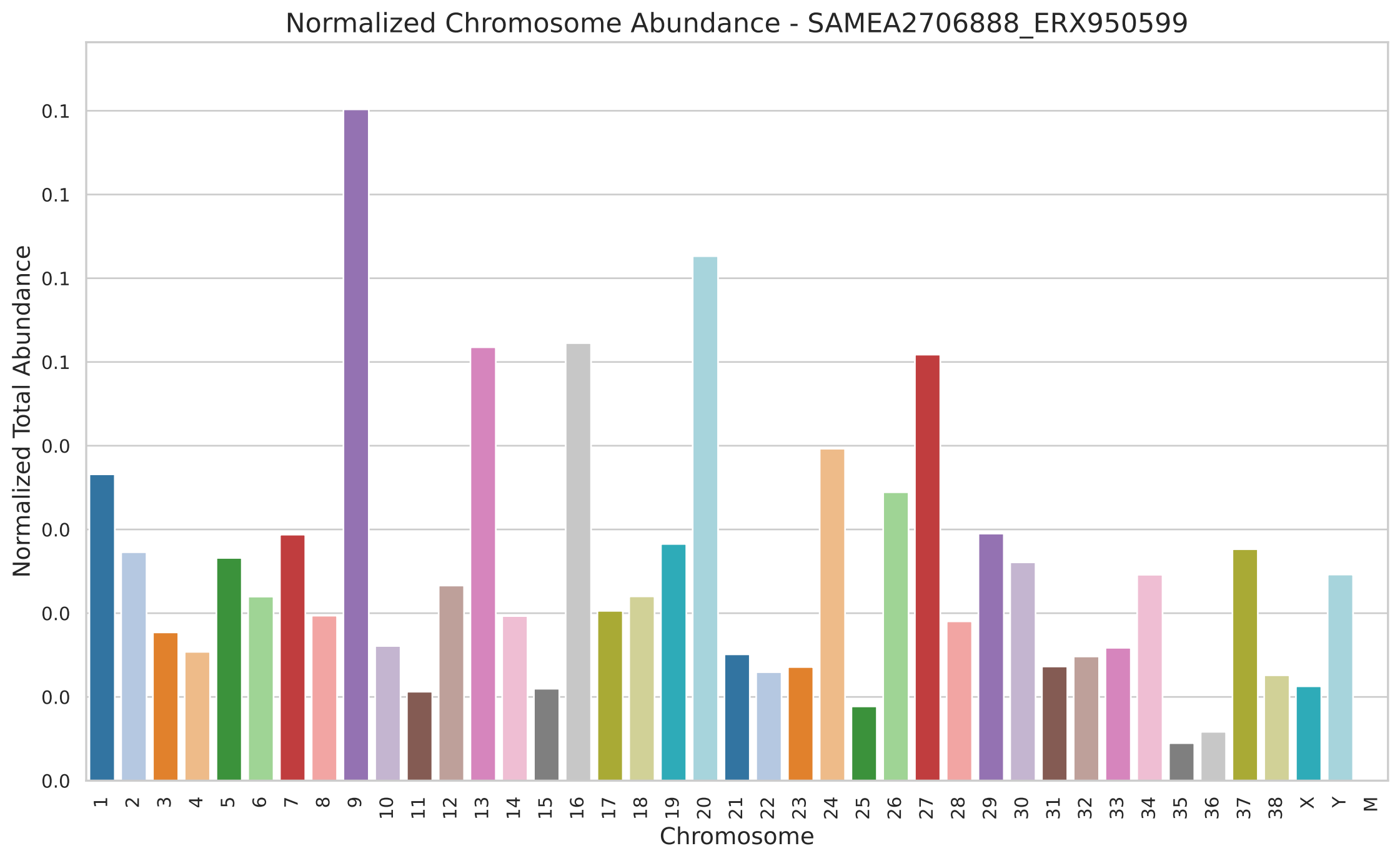

Normalized Chromosome Abundance - SAMEA2706886_ERX950501
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

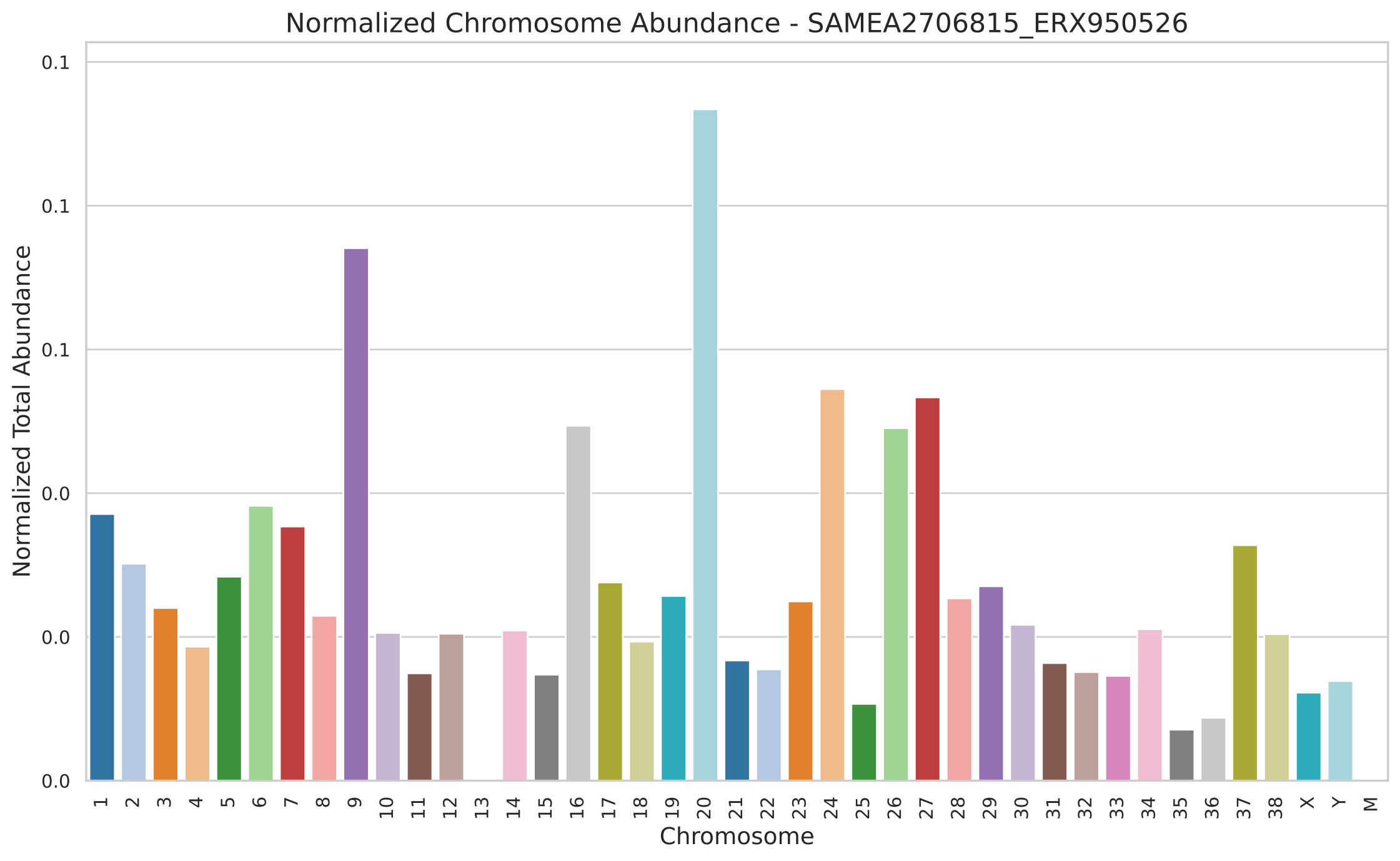

Normalized Chromosome Abundance - SAMEA2706854_ERX950565
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

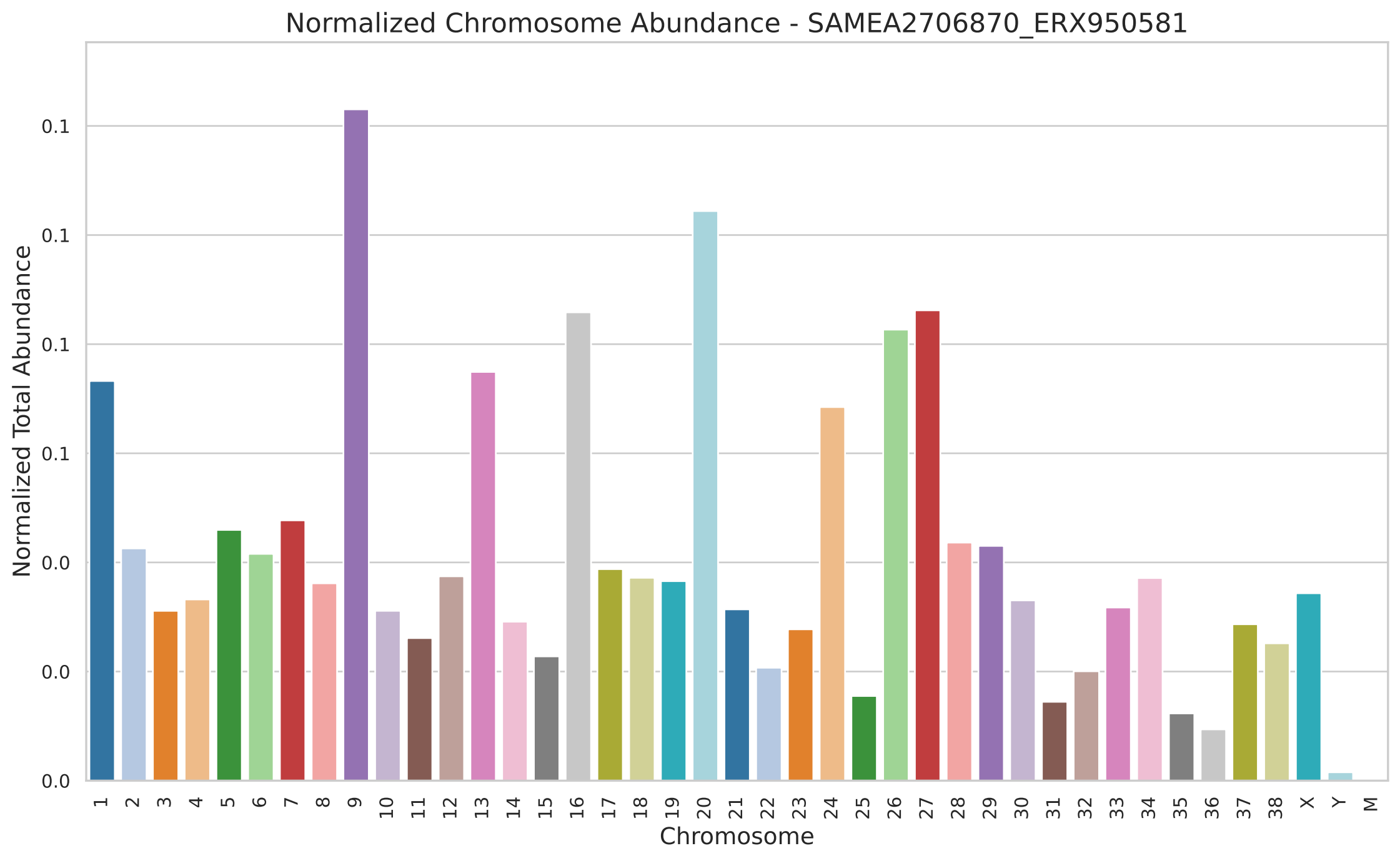

Normalized Chromosome Abundance - SAMEA2706812_ERX950523
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

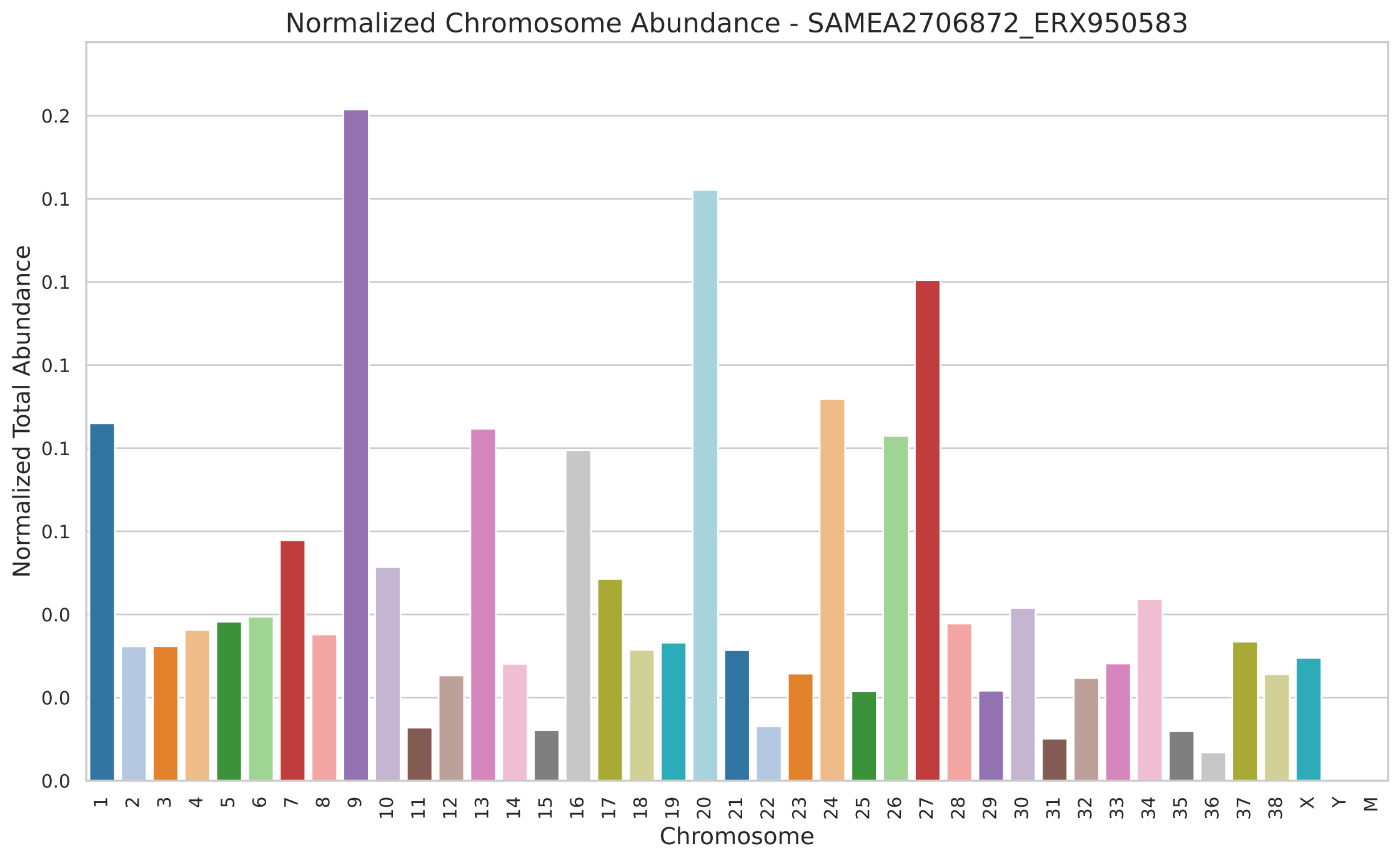

Normalized Chromosome Abundance - SAMEA2706860_ERX950571
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

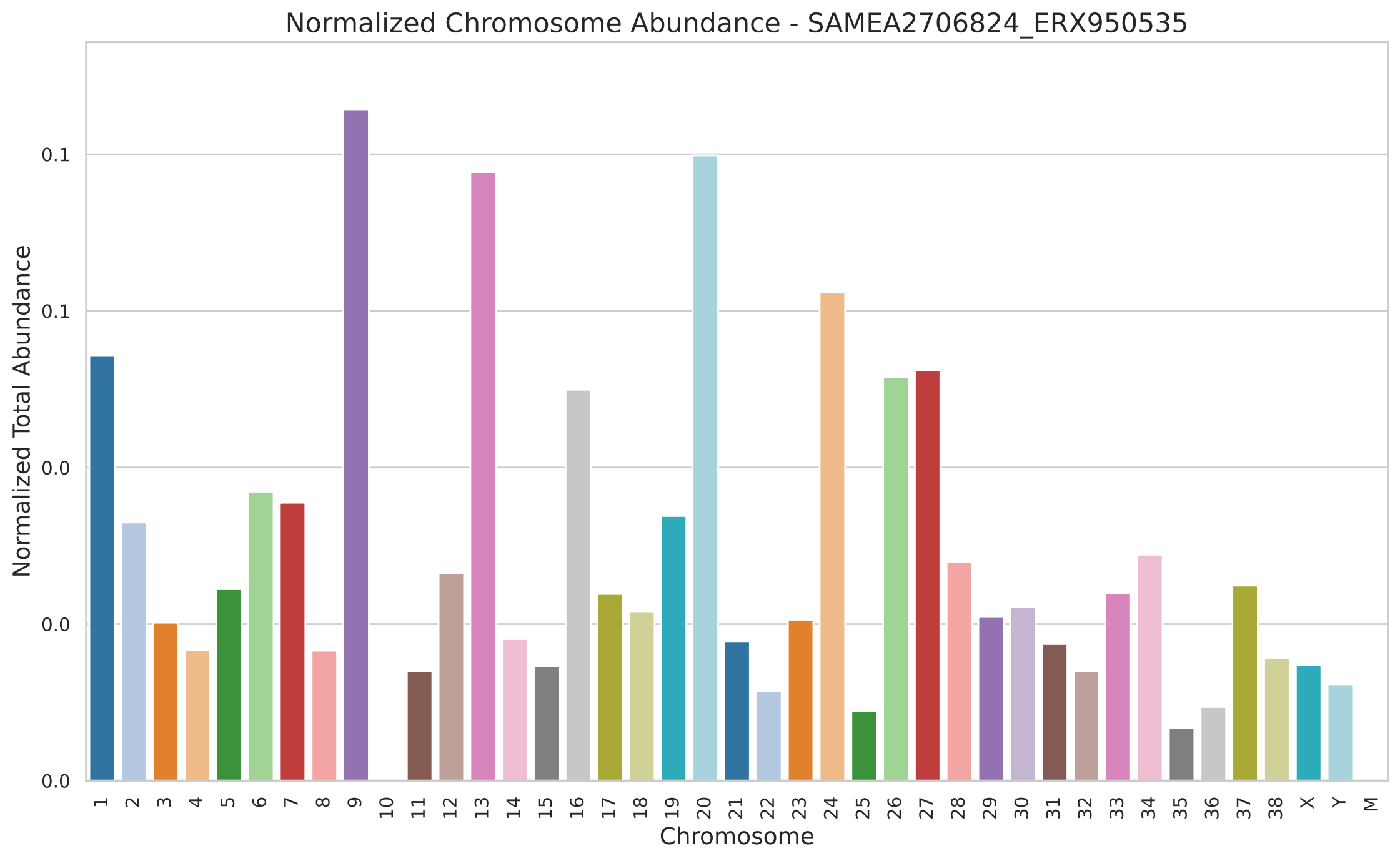

Normalized Chromosome Abundance - SAMEA2706830_ERX950541
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

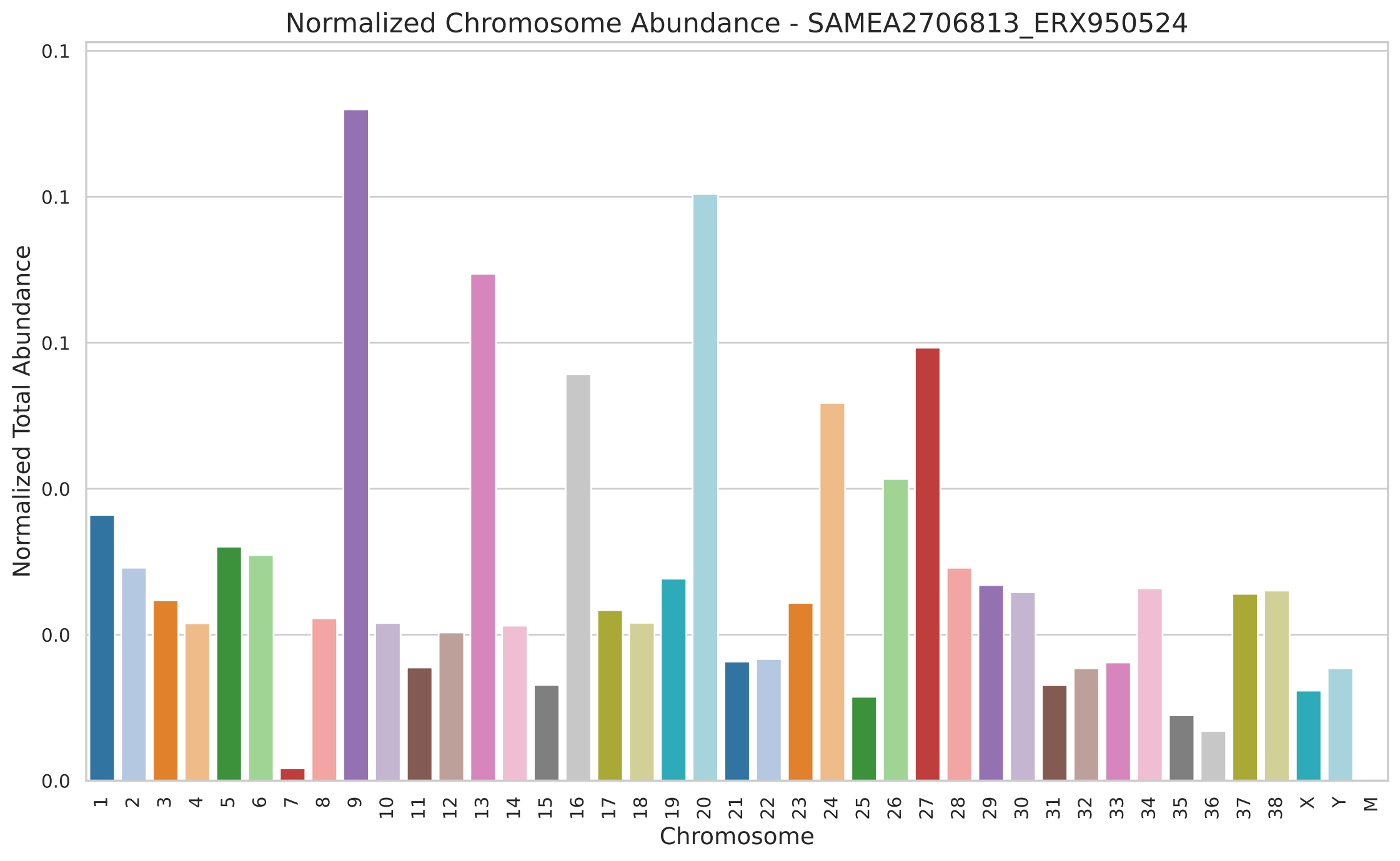

Normalized Chromosome Abundance - SAMEA2706888_ERX950599
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

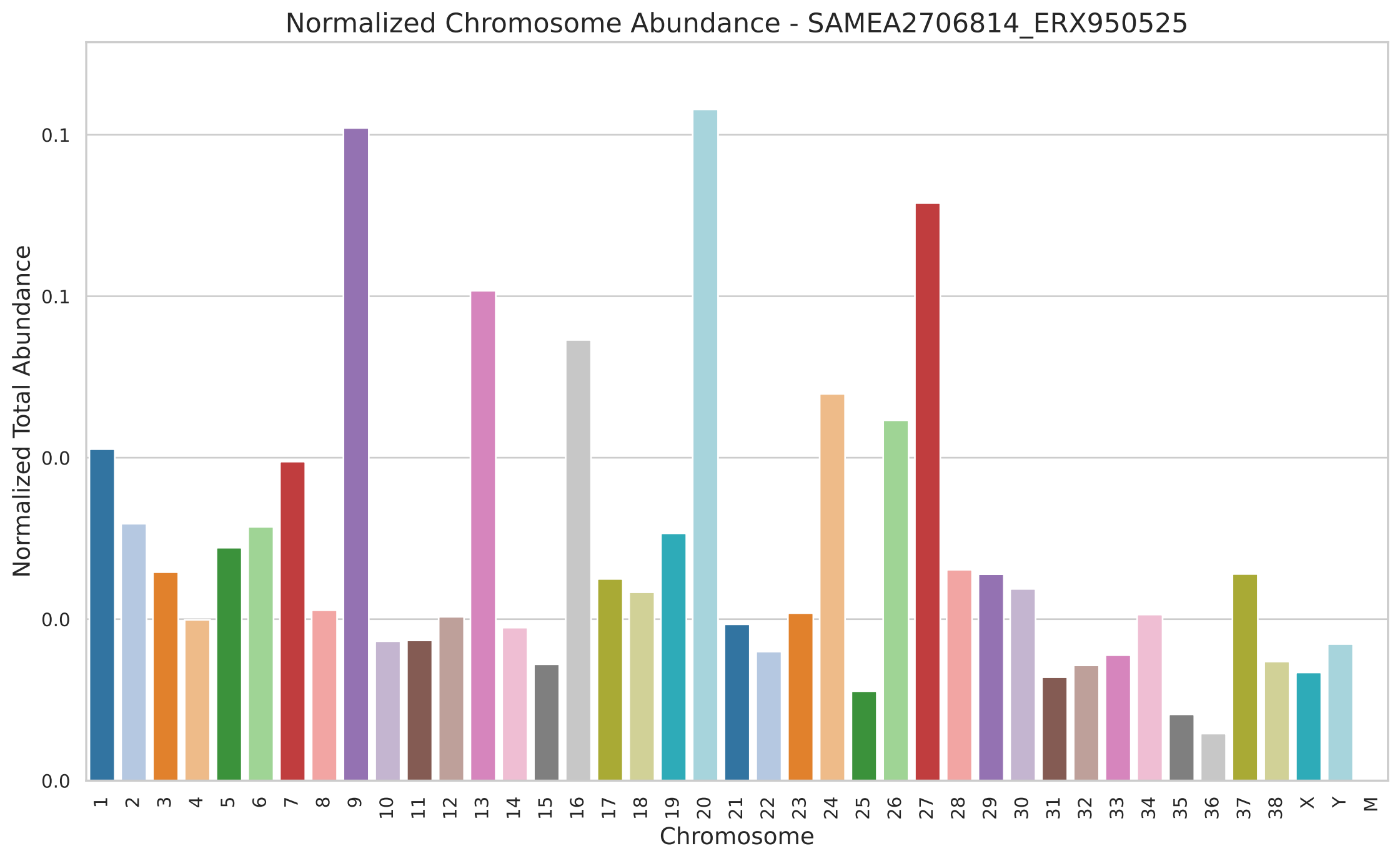

Normalized Chromosome Abundance - SAMEA2706815_ERX950526
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

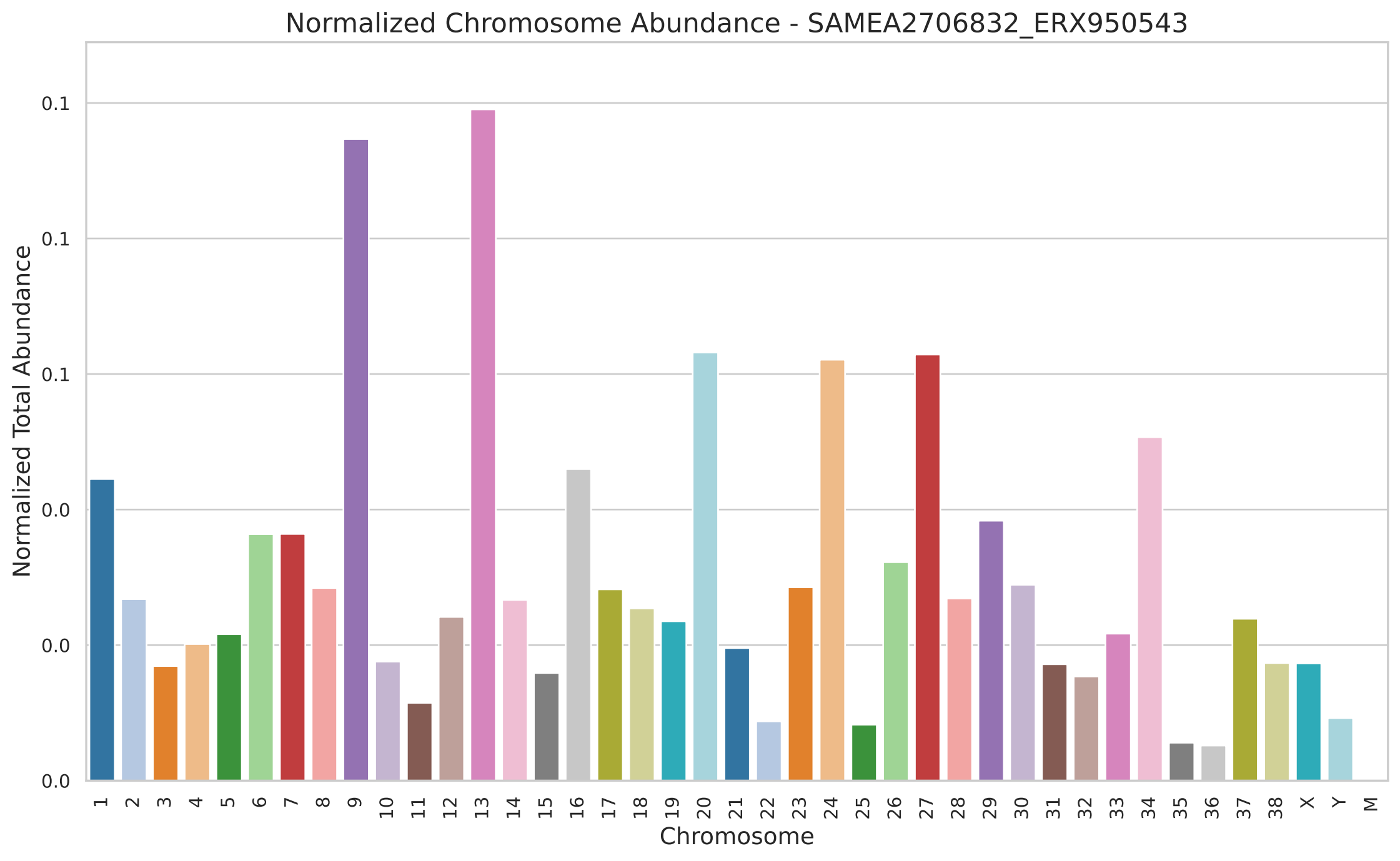

Normalized Chromosome Abundance - SAMEA2706870_ERX950581
Normalized Total Abundance
0.0
0.0
0.1
0.1
0.1
0.1
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

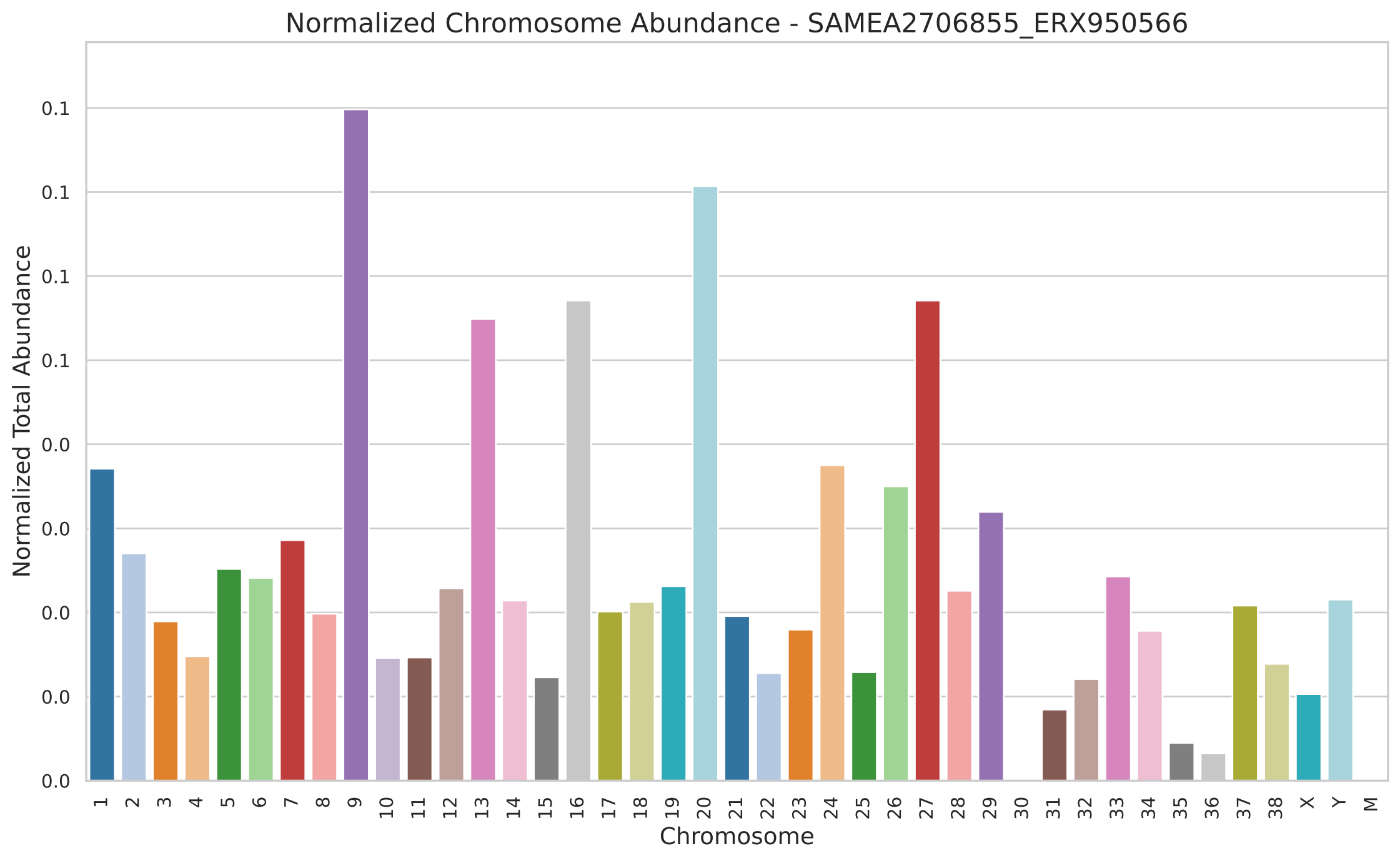

Normalized Chromosome Abundance - SAMEA2706872_ERX950583
Normalized Total Abundance
0.2
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

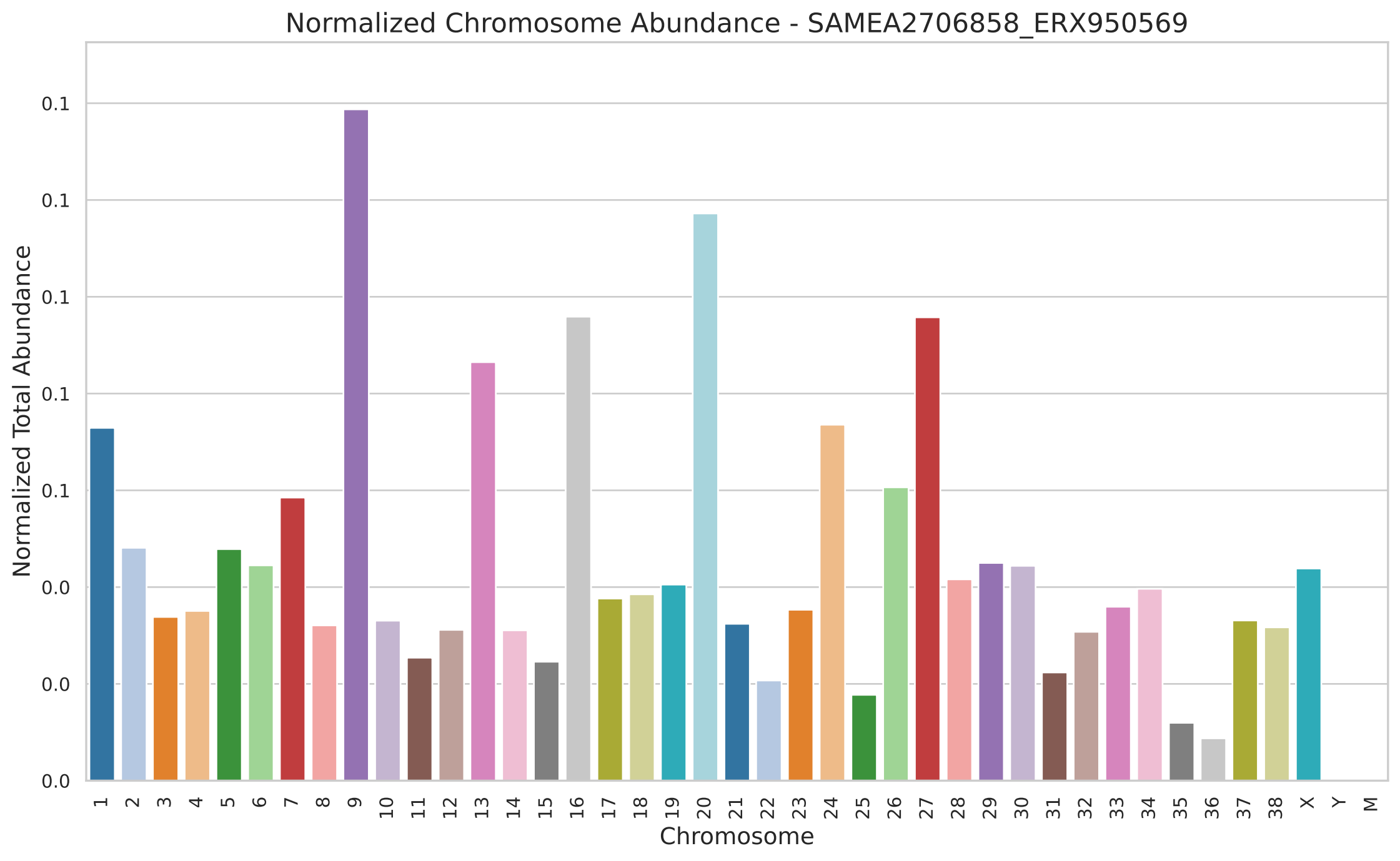

Normalized Chromosome Abundance - SAMEA2706824_ERX950535
Normalized Total Abundance
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

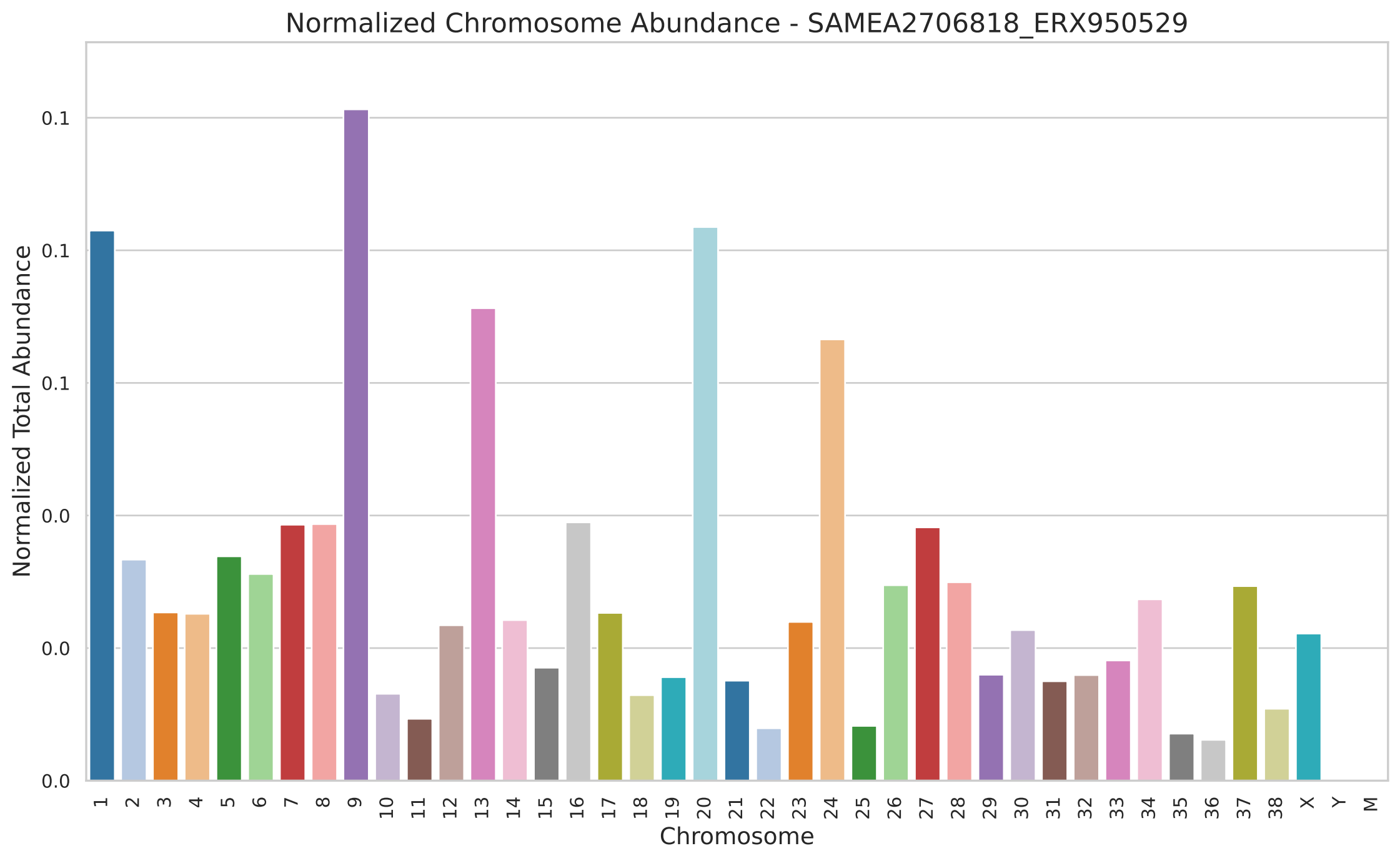

Normalized Chromosome Abundance - SAMEA2706813_ERX950524
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

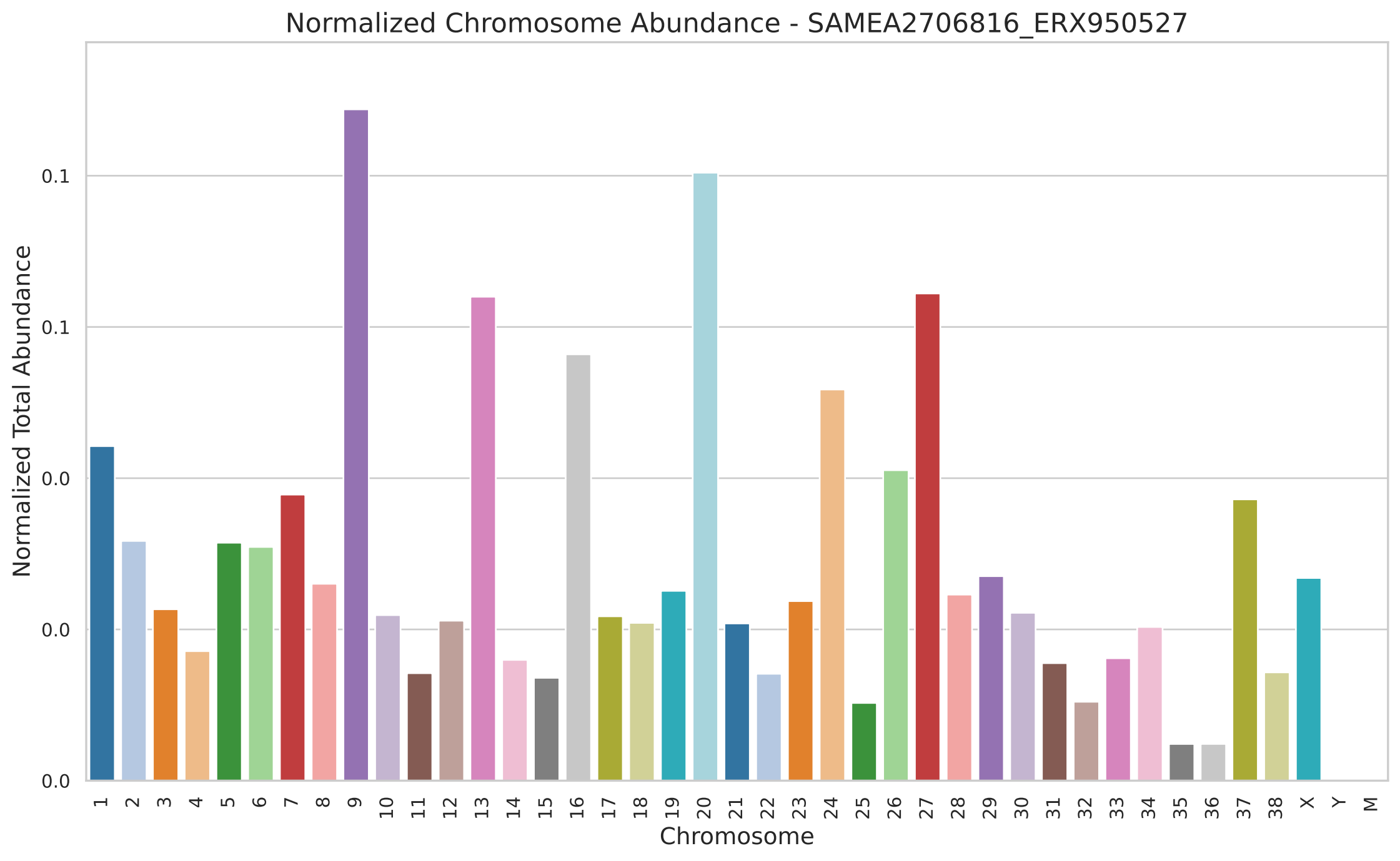

Normalized Chromosome Abundance - SAMEA2706814_ERX950525
Normalized Total Abundance
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

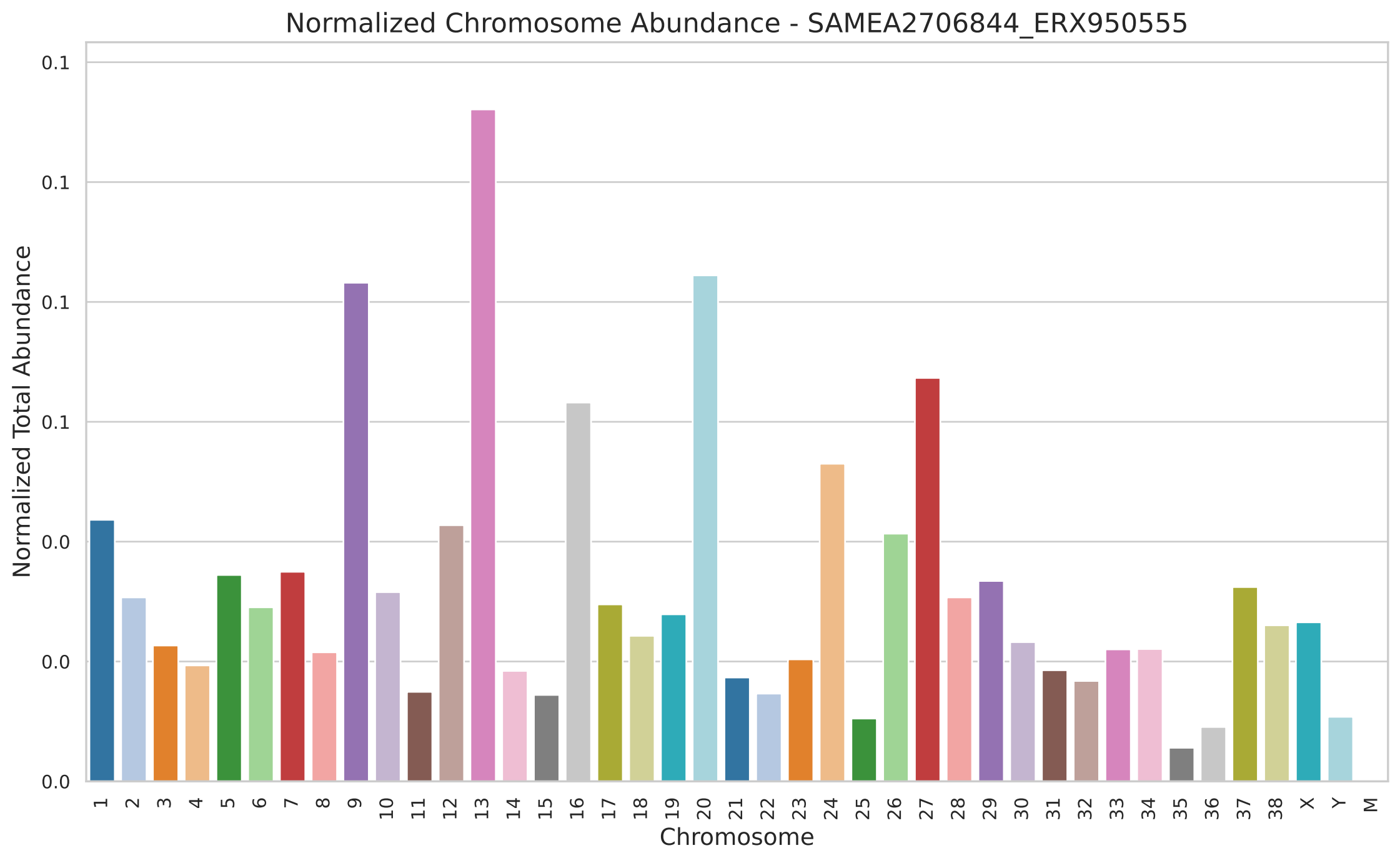

Normalized Chromosome Abundance - SAMEA2706832_ERX950543
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

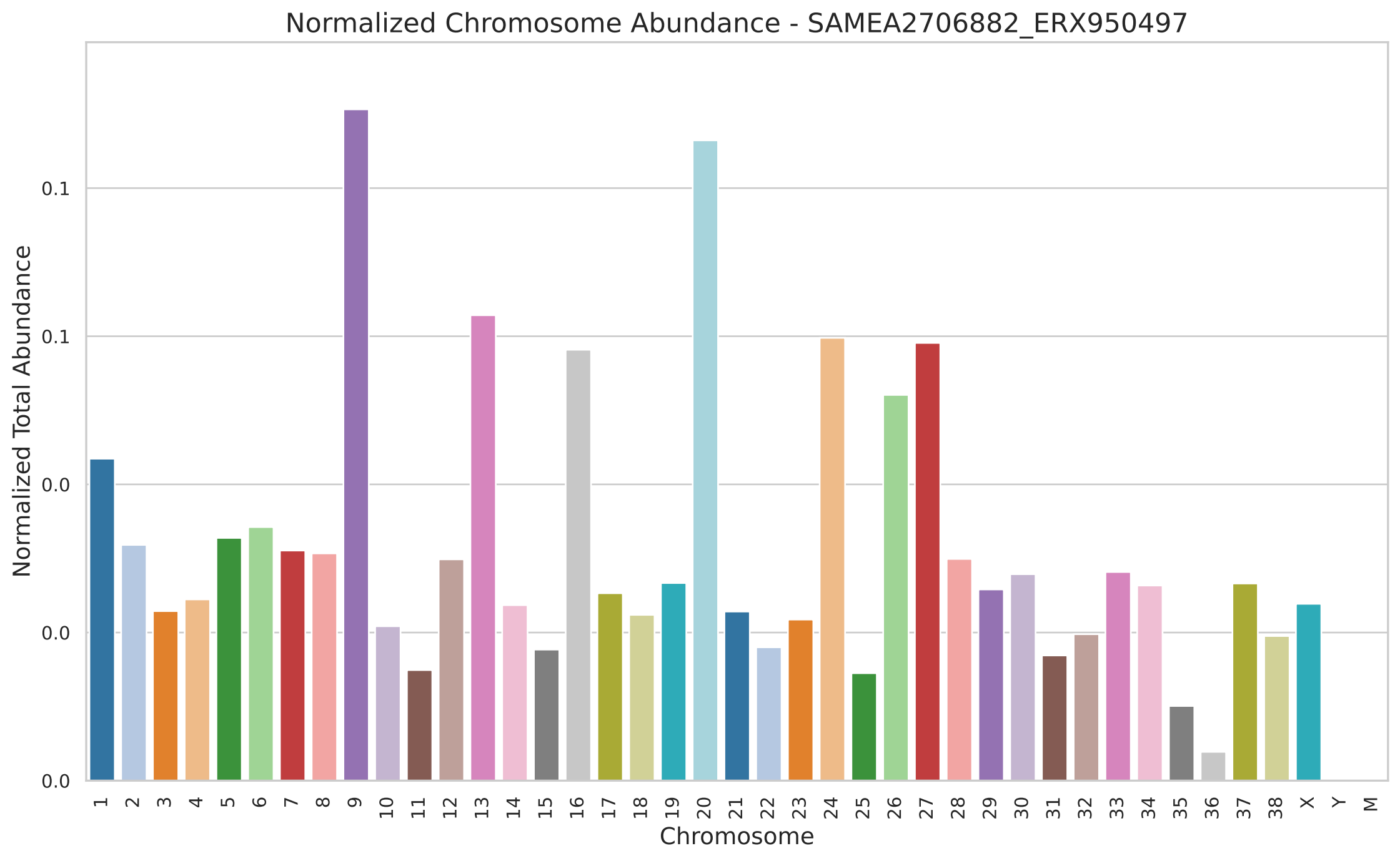

Normalized Chromosome Abundance - SAMEA2706855_ERX950566
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

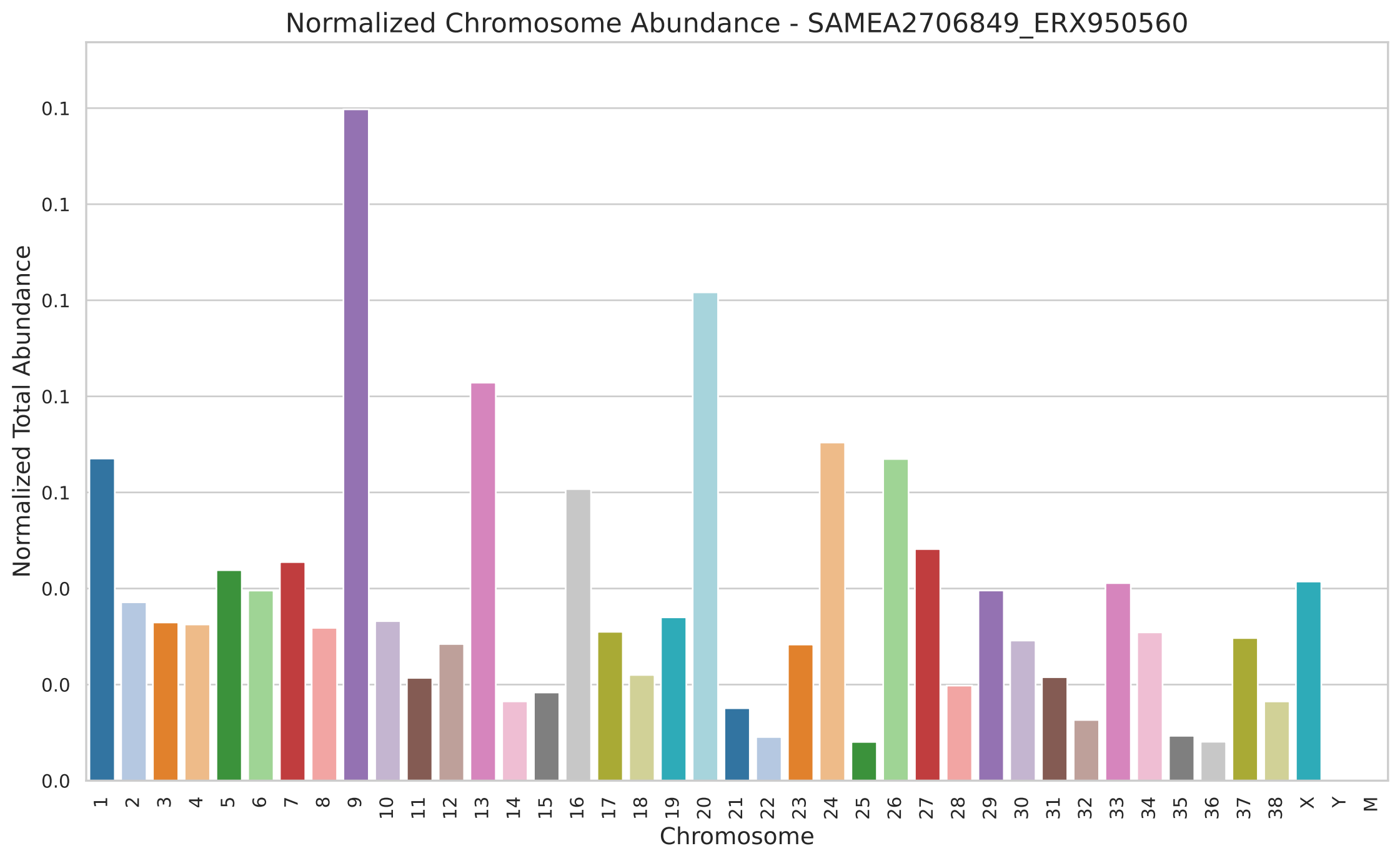

Normalized Chromosome Abundance - SAMEA2706858_ERX950569
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

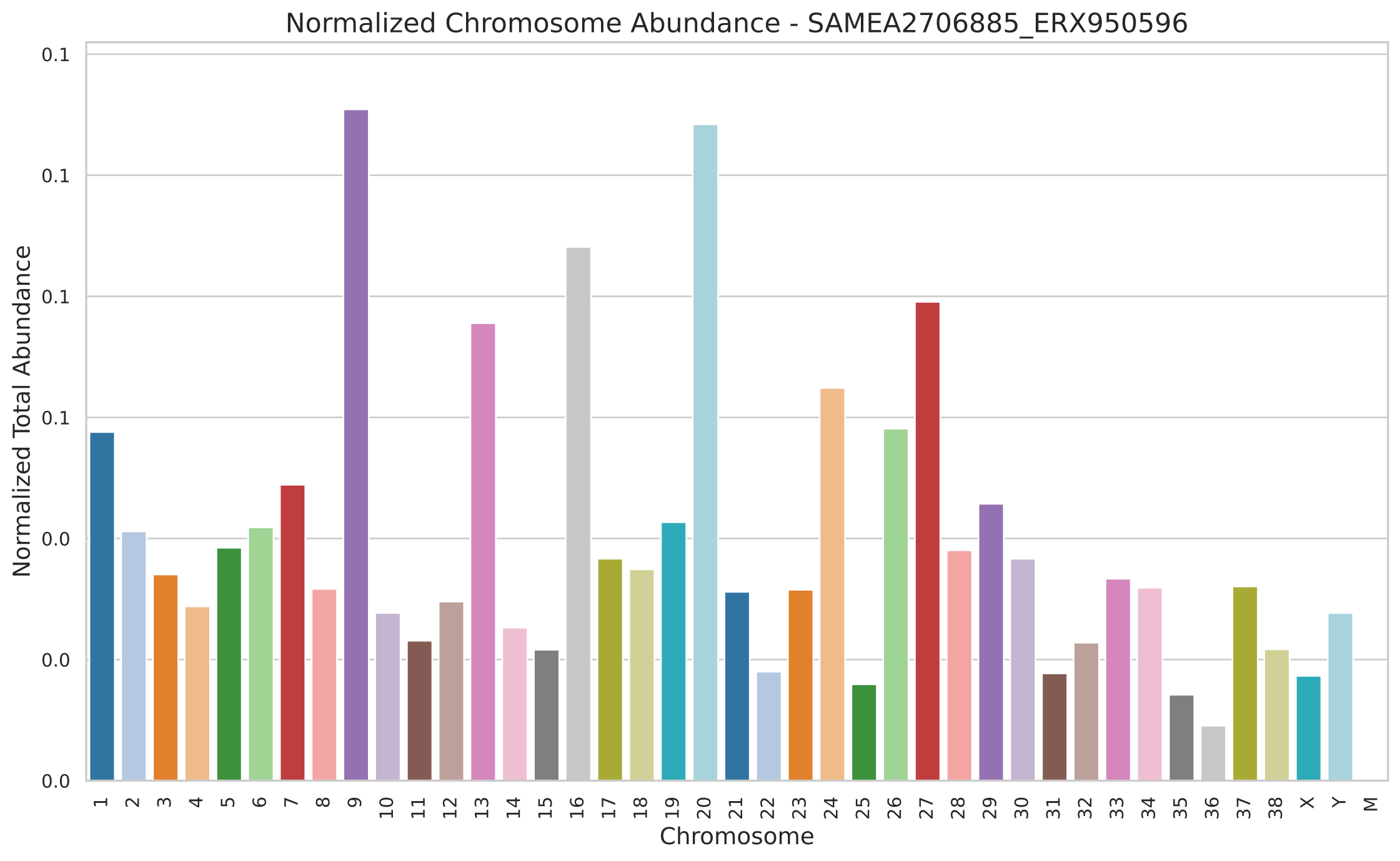

Normalized Chromosome Abundance - SAMEA2706818_ERX950529
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

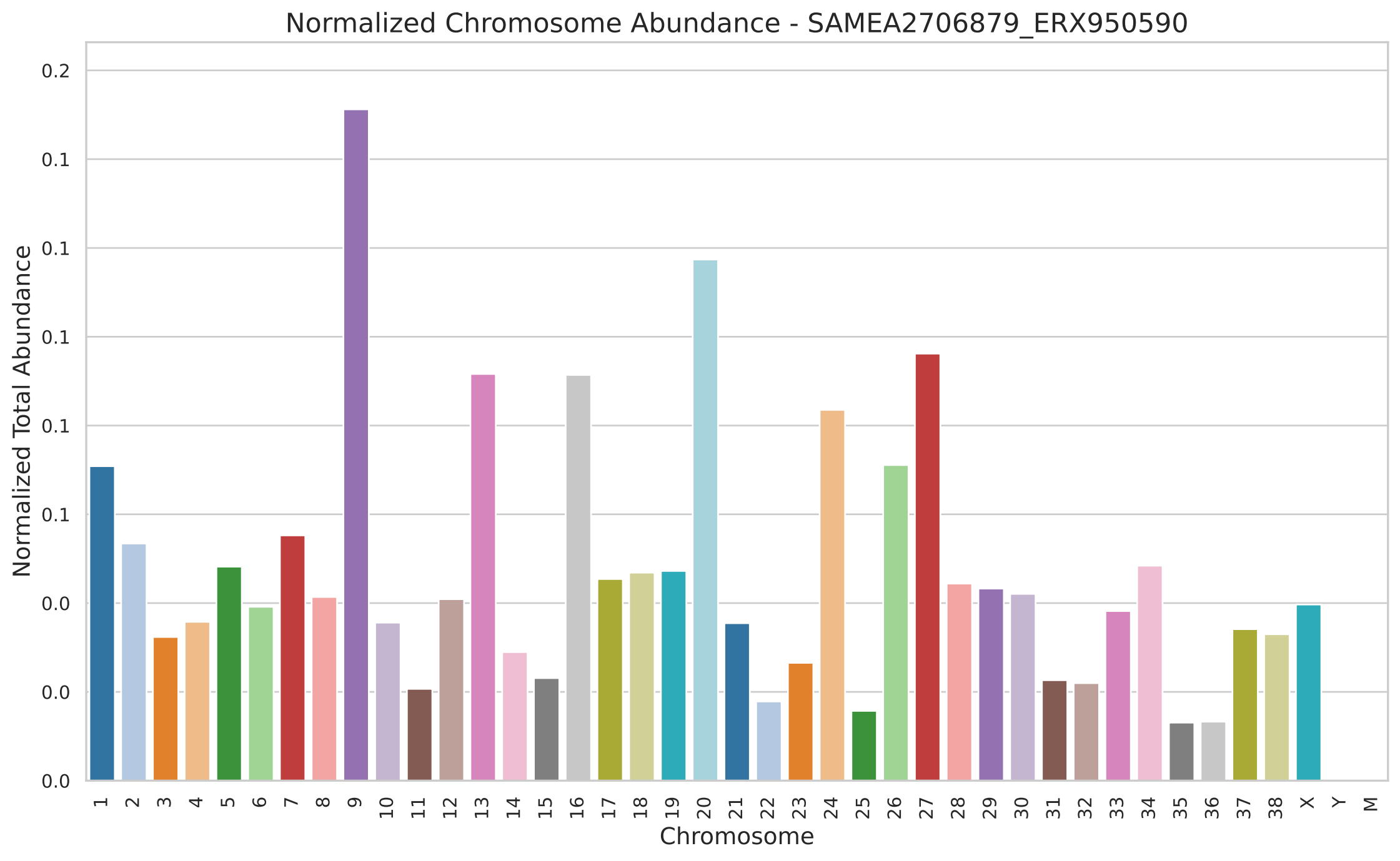

Normalized Chromosome Abundance - SAMEA2706816_ERX950527
Normalized Total Abundance
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

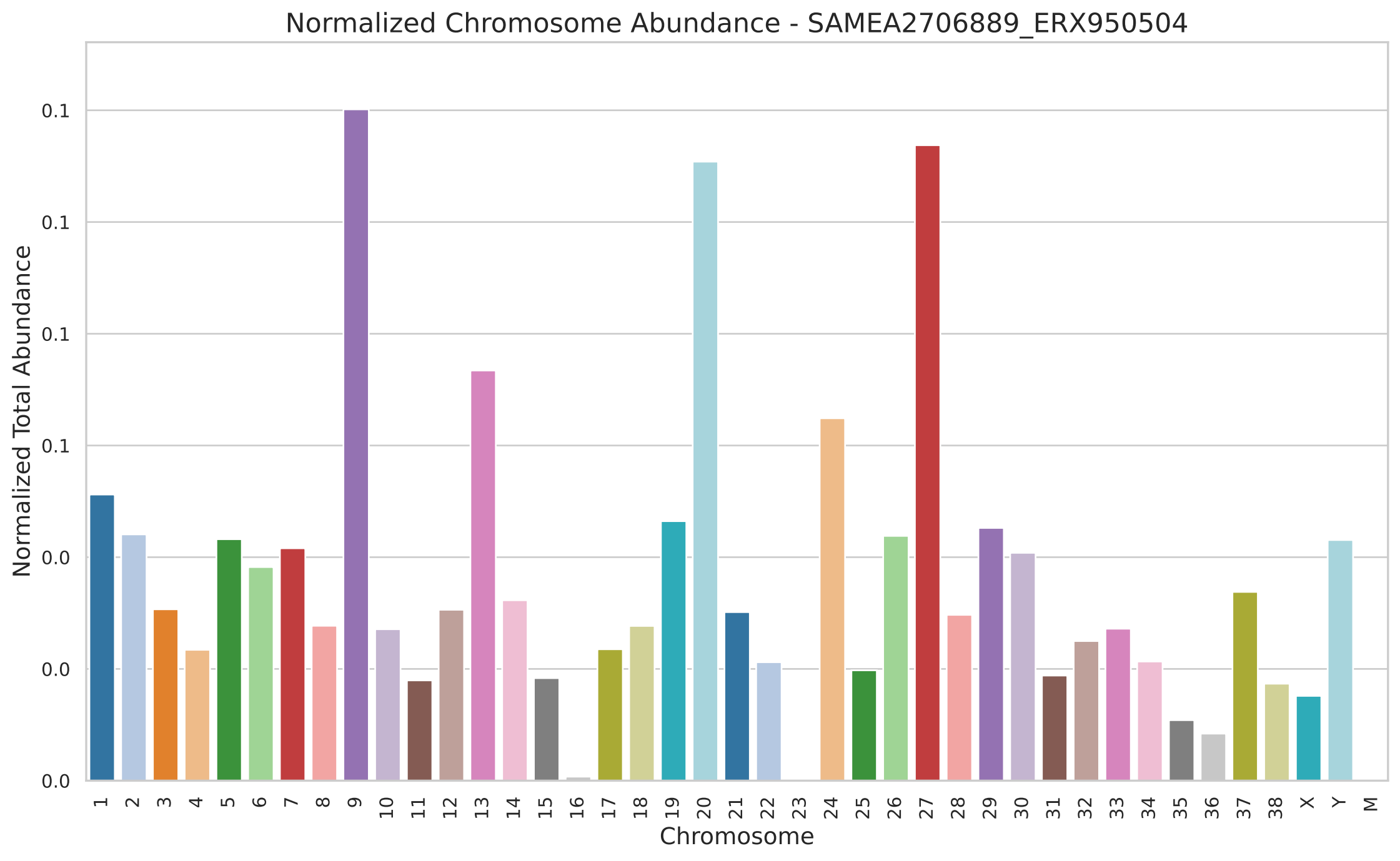

Normalized Chromosome Abundance - SAMEA2706844_ERX950555
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

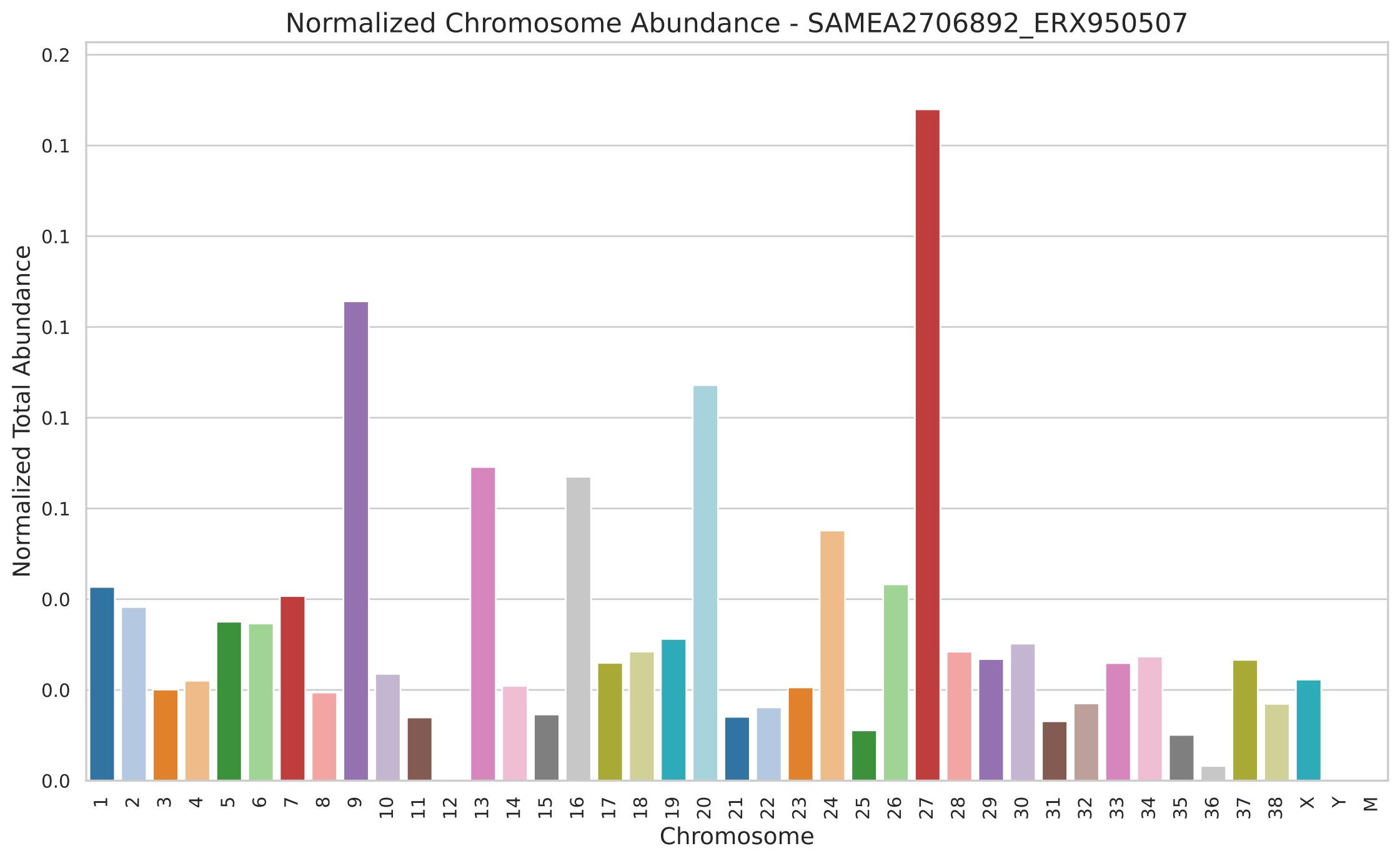

Normalized Chromosome Abundance - SAMEA2706882_ERX950497
Normalized Total Abundance
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

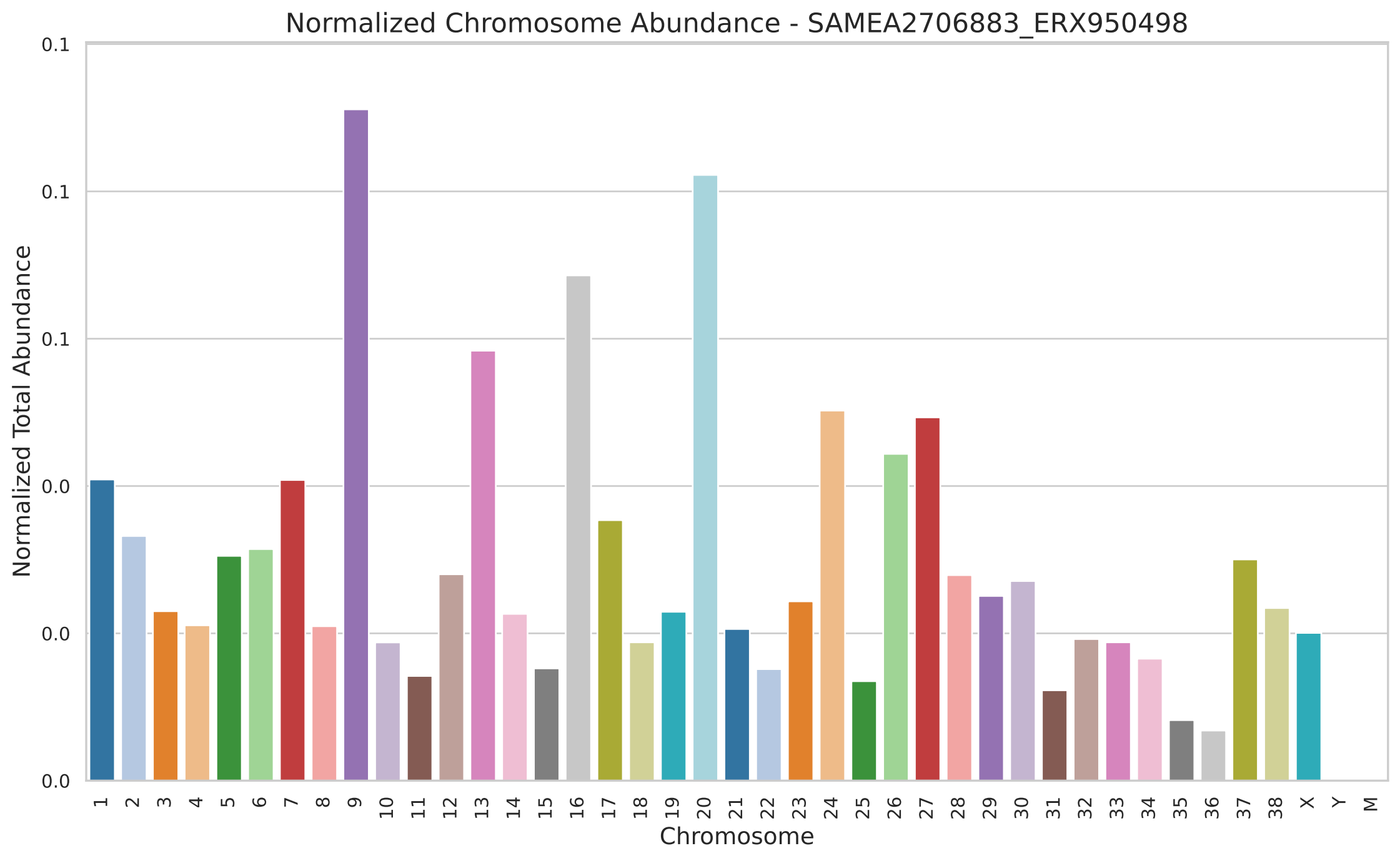

Normalized Chromosome Abundance - SAMEA2706849_ERX950560
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

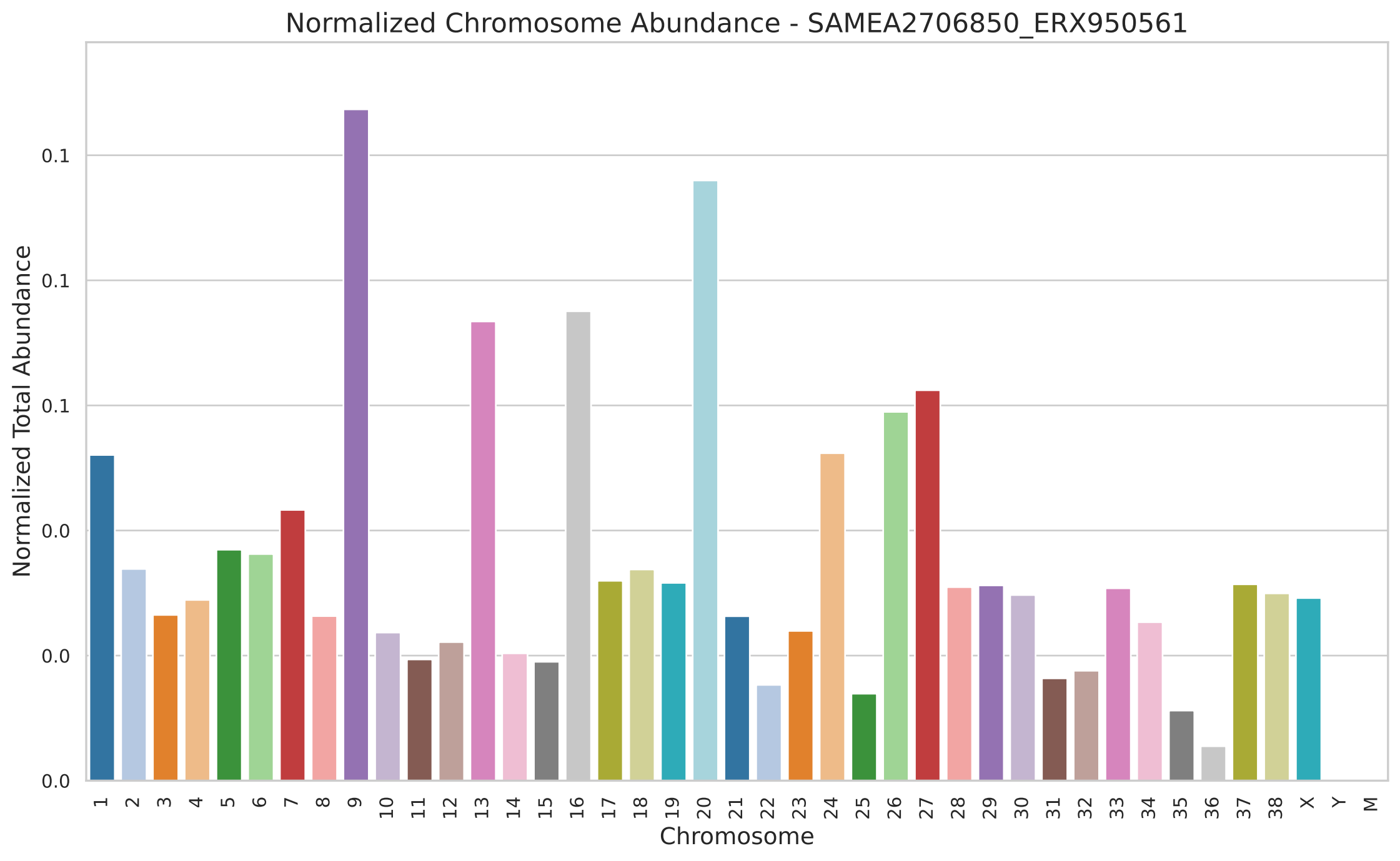

Normalized Chromosome Abundance - SAMEA2706885_ERX950596
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

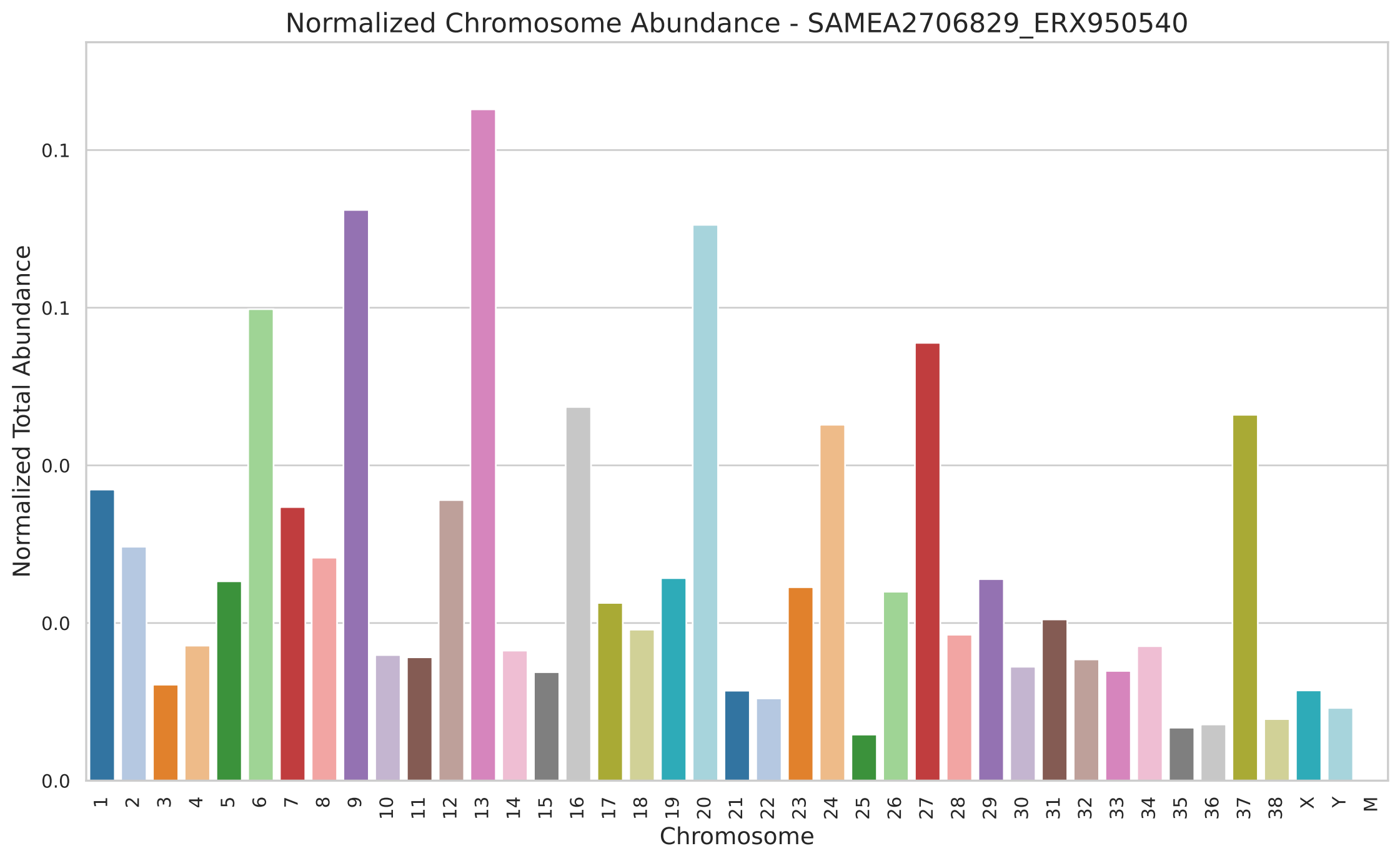

Normalized Chromosome Abundance - SAMEA2706879_ERX950590
Normalized Total Abundance
0.2
0.1
0.1
0.1
0.1
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

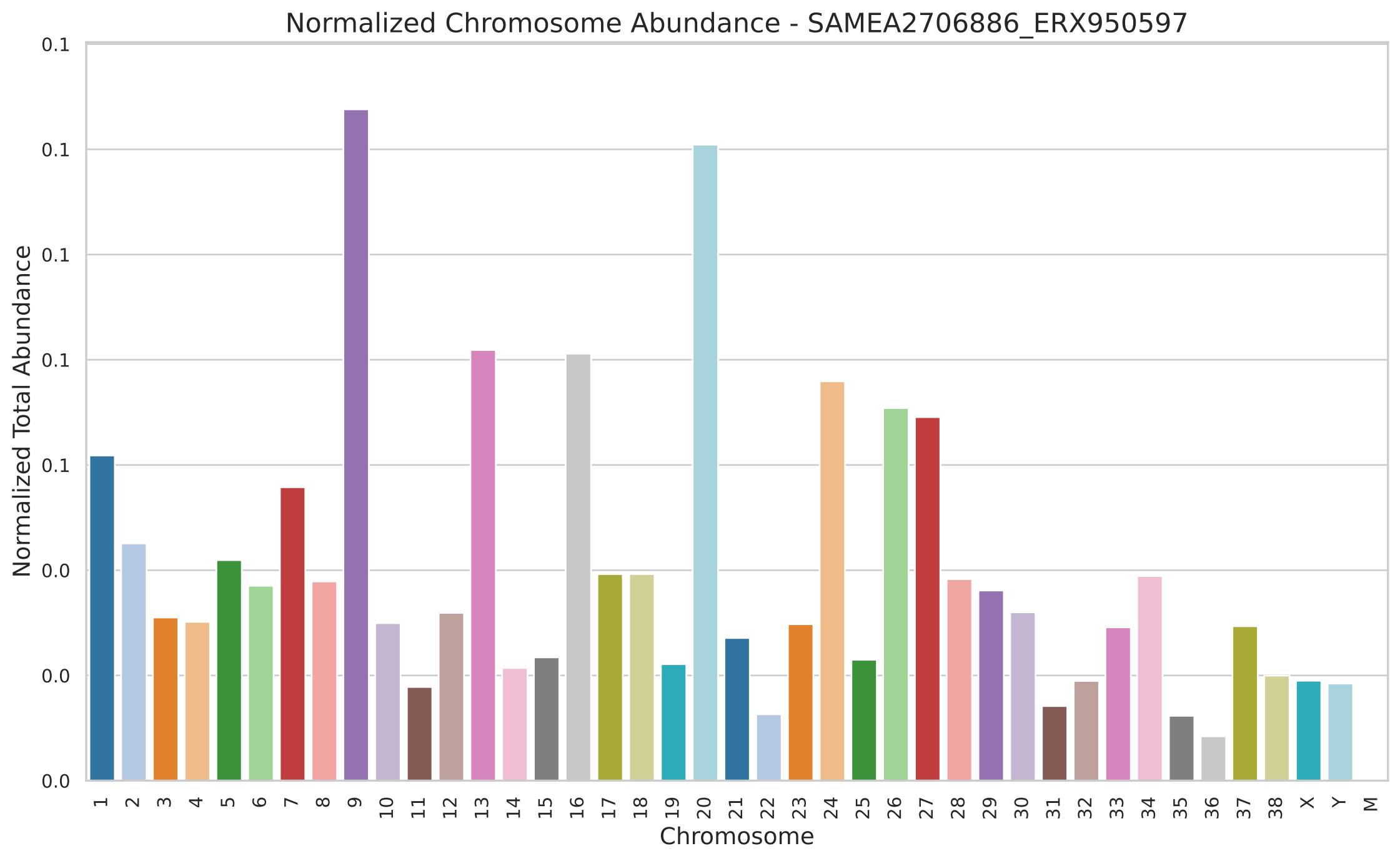

Normalized Chromosome Abundance - SAMEA2706889_ERX950504
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

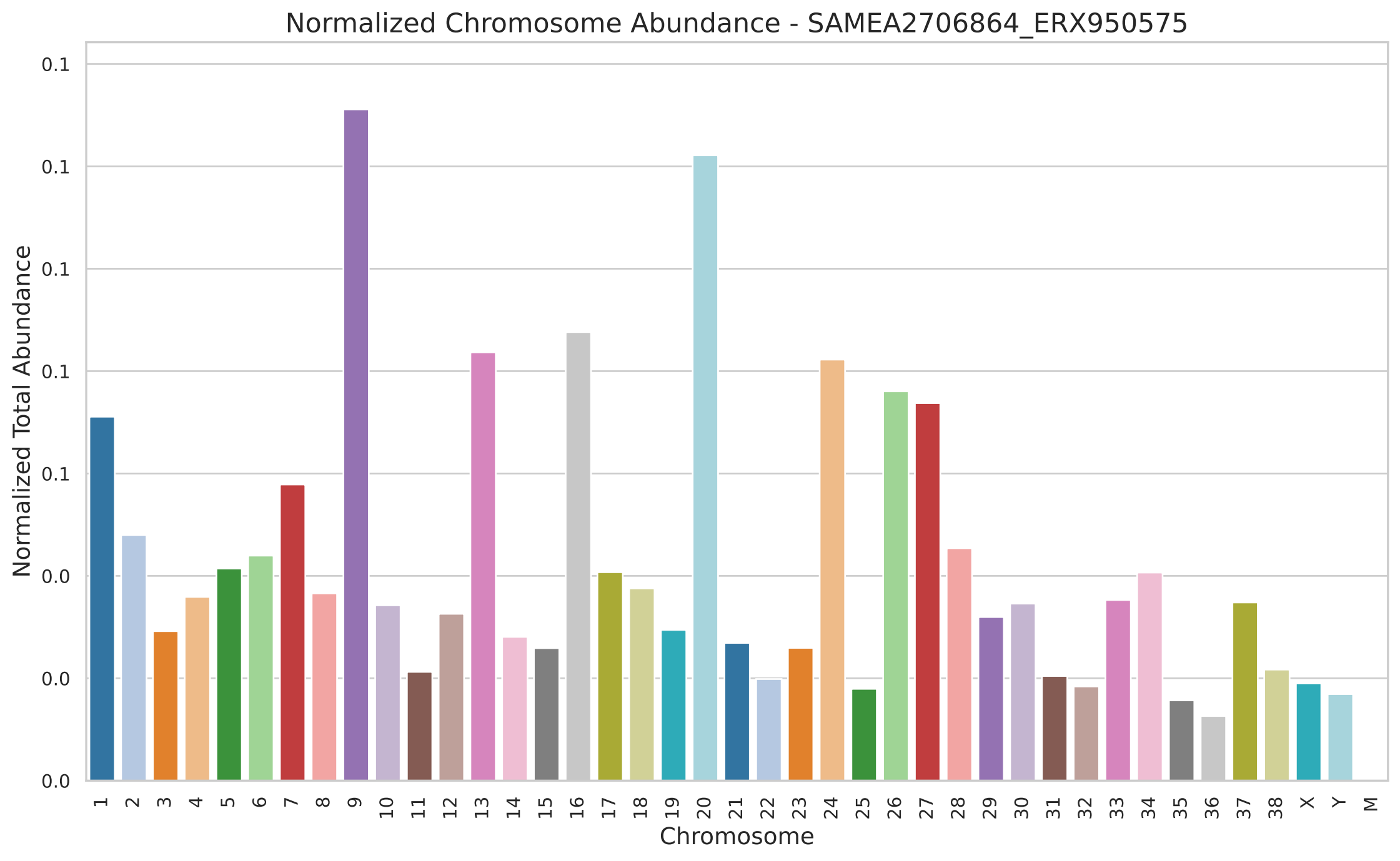

Normalized Chromosome Abundance - SAMEA2706892_ERX950507
Normalized Total Abundance
0.2
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

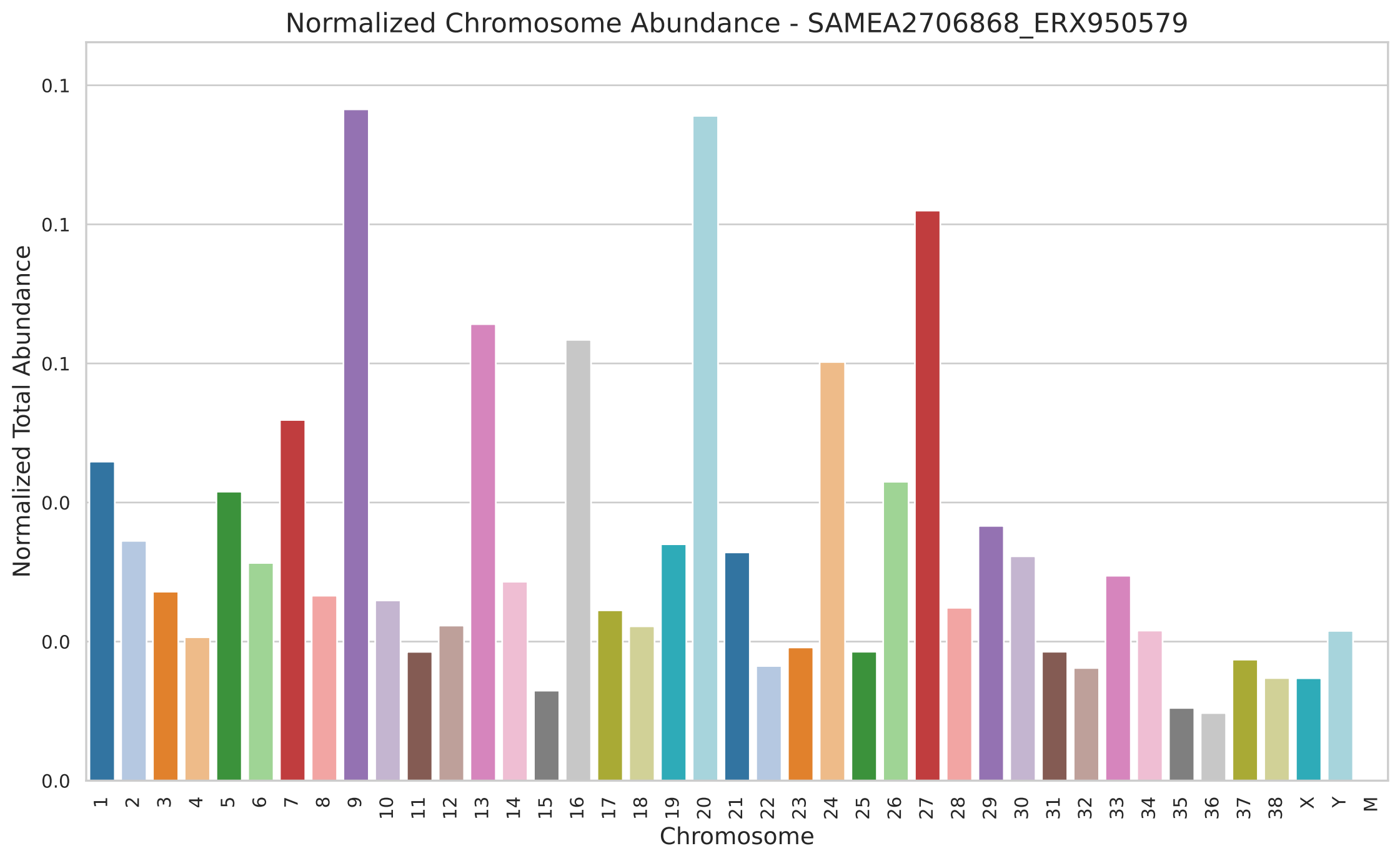

Normalized Chromosome Abundance - SAMEA2706883_ERX950498
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

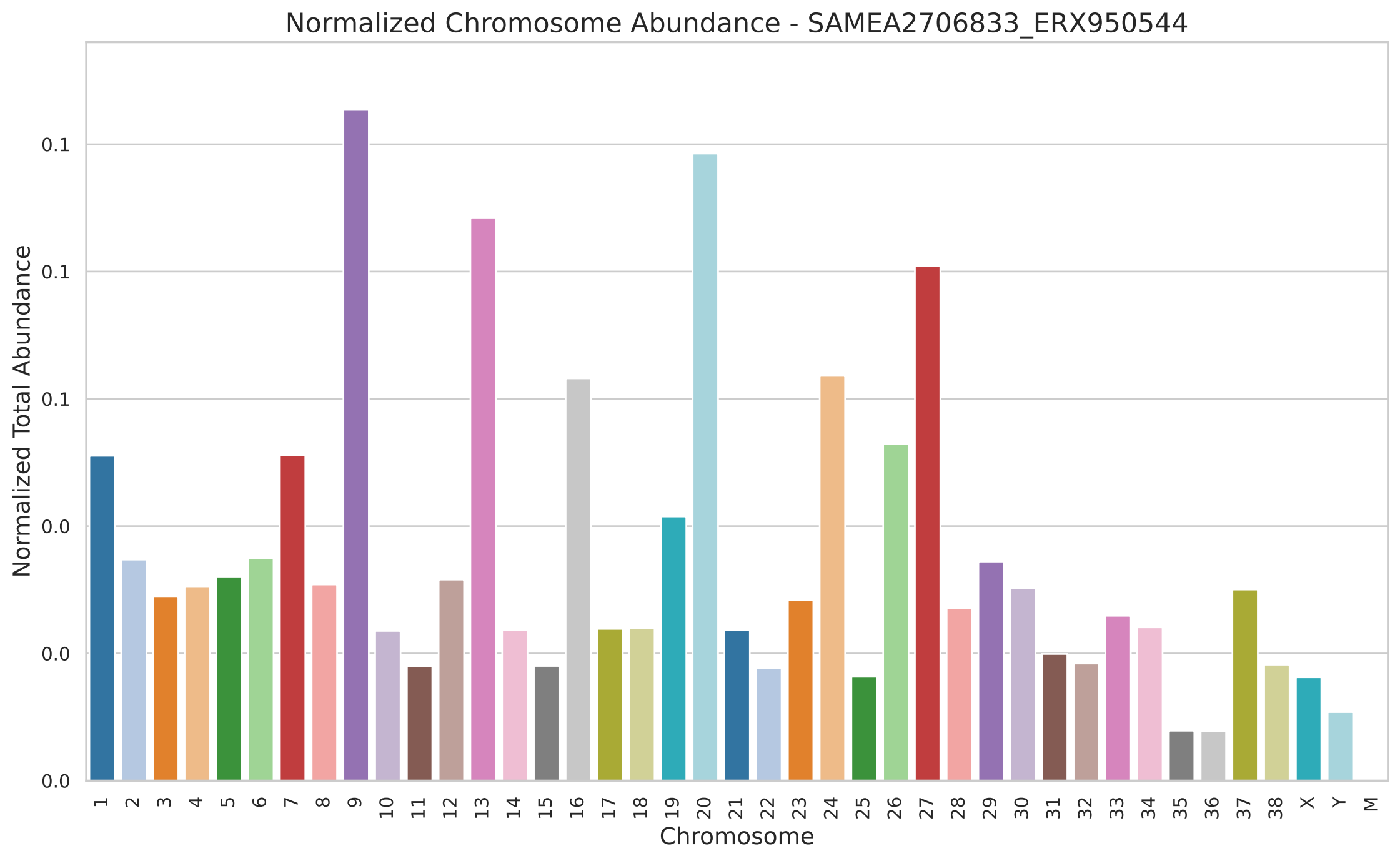

Normalized Chromosome Abundance - SAMEA2706850_ERX950561
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

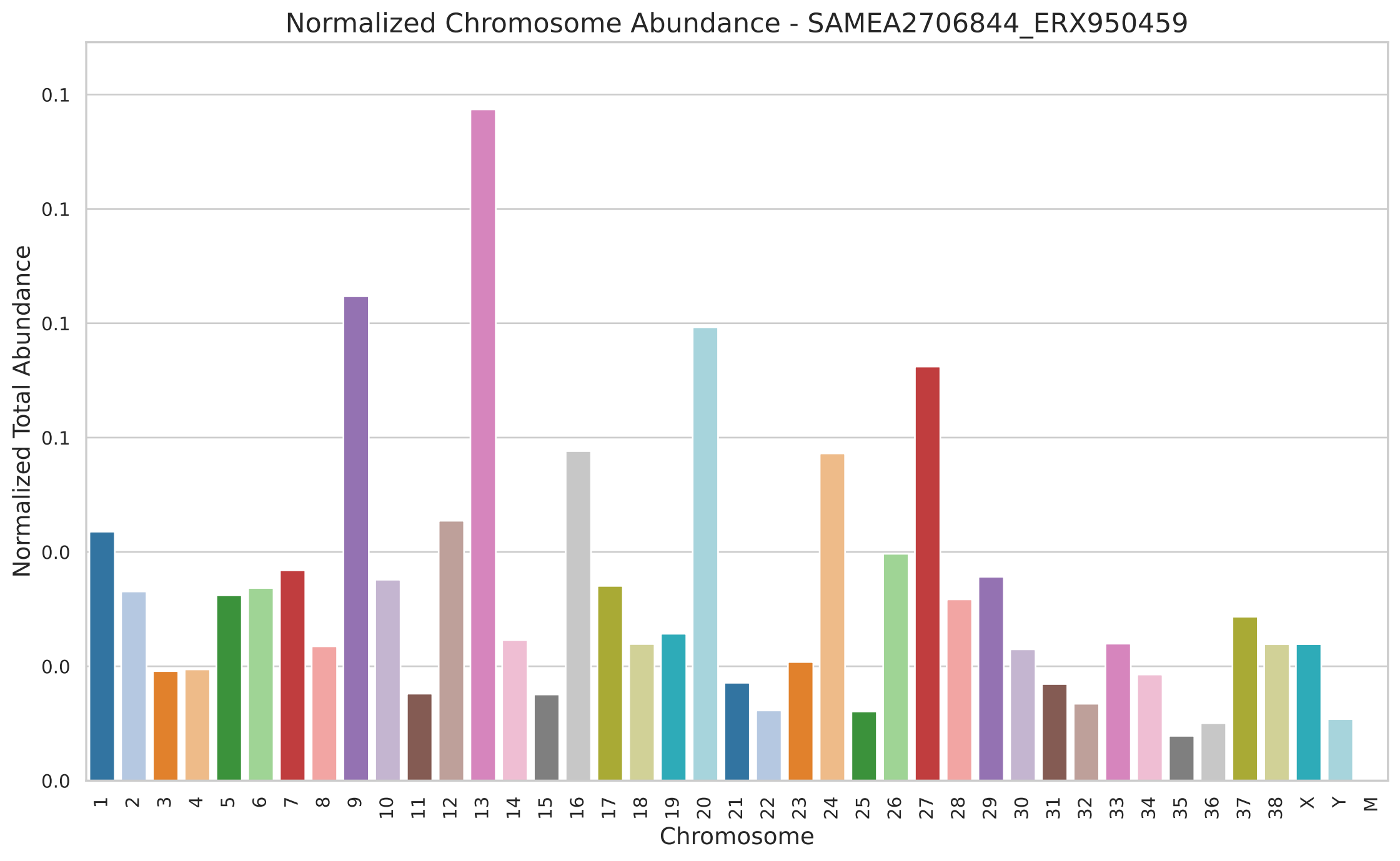

Normalized Chromosome Abundance - SAMEA2706829_ERX950540
Normalized Total Abundance
0.1
0.1
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

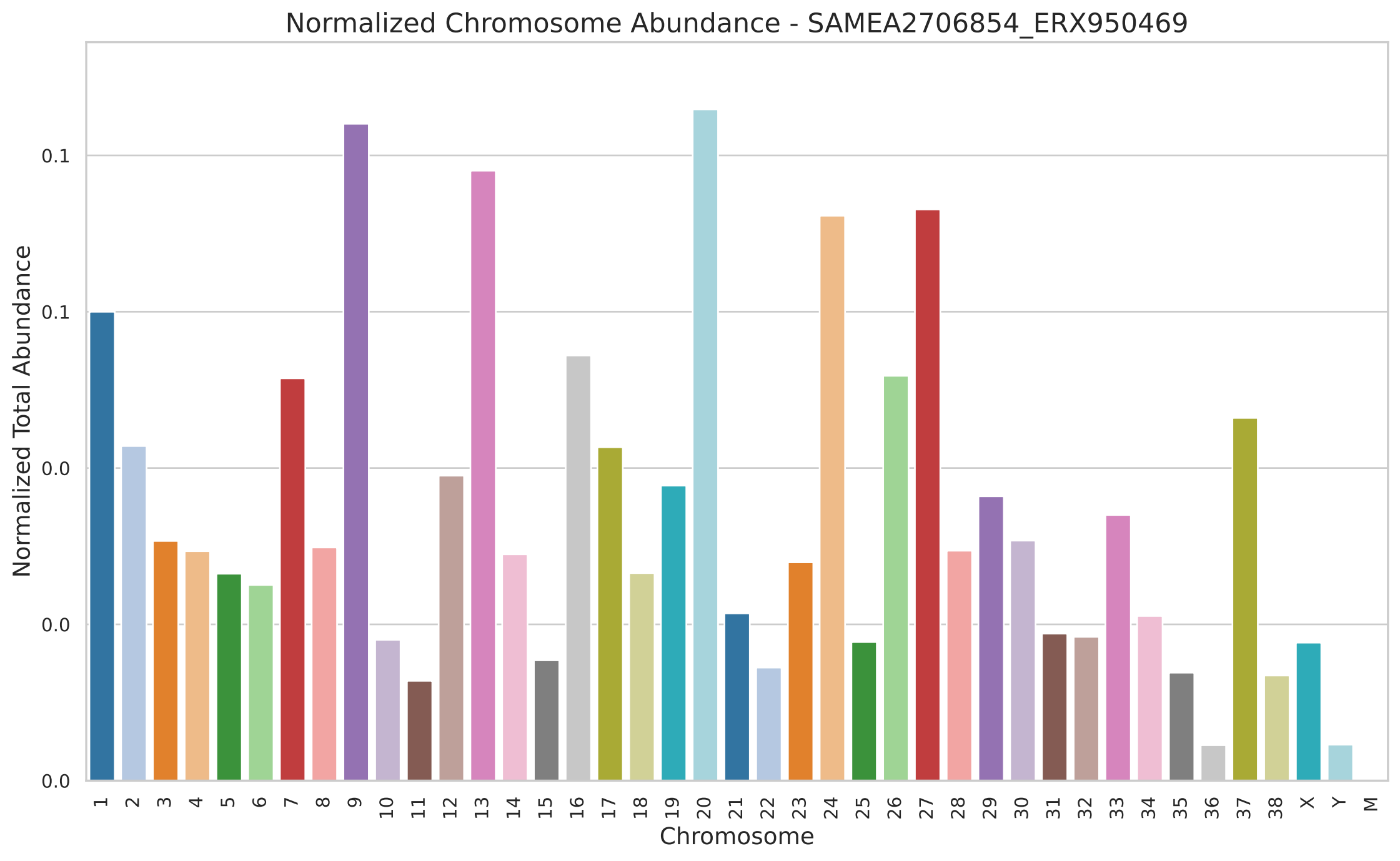

Normalized Chromosome Abundance - SAMEA2706886_ERX950597
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

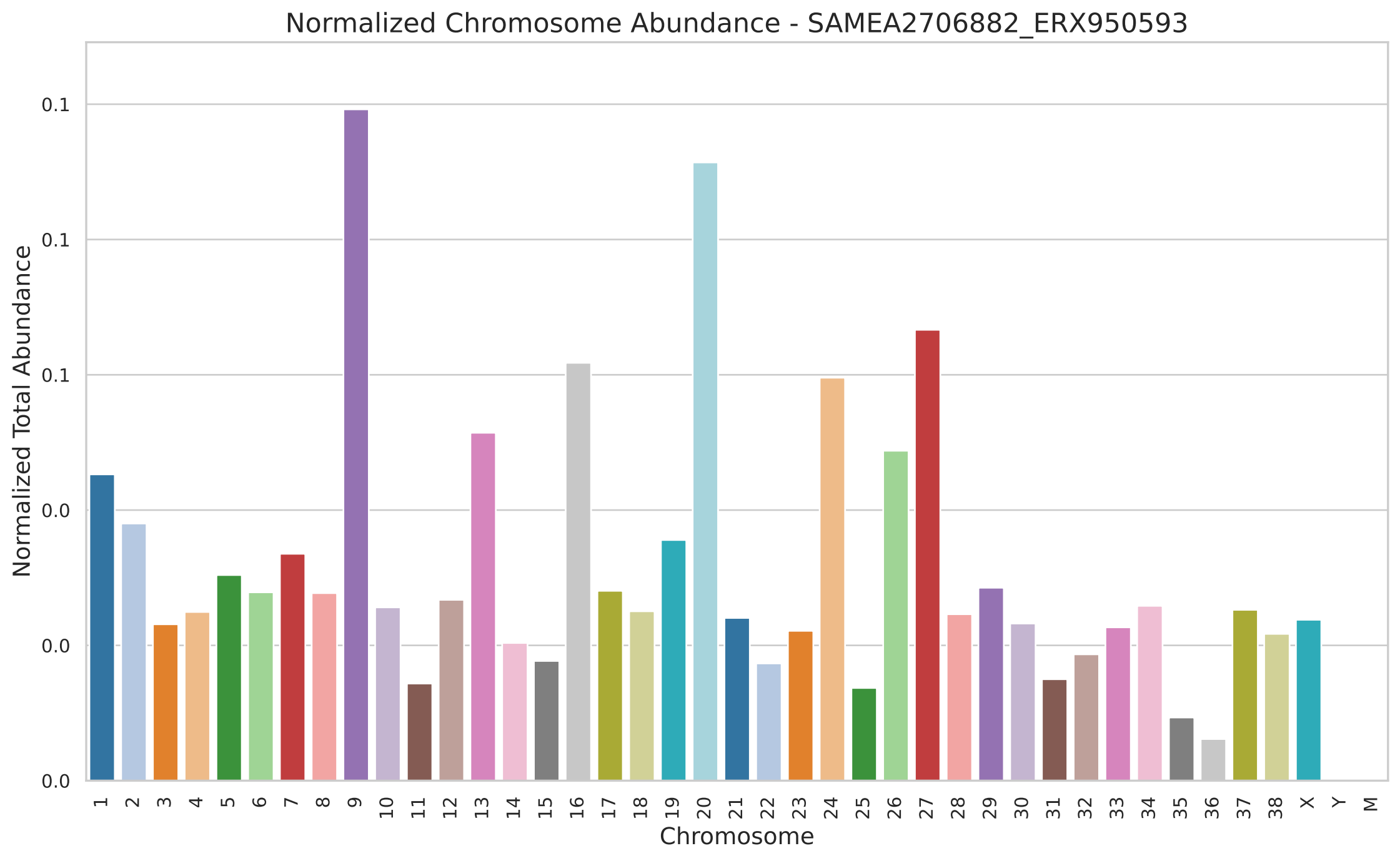

Normalized Chromosome Abundance - SAMEA2706864_ERX950575
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

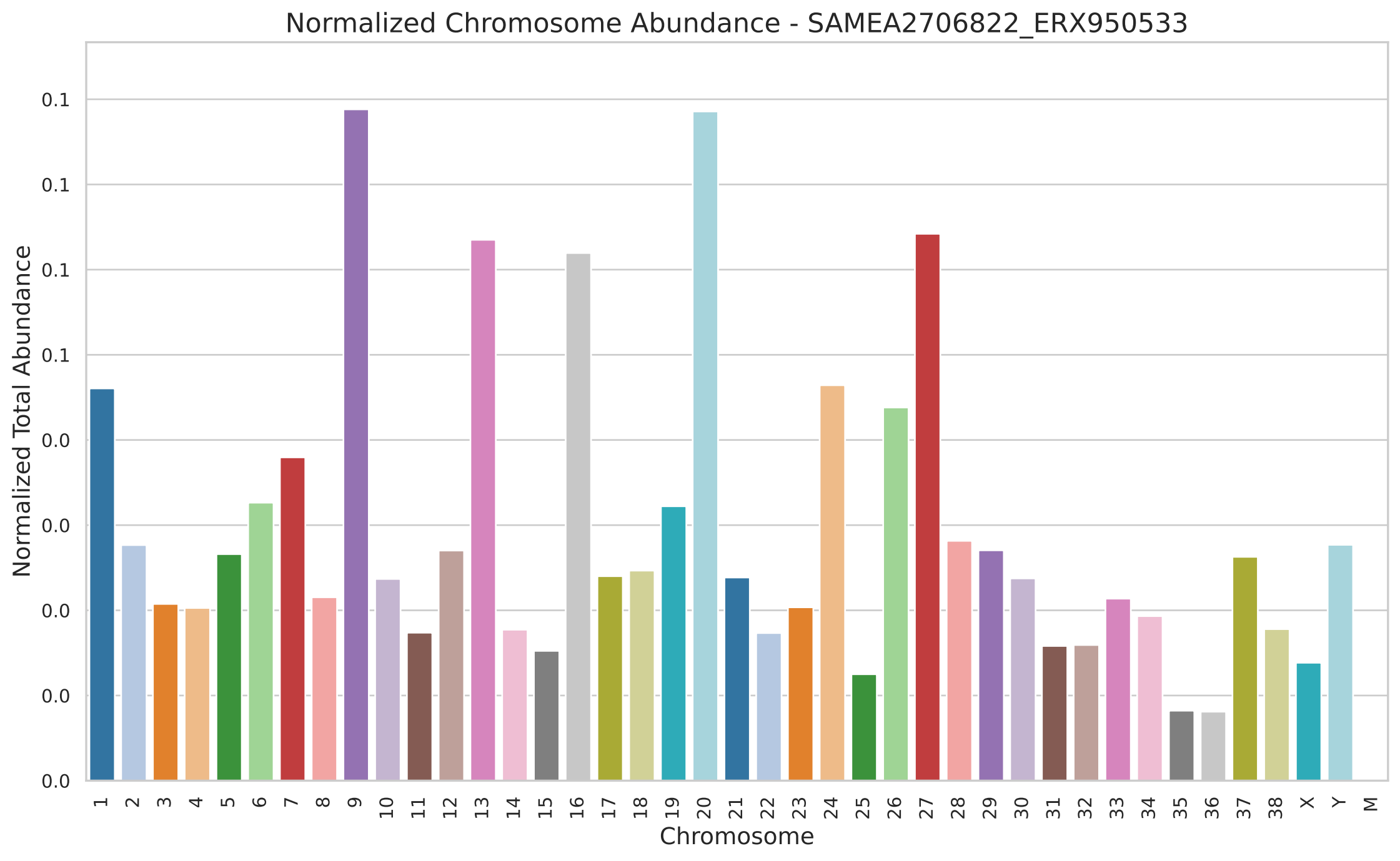

Normalized Chromosome Abundance - SAMEA2706868_ERX950579
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

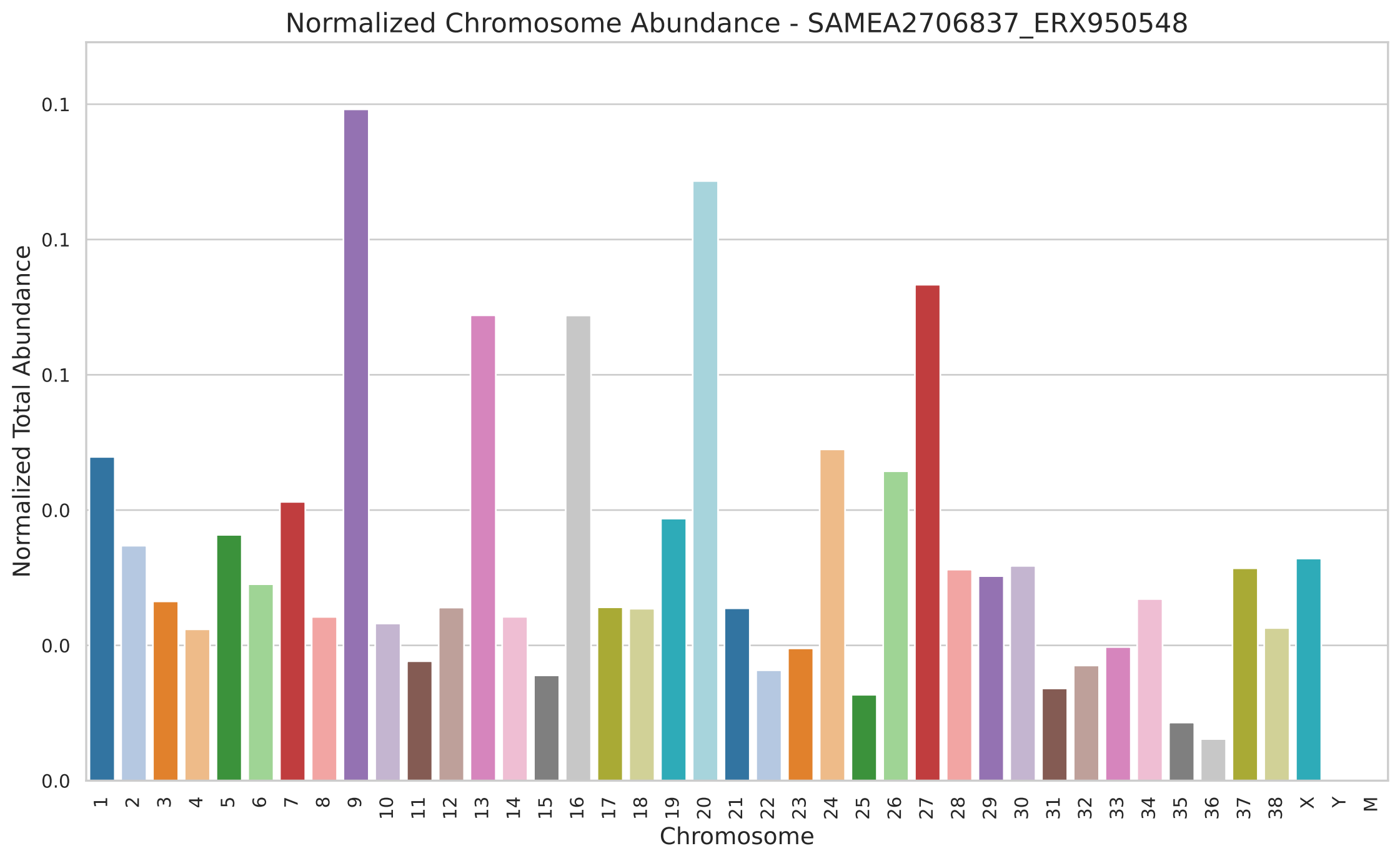

Normalized Chromosome Abundance - SAMEA2706833_ERX950544
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

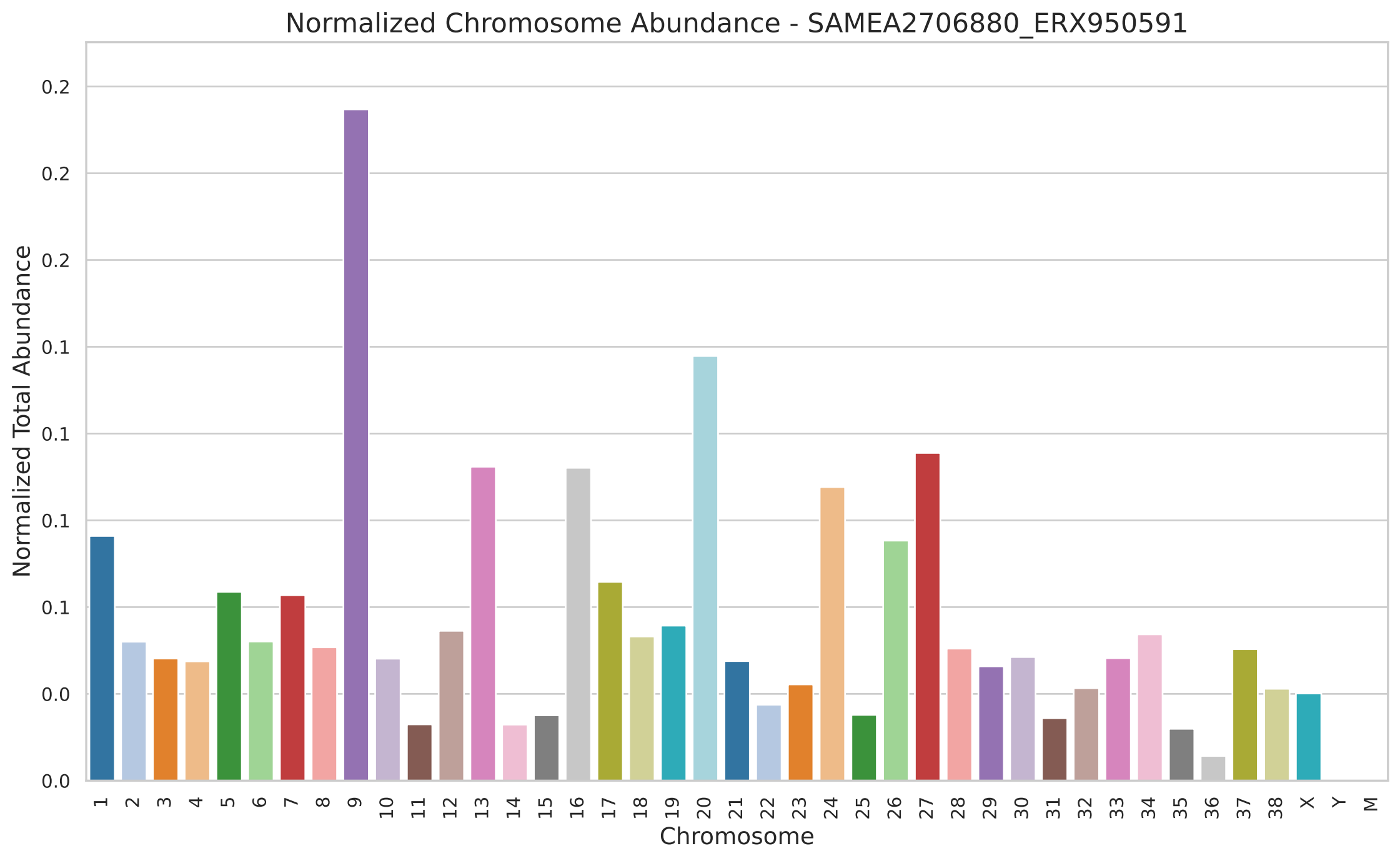

Normalized Chromosome Abundance - SAMEA2706844_ERX950459
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

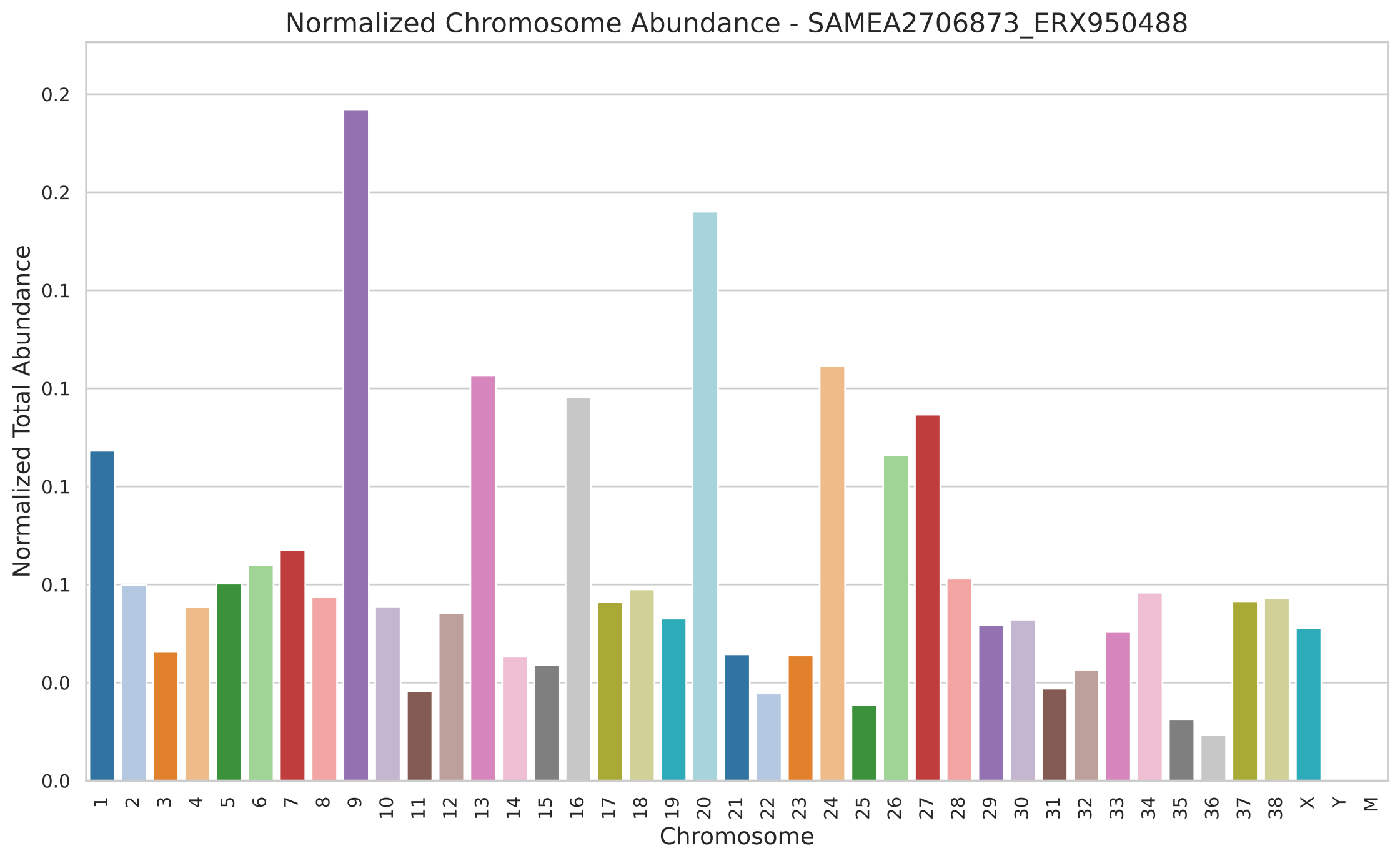

Normalized Chromosome Abundance - SAMEA2706854_ERX950469
Normalized Total Abundance
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

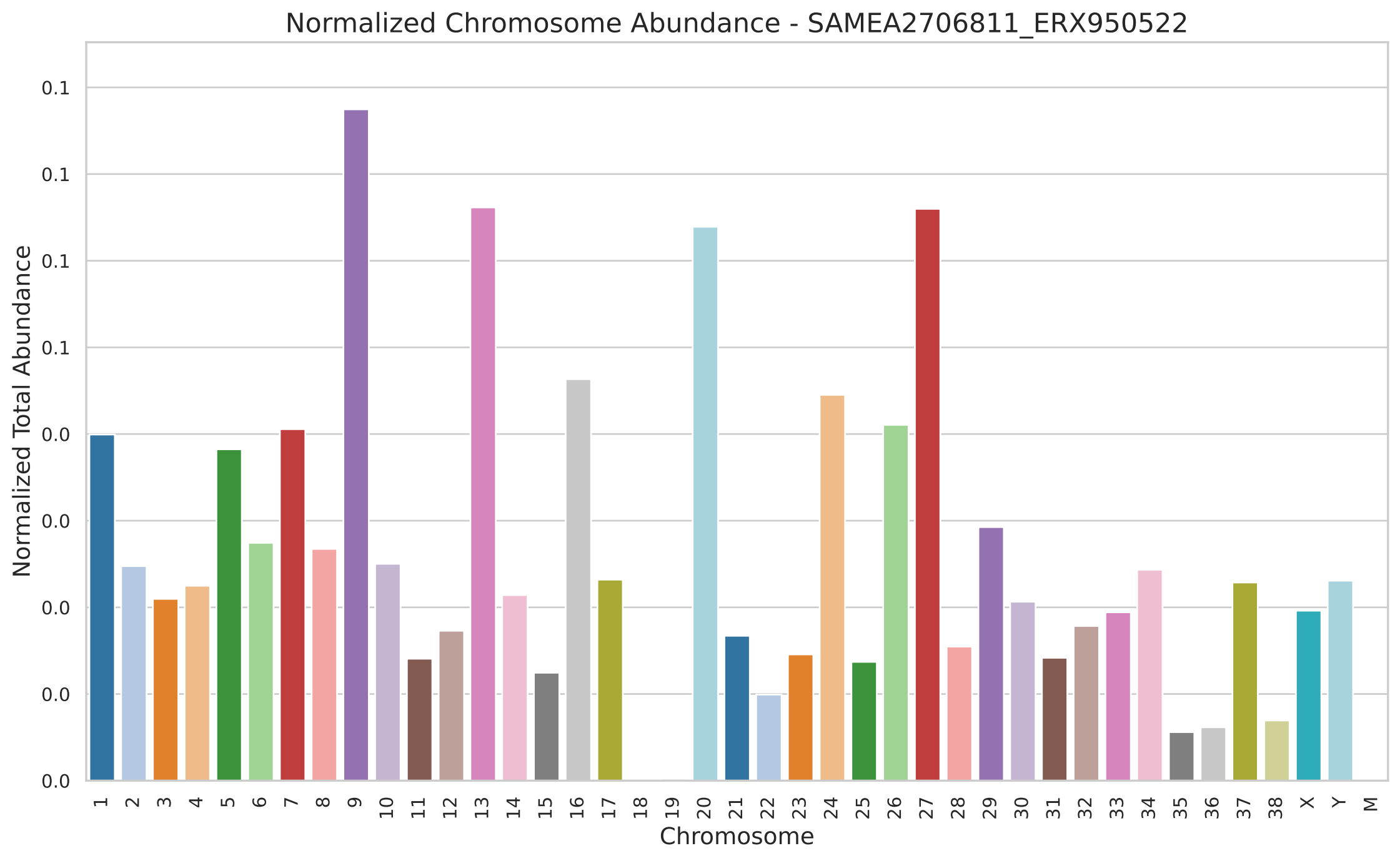

Normalized Chromosome Abundance - SAMEA2706882_ERX950593
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

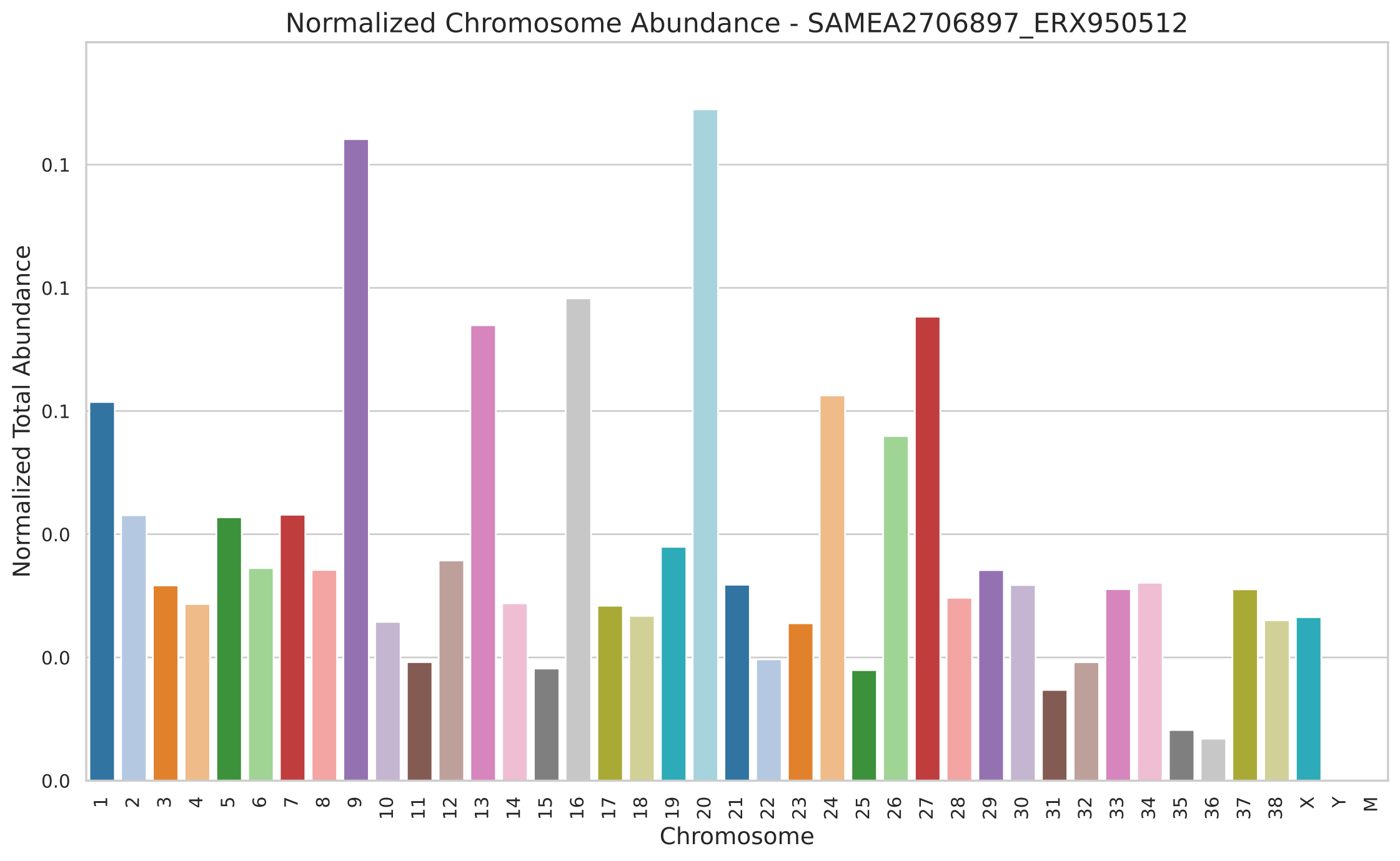

Normalized Chromosome Abundance - SAMEA2706822_ERX950533
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

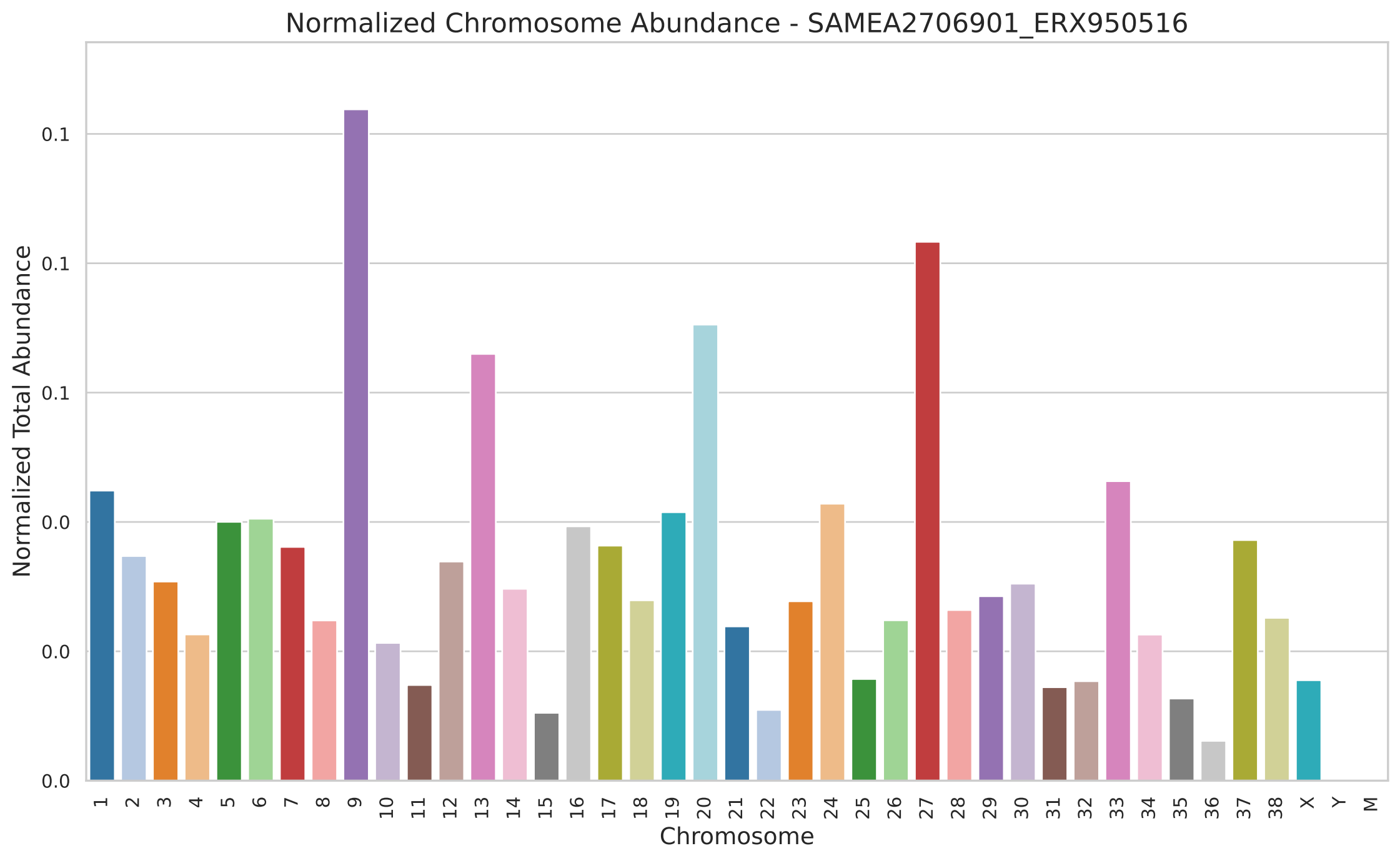

Normalized Chromosome Abundance - SAMEA2706837_ERX950548
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

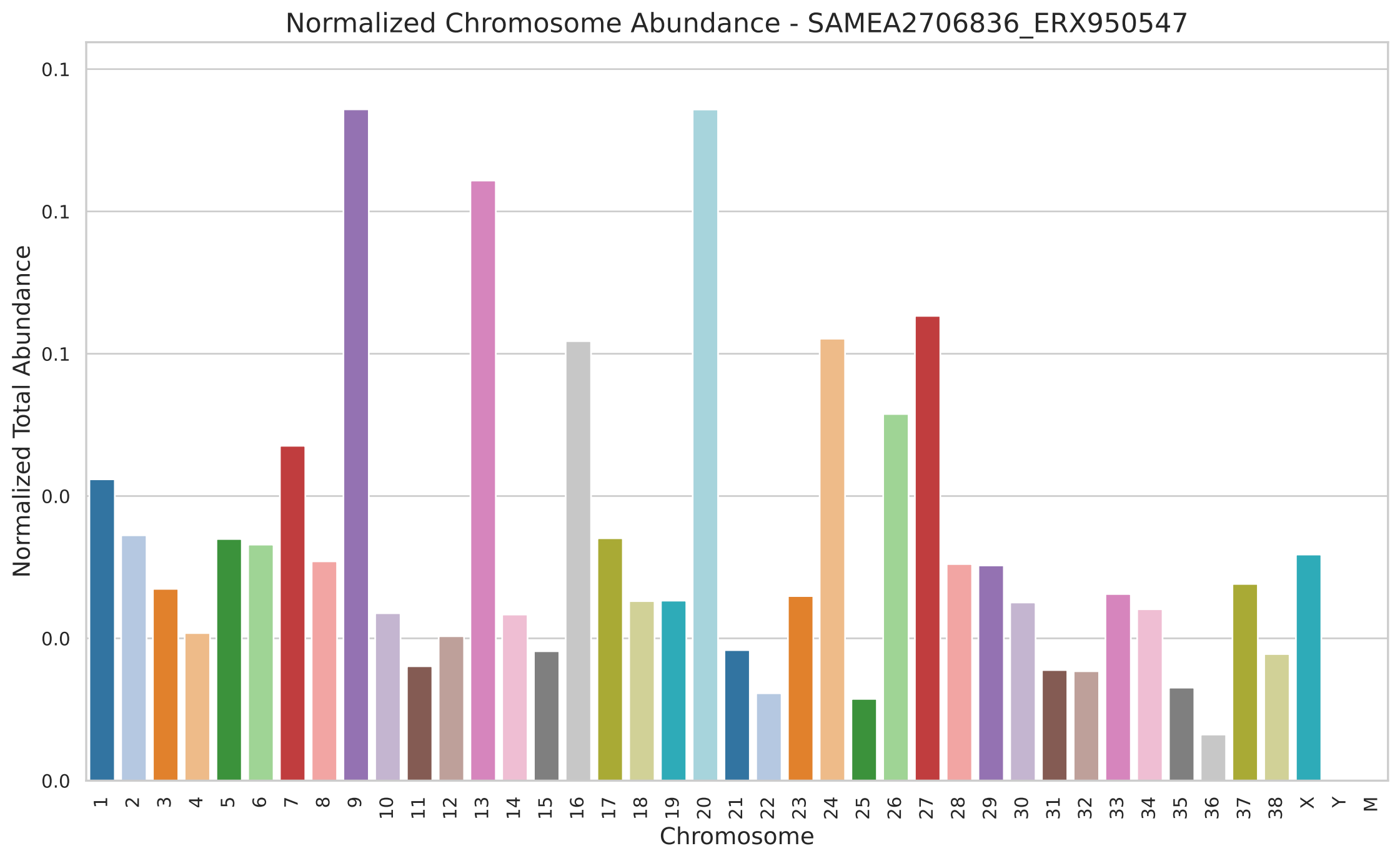

Normalized Chromosome Abundance - SAMEA2706880_ERX950591
Normalized Total Abundance
0.2
0.2
0.2
0.1
0.1
0.1
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

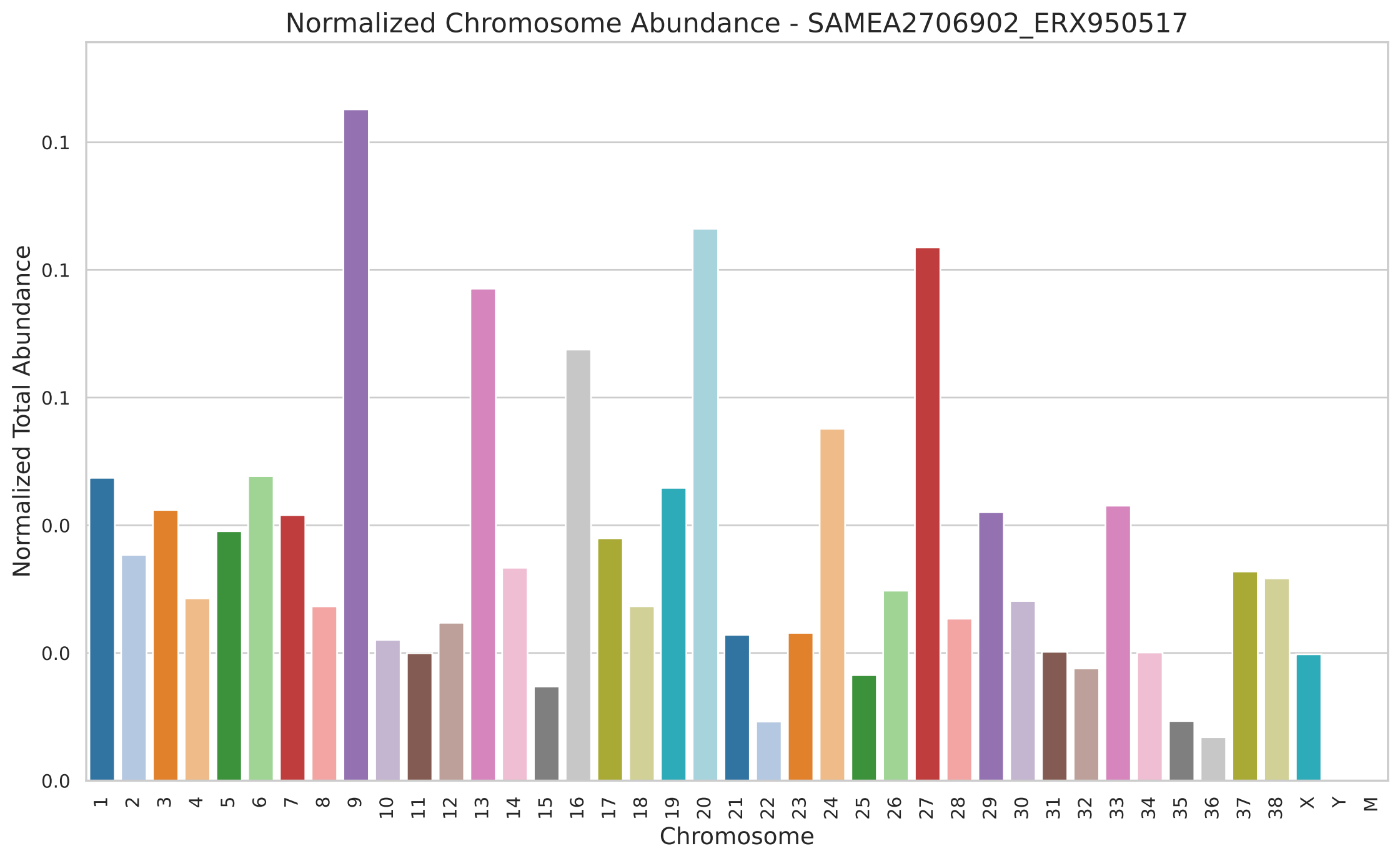

Normalized Chromosome Abundance - SAMEA2706873_ERX950488
Normalized Total Abundance
0.0
0.0
0.1
0.1
0.1
0.2
0.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

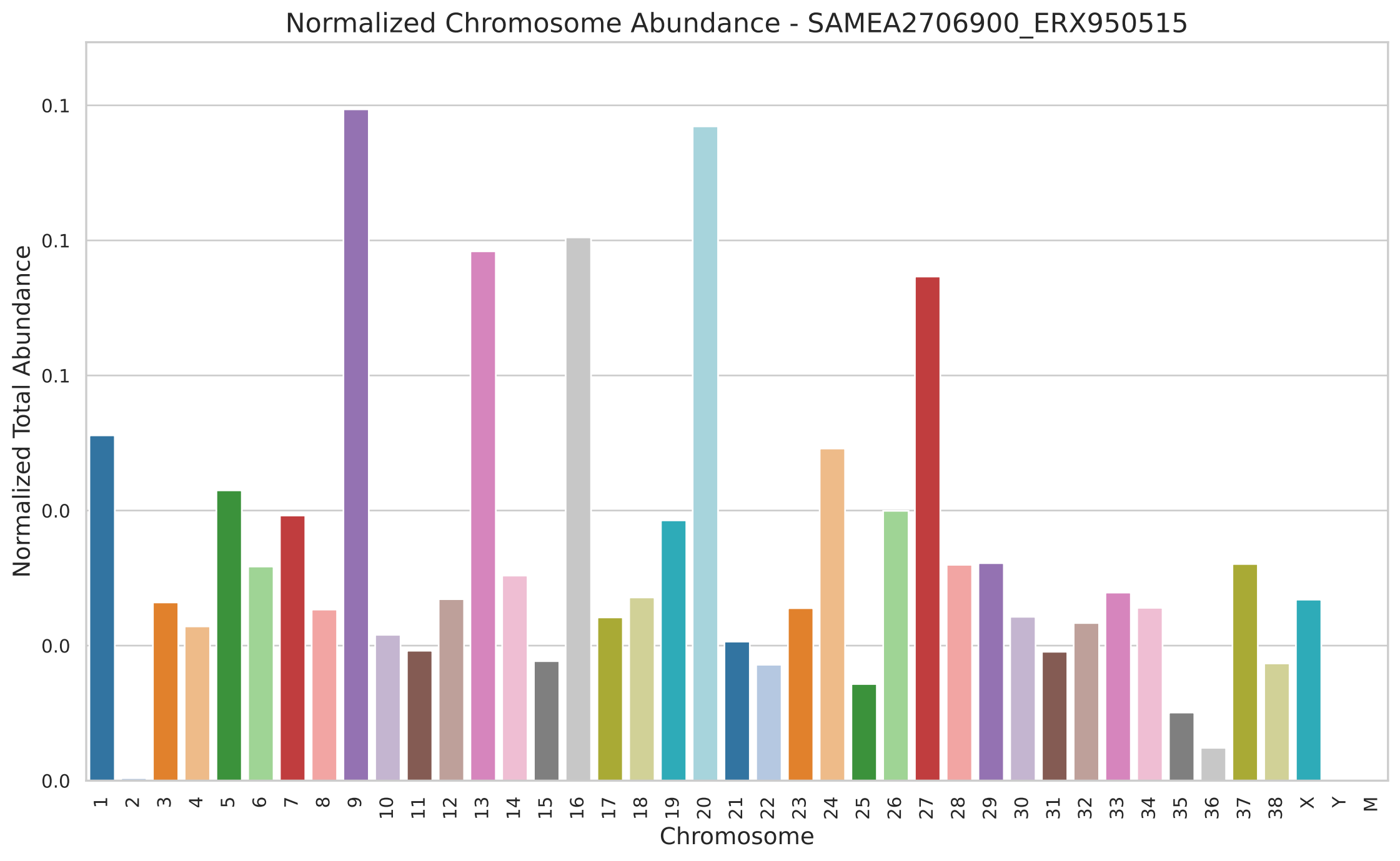

Normalized Chromosome Abundance - SAMEA2706811_ERX950522
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

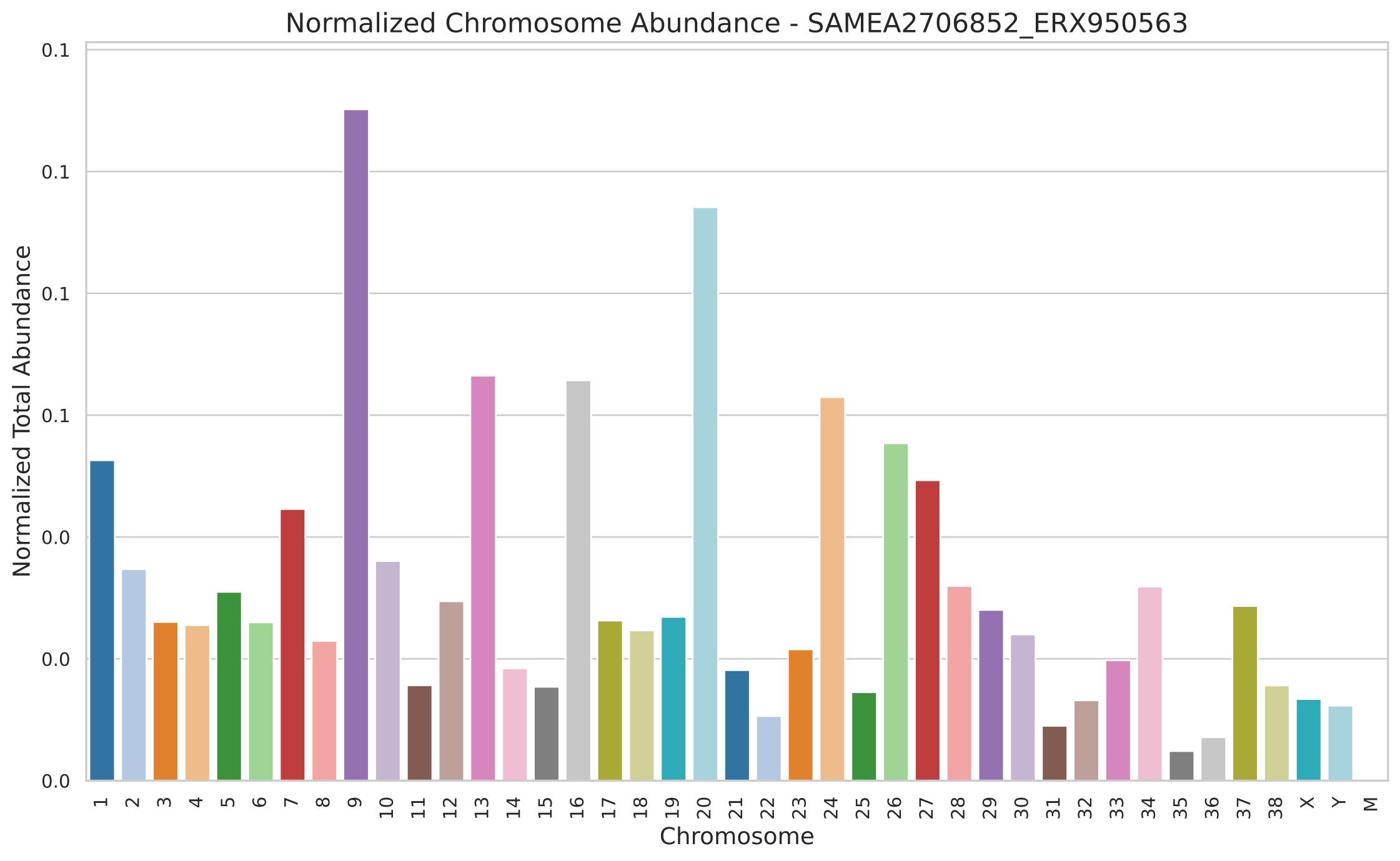

Normalized Chromosome Abundance - SAMEA2706897_ERX950512
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

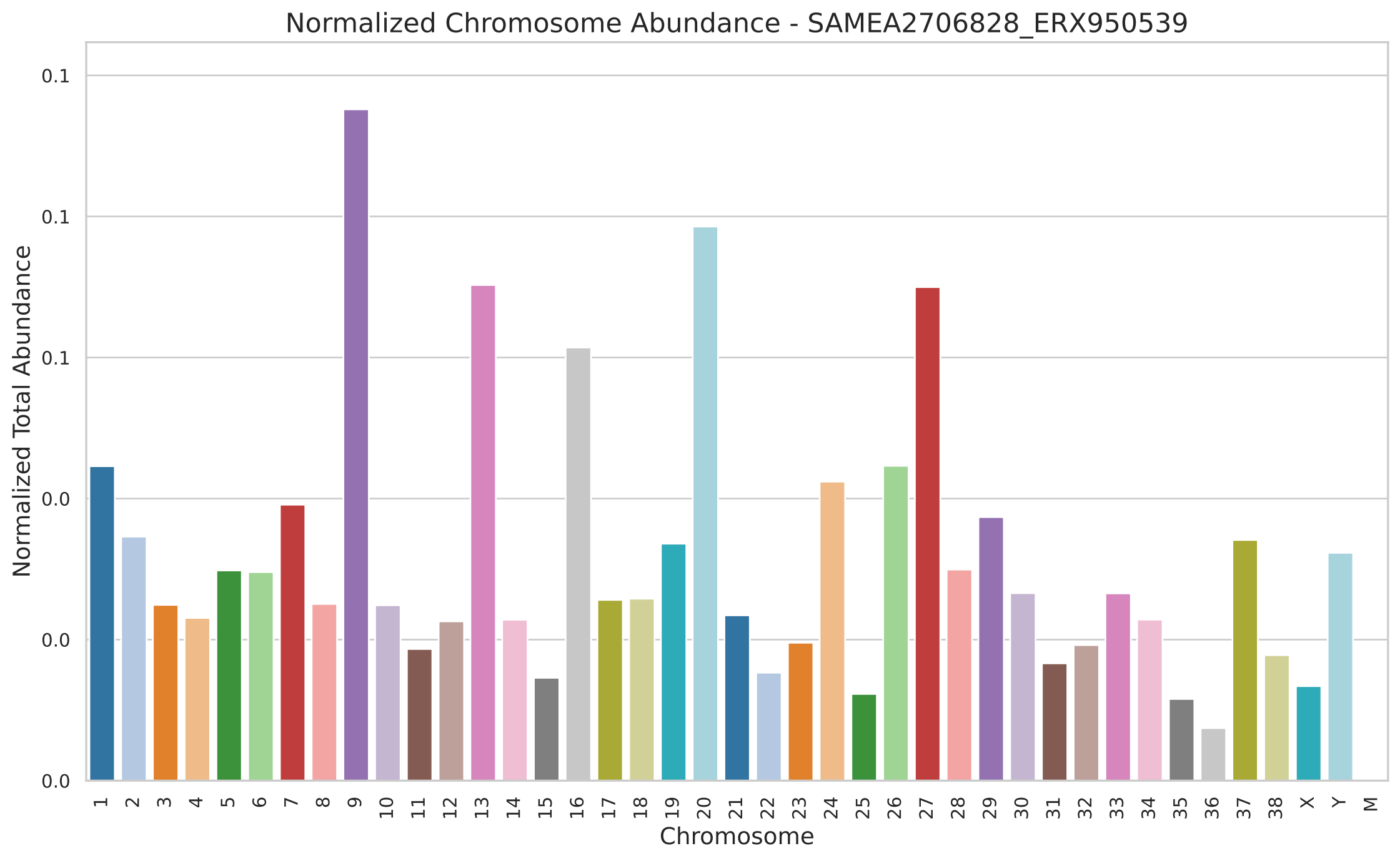

Normalized Chromosome Abundance - SAMEA2706901_ERX950516
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

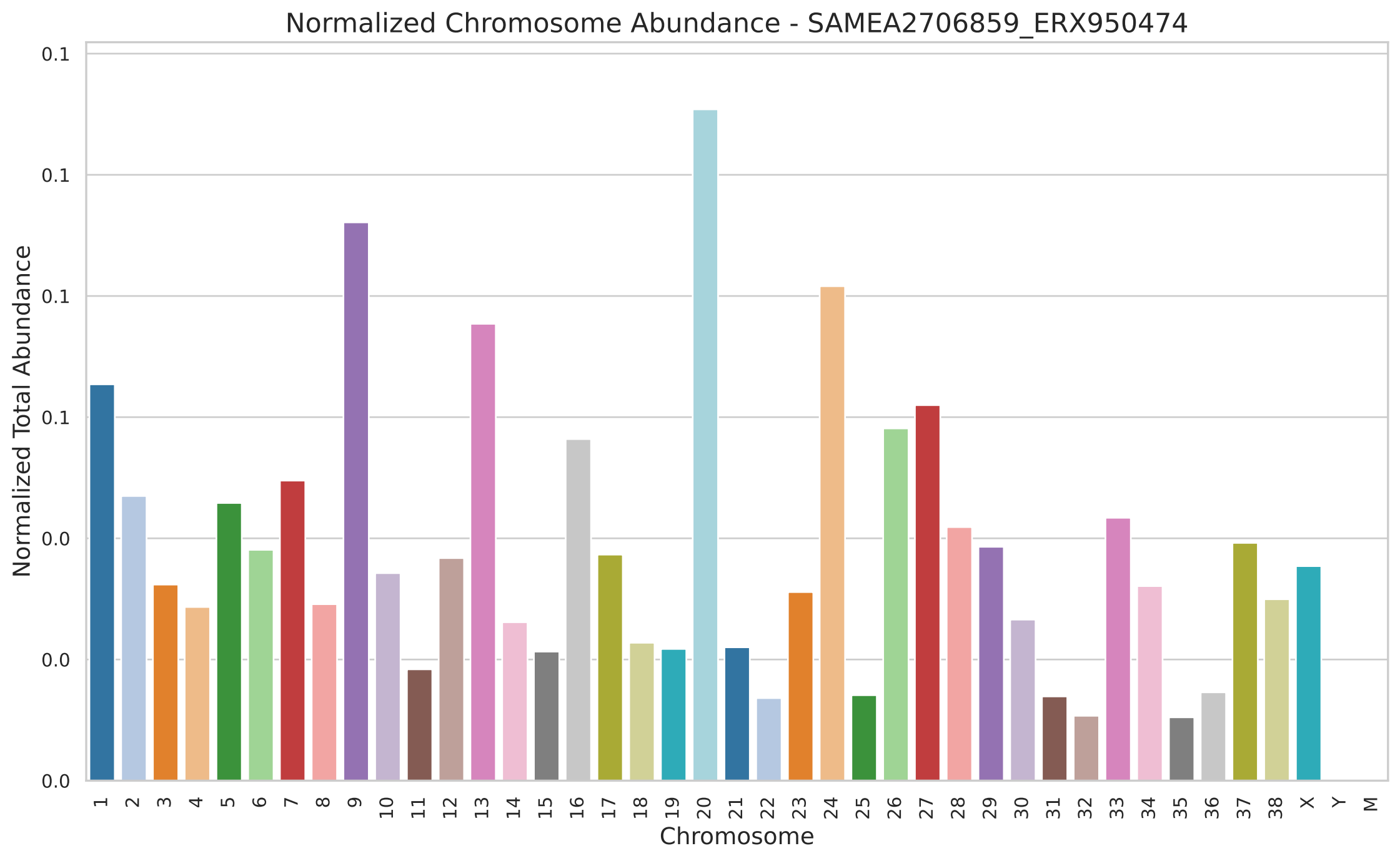

Normalized Chromosome Abundance - SAMEA2706836_ERX950547
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

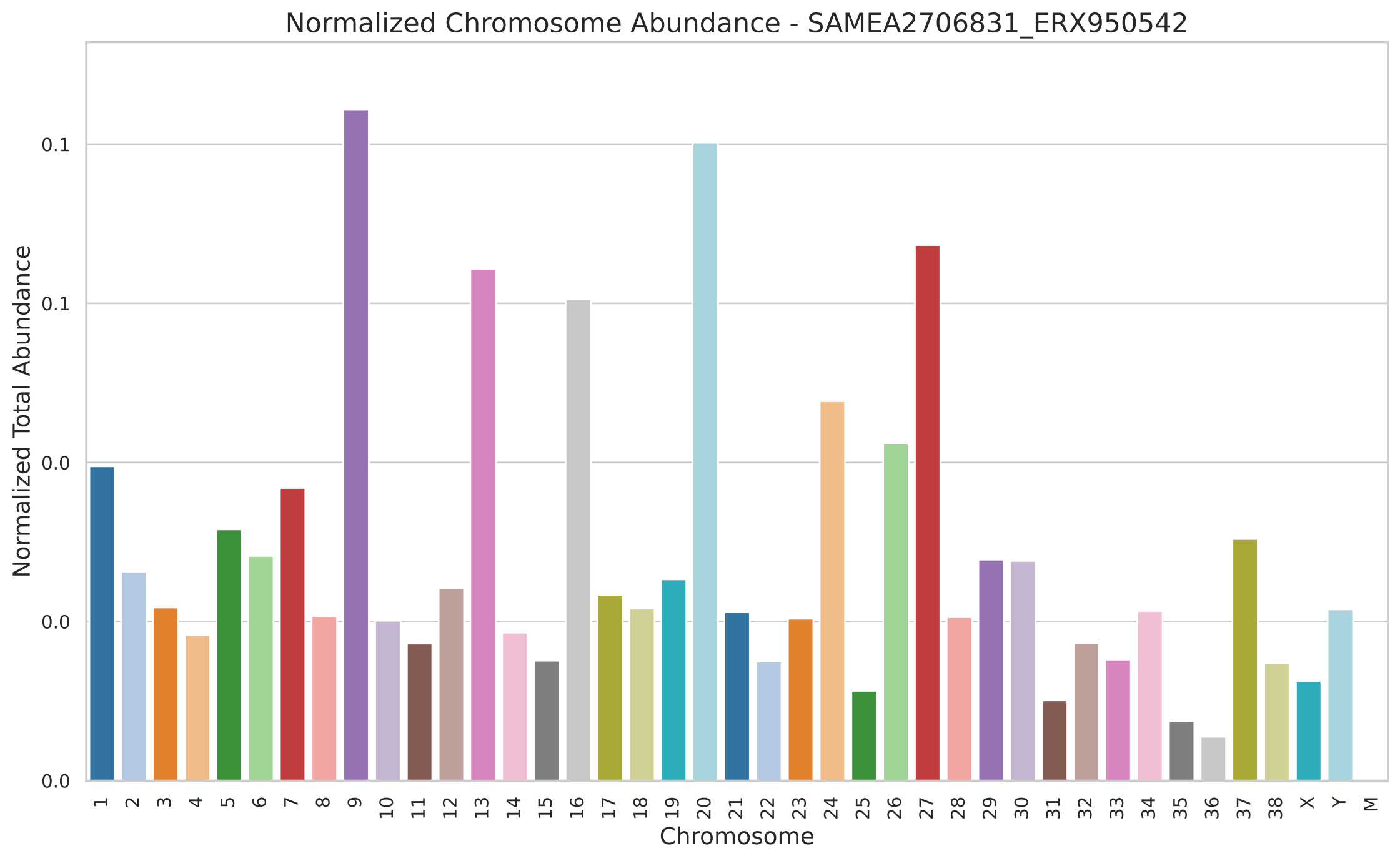

Normalized Chromosome Abundance - SAMEA2706902_ERX950517
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

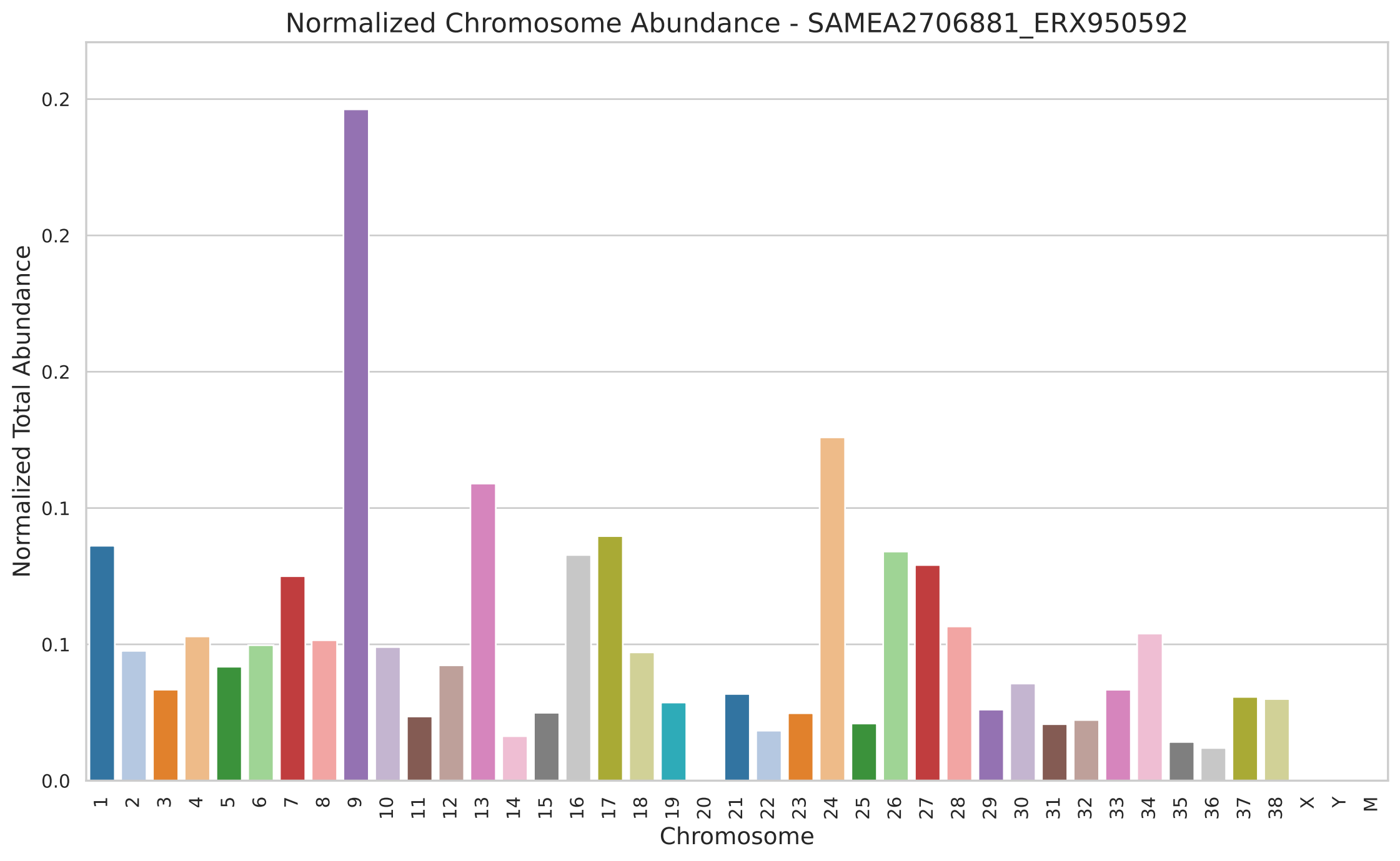

Normalized Chromosome Abundance - SAMEA2706900_ERX950515
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

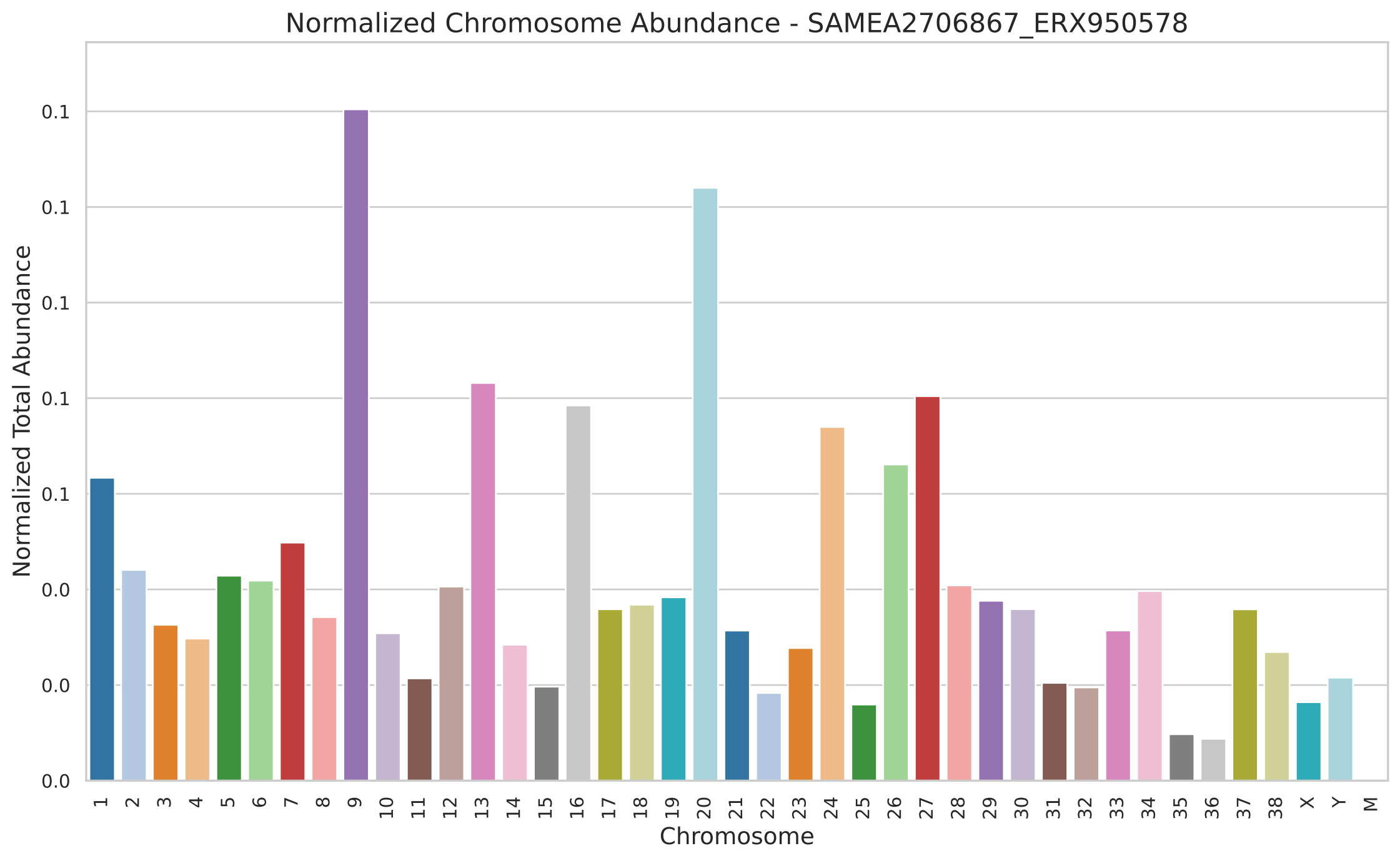

Normalized Chromosome Abundance - SAMEA2706852_ERX950563
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

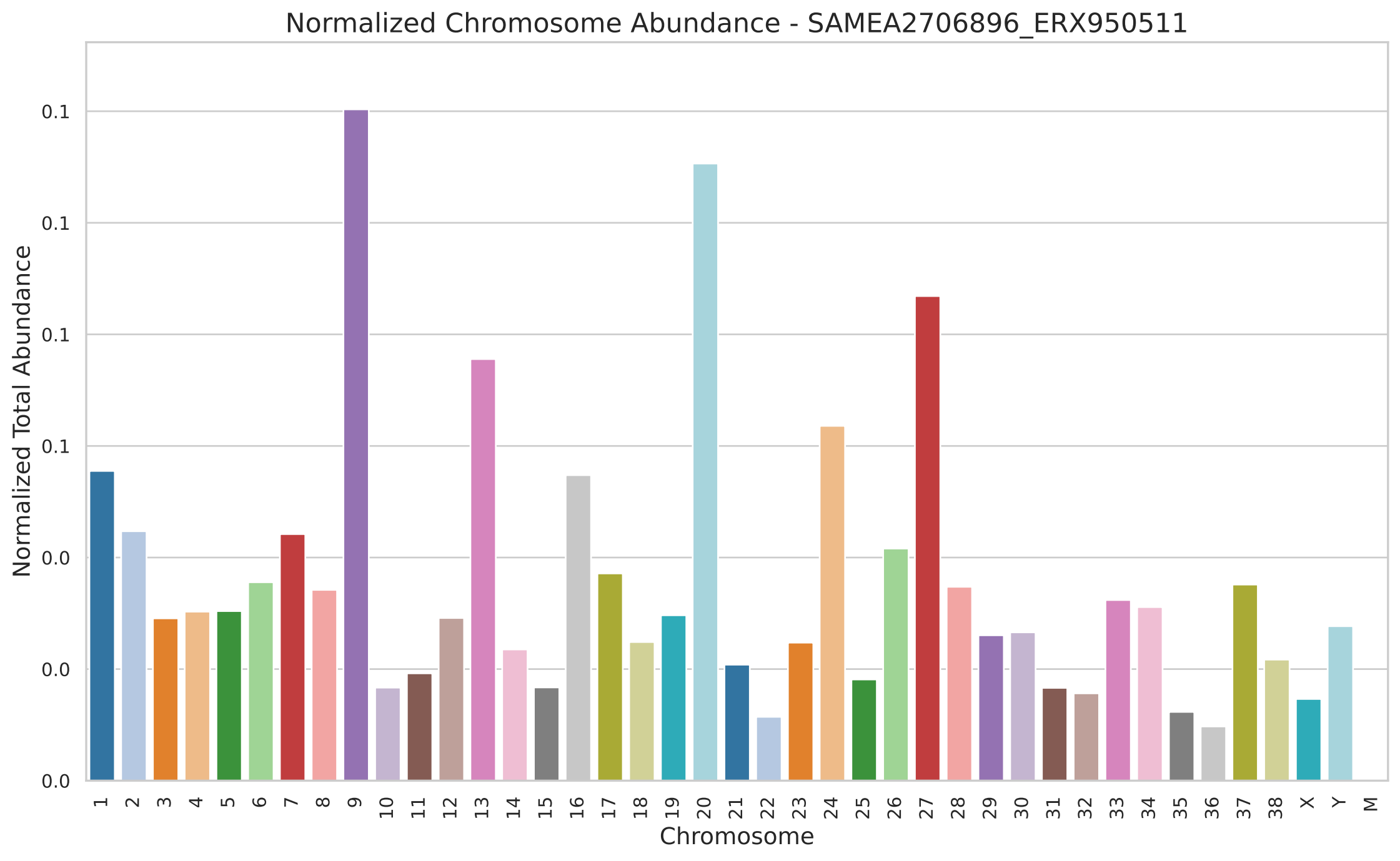

Normalized Chromosome Abundance - SAMEA2706828_ERX950539
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

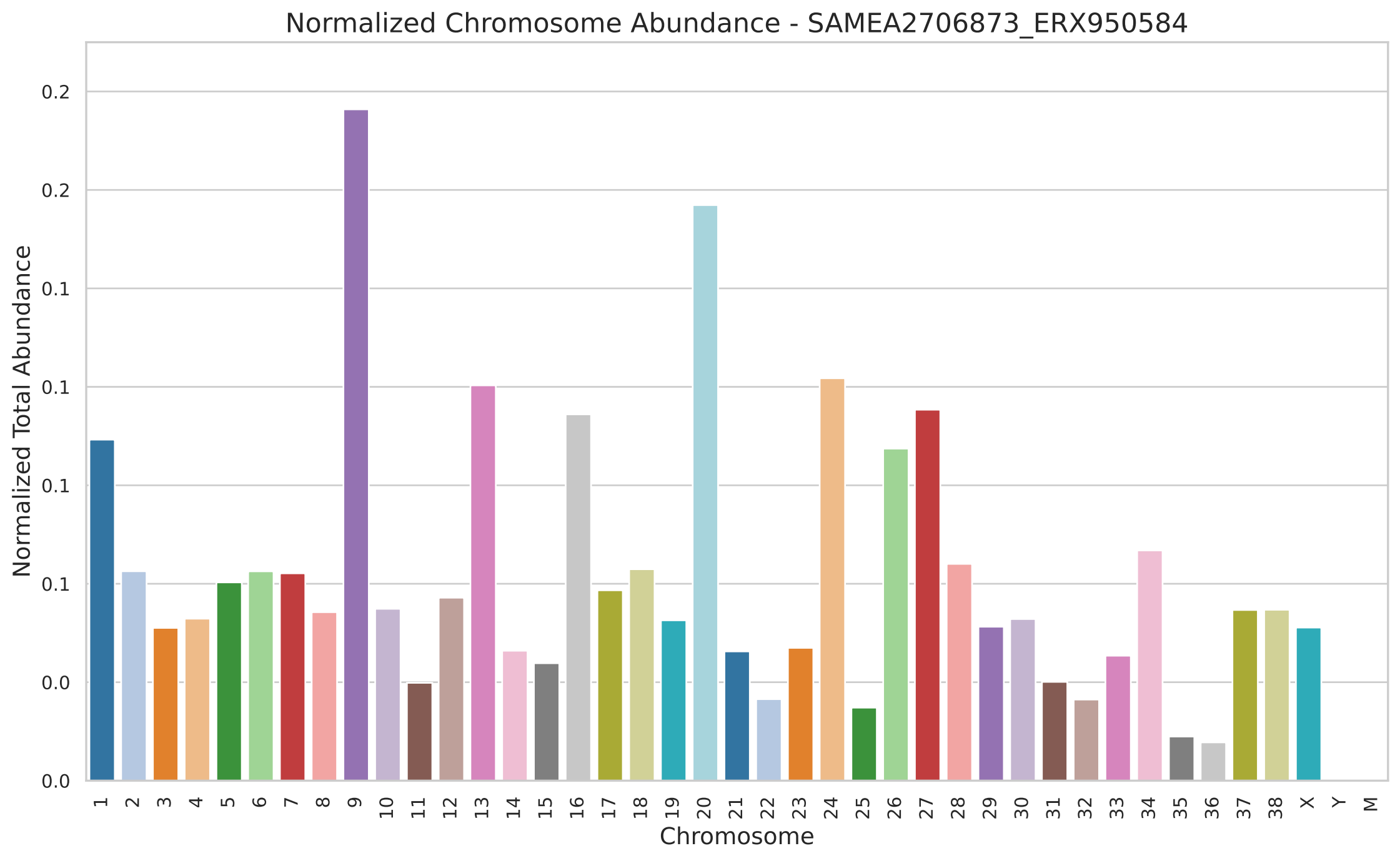

Normalized Chromosome Abundance - SAMEA2706859_ERX950474
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

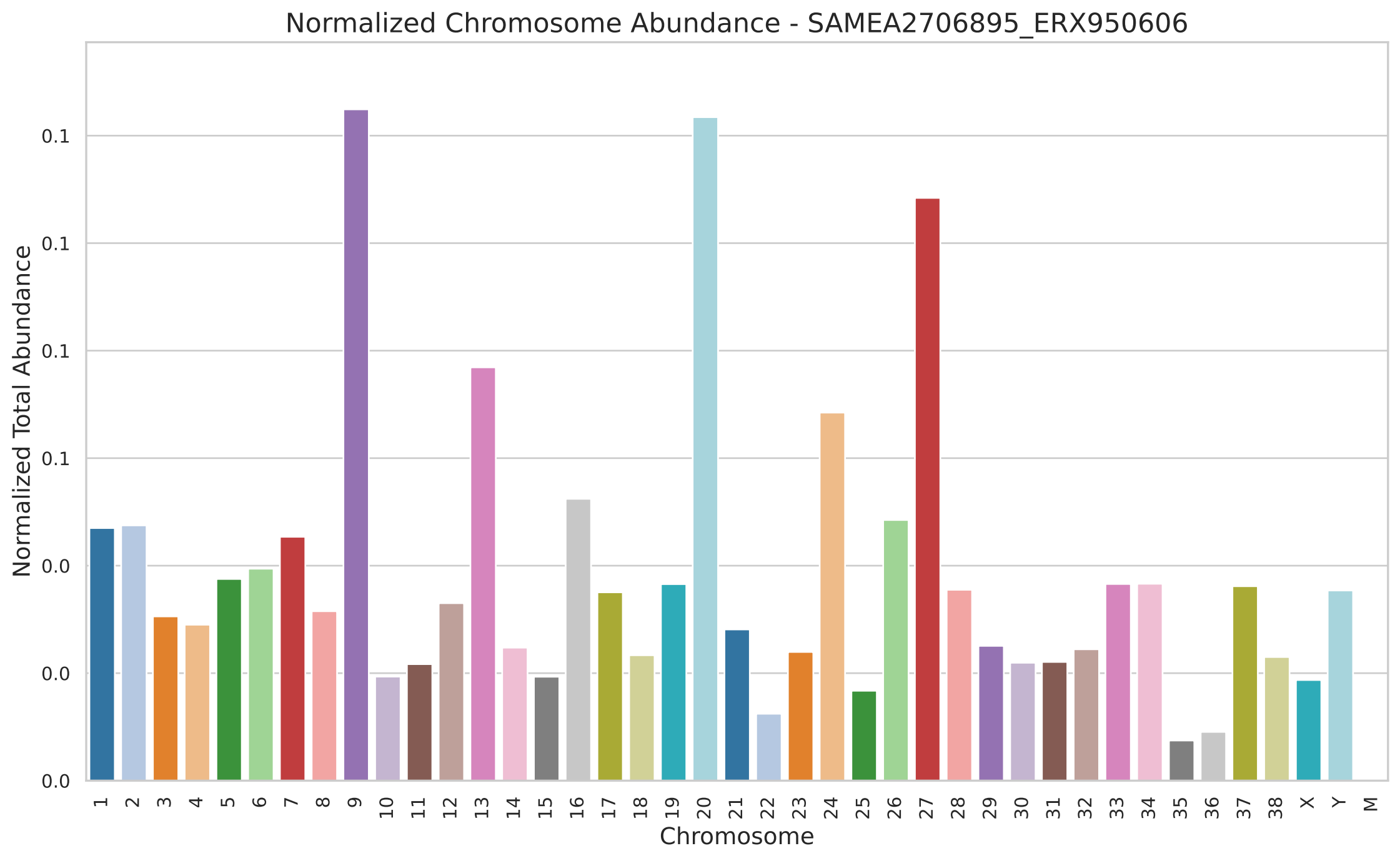

Normalized Chromosome Abundance - SAMEA2706831_ERX950542
Normalized Total Abundance
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

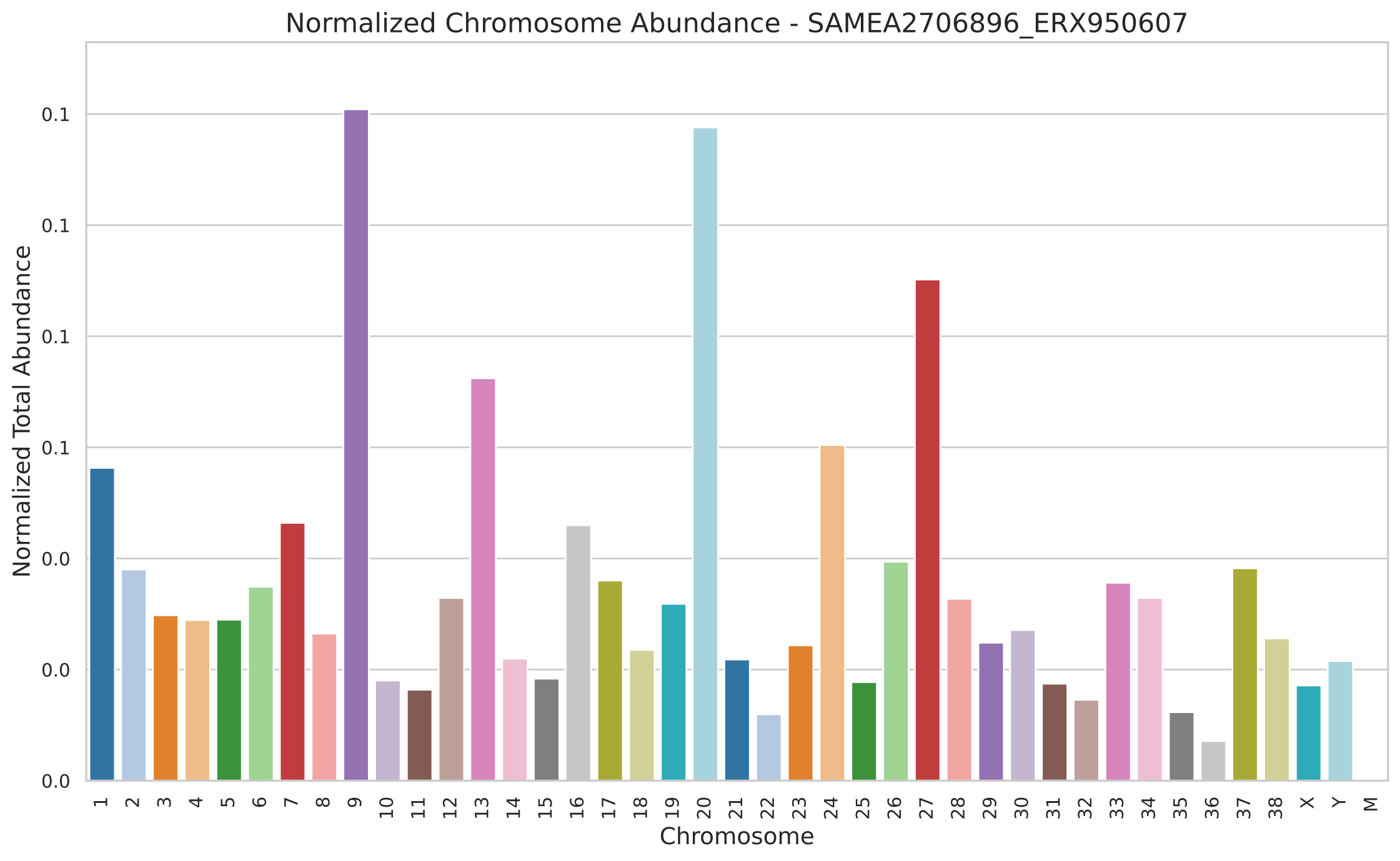

Normalized Chromosome Abundance - SAMEA2706881_ERX950592
Normalized Total Abundance
0.0
0.1
0.2
0.2
0.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

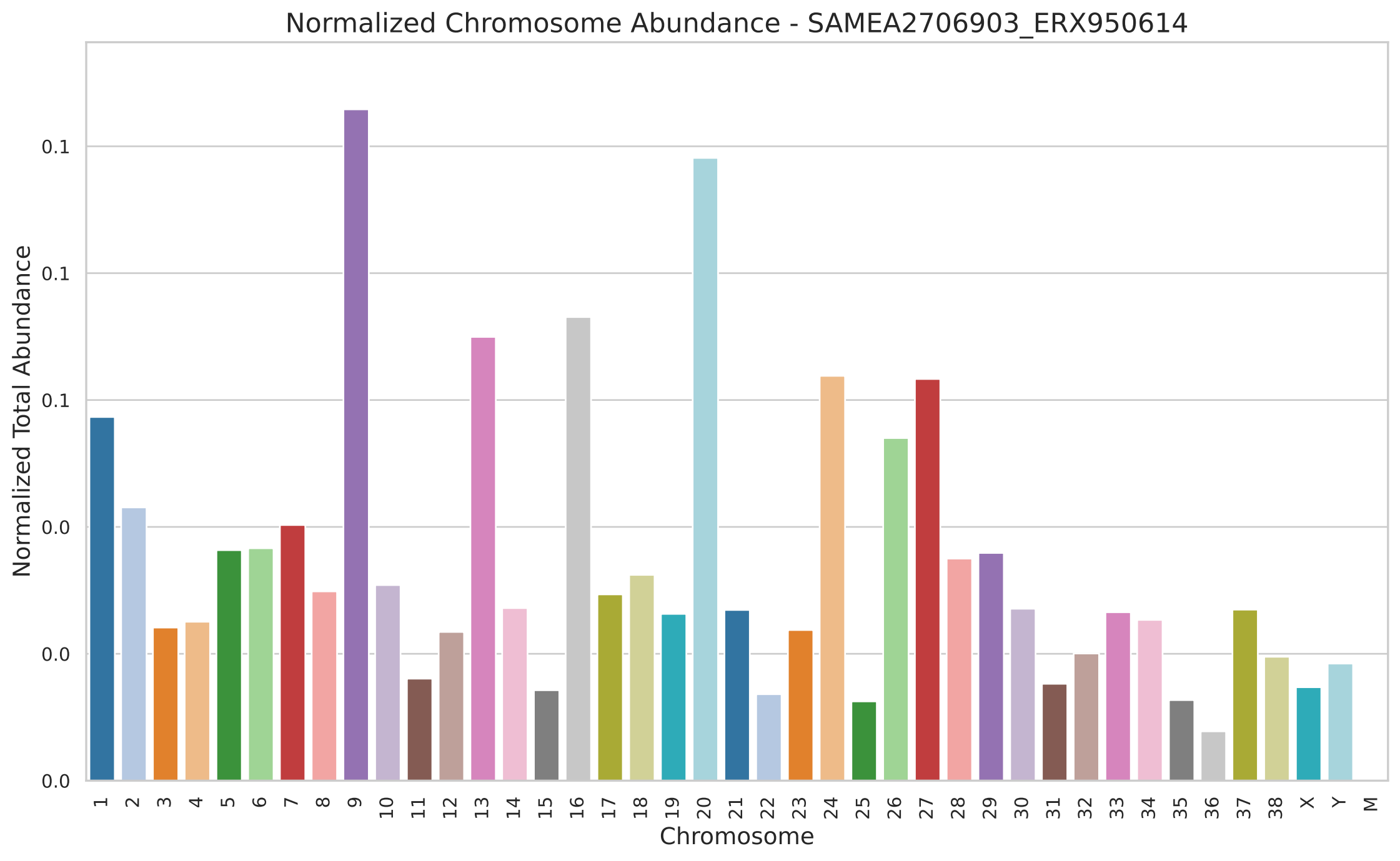

Normalized Chromosome Abundance - SAMEA2706867_ERX950578
Normalized Total Abundance
0.0
0.0
0.1
0.1
0.1
0.1
0.1
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

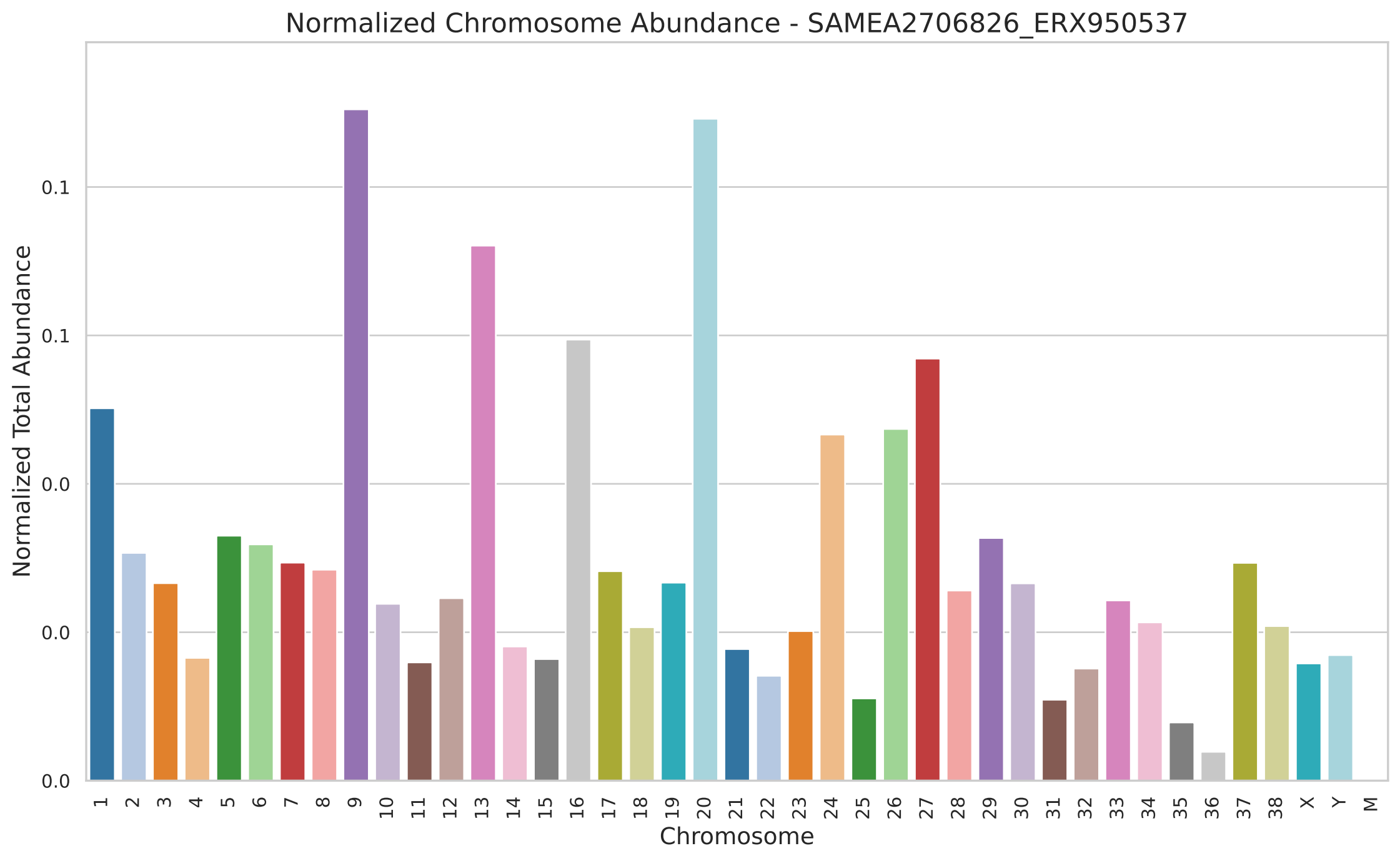

Normalized Chromosome Abundance - SAMEA2706896_ERX950511
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

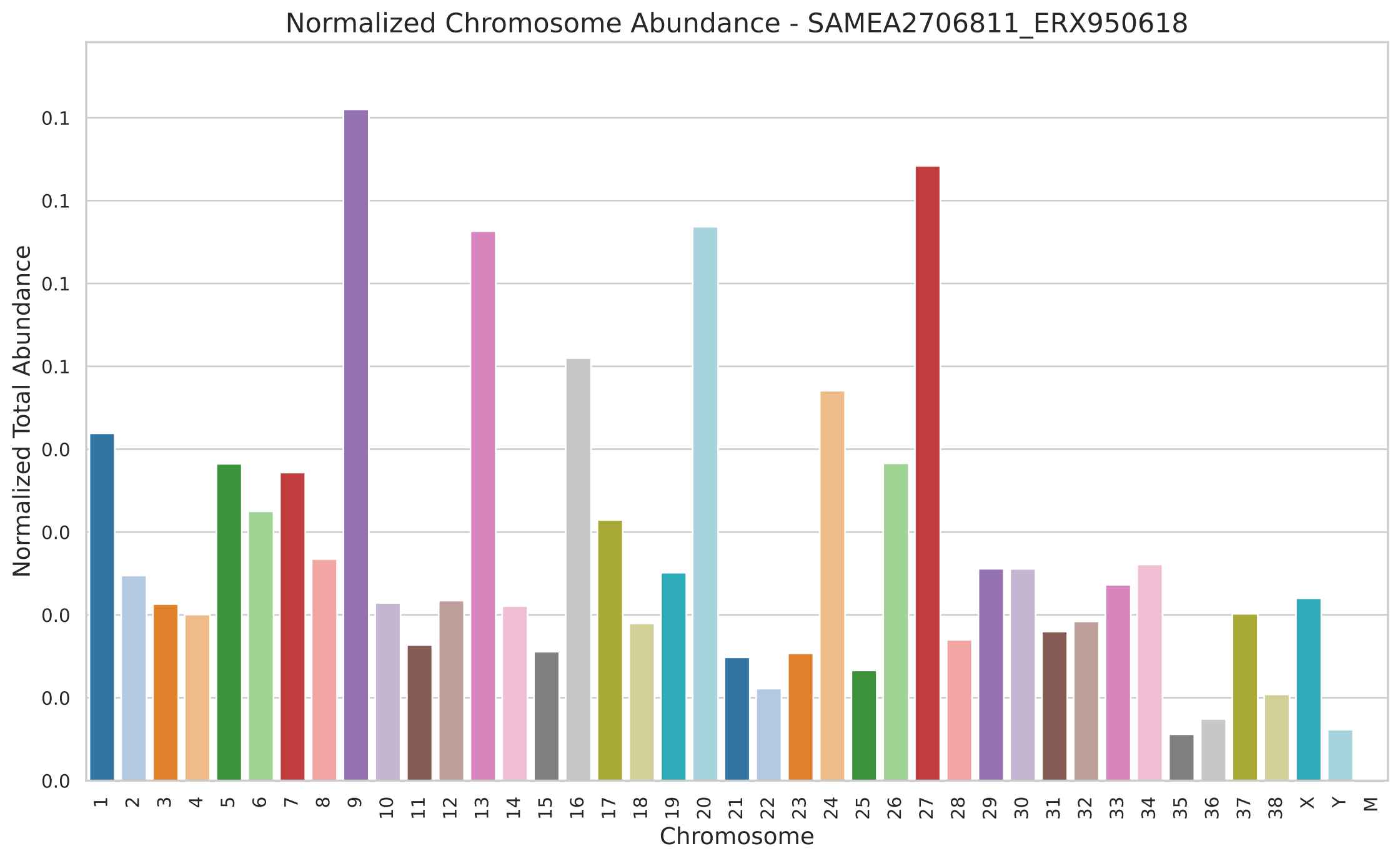

Normalized Chromosome Abundance - SAMEA2706873_ERX950584
Normalized Total Abundance
0.2
0.2
0.1
0.1
0.1
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

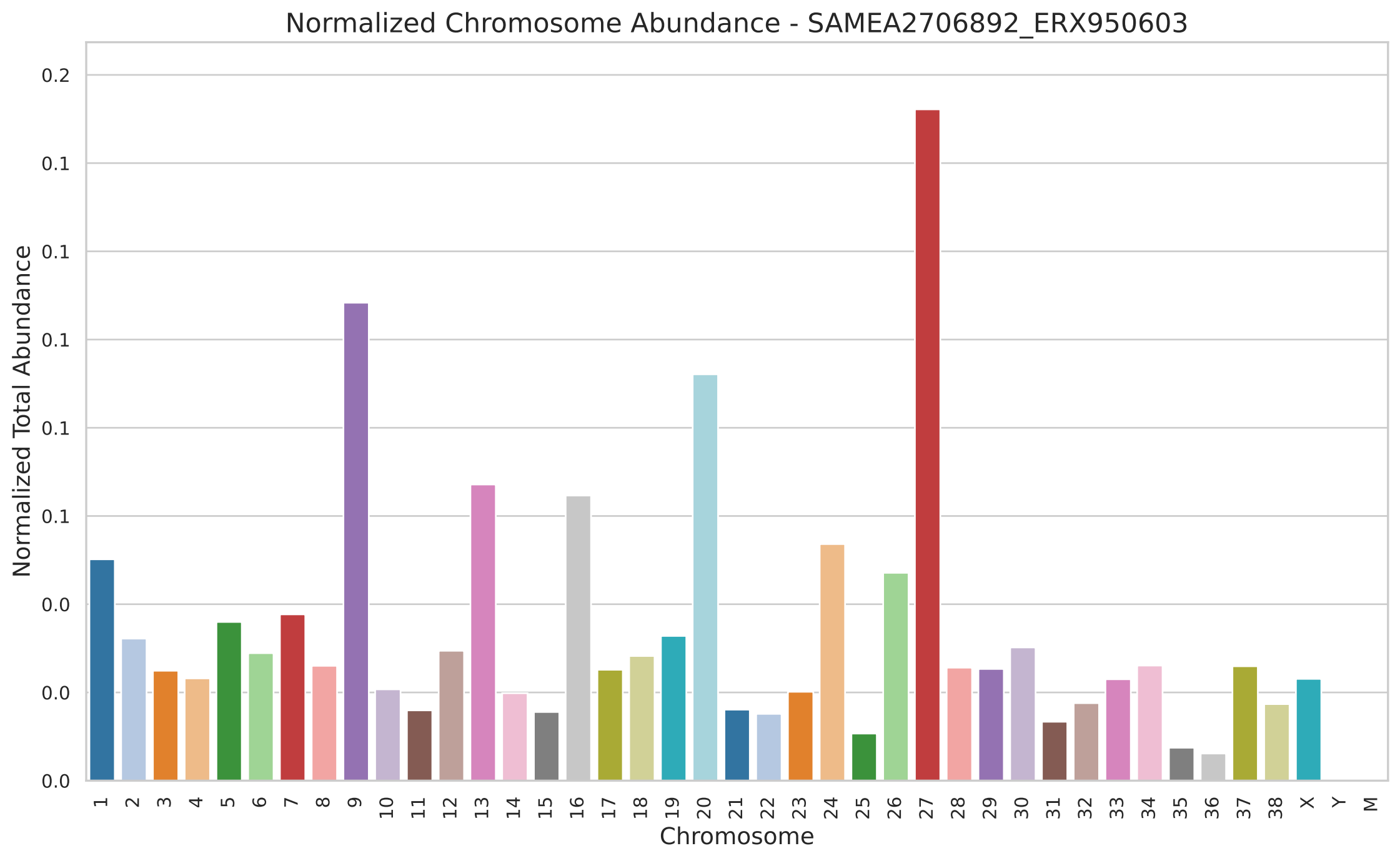

Normalized Chromosome Abundance - SAMEA2706895_ERX950606
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

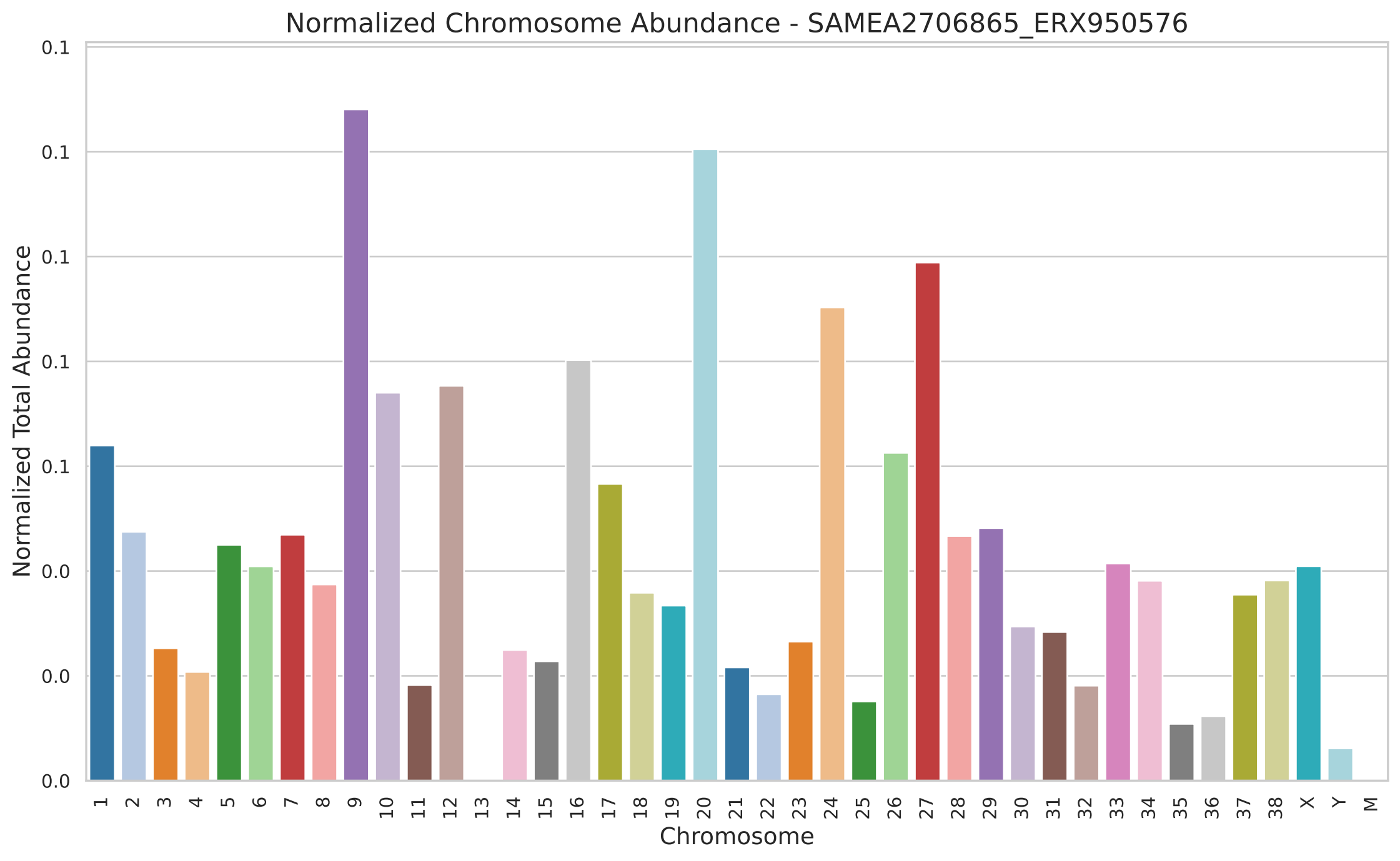

Normalized Chromosome Abundance - SAMEA2706896_ERX950607
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

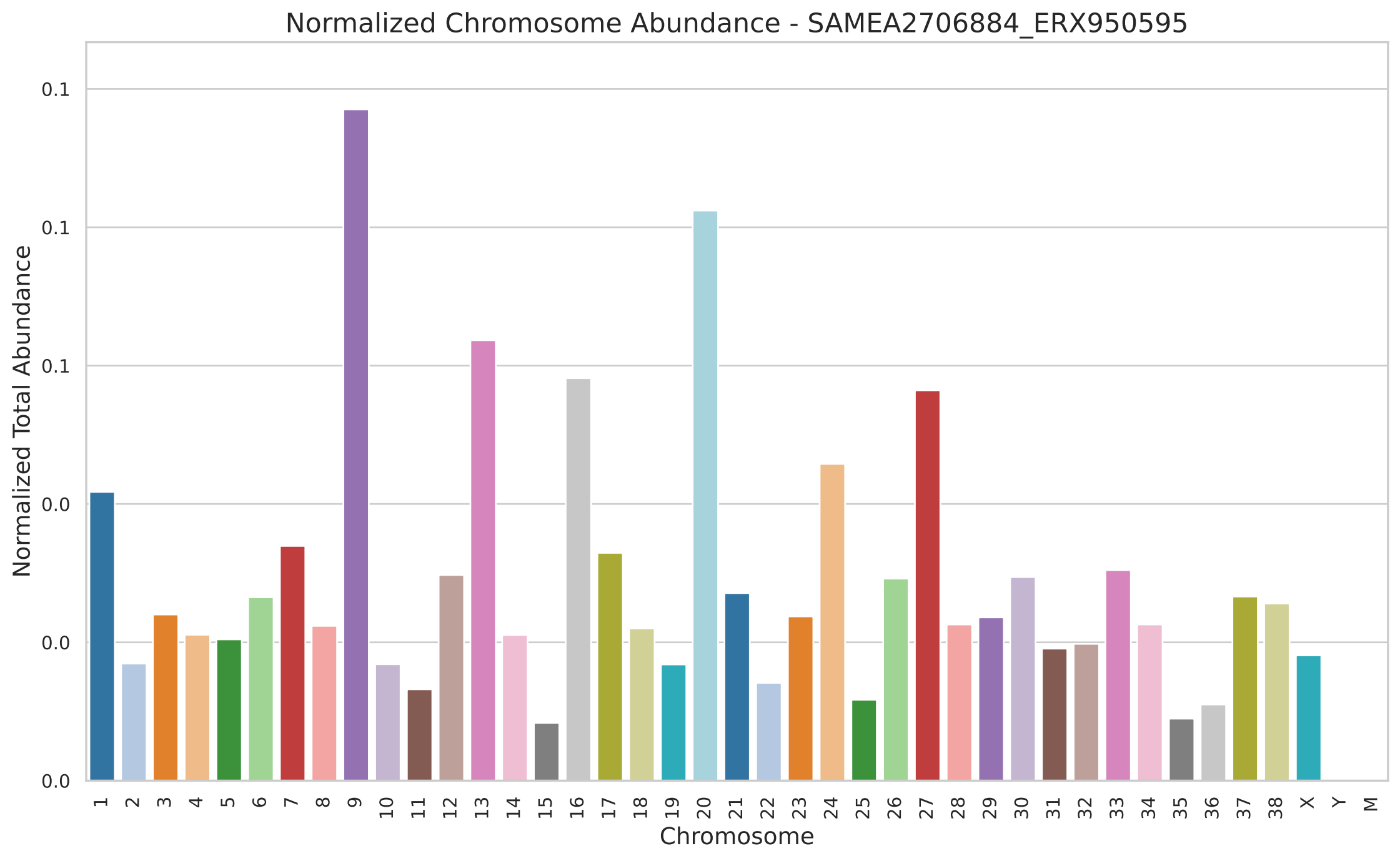

Normalized Chromosome Abundance - SAMEA2706903_ERX950614
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

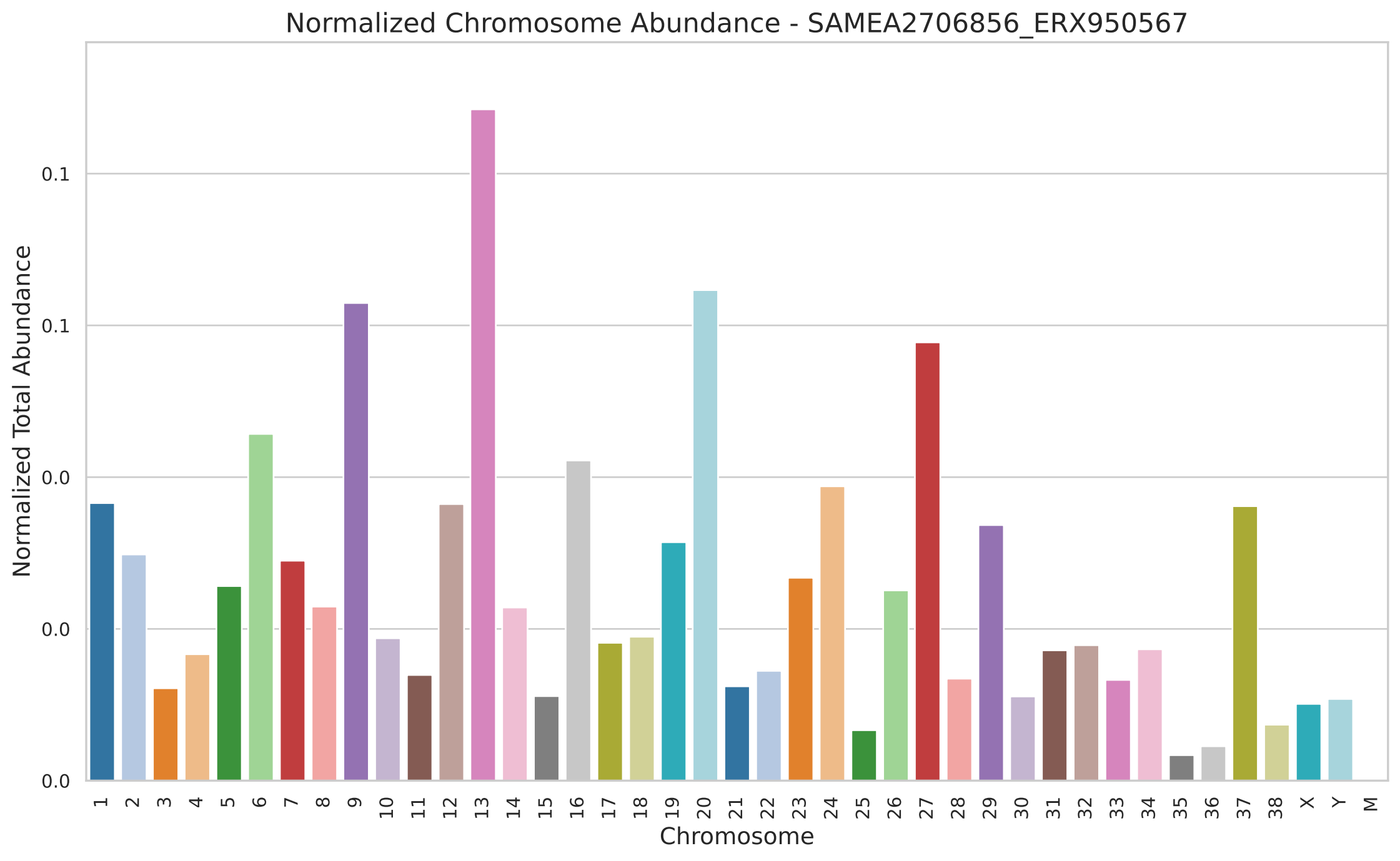

Normalized Chromosome Abundance - SAMEA2706826_ERX950537
Normalized Total Abundance
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

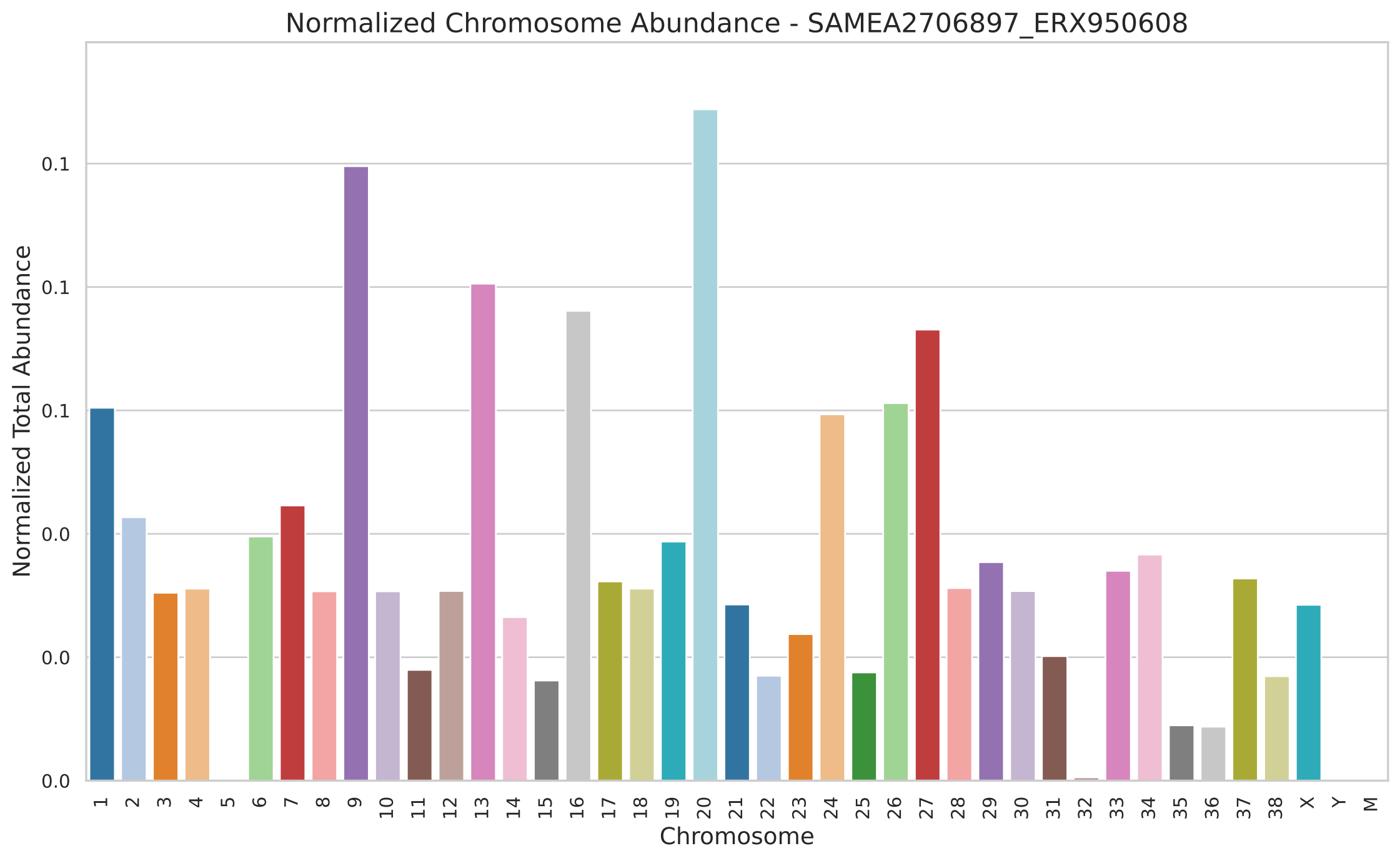

Normalized Chromosome Abundance - SAMEA2706811_ERX950618
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

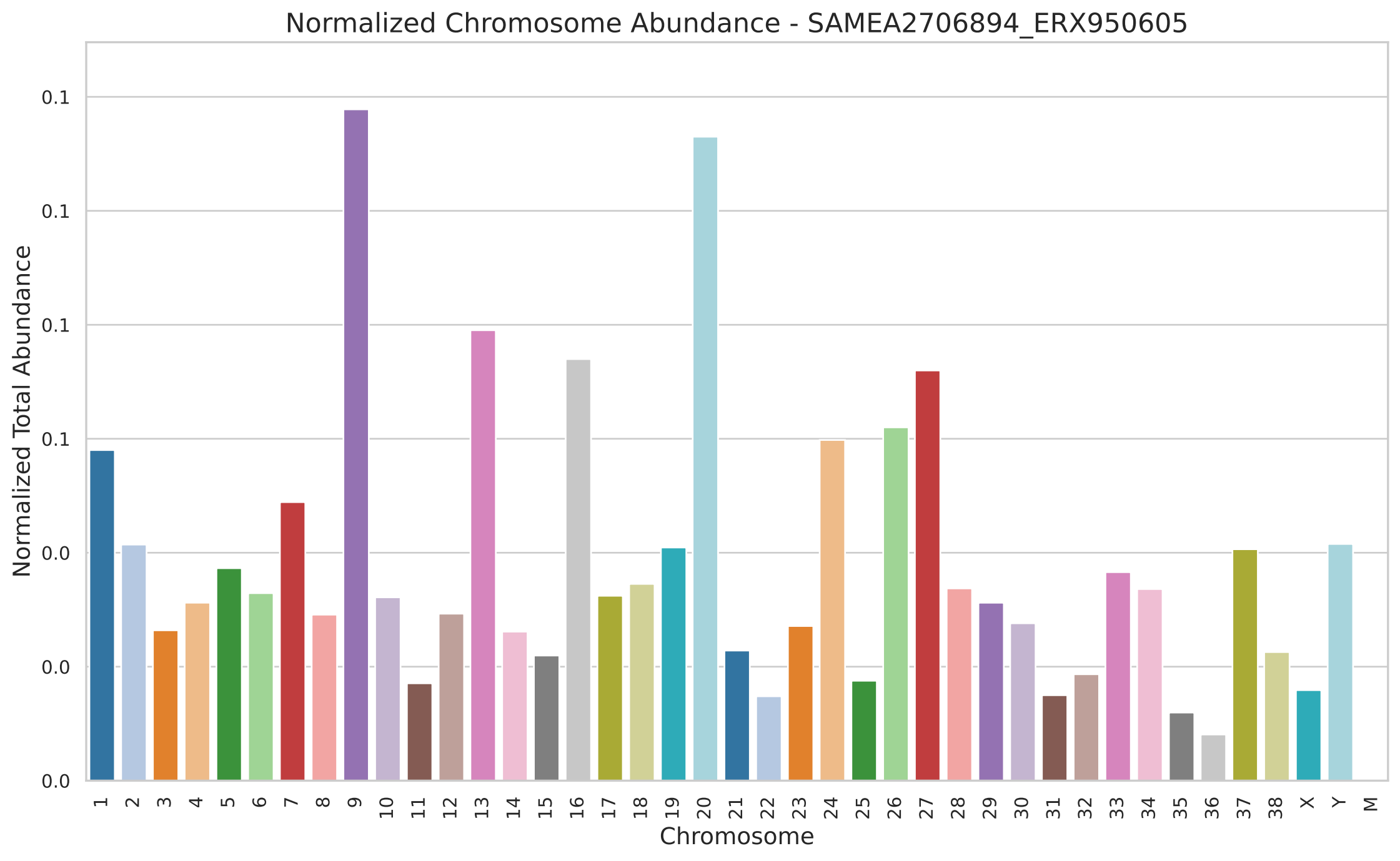

Normalized Chromosome Abundance - SAMEA2706892_ERX950603
Normalized Total Abundance
0.2
0.1
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

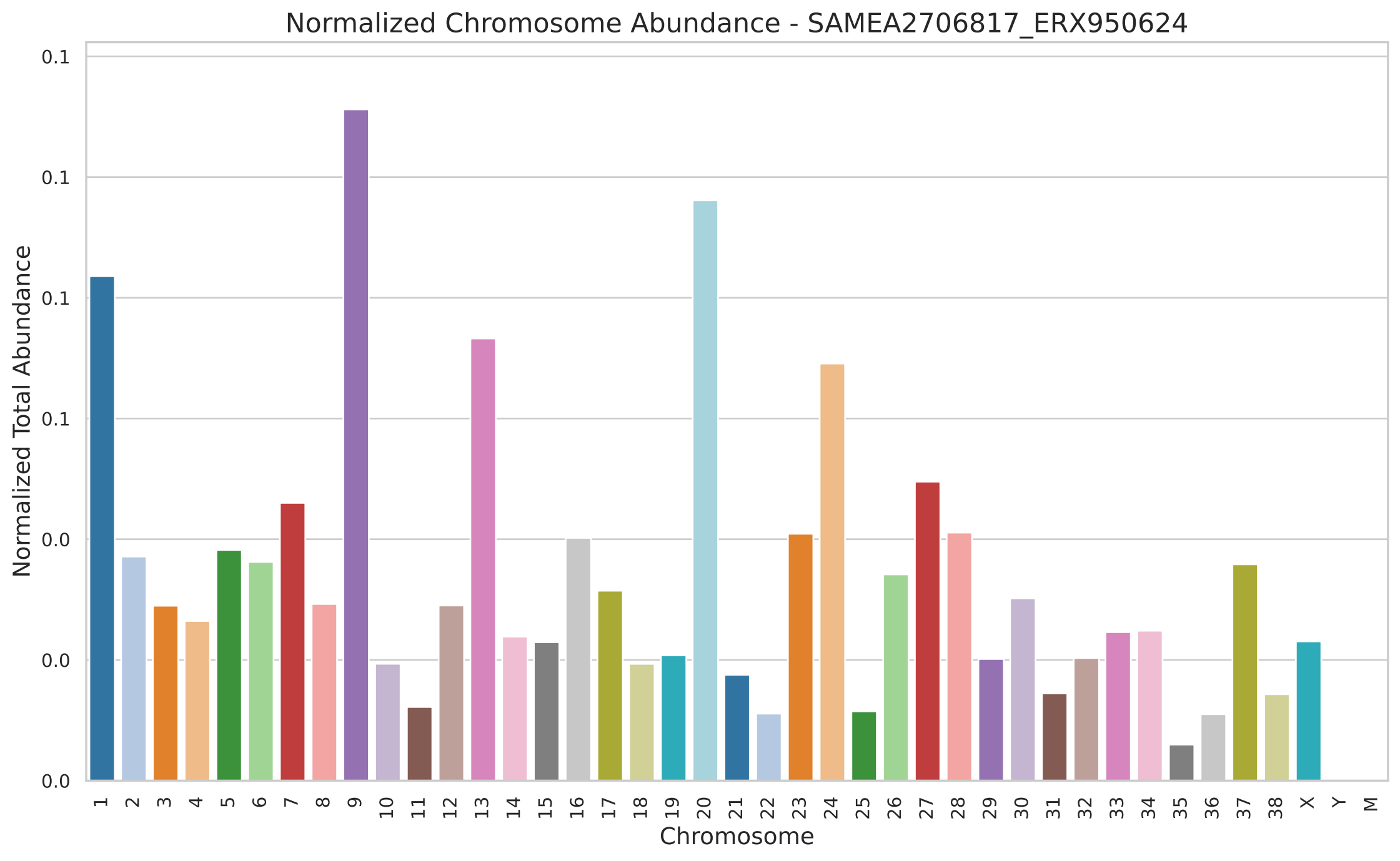

Normalized Chromosome Abundance - SAMEA2706865_ERX950576
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

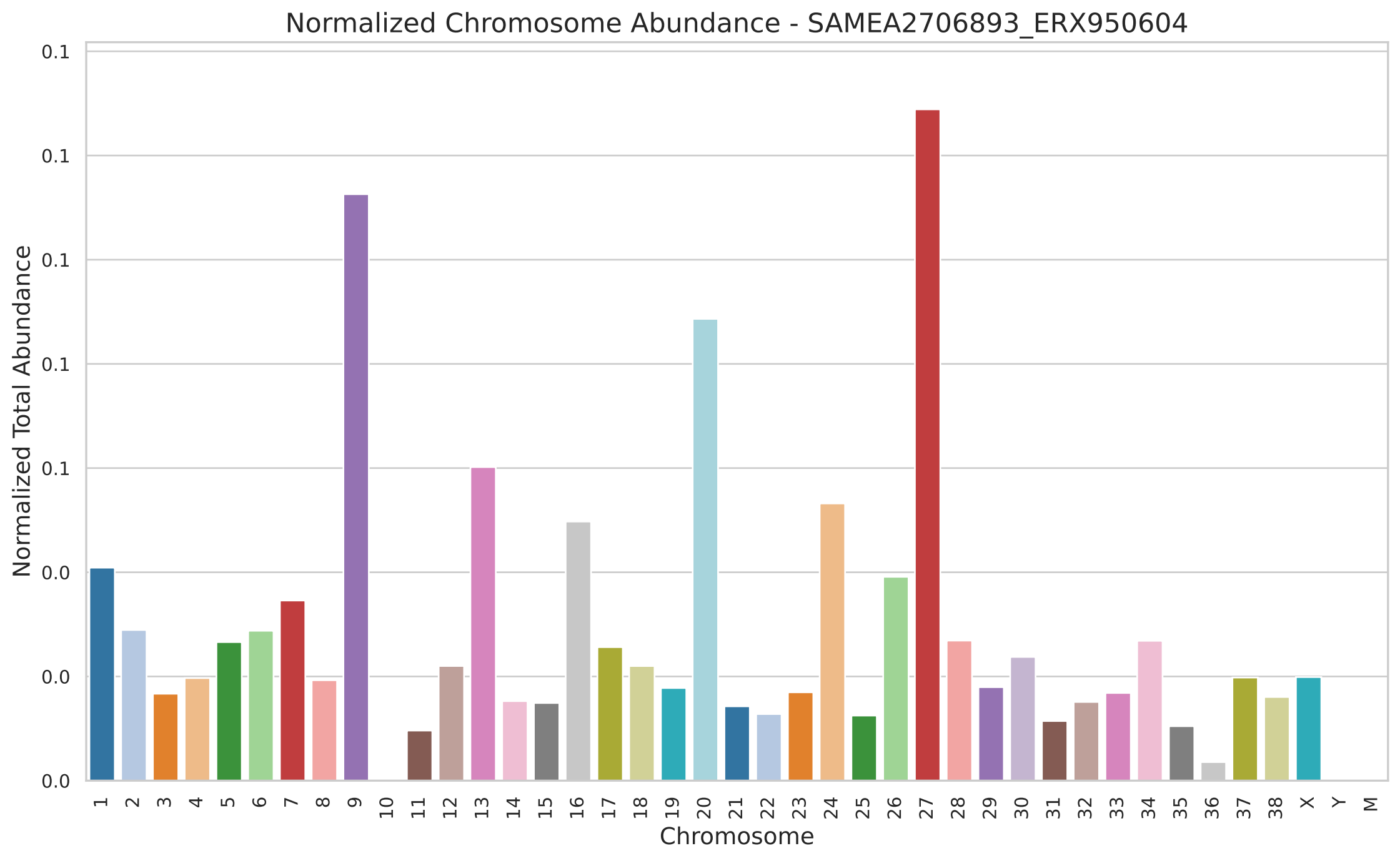

Normalized Chromosome Abundance - SAMEA2706884_ERX950595
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

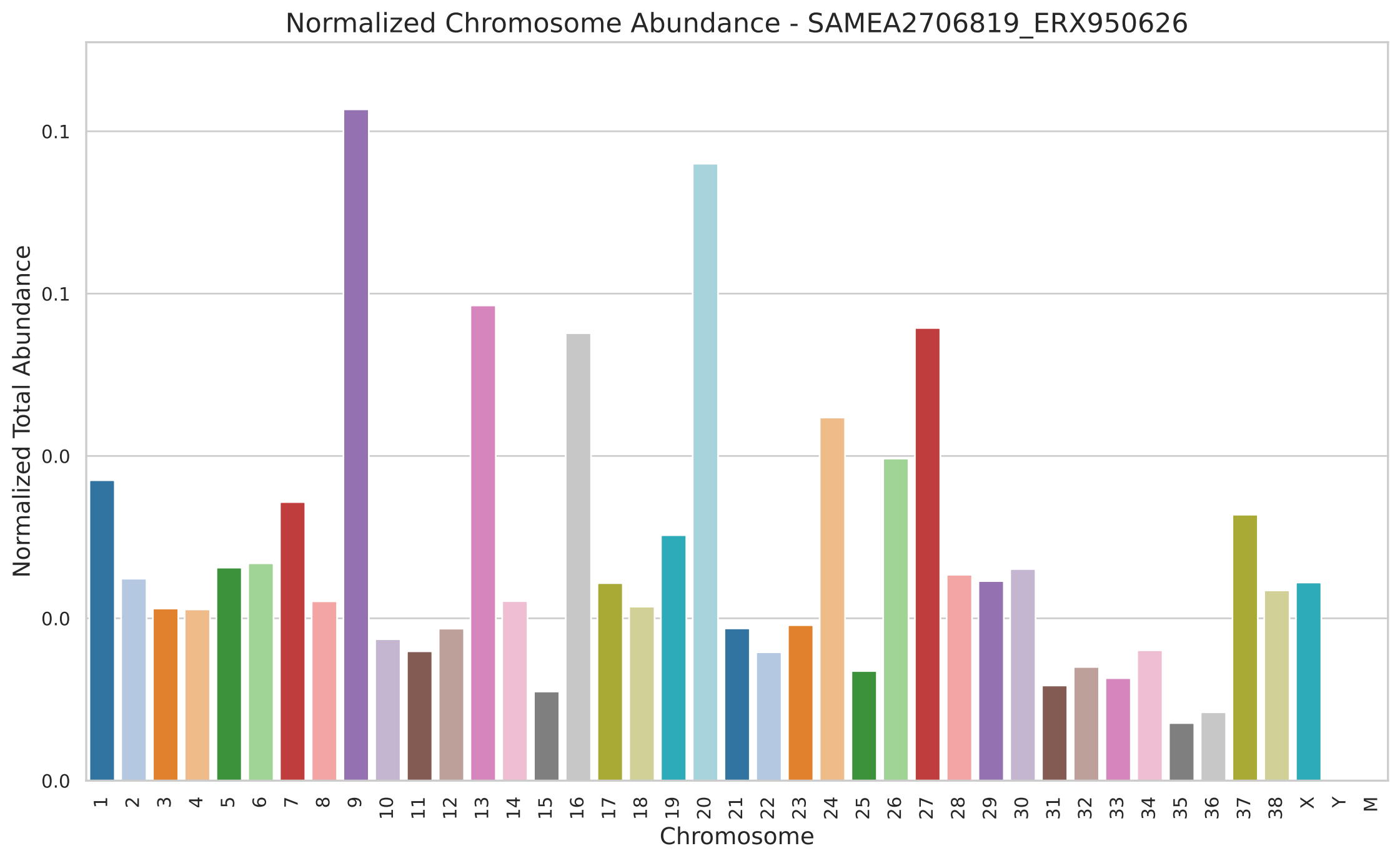

Normalized Chromosome Abundance - SAMEA2706856_ERX950567
Normalized Total Abundance
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

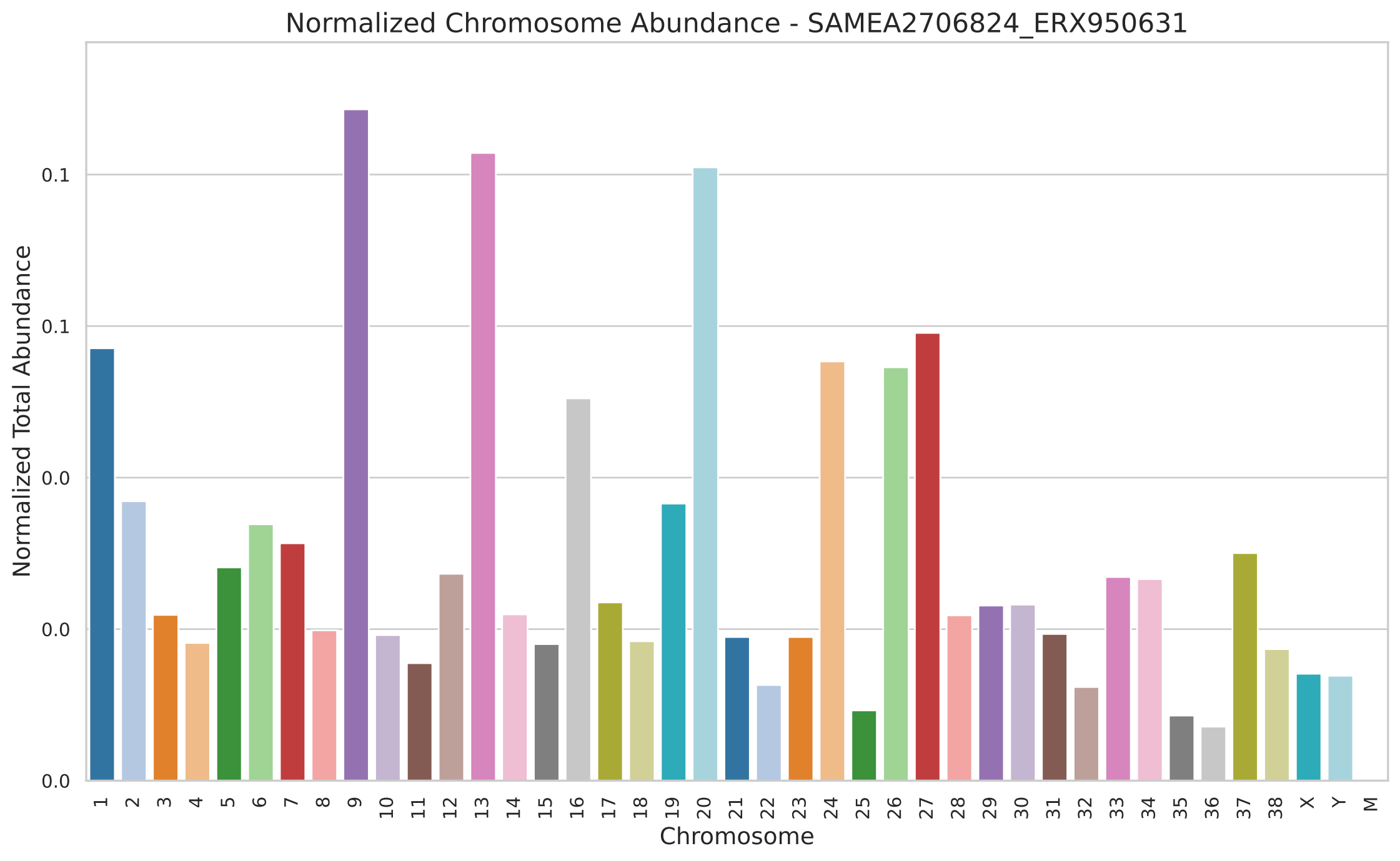

Normalized Chromosome Abundance - SAMEA2706897_ERX950608
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

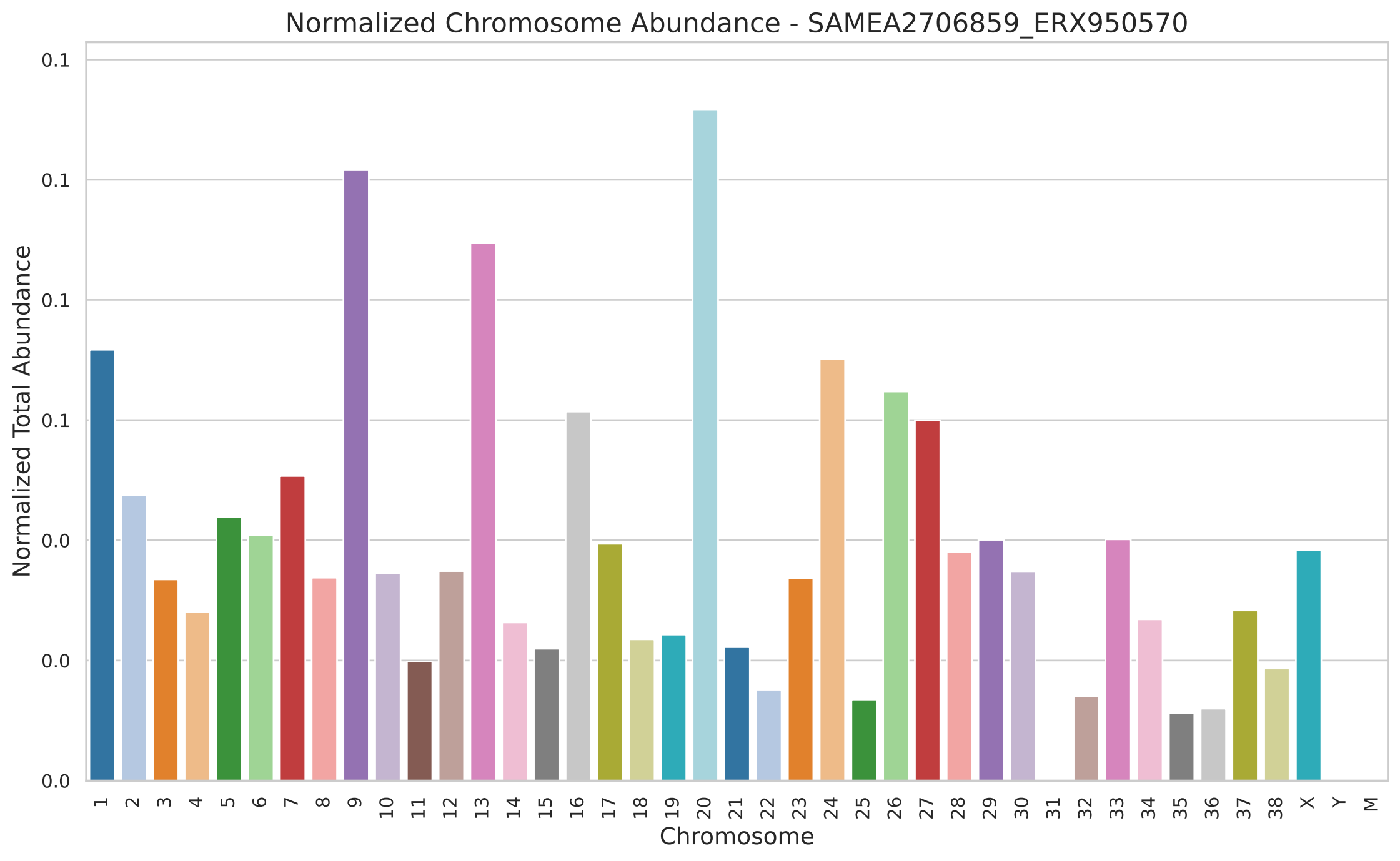

Normalized Chromosome Abundance - SAMEA2706894_ERX950605
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

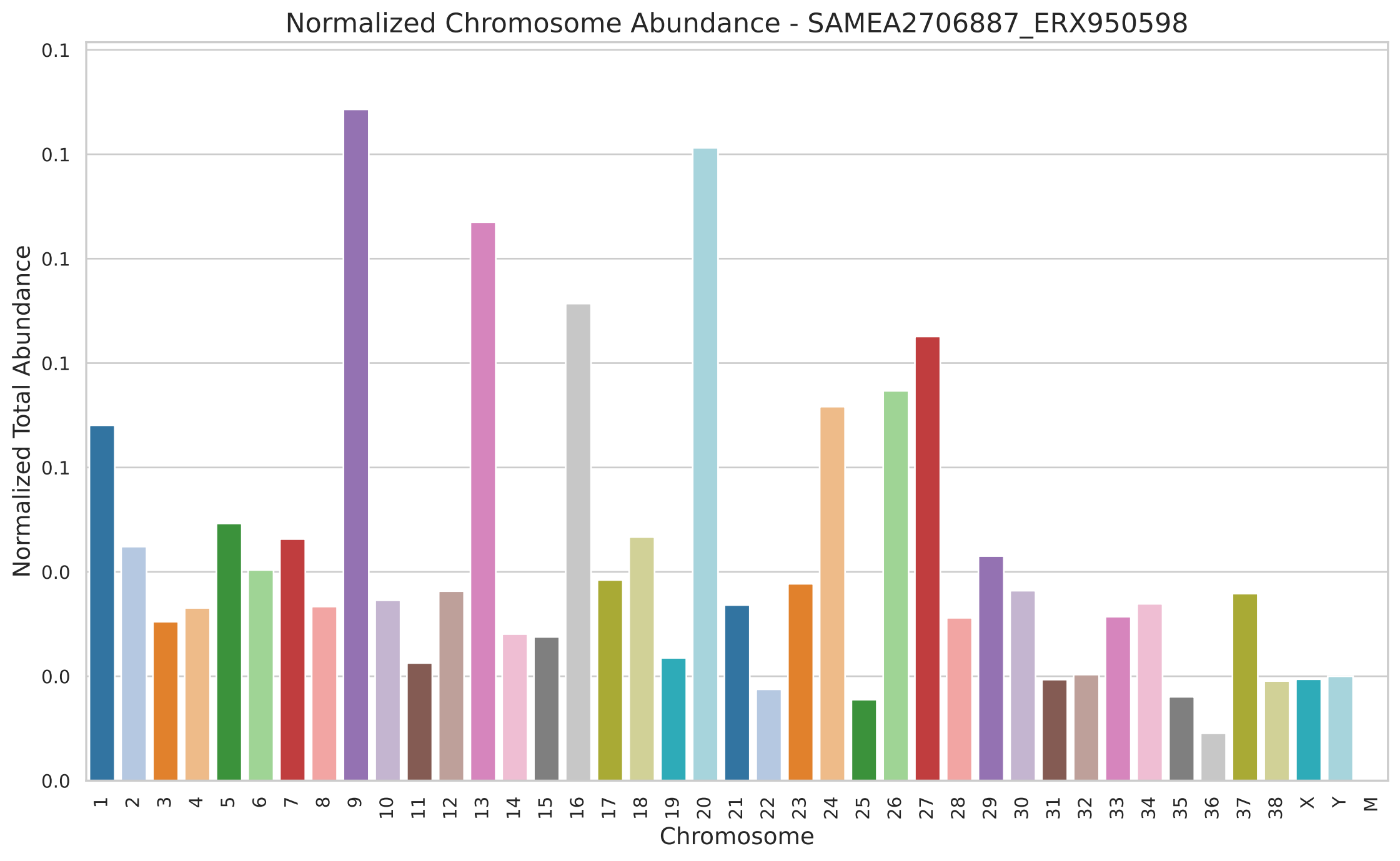

Normalized Chromosome Abundance - SAMEA2706817_ERX950624
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

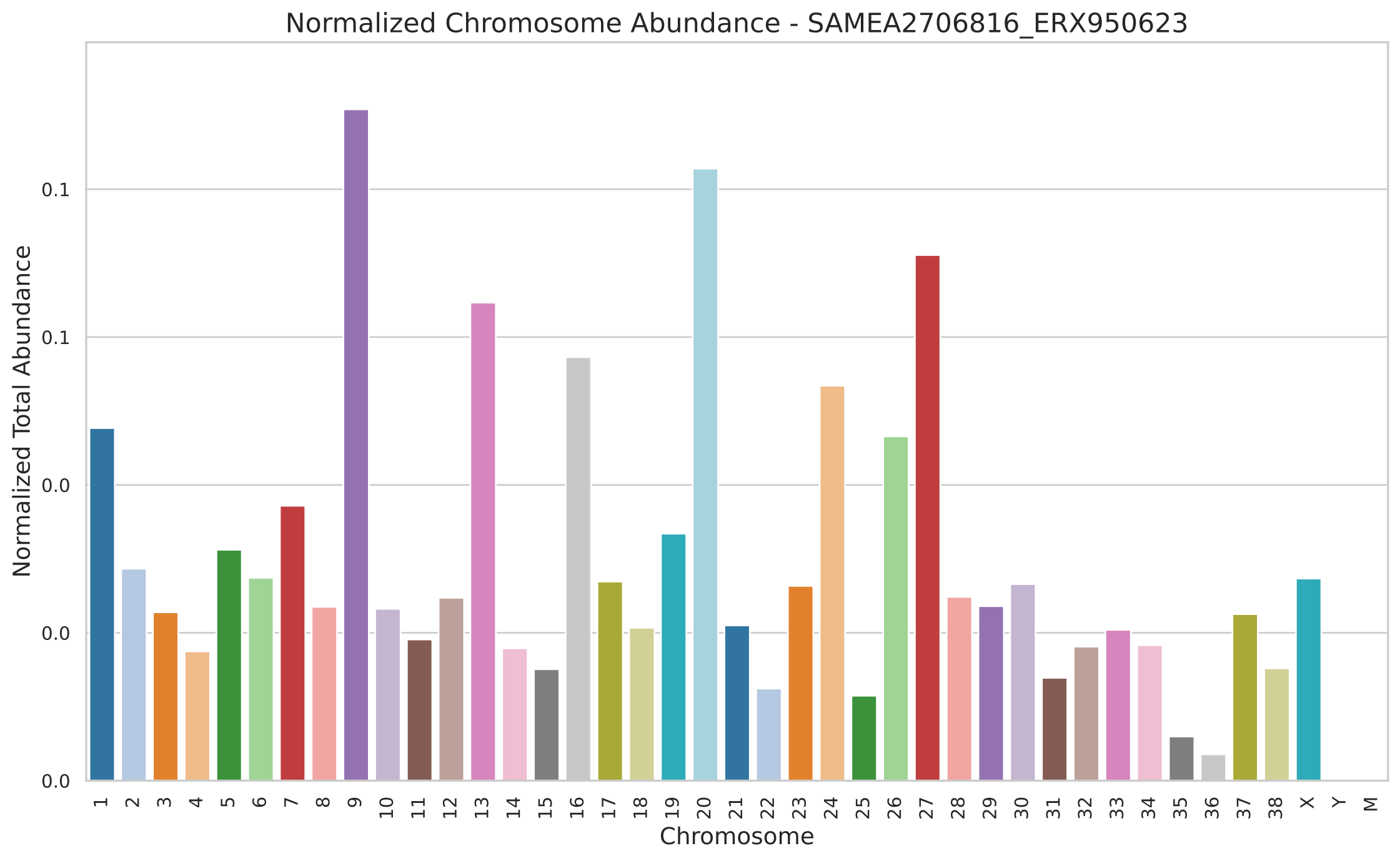

Normalized Chromosome Abundance - SAMEA2706893_ERX950604
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

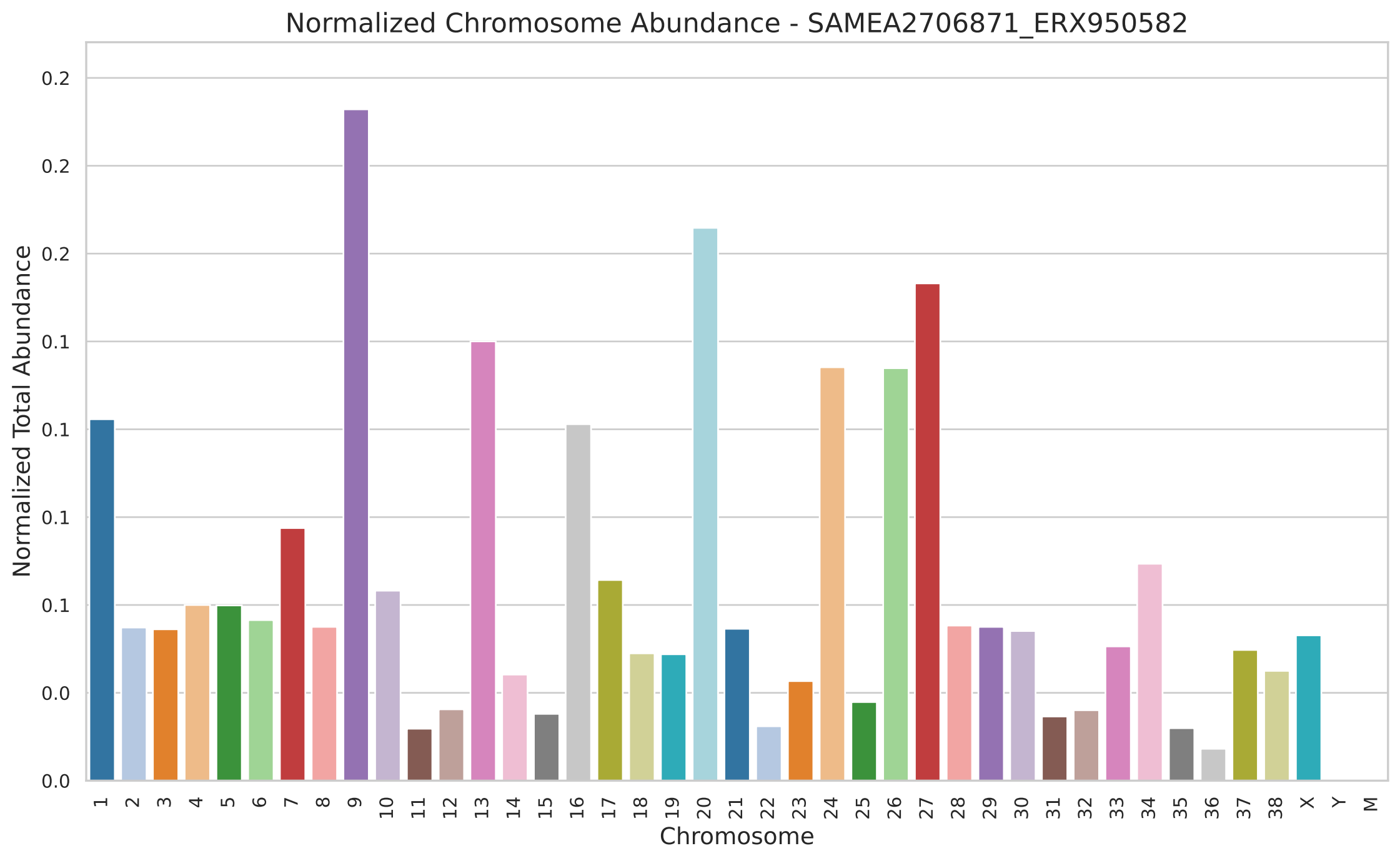

Normalized Chromosome Abundance - SAMEA2706819_ERX950626
Normalized Total Abundance
0.1
0.1
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

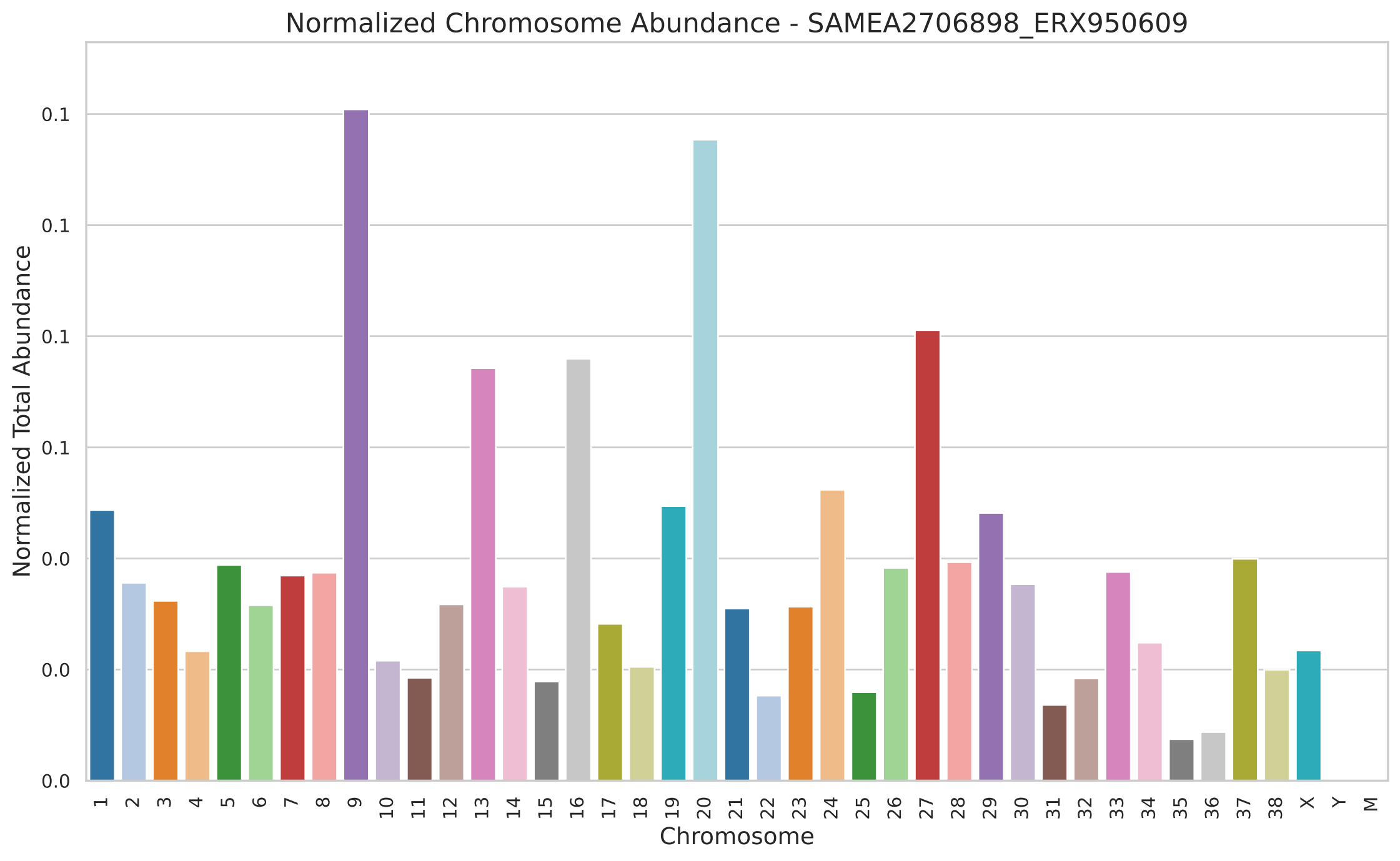

Normalized Chromosome Abundance - SAMEA2706824_ERX950631
Normalized Total Abundance
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

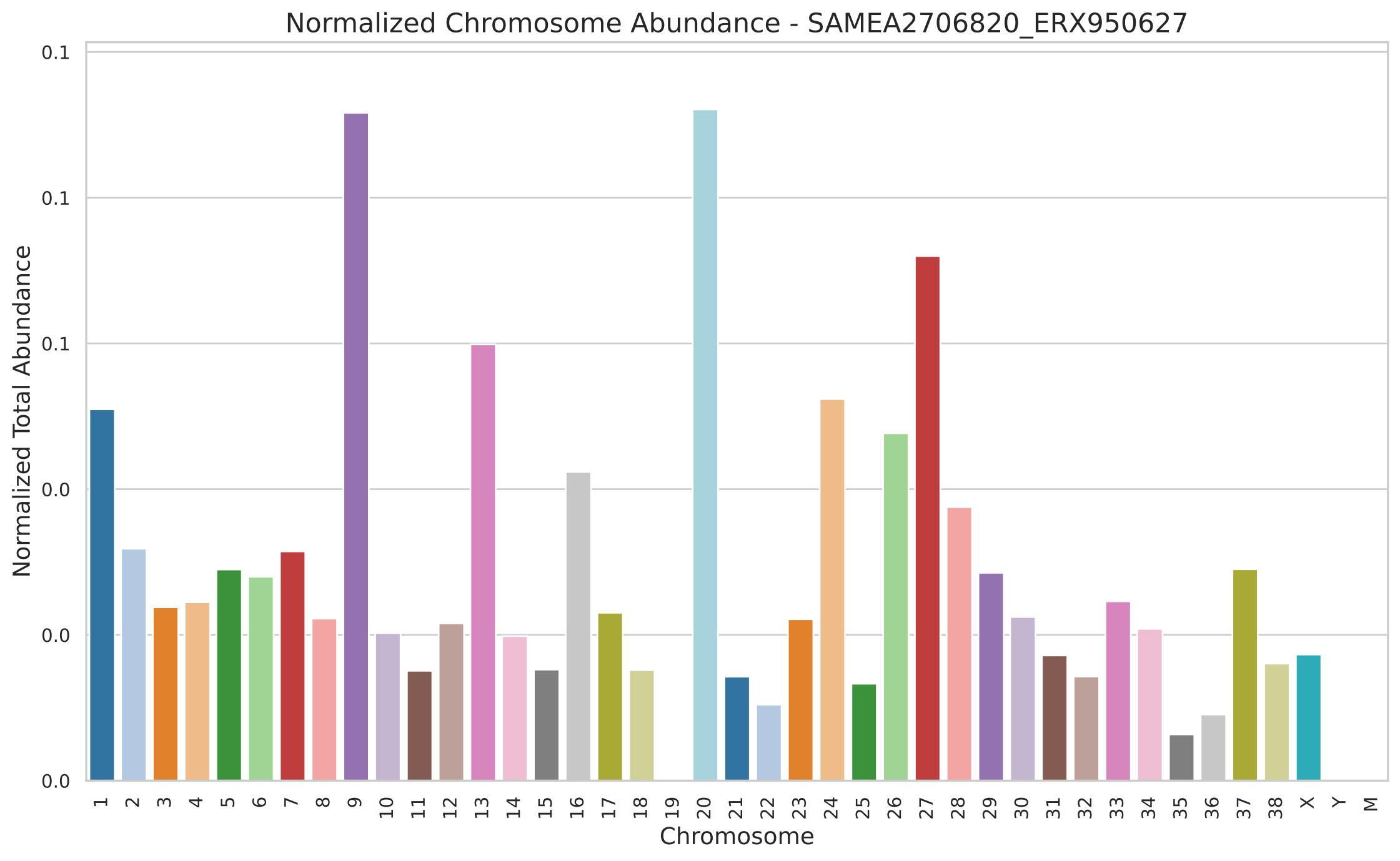

Normalized Chromosome Abundance - SAMEA2706859_ERX950570
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

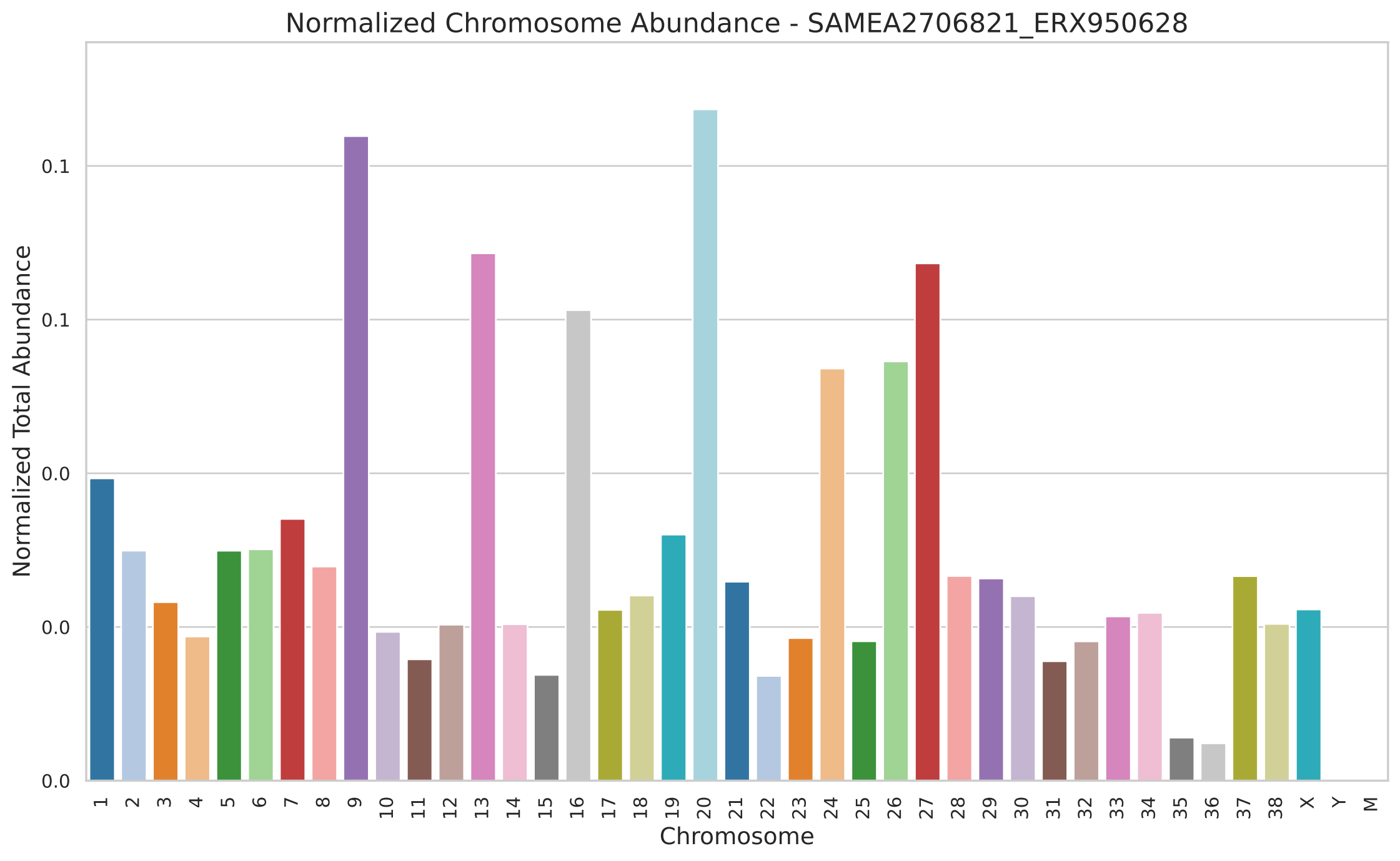

Normalized Chromosome Abundance - SAMEA2706887_ERX950598
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

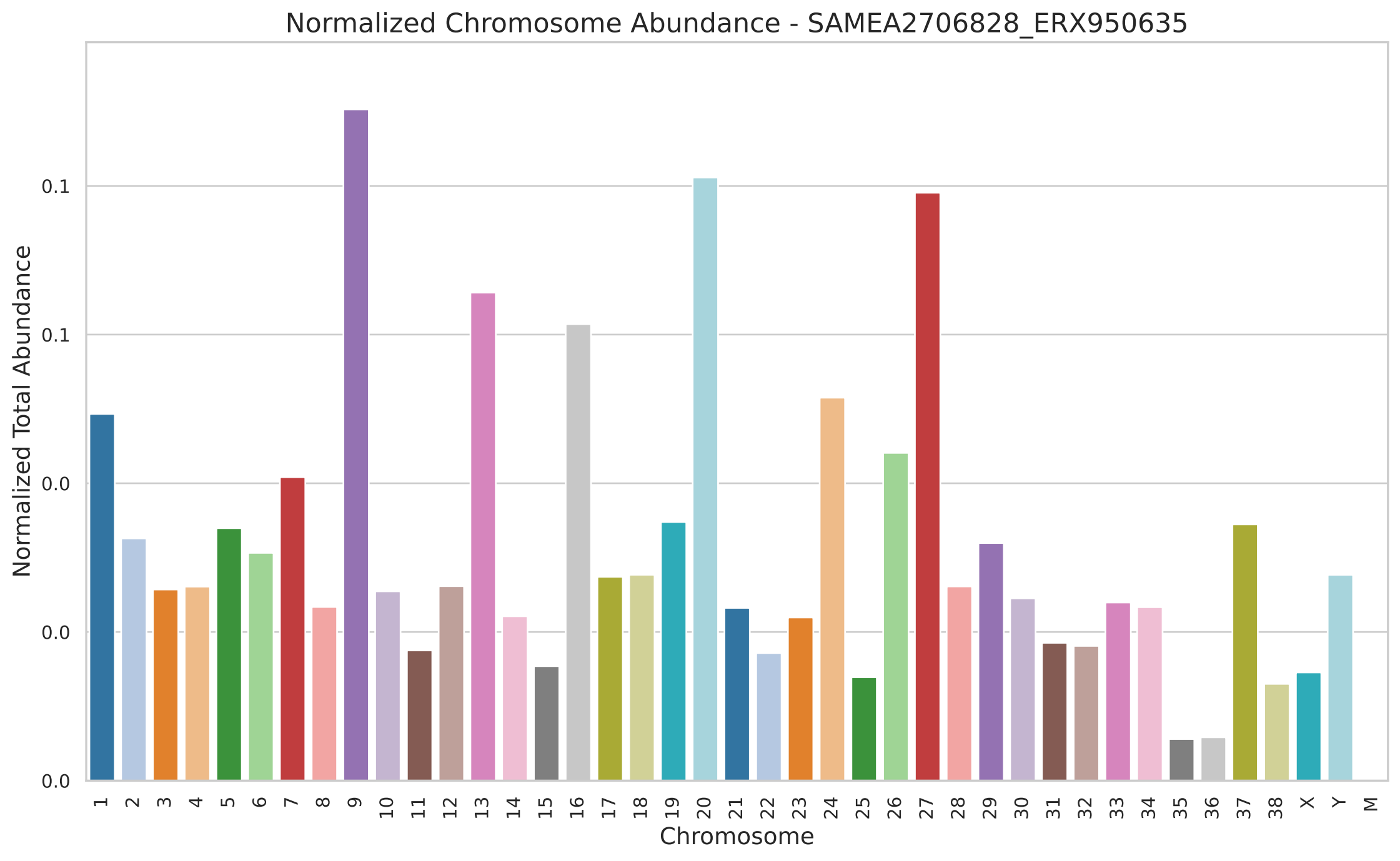

Normalized Chromosome Abundance - SAMEA2706816_ERX950623
Normalized Total Abundance
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

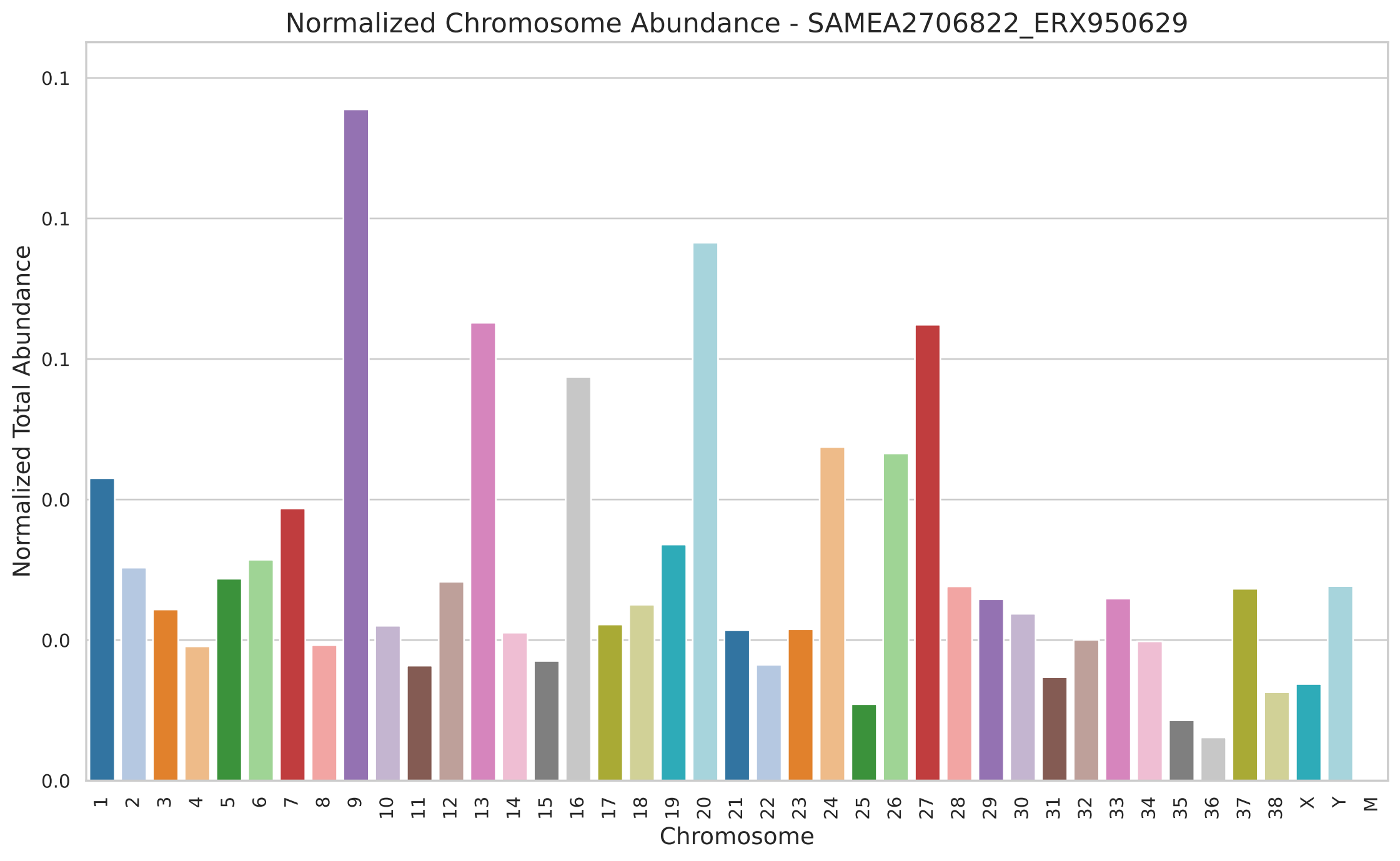

Normalized Chromosome Abundance - SAMEA2706871_ERX950582
Normalized Total Abundance
0.0
0.0
0.1
0.1
0.2
0.2
0.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

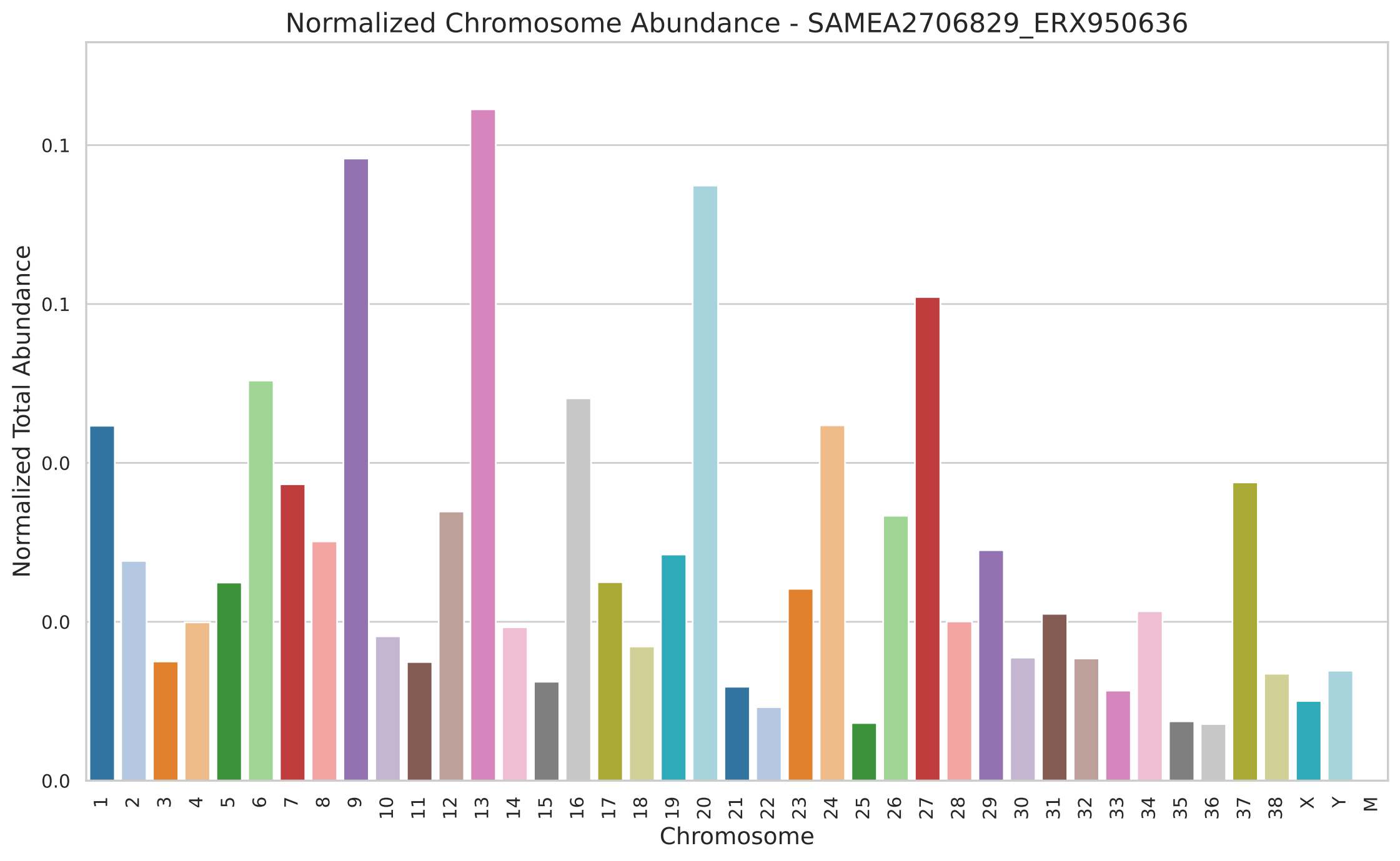

Normalized Chromosome Abundance - SAMEA2706898_ERX950609
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

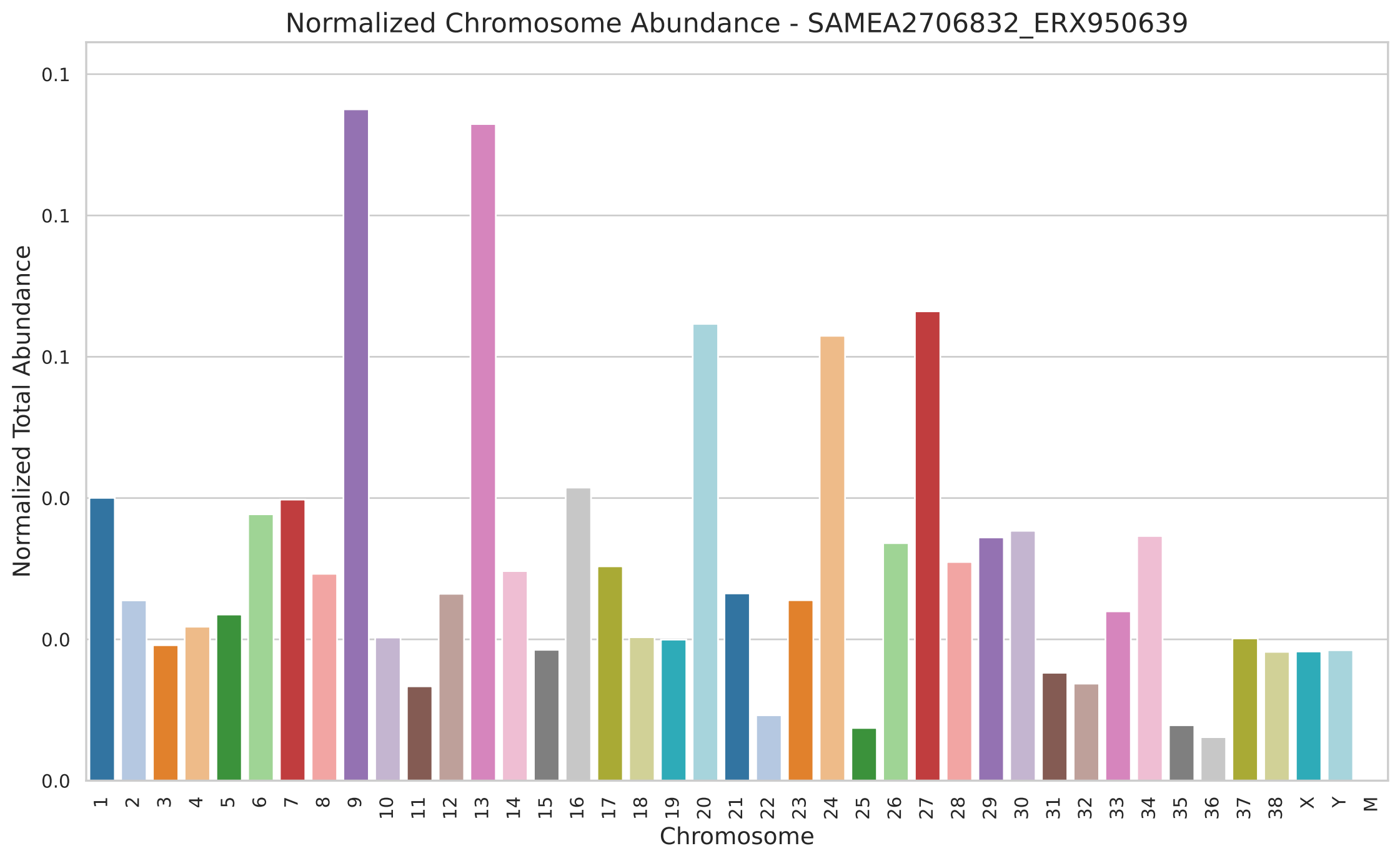

Normalized Chromosome Abundance - SAMEA2706820_ERX950627
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

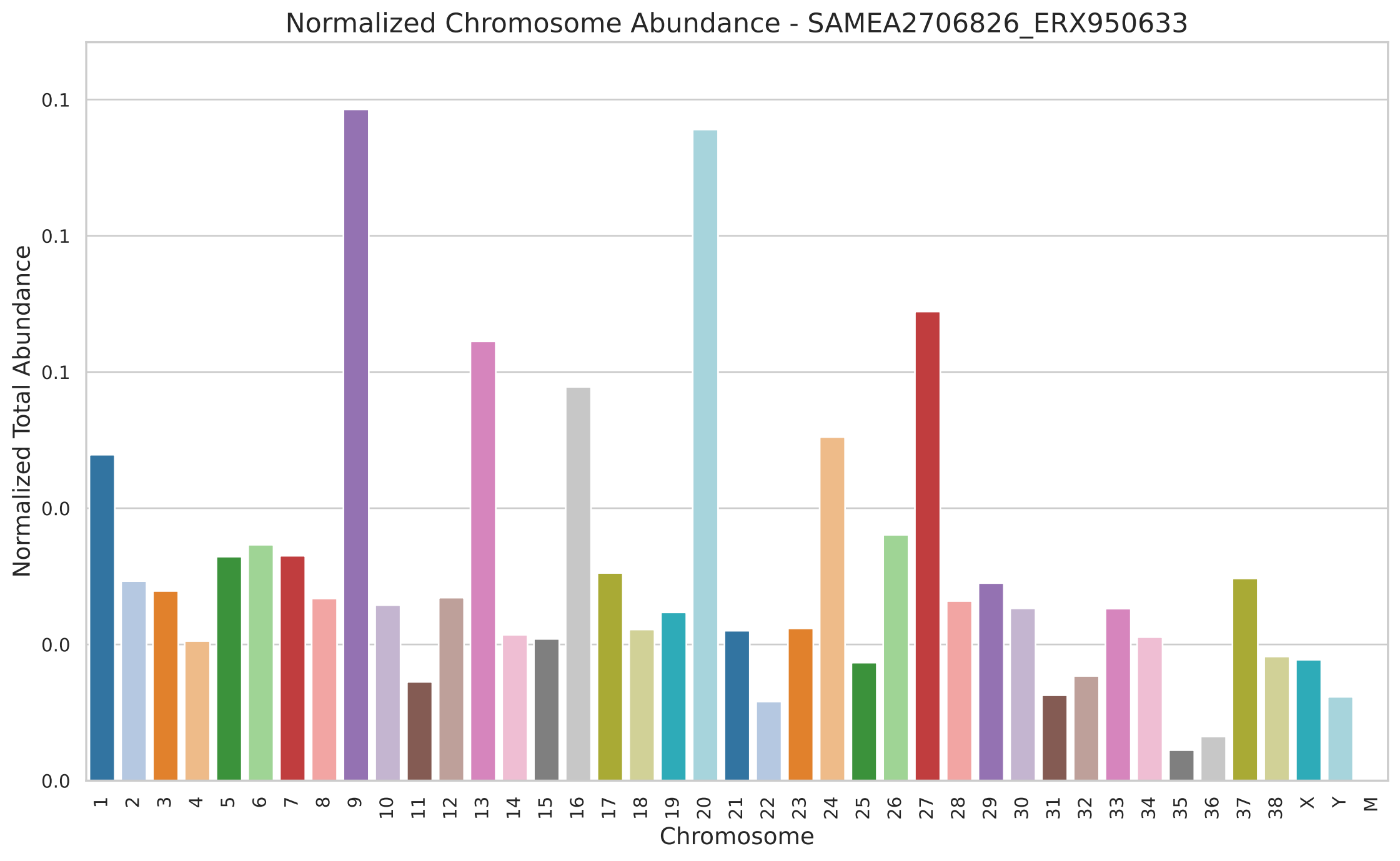

Normalized Chromosome Abundance - SAMEA2706821_ERX950628
Normalized Total Abundance
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

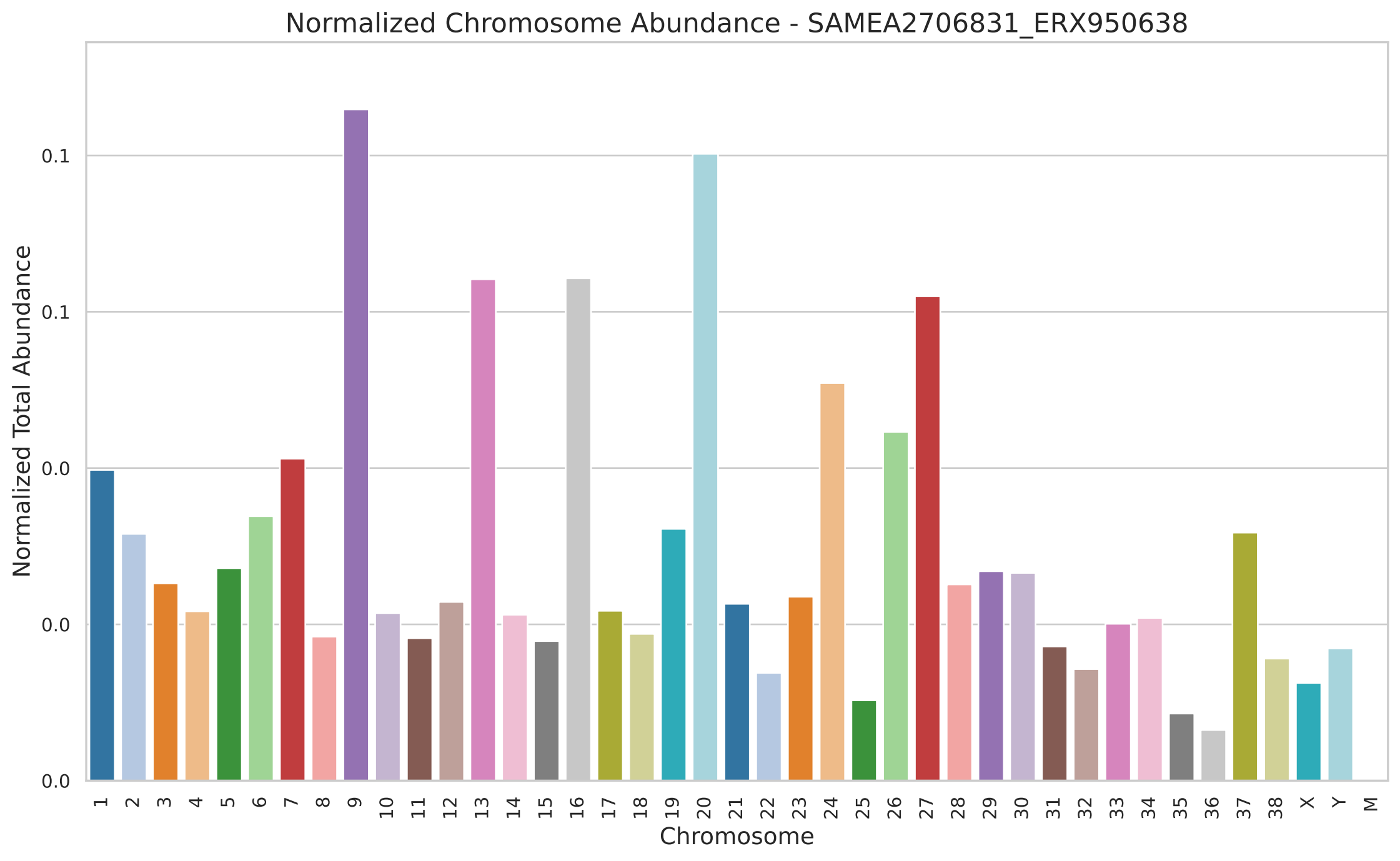

Normalized Chromosome Abundance - SAMEA2706828_ERX950635
Normalized Total Abundance
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

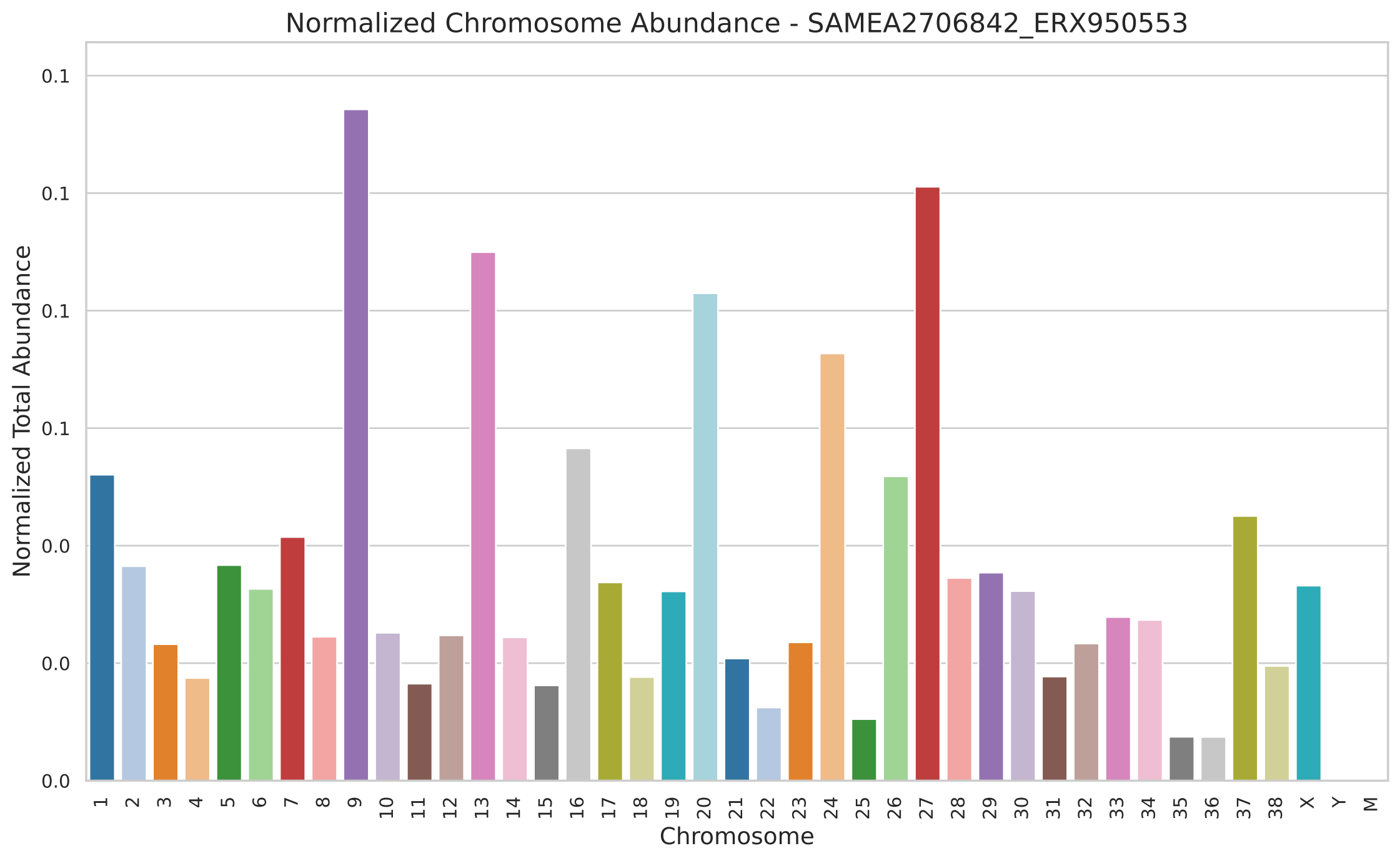

Normalized Chromosome Abundance - SAMEA2706822_ERX950629
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

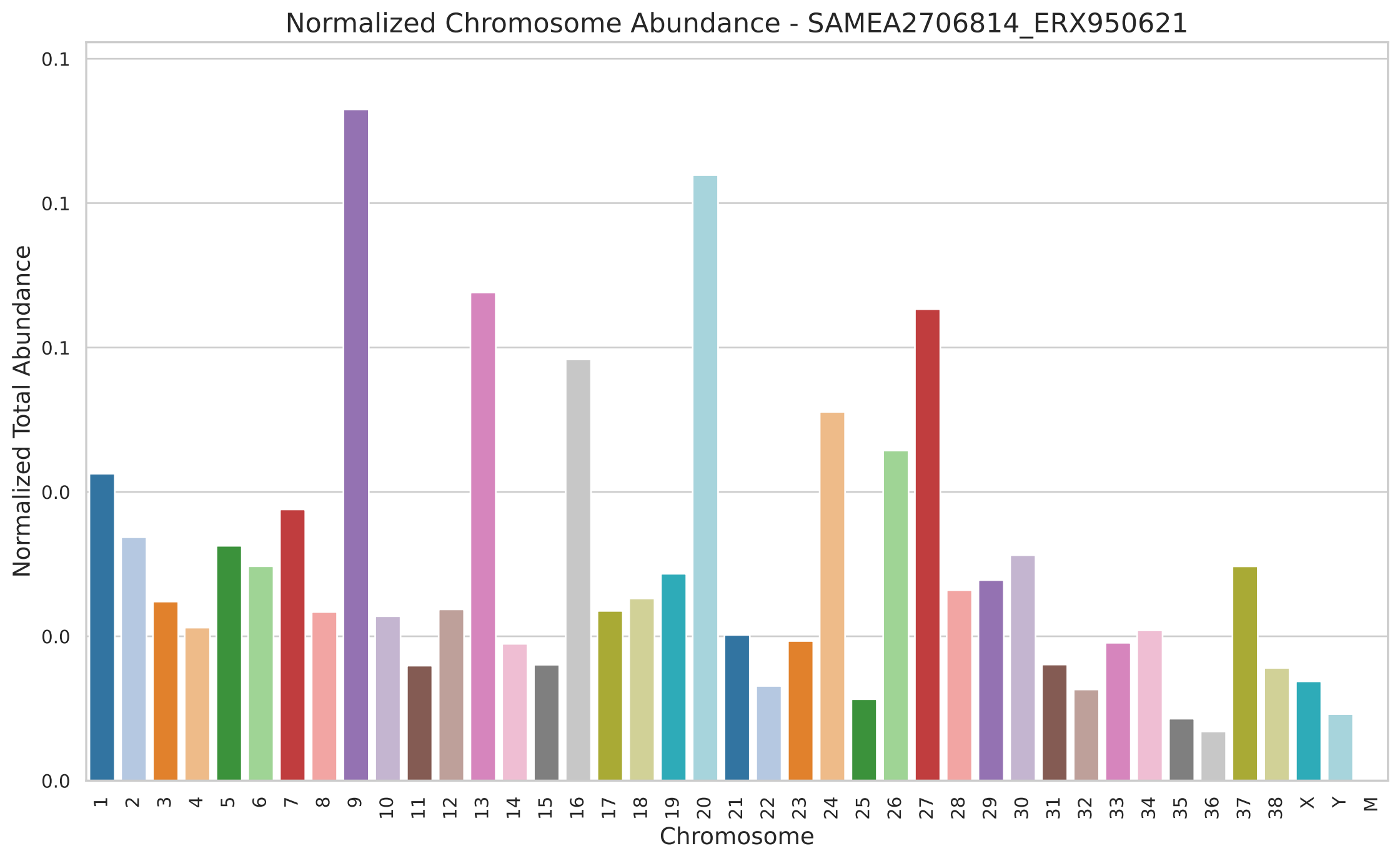

Normalized Chromosome Abundance - SAMEA2706829_ERX950636
Normalized Total Abundance
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

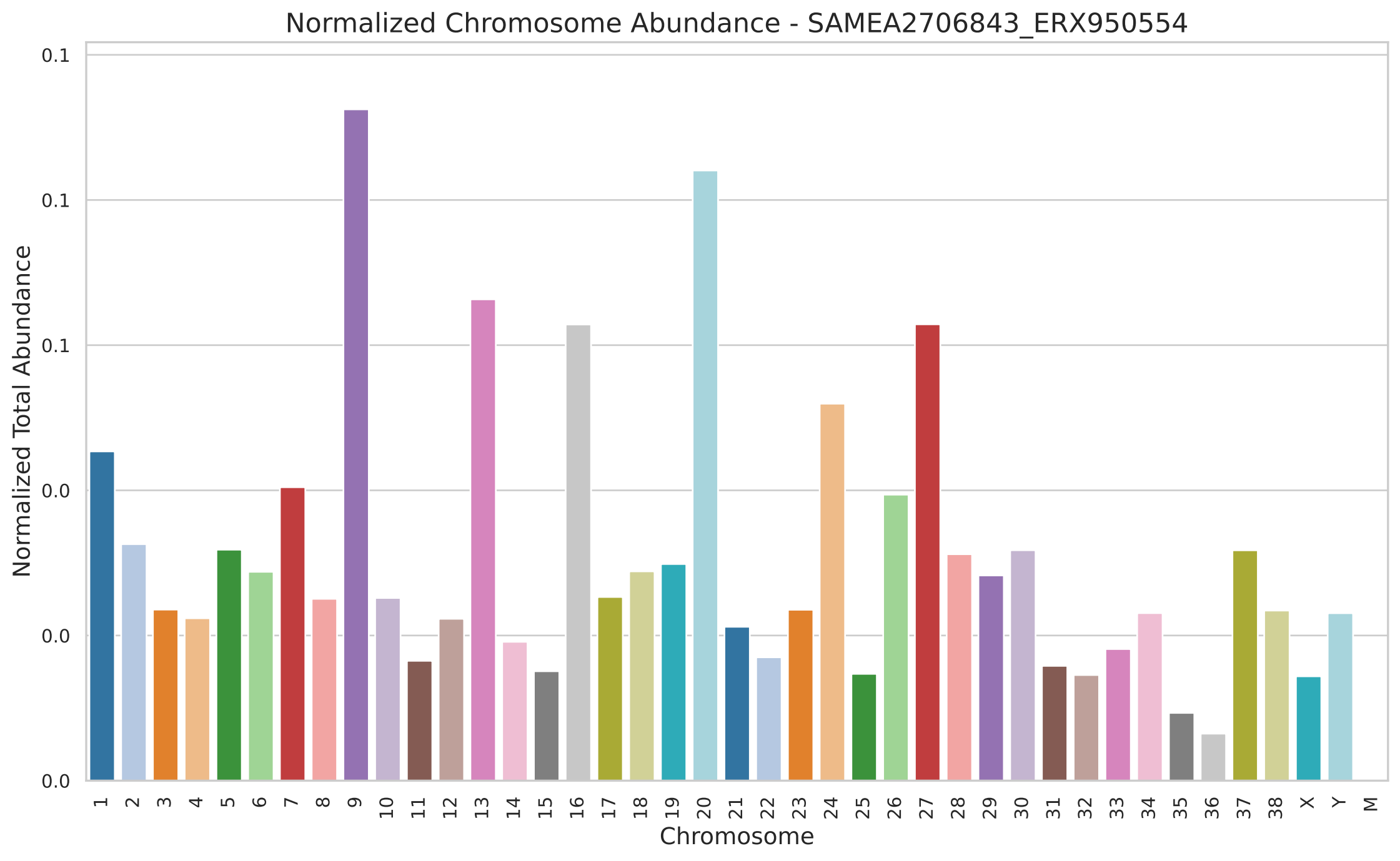

Normalized Chromosome Abundance - SAMEA2706832_ERX950639
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

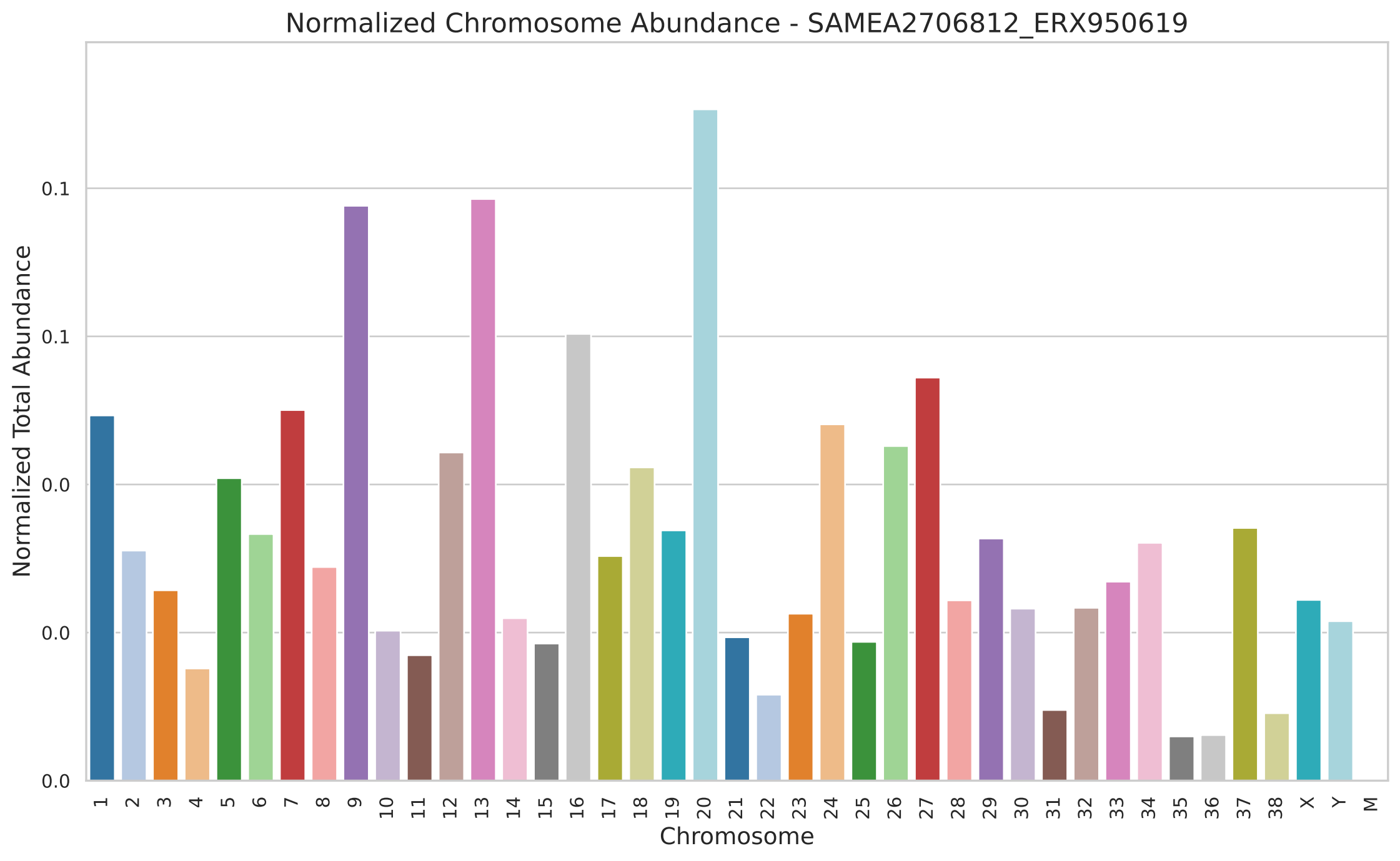

Normalized Chromosome Abundance - SAMEA2706826_ERX950633
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

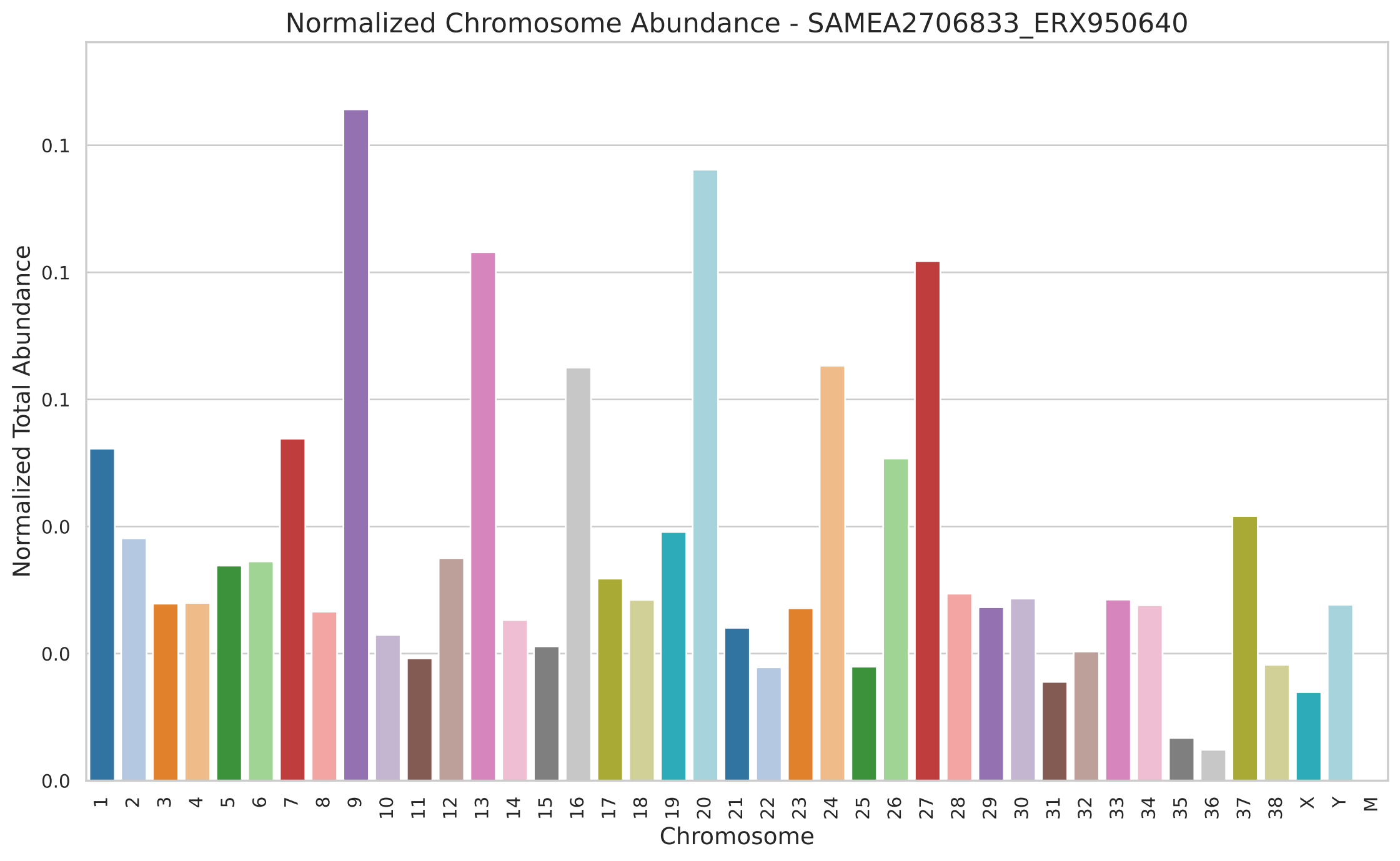

Normalized Chromosome Abundance - SAMEA2706831_ERX950638
Normalized Total Abundance
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

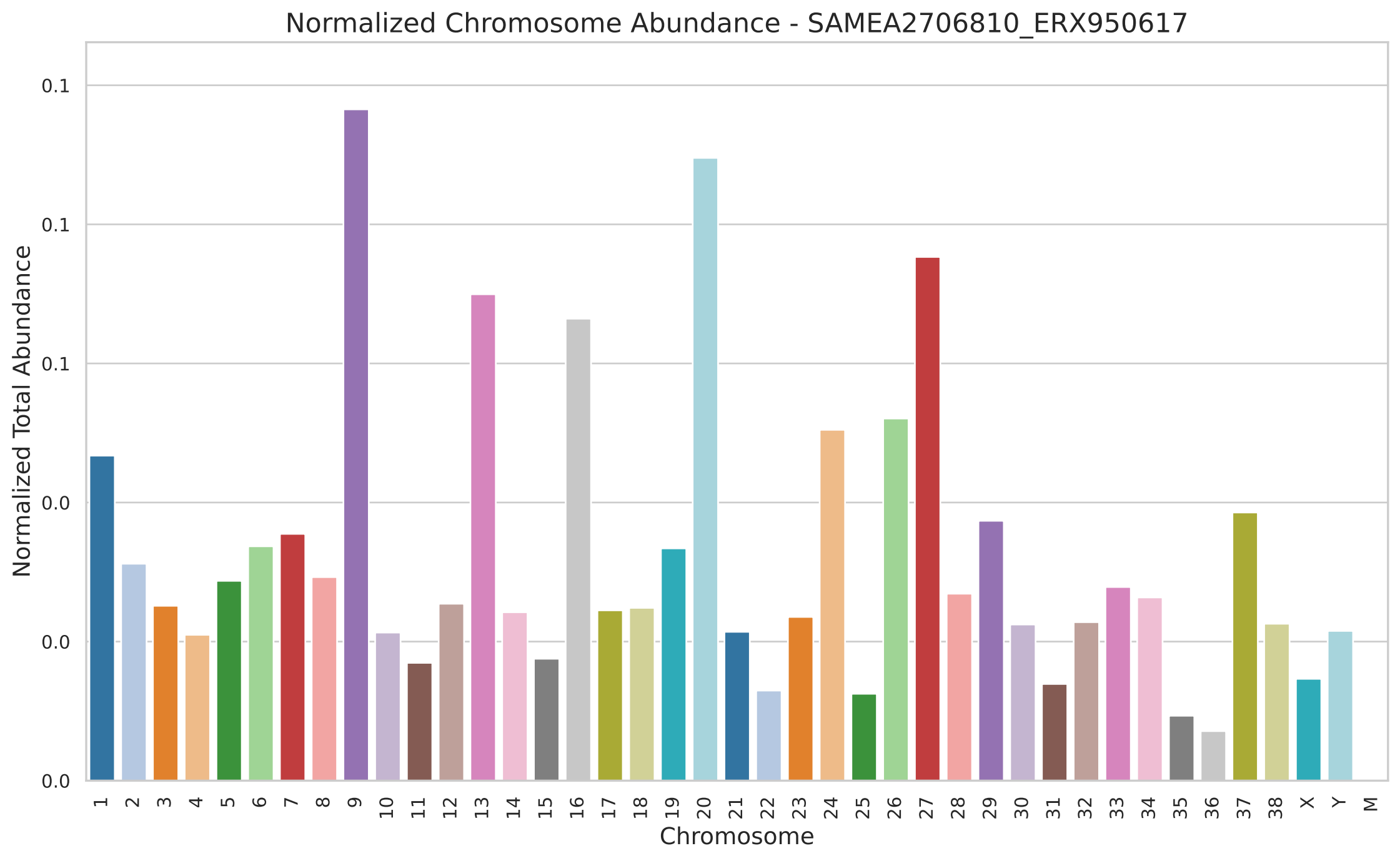

Normalized Chromosome Abundance - SAMEA2706842_ERX950553
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

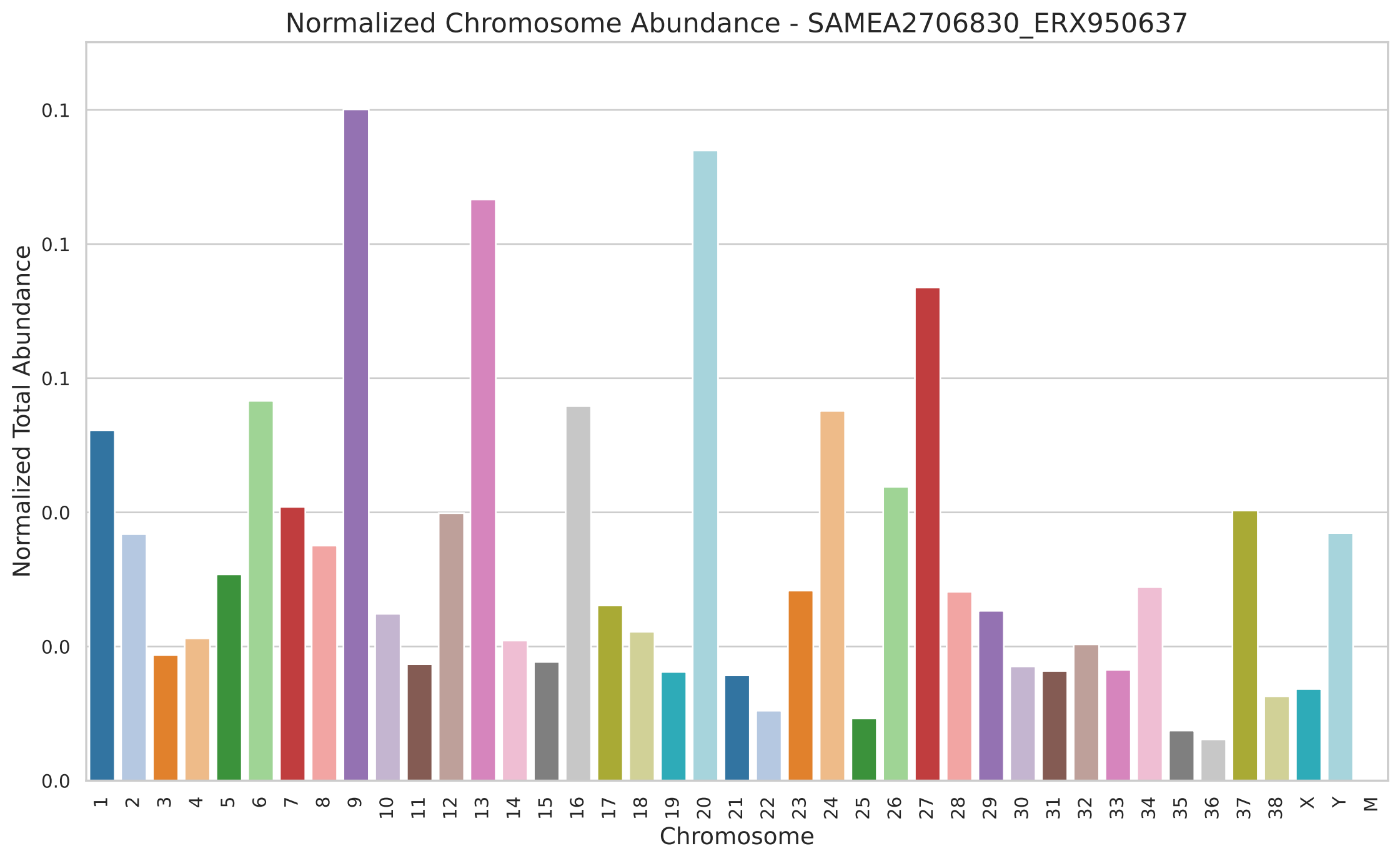

Normalized Chromosome Abundance - SAMEA2706814_ERX950621
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

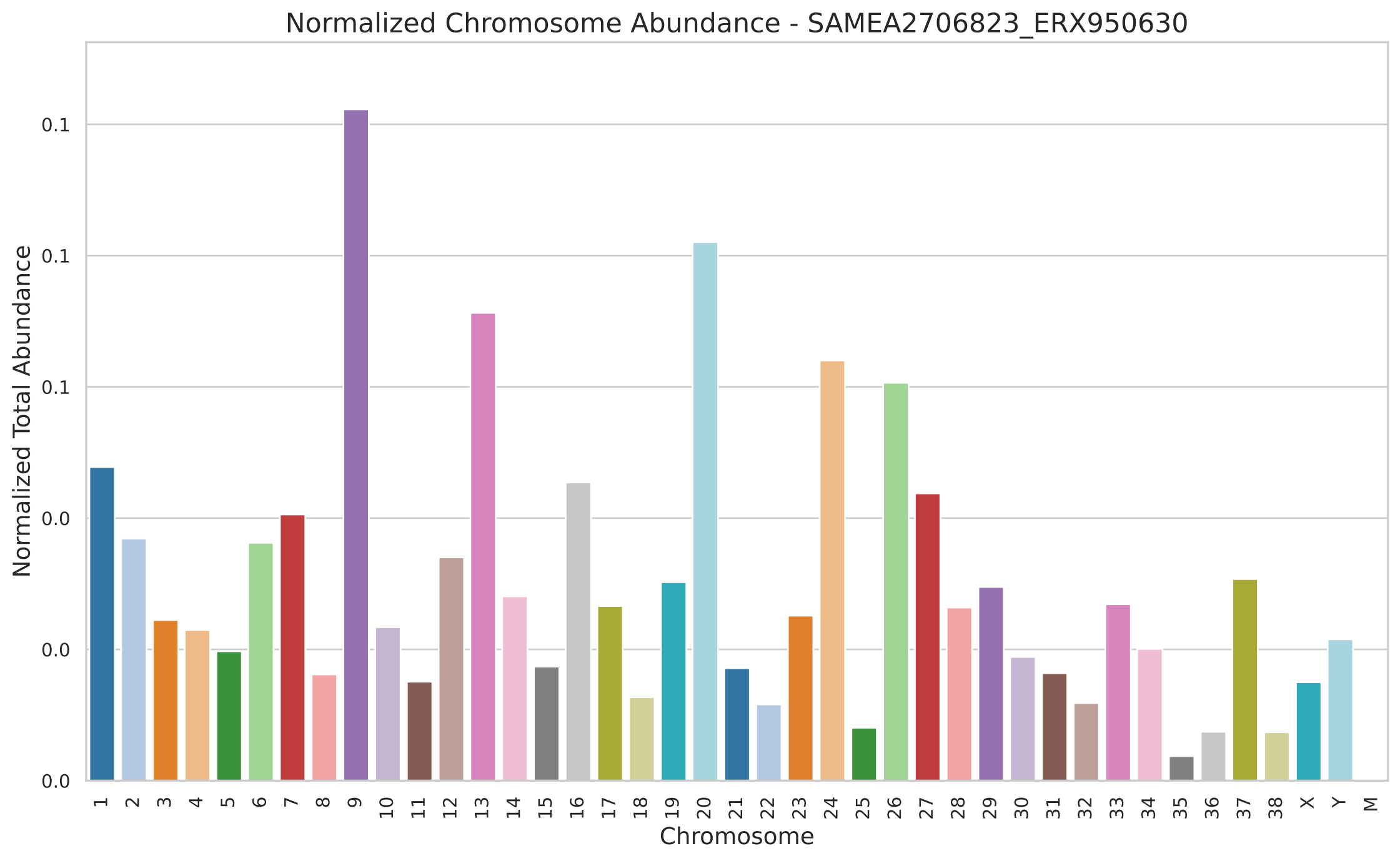

Normalized Chromosome Abundance - SAMEA2706843_ERX950554
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

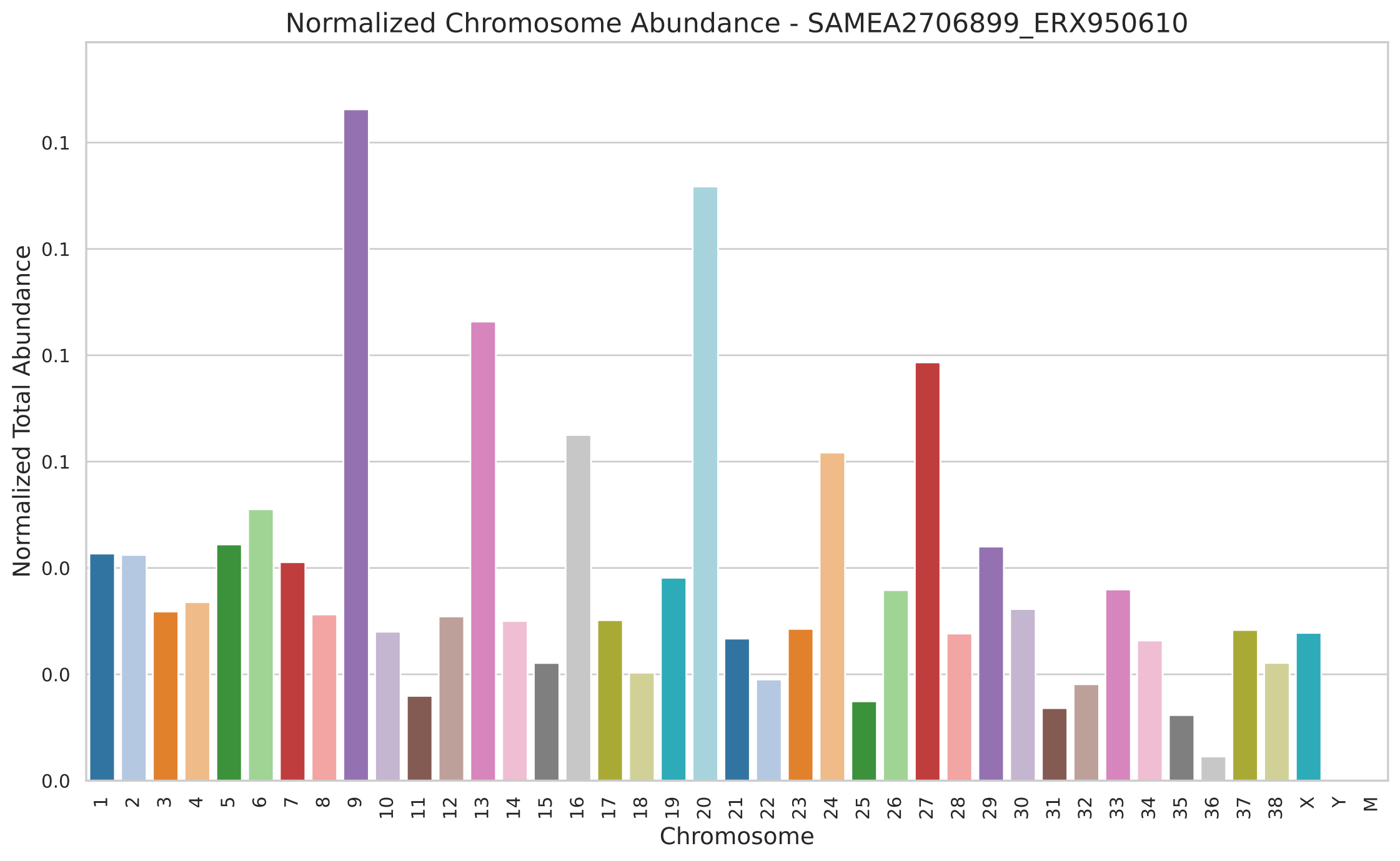

Normalized Chromosome Abundance - SAMEA2706812_ERX950619
Normalized Total Abundance
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

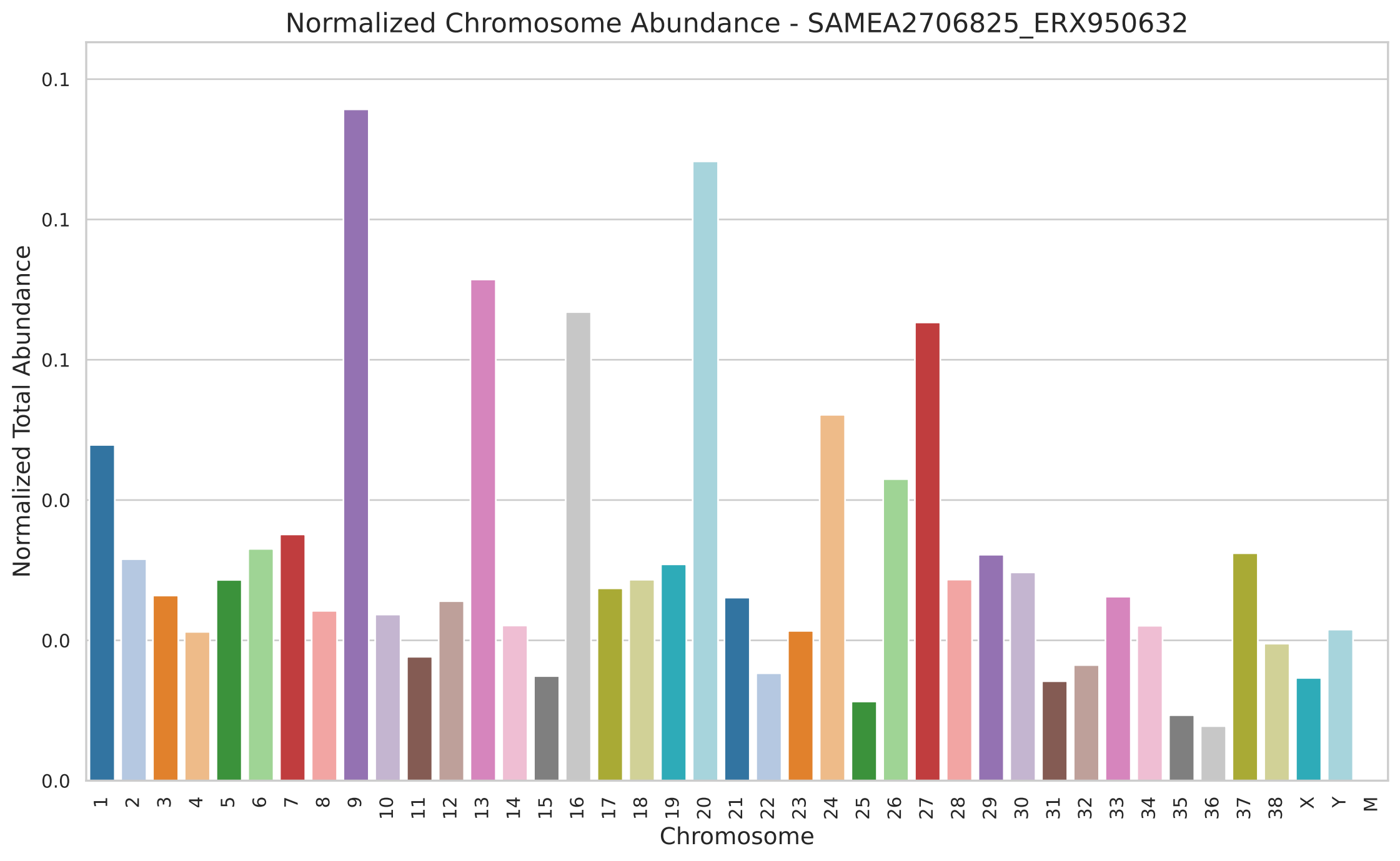

Normalized Chromosome Abundance - SAMEA2706833_ERX950640
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

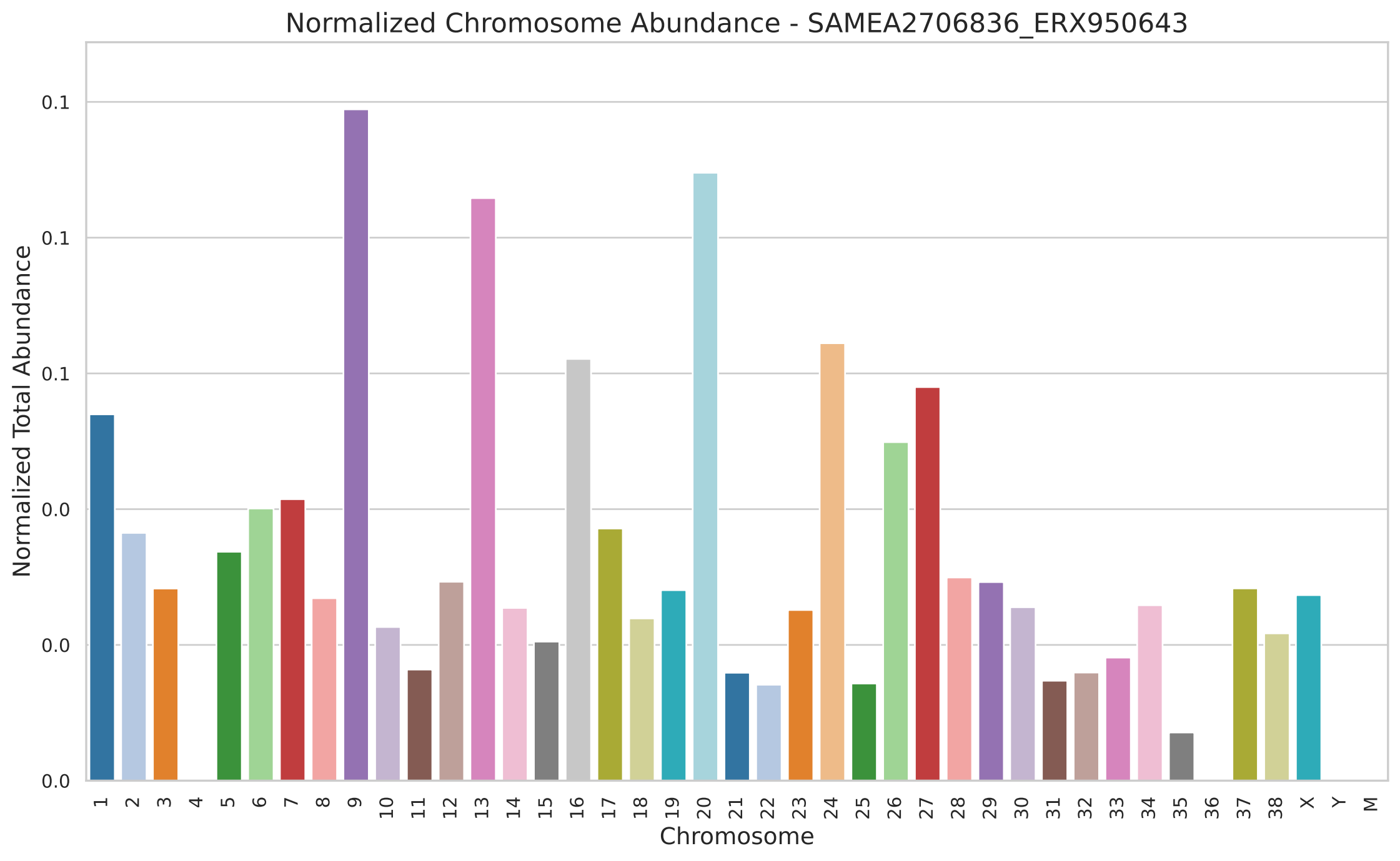

Normalized Chromosome Abundance - SAMEA2706810_ERX950617
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

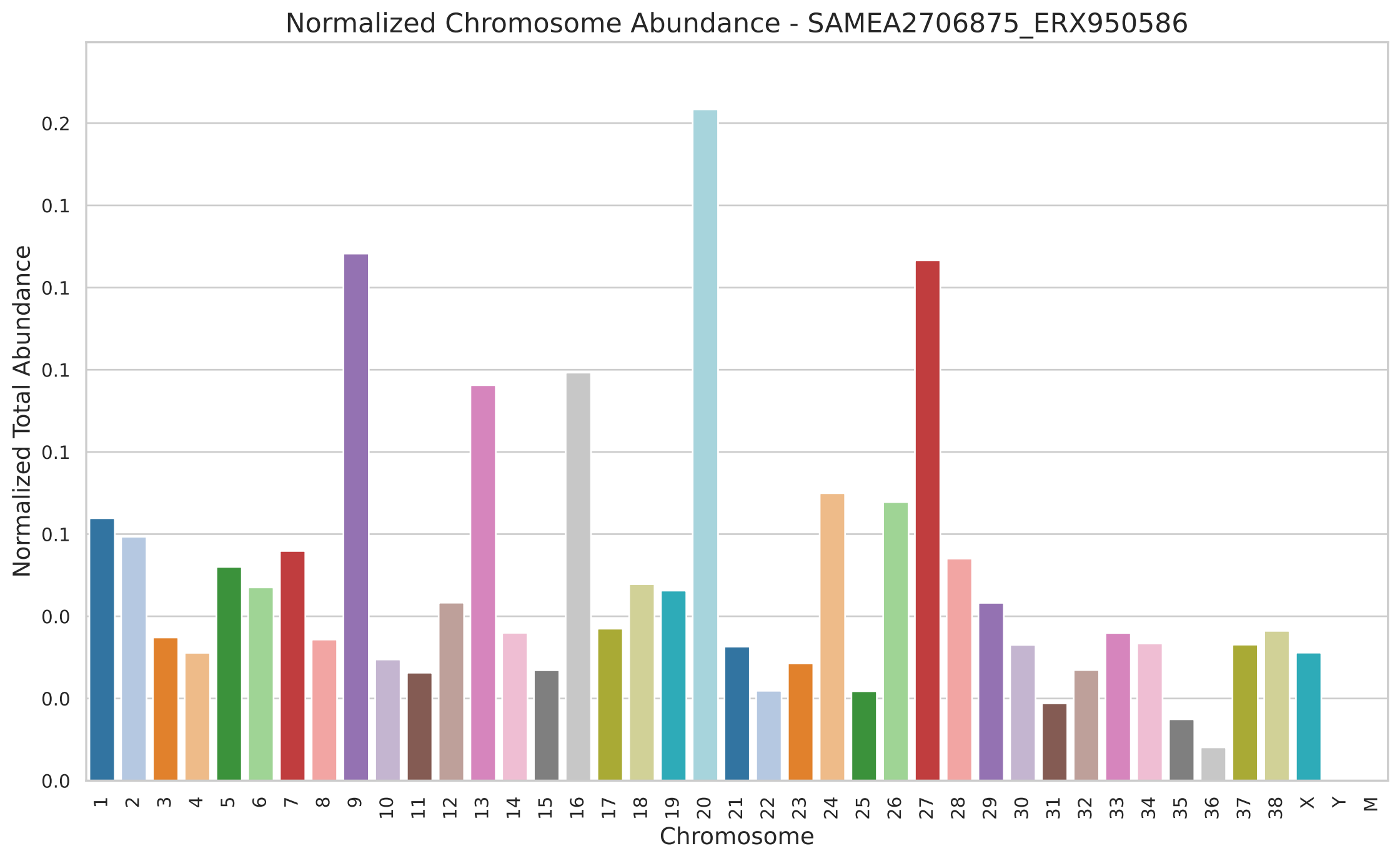

Normalized Chromosome Abundance - SAMEA2706830_ERX950637
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

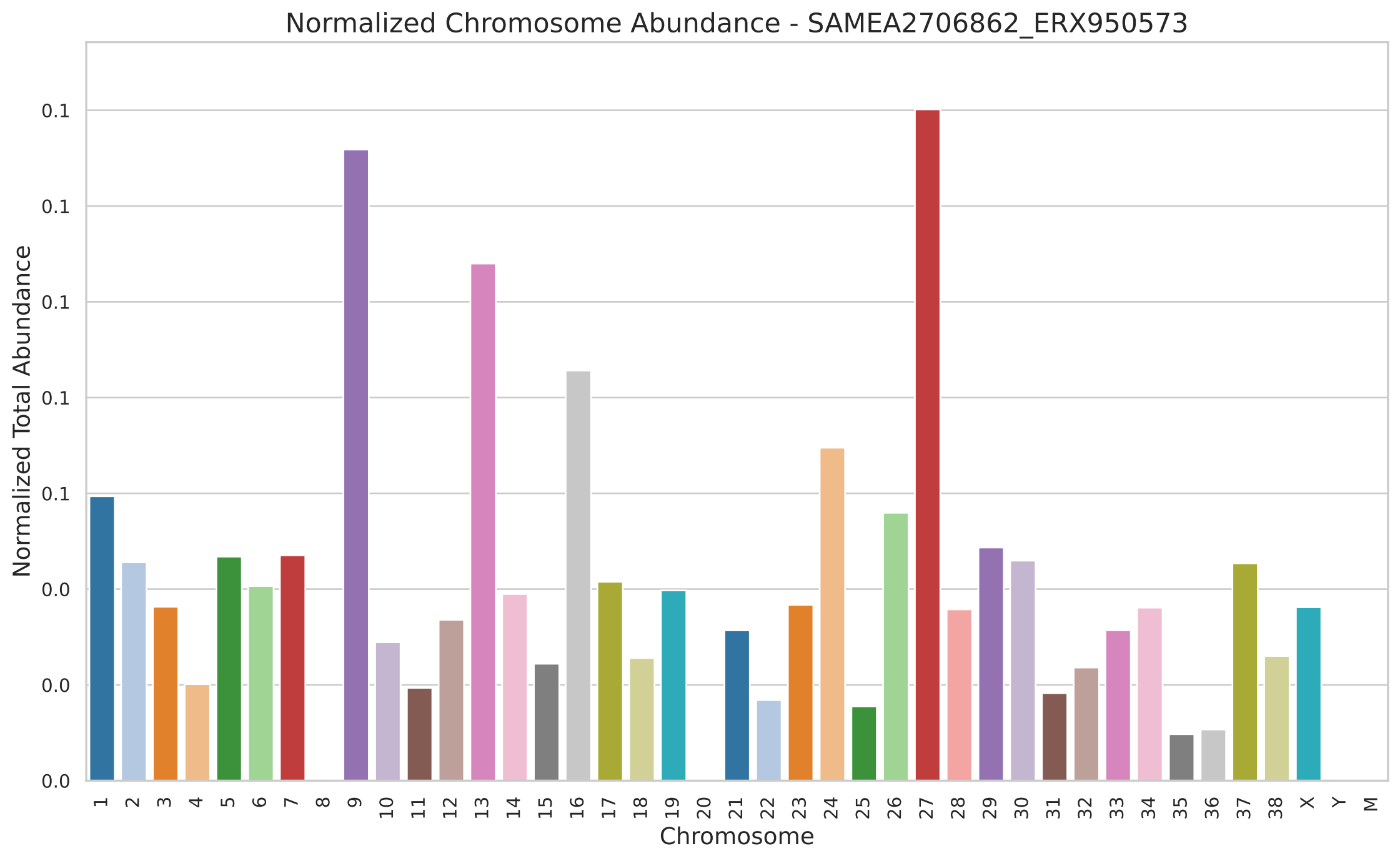

Normalized Chromosome Abundance - SAMEA2706823_ERX950630
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

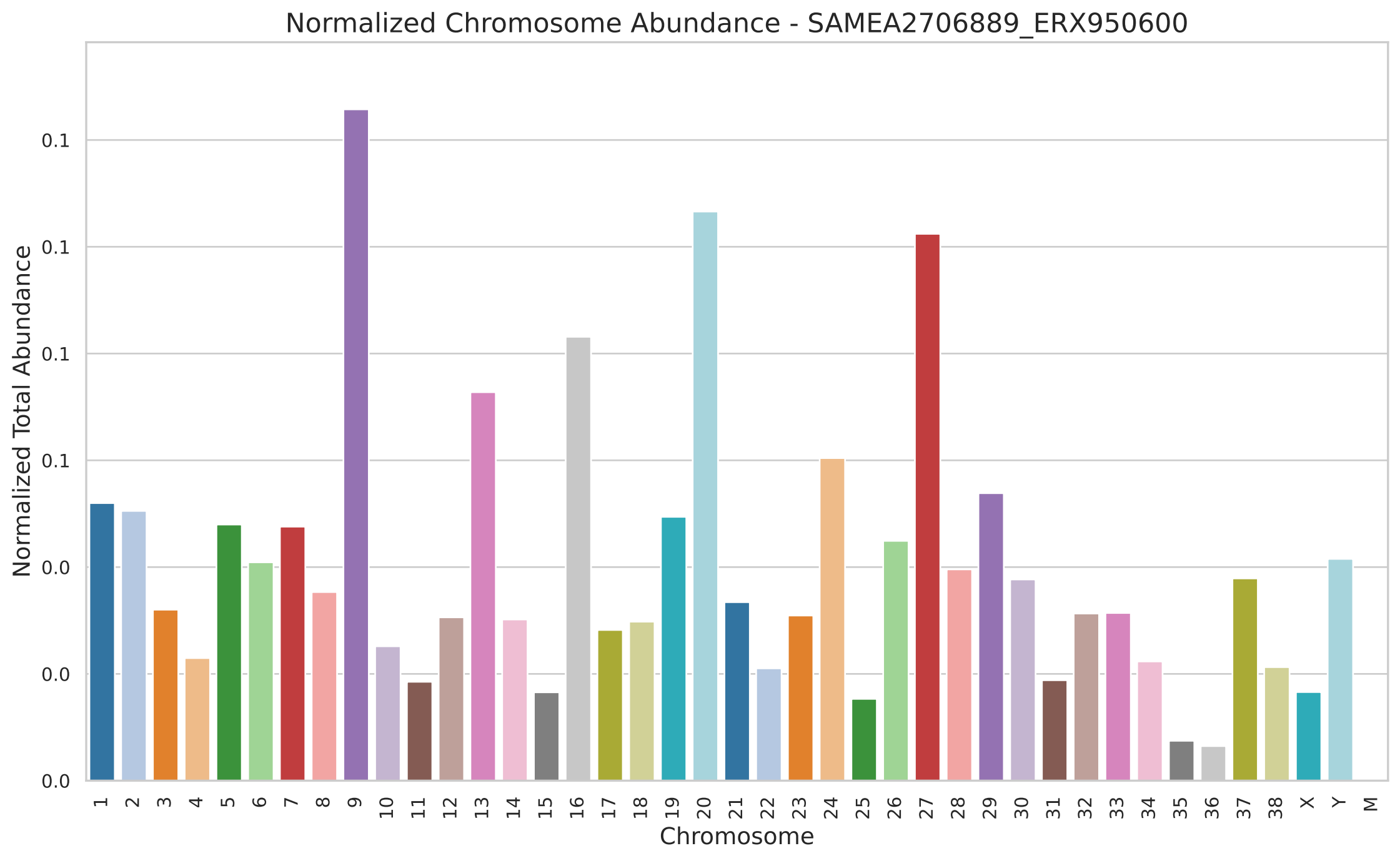

Normalized Chromosome Abundance - SAMEA2706899_ERX950610
Normalized Total Abundance
0.0
0.0
0.1
0.1
0.1
0.1
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

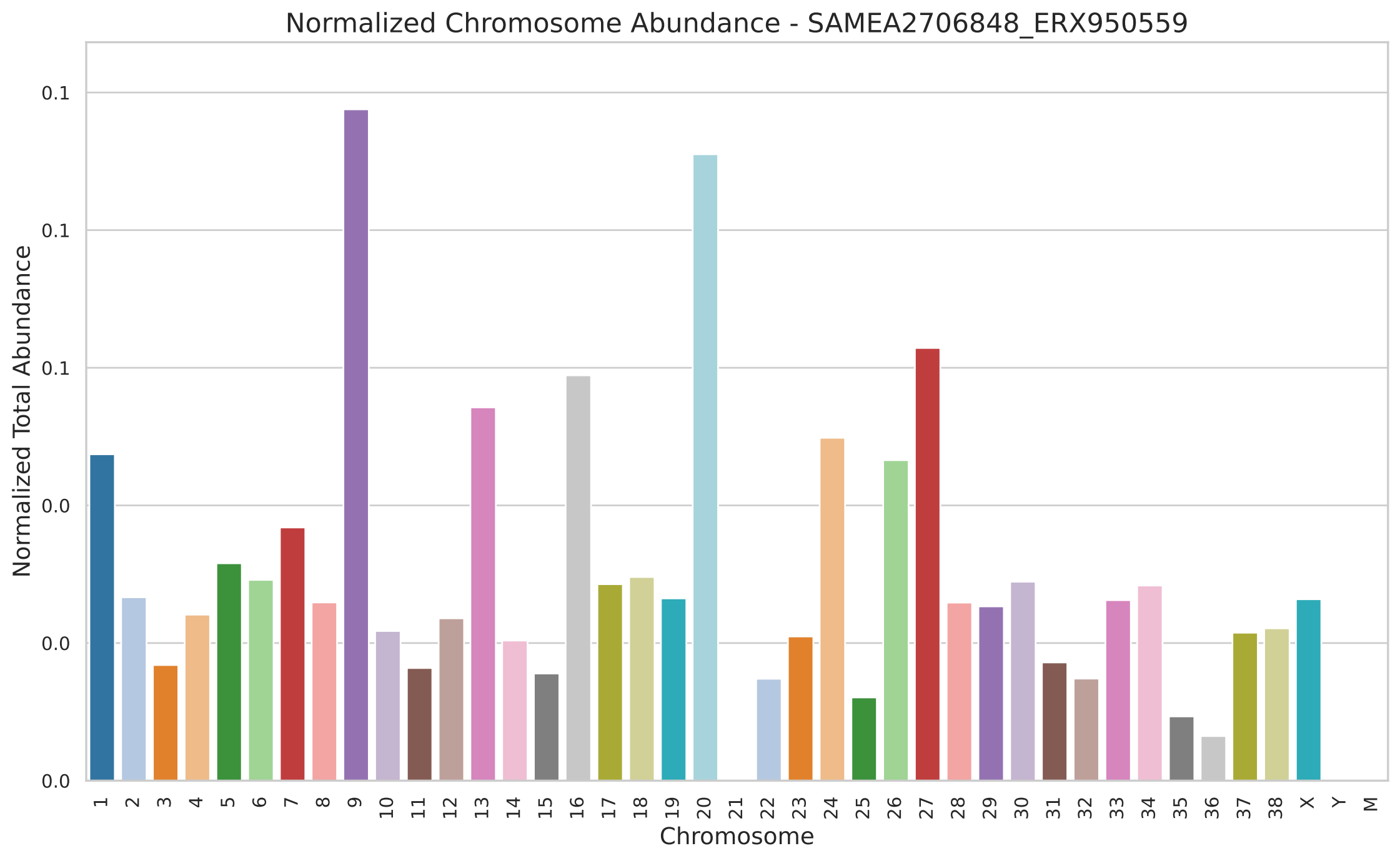

Normalized Chromosome Abundance - SAMEA2706825_ERX950632
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

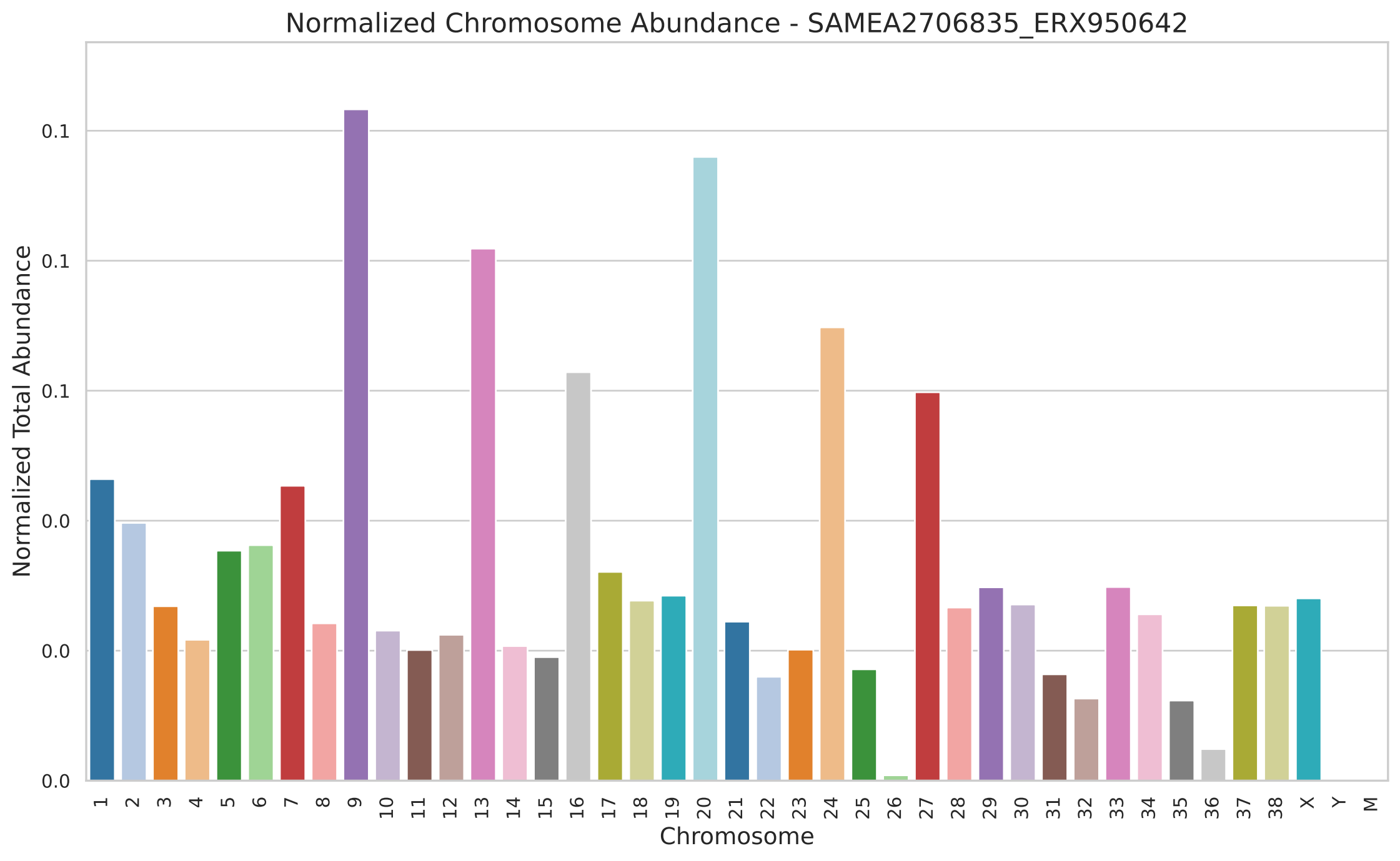

Normalized Chromosome Abundance - SAMEA2706836_ERX950643
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

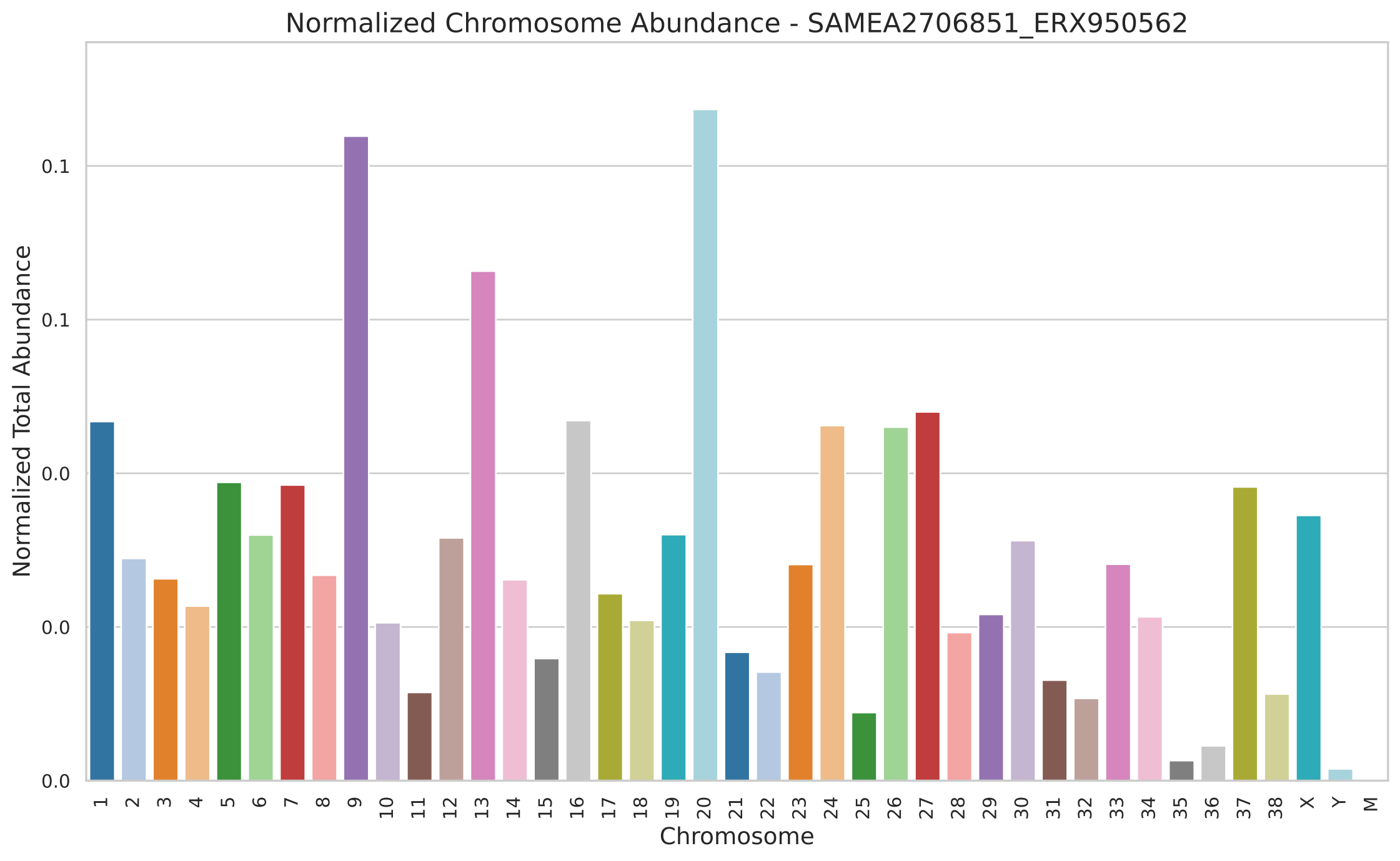

Normalized Chromosome Abundance - SAMEA2706875_ERX950586
Normalized Total Abundance
0.2
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

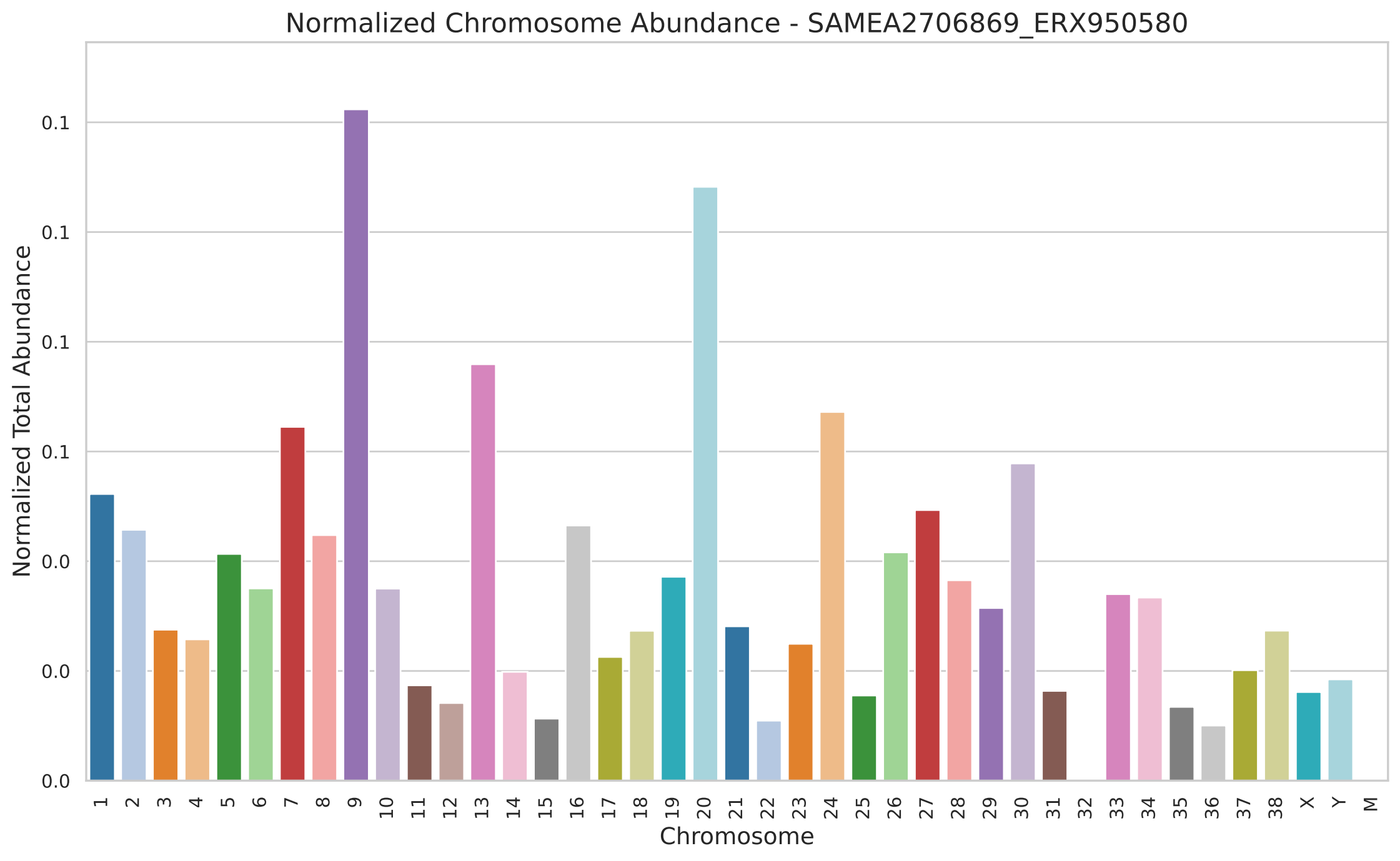

Normalized Chromosome Abundance - SAMEA2706862_ERX950573
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

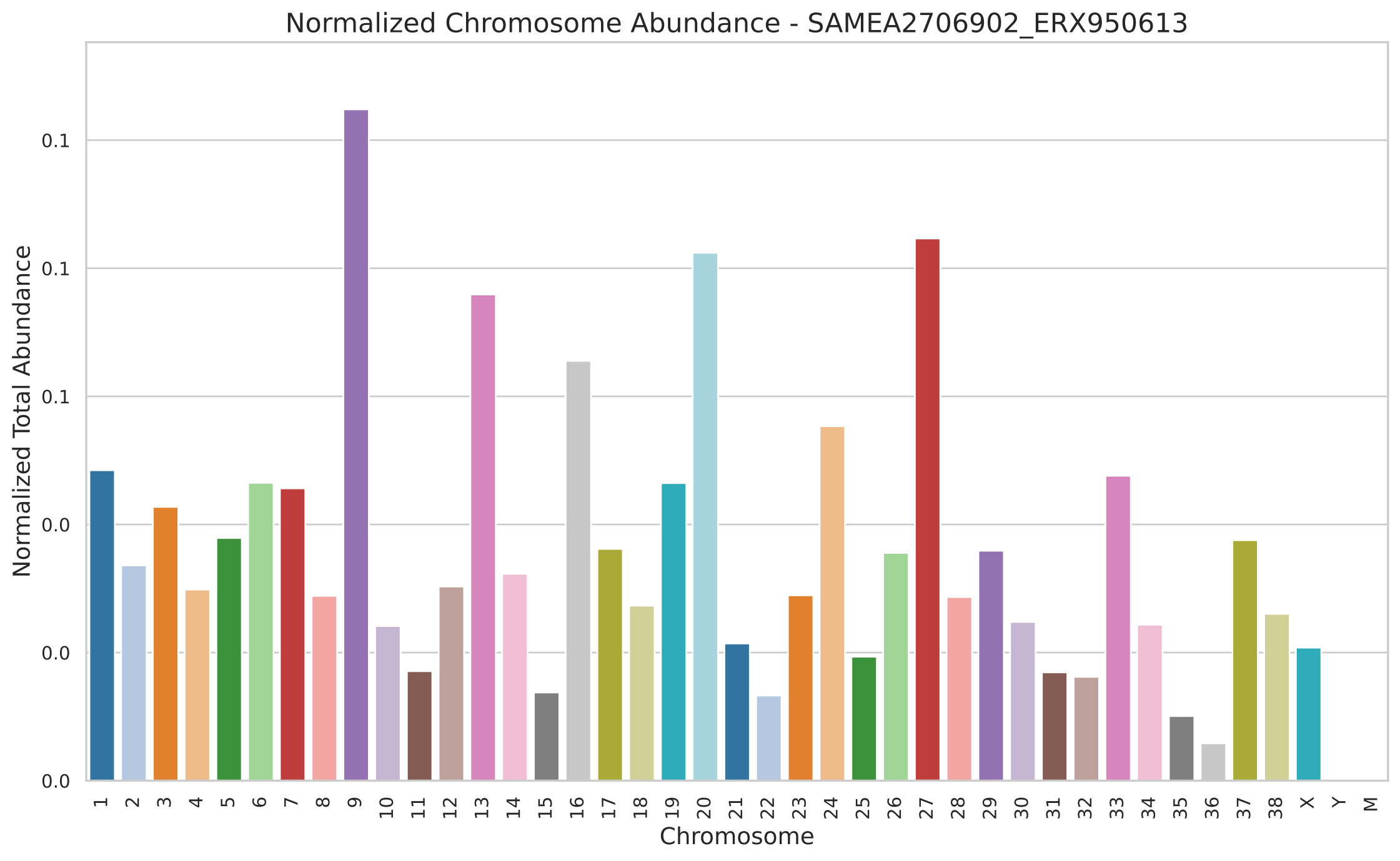

Normalized Chromosome Abundance - SAMEA2706889_ERX950600
Normalized Total Abundance
0.0
0.0
0.1
0.1
0.1
0.1
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

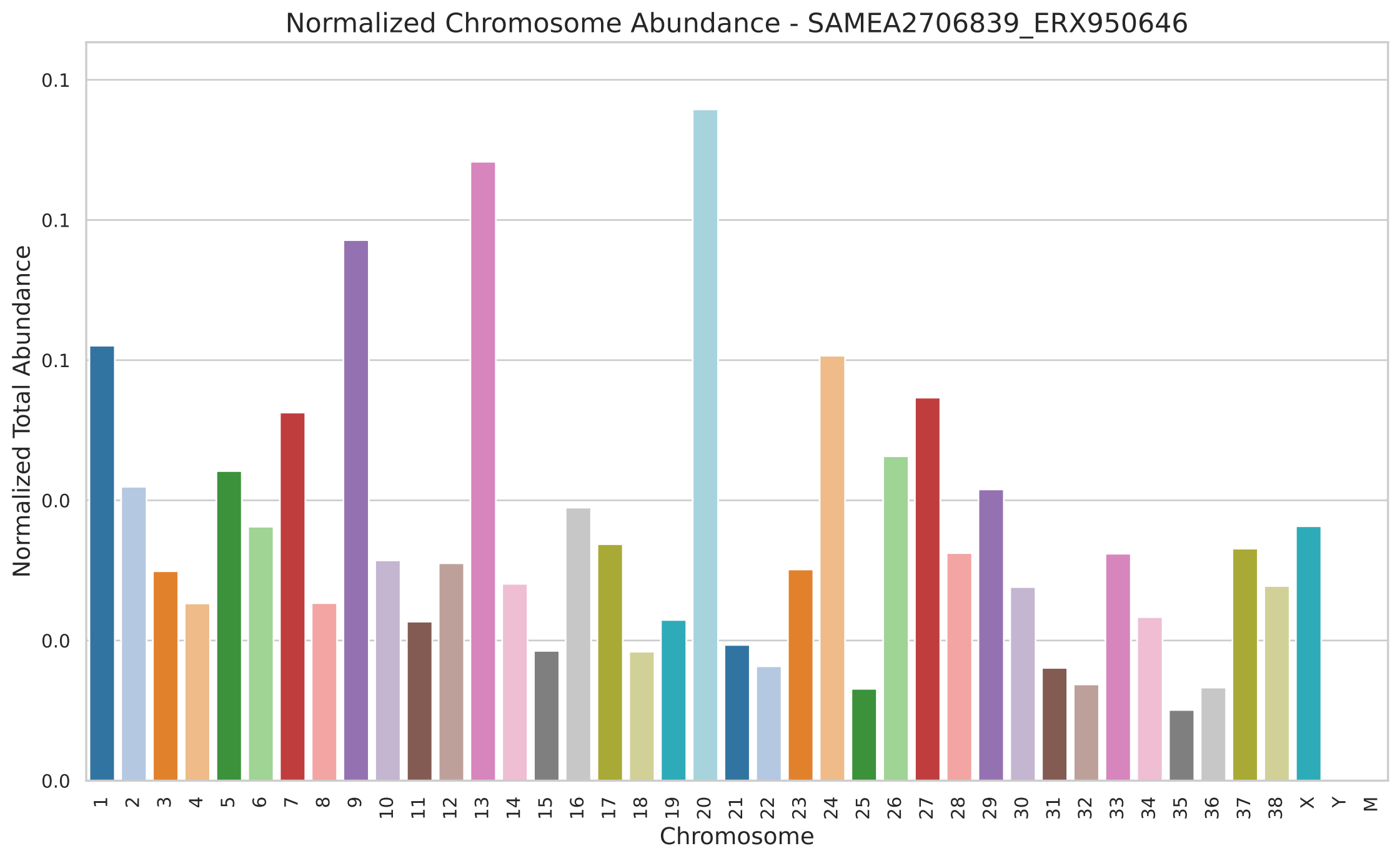

Normalized Chromosome Abundance - SAMEA2706848_ERX950559
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

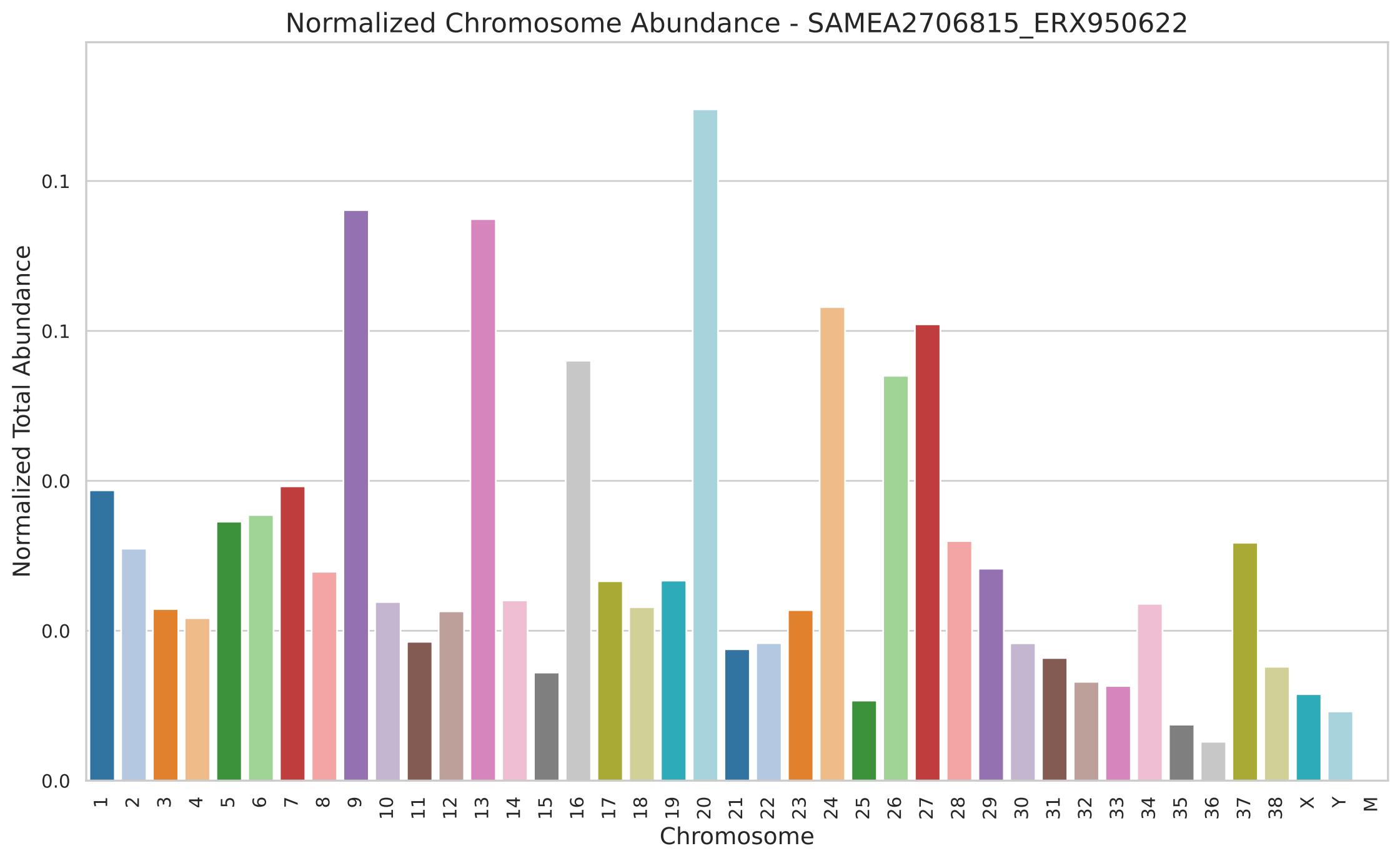

Normalized Chromosome Abundance - SAMEA2706835_ERX950642
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

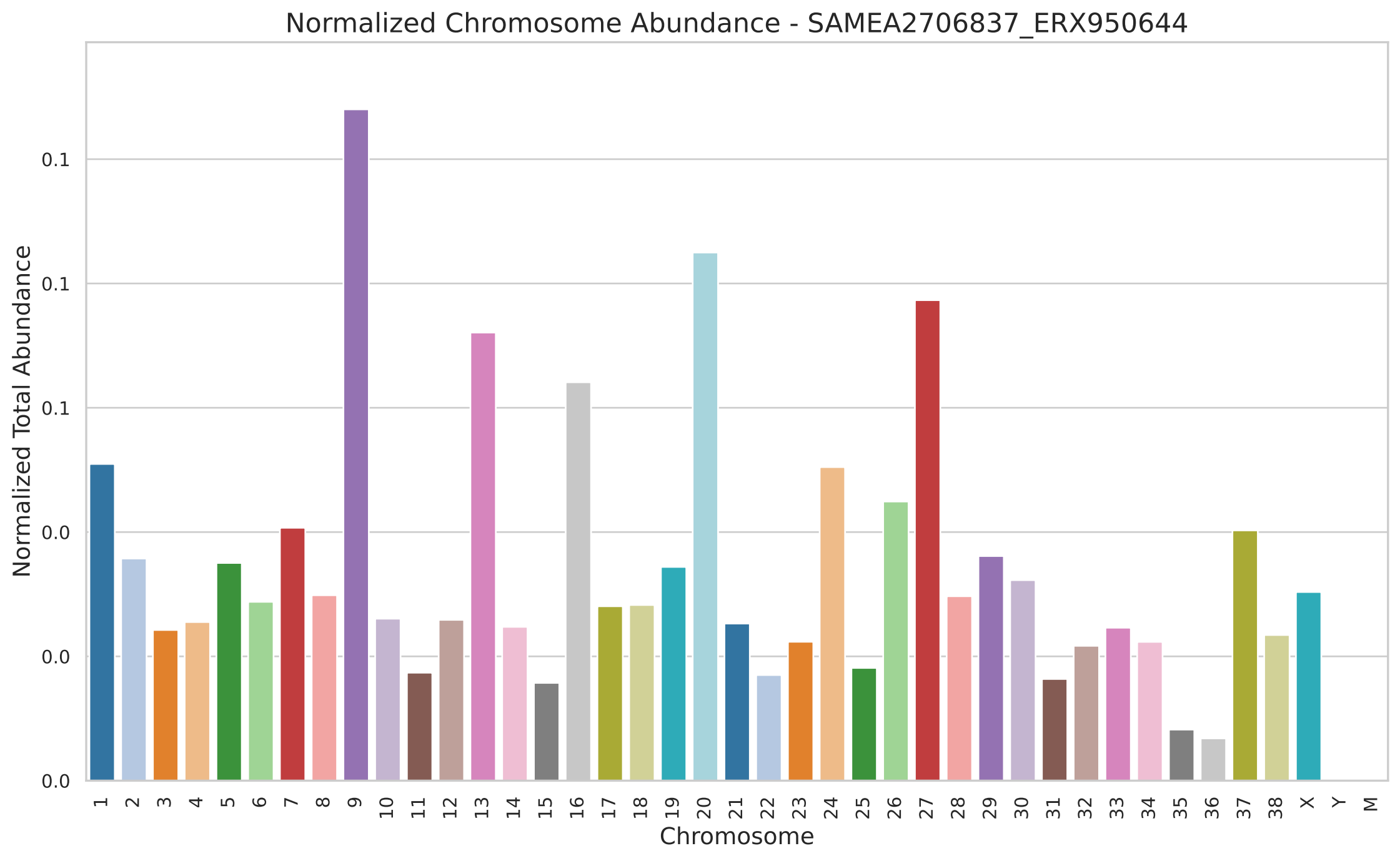

Normalized Chromosome Abundance - SAMEA2706851_ERX950562
Normalized Total Abundance
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

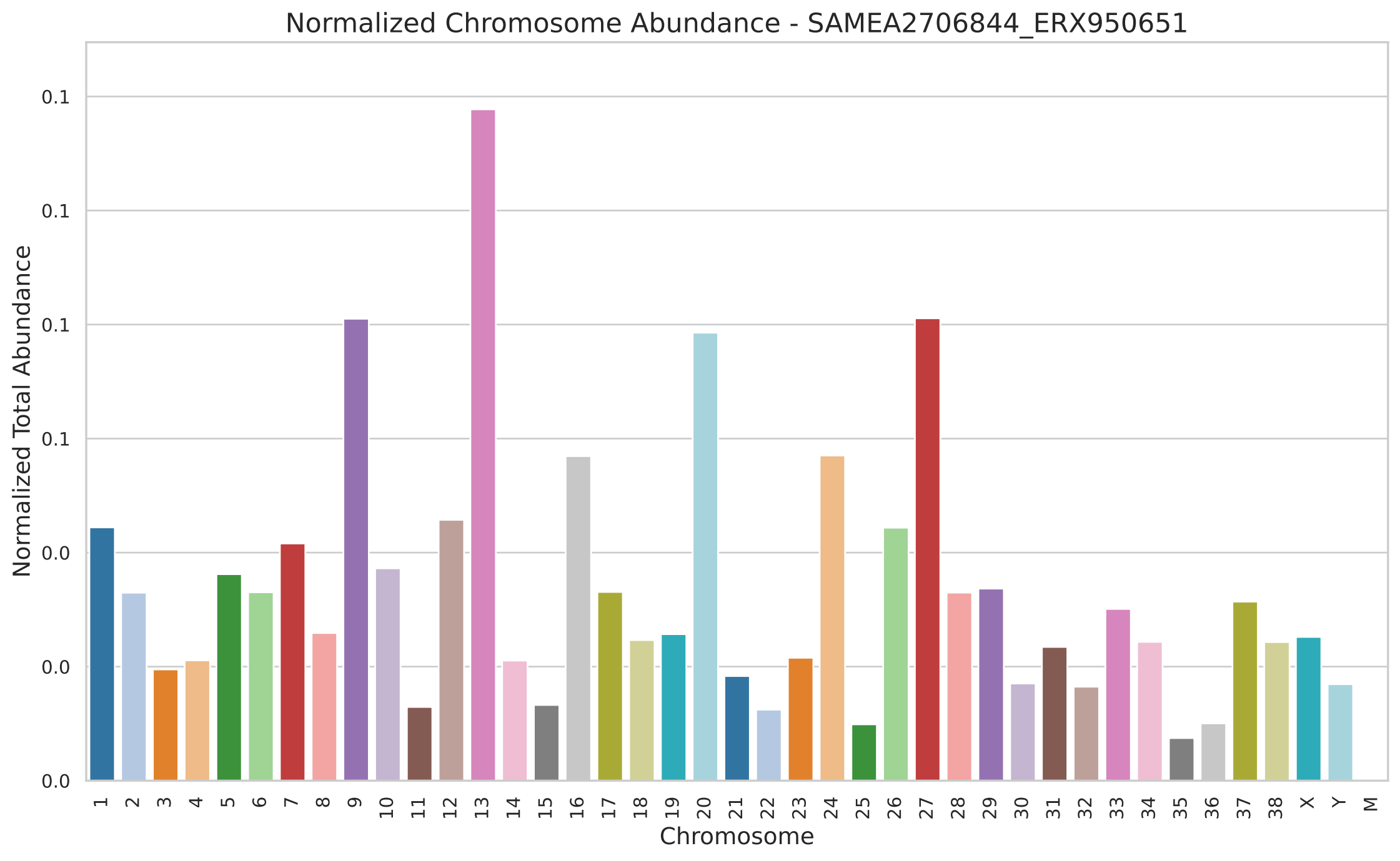

Normalized Chromosome Abundance - SAMEA2706869_ERX950580
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

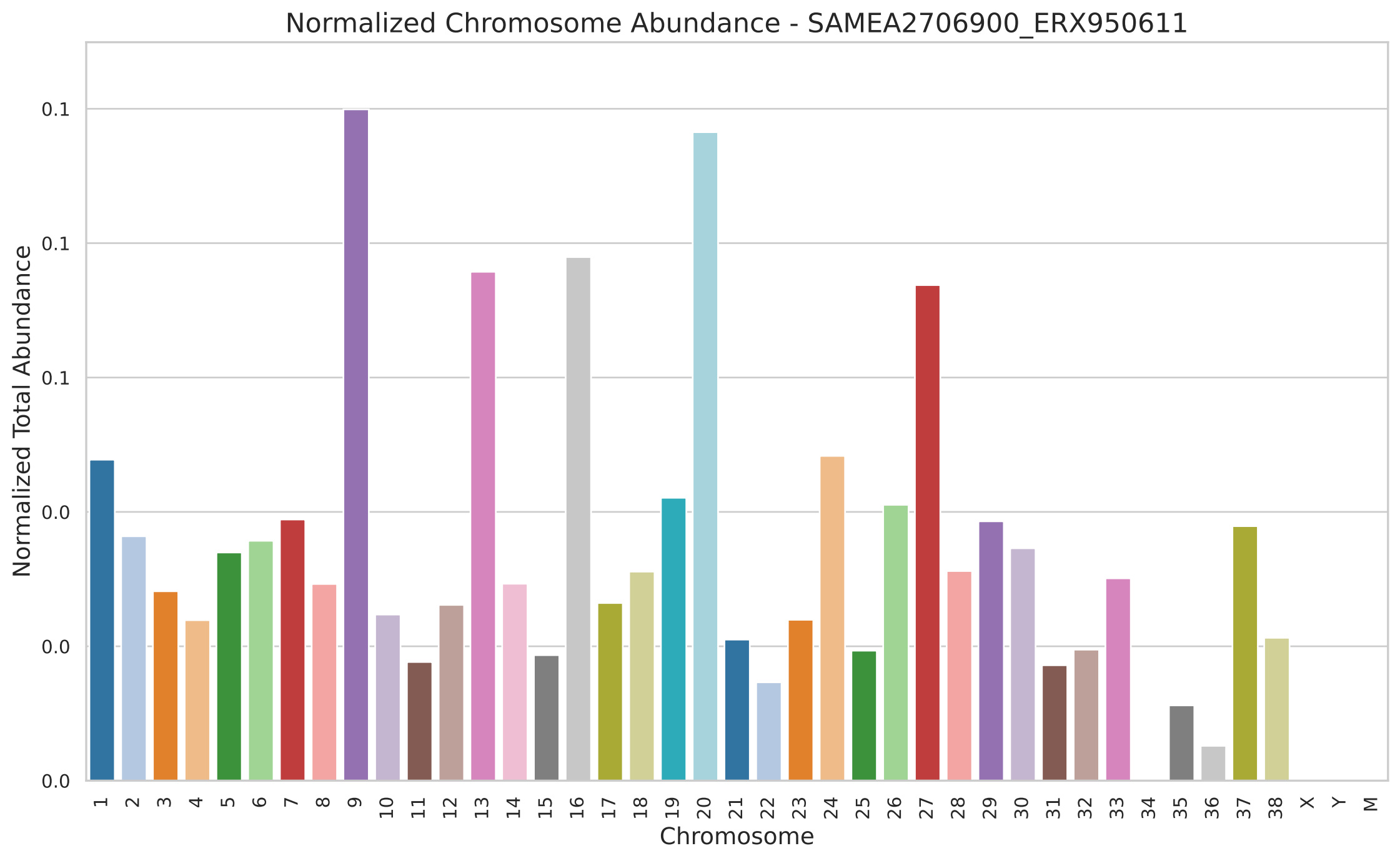

Normalized Chromosome Abundance - SAMEA2706902_ERX950613
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

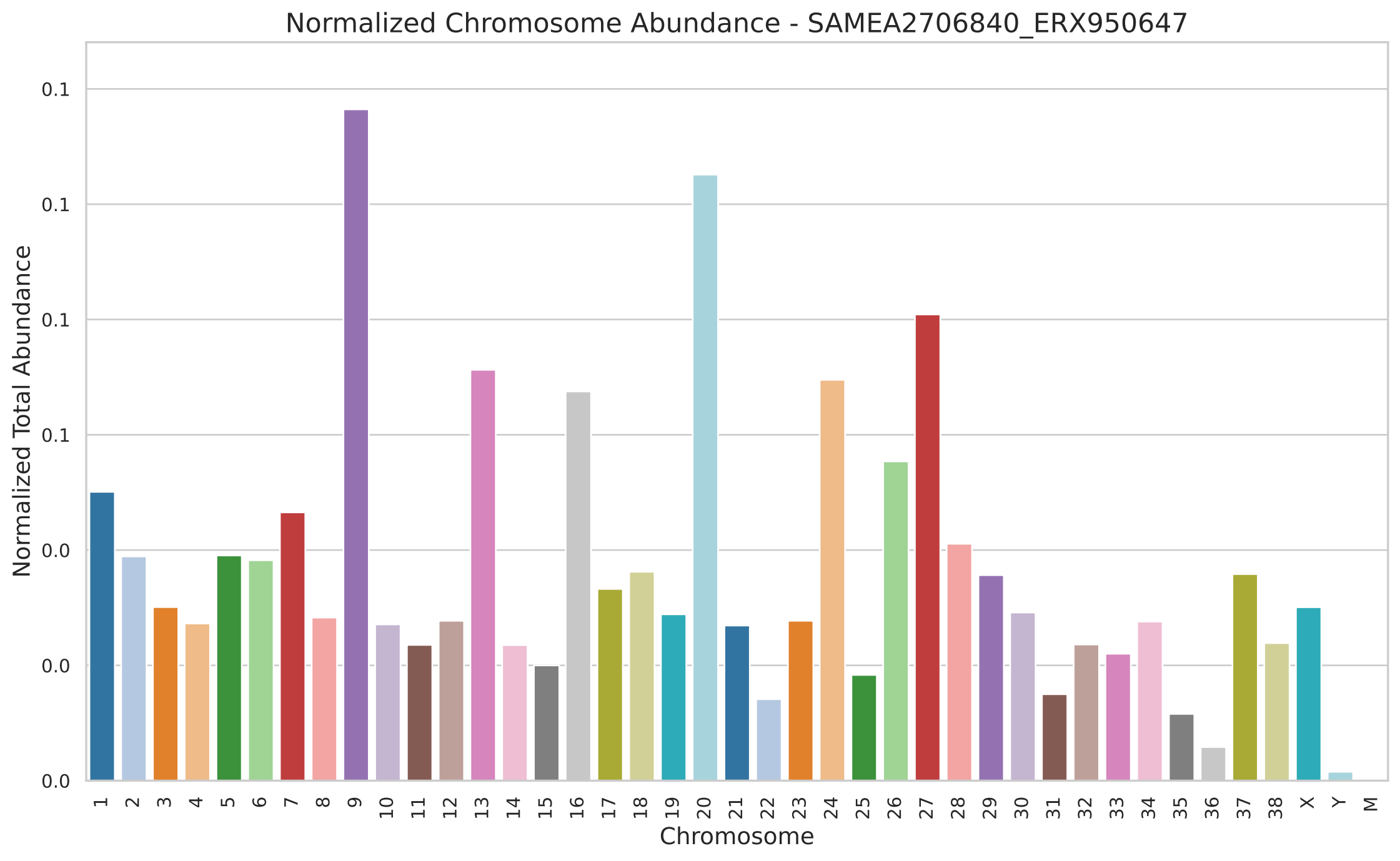

Normalized Chromosome Abundance - SAMEA2706839_ERX950646
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

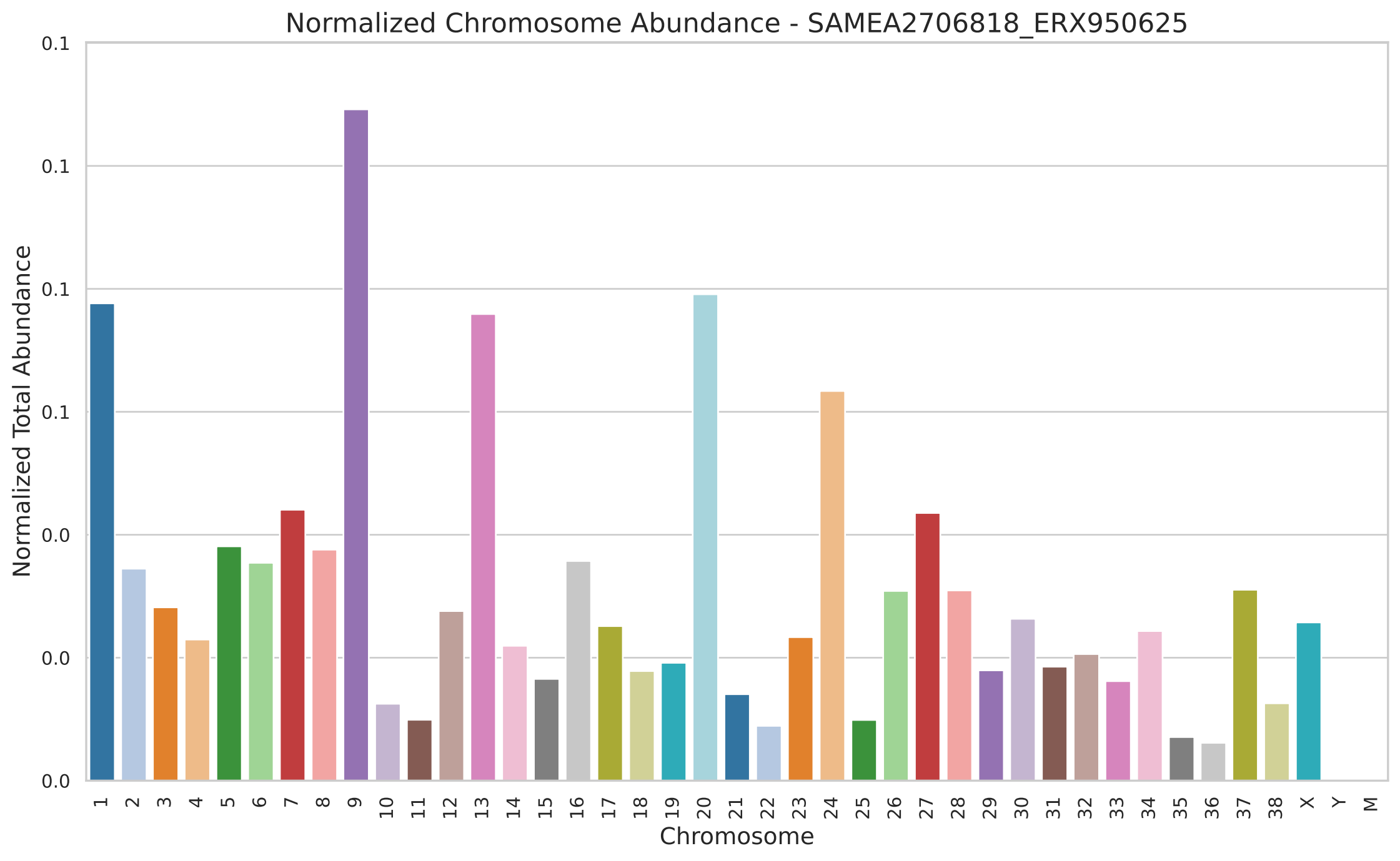

Normalized Chromosome Abundance - SAMEA2706815_ERX950622
Normalized Total Abundance
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

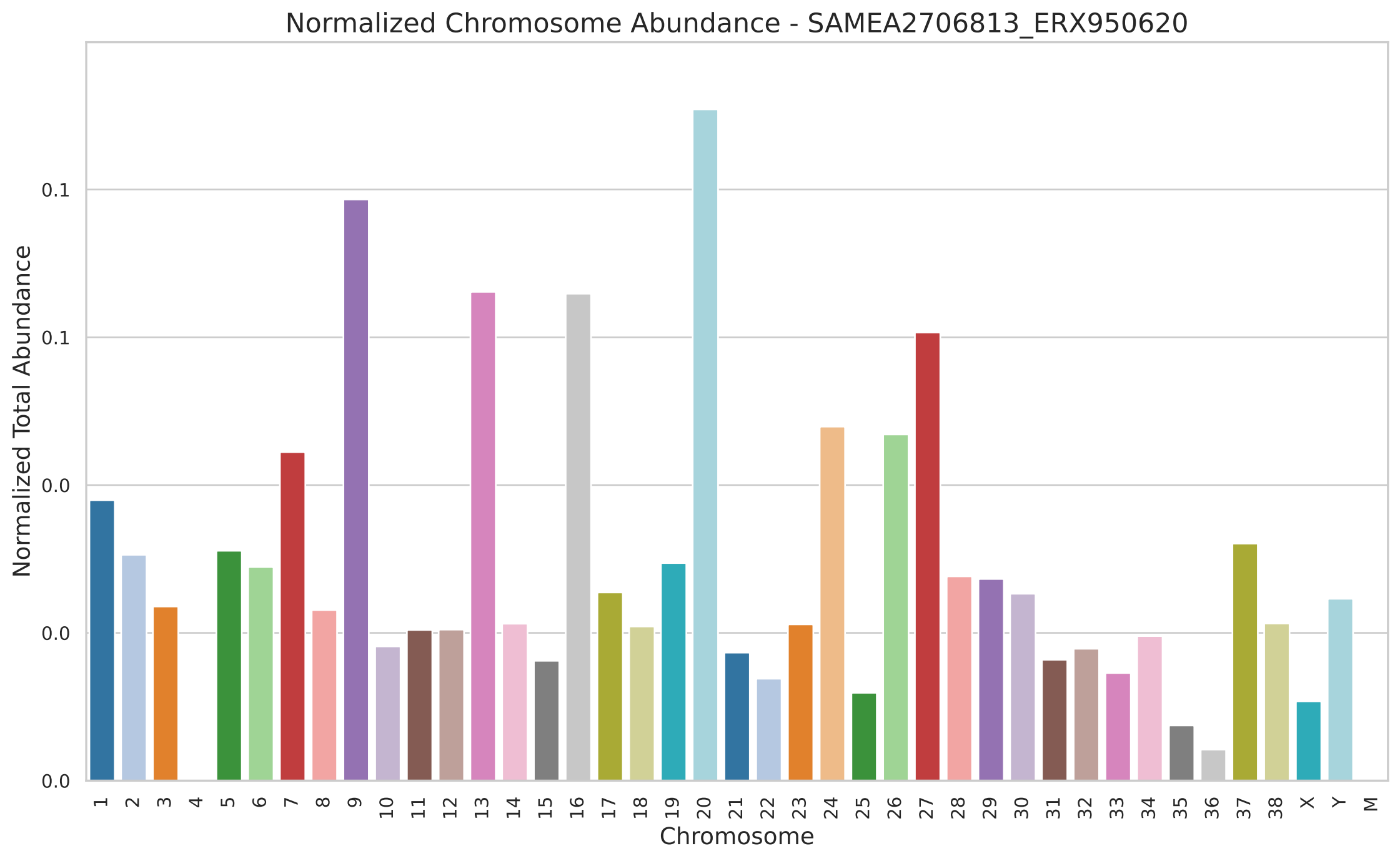

Normalized Chromosome Abundance - SAMEA2706837_ERX950644
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

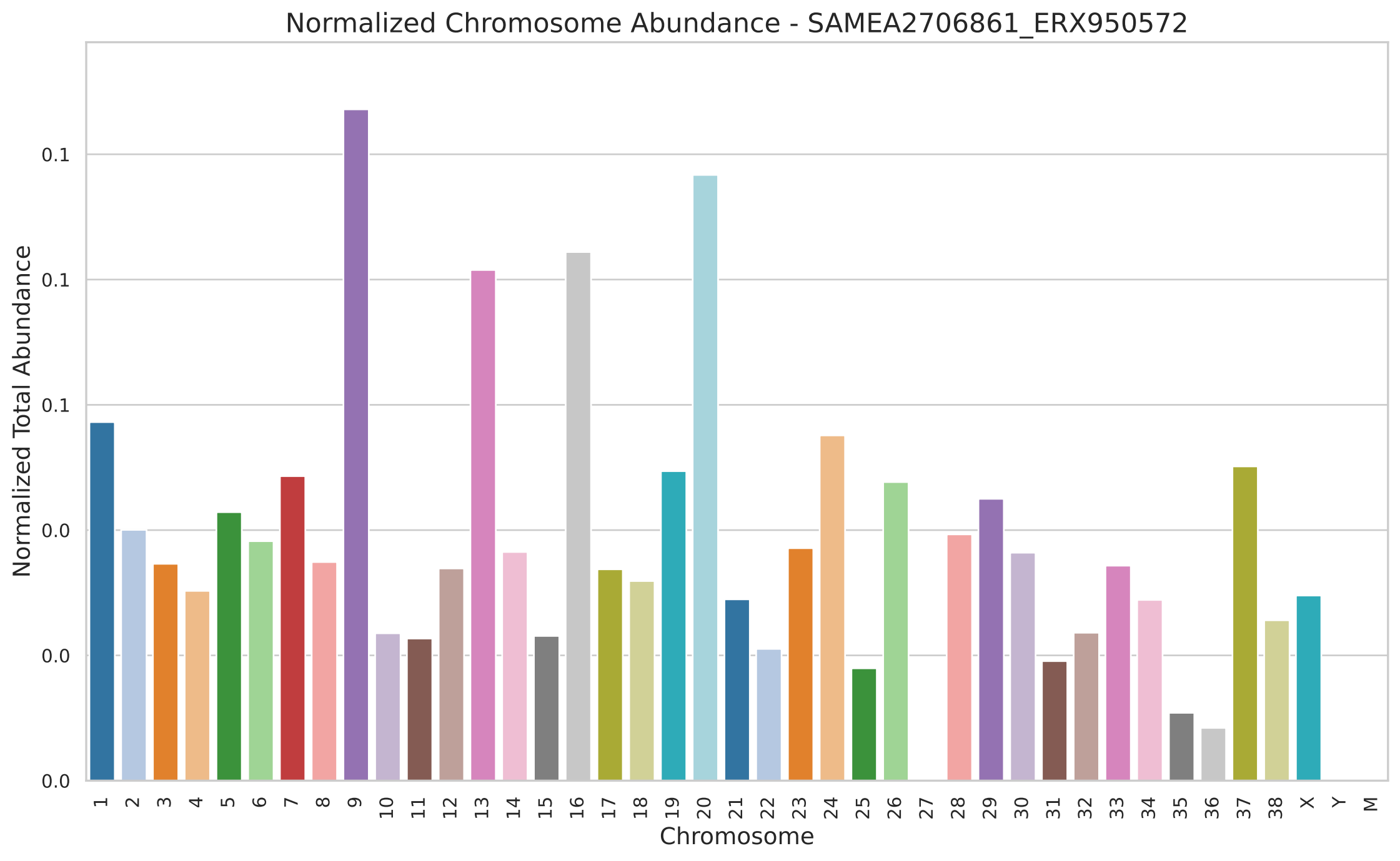

Normalized Chromosome Abundance - SAMEA2706844_ERX950651
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

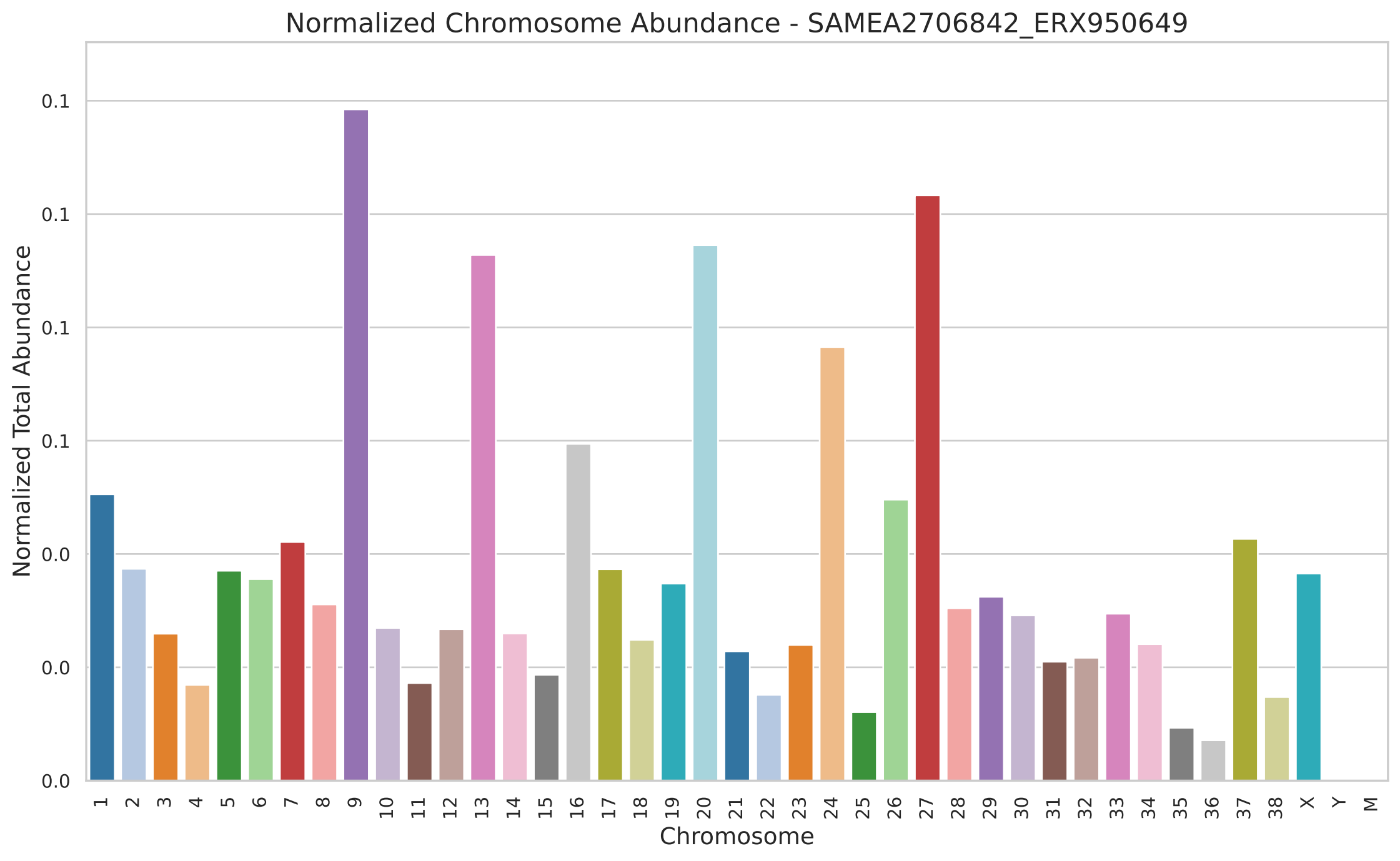

Normalized Chromosome Abundance - SAMEA2706900_ERX950611
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

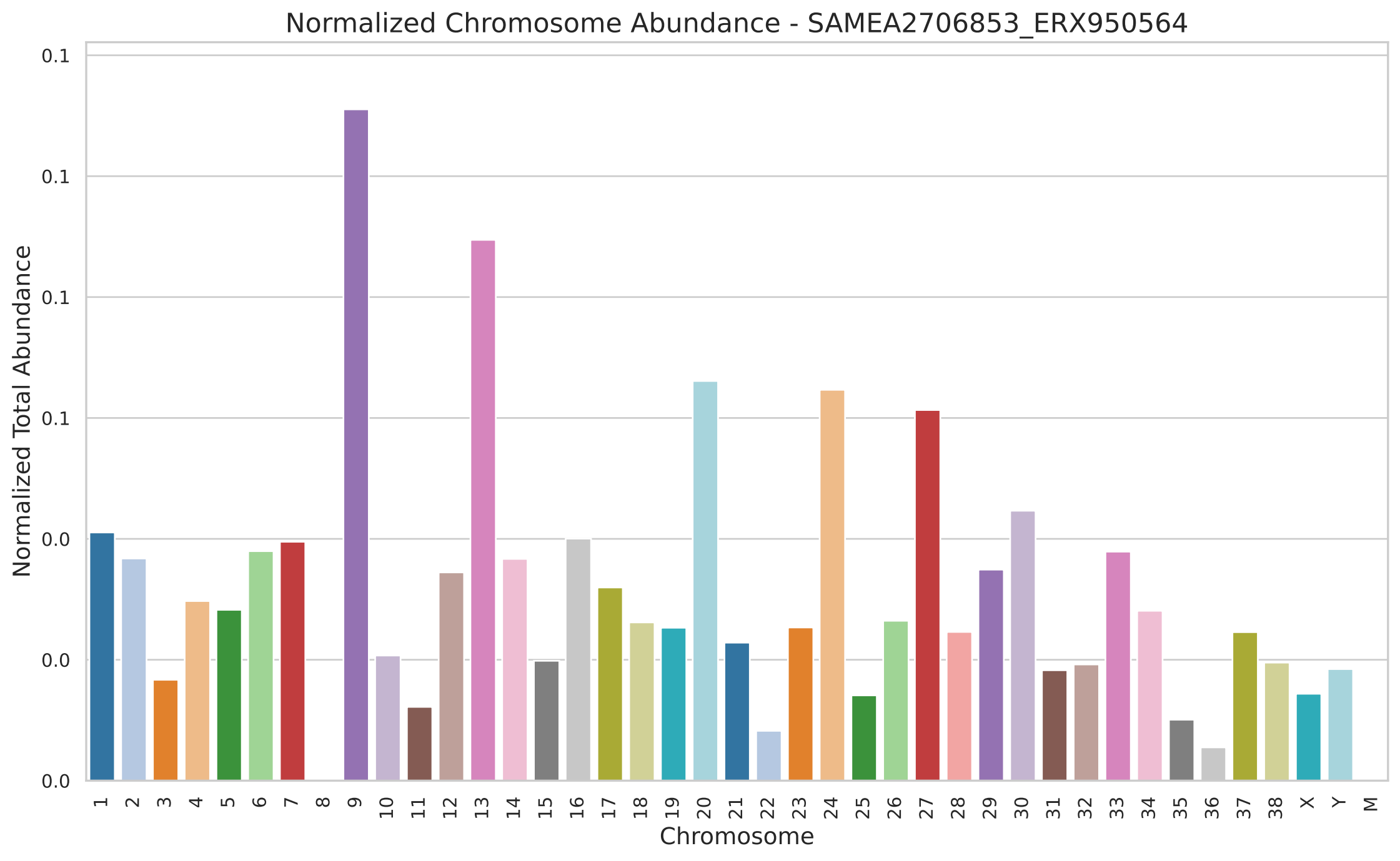

Normalized Chromosome Abundance - SAMEA2706840_ERX950647
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

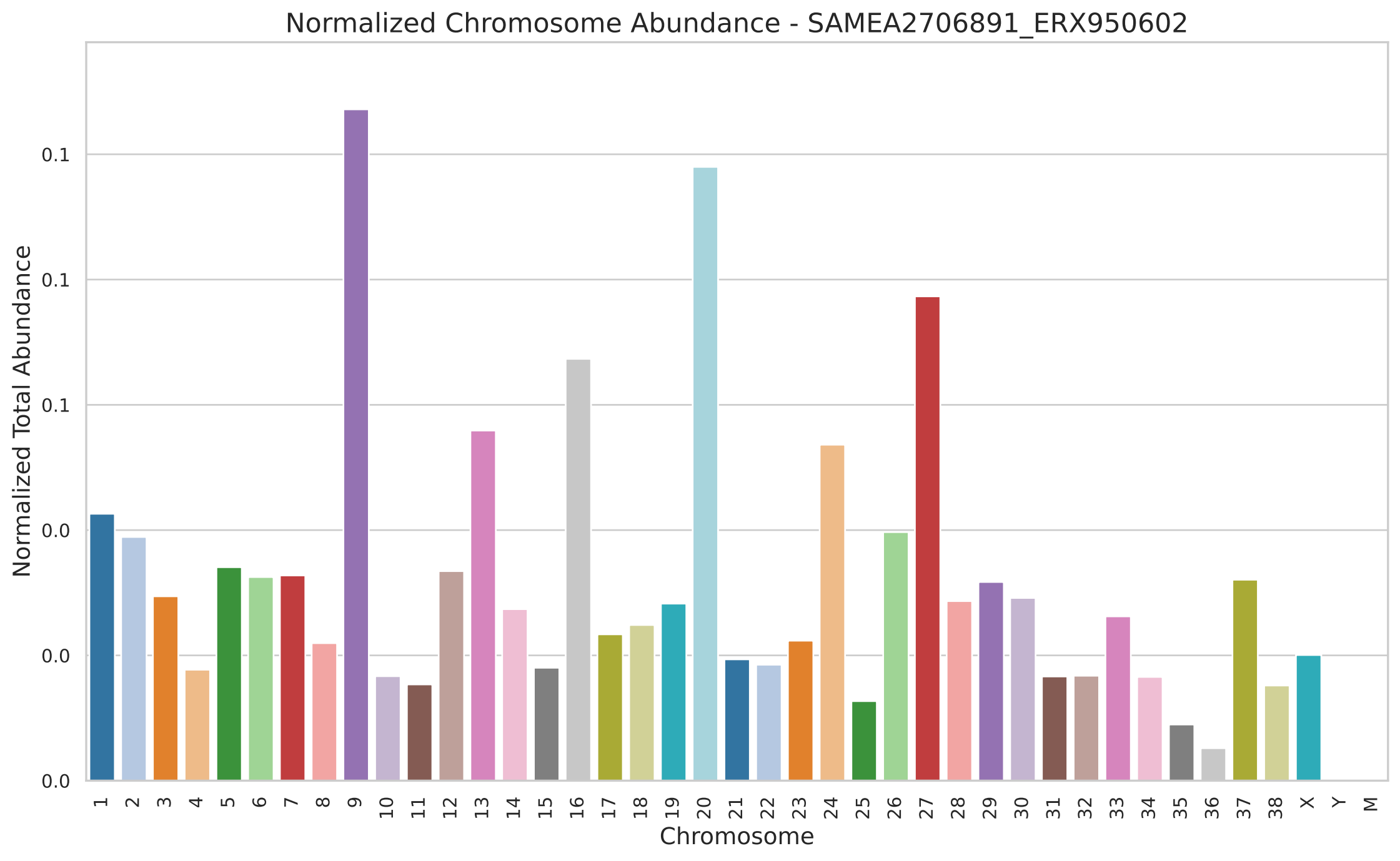

Normalized Chromosome Abundance - SAMEA2706818_ERX950625
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

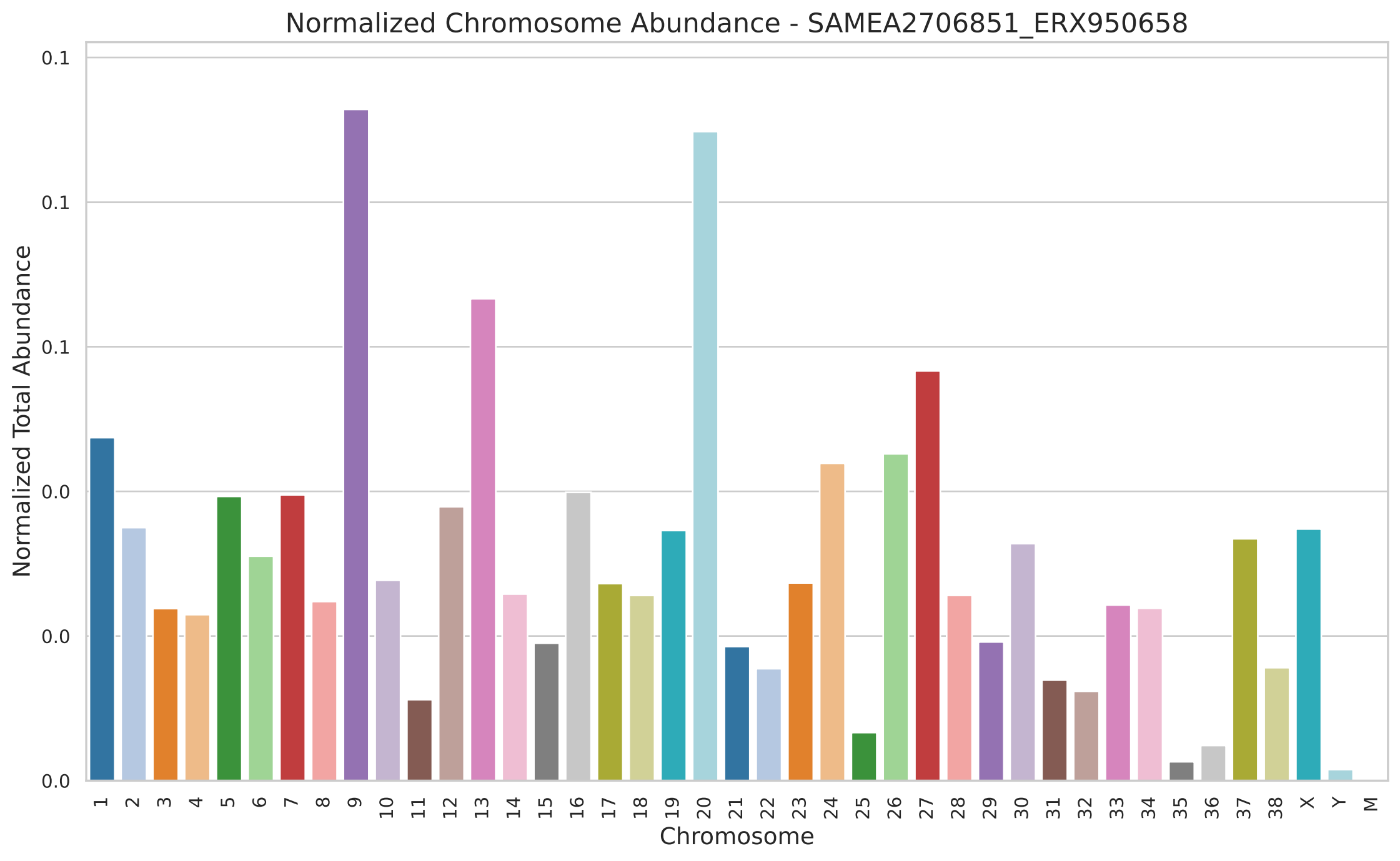

Normalized Chromosome Abundance - SAMEA2706813_ERX950620
Normalized Total Abundance
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

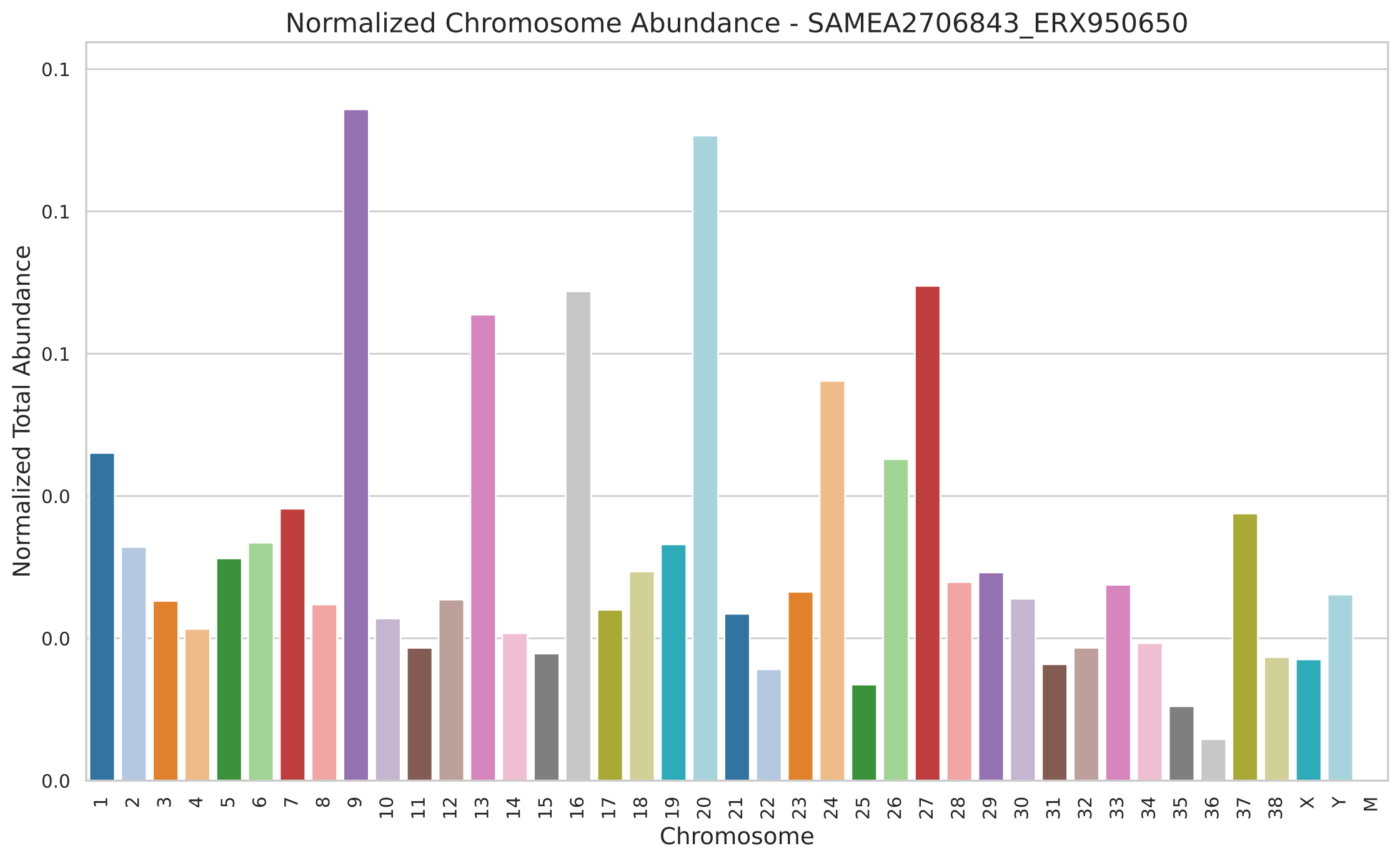

Normalized Chromosome Abundance - SAMEA2706861_ERX950572
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

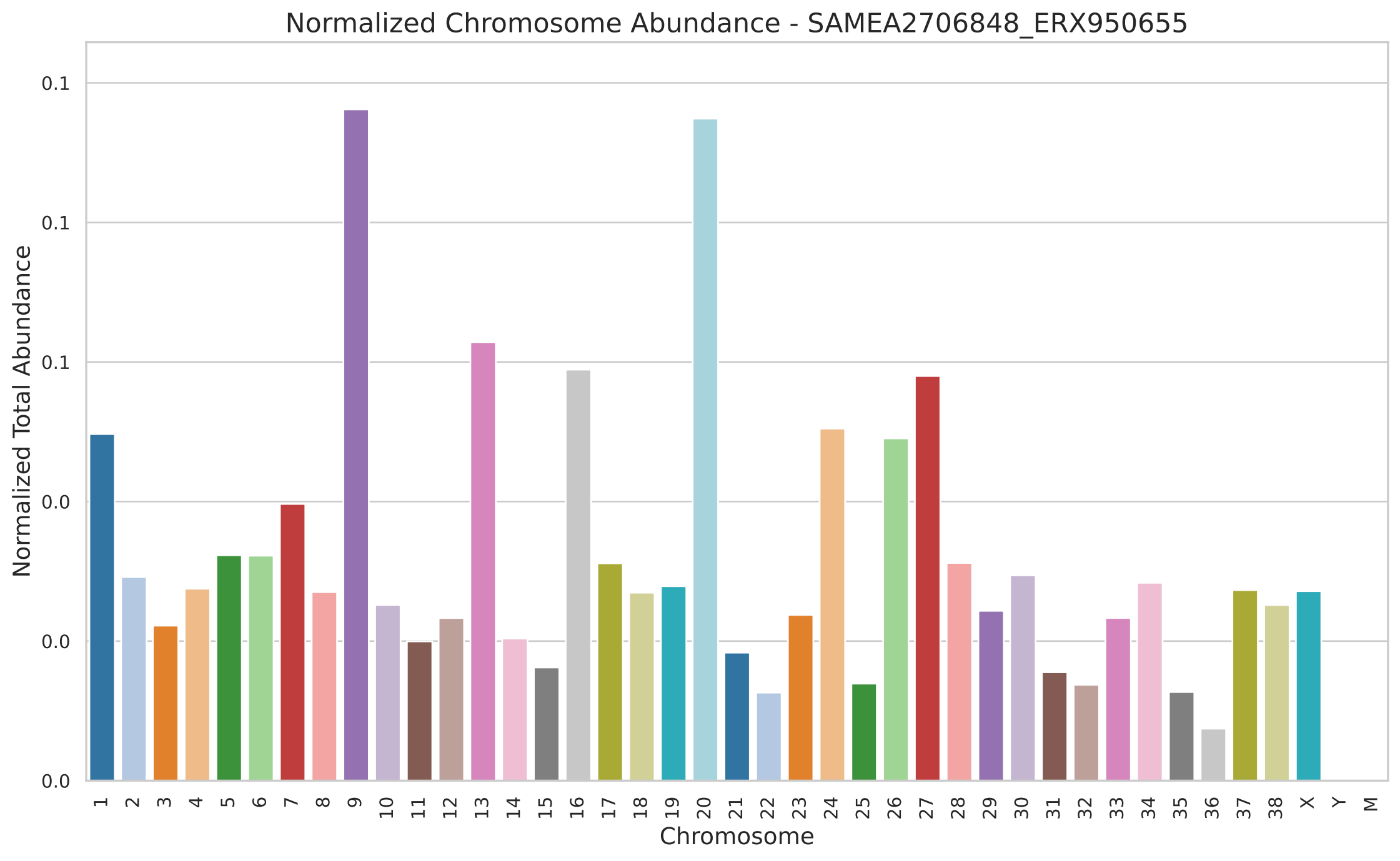

Normalized Chromosome Abundance - SAMEA2706842_ERX950649
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

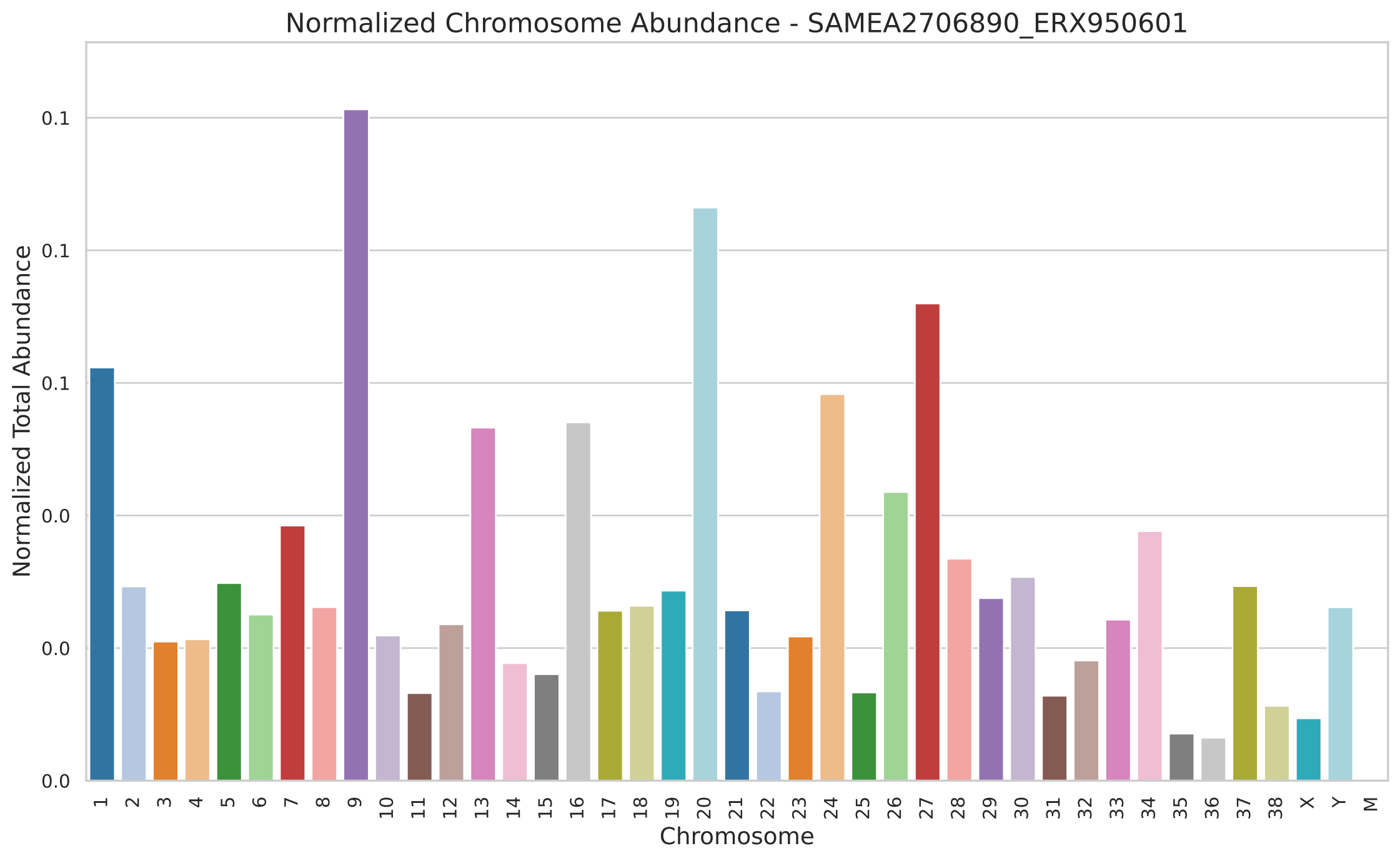

Normalized Chromosome Abundance - SAMEA2706853_ERX950564
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

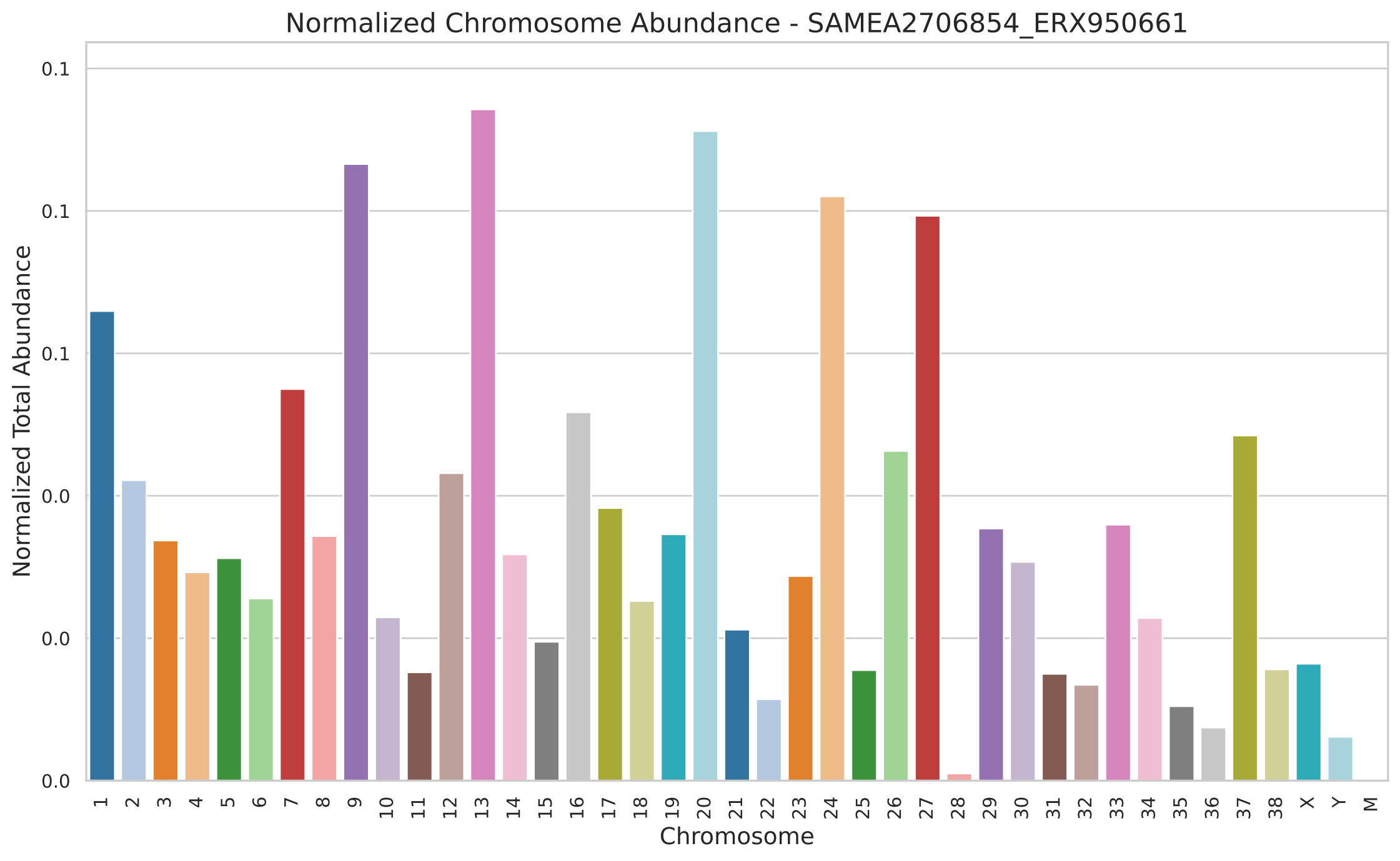

Normalized Chromosome Abundance - SAMEA2706891_ERX950602
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

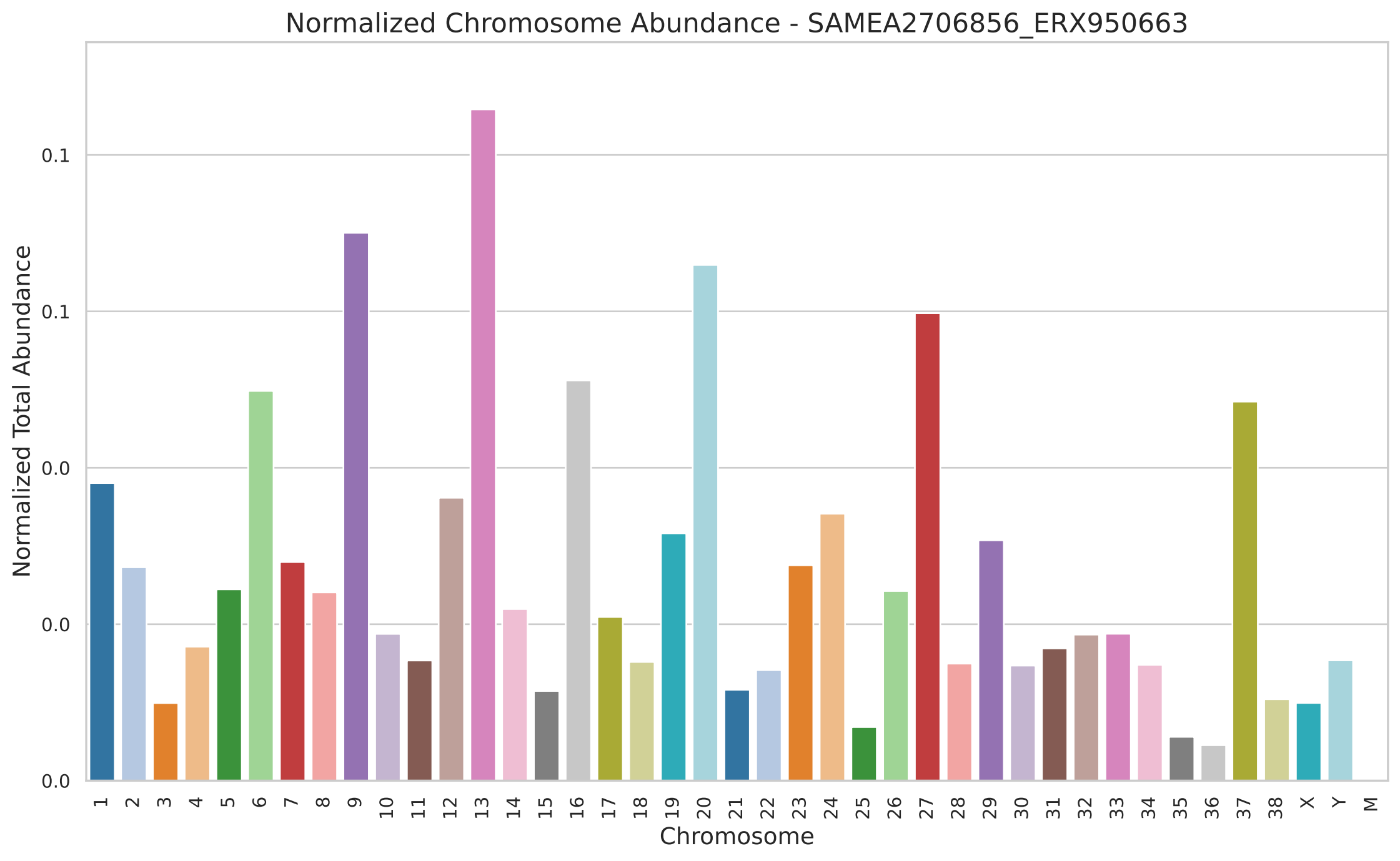

Normalized Chromosome Abundance - SAMEA2706851_ERX950658
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

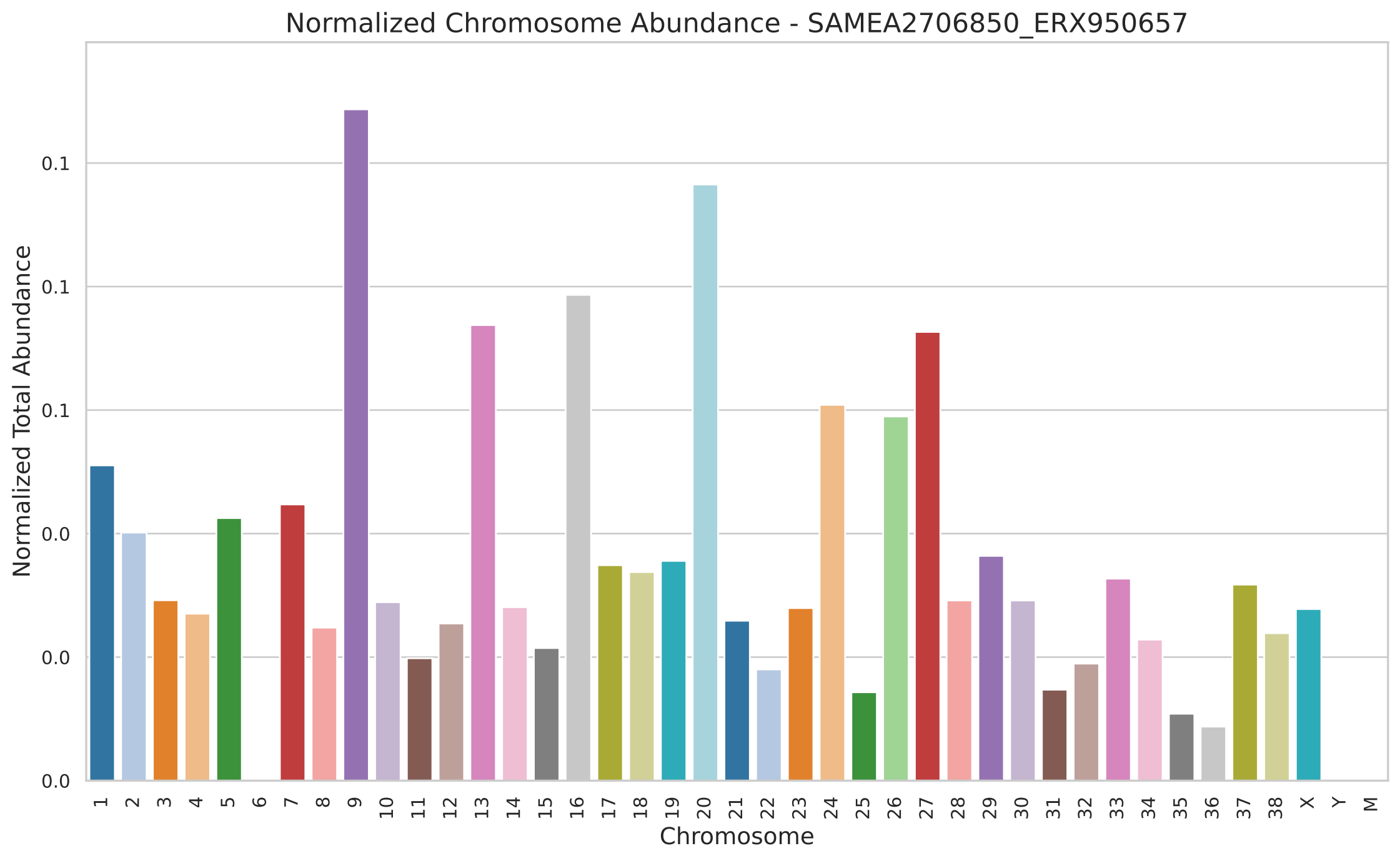

Normalized Chromosome Abundance - SAMEA2706843_ERX950650
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

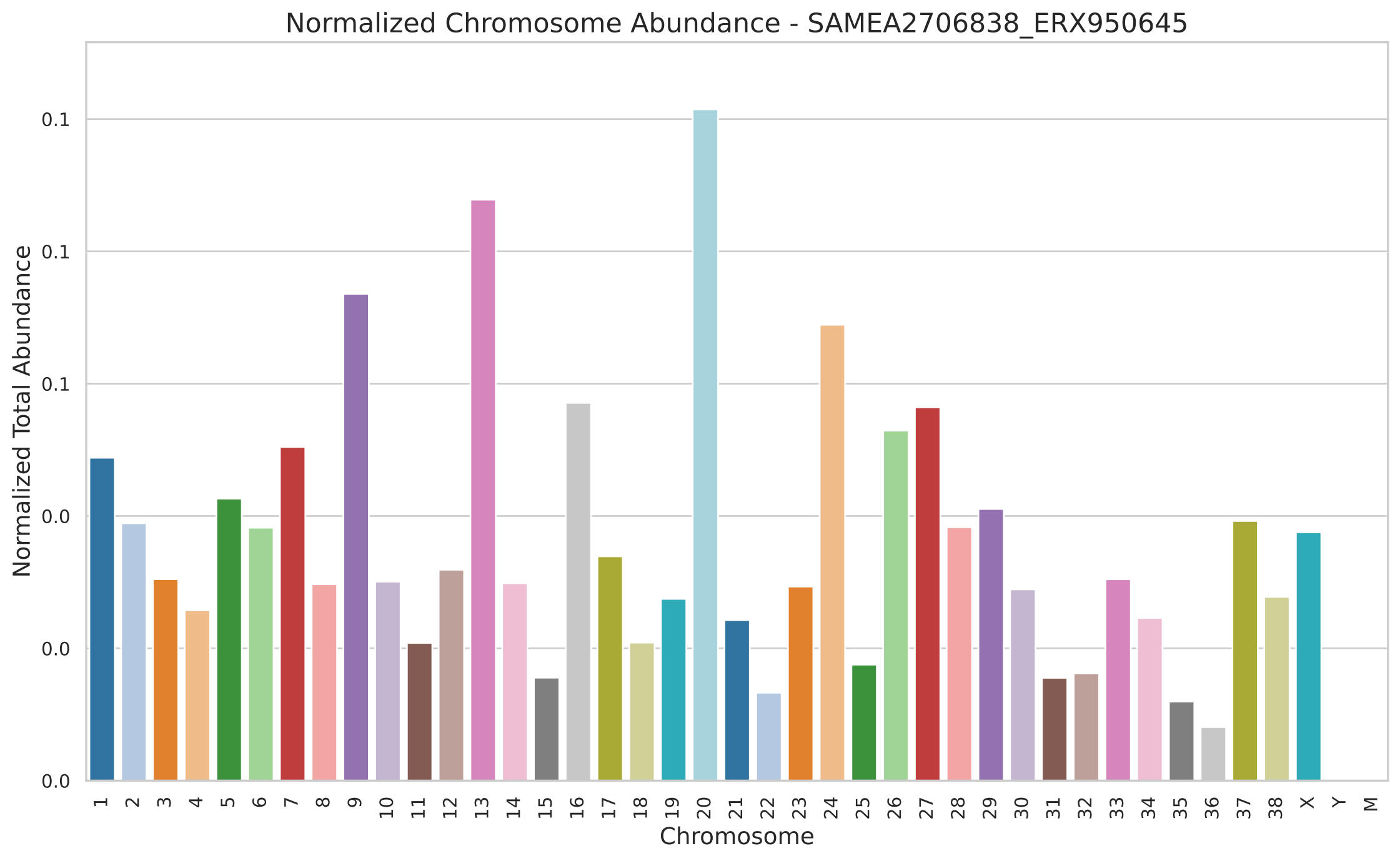

Normalized Chromosome Abundance - SAMEA2706848_ERX950655
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

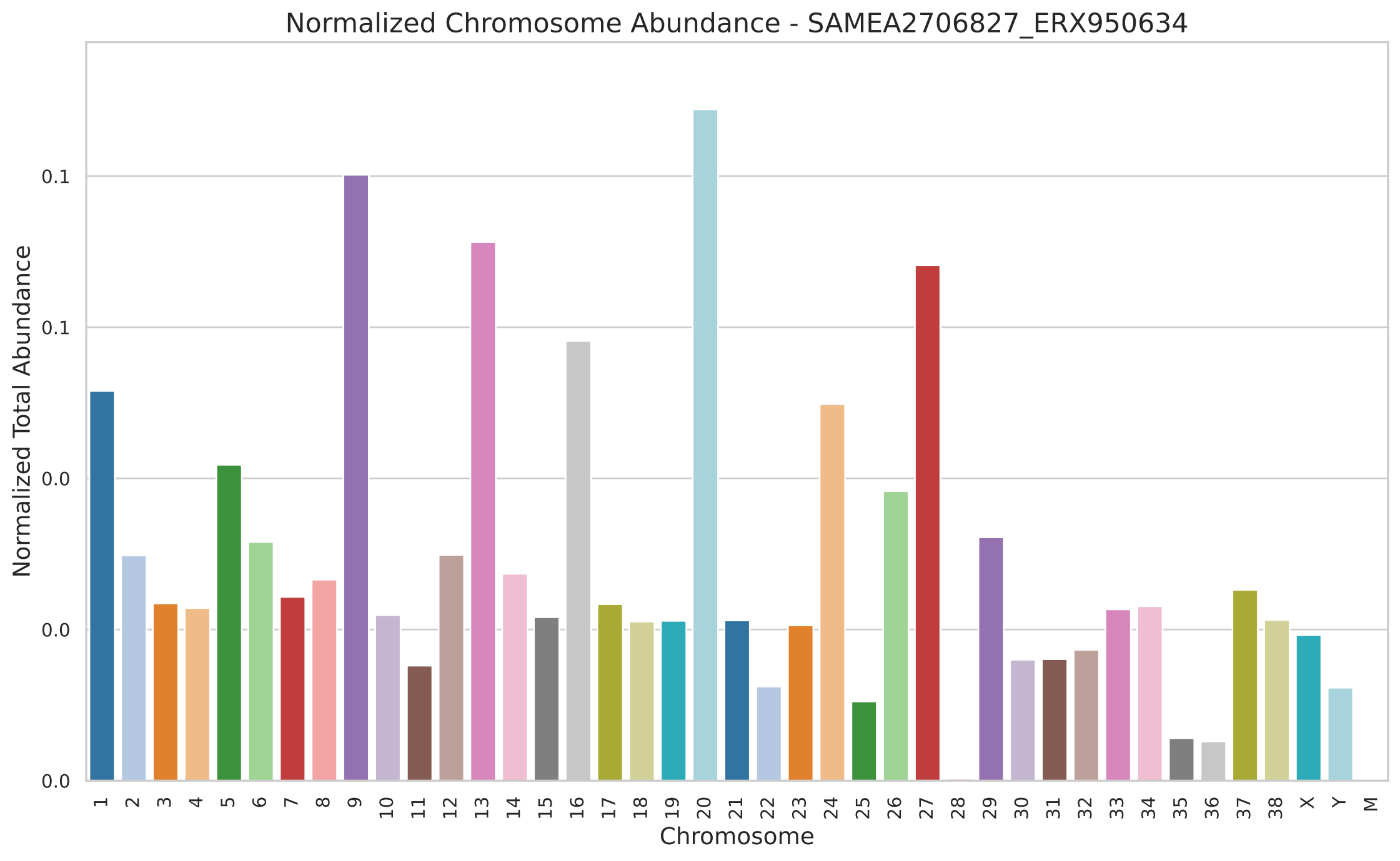

Normalized Chromosome Abundance - SAMEA2706890_ERX950601
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

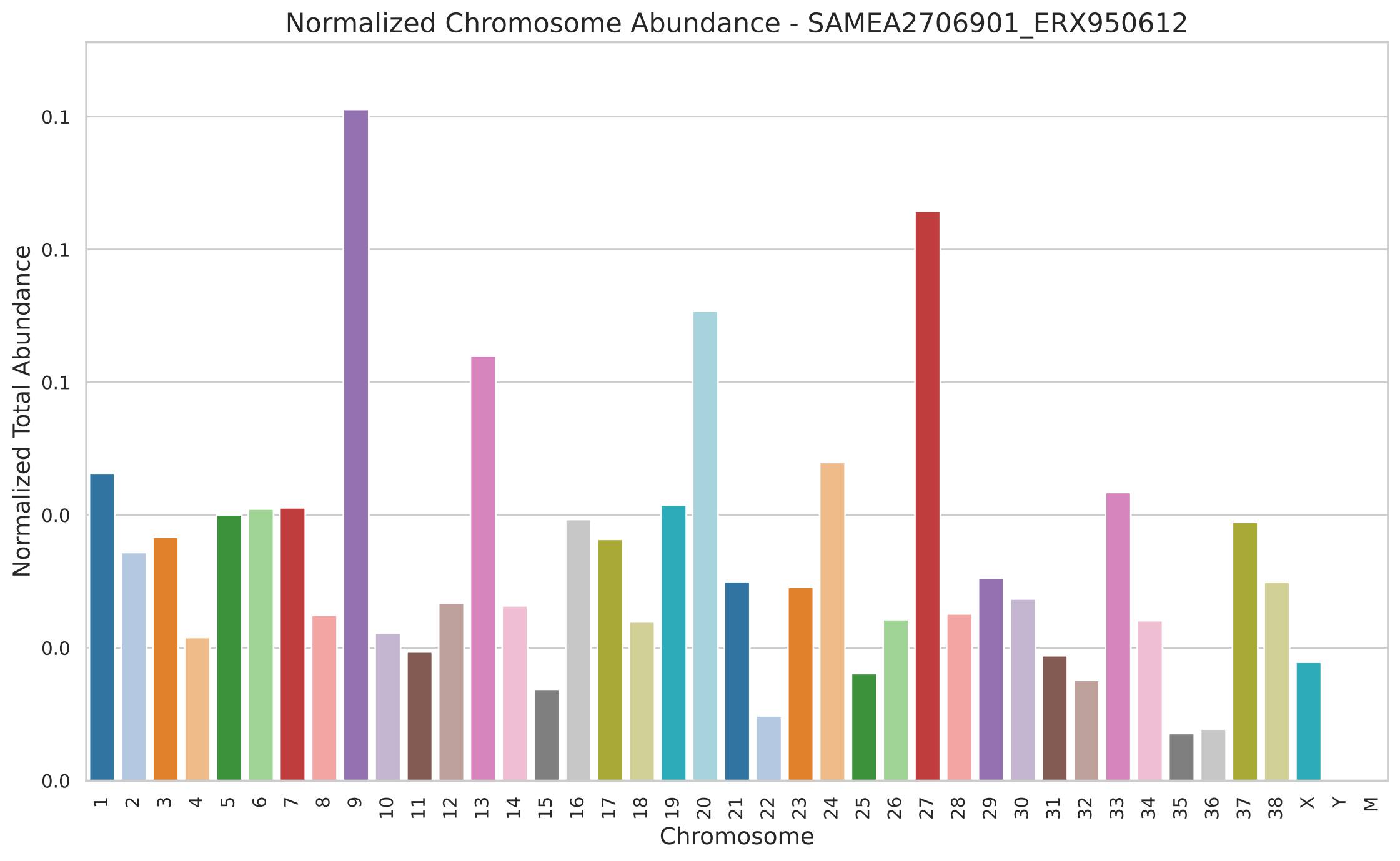

Normalized Chromosome Abundance - SAMEA2706854_ERX950661
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

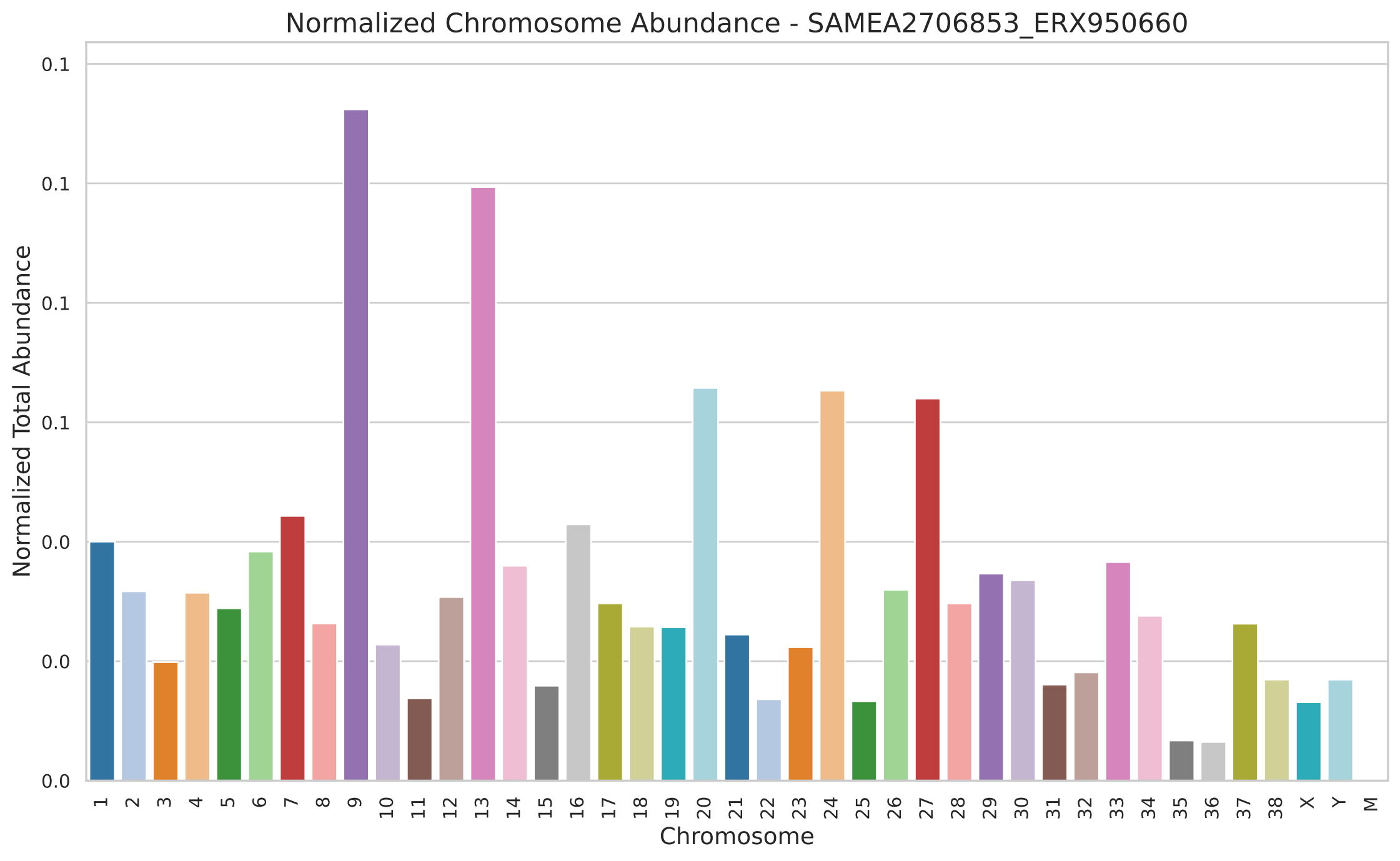

Normalized Chromosome Abundance - SAMEA2706856_ERX950663
Normalized Total Abundance
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

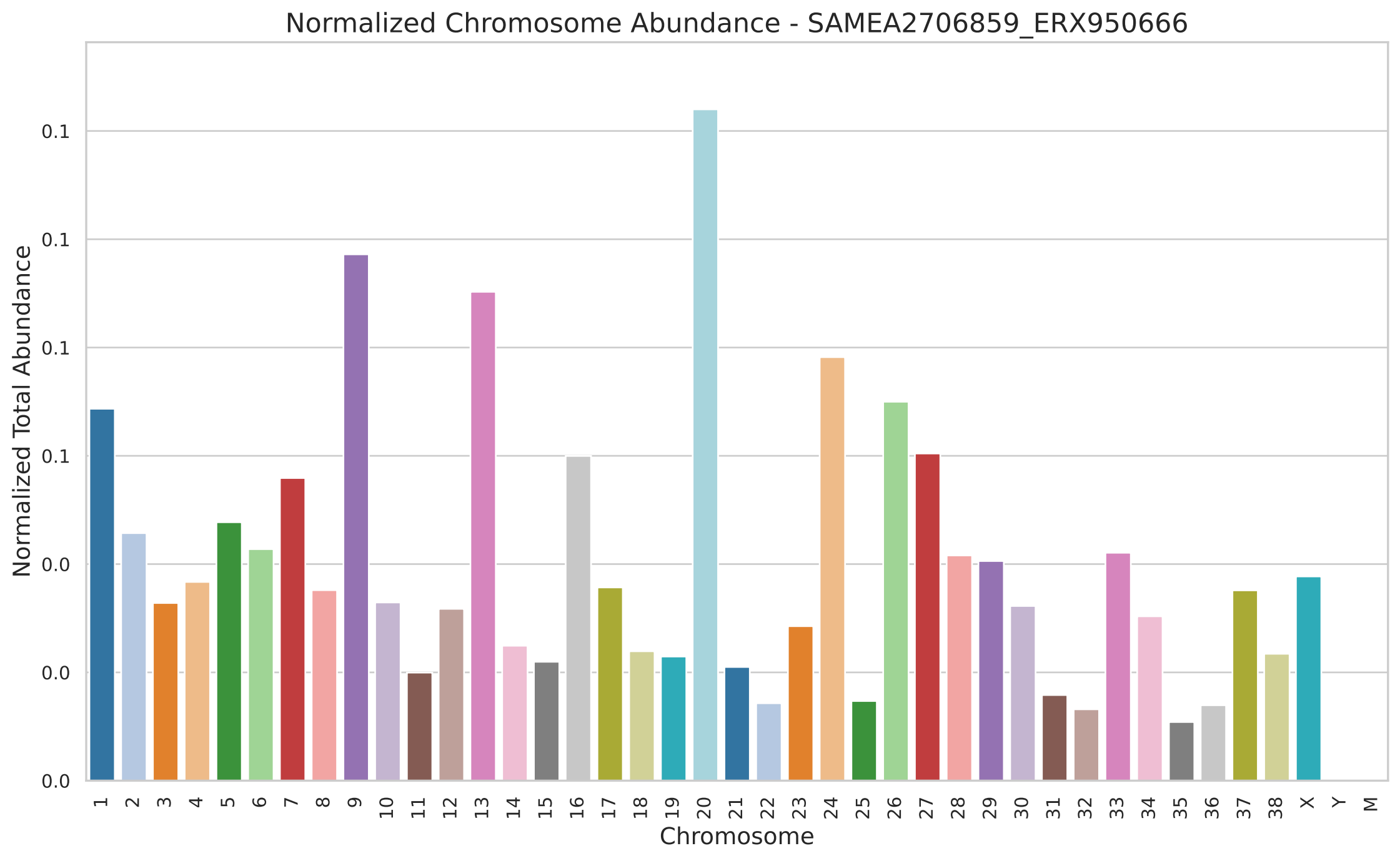

Normalized Chromosome Abundance - SAMEA2706850_ERX950657
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

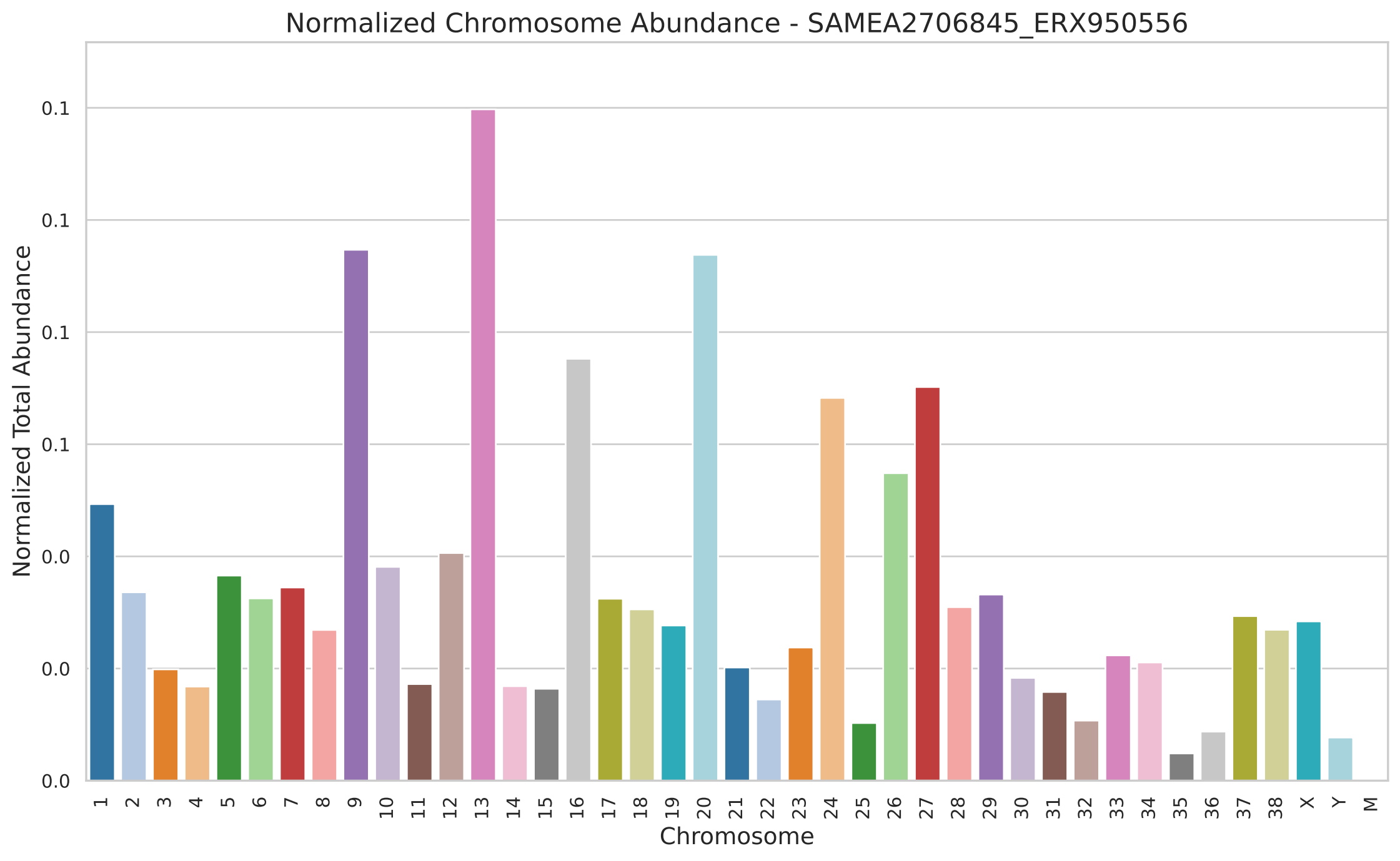

Normalized Chromosome Abundance - SAMEA2706838_ERX950645
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

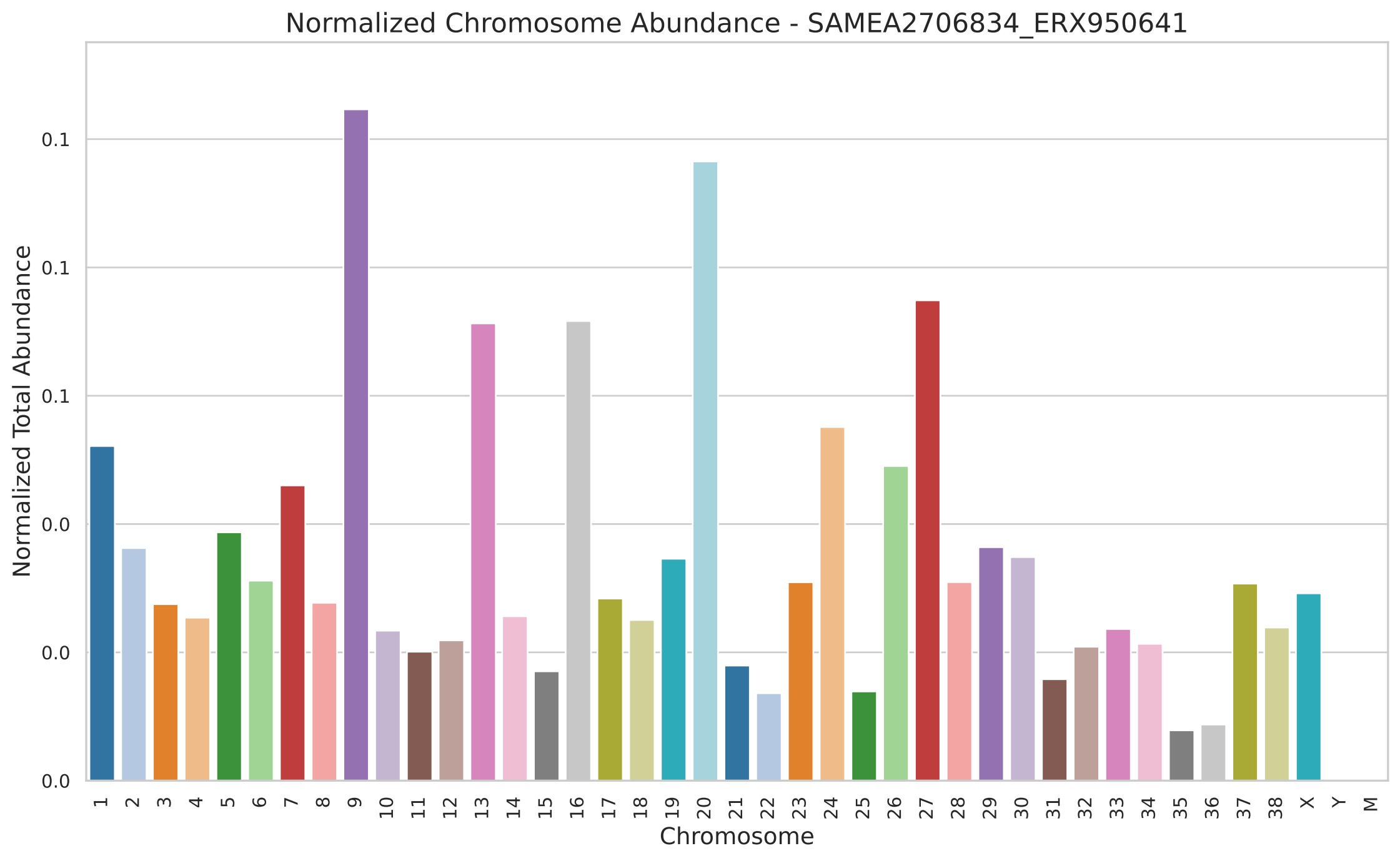

Normalized Chromosome Abundance - SAMEA2706827_ERX950634
Normalized Total Abundance
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

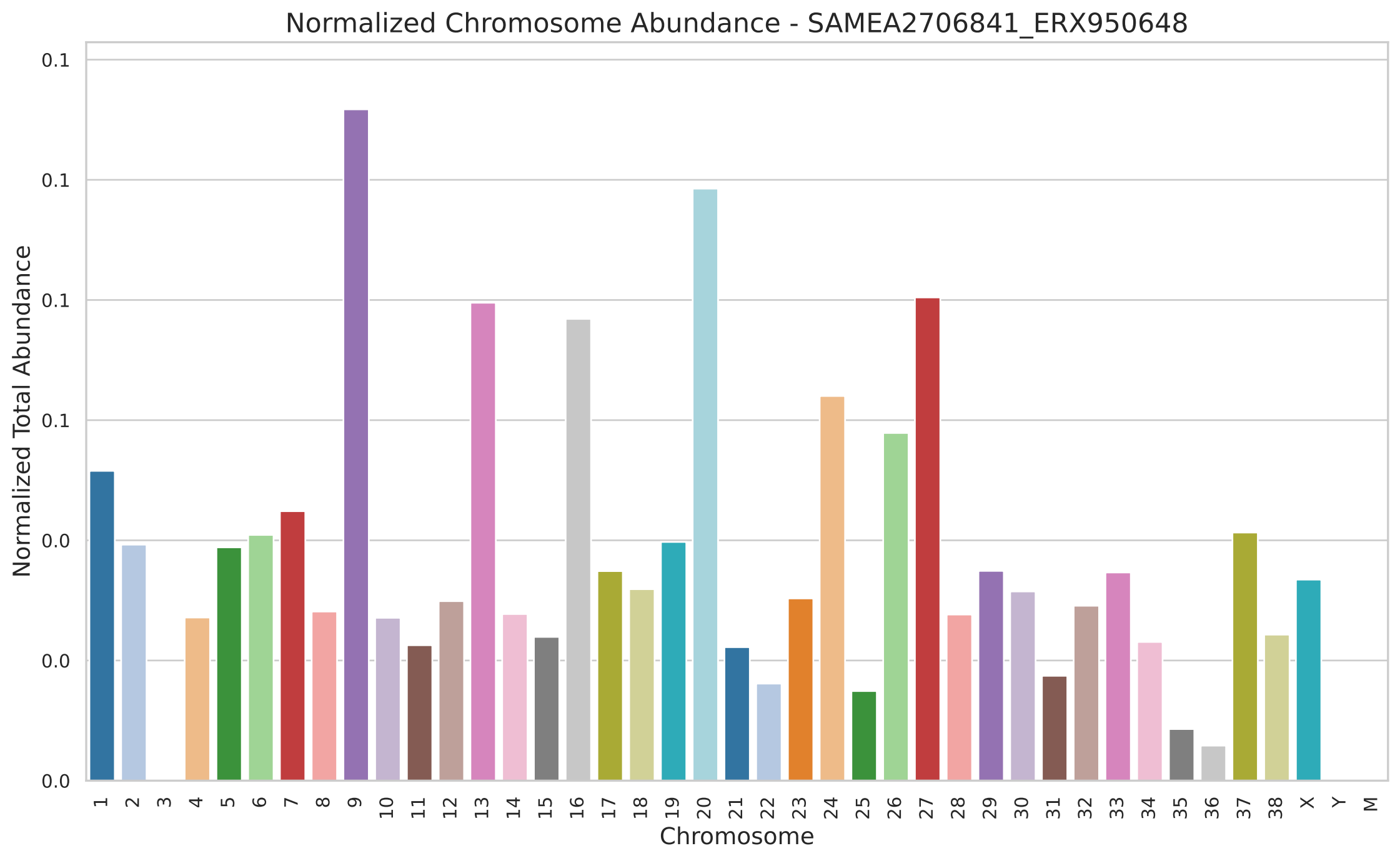

Normalized Chromosome Abundance - SAMEA2706901_ERX950612
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

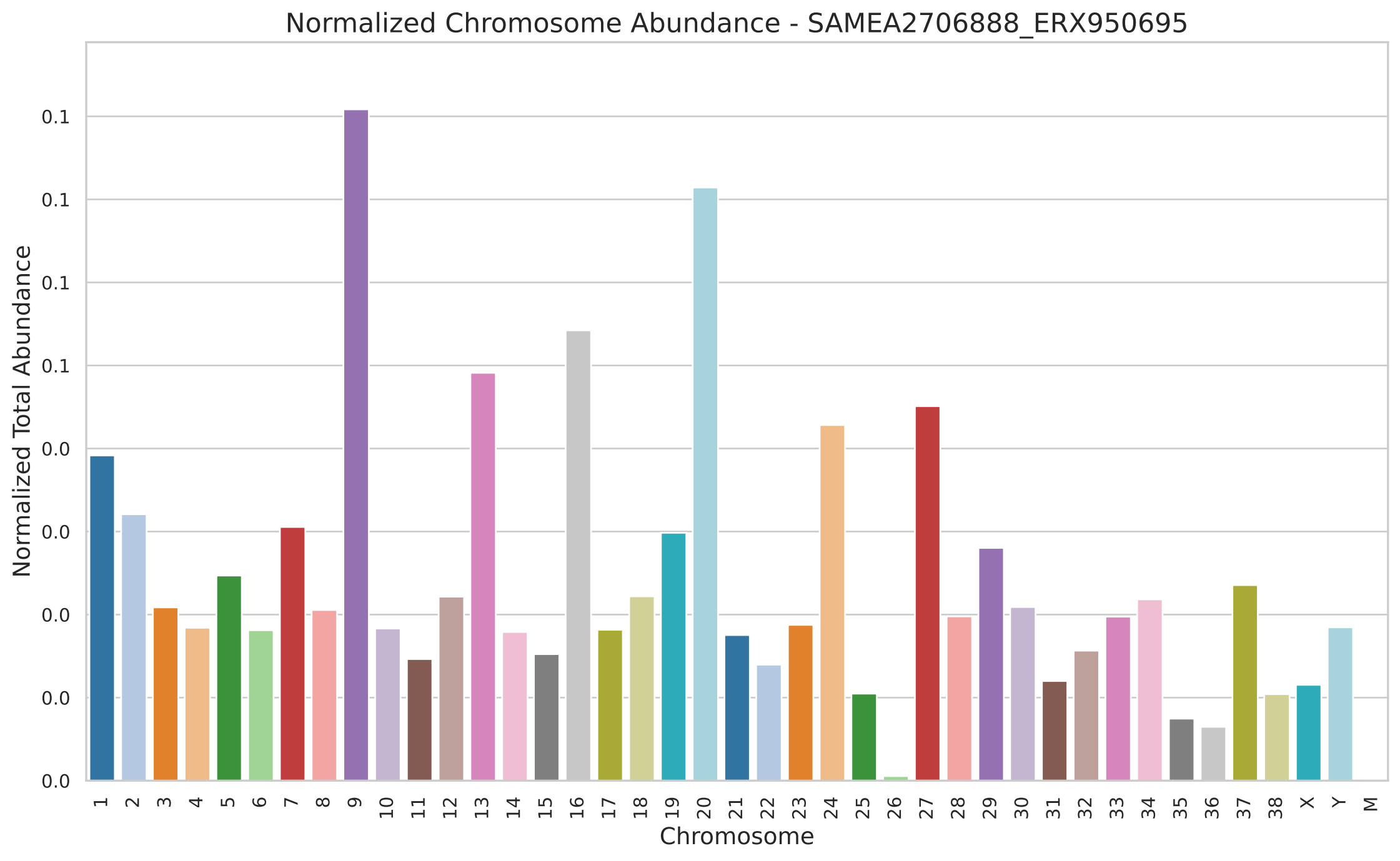

Normalized Chromosome Abundance - SAMEA2706853_ERX950660
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

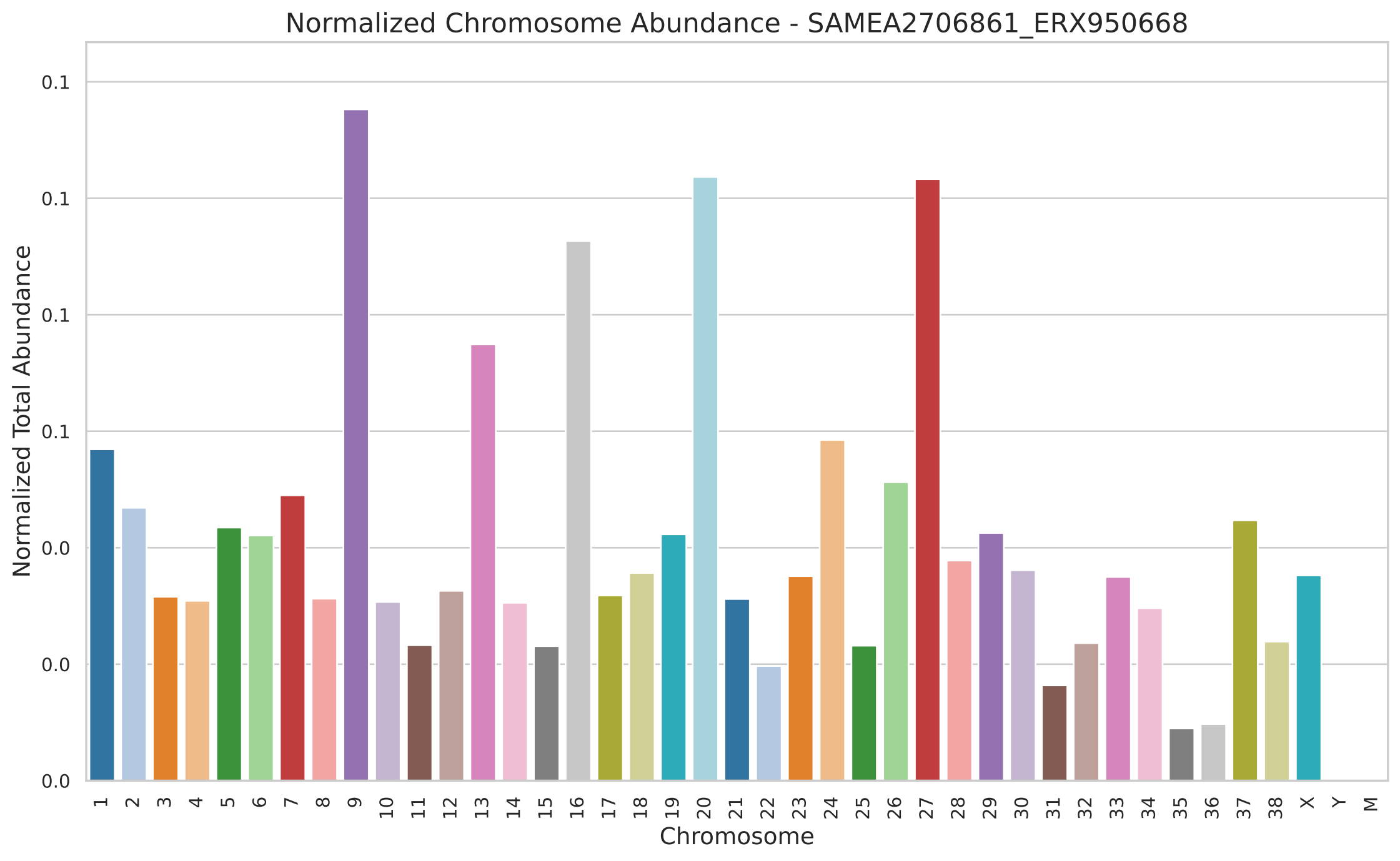

Normalized Chromosome Abundance - SAMEA2706859_ERX950666
Normalized Total Abundance
0.0
0.0
0.1
0.1
0.1
0.1
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

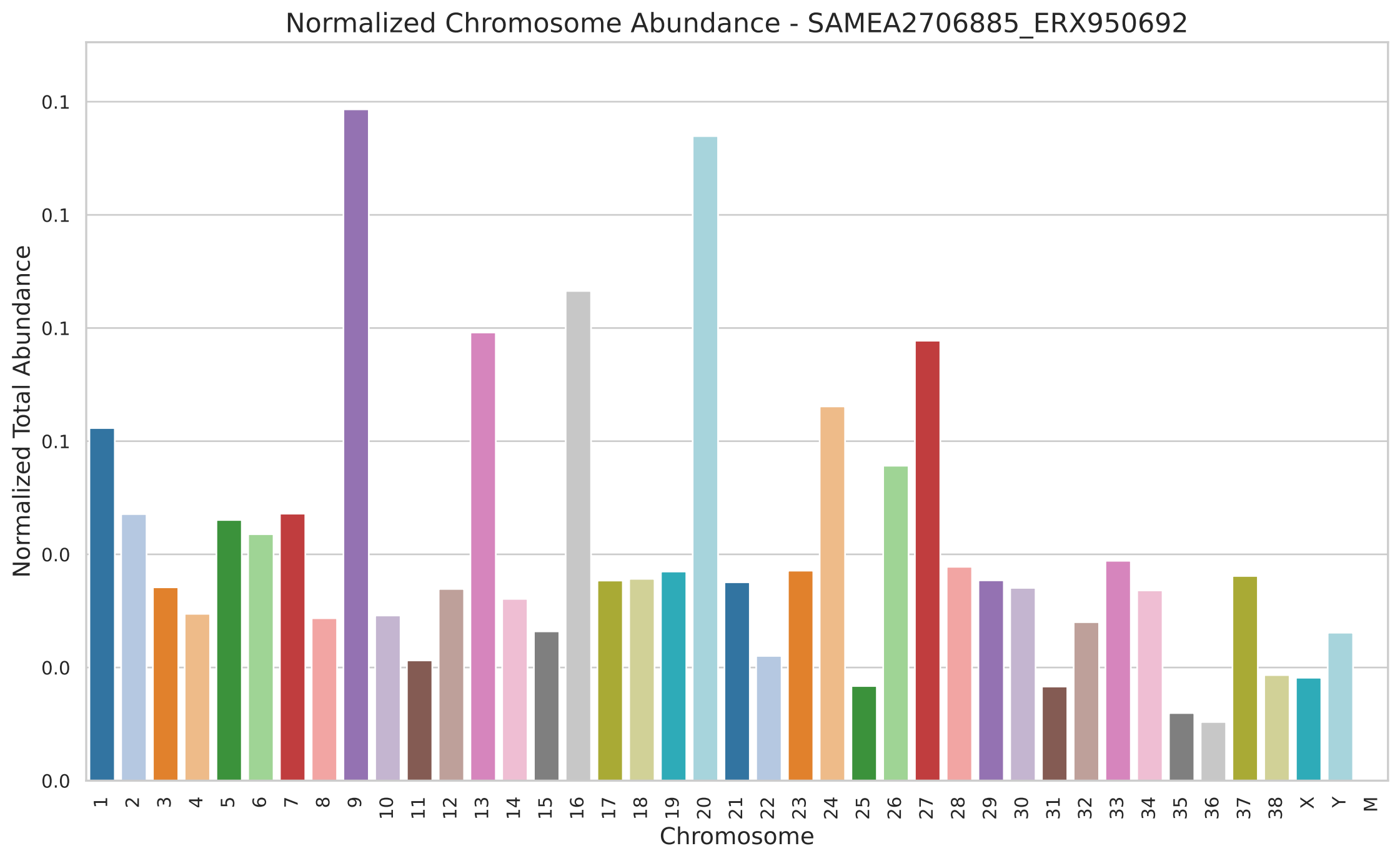

Normalized Chromosome Abundance - SAMEA2706845_ERX950556
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

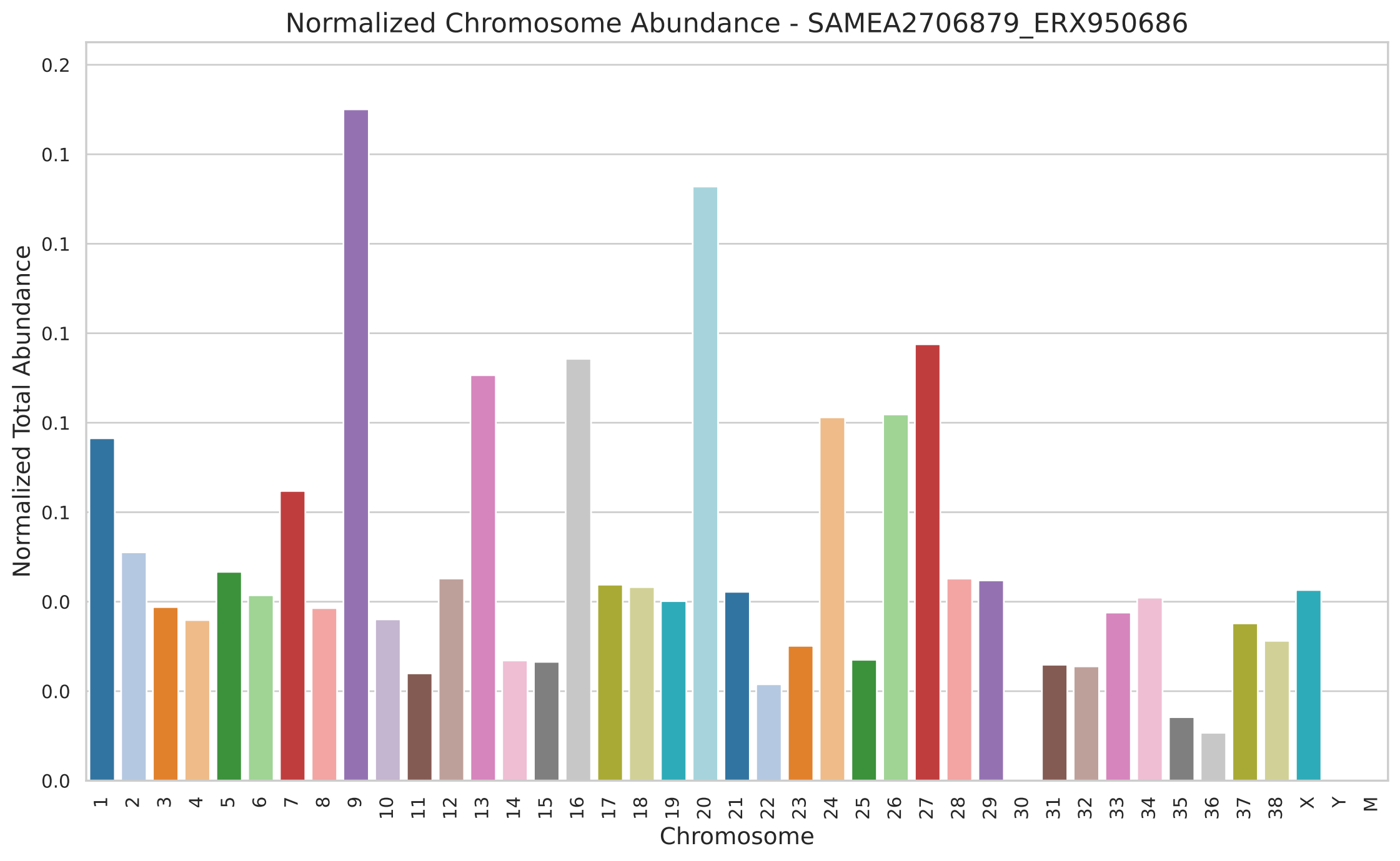

Normalized Chromosome Abundance - SAMEA2706834_ERX950641
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

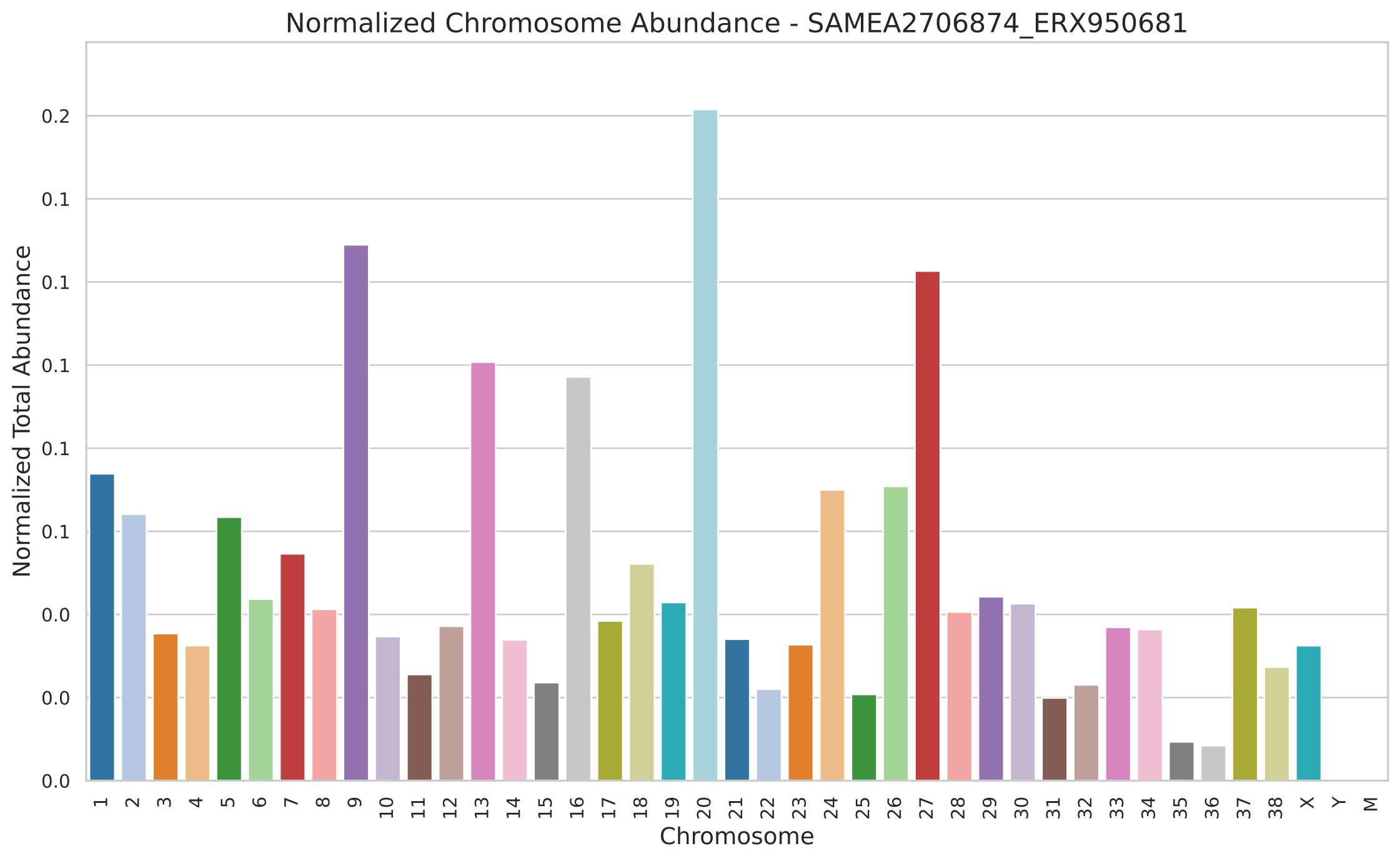

Normalized Chromosome Abundance - SAMEA2706841_ERX950648
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

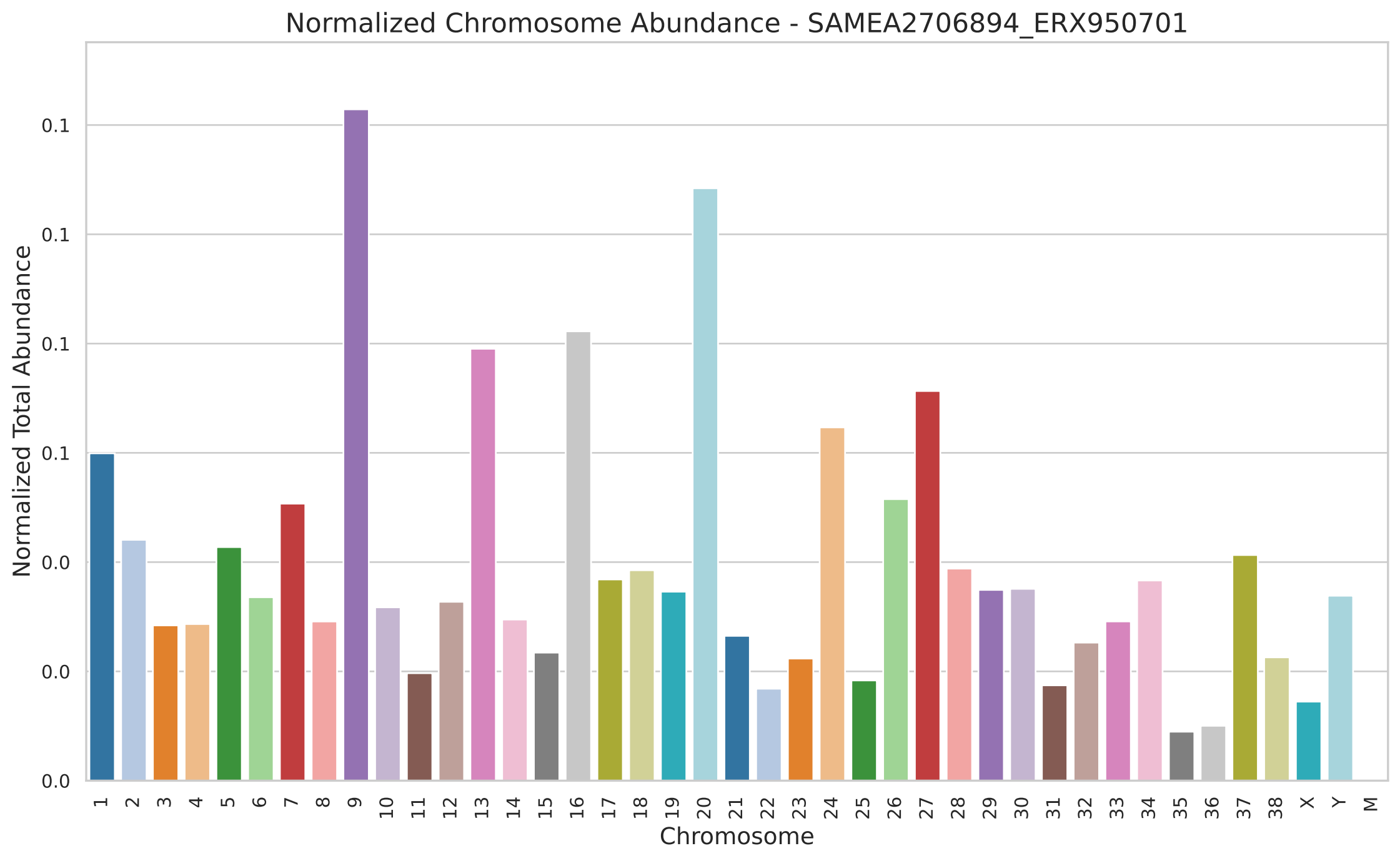

Normalized Chromosome Abundance - SAMEA2706888_ERX950695
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

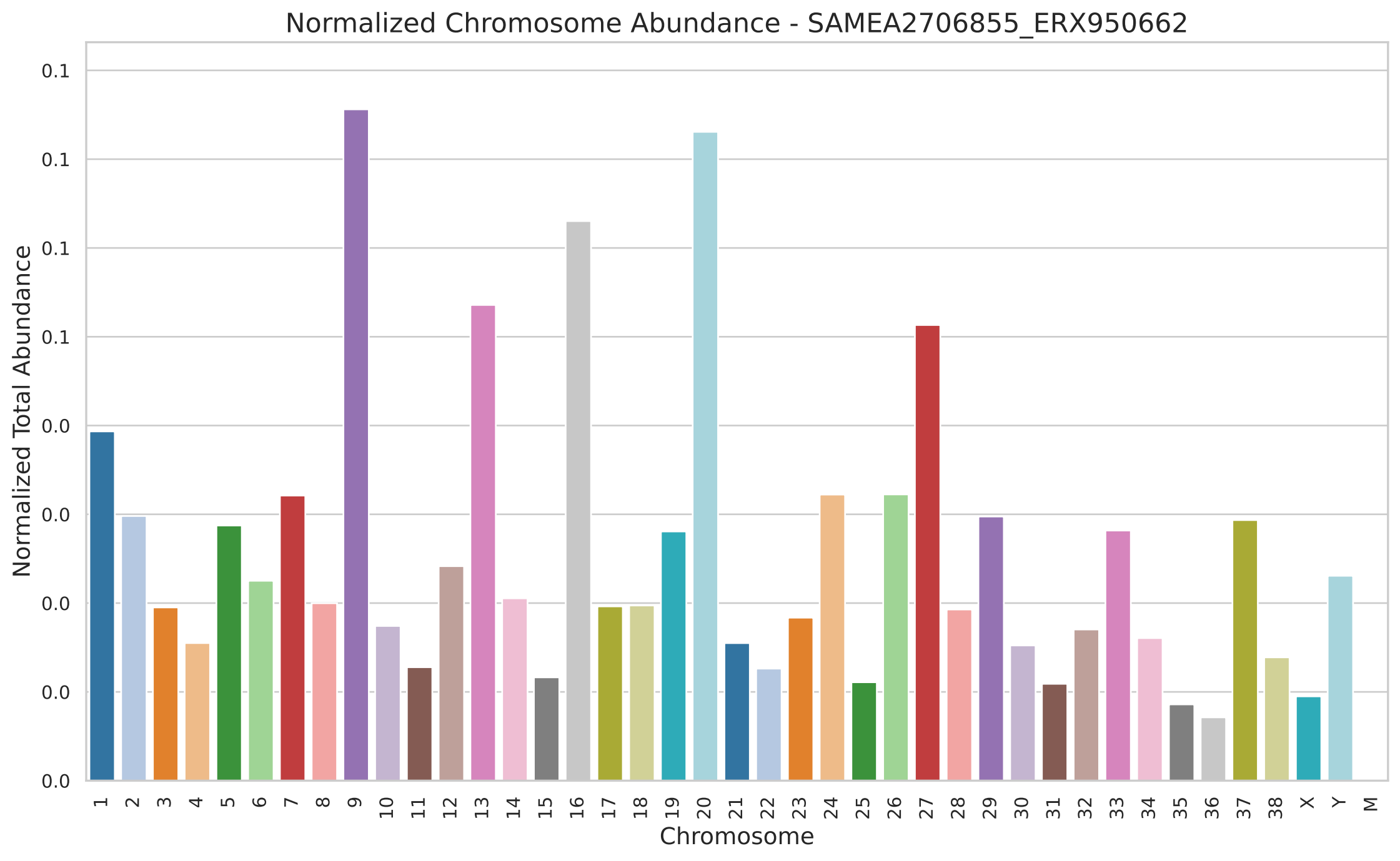

Normalized Chromosome Abundance - SAMEA2706861_ERX950668
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

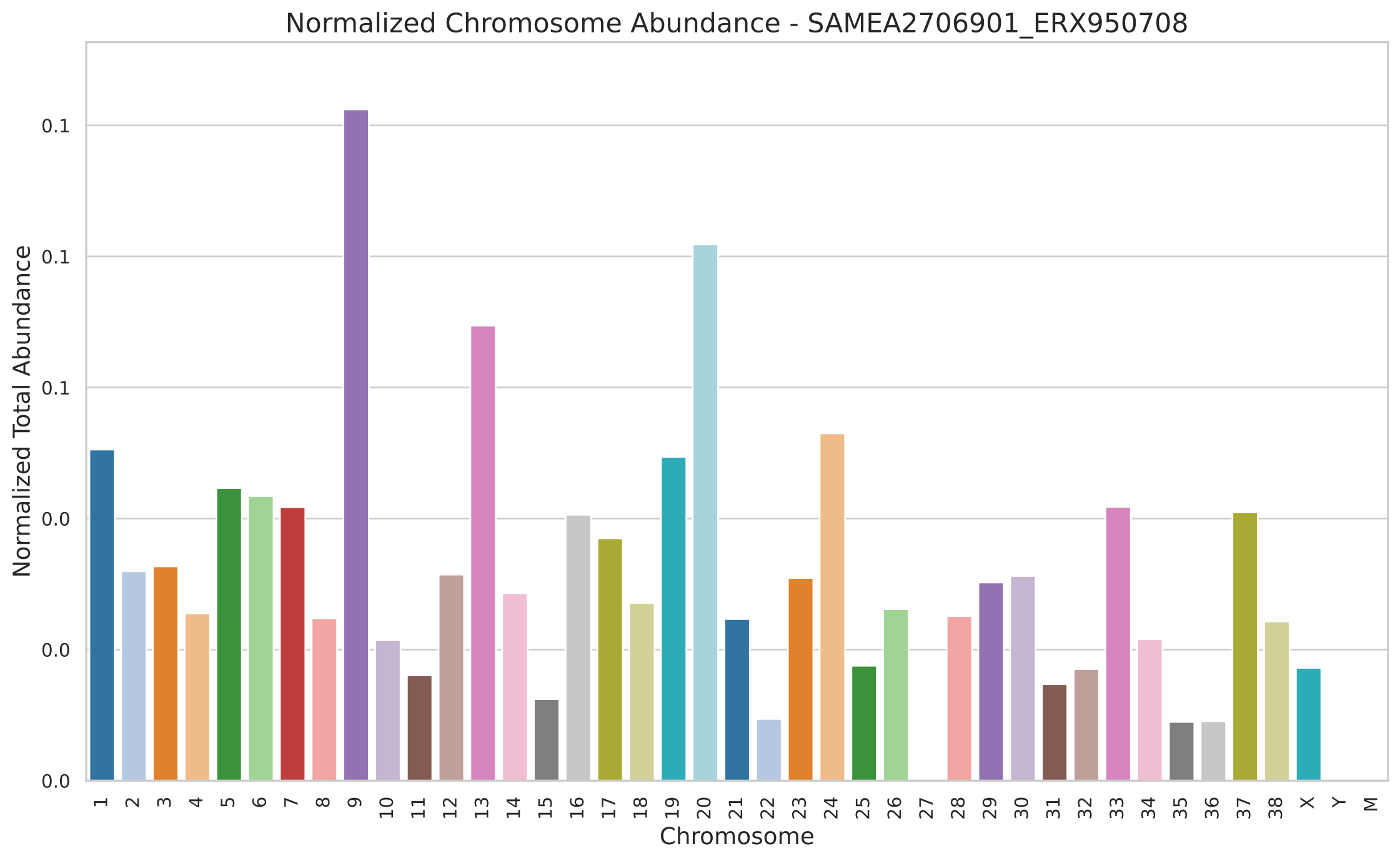

Normalized Chromosome Abundance - SAMEA2706885_ERX950692
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

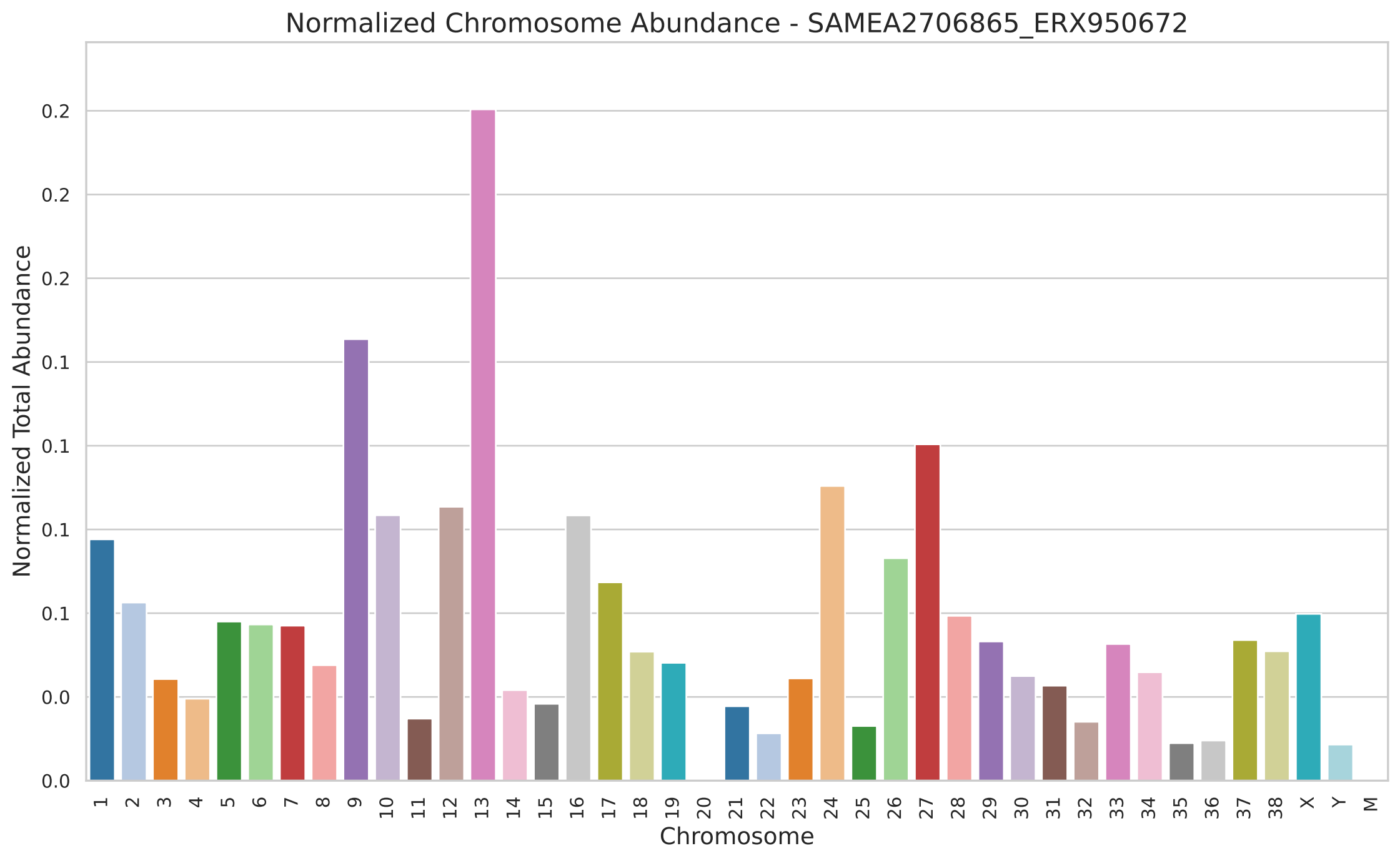

Normalized Chromosome Abundance - SAMEA2706879_ERX950686
Normalized Total Abundance
0.2
0.1
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

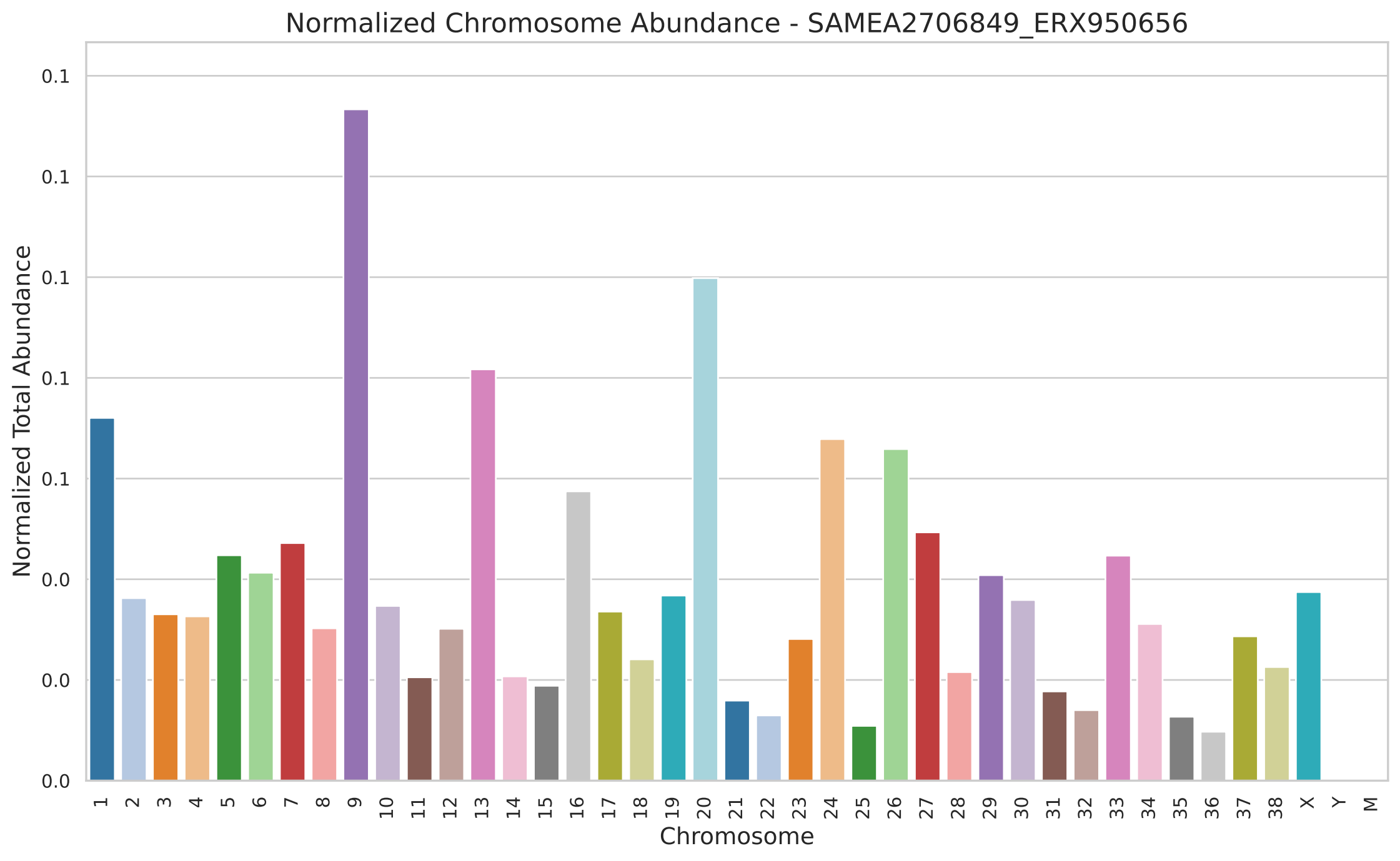

Normalized Chromosome Abundance - SAMEA2706874_ERX950681
Normalized Total Abundance
0.2
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

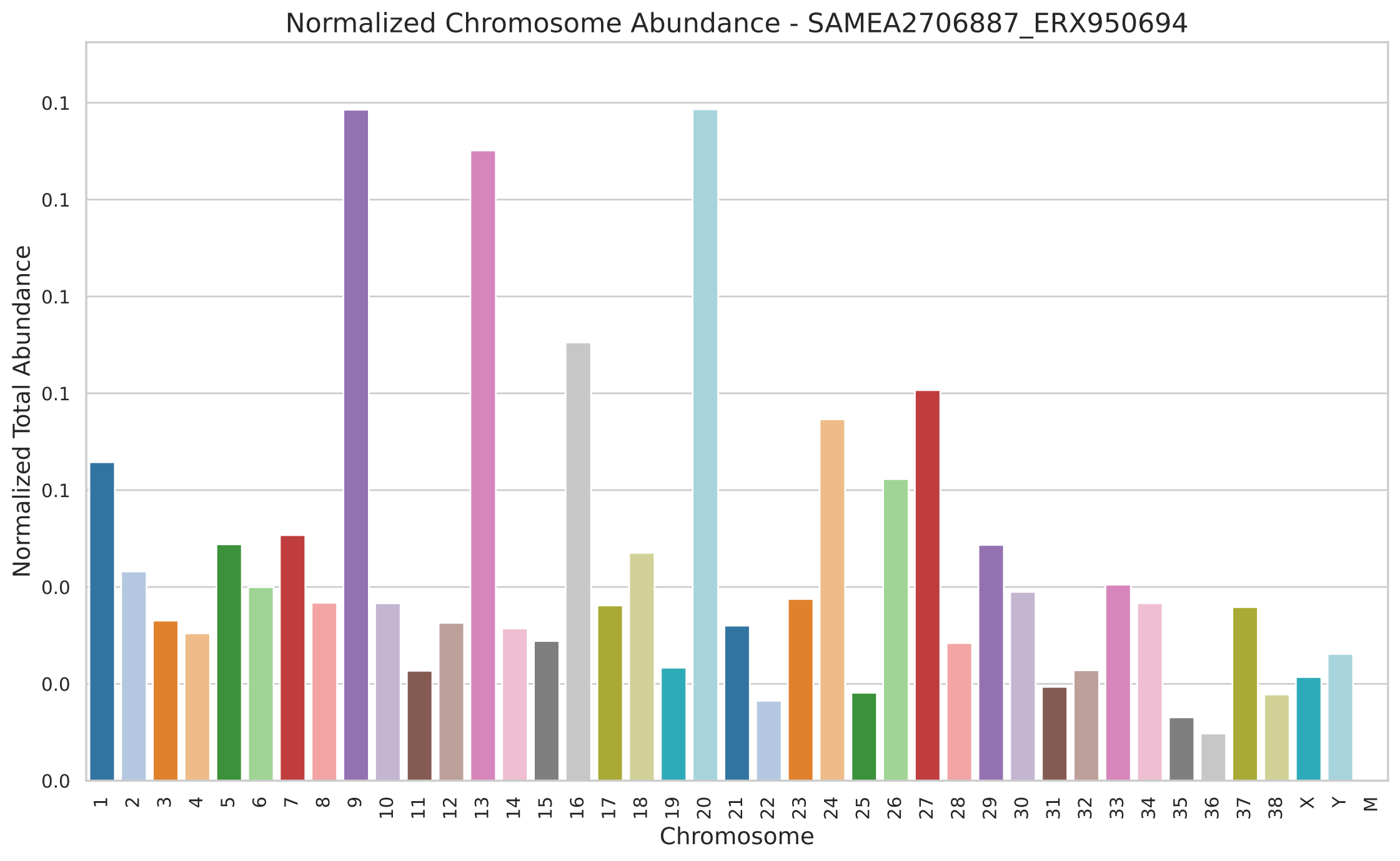

Normalized Chromosome Abundance - SAMEA2706894_ERX950701
Normalized Total Abundance
0.0
0.0
0.1
0.1
0.1
0.1
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

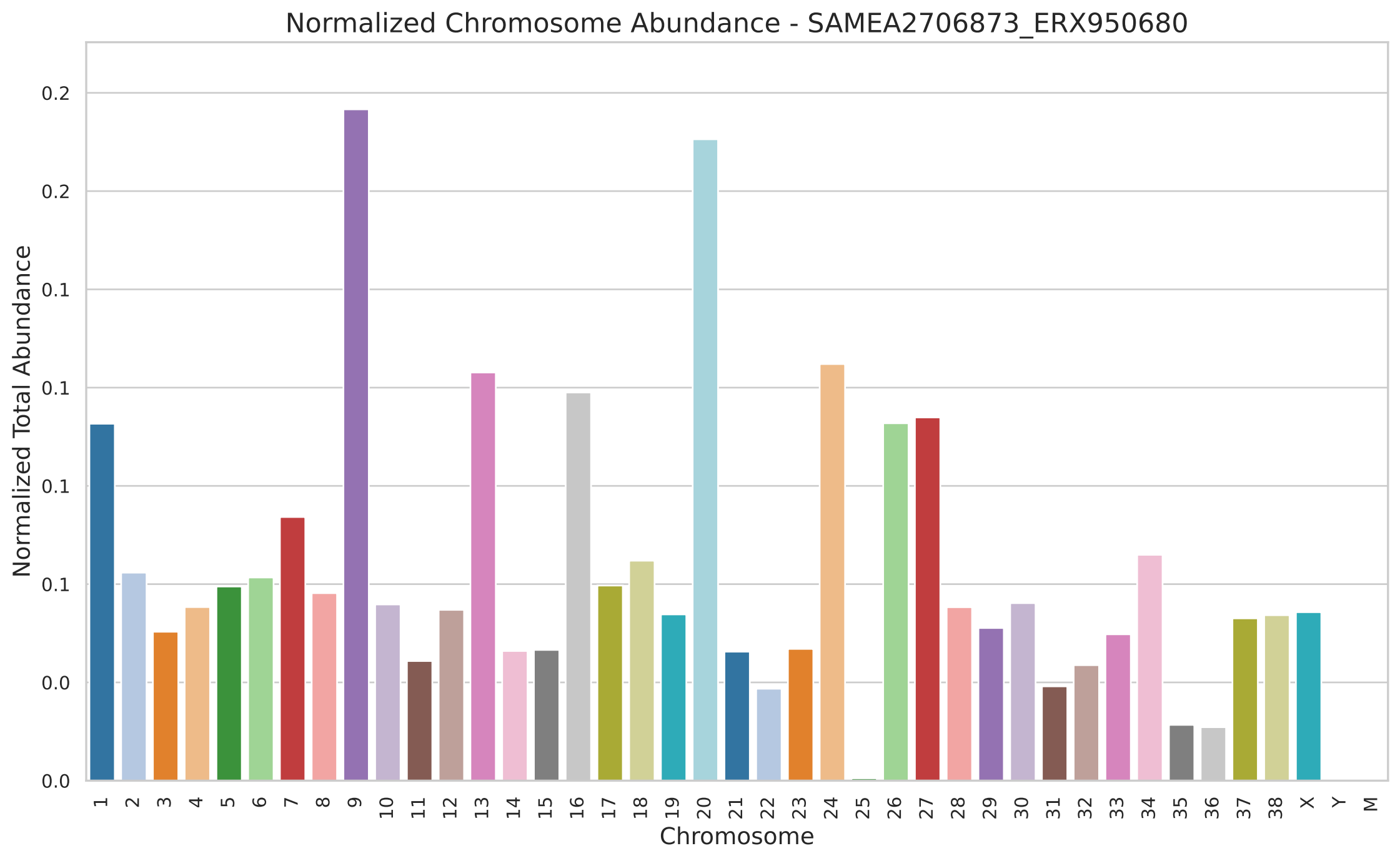

Normalized Chromosome Abundance - SAMEA2706855_ERX950662
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

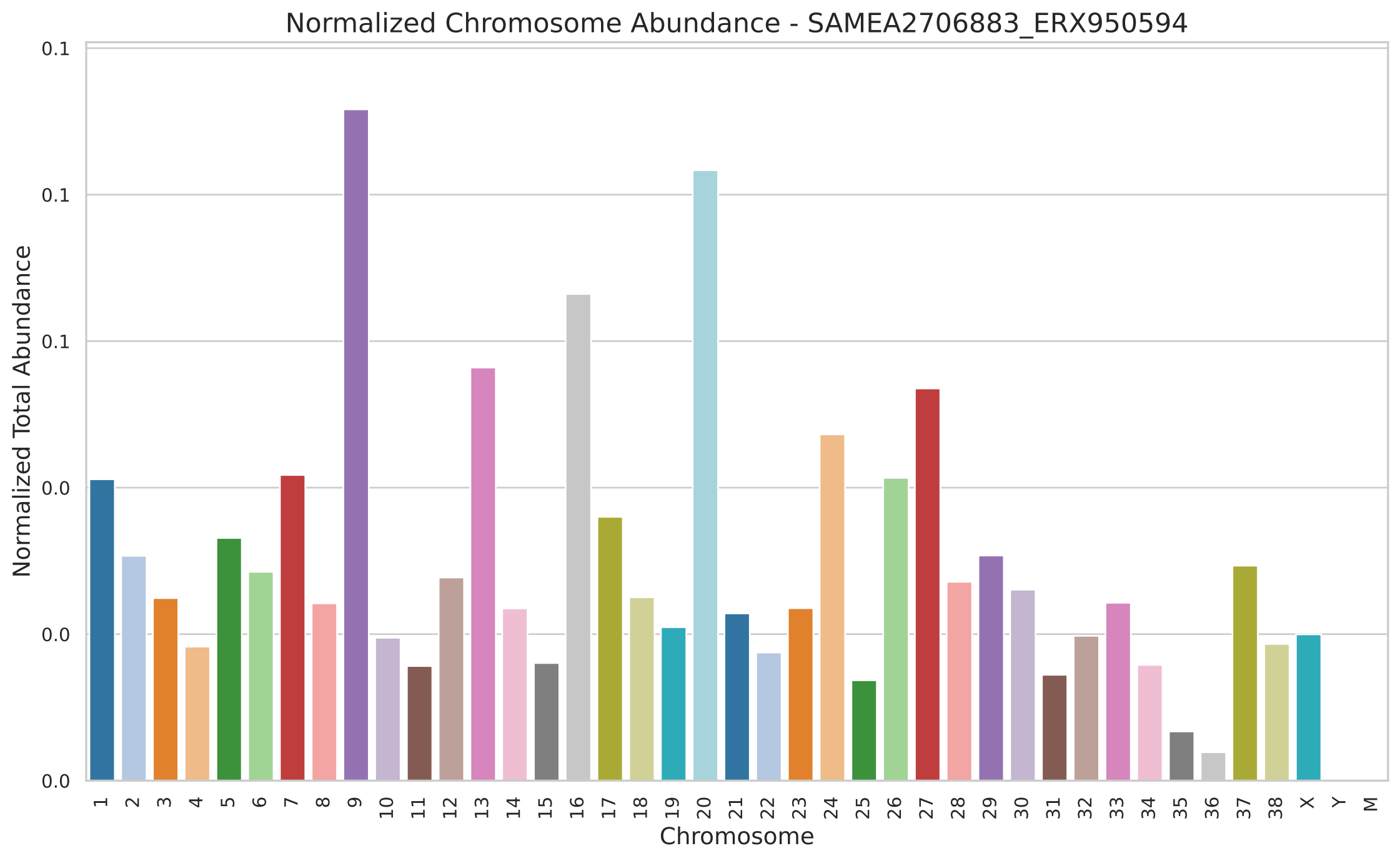

Normalized Chromosome Abundance - SAMEA2706901_ERX950708
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

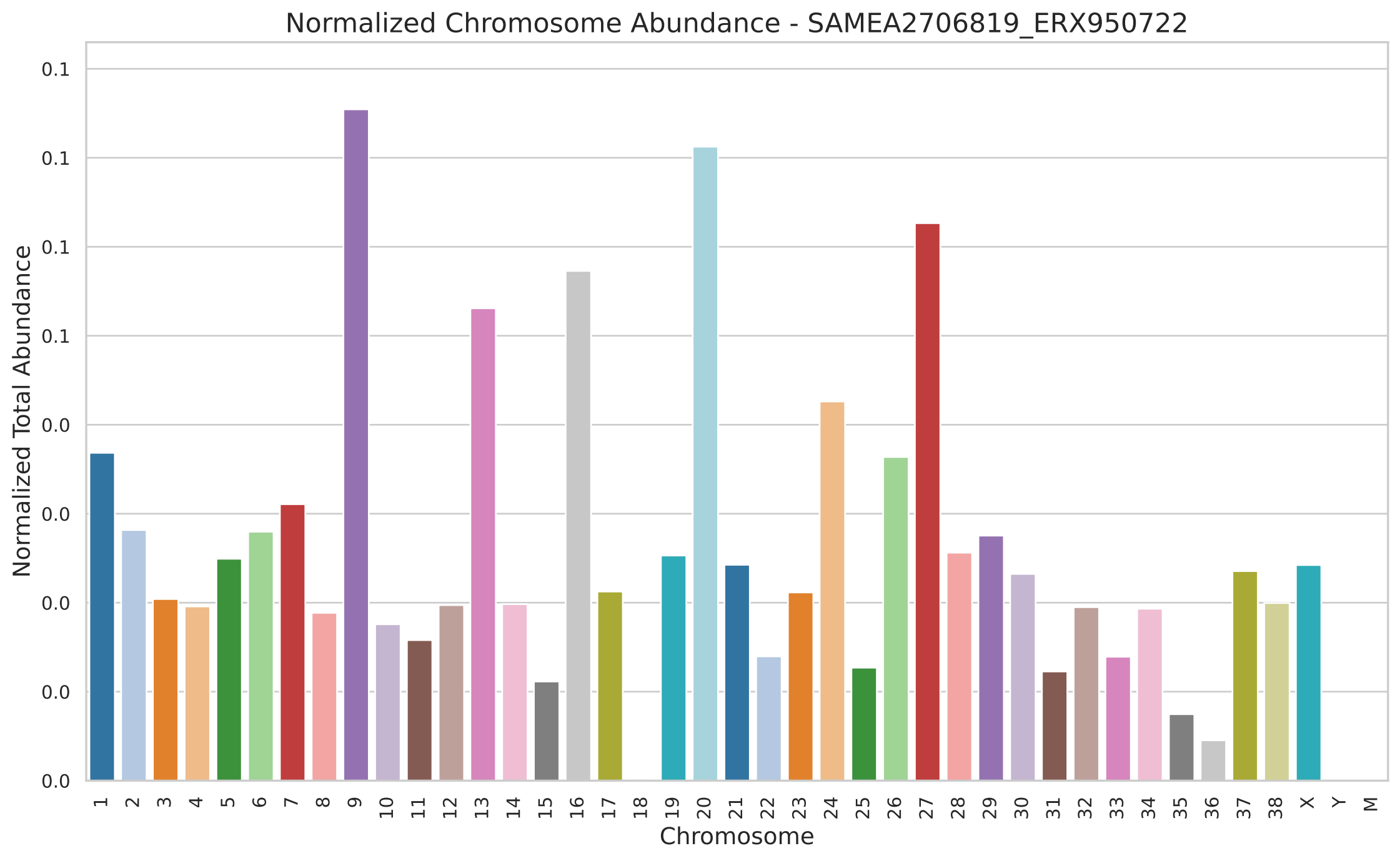

Normalized Chromosome Abundance - SAMEA2706865_ERX950672
Normalized Total Abundance
0.0
0.0
0.1
0.1
0.2
0.2
0.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

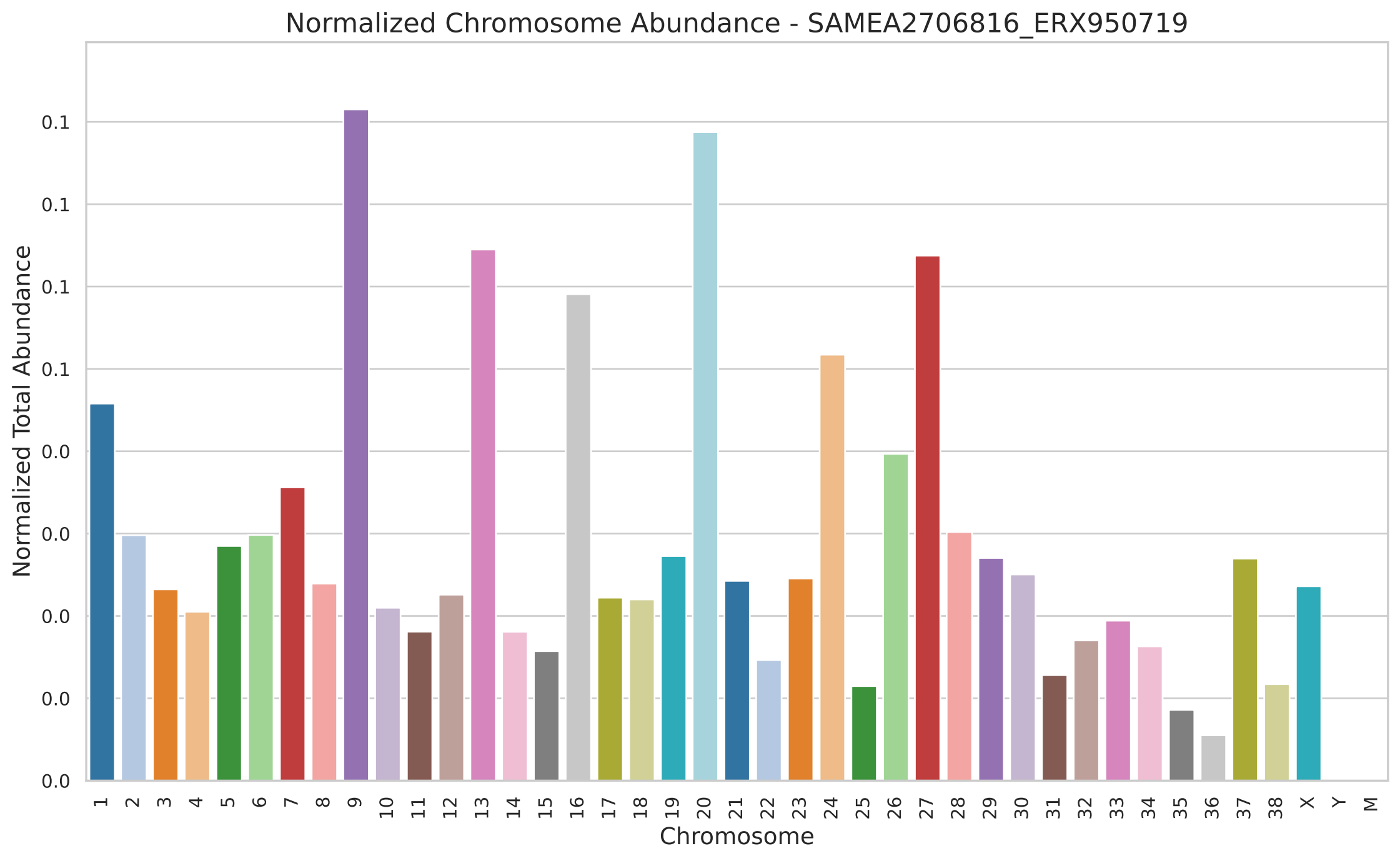

Normalized Chromosome Abundance - SAMEA2706849_ERX950656
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

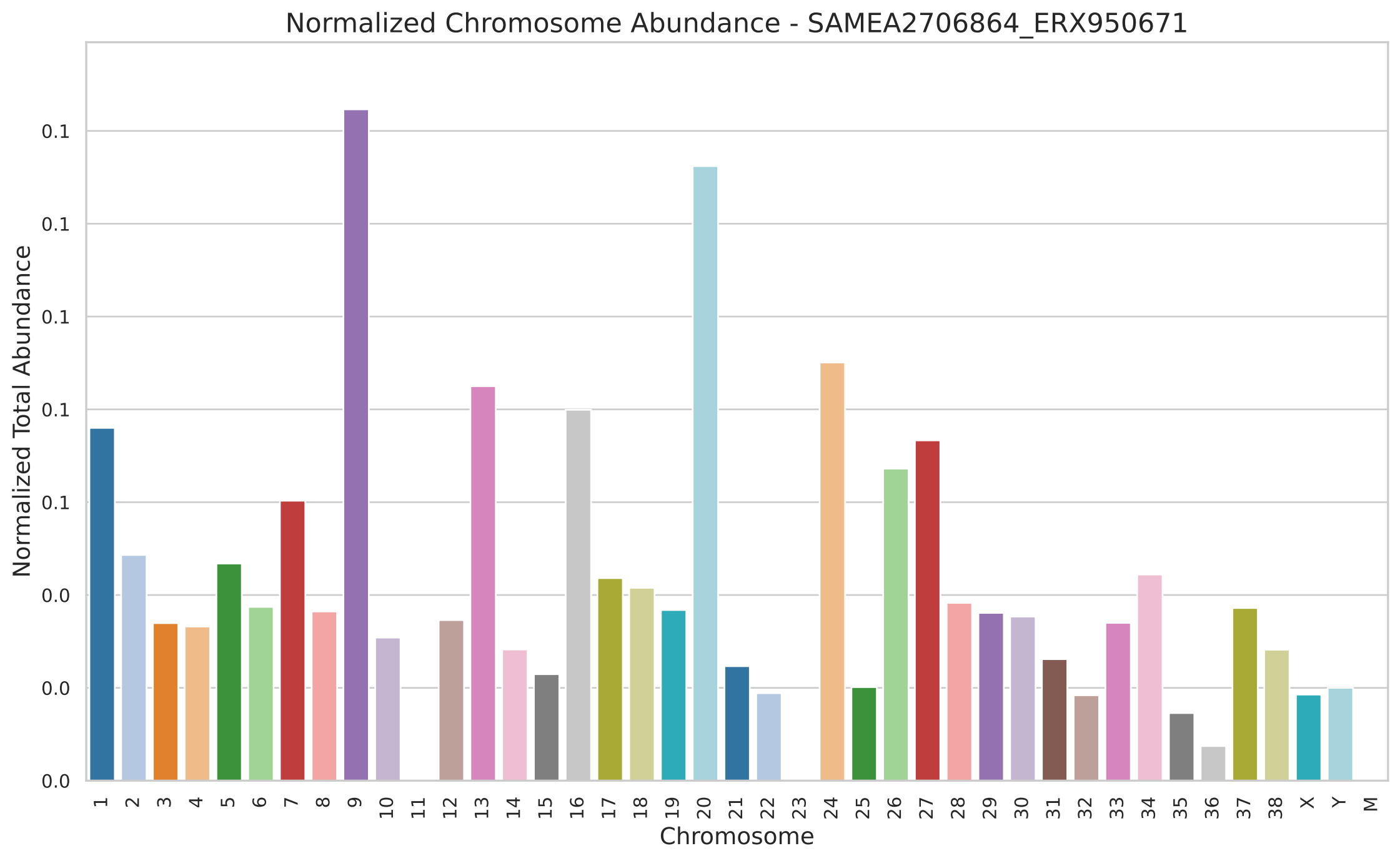

Normalized Chromosome Abundance - SAMEA2706887_ERX950694
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

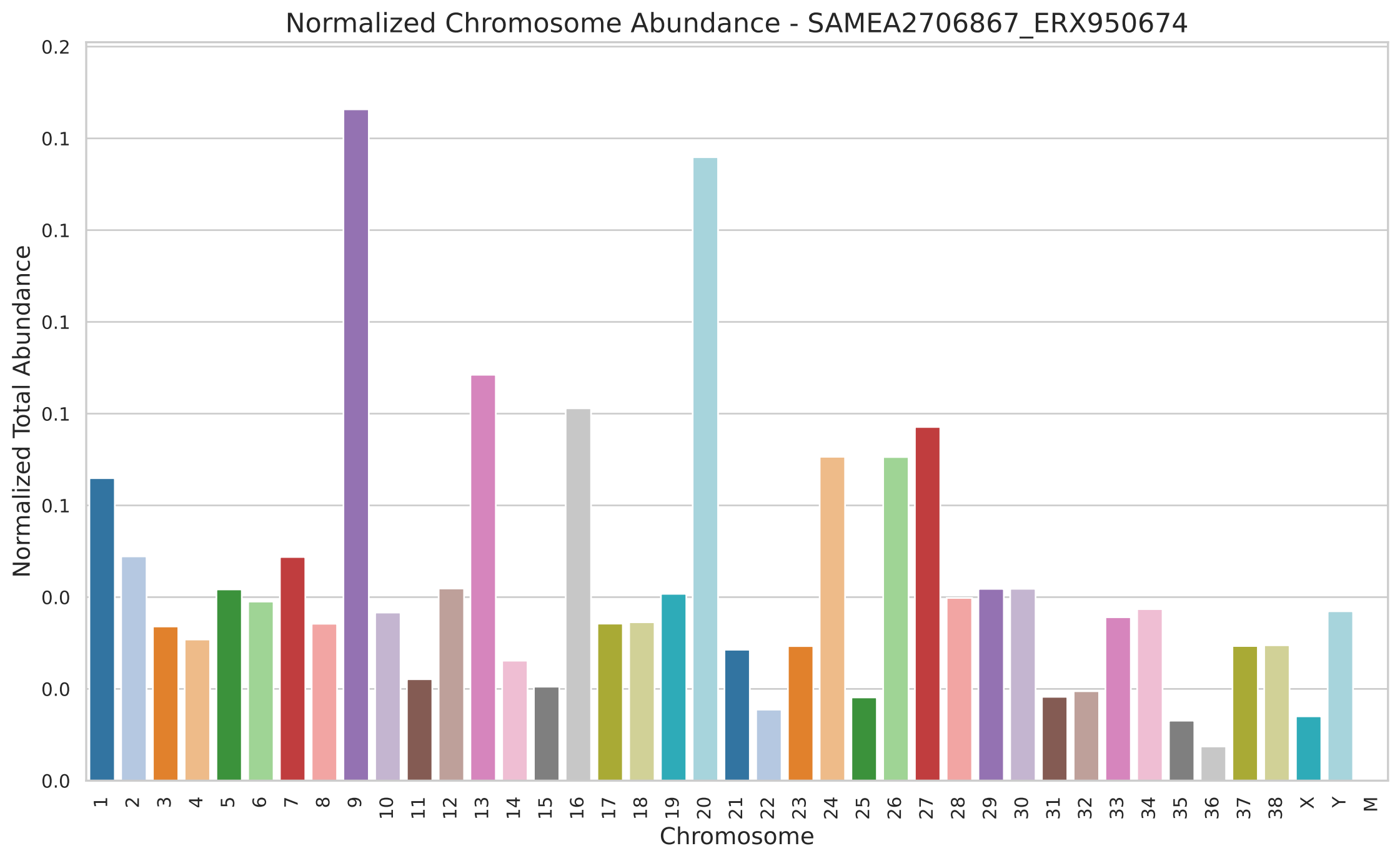

Normalized Chromosome Abundance - SAMEA2706873_ERX950680
Normalized Total Abundance
0.2
0.2
0.1
0.1
0.1
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

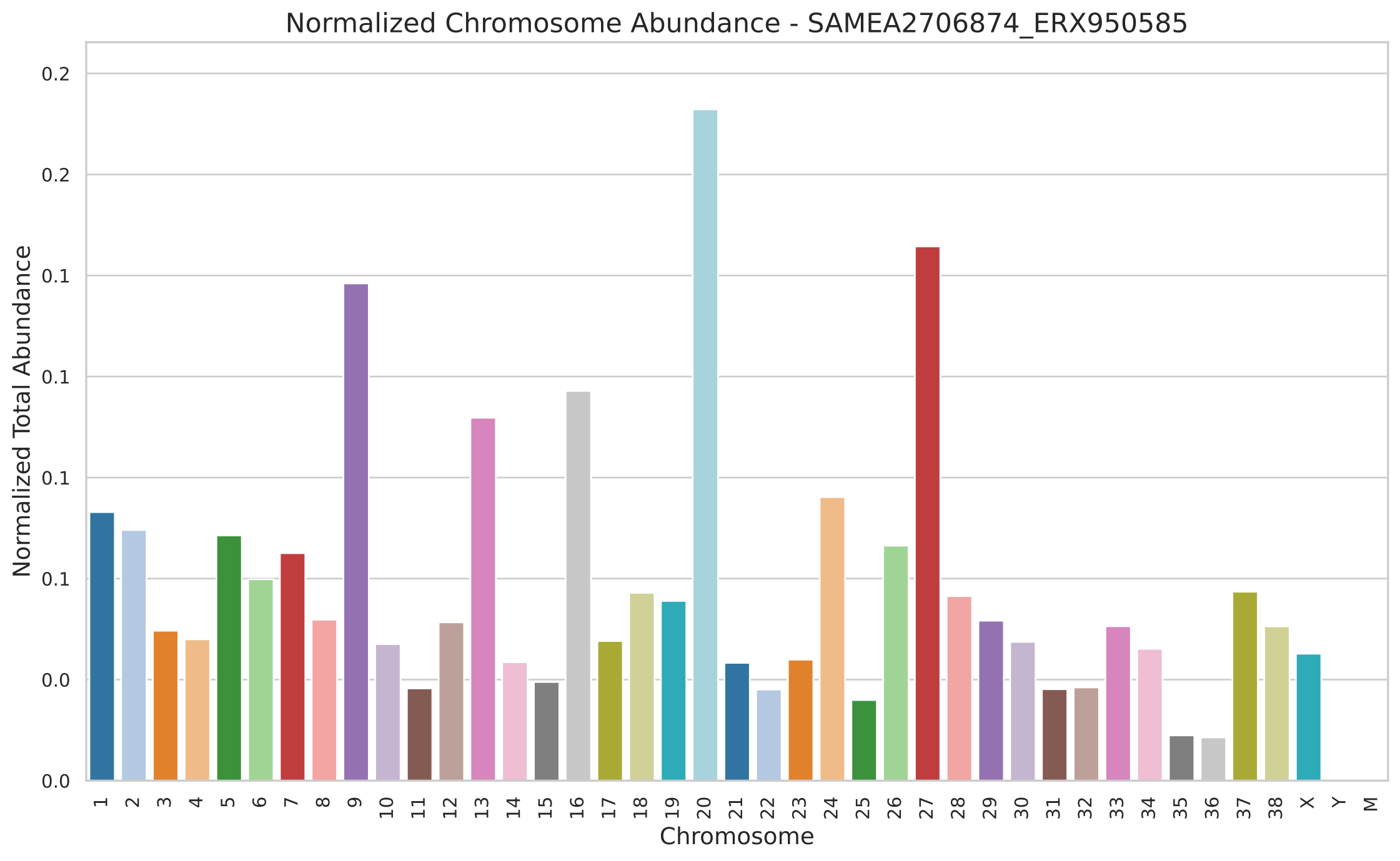

Normalized Chromosome Abundance - SAMEA2706883_ERX950594
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

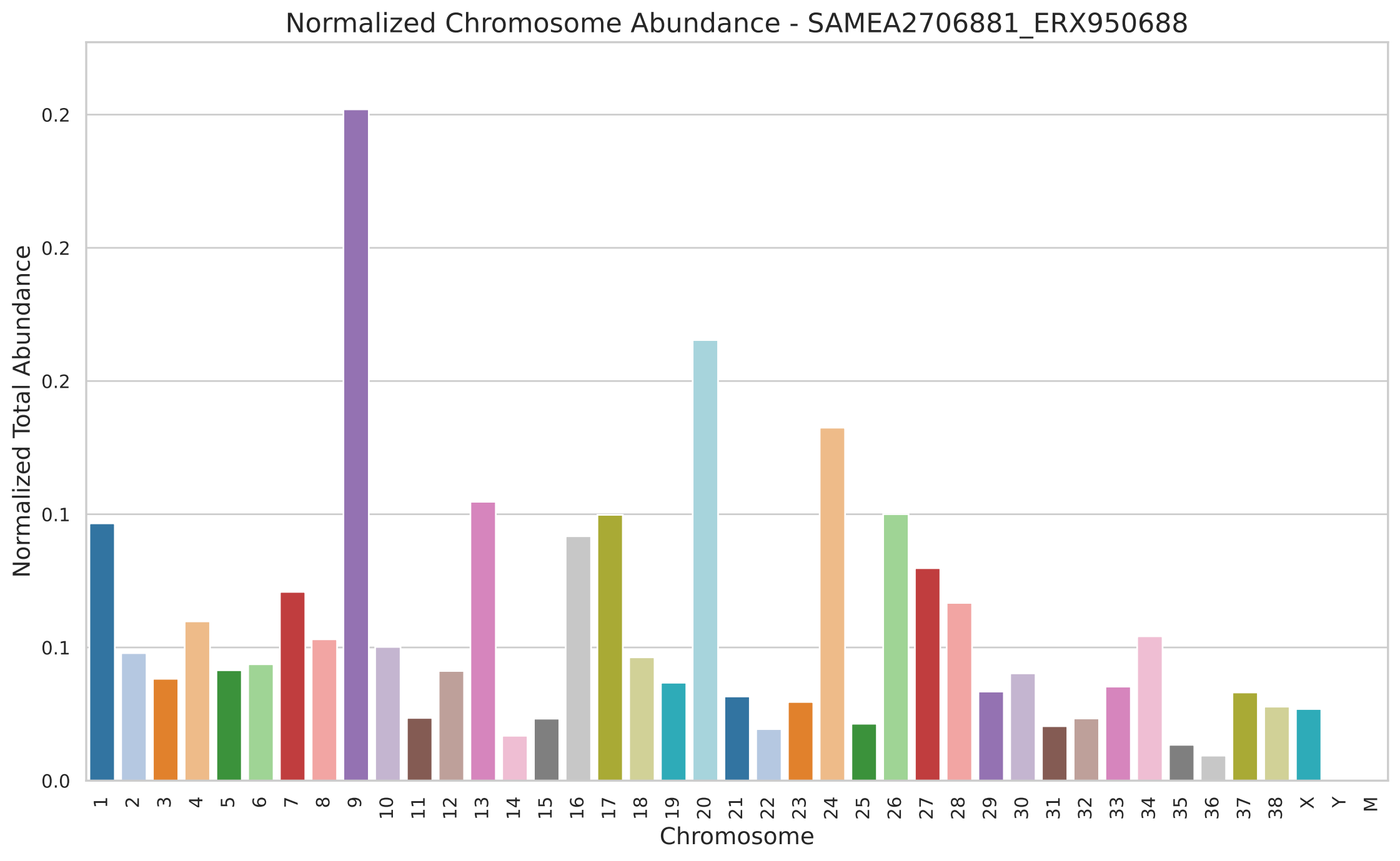

Normalized Chromosome Abundance - SAMEA2706819_ERX950722
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

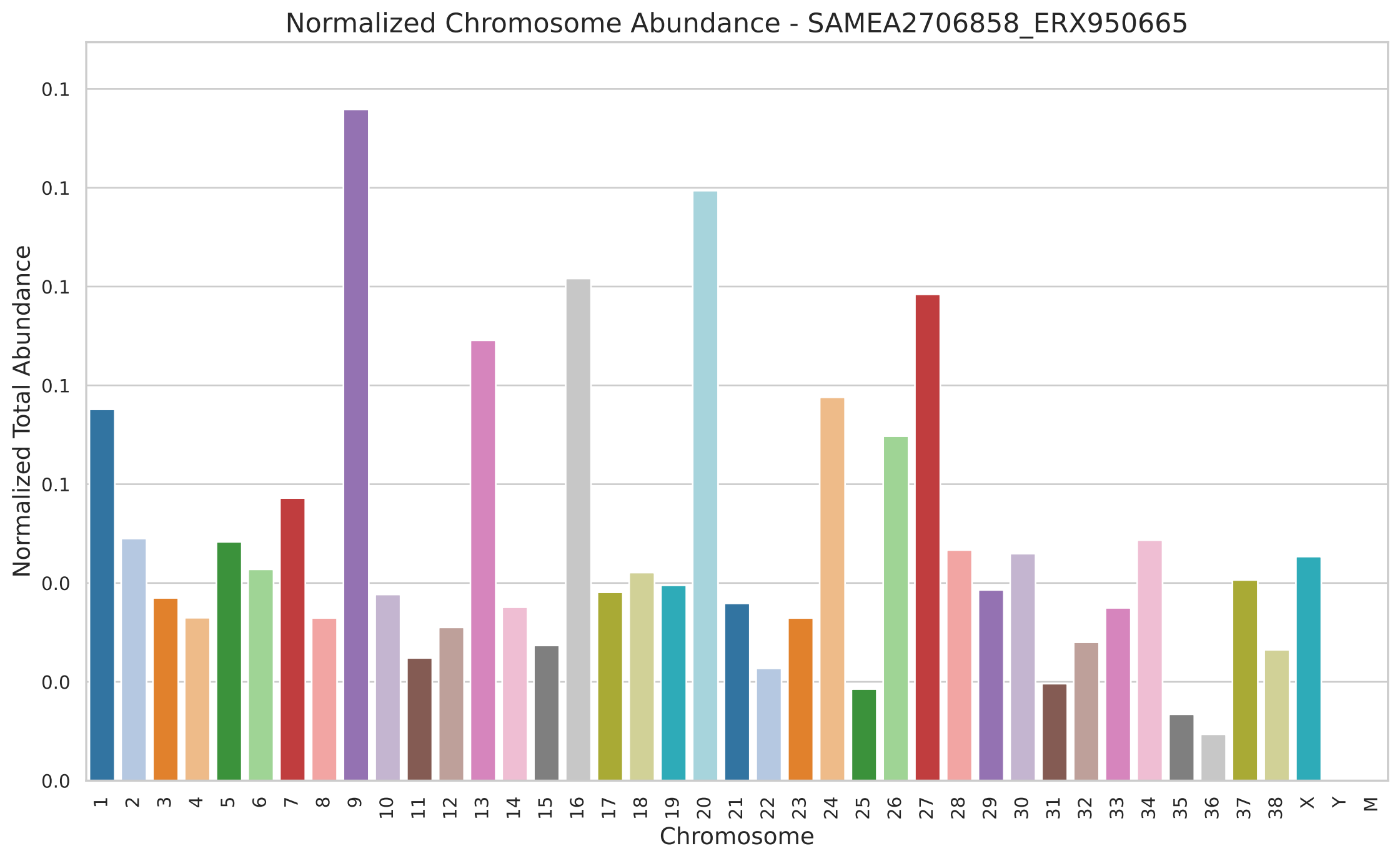

Normalized Chromosome Abundance - SAMEA2706816_ERX950719
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

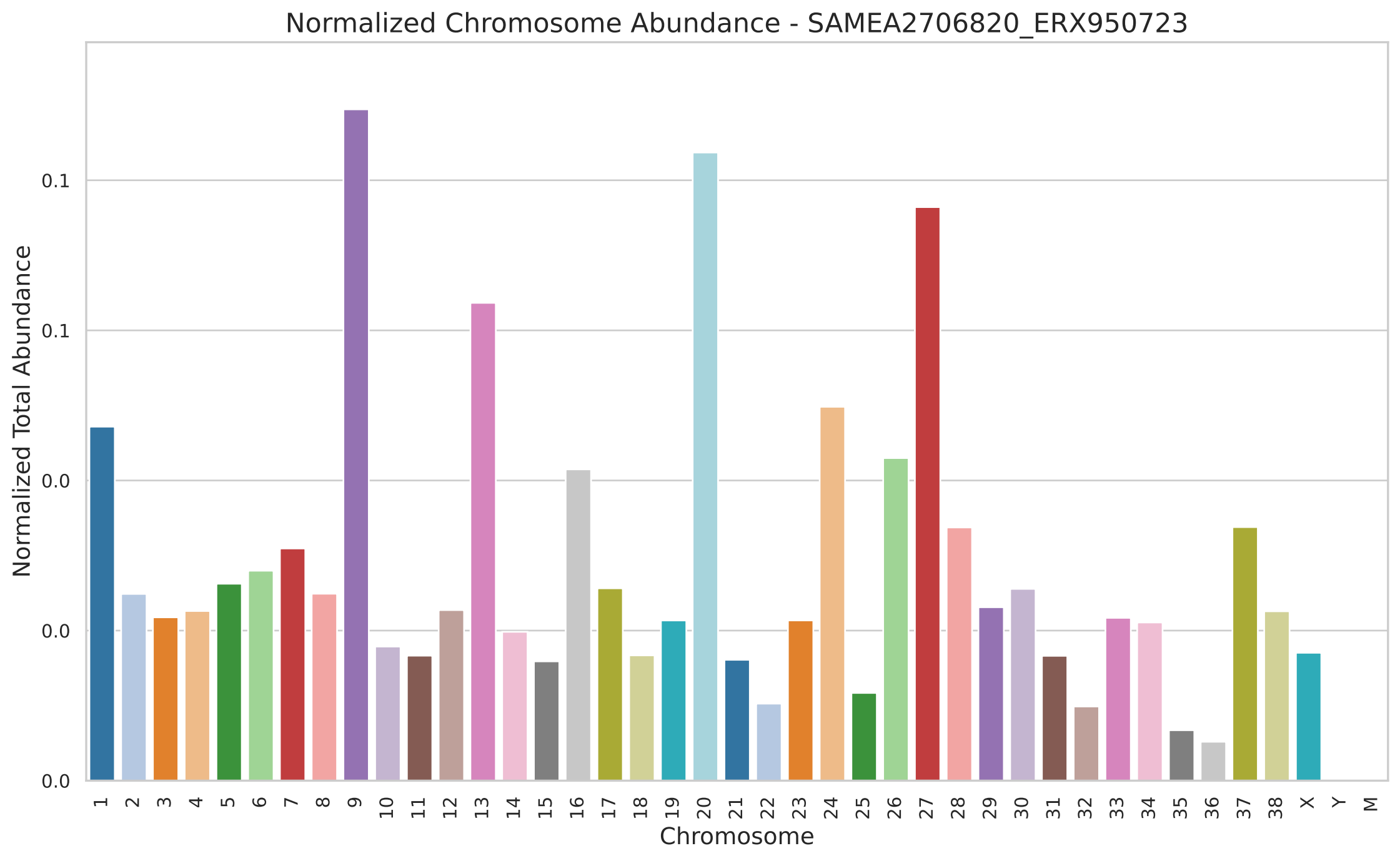

Normalized Chromosome Abundance - SAMEA2706864_ERX950671
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

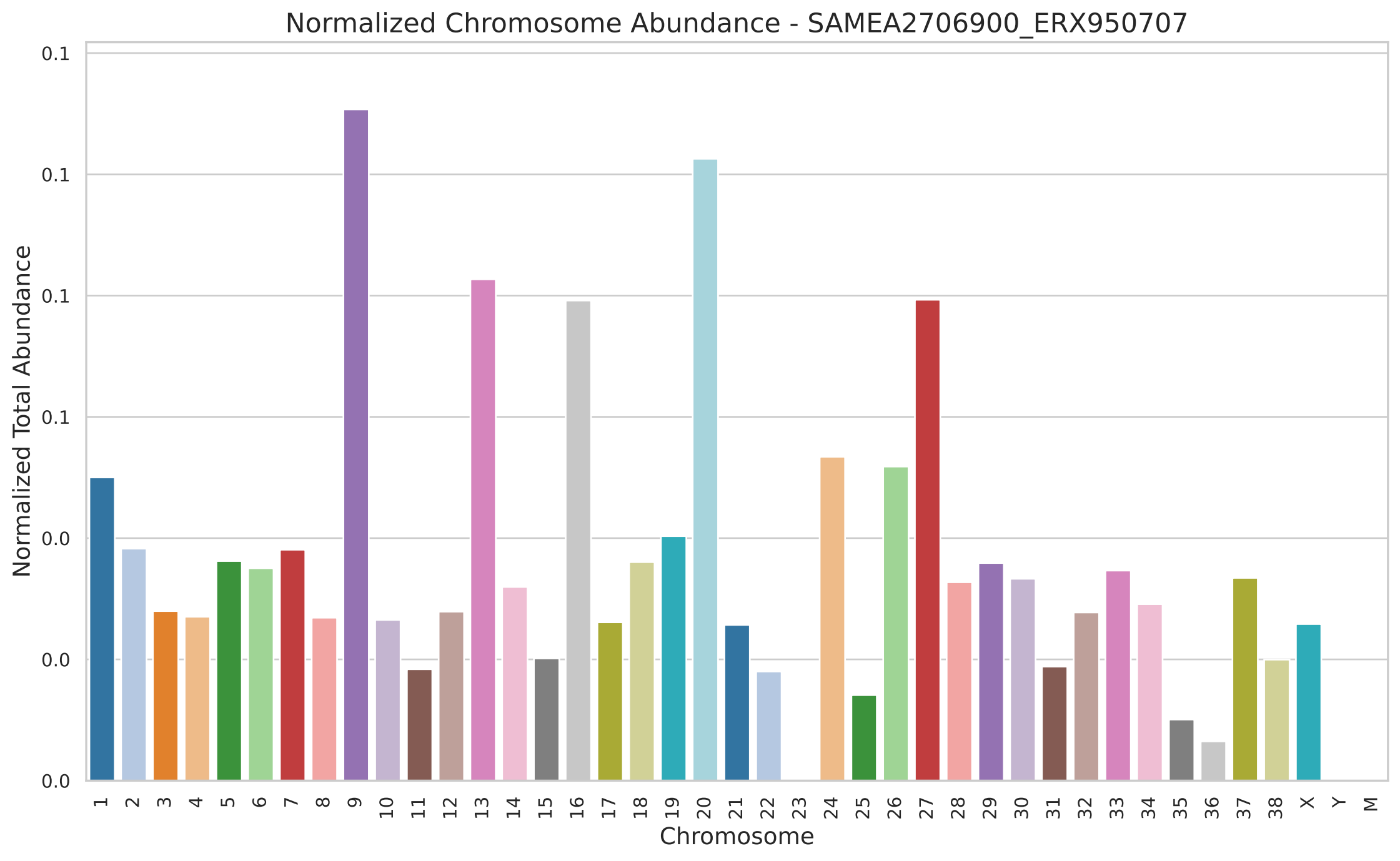

Normalized Chromosome Abundance - SAMEA2706867_ERX950674
Normalized Total Abundance
0.2
0.1
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

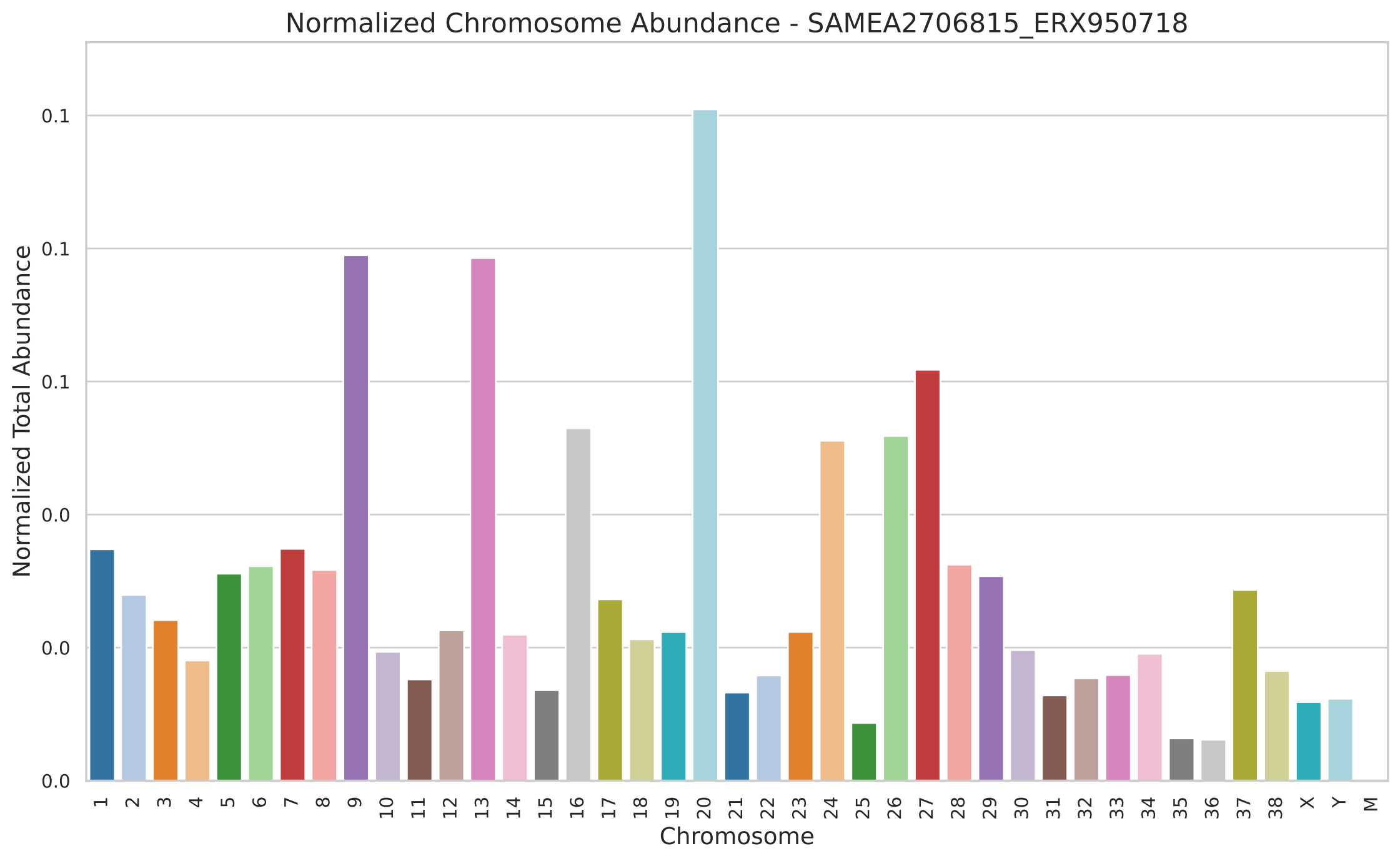

Normalized Chromosome Abundance - SAMEA2706874_ERX950585
Normalized Total Abundance
0.0
0.0
0.1
0.1
0.1
0.2
0.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

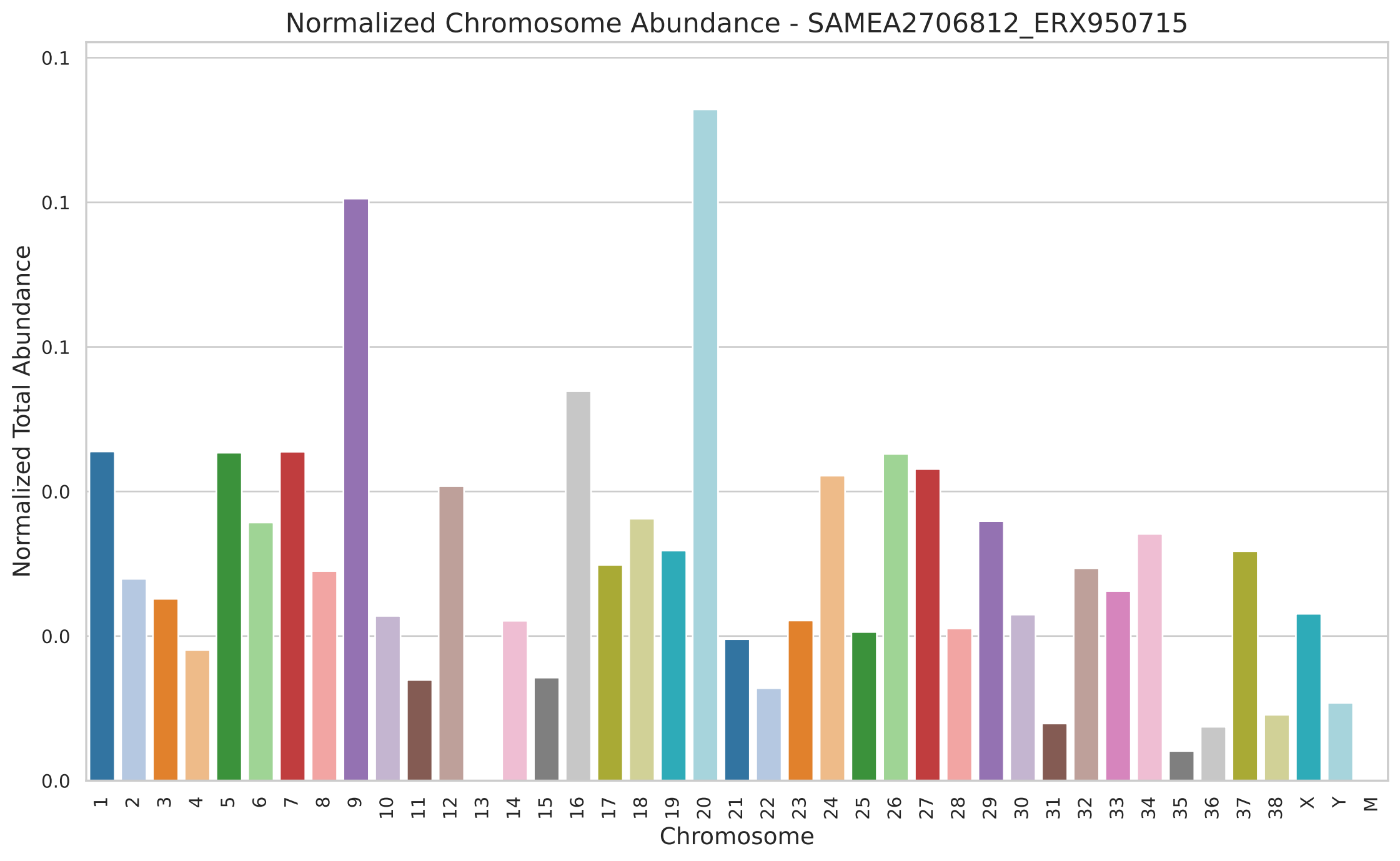

Normalized Chromosome Abundance - SAMEA2706881_ERX950688
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

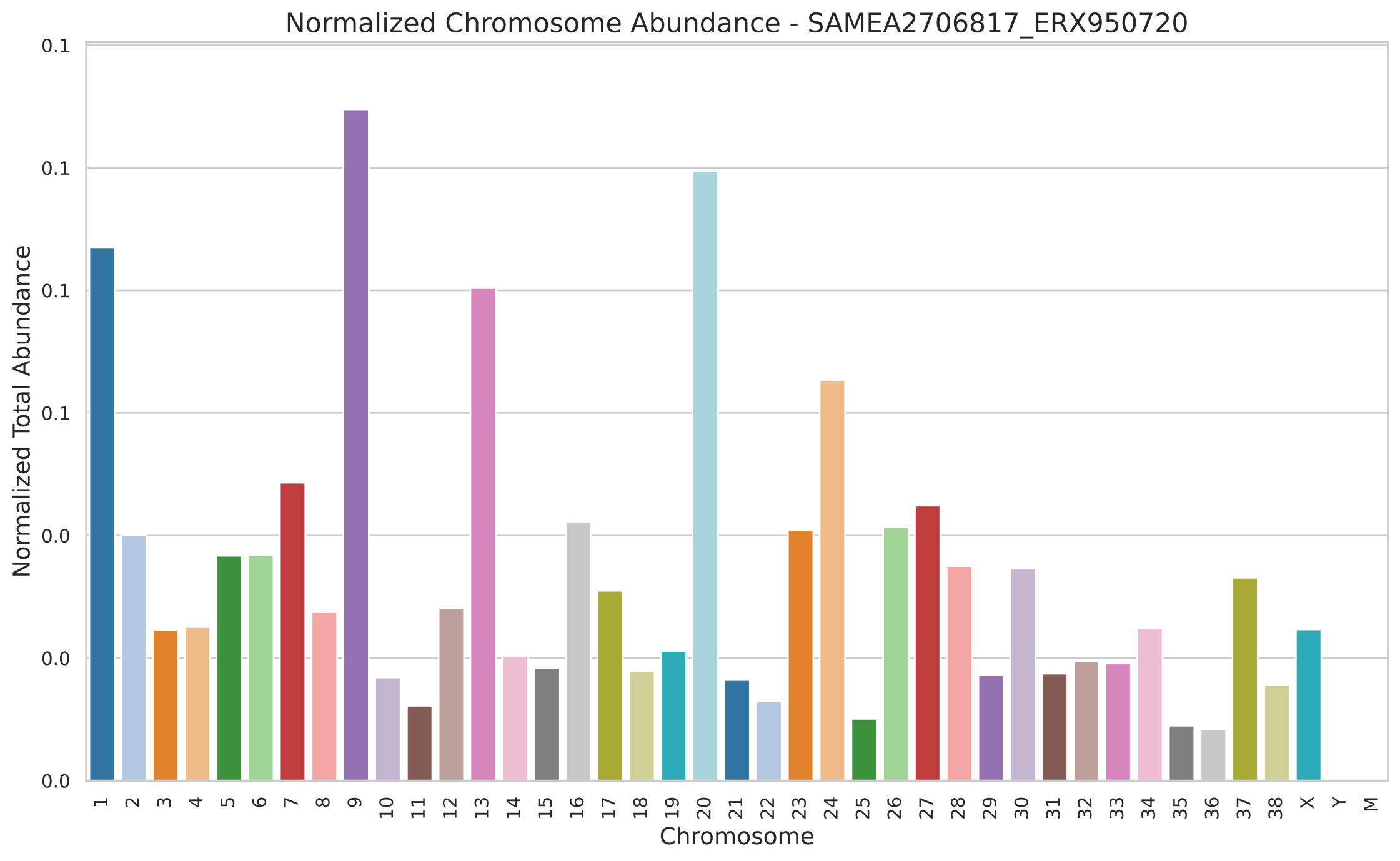

Normalized Chromosome Abundance - SAMEA2706858_ERX950665
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

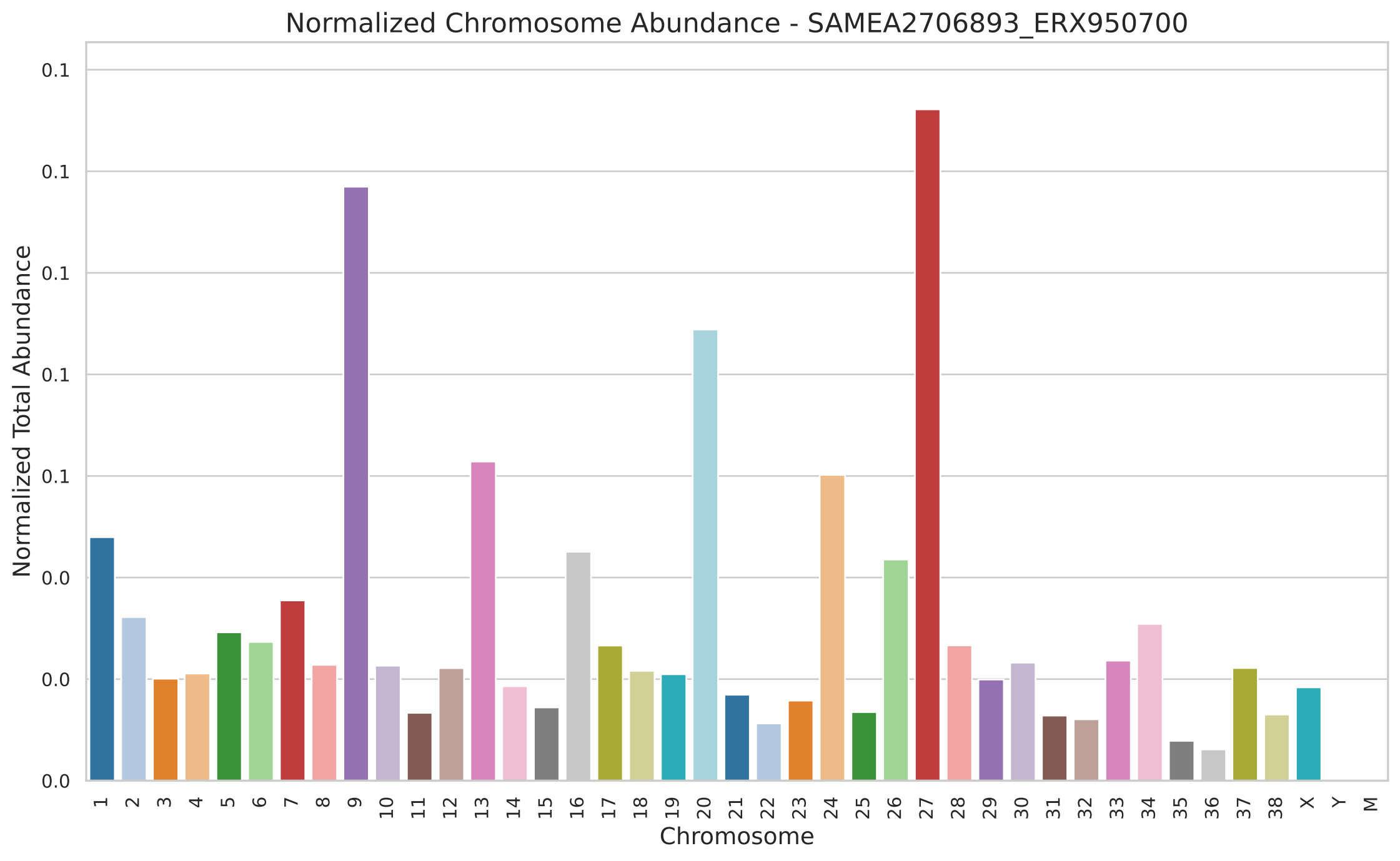

Normalized Chromosome Abundance - SAMEA2706820_ERX950723
Normalized Total Abundance
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

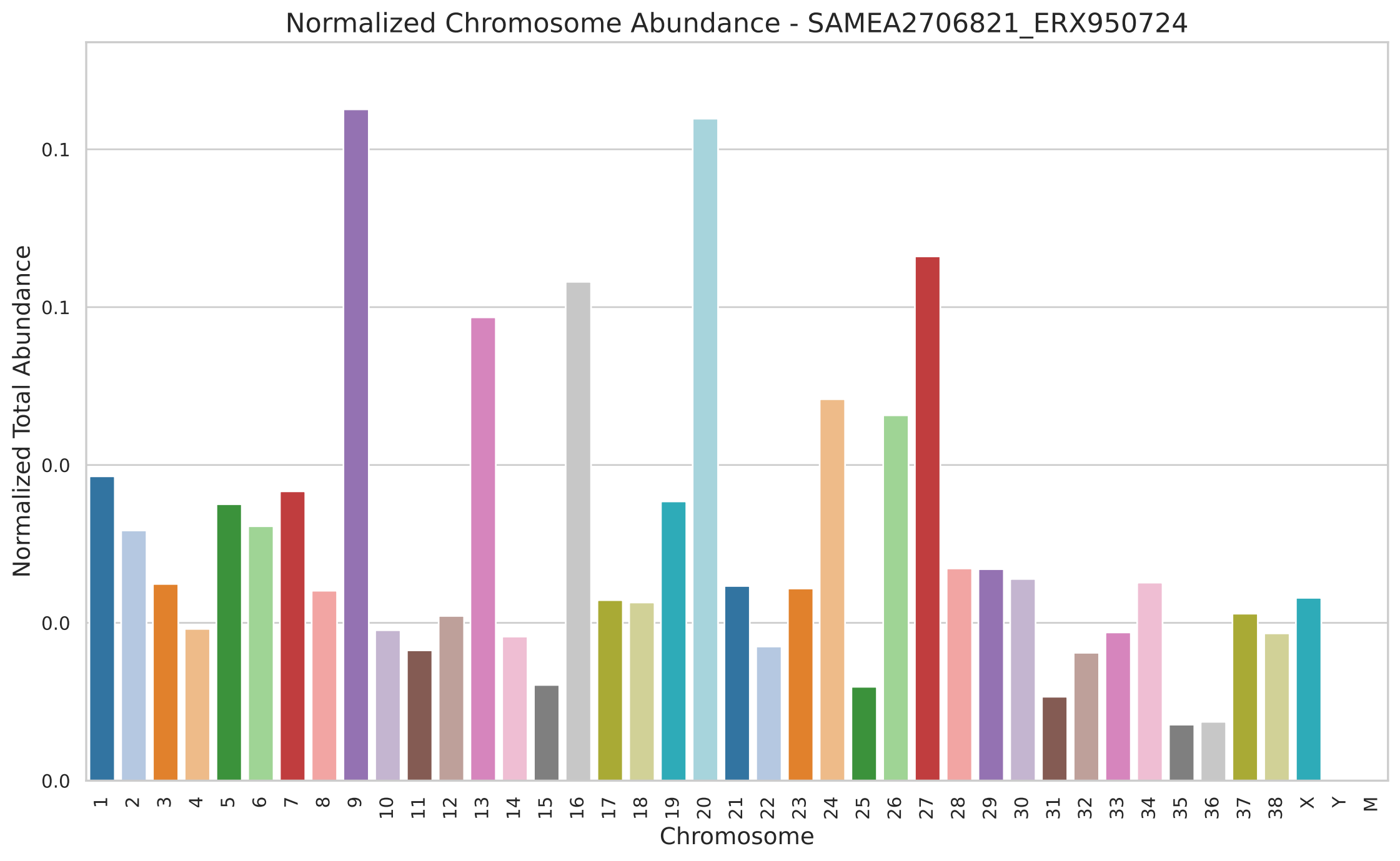

Normalized Chromosome Abundance - SAMEA2706900_ERX950707
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

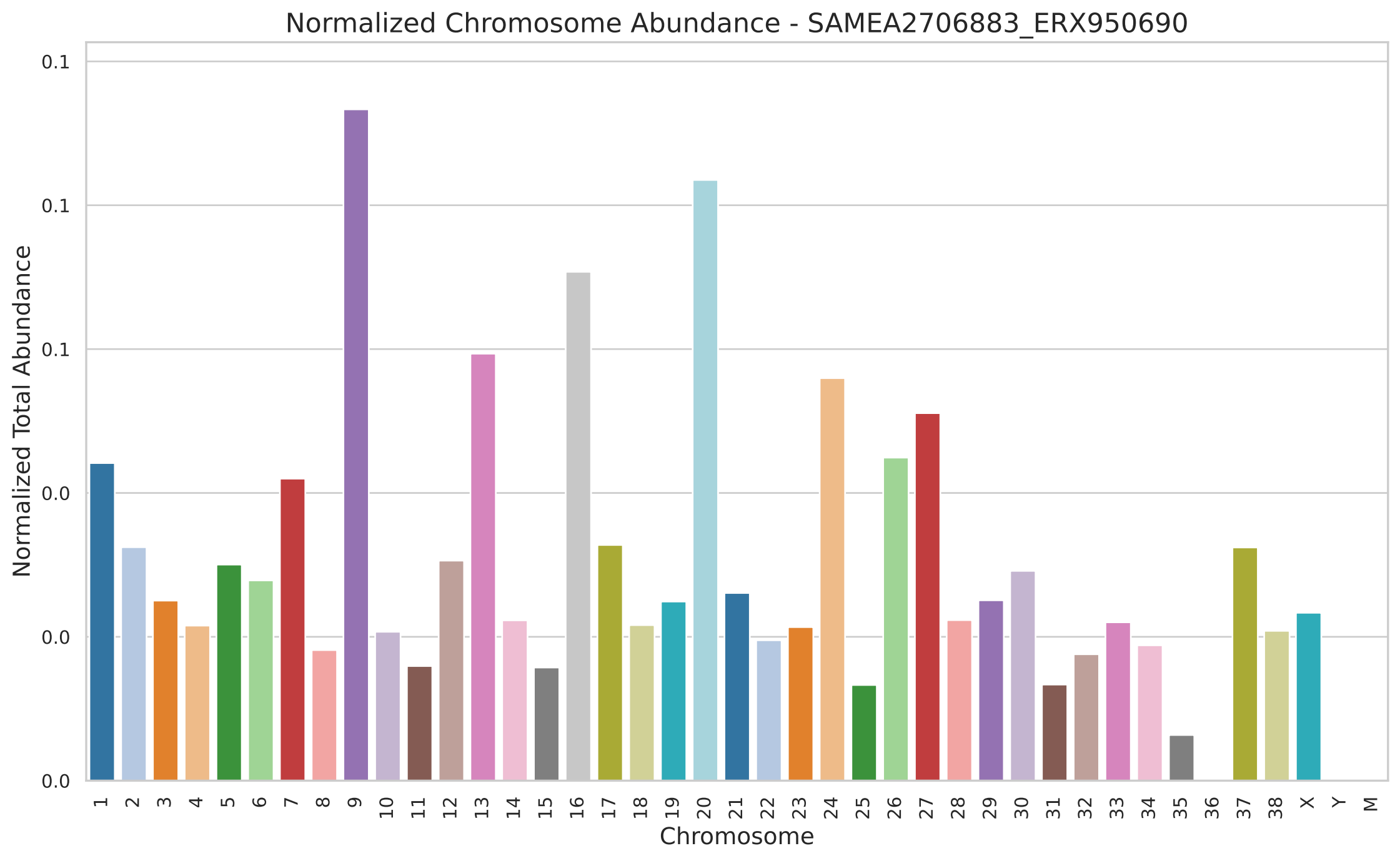

Normalized Chromosome Abundance - SAMEA2706815_ERX950718
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

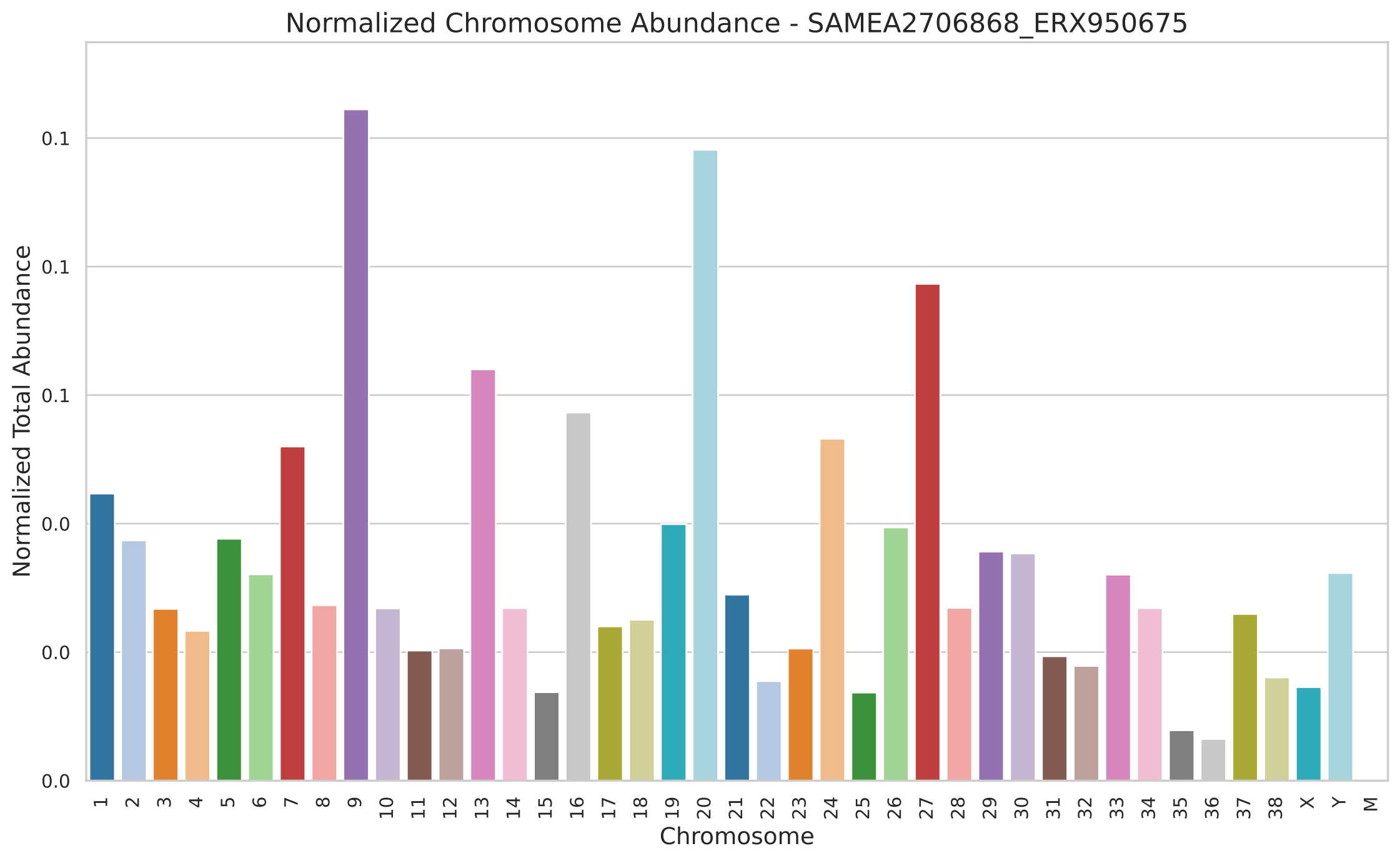

Normalized Chromosome Abundance - SAMEA2706812_ERX950715
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

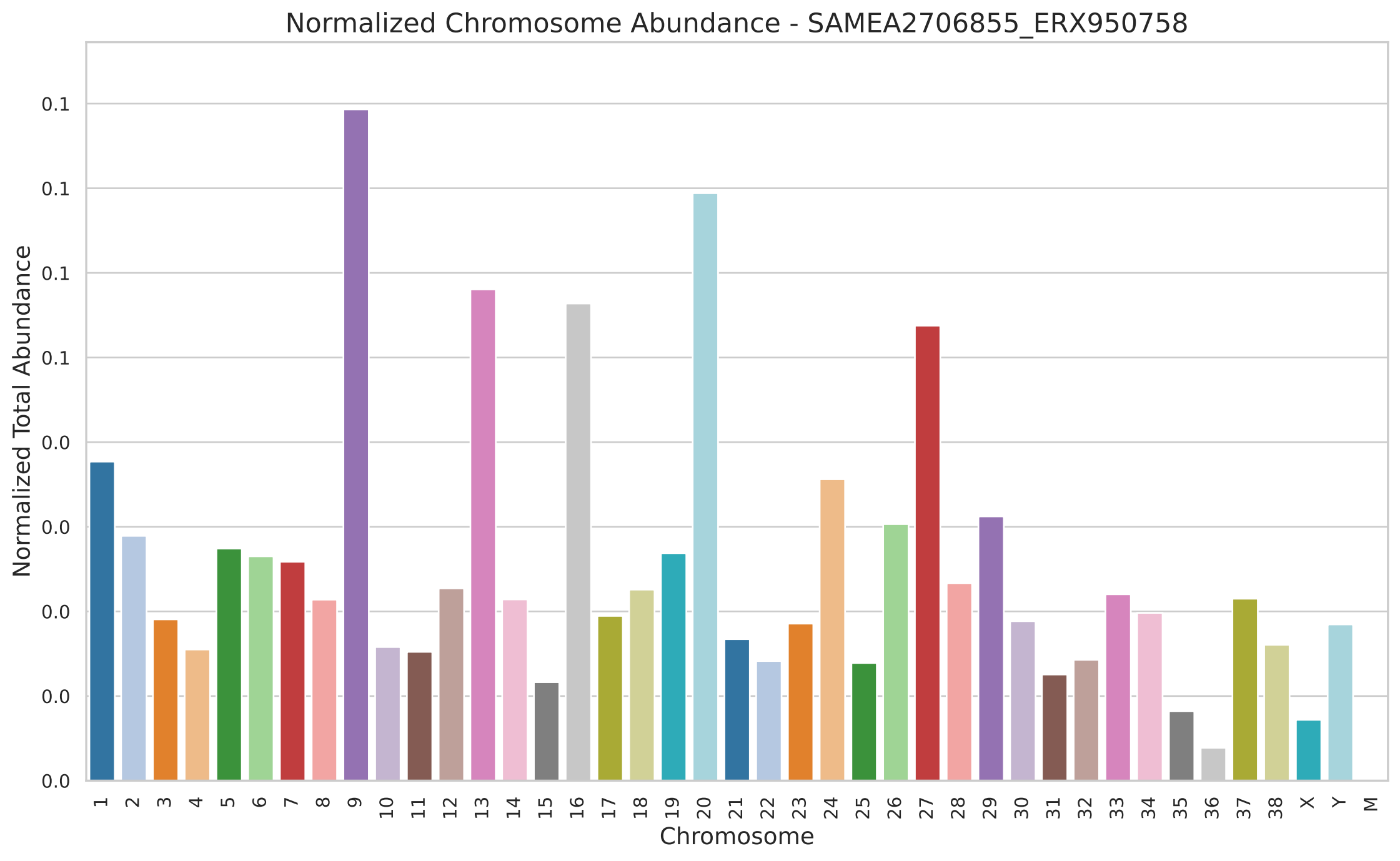

Normalized Chromosome Abundance - SAMEA2706817_ERX950720
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

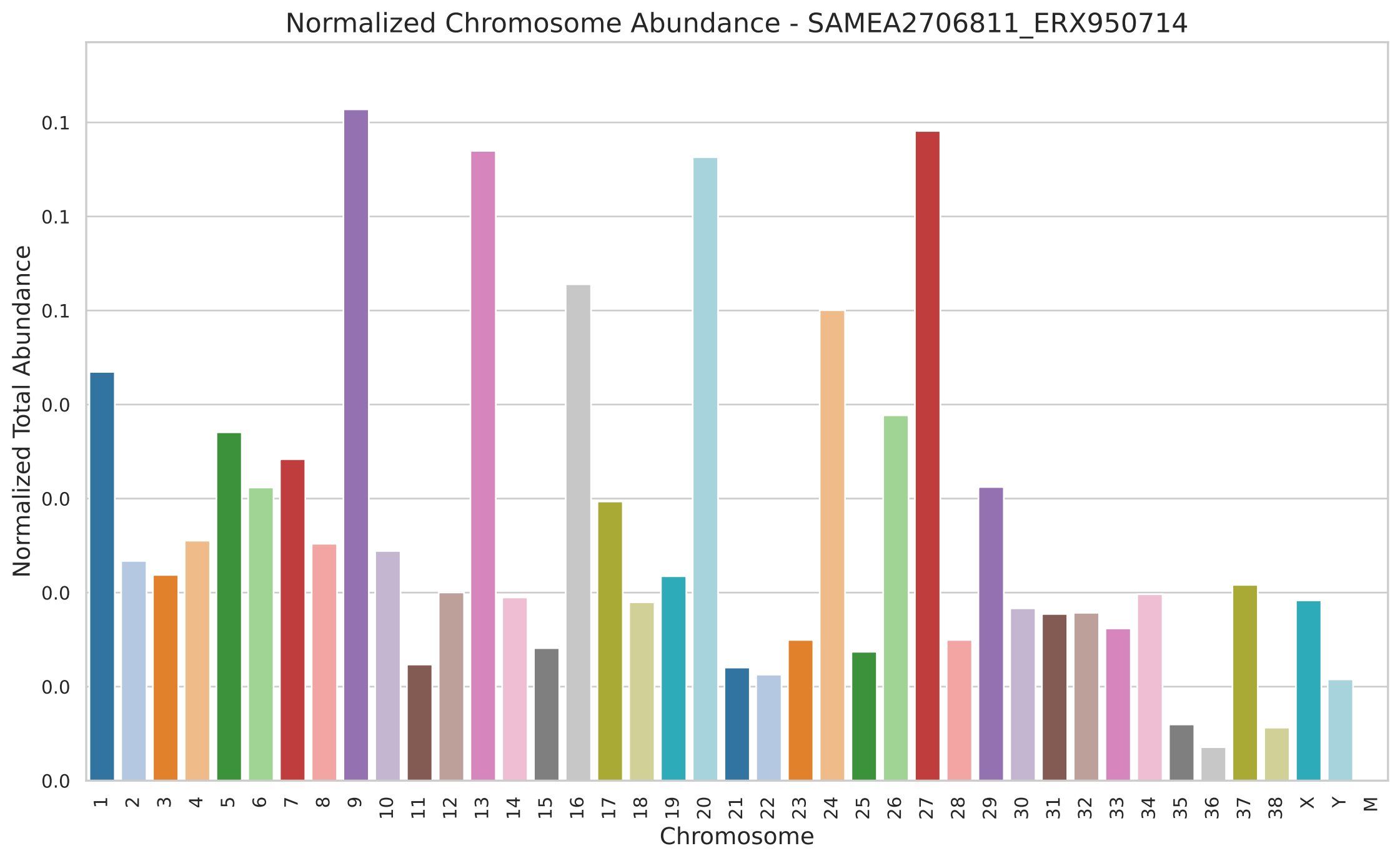

Normalized Chromosome Abundance - SAMEA2706893_ERX950700
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

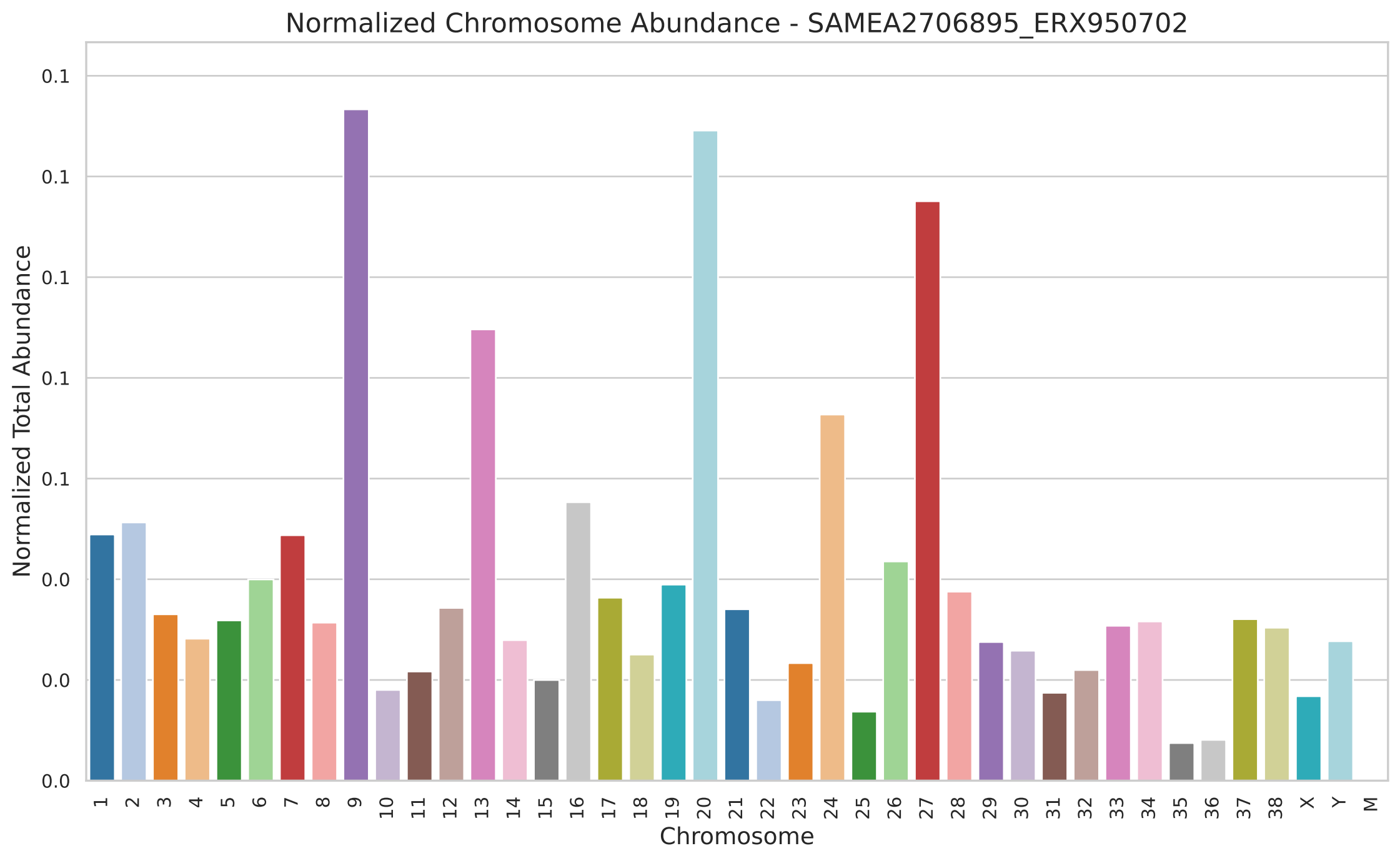

Normalized Chromosome Abundance - SAMEA2706821_ERX950724
Normalized Total Abundance
0.1
0.1
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

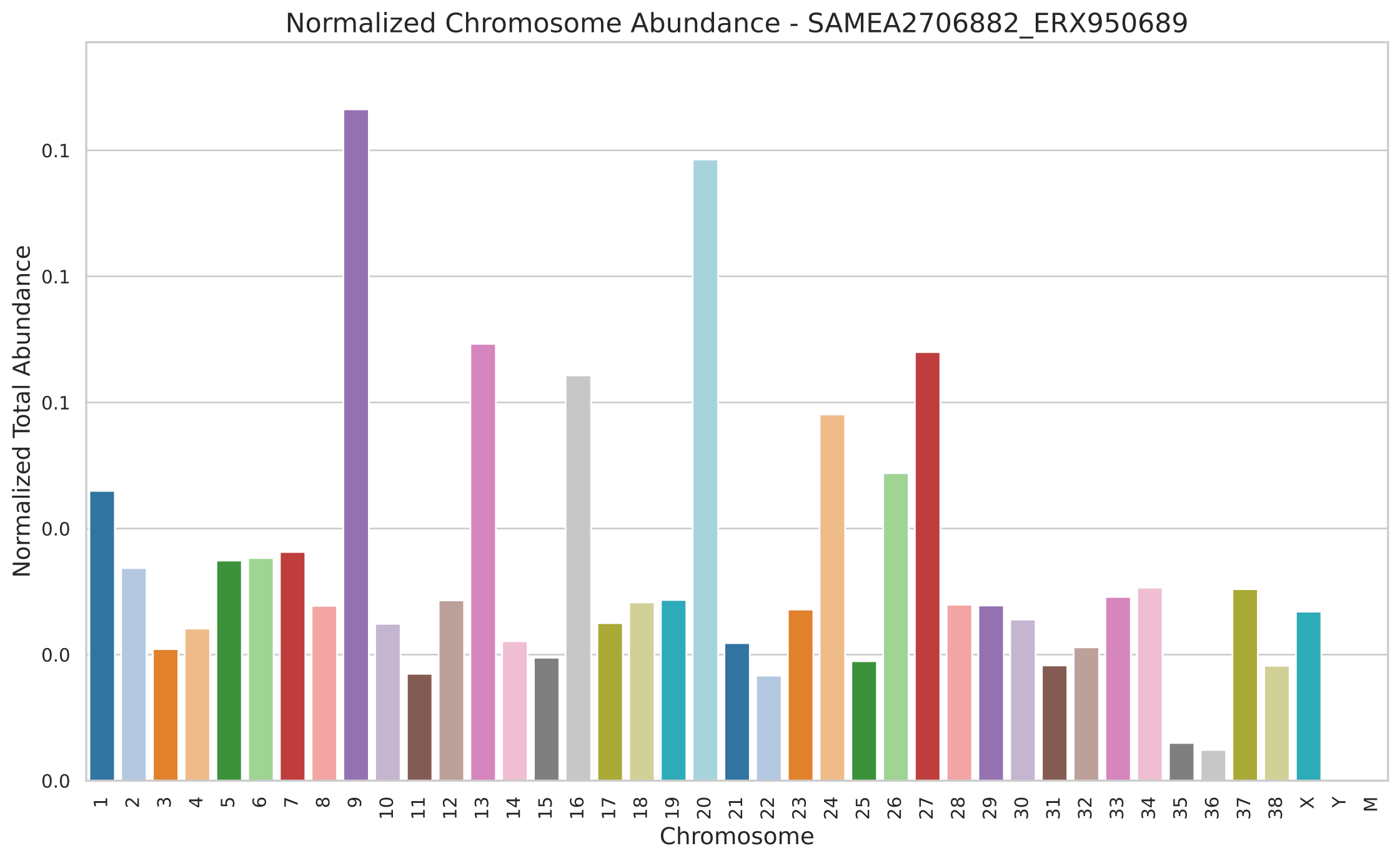

Normalized Chromosome Abundance - SAMEA2706883_ERX950690
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

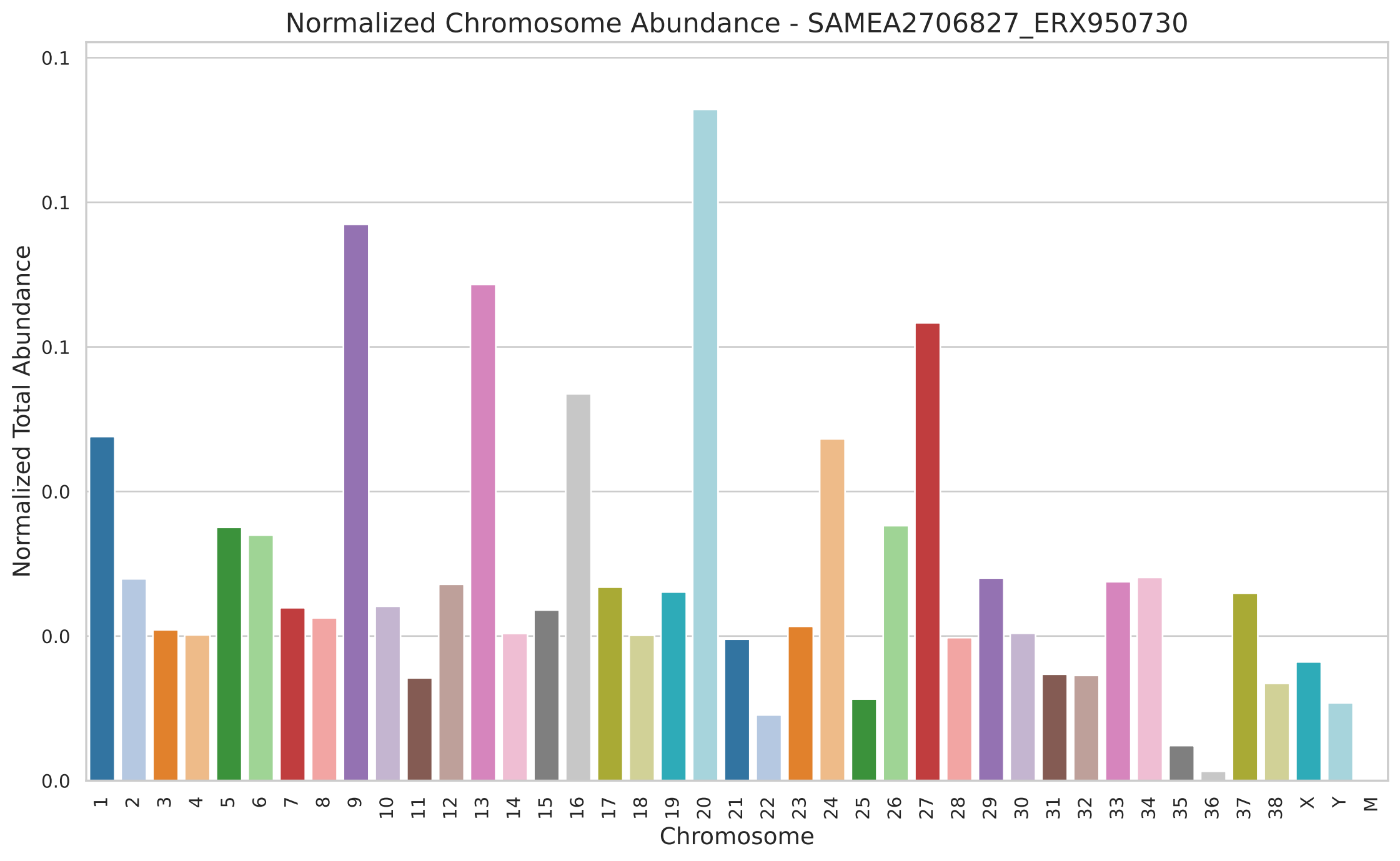

Normalized Chromosome Abundance - SAMEA2706868_ERX950675
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

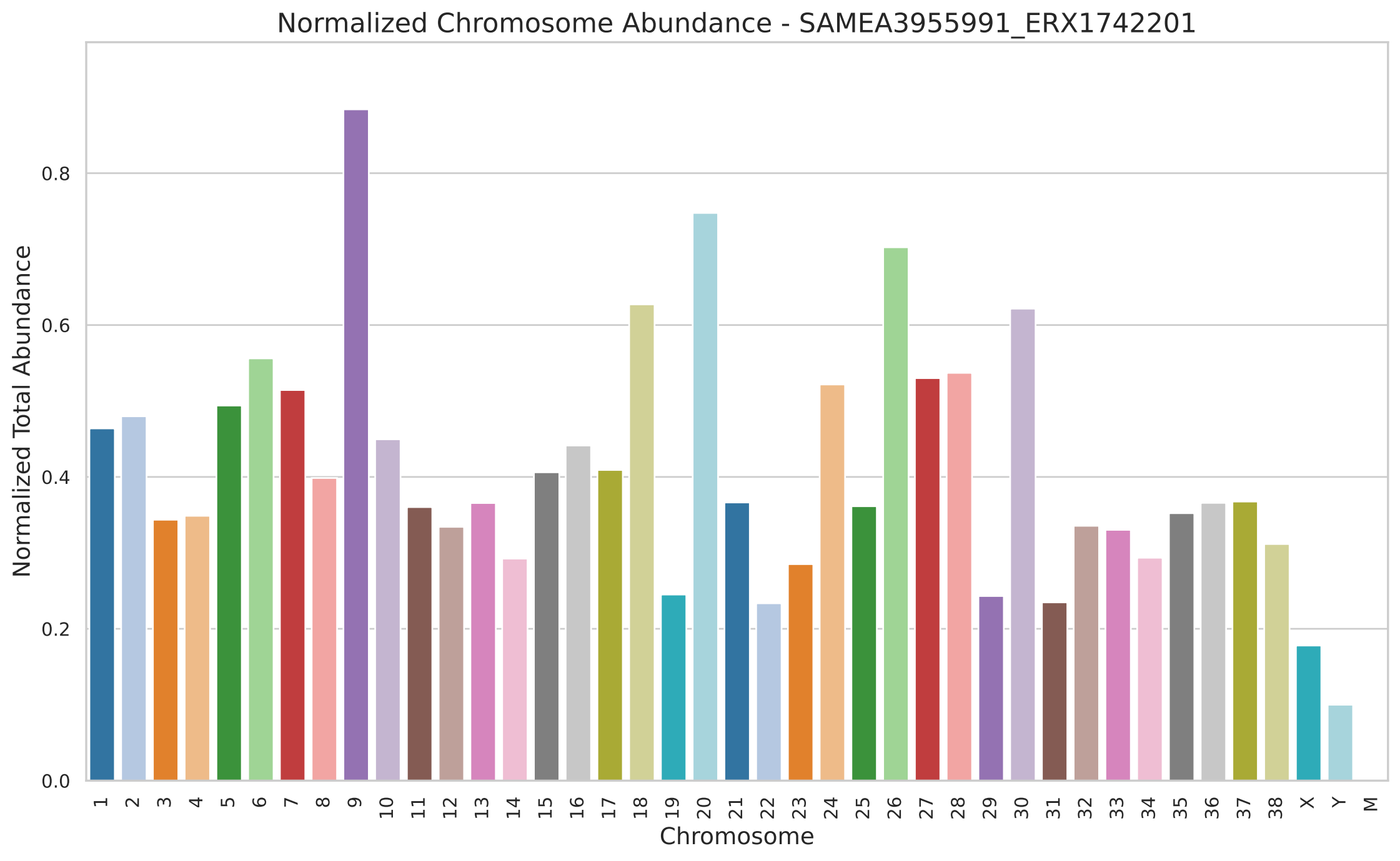

Normalized Chromosome Abundance - SAMEA2706855_ERX950758
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

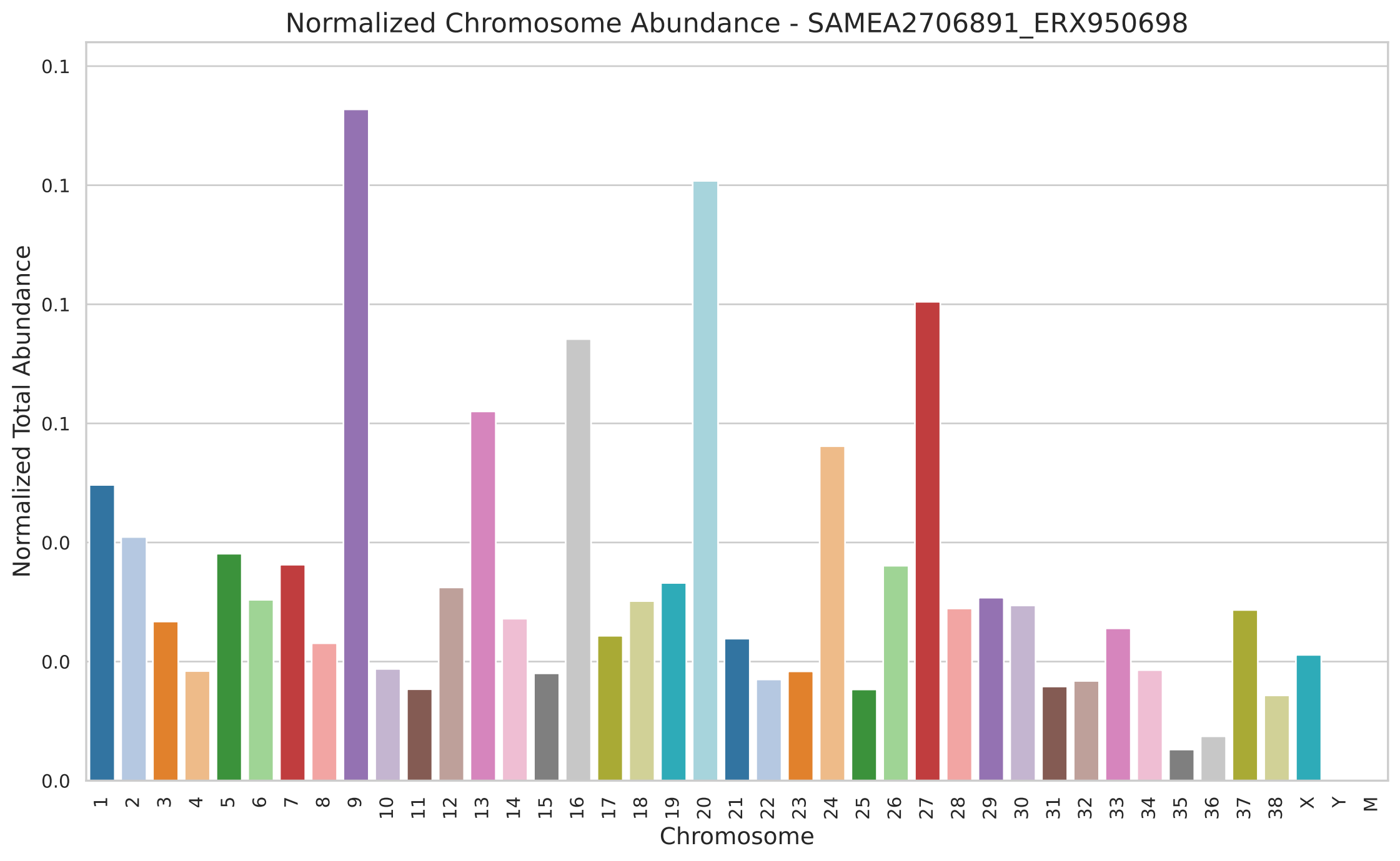

Normalized Chromosome Abundance - SAMEA2706811_ERX950714
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

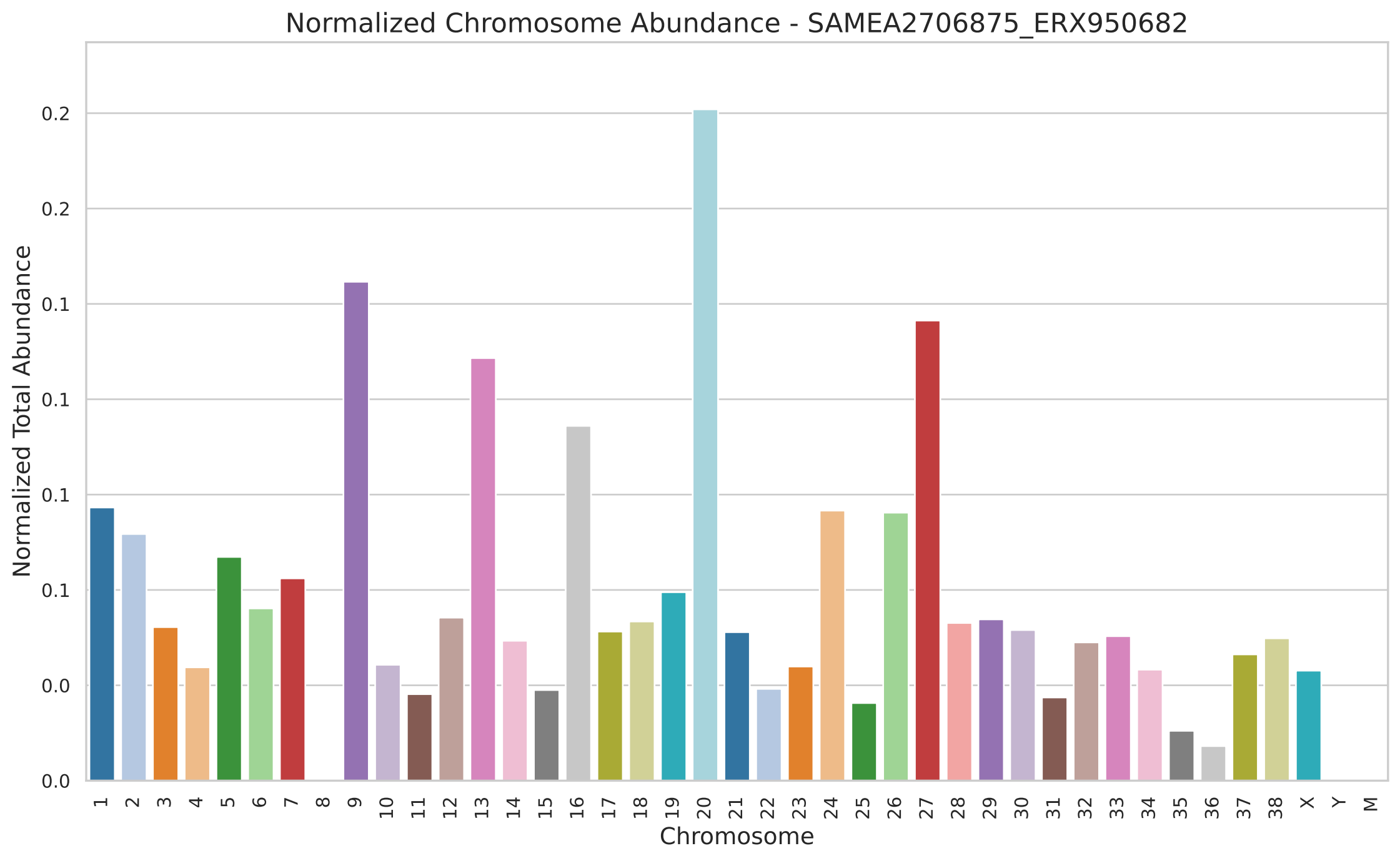

Normalized Chromosome Abundance - SAMEA2706895_ERX950702
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

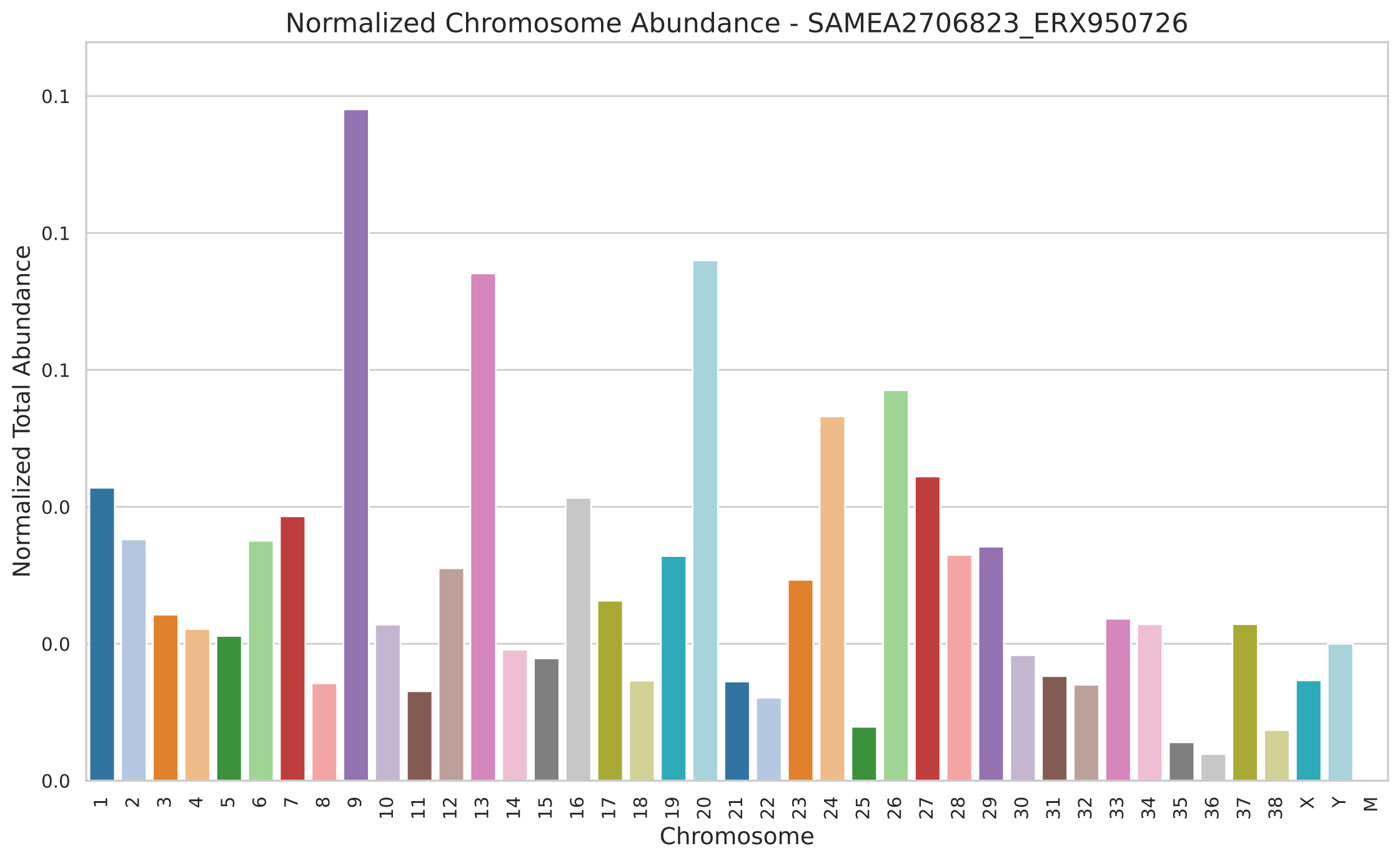

Normalized Chromosome Abundance - SAMEA2706882_ERX950689
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

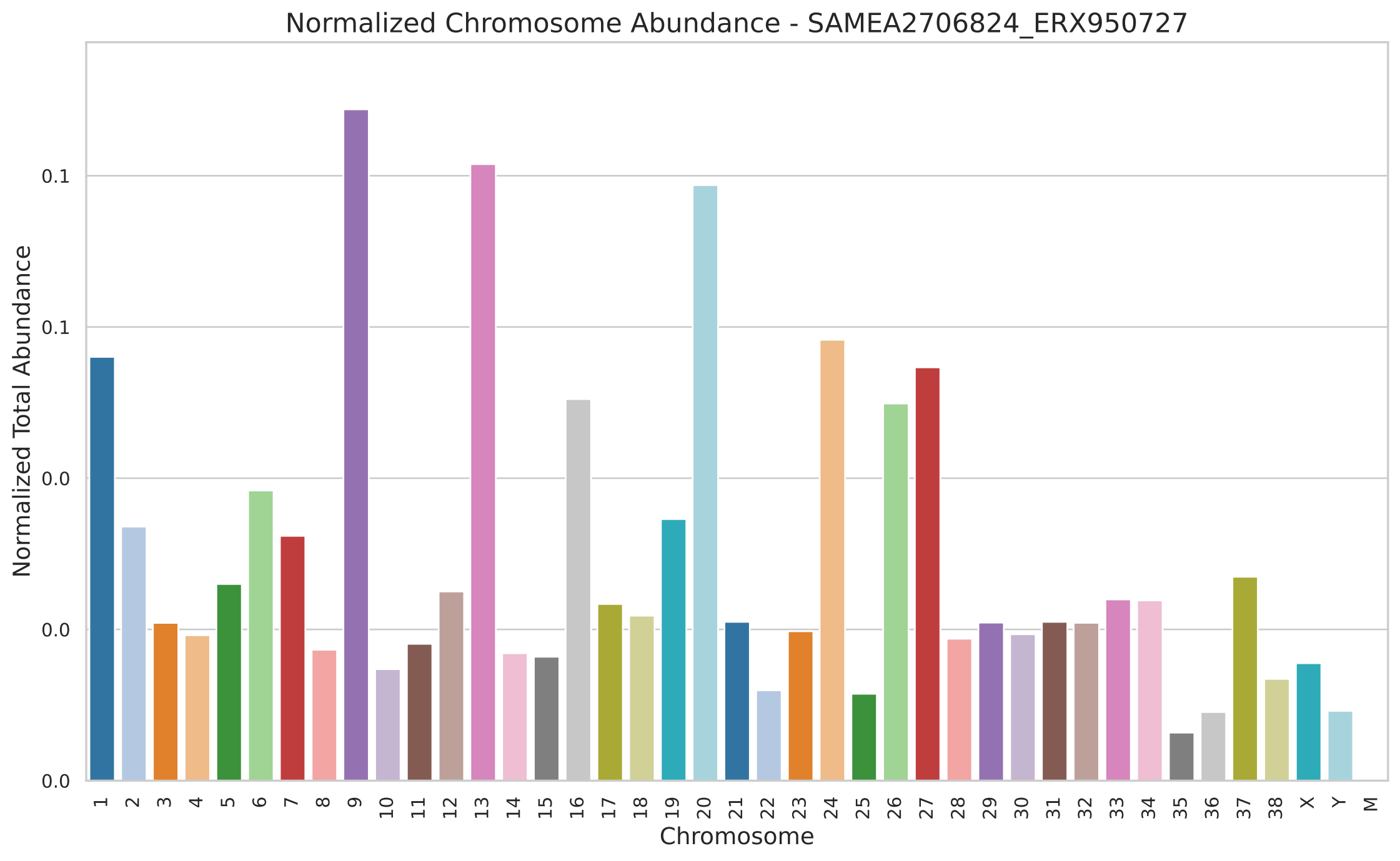

Normalized Chromosome Abundance - SAMEA2706827_ERX950730
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

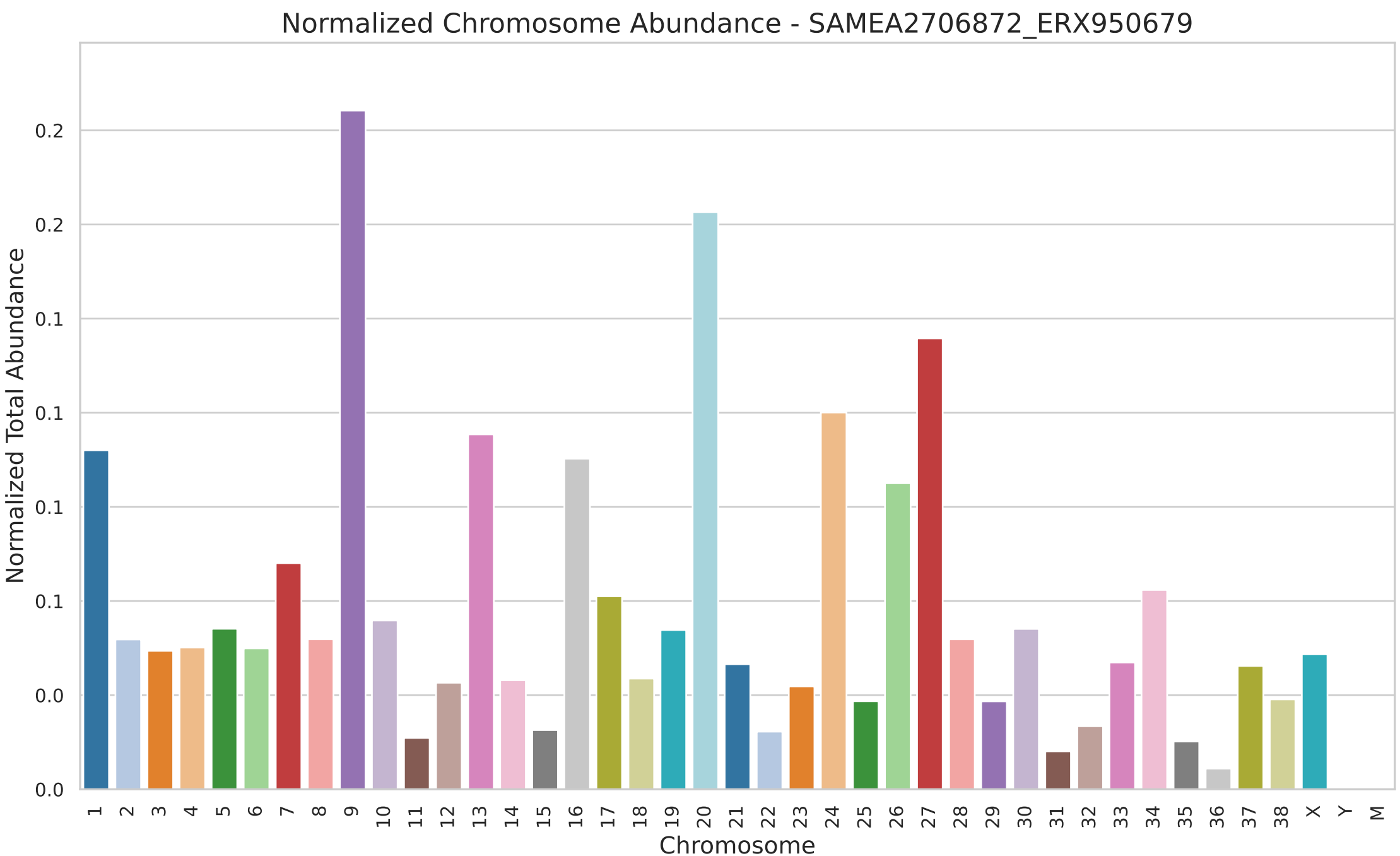

Normalized Chromosome Abundance - SAMEA3955991_ERX1742201
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

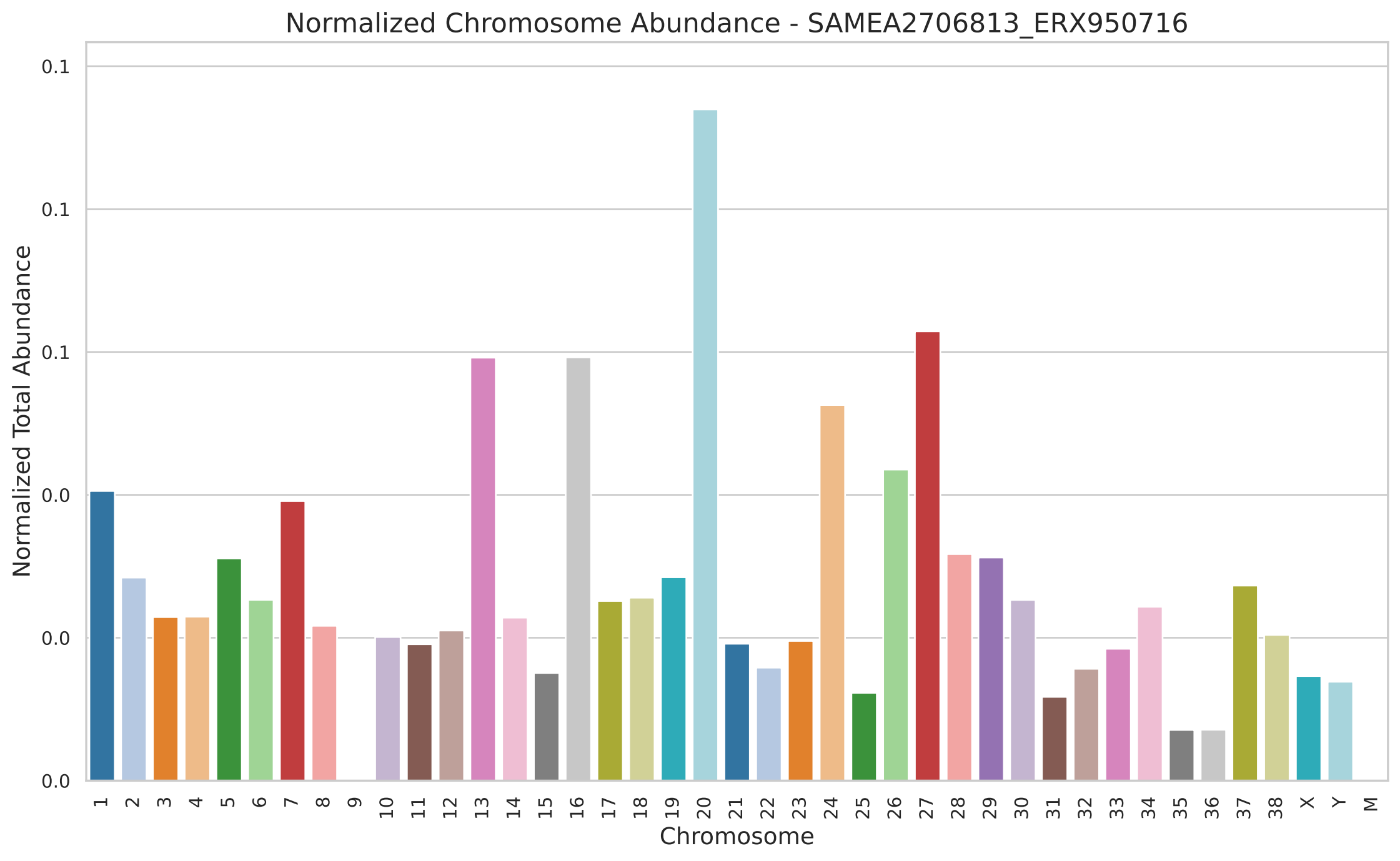

Normalized Chromosome Abundance - SAMEA2706891_ERX950698
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

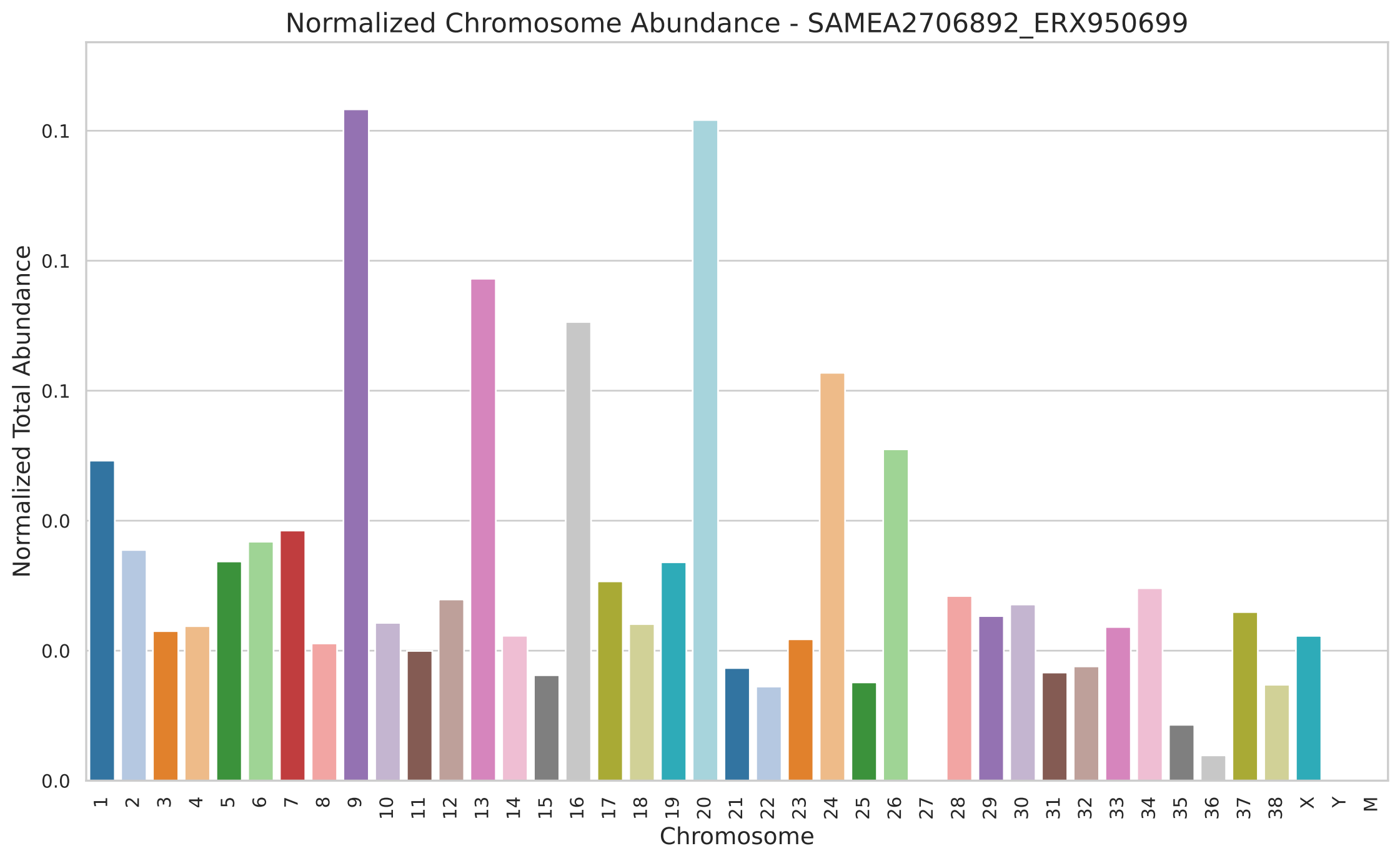

Normalized Chromosome Abundance - SAMEA2706875_ERX950682
Normalized Total Abundance
0.2
0.2
0.1
0.1
0.1
0.1
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

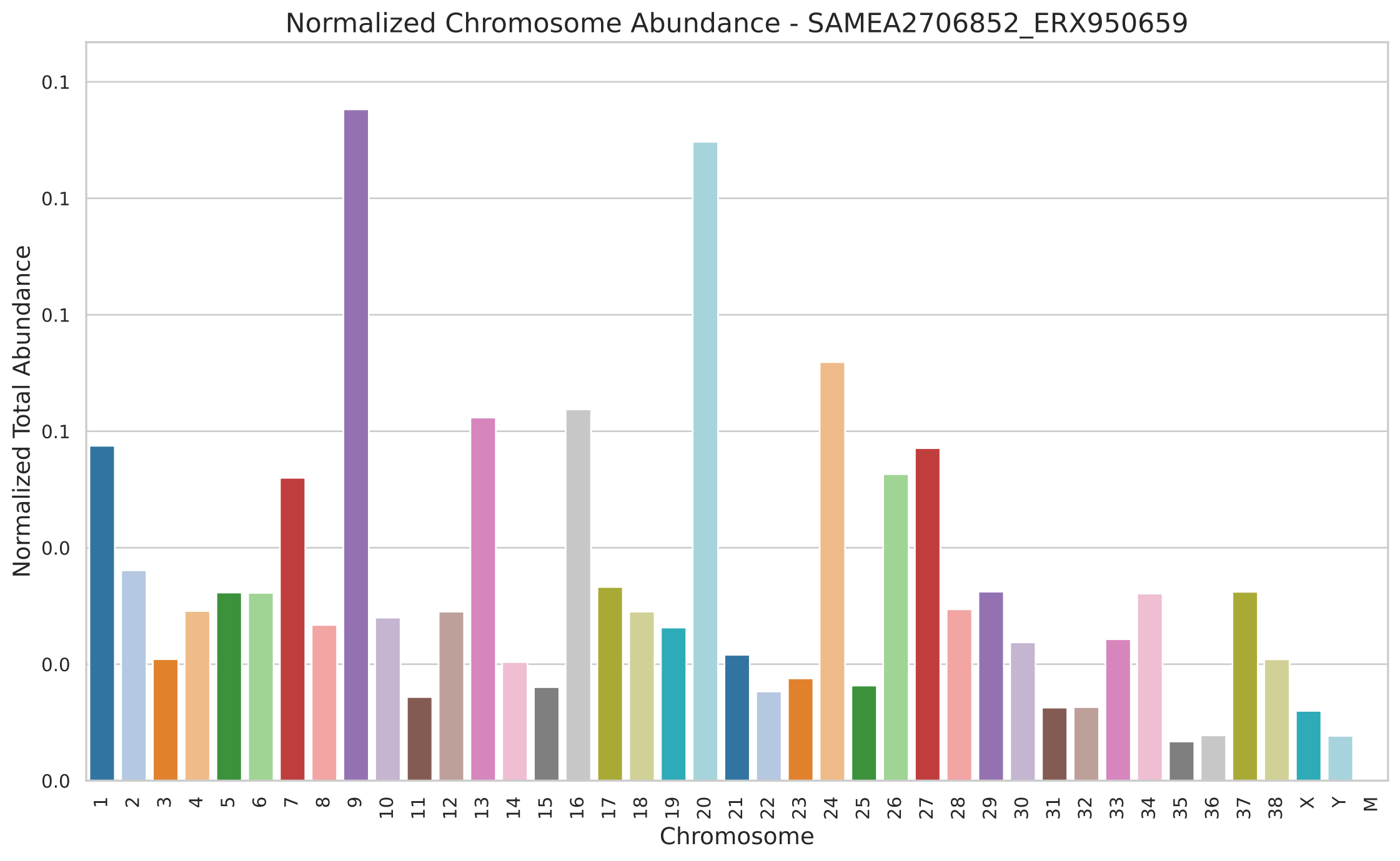

Normalized Chromosome Abundance - SAMEA2706823_ERX950726
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

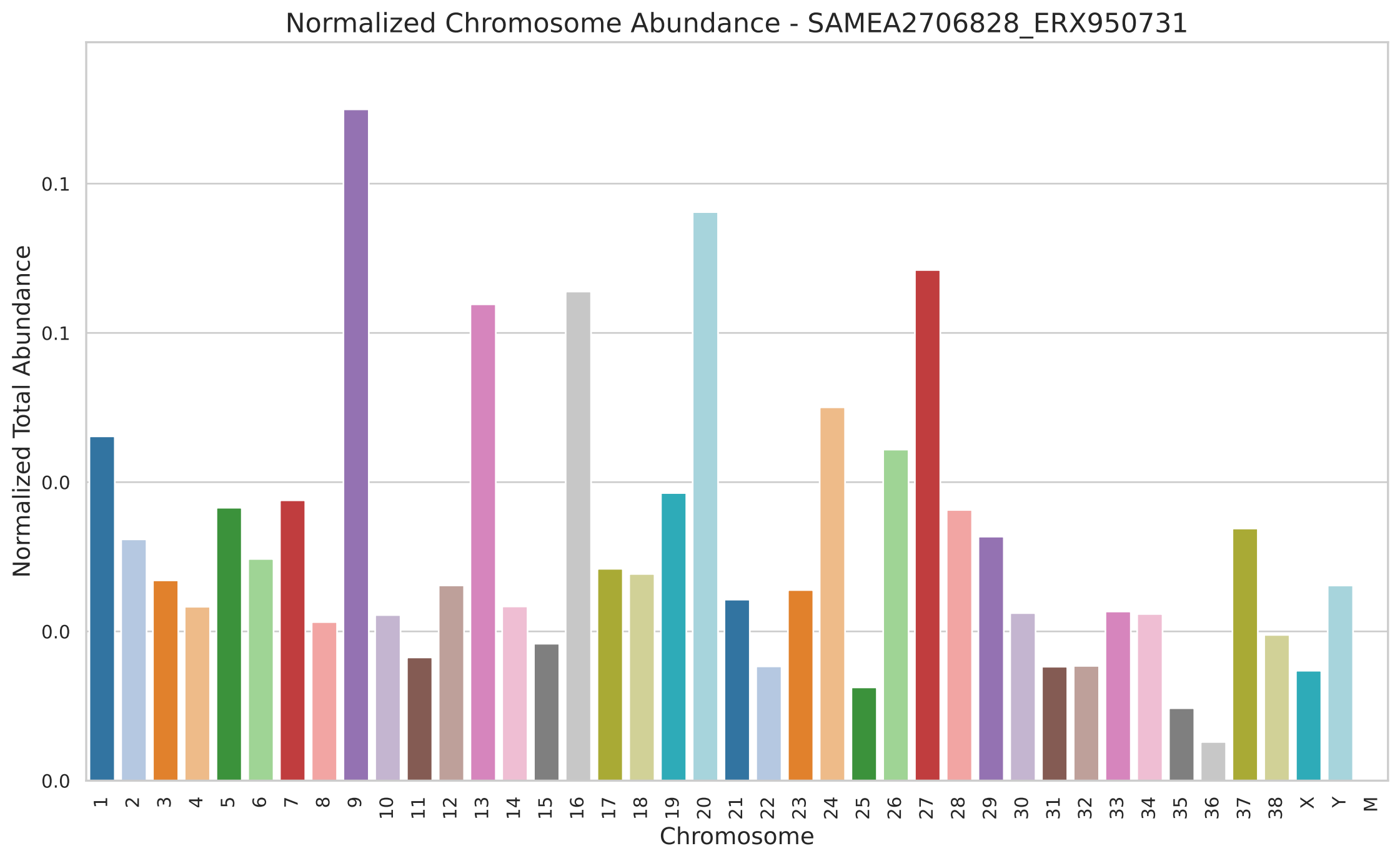

Normalized Chromosome Abundance - SAMEA2706824_ERX950727
Normalized Total Abundance
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

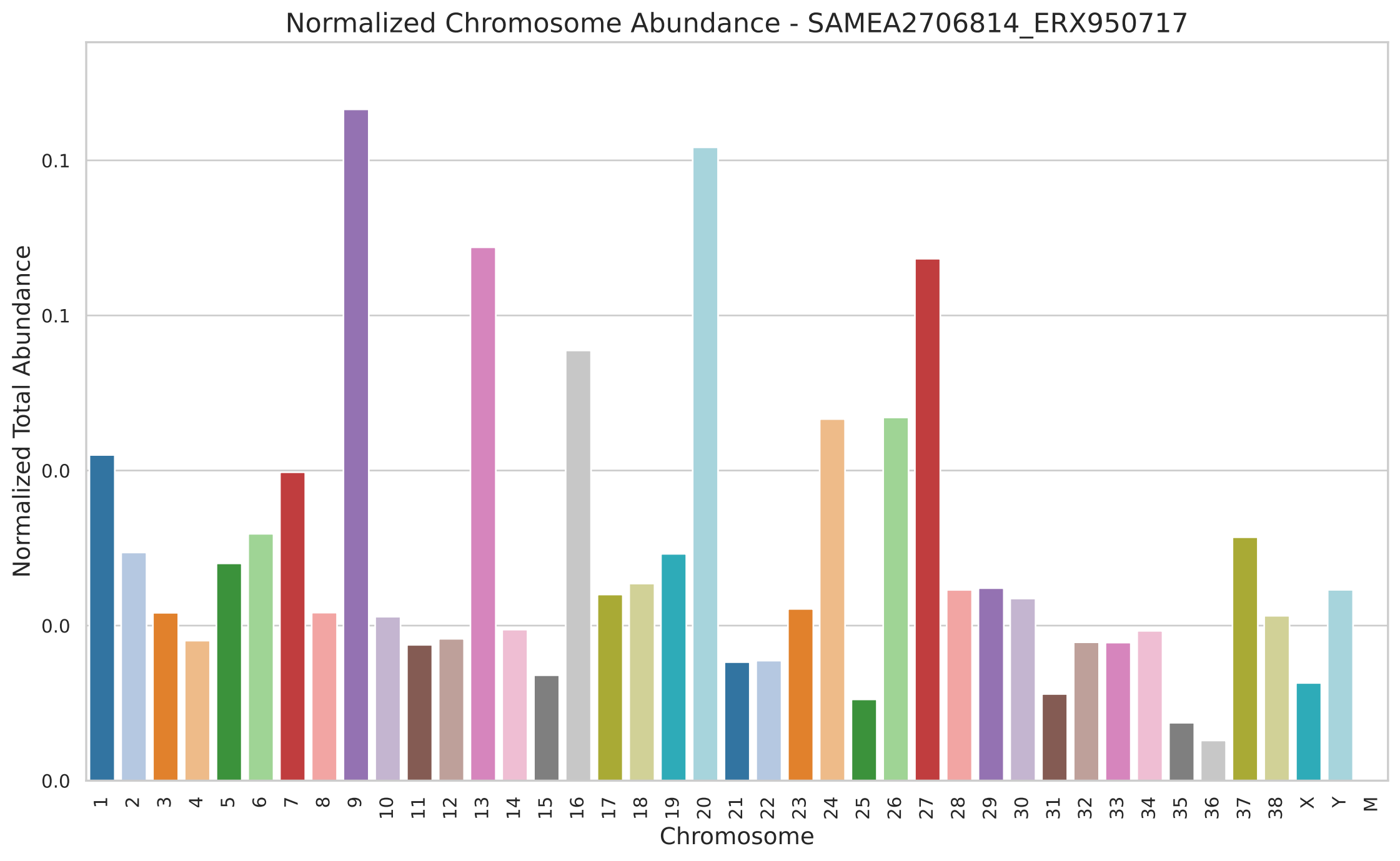

Normalized Chromosome Abundance - SAMEA2706872_ERX950679
Normalized Total Abundance
0.0
0.0
0.1
0.1
0.1
0.2
0.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

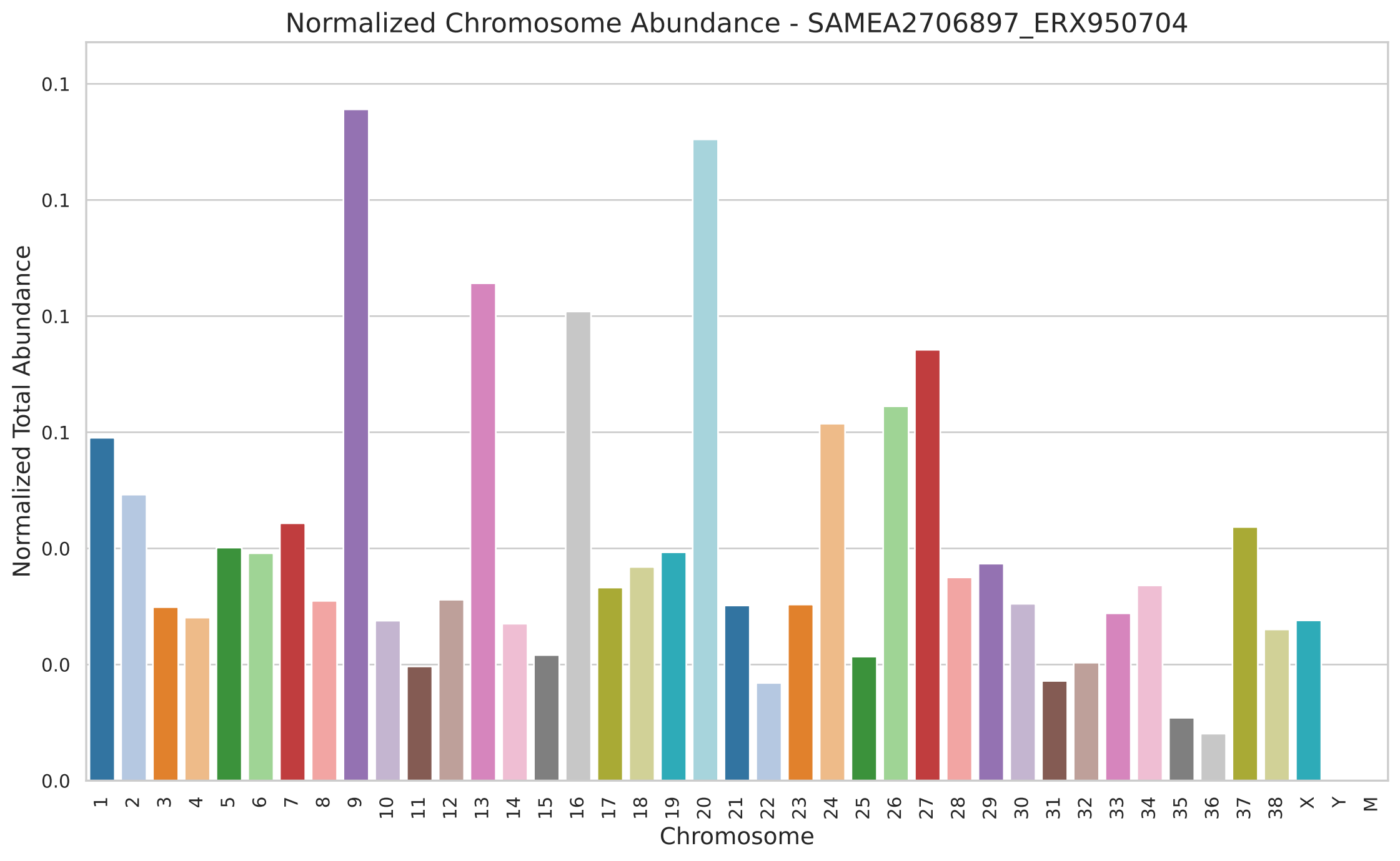

Normalized Chromosome Abundance - SAMEA2706813_ERX950716
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

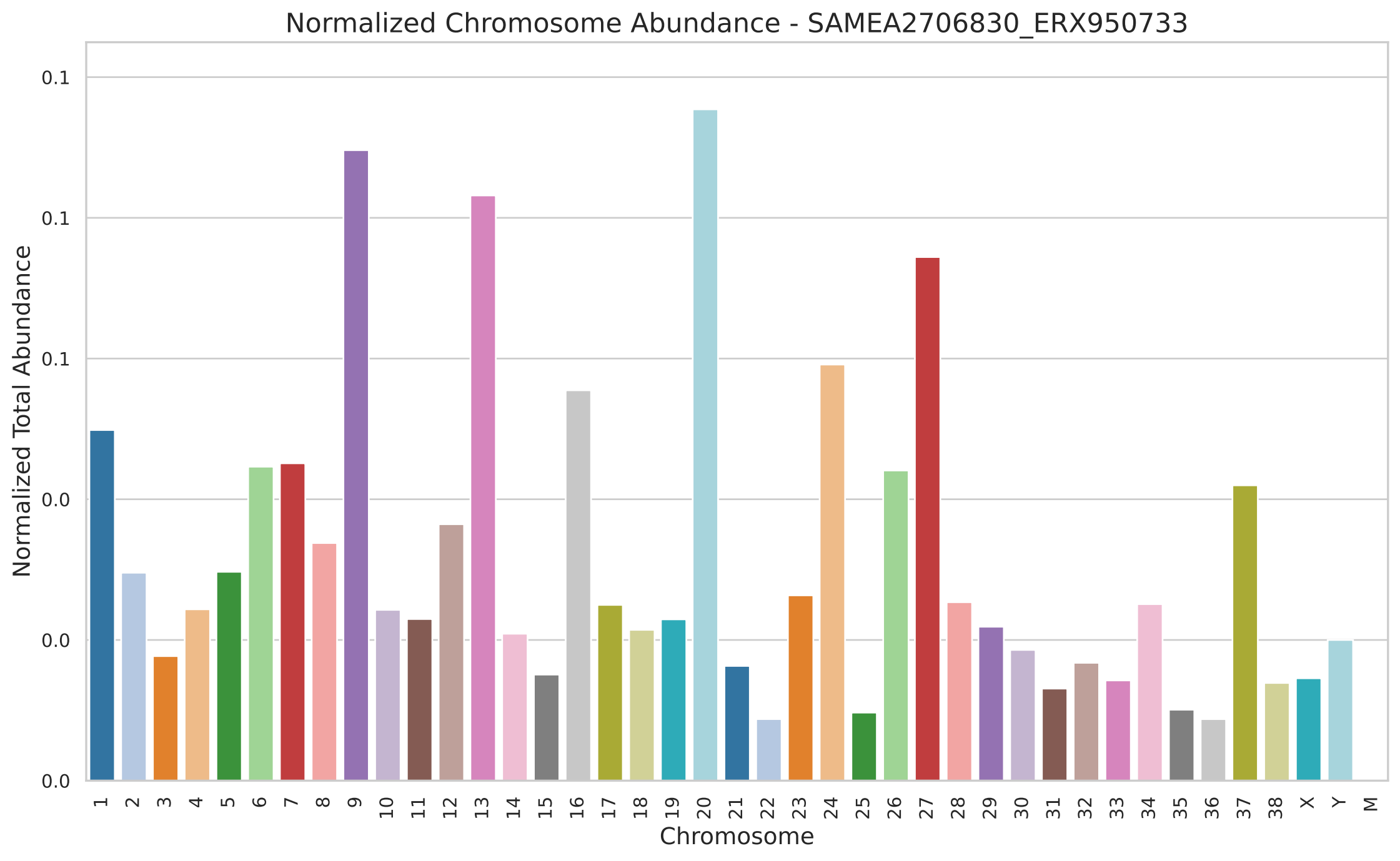

Normalized Chromosome Abundance - SAMEA2706892_ERX950699
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

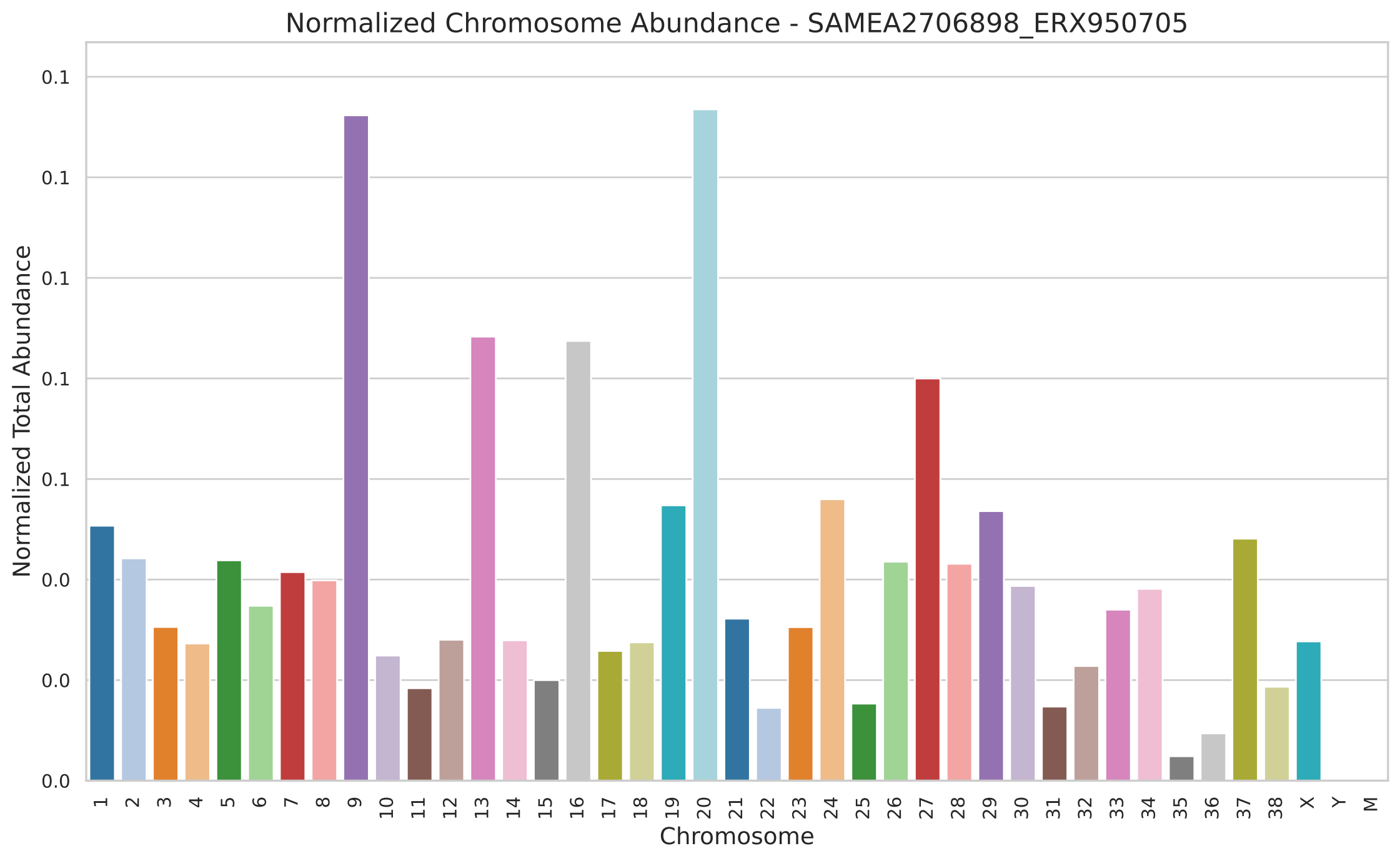

Normalized Chromosome Abundance - SAMEA2706852_ERX950659
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

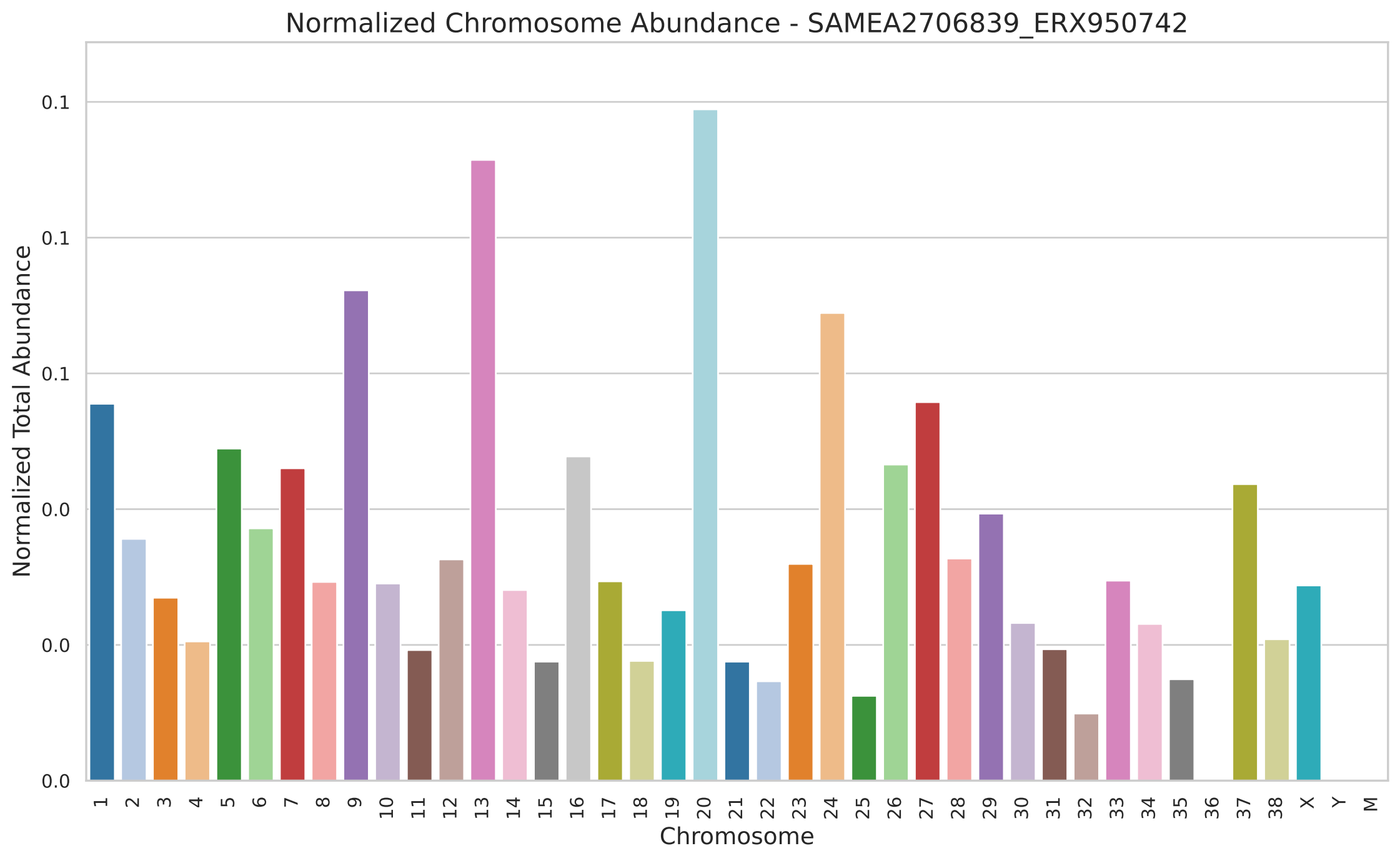

Normalized Chromosome Abundance - SAMEA2706828_ERX950731
Normalized Total Abundance
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

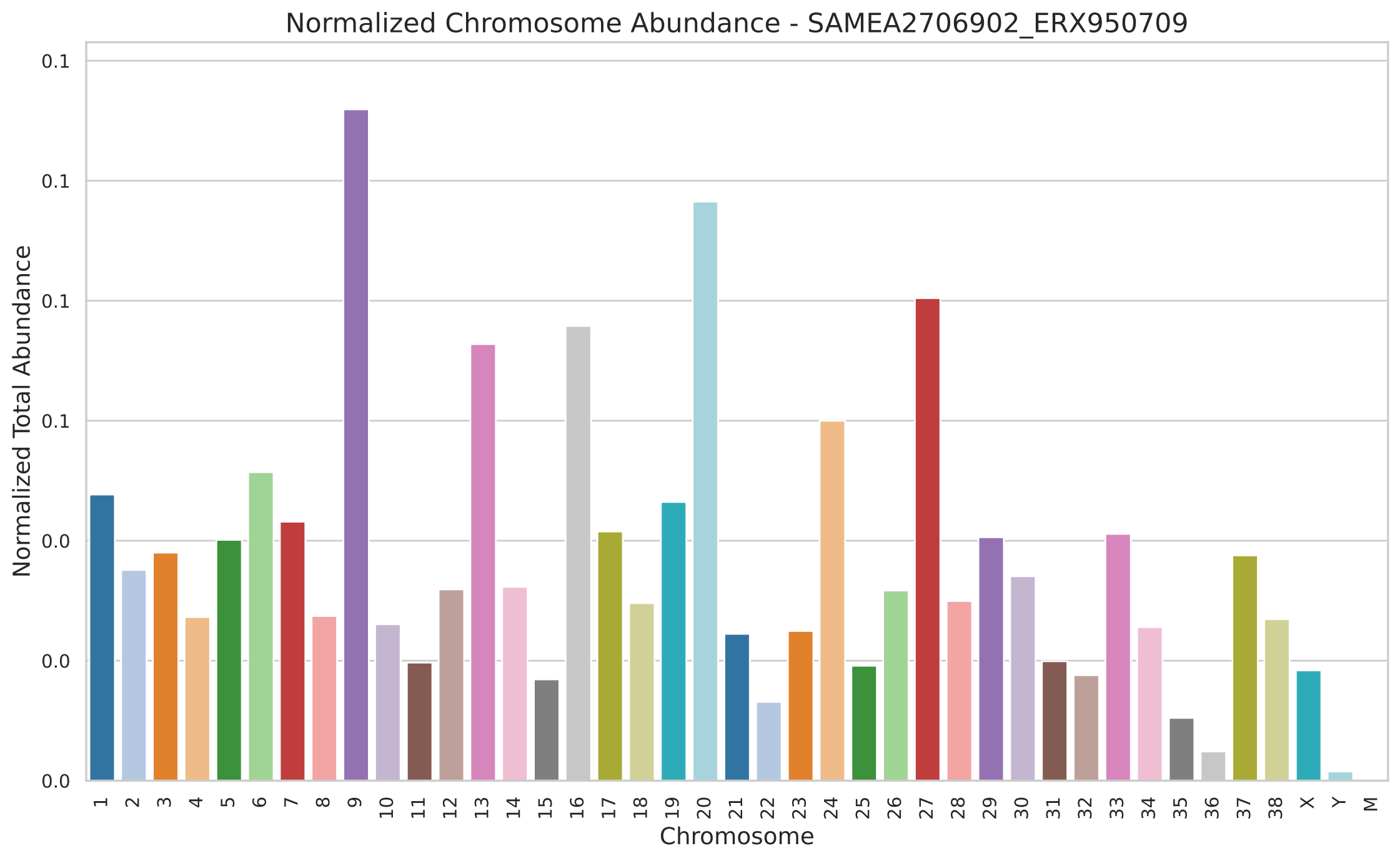

Normalized Chromosome Abundance - SAMEA2706814_ERX950717
Normalized Total Abundance
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

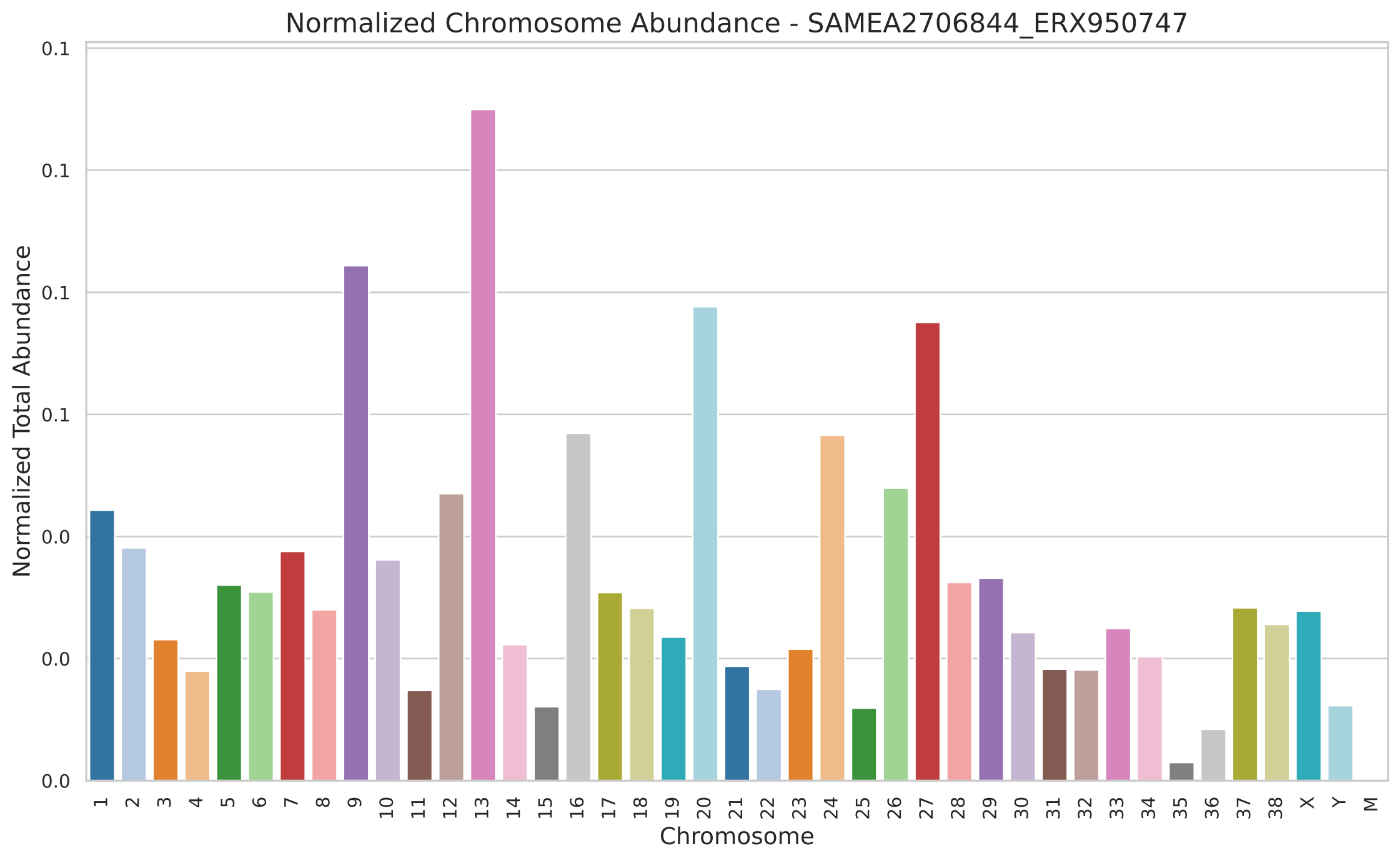

Normalized Chromosome Abundance - SAMEA2706897_ERX950704
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

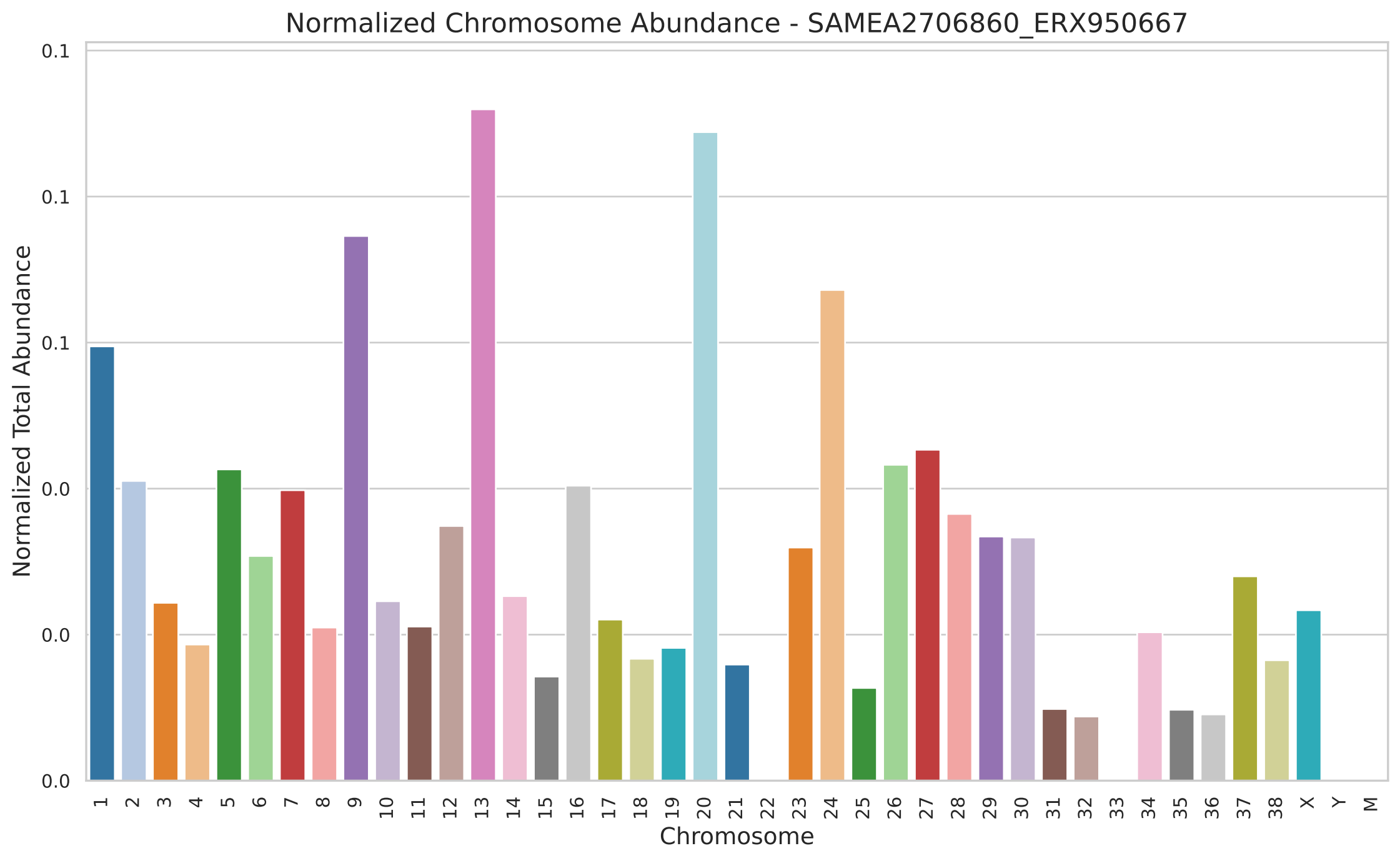

Normalized Chromosome Abundance - SAMEA2706830_ERX950733
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

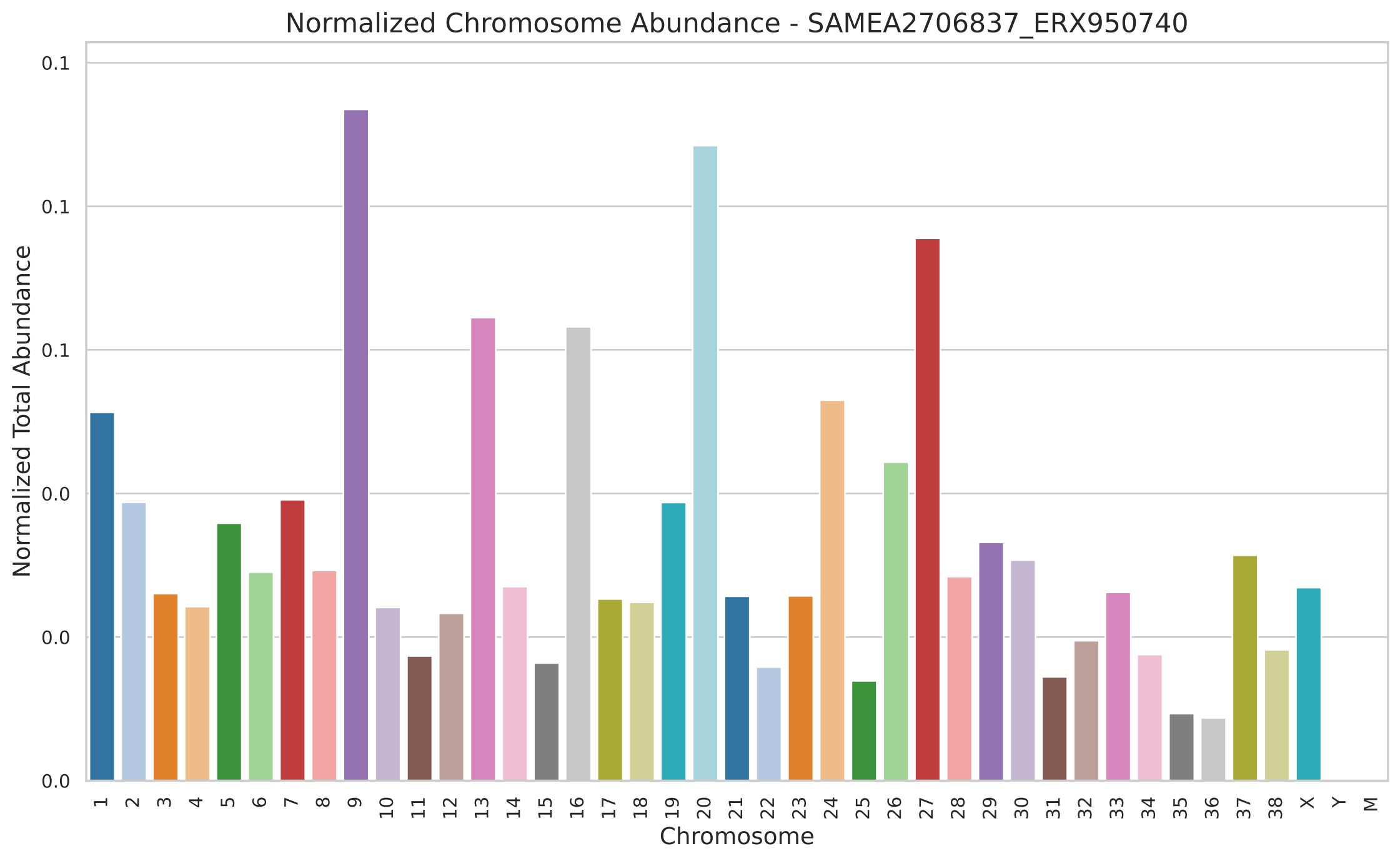

Normalized Chromosome Abundance - SAMEA2706898_ERX950705
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

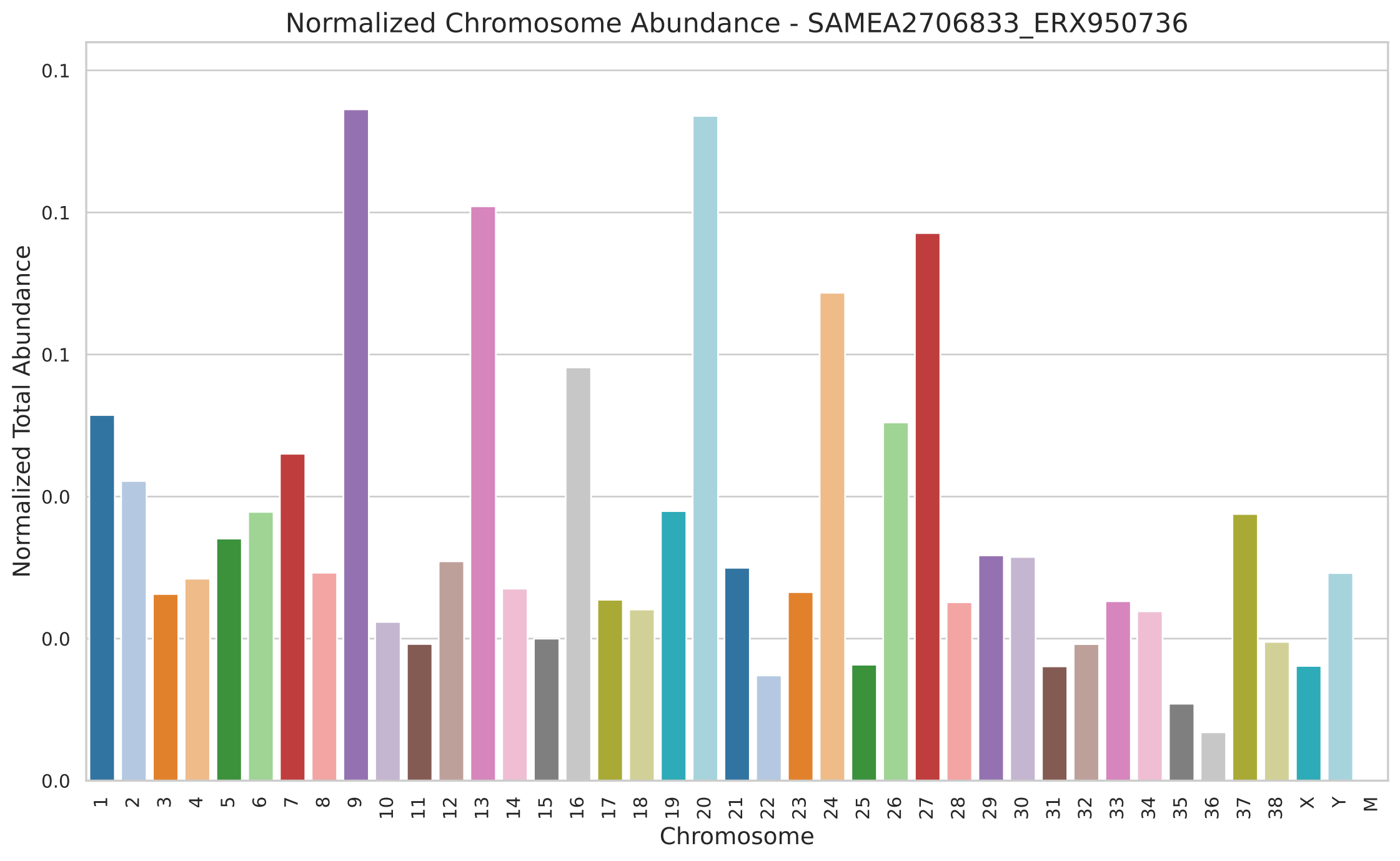

Normalized Chromosome Abundance - SAMEA2706839_ERX950742
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

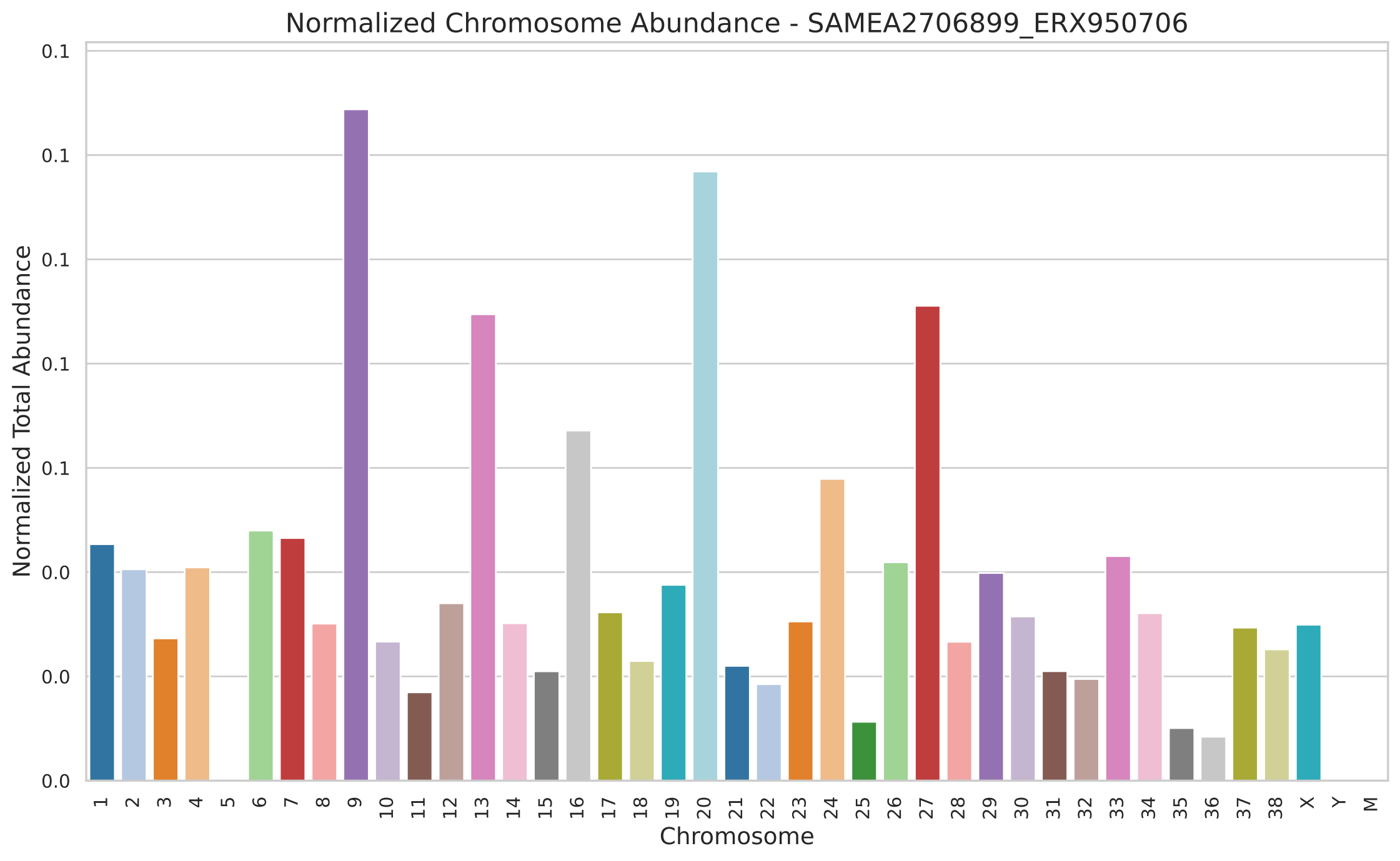

Normalized Chromosome Abundance - SAMEA2706902_ERX950709
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

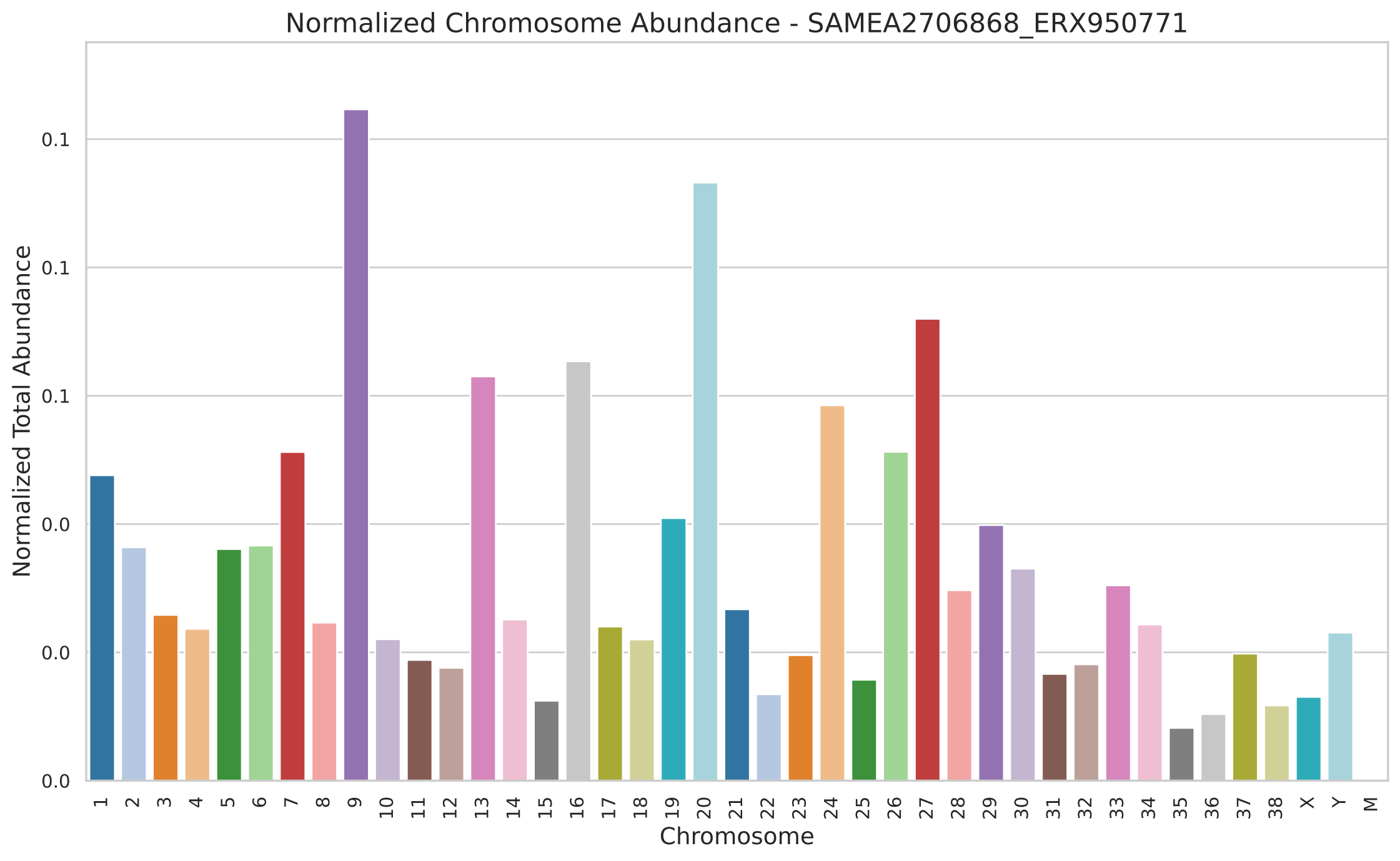

Normalized Chromosome Abundance - SAMEA2706844_ERX950747
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

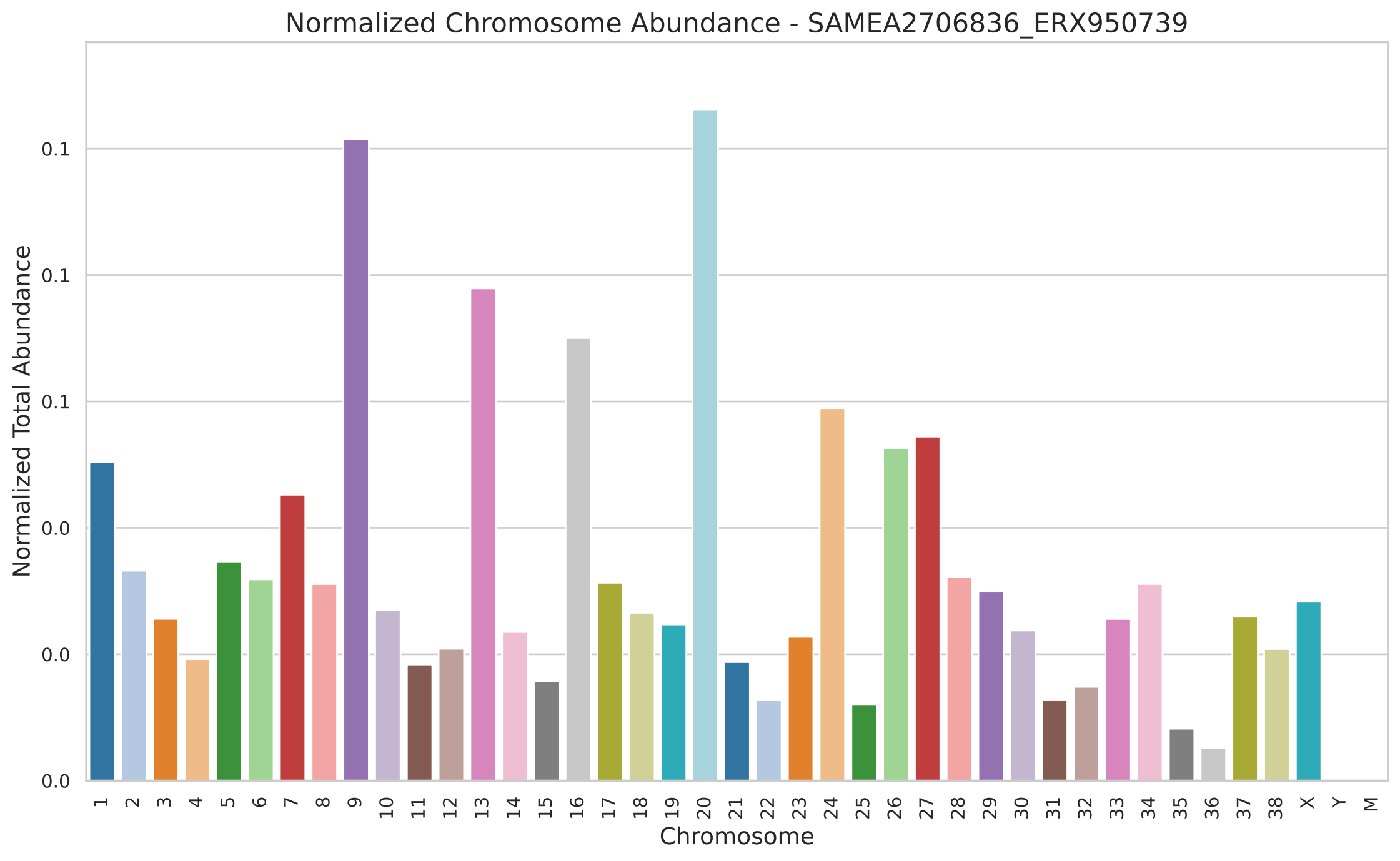

Normalized Chromosome Abundance - SAMEA2706860_ERX950667
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

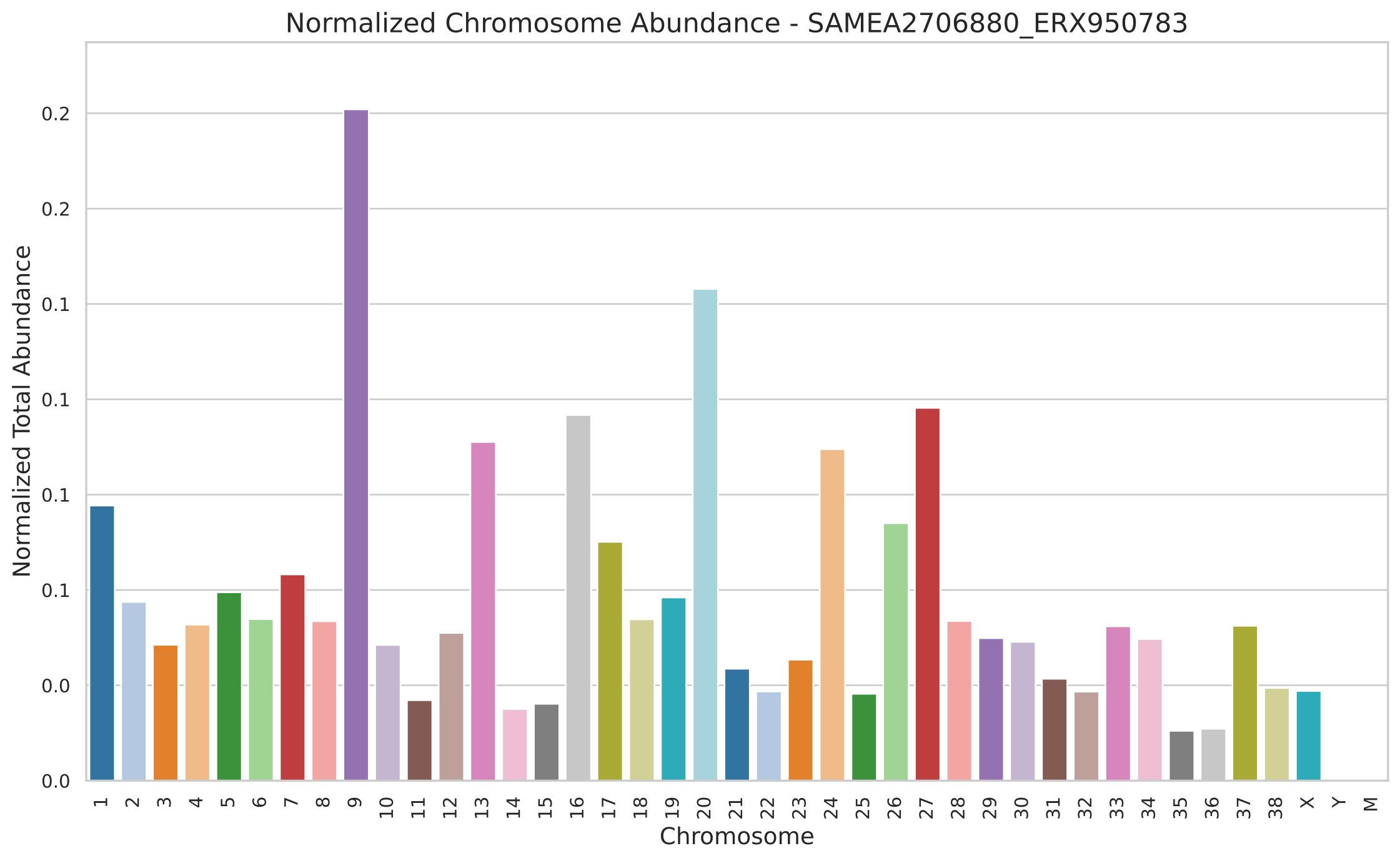

Normalized Chromosome Abundance - SAMEA2706837_ERX950740
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

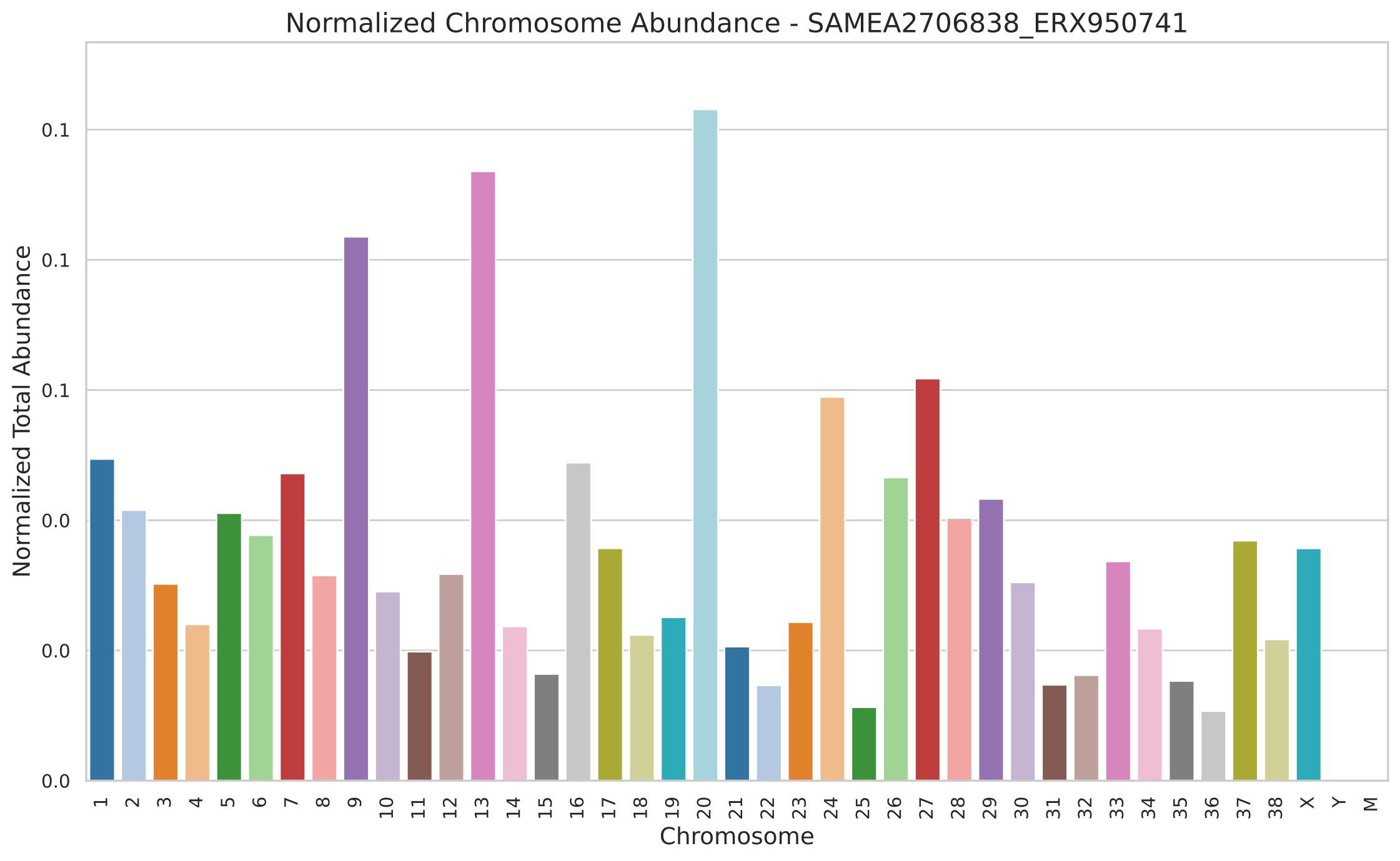

Normalized Chromosome Abundance - SAMEA2706833_ERX950736
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

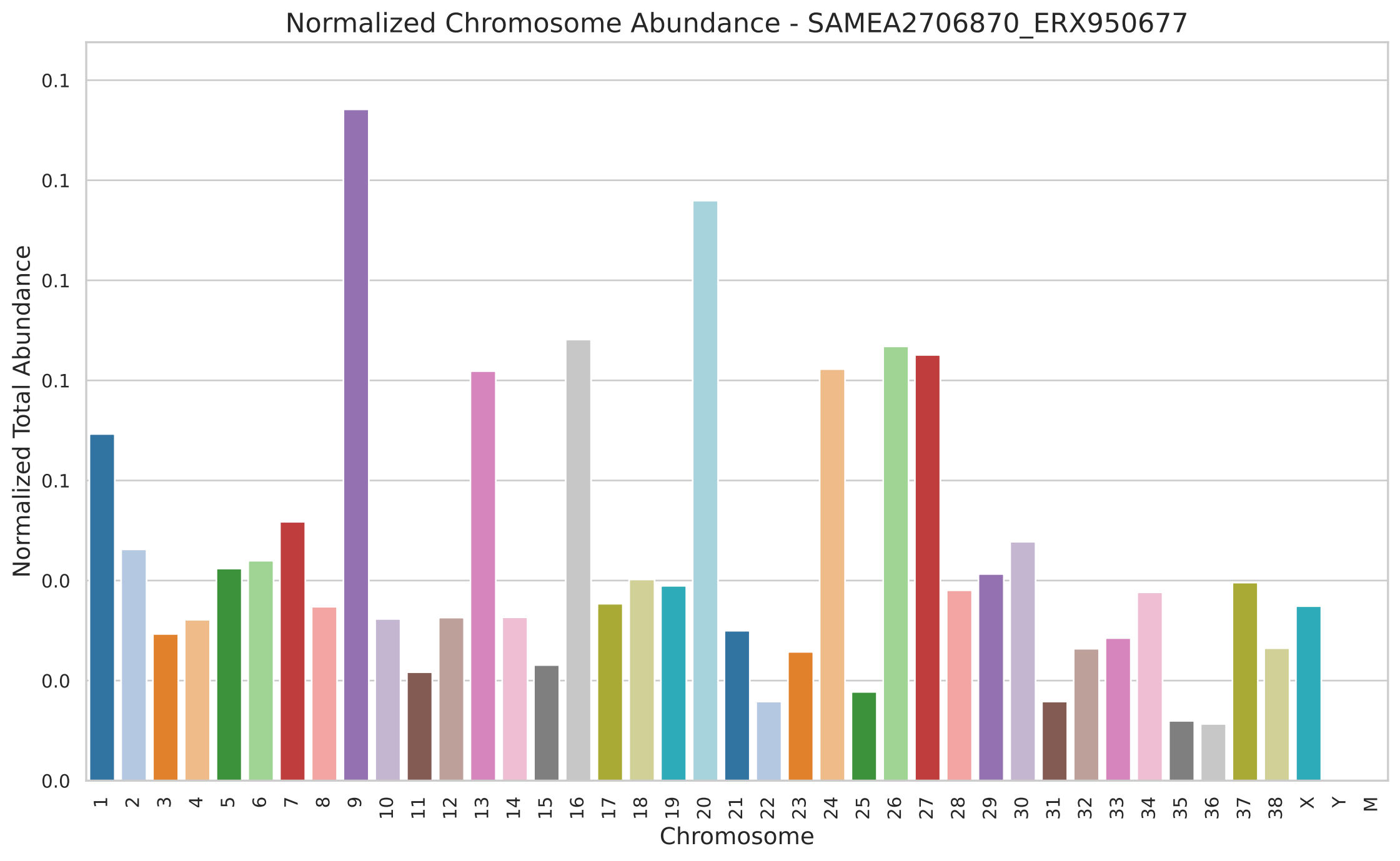

Normalized Chromosome Abundance - SAMEA2706899_ERX950706
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

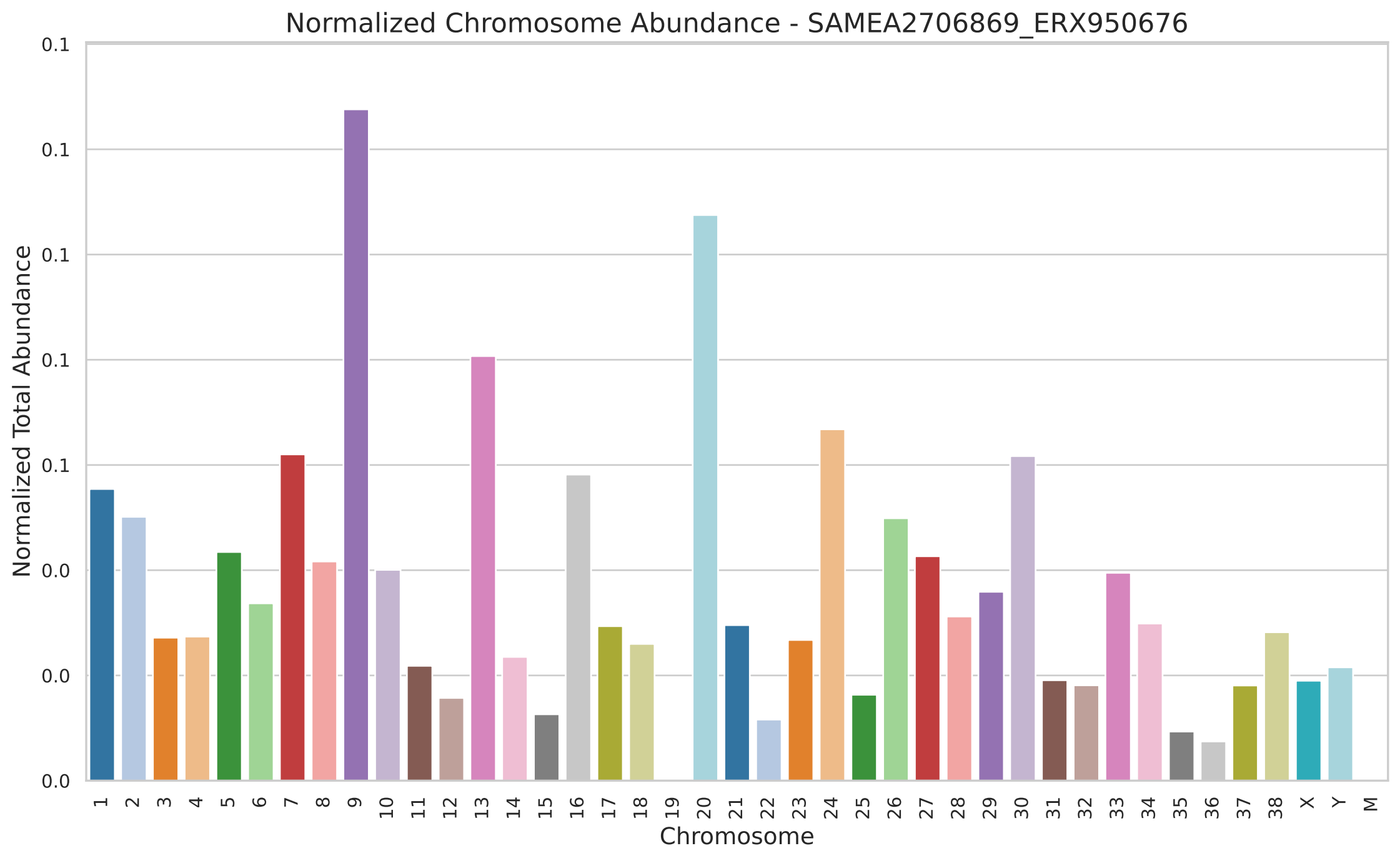

Normalized Chromosome Abundance - SAMEA2706868_ERX950771
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

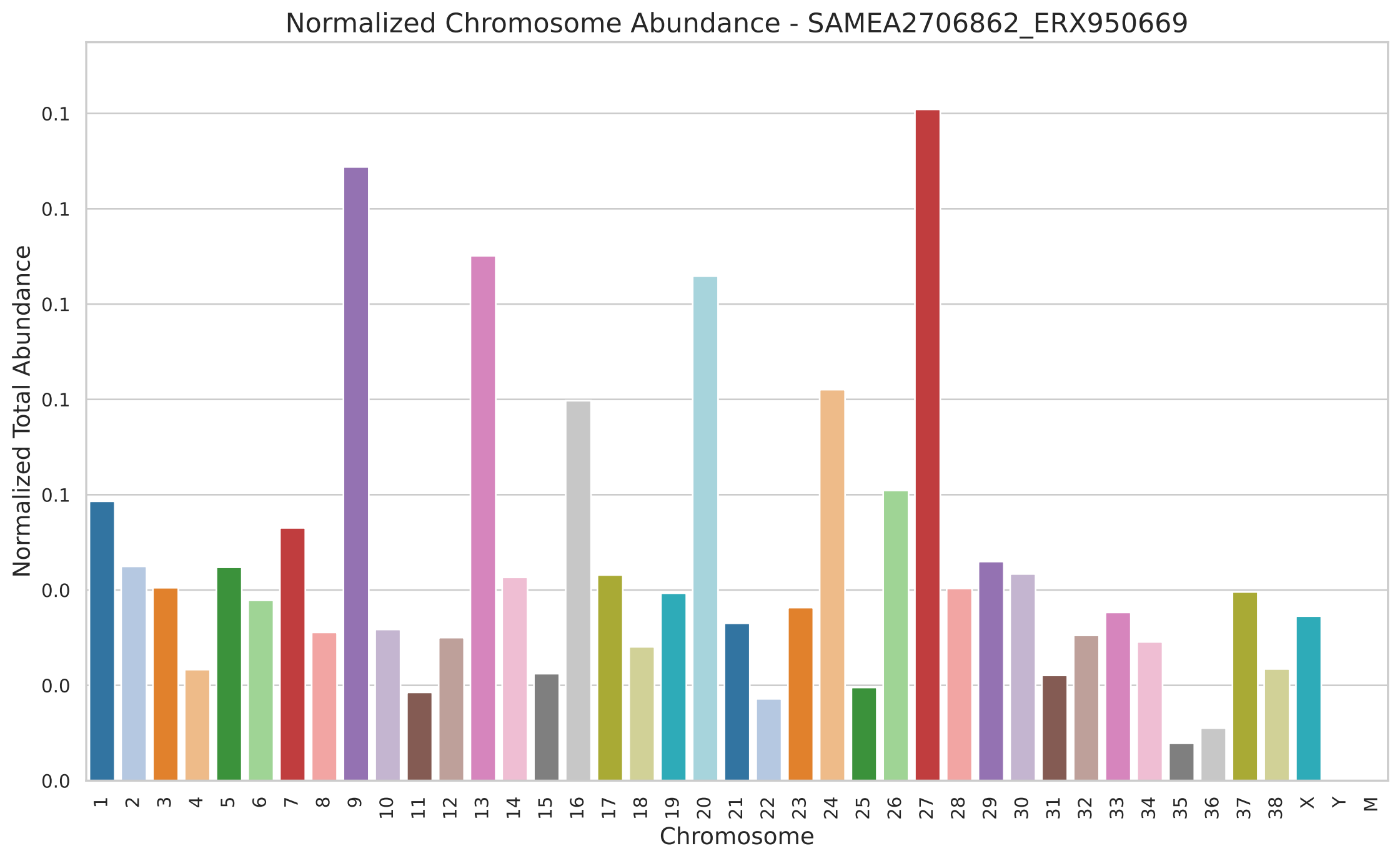

Normalized Chromosome Abundance - SAMEA2706836_ERX950739
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

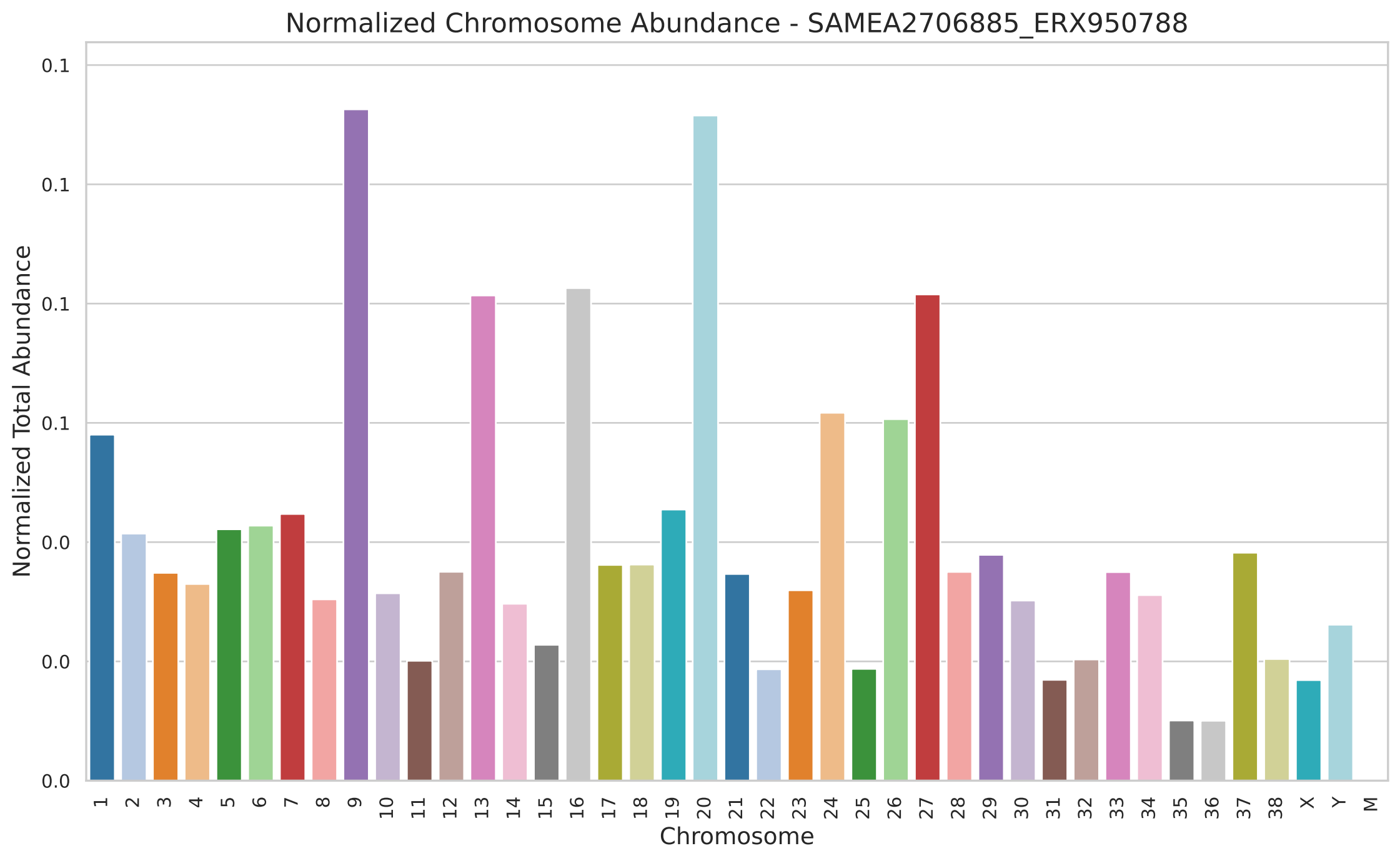

Normalized Chromosome Abundance - SAMEA2706880_ERX950783
Normalized Total Abundance
0.0
0.0
0.1
0.1
0.1
0.2
0.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

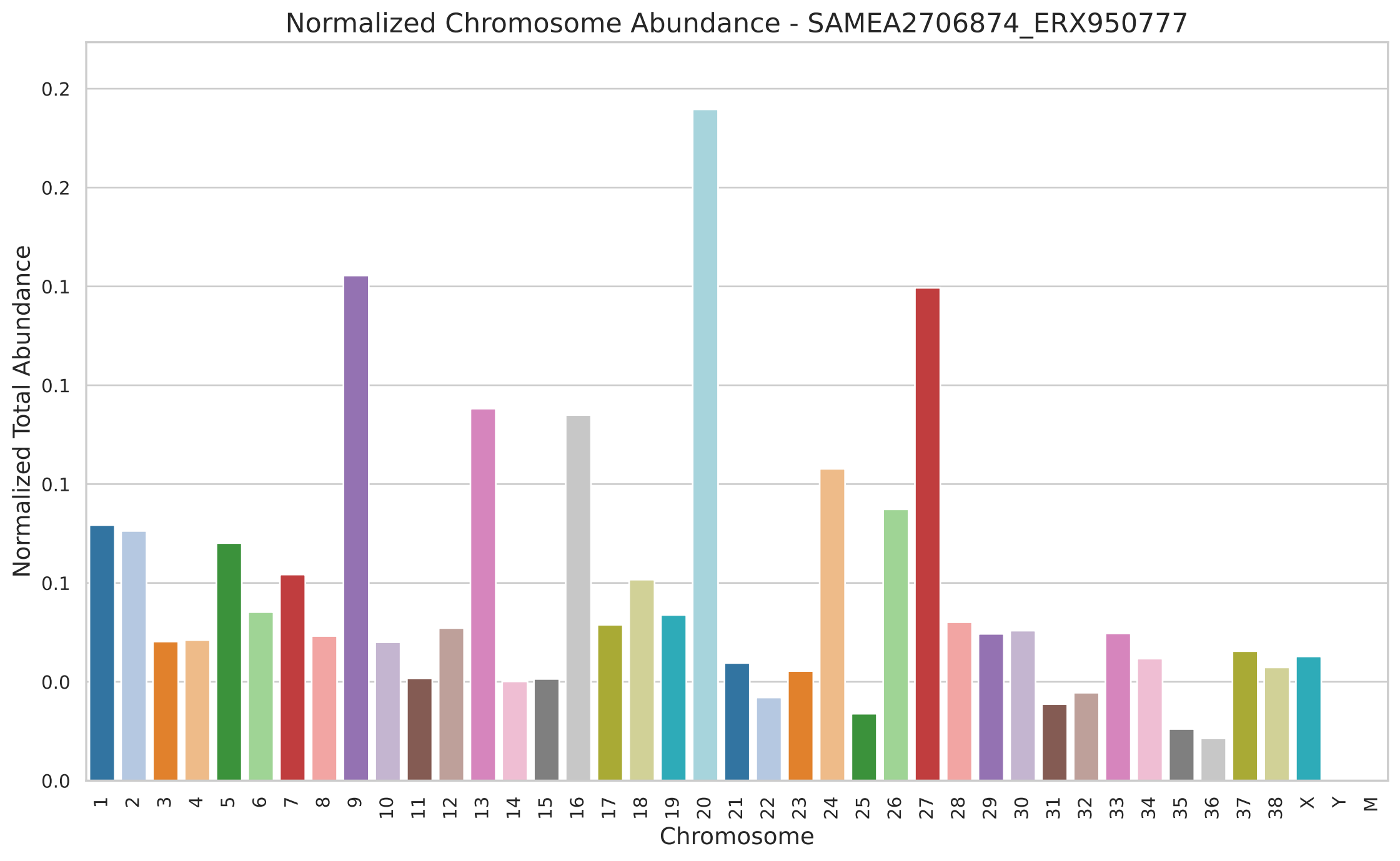

Normalized Chromosome Abundance - SAMEA2706838_ERX950741
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

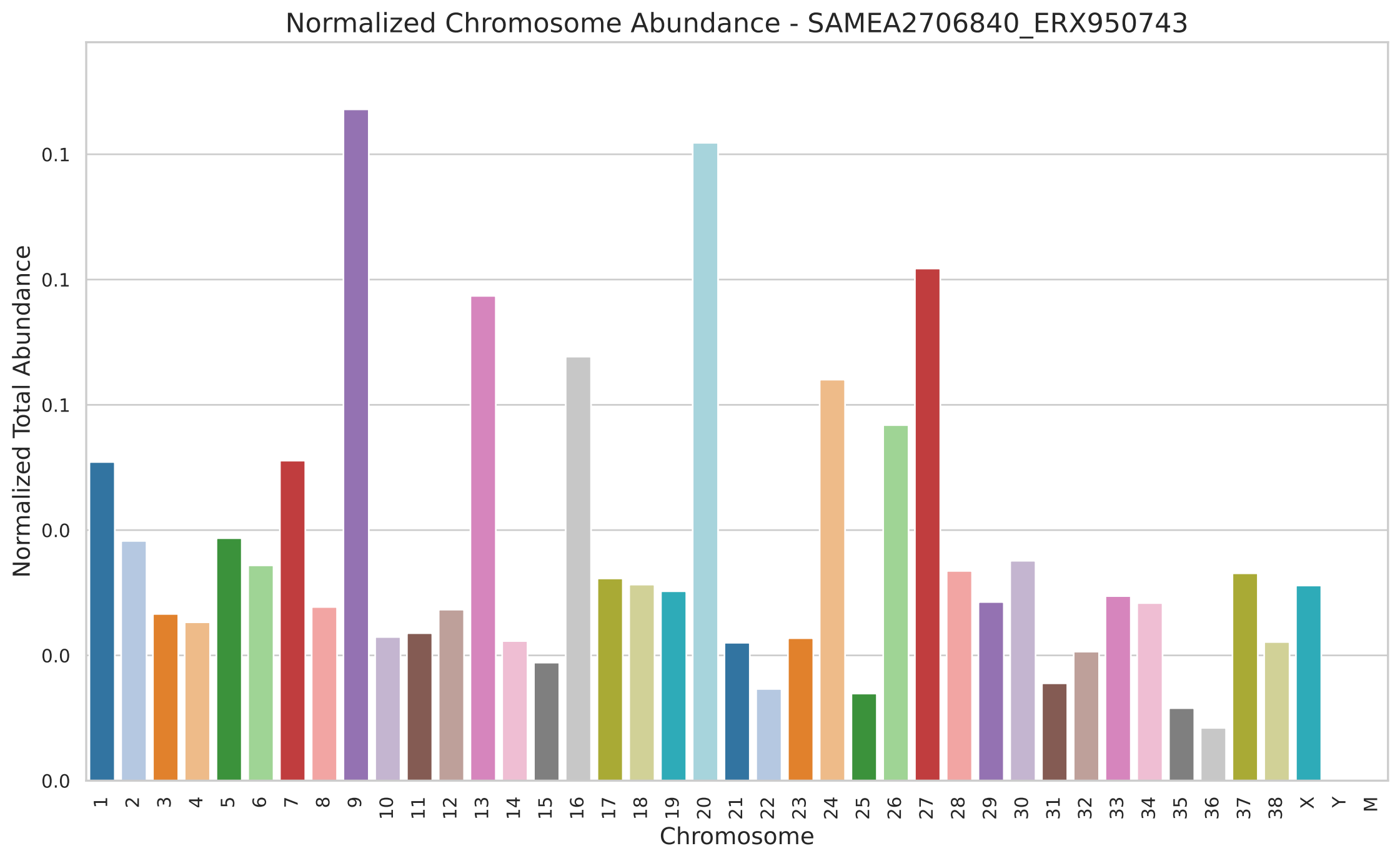

Normalized Chromosome Abundance - SAMEA2706870_ERX950677
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

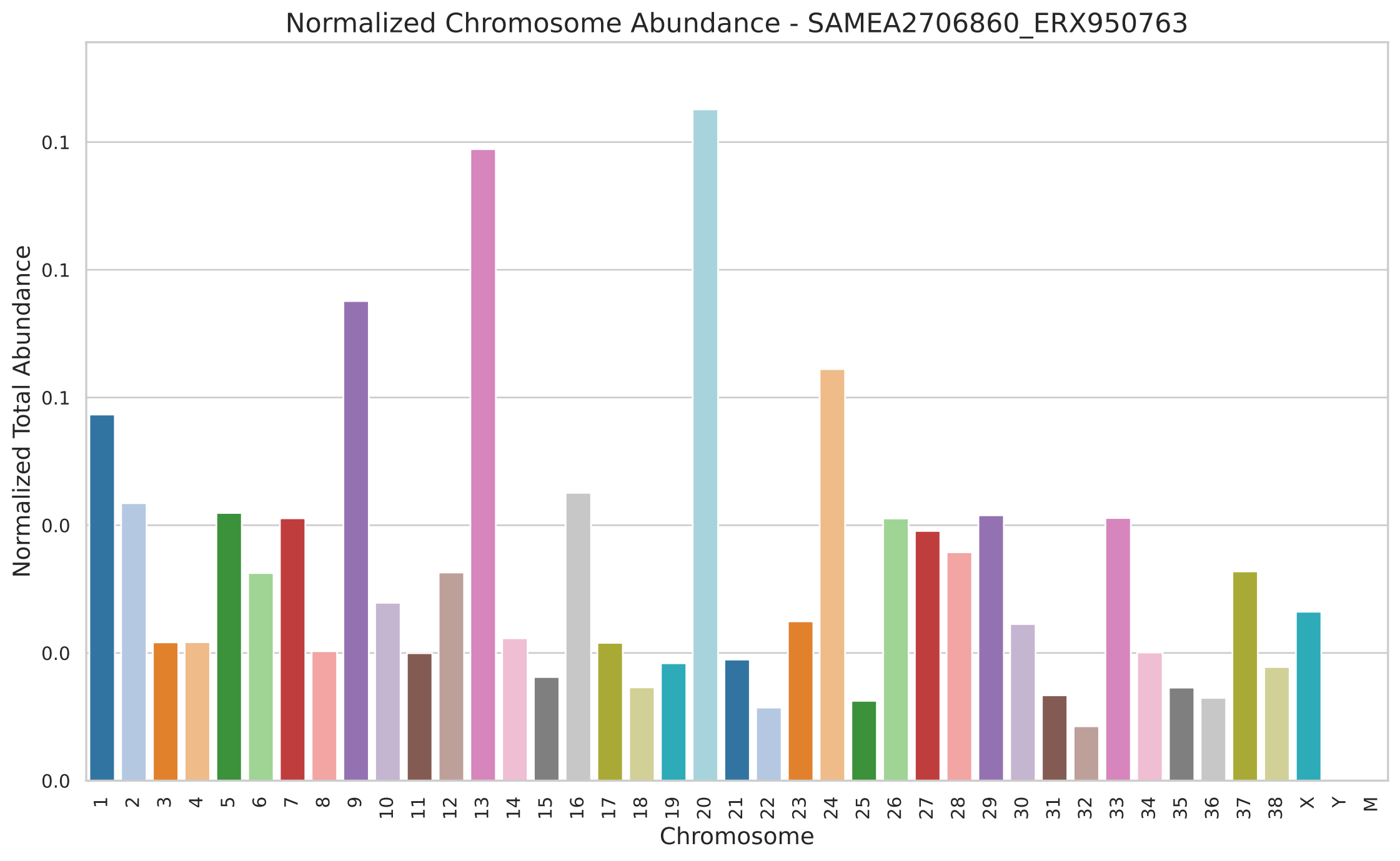

Normalized Chromosome Abundance - SAMEA2706869_ERX950676
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

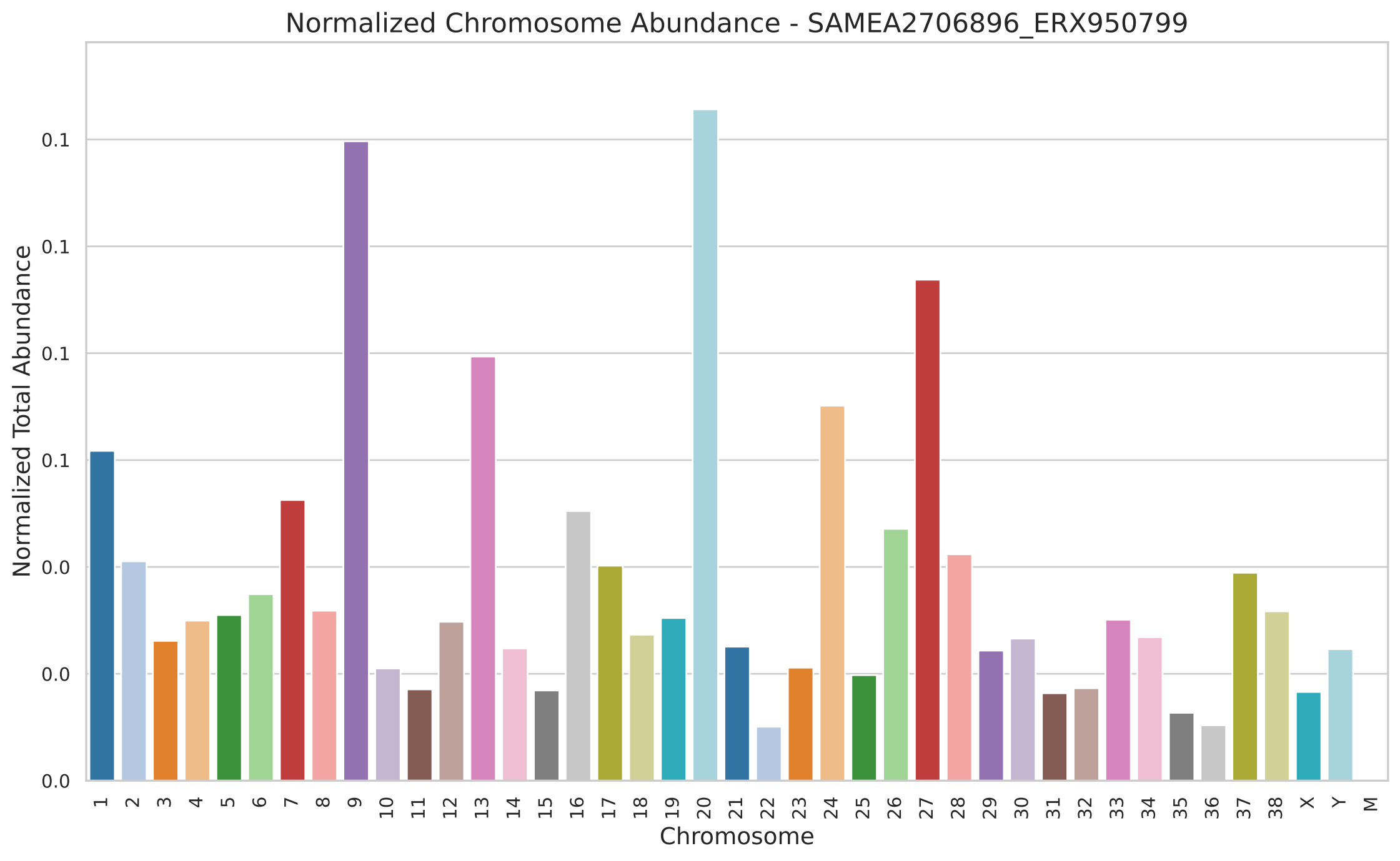

Normalized Chromosome Abundance - SAMEA2706862_ERX950669
Normalized Total Abundance
0.0
0.0
0.1
0.1
0.1
0.1
0.1
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

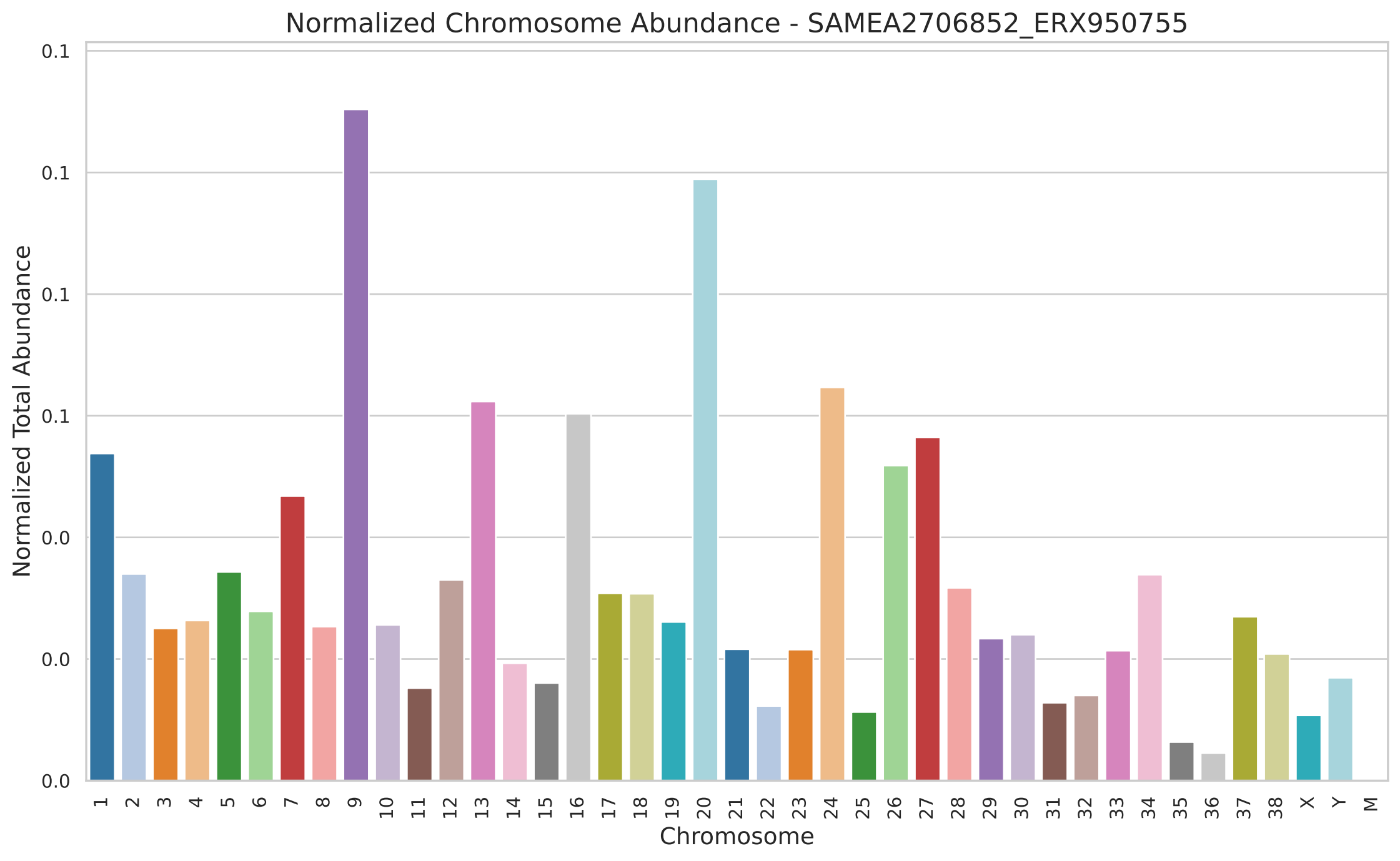

Normalized Chromosome Abundance - SAMEA2706885_ERX950788
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

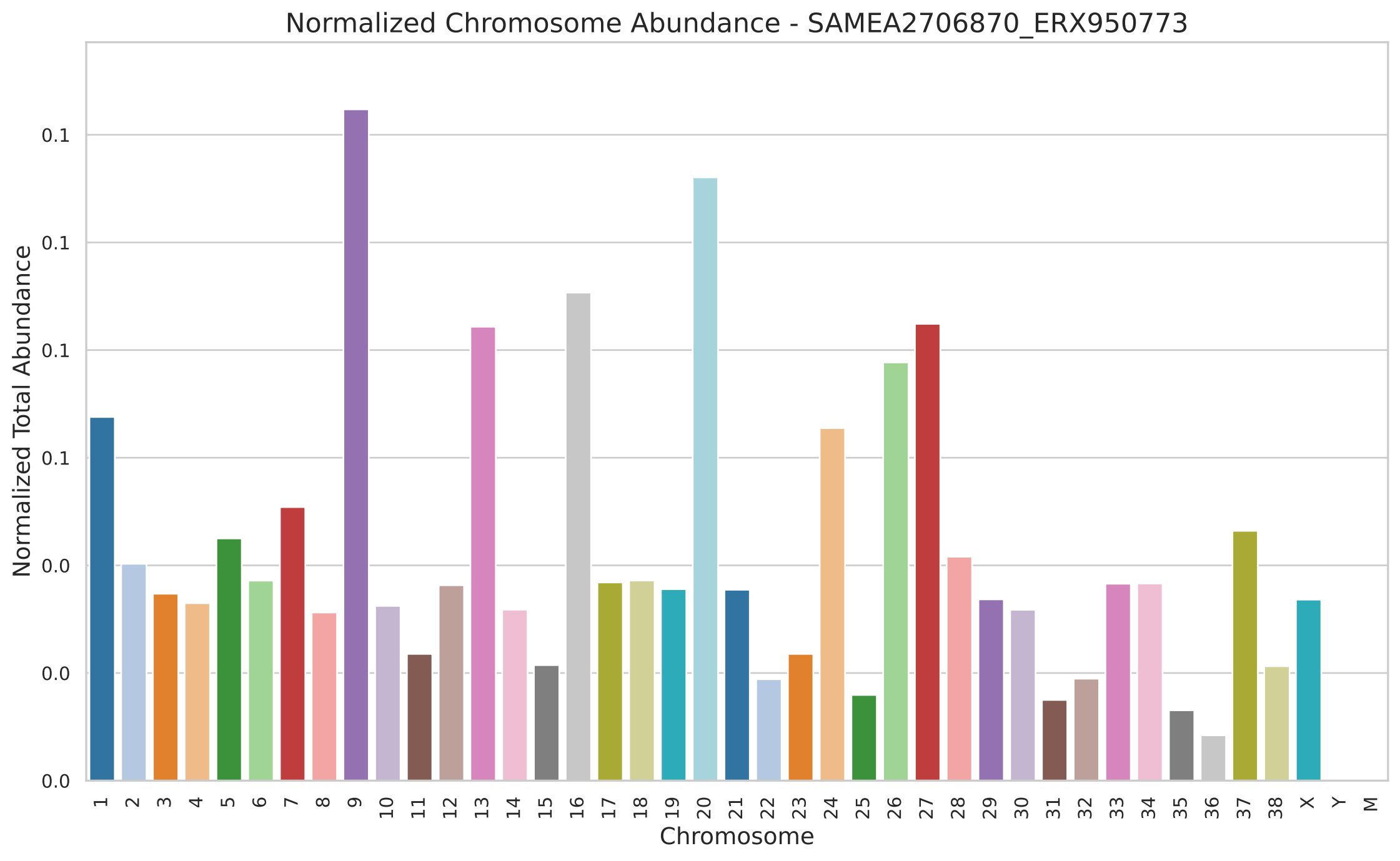

Normalized Chromosome Abundance - SAMEA2706874_ERX950777
Normalized Total Abundance
0.2
0.2
0.1
0.1
0.1
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

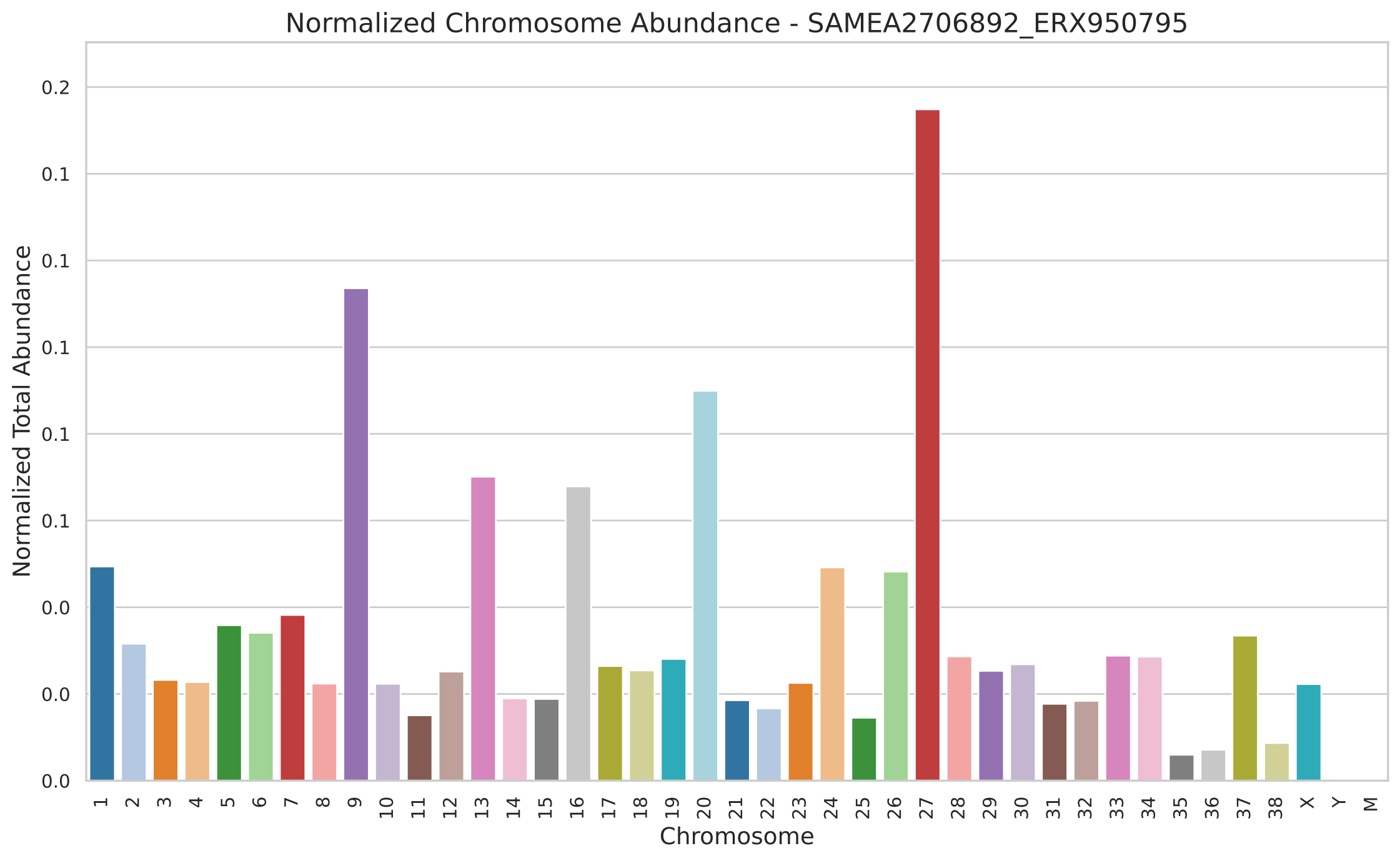

Normalized Chromosome Abundance - SAMEA2706840_ERX950743
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

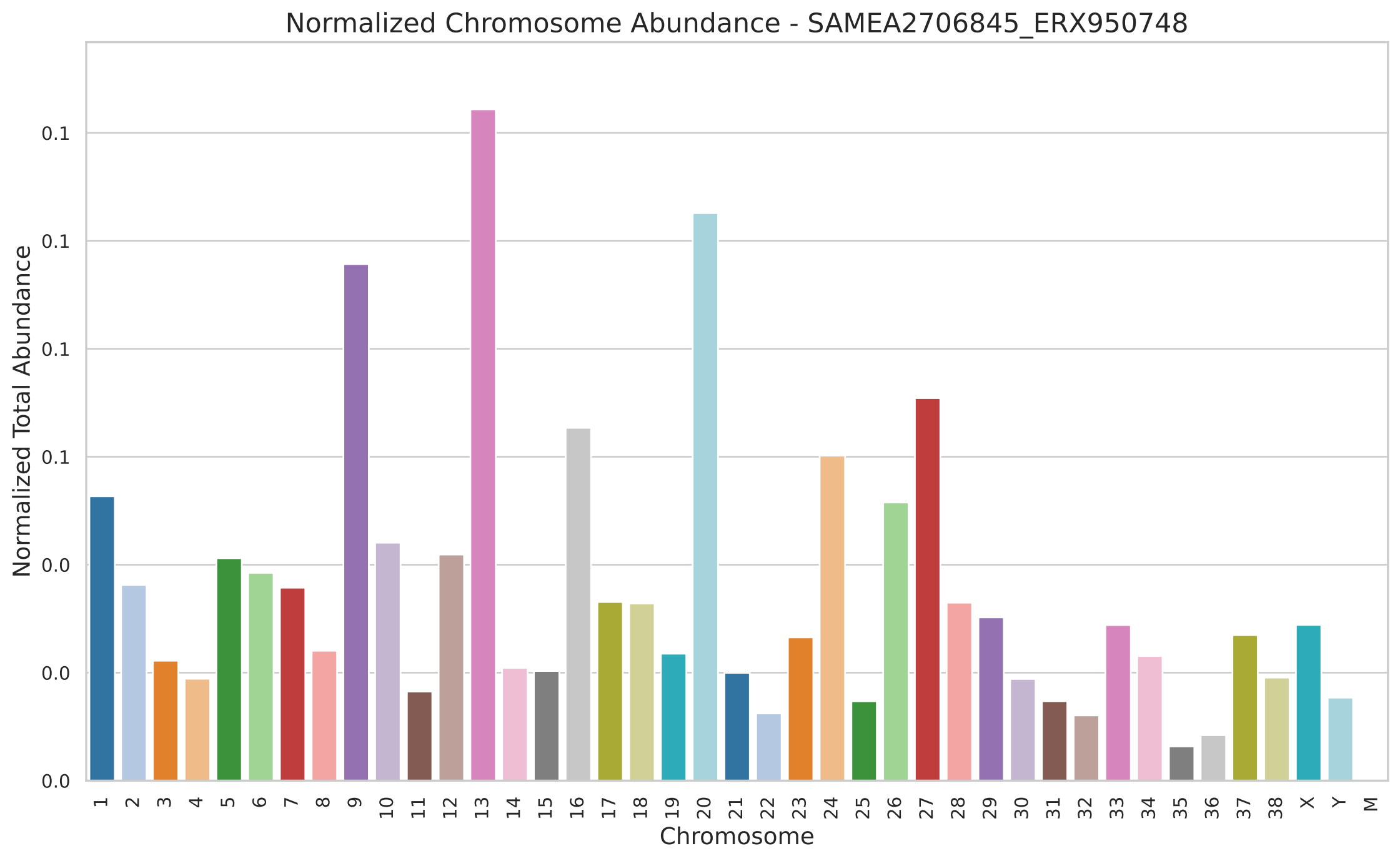

Normalized Chromosome Abundance - SAMEA2706860_ERX950763
Normalized Total Abundance
0.0
0.0
0.1
0.1
0.1
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

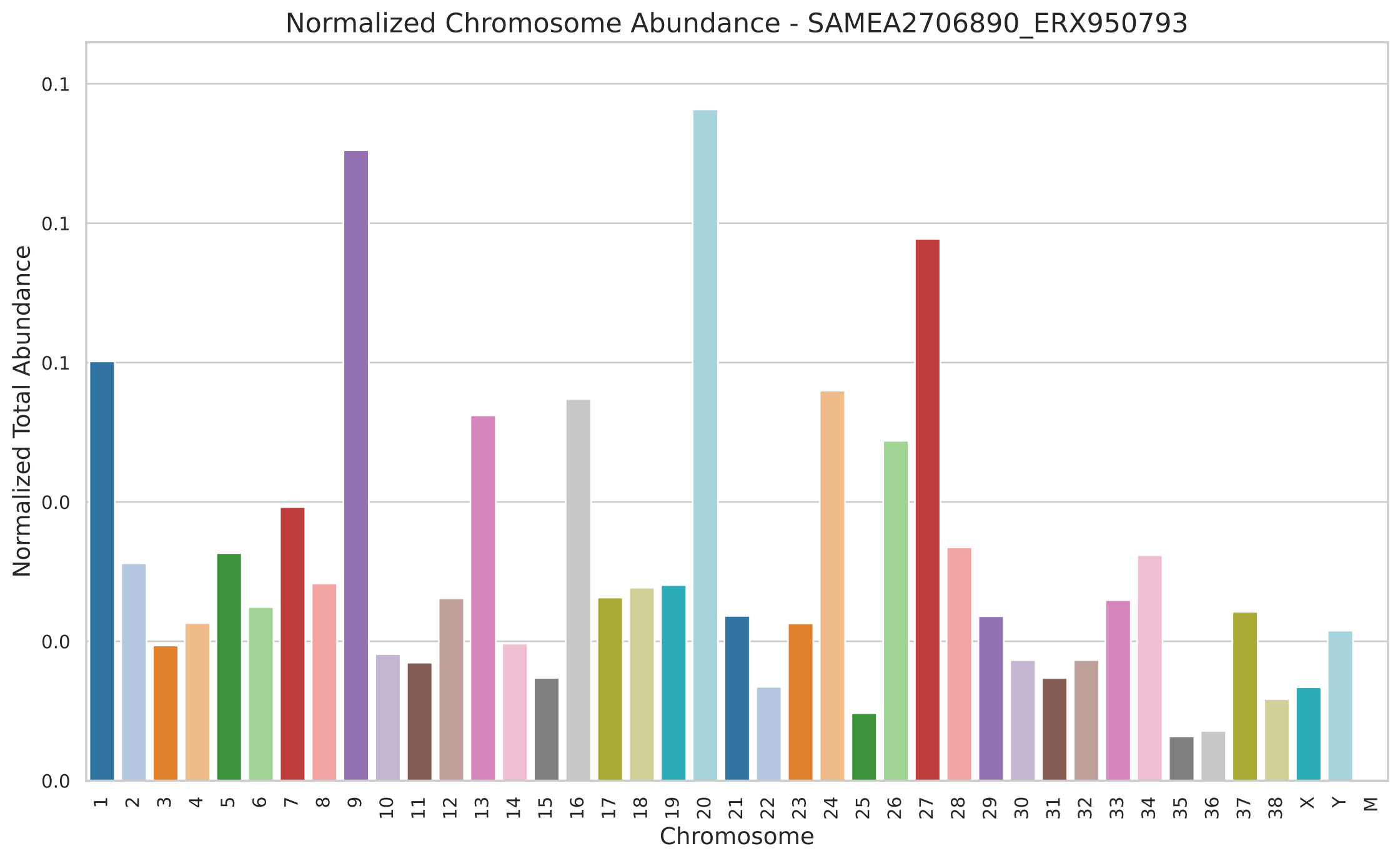

Normalized Chromosome Abundance - SAMEA2706896_ERX950799
Normalized Total Abundance
0.0
0.0
0.1
0.1
0.1
0.1
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

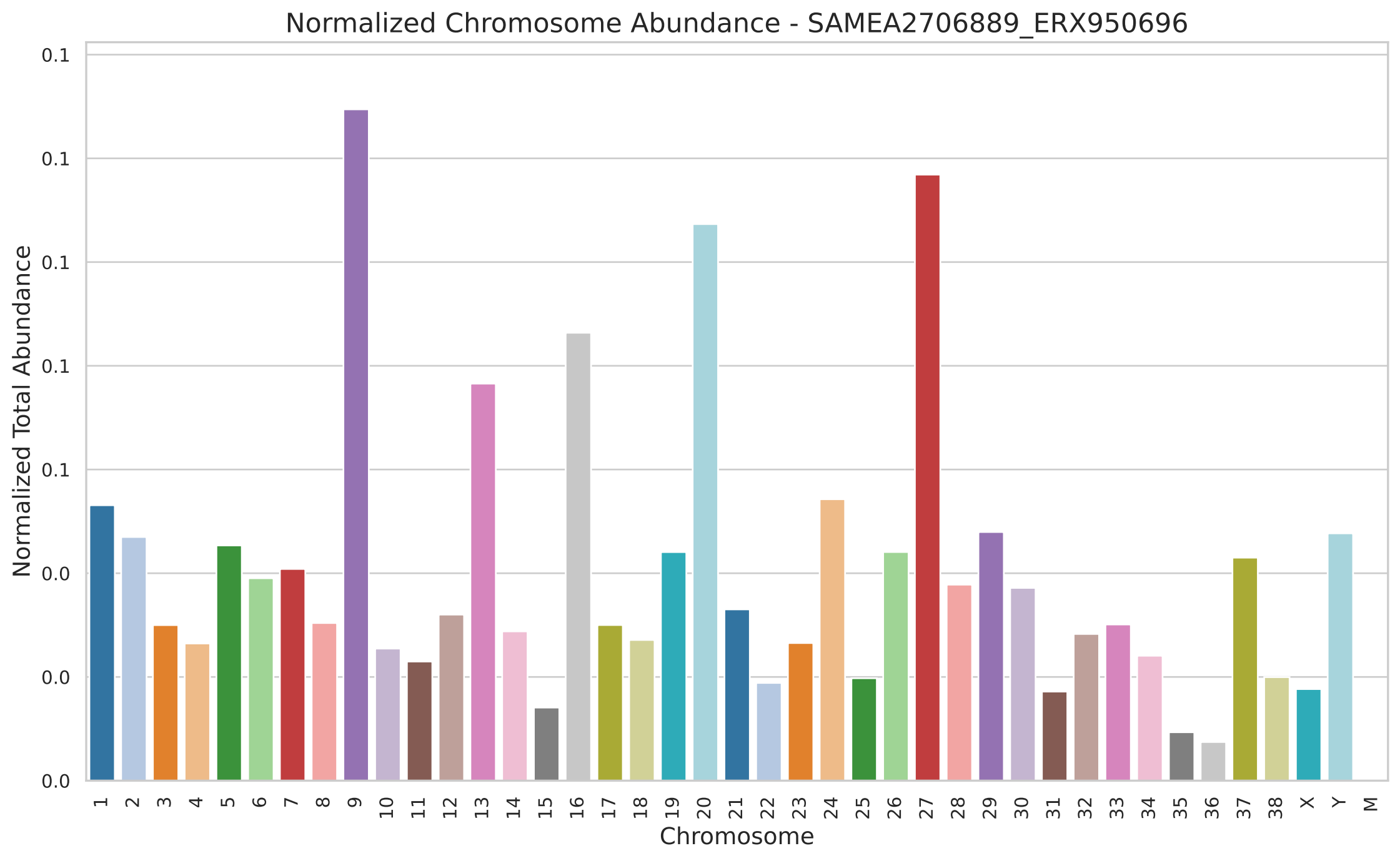

Normalized Chromosome Abundance - SAMEA2706852_ERX950755
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

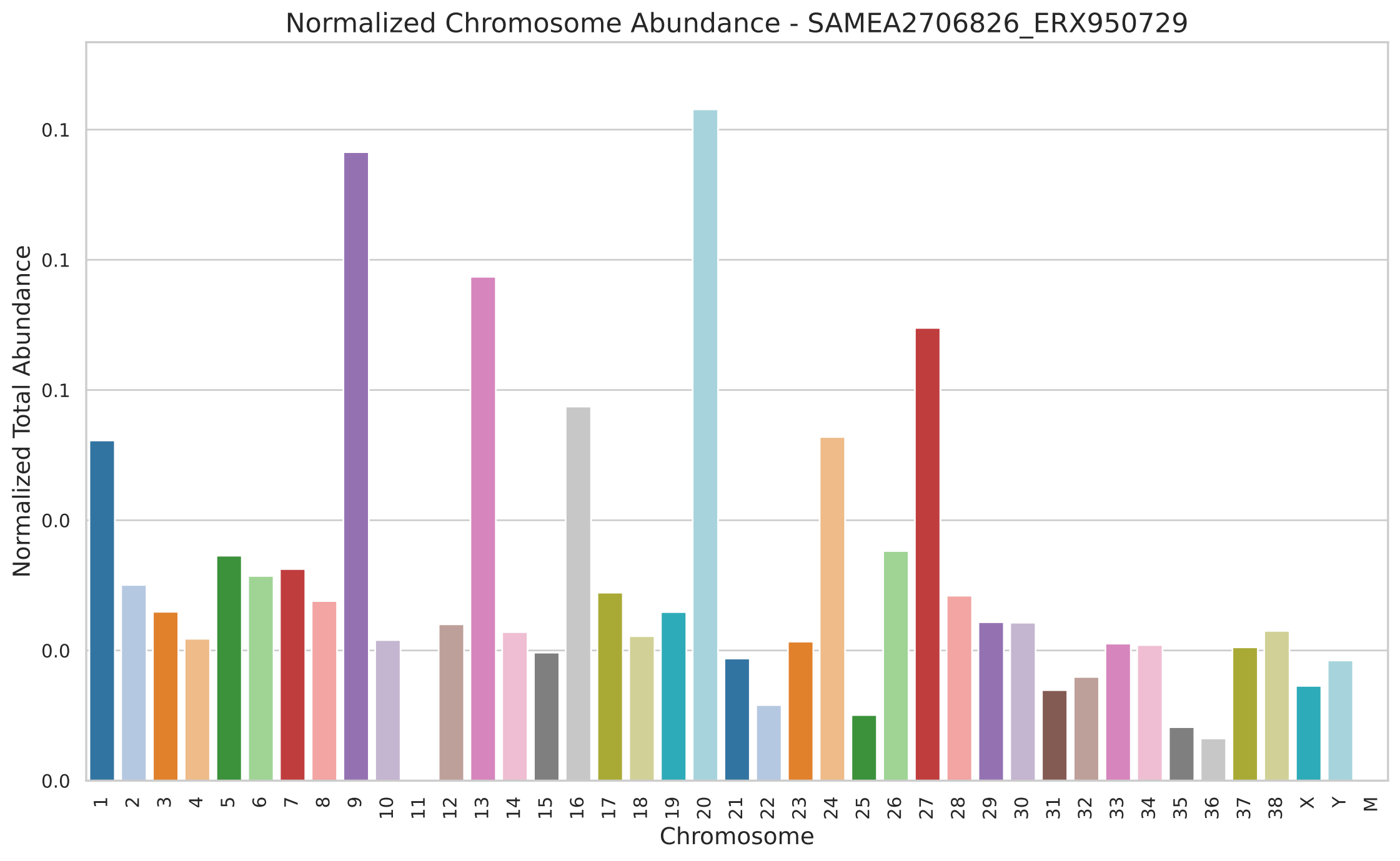

Normalized Chromosome Abundance - SAMEA2706870_ERX950773
Normalized Total Abundance
0.0
0.0
0.1
0.1
0.1
0.1
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

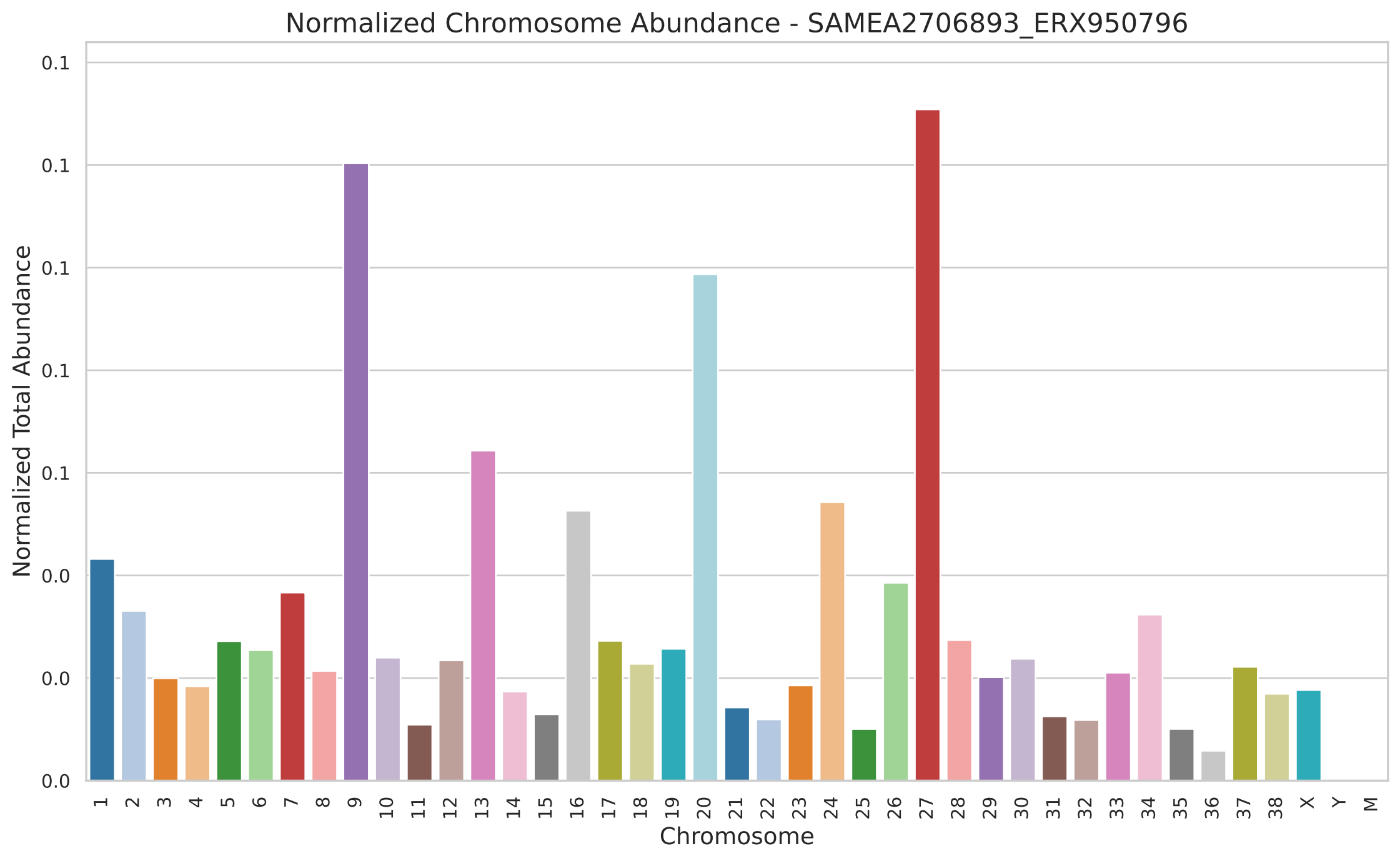

Normalized Chromosome Abundance - SAMEA2706892_ERX950795
Normalized Total Abundance
0.2
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

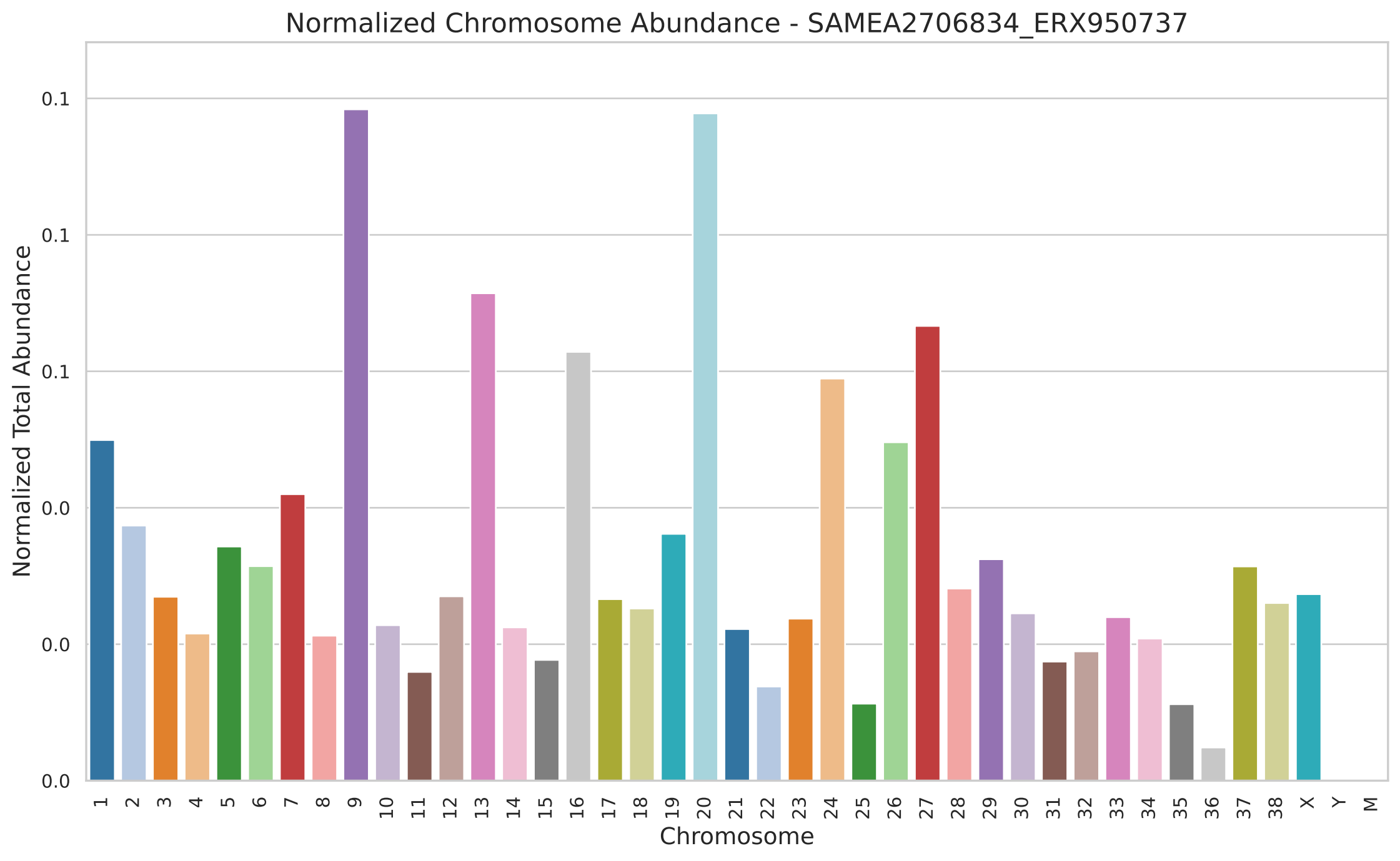

Normalized Chromosome Abundance - SAMEA2706845_ERX950748
Normalized Total Abundance
0.0
0.0
0.1
0.1
0.1
0.1
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

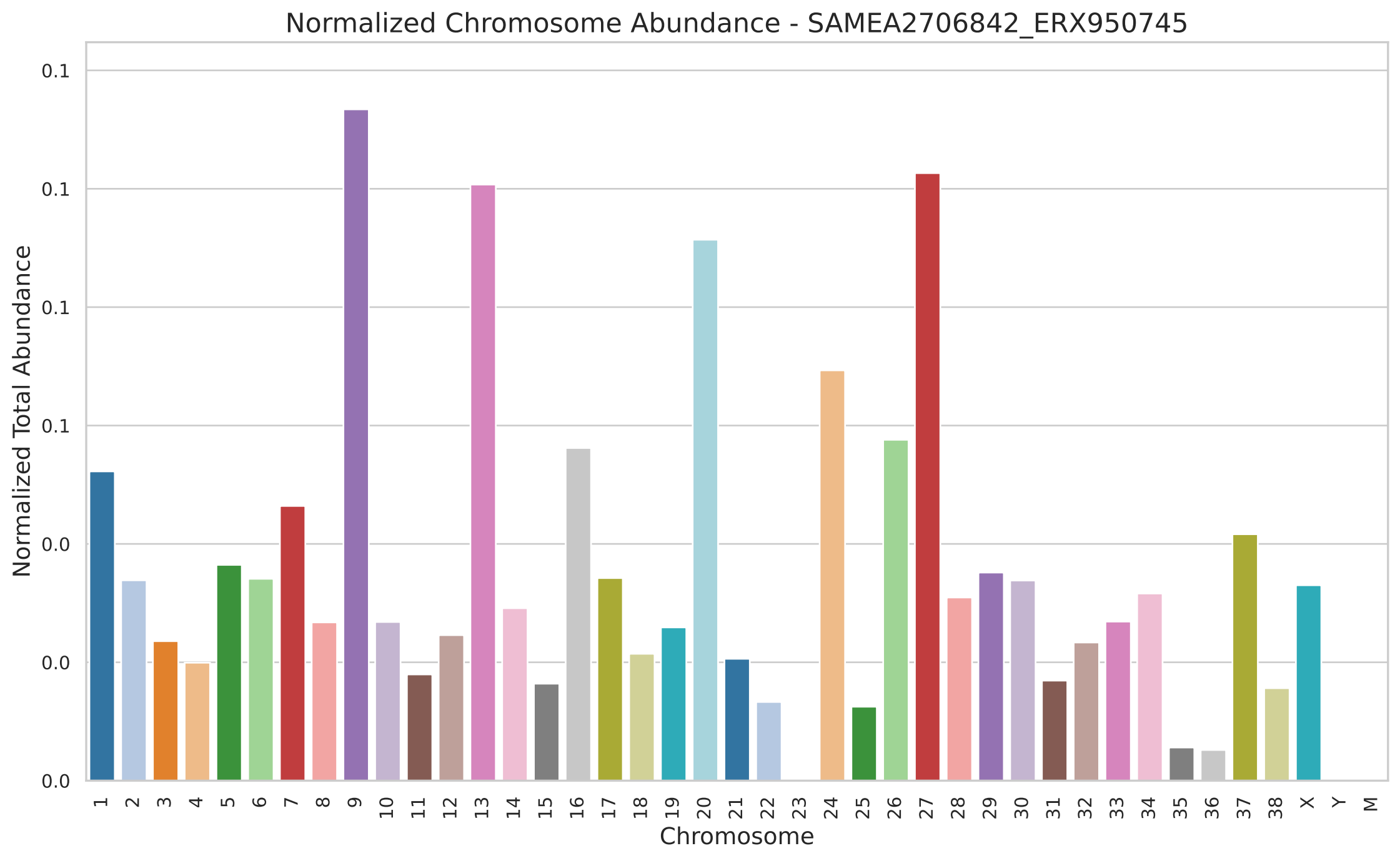

Normalized Chromosome Abundance - SAMEA2706890_ERX950793
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

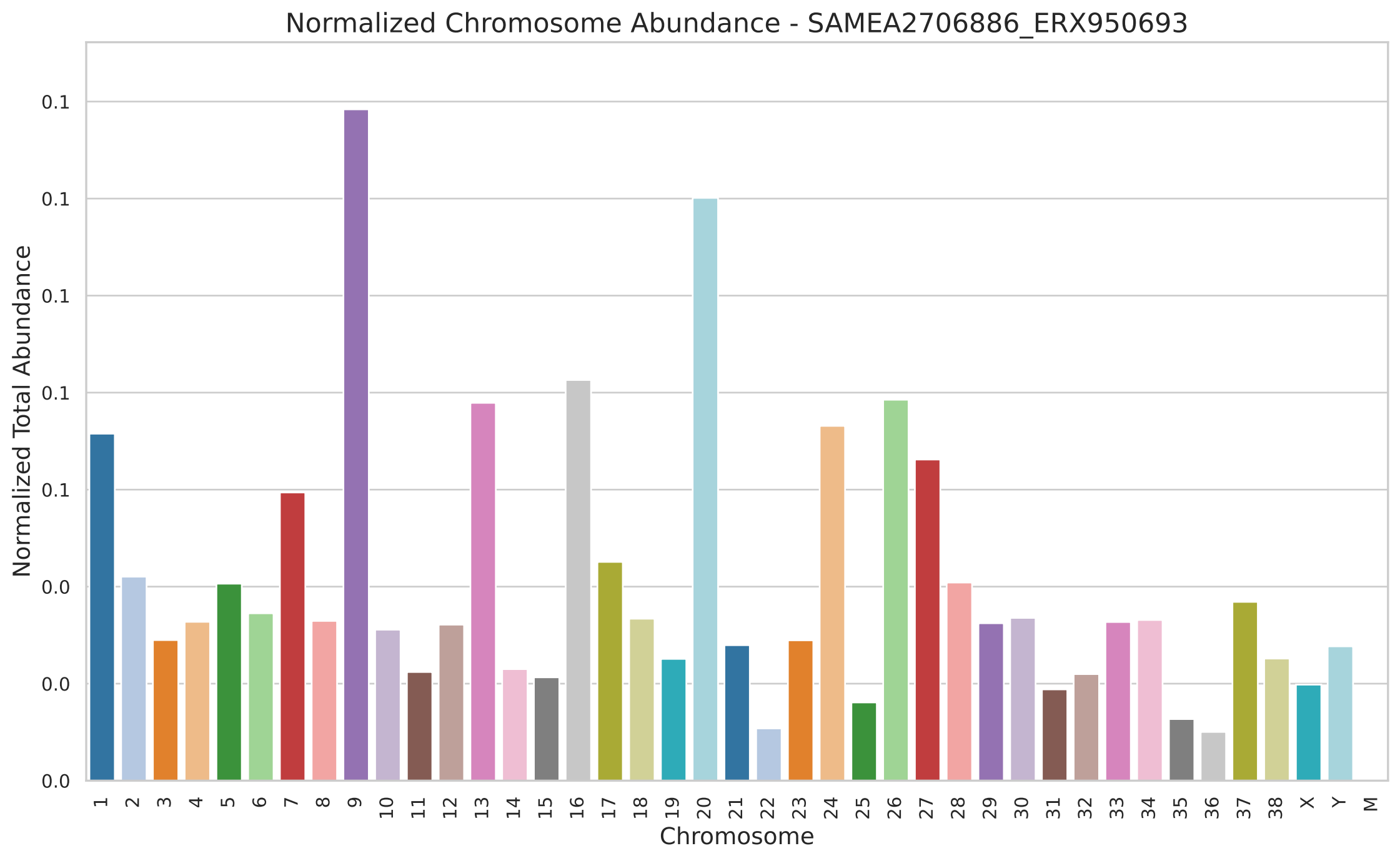

Normalized Chromosome Abundance - SAMEA2706889_ERX950696
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

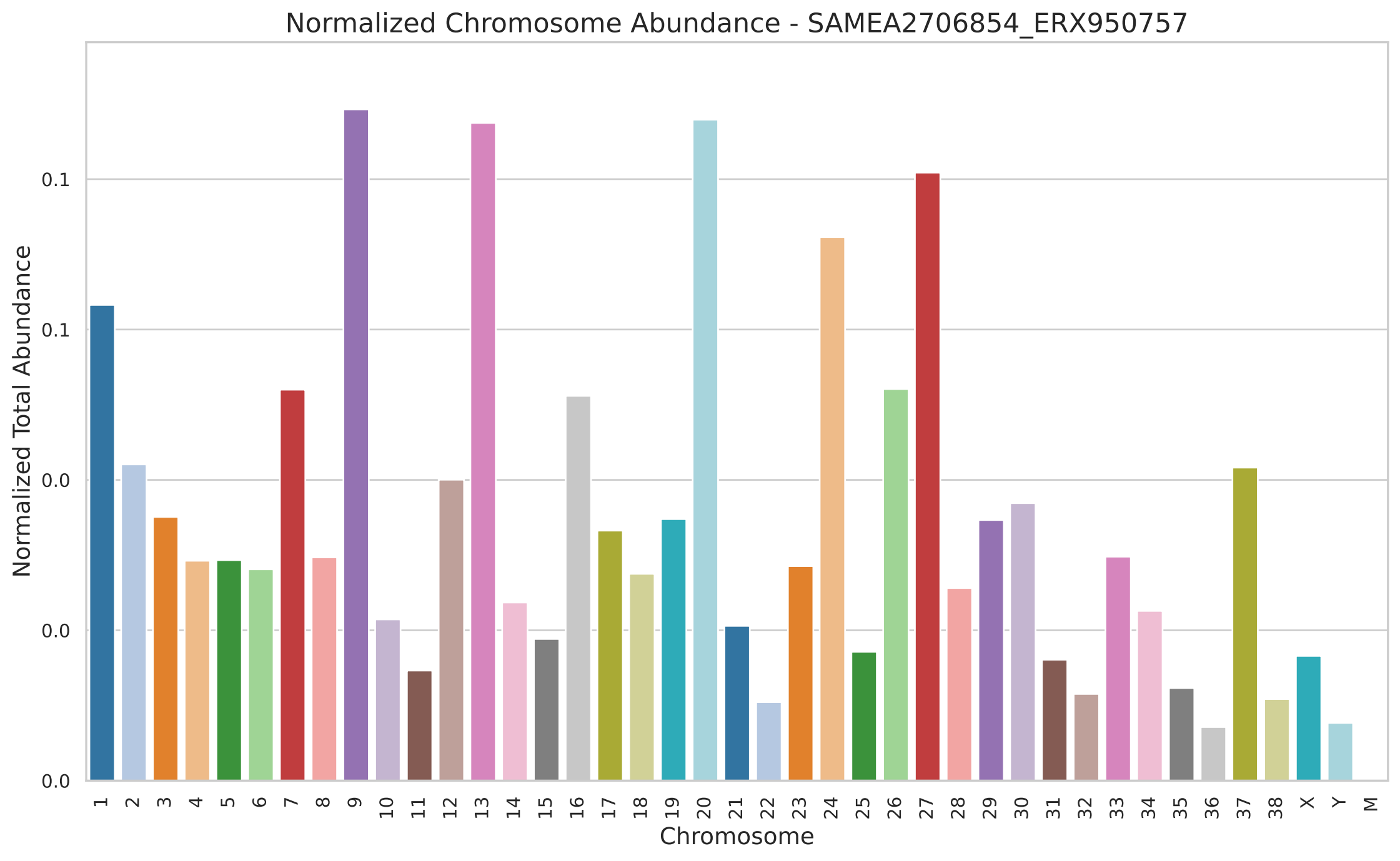

Normalized Chromosome Abundance - SAMEA2706826_ERX950729
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

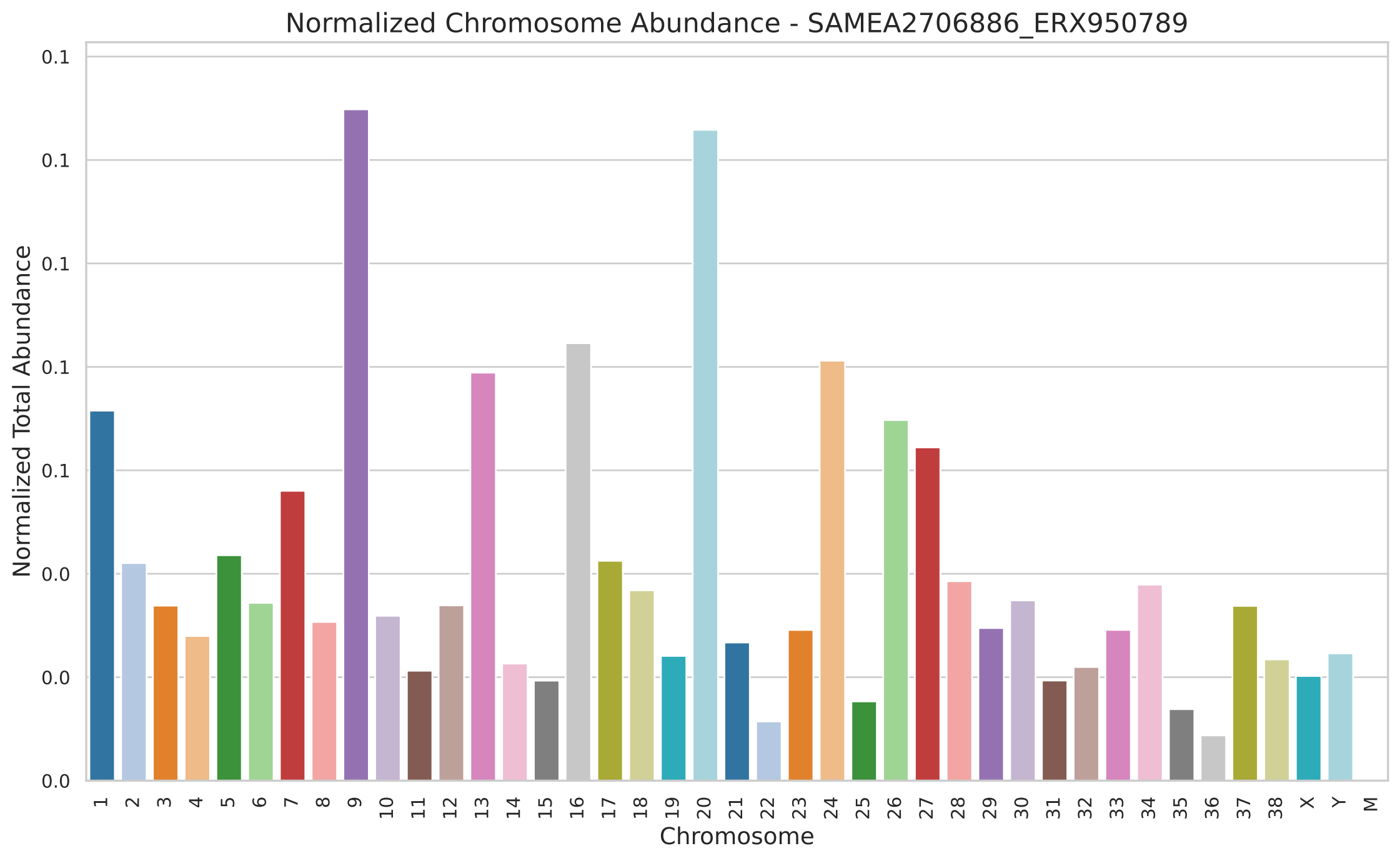

Normalized Chromosome Abundance - SAMEA2706893_ERX950796
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

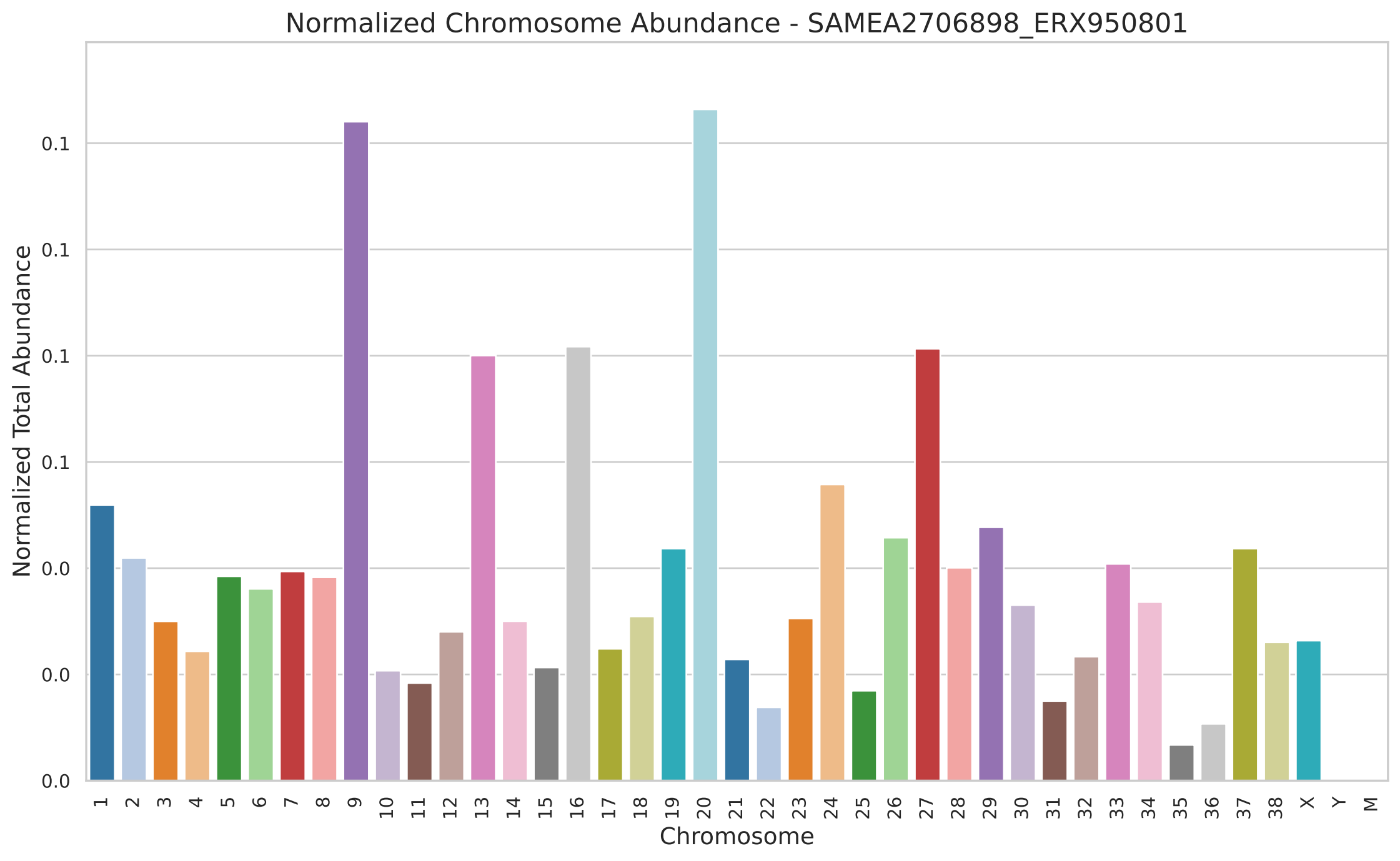

Normalized Chromosome Abundance - SAMEA2706834_ERX950737
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

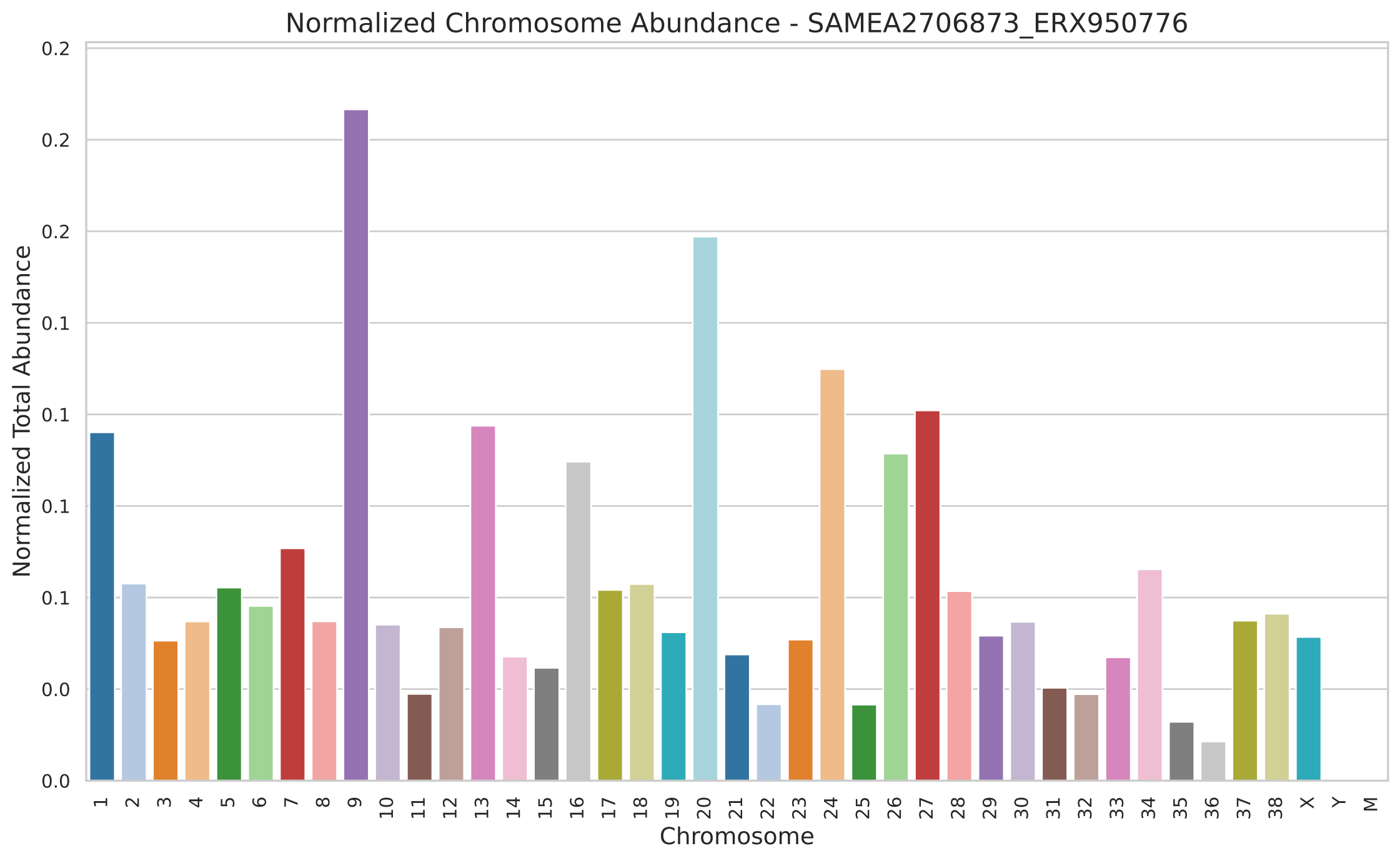

Normalized Chromosome Abundance - SAMEA2706842_ERX950745
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

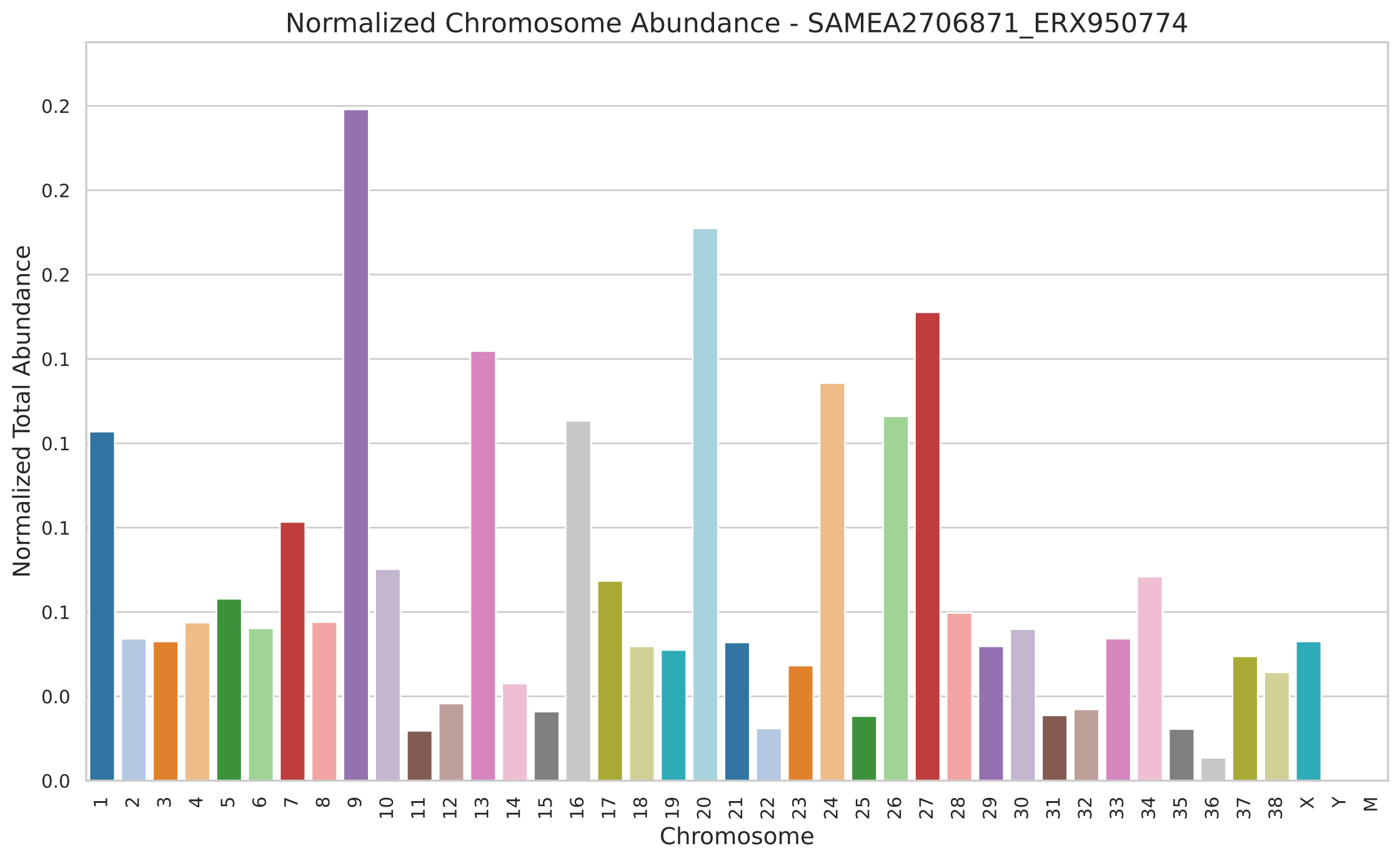

Normalized Chromosome Abundance - SAMEA2706886_ERX950693
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

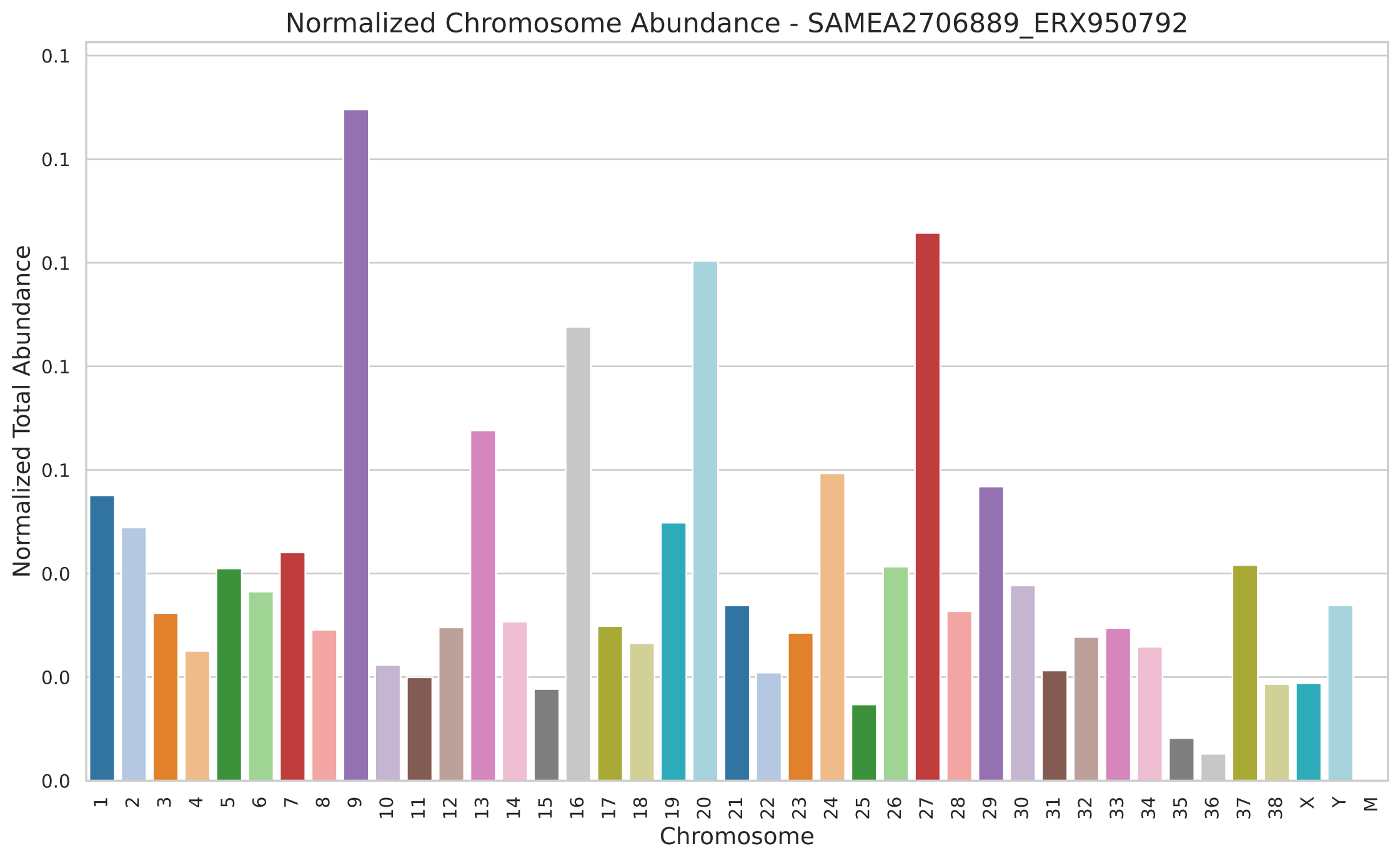

Normalized Chromosome Abundance - SAMEA2706854_ERX950757
Normalized Total Abundance
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

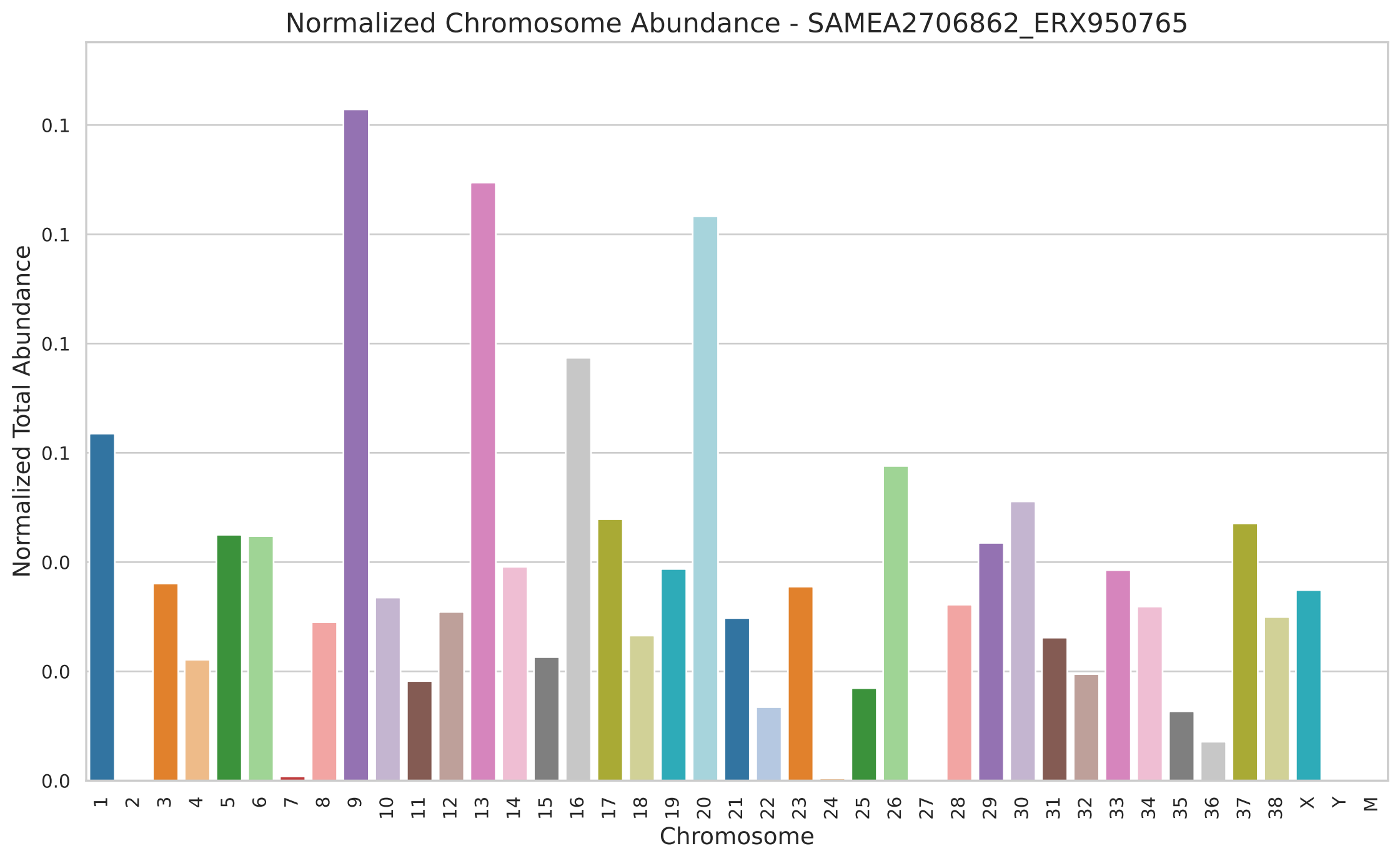

Normalized Chromosome Abundance - SAMEA2706886_ERX950789
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

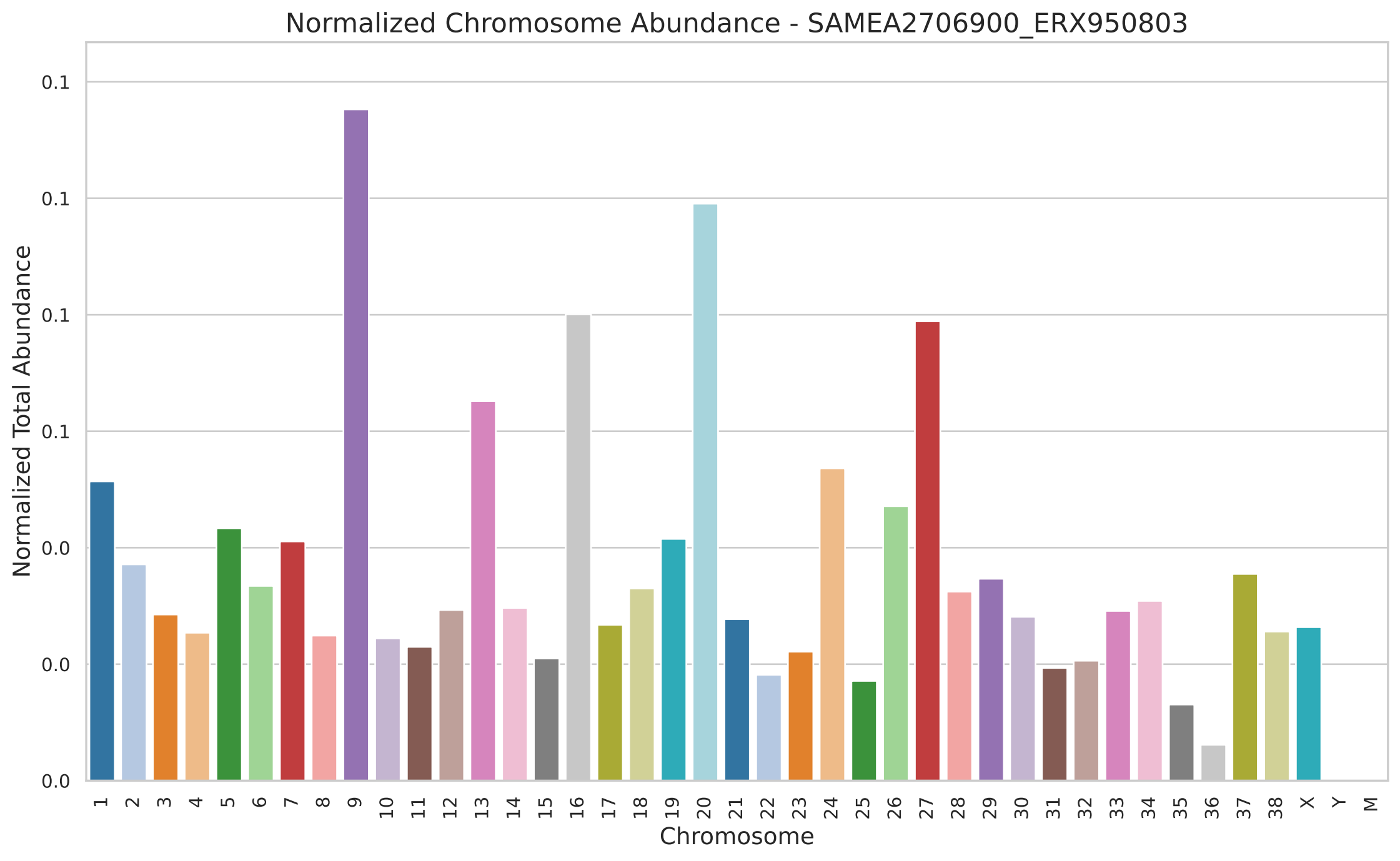

Normalized Chromosome Abundance - SAMEA2706898_ERX950801
Normalized Total Abundance
0.0
0.0
0.1
0.1
0.1
0.1
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

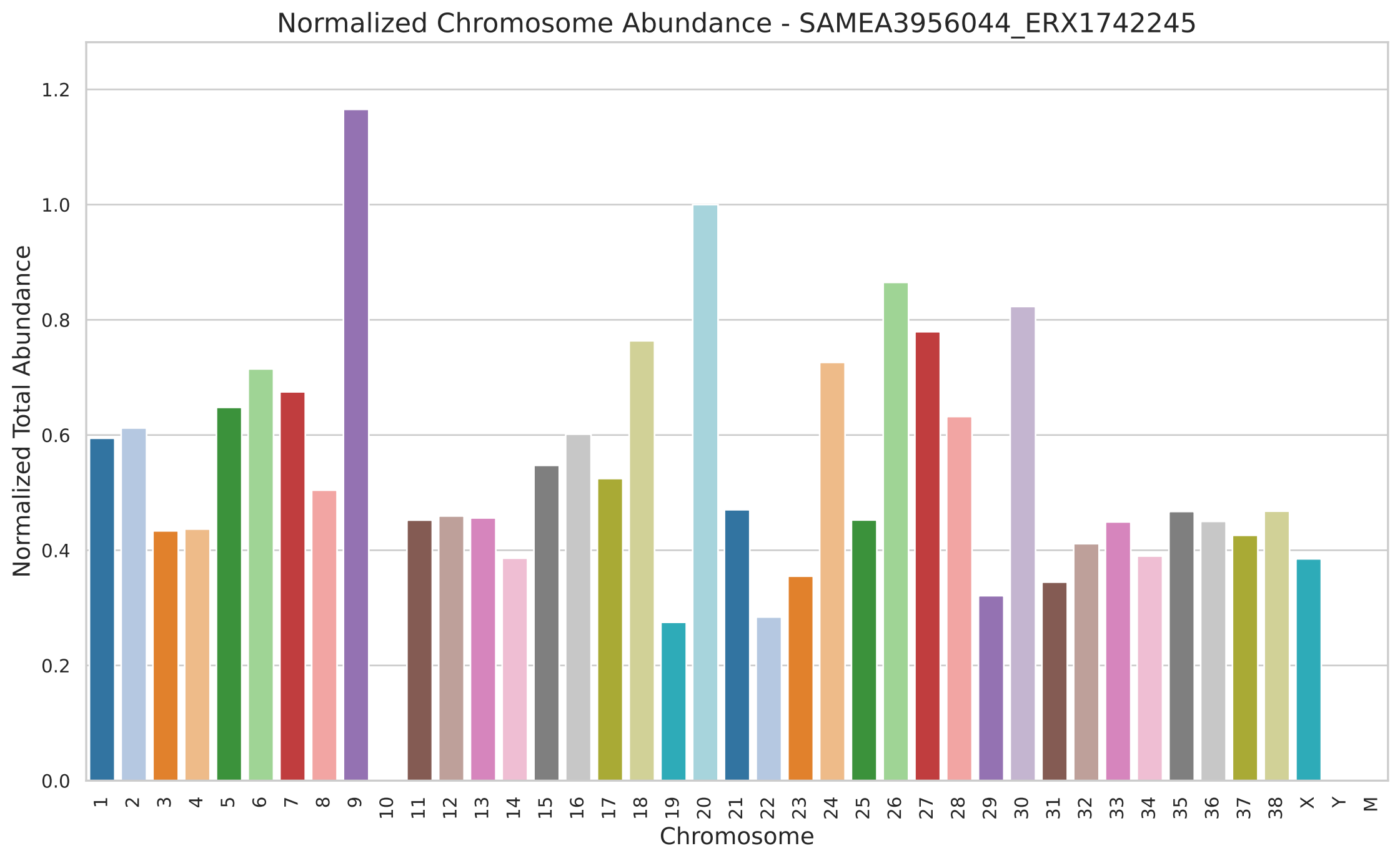

Normalized Chromosome Abundance - SAMEA2706873_ERX950776
Normalized Total Abundance
0.2
0.2
0.2
0.1
0.1
0.1
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

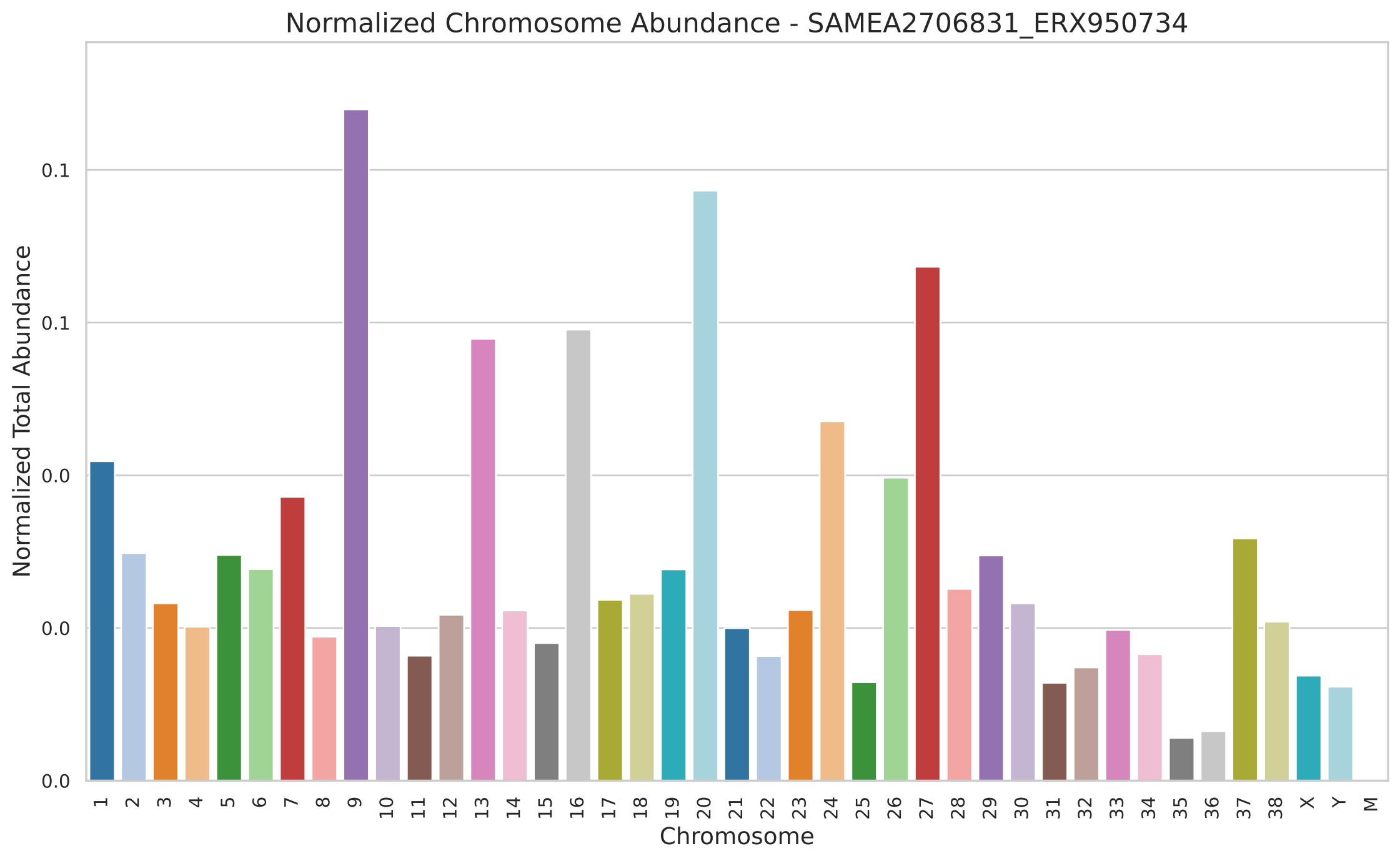

Normalized Chromosome Abundance - SAMEA2706871_ERX950774
Normalized Total Abundance
0.2
0.2
0.2
0.1
0.1
0.1
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

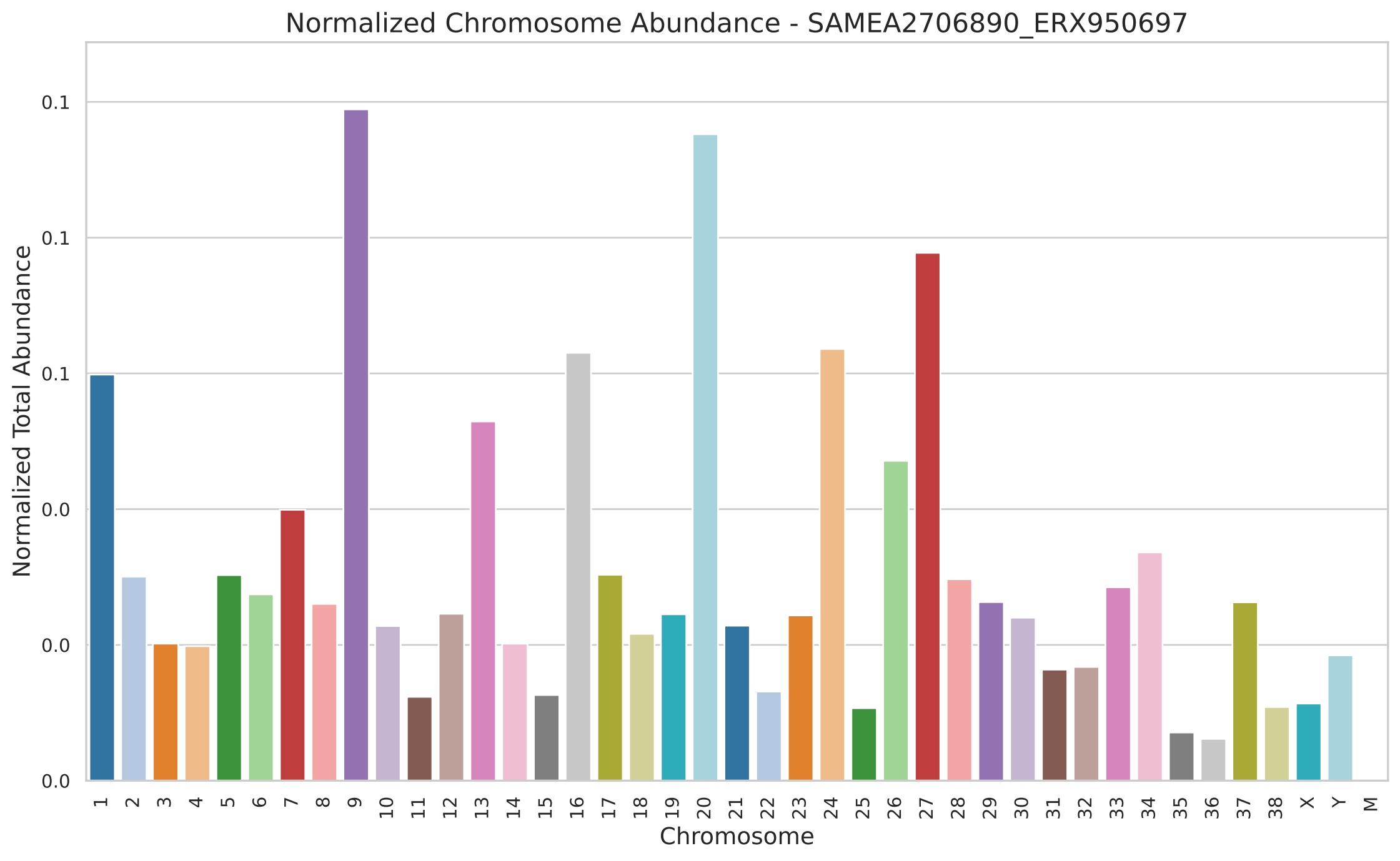

Normalized Chromosome Abundance - SAMEA2706889_ERX950792
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

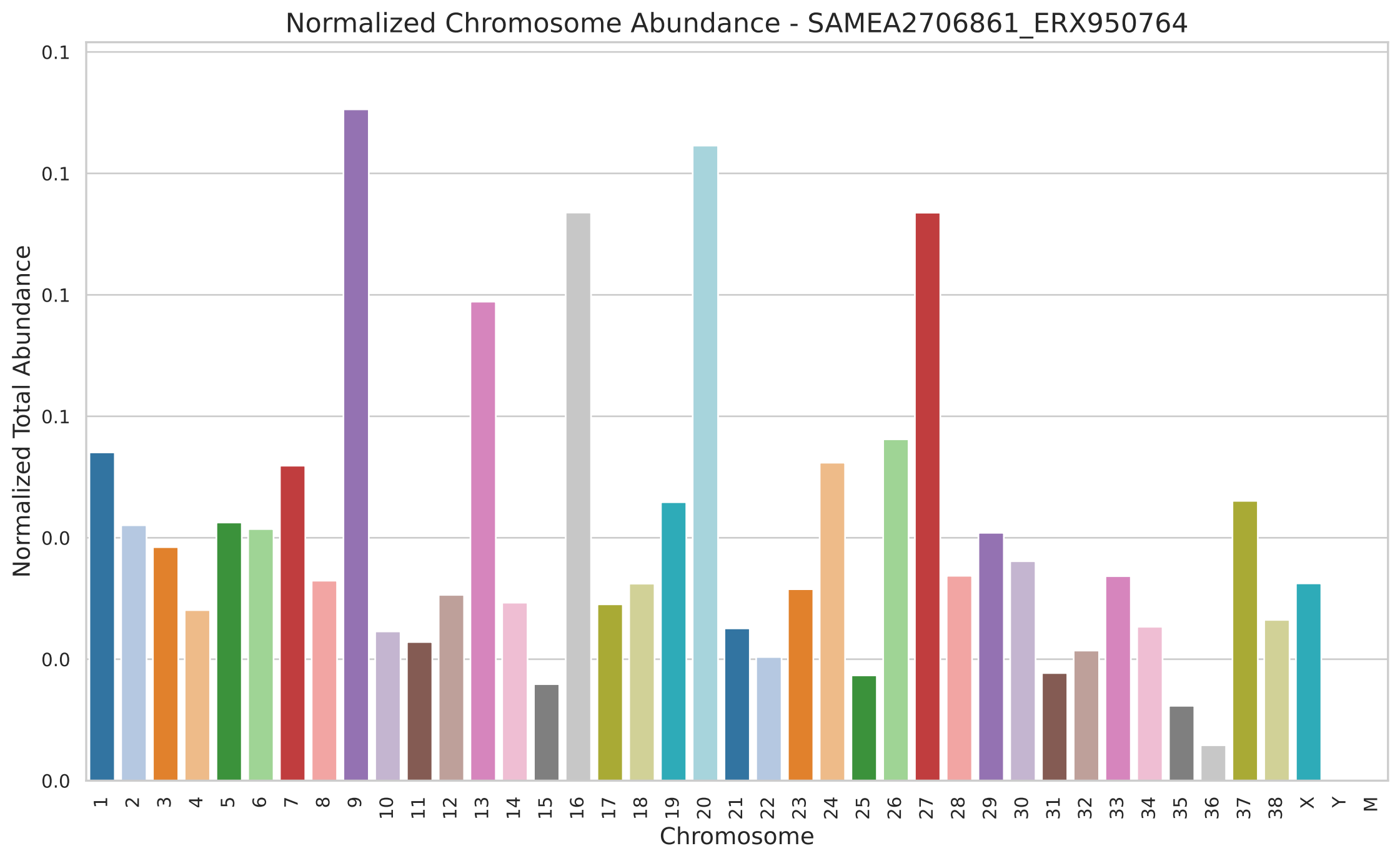

Normalized Chromosome Abundance - SAMEA2706862_ERX950765
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

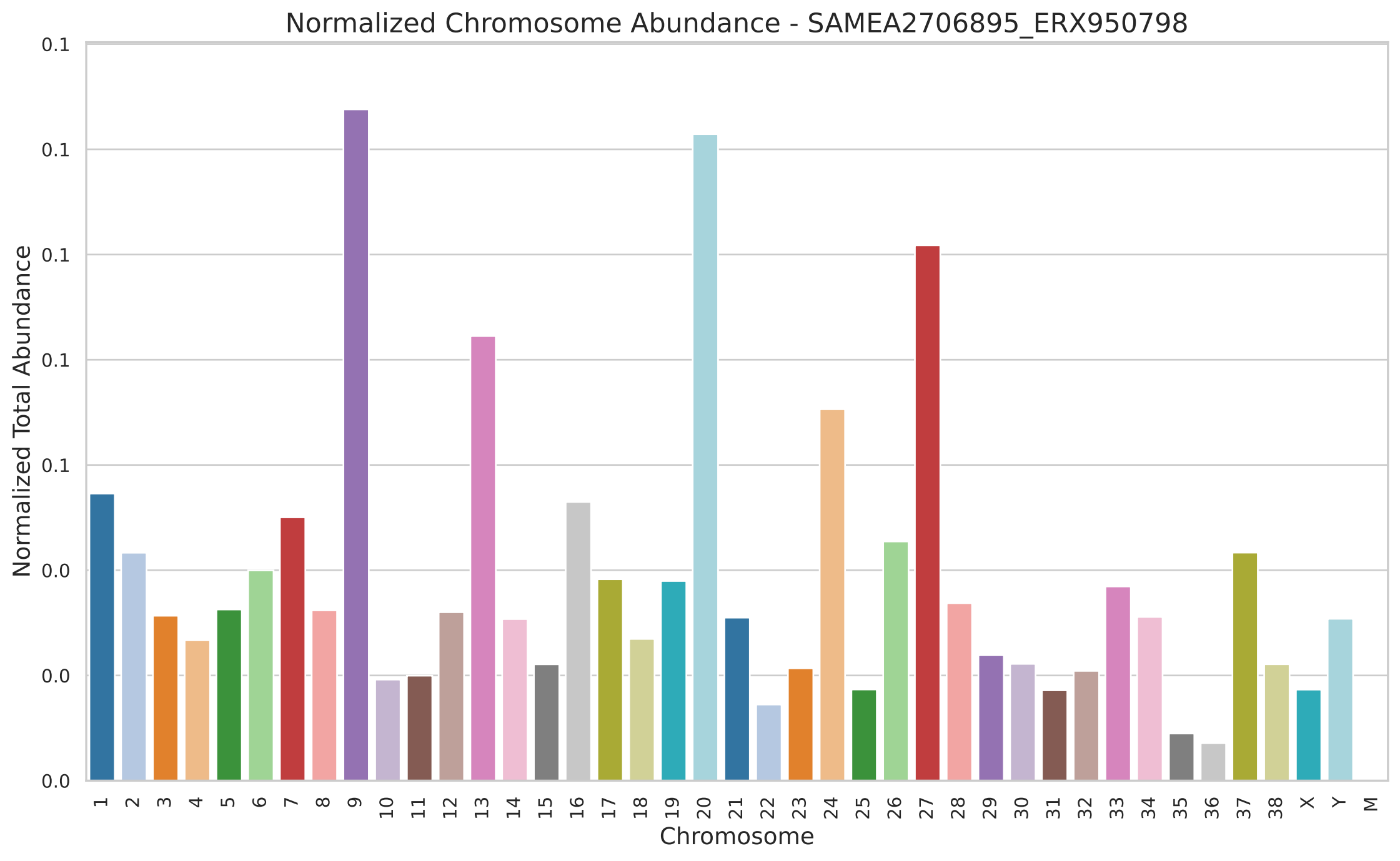

Normalized Chromosome Abundance - SAMEA2706900_ERX950803
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

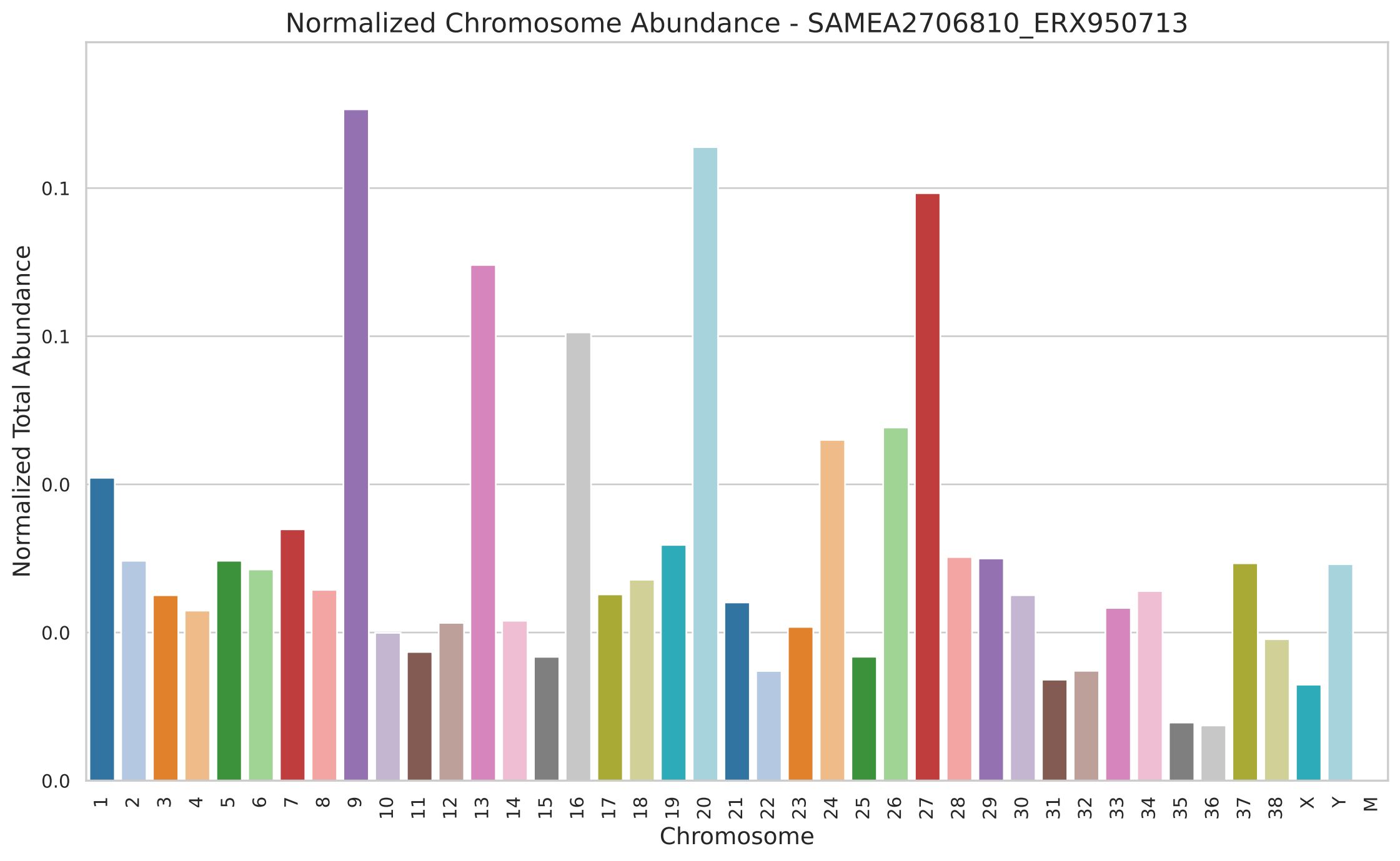

Normalized Chromosome Abundance - SAMEA3956044_ERX1742245
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

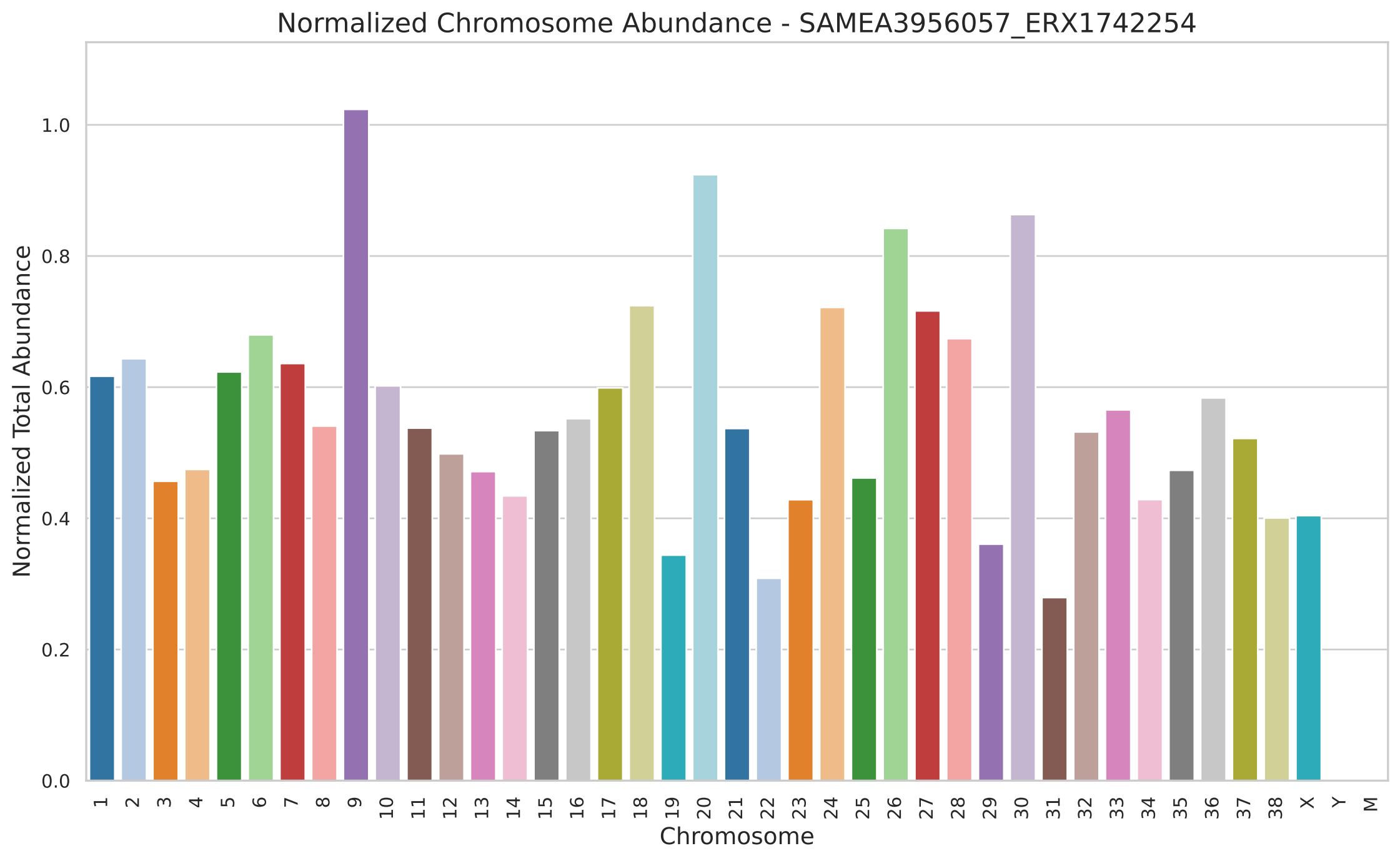

Normalized Chromosome Abundance - SAMEA2706831_ERX950734
Normalized Total Abundance
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

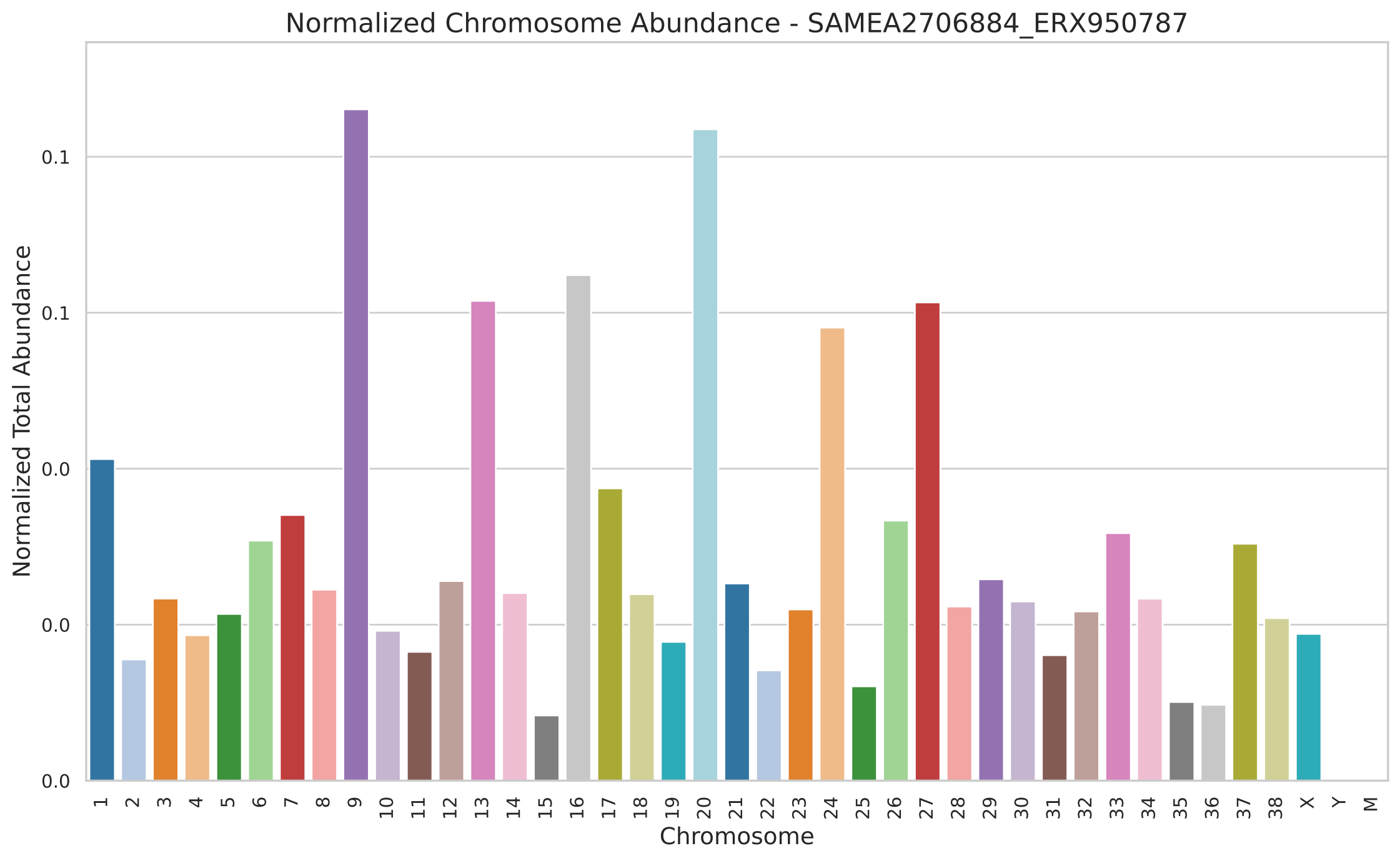

Normalized Chromosome Abundance - SAMEA2706890_ERX950697
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

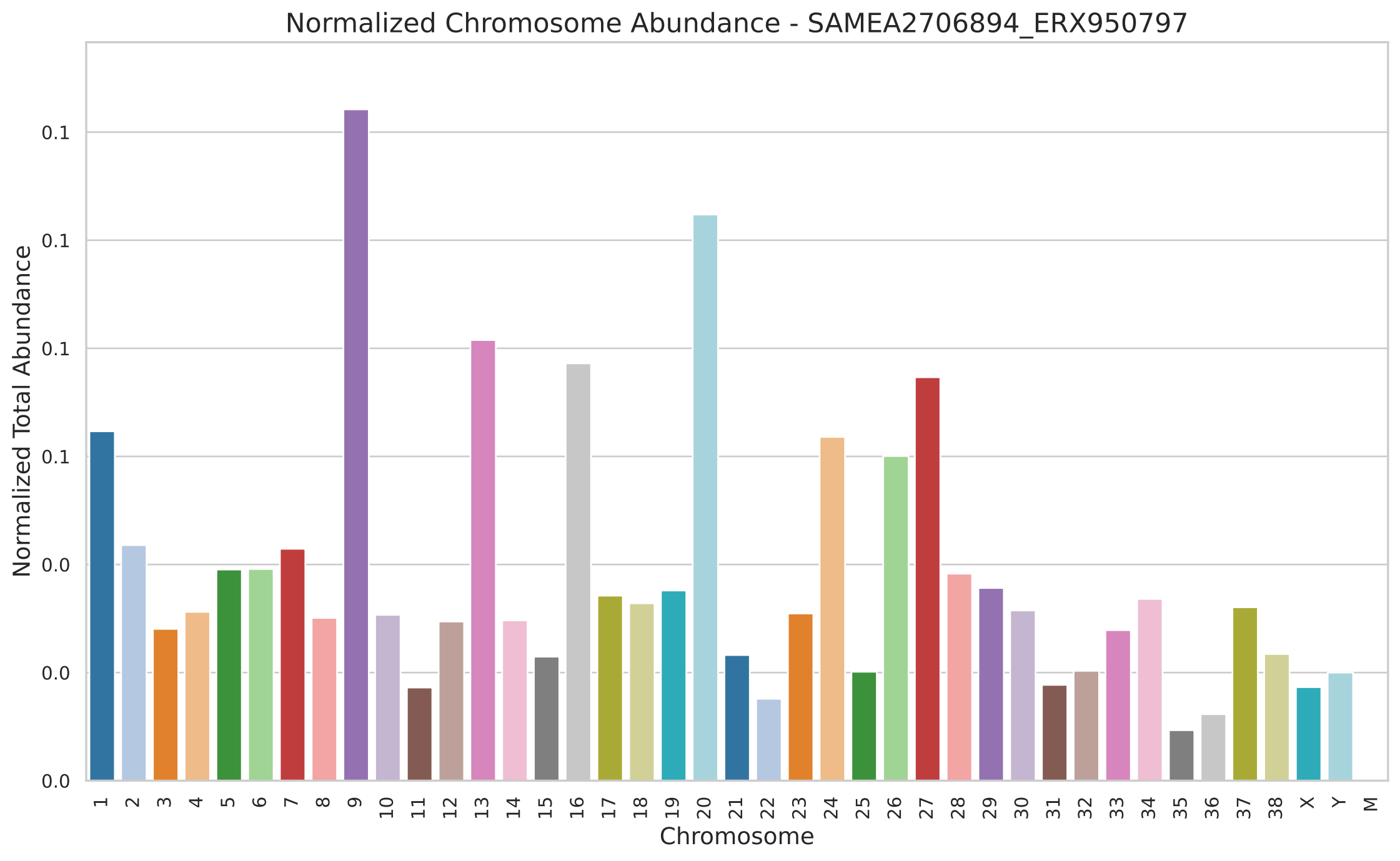

Normalized Chromosome Abundance - SAMEA2706861_ERX950764
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

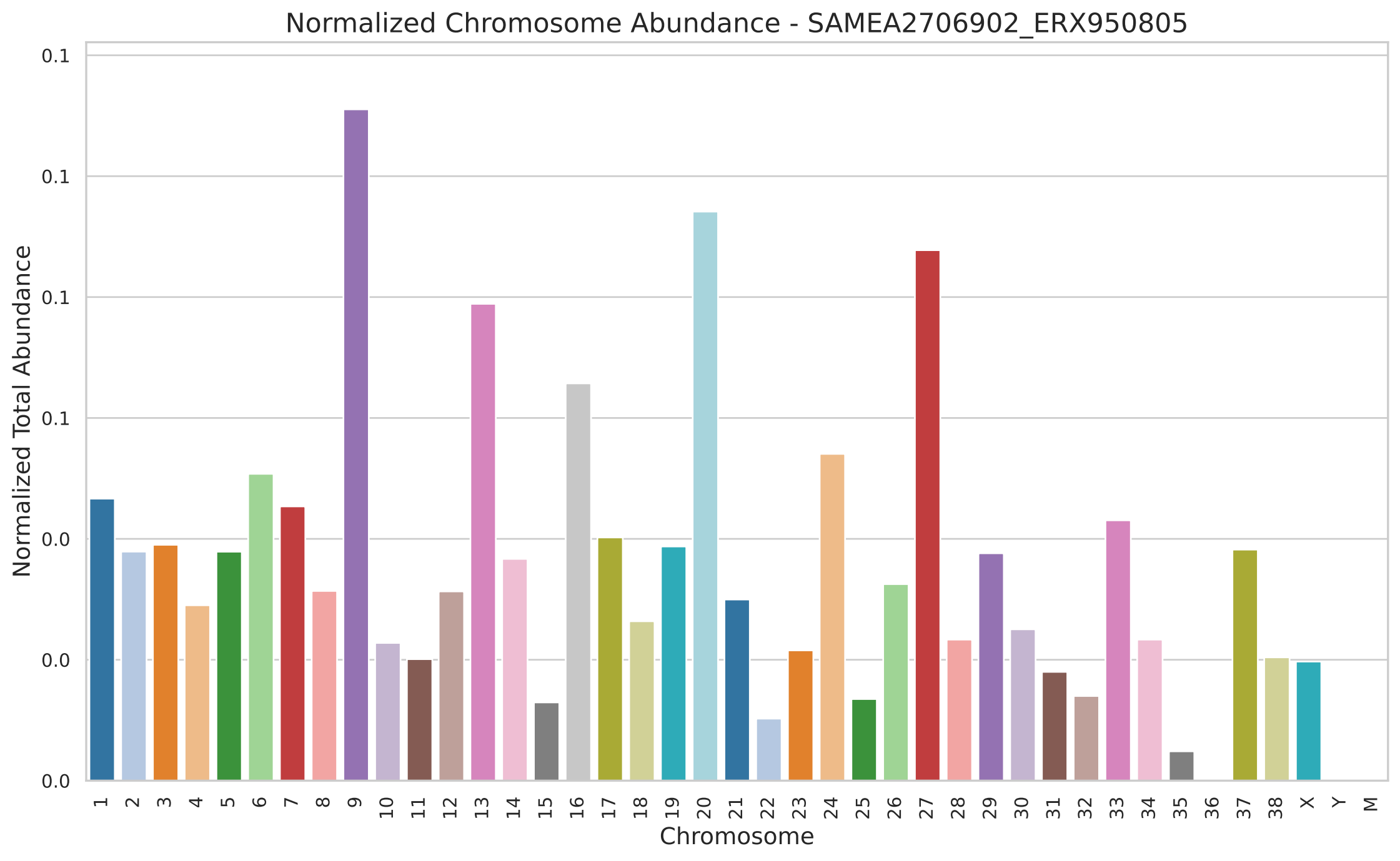

Normalized Chromosome Abundance - SAMEA2706895_ERX950798
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

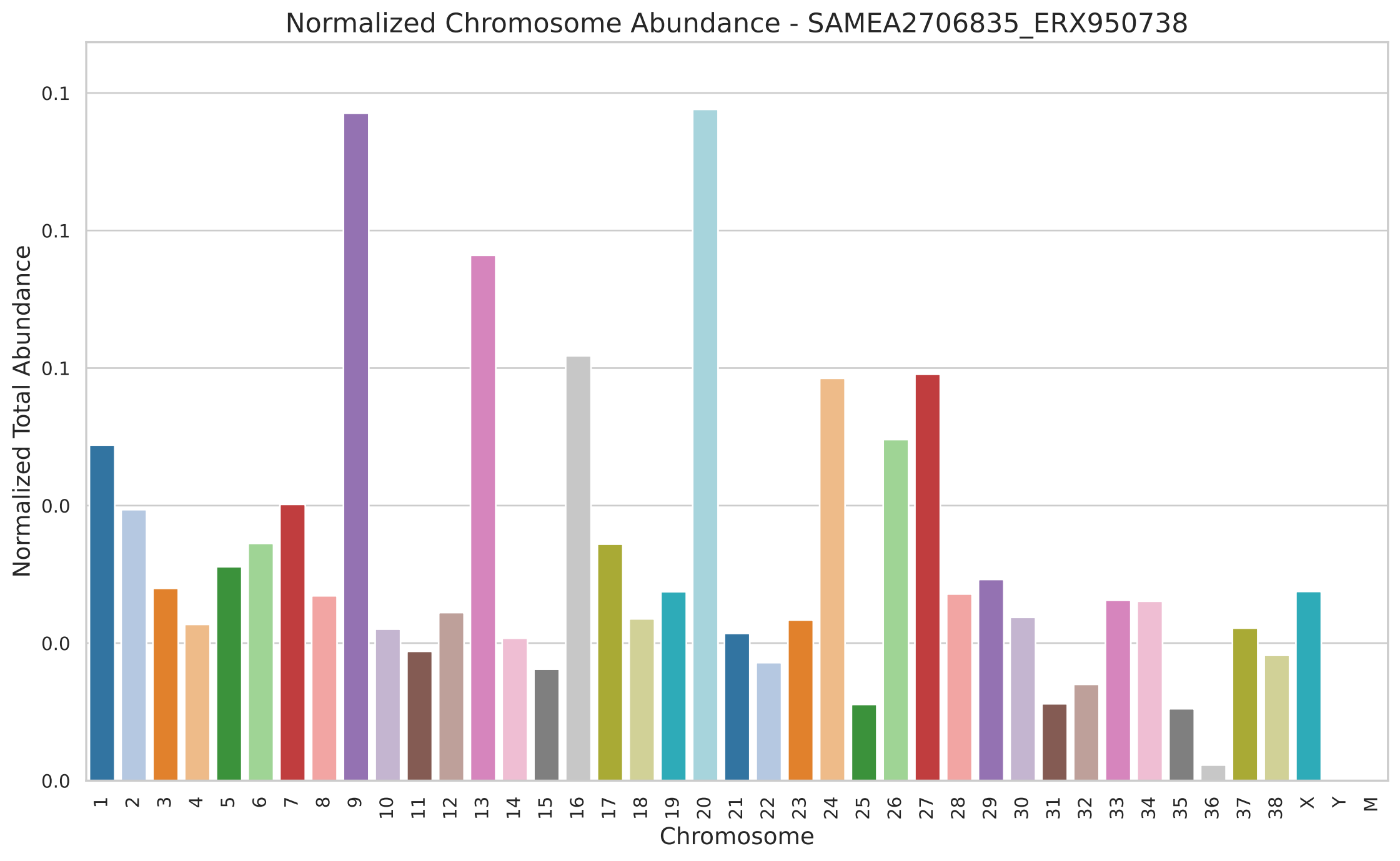

Normalized Chromosome Abundance - SAMEA2706810_ERX950713
Normalized Total Abundance
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

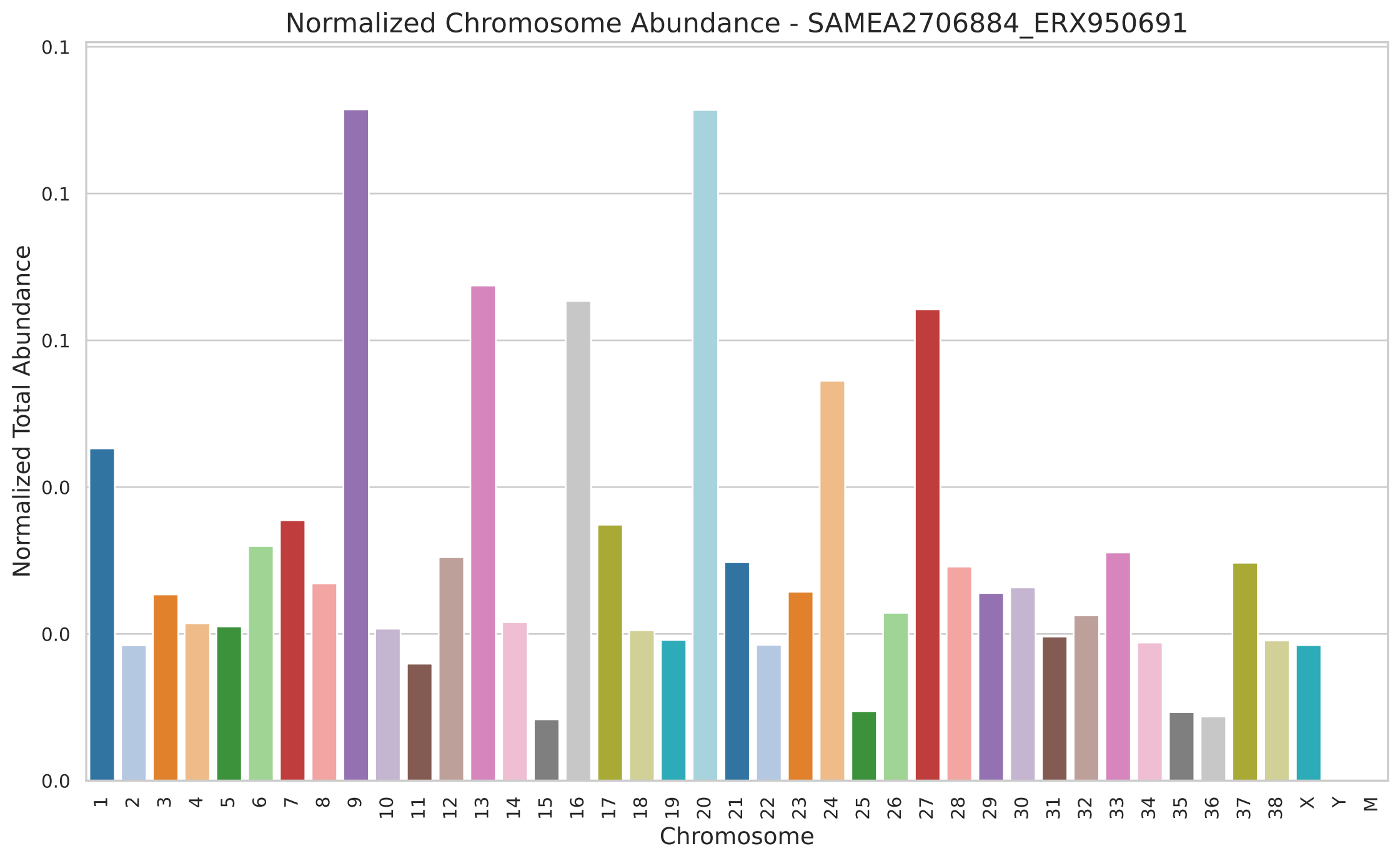

Normalized Chromosome Abundance - SAMEA3956057_ERX1742254
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

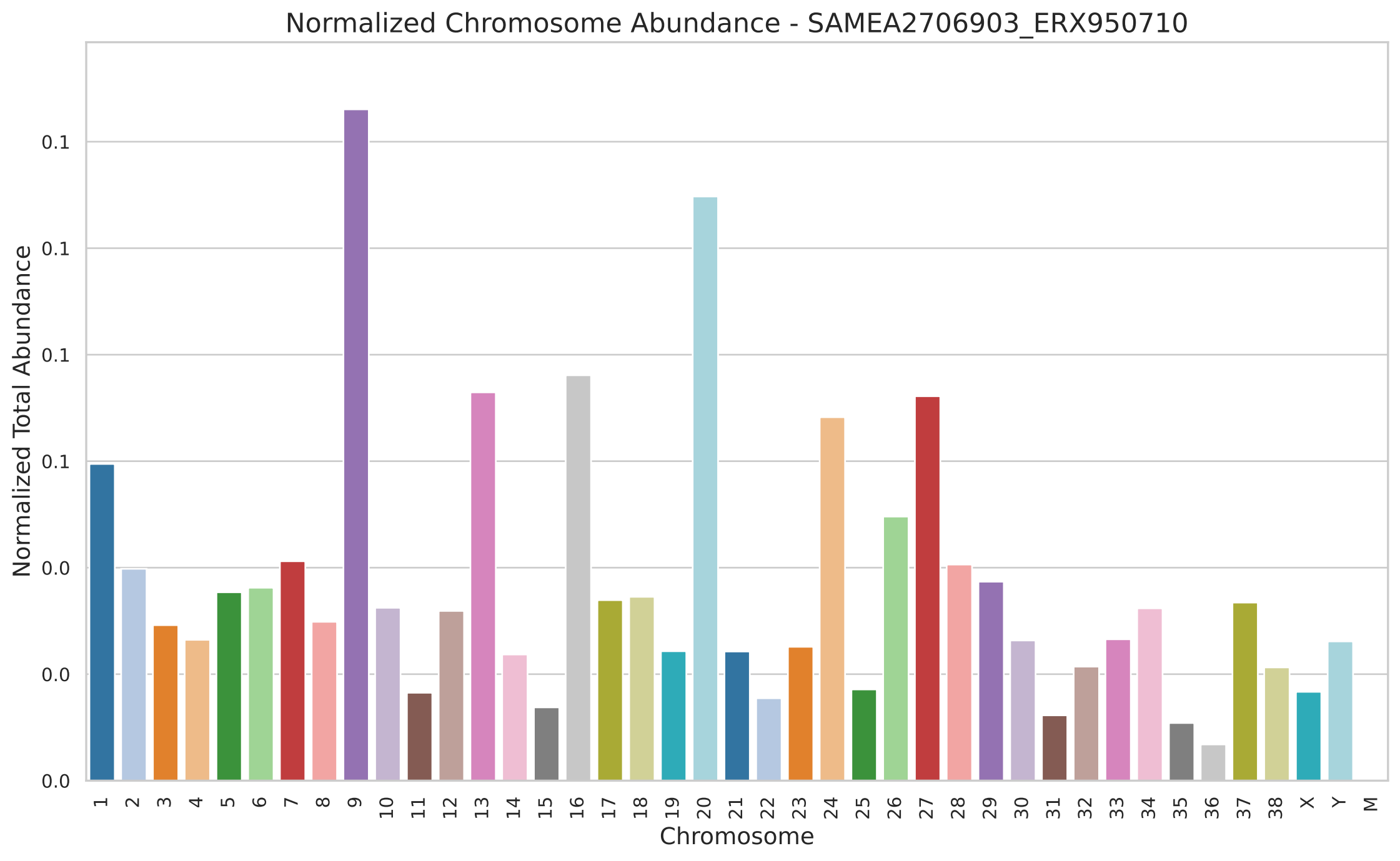

Normalized Chromosome Abundance - SAMEA2706884_ERX950787
Normalized Total Abundance
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

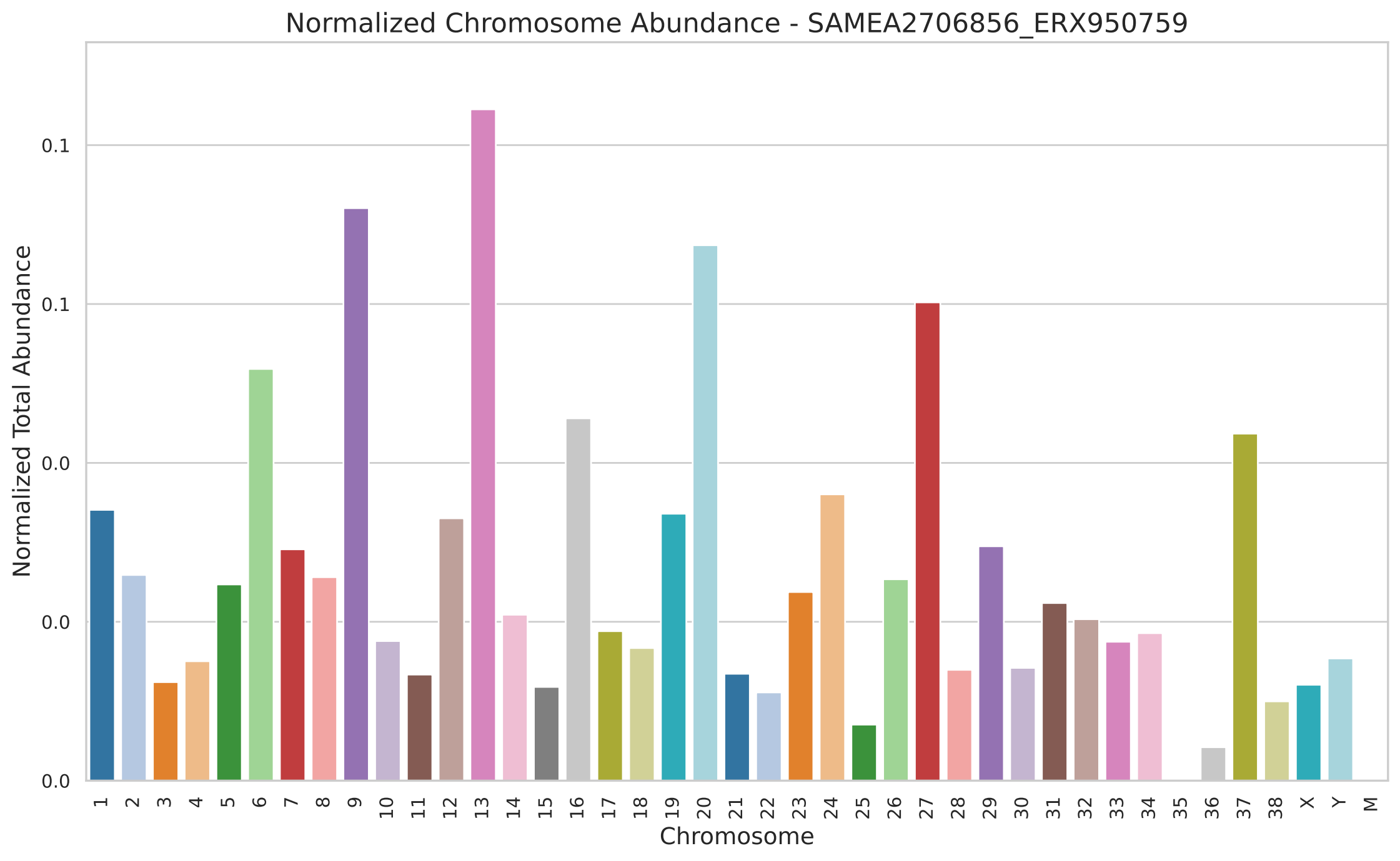

Normalized Chromosome Abundance - SAMEA2706894_ERX950797
Normalized Total Abundance
0.0
0.0
0.1
0.1
0.1
0.1
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

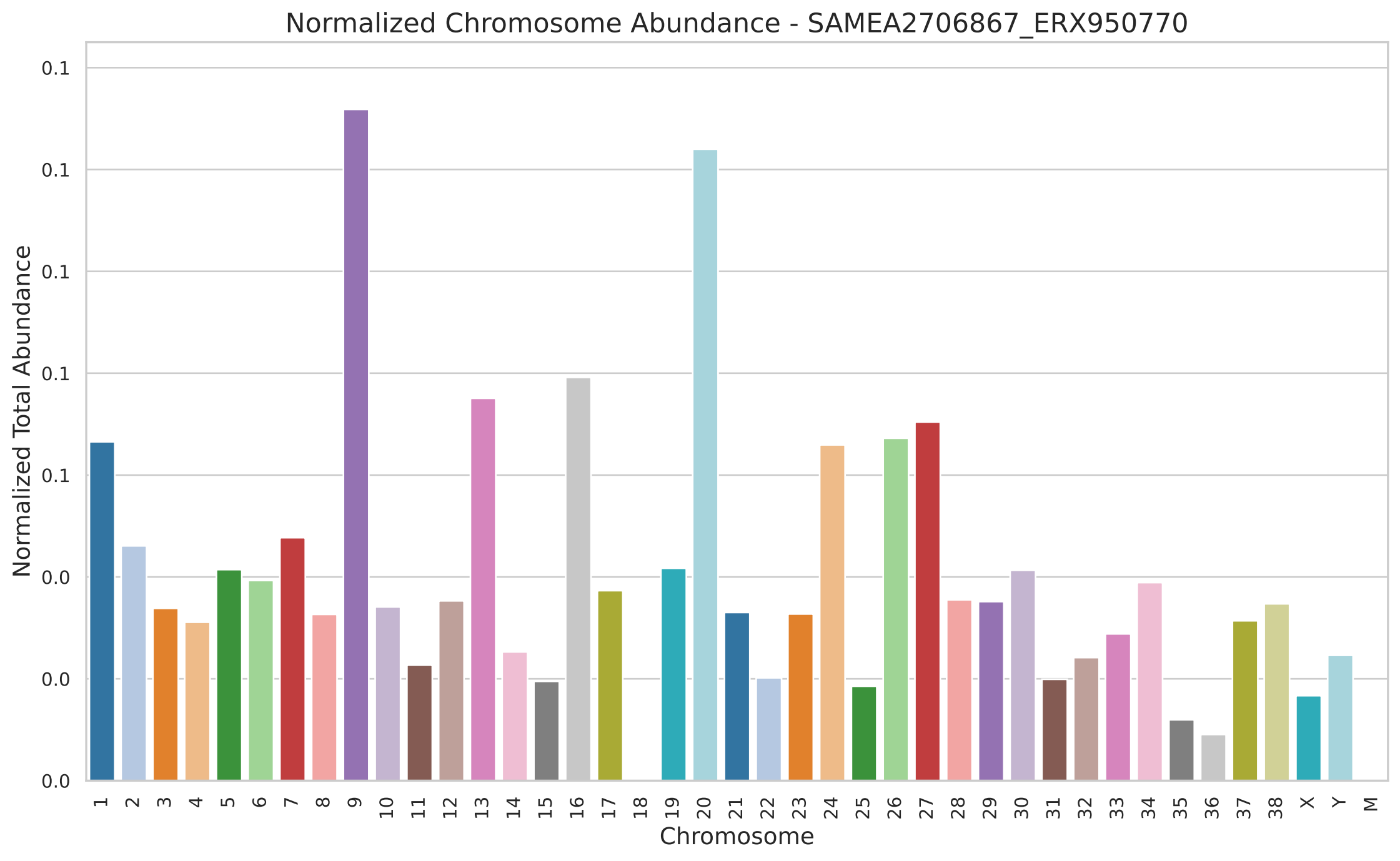

Normalized Chromosome Abundance - SAMEA2706902_ERX950805
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

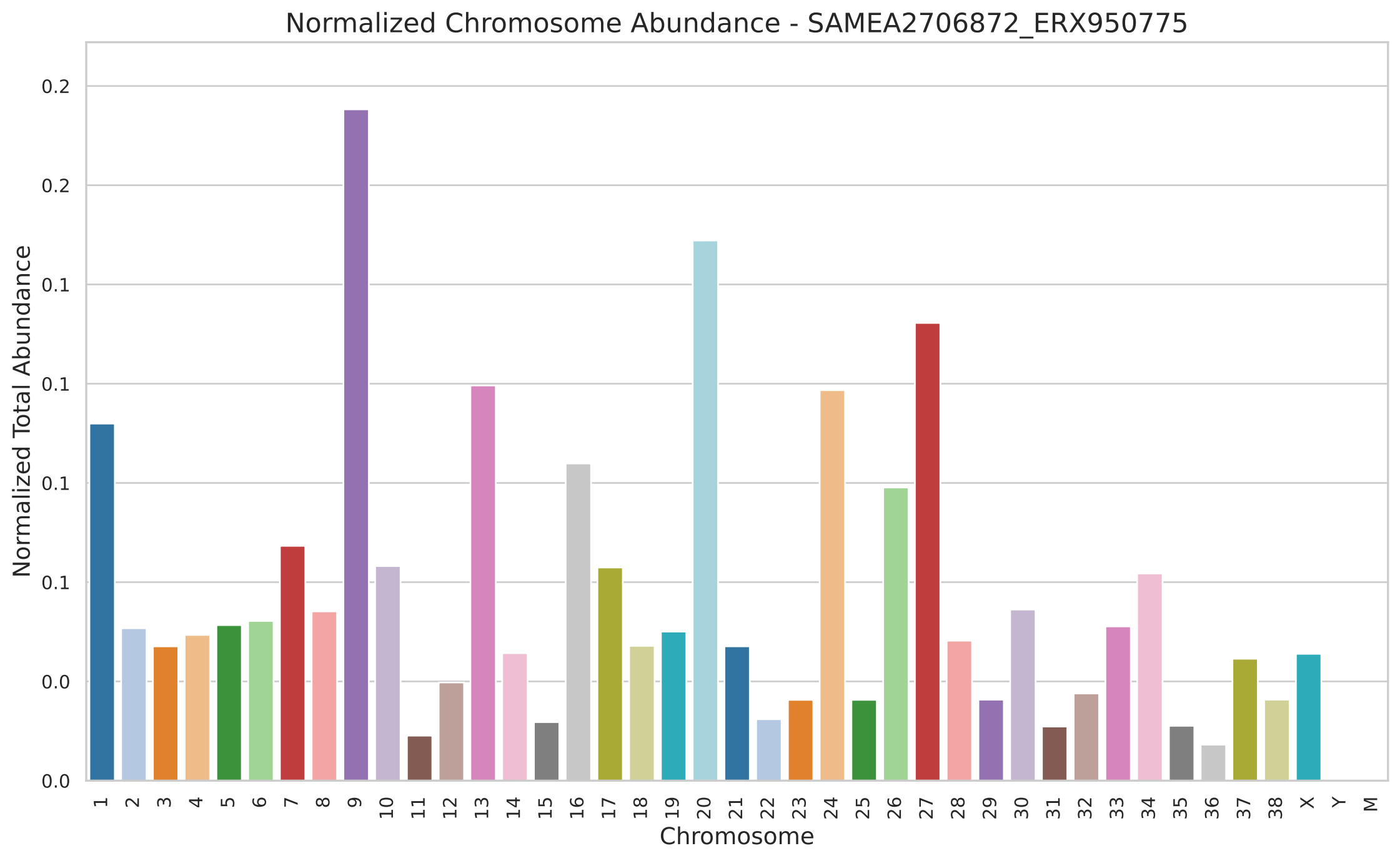

Normalized Chromosome Abundance - SAMEA2706835_ERX950738
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

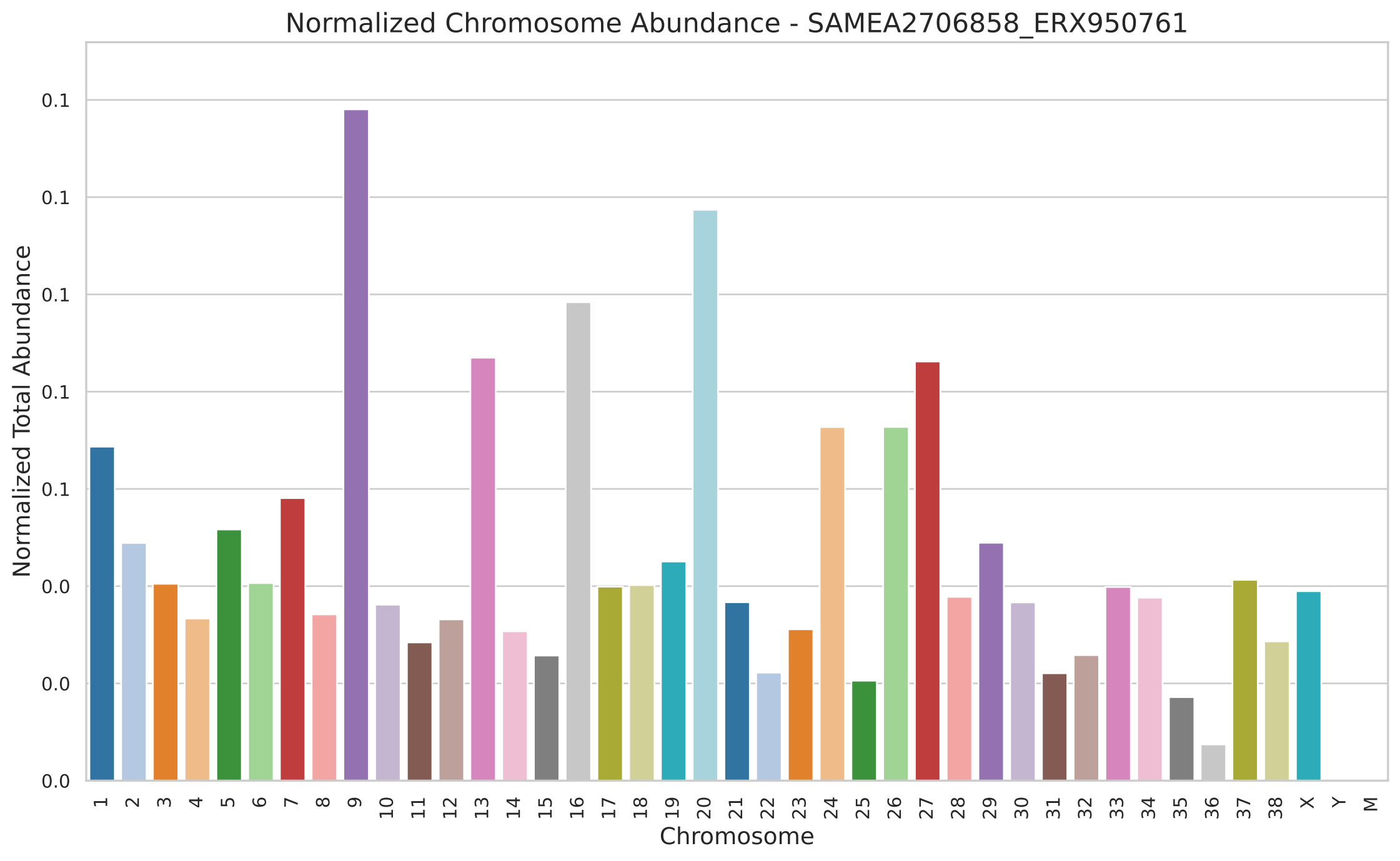

Normalized Chromosome Abundance - SAMEA2706884_ERX950691
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

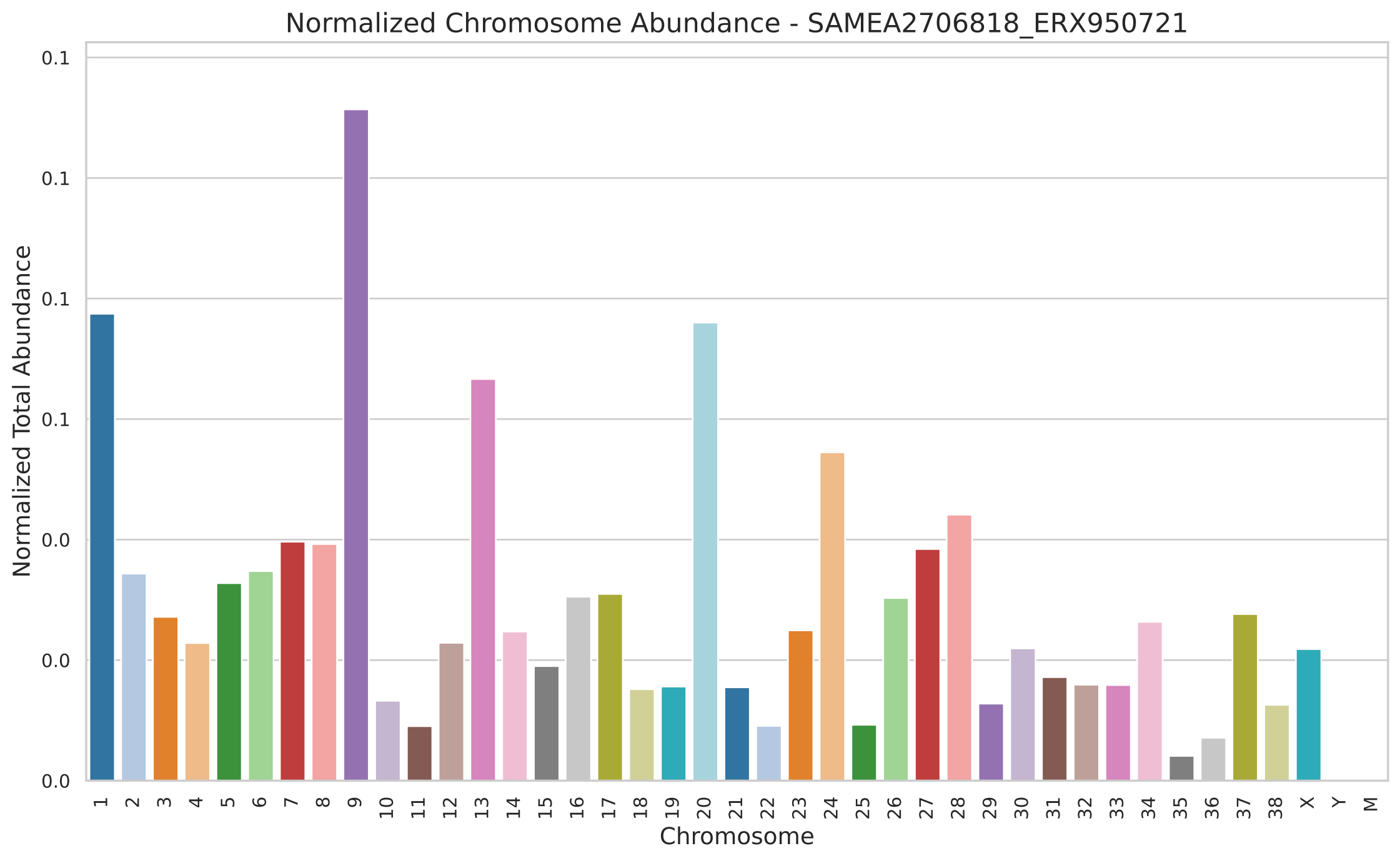

Normalized Chromosome Abundance - SAMEA2706903_ERX950710
Normalized Total Abundance
0.0
0.0
0.1
0.1
0.1
0.1
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

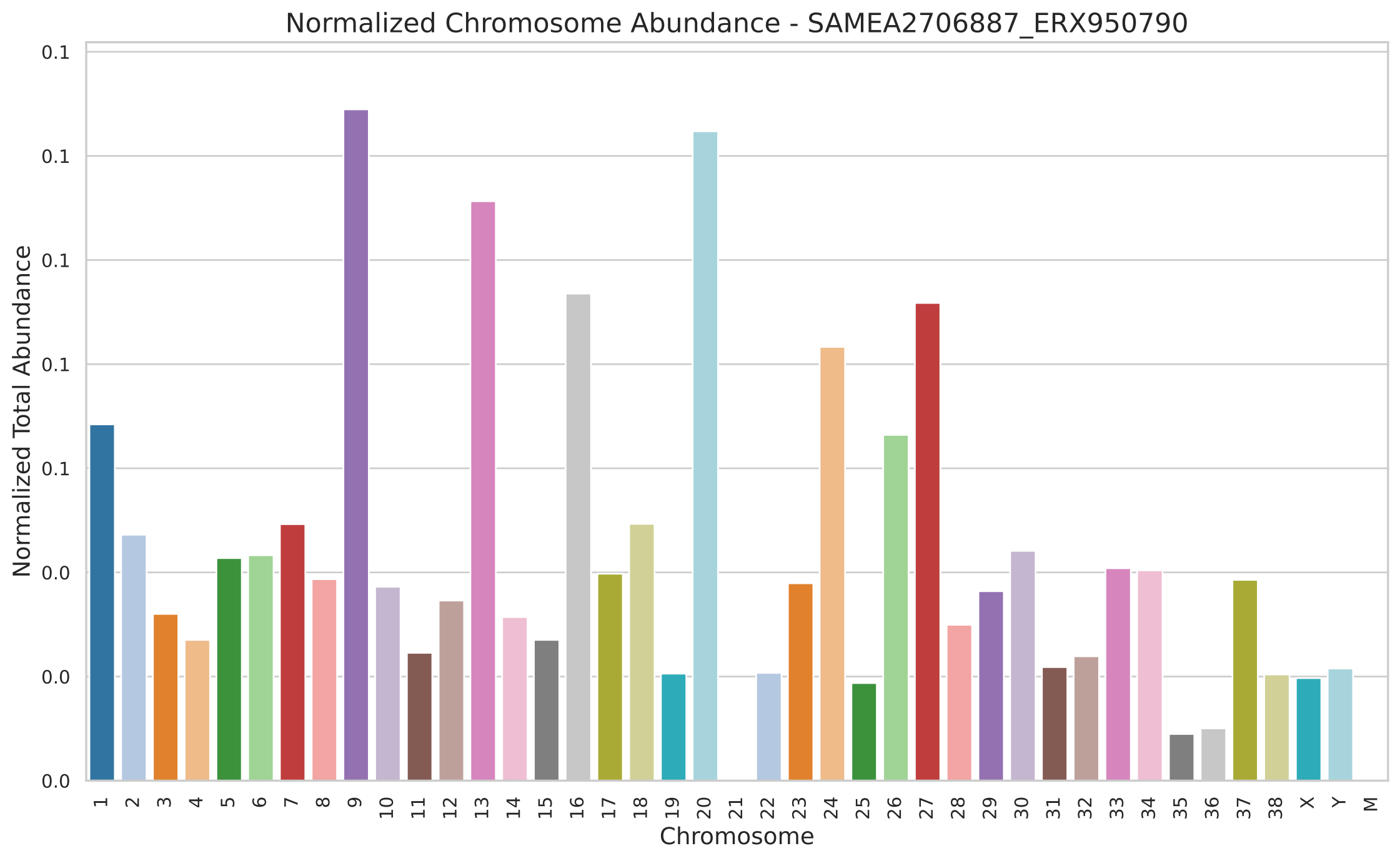

Normalized Chromosome Abundance - SAMEA2706856_ERX950759
Normalized Total Abundance
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

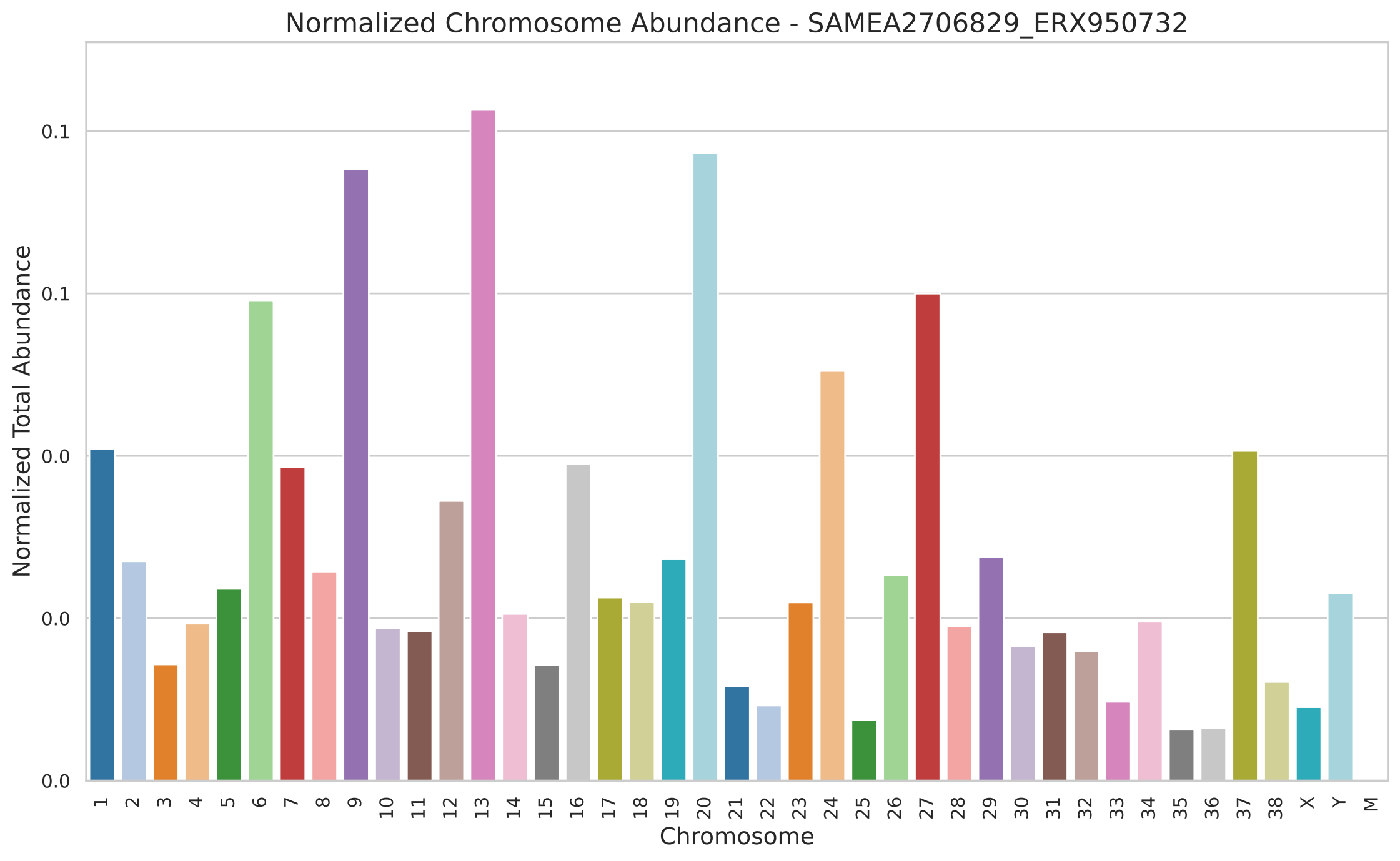

Normalized Chromosome Abundance - SAMEA2706867_ERX950770
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.1
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

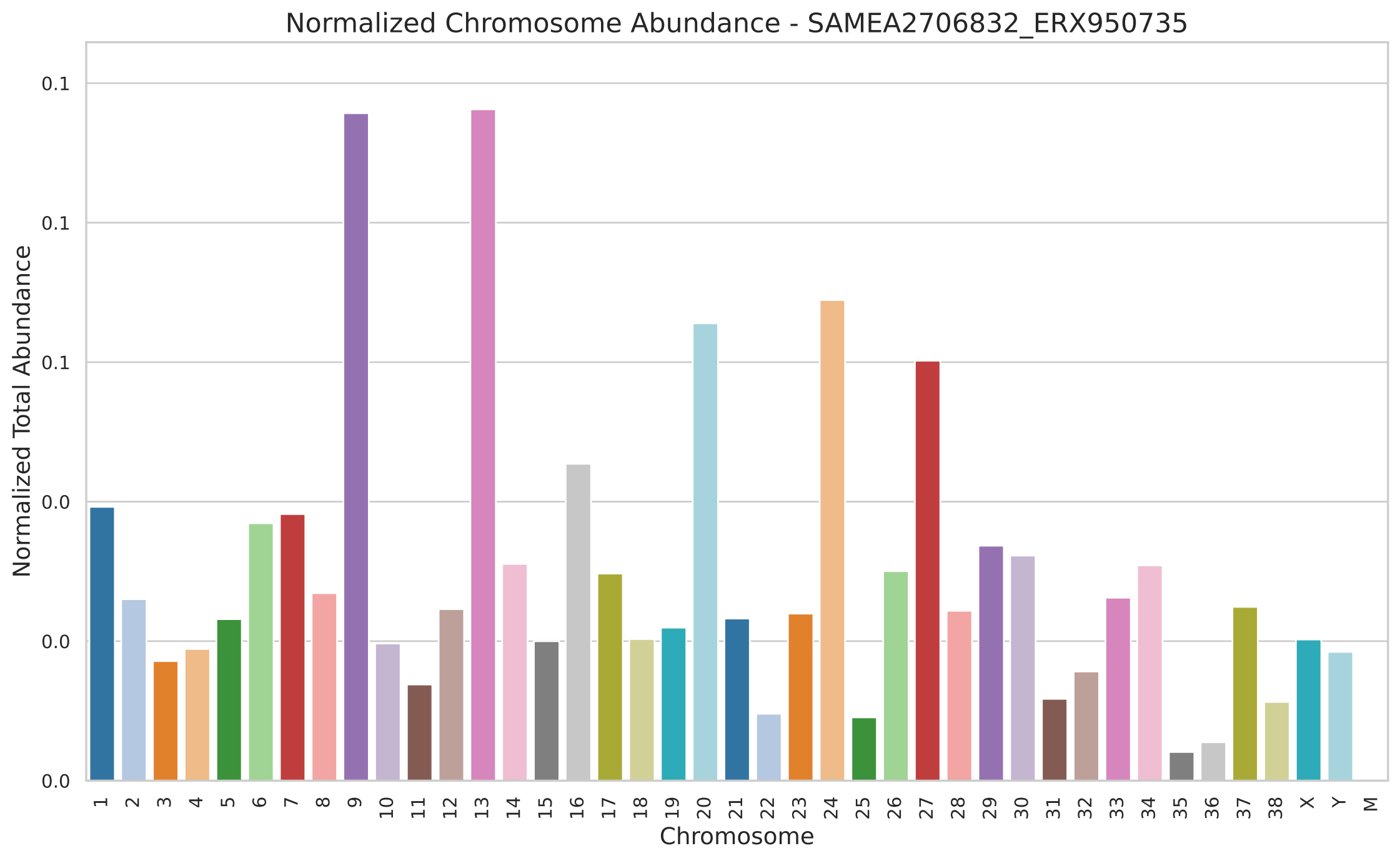

Normalized Chromosome Abundance - SAMEA2706872_ERX950775
Normalized Total Abundance
0.2
0.2
0.1
0.1
0.1
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

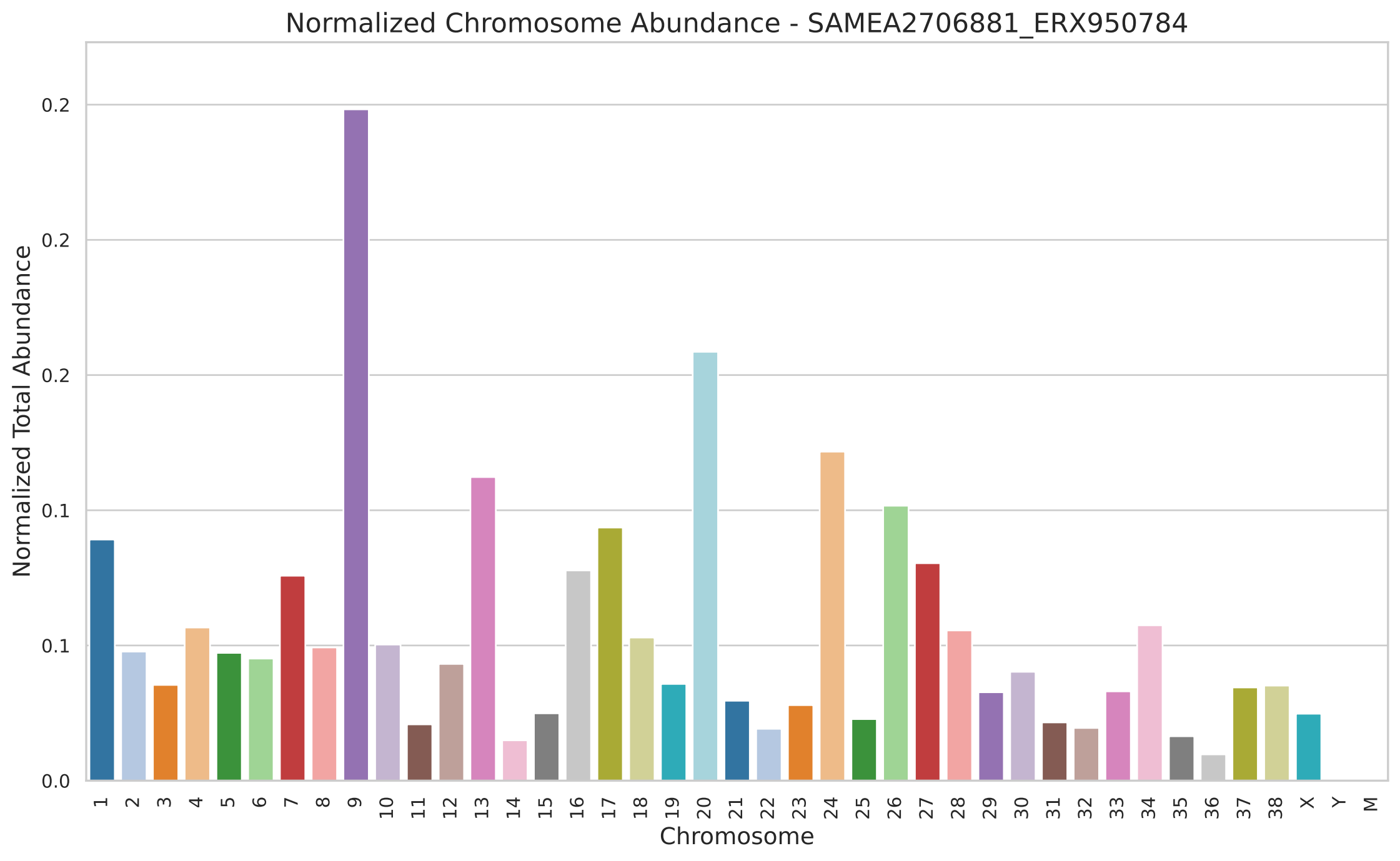

Normalized Chromosome Abundance - SAMEA2706858_ERX950761
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

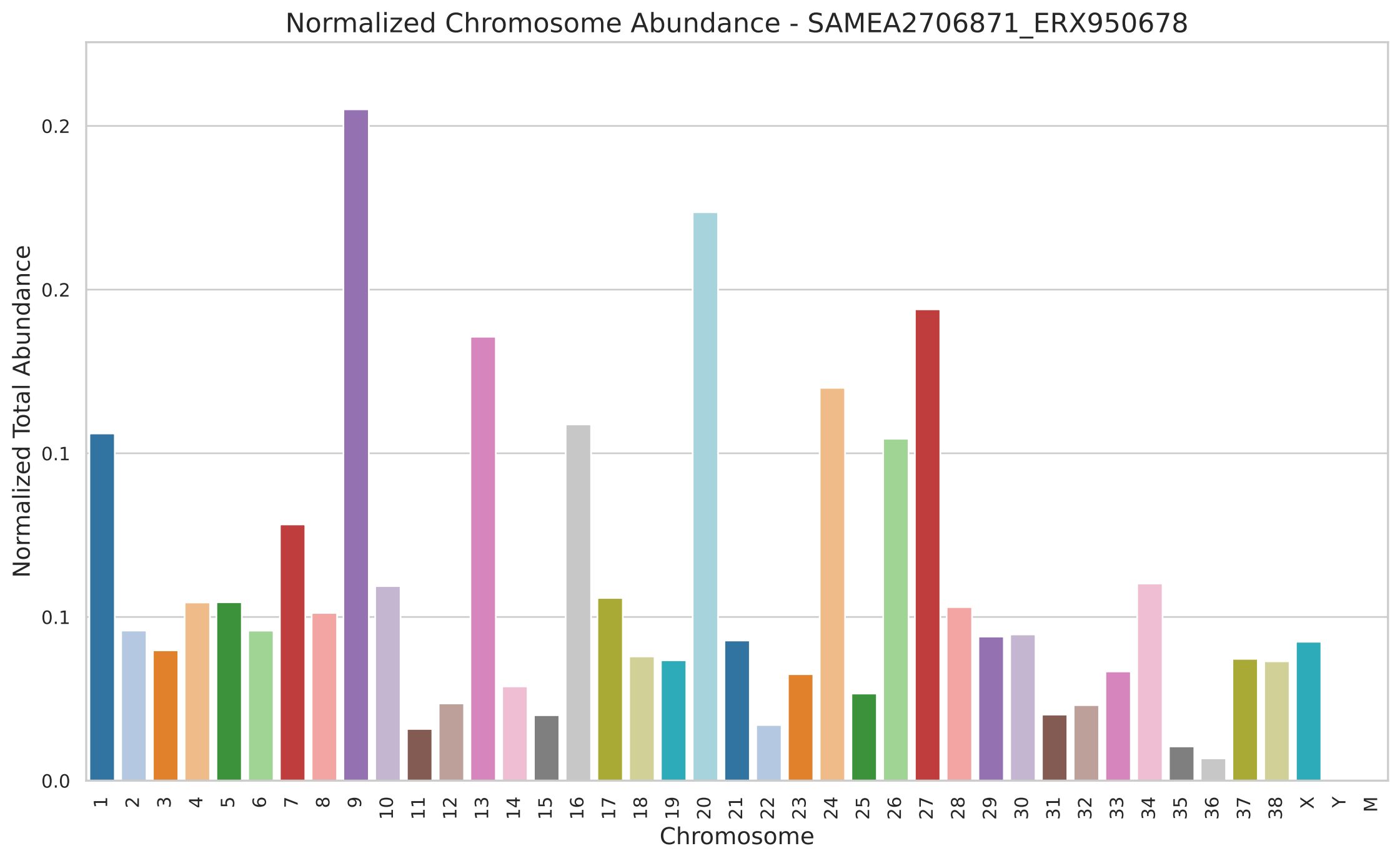

Normalized Chromosome Abundance - SAMEA2706818_ERX950721
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

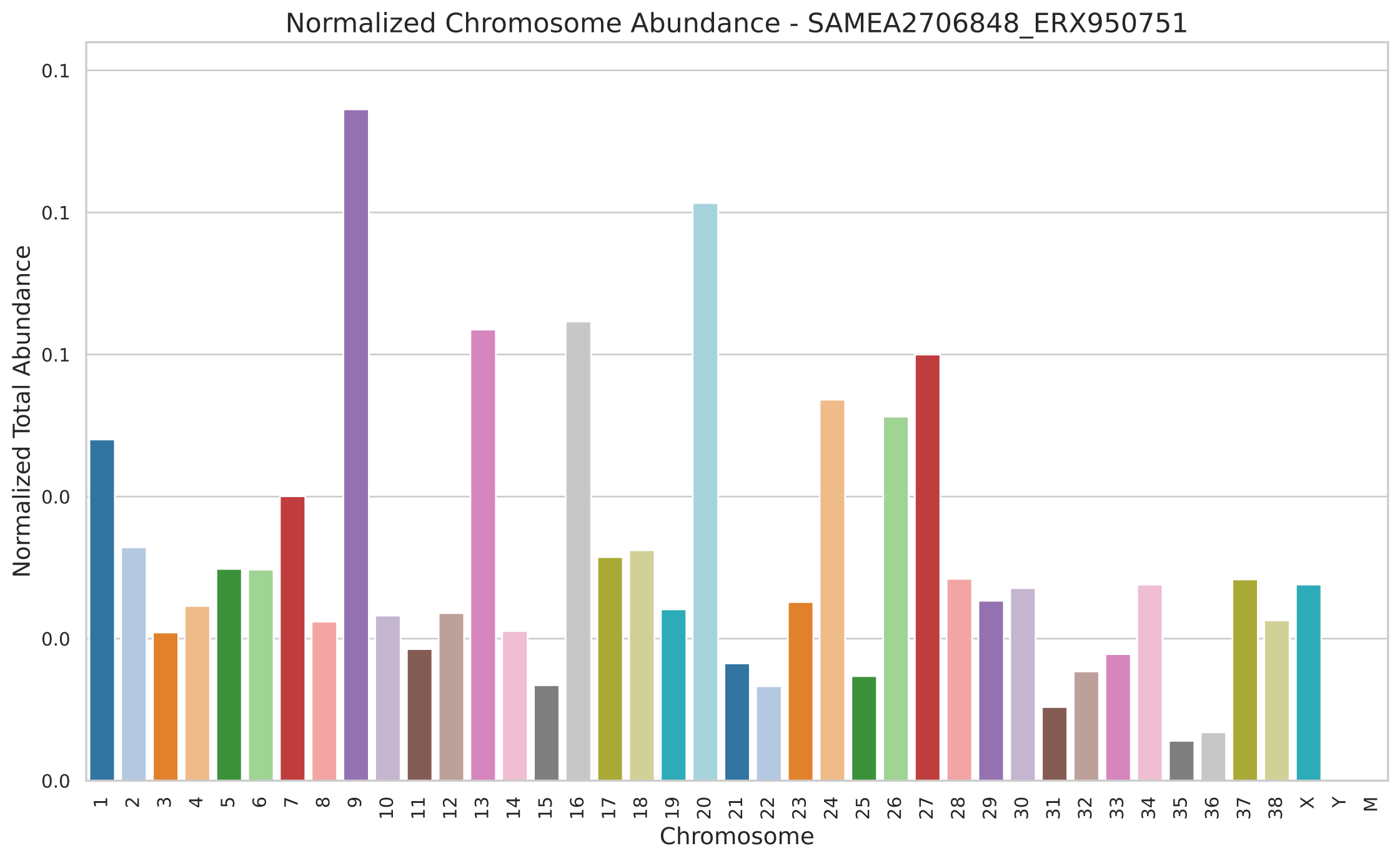

Normalized Chromosome Abundance - SAMEA2706887_ERX950790
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

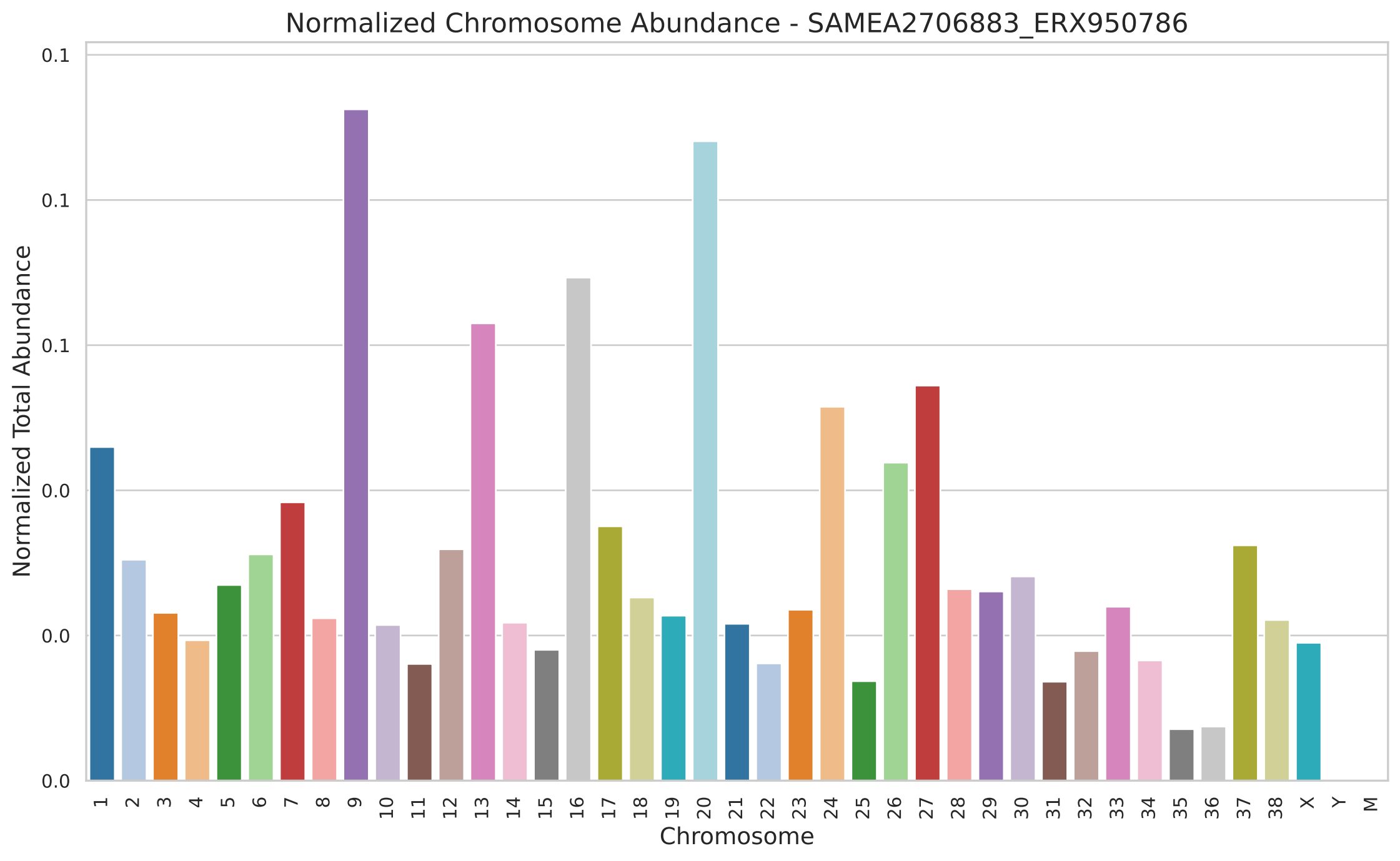

Normalized Chromosome Abundance - SAMEA2706829_ERX950732
Normalized Total Abundance
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

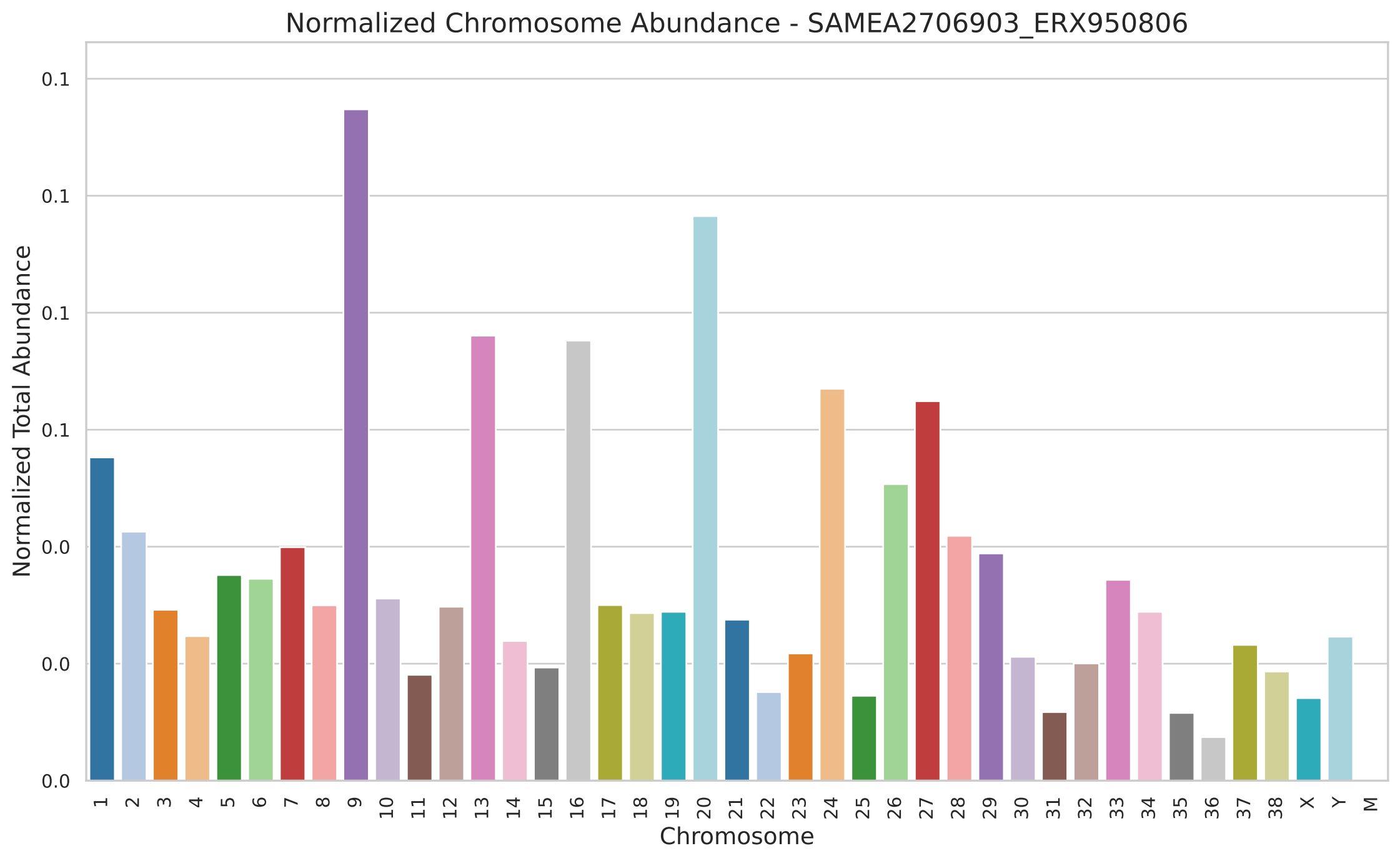

Normalized Chromosome Abundance - SAMEA2706832_ERX950735
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

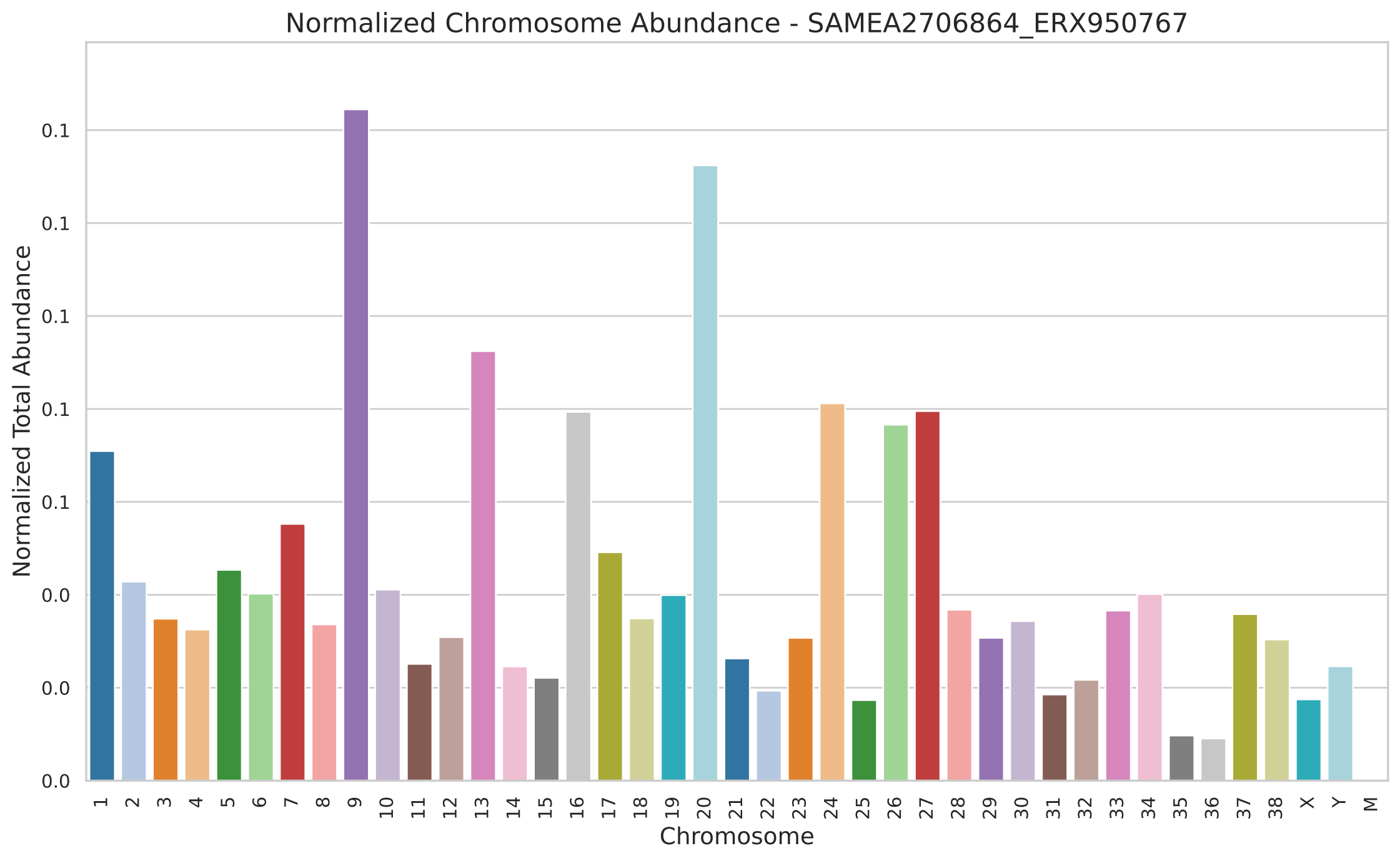

Normalized Chromosome Abundance - SAMEA2706881_ERX950784
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

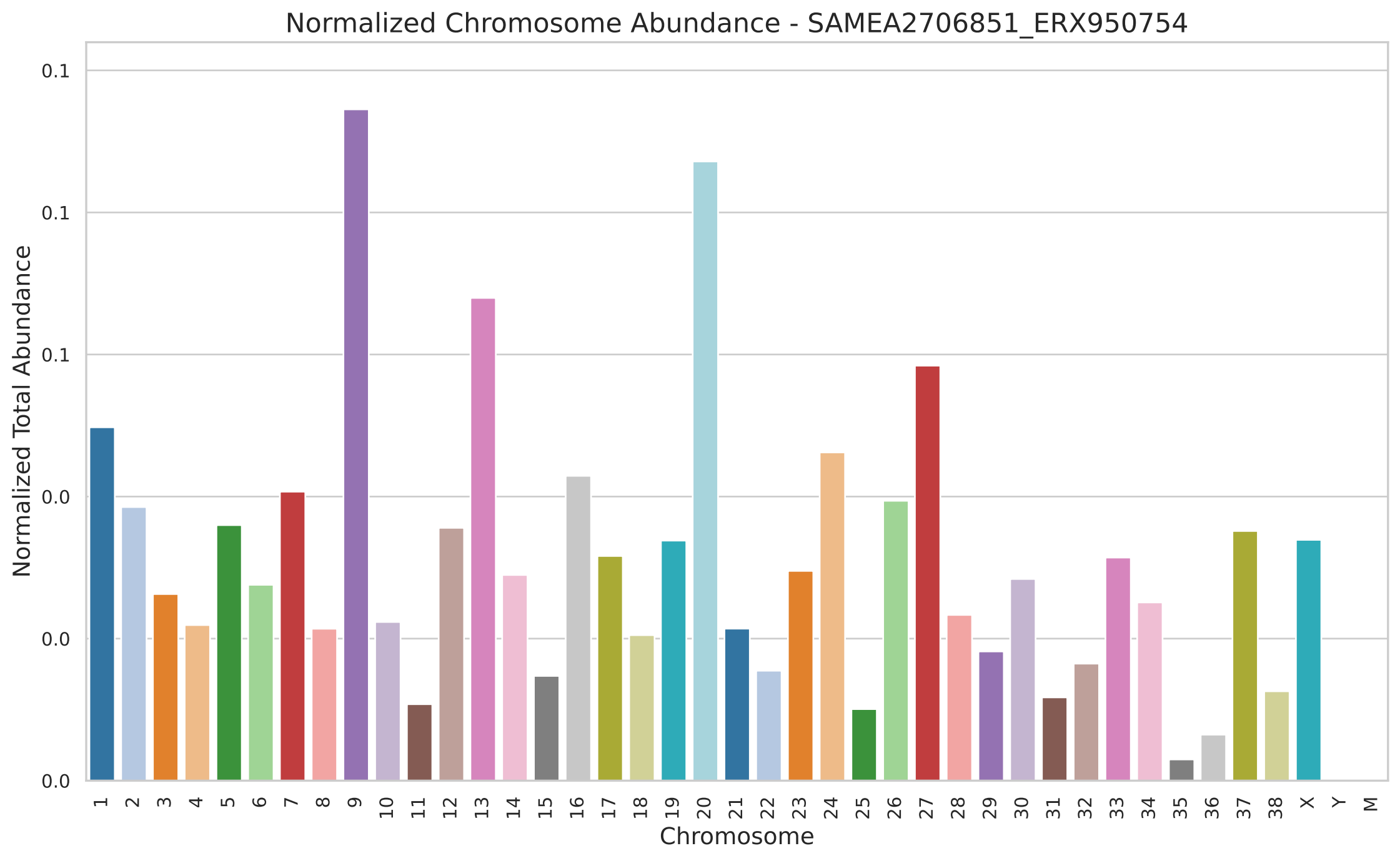

Normalized Chromosome Abundance - SAMEA2706871_ERX950678
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

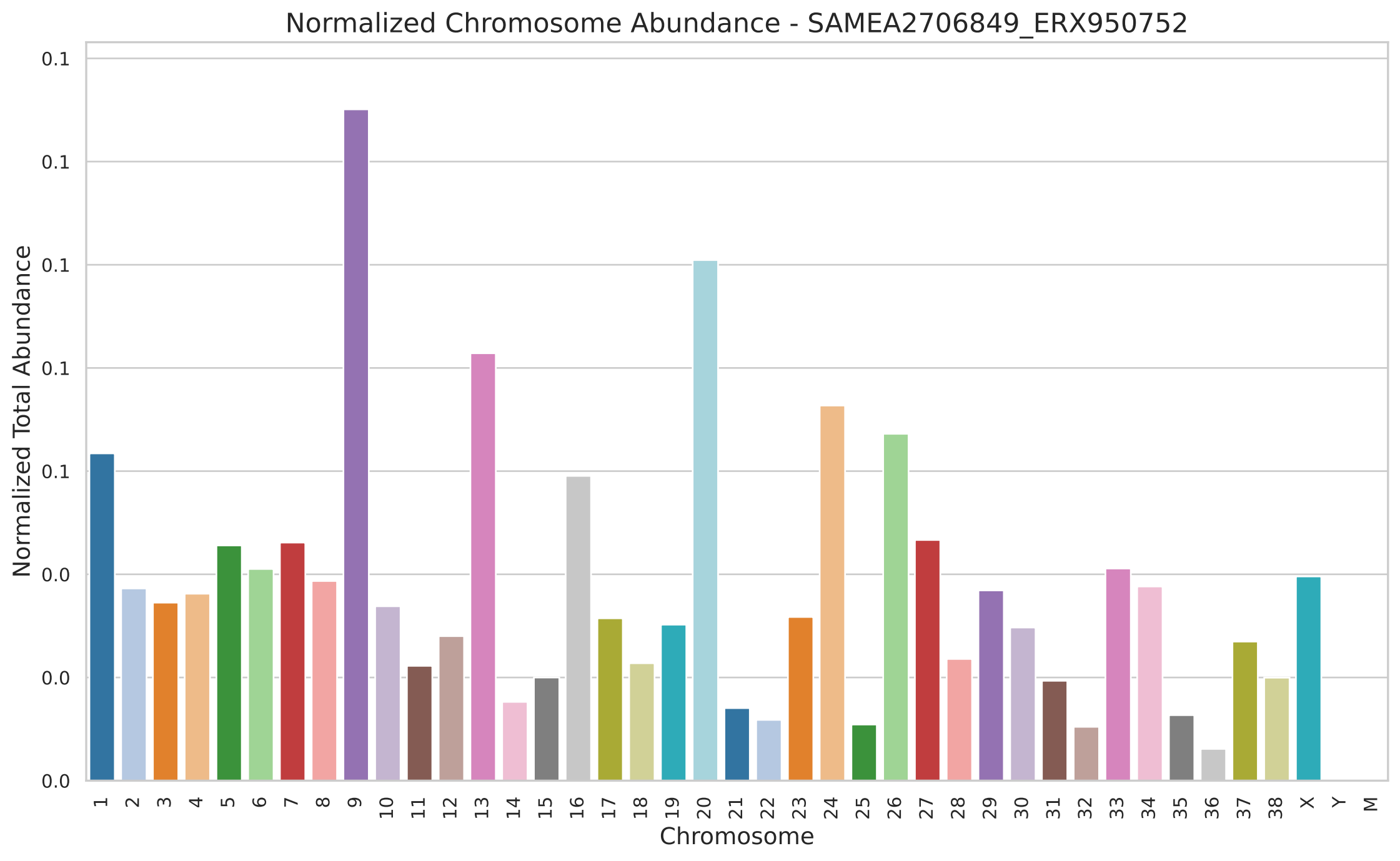

Normalized Chromosome Abundance - SAMEA2706848_ERX950751
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

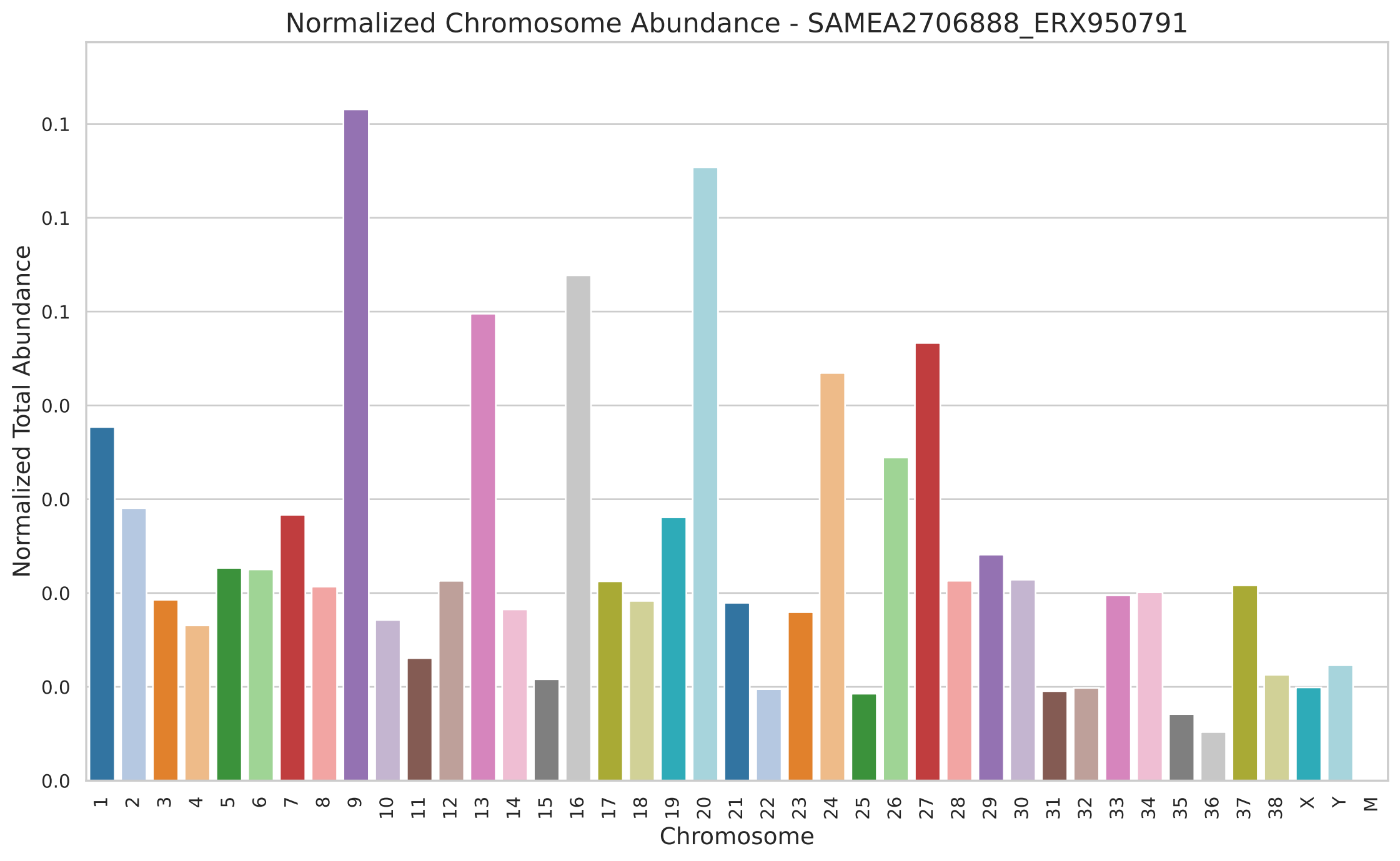

Normalized Chromosome Abundance - SAMEA2706883_ERX950786
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

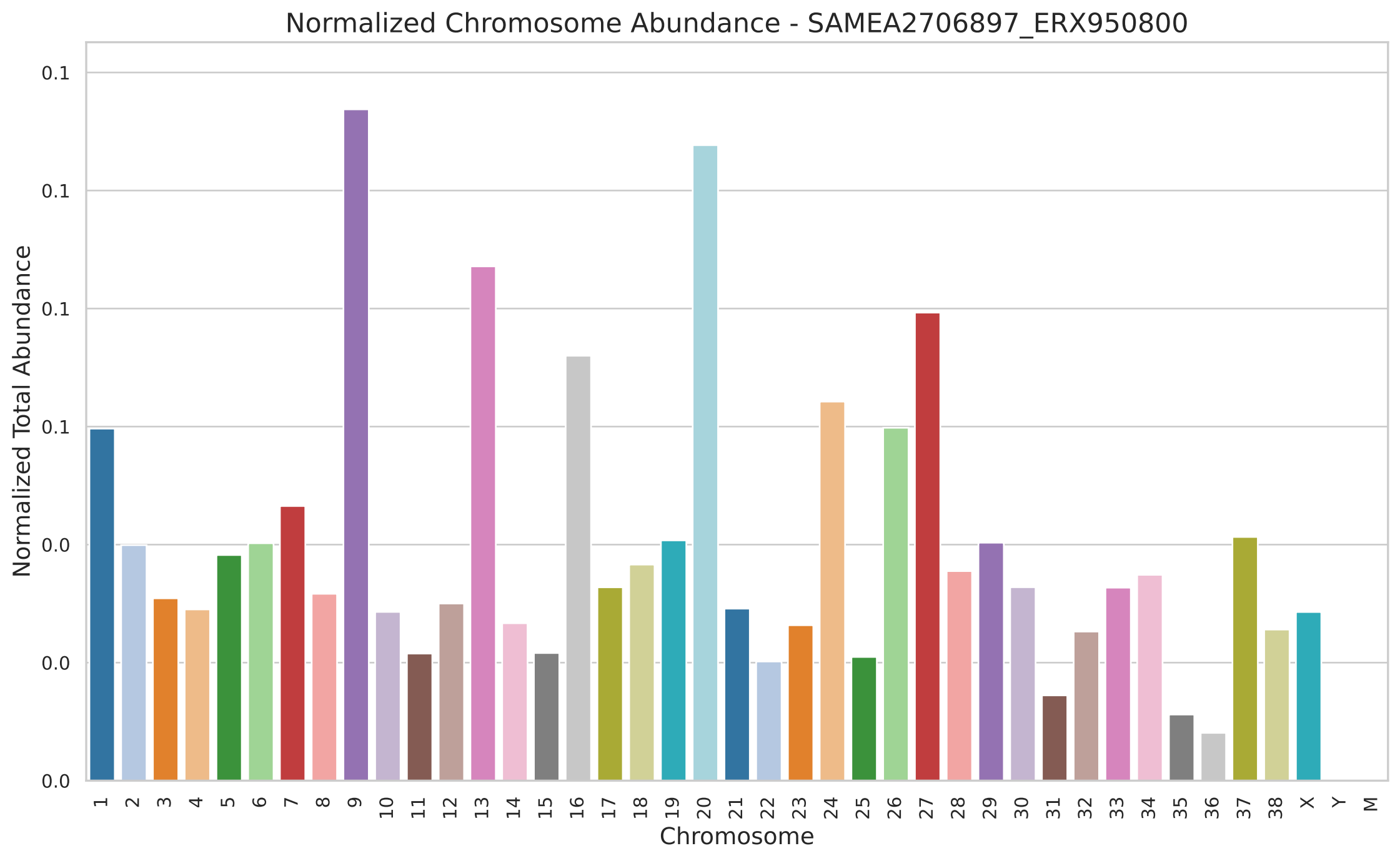

Normalized Chromosome Abundance - SAMEA2706903_ERX950806
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

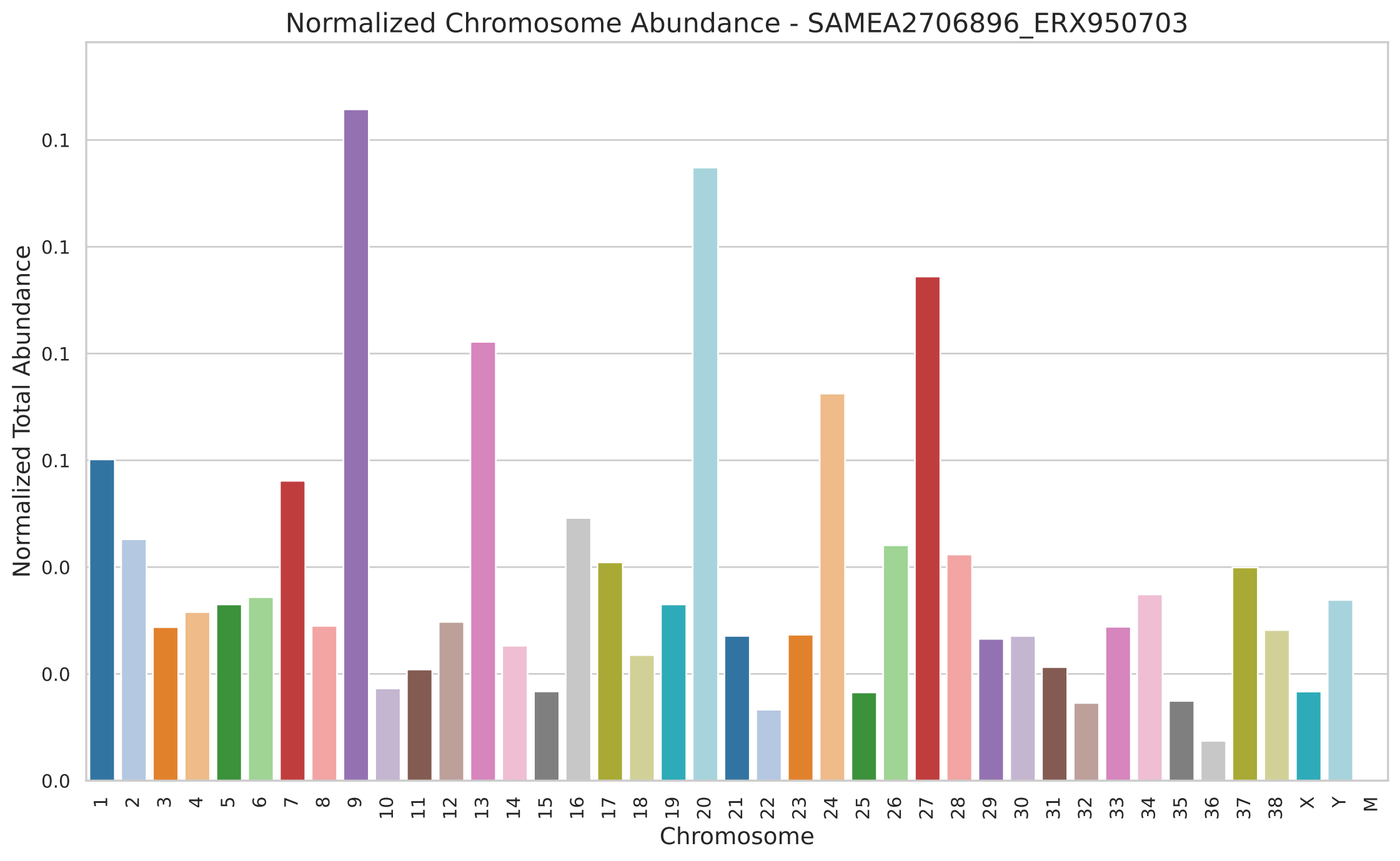

Normalized Chromosome Abundance - SAMEA2706864_ERX950767
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

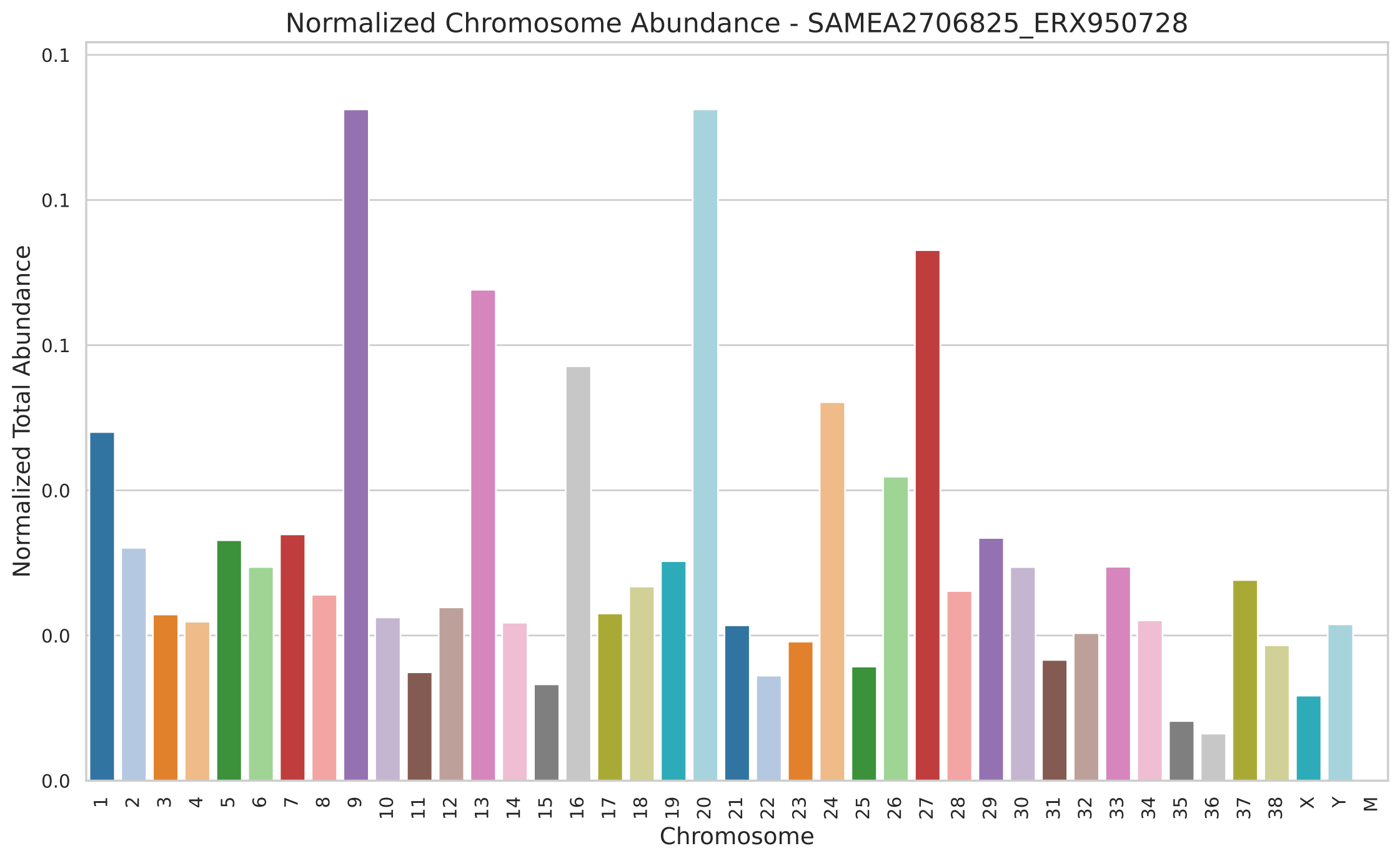

Normalized Chromosome Abundance - SAMEA2706851_ERX950754
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

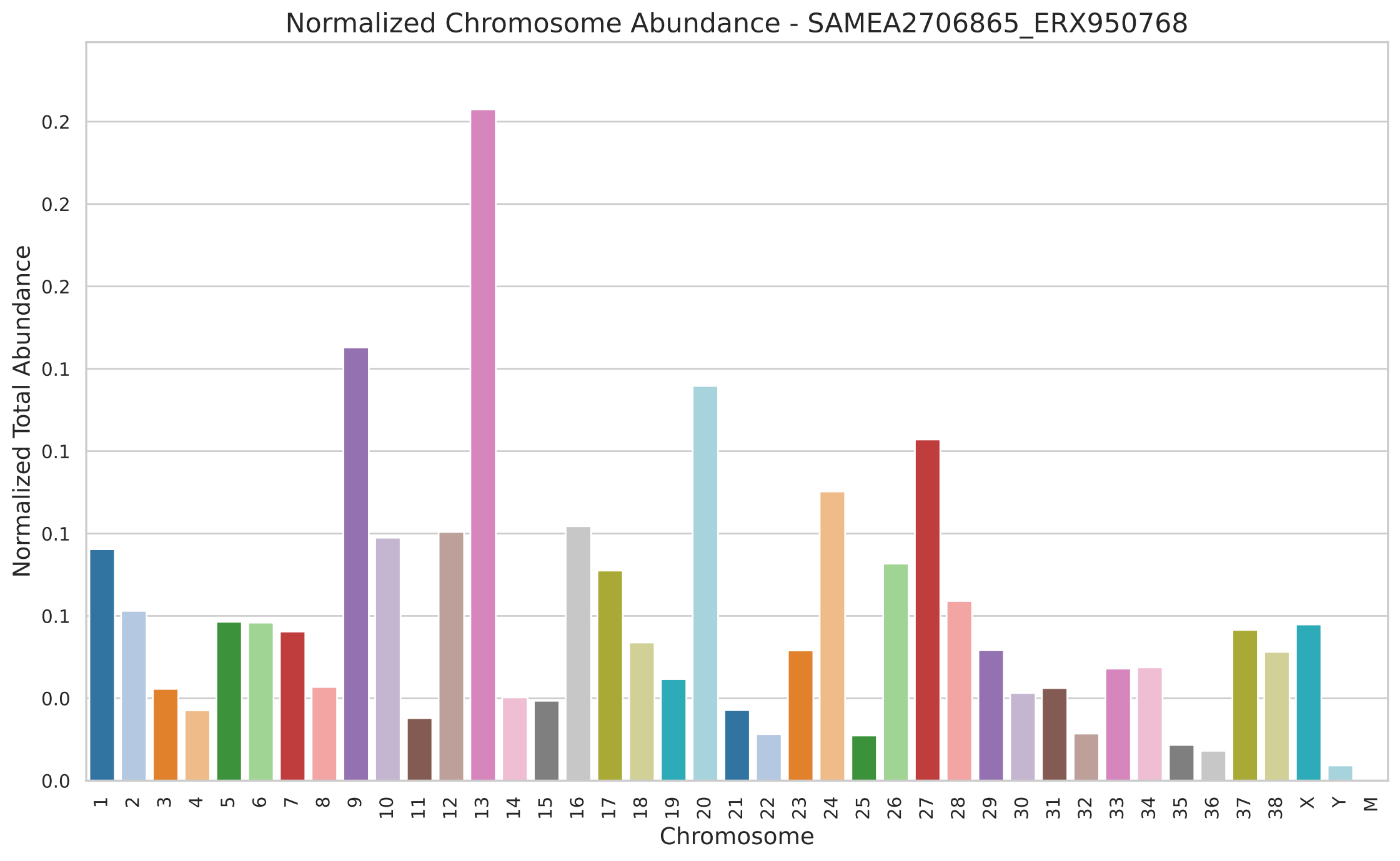

Normalized Chromosome Abundance - SAMEA2706849_ERX950752
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

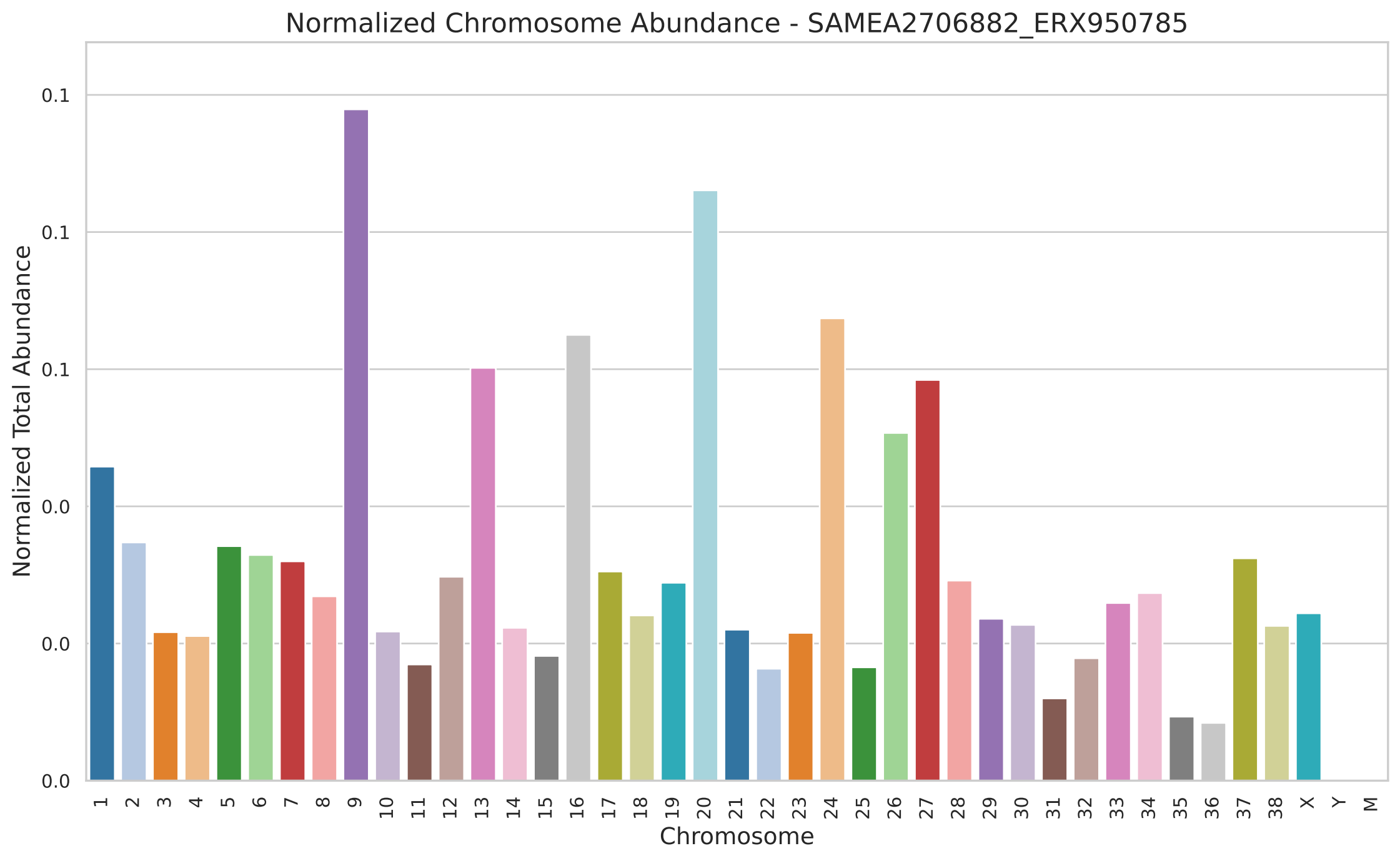

Normalized Chromosome Abundance - SAMEA2706888_ERX950791
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

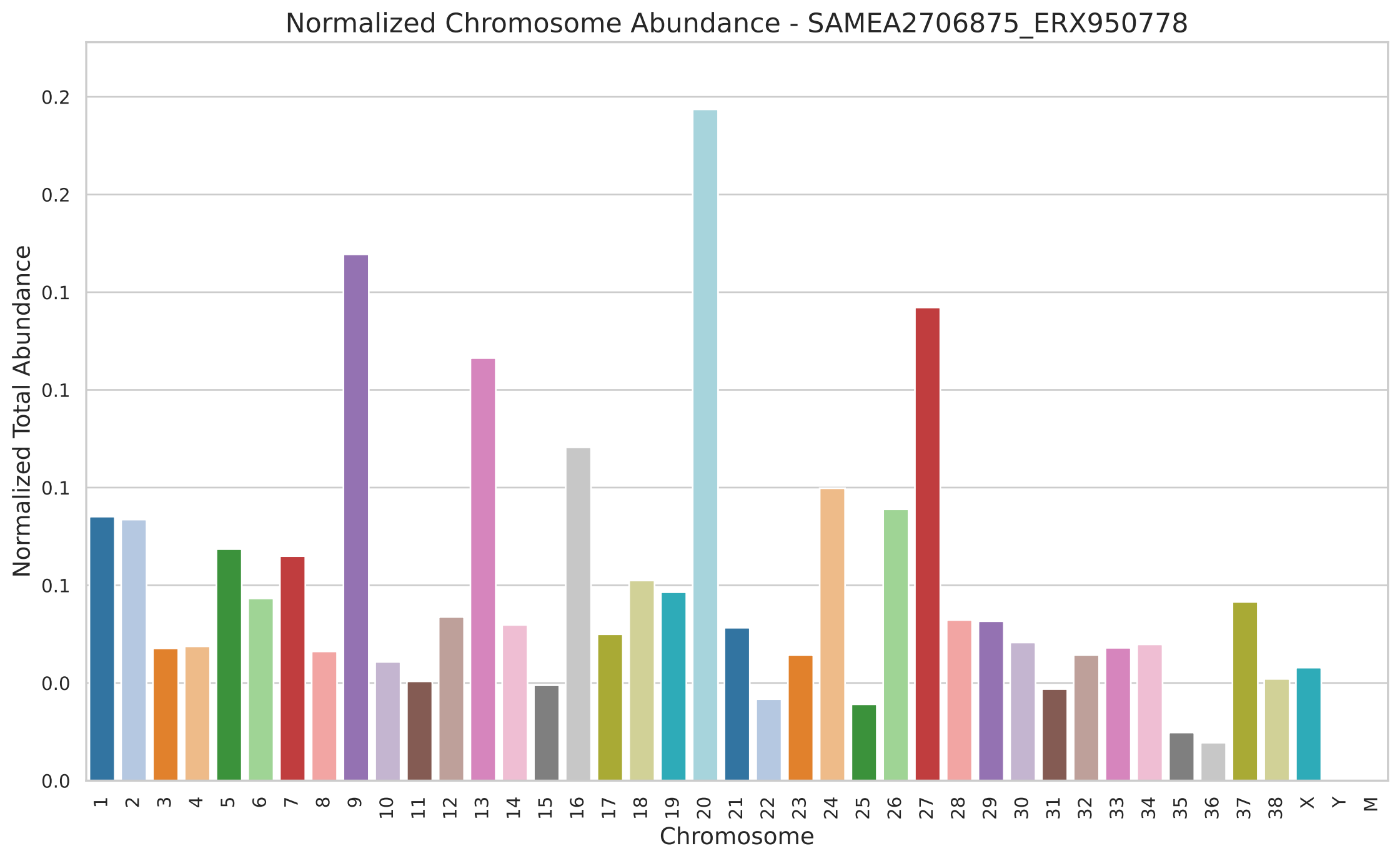

Normalized Chromosome Abundance - SAMEA2706897_ERX950800
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

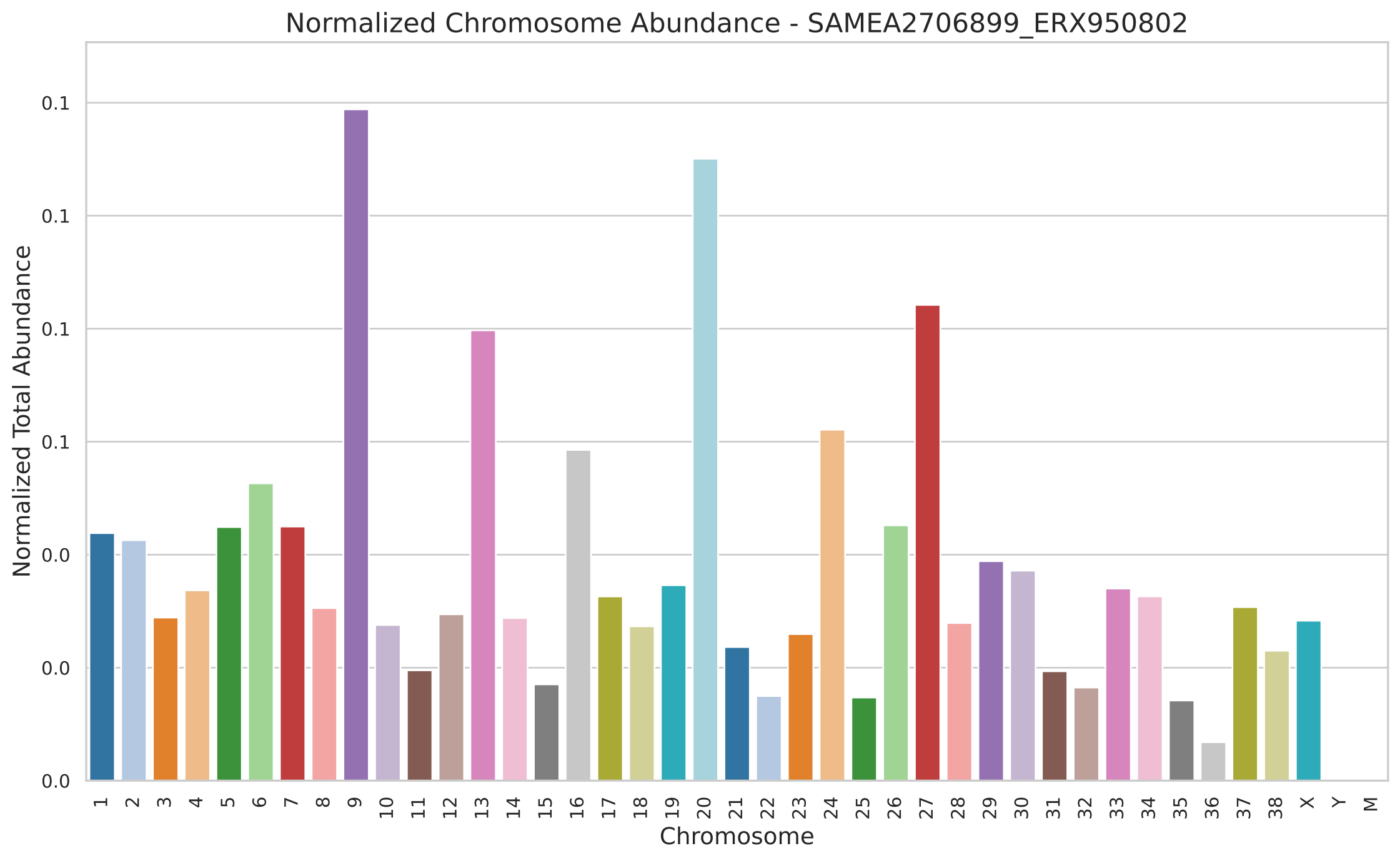

Normalized Chromosome Abundance - SAMEA2706896_ERX950703
Normalized Total Abundance
0.0
0.0
0.1
0.1
0.1
0.1
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

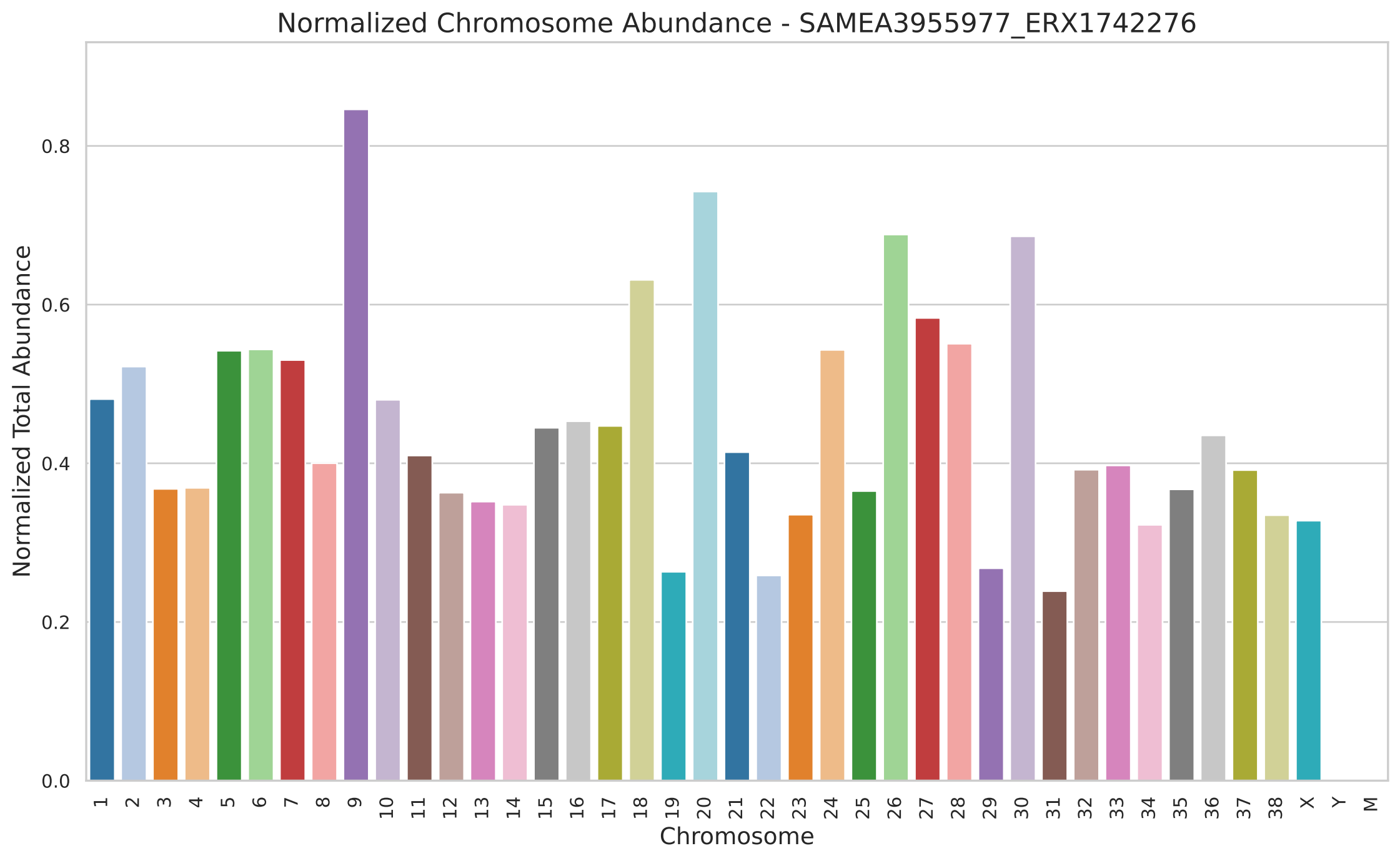

Normalized Chromosome Abundance - SAMEA2706825_ERX950728
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

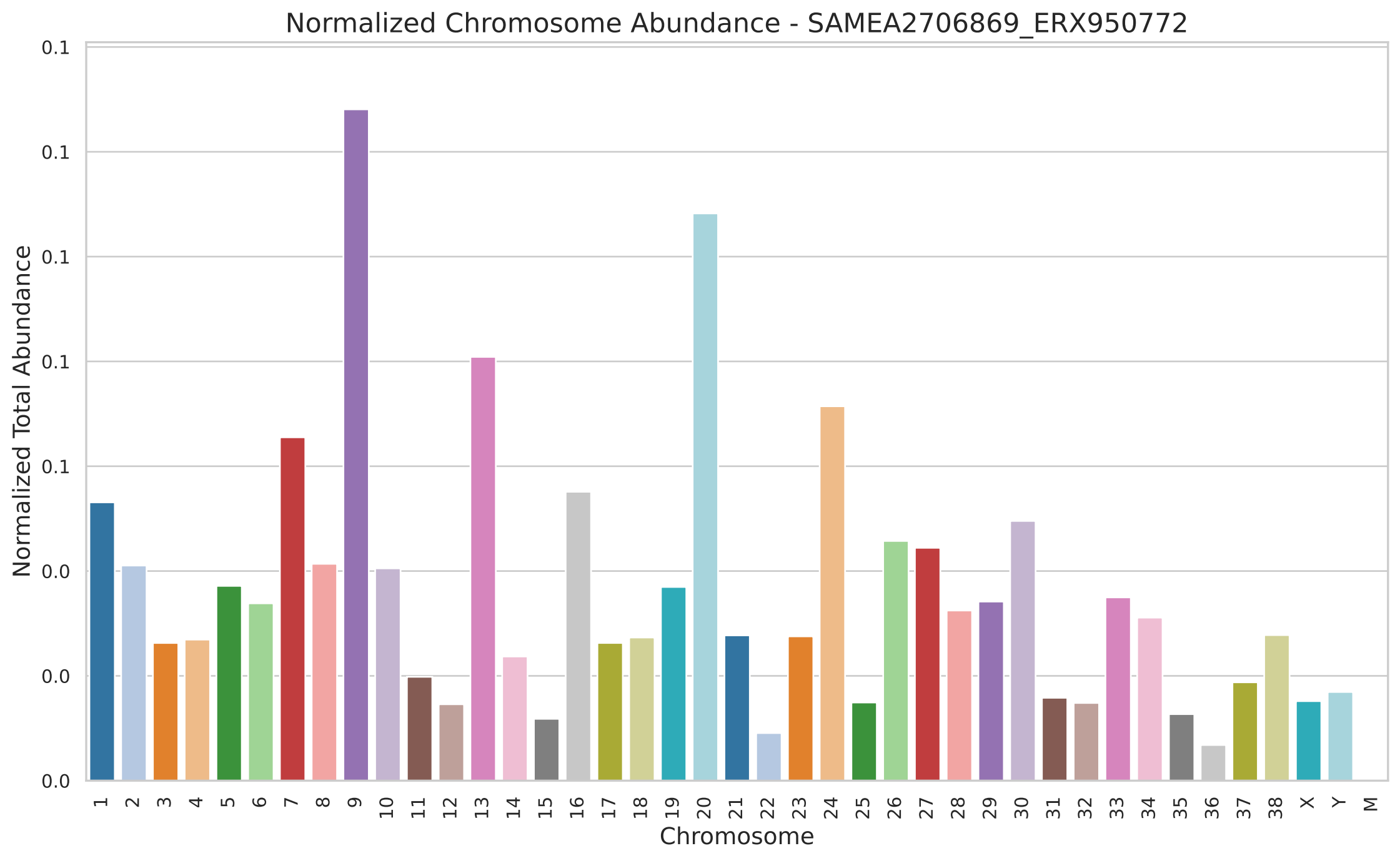

Normalized Chromosome Abundance - SAMEA2706865_ERX950768
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.2
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

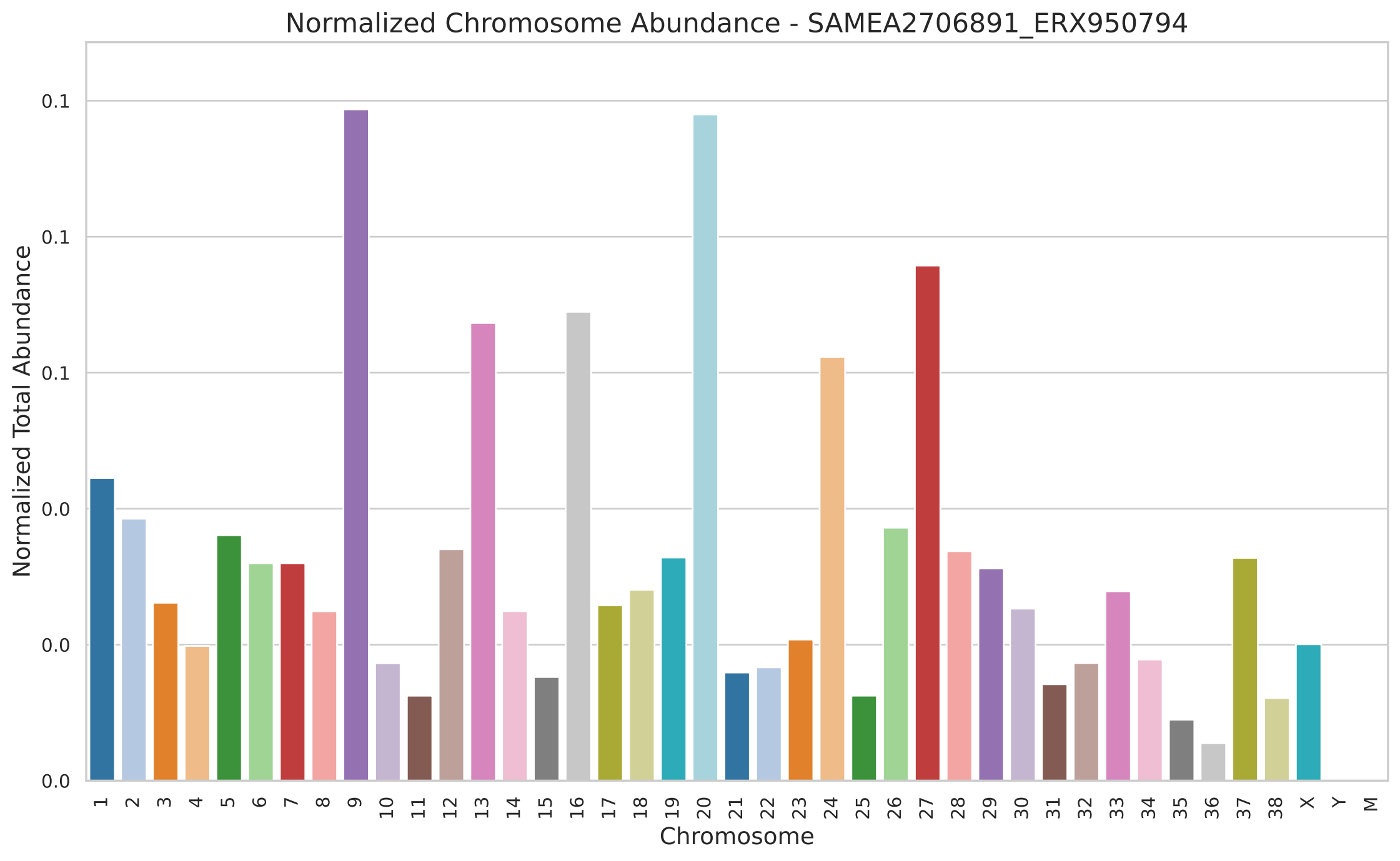

Normalized Chromosome Abundance - SAMEA2706882_ERX950785
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

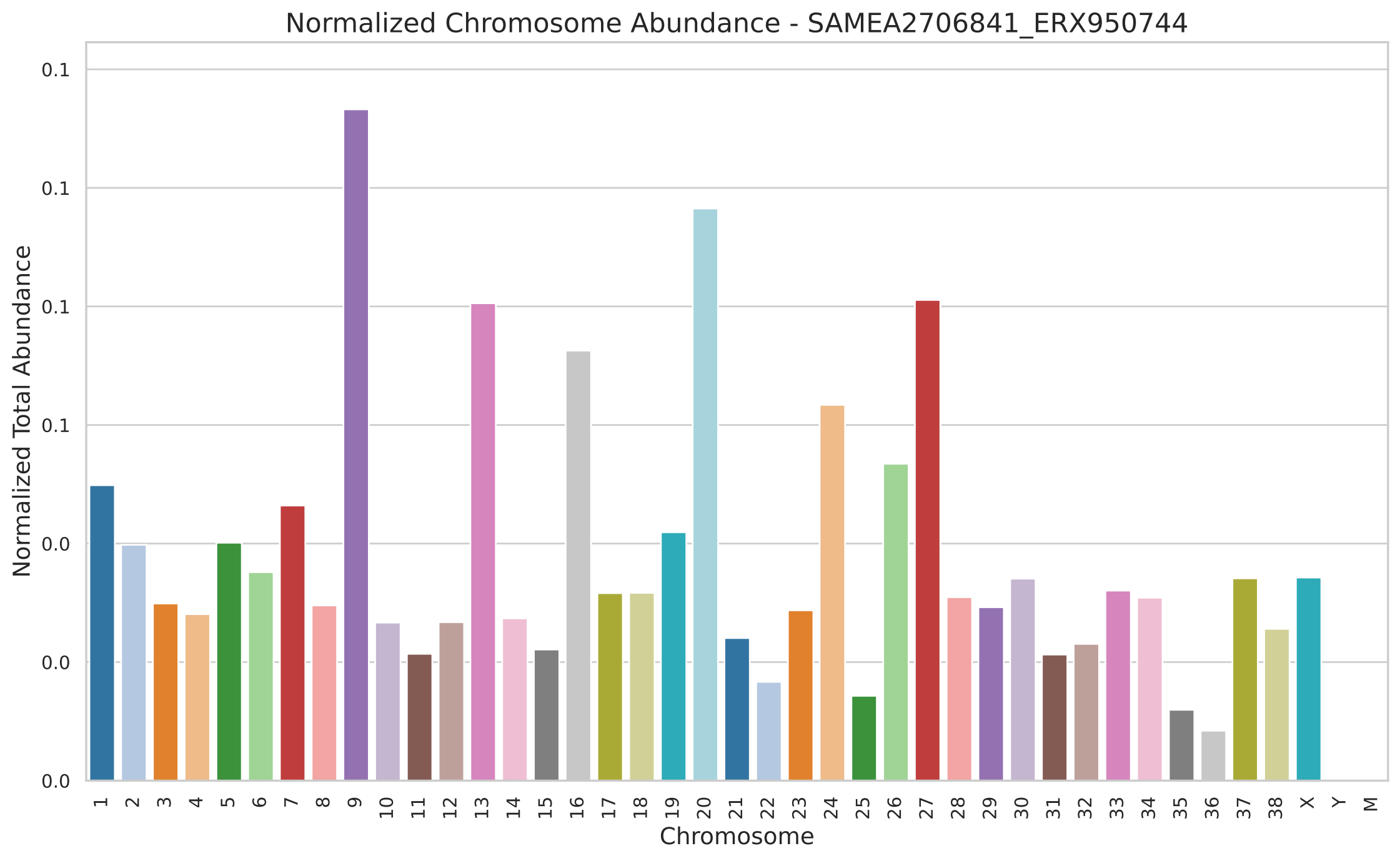

Normalized Chromosome Abundance - SAMEA2706875_ERX950778
Normalized Total Abundance
0.0
0.0
0.1
0.1
0.1
0.2
0.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

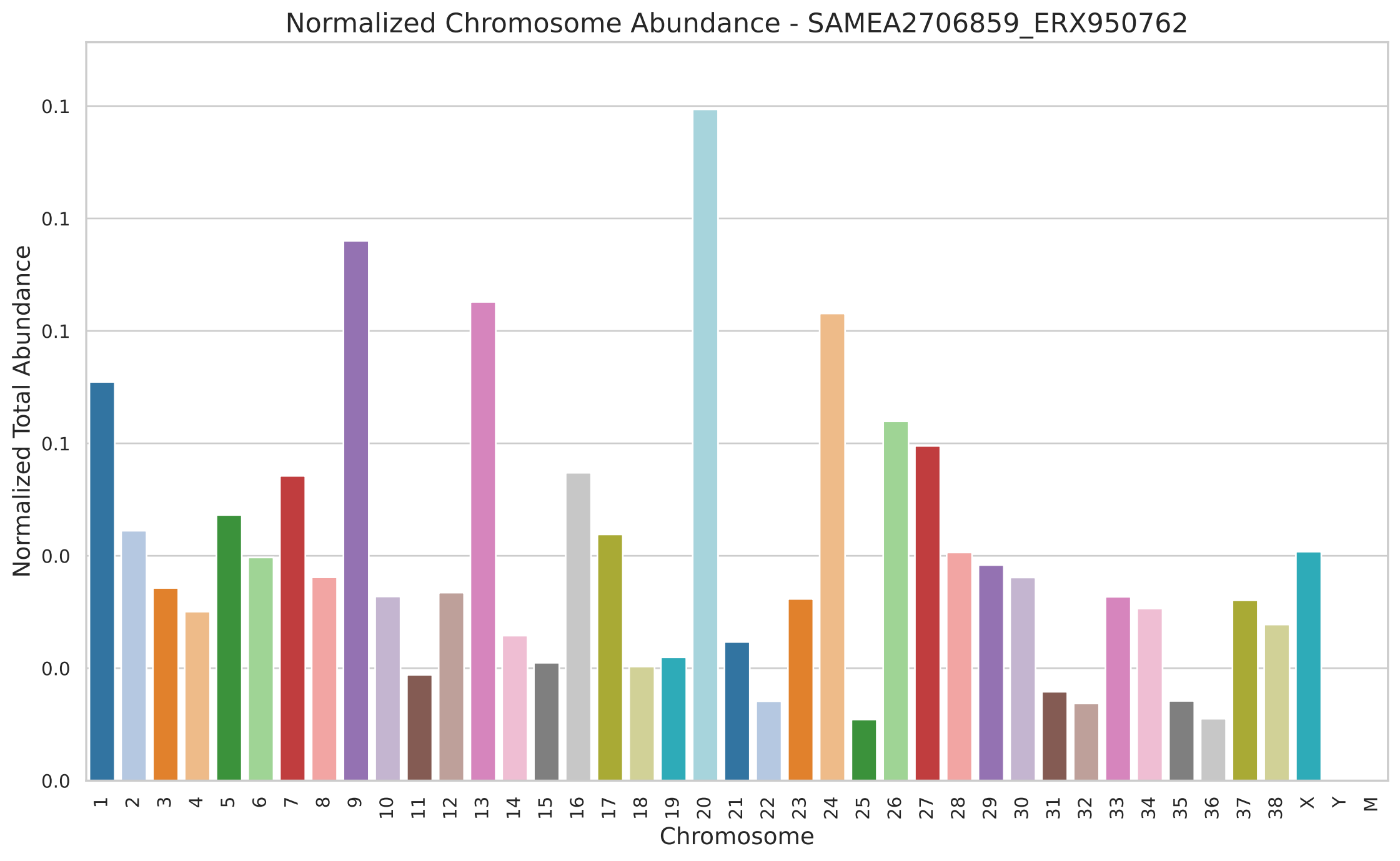

Normalized Chromosome Abundance - SAMEA2706899_ERX950802
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

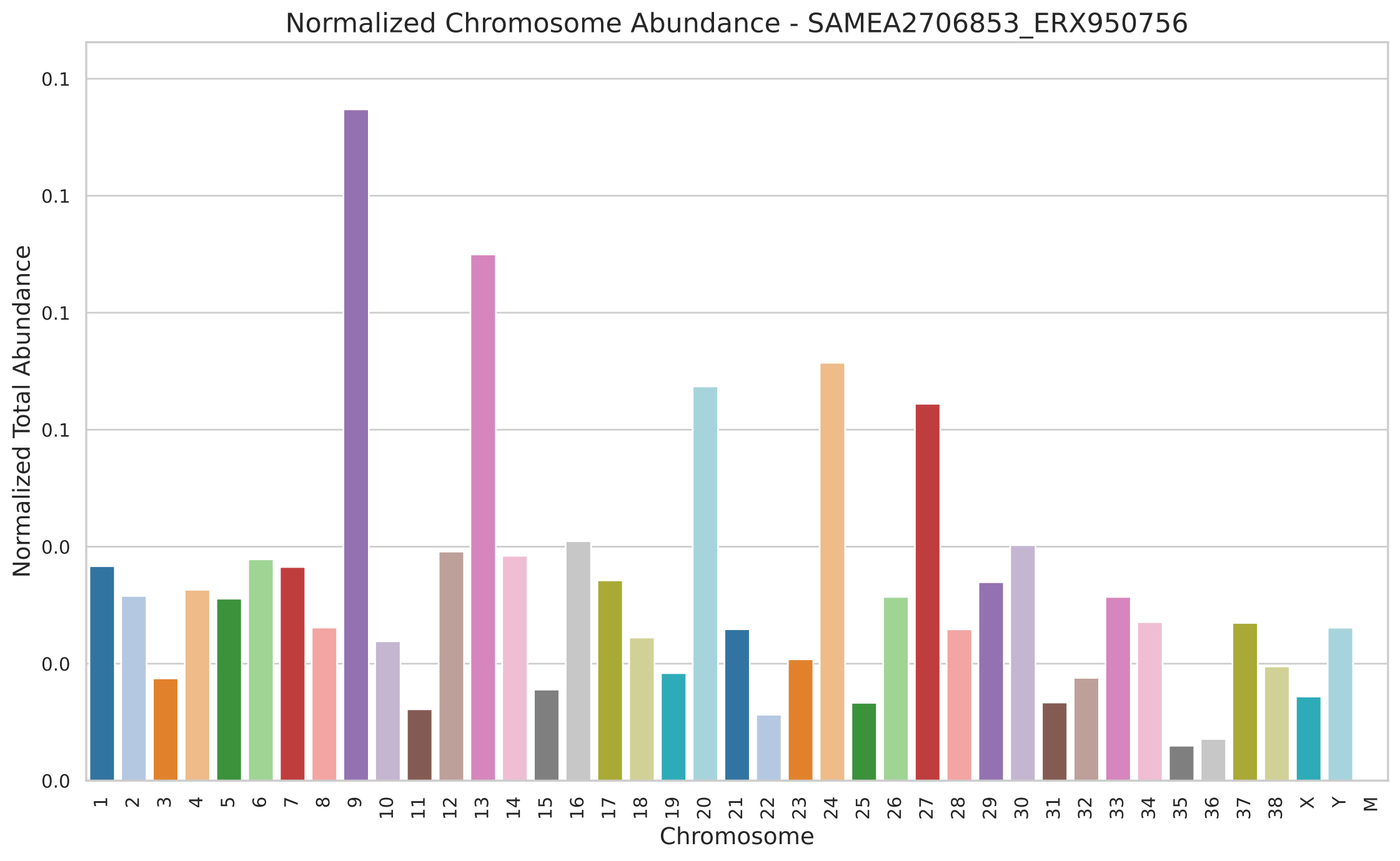

Normalized Chromosome Abundance - SAMEA3955977_ERX1742276
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

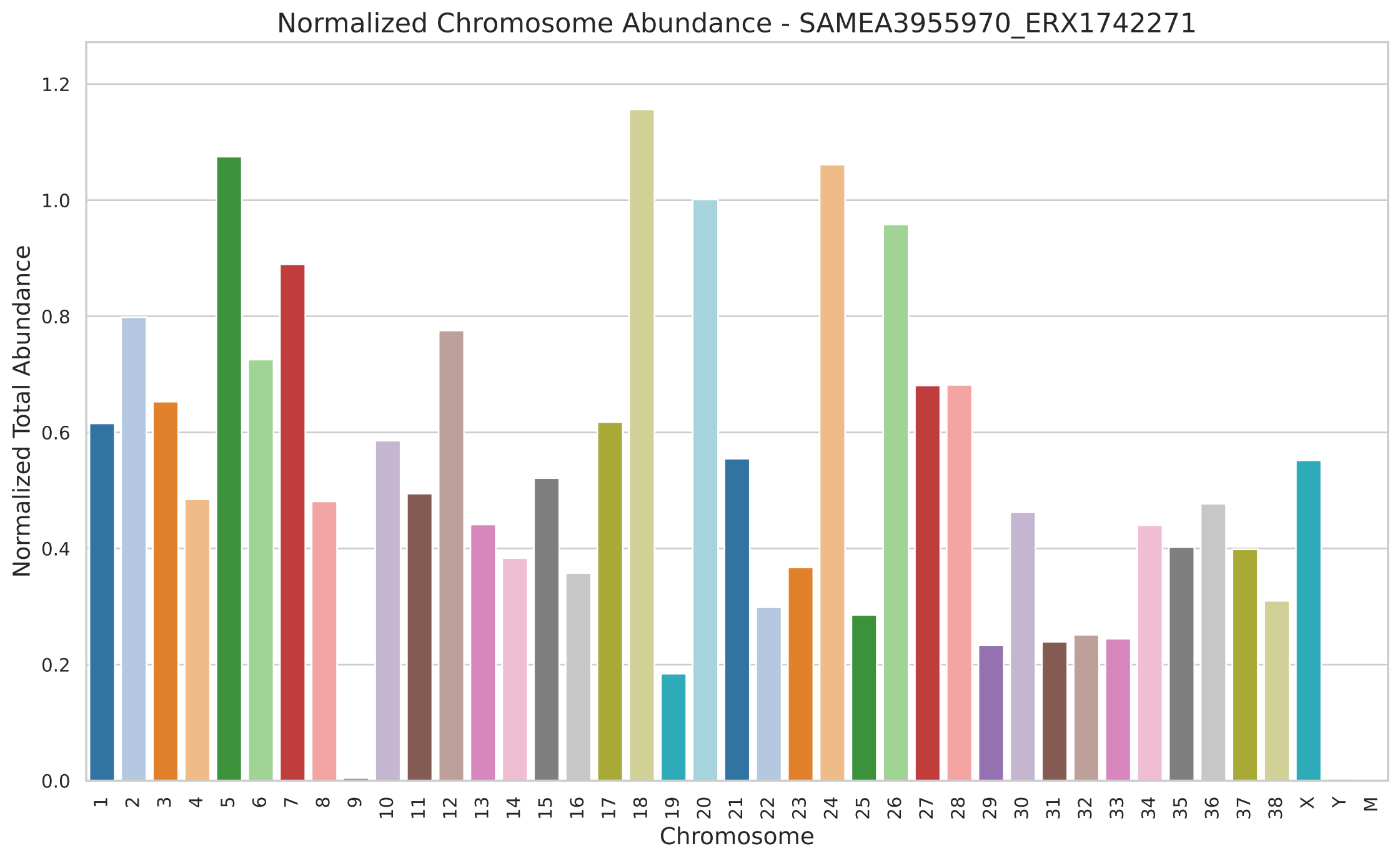

Normalized Chromosome Abundance - SAMEA2706869_ERX950772
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

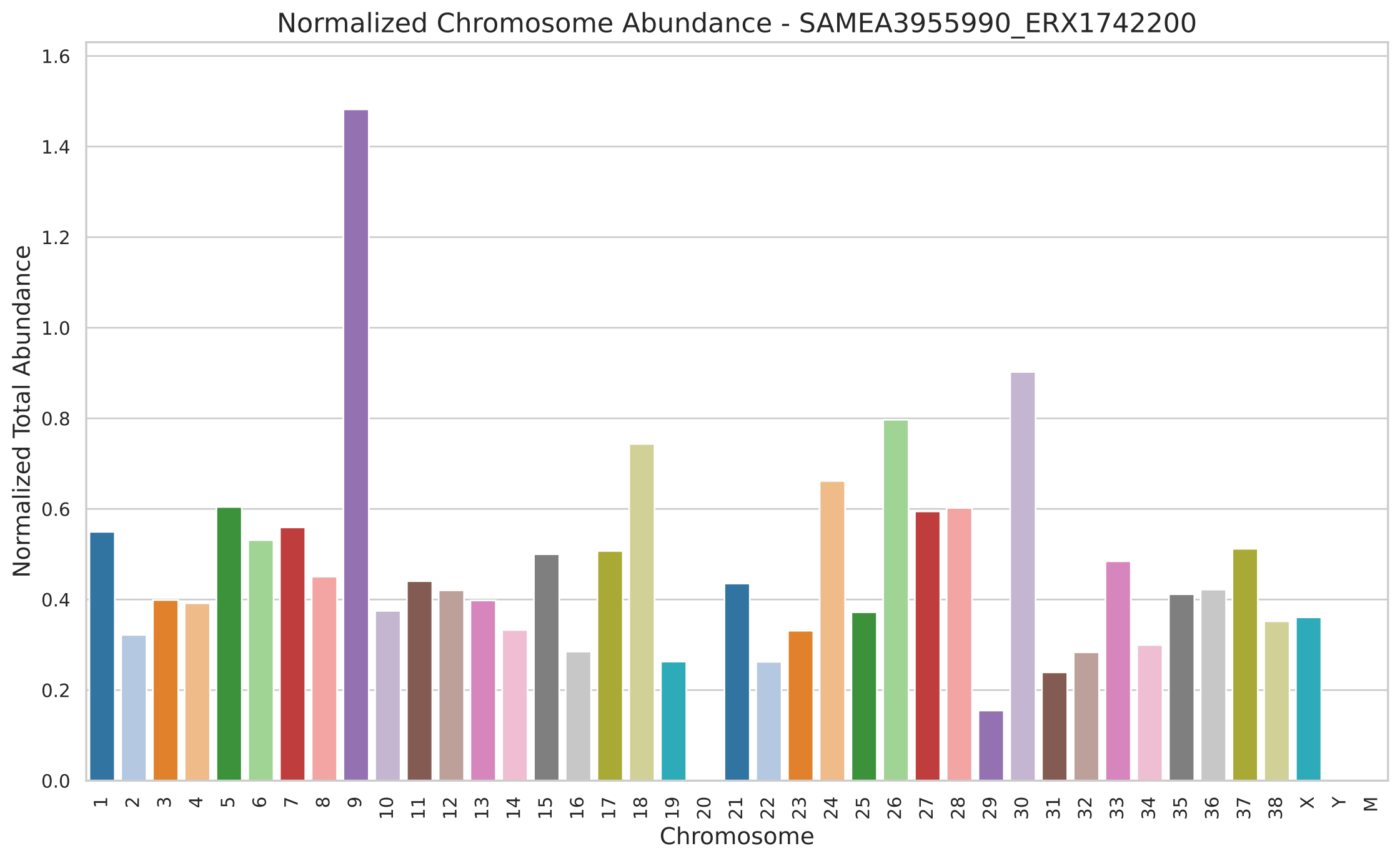

Normalized Chromosome Abundance - SAMEA2706891_ERX950794
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

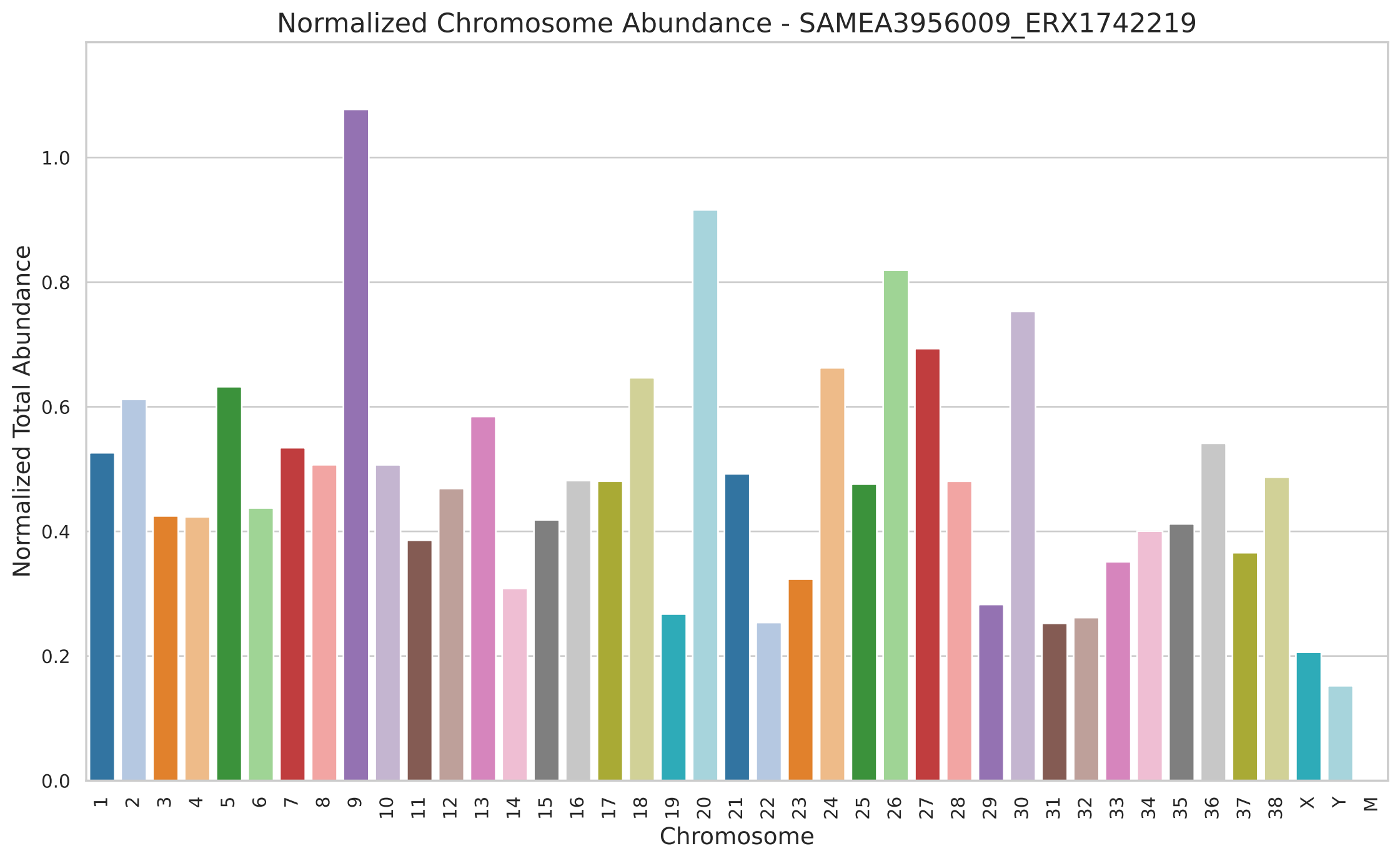

Normalized Chromosome Abundance - SAMEA2706841_ERX950744
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

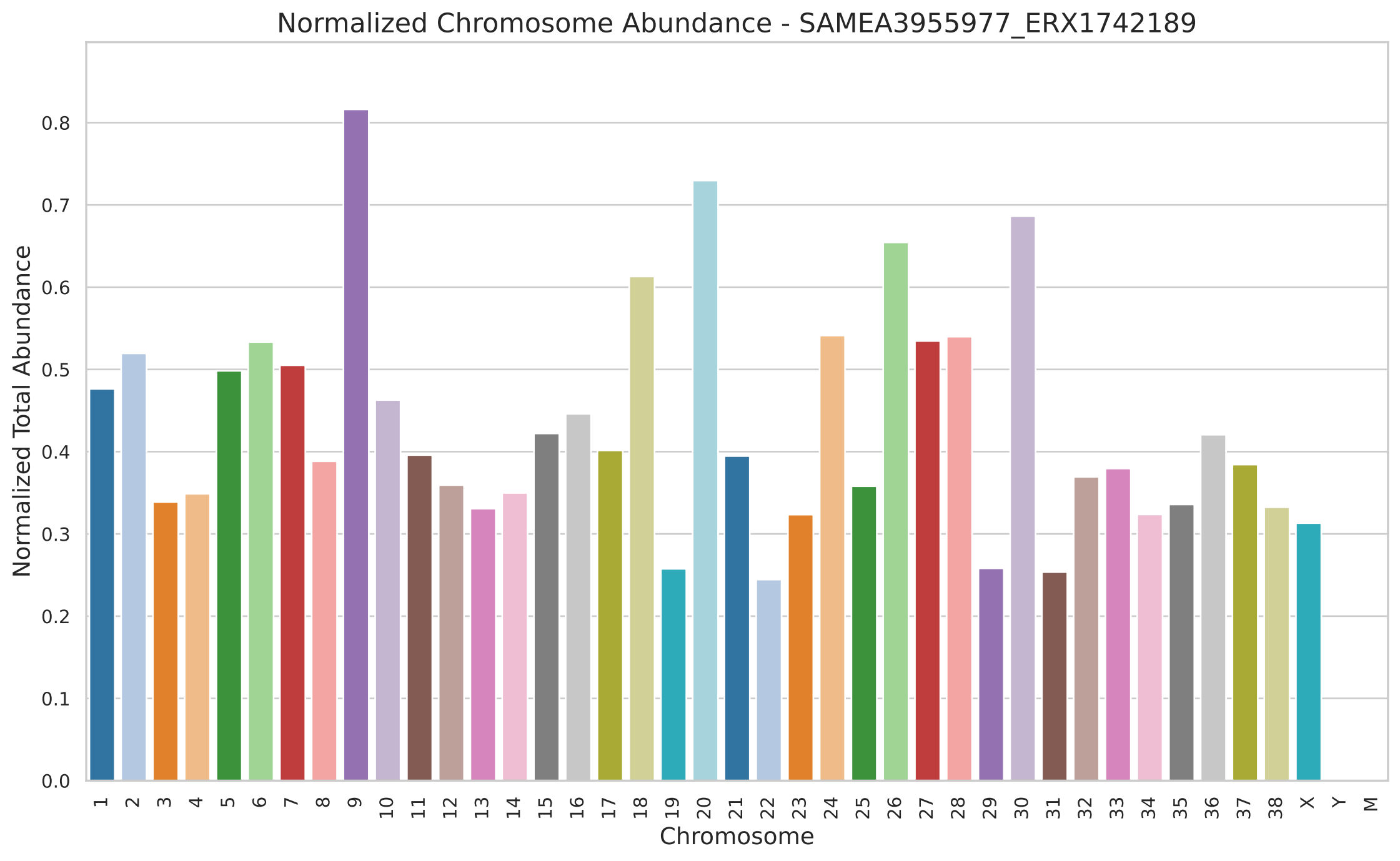

Normalized Chromosome Abundance - SAMEA2706859_ERX950762
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

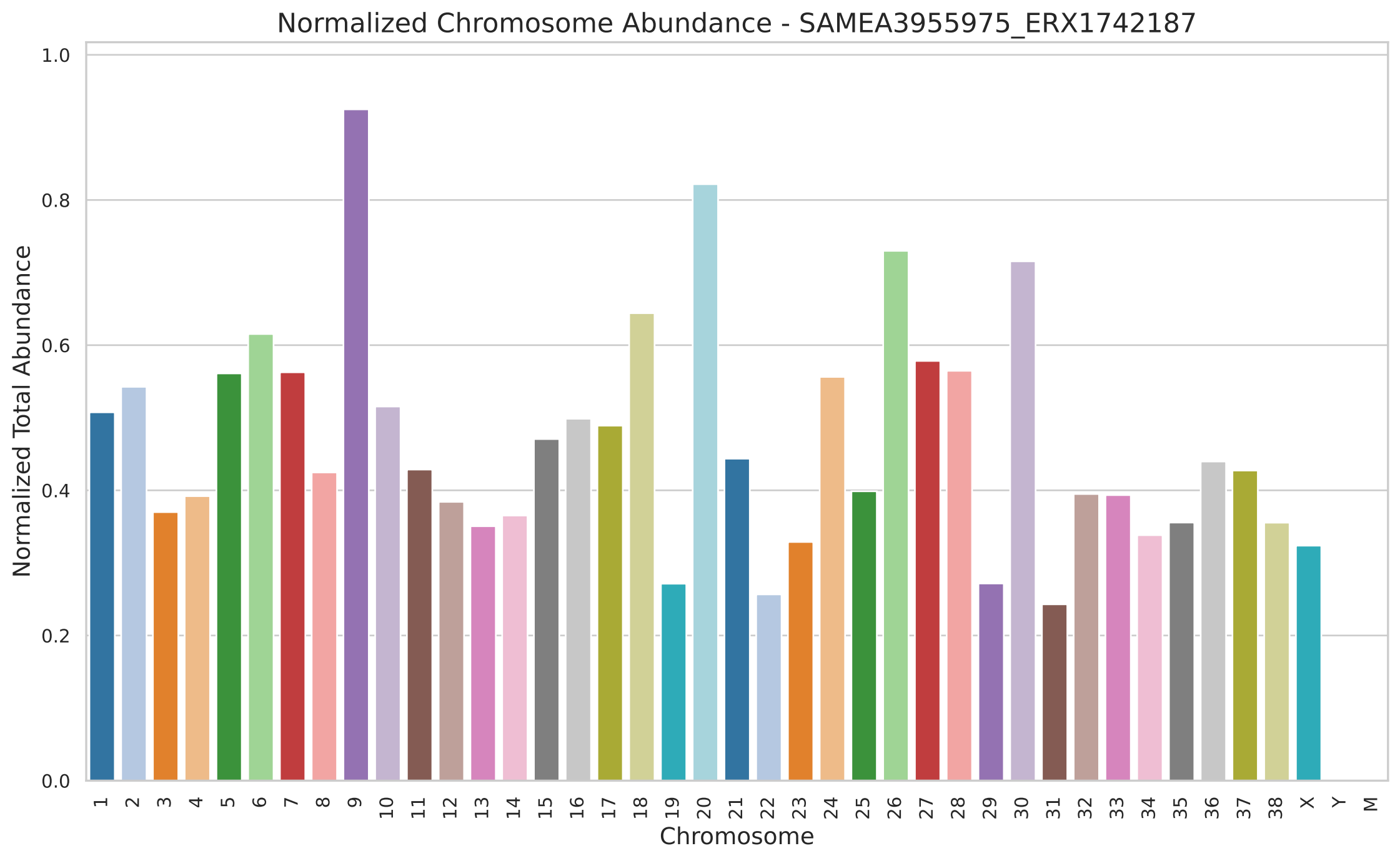

Normalized Chromosome Abundance - SAMEA2706853_ERX950756
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

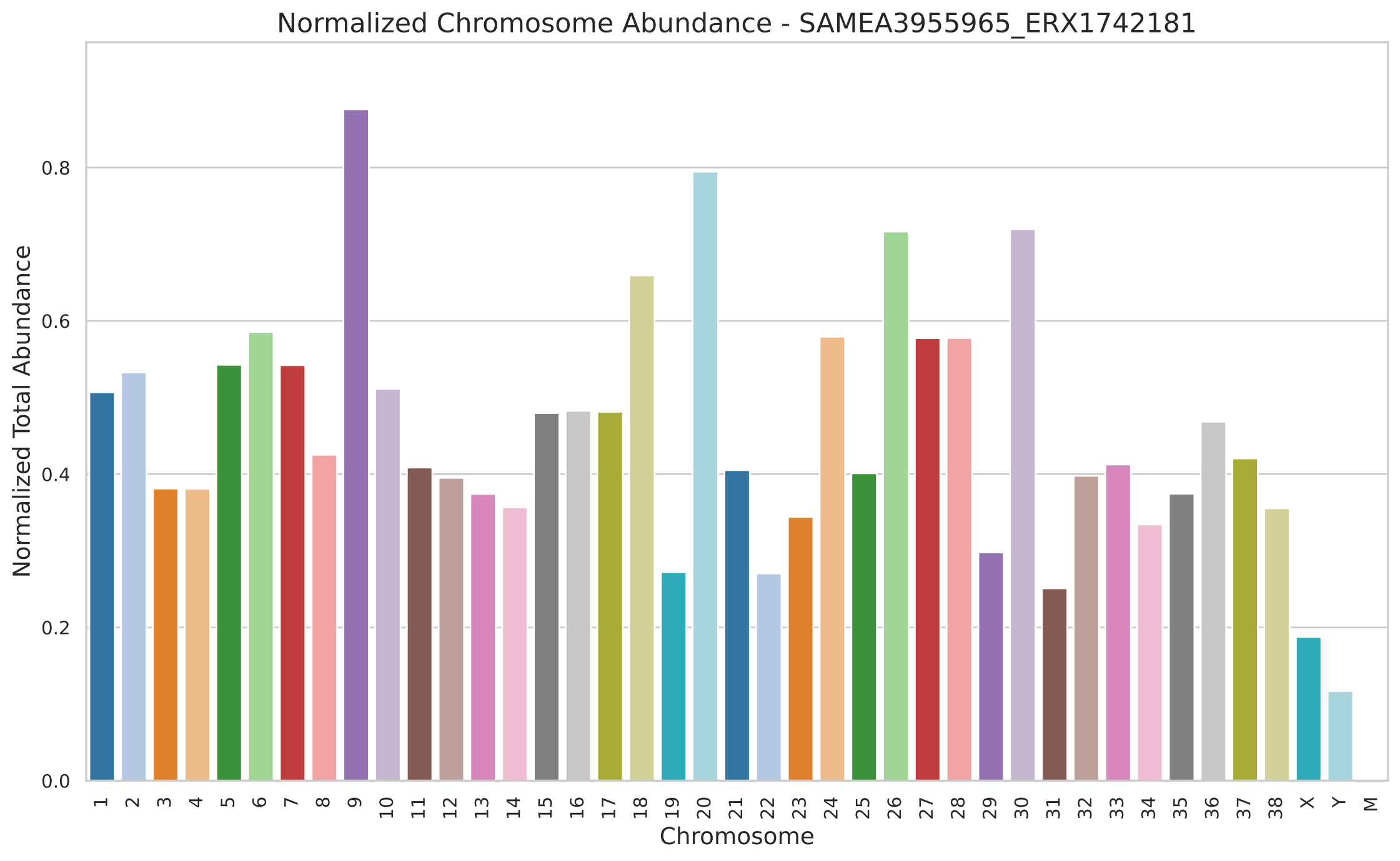

Normalized Chromosome Abundance - SAMEA3955970_ERX1742271
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

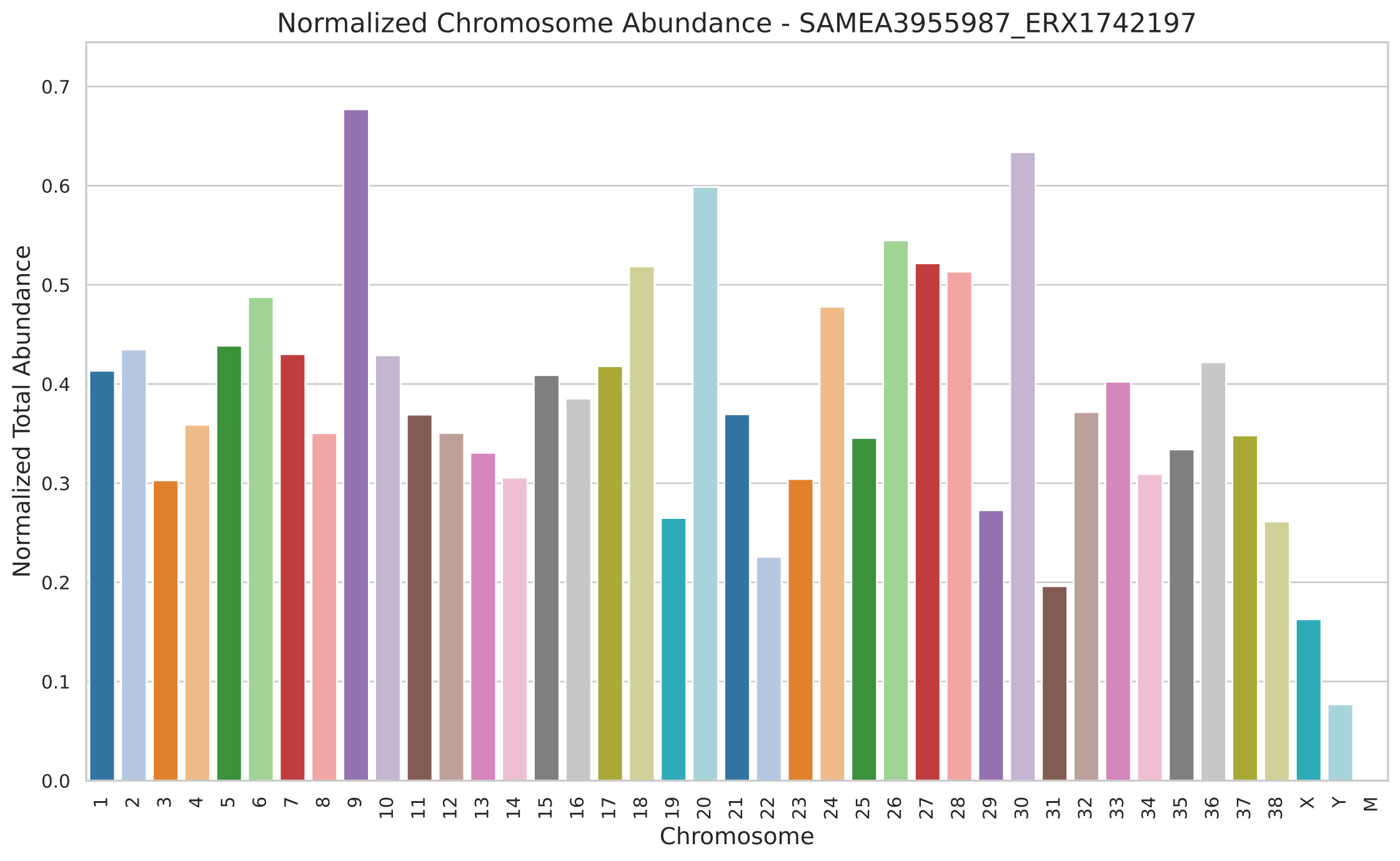

Normalized Chromosome Abundance - SAMEA3955990_ERX1742200
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

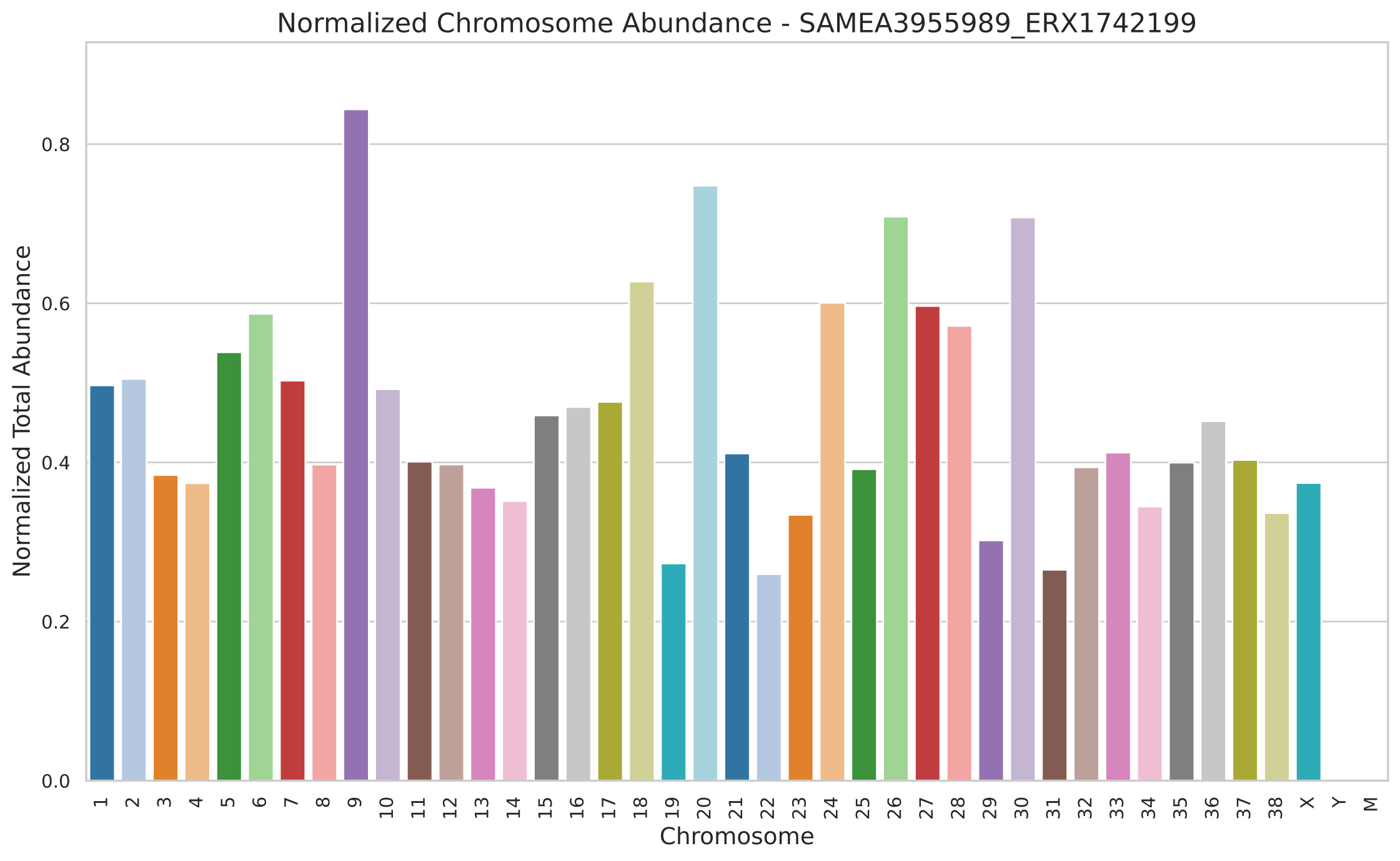

Normalized Chromosome Abundance - SAMEA3956009_ERX1742219
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

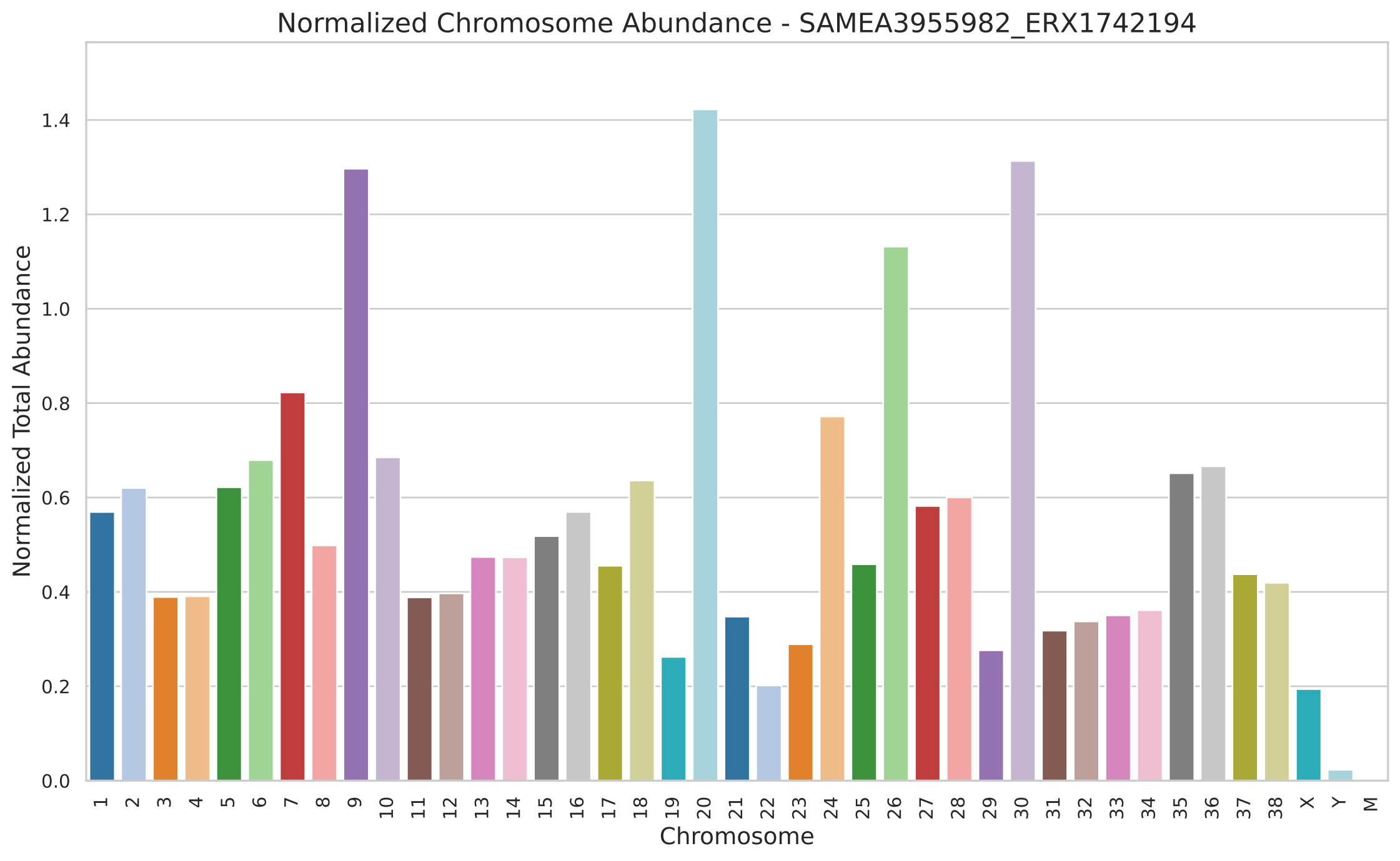

Normalized Chromosome Abundance - SAMEA3955977_ERX1742189
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

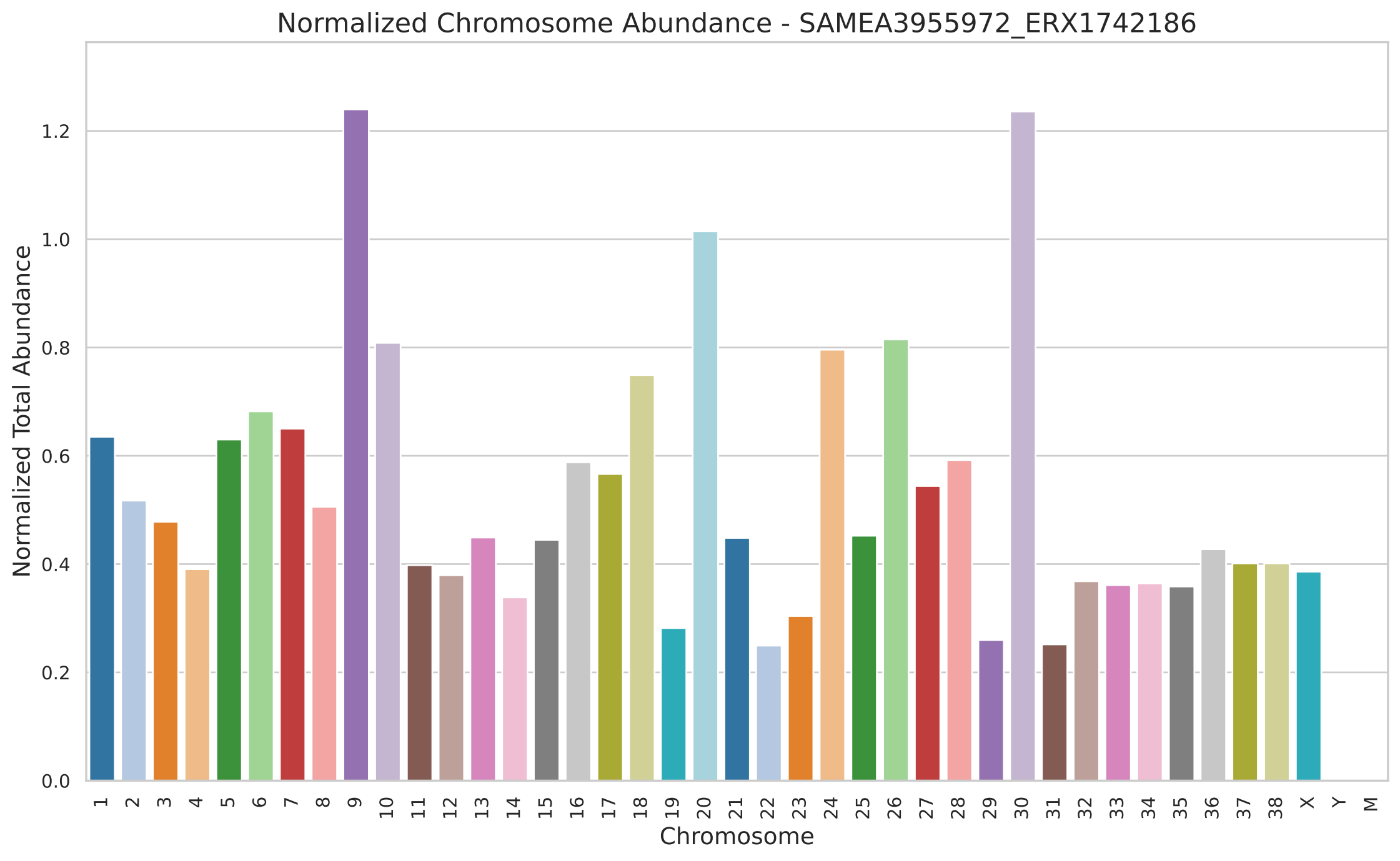

Normalized Chromosome Abundance - SAMEA3955975_ERX1742187
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

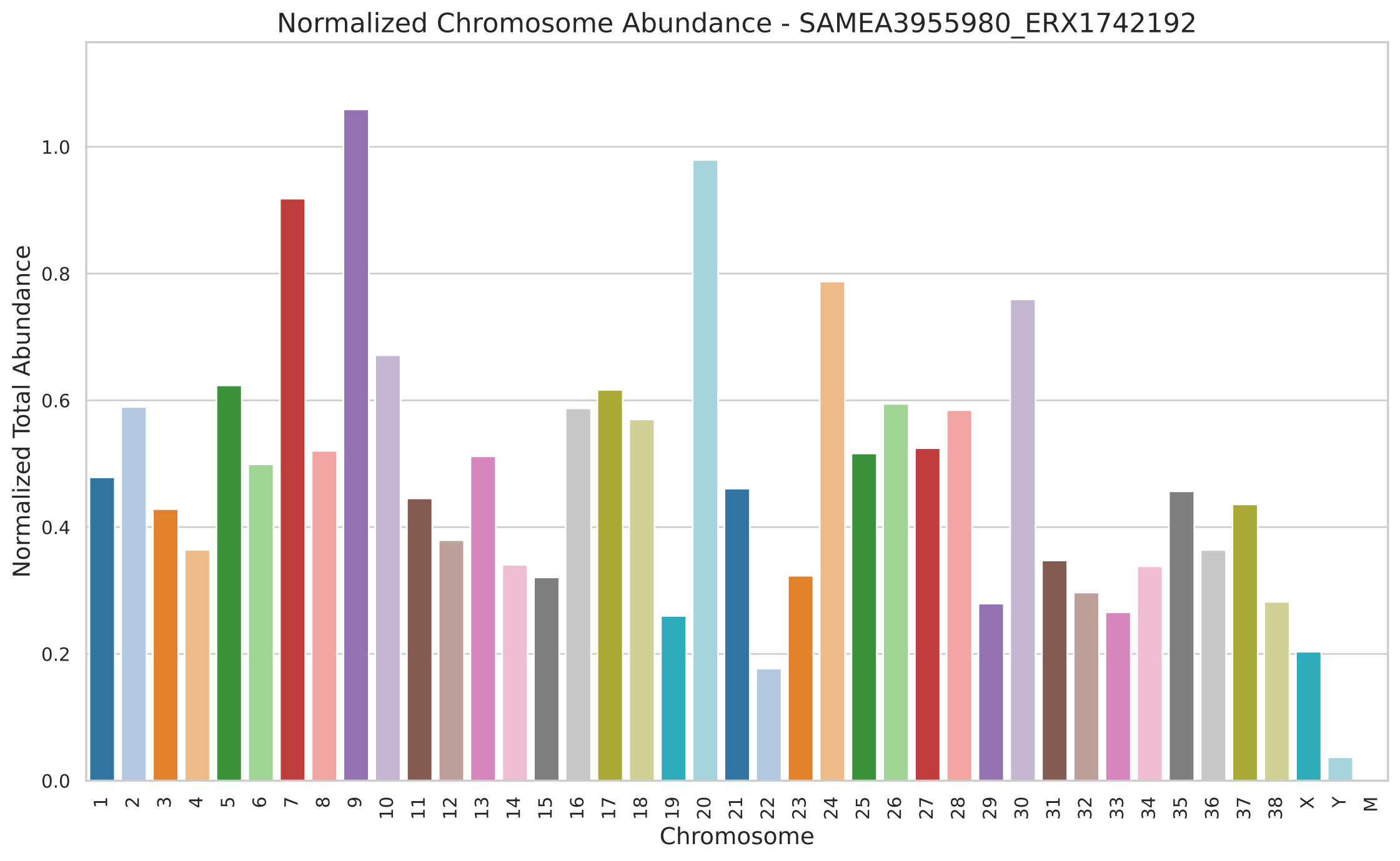

Normalized Chromosome Abundance - SAMEA3955965_ERX1742181
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

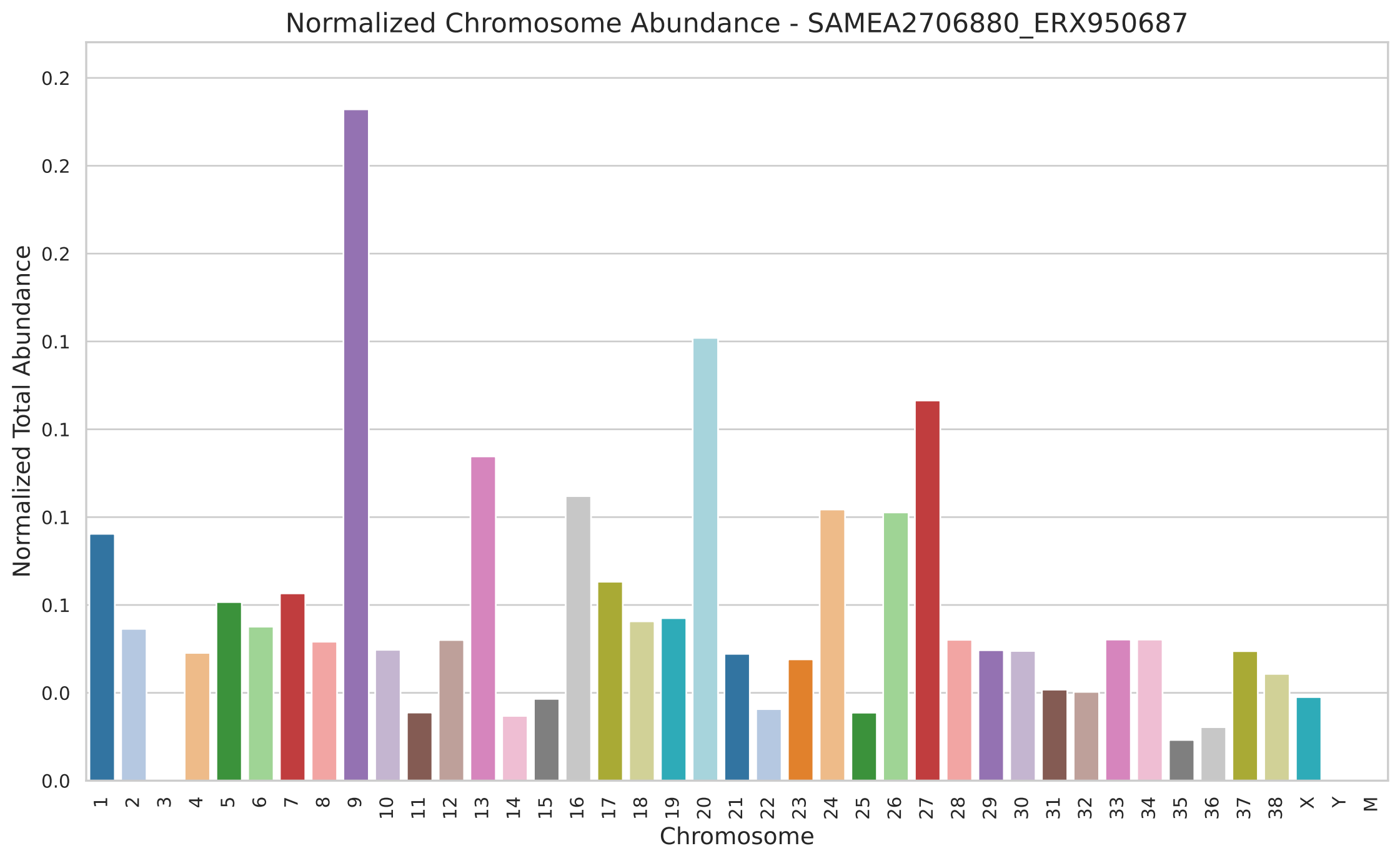

Normalized Chromosome Abundance - SAMEA3955987_ERX1742197
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

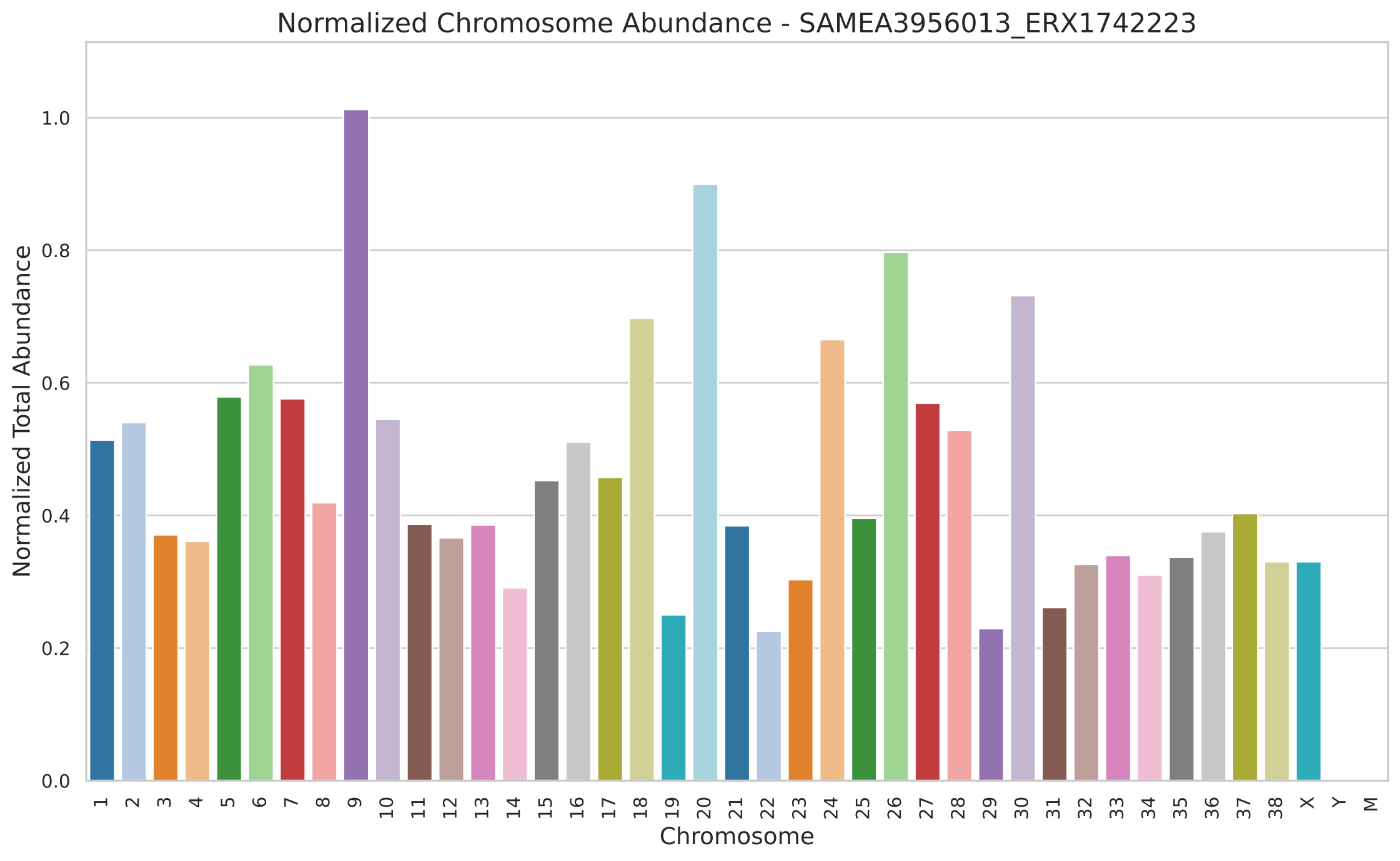

Normalized Chromosome Abundance - SAMEA3955989_ERX1742199
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

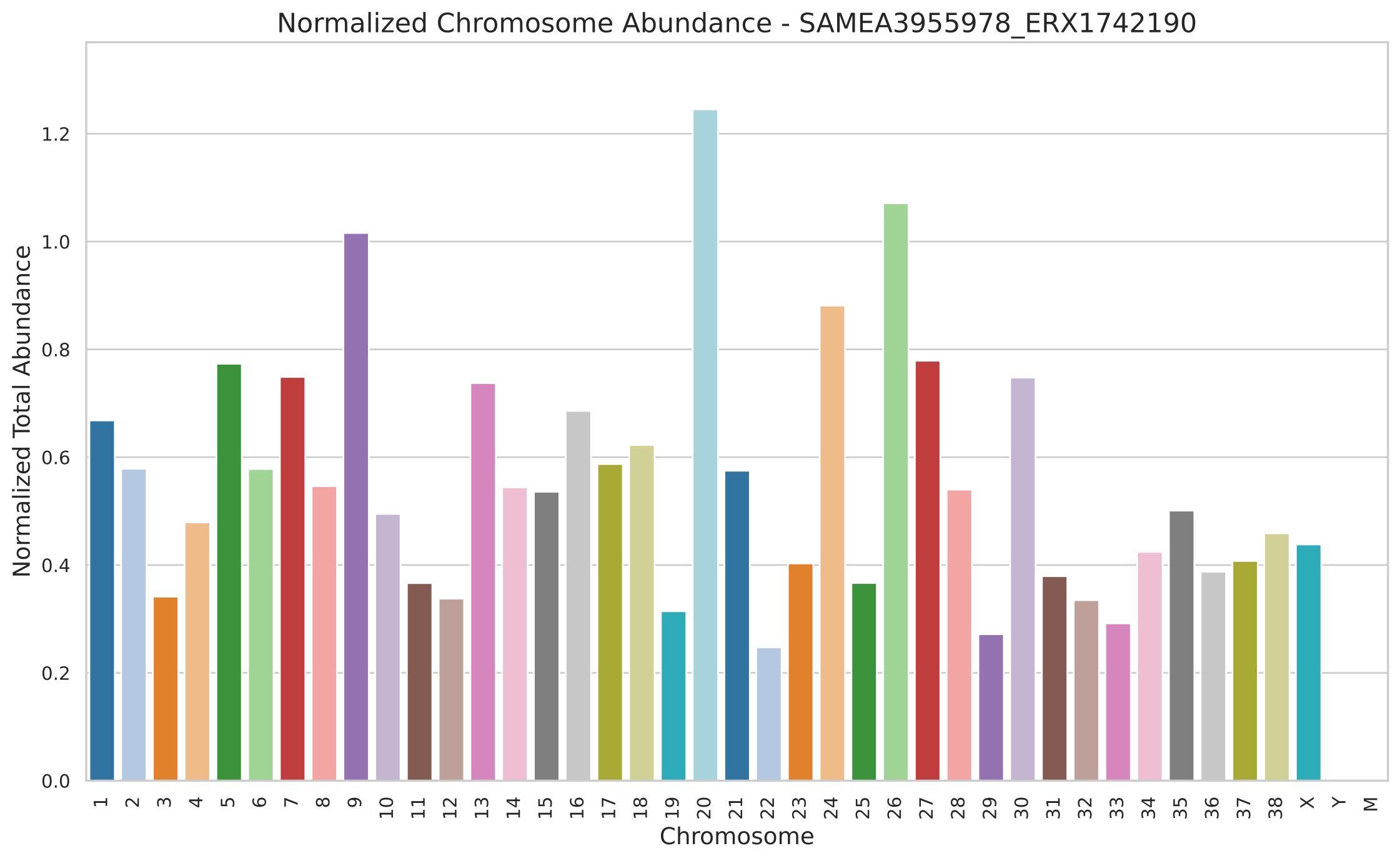

Normalized Chromosome Abundance - SAMEA3955982_ERX1742194
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

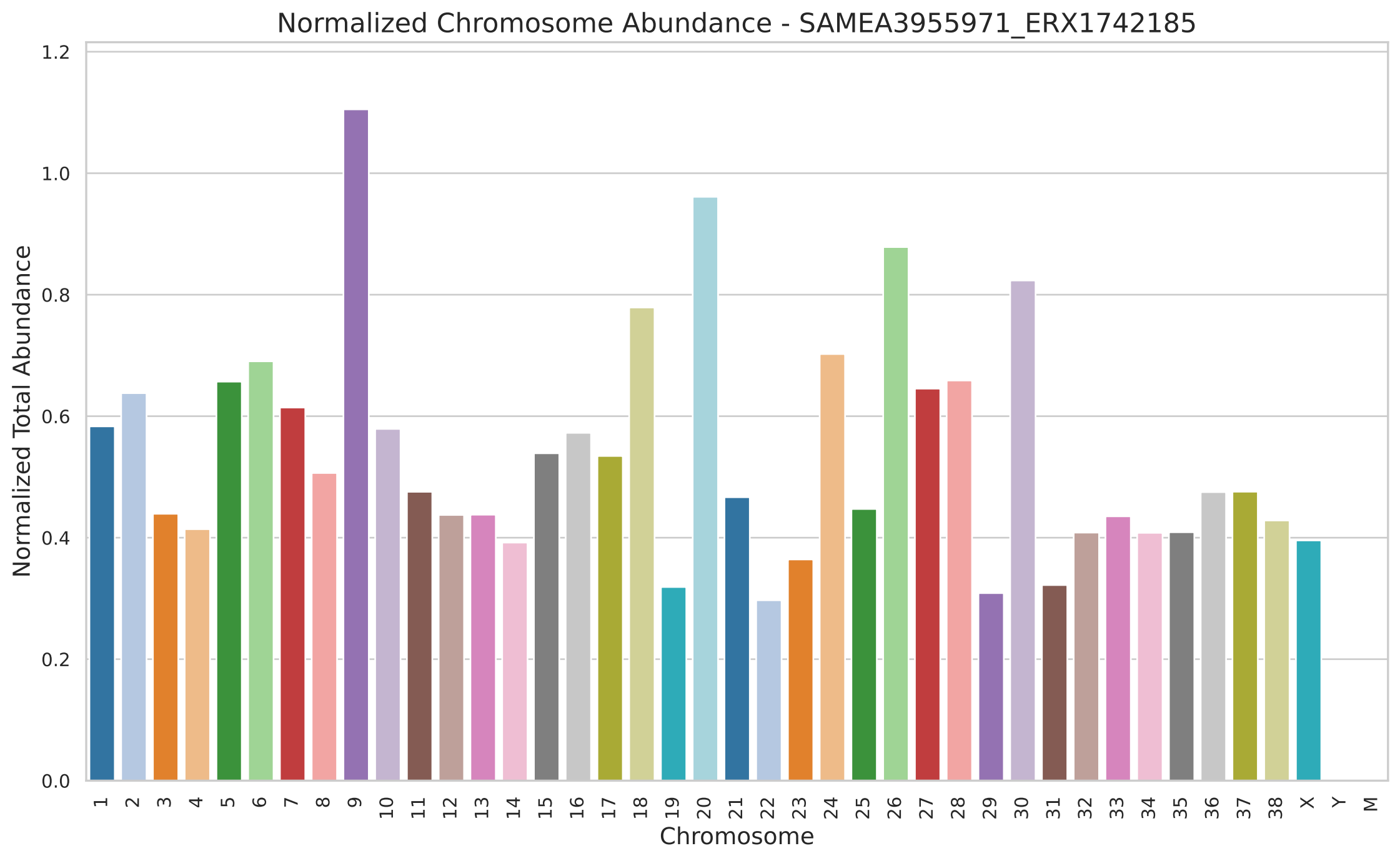

Normalized Chromosome Abundance - SAMEA3955972_ERX1742186
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

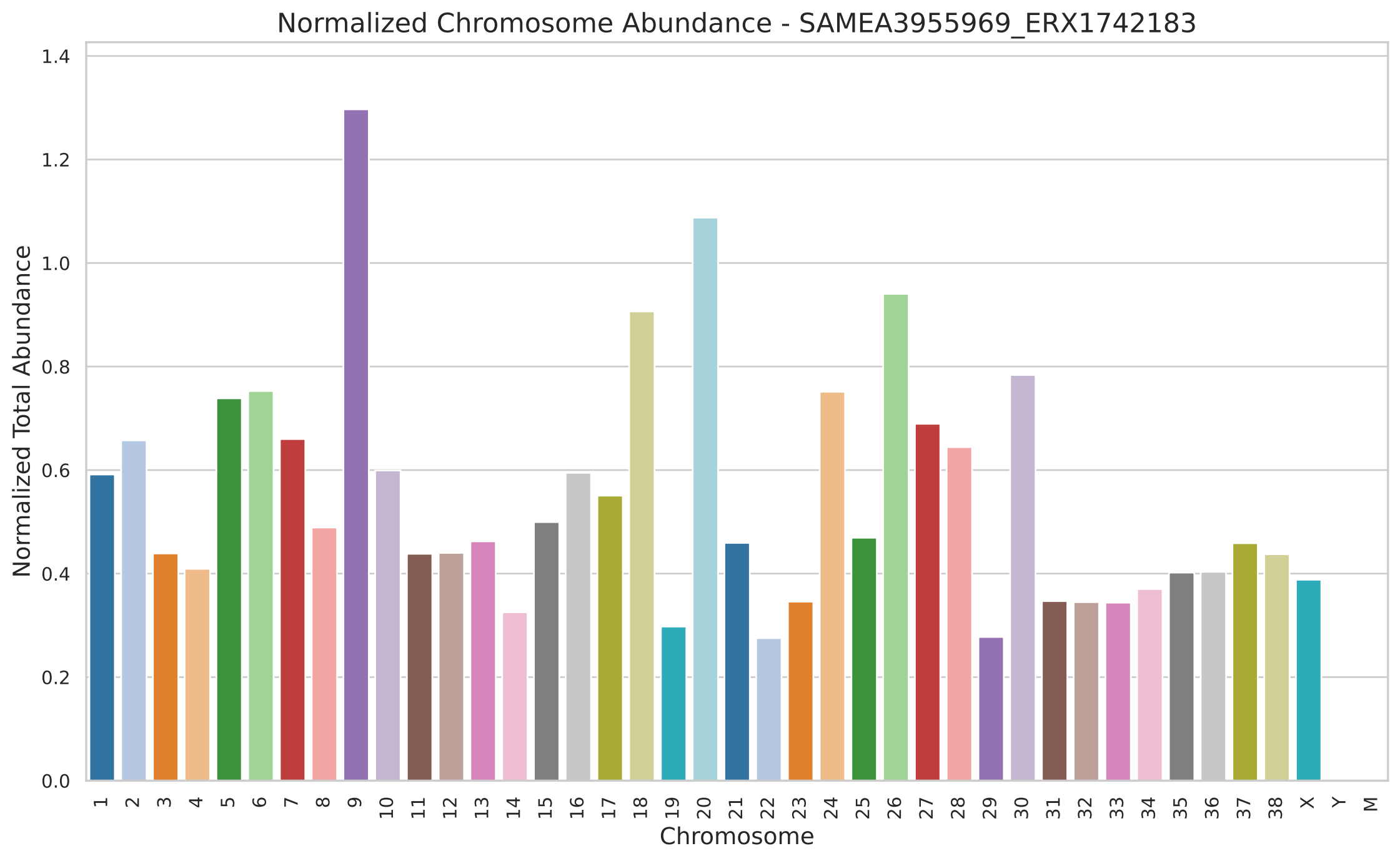

Normalized Chromosome Abundance - SAMEA3955980_ERX1742192
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

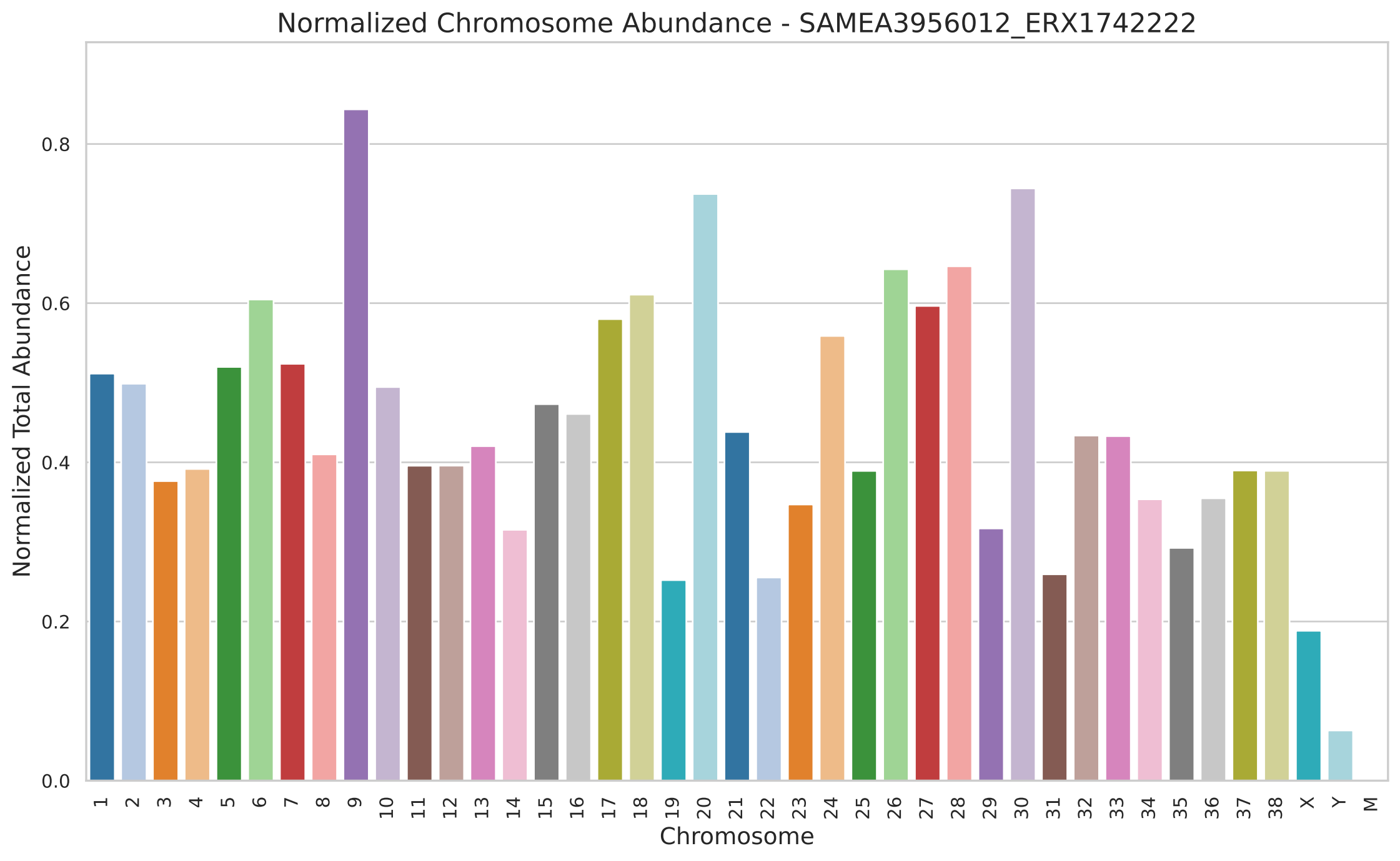

Normalized Chromosome Abundance - SAMEA2706880_ERX950687
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.2
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 X Y M
Chromosome

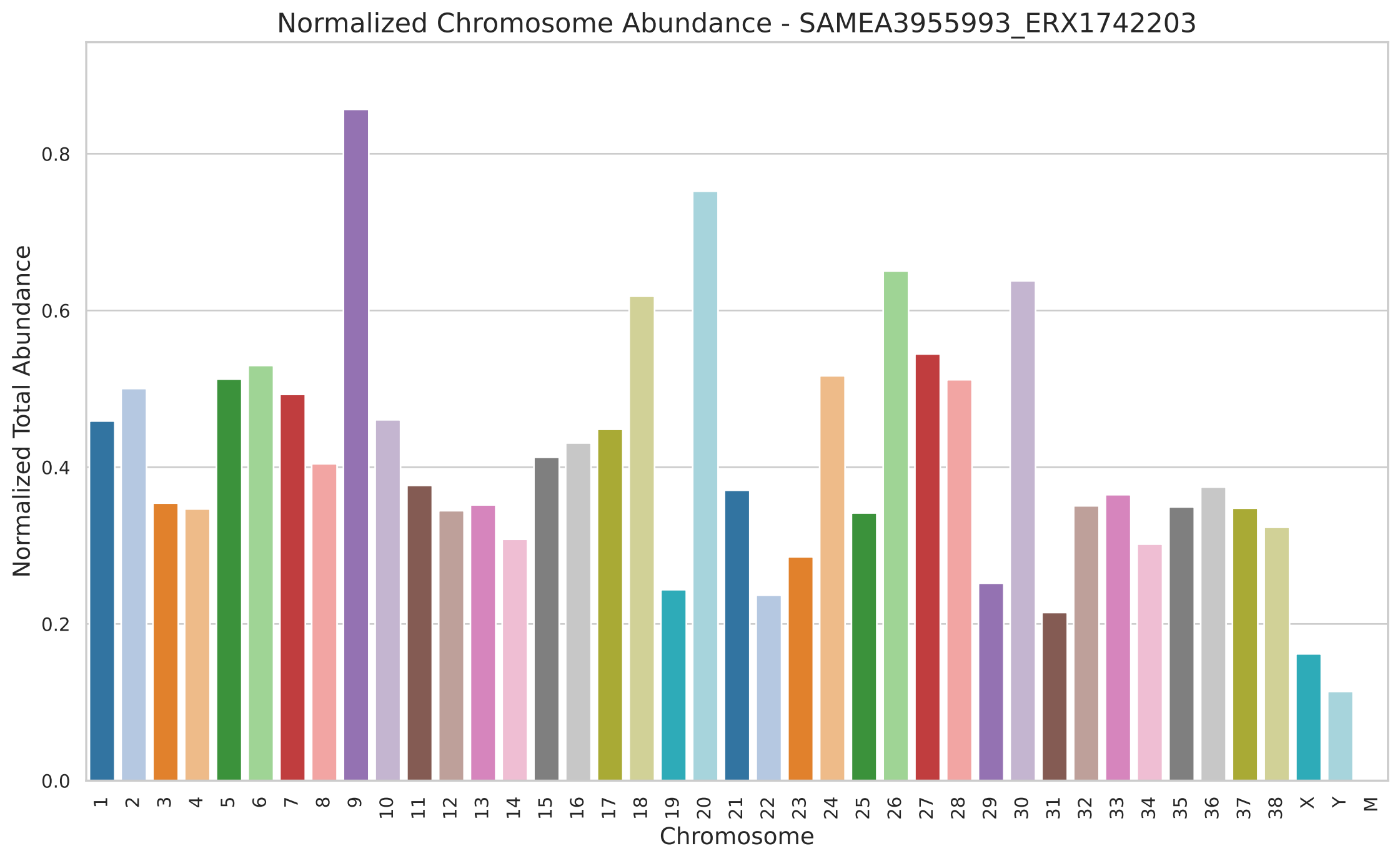

Normalized Chromosome Abundance - SAMEA3956013_ERX1742223
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

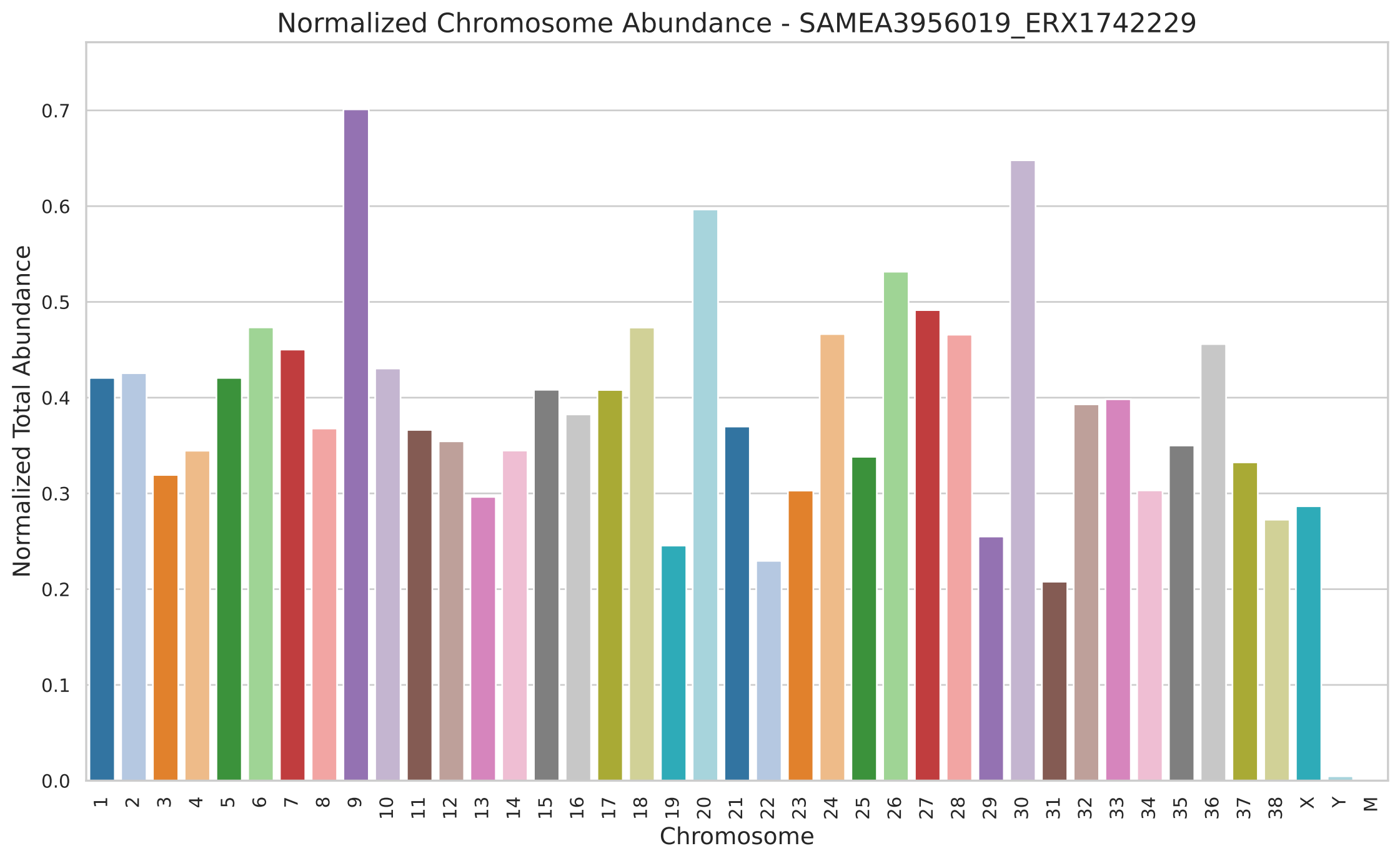

Normalized Chromosome Abundance - SAMEA3955978_ERX1742190
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

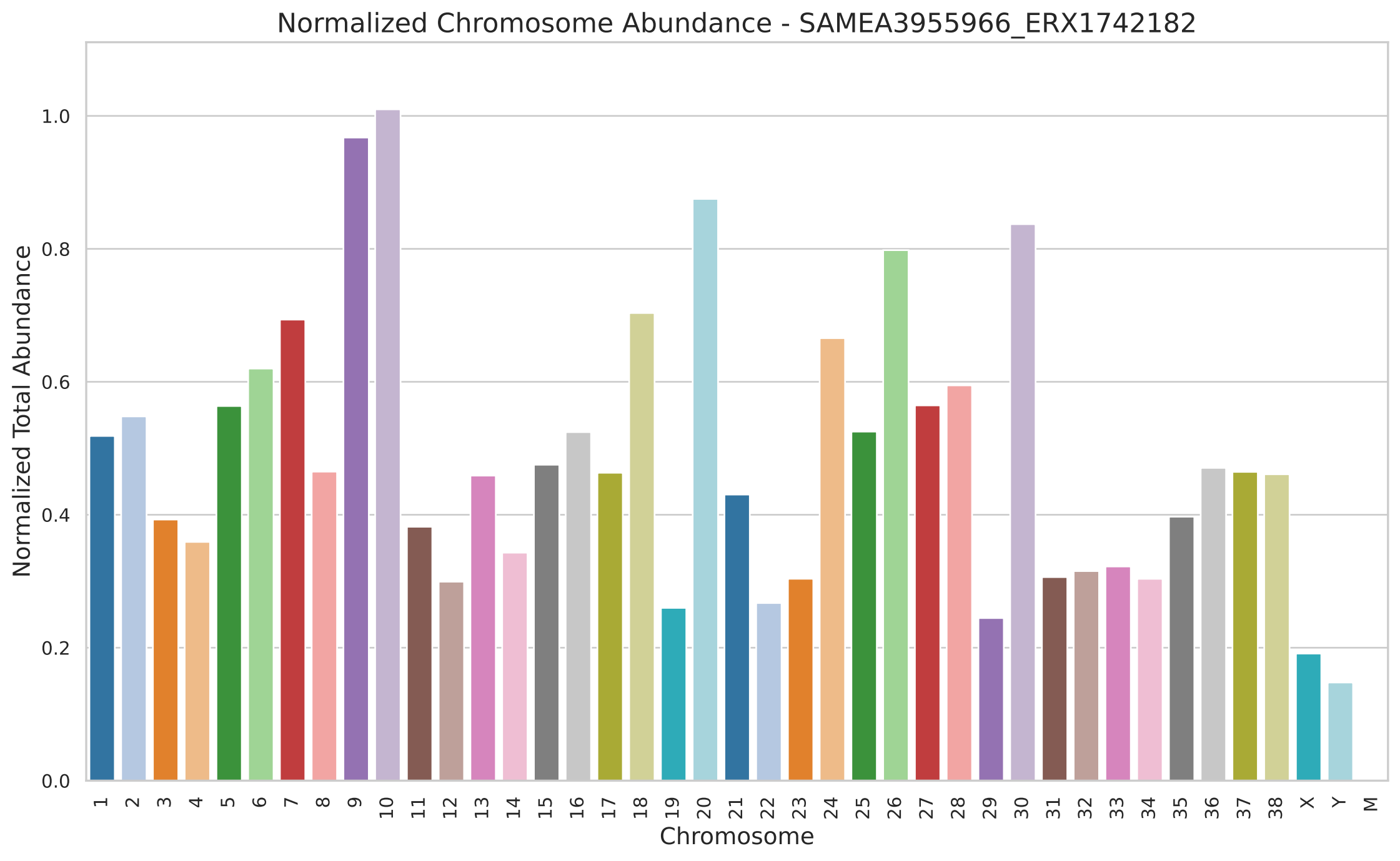

Normalized Chromosome Abundance - SAMEA3955971_ERX1742185
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

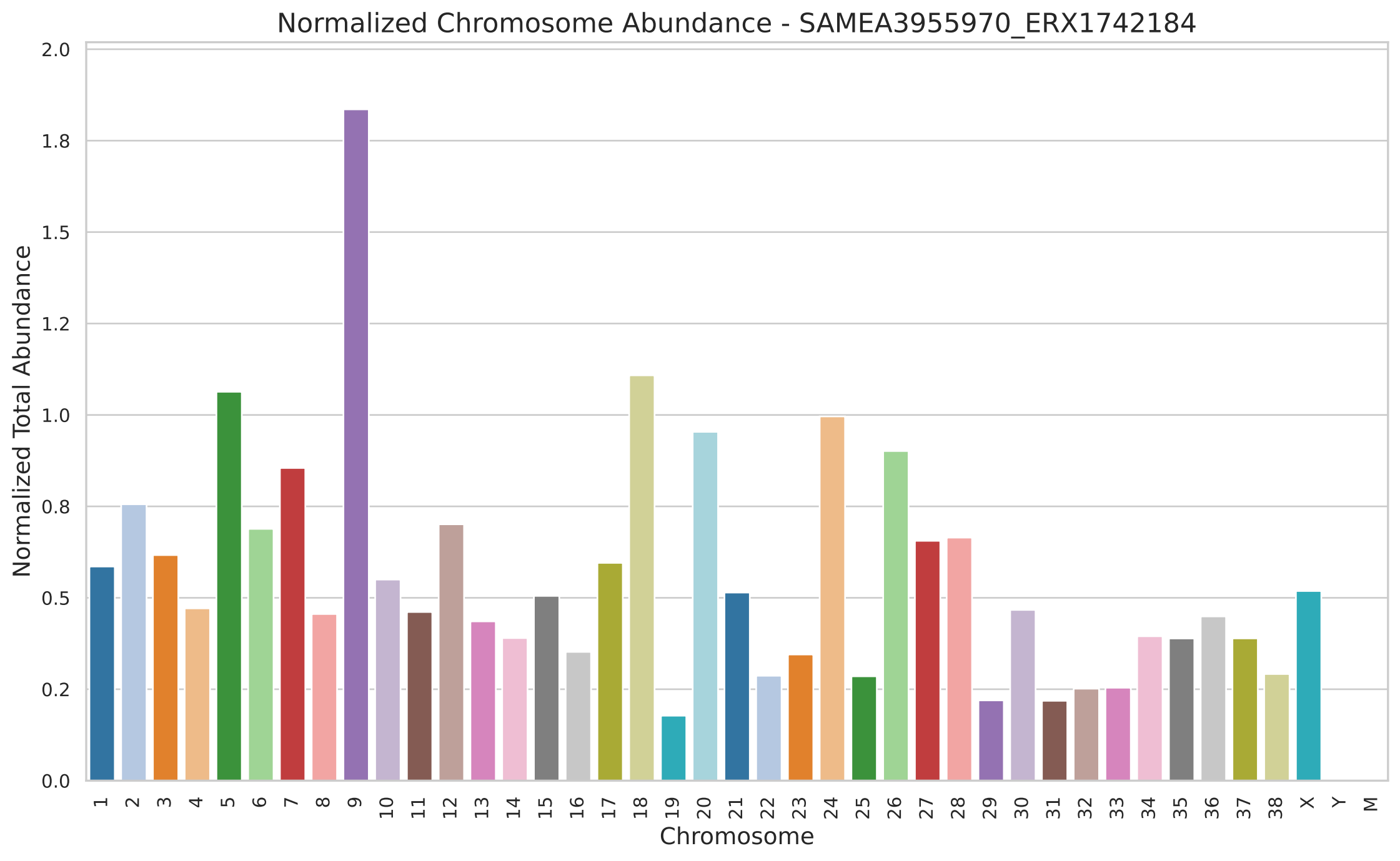

Normalized Chromosome Abundance - SAMEA3955969_ERX1742183
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

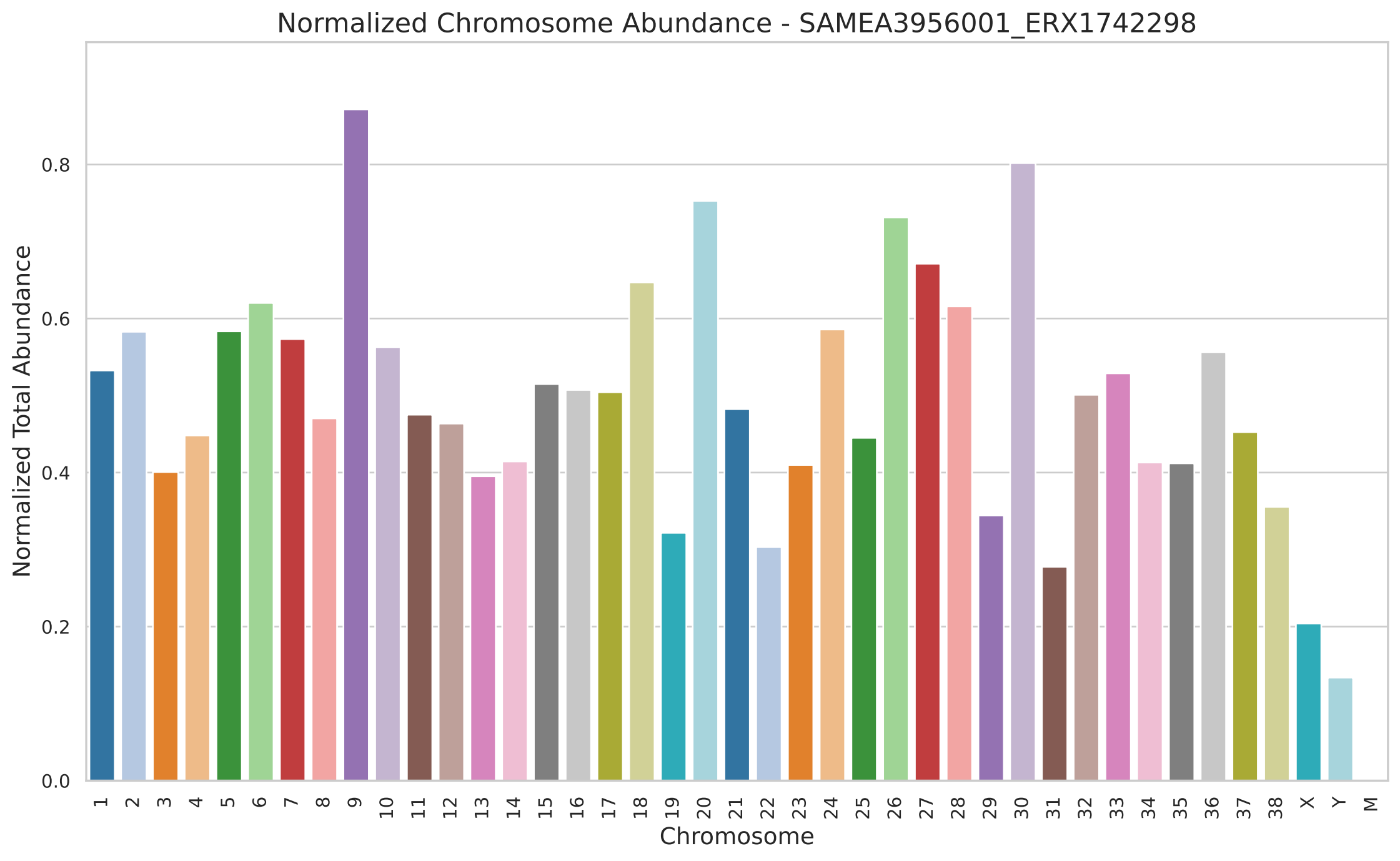

Normalized Chromosome Abundance - SAMEA3956012_ERX1742222
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

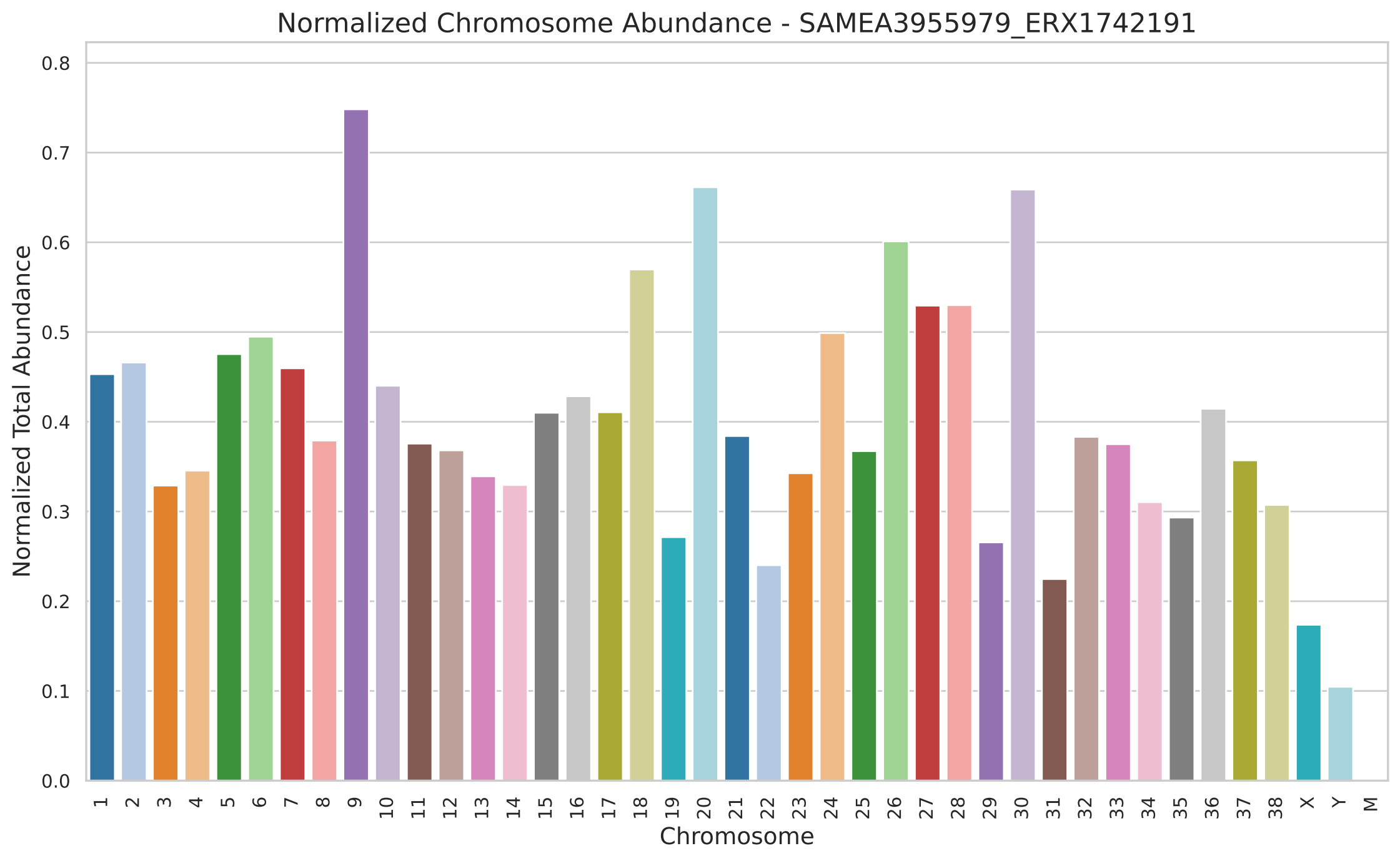

Normalized Chromosome Abundance - SAMEA3955993_ERX1742203
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

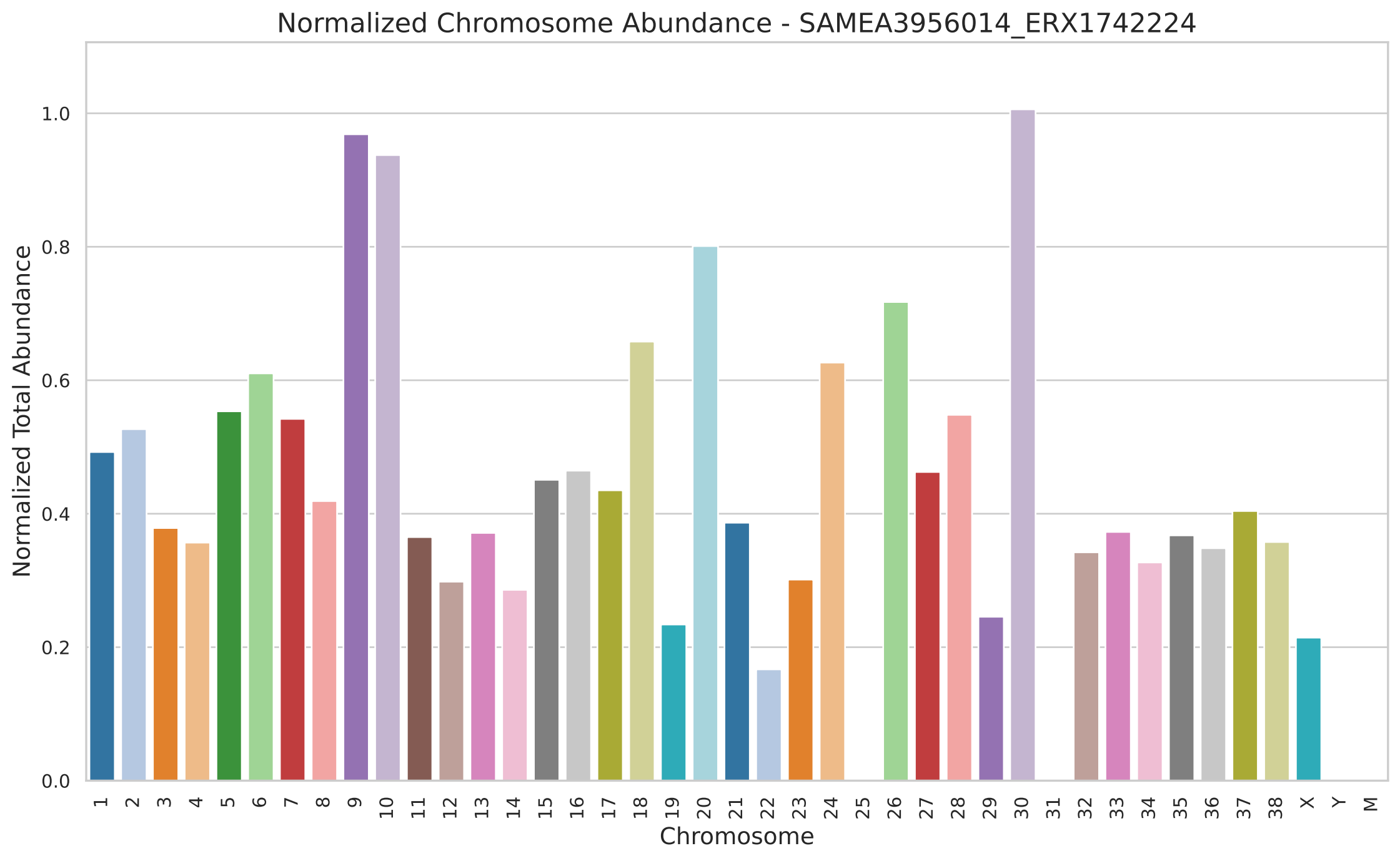

Normalized Chromosome Abundance - SAMEA3956019_ERX1742229
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

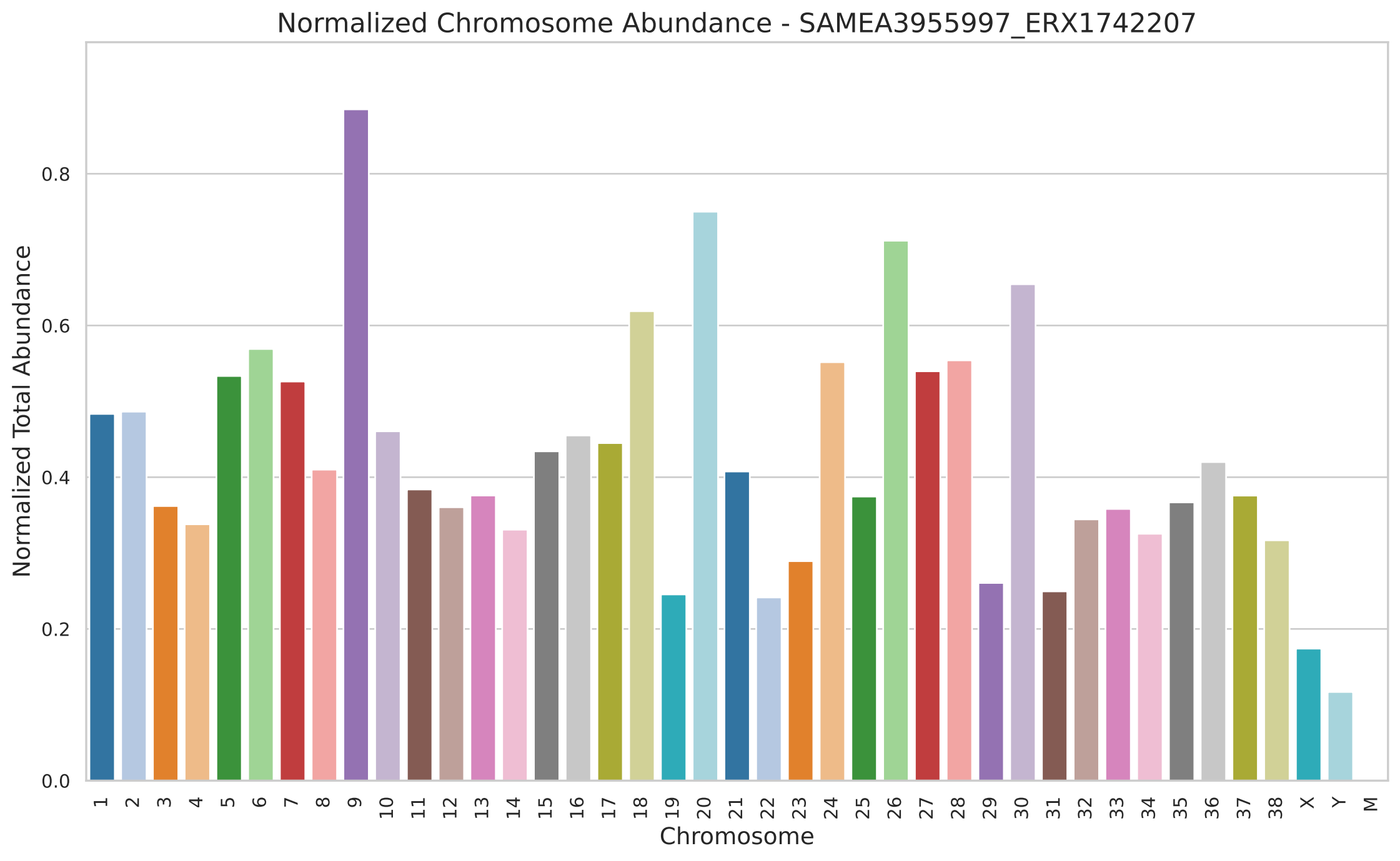

Normalized Chromosome Abundance - SAMEA3955966_ERX1742182
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

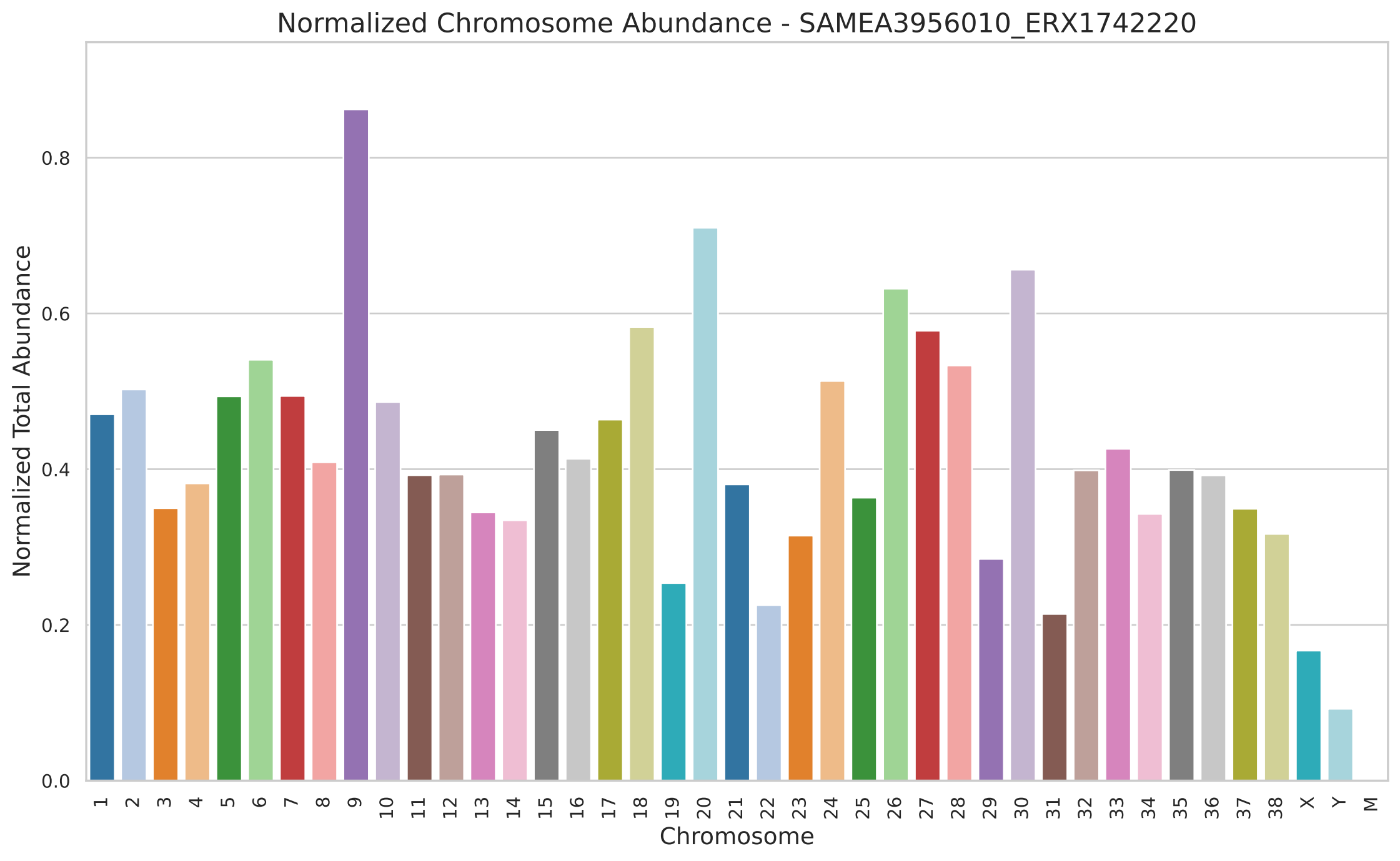

Normalized Chromosome Abundance - SAMEA3955970_ERX1742184
Normalized Total Abundance
2.0
1.8
1.5
1.2
1.0
0.8
0.5
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

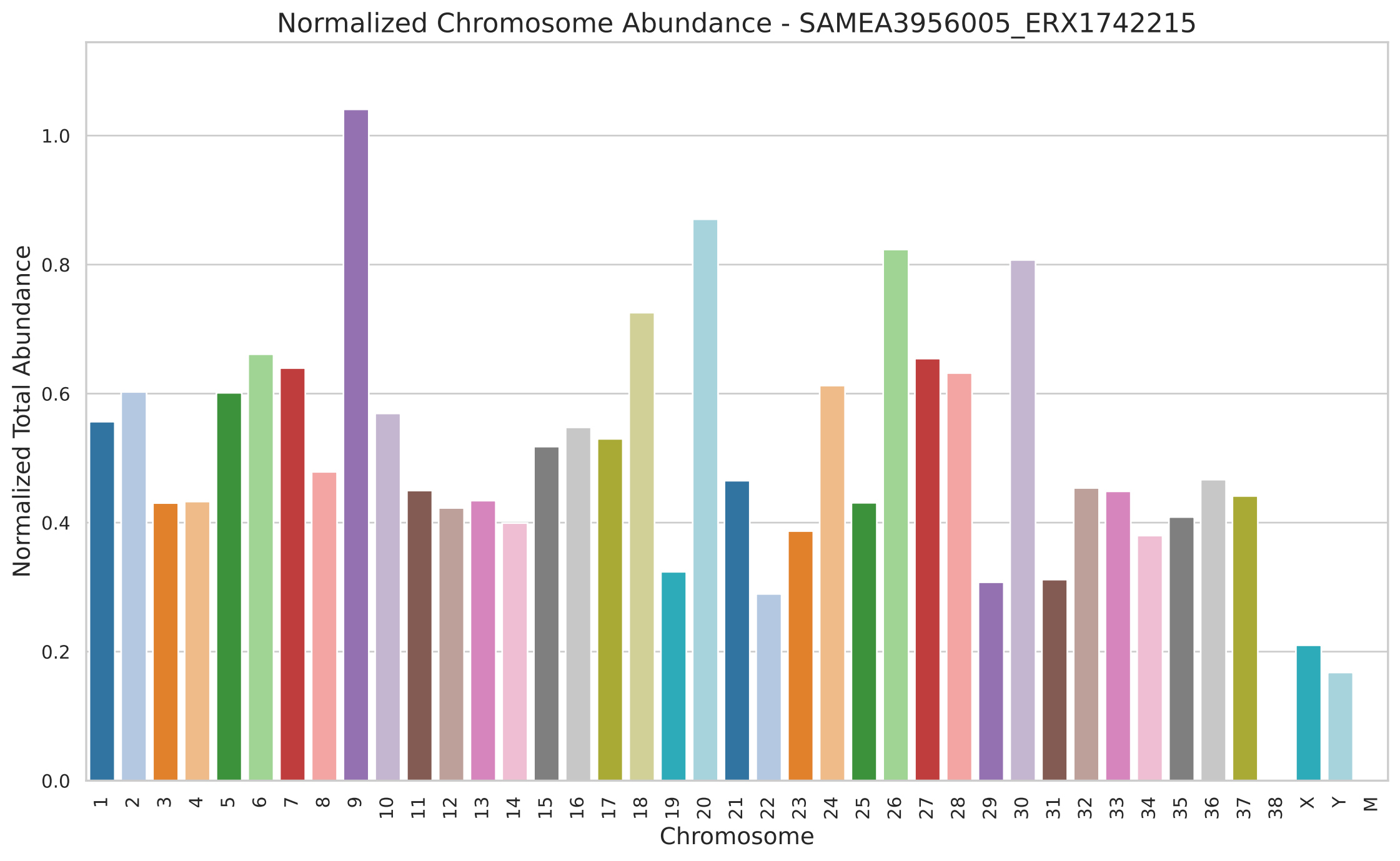

Normalized Chromosome Abundance - SAMEA3956001_ERX1742298
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

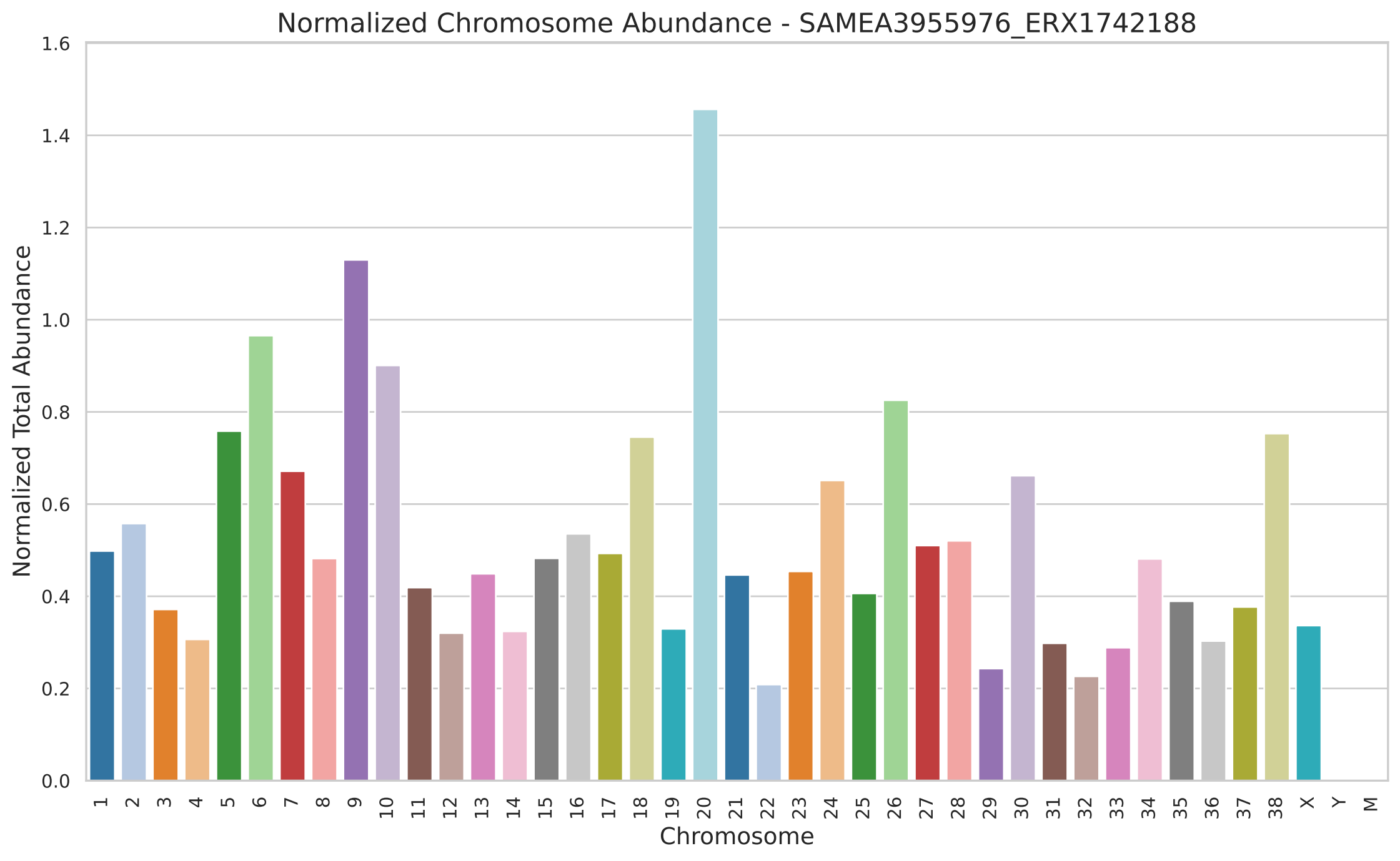

Normalized Chromosome Abundance - SAMEA3955979_ERX1742191
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

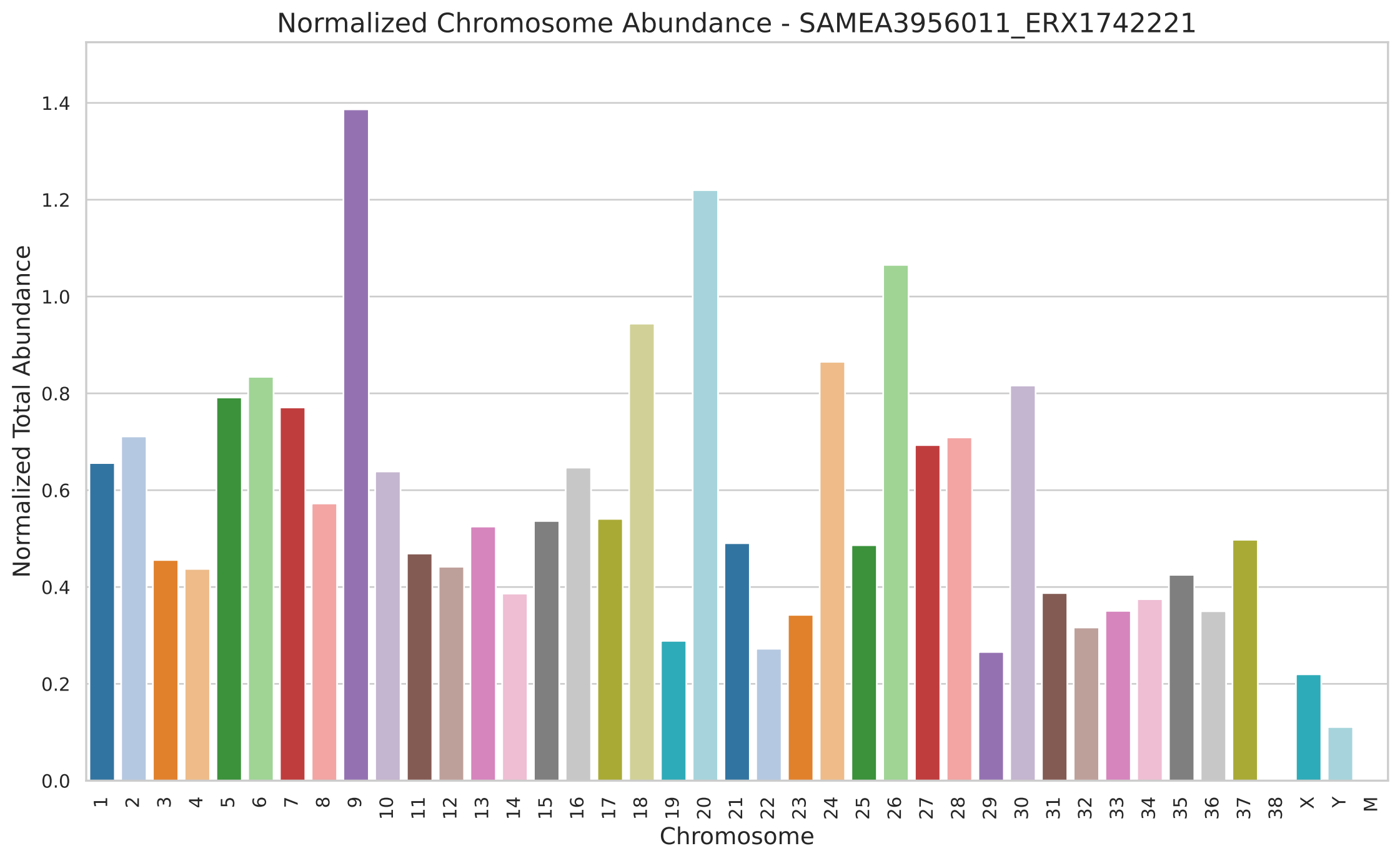

Normalized Chromosome Abundance - SAMEA3956014_ERX1742224
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

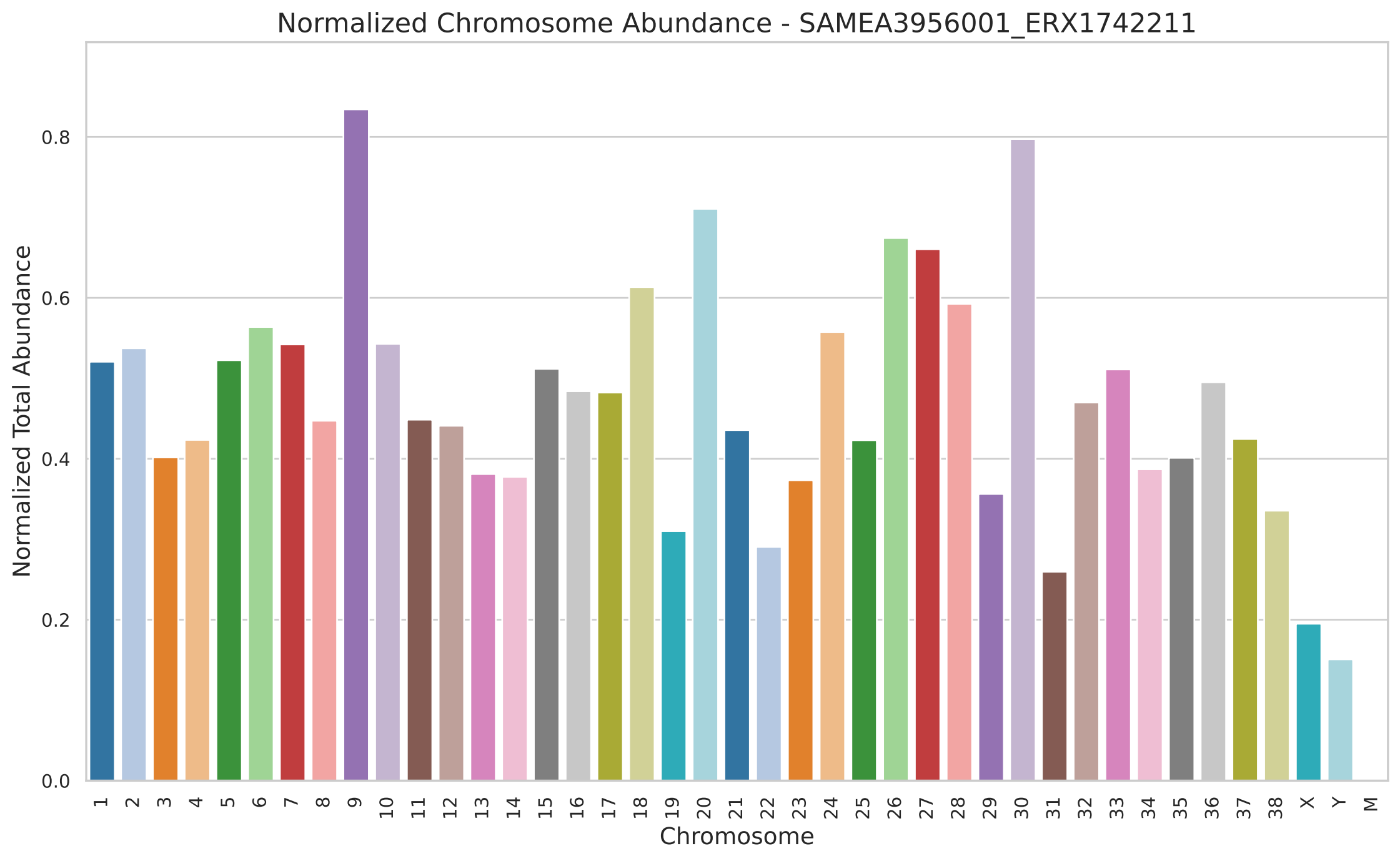

Normalized Chromosome Abundance - SAMEA3955997_ERX1742207
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

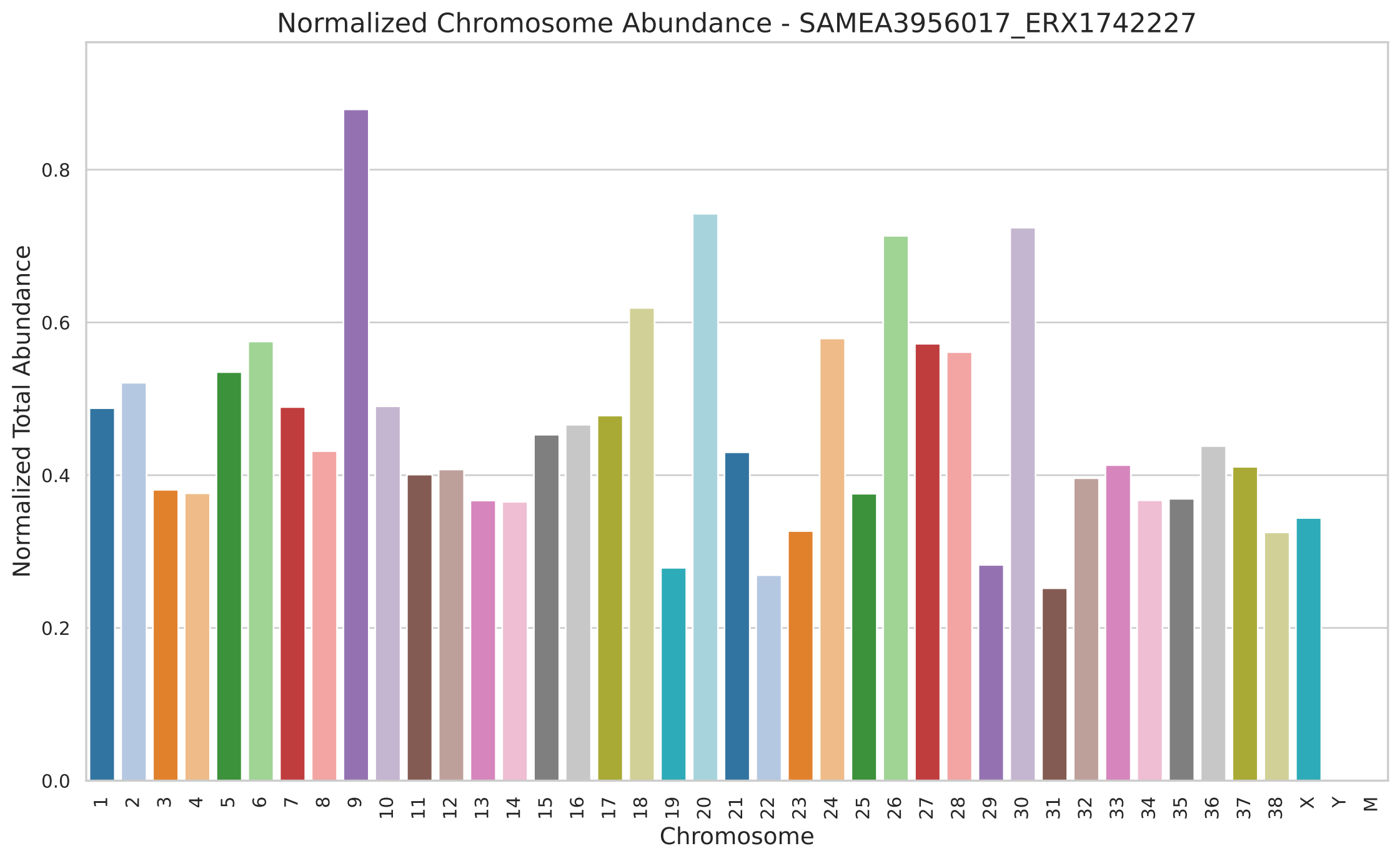

Normalized Chromosome Abundance - SAMEA3956010_ERX1742220
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

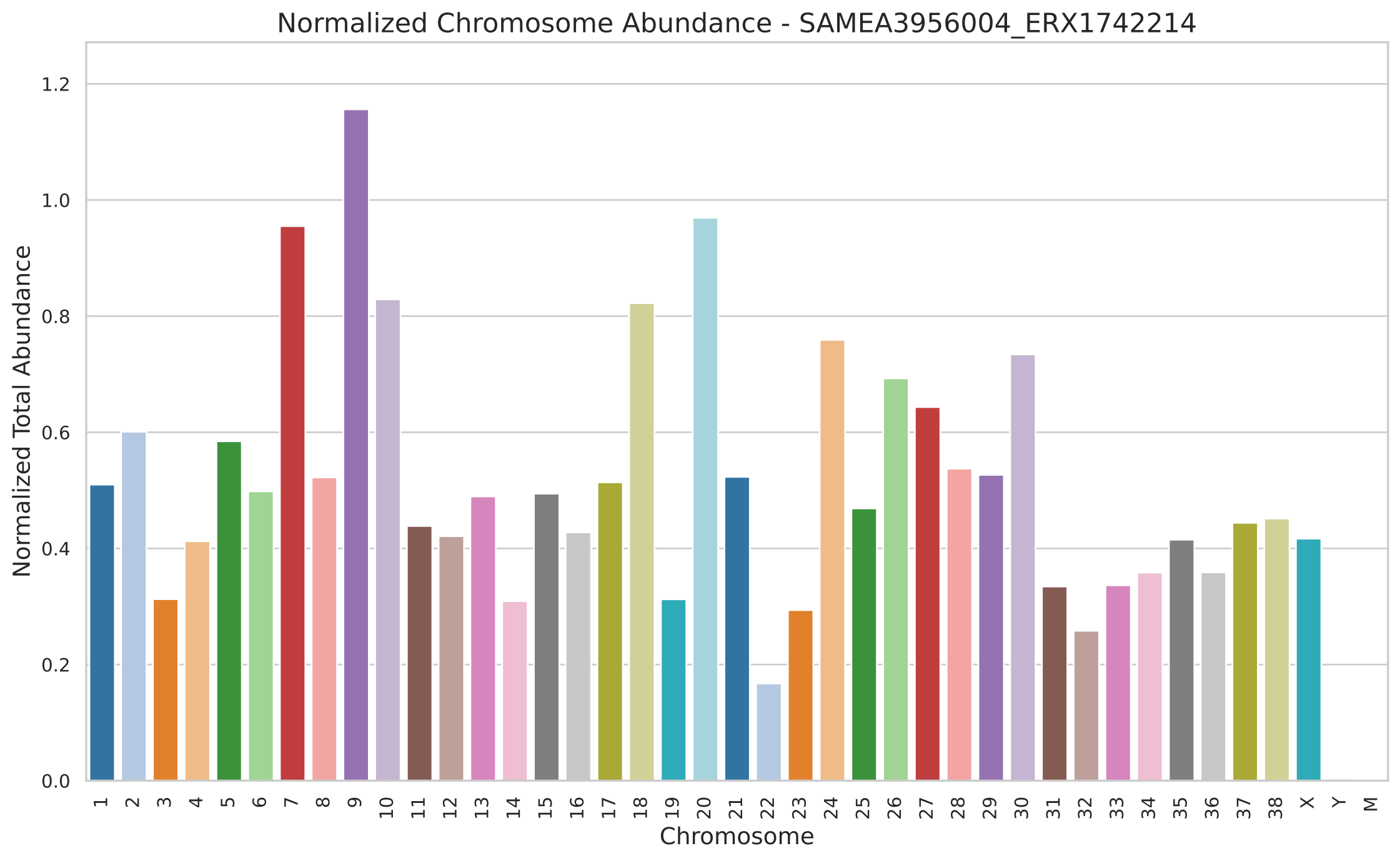

Normalized Chromosome Abundance - SAMEA3956005_ERX1742215
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

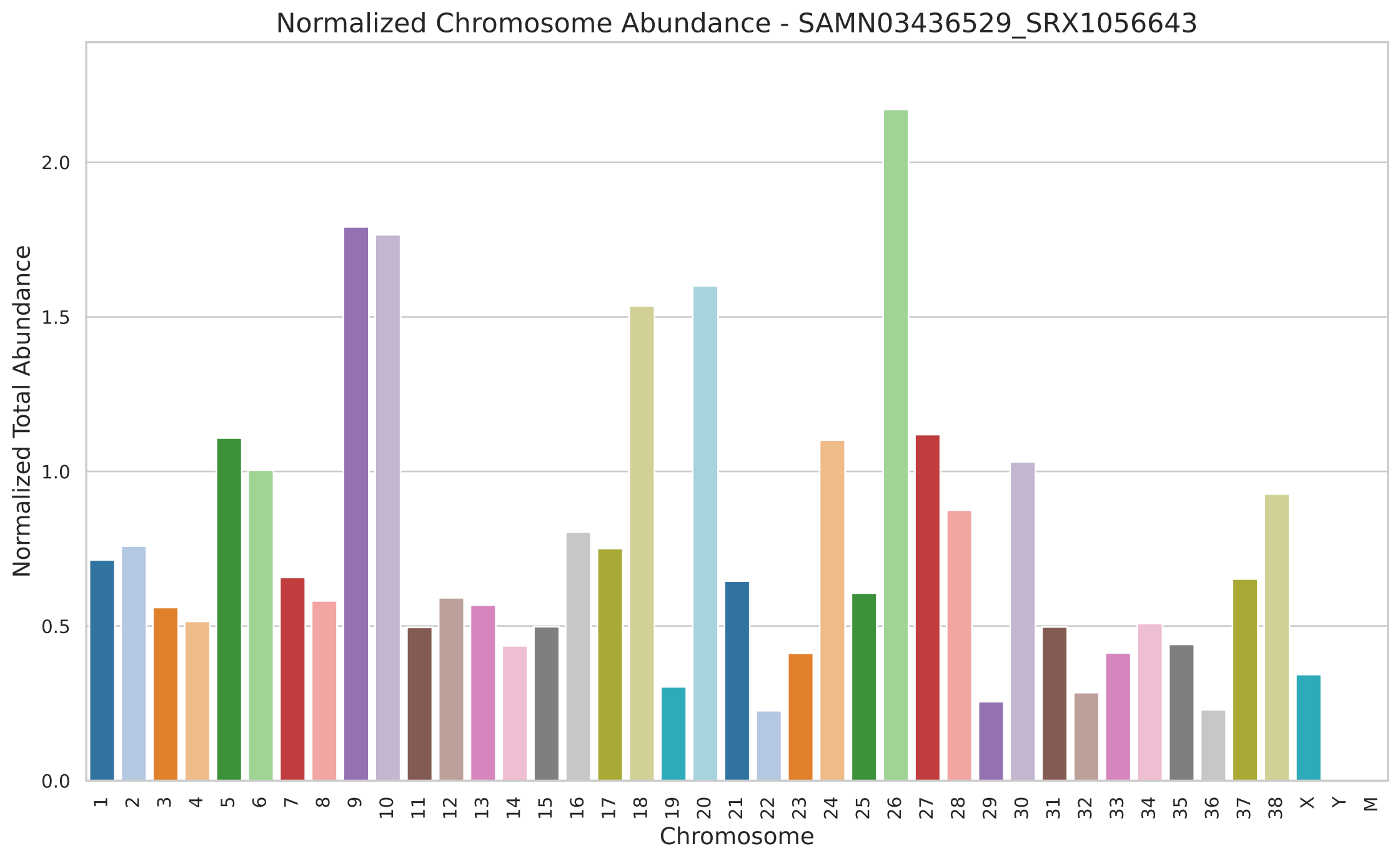

Normalized Chromosome Abundance - SAMEA3955976_ERX1742188
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

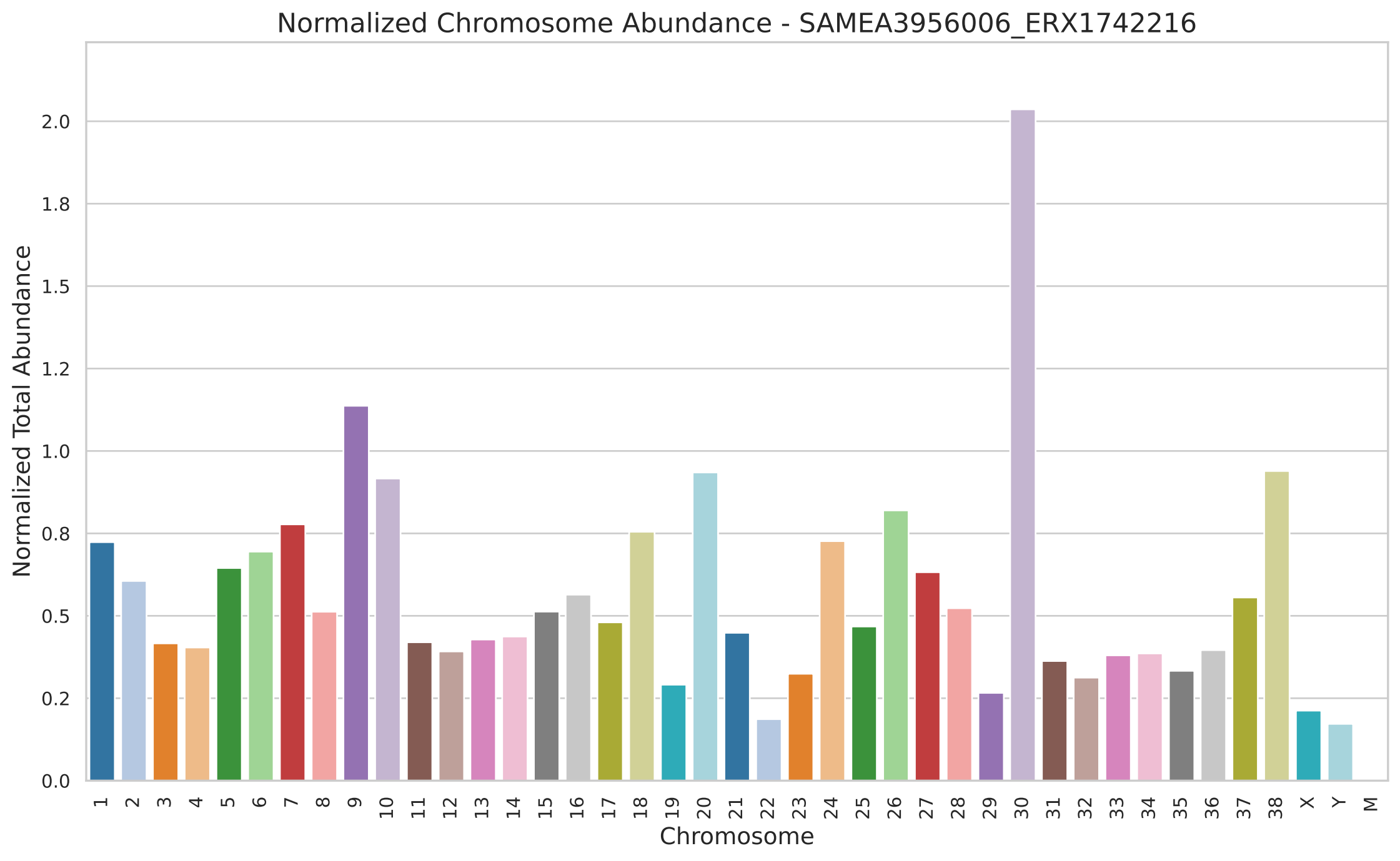

Normalized Chromosome Abundance - SAMEA3956011_ERX1742221
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

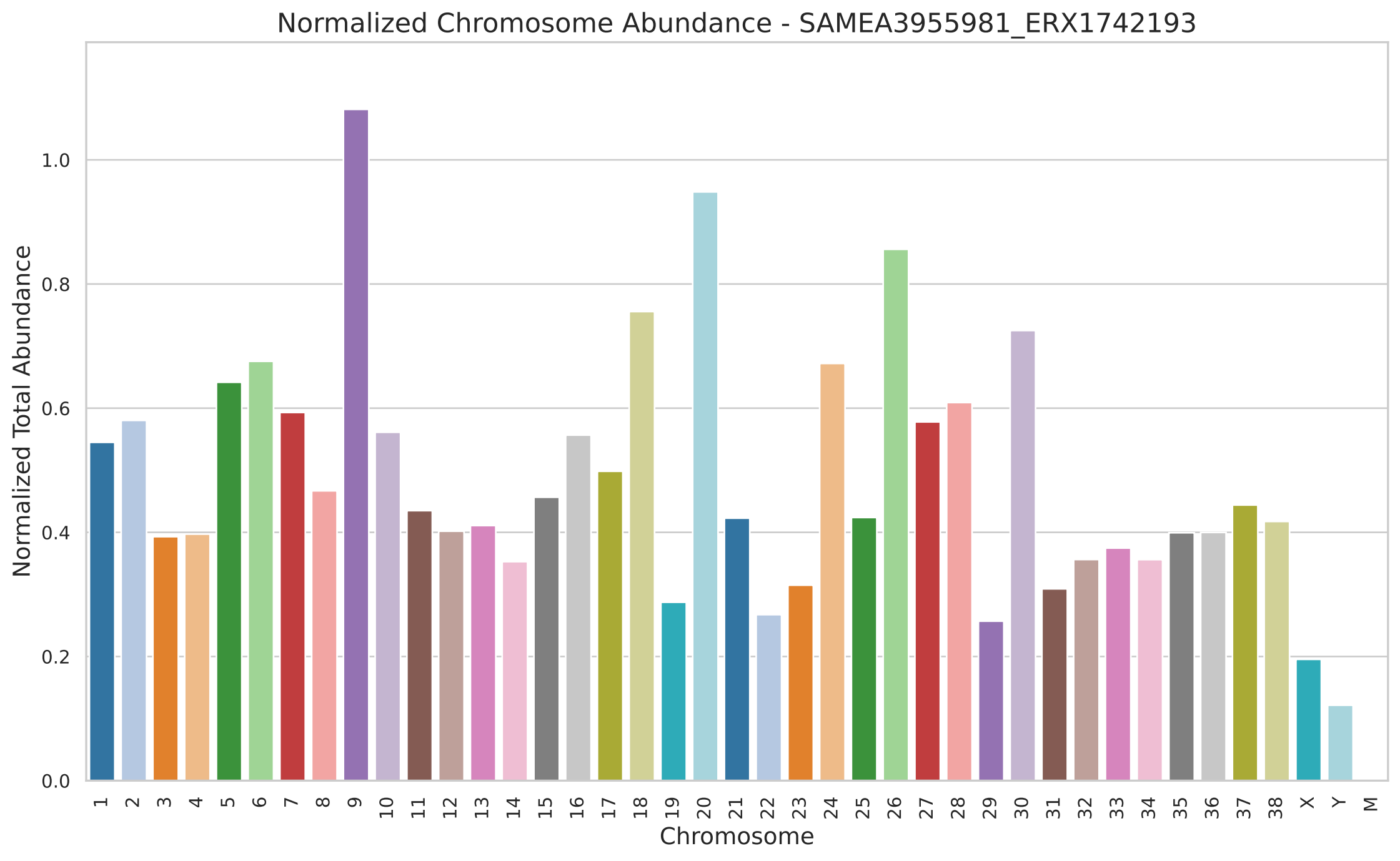

Normalized Chromosome Abundance - SAMEA3956001_ERX1742211
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

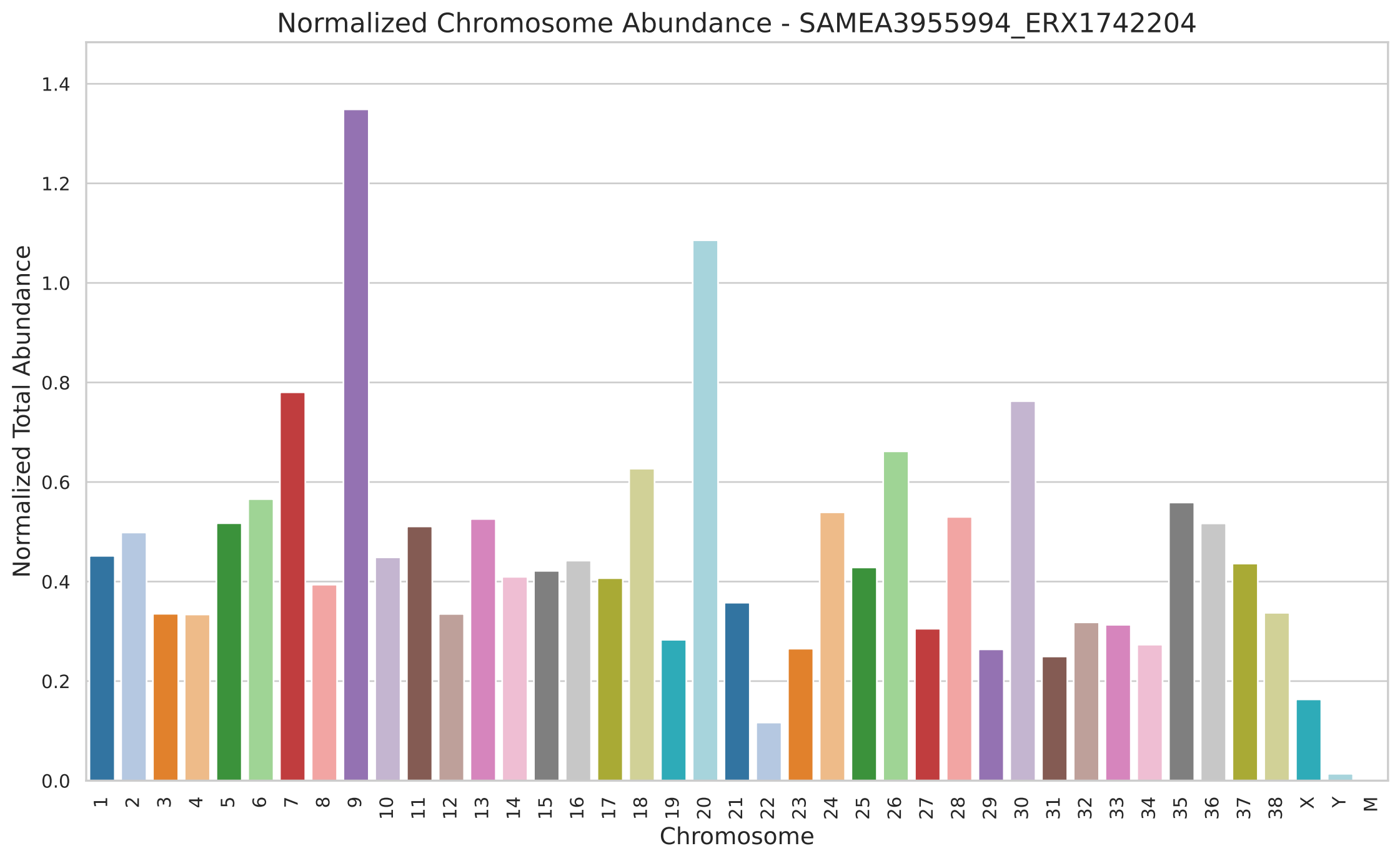

Normalized Chromosome Abundance - SAMEA3956017_ERX1742227
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

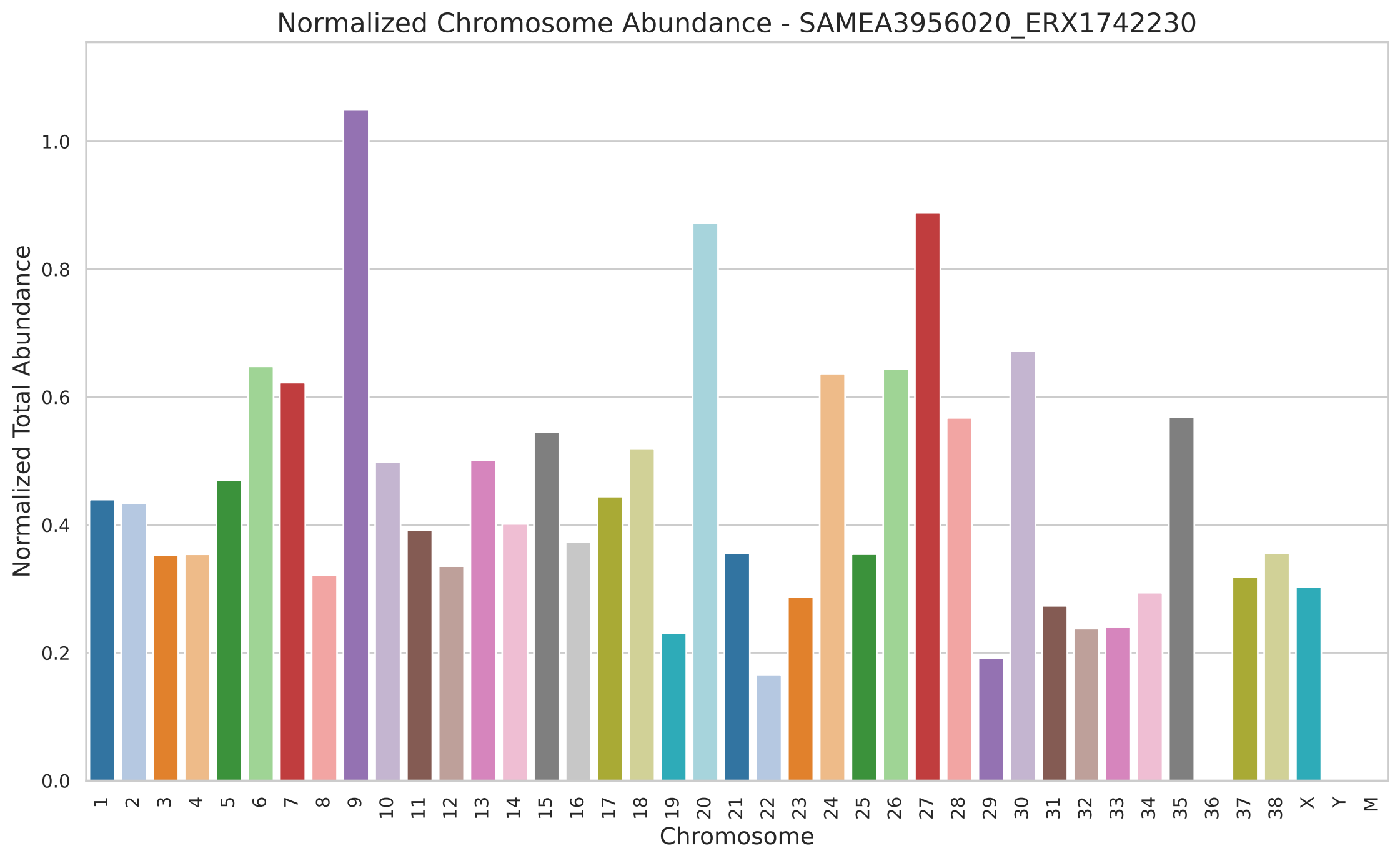

Normalized Chromosome Abundance - SAMEA3956004_ERX1742214
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

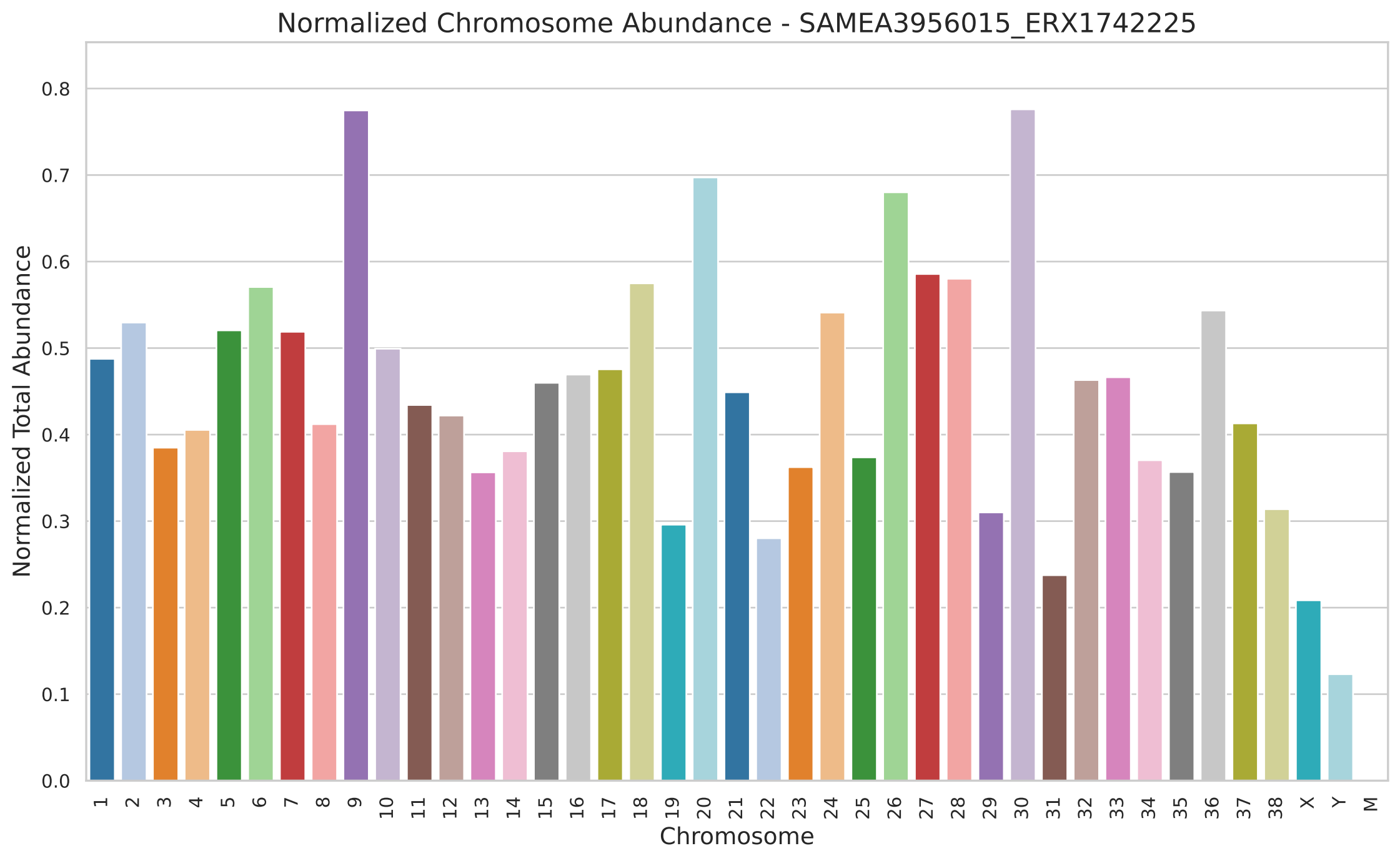

Normalized Chromosome Abundance - SAMN03436529_SRX1056643
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

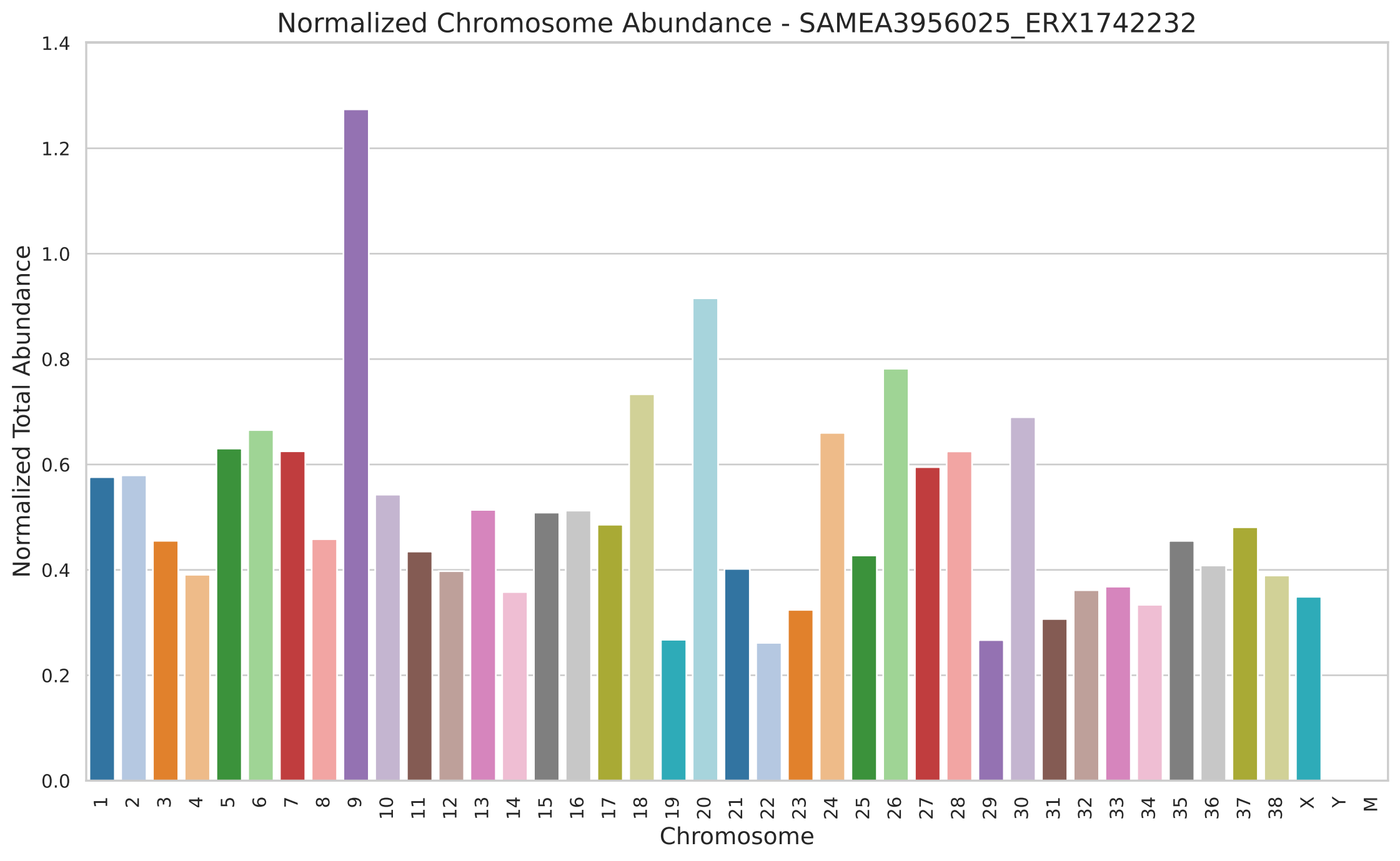

Normalized Chromosome Abundance - SAMEA3956006_ERX1742216
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

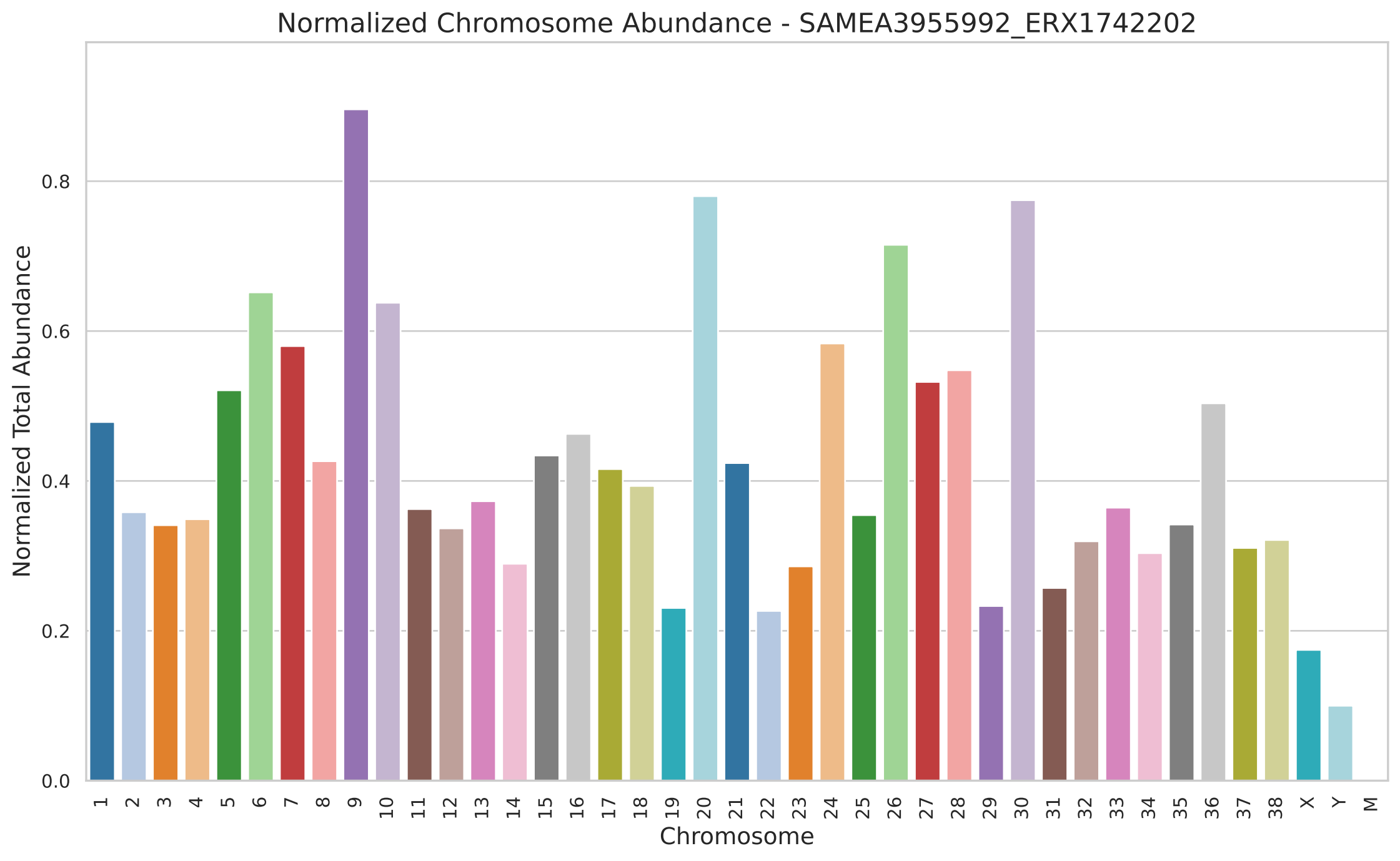

Normalized Chromosome Abundance - SAMEA3955981_ERX1742193
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

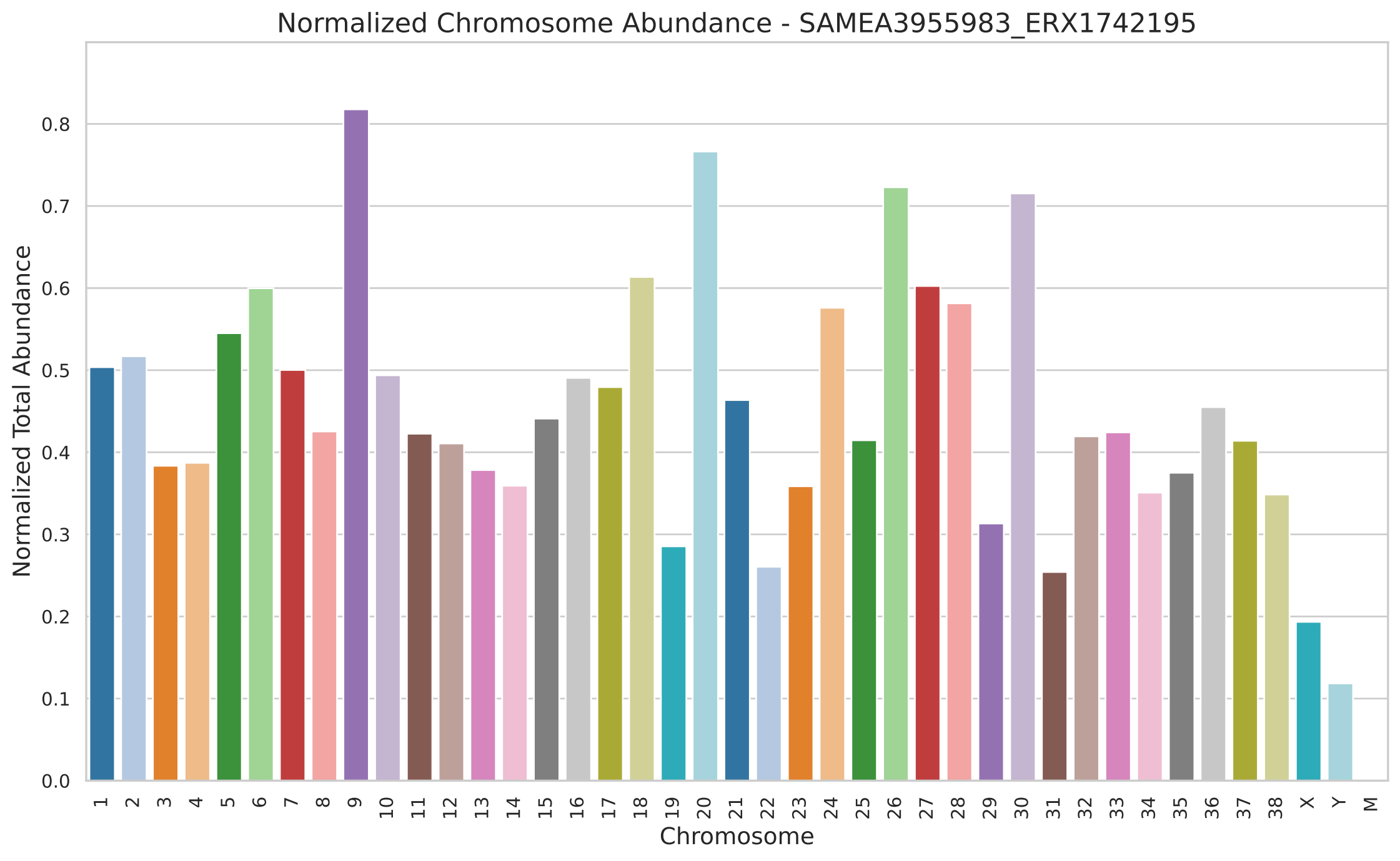

Normalized Chromosome Abundance - SAMEA3955994_ERX1742204
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

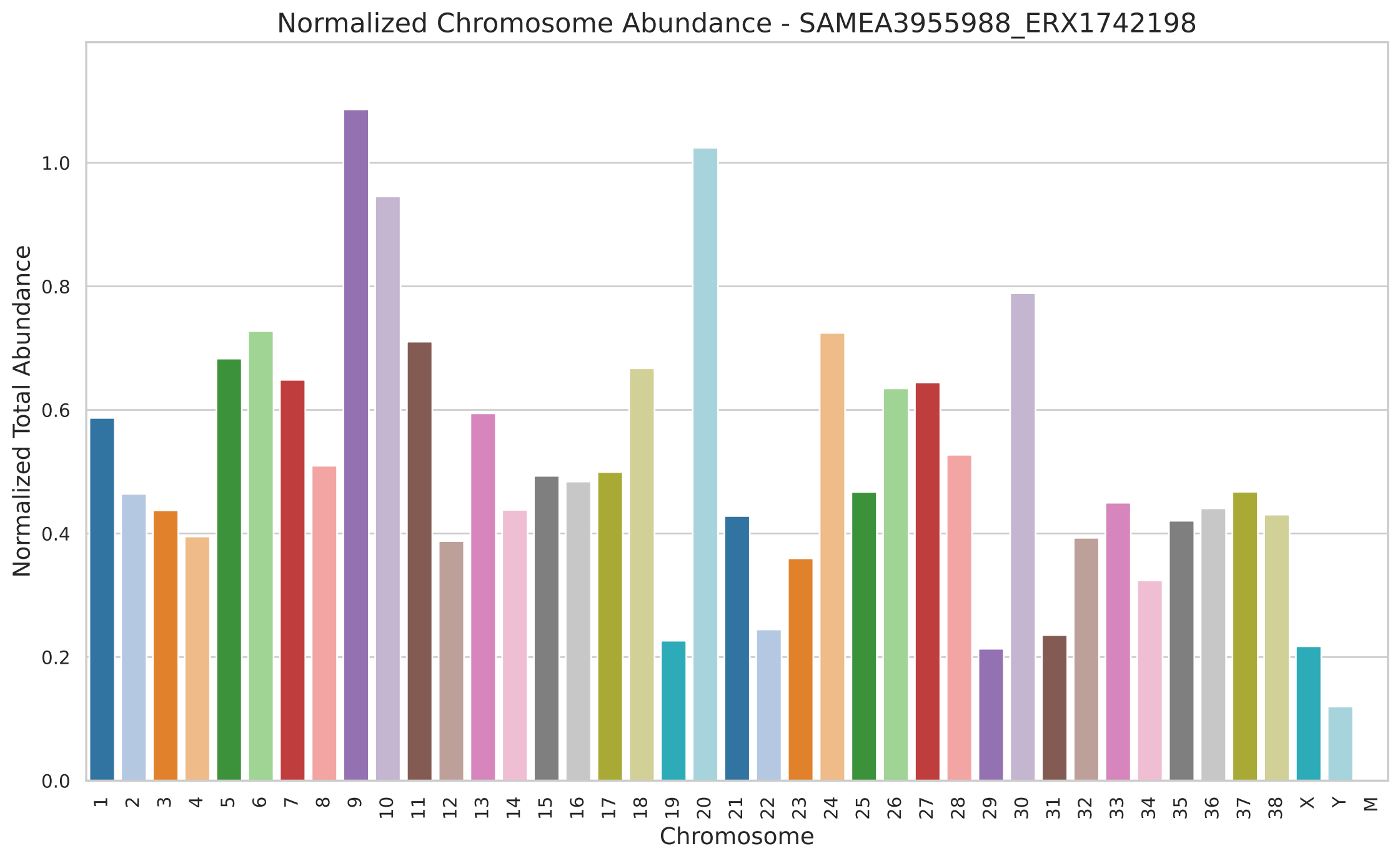

Normalized Chromosome Abundance - SAMEA3956020_ERX1742230
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

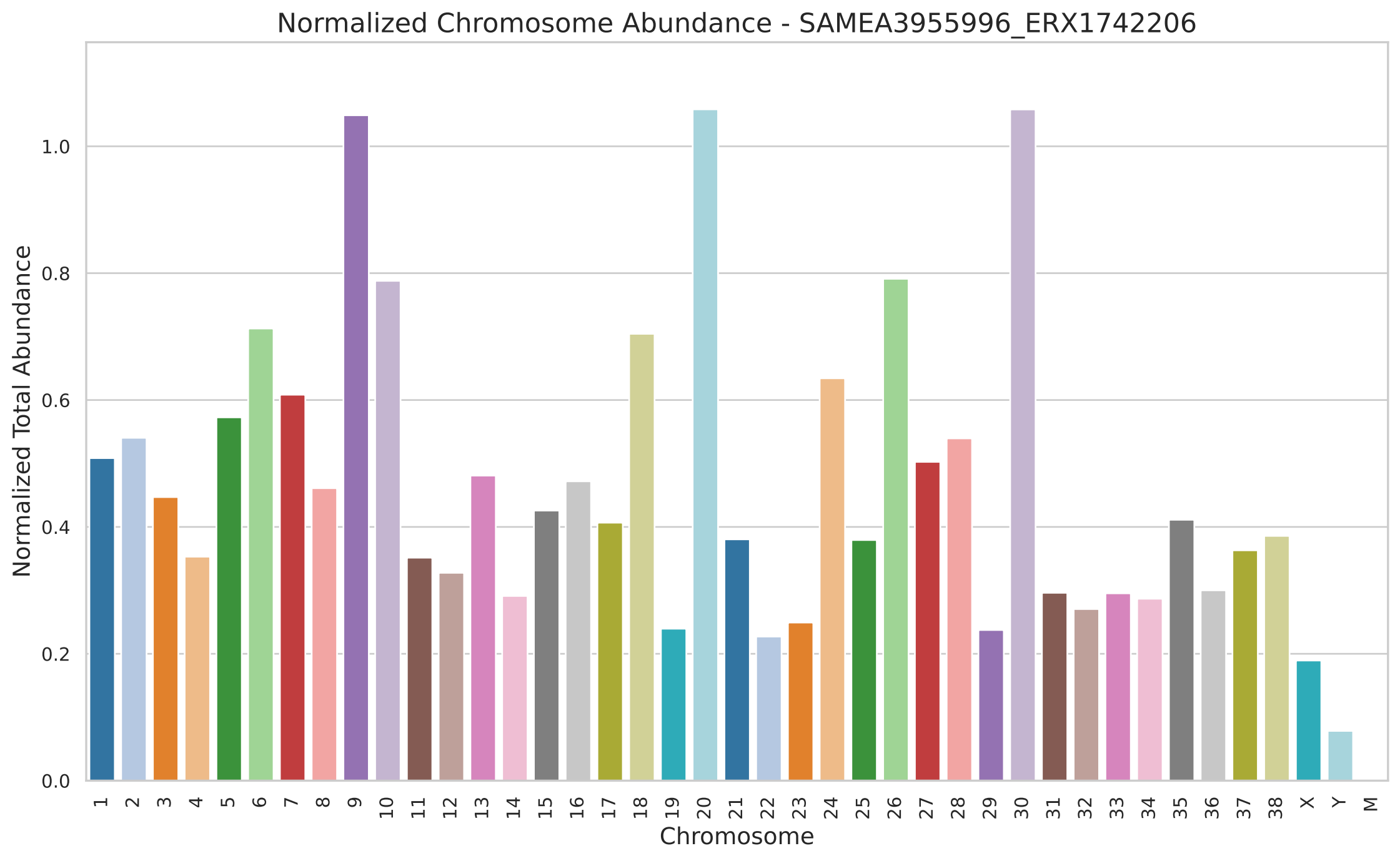

Normalized Chromosome Abundance - SAMEA3956015_ERX1742225
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

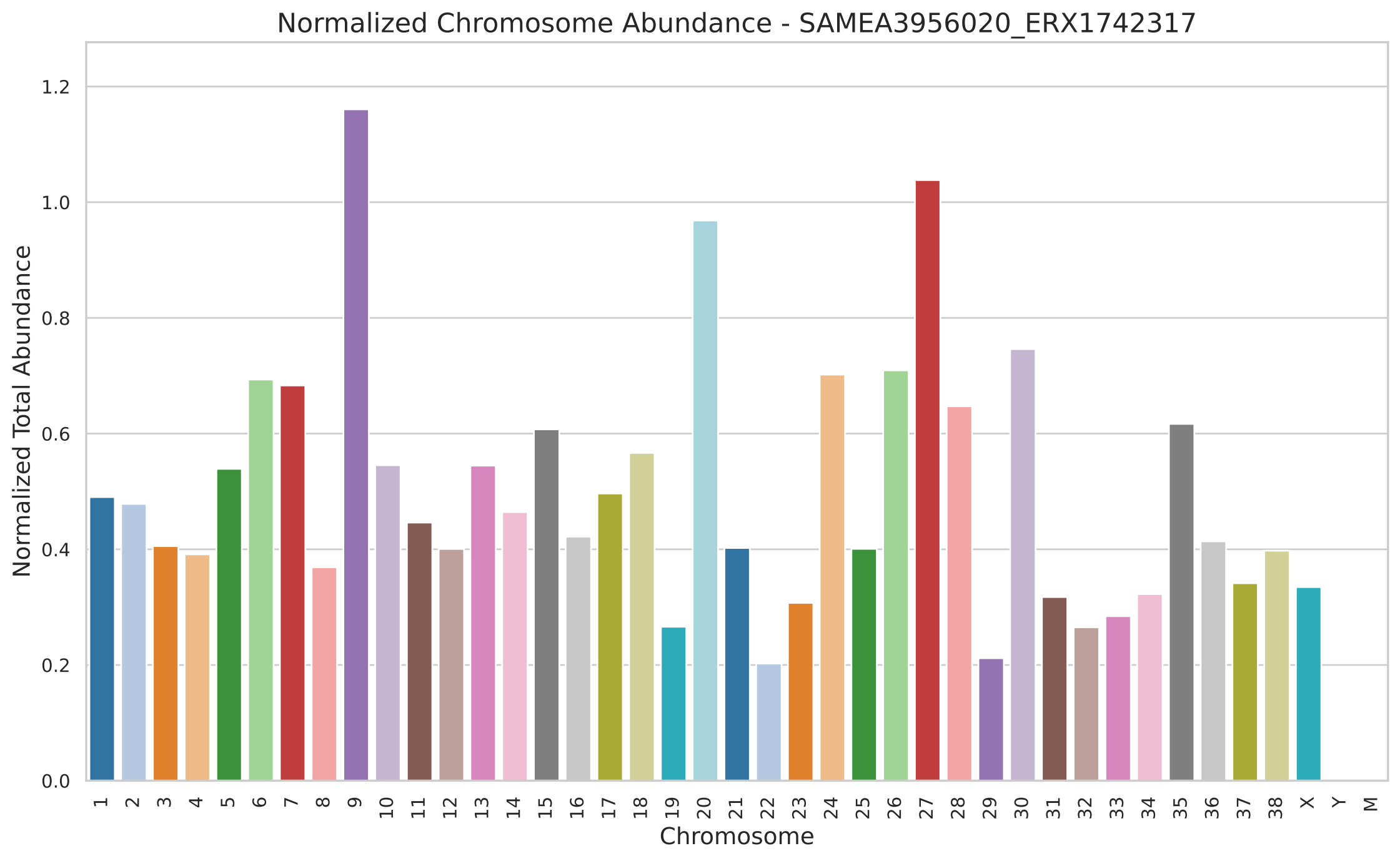

Normalized Chromosome Abundance - SAMEA3956025_ERX1742232
Normalized Total Abundance
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

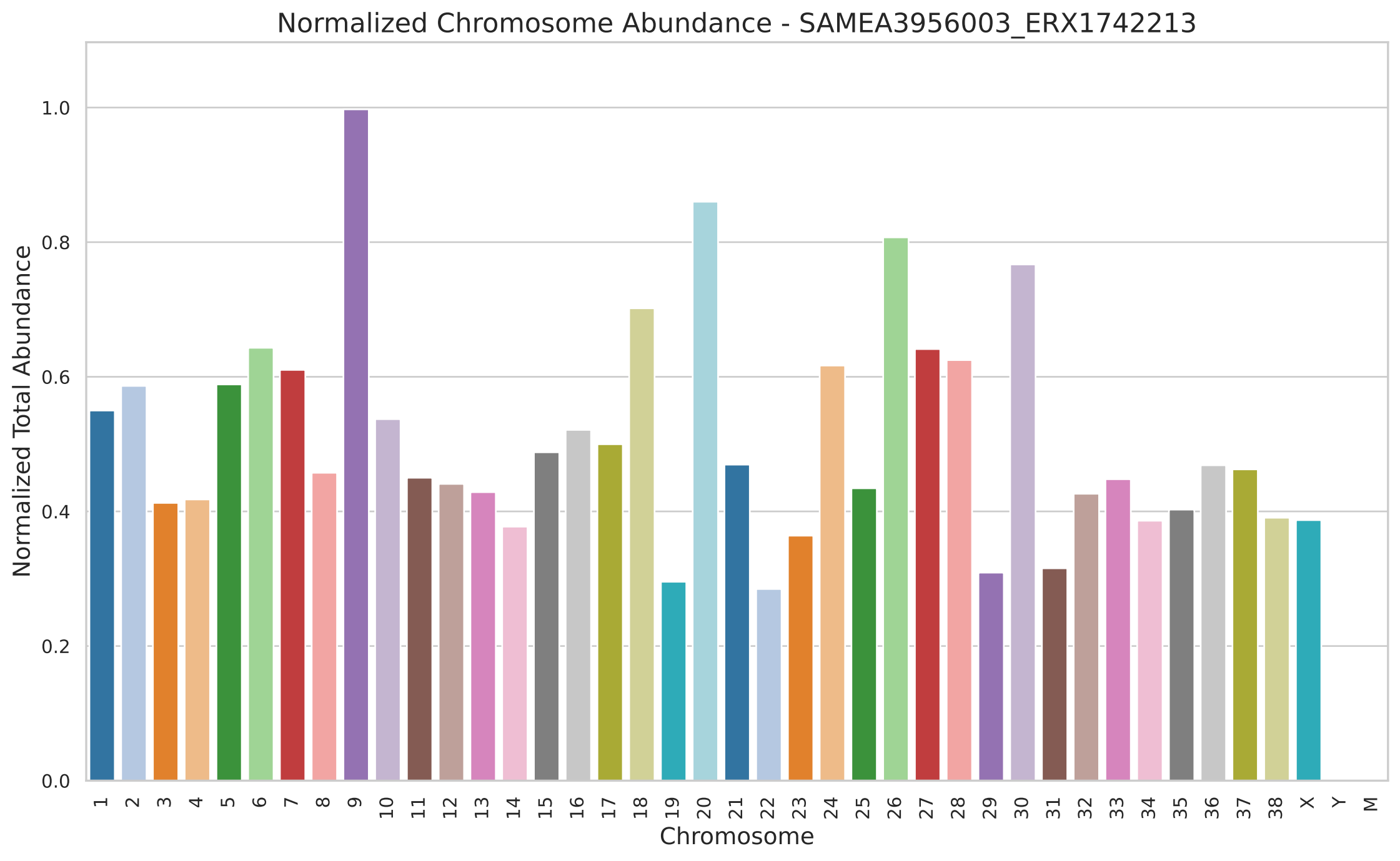

Normalized Chromosome Abundance - SAMEA3955992_ERX1742202
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

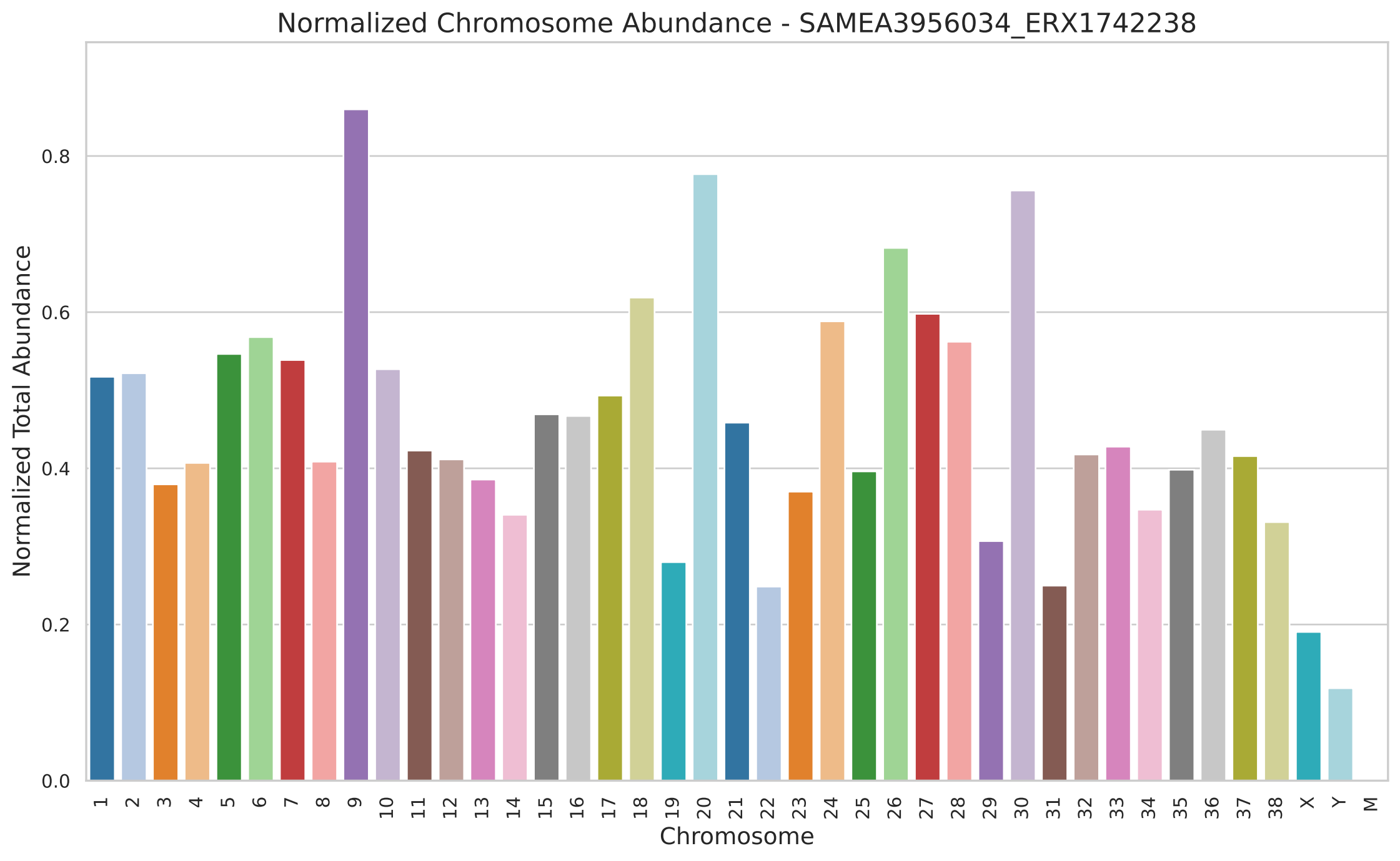

Normalized Chromosome Abundance - SAMEA3955983_ERX1742195
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

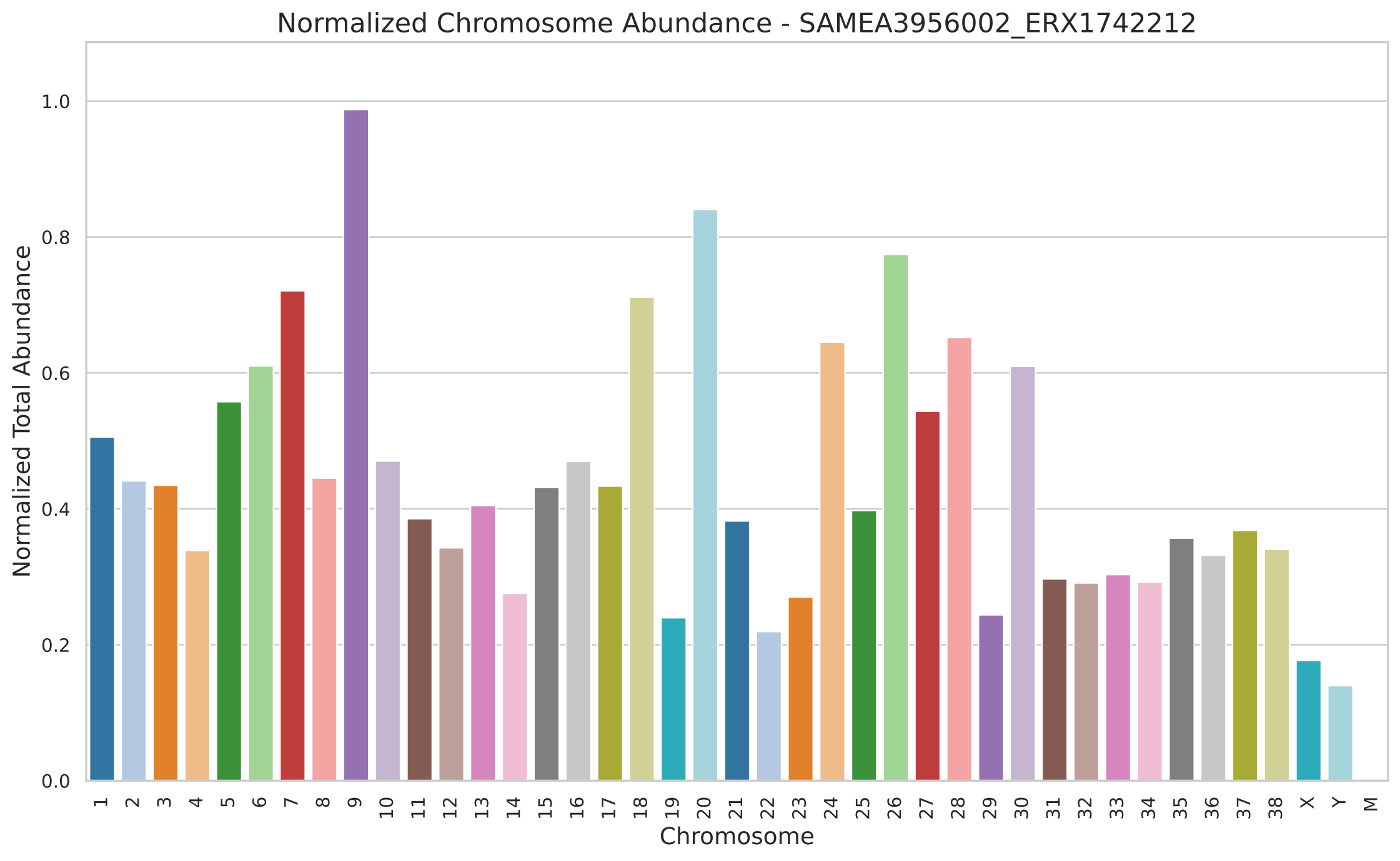

Normalized Chromosome Abundance - SAMEA3955988_ERX1742198
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

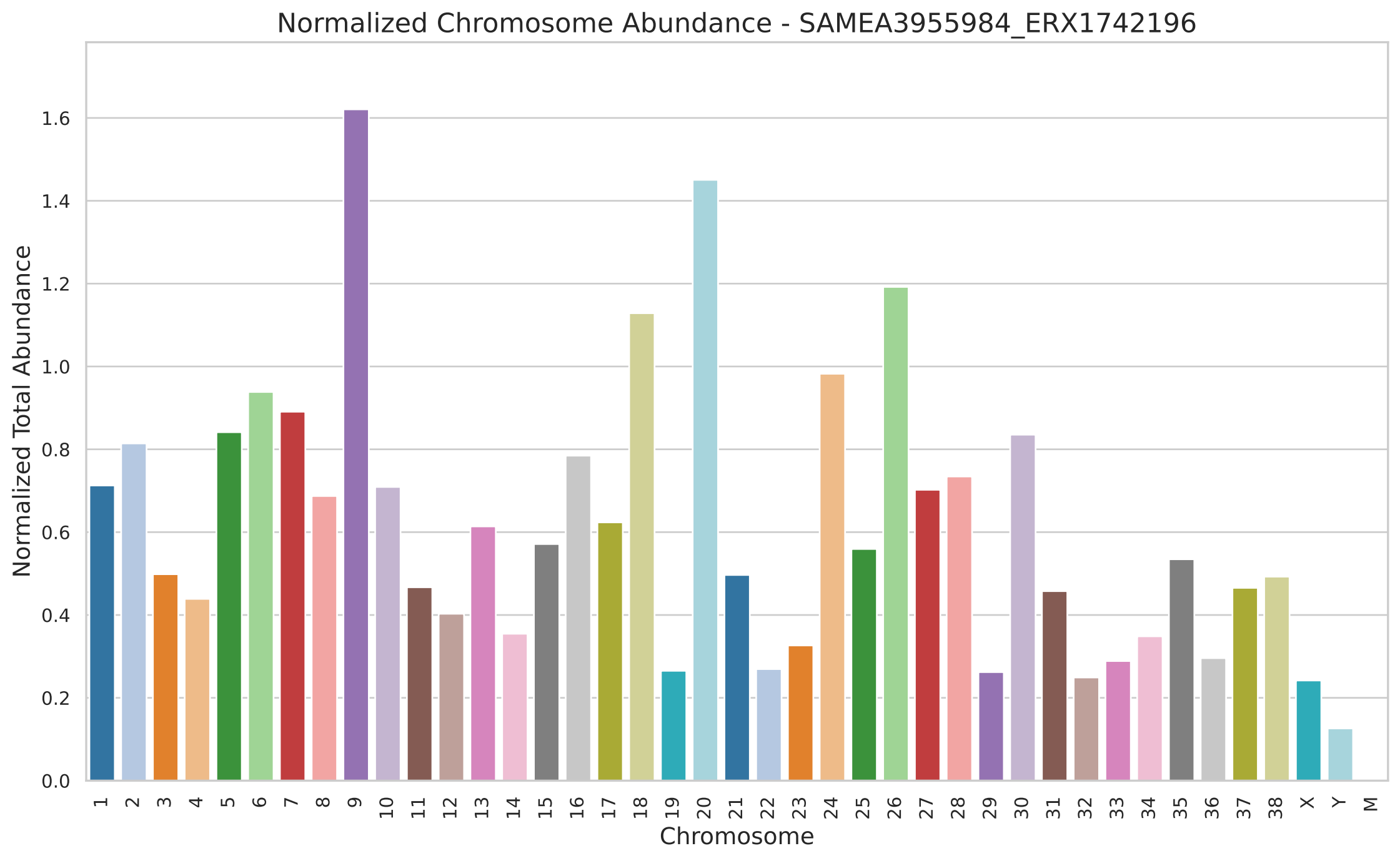

Normalized Chromosome Abundance - SAMEA3955996_ERX1742206
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

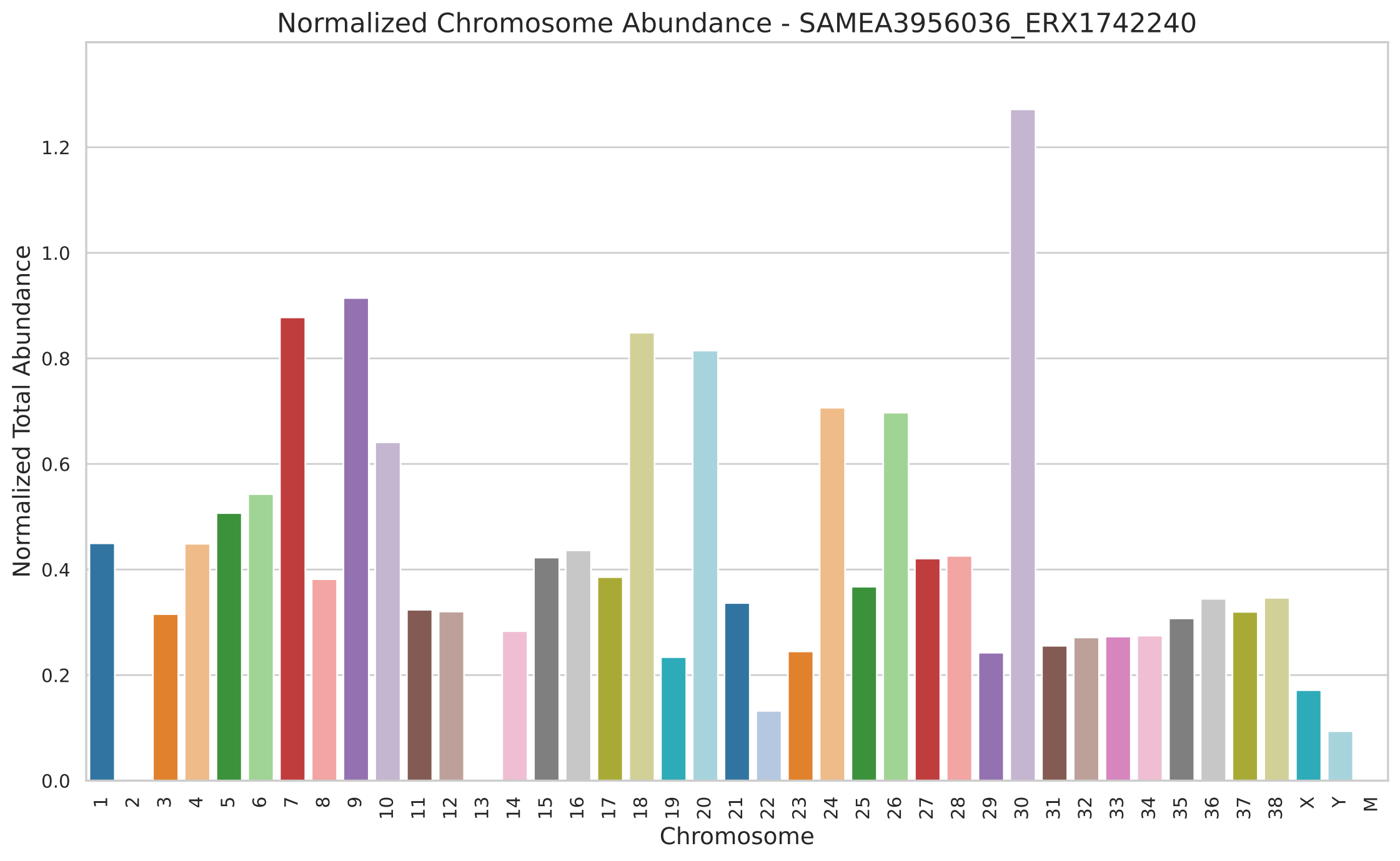

Normalized Chromosome Abundance - SAMEA3956020_ERX1742317
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

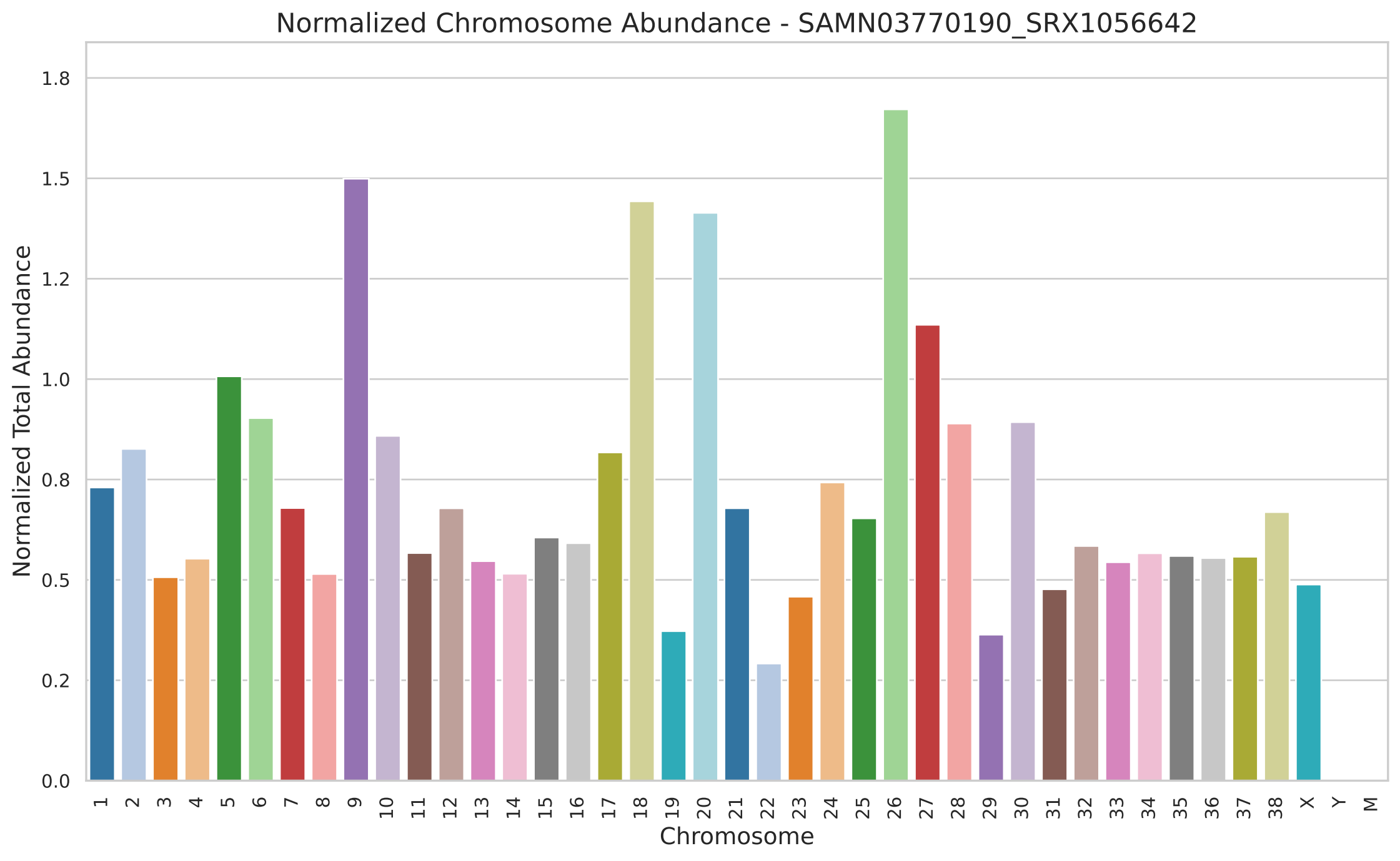

Normalized Chromosome Abundance - SAMEA3956003_ERX1742213
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

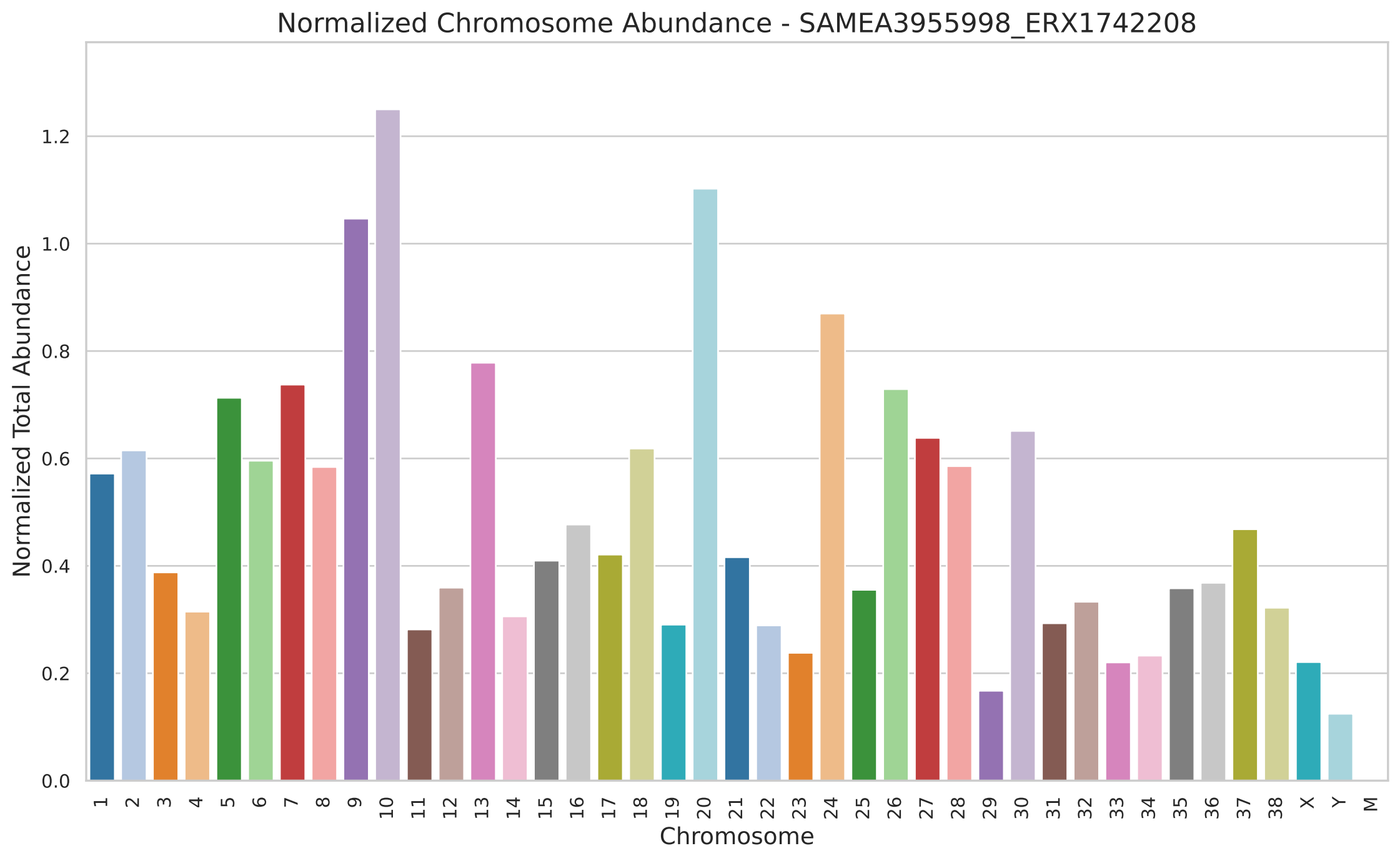

Normalized Chromosome Abundance - SAMEA3956034_ERX1742238
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

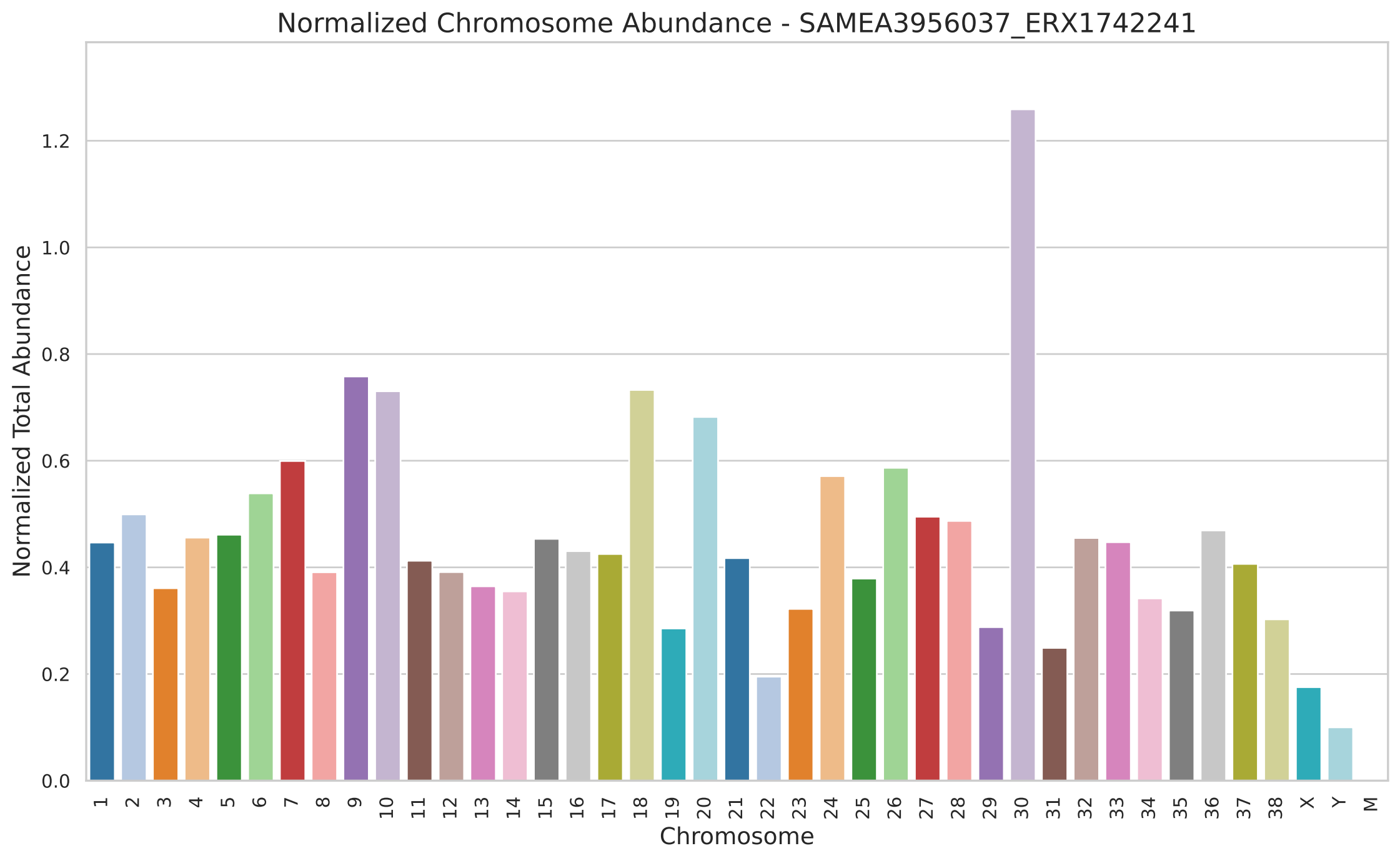

Normalized Chromosome Abundance - SAMEA3956002_ERX1742212
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

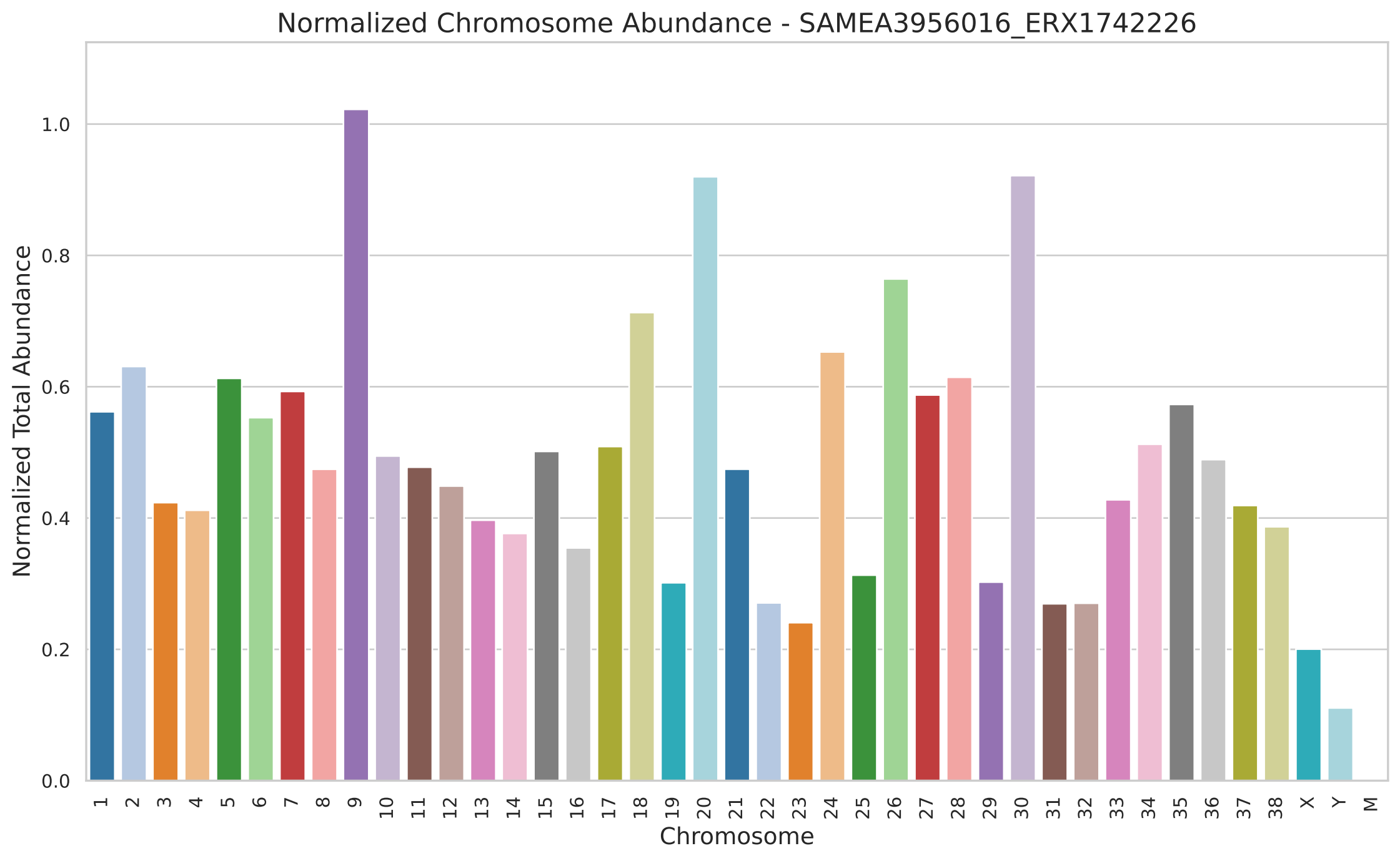

Normalized Chromosome Abundance - SAMEA3955984_ERX1742196
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

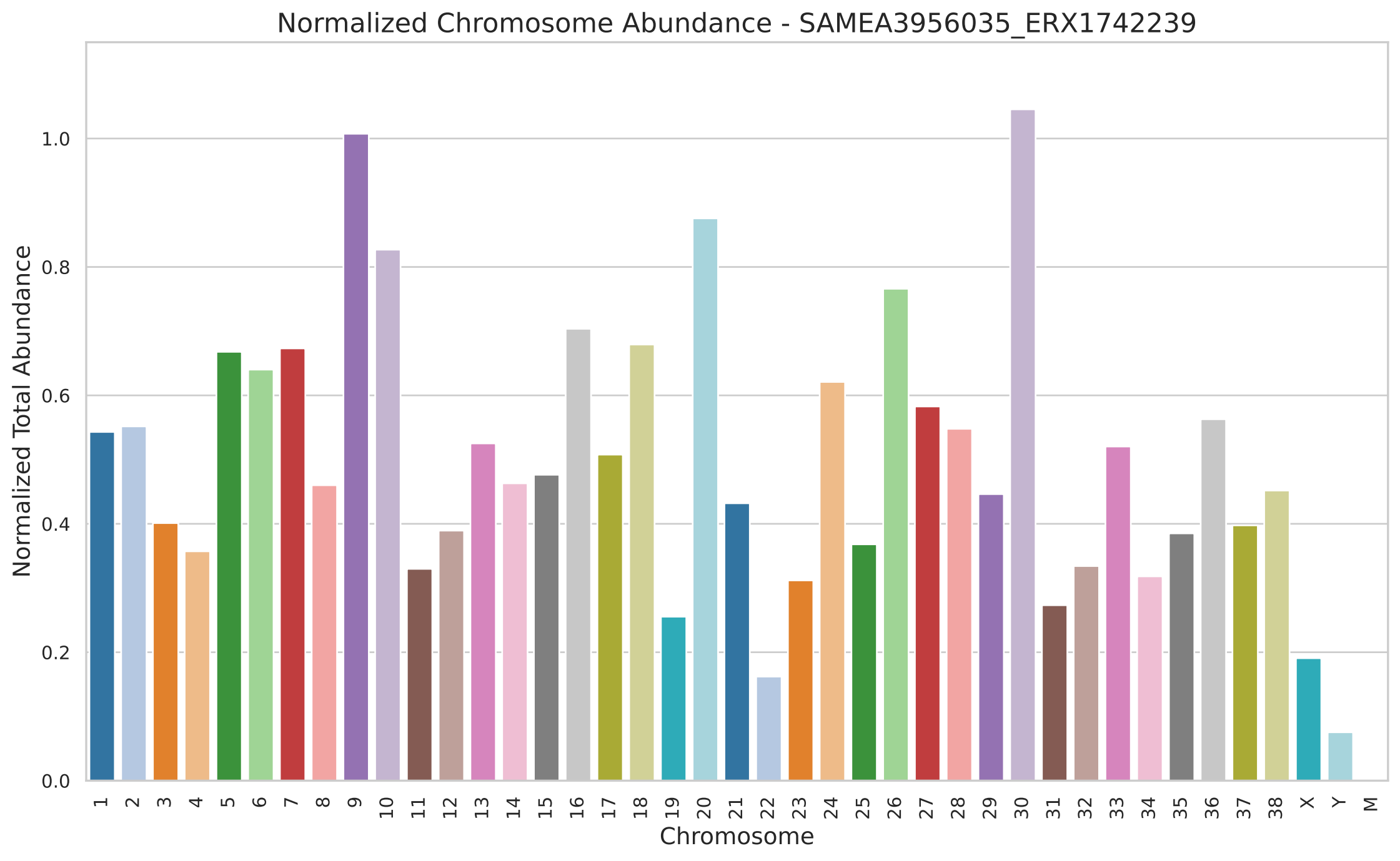

Normalized Chromosome Abundance - SAMEA3956036_ERX1742240
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

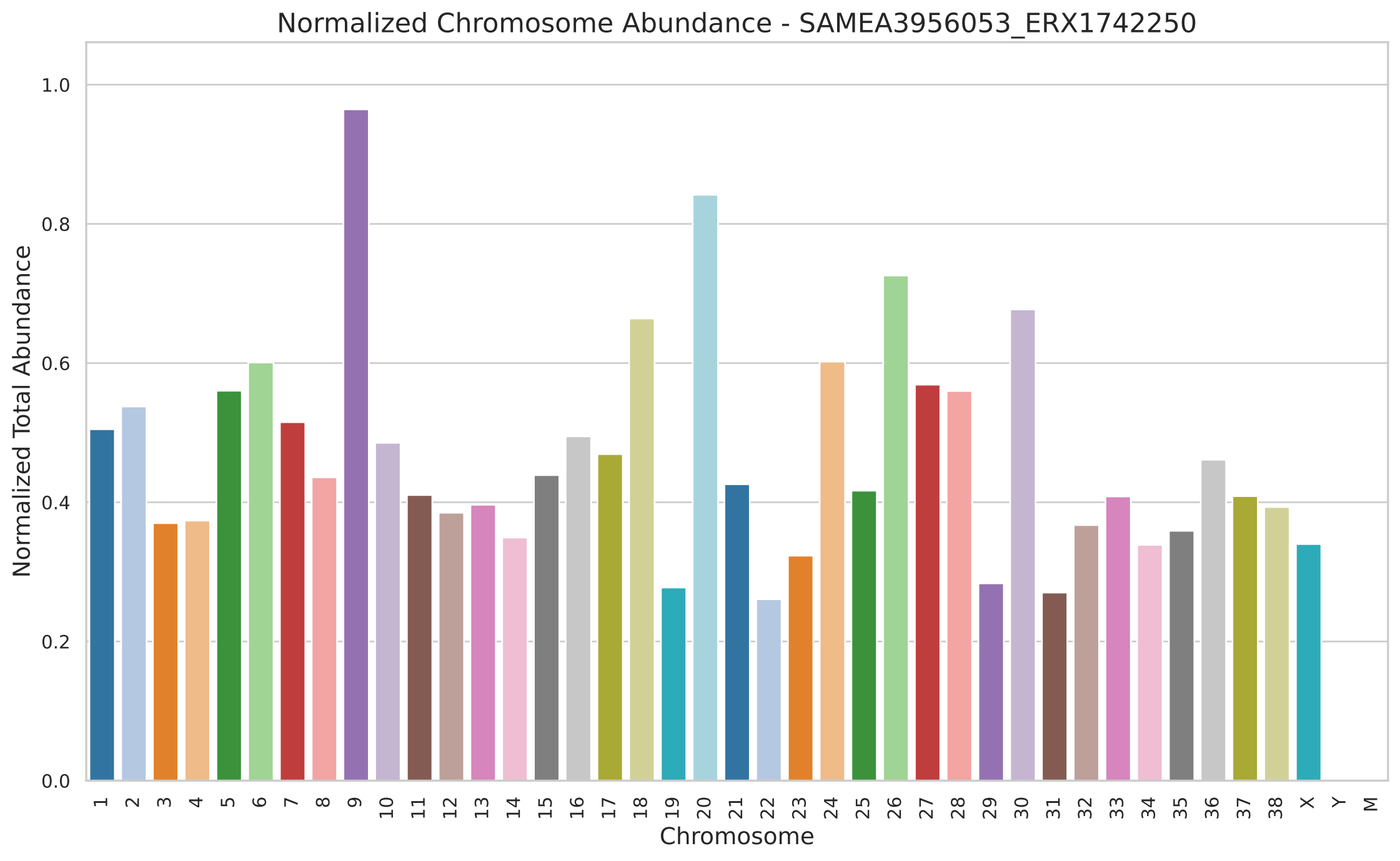

Normalized Chromosome Abundance - SAMN03770190_SRX1056642
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

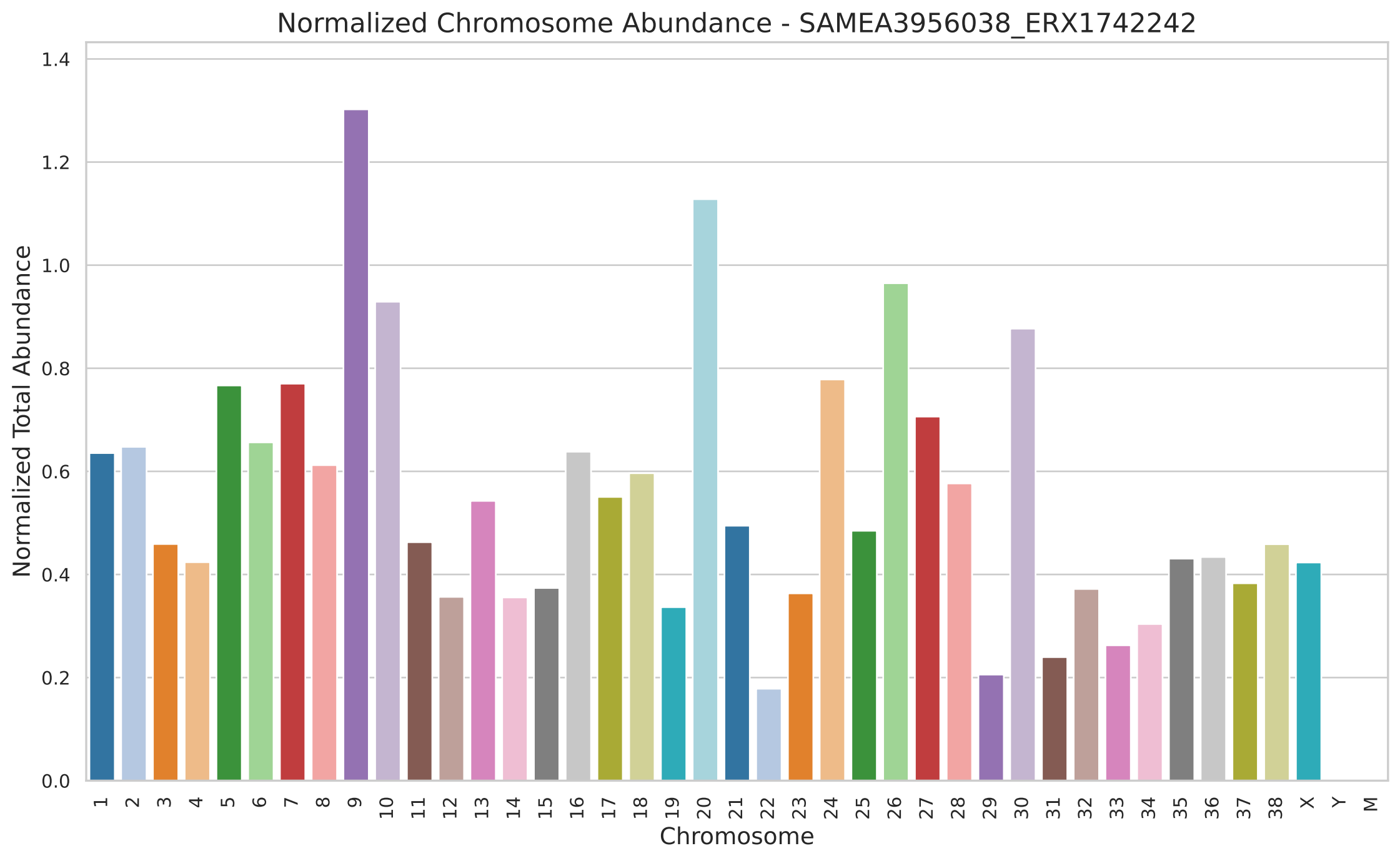

Normalized Chromosome Abundance - SAMEA3955998_ERX1742208
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

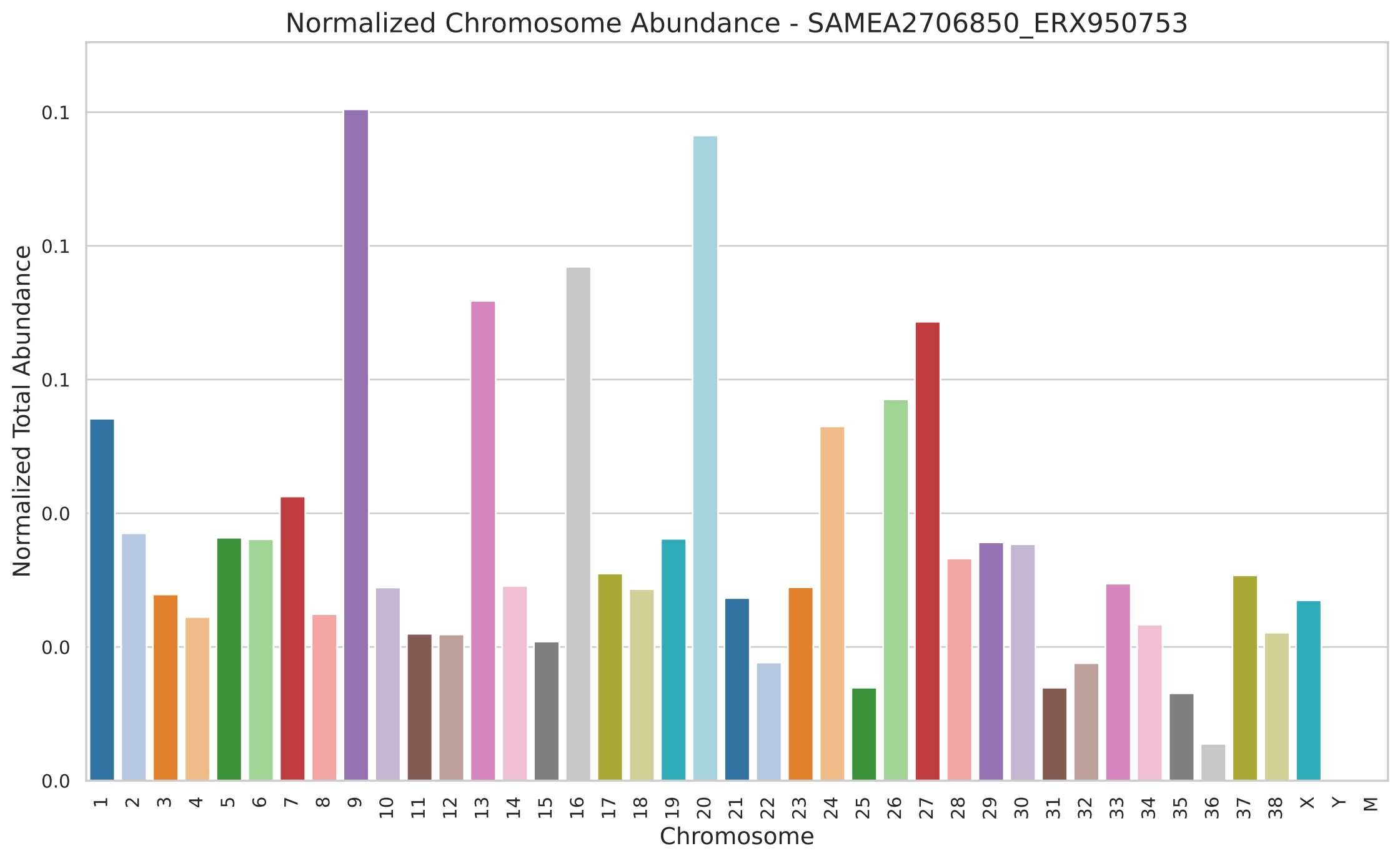

Normalized Chromosome Abundance - SAMEA3956037_ERX1742241
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

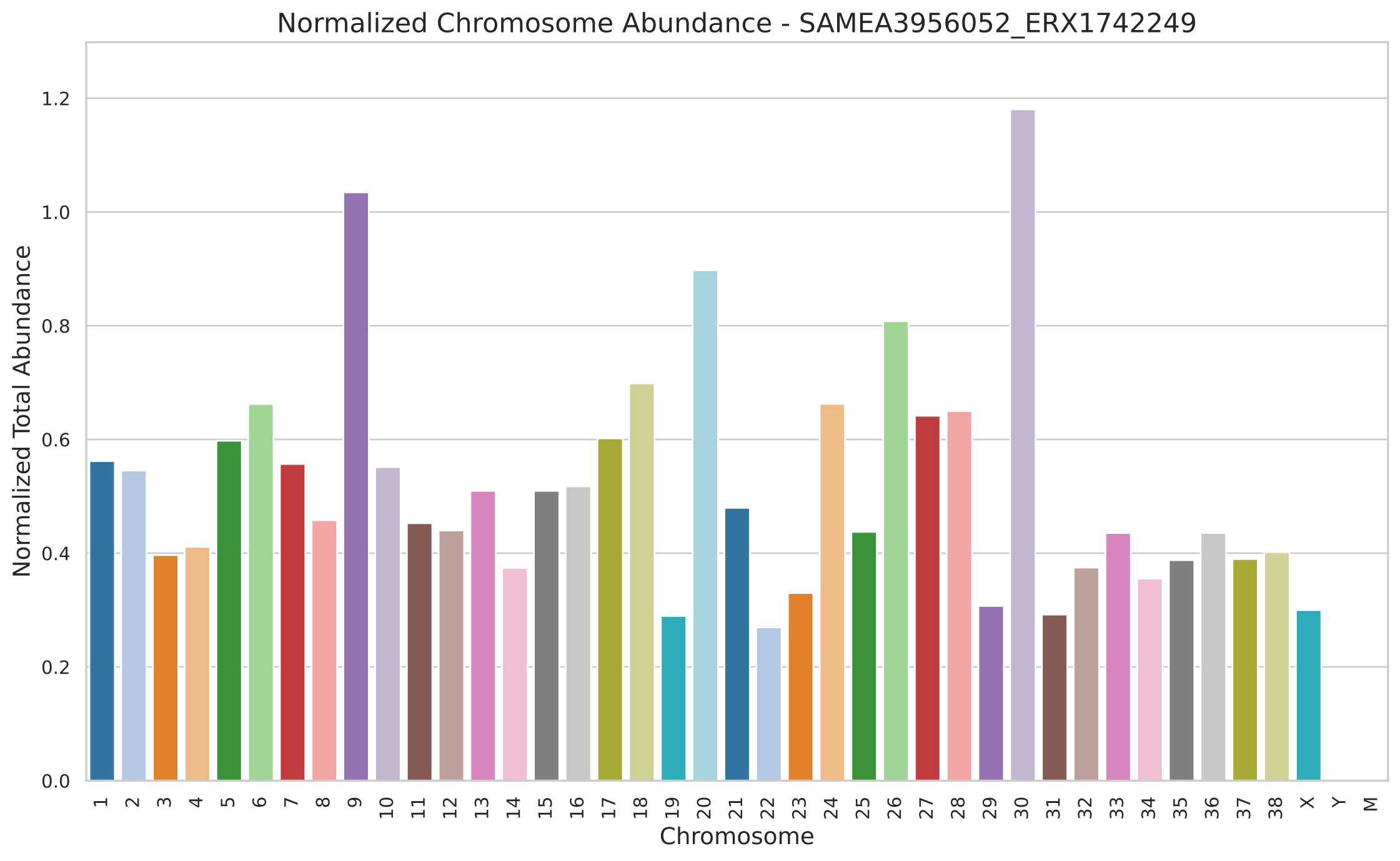

Normalized Chromosome Abundance - SAMEA3956016_ERX1742226
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

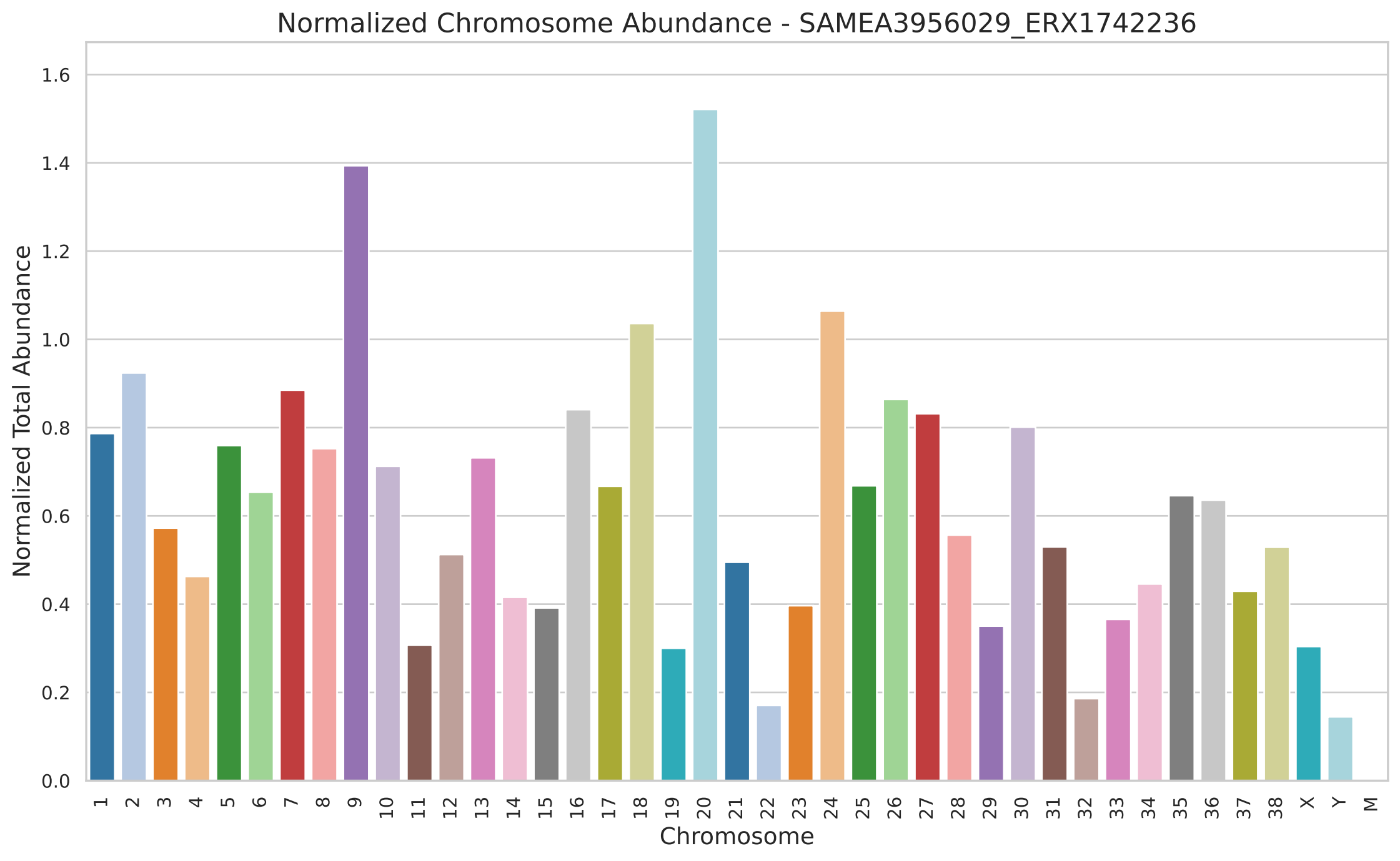

Normalized Chromosome Abundance - SAMEA3956035_ERX1742239
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

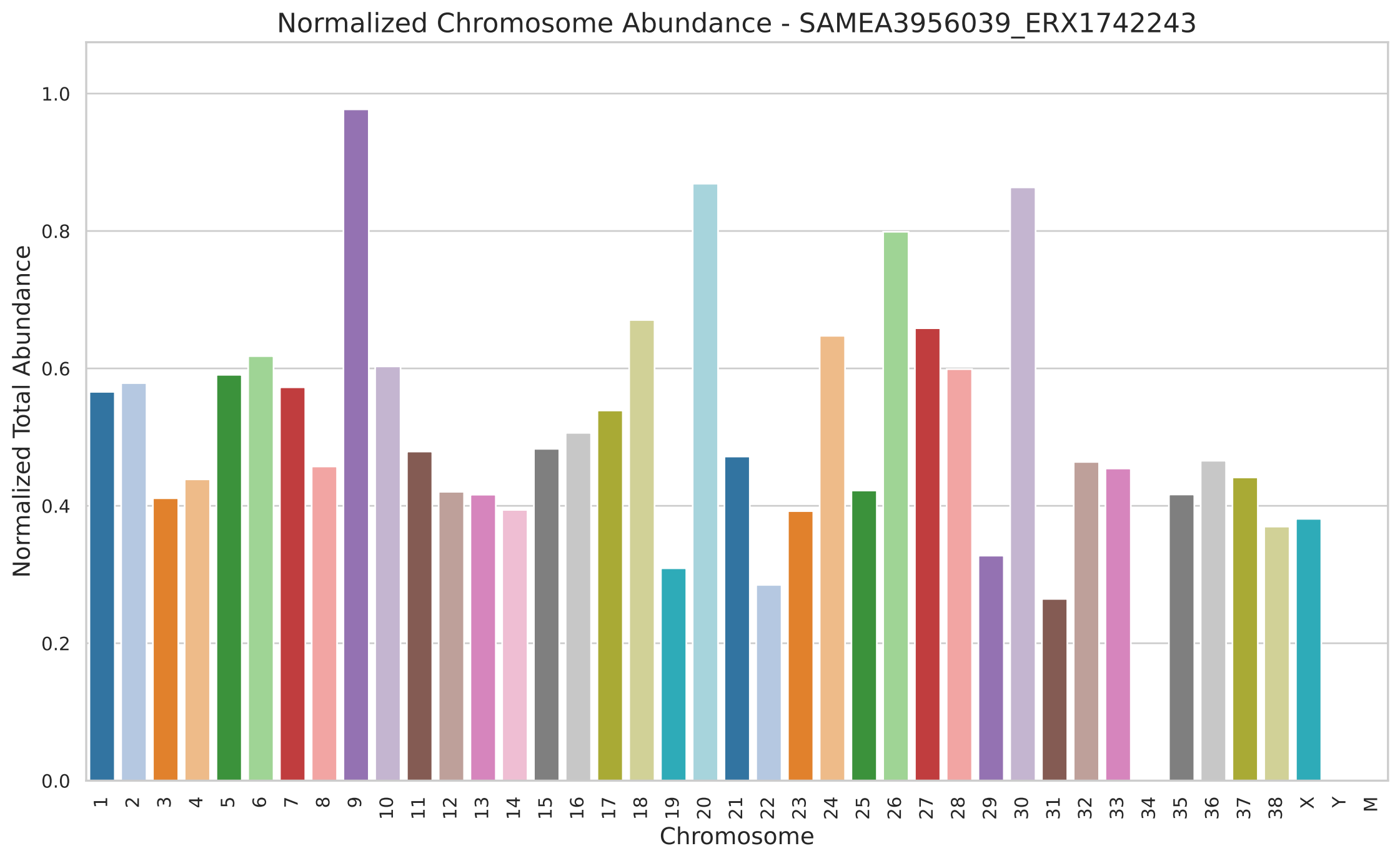

Normalized Chromosome Abundance - SAMEA3956053_ERX1742250
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

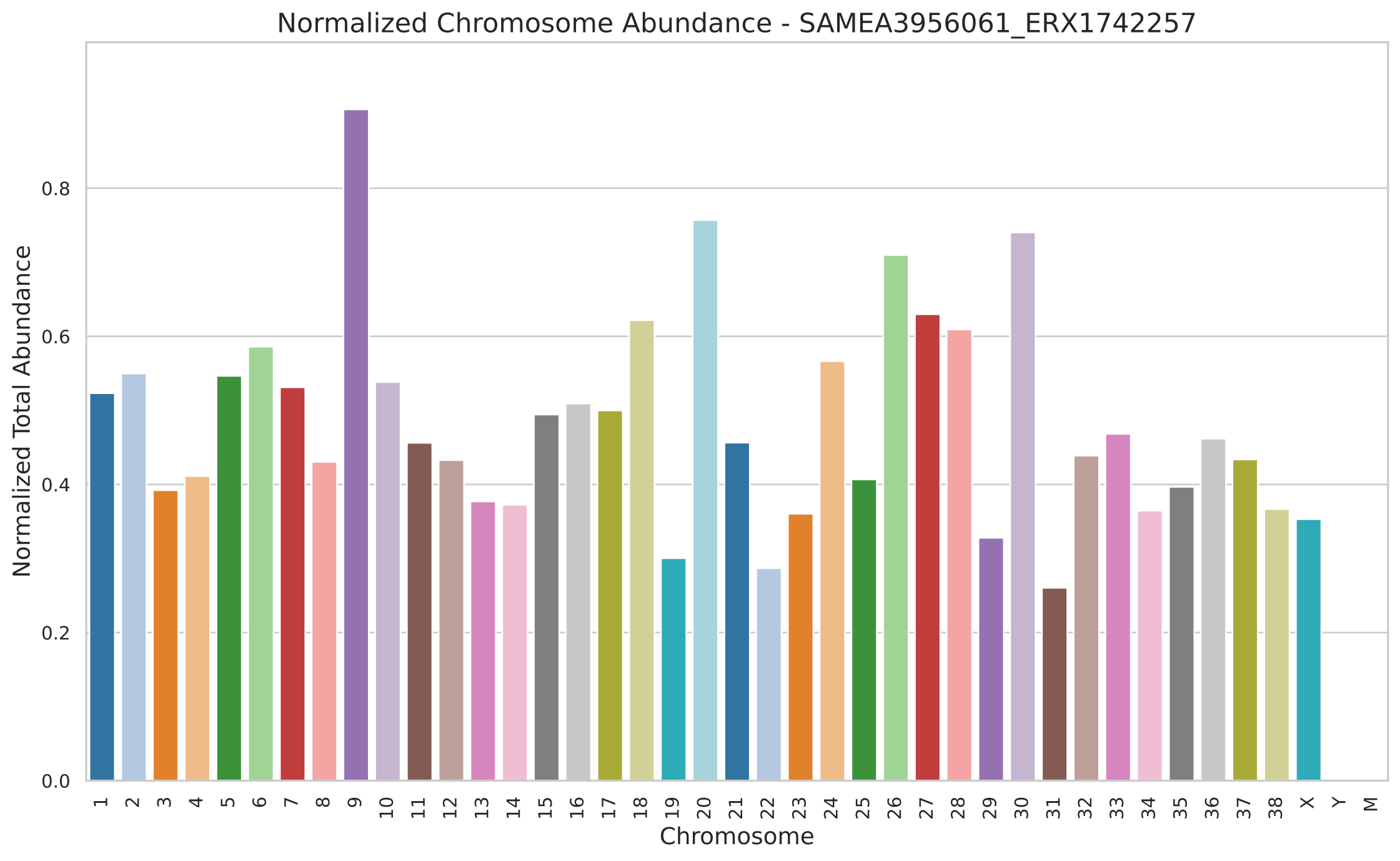

Normalized Chromosome Abundance - SAMEA3956038_ERX1742242
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

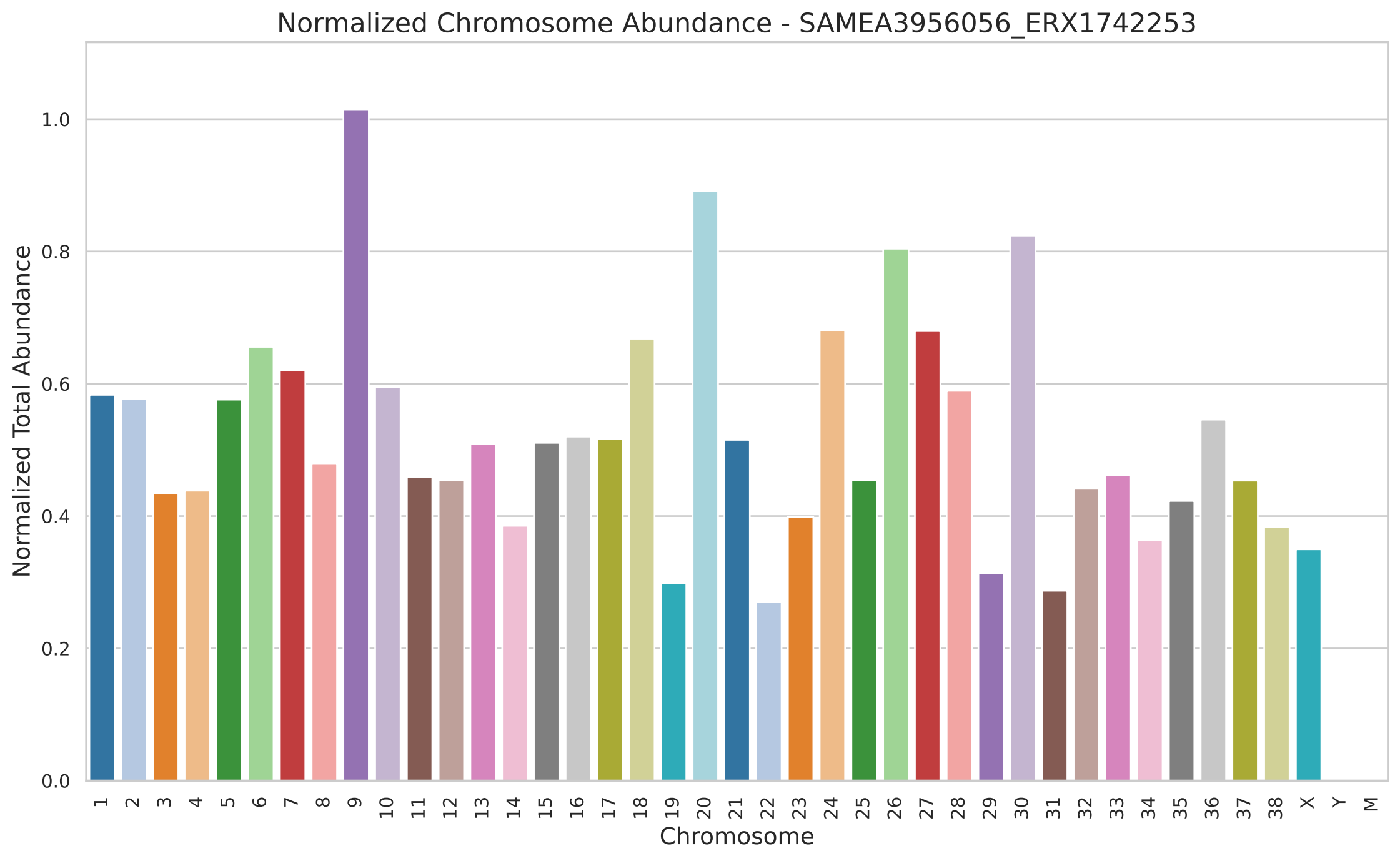

Normalized Chromosome Abundance - SAMEA2706850_ERX950753
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

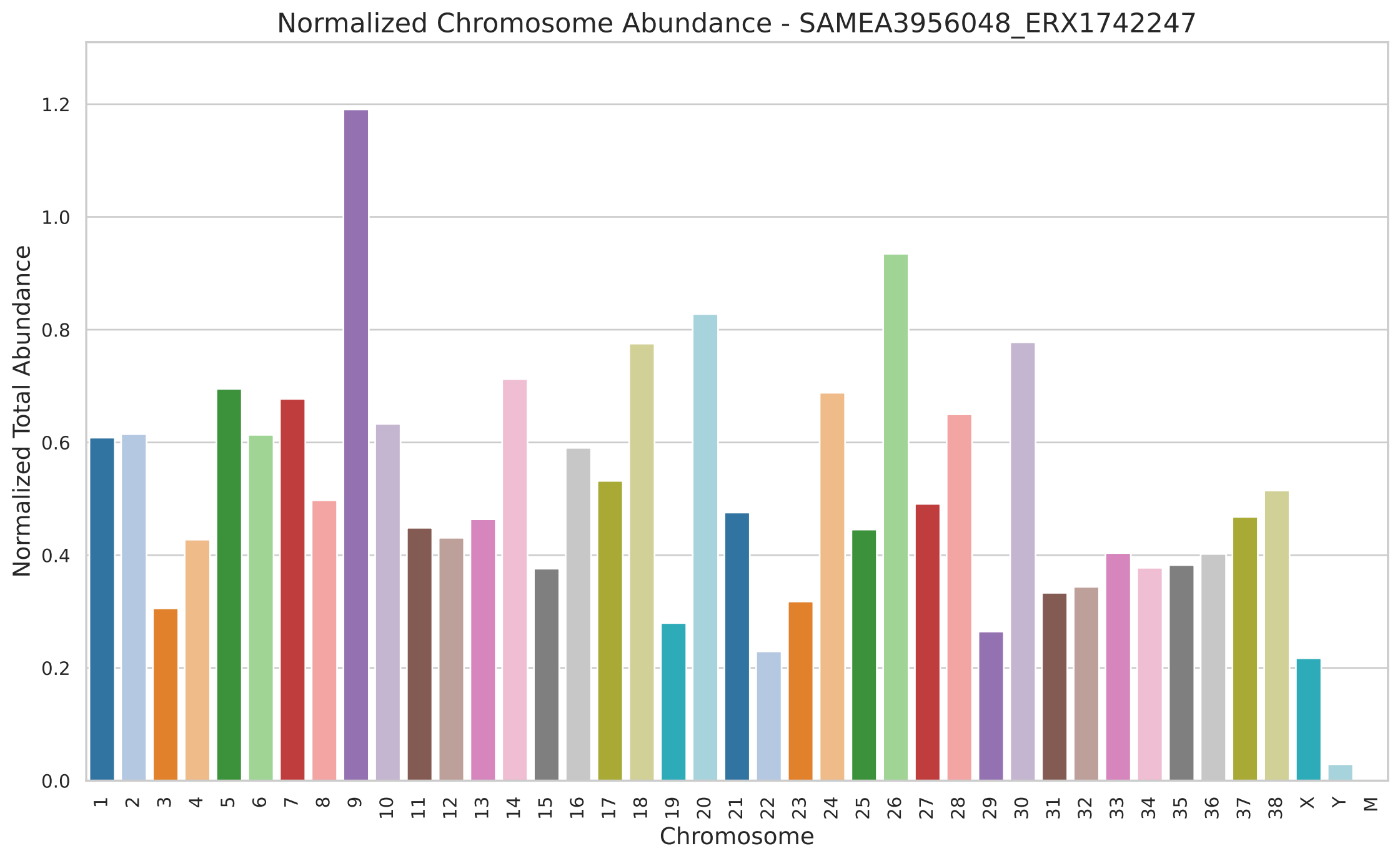

Normalized Chromosome Abundance - SAMEA3956052_ERX1742249
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

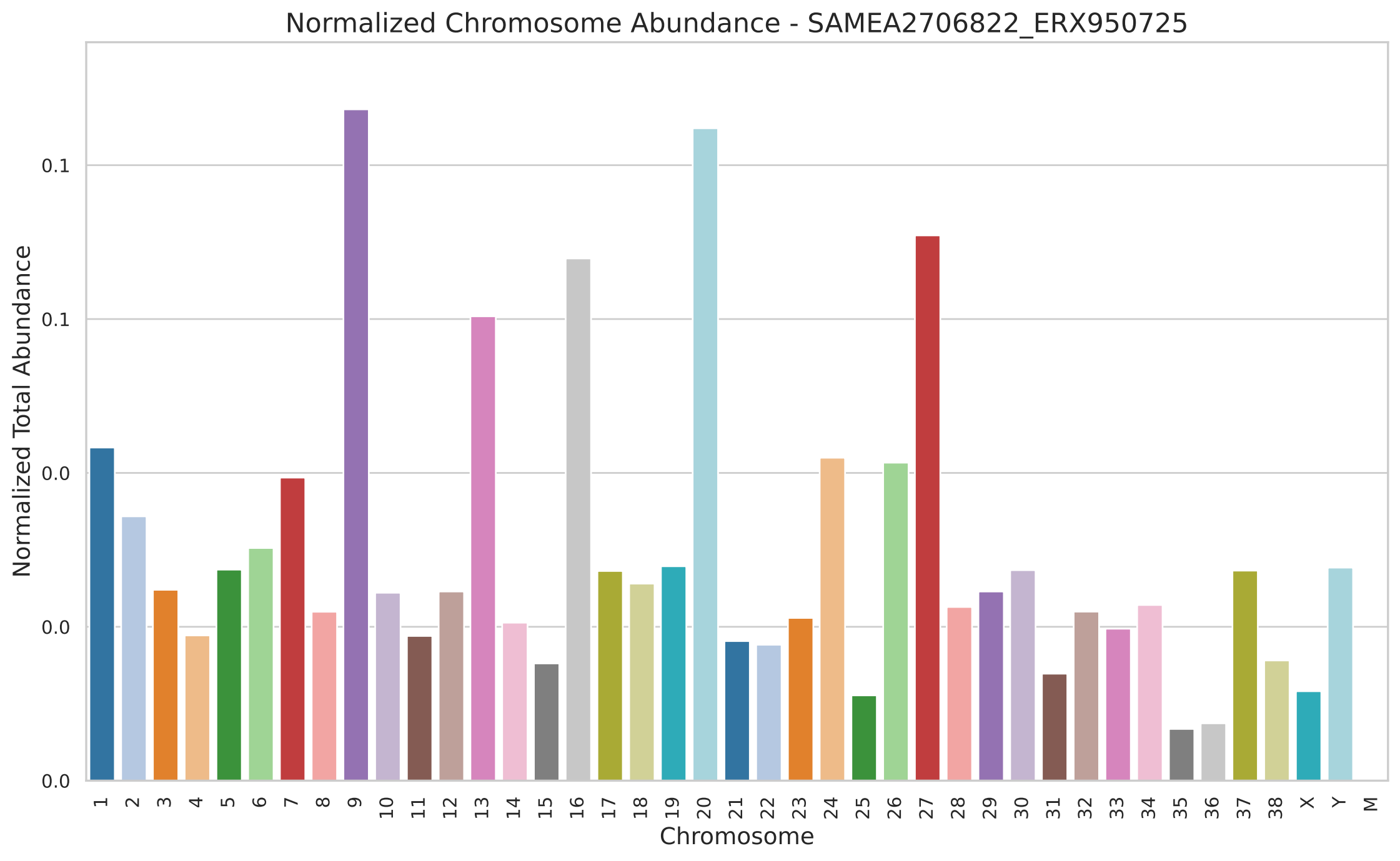

Normalized Chromosome Abundance - SAMEA3956029_ERX1742236
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

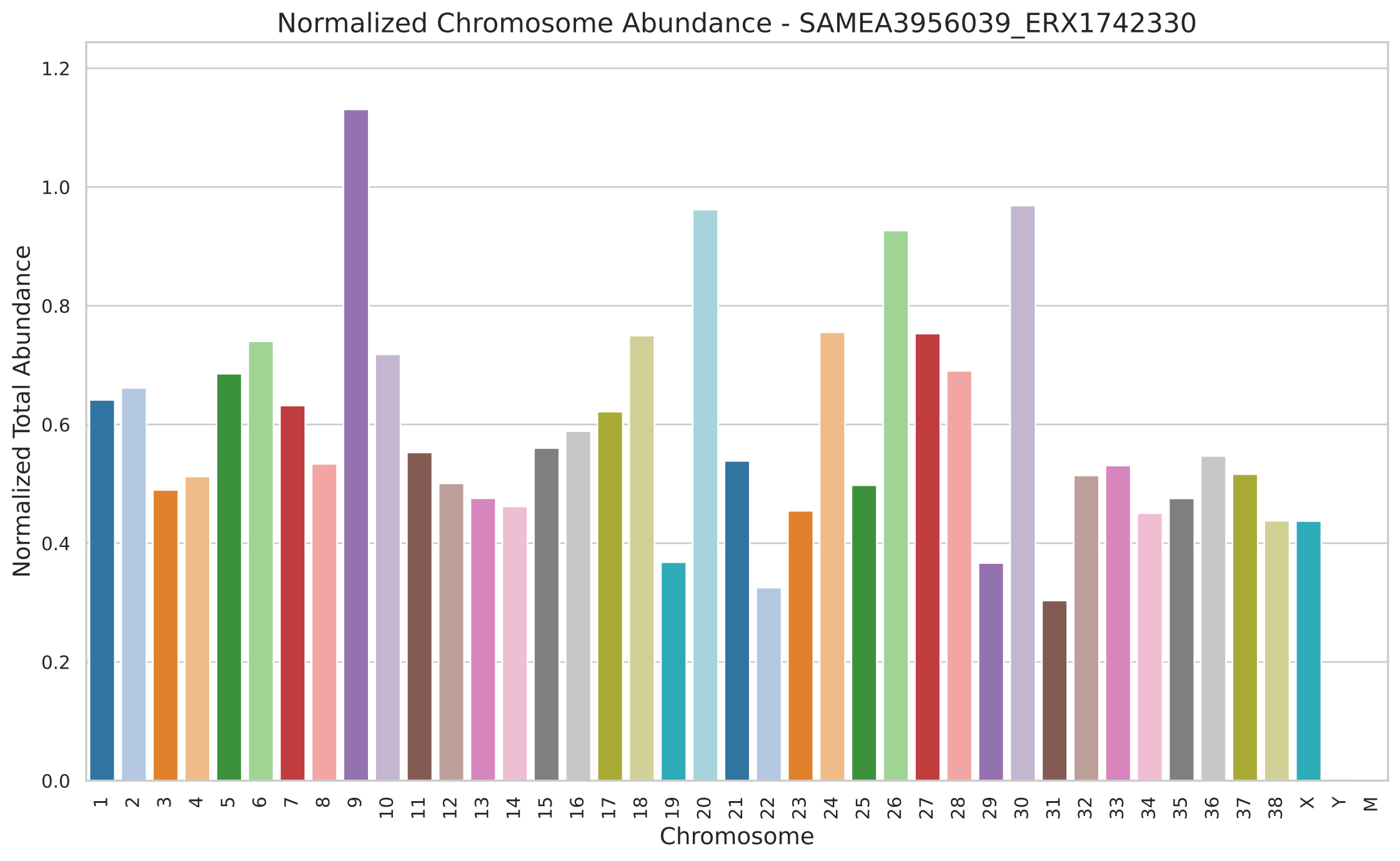

Normalized Chromosome Abundance - SAMEA3956039_ERX1742243
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

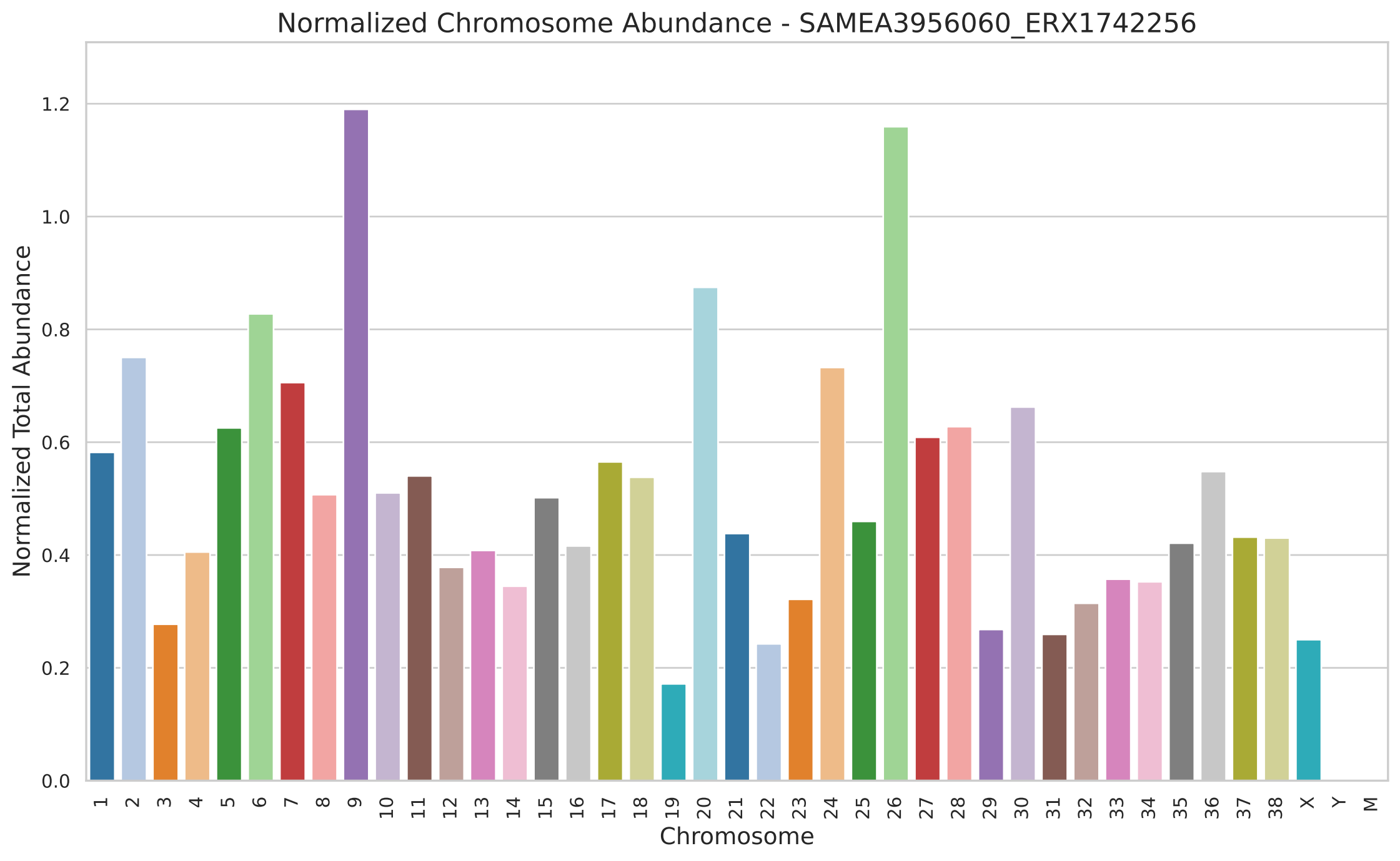

Normalized Chromosome Abundance - SAMEA3956061_ERX1742257
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

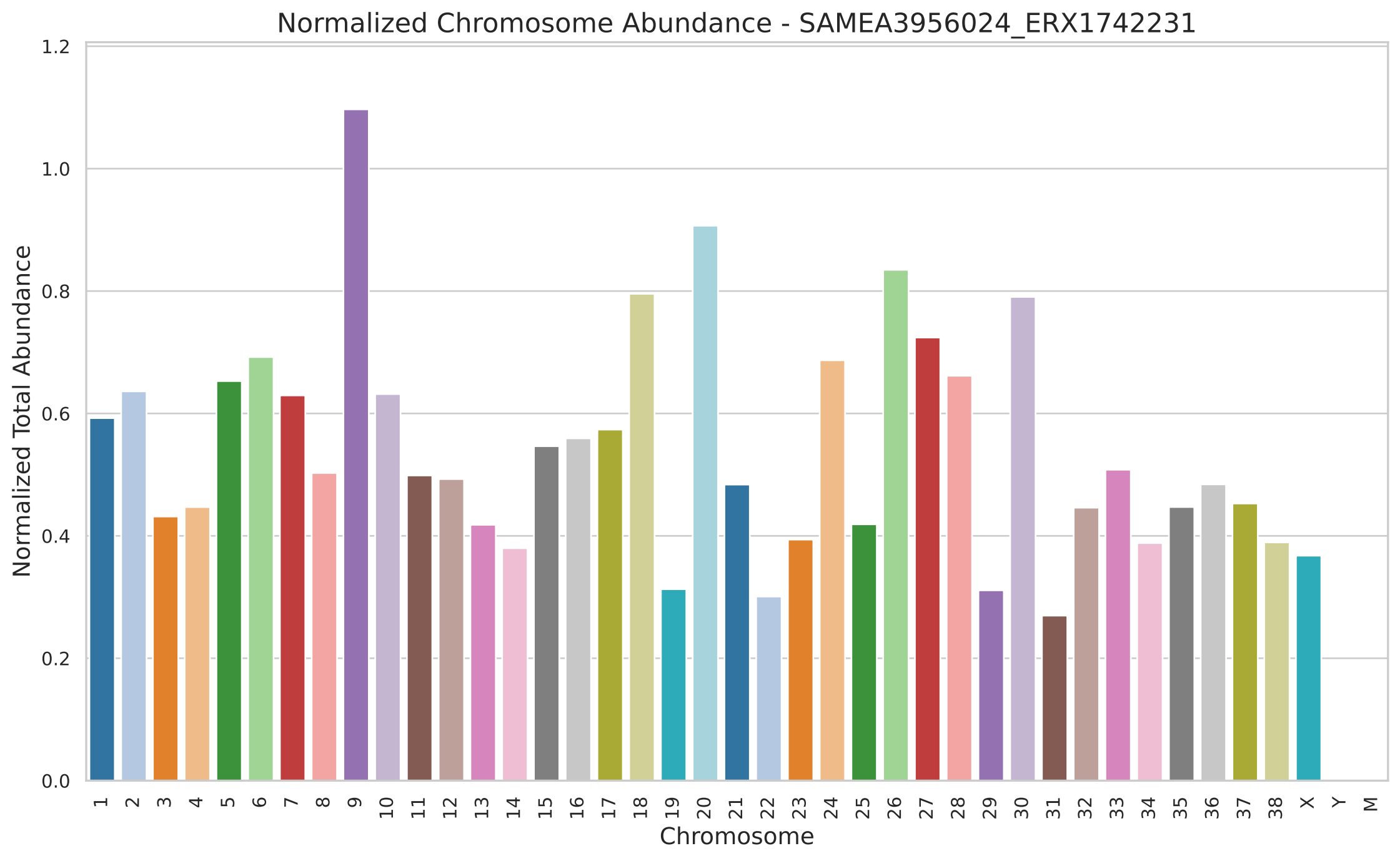

Normalized Chromosome Abundance - SAMEA3956056_ERX1742253
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

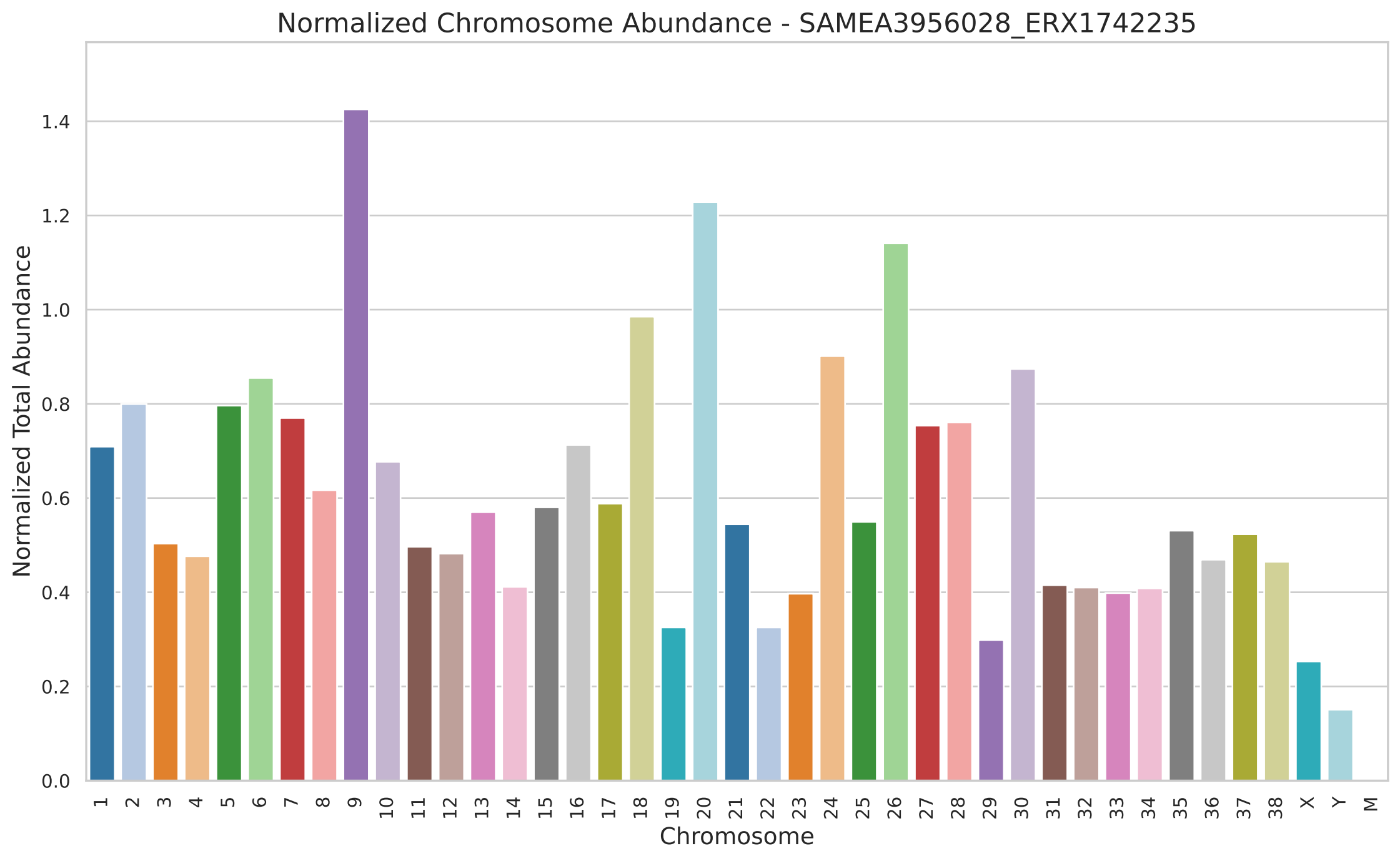

Normalized Chromosome Abundance - SAMEA3956048_ERX1742247
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

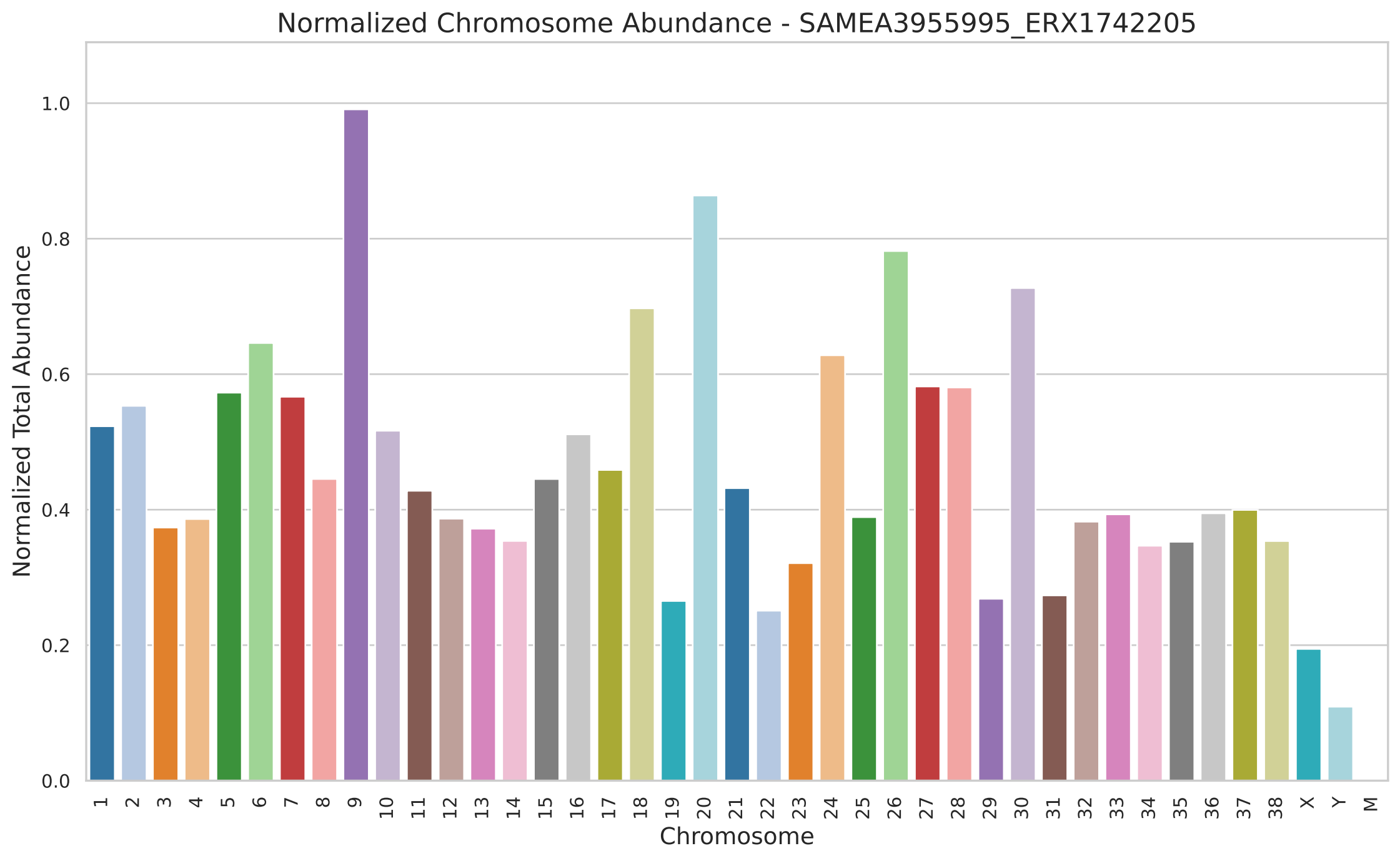

Normalized Chromosome Abundance - SAMEA2706822_ERX950725
Normalized Total Abundance
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

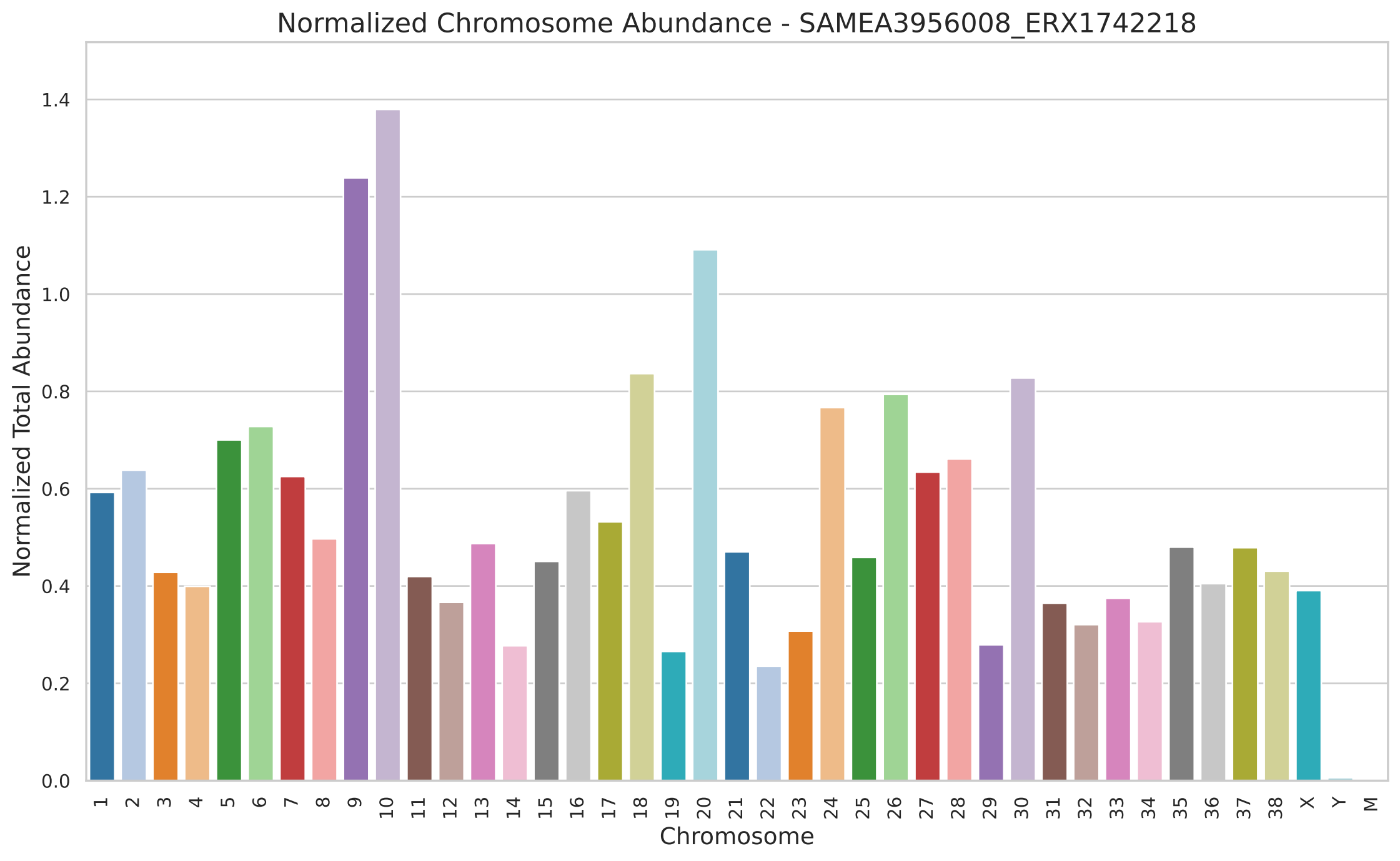

Normalized Chromosome Abundance - SAMEA3956039_ERX1742330
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

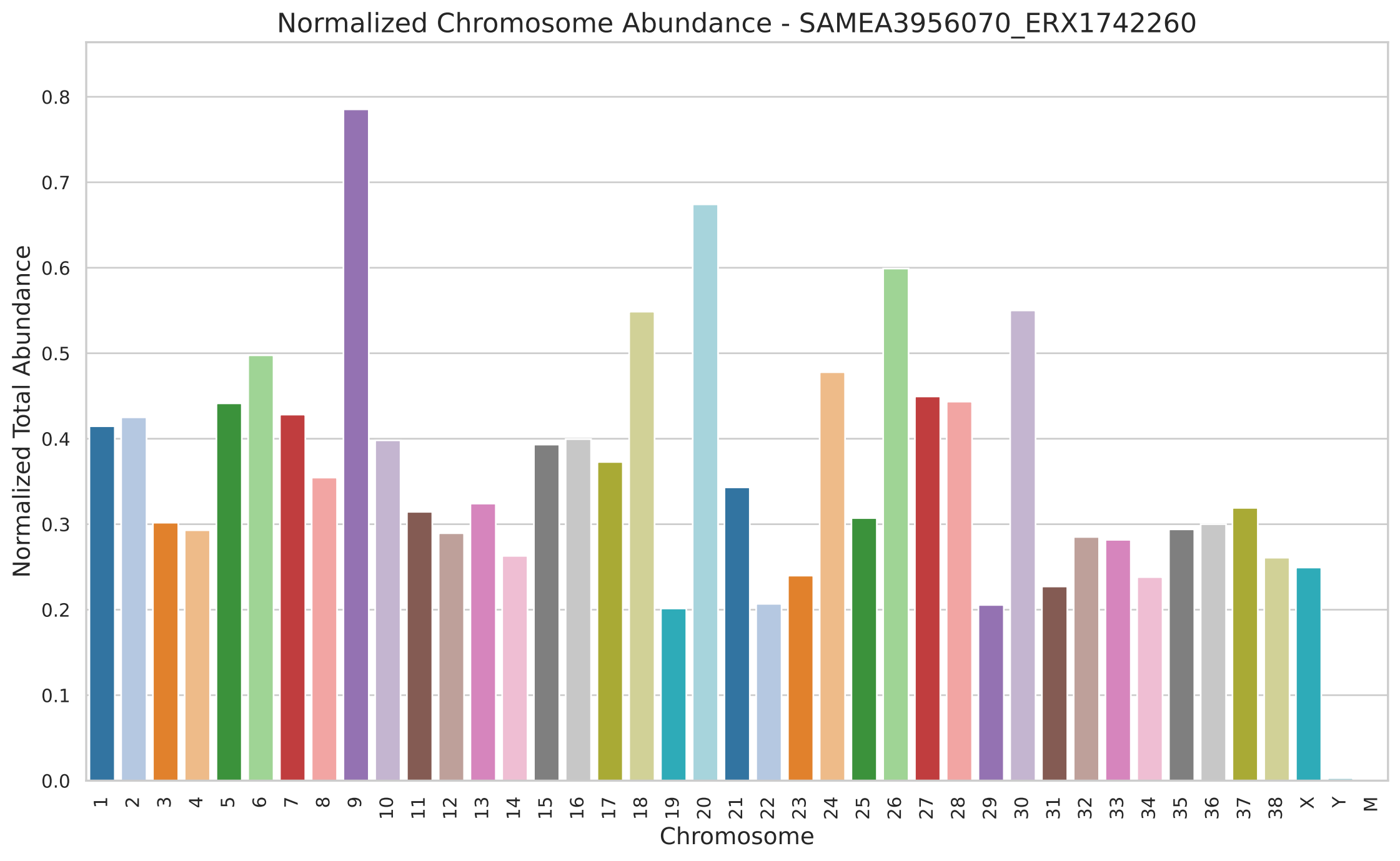

Normalized Chromosome Abundance - SAMEA3956060_ERX1742256
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

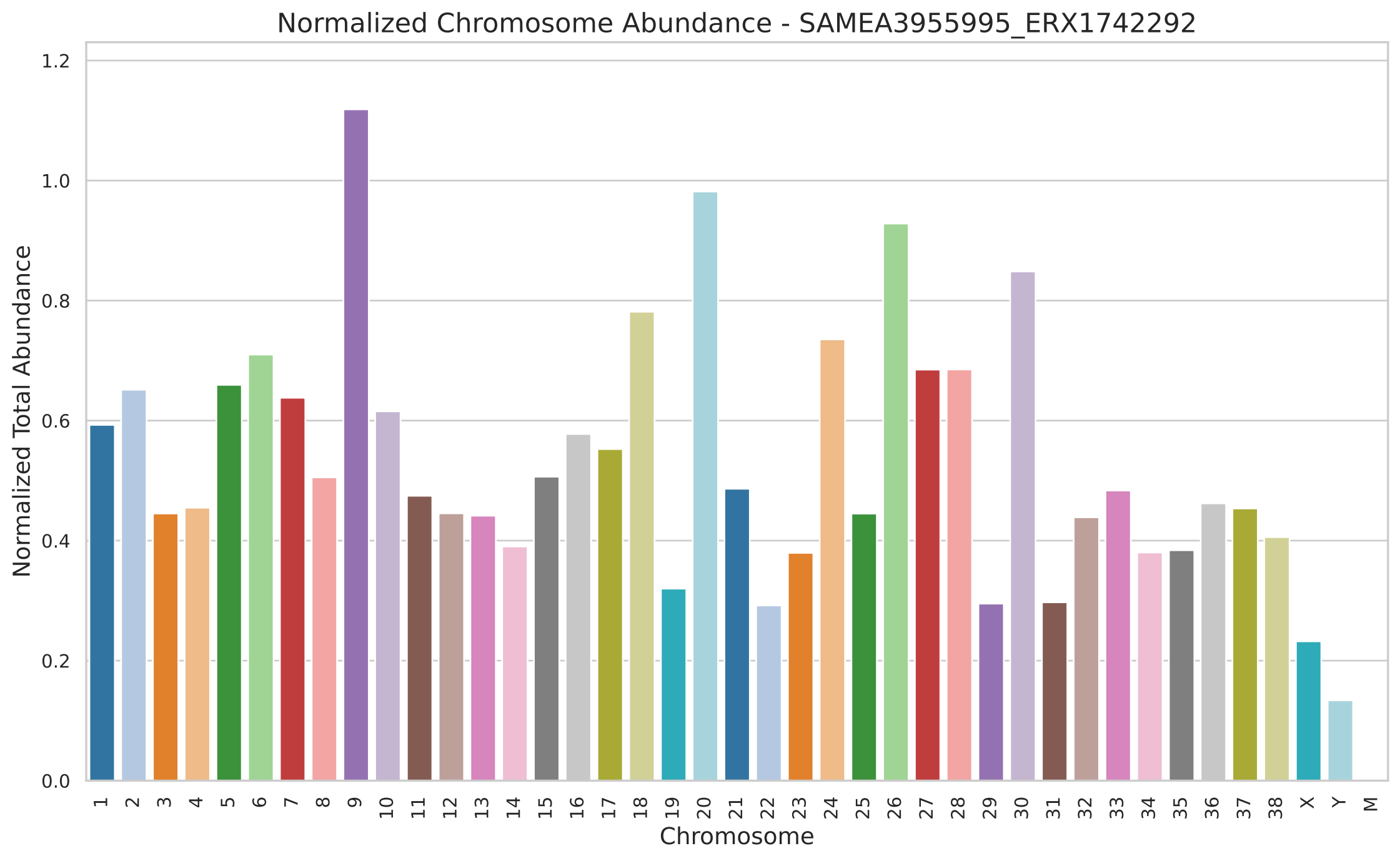

Normalized Chromosome Abundance - SAMEA3956024_ERX1742231
Normalized Total Abundance
1.2
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

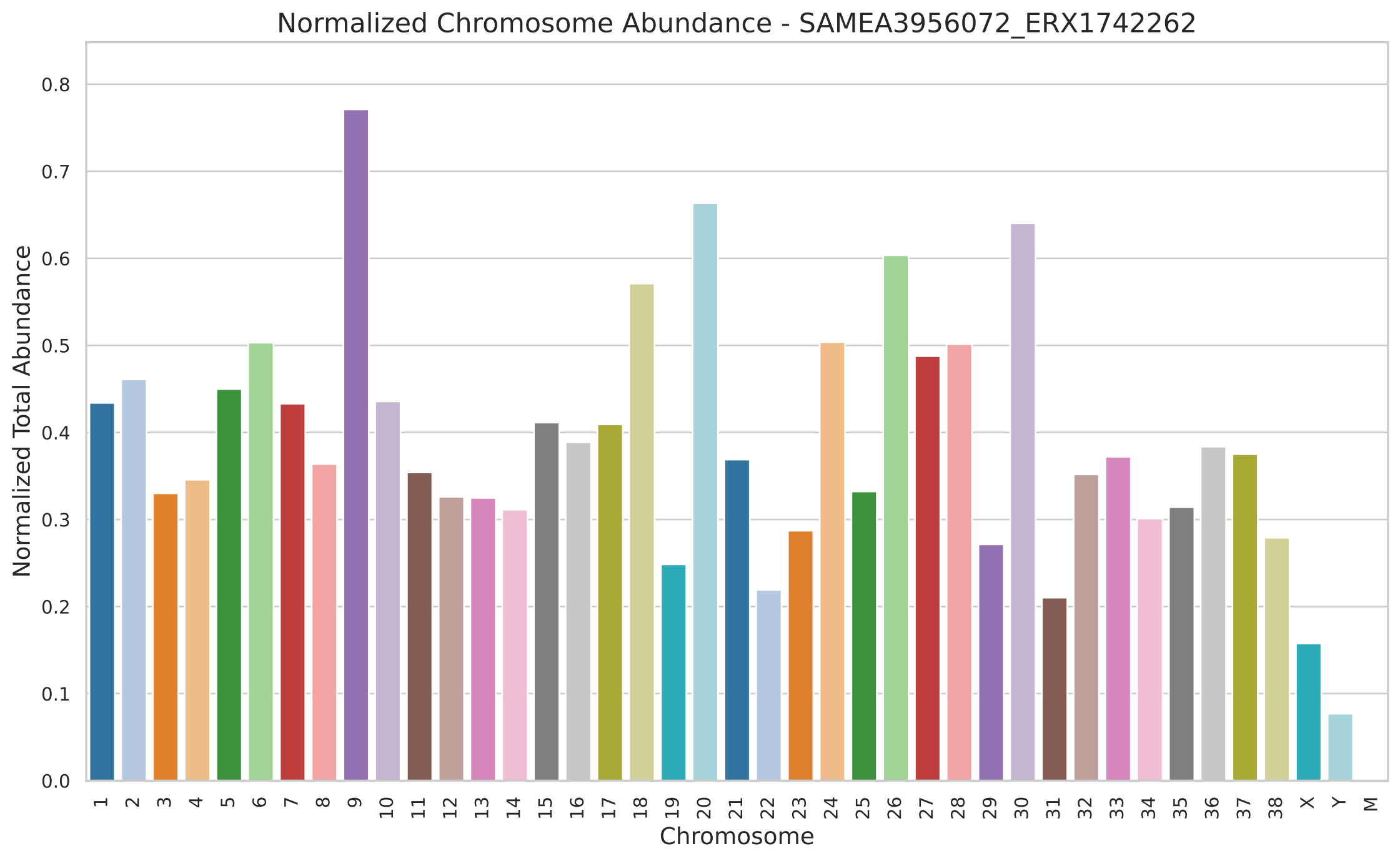

Normalized Chromosome Abundance - SAMEA3956028_ERX1742235
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

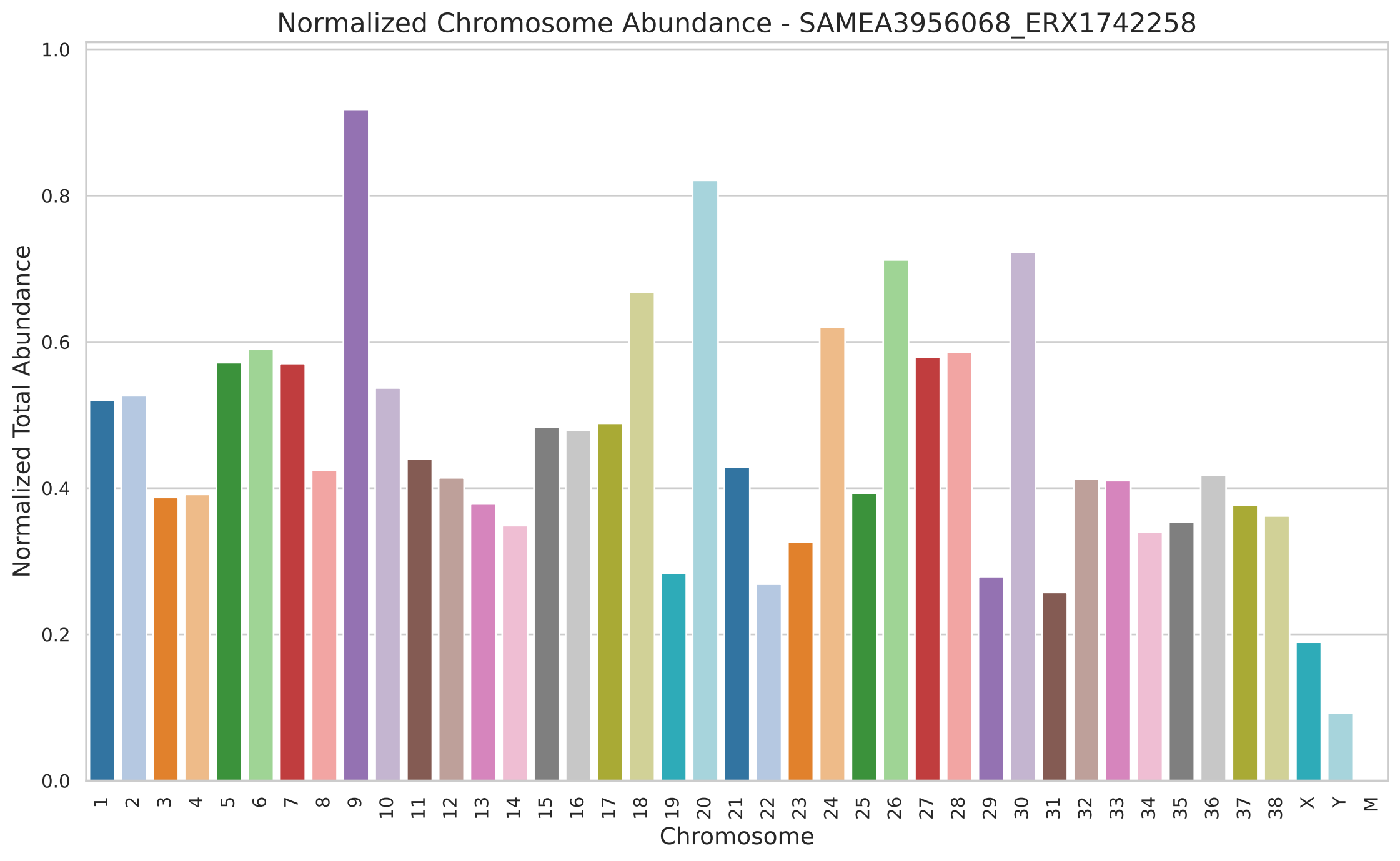

Normalized Chromosome Abundance - SAMEA3955995_ERX1742205
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

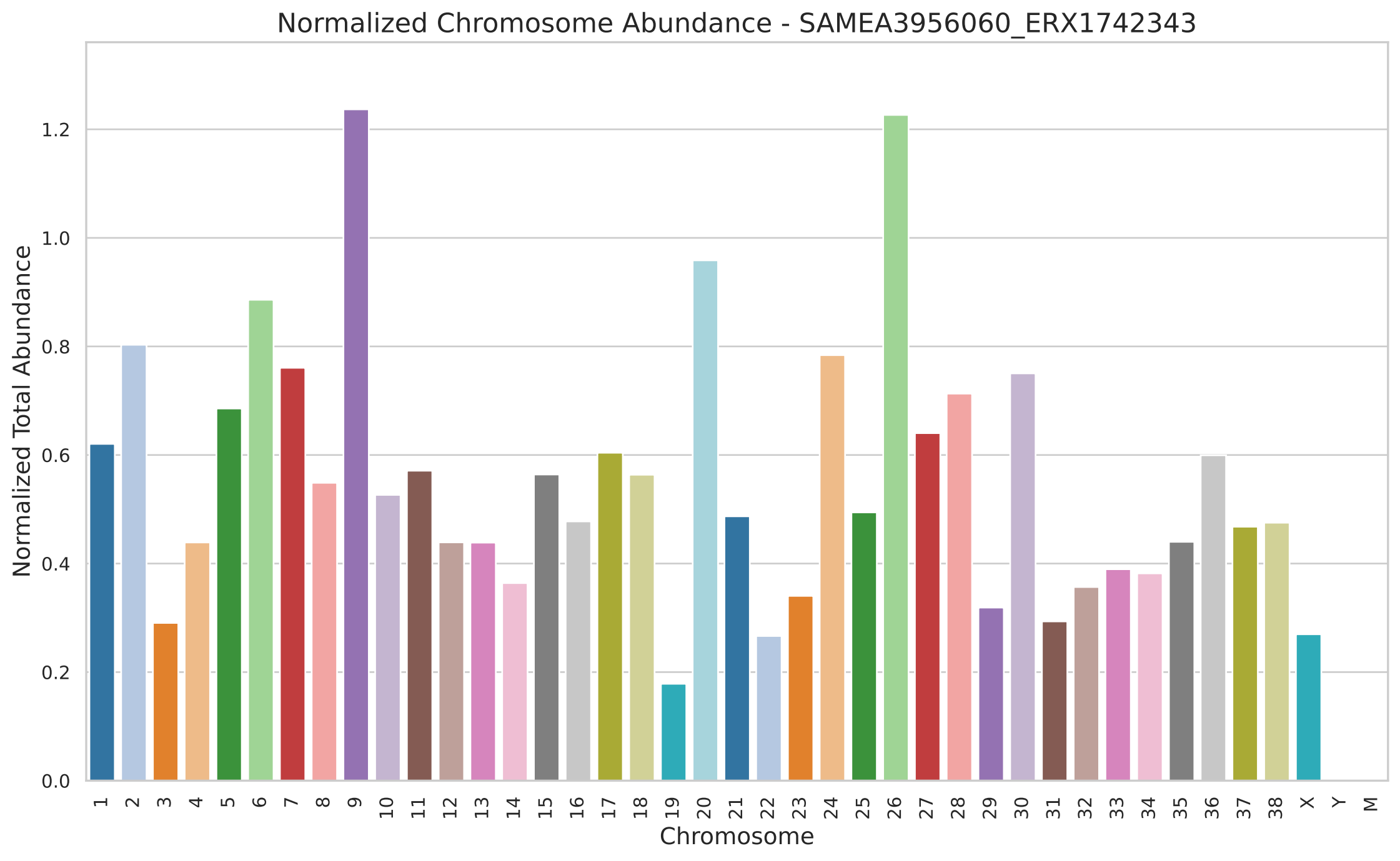

Normalized Chromosome Abundance - SAMEA3956008_ERX1742218
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

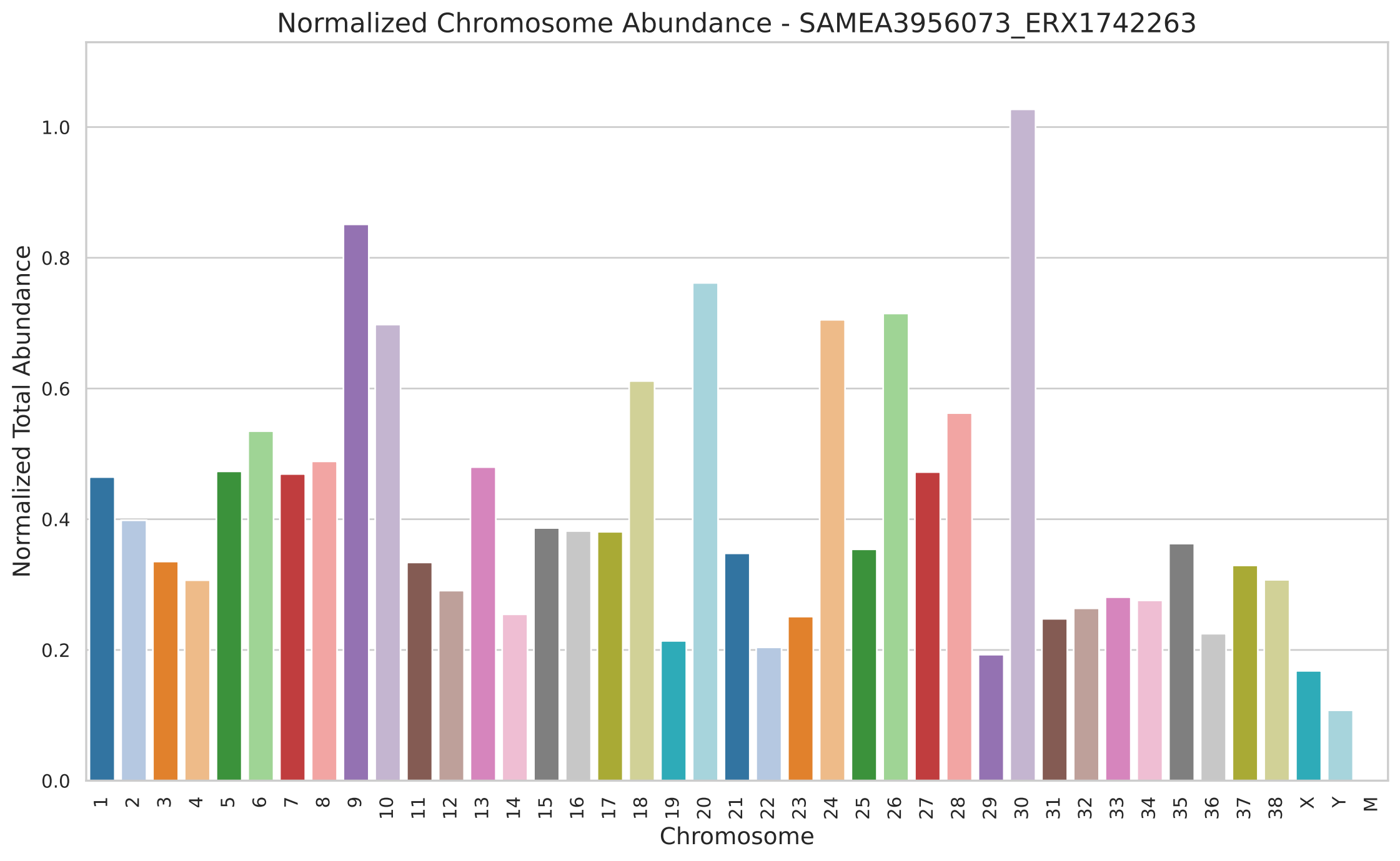

Normalized Chromosome Abundance - SAMEA3956070_ERX1742260
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

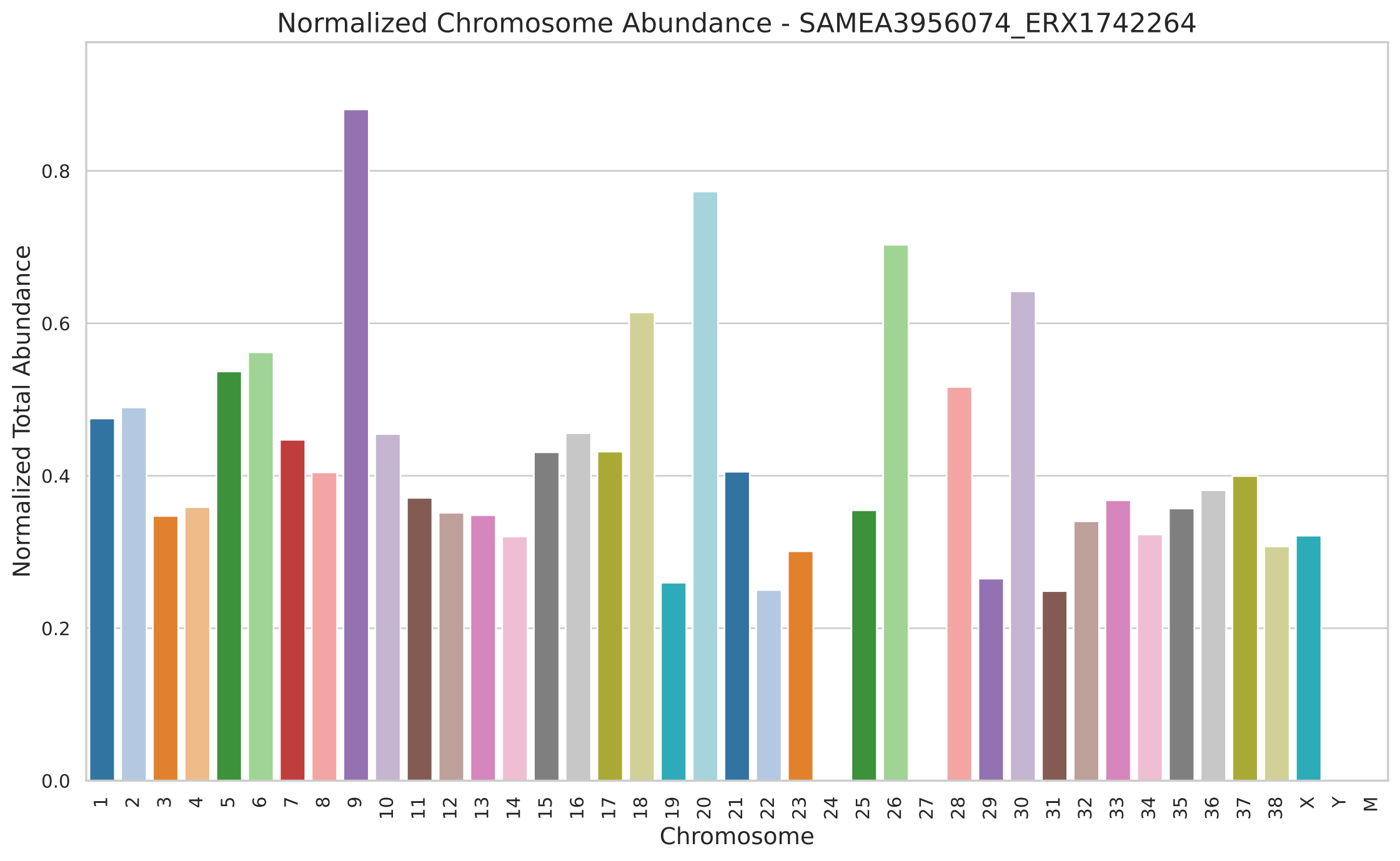

Normalized Chromosome Abundance - SAMEA3955995_ERX1742292
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

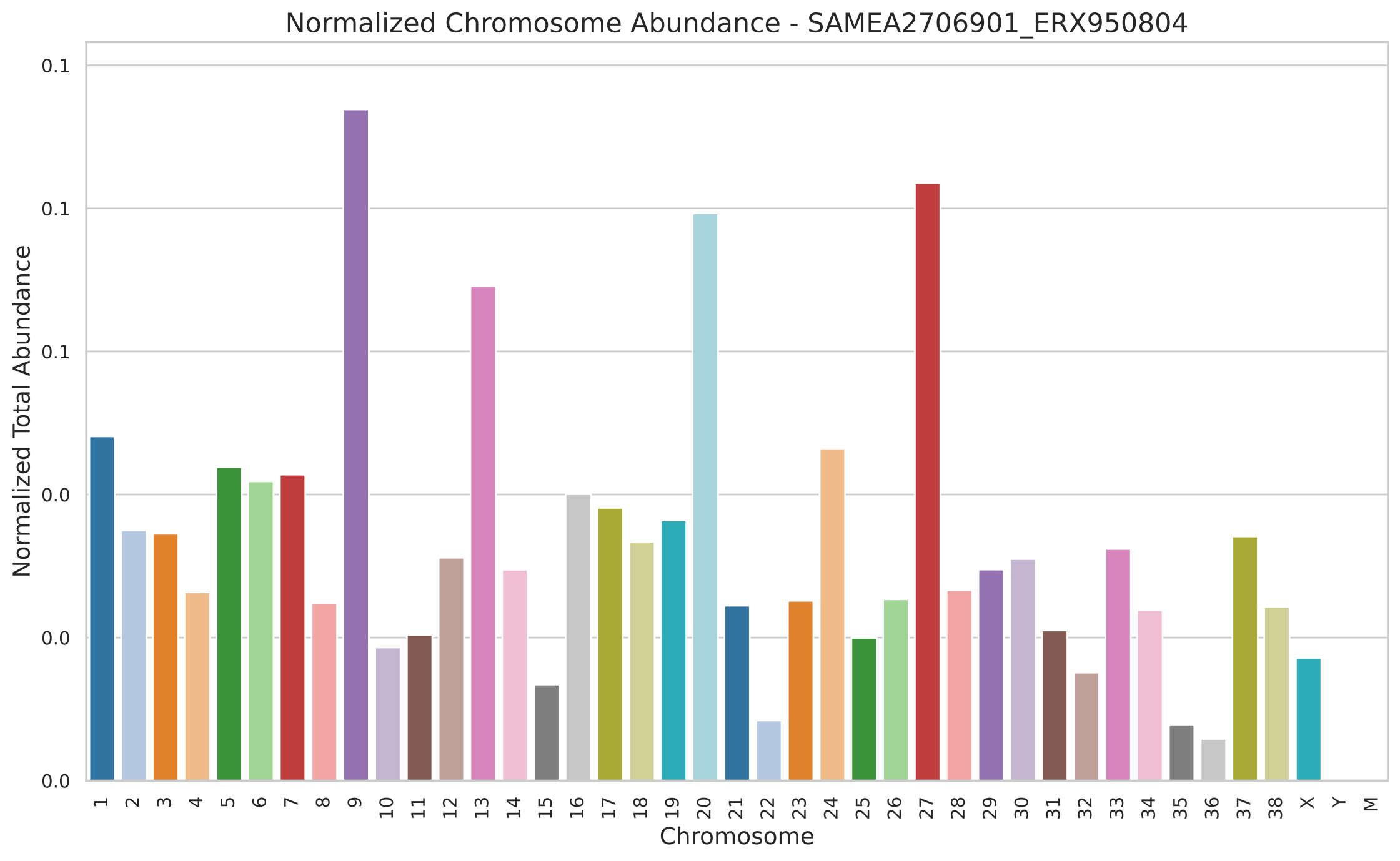

Normalized Chromosome Abundance - SAMEA3956072_ERX1742262
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

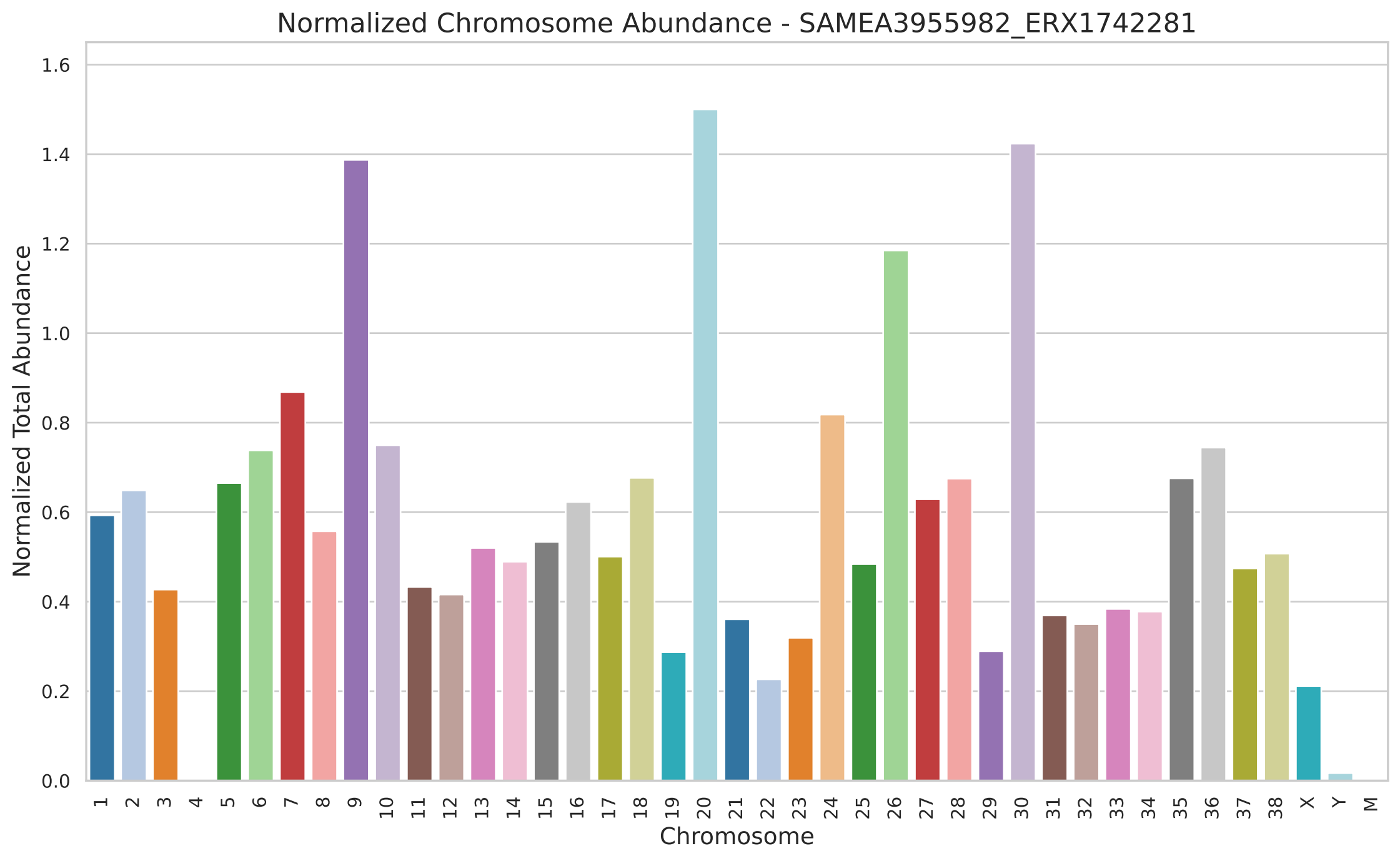

Normalized Chromosome Abundance - SAMEA3956068_ERX1742258
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

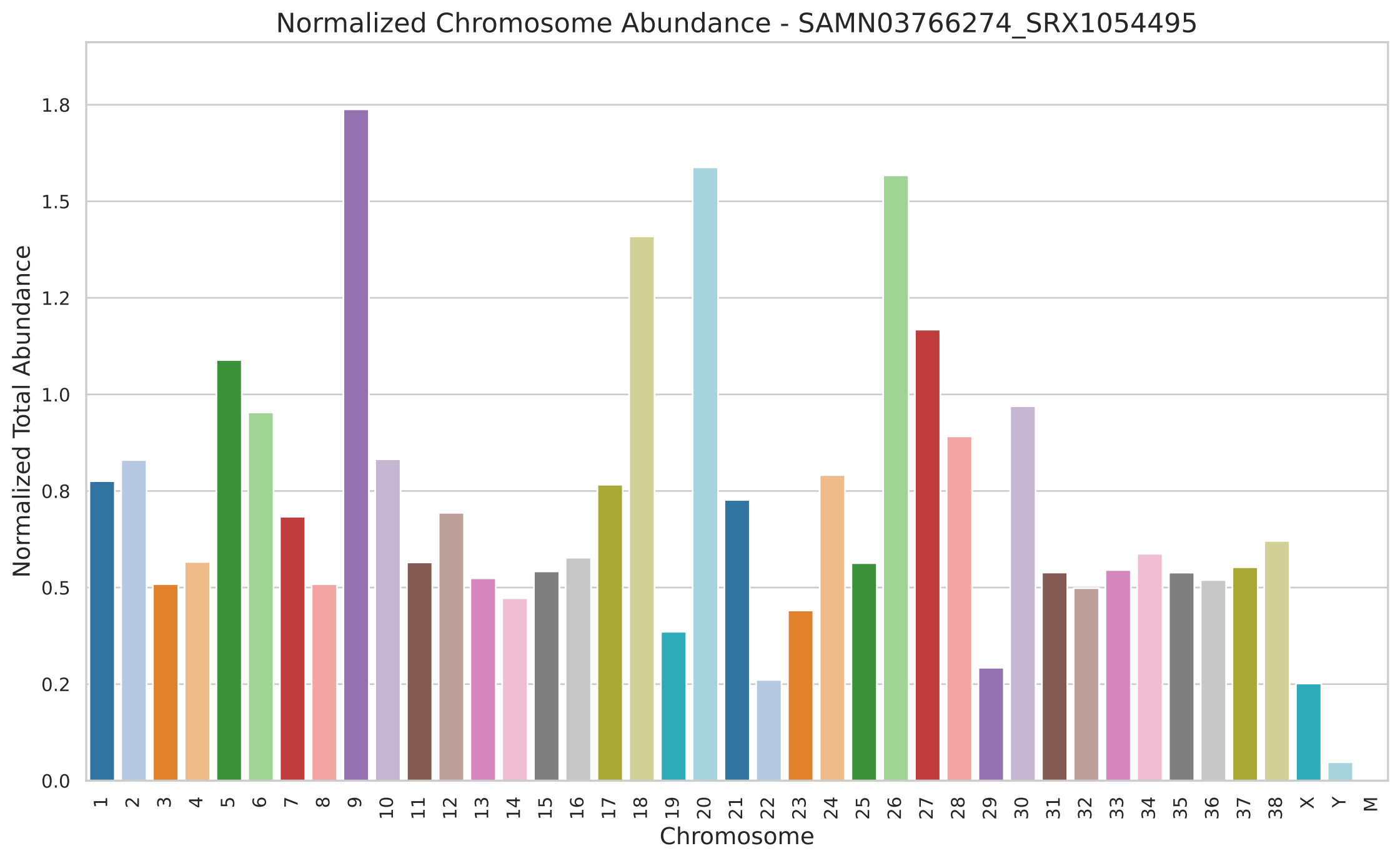

Normalized Chromosome Abundance - SAMEA3956060_ERX1742343
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

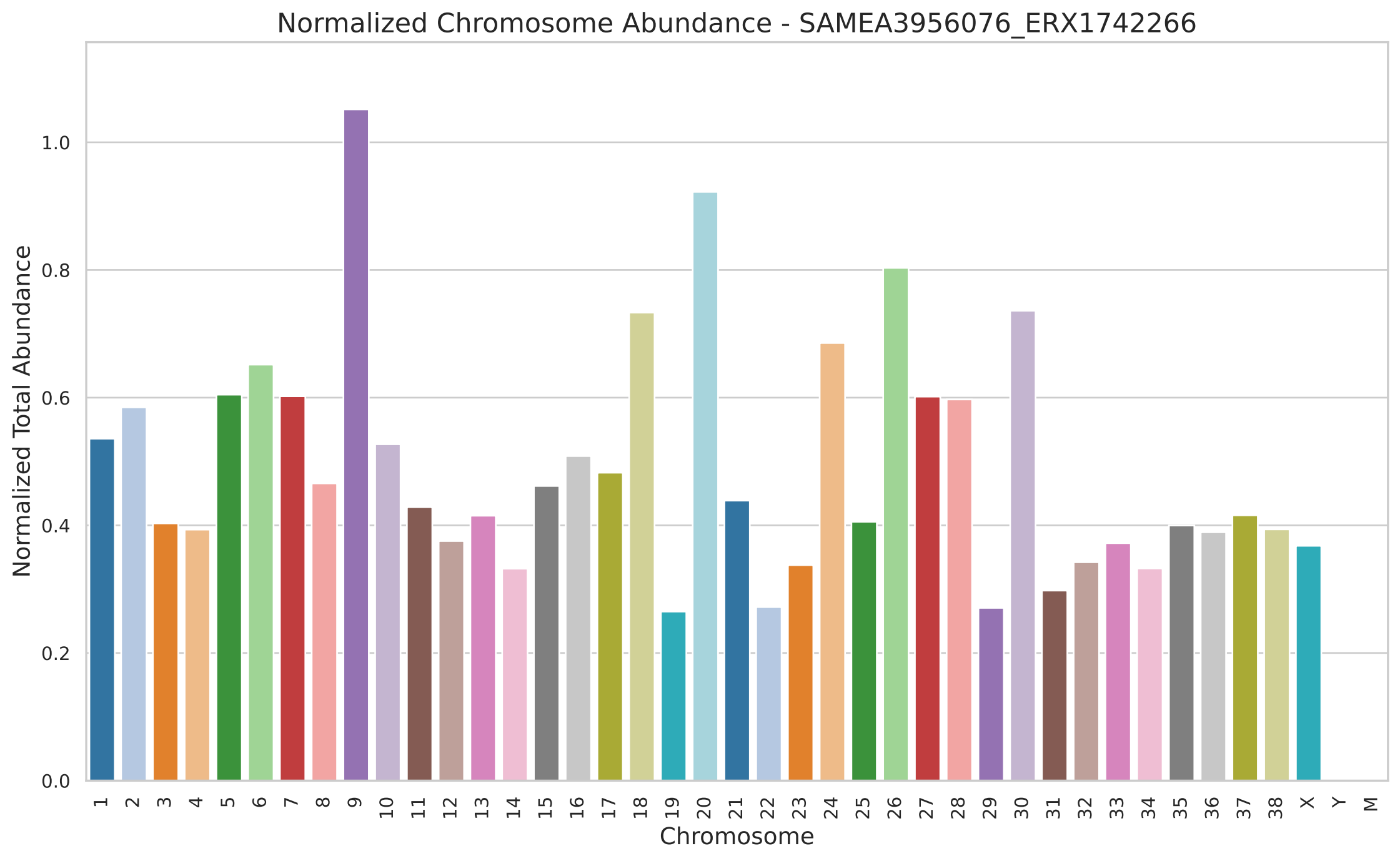

Normalized Chromosome Abundance - SAMEA3956073_ERX1742263
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

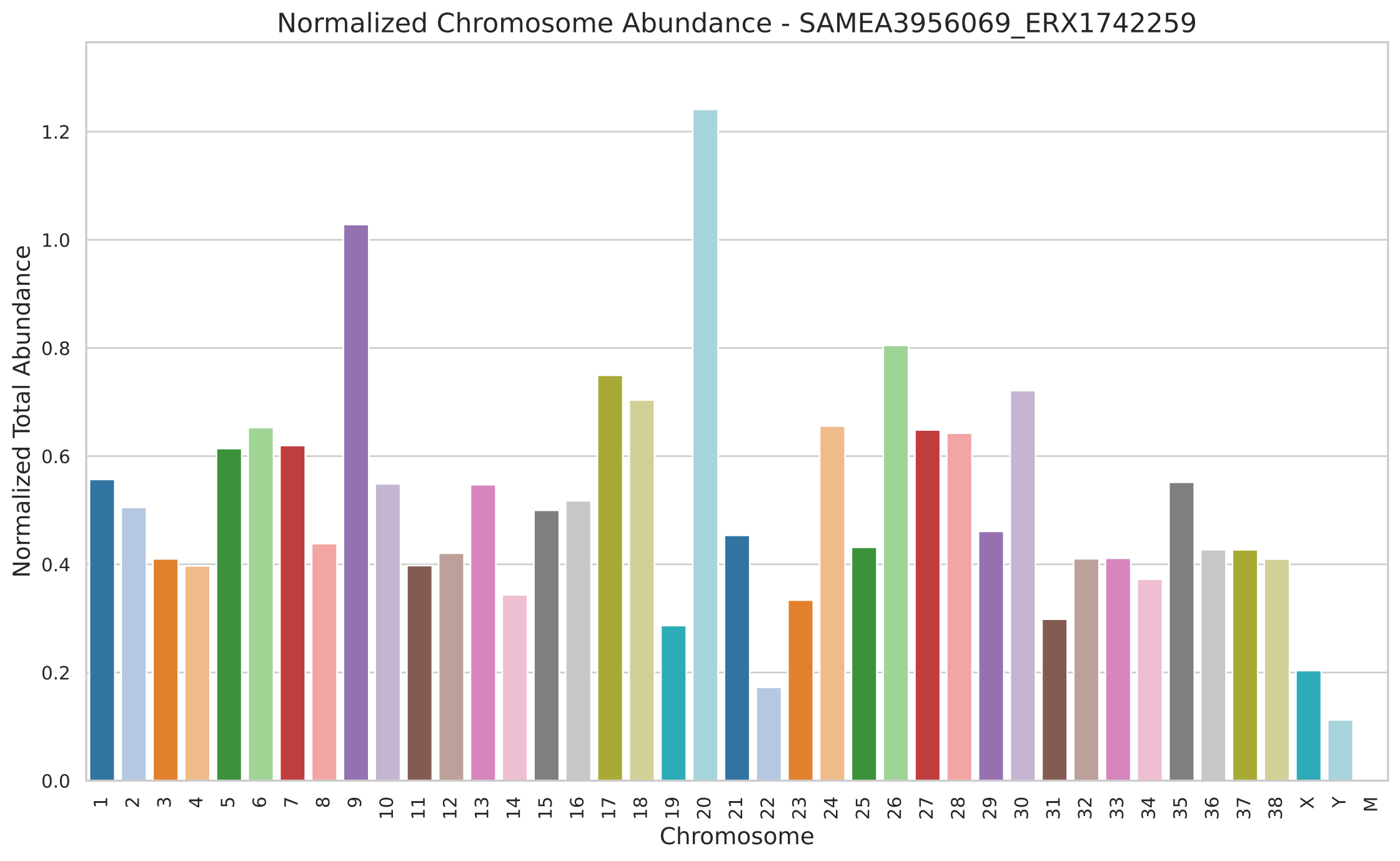

Normalized Chromosome Abundance - SAMEA3956074_ERX1742264
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

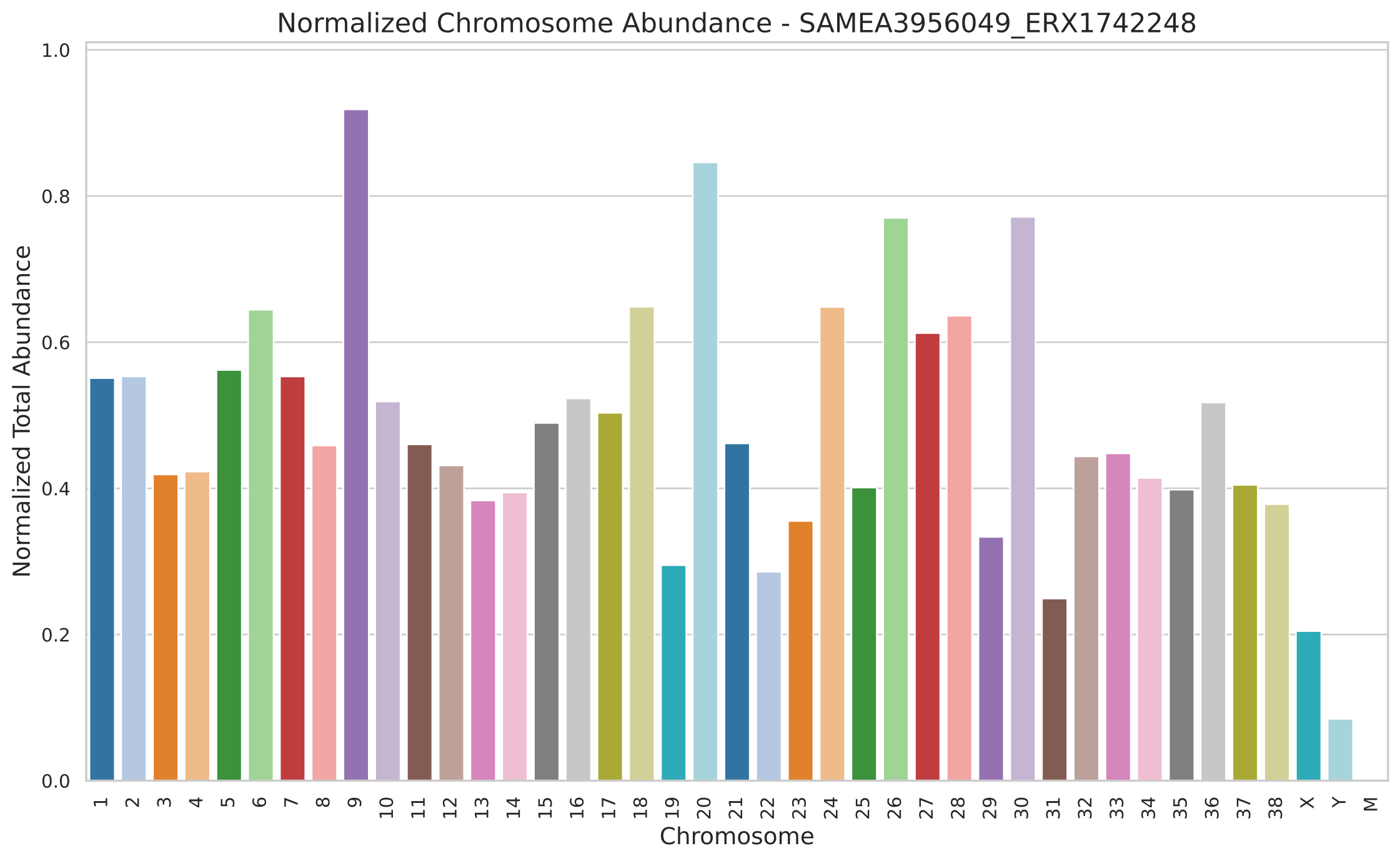

Normalized Chromosome Abundance - SAMEA2706901_ERX950804
Normalized Total Abundance
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

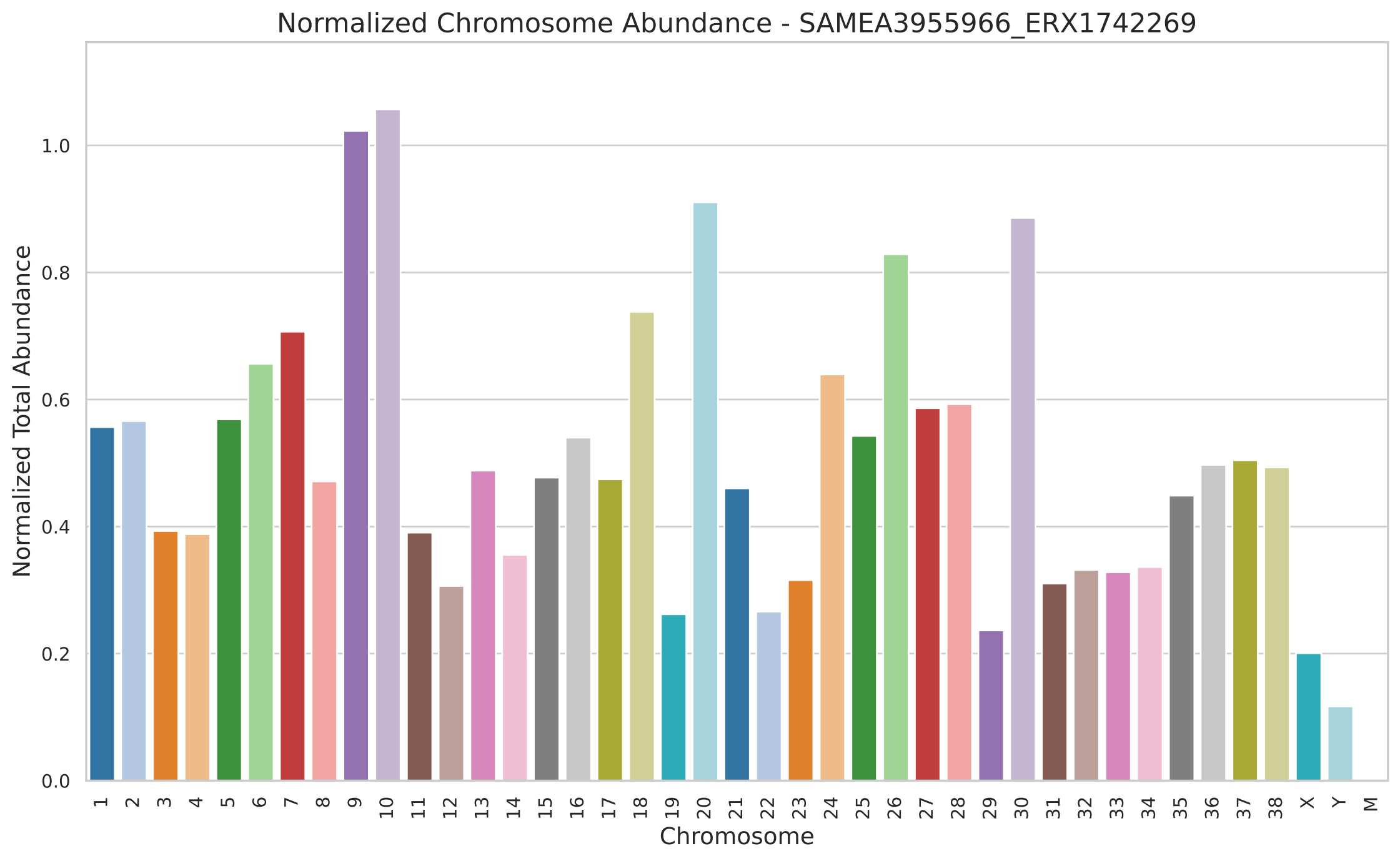

Normalized Chromosome Abundance - SAMEA3955982_ERX1742281
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

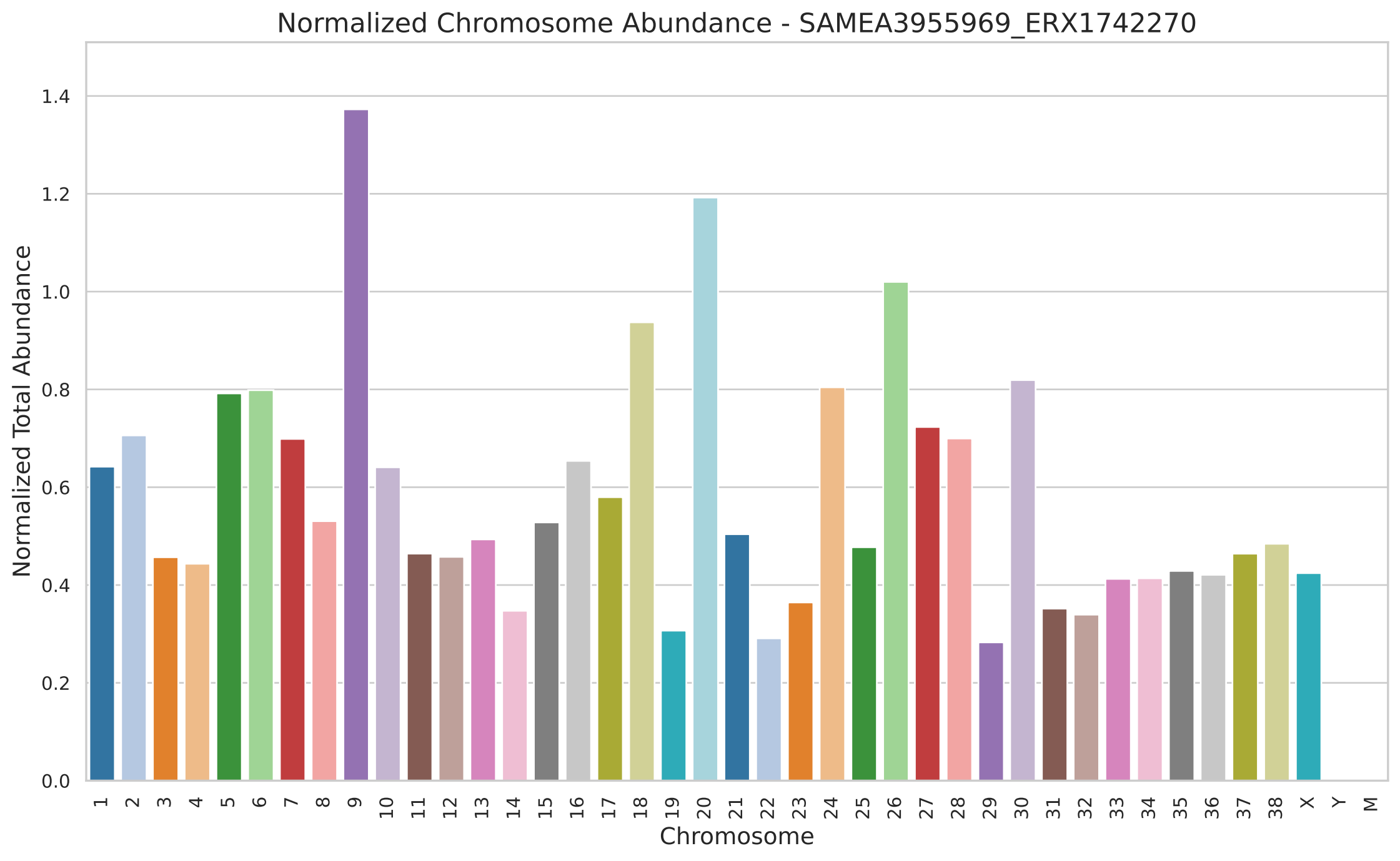

Normalized Chromosome Abundance - SAMN03766274_SRX1054495
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

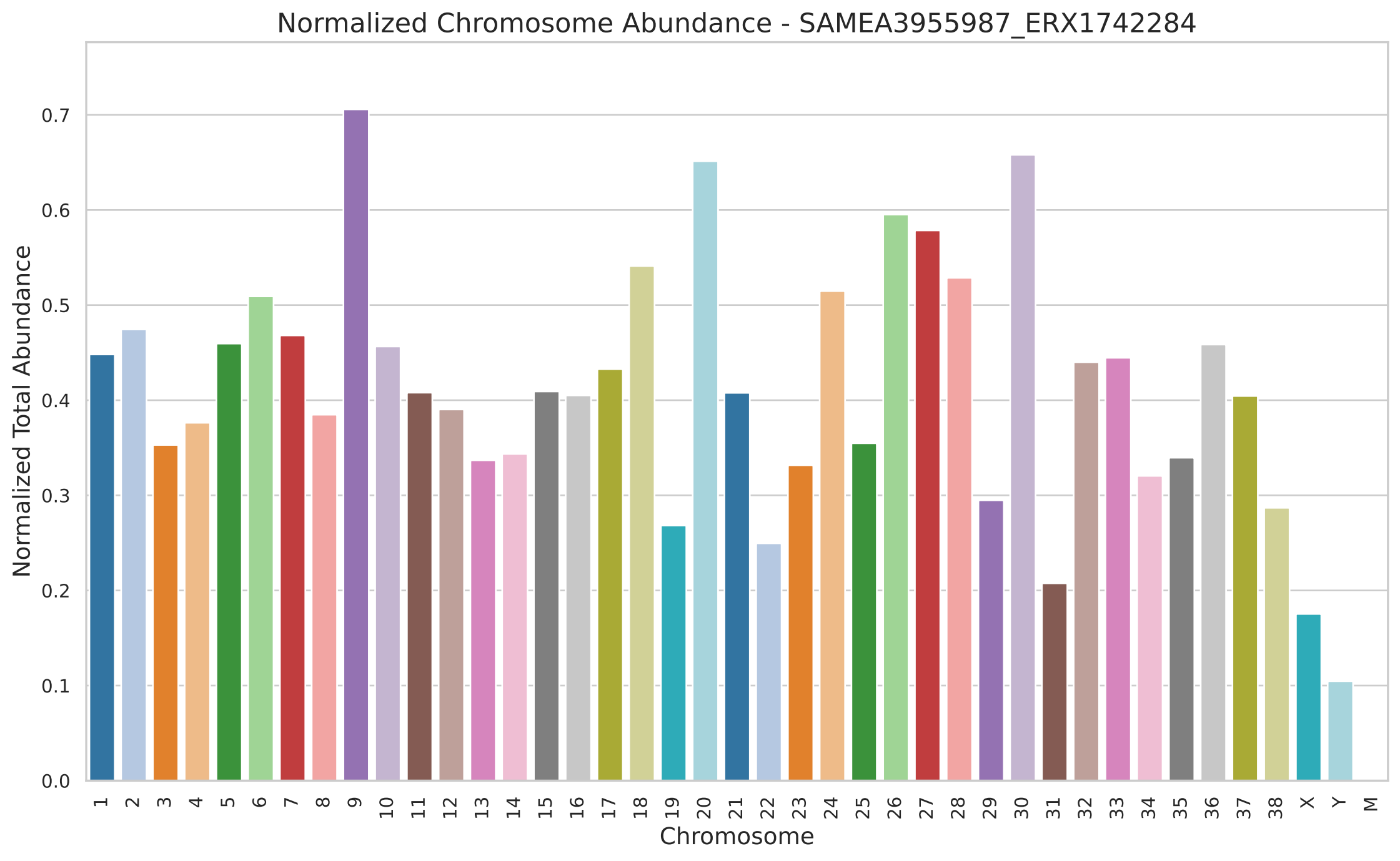

Normalized Chromosome Abundance - SAMEA3956076_ERX1742266
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

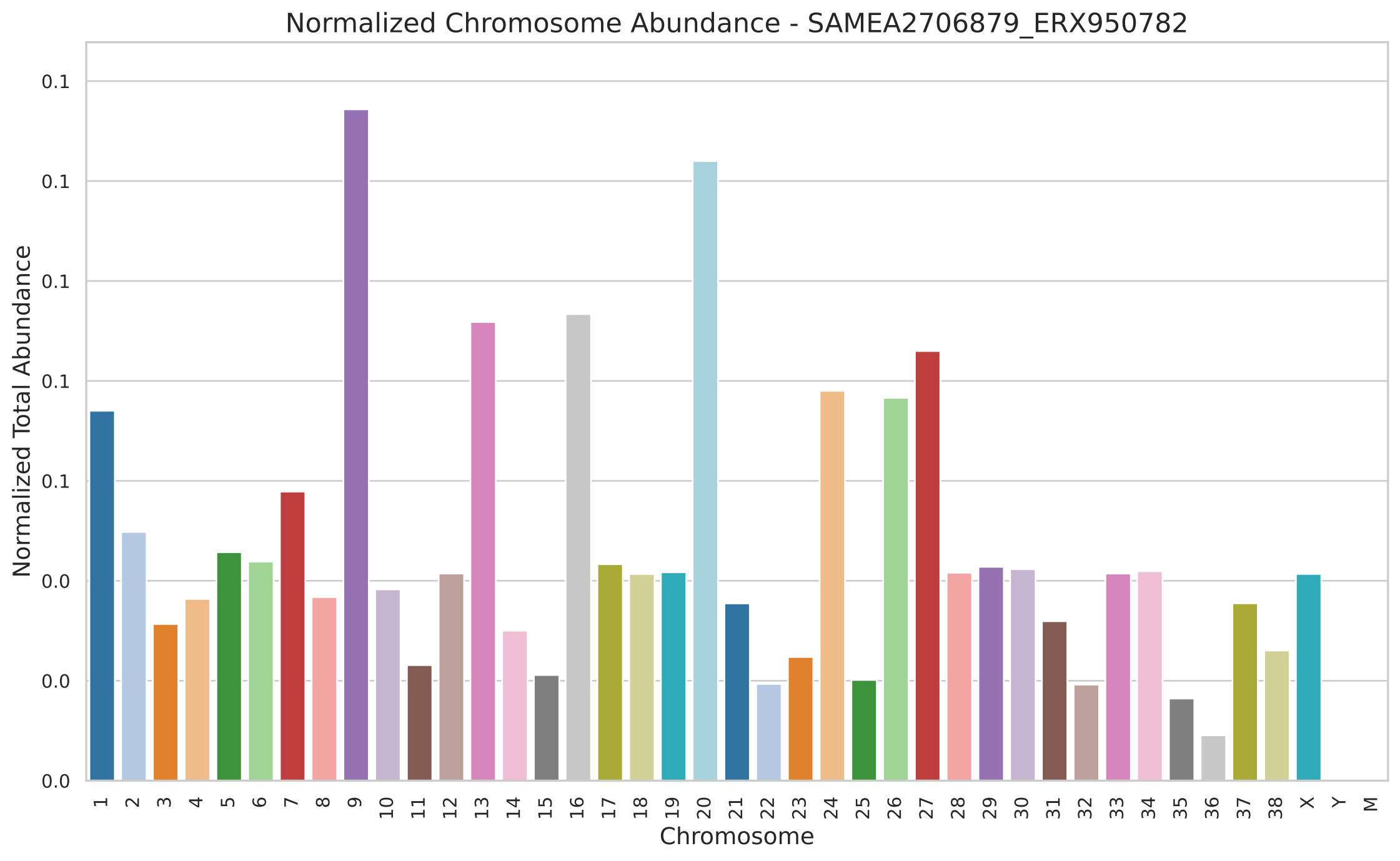

Normalized Chromosome Abundance - SAMEA3956069_ERX1742259
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

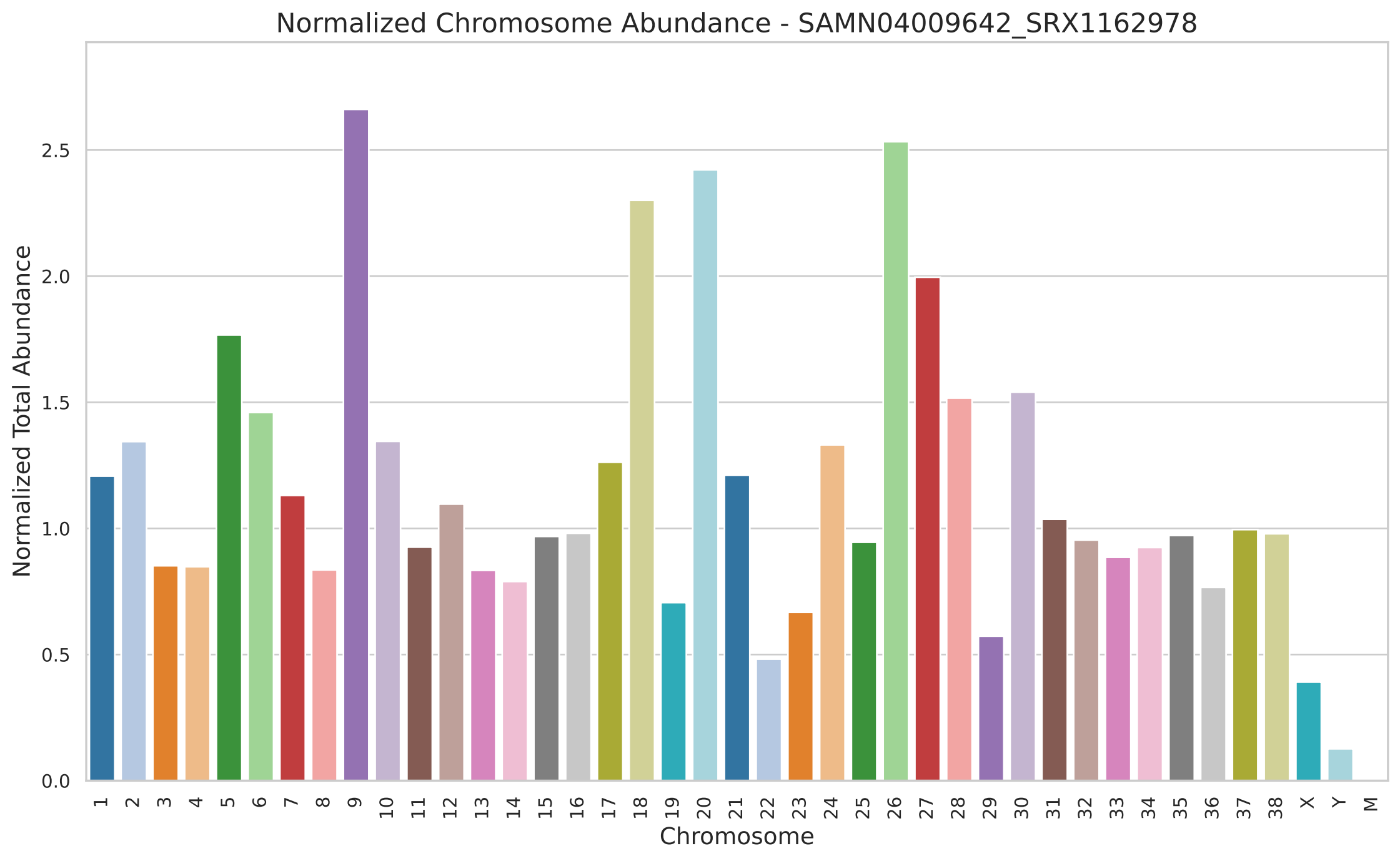

Normalized Chromosome Abundance - SAMEA3956049_ERX1742248
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

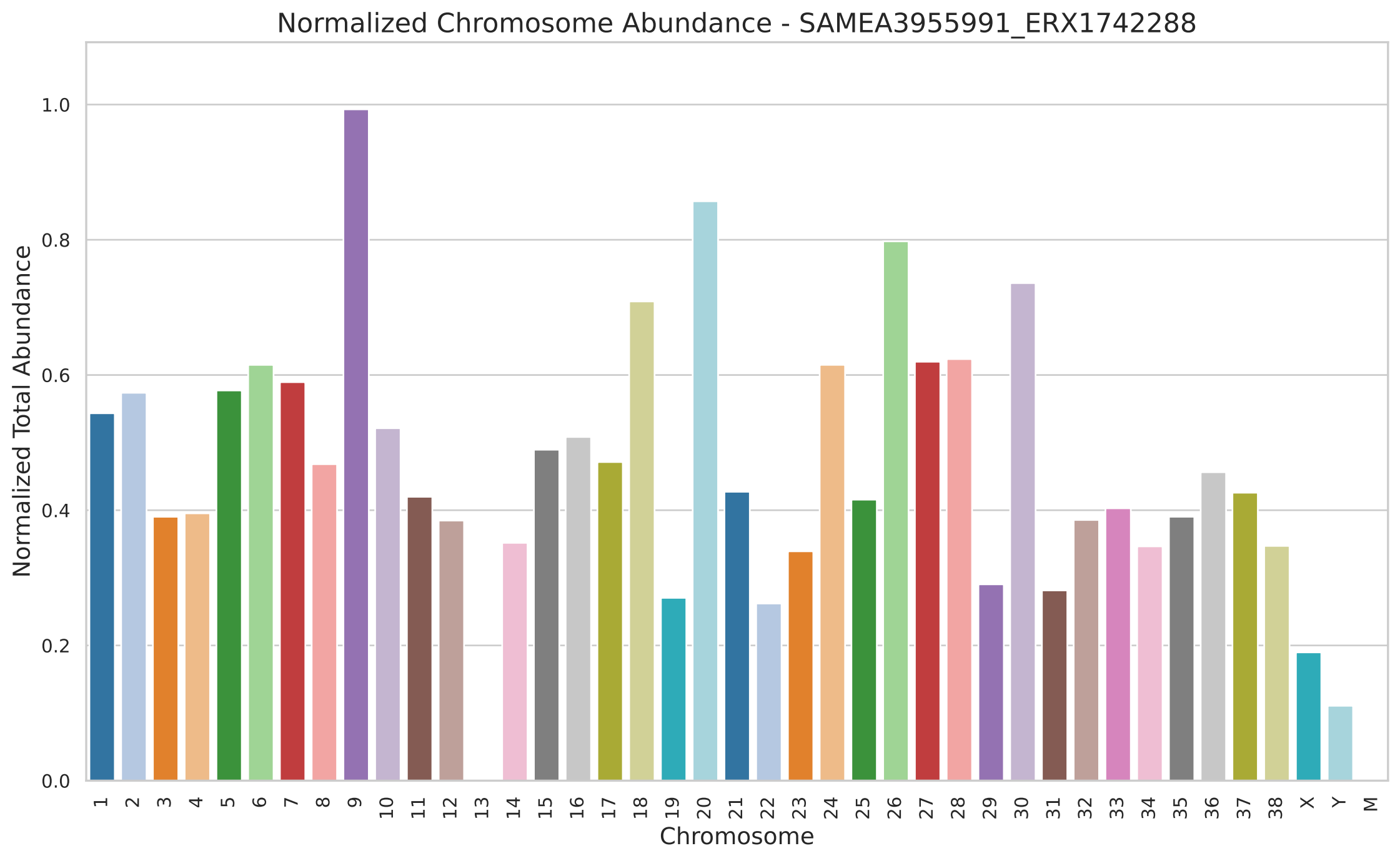

Normalized Chromosome Abundance - SAMEA3955966_ERX1742269
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

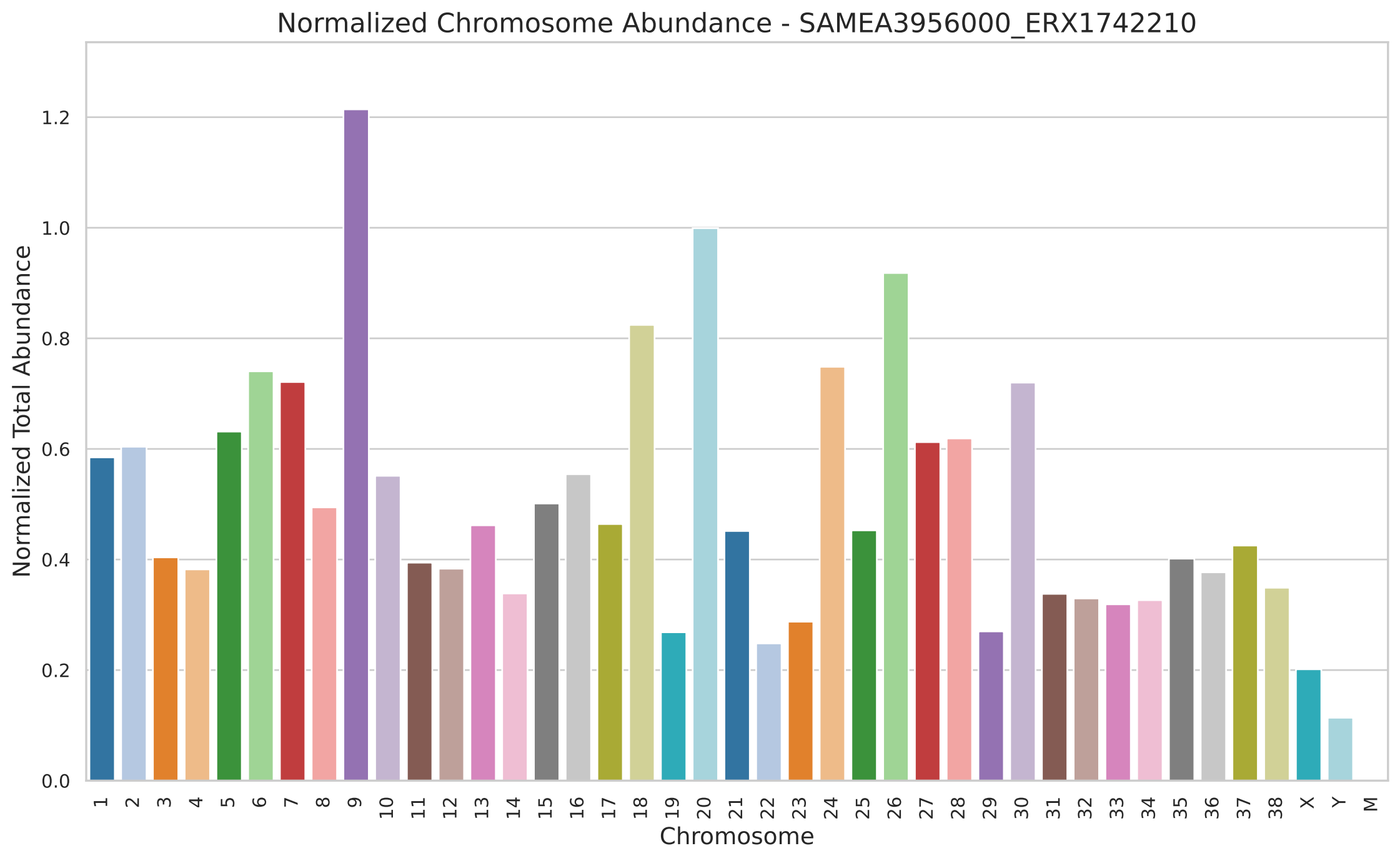

Normalized Chromosome Abundance - SAMEA3955969_ERX1742270
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

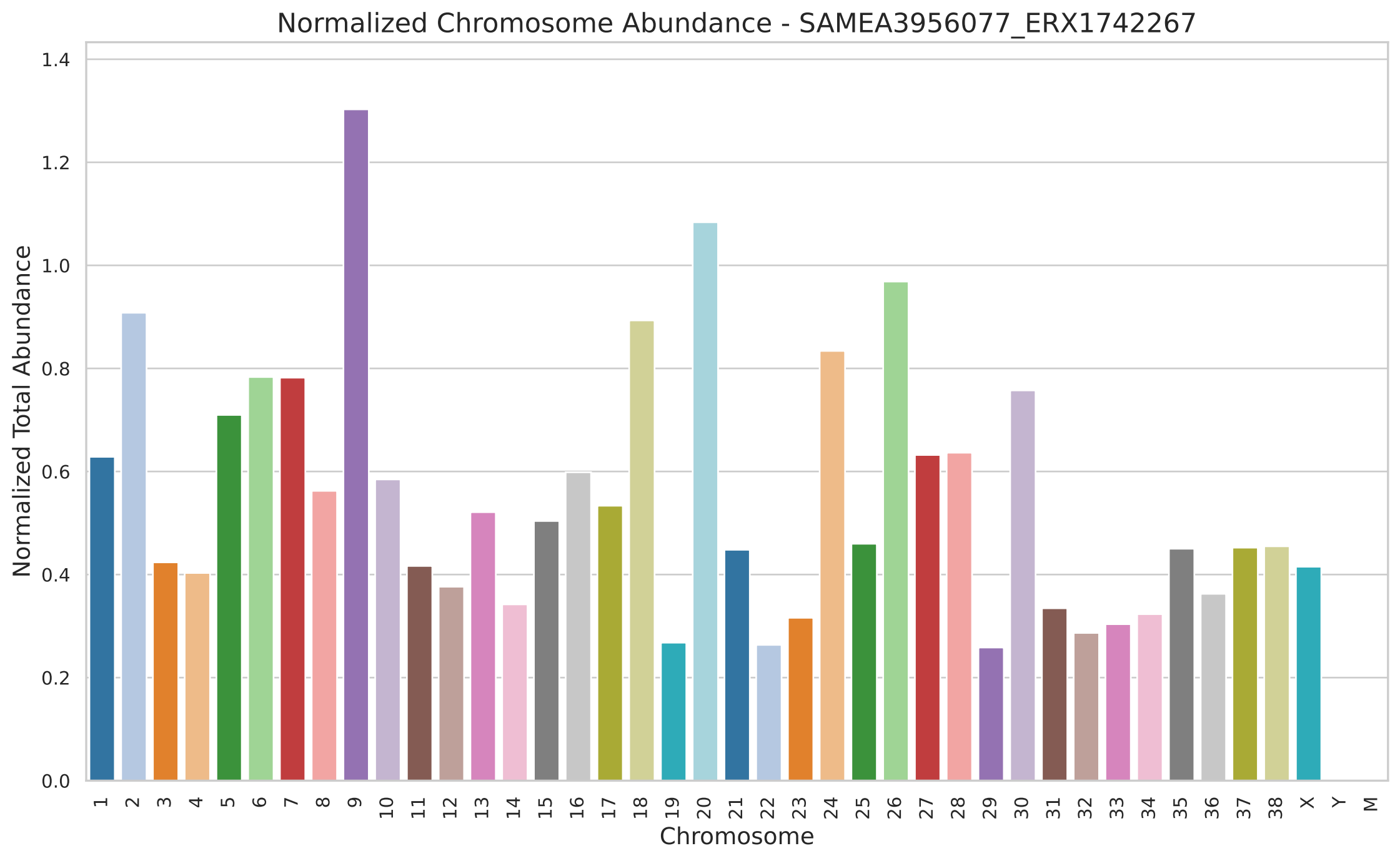

Normalized Chromosome Abundance - SAMEA3955987_ERX1742284
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

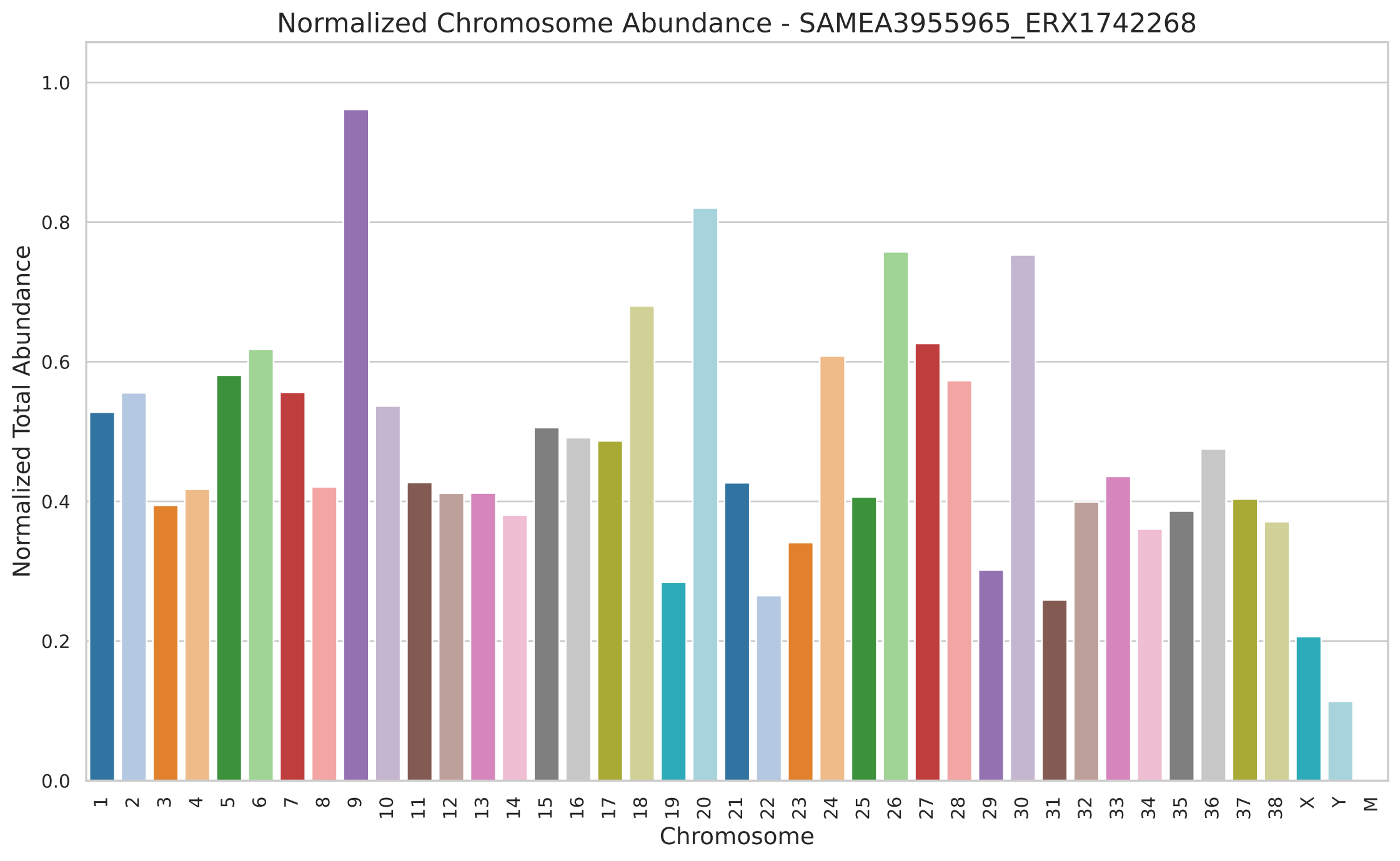

Normalized Chromosome Abundance - SAMEA2706879_ERX950782
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

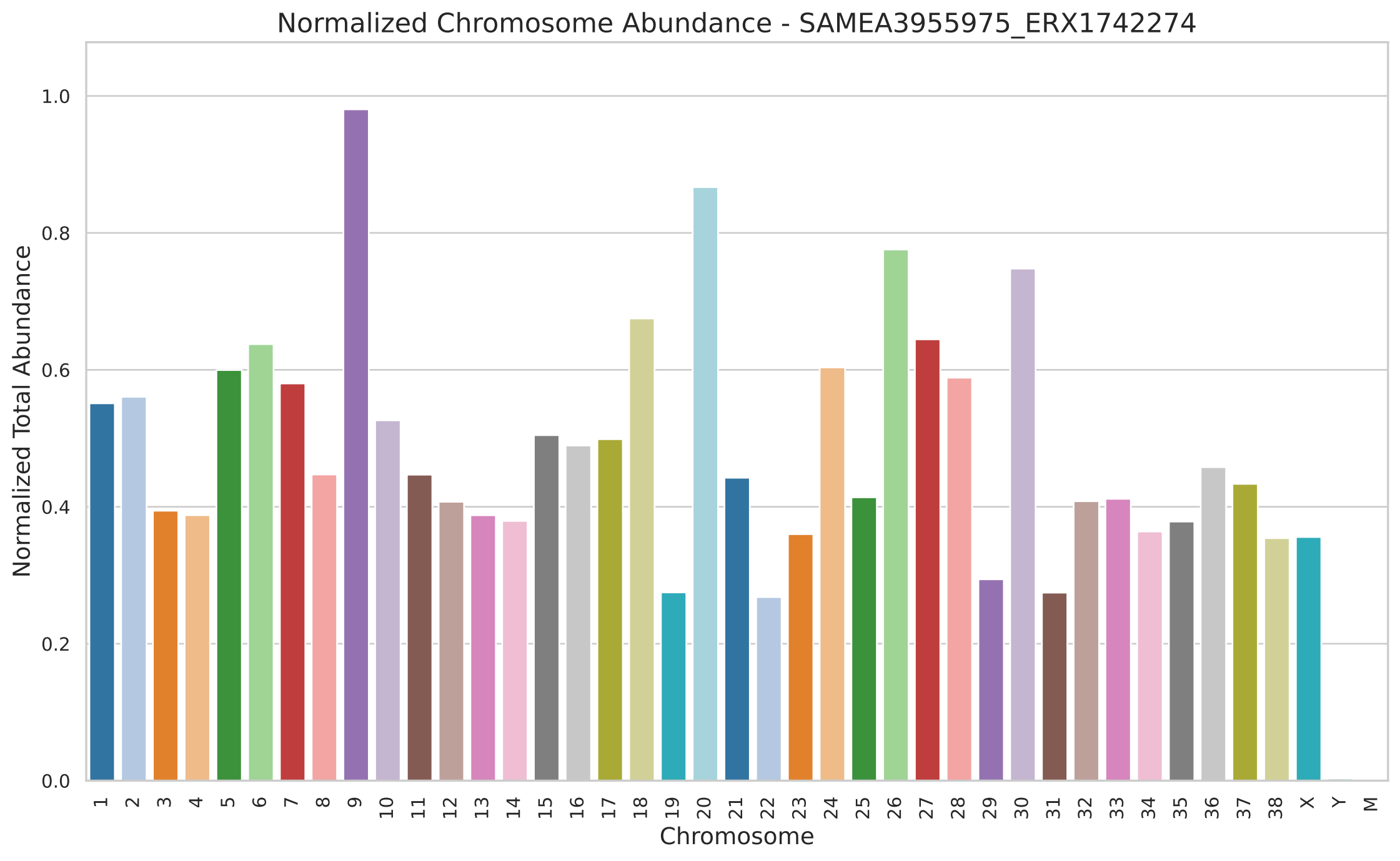

Normalized Chromosome Abundance - SAMN04009642_SRX1162978
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

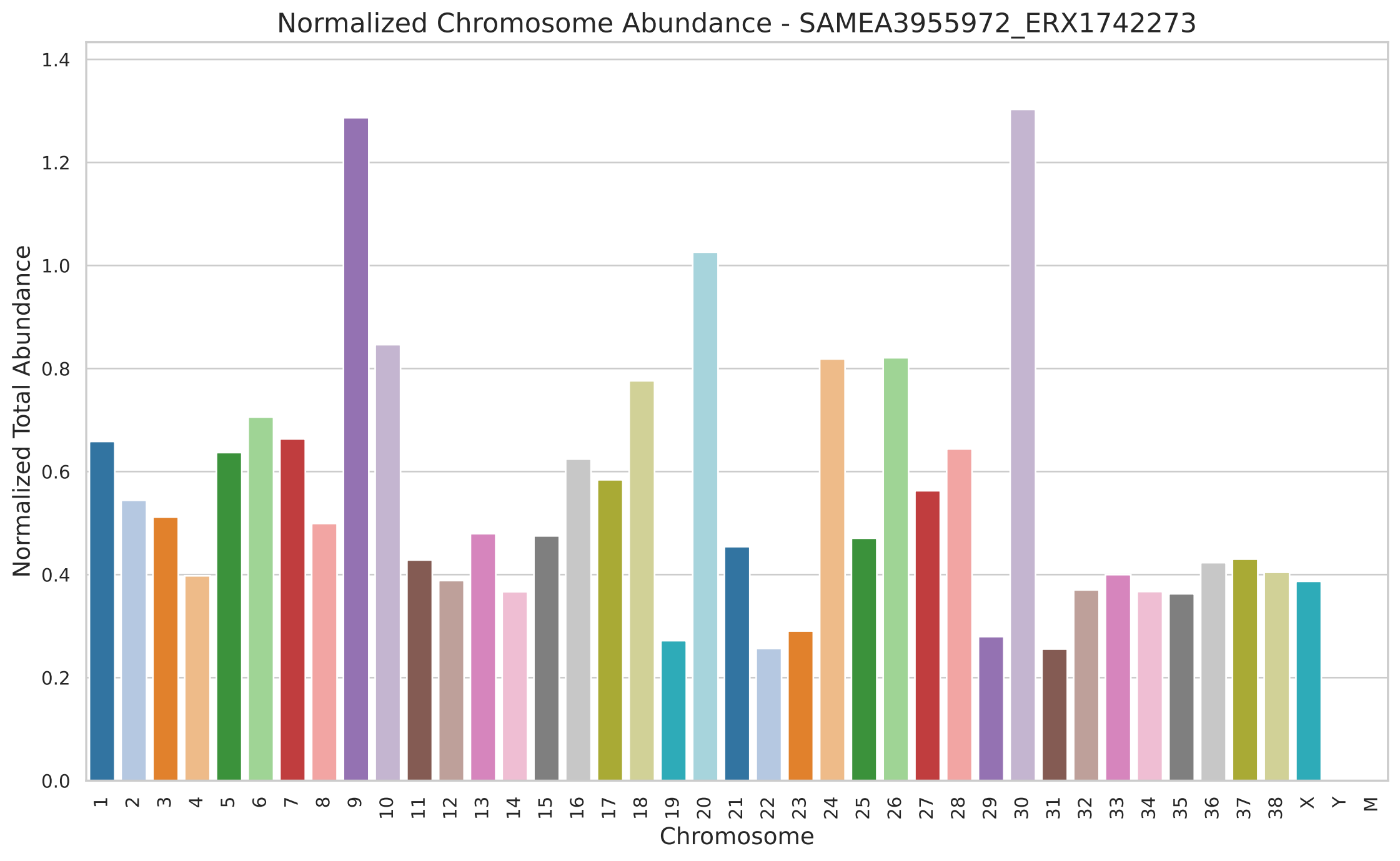

Normalized Chromosome Abundance - SAMEA3955991_ERX1742288
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

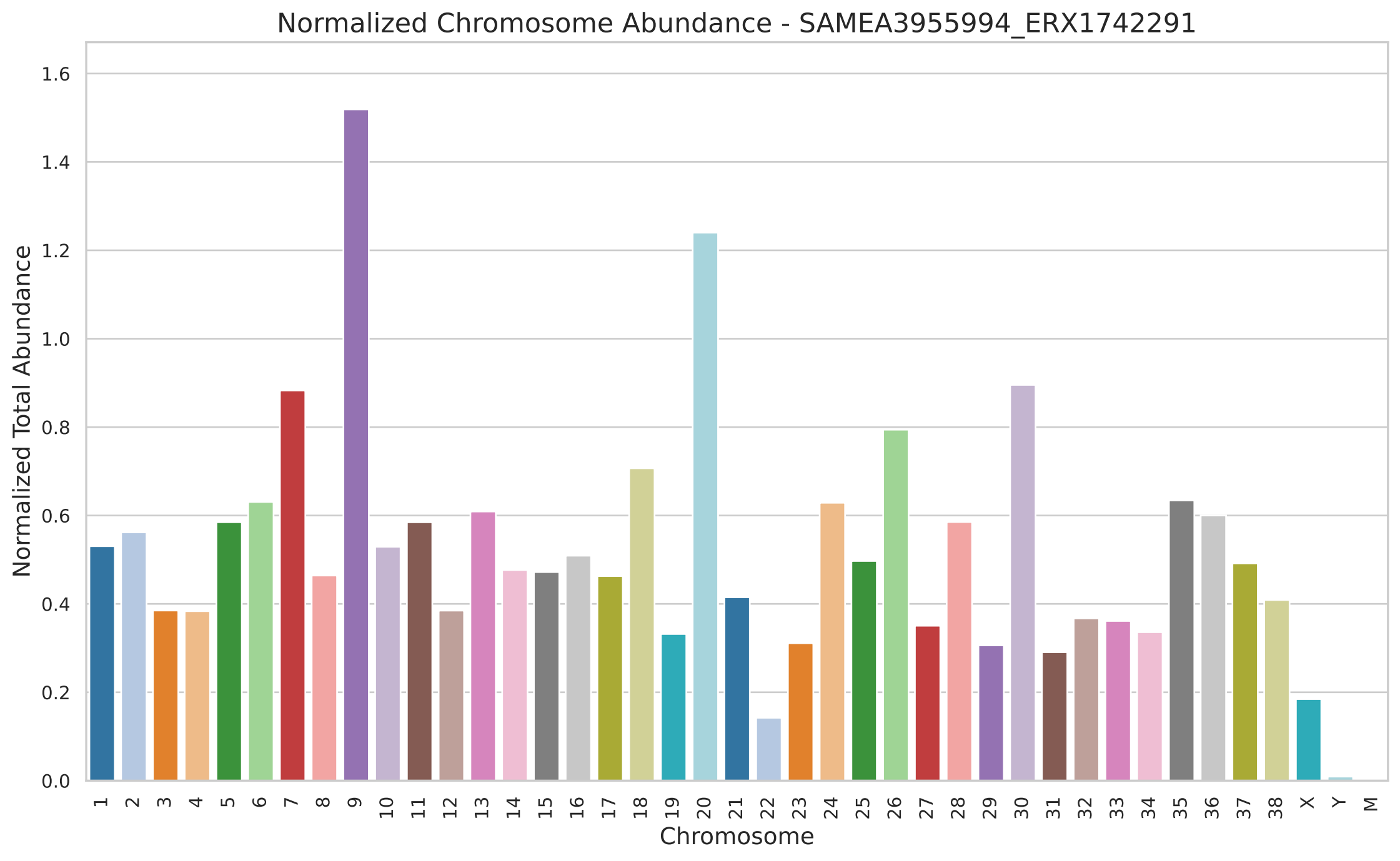

Normalized Chromosome Abundance - SAMEA3956000_ERX1742210
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

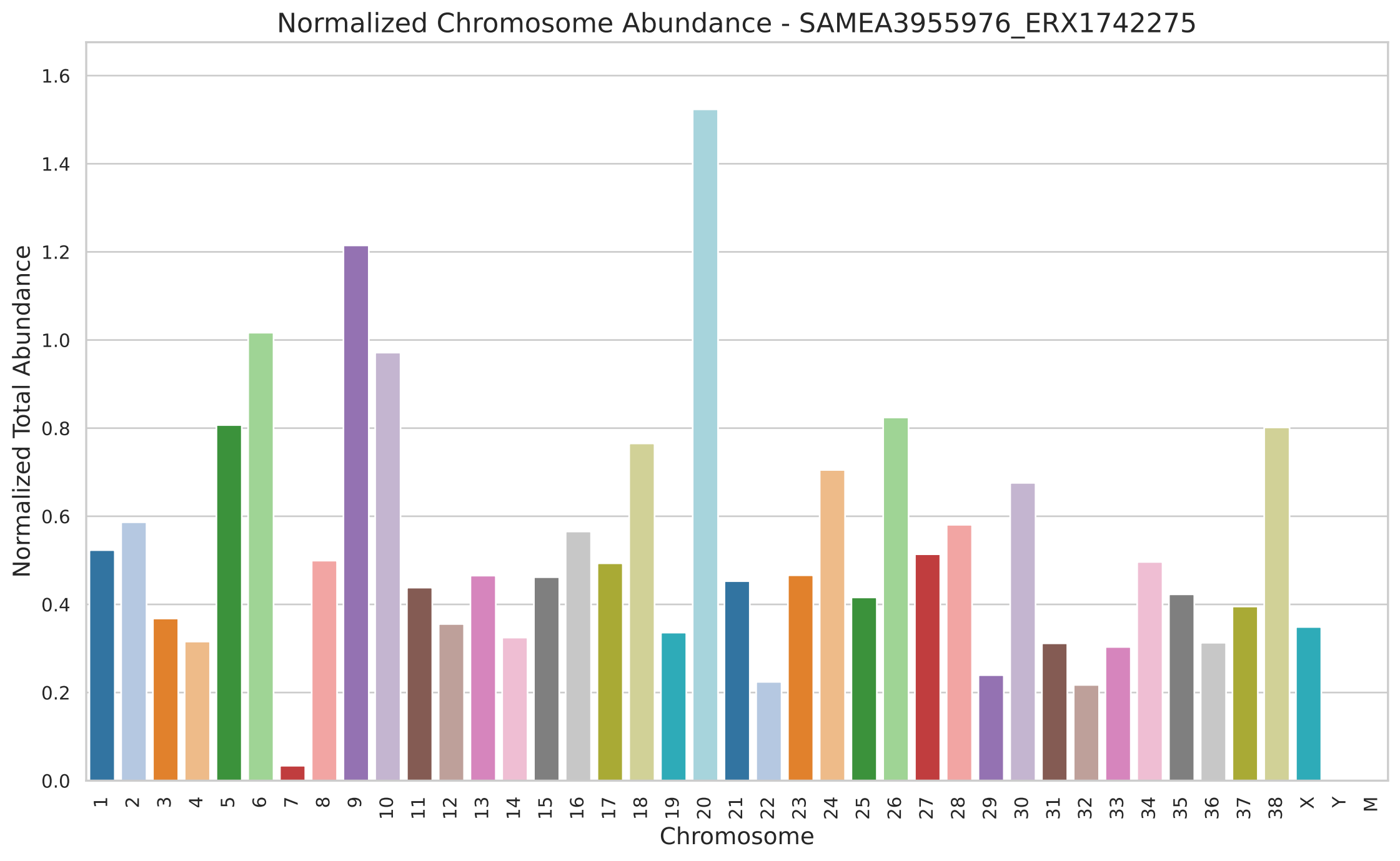

Normalized Chromosome Abundance - SAMEA3956077_ERX1742267
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

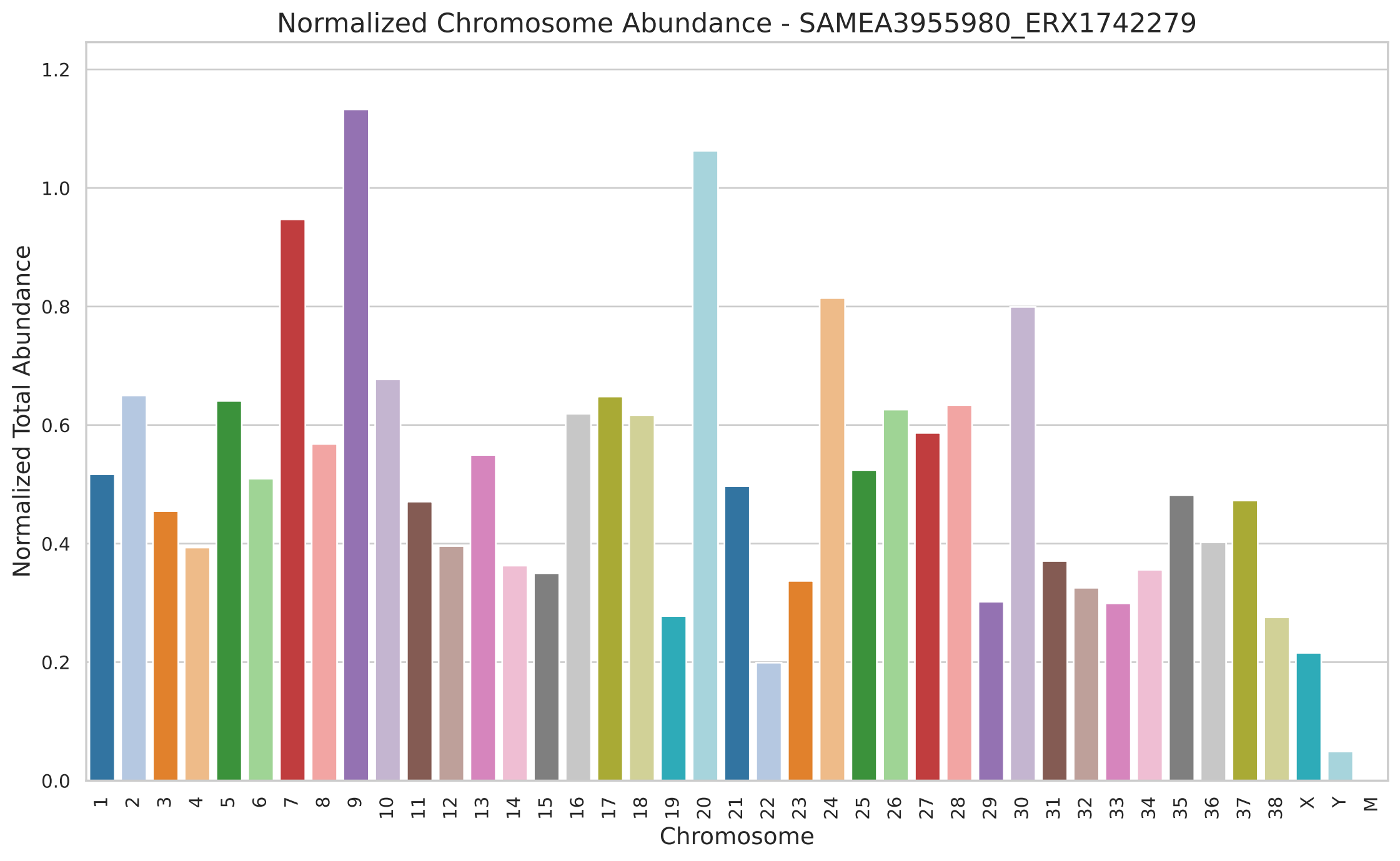

Normalized Chromosome Abundance - SAMEA3955965_ERX1742268
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

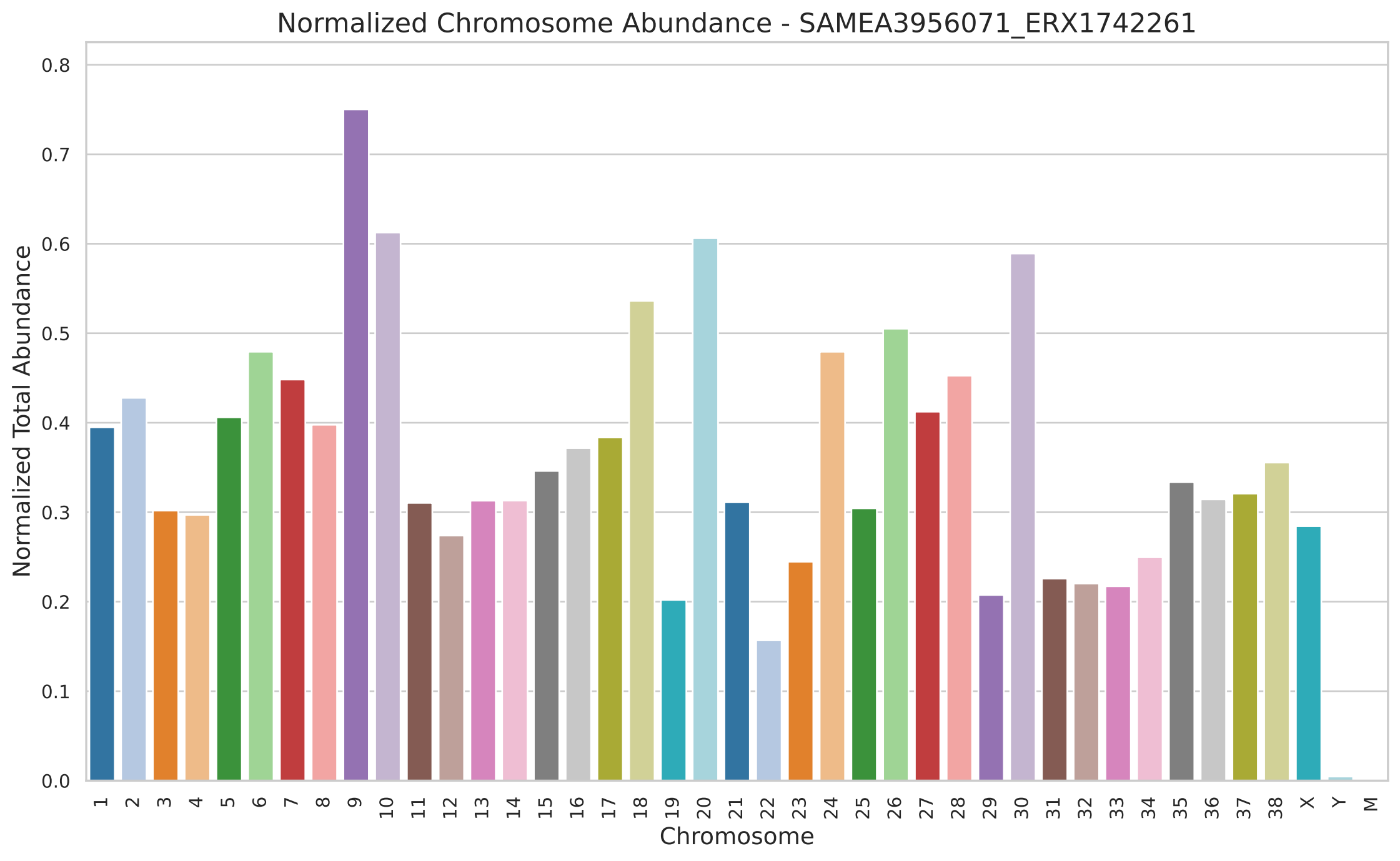

Normalized Chromosome Abundance - SAMEA3955975_ERX1742274
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

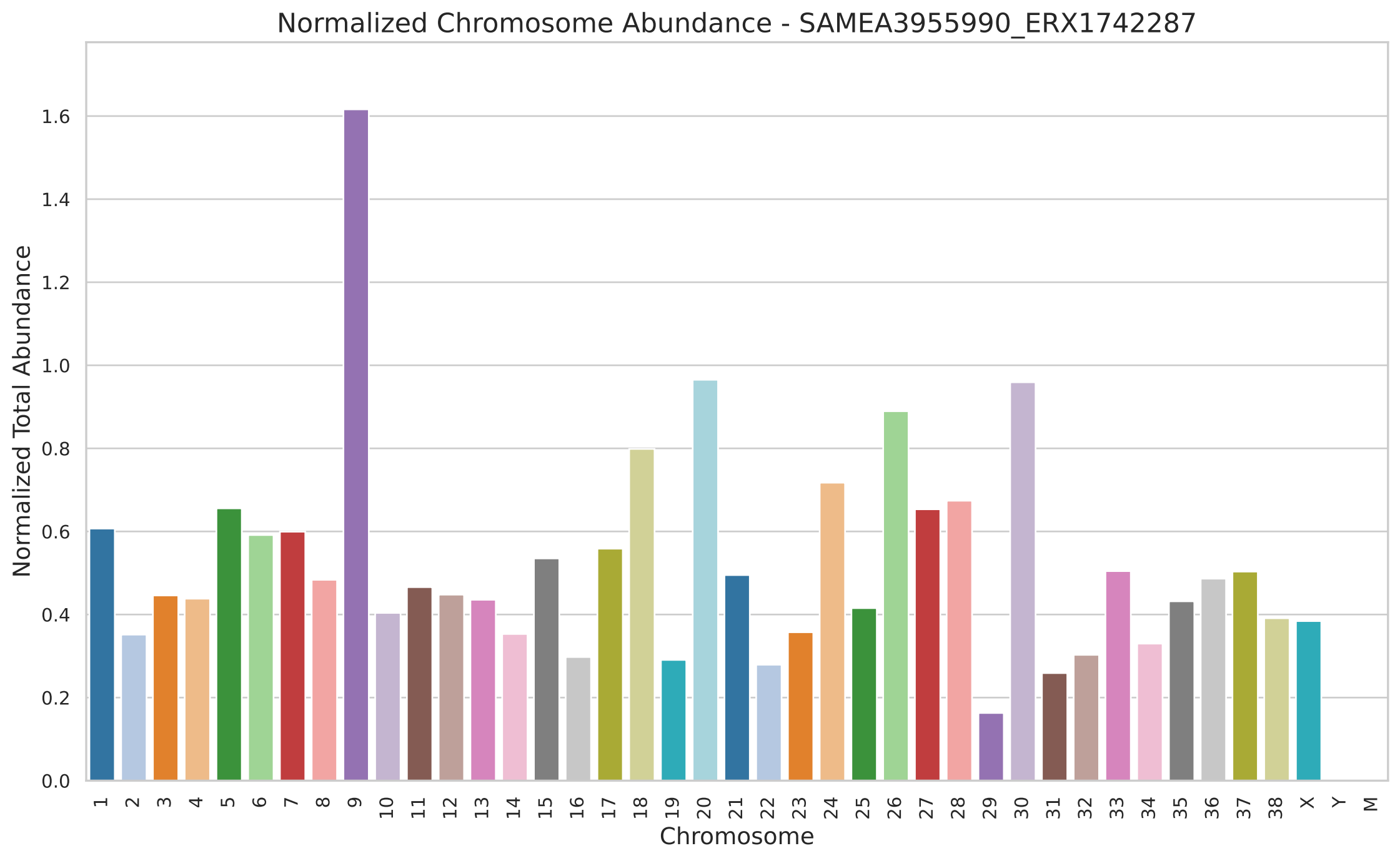

Normalized Chromosome Abundance - SAMEA3955972_ERX1742273
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

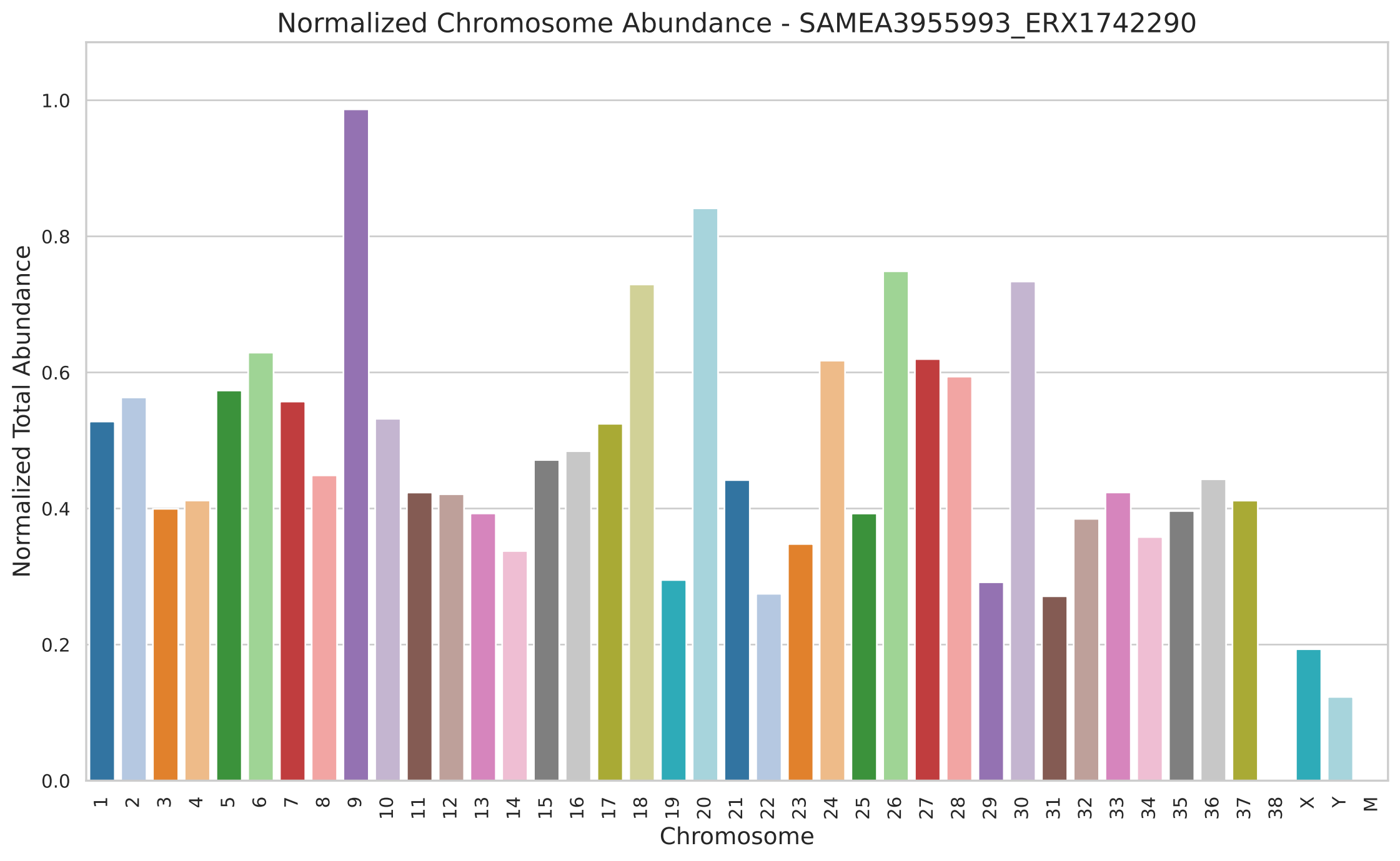

Normalized Chromosome Abundance - SAMEA3955994_ERX1742291
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

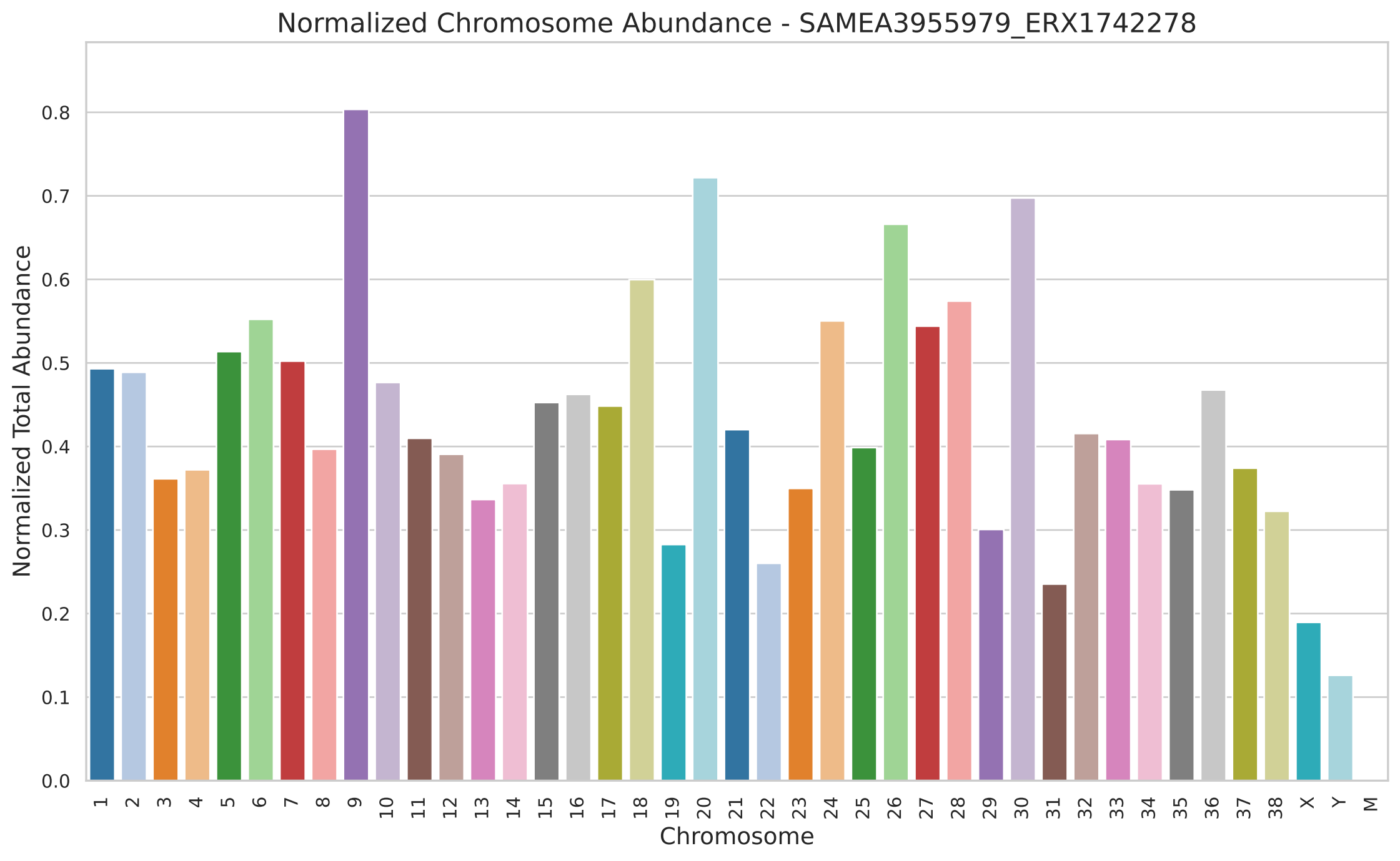

Normalized Chromosome Abundance - SAMEA3955976_ERX1742275
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

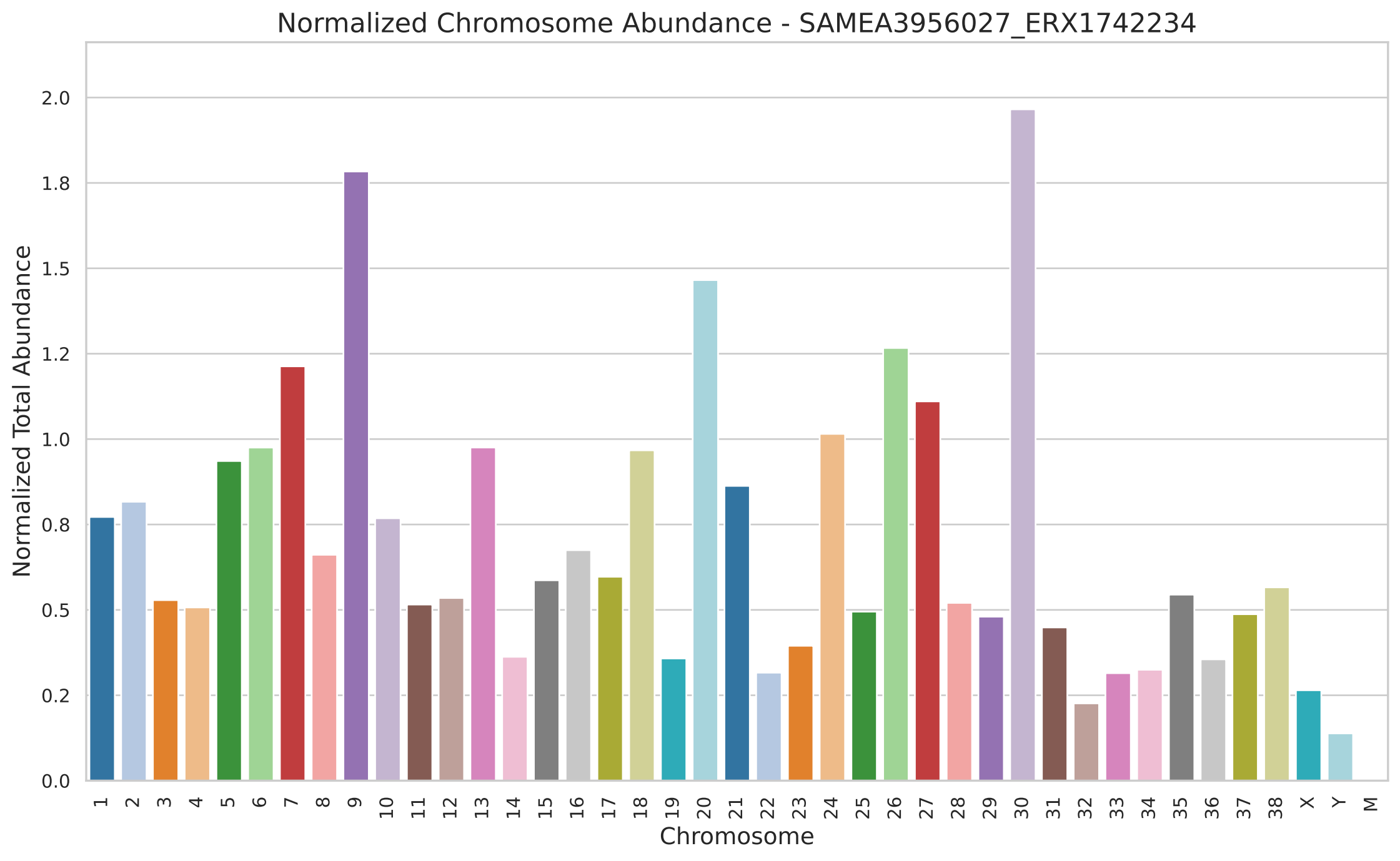

Normalized Chromosome Abundance - SAMEA3955980_ERX1742279
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

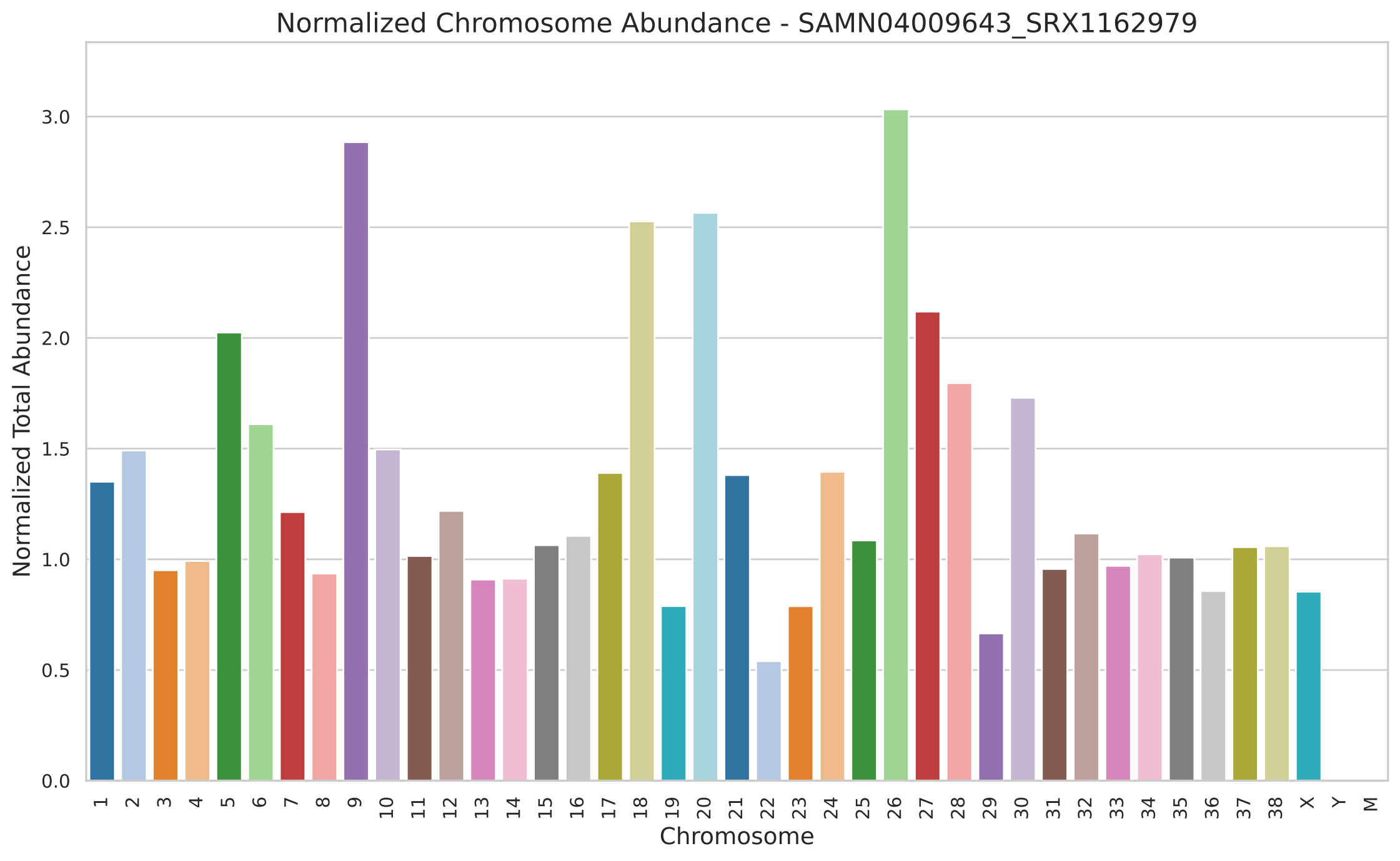

Normalized Chromosome Abundance - SAMEA3956071_ERX1742261
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

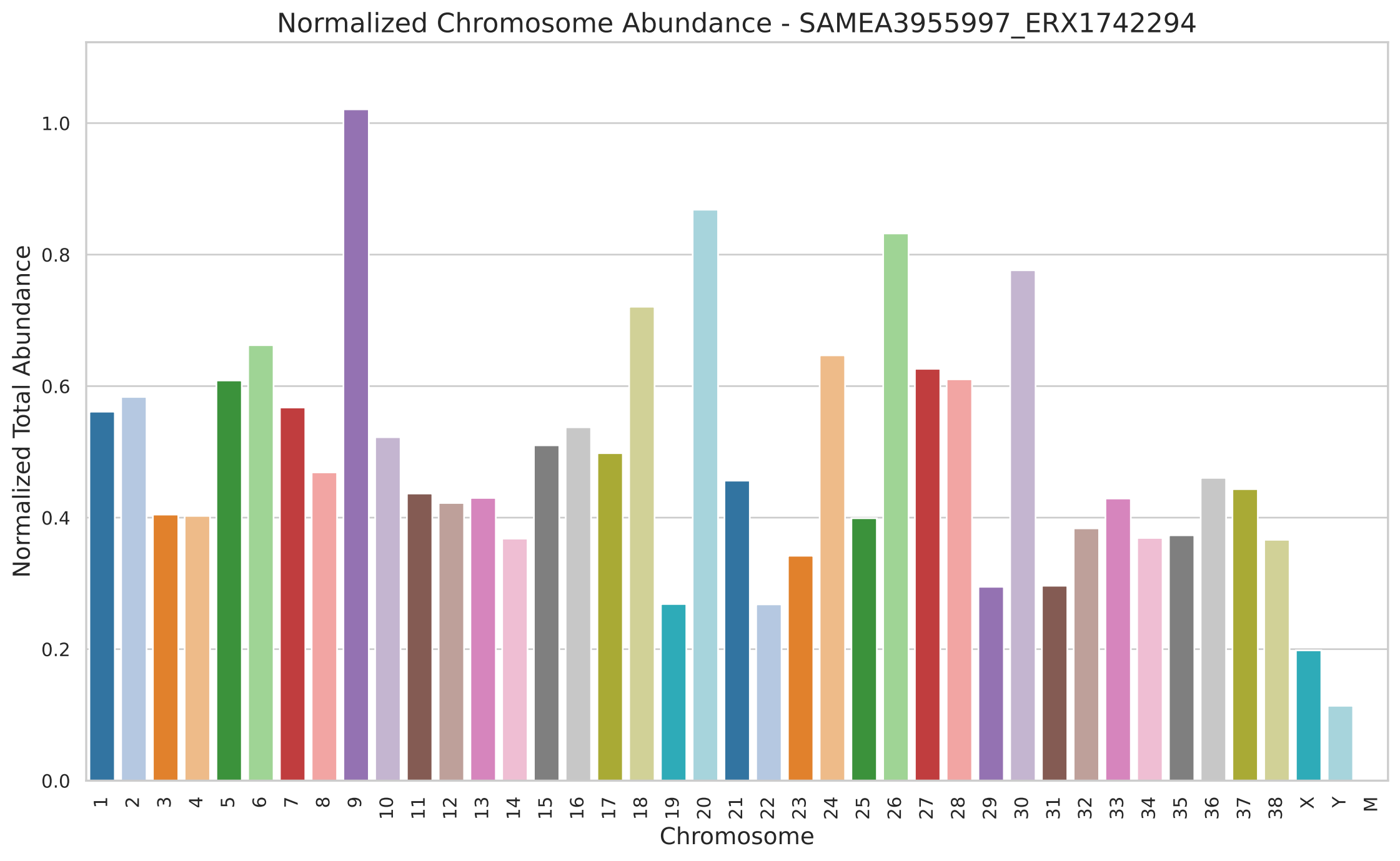

Normalized Chromosome Abundance - SAMEA3955990_ERX1742287
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

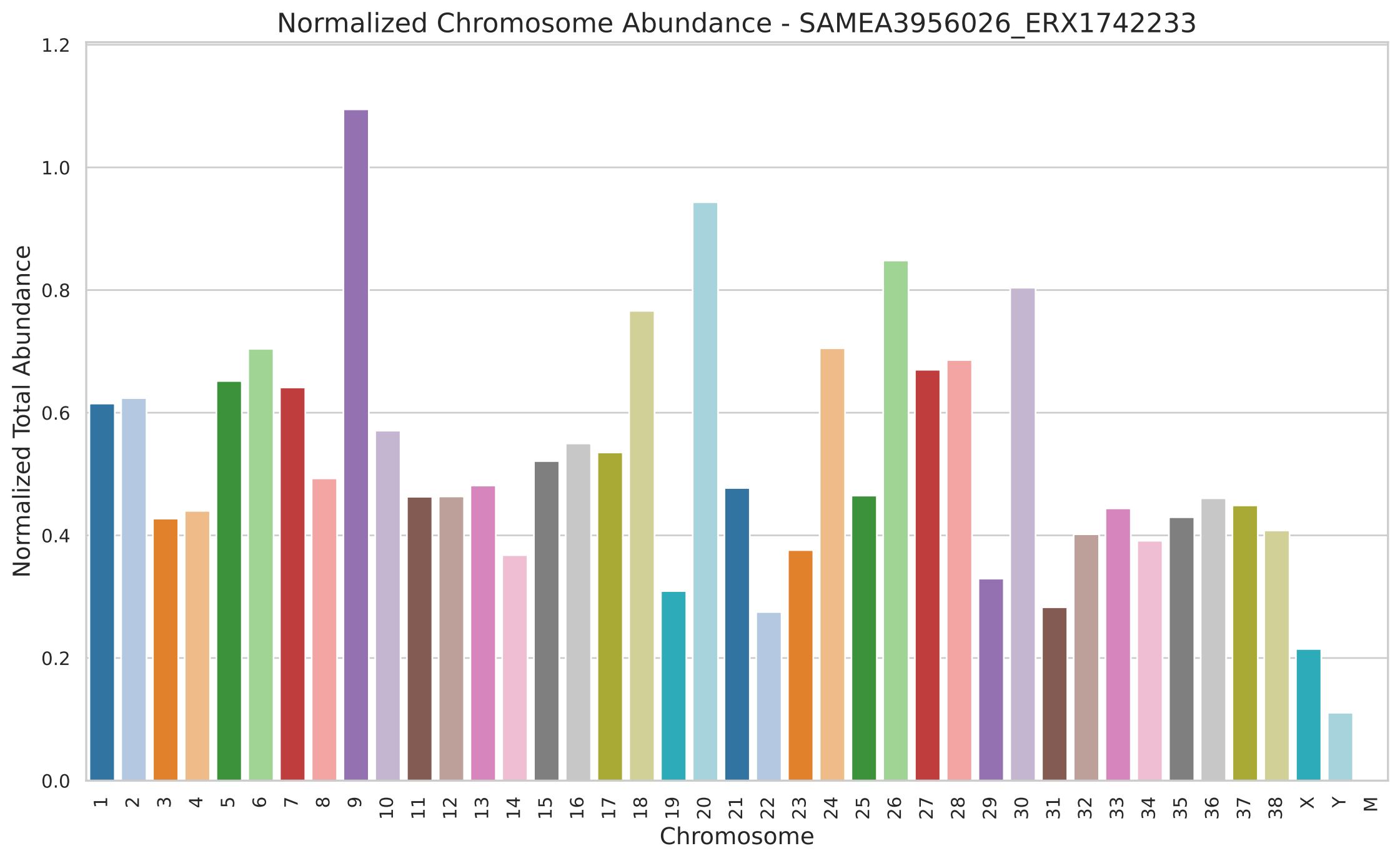

Normalized Chromosome Abundance - SAMEA3955993_ERX1742290
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

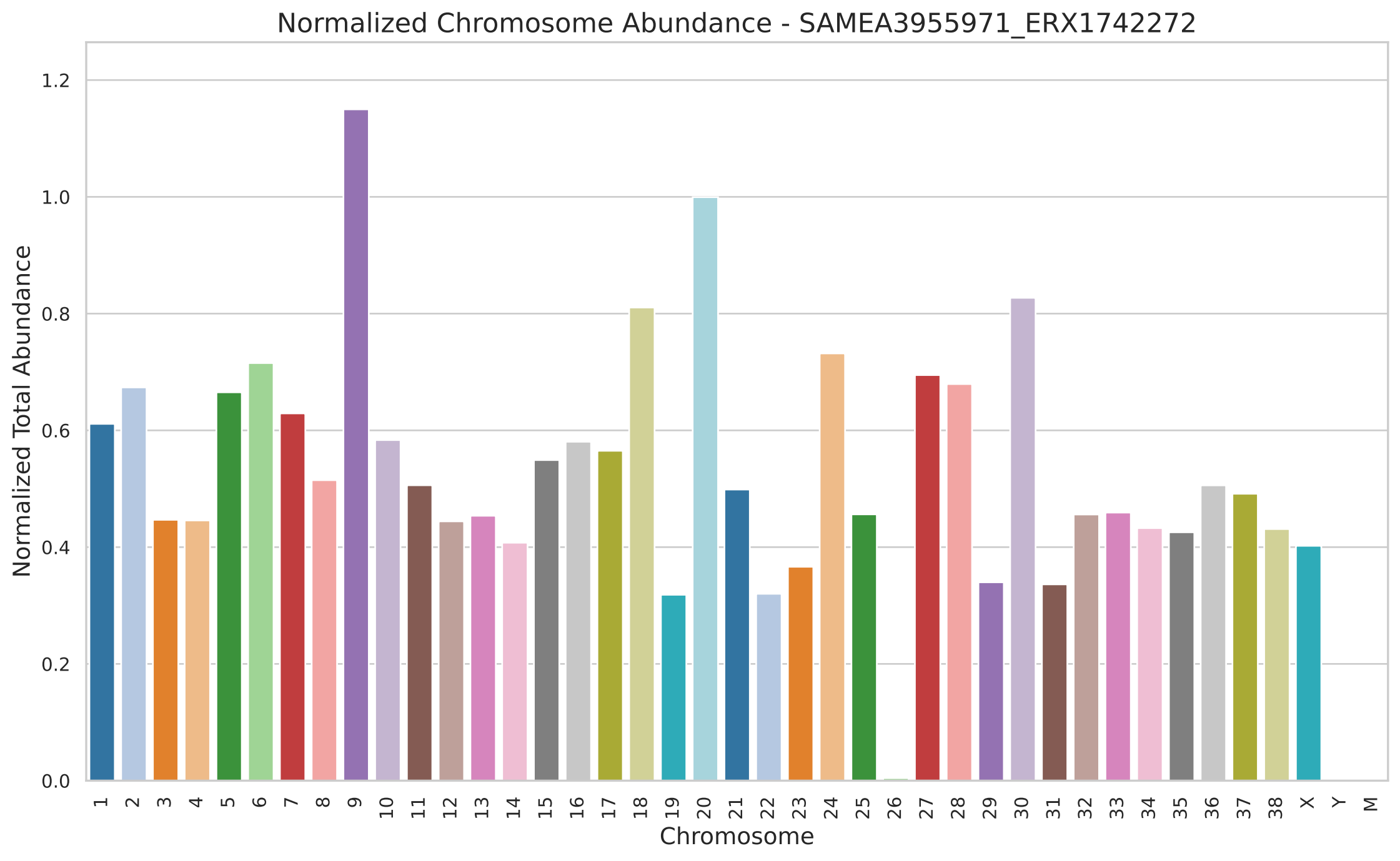

Normalized Chromosome Abundance - SAMEA3955979_ERX1742278
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

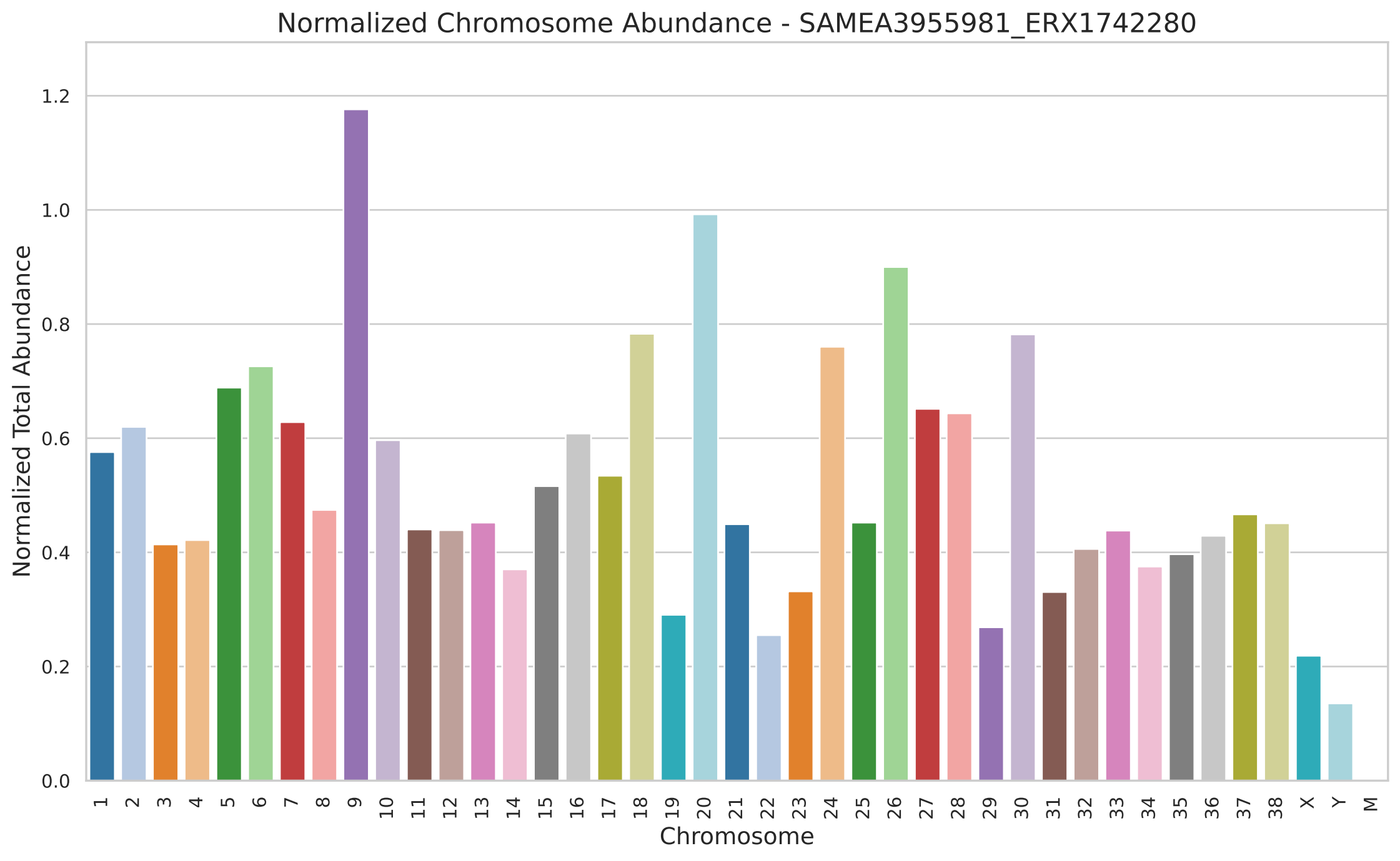

Normalized Chromosome Abundance - SAMEA3956027_ERX1742234
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

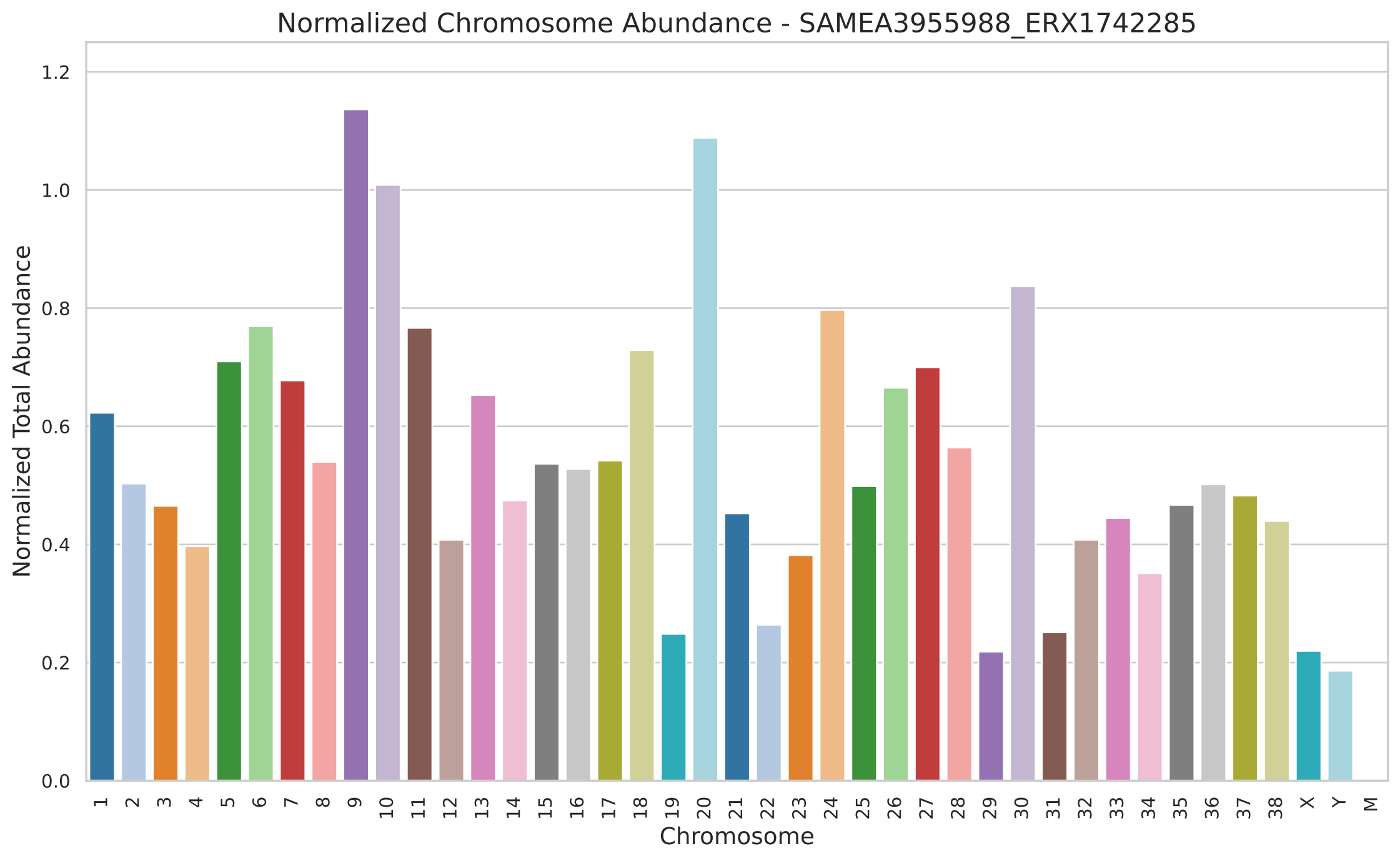

Normalized Chromosome Abundance - SAMN04009643_SRX1162979
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

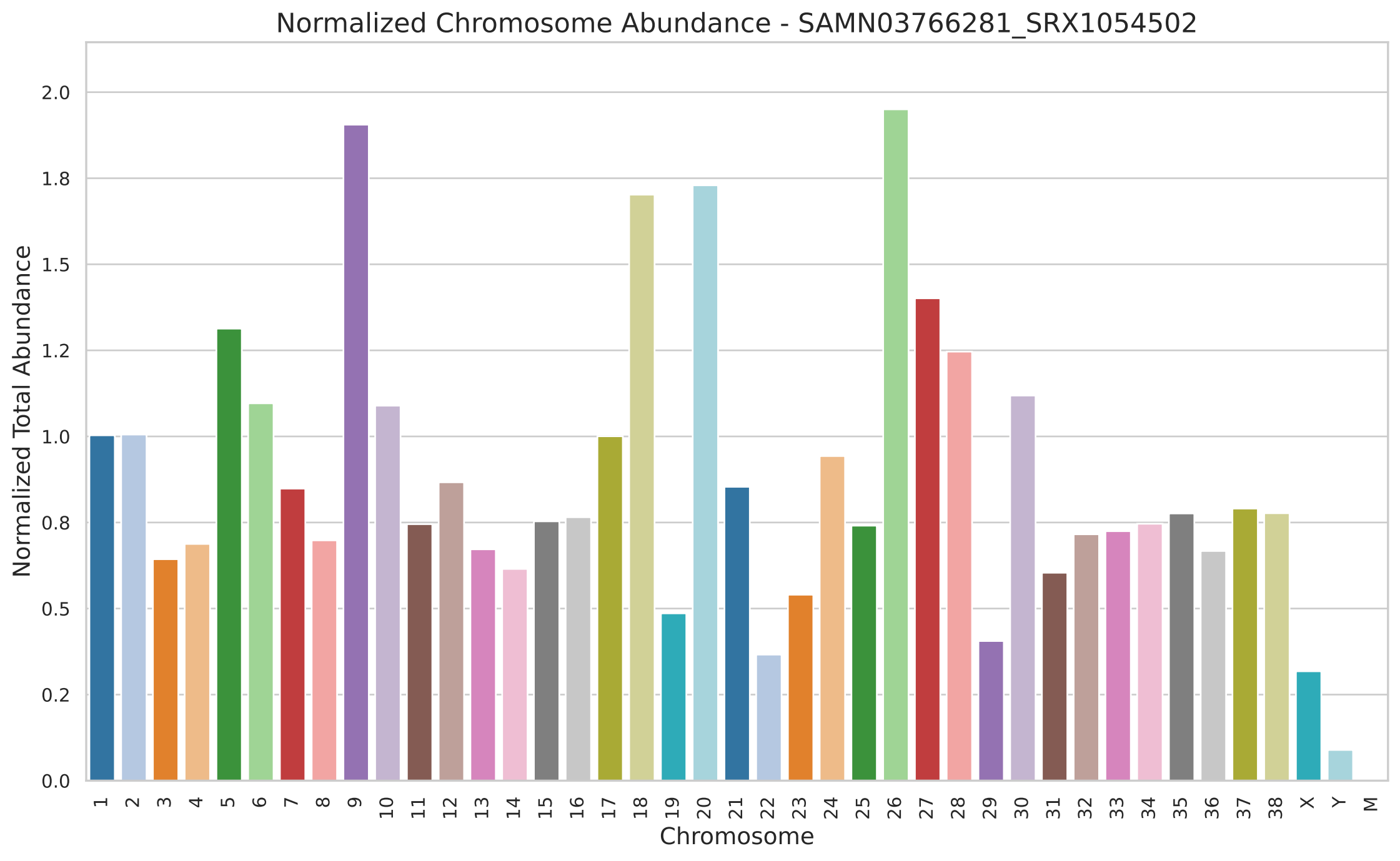

Normalized Chromosome Abundance - SAMEA3955997_ERX1742294
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

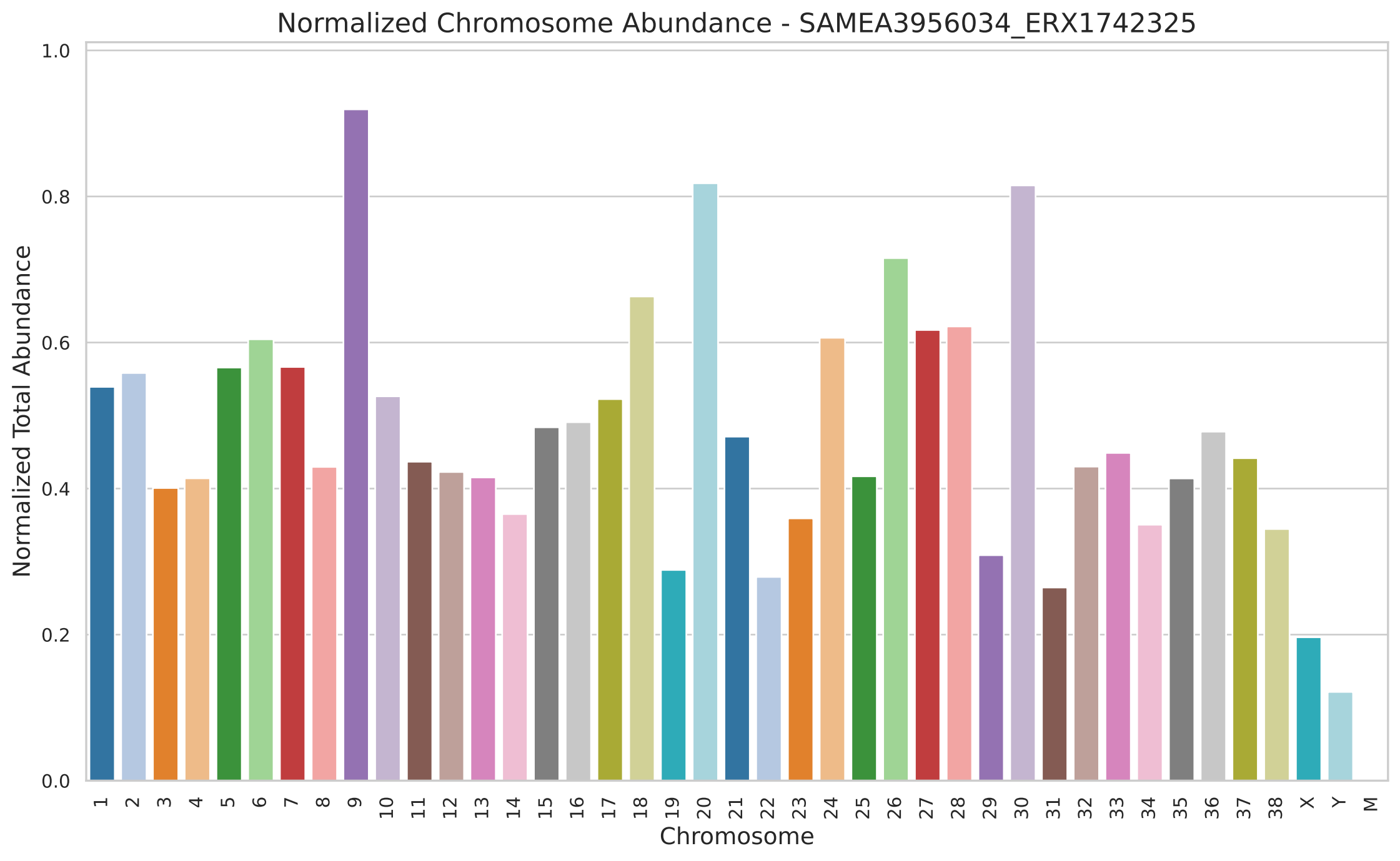

Normalized Chromosome Abundance - SAMEA3956026_ERX1742233
Normalized Total Abundance
1.2
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

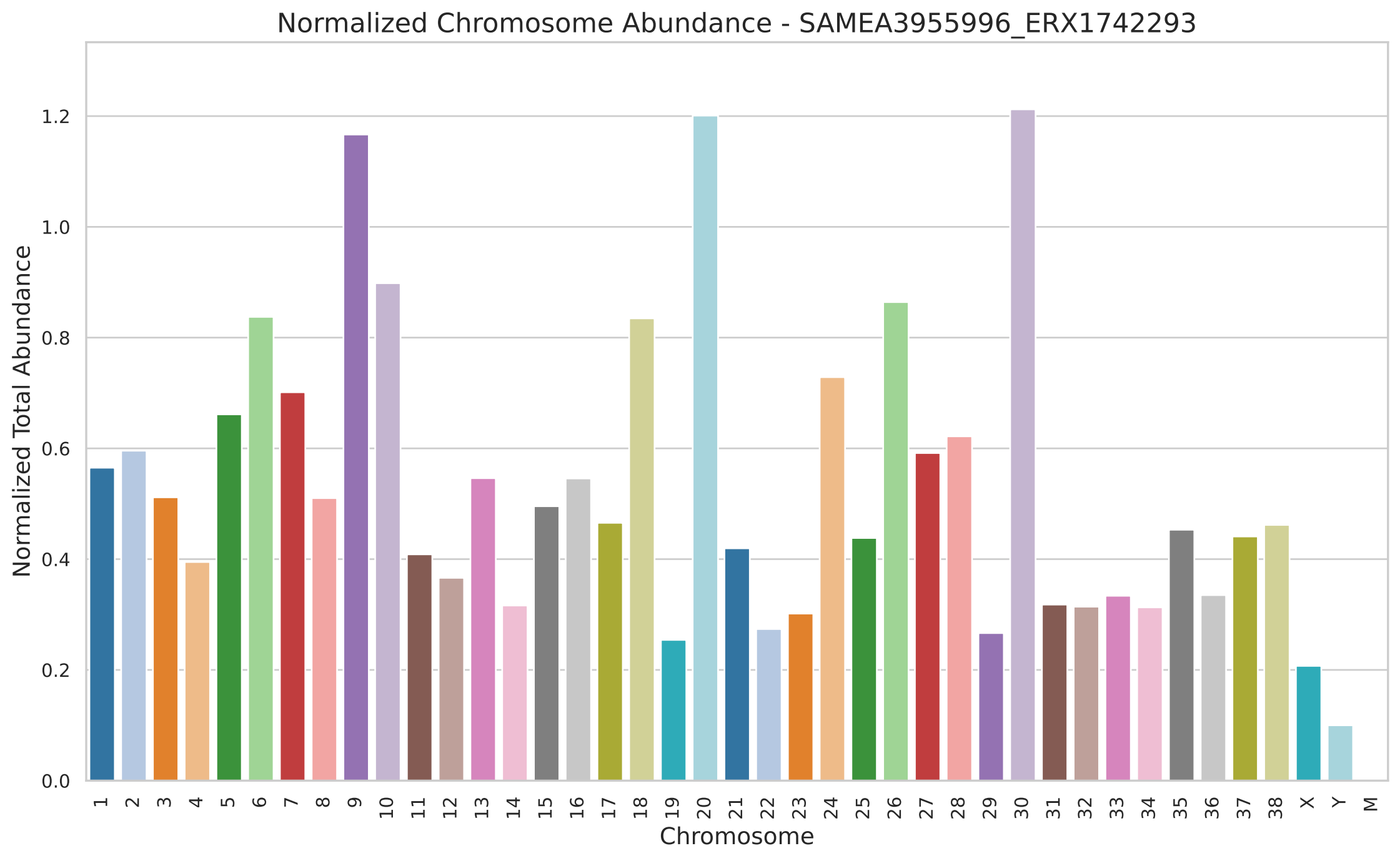

Normalized Chromosome Abundance - SAMEA3955971_ERX1742272
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

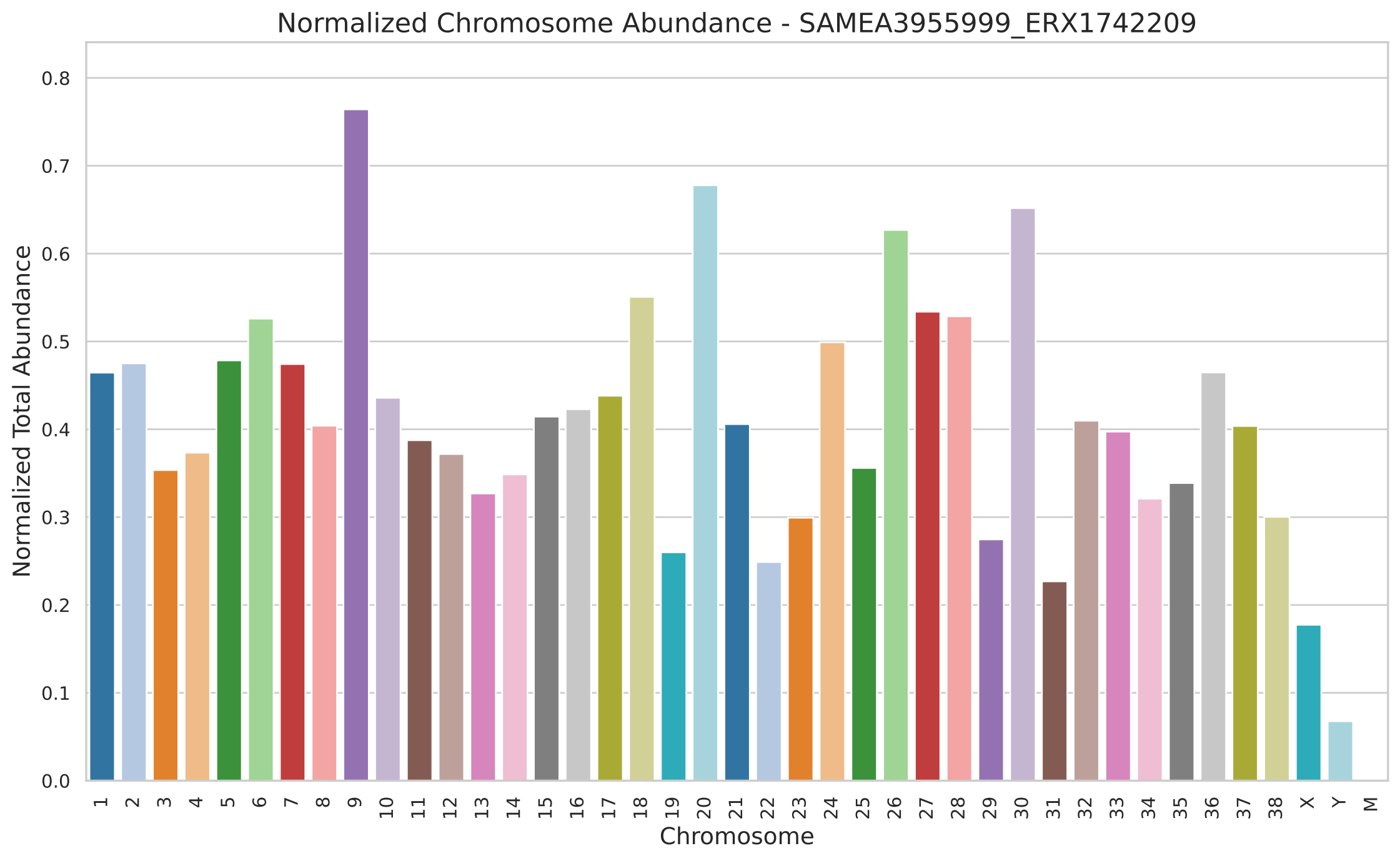

Normalized Chromosome Abundance - SAMEA3955981_ERX1742280
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

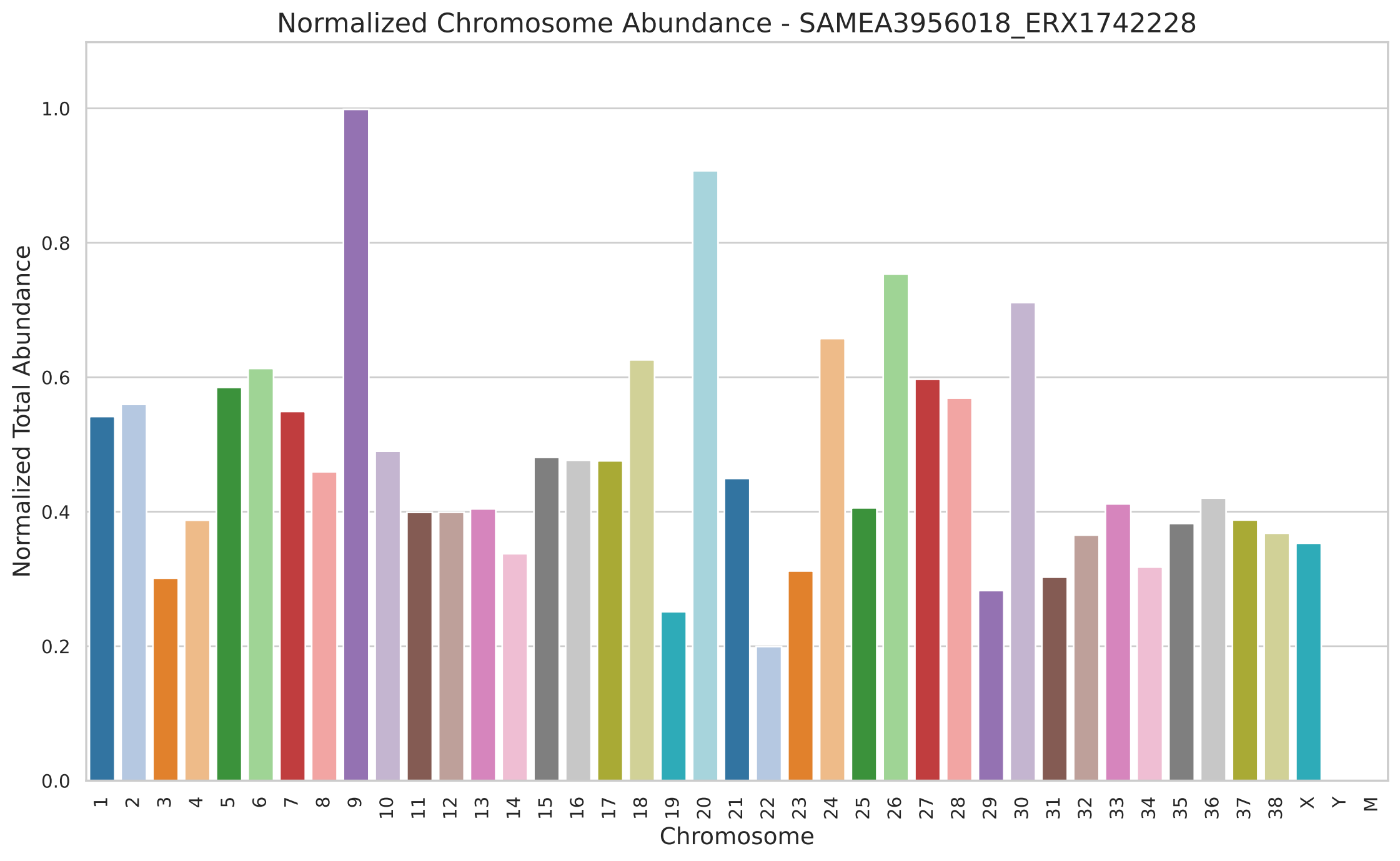

Normalized Chromosome Abundance - SAMEA3955988_ERX1742285
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

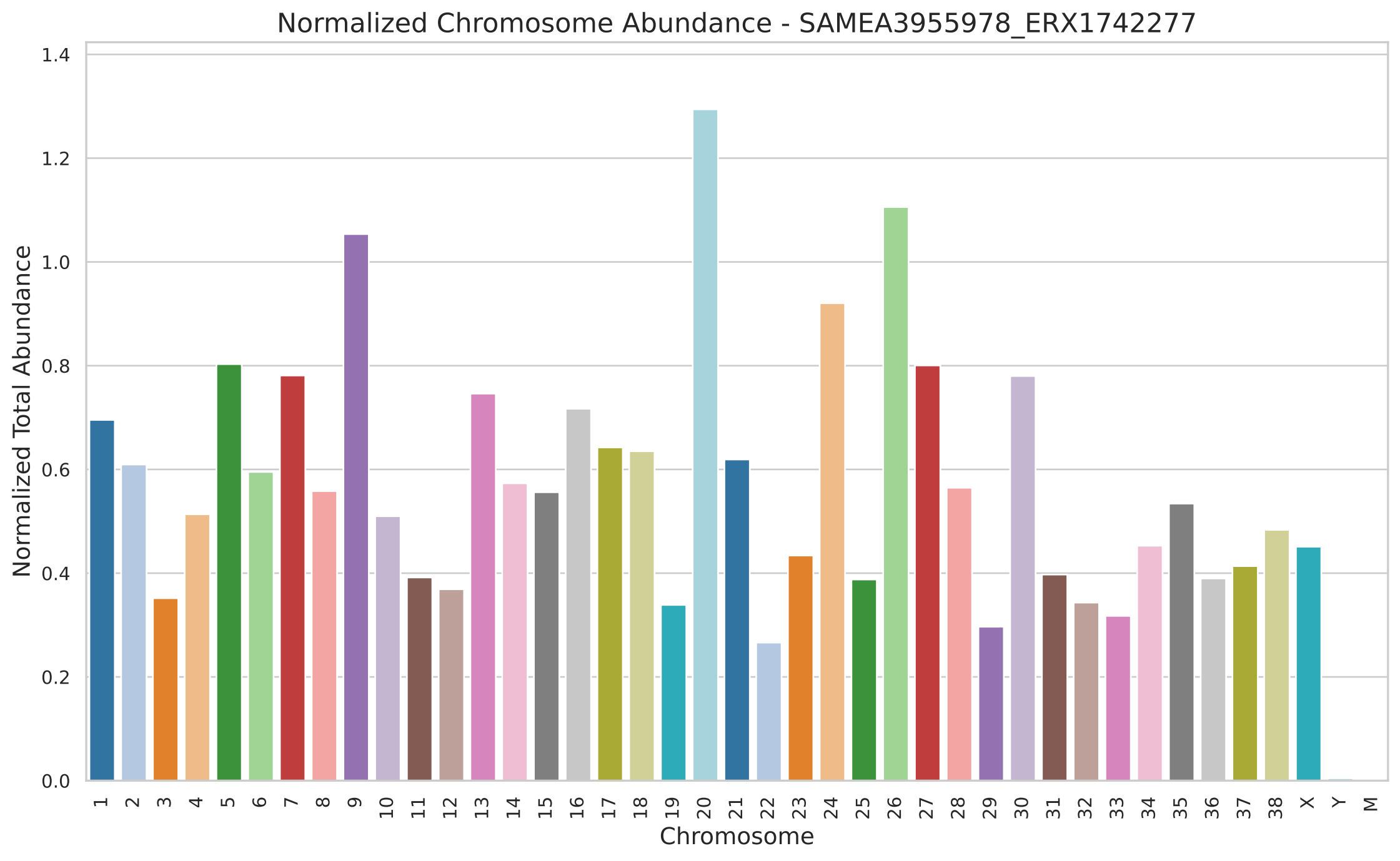

Normalized Chromosome Abundance - SAMN03766281_SRX1054502
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

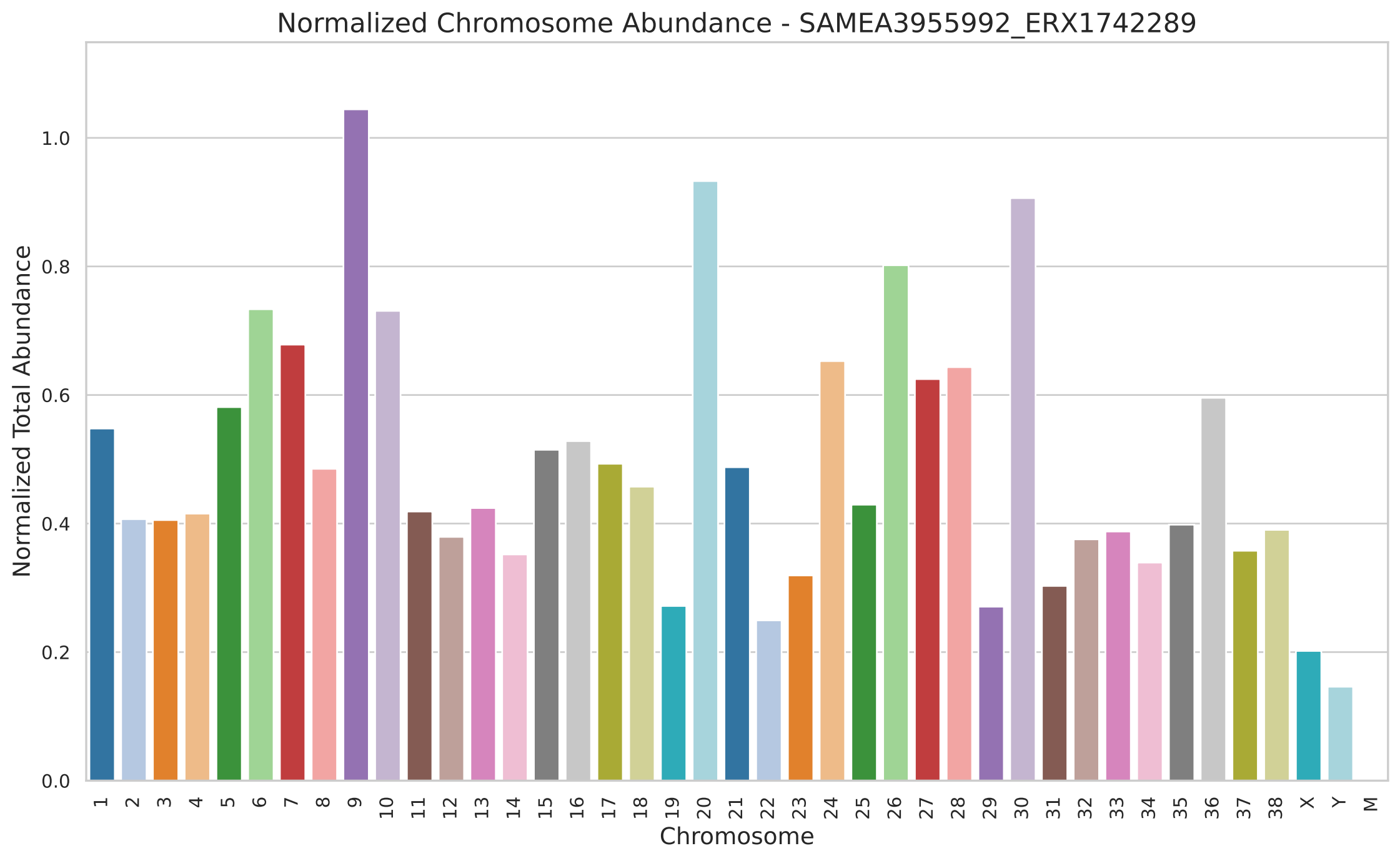

Normalized Chromosome Abundance - SAMEA3956034_ERX1742325
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

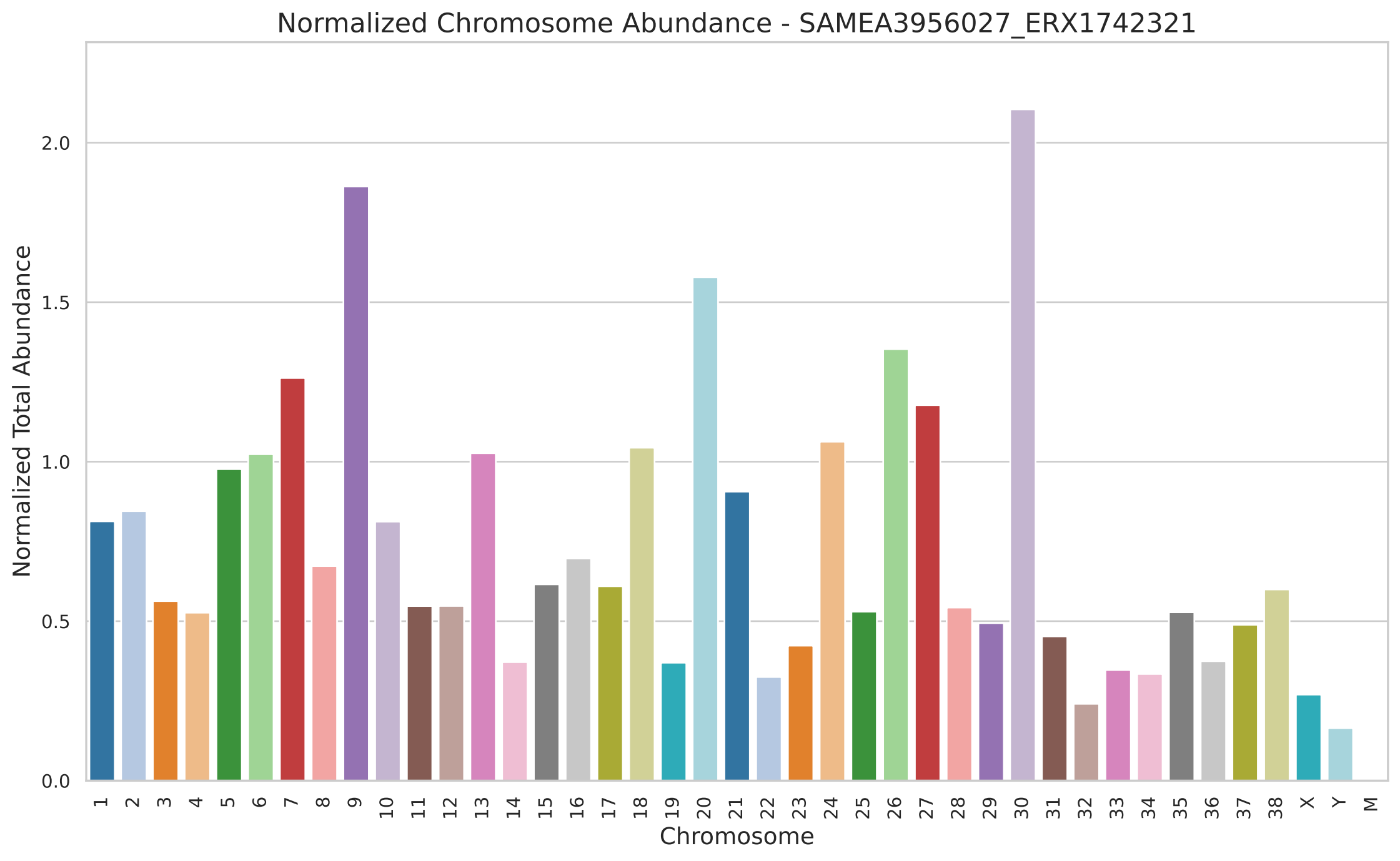

Normalized Chromosome Abundance - SAMEA3955996_ERX1742293
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

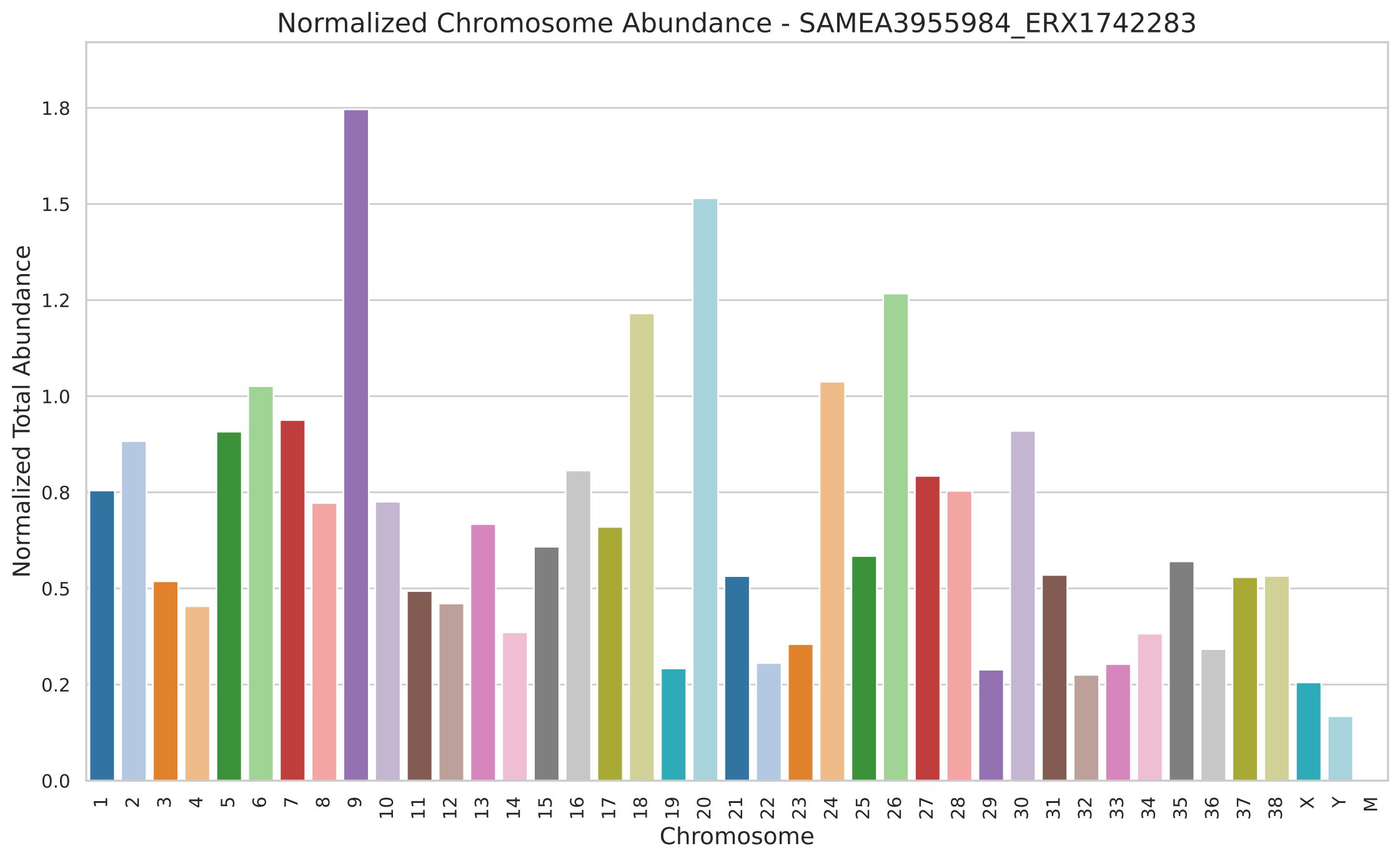

Normalized Chromosome Abundance - SAMEA3955999_ERX1742209
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

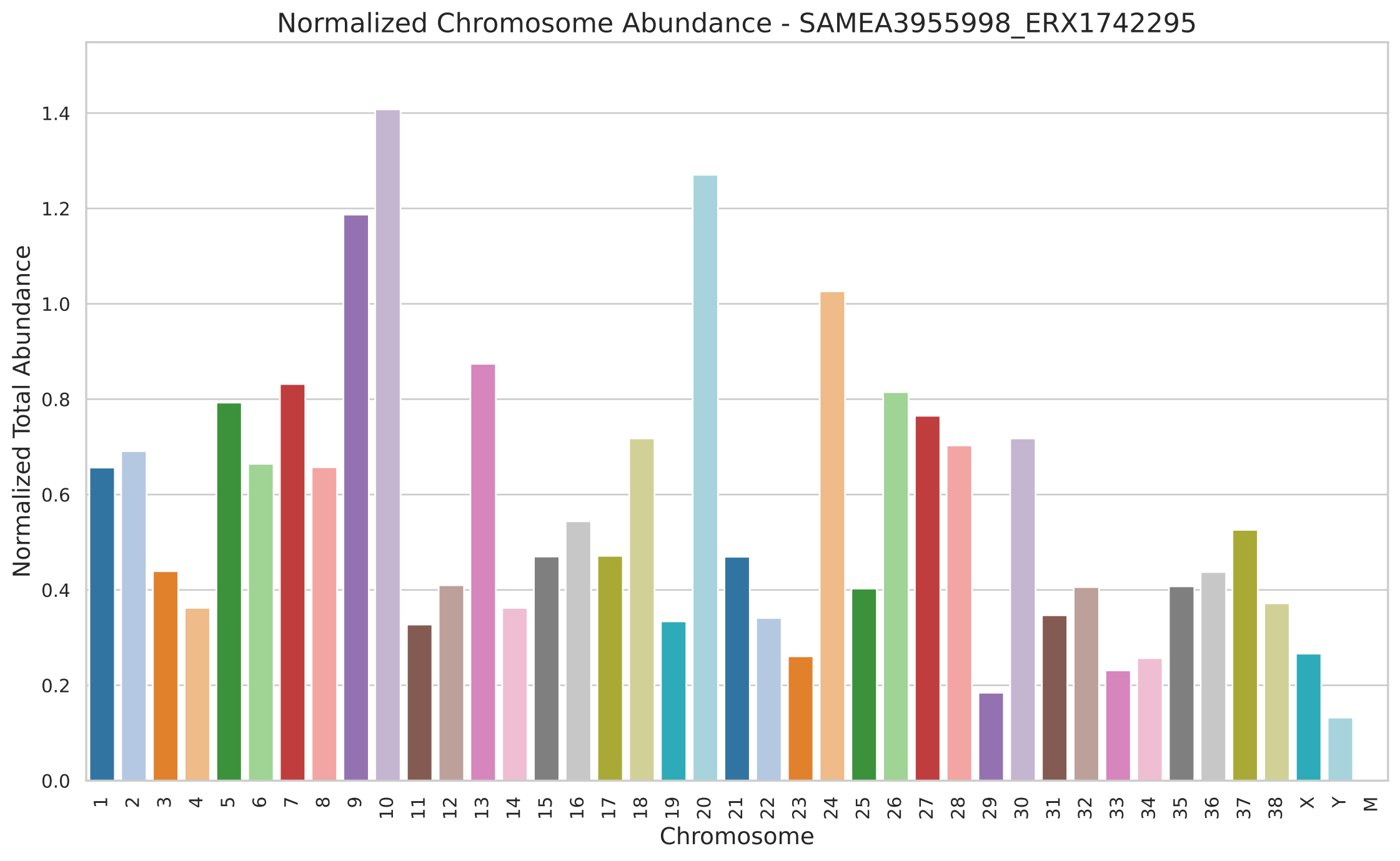

Normalized Chromosome Abundance - SAMEA3956018_ERX1742228
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

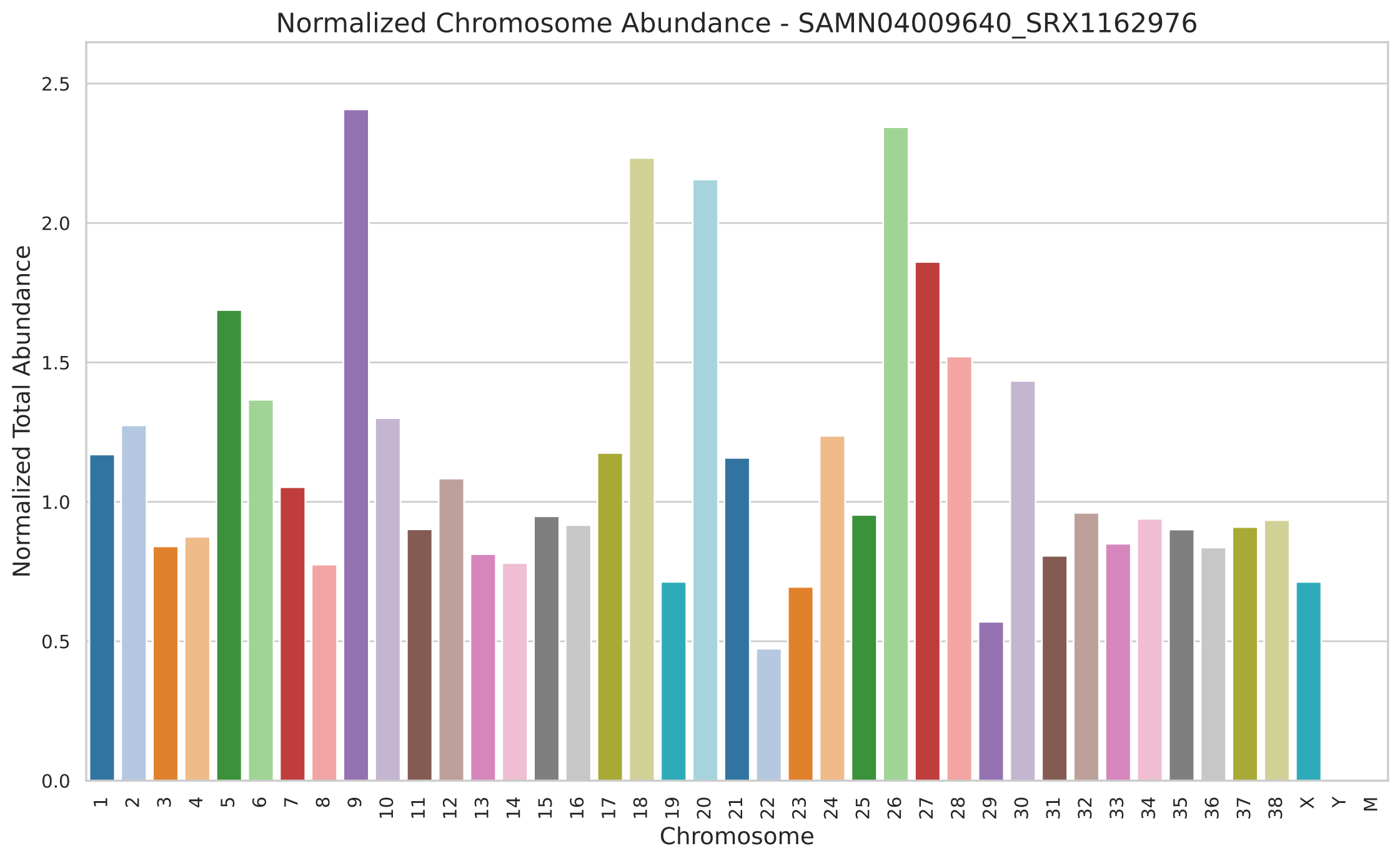

Normalized Chromosome Abundance - SAMEA3955978_ERX1742277
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

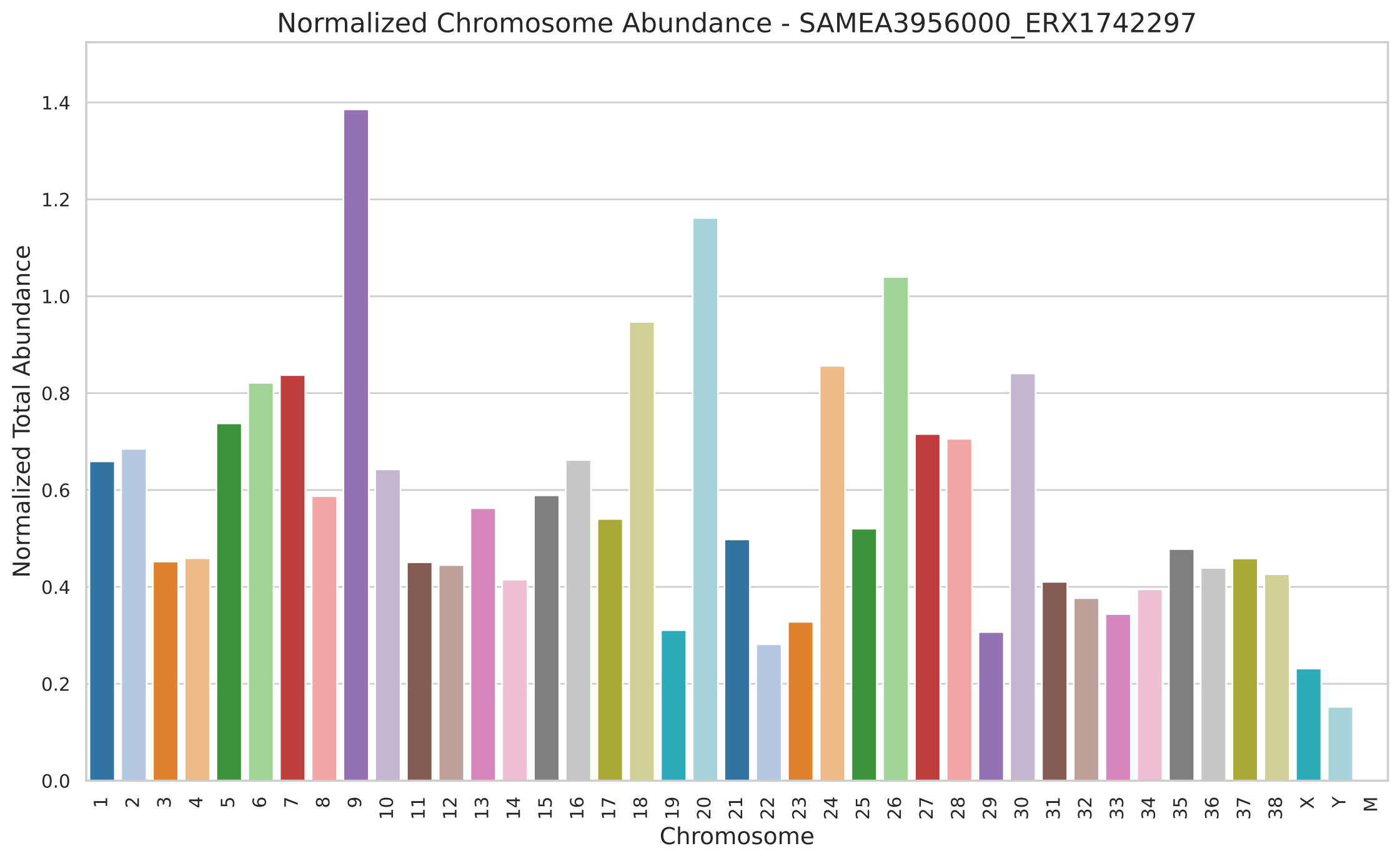

Normalized Chromosome Abundance - SAMEA3955992_ERX1742289
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

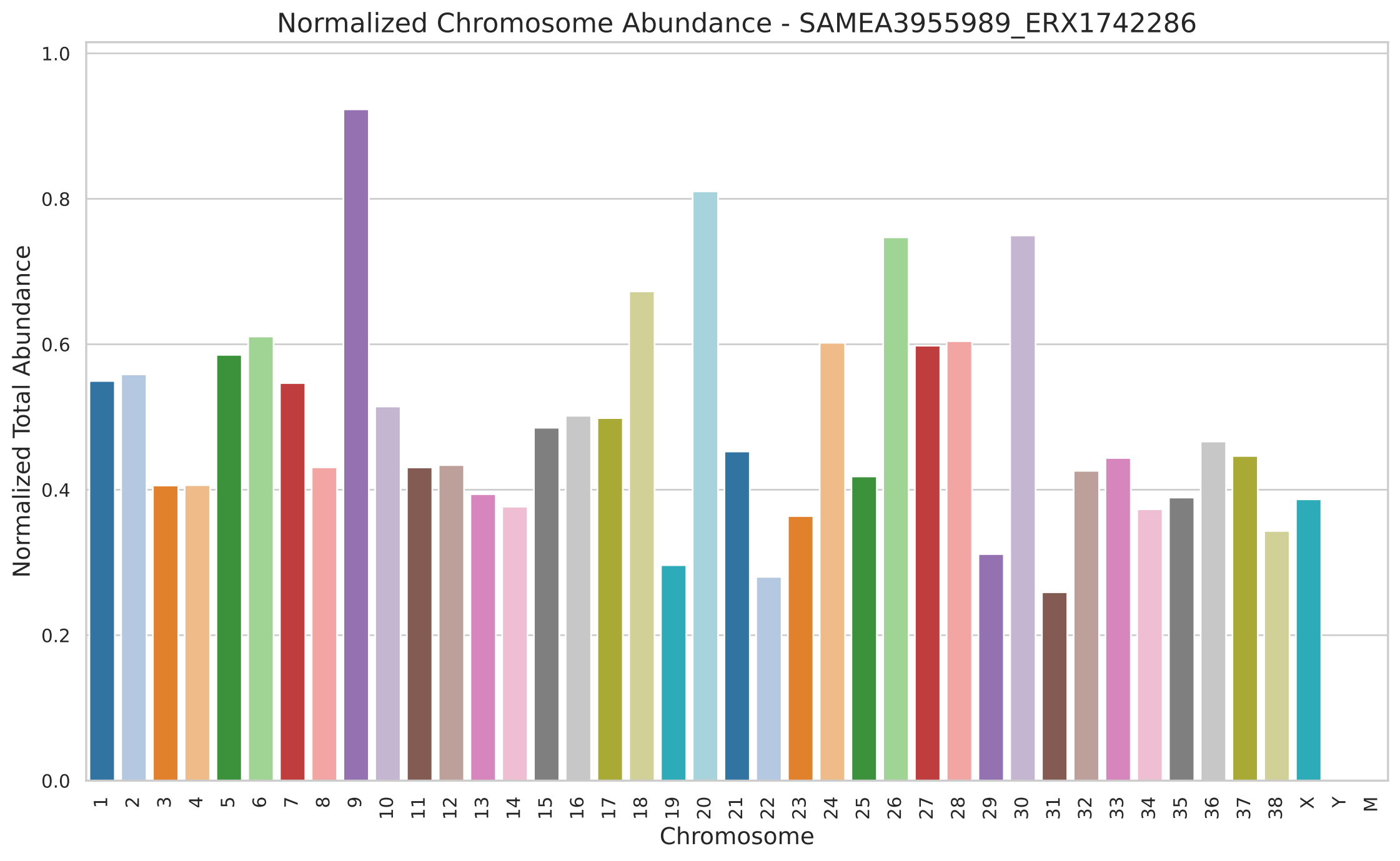

Normalized Chromosome Abundance - SAMEA3956027_ERX1742321
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

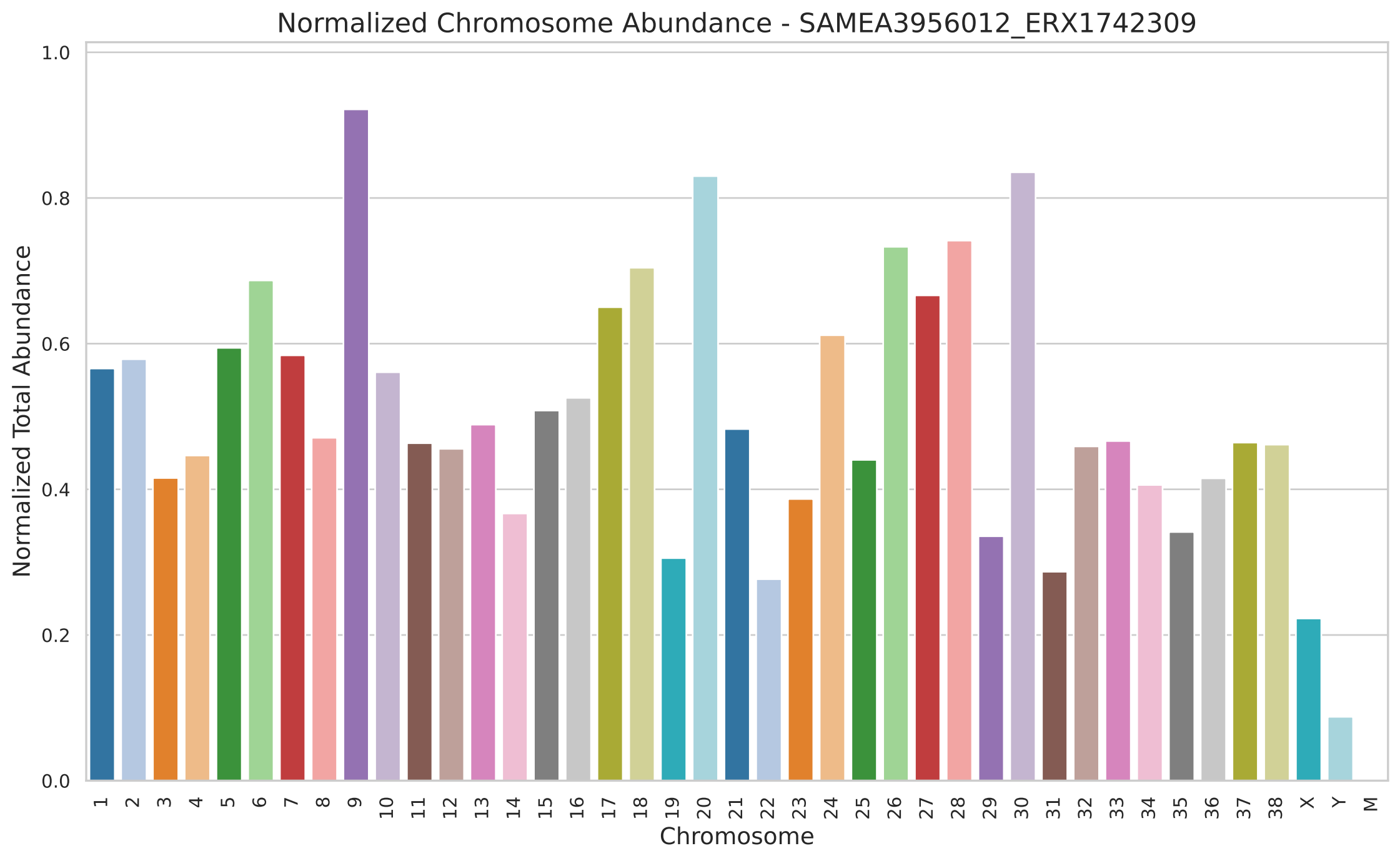

Normalized Chromosome Abundance - SAMEA3955984_ERX1742283
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

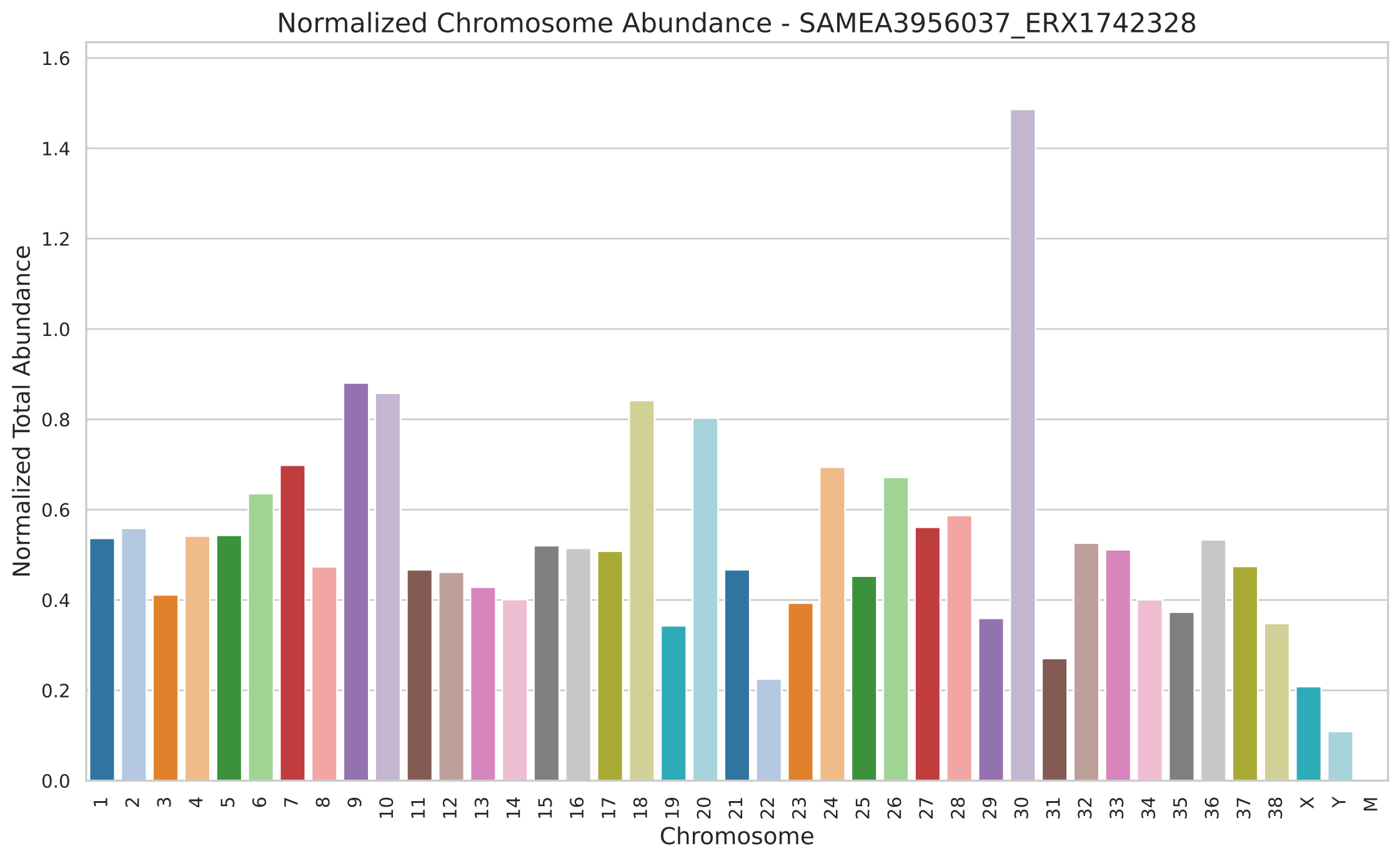

Normalized Chromosome Abundance - SAMEA3955998_ERX1742295
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

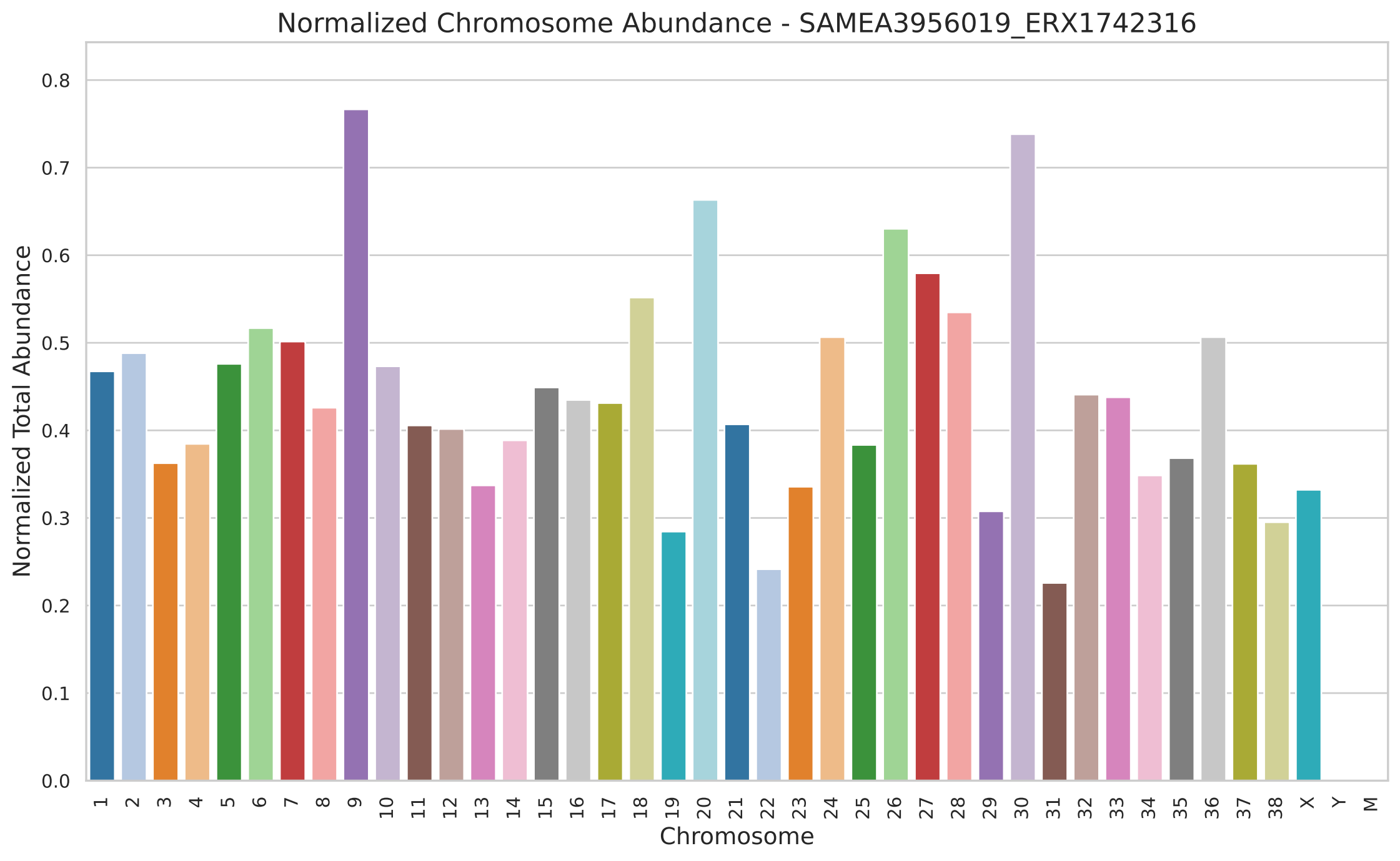

Normalized Chromosome Abundance - SAMN04009640_SRX1162976
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

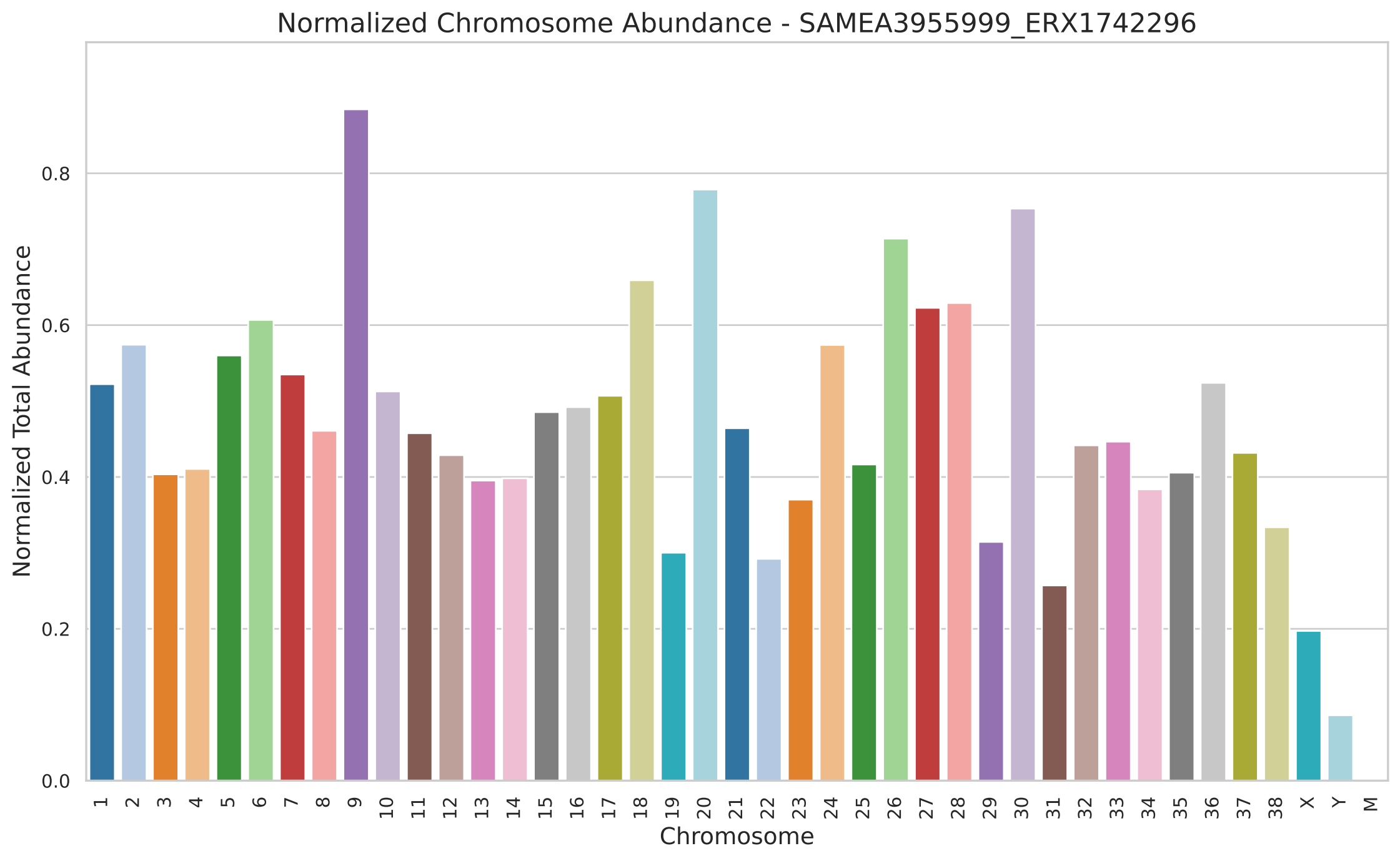

Normalized Chromosome Abundance - SAMEA3956000_ERX1742297
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

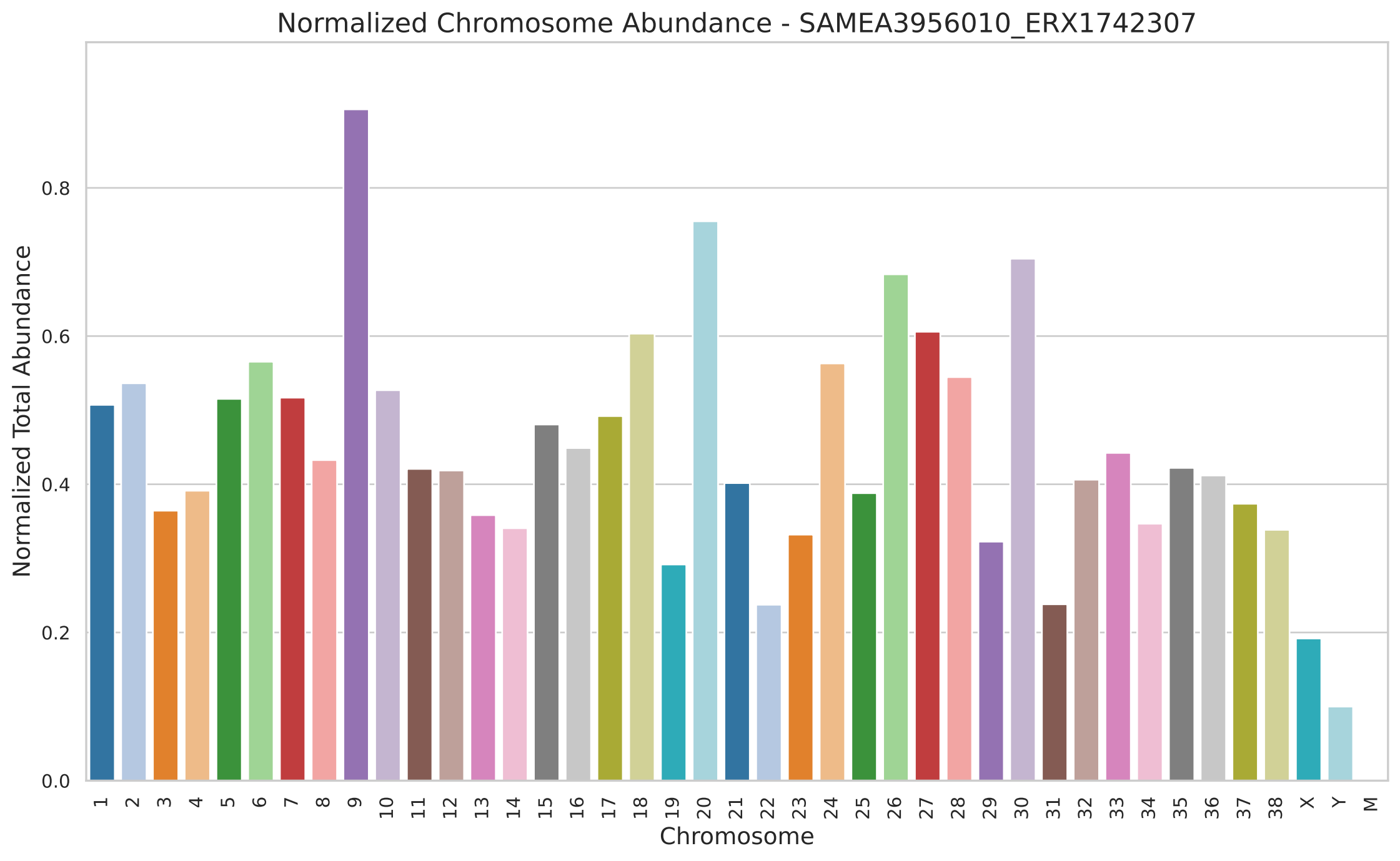

Normalized Chromosome Abundance - SAMEA3955989_ERX1742286
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

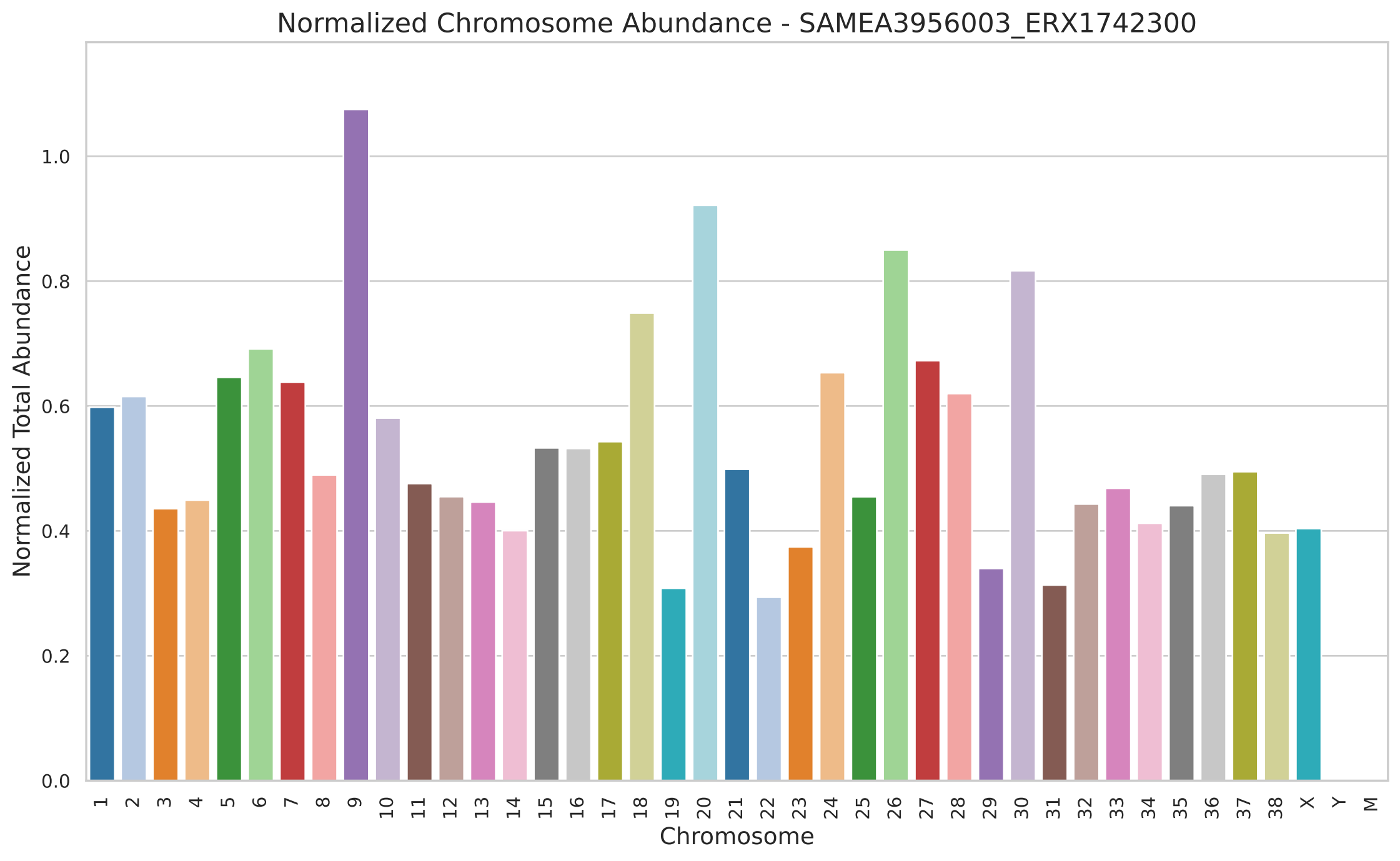

Normalized Chromosome Abundance - SAMEA3956012_ERX1742309
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

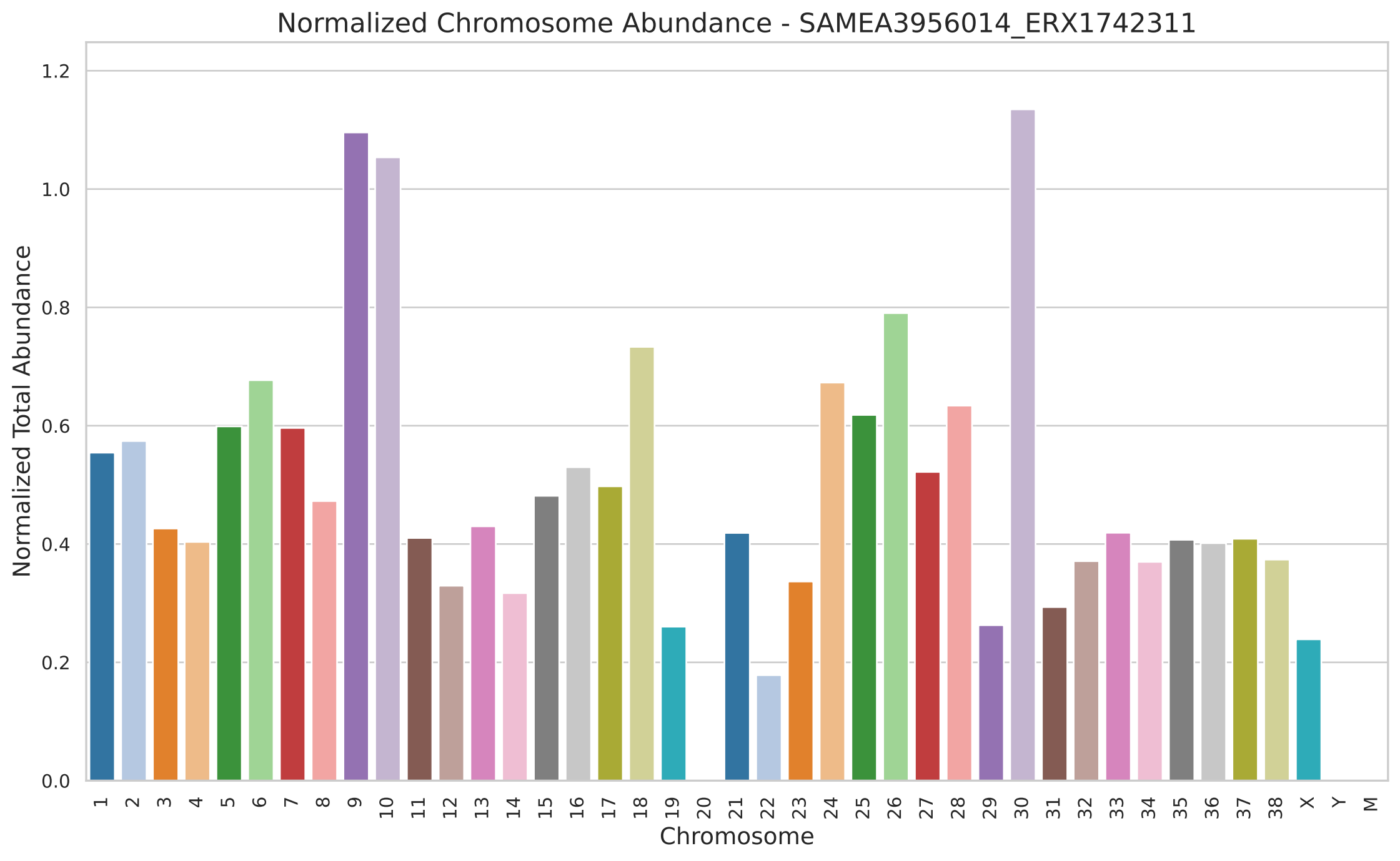

Normalized Chromosome Abundance - SAMEA3956037_ERX1742328
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

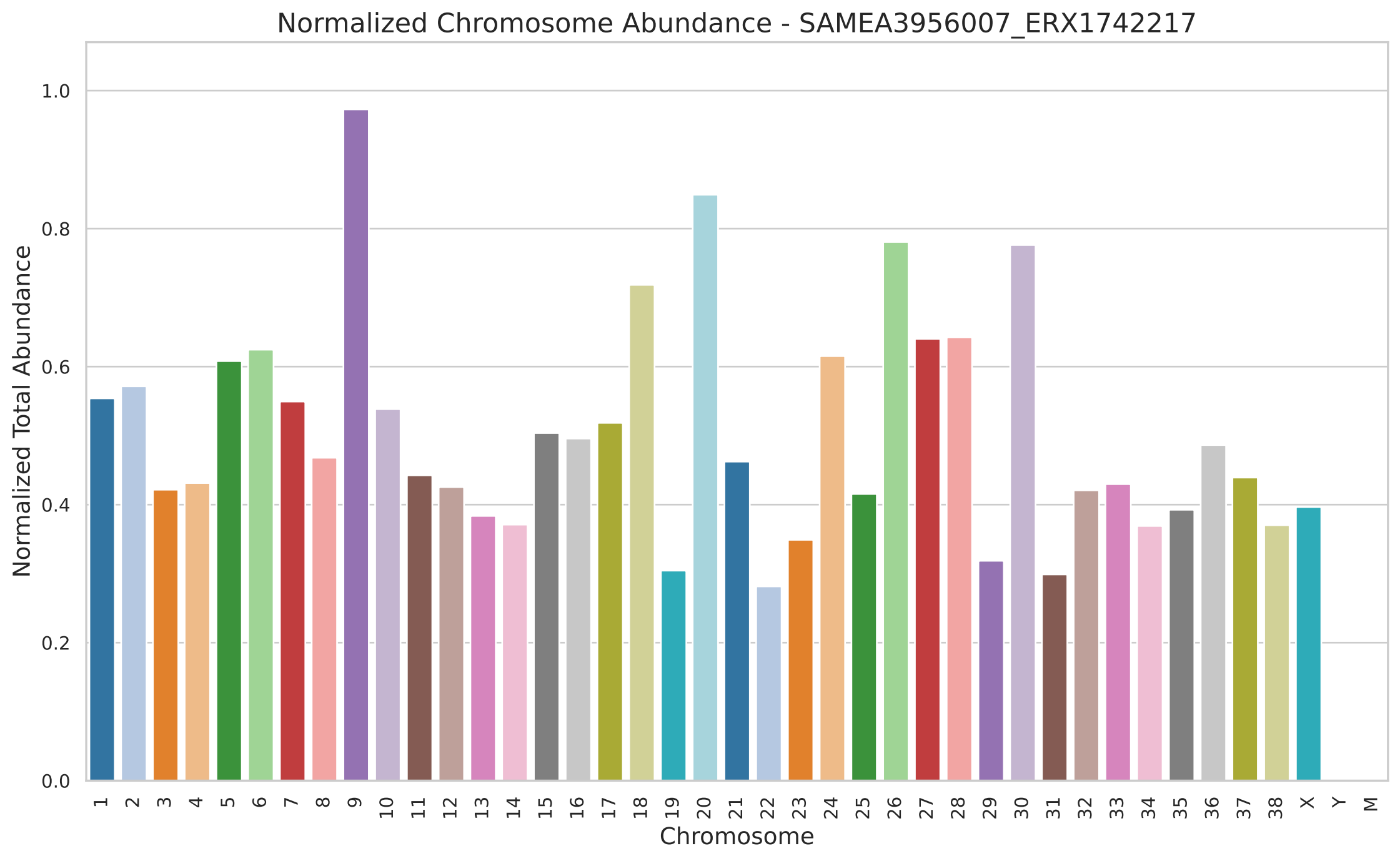

Normalized Chromosome Abundance - SAMEA3956019_ERX1742316
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

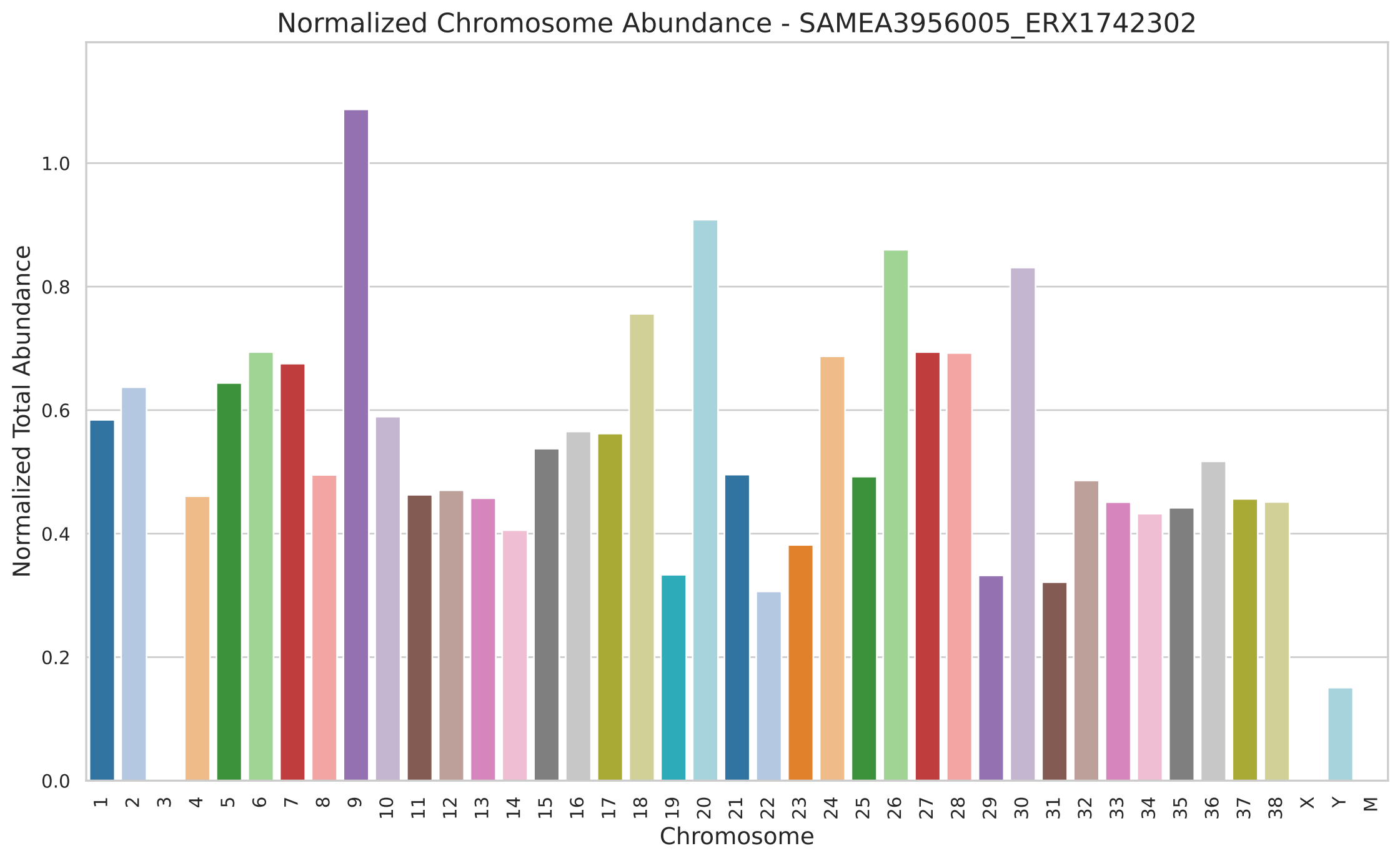

Normalized Chromosome Abundance - SAMEA3955999_ERX1742296
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

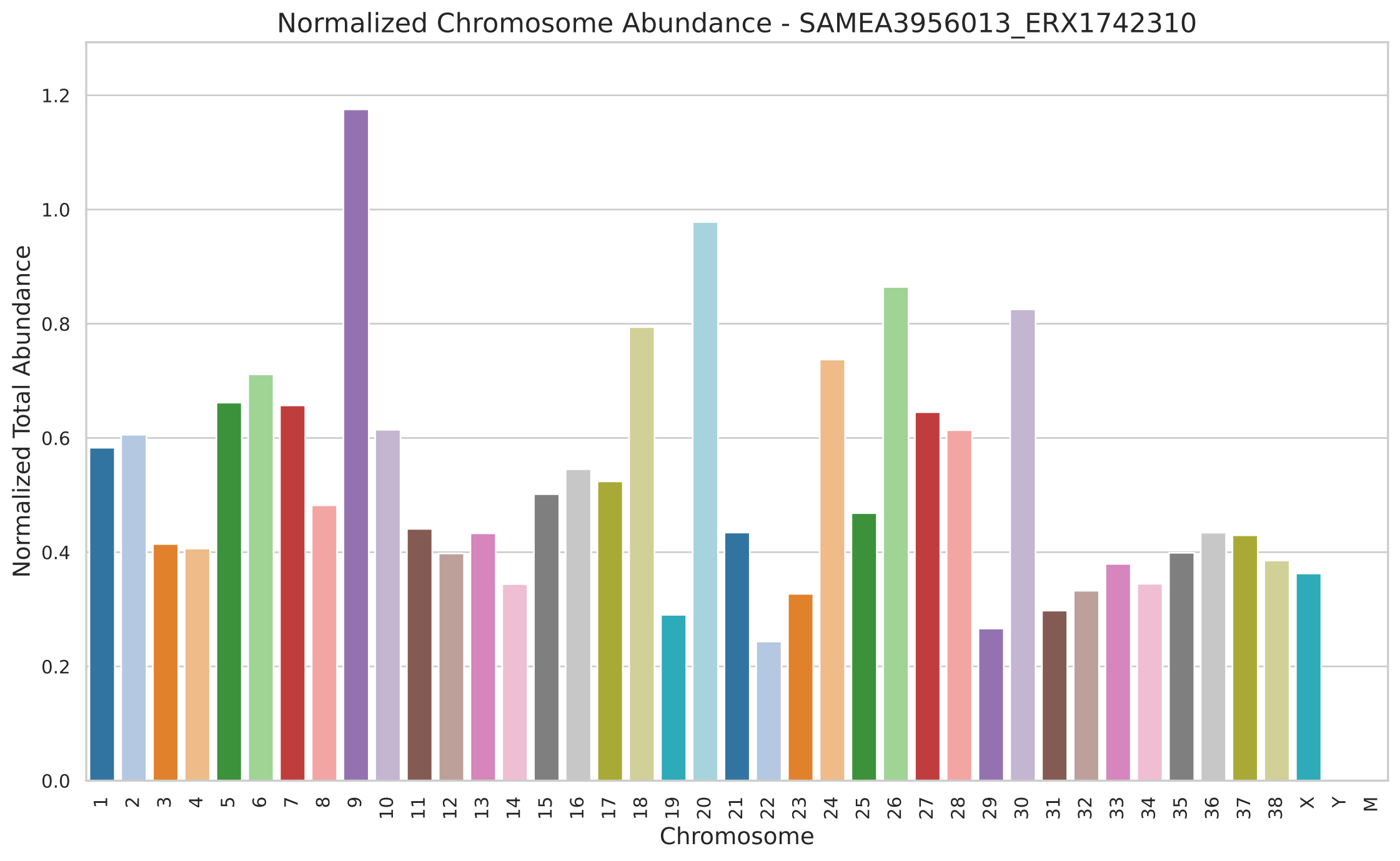

Normalized Chromosome Abundance - SAMEA3956010_ERX1742307
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

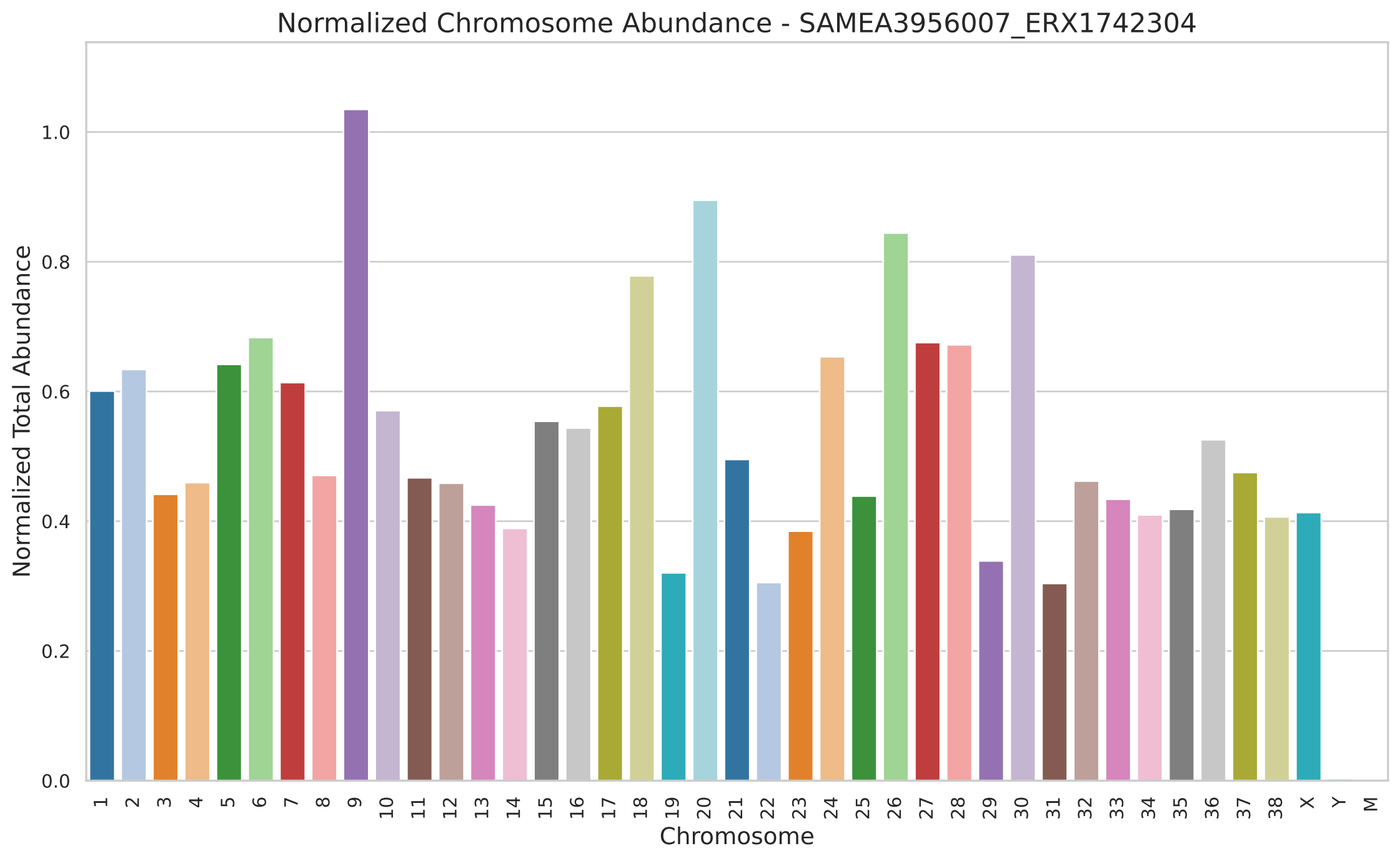

Normalized Chromosome Abundance - SAMEA3956003_ERX1742300
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

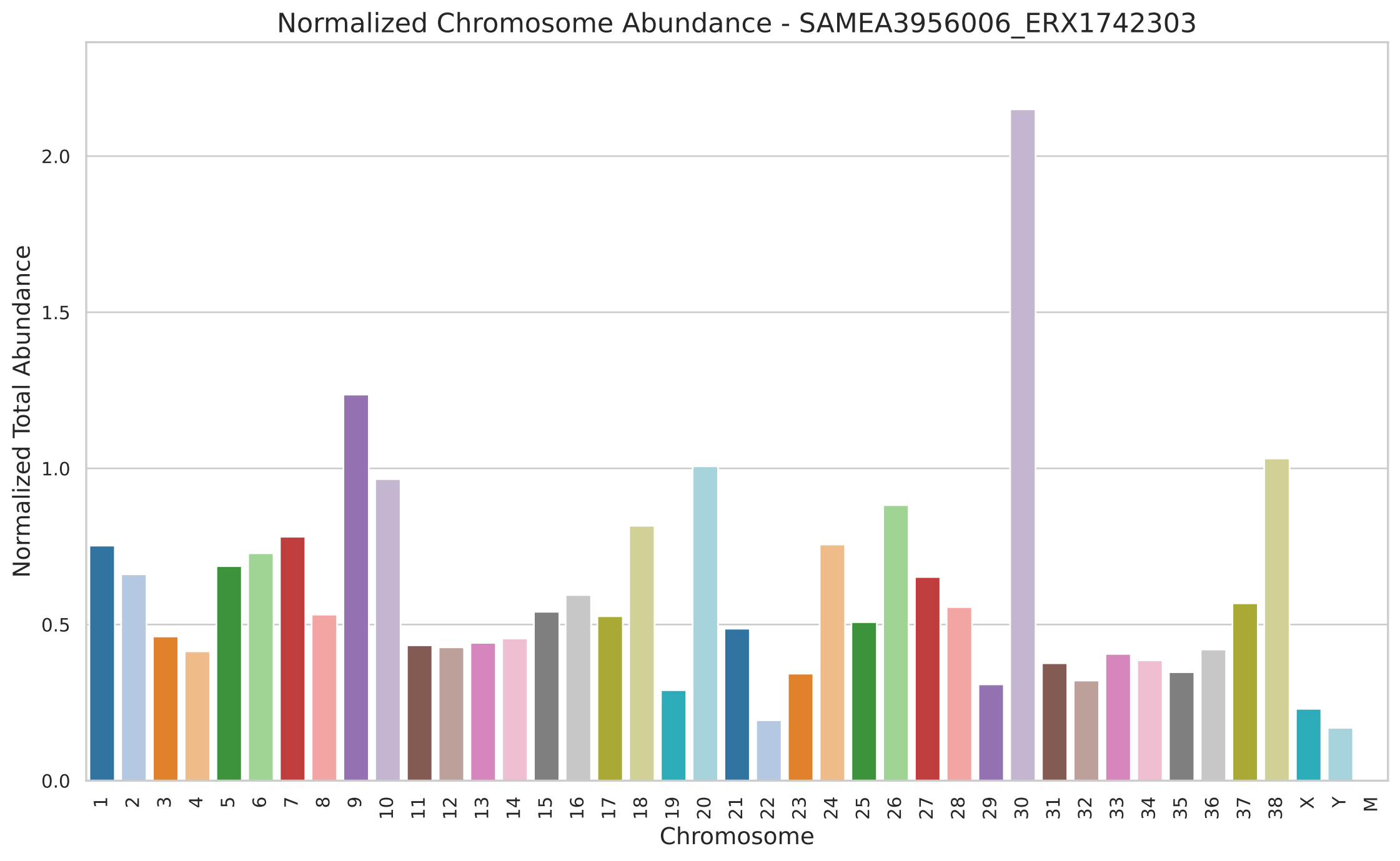

Normalized Chromosome Abundance - SAMEA3956014_ERX1742311
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

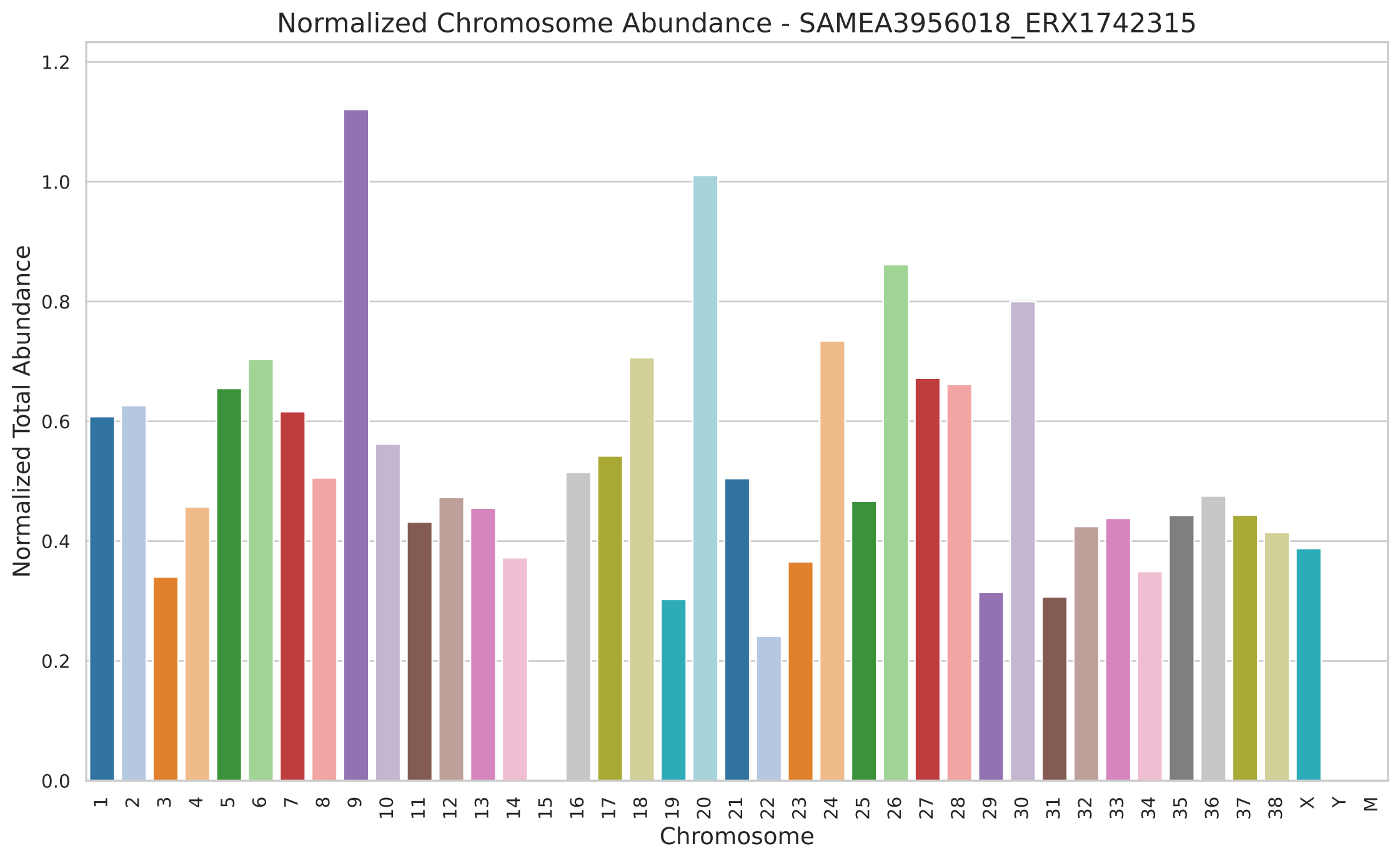

Normalized Chromosome Abundance - SAMEA3956007_ERX1742217
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

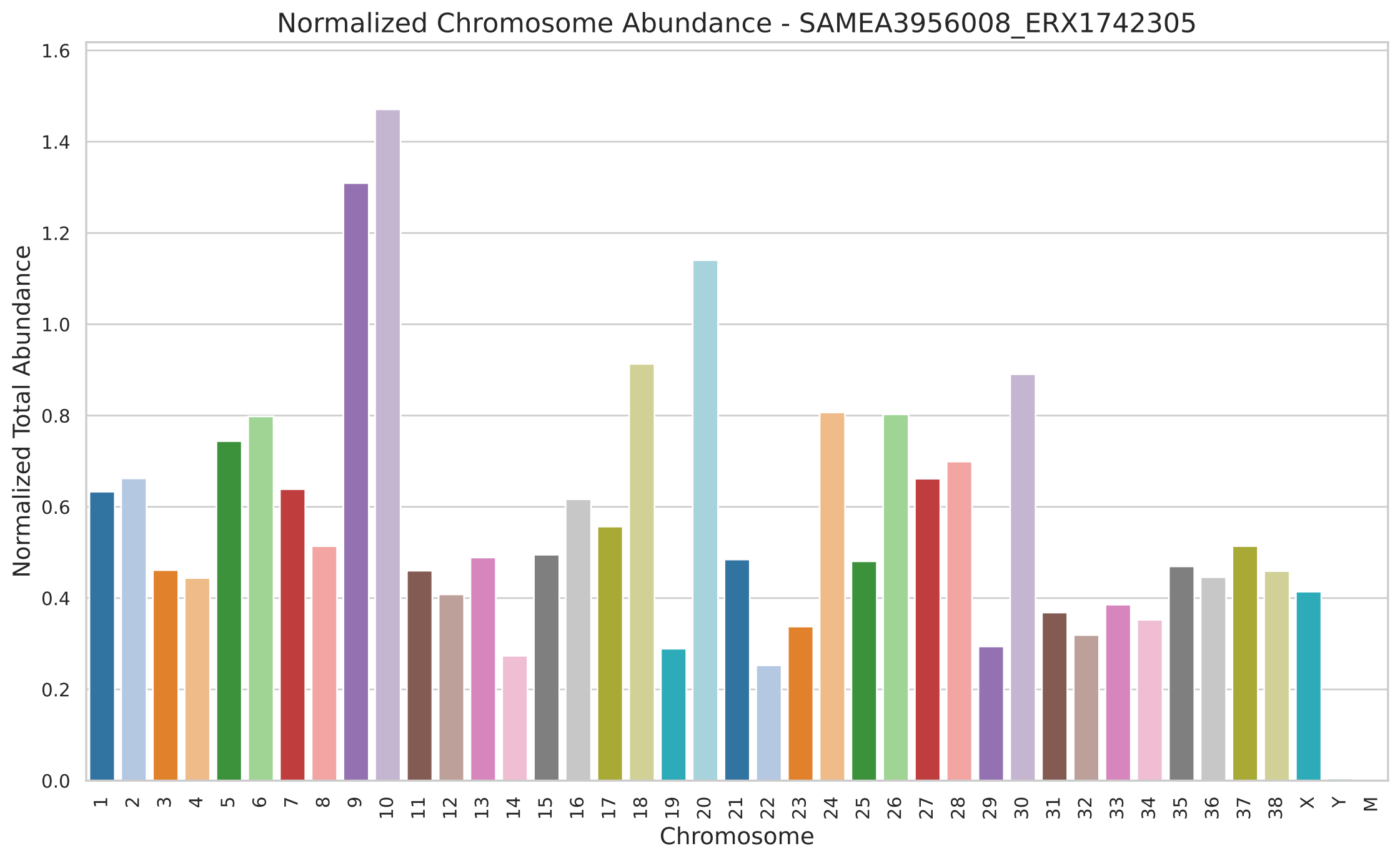

Normalized Chromosome Abundance - SAMEA3956005_ERX1742302
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

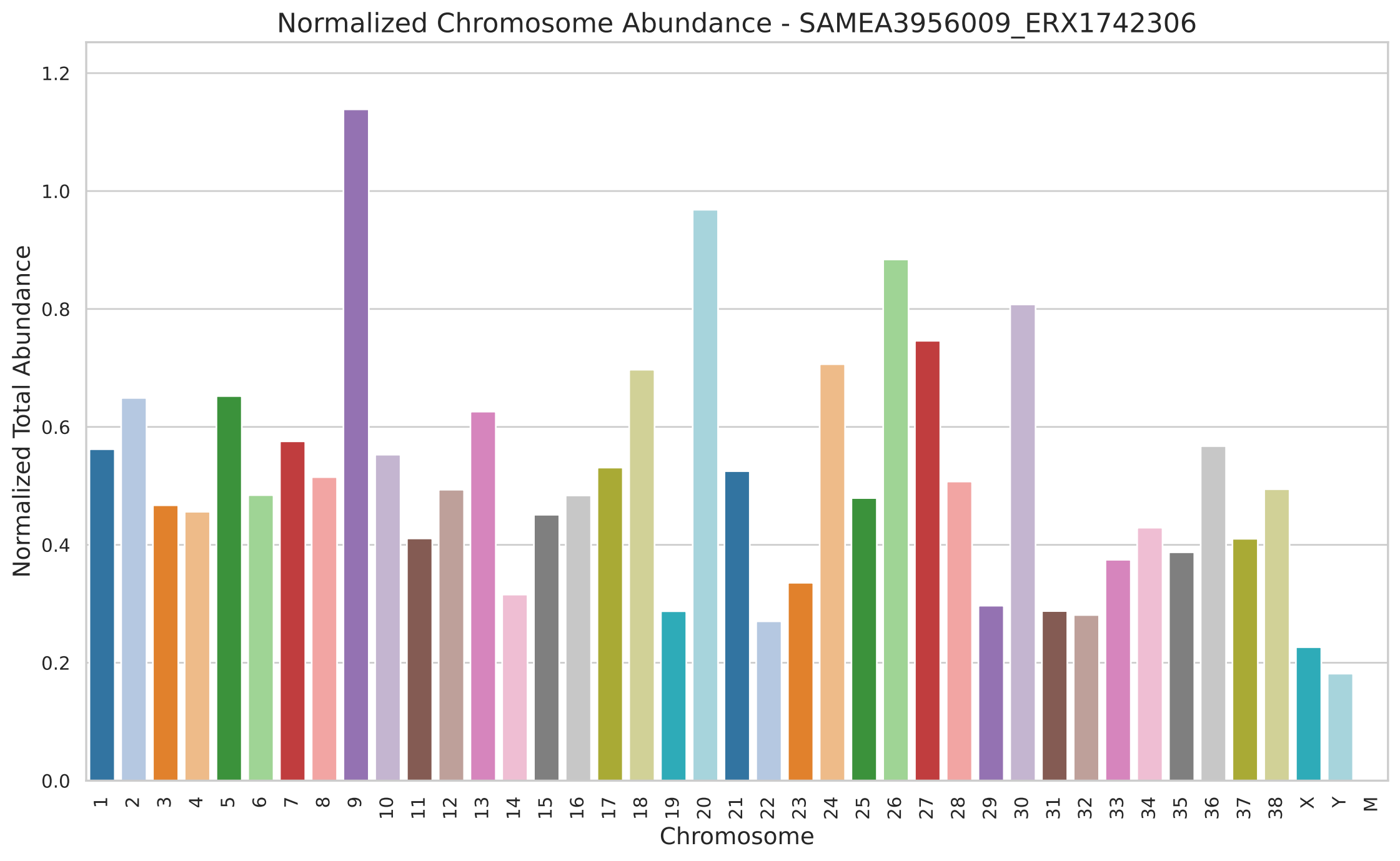

Normalized Chromosome Abundance - SAMEA3956013_ERX1742310
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

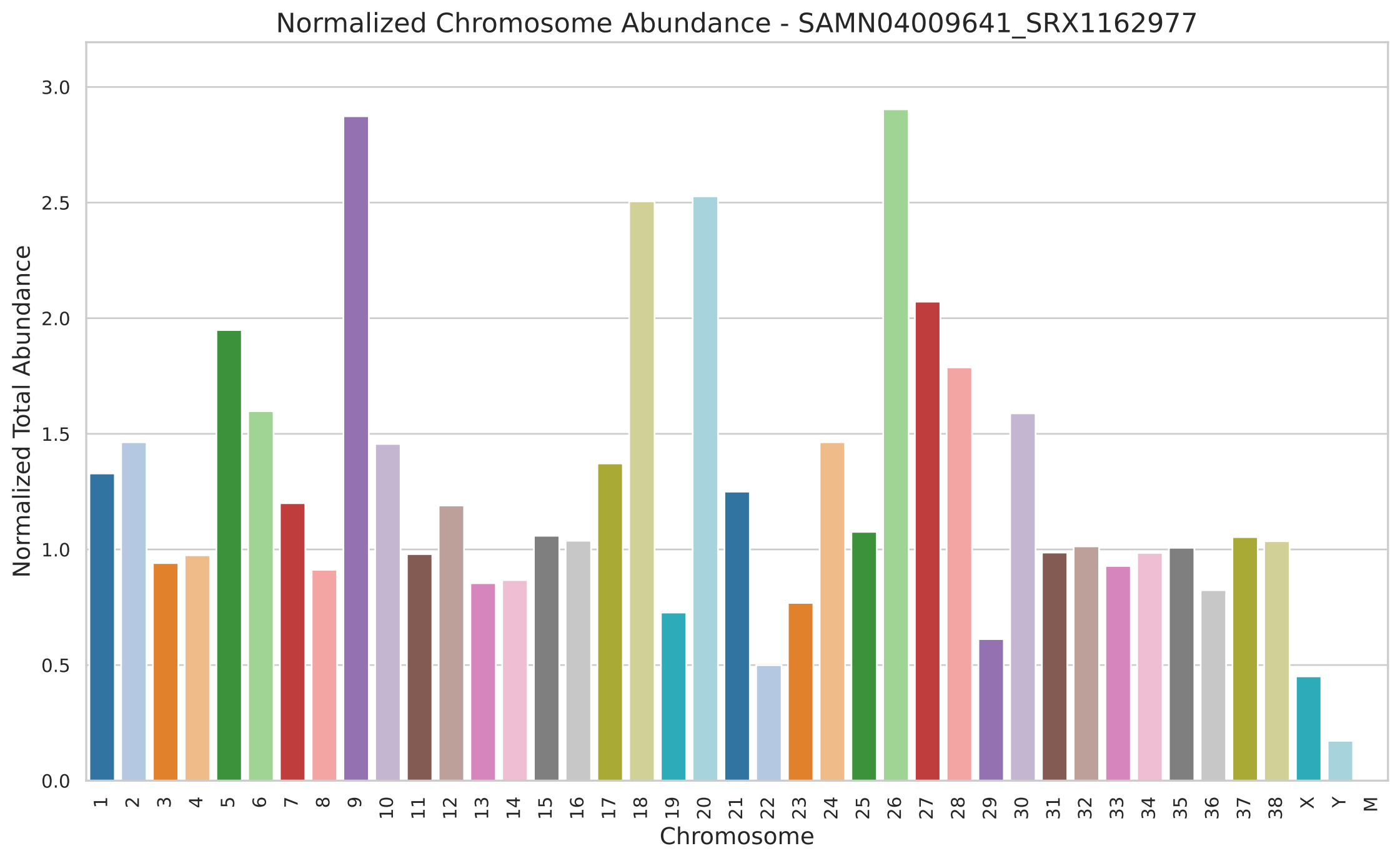

Normalized Chromosome Abundance - SAMEA3956007_ERX1742304
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

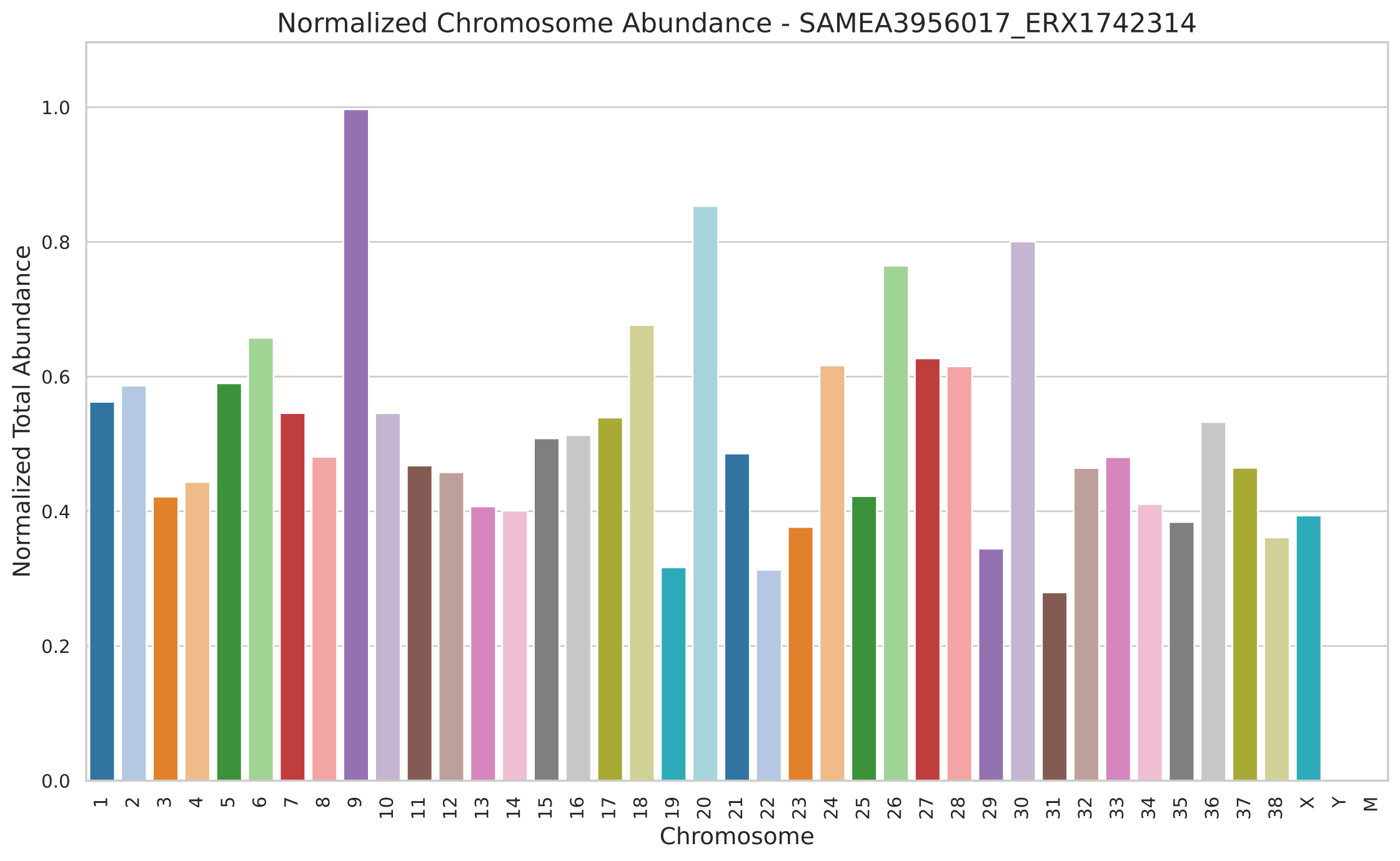

Normalized Chromosome Abundance - SAMEA3956006_ERX1742303
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

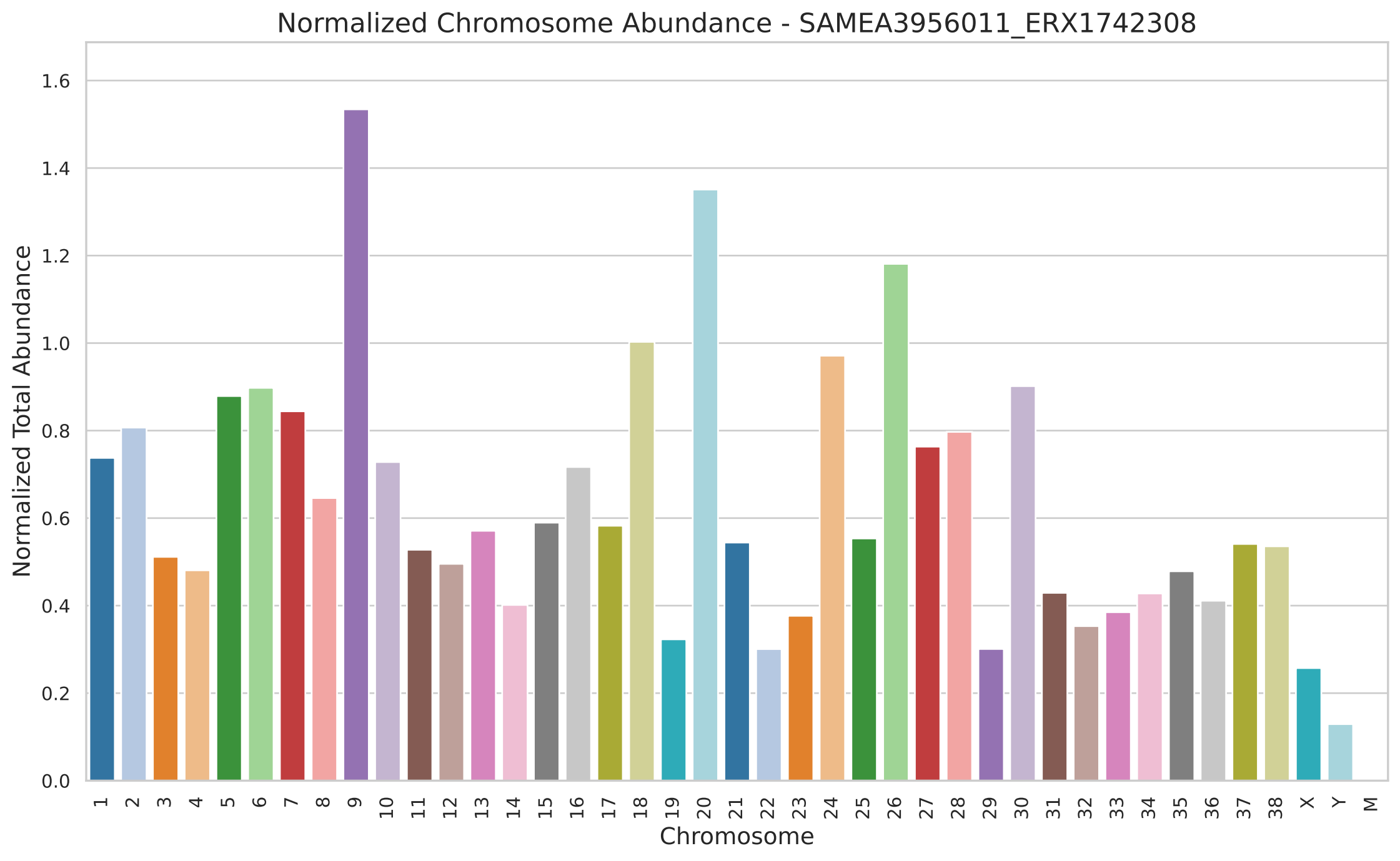

Normalized Chromosome Abundance - SAMEA3956018_ERX1742315
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

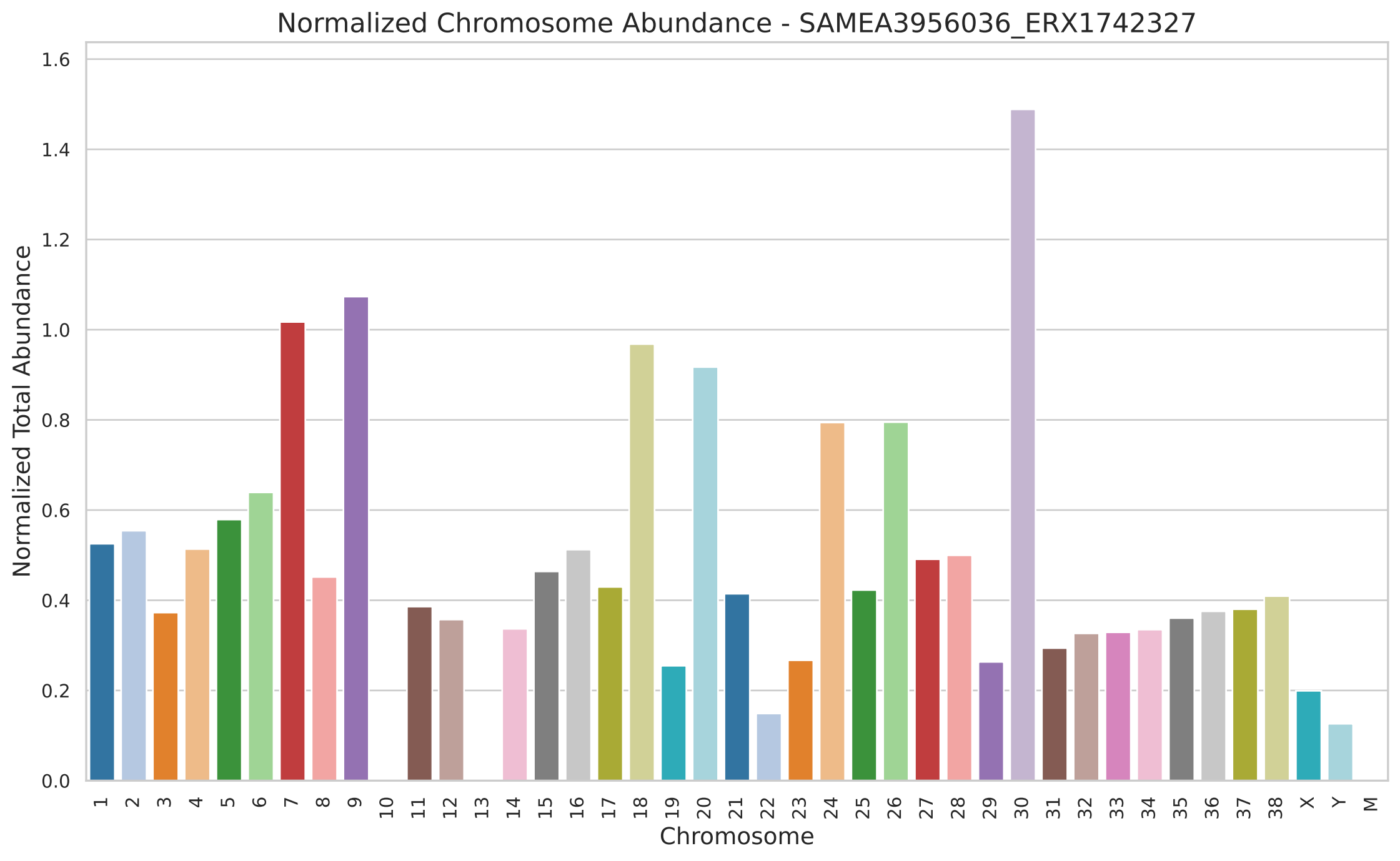

Normalized Chromosome Abundance - SAMEA3956008_ERX1742305
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

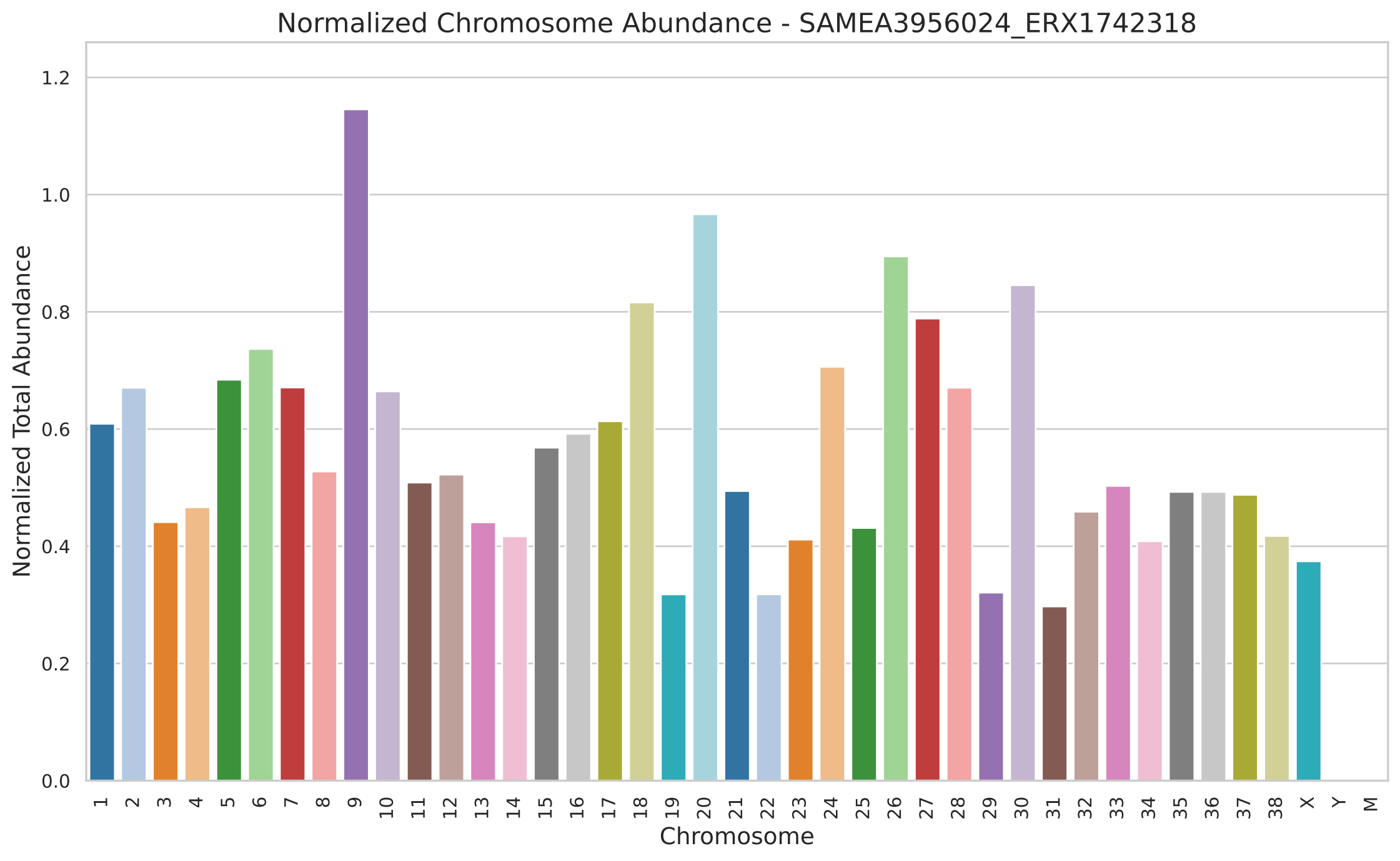

Normalized Chromosome Abundance - SAMEA3956009_ERX1742306
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

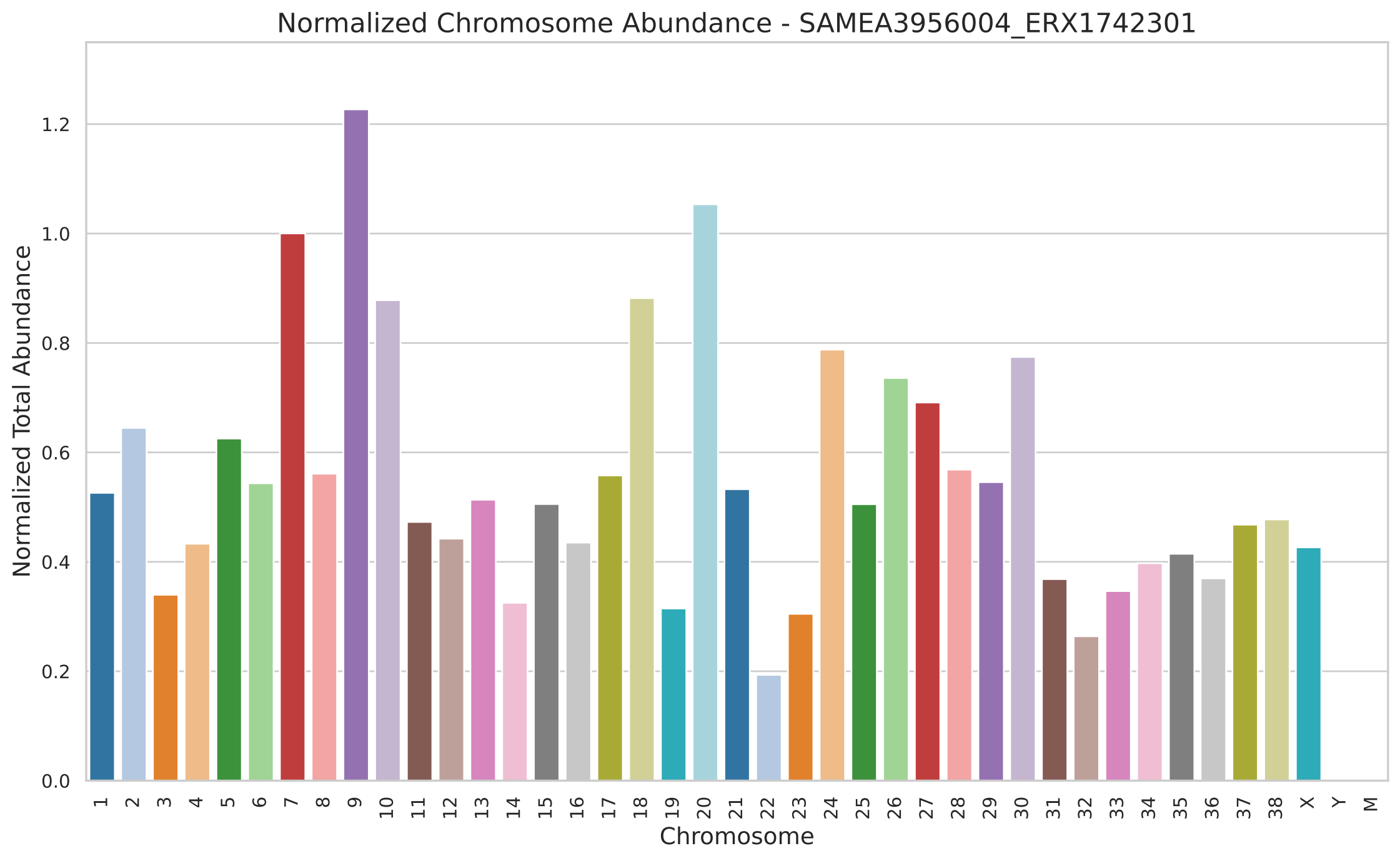

Normalized Chromosome Abundance - SAMN04009641_SRX1162977
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

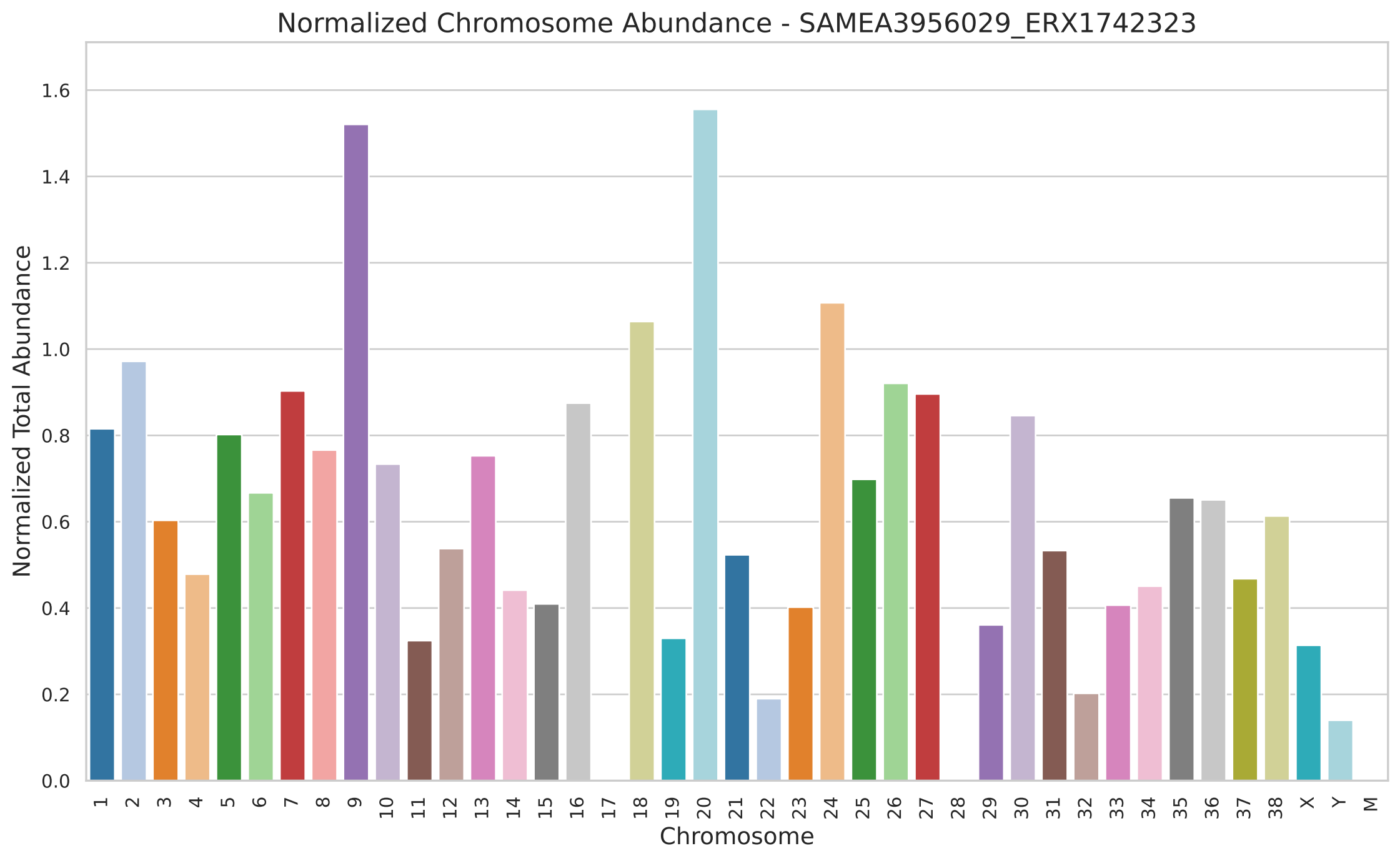

Normalized Chromosome Abundance - SAMEA3956017_ERX1742314
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

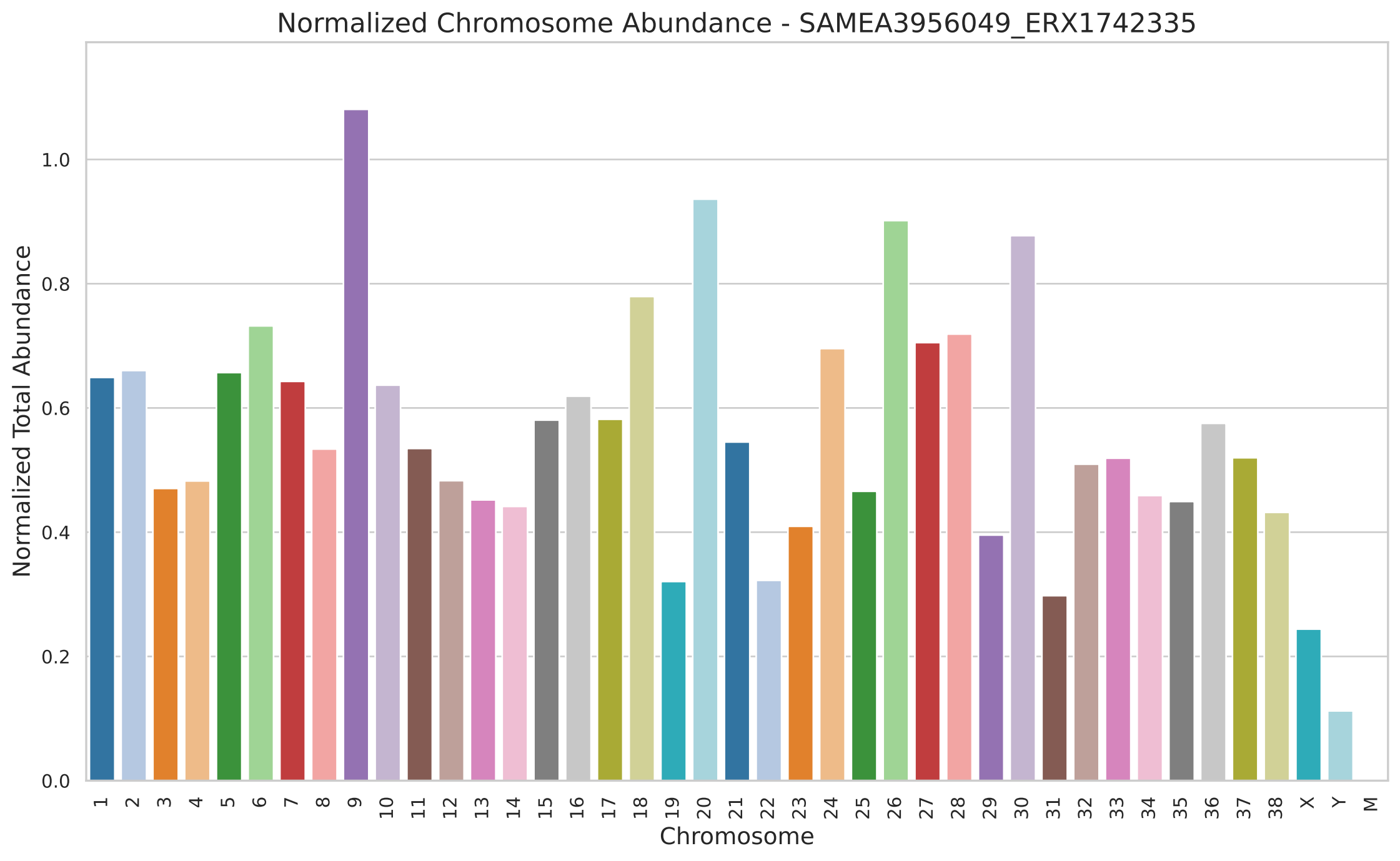

Normalized Chromosome Abundance - SAMEA3956011_ERX1742308
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

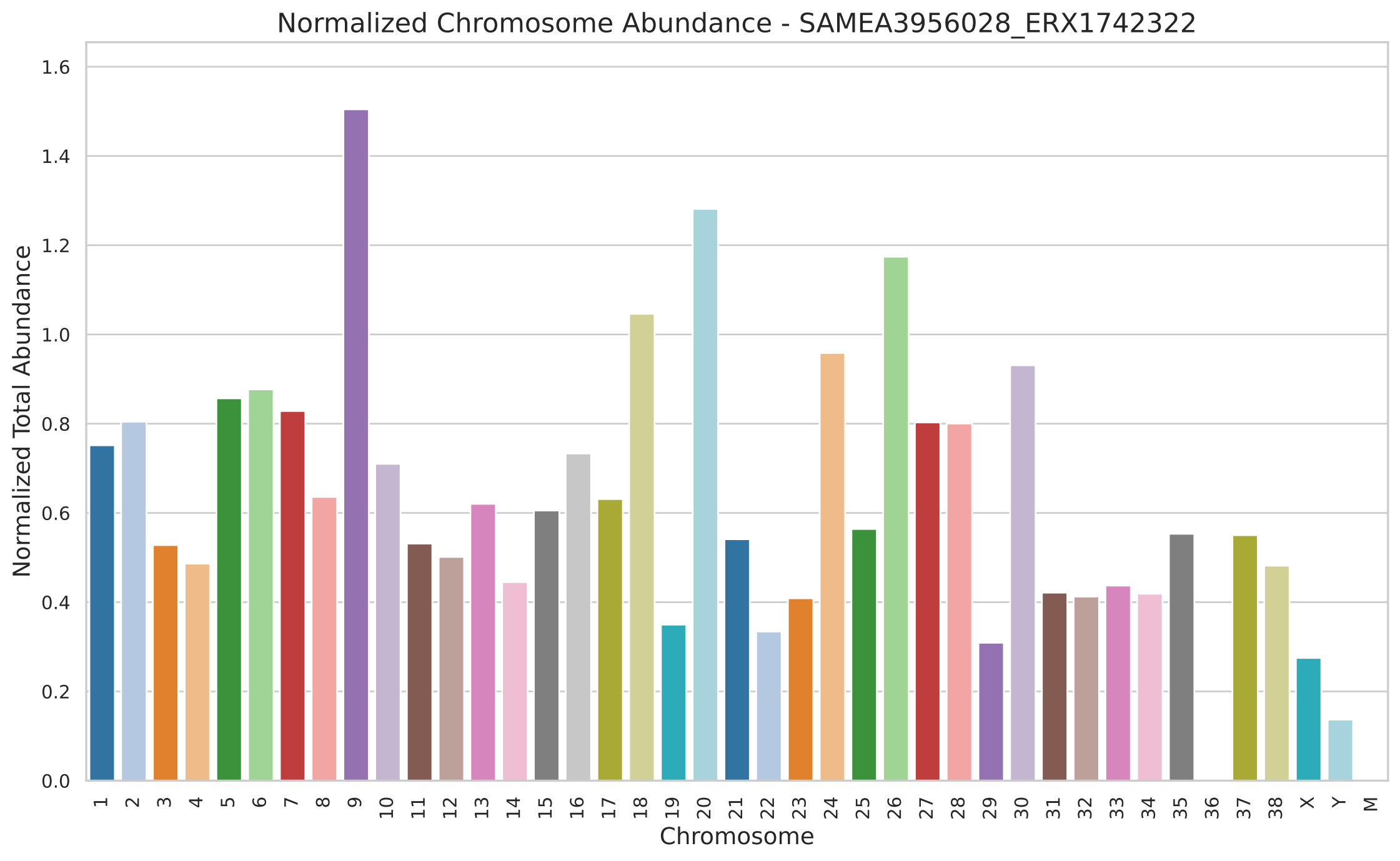

Normalized Chromosome Abundance - SAMEA3956036_ERX1742327
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

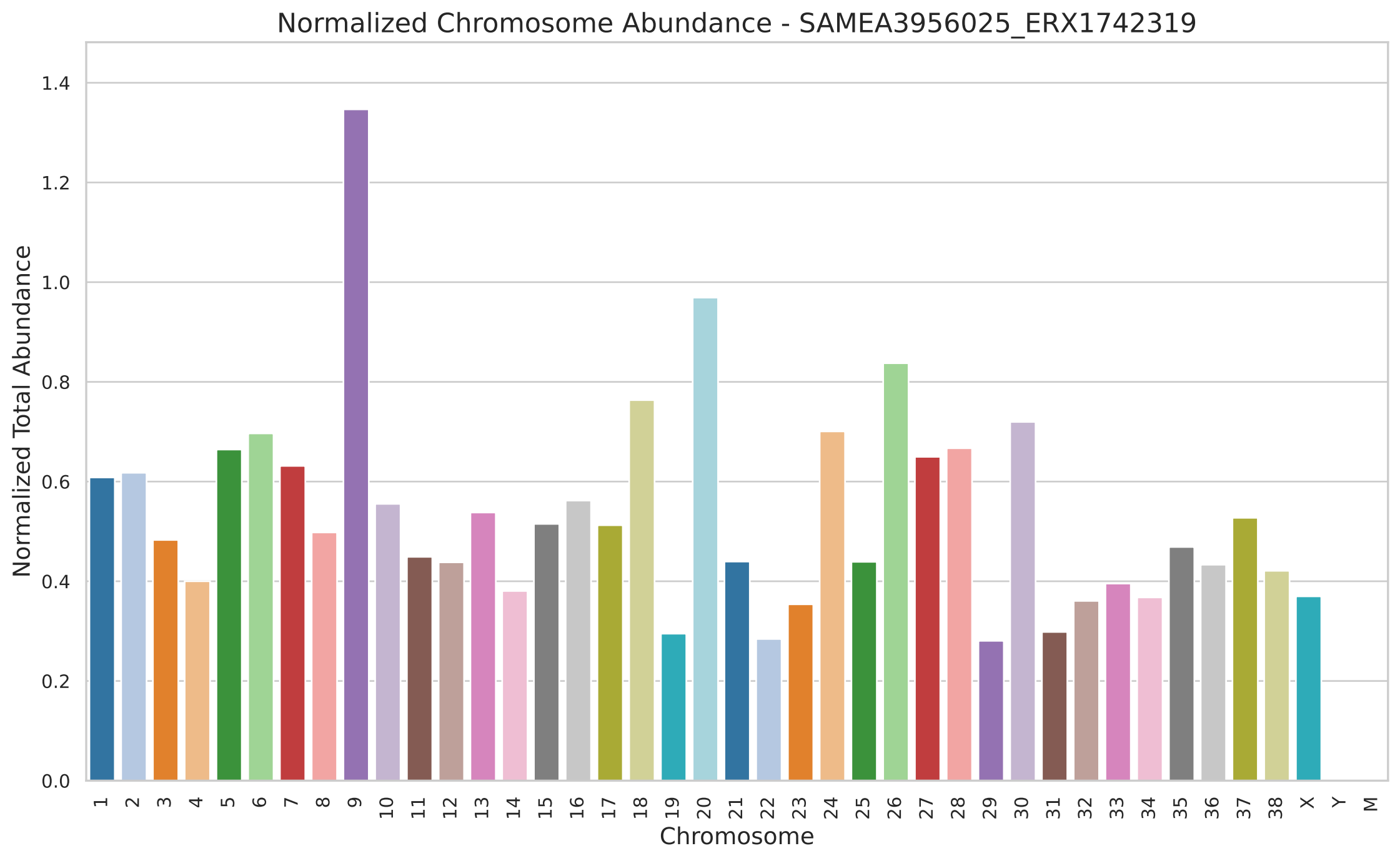

Normalized Chromosome Abundance - SAMEA3956024_ERX1742318
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

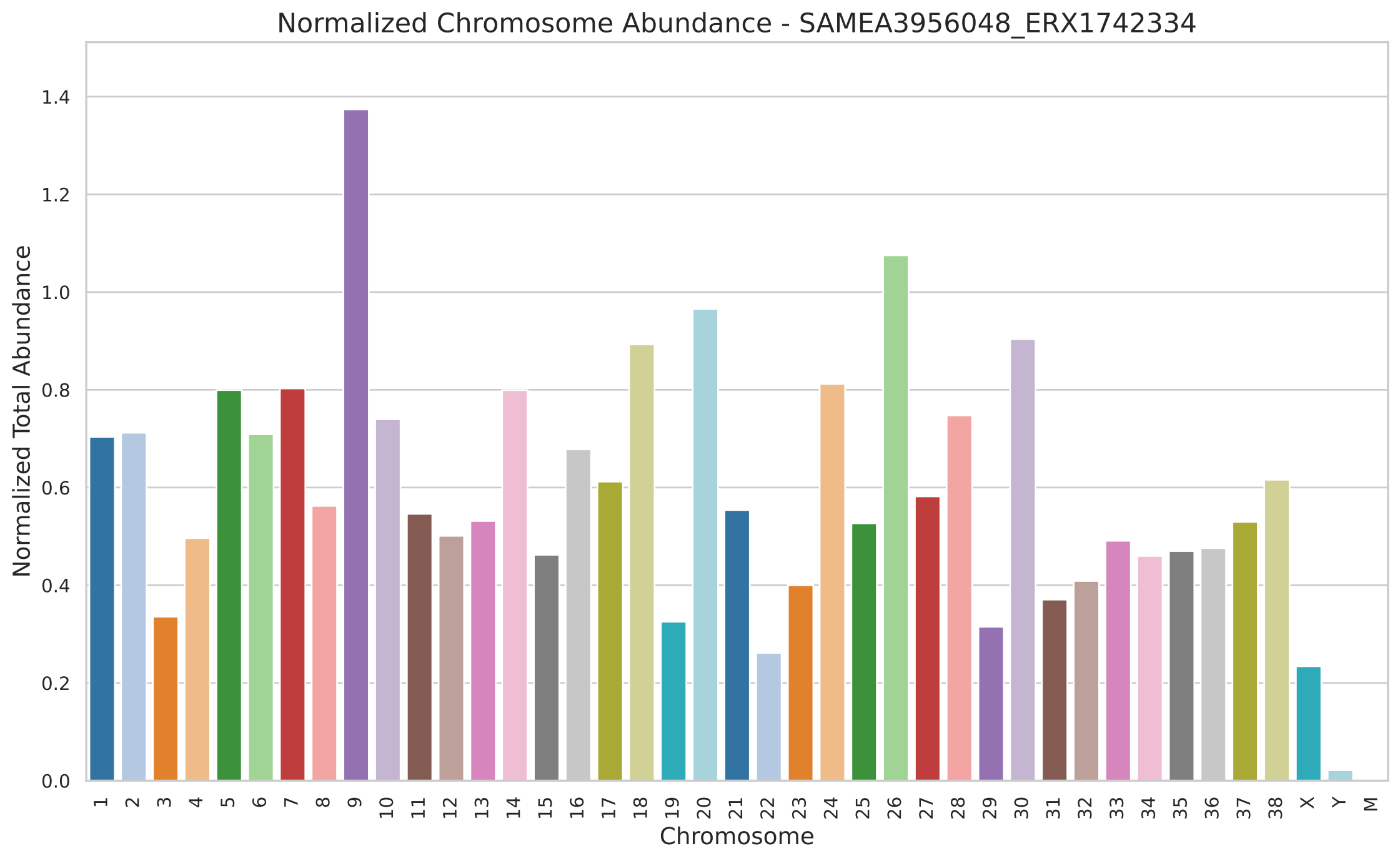

Normalized Chromosome Abundance - SAMEA3956004_ERX1742301
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

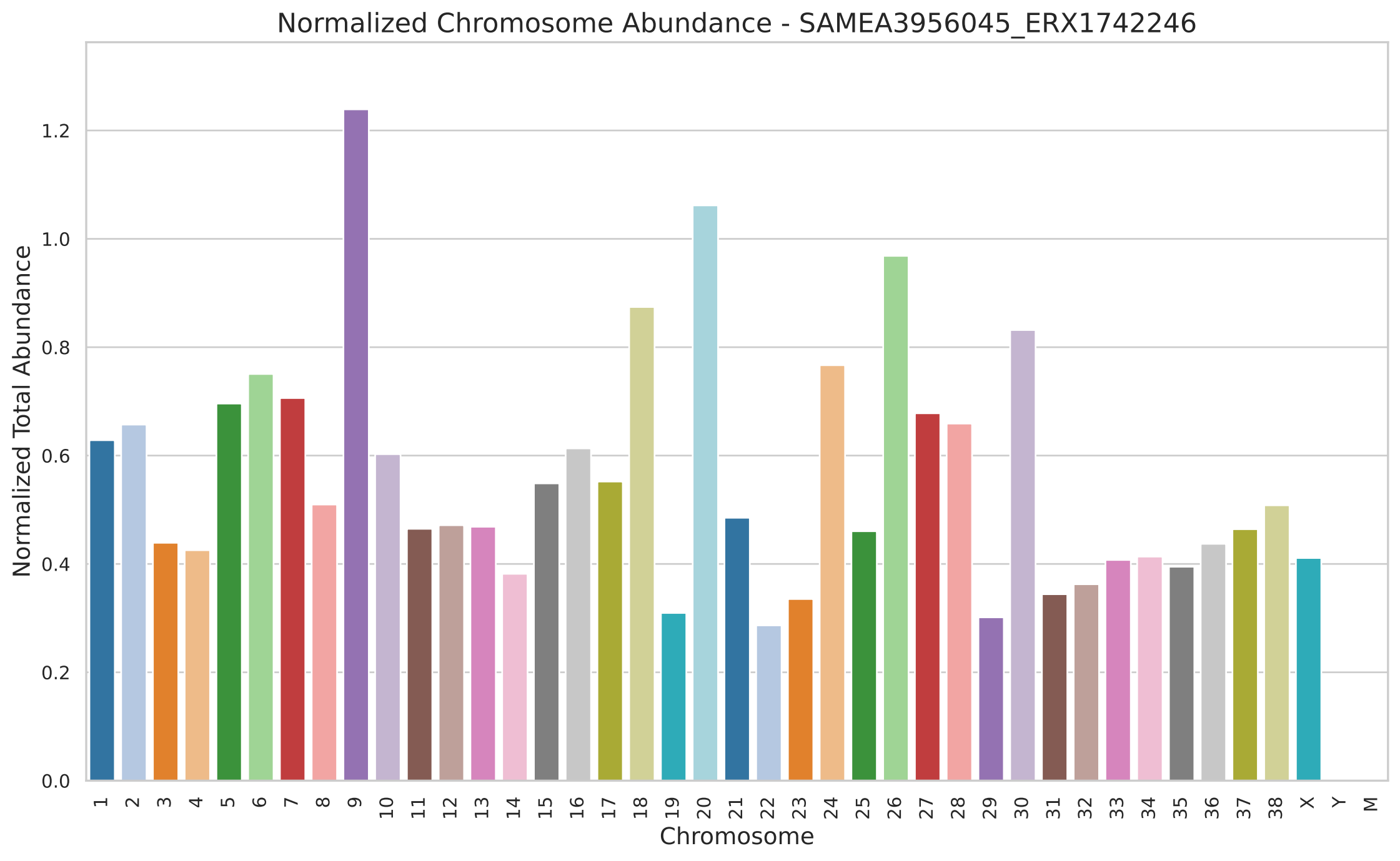

Normalized Chromosome Abundance - SAMEA3956029_ERX1742323
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

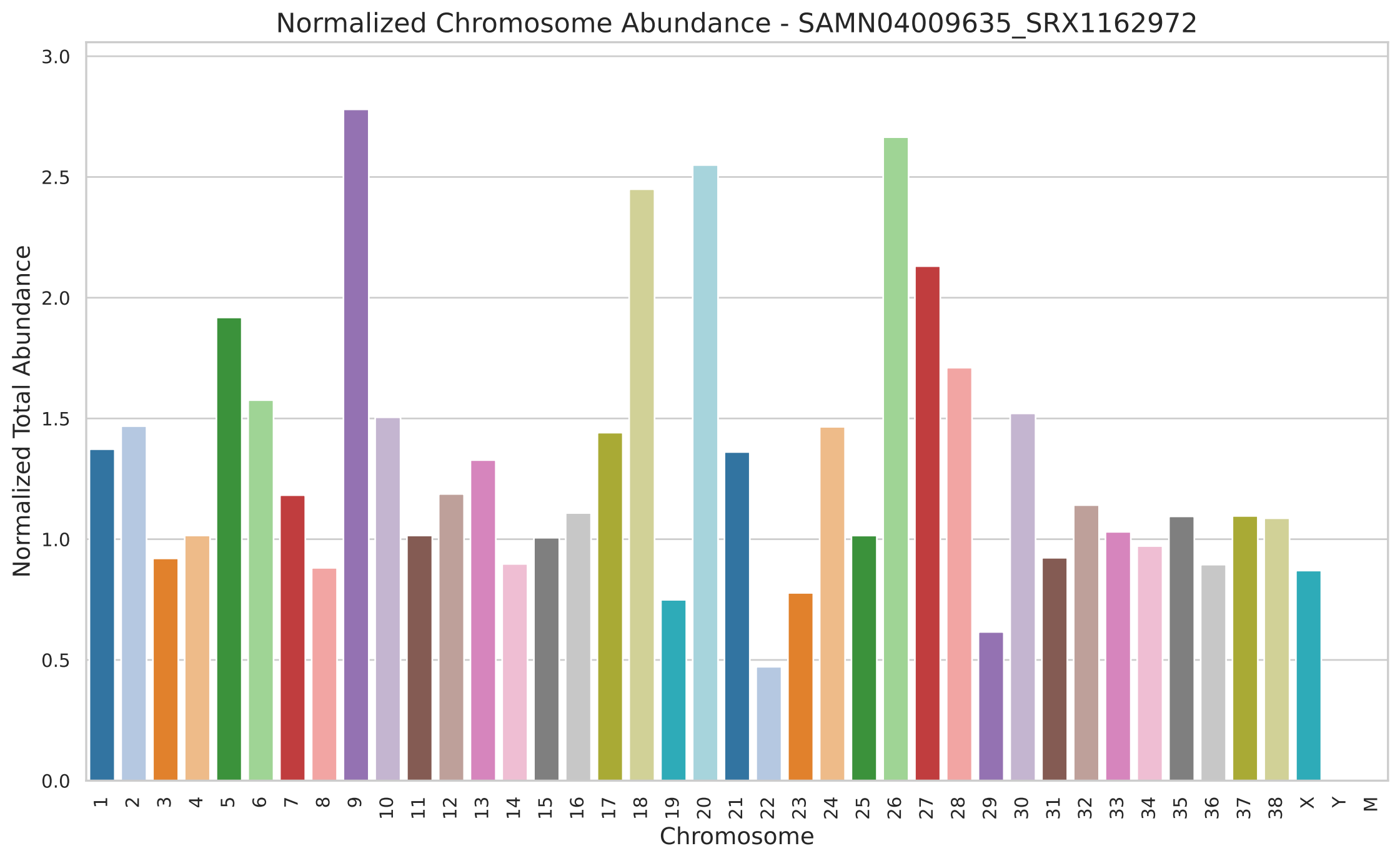

Normalized Chromosome Abundance - SAMEA3956049_ERX1742335
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

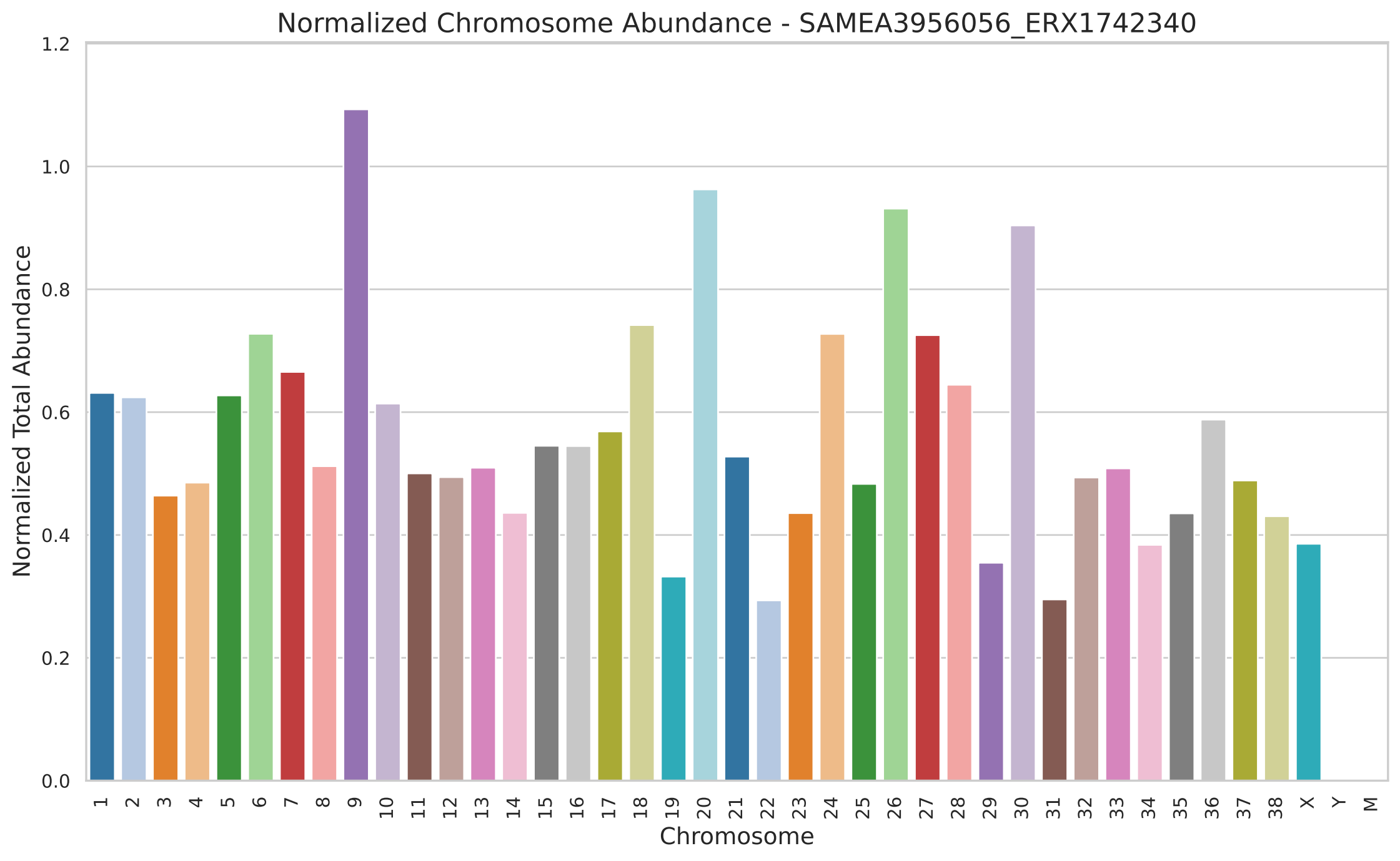

Normalized Chromosome Abundance - SAMEA3956028_ERX1742322
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

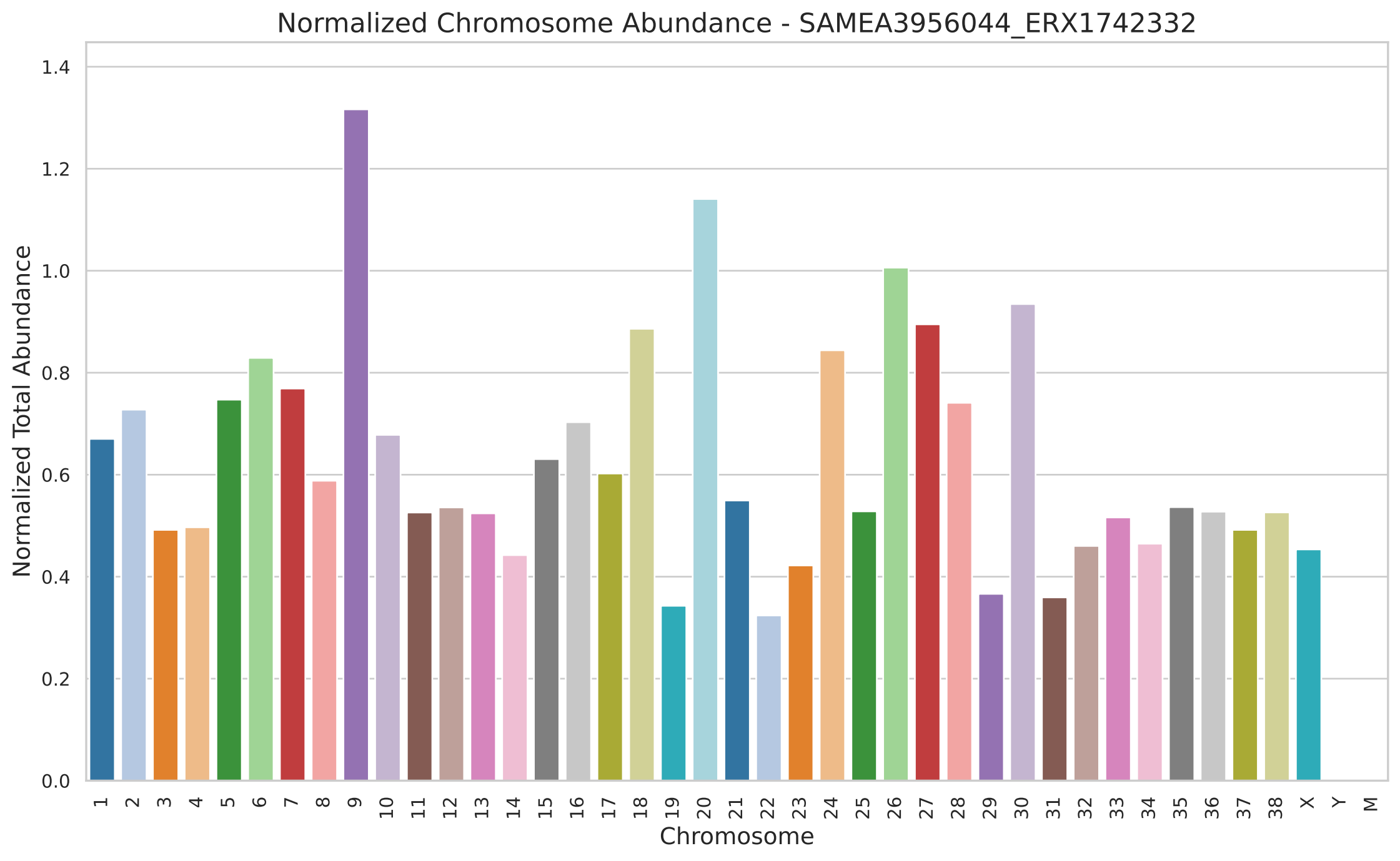

Normalized Chromosome Abundance - SAMEA3956025_ERX1742319
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

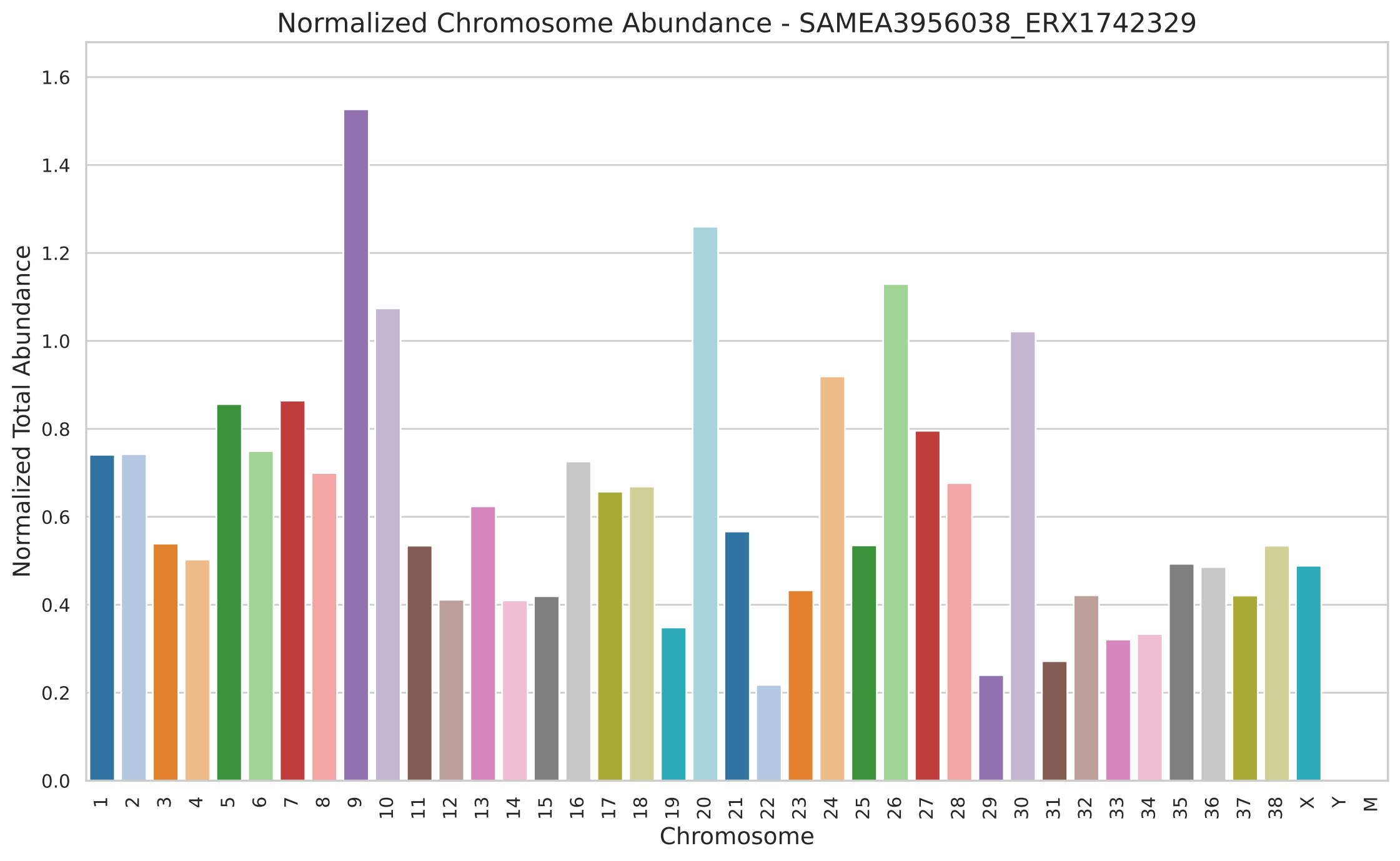

Normalized Chromosome Abundance - SAMEA3956048_ERX1742334
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

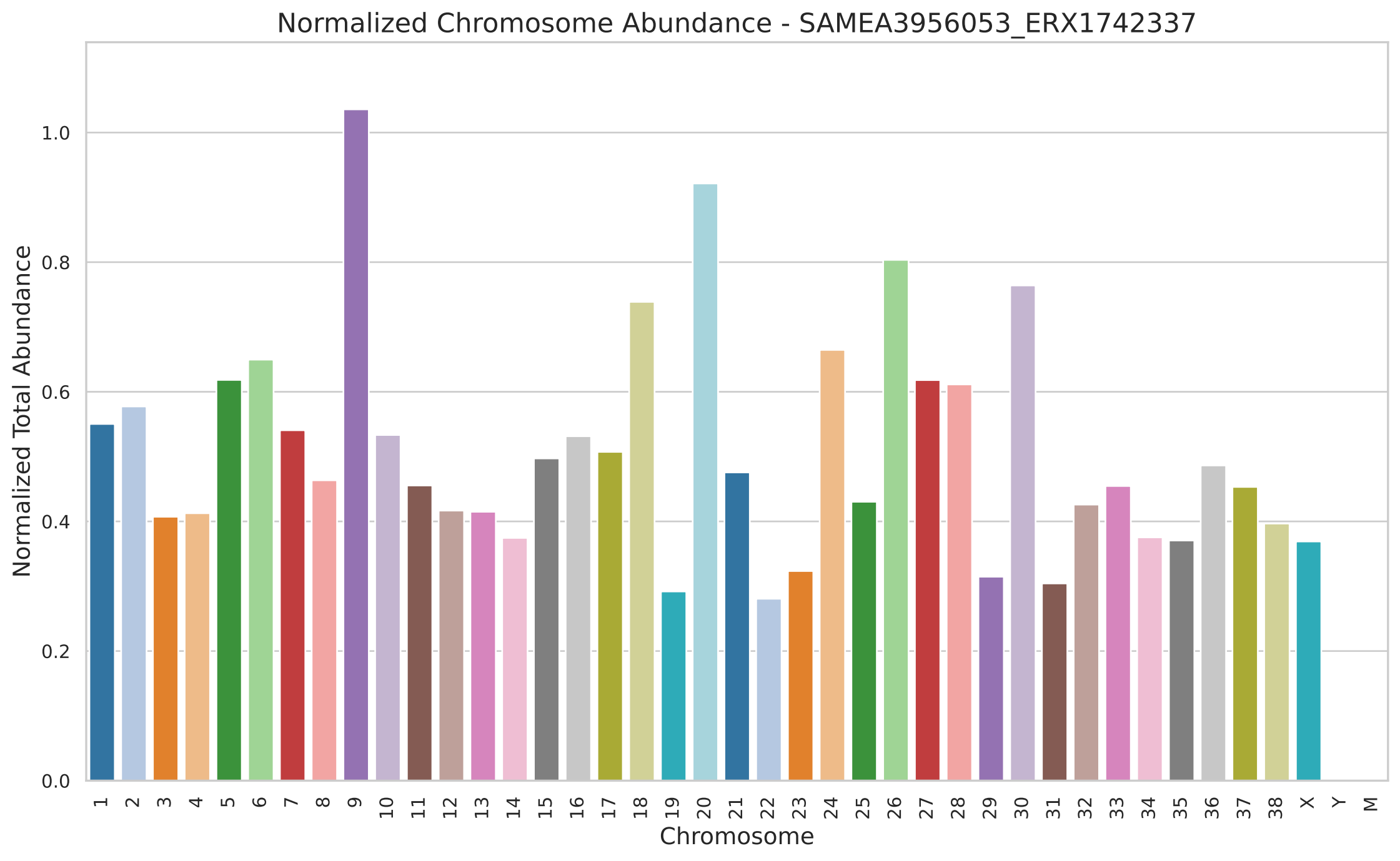

Normalized Chromosome Abundance - SAMEA3956045_ERX1742246
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

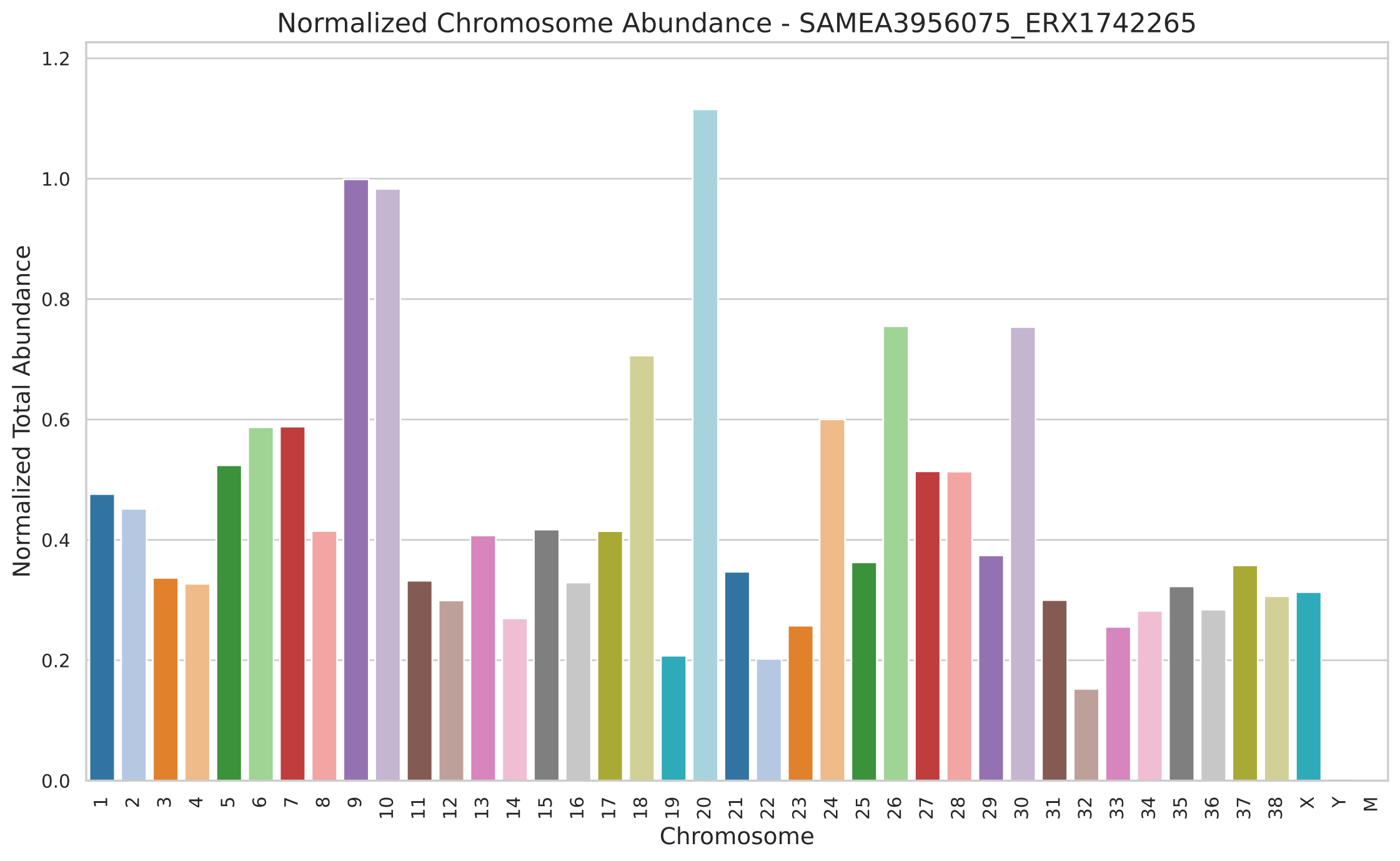

Normalized Chromosome Abundance - SAMN04009635_SRX1162972
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

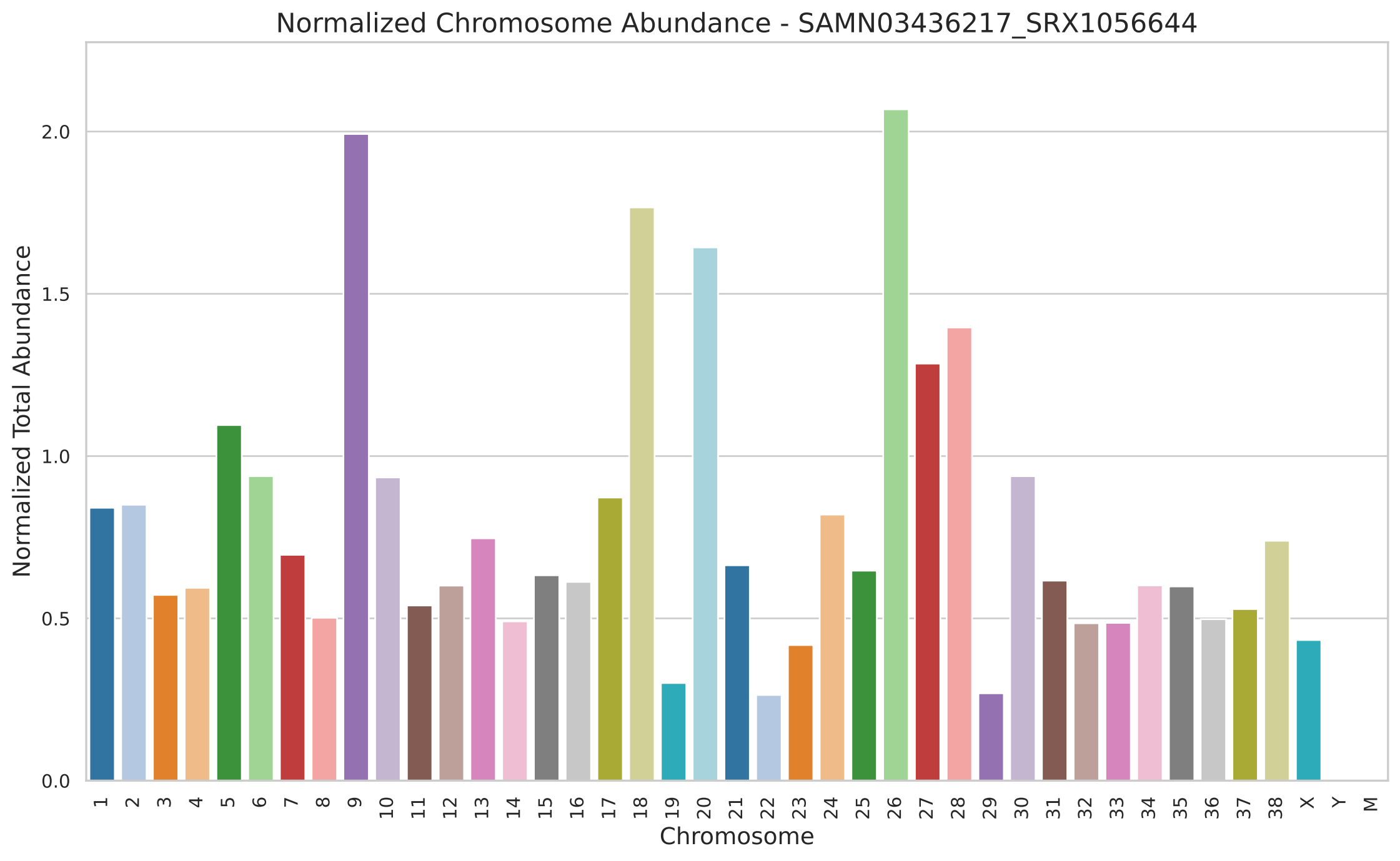

Normalized Chromosome Abundance - SAMEA3956056_ERX1742340
Normalized Total Abundance
1.2
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

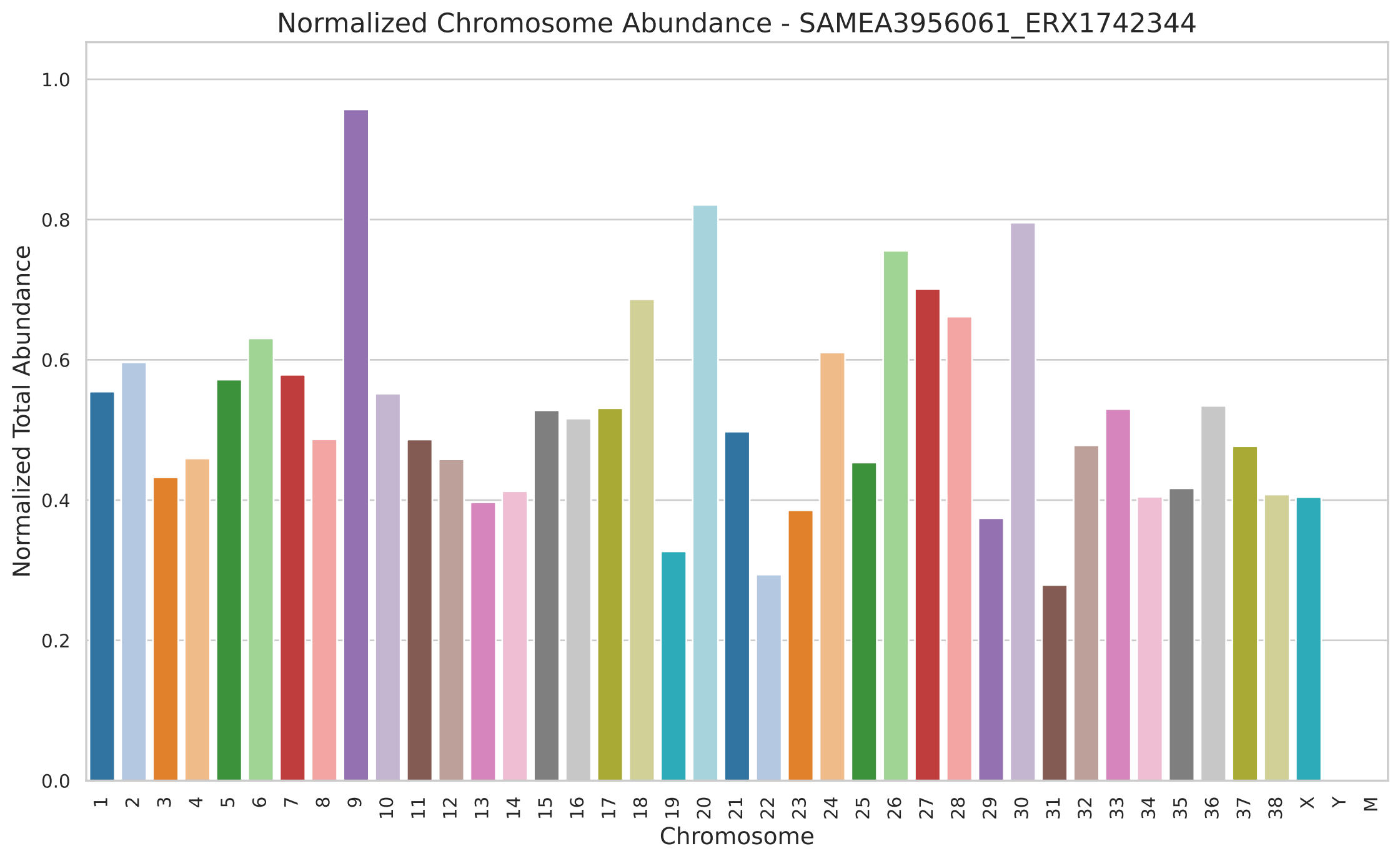

Normalized Chromosome Abundance - SAMEA3956044_ERX1742332
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

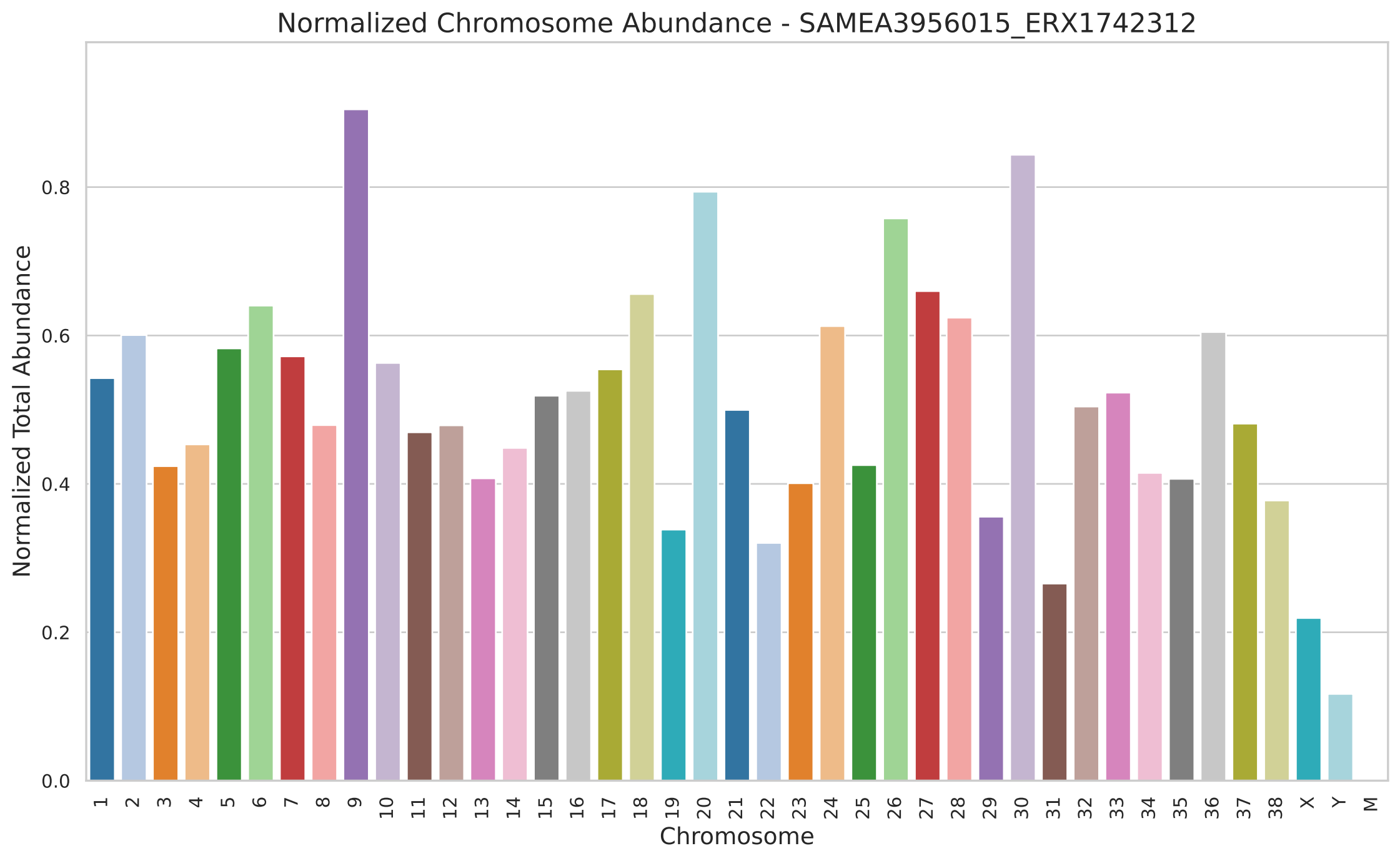

Normalized Chromosome Abundance - SAMEA3956038_ERX1742329
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

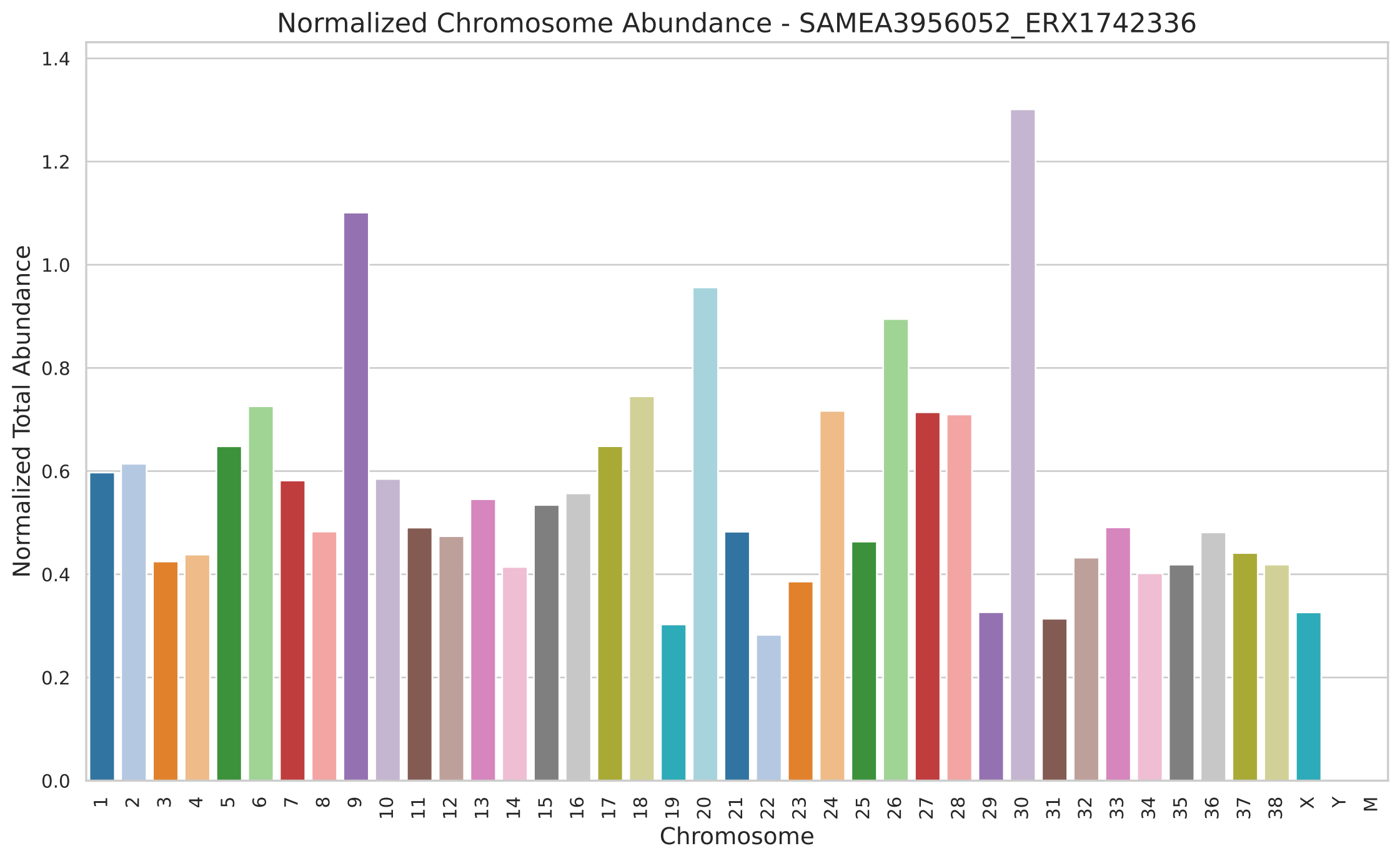

Normalized Chromosome Abundance - SAMEA3956053_ERX1742337
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

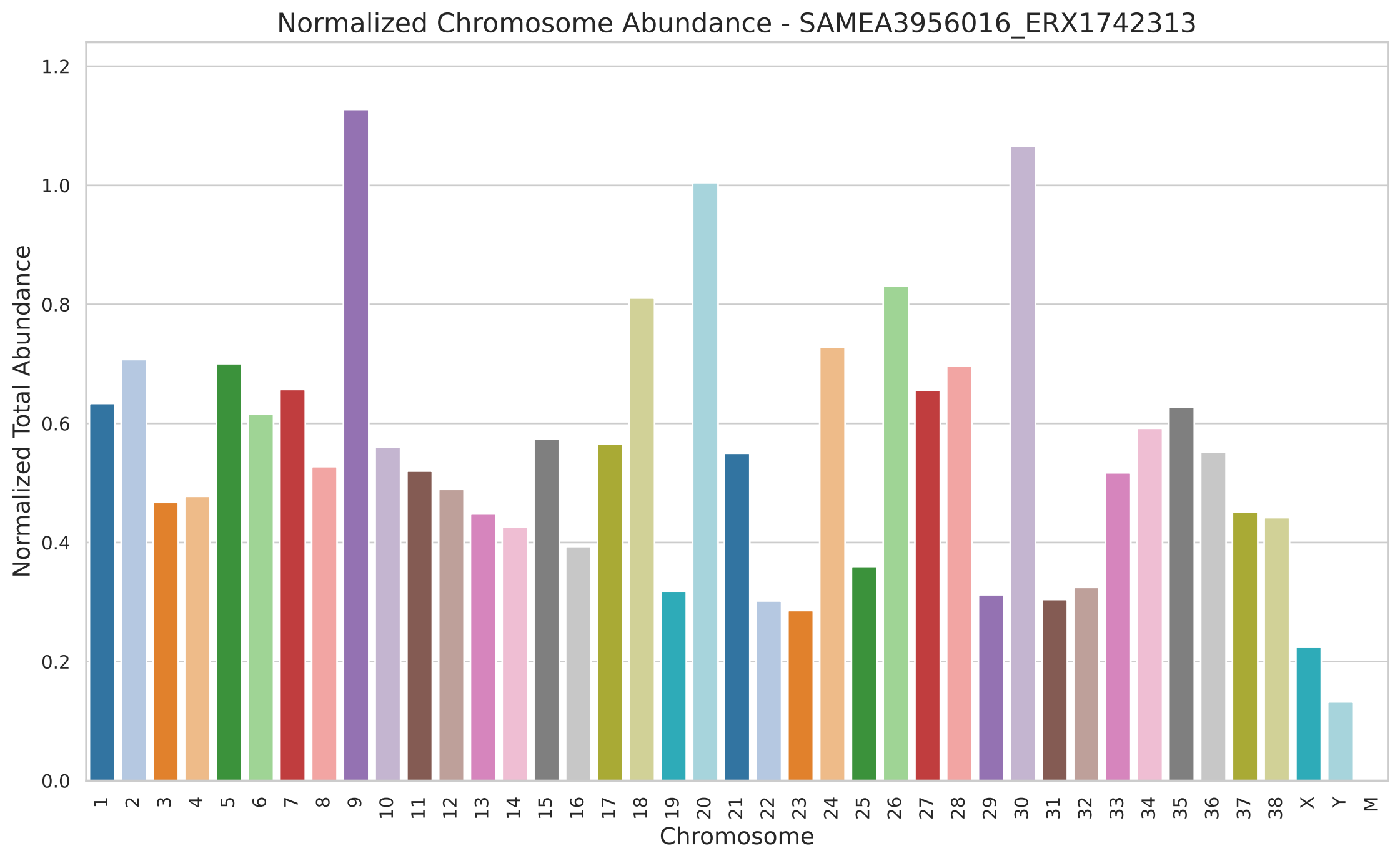

Normalized Chromosome Abundance - SAMEA3956075_ERX1742265
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

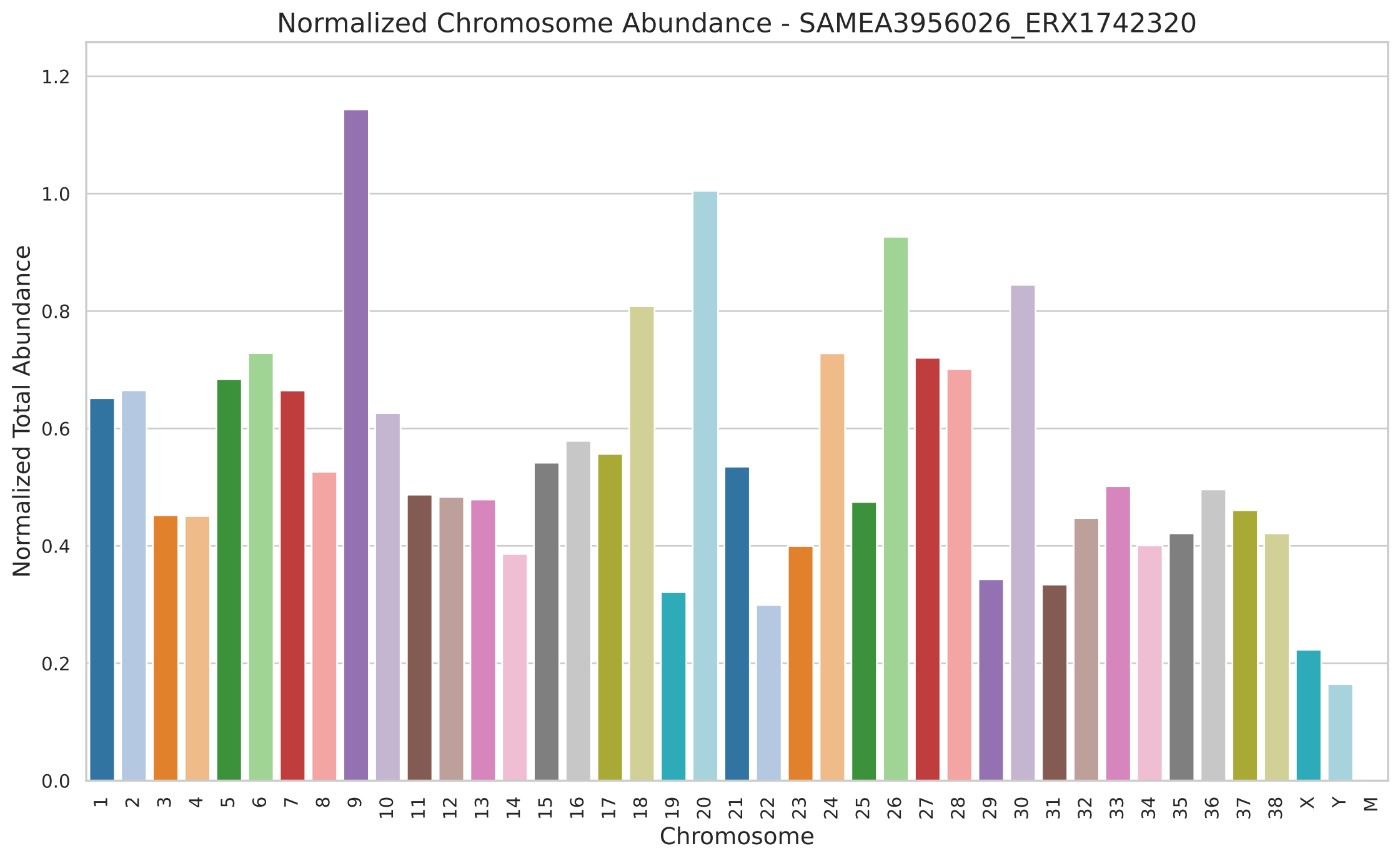

Normalized Chromosome Abundance - SAMN03436217_SRX1056644
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

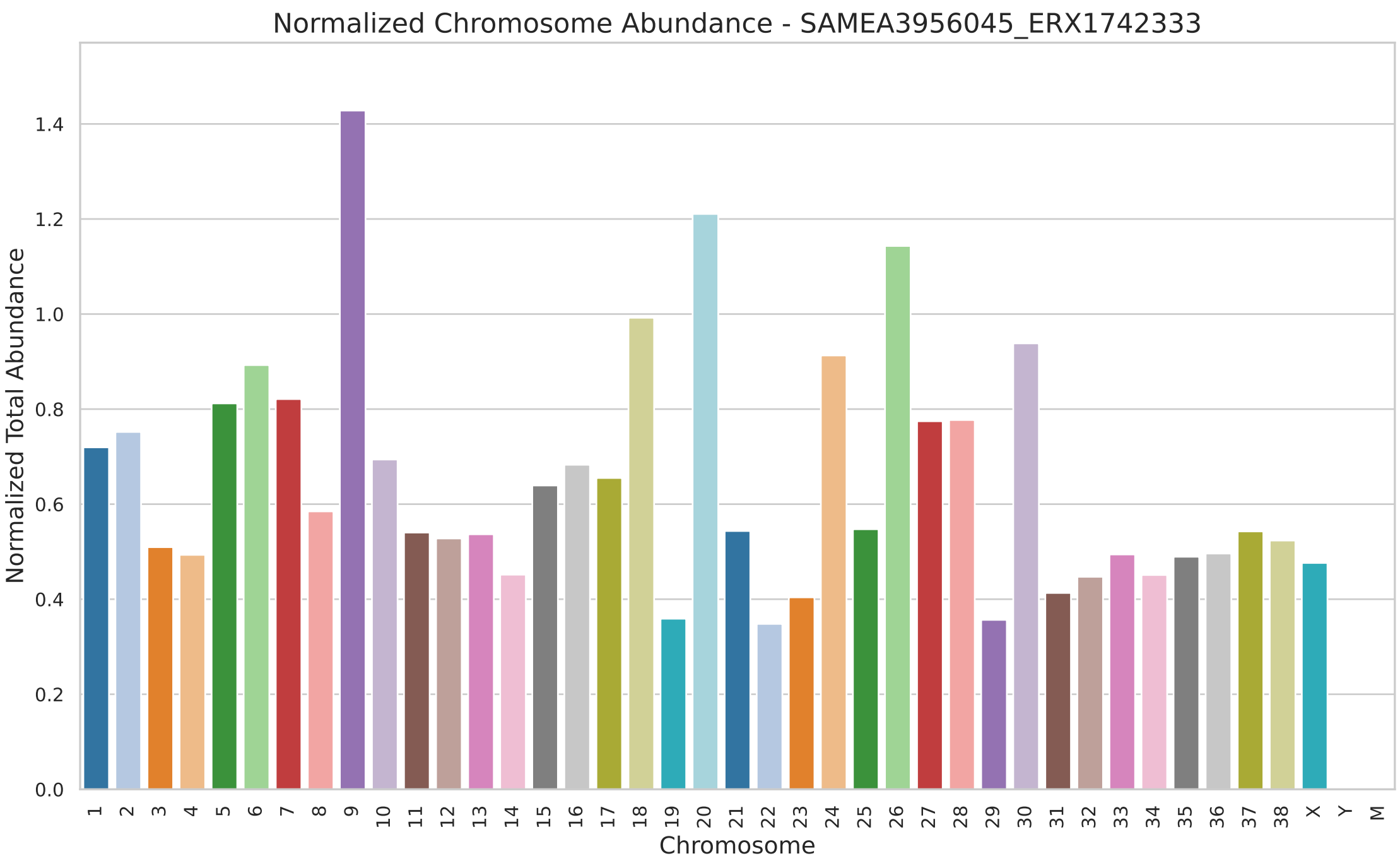

Normalized Chromosome Abundance - SAMEA3956061_ERX1742344
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

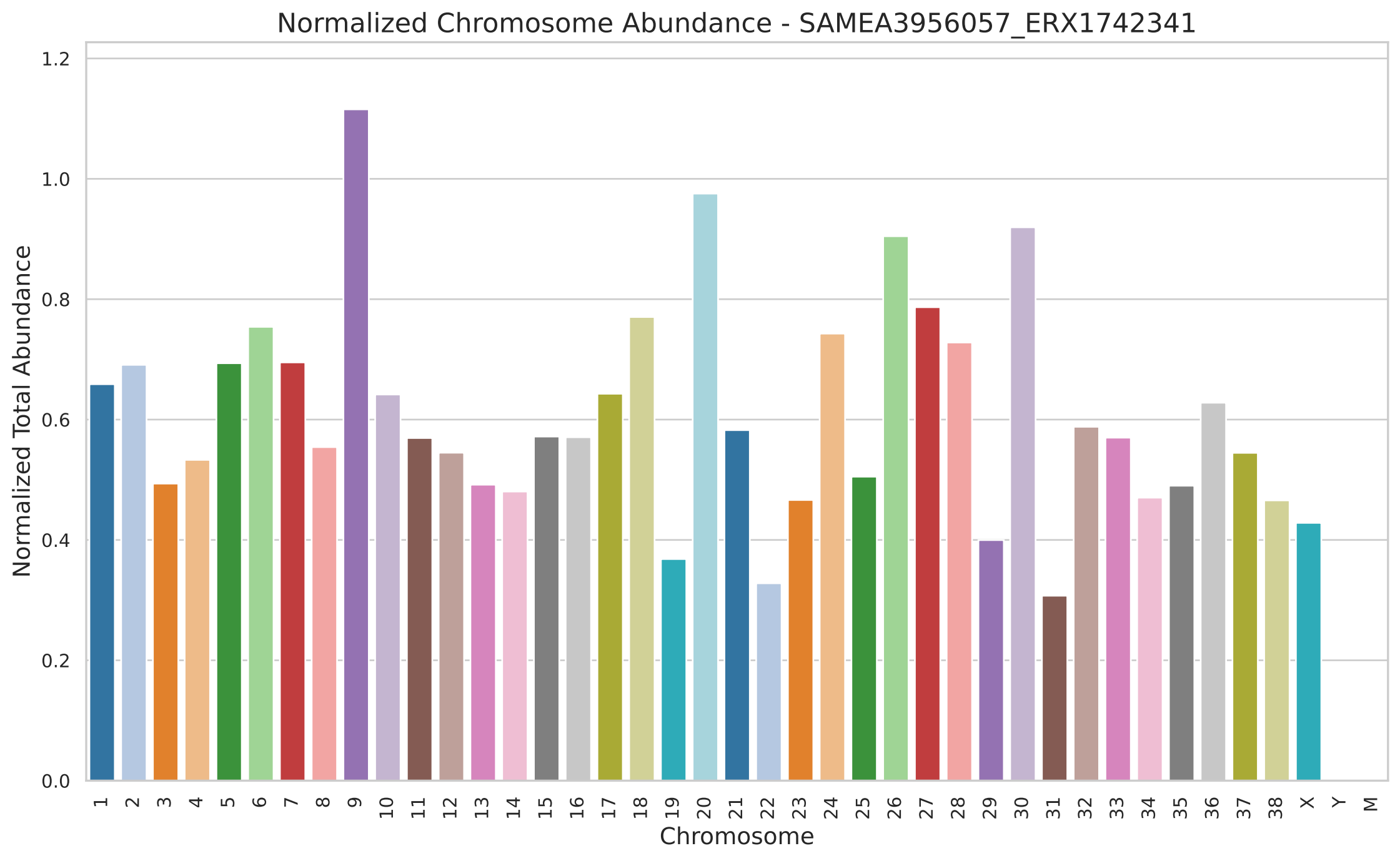

Normalized Chromosome Abundance - SAMEA3956015_ERX1742312
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

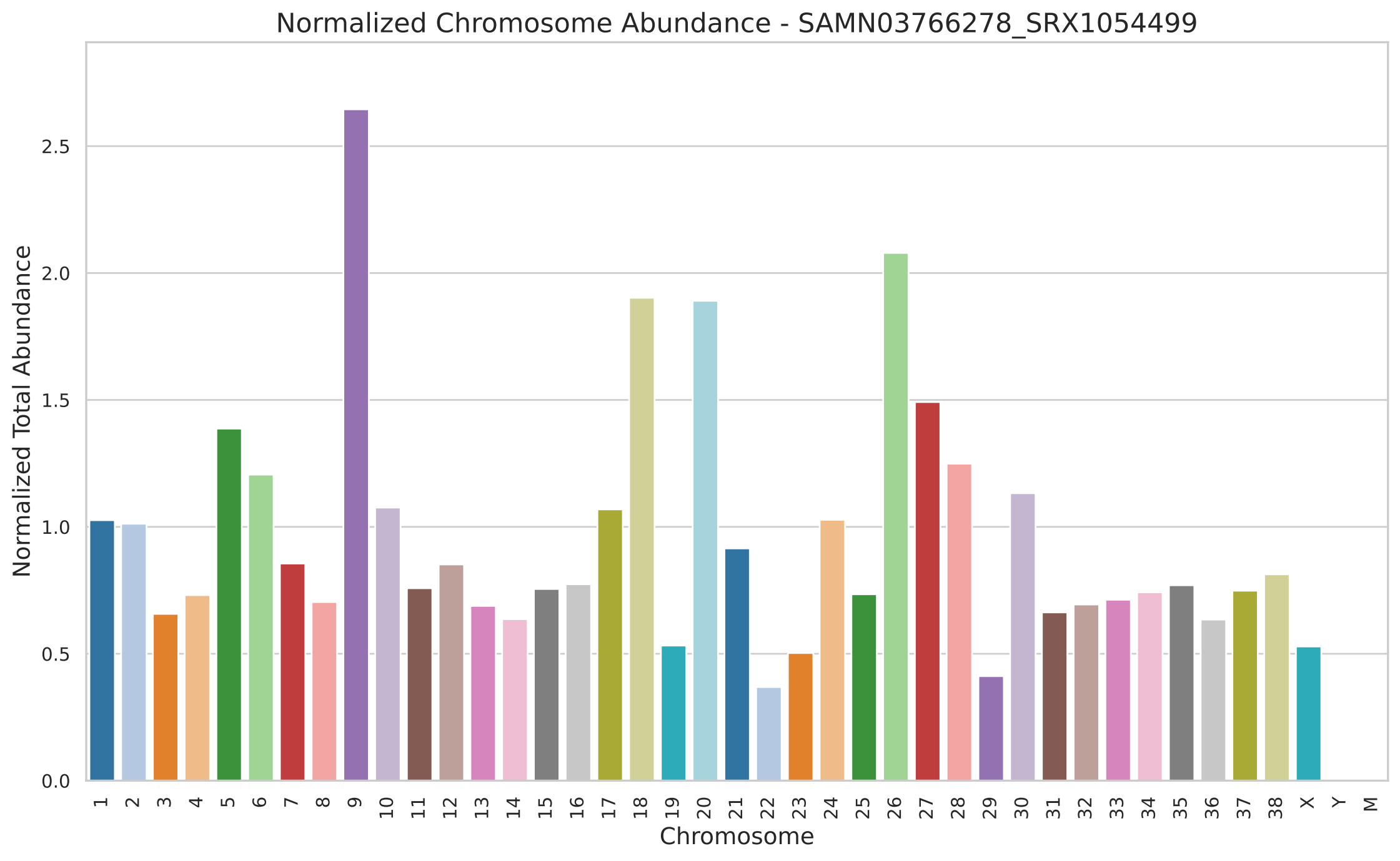

Normalized Chromosome Abundance - SAMEA3956052_ERX1742336
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

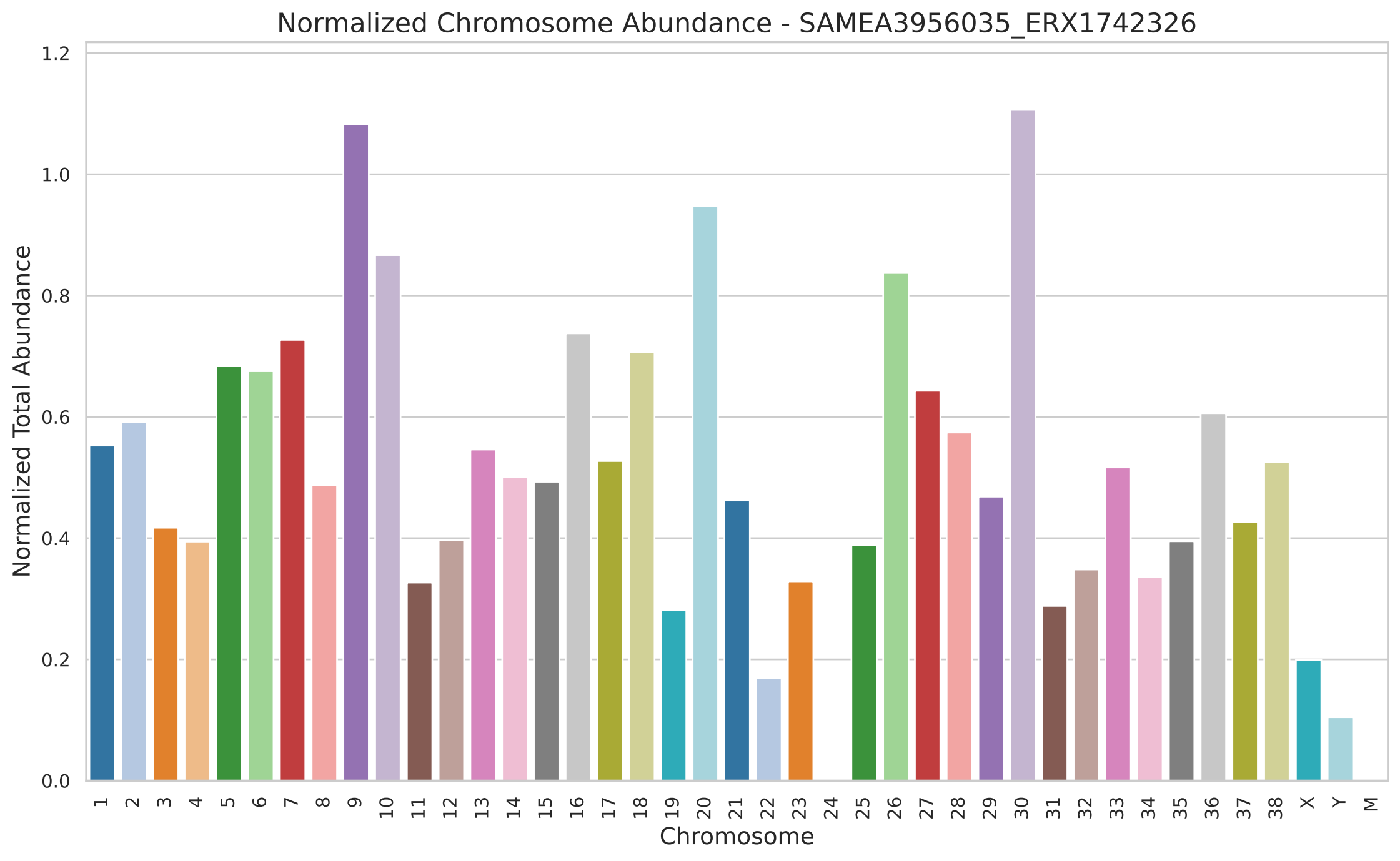

Normalized Chromosome Abundance - SAMEA3956016_ERX1742313
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

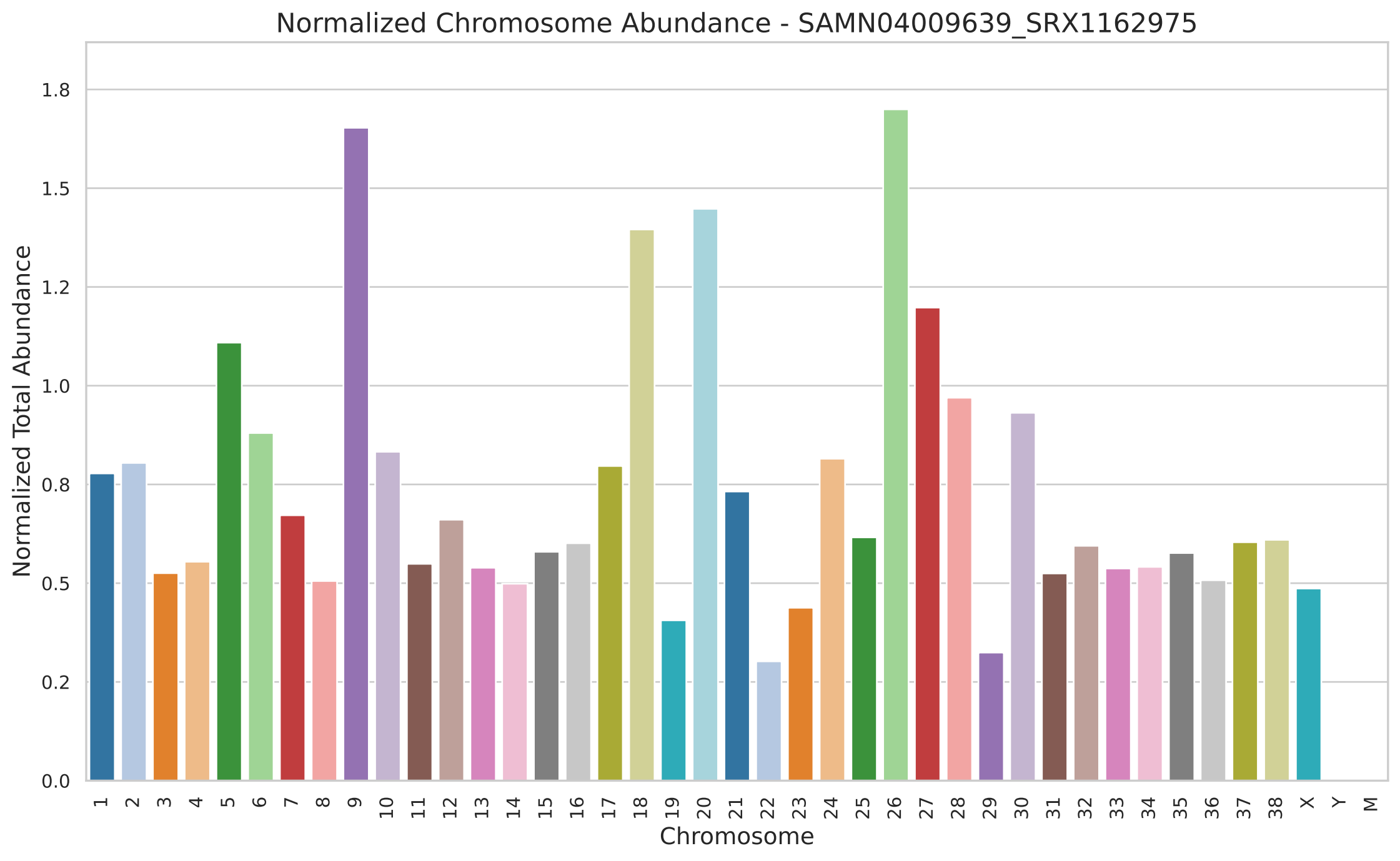

Normalized Chromosome Abundance - SAMEA3956026_ERX1742320
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

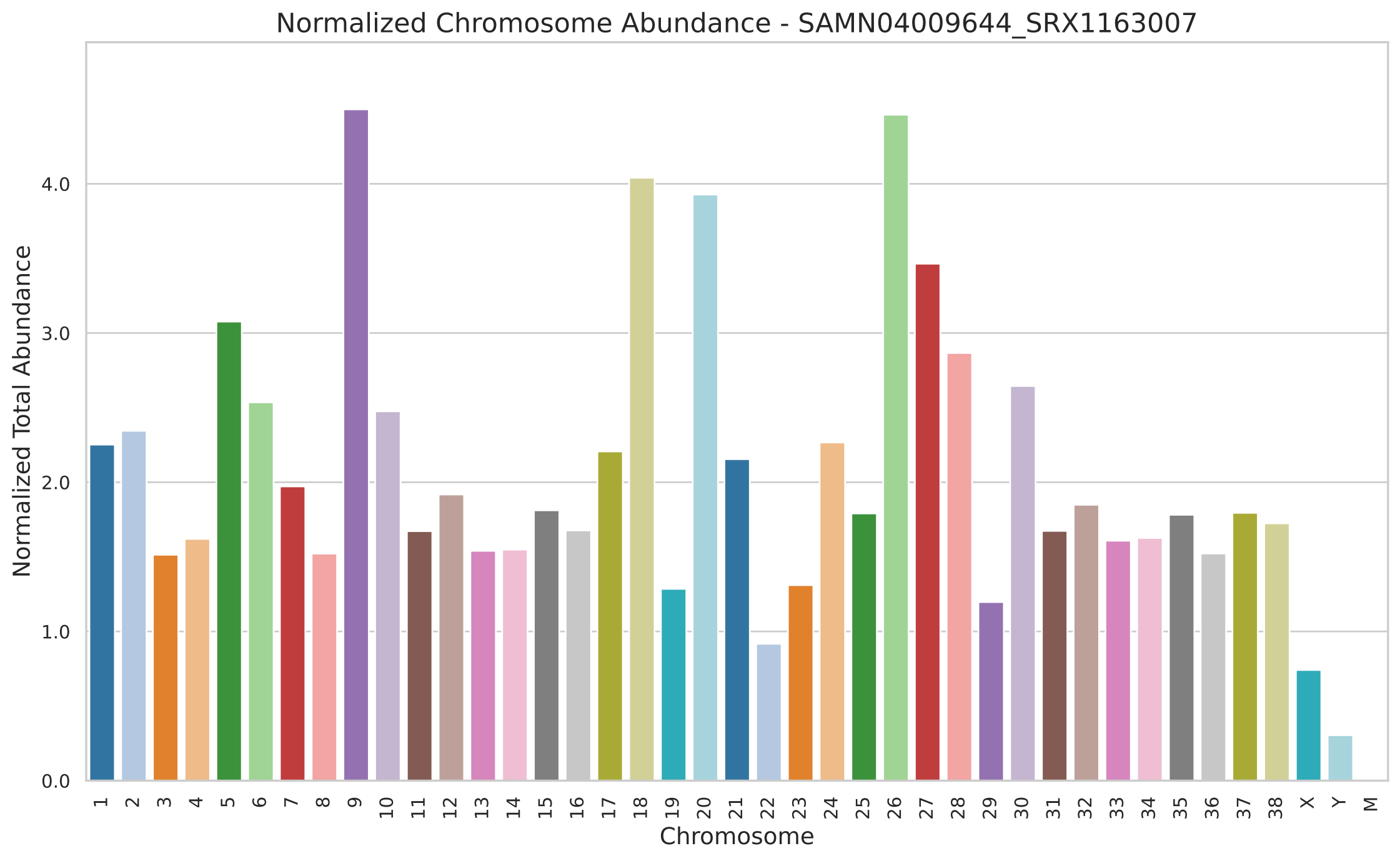

Normalized Chromosome Abundance - SAMEA3956045_ERX1742333
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

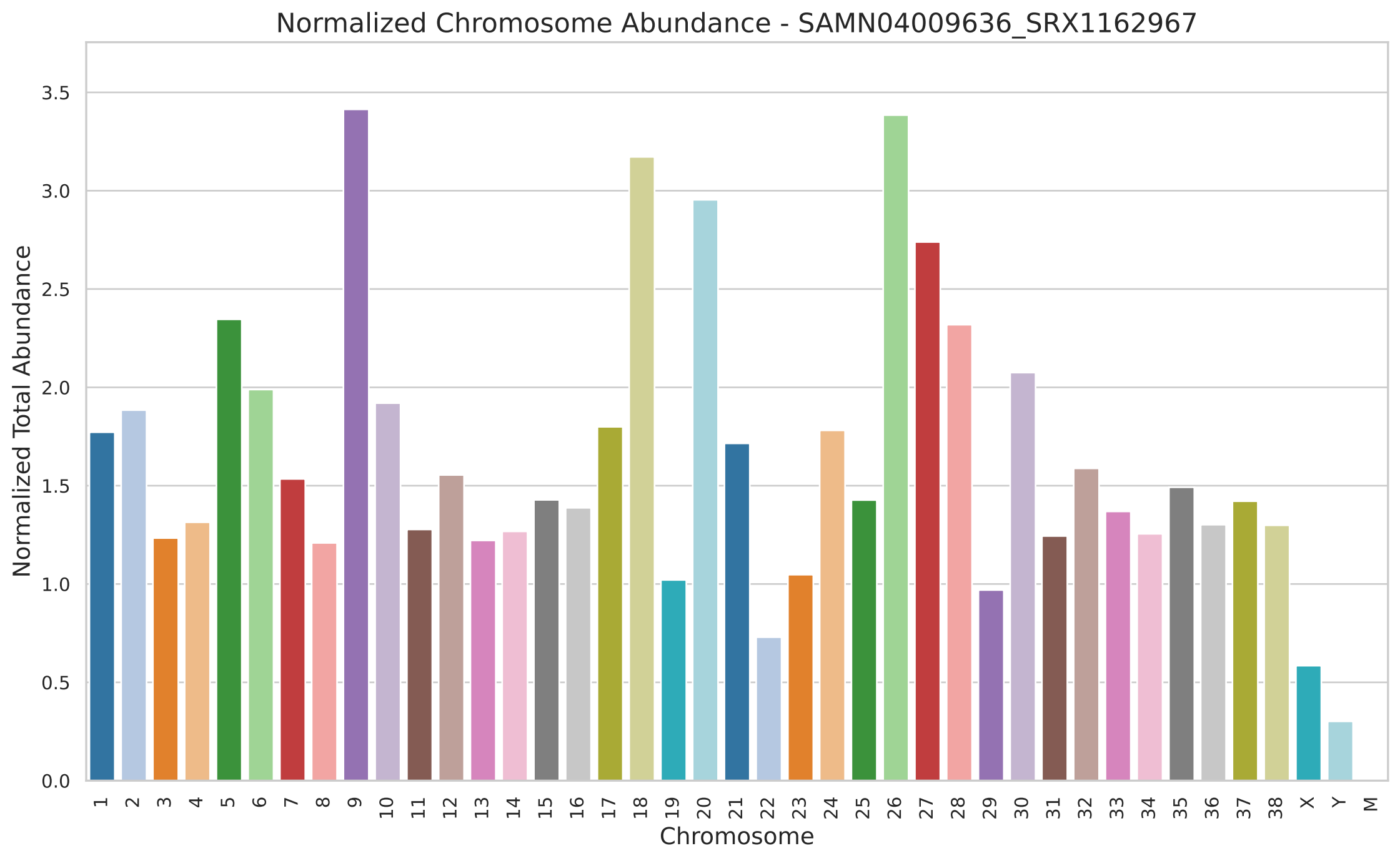

Normalized Chromosome Abundance - SAMEA3956057_ERX1742341
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

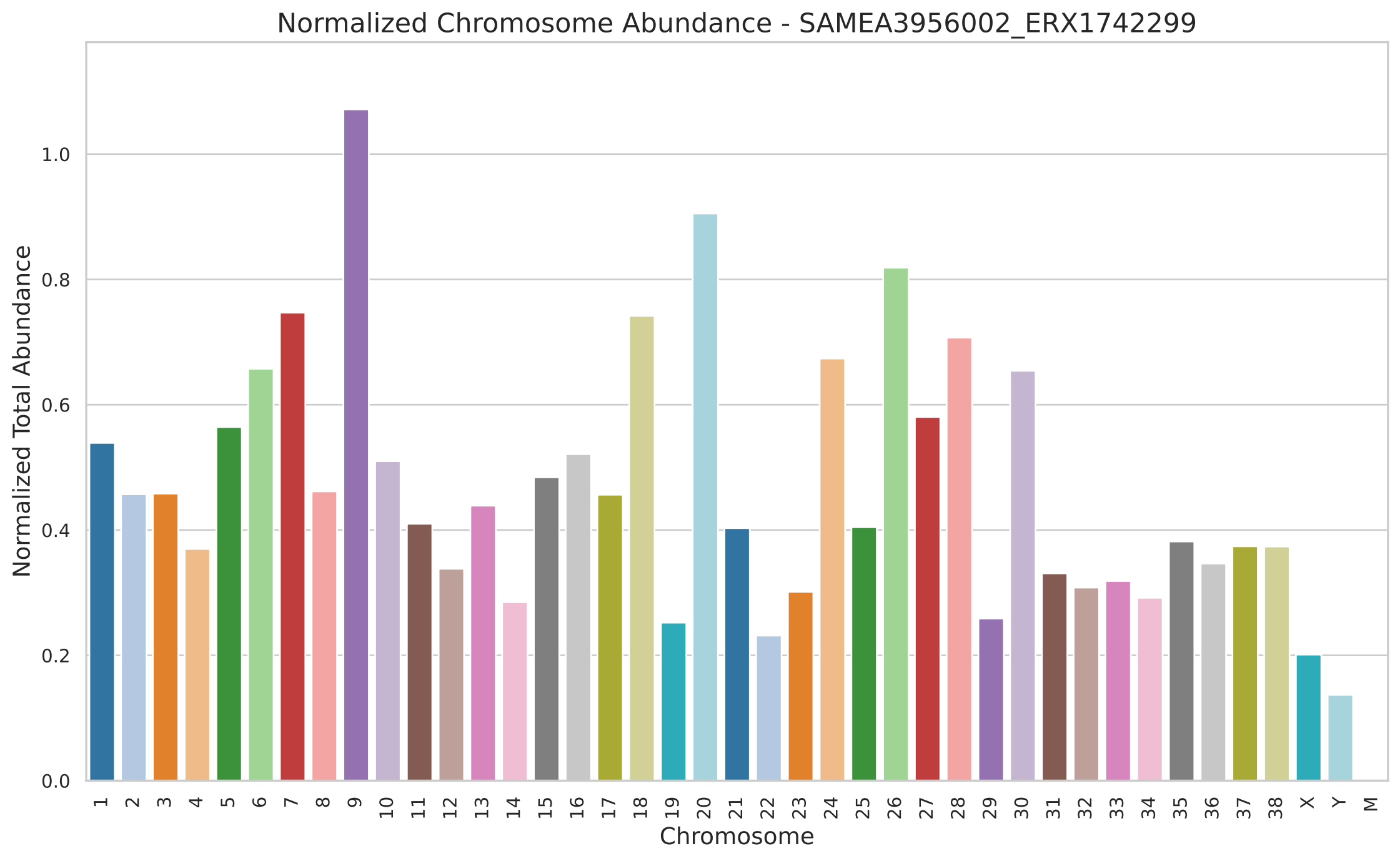

Normalized Chromosome Abundance - SAMN03766278_SRX1054499
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

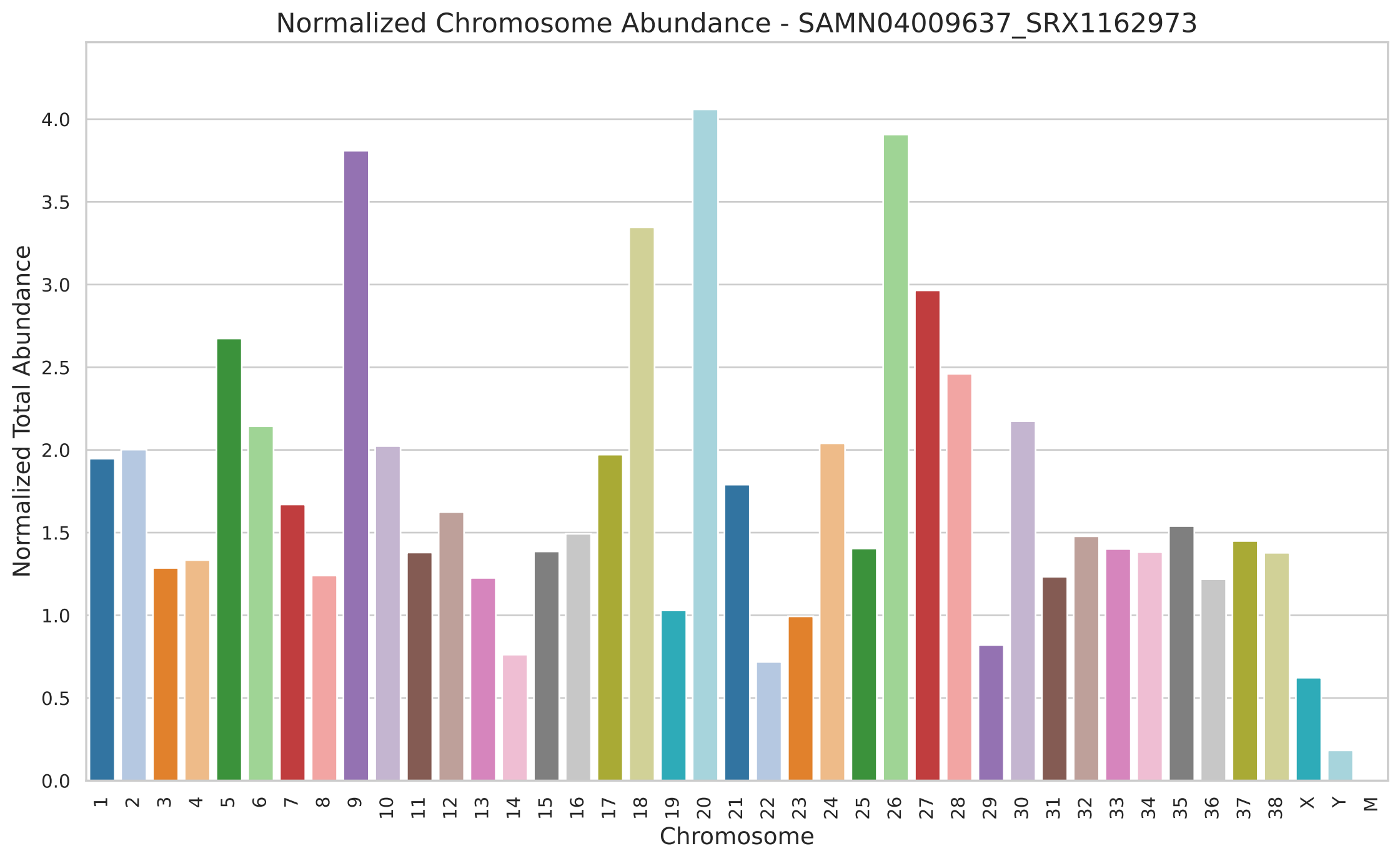

Normalized Chromosome Abundance - SAMEA3956035_ERX1742326
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

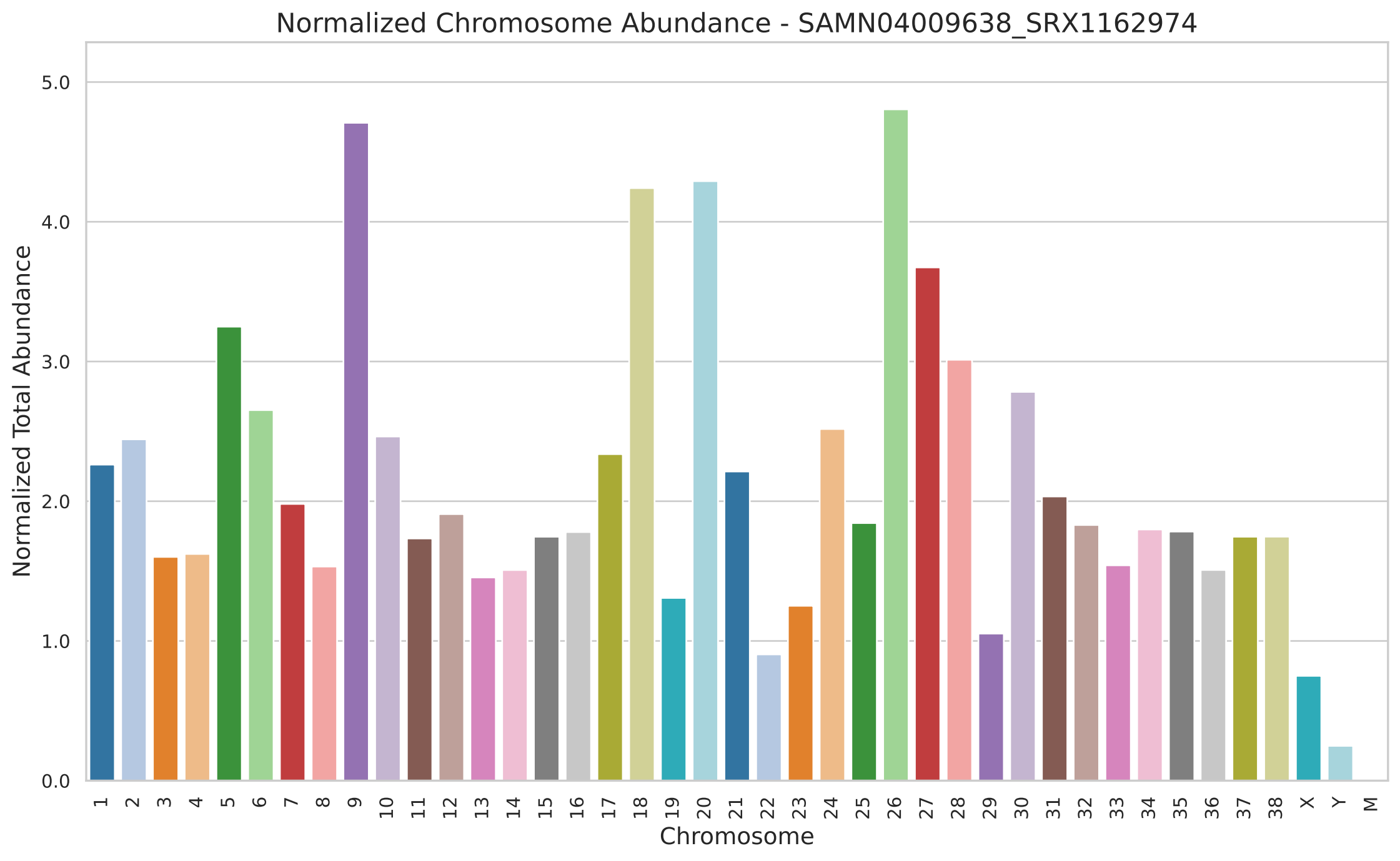

Normalized Chromosome Abundance - SAMN04009639_SRX1162975
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

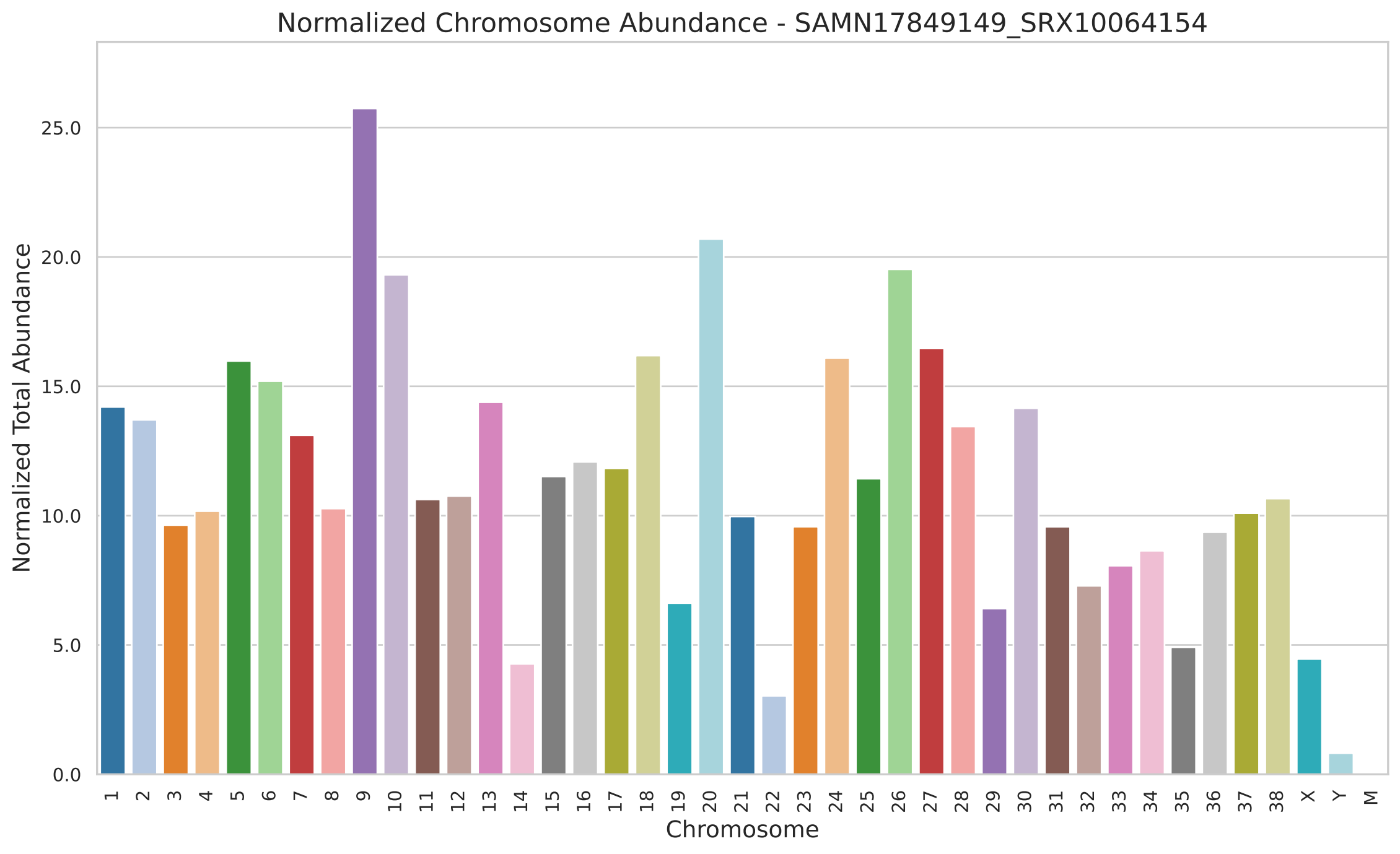

Normalized Chromosome Abundance - SAMN04009644_SRX1163007
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

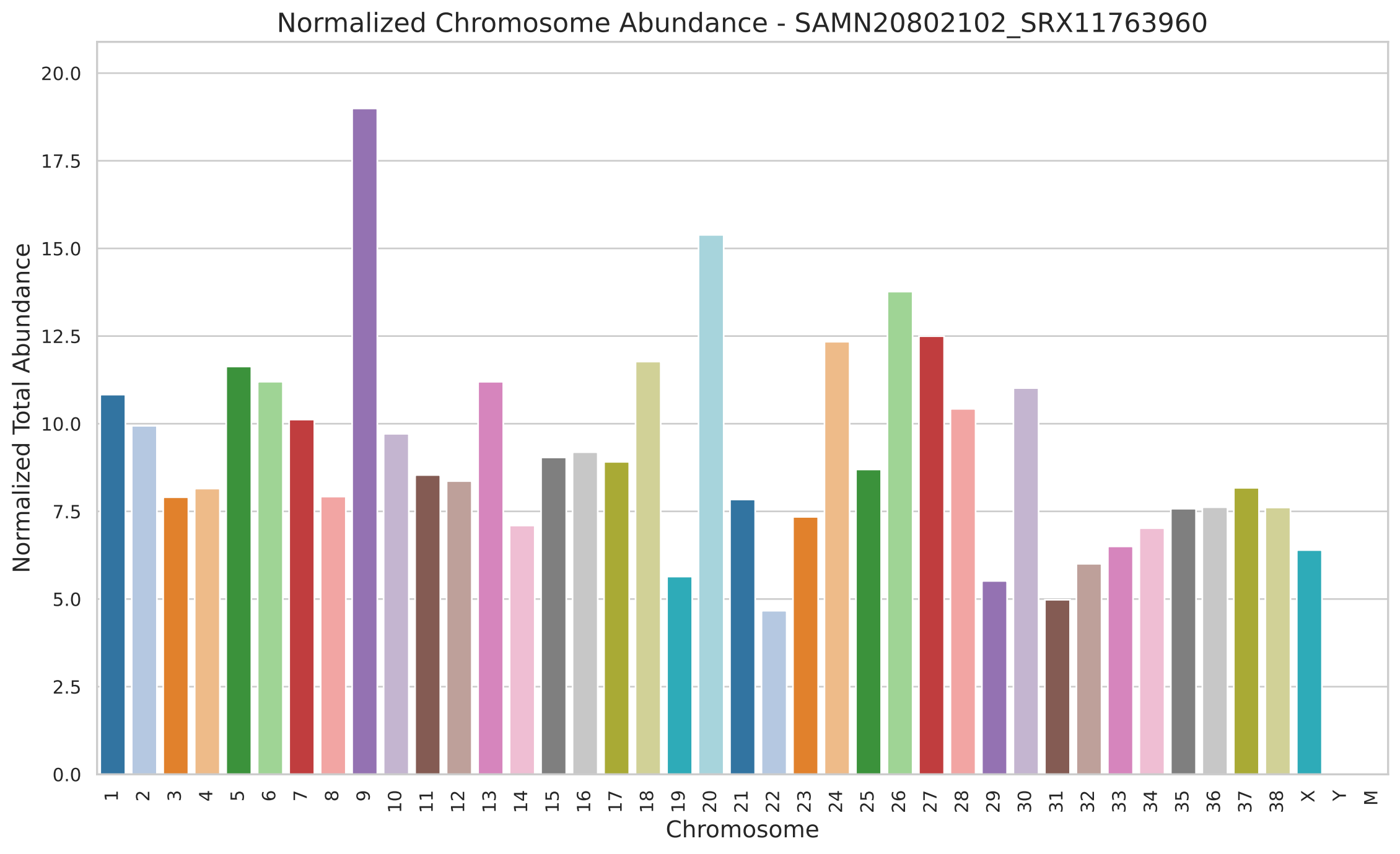

Normalized Chromosome Abundance - SAMN04009636_SRX1162967
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

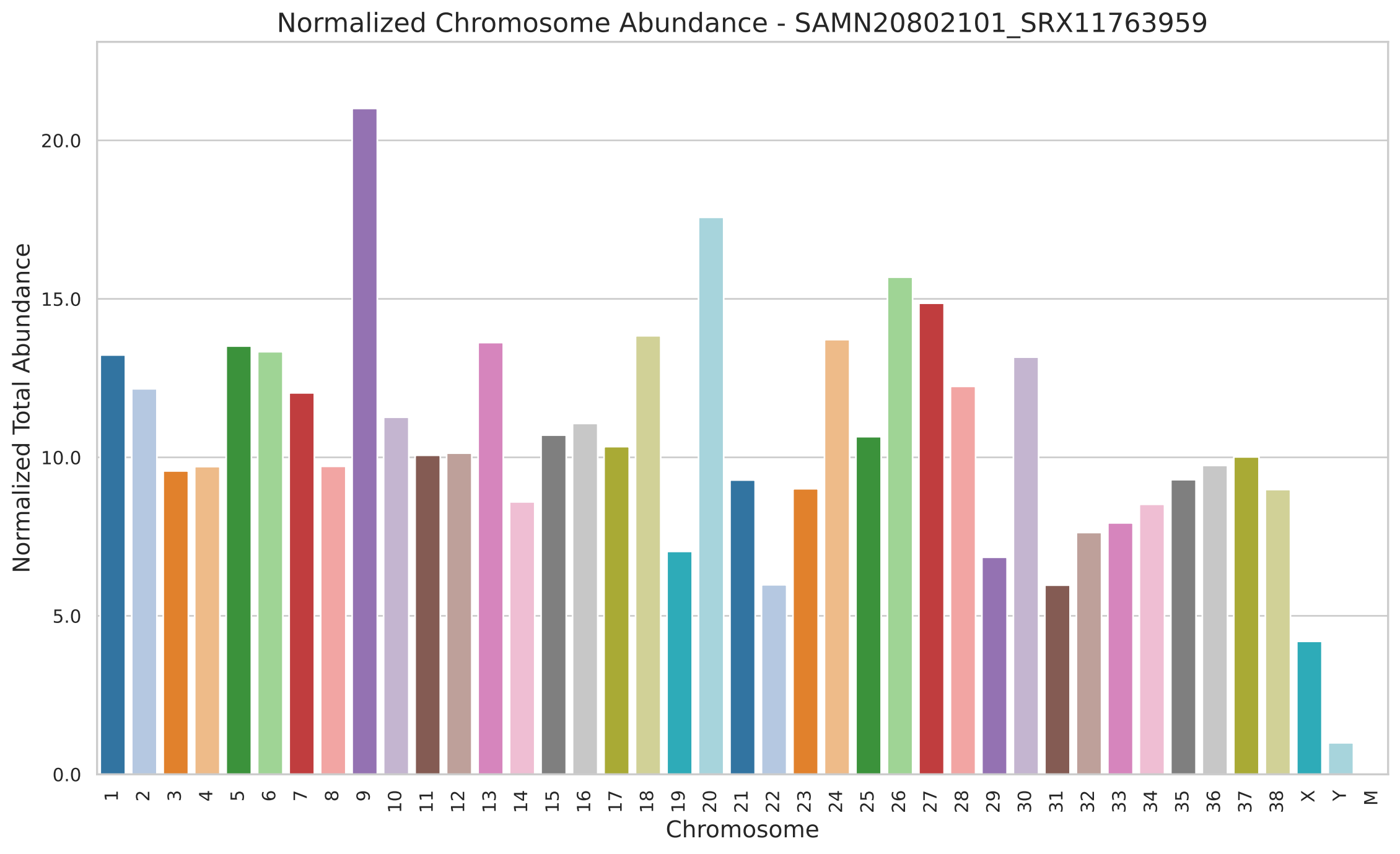

Normalized Chromosome Abundance - SAMEA3956002_ERX1742299
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

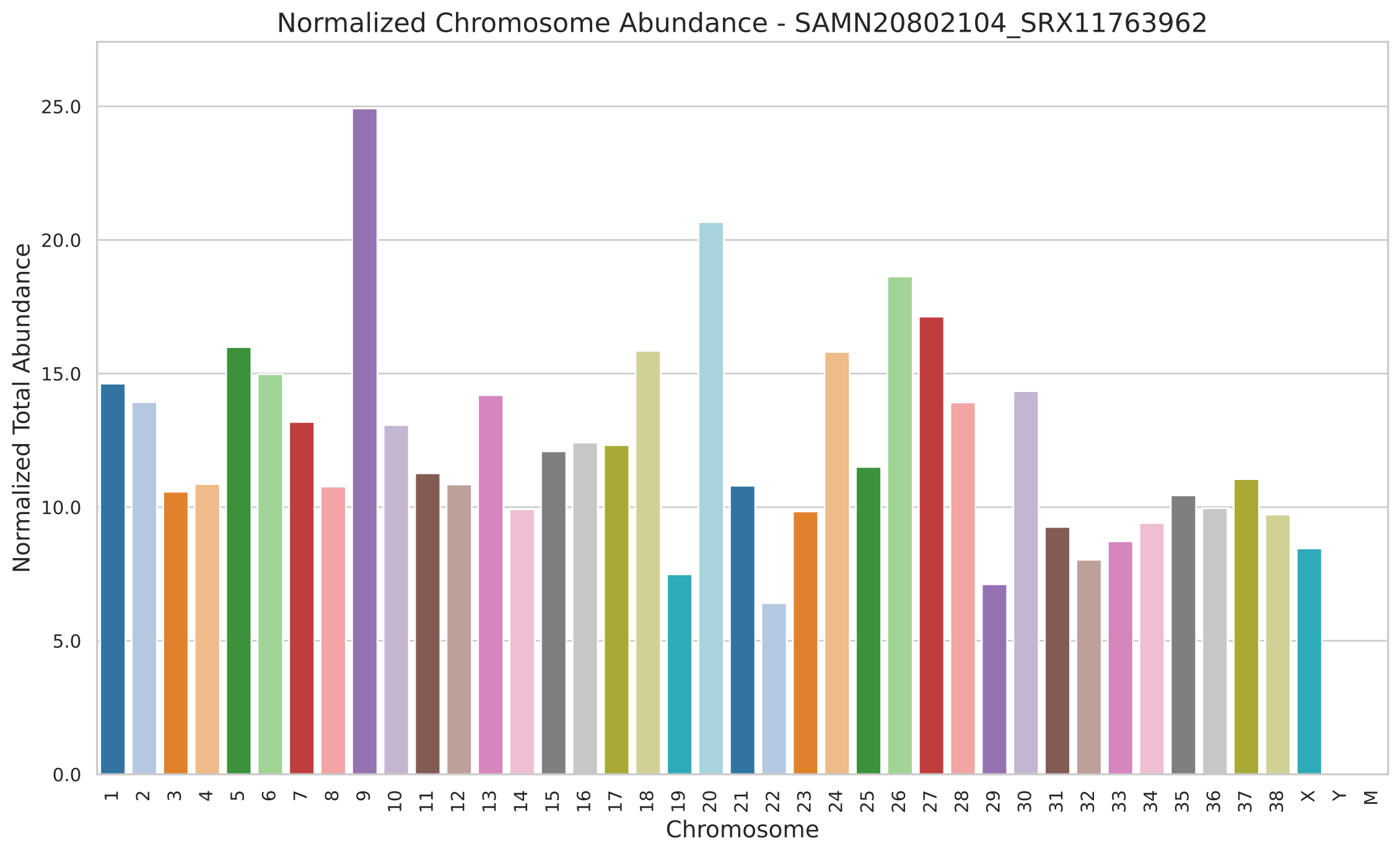

Normalized Chromosome Abundance - SAMN04009637_SRX1162973
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

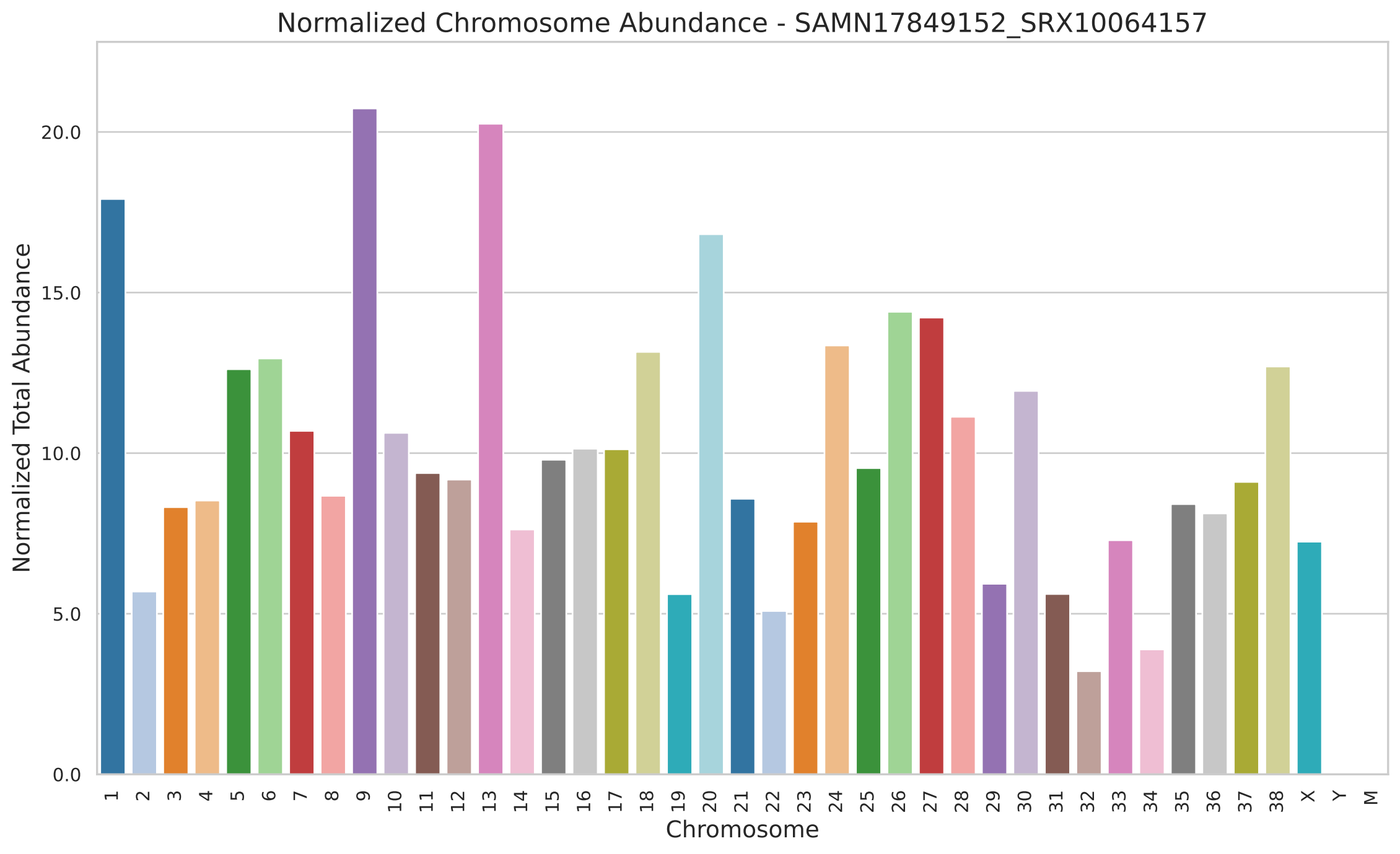

Normalized Chromosome Abundance - SAMN04009638_SRX1162974
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

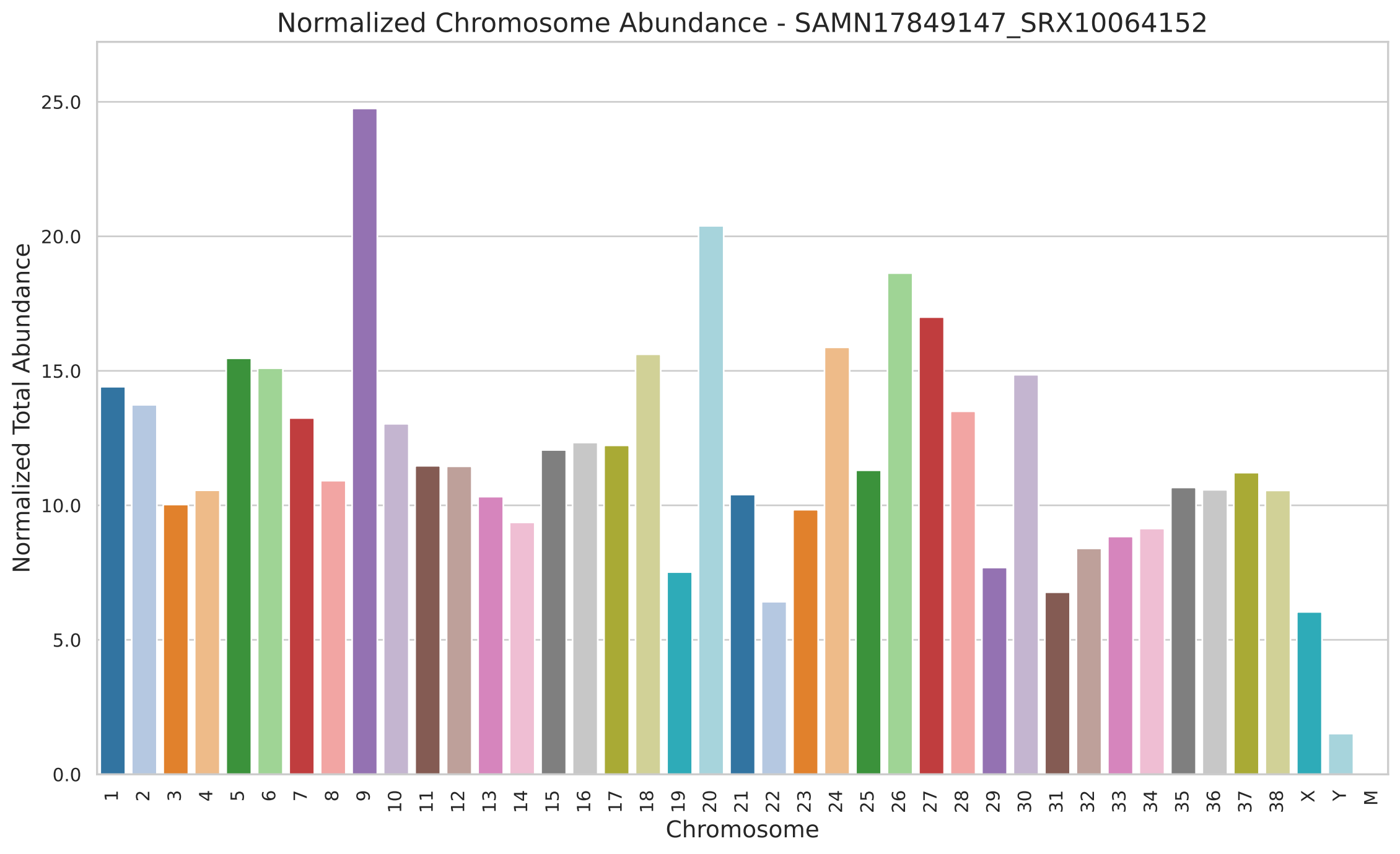

Normalized Chromosome Abundance - SAMN17849149_SRX10064154
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

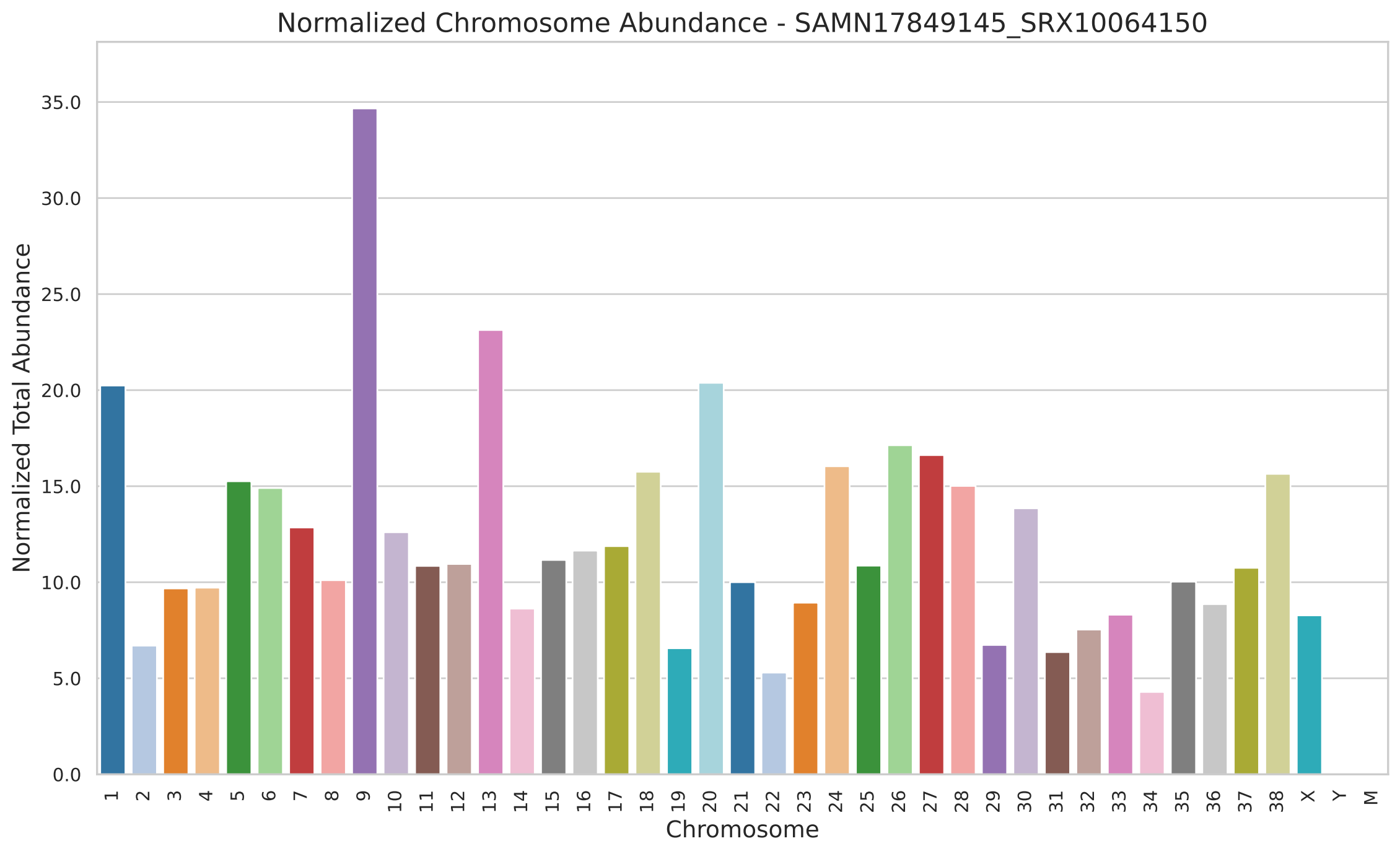

Normalized Chromosome Abundance - SAMN20802102_SRX11763960
Normalized Total Abundance
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5
20.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

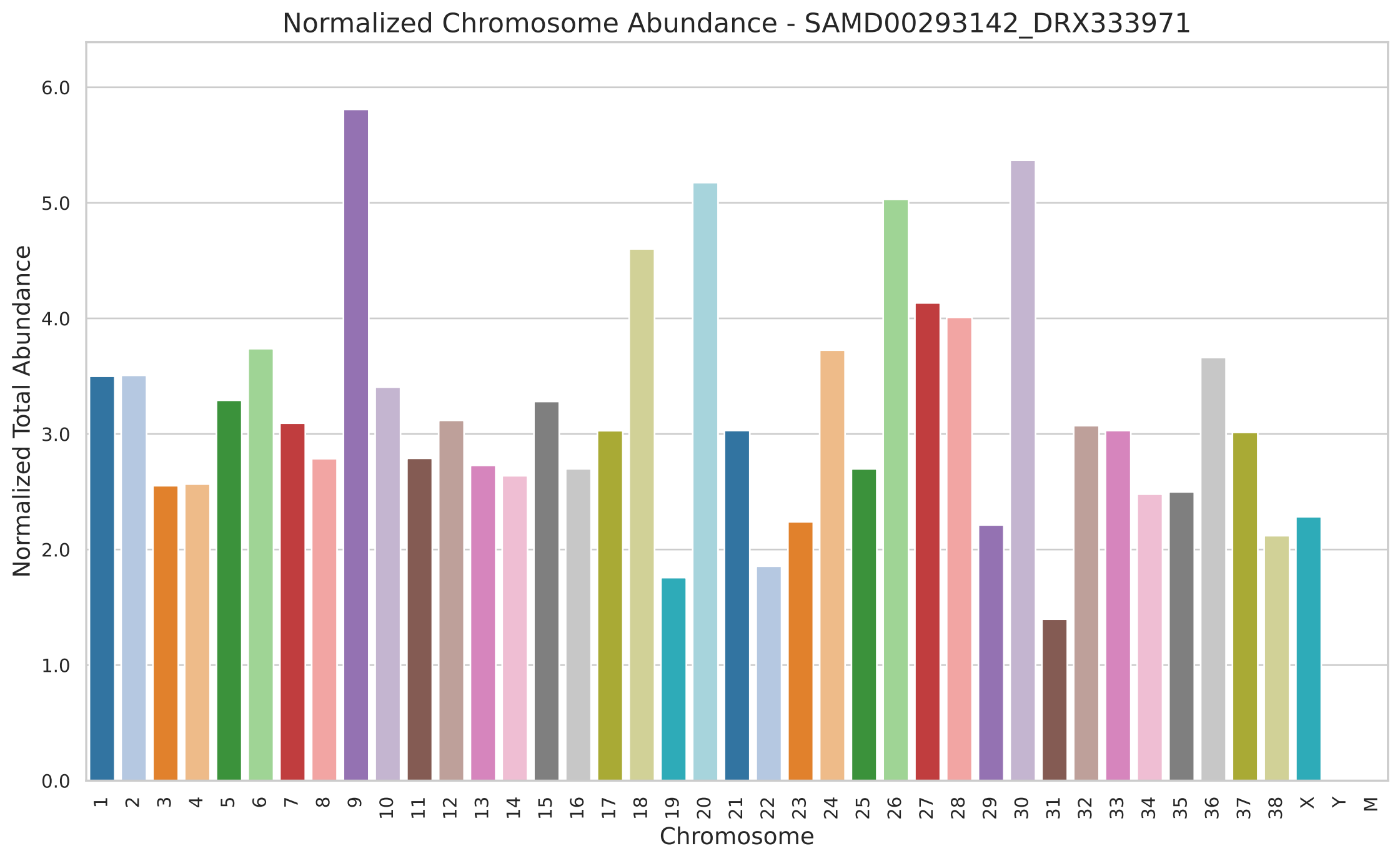

Normalized Chromosome Abundance - SAMN20802101_SRX11763959
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

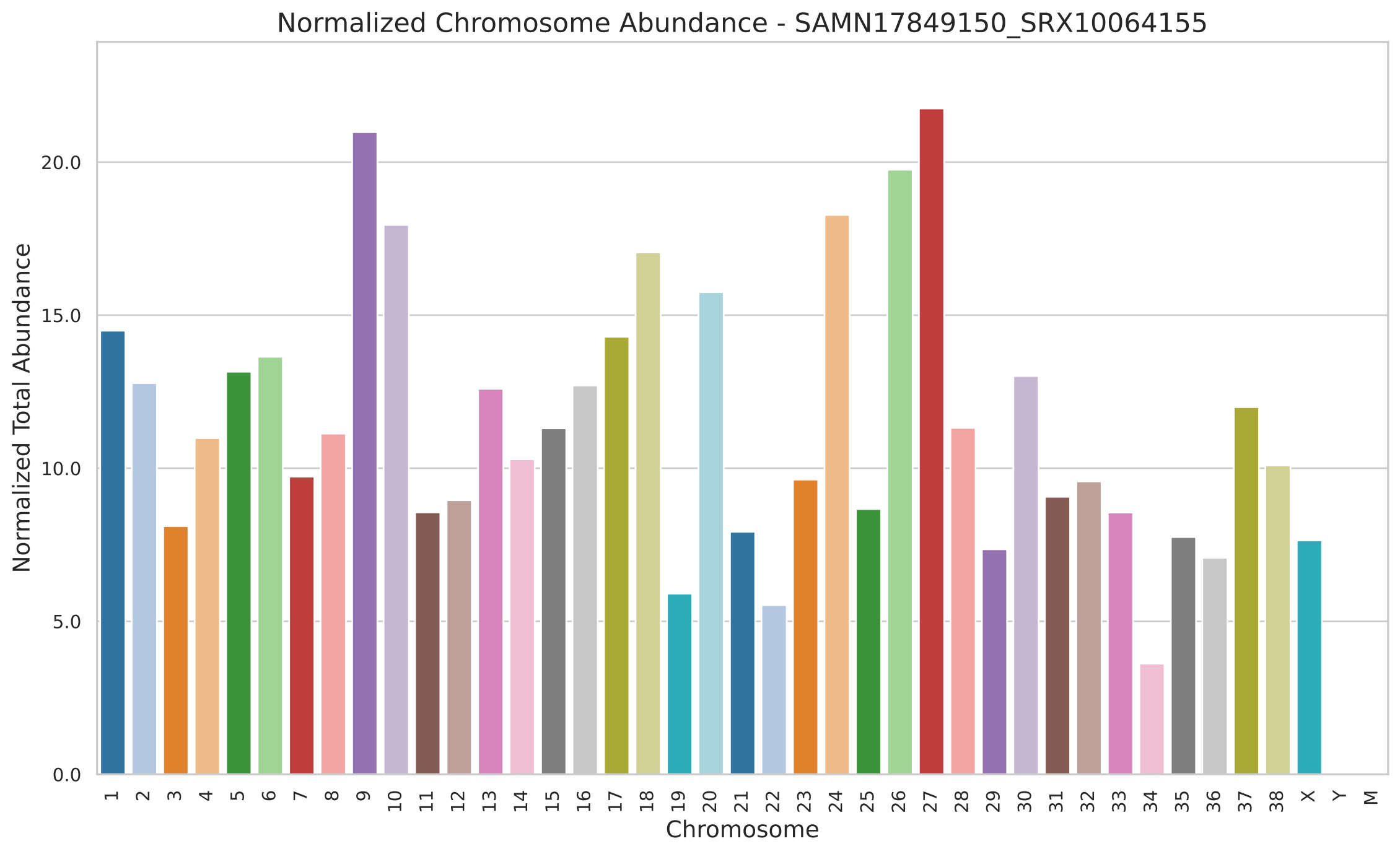

Normalized Chromosome Abundance - SAMN20802104_SRX11763962
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

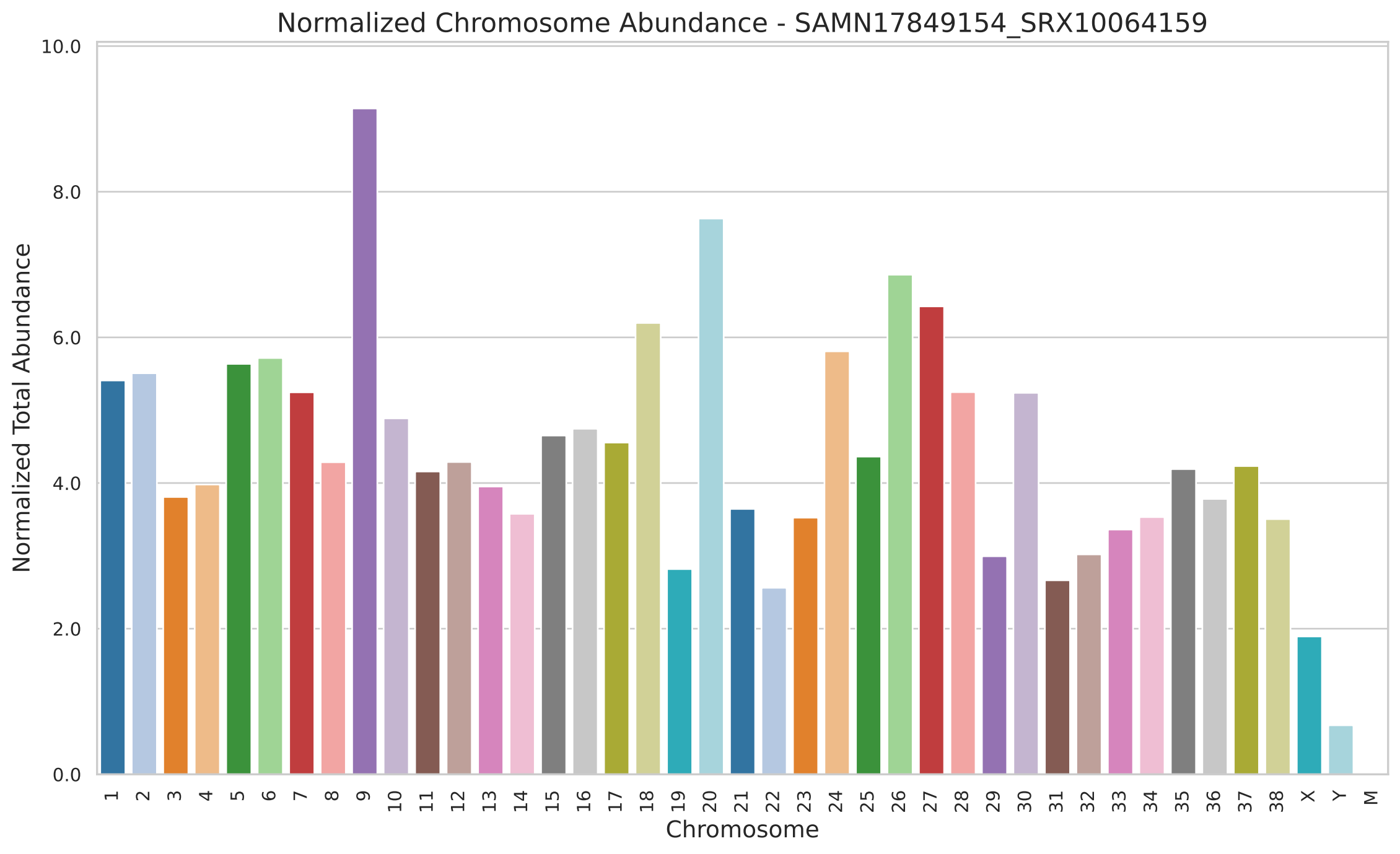

Normalized Chromosome Abundance - SAMN17849152_SRX10064157
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

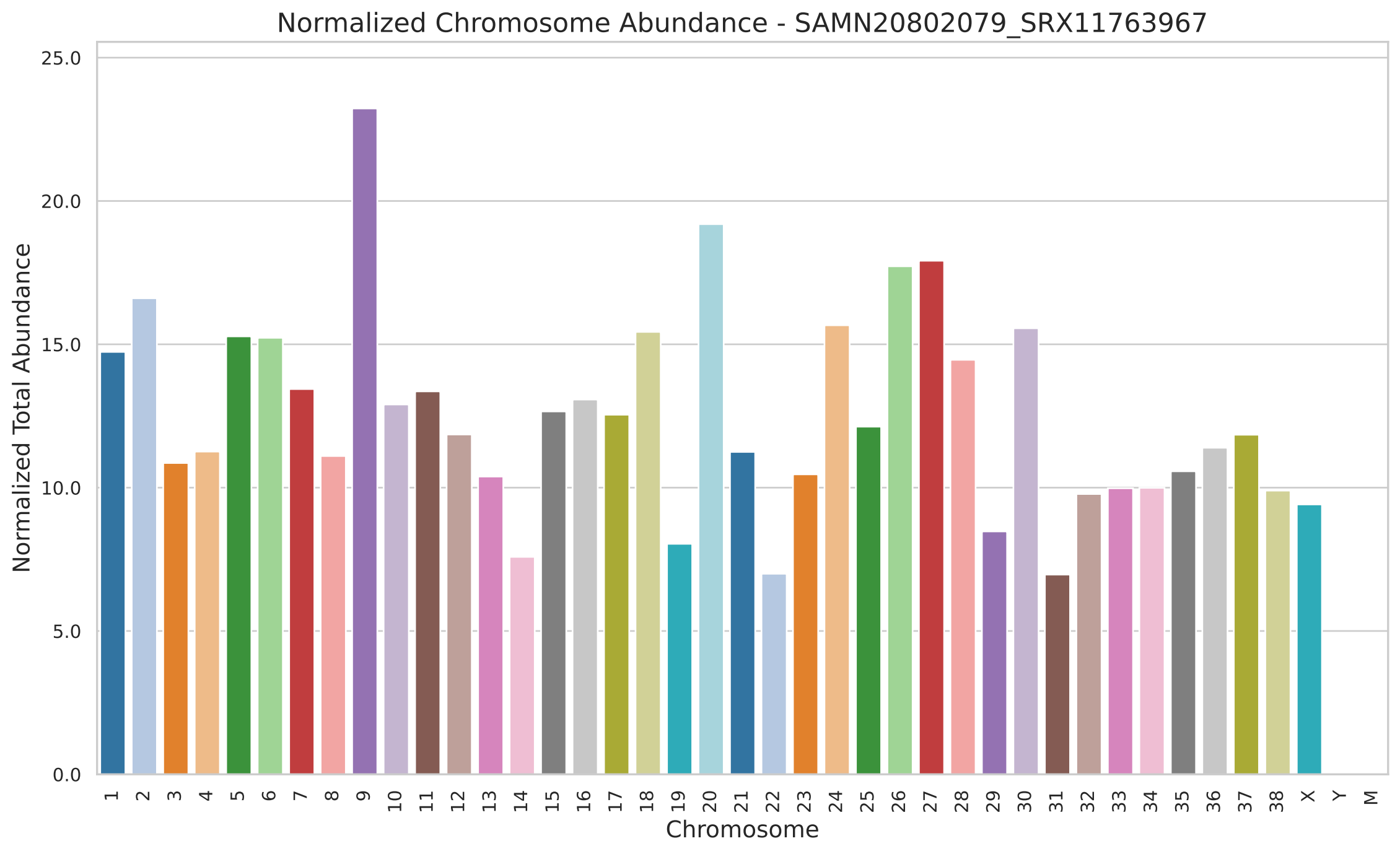

Normalized Chromosome Abundance - SAMN17849147_SRX10064152
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

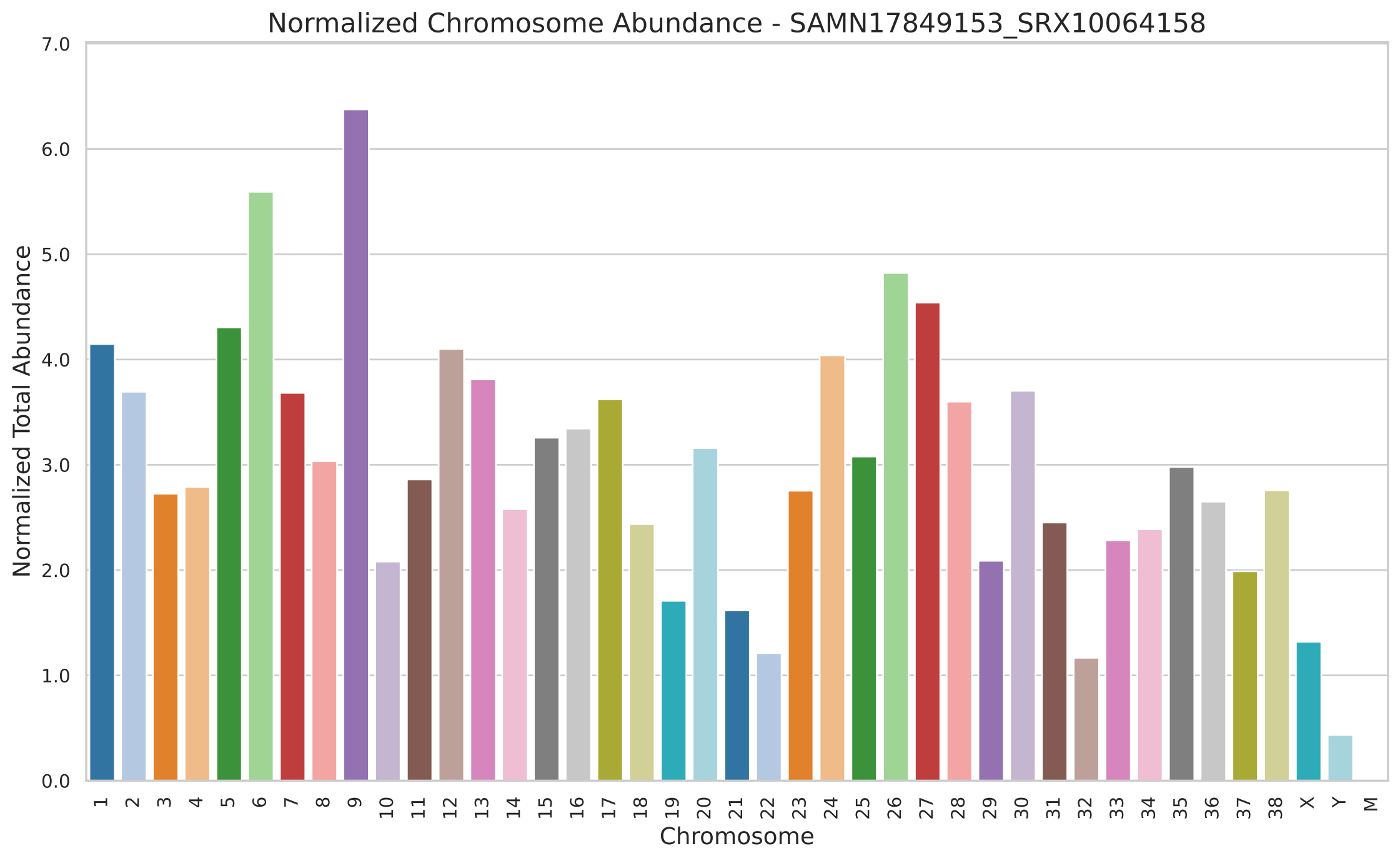

Normalized Chromosome Abundance - SAMN17849145_SRX10064150
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
35.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

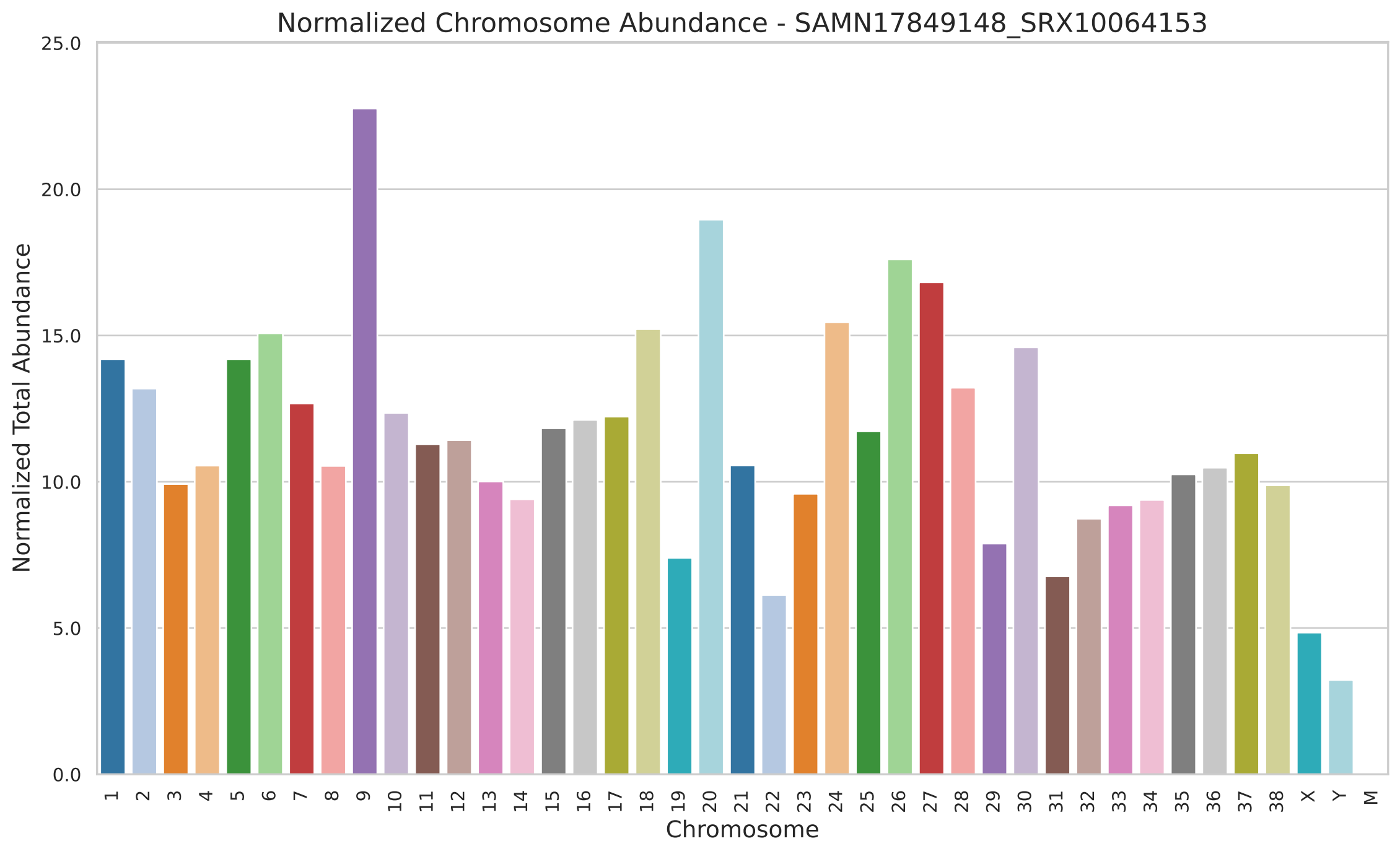

Normalized Chromosome Abundance - SAMD00293142_DRX333971
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

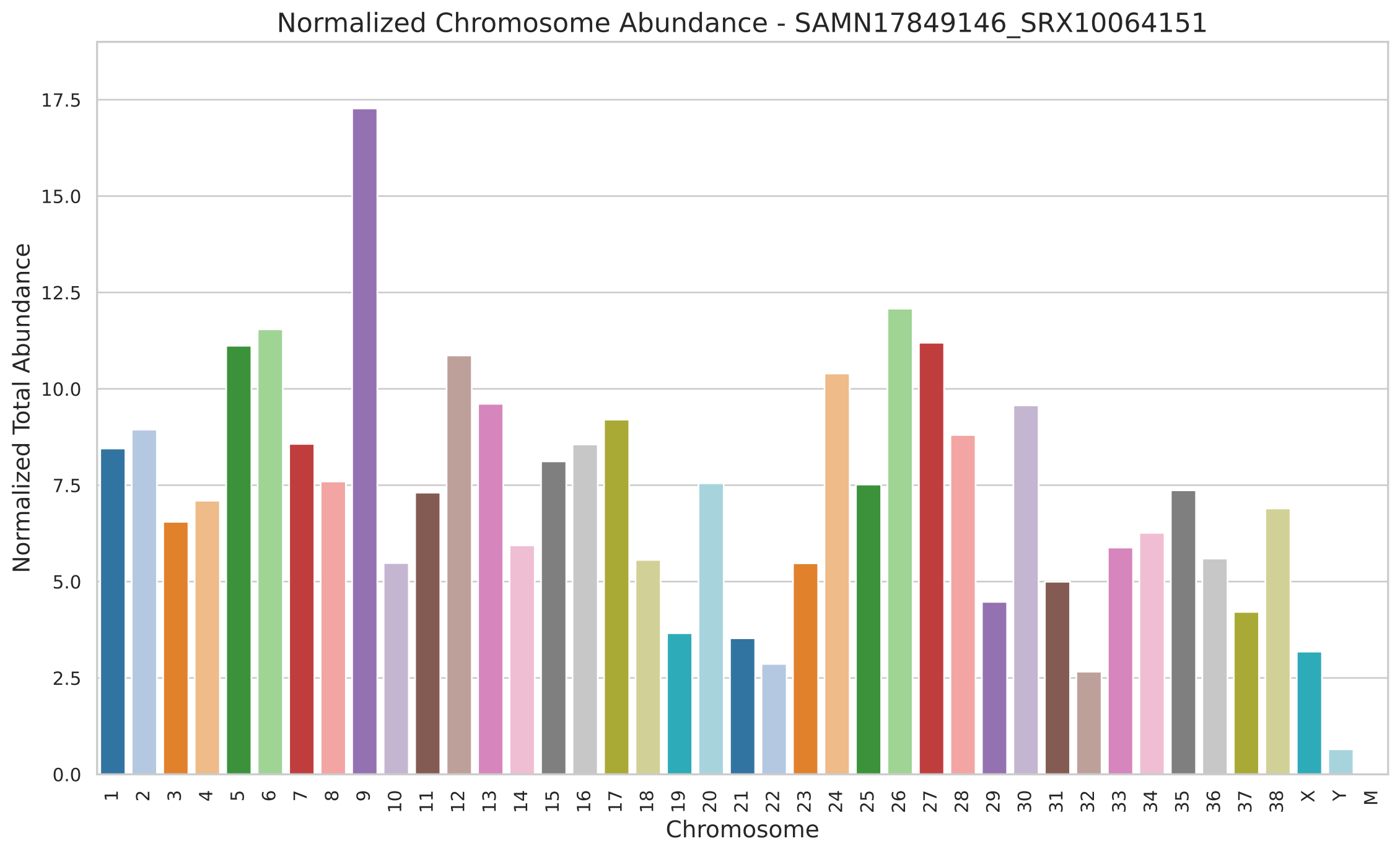

Normalized Chromosome Abundance - SAMN17849150_SRX10064155
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

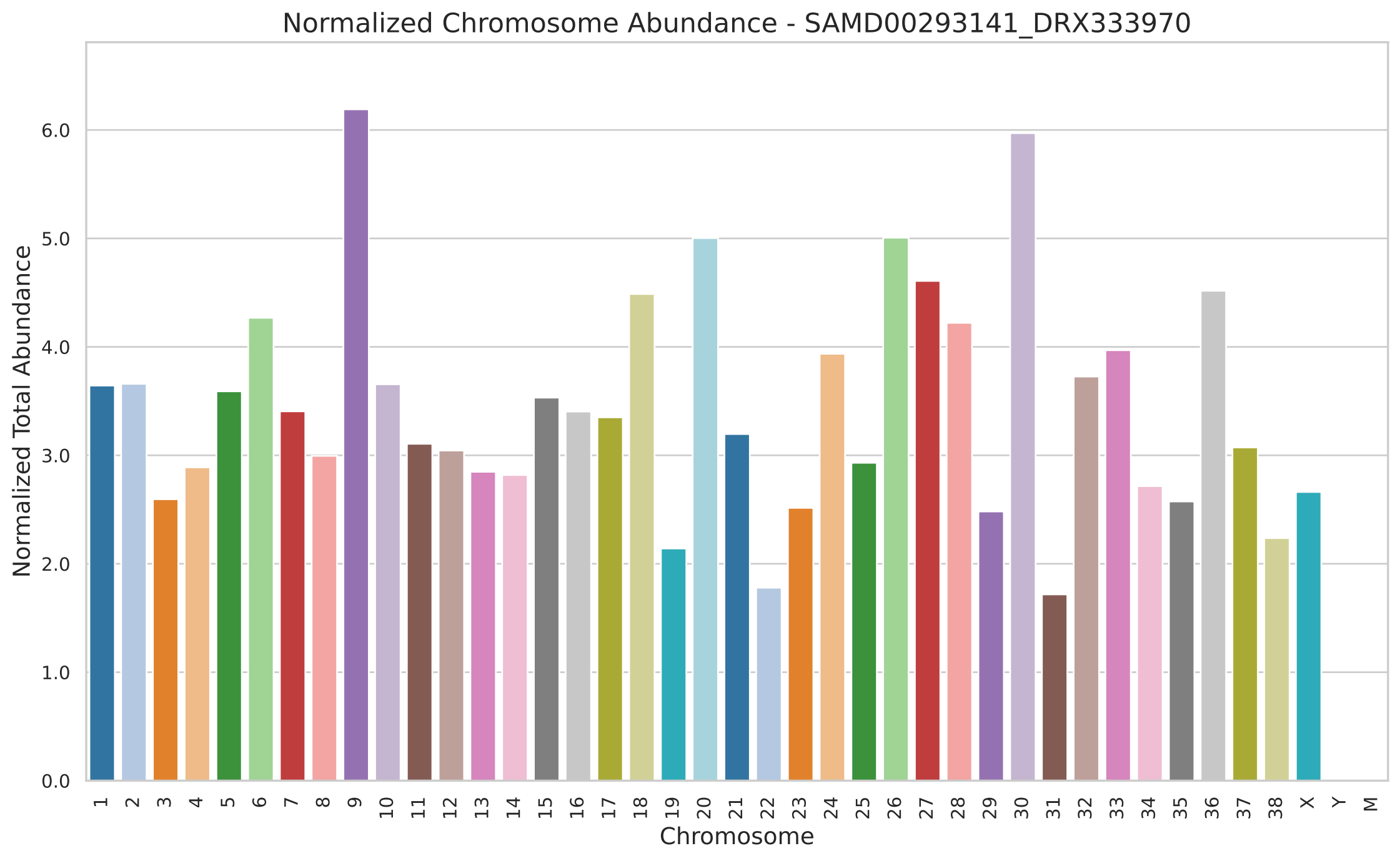

Normalized Chromosome Abundance - SAMN17849154_SRX10064159
Normalized Total Abundance
10.0
8.0
6.0
4.0
2.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

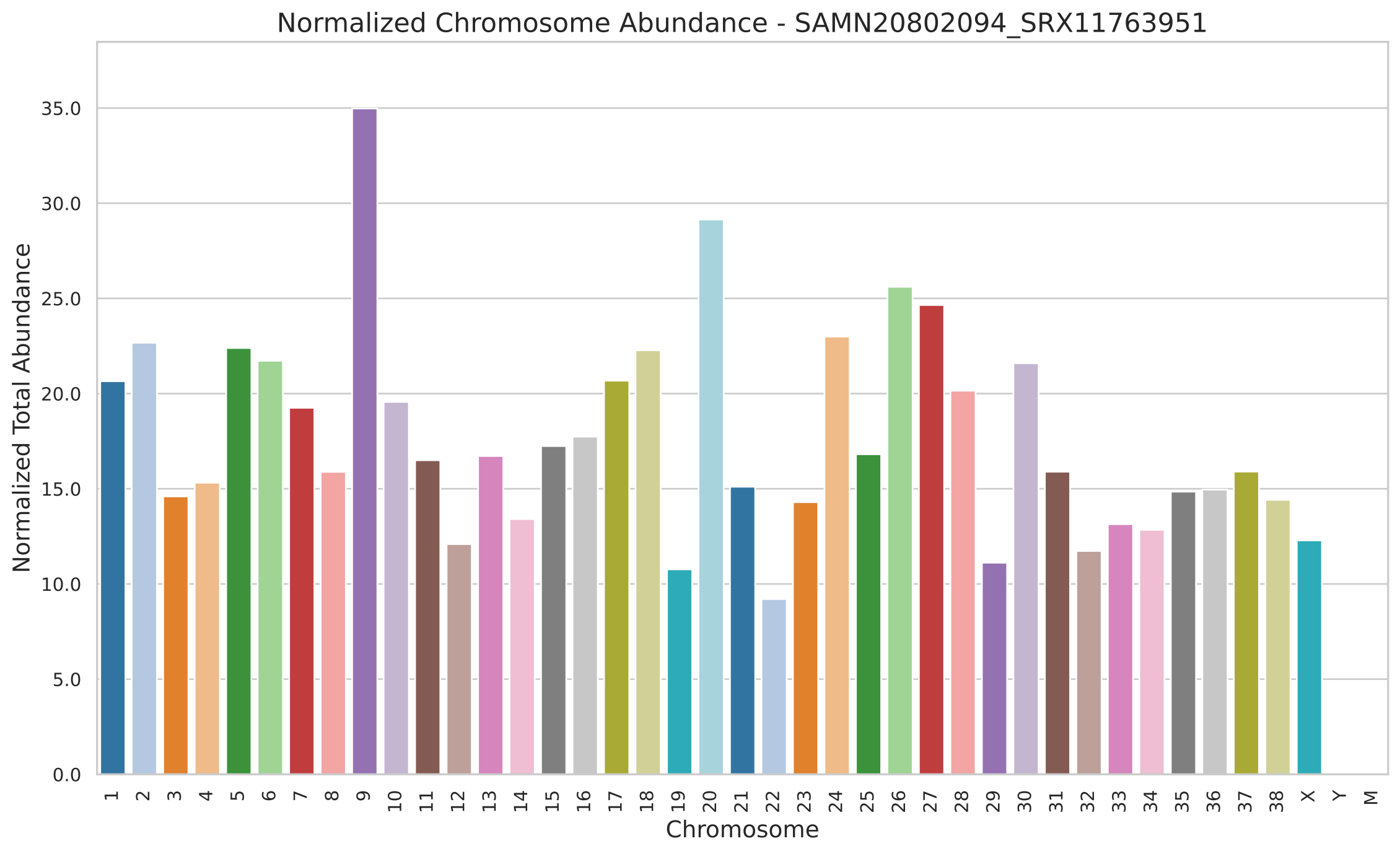

Normalized Chromosome Abundance - SAMN20802079_SRX11763967
Normalized Total Abundance
25.0
20.0
15.0
10.0
5.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

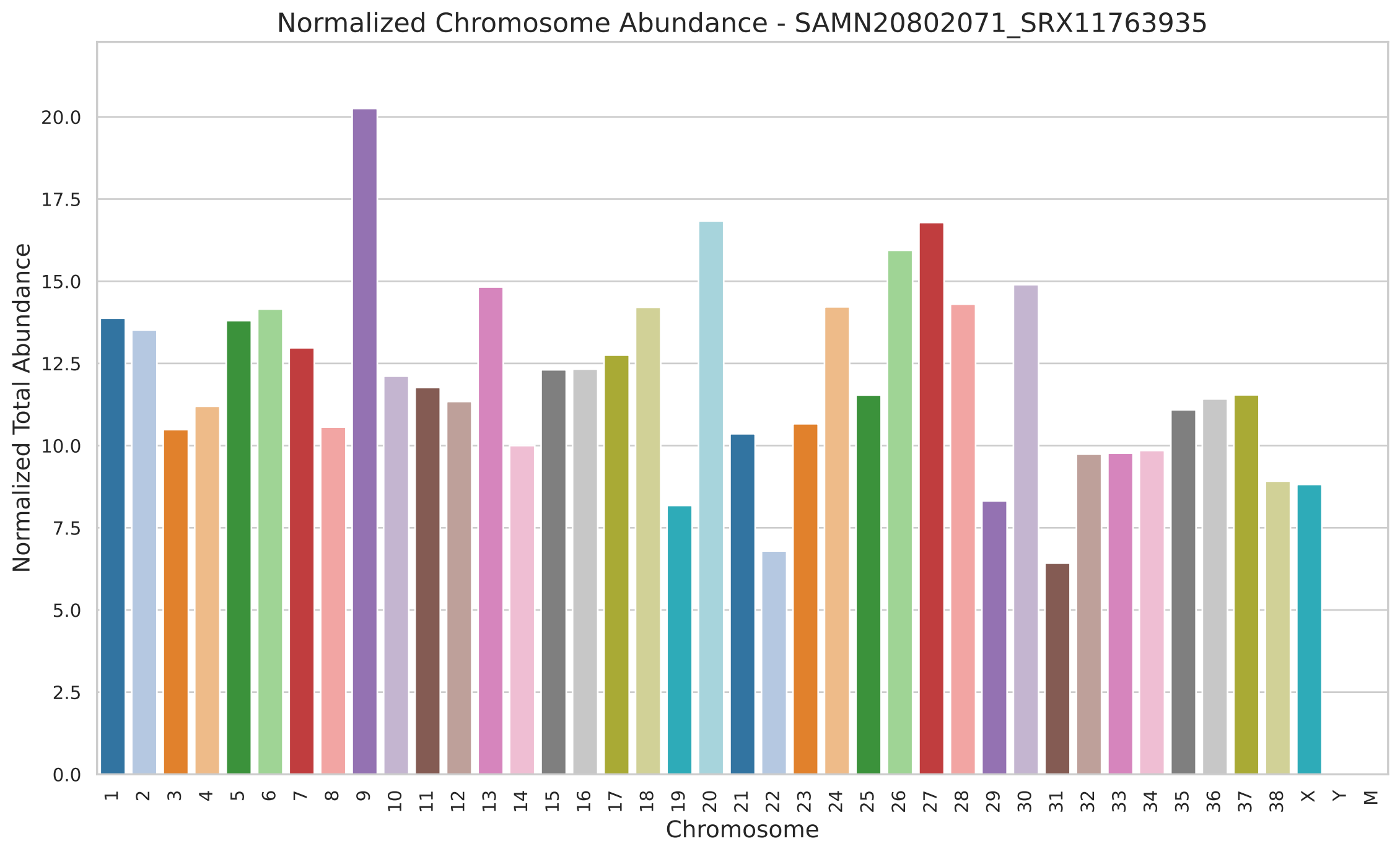

Normalized Chromosome Abundance - SAMN17849153_SRX10064158
Normalized Total Abundance
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

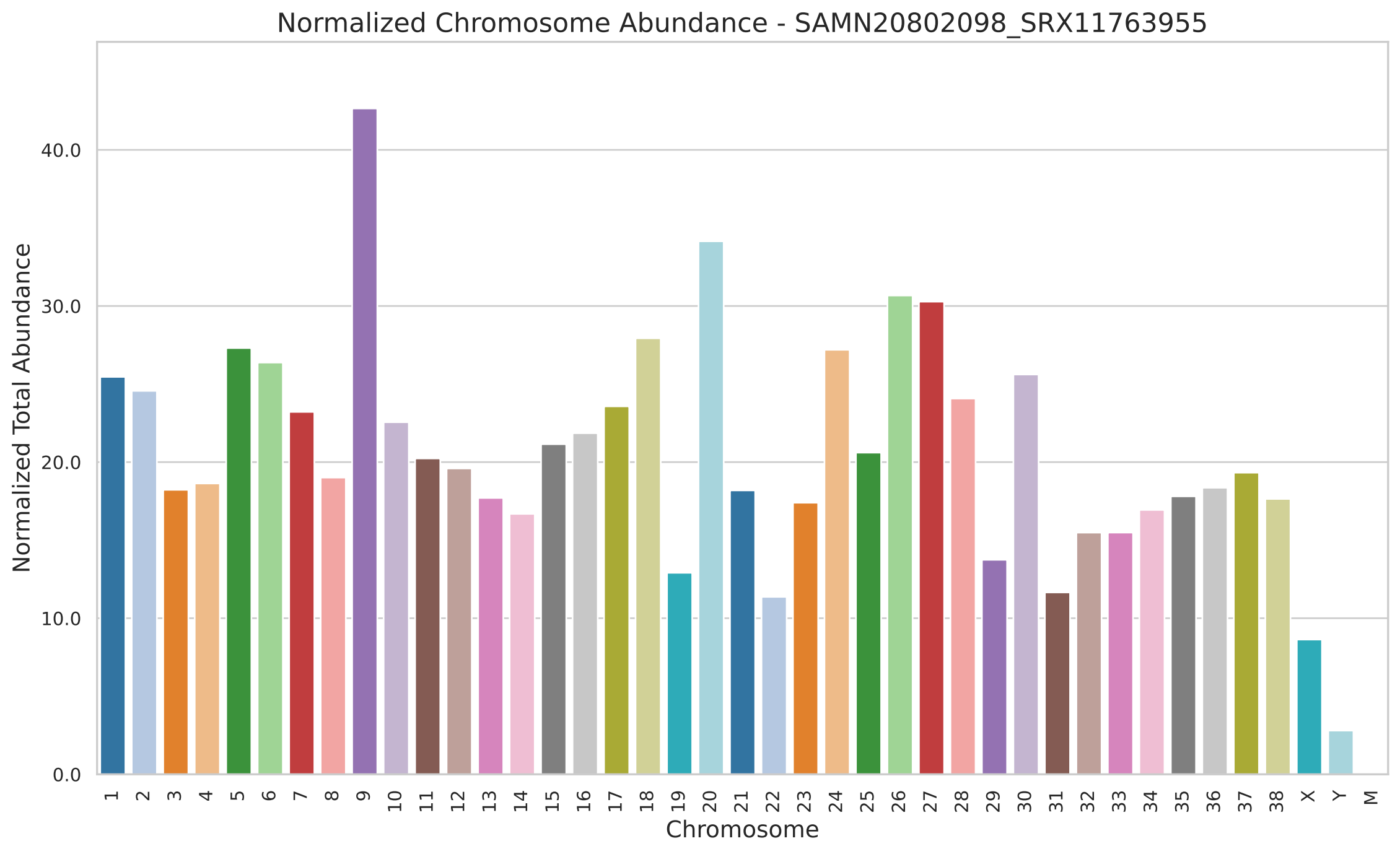

Normalized Chromosome Abundance - SAMN17849148_SRX10064153
Normalized Total Abundance
25.0
20.0
15.0
10.0
5.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

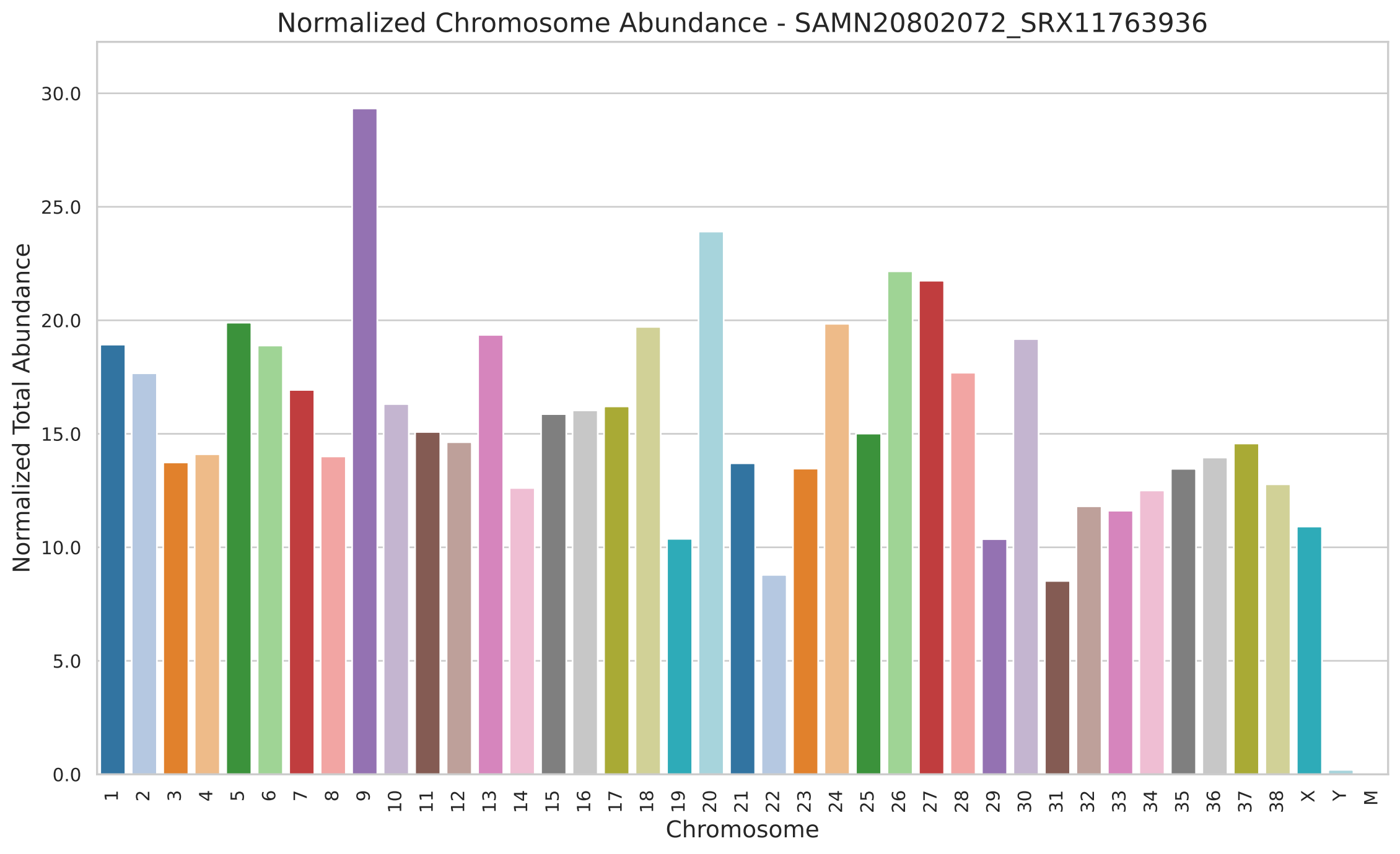

Normalized Chromosome Abundance - SAMN17849146_SRX10064151
Normalized Total Abundance
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

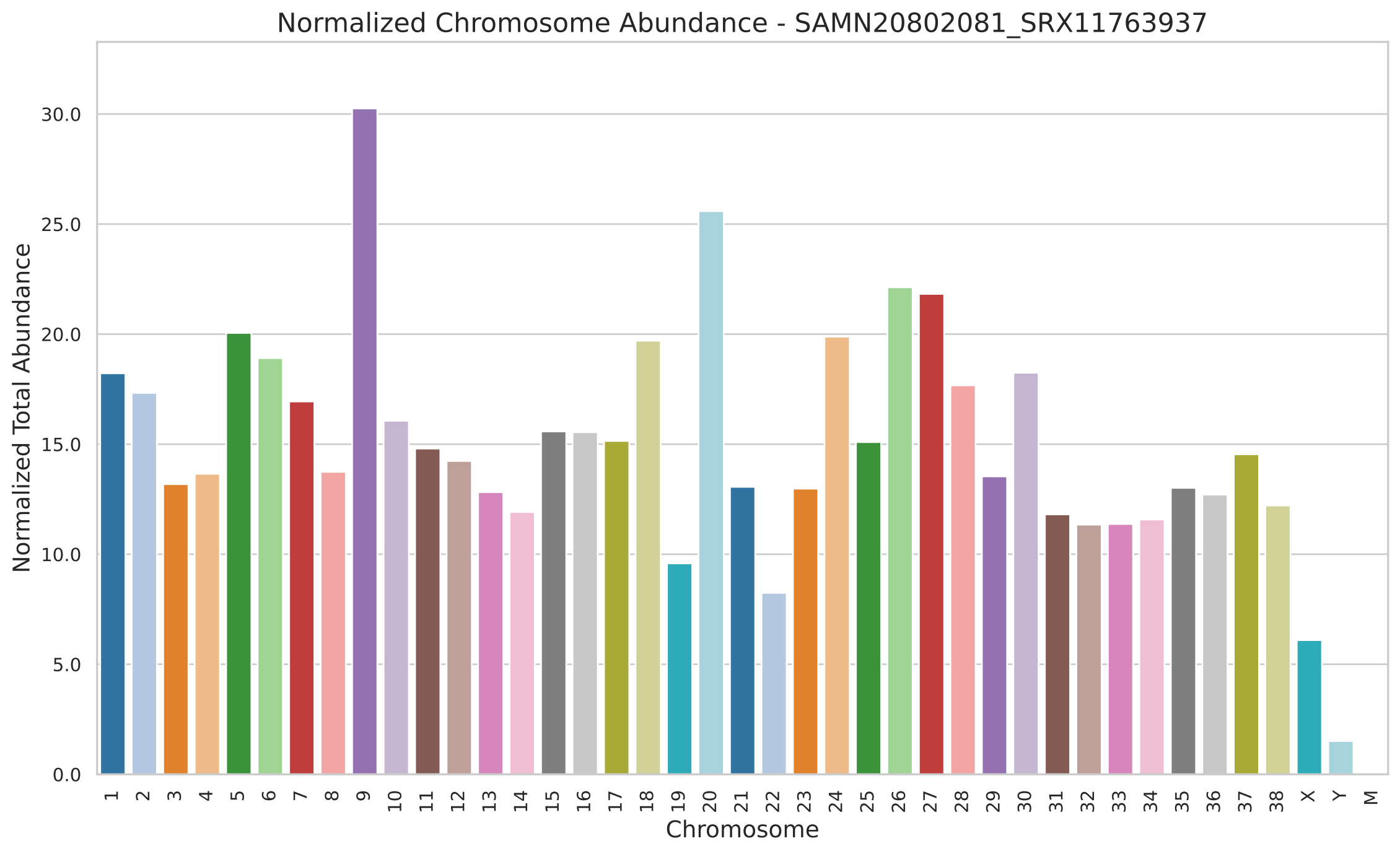

Normalized Chromosome Abundance - SAMD00293141_DRX333970
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

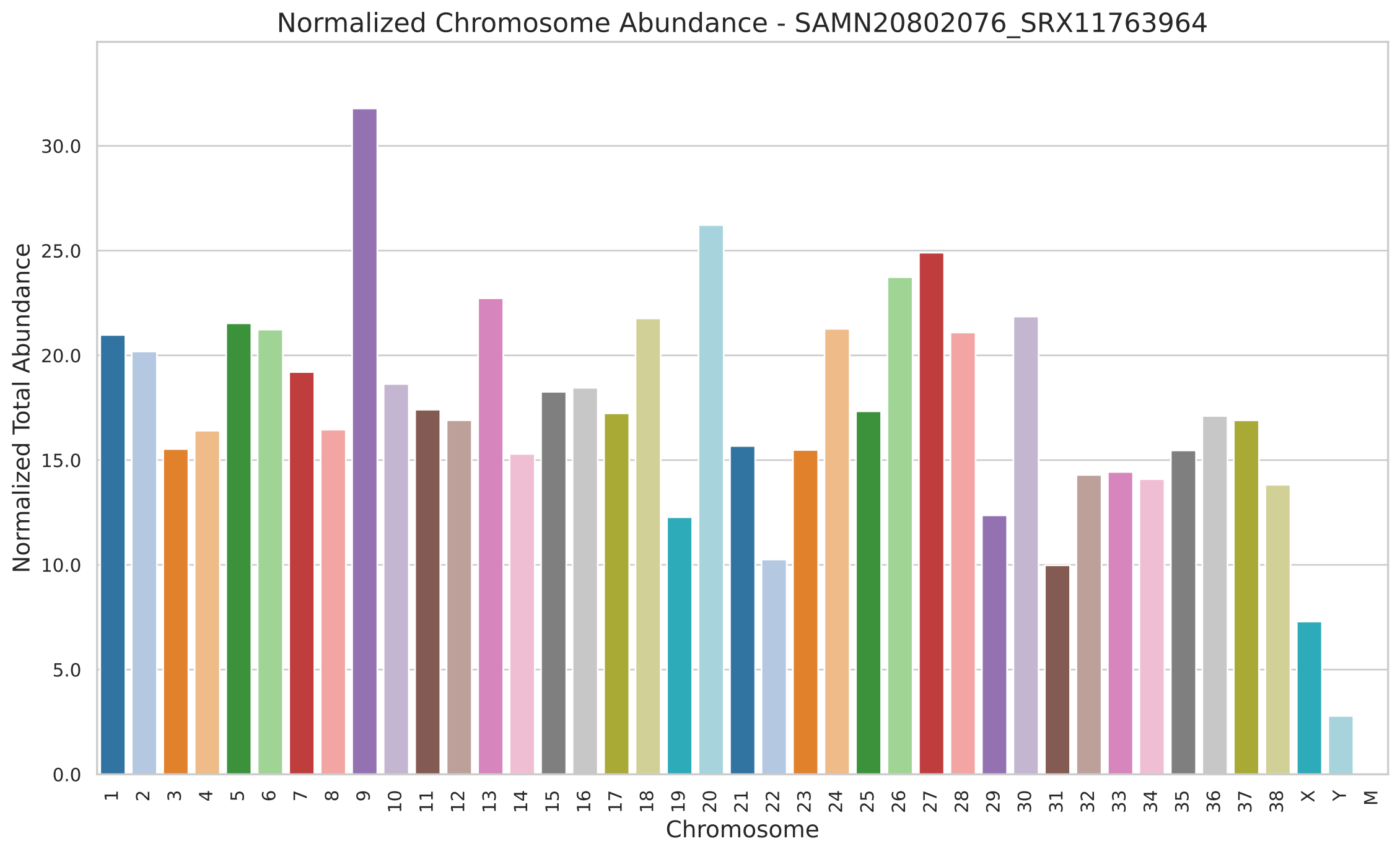

Normalized Chromosome Abundance - SAMN20802094_SRX11763951
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
35.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

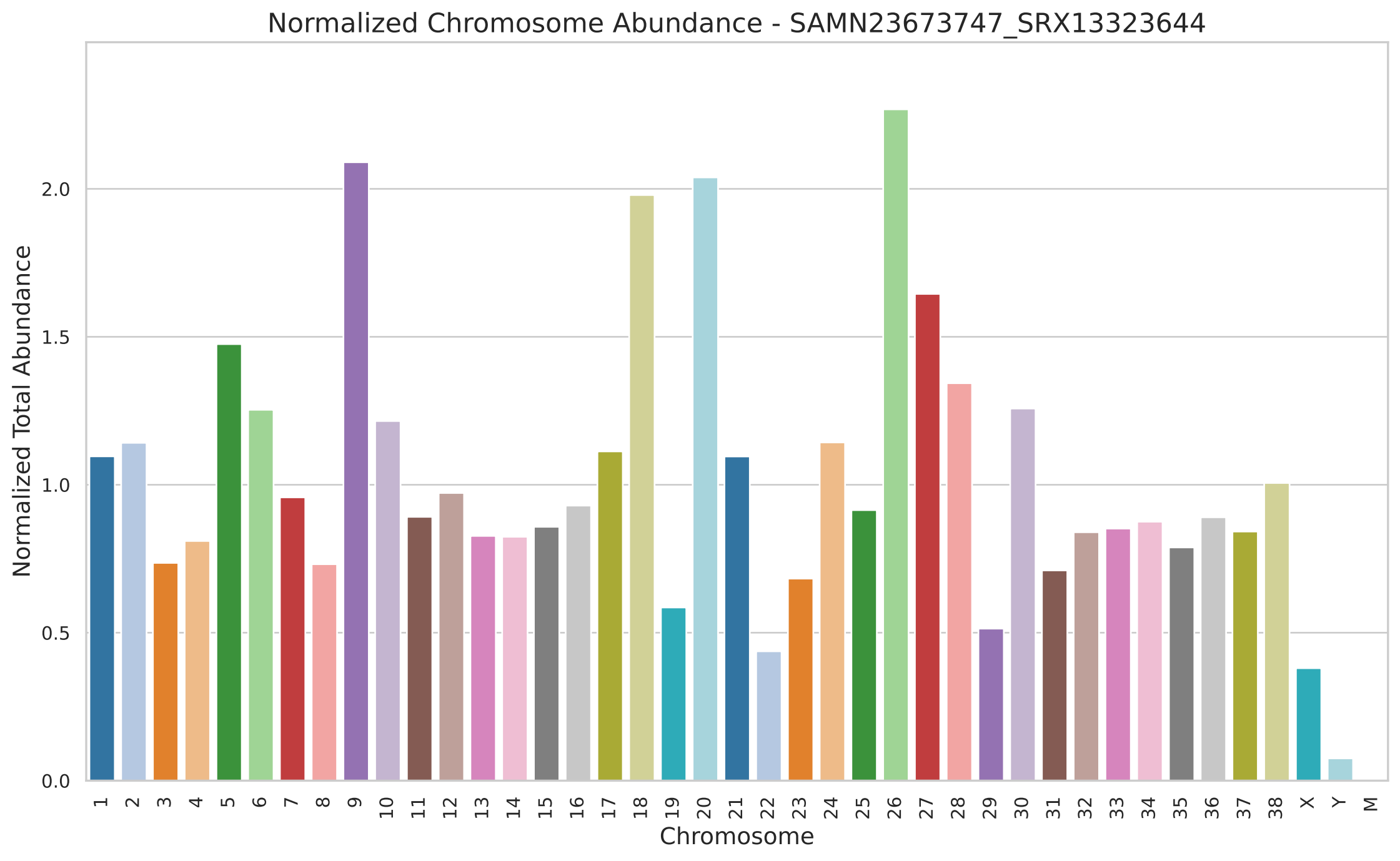

Normalized Chromosome Abundance - SAMN20802071_SRX11763935
Normalized Total Abundance
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5
20.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

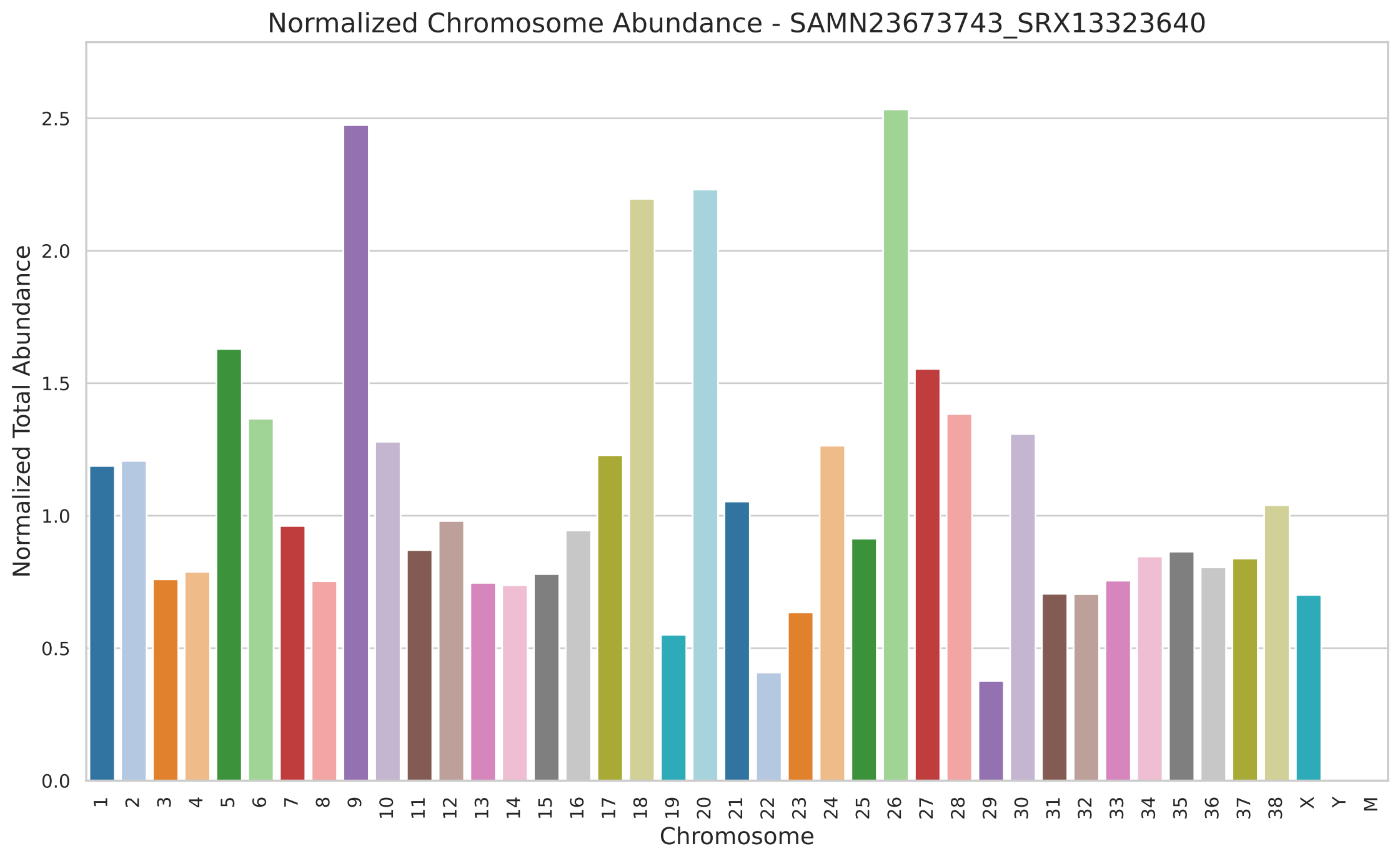

Normalized Chromosome Abundance - SAMN20802098_SRX11763955
Normalized Total Abundance
0.0
10.0
20.0
30.0
40.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

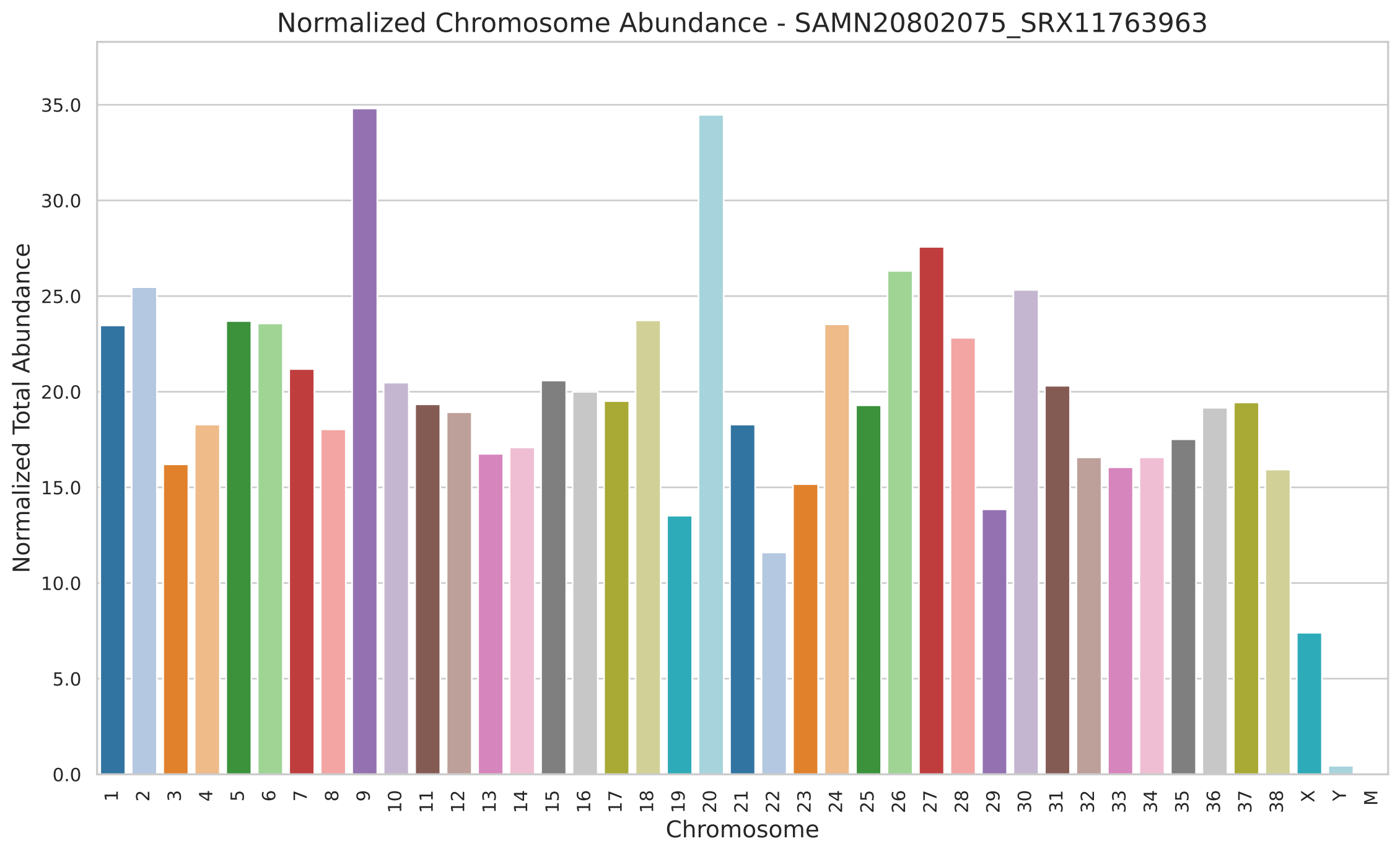

Normalized Chromosome Abundance - SAMN20802072_SRX11763936
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

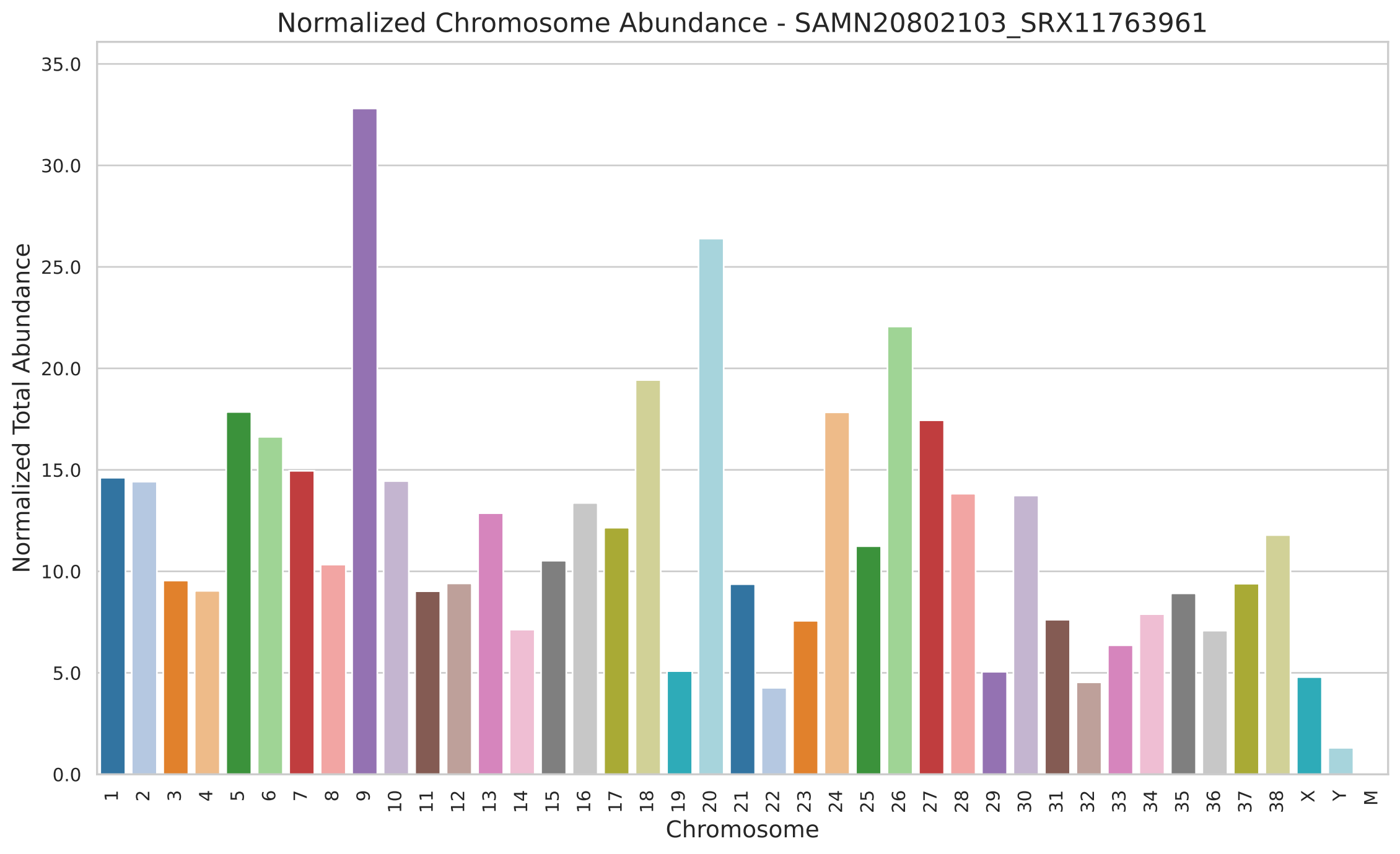

Normalized Chromosome Abundance - SAMN20802081_SRX11763937
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

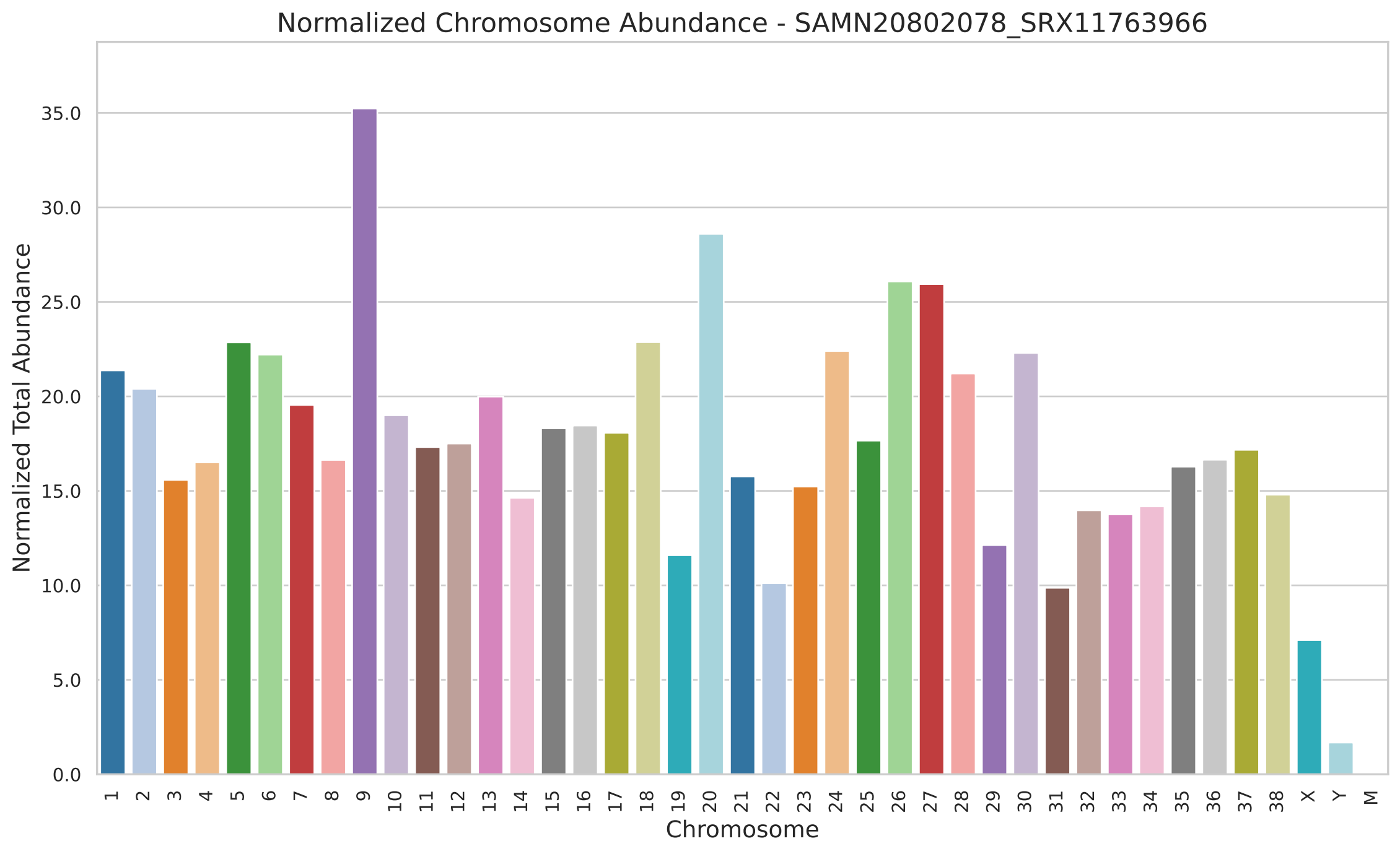

Normalized Chromosome Abundance - SAMN20802076_SRX11763964
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

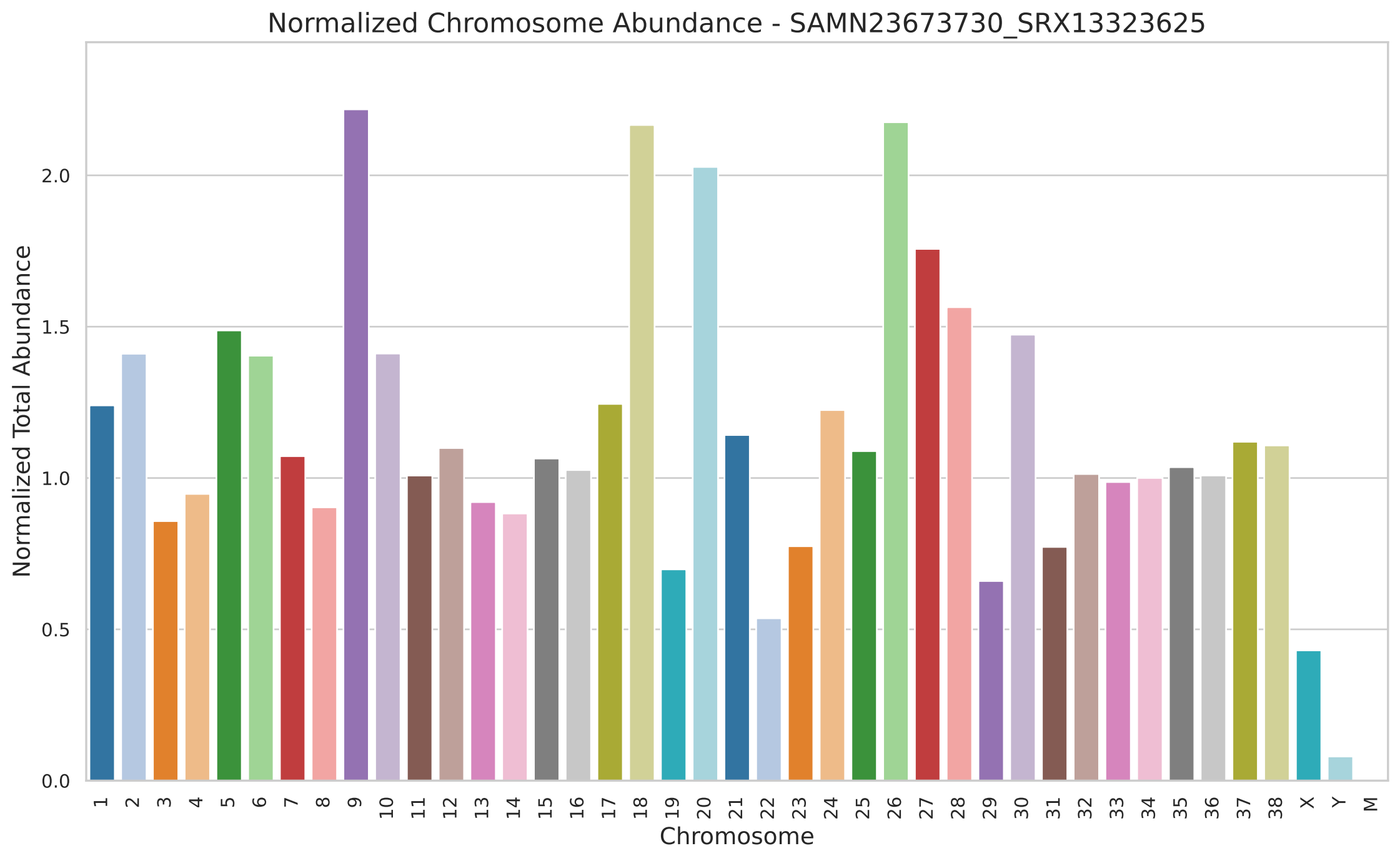

Normalized Chromosome Abundance - SAMN23673747_SRX13323644
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

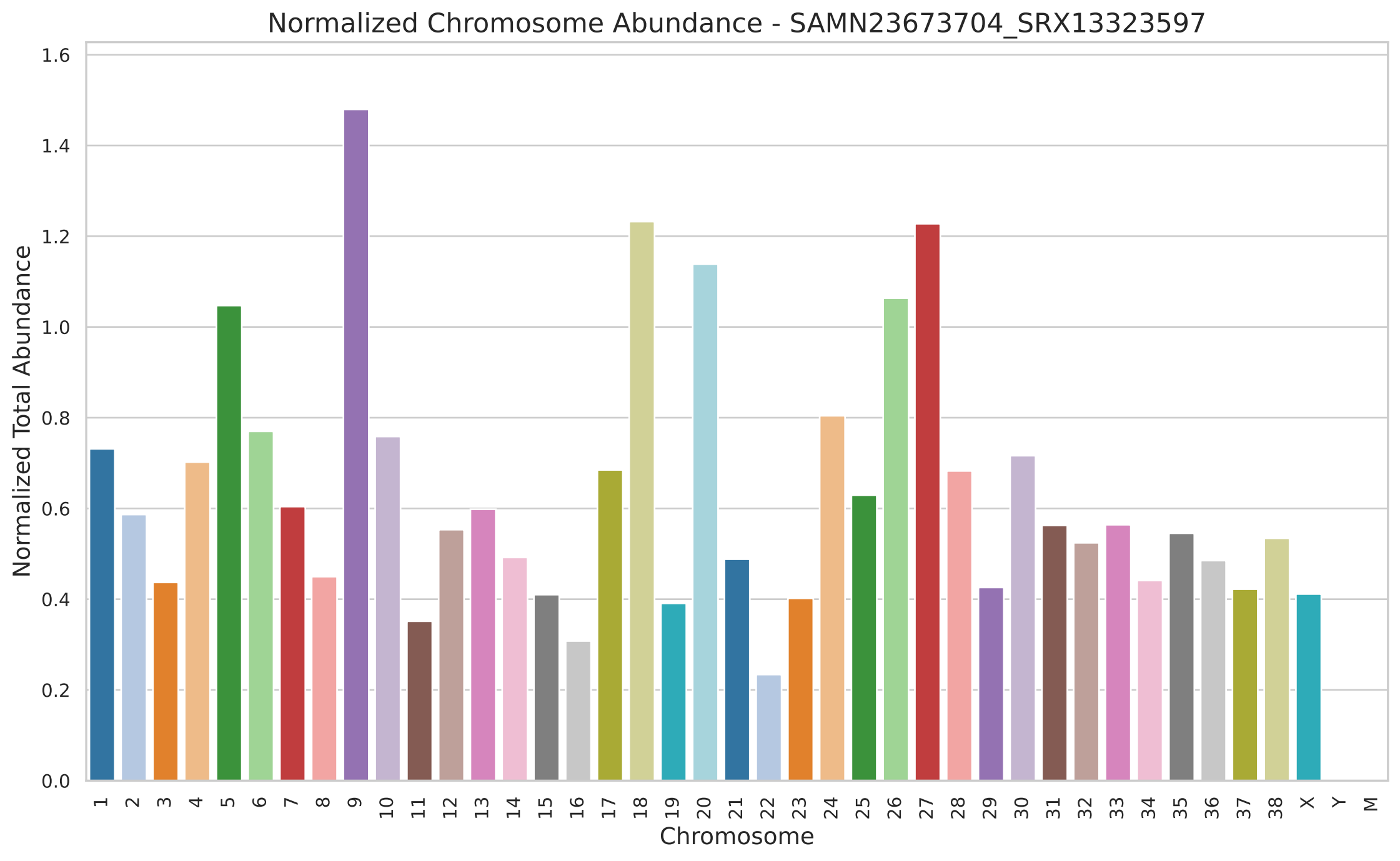

Normalized Chromosome Abundance - SAMN23673743_SRX13323640
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

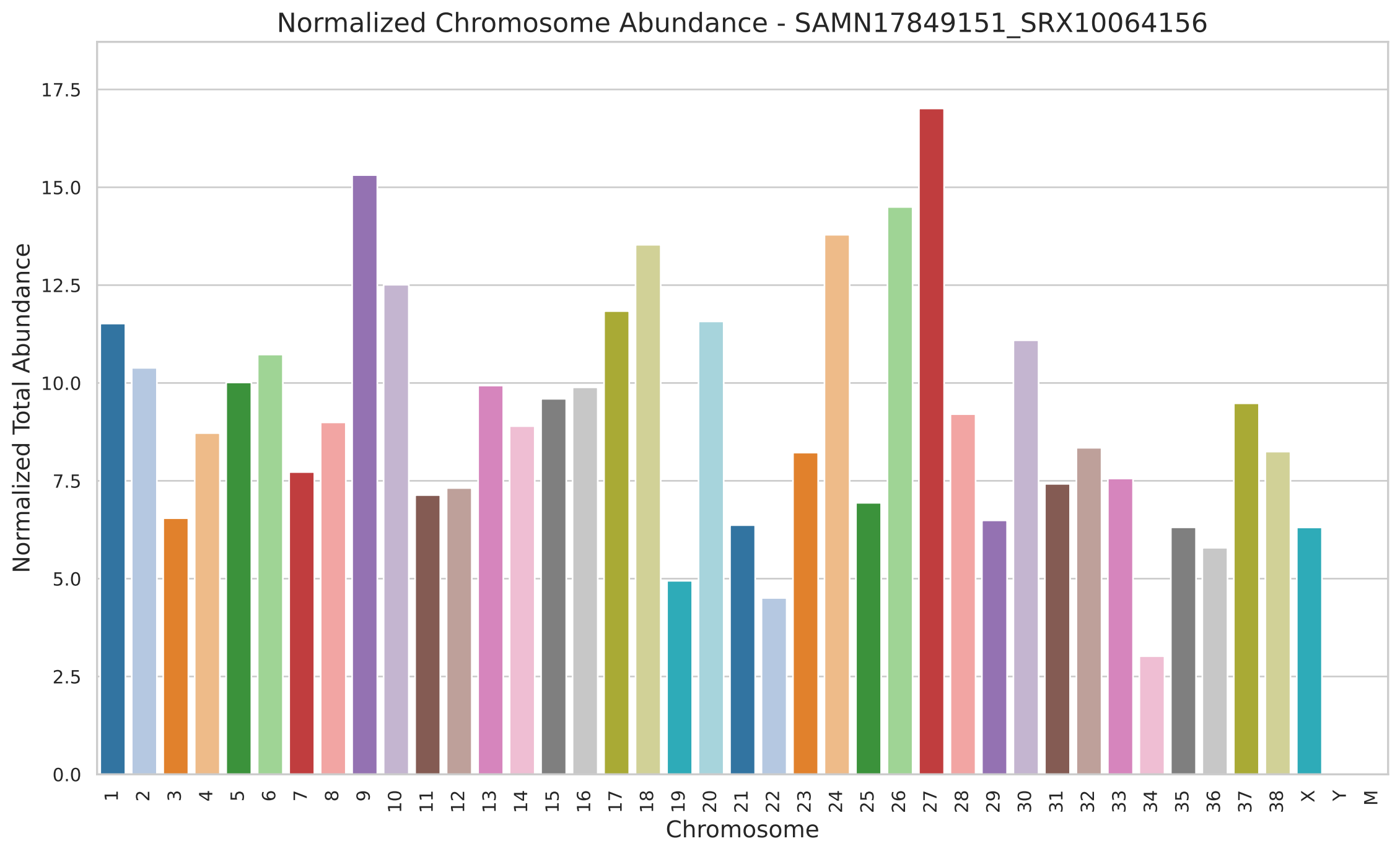

Normalized Chromosome Abundance - SAMN20802075_SRX11763963
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
35.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

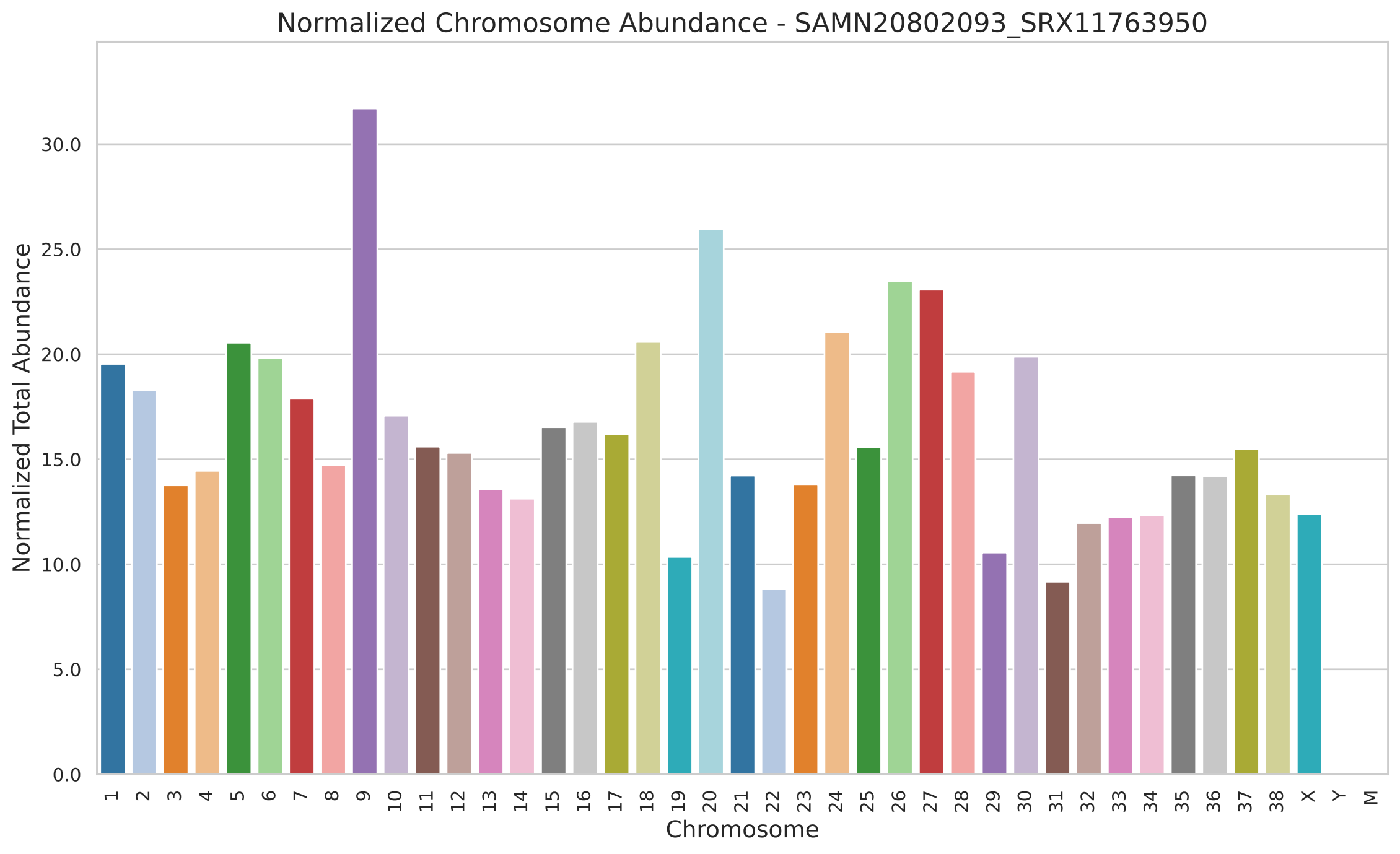

Normalized Chromosome Abundance - SAMN20802103_SRX11763961
Normalized Total Abundance
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

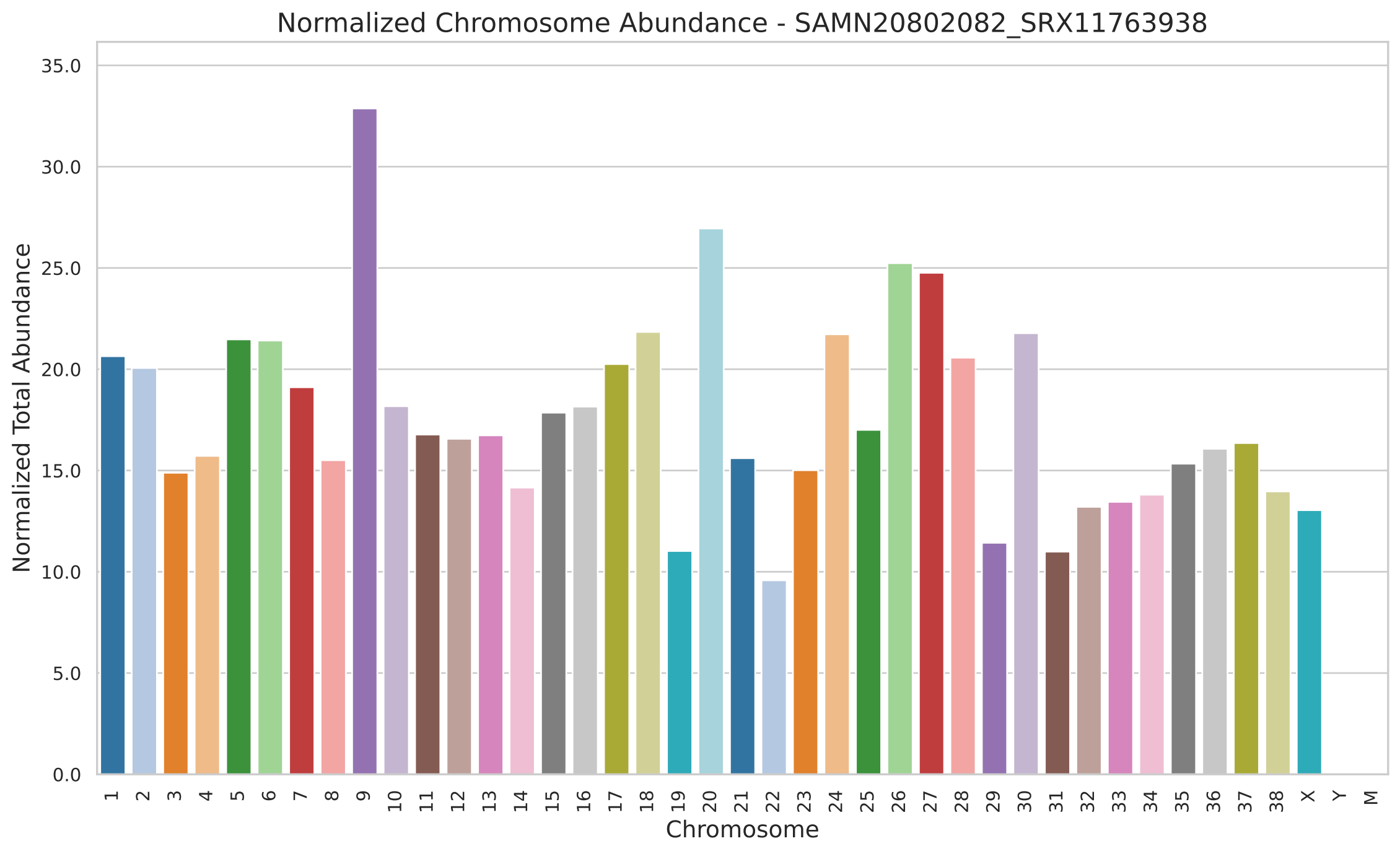

Normalized Chromosome Abundance - SAMN20802078_SRX11763966
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
35.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

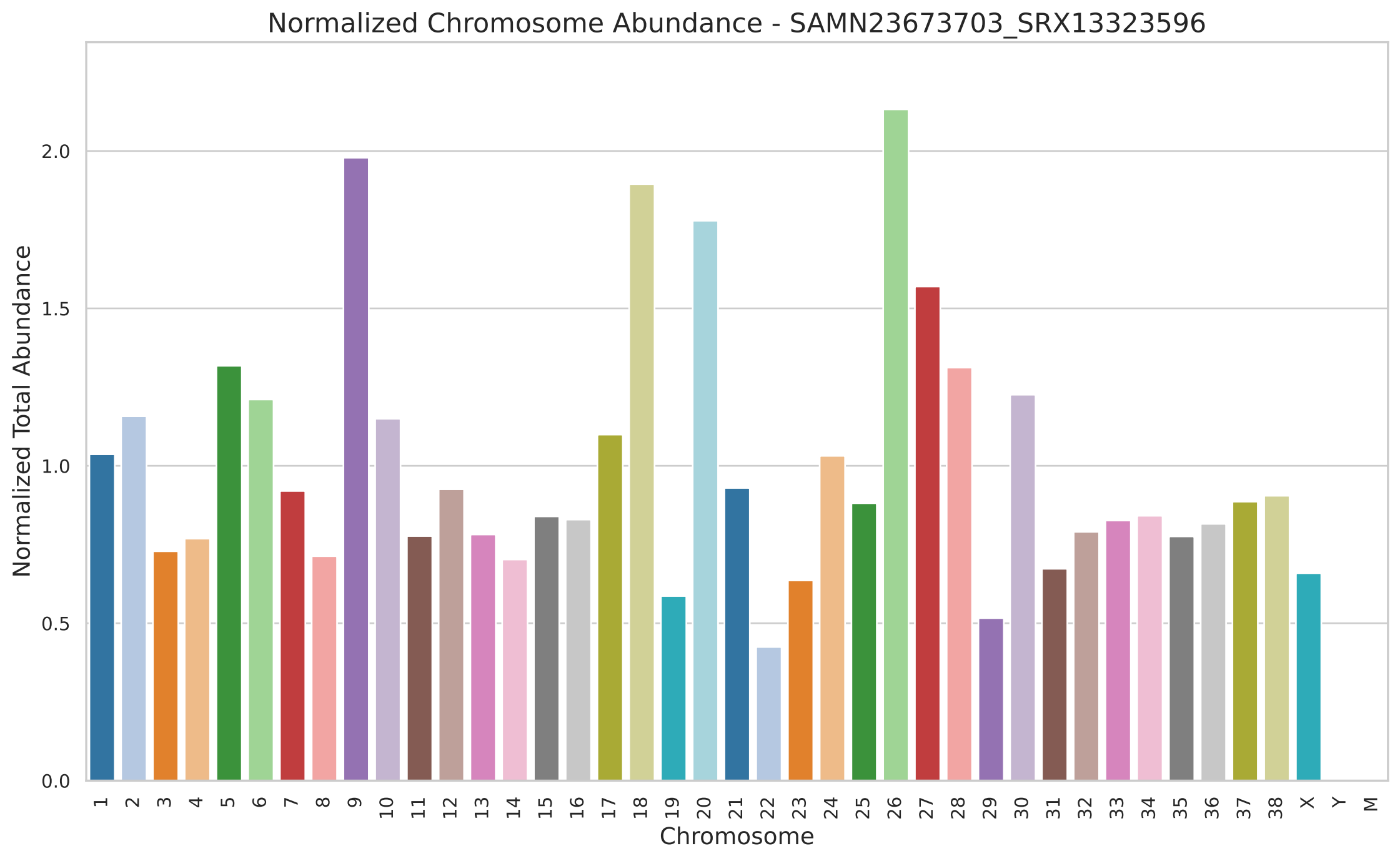

Normalized Chromosome Abundance - SAMN23673730_SRX13323625
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

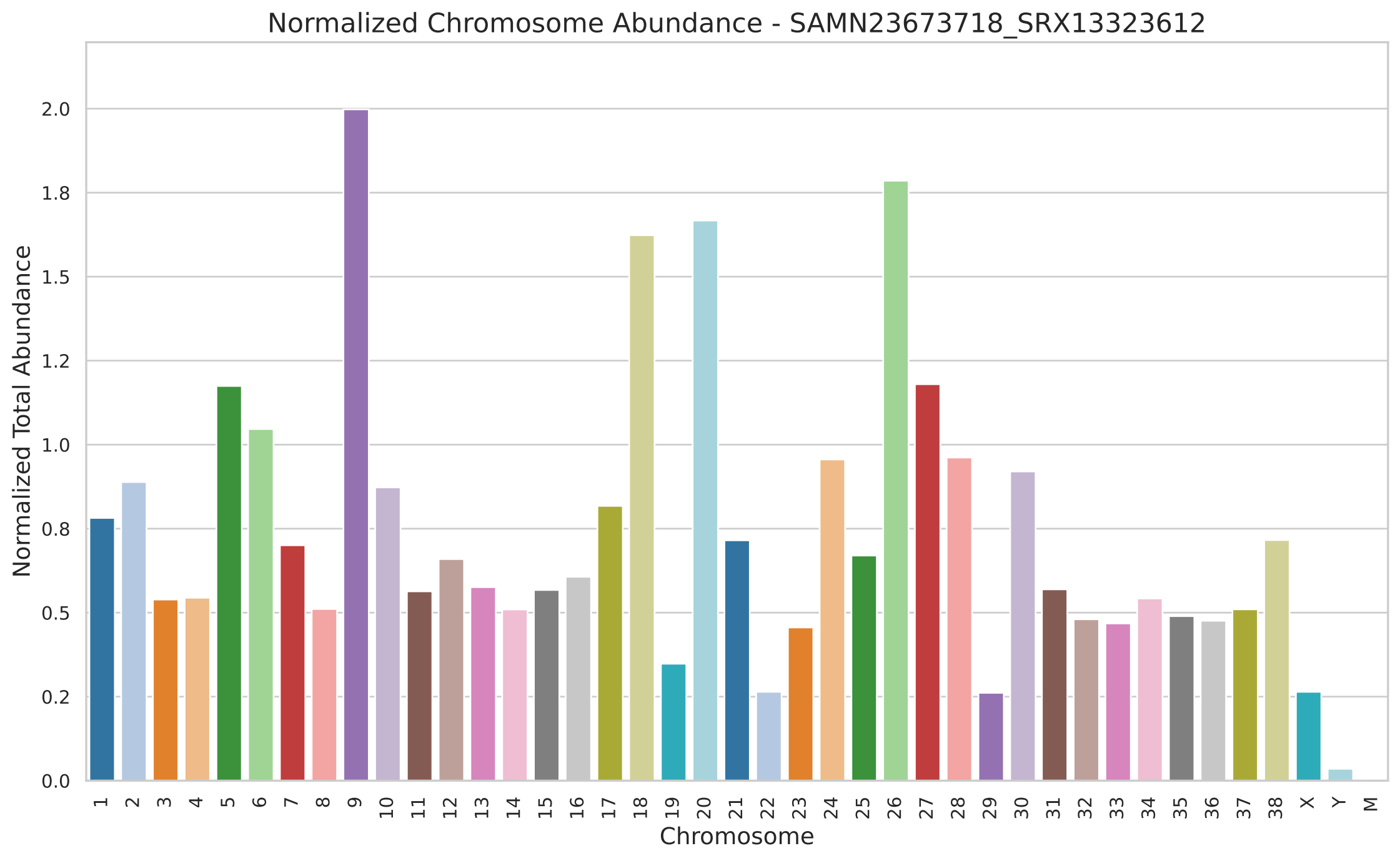

Normalized Chromosome Abundance - SAMN23673704_SRX13323597
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

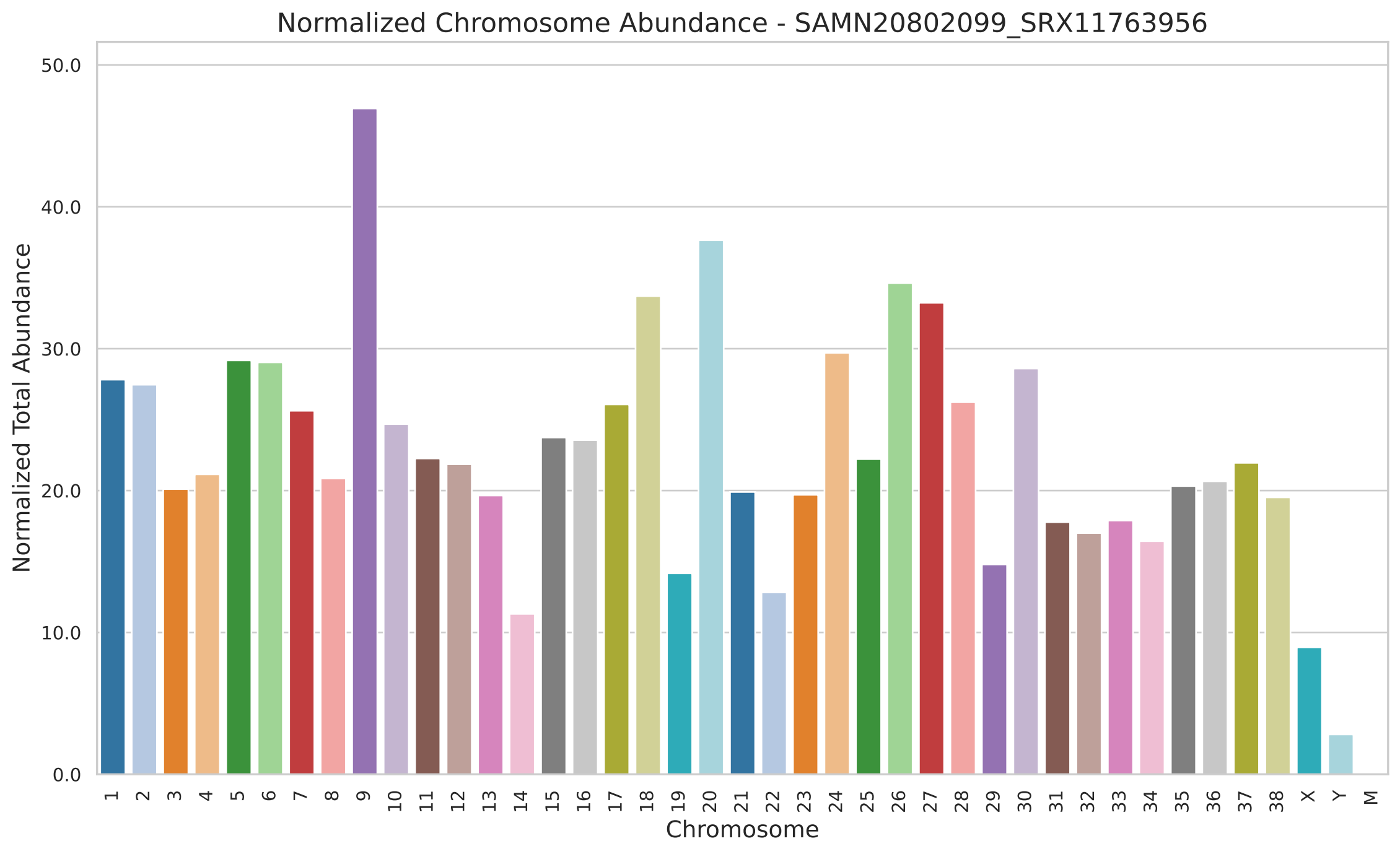

Normalized Chromosome Abundance - SAMN17849151_SRX10064156
Normalized Total Abundance
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

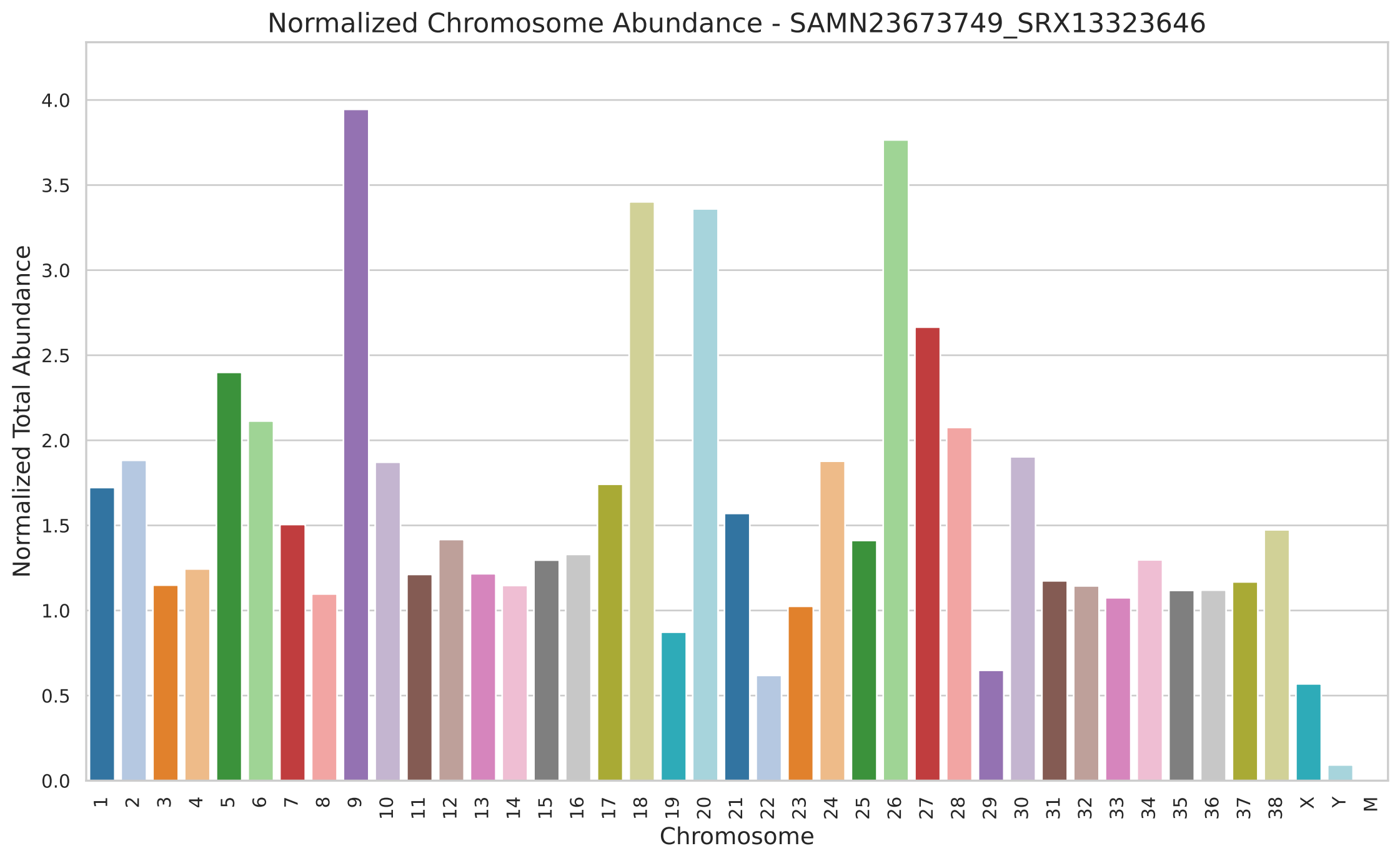

Normalized Chromosome Abundance - SAMN20802093_SRX11763950
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

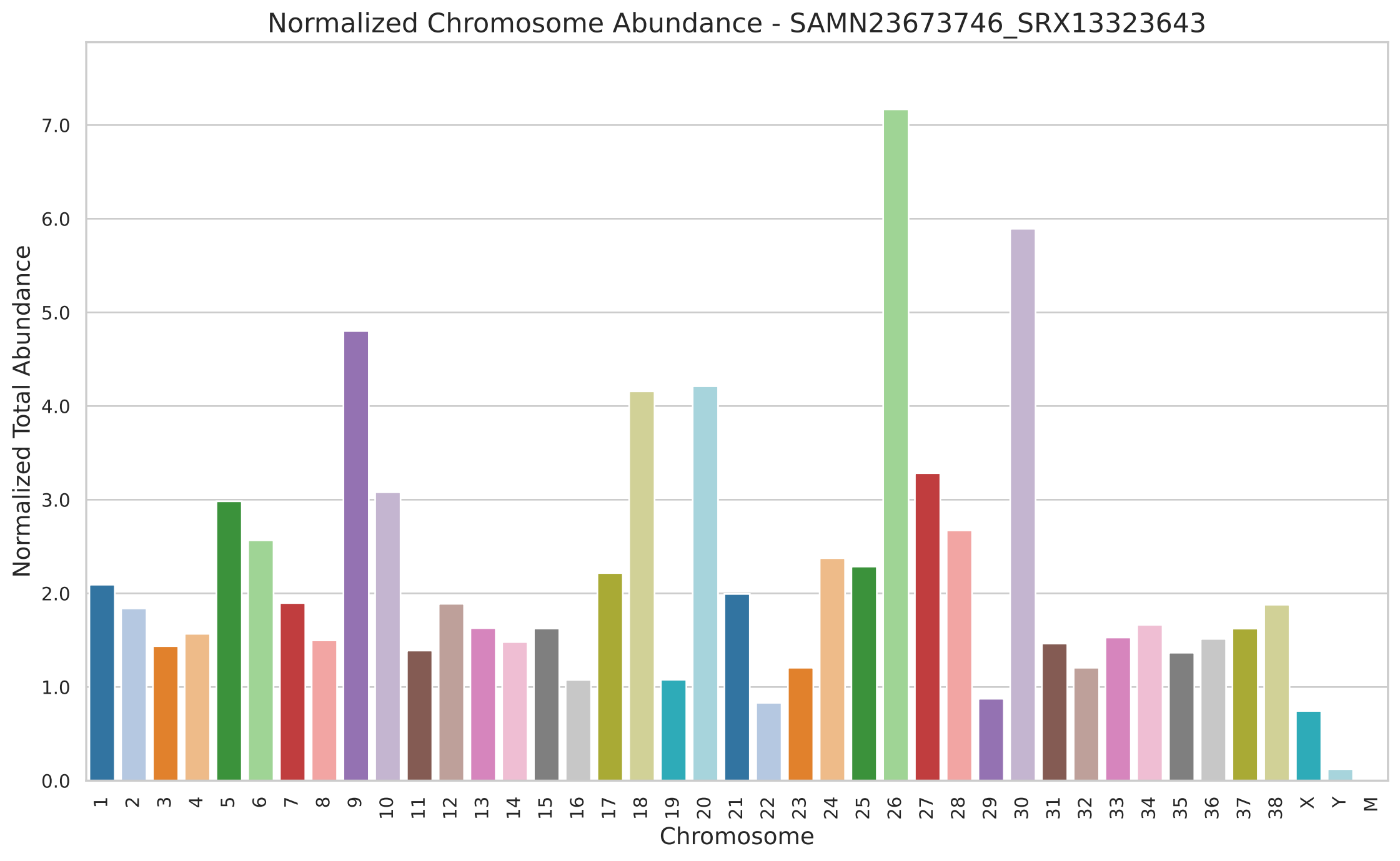

Normalized Chromosome Abundance - SAMN20802082_SRX11763938
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
35.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

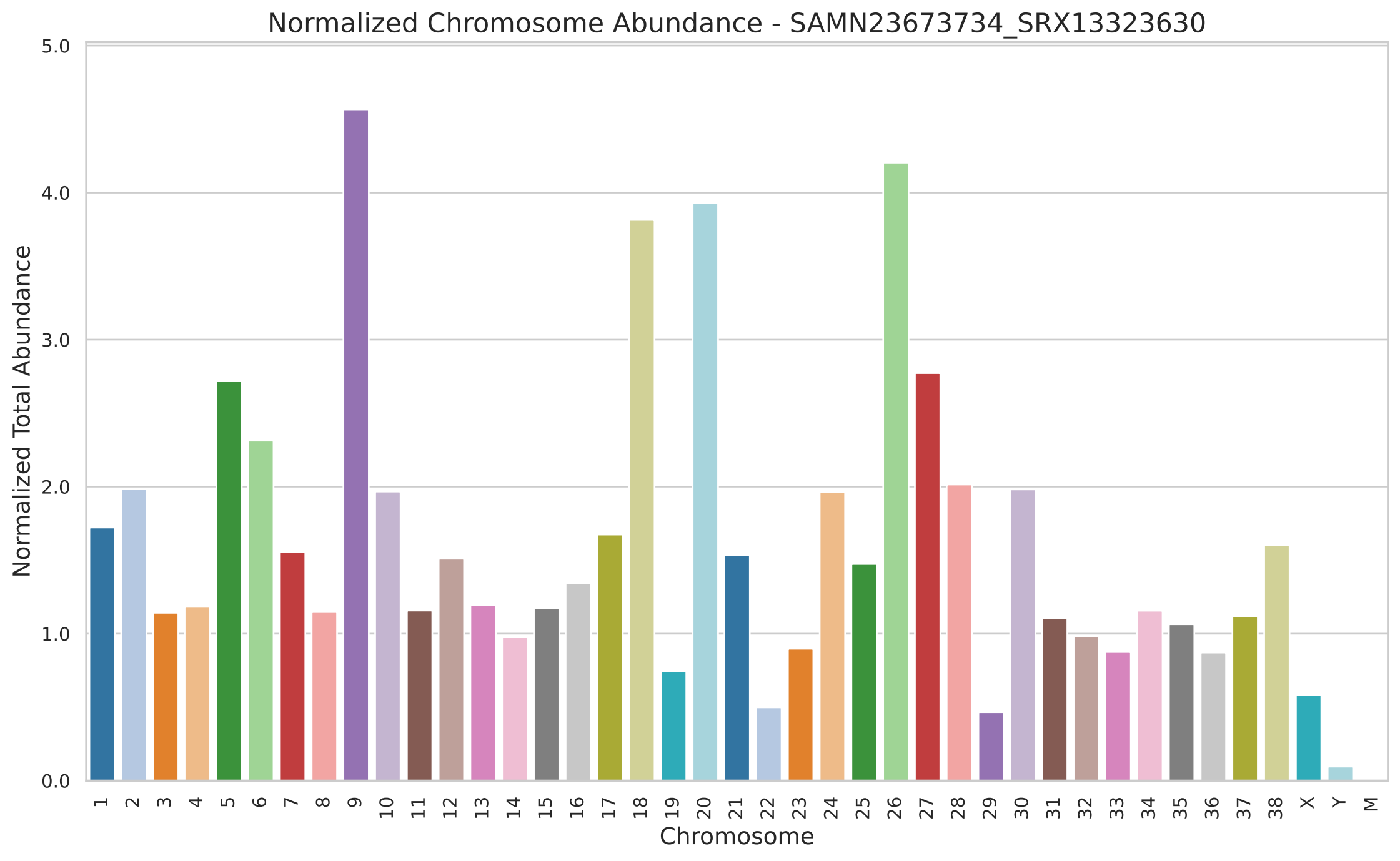

Normalized Chromosome Abundance - SAMN23673703_SRX13323596
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

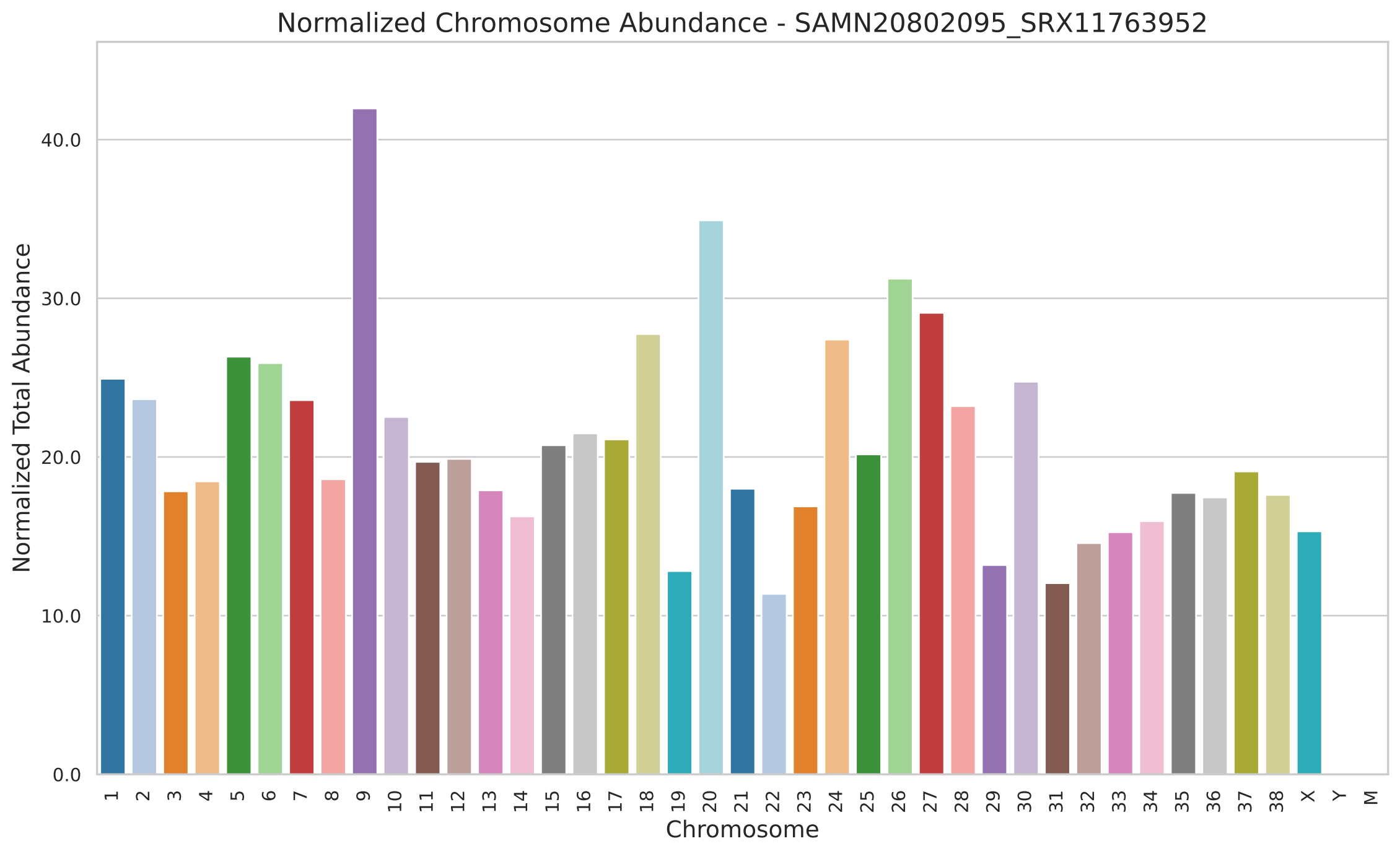

Normalized Chromosome Abundance - SAMN23673718_SRX13323612
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

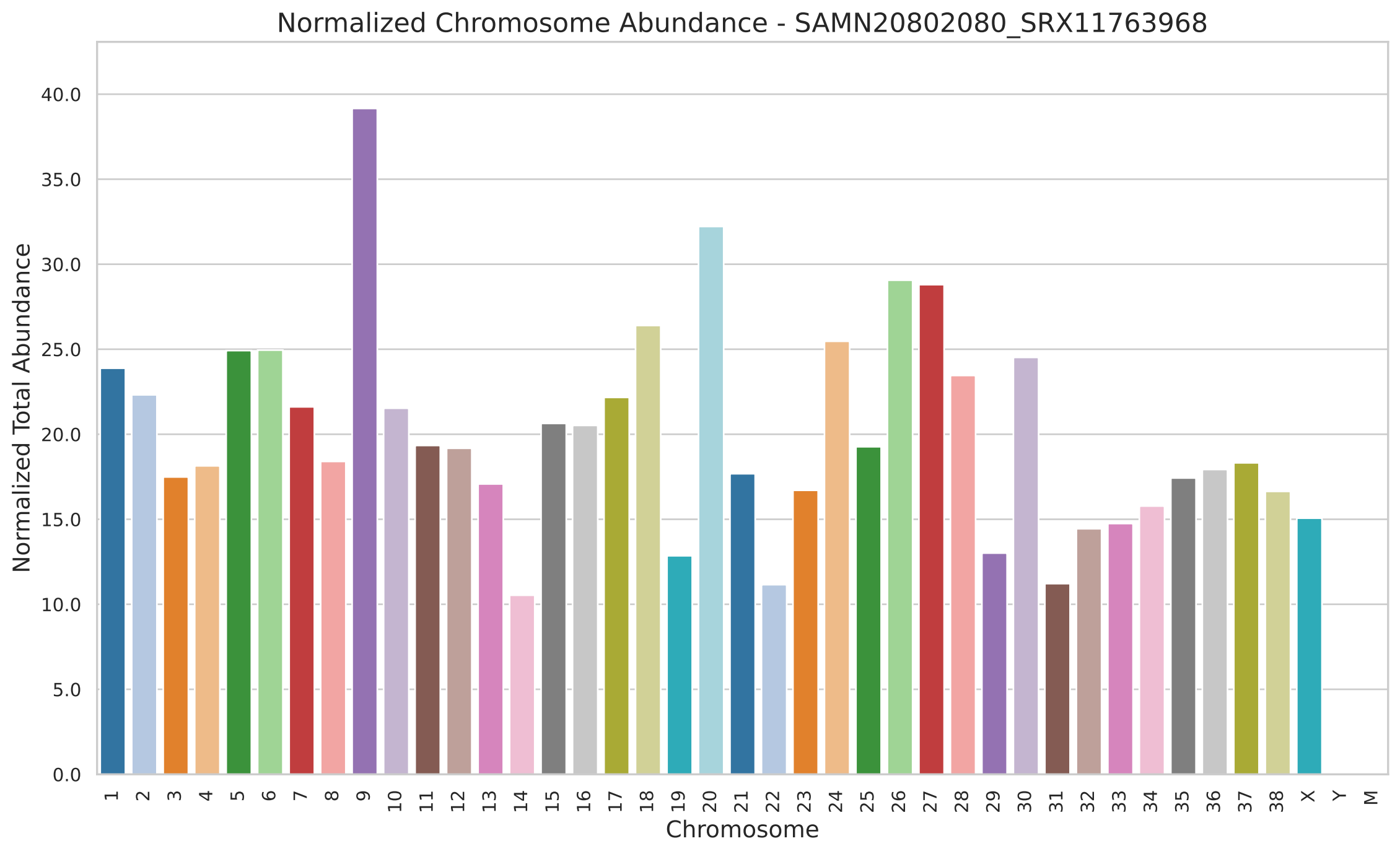

Normalized Chromosome Abundance - SAMN20802099_SRX11763956
Normalized Total Abundance
50.0
40.0
30.0
20.0
10.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

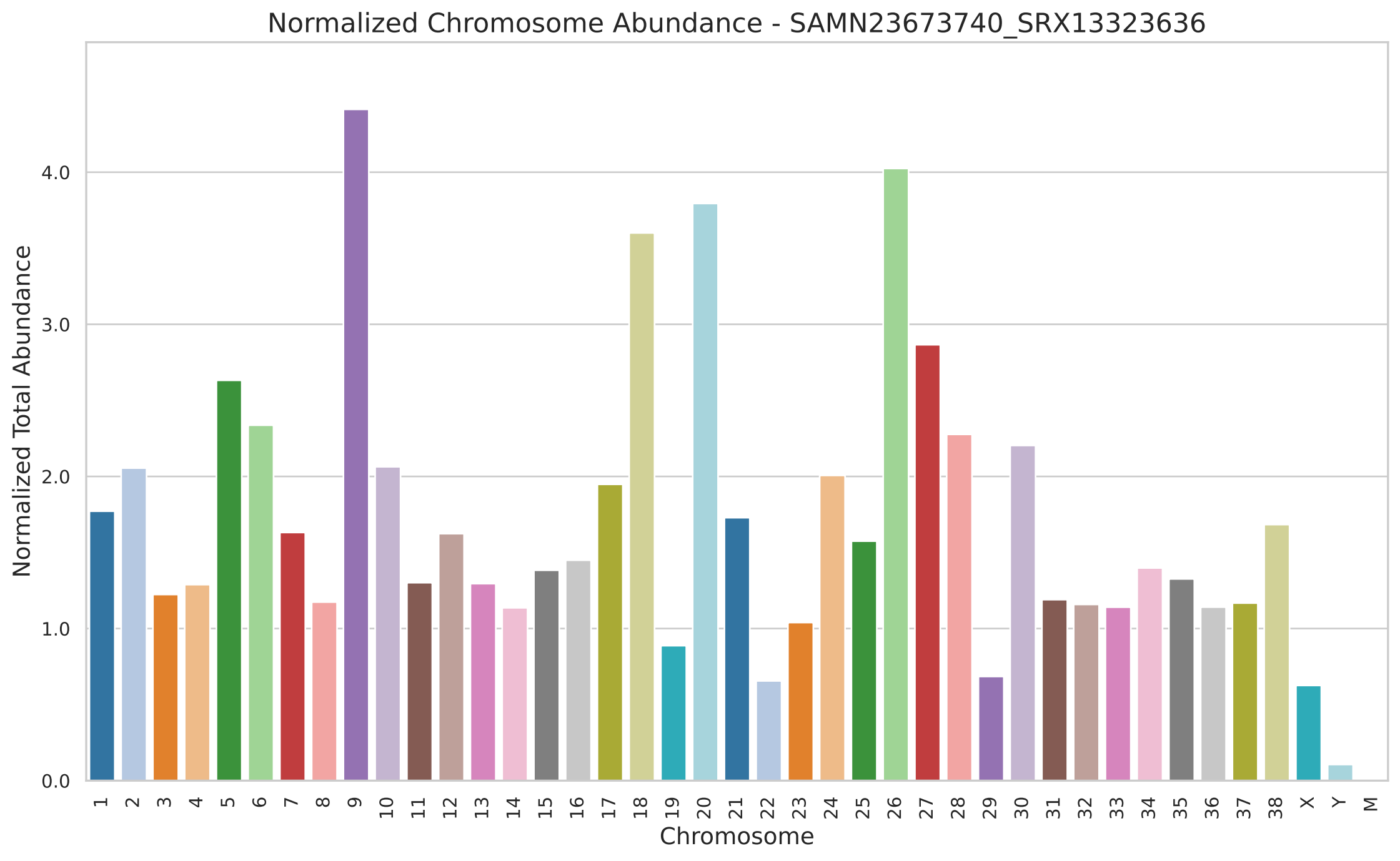

Normalized Chromosome Abundance - SAMN23673749_SRX13323646
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

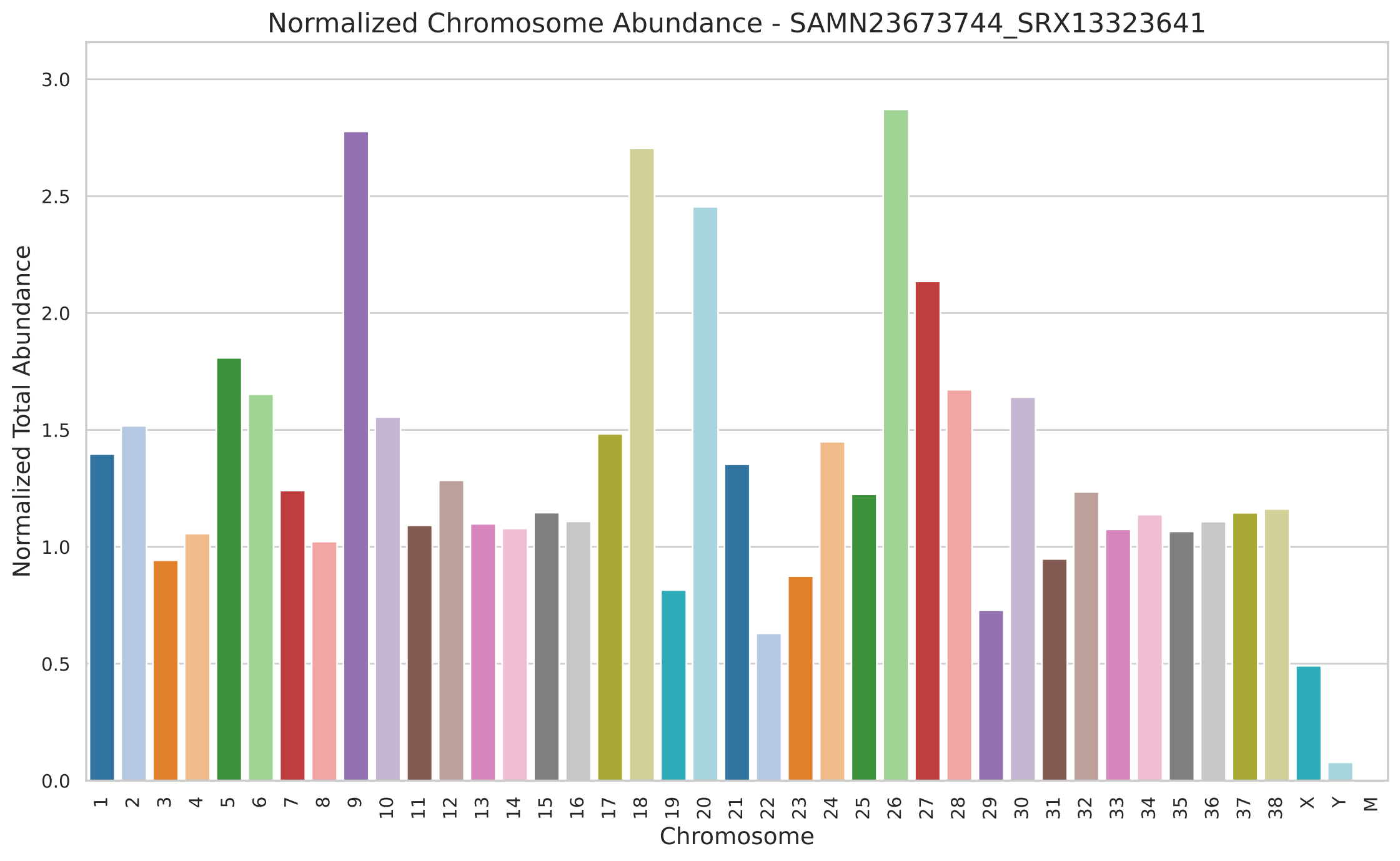

Normalized Chromosome Abundance - SAMN23673746_SRX13323643
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

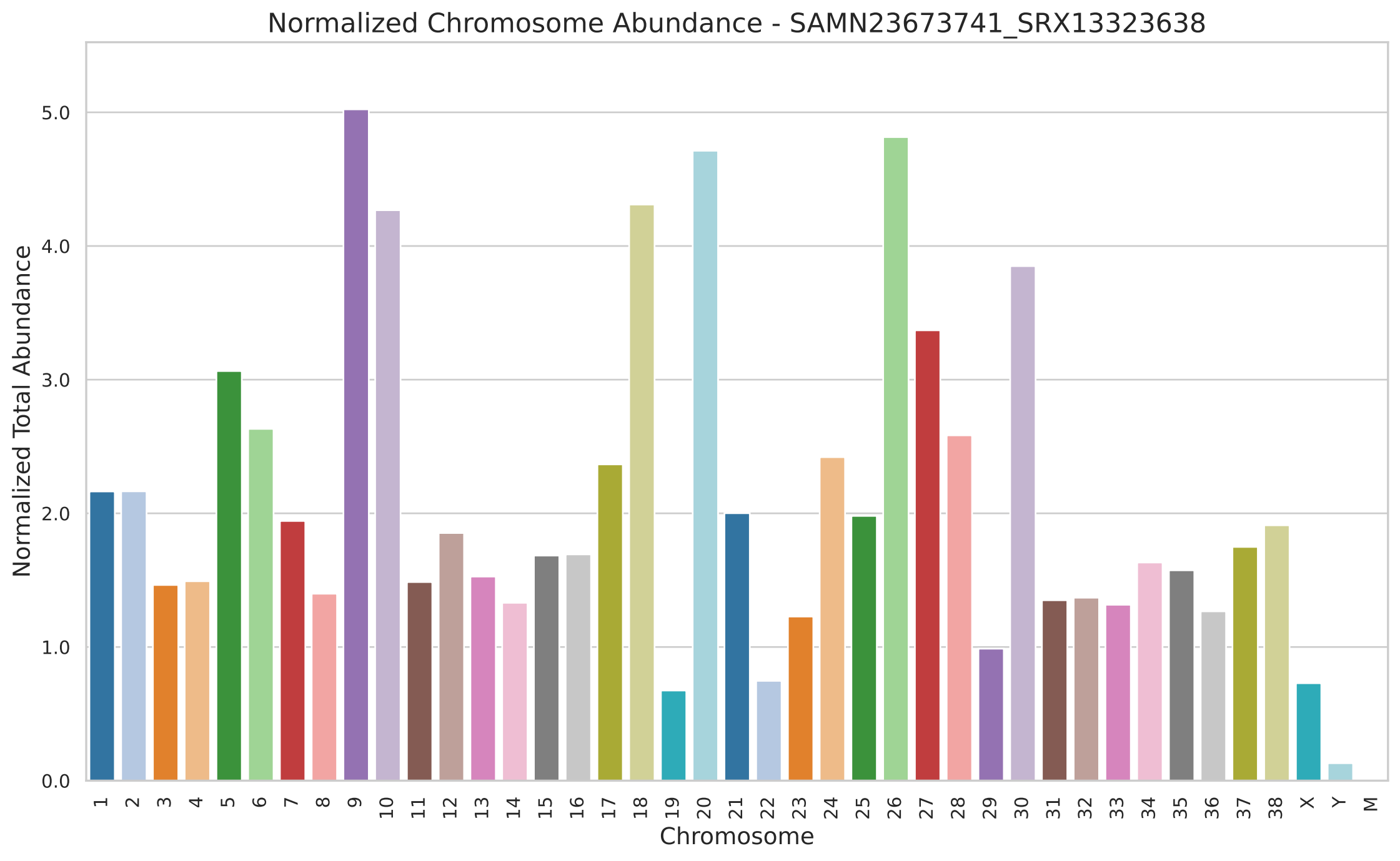

Normalized Chromosome Abundance - SAMN23673734_SRX13323630
Normalized Total Abundance
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

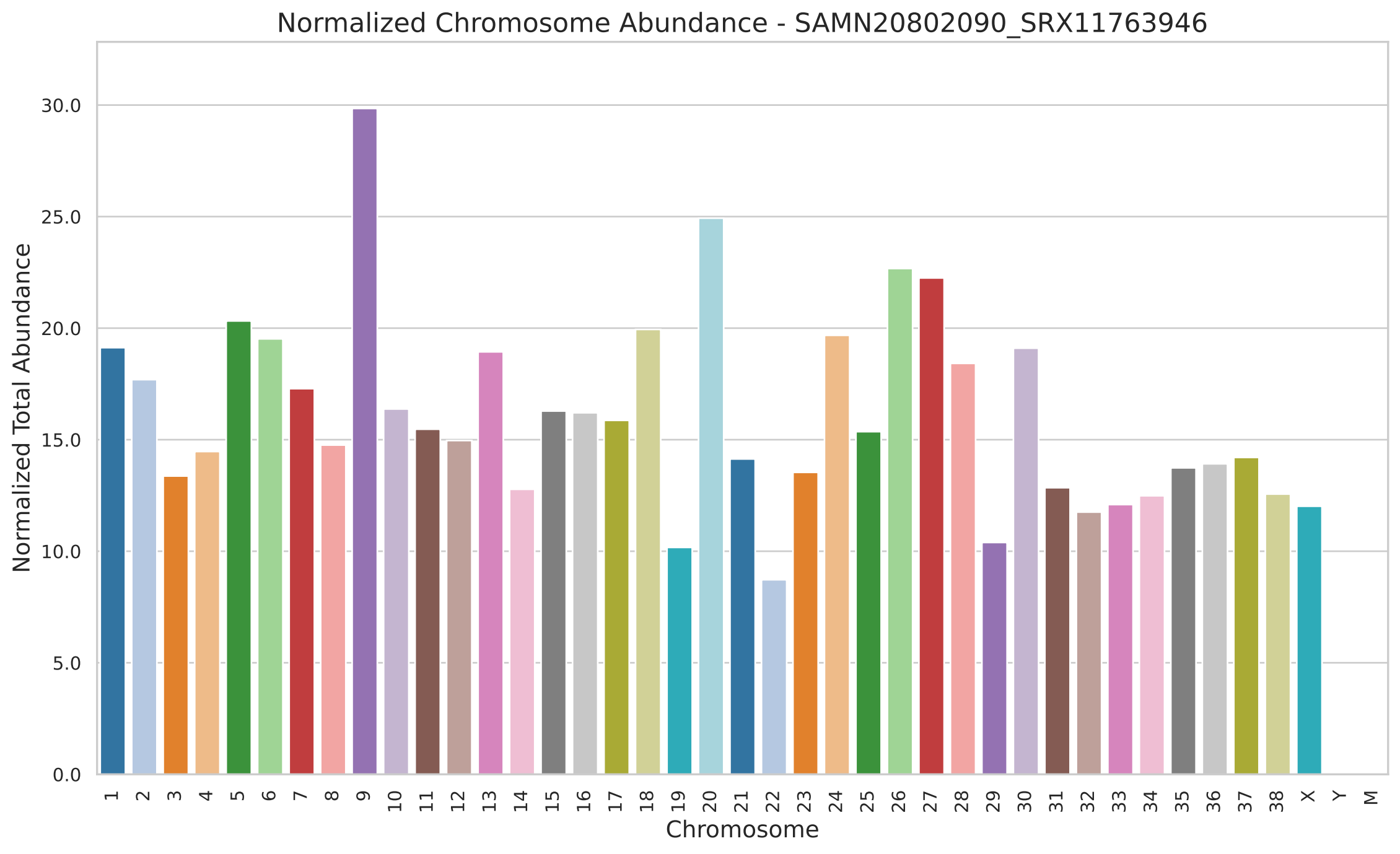

Normalized Chromosome Abundance - SAMN20802095_SRX11763952
Normalized Total Abundance
0.0
10.0
20.0
30.0
40.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

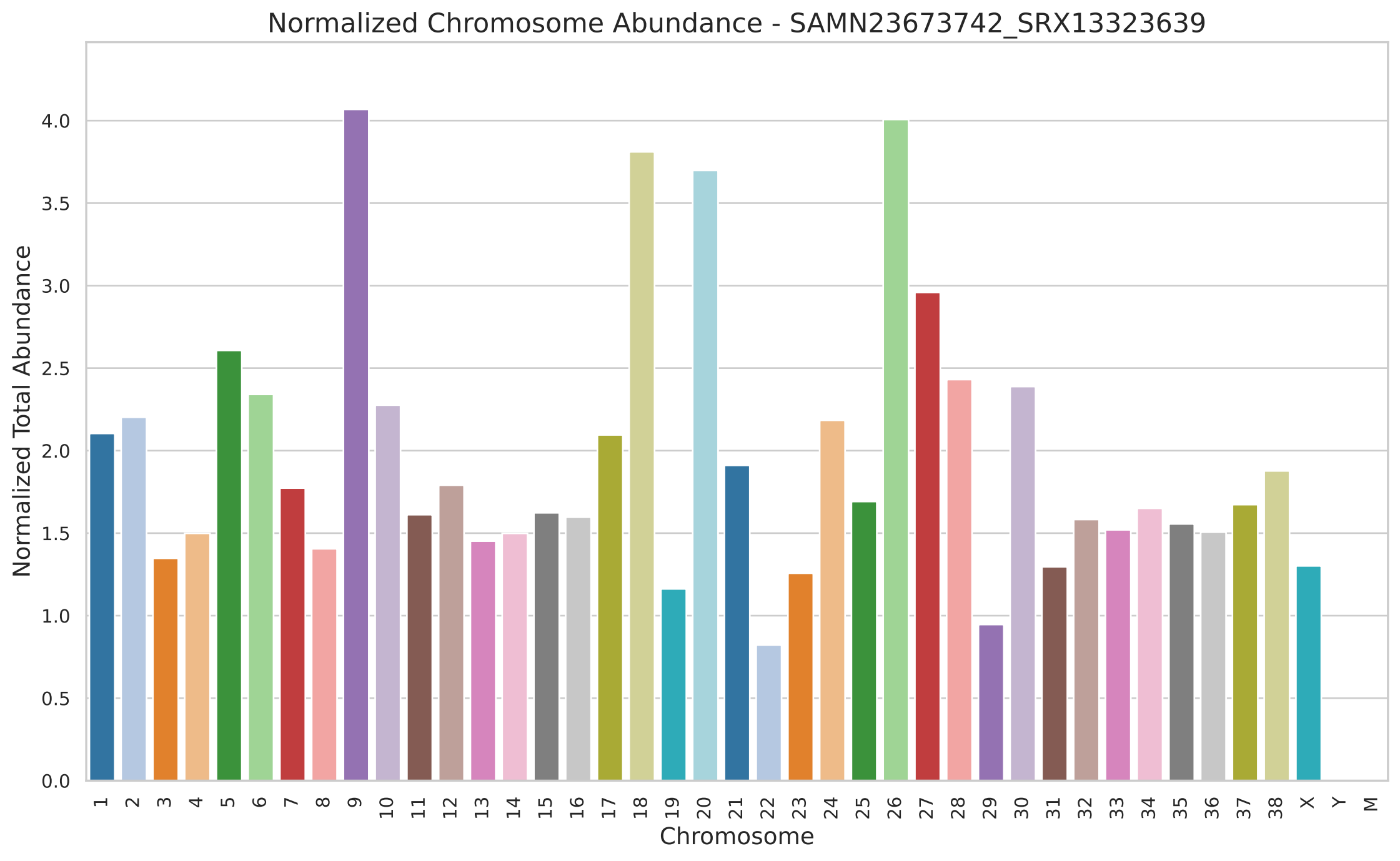

Normalized Chromosome Abundance - SAMN20802080_SRX11763968
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
35.0
40.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

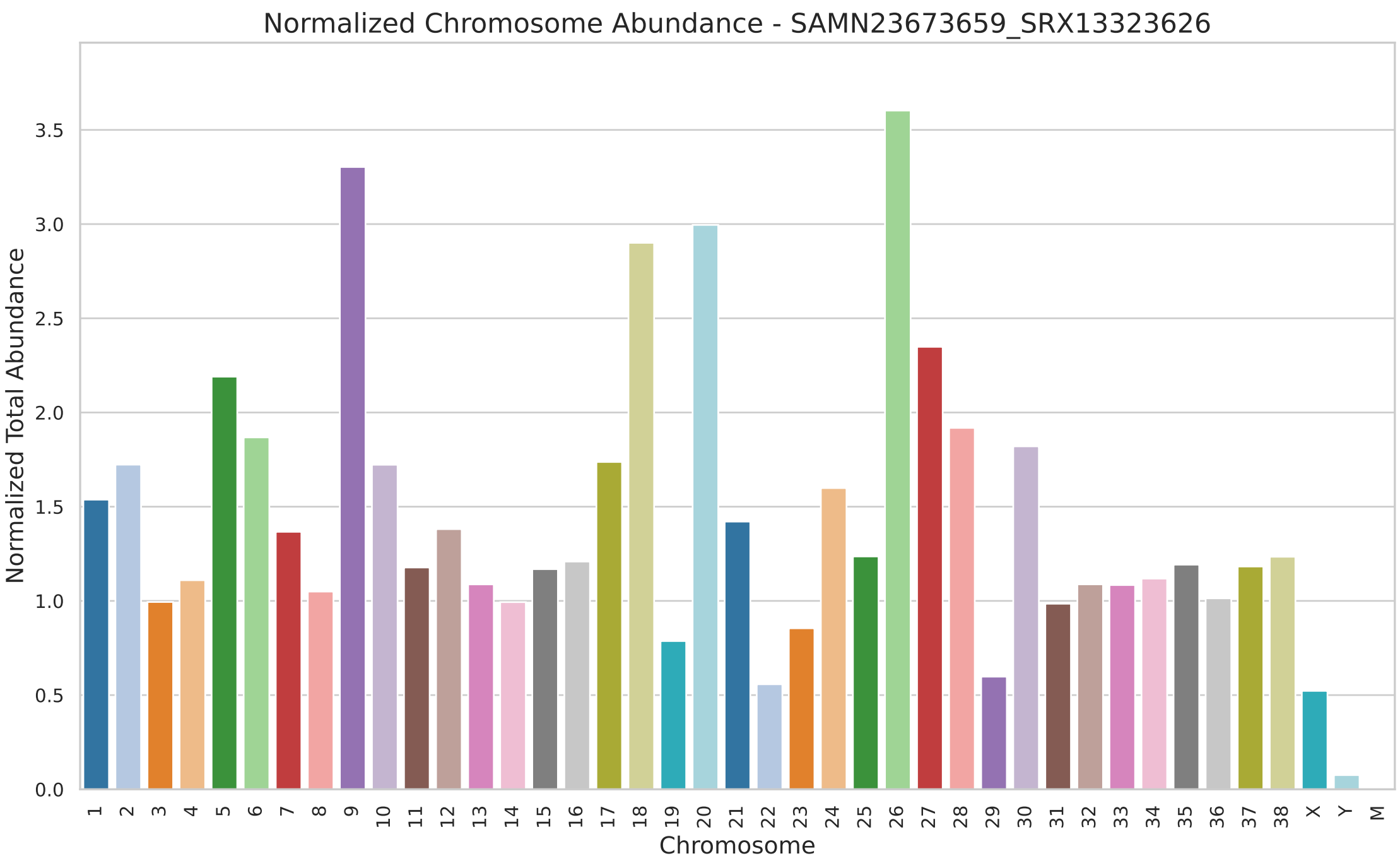

Normalized Chromosome Abundance - SAMN23673740_SRX13323636
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

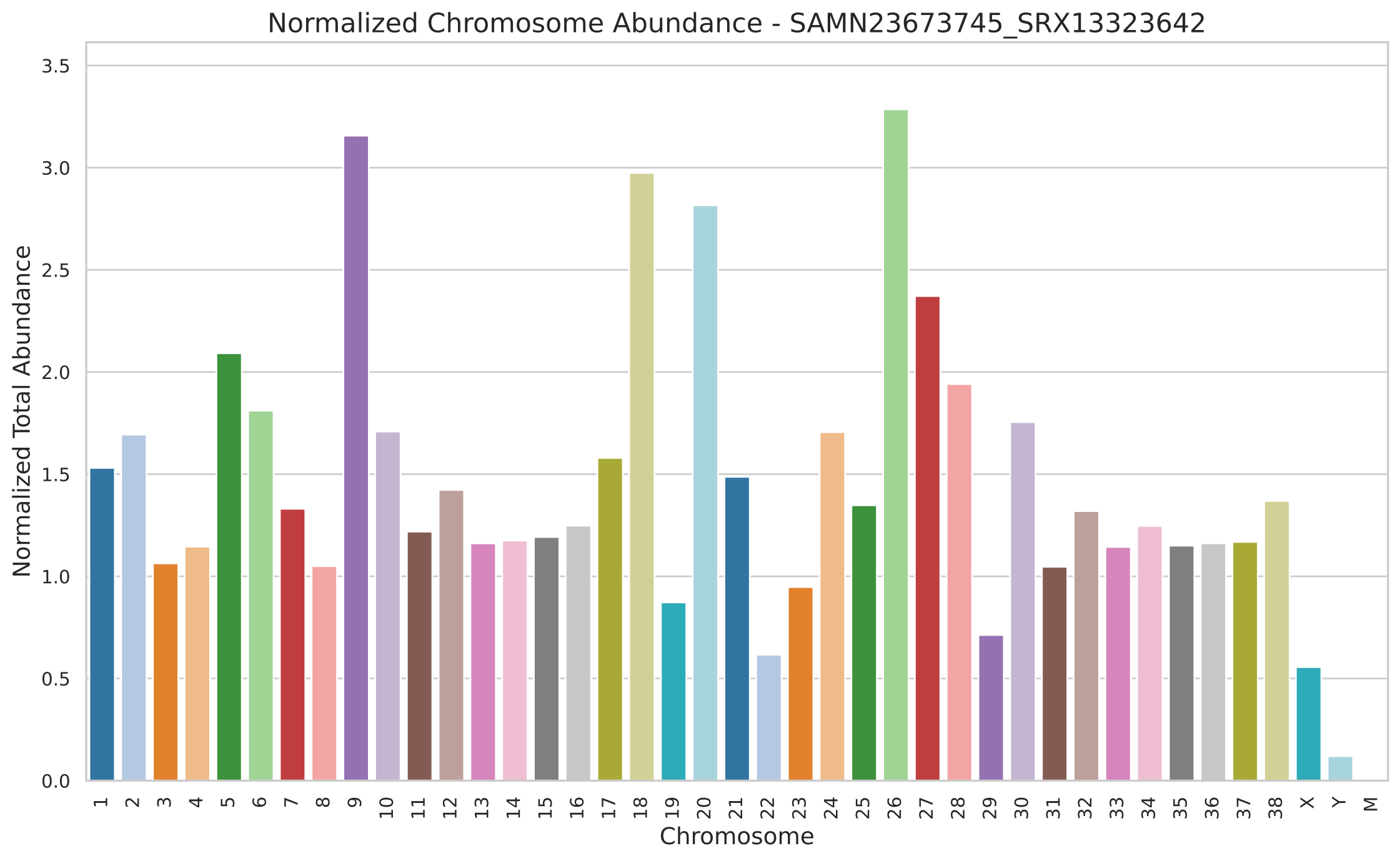

Normalized Chromosome Abundance - SAMN23673744_SRX13323641
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

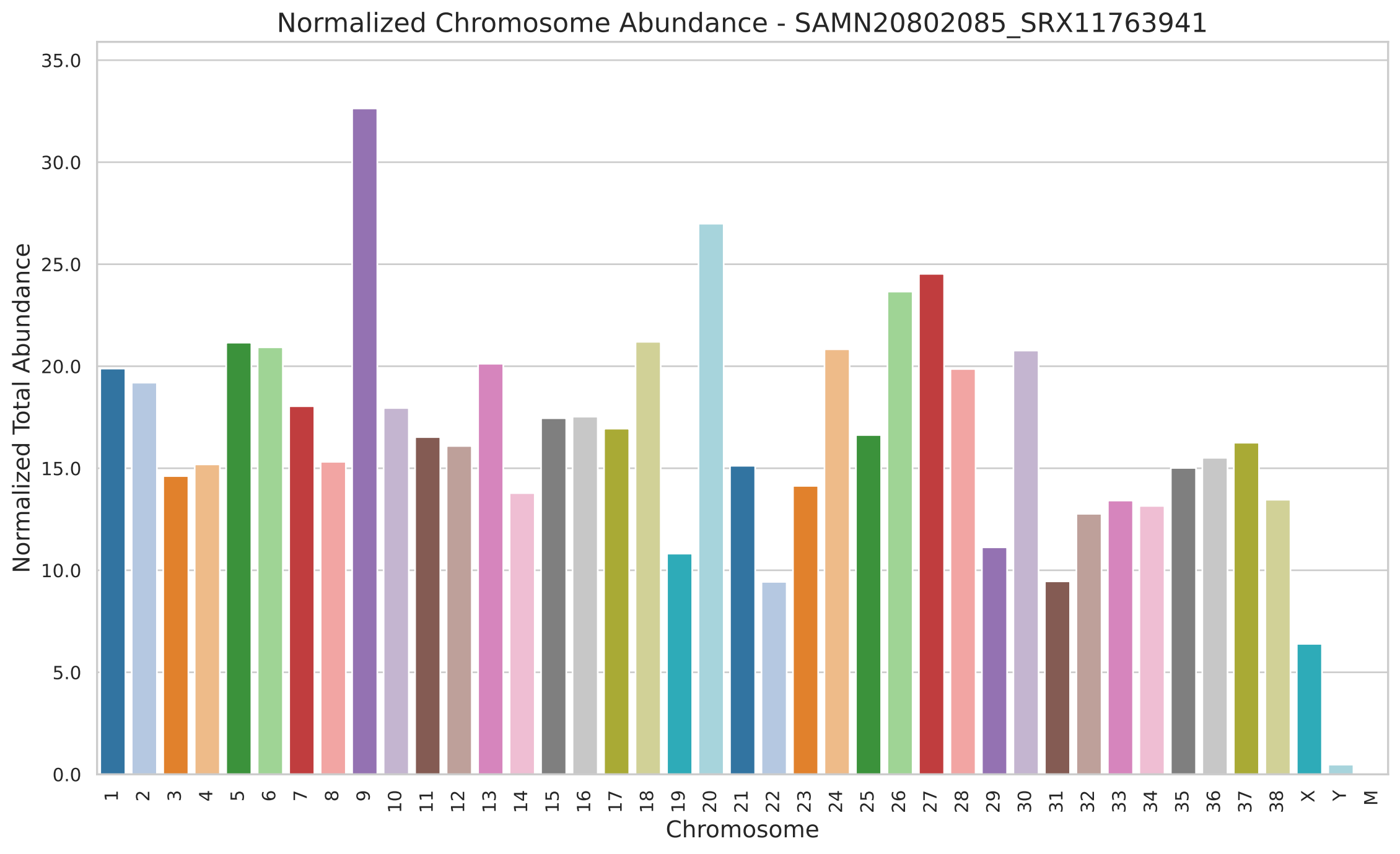

Normalized Chromosome Abundance - SAMN23673741_SRX13323638
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

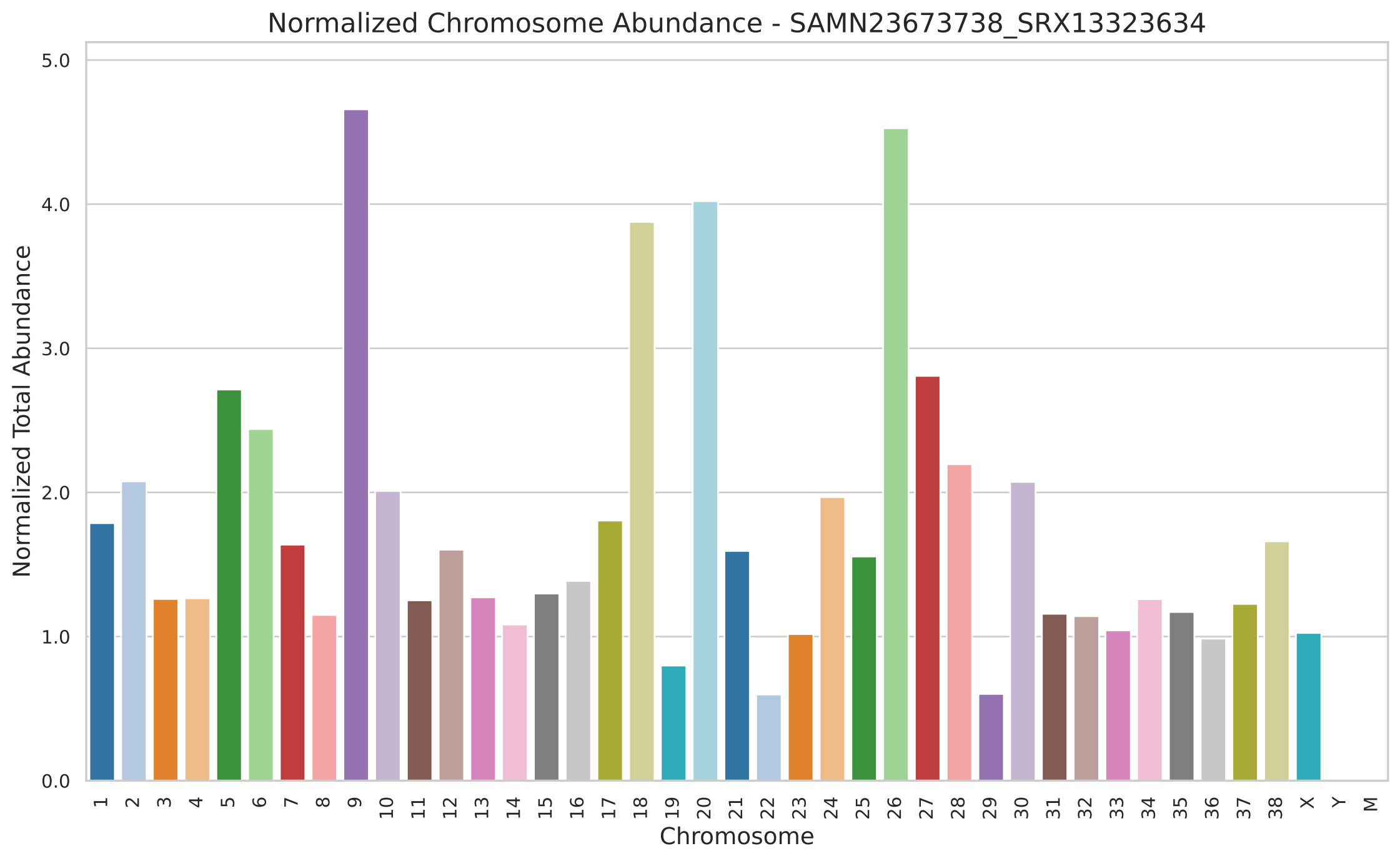

Normalized Chromosome Abundance - SAMN20802090_SRX11763946
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

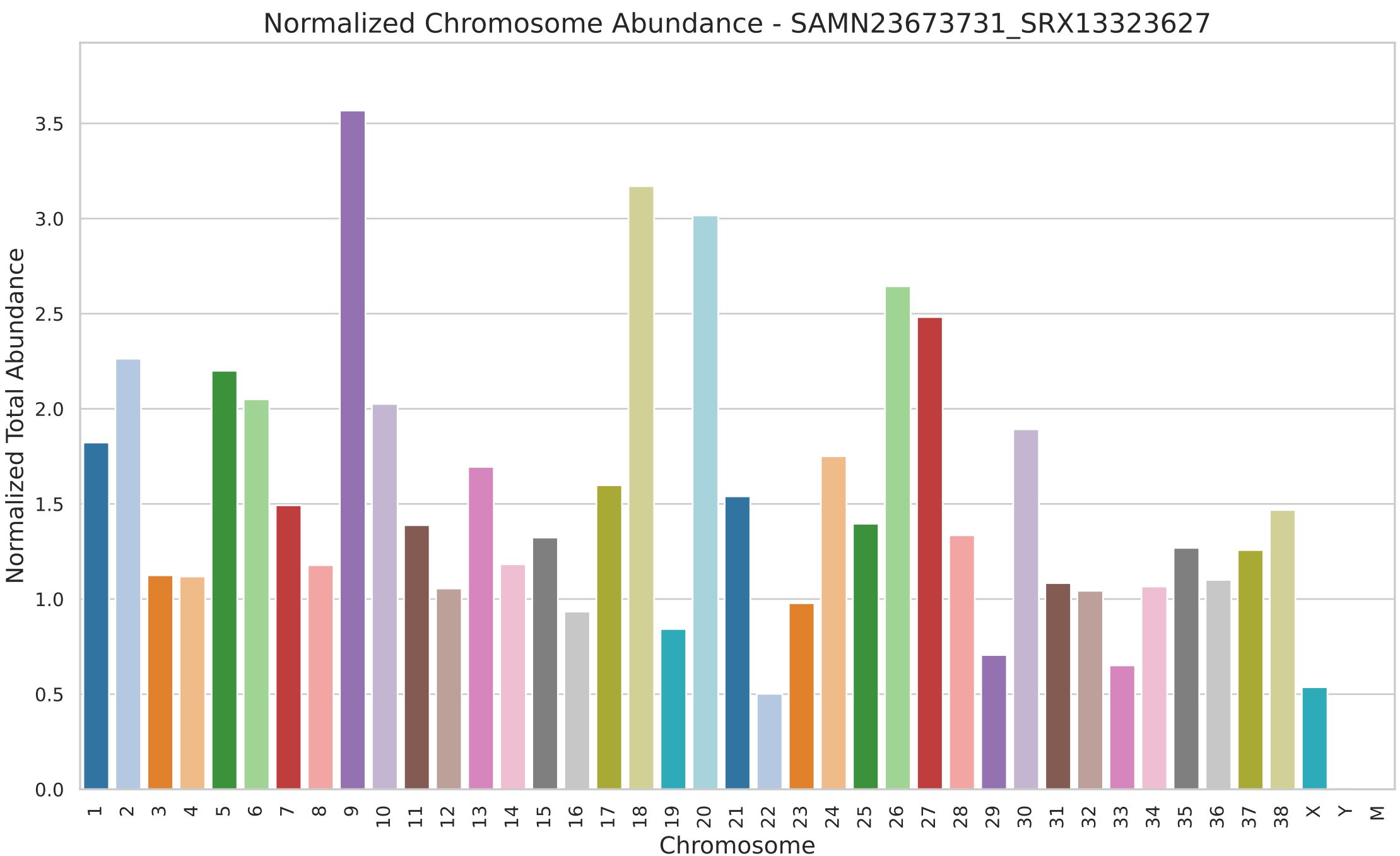

Normalized Chromosome Abundance - SAMN23673742_SRX13323639
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

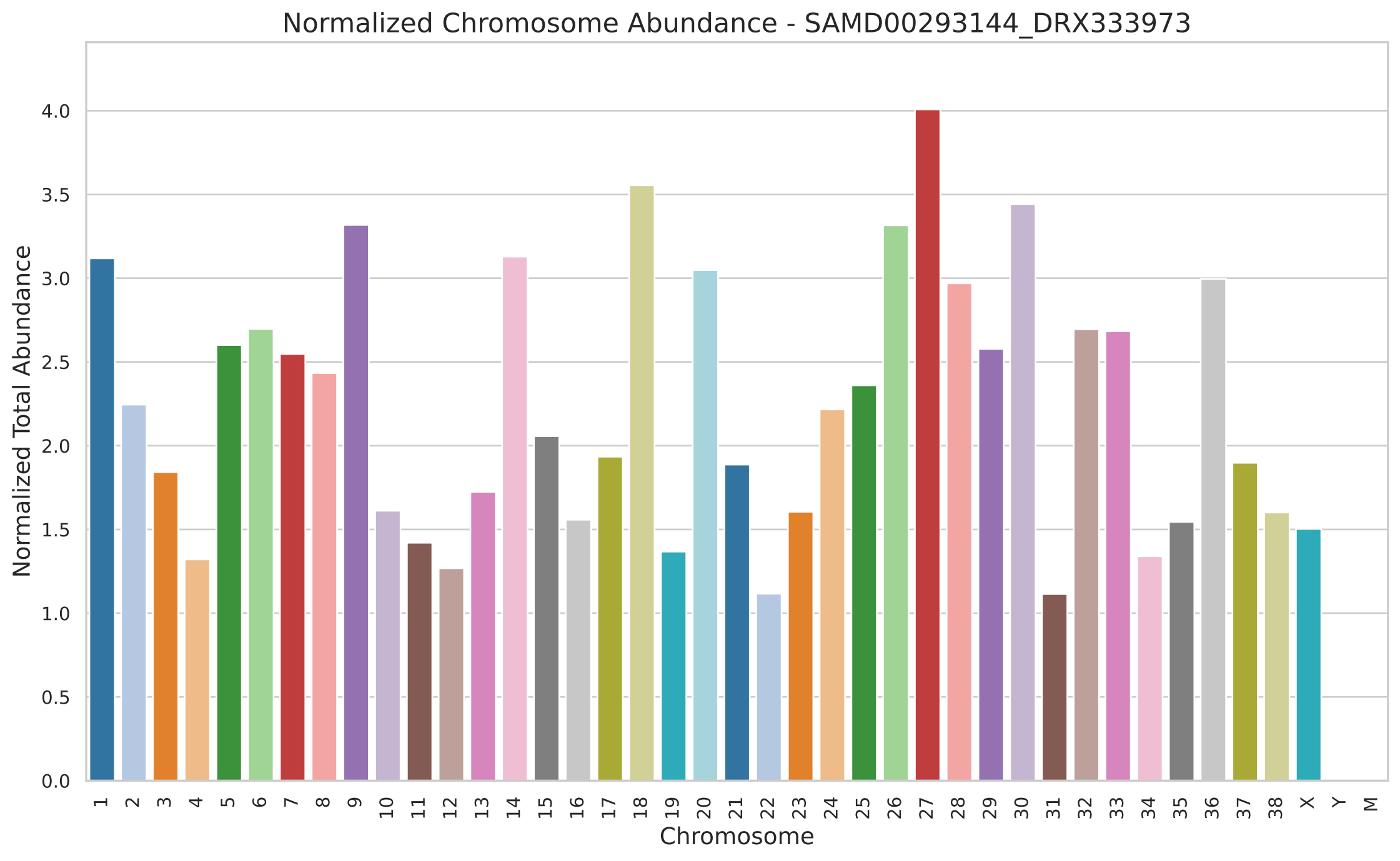

Normalized Chromosome Abundance - SAMN23673659_SRX13323626
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

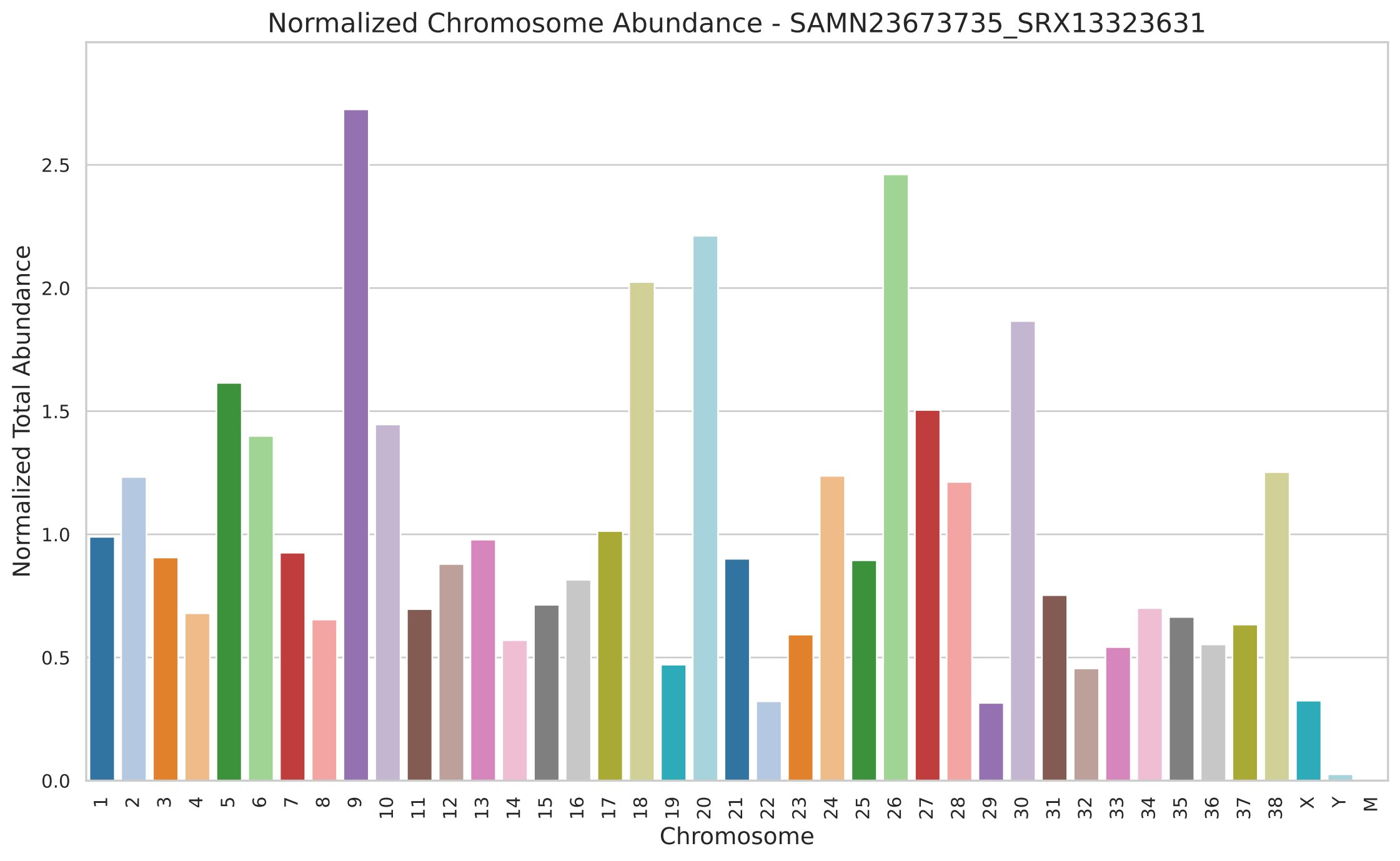

Normalized Chromosome Abundance - SAMN23673745_SRX13323642
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

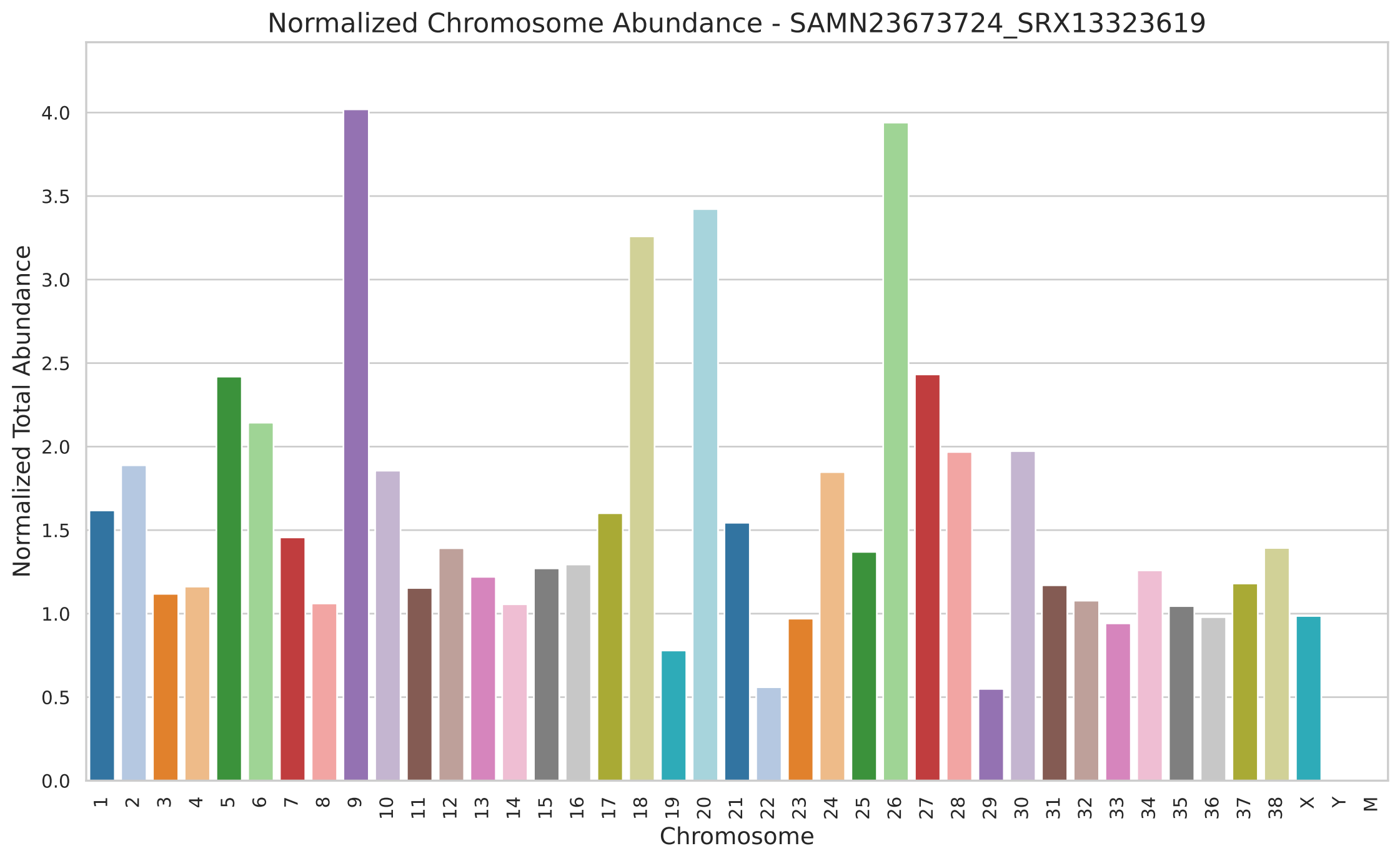

Normalized Chromosome Abundance - SAMN20802085_SRX11763941
Normalized Total Abundance
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

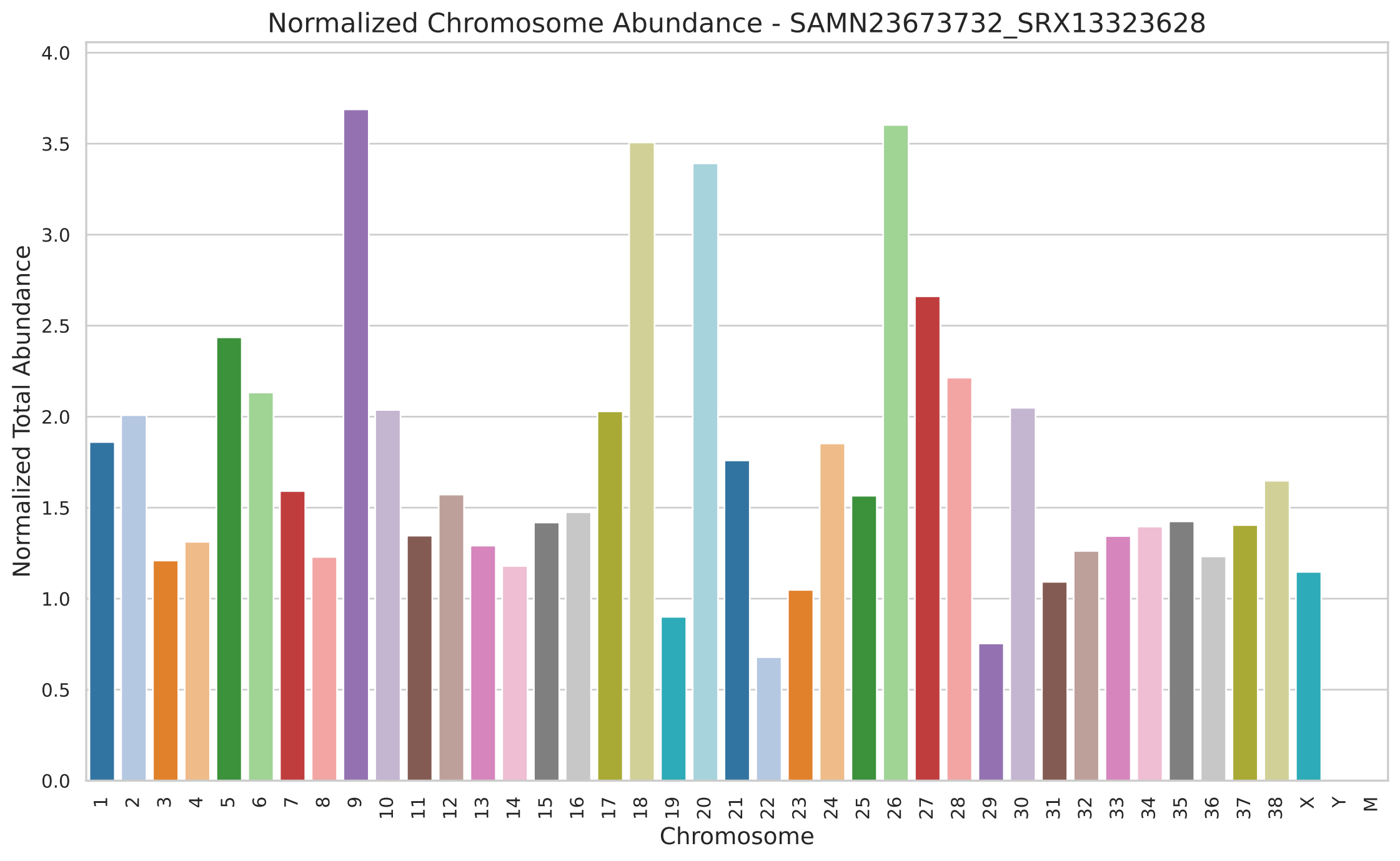

Normalized Chromosome Abundance - SAMN23673738_SRX13323634
Normalized Total Abundance
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

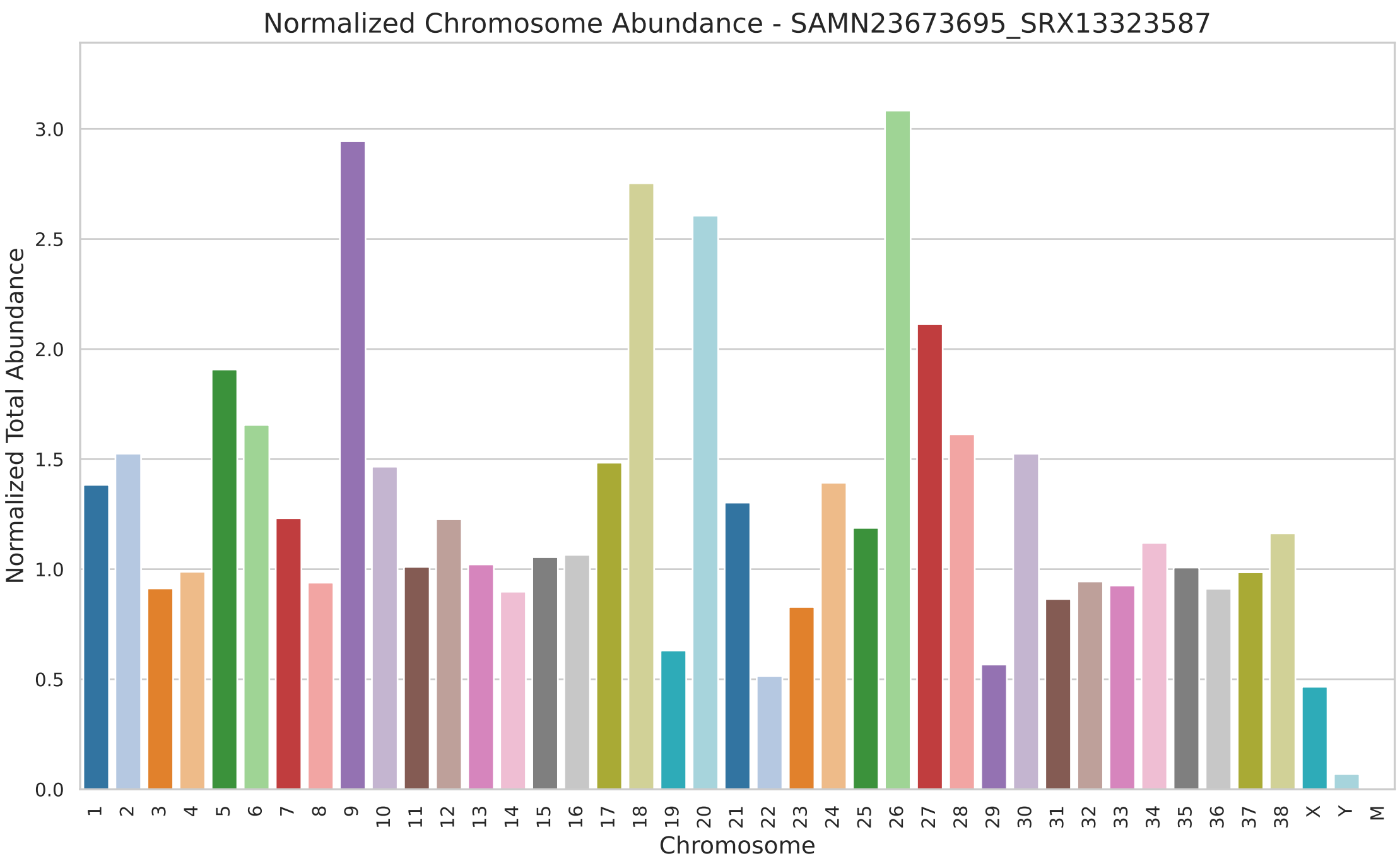

Normalized Chromosome Abundance - SAMN23673731_SRX13323627
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

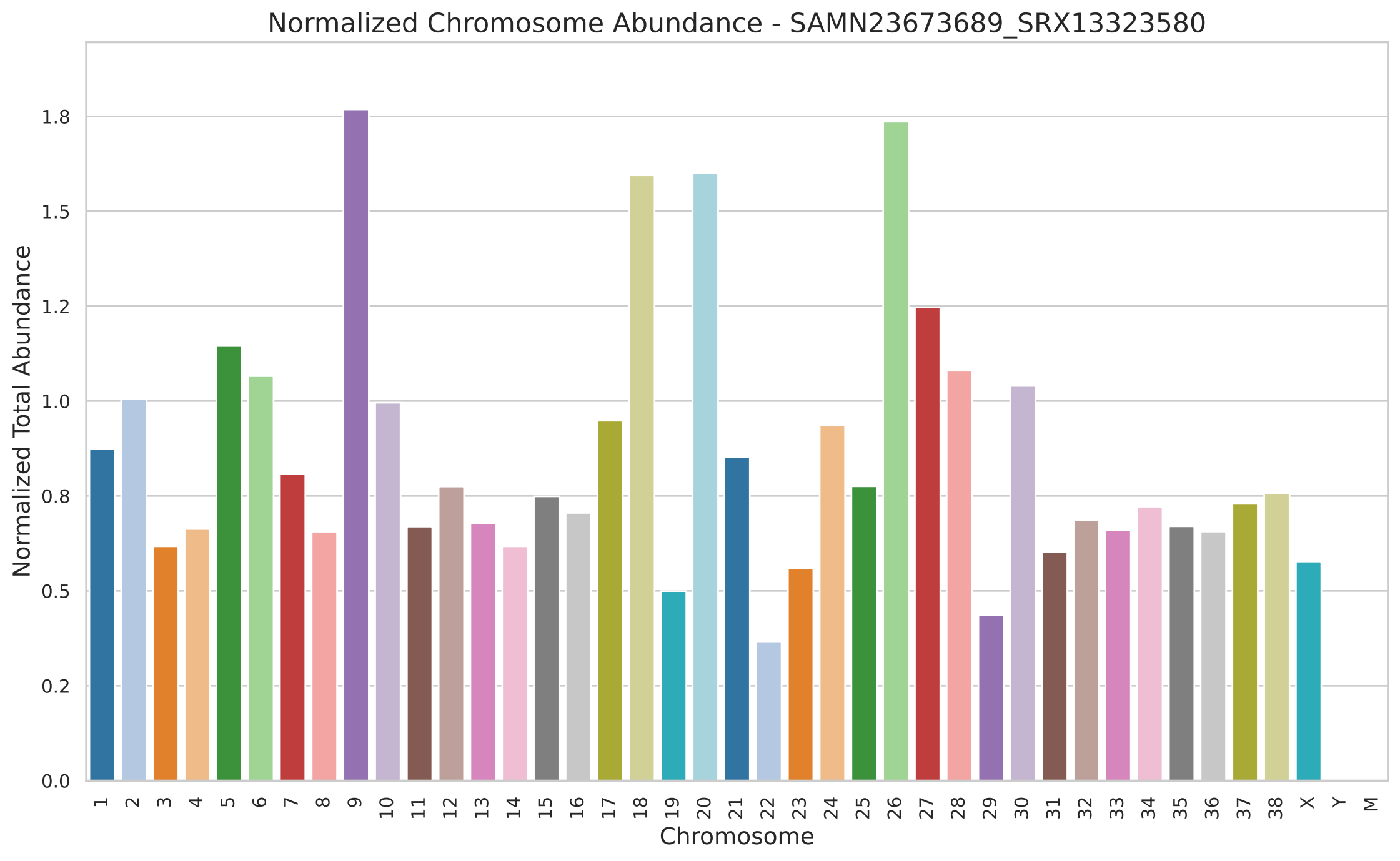

Normalized Chromosome Abundance - SAMD00293144_DRX333973
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

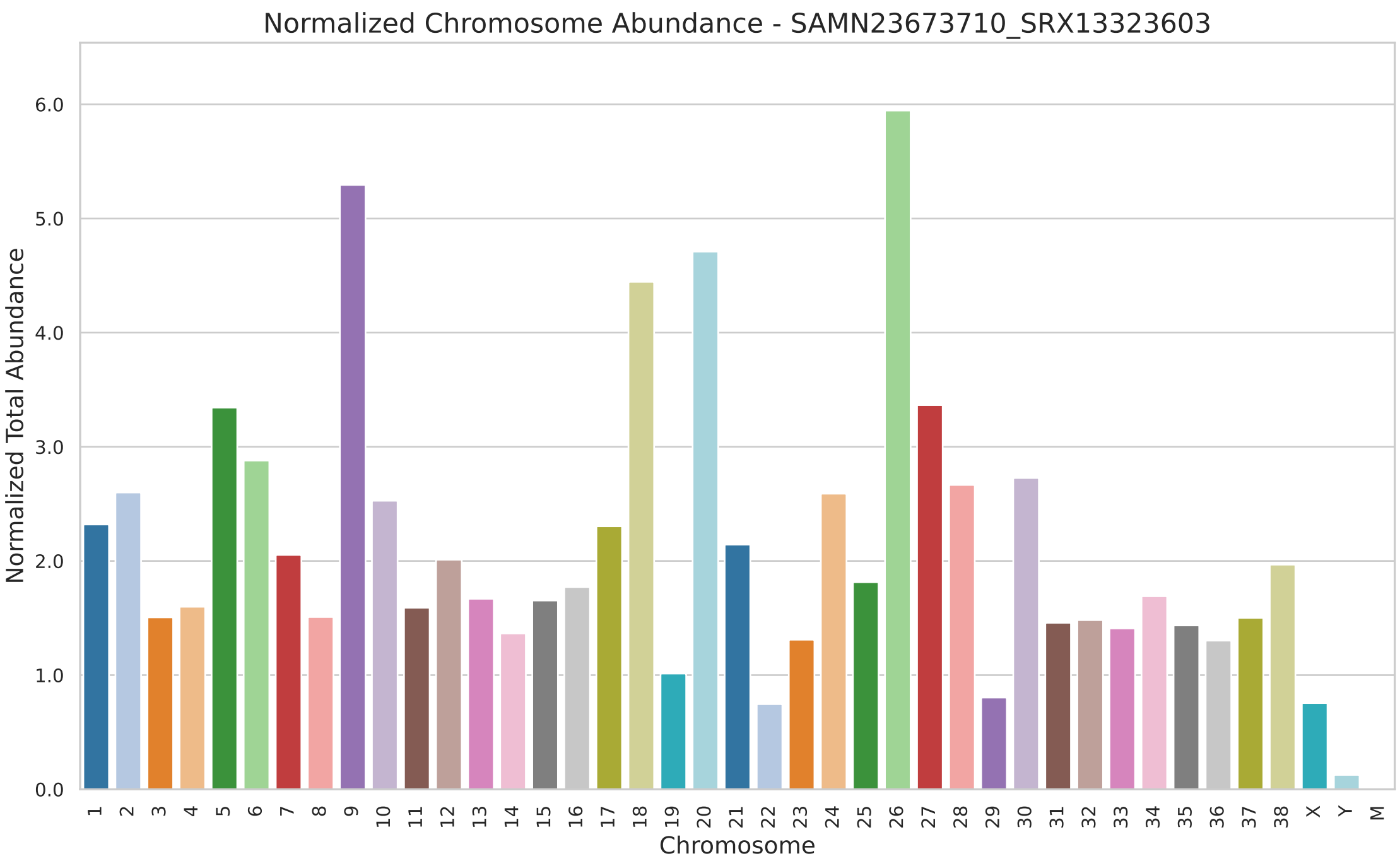

Normalized Chromosome Abundance - SAMN23673735_SRX13323631
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

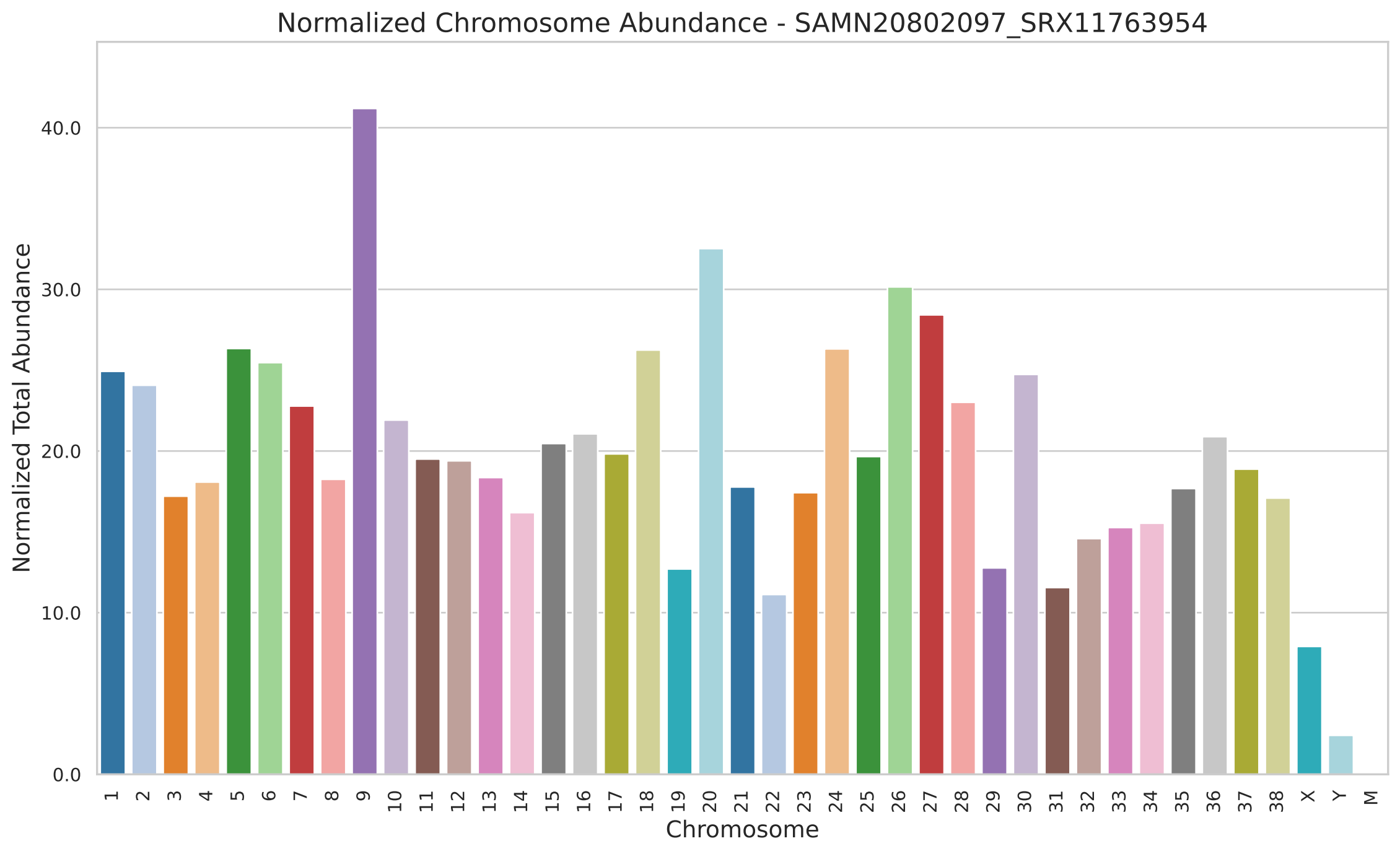

Normalized Chromosome Abundance - SAMN23673724_SRX13323619
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

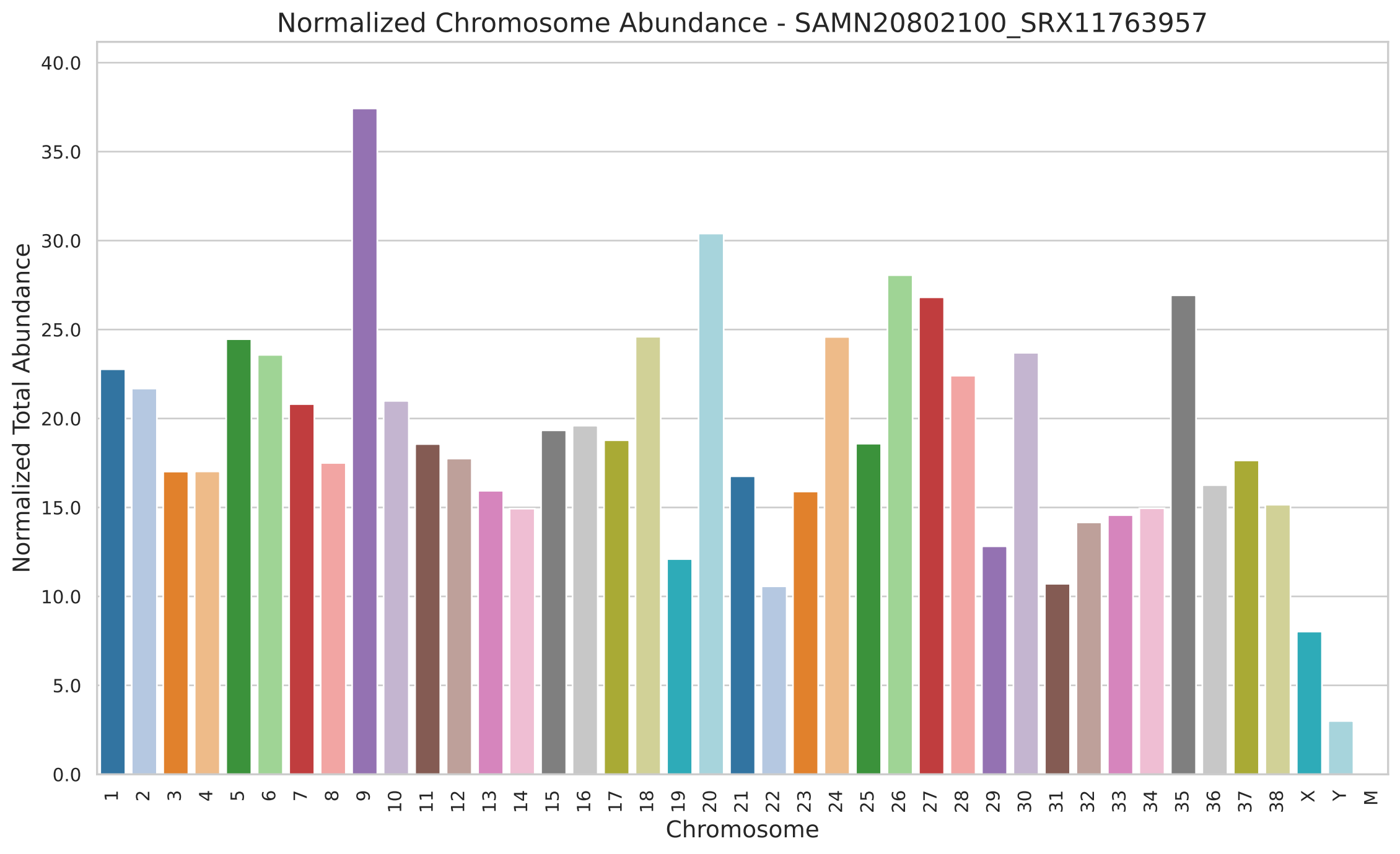

Normalized Chromosome Abundance - SAMN23673732_SRX13323628
Normalized Total Abundance
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

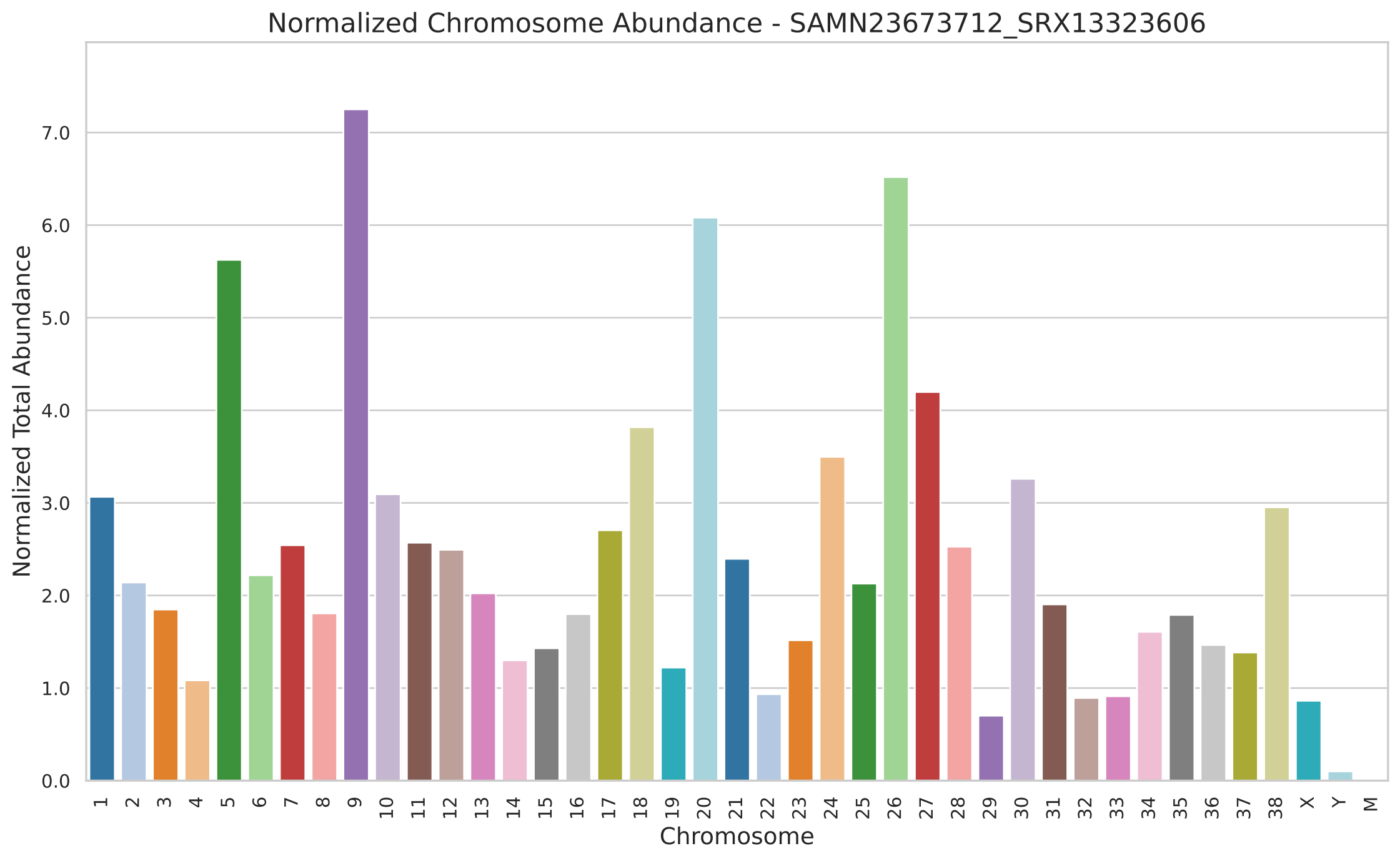

Normalized Chromosome Abundance - SAMN23673695_SRX13323587
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

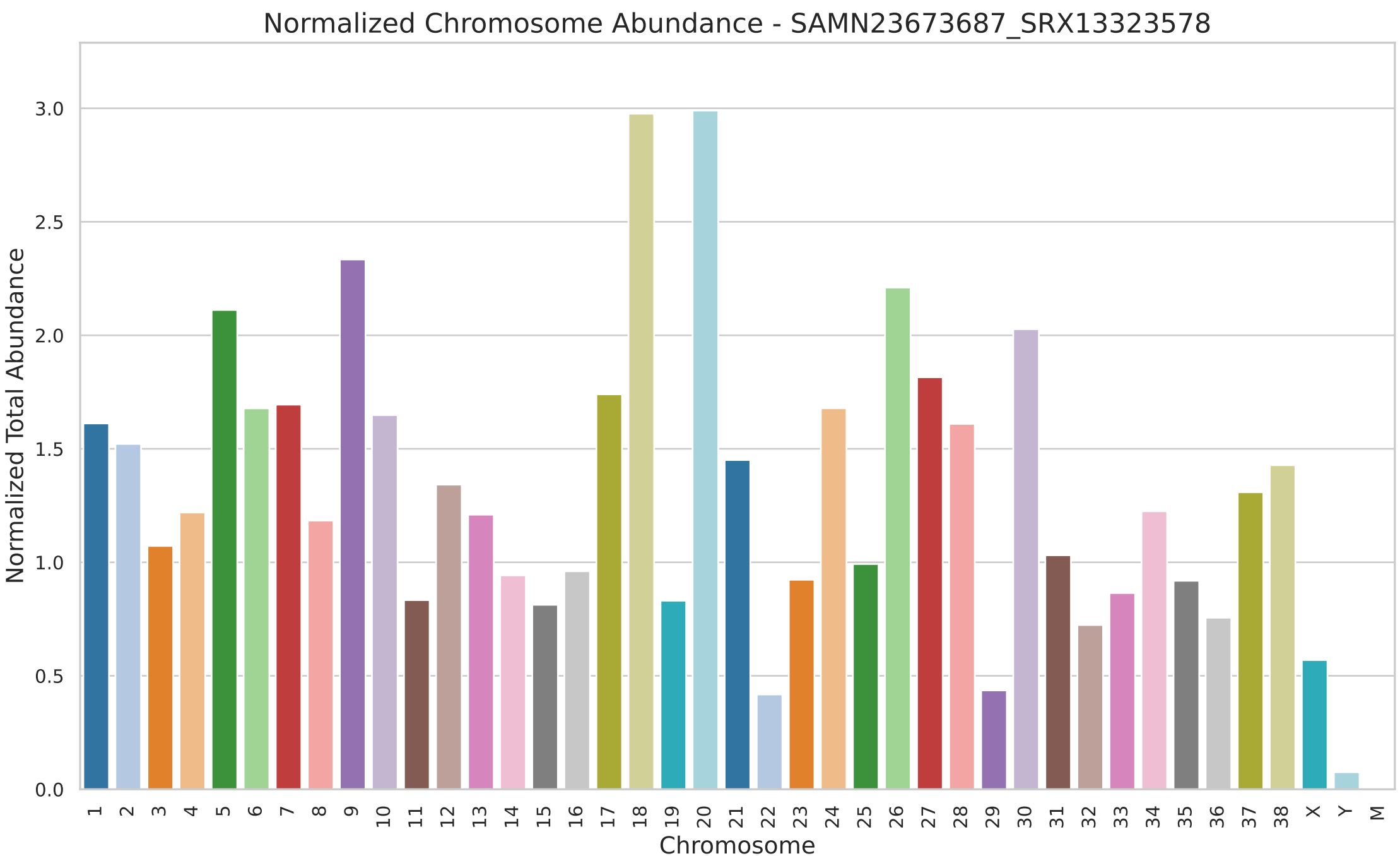

Normalized Chromosome Abundance - SAMN23673689_SRX13323580
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

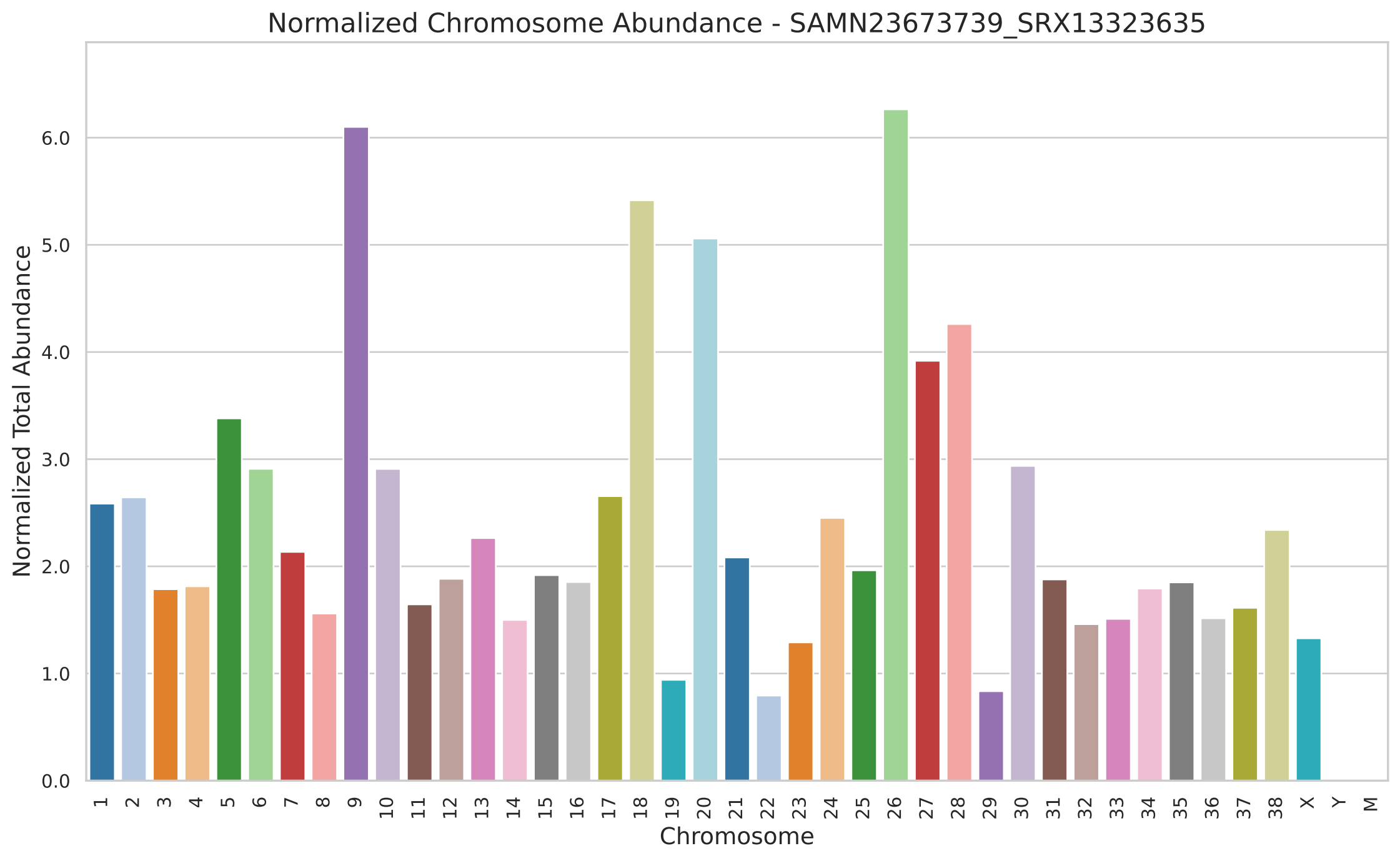

Normalized Chromosome Abundance - SAMN23673710_SRX13323603
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

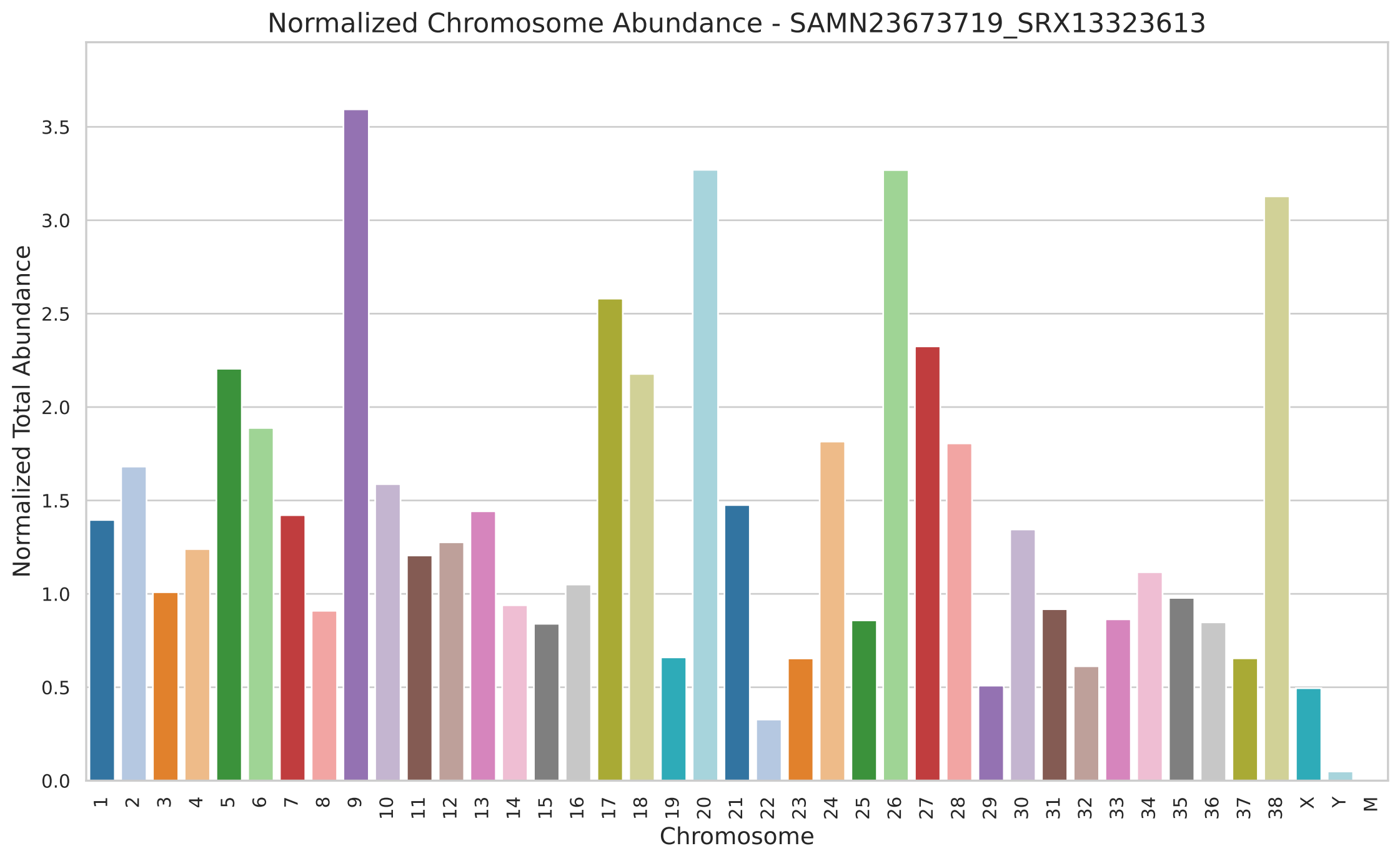

Normalized Chromosome Abundance - SAMN20802097_SRX11763954
Normalized Total Abundance
0.0
10.0
20.0
30.0
40.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

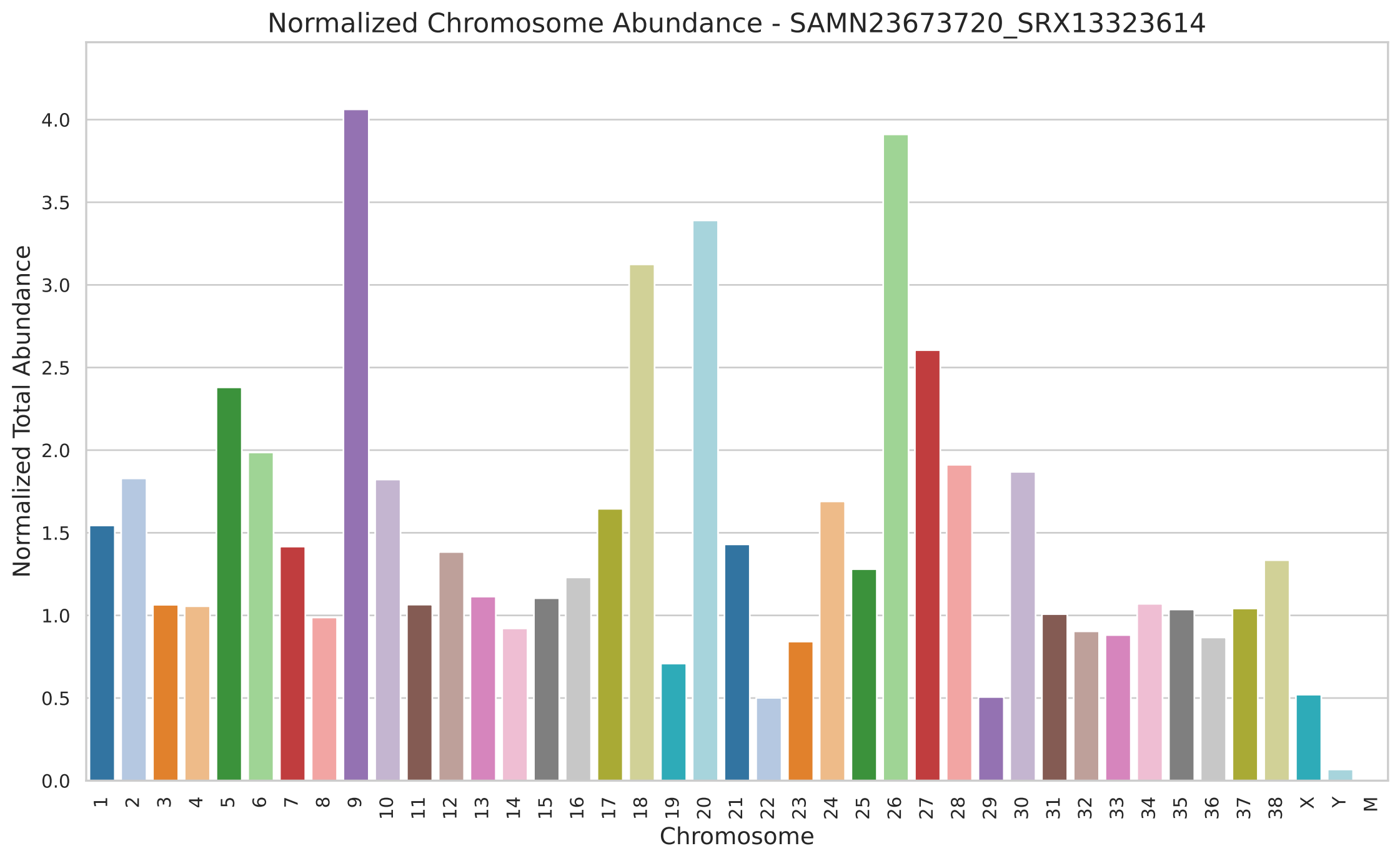

Normalized Chromosome Abundance - SAMN20802100_SRX11763957
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
35.0
40.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

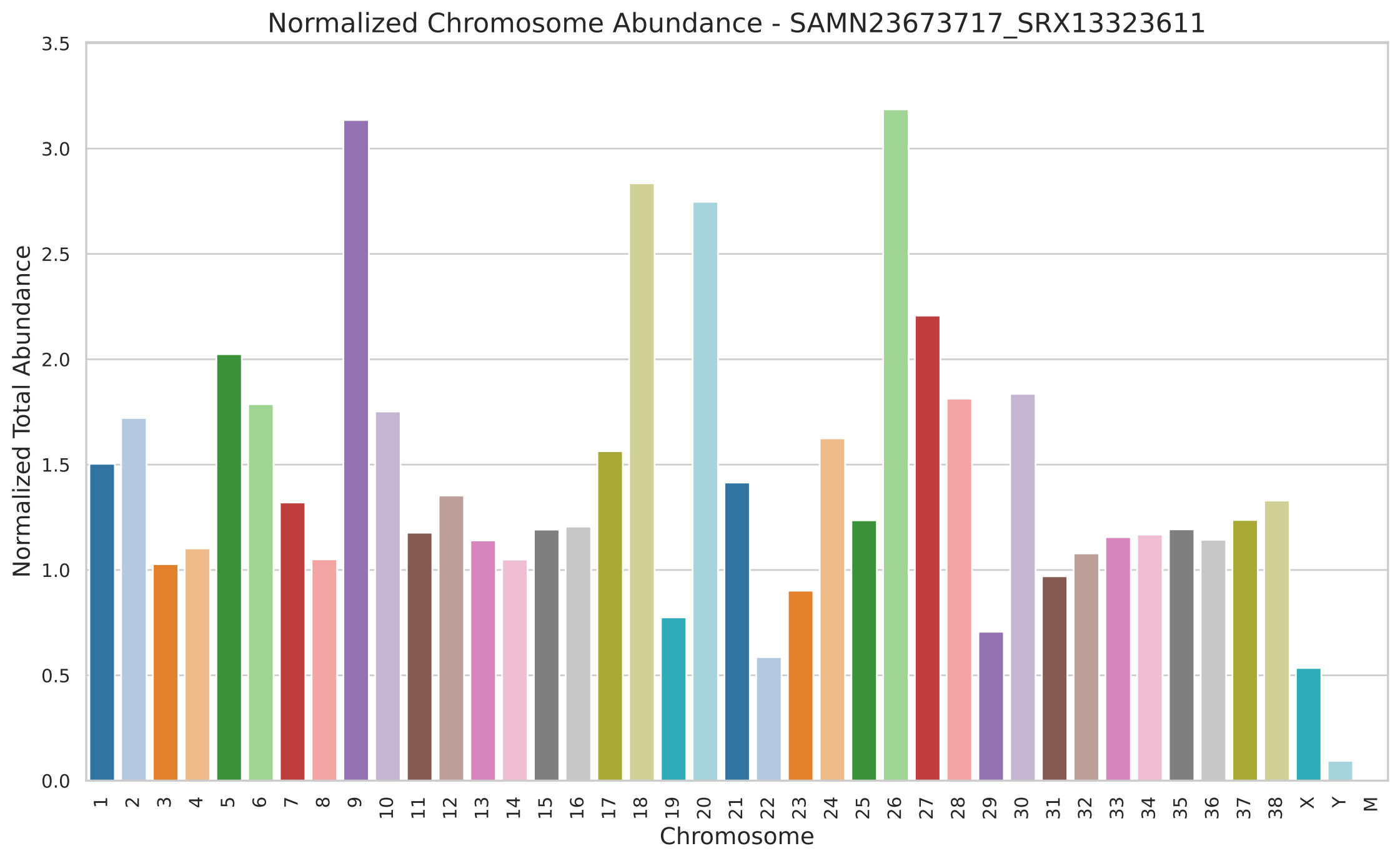

Normalized Chromosome Abundance - SAMN23673712_SRX13323606
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

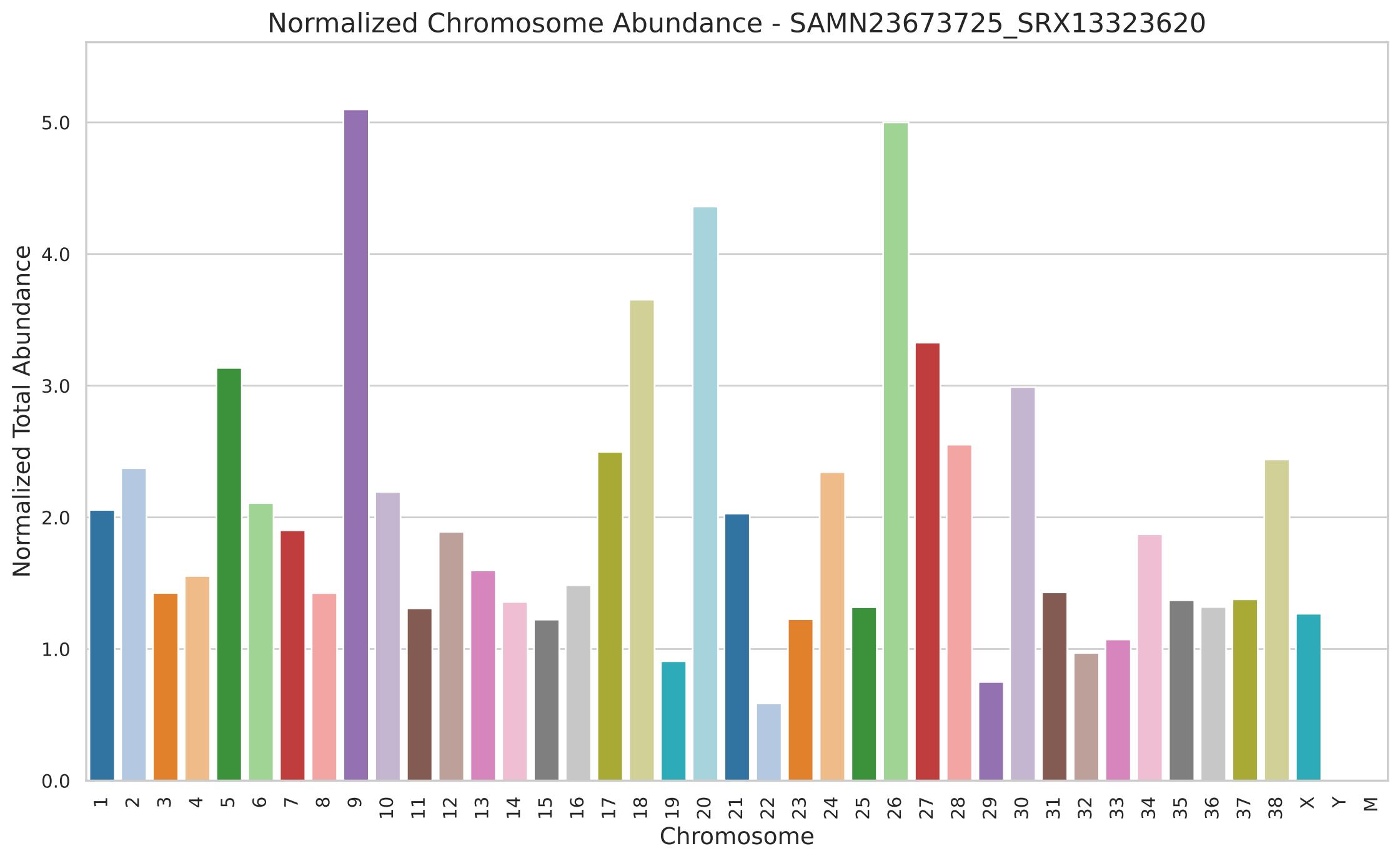

Normalized Chromosome Abundance - SAMN23673687_SRX13323578
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

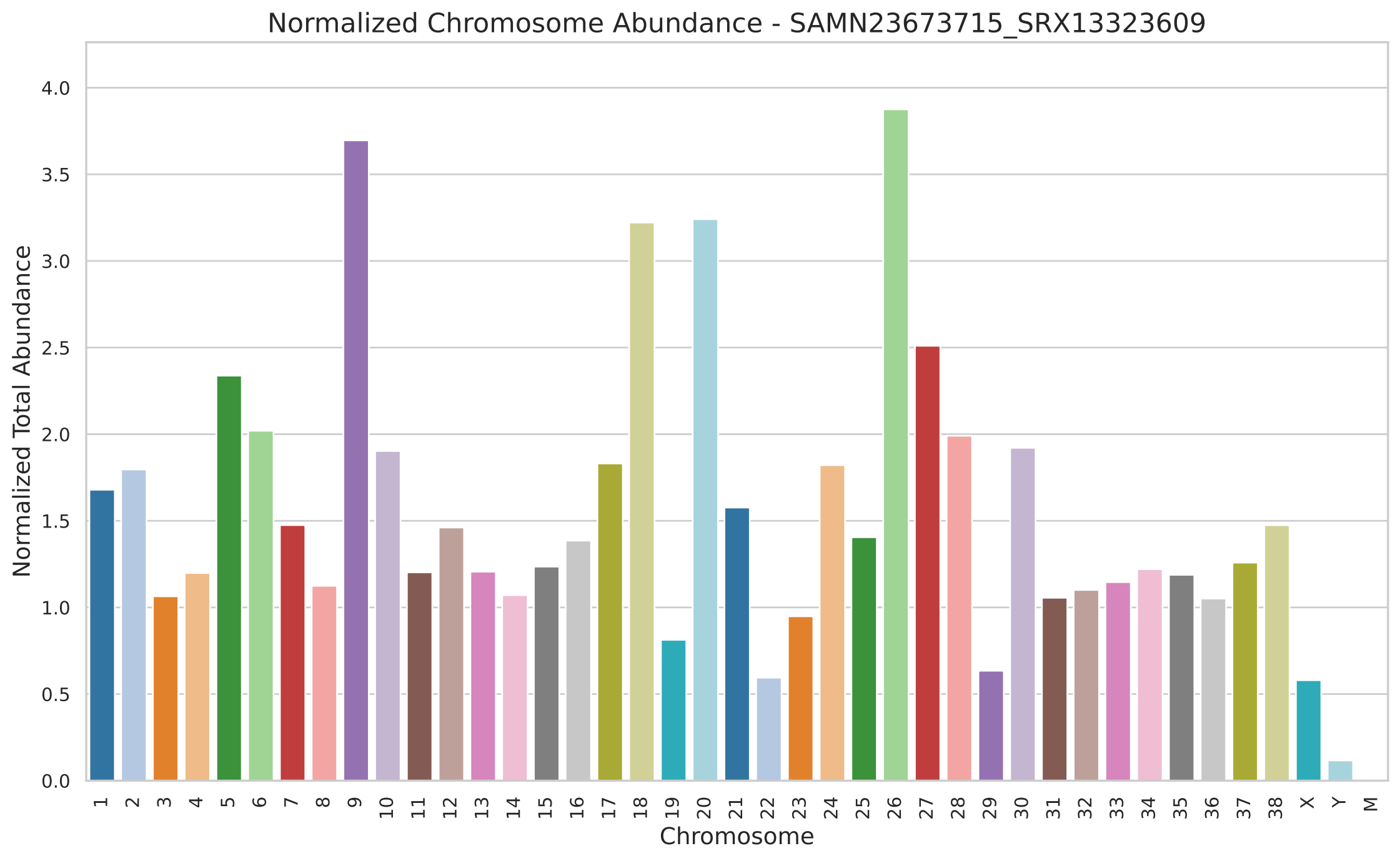

Normalized Chromosome Abundance - SAMN23673739_SRX13323635
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

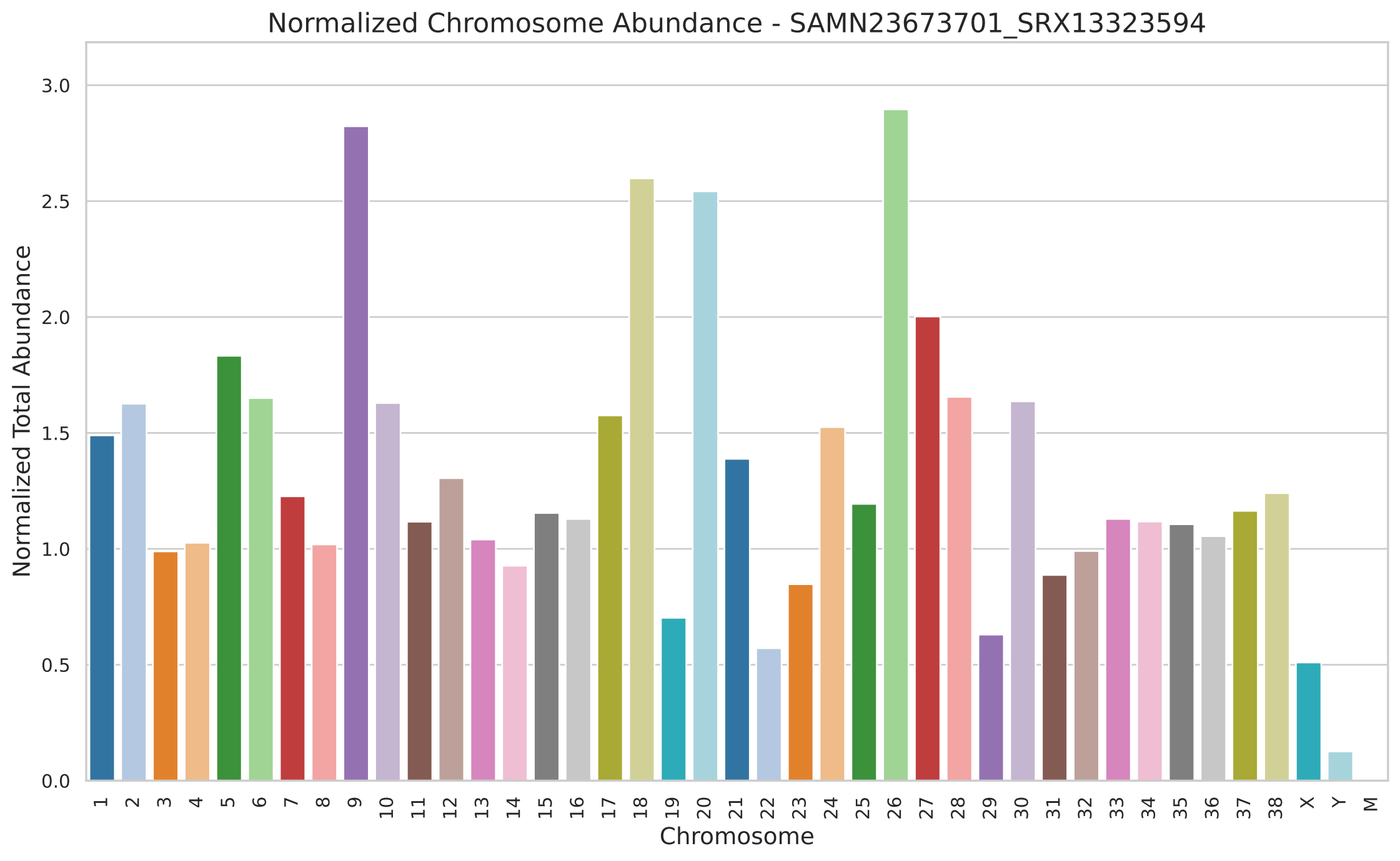

Normalized Chromosome Abundance - SAMN23673719_SRX13323613
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

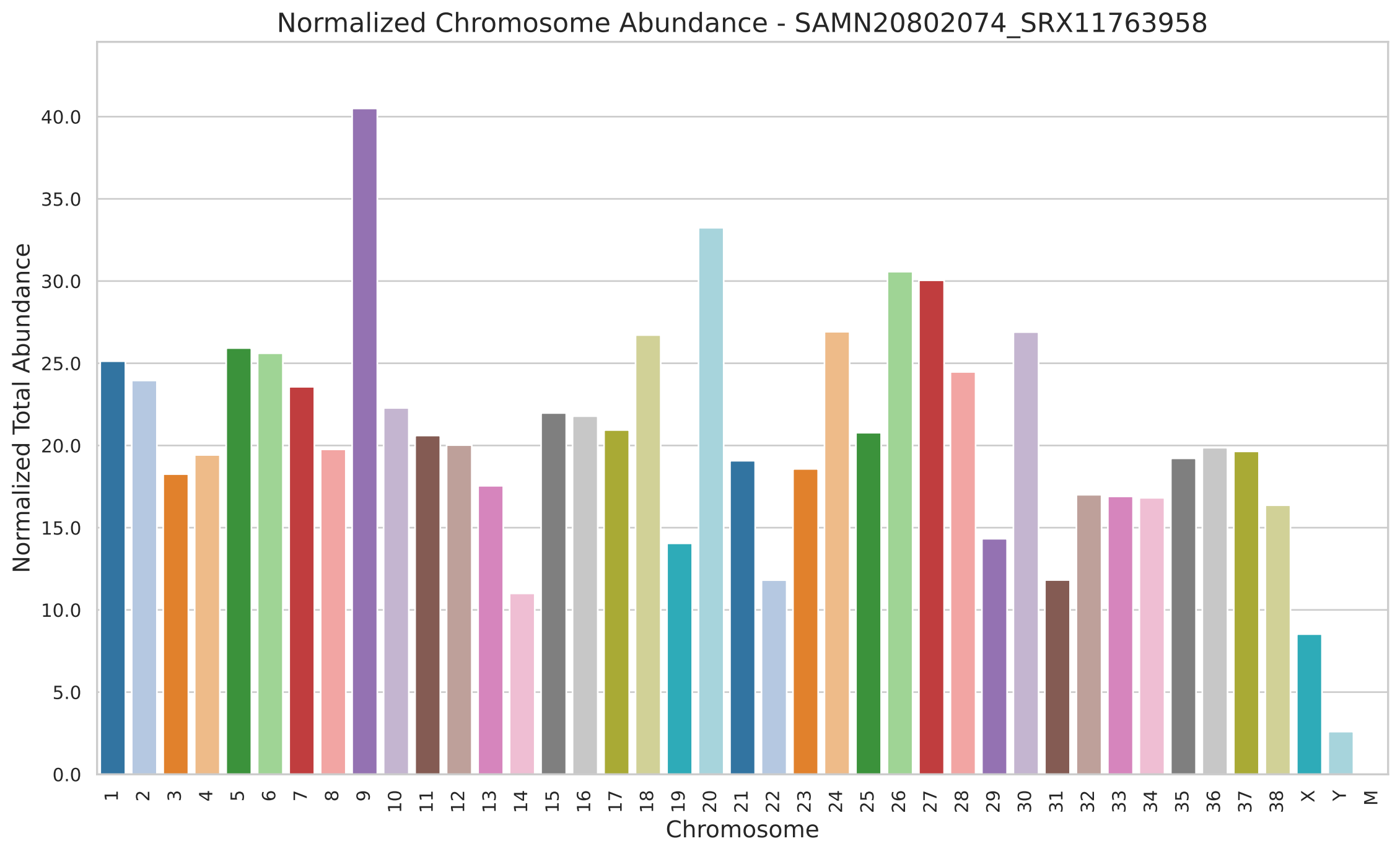

Normalized Chromosome Abundance - SAMN23673720_SRX13323614
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

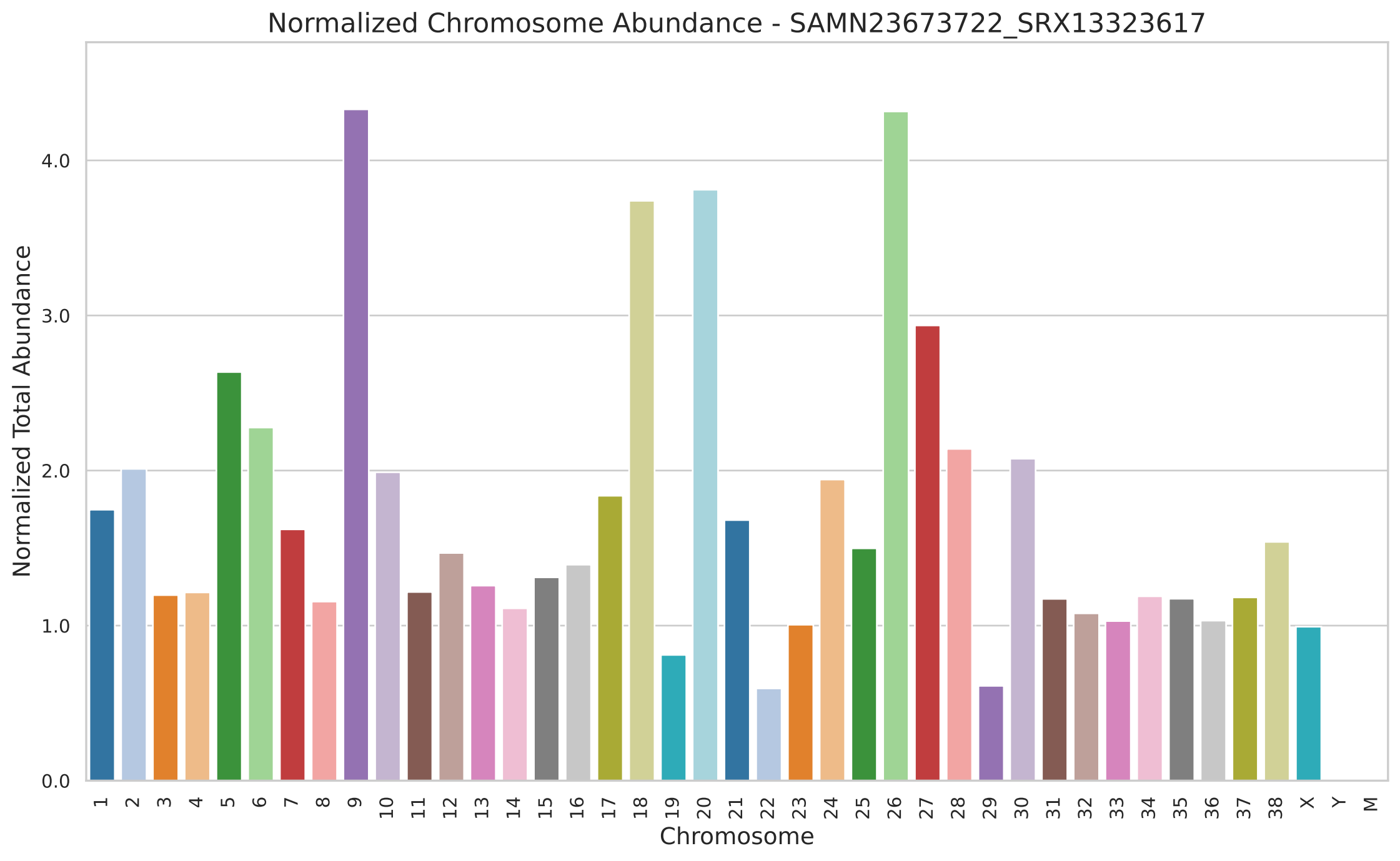

Normalized Chromosome Abundance - SAMN23673717_SRX13323611
Normalized Total Abundance
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

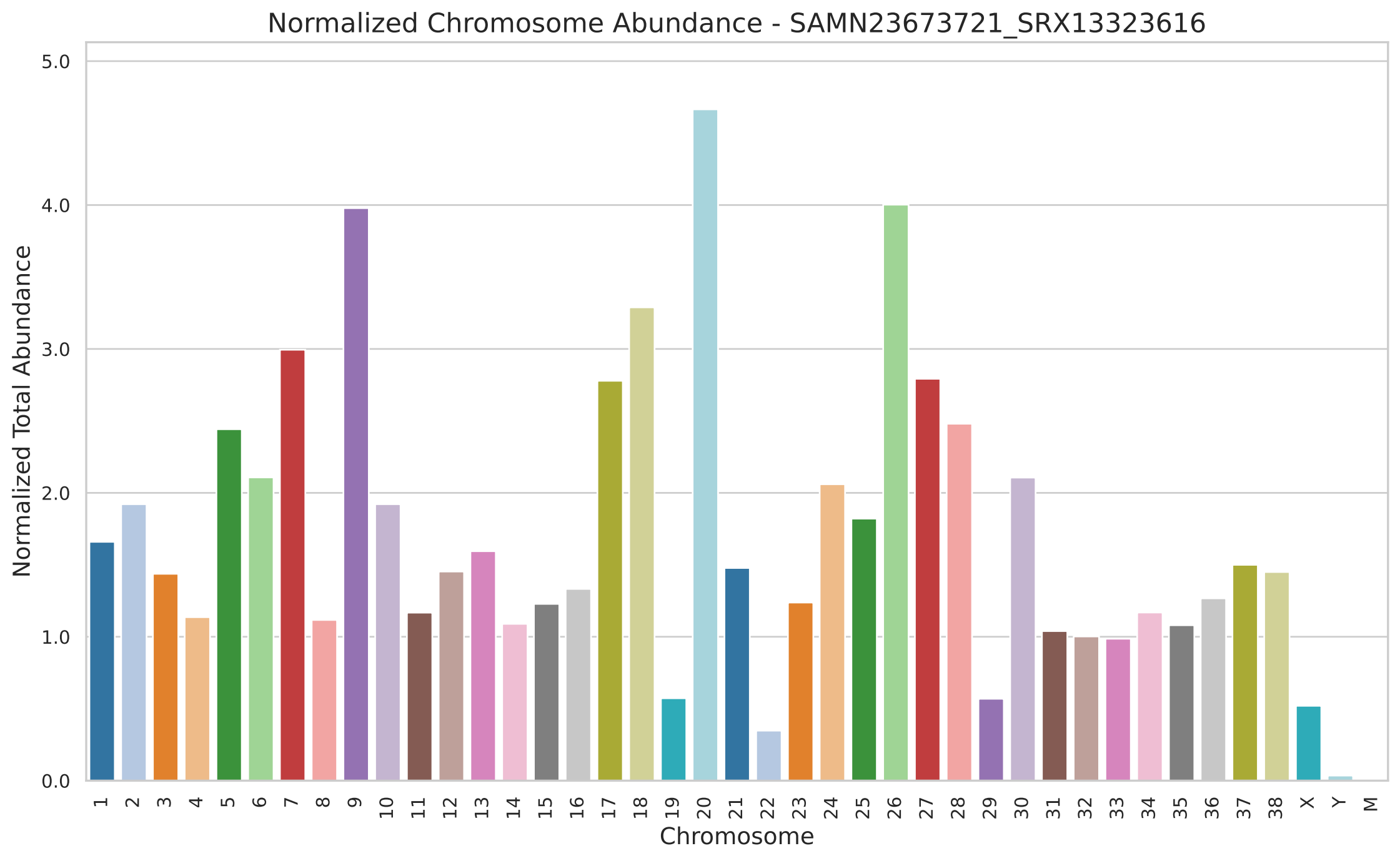

Normalized Chromosome Abundance - SAMN23673725_SRX13323620
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

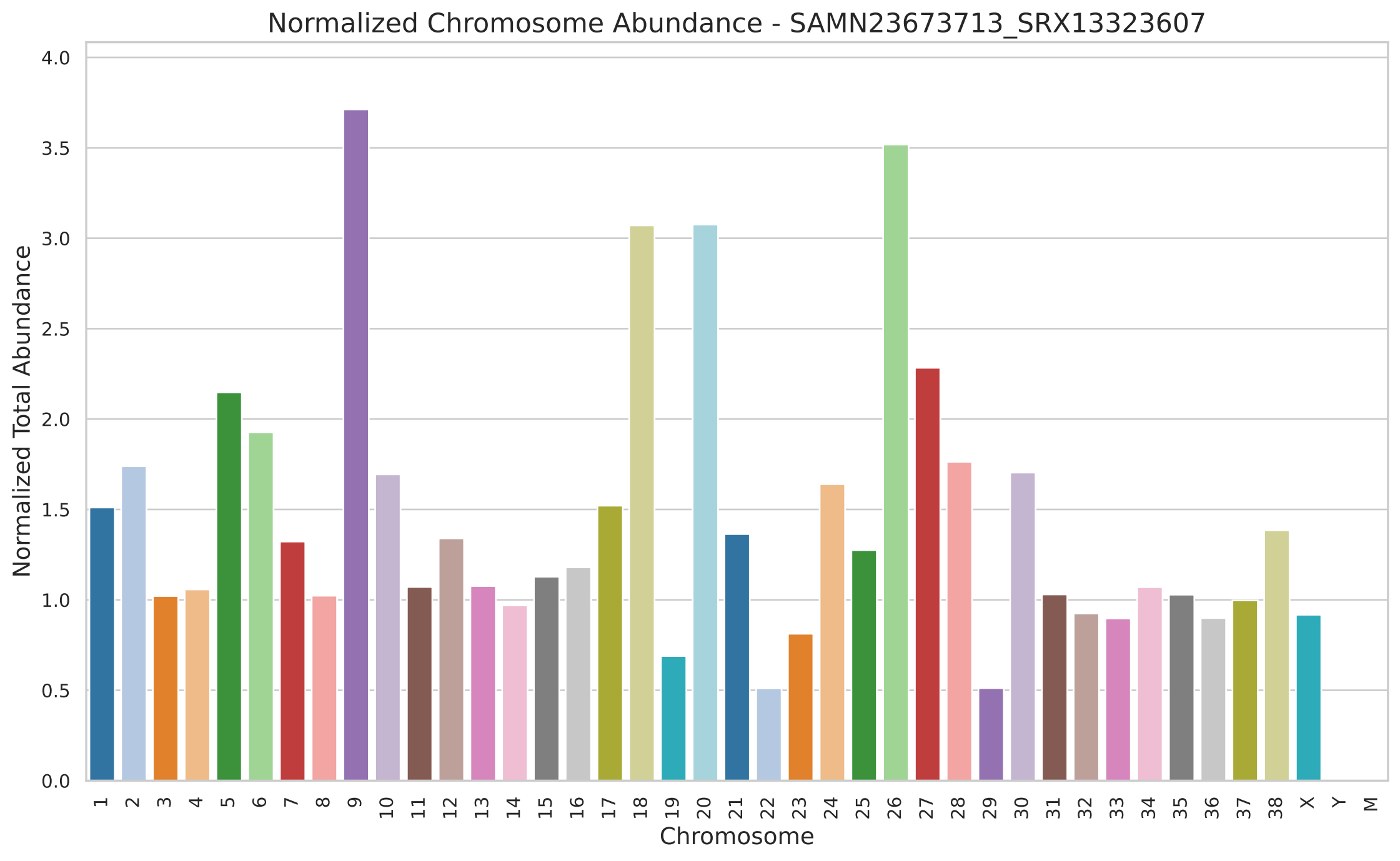

Normalized Chromosome Abundance - SAMN23673715_SRX13323609
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

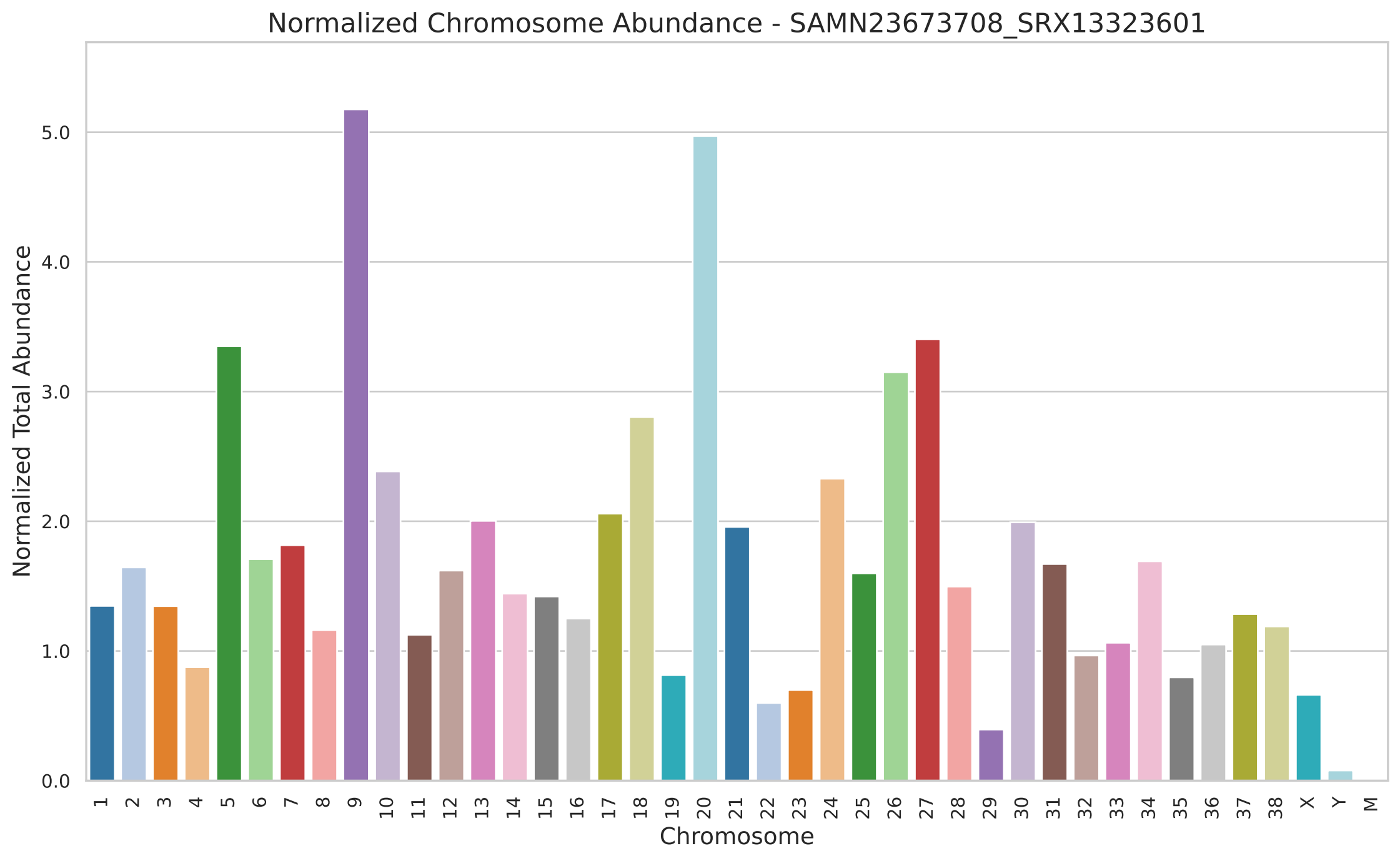

Normalized Chromosome Abundance - SAMN23673701_SRX13323594
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

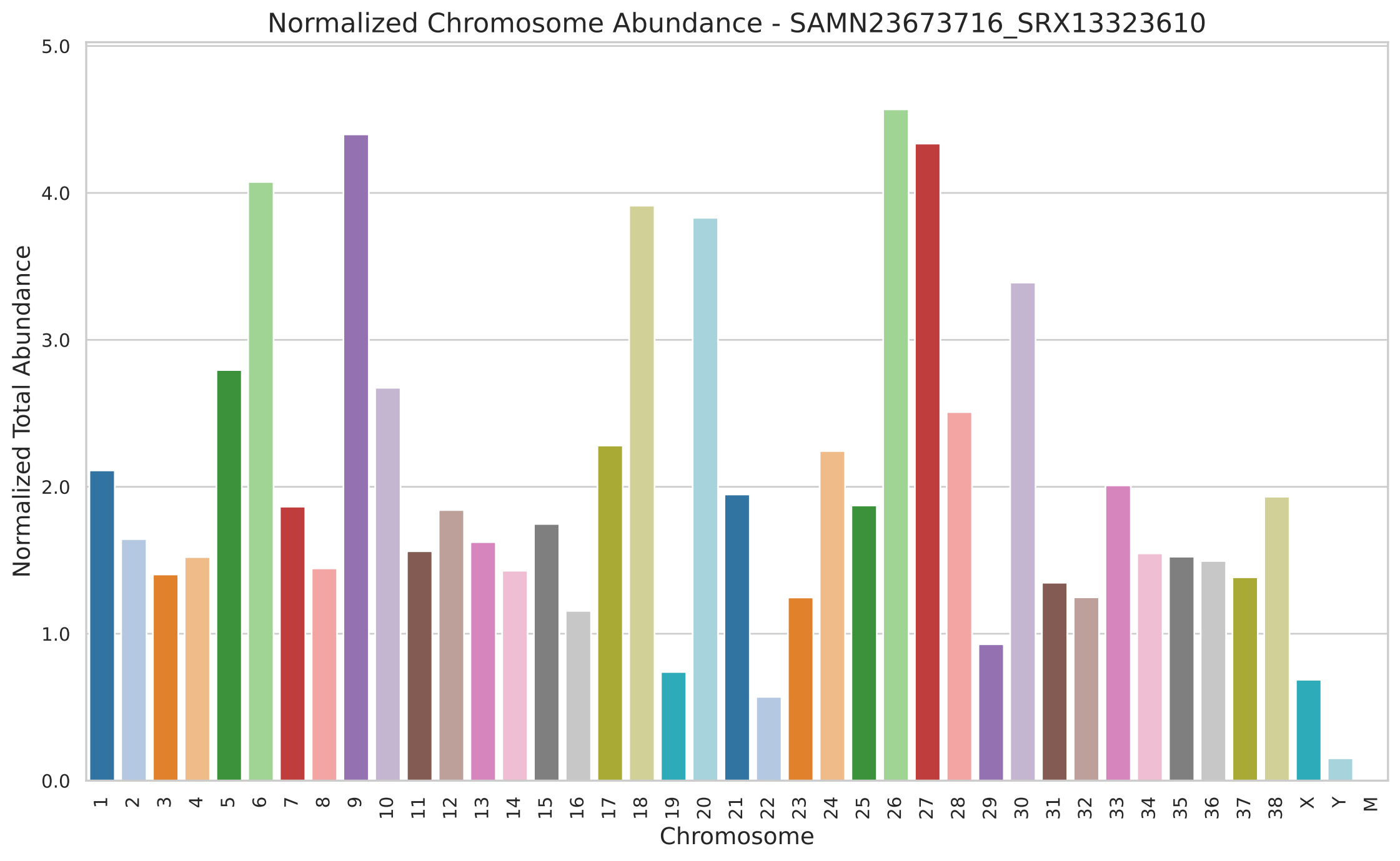

Normalized Chromosome Abundance - SAMN20802074_SRX11763958
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
35.0
40.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

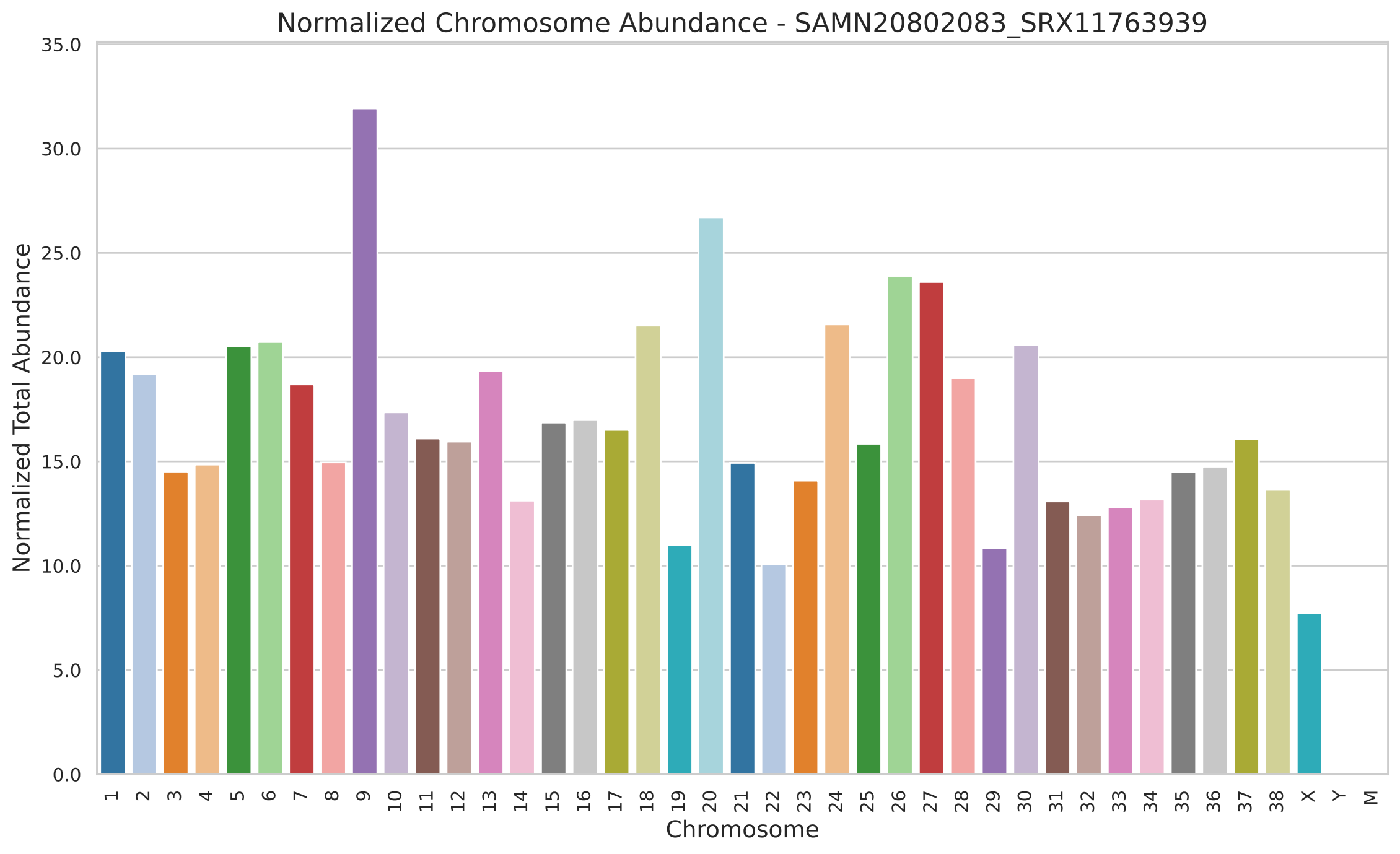

Normalized Chromosome Abundance - SAMN23673722_SRX13323617
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

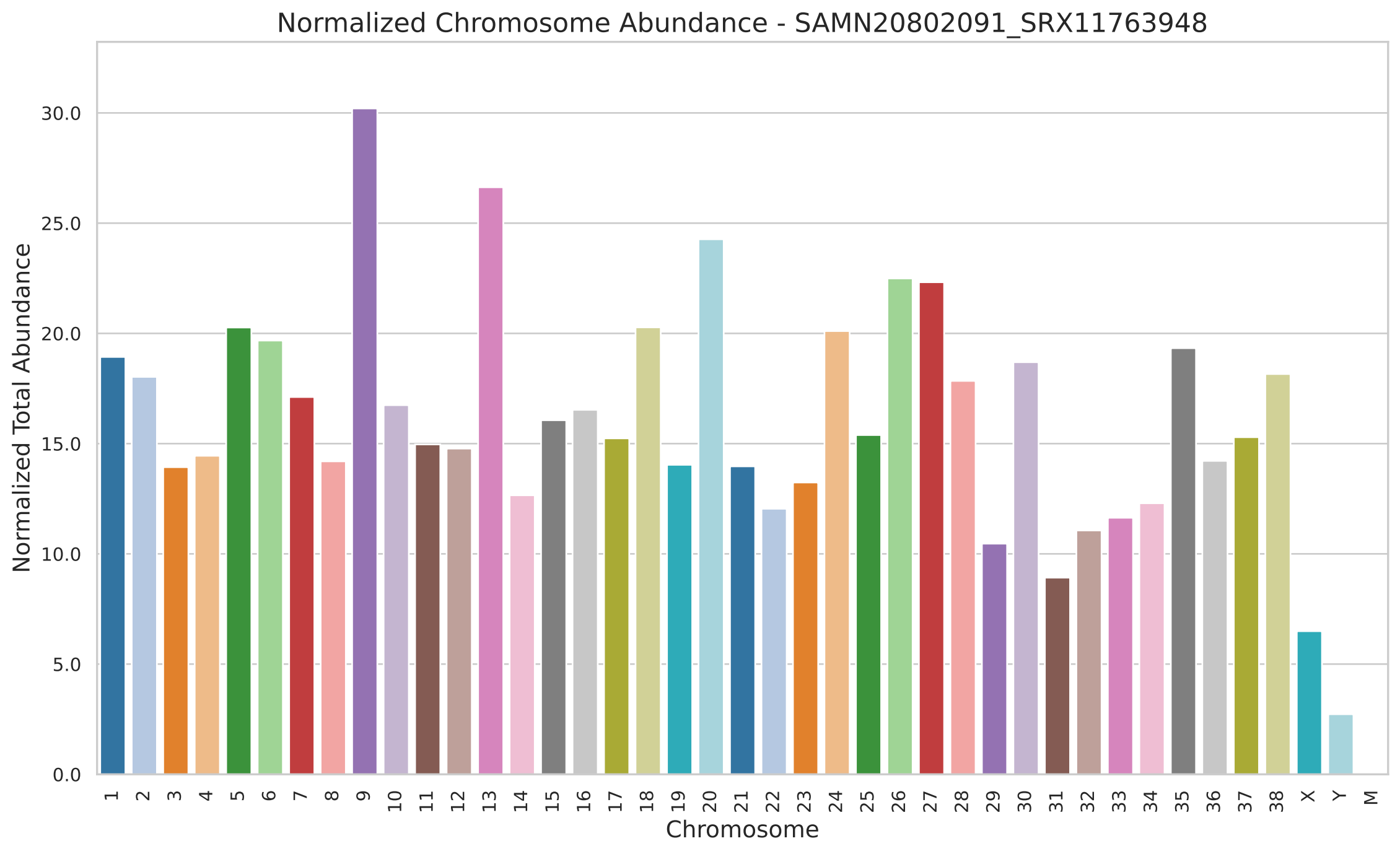

Normalized Chromosome Abundance - SAMN23673721_SRX13323616
Normalized Total Abundance
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

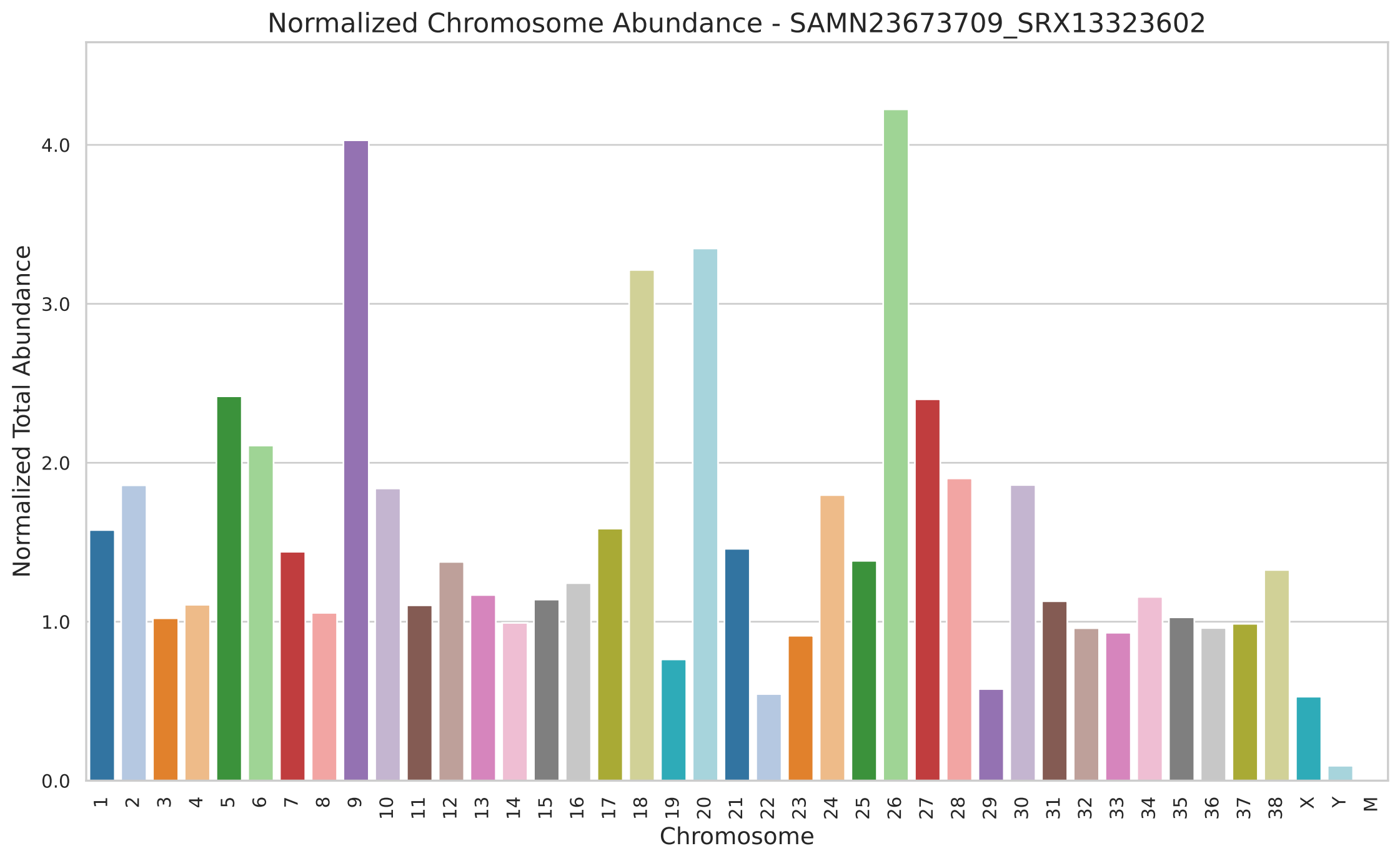

Normalized Chromosome Abundance - SAMN23673713_SRX13323607
Normalized Total Abundance
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

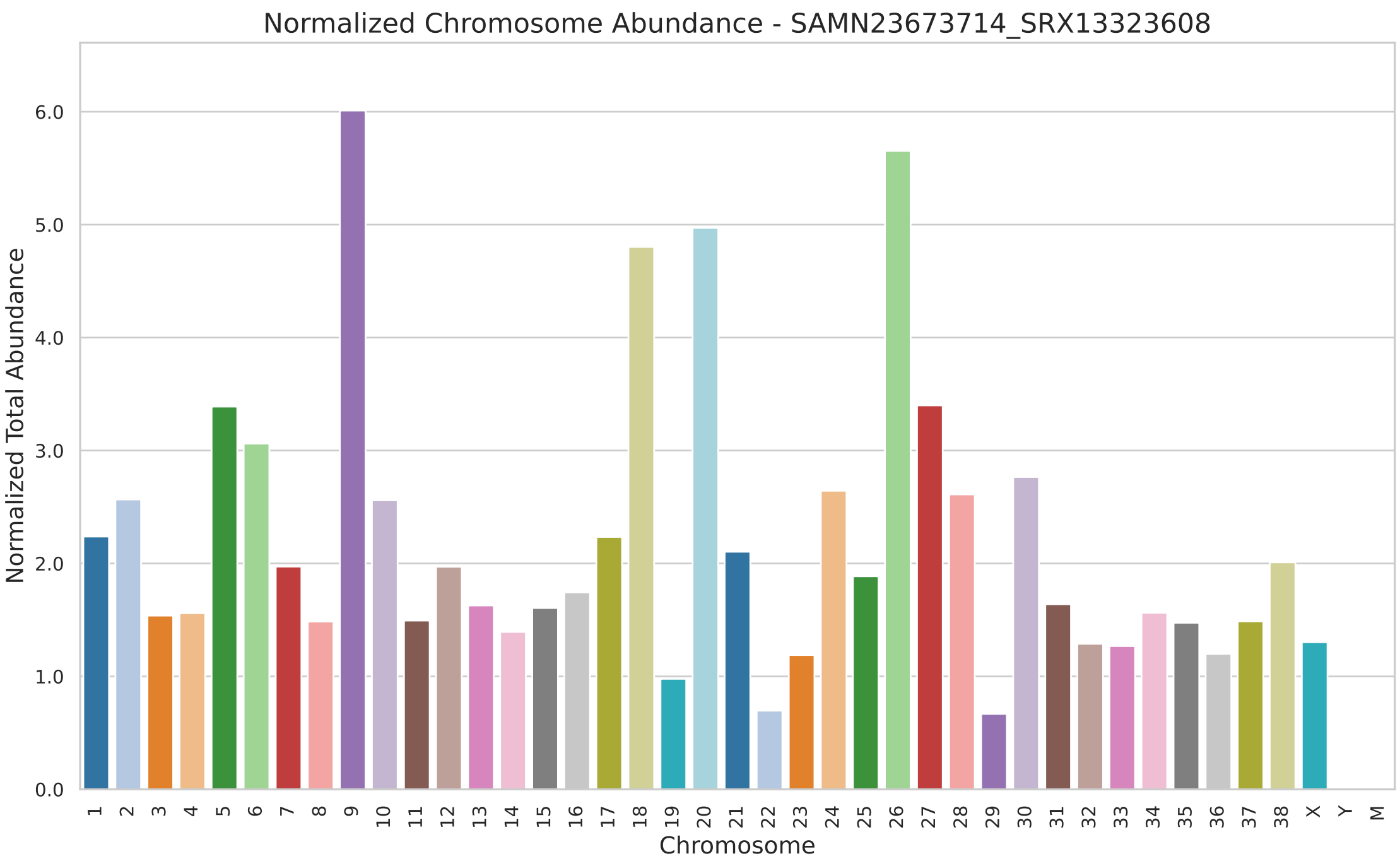

Normalized Chromosome Abundance - SAMN23673708_SRX13323601
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

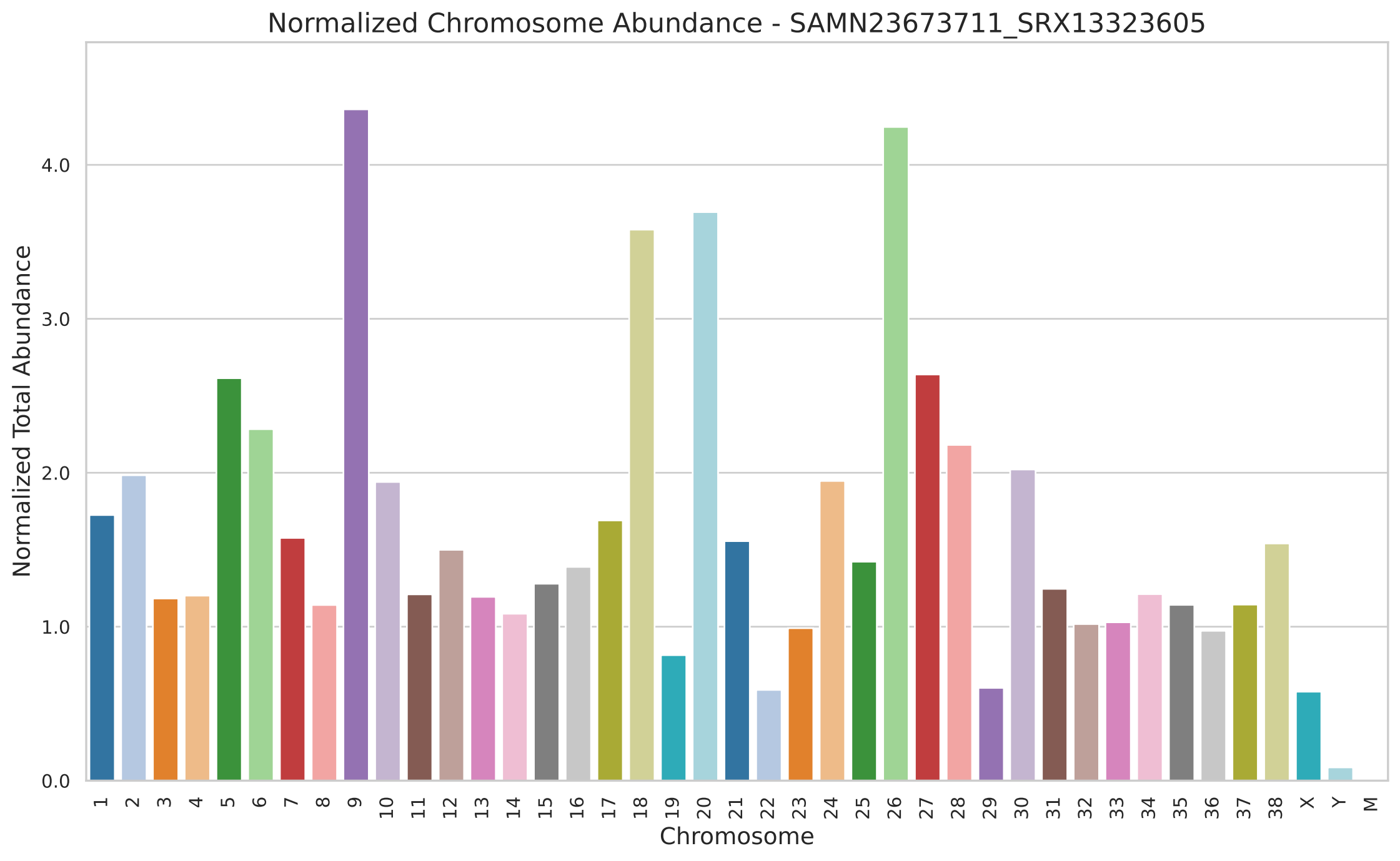

Normalized Chromosome Abundance - SAMN23673716_SRX13323610
Normalized Total Abundance
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

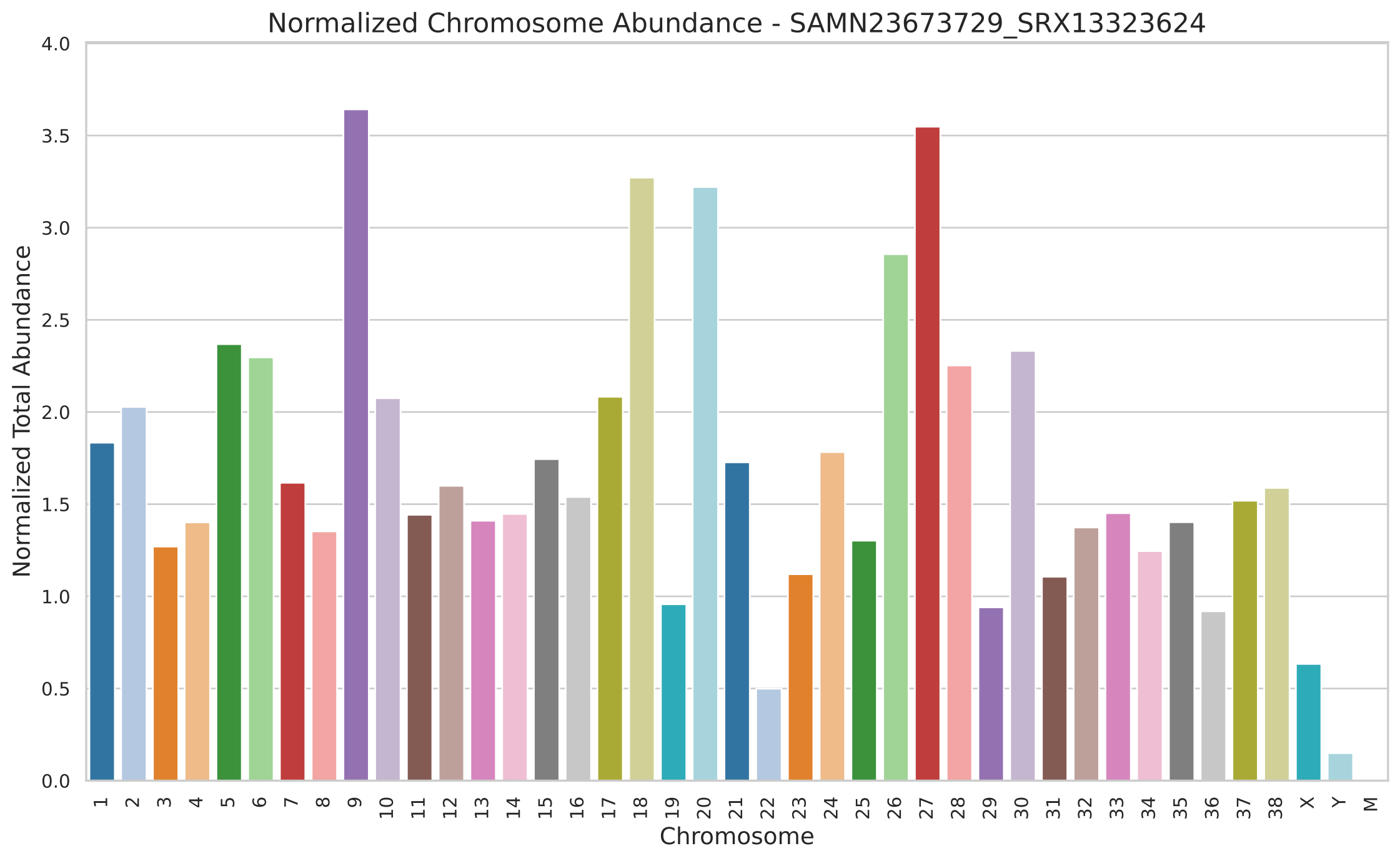

Normalized Chromosome Abundance - SAMN20802083_SRX11763939
Normalized Total Abundance
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

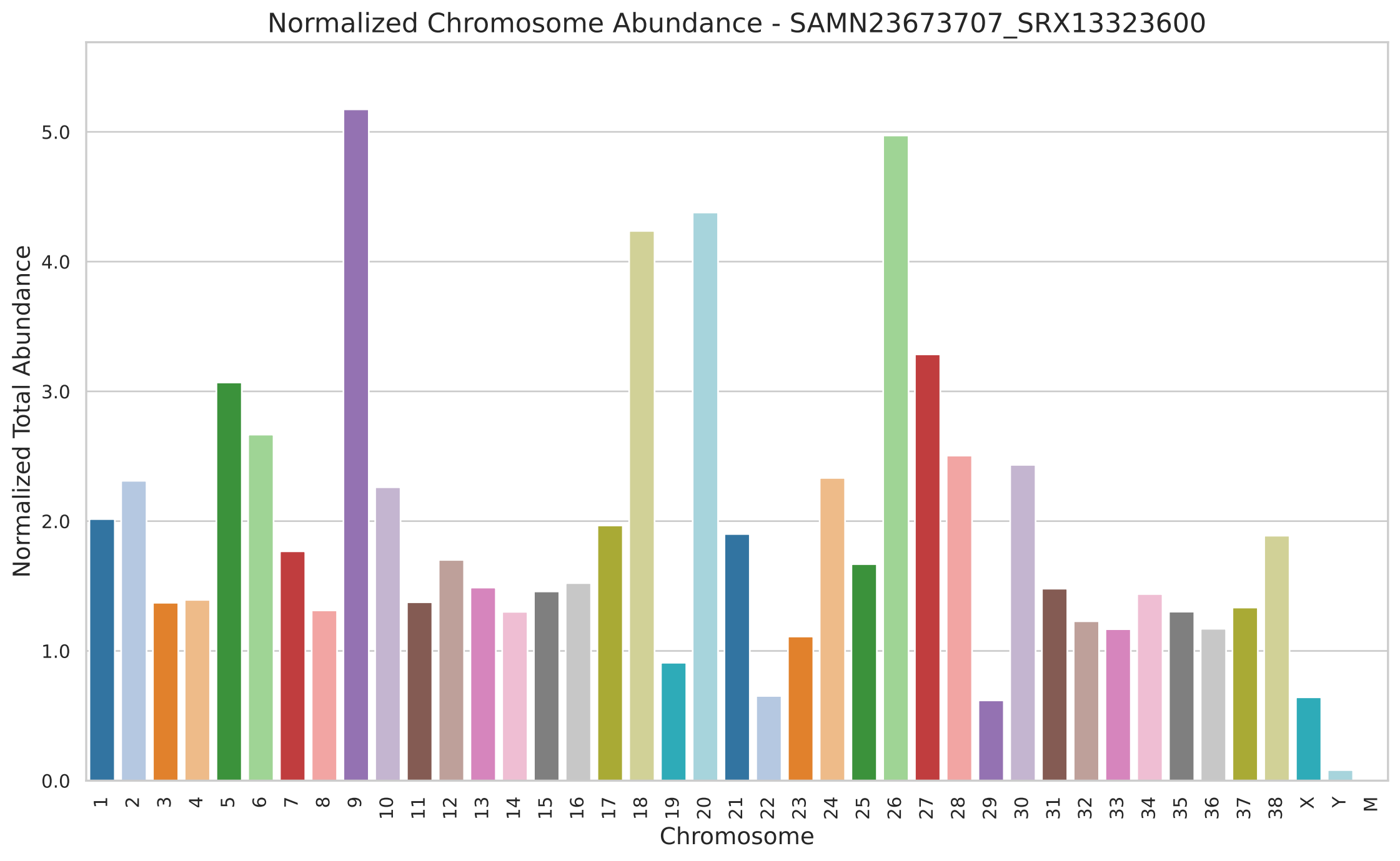

Normalized Chromosome Abundance - SAMN20802091_SRX11763948
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

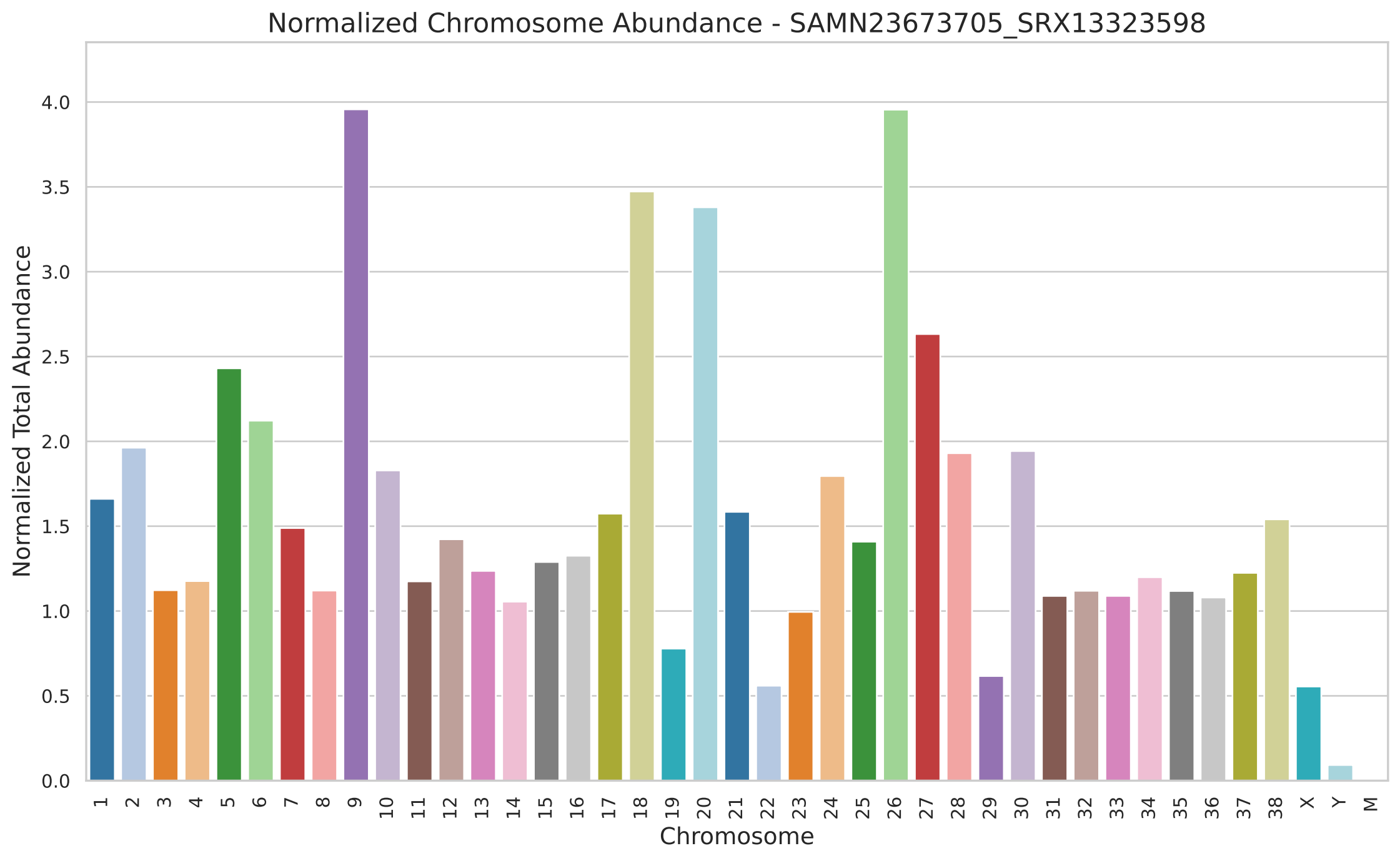

Normalized Chromosome Abundance - SAMN23673709_SRX13323602
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

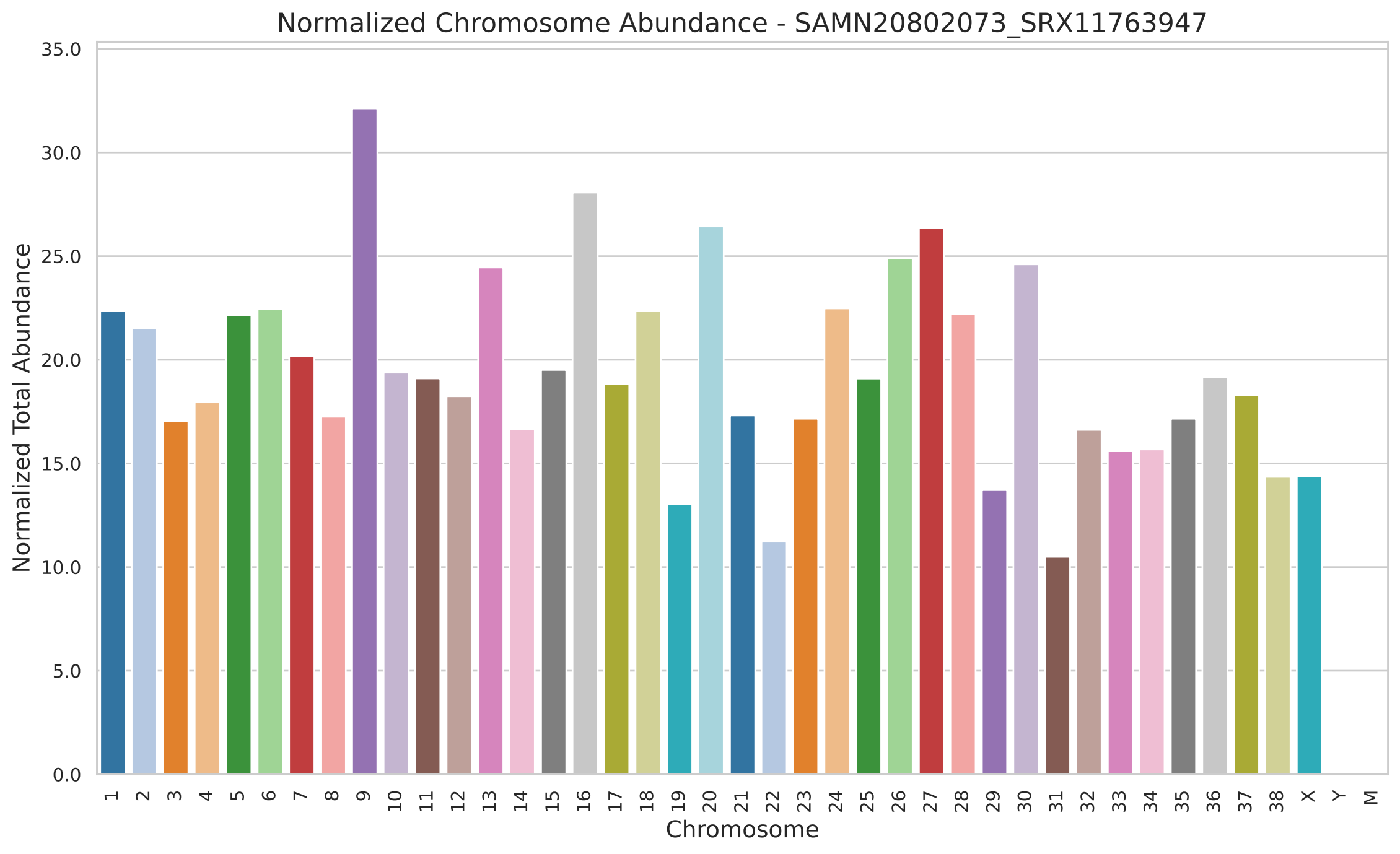

Normalized Chromosome Abundance - SAMN23673714_SRX13323608
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

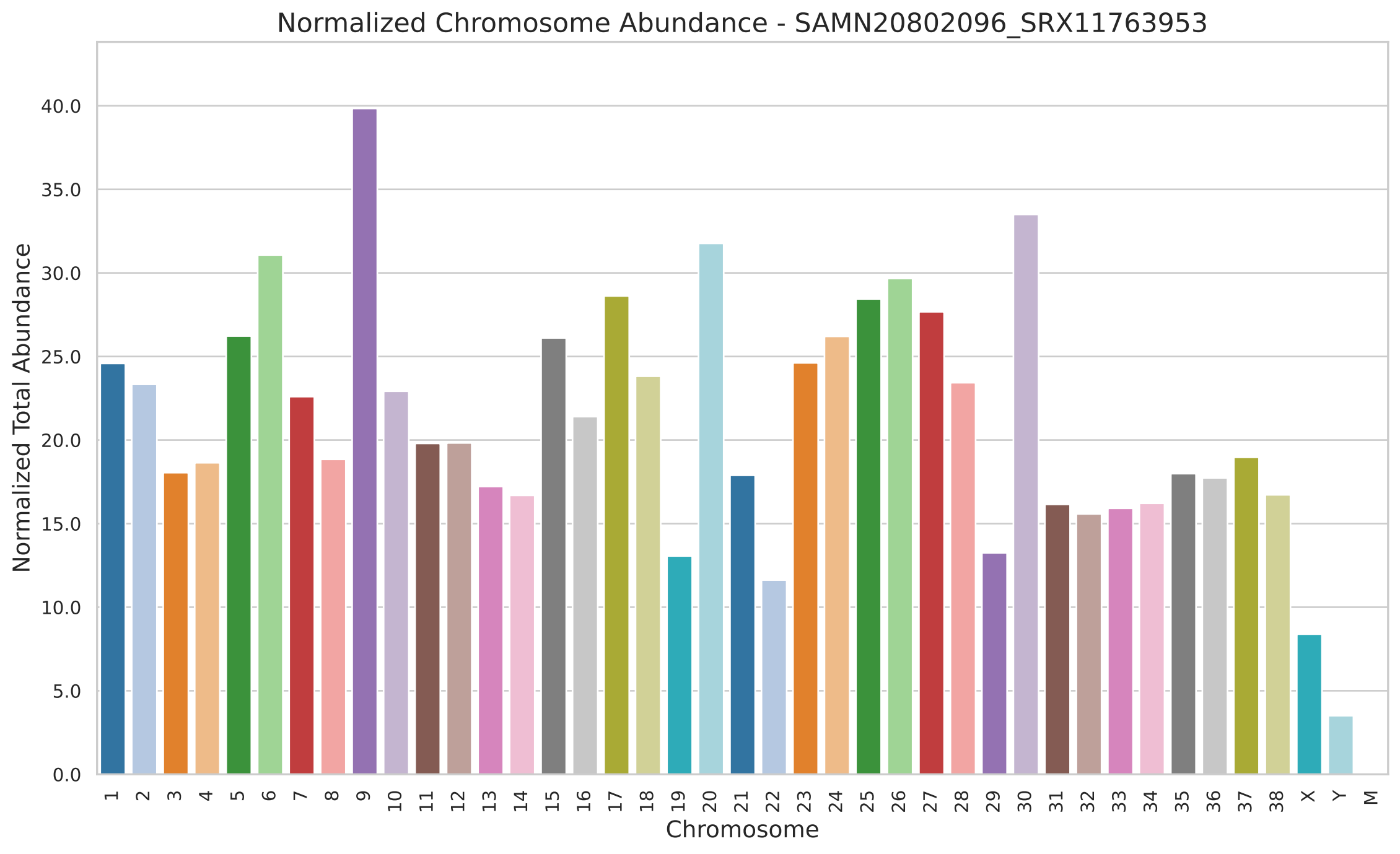

Normalized Chromosome Abundance - SAMN23673711_SRX13323605
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

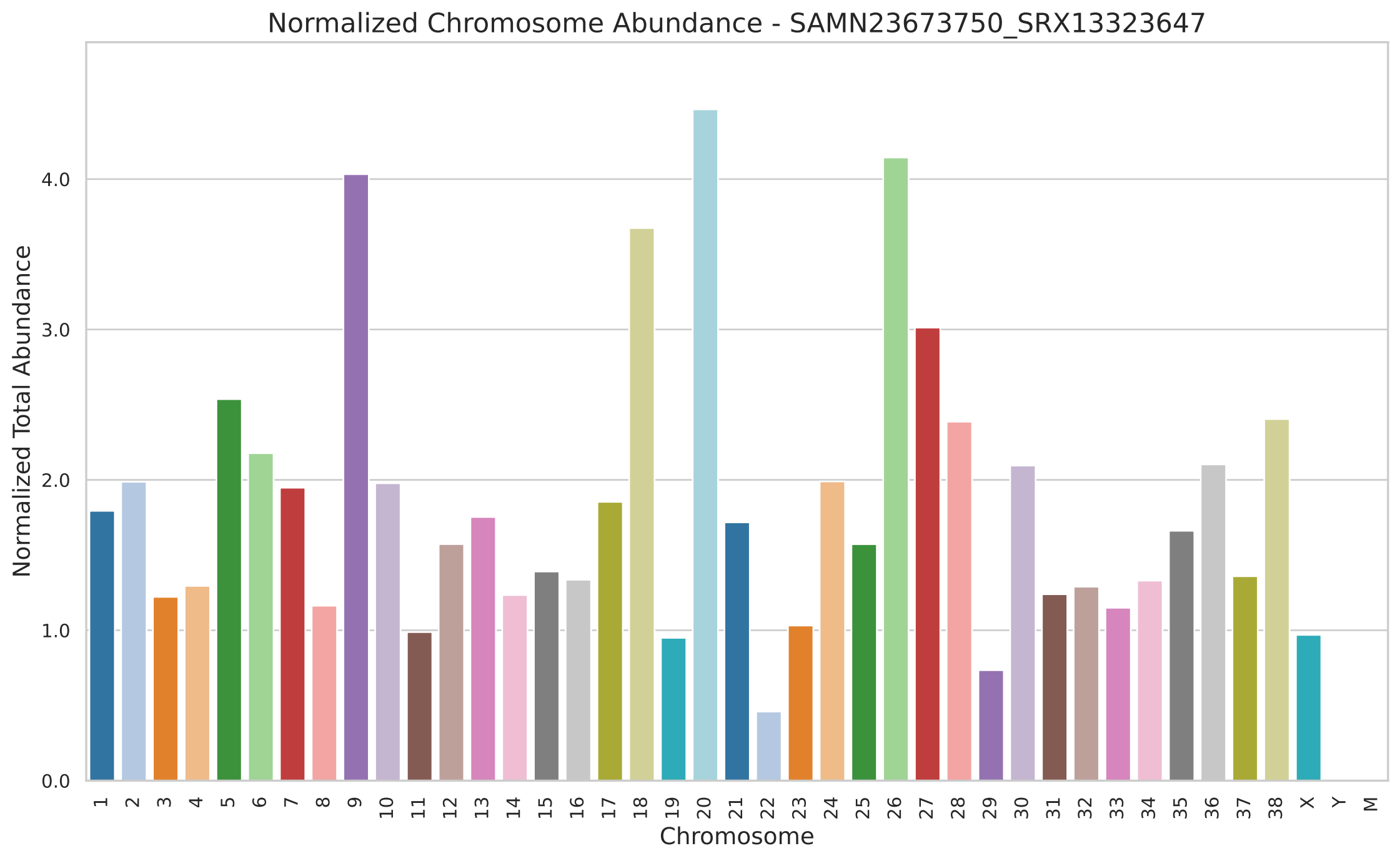

Normalized Chromosome Abundance - SAMN23673729_SRX13323624
Normalized Total Abundance
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

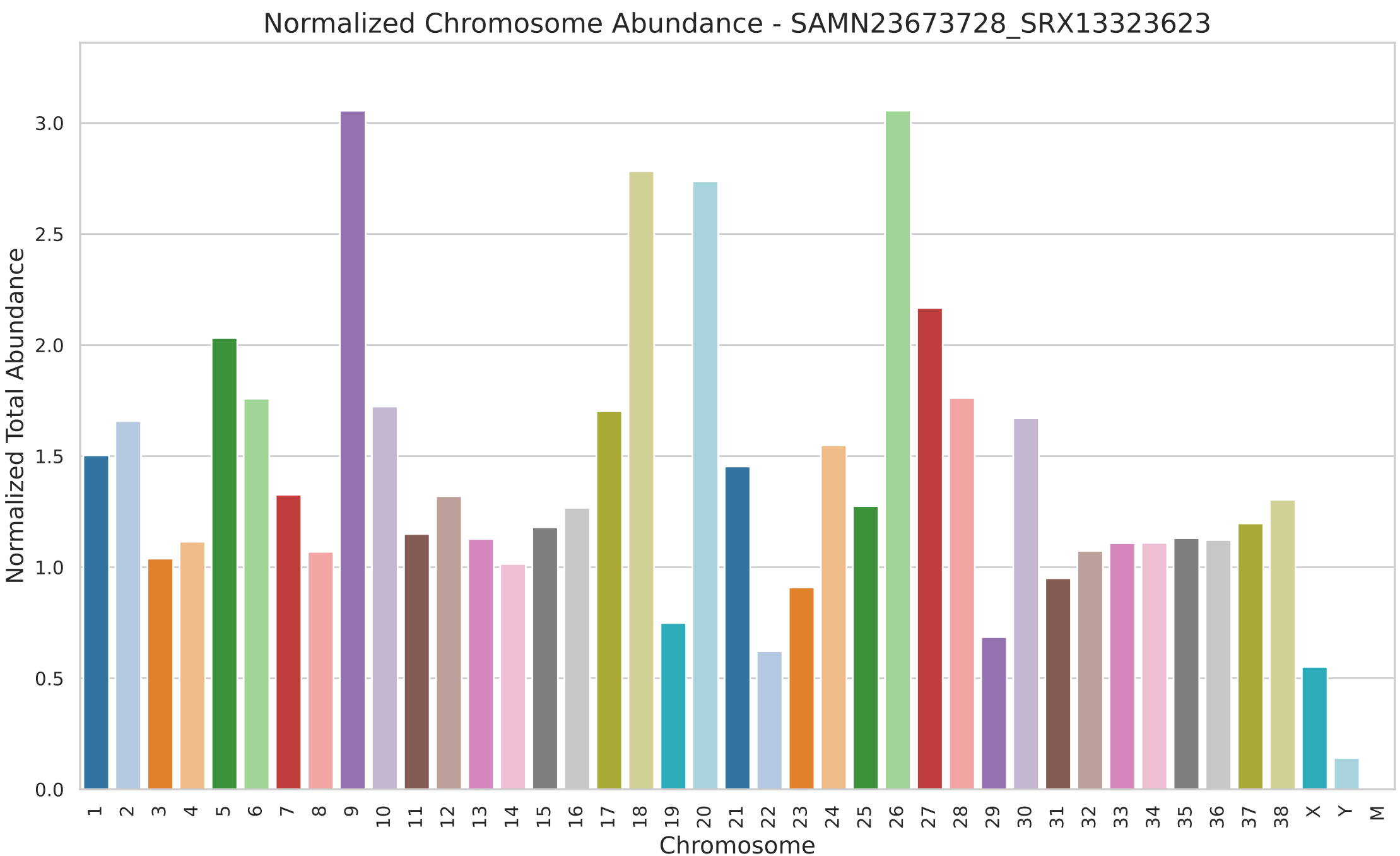

Normalized Chromosome Abundance - SAMN23673707_SRX13323600
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

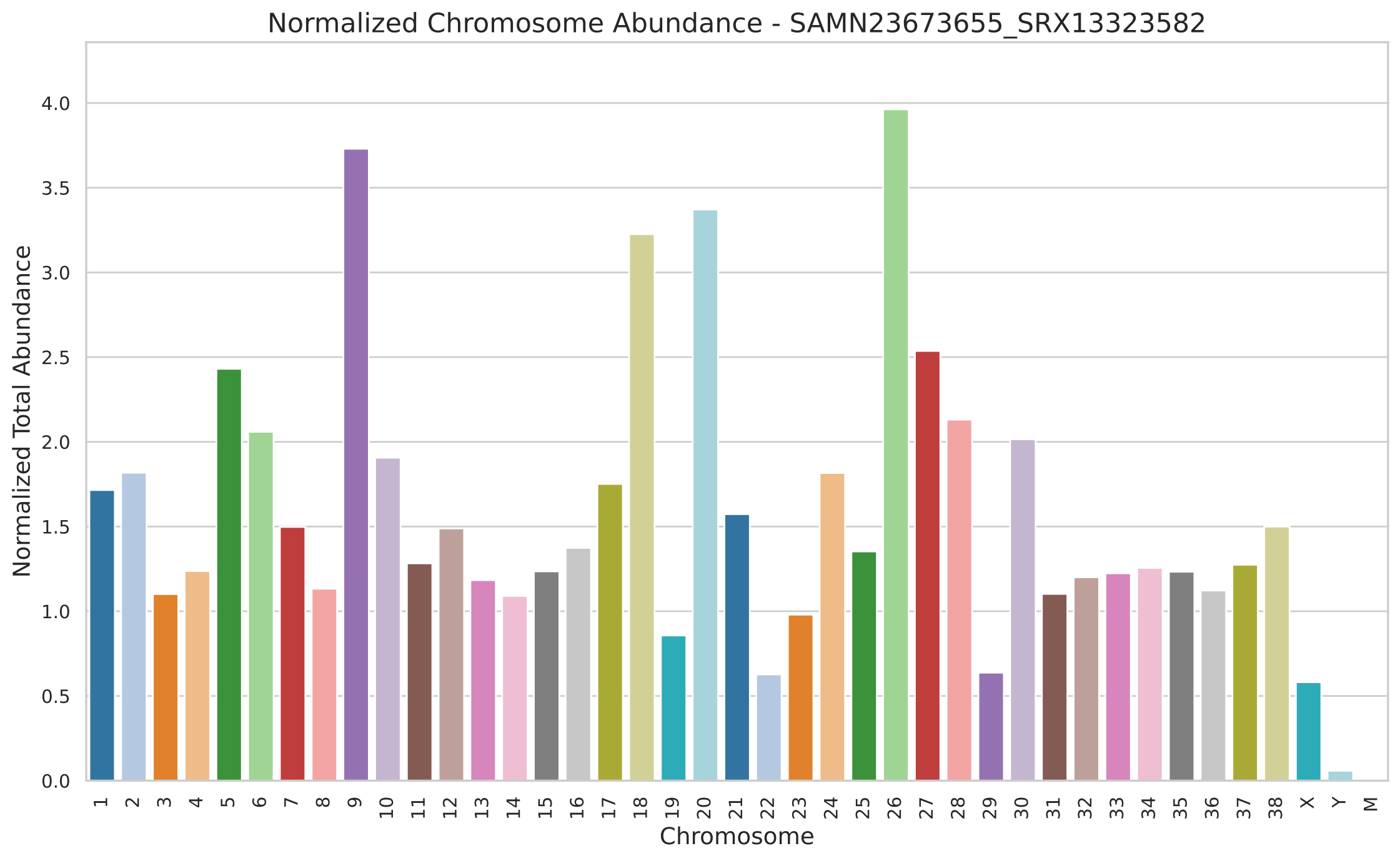

Normalized Chromosome Abundance - SAMN23673705_SRX13323598
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

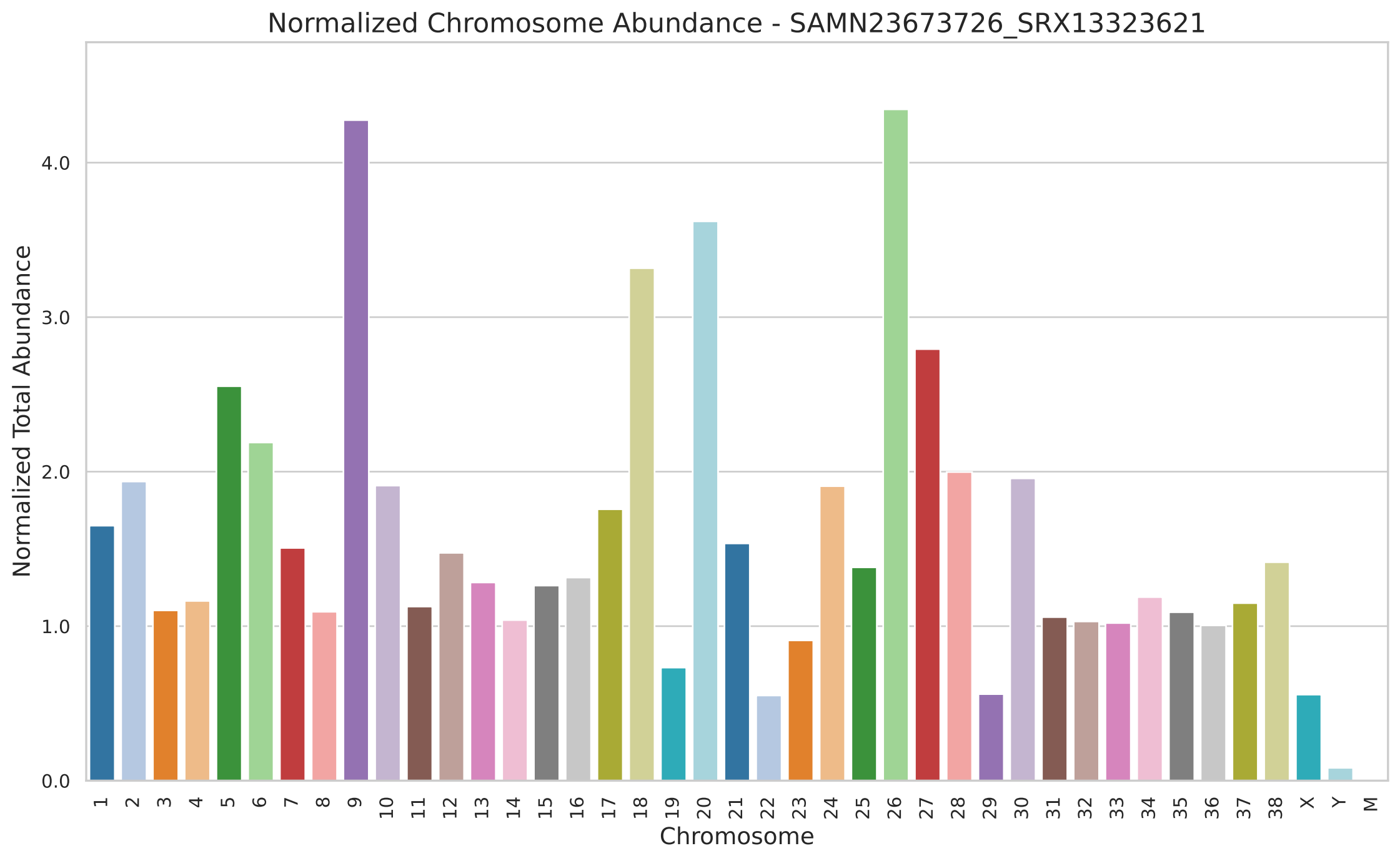

Normalized Chromosome Abundance - SAMN20802073_SRX11763947
Normalized Total Abundance
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

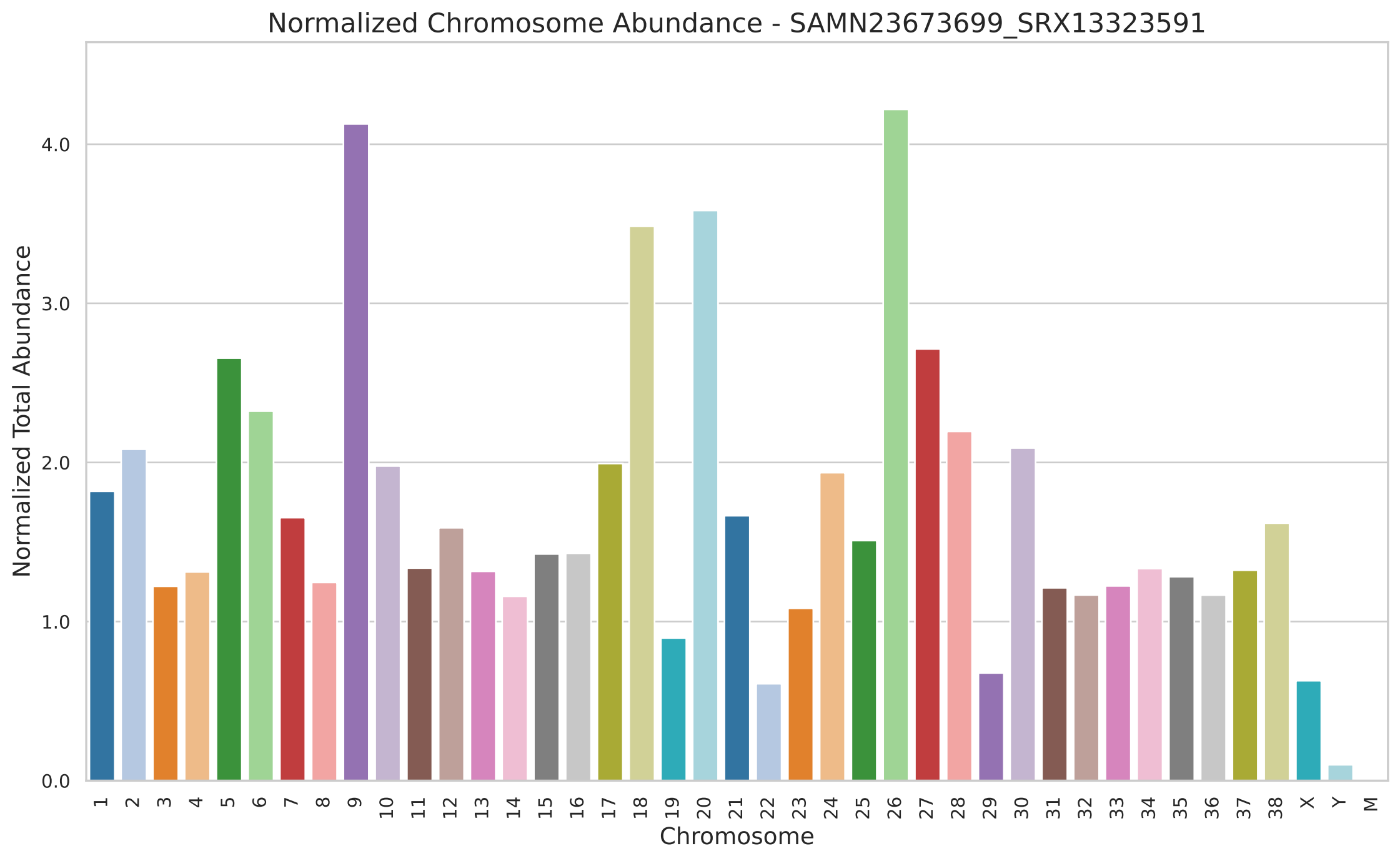

Normalized Chromosome Abundance - SAMN20802096_SRX11763953
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
35.0
40.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

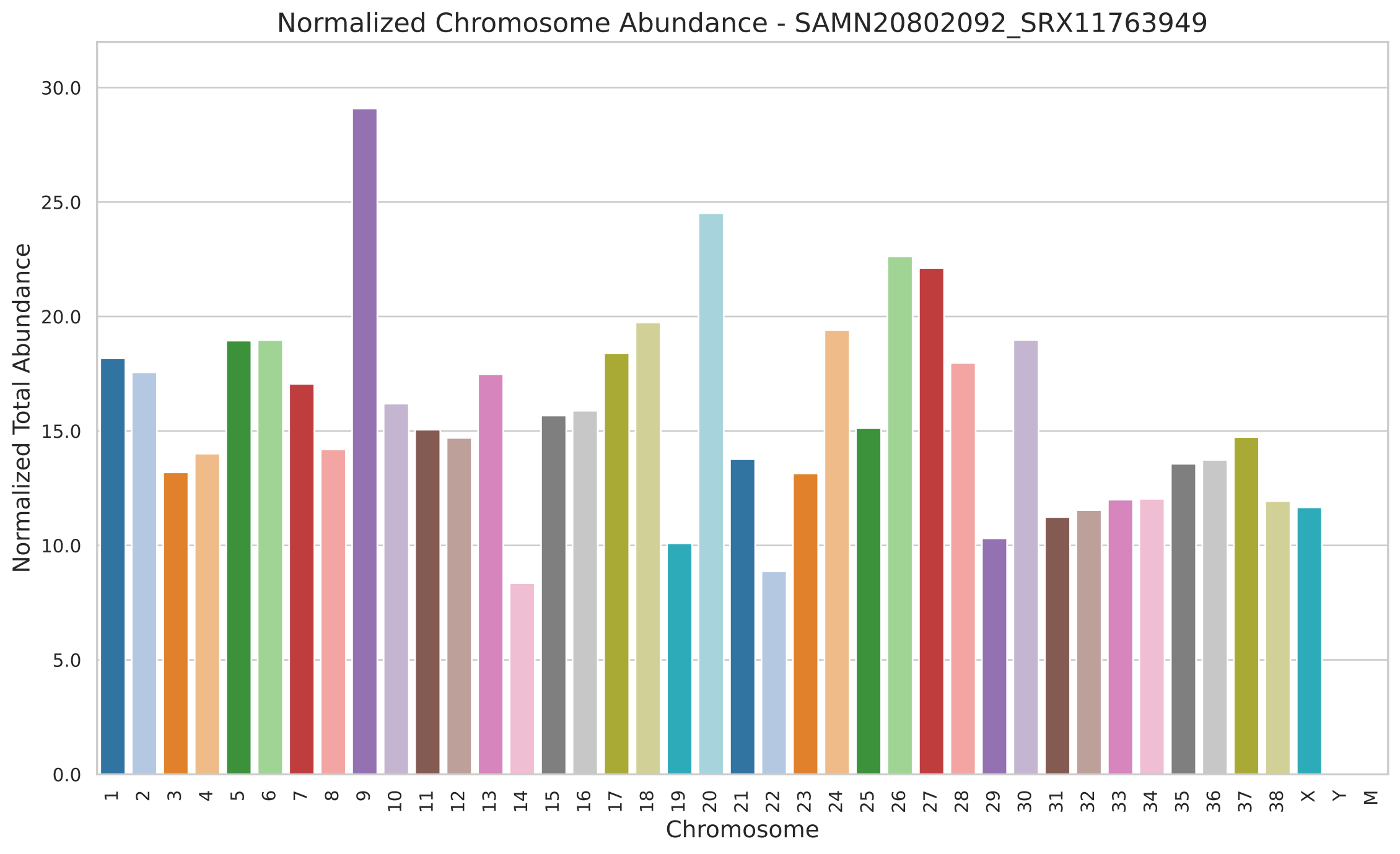

Normalized Chromosome Abundance - SAMN23673750_SRX13323647
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

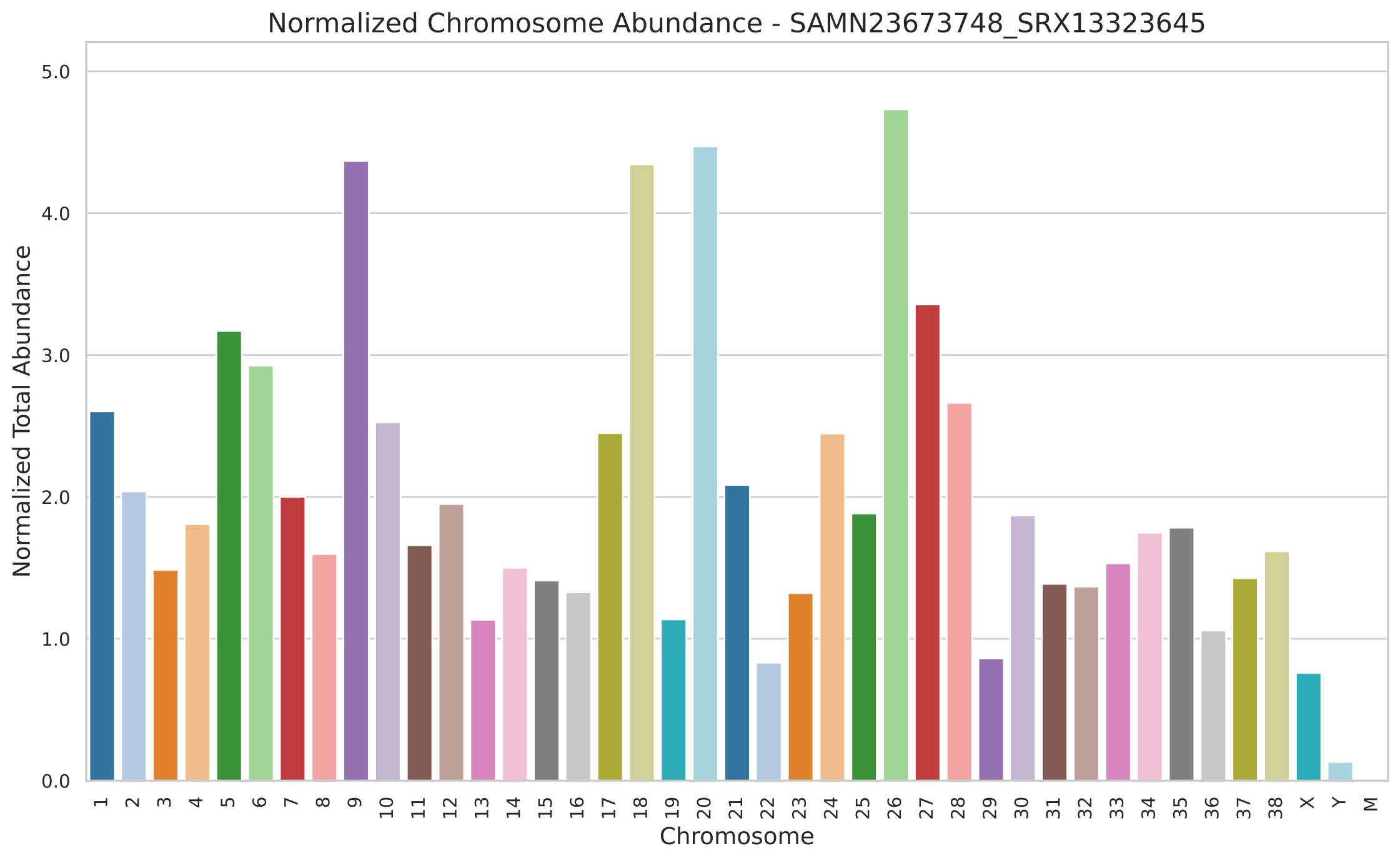

Normalized Chromosome Abundance - SAMN23673728_SRX13323623
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

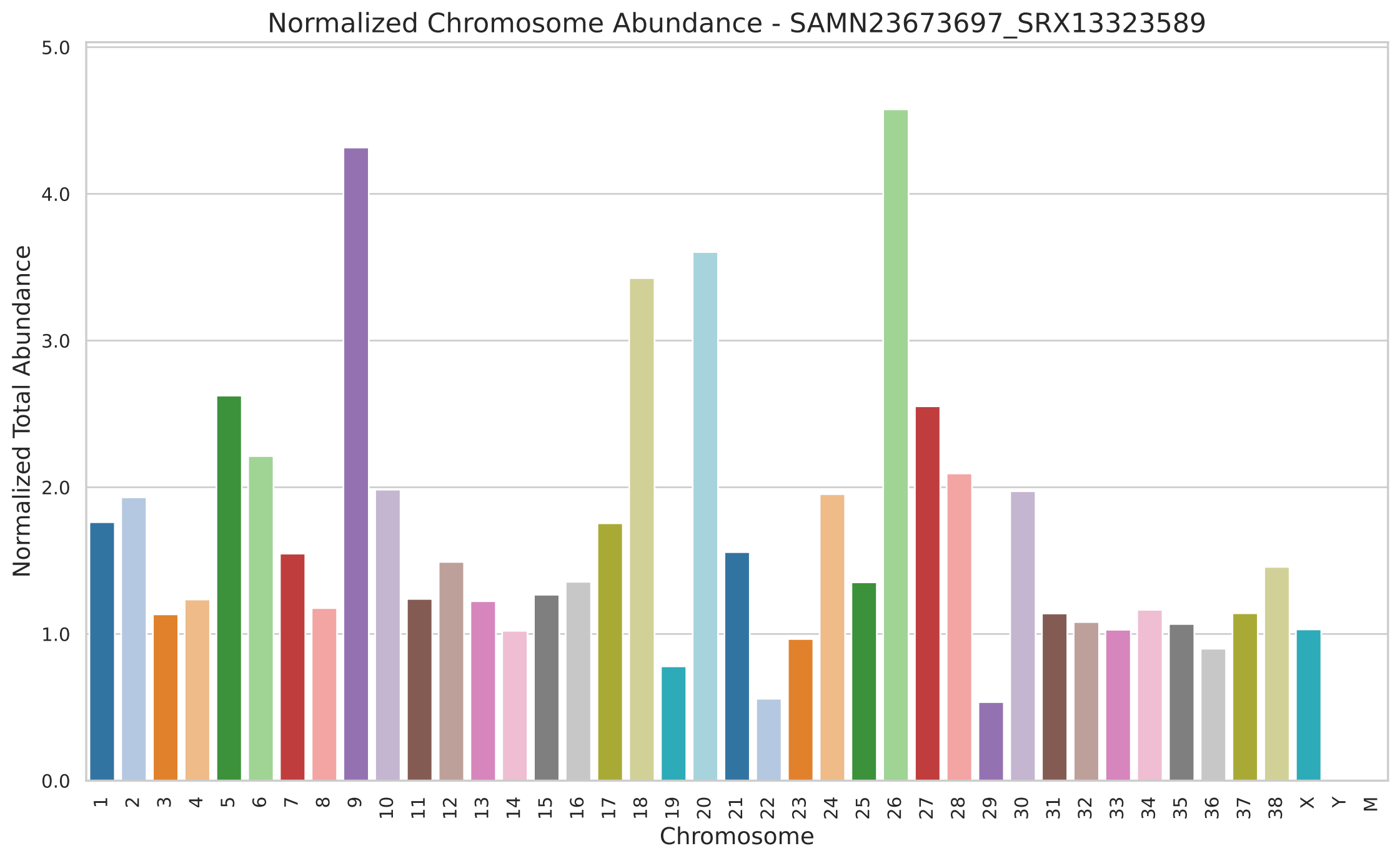

Normalized Chromosome Abundance - SAMN23673655_SRX13323582
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

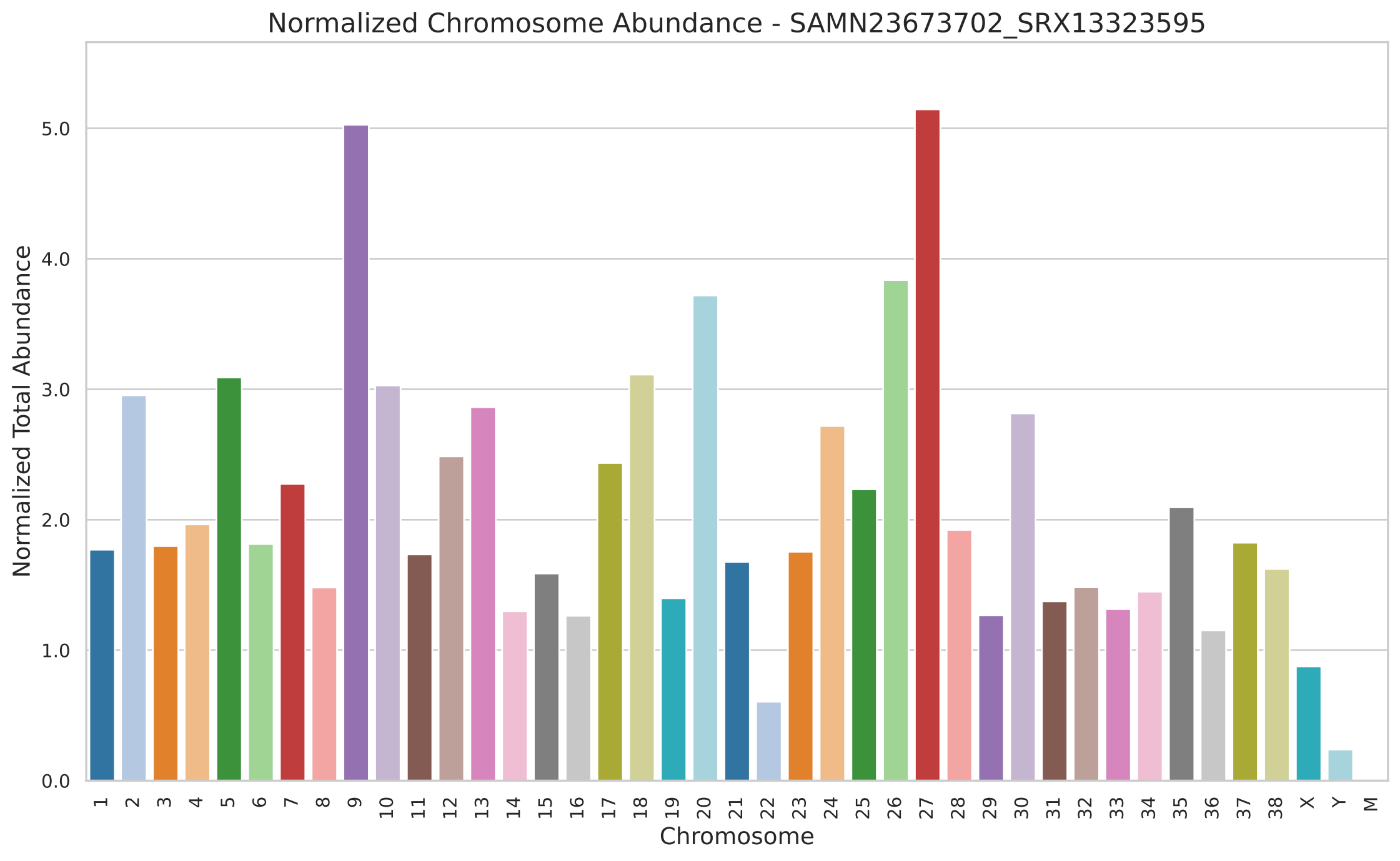

Normalized Chromosome Abundance - SAMN23673726_SRX13323621
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

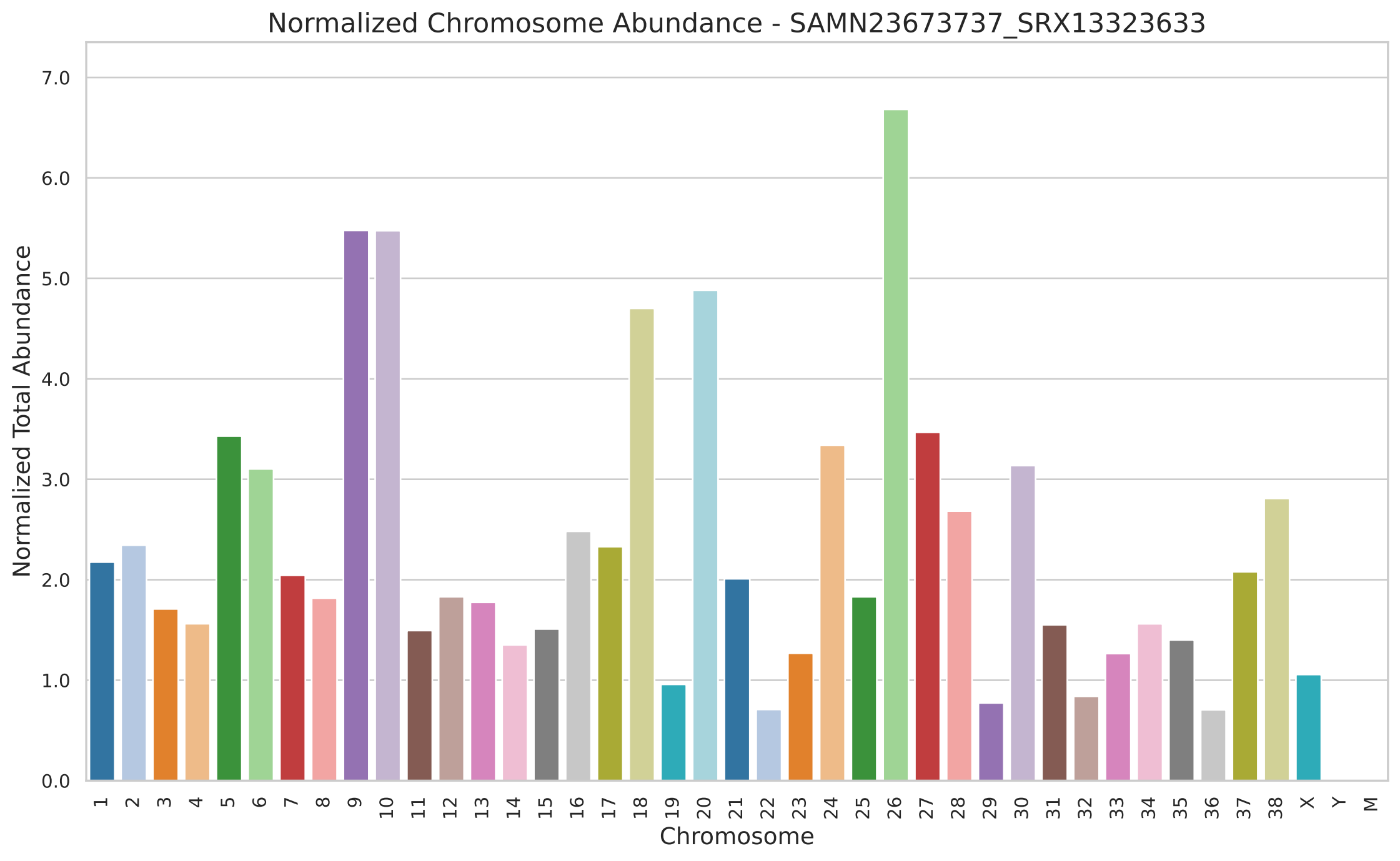

Normalized Chromosome Abundance - SAMN23673699_SRX13323591
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

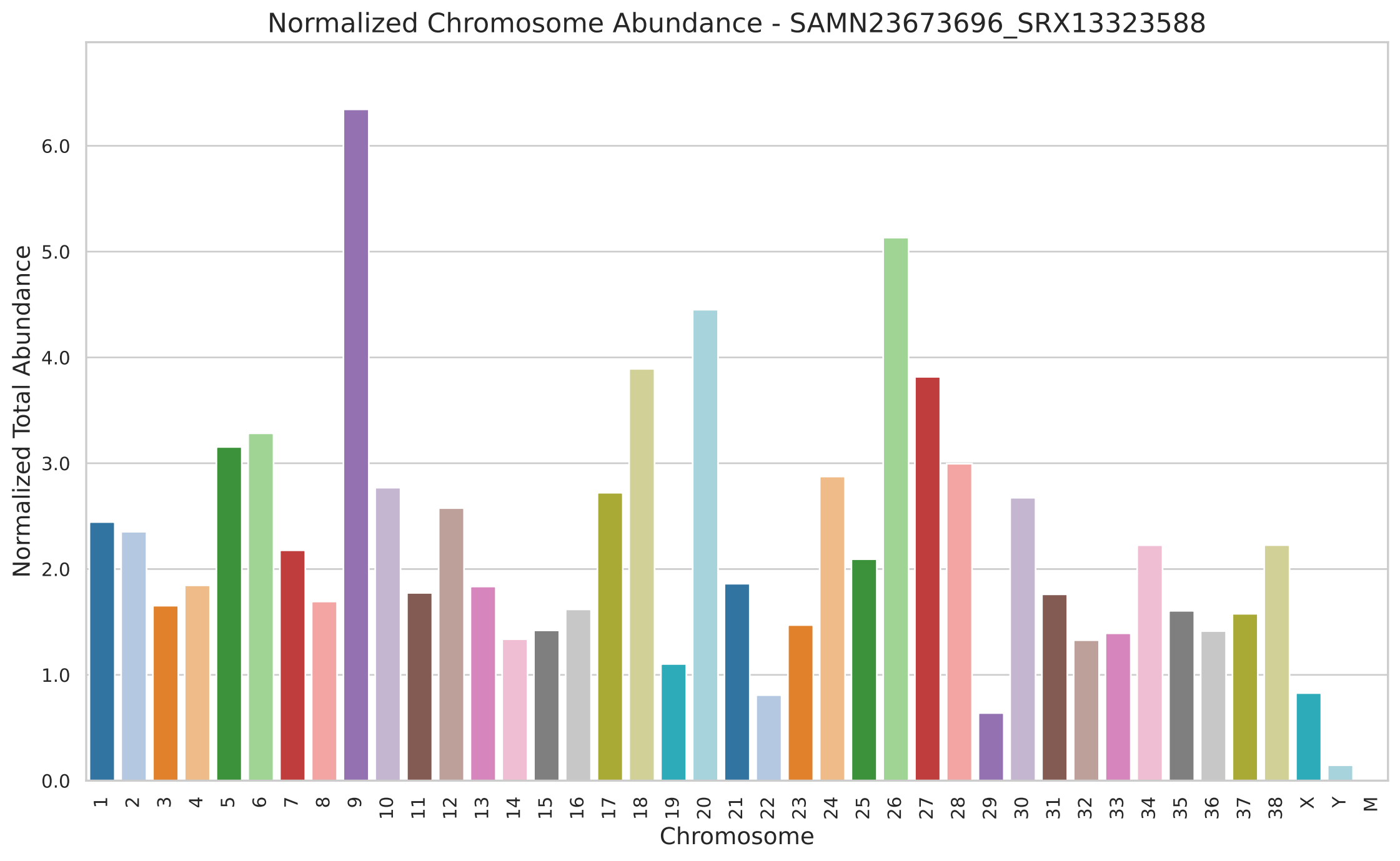

Normalized Chromosome Abundance - SAMN20802092_SRX11763949
Normalized Total Abundance
30.0
25.0
20.0
15.0
10.0
5.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

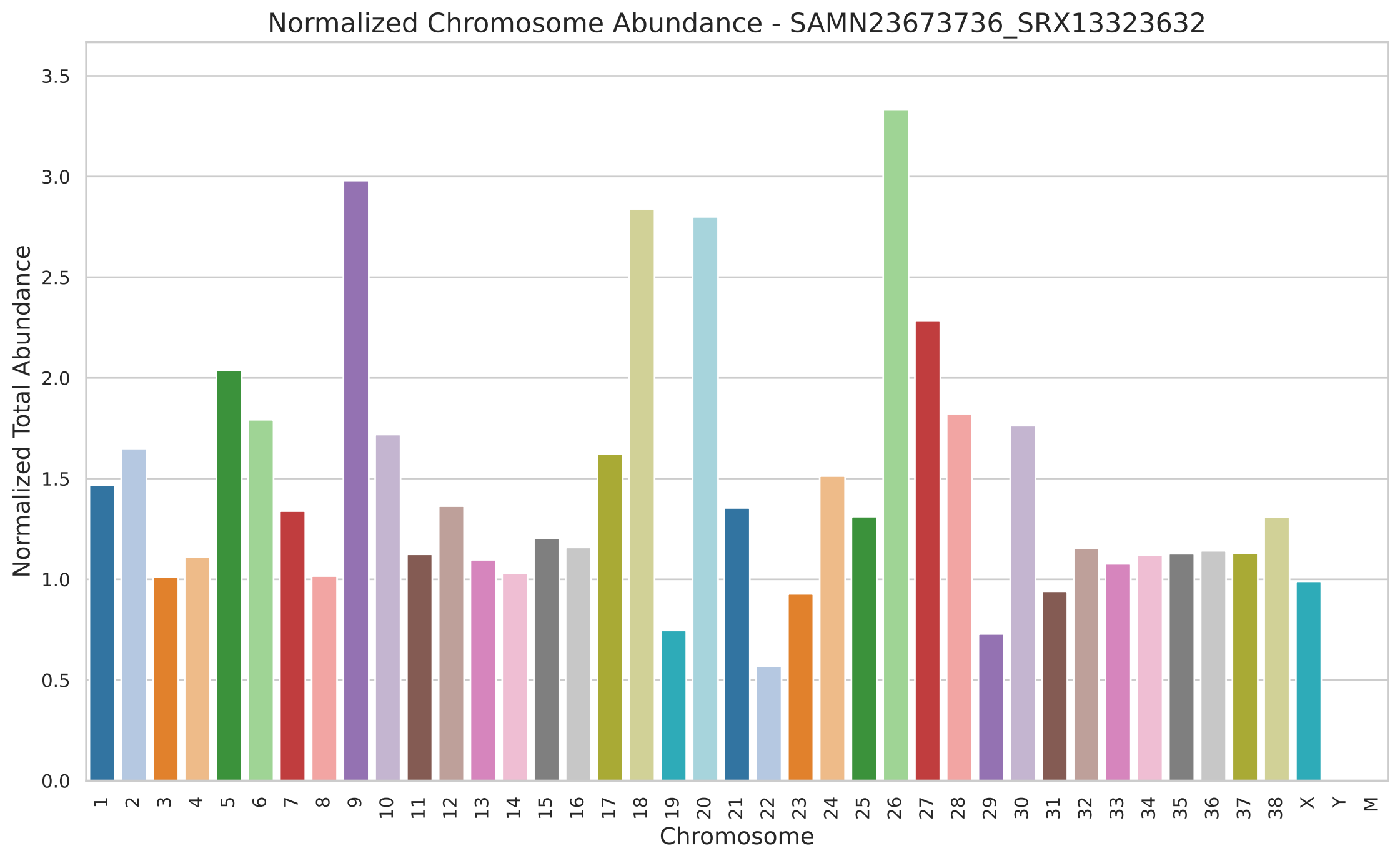

Normalized Chromosome Abundance - SAMN23673748_SRX13323645
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

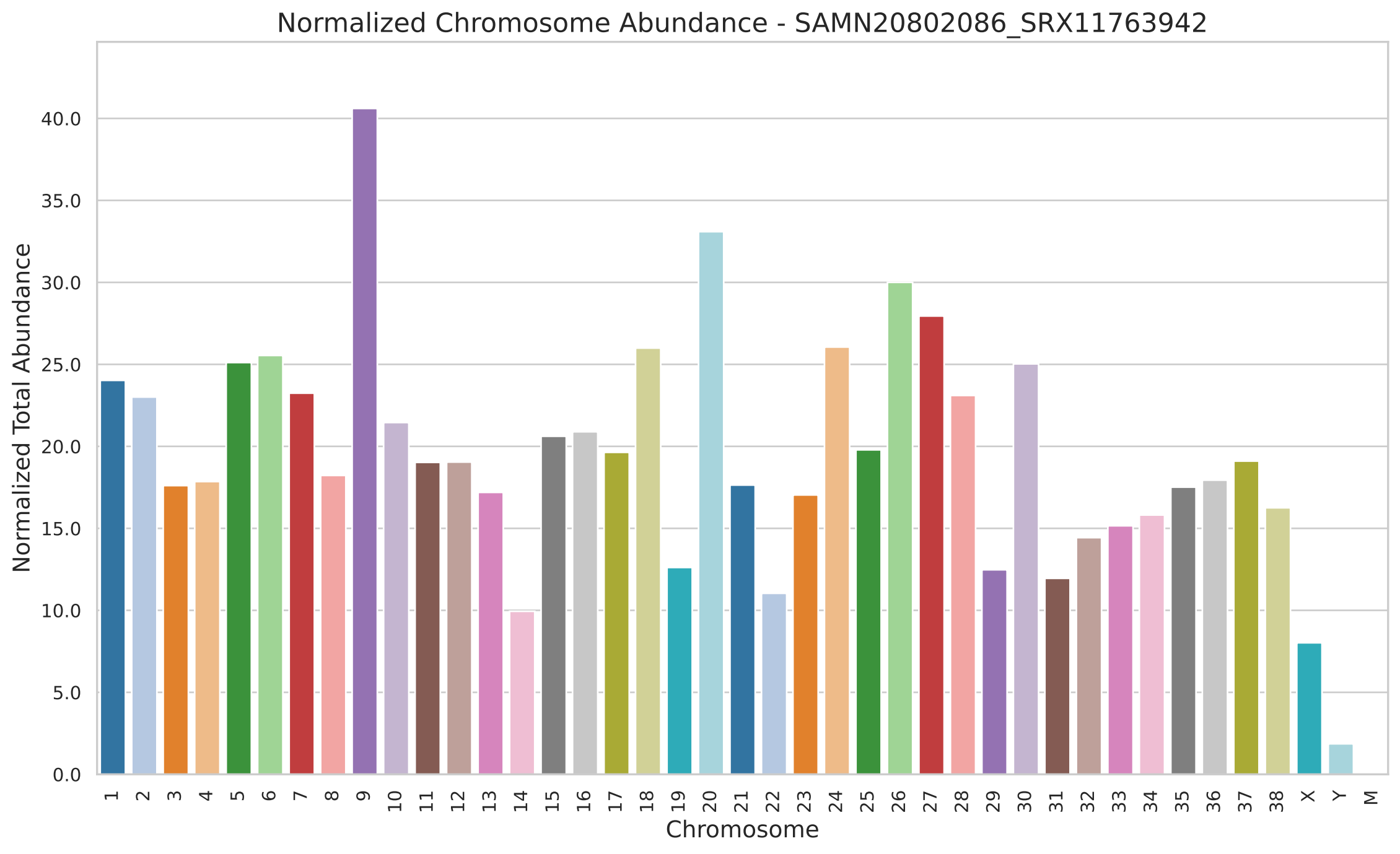

Normalized Chromosome Abundance - SAMN23673697_SRX13323589
Normalized Total Abundance
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

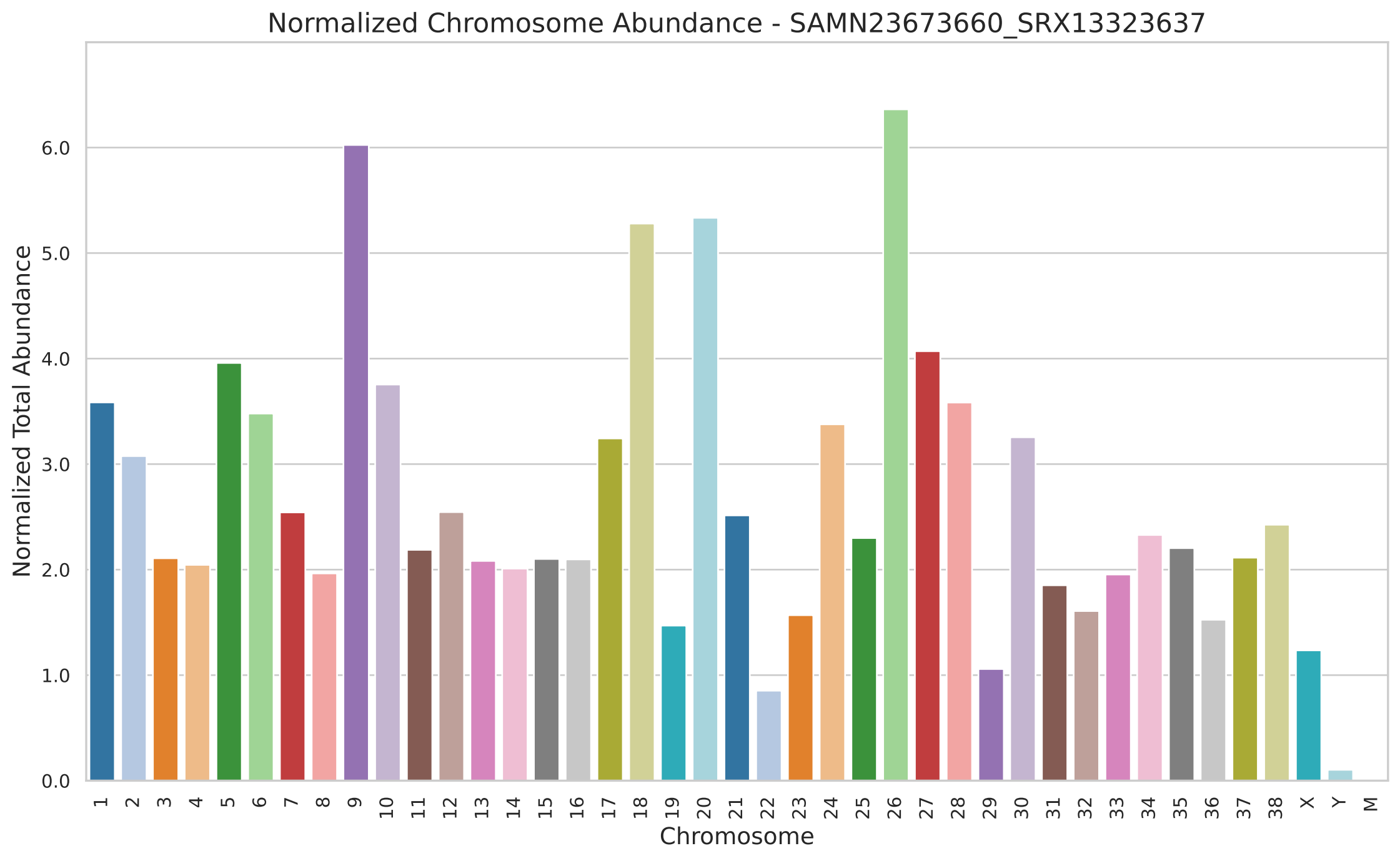

Normalized Chromosome Abundance - SAMN23673702_SRX13323595
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

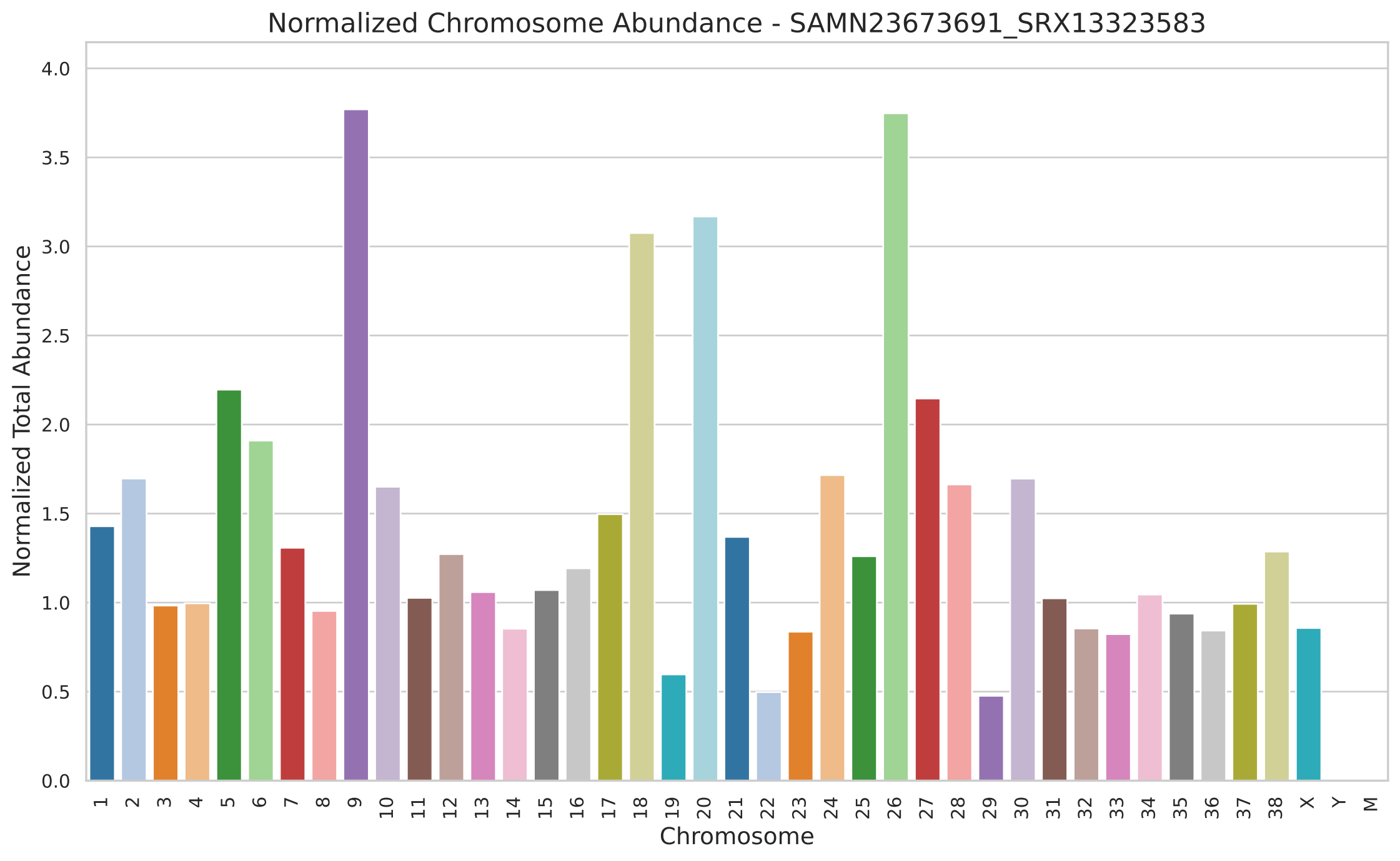

Normalized Chromosome Abundance - SAMN23673737_SRX13323633
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

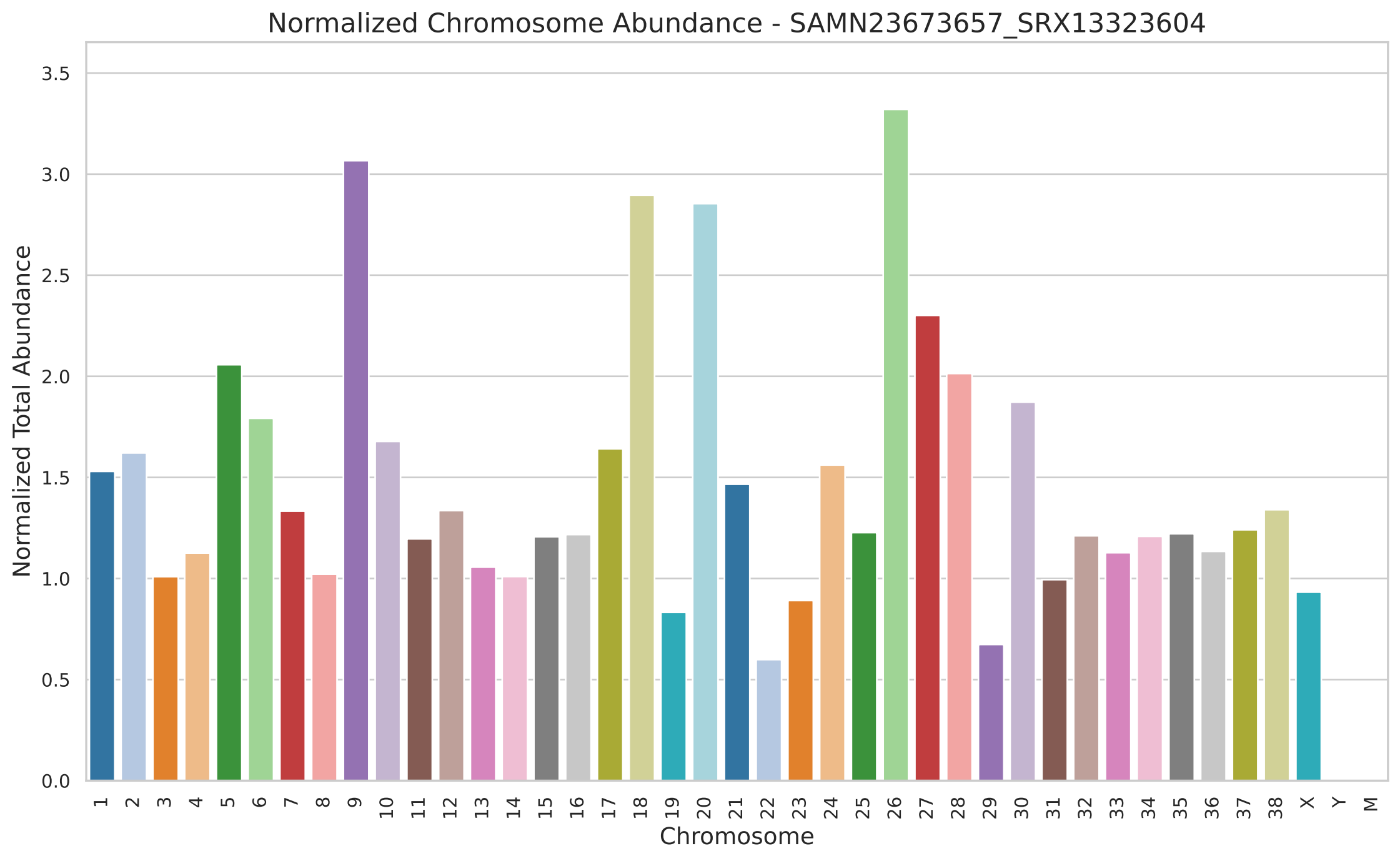

Normalized Chromosome Abundance - SAMN23673696_SRX13323588
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

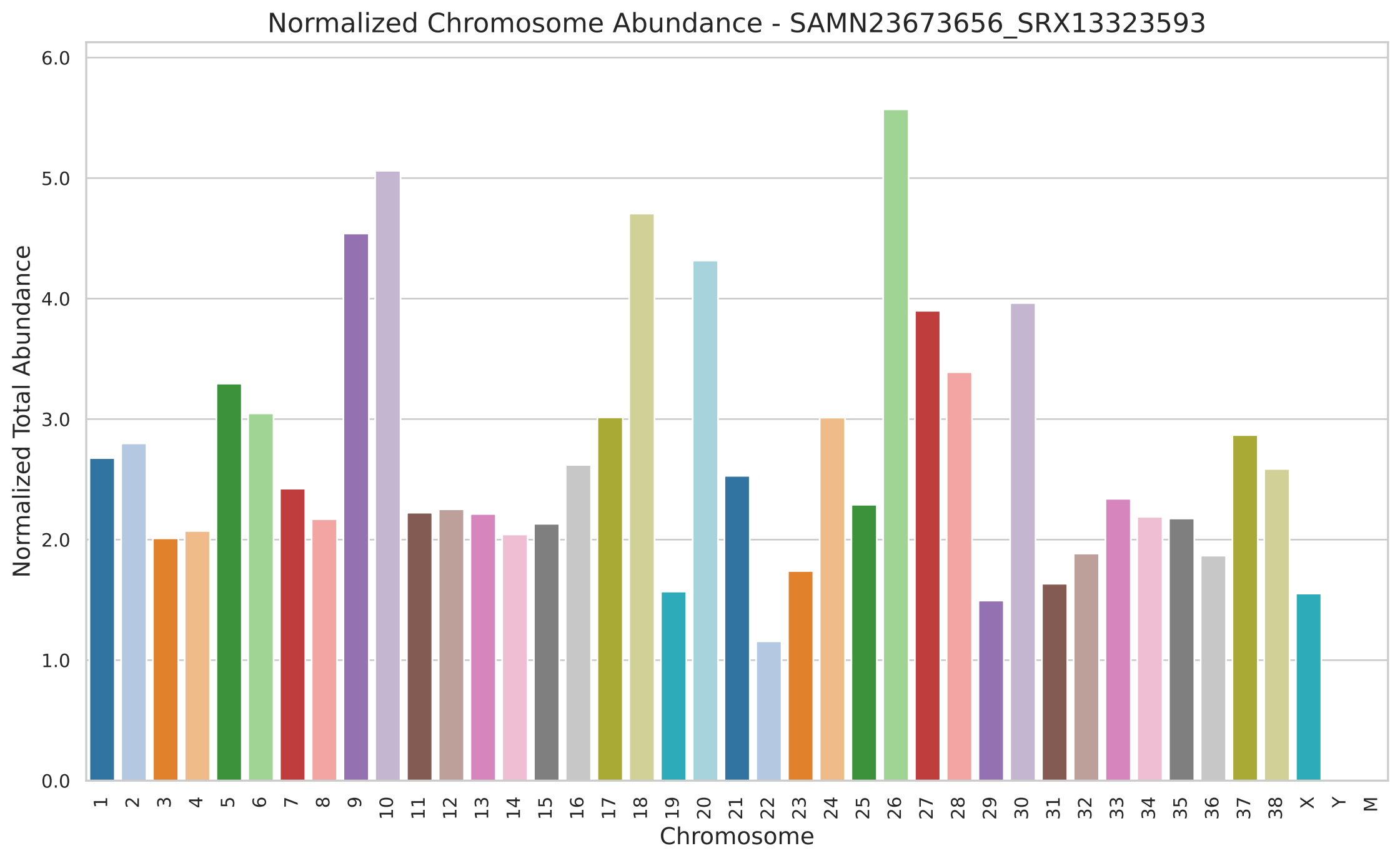

Normalized Chromosome Abundance - SAMN23673736_SRX13323632
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

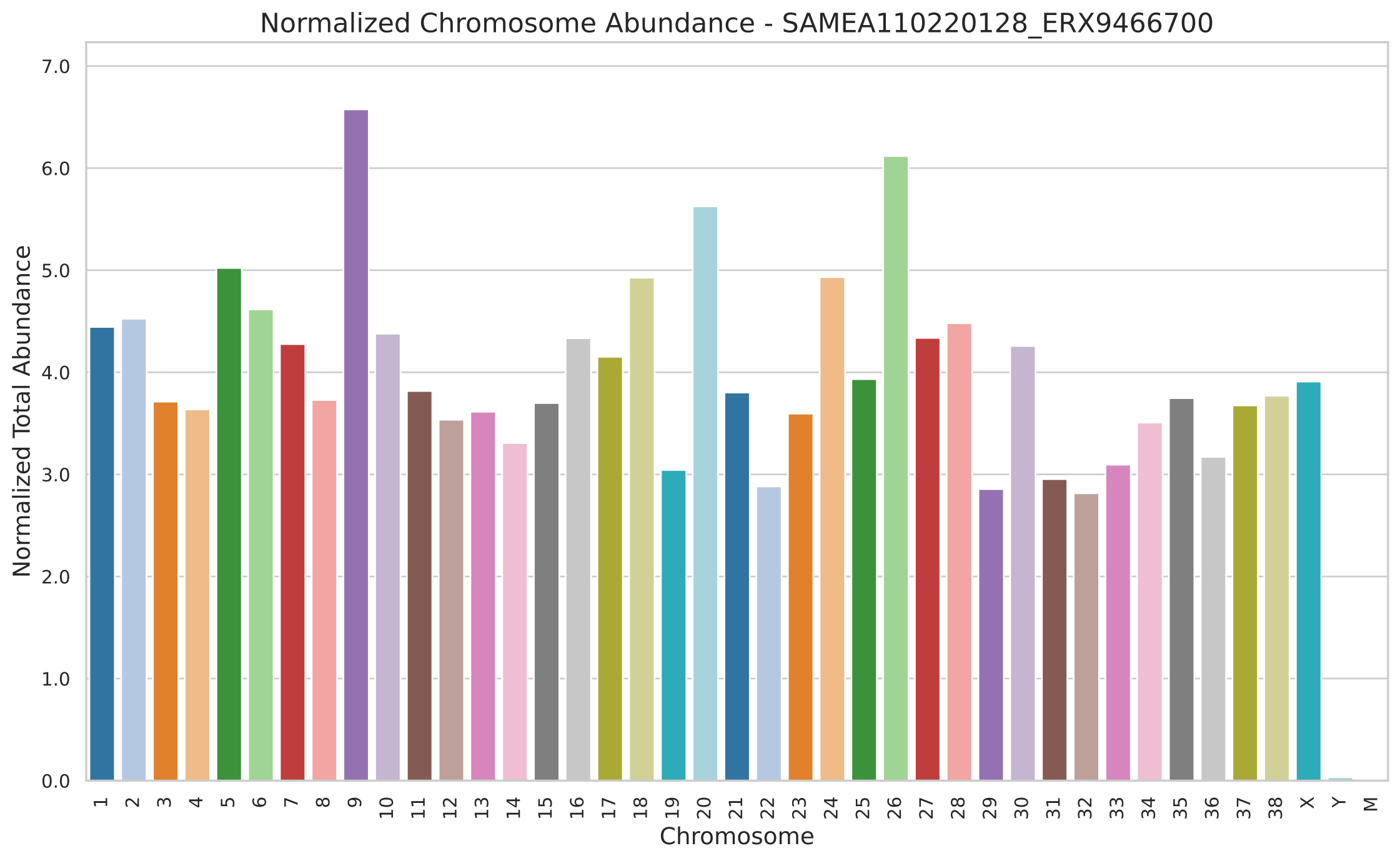

Normalized Chromosome Abundance - SAMN20802086_SRX11763942
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
35.0
40.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

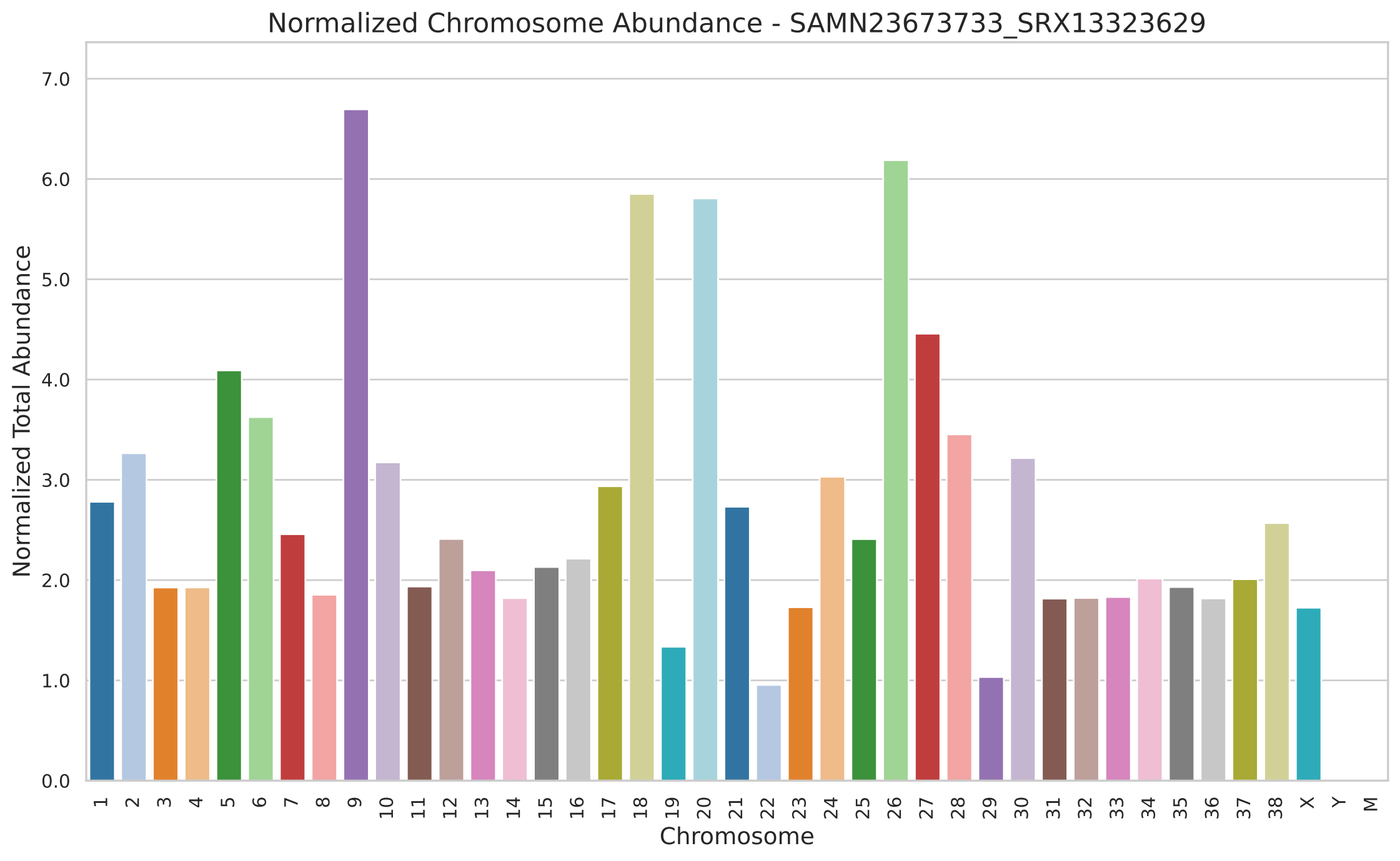

Normalized Chromosome Abundance - SAMN23673660_SRX13323637
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

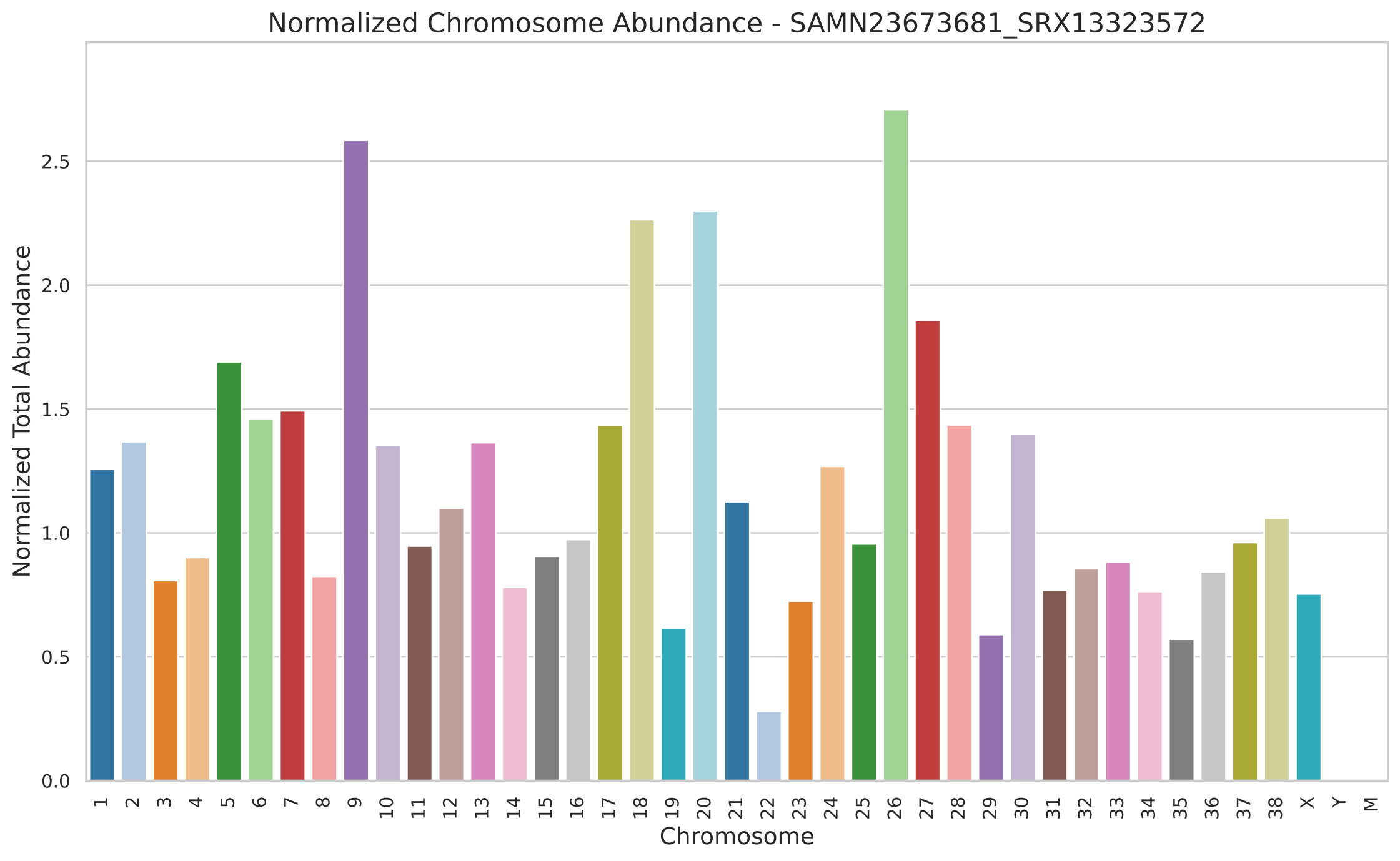

Normalized Chromosome Abundance - SAMN23673691_SRX13323583
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

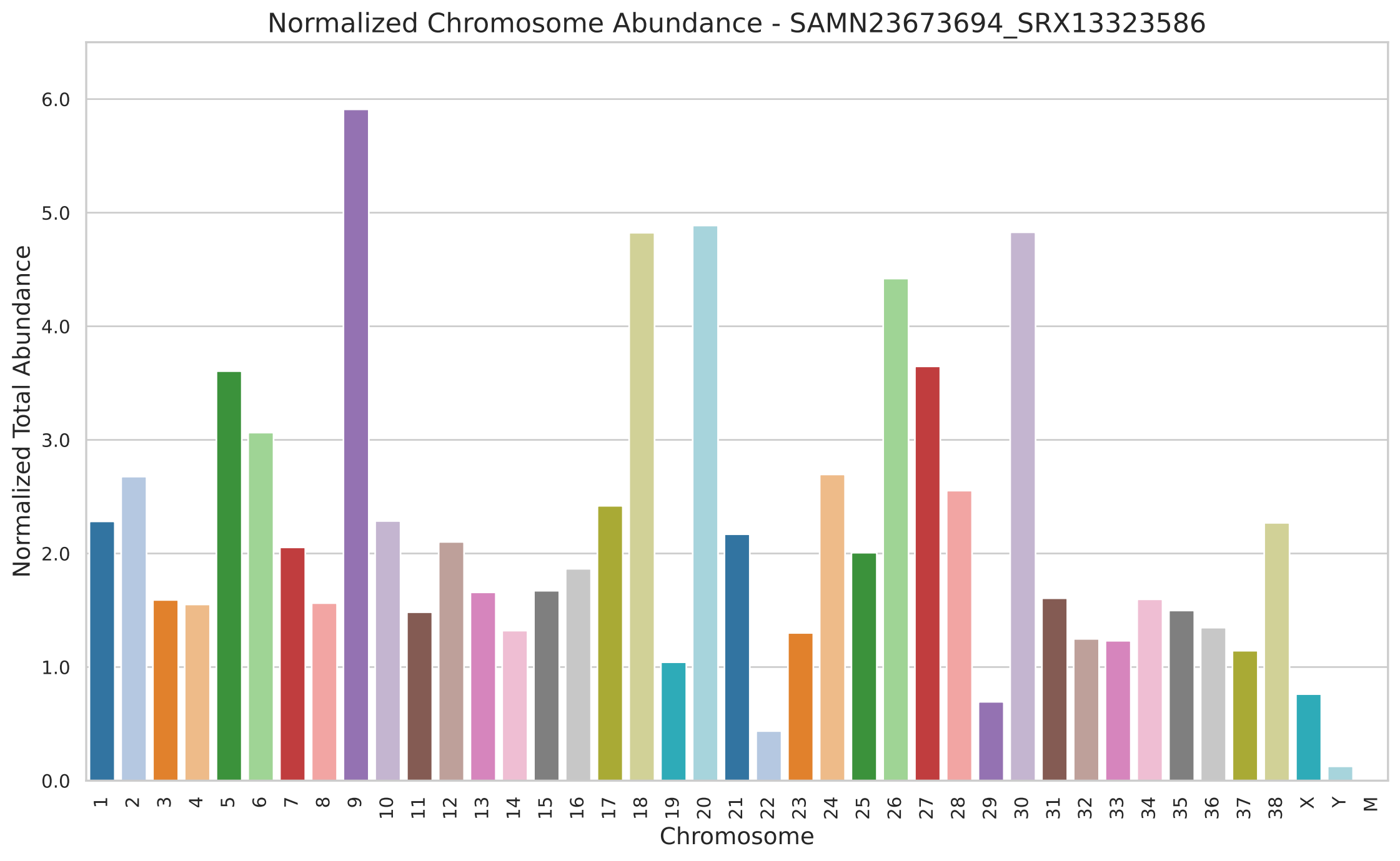

Normalized Chromosome Abundance - SAMN23673657_SRX13323604
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

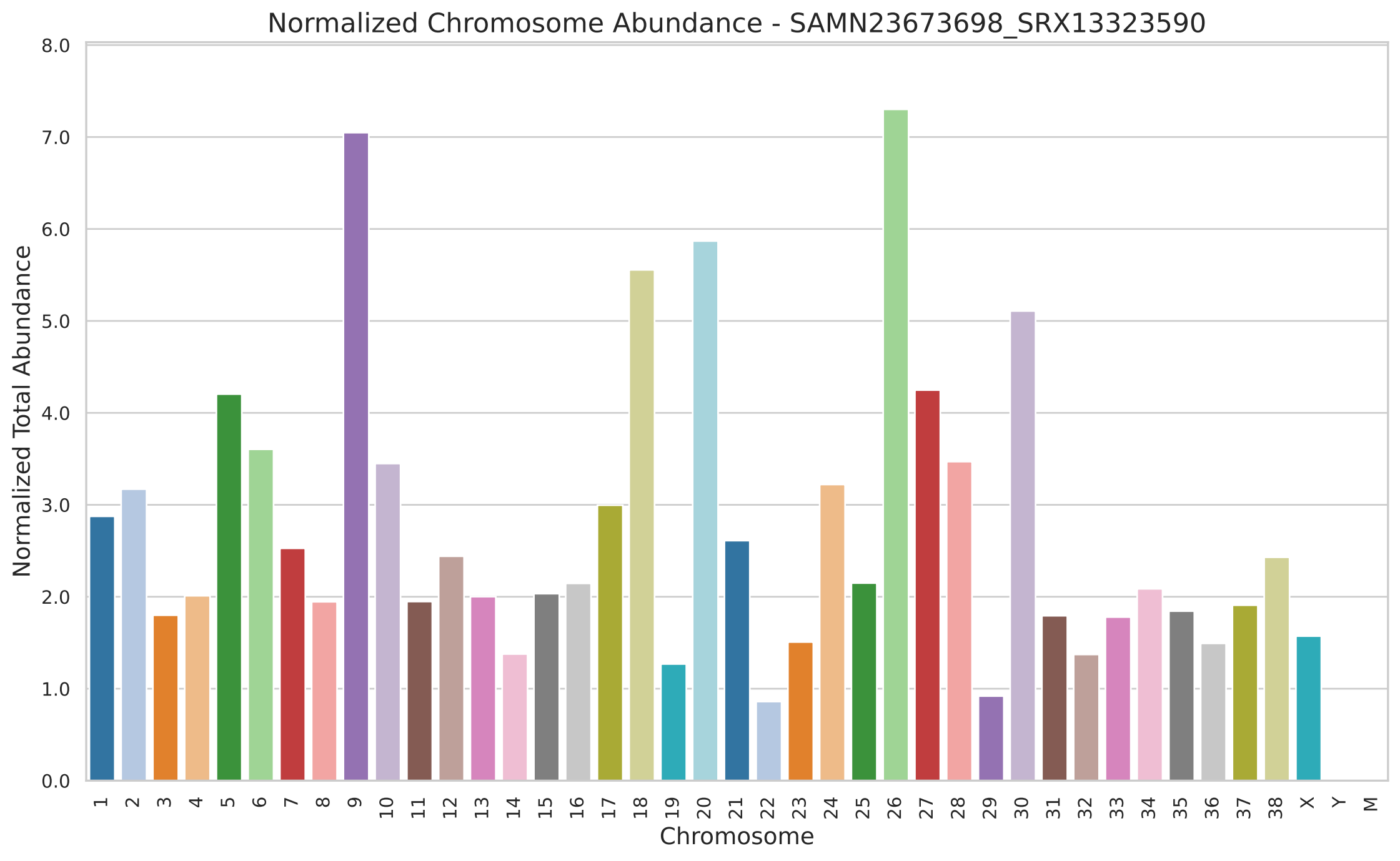

Normalized Chromosome Abundance - SAMN23673656_SRX13323593
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

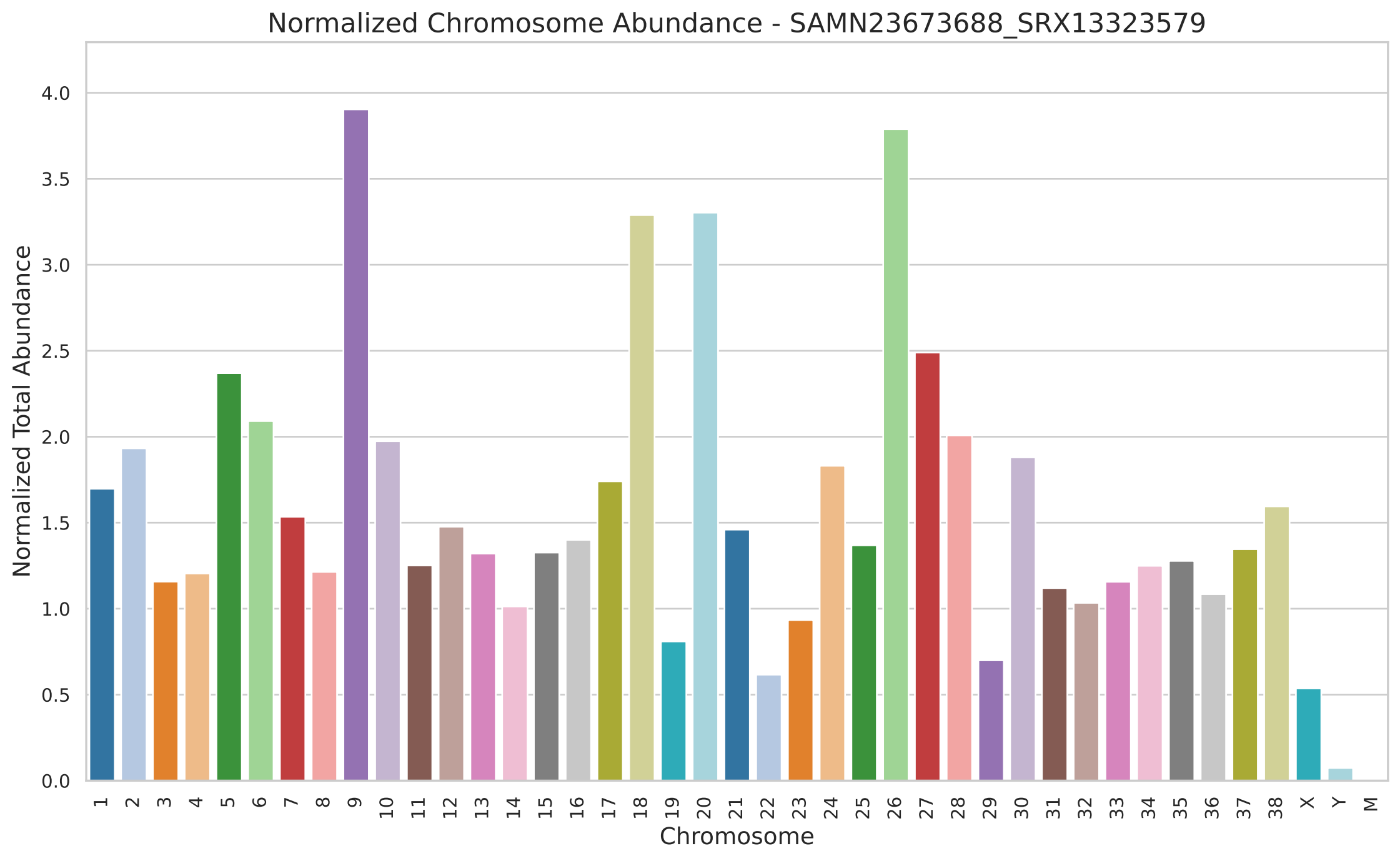

Normalized Chromosome Abundance - SAMEA110220128_ERX9466700
Normalized Total Abundance
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

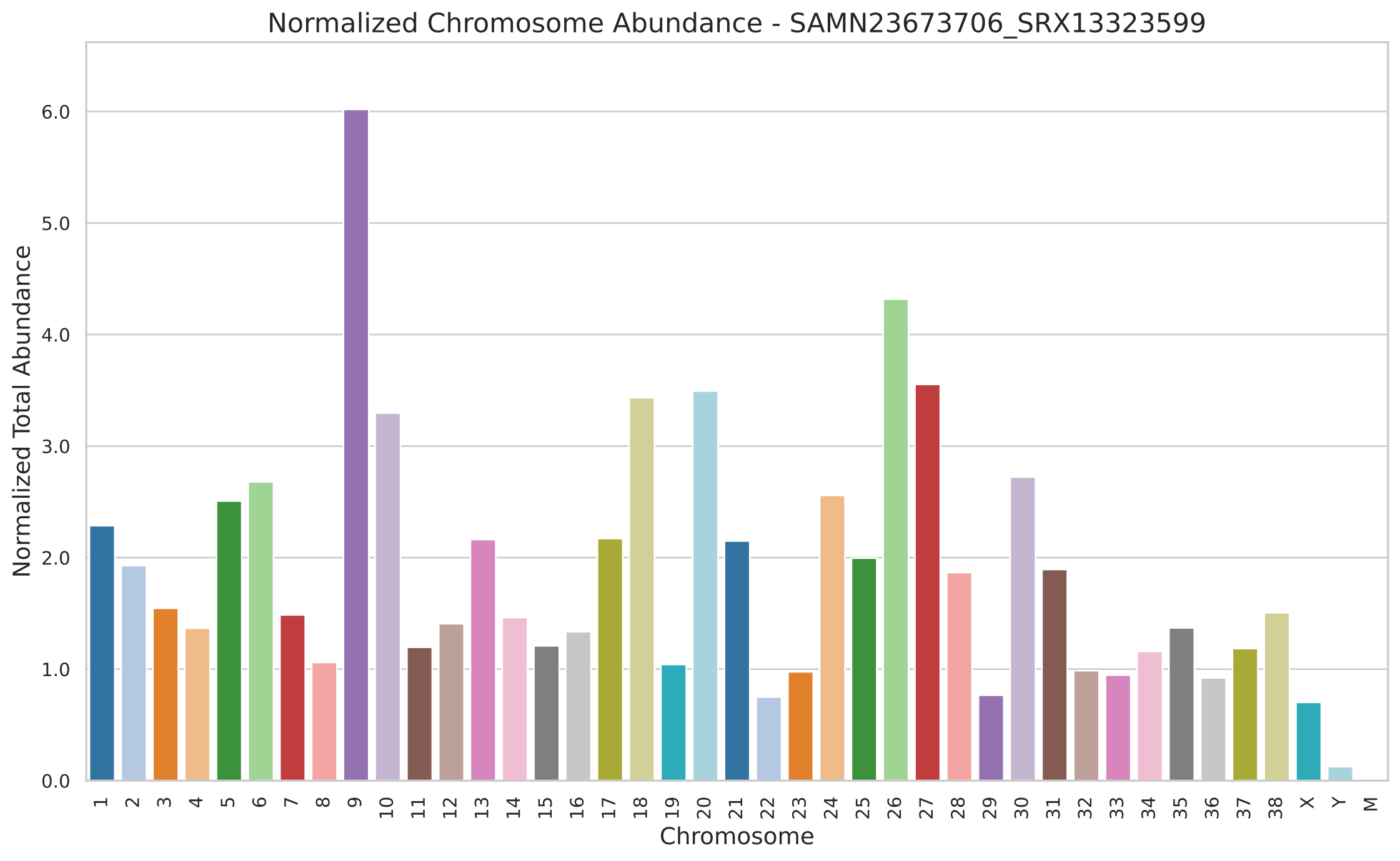

Normalized Chromosome Abundance - SAMN23673733_SRX13323629
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

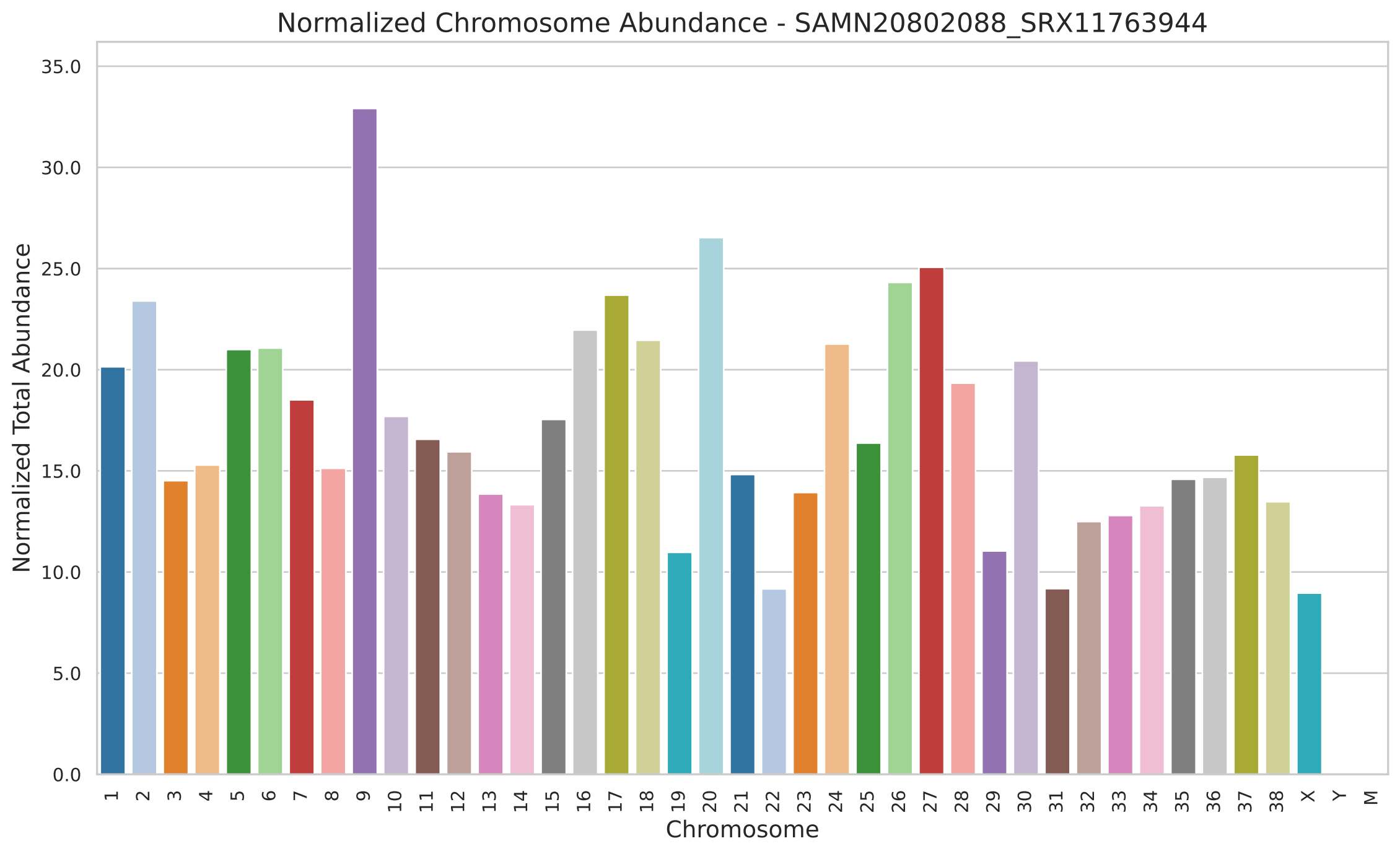

Normalized Chromosome Abundance - SAMN23673681_SRX13323572
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

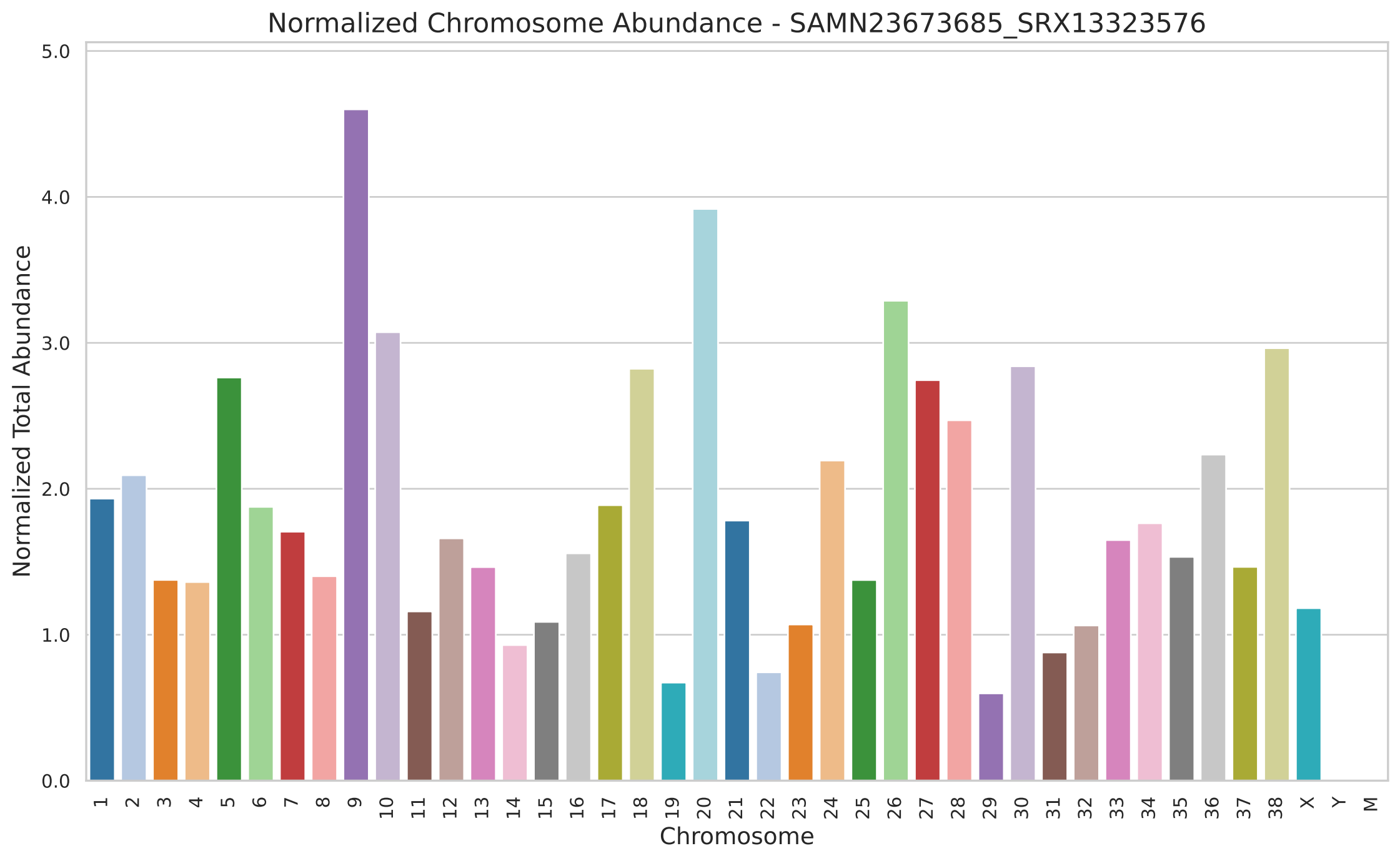

Normalized Chromosome Abundance - SAMN23673694_SRX13323586
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

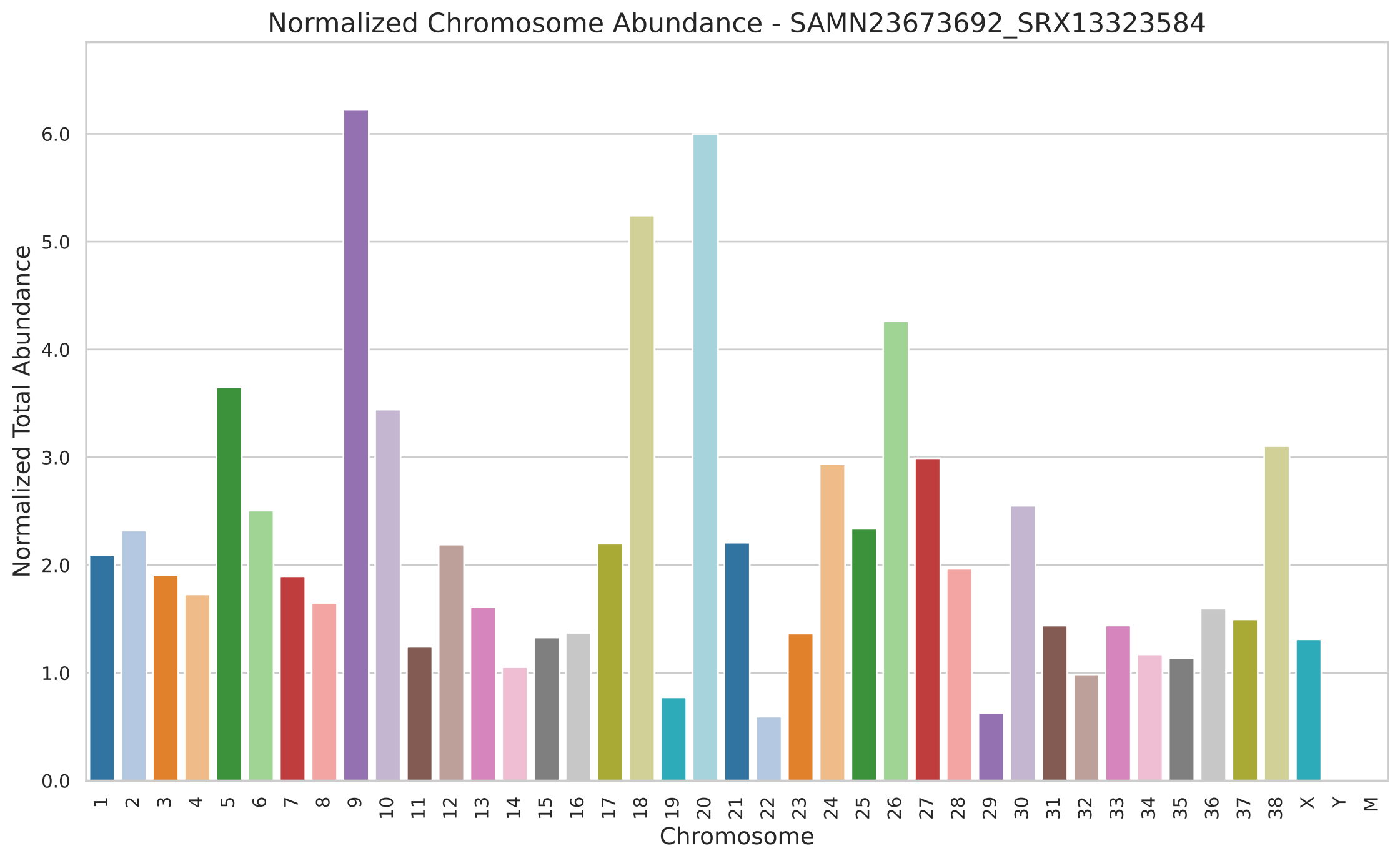

Normalized Chromosome Abundance - SAMN23673698_SRX13323590
Normalized Total Abundance
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

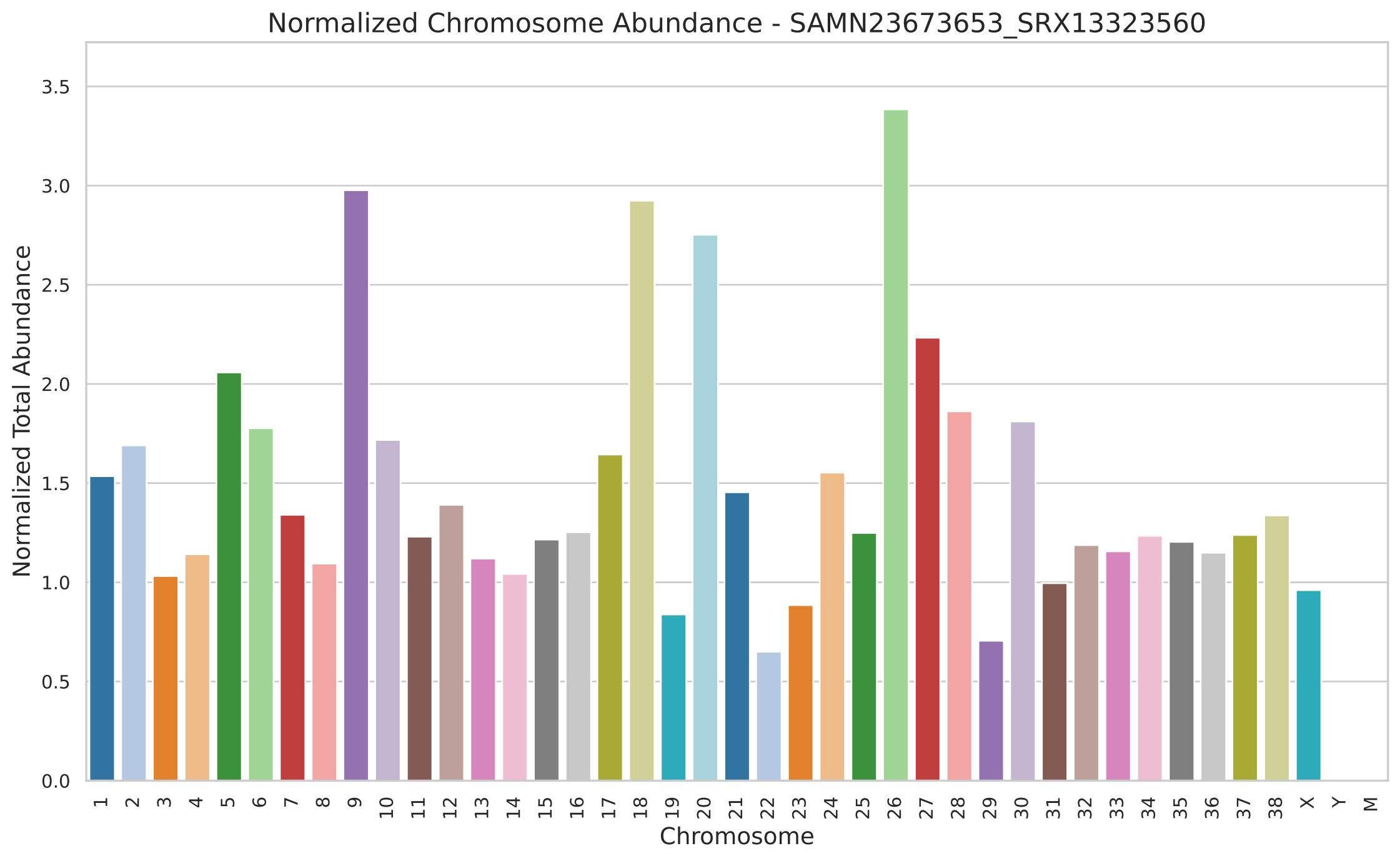

Normalized Chromosome Abundance - SAMN23673688_SRX13323579
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

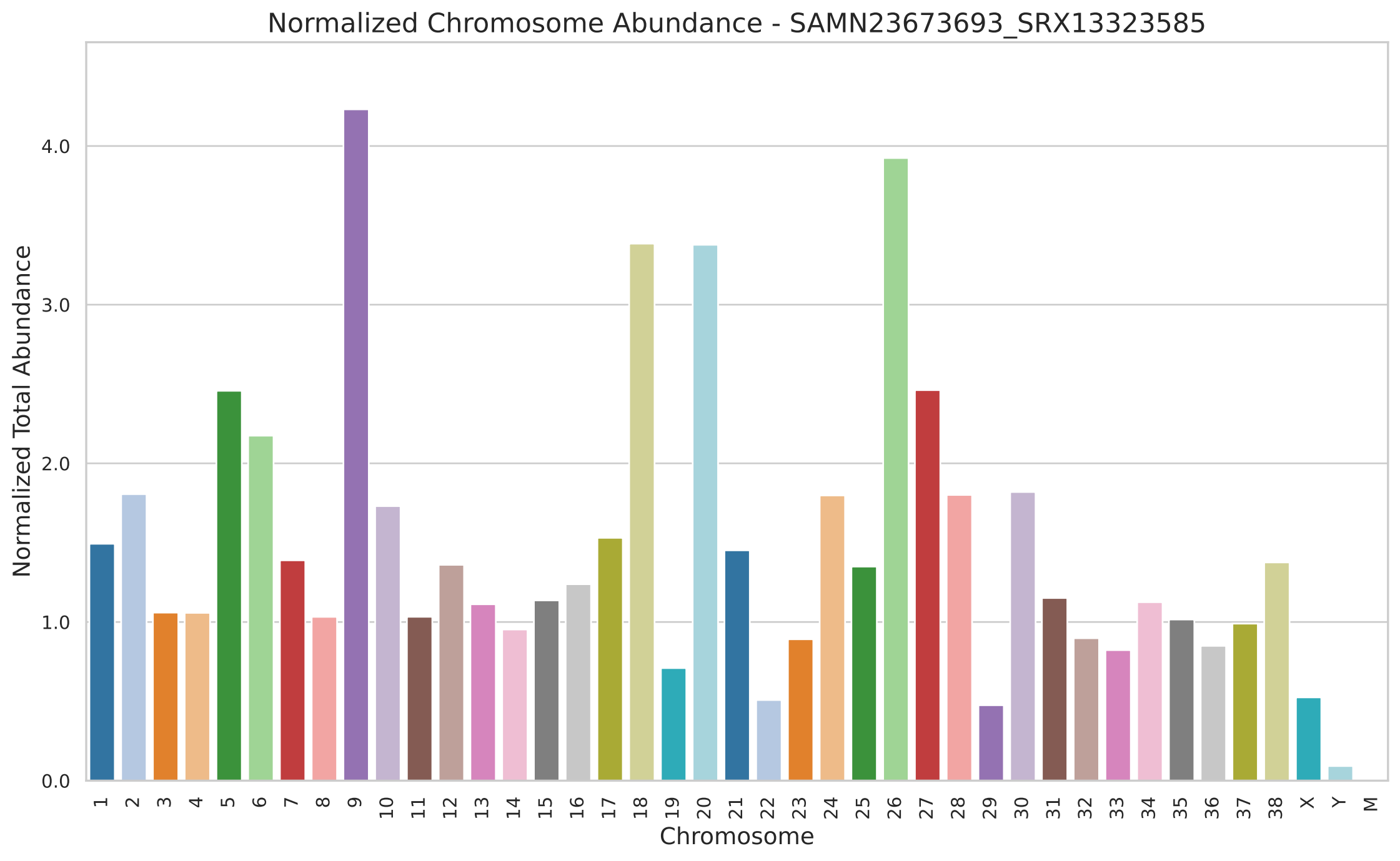

Normalized Chromosome Abundance - SAMN23673706_SRX13323599
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

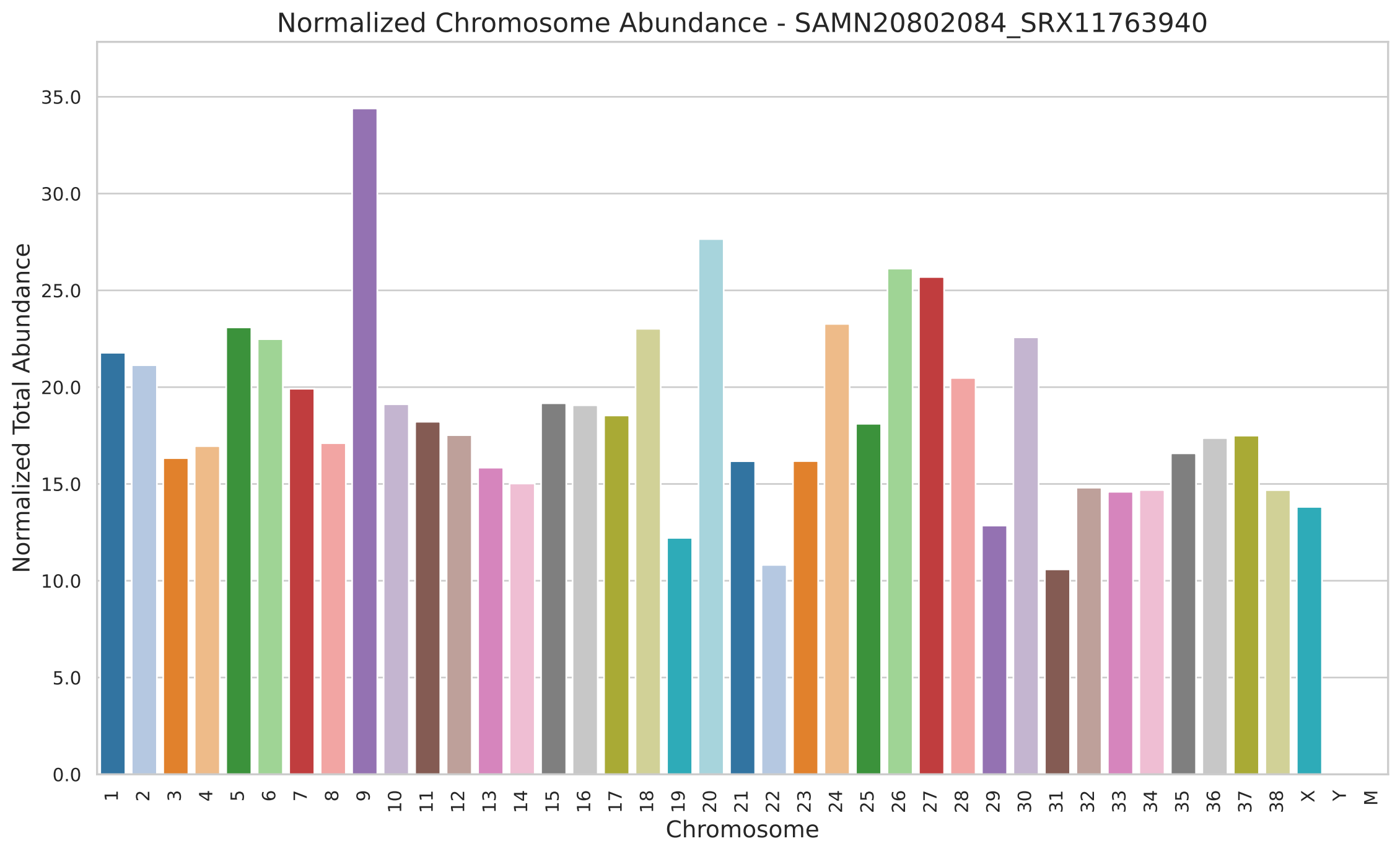

Normalized Chromosome Abundance - SAMN20802088_SRX11763944
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
35.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

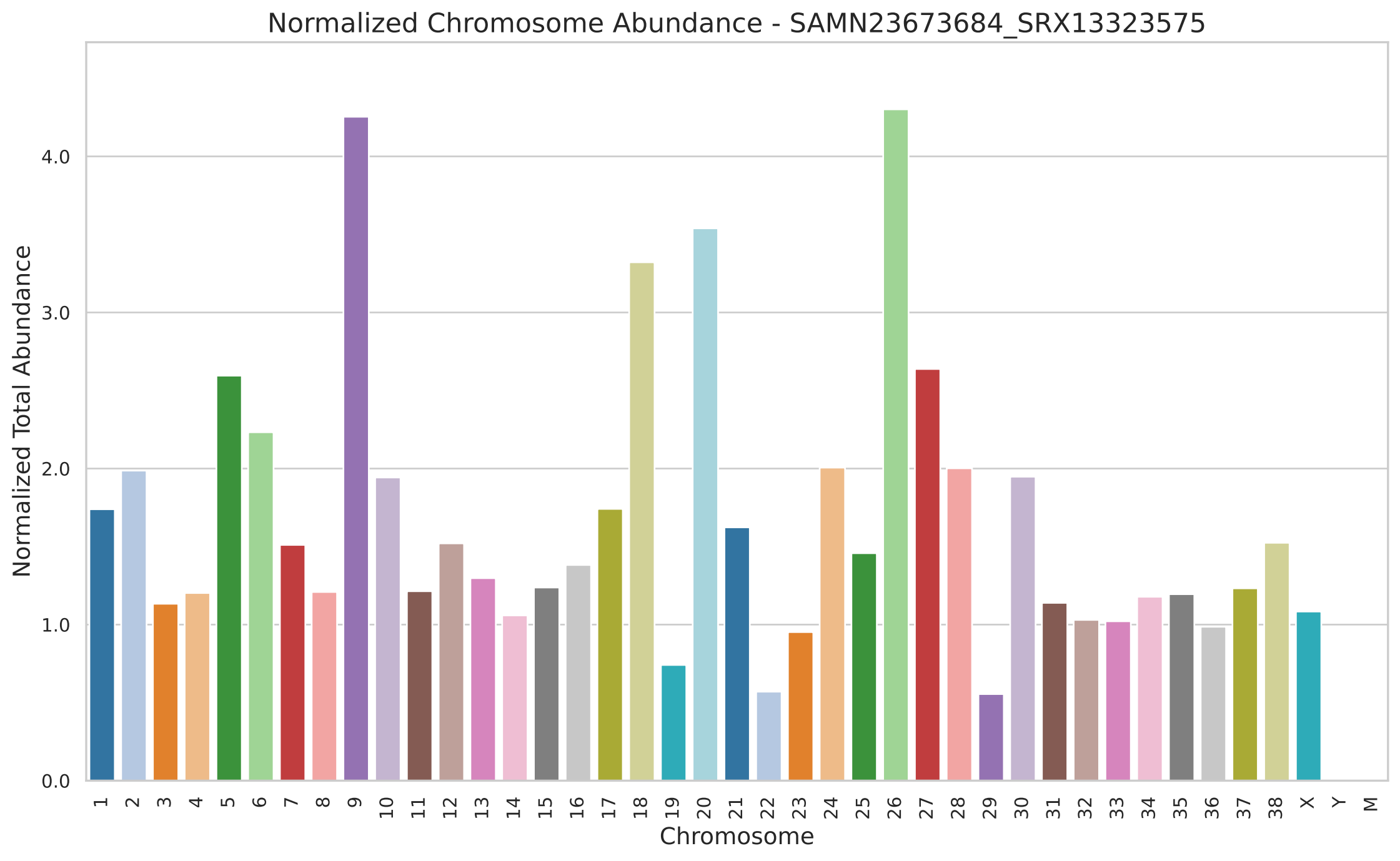

Normalized Chromosome Abundance - SAMN23673685_SRX13323576
Normalized Total Abundance
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

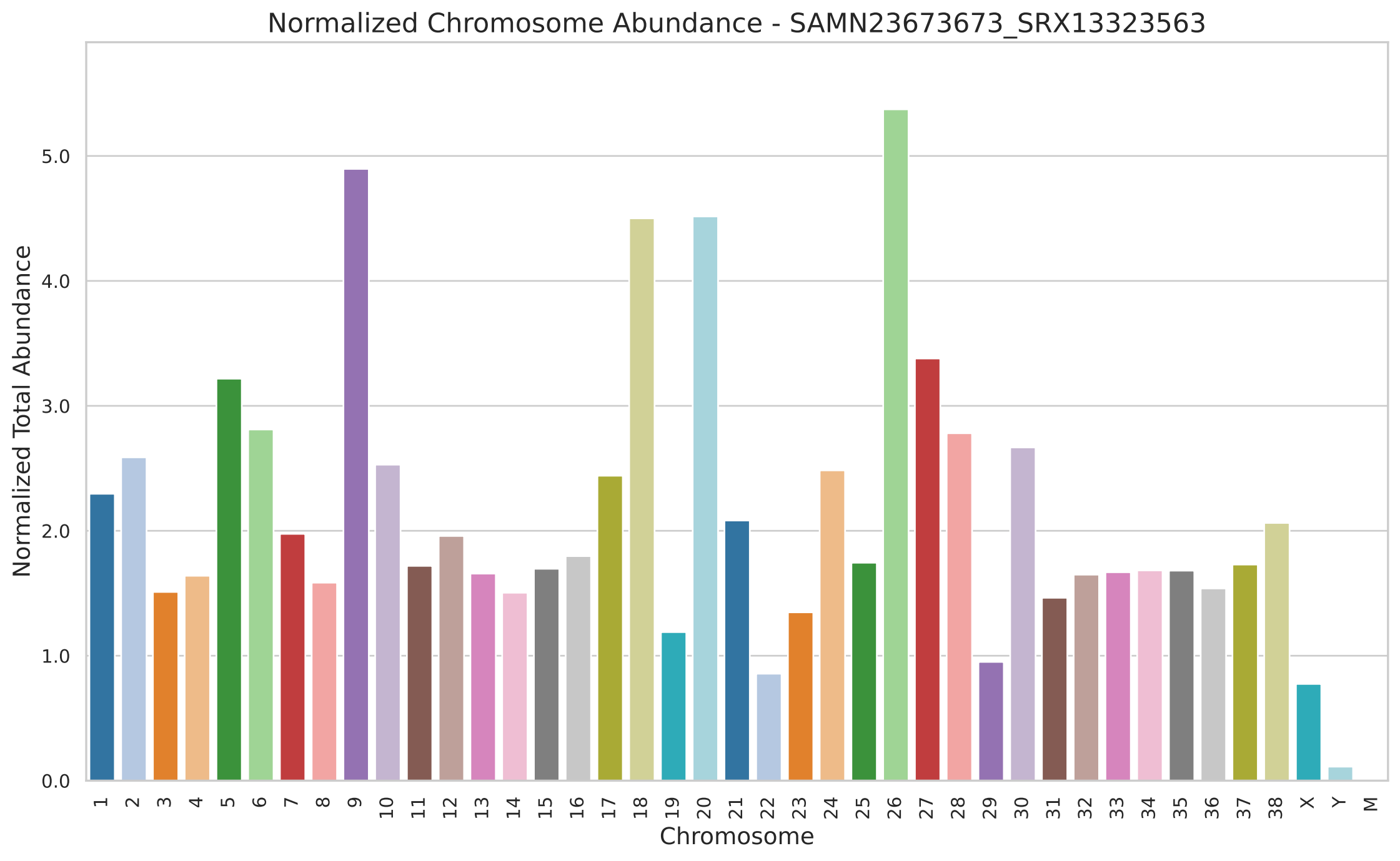

Normalized Chromosome Abundance - SAMN23673692_SRX13323584
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

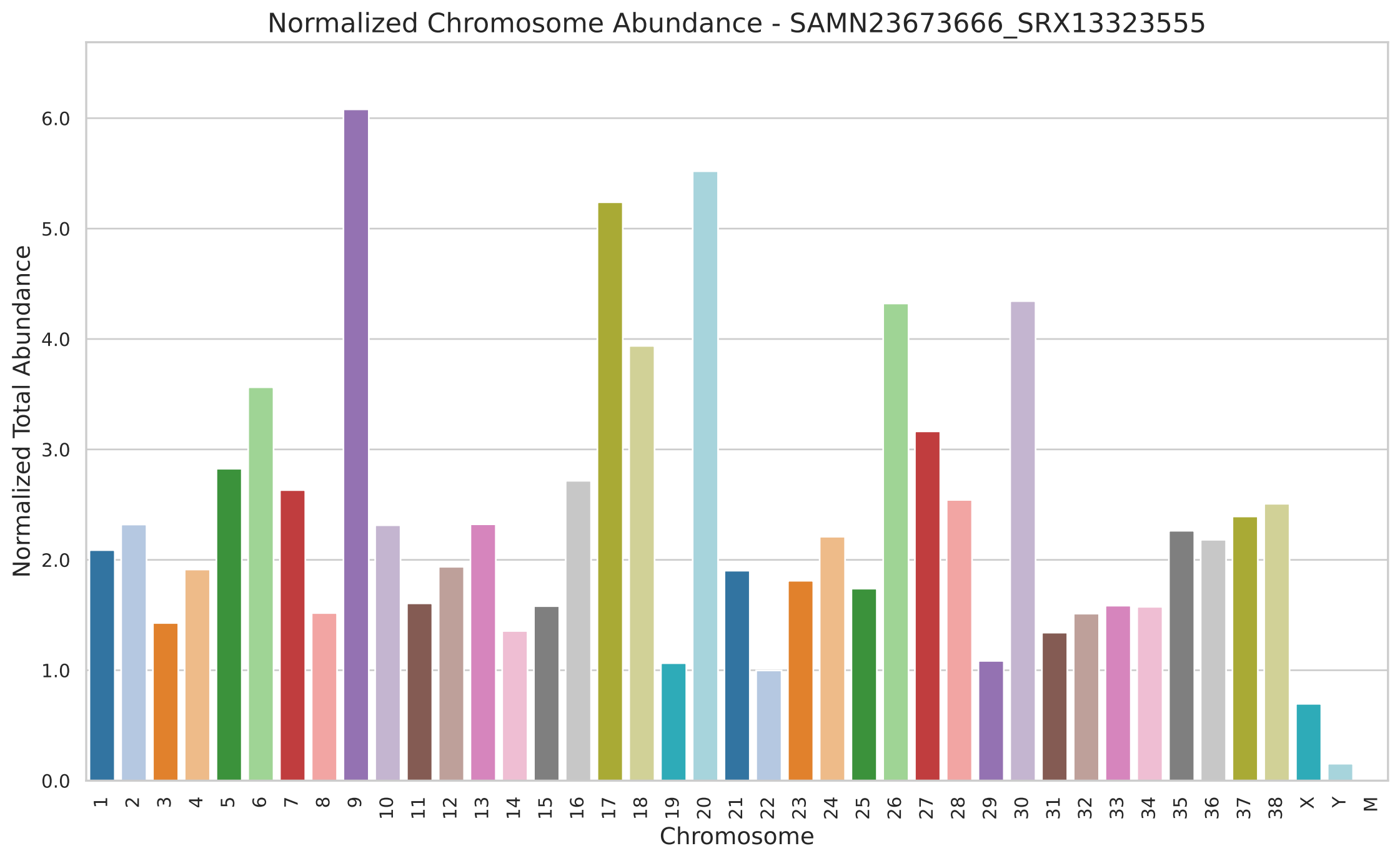

Normalized Chromosome Abundance - SAMN23673653_SRX13323560
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

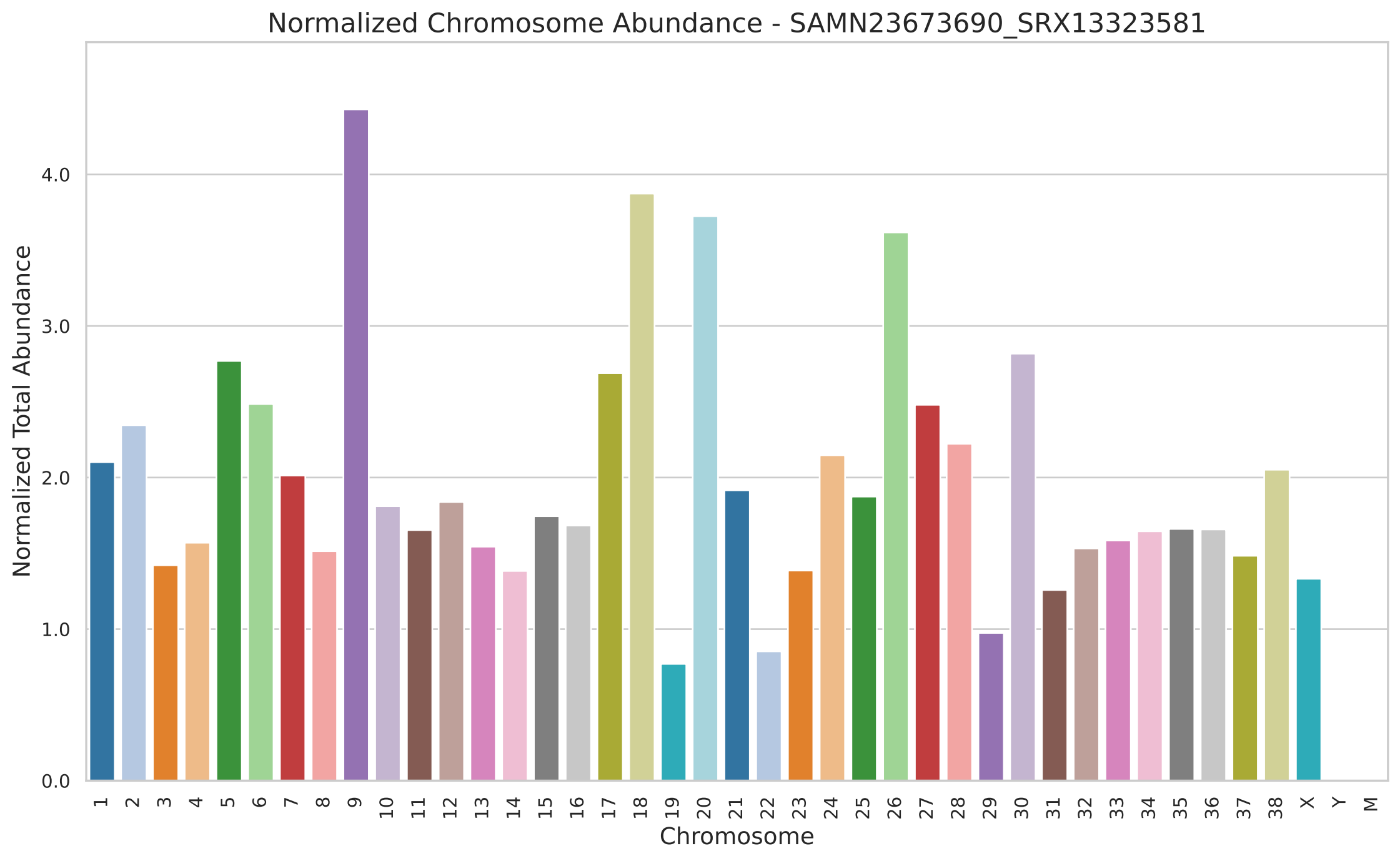

Normalized Chromosome Abundance - SAMN23673693_SRX13323585
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

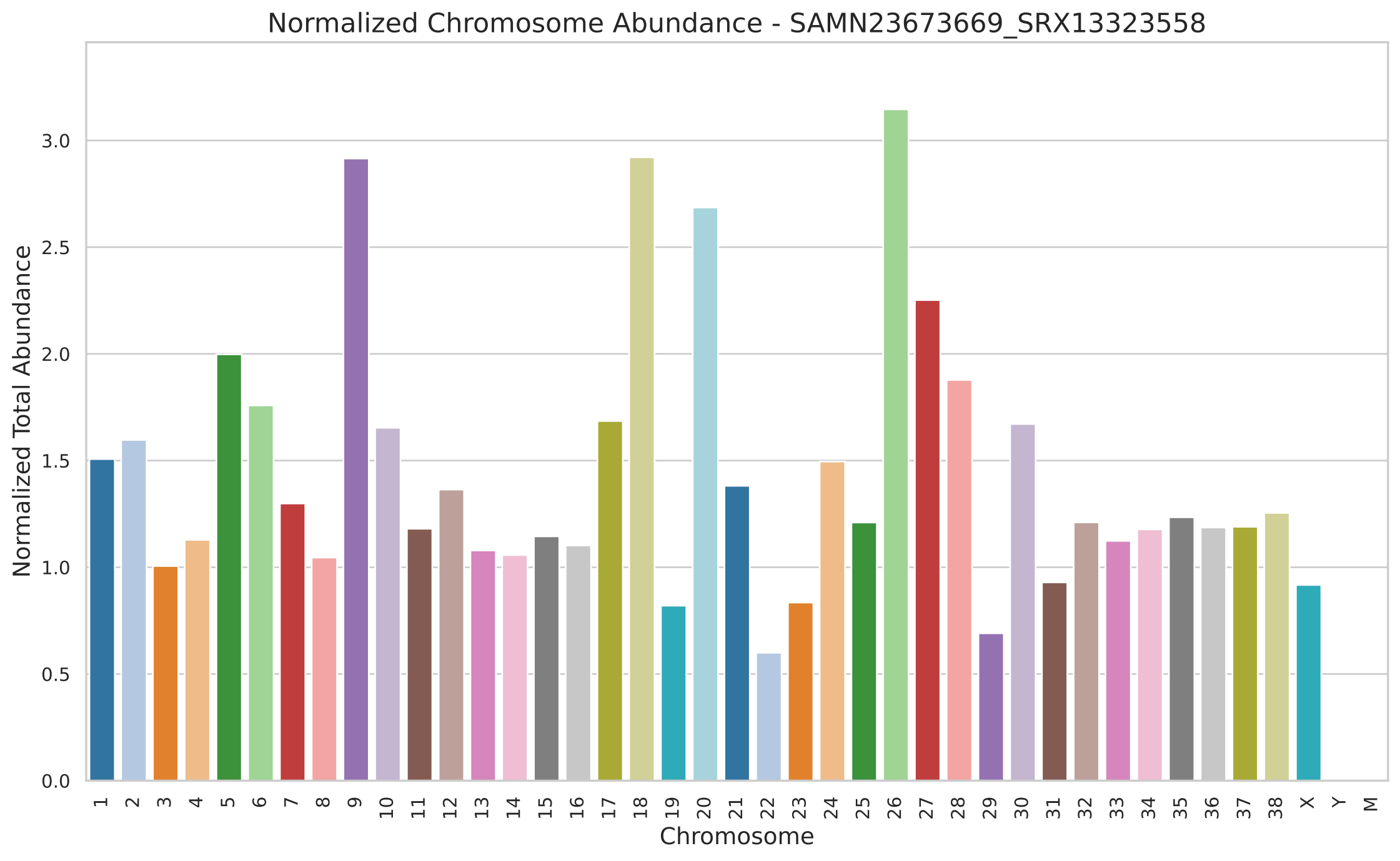

Normalized Chromosome Abundance - SAMN20802084_SRX11763940
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
35.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

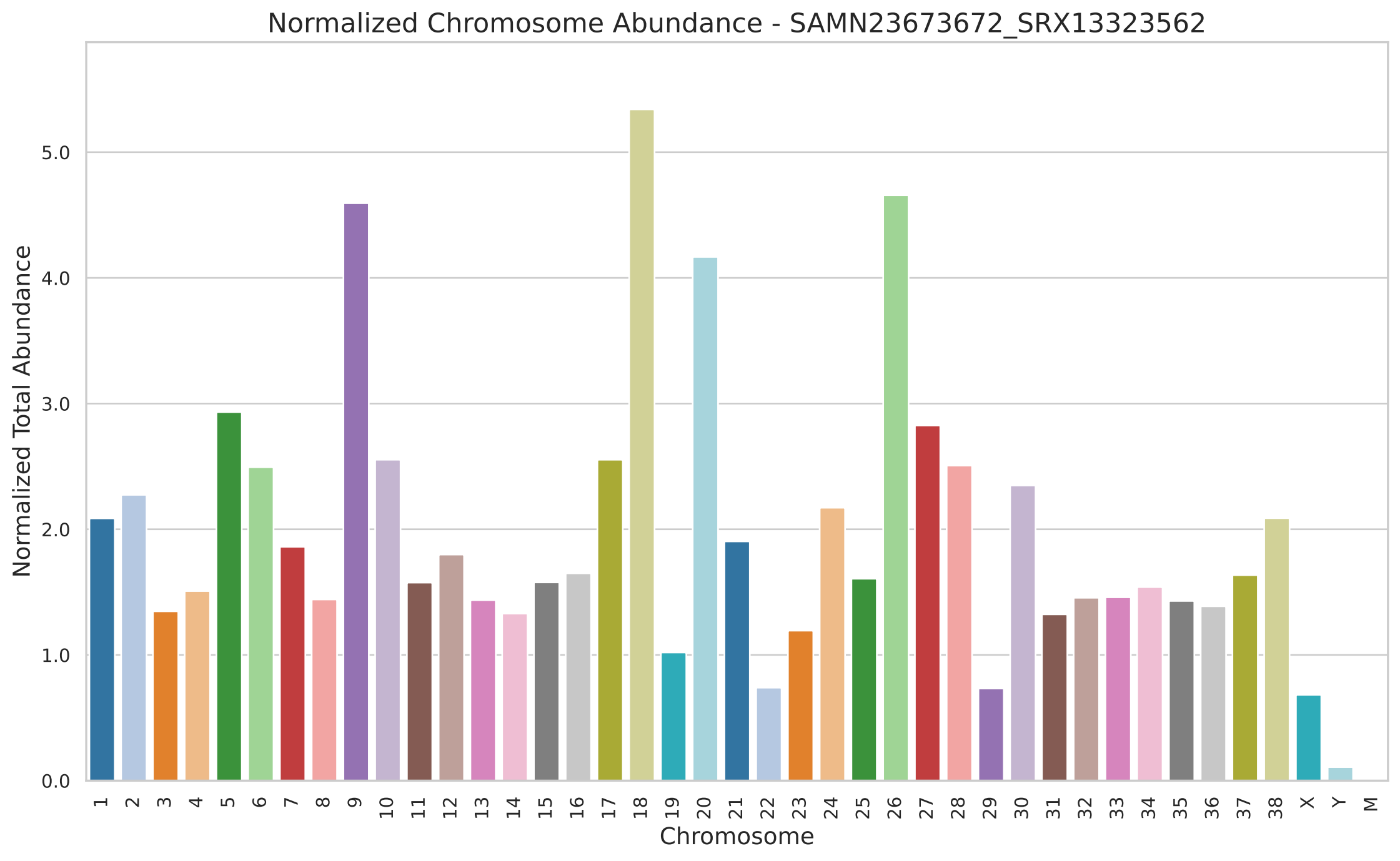

Normalized Chromosome Abundance - SAMN23673684_SRX13323575
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

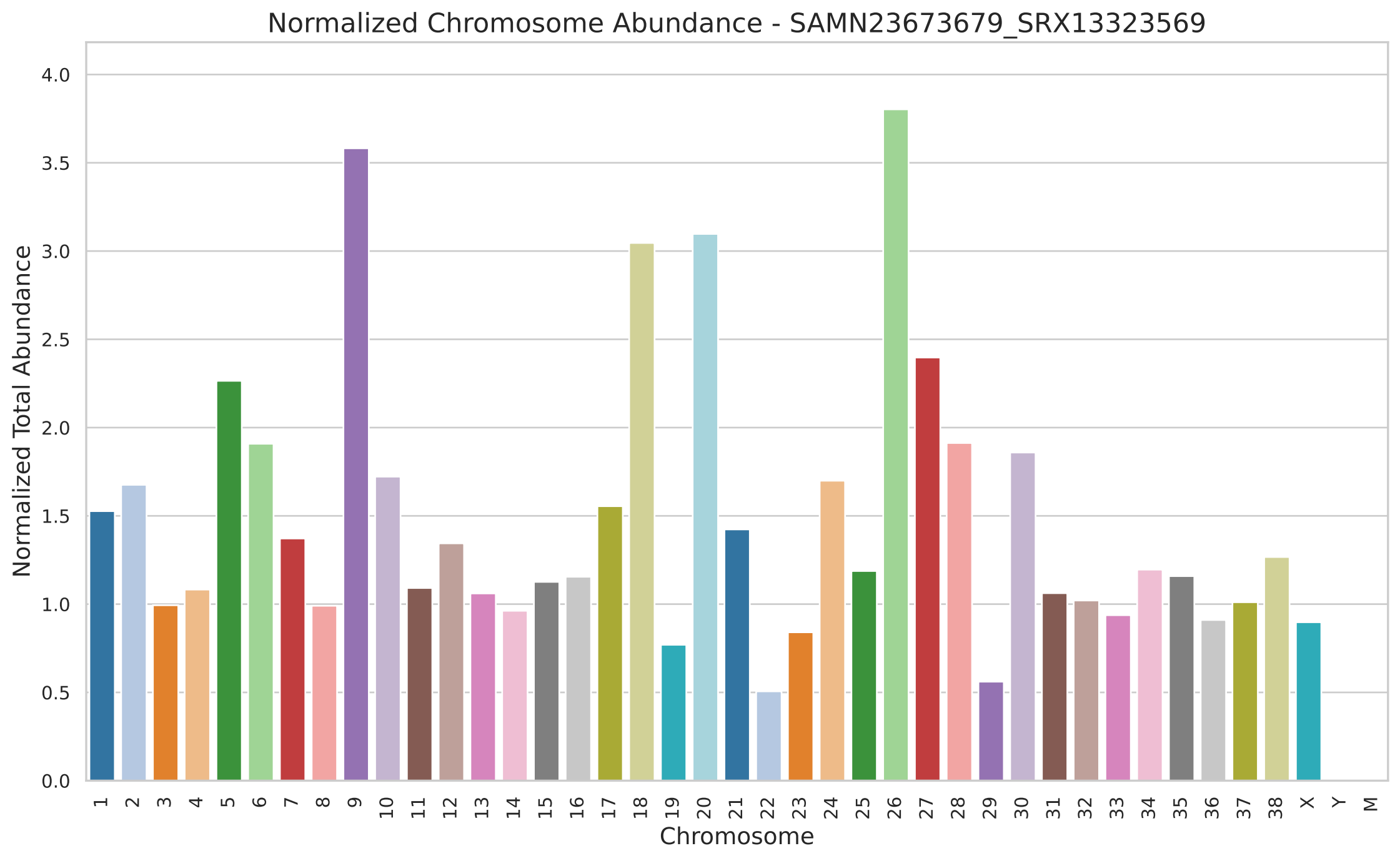

Normalized Chromosome Abundance - SAMN23673673_SRX13323563
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

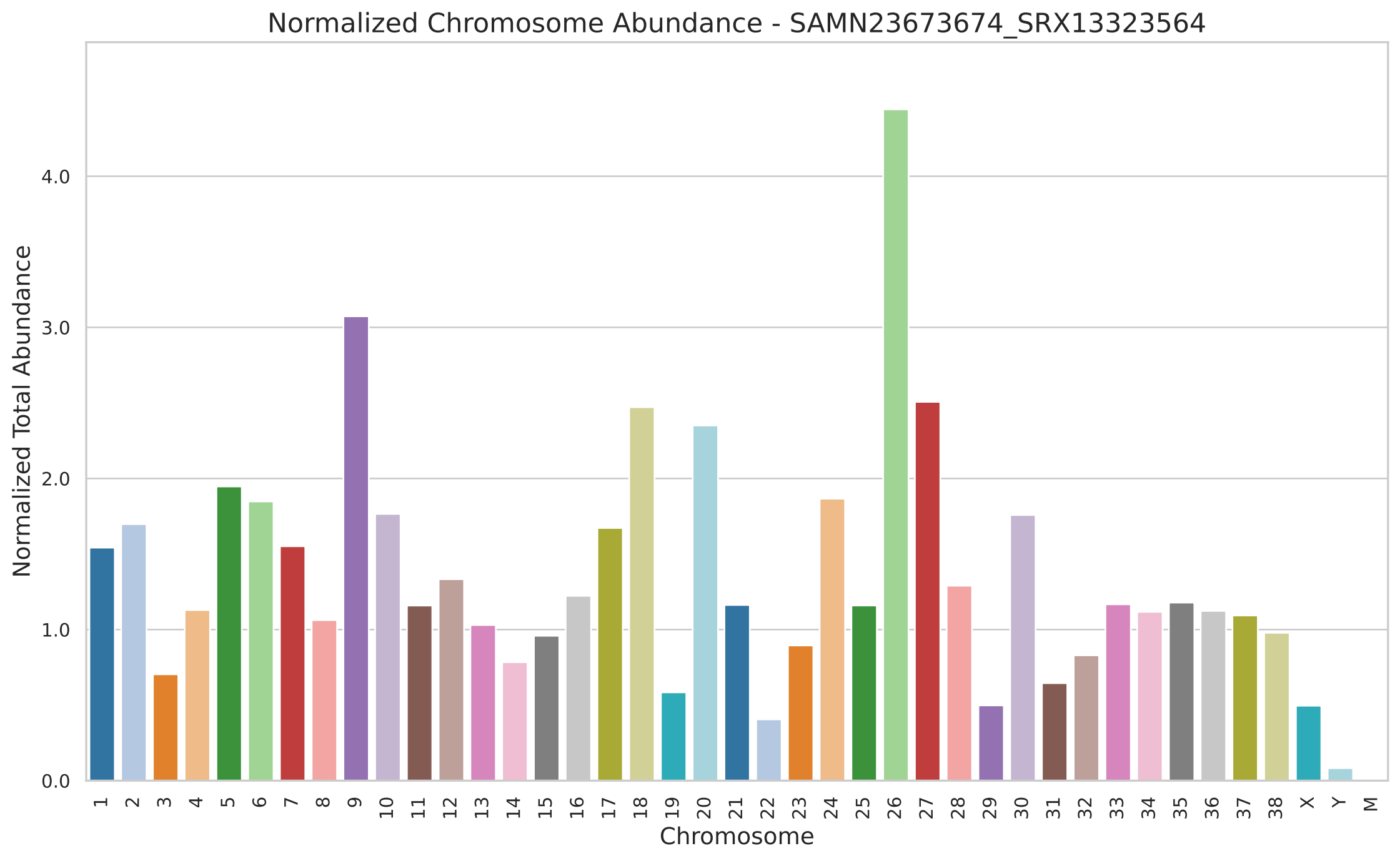

Normalized Chromosome Abundance - SAMN23673666_SRX13323555
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

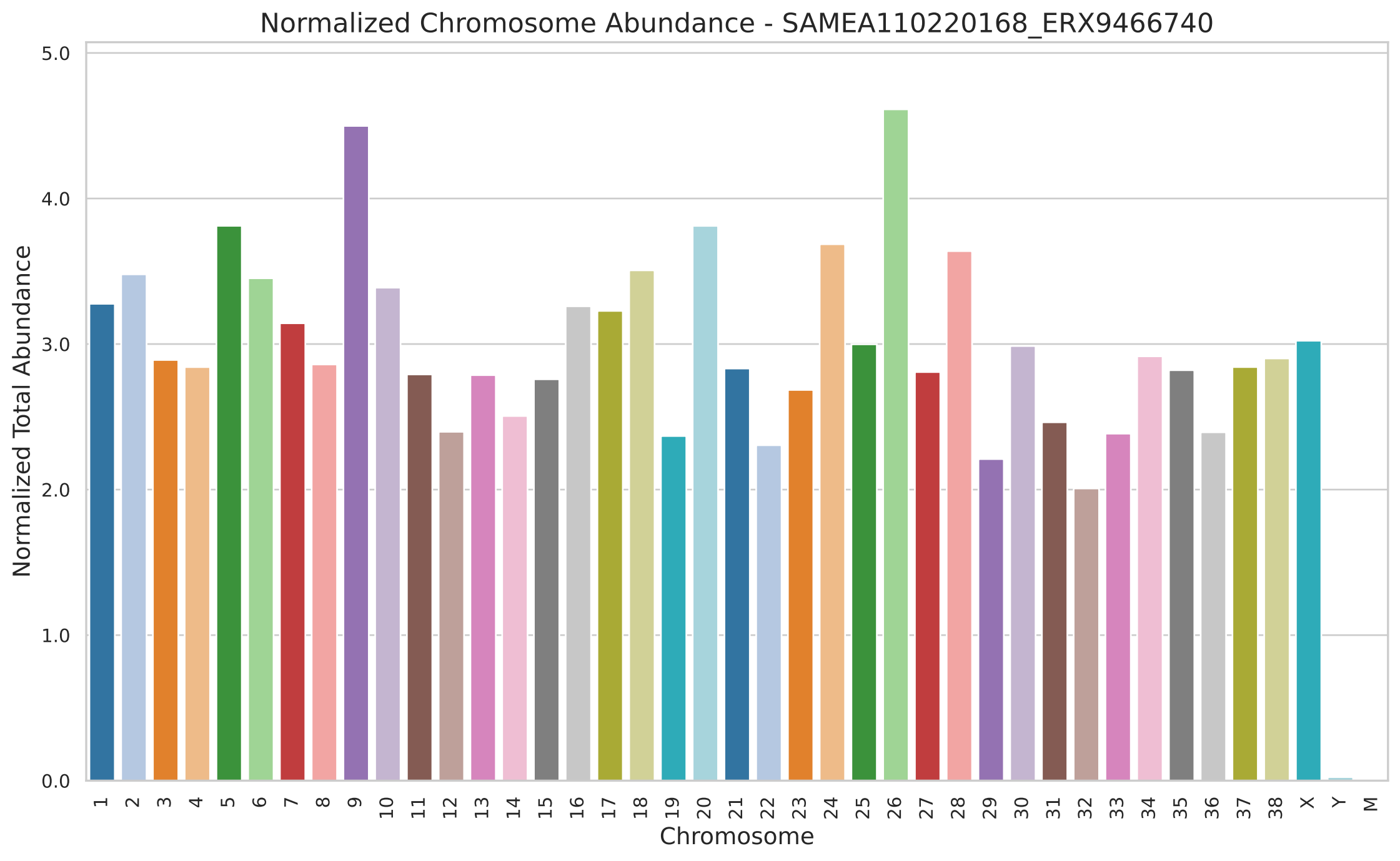

Normalized Chromosome Abundance - SAMN23673690_SRX13323581
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

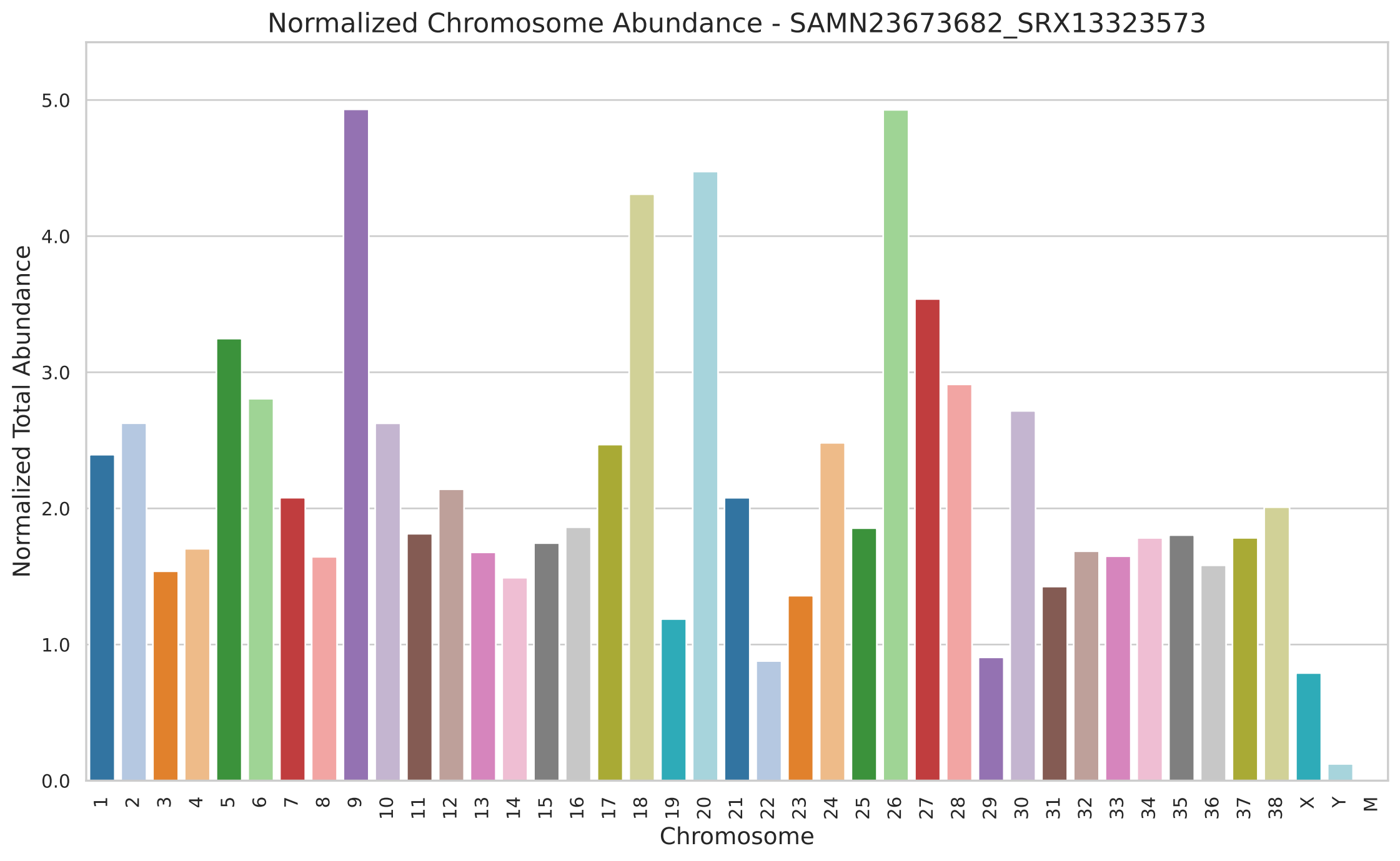

Normalized Chromosome Abundance - SAMN23673669_SRX13323558
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

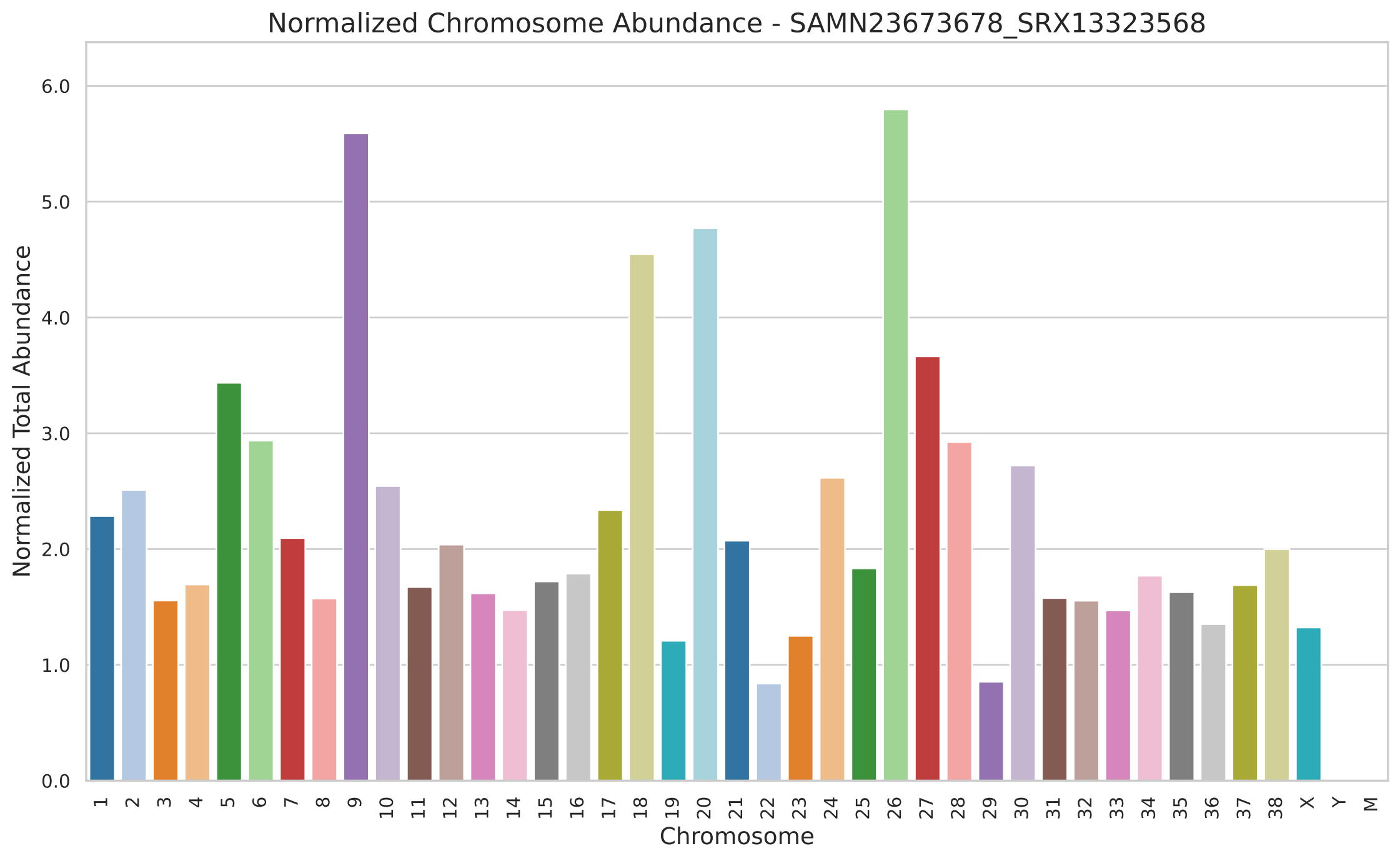

Normalized Chromosome Abundance - SAMN23673672_SRX13323562
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

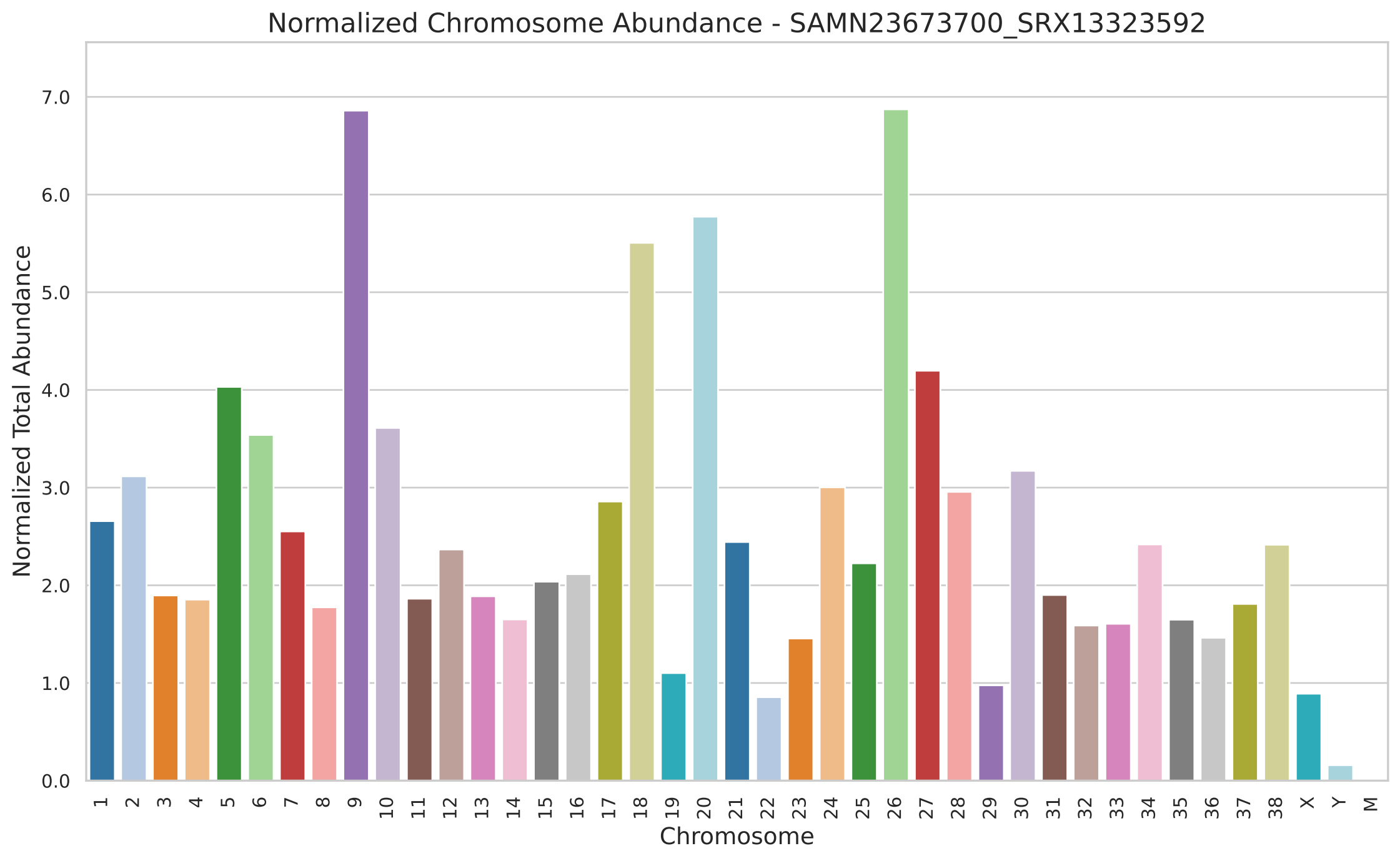

Normalized Chromosome Abundance - SAMN23673679_SRX13323569
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

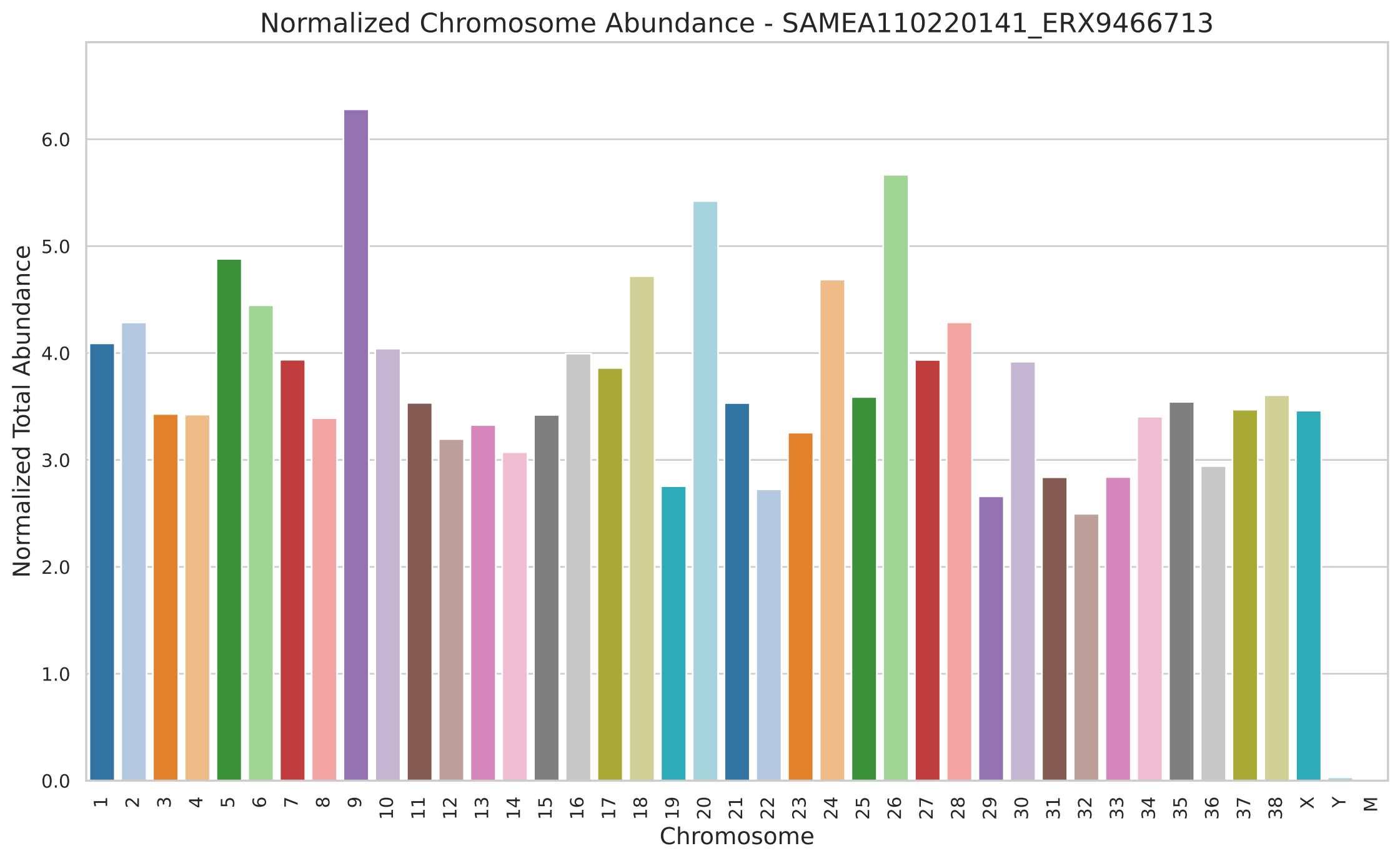

Normalized Chromosome Abundance - SAMN23673674_SRX13323564
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

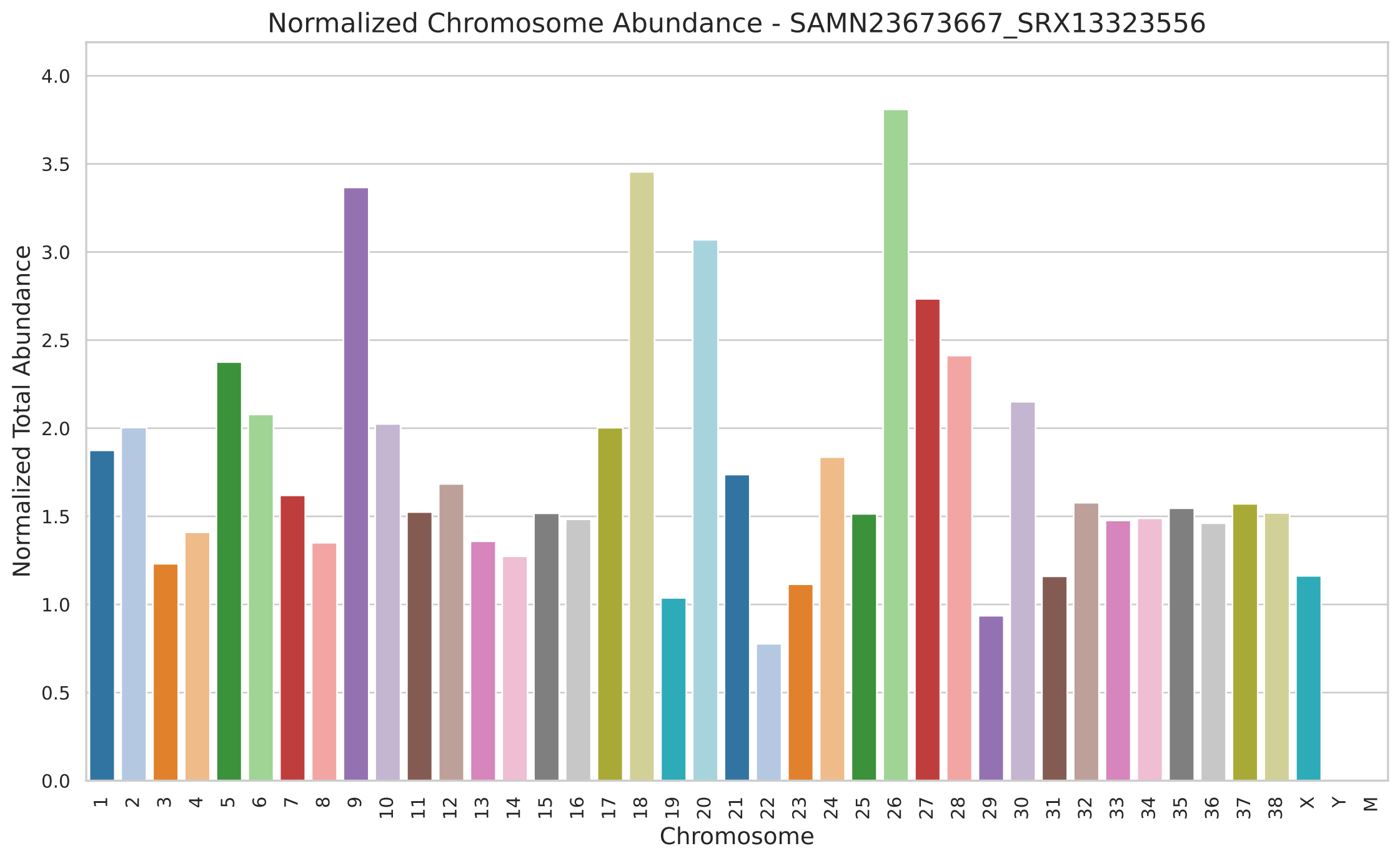

Normalized Chromosome Abundance - SAMEA110220168_ERX9466740
Normalized Total Abundance
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

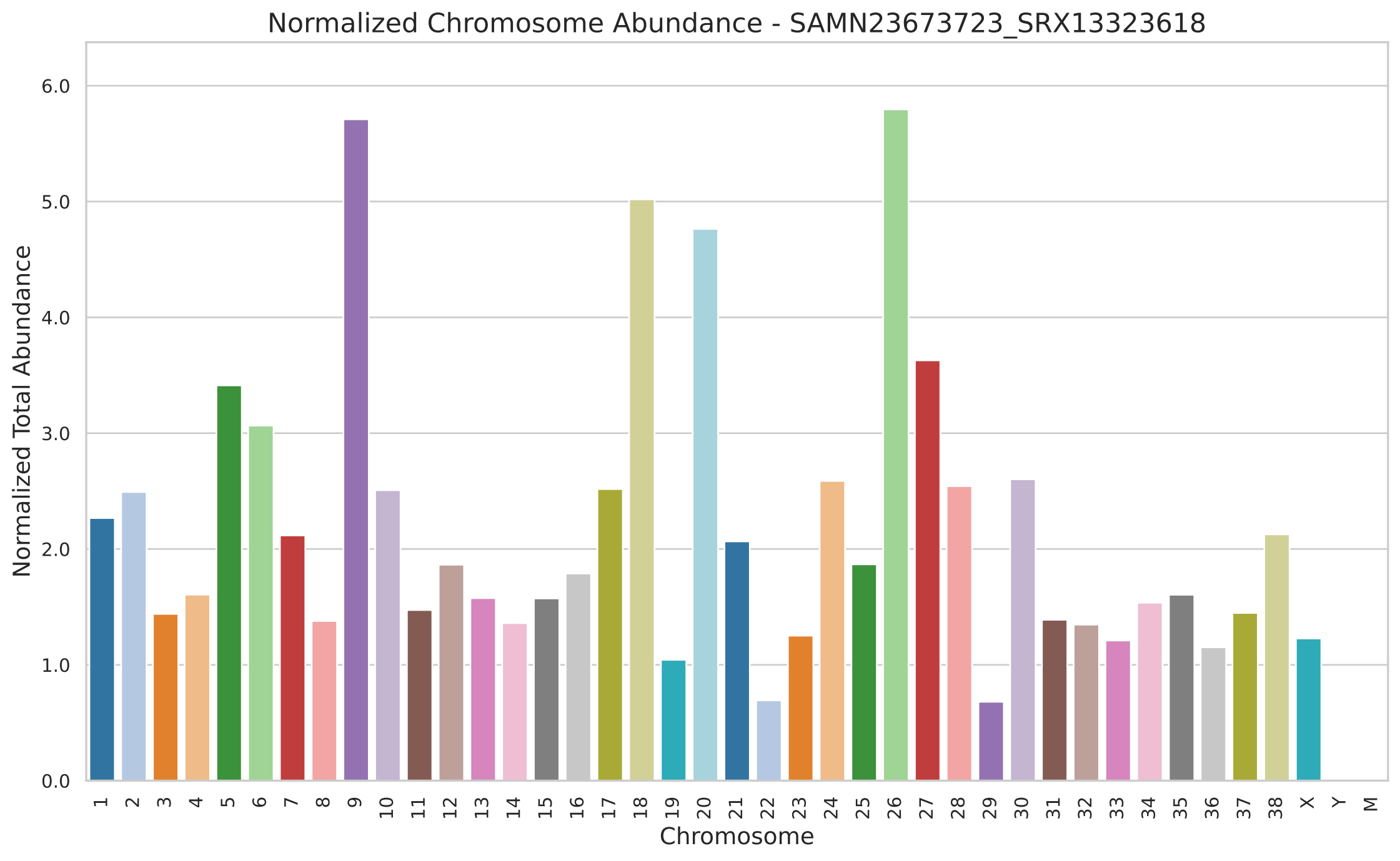

Normalized Chromosome Abundance - SAMN23673682_SRX13323573
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

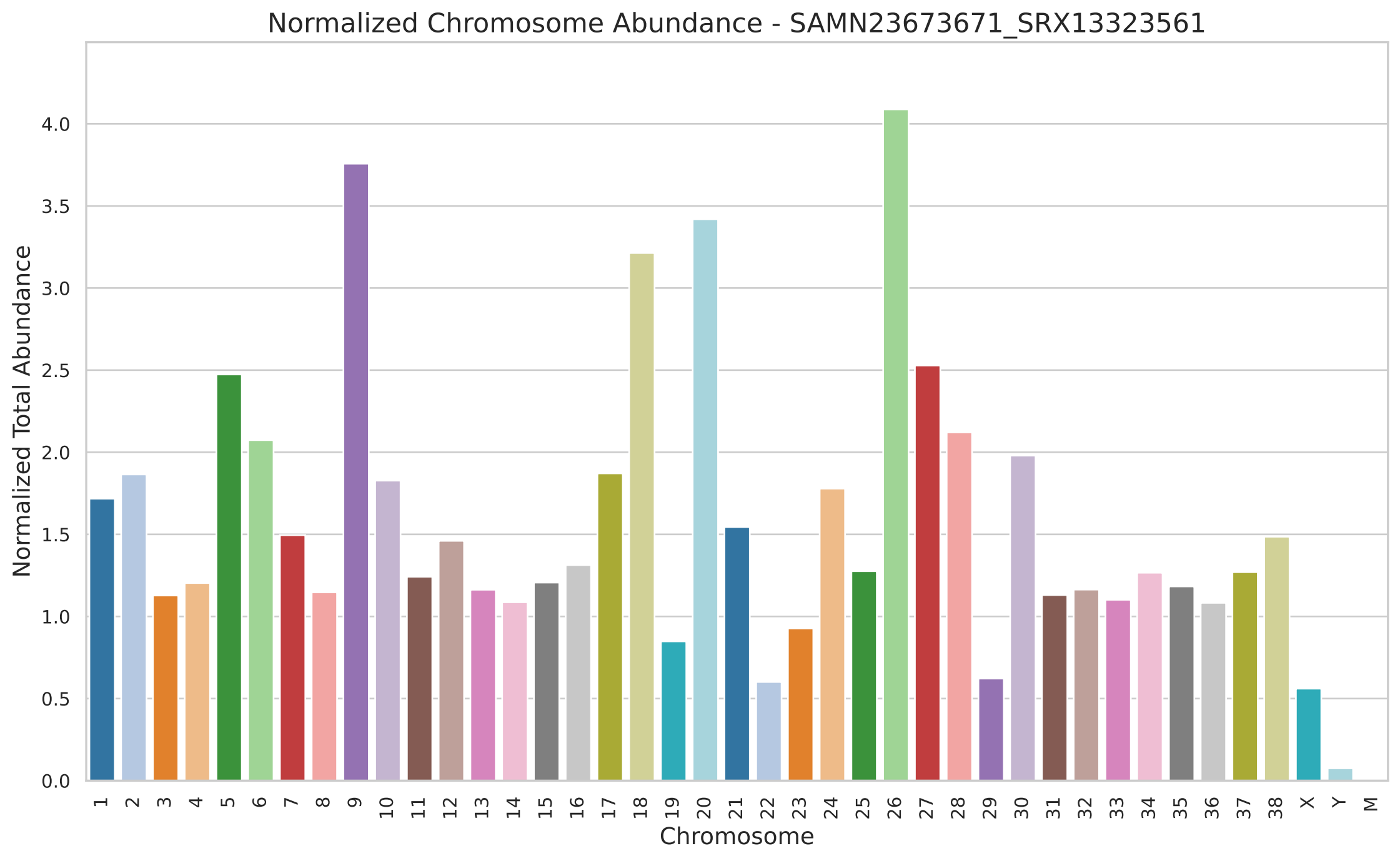

Normalized Chromosome Abundance - SAMN23673678_SRX13323568
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

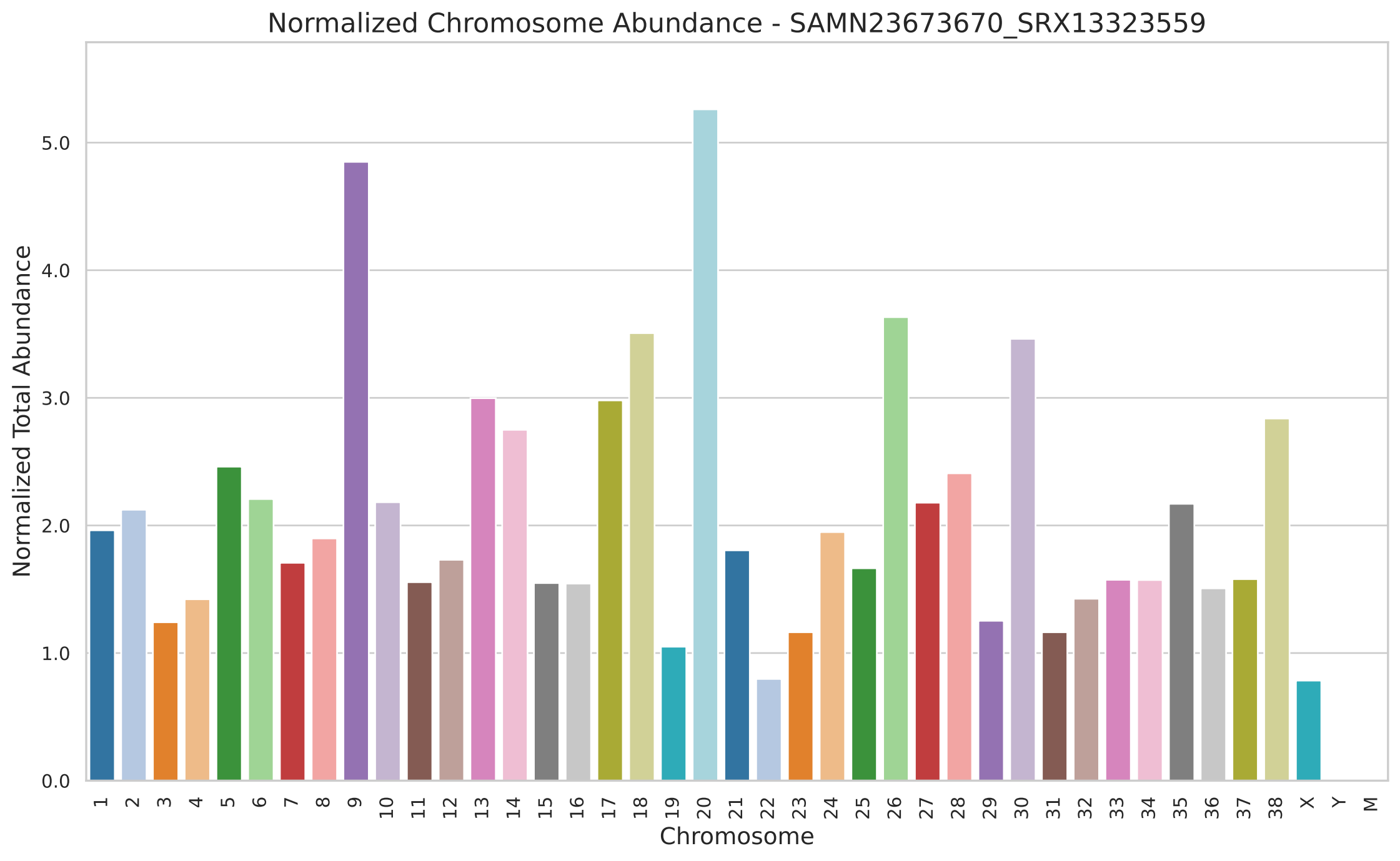

Normalized Chromosome Abundance - SAMN23673700_SRX13323592
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

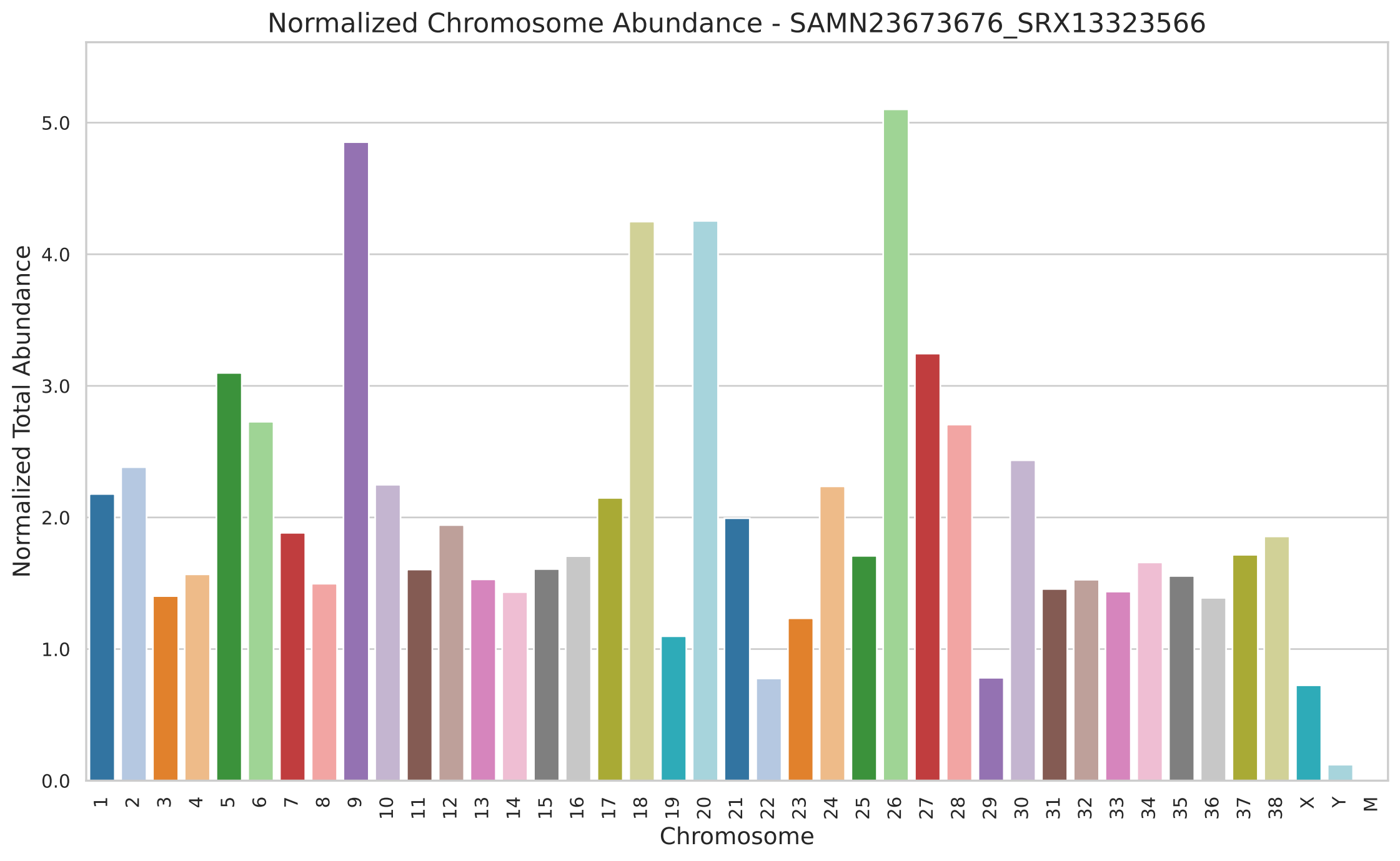

Normalized Chromosome Abundance - SAMEA110220141_ERX9466713
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

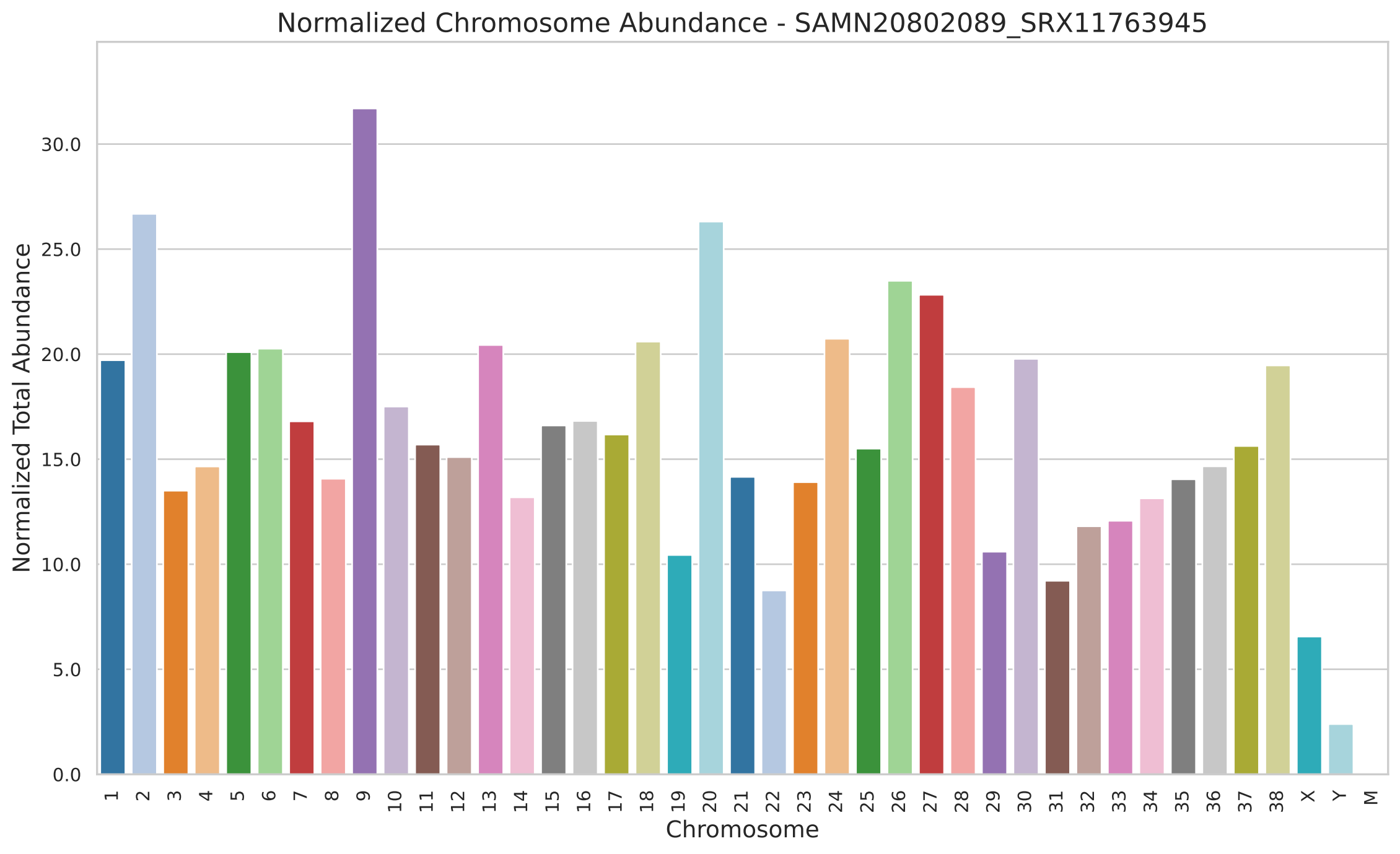

Normalized Chromosome Abundance - SAMN23673667_SRX13323556
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

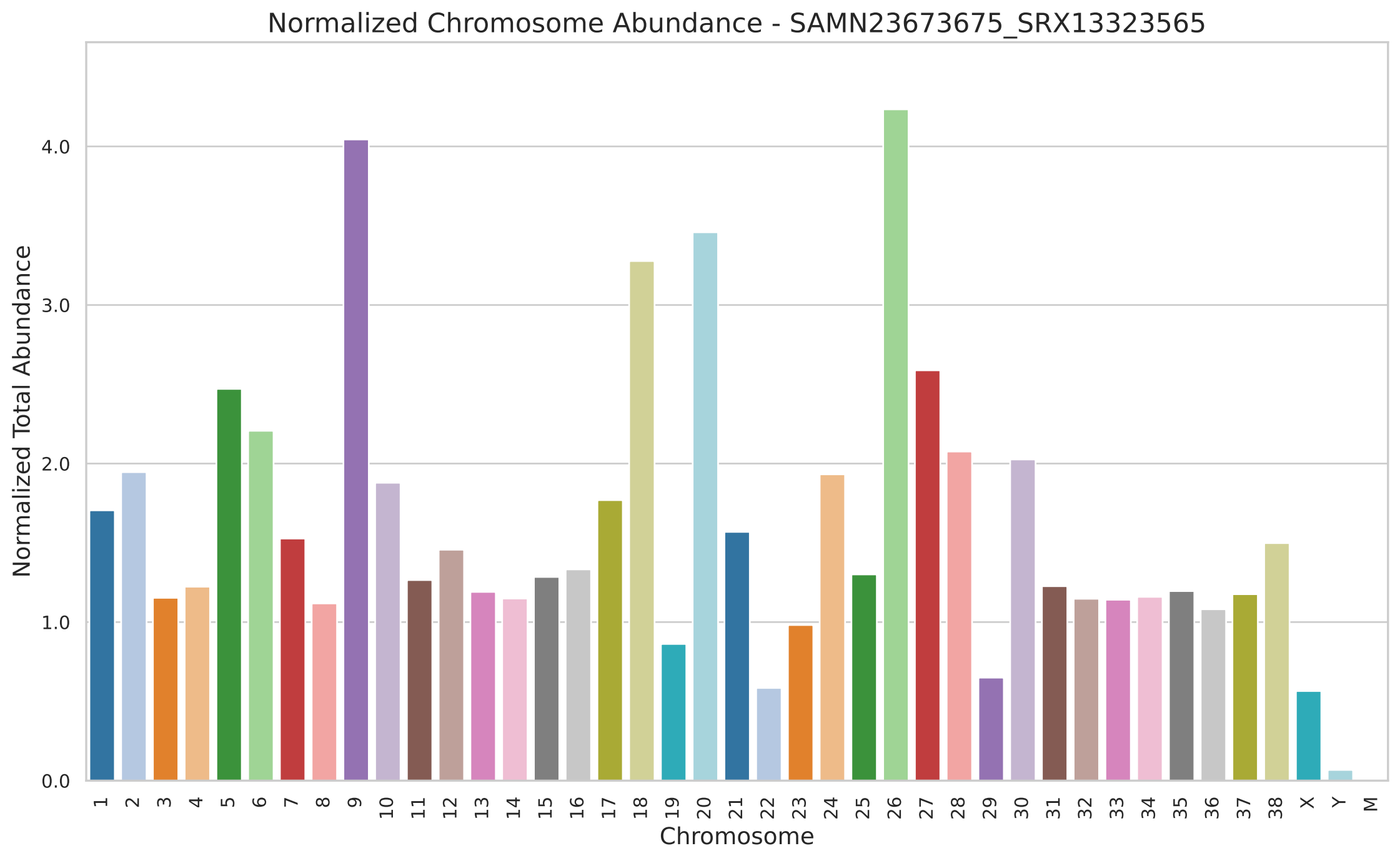

Normalized Chromosome Abundance - SAMN23673723_SRX13323618
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

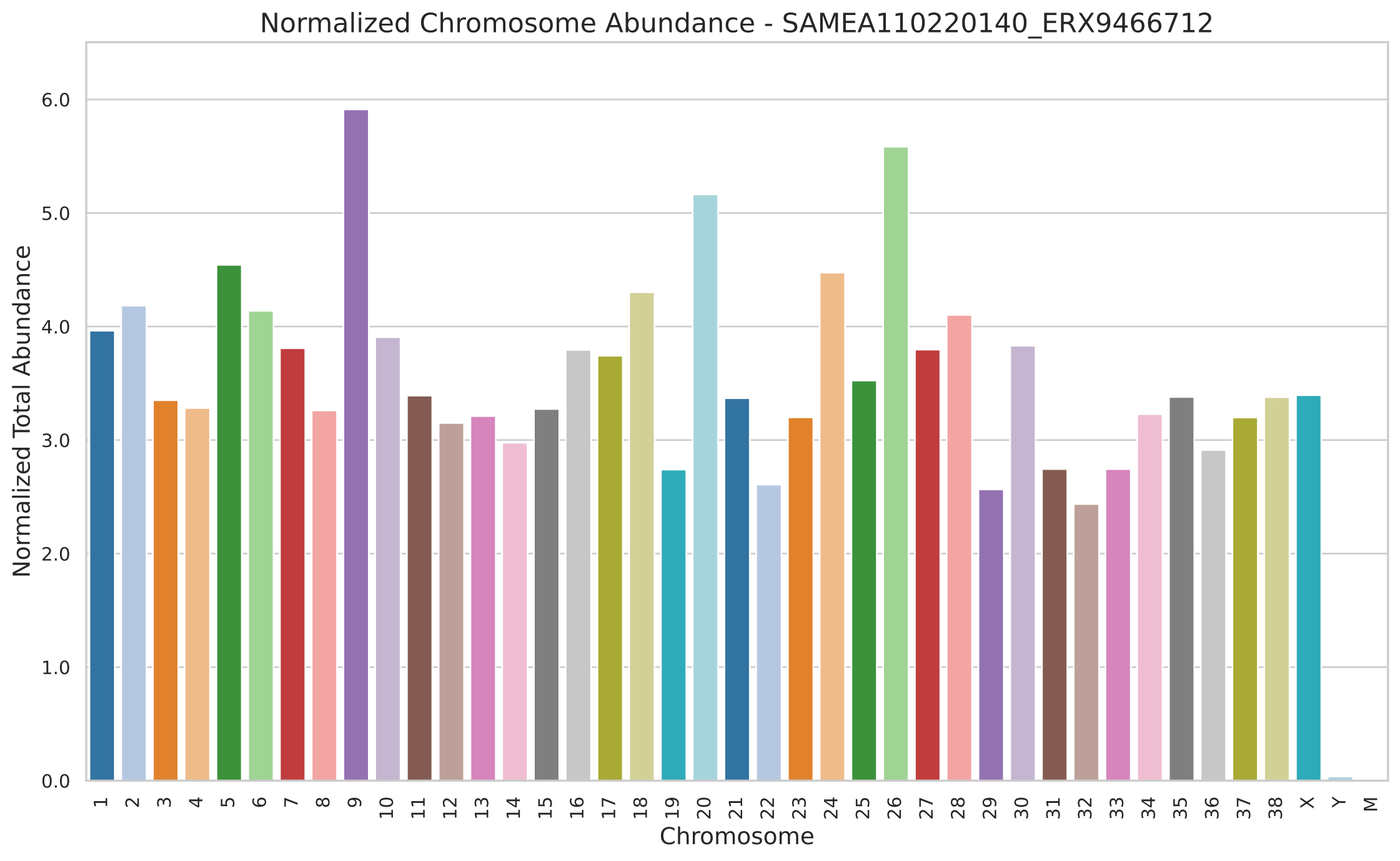

Normalized Chromosome Abundance - SAMN23673671_SRX13323561
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

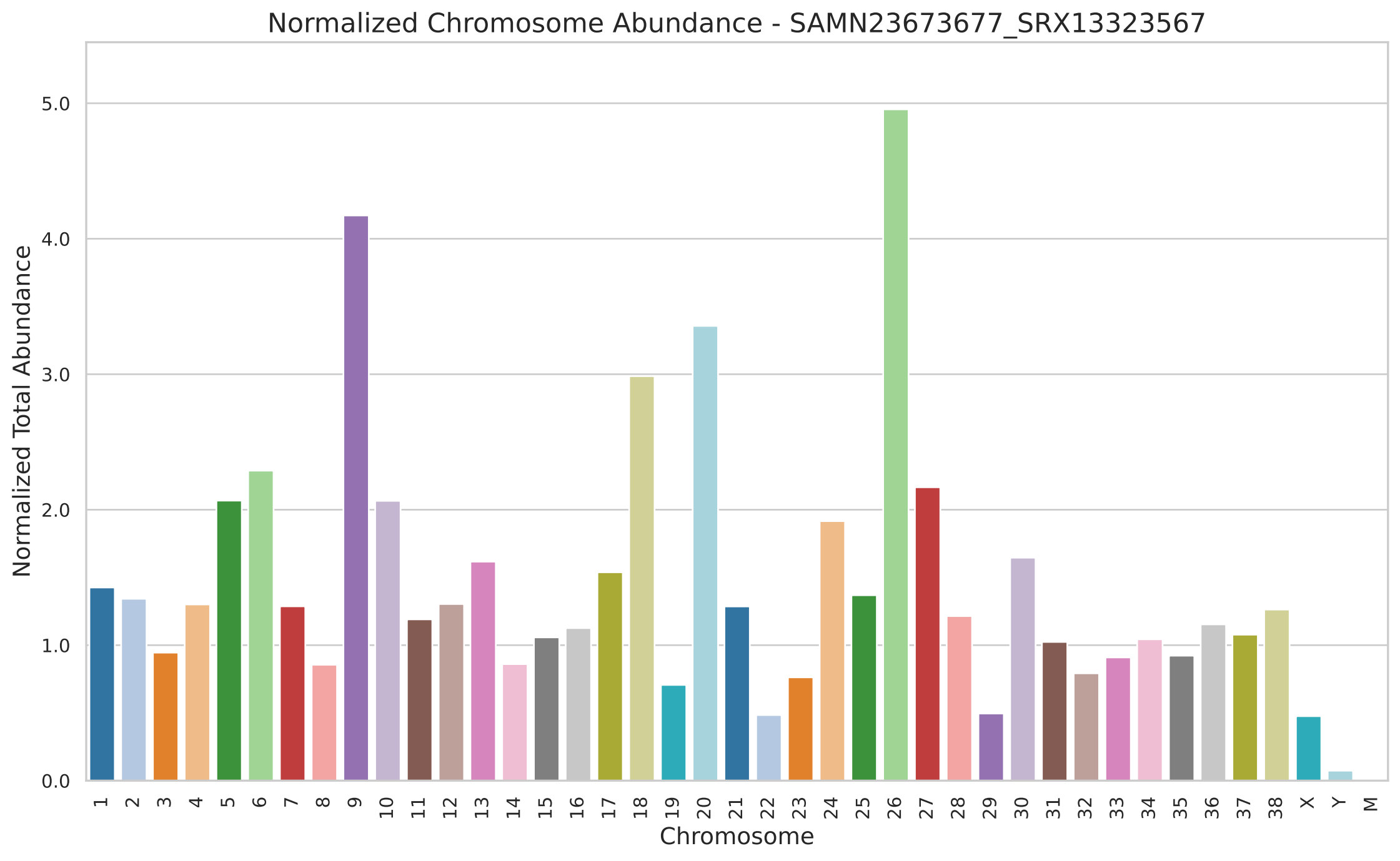

Normalized Chromosome Abundance - SAMN23673670_SRX13323559
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

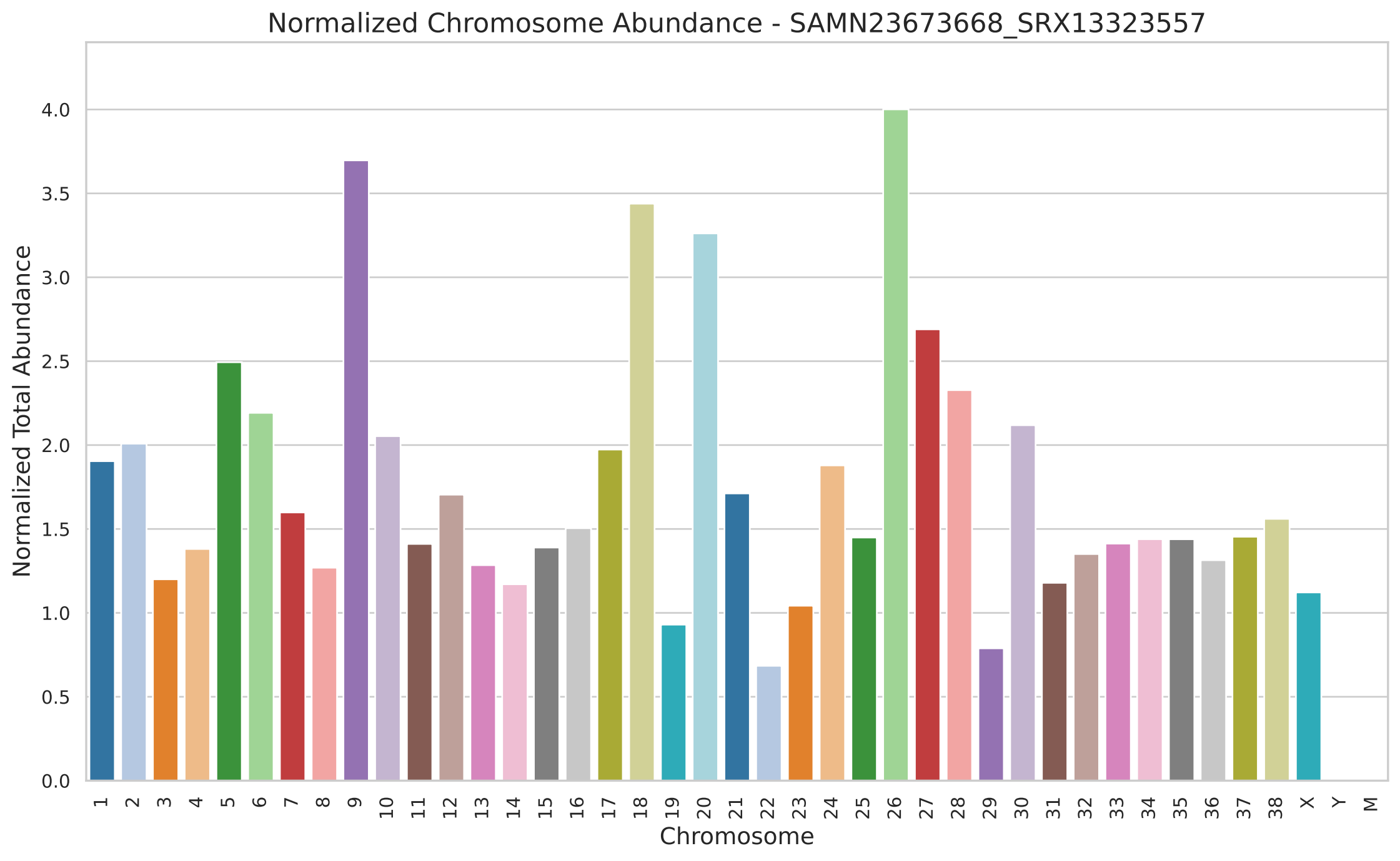

Normalized Chromosome Abundance - SAMN23673676_SRX13323566
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

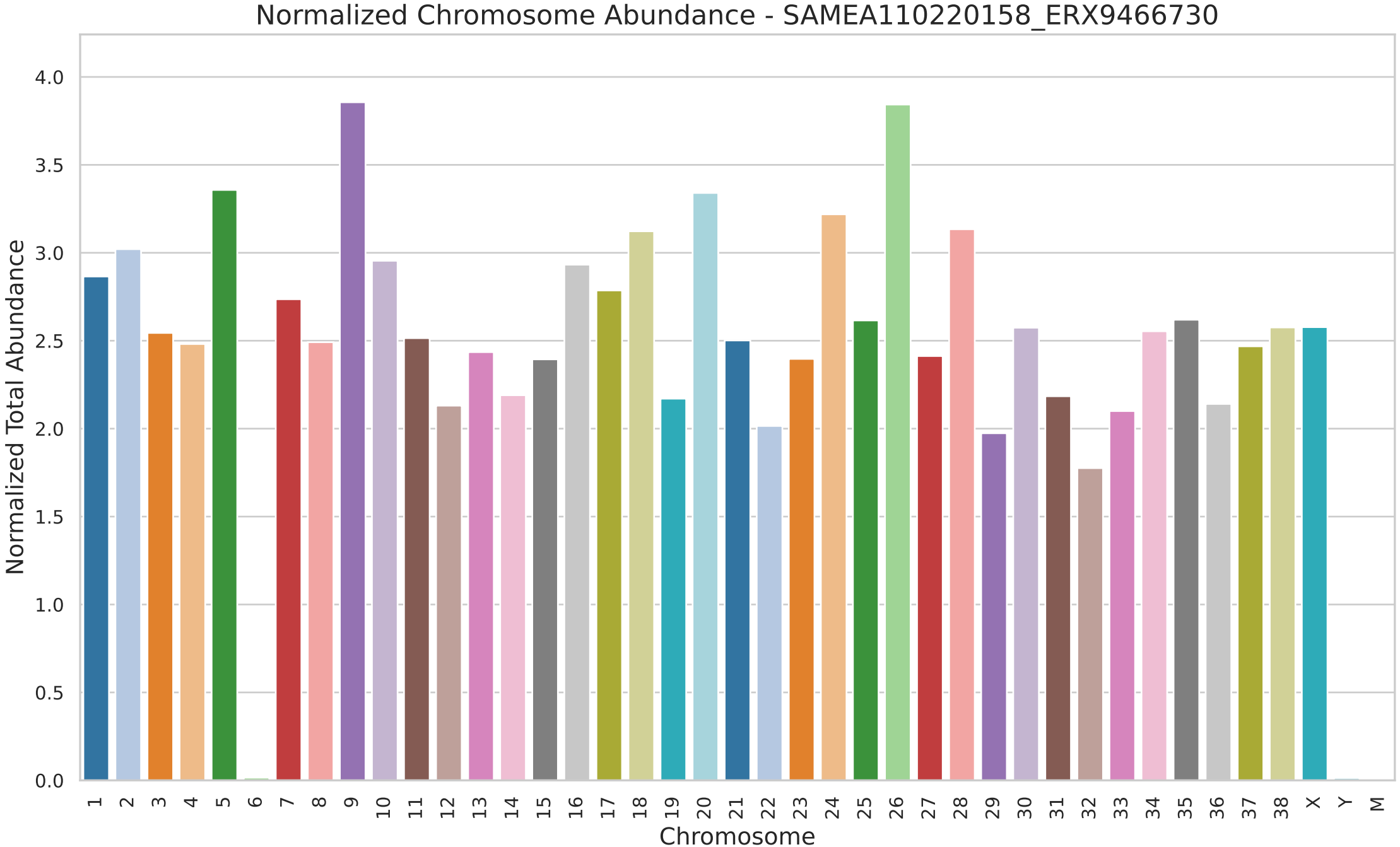

Normalized Chromosome Abundance - SAMN20802089_SRX11763945
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

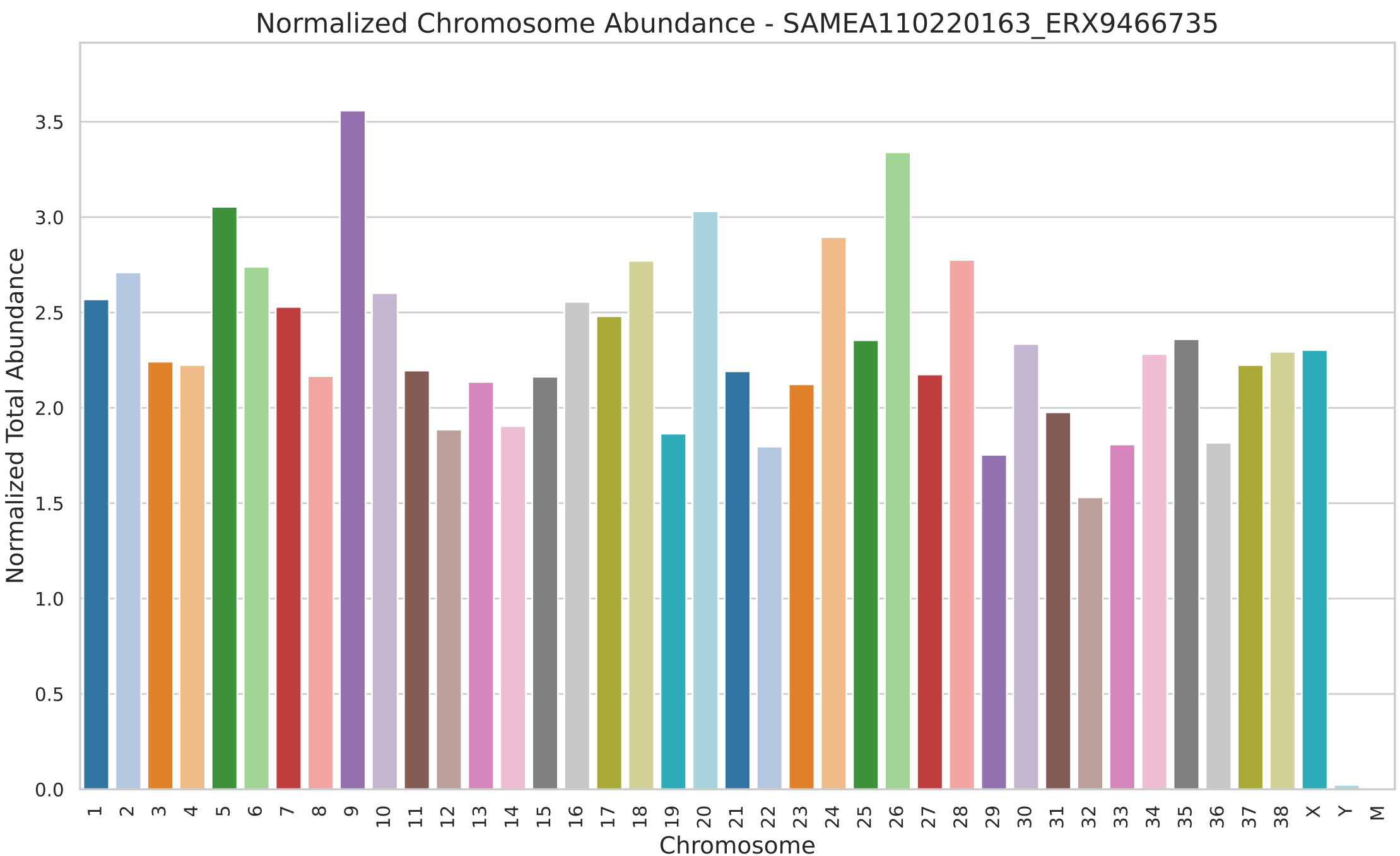

Normalized Chromosome Abundance - SAMN23673675_SRX13323565
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

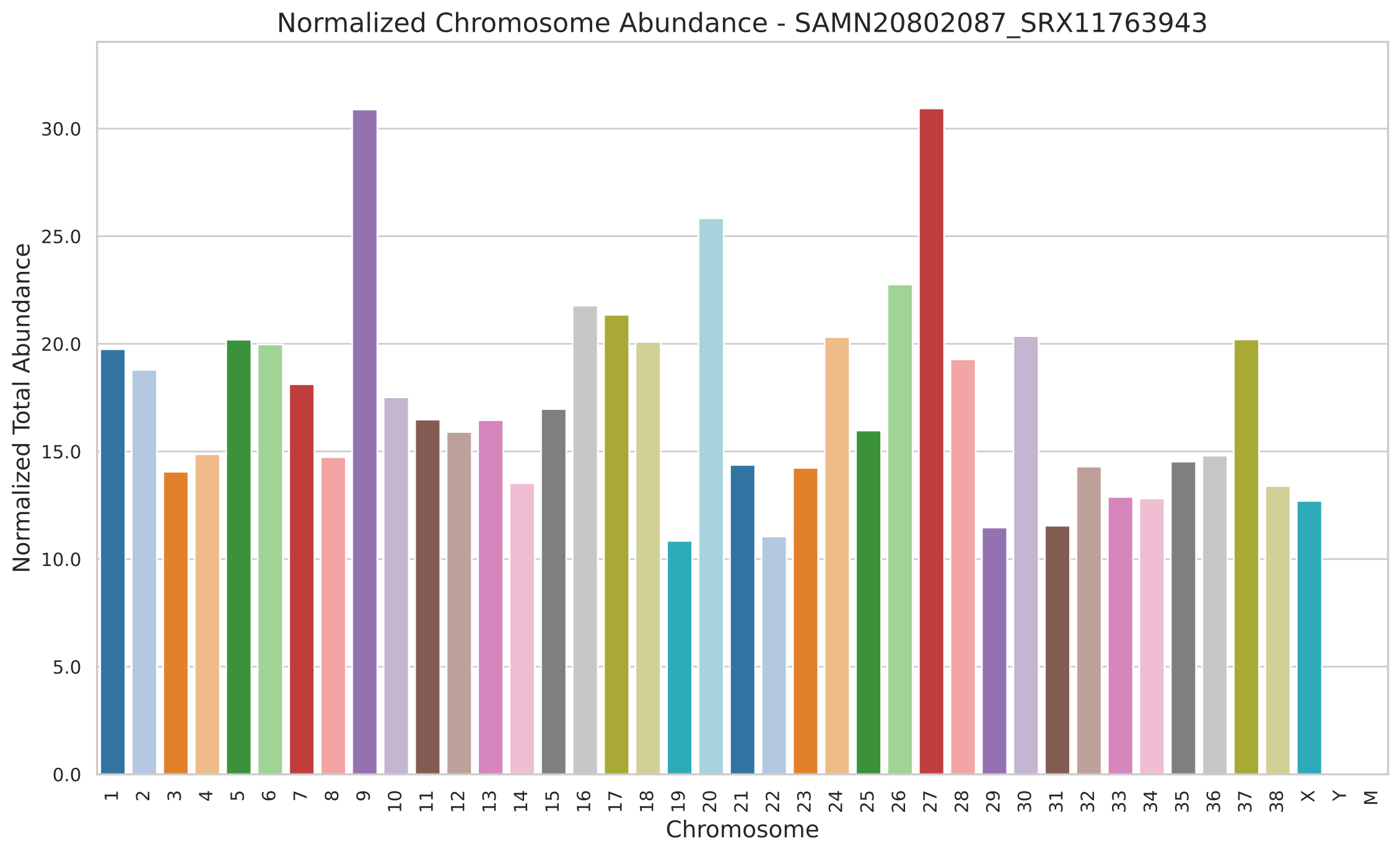

Normalized Chromosome Abundance - SAMEA110220140_ERX9466712
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

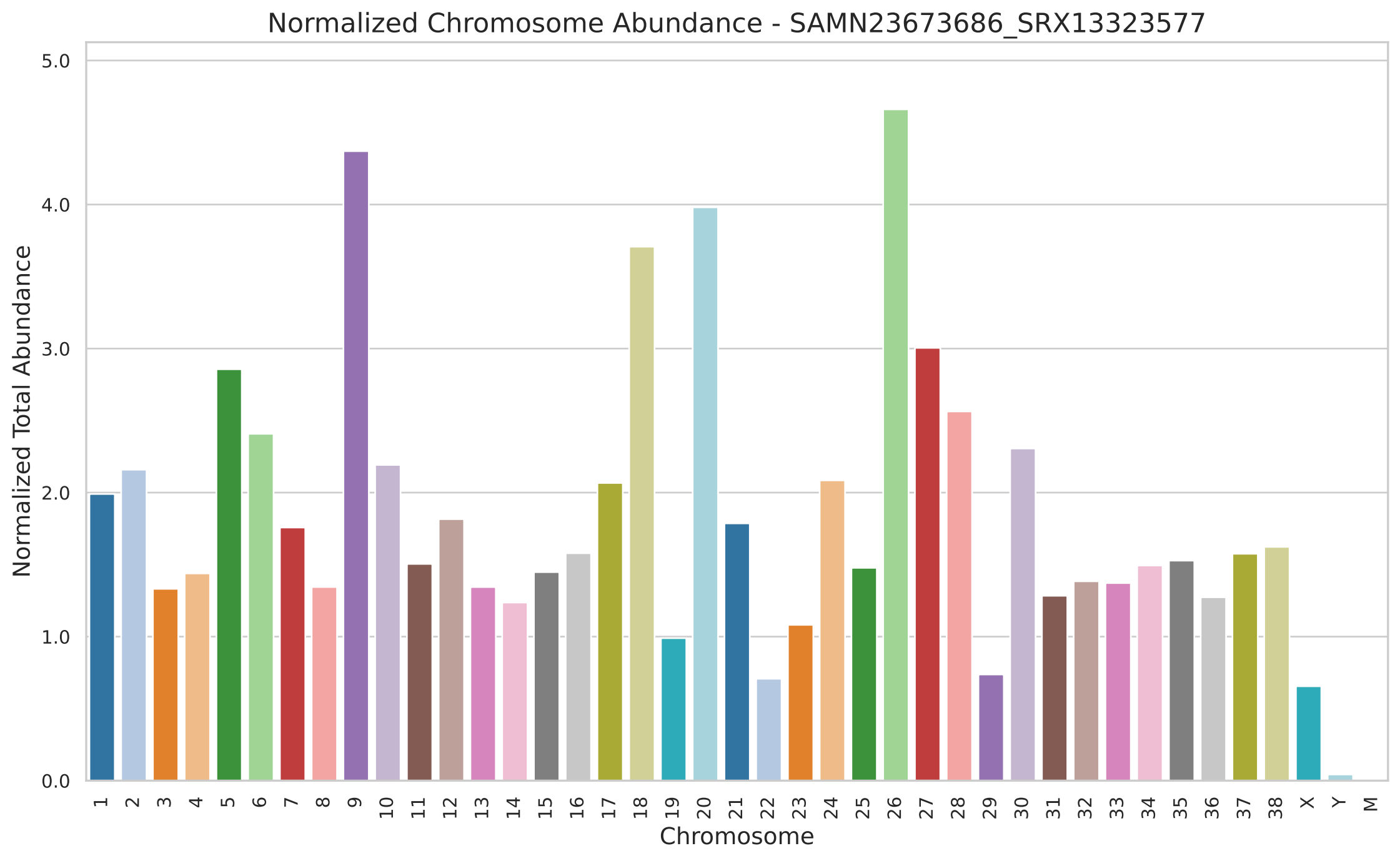

Normalized Chromosome Abundance - SAMN23673677_SRX13323567
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

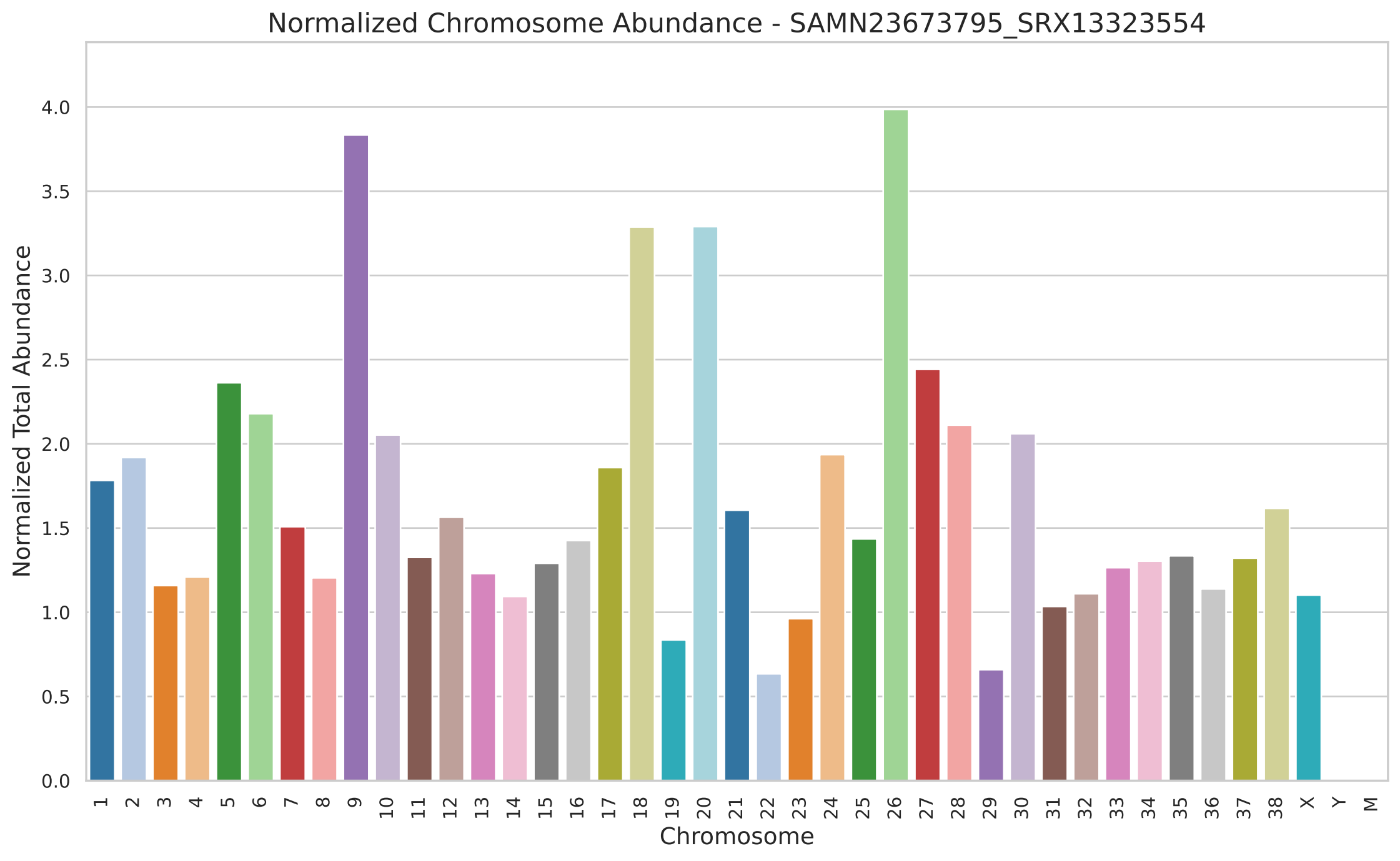

Normalized Chromosome Abundance - SAMN23673668_SRX13323557
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

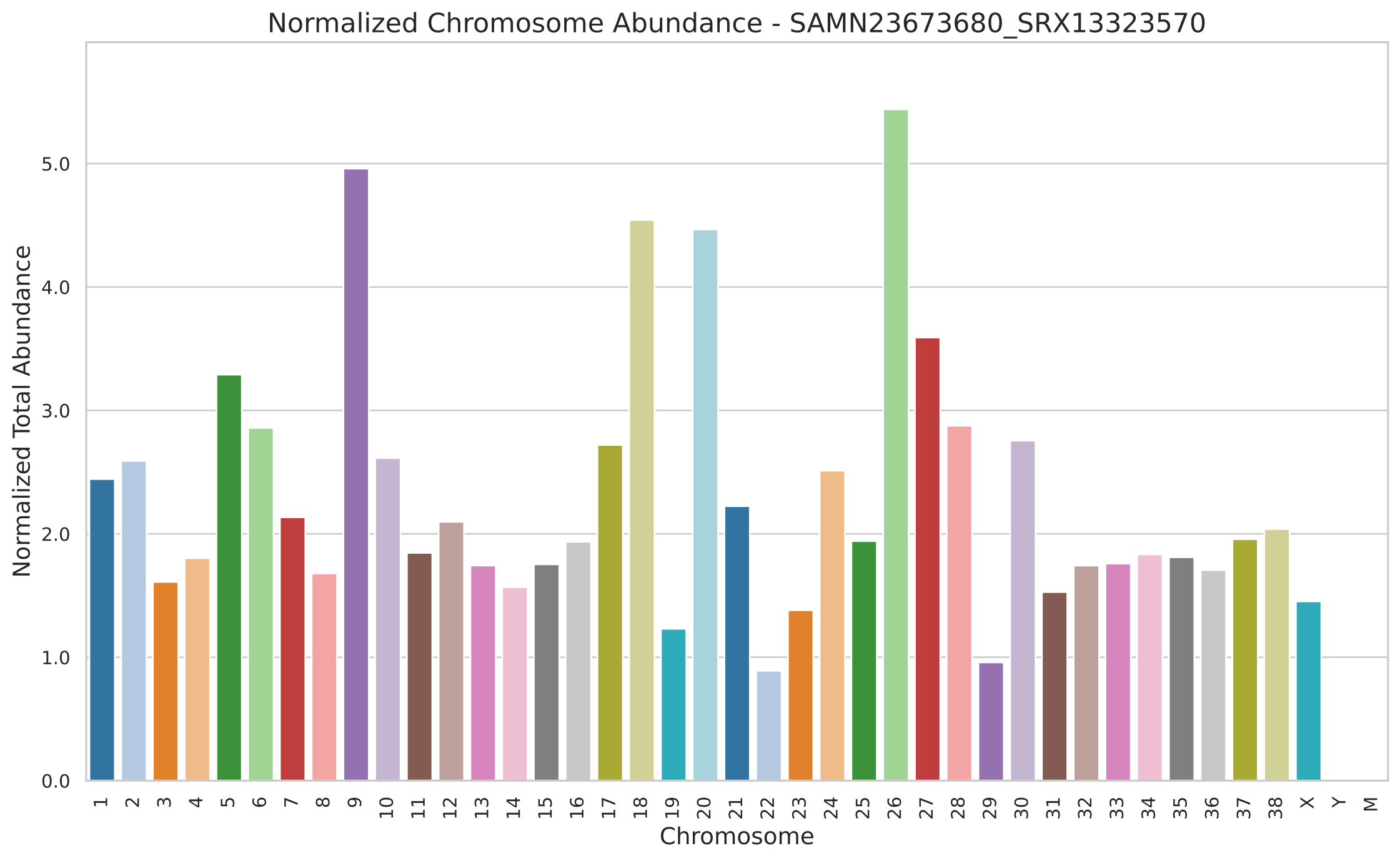

Normalized Chromosome Abundance - SAMEA110220158_ERX9466730
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

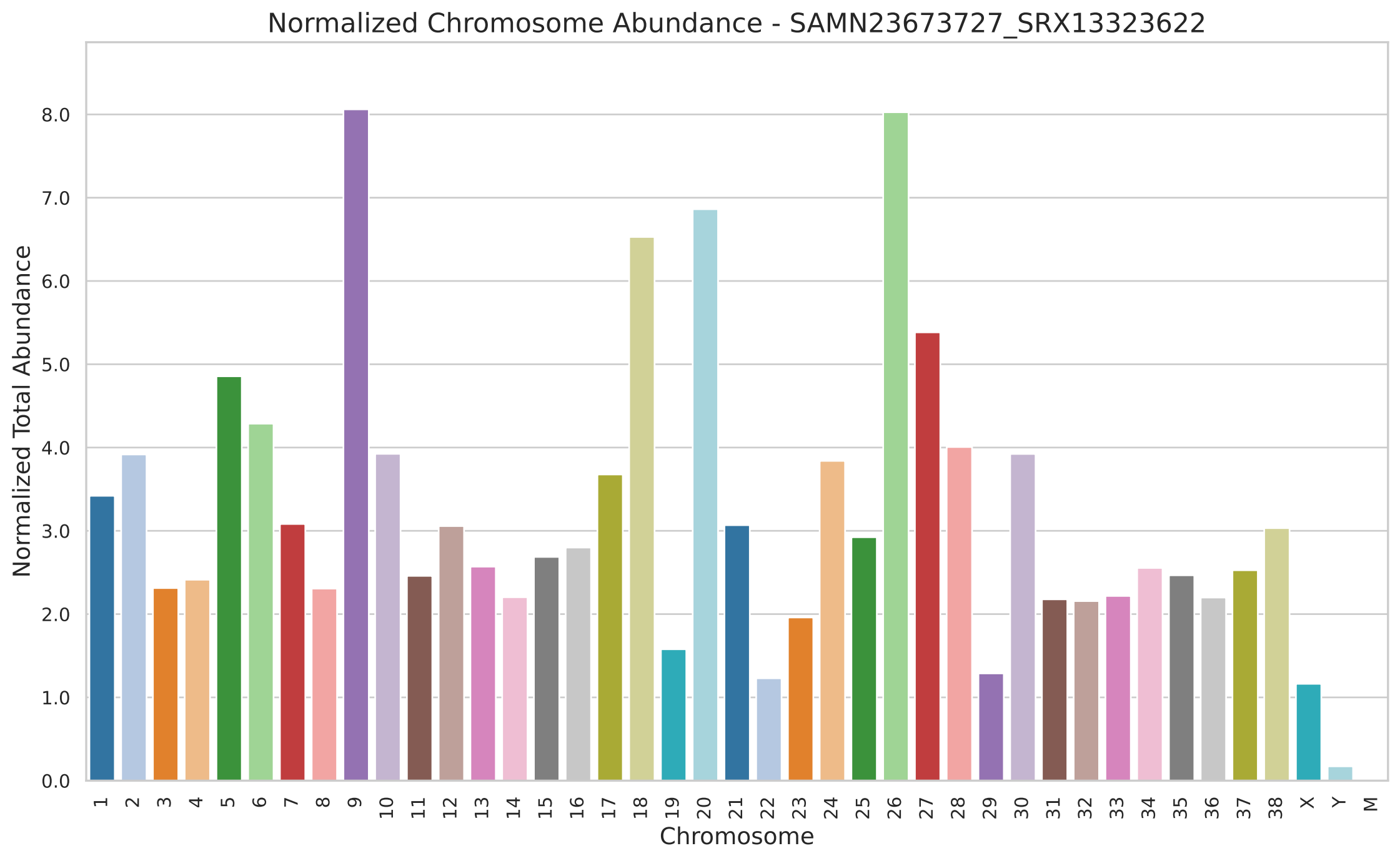

Normalized Chromosome Abundance - SAMEA110220163_ERX9466735
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

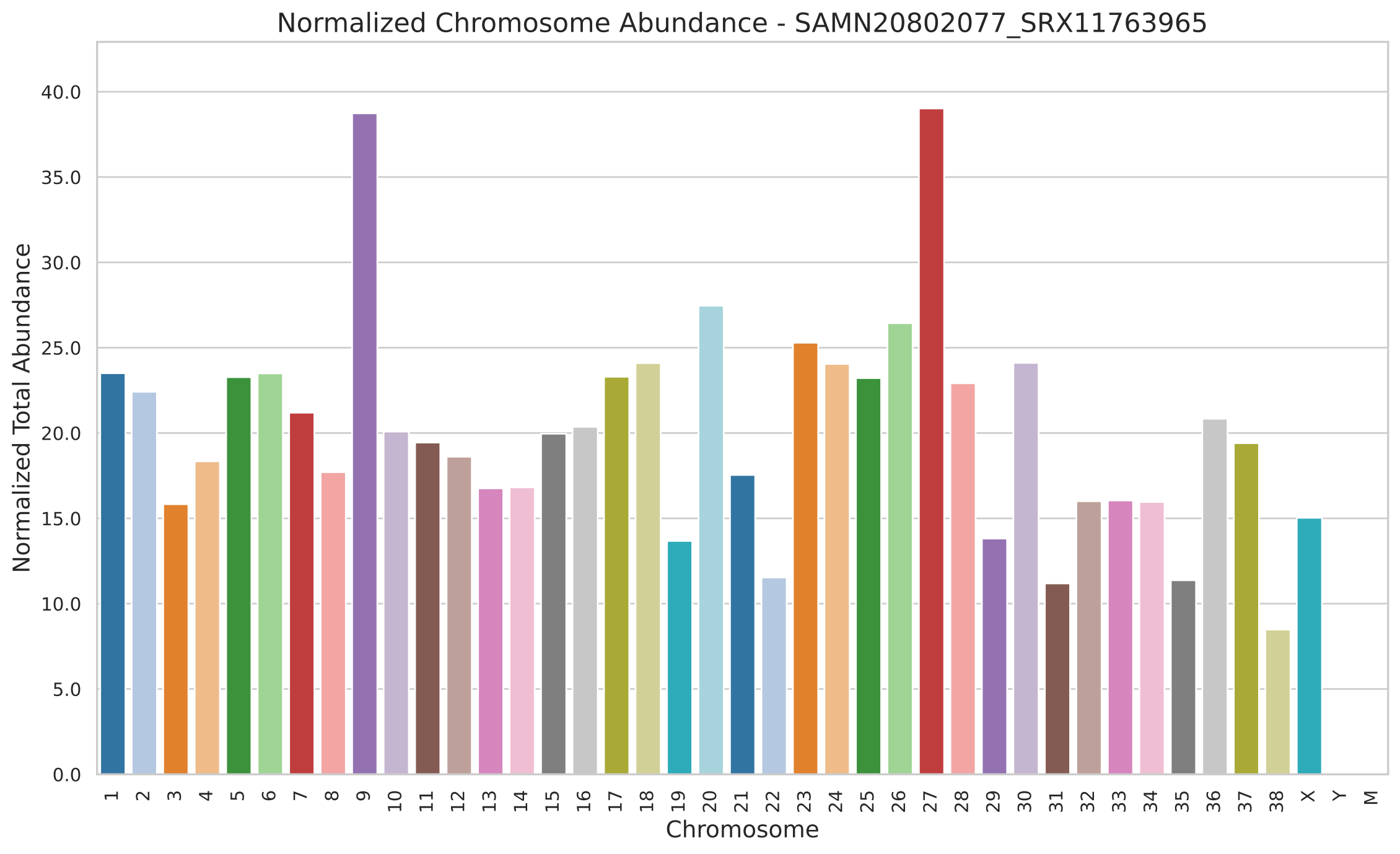

Normalized Chromosome Abundance - SAMN20802087_SRX11763943
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

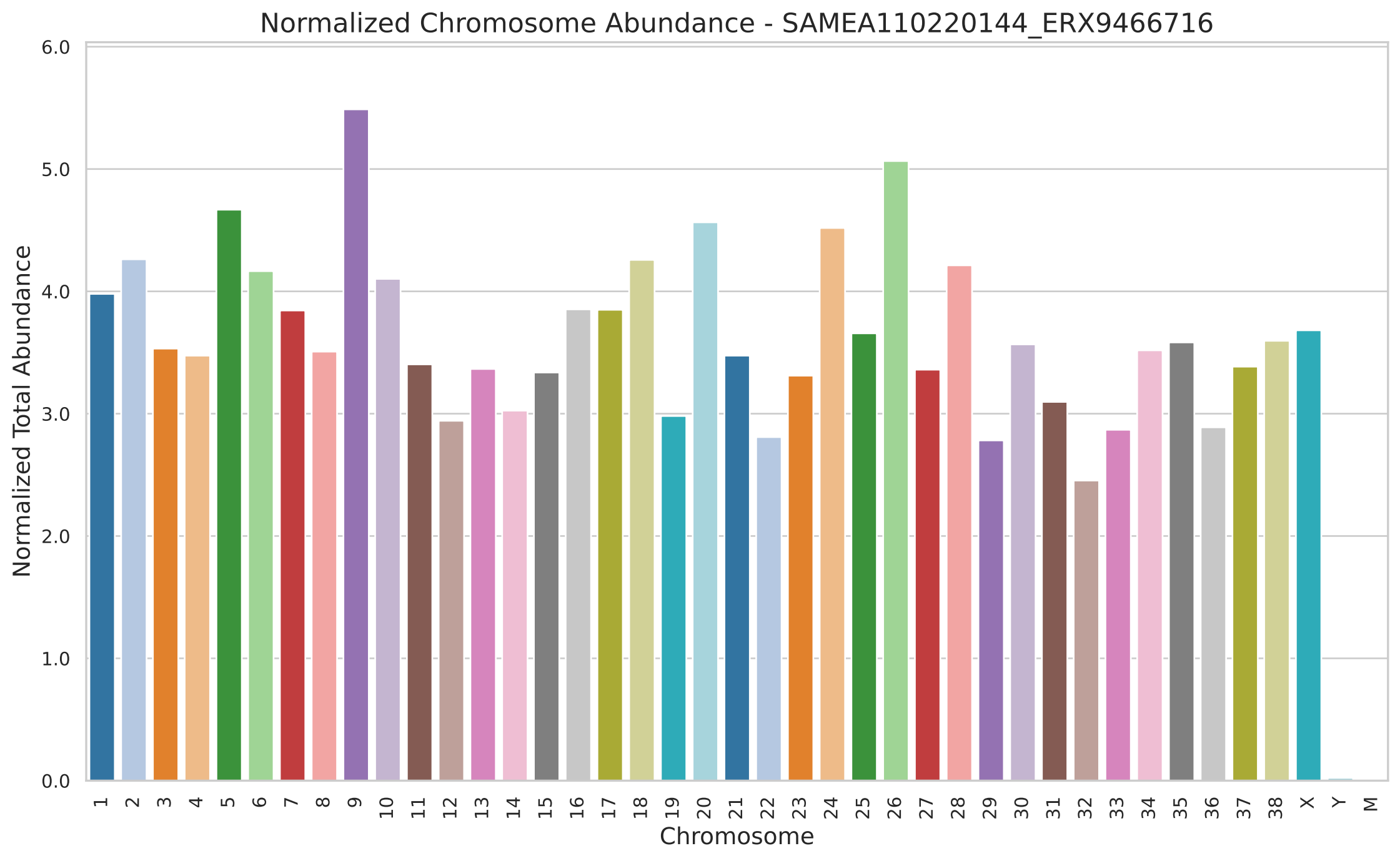

Normalized Chromosome Abundance - SAMN23673686_SRX13323577
Normalized Total Abundance
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

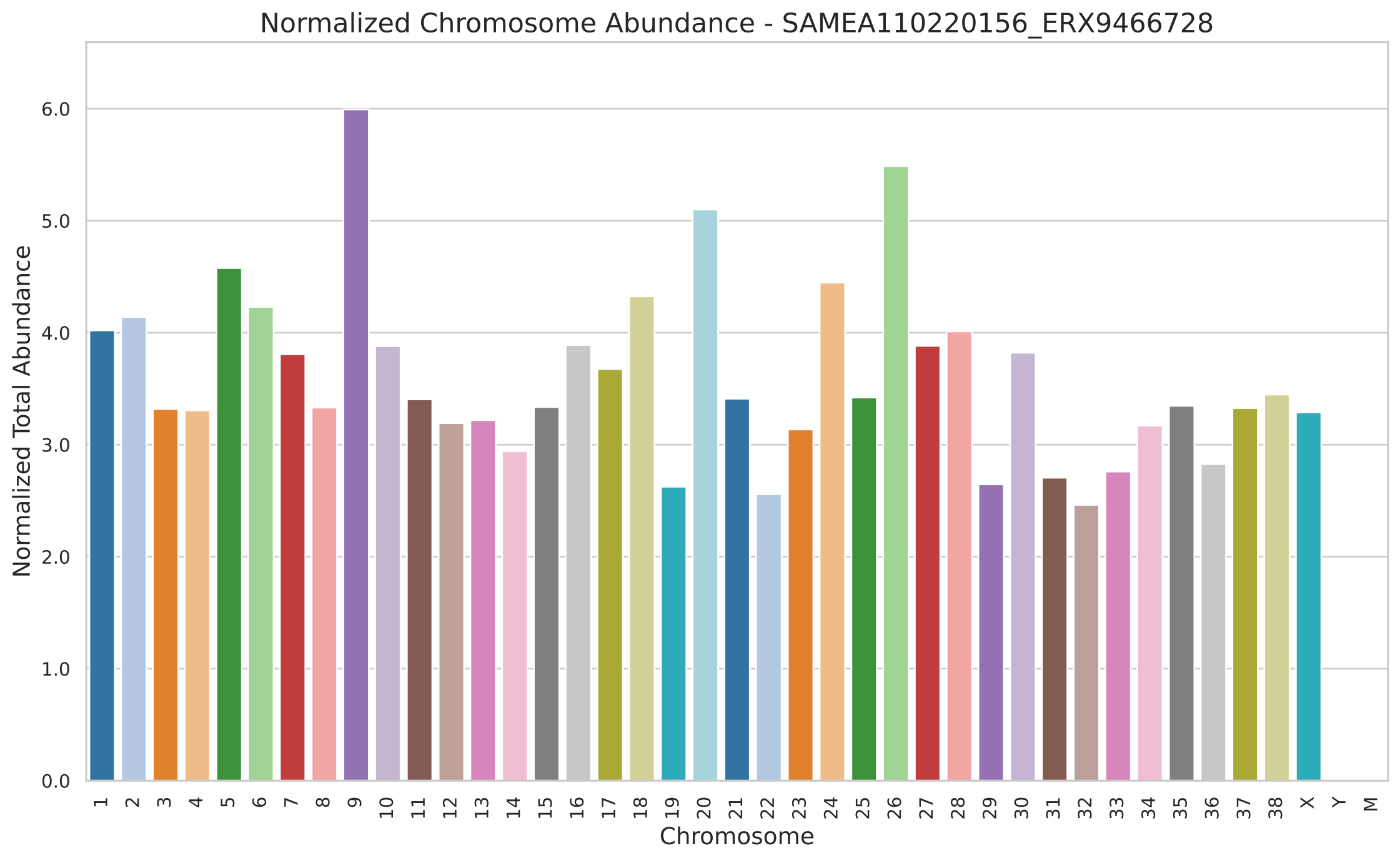

Normalized Chromosome Abundance - SAMN23673795_SRX13323554
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

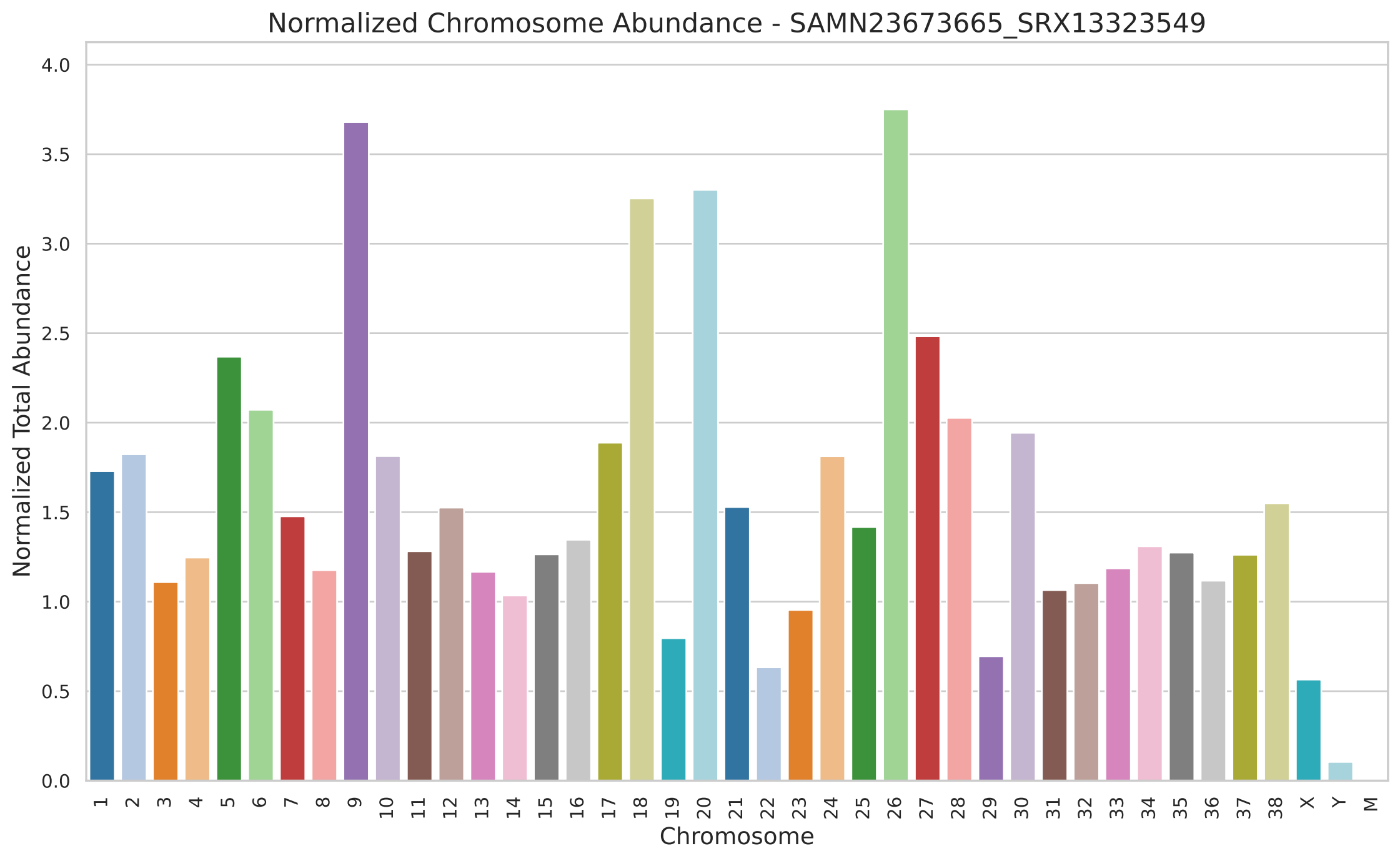

Normalized Chromosome Abundance - SAMN23673680_SRX13323570
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

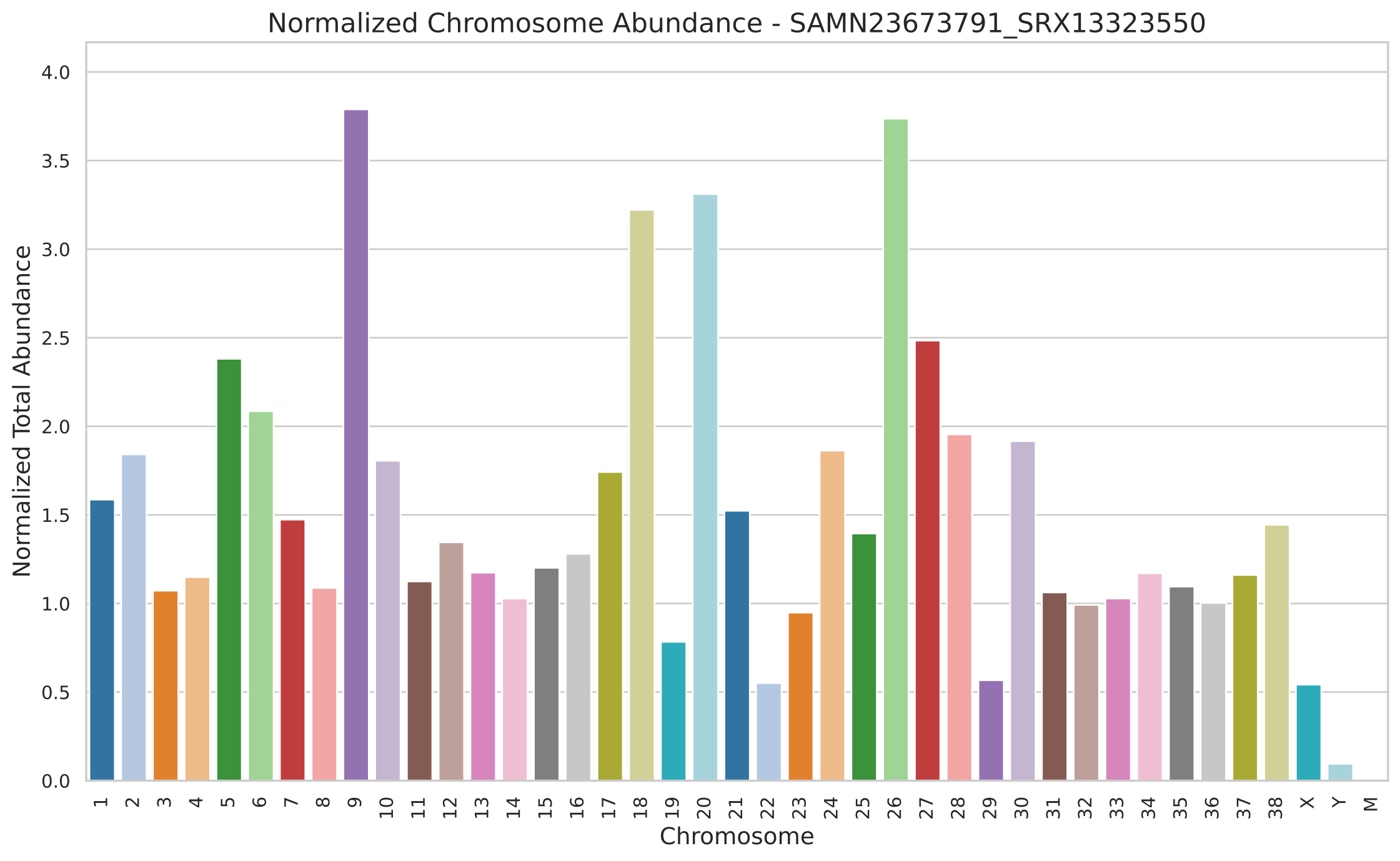

Normalized Chromosome Abundance - SAMN23673727_SRX13323622
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

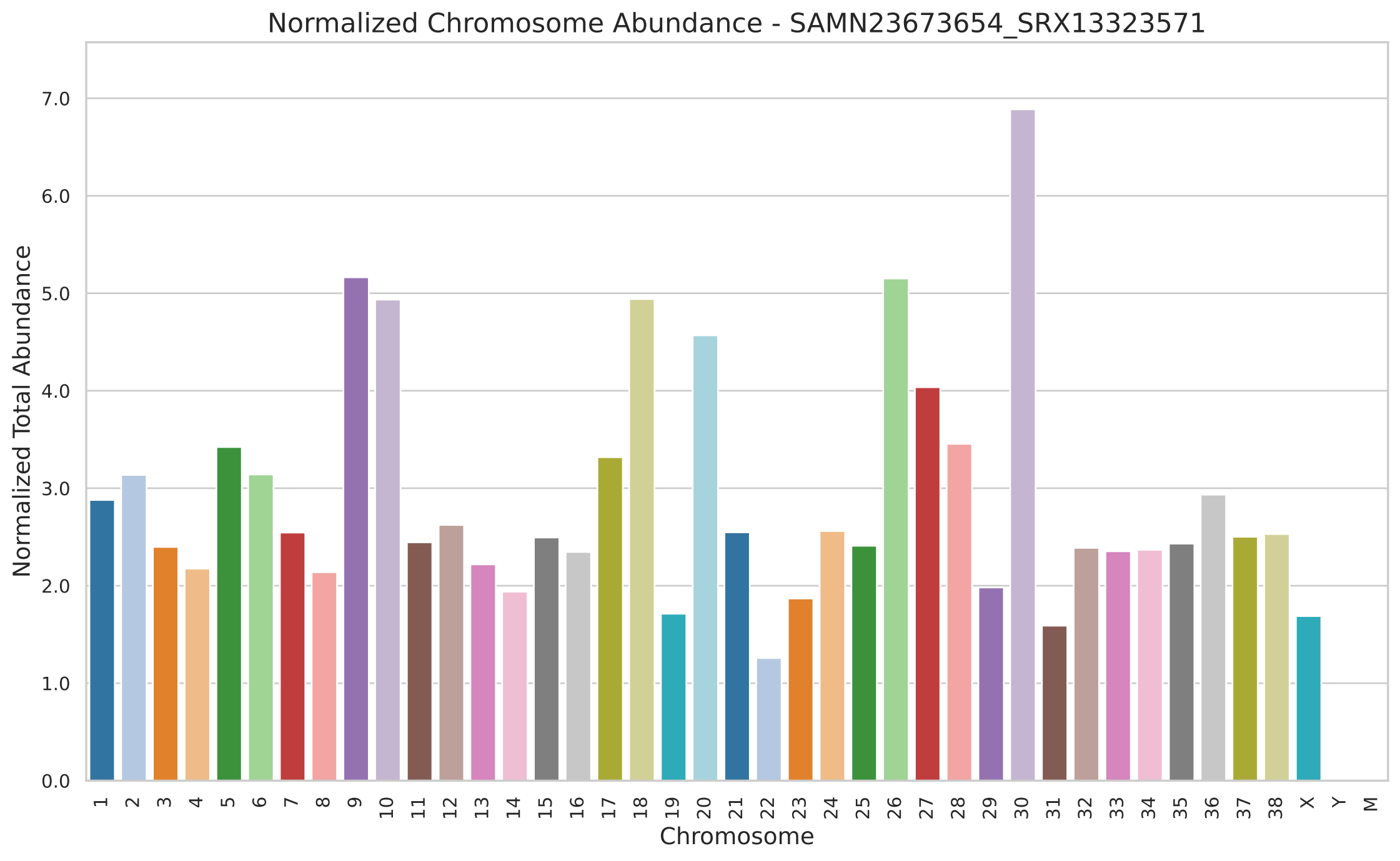

Normalized Chromosome Abundance - SAMN20802077_SRX11763965
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
35.0
40.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

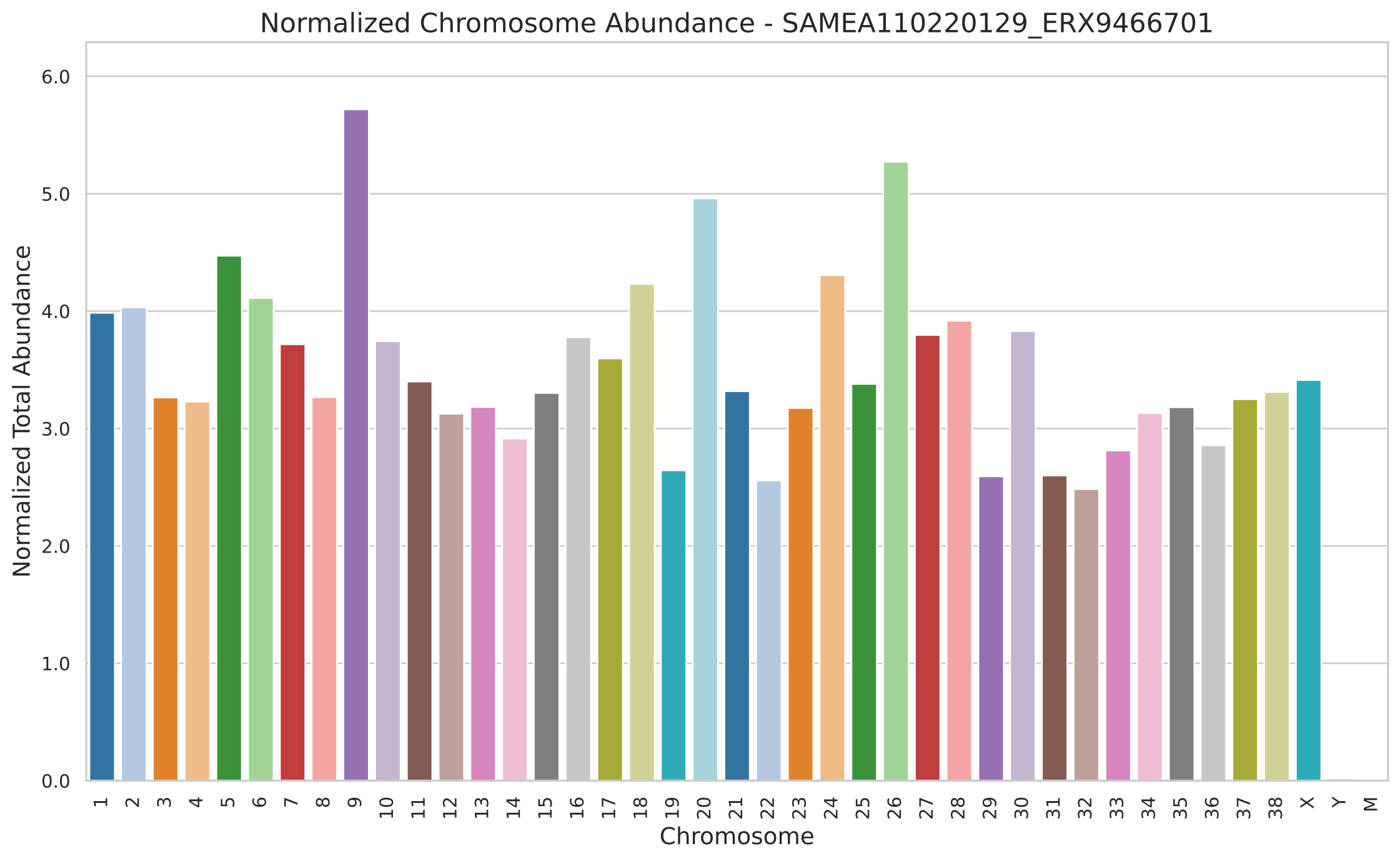

Normalized Chromosome Abundance - SAMEA110220144_ERX9466716
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

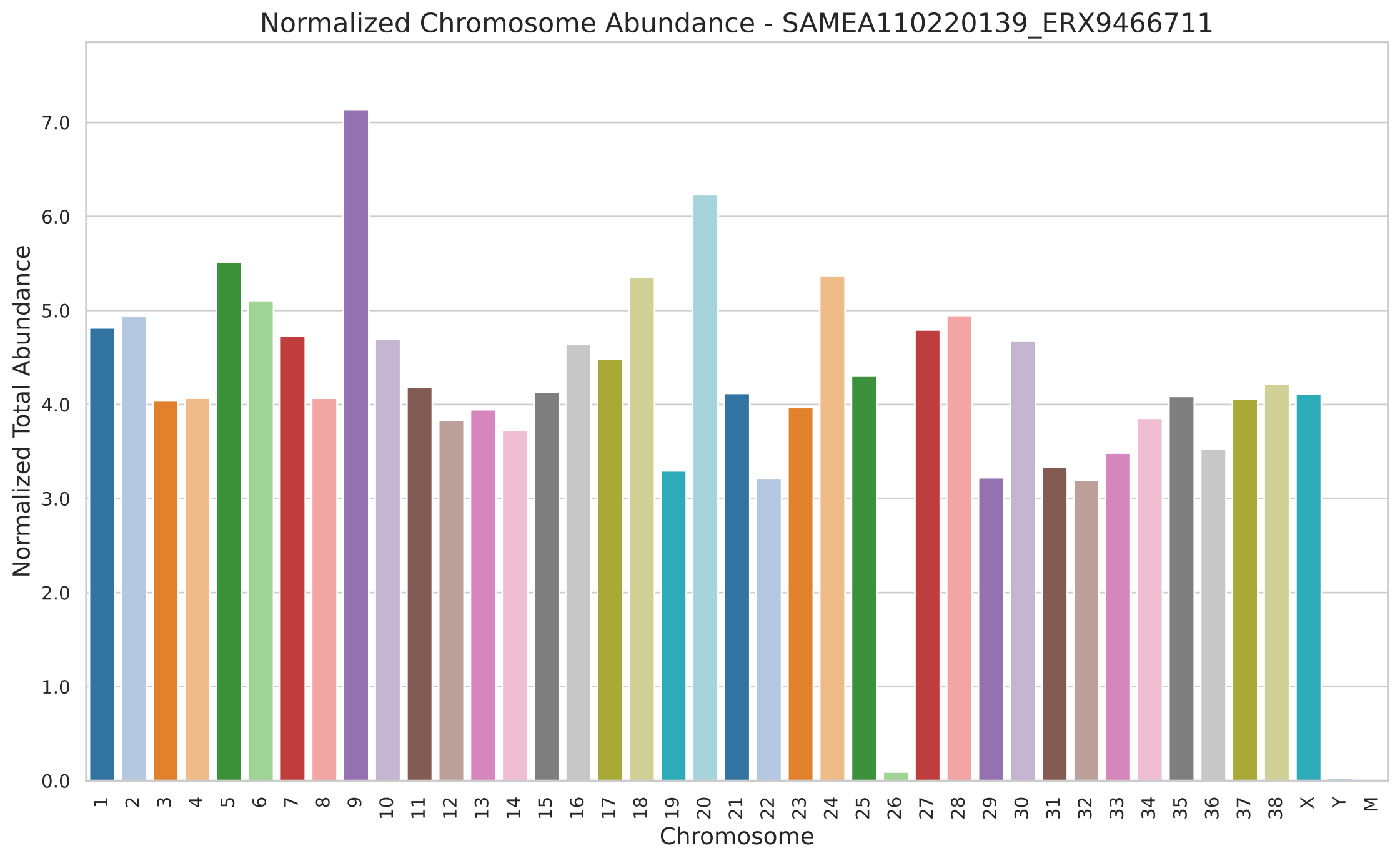

Normalized Chromosome Abundance - SAMEA110220156_ERX9466728
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

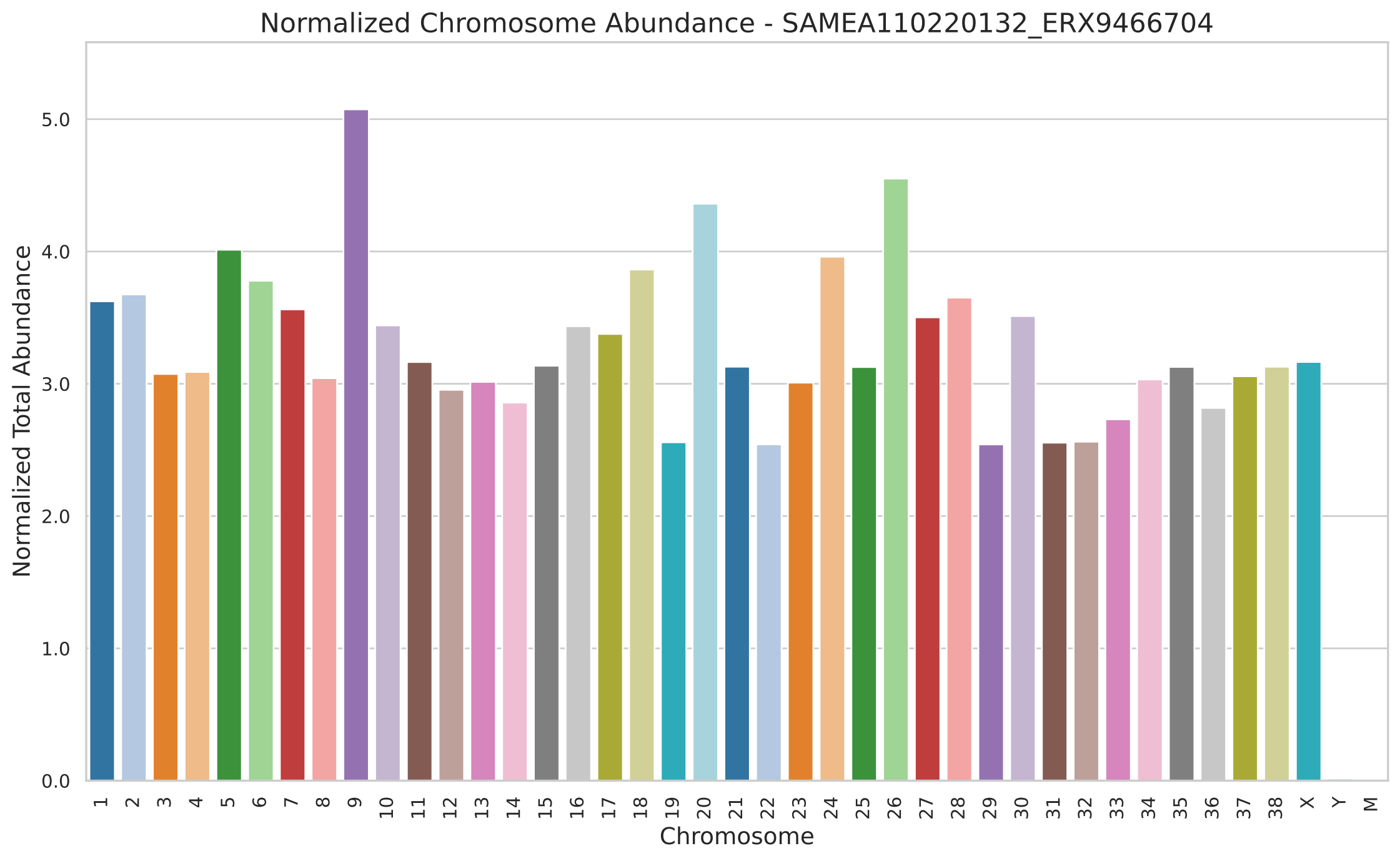

Normalized Chromosome Abundance - SAMN23673665_SRX13323549
Normalized Total Abundance
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

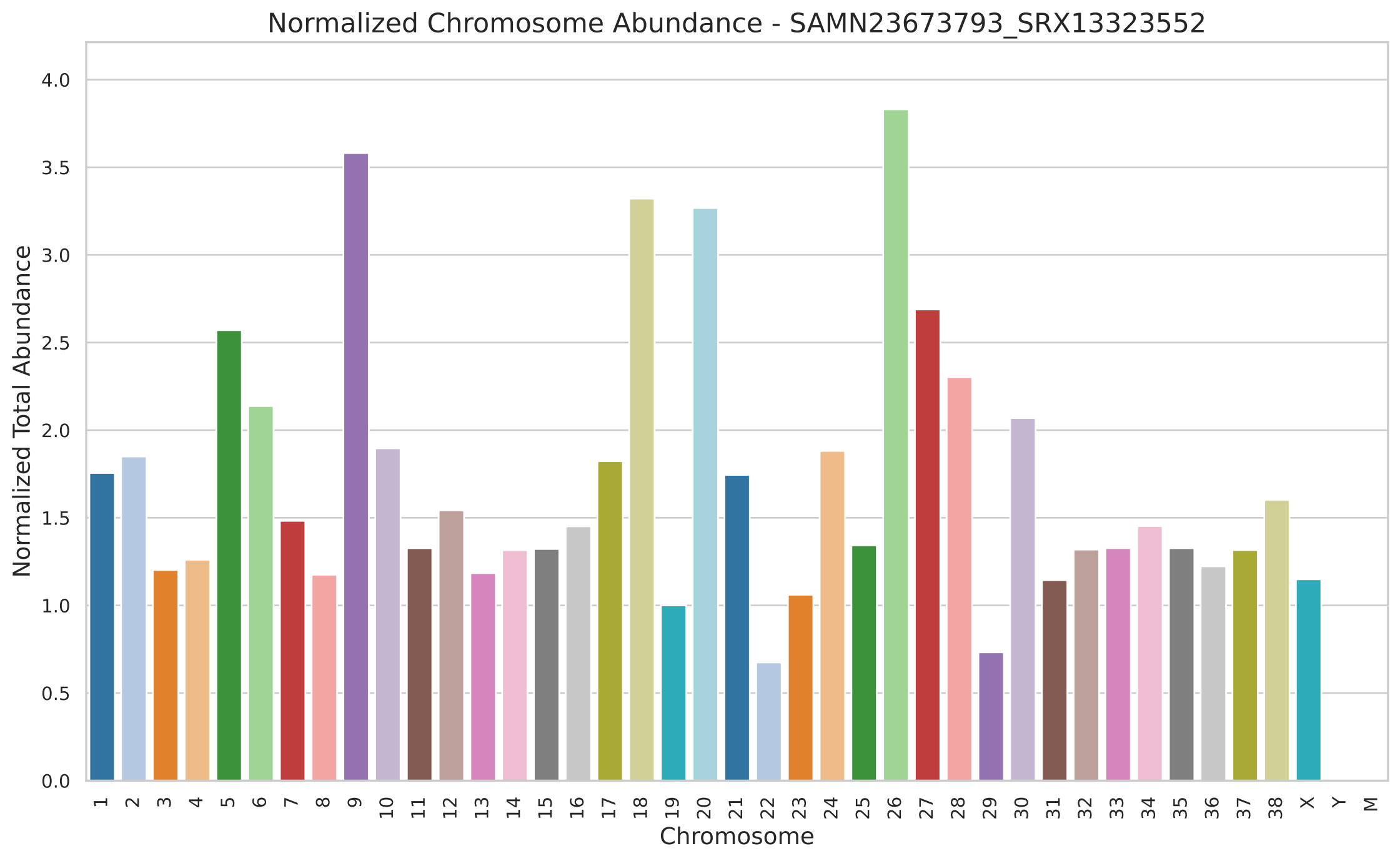

Normalized Chromosome Abundance - SAMN23673791_SRX13323550
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

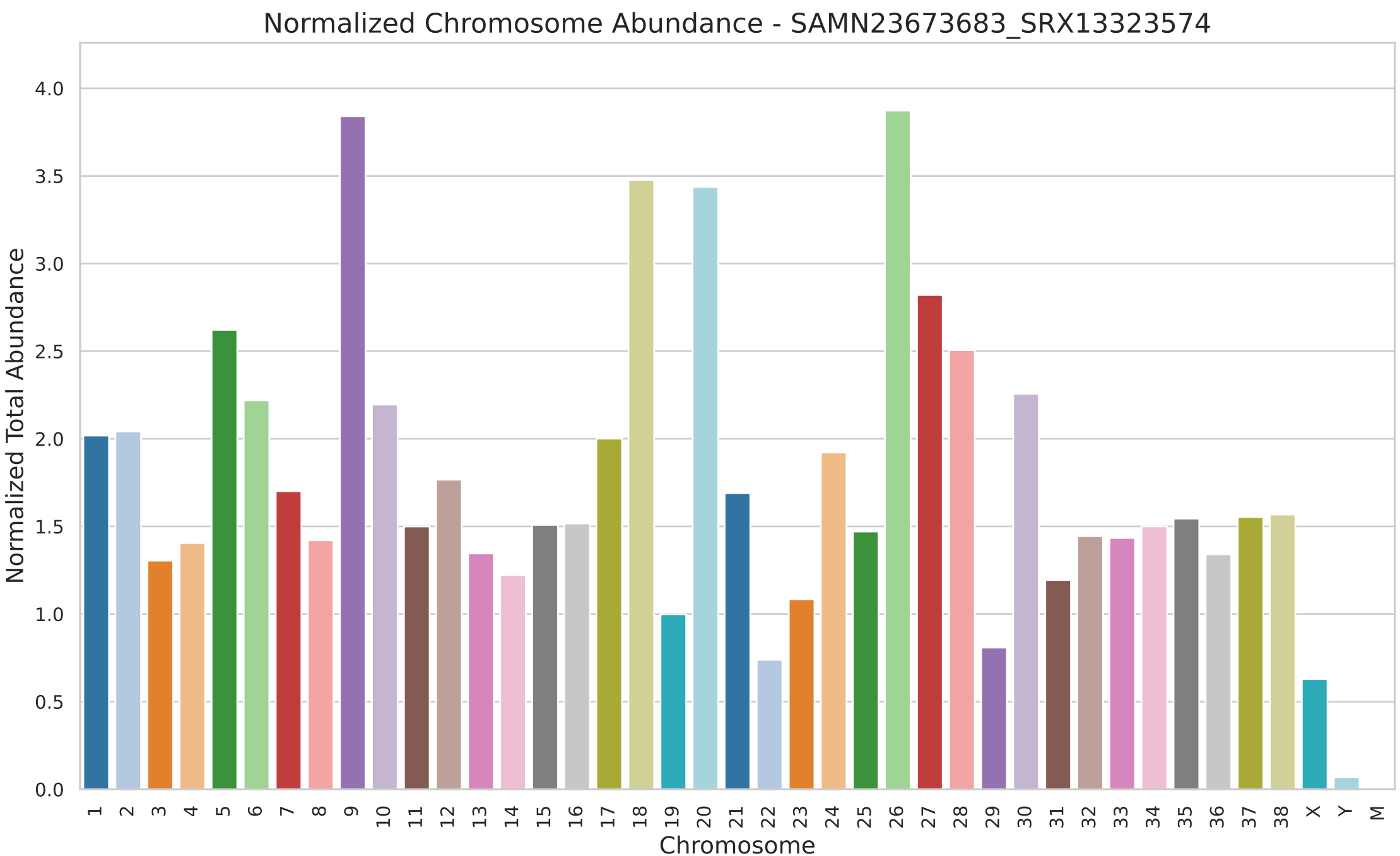

Normalized Chromosome Abundance - SAMN23673654_SRX13323571
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

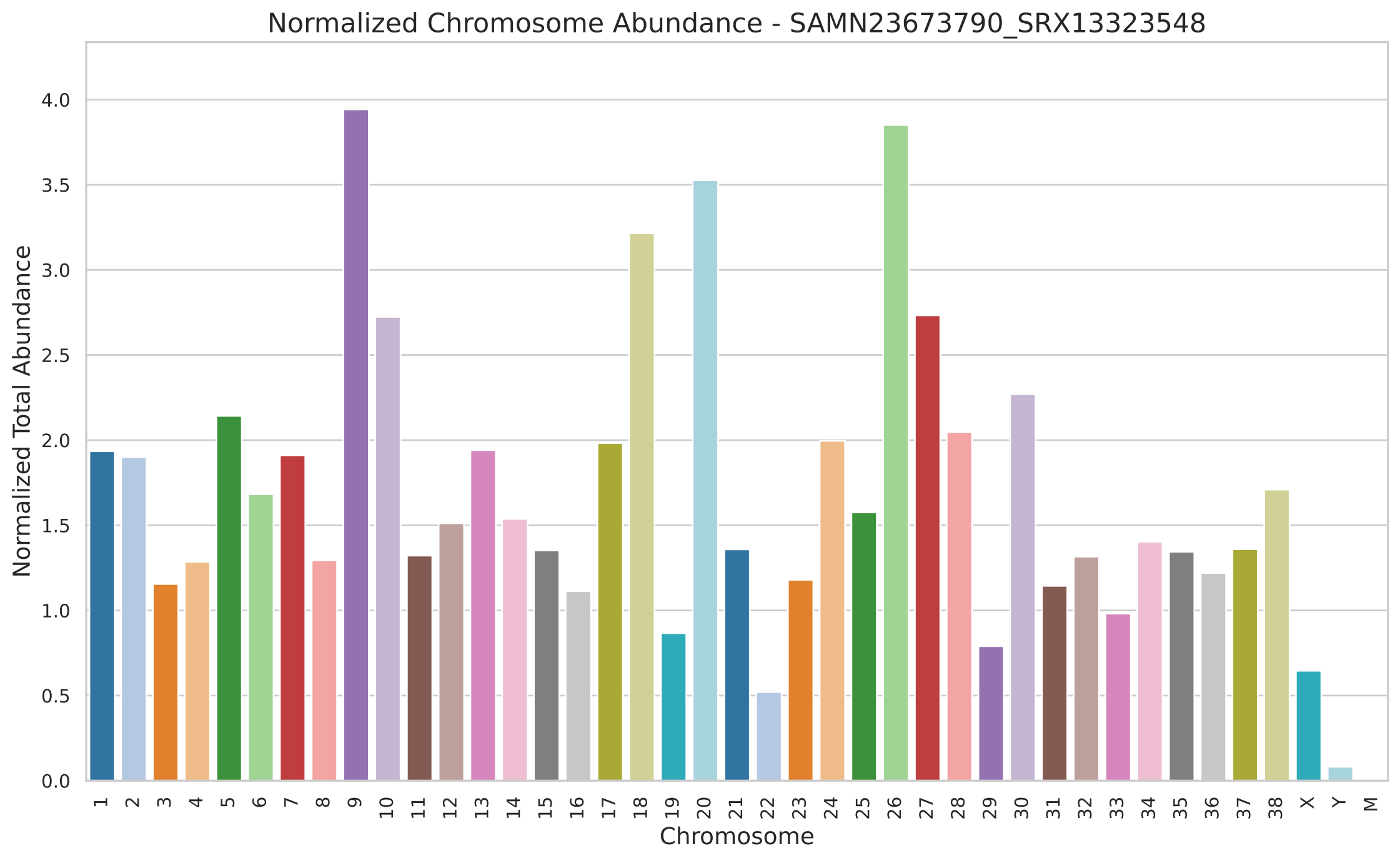

Normalized Chromosome Abundance - SAMEA110220129_ERX9466701
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

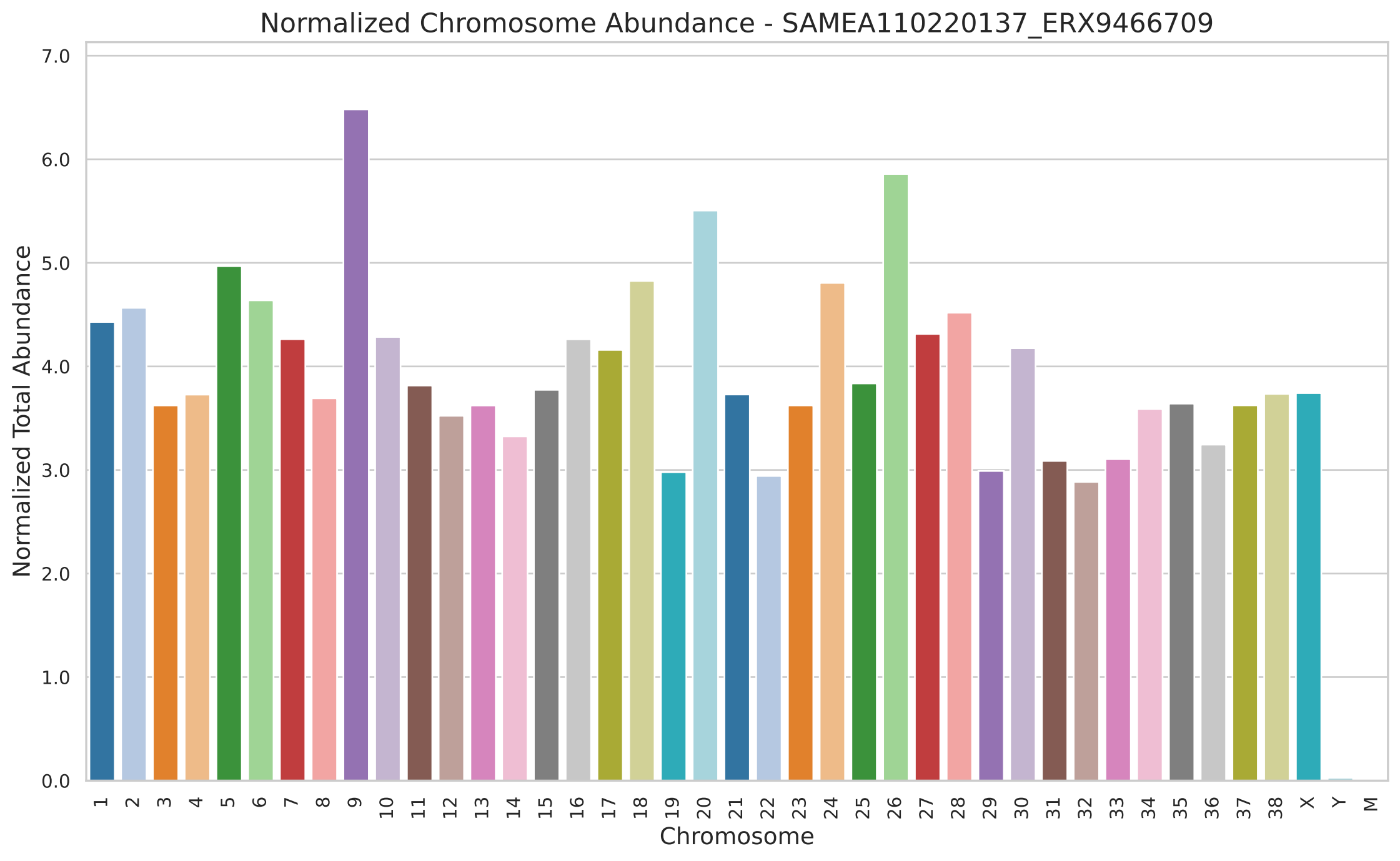

Normalized Chromosome Abundance - SAMEA110220139_ERX9466711
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

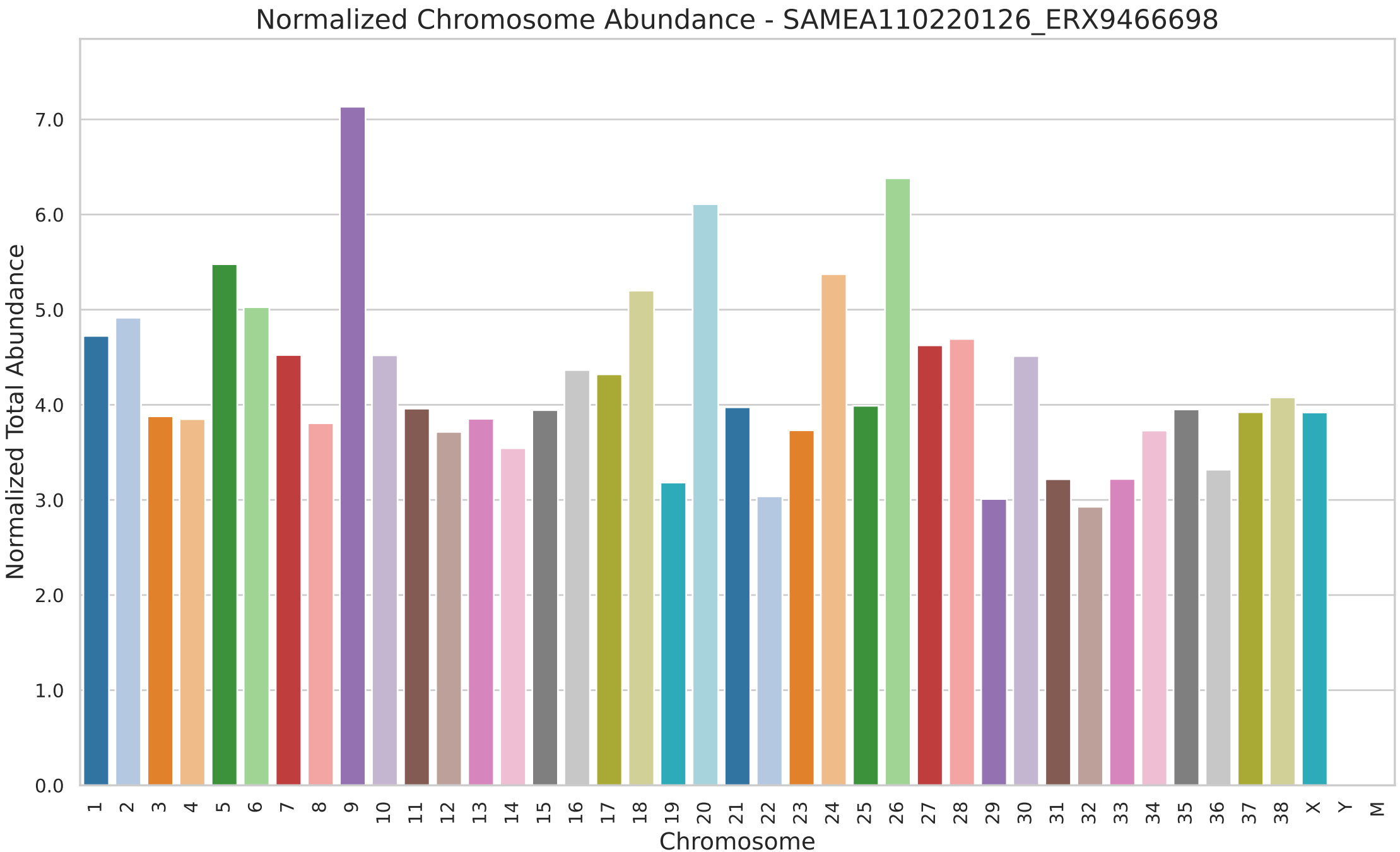

Normalized Chromosome Abundance - SAMEA110220132_ERX9466704
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

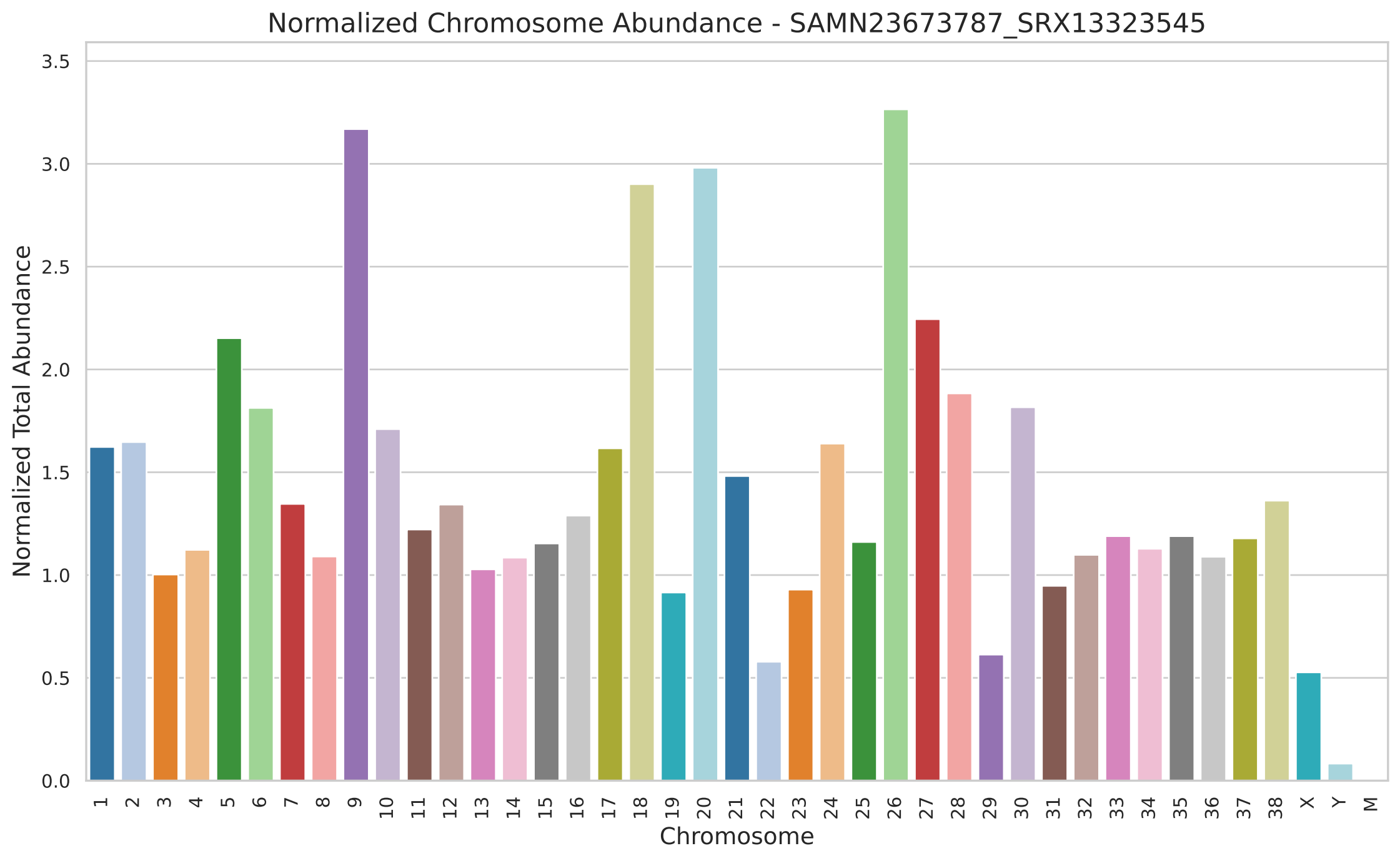

Normalized Chromosome Abundance - SAMN23673793_SRX13323552
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

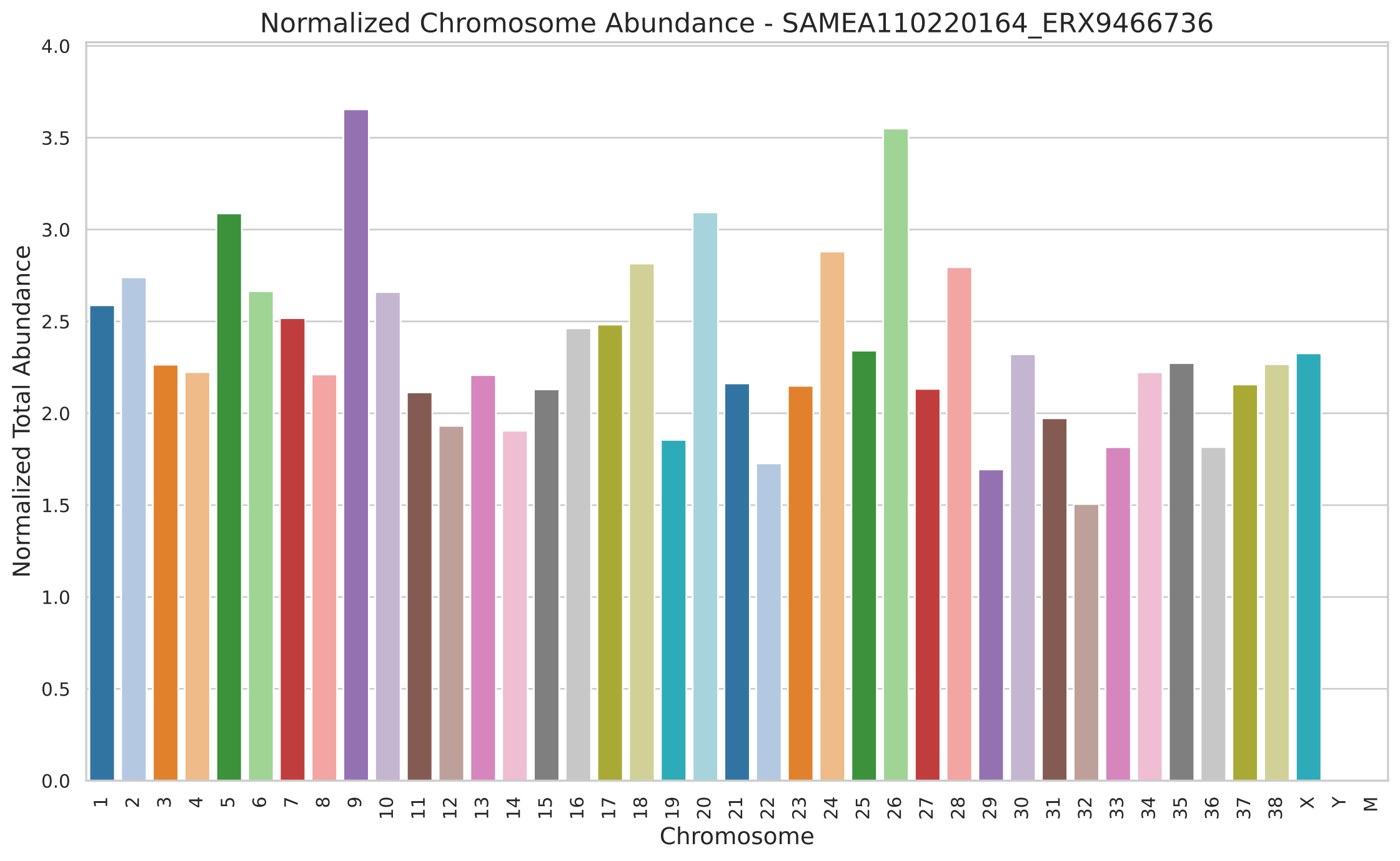

Normalized Chromosome Abundance - SAMN23673683_SRX13323574
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

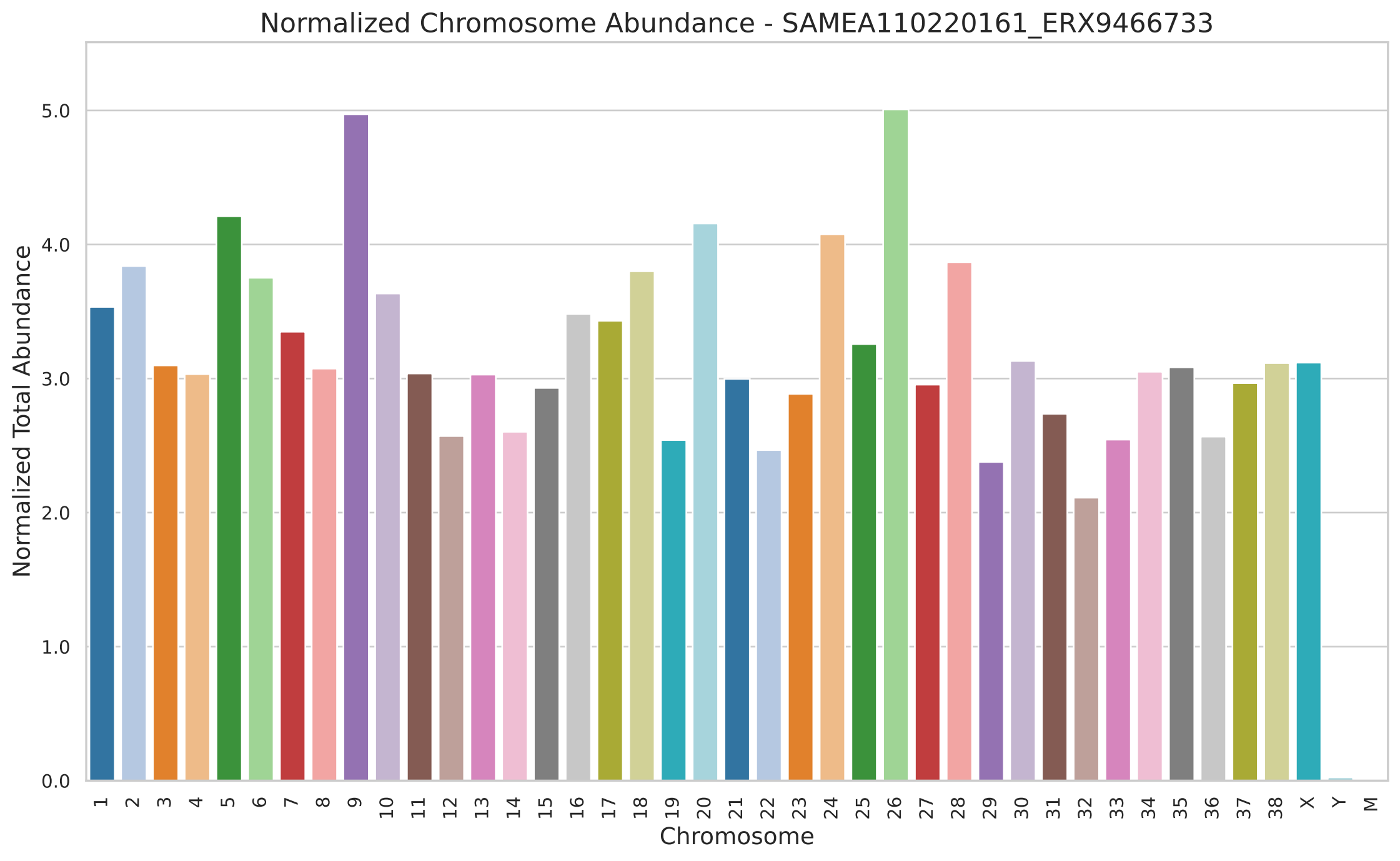

Normalized Chromosome Abundance - SAMN23673790_SRX13323548
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

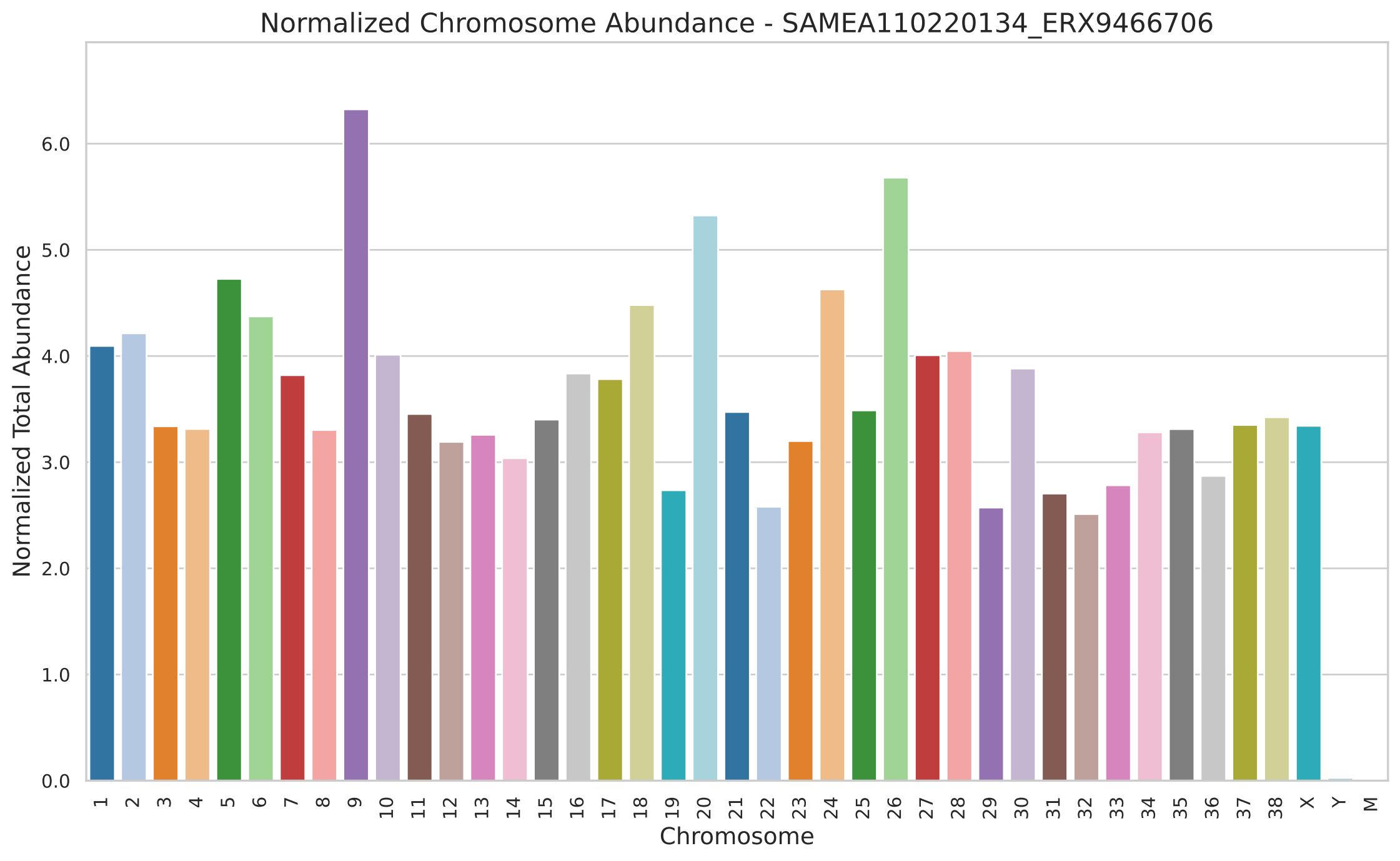

Normalized Chromosome Abundance - SAMEA110220137_ERX9466709
Normalized Total Abundance
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

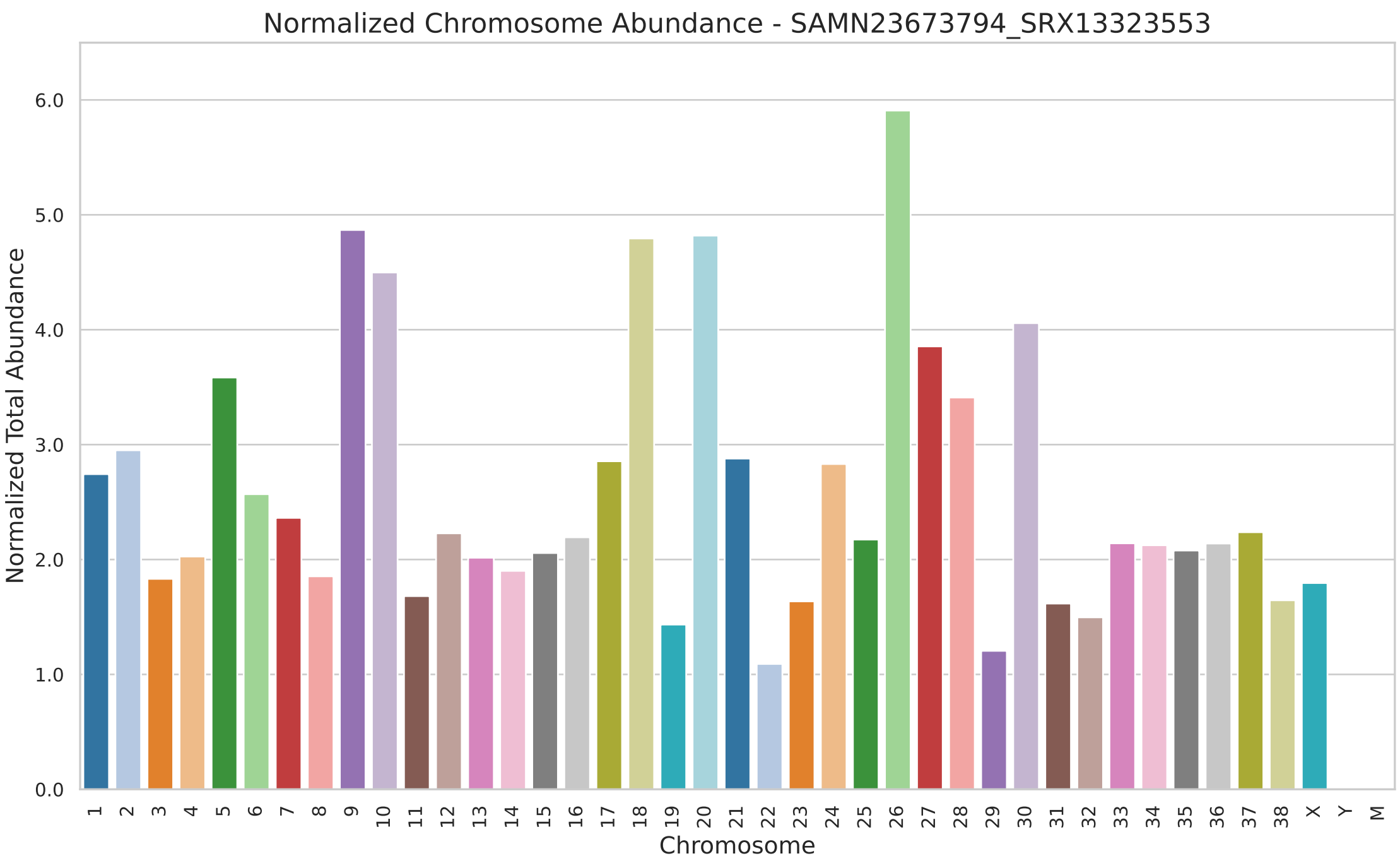

Normalized Chromosome Abundance - SAMEA110220126_ERX9466698
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

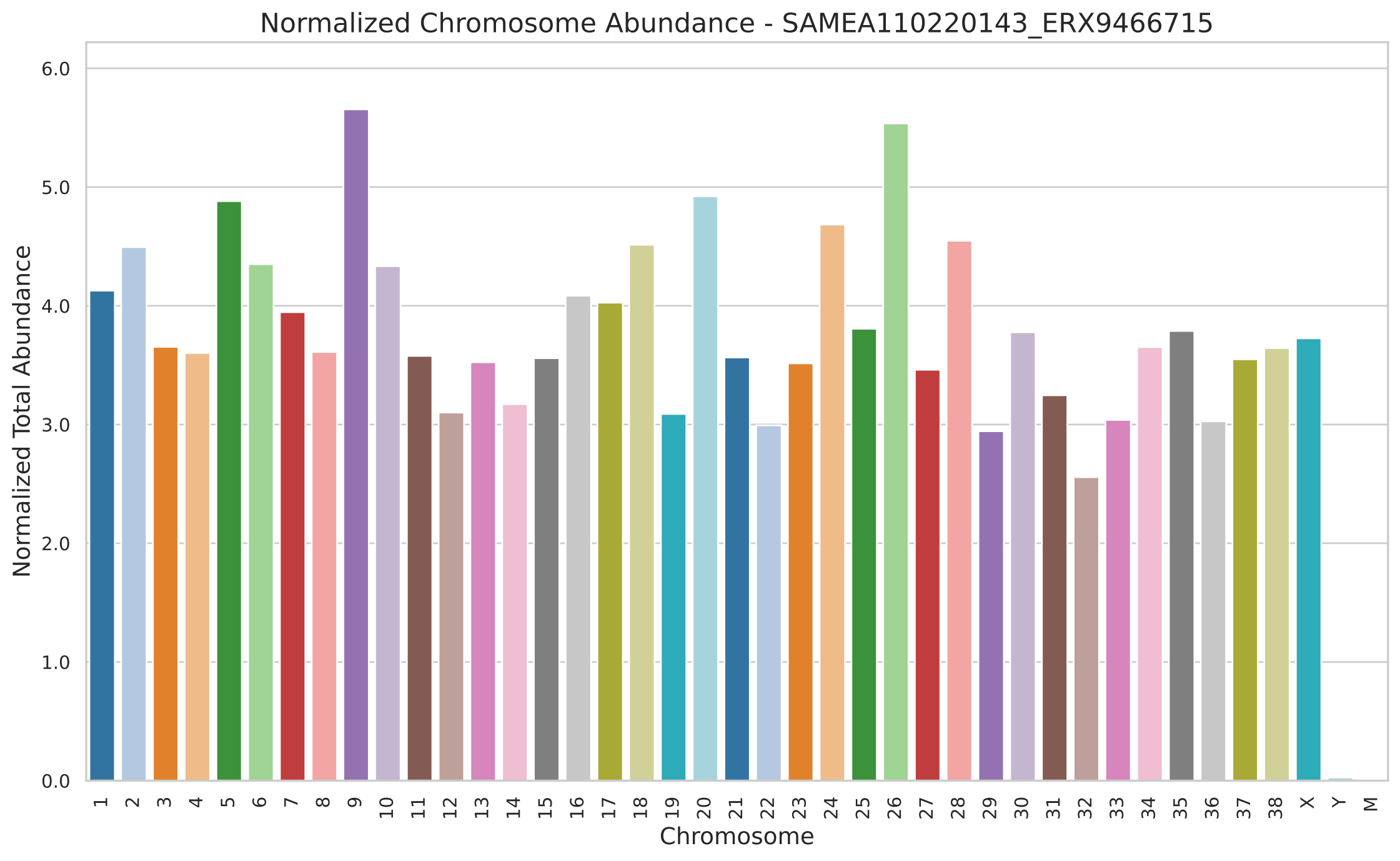

Normalized Chromosome Abundance - SAMN23673787_SRX13323545
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

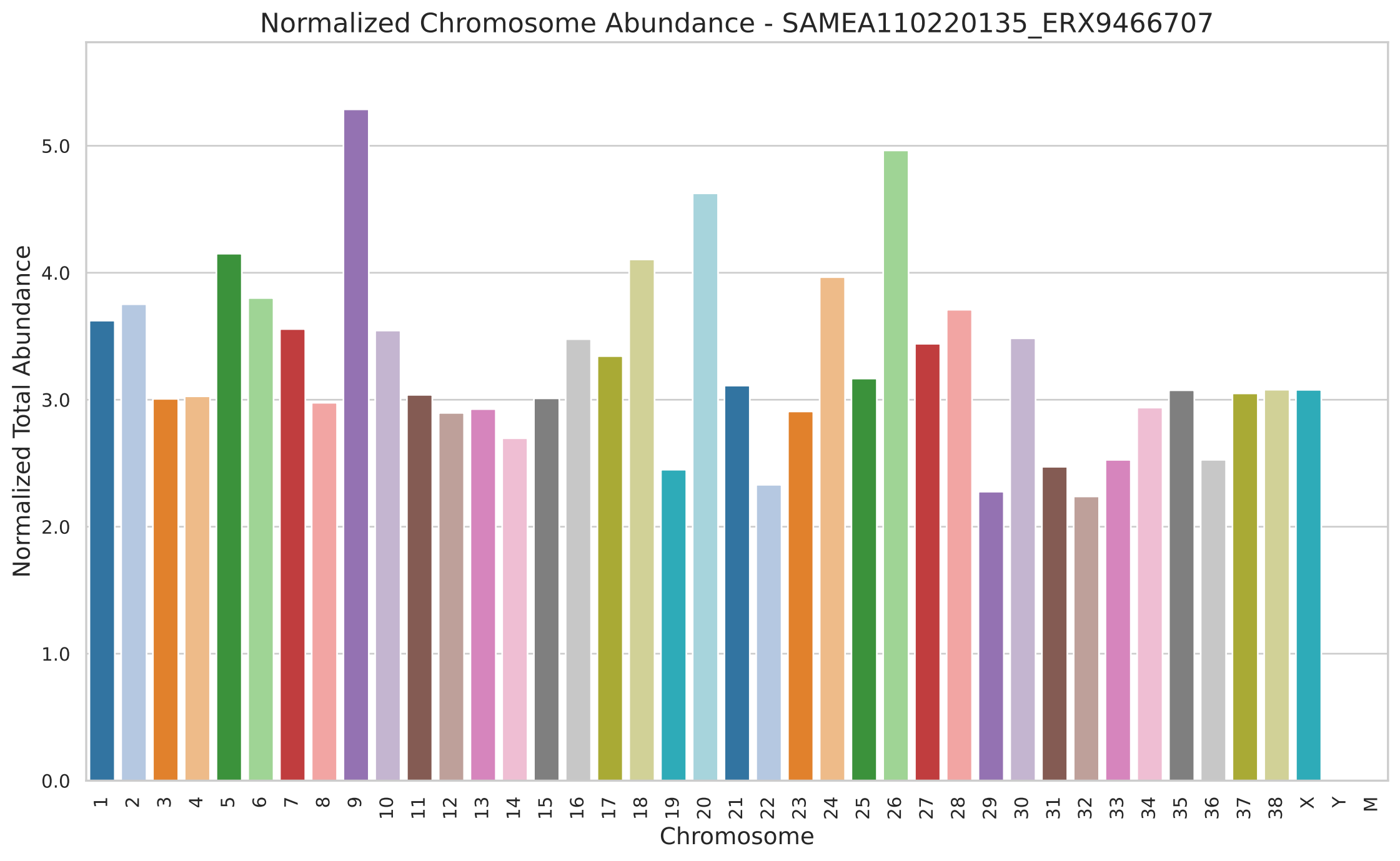

Normalized Chromosome Abundance - SAMEA110220164_ERX9466736
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

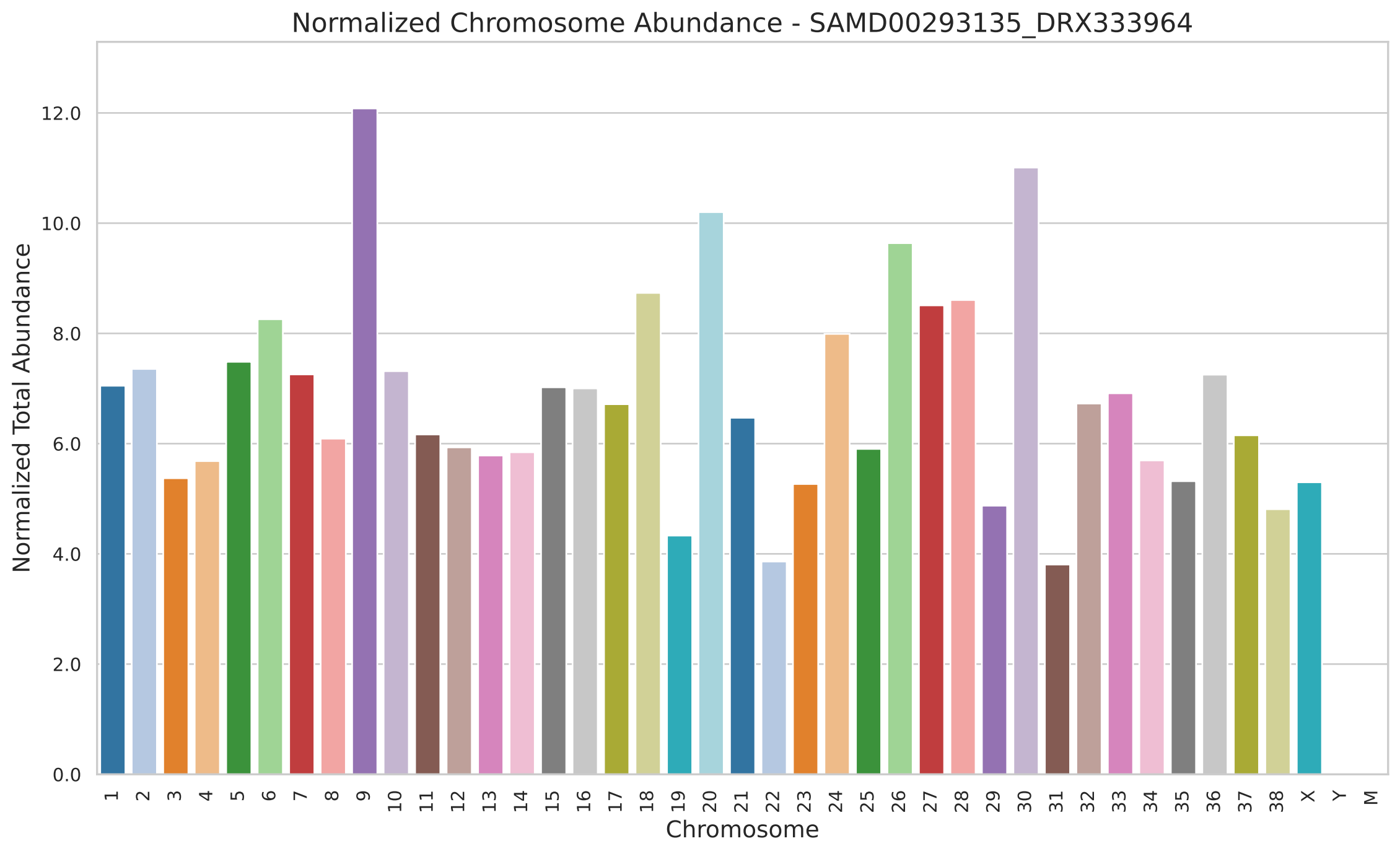

Normalized Chromosome Abundance - SAMEA110220161_ERX9466733
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

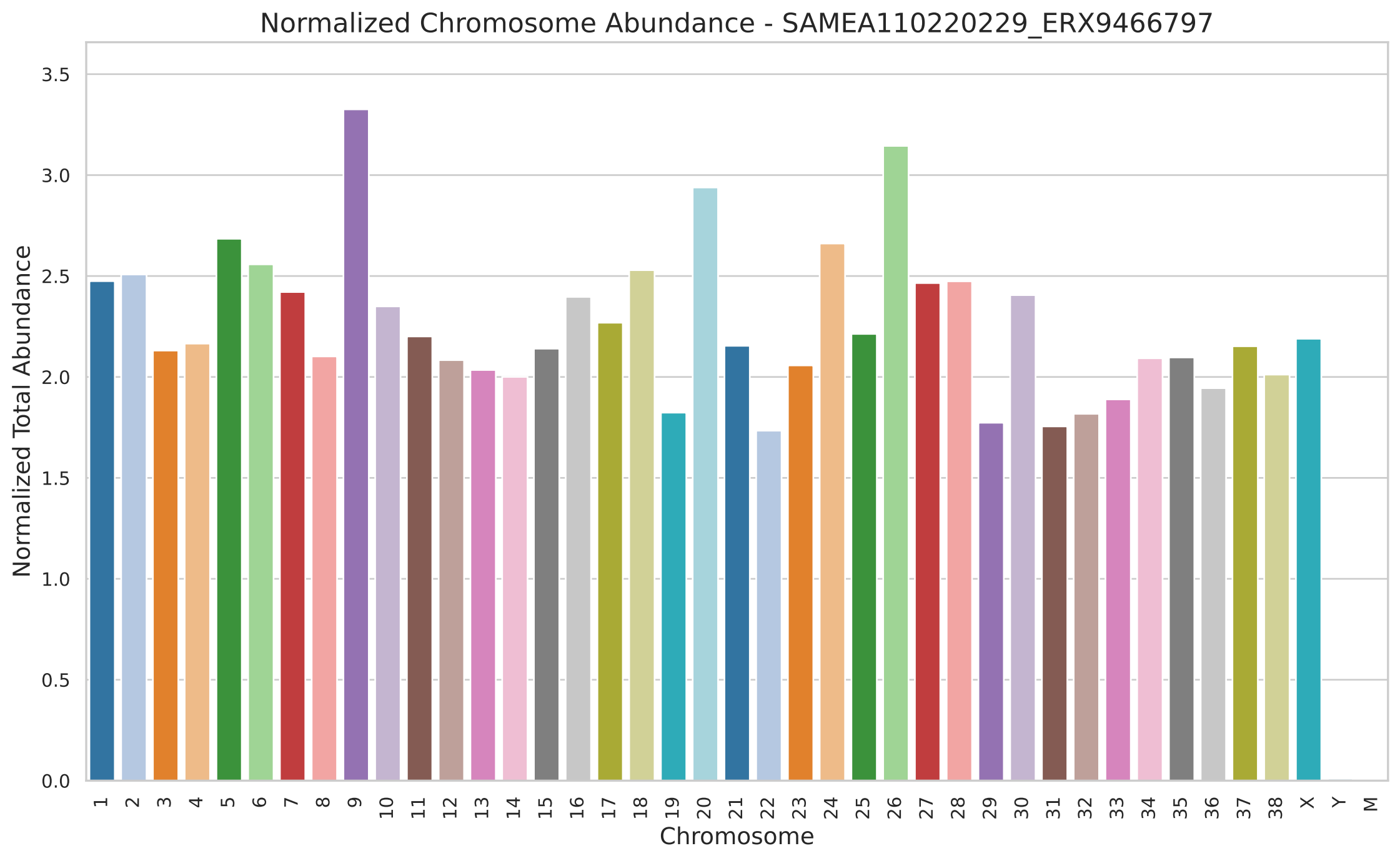

Normalized Chromosome Abundance - SAMEA110220134_ERX9466706
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

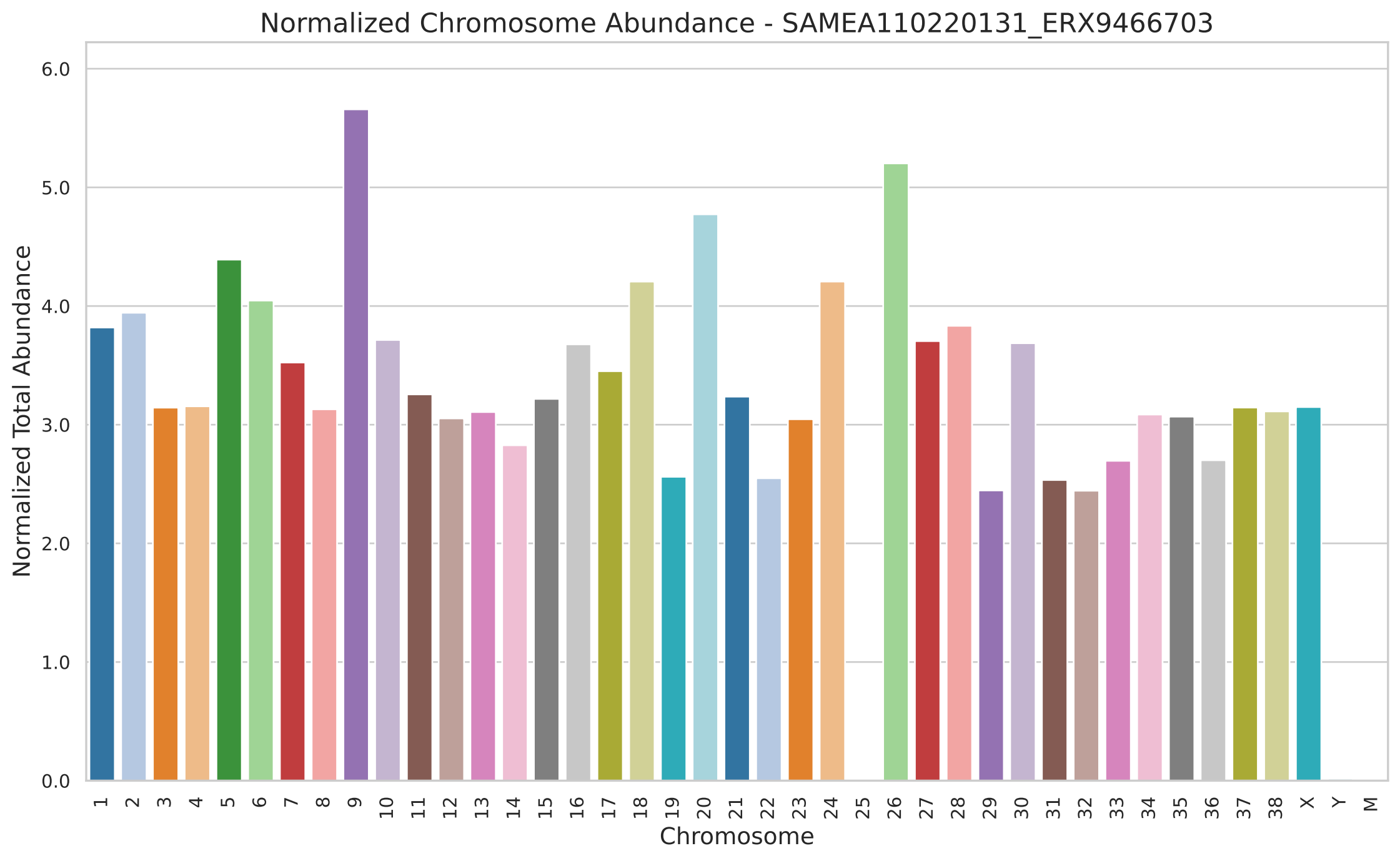

Normalized Chromosome Abundance - SAMN23673794_SRX13323553
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

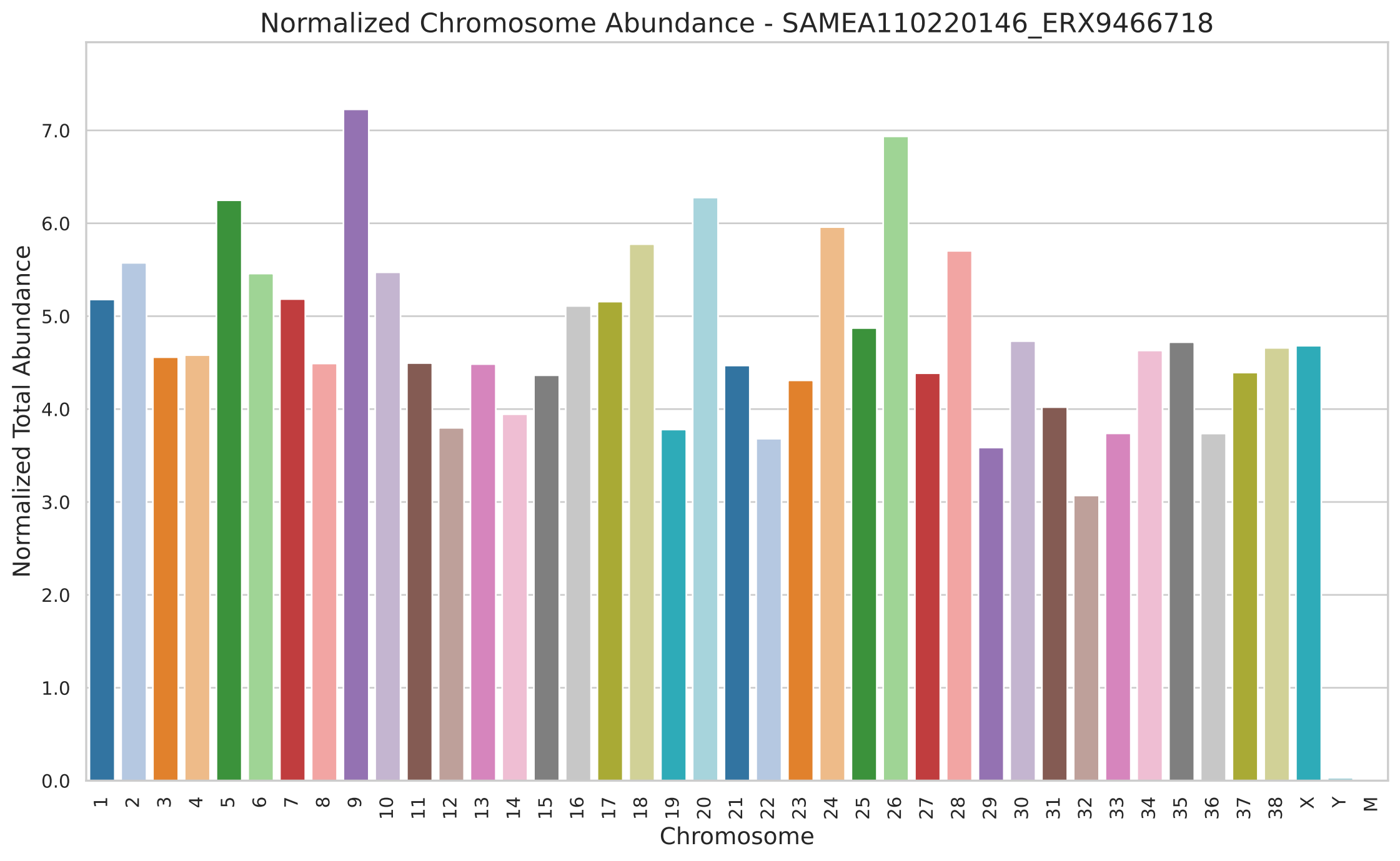

Normalized Chromosome Abundance - SAMEA110220143_ERX9466715
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

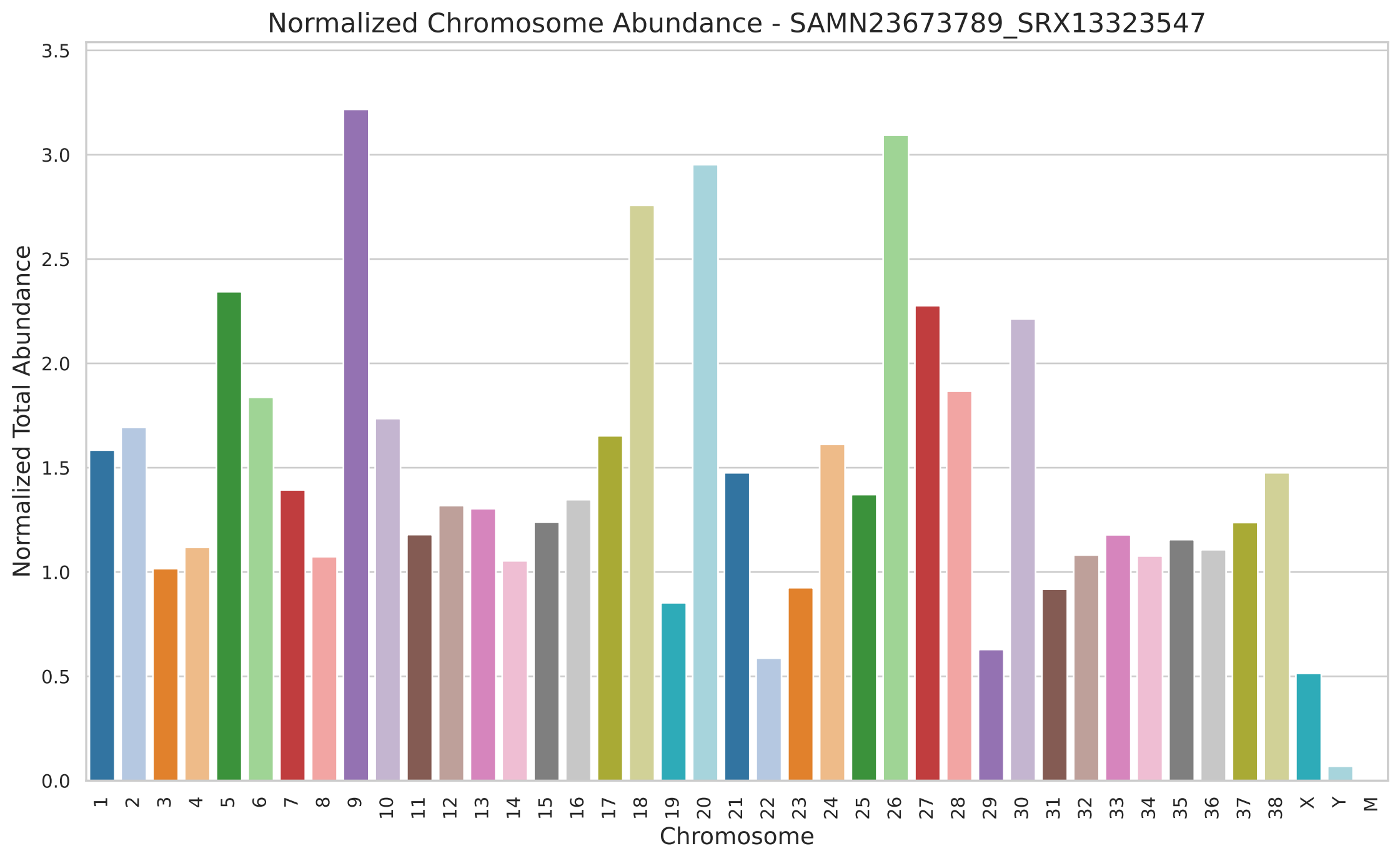

Normalized Chromosome Abundance - SAMEA110220135_ERX9466707
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

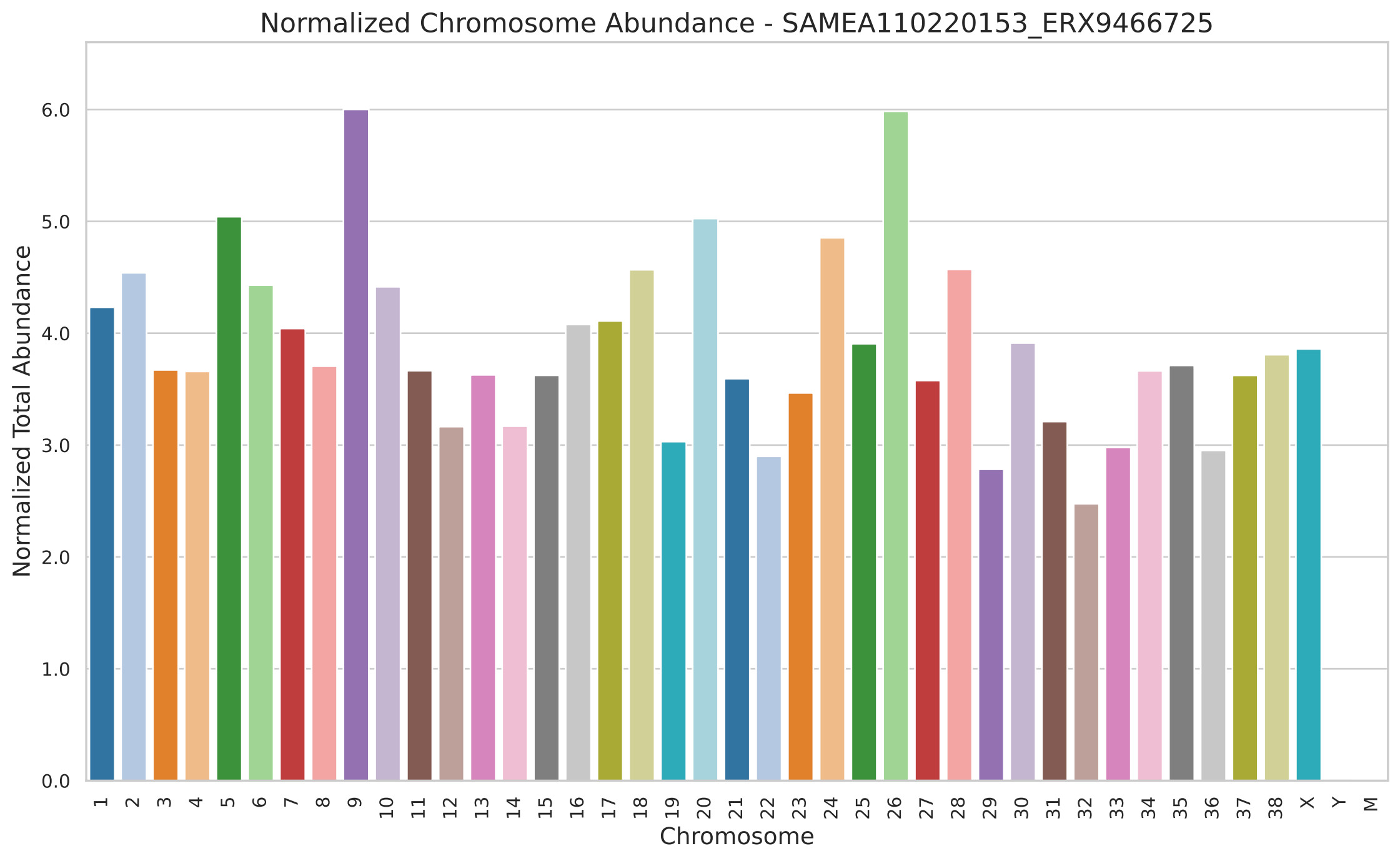

Normalized Chromosome Abundance - SAMD00293135_DRX333964
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
12.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

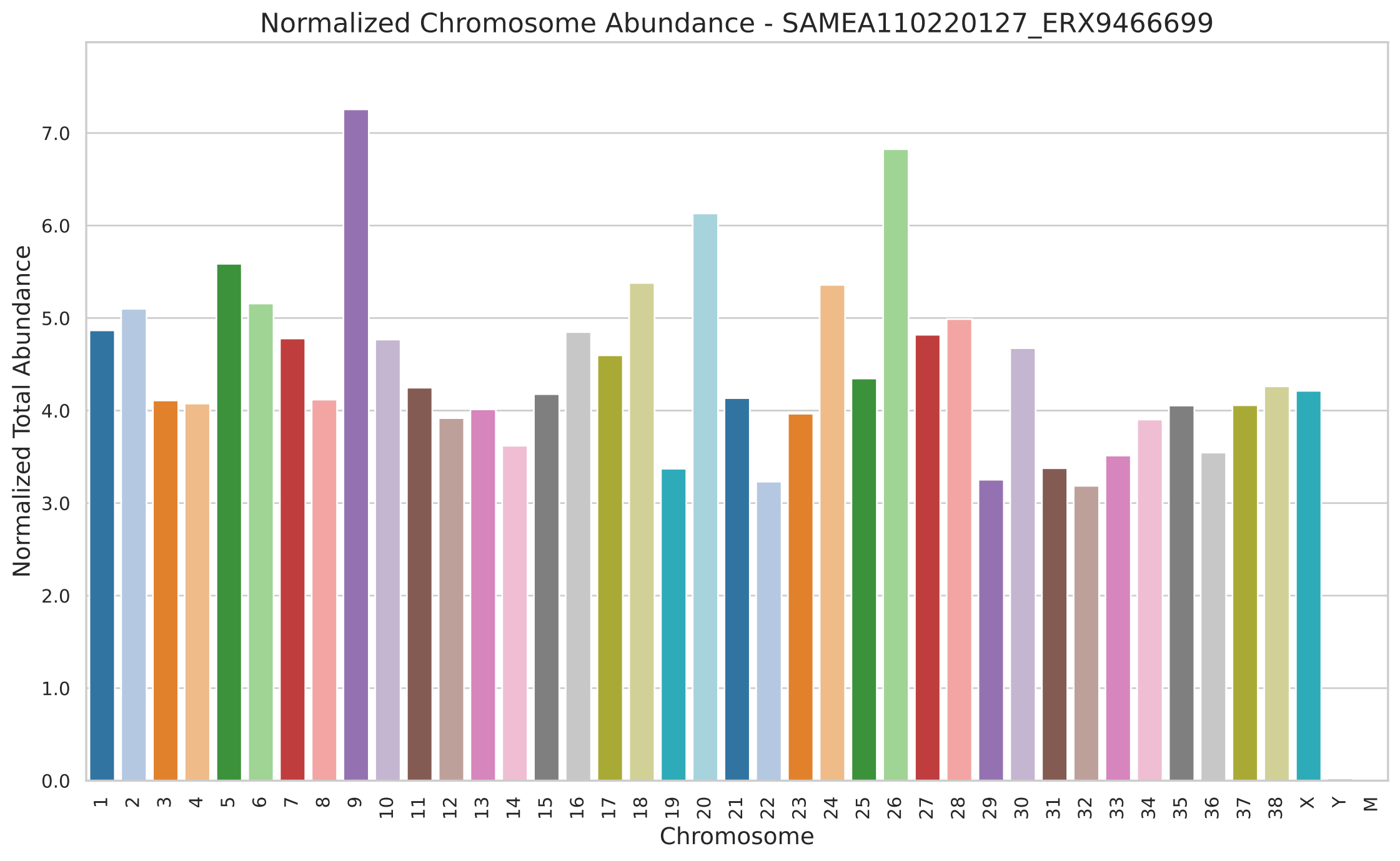

Normalized Chromosome Abundance - SAMEA110220229_ERX9466797
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

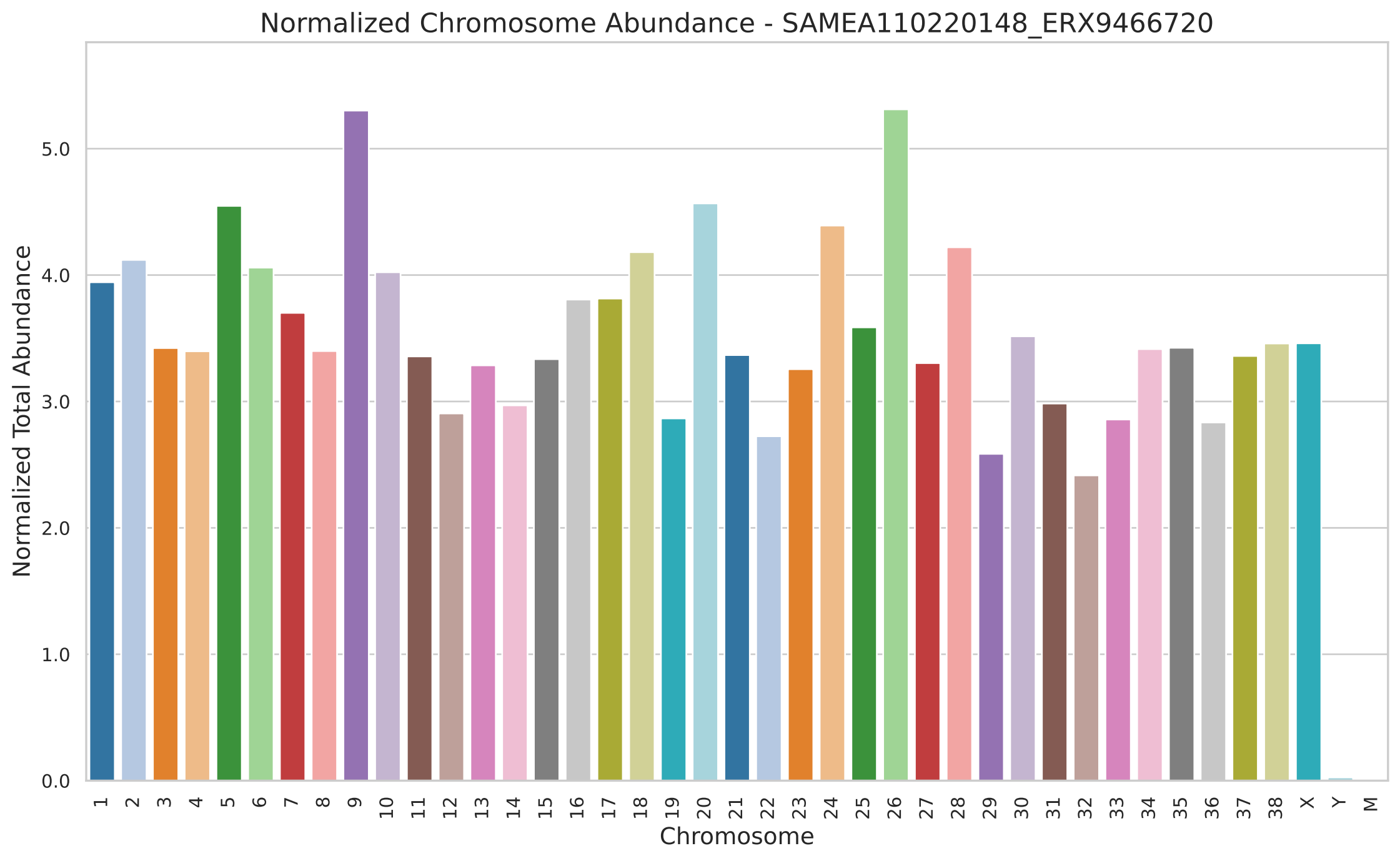

Normalized Chromosome Abundance - SAMEA110220131_ERX9466703
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

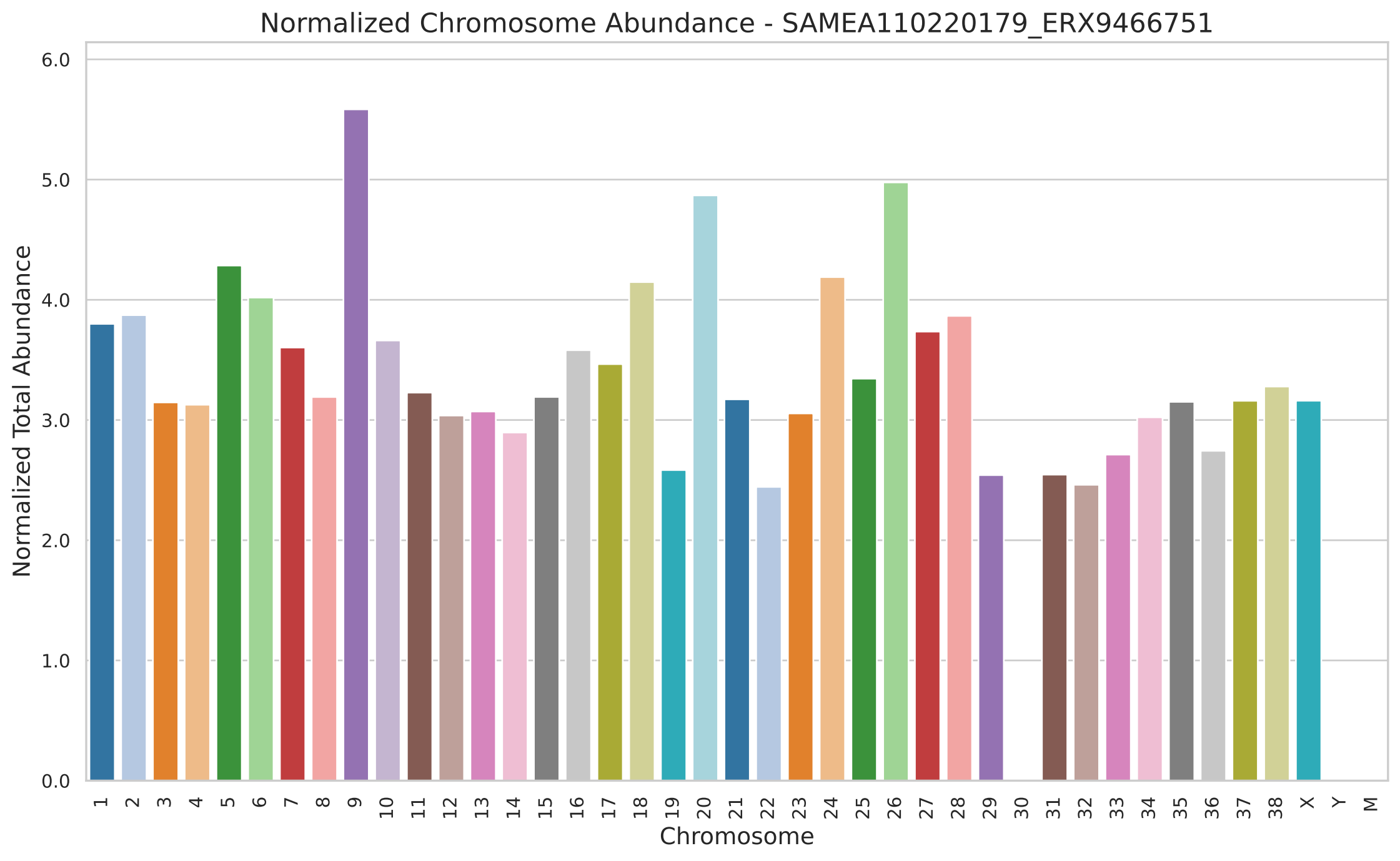

Normalized Chromosome Abundance - SAMEA110220146_ERX9466718
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

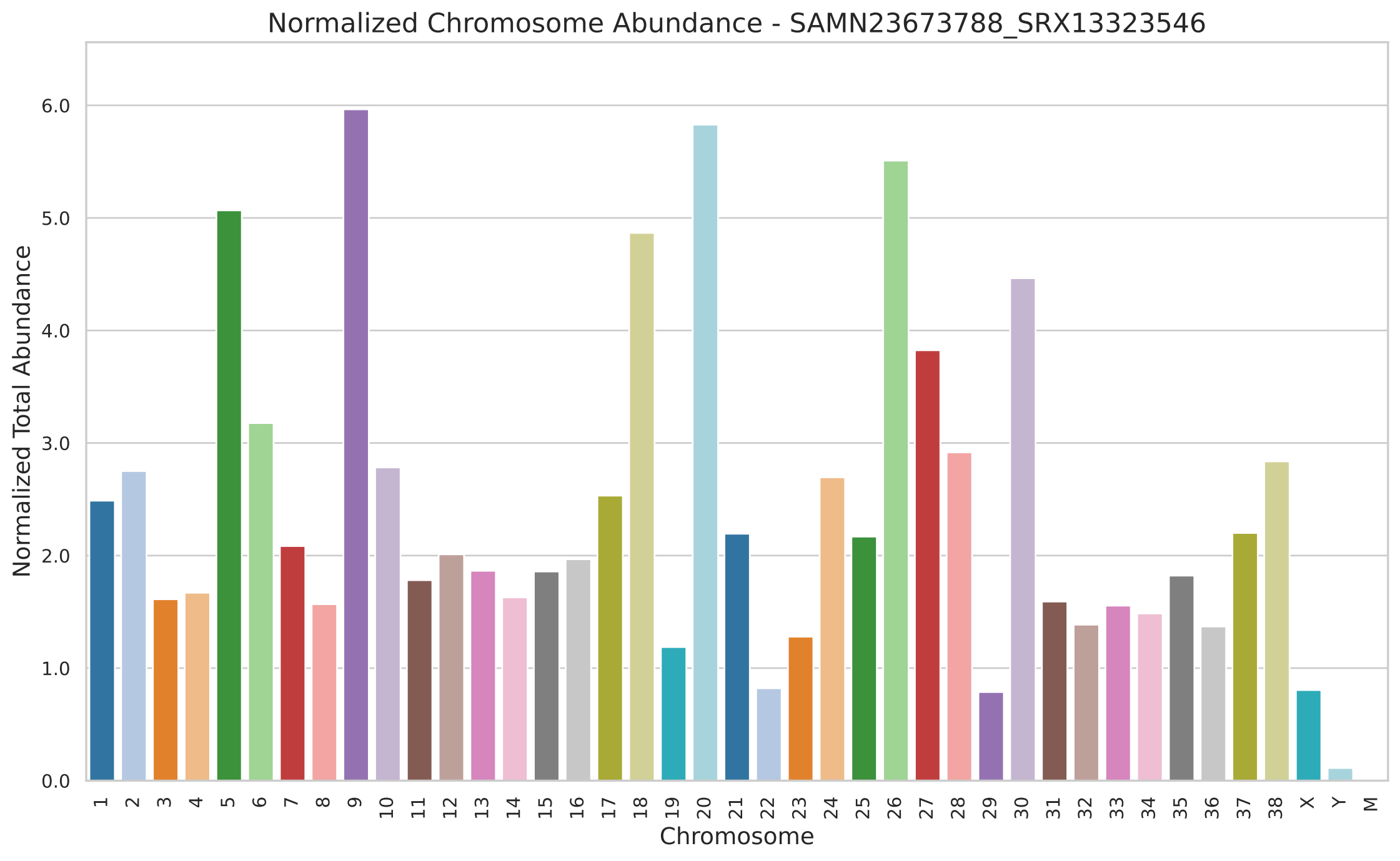

Normalized Chromosome Abundance - SAMN23673789_SRX13323547
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

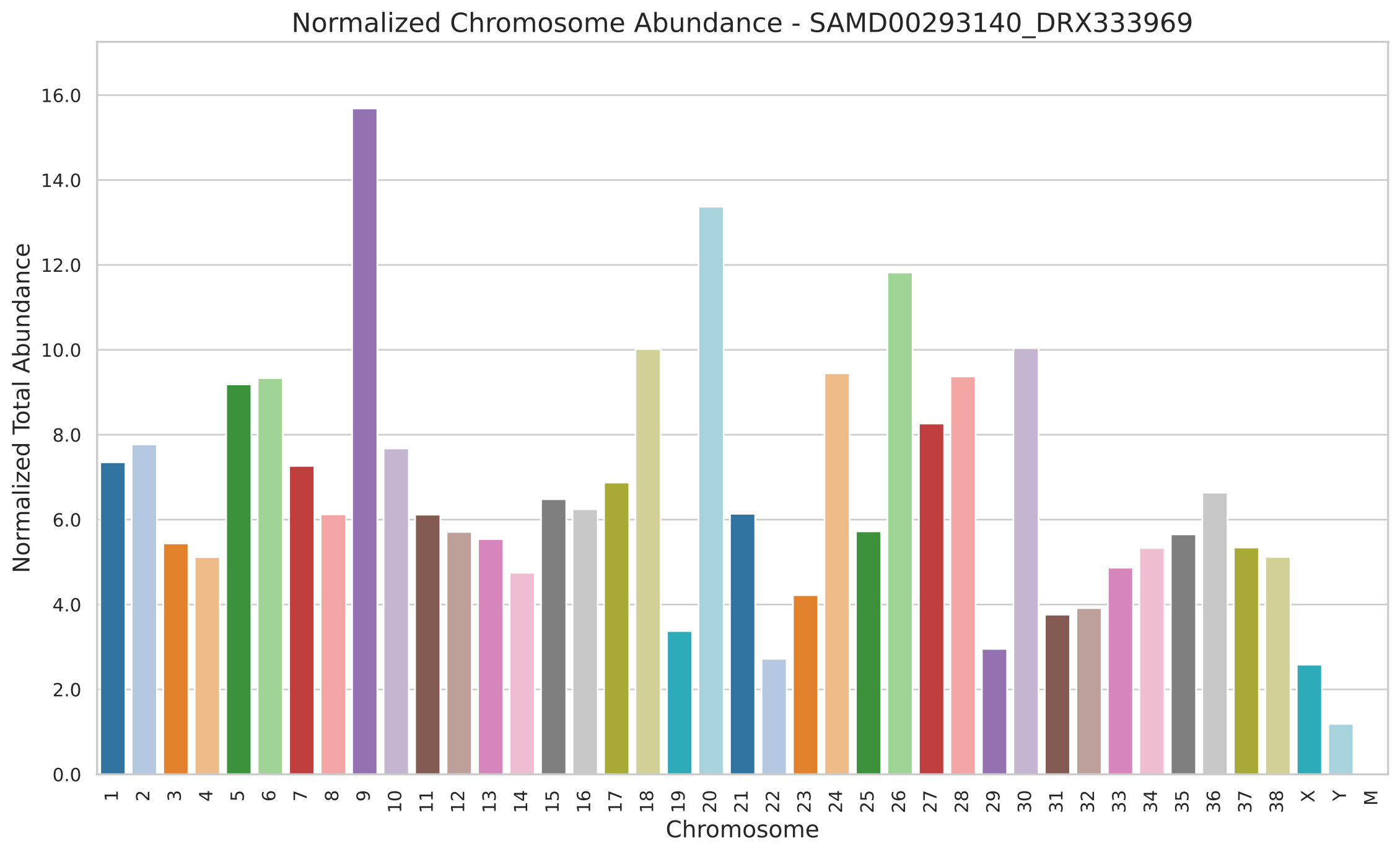

Normalized Chromosome Abundance - SAMEA110220153_ERX9466725
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

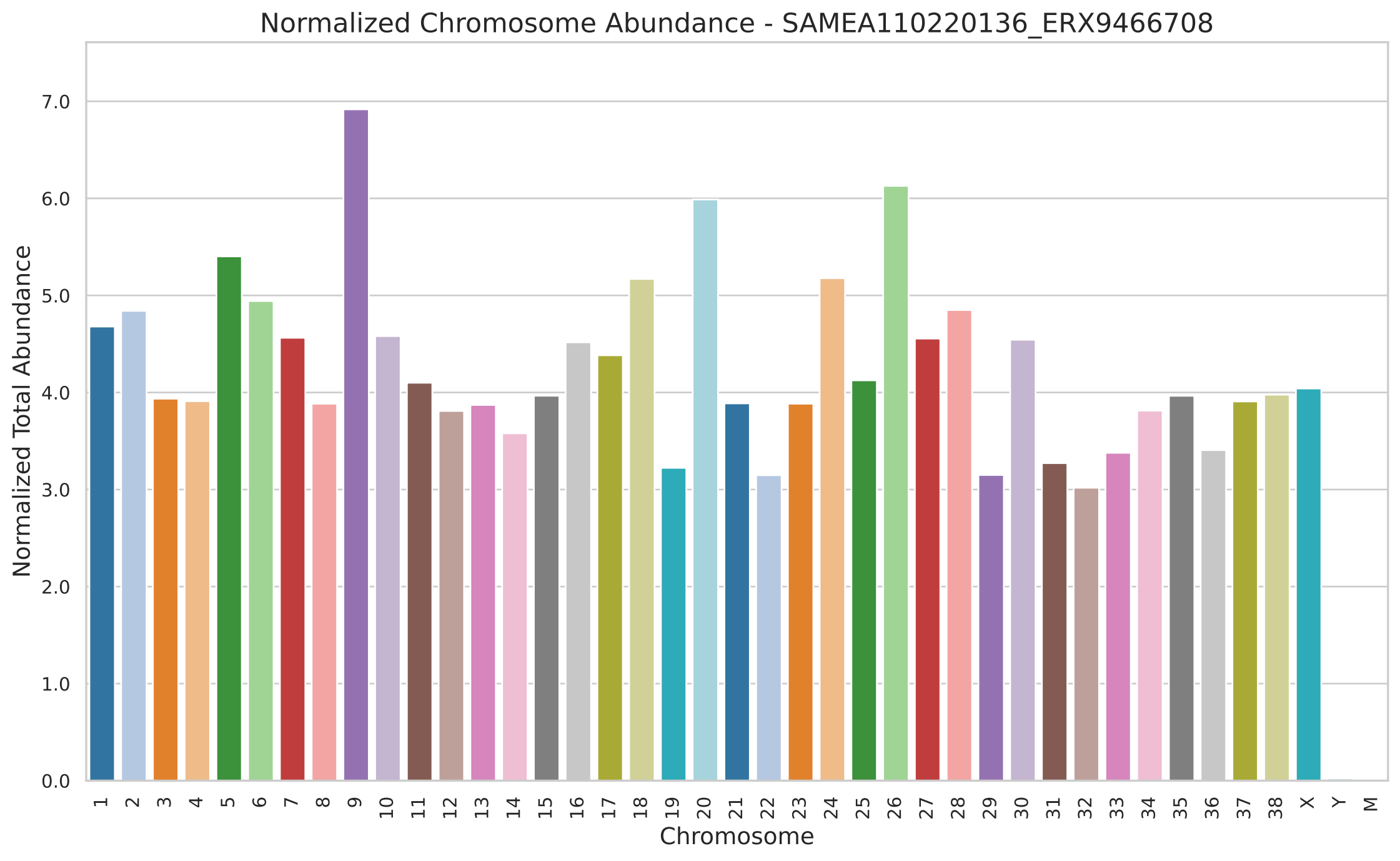

Normalized Chromosome Abundance - SAMEA110220127_ERX9466699
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

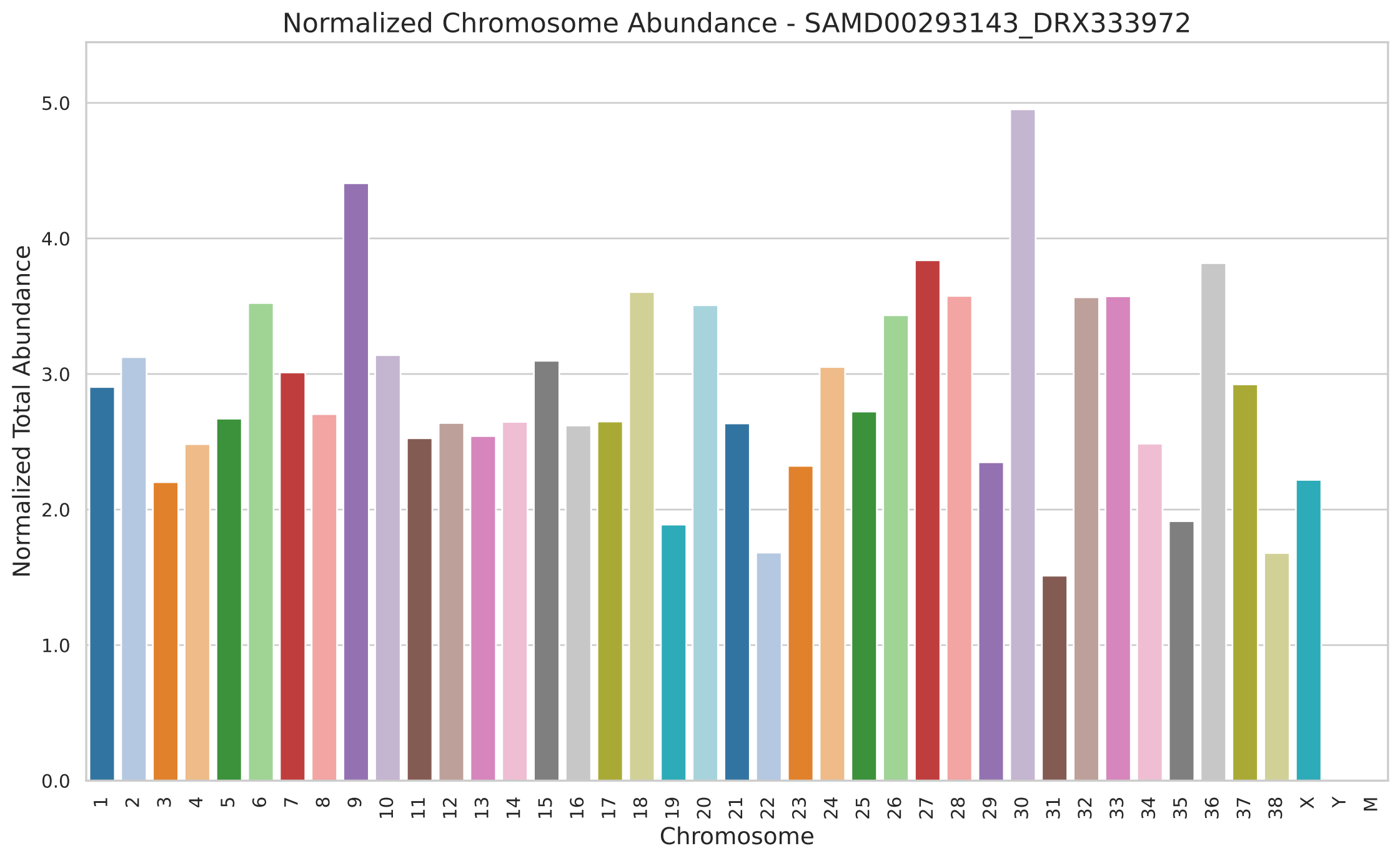

Normalized Chromosome Abundance - SAMEA110220148_ERX9466720
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

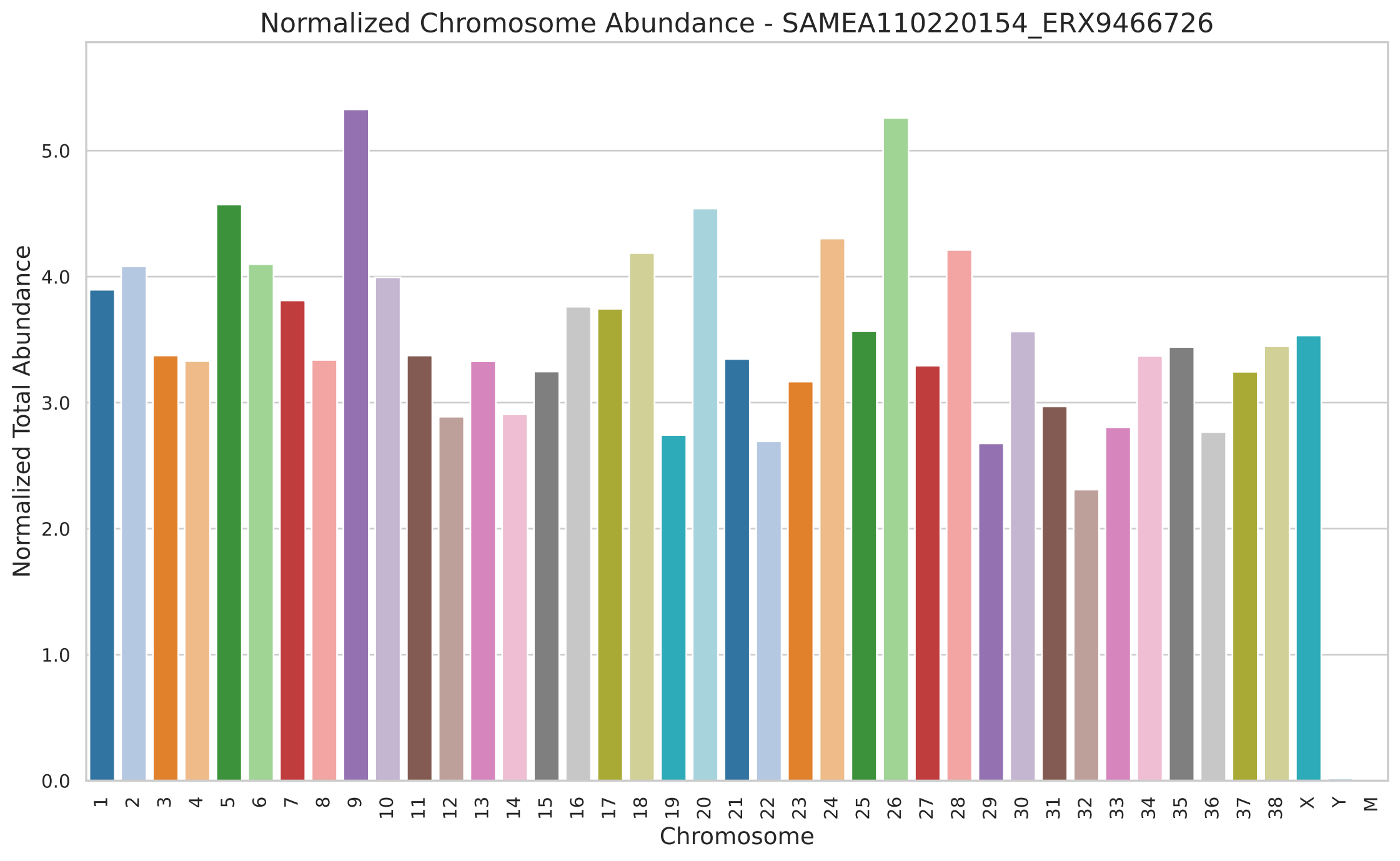

Normalized Chromosome Abundance - SAMEA110220179_ERX9466751
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

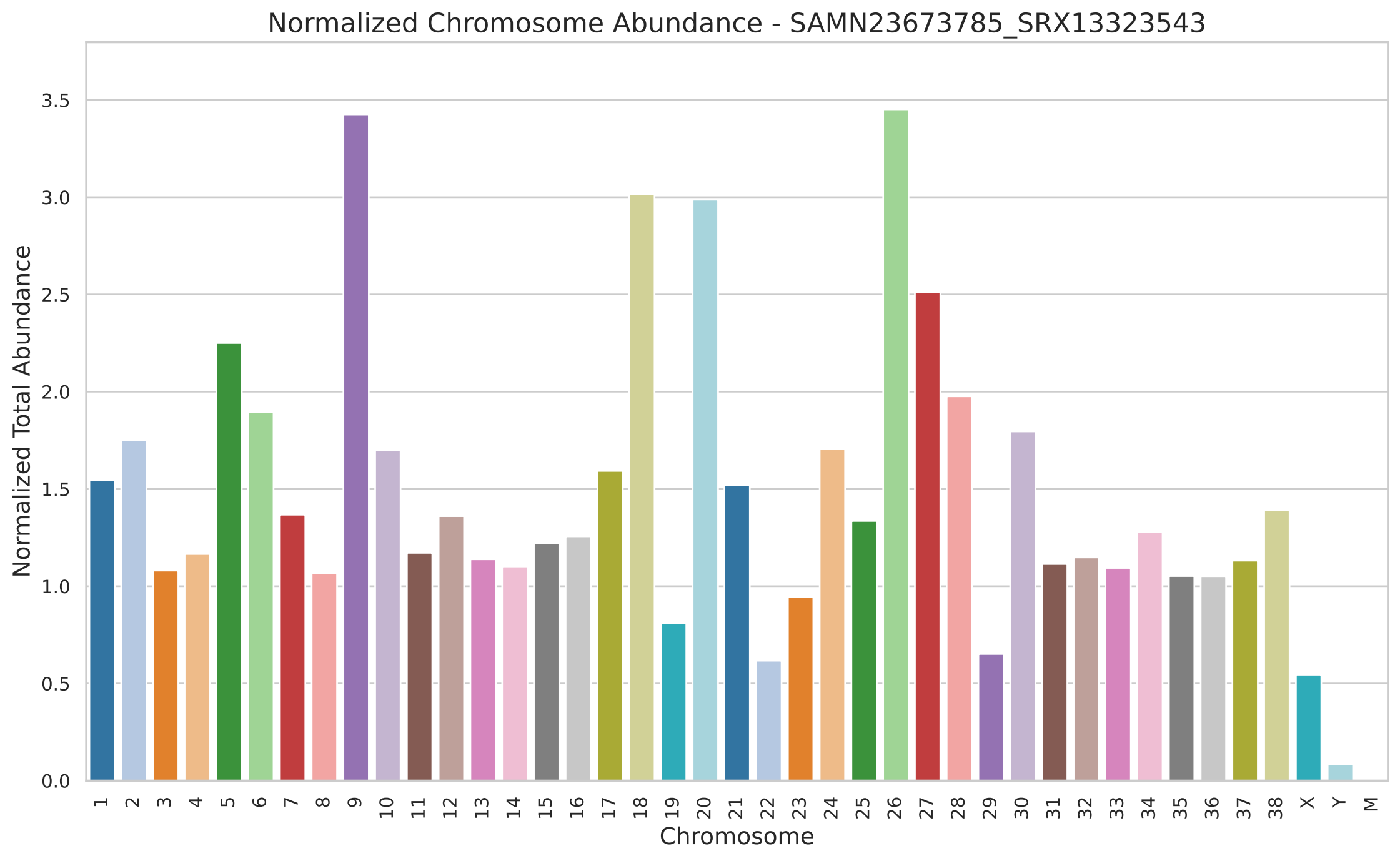

Normalized Chromosome Abundance - SAMN23673788_SRX13323546
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

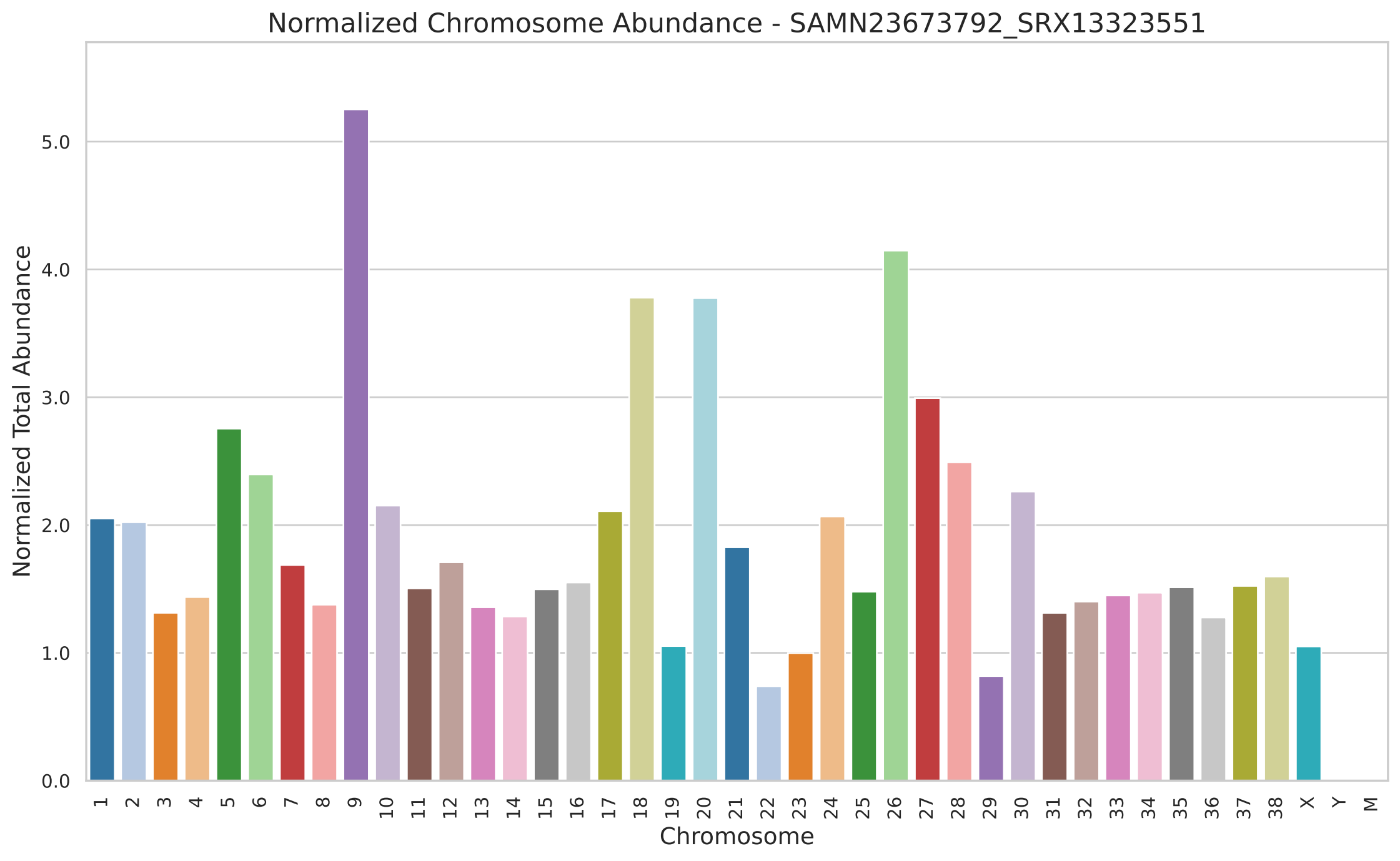

Normalized Chromosome Abundance - SAMD00293140_DRX333969
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
12.0
14.0
16.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

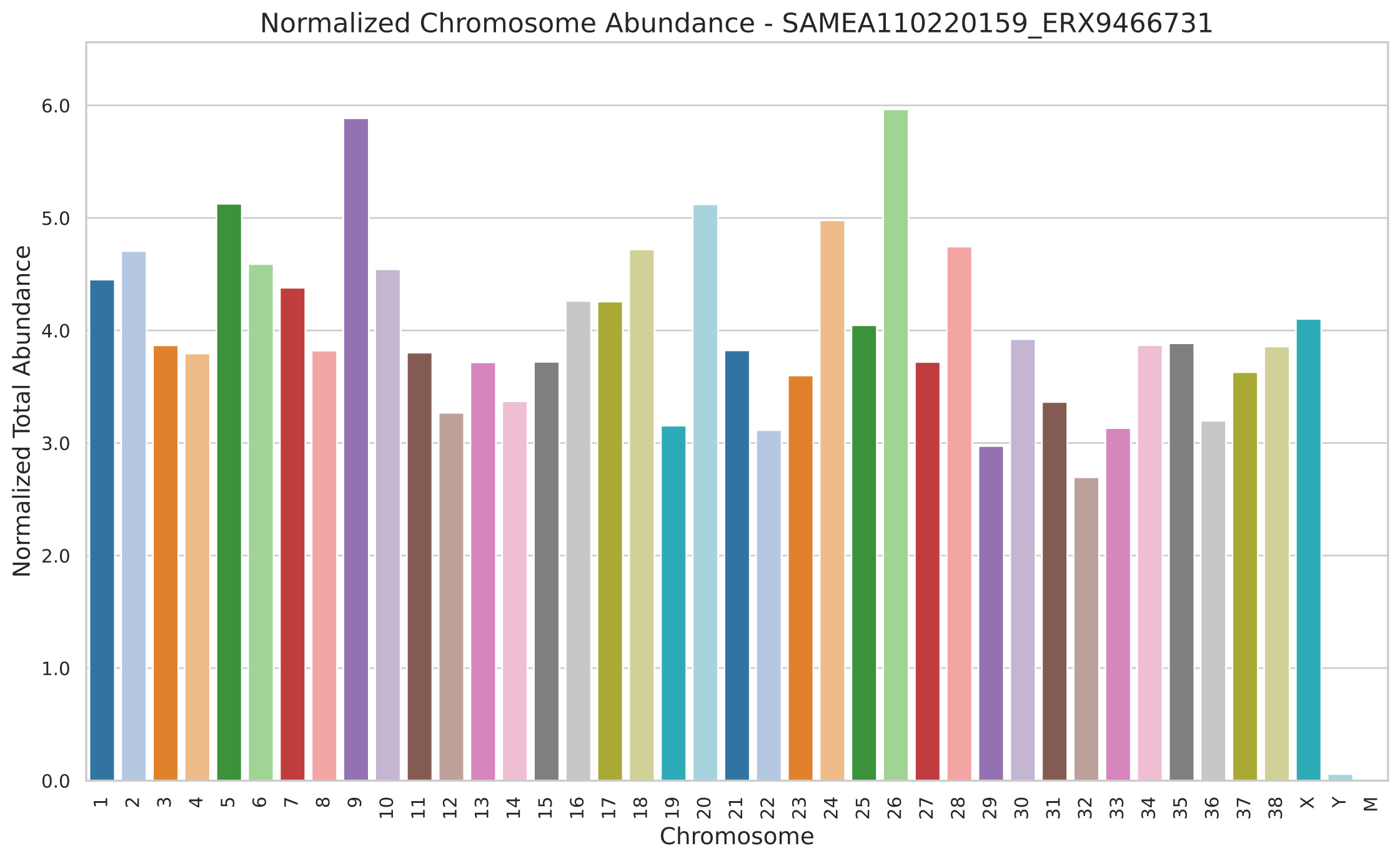

Normalized Chromosome Abundance - SAMEA110220136_ERX9466708
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

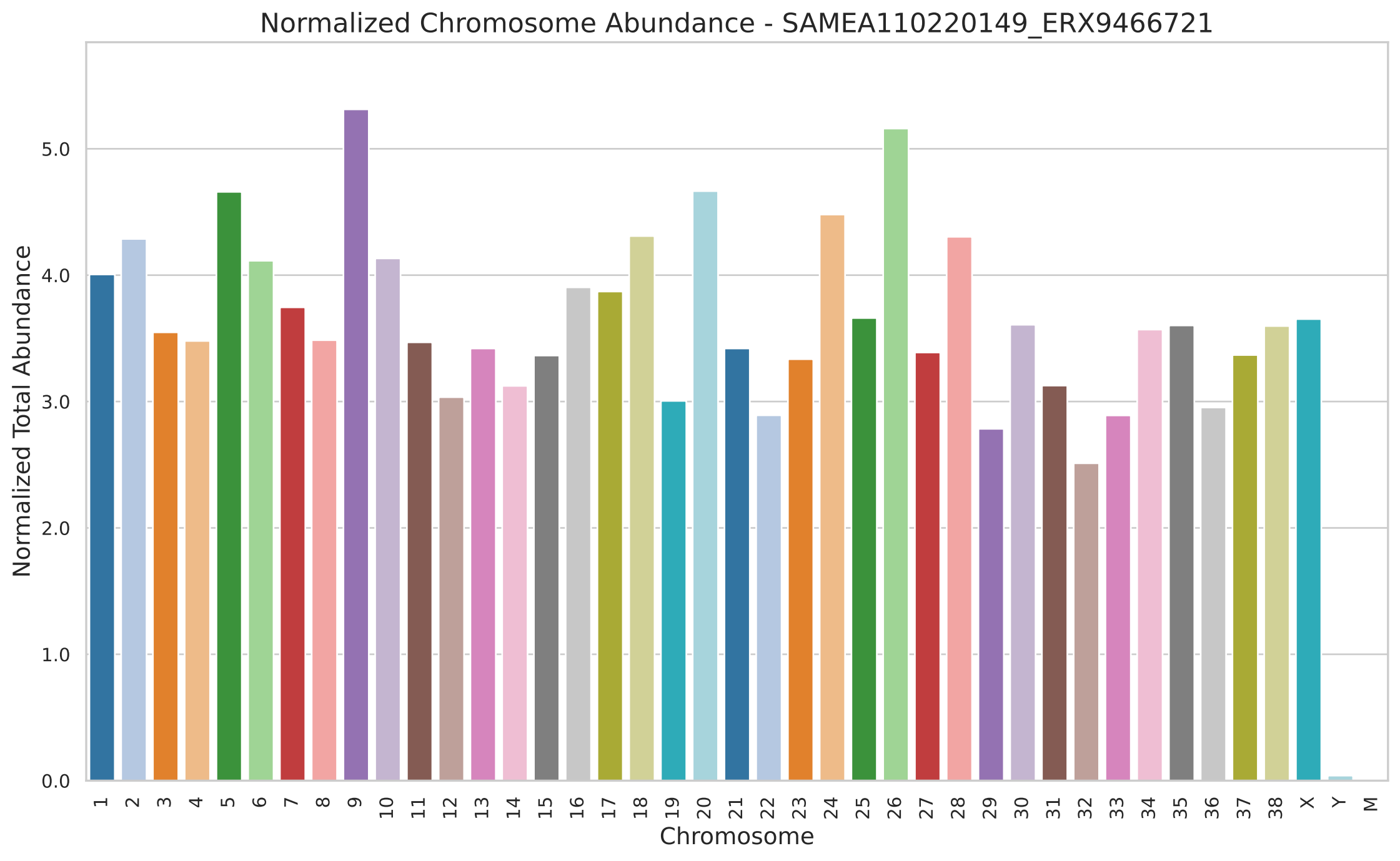

Normalized Chromosome Abundance - SAMD00293143_DRX333972
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

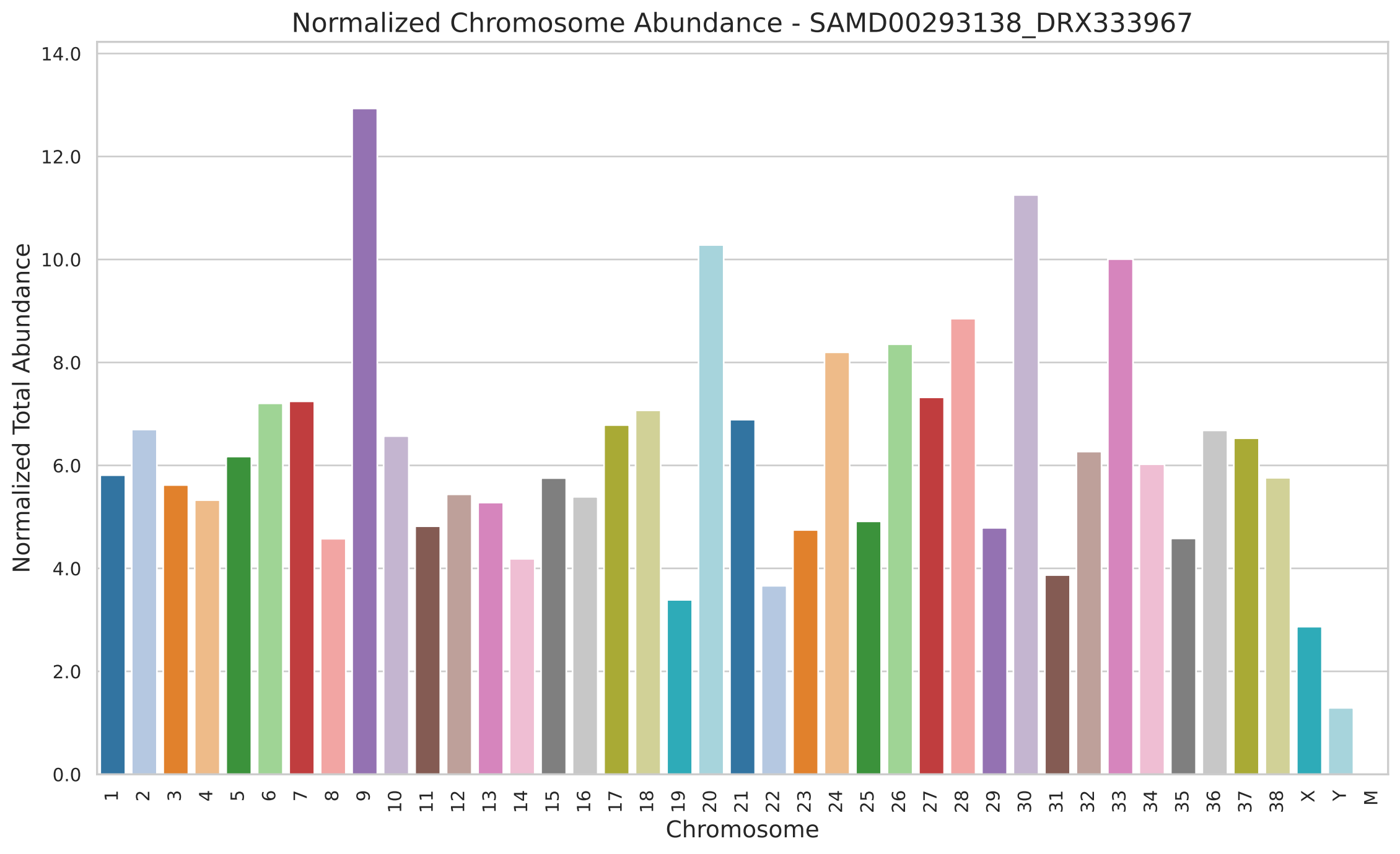

Normalized Chromosome Abundance - SAMEA110220154_ERX9466726
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

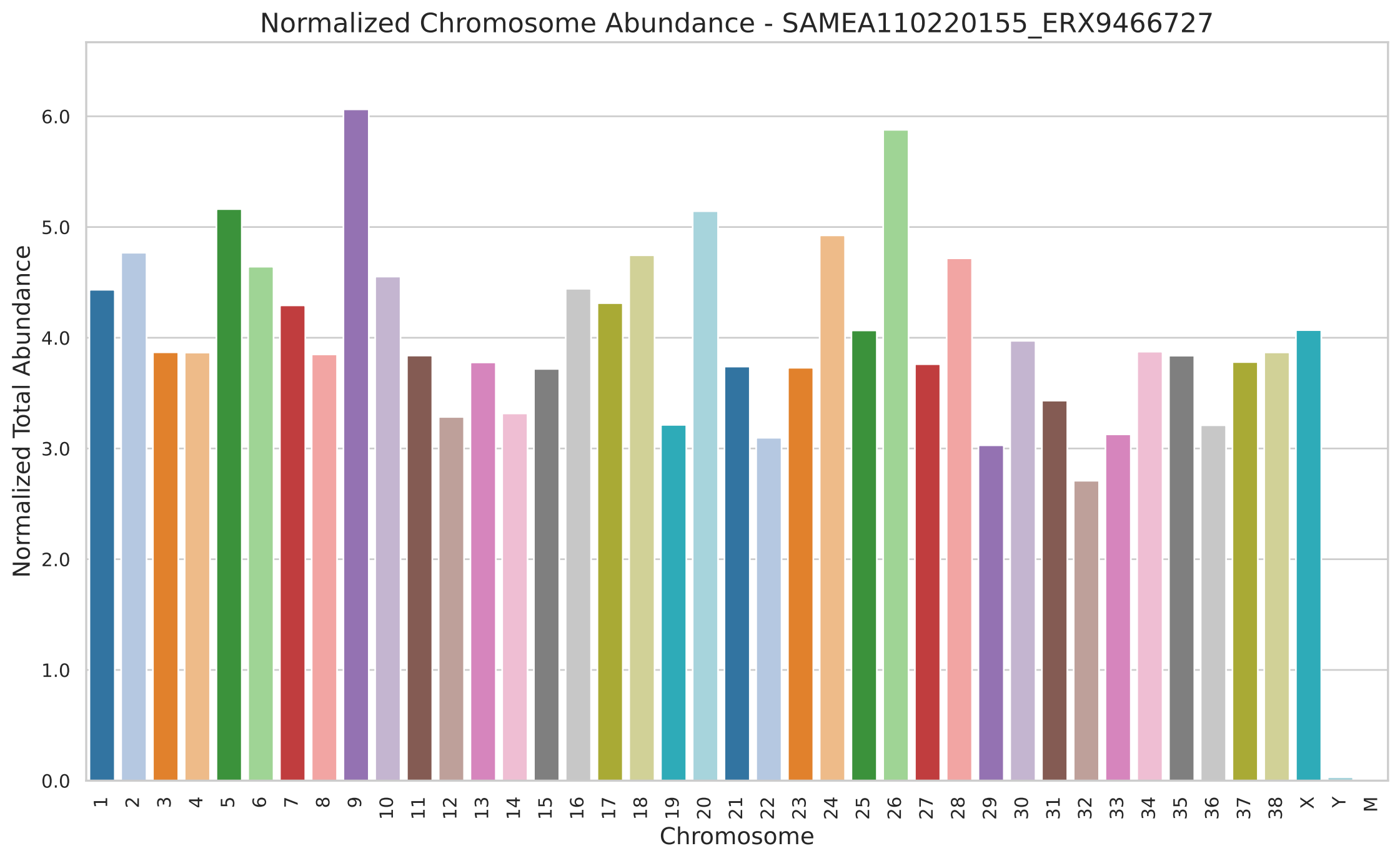

Normalized Chromosome Abundance - SAMN23673785_SRX13323543
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

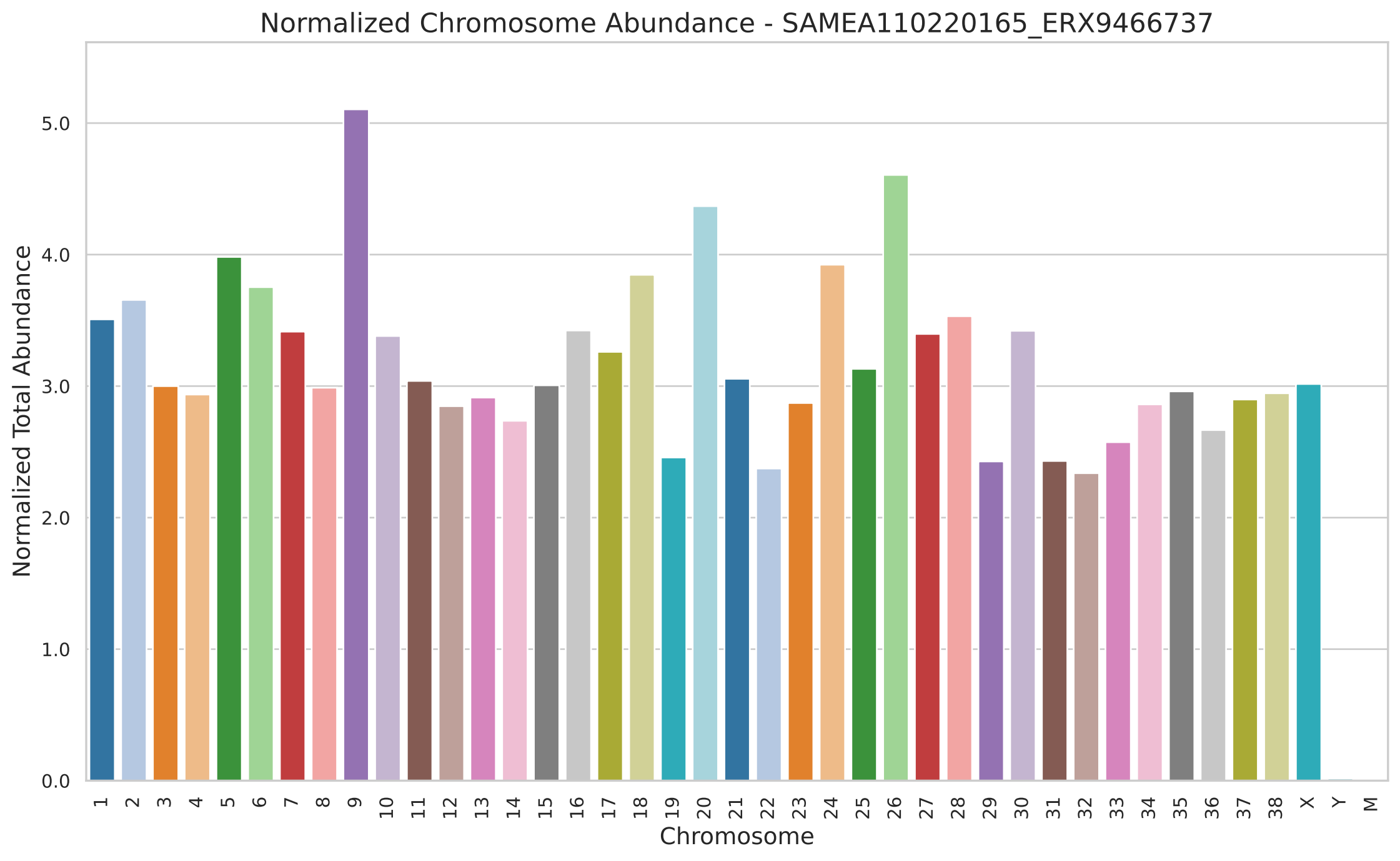

Normalized Chromosome Abundance - SAMN23673792_SRX13323551
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

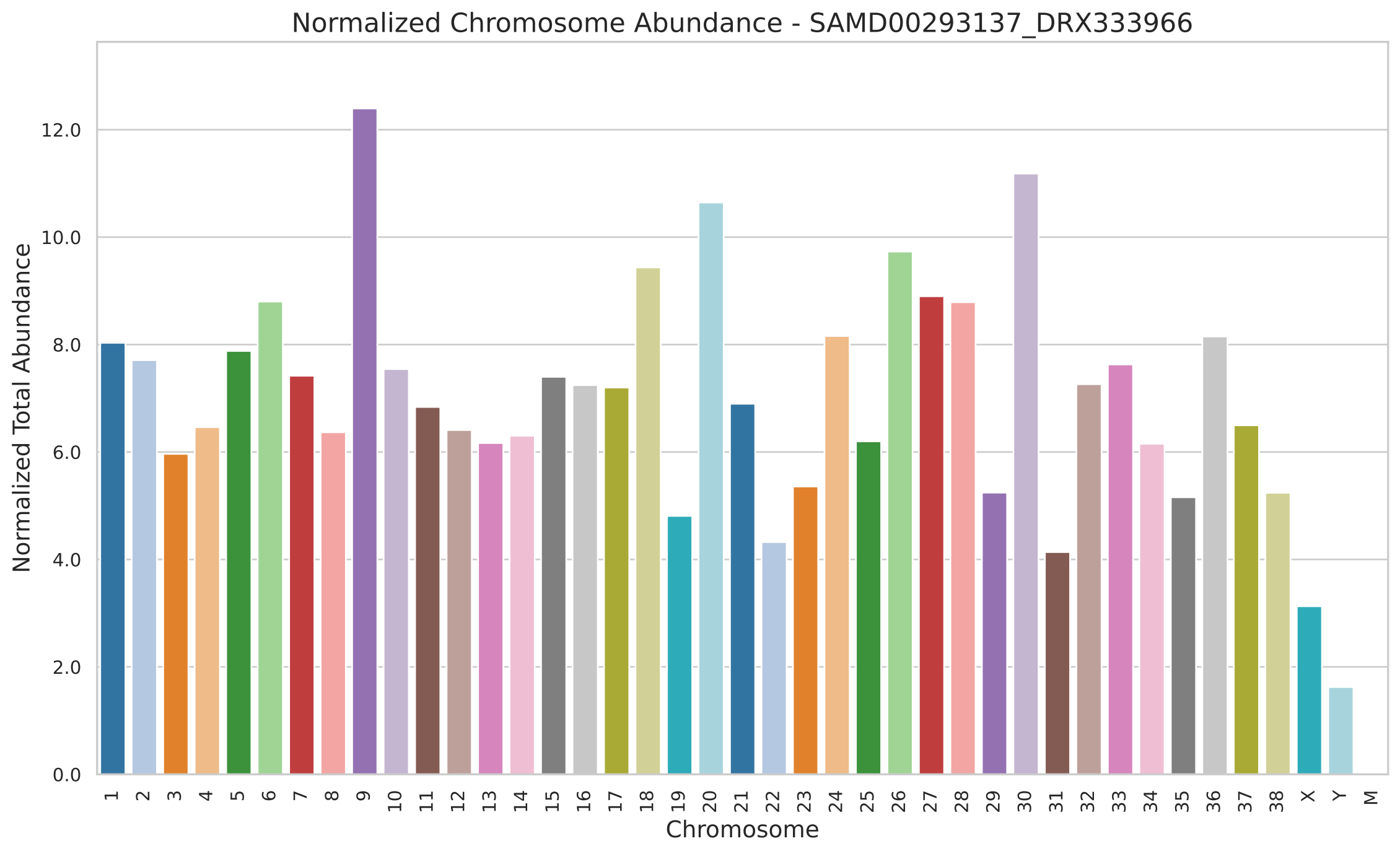

Normalized Chromosome Abundance - SAMEA110220159_ERX9466731
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

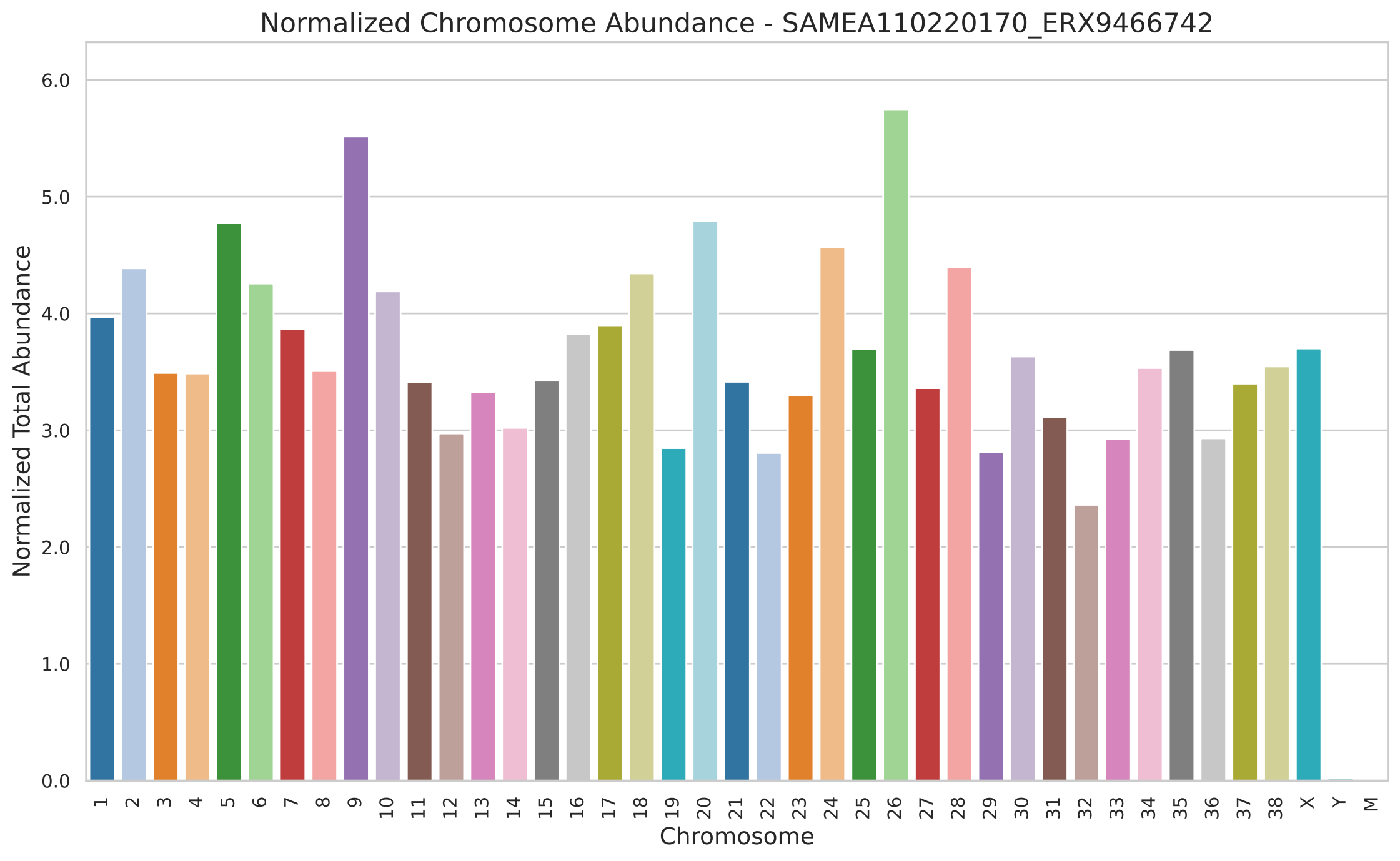

Normalized Chromosome Abundance - SAMEA110220149_ERX9466721
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

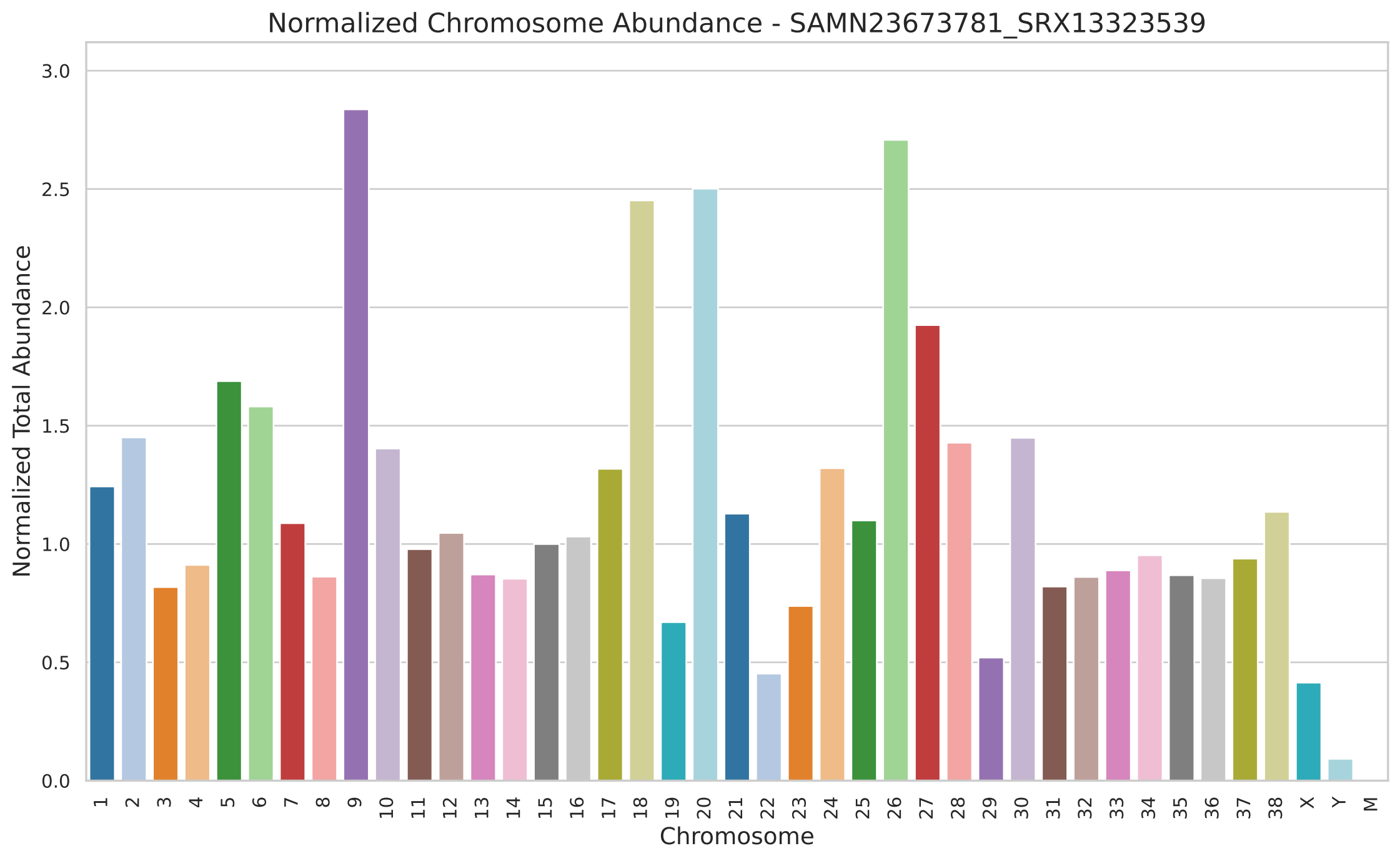

Normalized Chromosome Abundance - SAMD00293138_DRX333967
Normalized Total Abundance
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

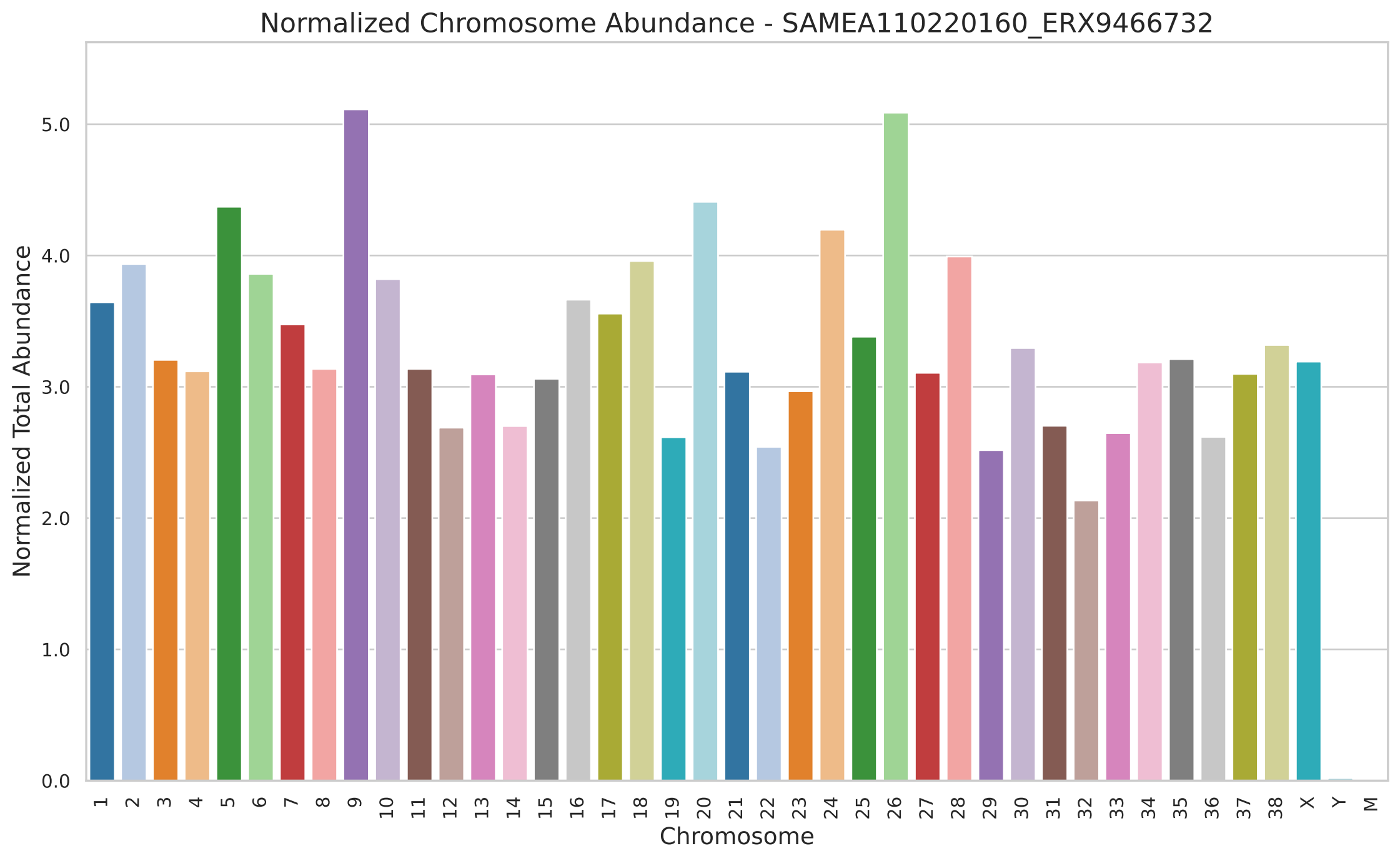

Normalized Chromosome Abundance - SAMEA110220155_ERX9466727
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

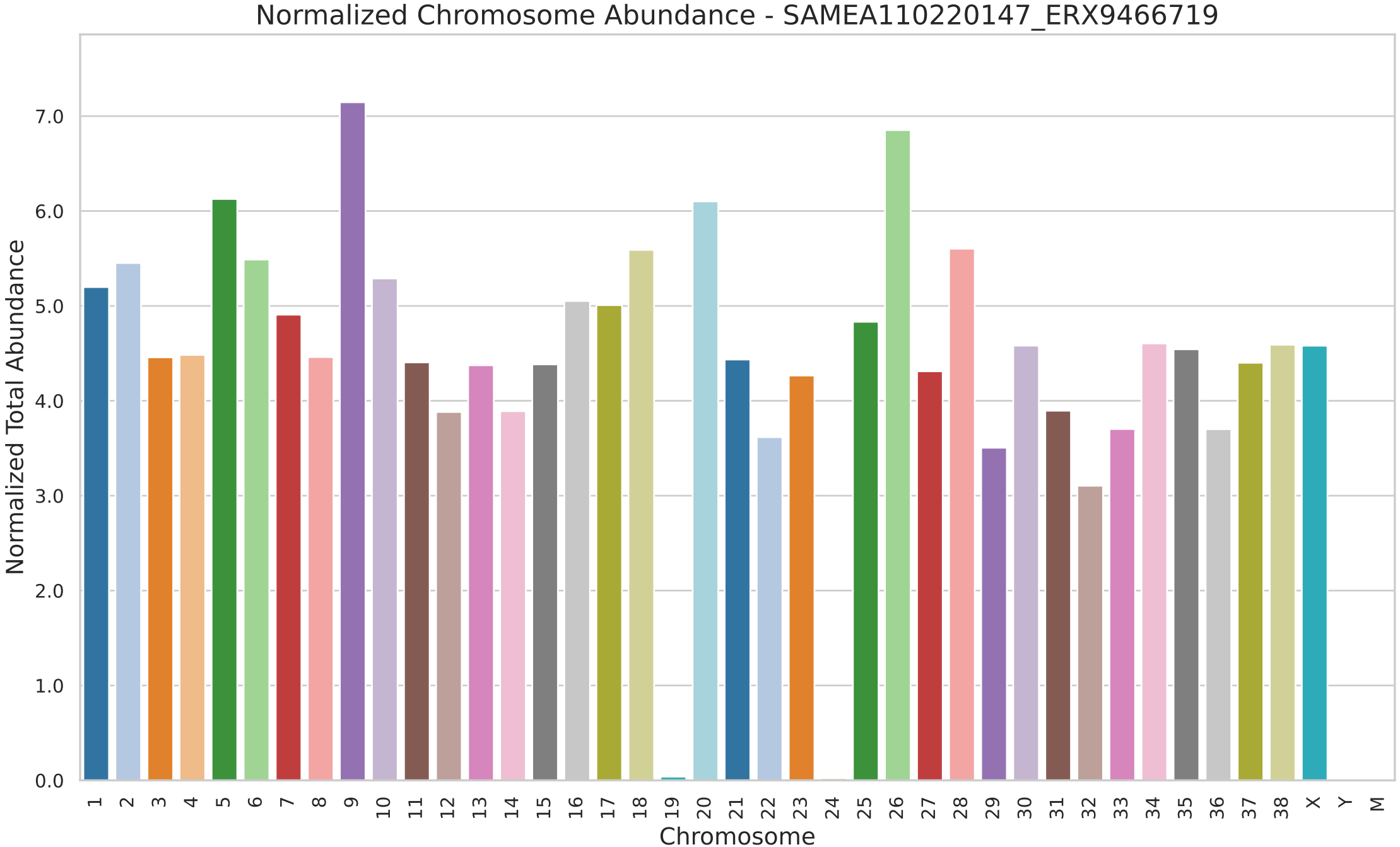

Normalized Chromosome Abundance - SAMEA110220165_ERX9466737
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

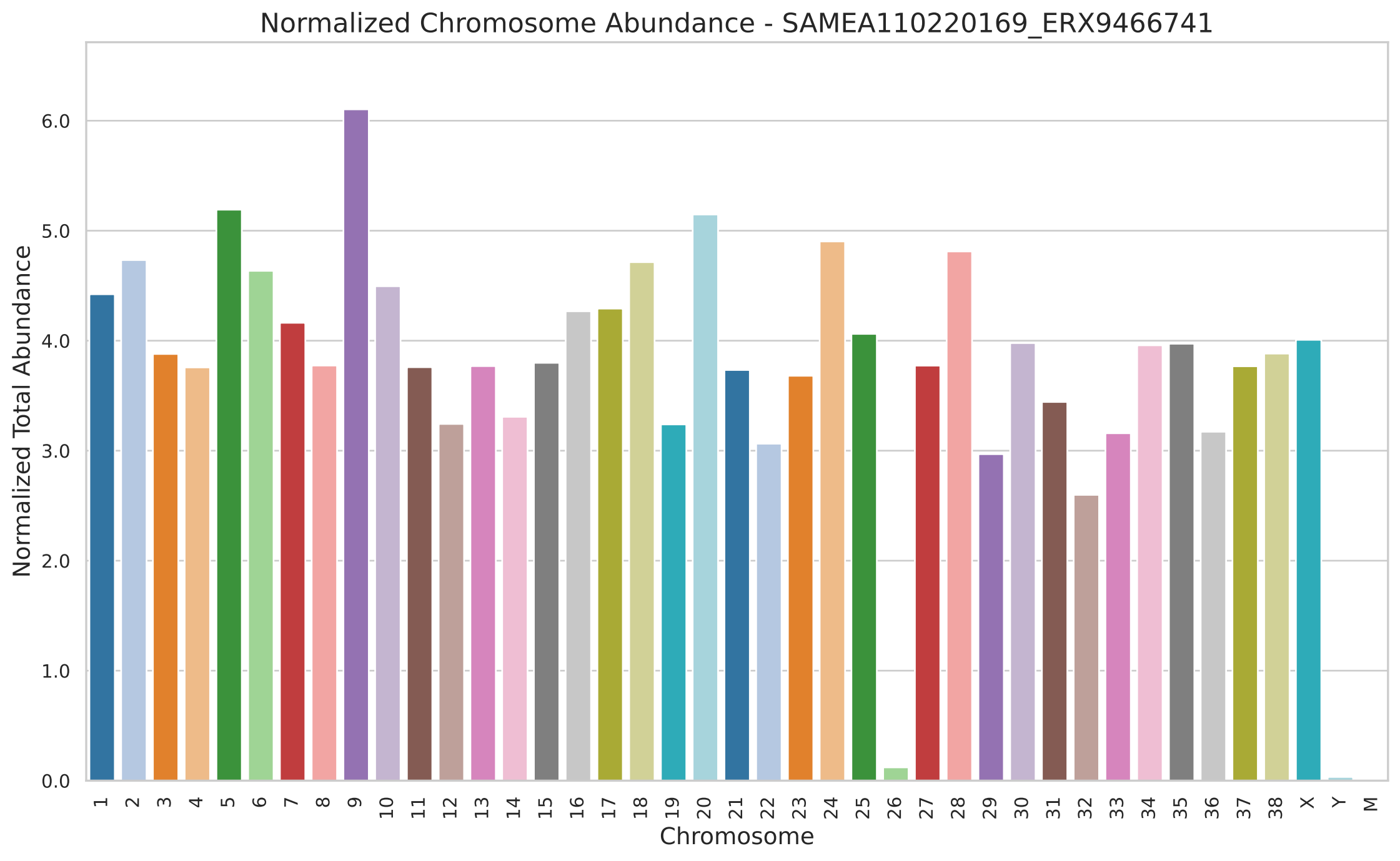

Normalized Chromosome Abundance - SAMD00293137_DRX333966
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
12.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

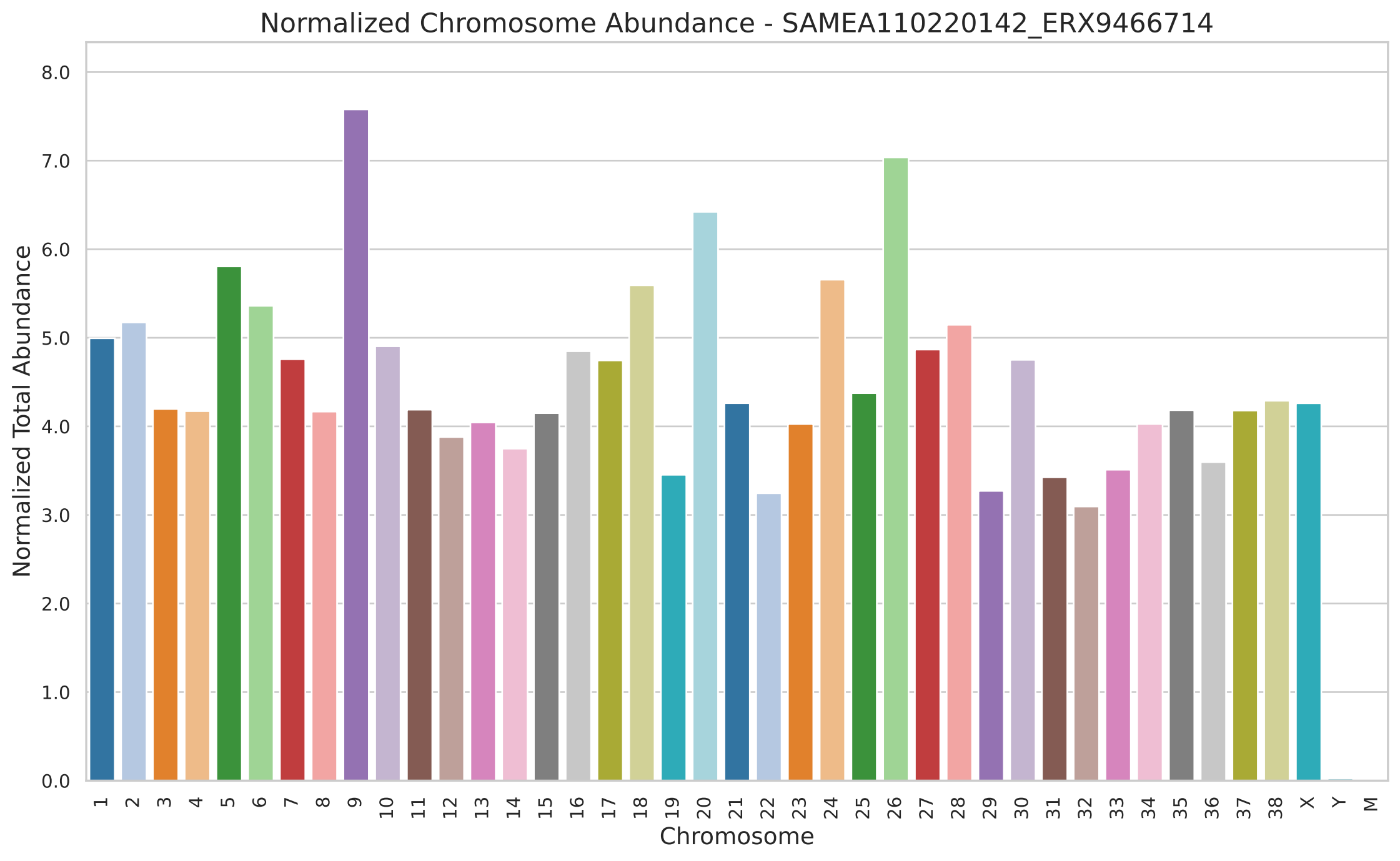

Normalized Chromosome Abundance - SAMEA110220170_ERX9466742
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

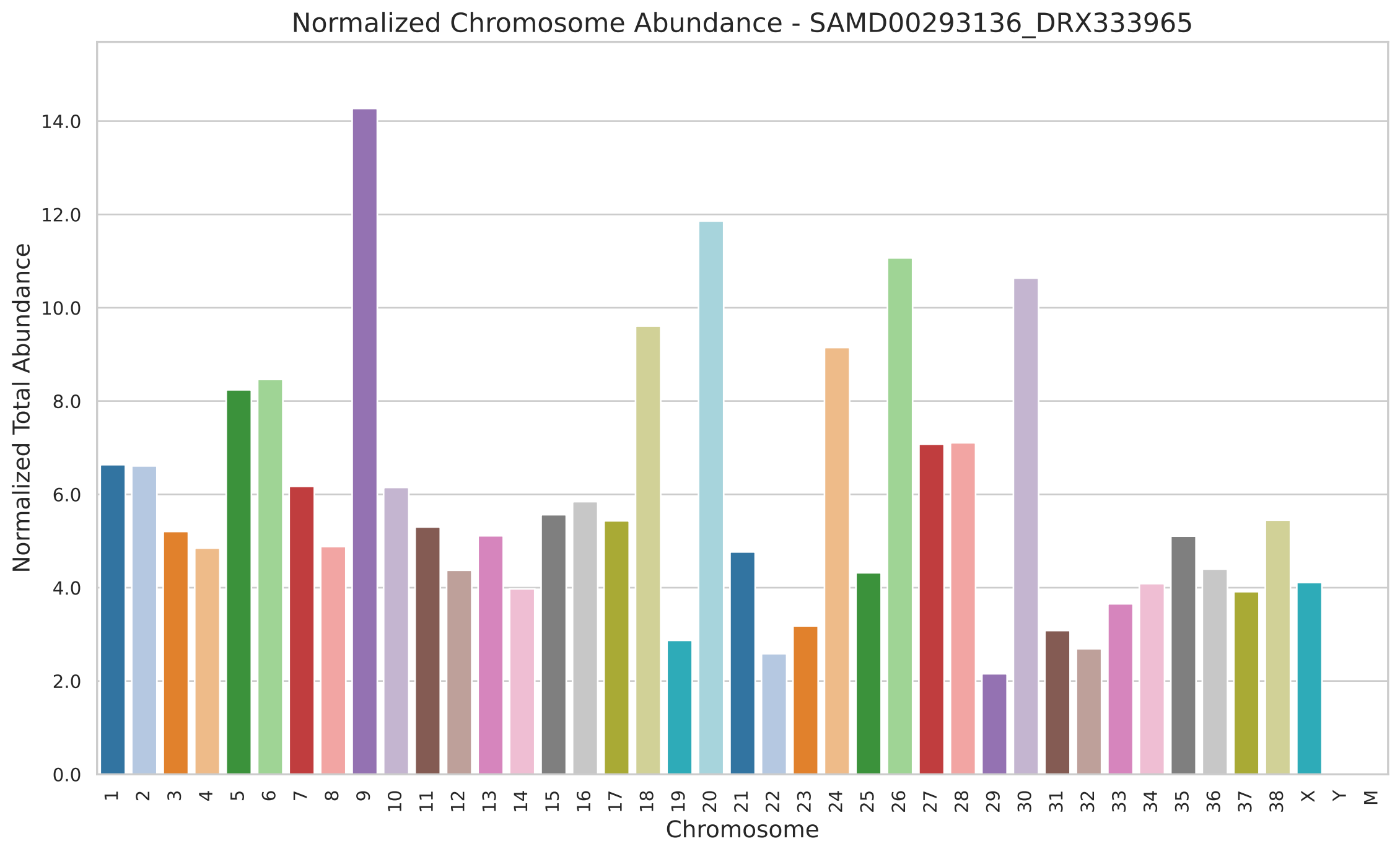

Normalized Chromosome Abundance - SAMN23673781_SRX13323539
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

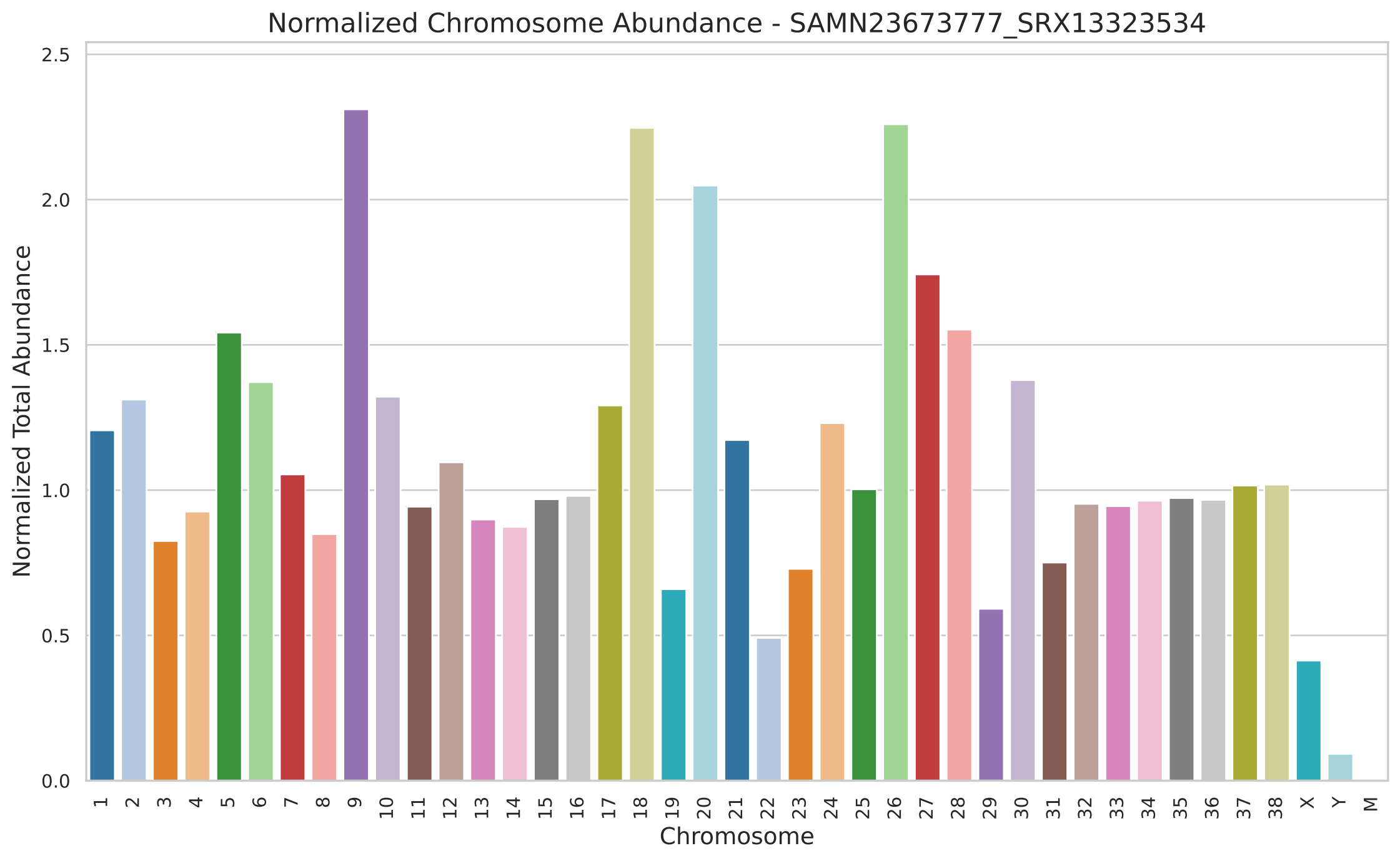

Normalized Chromosome Abundance - SAMEA110220160_ERX9466732
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

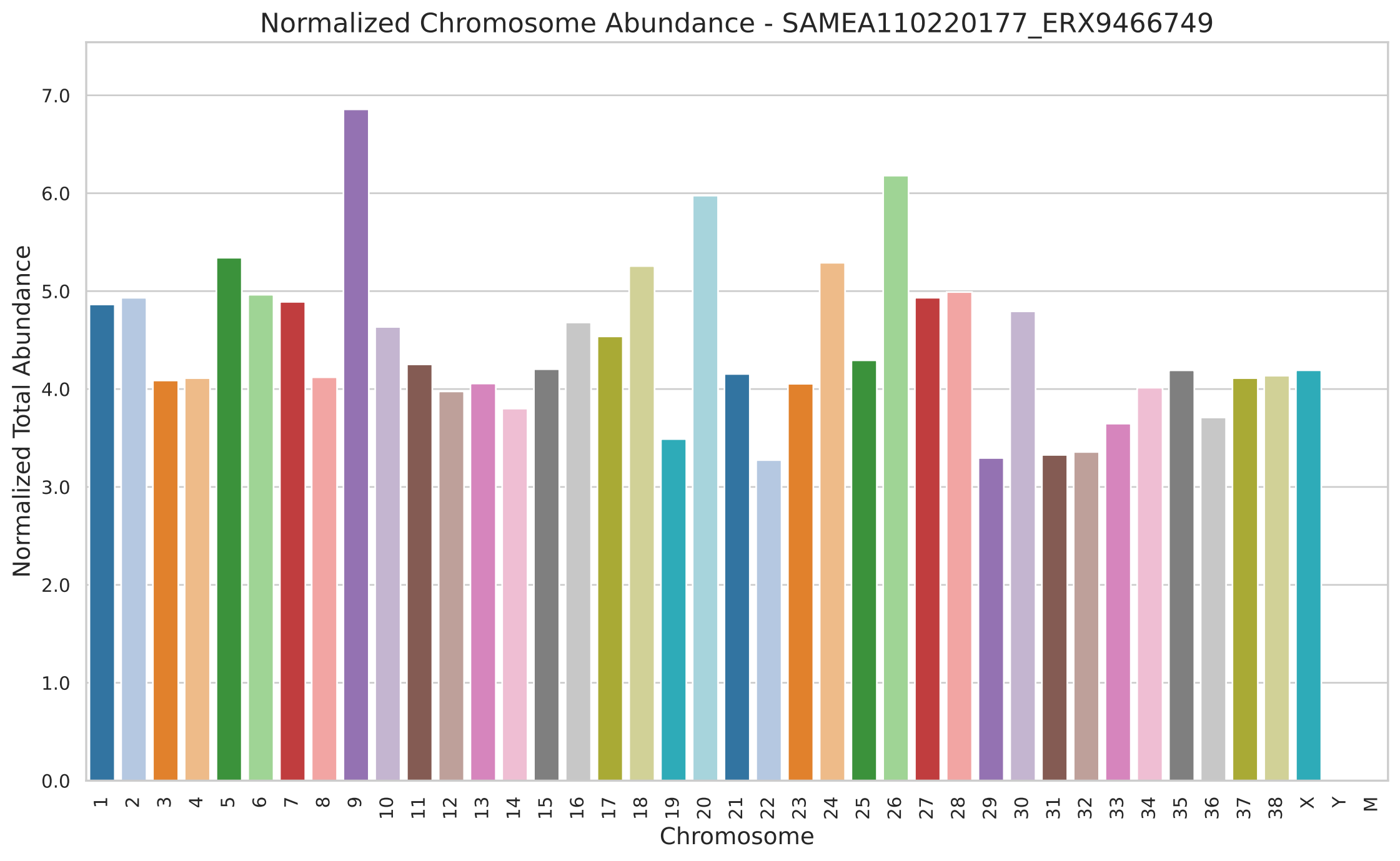

Normalized Chromosome Abundance - SAMEA110220147_ERX9466719
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

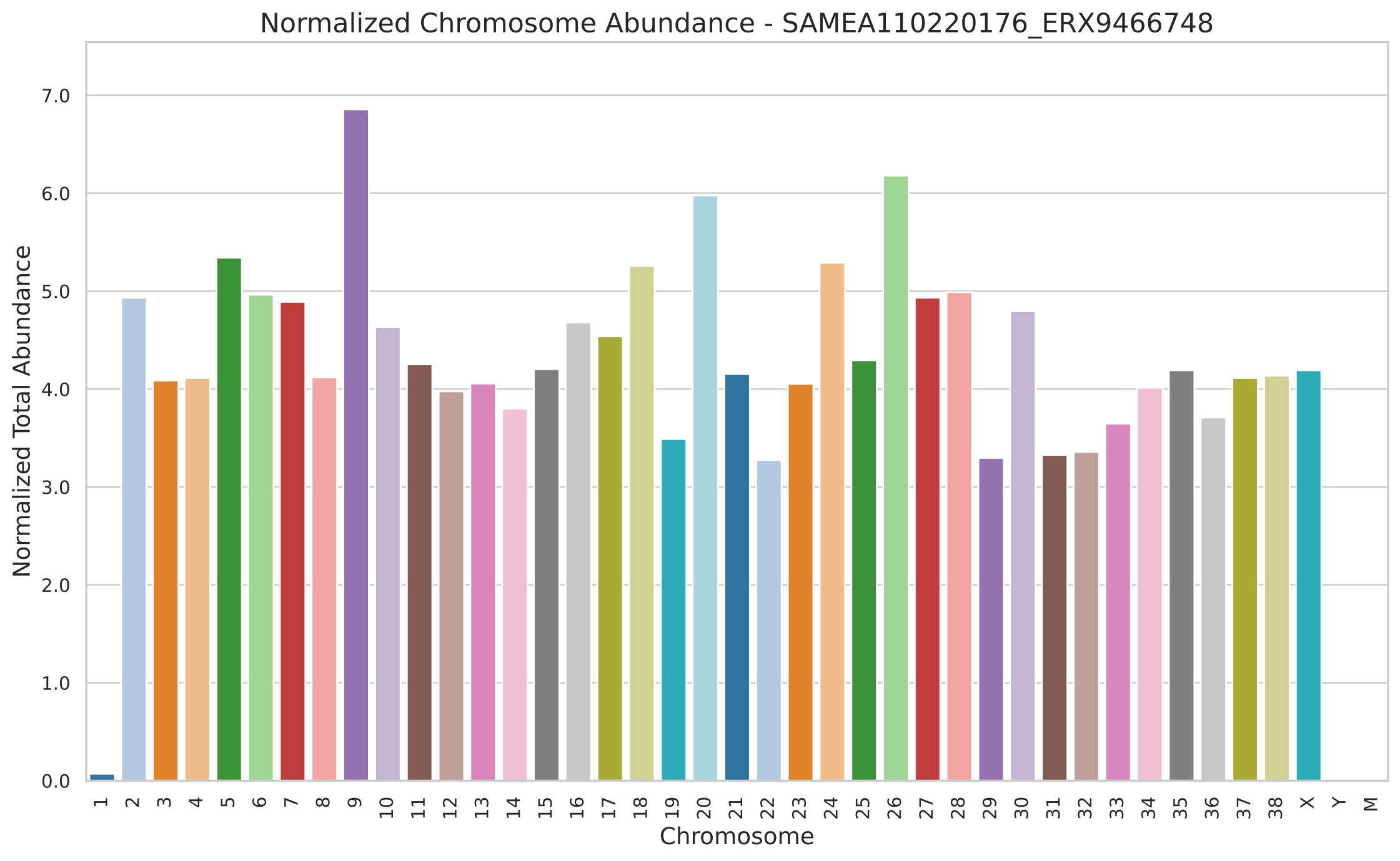

Normalized Chromosome Abundance - SAMEA110220169_ERX9466741
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

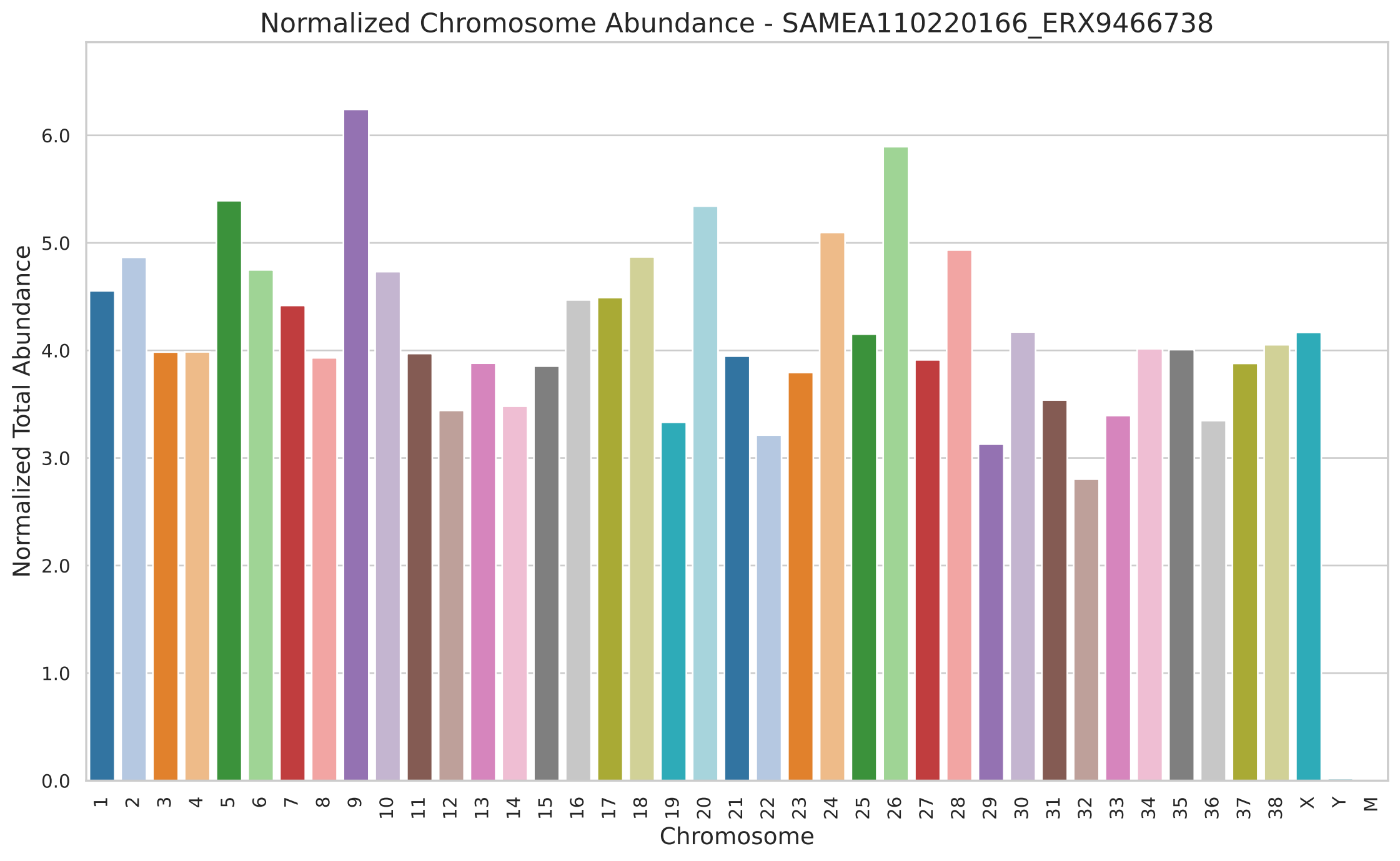

Normalized Chromosome Abundance - SAMEA110220142_ERX9466714
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

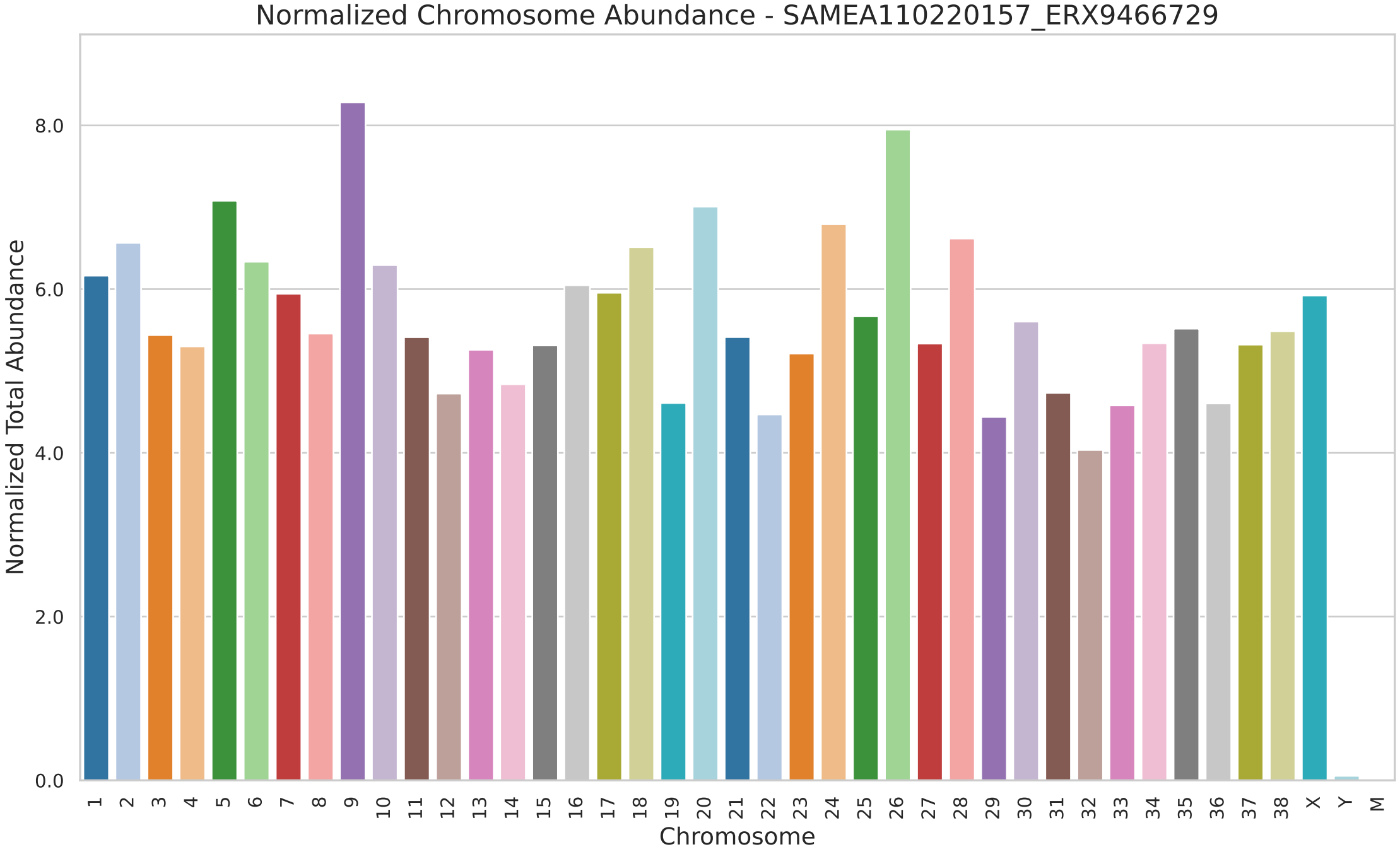

Normalized Chromosome Abundance - SAMD00293136_DRX333965
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
12.0
14.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

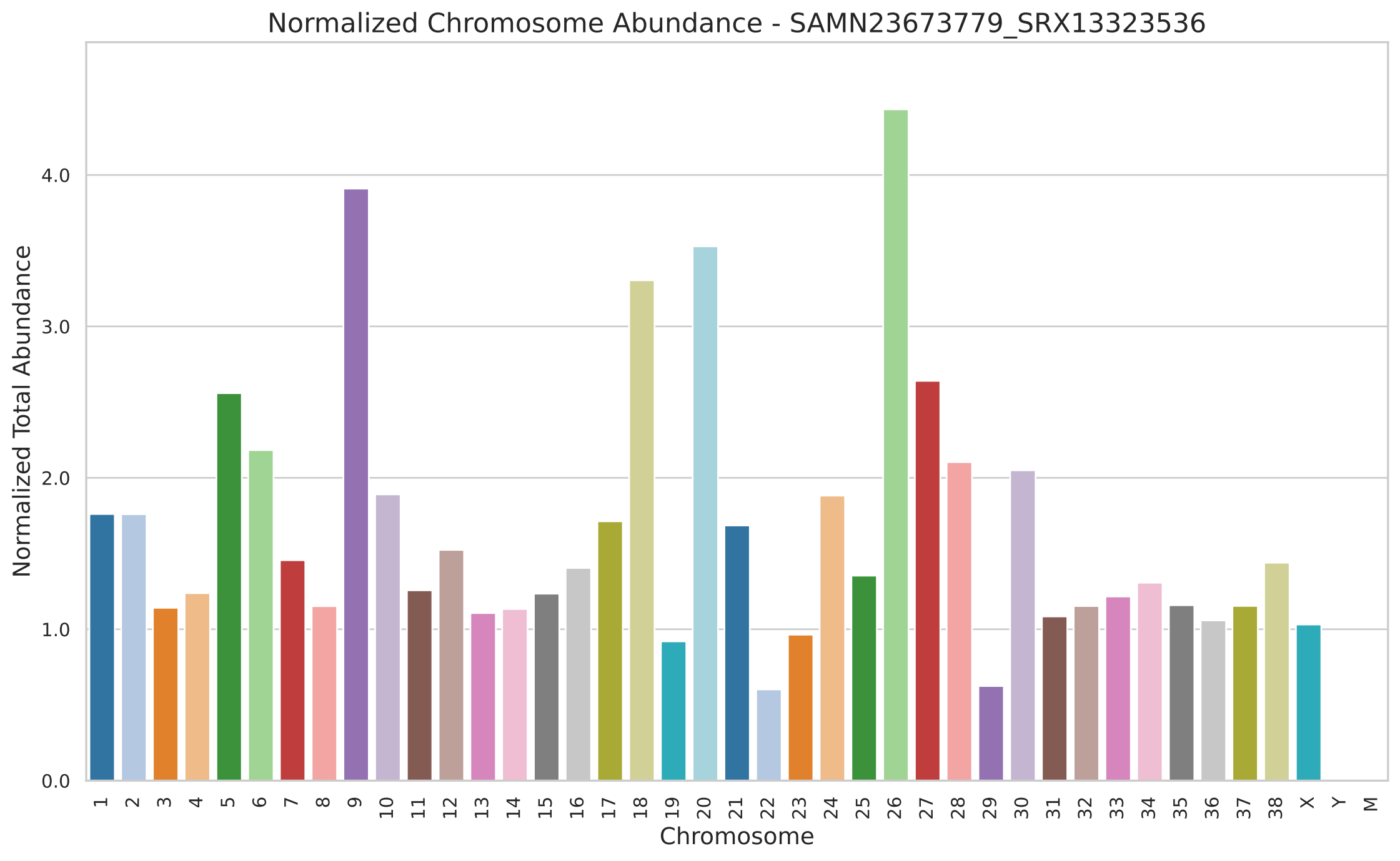

Normalized Chromosome Abundance - SAMN23673777_SRX13323534
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

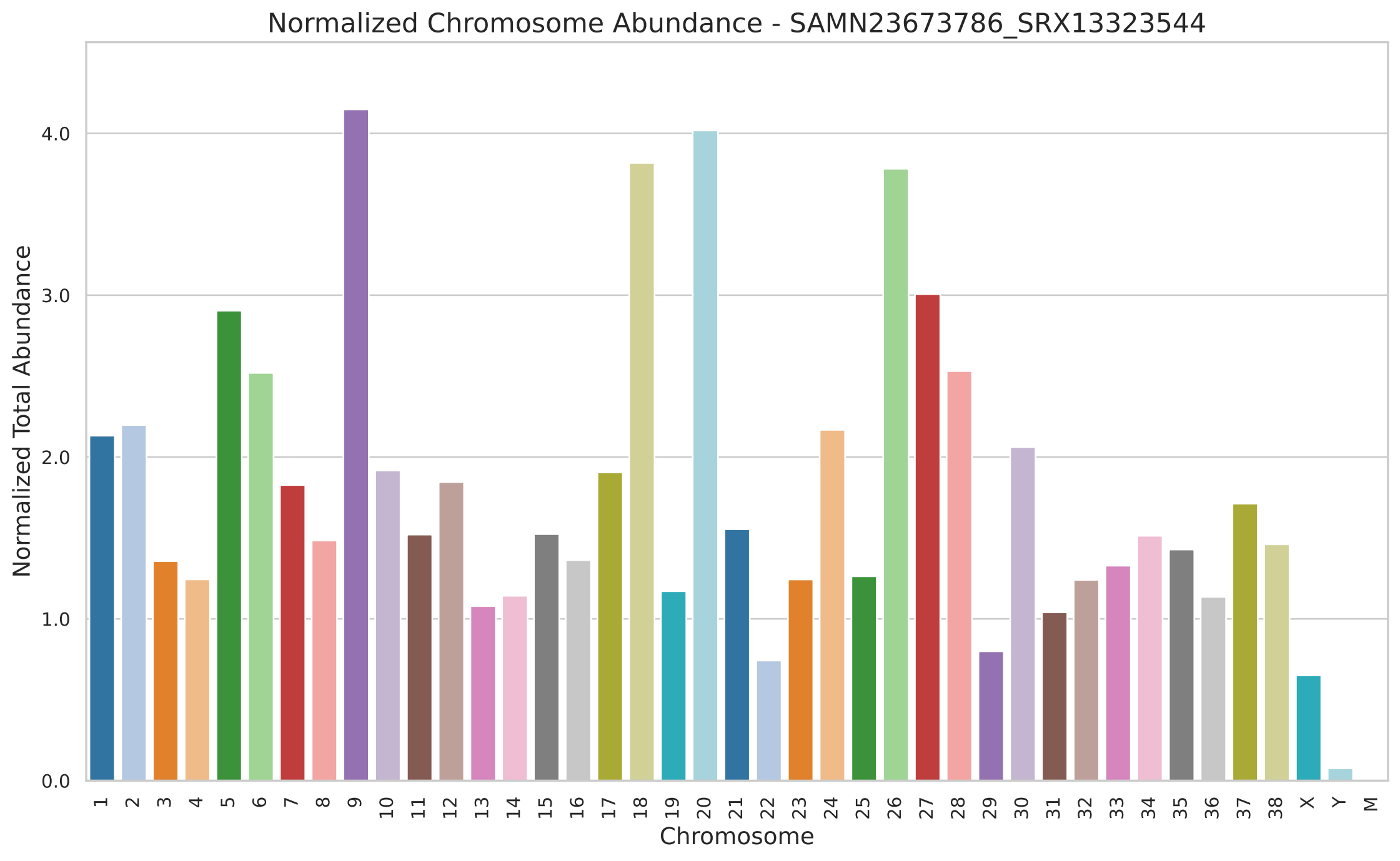

Normalized Chromosome Abundance - SAMEA110220177_ERX9466749
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

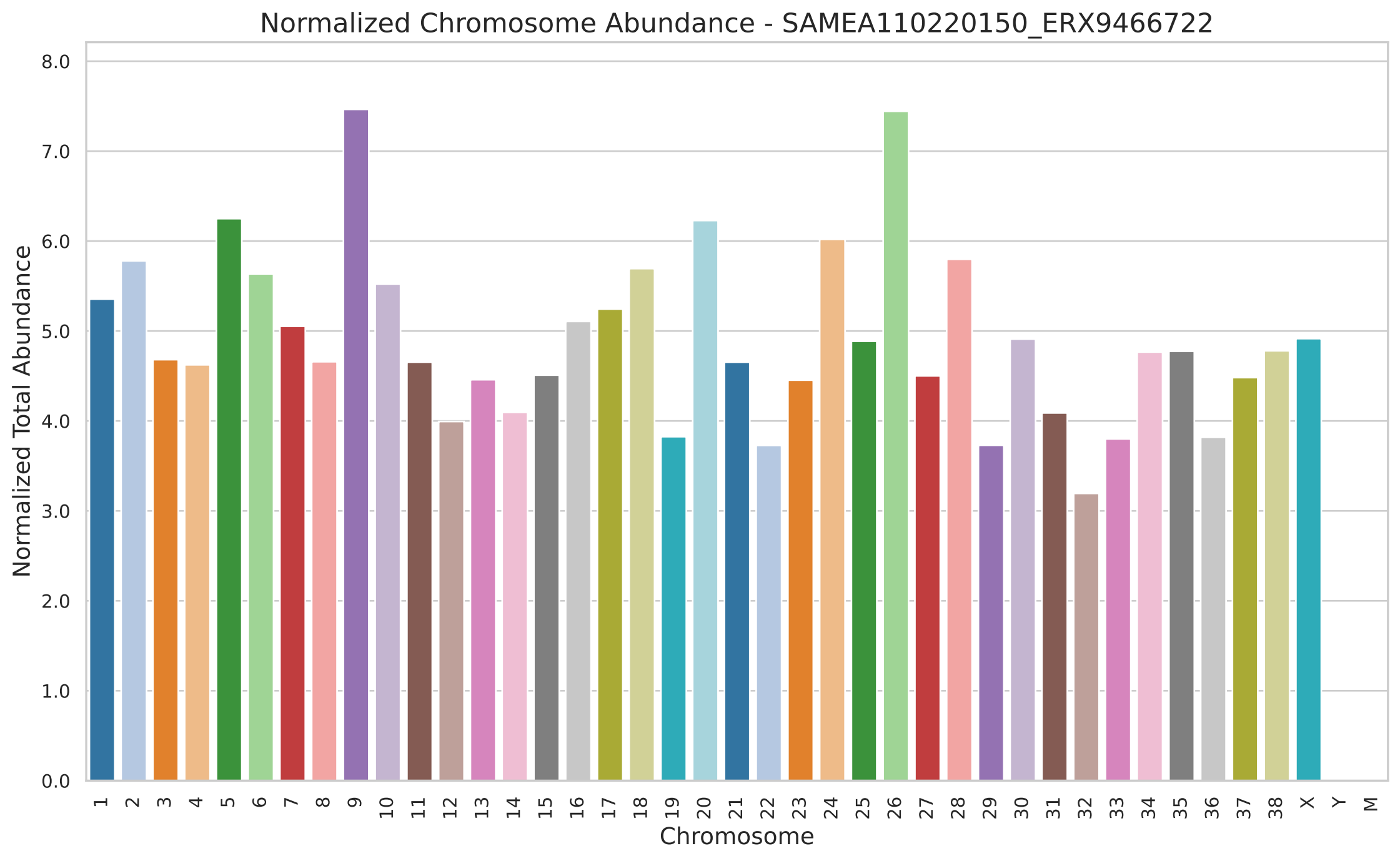

Normalized Chromosome Abundance - SAMEA110220176_ERX9466748
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

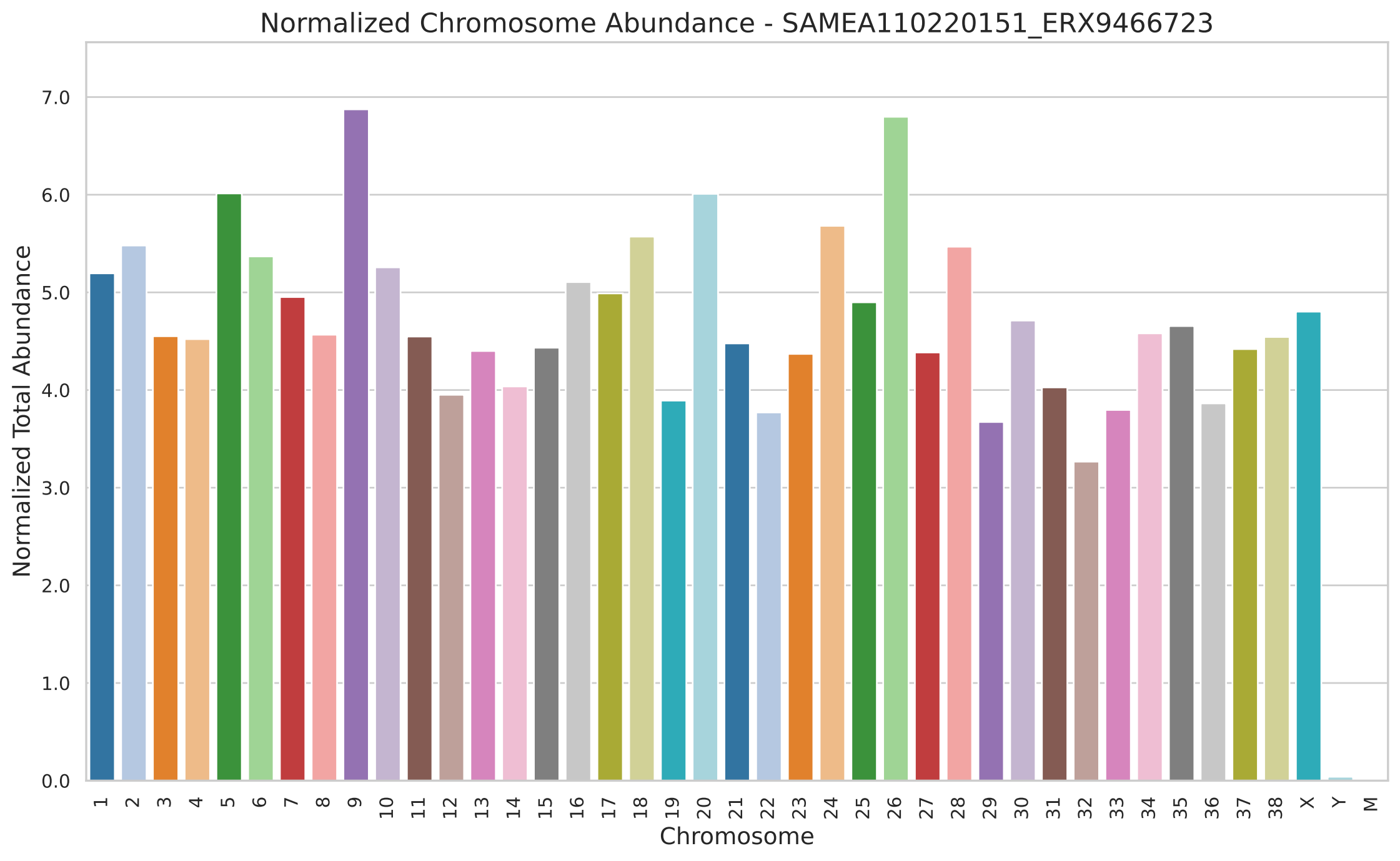

Normalized Chromosome Abundance - SAMEA110220166_ERX9466738
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

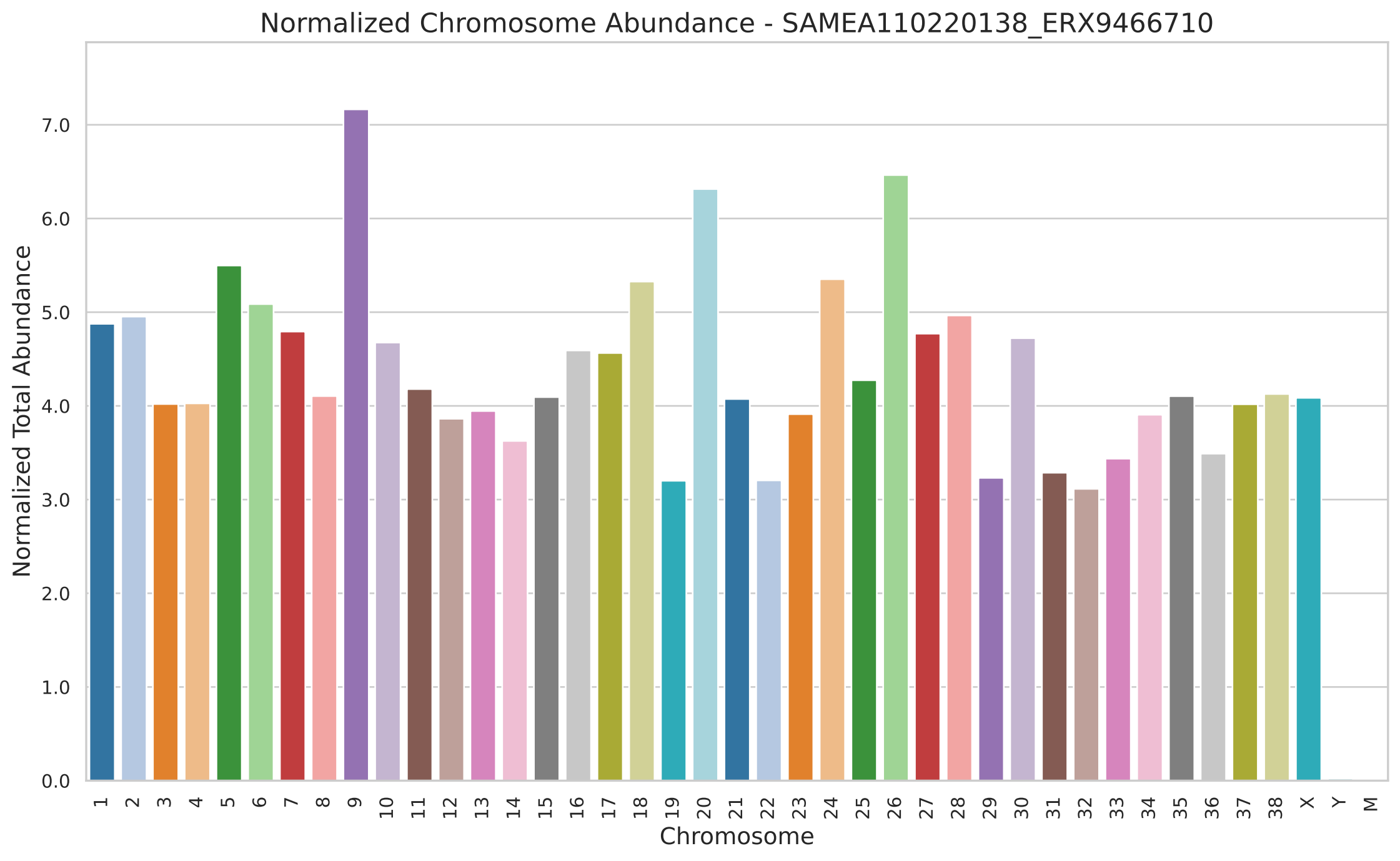

Normalized Chromosome Abundance - SAMEA110220157_ERX9466729
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

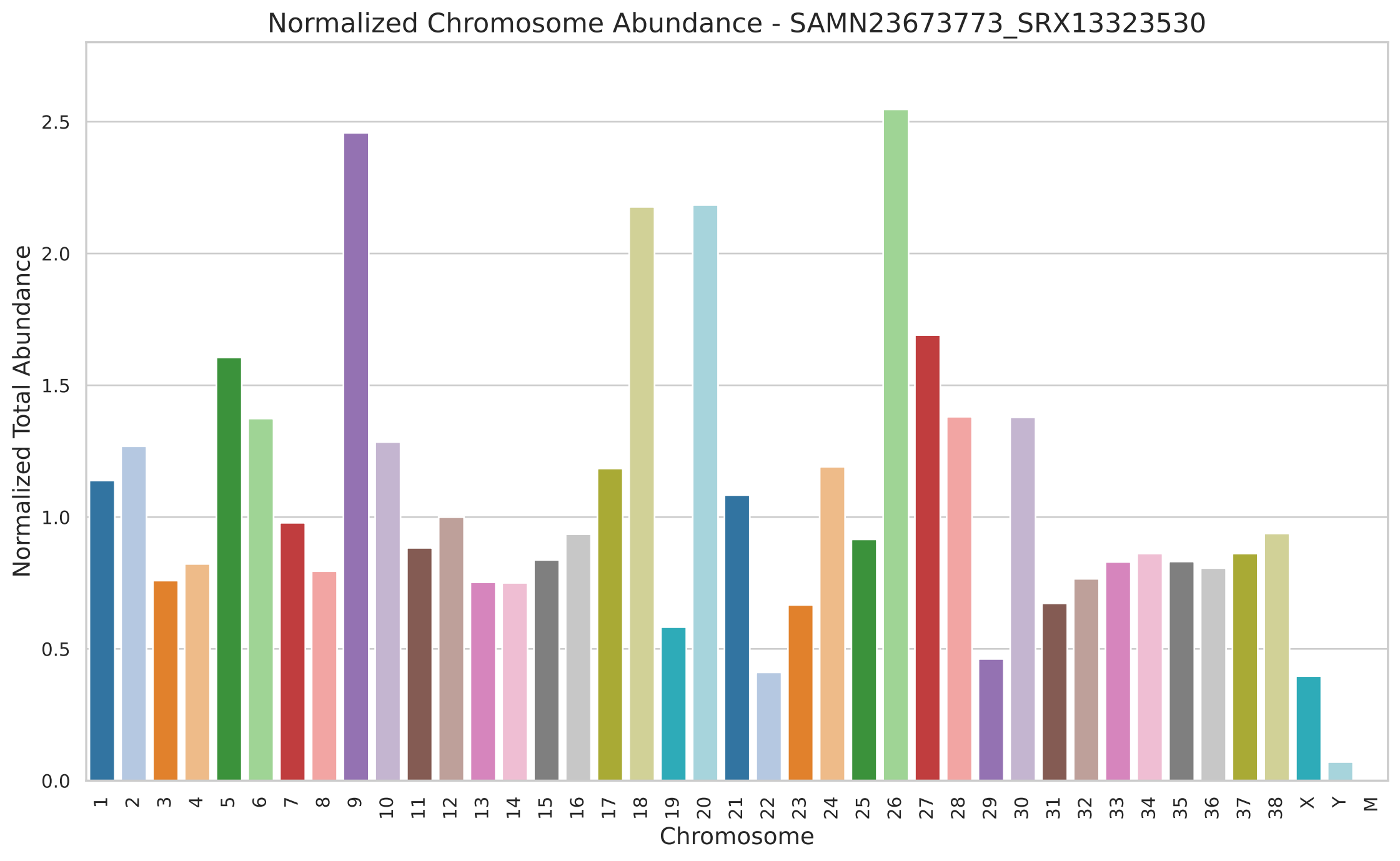

Normalized Chromosome Abundance - SAMN23673779_SRX13323536
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

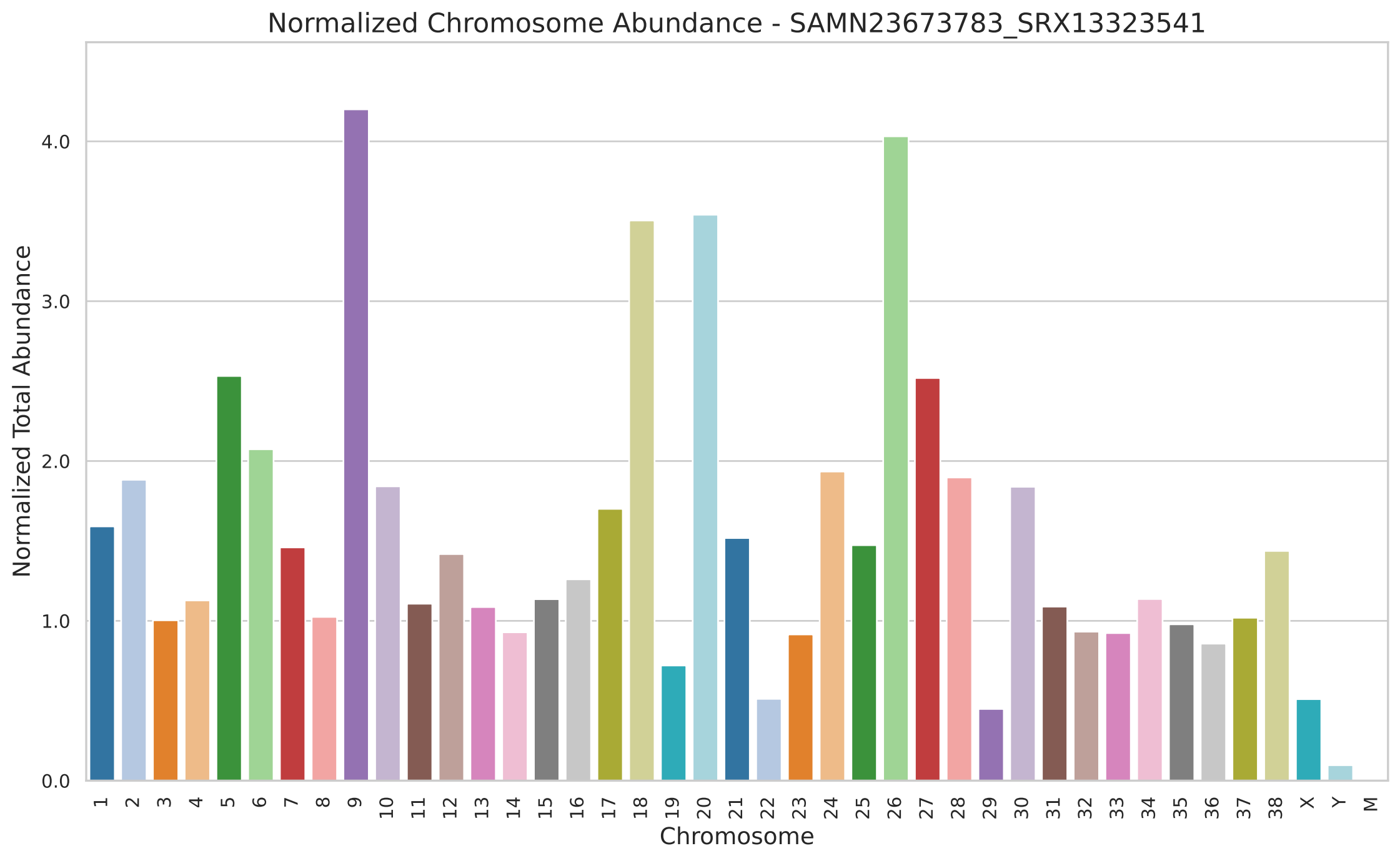

Normalized Chromosome Abundance - SAMN23673786_SRX13323544
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

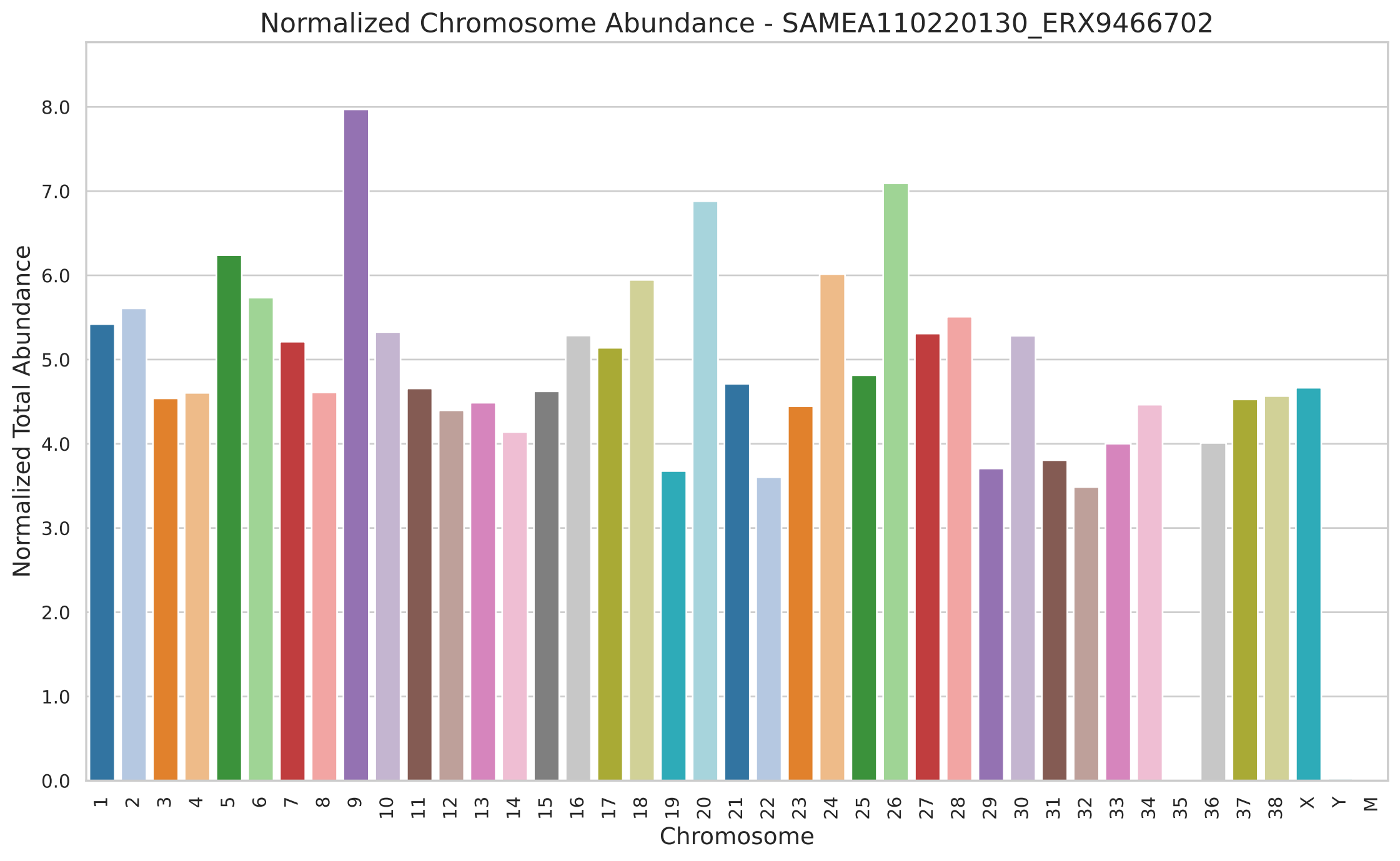

Normalized Chromosome Abundance - SAMEA110220150_ERX9466722
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

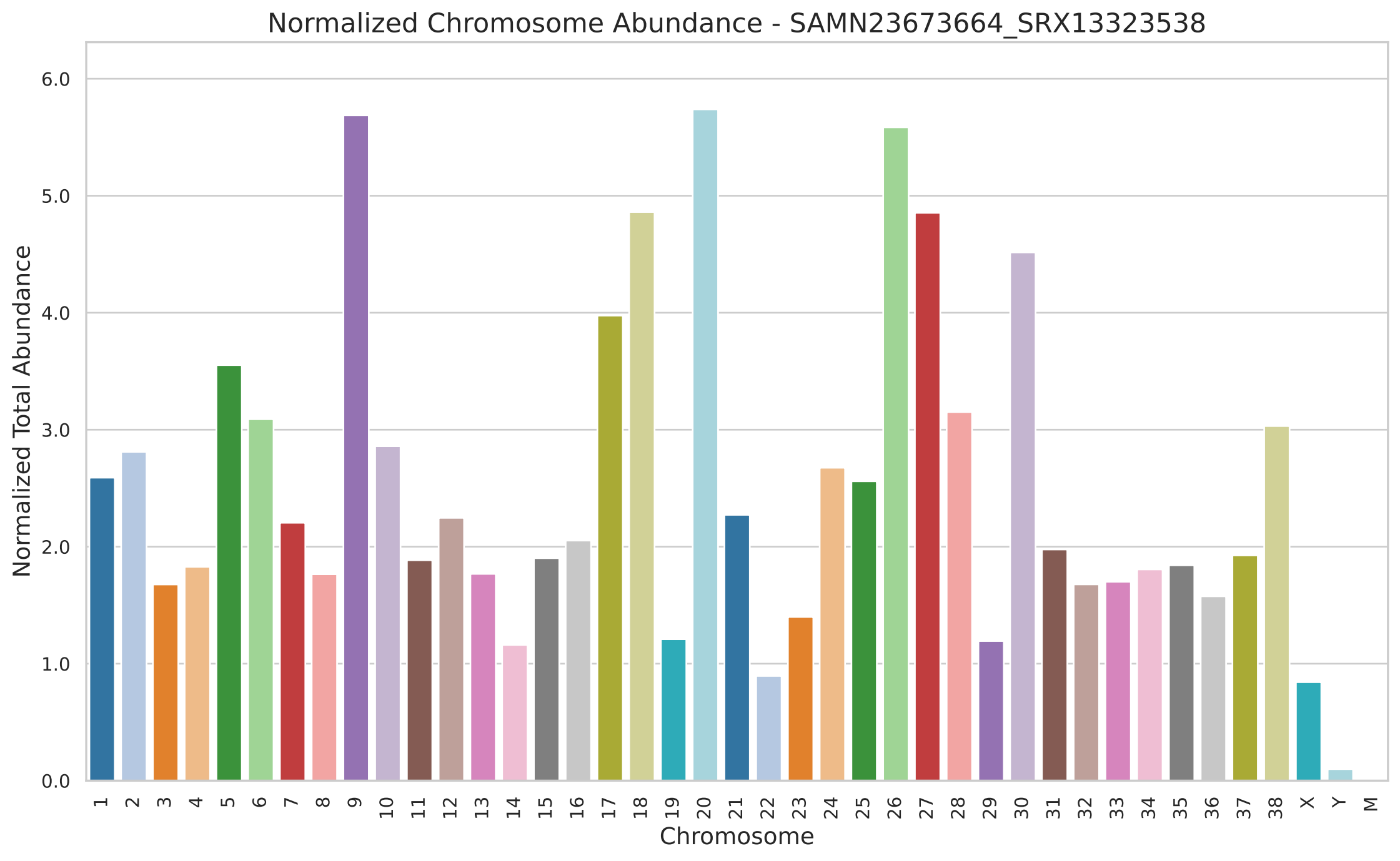

Normalized Chromosome Abundance - SAMEA110220151_ERX9466723
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

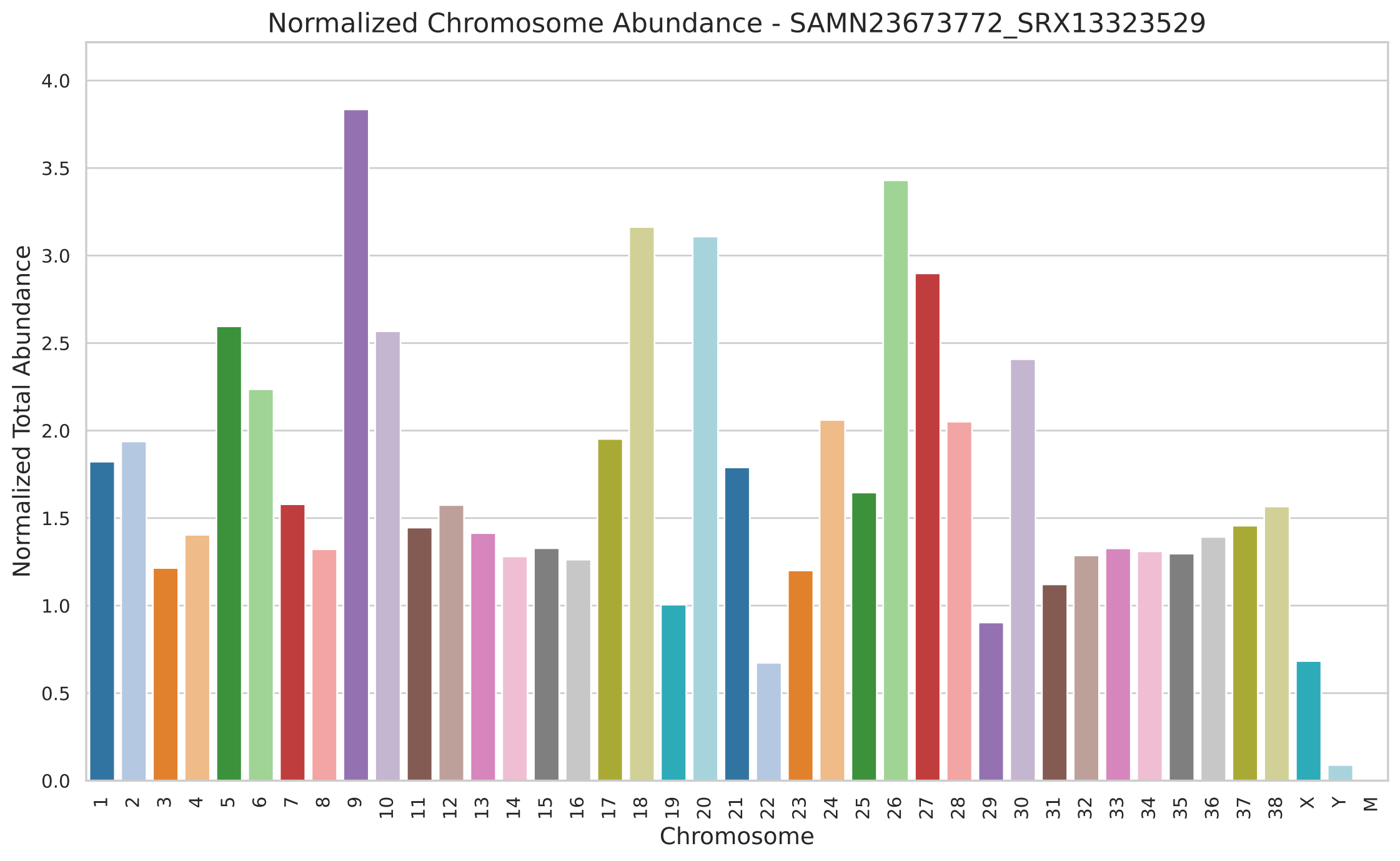

Normalized Chromosome Abundance - SAMEA110220138_ERX9466710
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

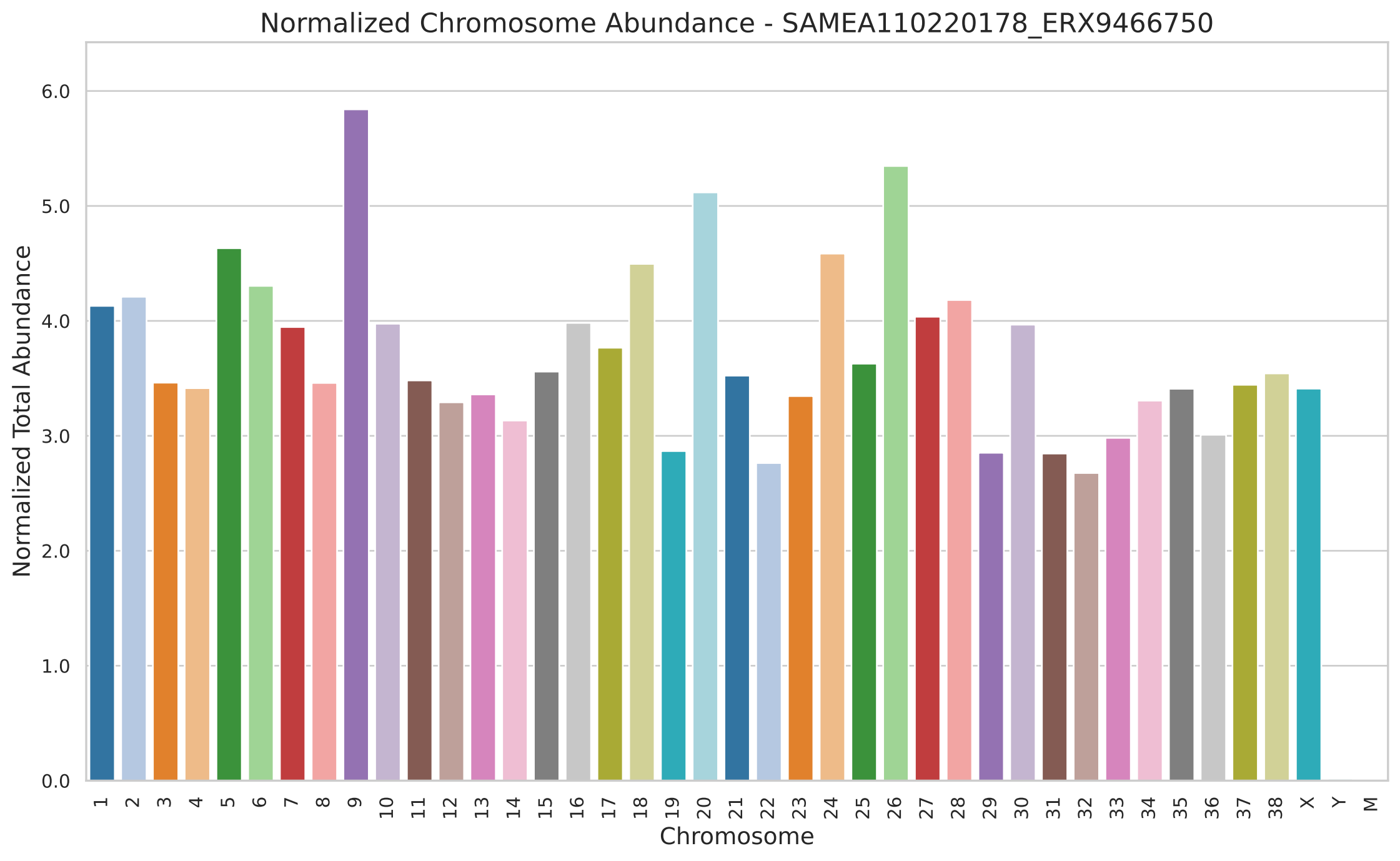

Normalized Chromosome Abundance - SAMN23673773_SRX13323530
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

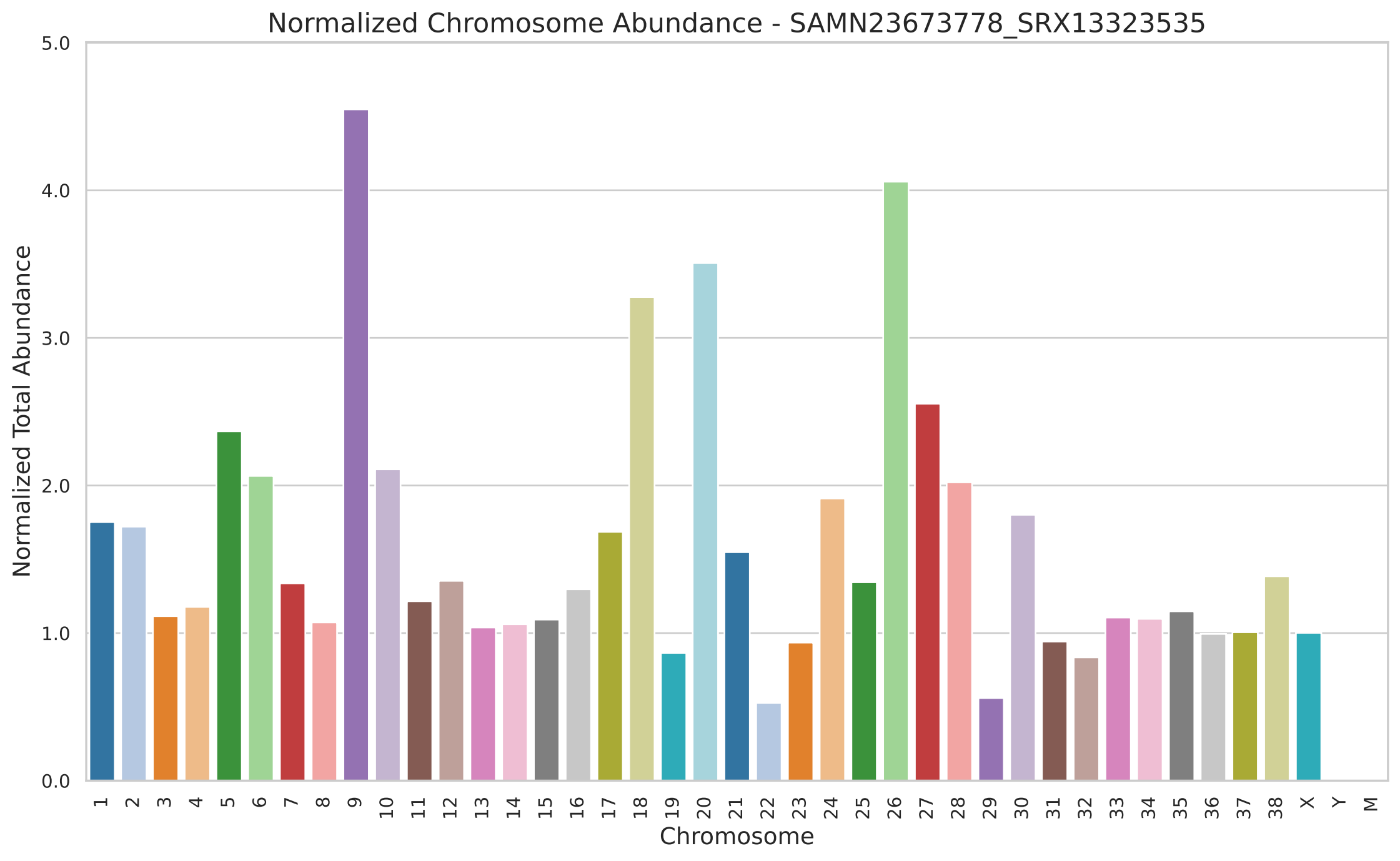

Normalized Chromosome Abundance - SAMN23673783_SRX13323541
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

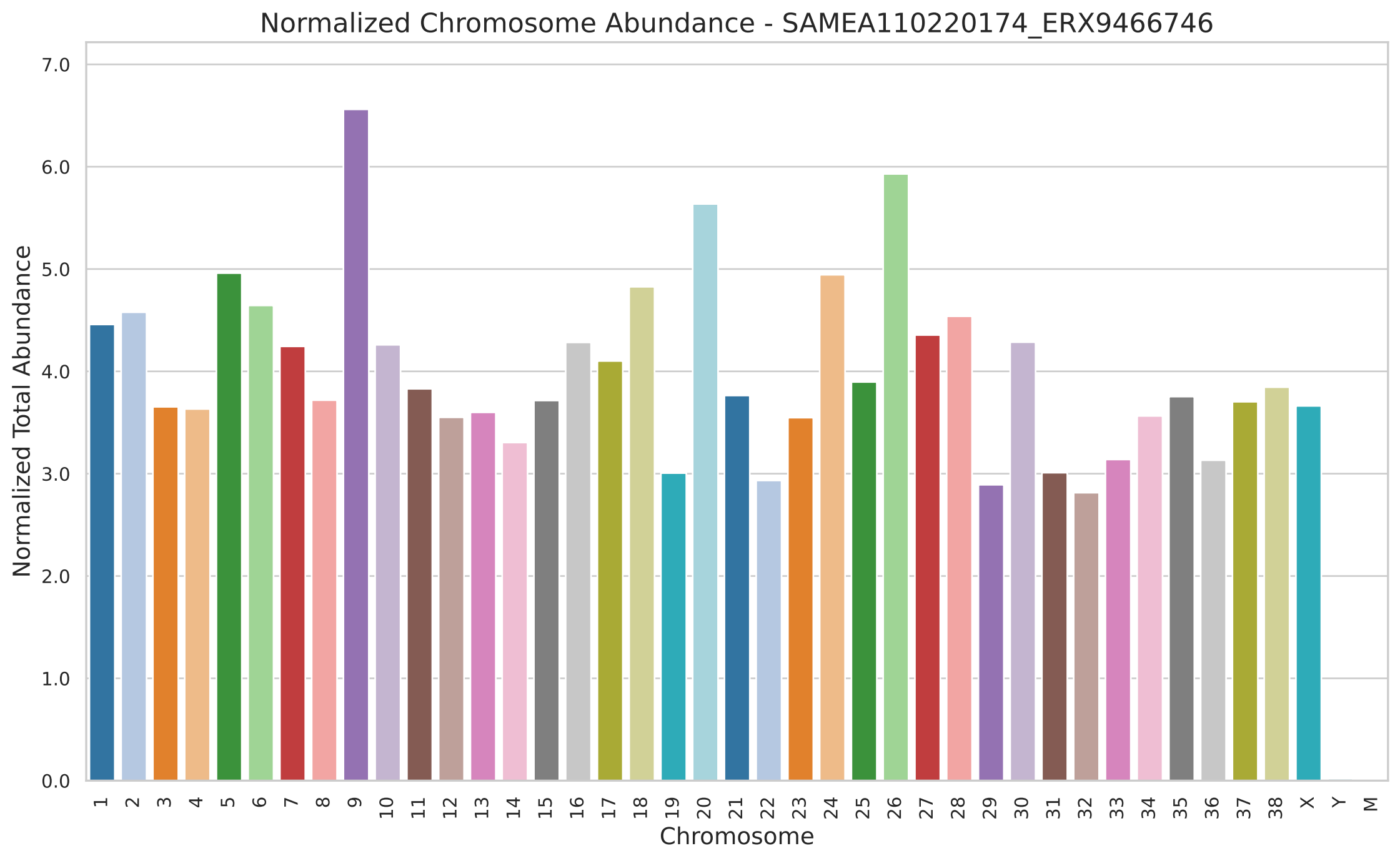

Normalized Chromosome Abundance - SAMEA110220130_ERX9466702
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

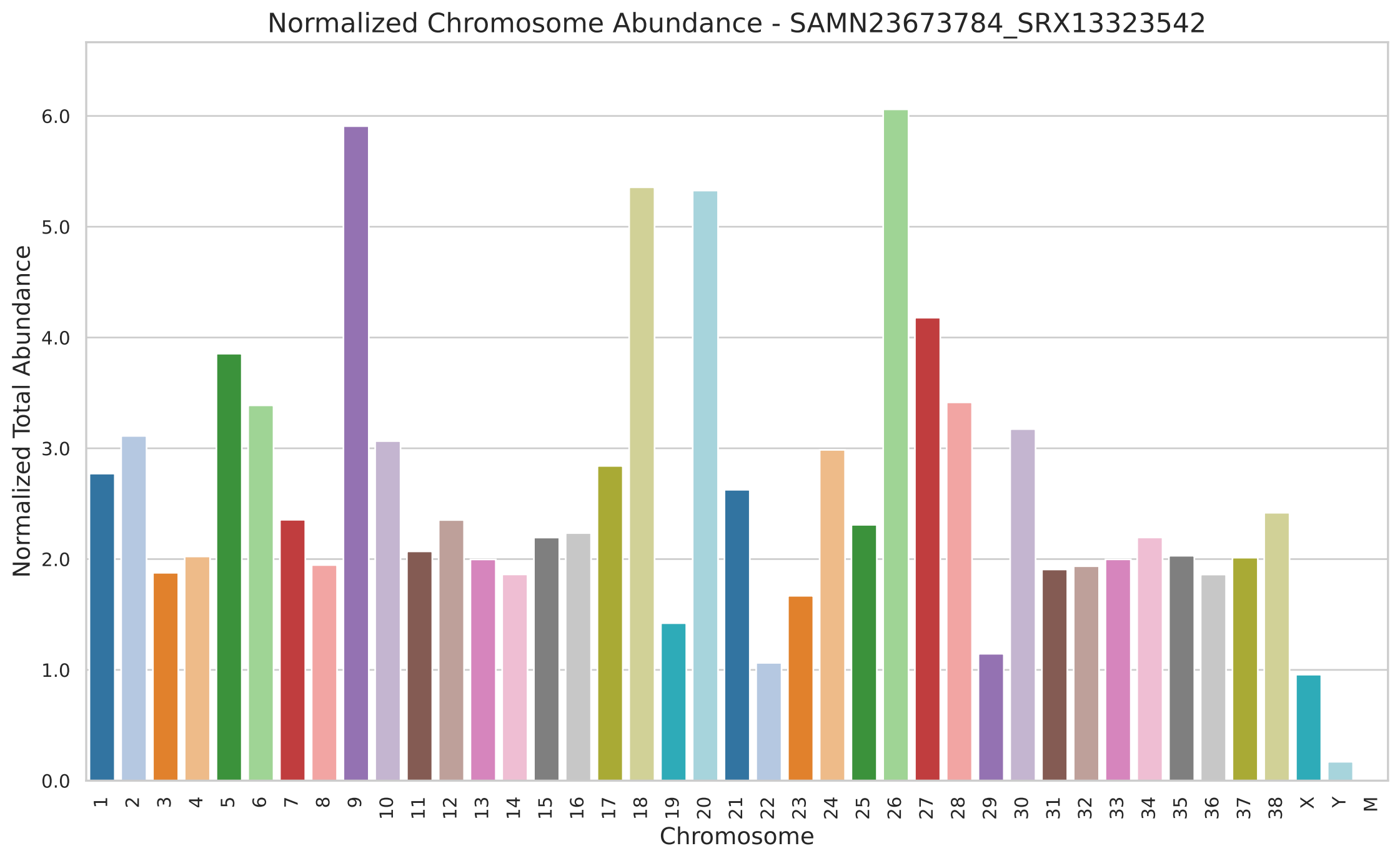

Normalized Chromosome Abundance - SAMN23673664_SRX13323538
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

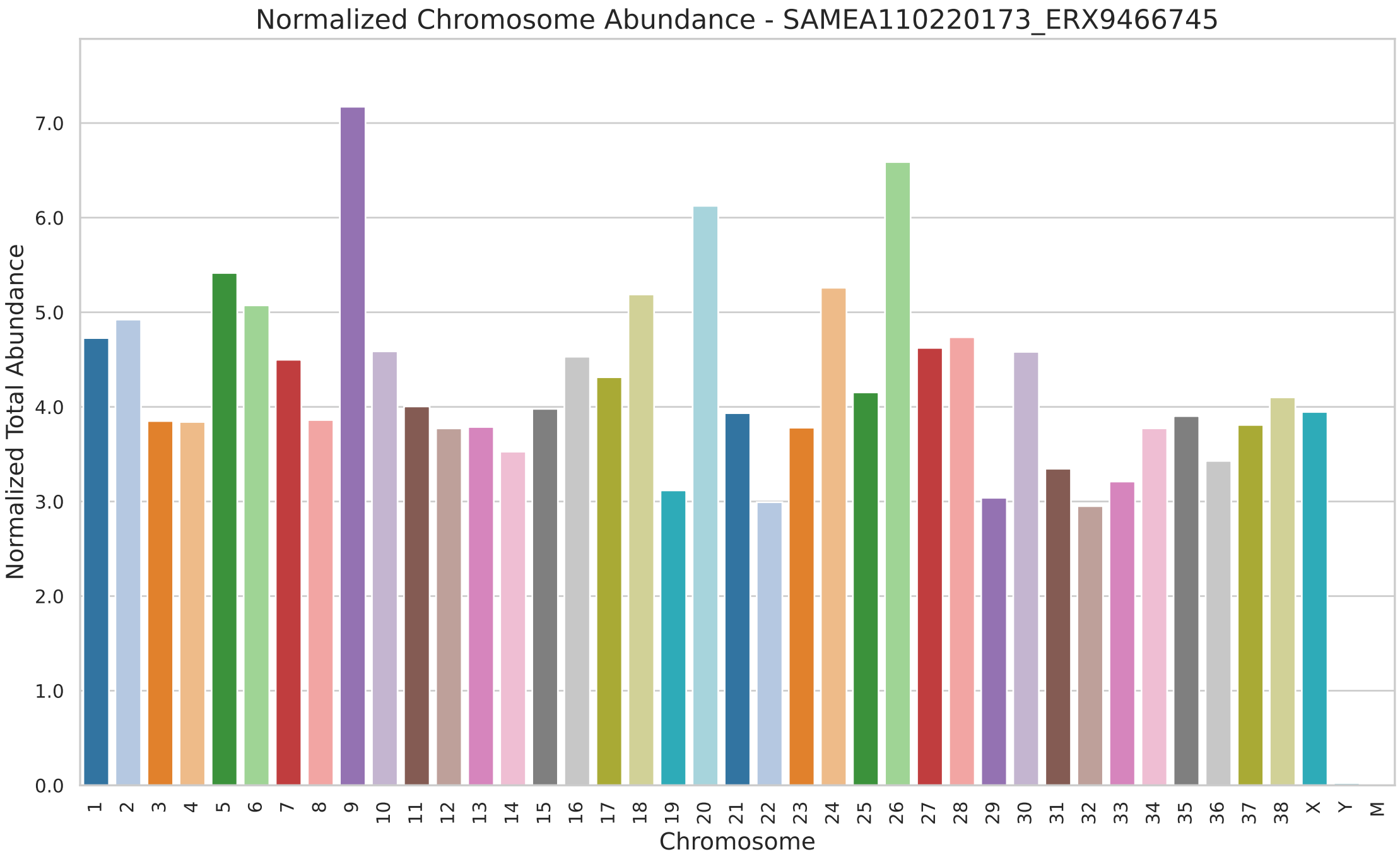

Normalized Chromosome Abundance - SAMN23673772_SRX13323529
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

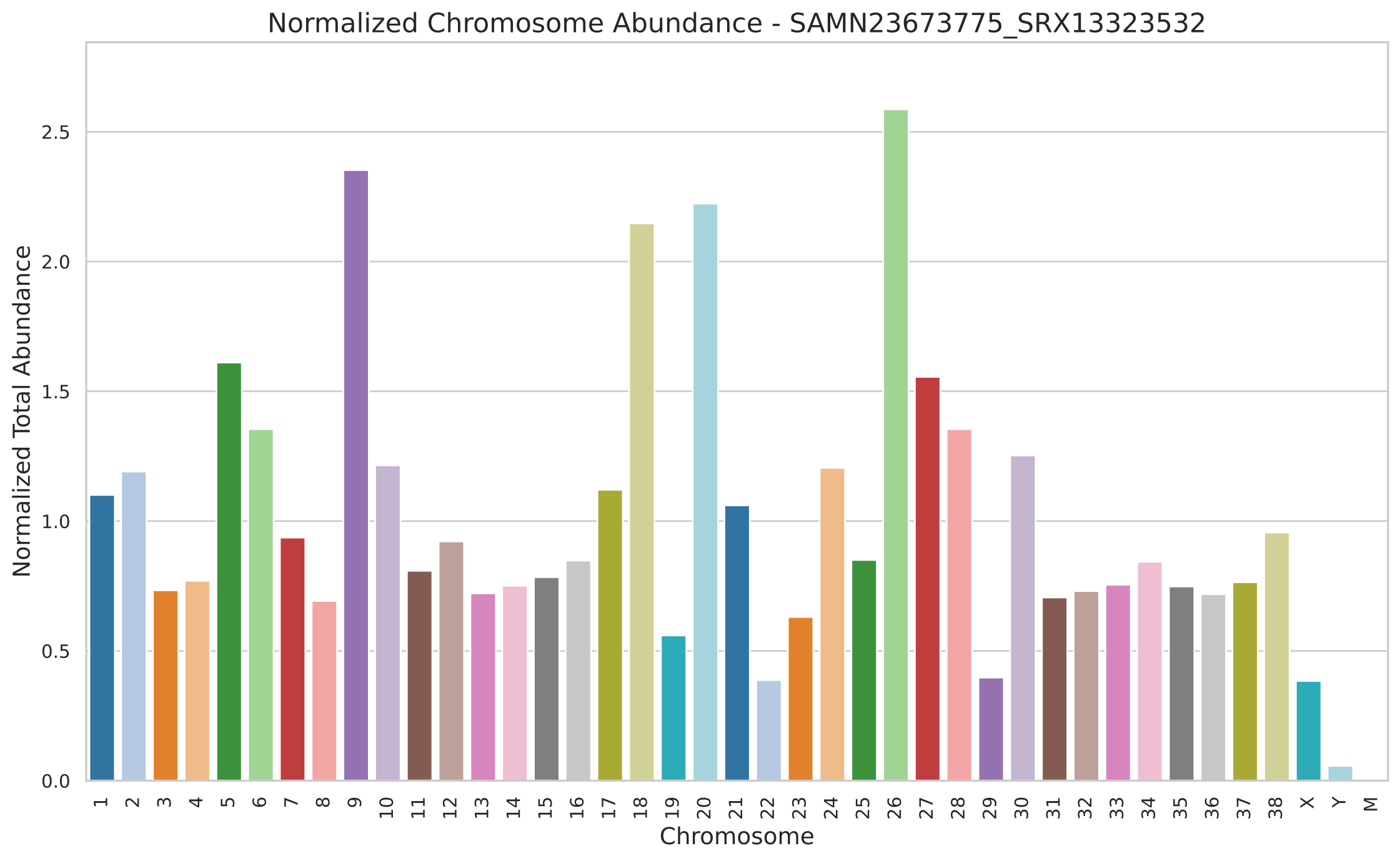

Normalized Chromosome Abundance - SAMEA110220178_ERX9466750
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

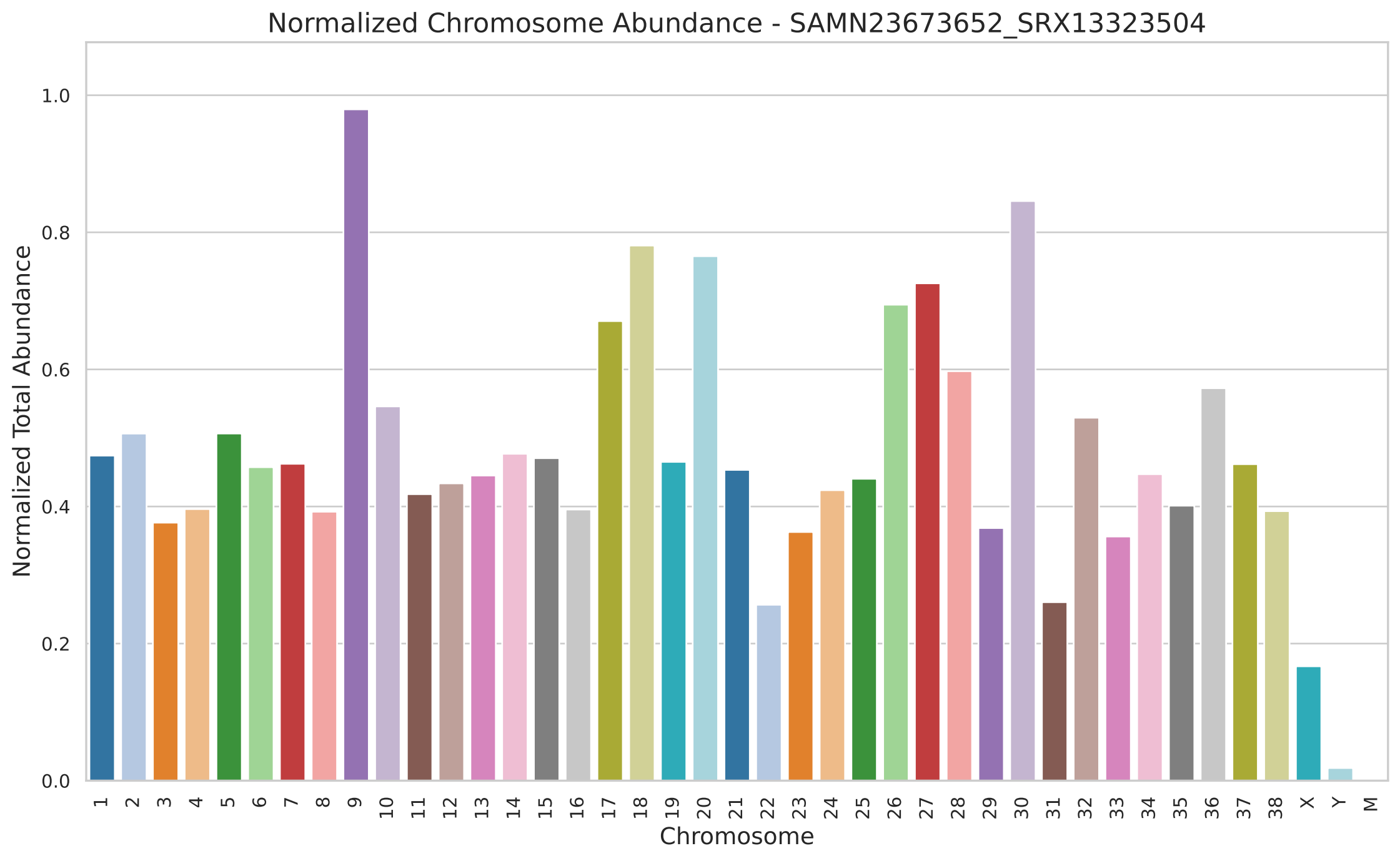

Normalized Chromosome Abundance - SAMN23673778_SRX13323535
Normalized Total Abundance
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

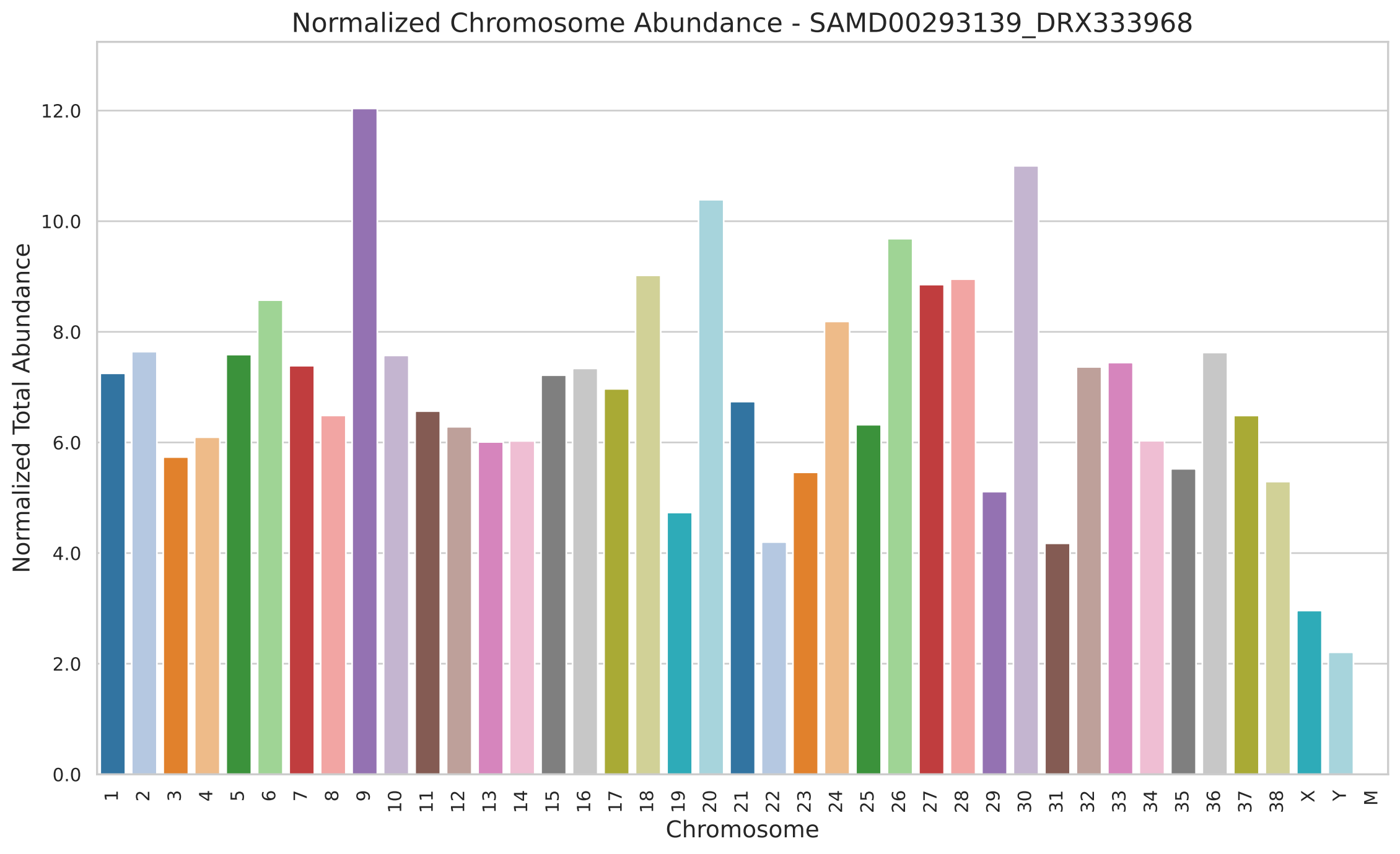

Normalized Chromosome Abundance - SAMEA110220174_ERX9466746
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

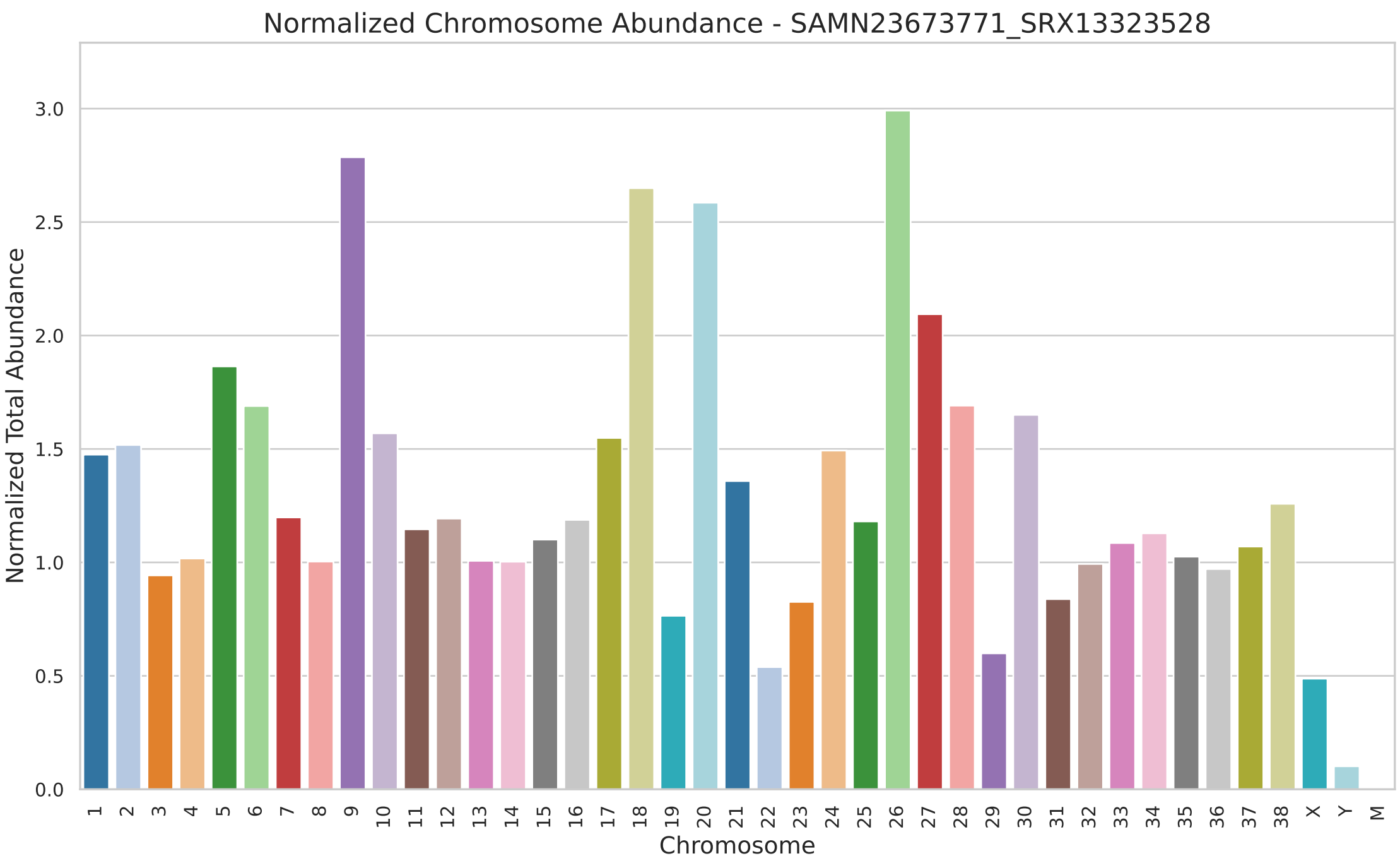

Normalized Chromosome Abundance - SAMN23673784_SRX13323542
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

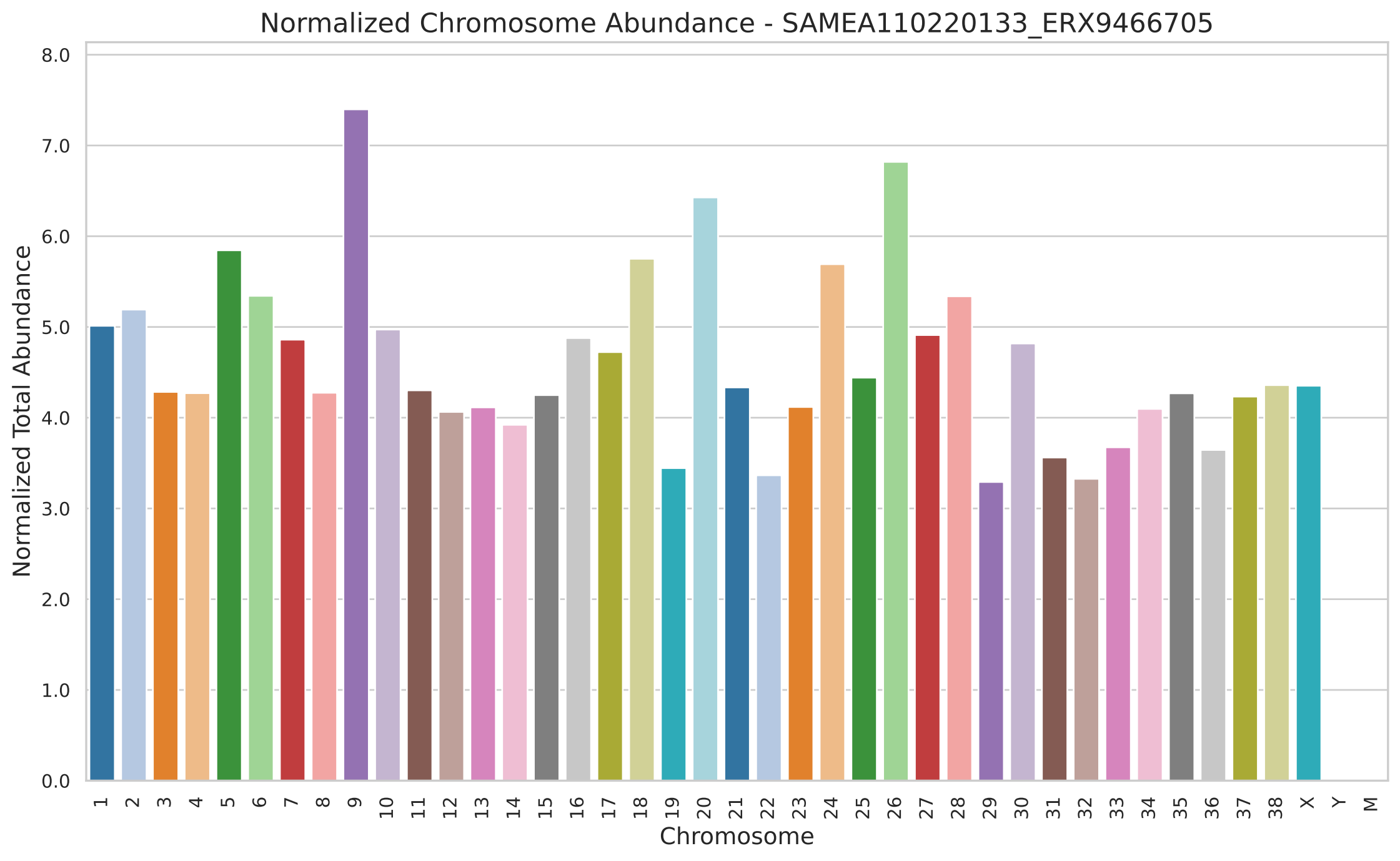

Normalized Chromosome Abundance - SAMEA110220173_ERX9466745
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

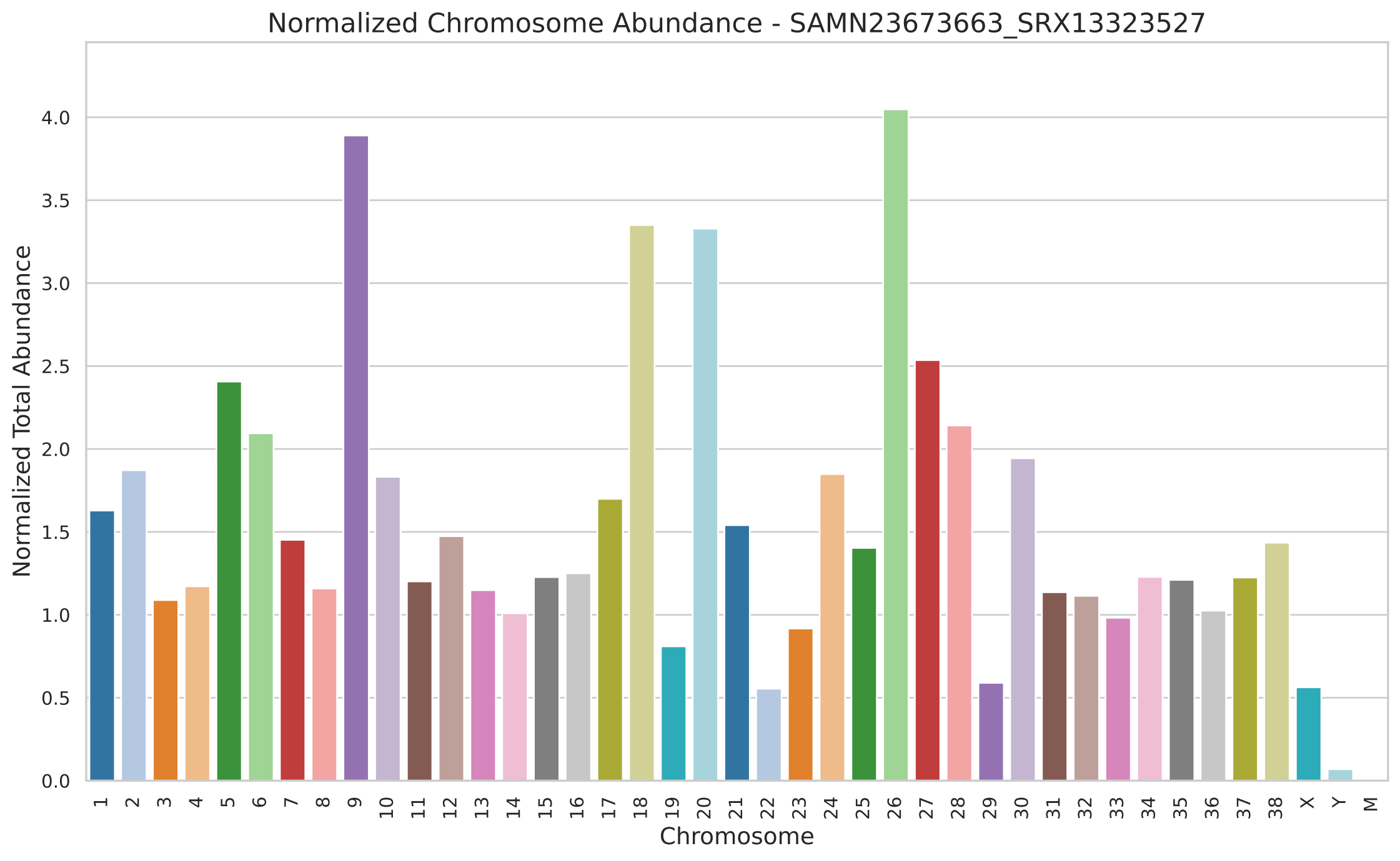

Normalized Chromosome Abundance - SAMN23673775_SRX13323532
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

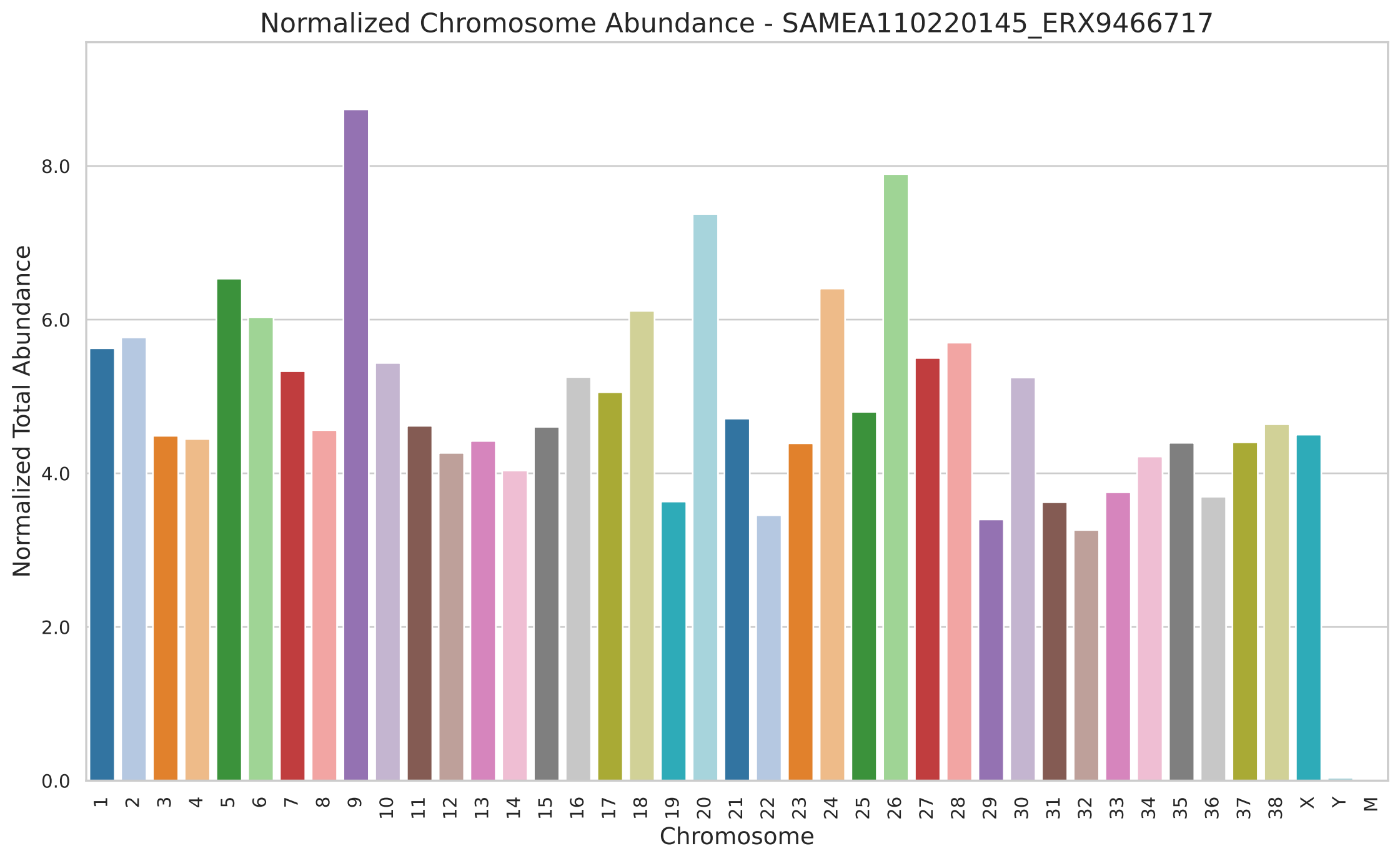

Normalized Chromosome Abundance - SAMN23673652_SRX13323504
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

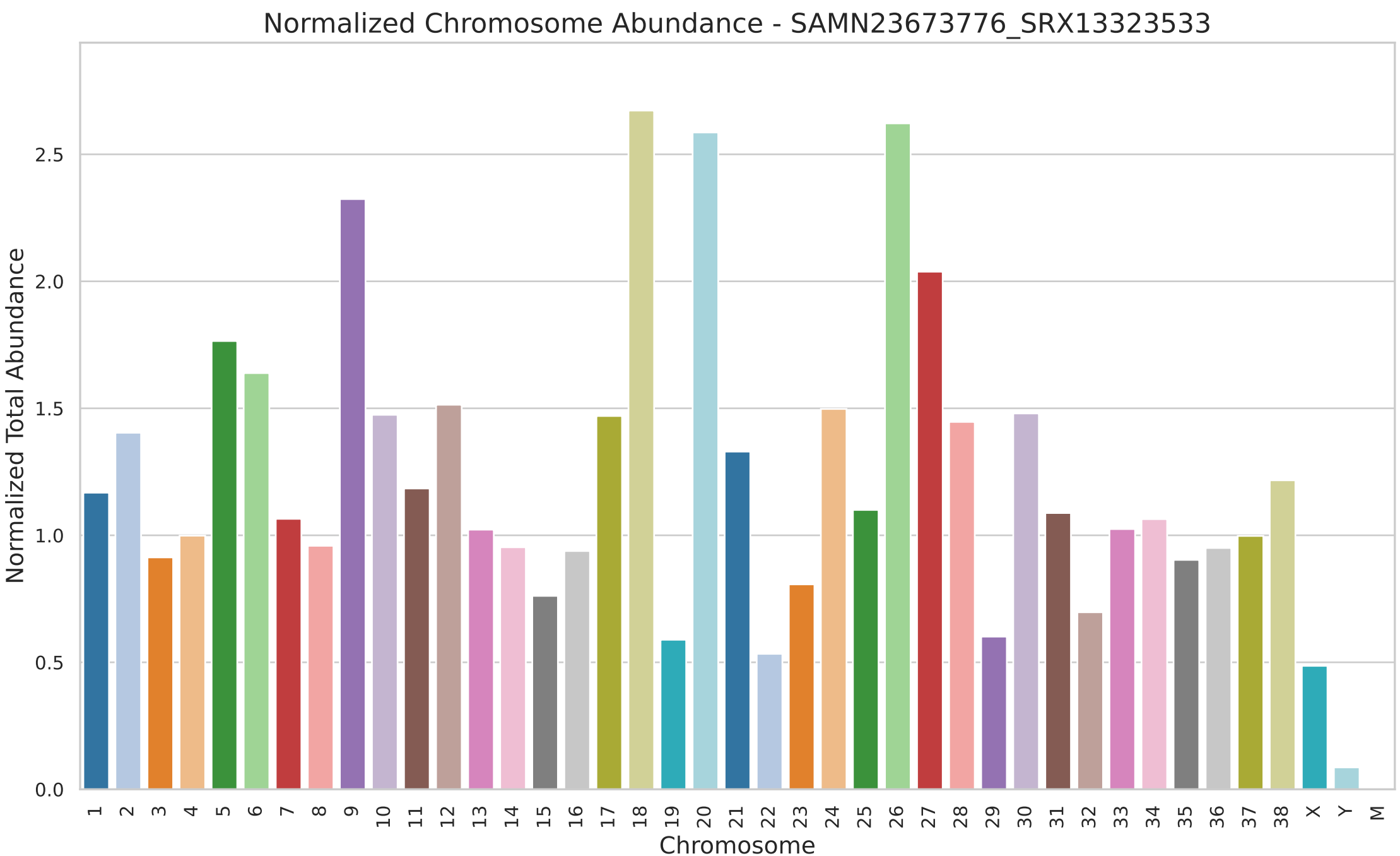

Normalized Chromosome Abundance - SAMD00293139_DRX333968
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
12.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

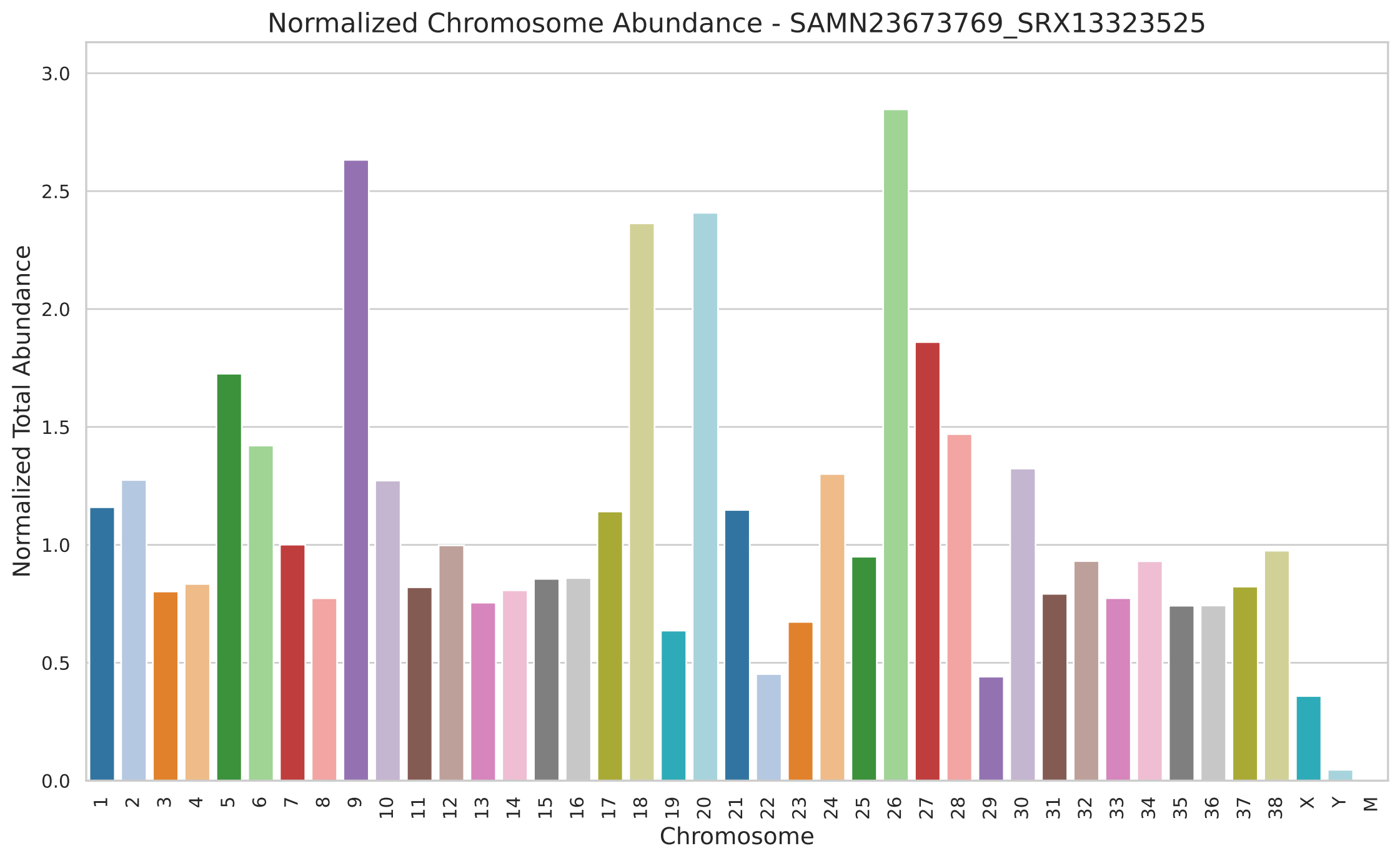

Normalized Chromosome Abundance - SAMN23673771_SRX13323528
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

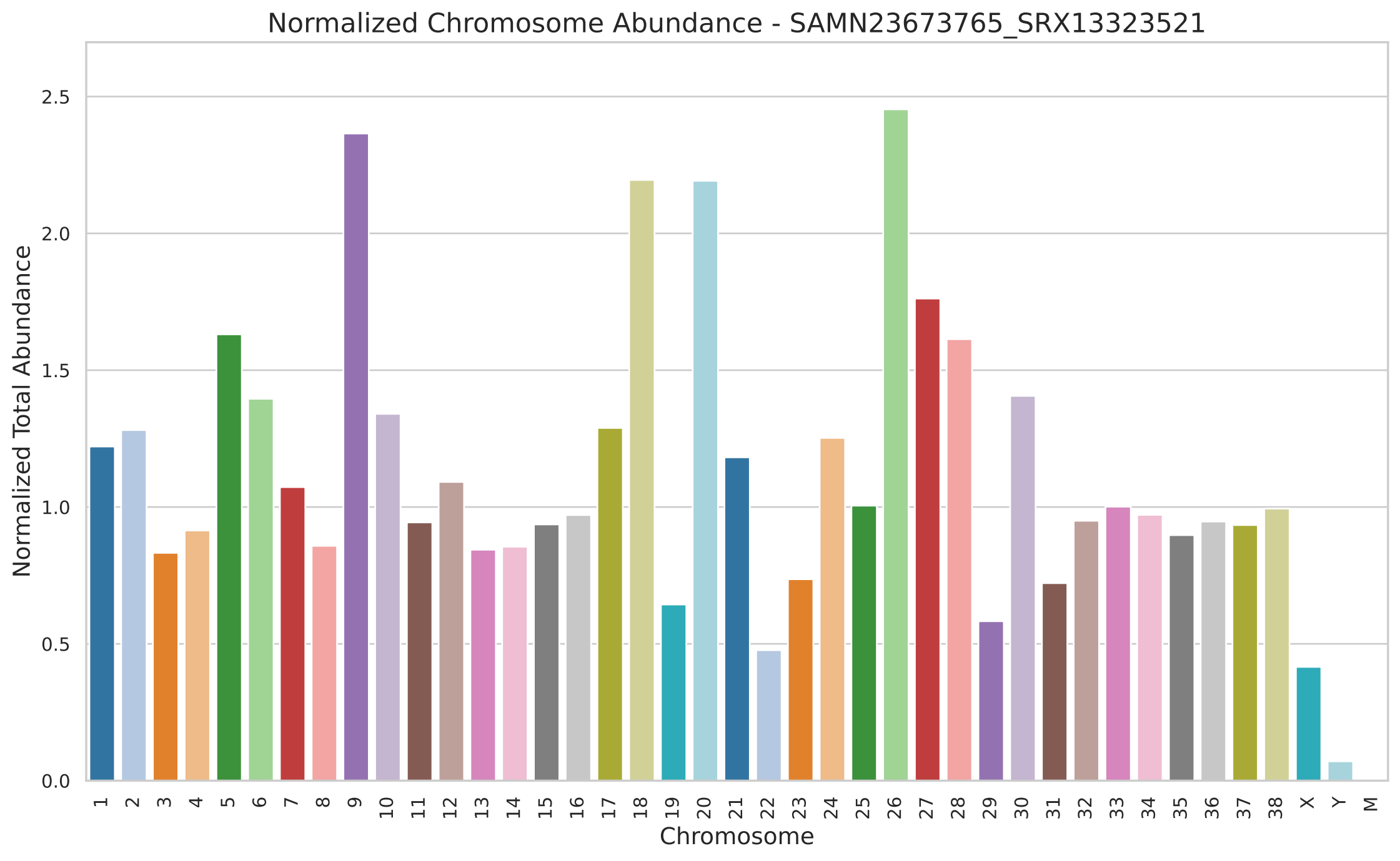

Normalized Chromosome Abundance - SAMEA110220133_ERX9466705
Normalized Total Abundance
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 X Y M
Chromosome

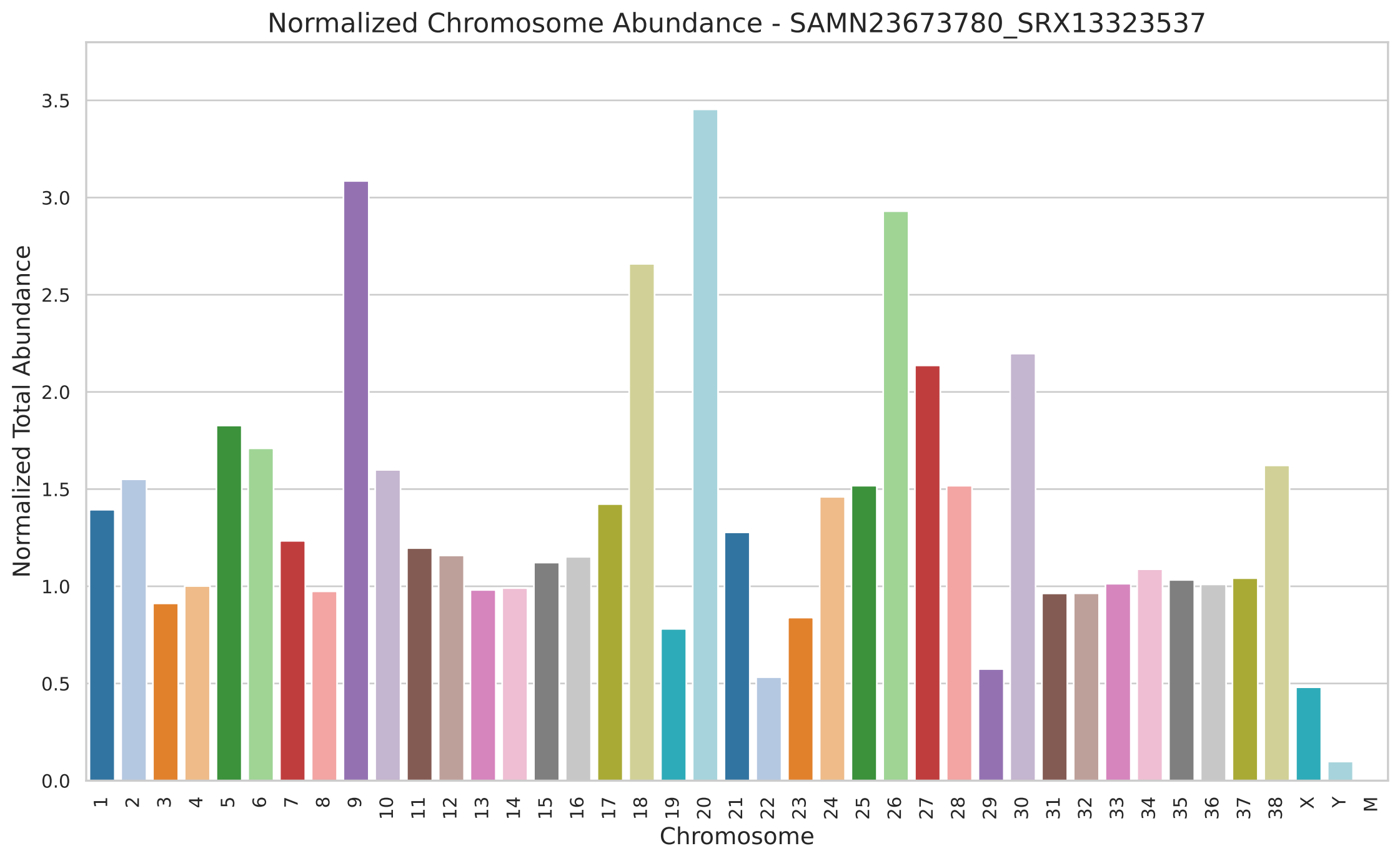

Normalized Chromosome Abundance - SAMN23673663_SRX13323527
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

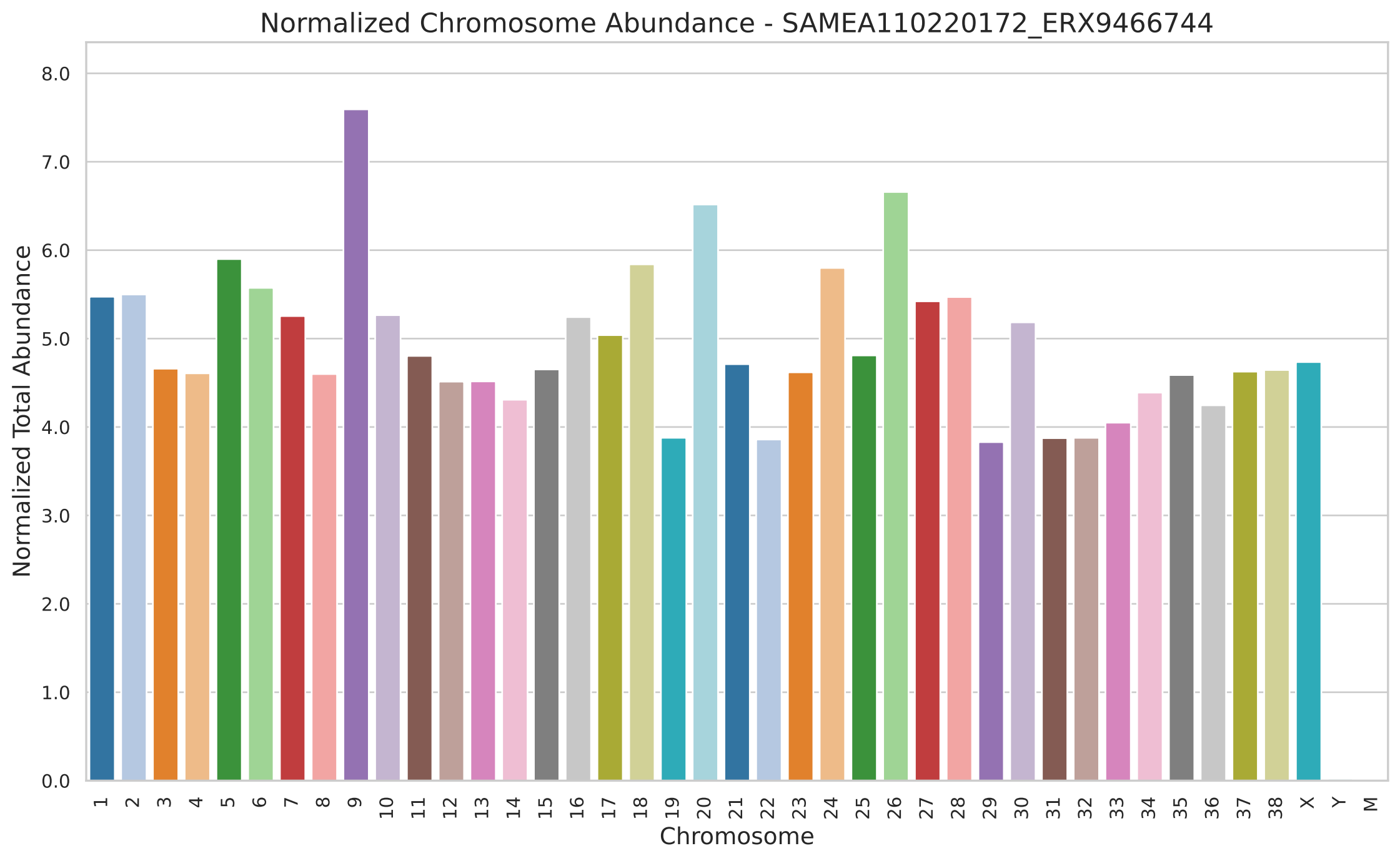

Normalized Chromosome Abundance - SAMEA110220145_ERX9466717
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

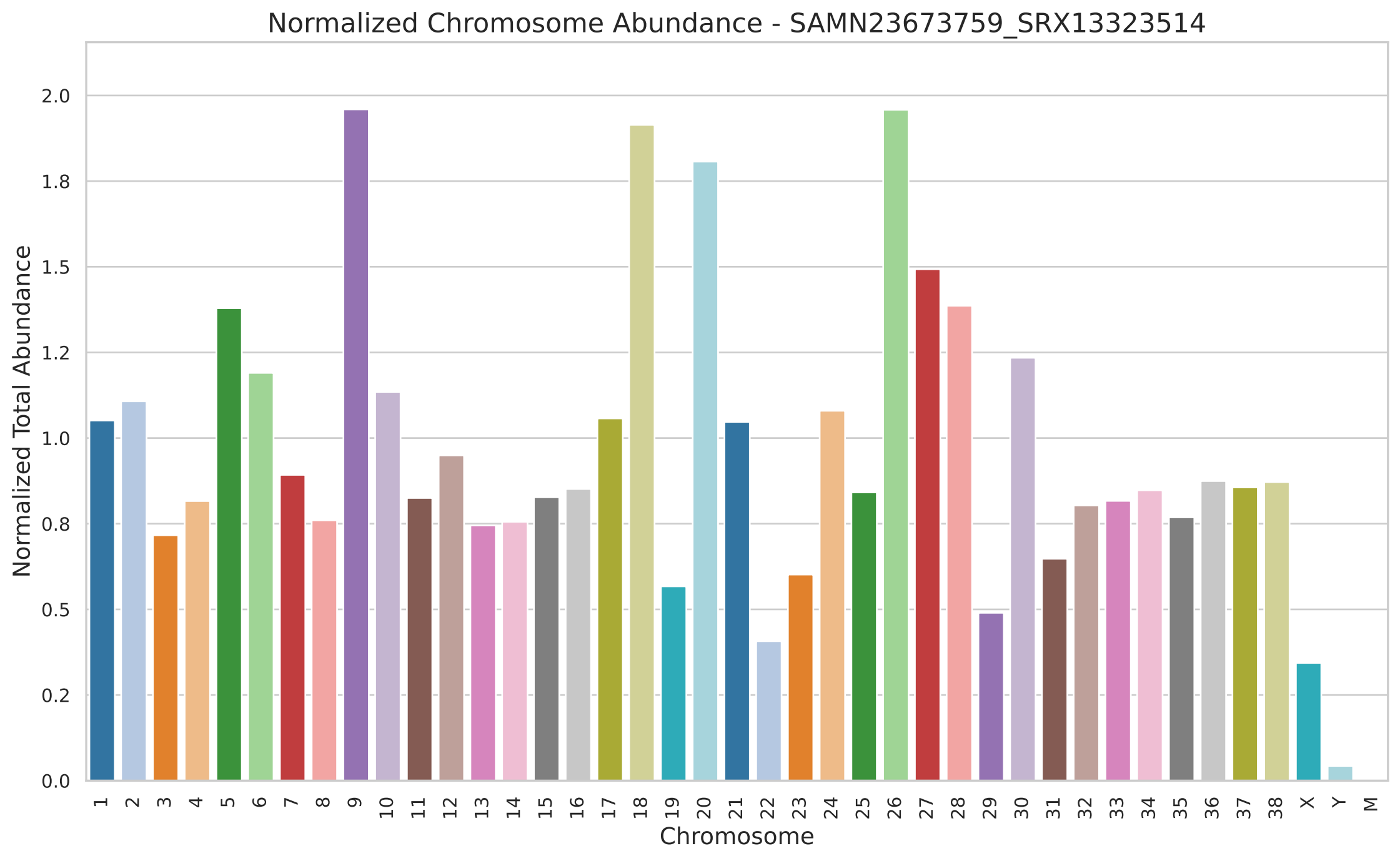

Normalized Chromosome Abundance - SAMN23673776_SRX13323533
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

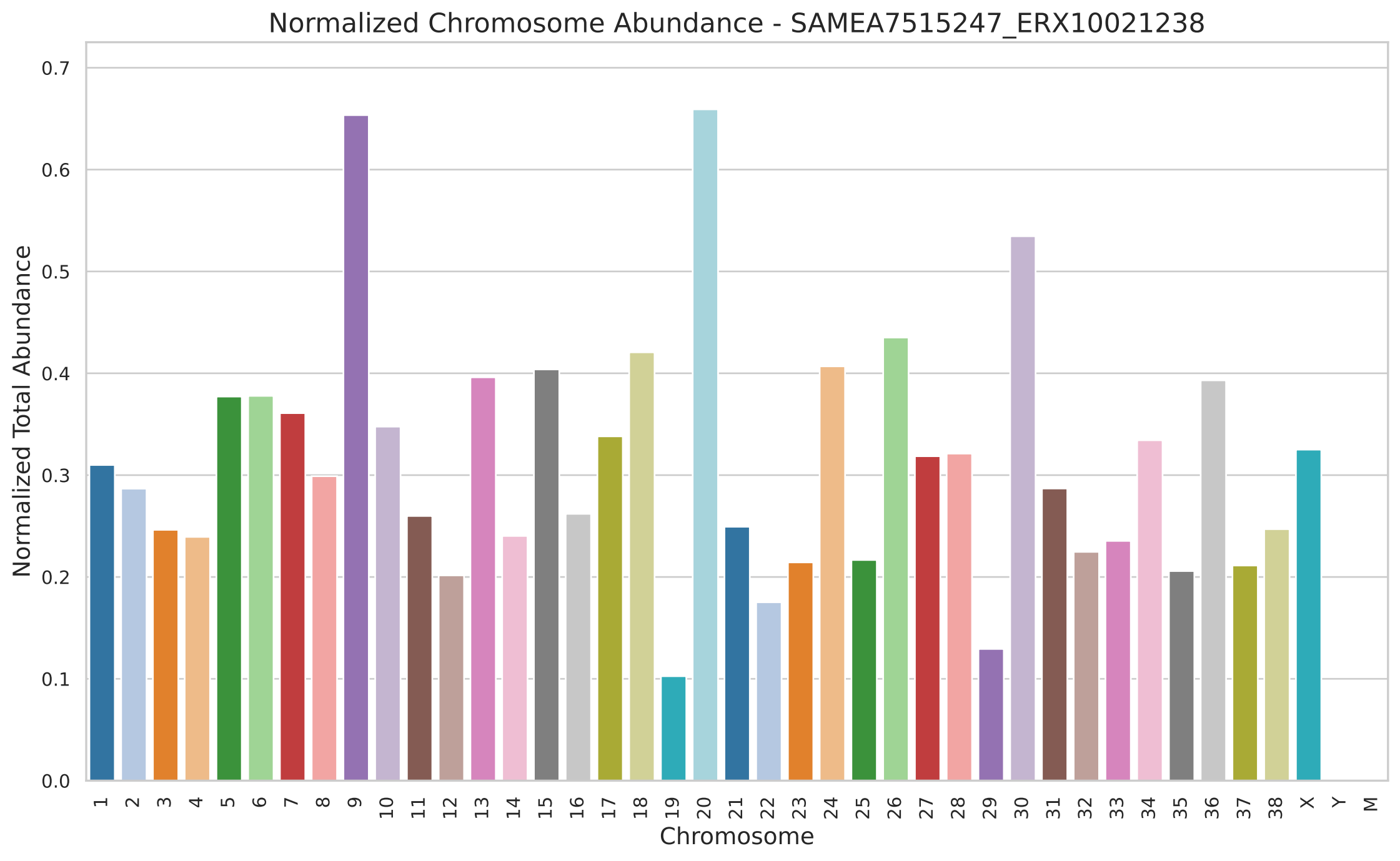

Normalized Chromosome Abundance - SAMN23673769_SRX13323525
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

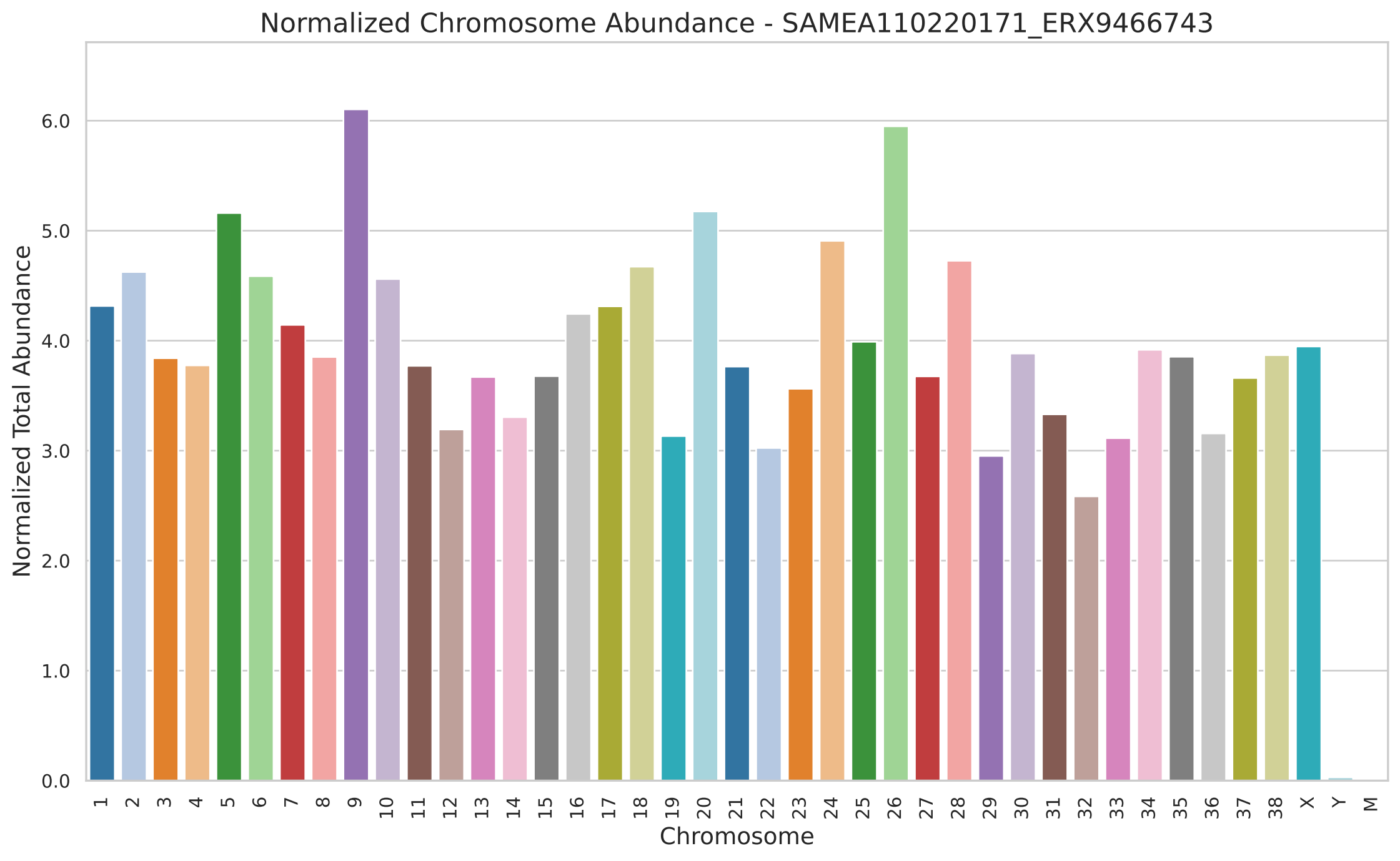

Normalized Chromosome Abundance - SAMN23673765_SRX13323521
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

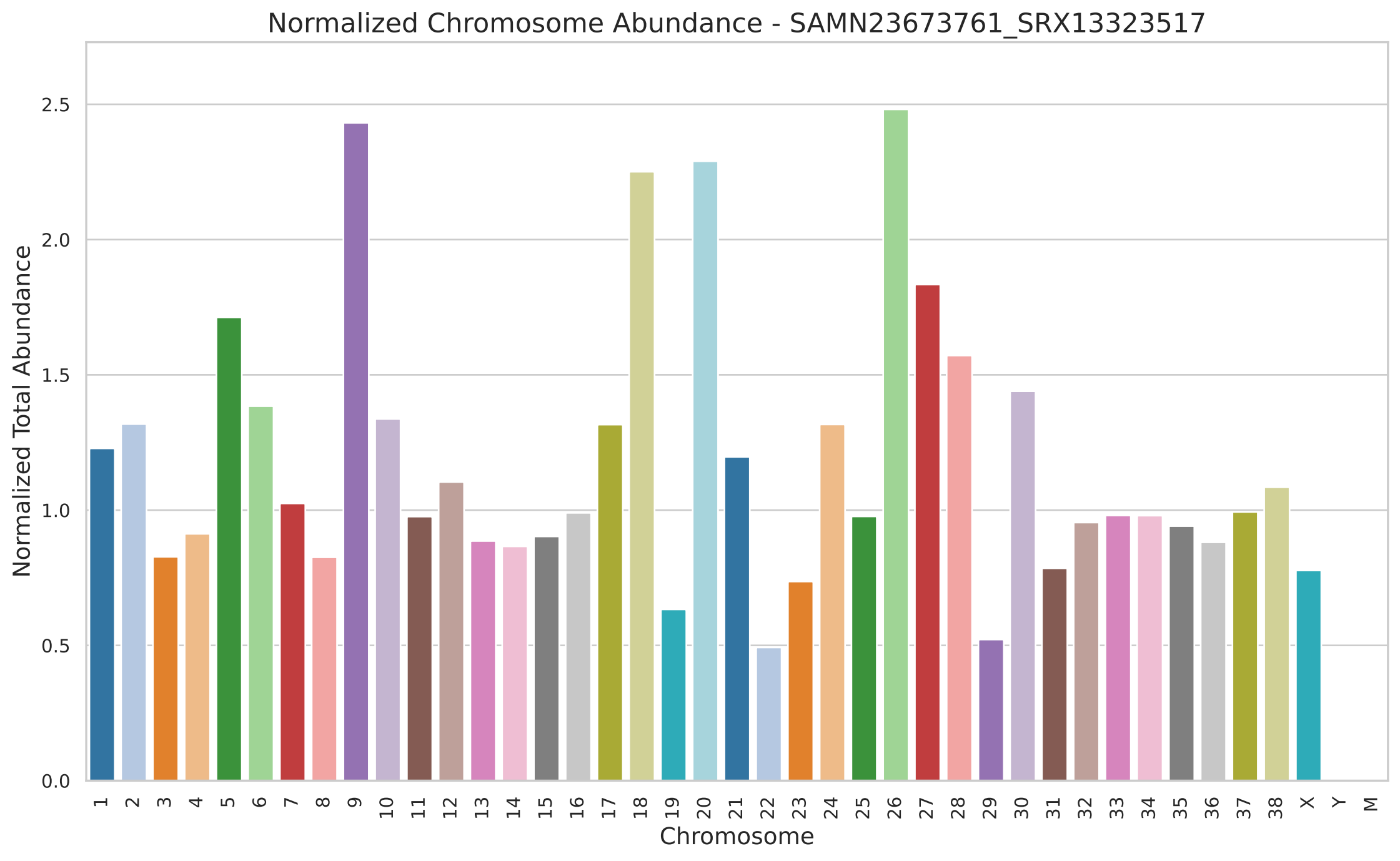

Normalized Chromosome Abundance - SAMN23673780_SRX13323537
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

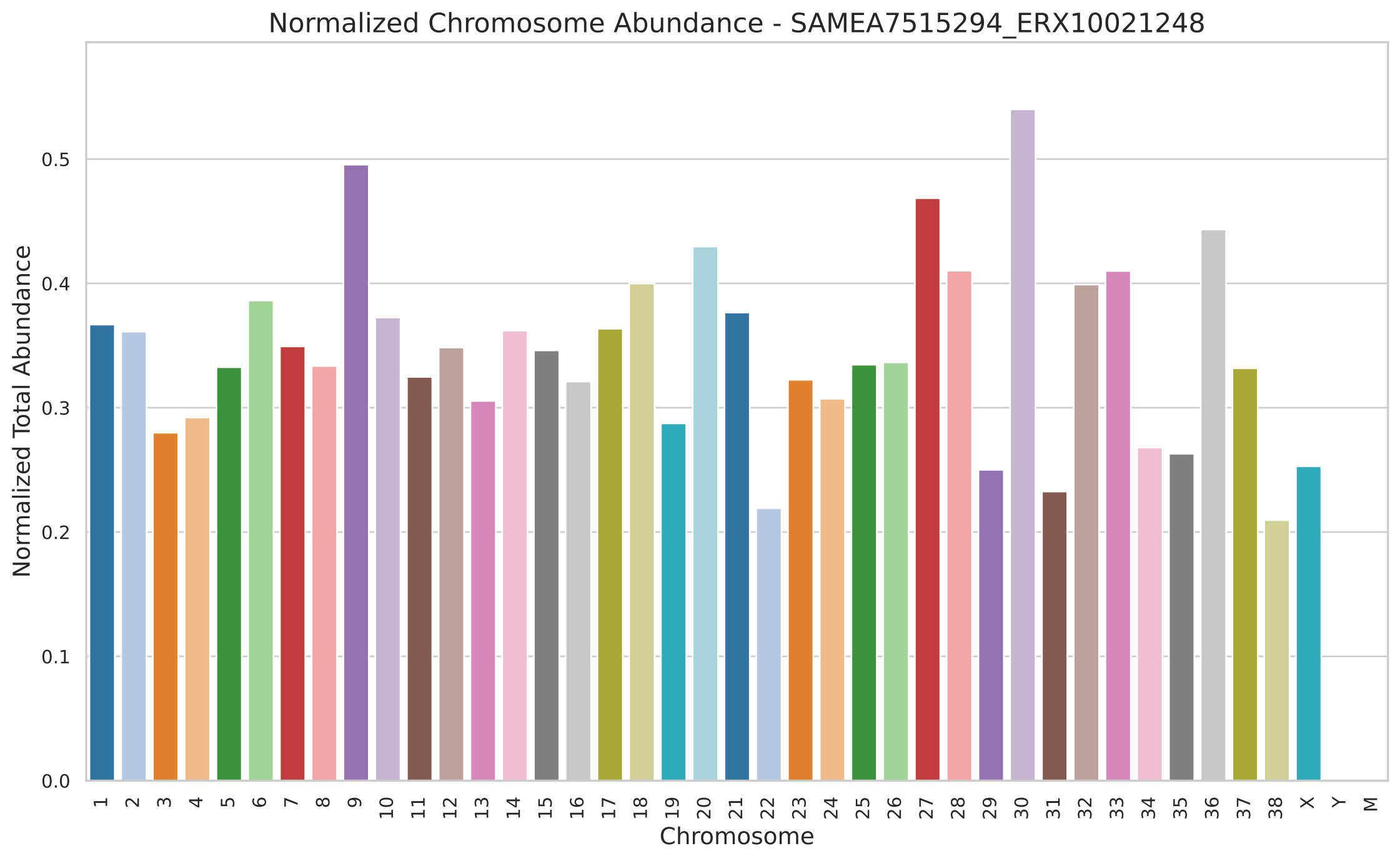

Normalized Chromosome Abundance - SAMEA110220172_ERX9466744
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

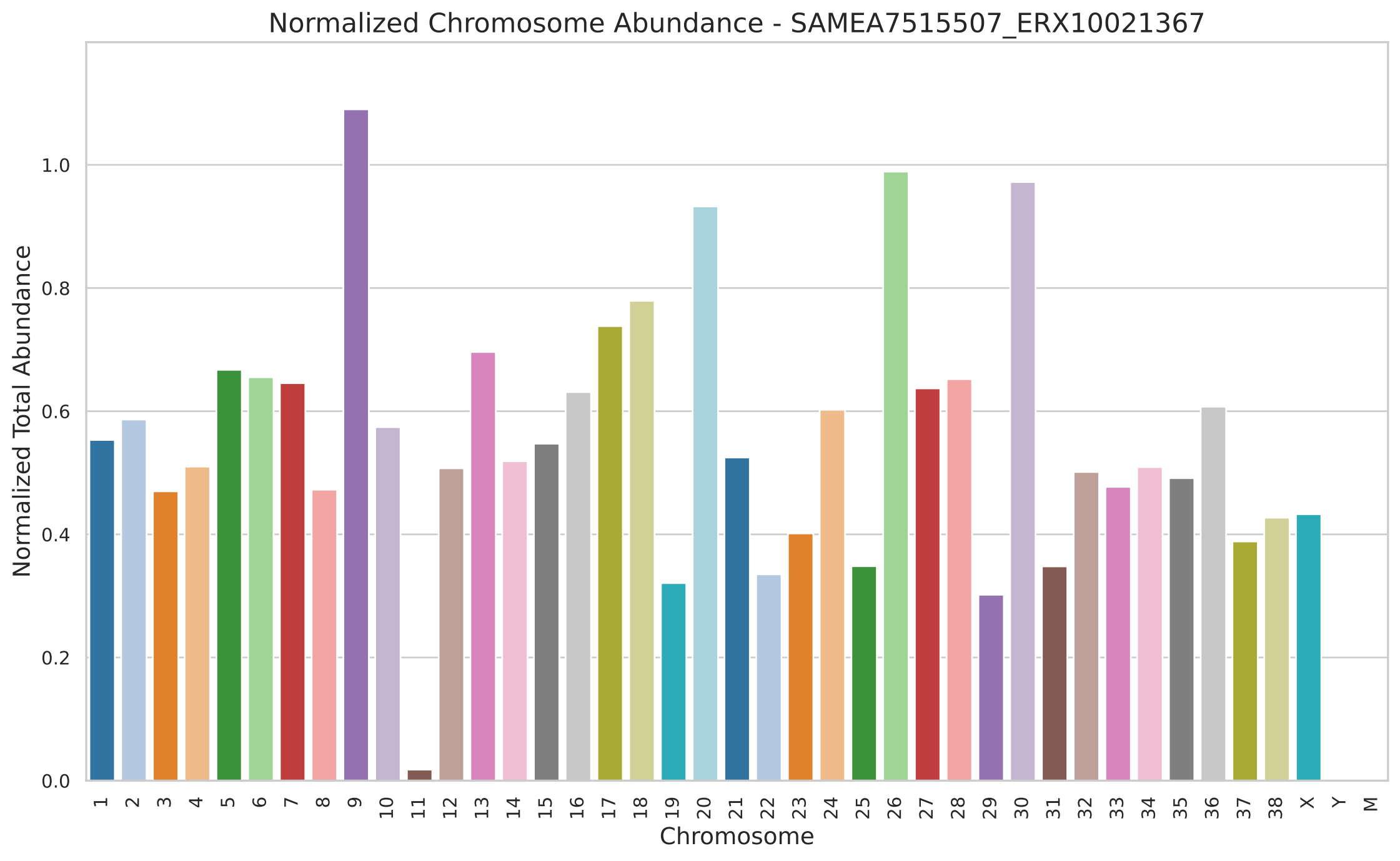

Normalized Chromosome Abundance - SAMN23673759_SRX13323514
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

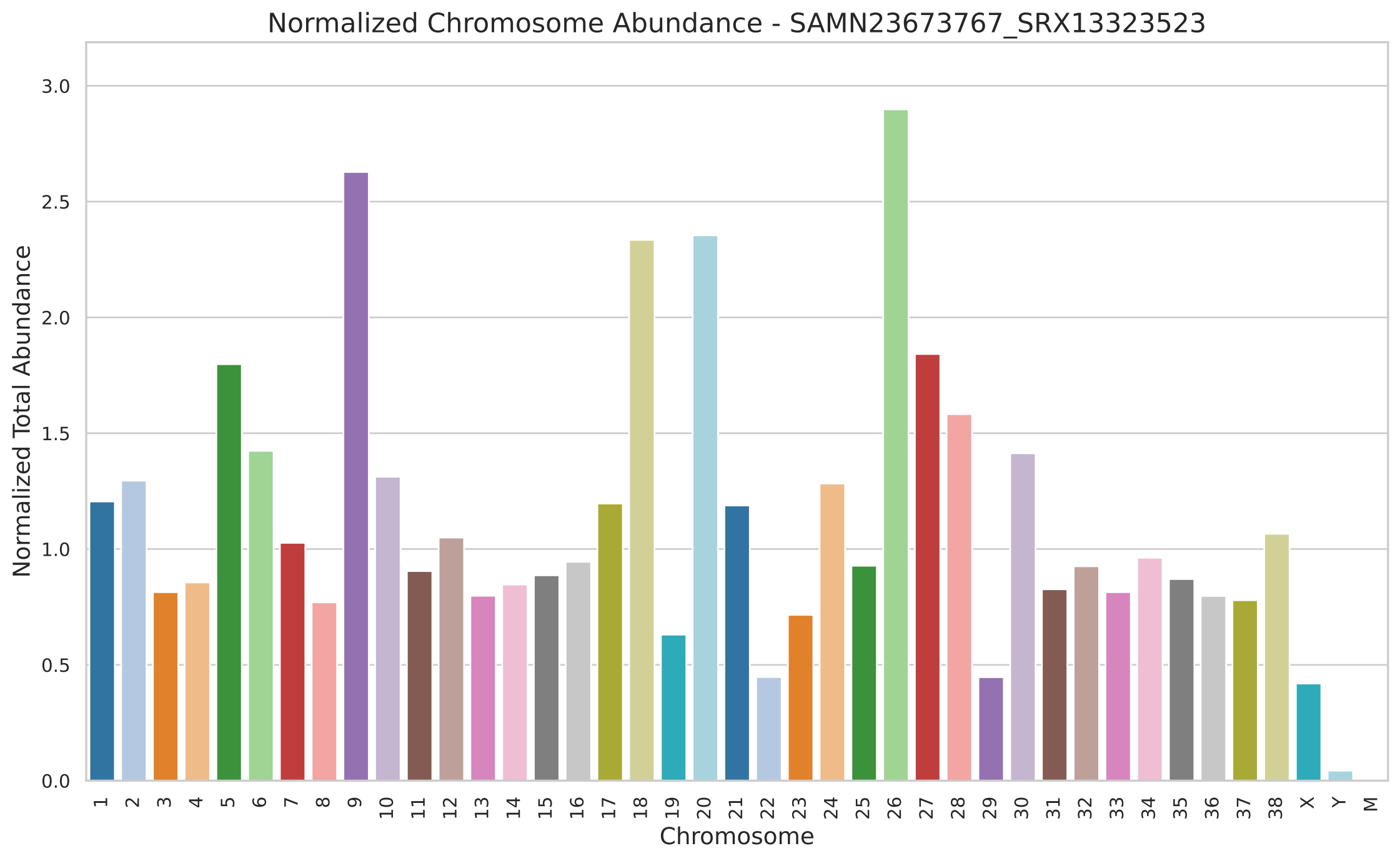

Normalized Chromosome Abundance - SAMEA7515247_ERX10021238
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

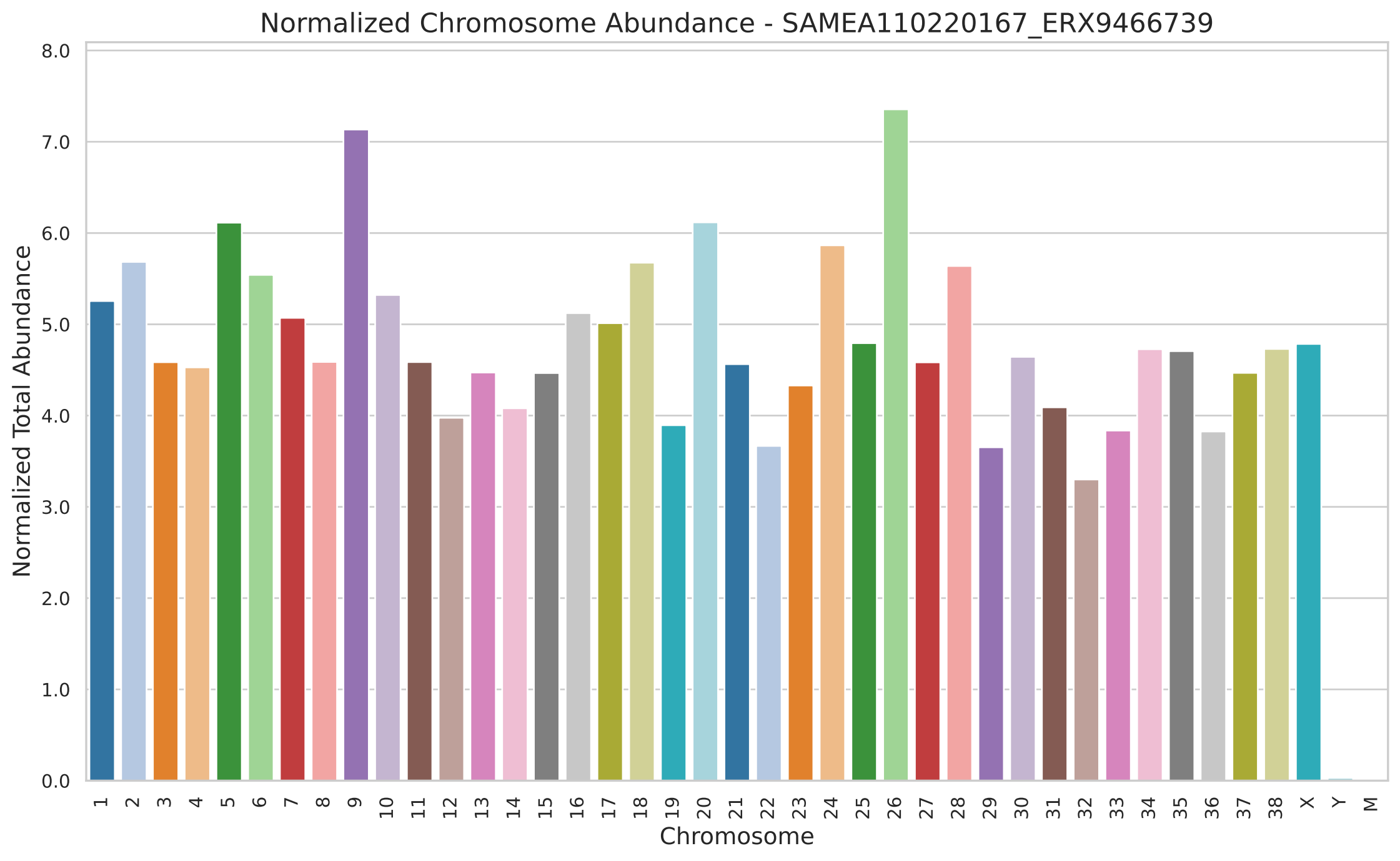

Normalized Chromosome Abundance - SAMEA110220171_ERX9466743
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

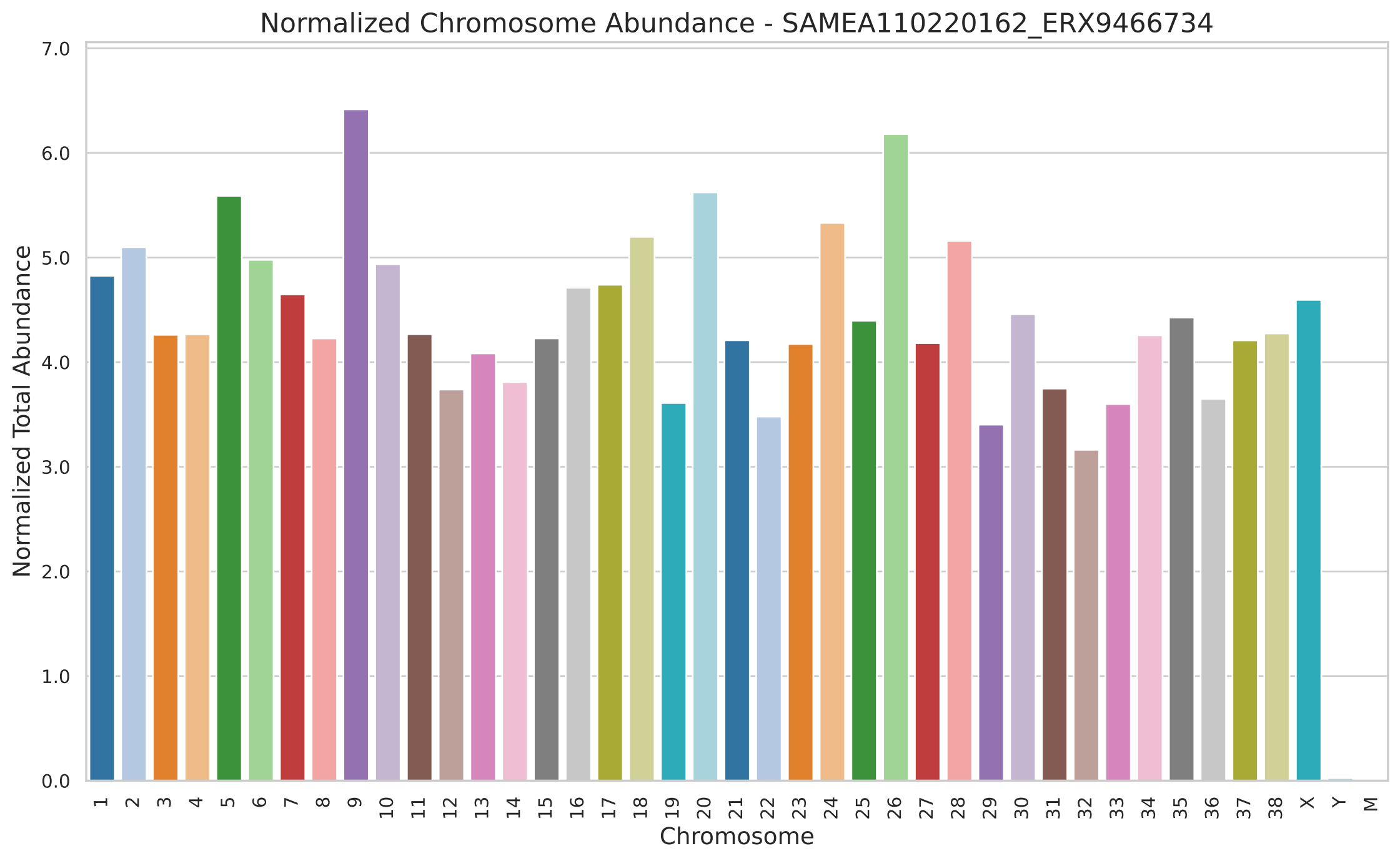

Normalized Chromosome Abundance - SAMN23673761_SRX13323517
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

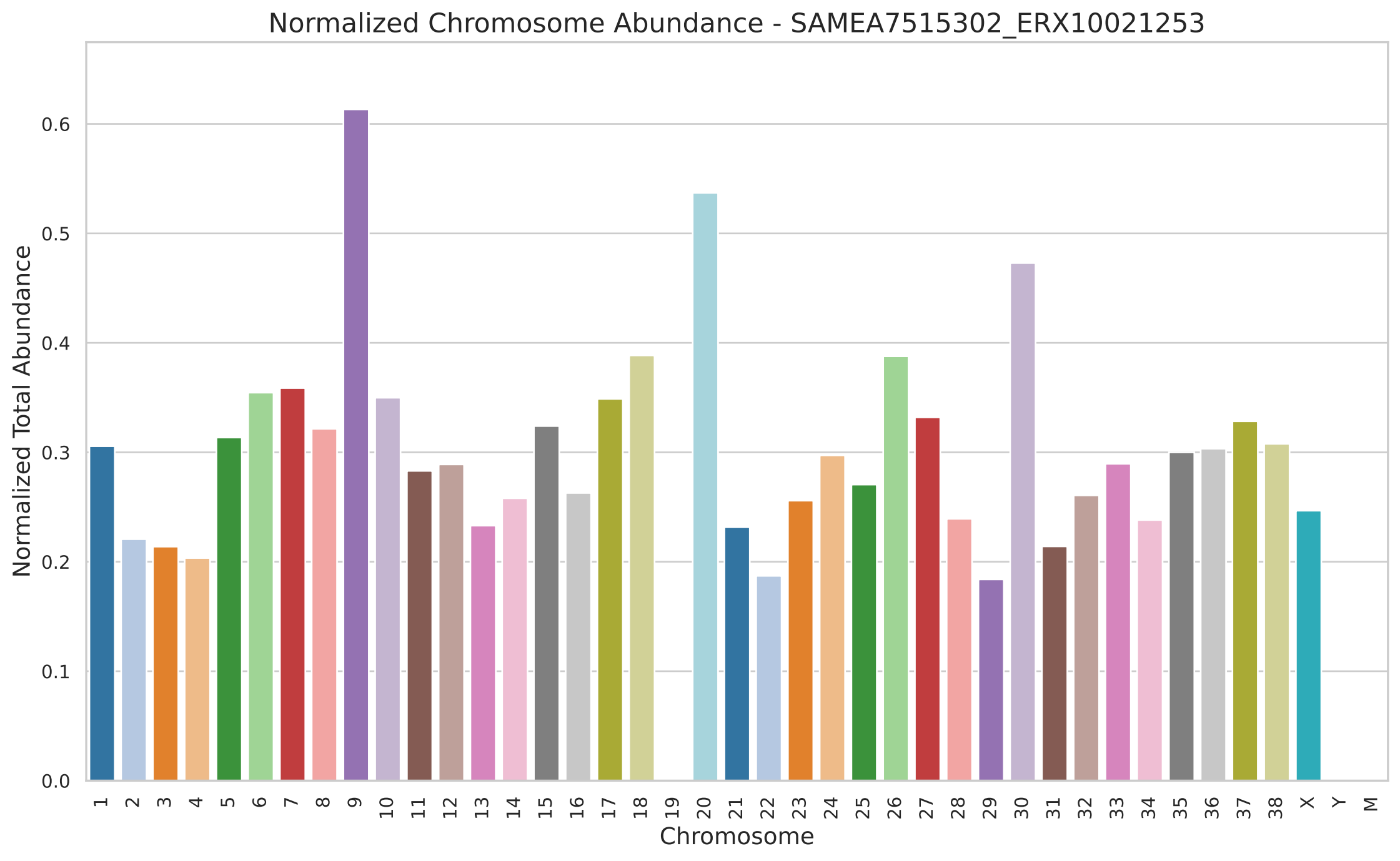

Normalized Chromosome Abundance - SAMEA7515294_ERX10021248
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

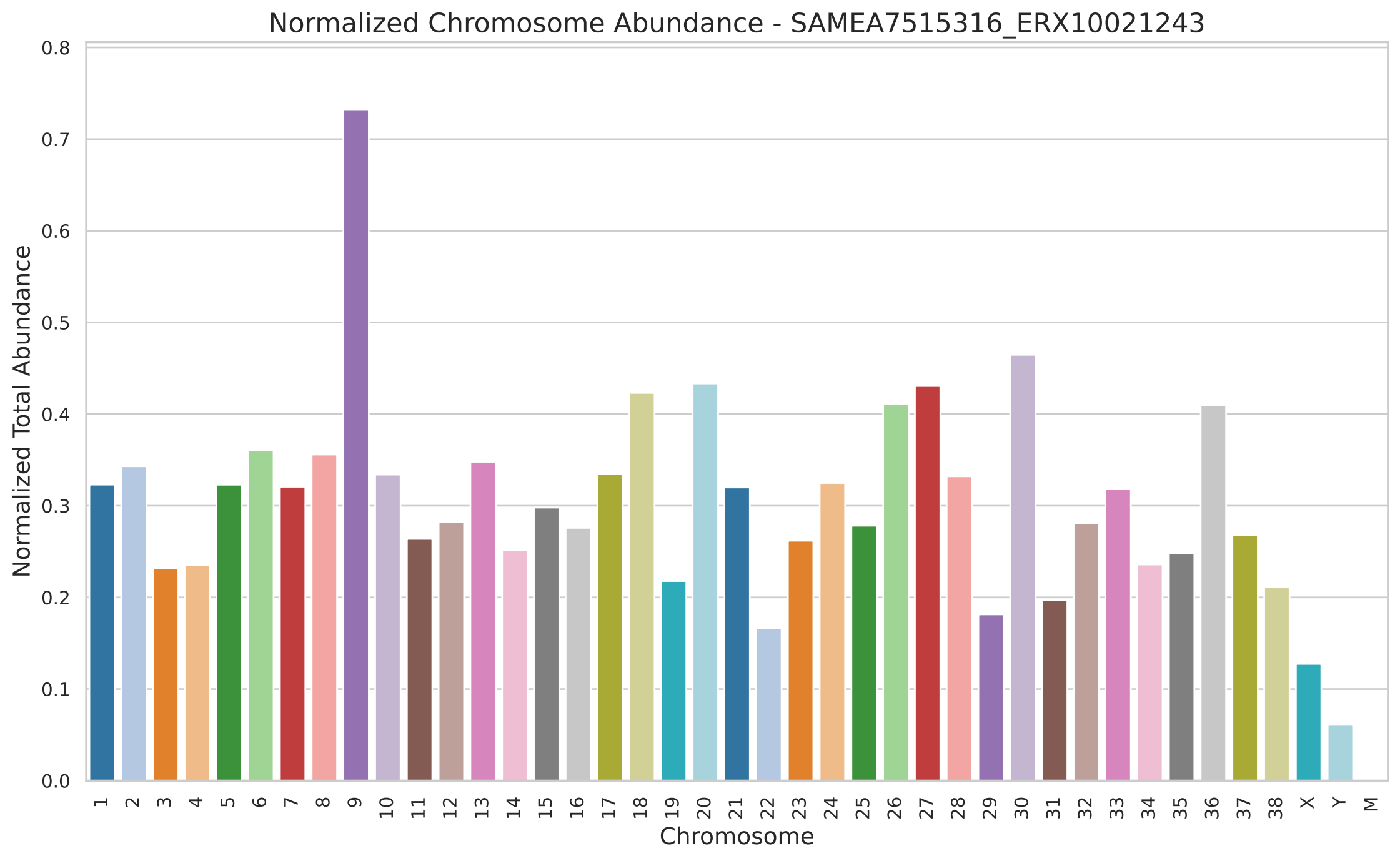

Normalized Chromosome Abundance - SAMEA7515507_ERX10021367
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

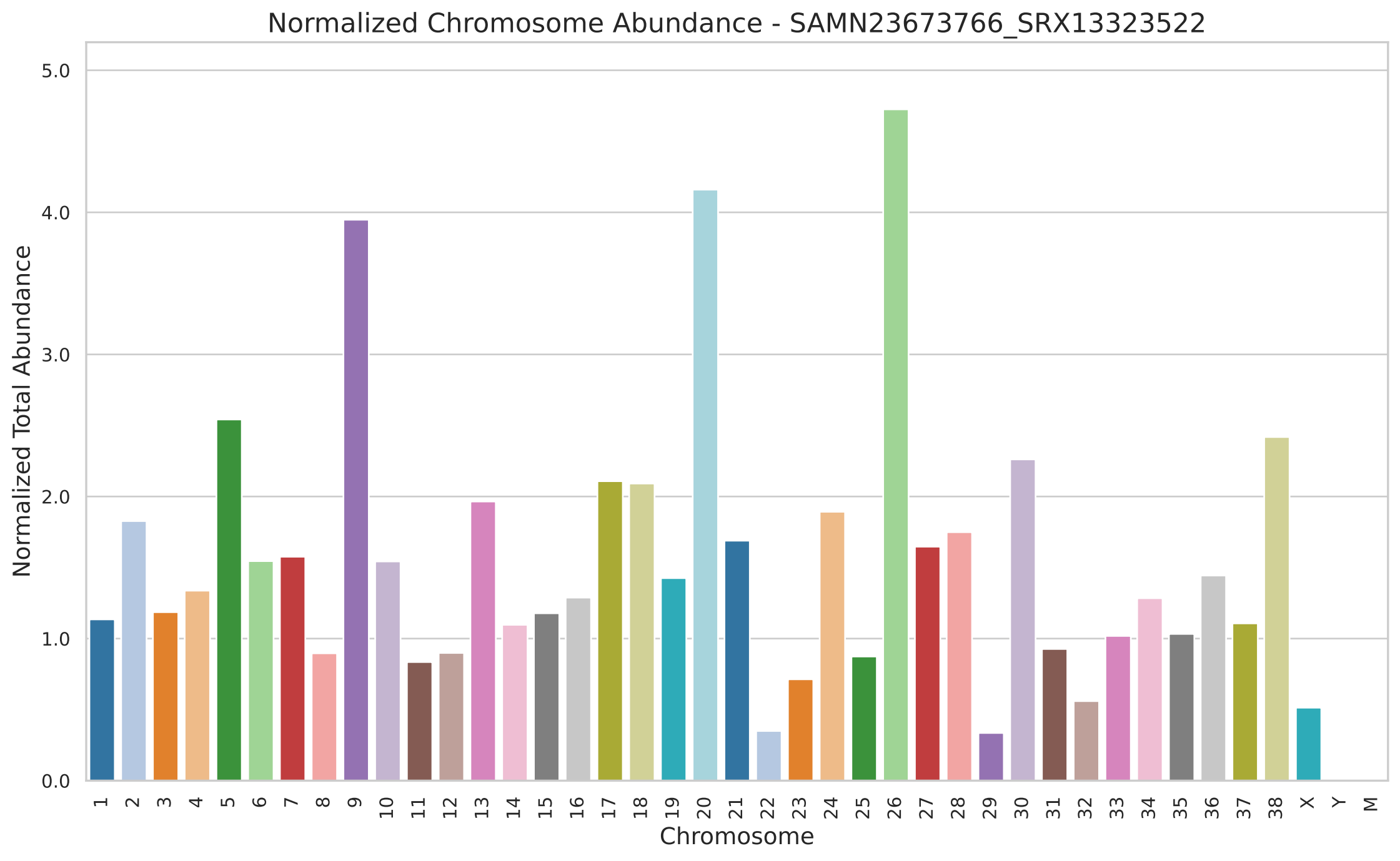

Normalized Chromosome Abundance - SAMN23673767_SRX13323523
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

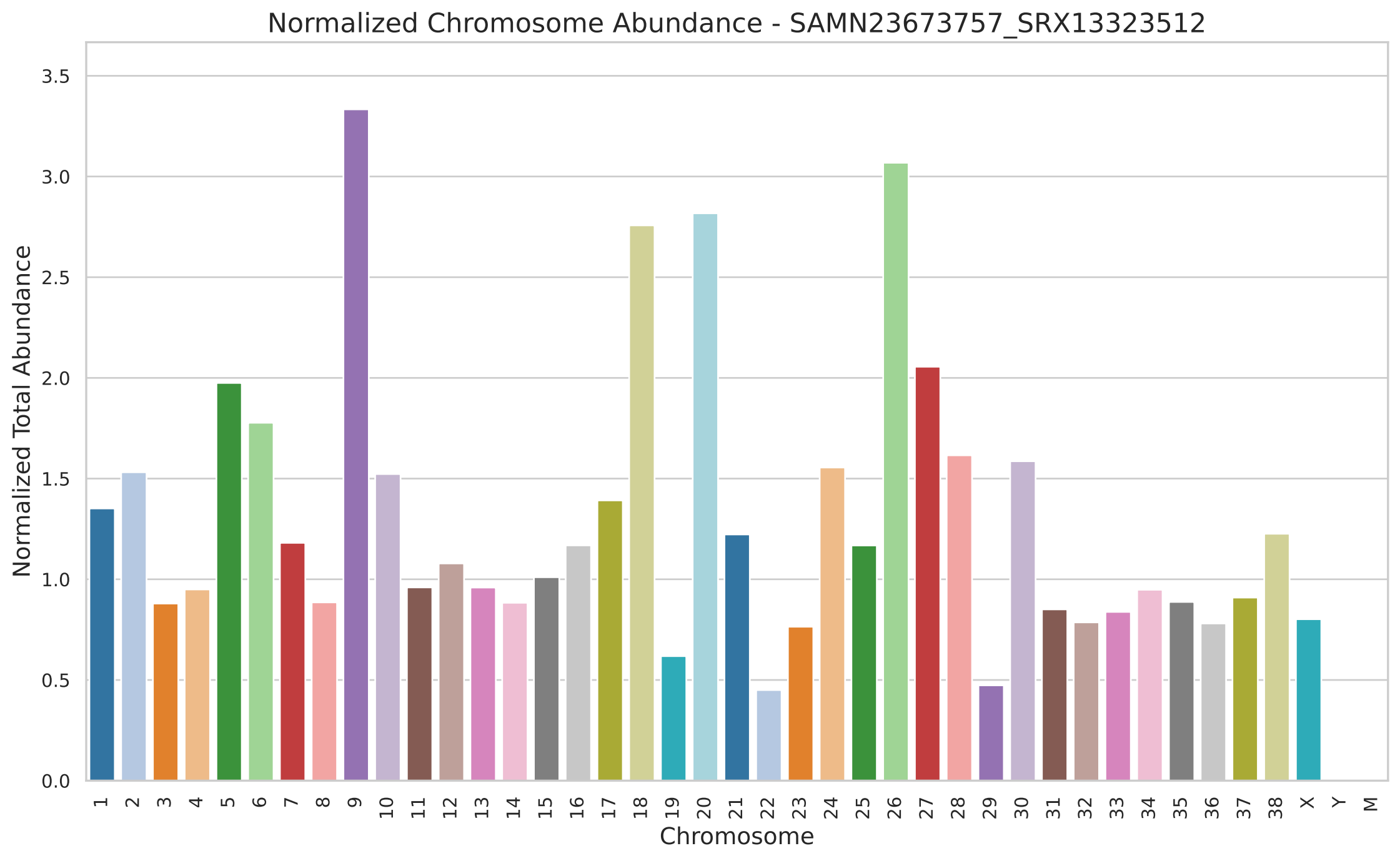

Normalized Chromosome Abundance - SAMEA110220167_ERX9466739
Normalized Total Abundance
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 X Y M
Chromosome

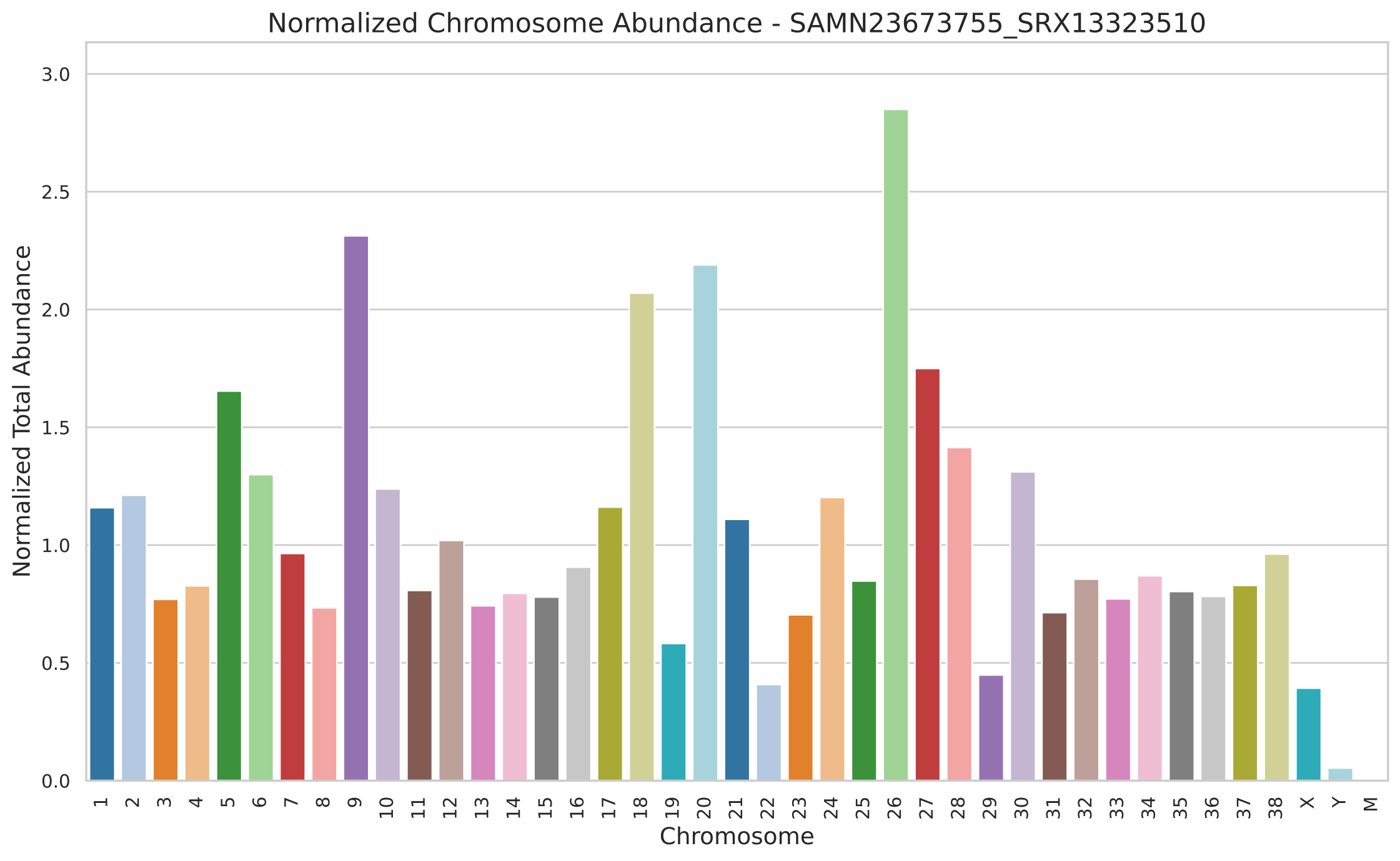

Normalized Chromosome Abundance - SAMEA110220162_ERX9466734
Normalized Total Abundance
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

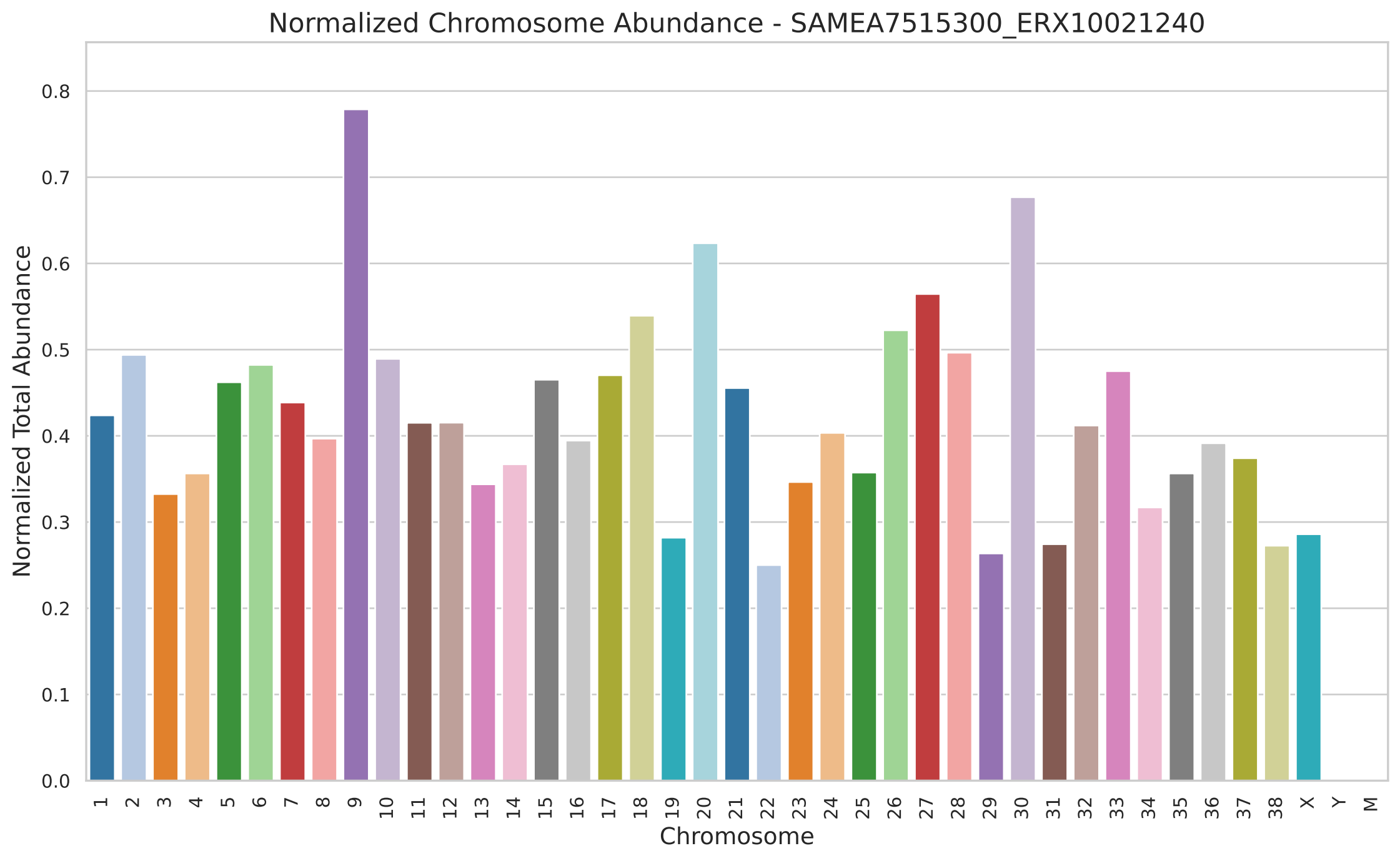

Normalized Chromosome Abundance - SAMEA7515302_ERX10021253
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

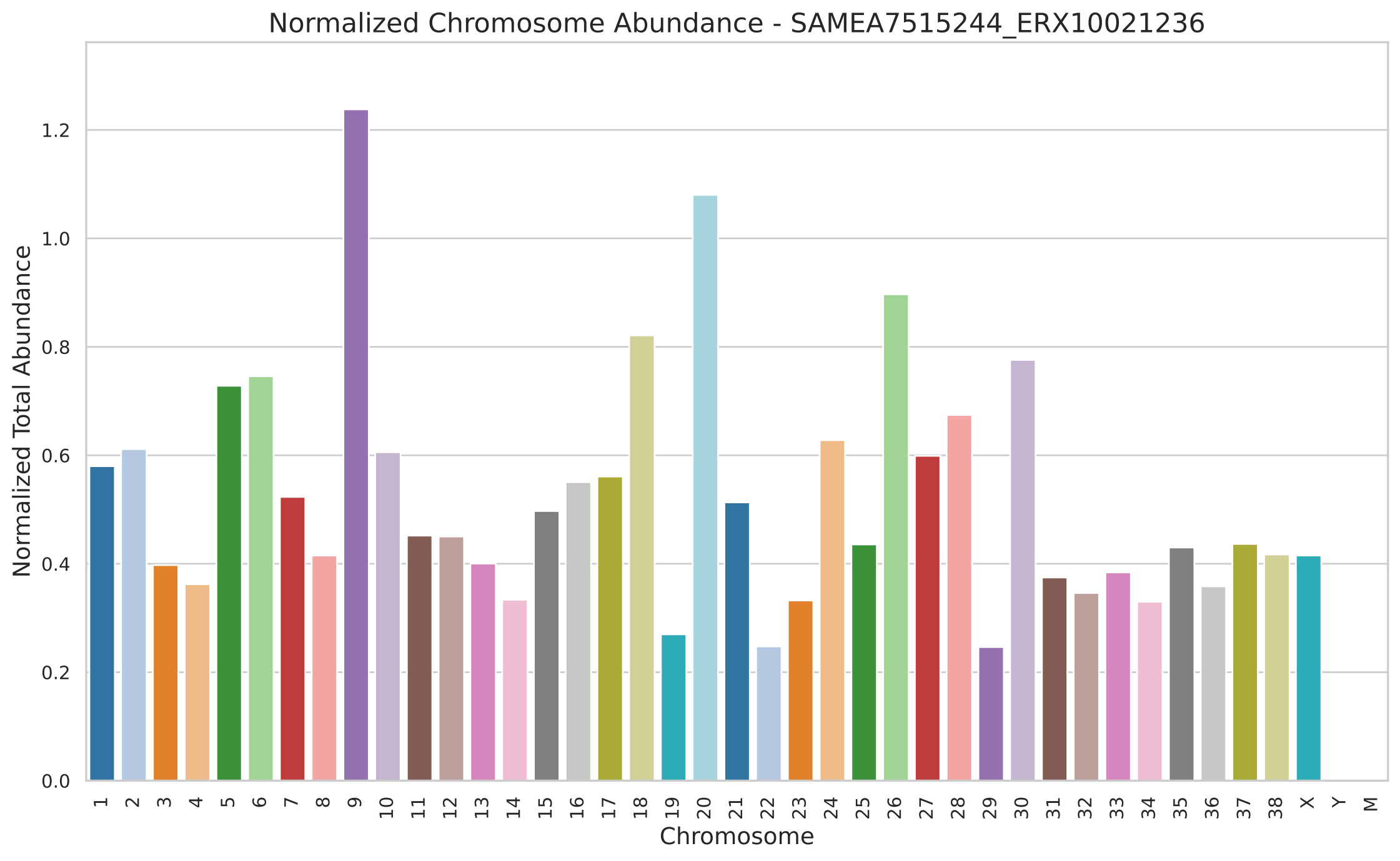

Normalized Chromosome Abundance - SAMEA7515316_ERX10021243
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

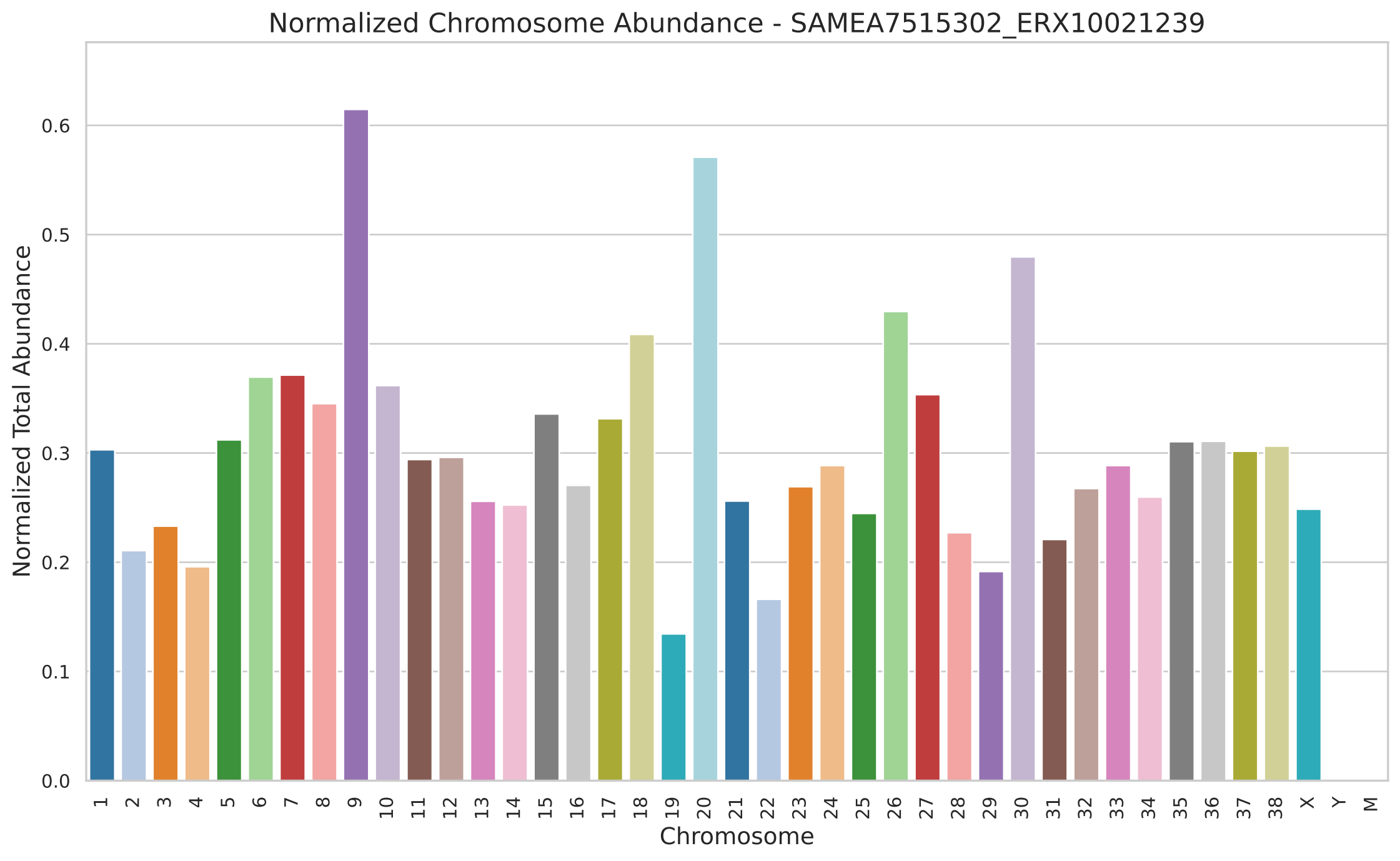

Normalized Chromosome Abundance - SAMN23673766_SRX13323522
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

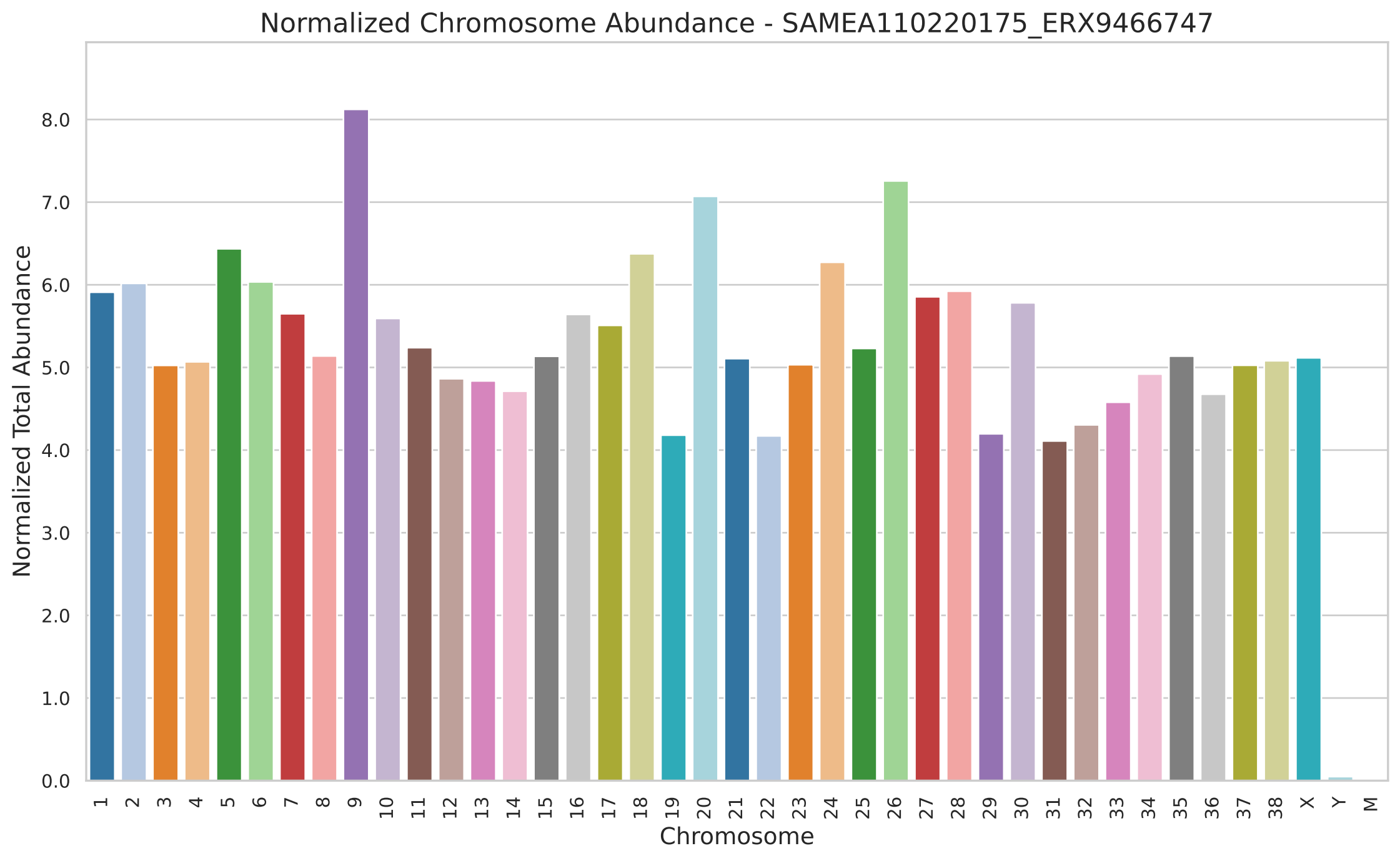

Normalized Chromosome Abundance - SAMN23673757_SRX13323512
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

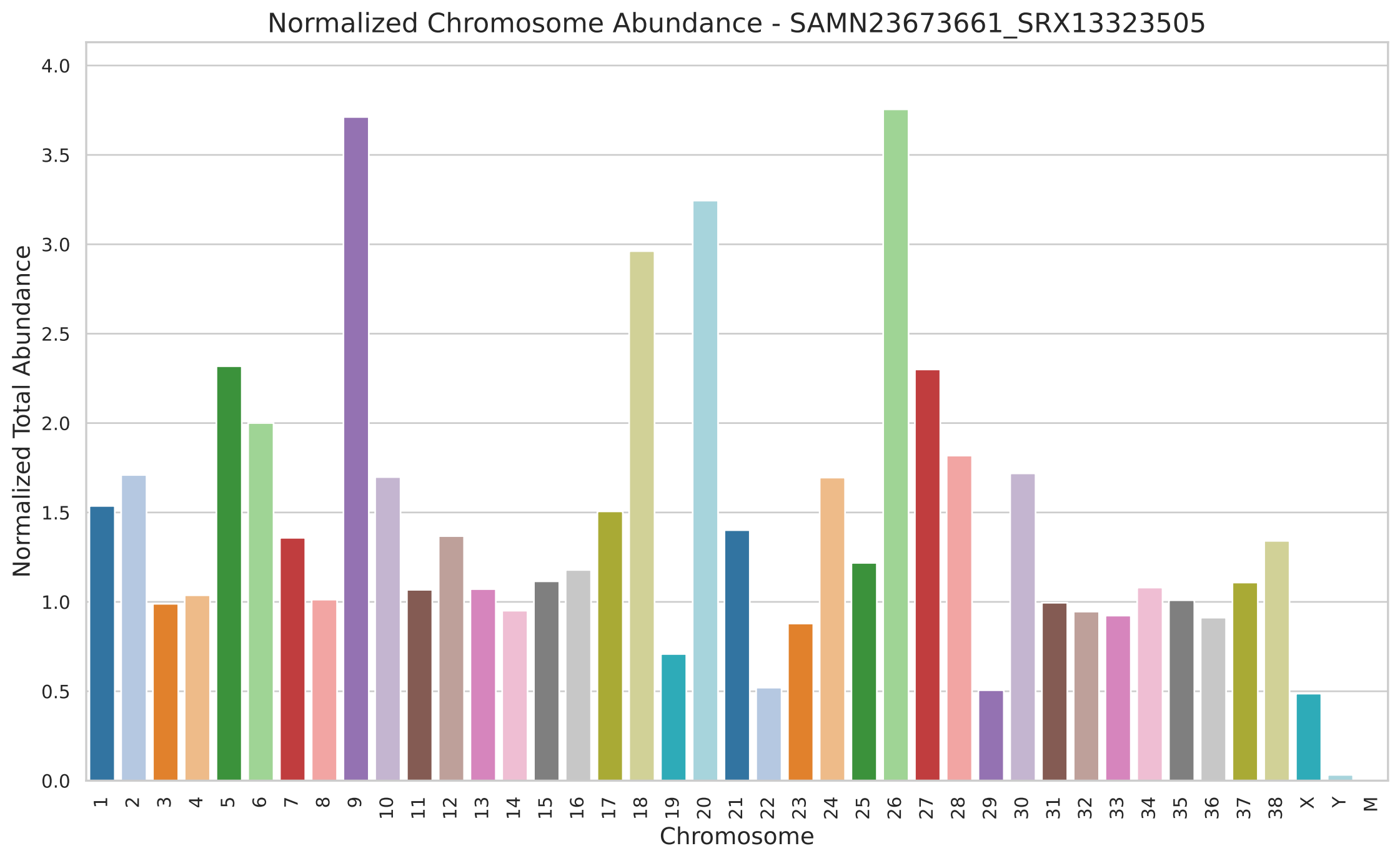

Normalized Chromosome Abundance - SAMN23673755_SRX13323510
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

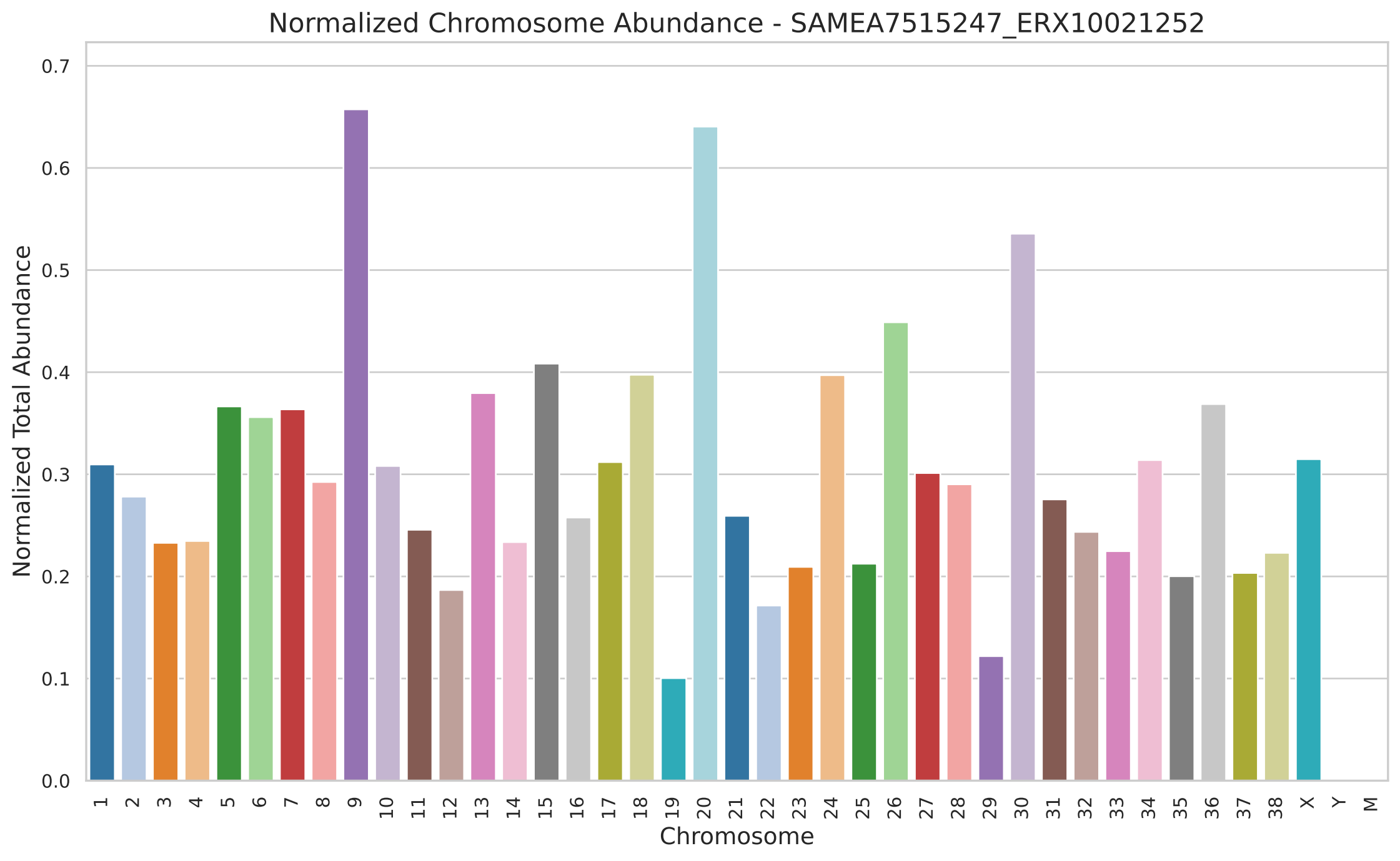

Normalized Chromosome Abundance - SAMEA7515300_ERX10021240
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

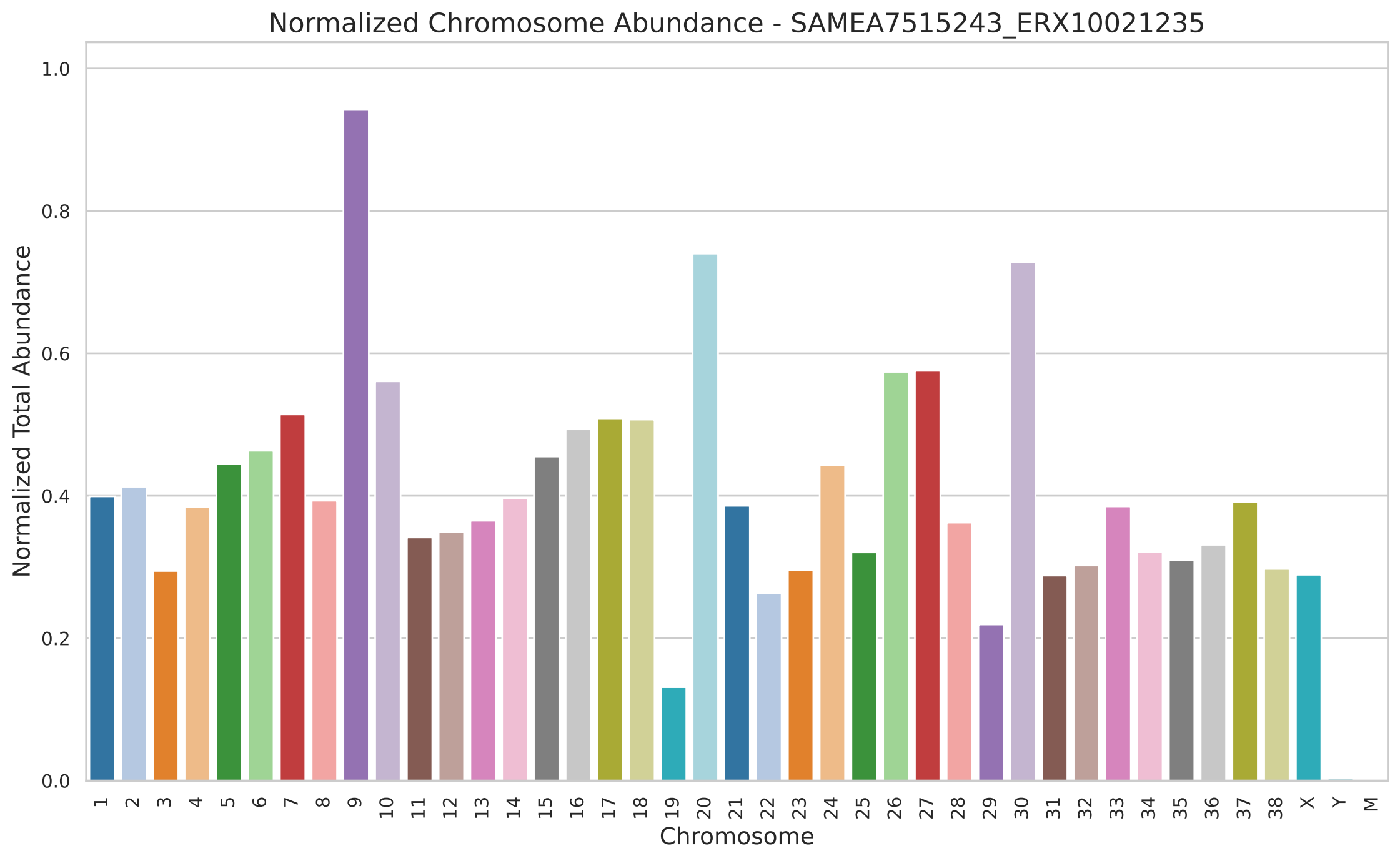

Normalized Chromosome Abundance - SAMEA7515244_ERX10021236
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

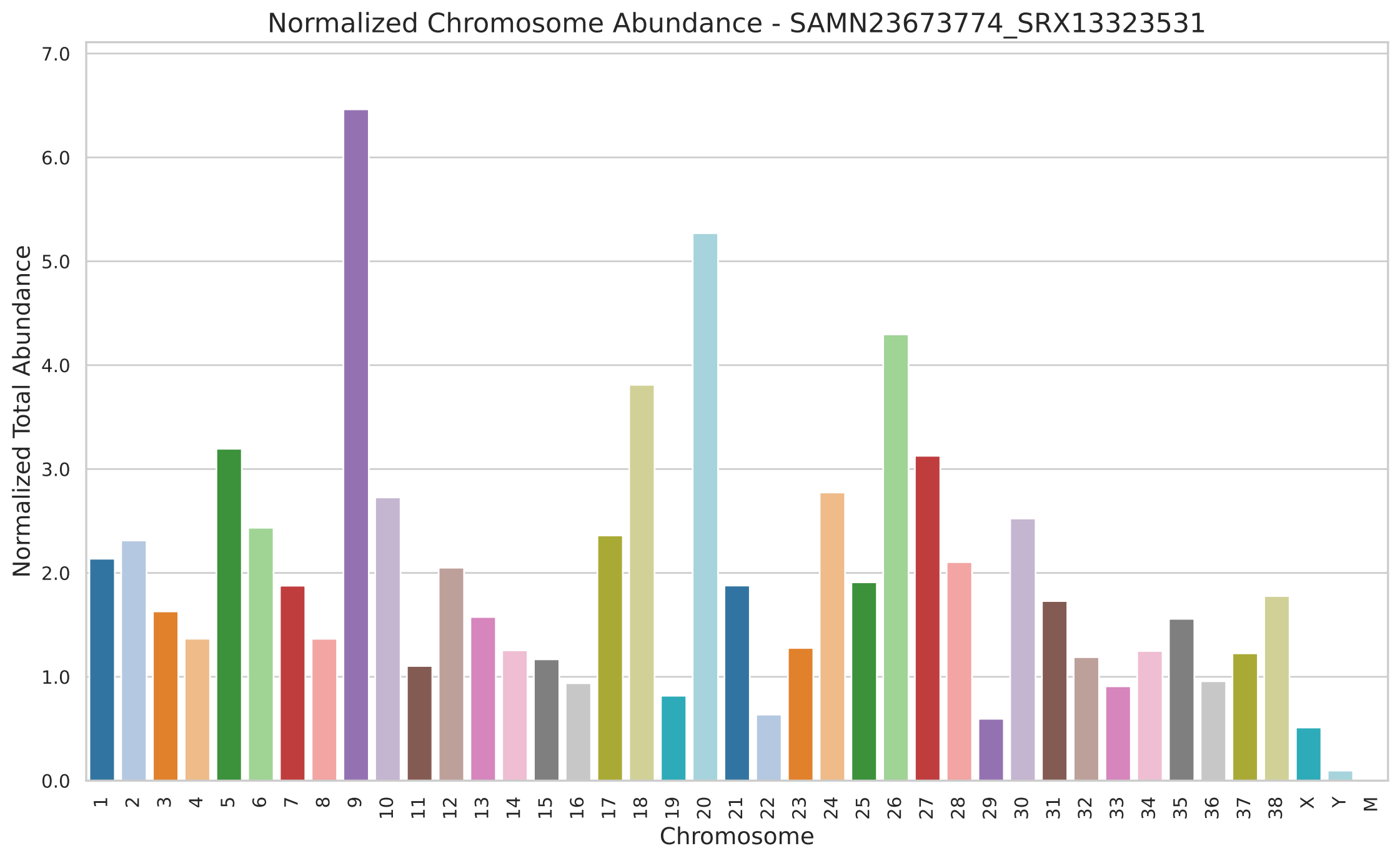

Normalized Chromosome Abundance - SAMEA7515302_ERX10021239
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

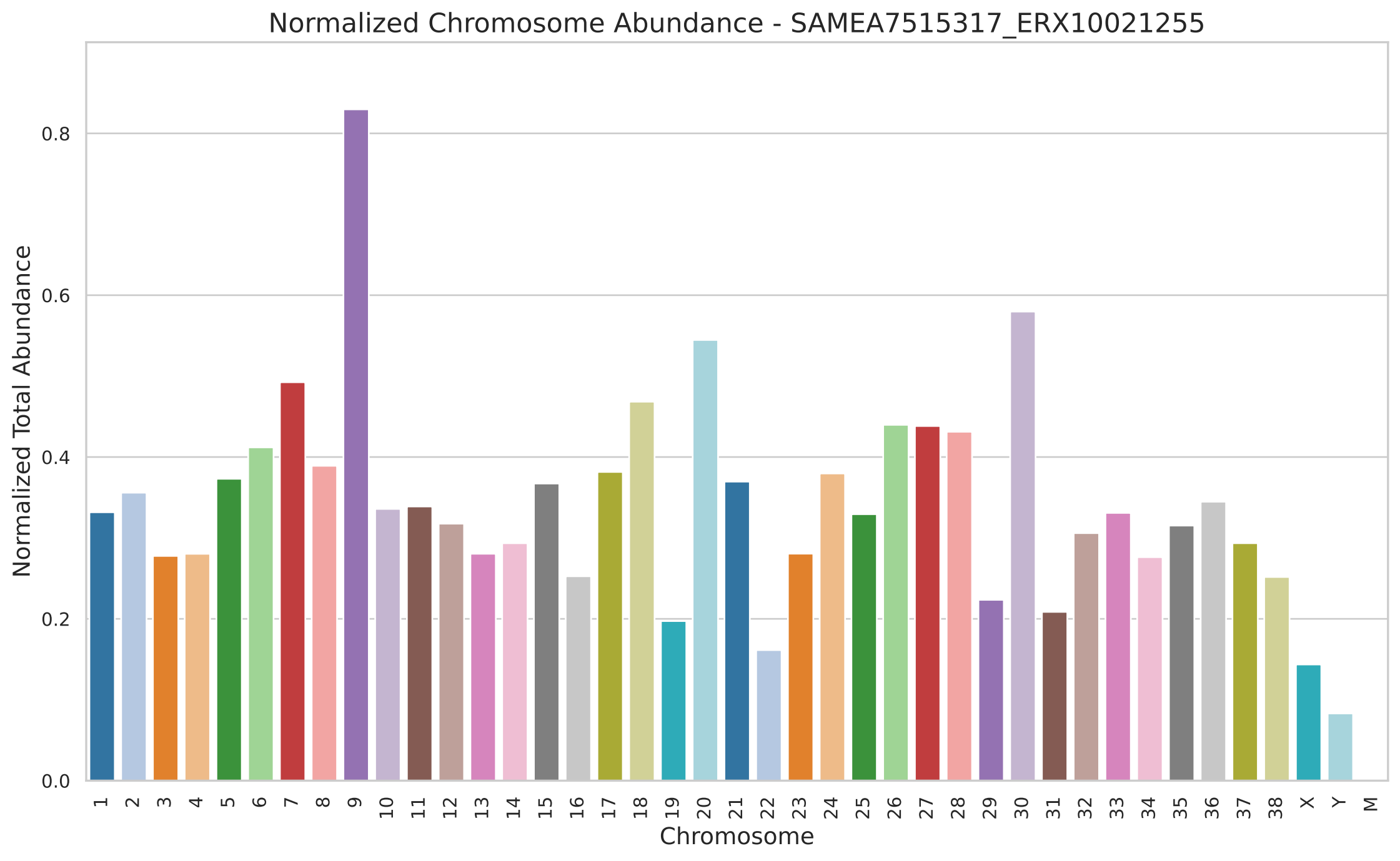

Normalized Chromosome Abundance - SAMEA110220175_ERX9466747
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

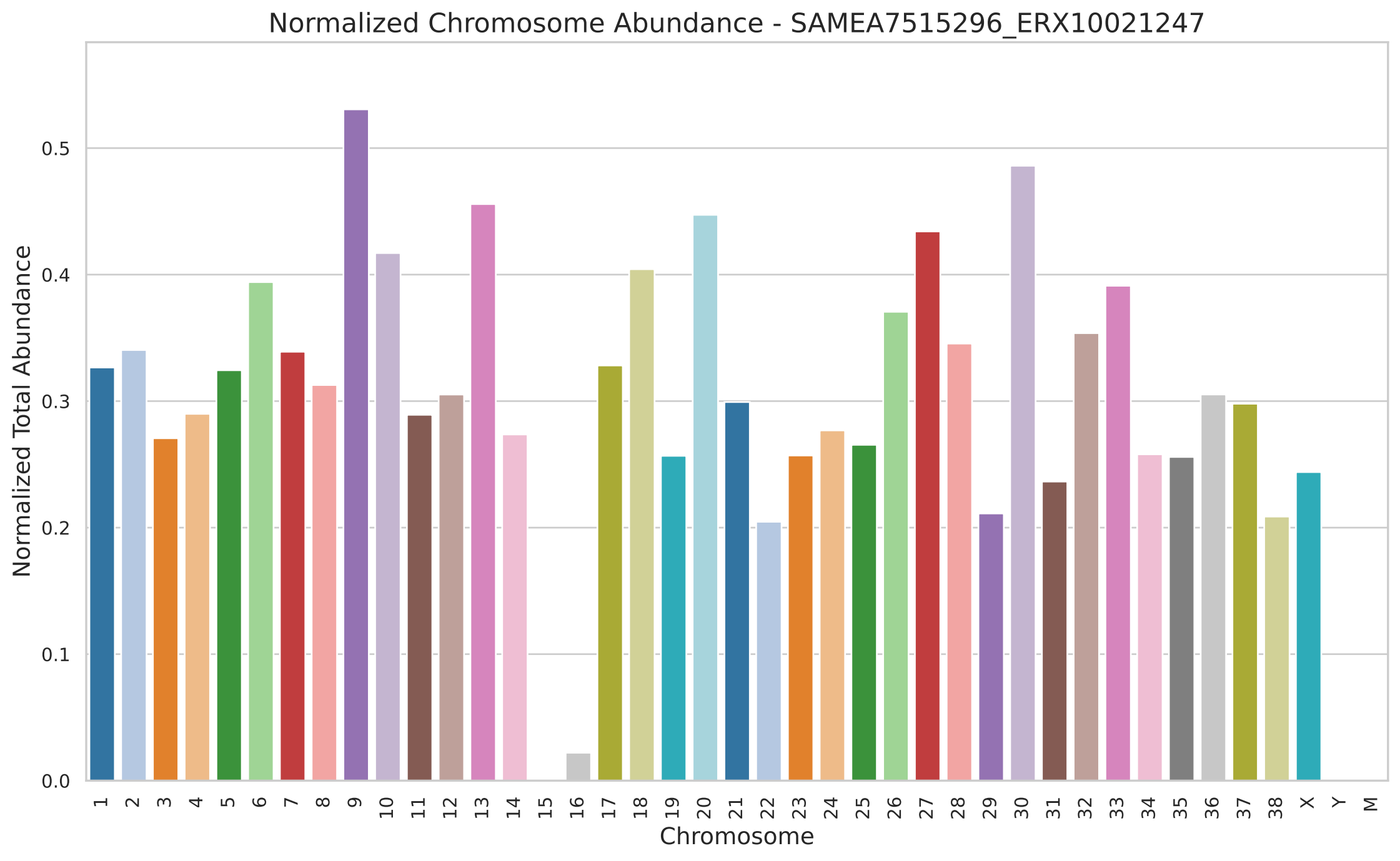

Normalized Chromosome Abundance - SAMN23673661_SRX13323505
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

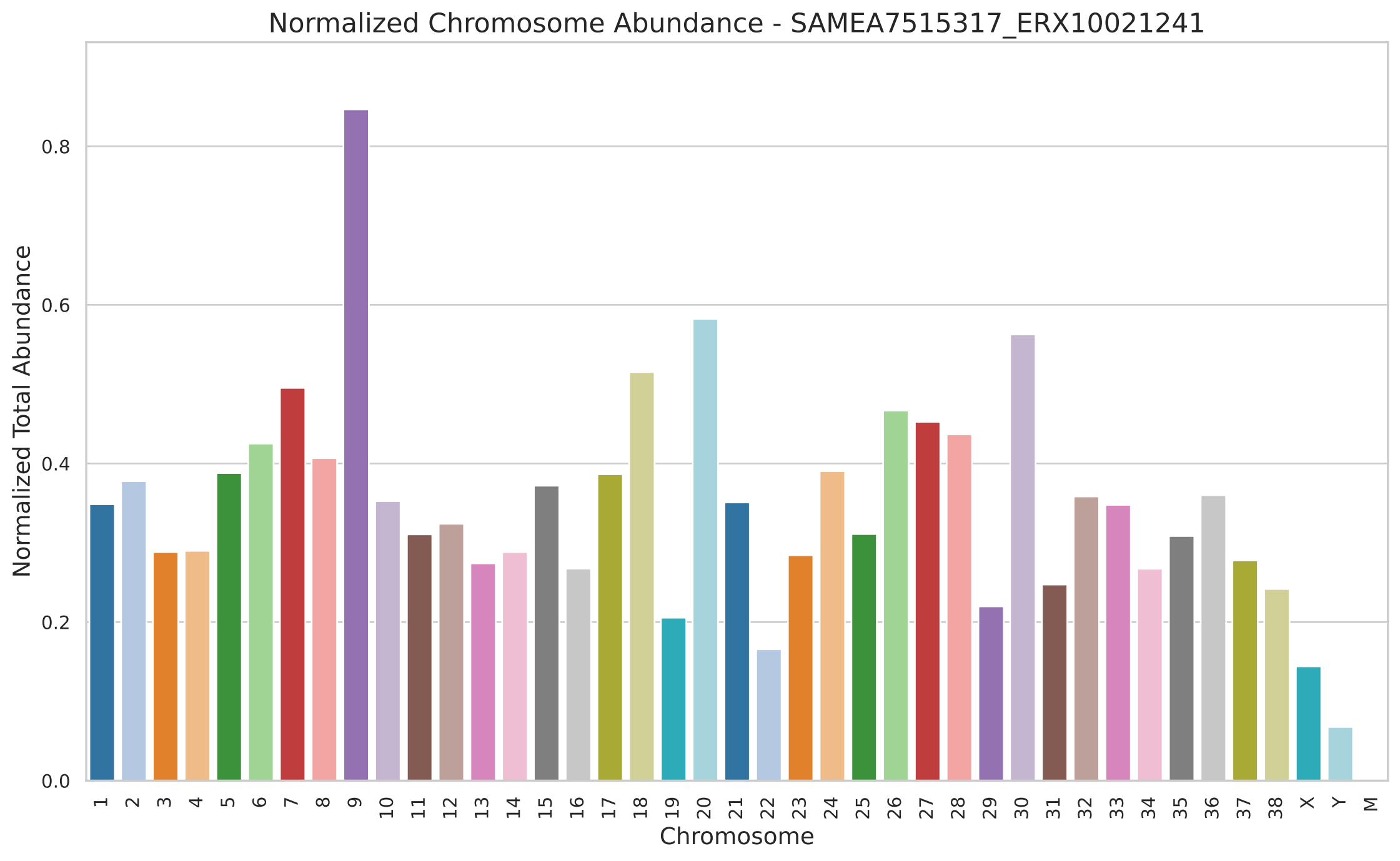

Normalized Chromosome Abundance - SAMEA7515247_ERX10021252
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

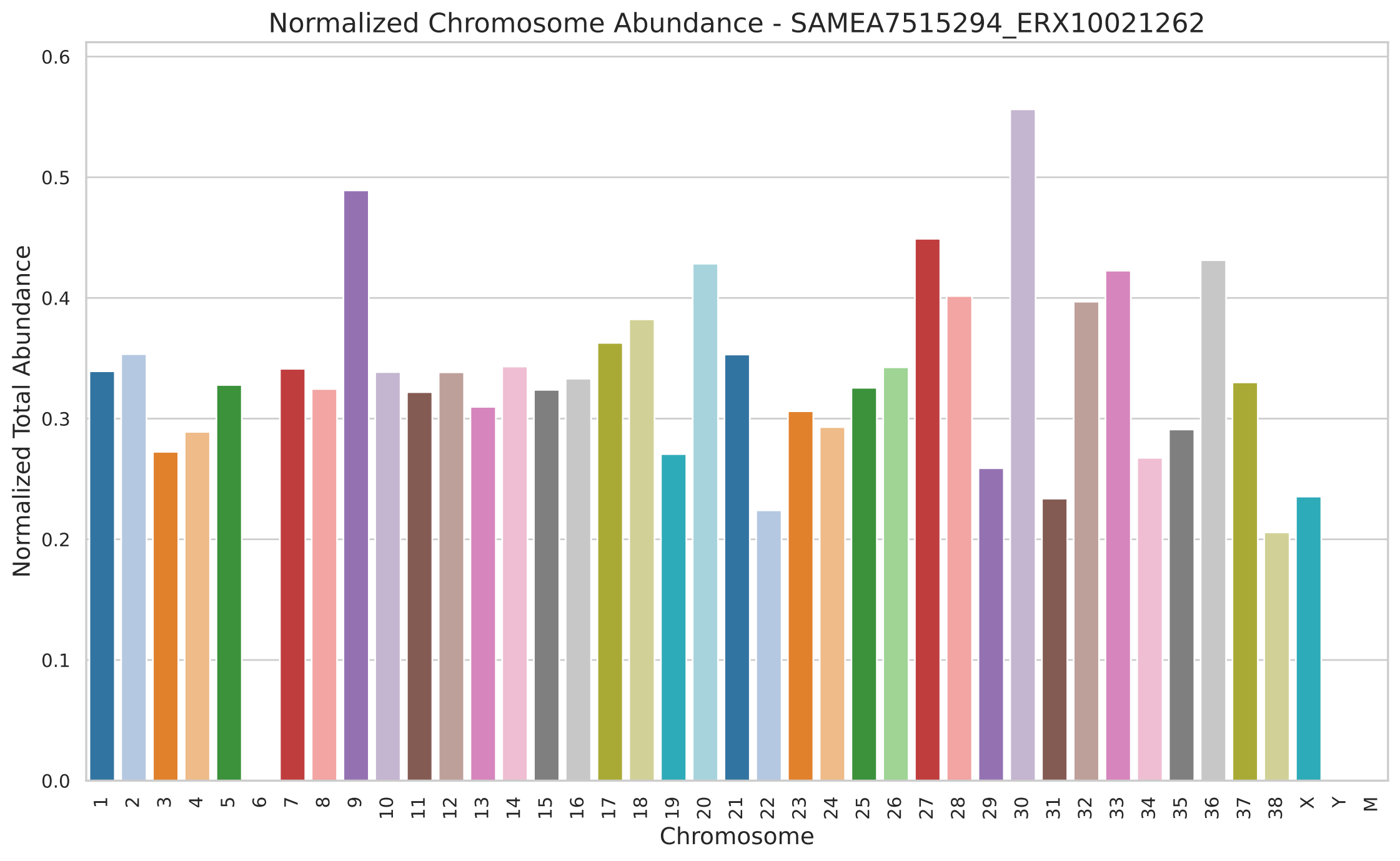

Normalized Chromosome Abundance - SAMEA7515243_ERX10021235
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

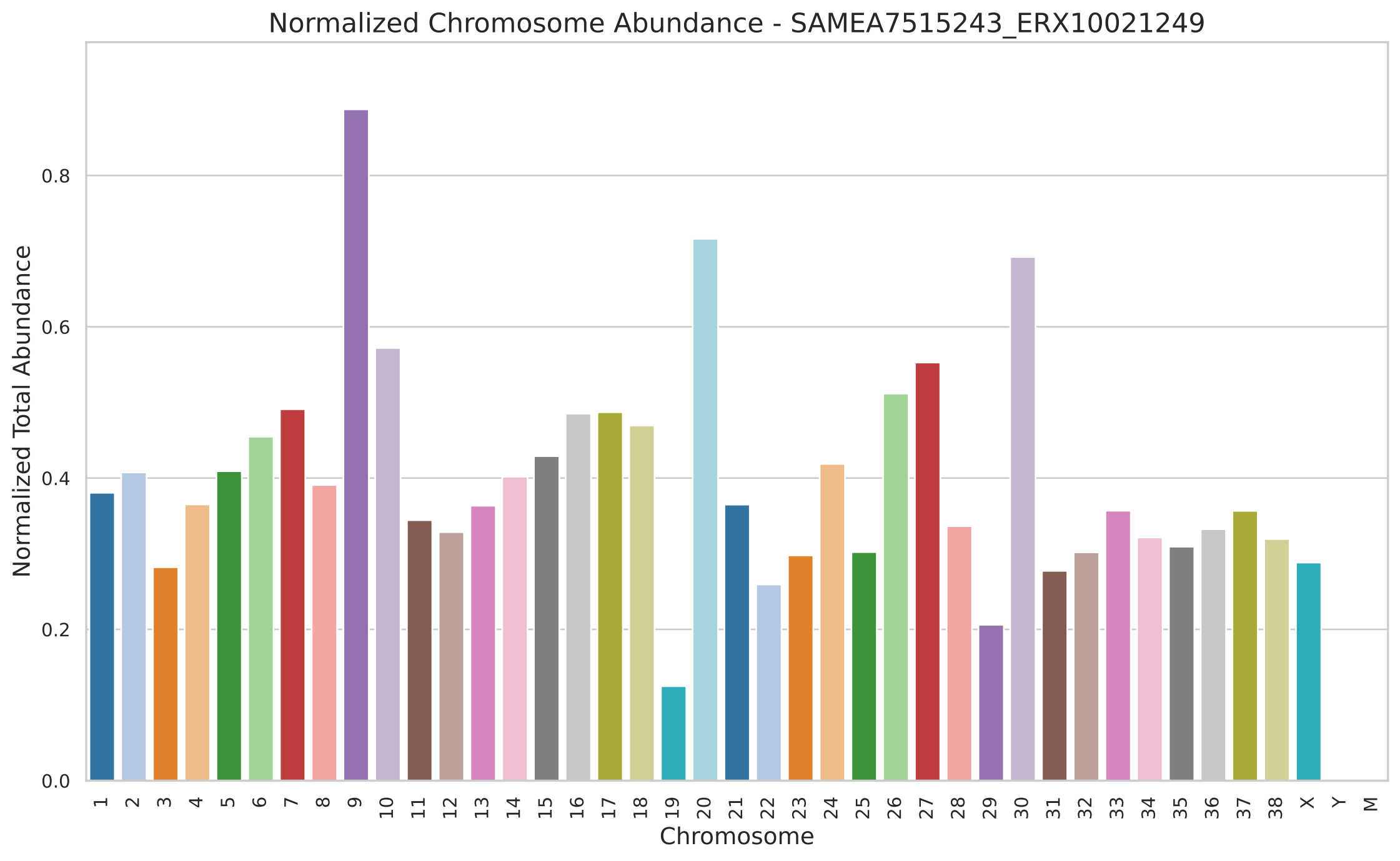

Normalized Chromosome Abundance - SAMN23673774_SRX13323531
Normalized Total Abundance
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

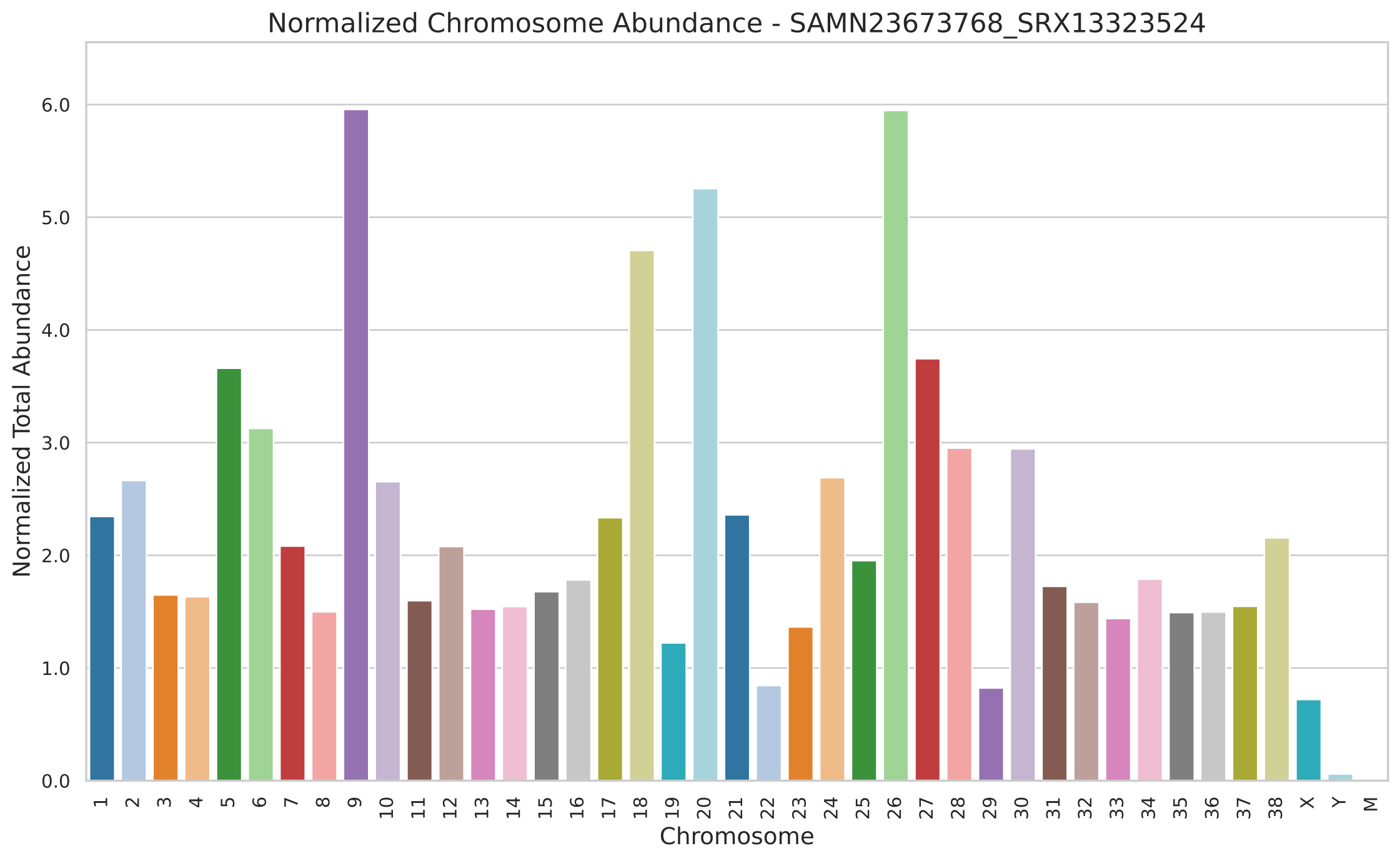

Normalized Chromosome Abundance - SAMEA7515317_ERX10021255
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

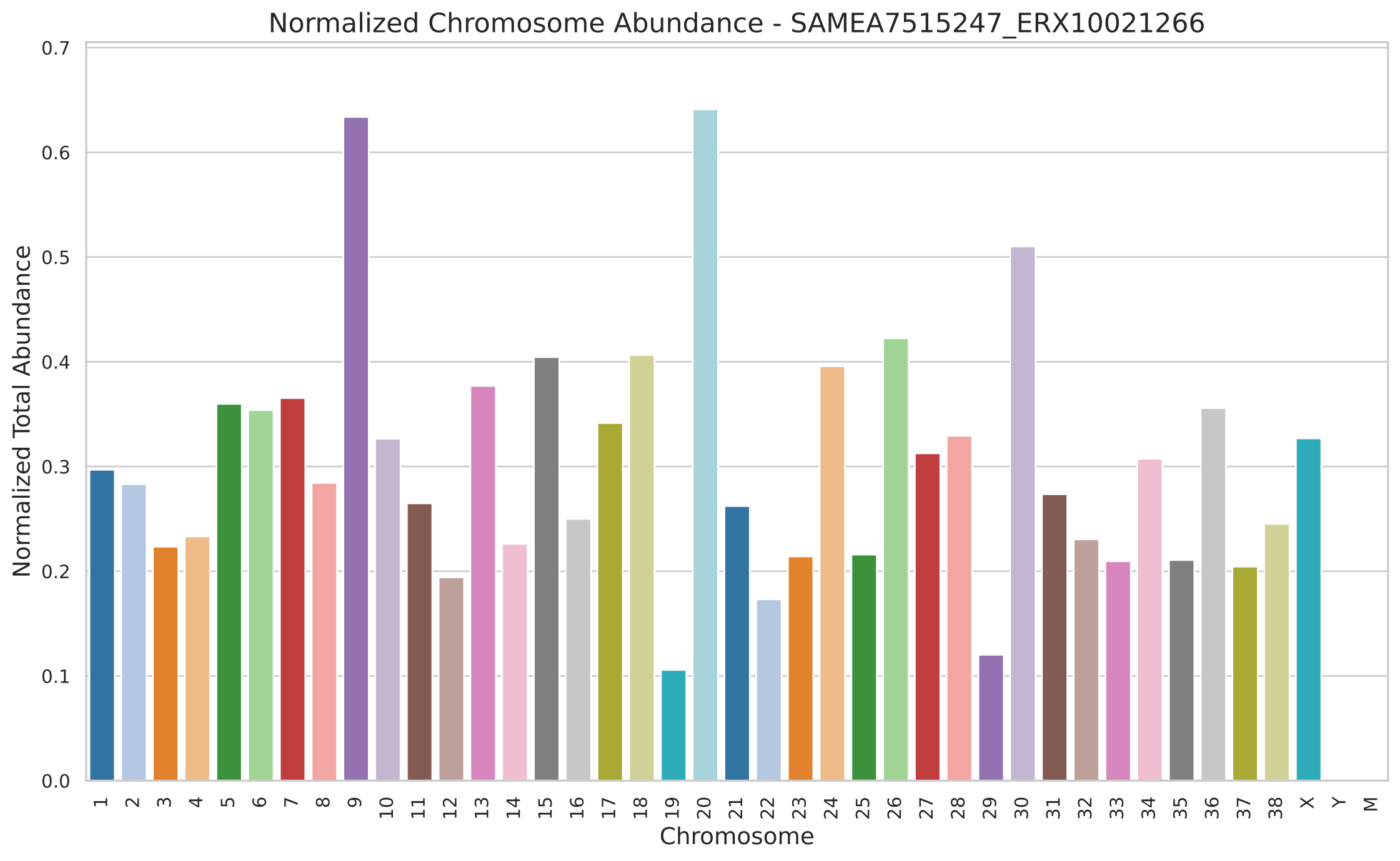

Normalized Chromosome Abundance - SAMEA7515296_ERX10021247
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

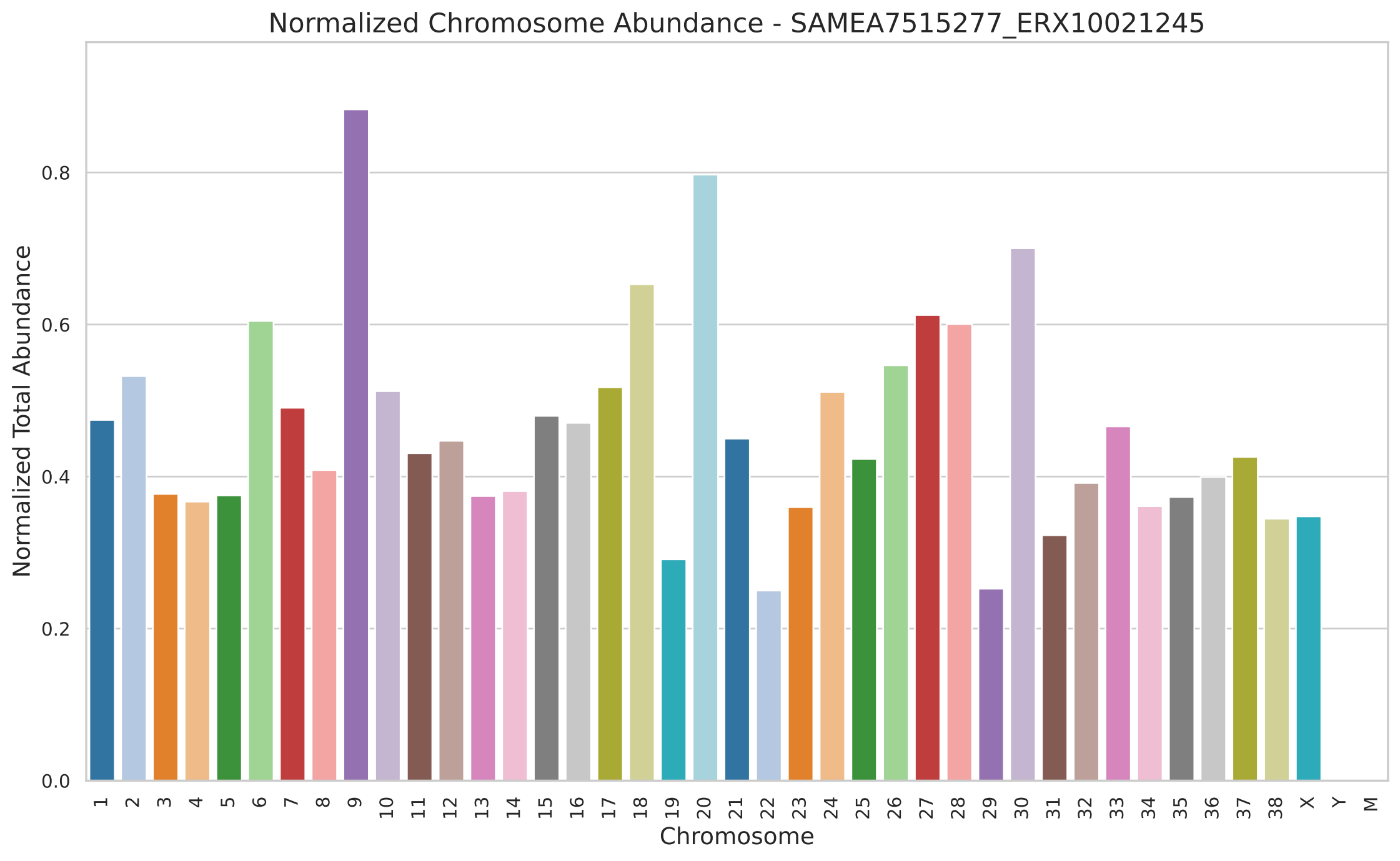

Normalized Chromosome Abundance - SAMEA7515317_ERX10021241
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

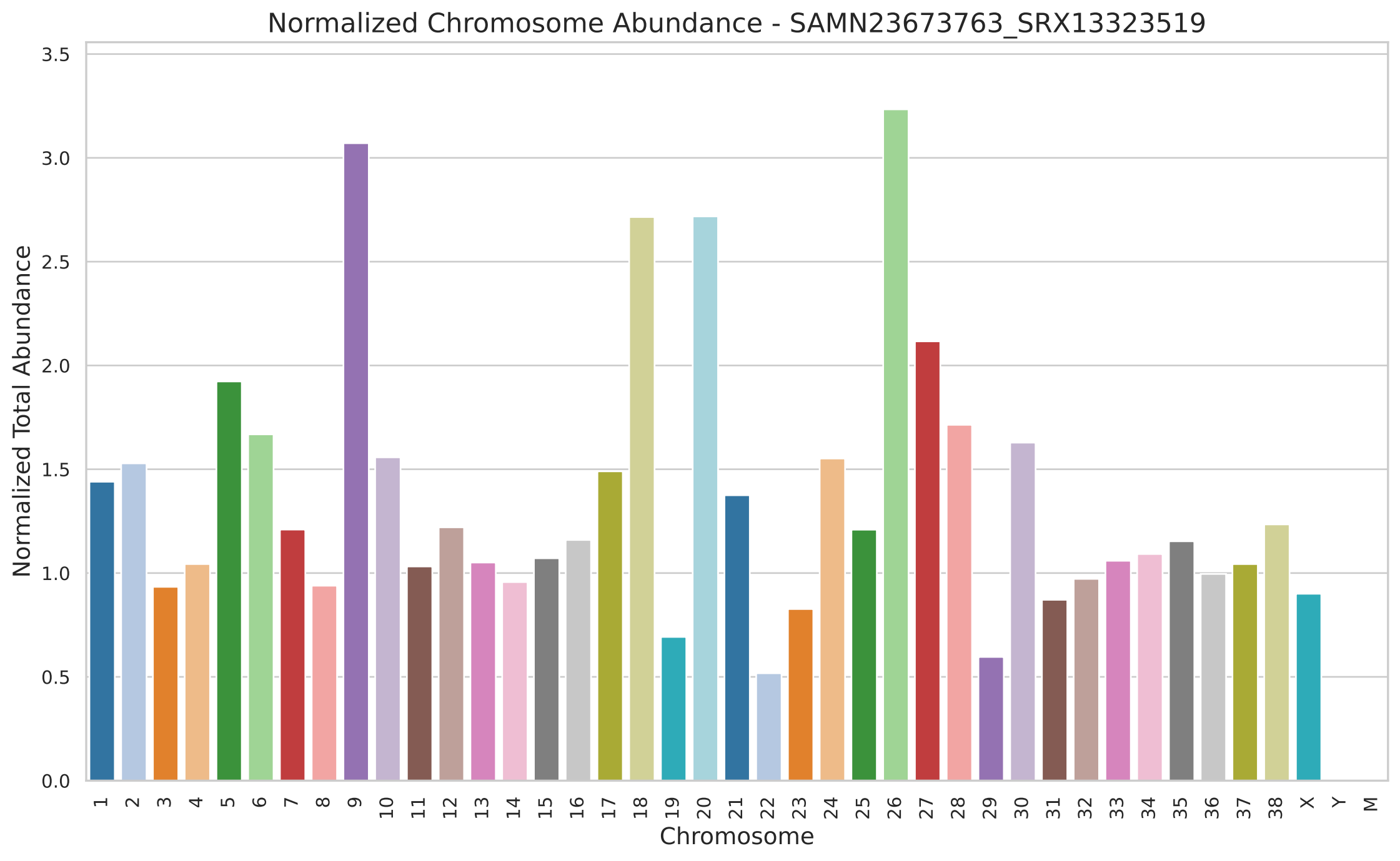

Normalized Chromosome Abundance - SAMEA7515294_ERX10021262
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

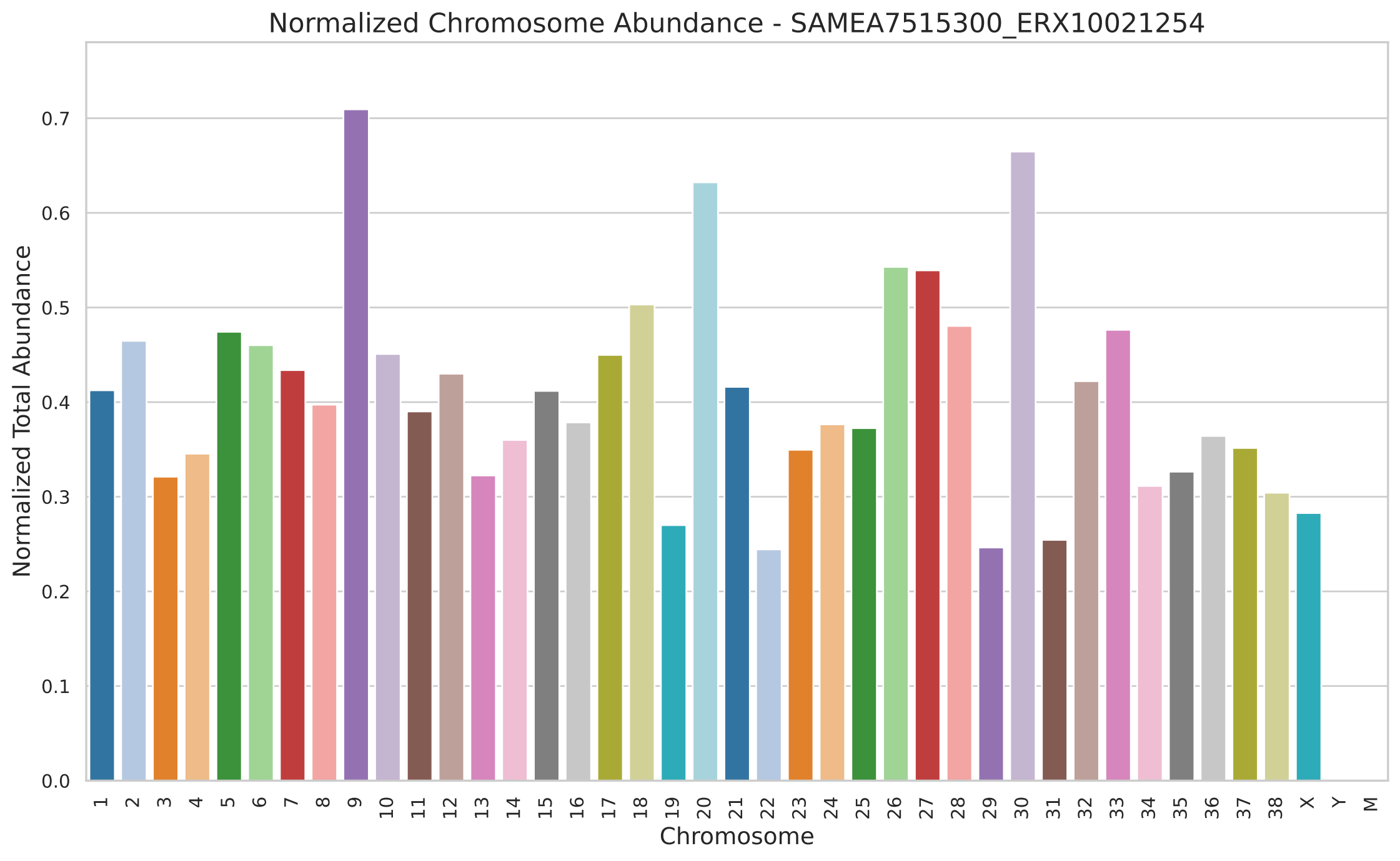

Normalized Chromosome Abundance - SAMEA7515243_ERX10021249
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

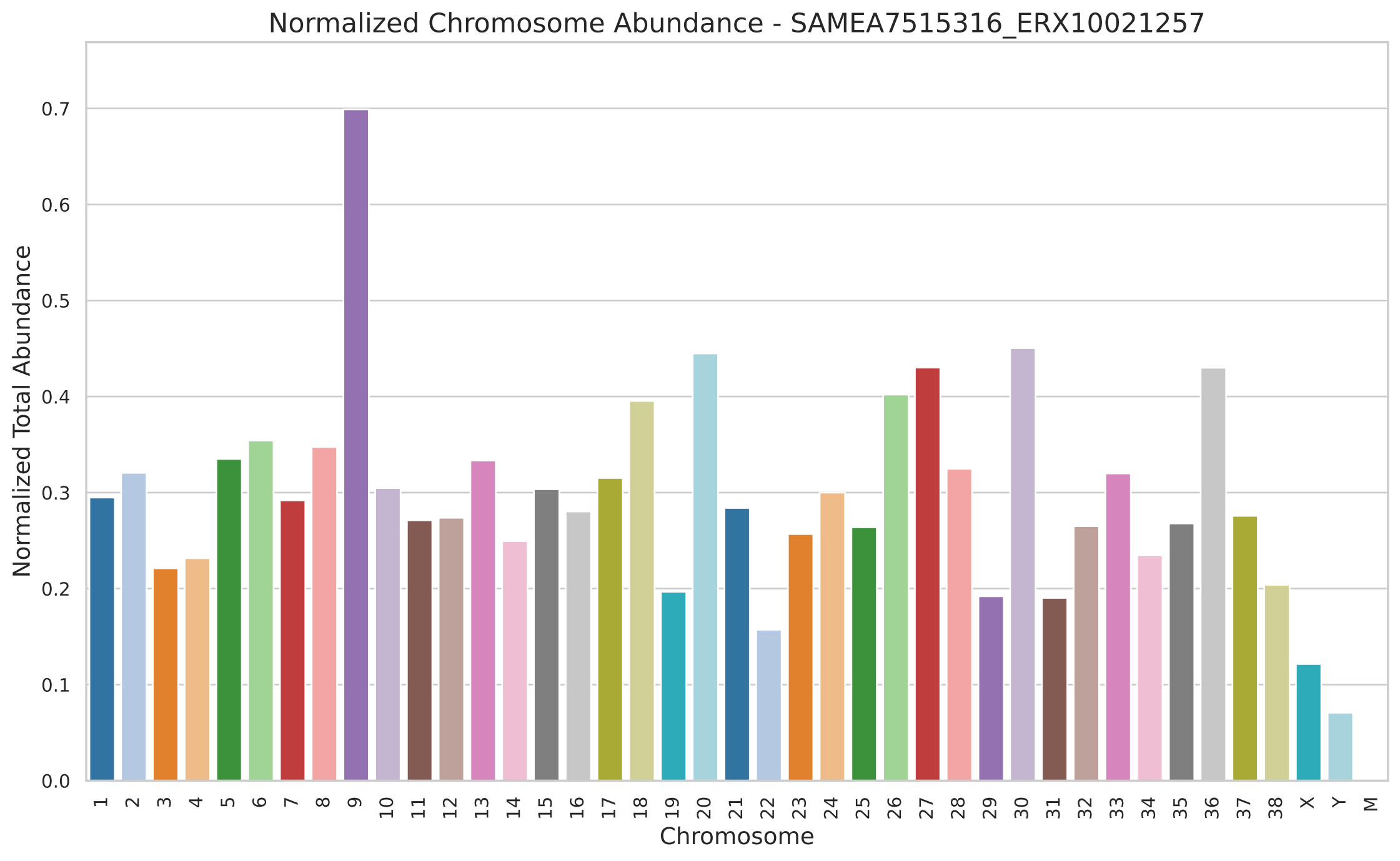

Normalized Chromosome Abundance - SAMN23673768_SRX13323524
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

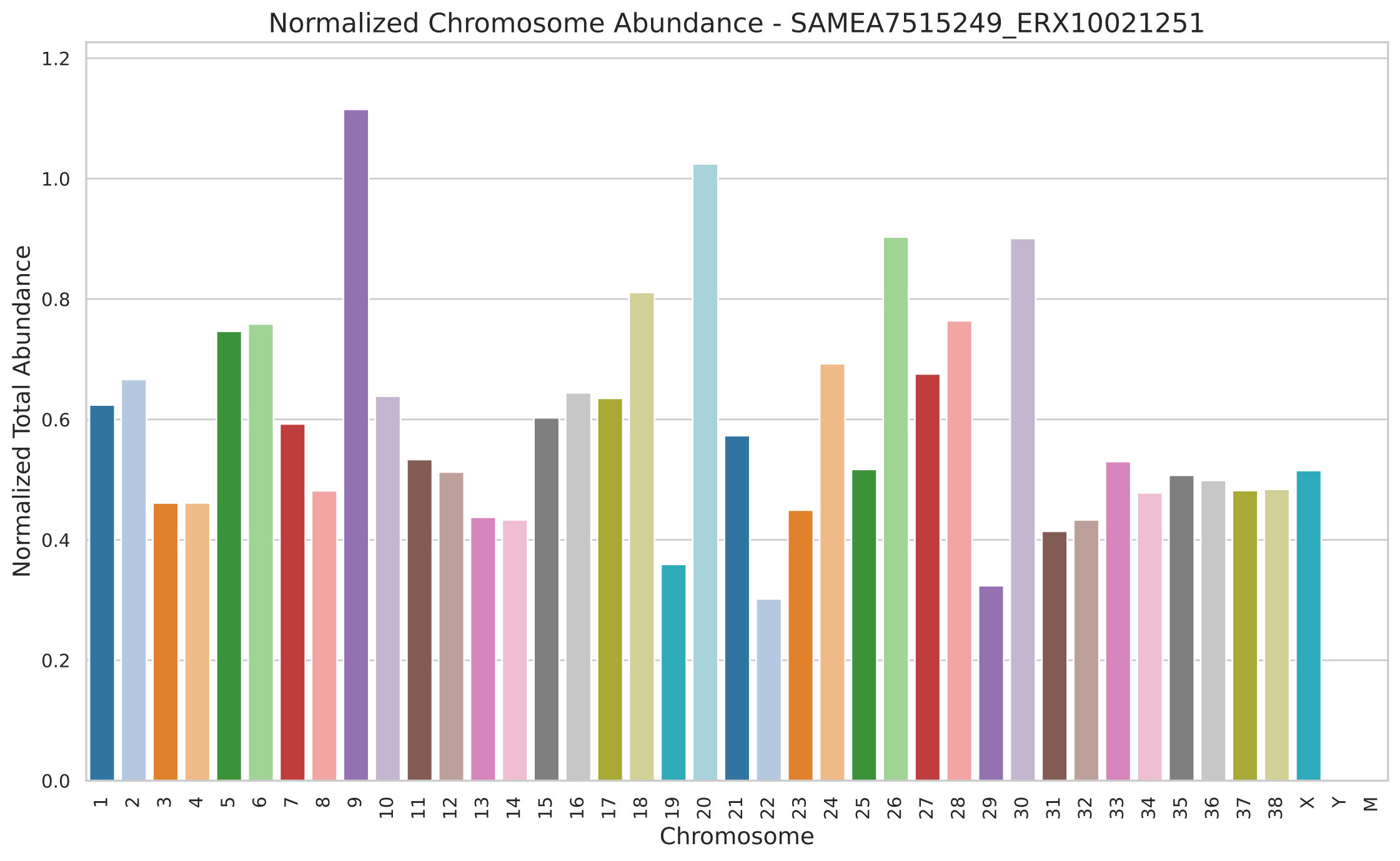

Normalized Chromosome Abundance - SAMEA7515247_ERX10021266
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

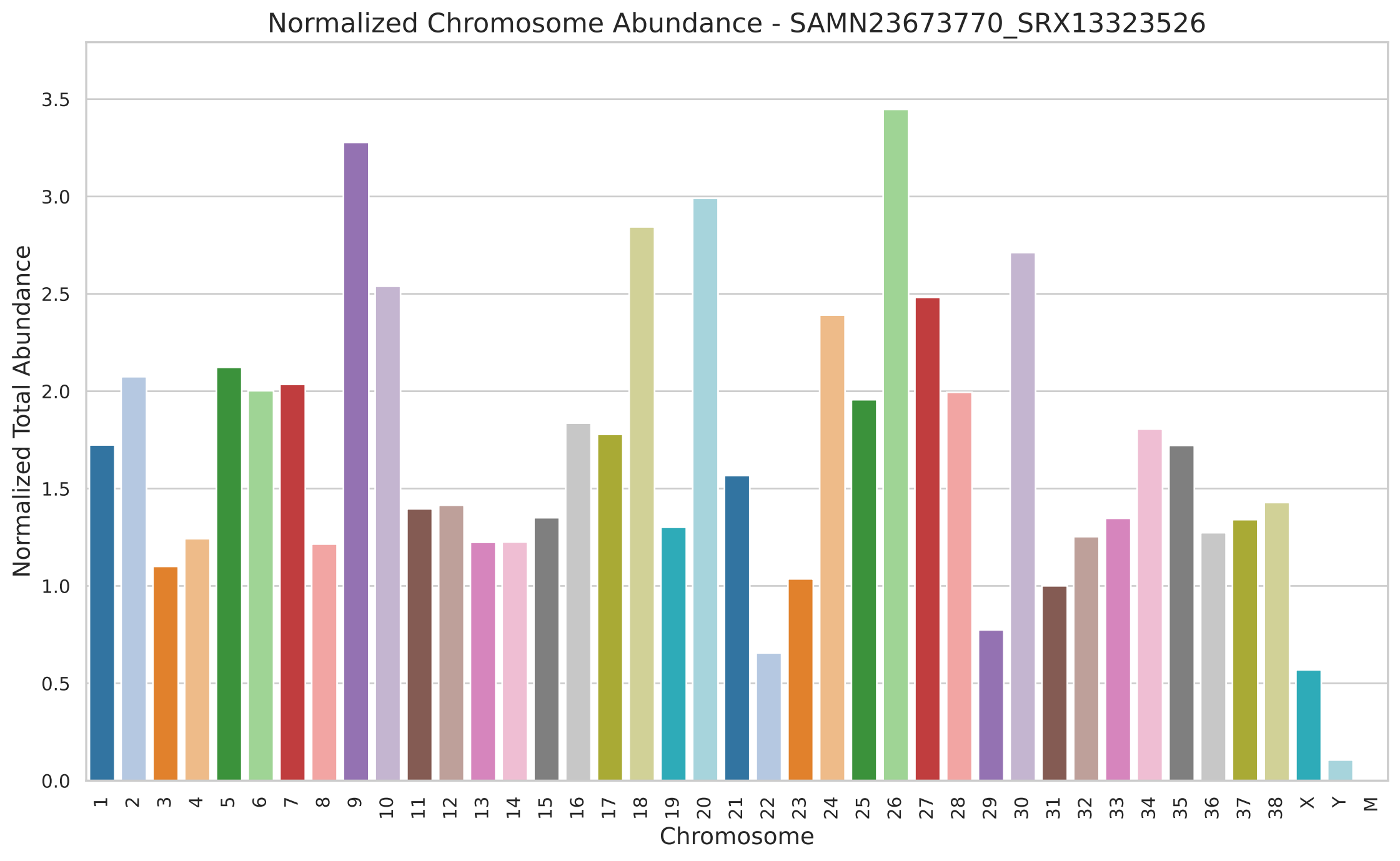

Normalized Chromosome Abundance - SAMEA7515277_ERX10021245
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

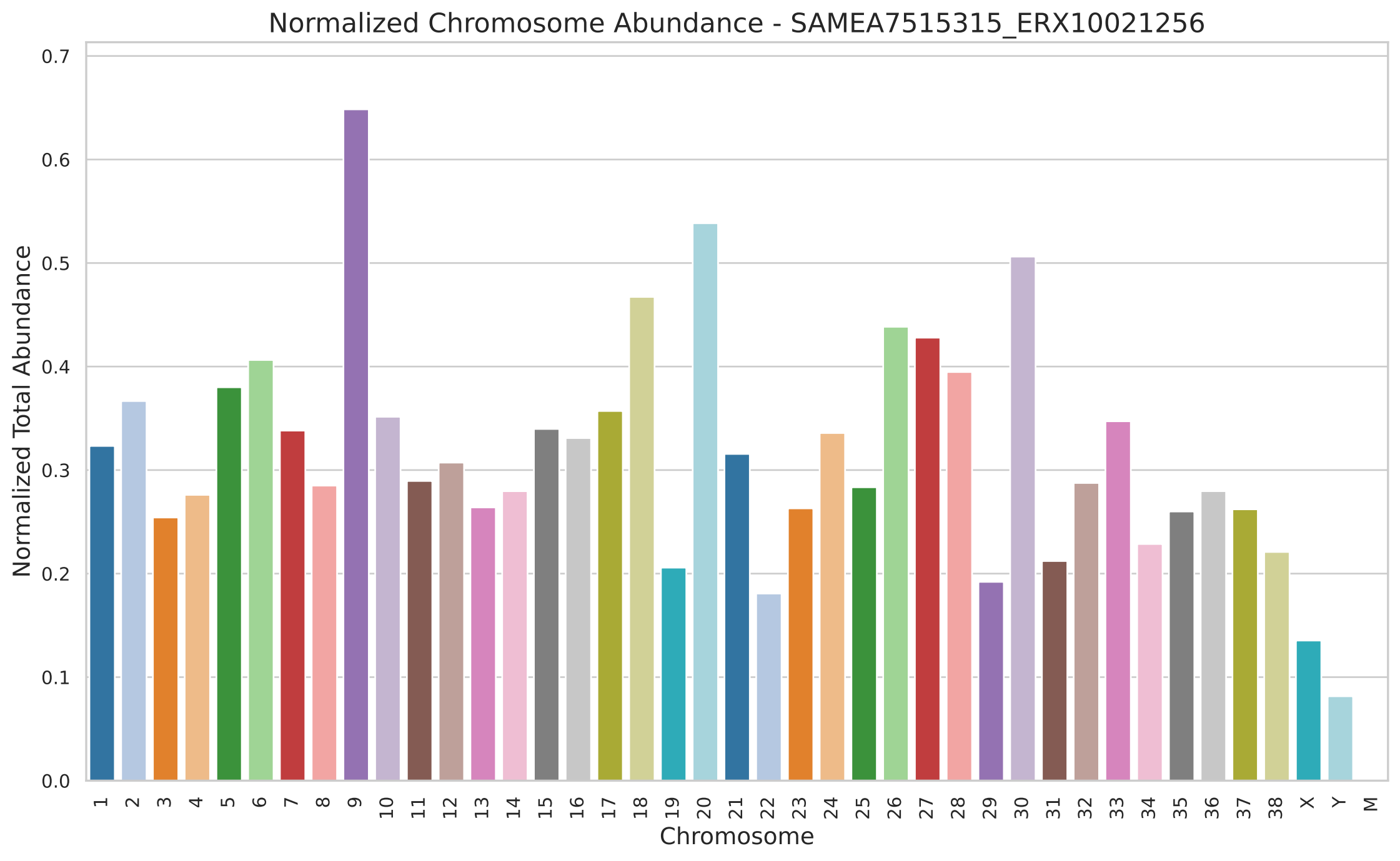

Normalized Chromosome Abundance - SAMN23673763_SRX13323519
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

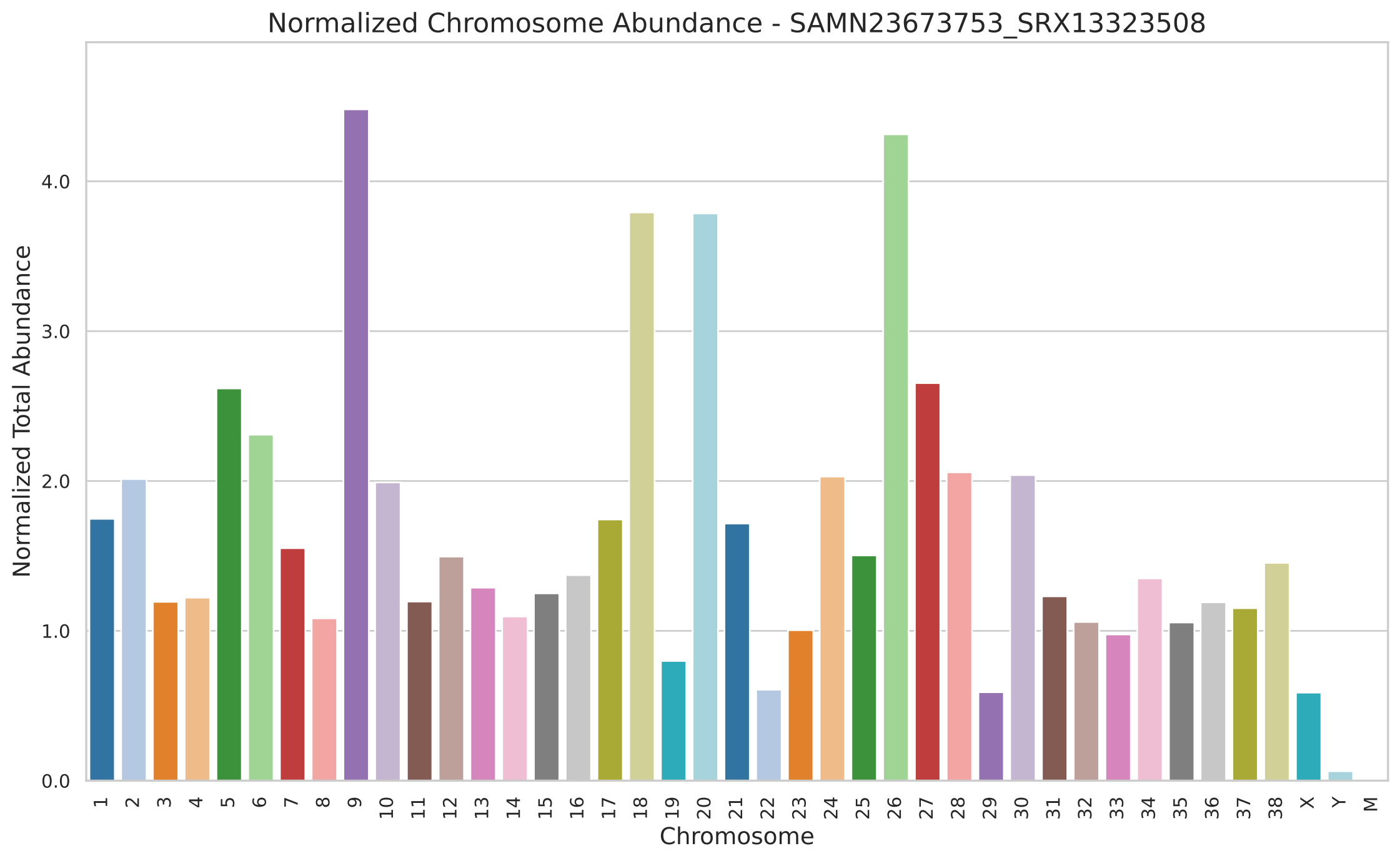

Normalized Chromosome Abundance - SAMEA7515300_ERX10021254
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

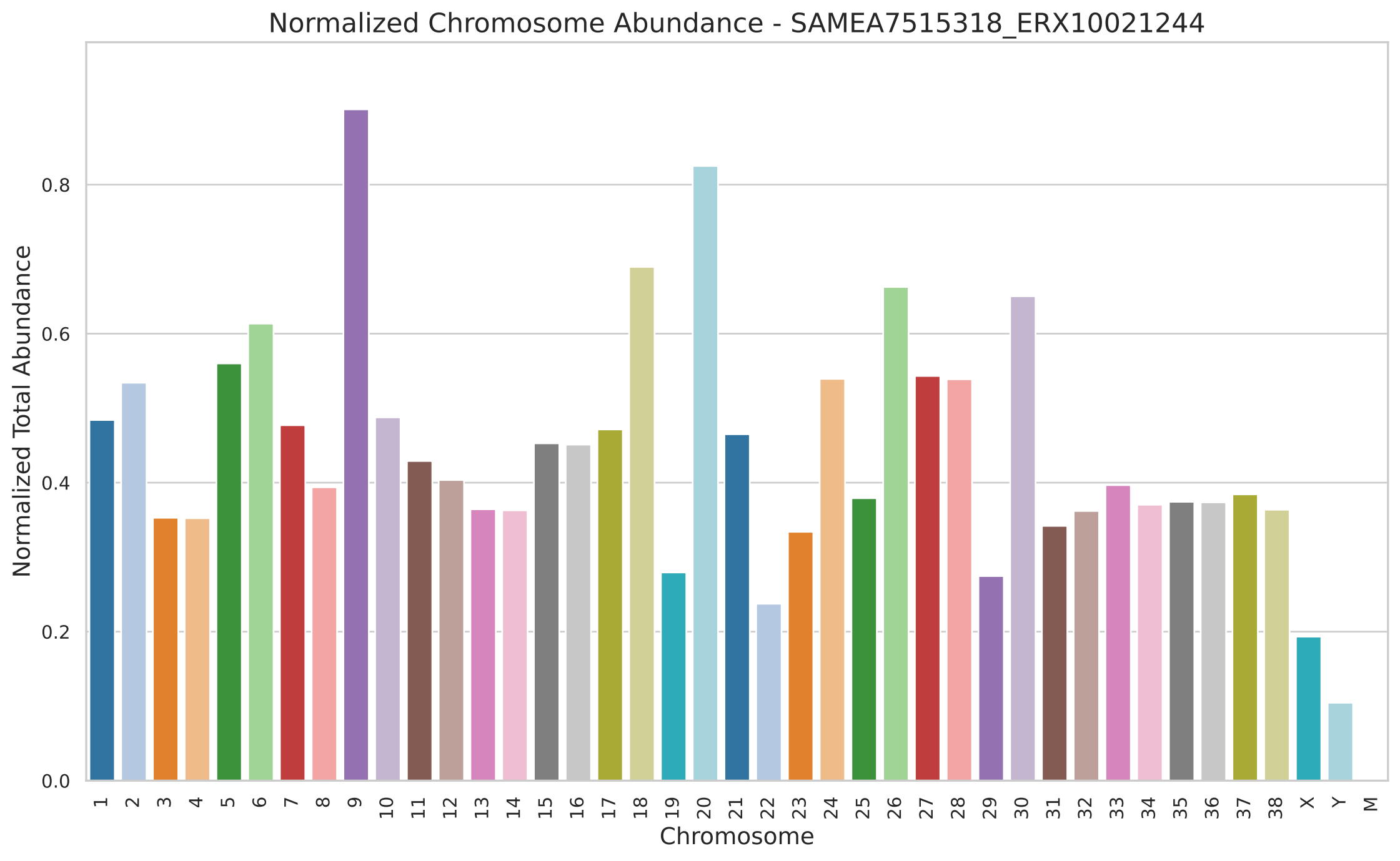

Normalized Chromosome Abundance - SAMEA7515316_ERX10021257
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

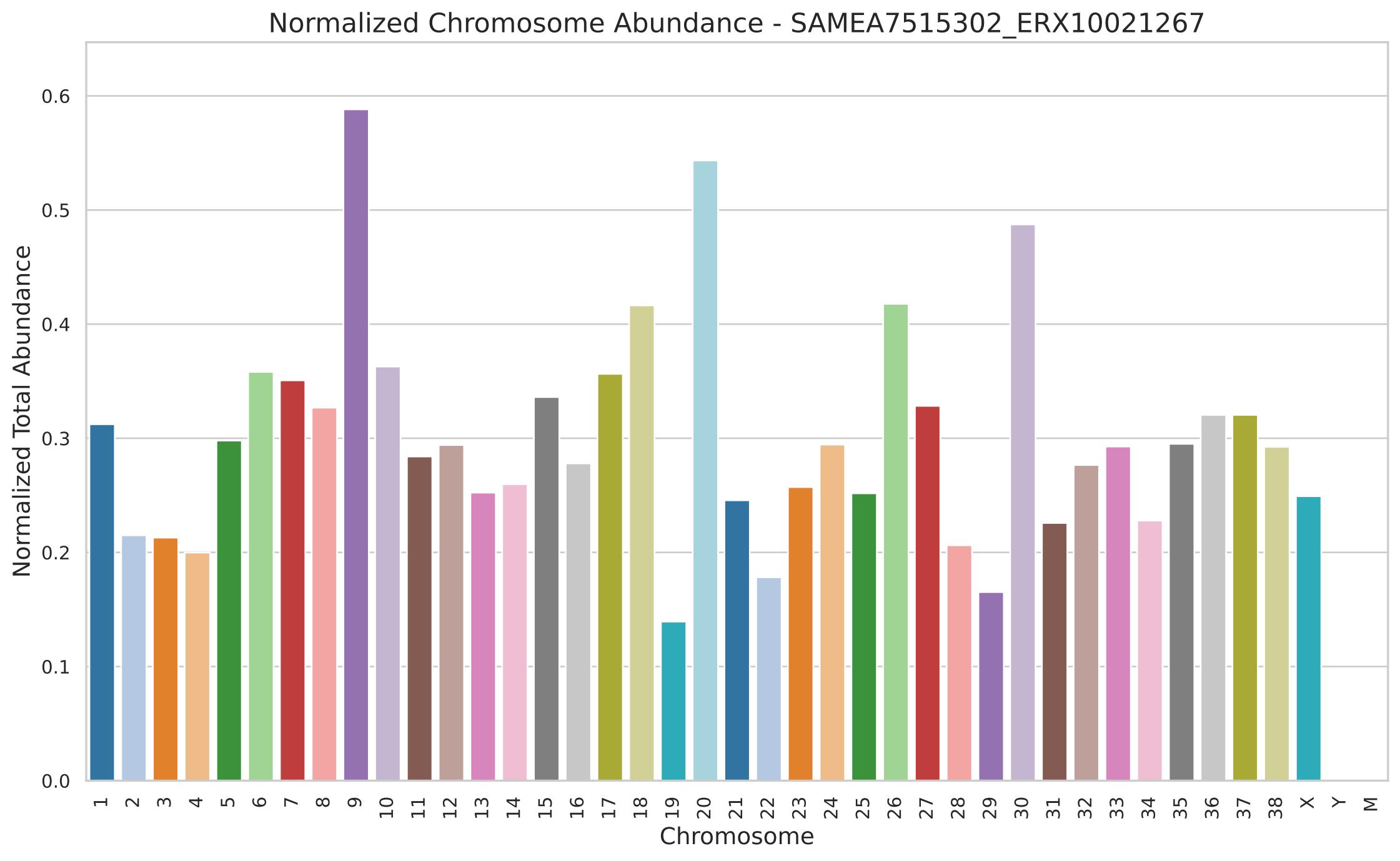

Normalized Chromosome Abundance - SAMEA7515249_ERX10021251
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

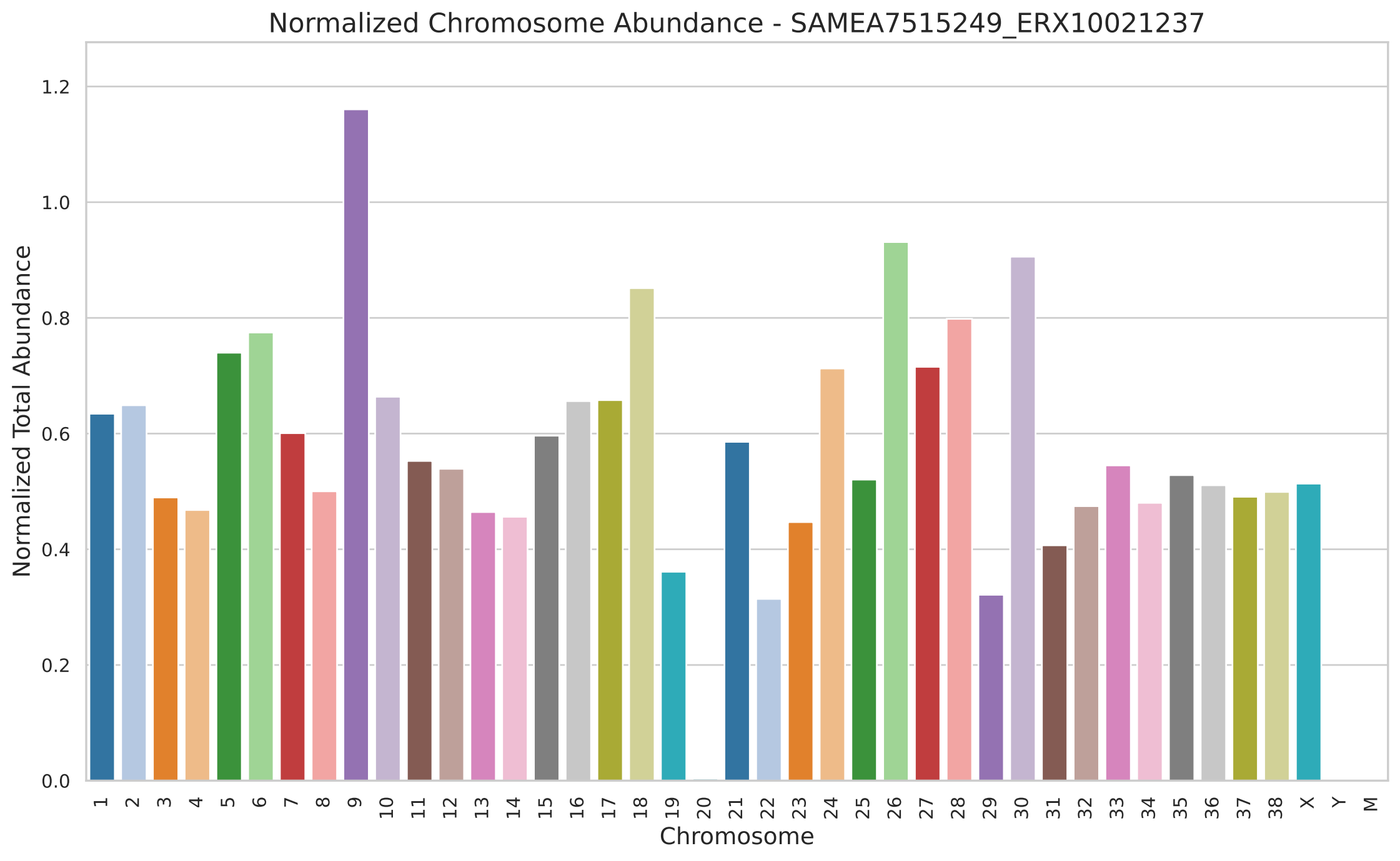

Normalized Chromosome Abundance - SAMN23673770_SRX13323526
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

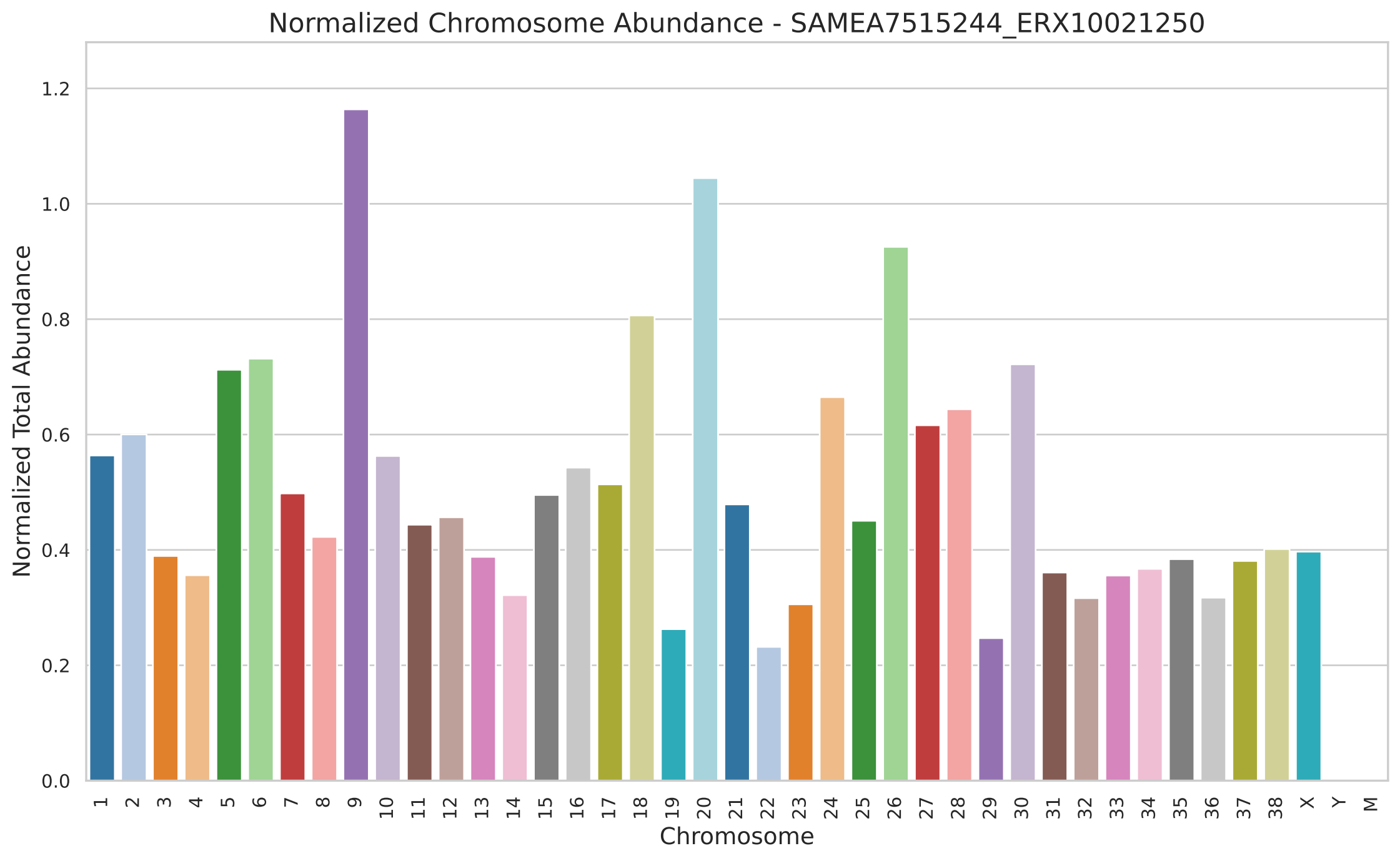

Normalized Chromosome Abundance - SAMEA7515315_ERX10021256
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

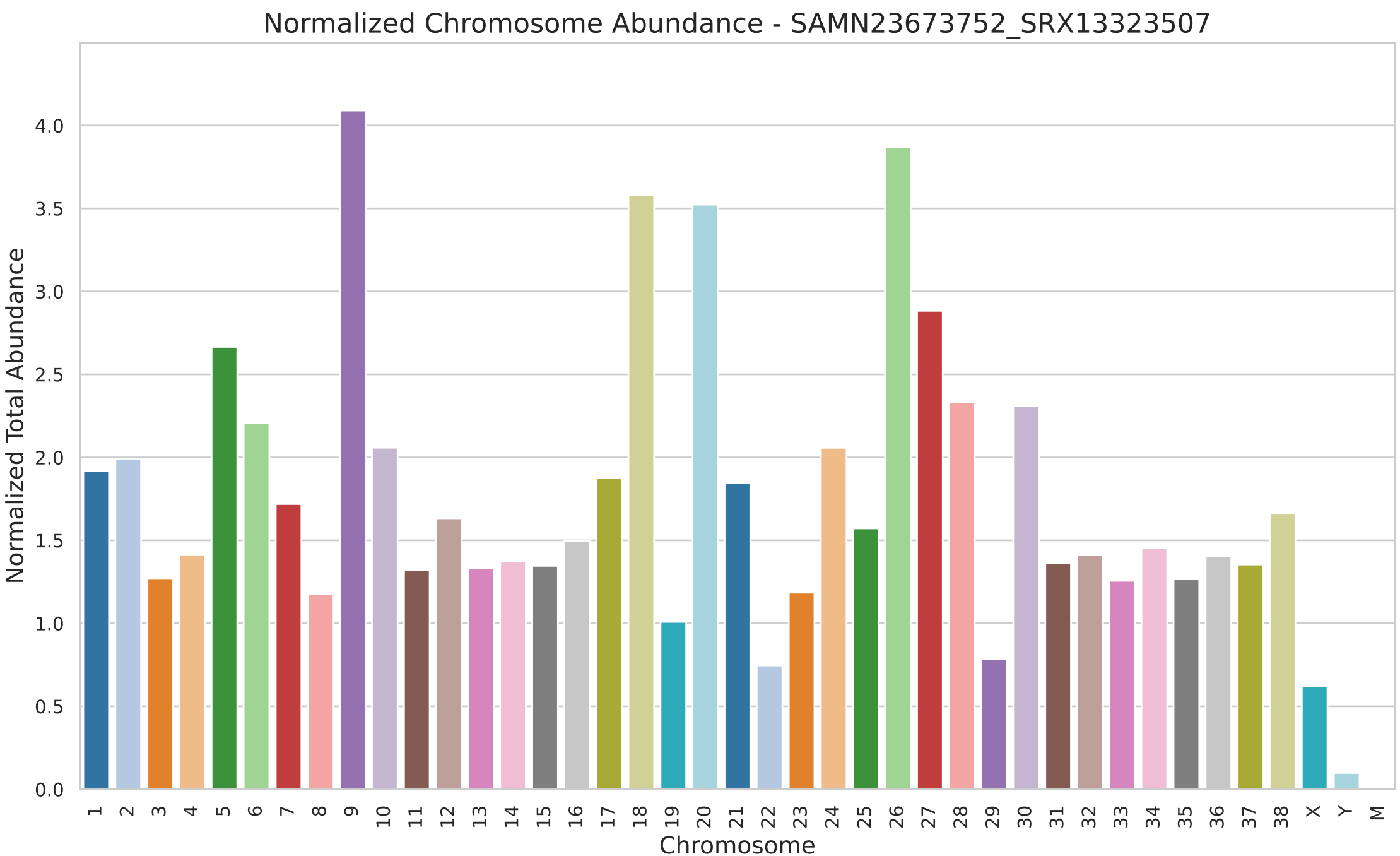

Normalized Chromosome Abundance - SAMN23673753_SRX13323508
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

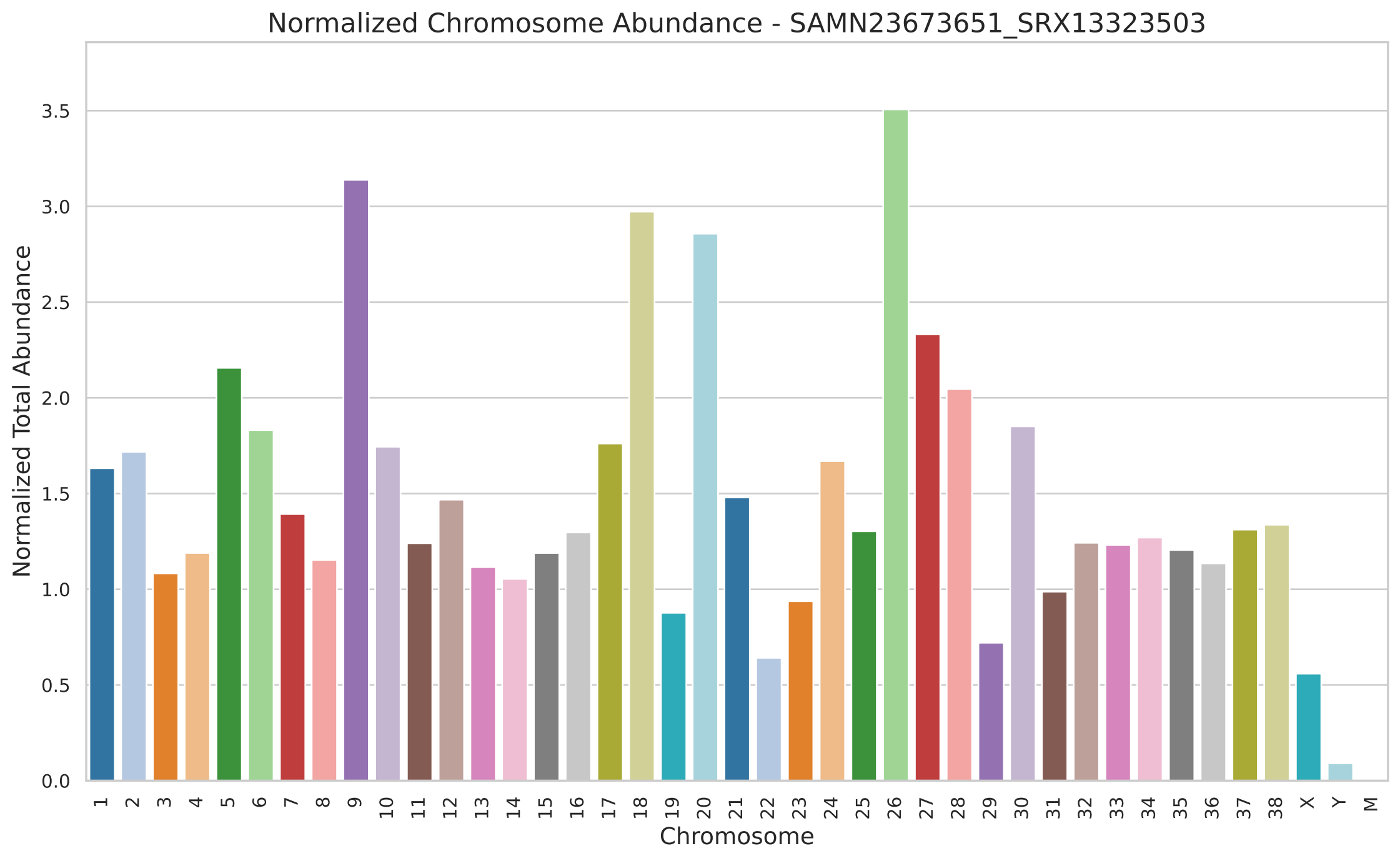

Normalized Chromosome Abundance - SAMEA7515318_ERX10021244
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

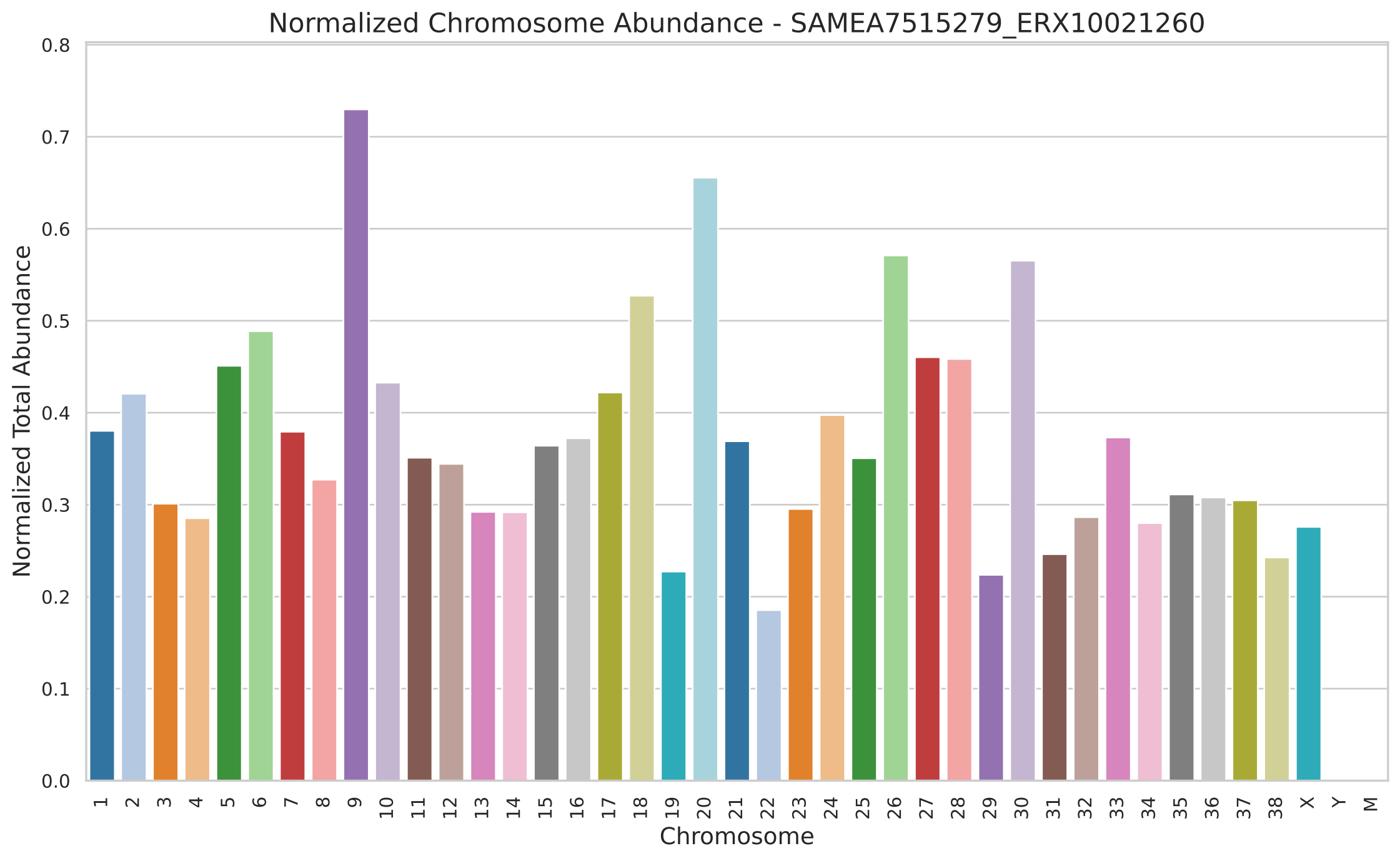

Normalized Chromosome Abundance - SAMEA7515302_ERX10021267
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

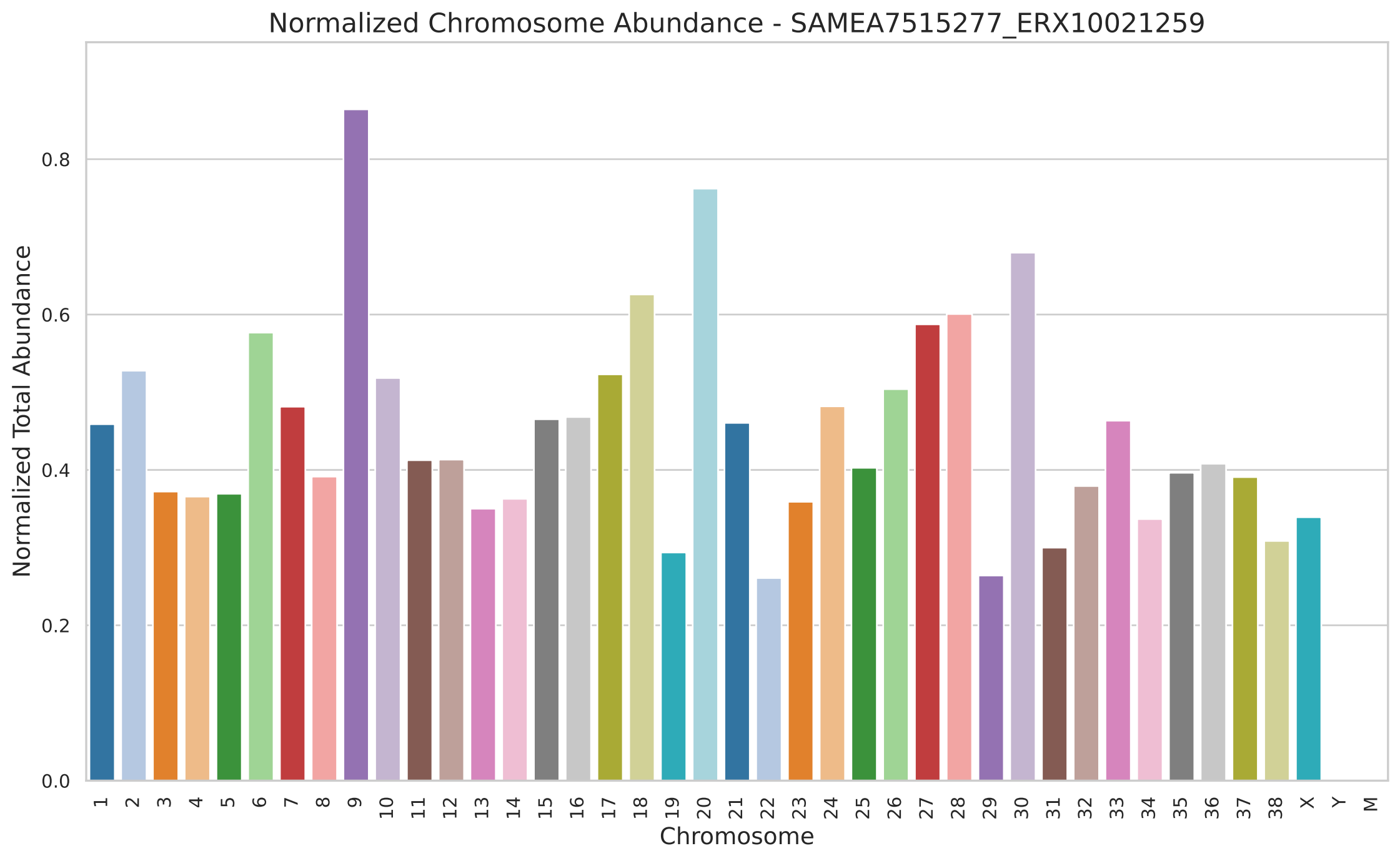

Normalized Chromosome Abundance - SAMEA7515249_ERX10021237
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

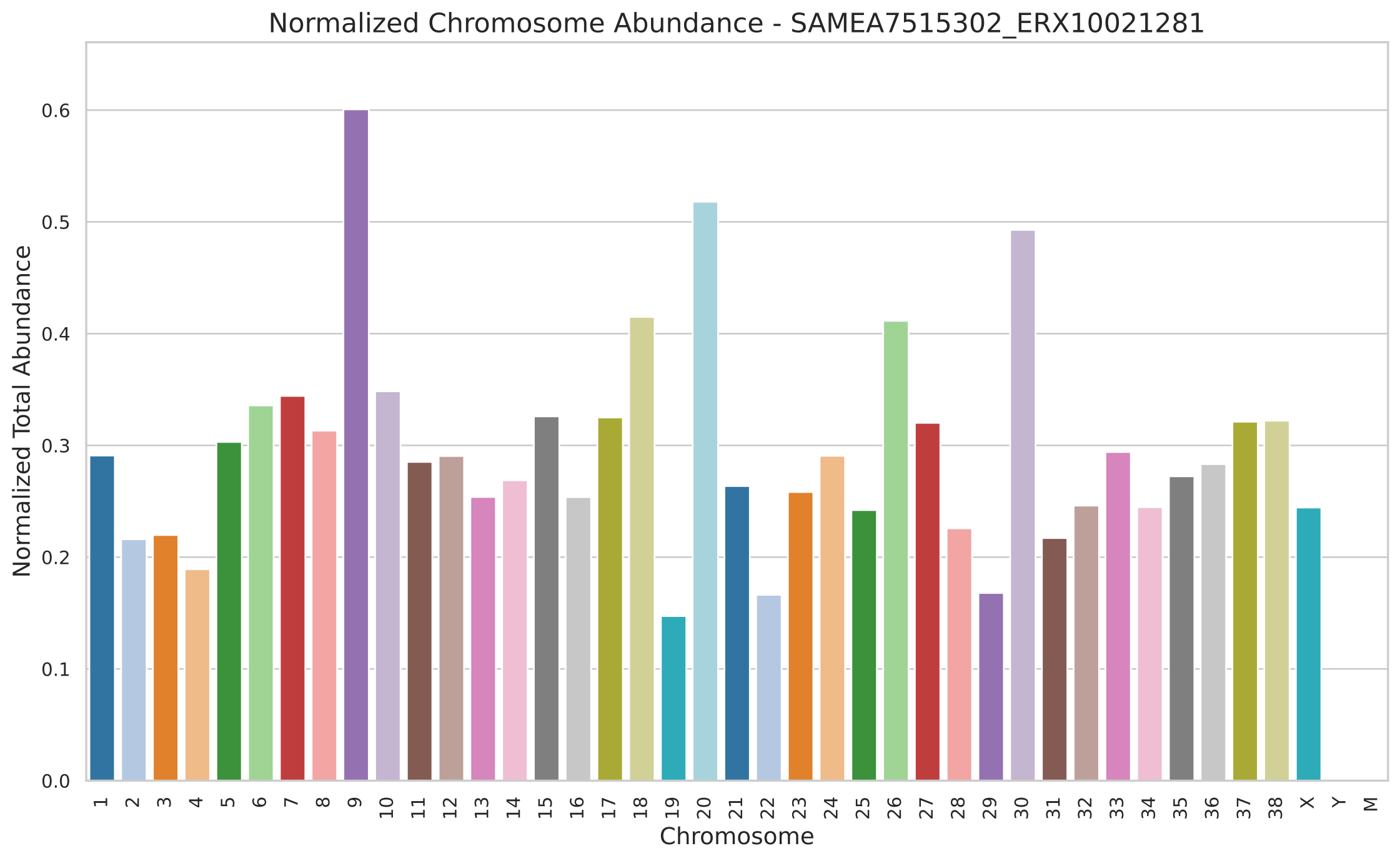

Normalized Chromosome Abundance - SAMEA7515244_ERX10021250
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

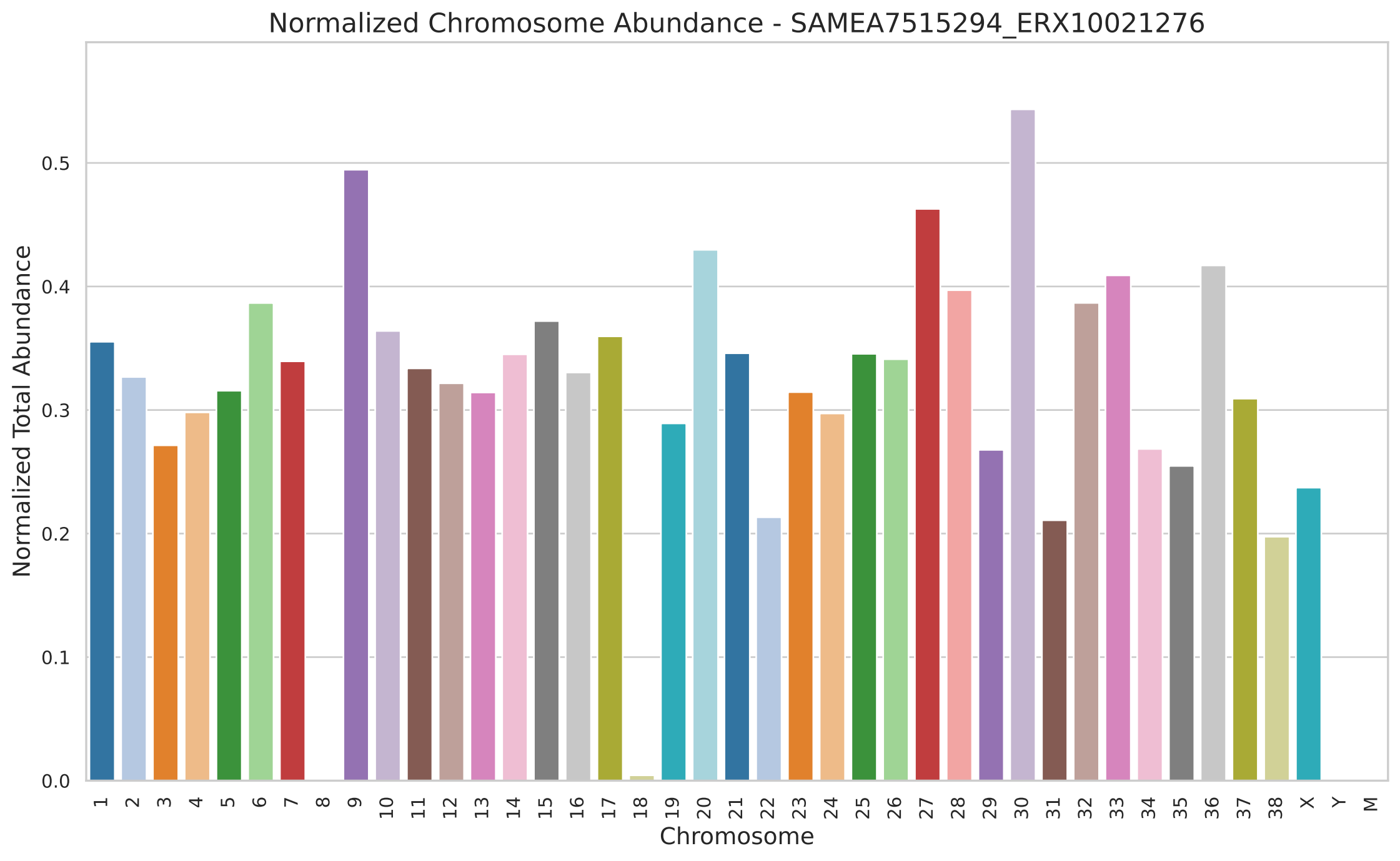

Normalized Chromosome Abundance - SAMN23673752_SRX13323507
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

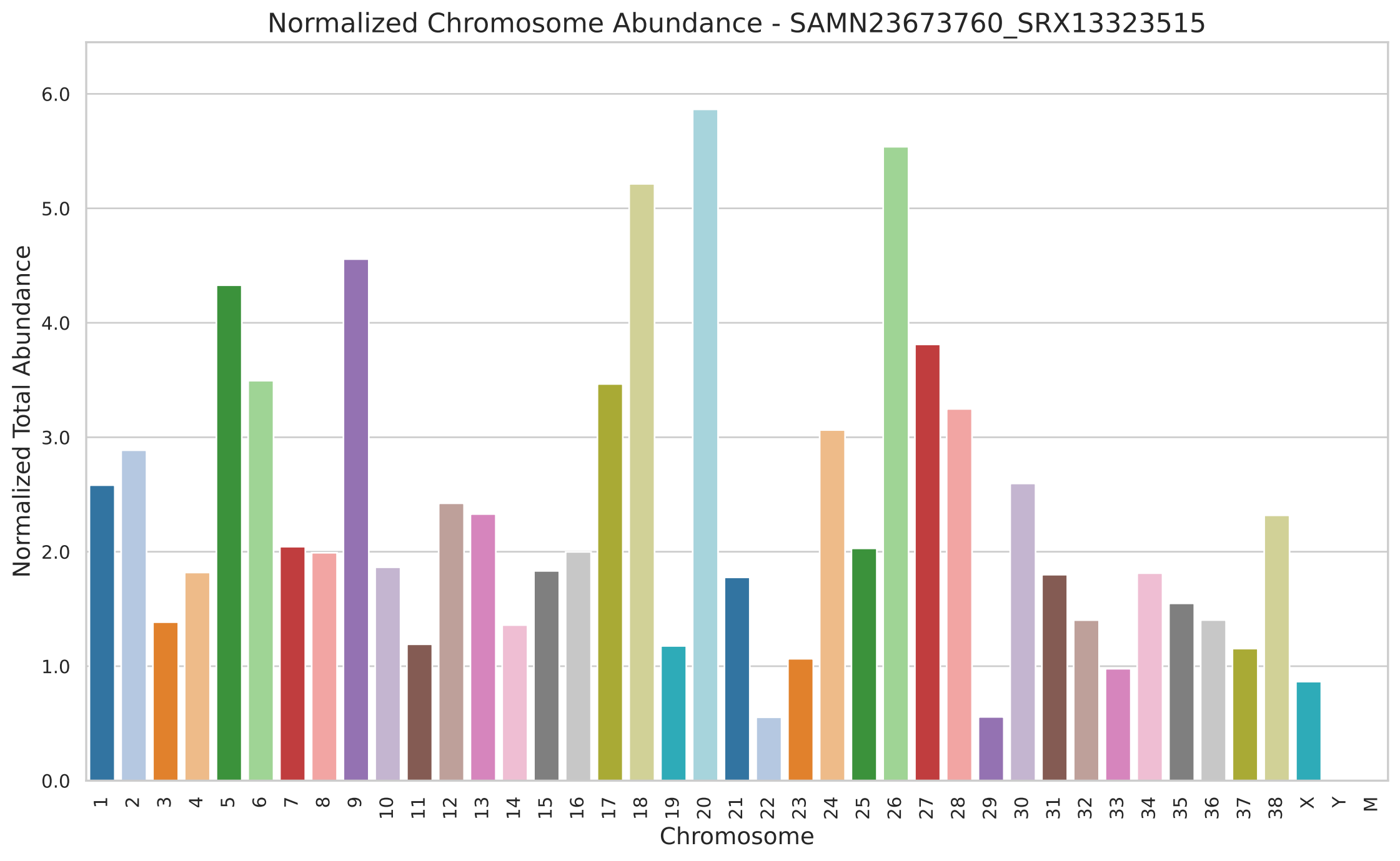

Normalized Chromosome Abundance - SAMN23673651_SRX13323503
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

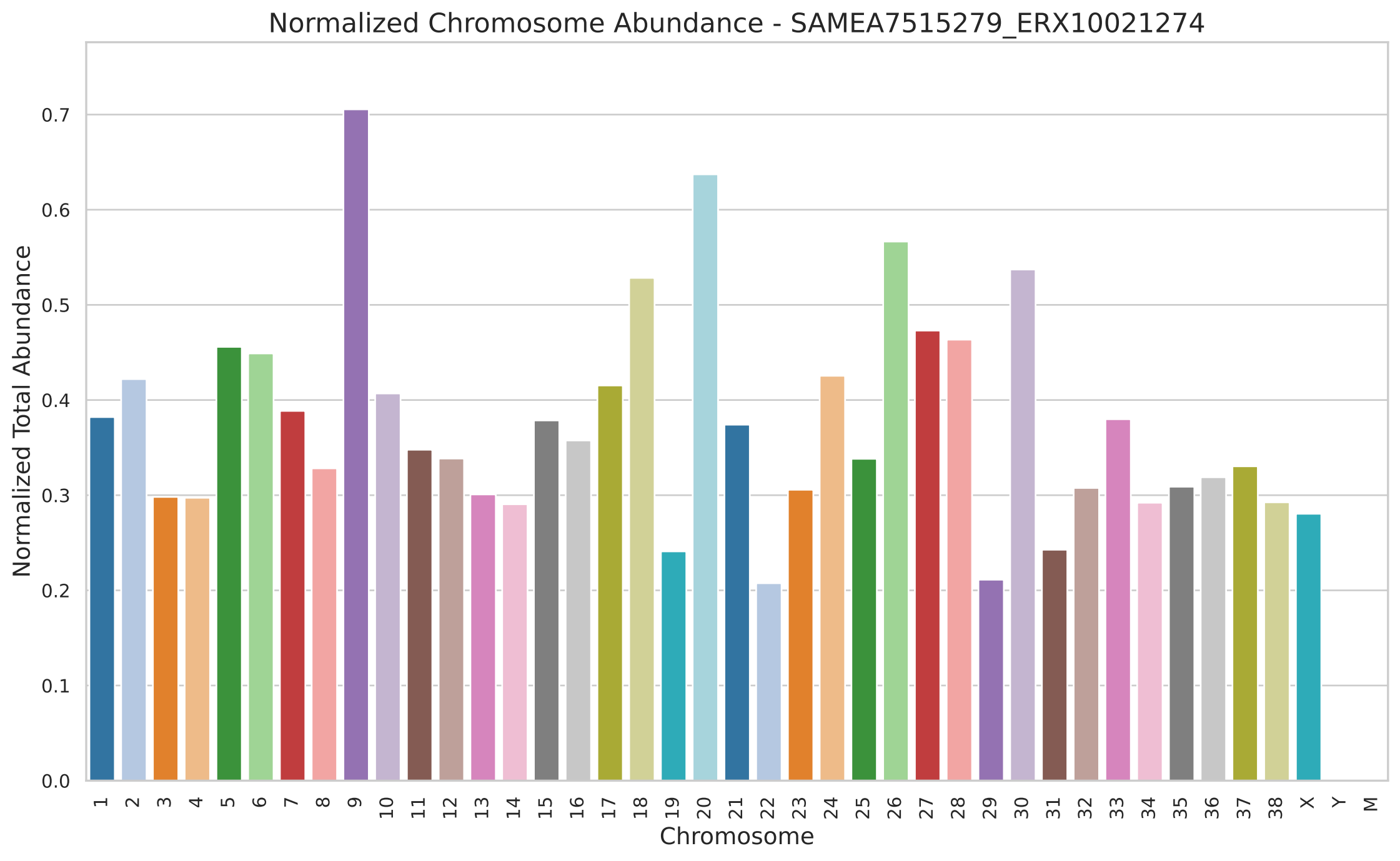

Normalized Chromosome Abundance - SAMEA7515279_ERX10021260
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

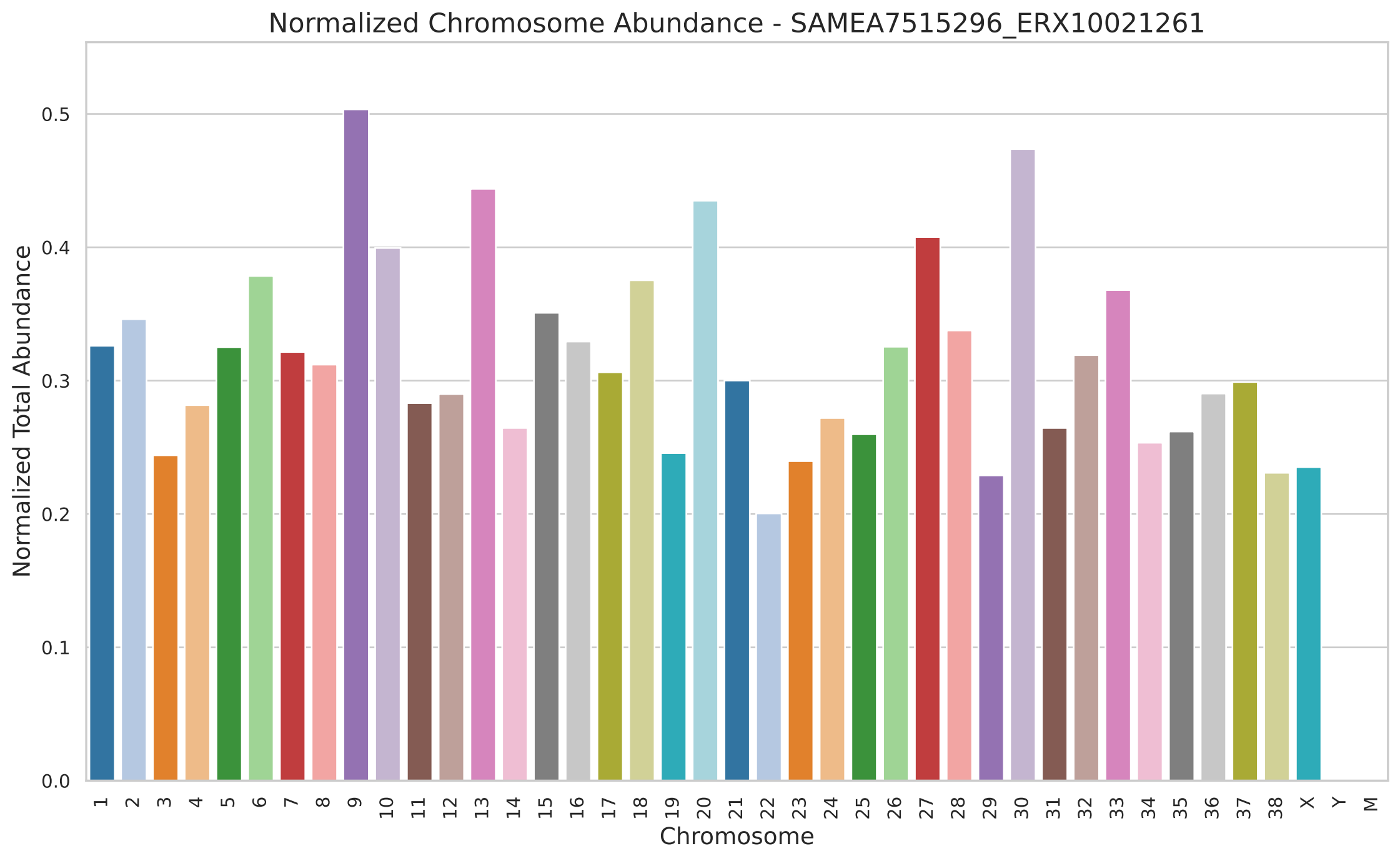

Normalized Chromosome Abundance - SAMEA7515277_ERX10021259
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

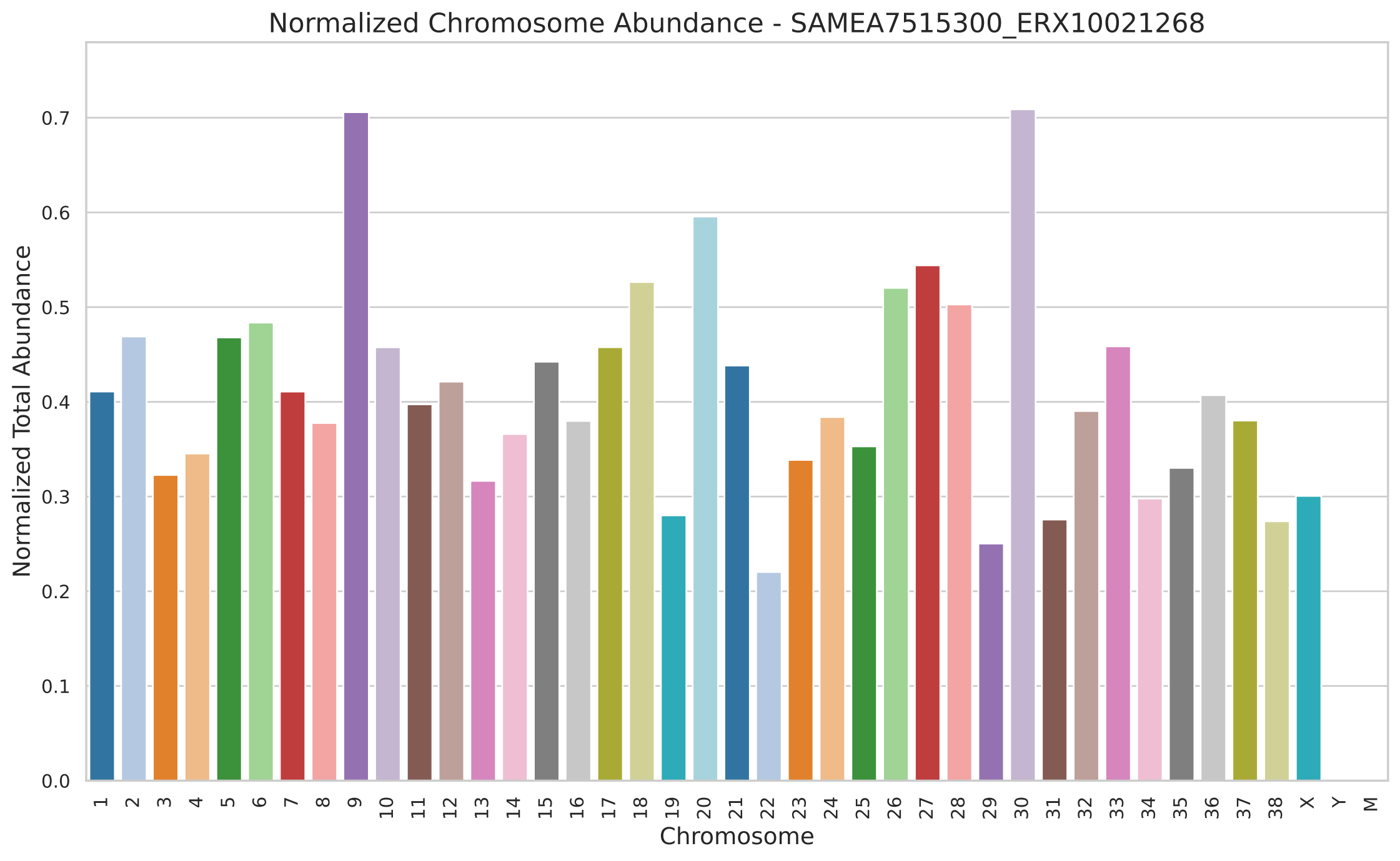

Normalized Chromosome Abundance - SAMEA7515302_ERX10021281
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

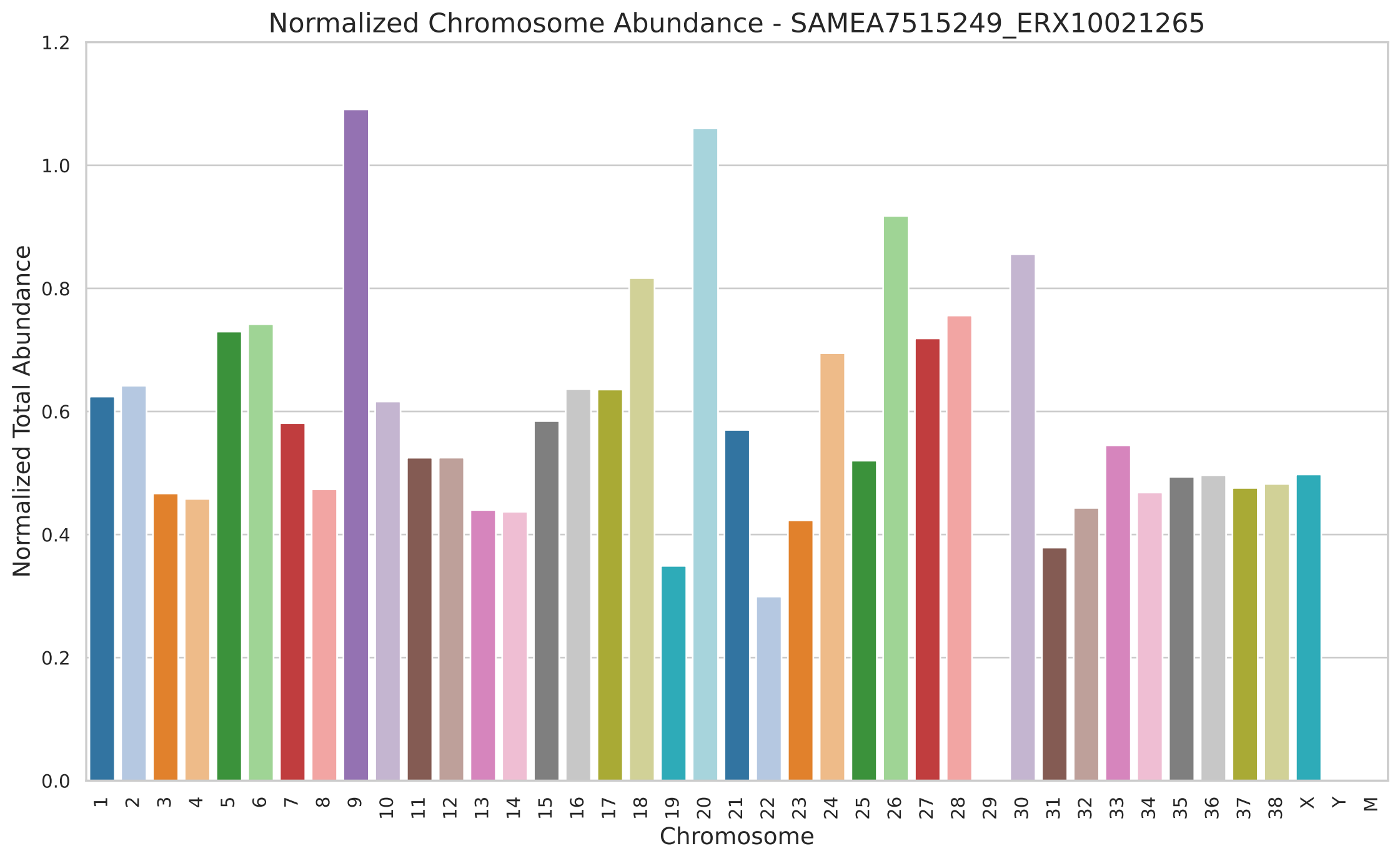

Normalized Chromosome Abundance - SAMEA7515294_ERX10021276
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

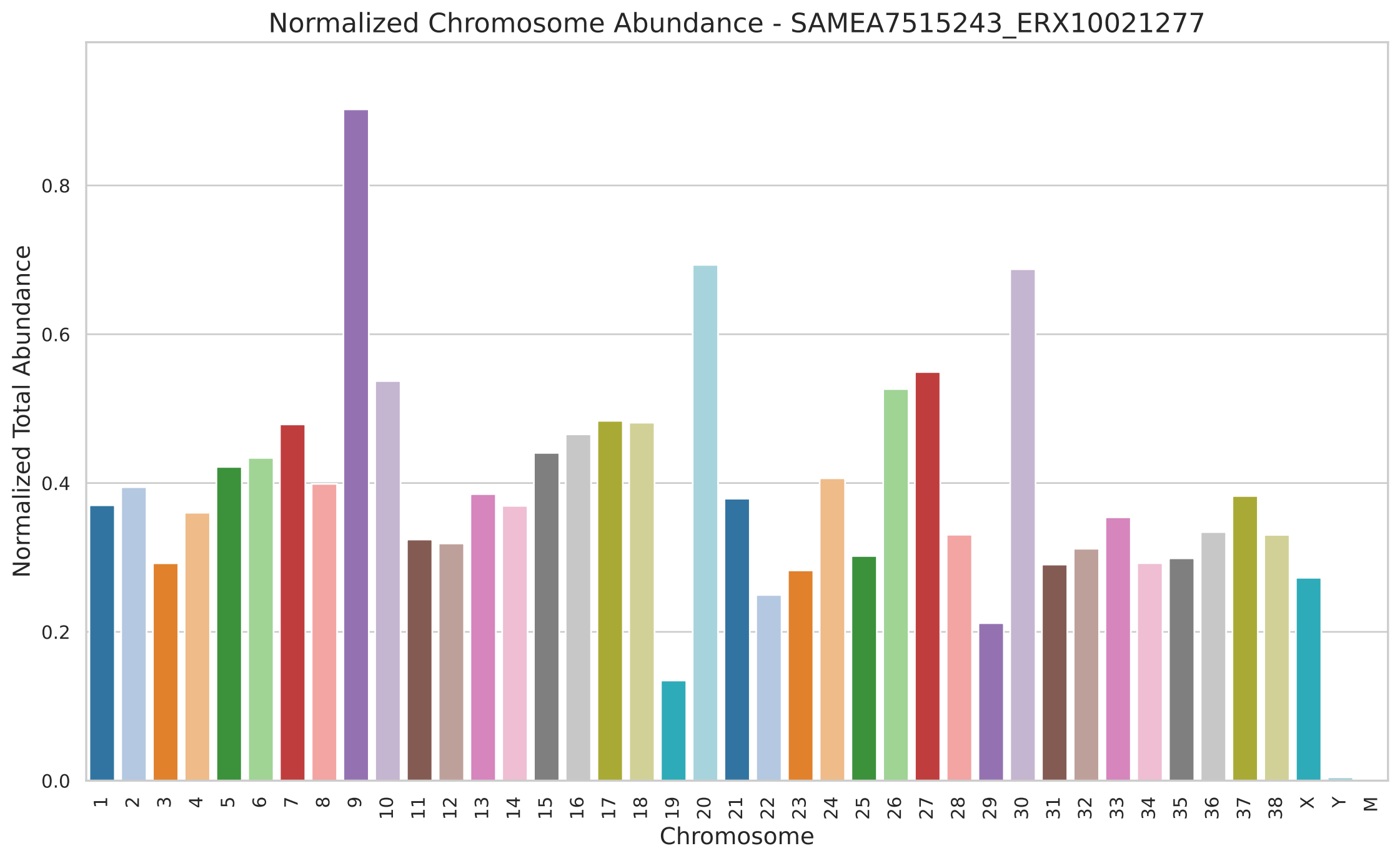

Normalized Chromosome Abundance - SAMN23673760_SRX13323515
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

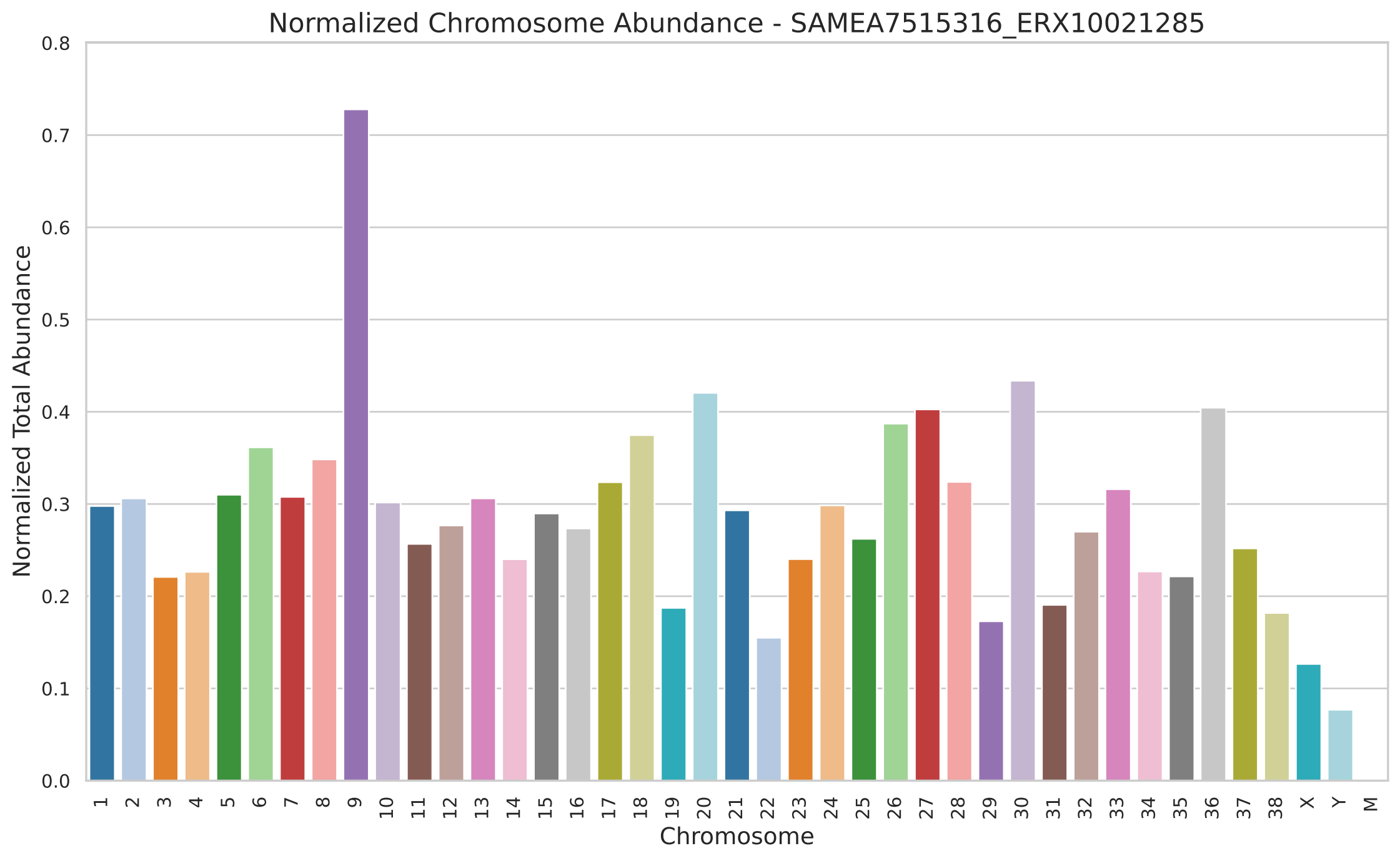

Normalized Chromosome Abundance - SAMEA7515279_ERX10021274
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

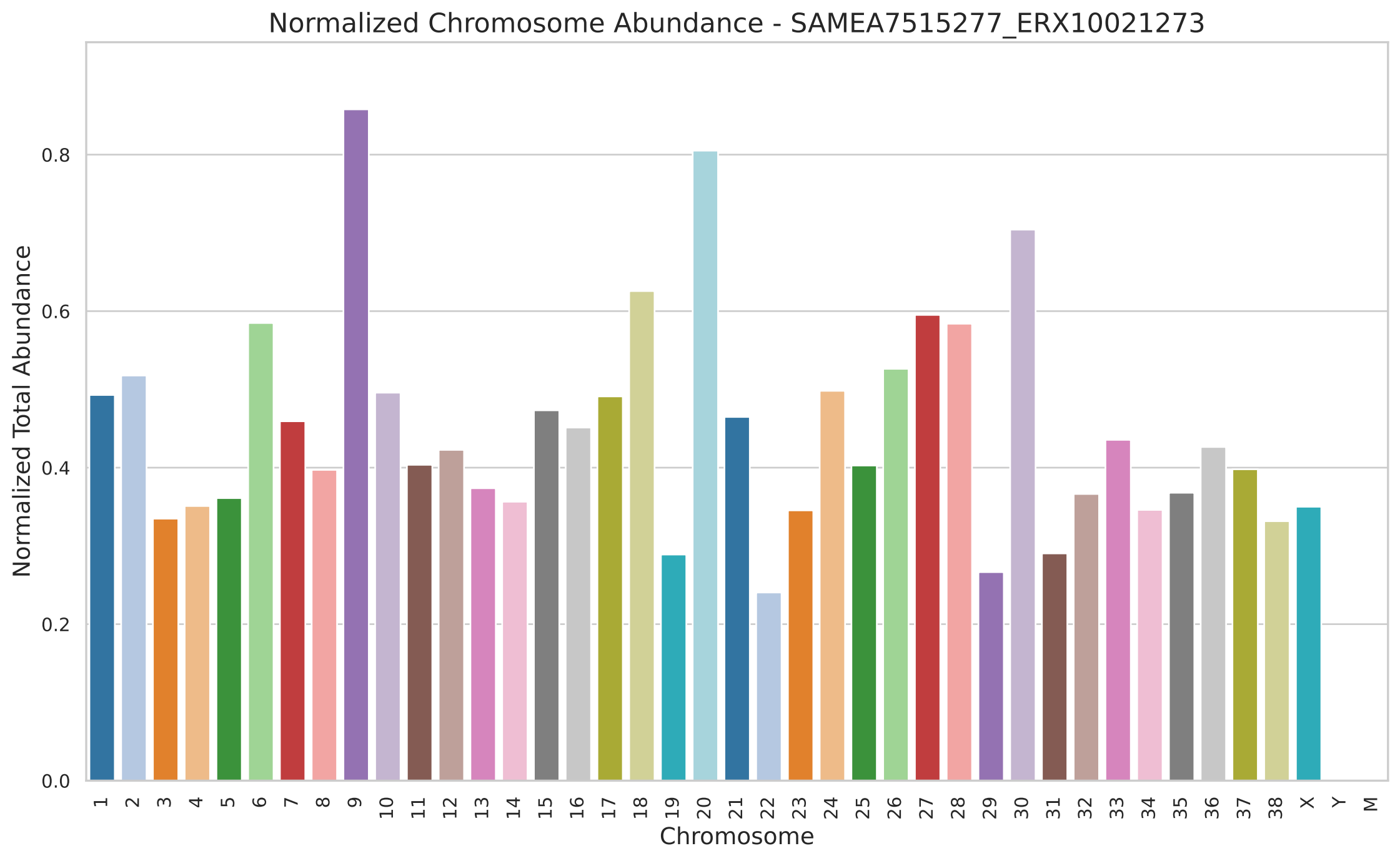

Normalized Chromosome Abundance - SAMEA7515296_ERX10021261
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

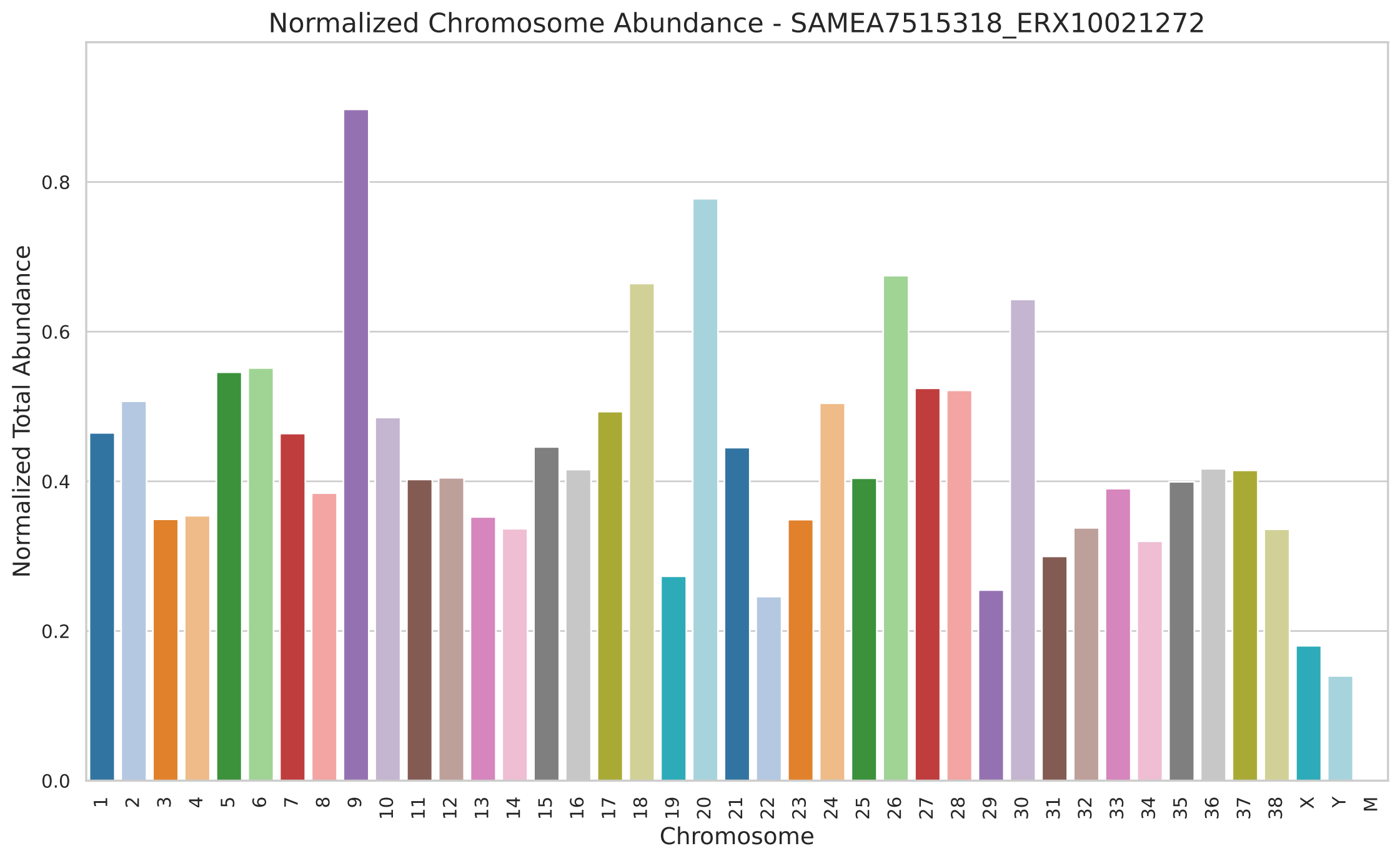

Normalized Chromosome Abundance - SAMEA7515300_ERX10021268
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

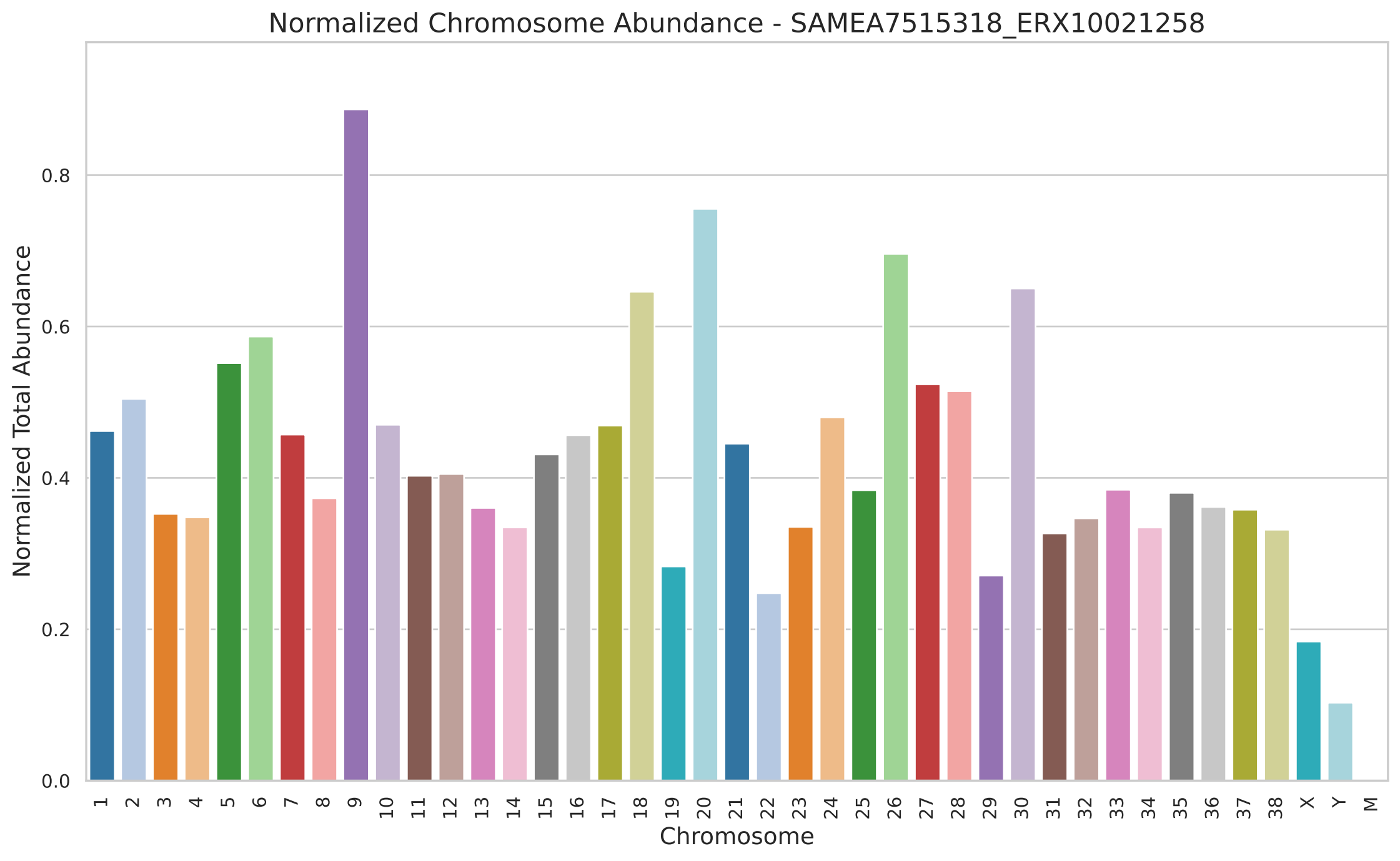

Normalized Chromosome Abundance - SAMEA7515249_ERX10021265
Normalized Total Abundance
1.2
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

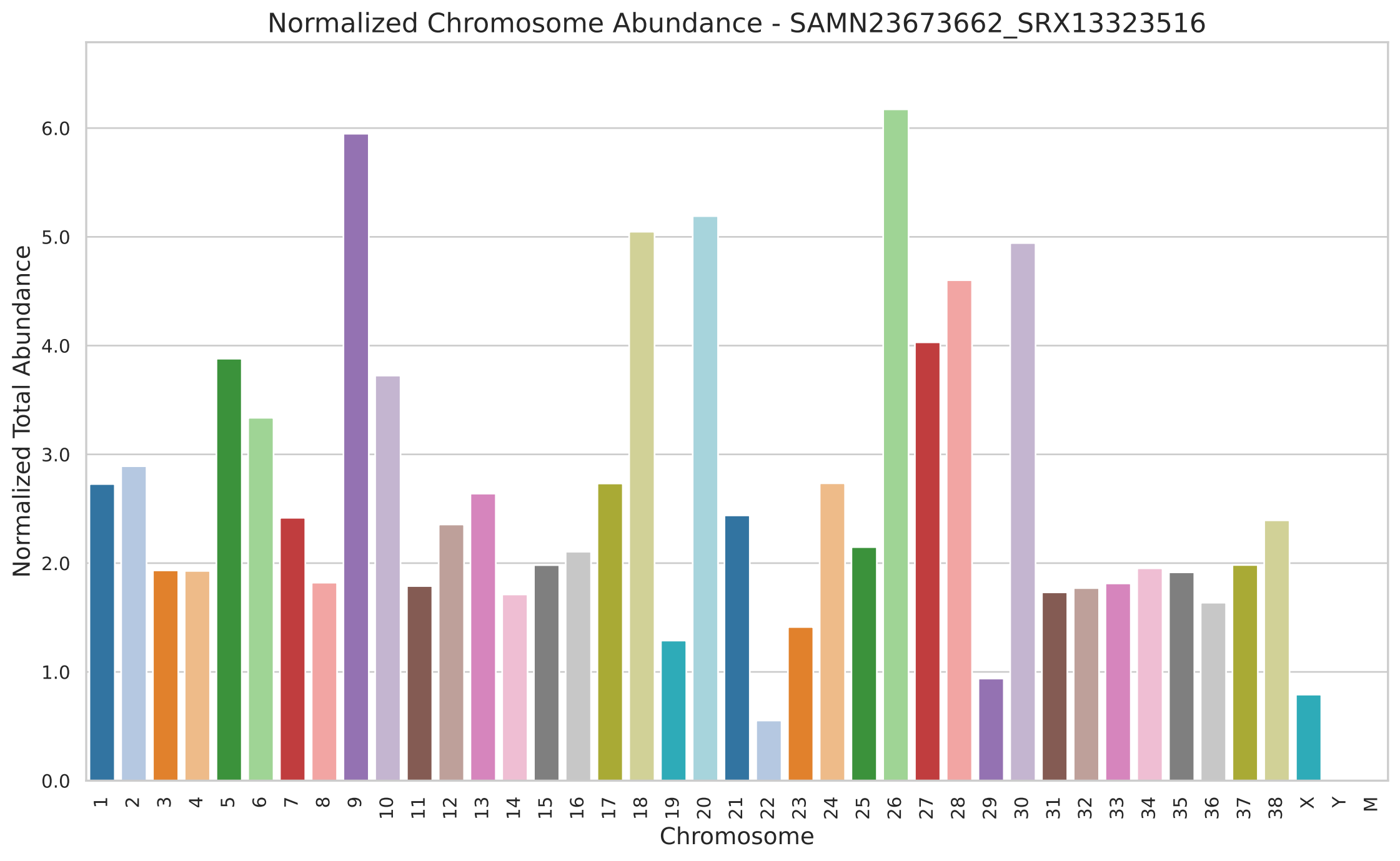

Normalized Chromosome Abundance - SAMEA7515243_ERX10021277
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

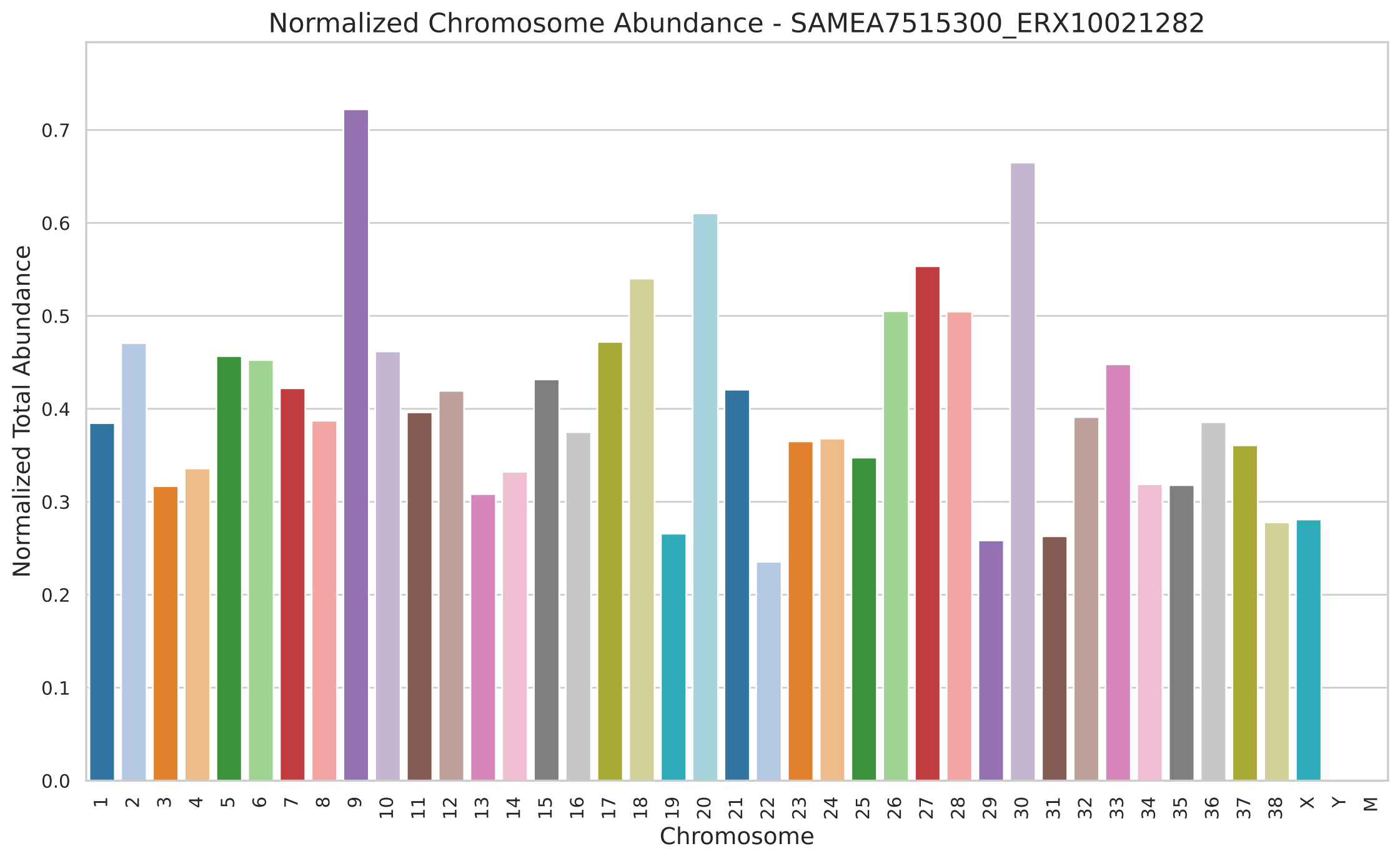

Normalized Chromosome Abundance - SAMEA7515316_ERX10021285
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

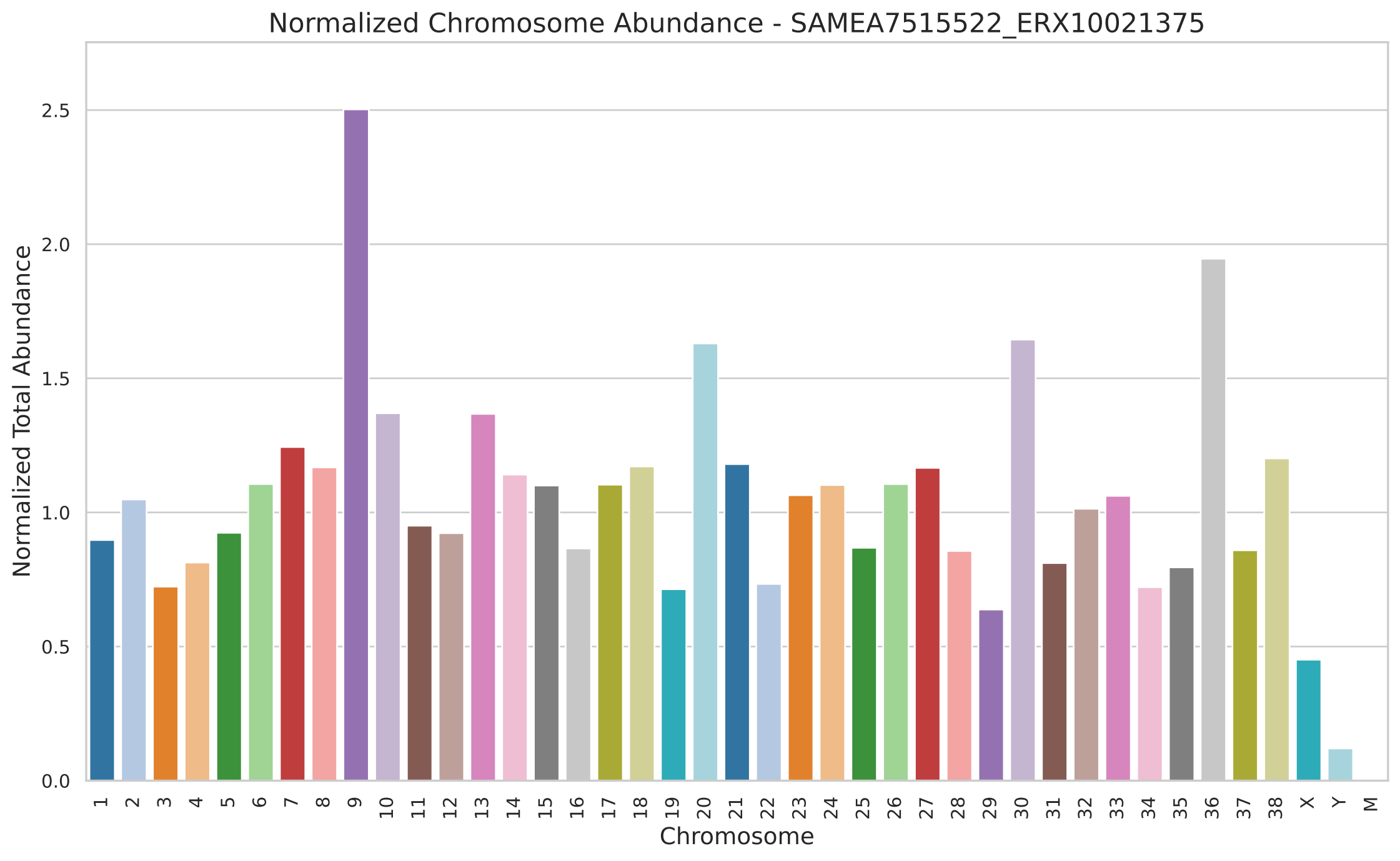

Normalized Chromosome Abundance - SAMEA7515277_ERX10021273
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

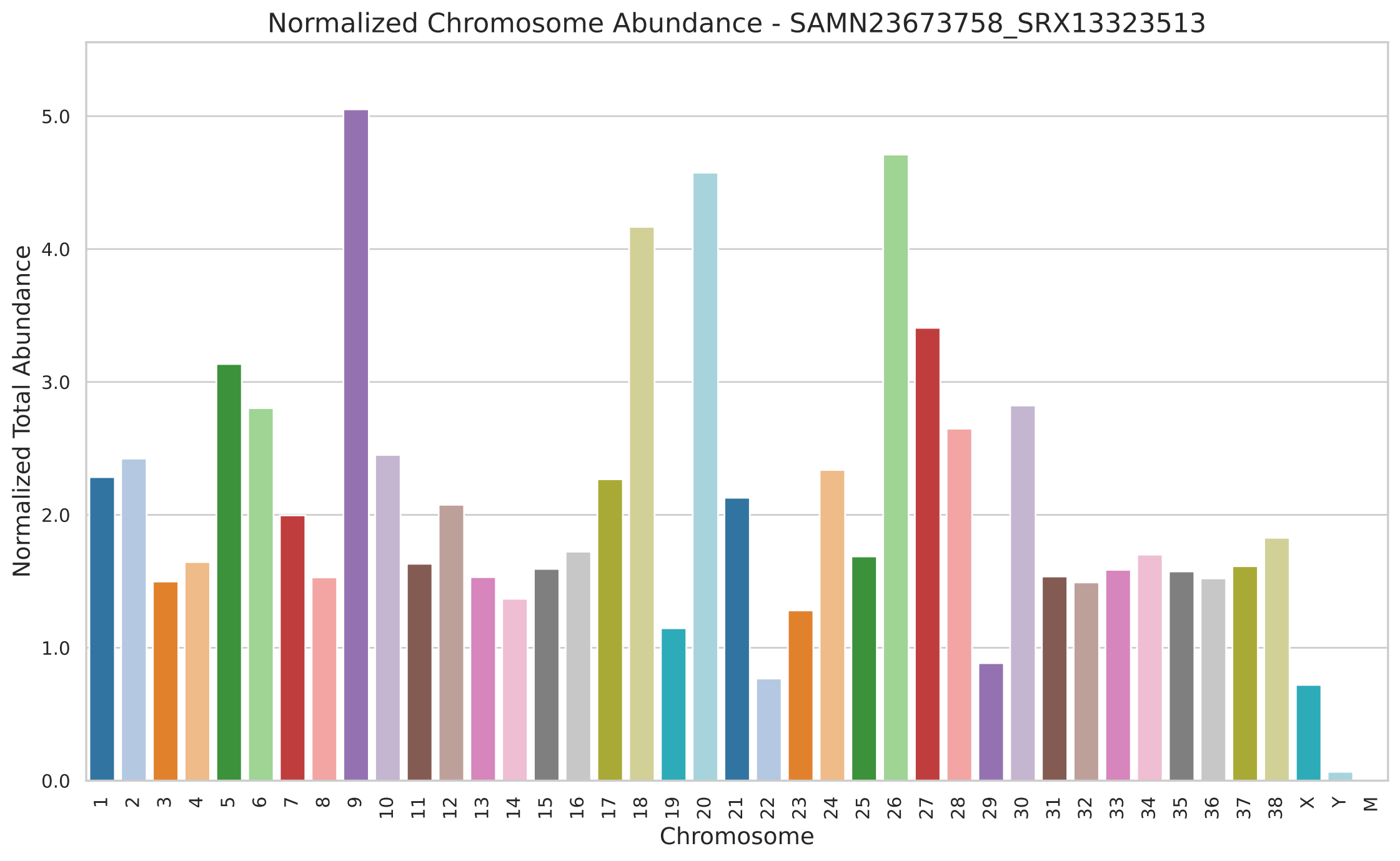

Normalized Chromosome Abundance - SAMEA7515318_ERX10021272
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

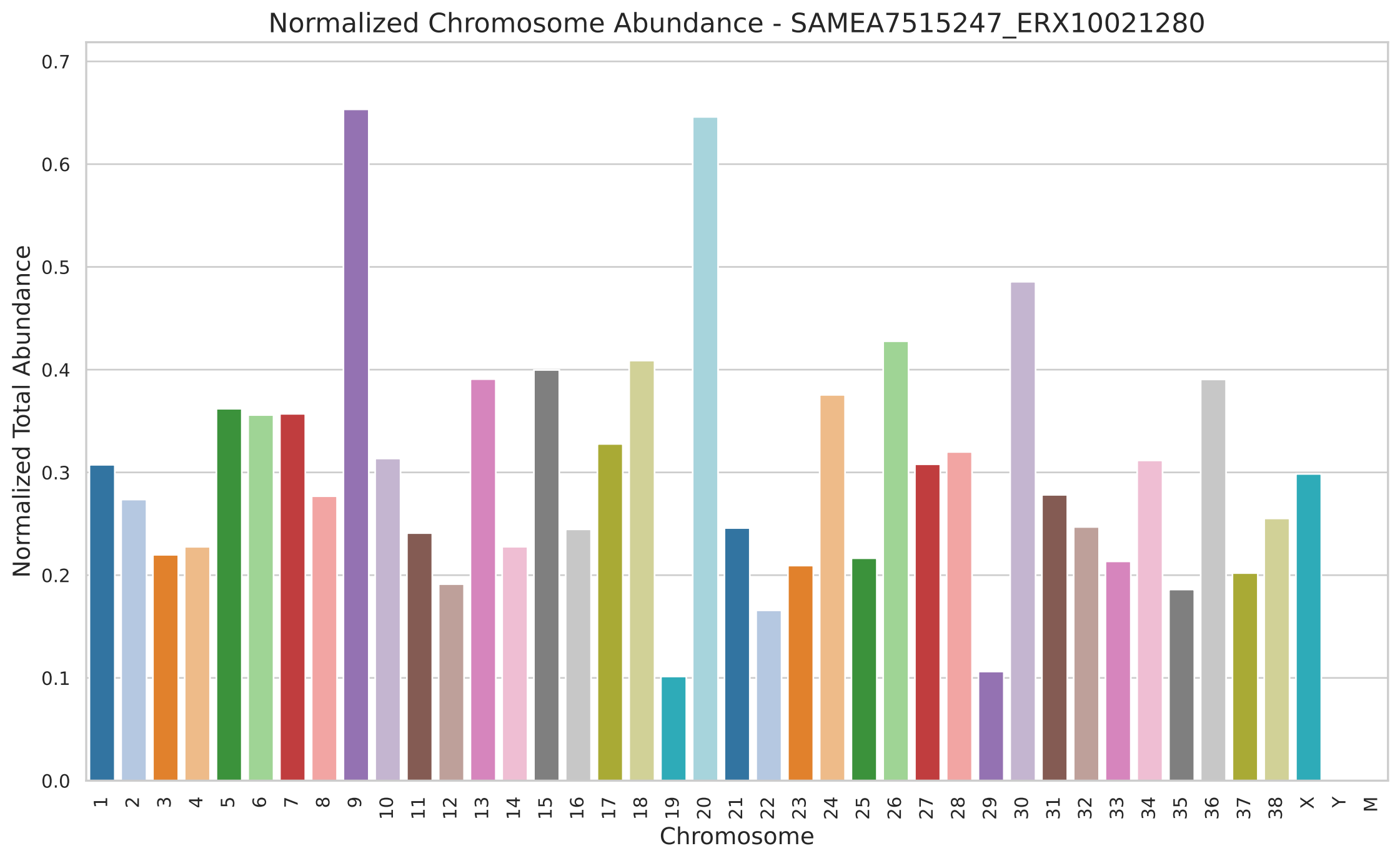

Normalized Chromosome Abundance - SAMEA7515318_ERX10021258
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

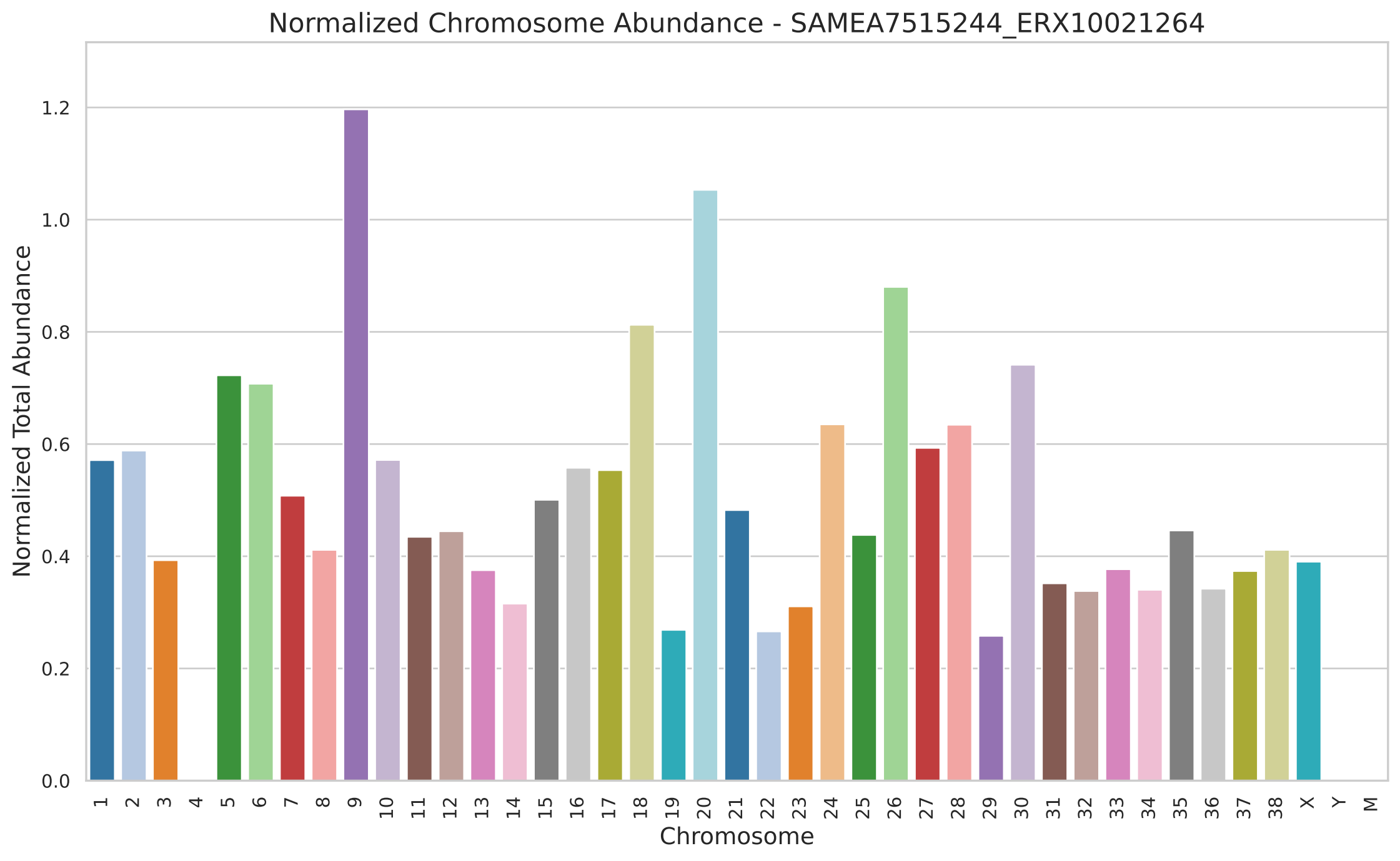

Normalized Chromosome Abundance - SAMN23673662_SRX13323516
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

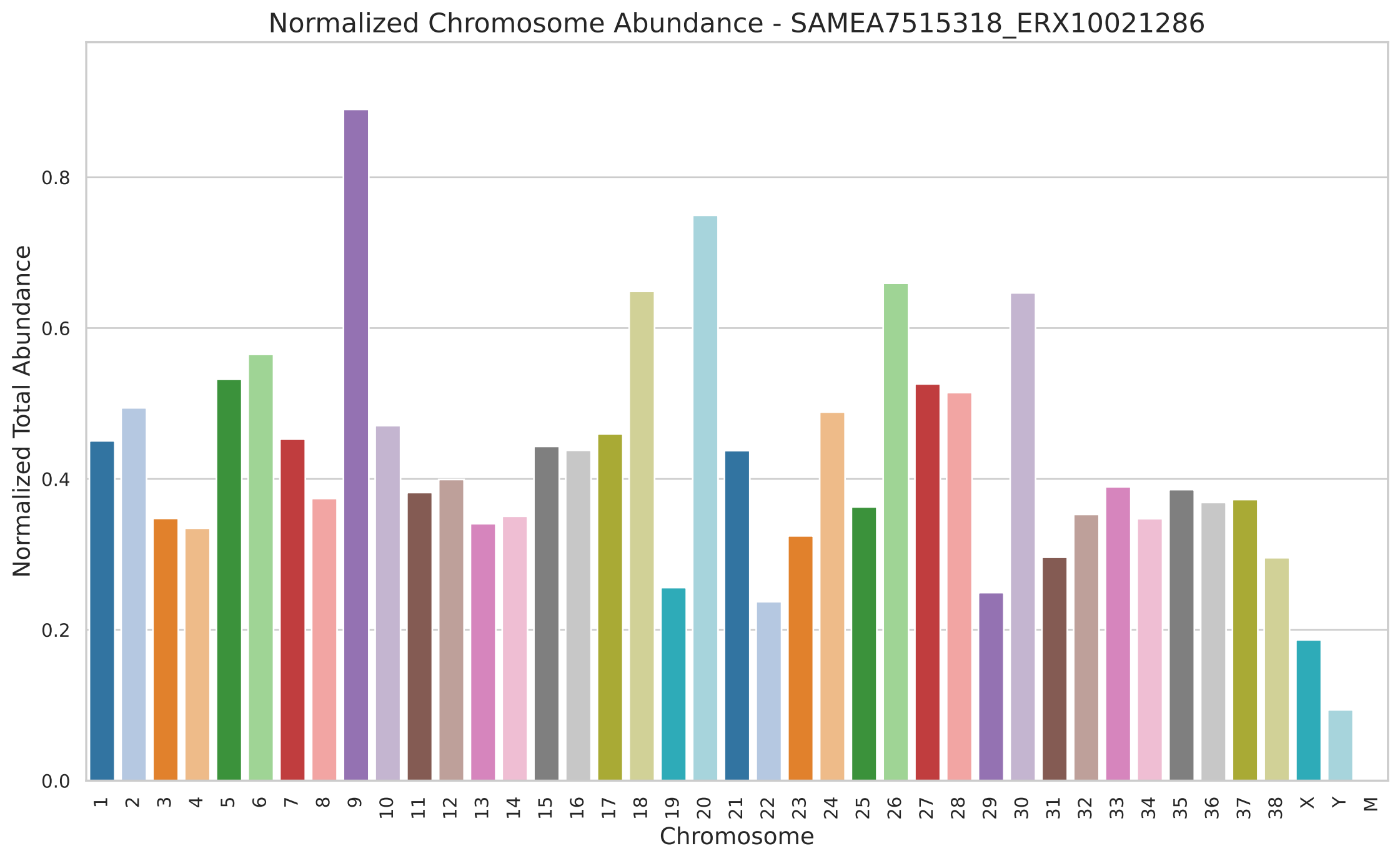

Normalized Chromosome Abundance - SAMEA7515300_ERX10021282
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

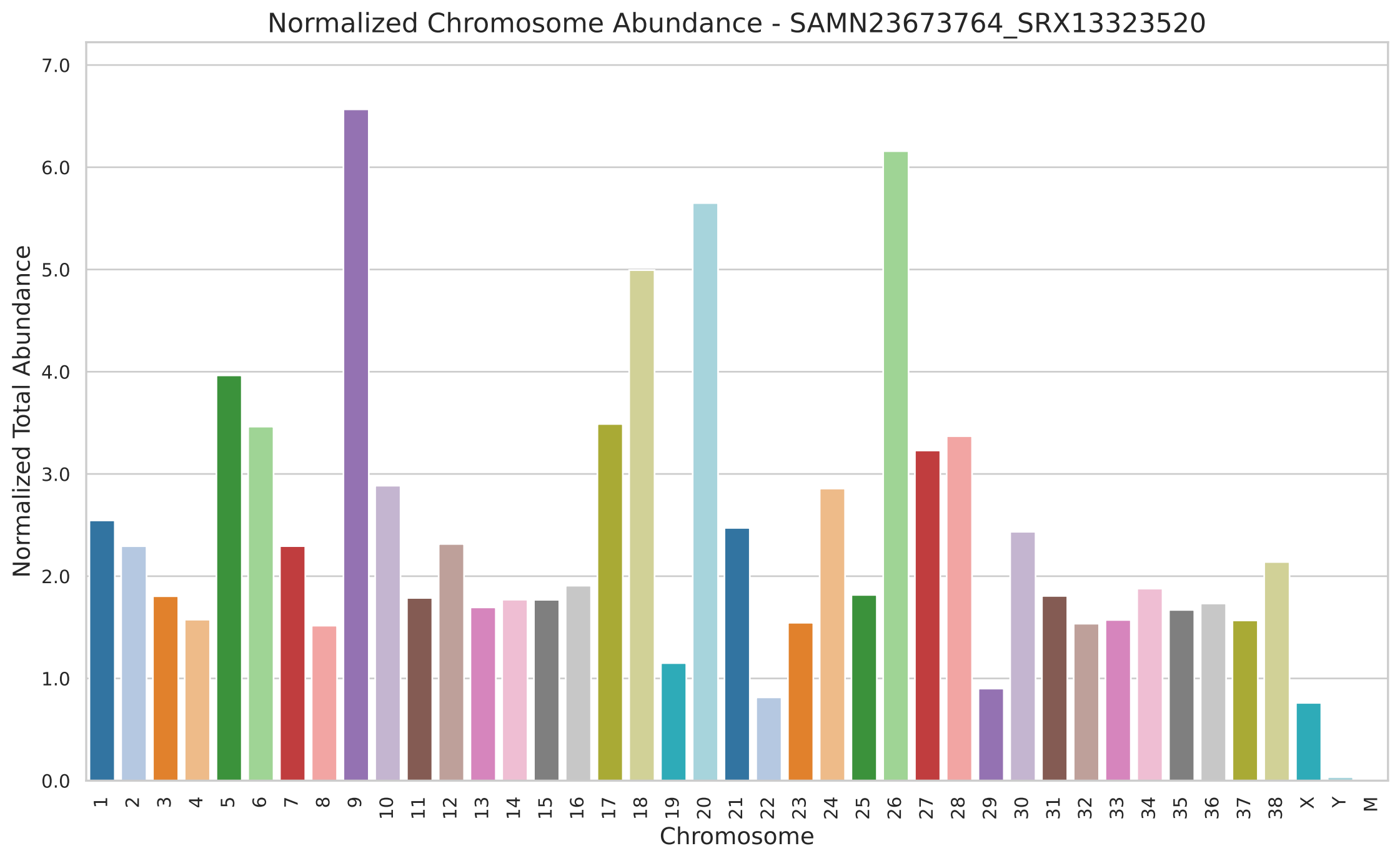

Normalized Chromosome Abundance - SAMEA7515522_ERX10021375
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

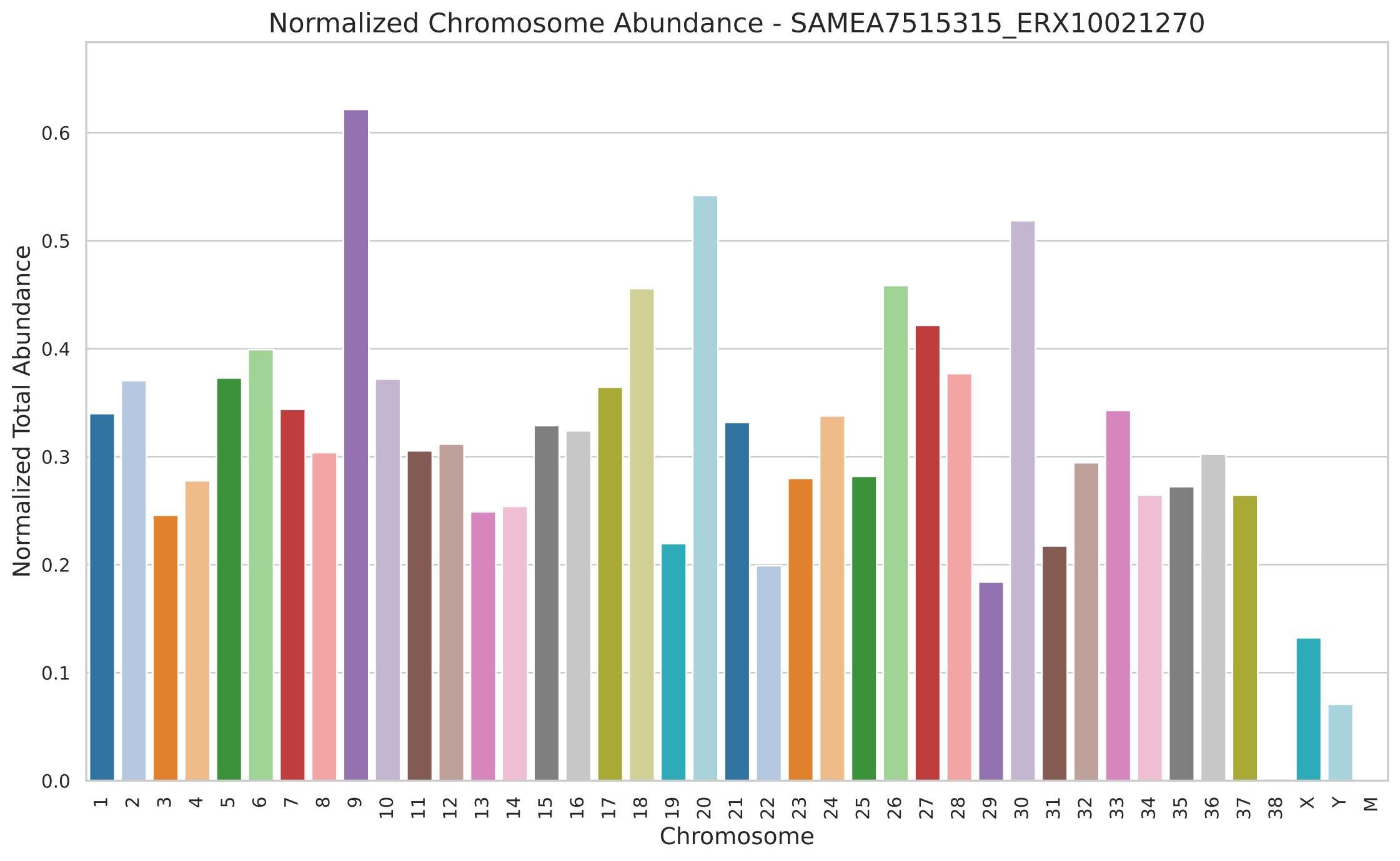

Normalized Chromosome Abundance - SAMN23673758_SRX13323513
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

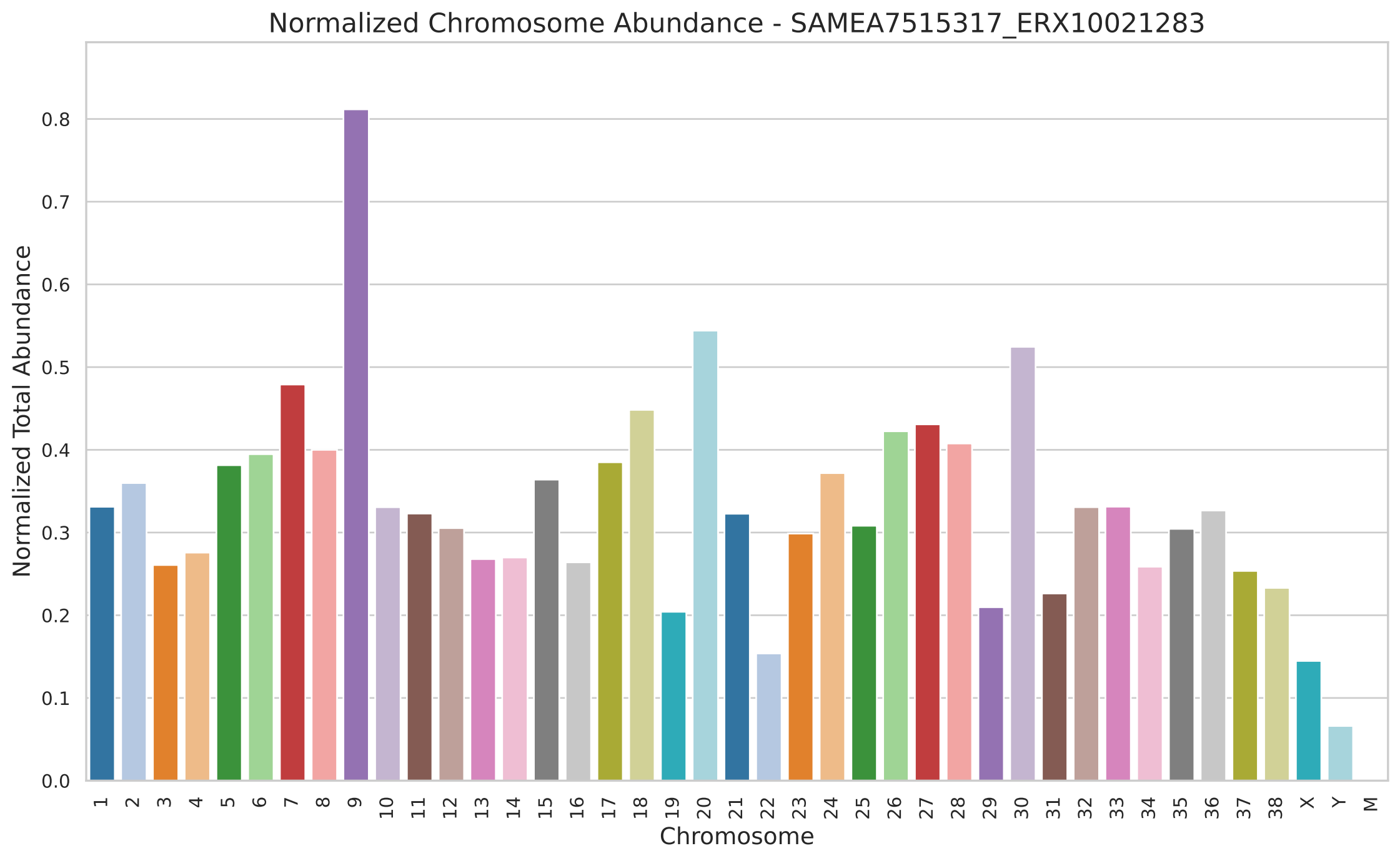

Normalized Chromosome Abundance - SAMEA7515247_ERX10021280
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

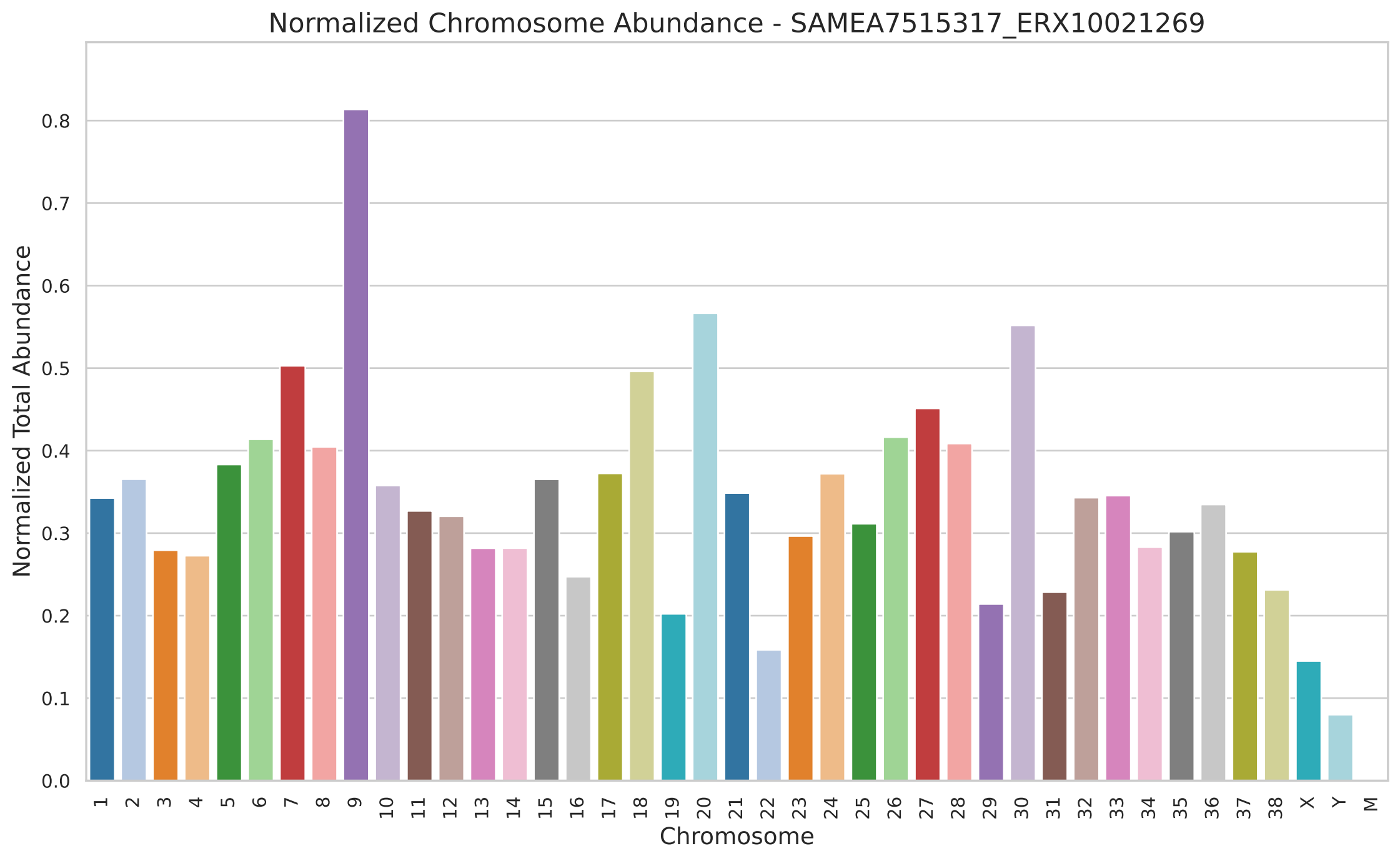

Normalized Chromosome Abundance - SAMEA7515244_ERX10021264
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

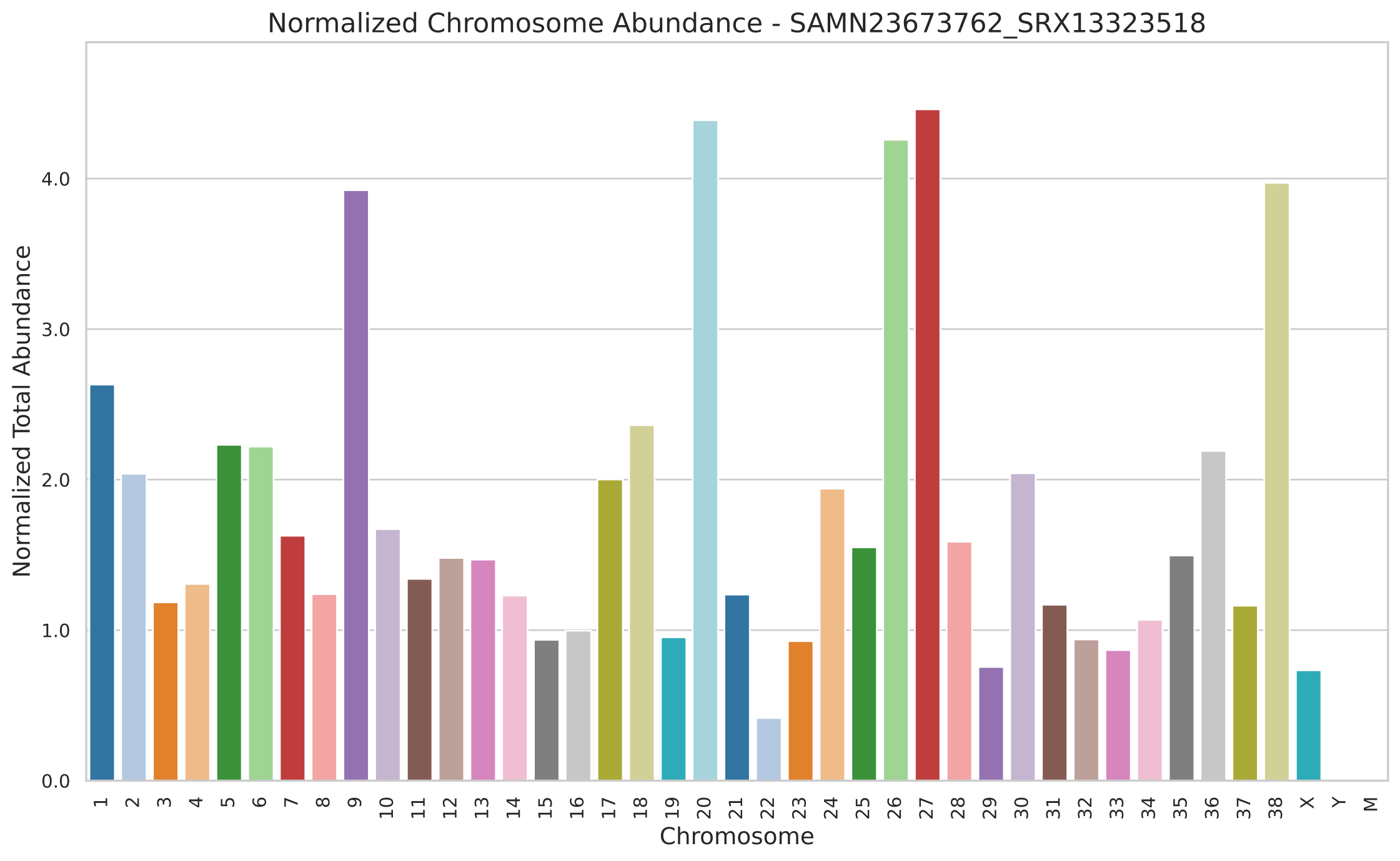

Normalized Chromosome Abundance - SAMEA7515318_ERX10021286
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

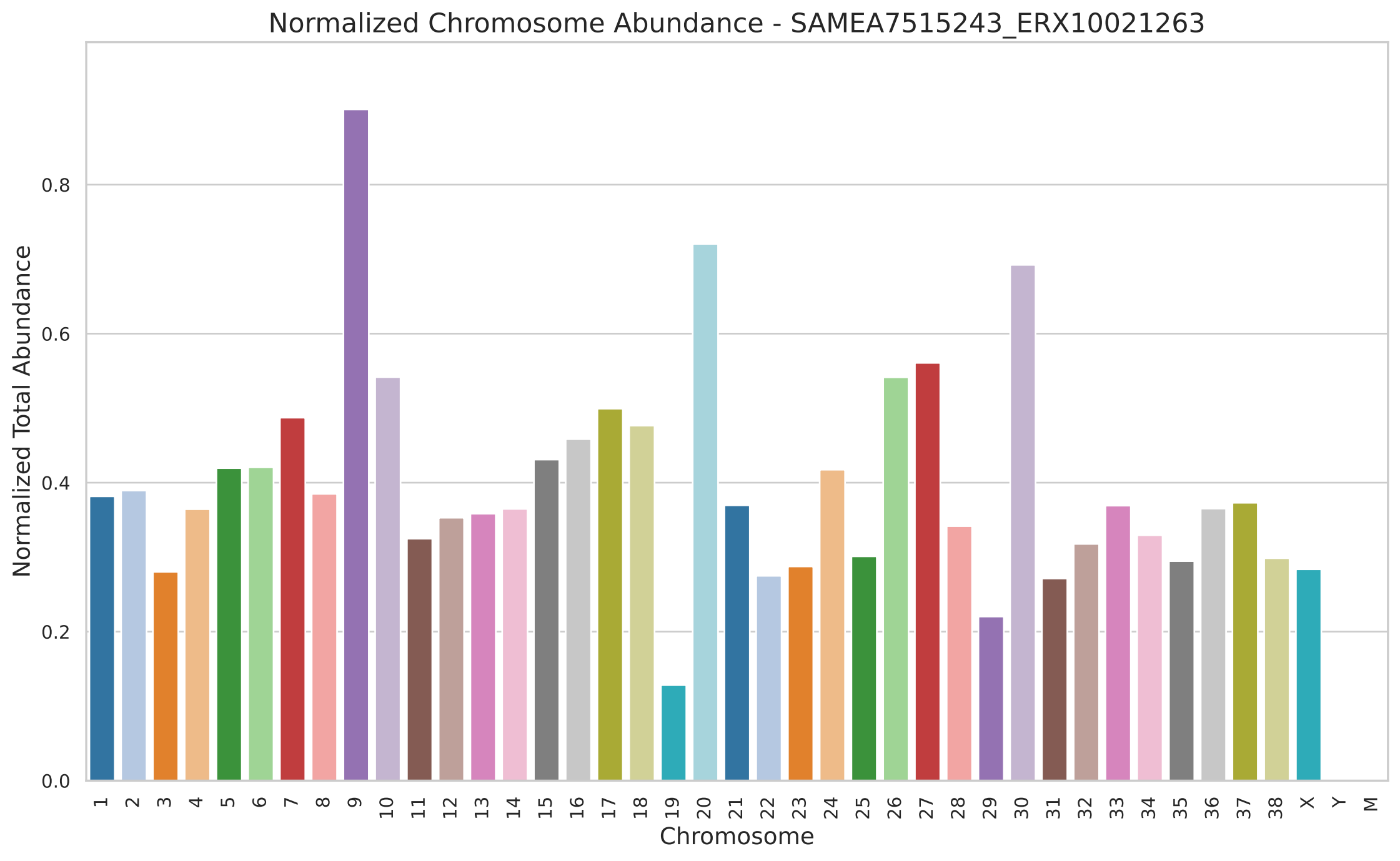

Normalized Chromosome Abundance - SAMN23673764_SRX13323520
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

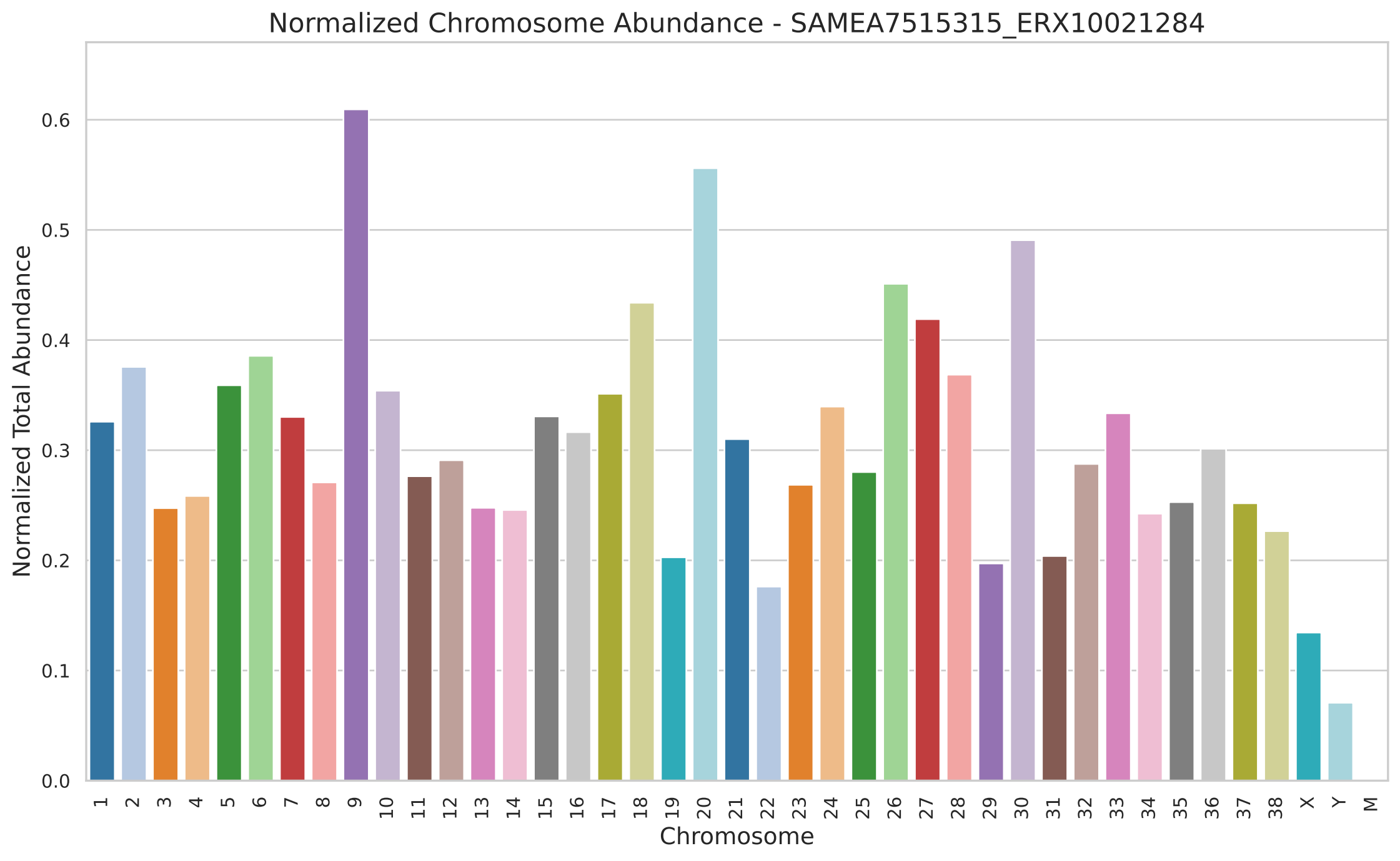

Normalized Chromosome Abundance - SAMEA7515315_ERX10021270
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

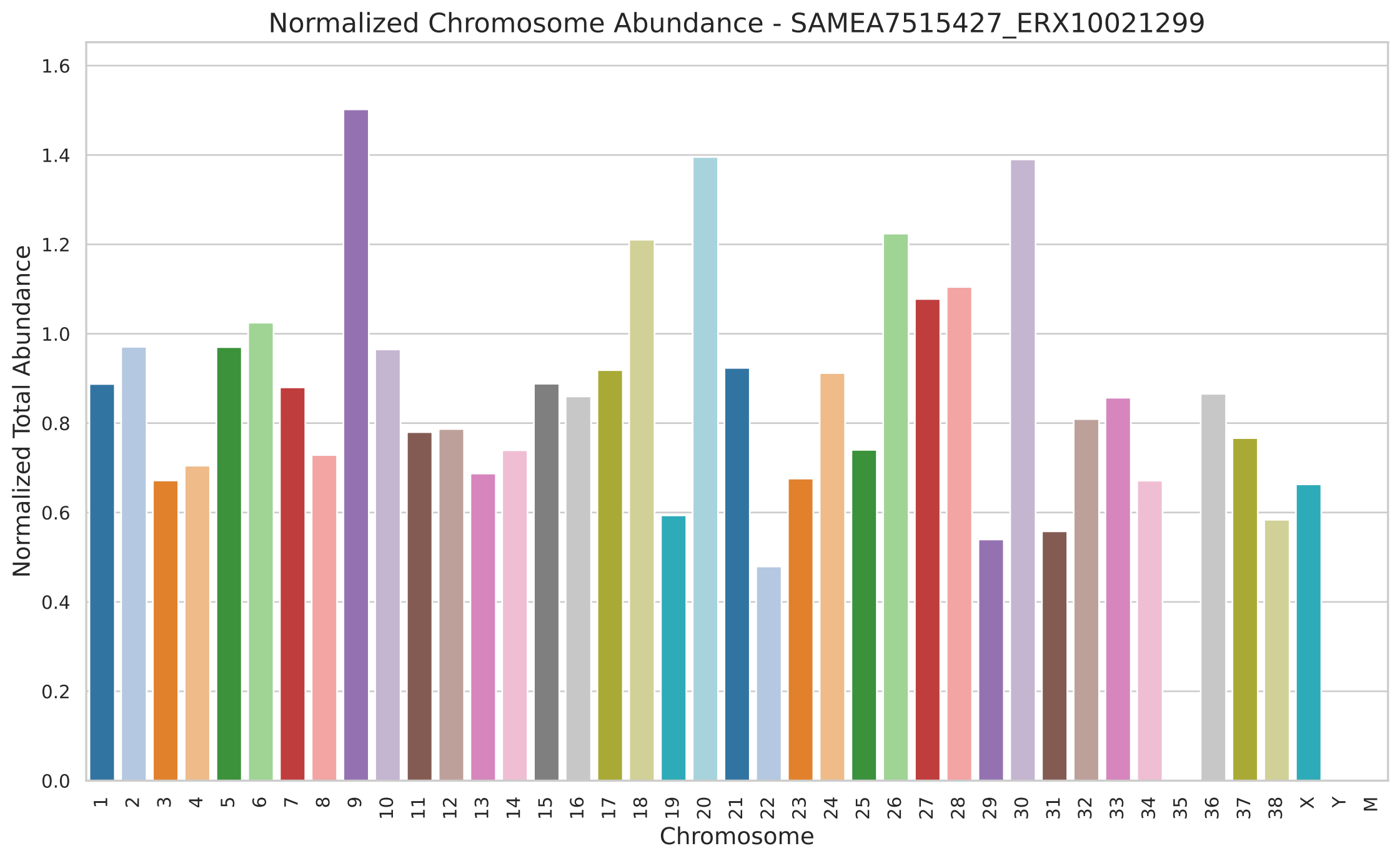

Normalized Chromosome Abundance - SAMEA7515317_ERX10021283
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

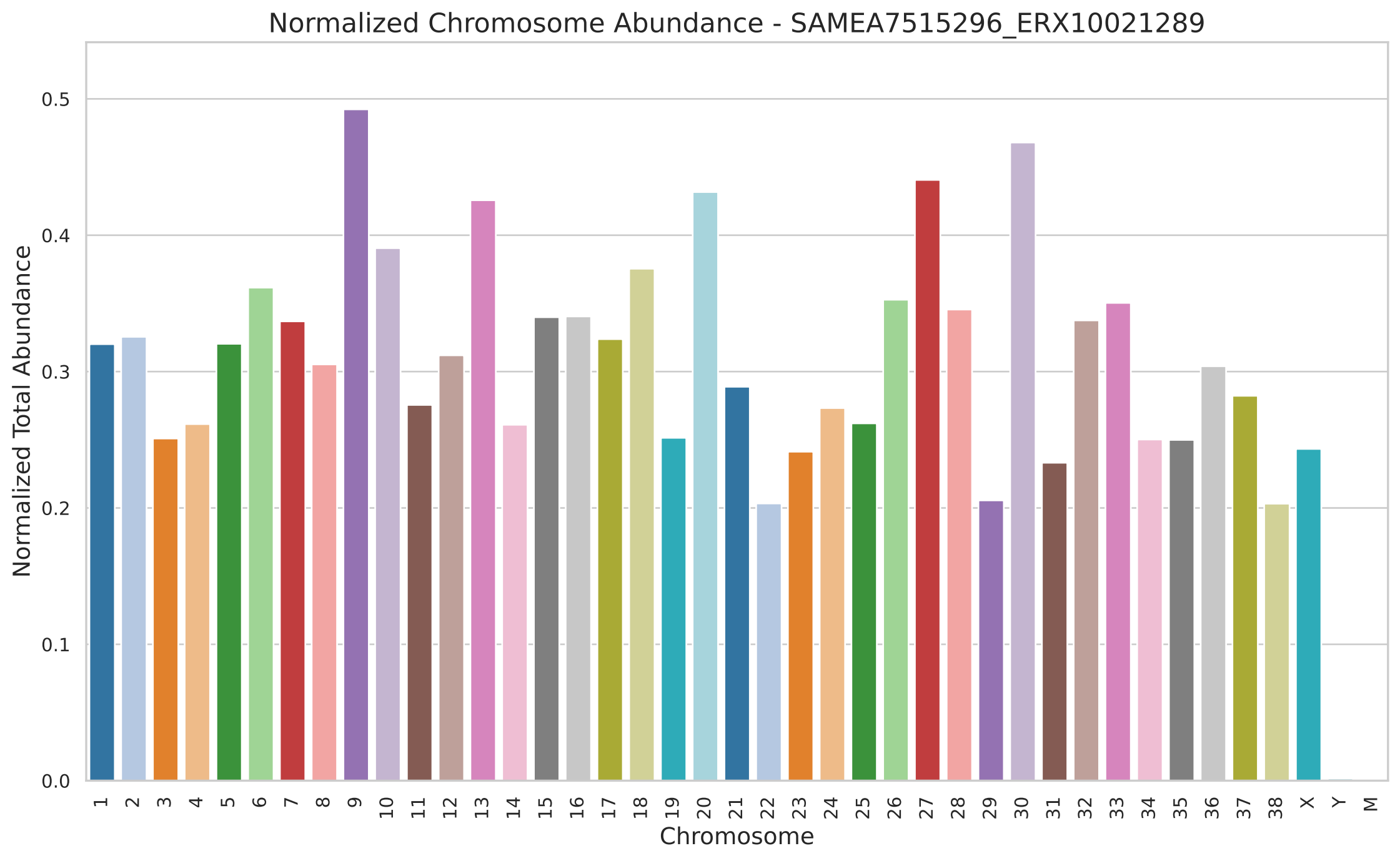

Normalized Chromosome Abundance - SAMEA7515317_ERX10021269
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

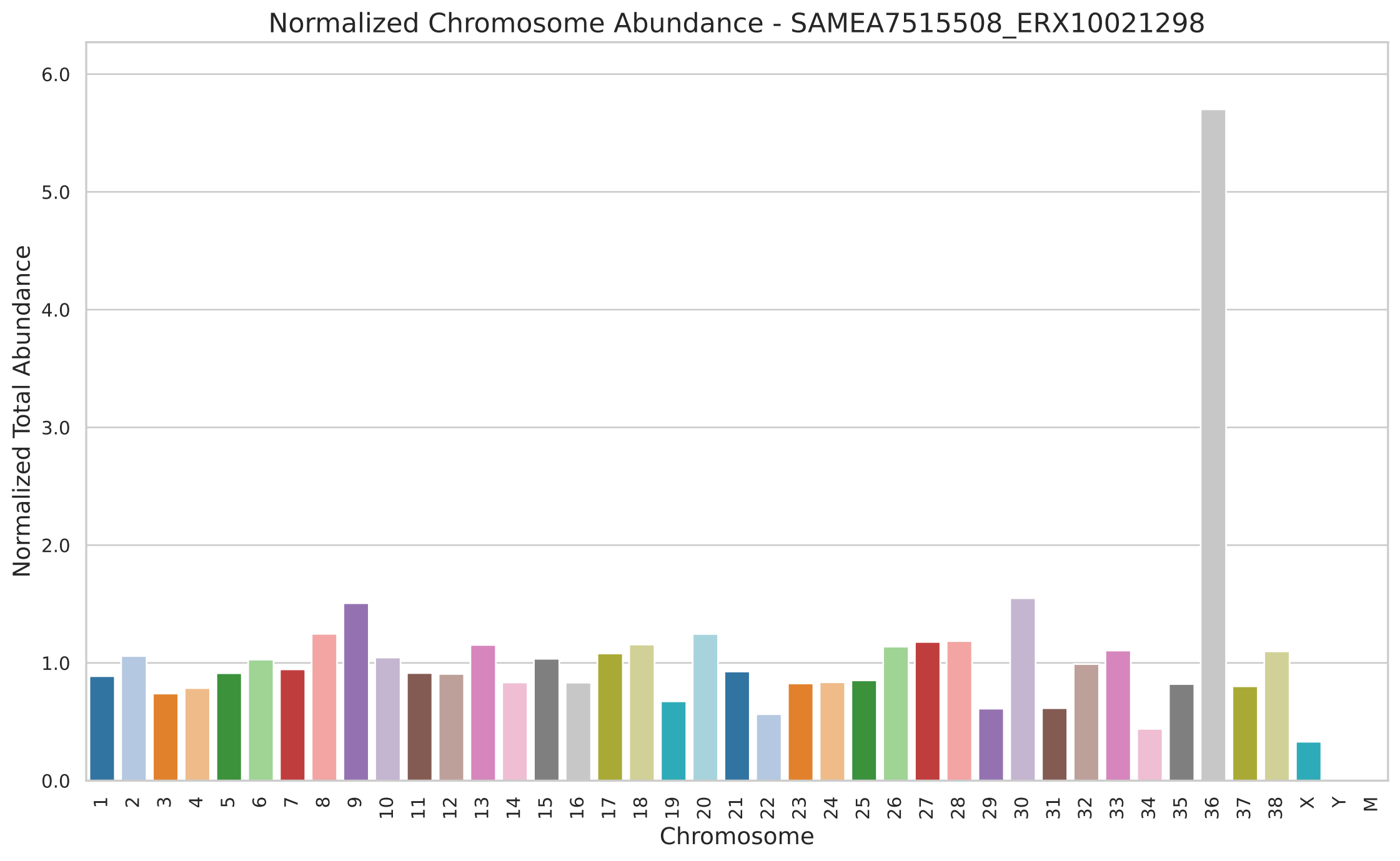

Normalized Chromosome Abundance - SAMN23673762_SRX13323518
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

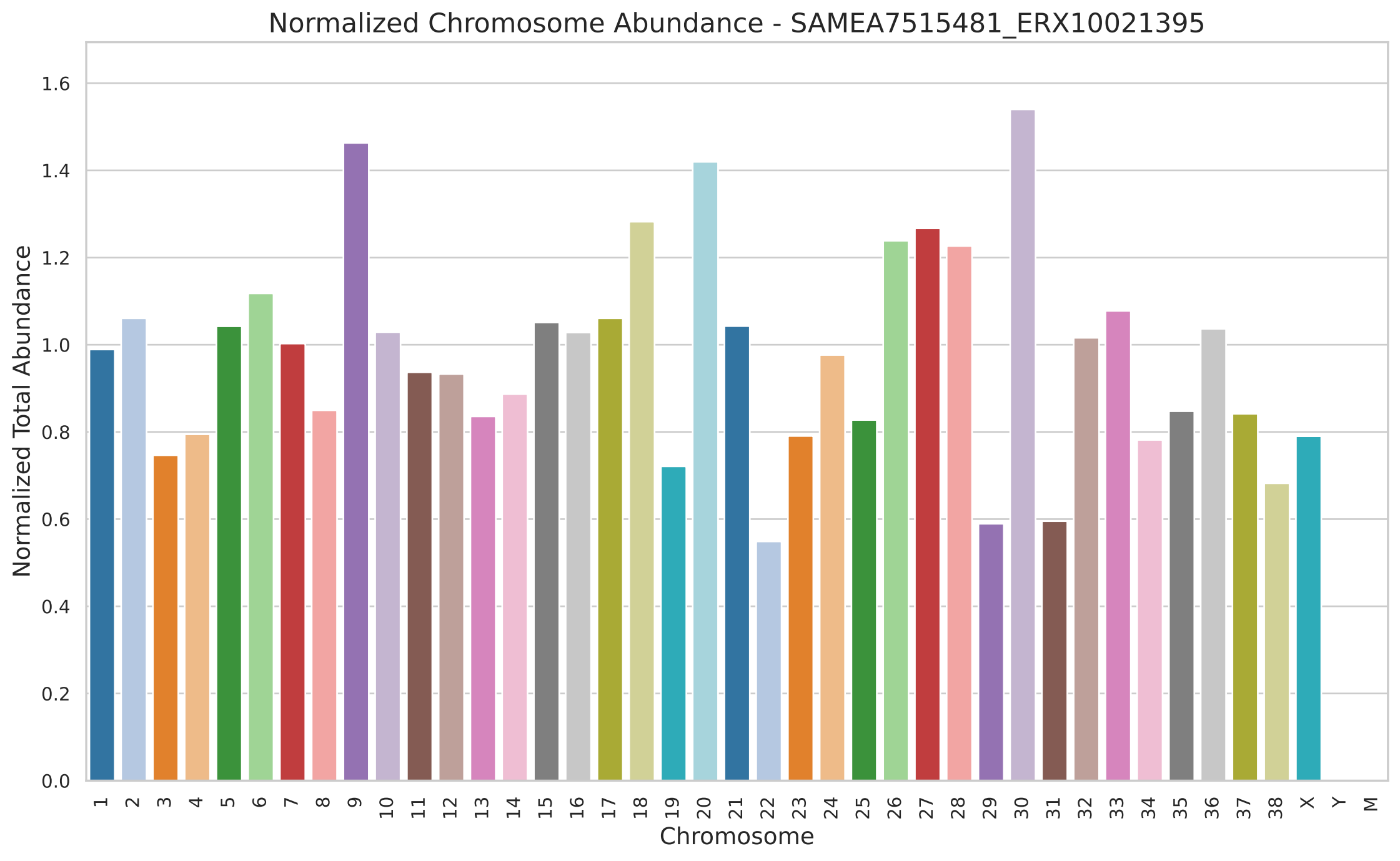

Normalized Chromosome Abundance - SAMEA7515243_ERX10021263
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

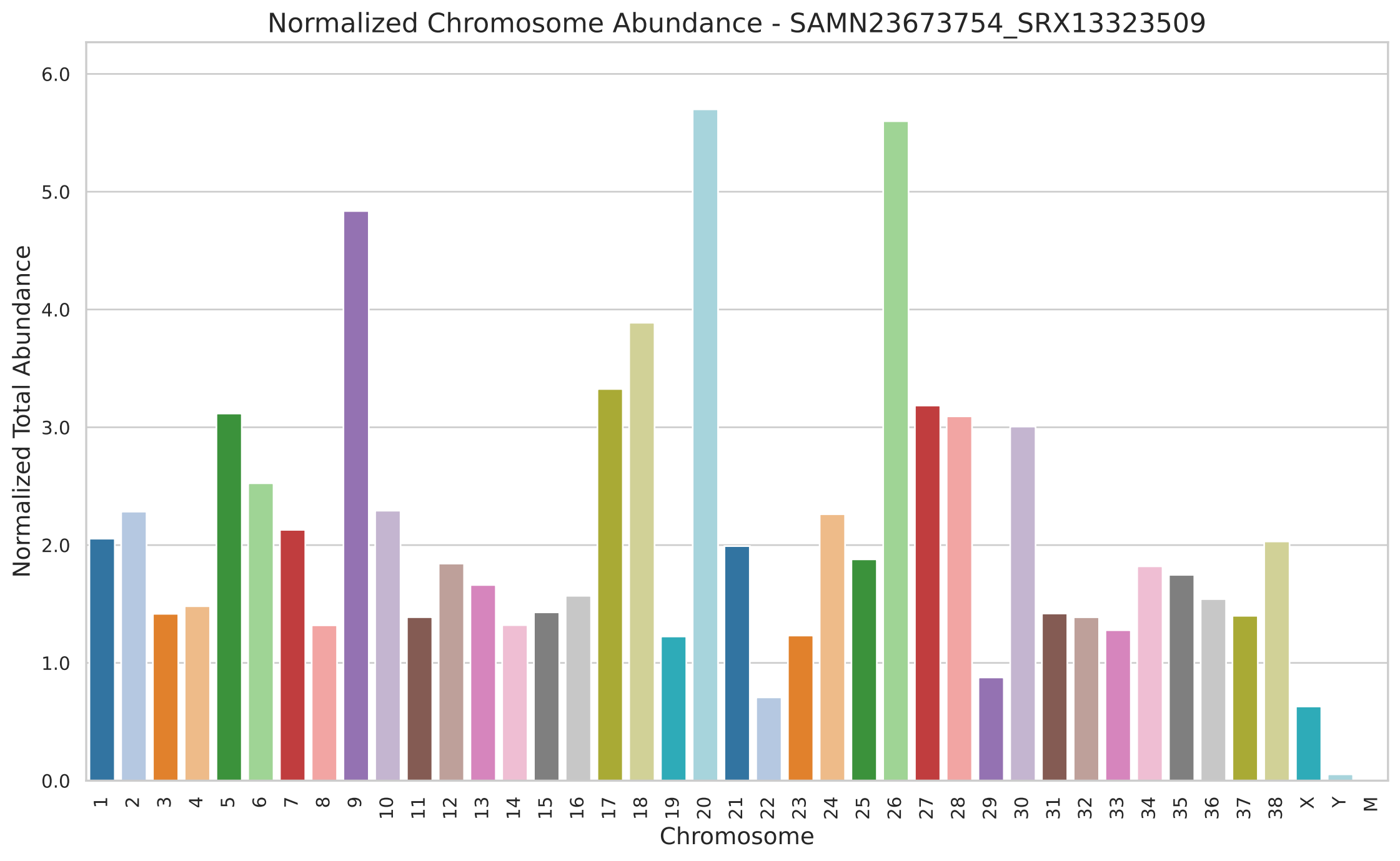

Normalized Chromosome Abundance - SAMEA7515315_ERX10021284
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

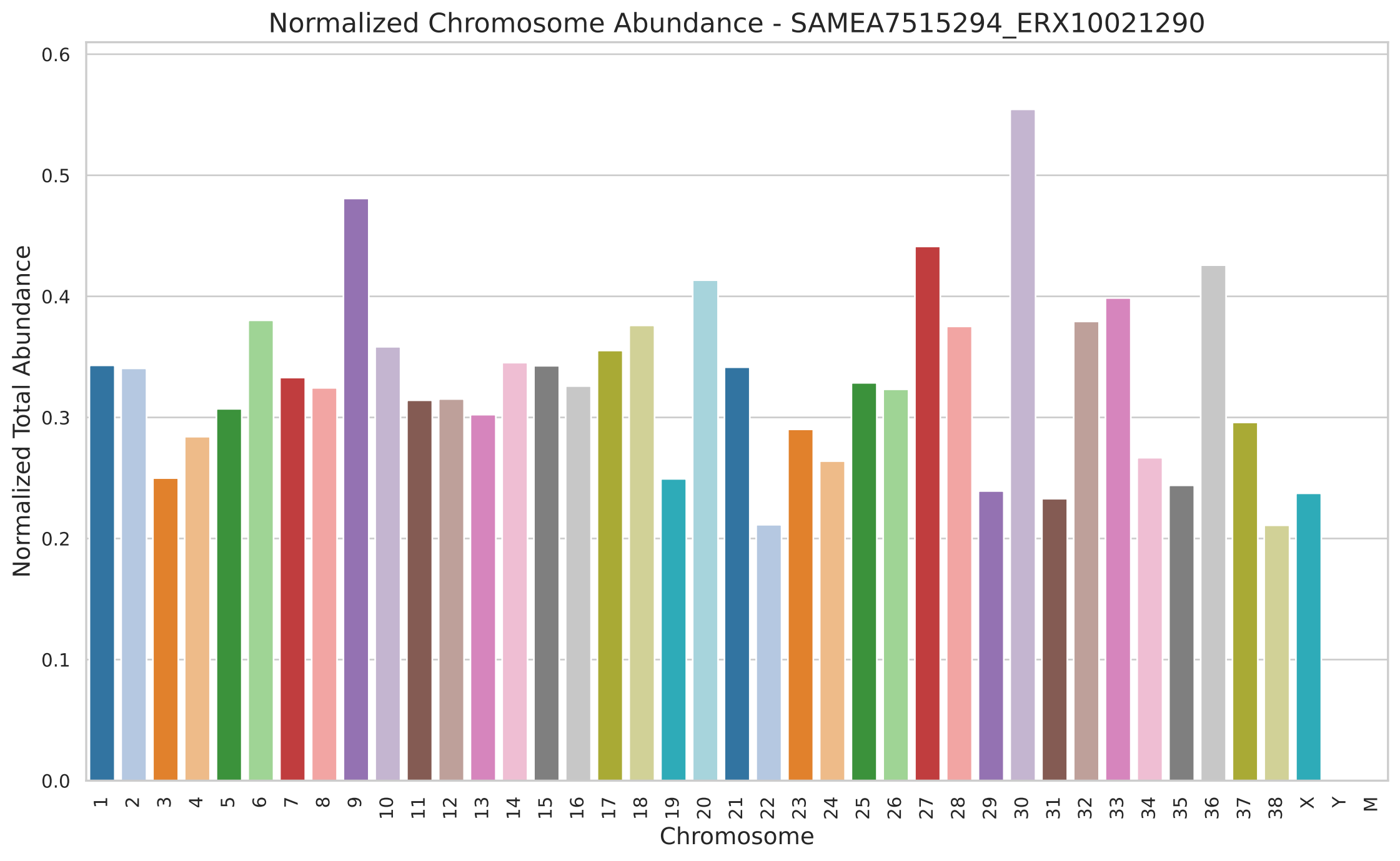

Normalized Chromosome Abundance - SAMEA7515427_ERX10021299
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

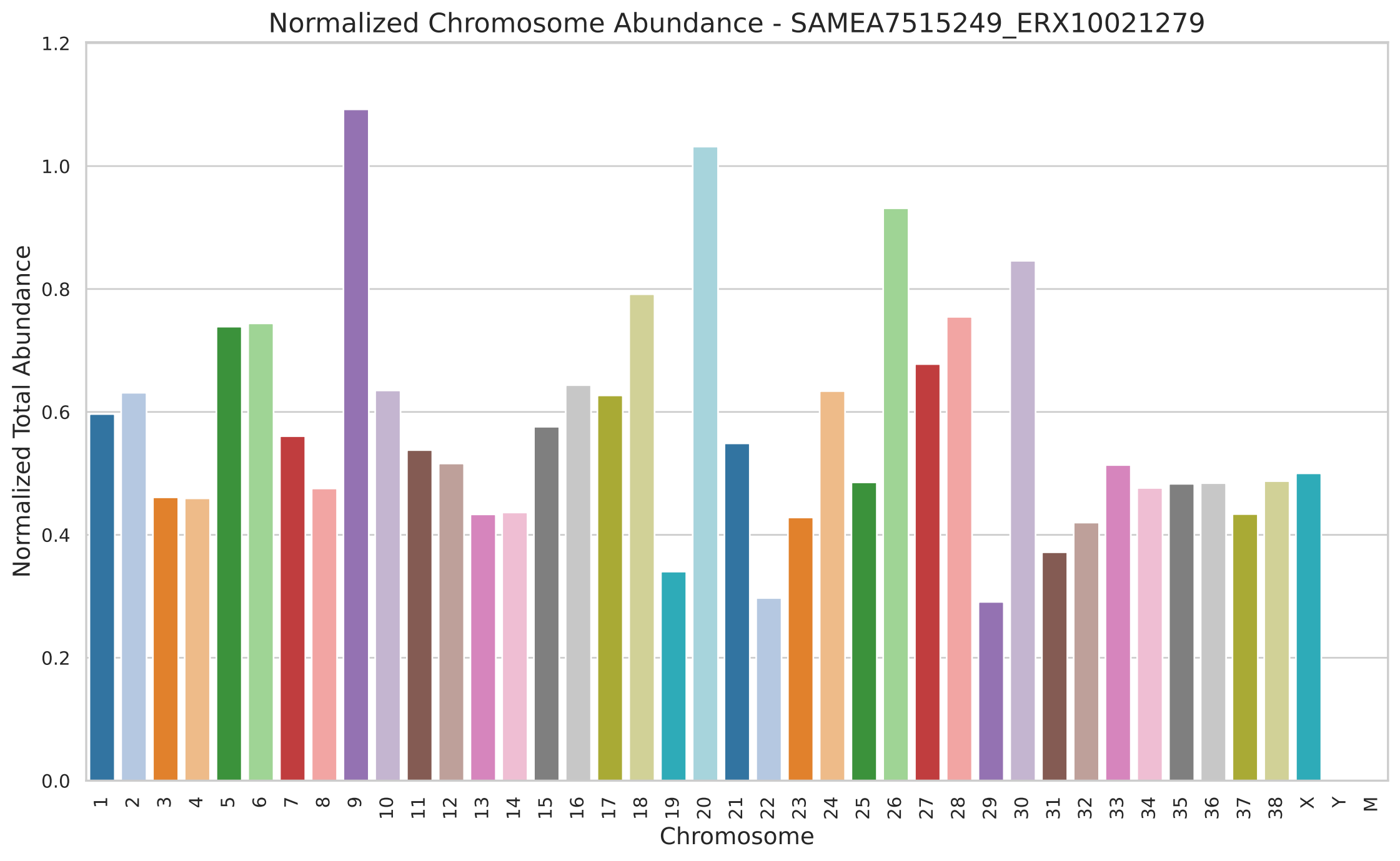

Normalized Chromosome Abundance - SAMEA7515296_ERX10021289
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

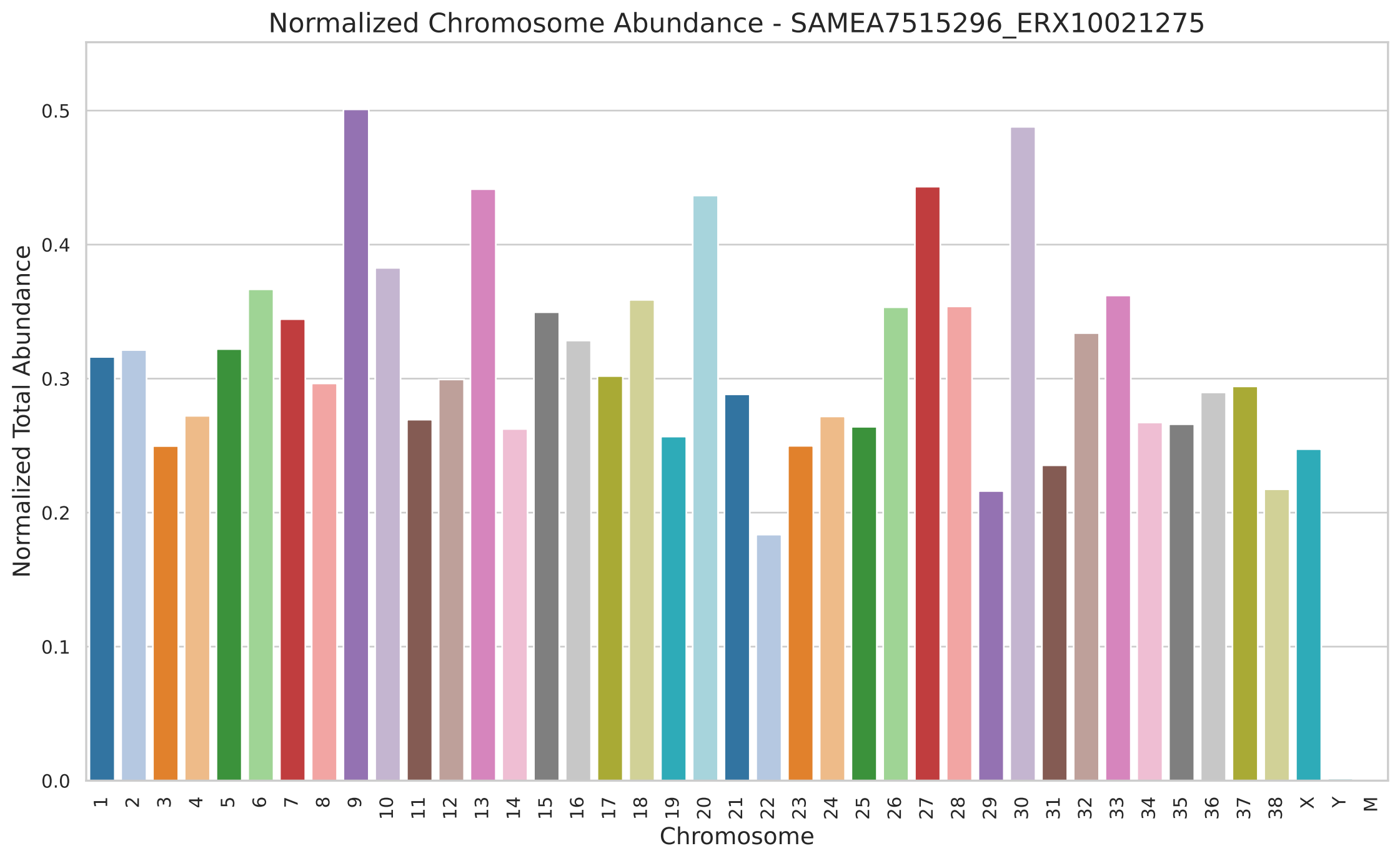

Normalized Chromosome Abundance - SAMEA7515508_ERX10021298
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

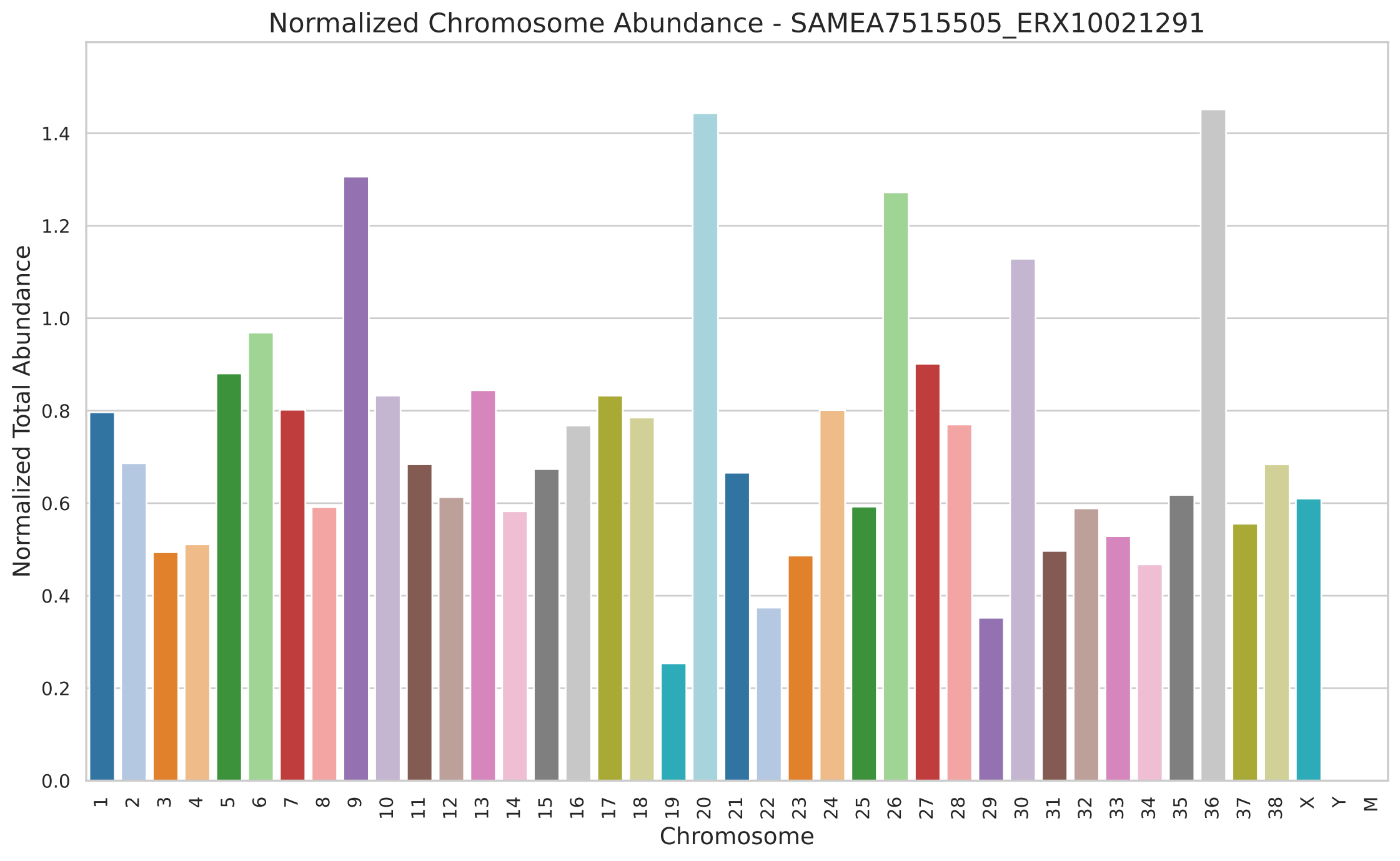

Normalized Chromosome Abundance - SAMEA7515481_ERX10021395
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

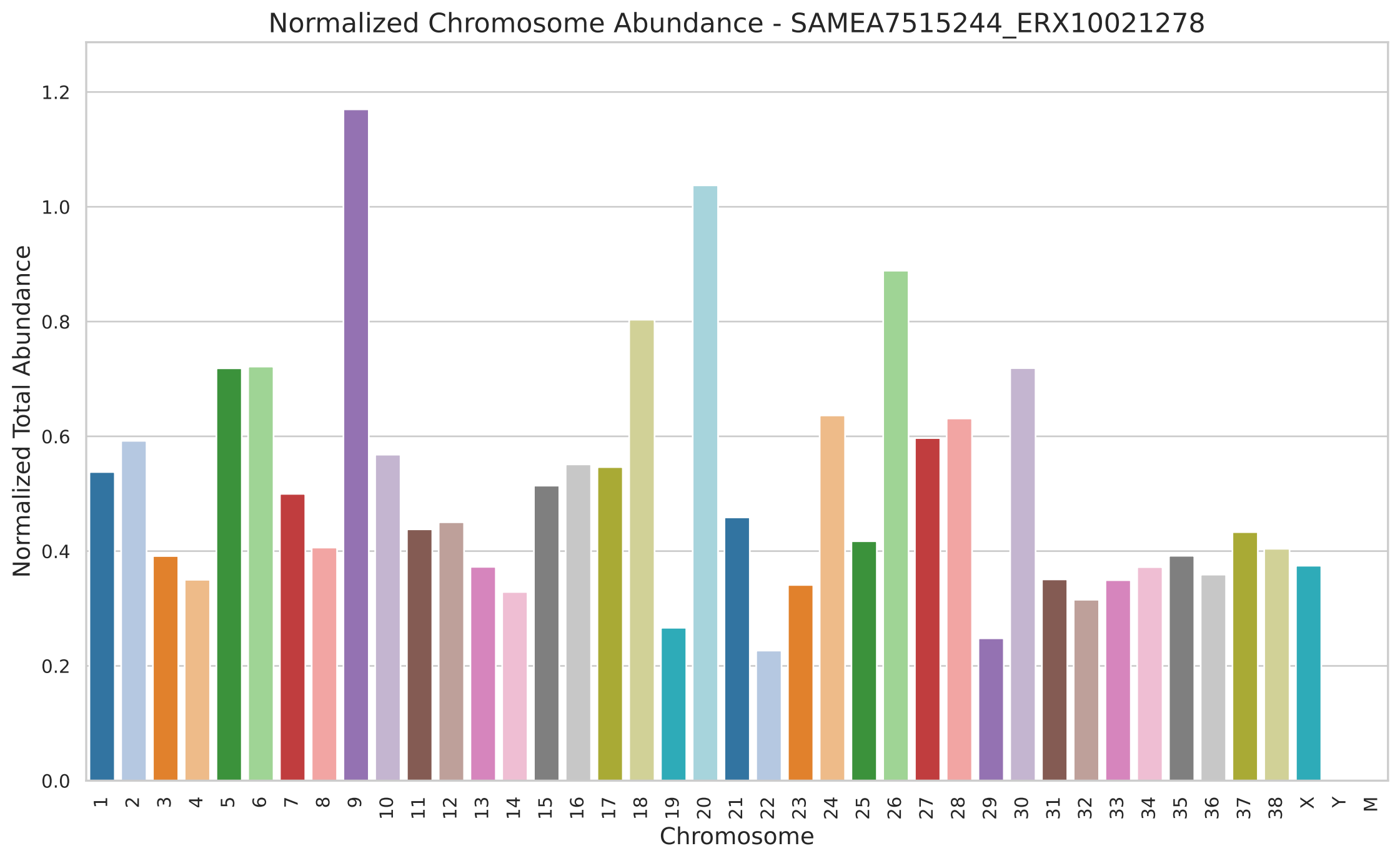

Normalized Chromosome Abundance - SAMN23673754_SRX13323509
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

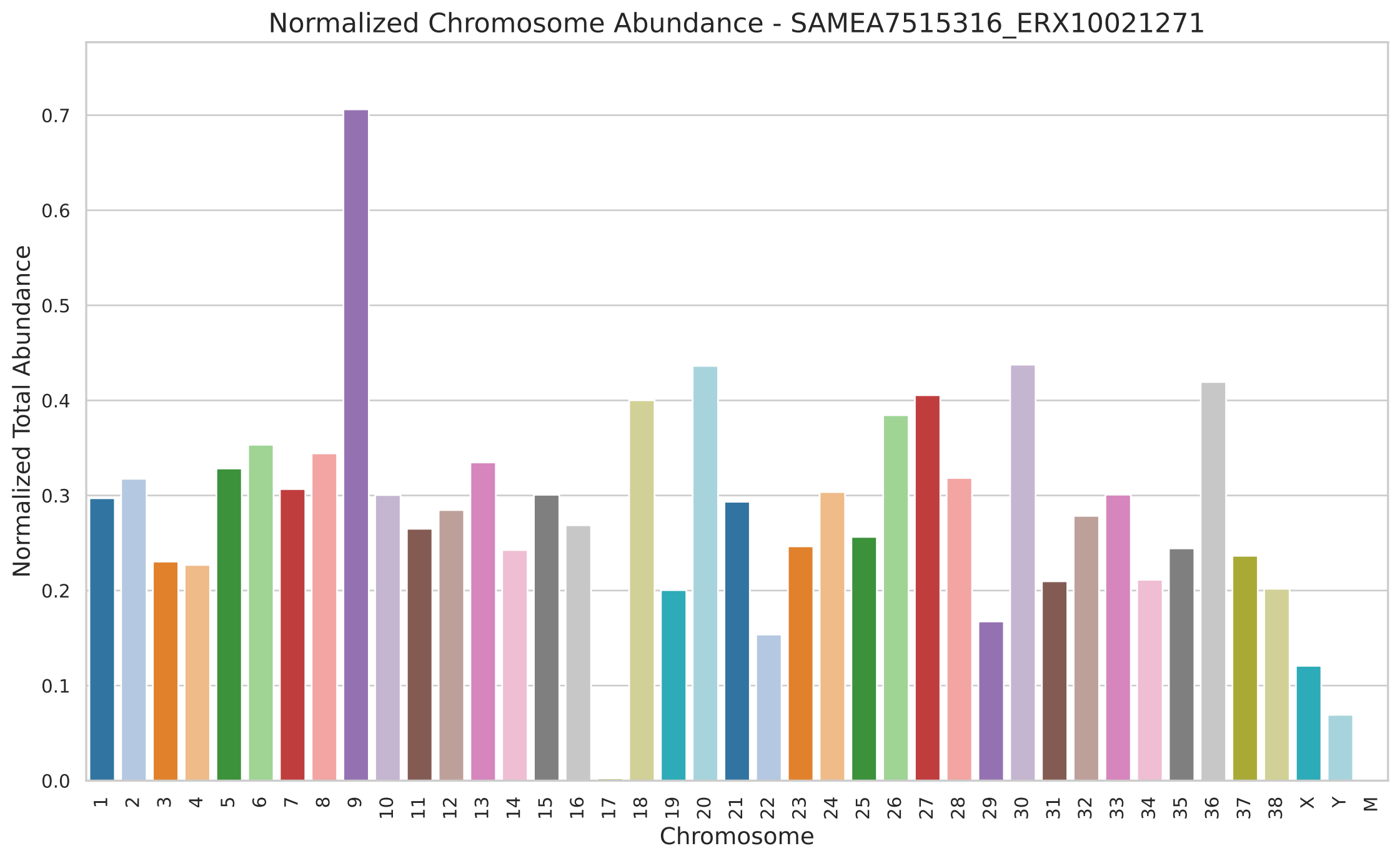

Normalized Chromosome Abundance - SAMEA7515294_ERX10021290
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

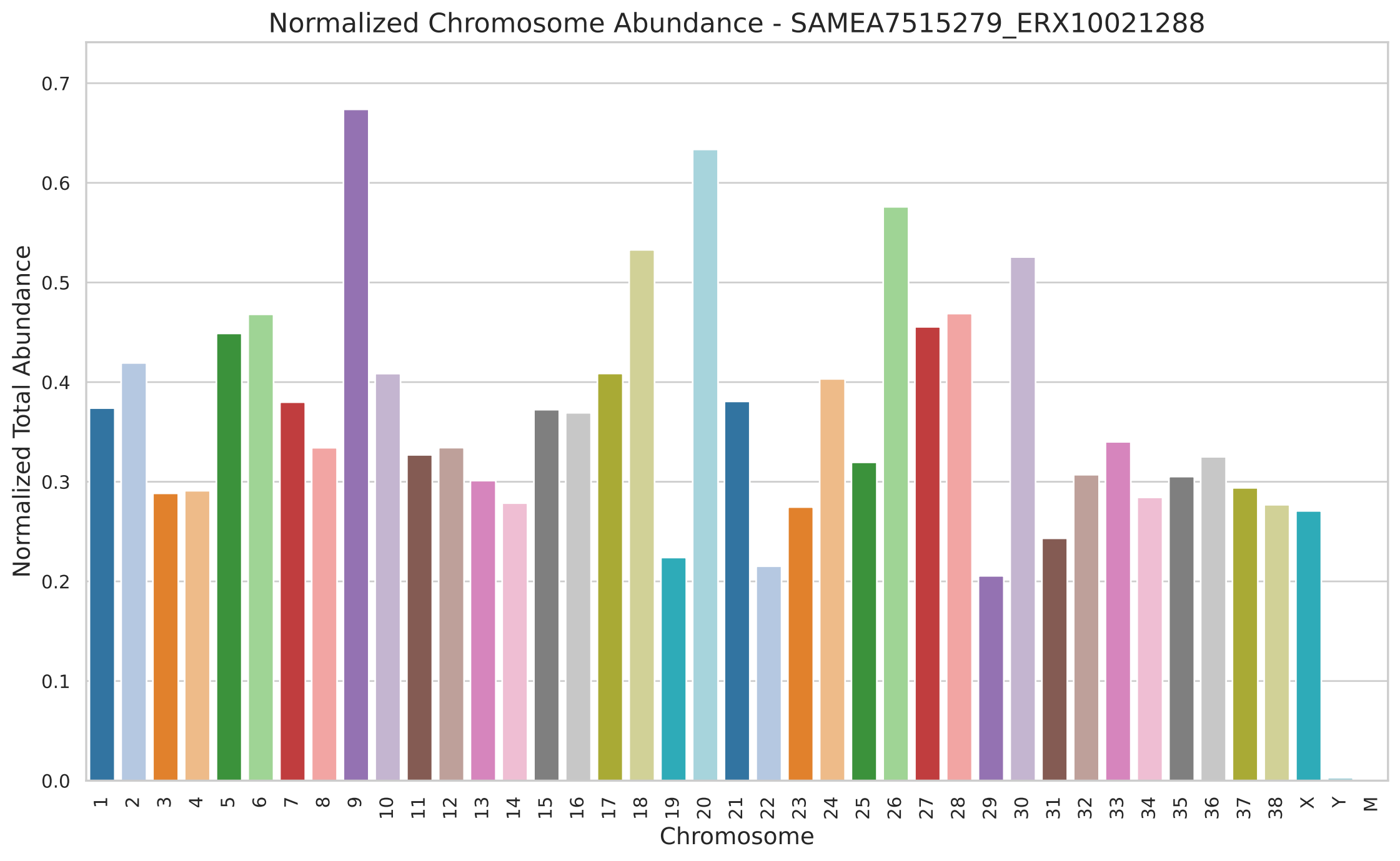

Normalized Chromosome Abundance - SAMEA7515249_ERX10021279
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

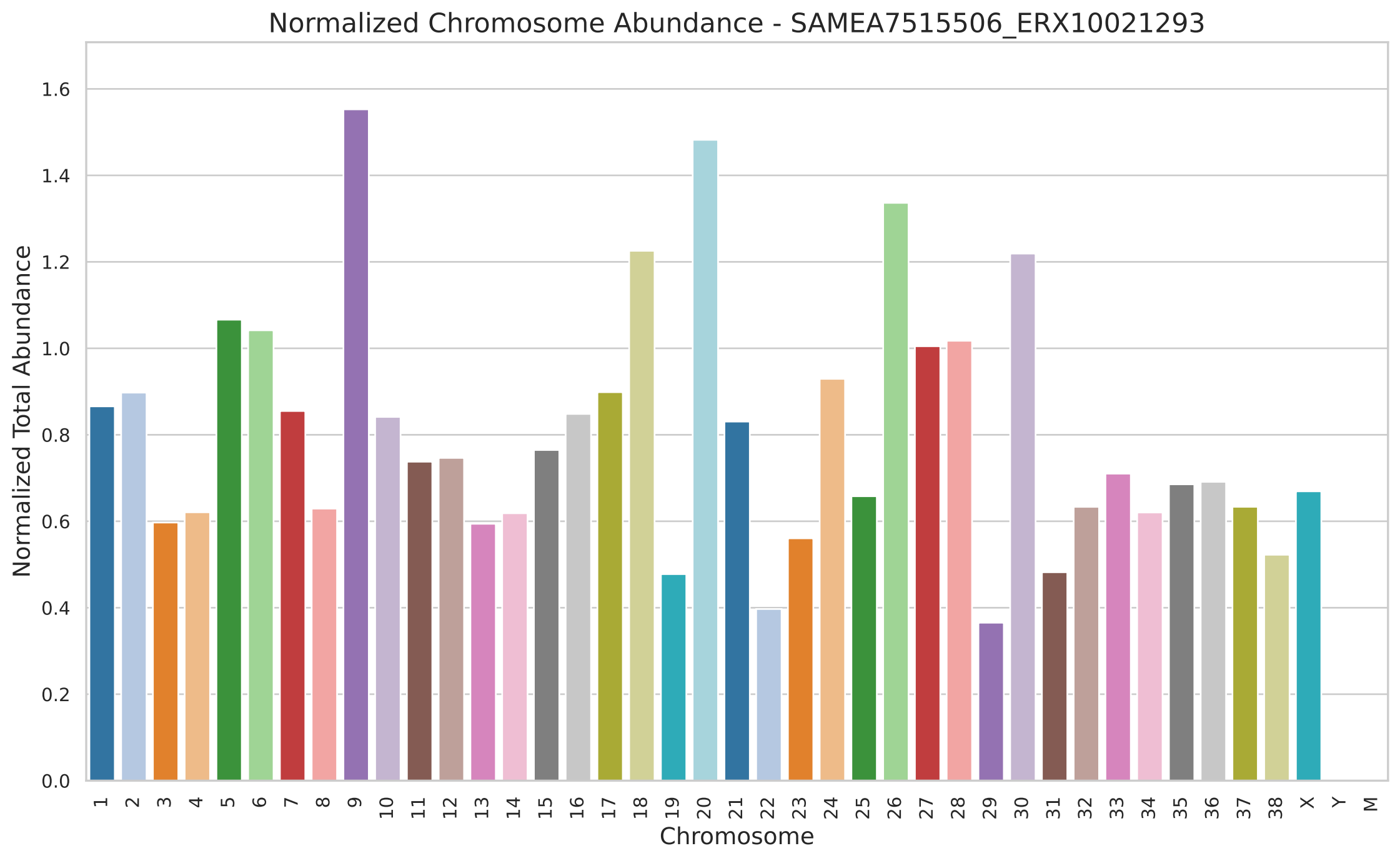

Normalized Chromosome Abundance - SAMEA7515296_ERX10021275
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

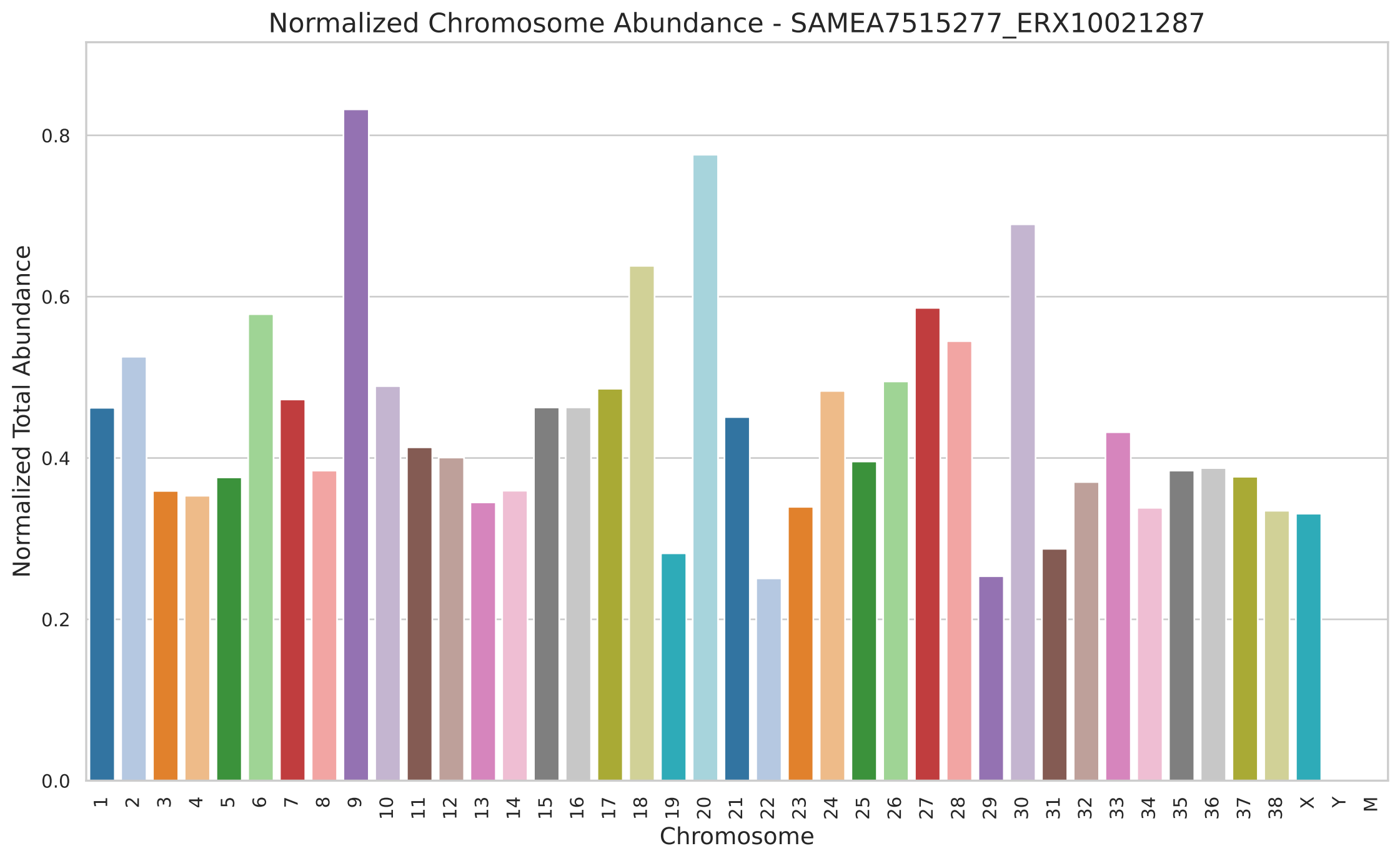

Normalized Chromosome Abundance - SAMEA7515505_ERX10021291
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

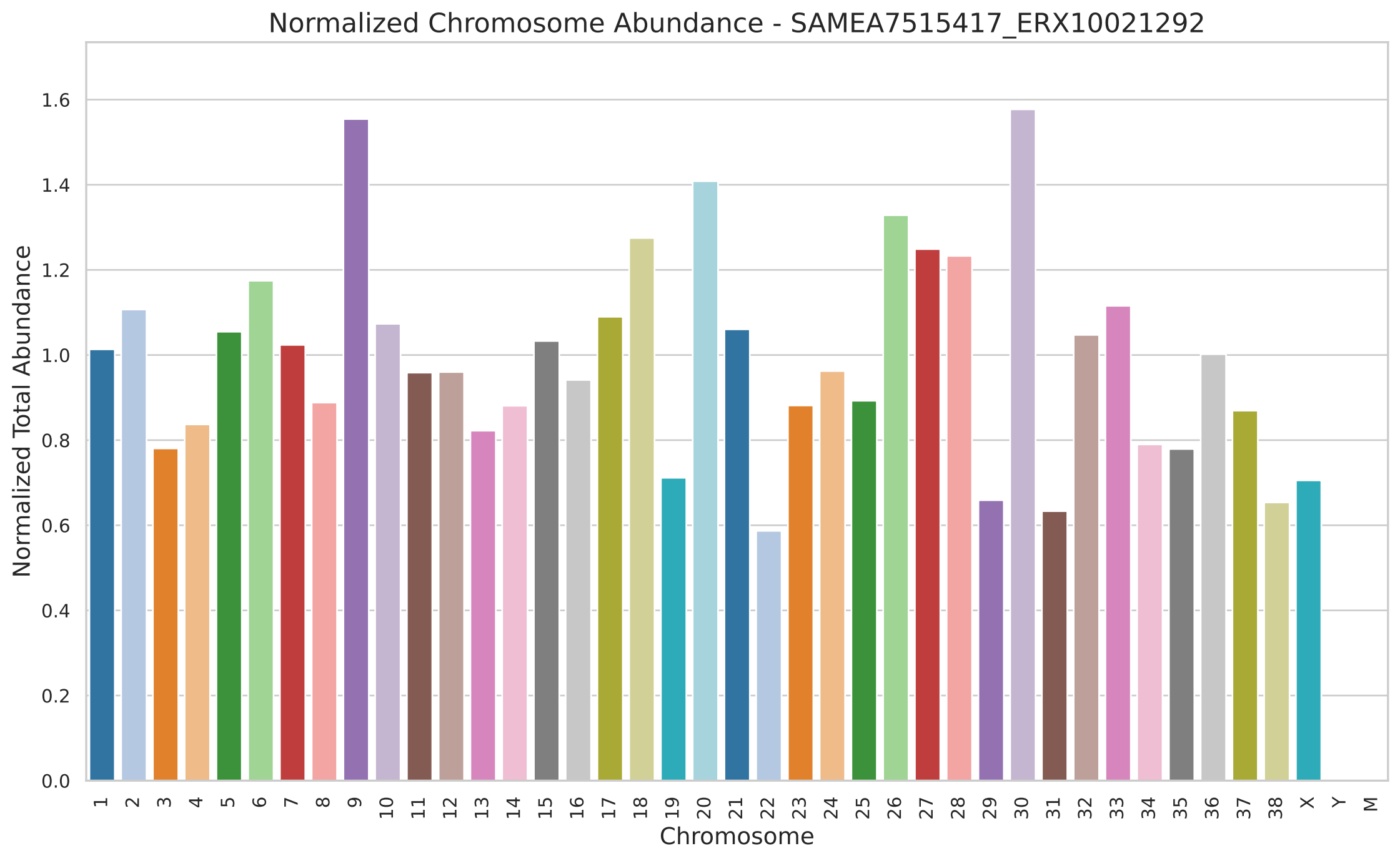

Normalized Chromosome Abundance - SAMEA7515244_ERX10021278
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

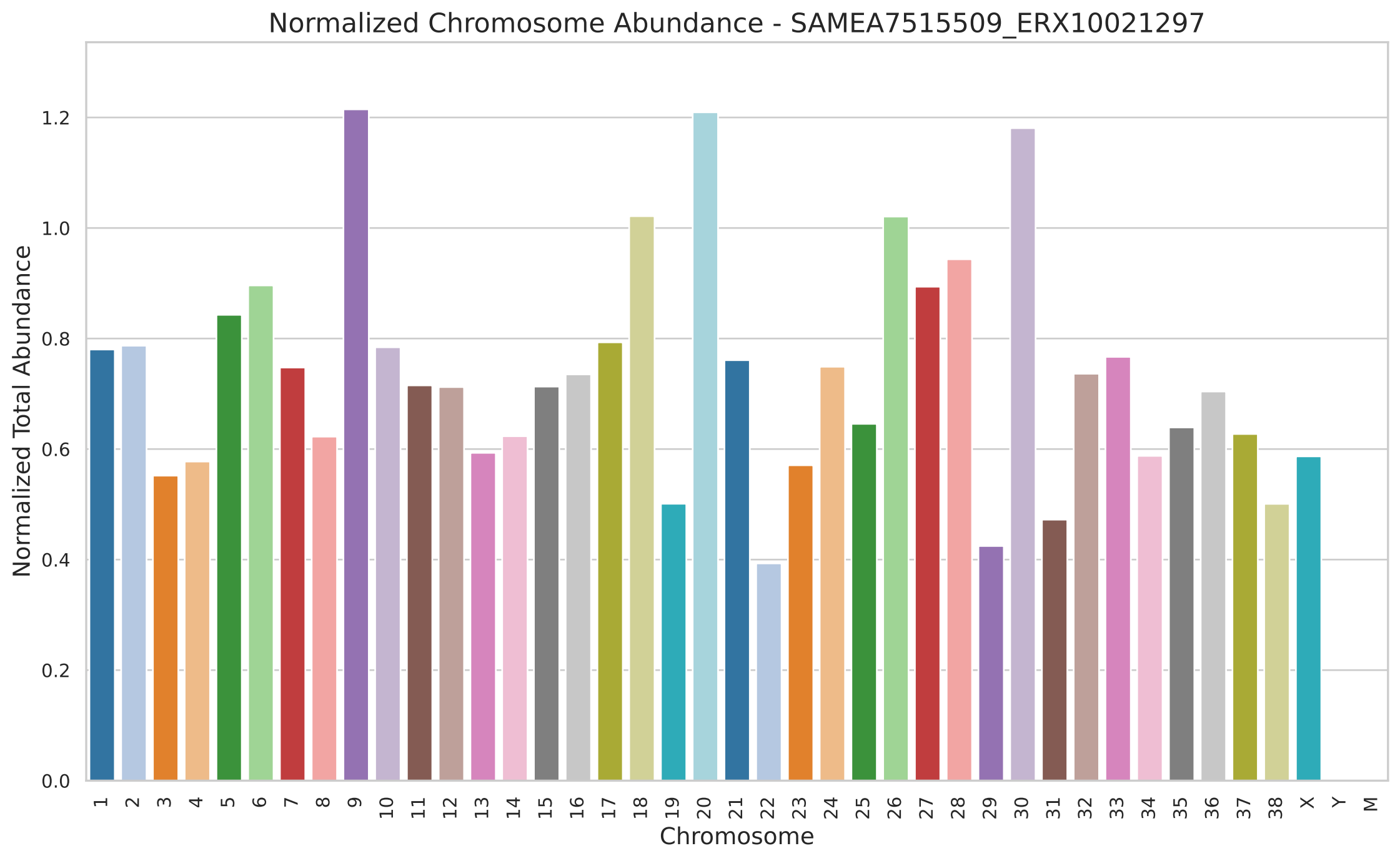

Normalized Chromosome Abundance - SAMEA7515316_ERX10021271
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

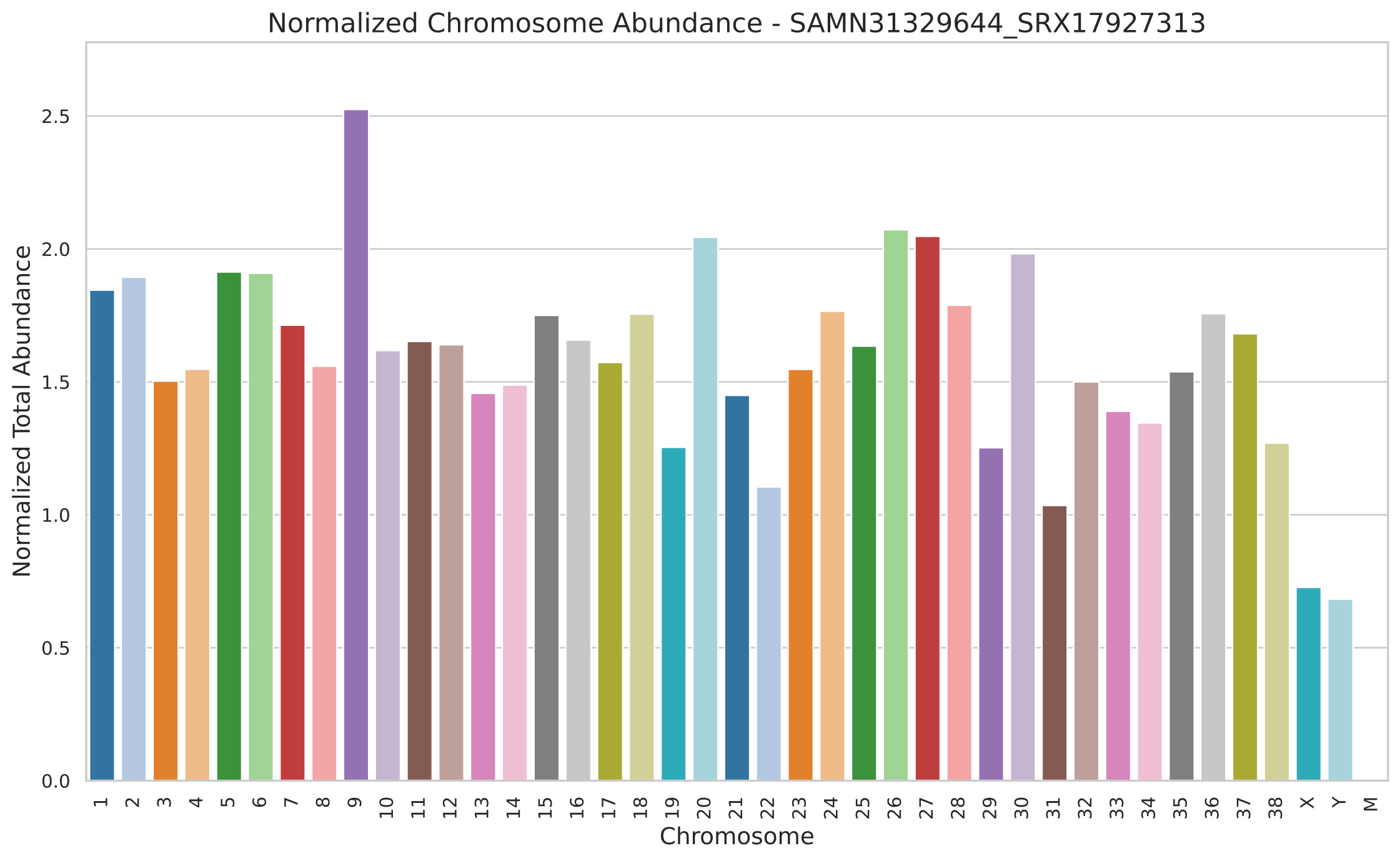

Normalized Chromosome Abundance - SAMEA7515279_ERX10021288
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

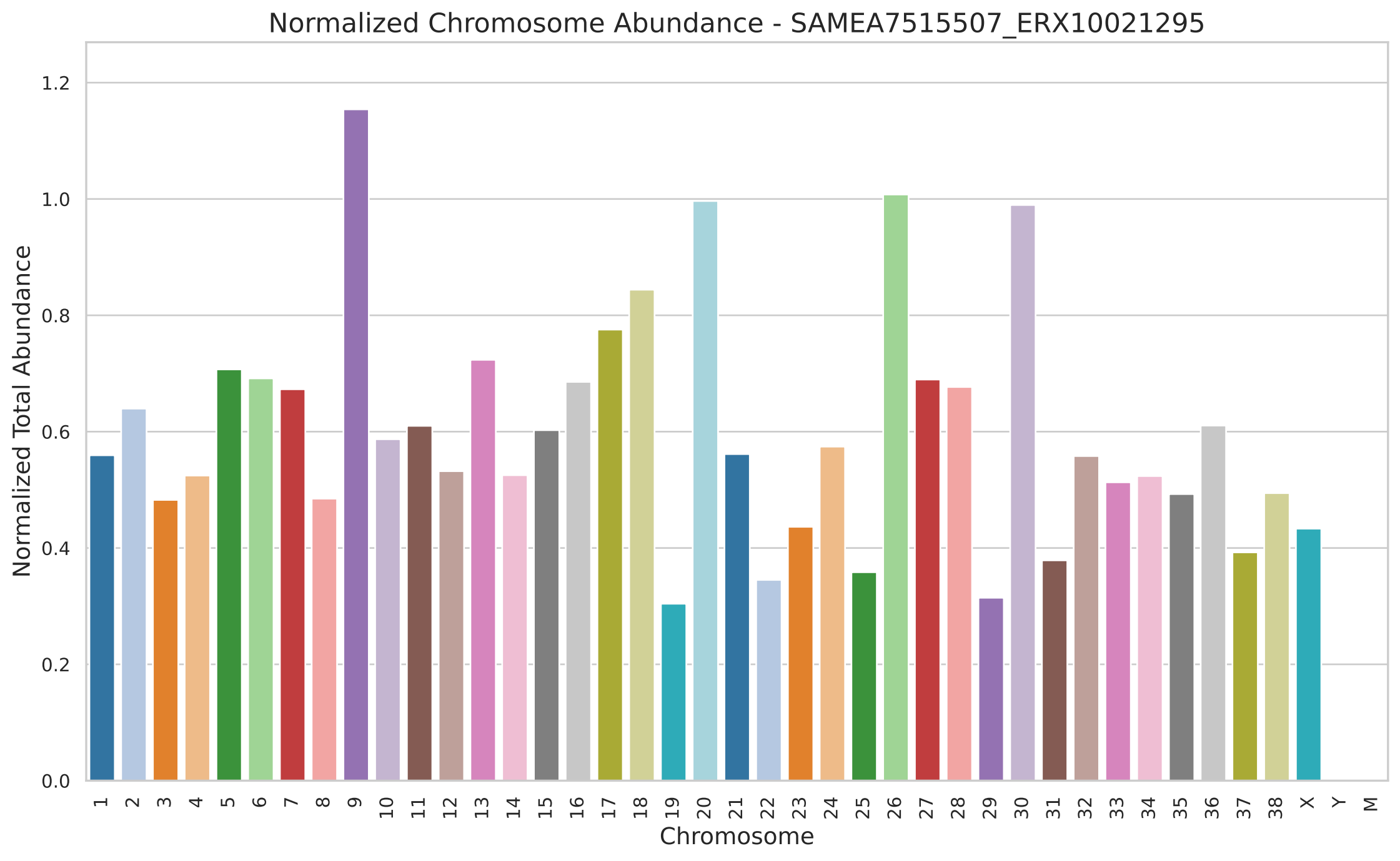

Normalized Chromosome Abundance - SAMEA7515506_ERX10021293
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

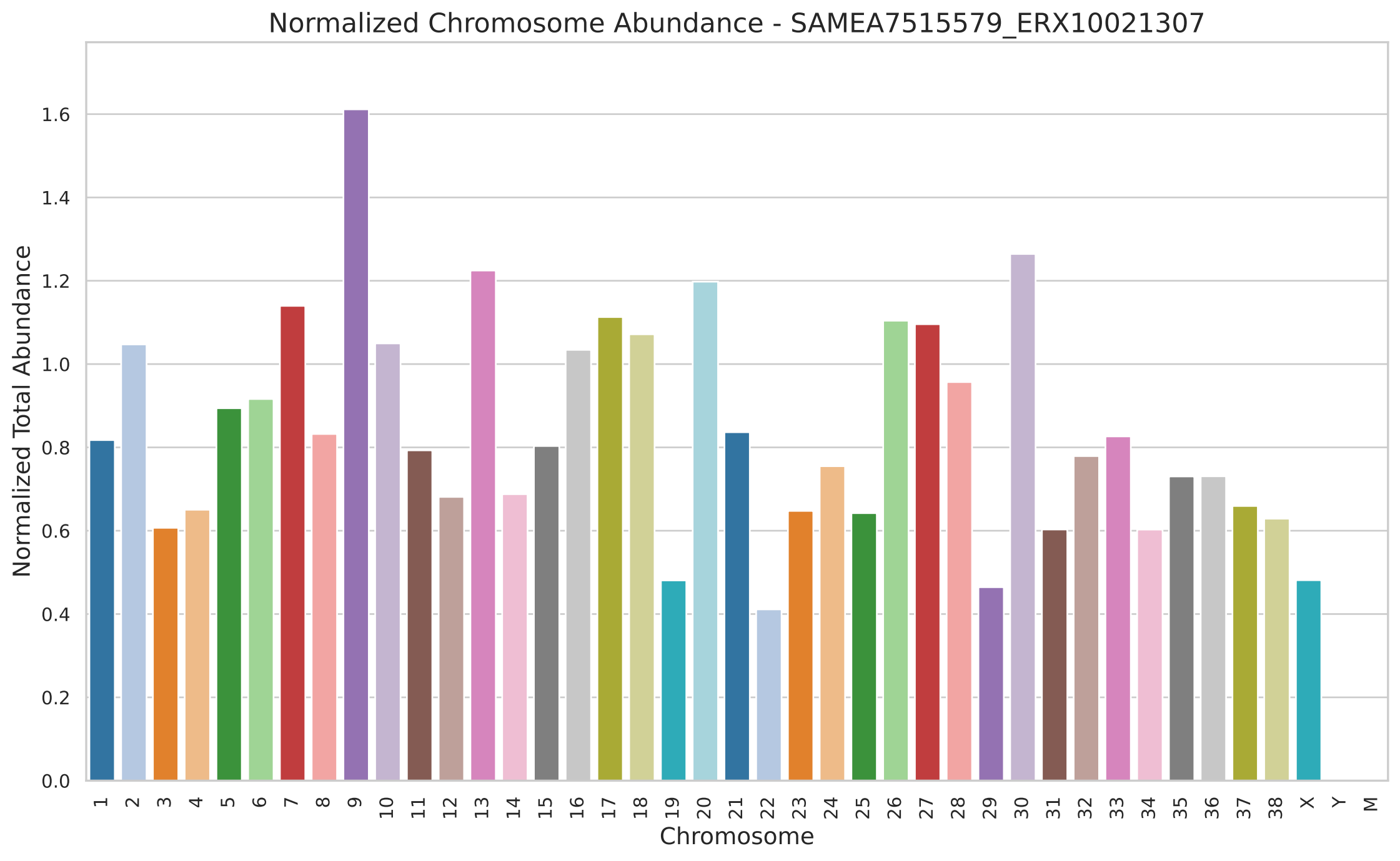

Normalized Chromosome Abundance - SAMEA7515277_ERX10021287
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

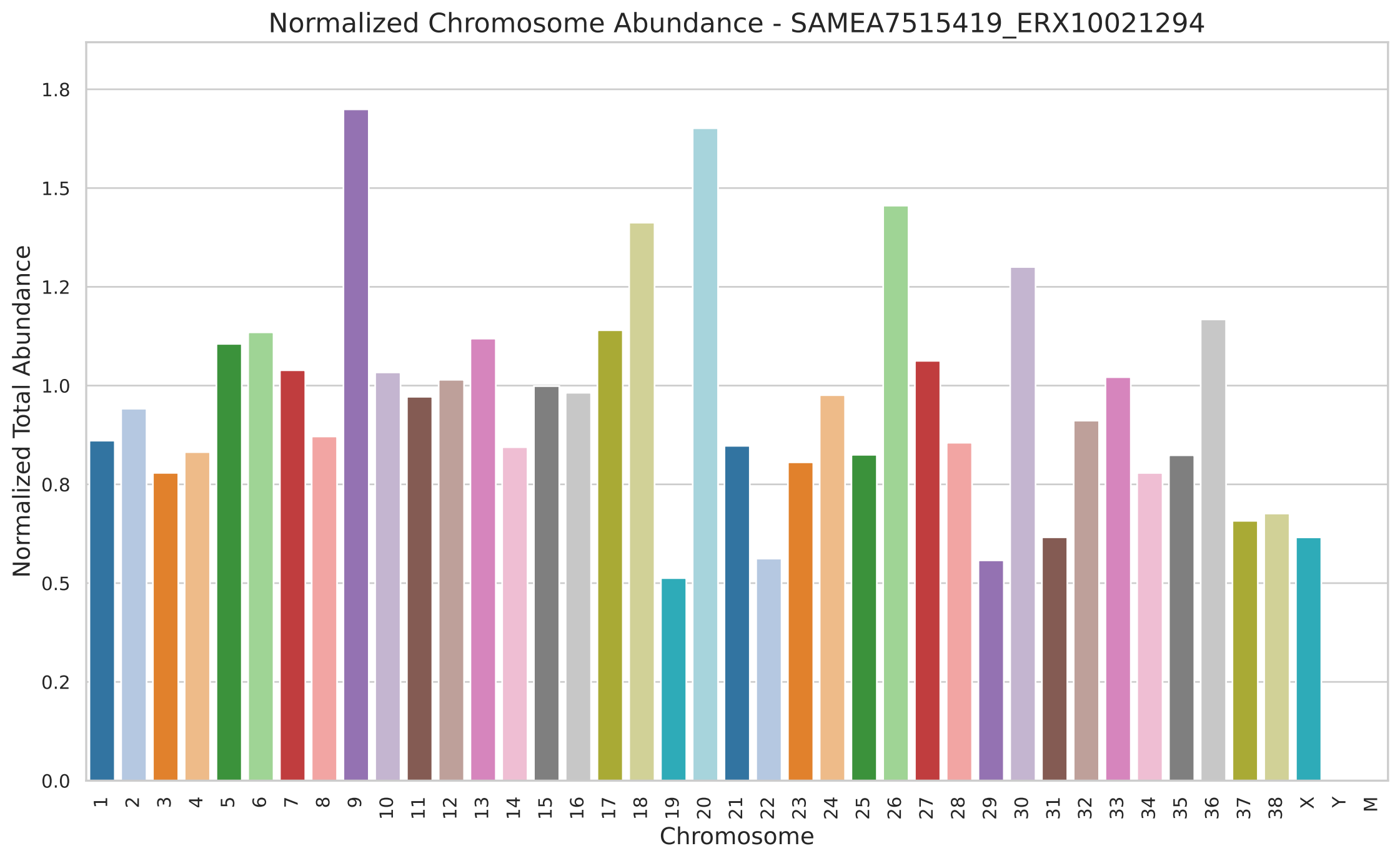

Normalized Chromosome Abundance - SAMEA7515417_ERX10021292
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

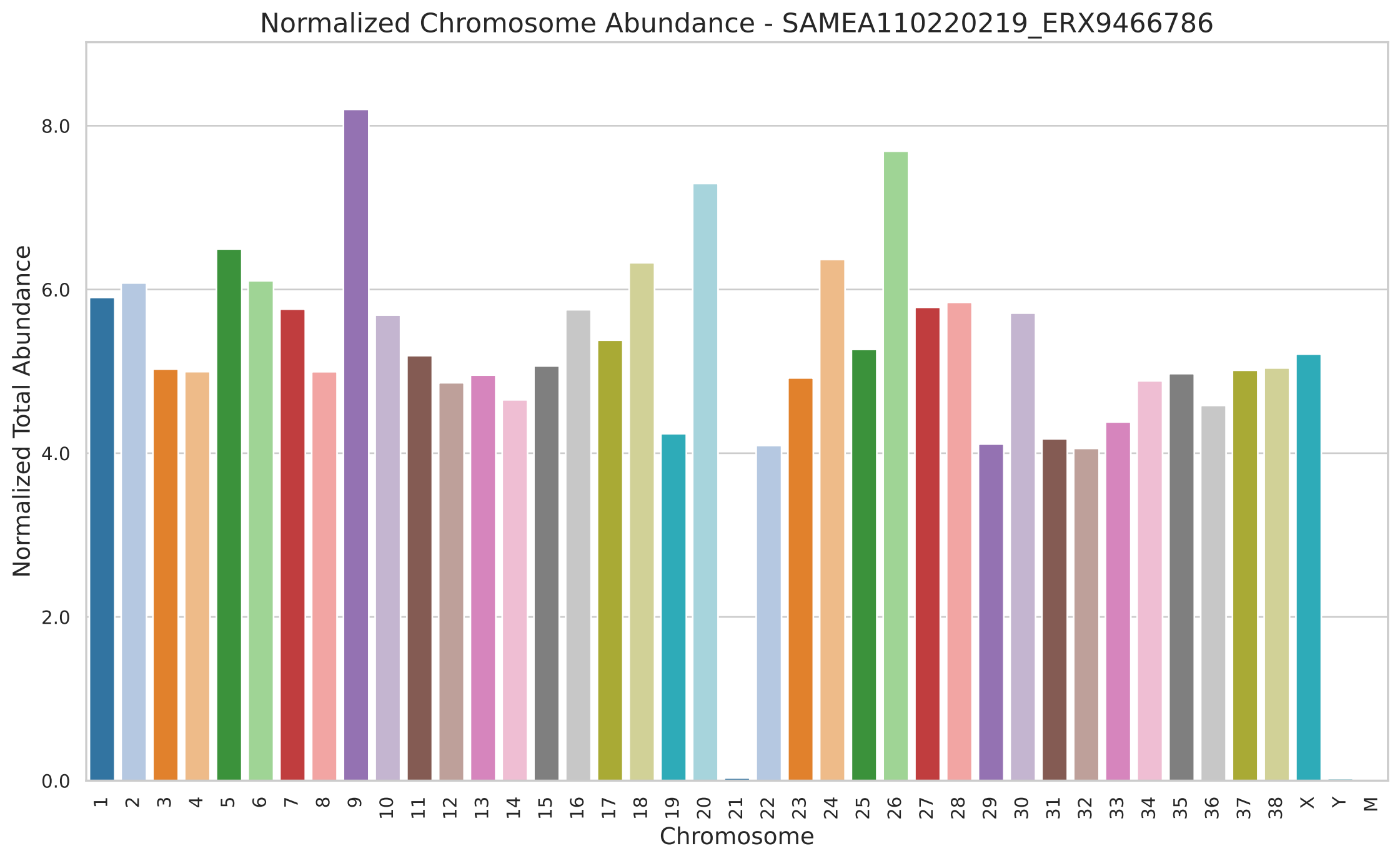

Normalized Chromosome Abundance - SAMEA7515509_ERX10021297
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

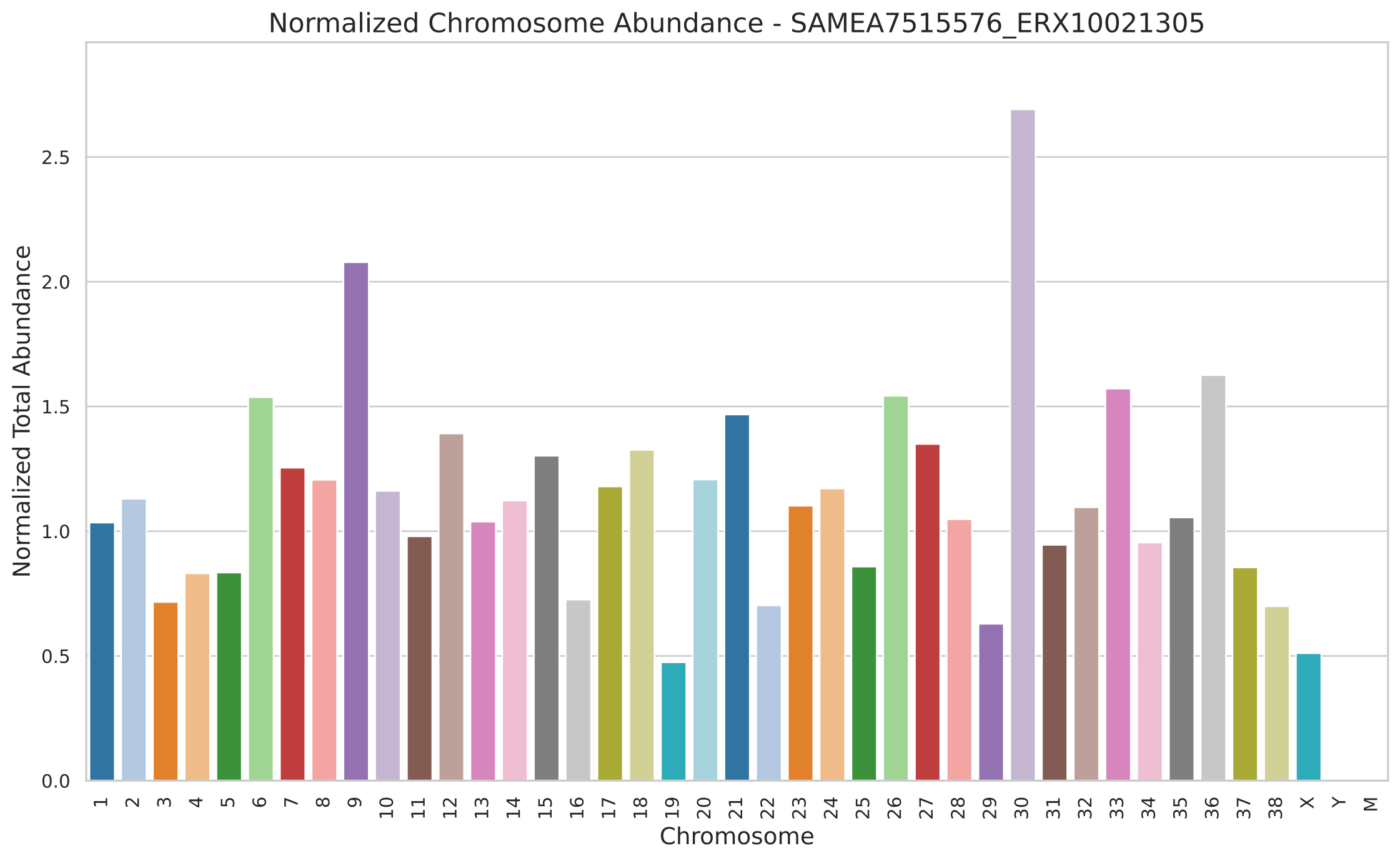

Normalized Chromosome Abundance - SAMN31329644_SRX17927313
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

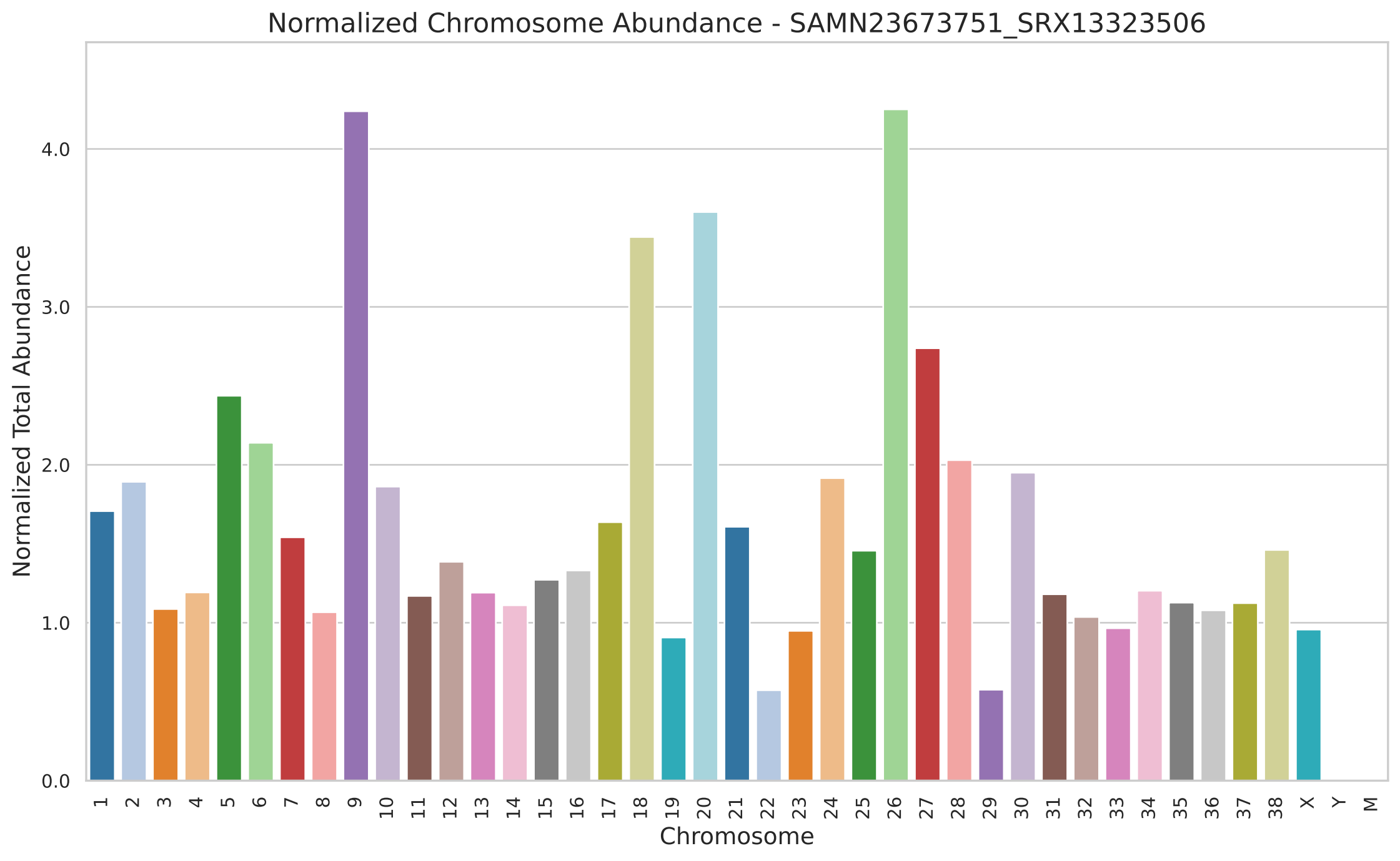

Normalized Chromosome Abundance - SAMEA7515507_ERX10021295
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

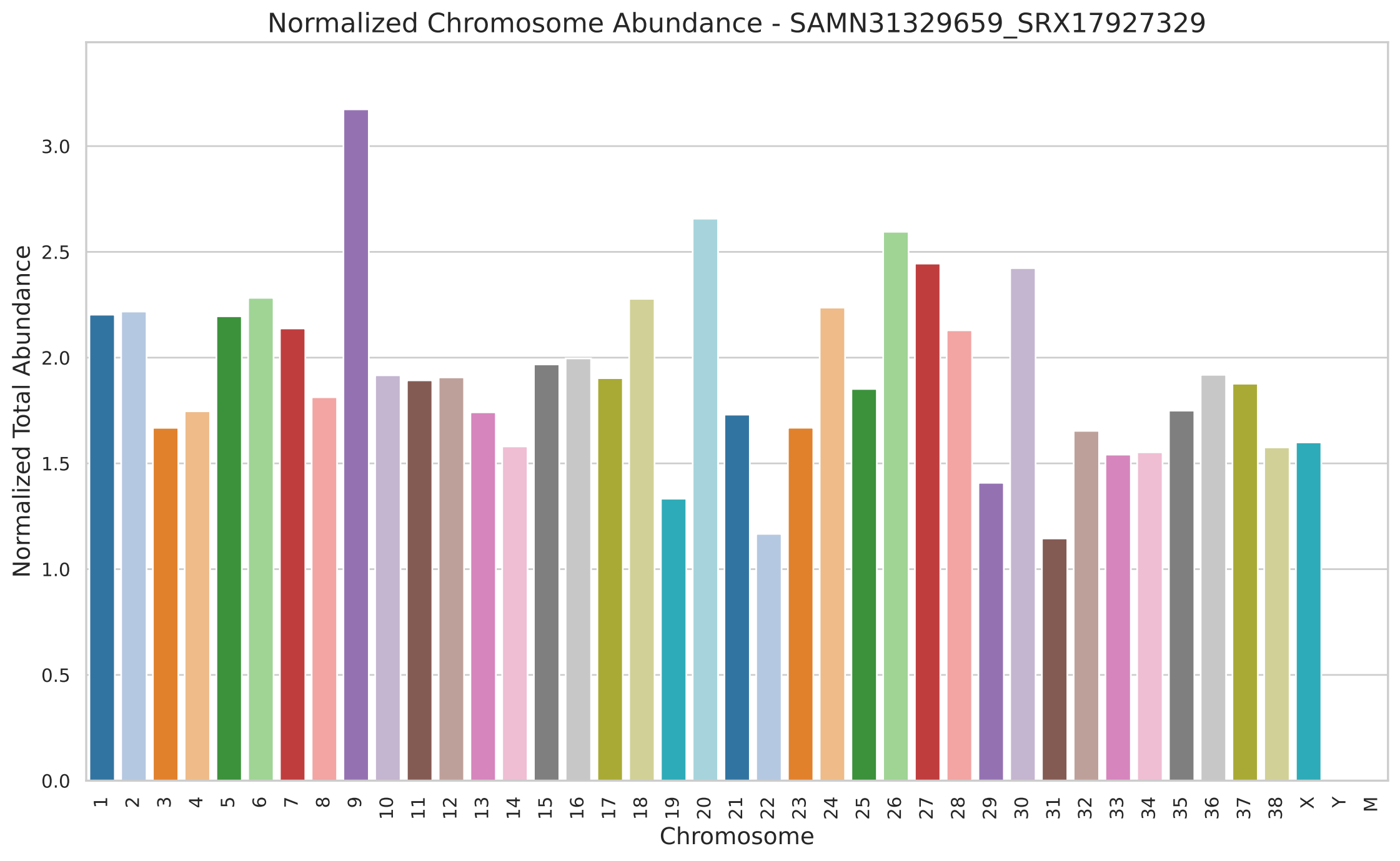

Normalized Chromosome Abundance - SAMEA7515579_ERX10021307
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

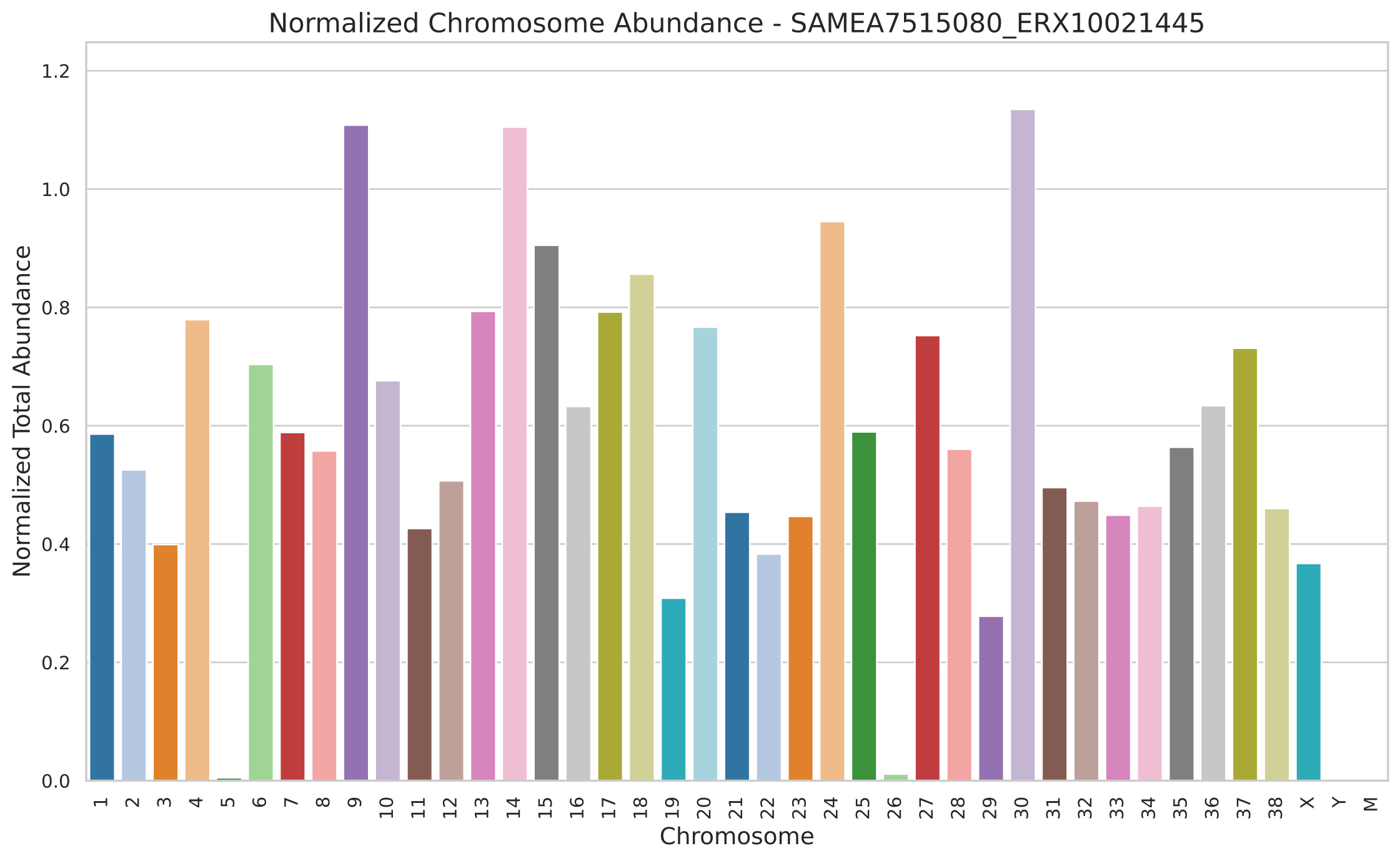

Normalized Chromosome Abundance - SAMEA7515419_ERX10021294
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

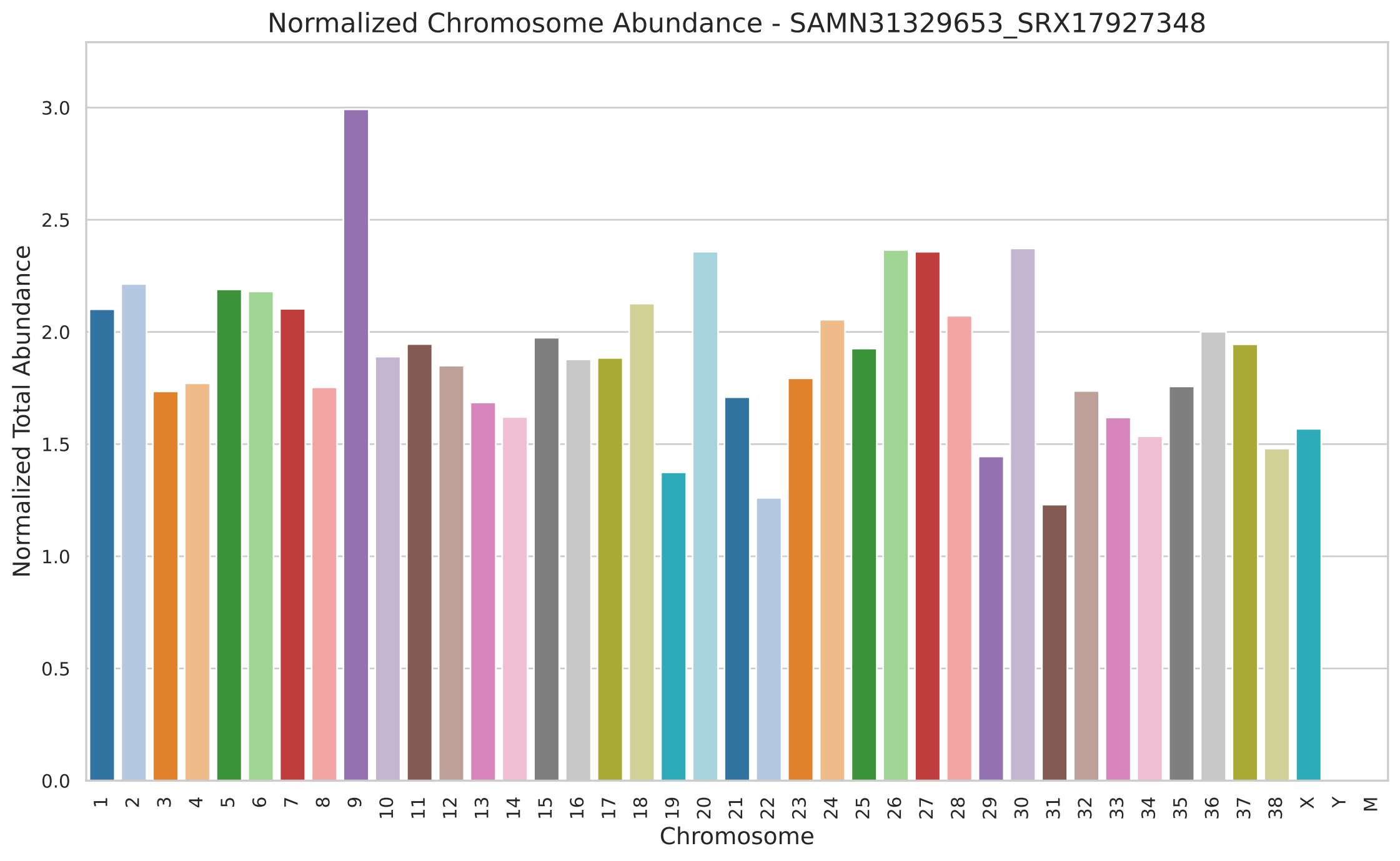

Normalized Chromosome Abundance - SAMEA110220219_ERX9466786
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

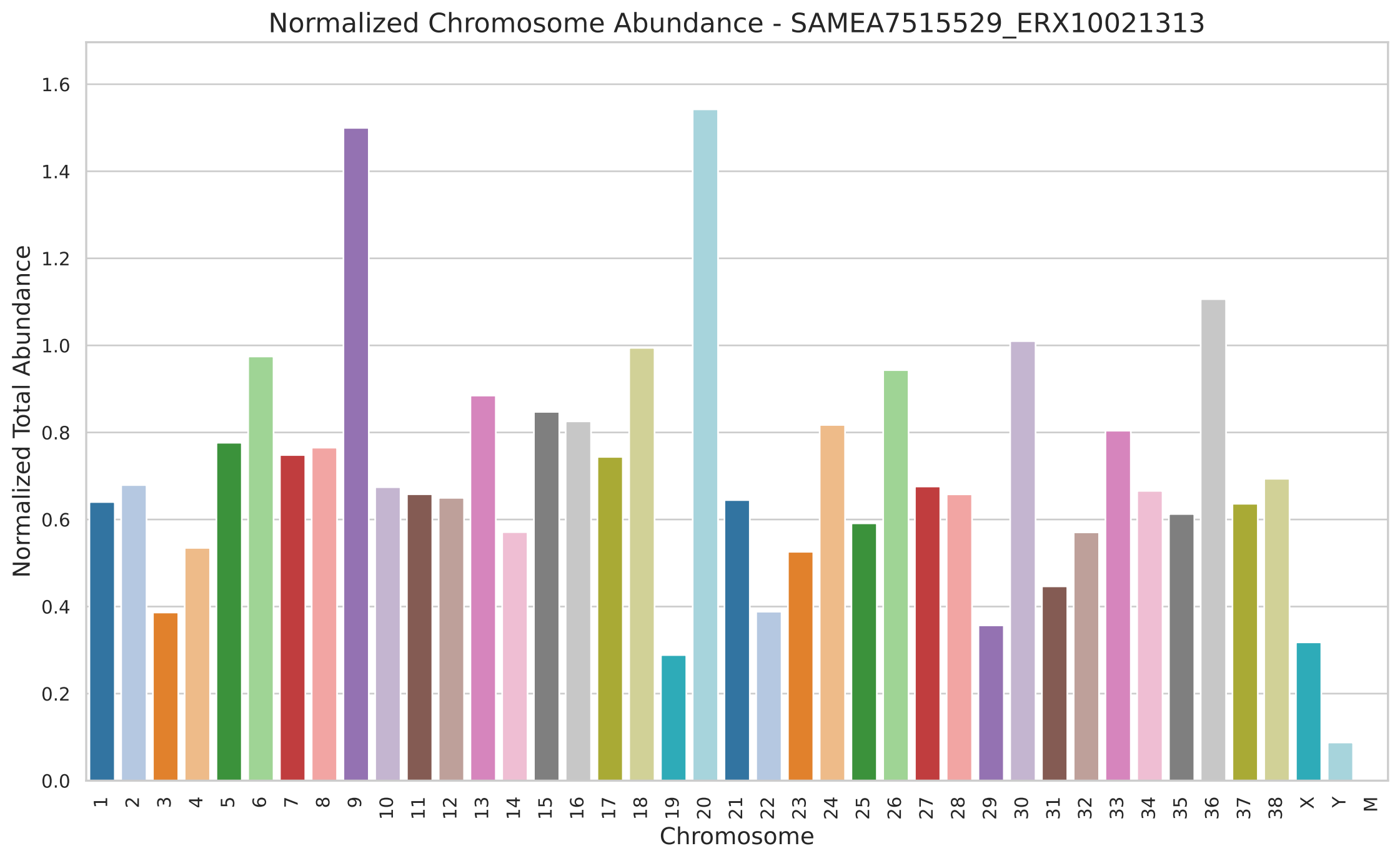

Normalized Chromosome Abundance - SAMEA7515576_ERX10021305
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

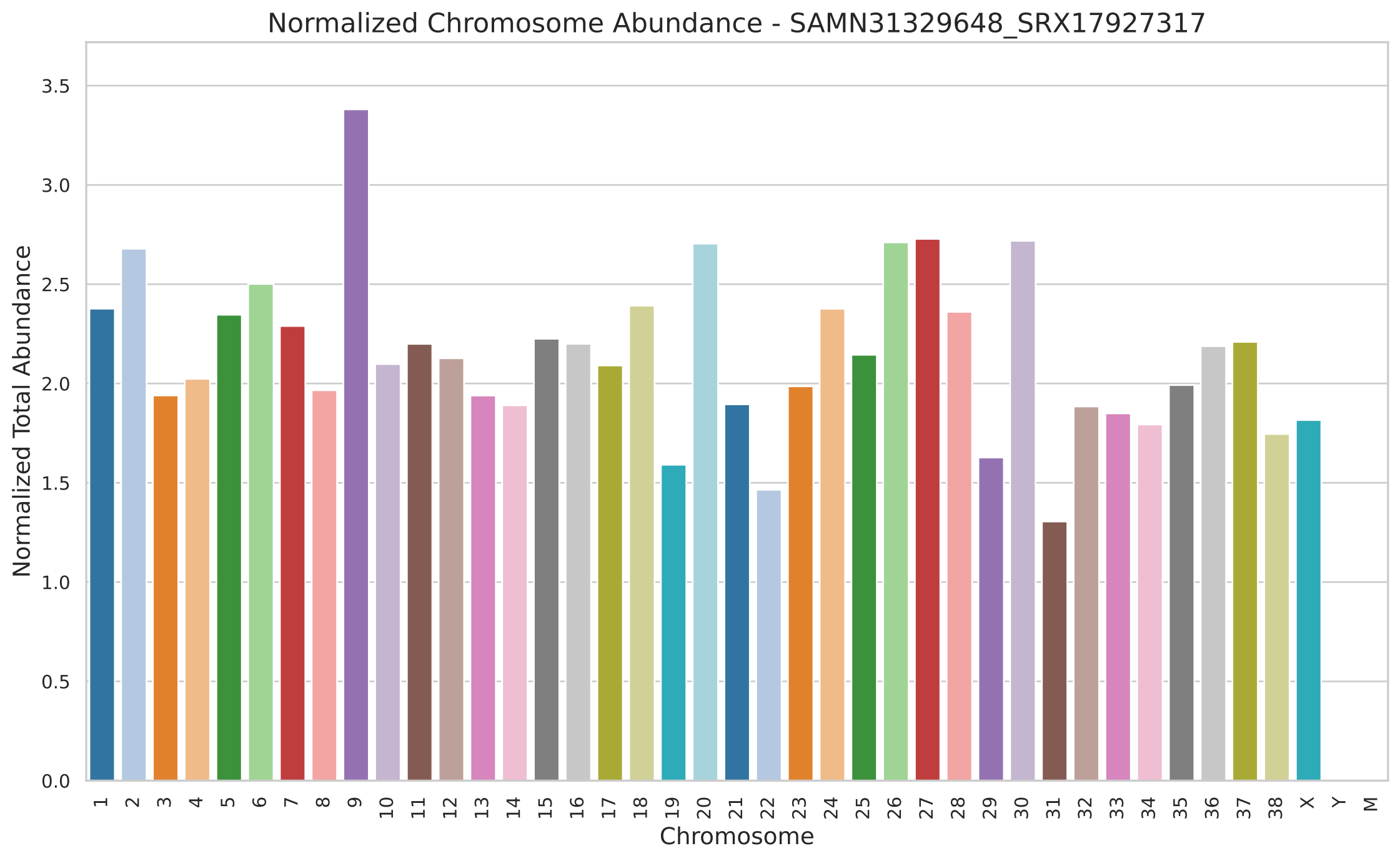

Normalized Chromosome Abundance - SAMN23673751_SRX13323506
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

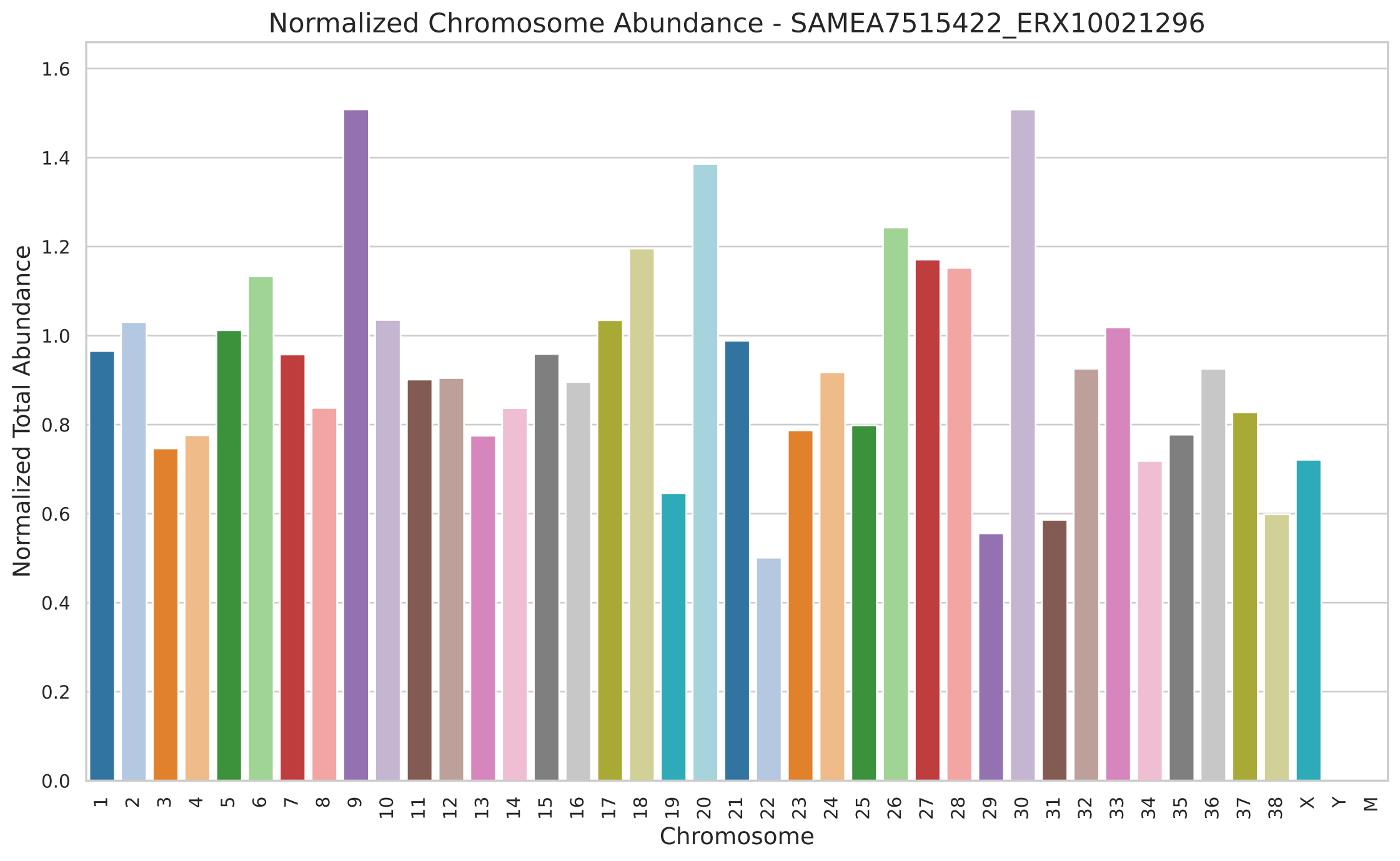

Normalized Chromosome Abundance - SAMN31329659_SRX17927329
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

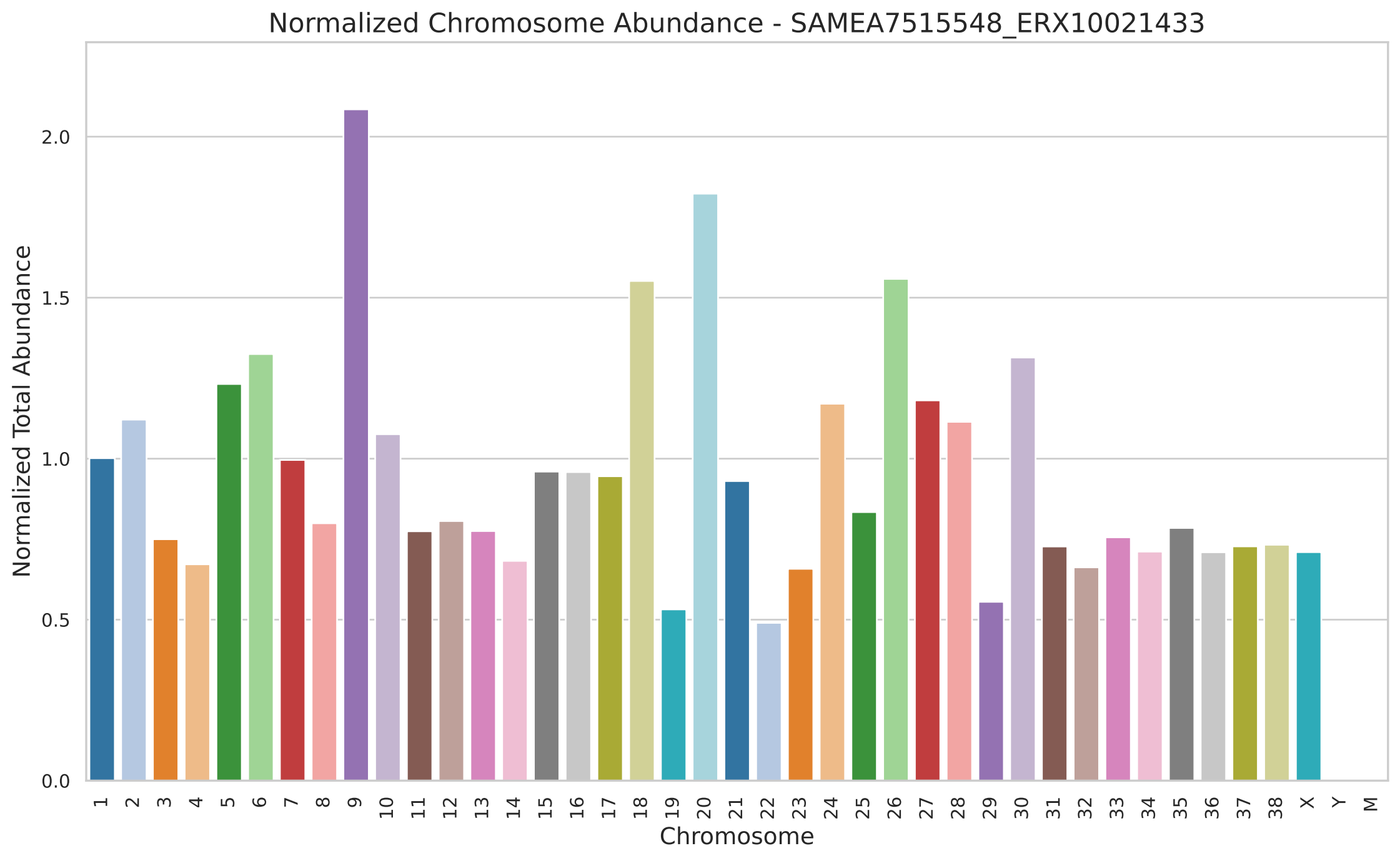

Normalized Chromosome Abundance - SAMEA7515080_ERX10021445
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

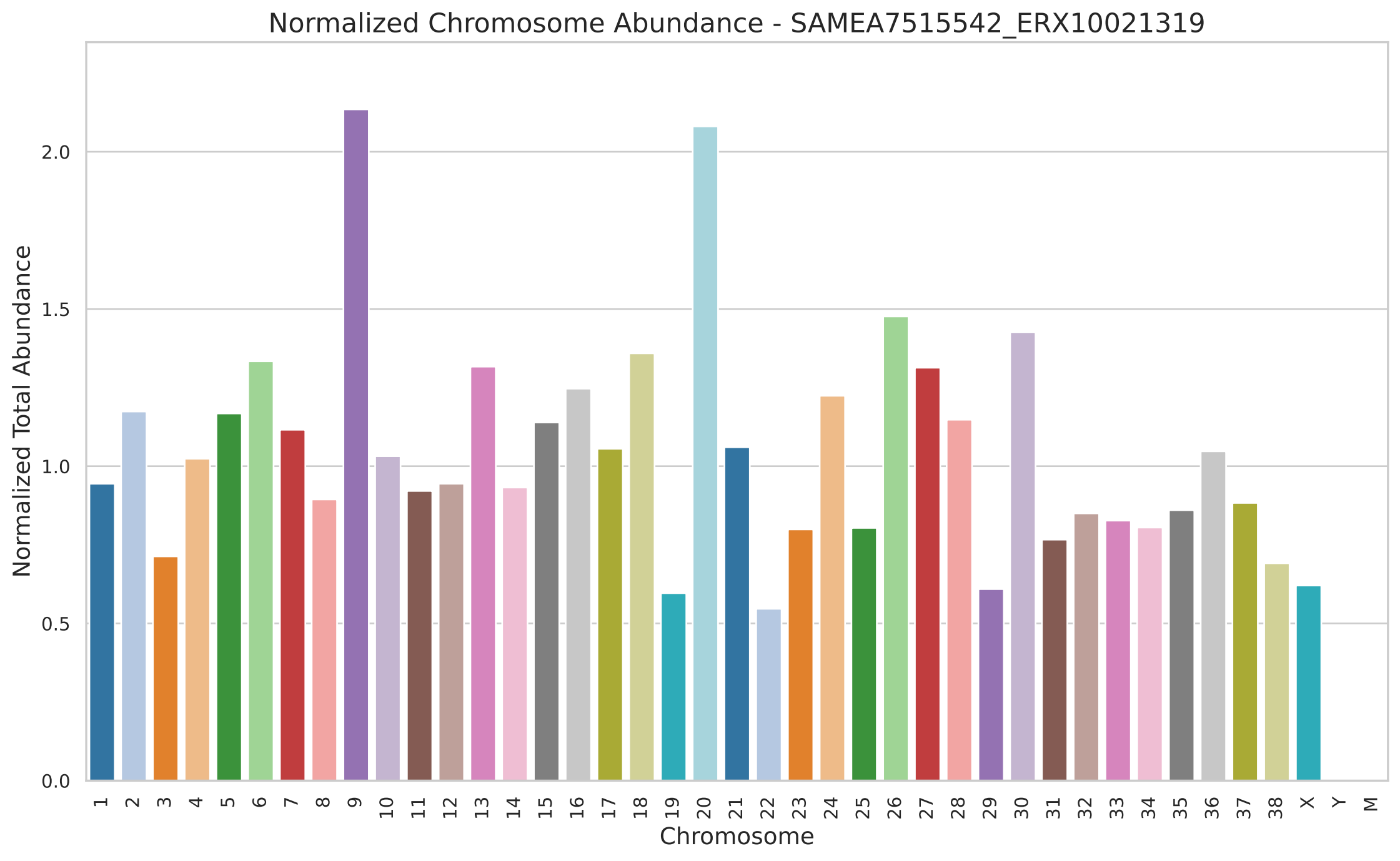

Normalized Chromosome Abundance - SAMN31329653_SRX17927348
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

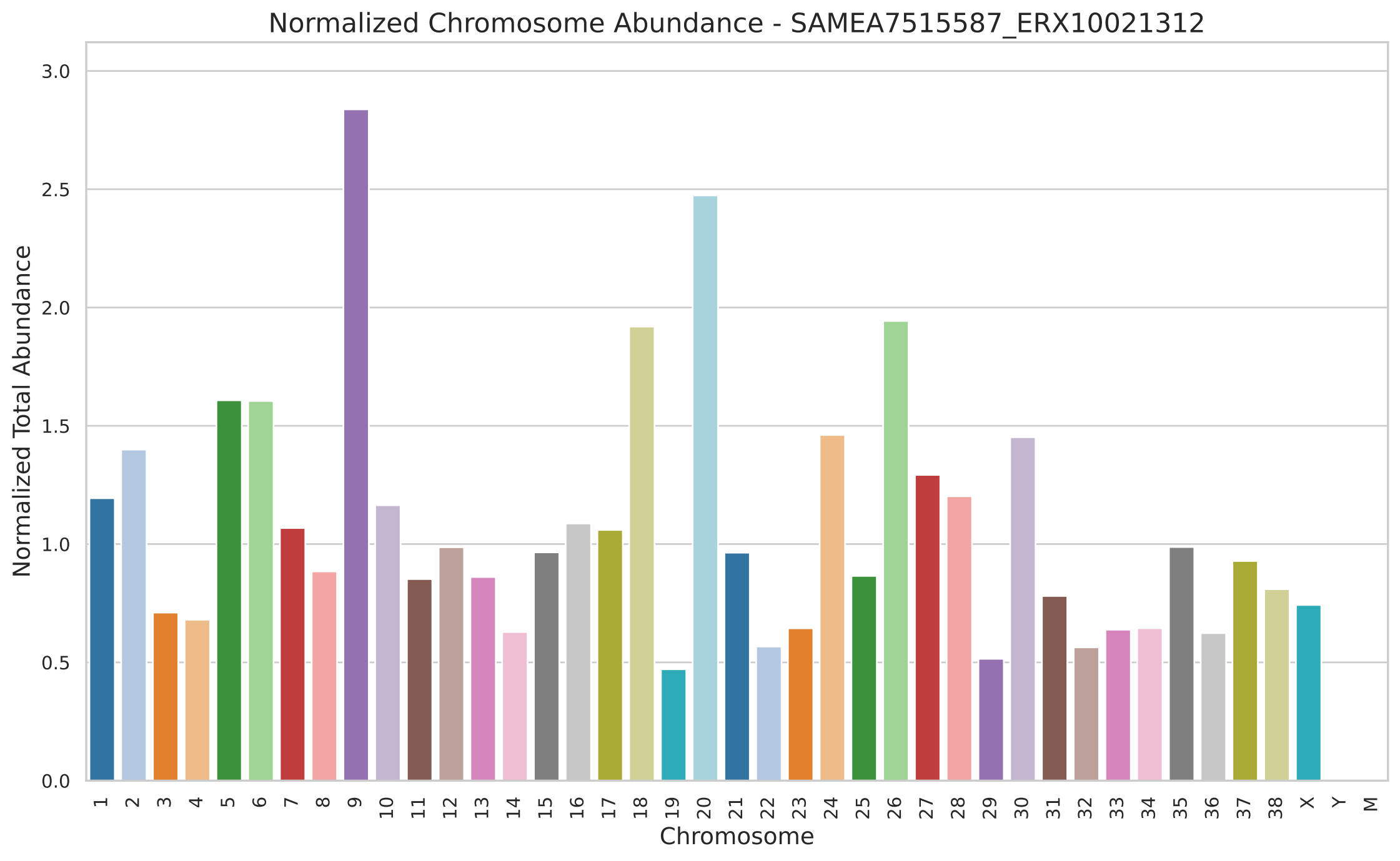

Normalized Chromosome Abundance - SAMEA7515529_ERX10021313
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

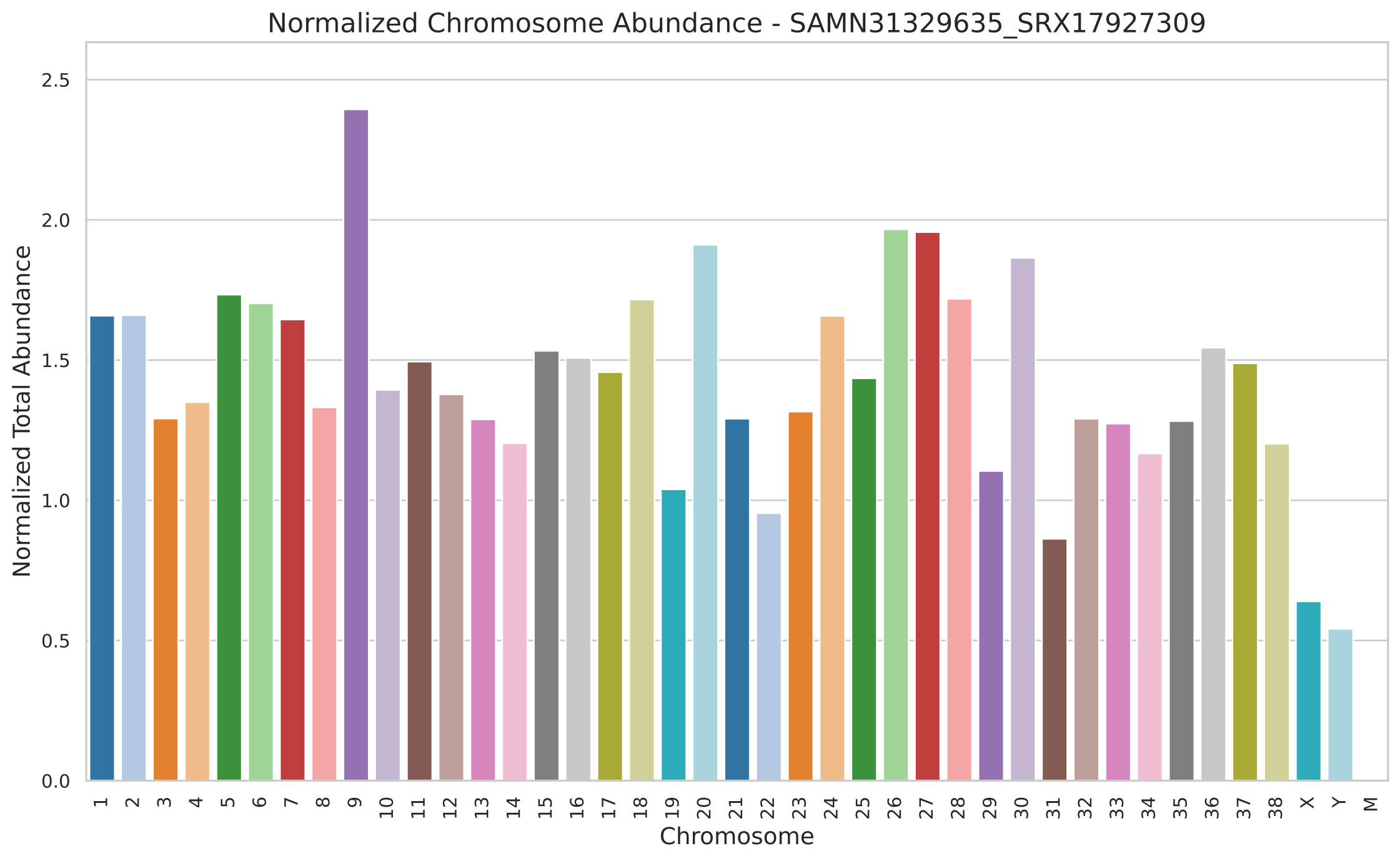

Normalized Chromosome Abundance - SAMN31329648_SRX17927317
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

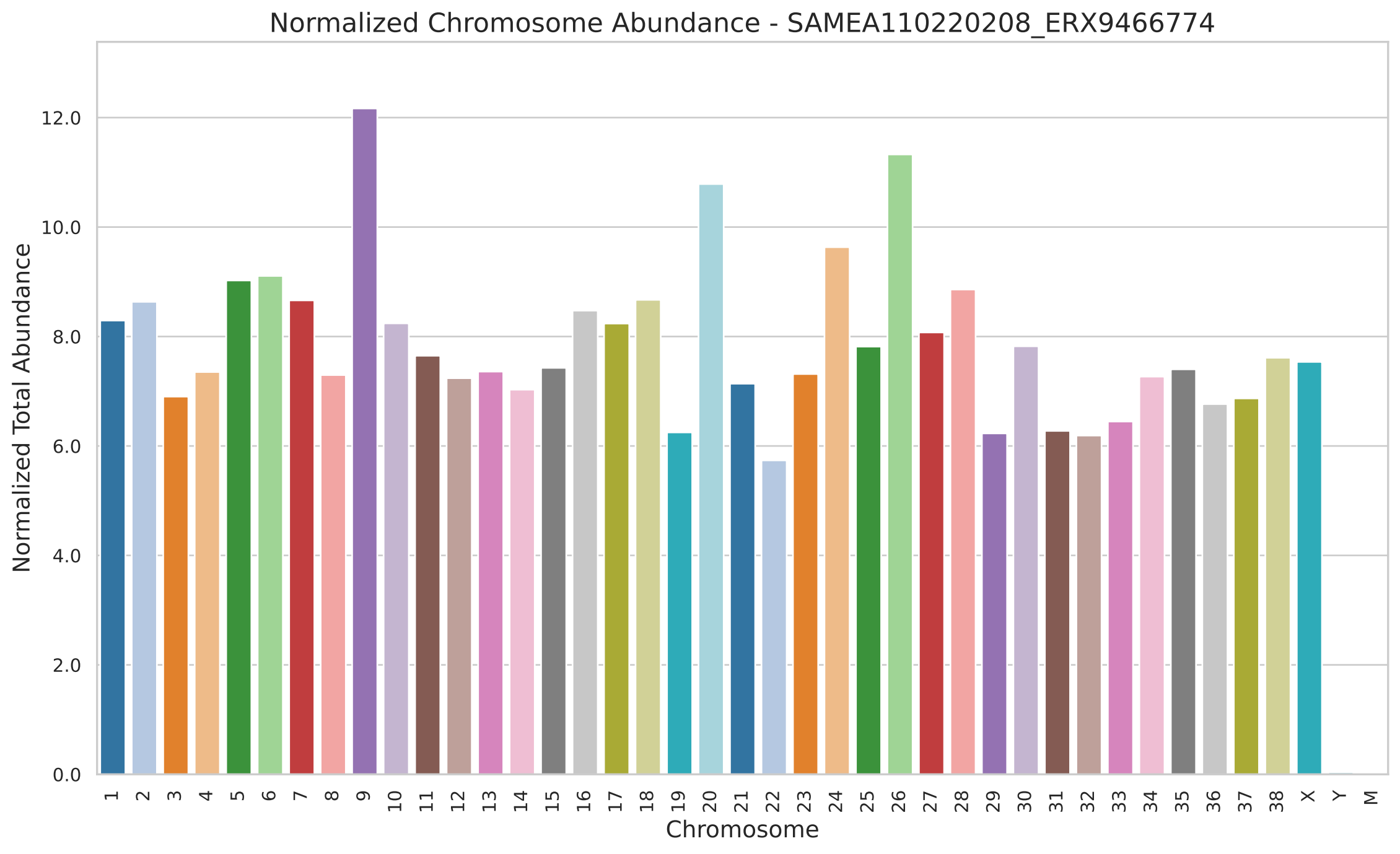

Normalized Chromosome Abundance - SAMEA7515422_ERX10021296
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

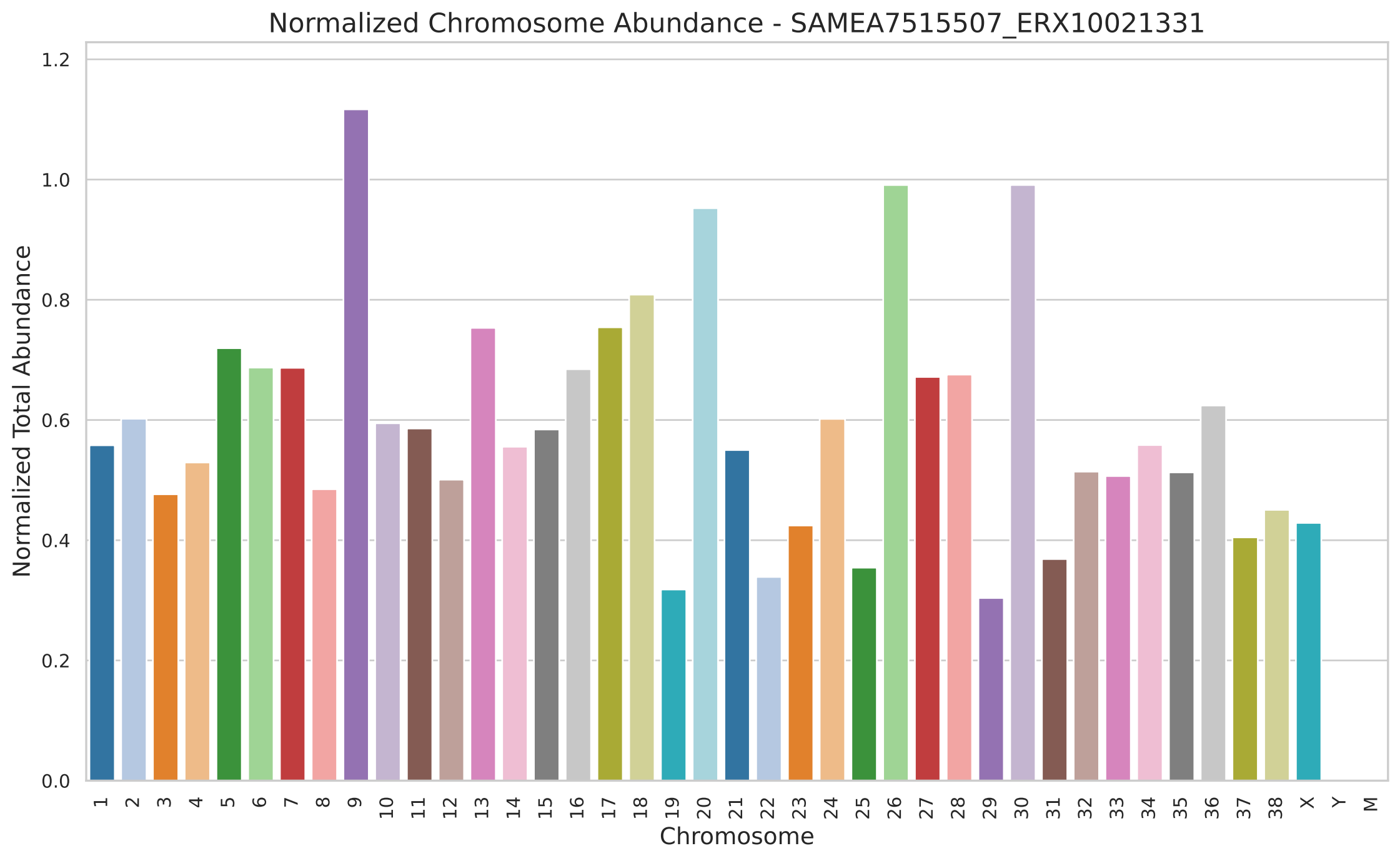

Normalized Chromosome Abundance - SAMEA7515548_ERX10021433
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

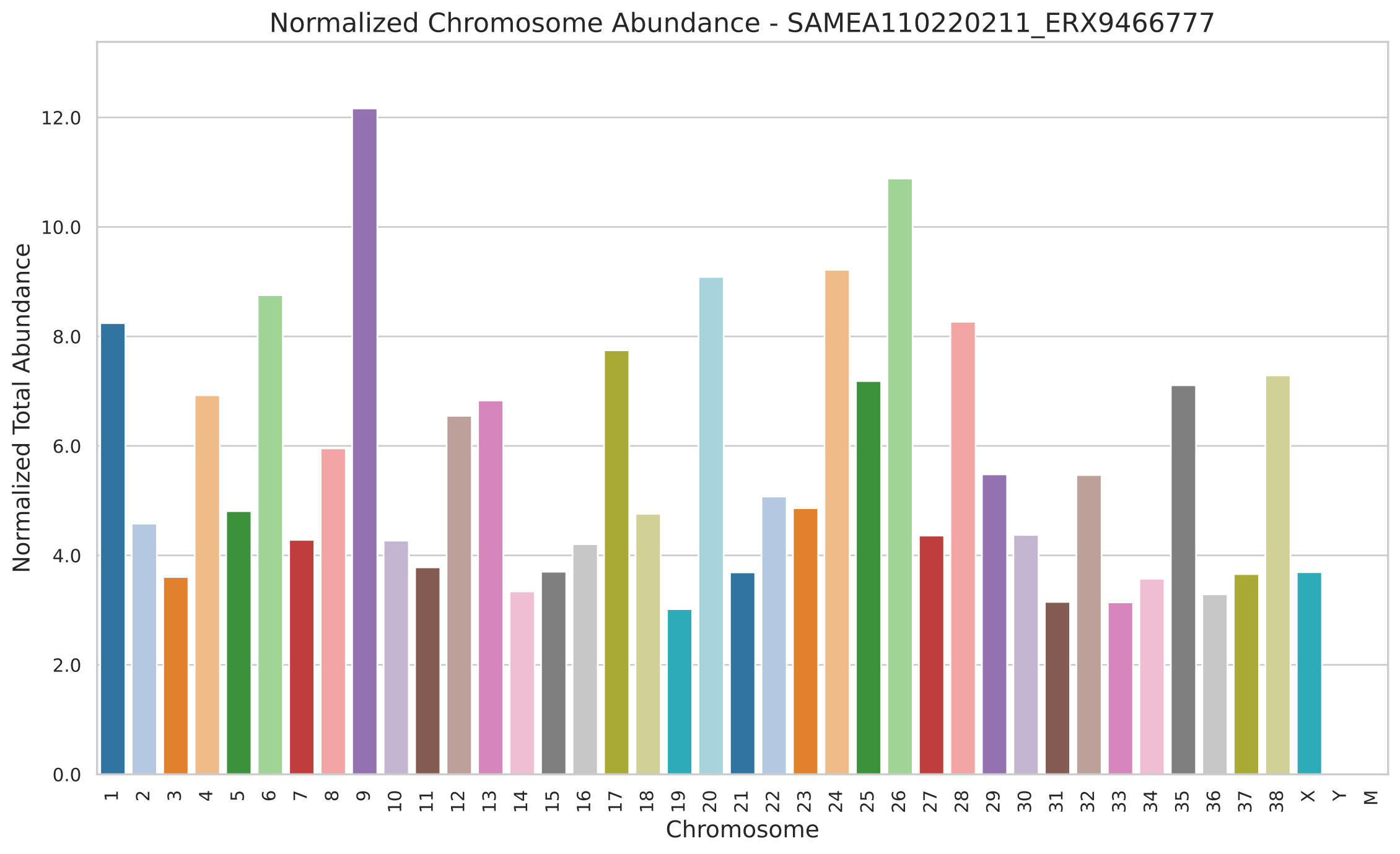

Normalized Chromosome Abundance - SAMEA7515542_ERX10021319
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

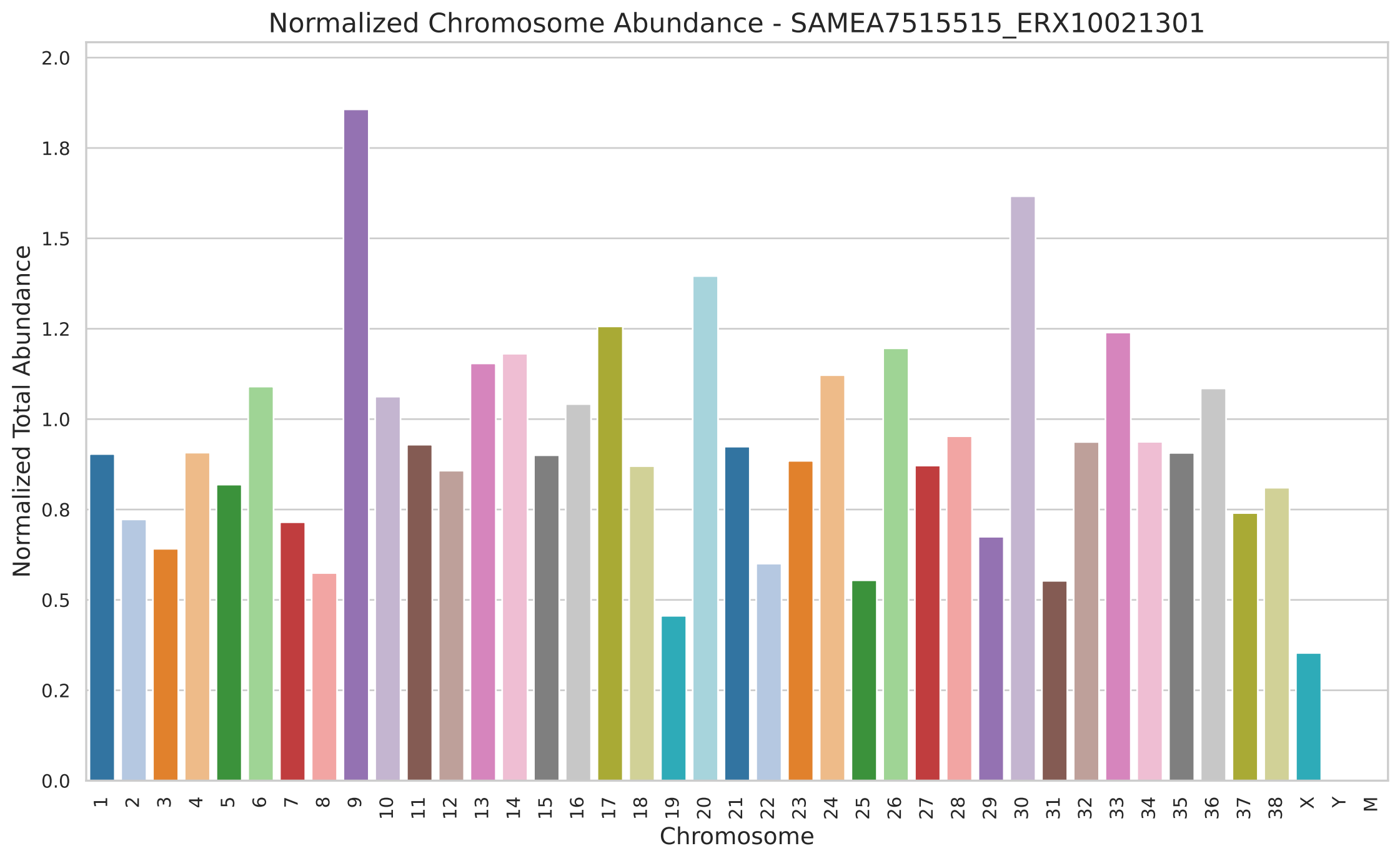

Normalized Chromosome Abundance - SAMEA7515587_ERX10021312
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

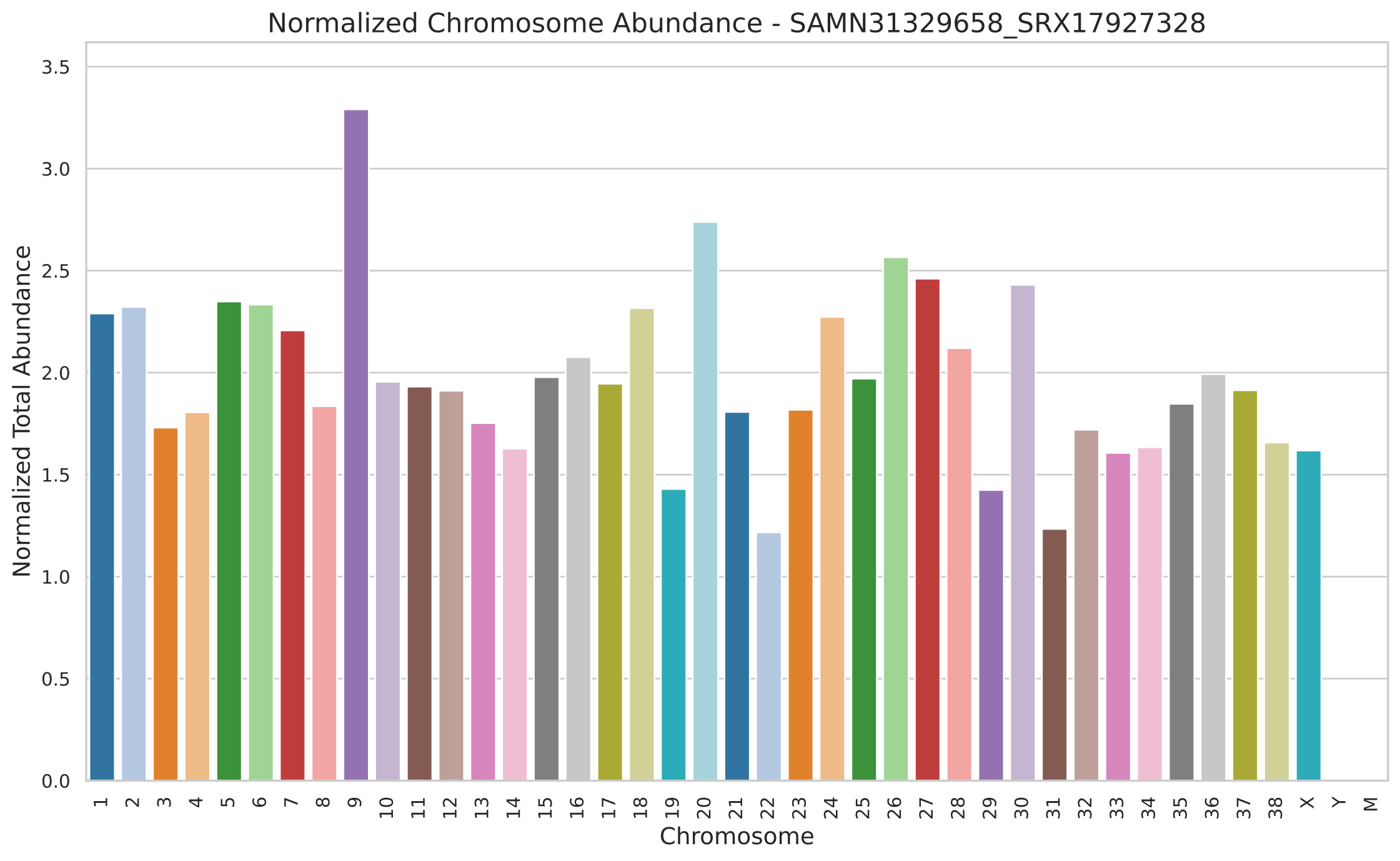

Normalized Chromosome Abundance - SAMN31329635_SRX17927309
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

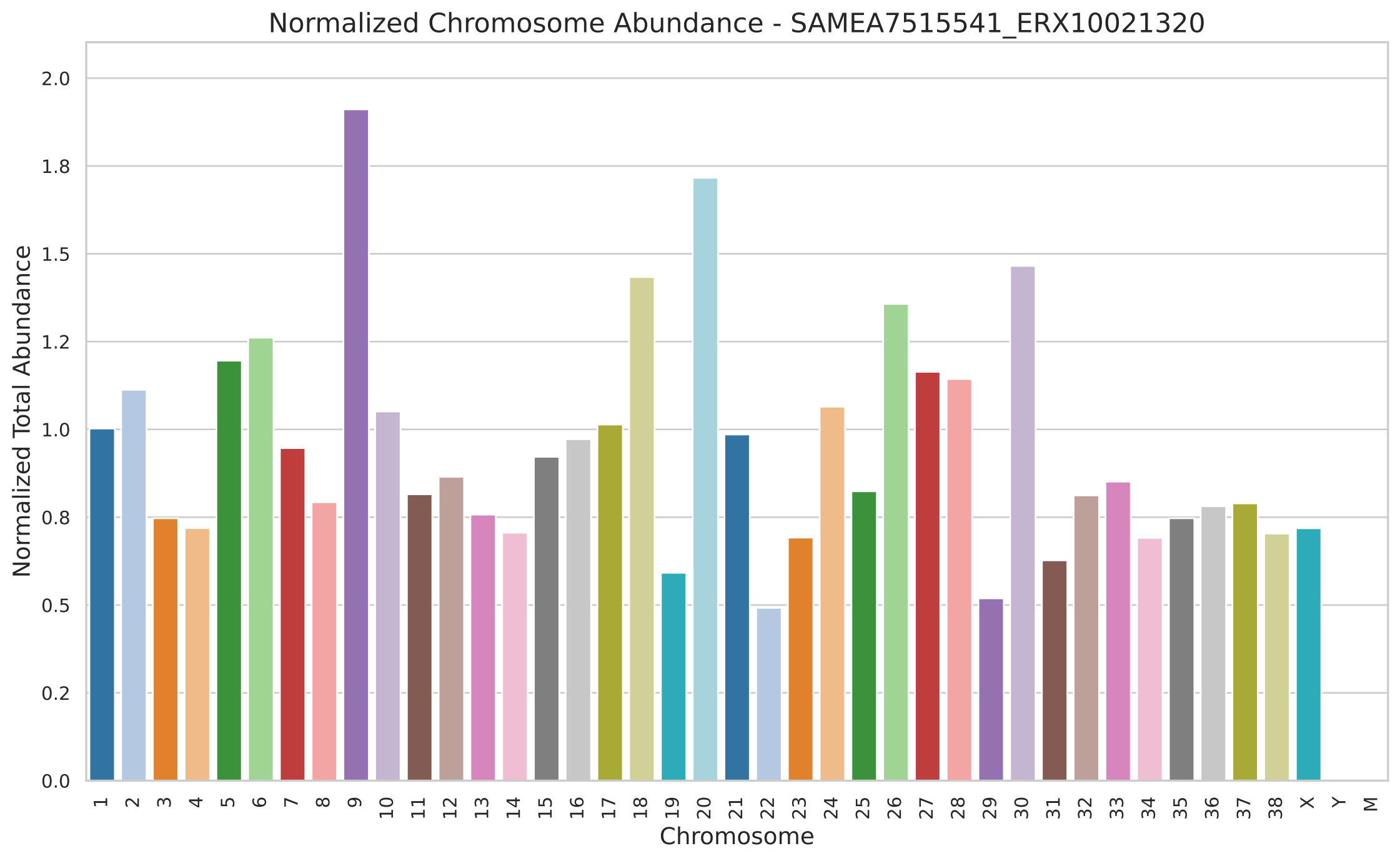

Normalized Chromosome Abundance - SAMEA110220208_ERX9466774
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
12.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

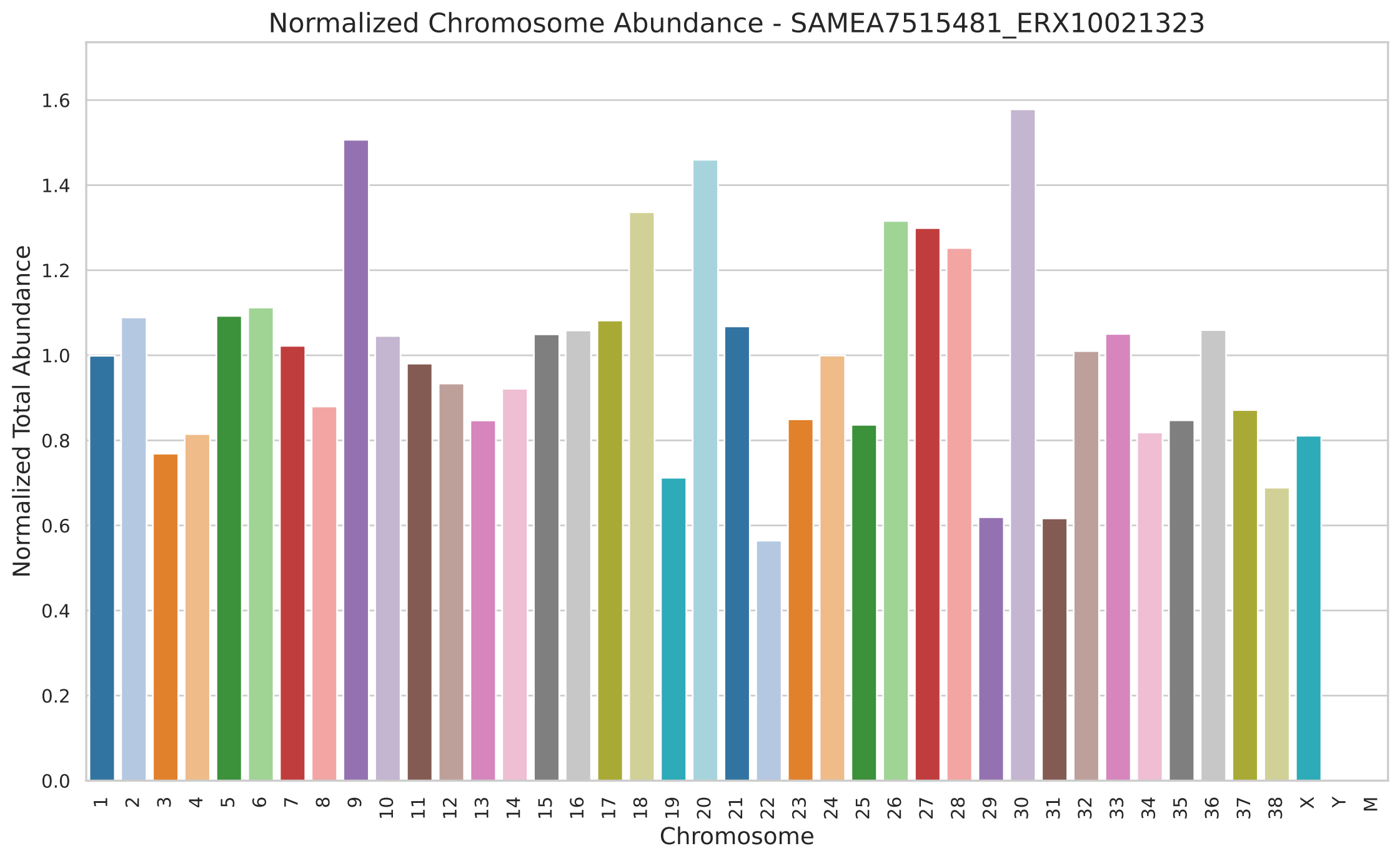

Normalized Chromosome Abundance - SAMEA7515507_ERX10021331
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

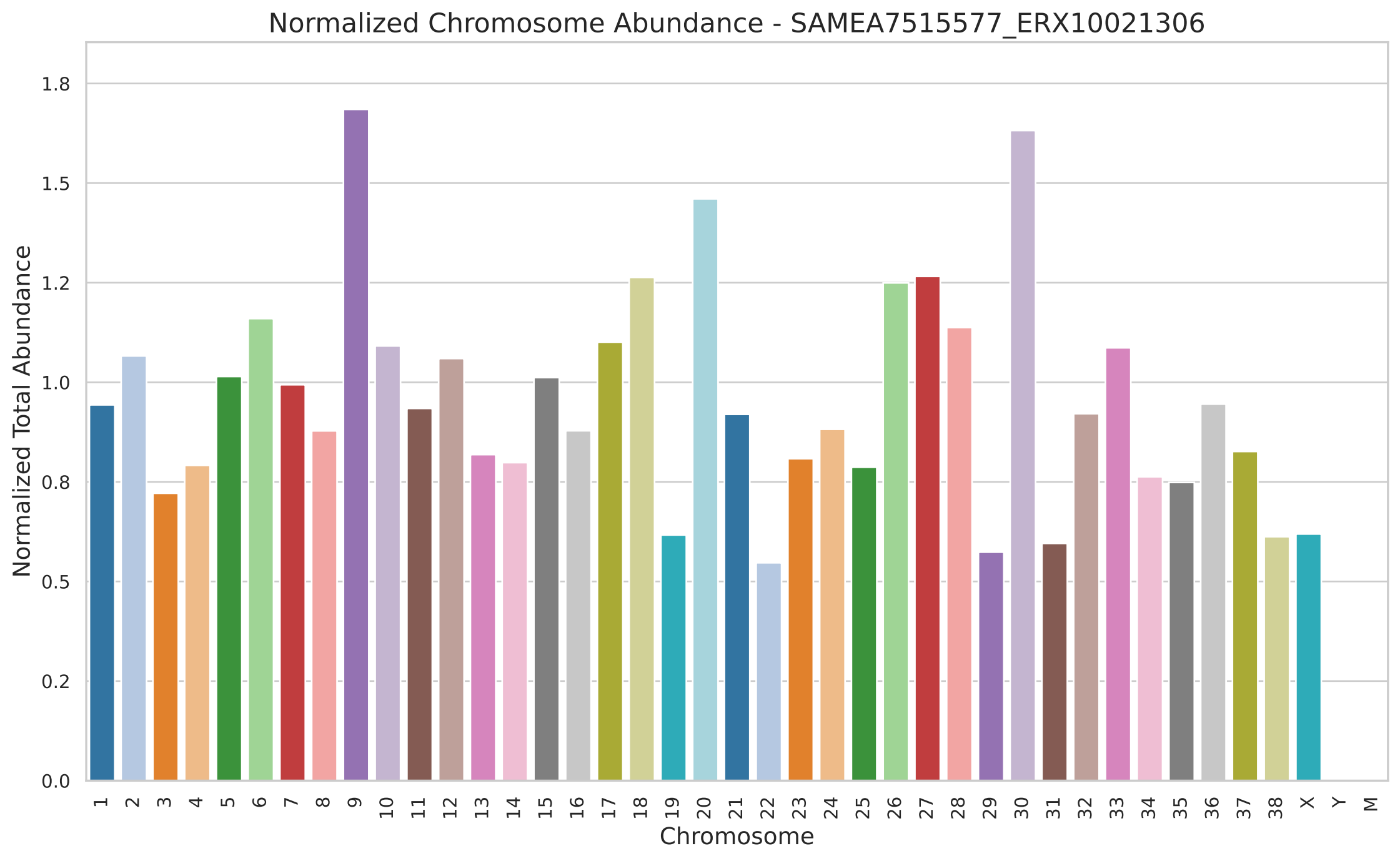

Normalized Chromosome Abundance - SAMEA110220211_ERX9466777
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
12.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

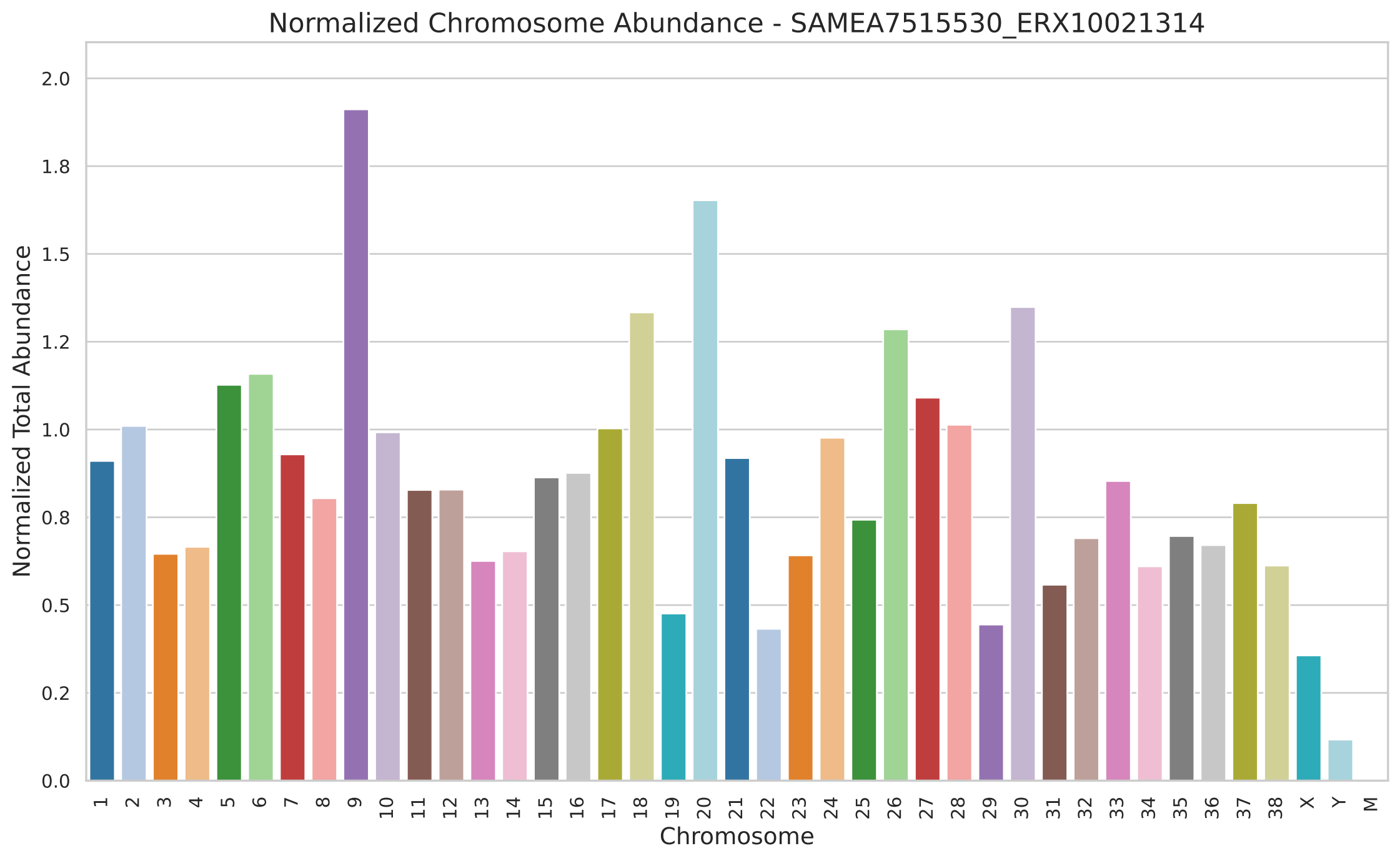

Normalized Chromosome Abundance - SAMEA7515515_ERX10021301
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

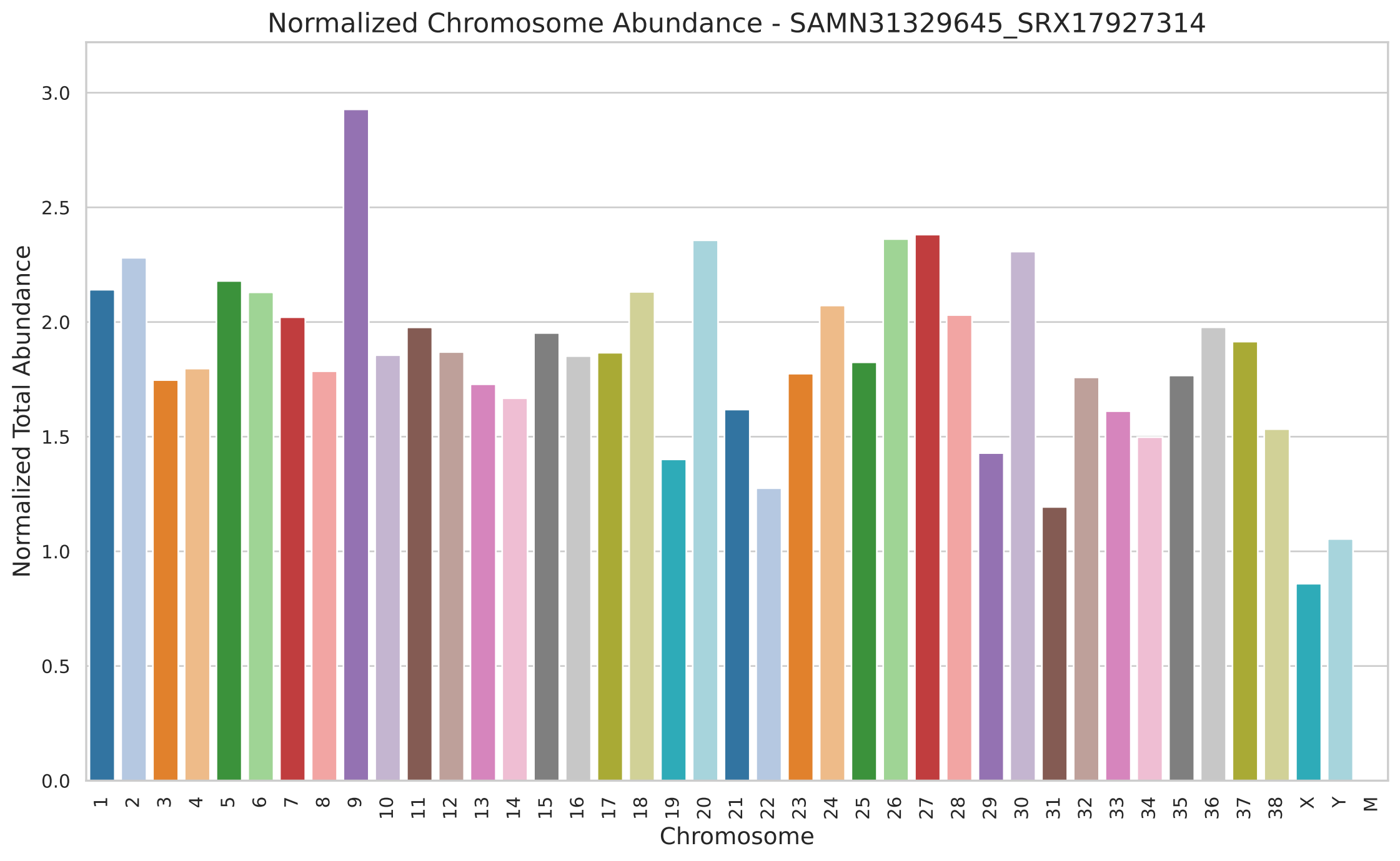

Normalized Chromosome Abundance - SAMN31329658_SRX17927328
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

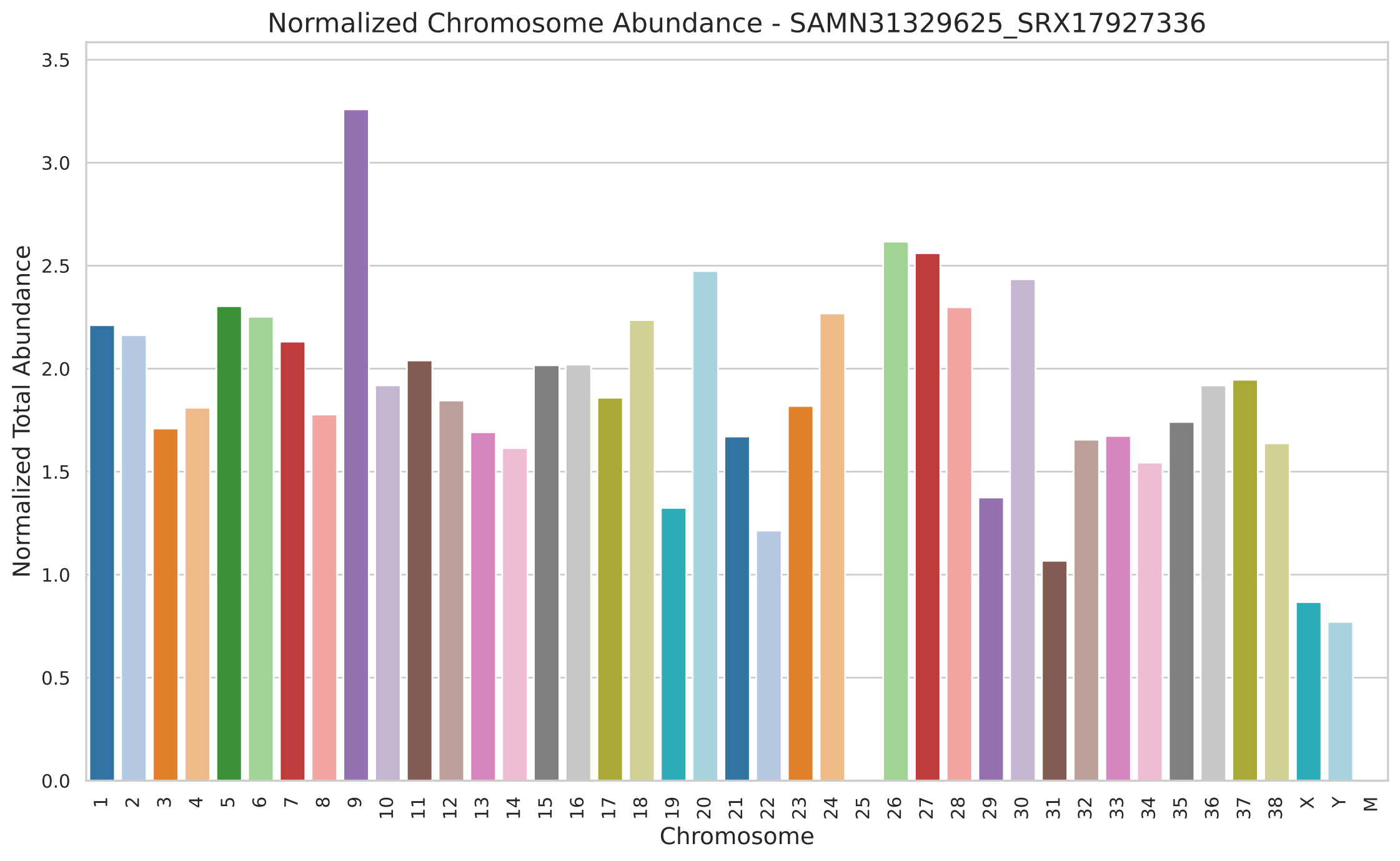

Normalized Chromosome Abundance - SAMEA7515541_ERX10021320
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

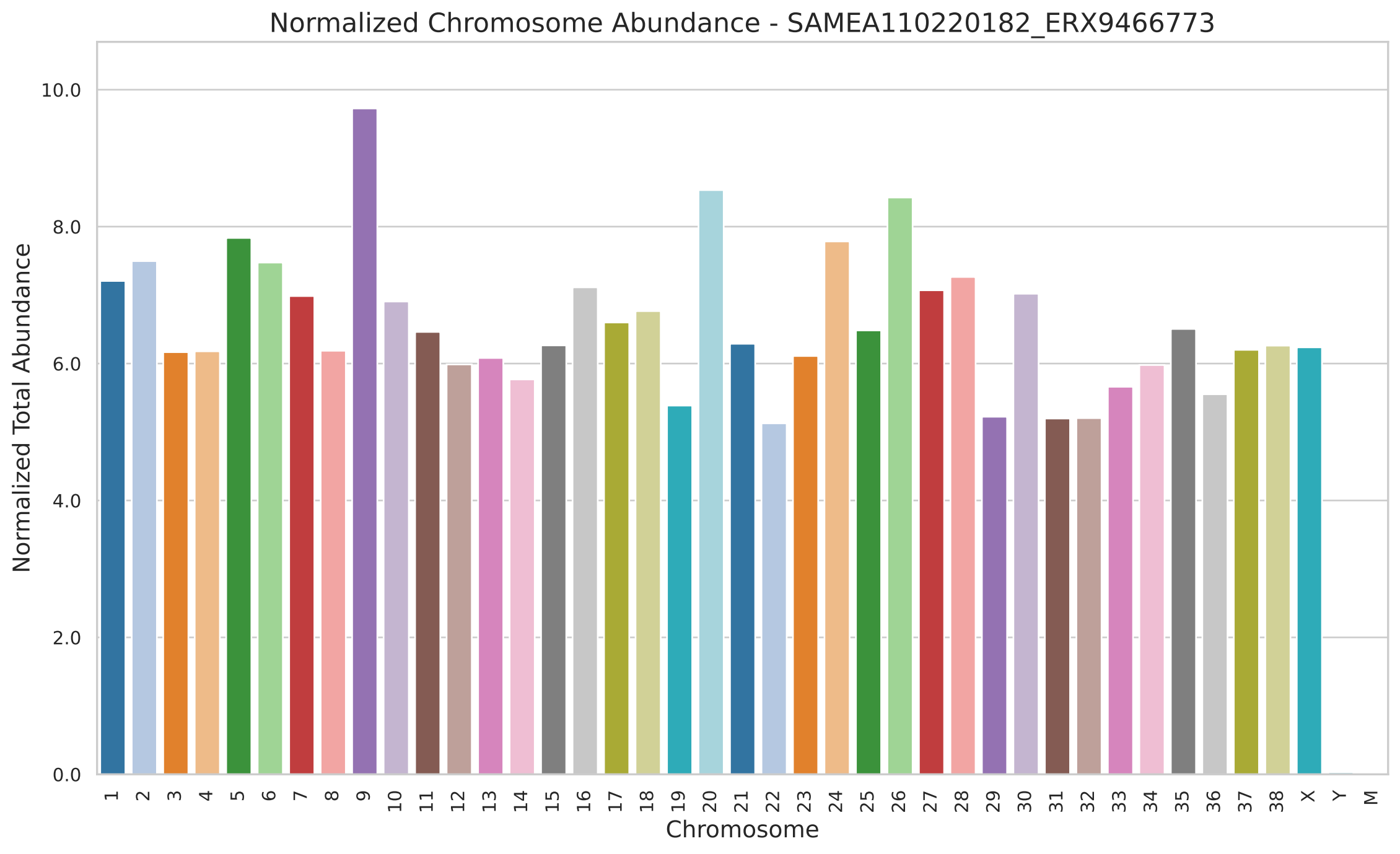

Normalized Chromosome Abundance - SAMEA7515481_ERX10021323
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

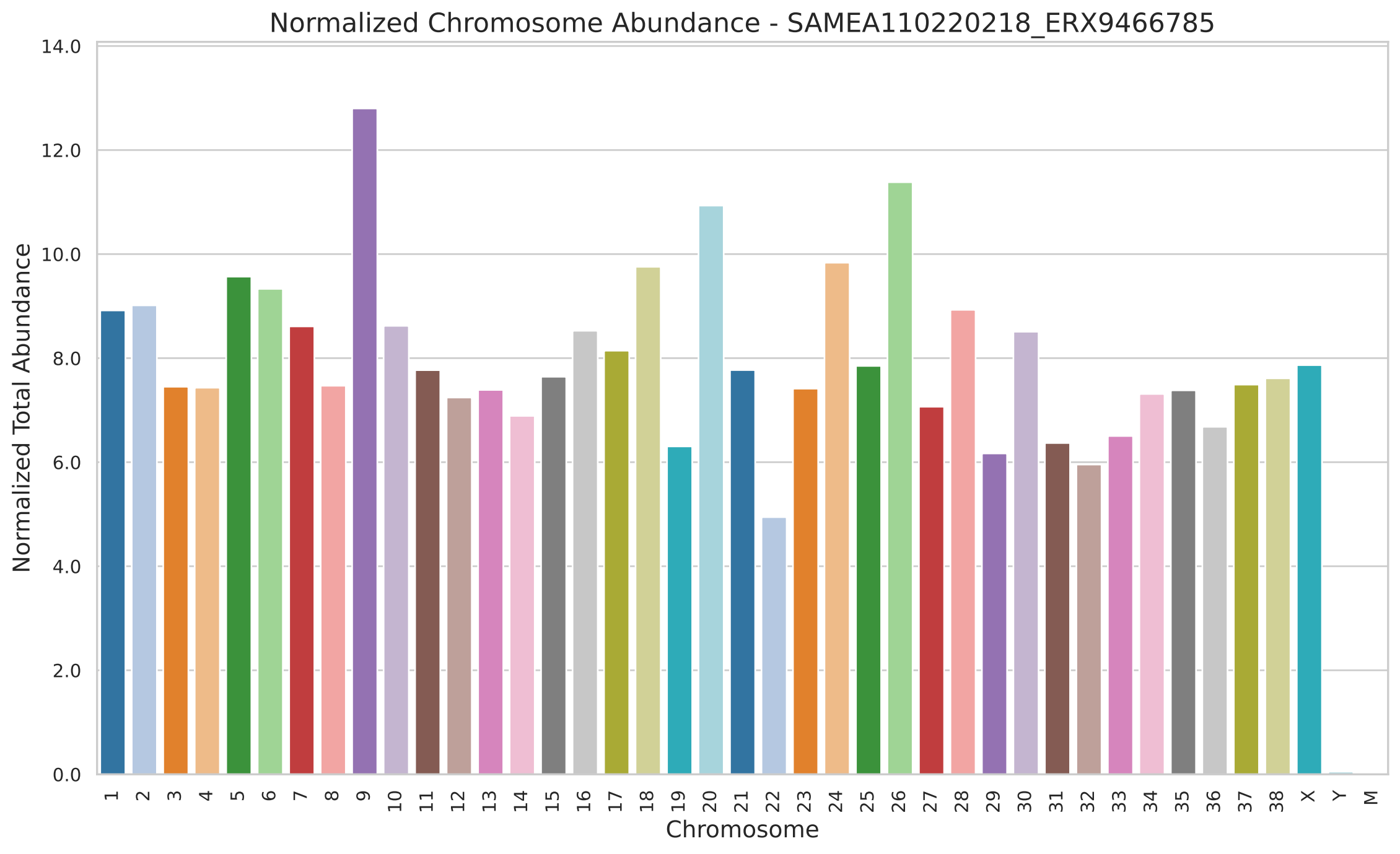

Normalized Chromosome Abundance - SAMEA7515577_ERX10021306
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

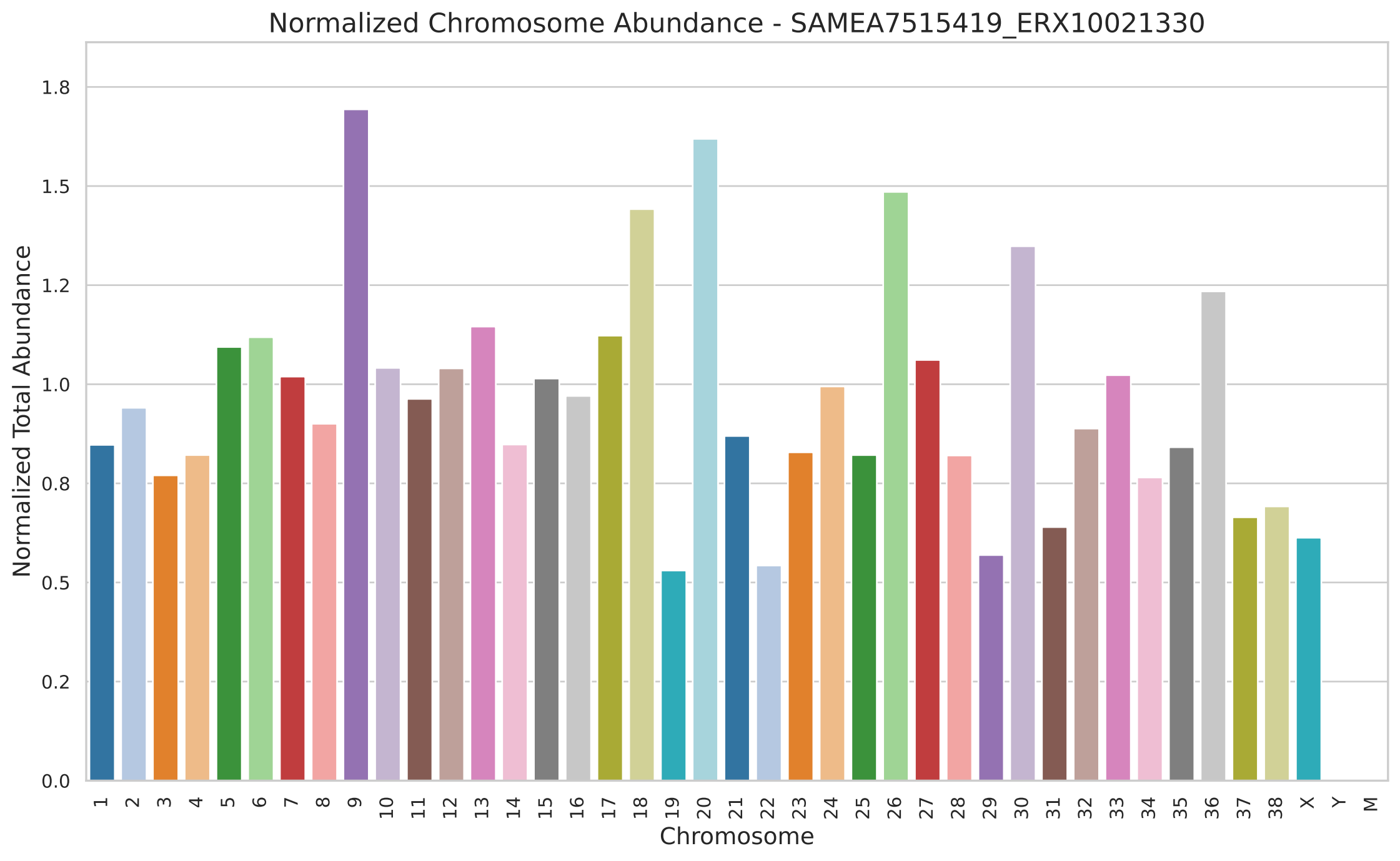

Normalized Chromosome Abundance - SAMEA7515530_ERX10021314
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

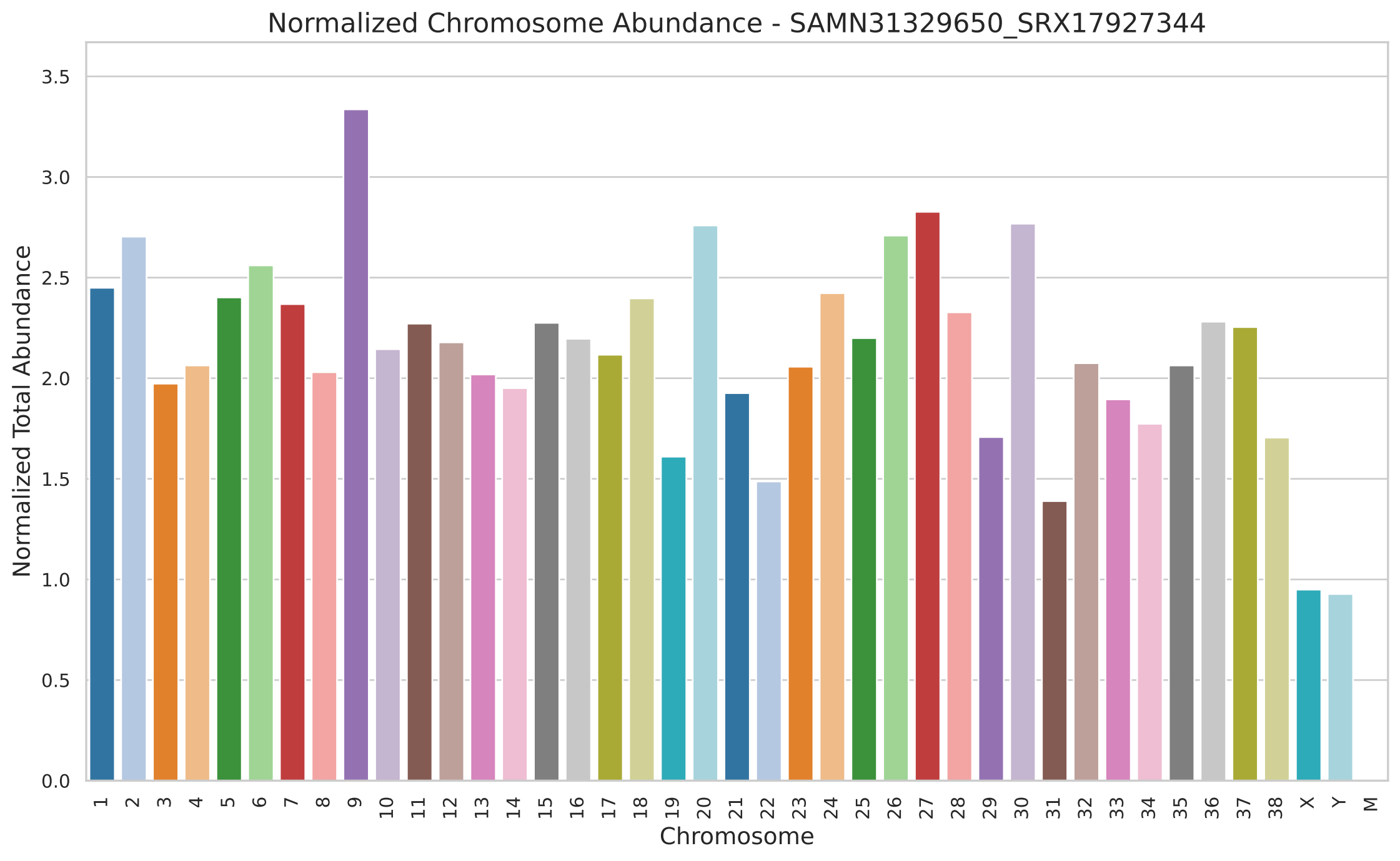

Normalized Chromosome Abundance - SAMN31329645_SRX17927314
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

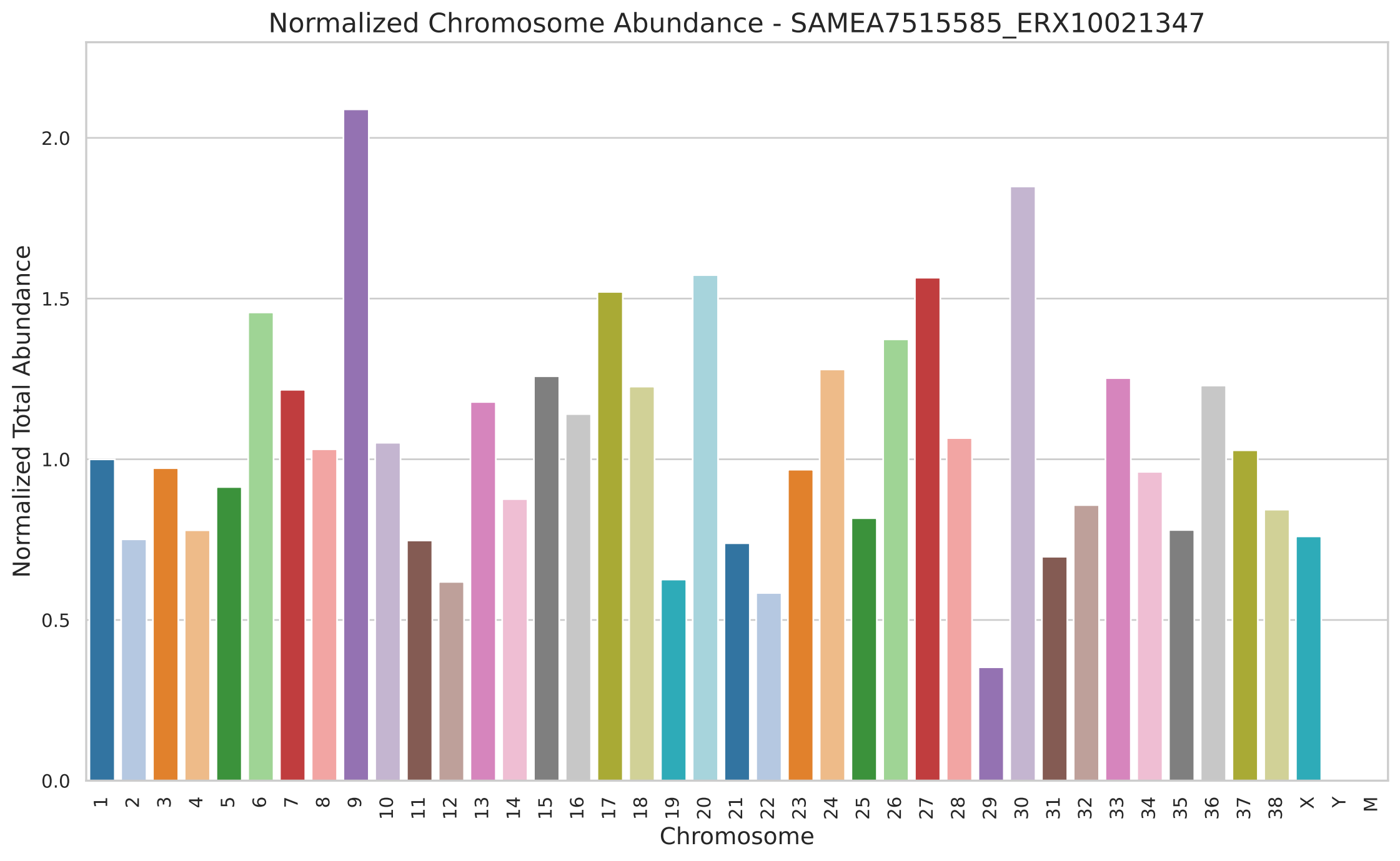

Normalized Chromosome Abundance - SAMN31329625_SRX17927336
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

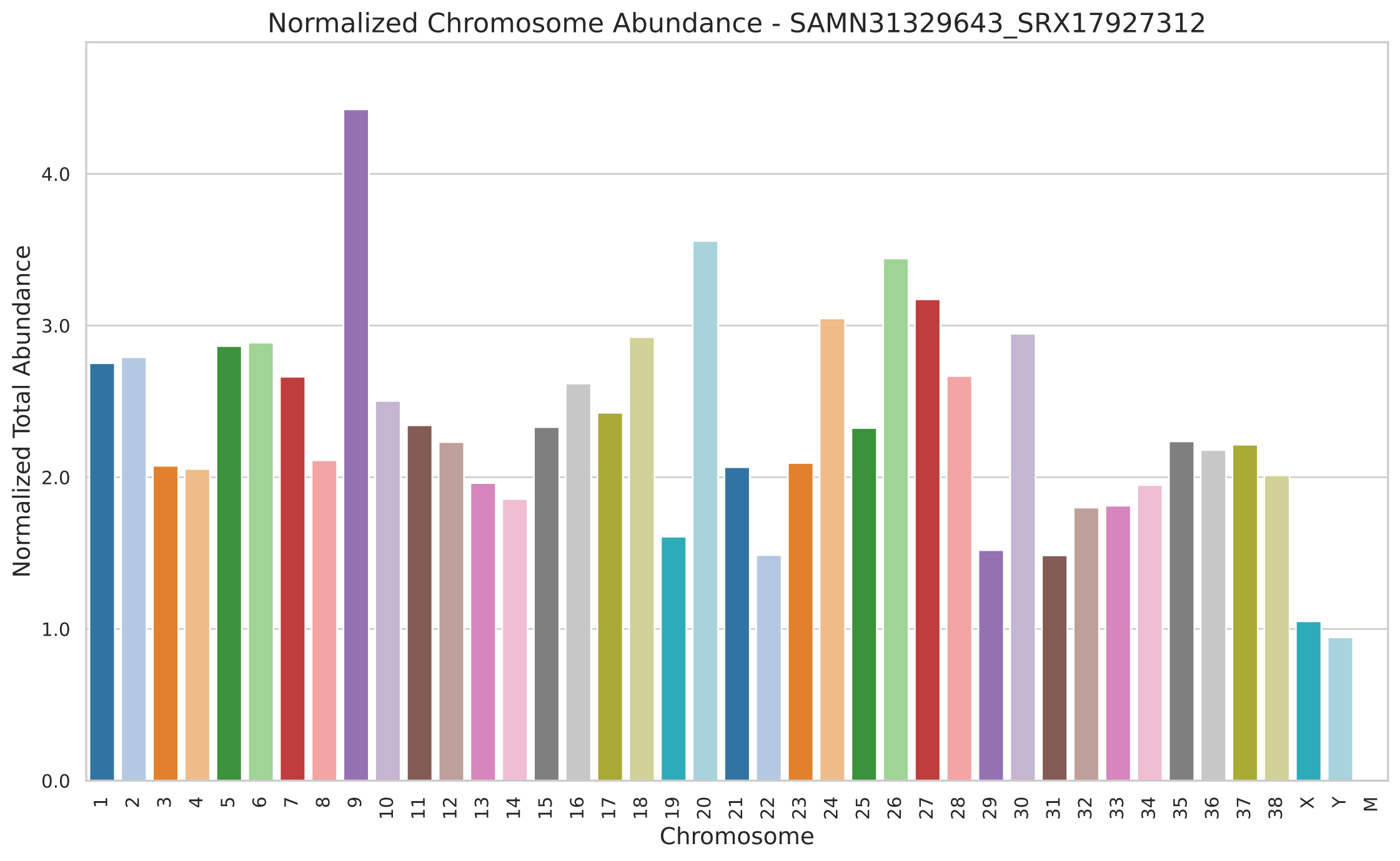

Normalized Chromosome Abundance - SAMEA110220182_ERX9466773
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

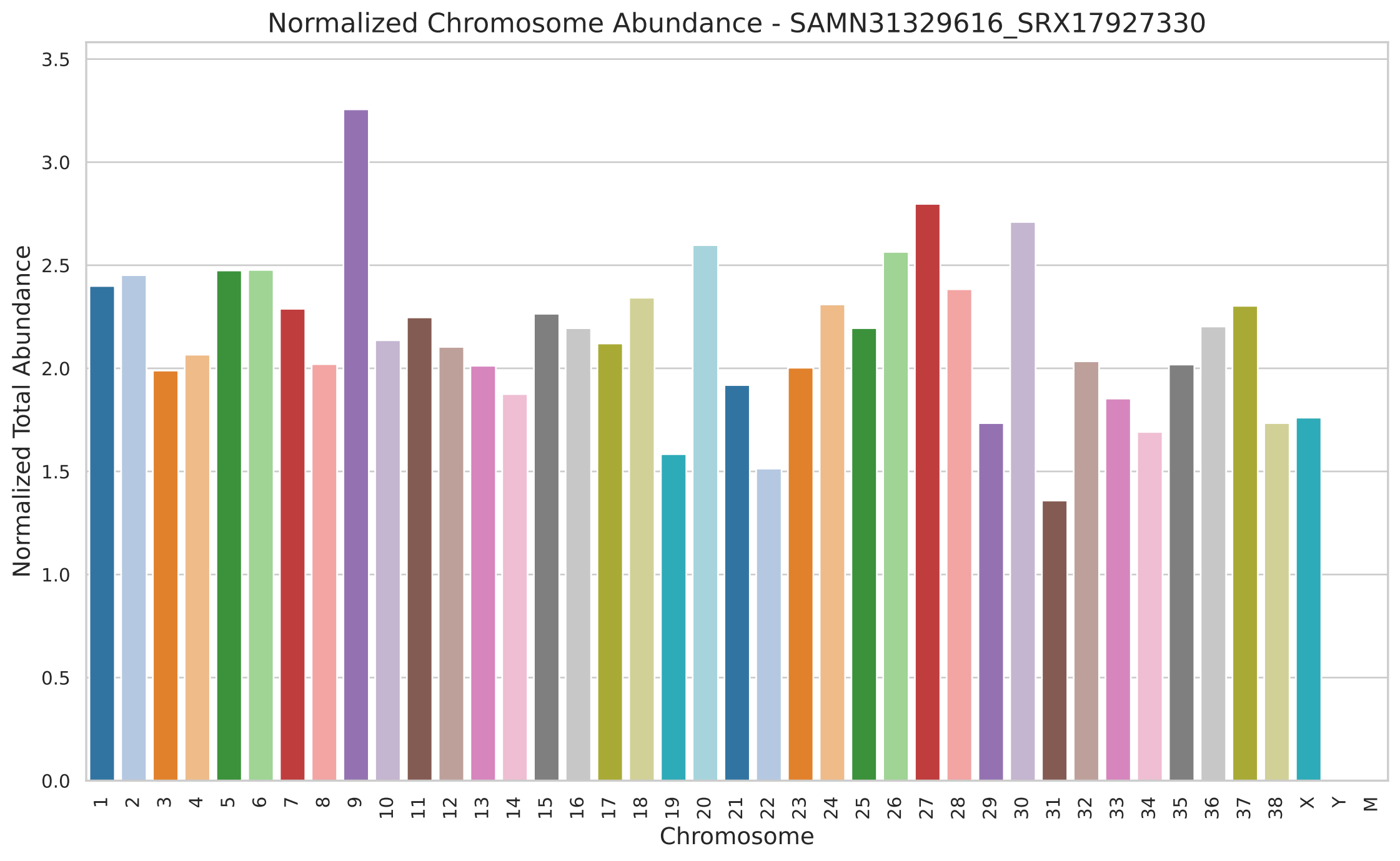

Normalized Chromosome Abundance - SAMEA110220218_ERX9466785
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
12.0
14.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

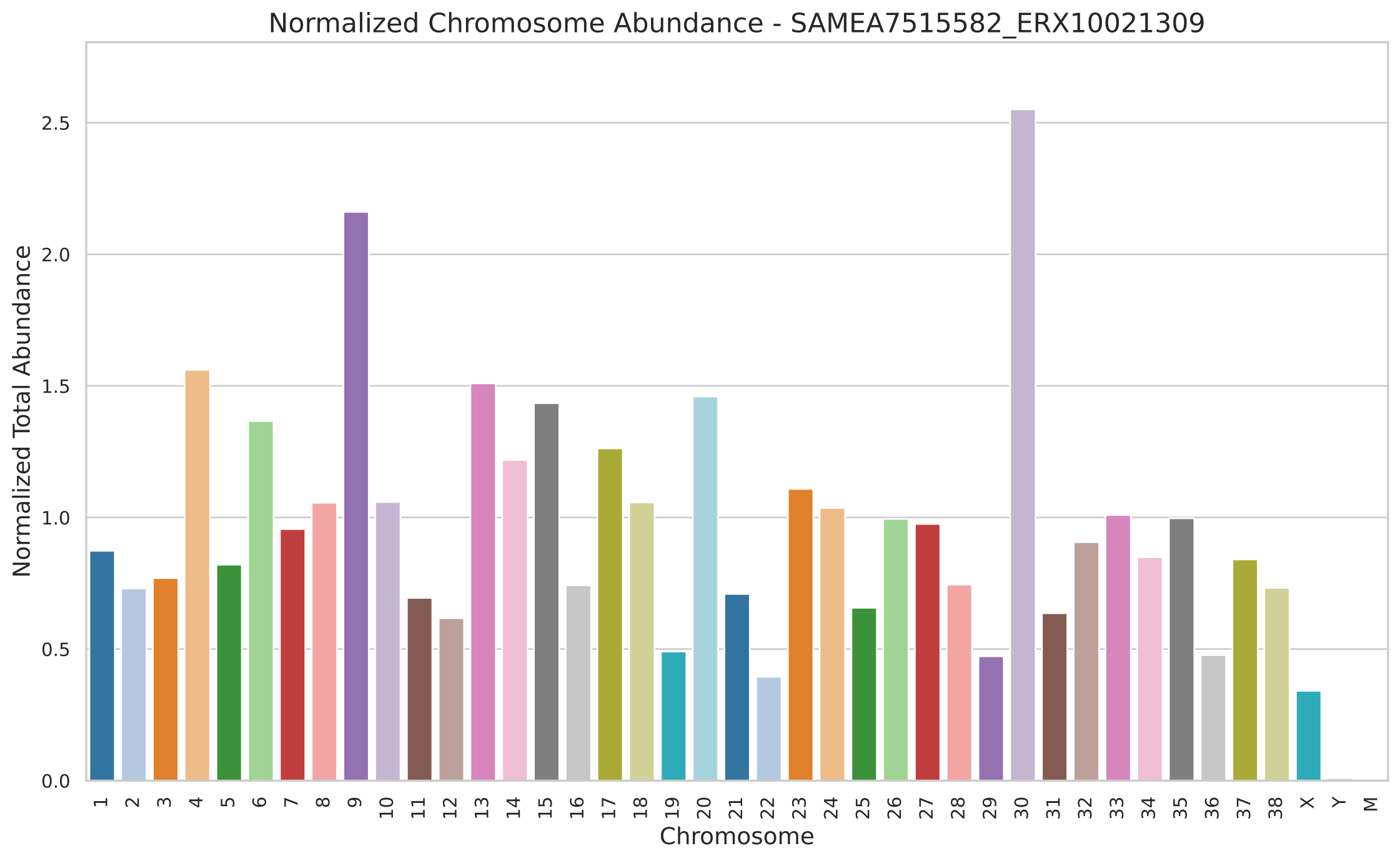

Normalized Chromosome Abundance - SAMEA7515419_ERX10021330
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

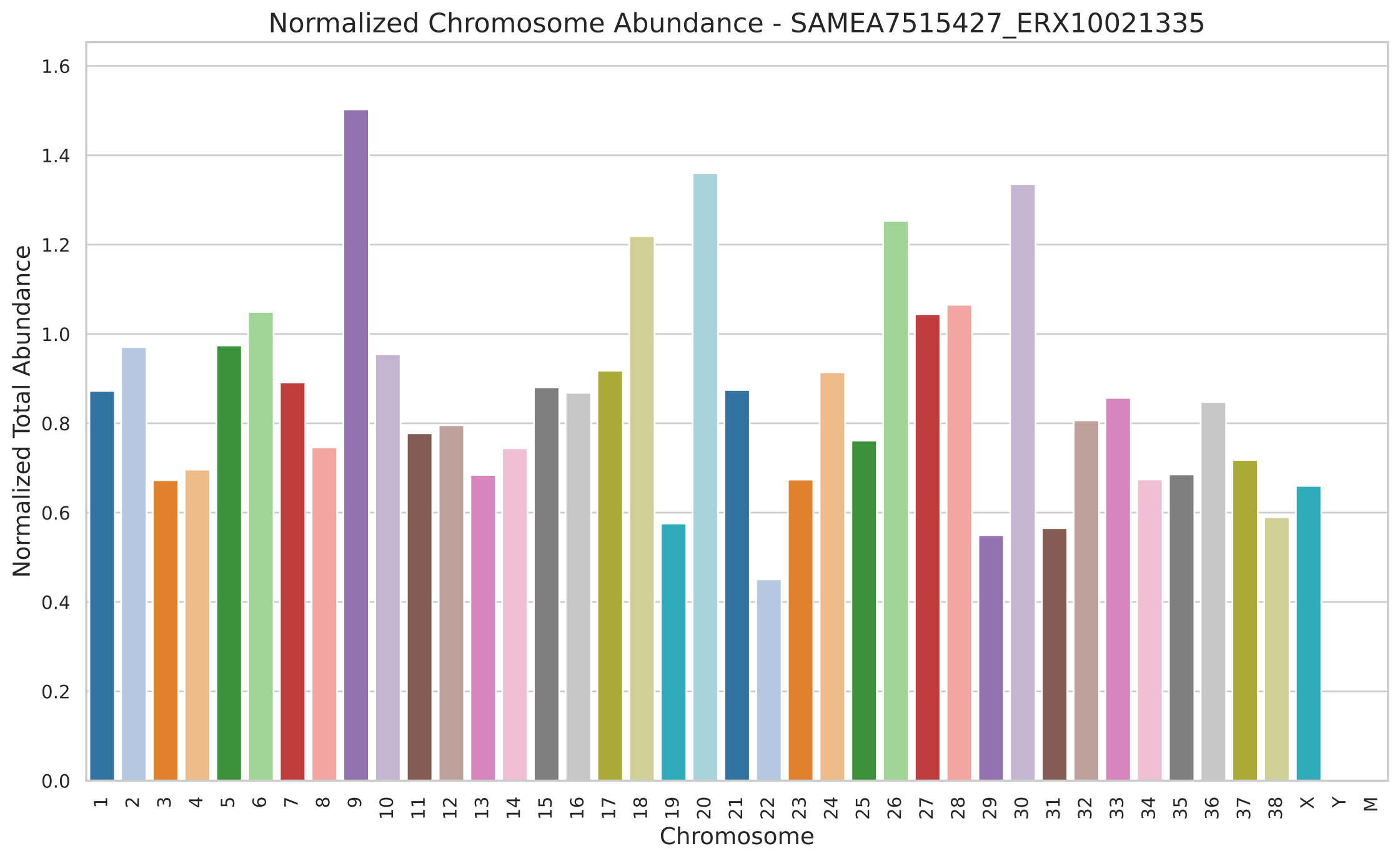

Normalized Chromosome Abundance - SAMN31329650_SRX17927344
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

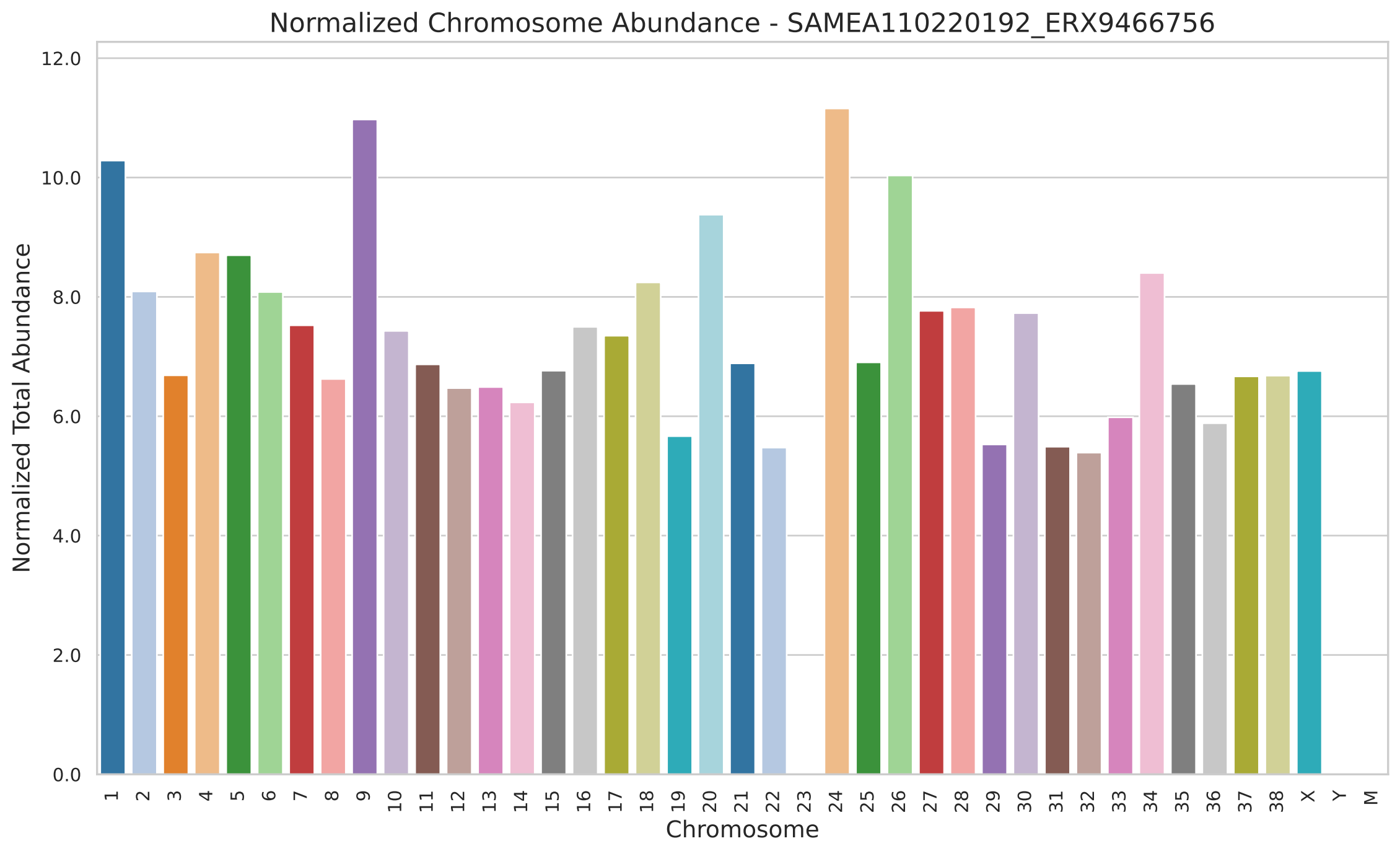

Normalized Chromosome Abundance - SAMEA7515585_ERX10021347
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

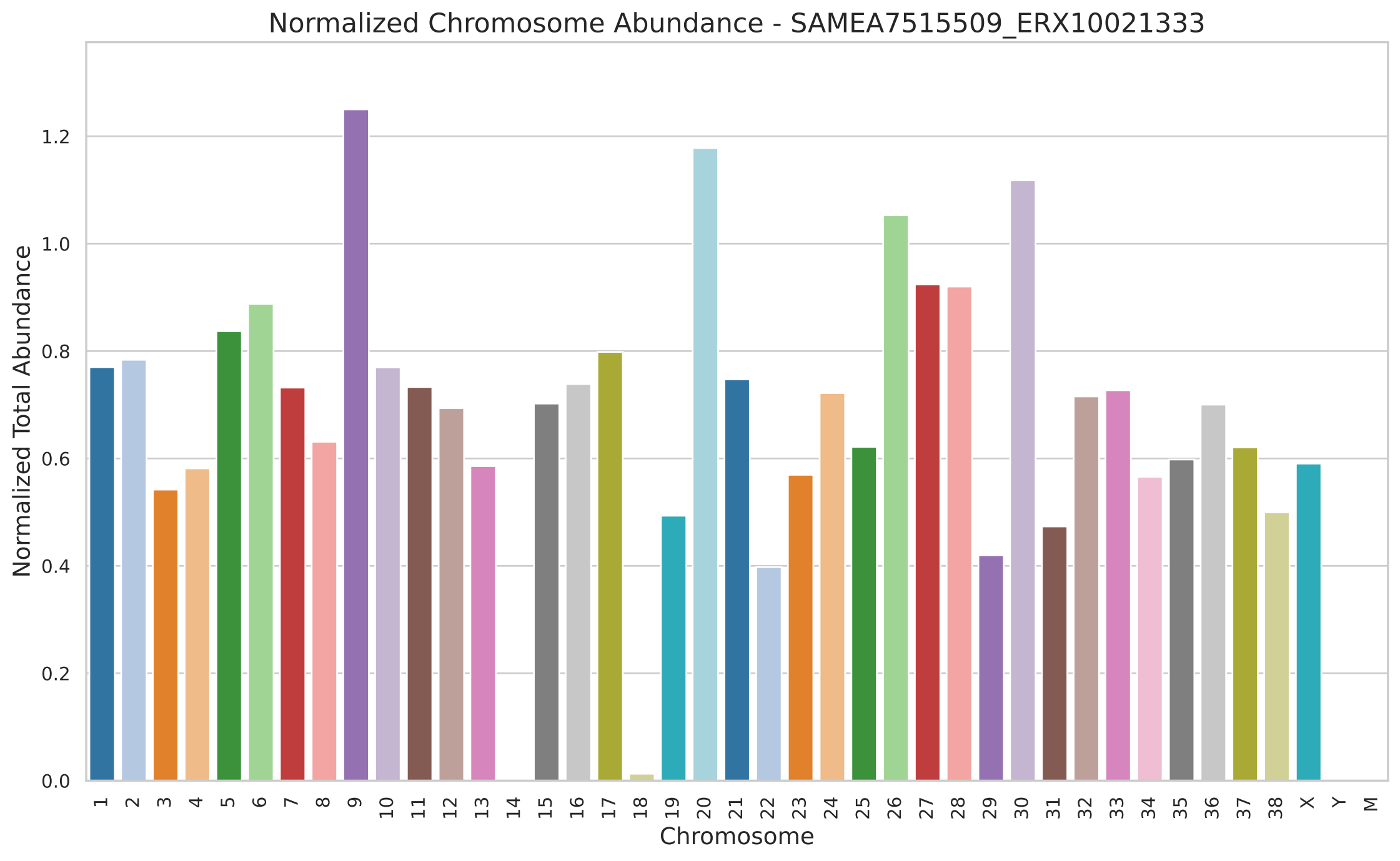

Normalized Chromosome Abundance - SAMN31329643_SRX17927312
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

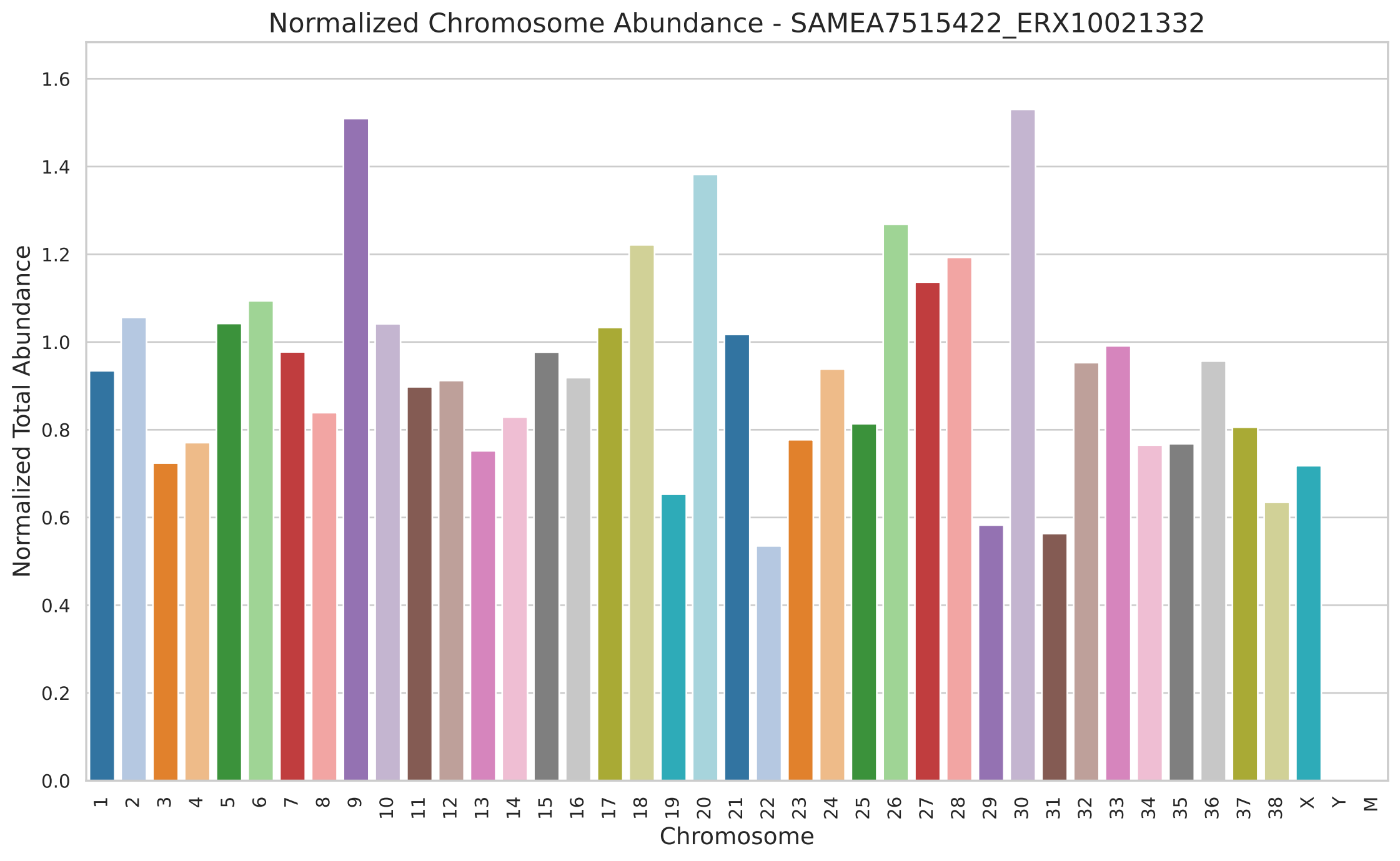

Normalized Chromosome Abundance - SAMN31329616_SRX17927330
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

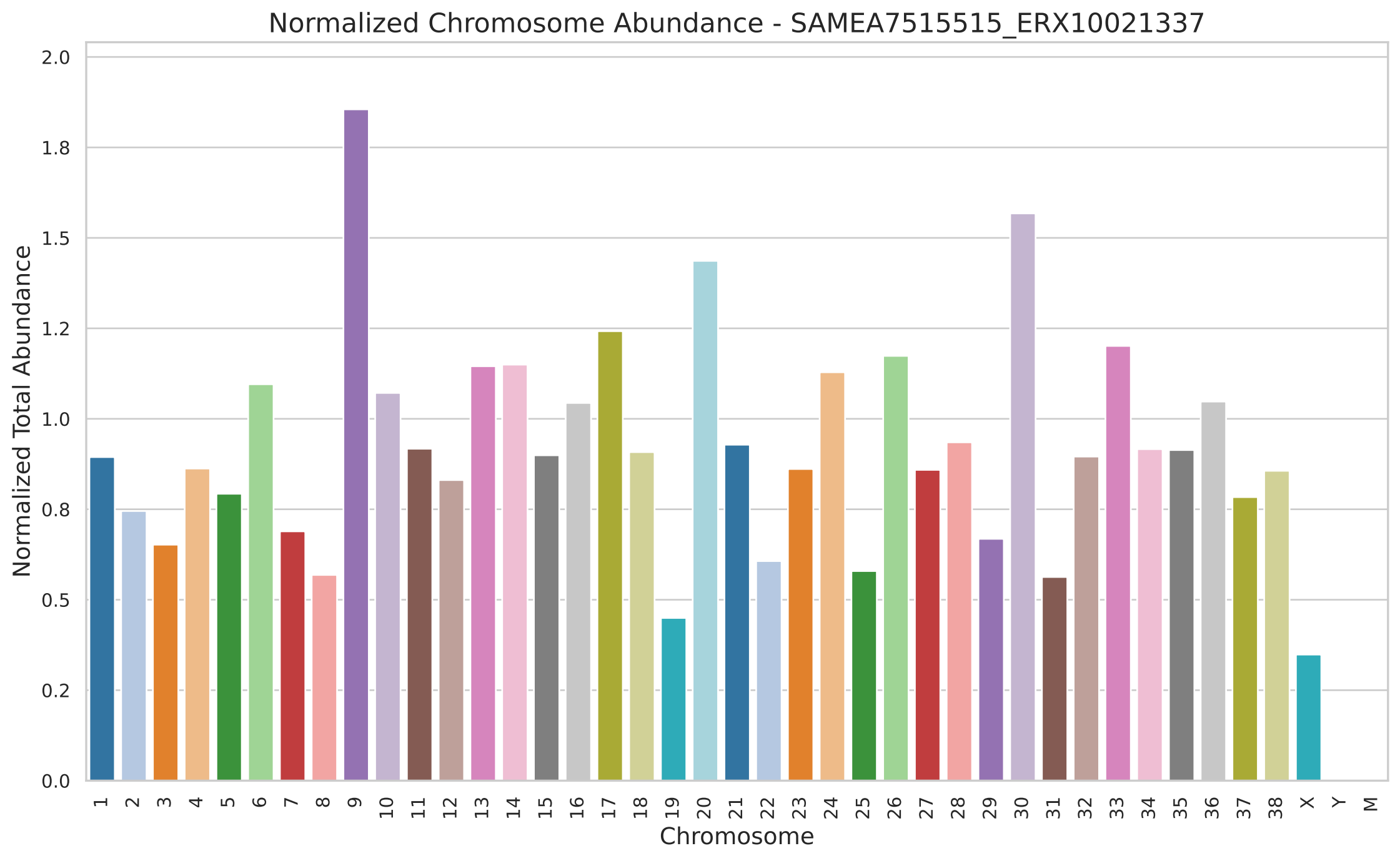

Normalized Chromosome Abundance - SAMEA7515582_ERX10021309
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

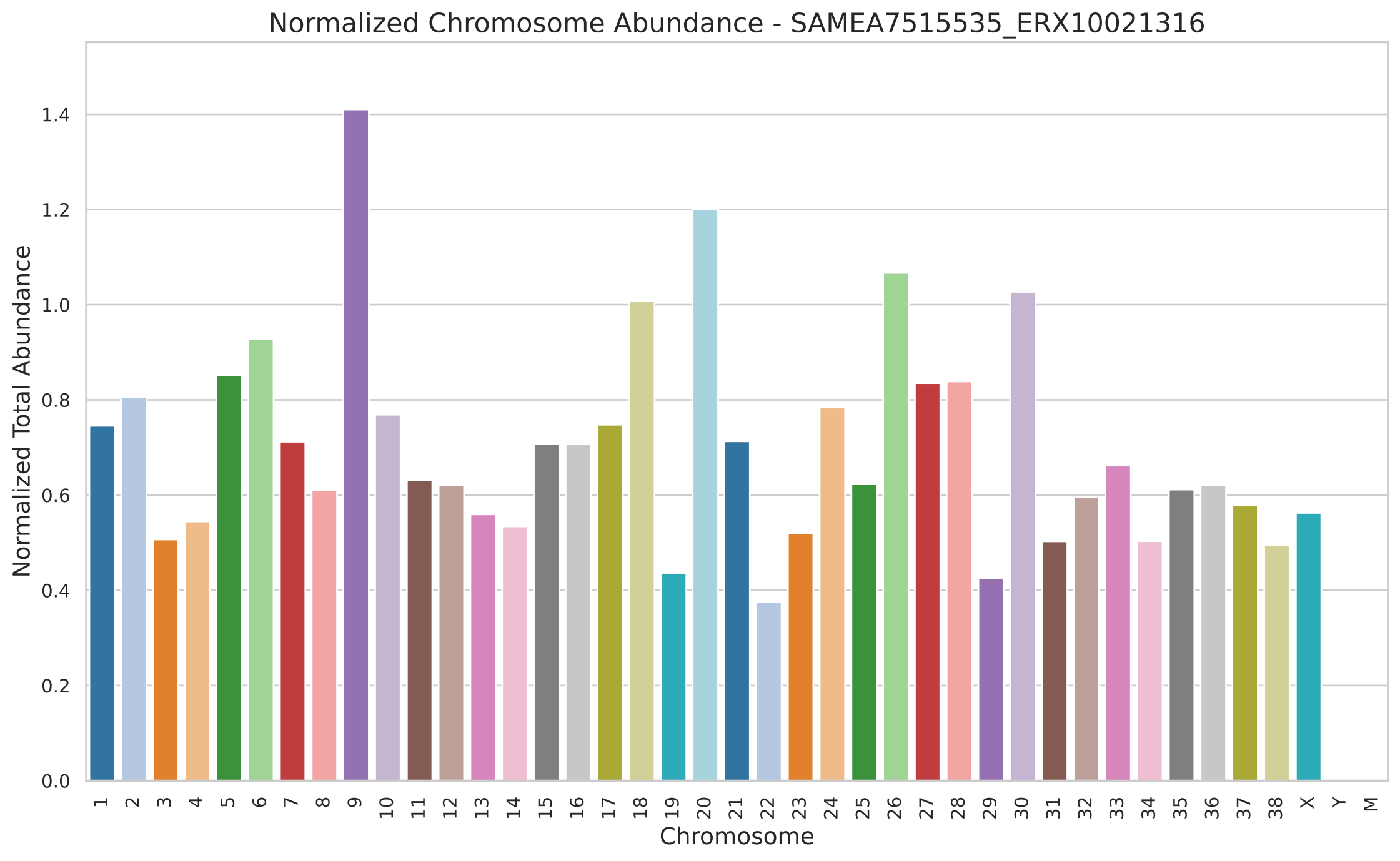

Normalized Chromosome Abundance - SAMEA7515427_ERX10021335
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

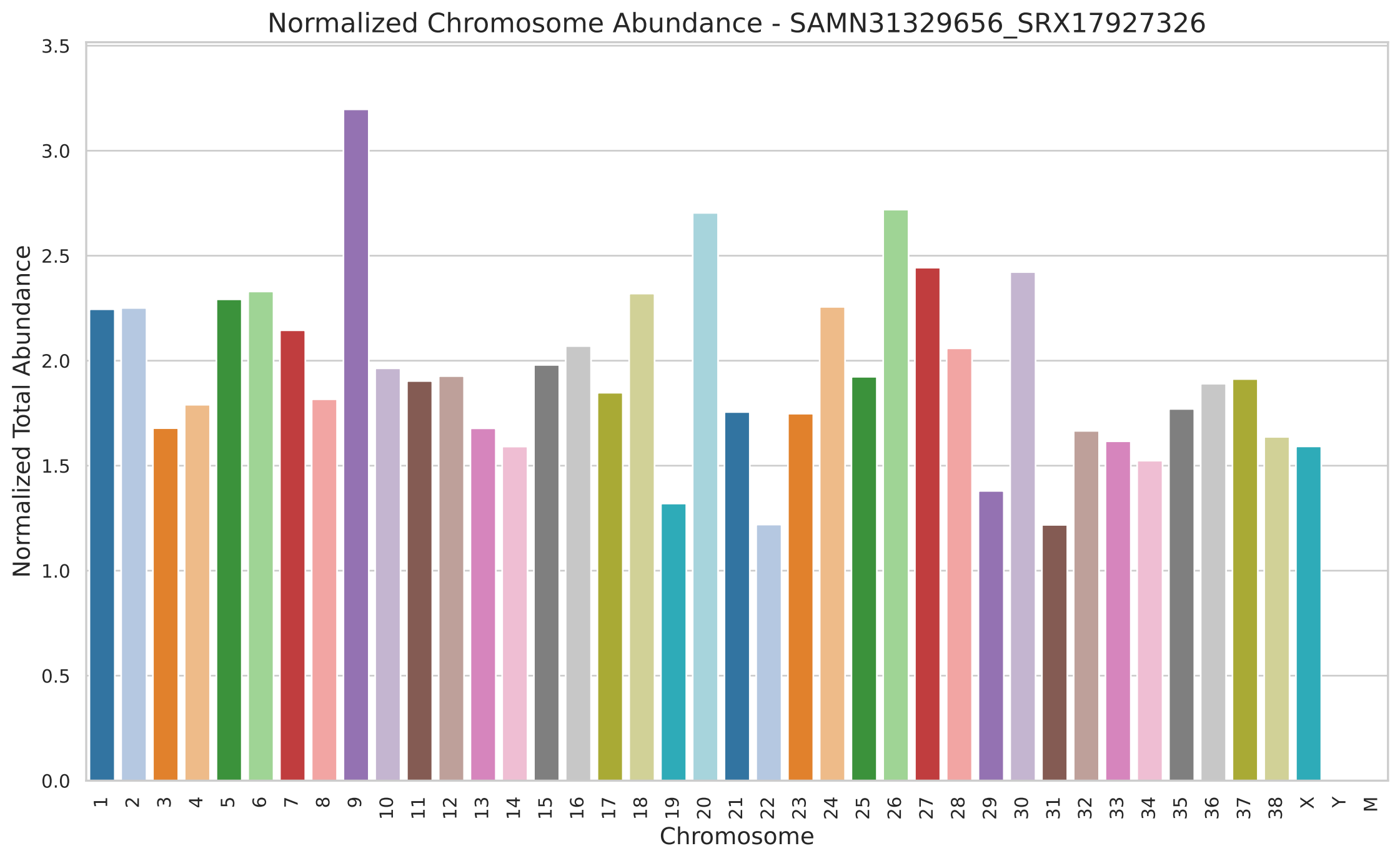

Normalized Chromosome Abundance - SAMEA110220192_ERX9466756
Normalized Total Abundance
12.0
10.0
8.0
6.0
4.0
2.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

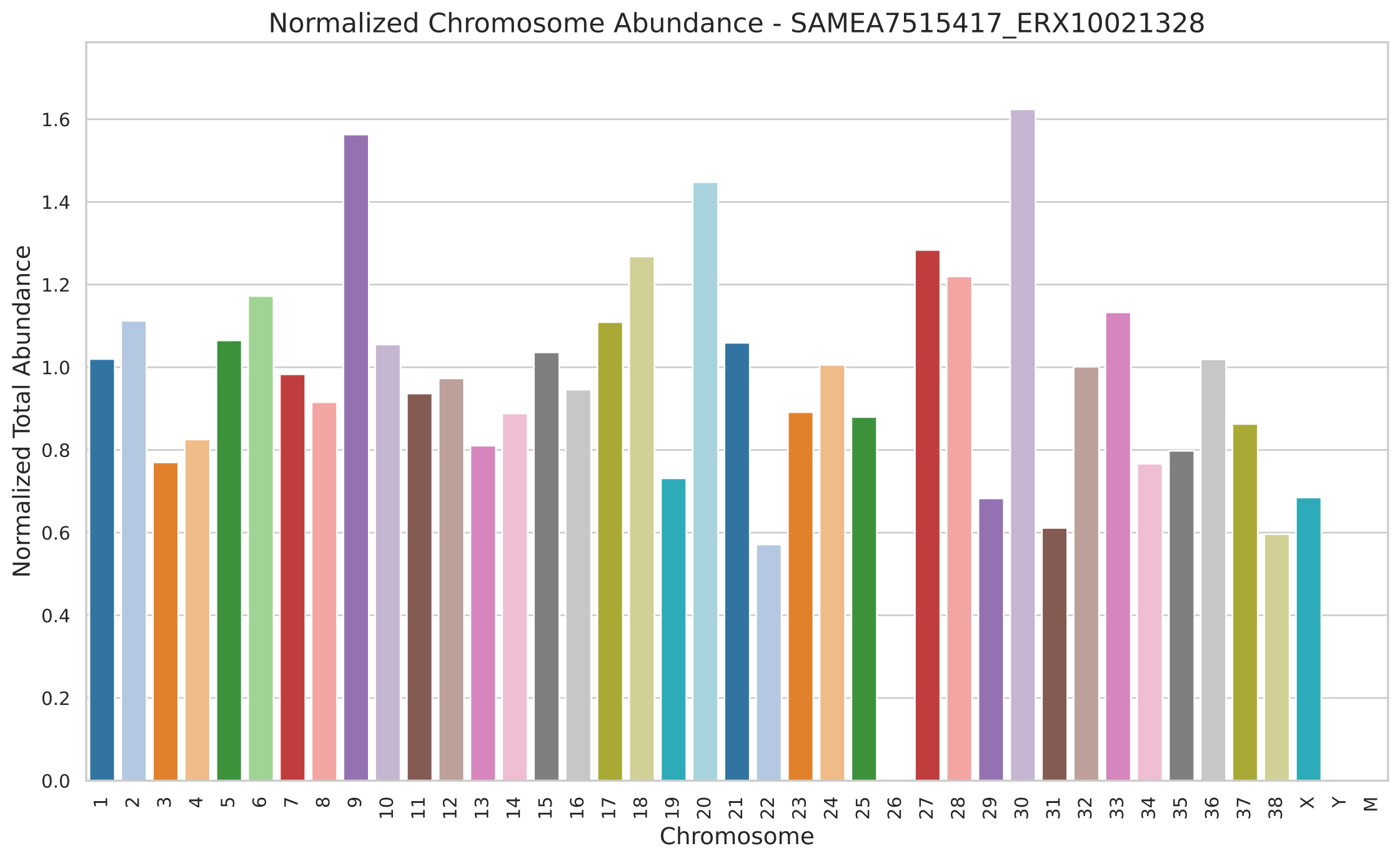

Normalized Chromosome Abundance - SAMEA7515509_ERX10021333
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

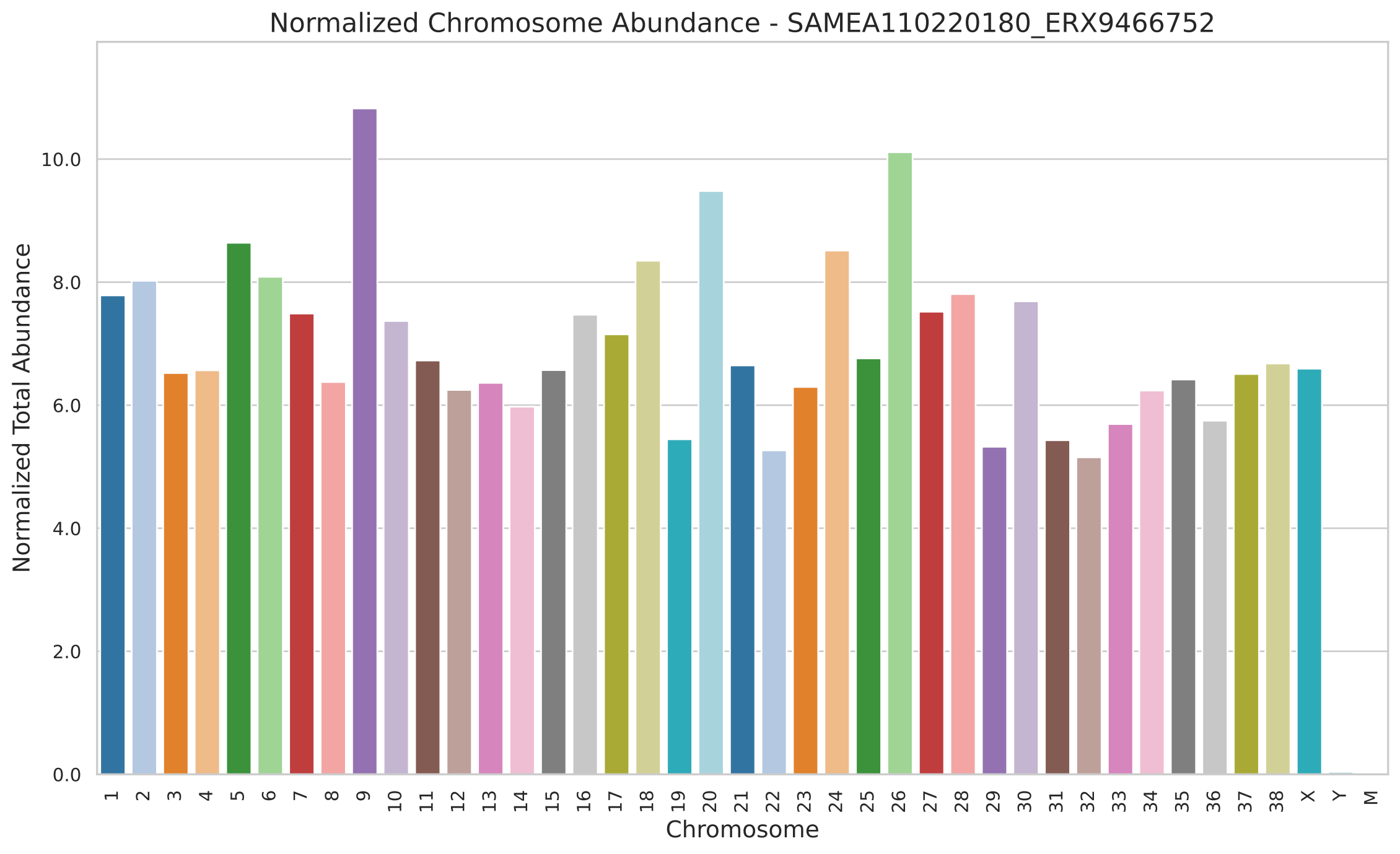

Normalized Chromosome Abundance - SAMEA7515422_ERX10021332
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

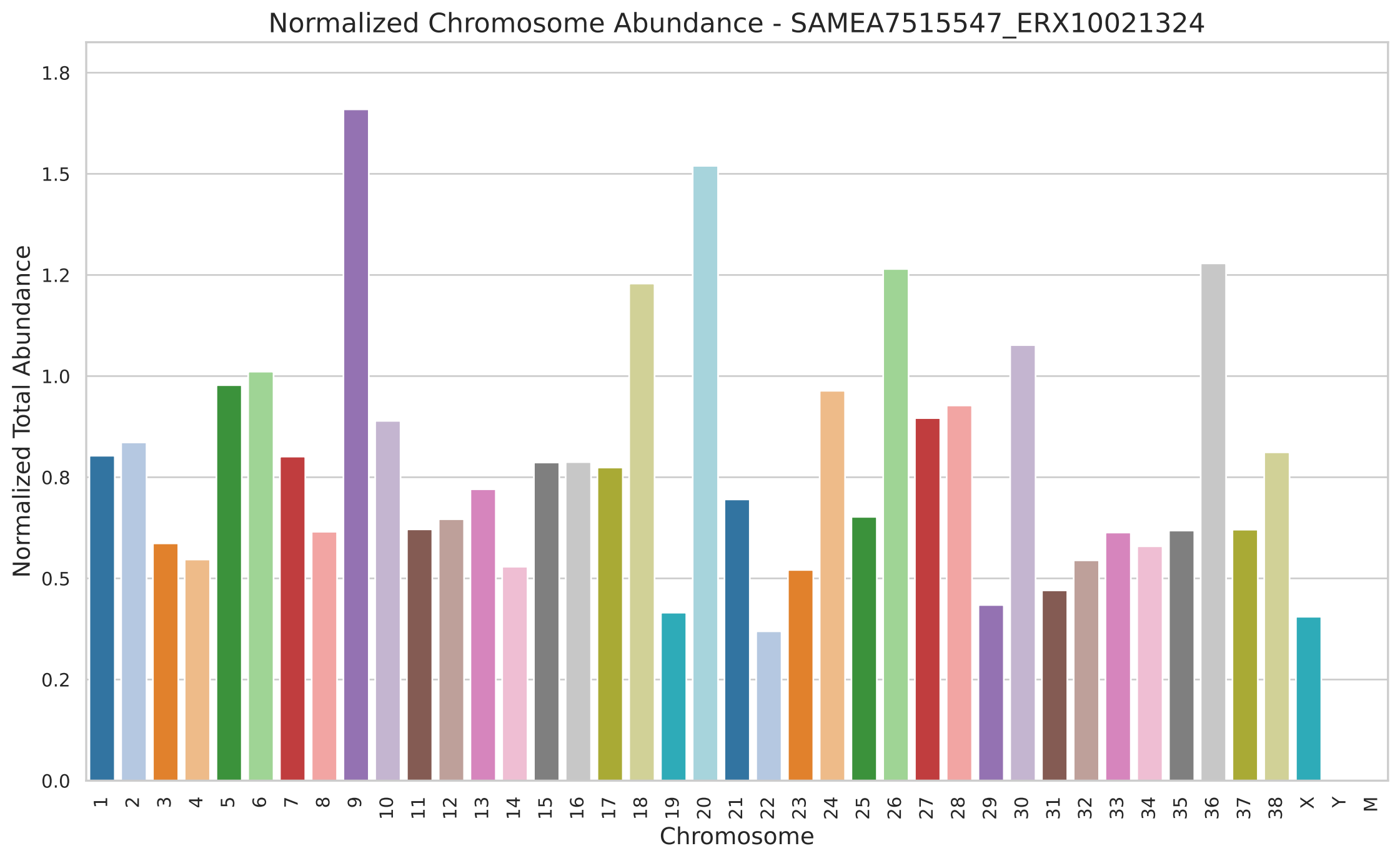

Normalized Chromosome Abundance - SAMEA7515515_ERX10021337
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

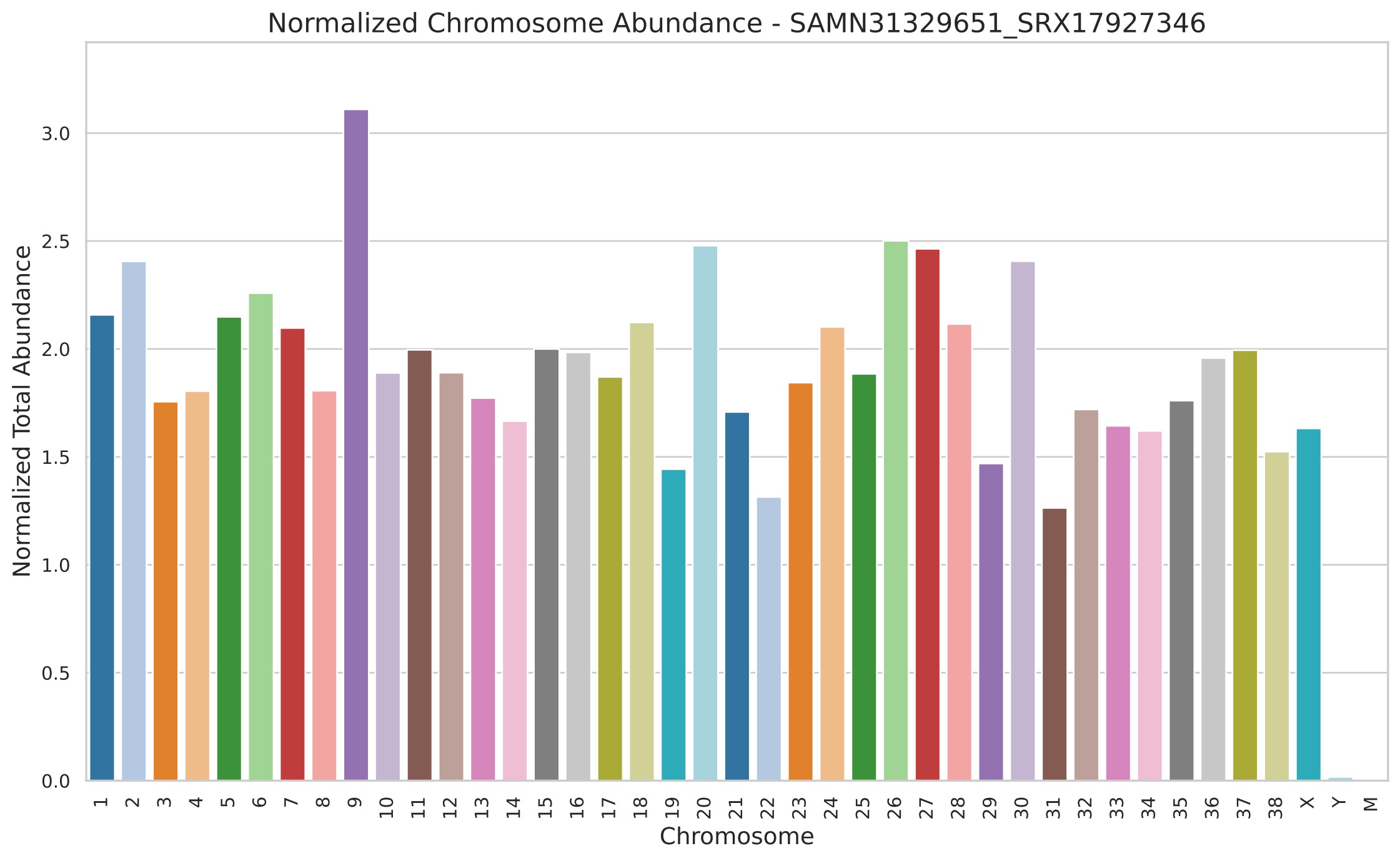

Normalized Chromosome Abundance - SAMEA7515535_ERX10021316
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

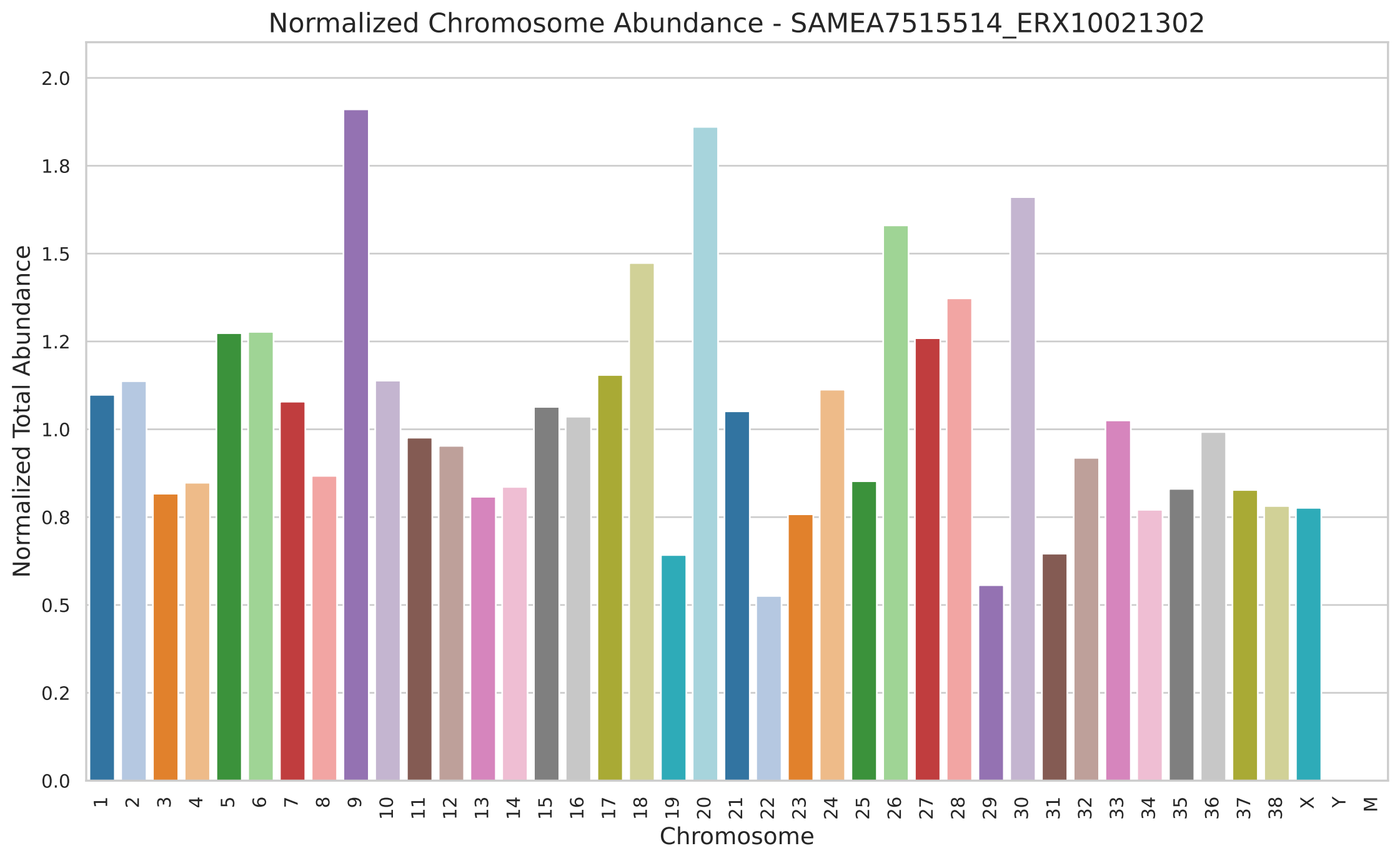

Normalized Chromosome Abundance - SAMN31329656_SRX17927326
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

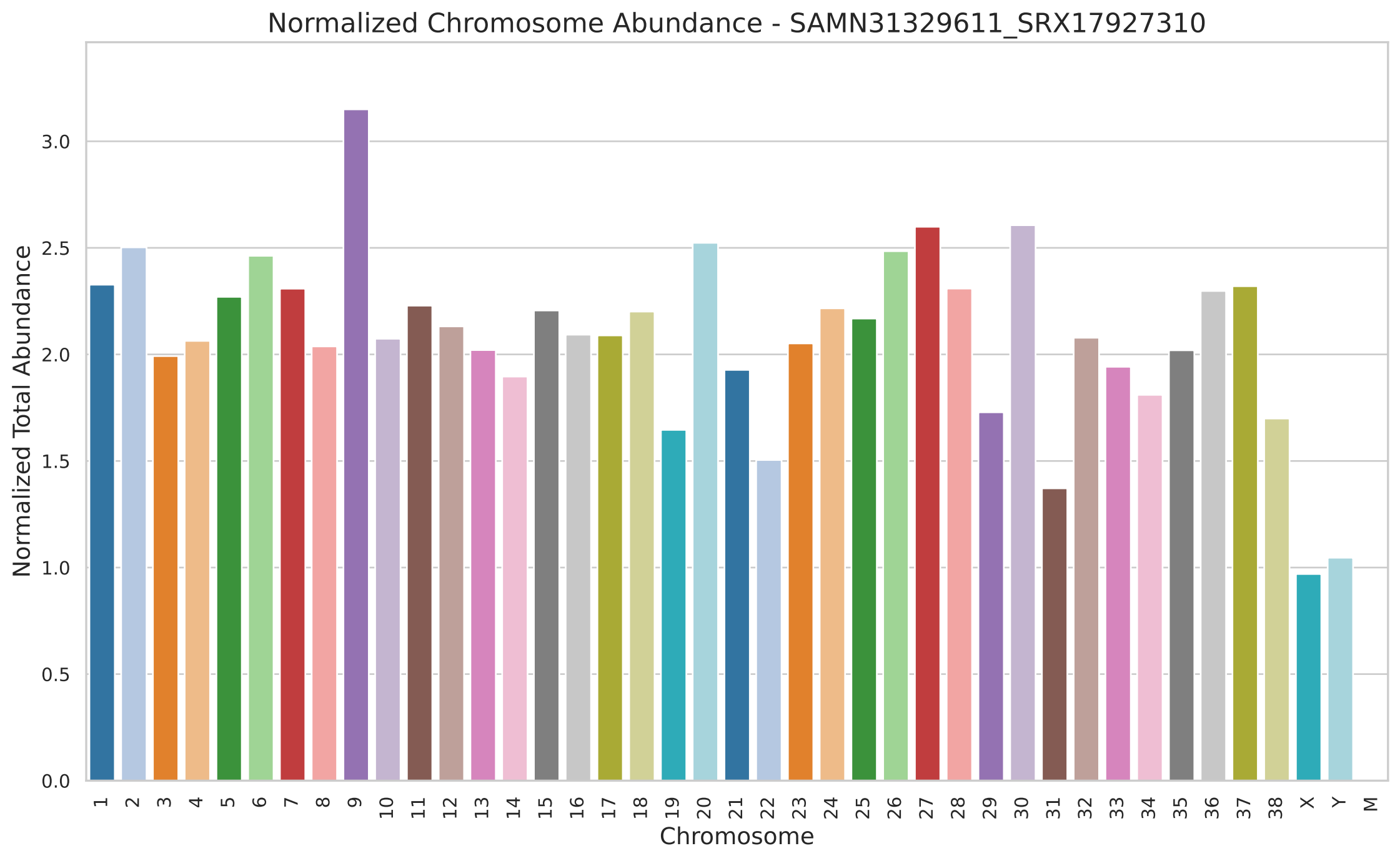

Normalized Chromosome Abundance - SAMEA7515417_ERX10021328
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

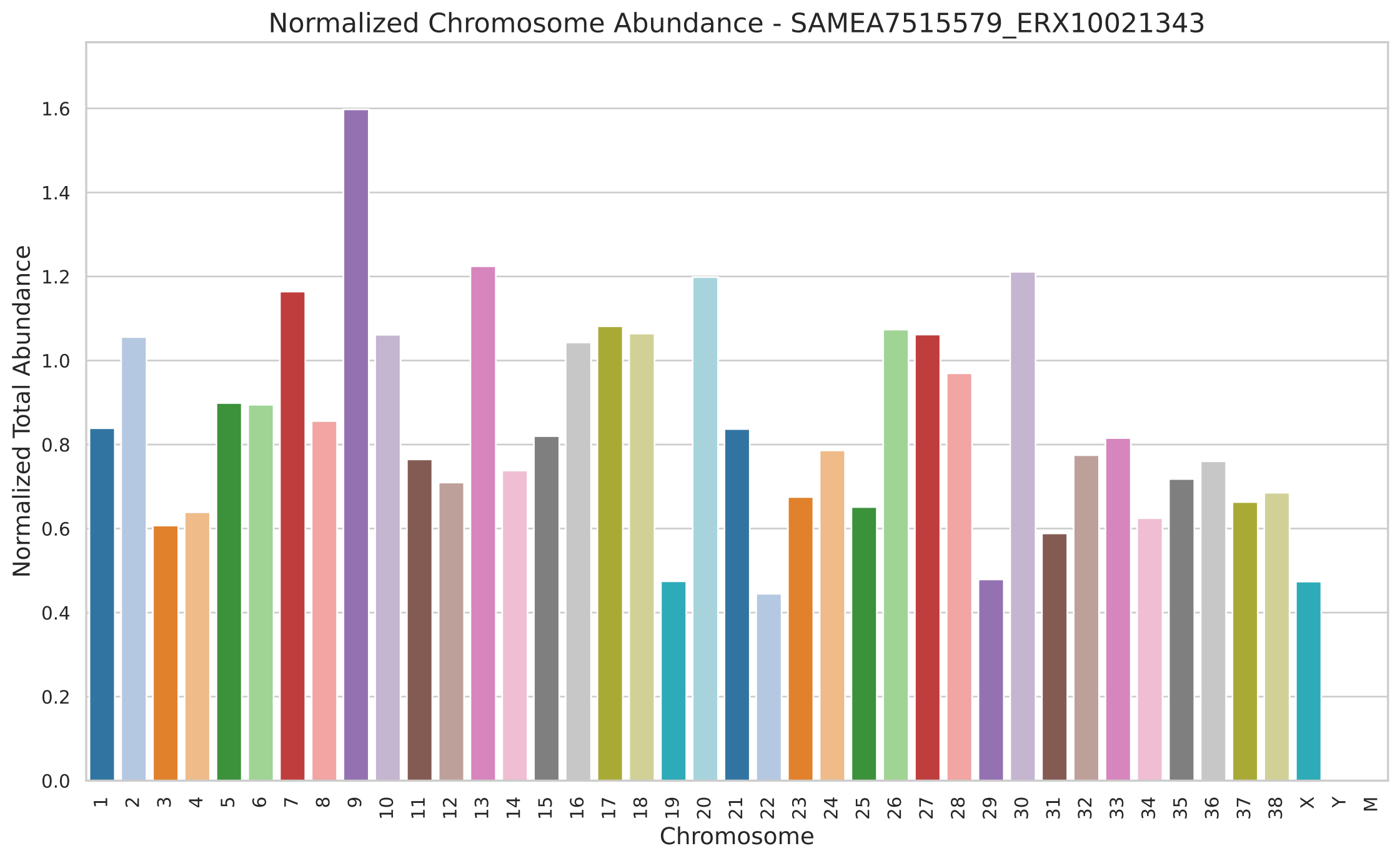

Normalized Chromosome Abundance - SAMEA110220180_ERX9466752
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

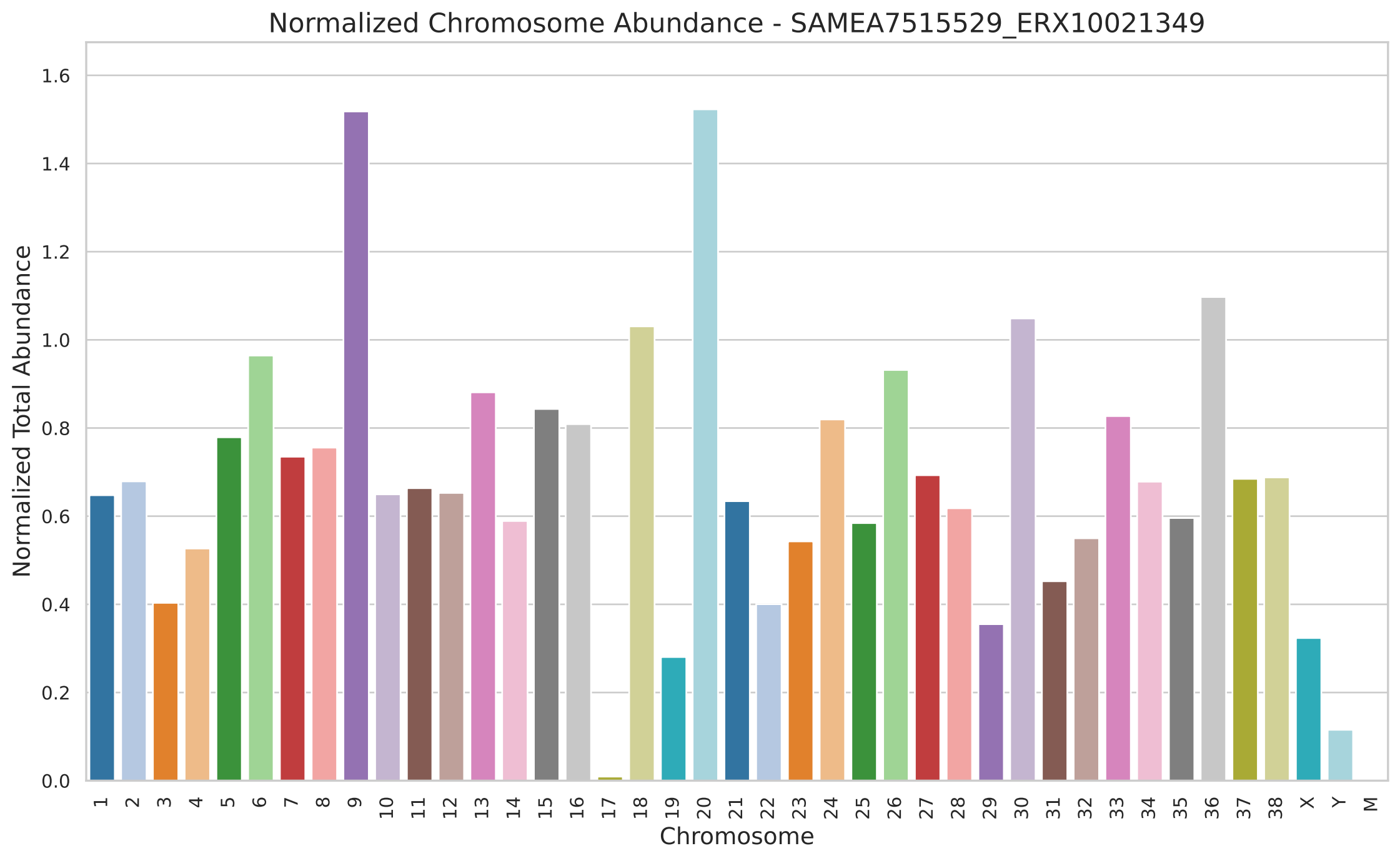

Normalized Chromosome Abundance - SAMEA7515547_ERX10021324
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

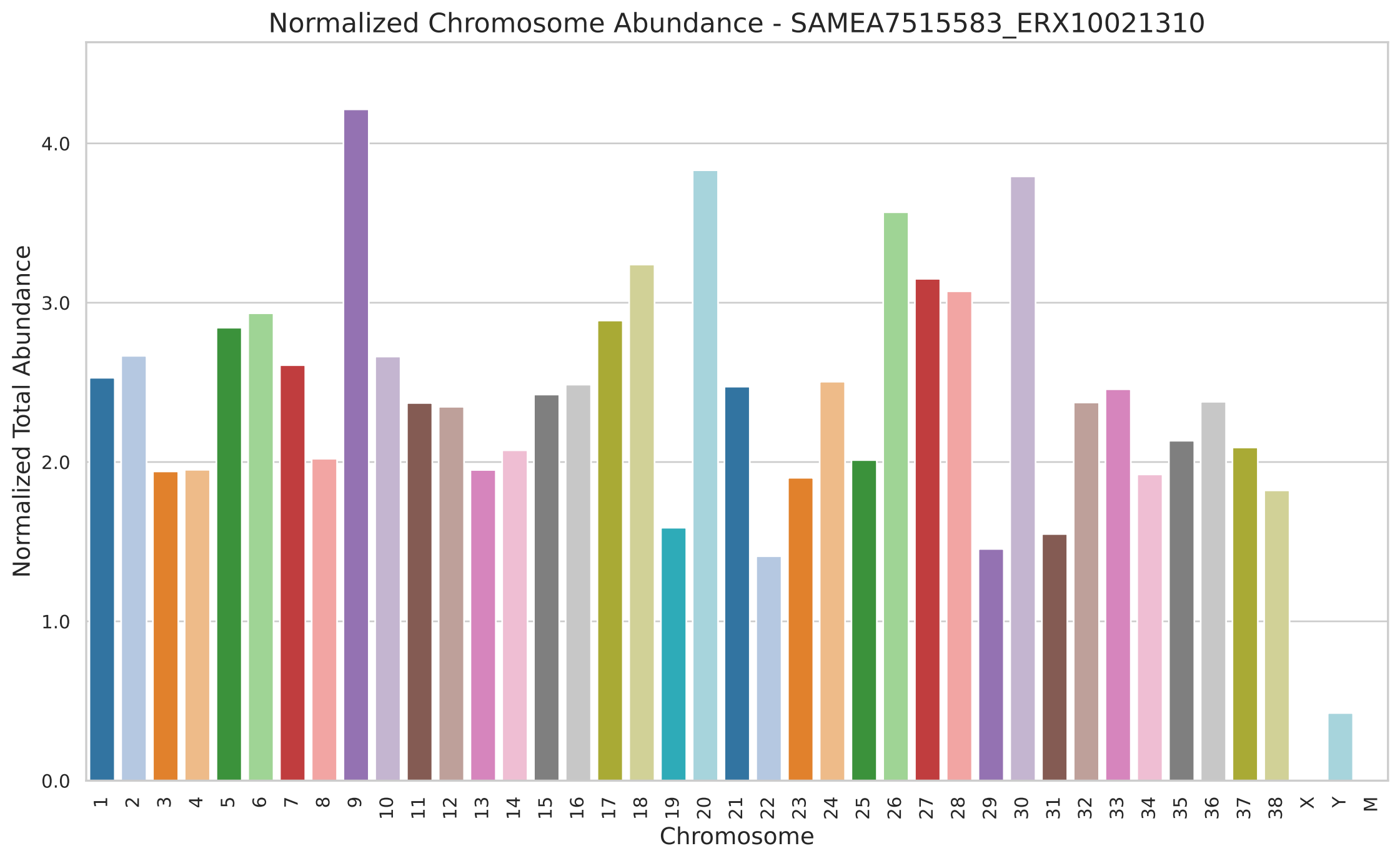

Normalized Chromosome Abundance - SAMN31329651_SRX17927346
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

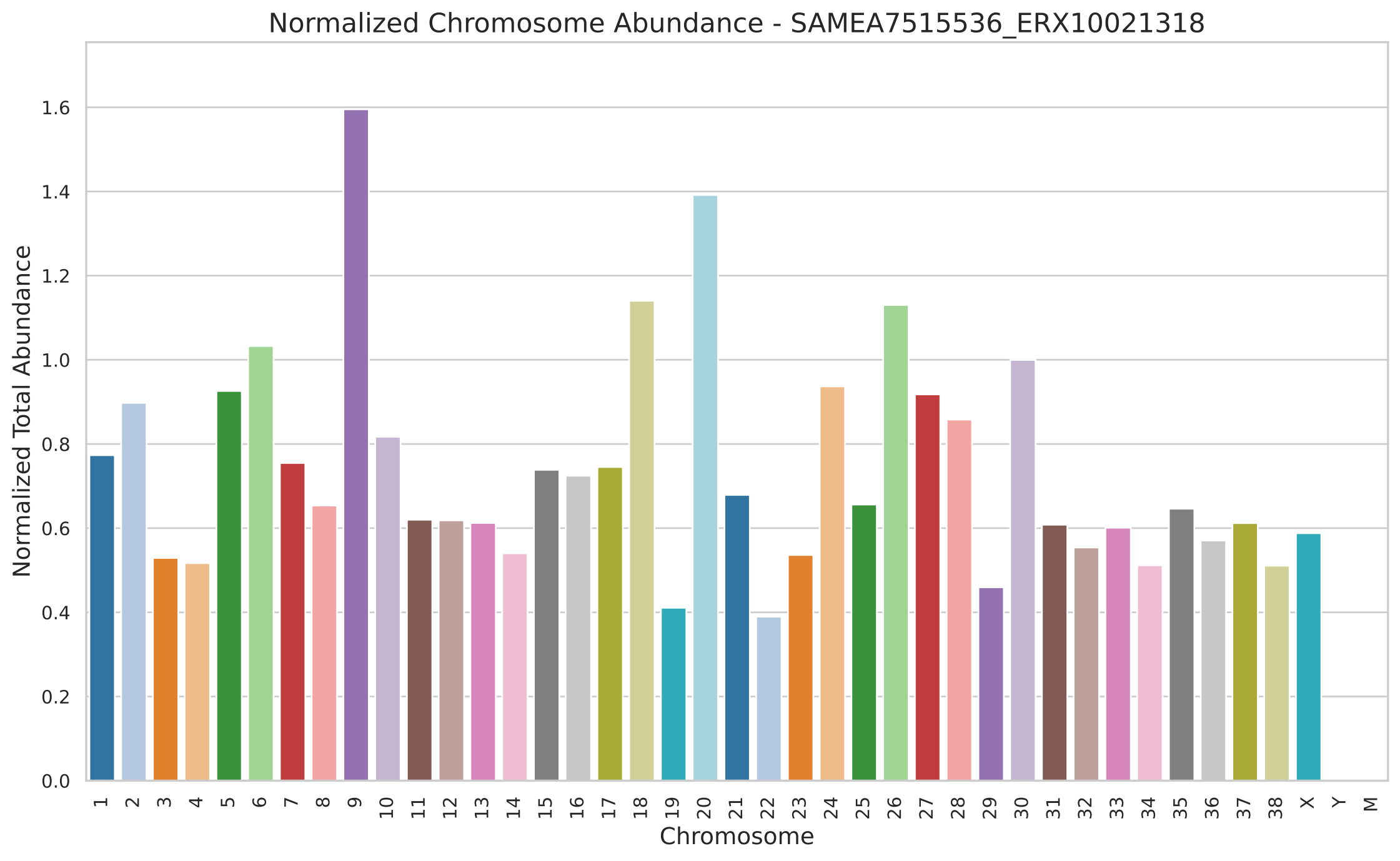

Normalized Chromosome Abundance - SAMEA7515514_ERX10021302
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

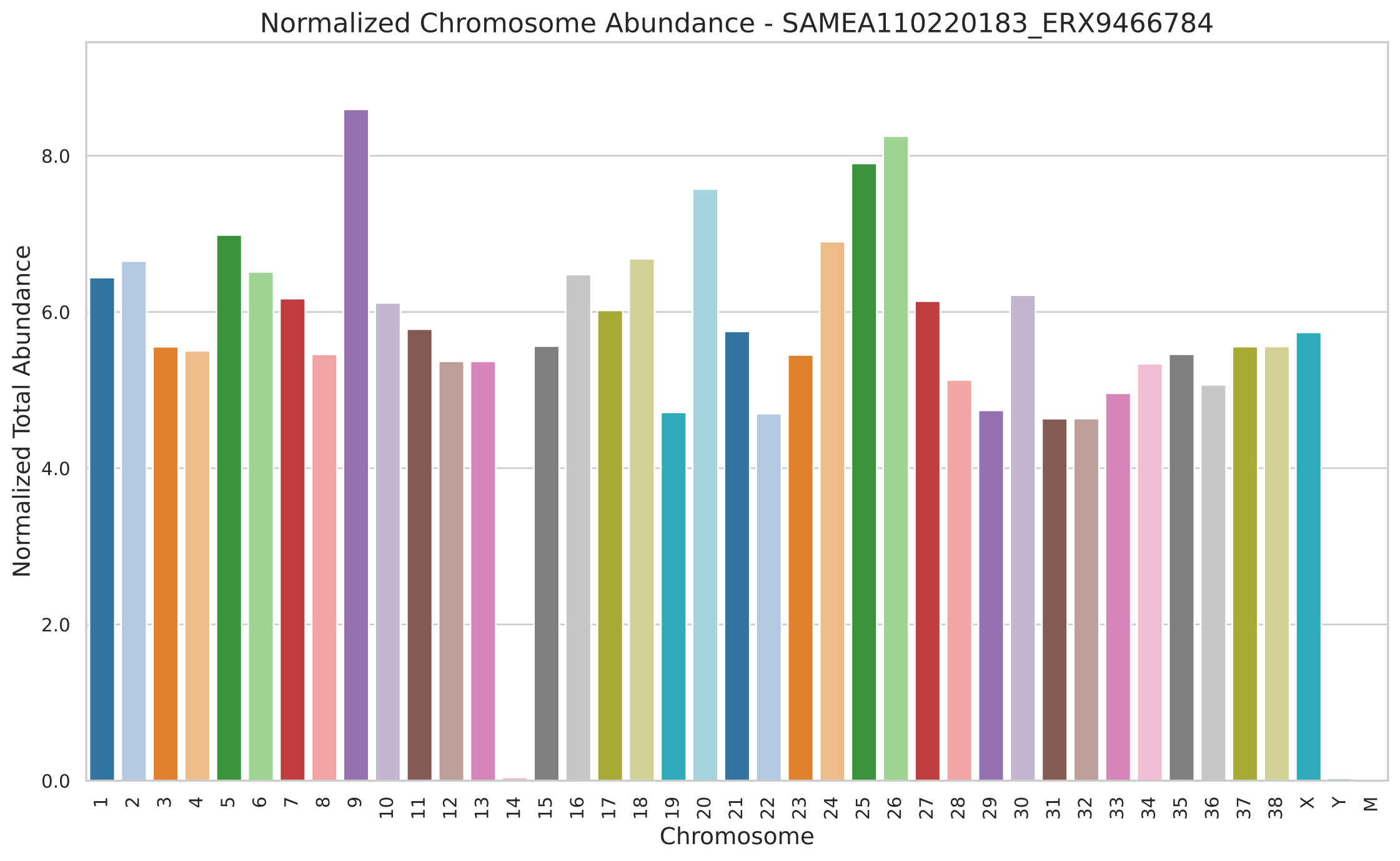

Normalized Chromosome Abundance - SAMN31329611_SRX17927310
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

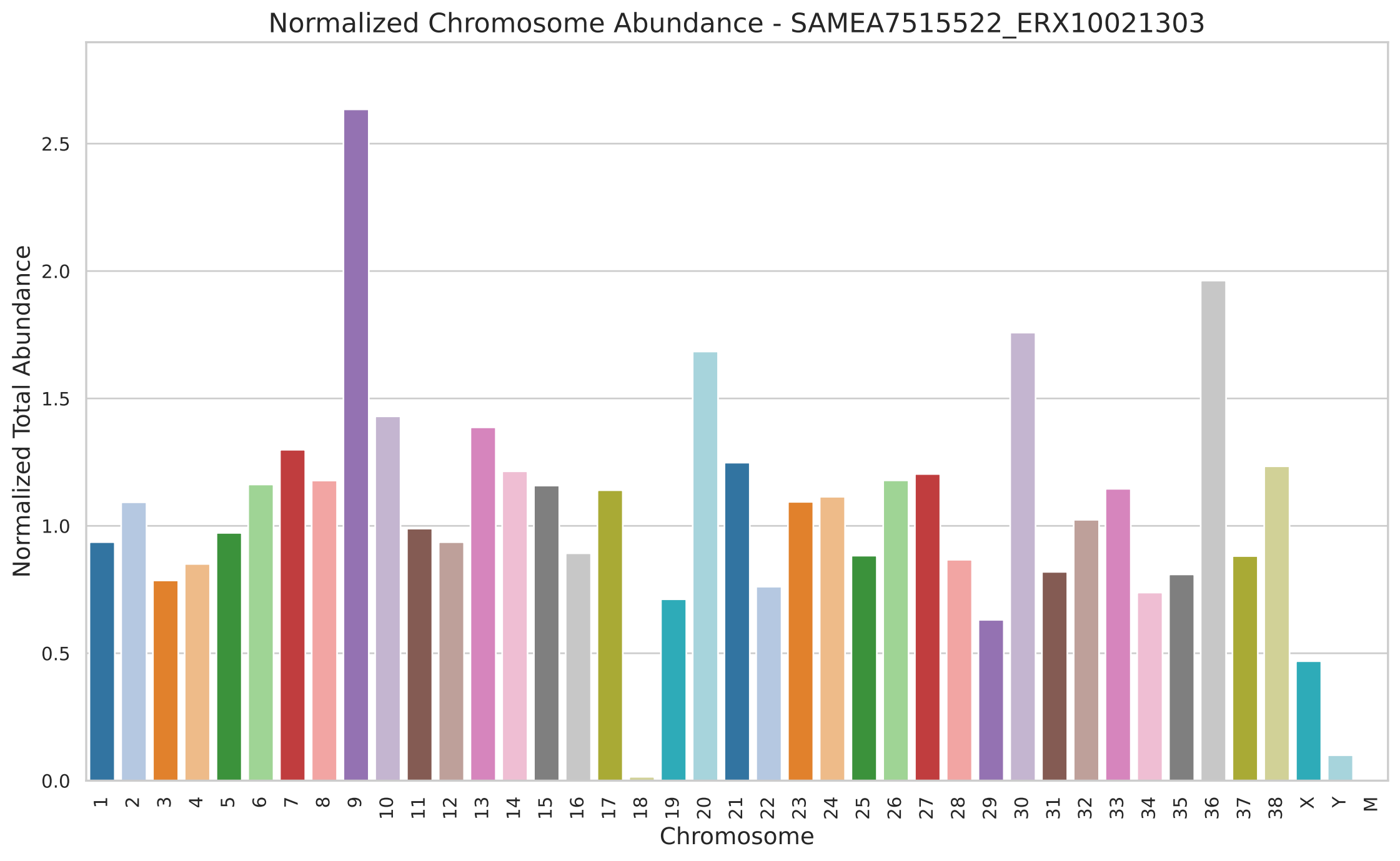

Normalized Chromosome Abundance - SAMEA7515579_ERX10021343
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

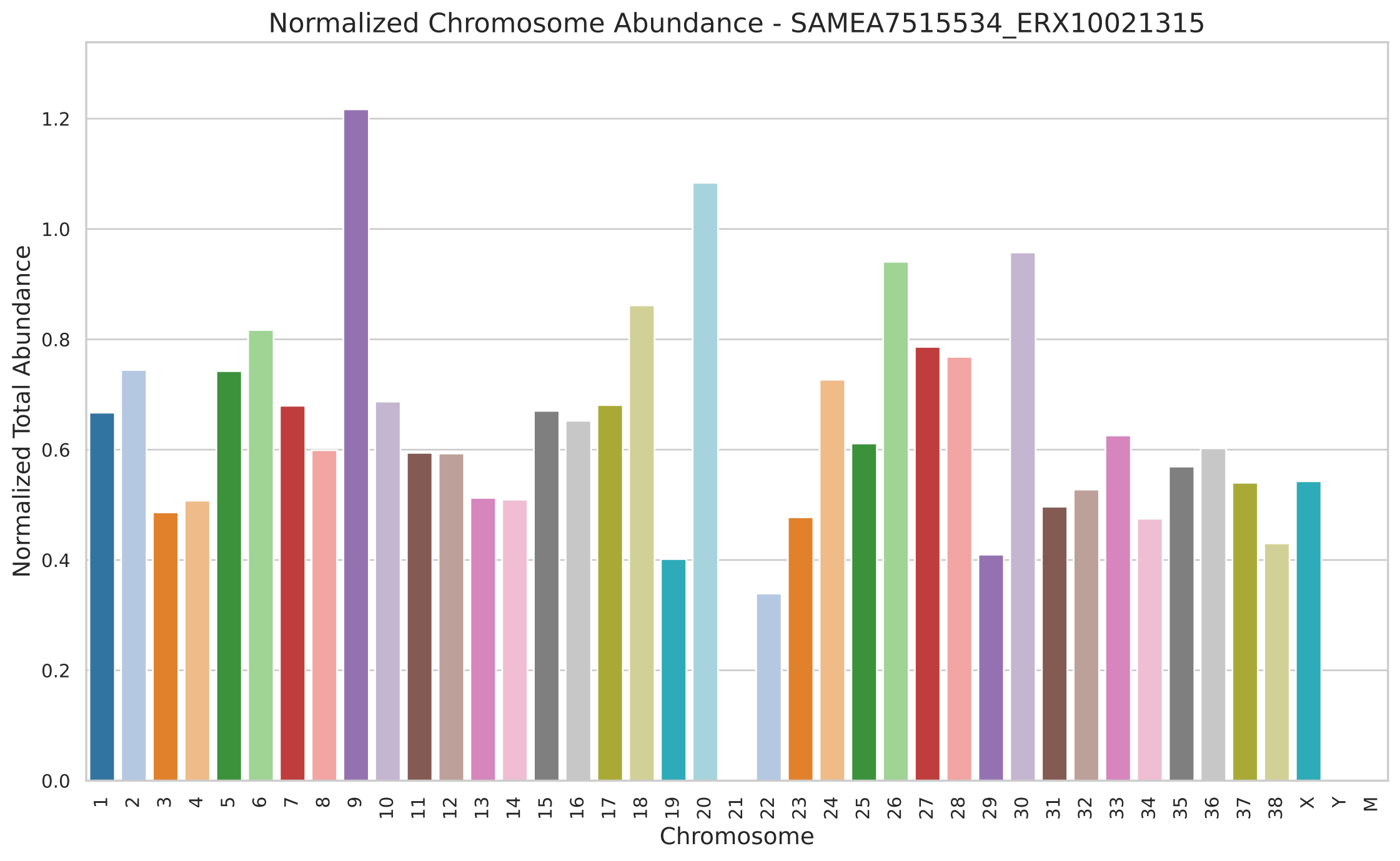

Normalized Chromosome Abundance - SAMEA7515529_ERX10021349
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

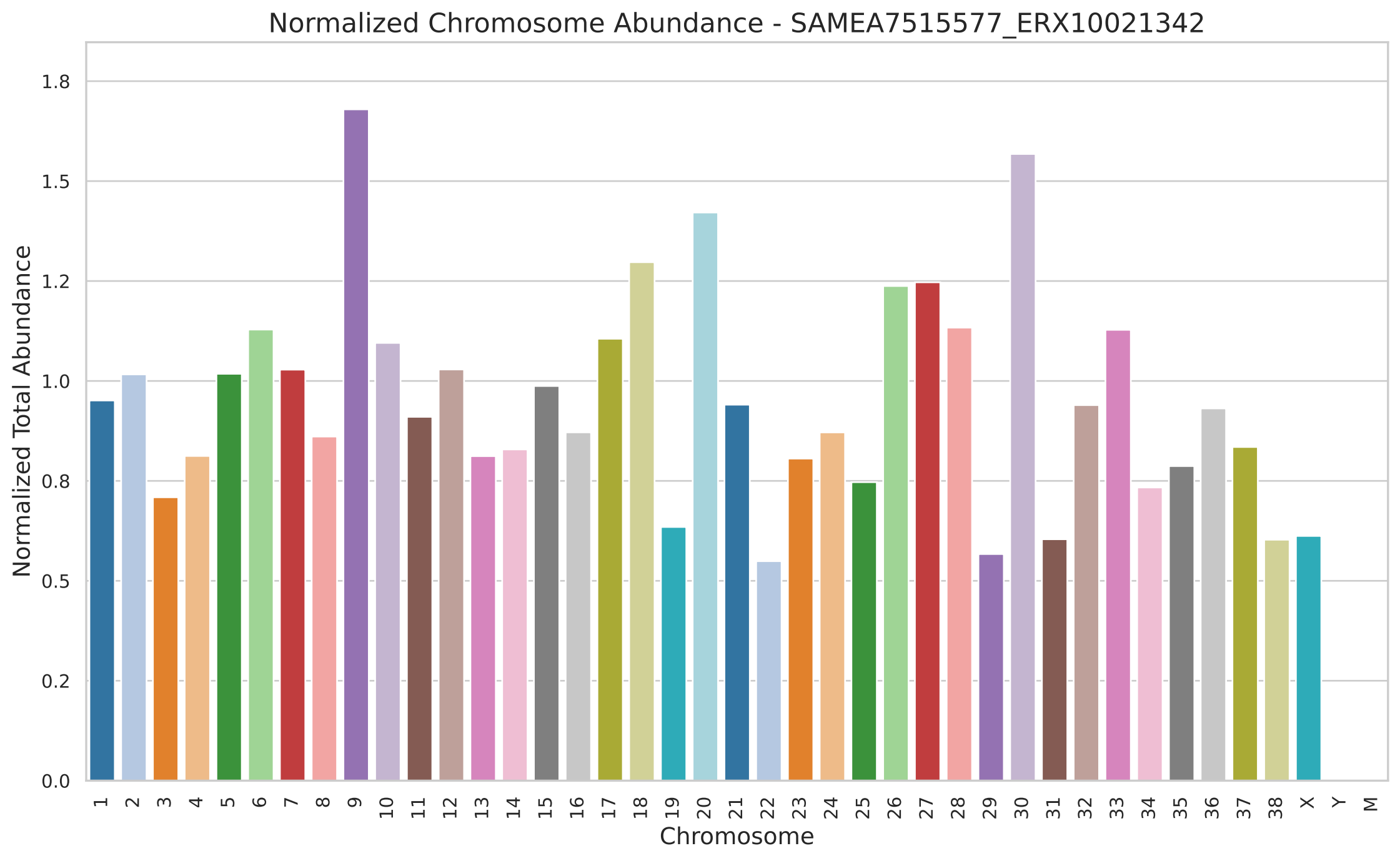

Normalized Chromosome Abundance - SAMEA7515583_ERX10021310
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

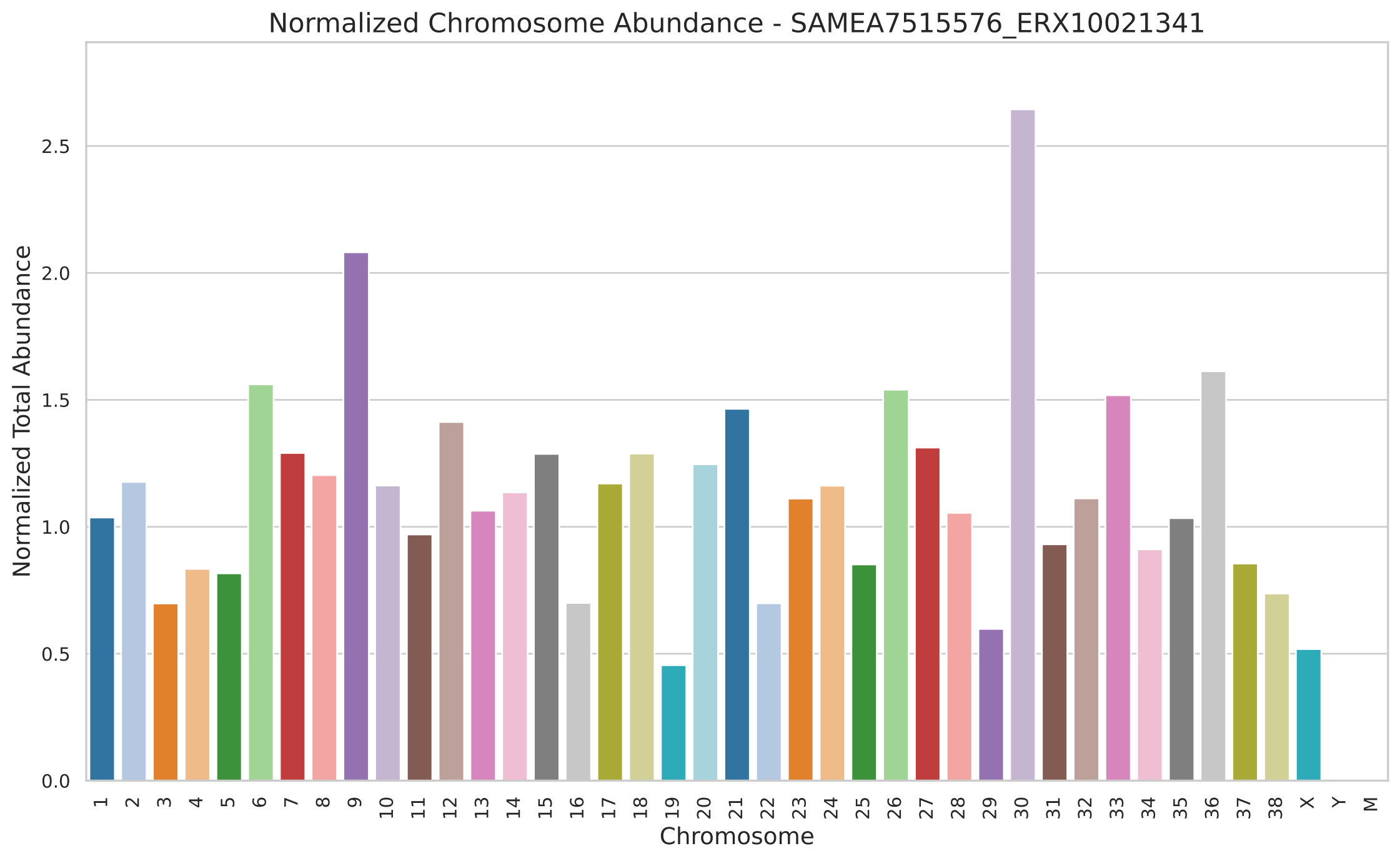

Normalized Chromosome Abundance - SAMEA7515536_ERX10021318
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

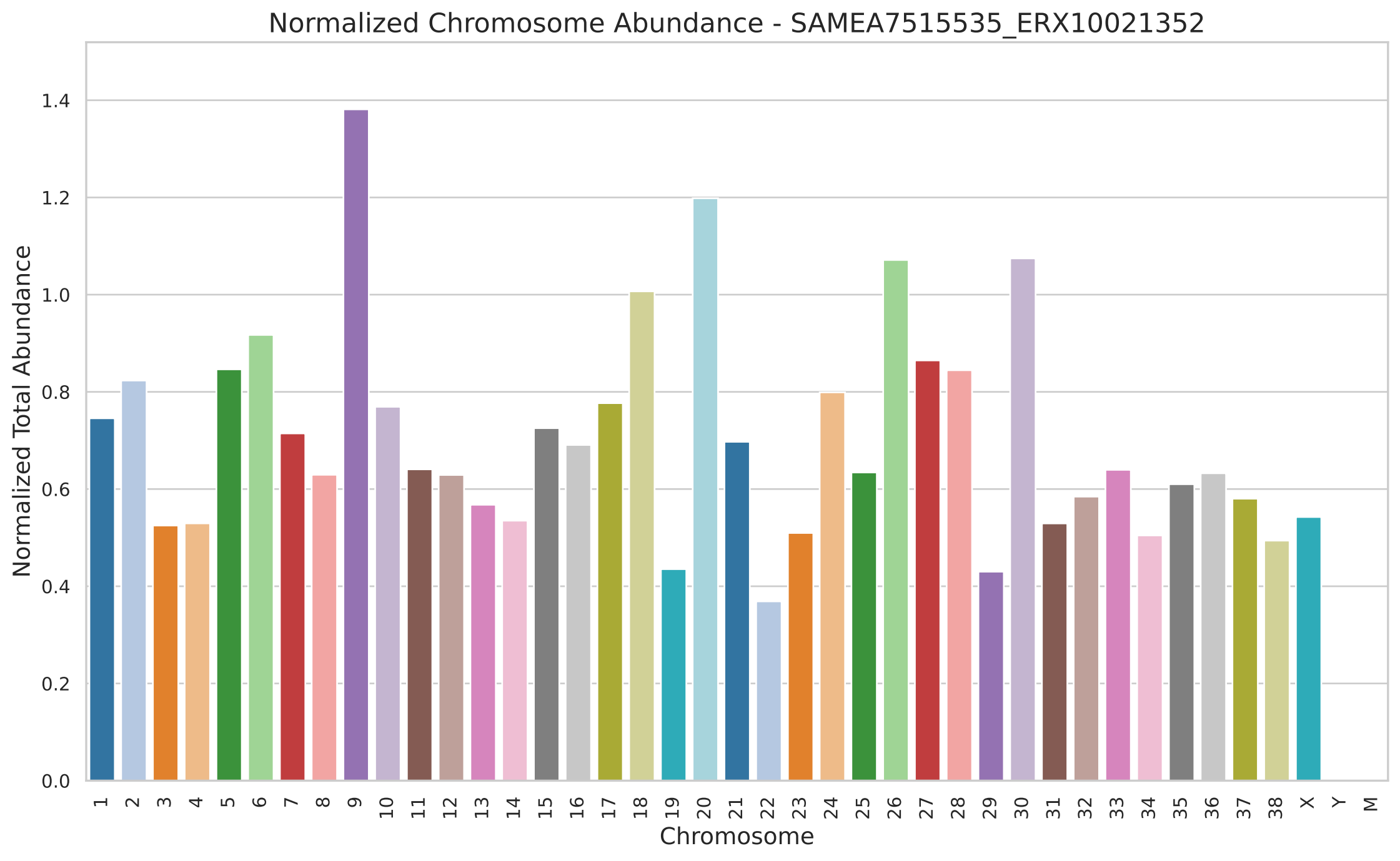

Normalized Chromosome Abundance - SAMEA110220183_ERX9466784
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

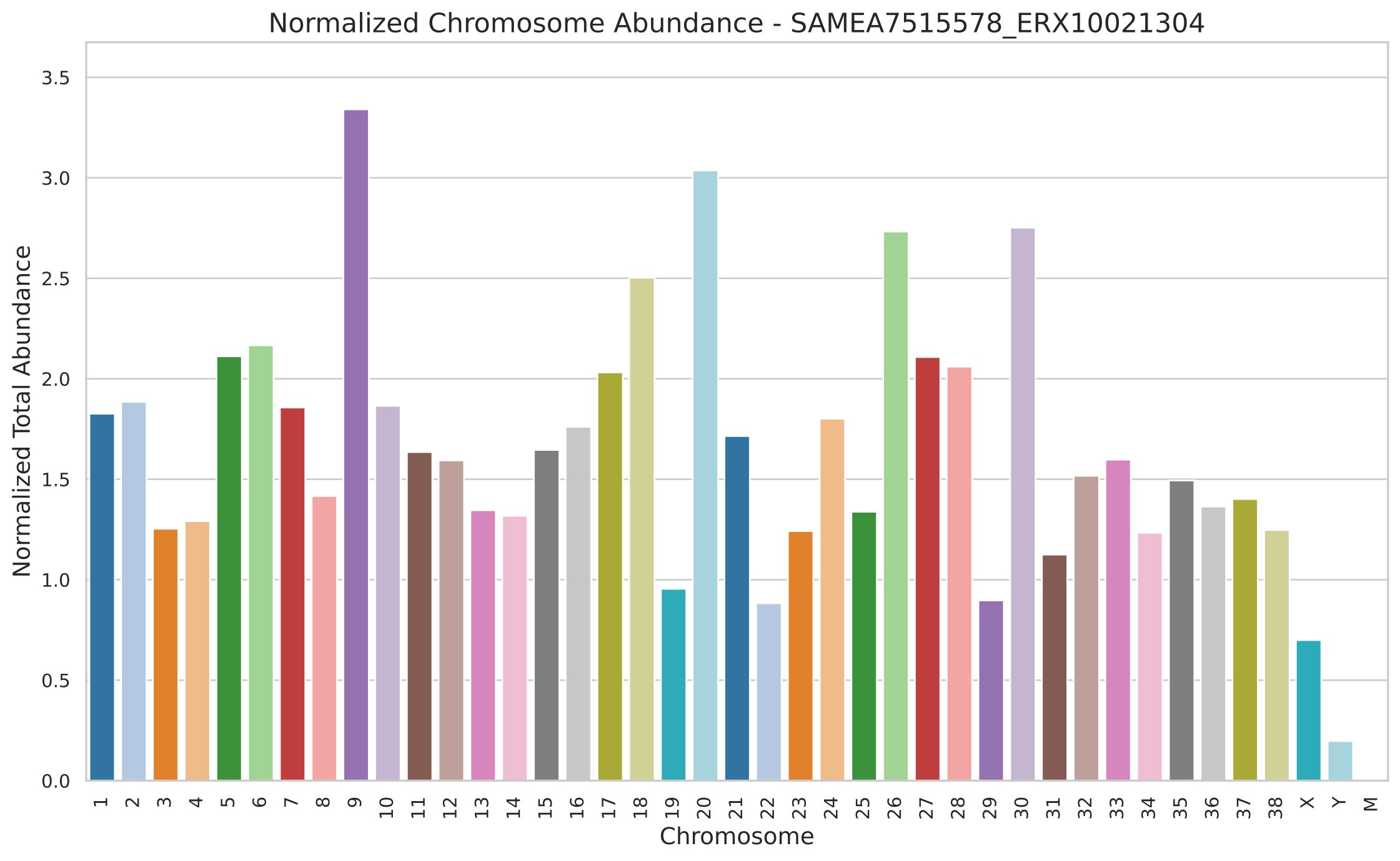

Normalized Chromosome Abundance - SAMEA7515522_ERX10021303
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

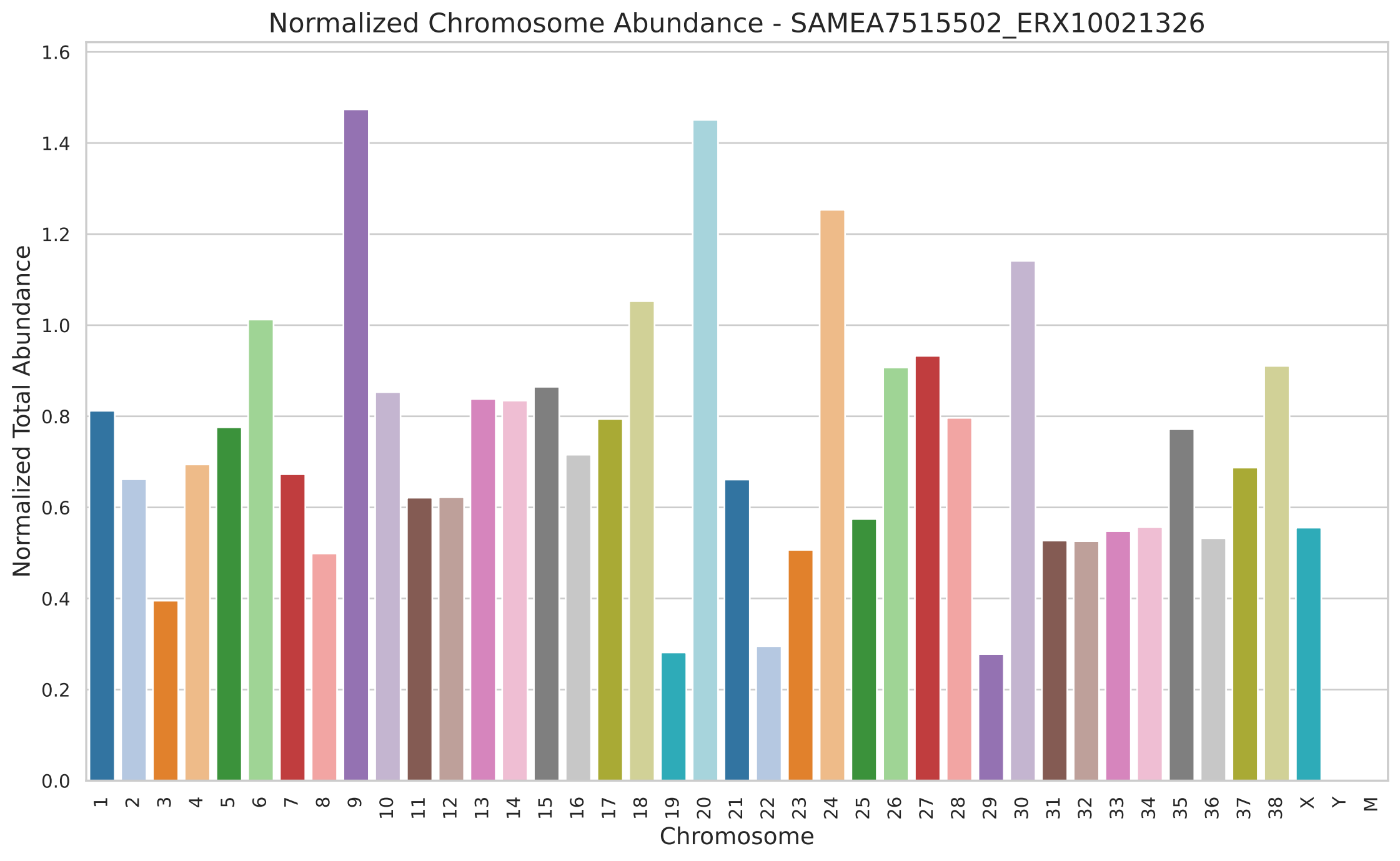

Normalized Chromosome Abundance - SAMEA7515534_ERX10021315
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

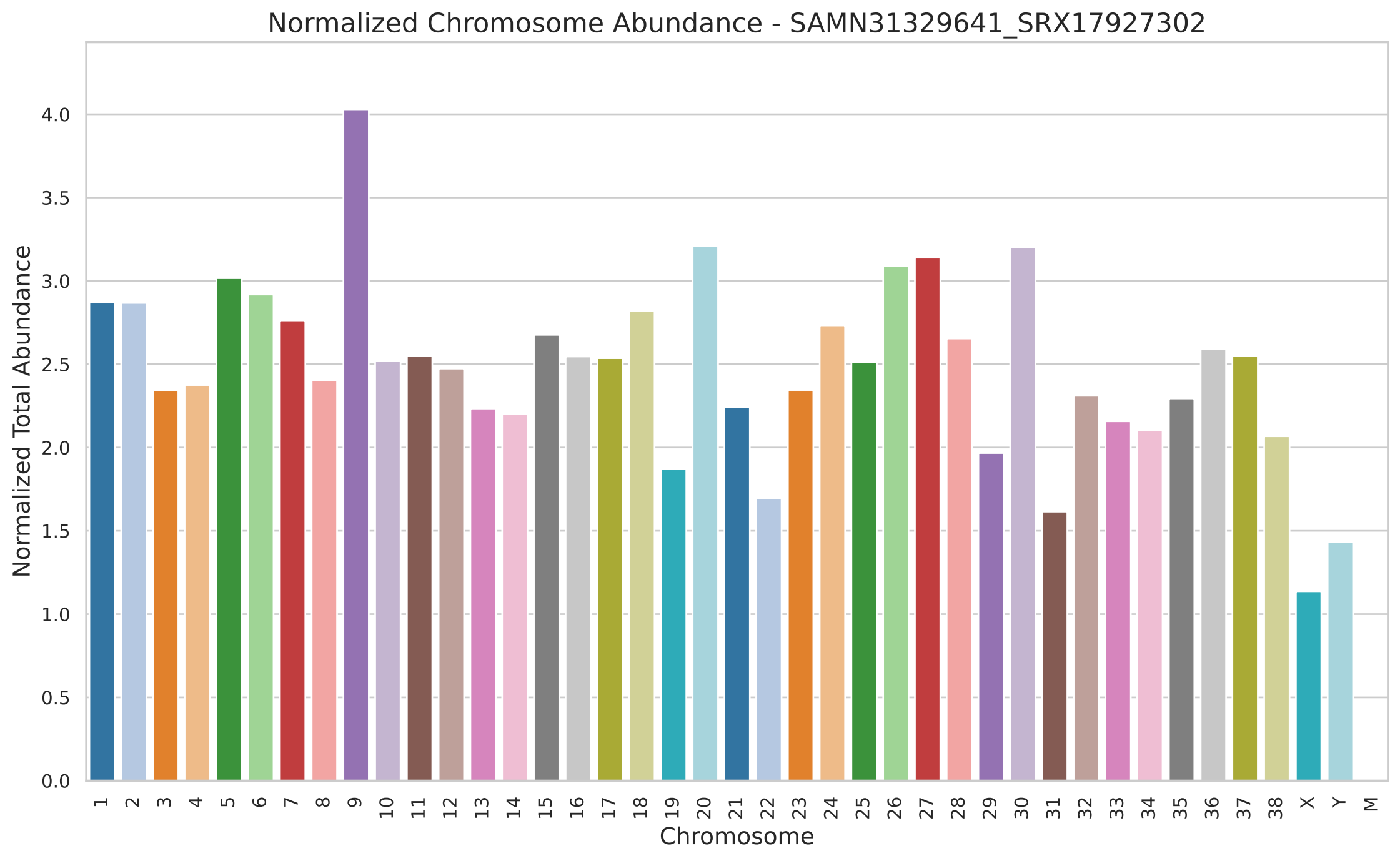

Normalized Chromosome Abundance - SAMEA7515577_ERX10021342
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

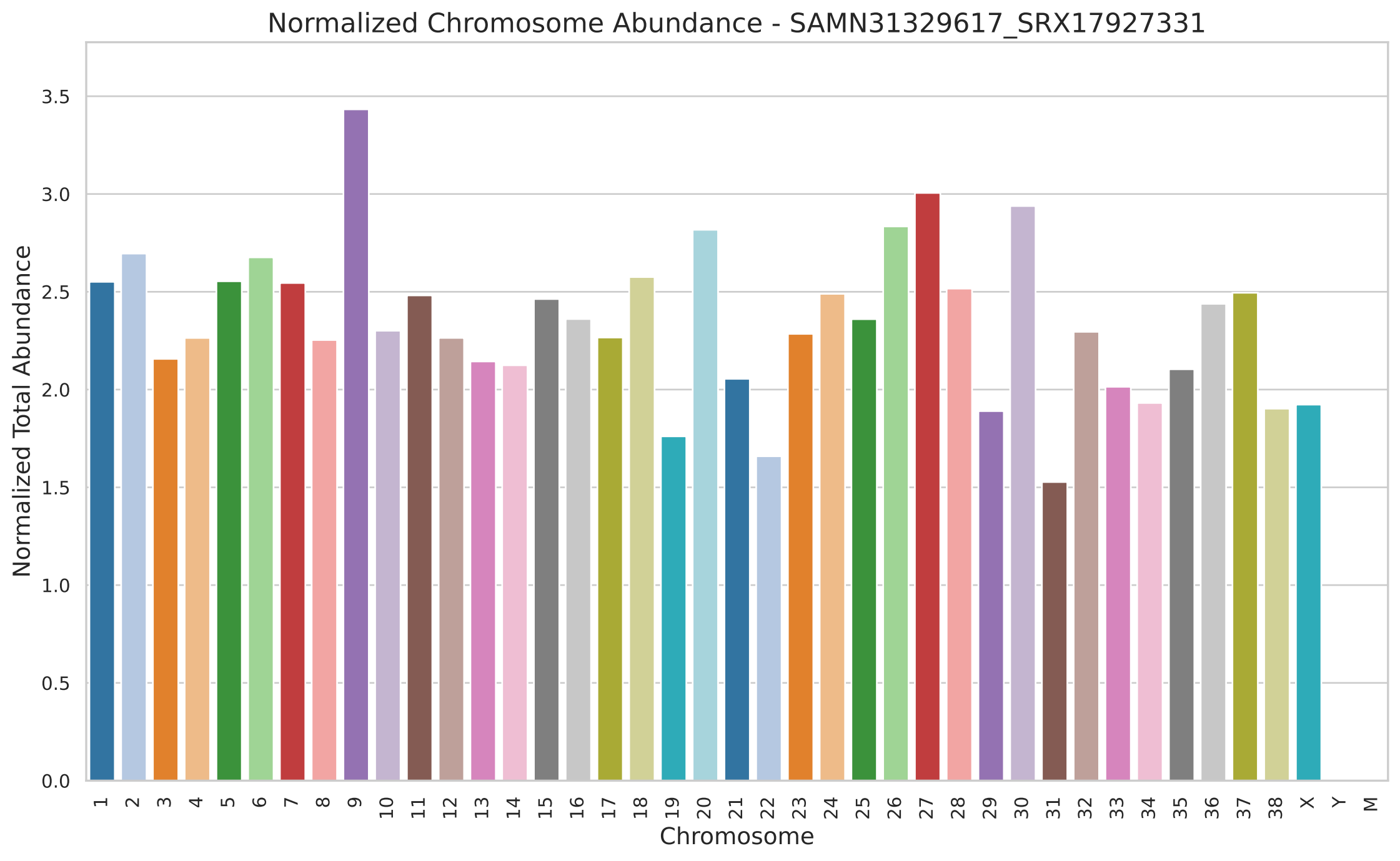

Normalized Chromosome Abundance - SAMEA7515576_ERX10021341
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

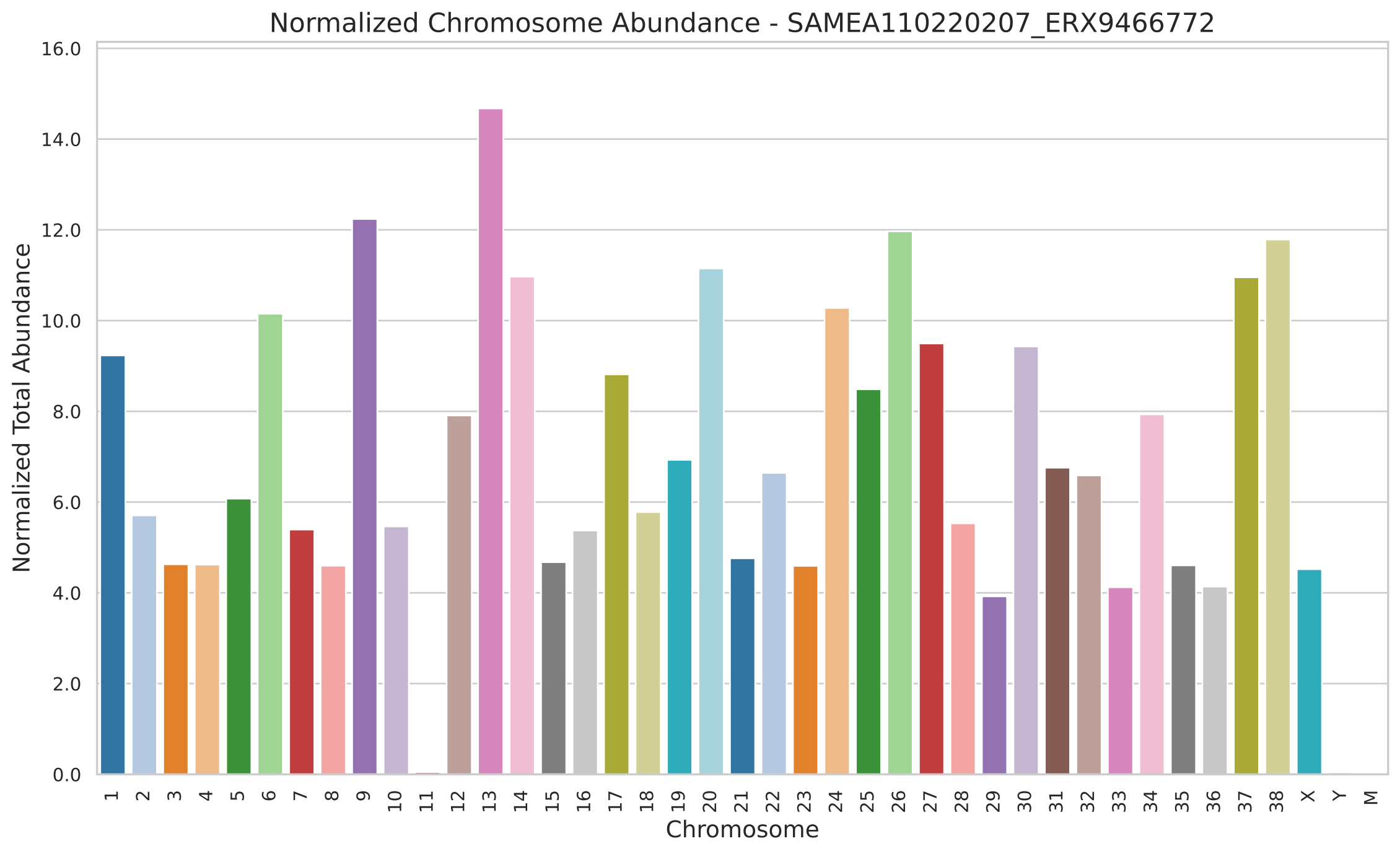

Normalized Chromosome Abundance - SAMEA7515535_ERX10021352
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

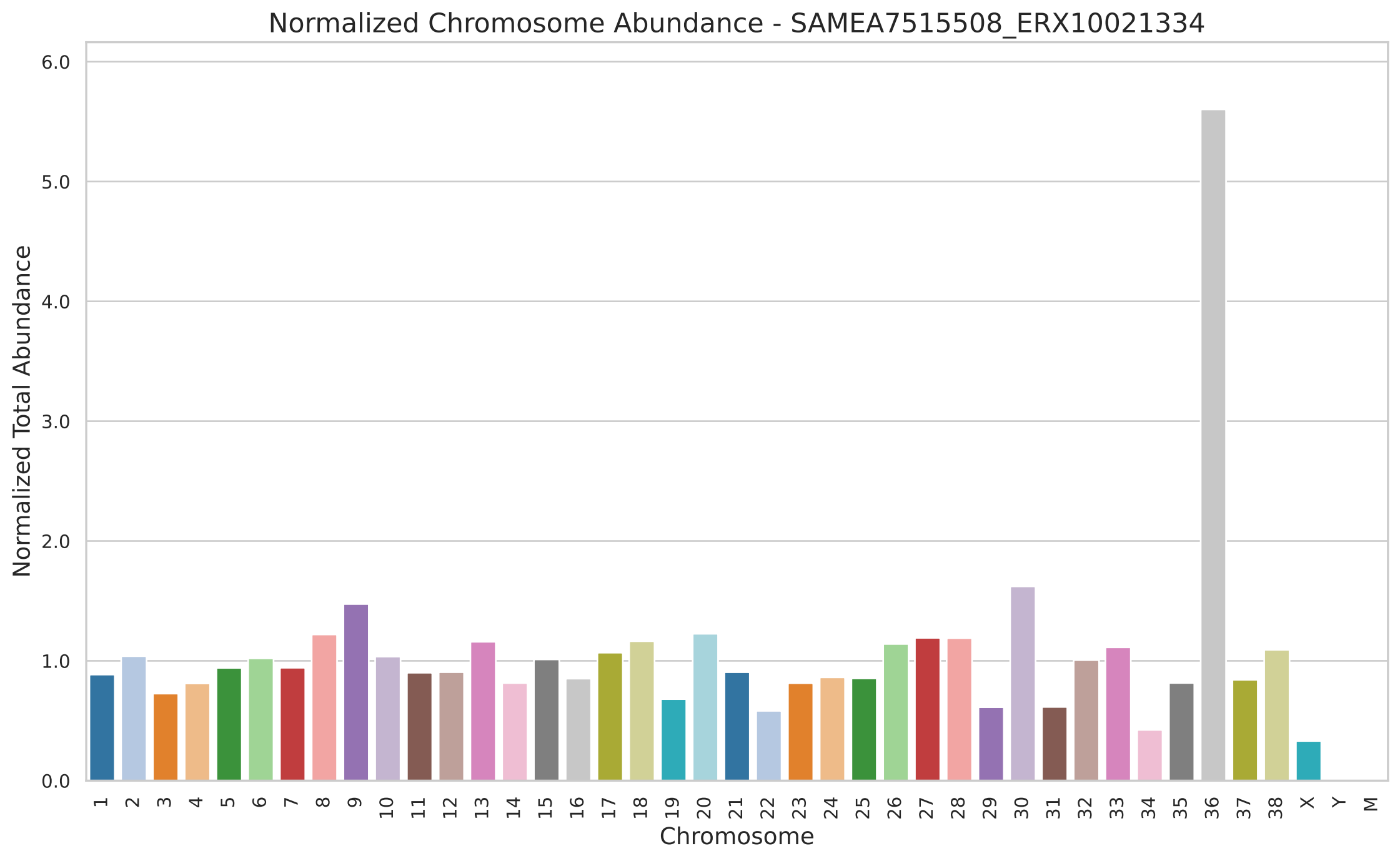

Normalized Chromosome Abundance - SAMEA7515578_ERX10021304
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

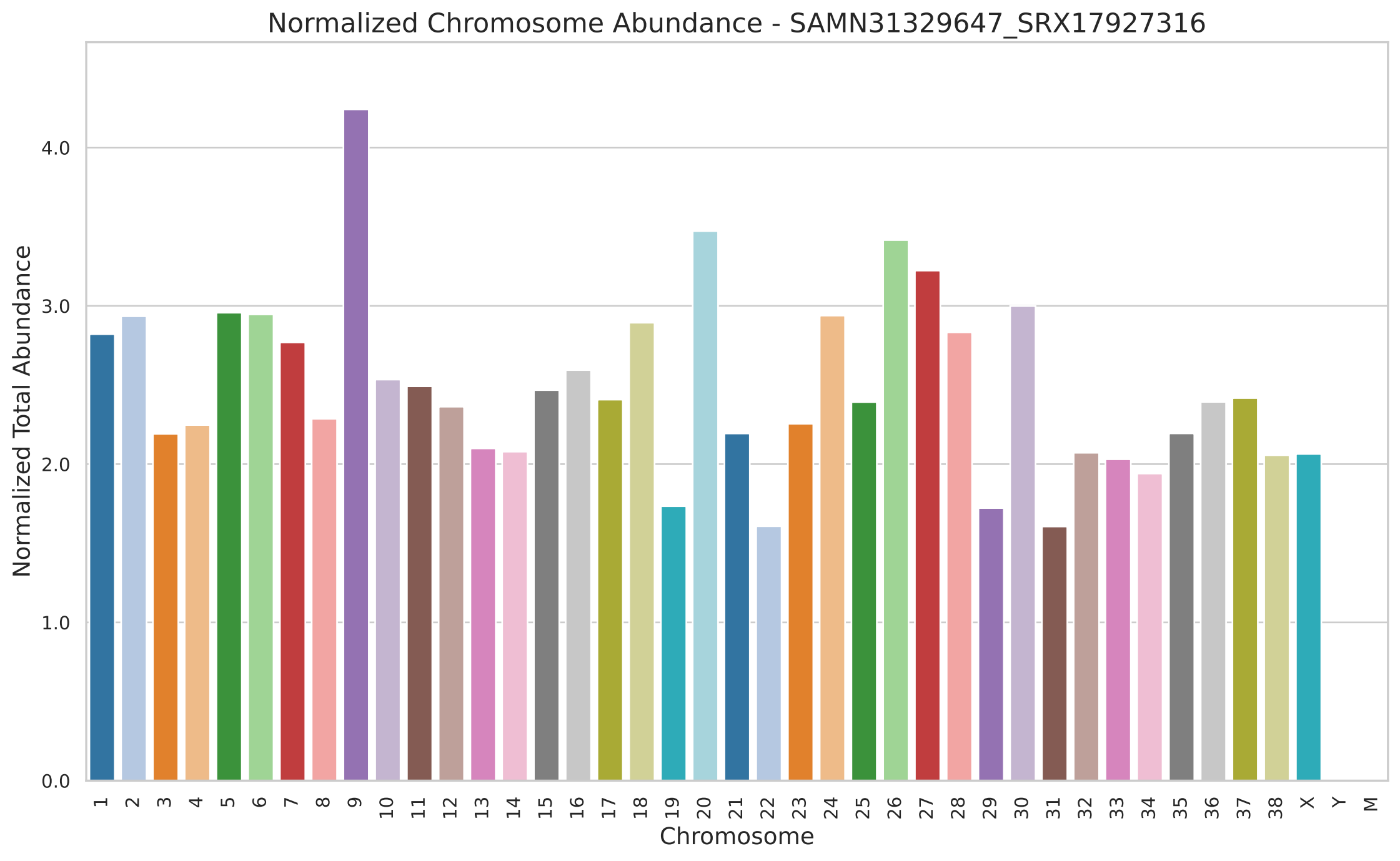

Normalized Chromosome Abundance - SAMEA7515502_ERX10021326
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

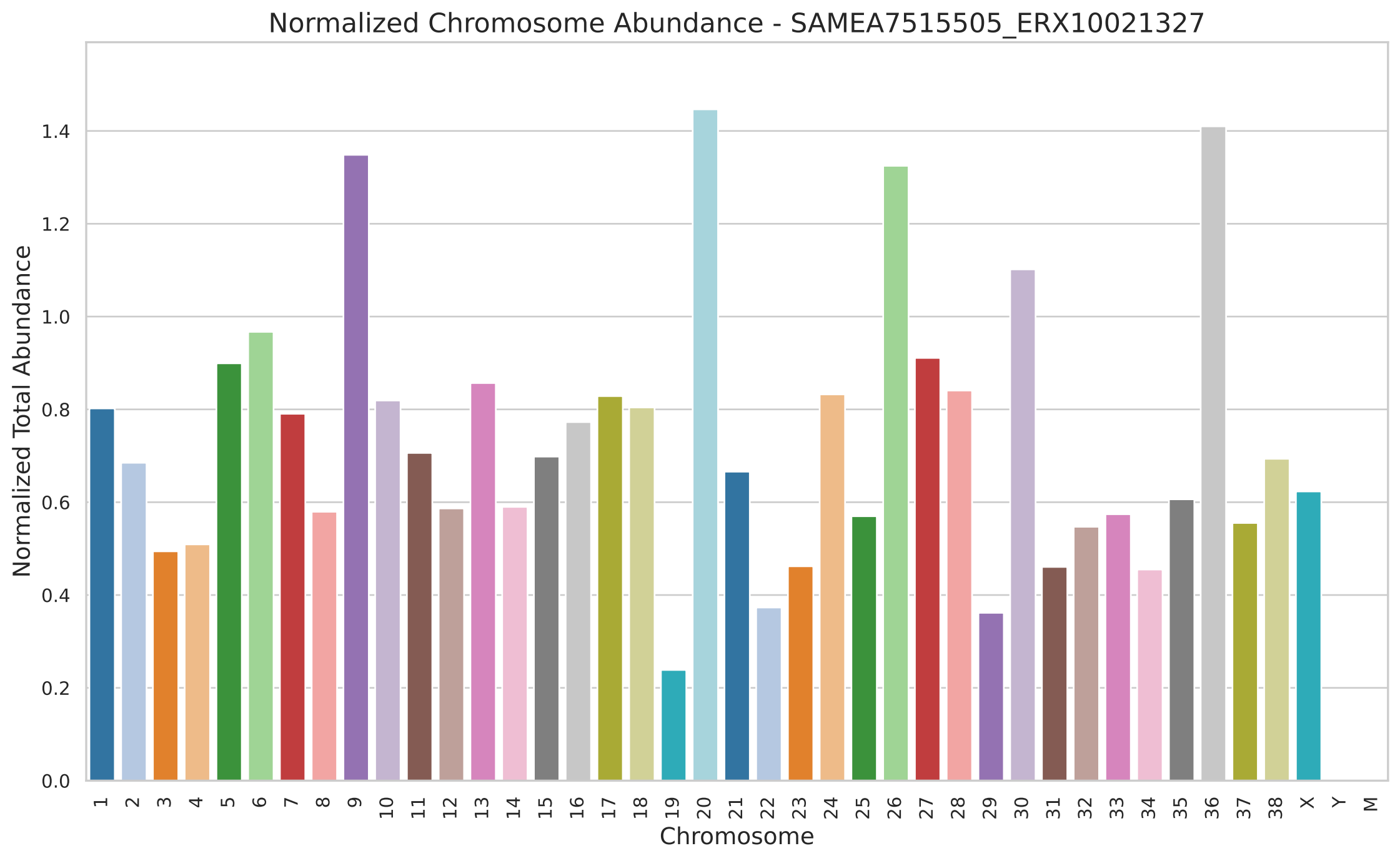

Normalized Chromosome Abundance - SAMN31329641_SRX17927302
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

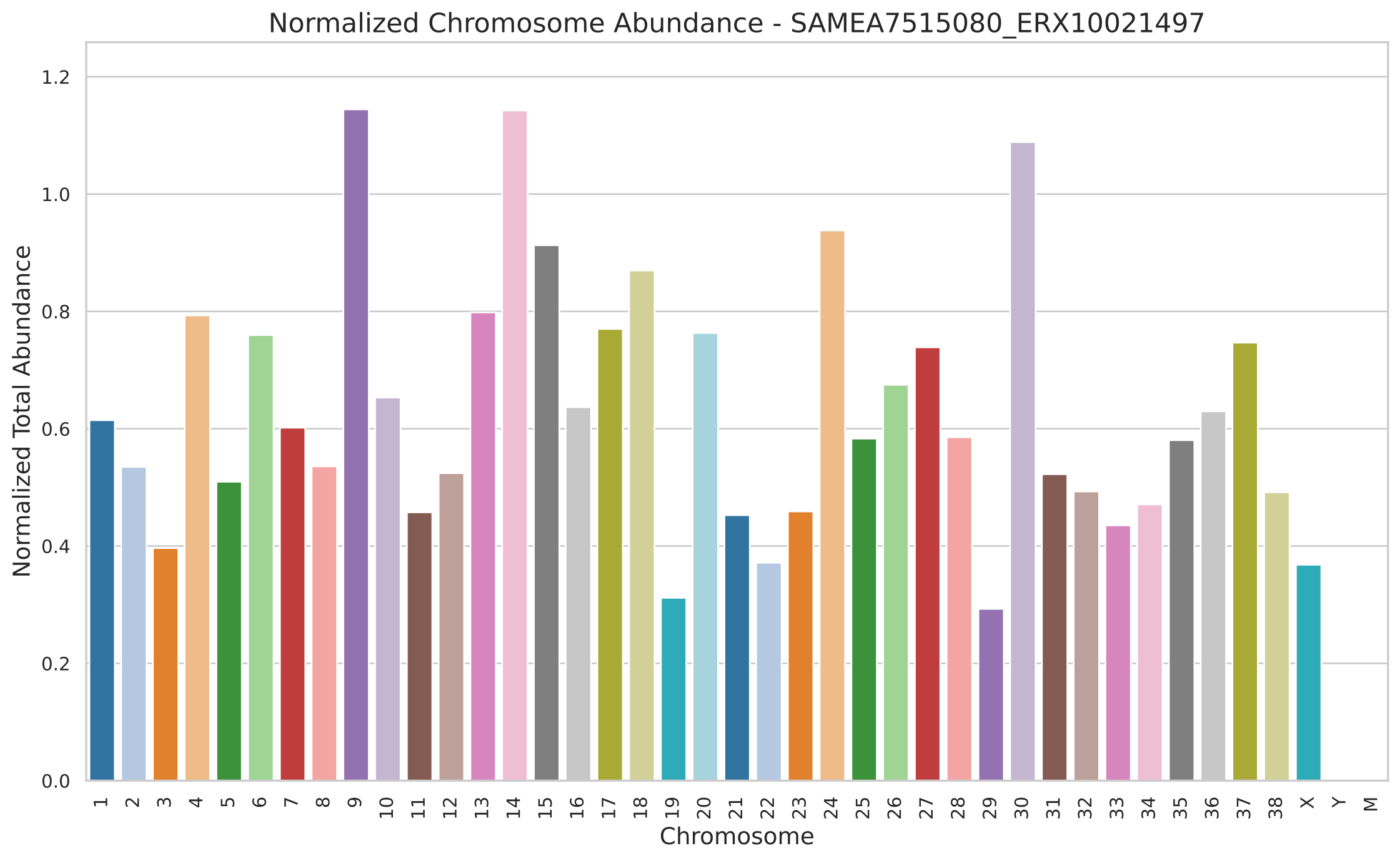

Normalized Chromosome Abundance - SAMN31329617_SRX17927331
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

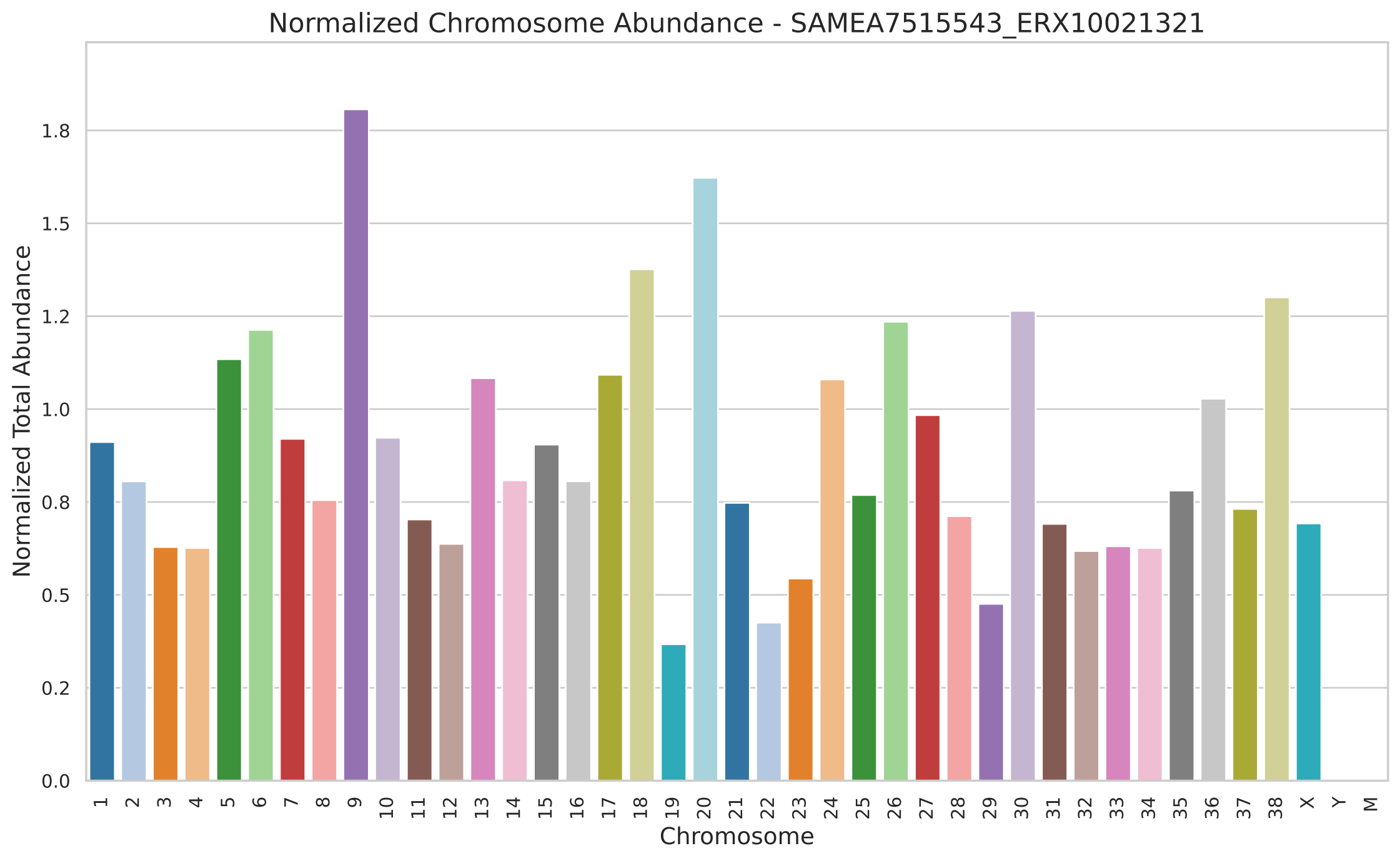

Normalized Chromosome Abundance - SAMEA110220207_ERX9466772
Normalized Total Abundance
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

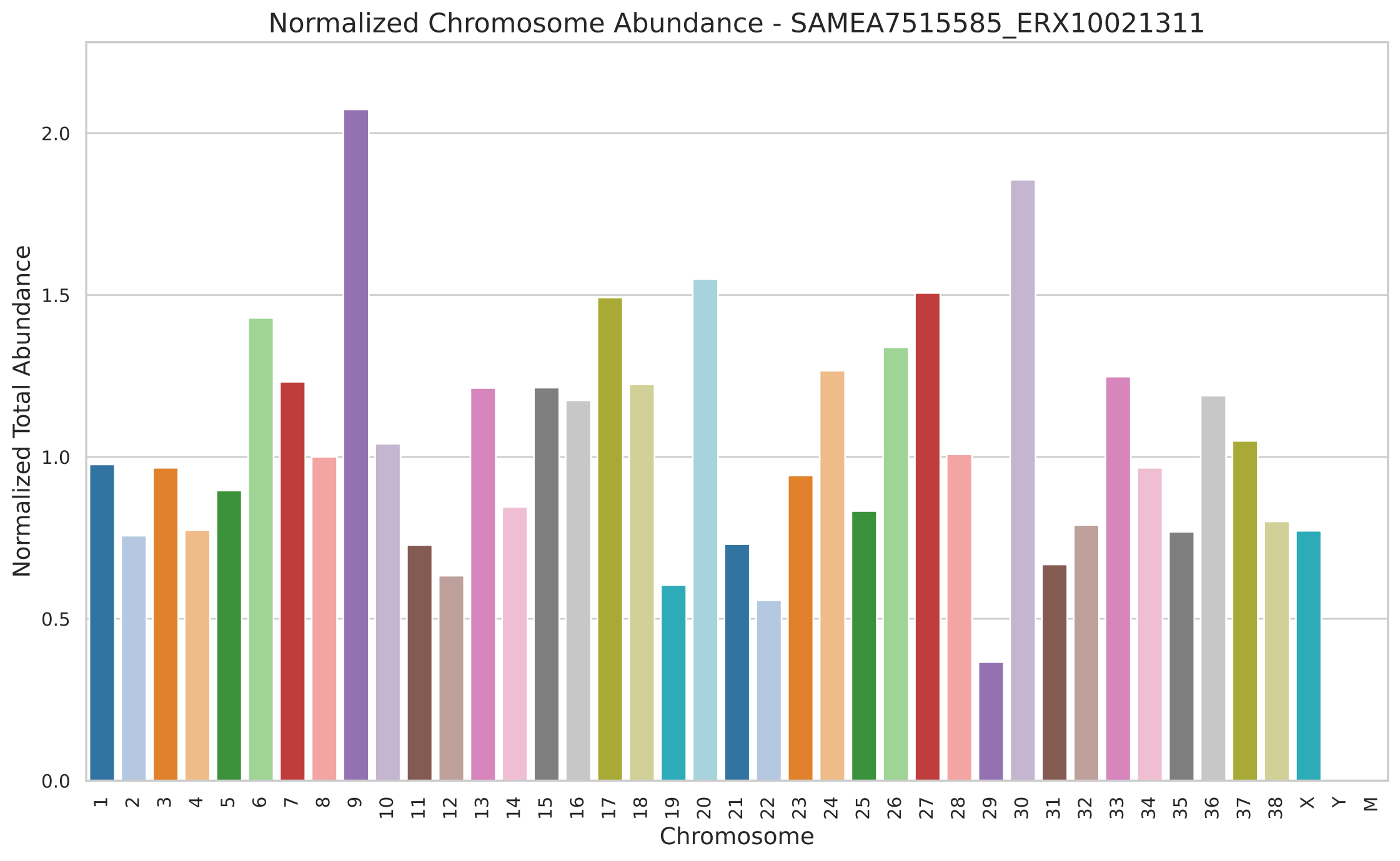

Normalized Chromosome Abundance - SAMEA7515508_ERX10021334
Normalized Total Abundance
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

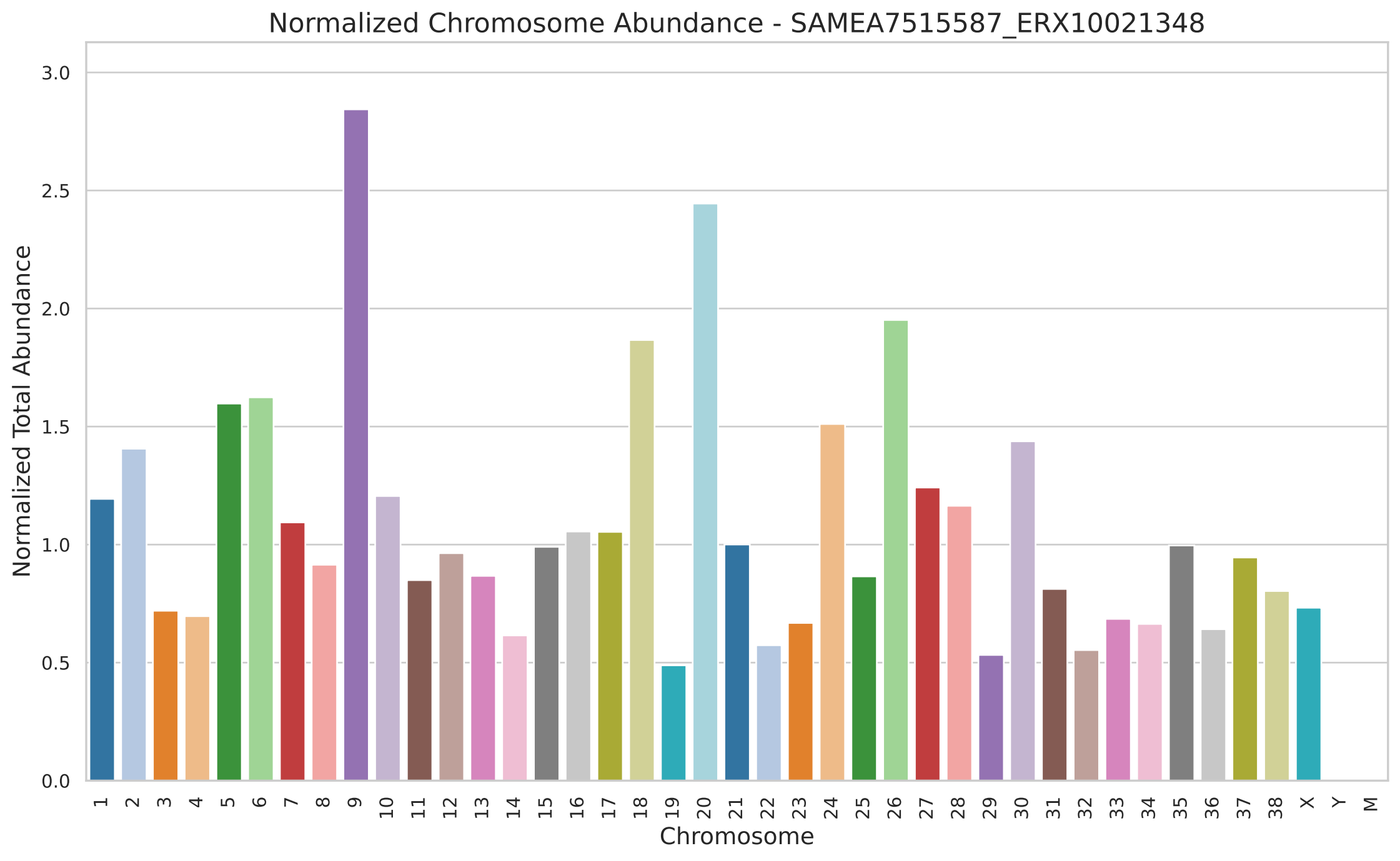

Normalized Chromosome Abundance - SAMN31329647_SRX17927316
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

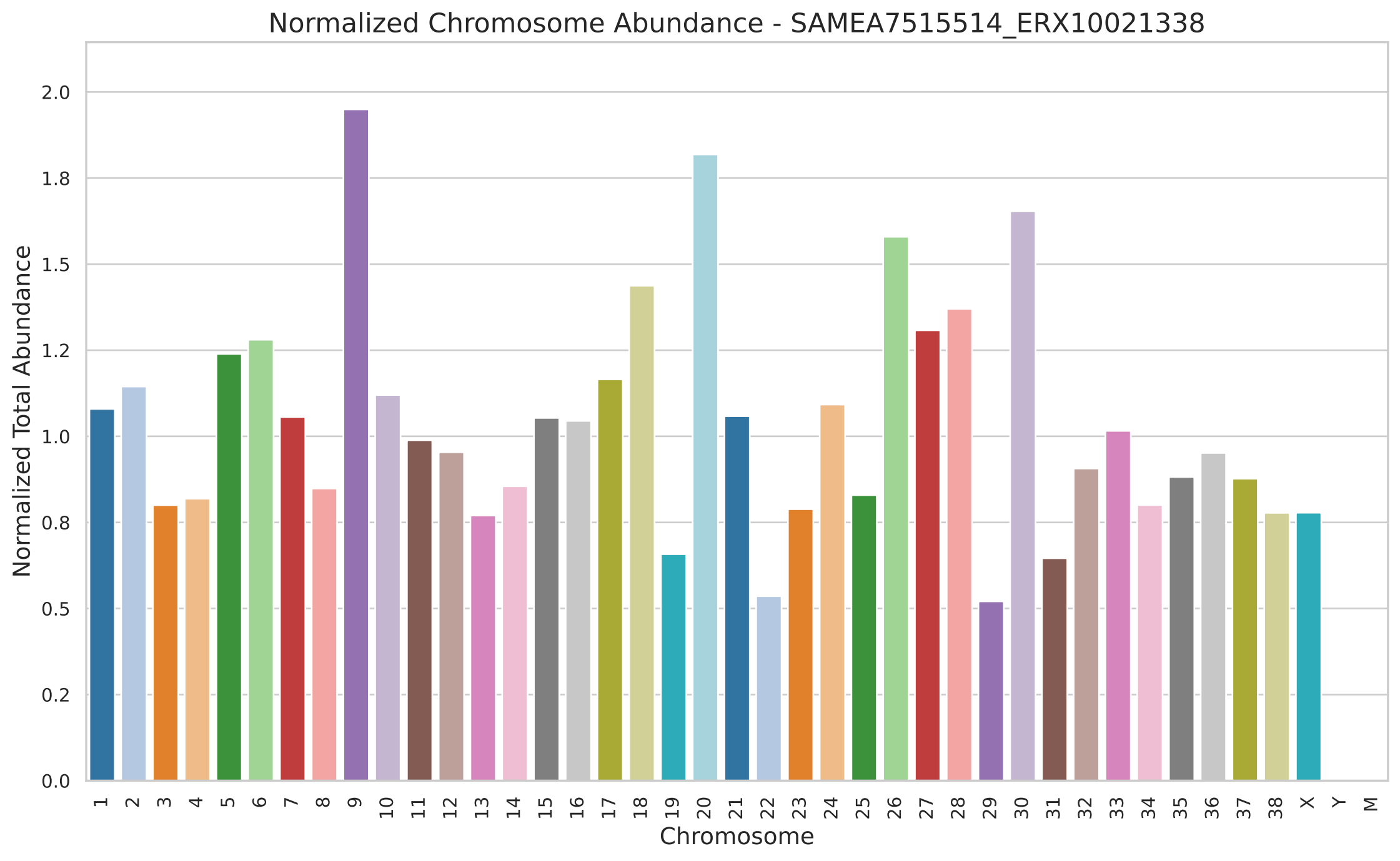

Normalized Chromosome Abundance - SAMEA7515505_ERX10021327
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

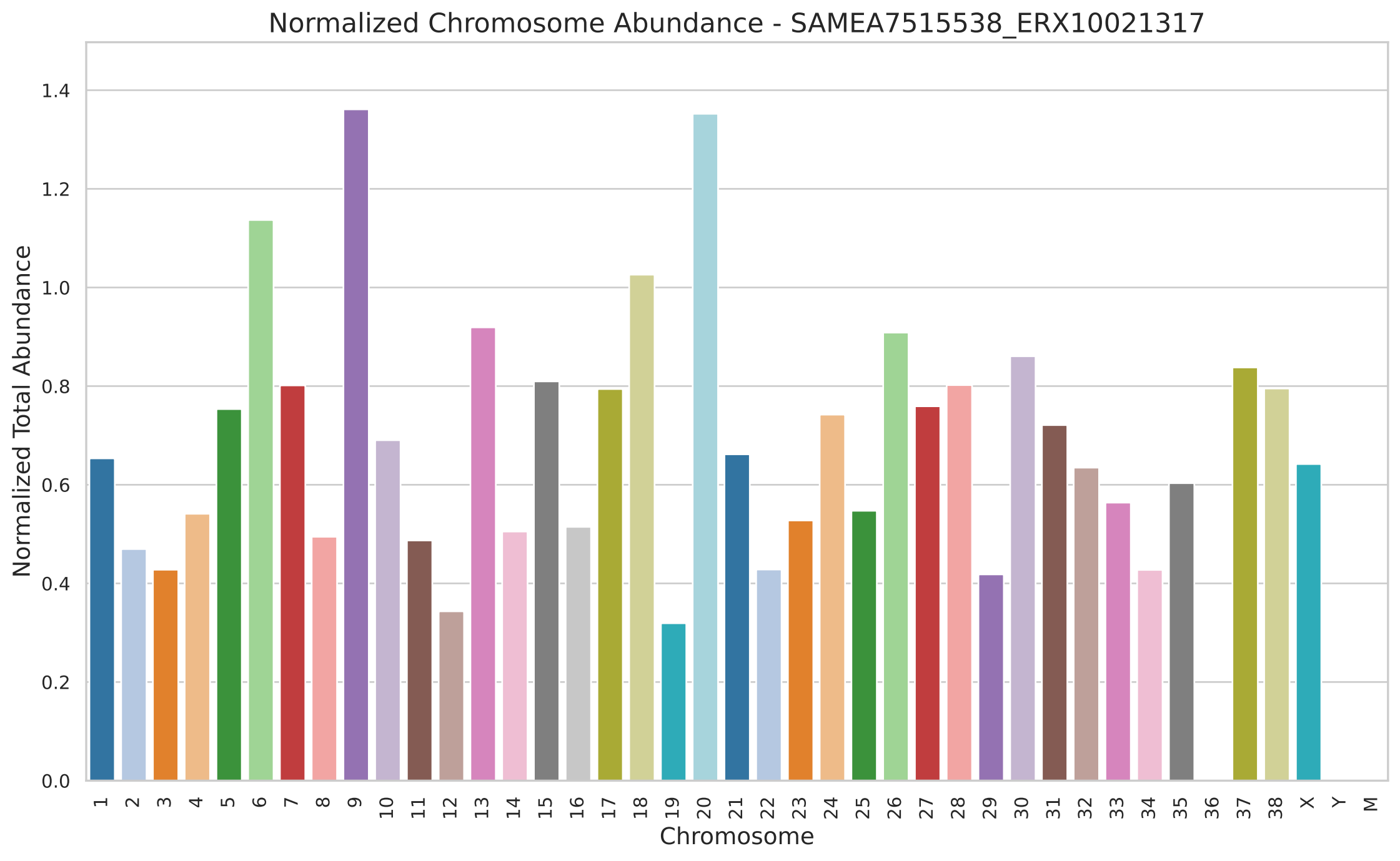

Normalized Chromosome Abundance - SAMEA7515080_ERX10021497
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

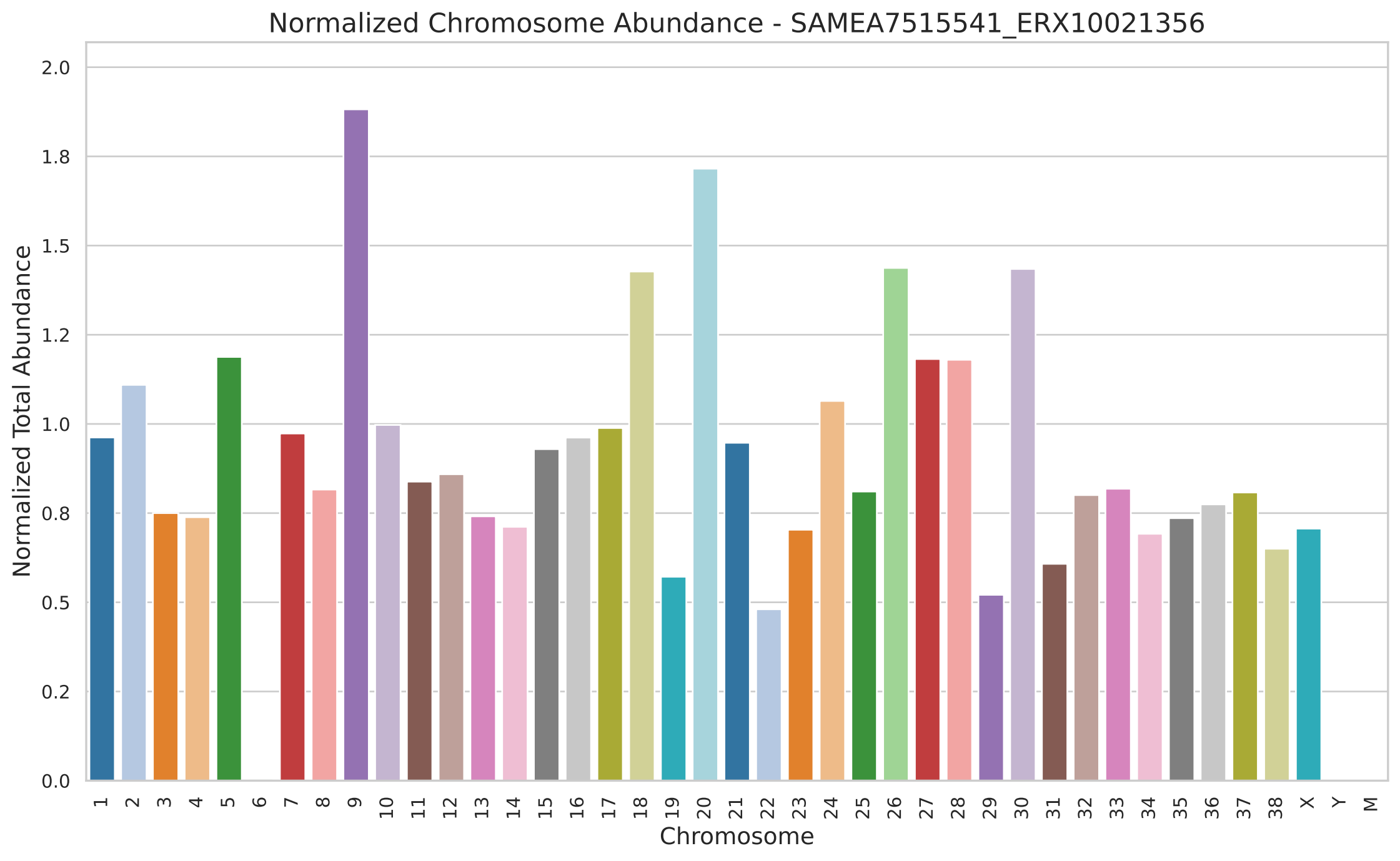

Normalized Chromosome Abundance - SAMEA7515543_ERX10021321
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

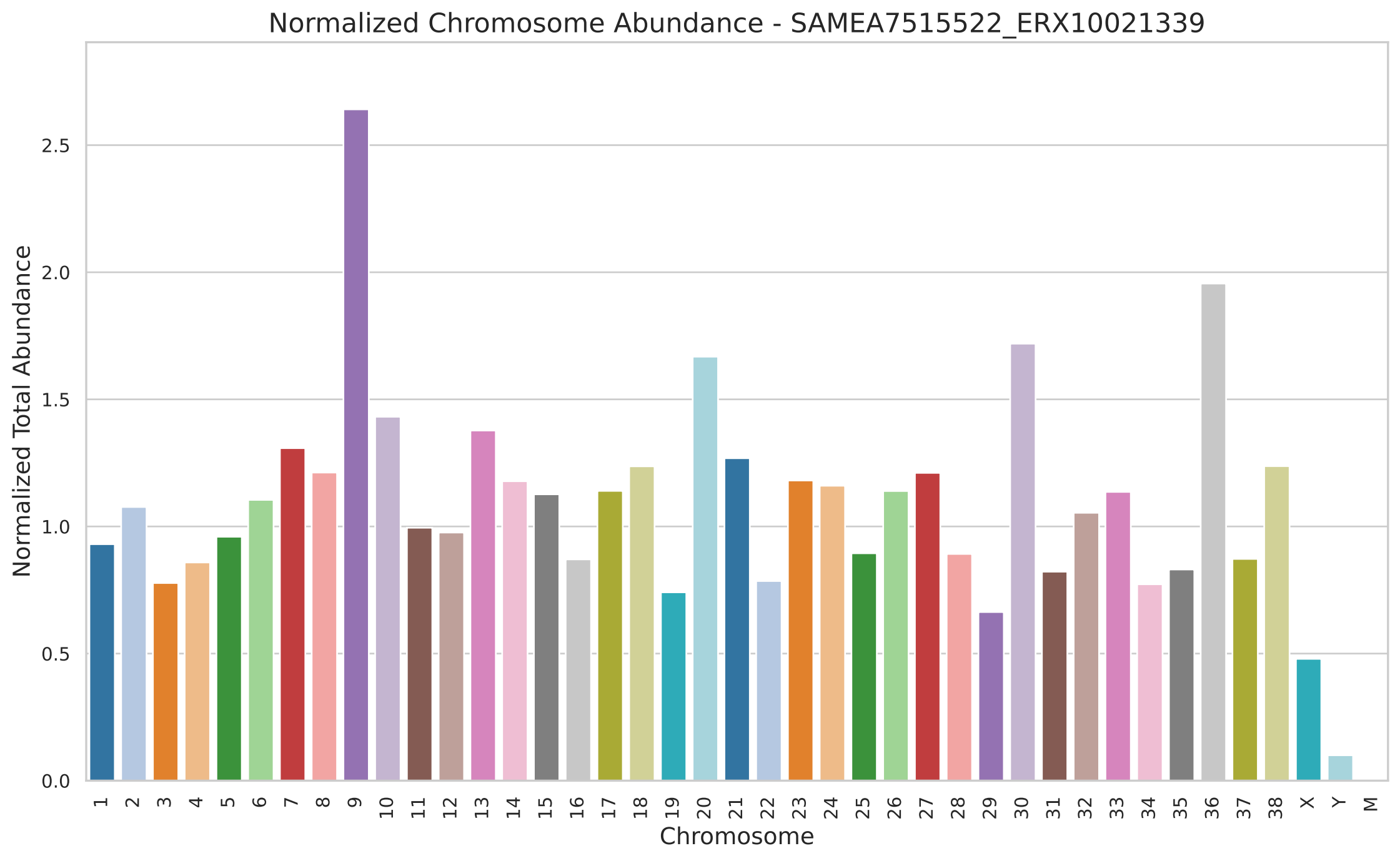

Normalized Chromosome Abundance - SAMEA7515585_ERX10021311
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

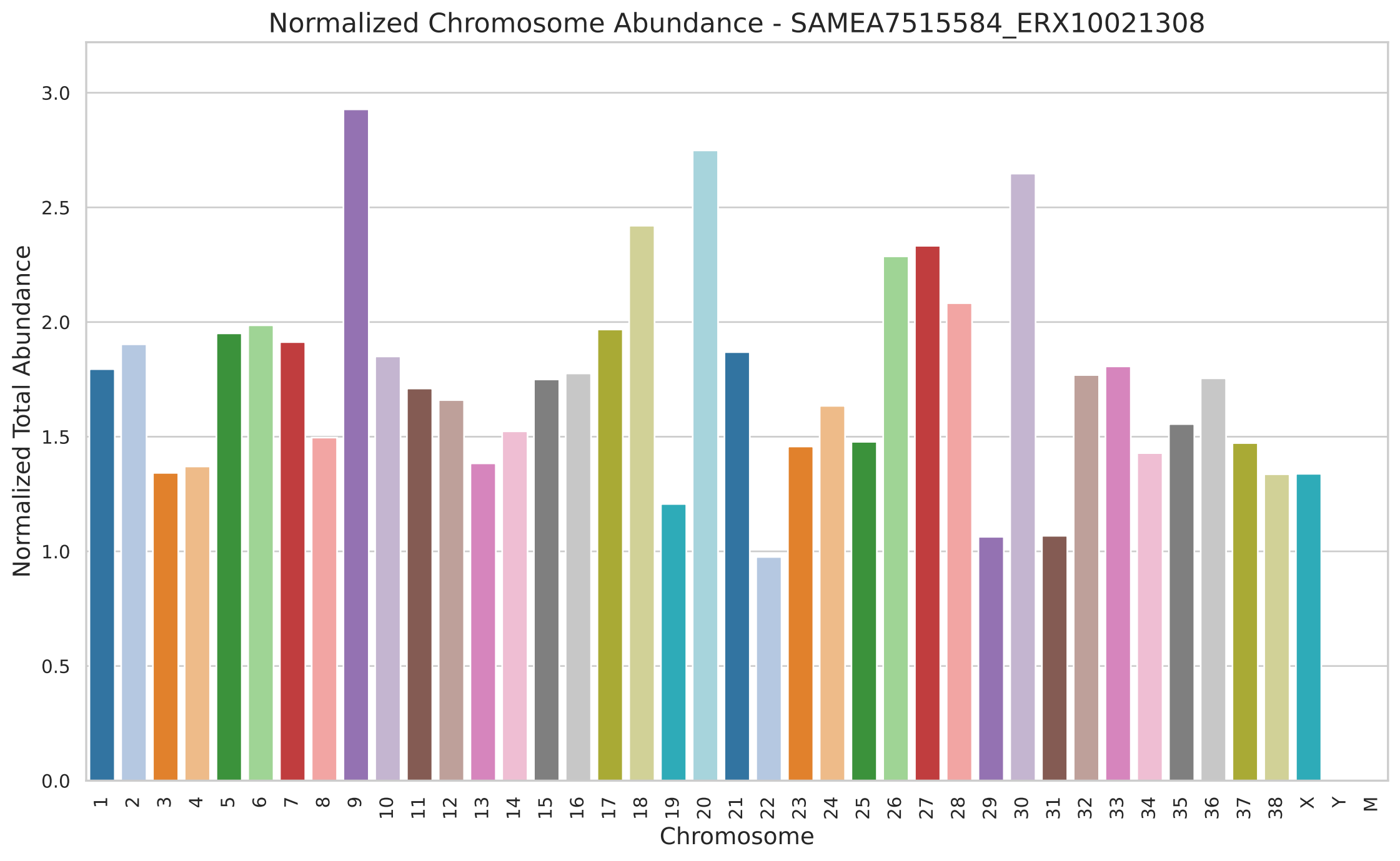

Normalized Chromosome Abundance - SAMEA7515587_ERX10021348
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

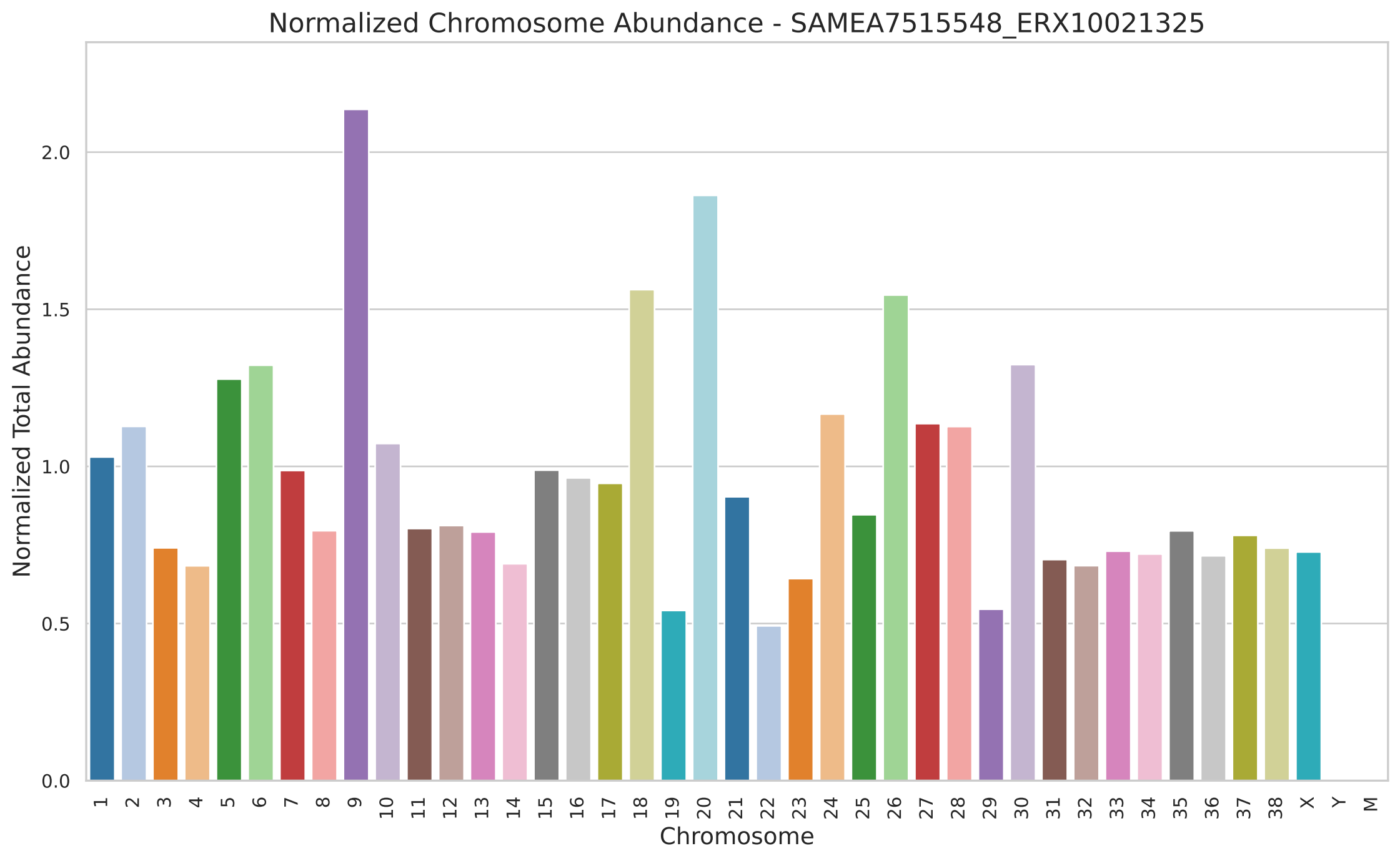

Normalized Chromosome Abundance - SAMEA7515514_ERX10021338
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

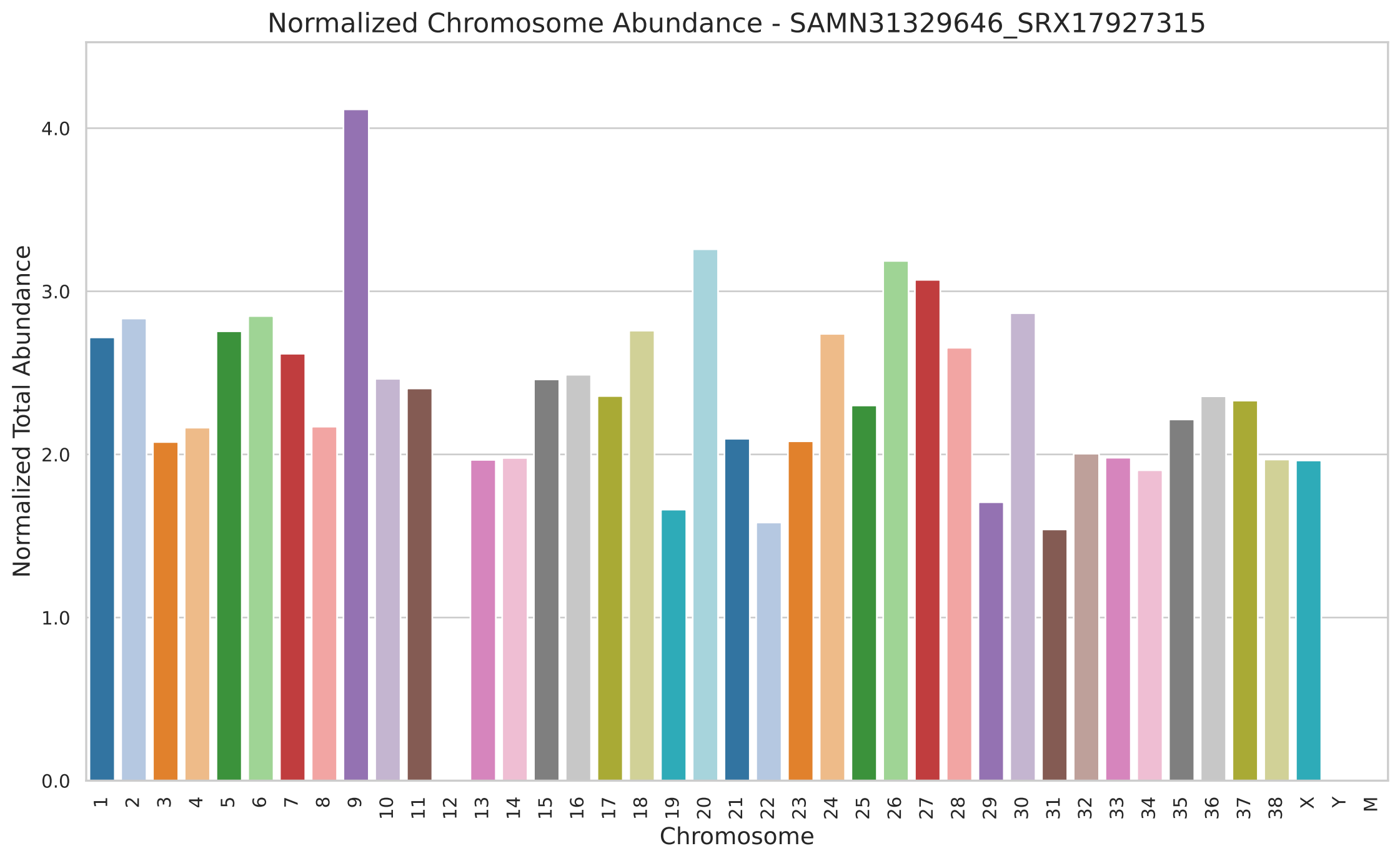

Normalized Chromosome Abundance - SAMEA7515538_ERX10021317
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

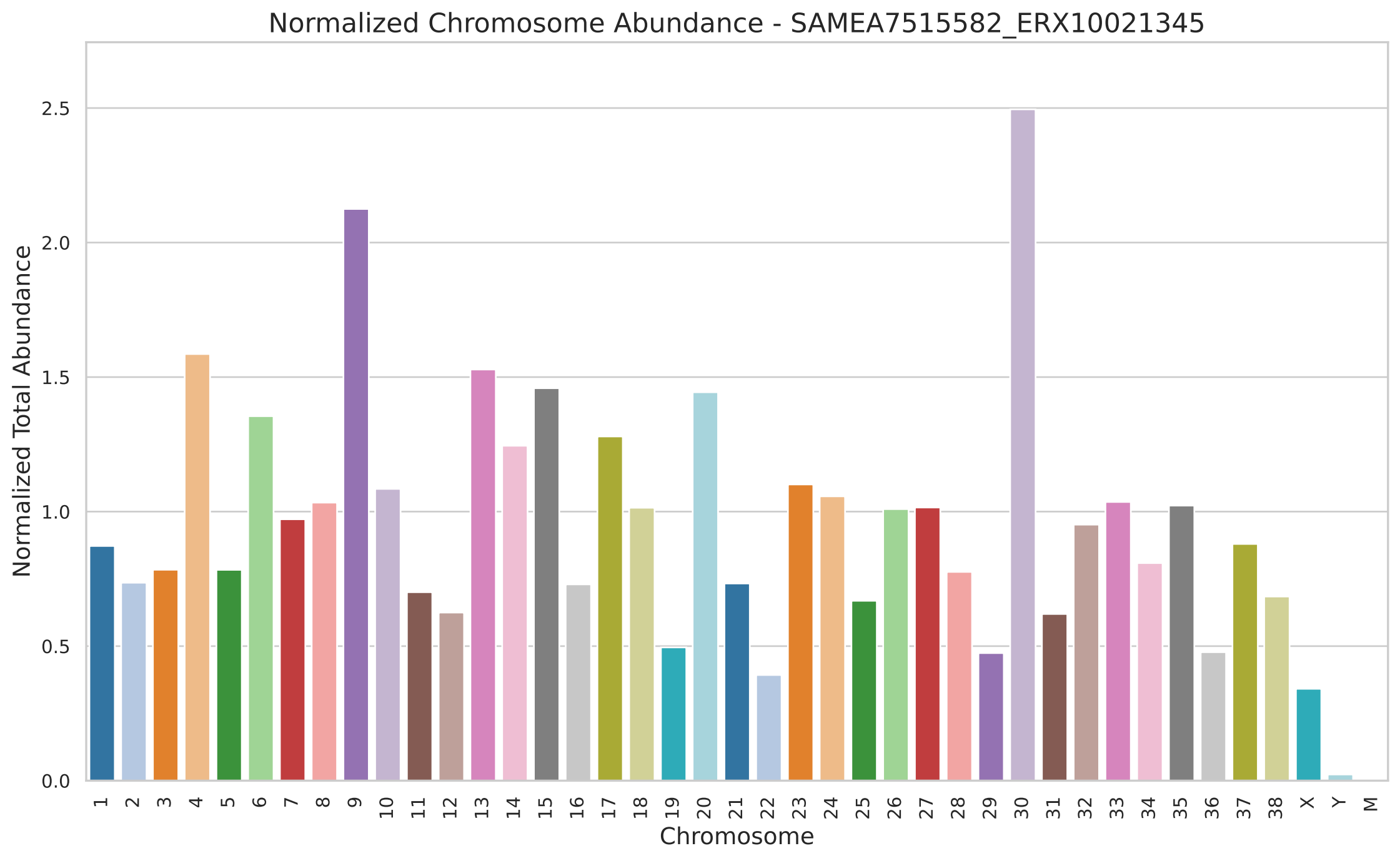

Normalized Chromosome Abundance - SAMEA7515541_ERX10021356
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

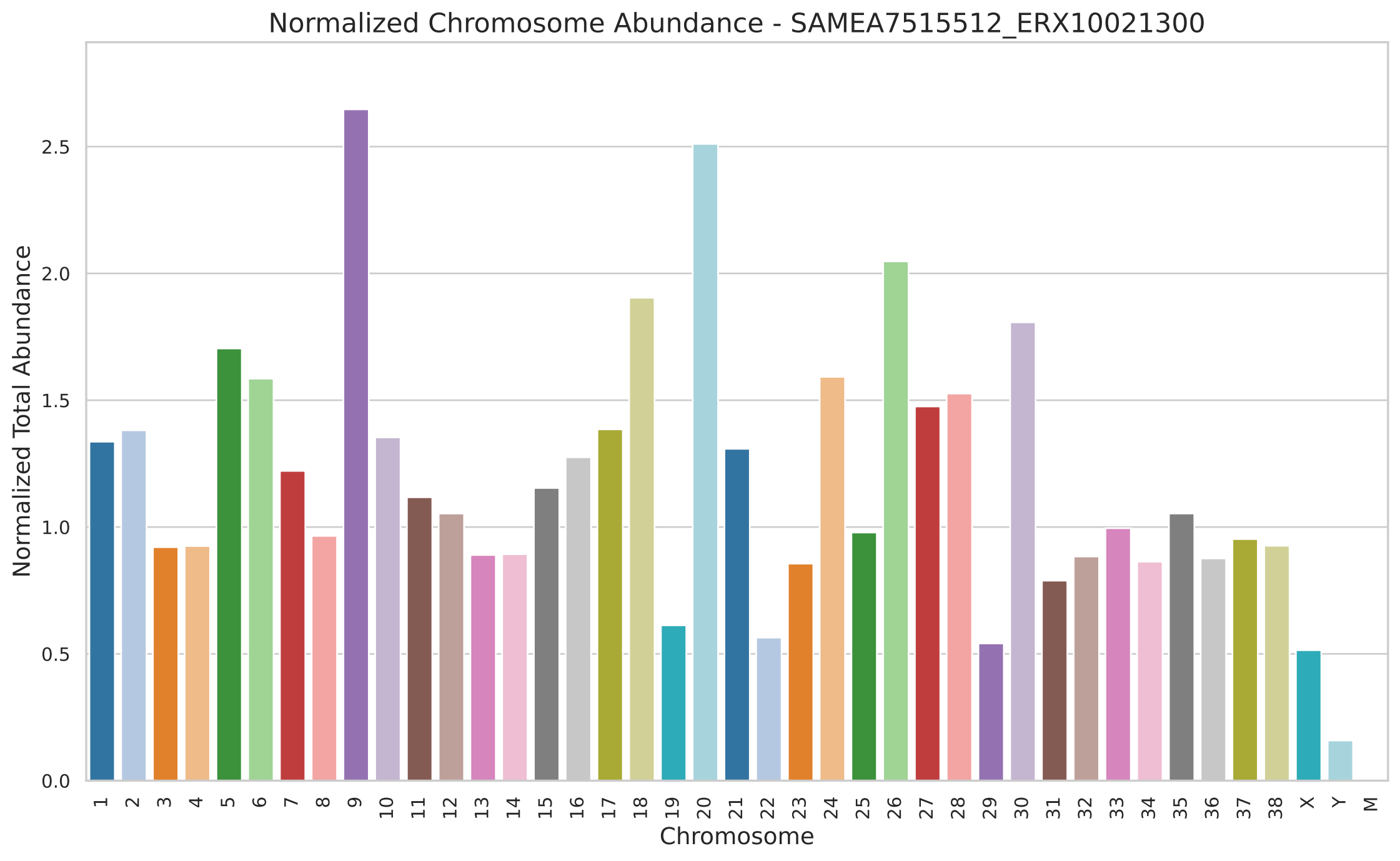

Normalized Chromosome Abundance - SAMEA7515522_ERX10021339
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

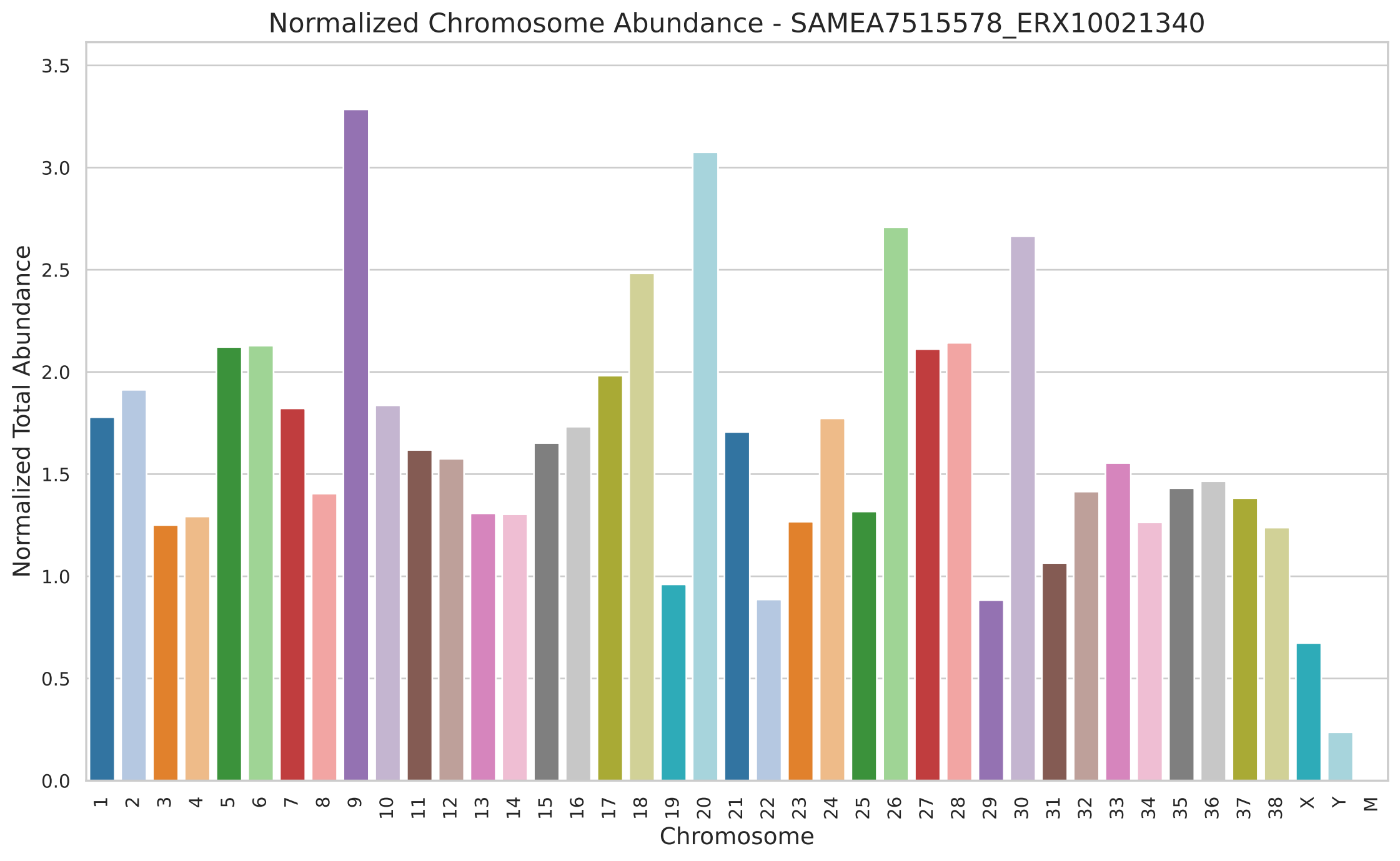

Normalized Chromosome Abundance - SAMEA7515584_ERX10021308
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

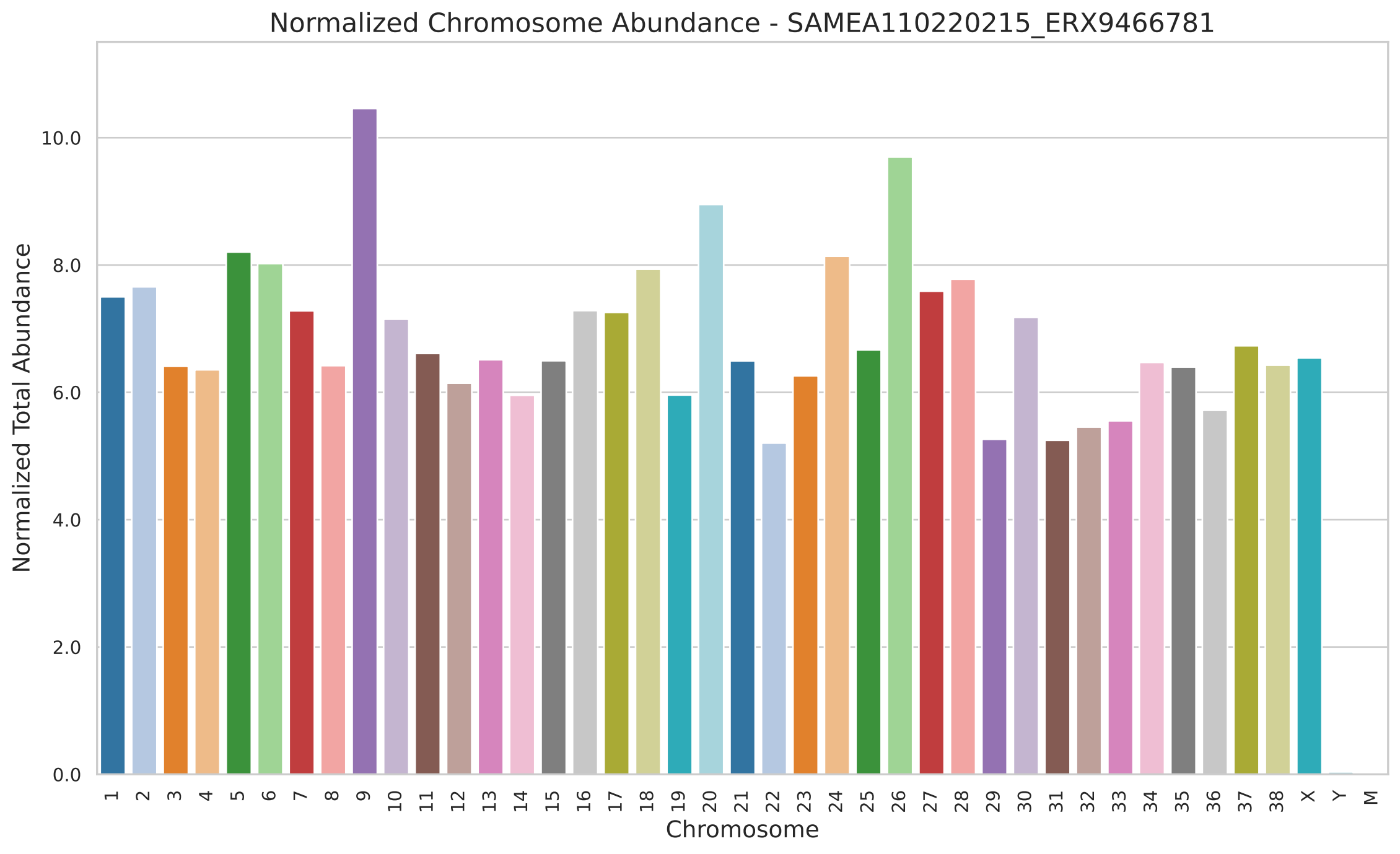

Normalized Chromosome Abundance - SAMEA7515548_ERX10021325
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

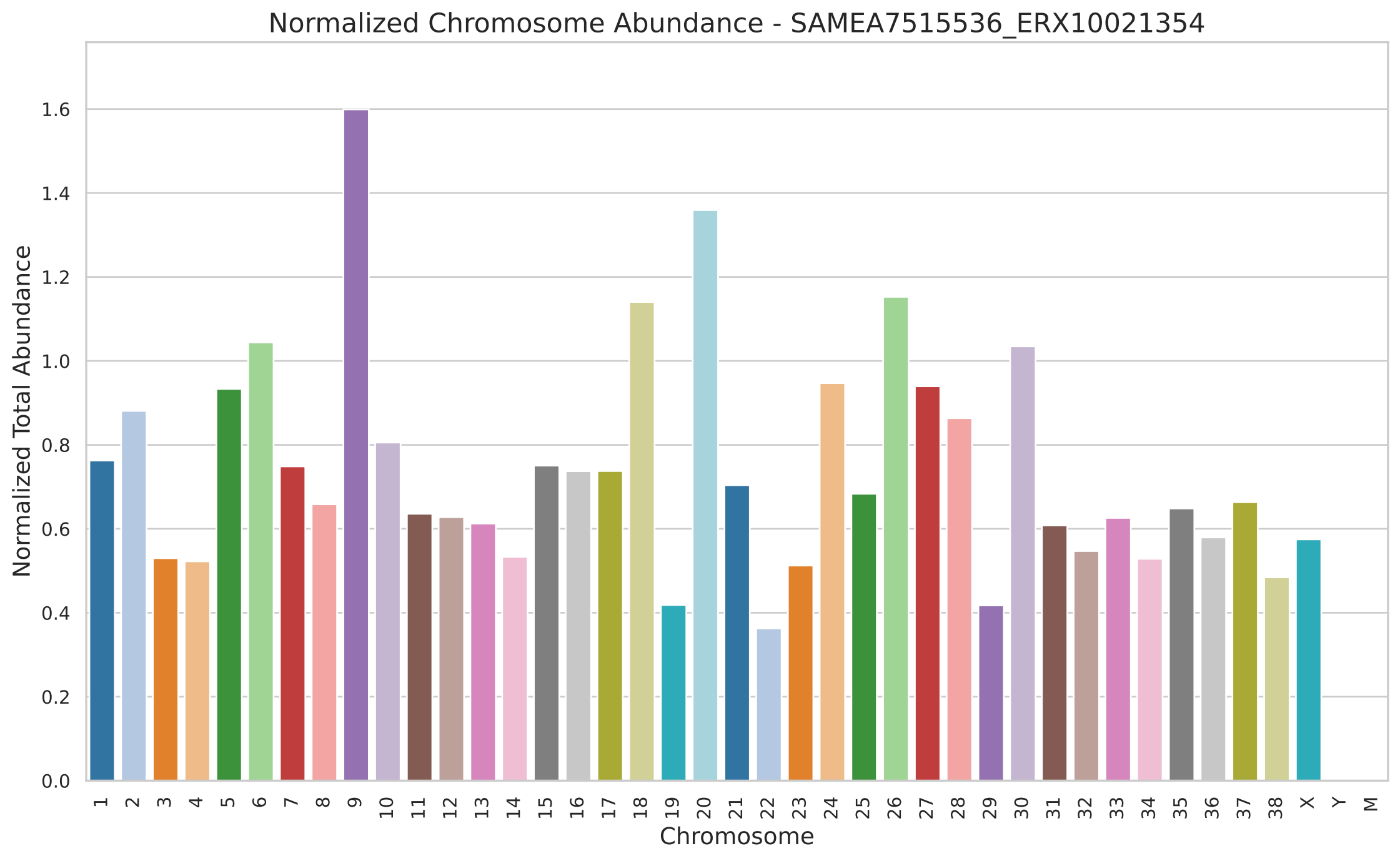

Normalized Chromosome Abundance - SAMN31329646_SRX17927315
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

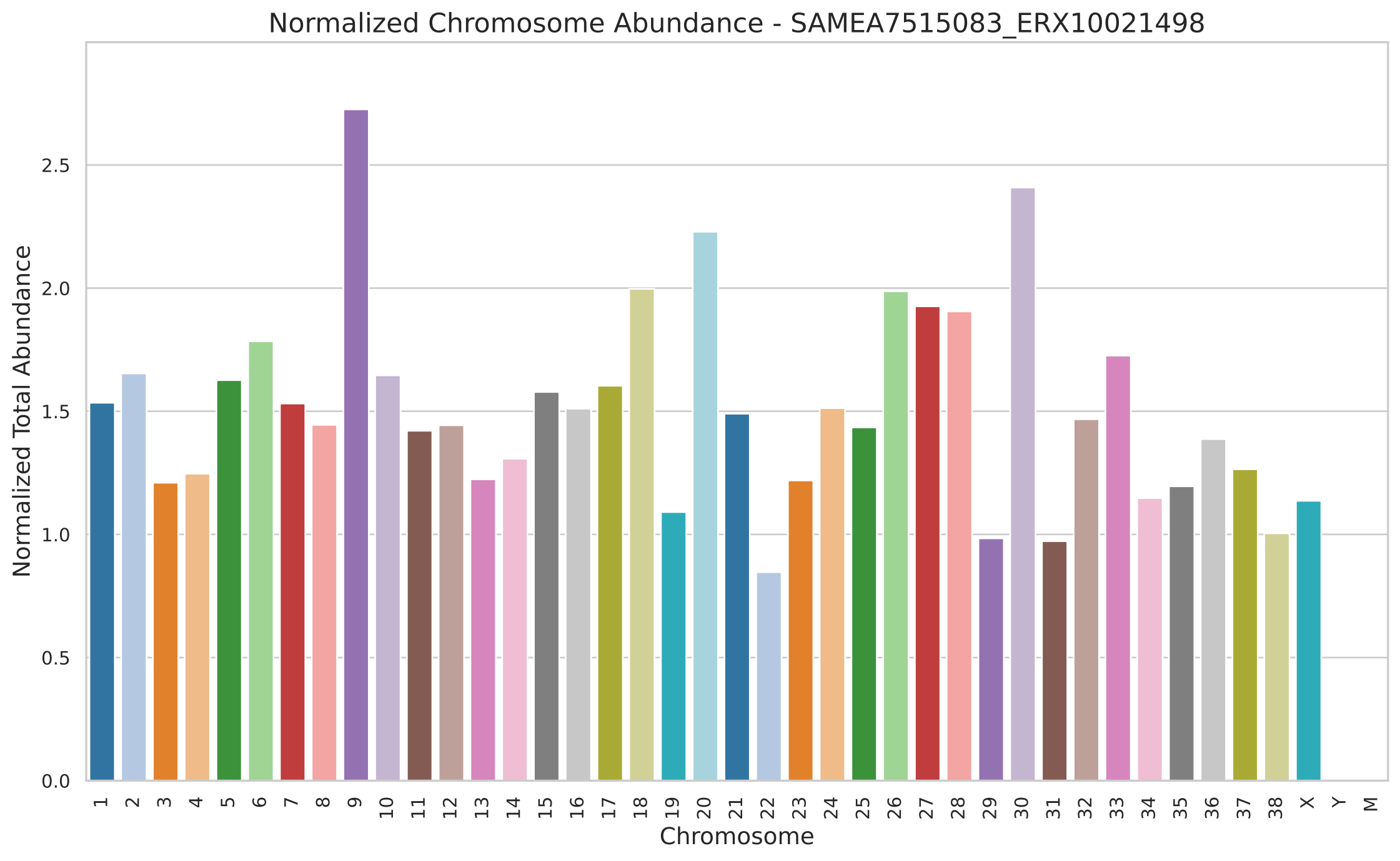

Normalized Chromosome Abundance - SAMEA7515582_ERX10021345
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

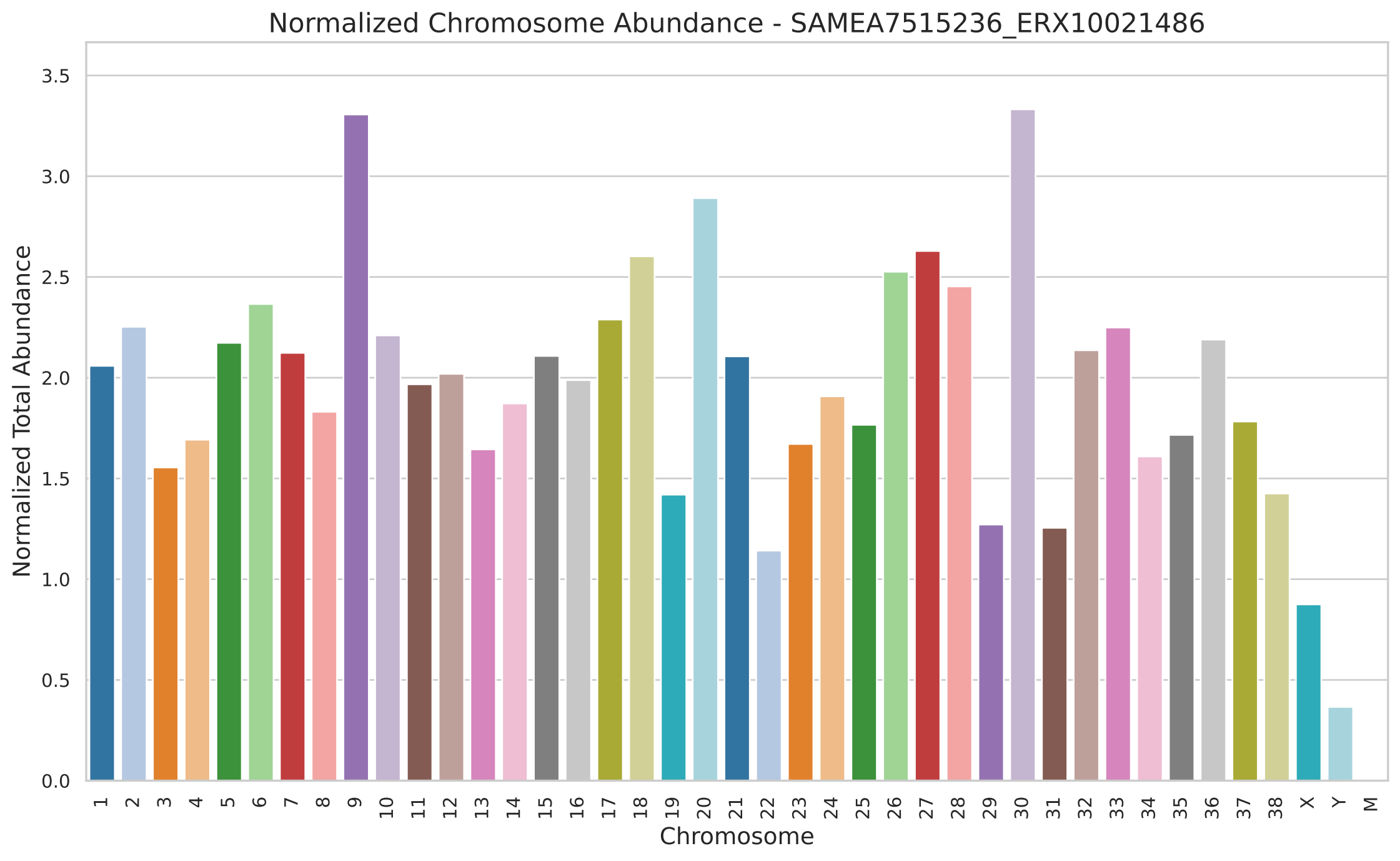

Normalized Chromosome Abundance - SAMEA7515512_ERX10021300
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

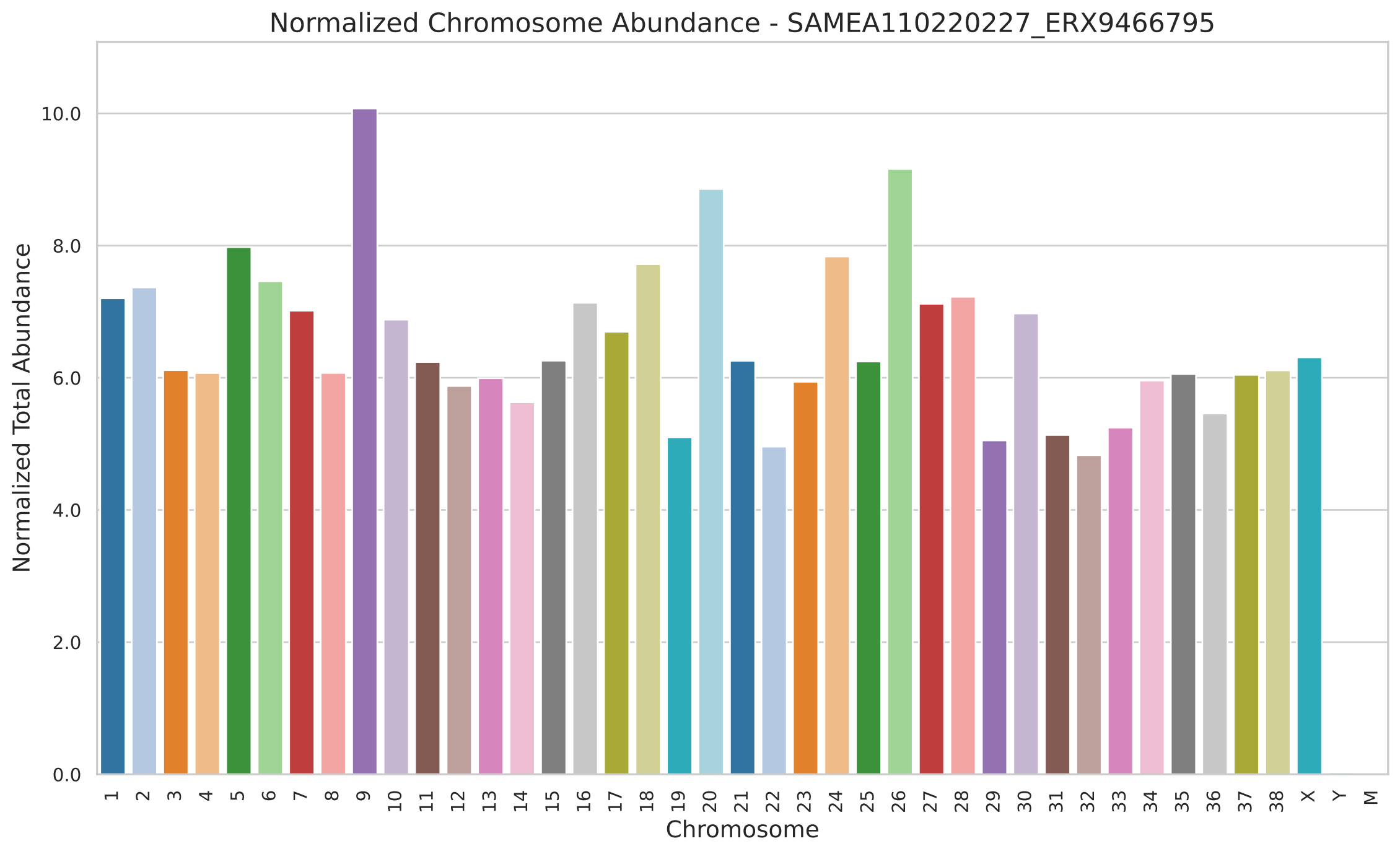

Normalized Chromosome Abundance - SAMEA7515578_ERX10021340
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

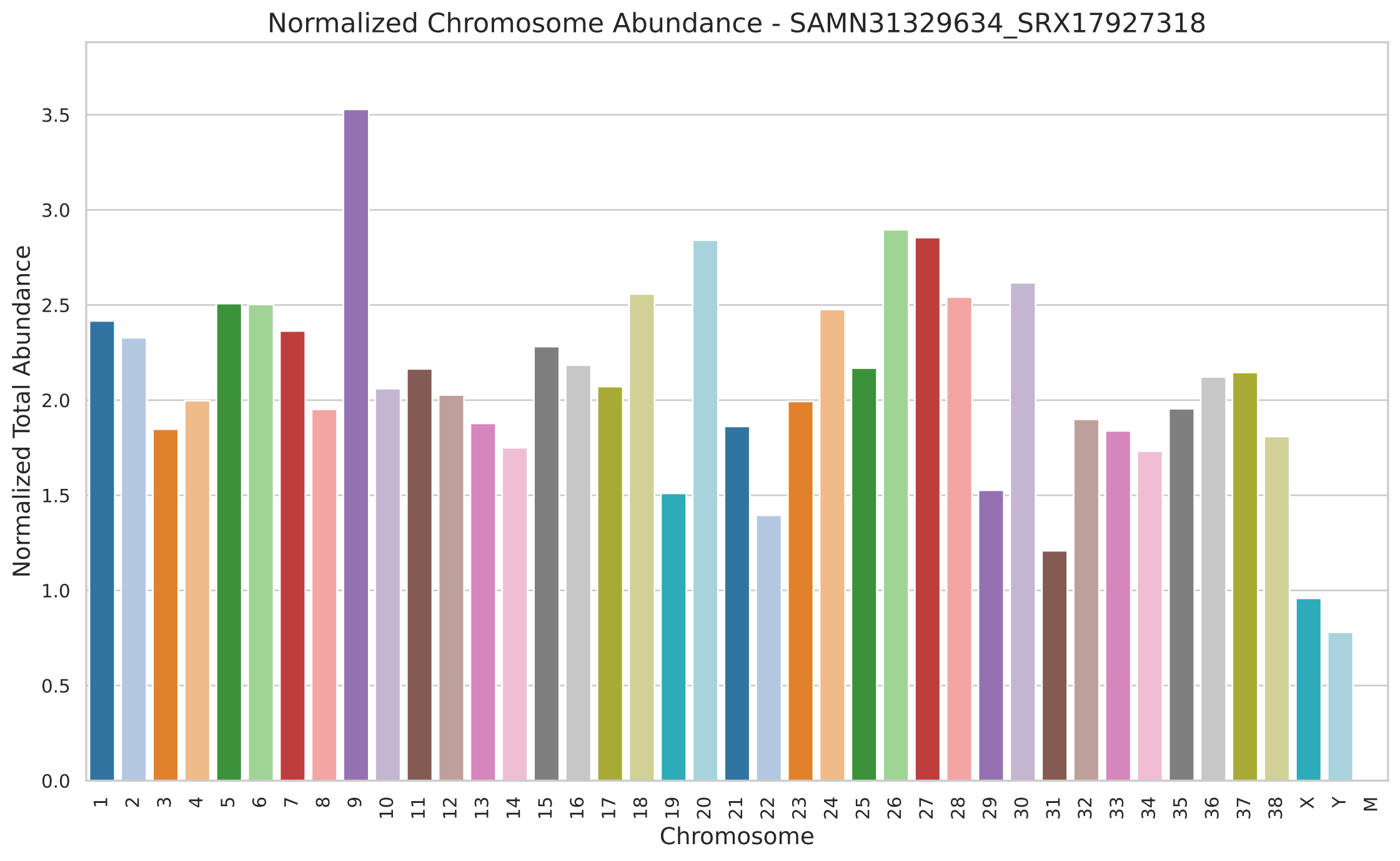

Normalized Chromosome Abundance - SAMEA110220215_ERX9466781
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

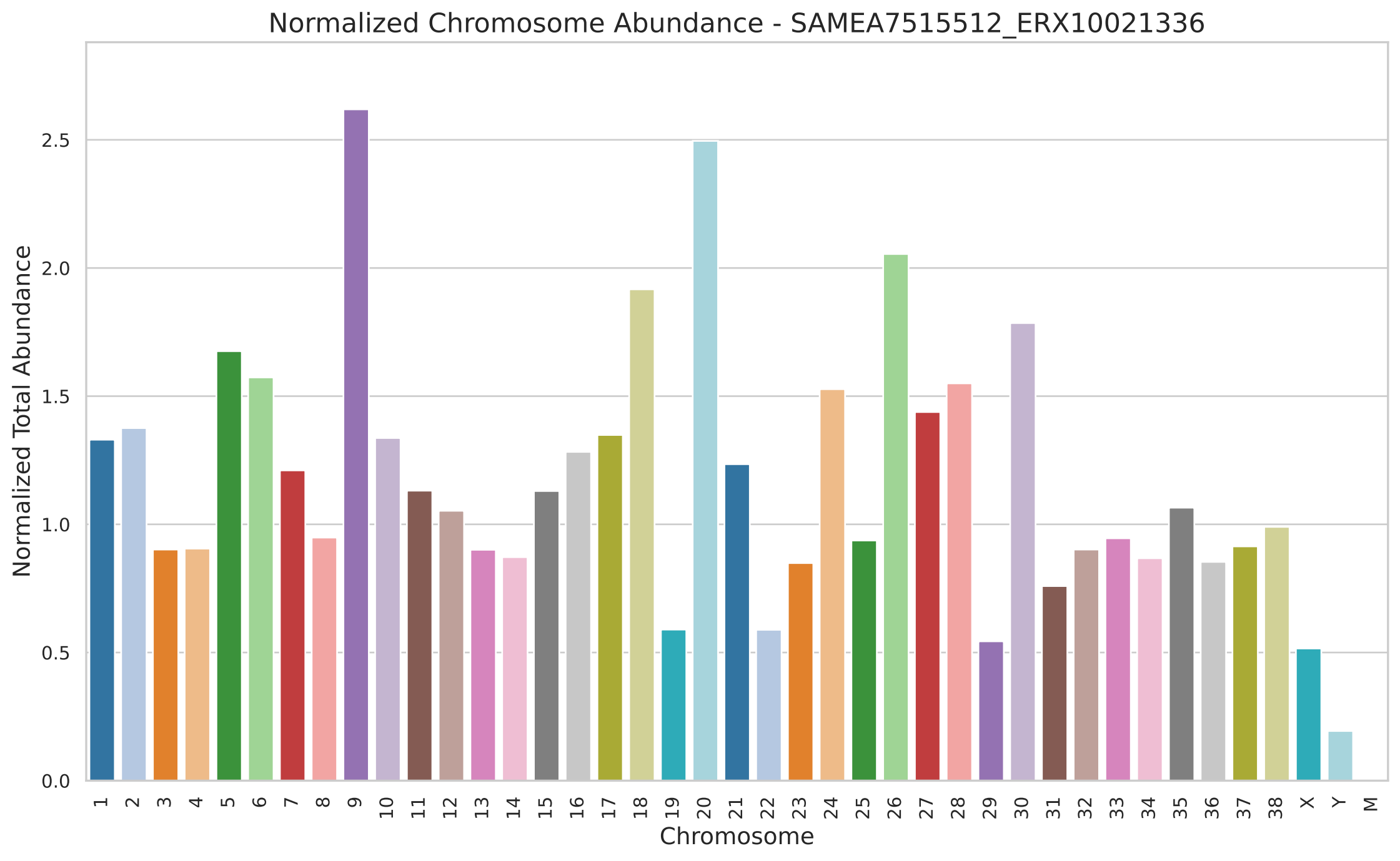

Normalized Chromosome Abundance - SAMEA7515536_ERX10021354
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

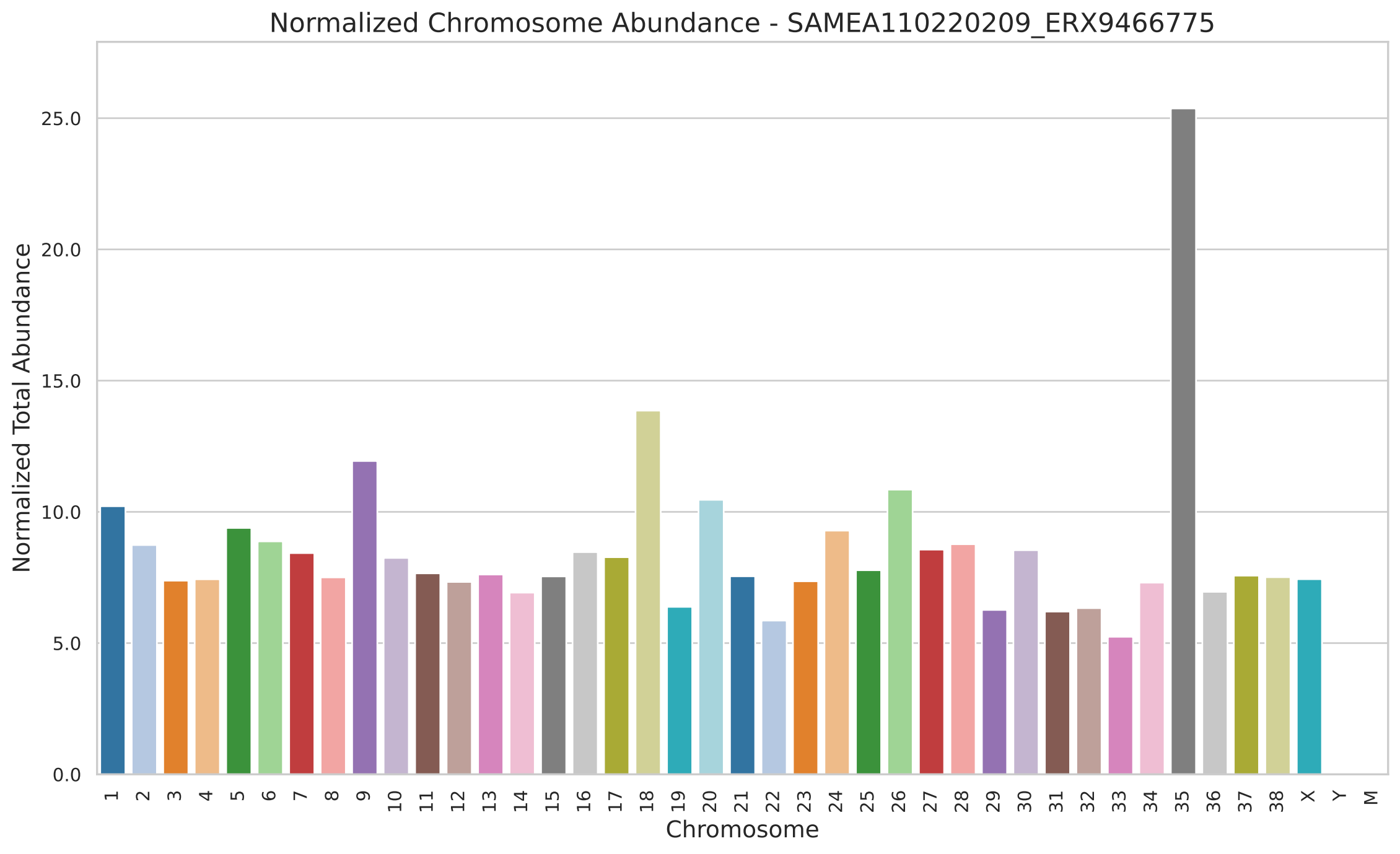

Normalized Chromosome Abundance - SAMEA7515083_ERX10021498
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

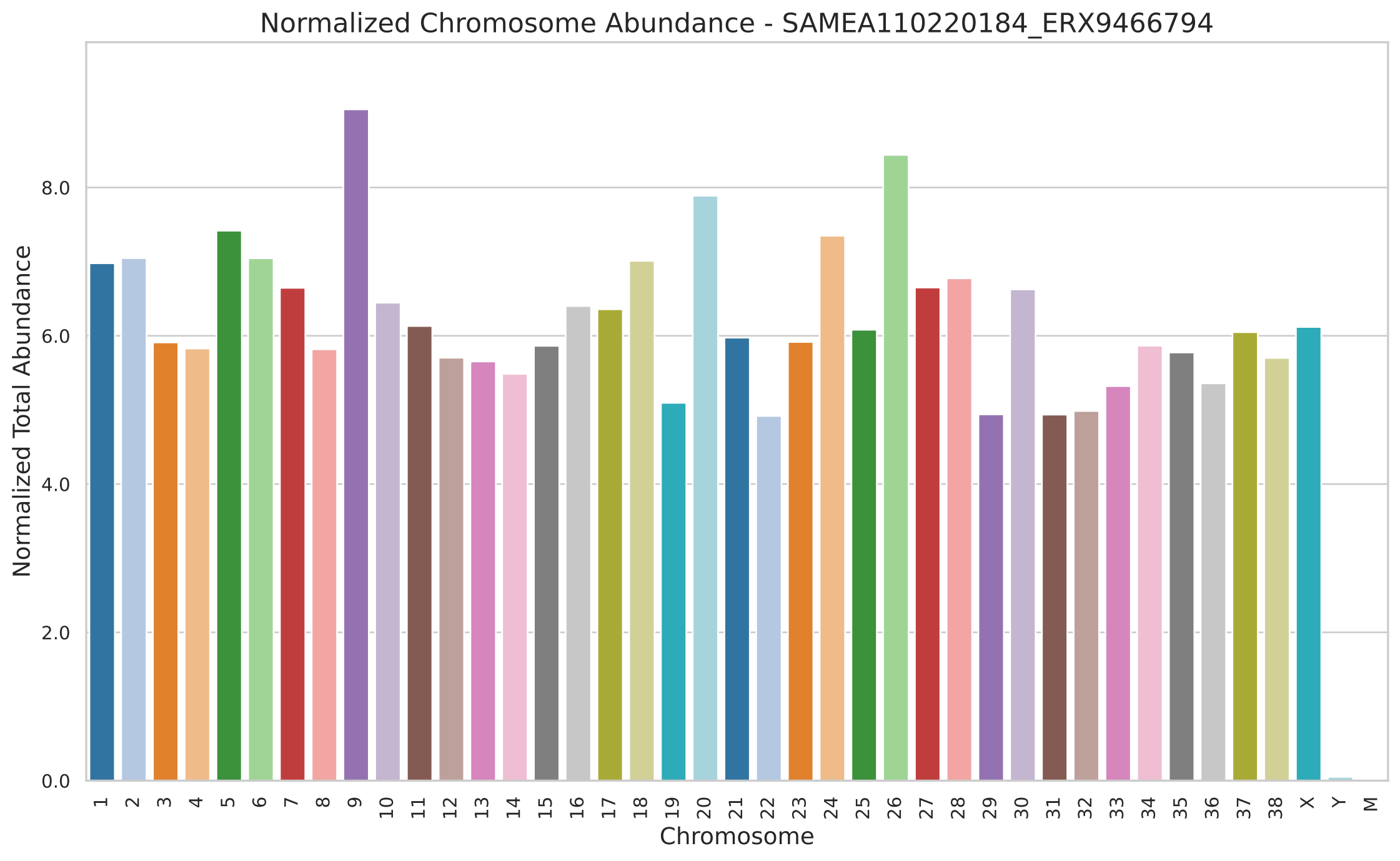

Normalized Chromosome Abundance - SAMEA7515236_ERX10021486
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

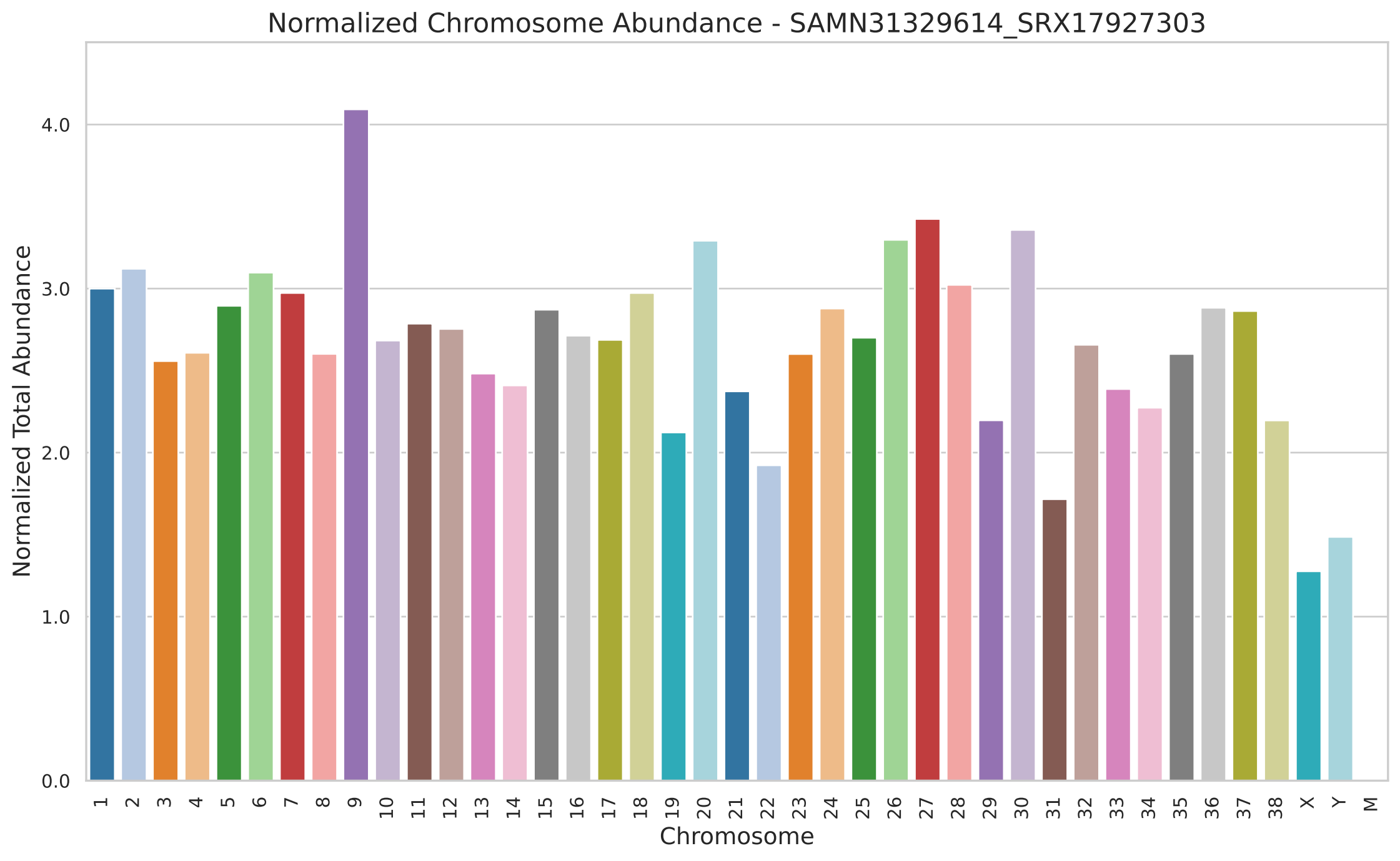

Normalized Chromosome Abundance - SAMEA110220227_ERX9466795
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

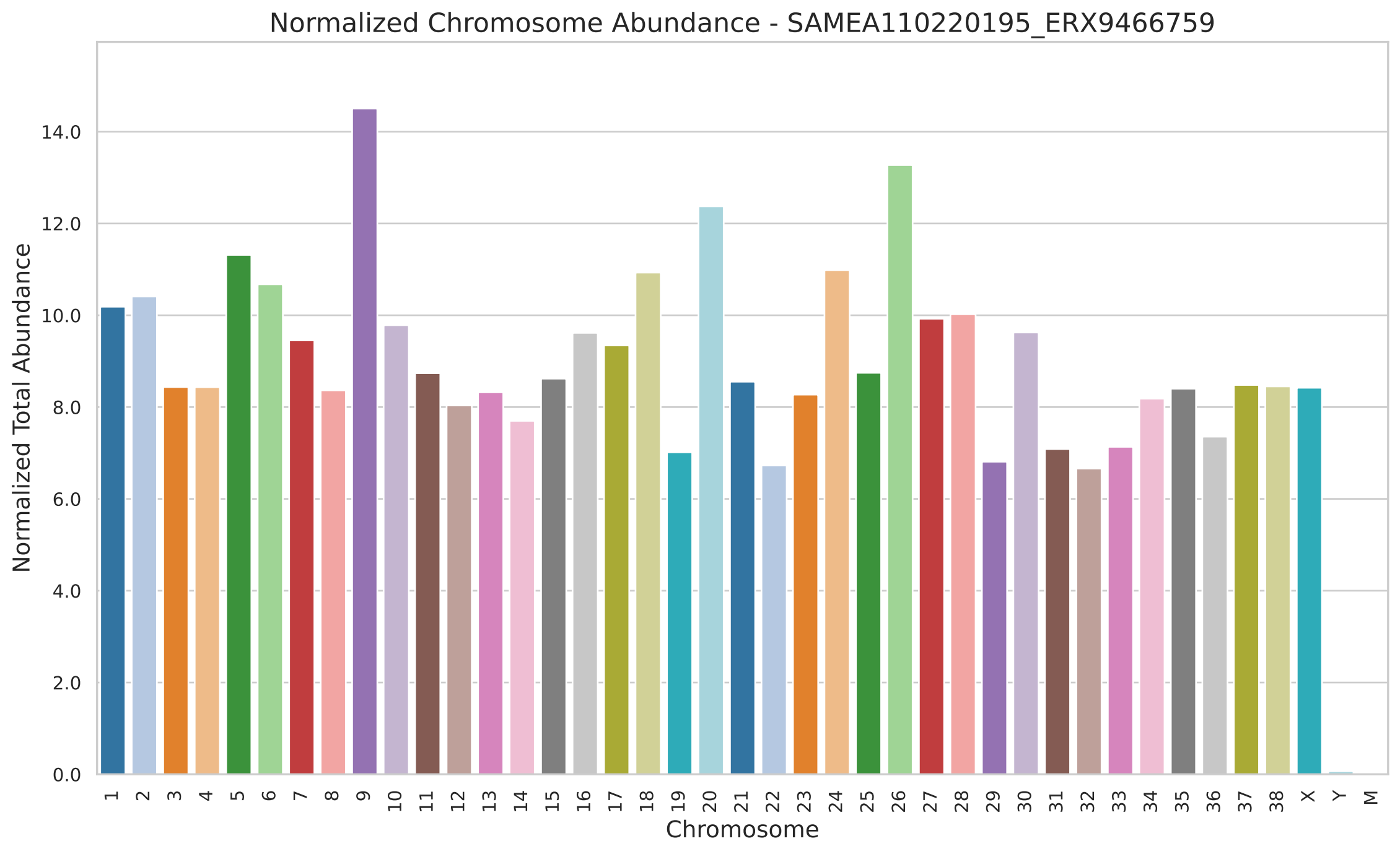

Normalized Chromosome Abundance - SAMN31329634_SRX17927318
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

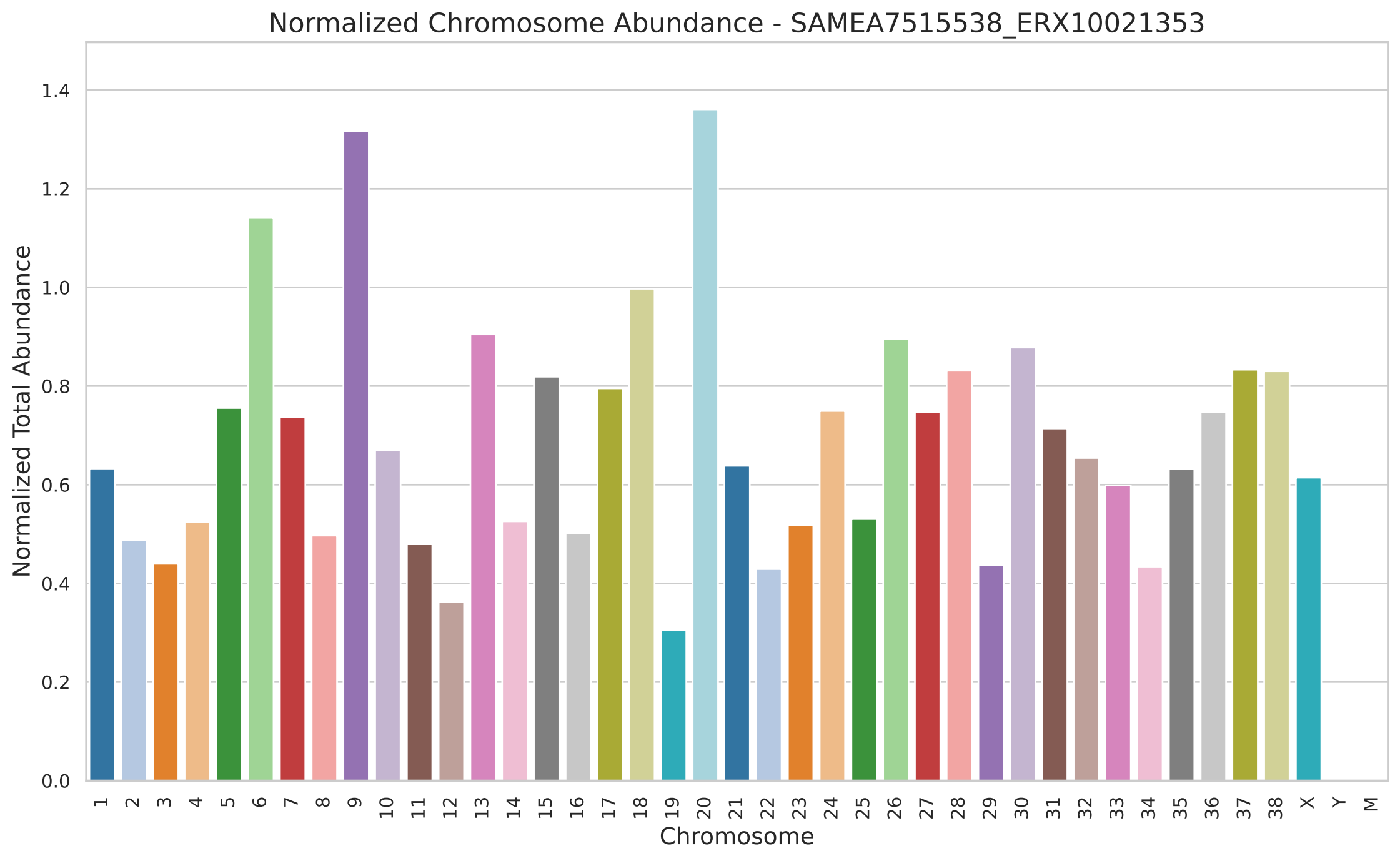

Normalized Chromosome Abundance - SAMEA7515512_ERX10021336
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

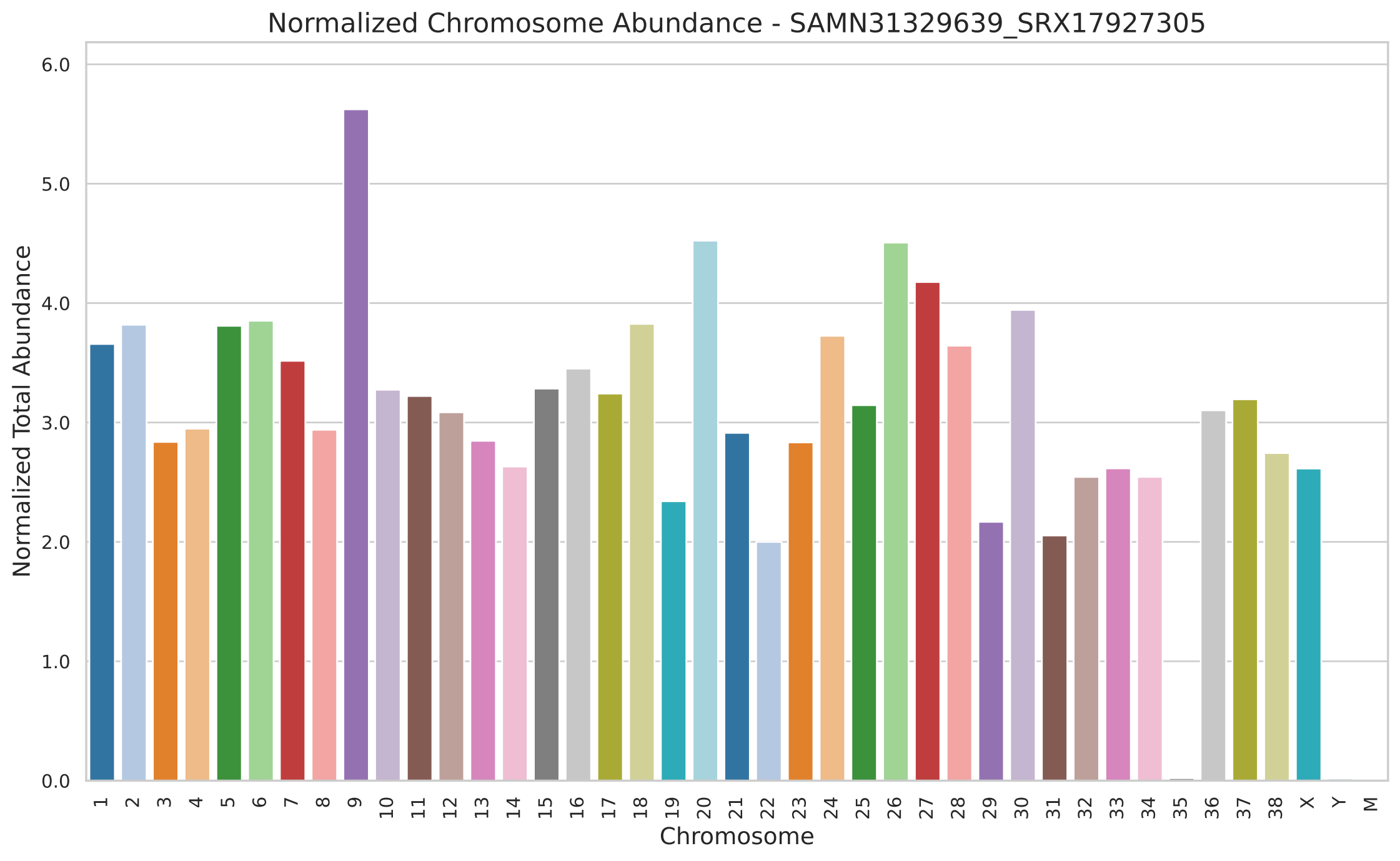

Normalized Chromosome Abundance - SAMEA110220209_ERX9466775
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

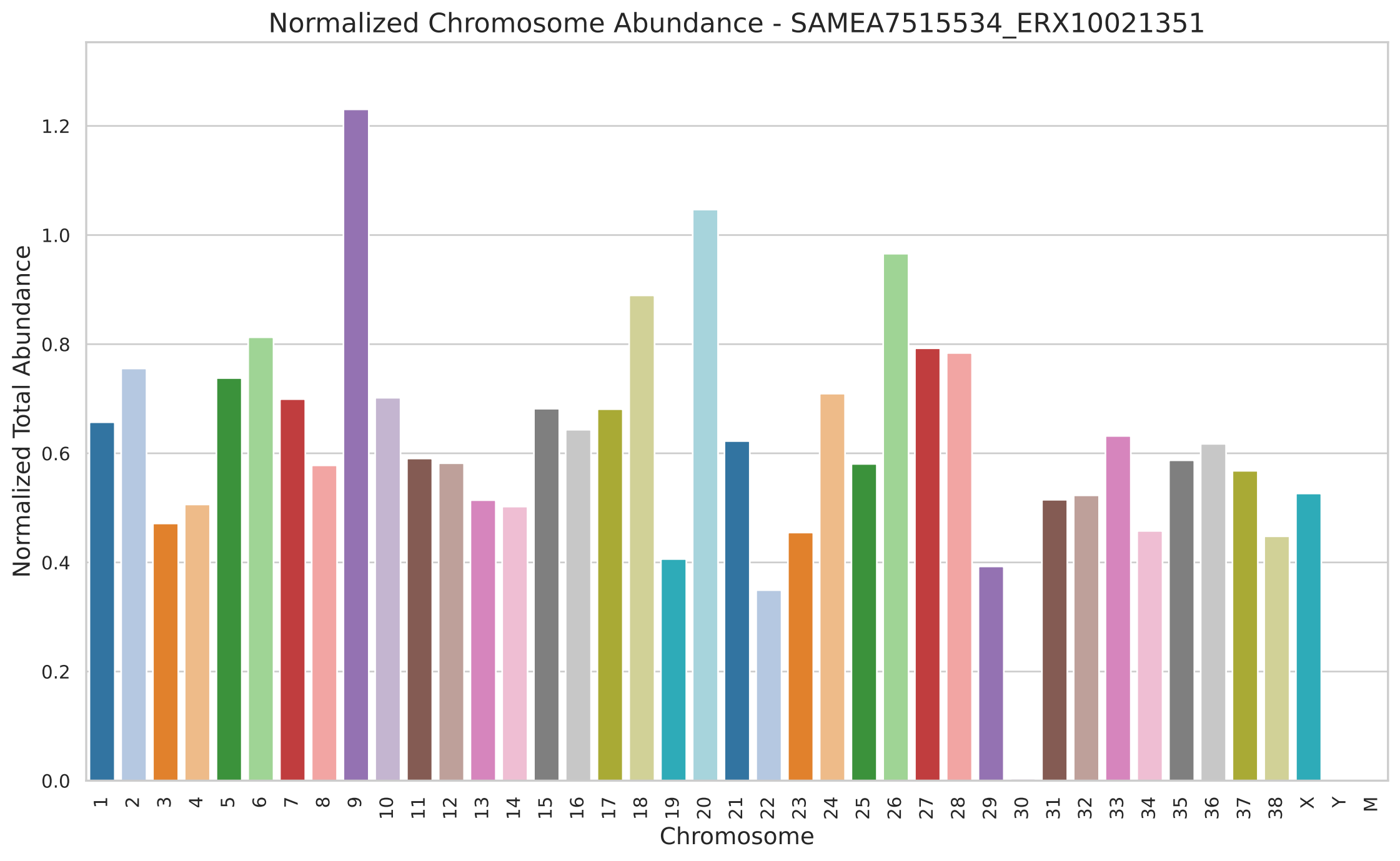

Normalized Chromosome Abundance - SAMEA110220184_ERX9466794
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

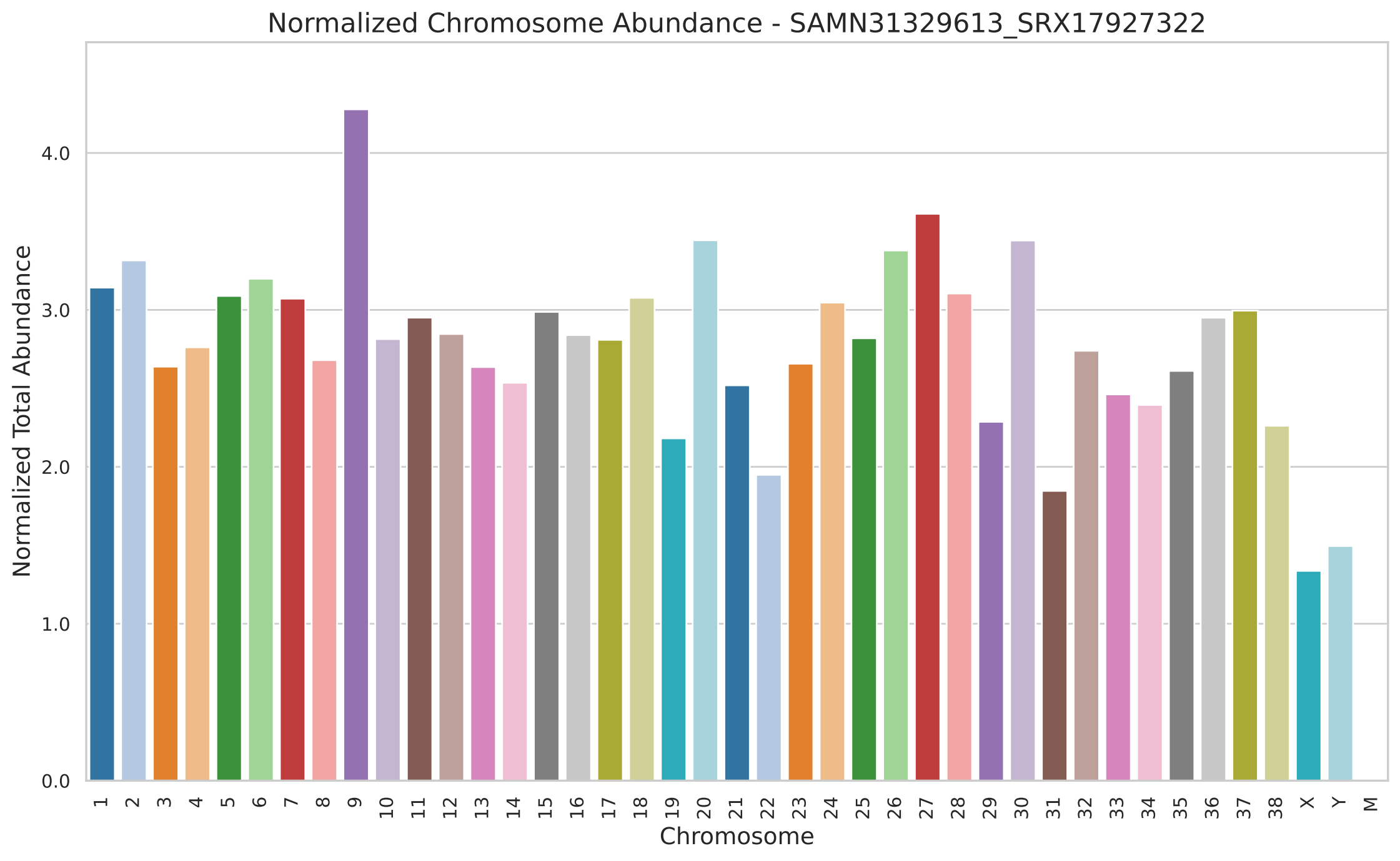

Normalized Chromosome Abundance - SAMN31329614_SRX17927303
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

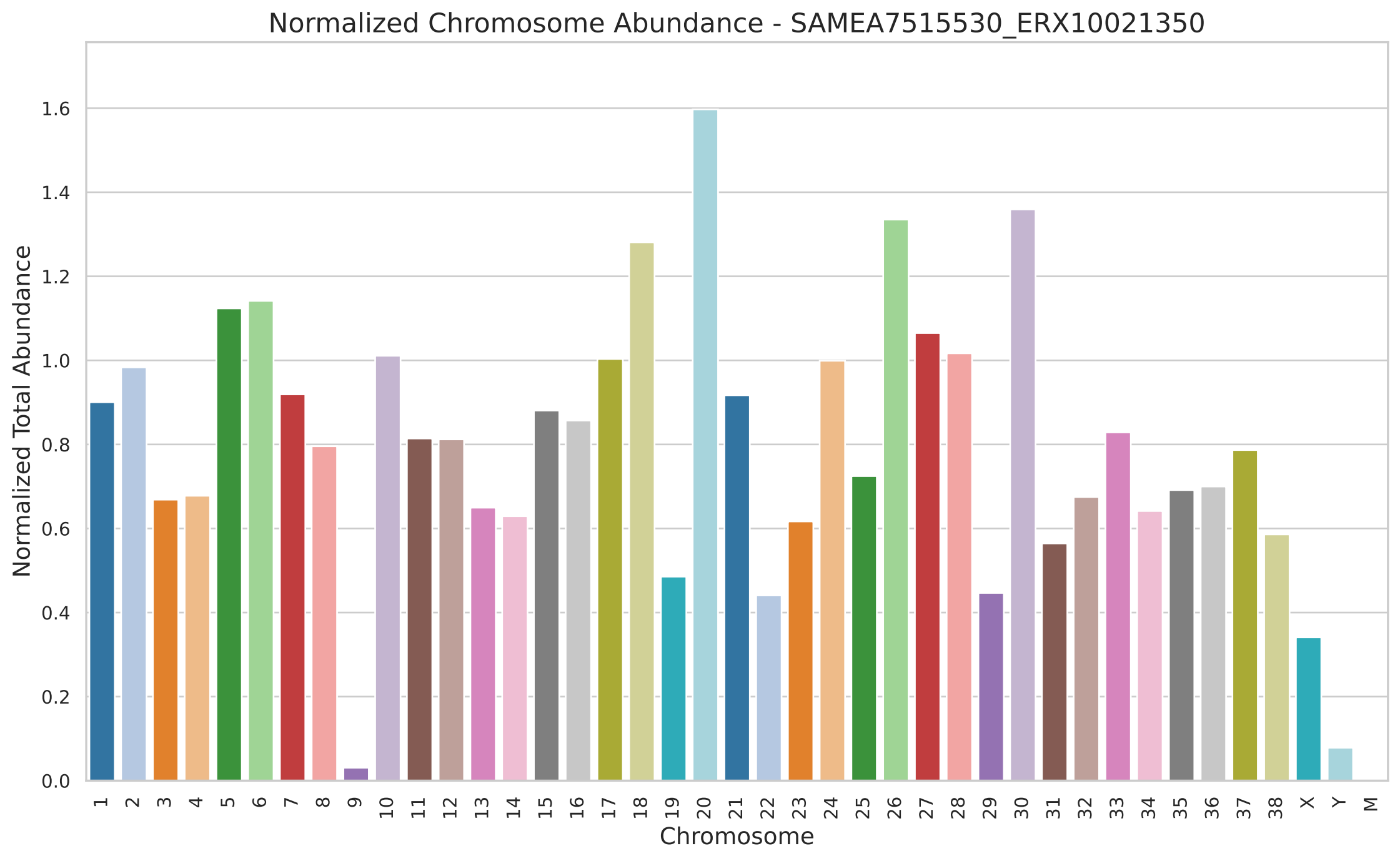

Normalized Chromosome Abundance - SAMEA110220195_ERX9466759
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
12.0
14.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

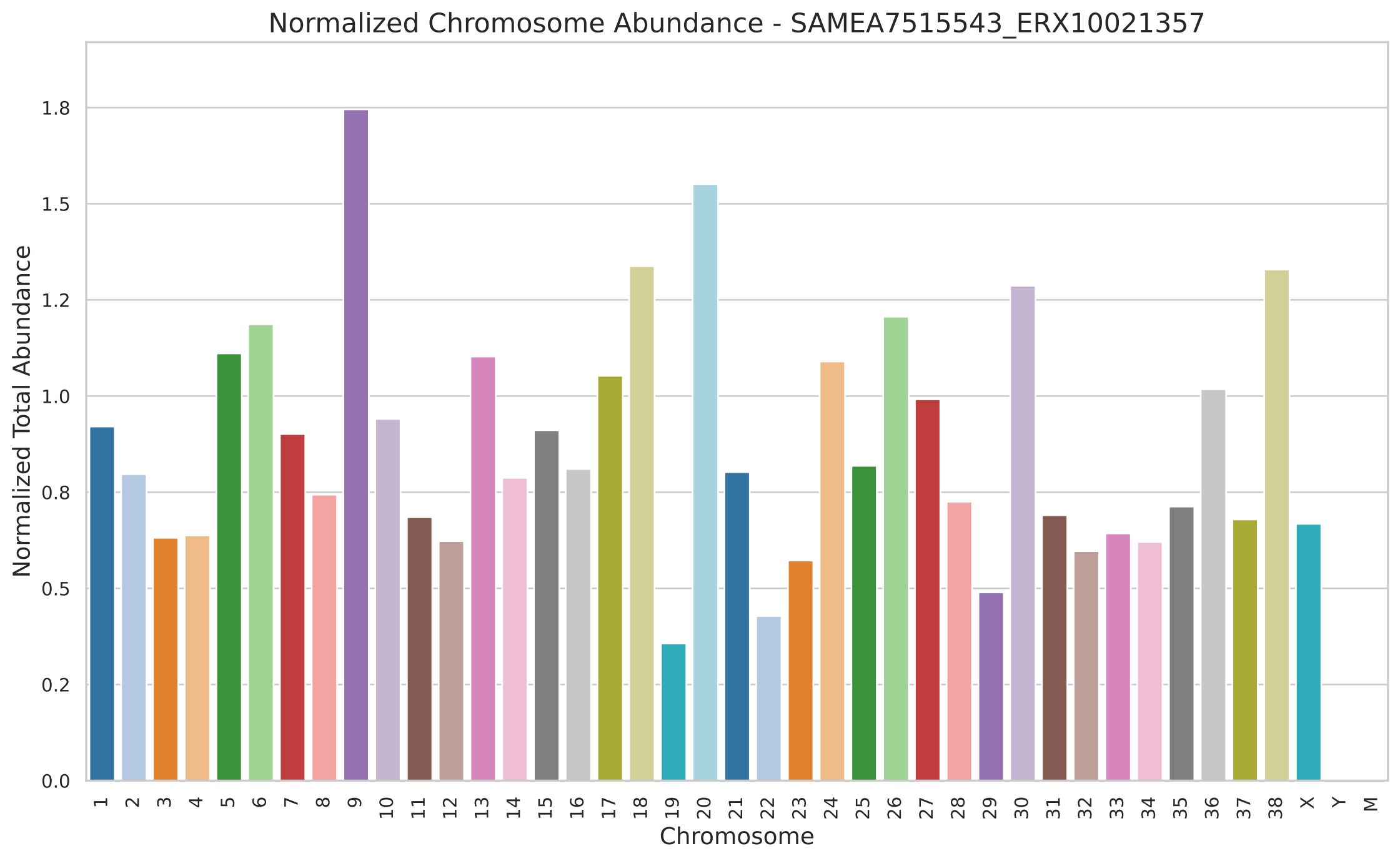

Normalized Chromosome Abundance - SAMEA7515538_ERX10021353
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

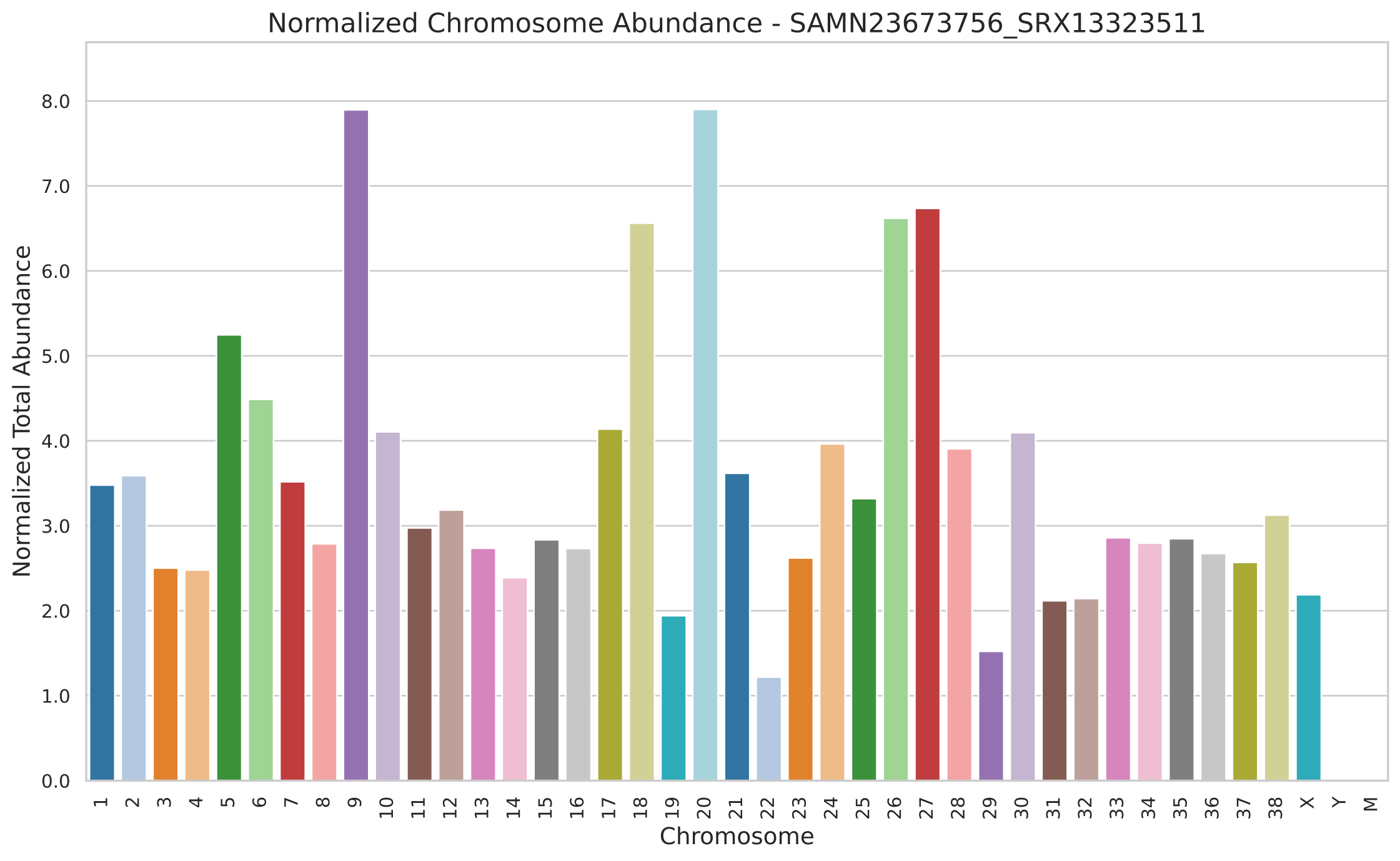

Normalized Chromosome Abundance - SAMN31329639_SRX17927305
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

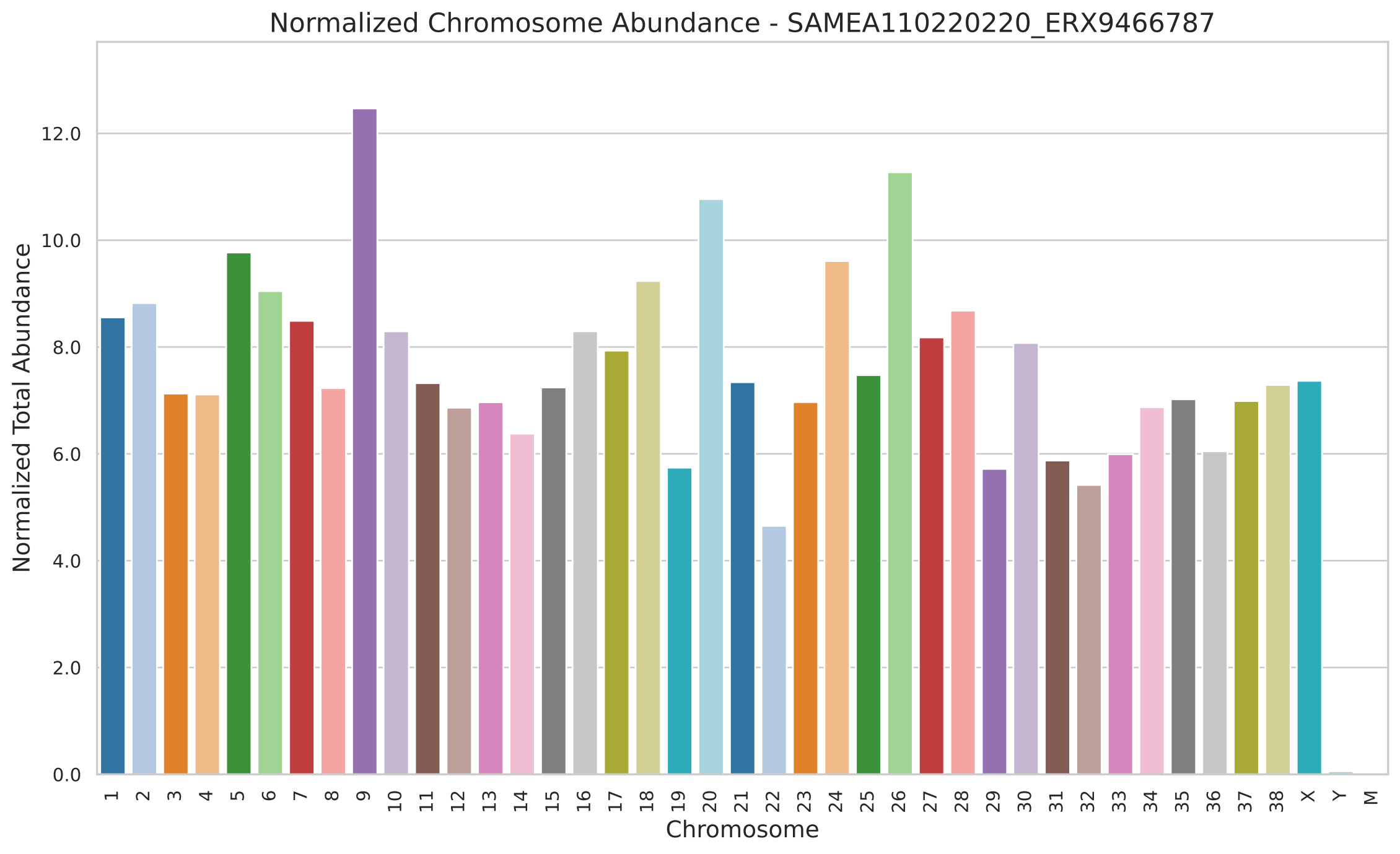

Normalized Chromosome Abundance - SAMEA7515534_ERX10021351
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

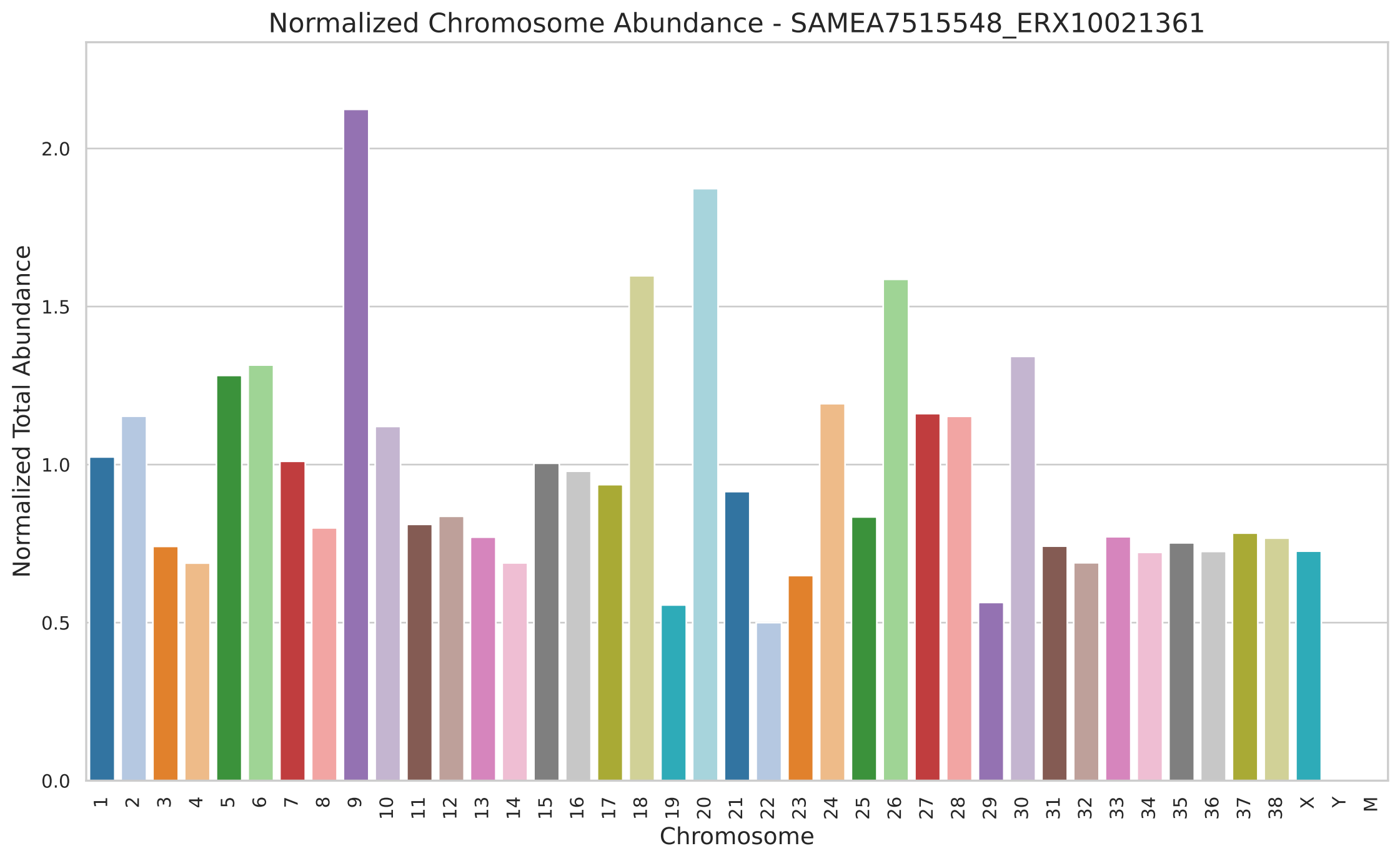

Normalized Chromosome Abundance - SAMN31329613_SRX17927322
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

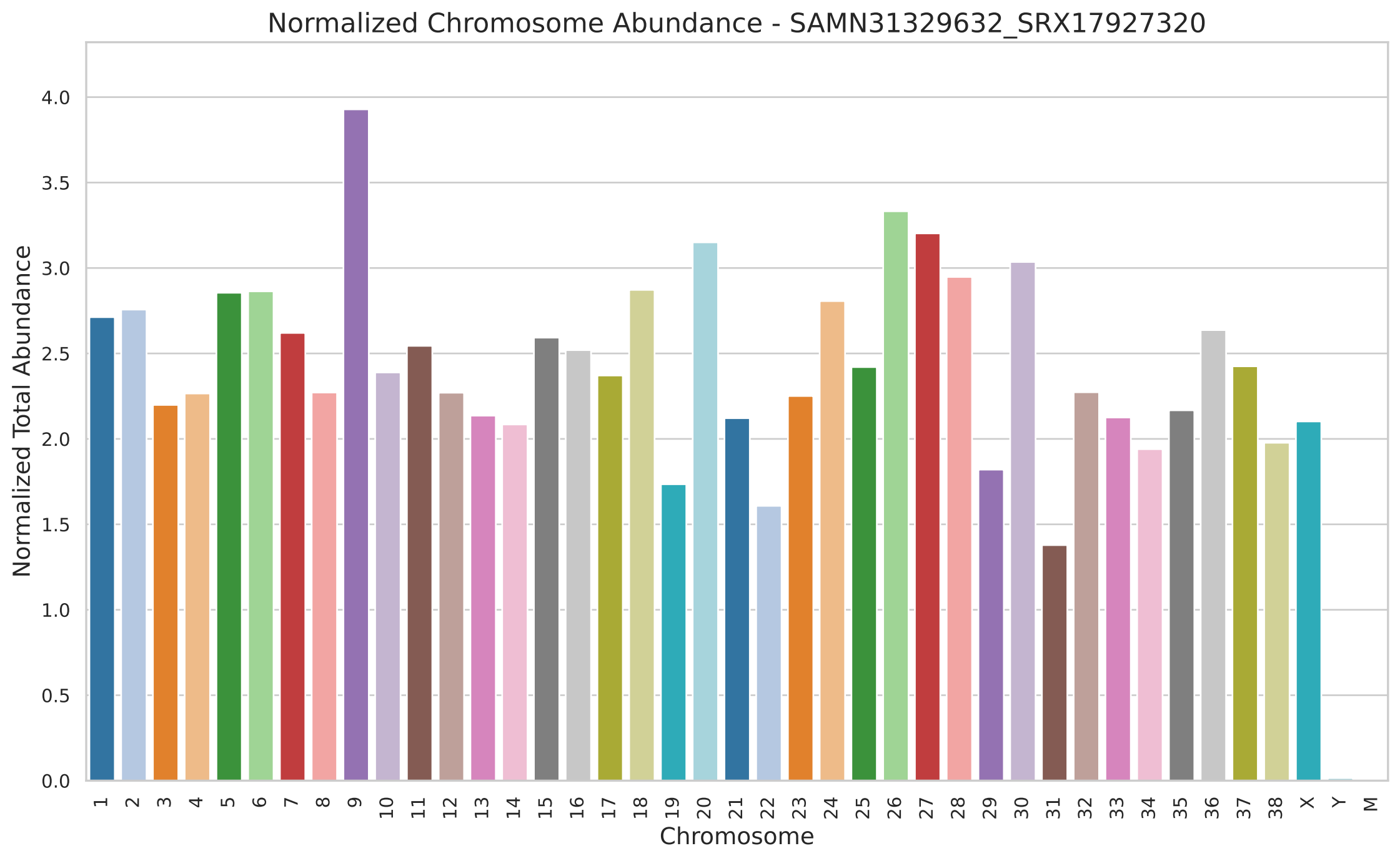

Normalized Chromosome Abundance - SAMEA7515530_ERX10021350
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

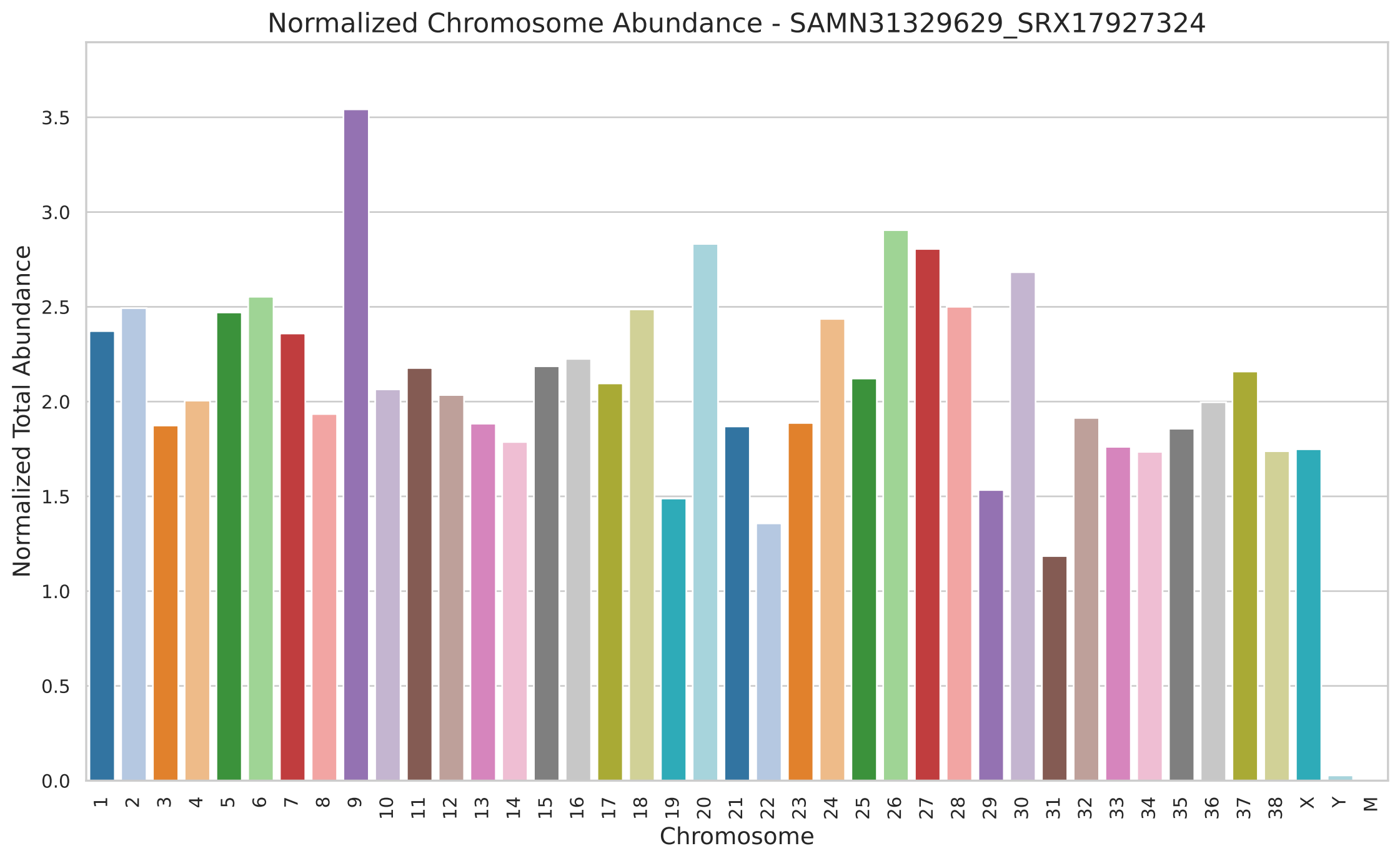

Normalized Chromosome Abundance - SAMEA7515543_ERX10021357
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

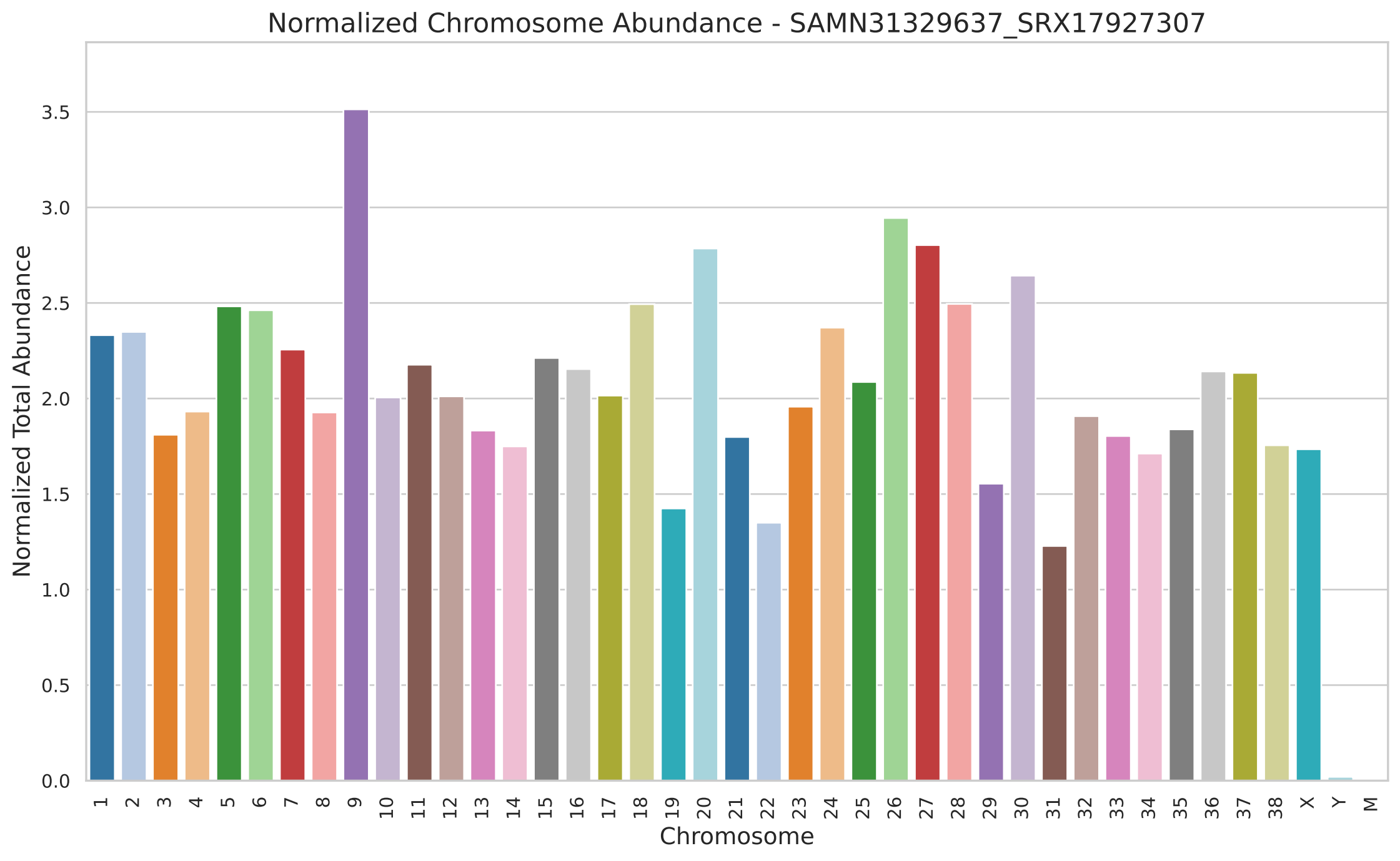

Normalized Chromosome Abundance - SAMN23673756_SRX13323511
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

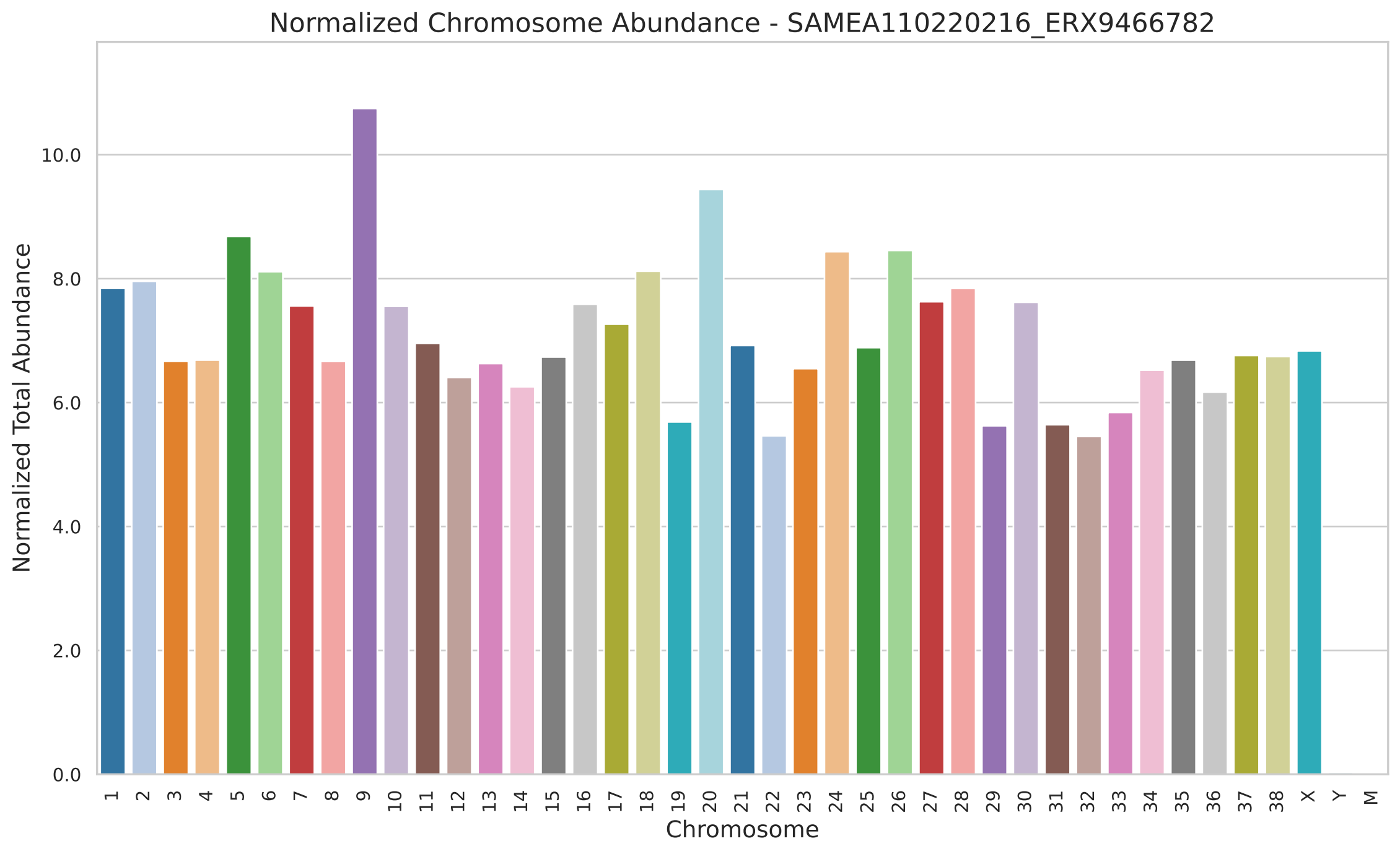

Normalized Chromosome Abundance - SAMEA110220220_ERX9466787
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
12.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

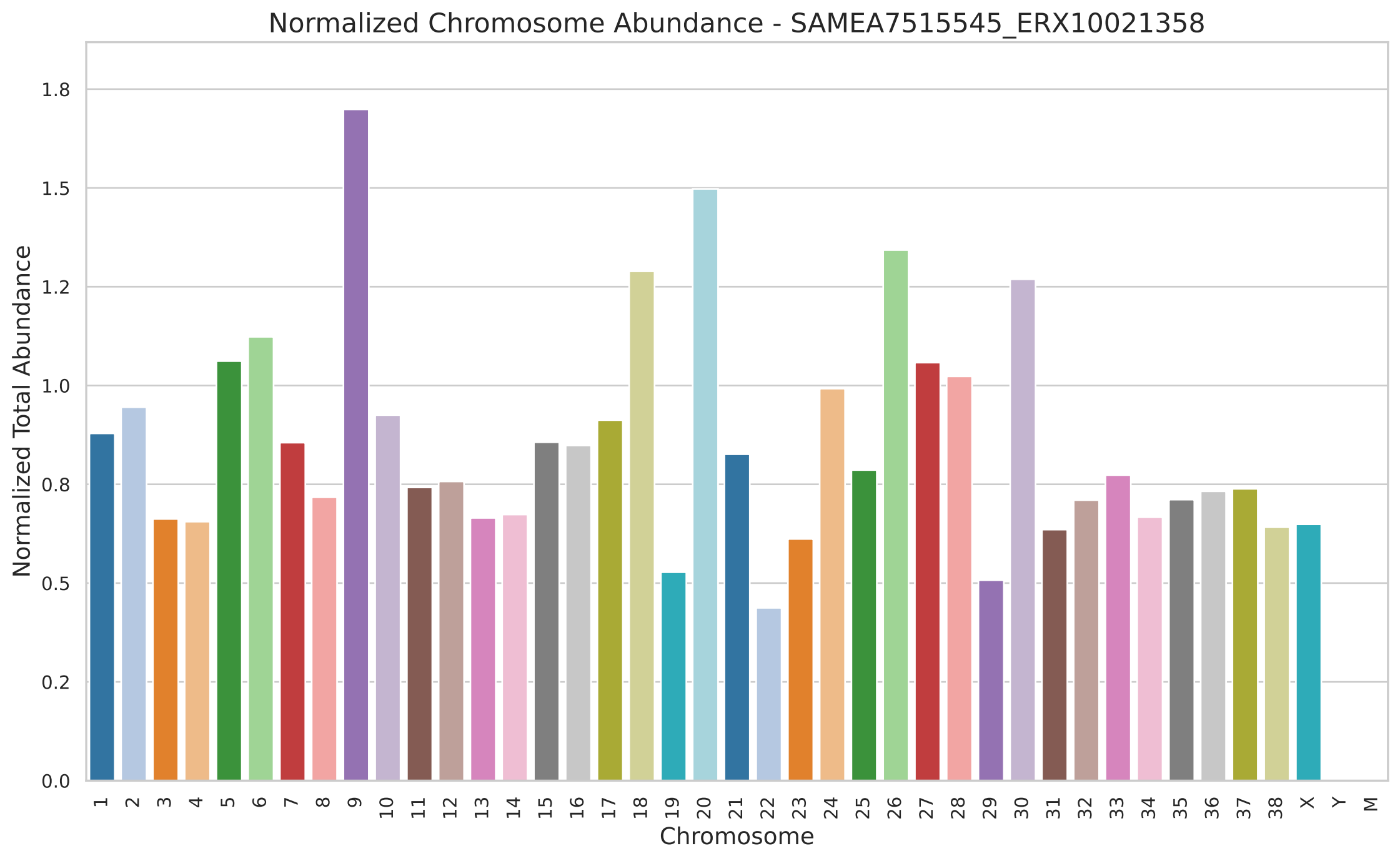

Normalized Chromosome Abundance - SAMEA7515548_ERX10021361
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

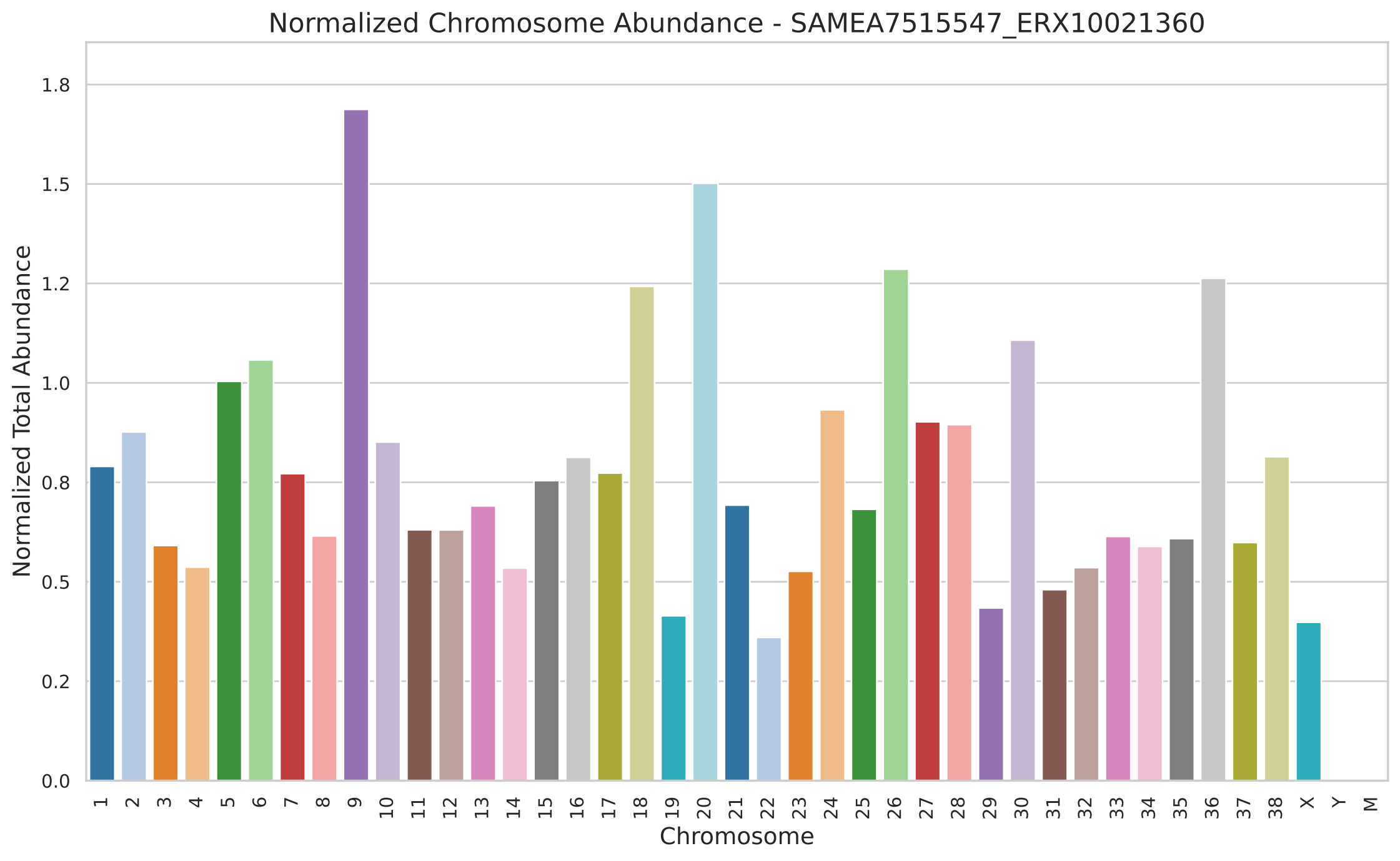

Normalized Chromosome Abundance - SAMN31329632_SRX17927320
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

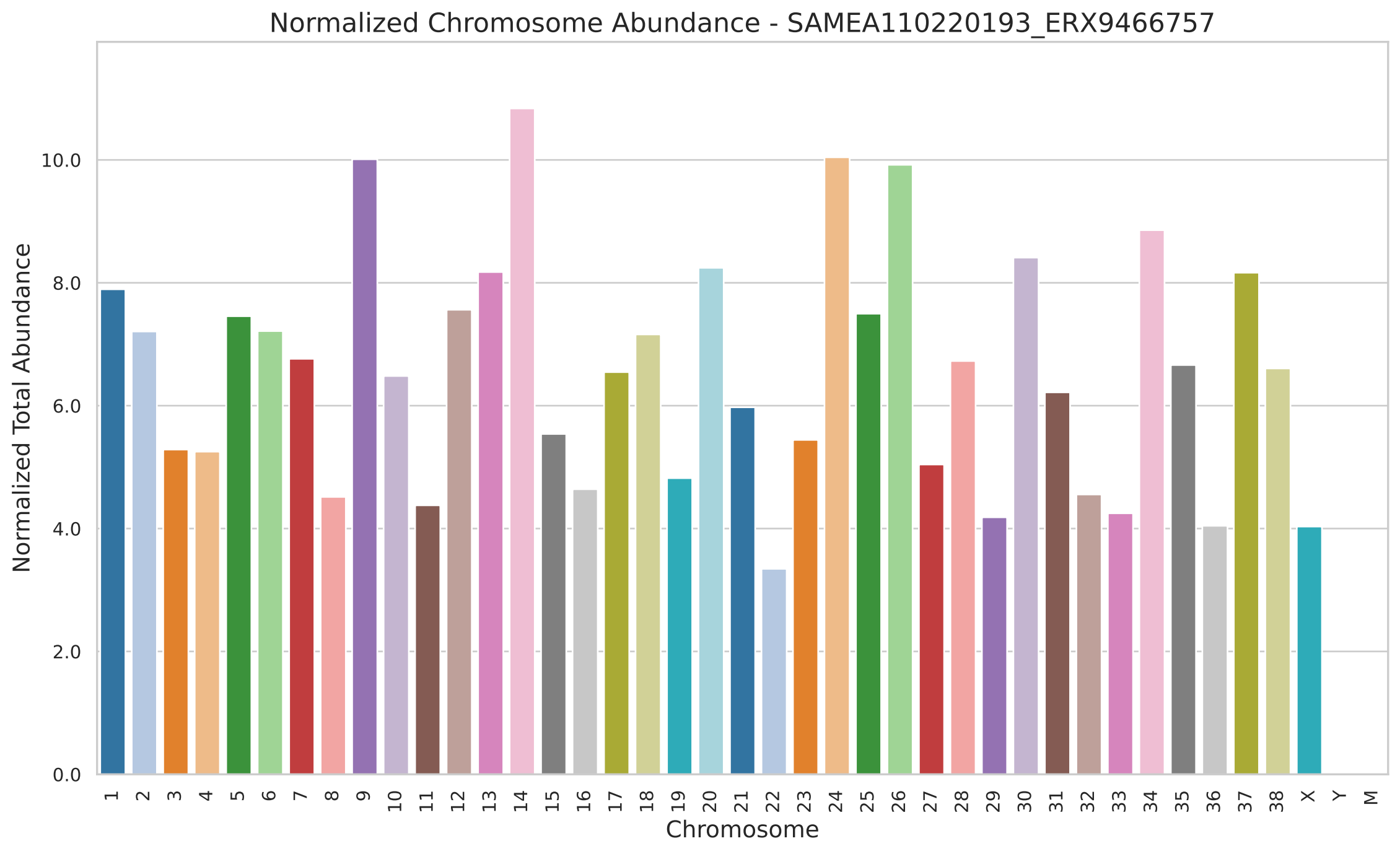

Normalized Chromosome Abundance - SAMN31329629_SRX17927324
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

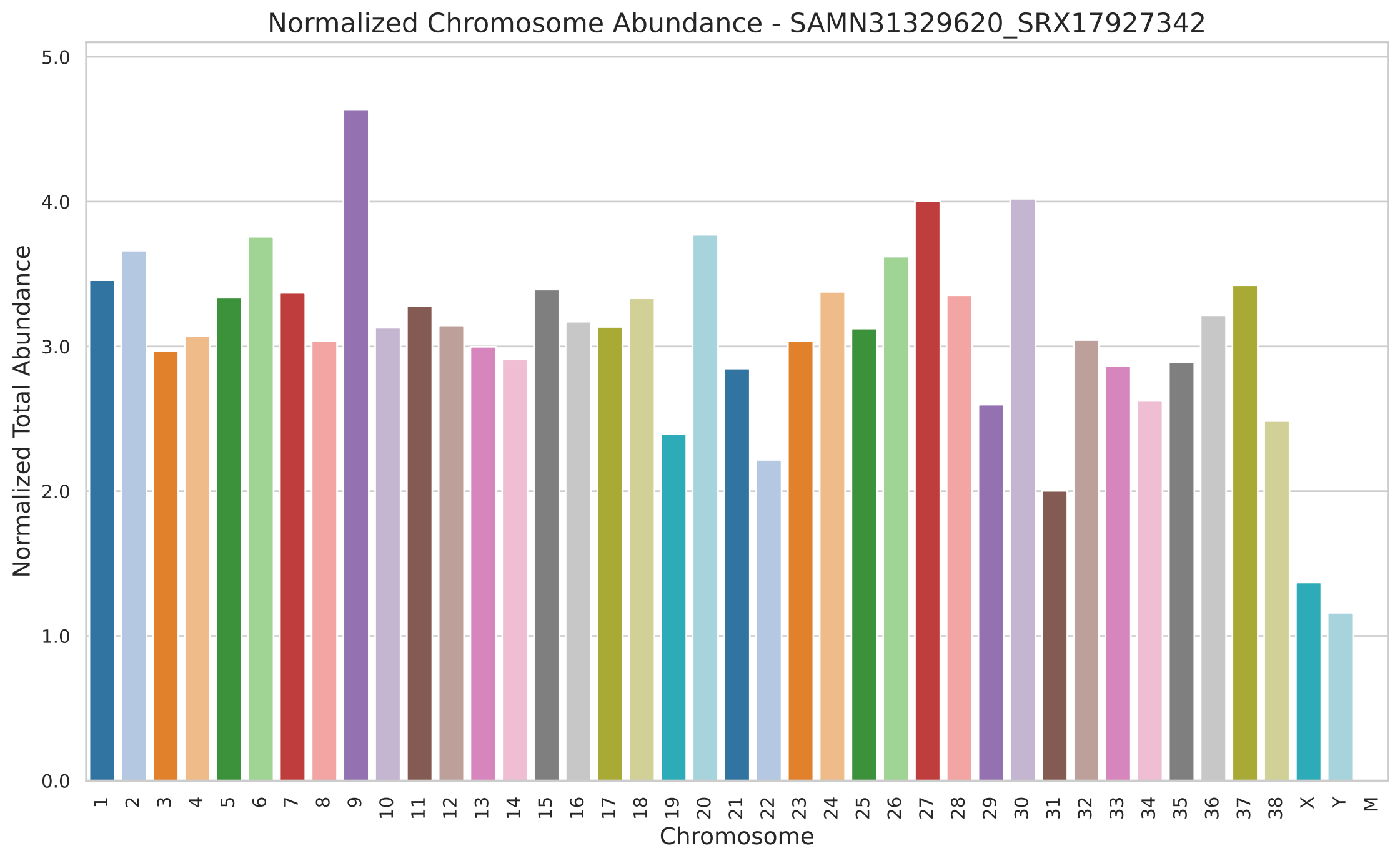

Normalized Chromosome Abundance - SAMN31329637_SRX17927307
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

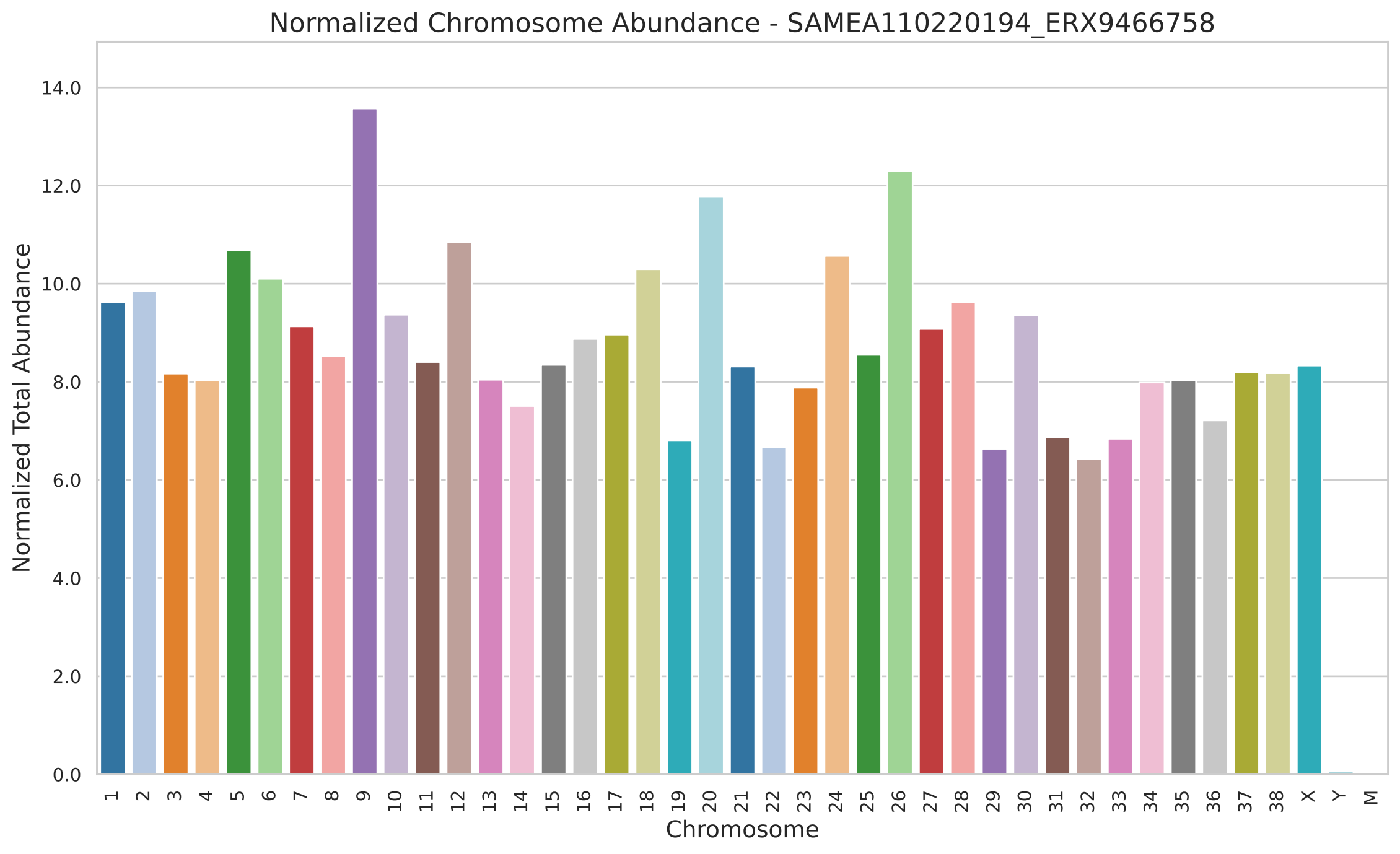

Normalized Chromosome Abundance - SAMEA110220216_ERX9466782
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

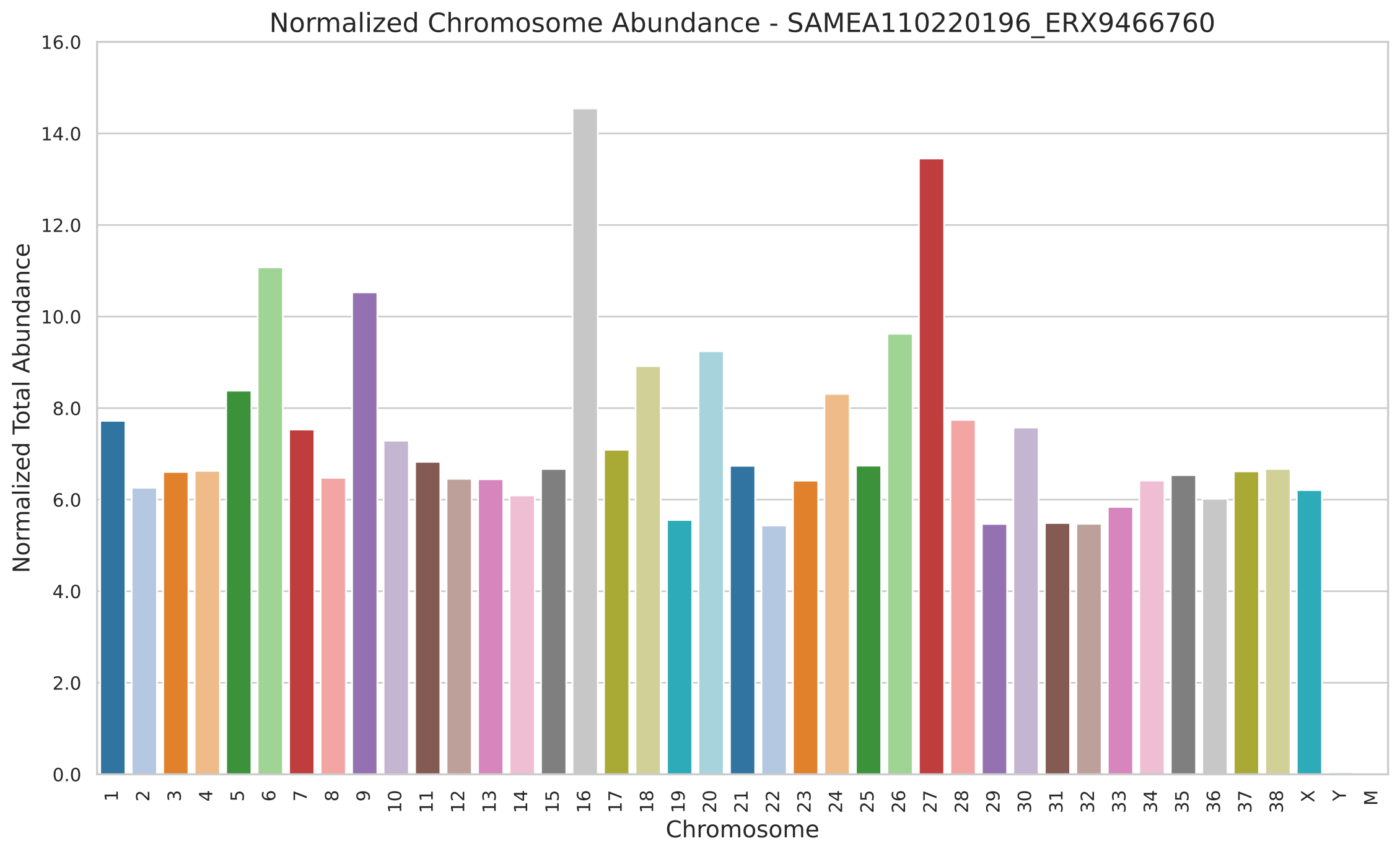

Normalized Chromosome Abundance - SAMEA7515545_ERX10021358
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

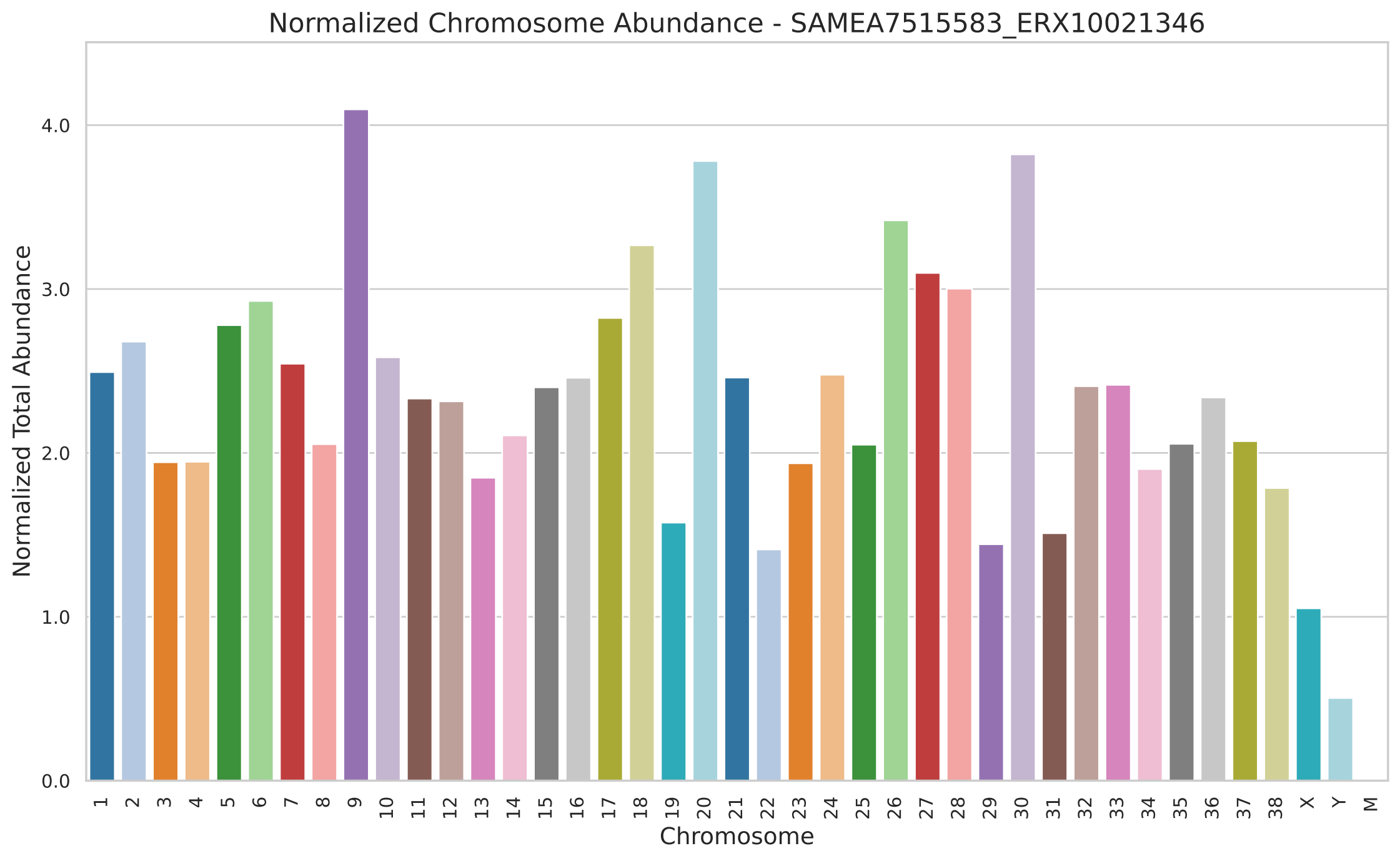

Normalized Chromosome Abundance - SAMEA7515547_ERX10021360
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

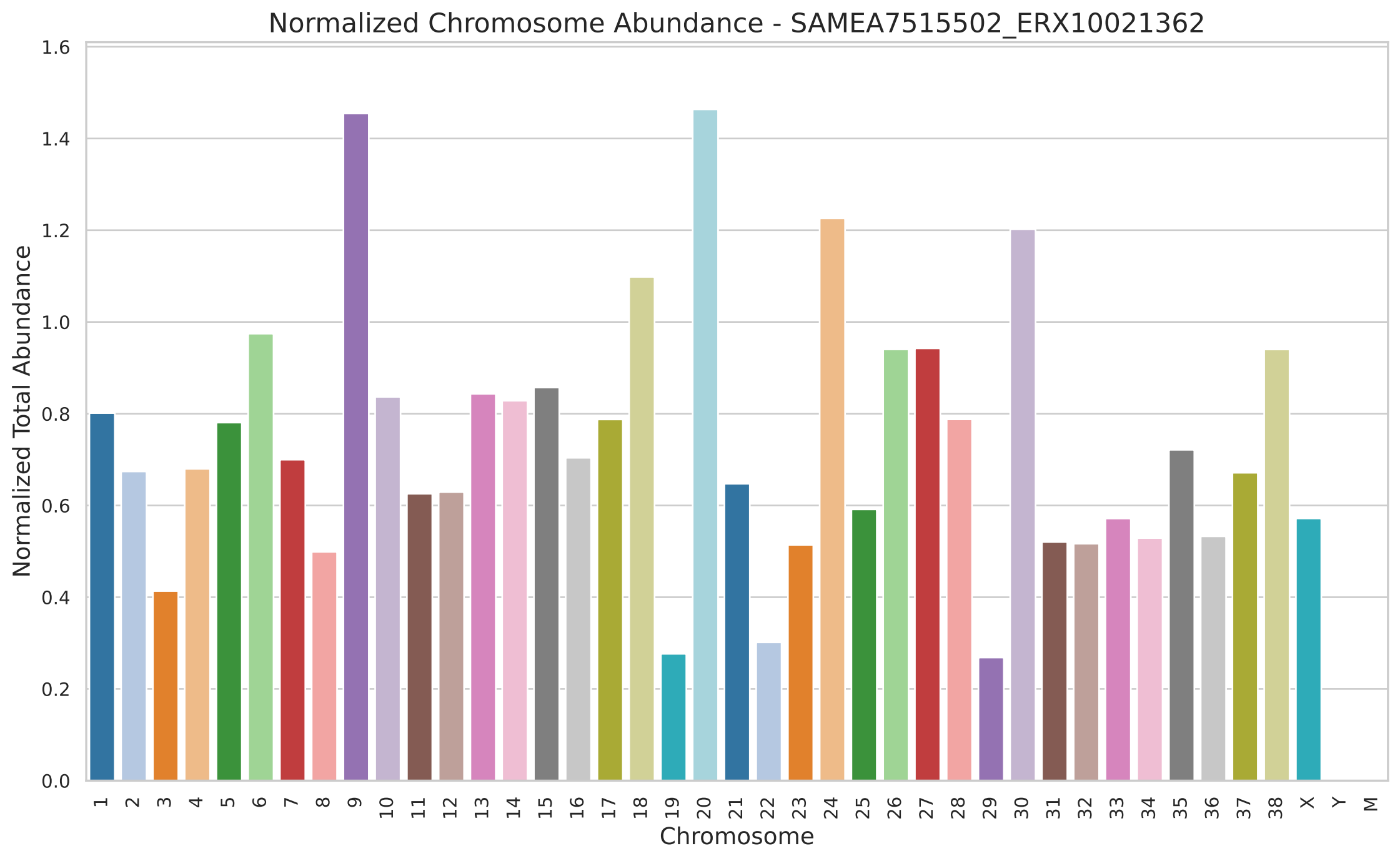

Normalized Chromosome Abundance - SAMEA110220193_ERX9466757
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

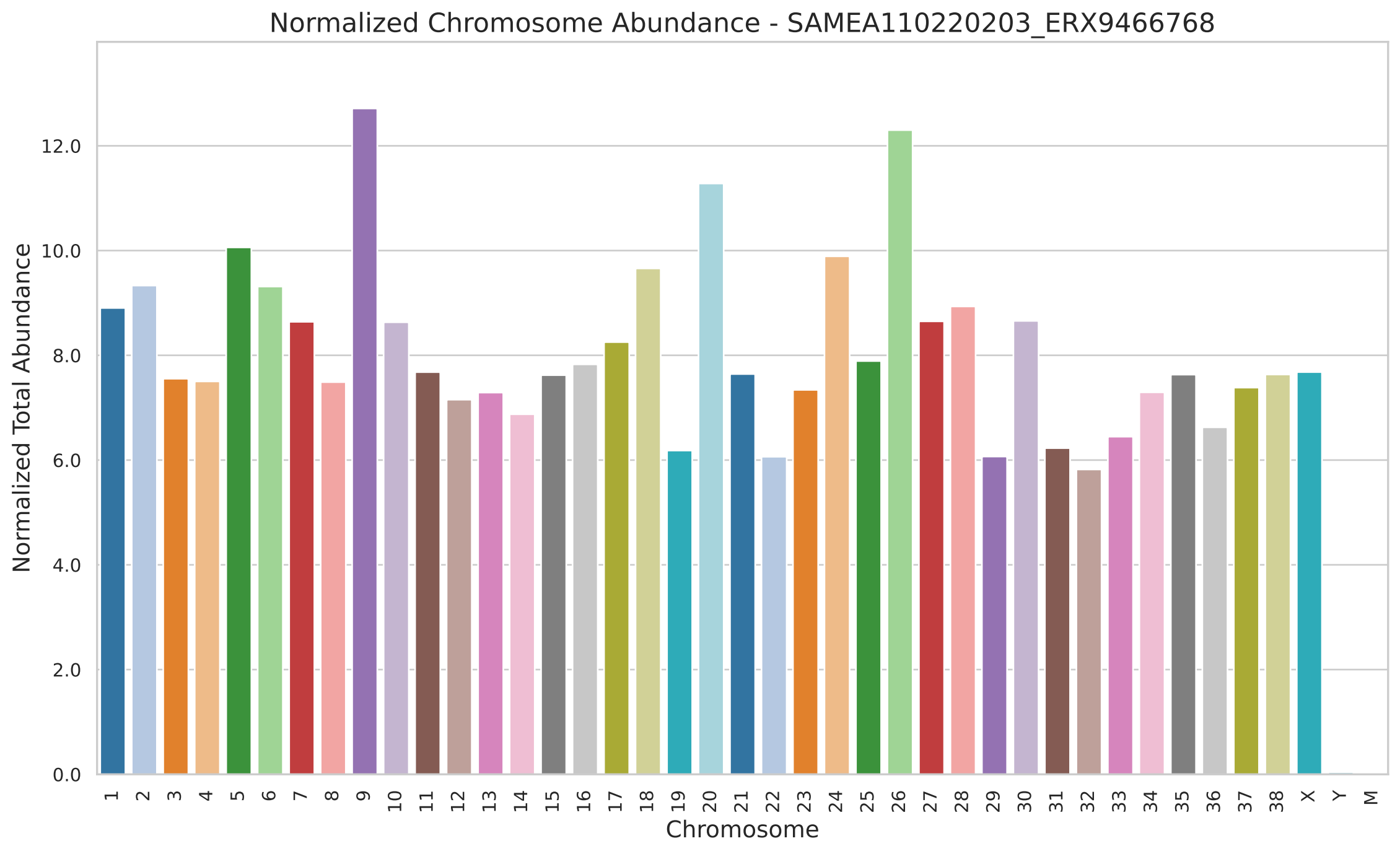

Normalized Chromosome Abundance - SAMN31329620_SRX17927342
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

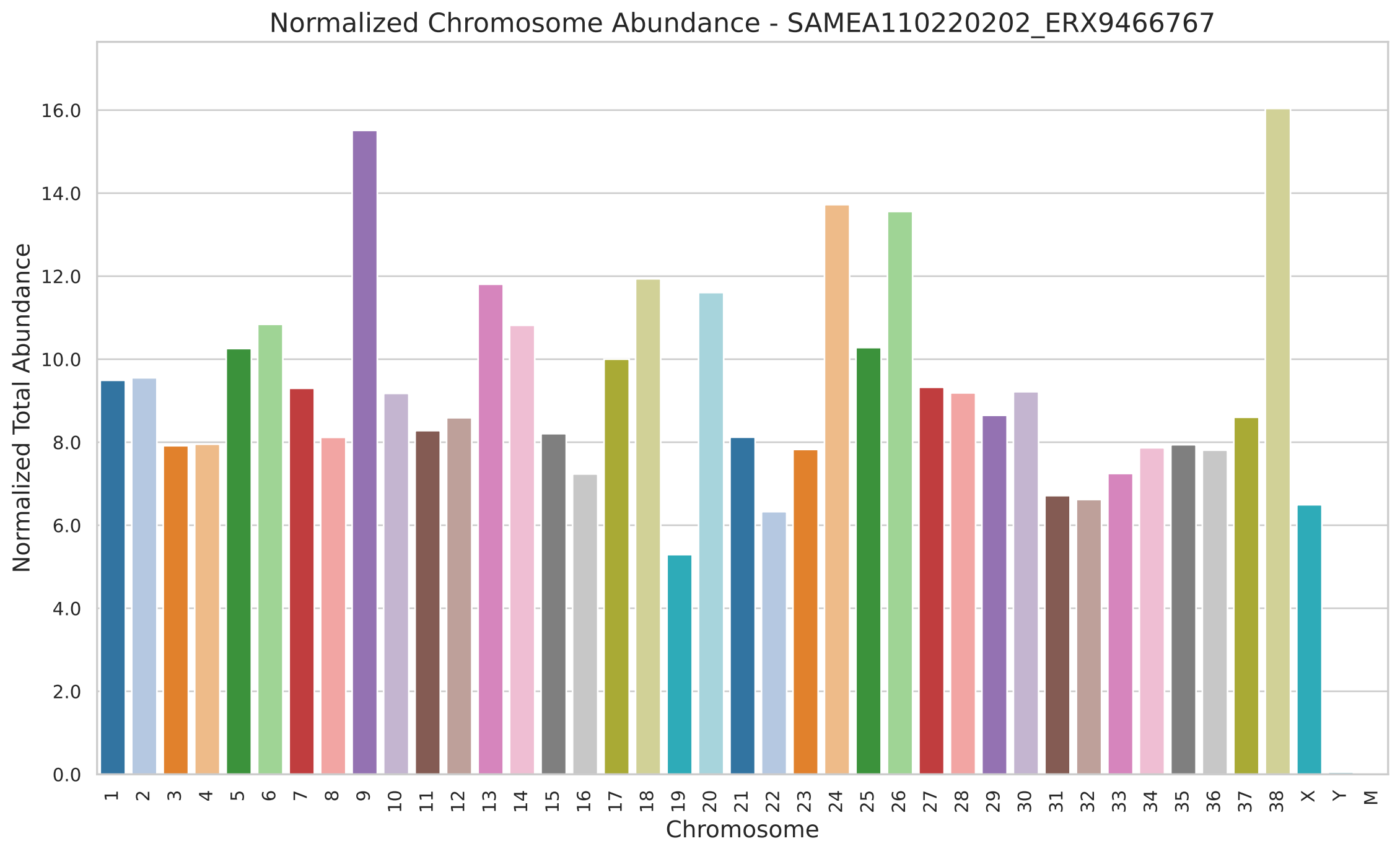

Normalized Chromosome Abundance - SAMEA110220194_ERX9466758
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
12.0
14.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

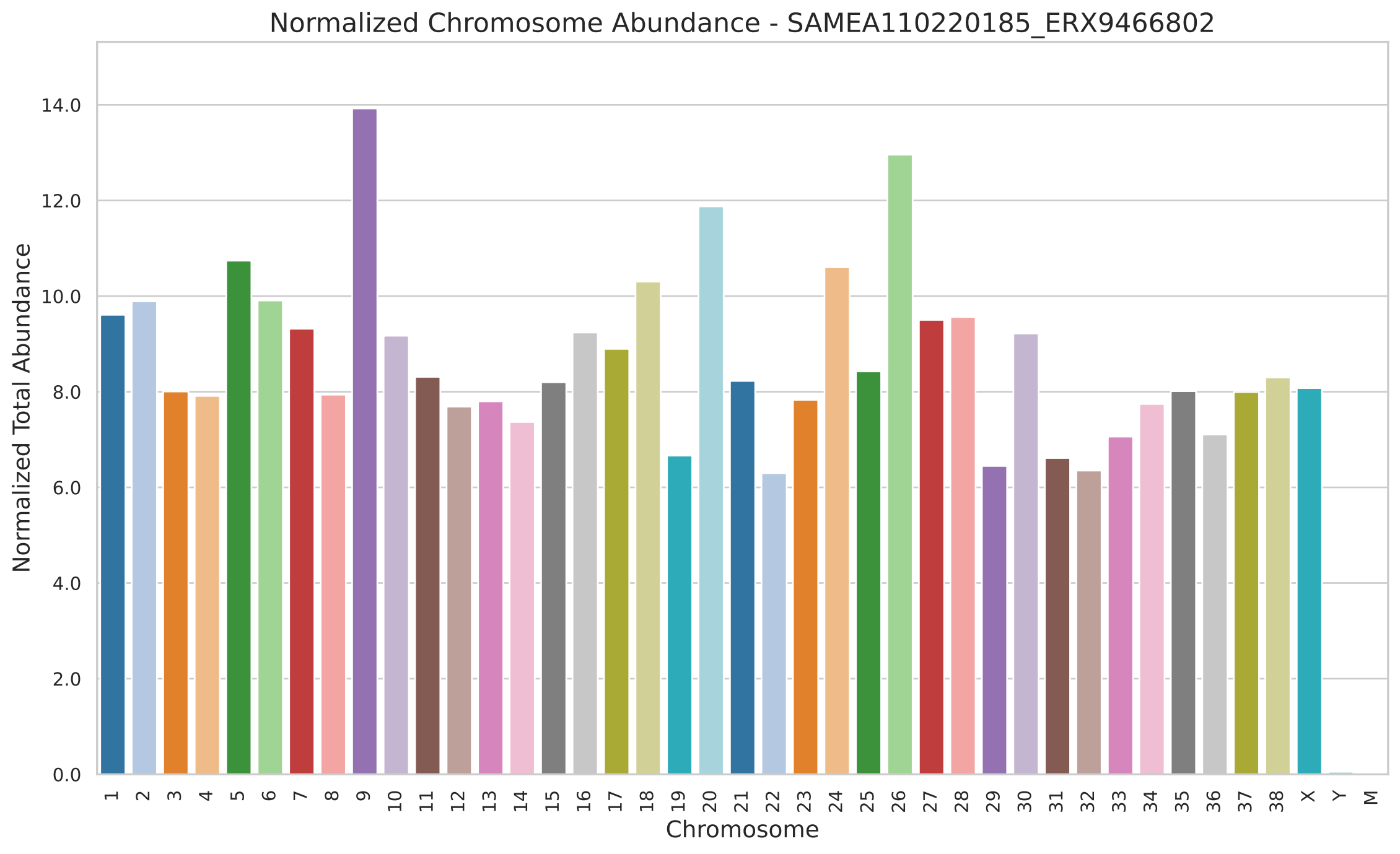

Normalized Chromosome Abundance - SAMEA110220196_ERX9466760
Normalized Total Abundance
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

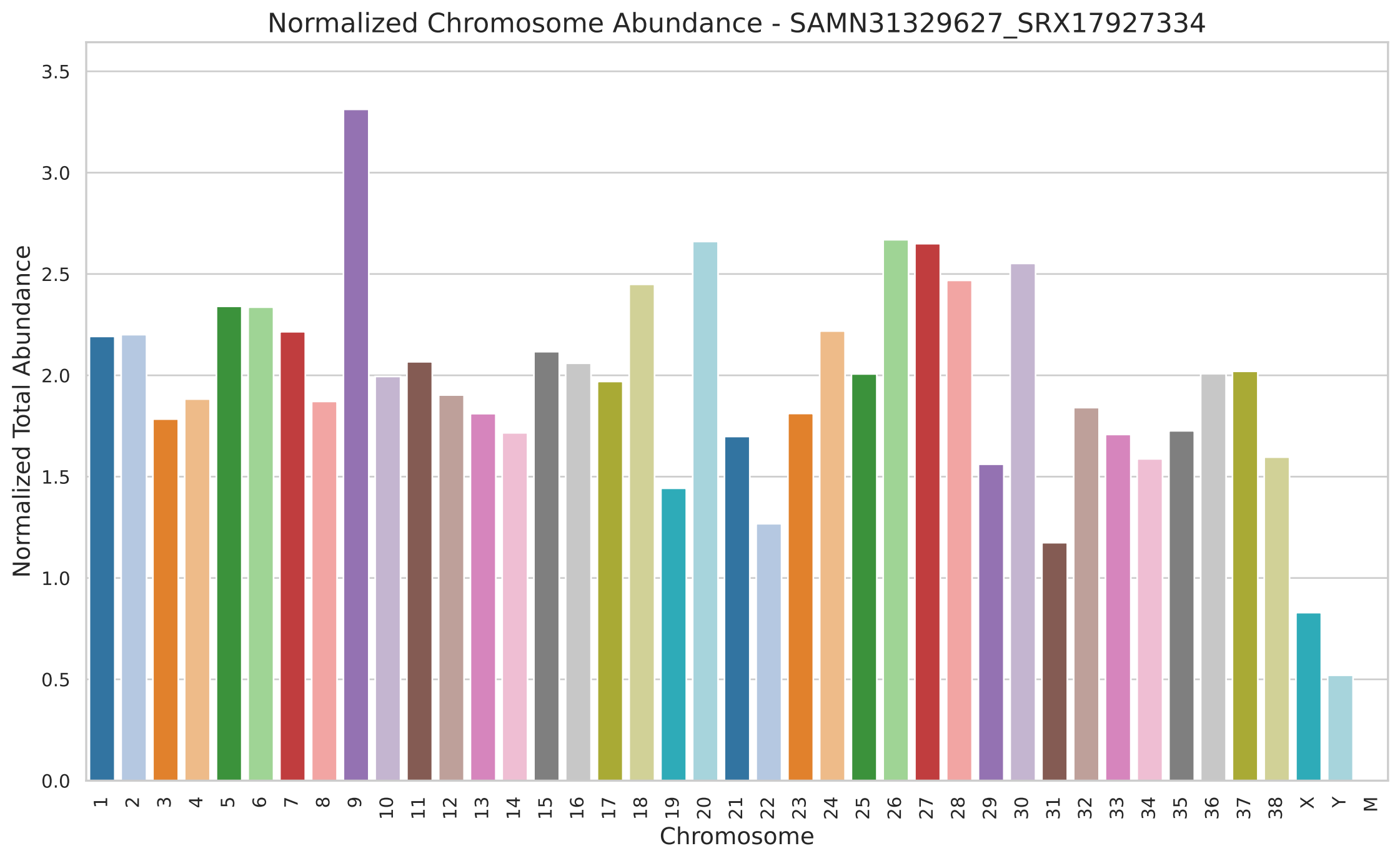

Normalized Chromosome Abundance - SAMEA7515583_ERX10021346
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

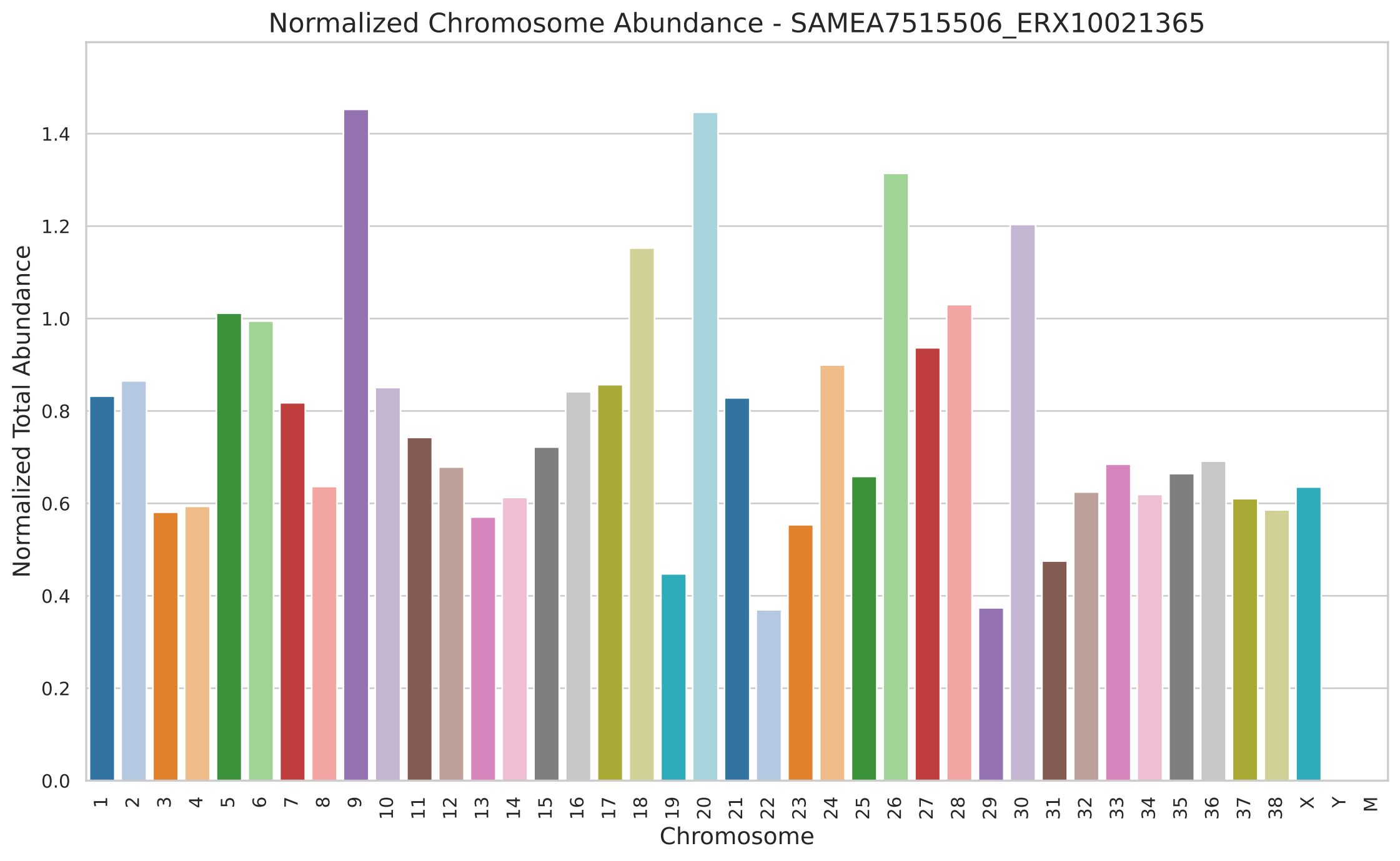

Normalized Chromosome Abundance - SAMEA7515502_ERX10021362
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

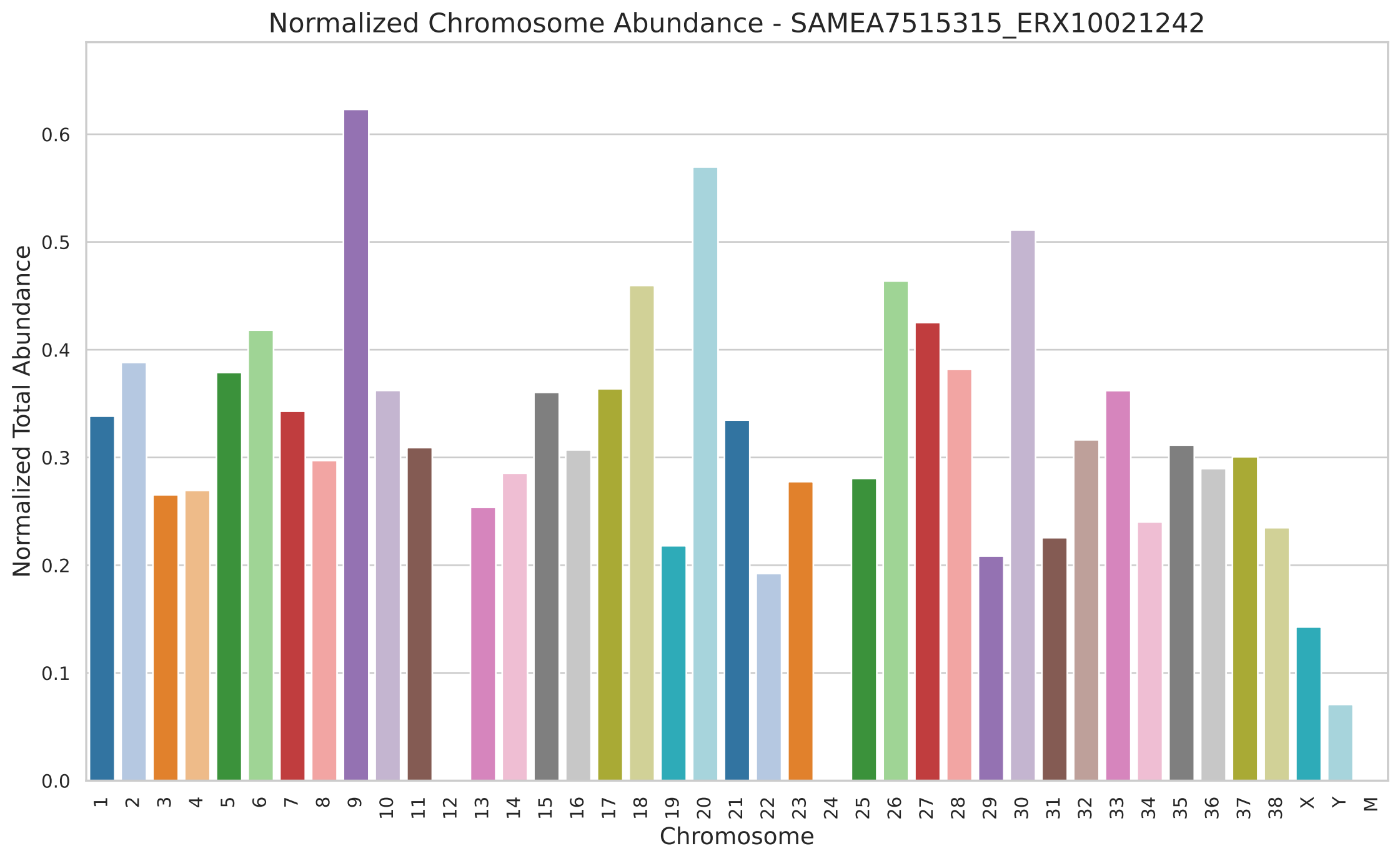

Normalized Chromosome Abundance - SAMEA110220203_ERX9466768
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
12.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

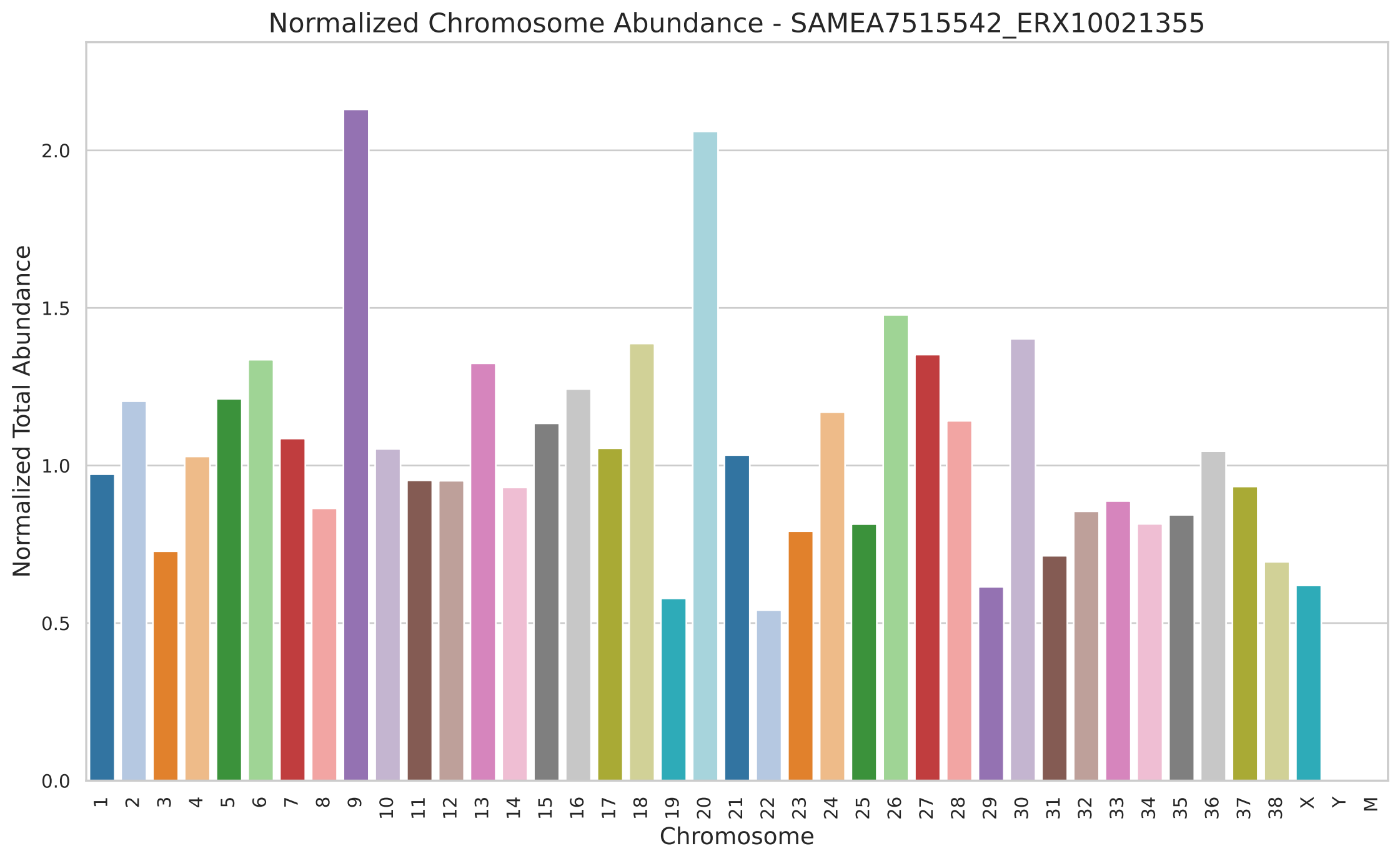

Normalized Chromosome Abundance - SAMEA110220202_ERX9466767
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
12.0
14.0
16.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

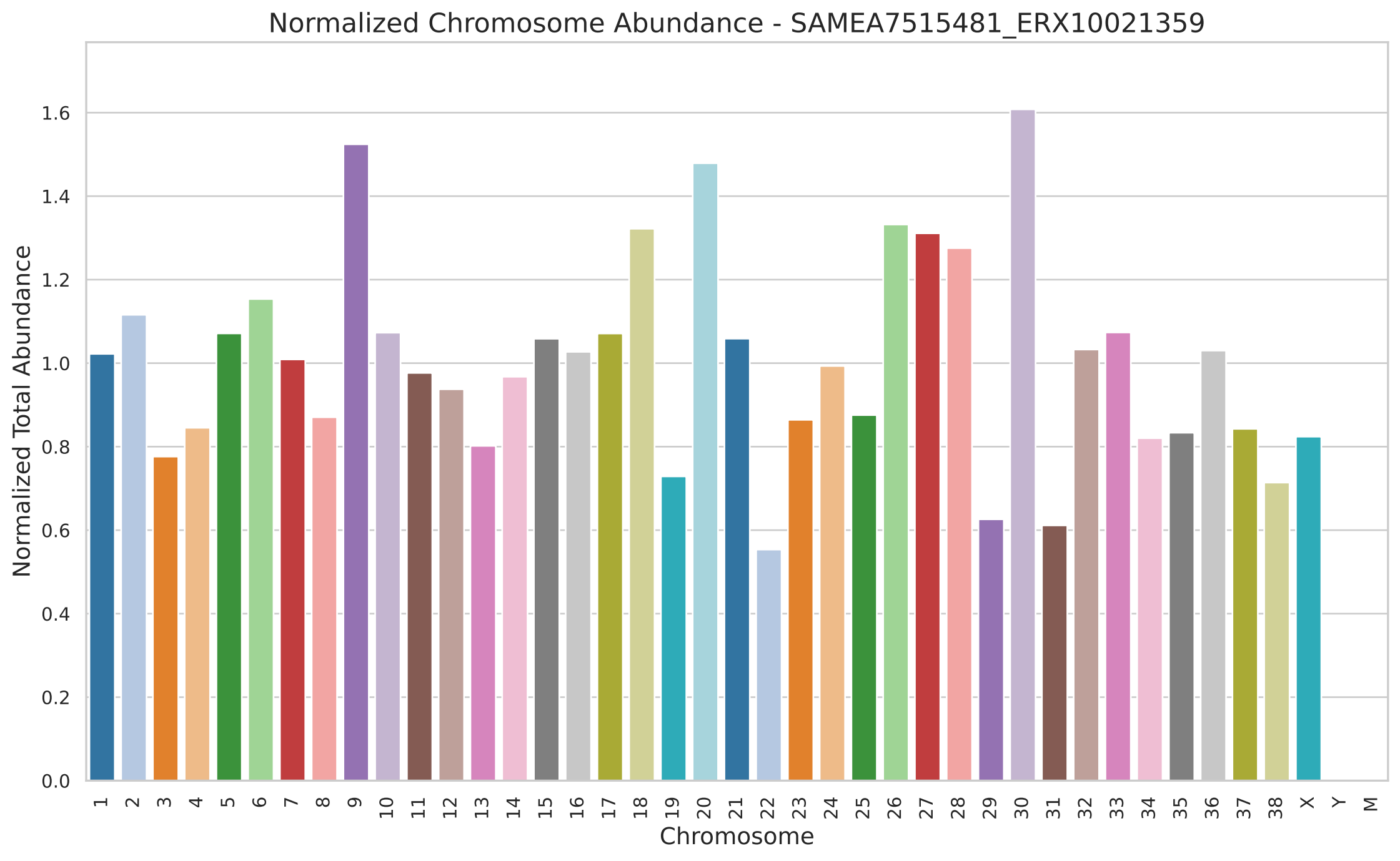

Normalized Chromosome Abundance - SAMEA110220185_ERX9466802
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
12.0
14.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

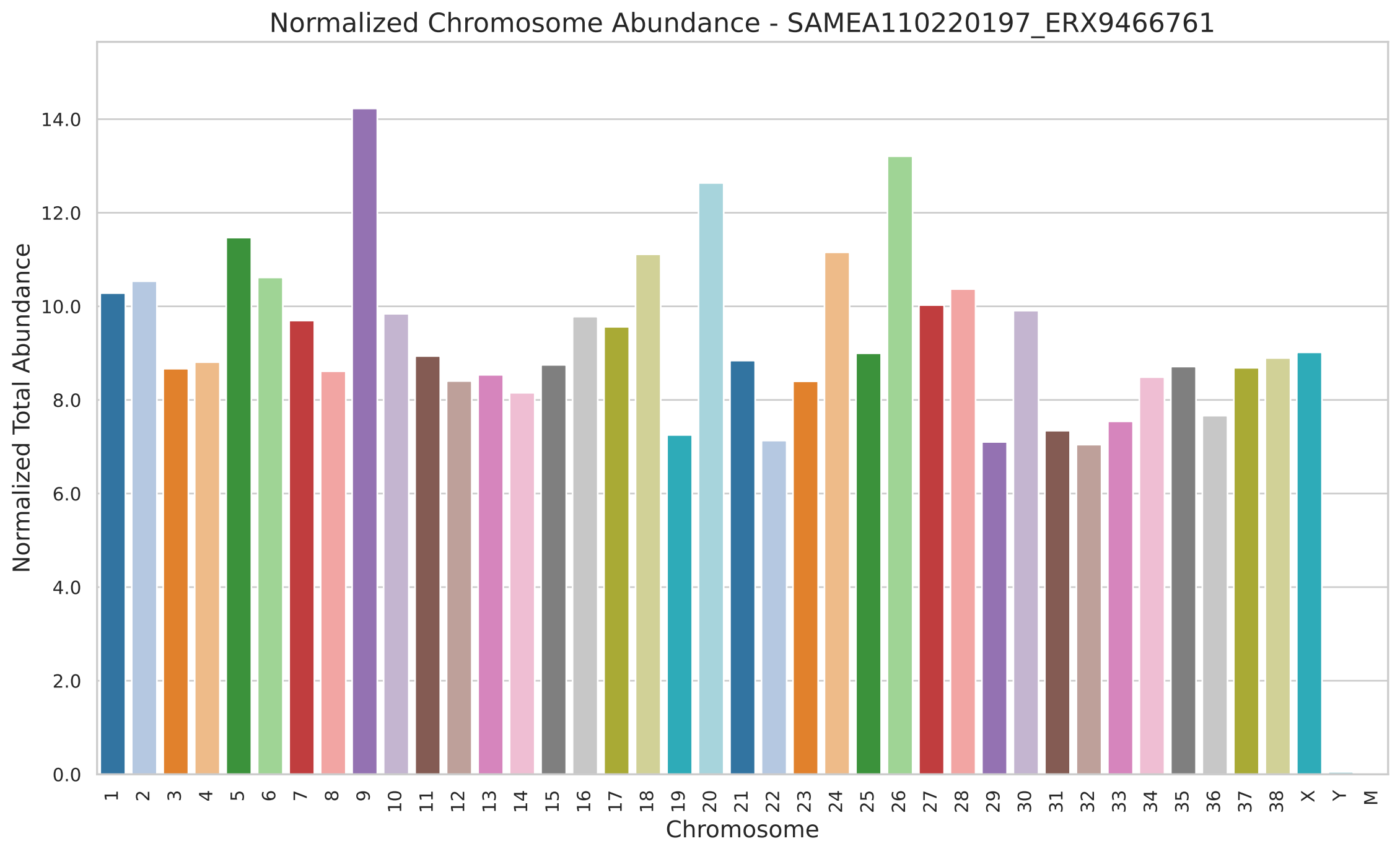

Normalized Chromosome Abundance - SAMN31329627_SRX17927334
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

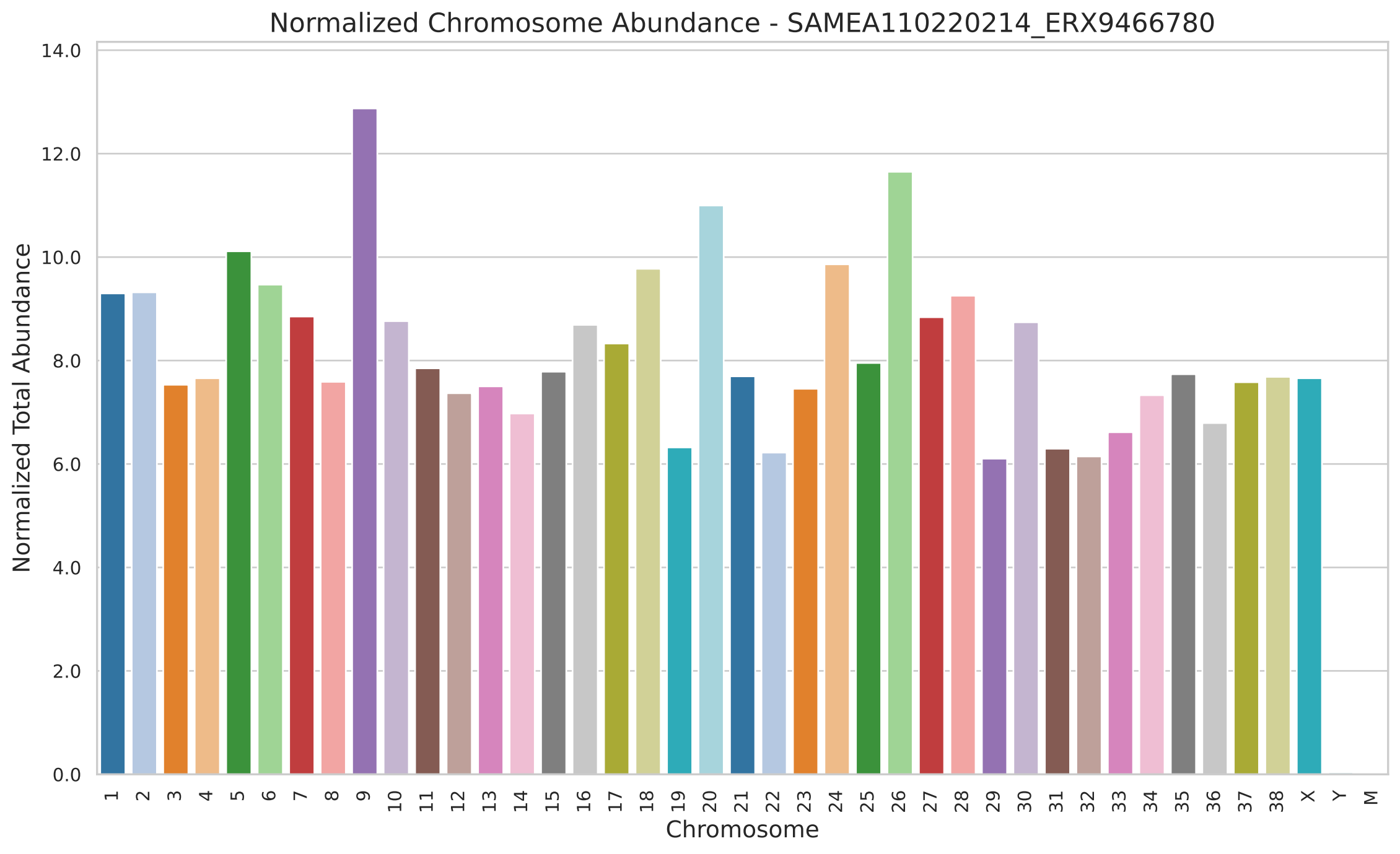

Normalized Chromosome Abundance - SAMEA7515506_ERX10021365
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

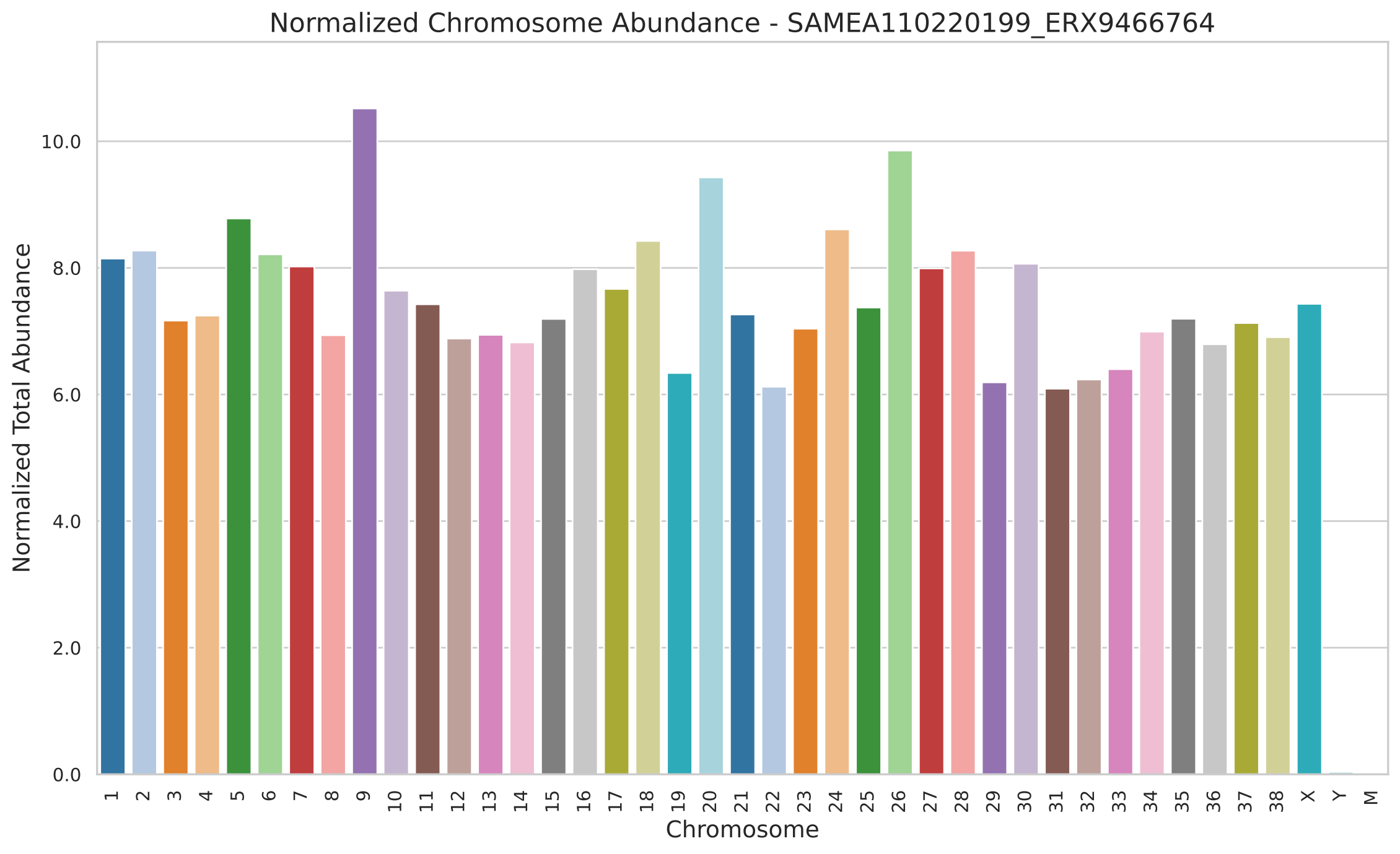

Normalized Chromosome Abundance - SAMEA7515315_ERX10021242
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

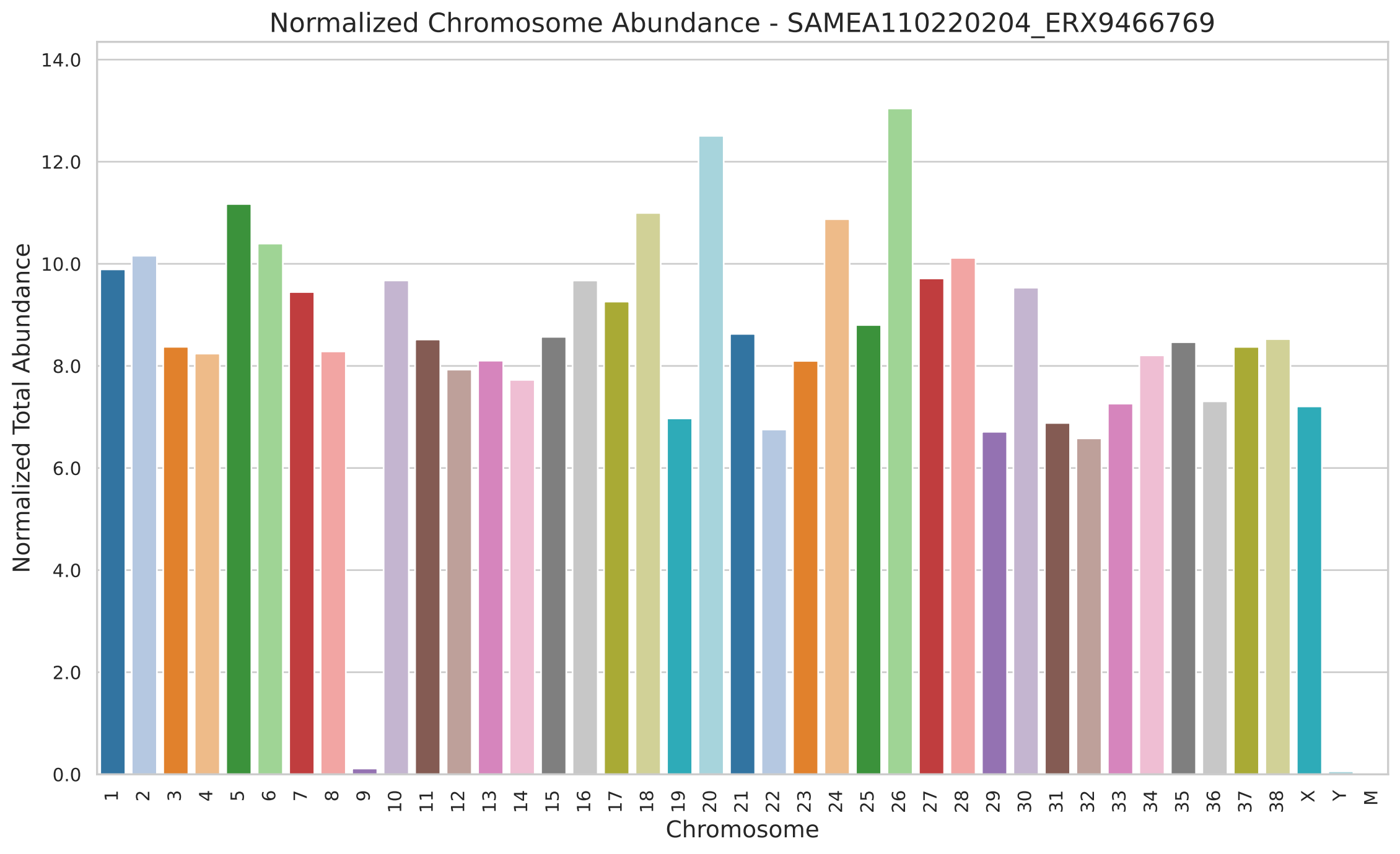

Normalized Chromosome Abundance - SAMEA7515542_ERX10021355
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

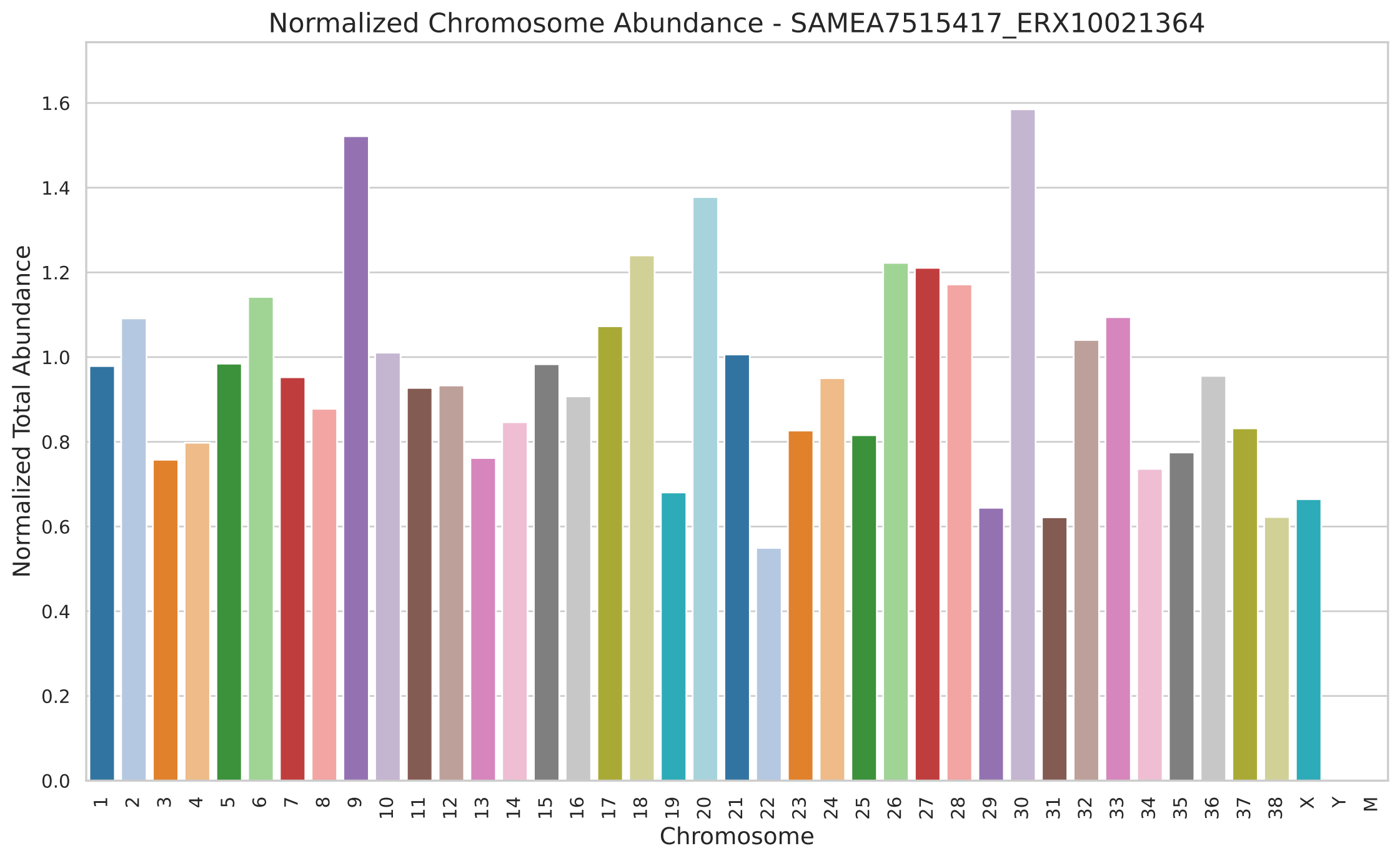

Normalized Chromosome Abundance - SAMEA7515481_ERX10021359
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

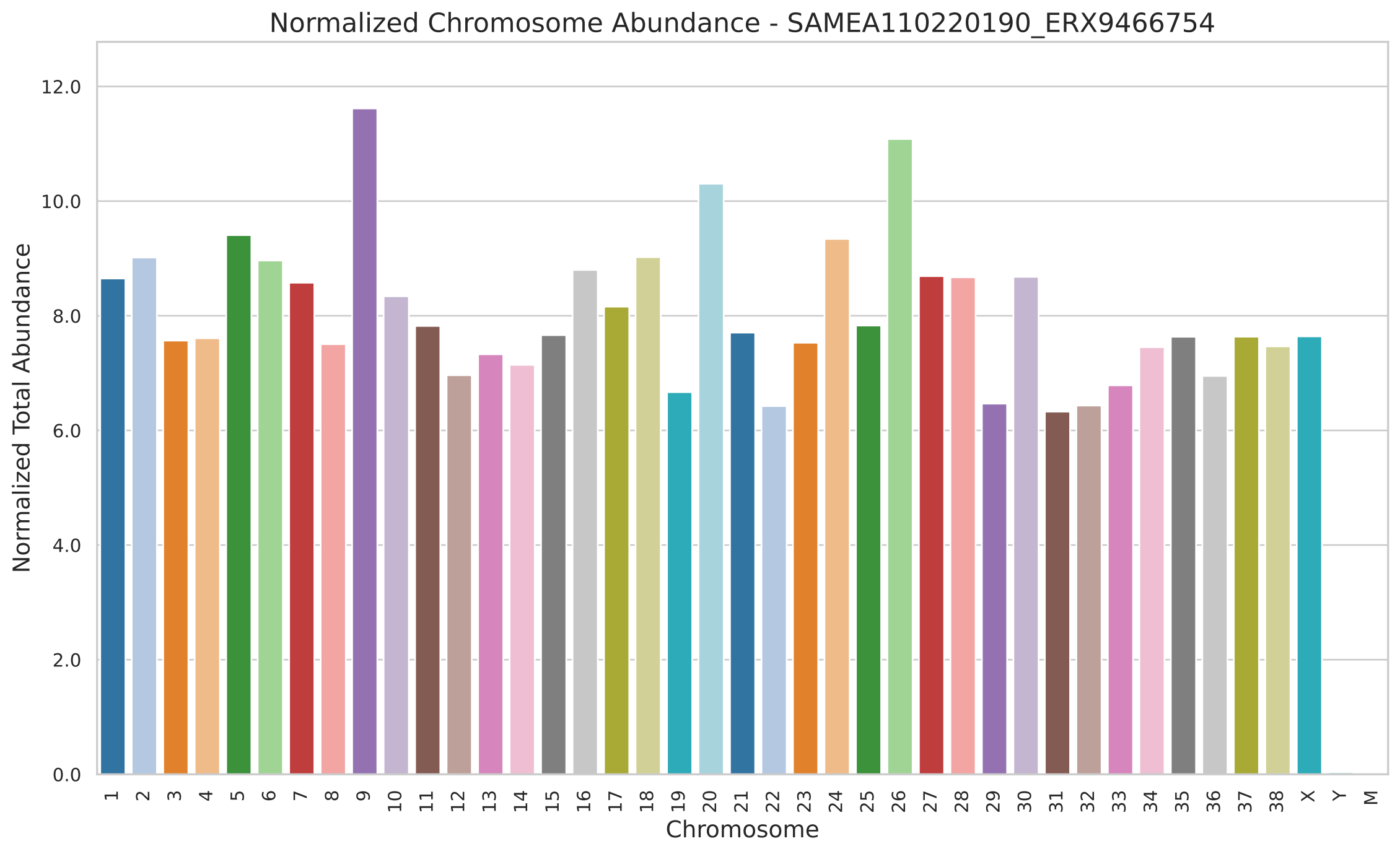

Normalized Chromosome Abundance - SAMEA110220197_ERX9466761
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
12.0
14.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

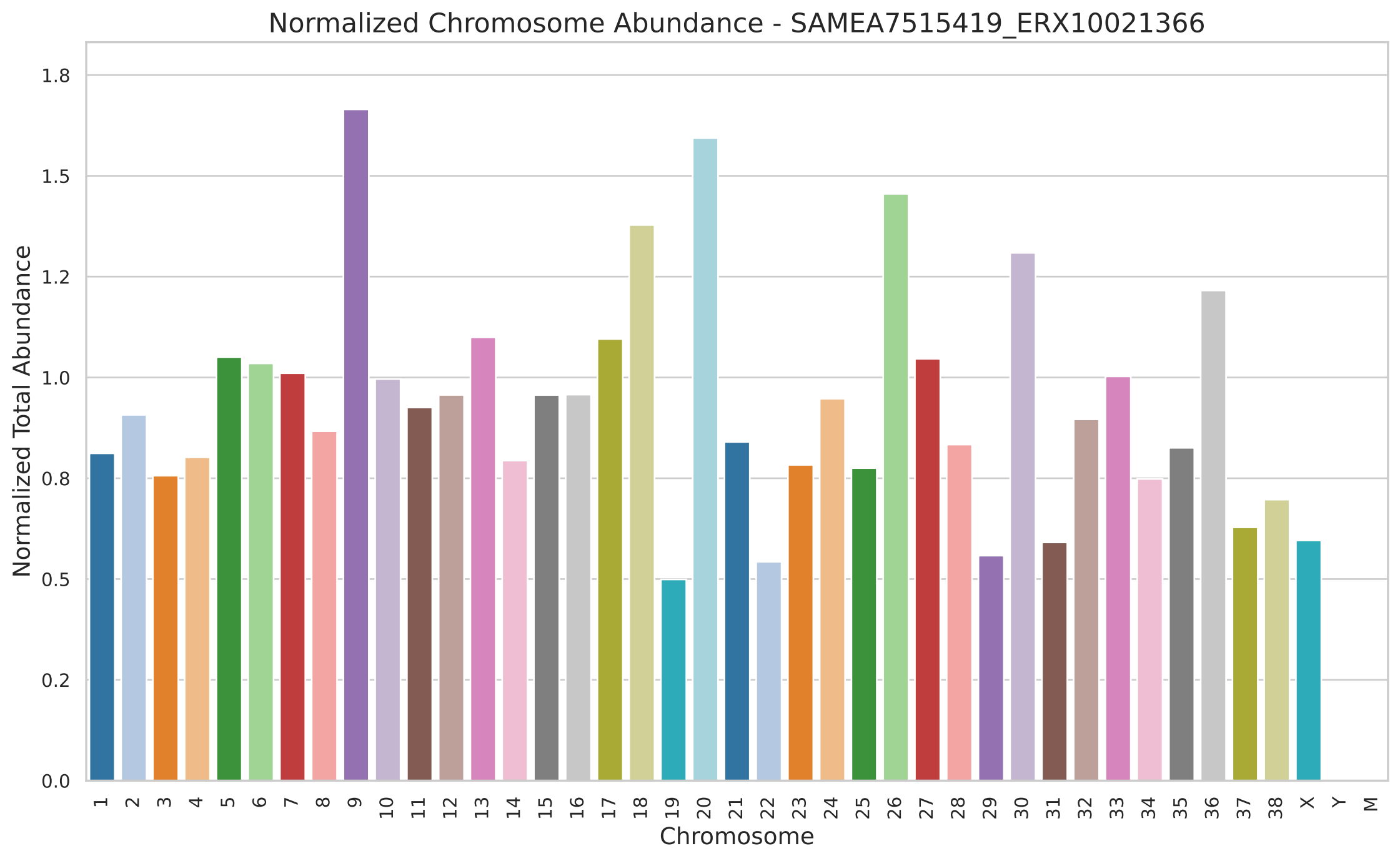

Normalized Chromosome Abundance - SAMEA110220214_ERX9466780
Normalized Total Abundance
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

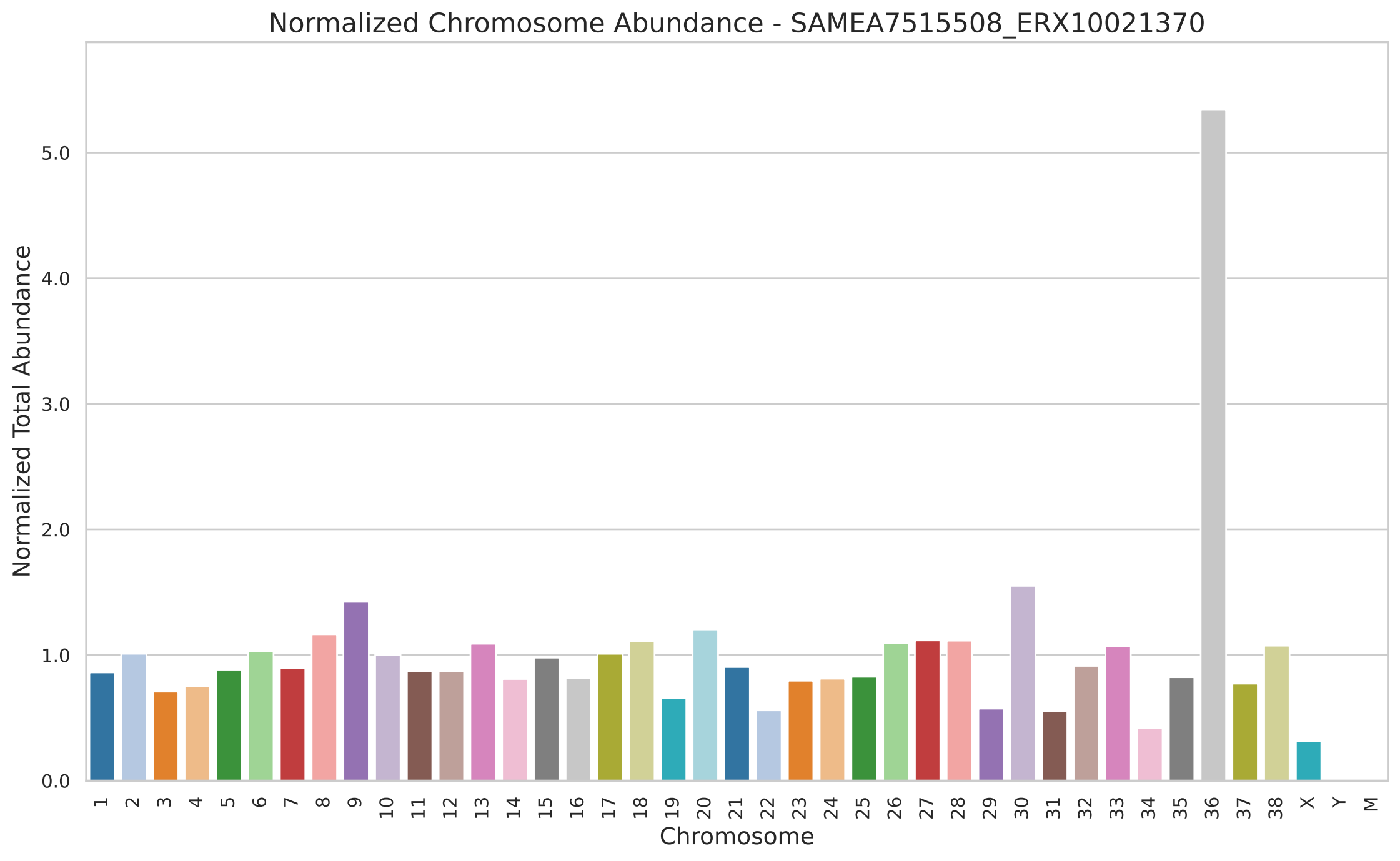

Normalized Chromosome Abundance - SAMEA110220199_ERX9466764
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

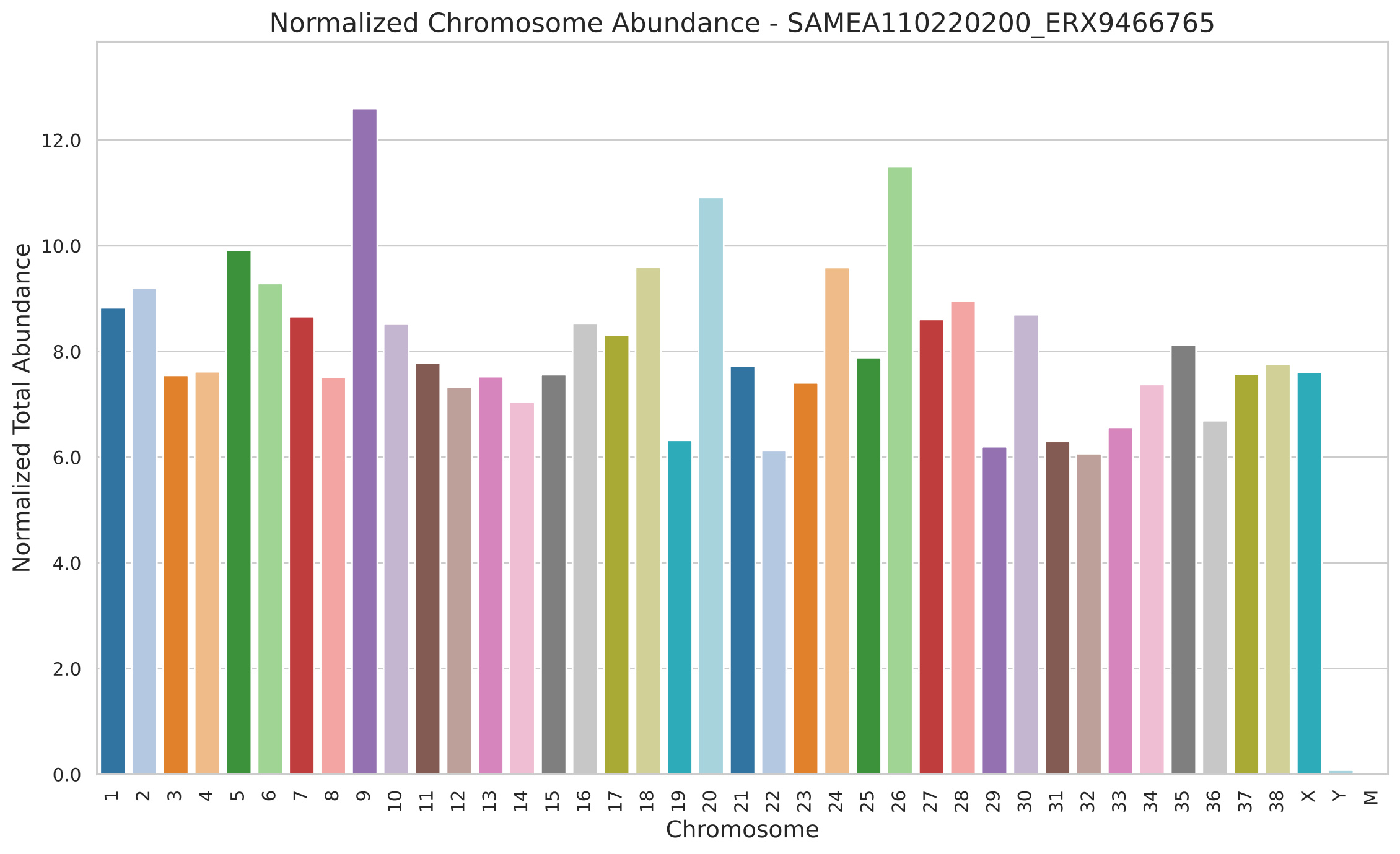

Normalized Chromosome Abundance - SAMEA110220204_ERX9466769
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
12.0
14.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

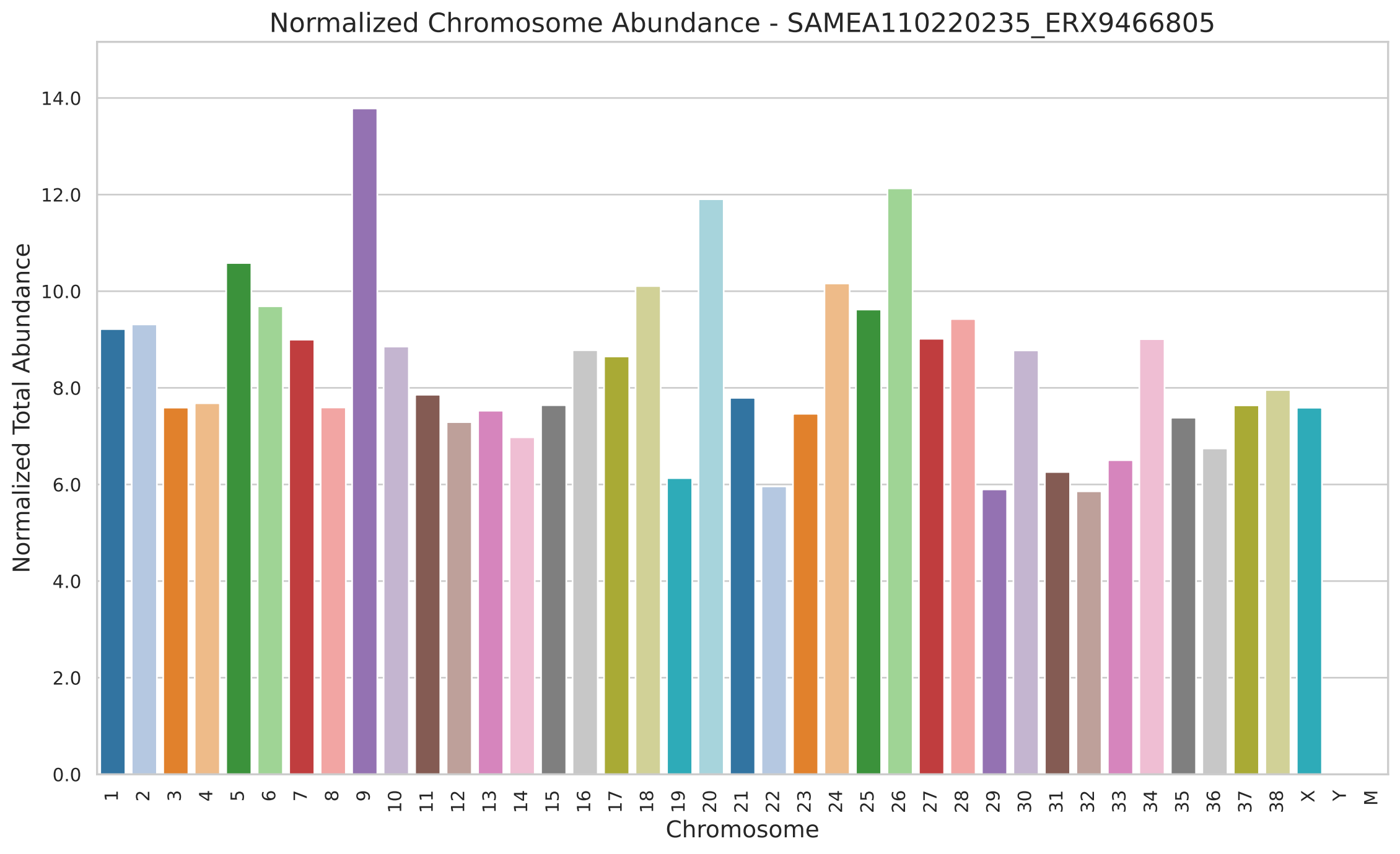

Normalized Chromosome Abundance - SAMEA7515417_ERX10021364
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

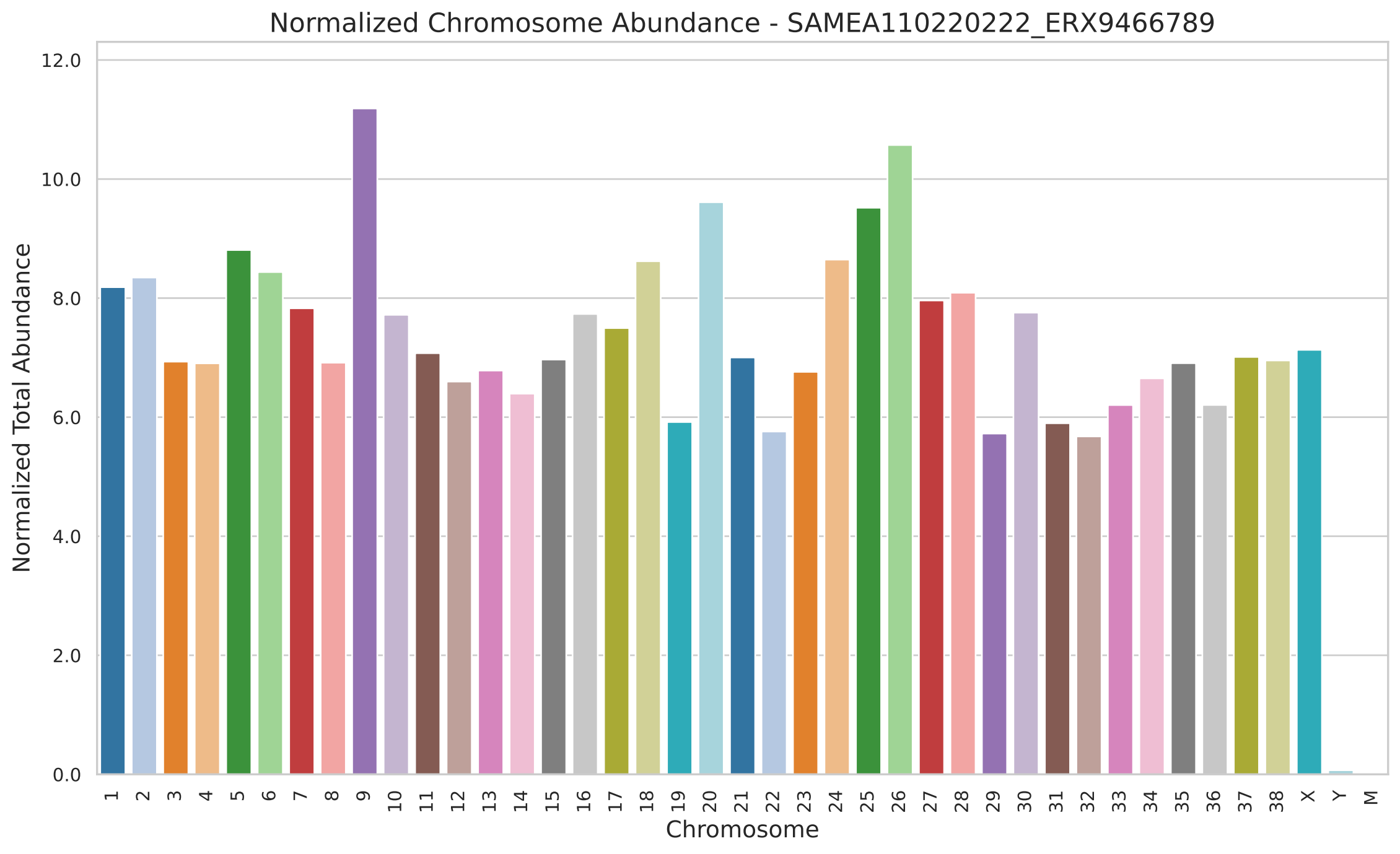

Normalized Chromosome Abundance - SAMEA110220190_ERX9466754
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
12.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

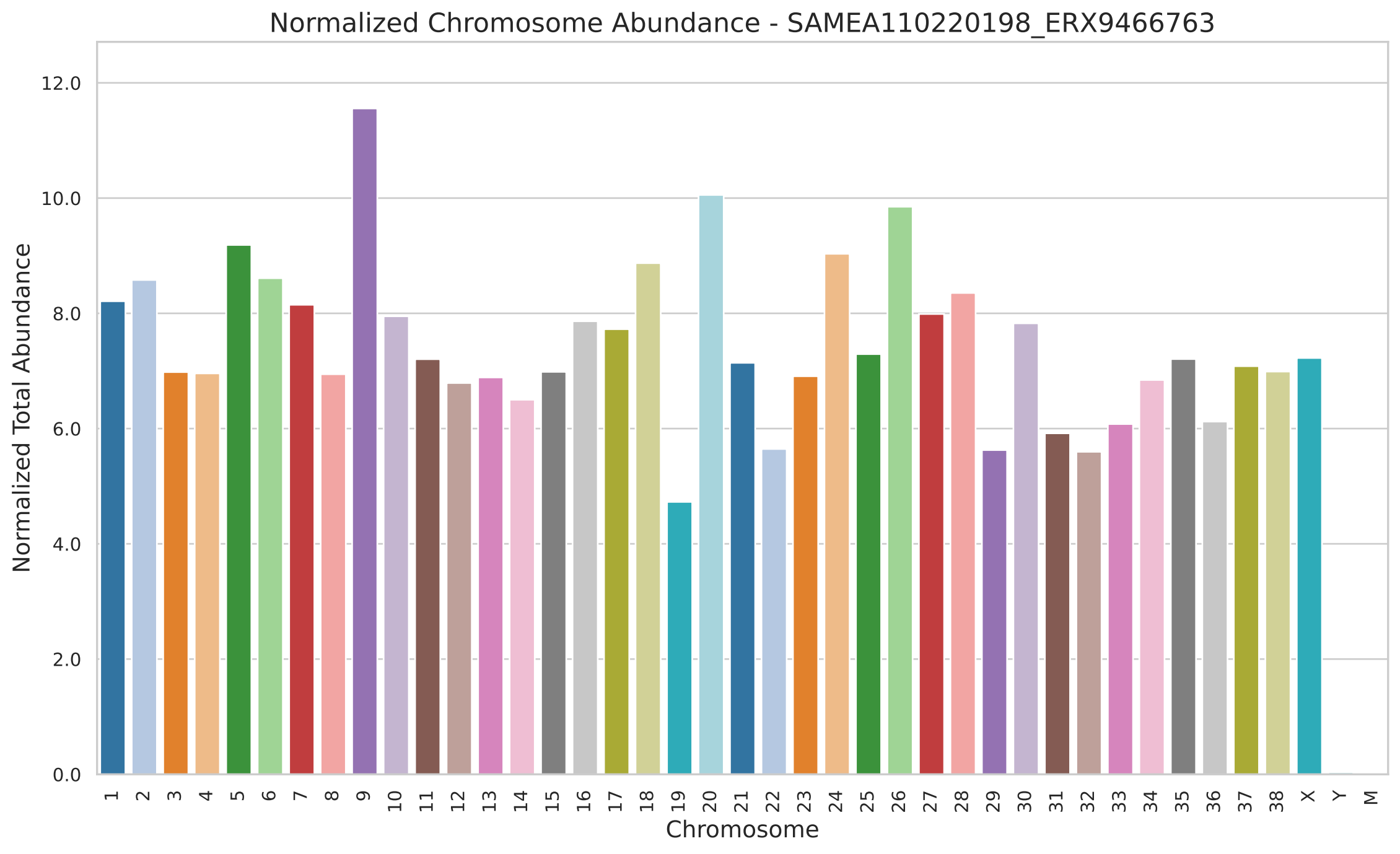

Normalized Chromosome Abundance - SAMEA7515419_ERX10021366
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

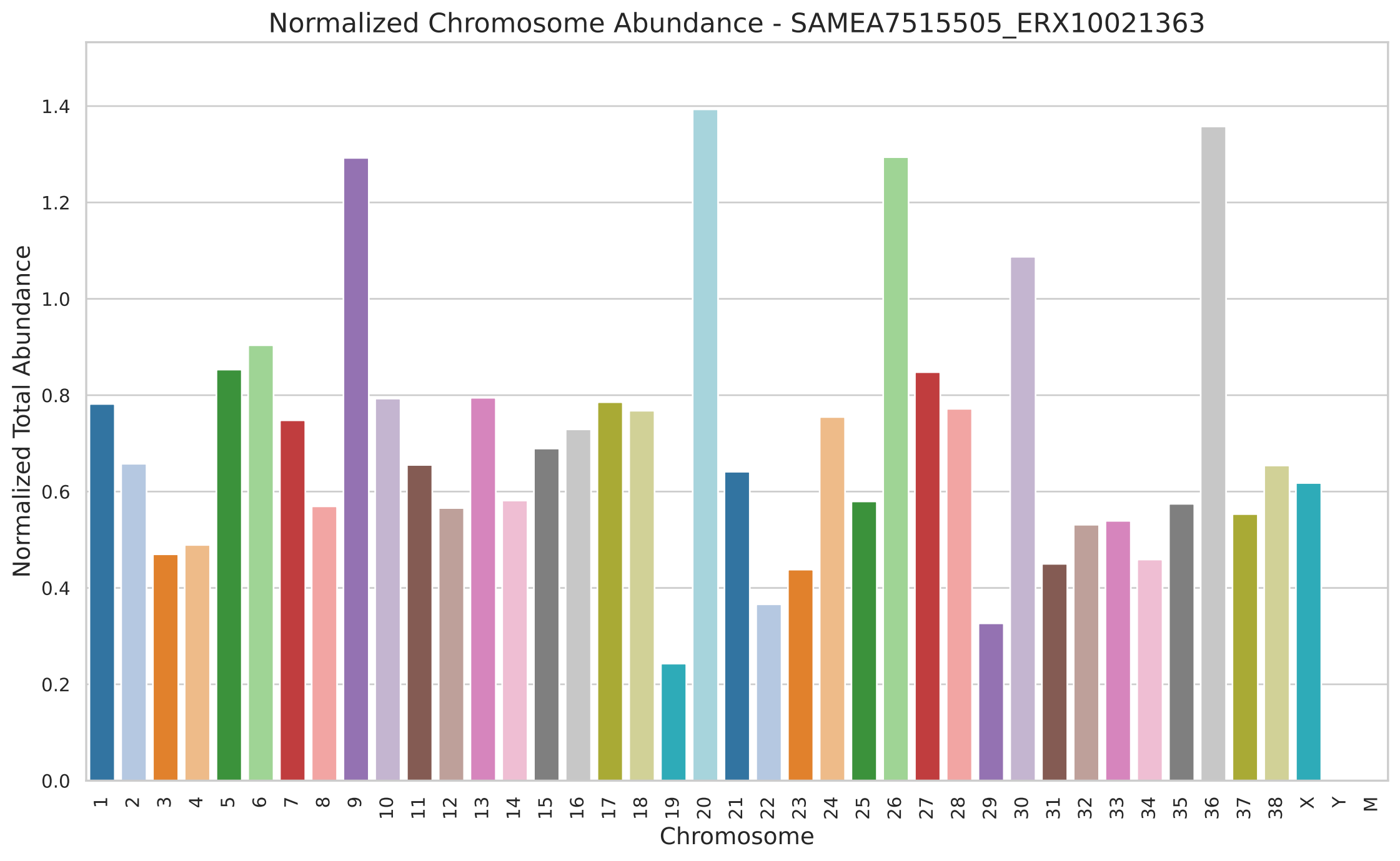

Normalized Chromosome Abundance - SAMEA7515508_ERX10021370
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

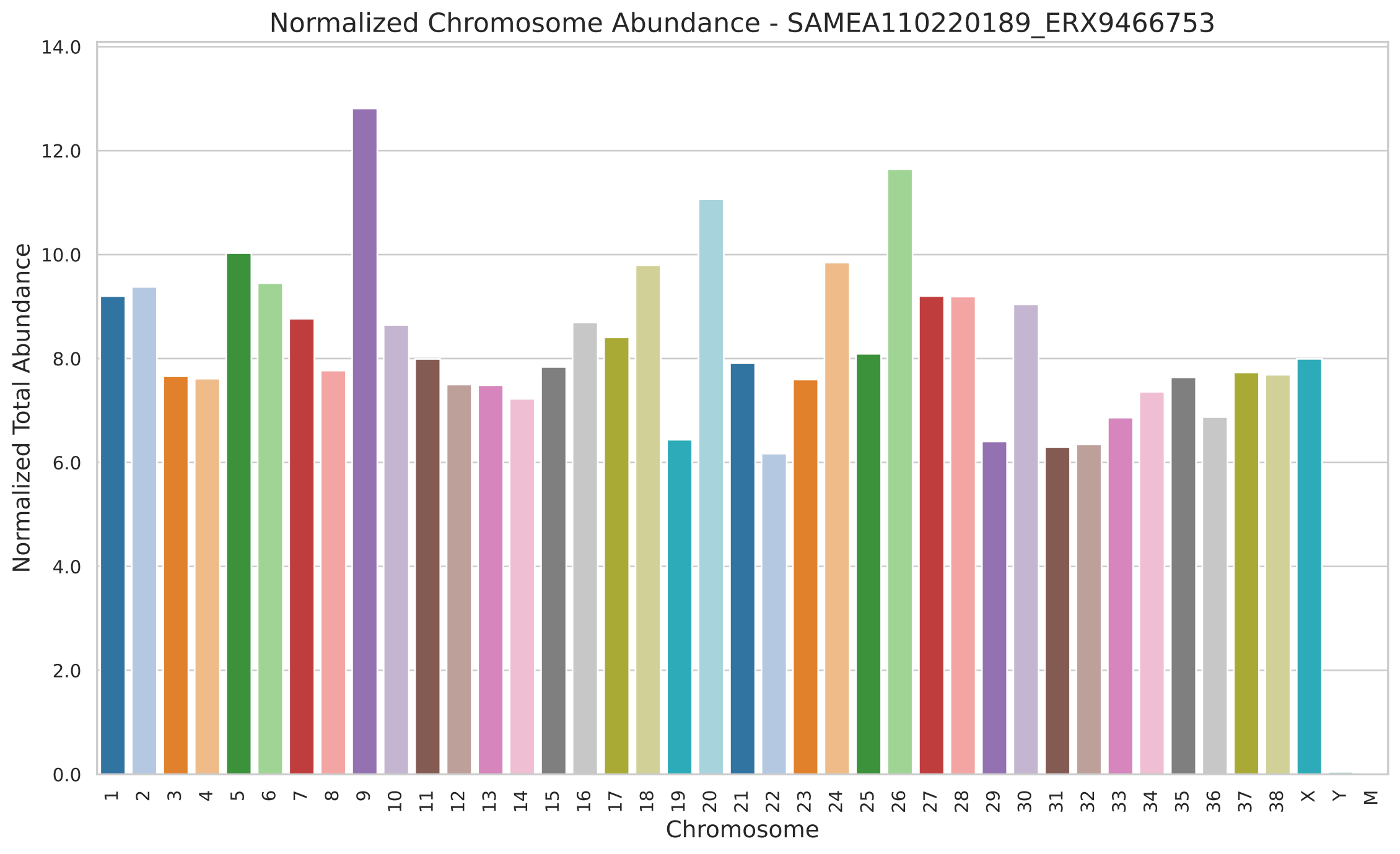

Normalized Chromosome Abundance - SAMEA110220200_ERX9466765
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
12.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

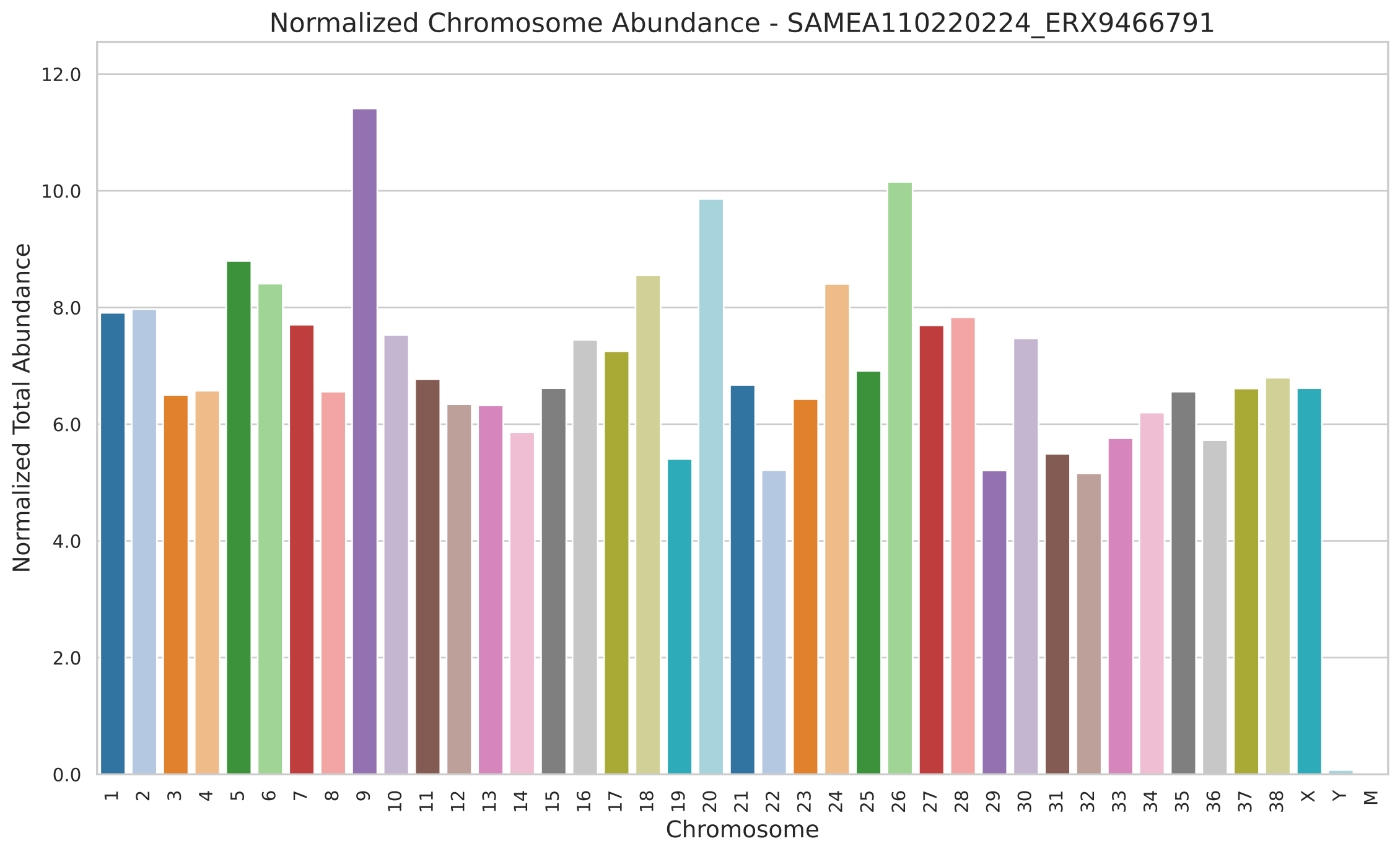

Normalized Chromosome Abundance - SAMEA110220235_ERX9466805
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
12.0
14.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

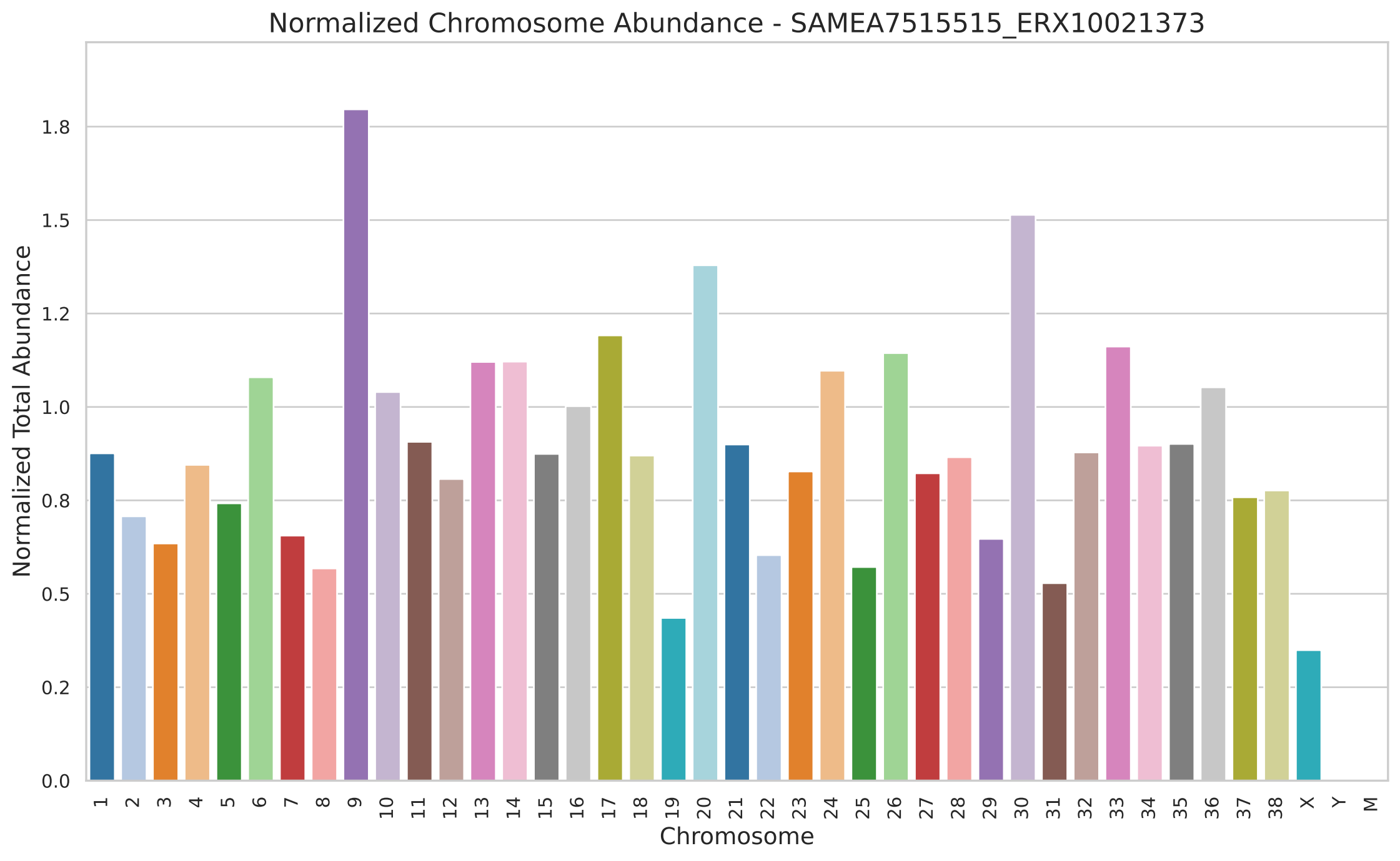

Normalized Chromosome Abundance - SAMEA110220222_ERX9466789
Normalized Total Abundance
12.0
10.0
8.0
6.0
4.0
2.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

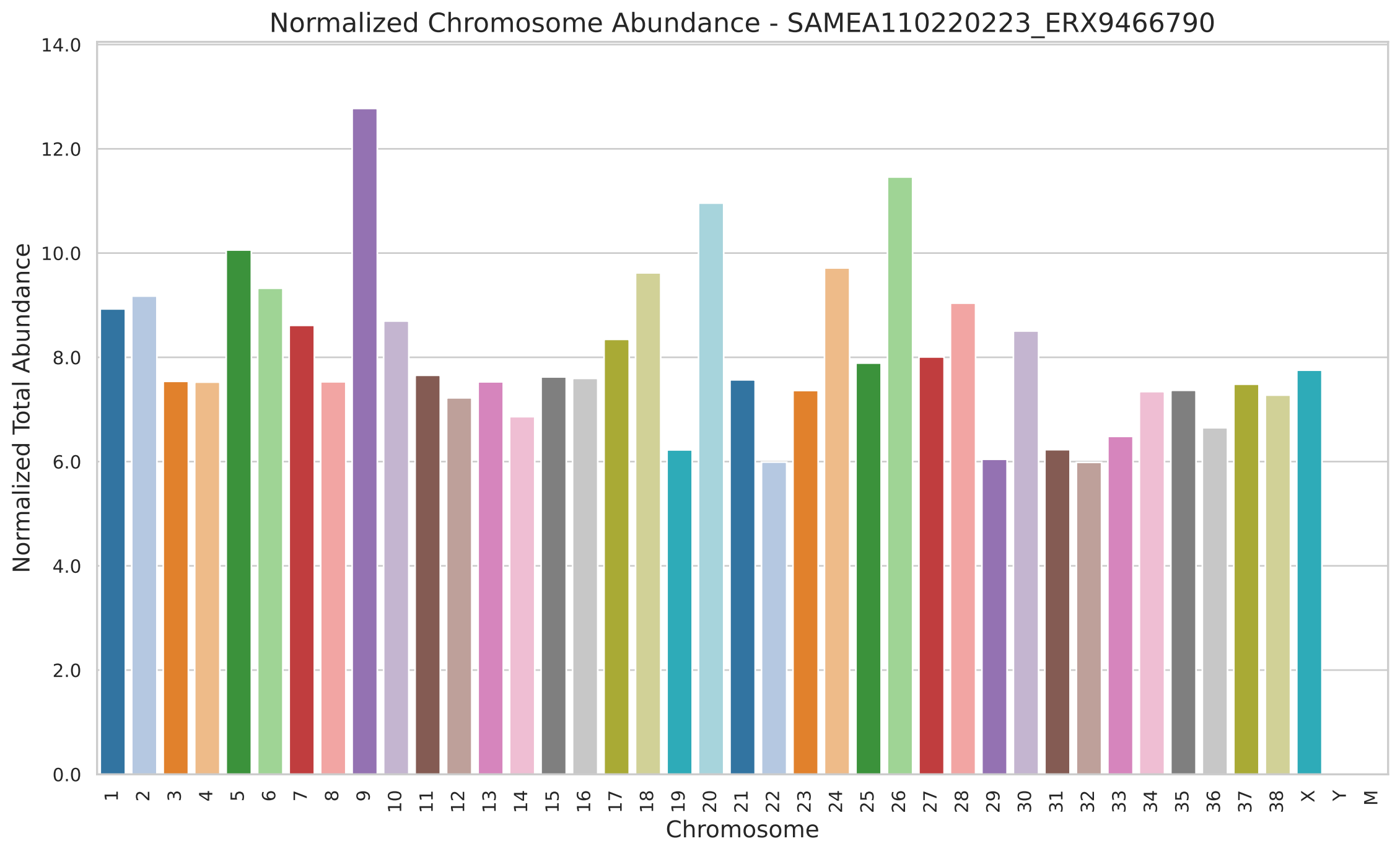

Normalized Chromosome Abundance - SAMEA110220198_ERX9466763
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
12.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

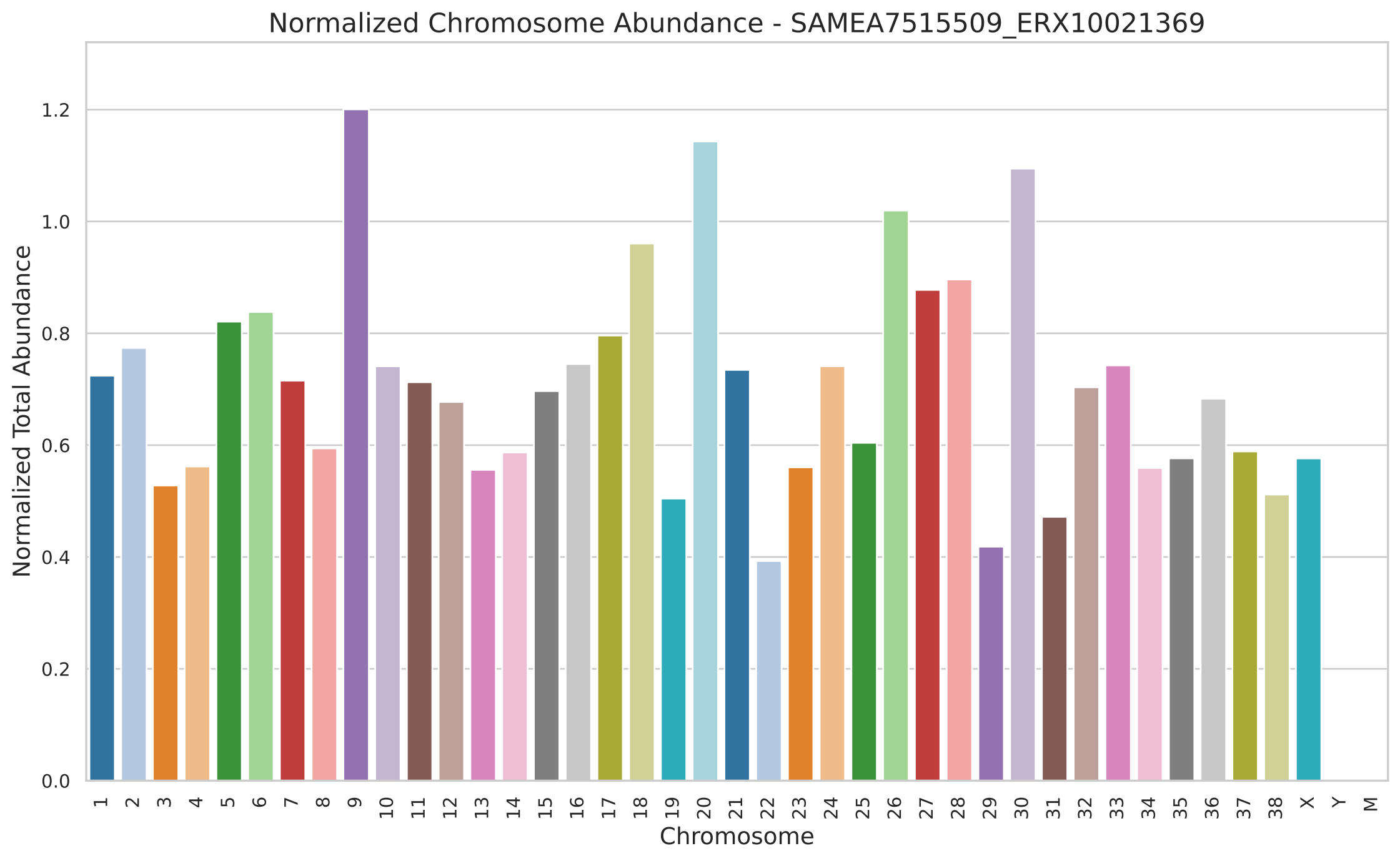

Normalized Chromosome Abundance - SAMEA7515505_ERX10021363
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

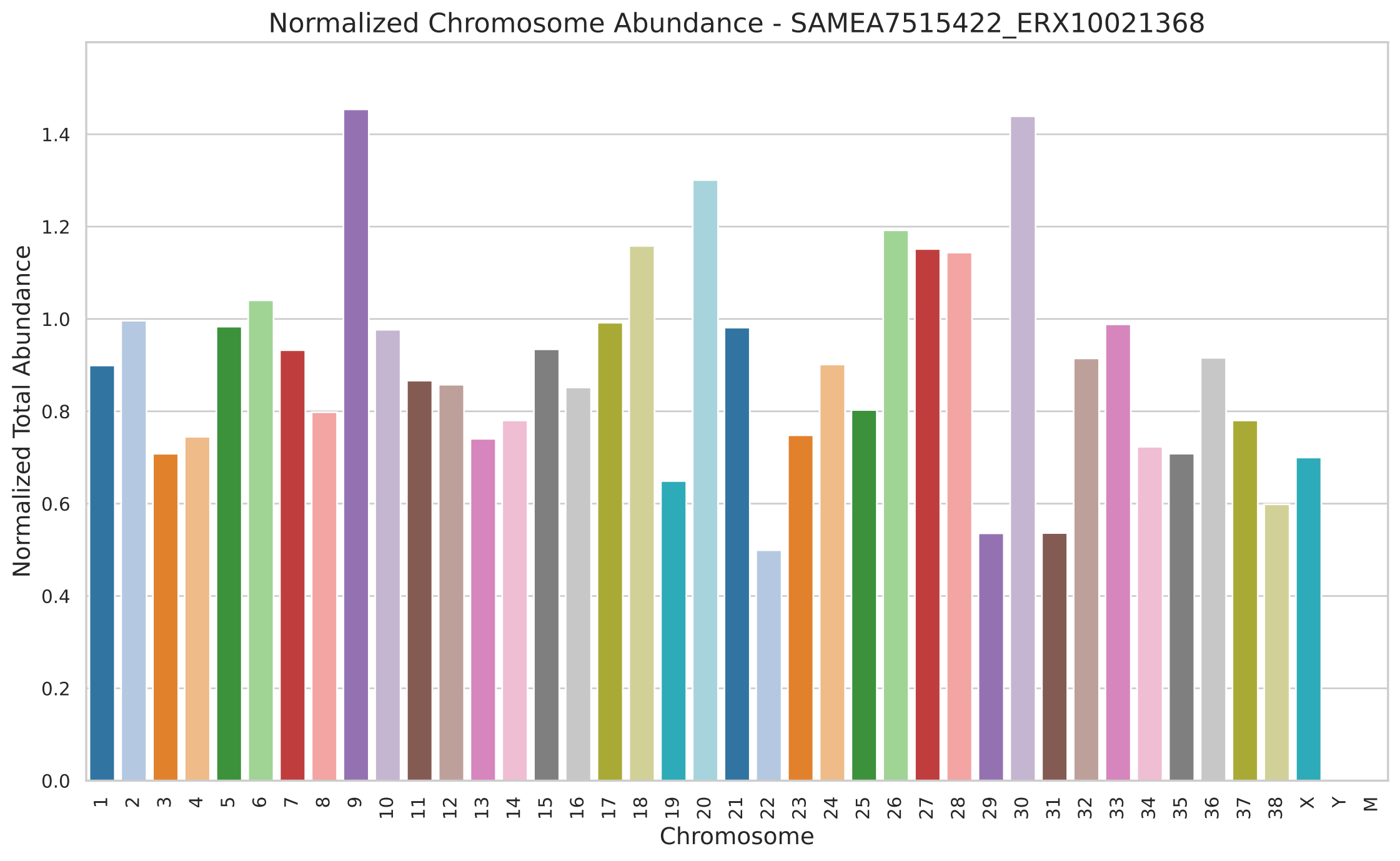

Normalized Chromosome Abundance - SAMEA110220189_ERX9466753
Normalized Total Abundance
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

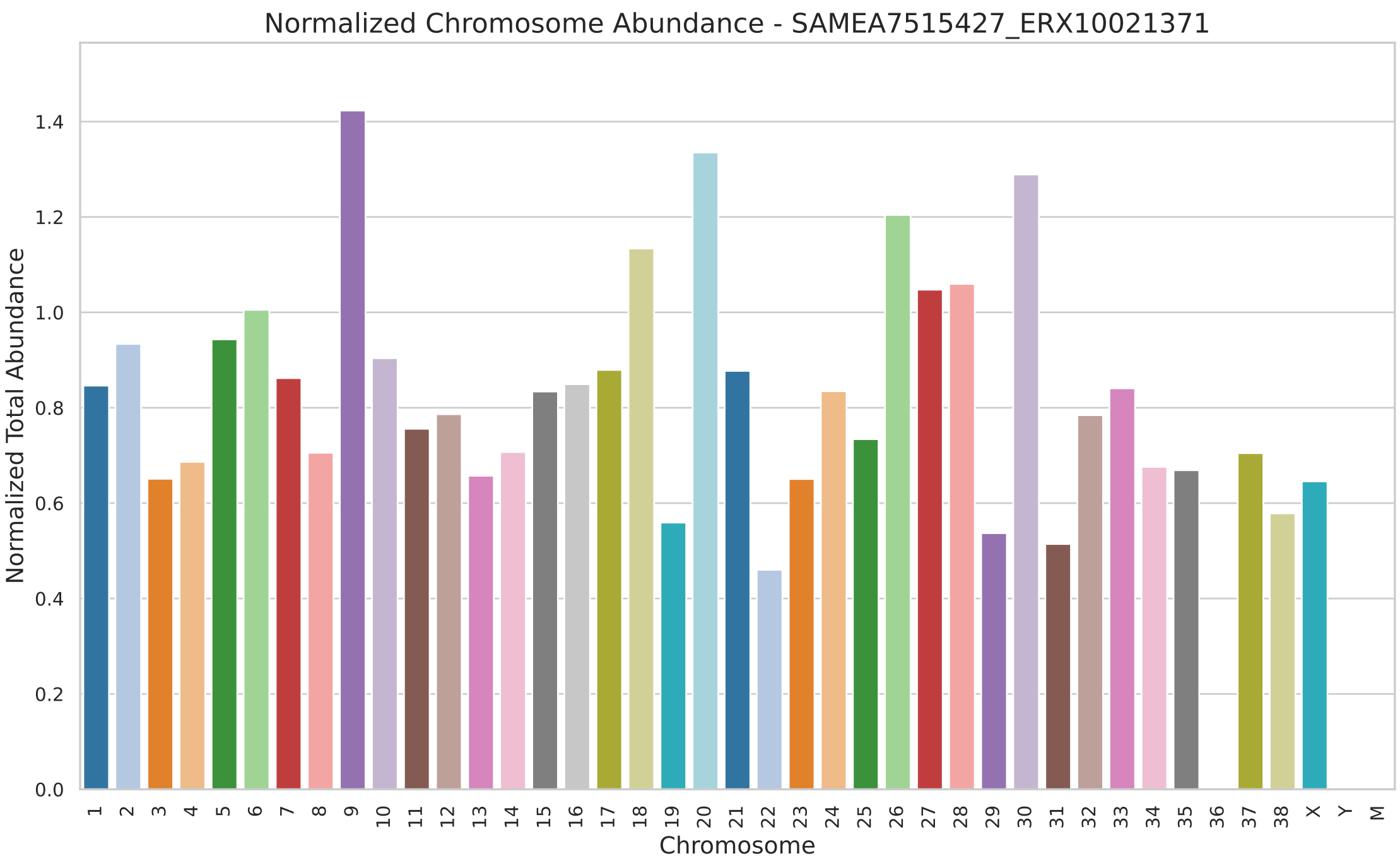

Normalized Chromosome Abundance - SAMEA110220224_ERX9466791
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
12.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

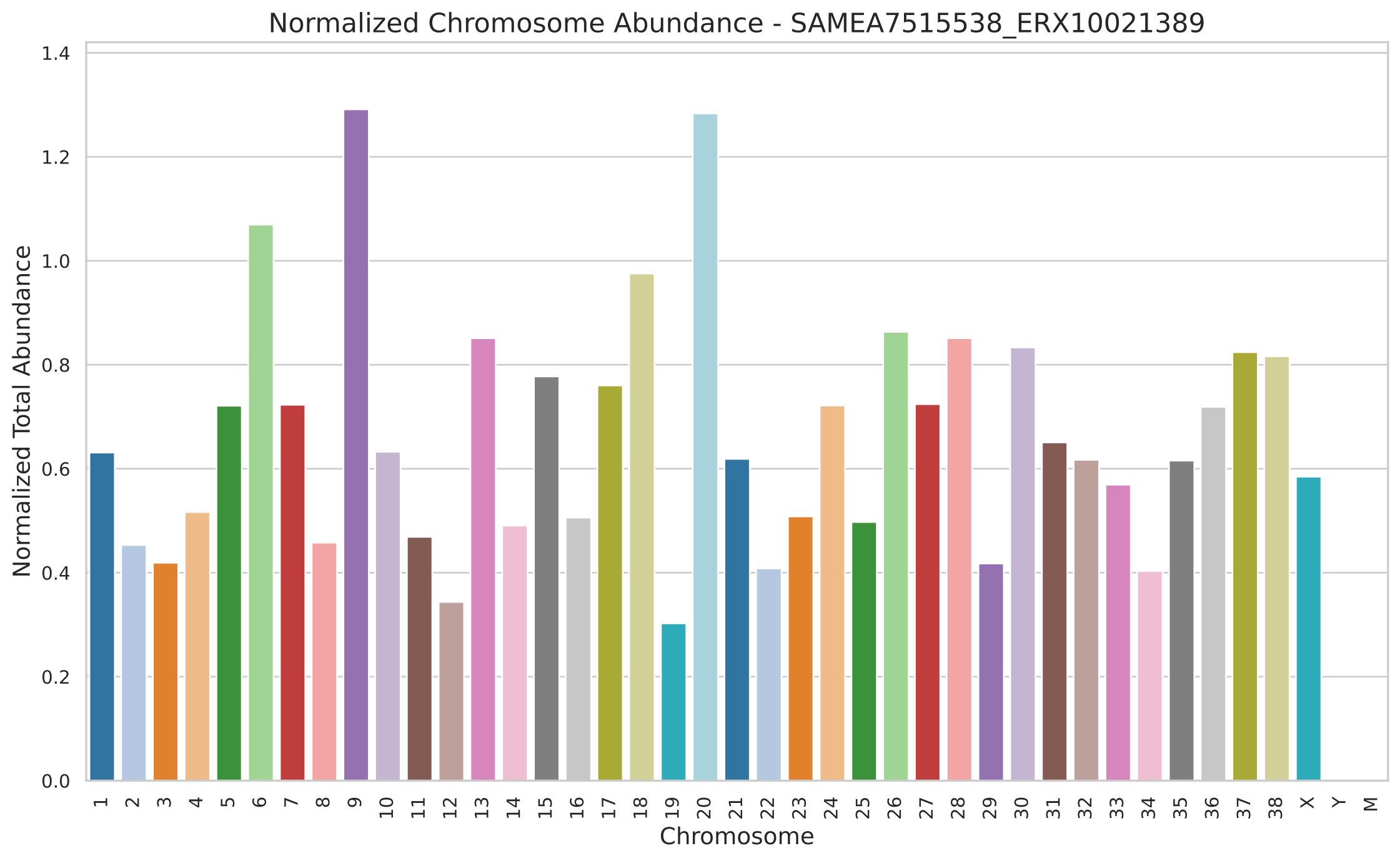

Normalized Chromosome Abundance - SAMEA7515515_ERX10021373
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

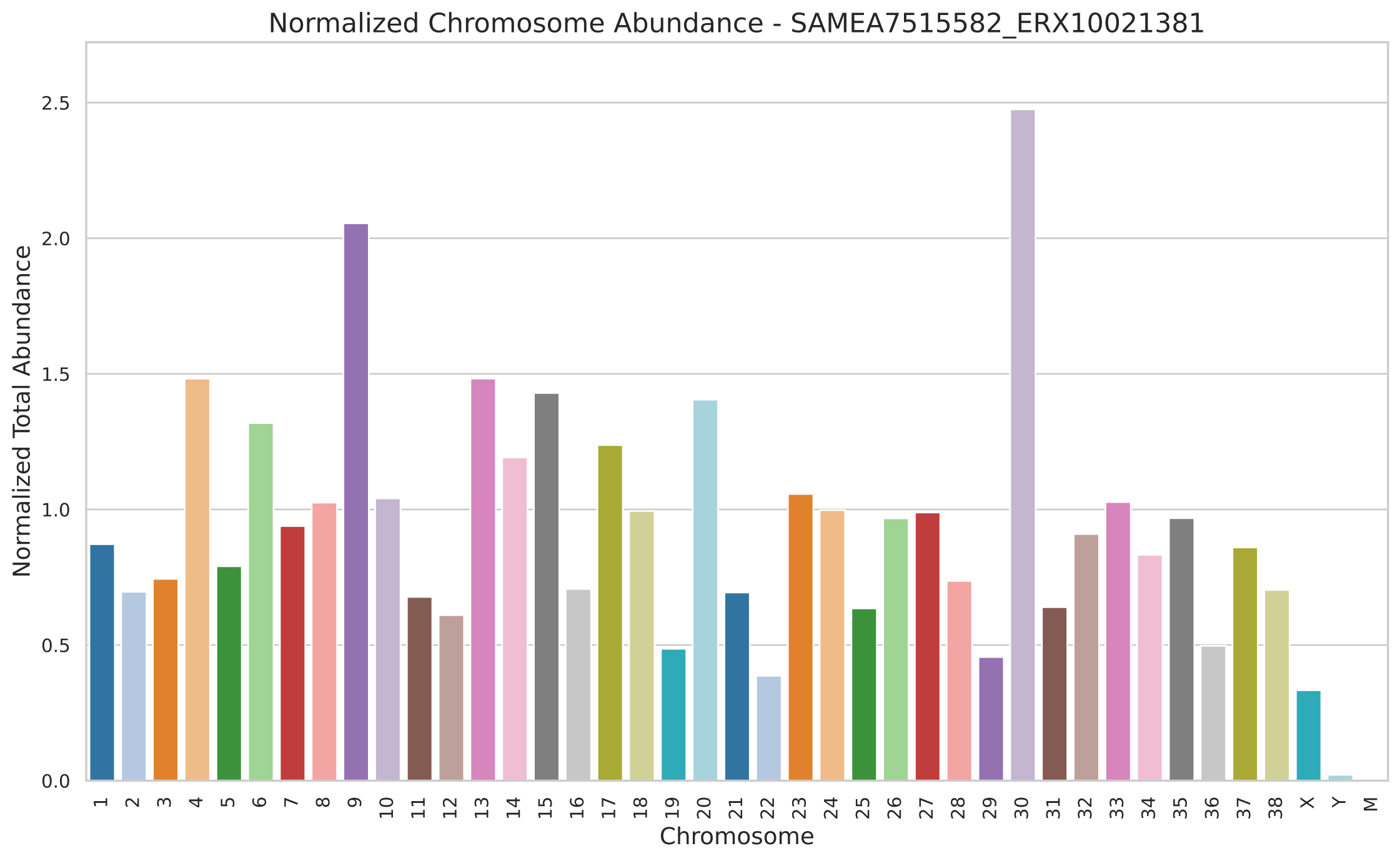

Normalized Chromosome Abundance - SAMEA110220223_ERX9466790
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
12.0
14.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

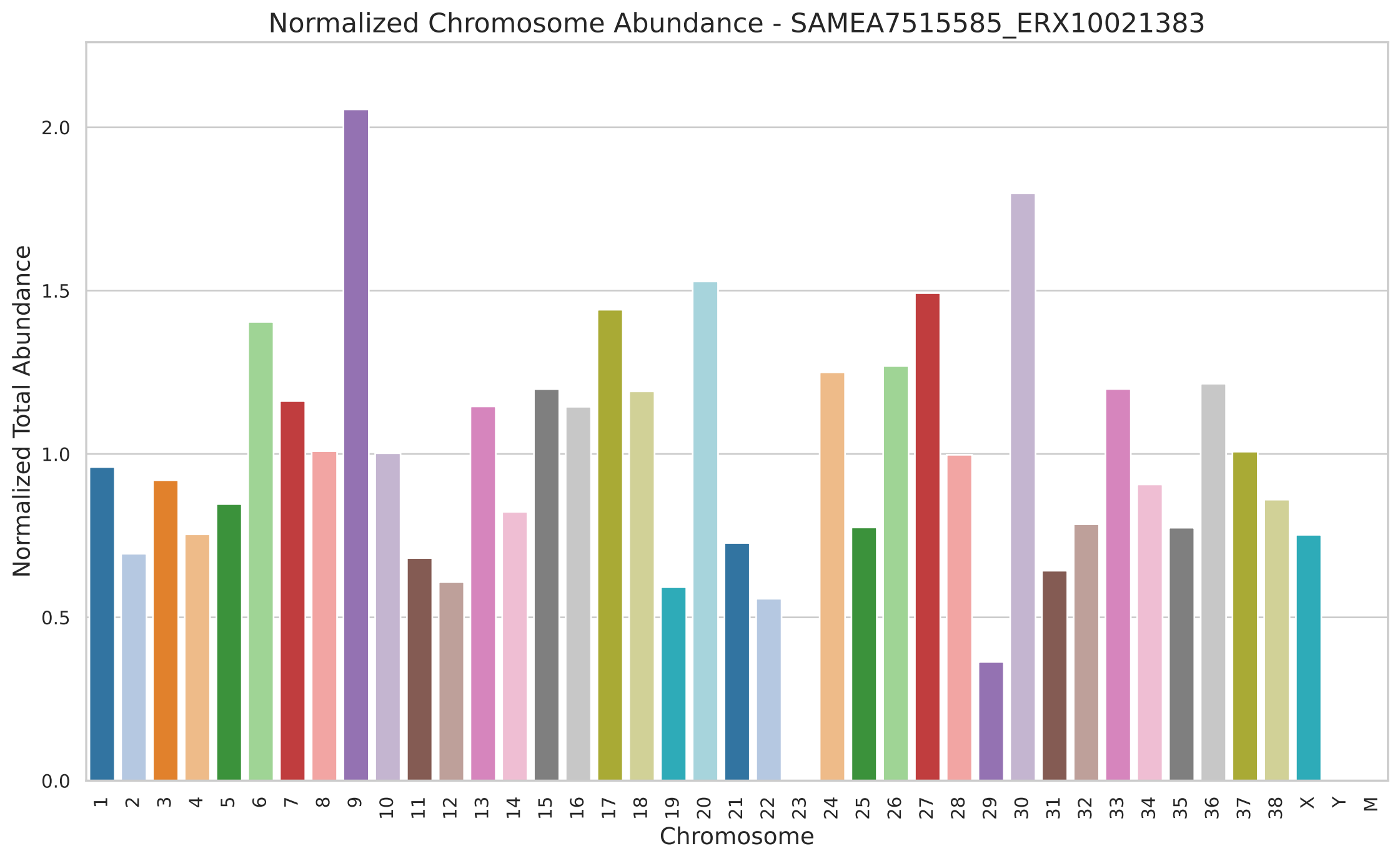

Normalized Chromosome Abundance - SAMEA7515509_ERX10021369
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

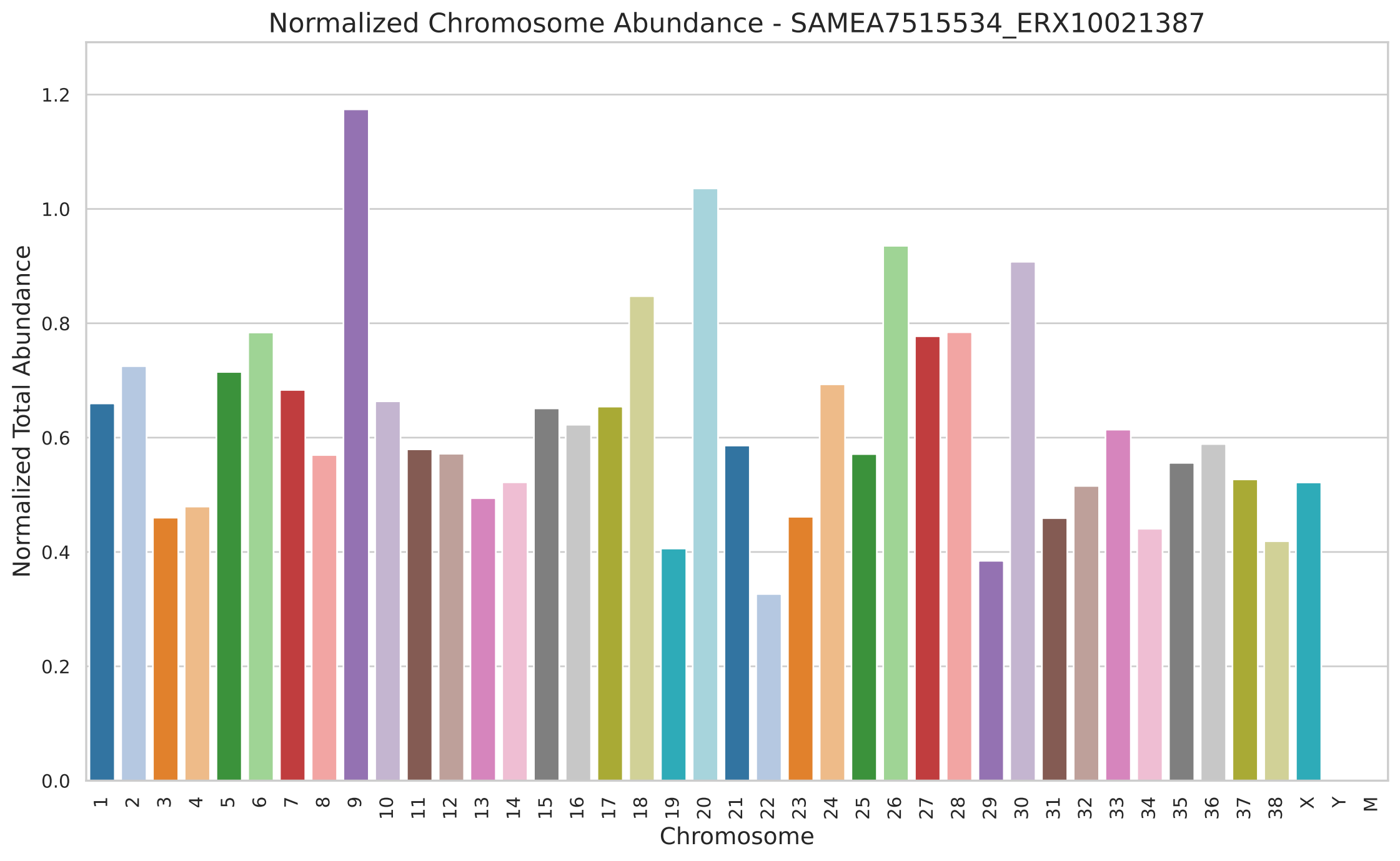

Normalized Chromosome Abundance - SAMEA7515422_ERX10021368
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

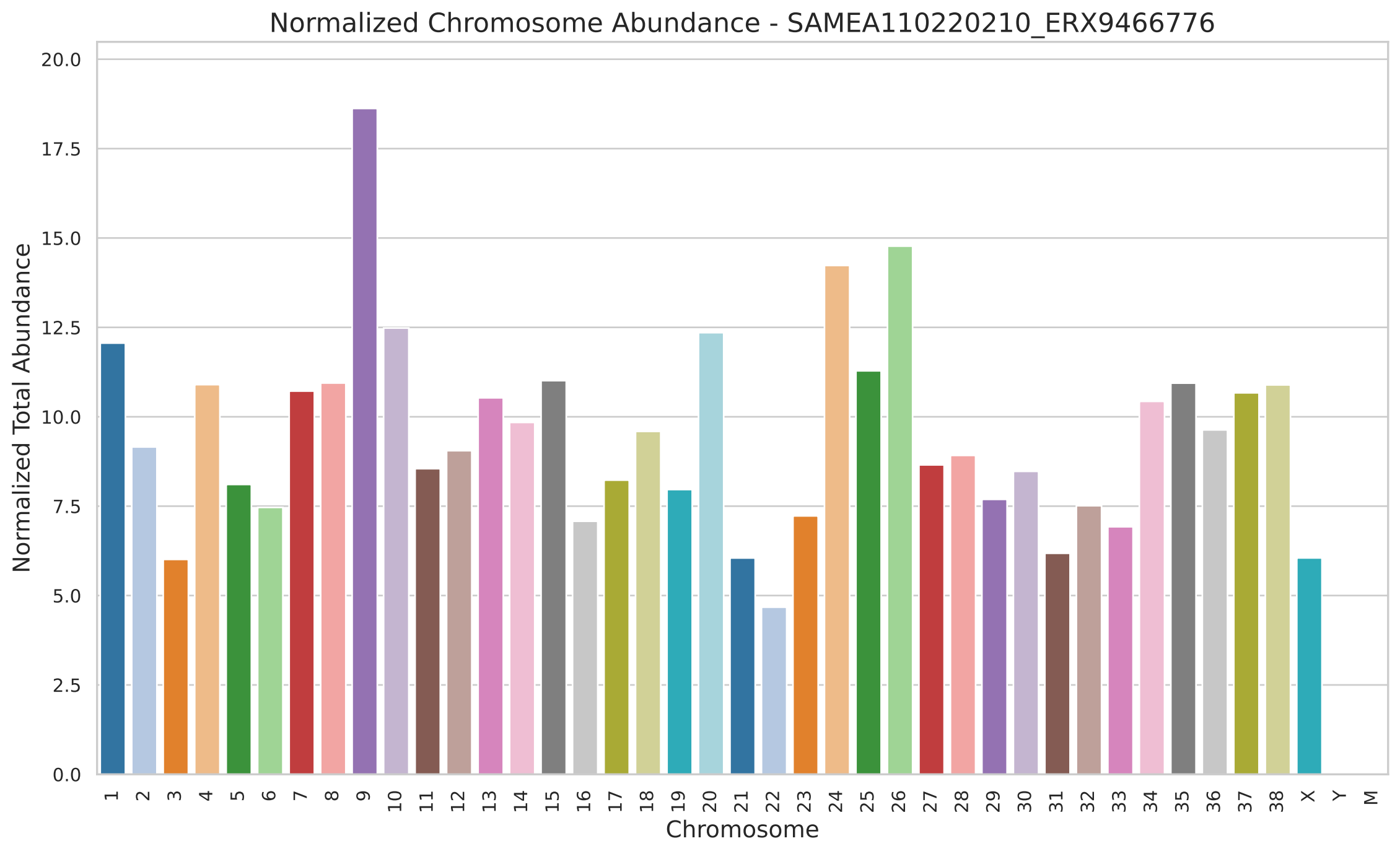

Normalized Chromosome Abundance - SAMEA7515427_ERX10021371
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 X Y M
Chromosome

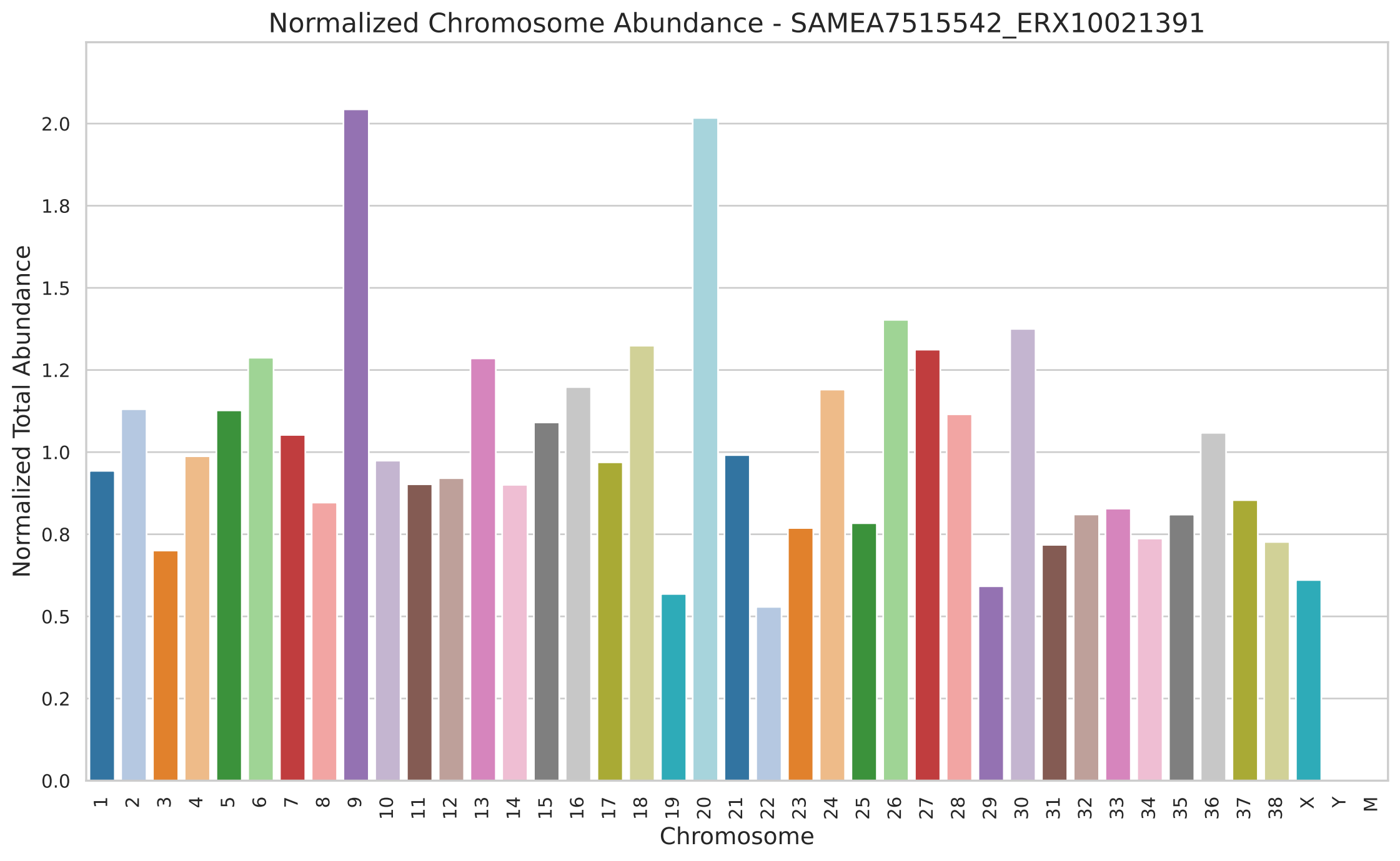

Normalized Chromosome Abundance - SAMEA7515538_ERX10021389
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

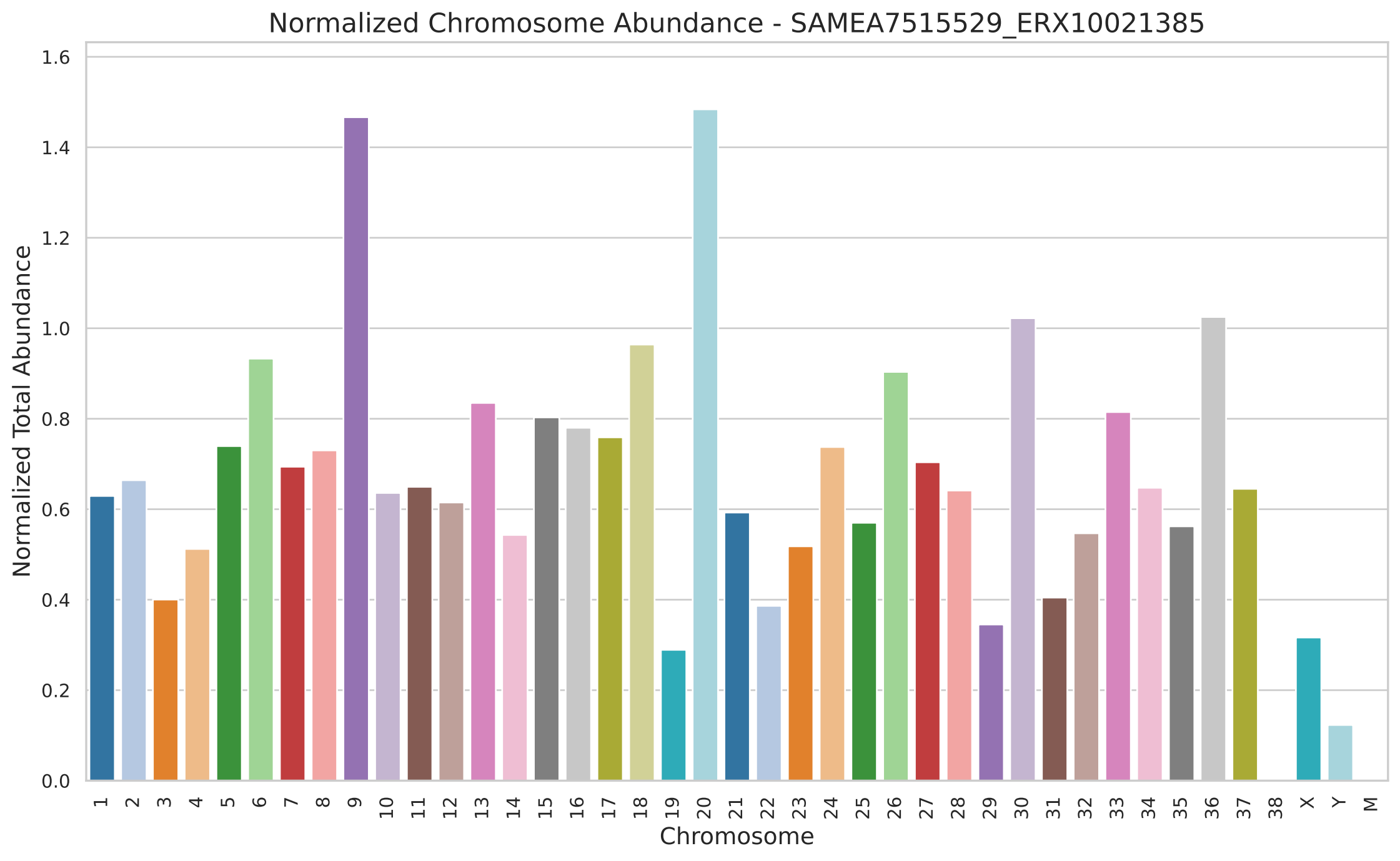

Normalized Chromosome Abundance - SAMEA7515582_ERX10021381
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

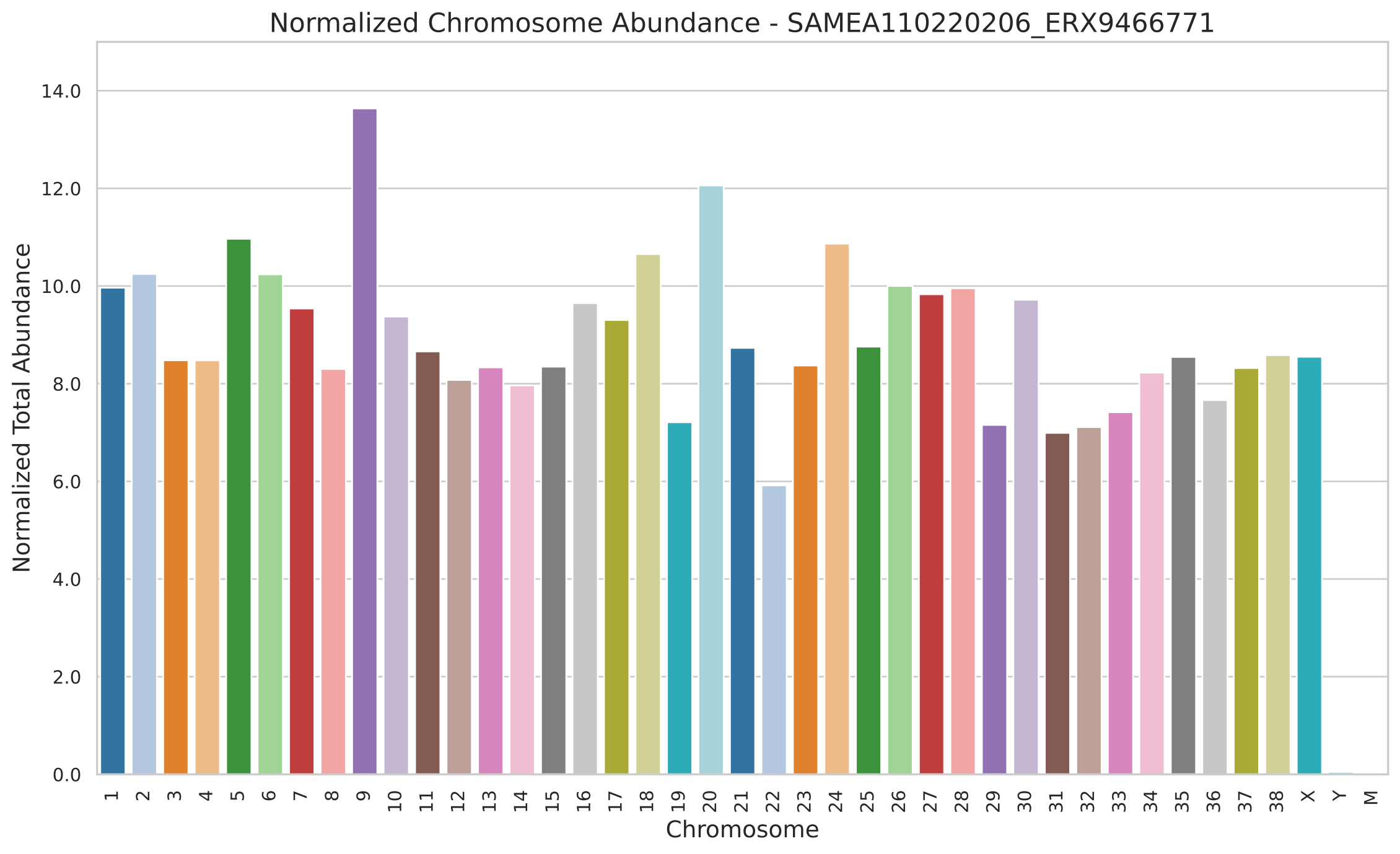

Normalized Chromosome Abundance - SAMEA7515585_ERX10021383
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

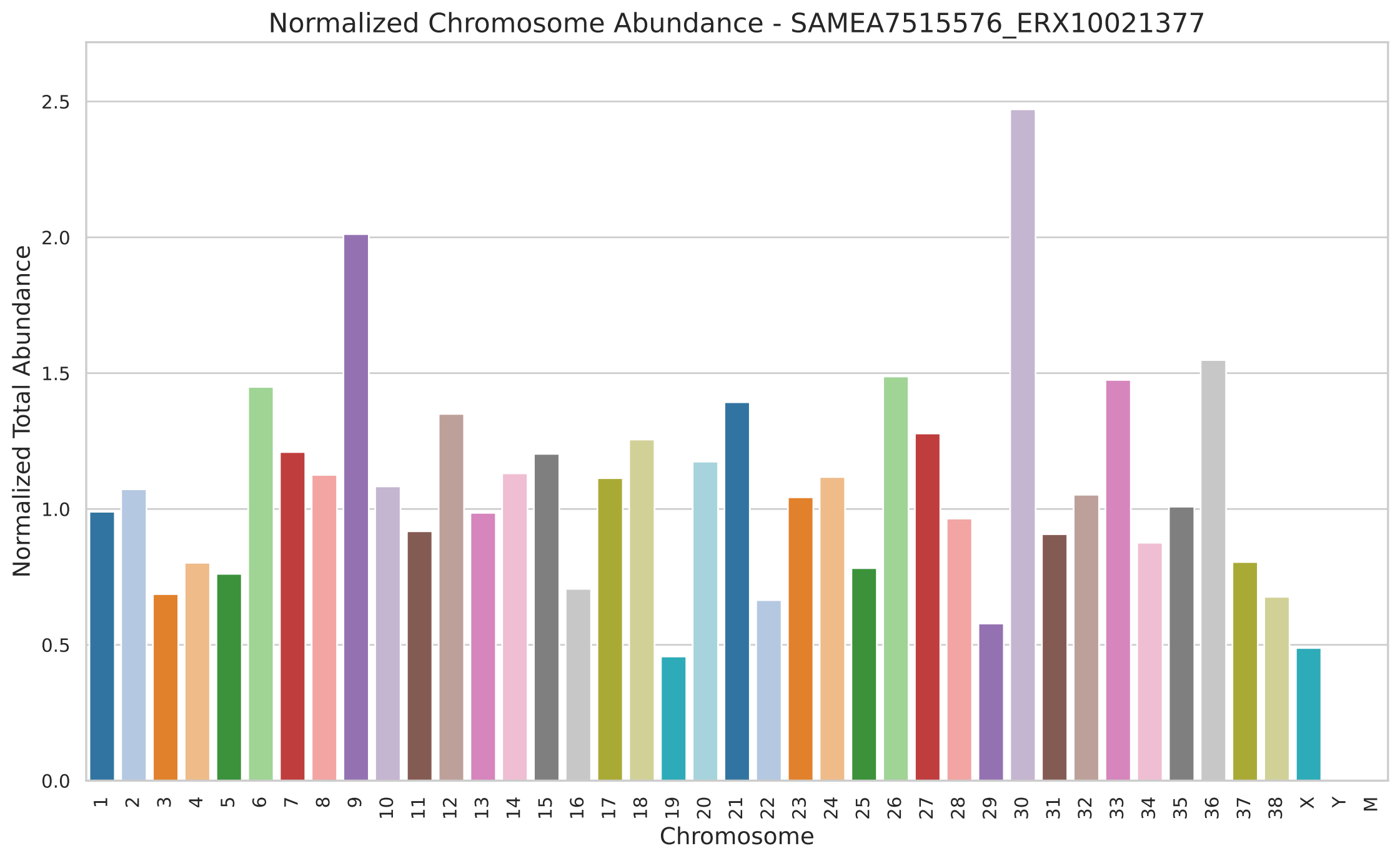

Normalized Chromosome Abundance - SAMEA7515534_ERX10021387
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

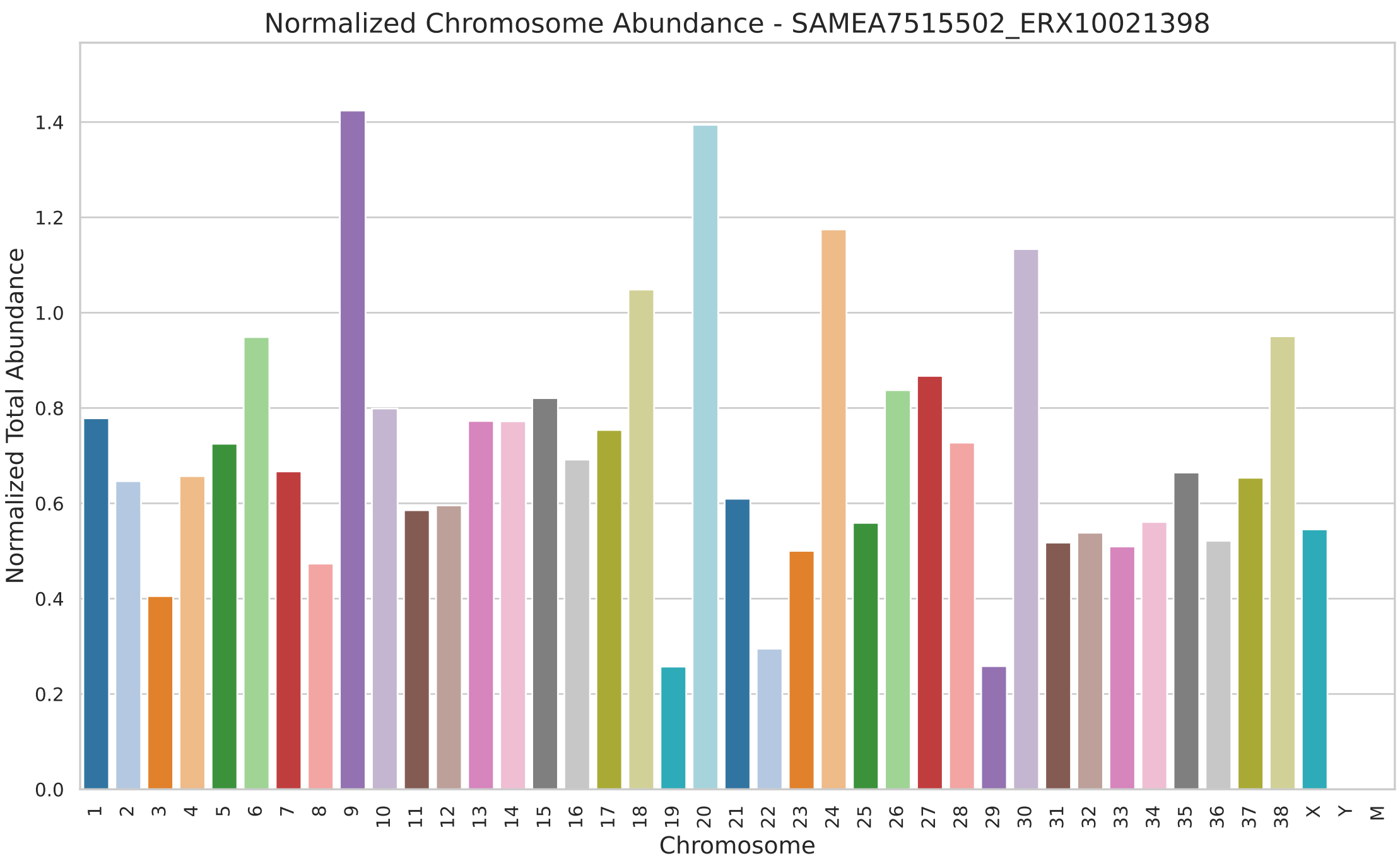

Normalized Chromosome Abundance - SAMEA110220210_ERX9466776
Normalized Total Abundance
20.0
17.5
15.0
12.5
10.0
7.5
5.0
2.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

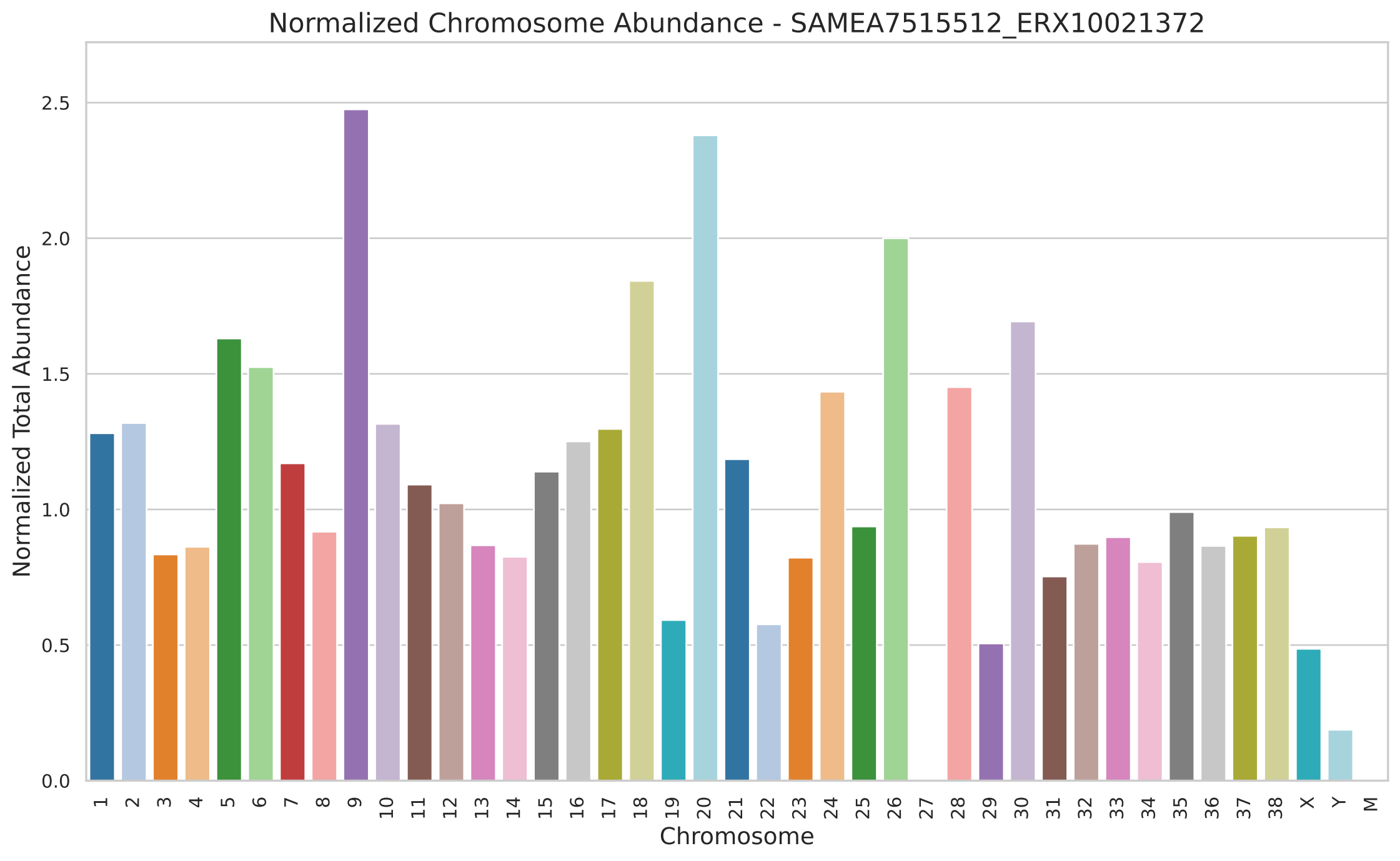

Normalized Chromosome Abundance - SAMEA7515542_ERX10021391
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

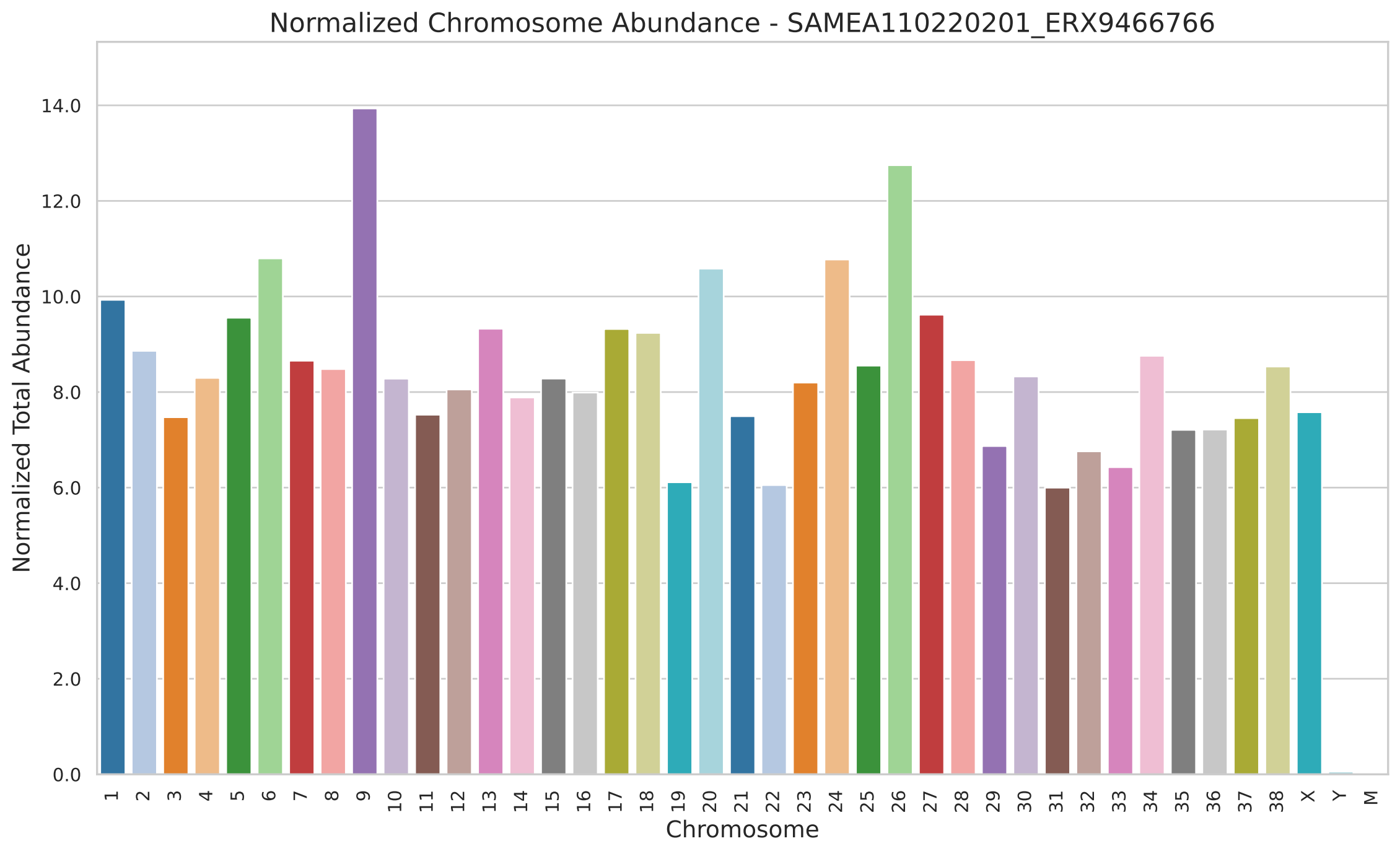

Normalized Chromosome Abundance - SAMEA7515529_ERX10021385
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

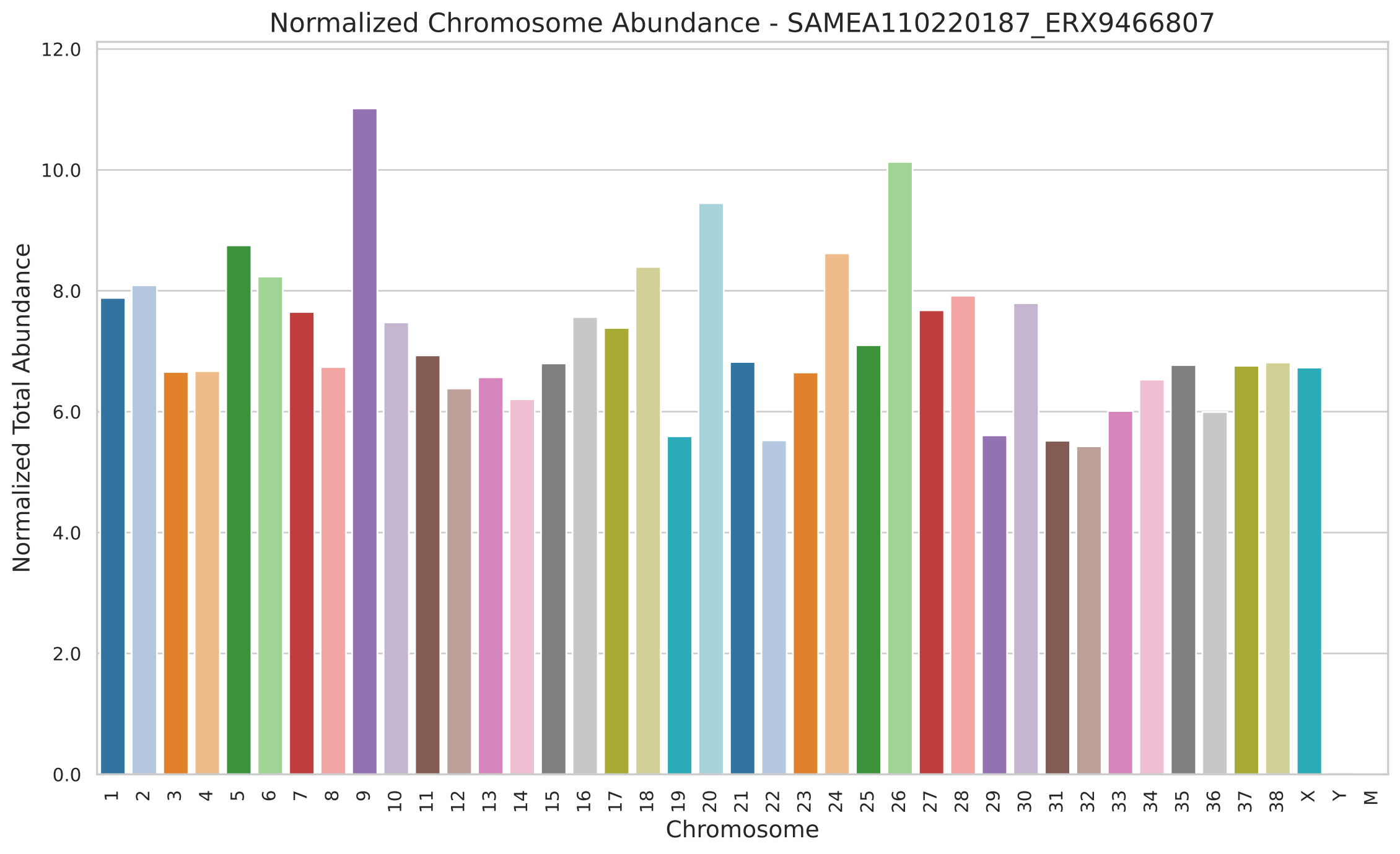

Normalized Chromosome Abundance - SAMEA110220206_ERX9466771
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
12.0
14.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

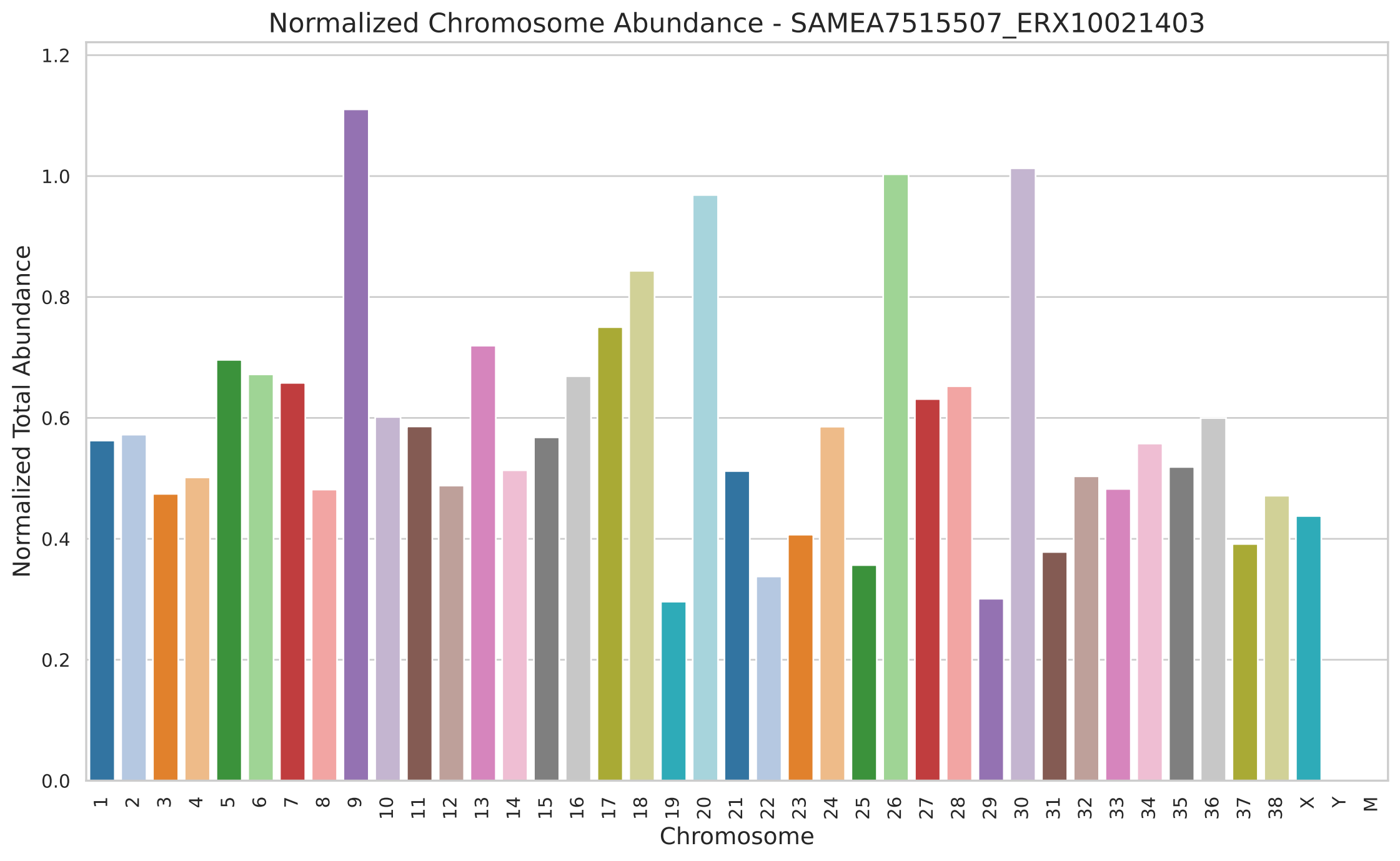

Normalized Chromosome Abundance - SAMEA7515576_ERX10021377
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

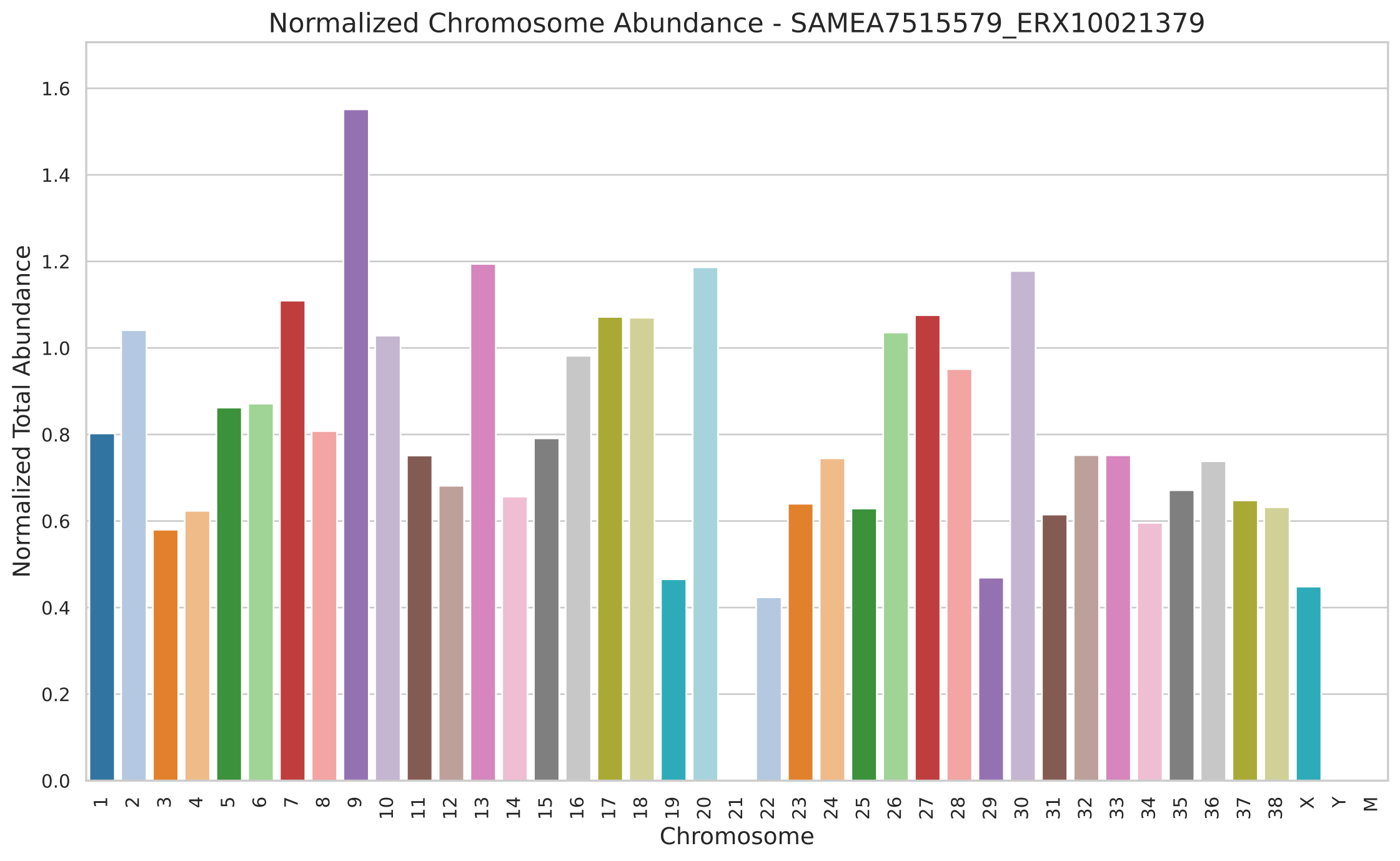

Normalized Chromosome Abundance - SAMEA7515502_ERX10021398
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 X Y M
Chromosome

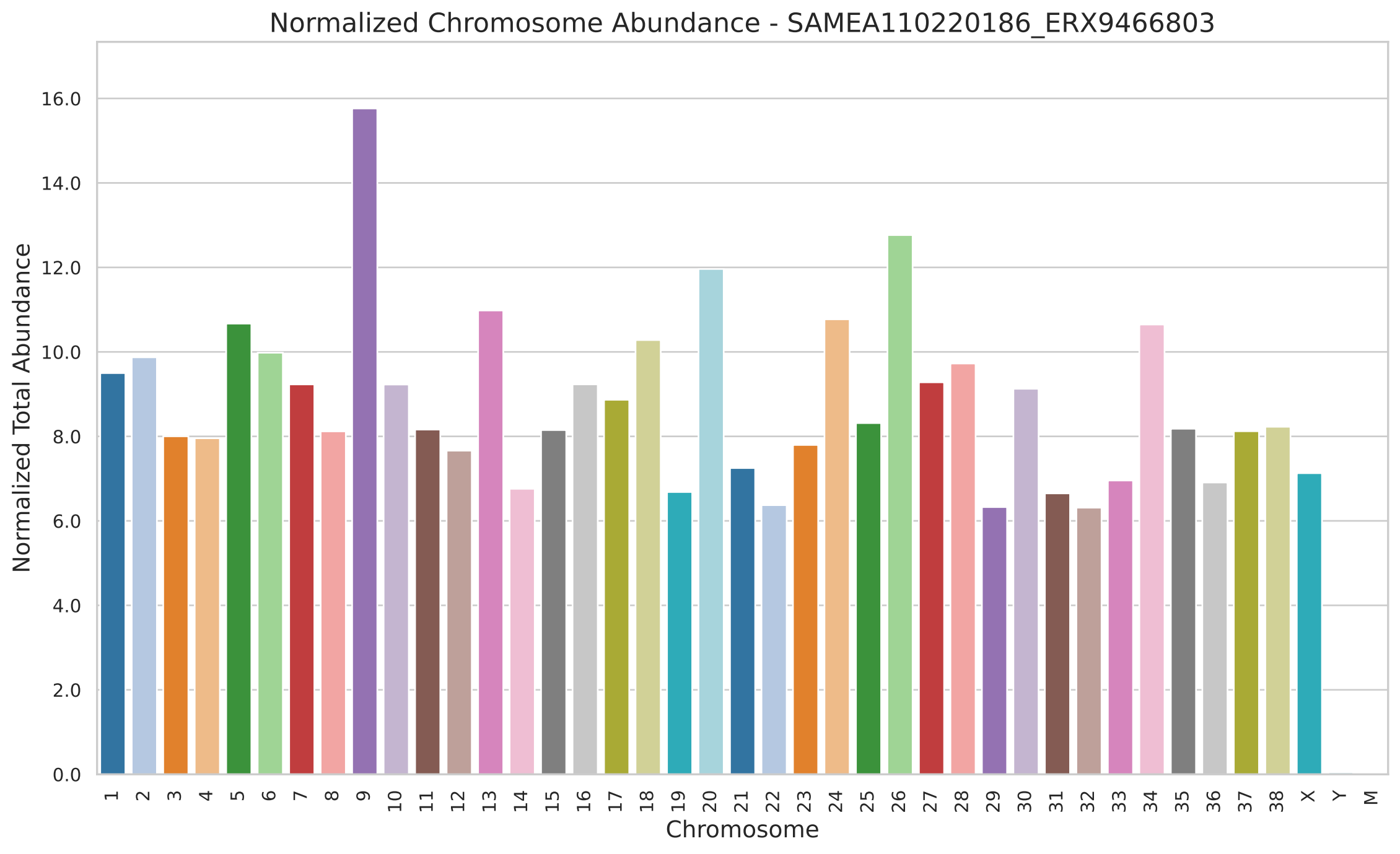

Normalized Chromosome Abundance - SAMEA7515512_ERX10021372
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

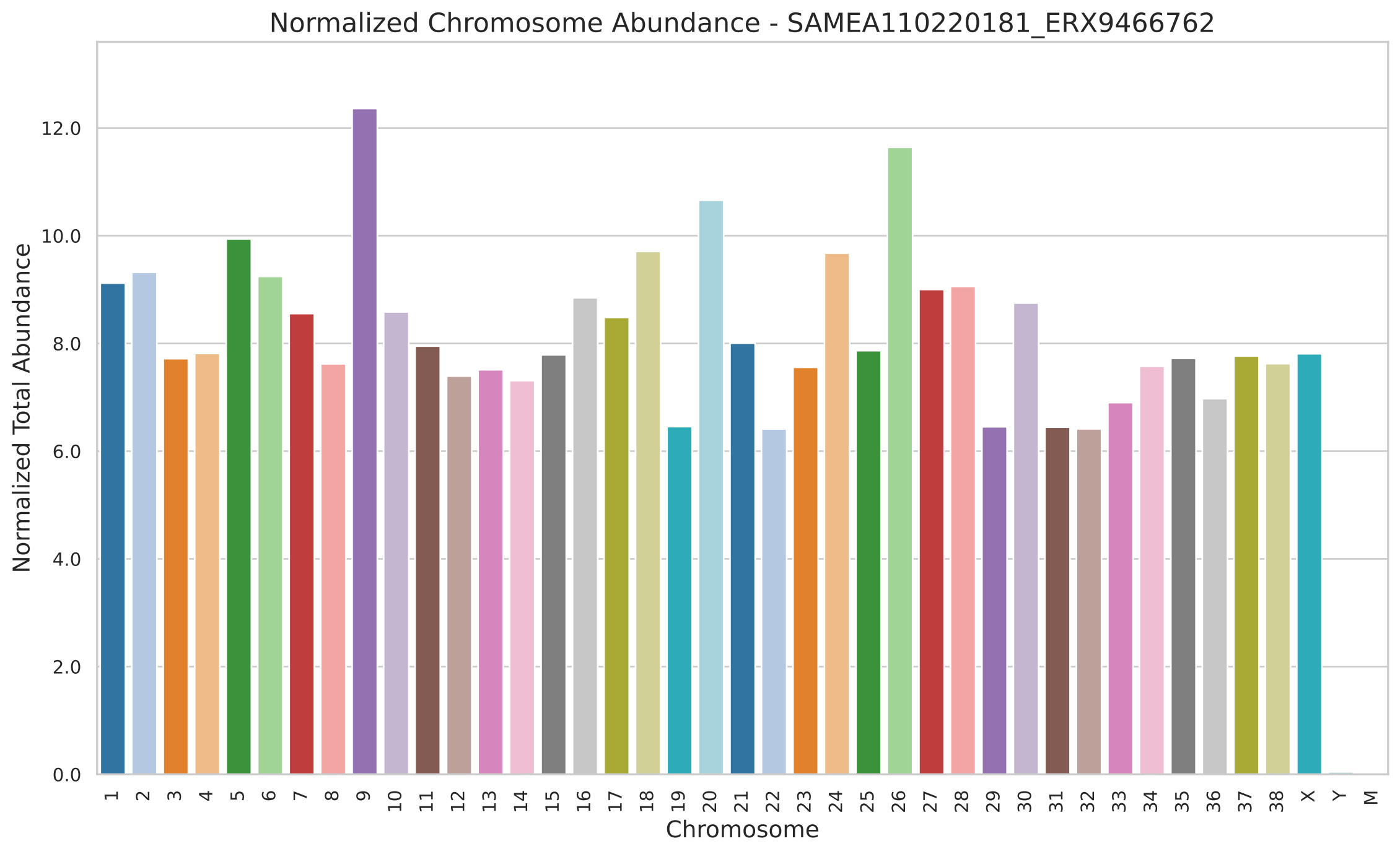

Normalized Chromosome Abundance - SAMEA110220201_ERX9466766
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
12.0
14.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

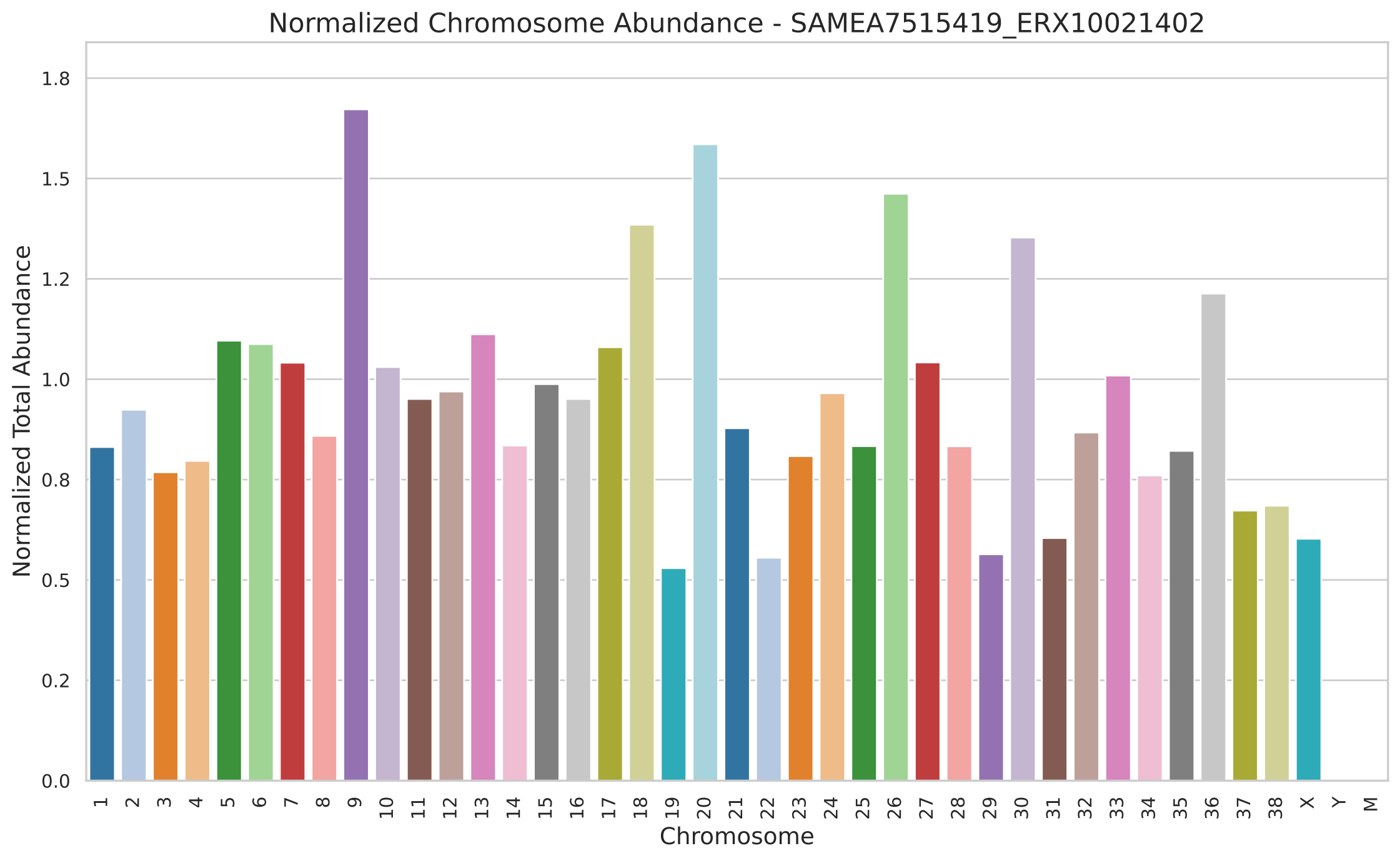

Normalized Chromosome Abundance - SAMEA110220187_ERX9466807
Normalized Total Abundance
12.0
10.0
8.0
6.0
4.0
2.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

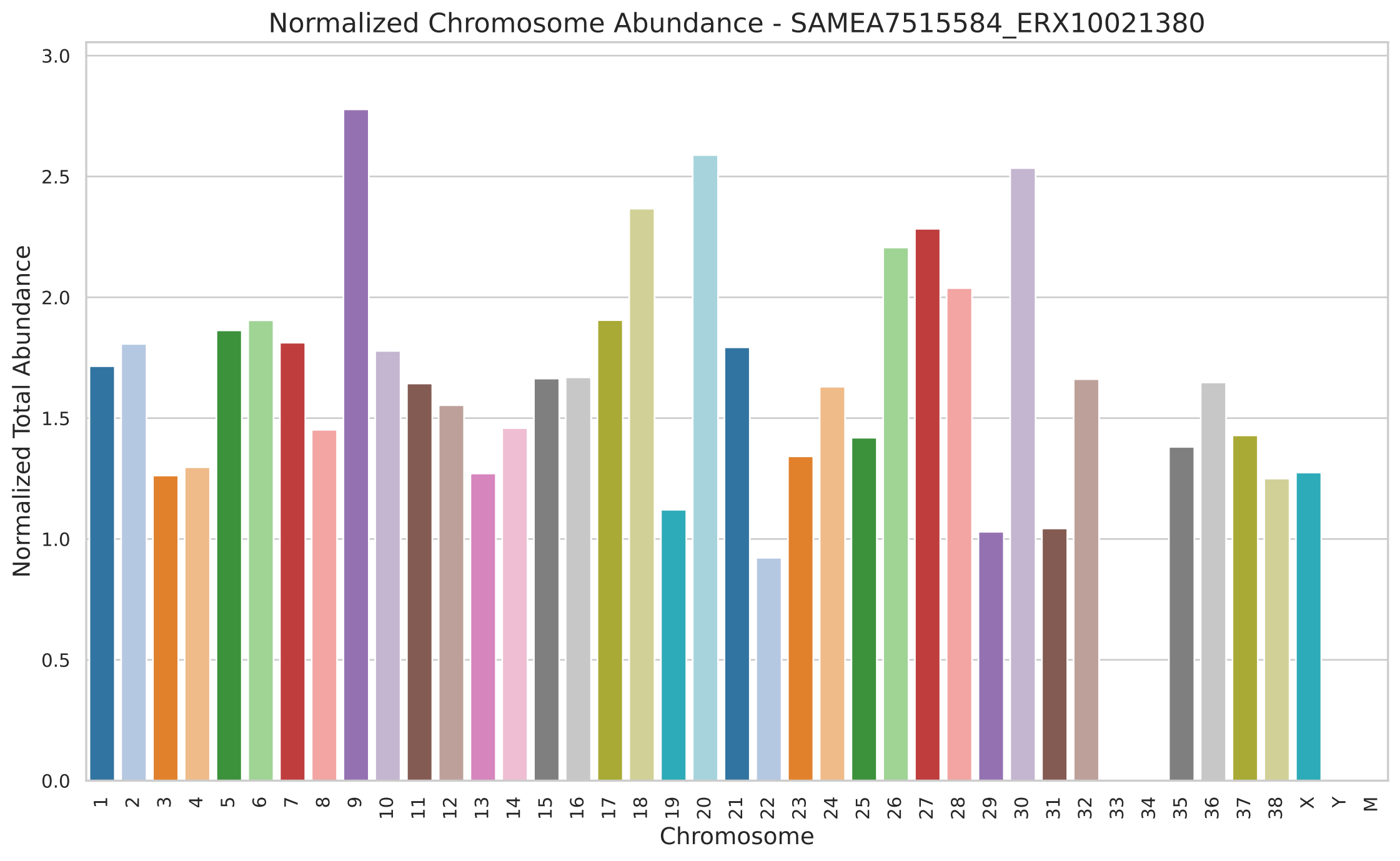

Normalized Chromosome Abundance - SAMEA7515507_ERX10021403
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

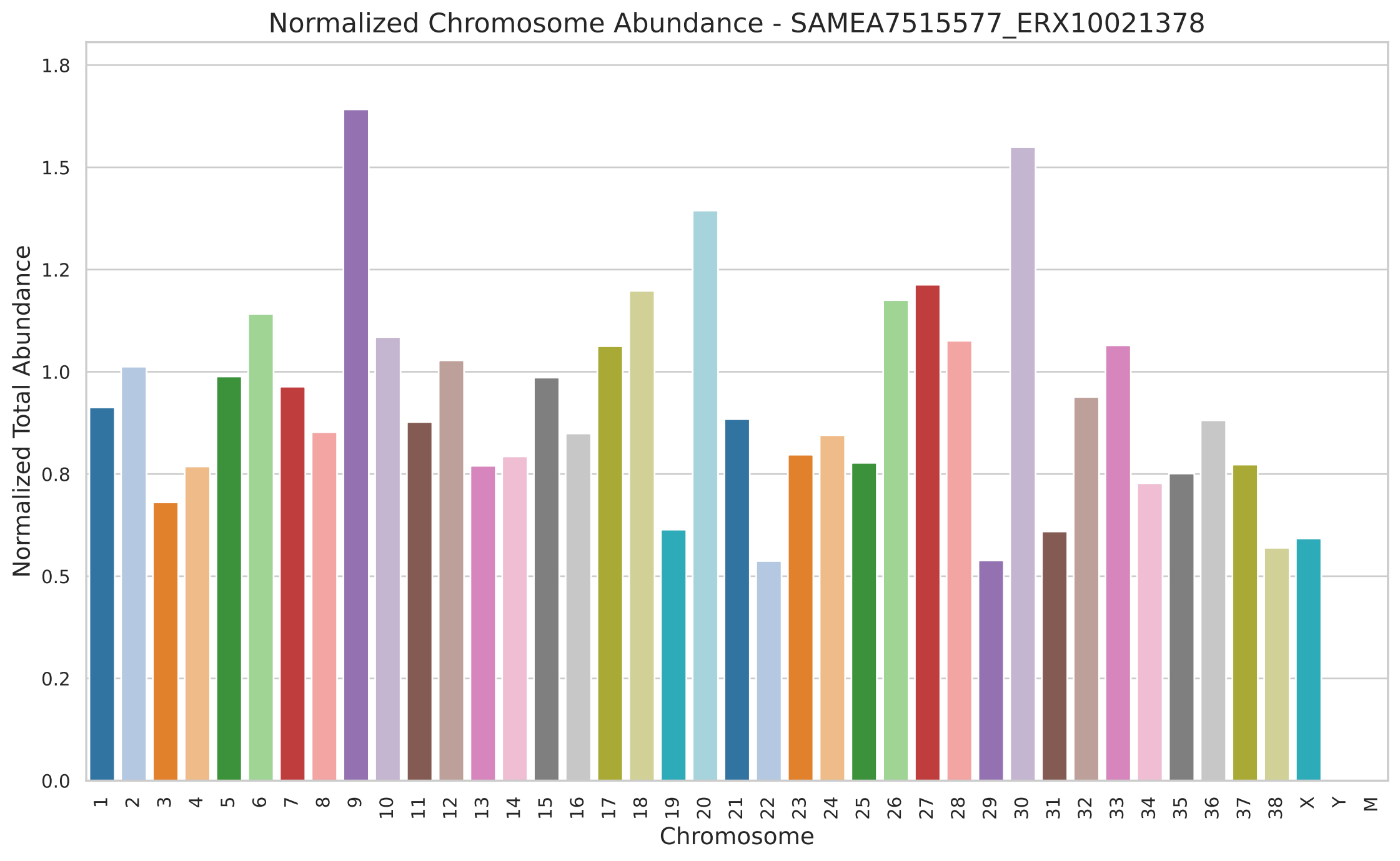

Normalized Chromosome Abundance - SAMEA7515579_ERX10021379
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

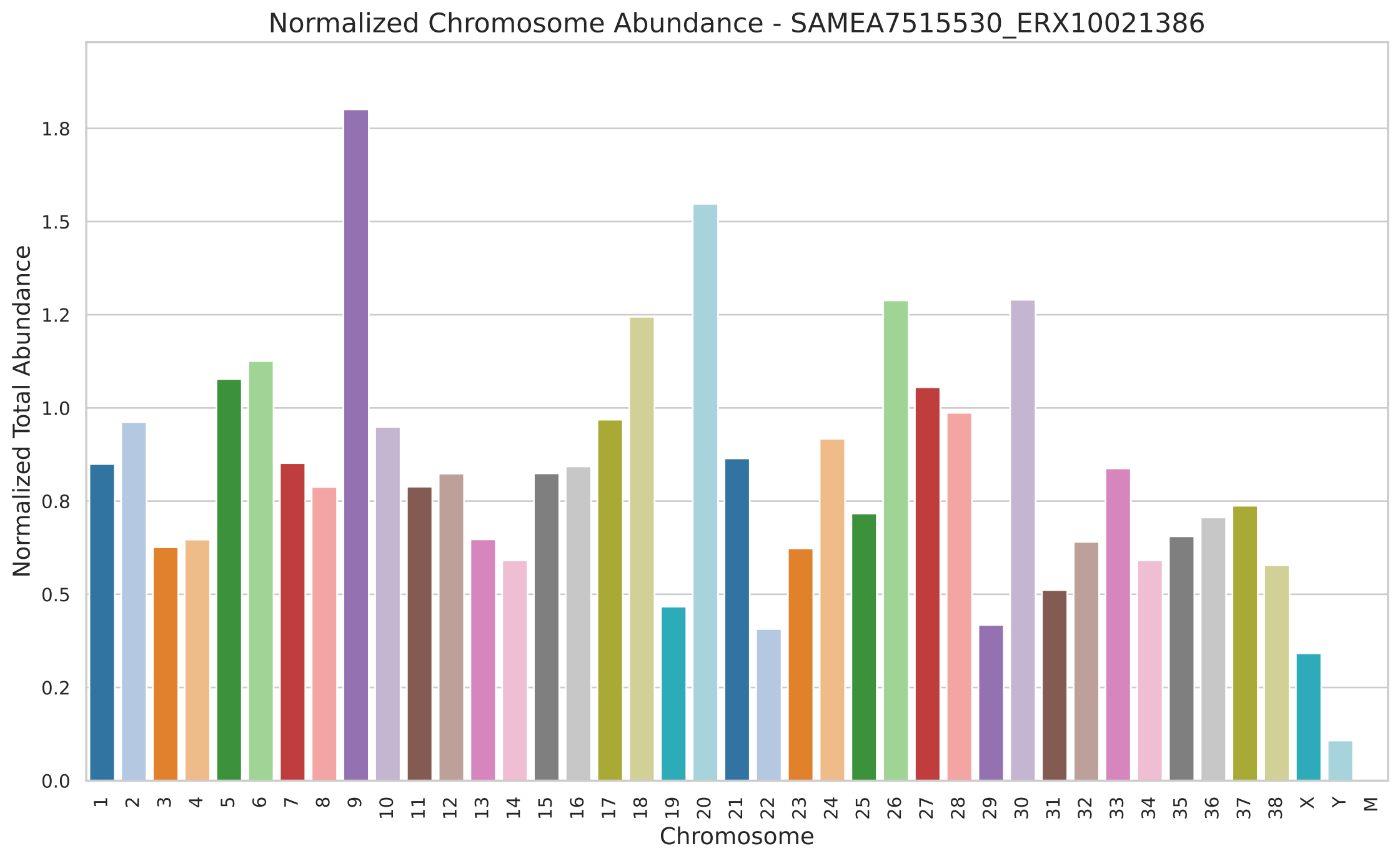

Normalized Chromosome Abundance - SAMEA110220186_ERX9466803
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
12.0
14.0
16.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

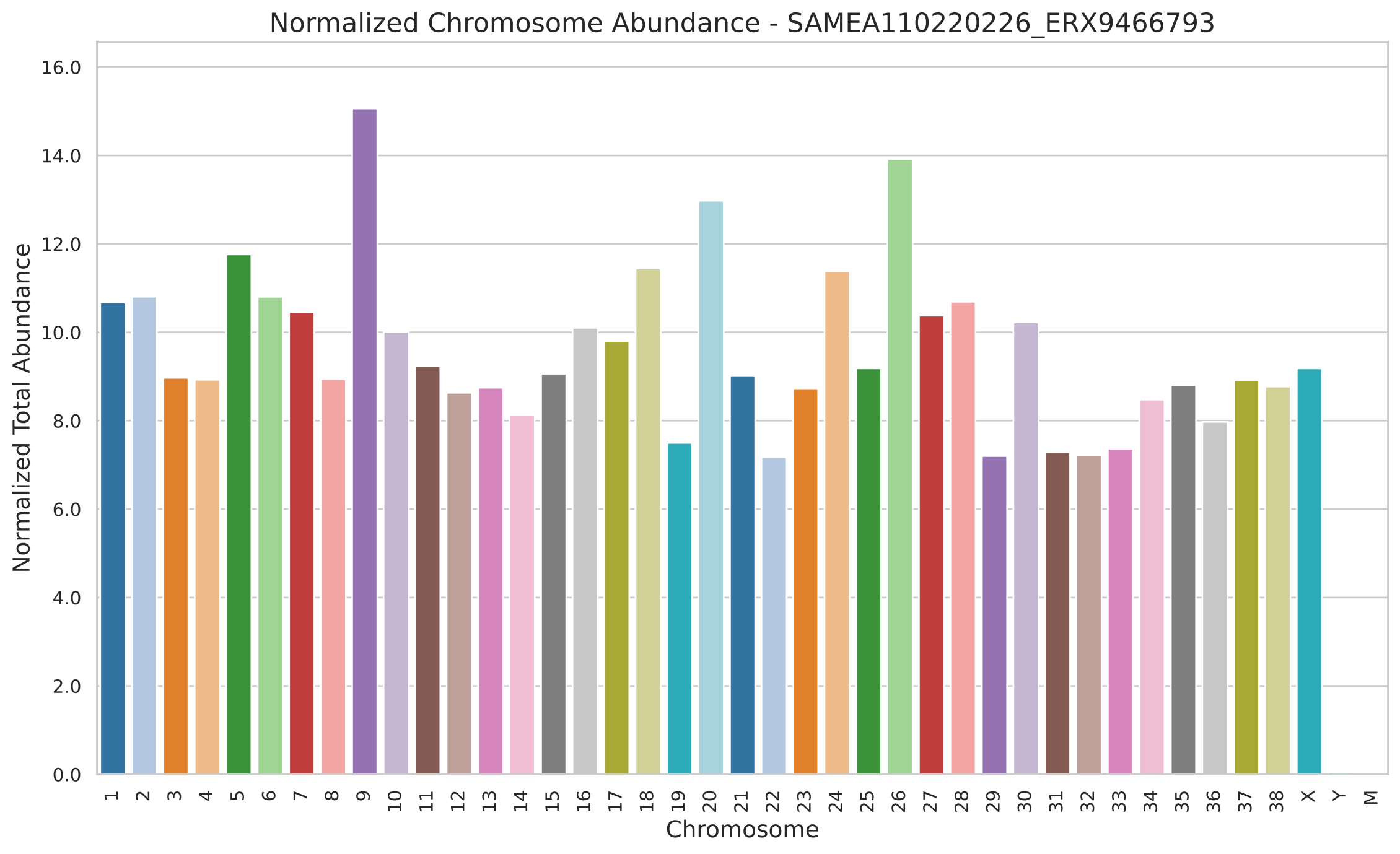

Normalized Chromosome Abundance - SAMEA110220181_ERX9466762
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
12.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

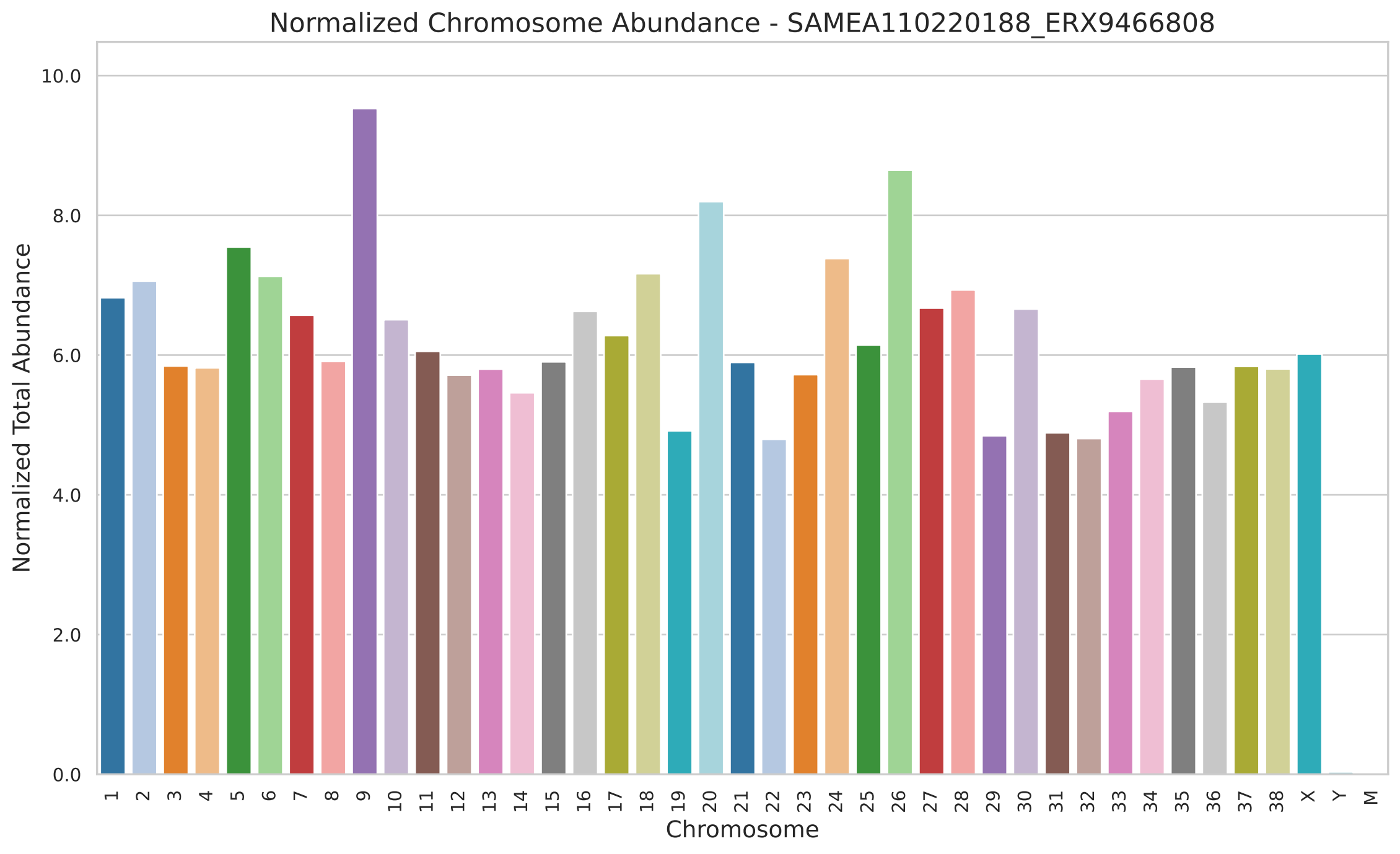

Normalized Chromosome Abundance - SAMEA7515419_ERX10021402
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

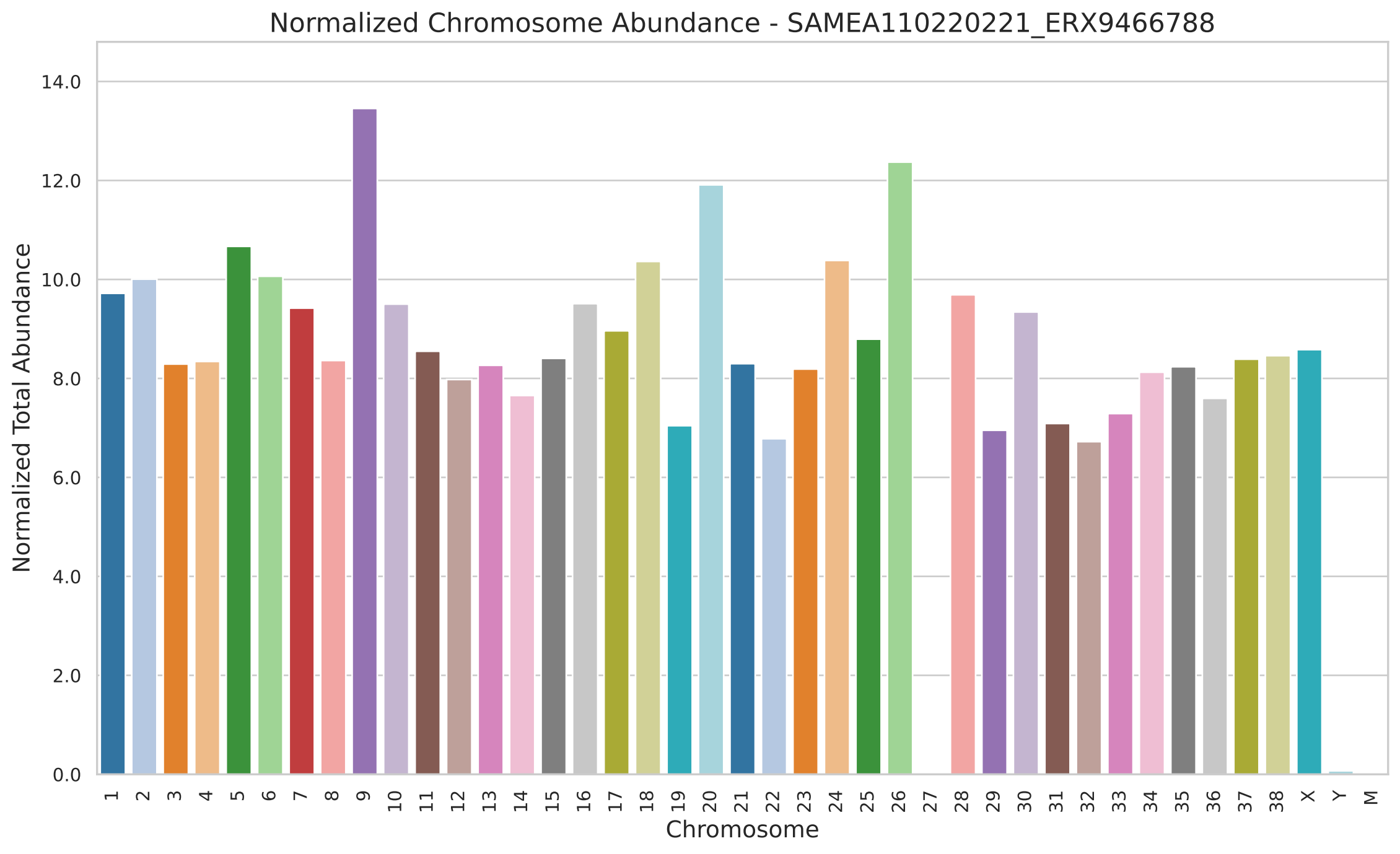

Normalized Chromosome Abundance - SAMEA7515584_ERX10021380
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

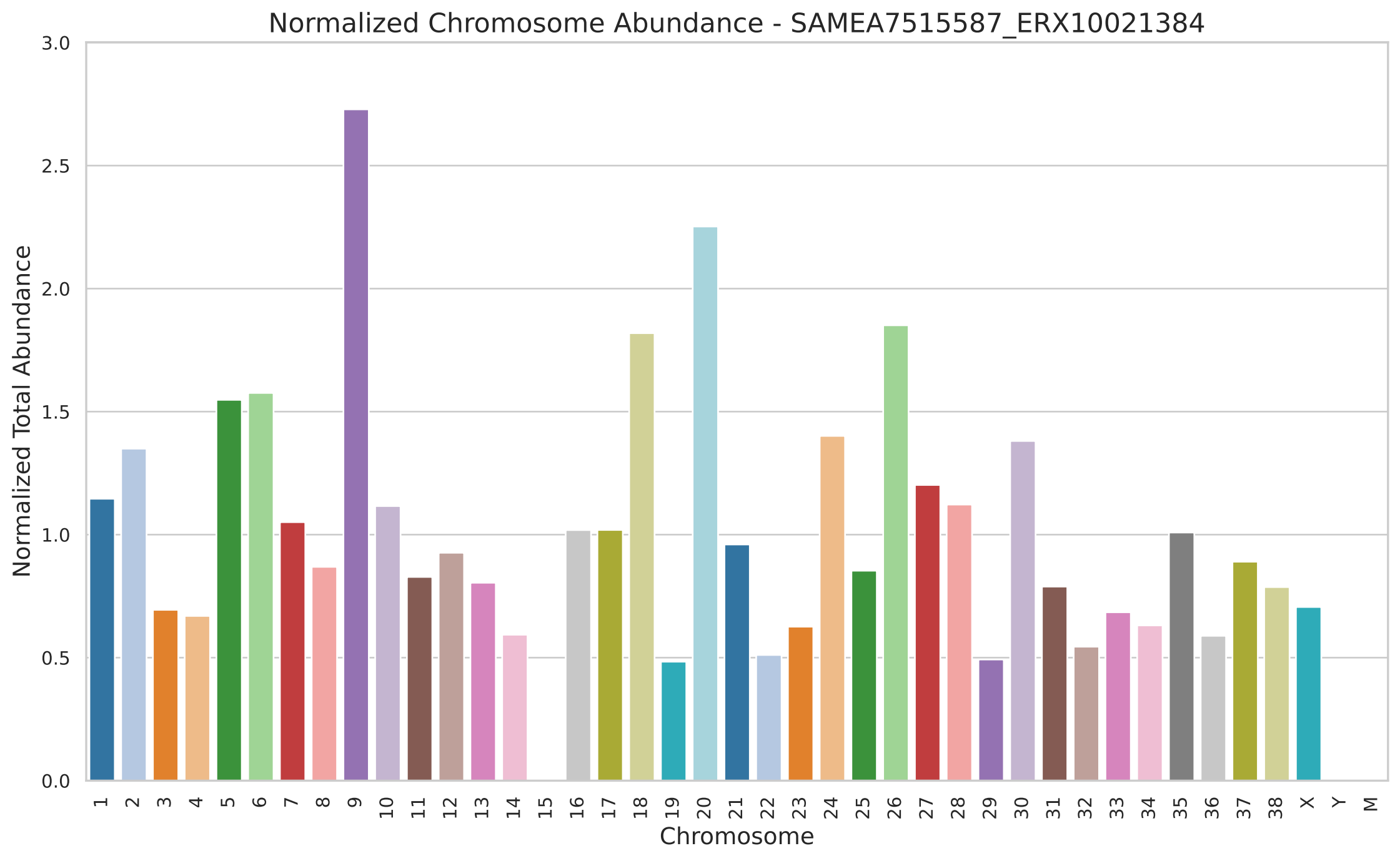

Normalized Chromosome Abundance - SAMEA7515577_ERX10021378
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

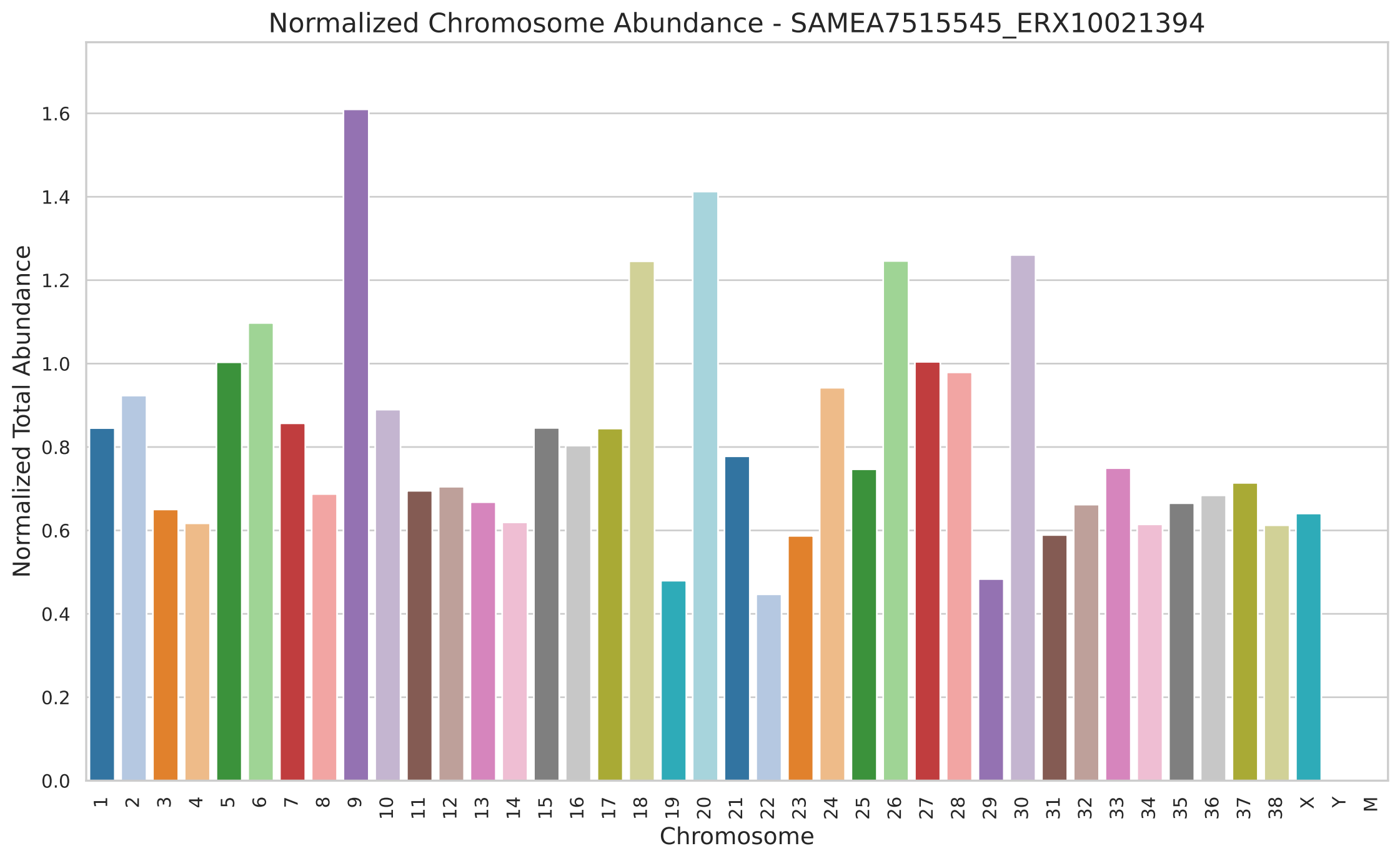

Normalized Chromosome Abundance - SAMEA7515530_ERX10021386
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

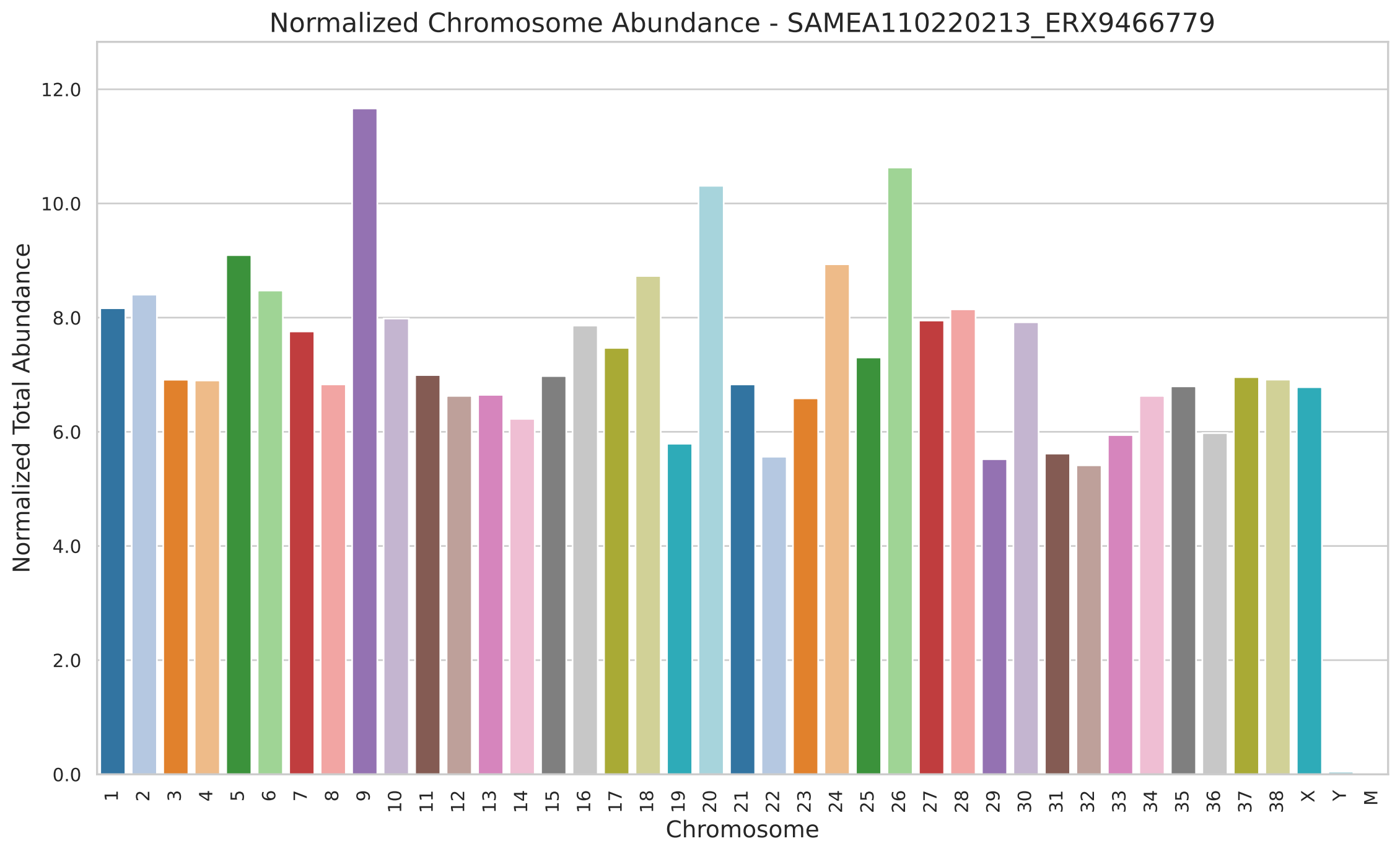

Normalized Chromosome Abundance - SAMEA110220226_ERX9466793
Normalized Total Abundance
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

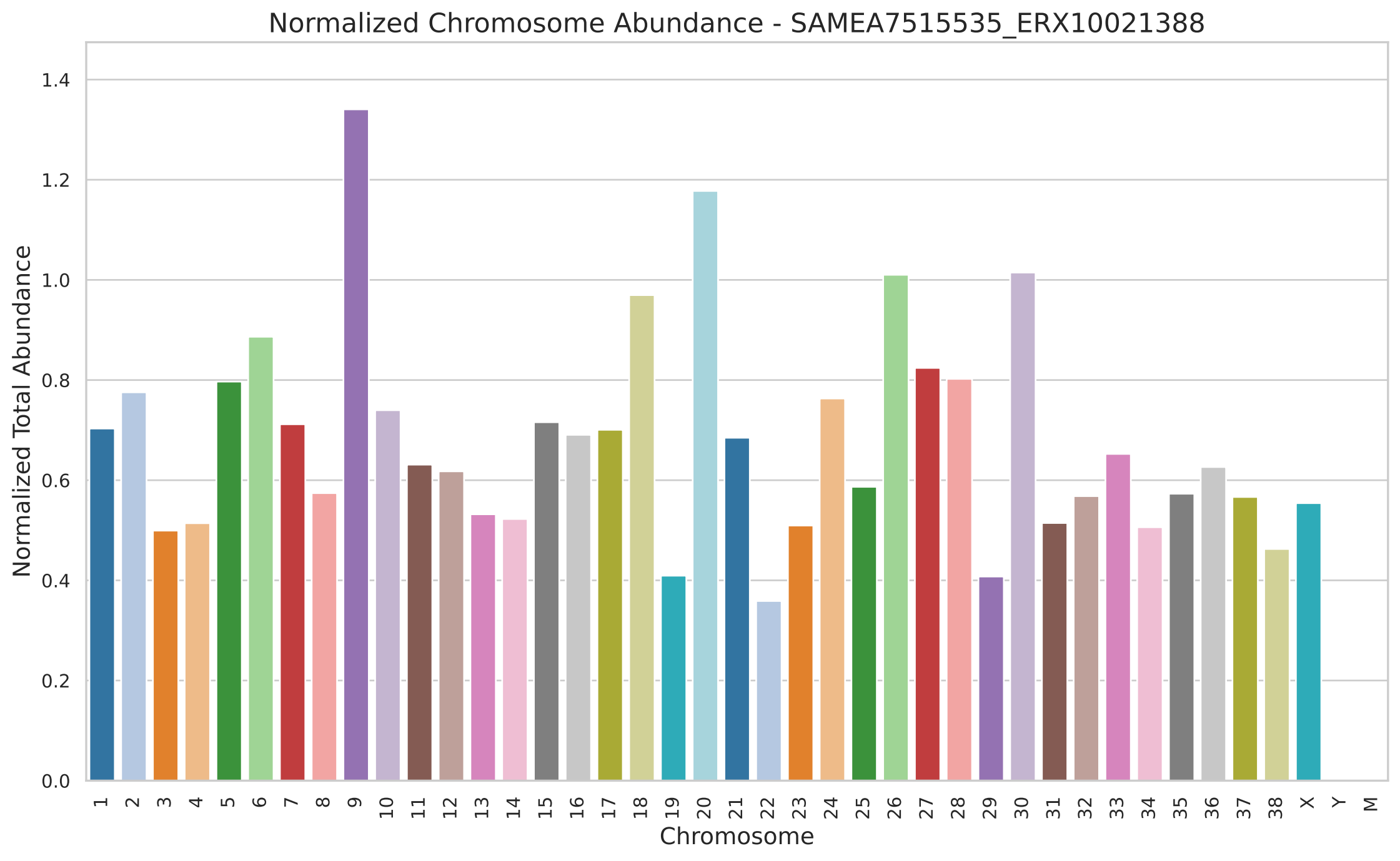

Normalized Chromosome Abundance - SAMEA110220188_ERX9466808
Normalized Total Abundance
10.0
8.0
6.0
4.0
2.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

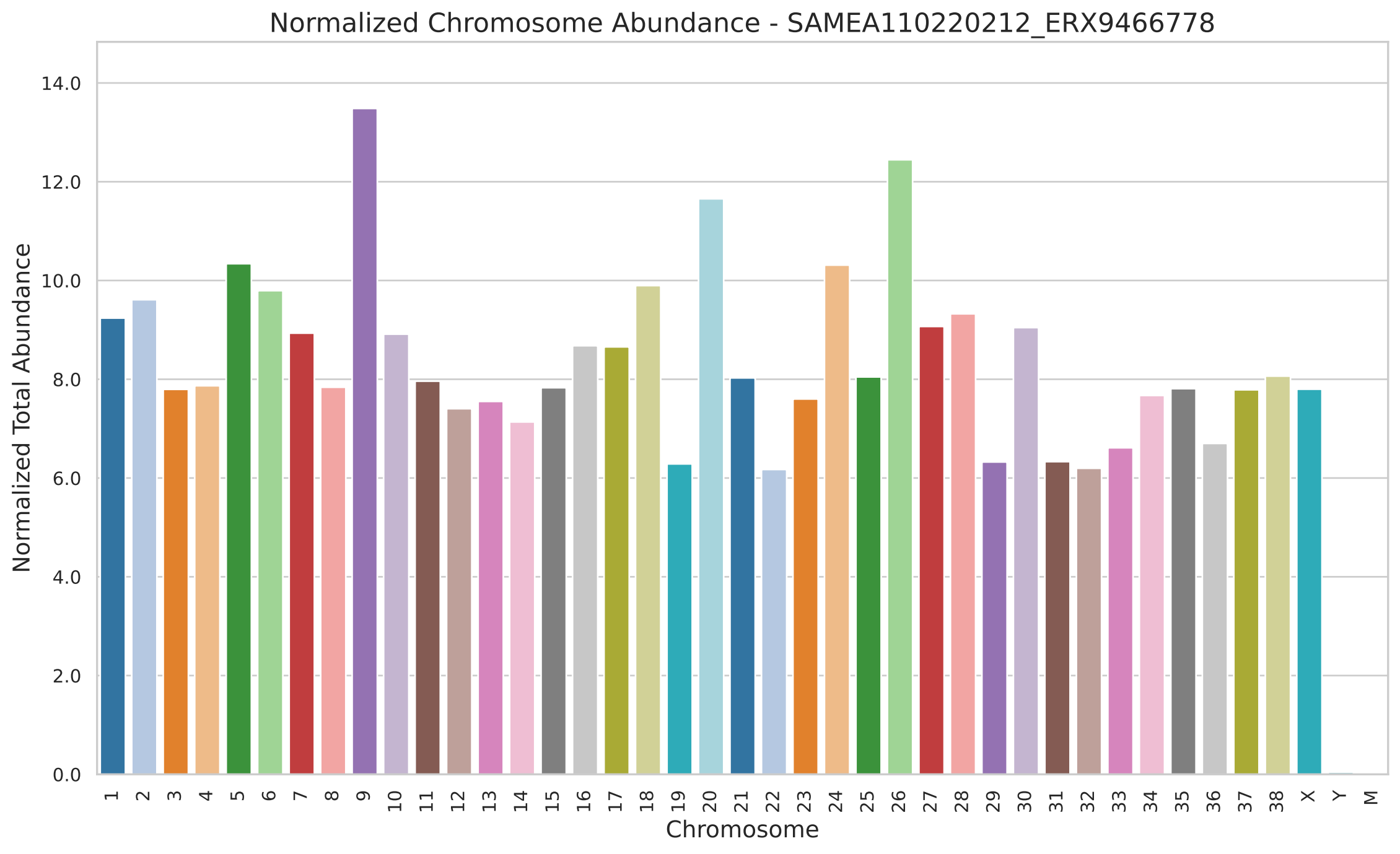

Normalized Chromosome Abundance - SAMEA110220221_ERX9466788
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
12.0
14.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

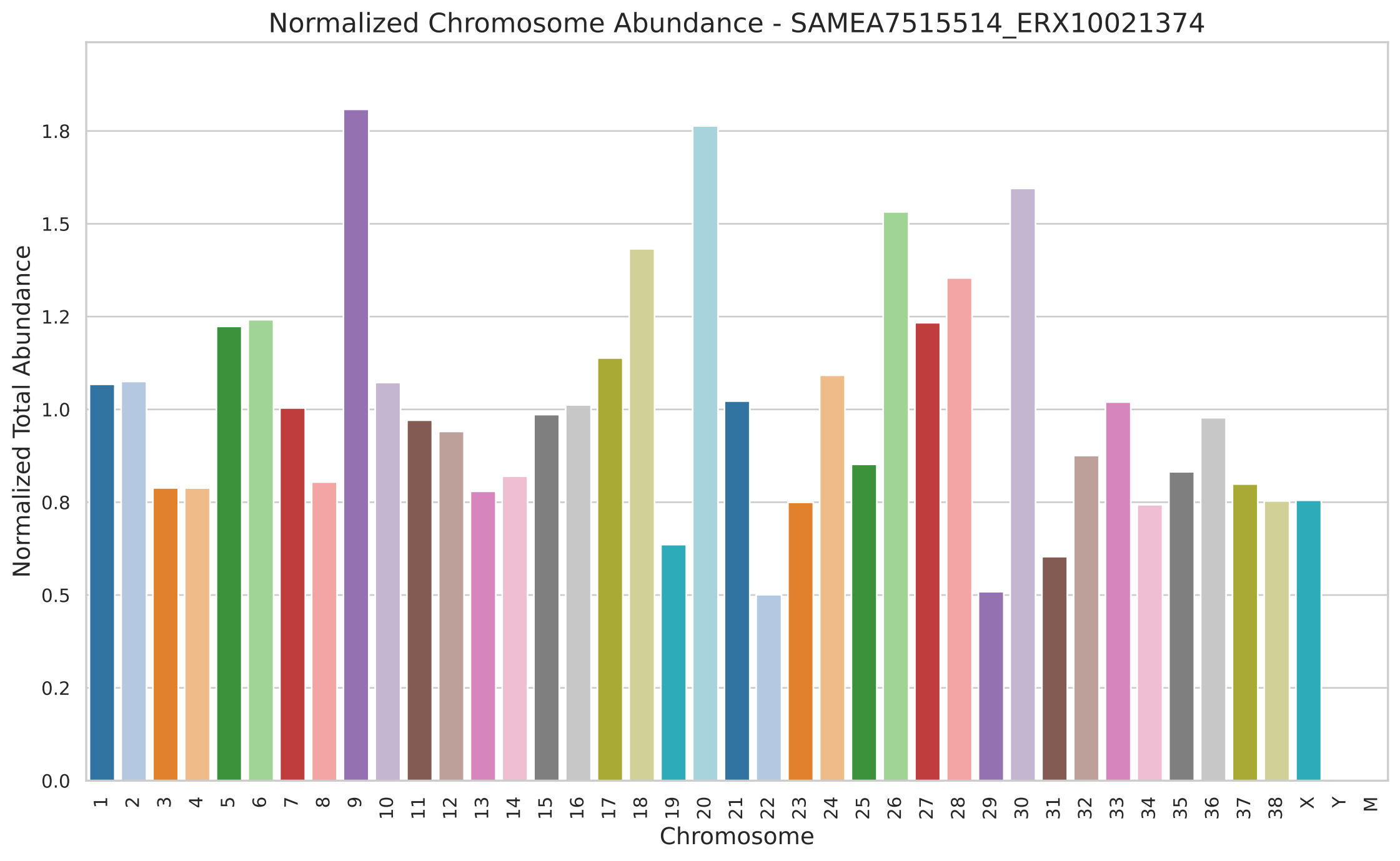

Normalized Chromosome Abundance - SAMEA7515587_ERX10021384
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

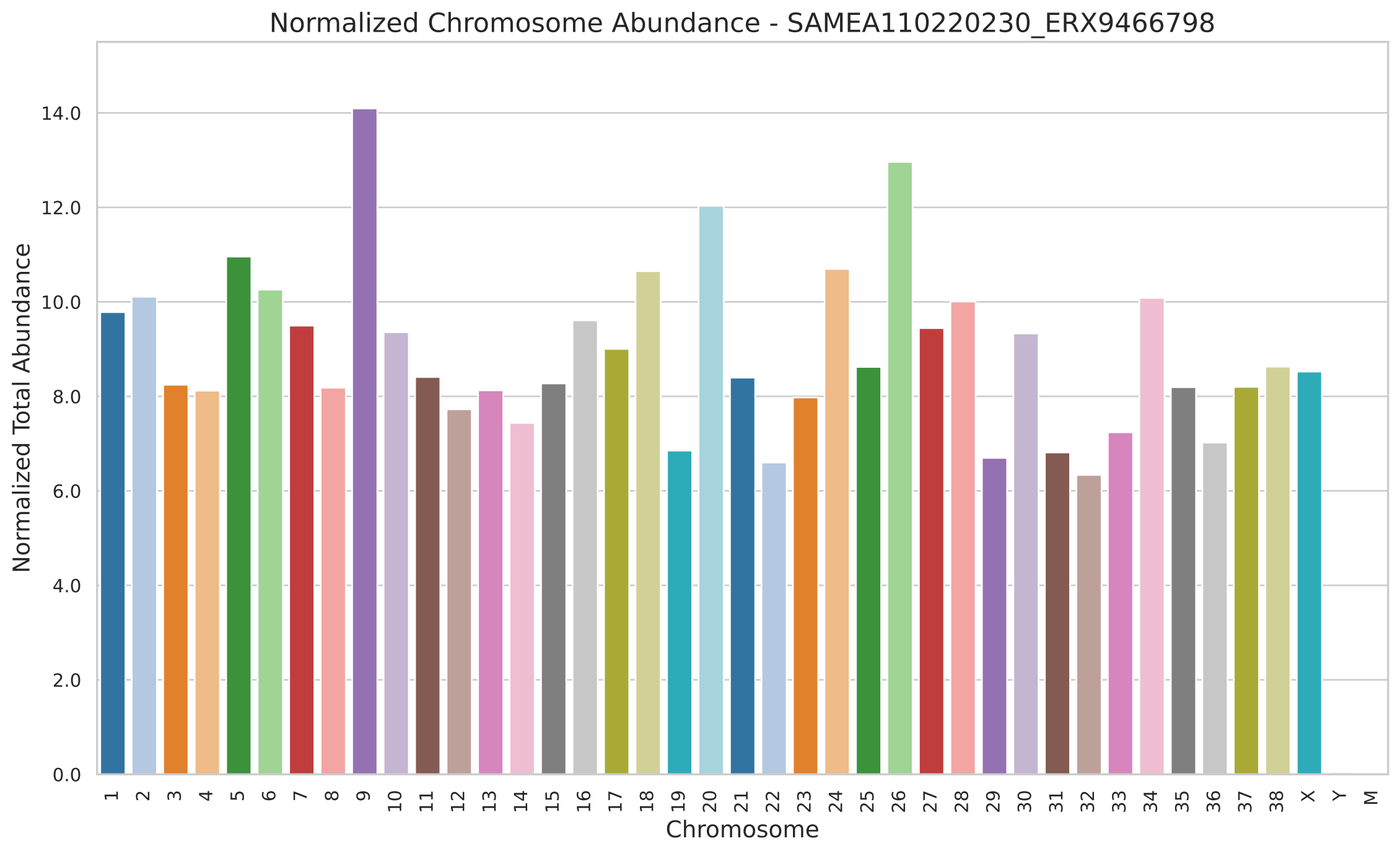

Normalized Chromosome Abundance - SAMEA7515545_ERX10021394
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

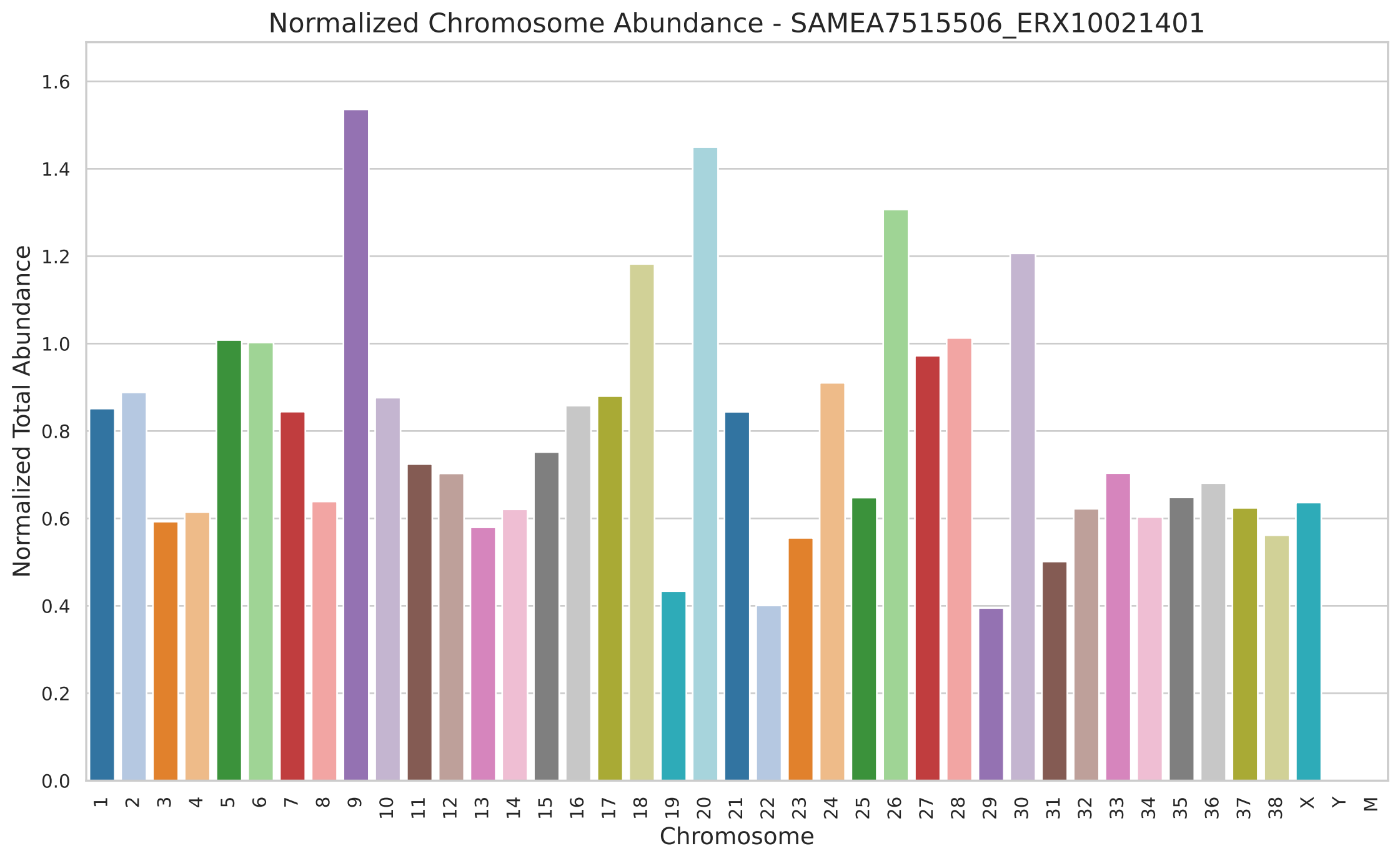

Normalized Chromosome Abundance - SAMEA110220213_ERX9466779
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
12.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

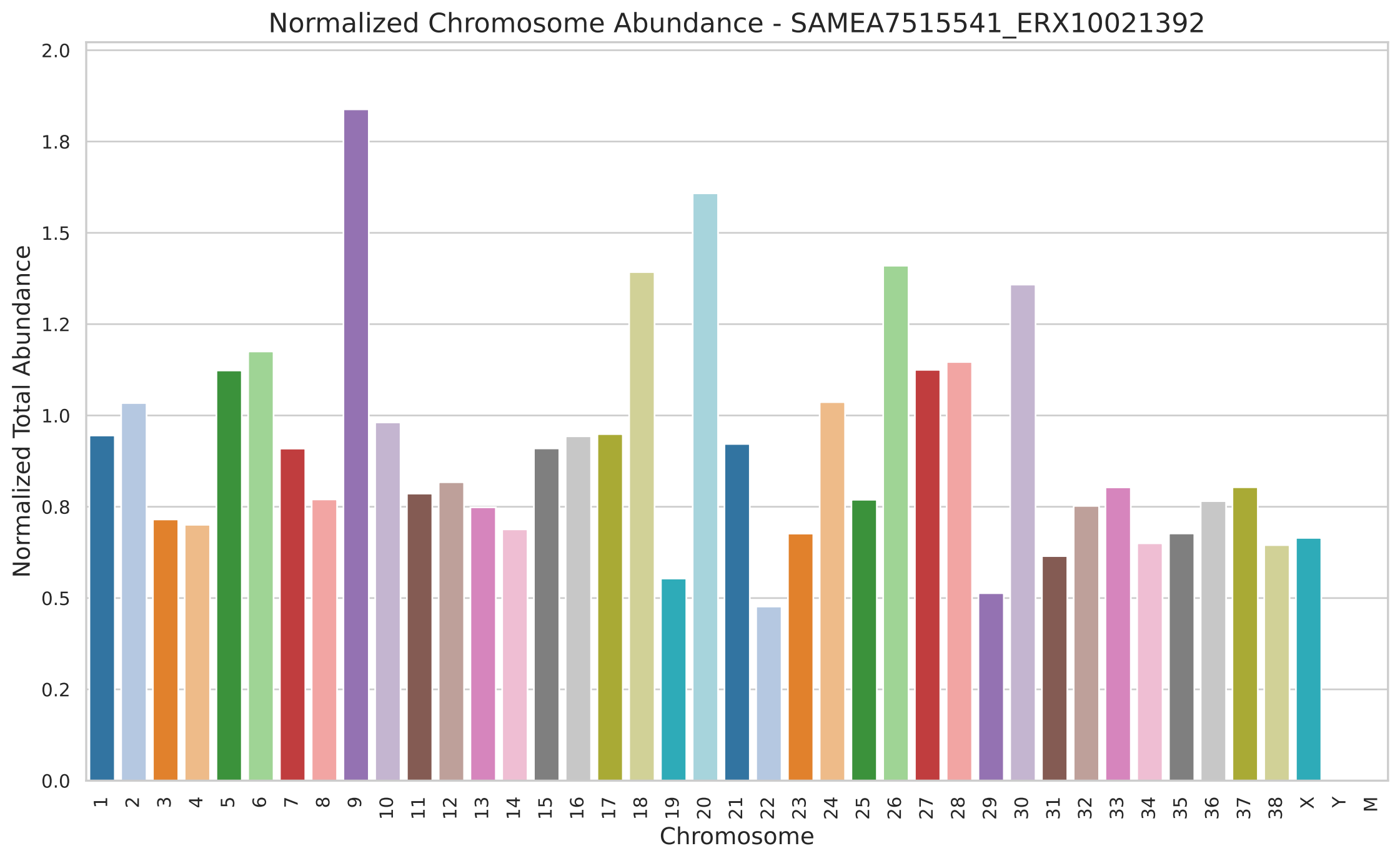

Normalized Chromosome Abundance - SAMEA7515535_ERX10021388
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

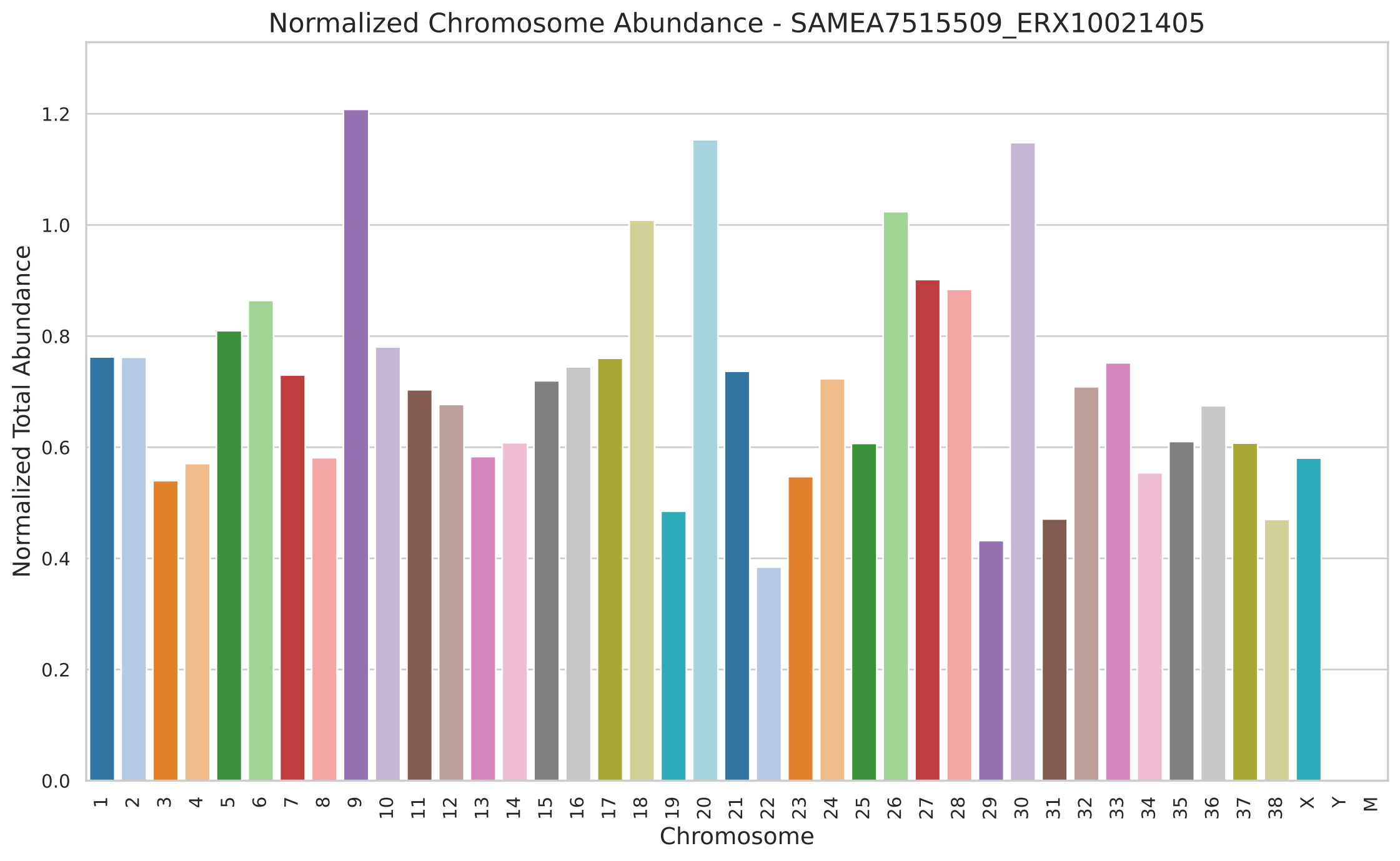

Normalized Chromosome Abundance - SAMEA110220212_ERX9466778
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
12.0
14.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

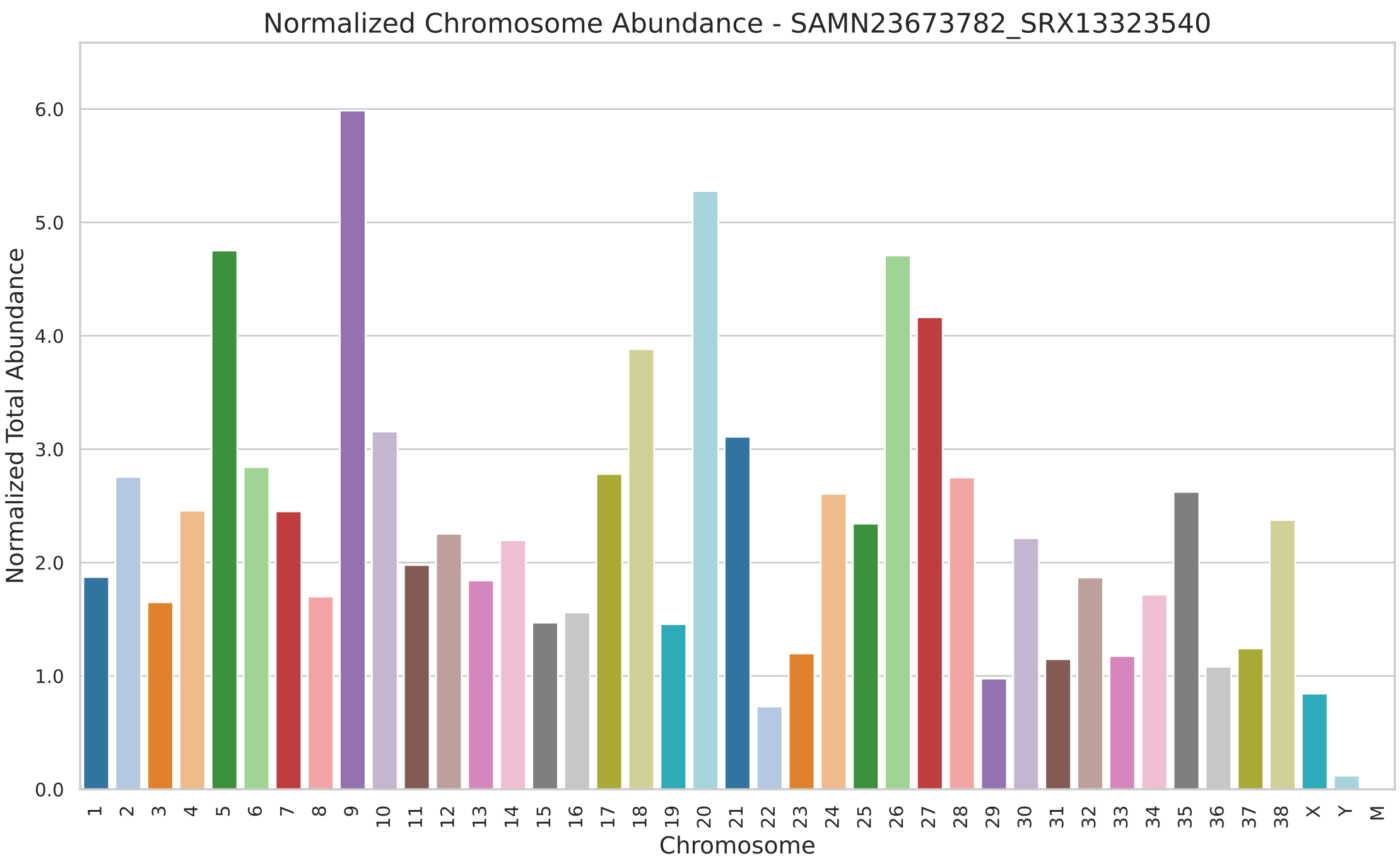

Normalized Chromosome Abundance - SAMEA7515514_ERX10021374
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

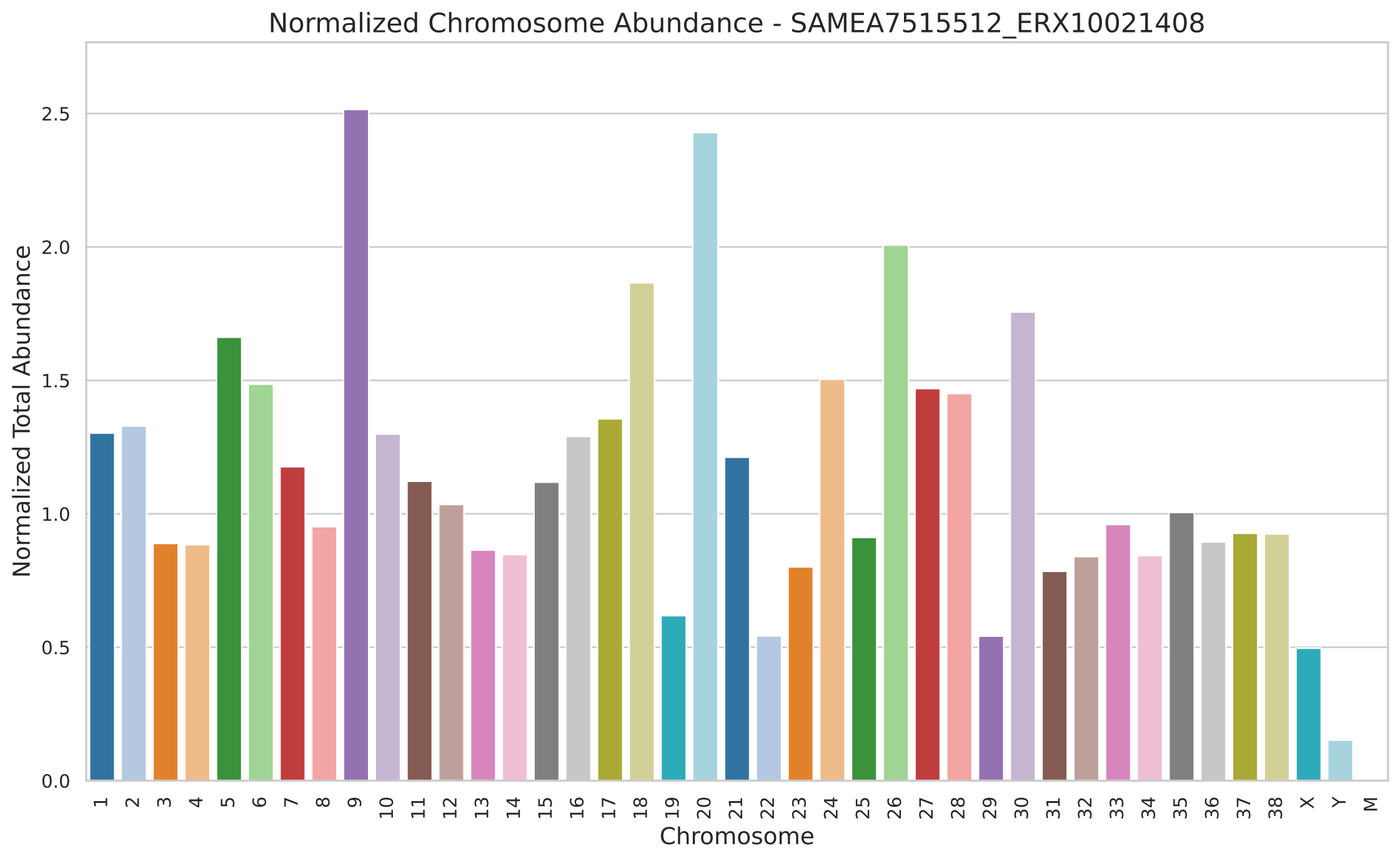

Normalized Chromosome Abundance - SAMEA110220230_ERX9466798
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
12.0
14.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

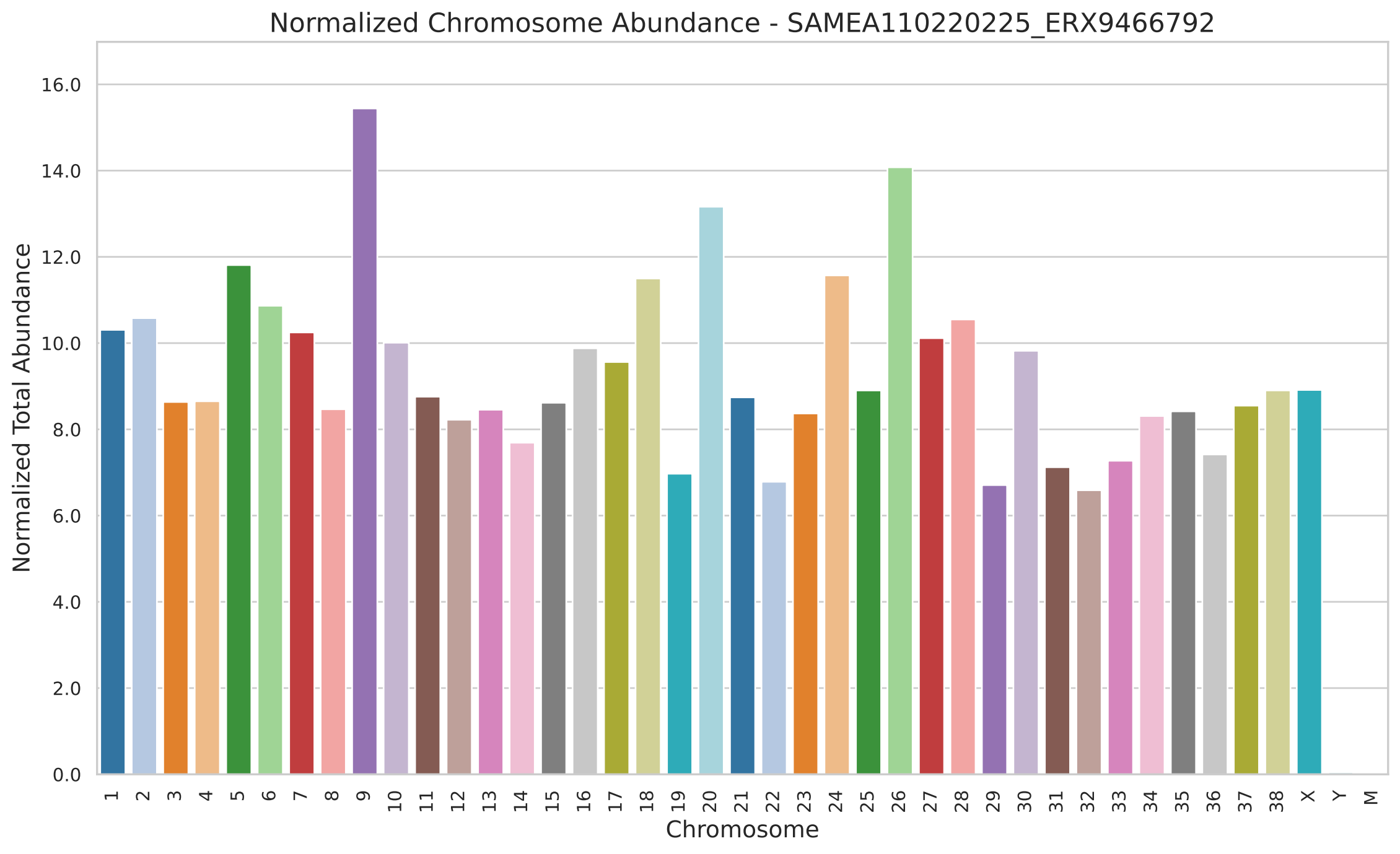

Normalized Chromosome Abundance - SAMEA7515506_ERX10021401
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

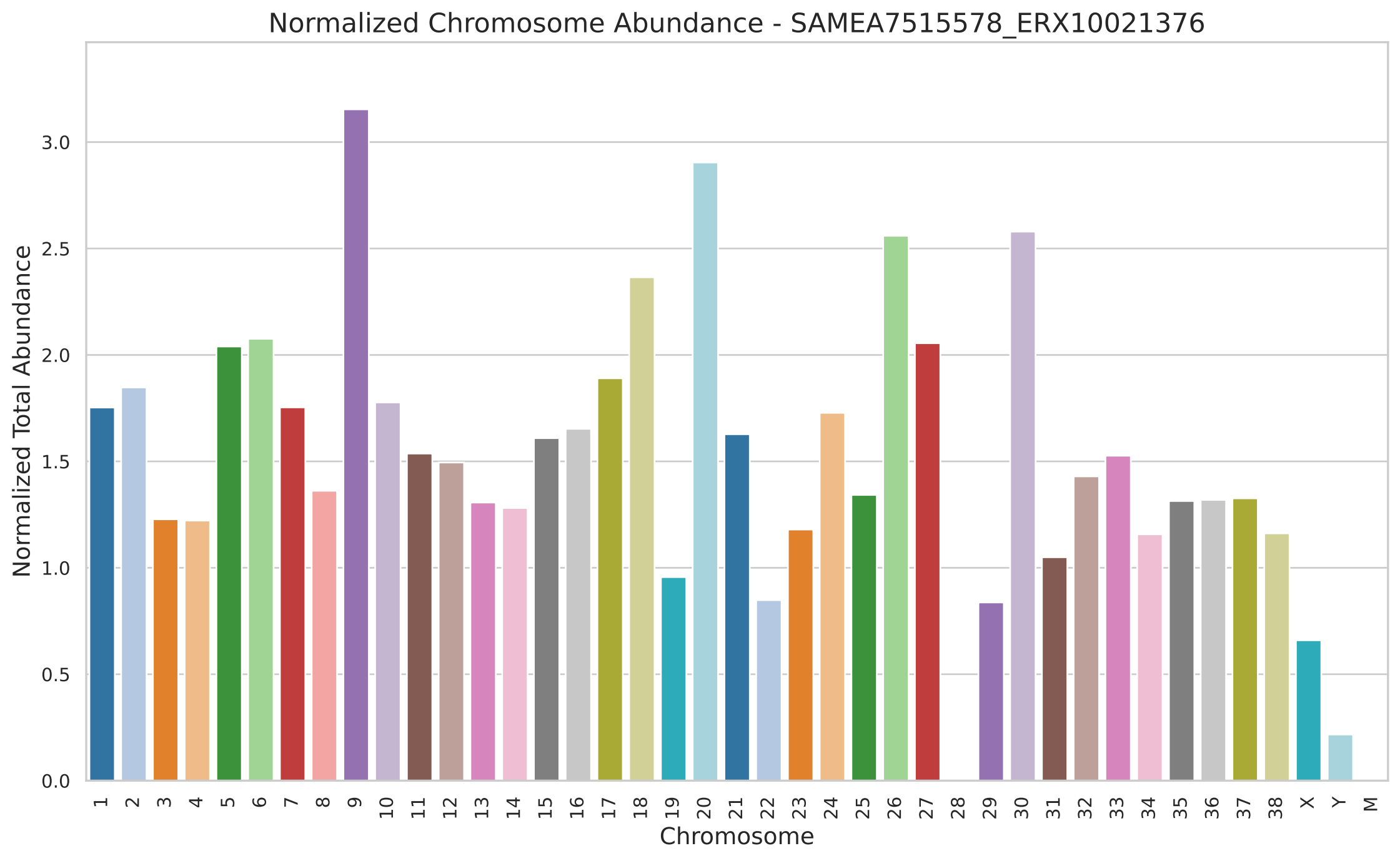

Normalized Chromosome Abundance - SAMEA7515541_ERX10021392
Normalized Total Abundance
2.0
1.8
1.5
1.2
1.0
0.8
0.5
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

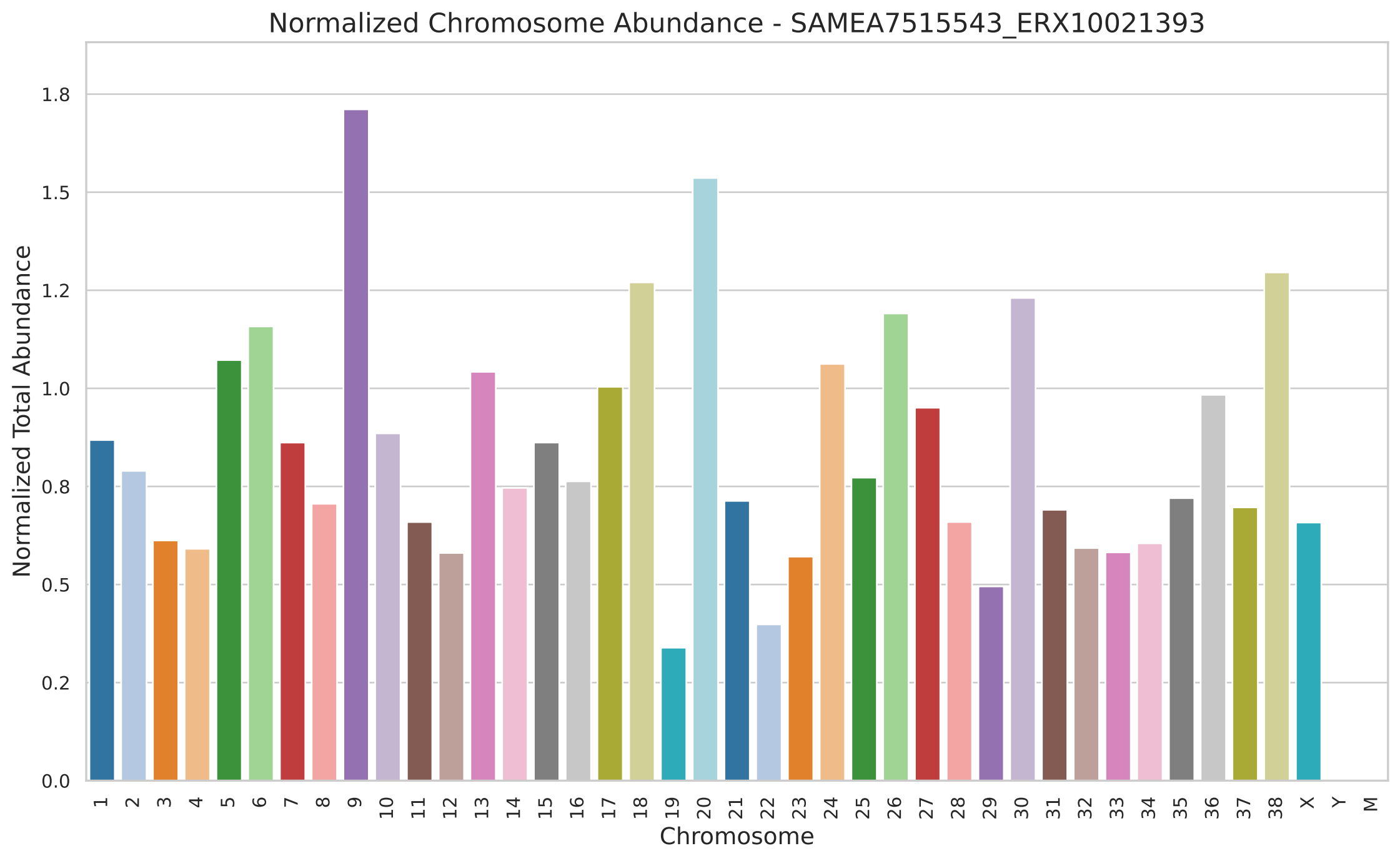

Normalized Chromosome Abundance - SAMEA7515509_ERX10021405
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

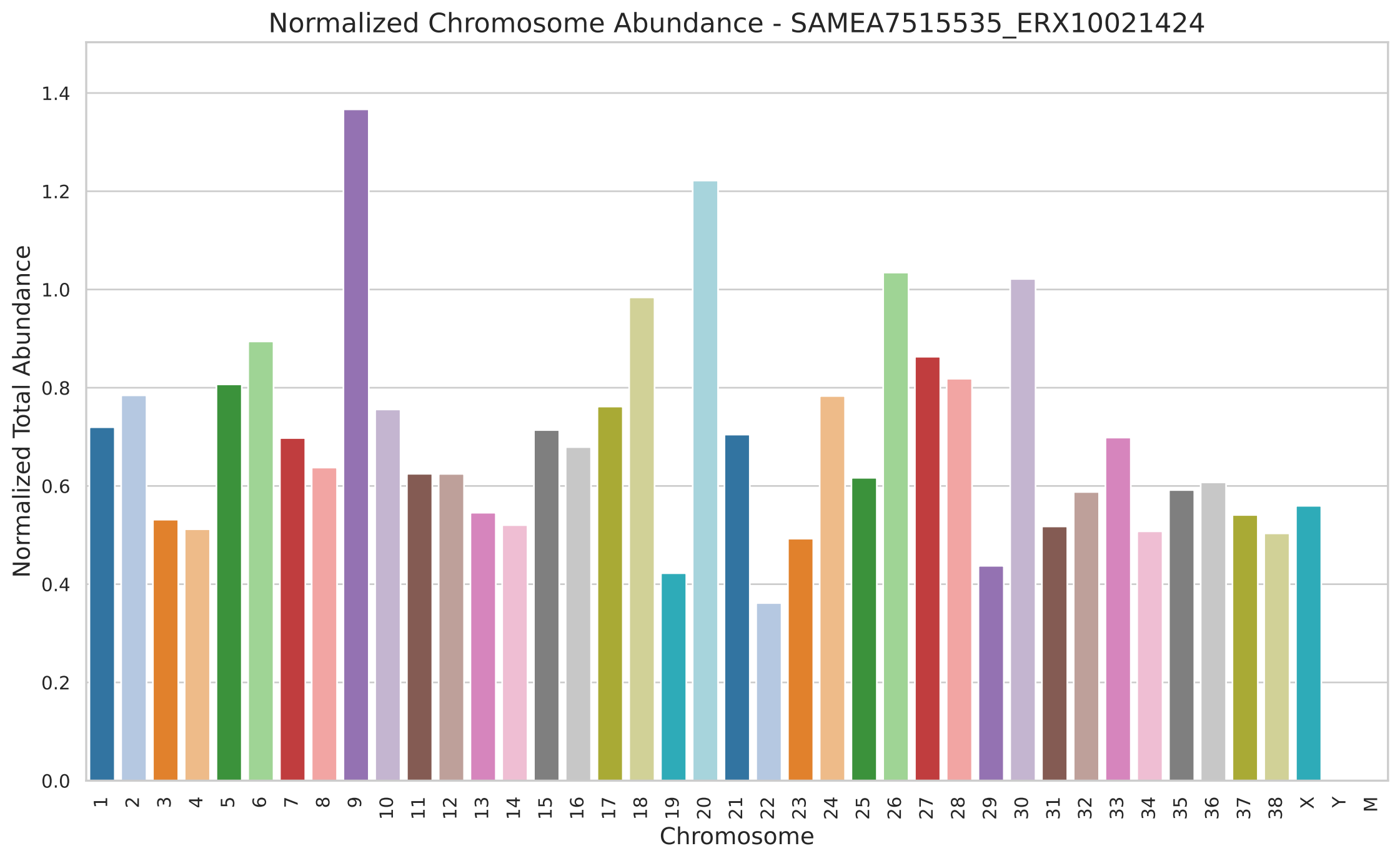

Normalized Chromosome Abundance - SAMN23673782_SRX13323540
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

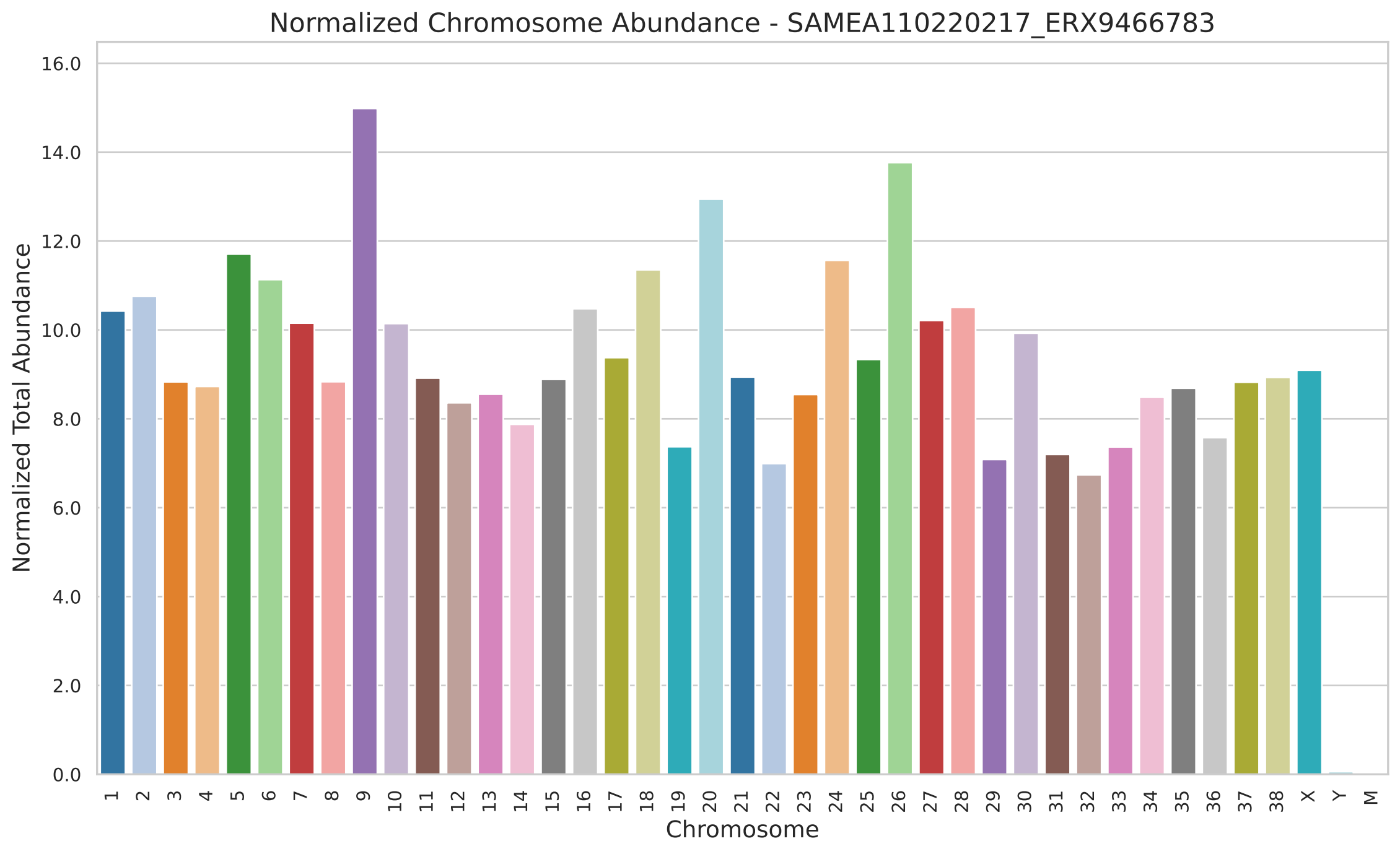

Normalized Chromosome Abundance - SAMEA7515512_ERX10021408
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

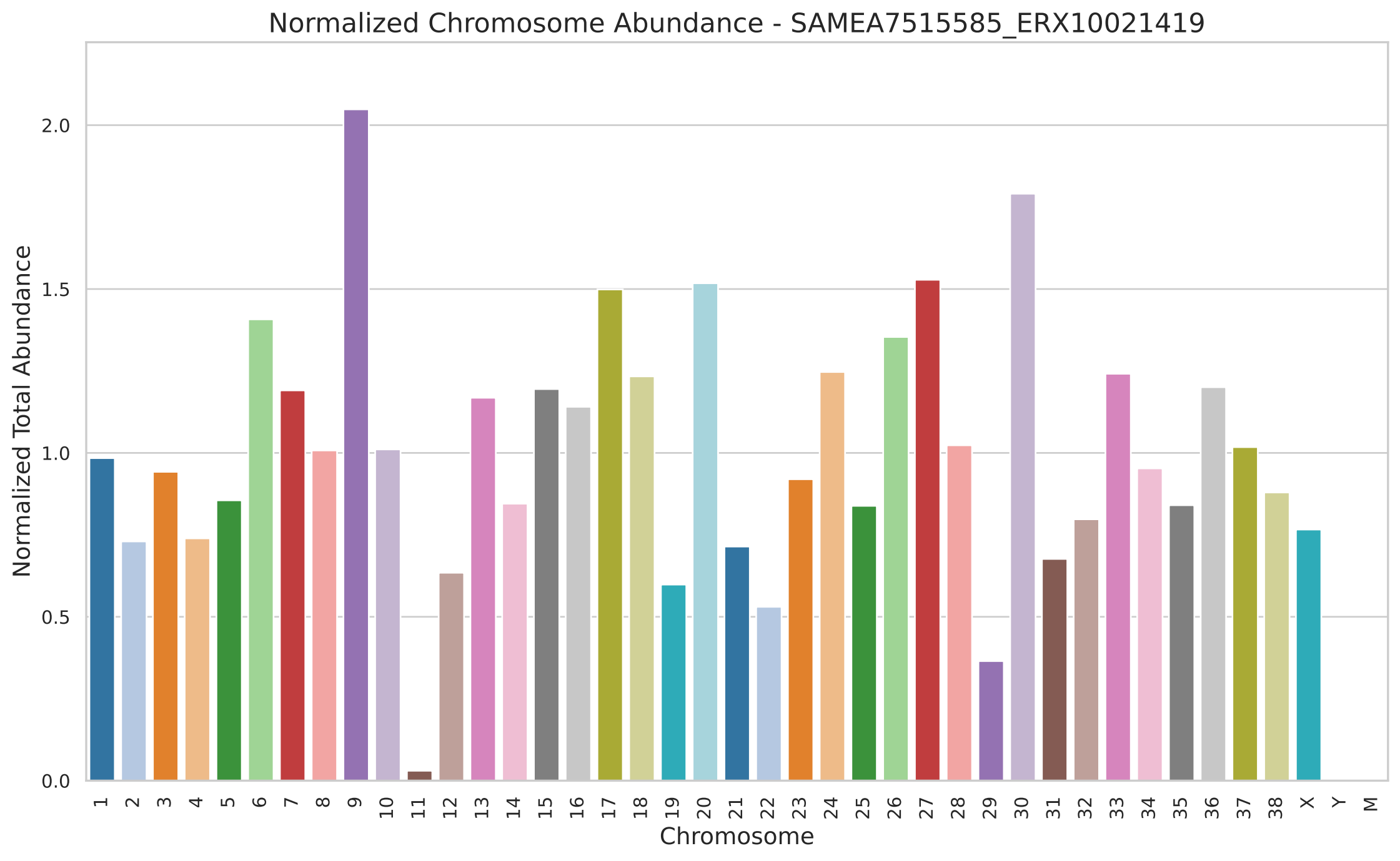

Normalized Chromosome Abundance - SAMEA110220225_ERX9466792
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
12.0
14.0
16.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

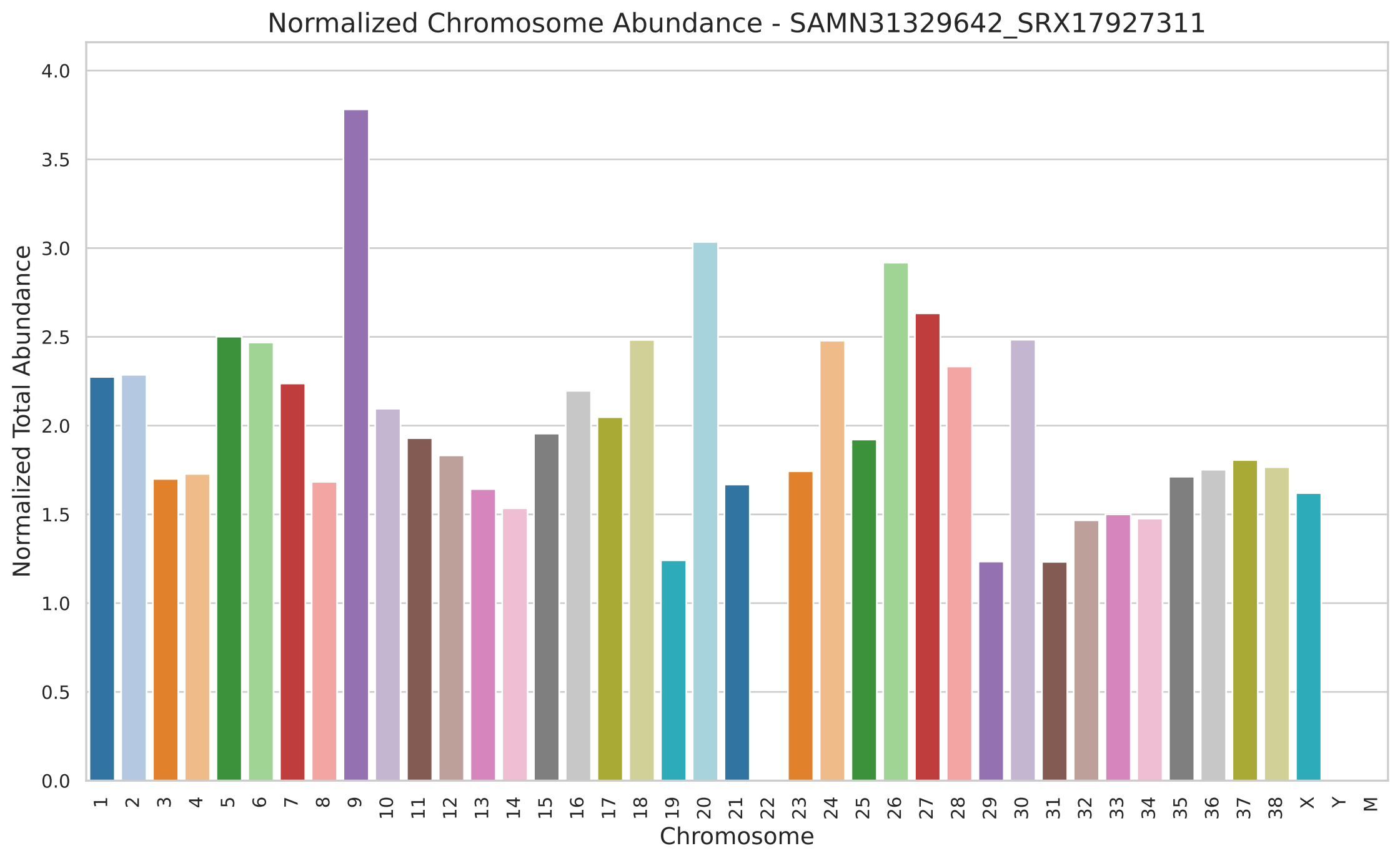

Normalized Chromosome Abundance - SAMEA7515578_ERX10021376
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

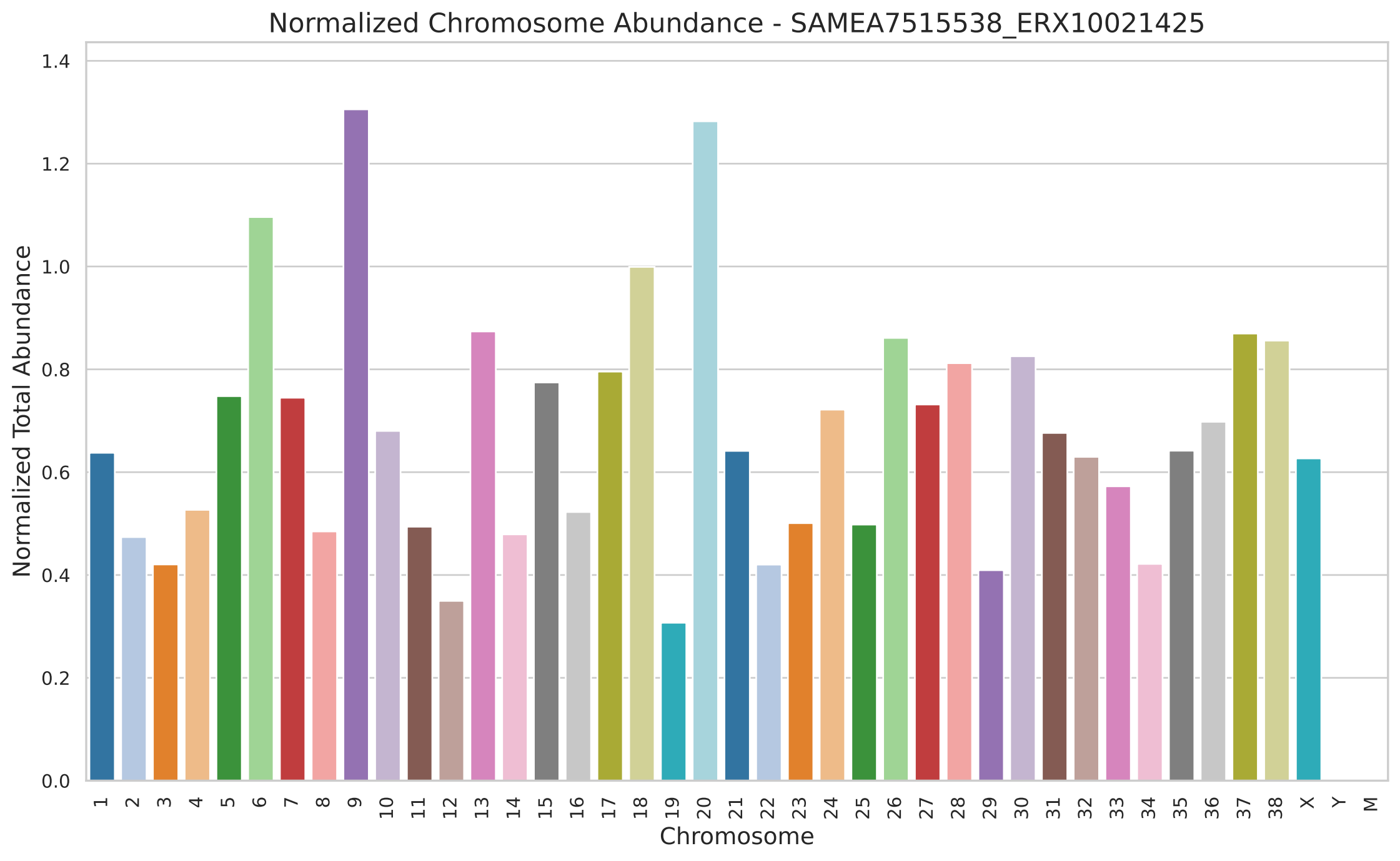

Normalized Chromosome Abundance - SAMEA7515543_ERX10021393
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

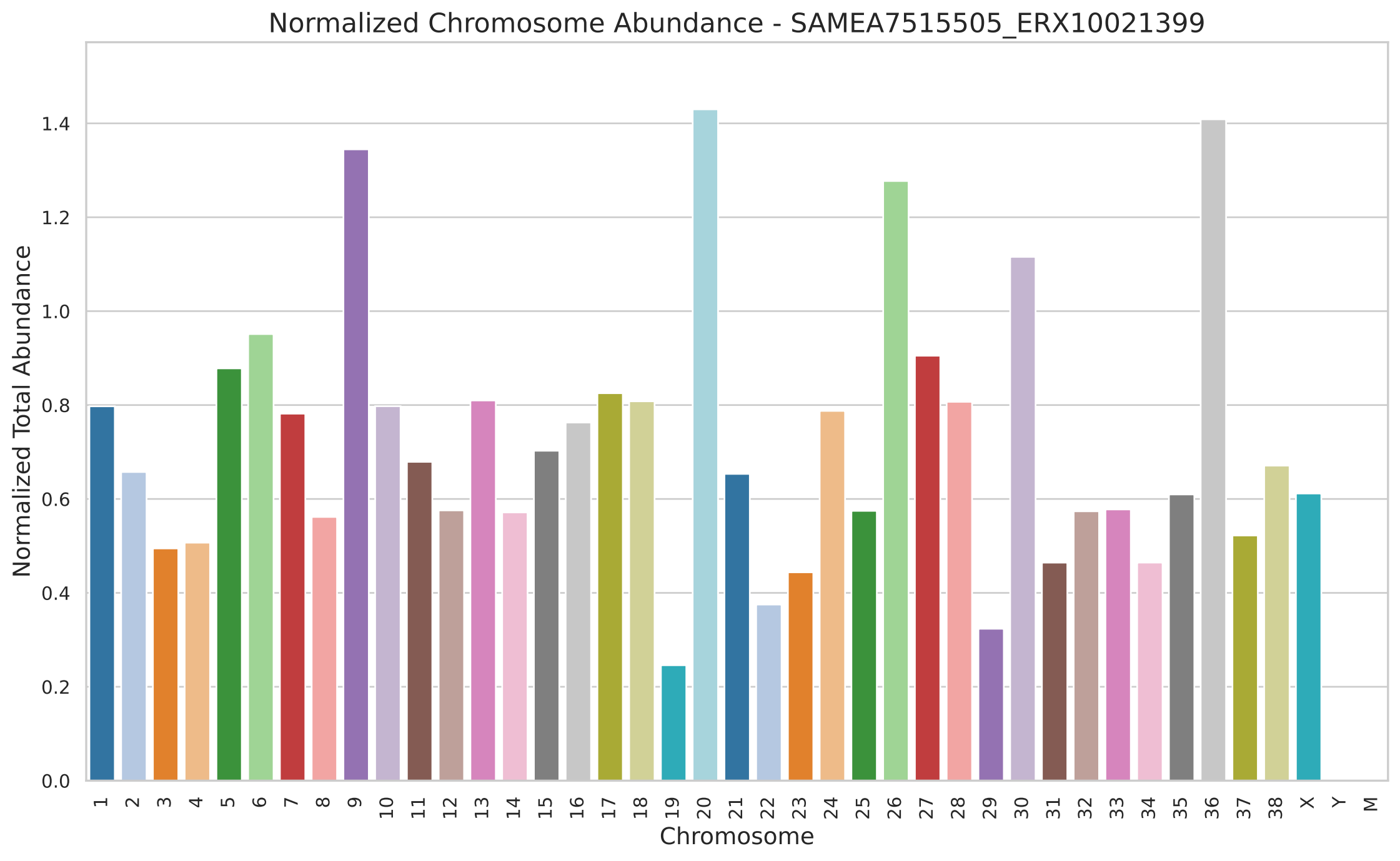

Normalized Chromosome Abundance - SAMEA7515535_ERX10021424
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

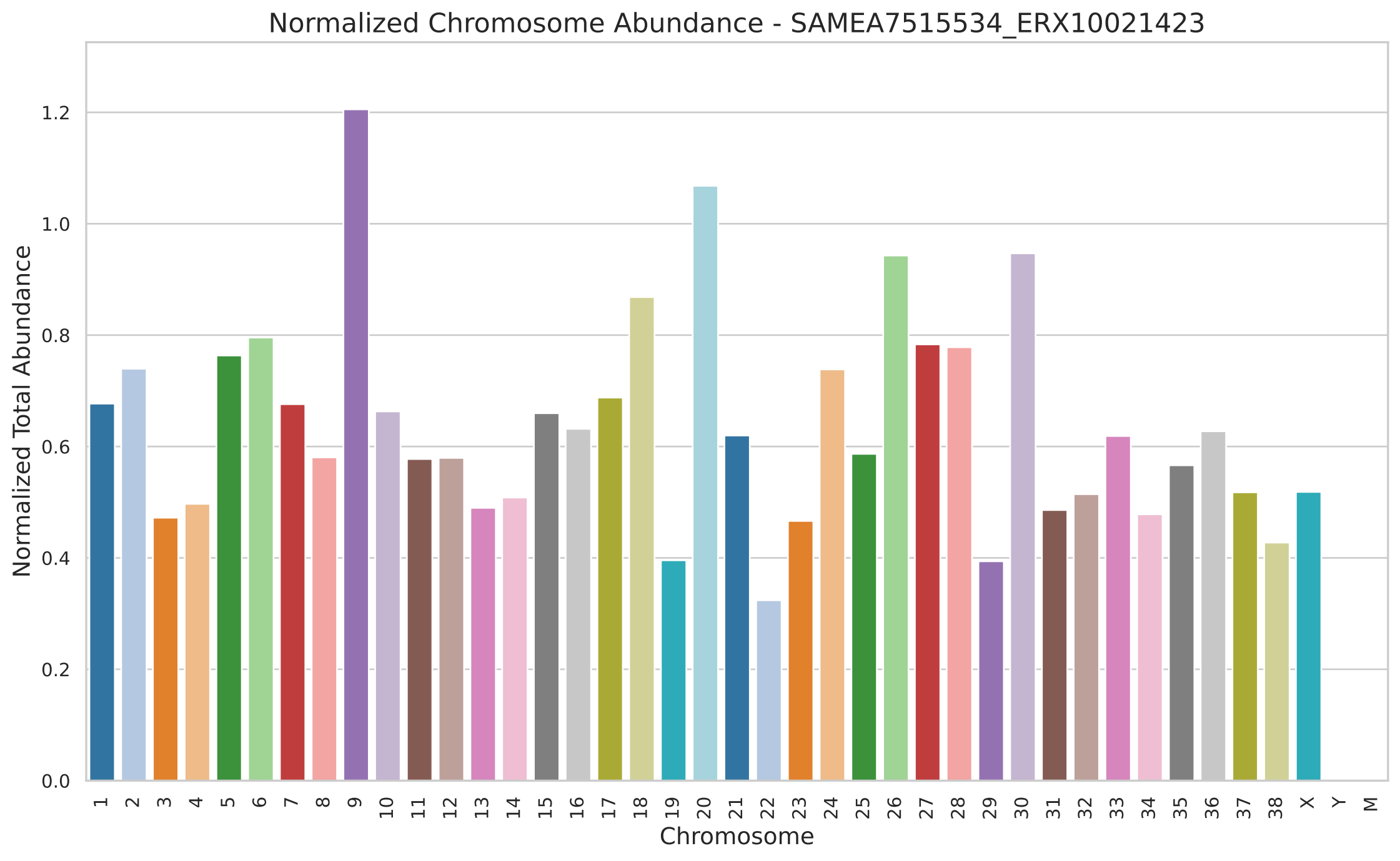

Normalized Chromosome Abundance - SAMEA110220217_ERX9466783
Normalized Total Abundance
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

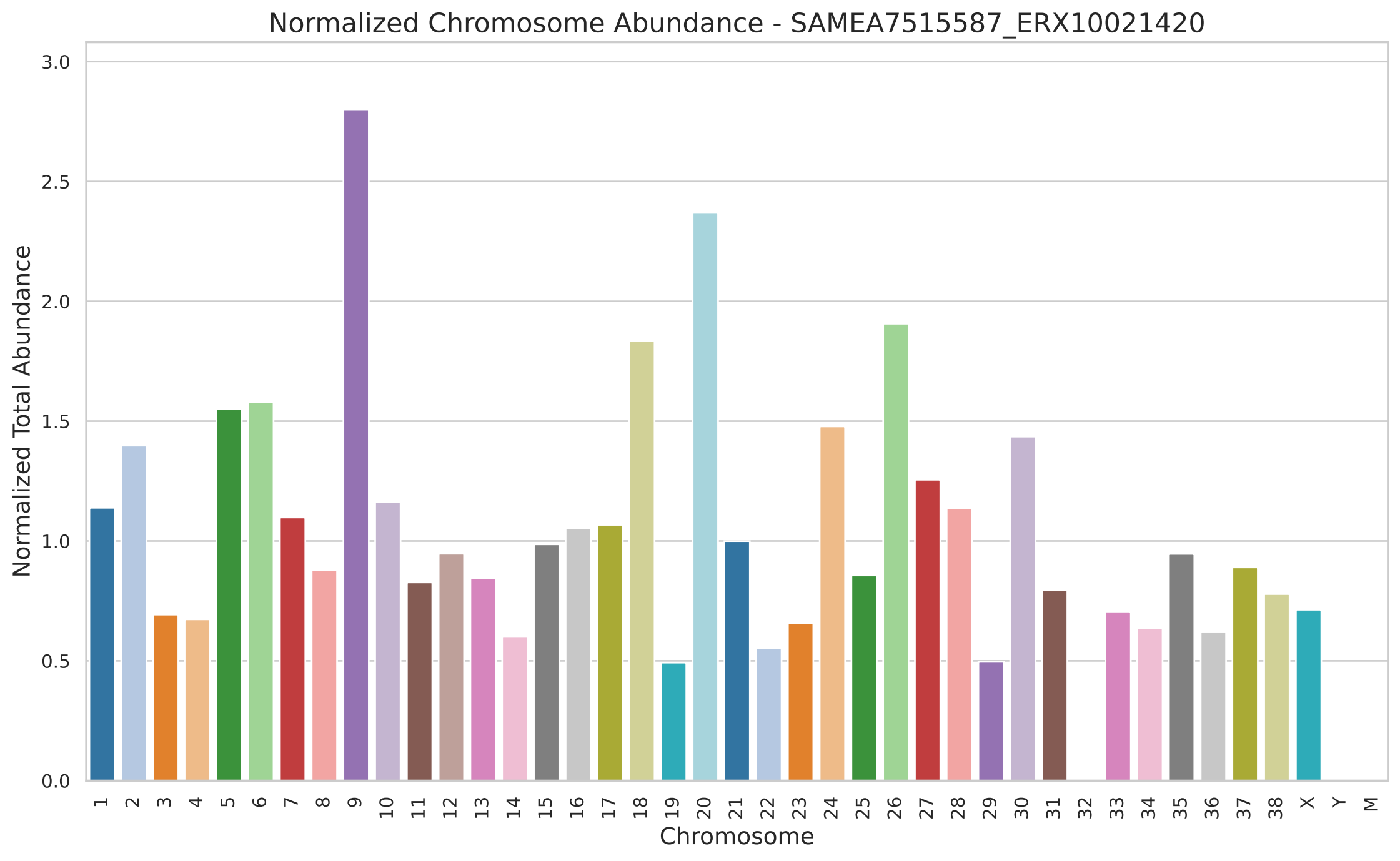

Normalized Chromosome Abundance - SAMEA7515585_ERX10021419
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

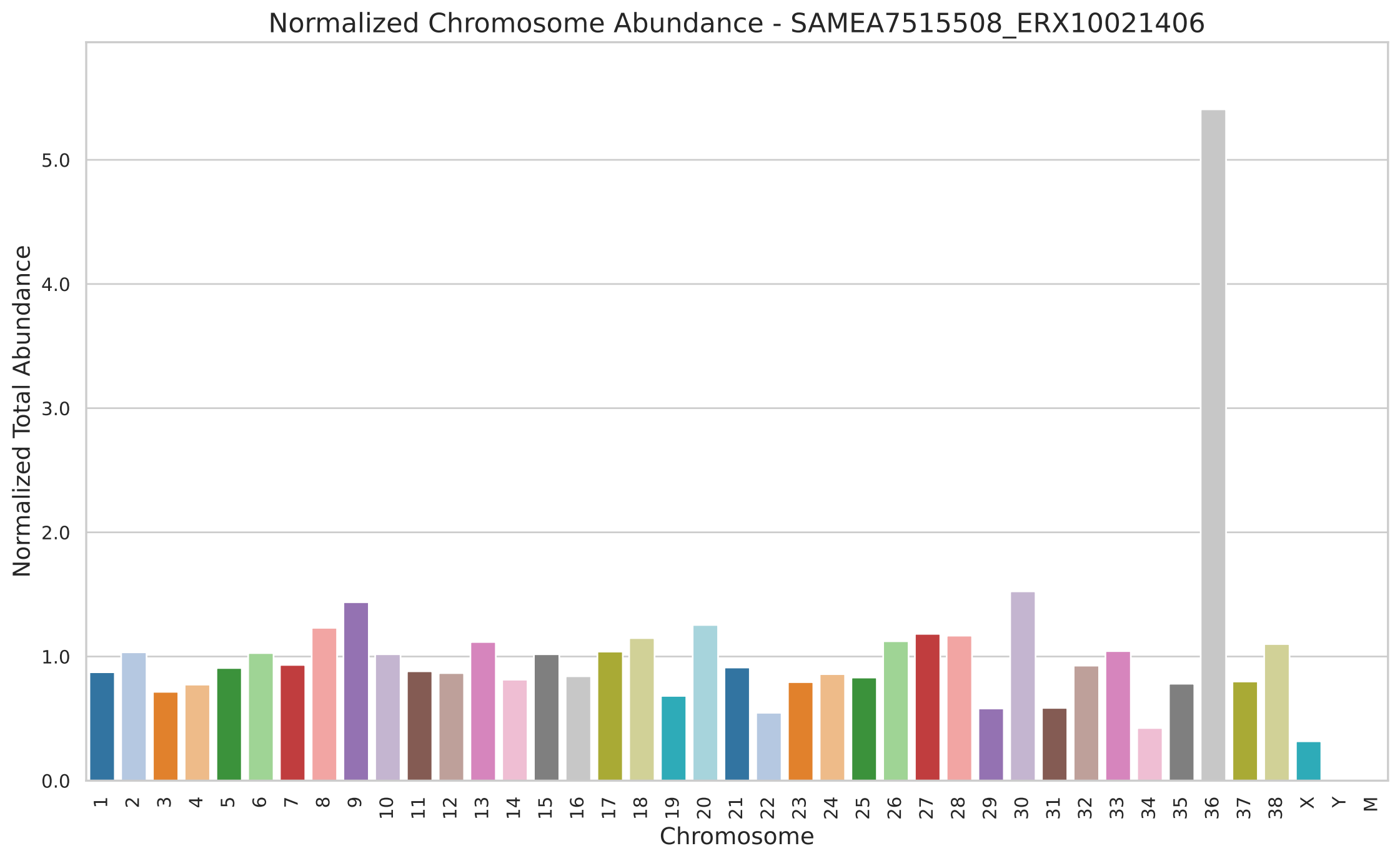

Normalized Chromosome Abundance - SAMN31329642_SRX17927311
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

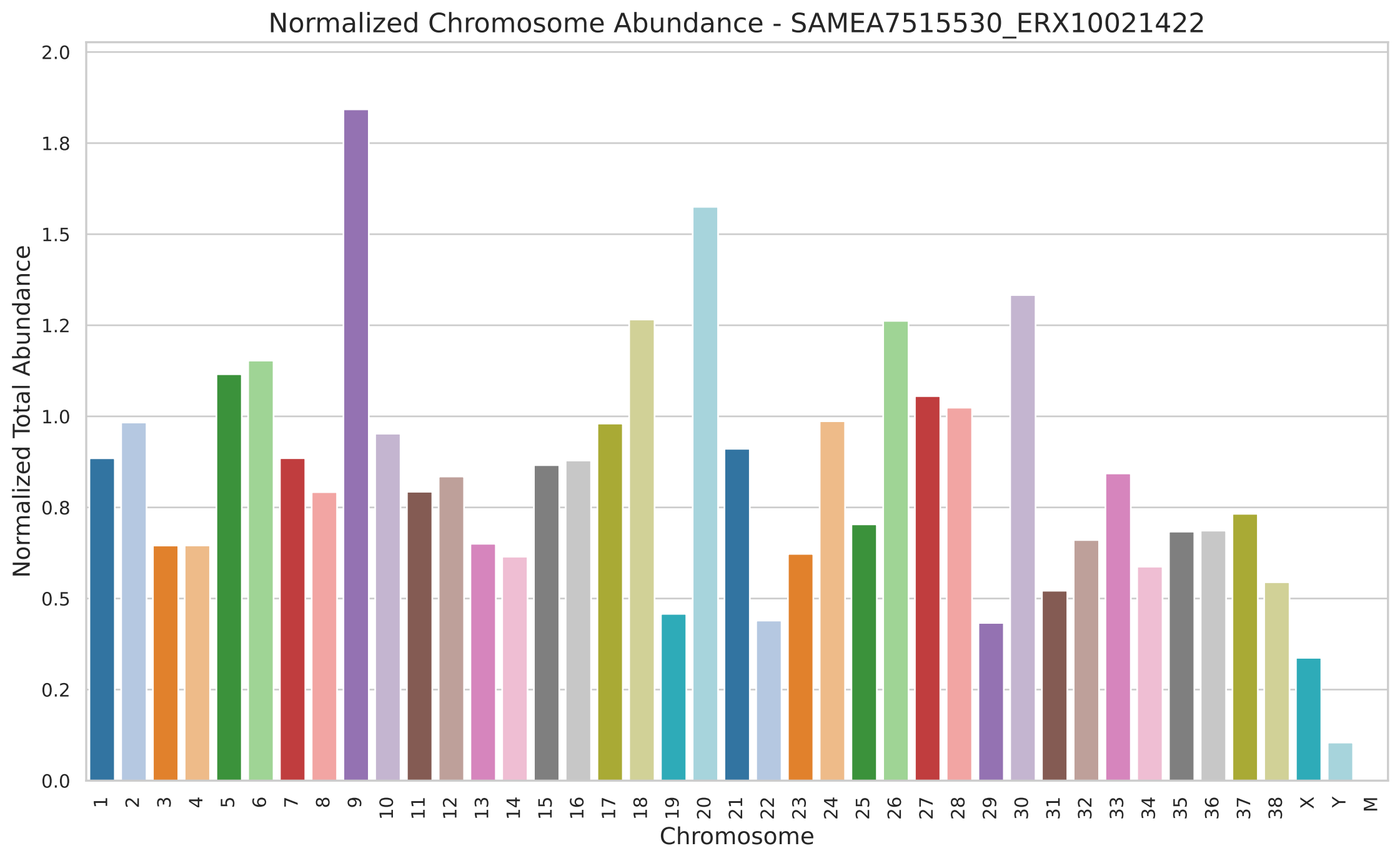

Normalized Chromosome Abundance - SAMEA7515538_ERX10021425
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

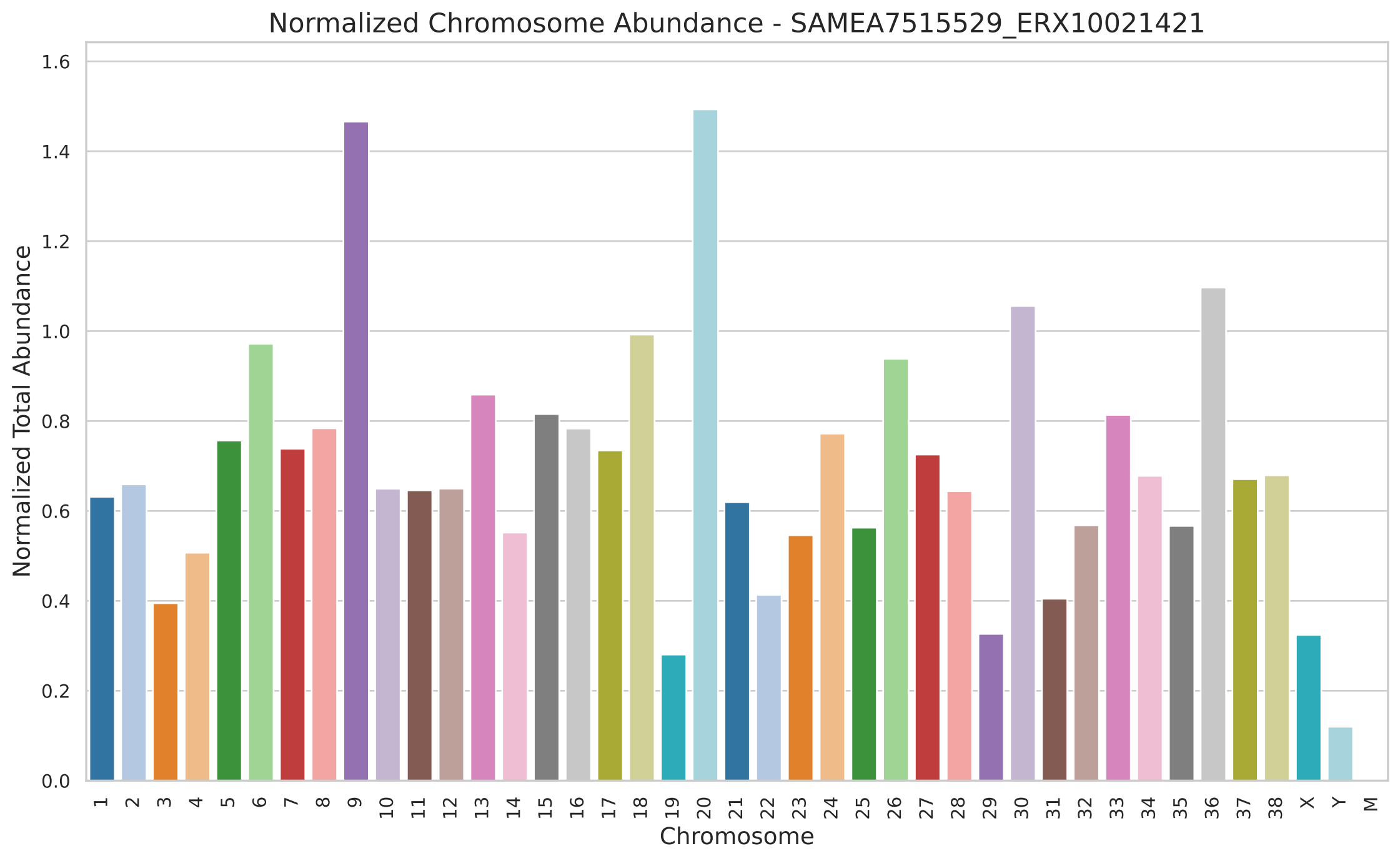

Normalized Chromosome Abundance - SAMEA7515505_ERX10021399
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

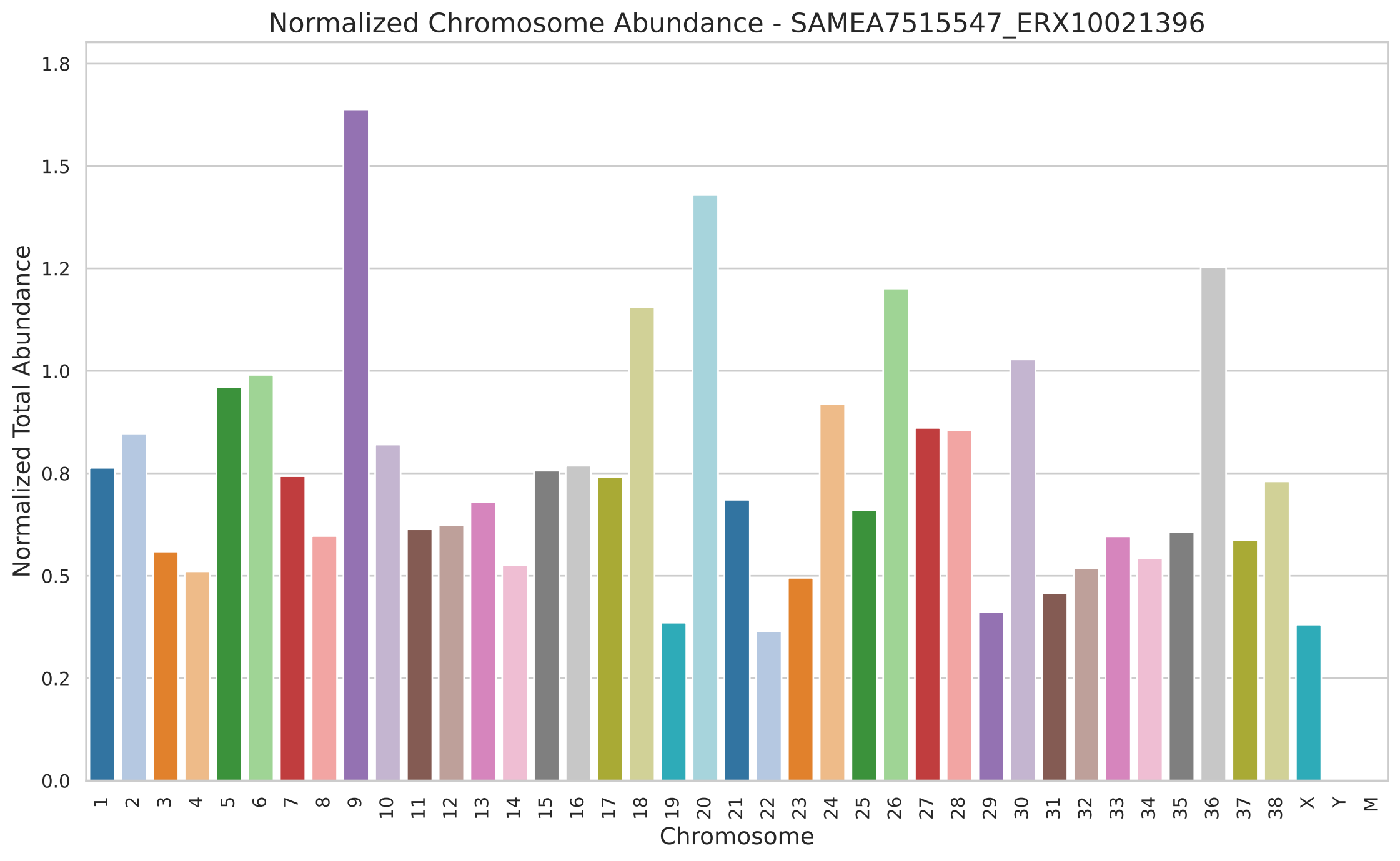

Normalized Chromosome Abundance - SAMEA7515534_ERX10021423
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

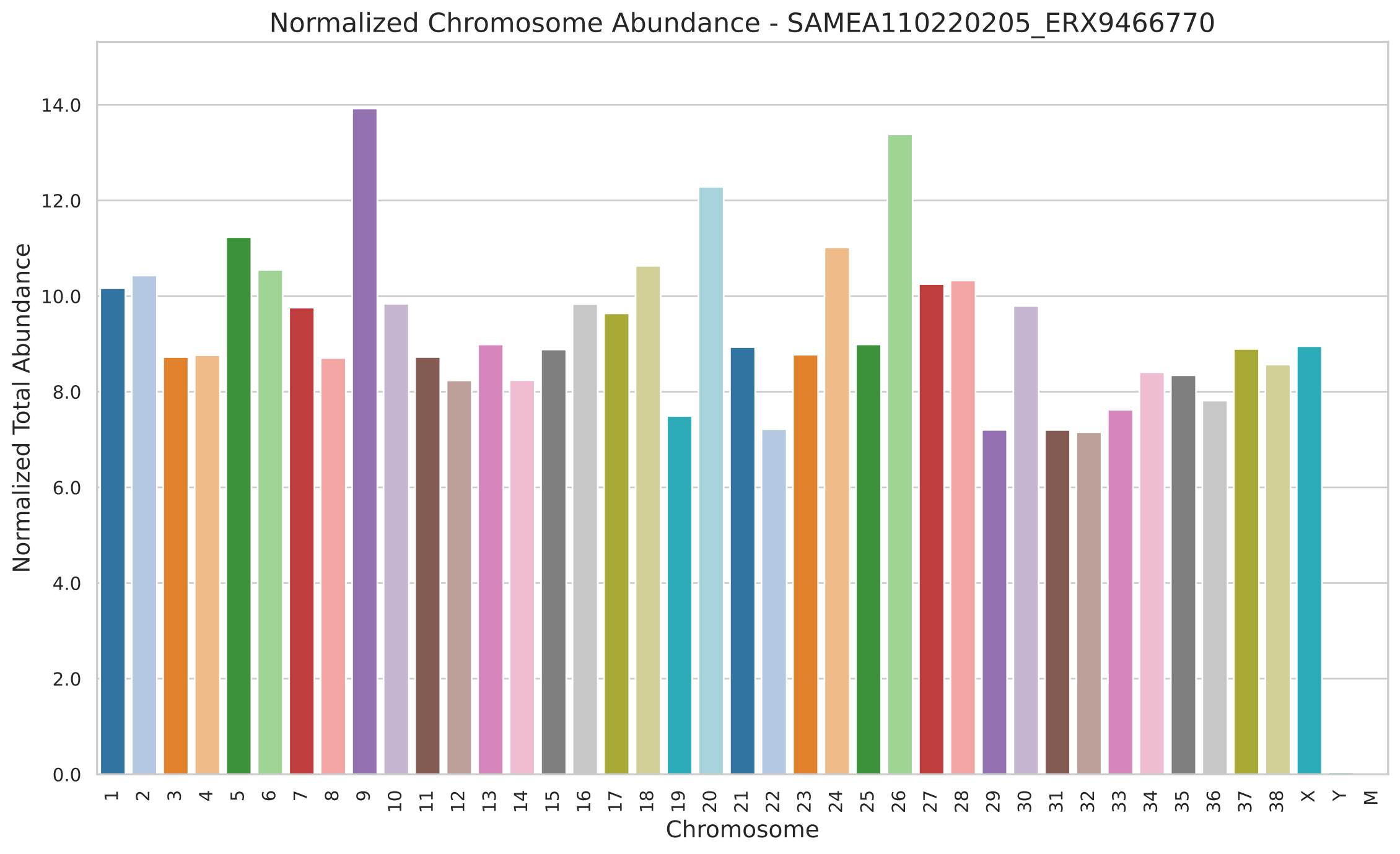

Normalized Chromosome Abundance - SAMEA7515587_ERX10021420
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

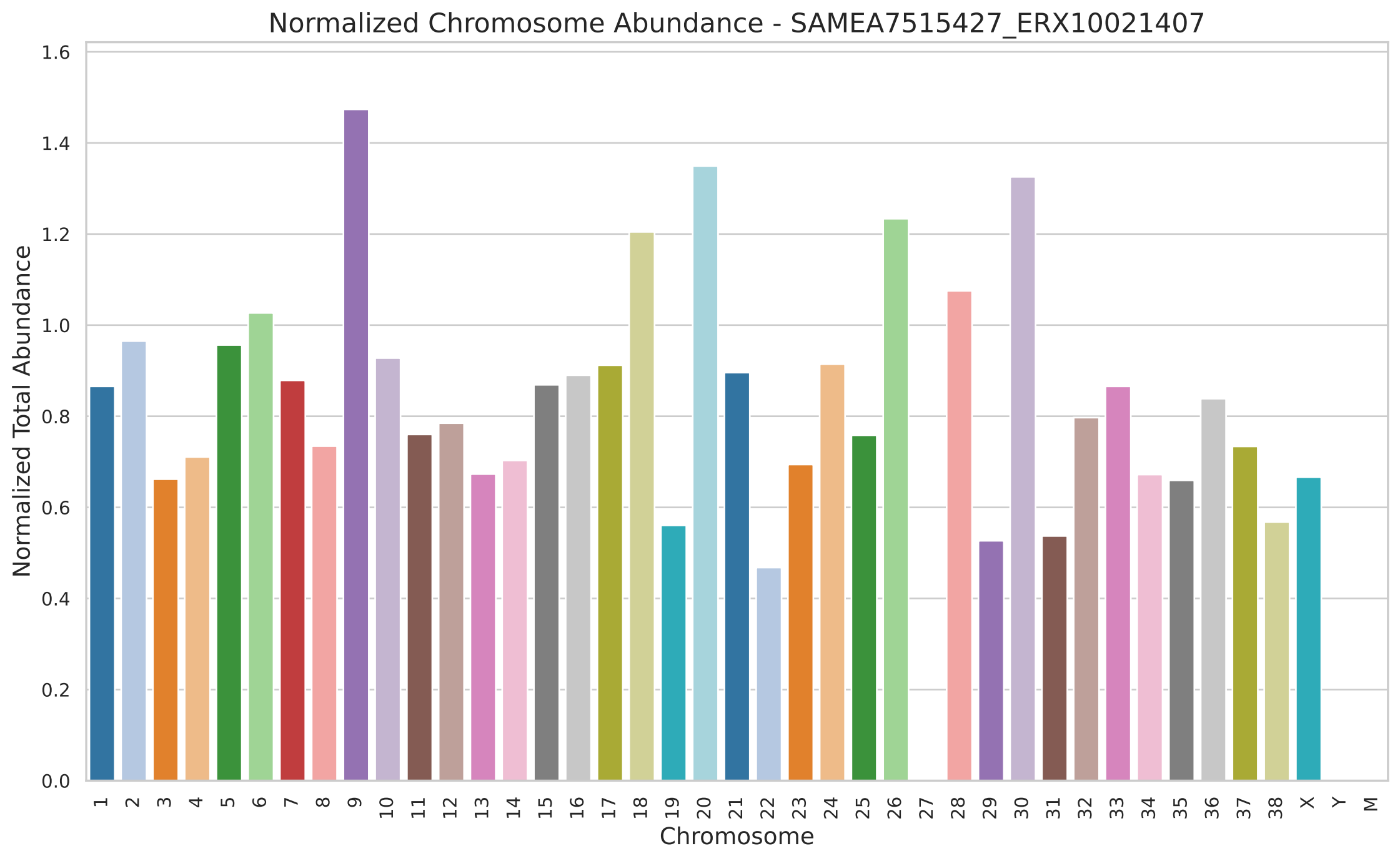

Normalized Chromosome Abundance - SAMEA7515508_ERX10021406
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

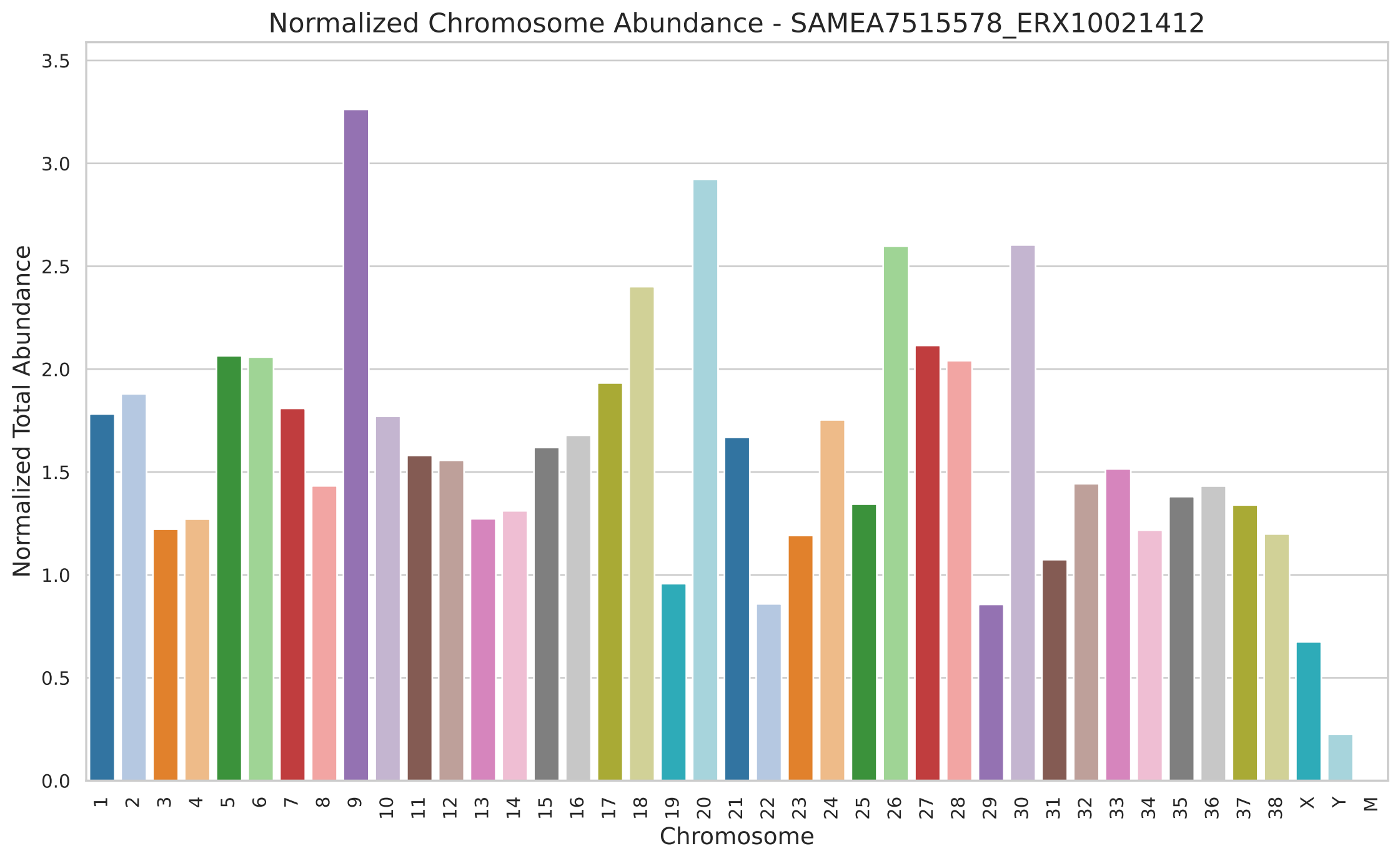

Normalized Chromosome Abundance - SAMEA7515530_ERX10021422
Normalized Total Abundance
2.0
1.8
1.5
1.2
1.0
0.8
0.5
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

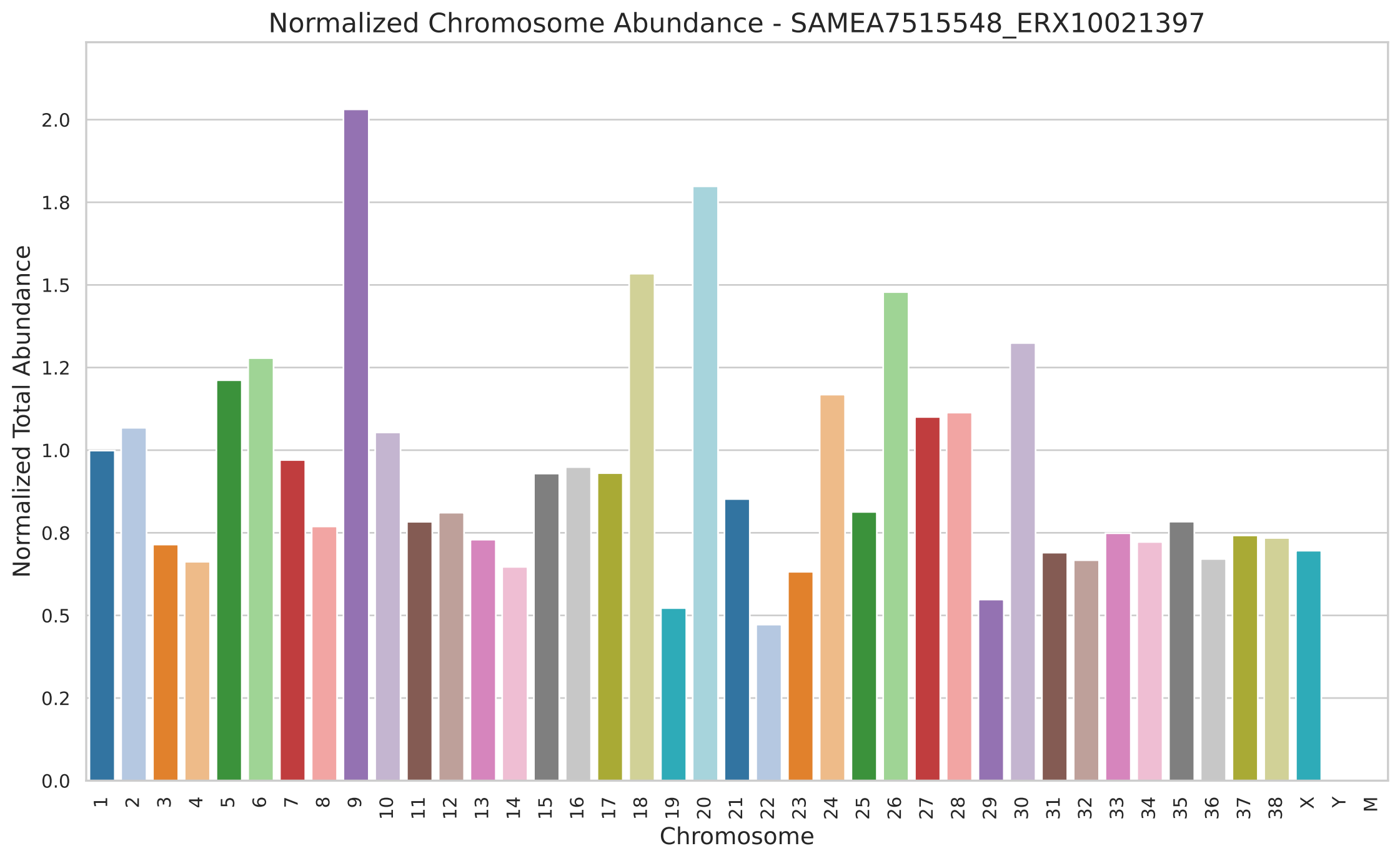

Normalized Chromosome Abundance - SAMEA7515529_ERX10021421
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

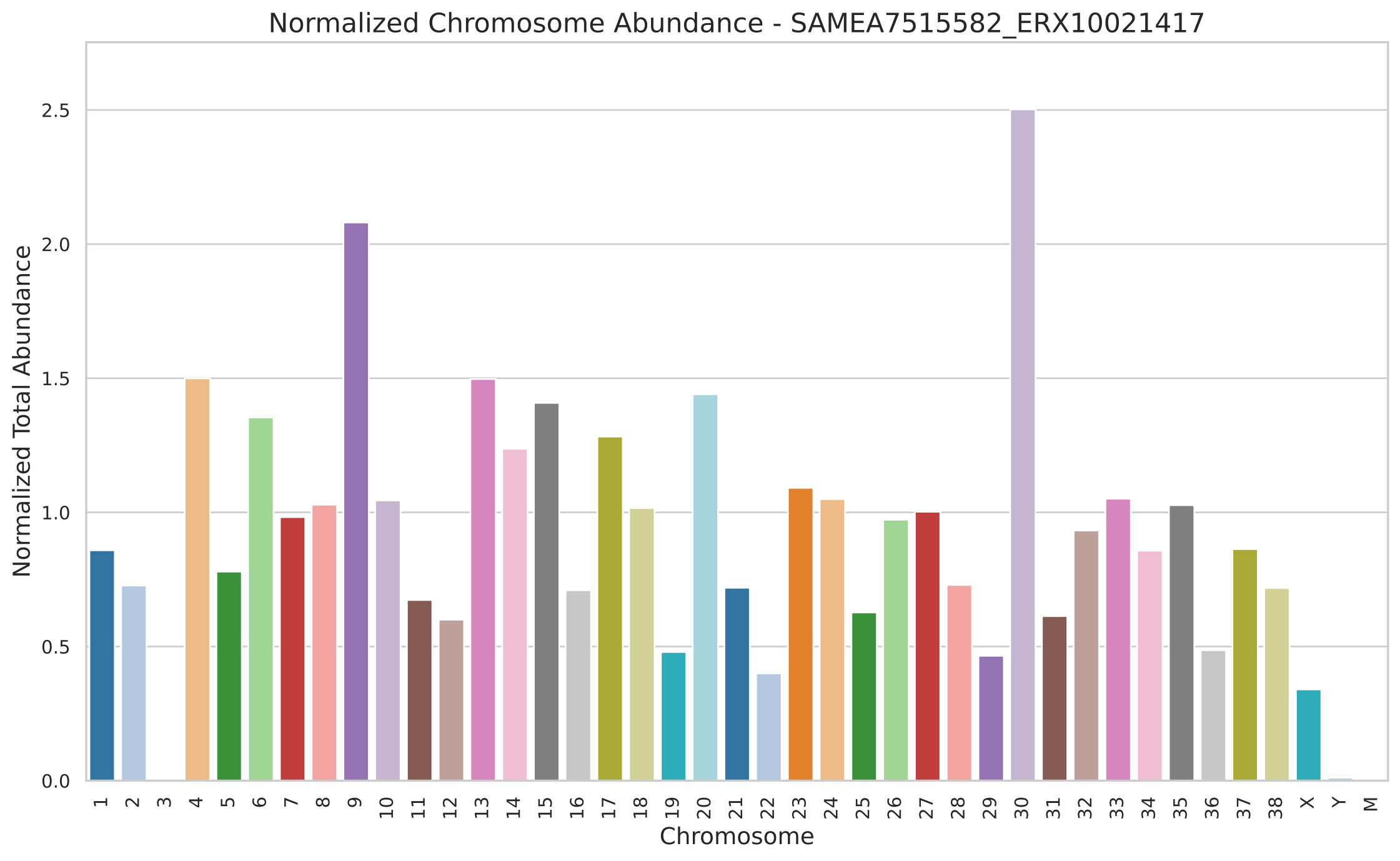

Normalized Chromosome Abundance - SAMEA7515547_ERX10021396
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

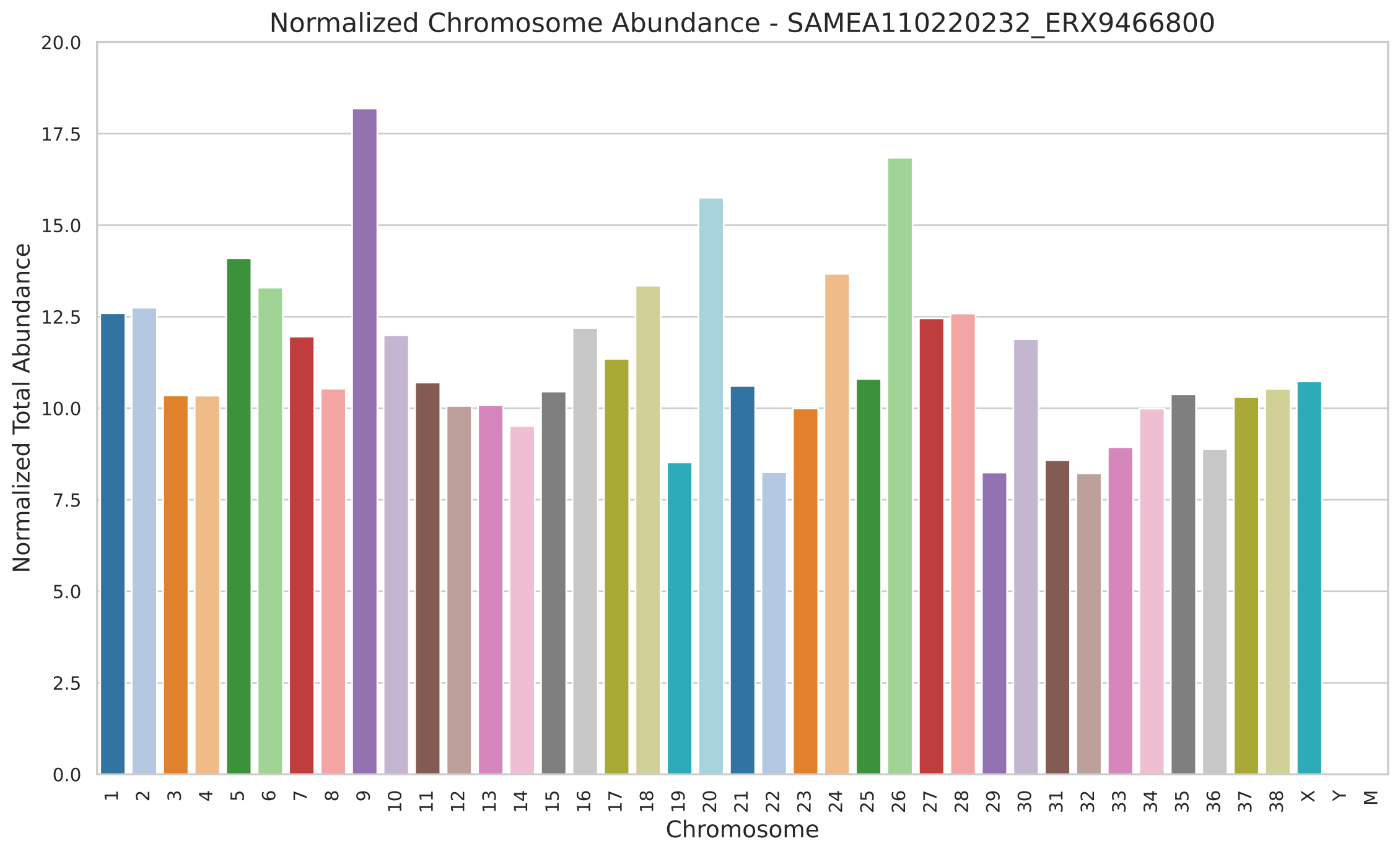

Normalized Chromosome Abundance - SAMEA110220205_ERX9466770
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
12.0
14.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

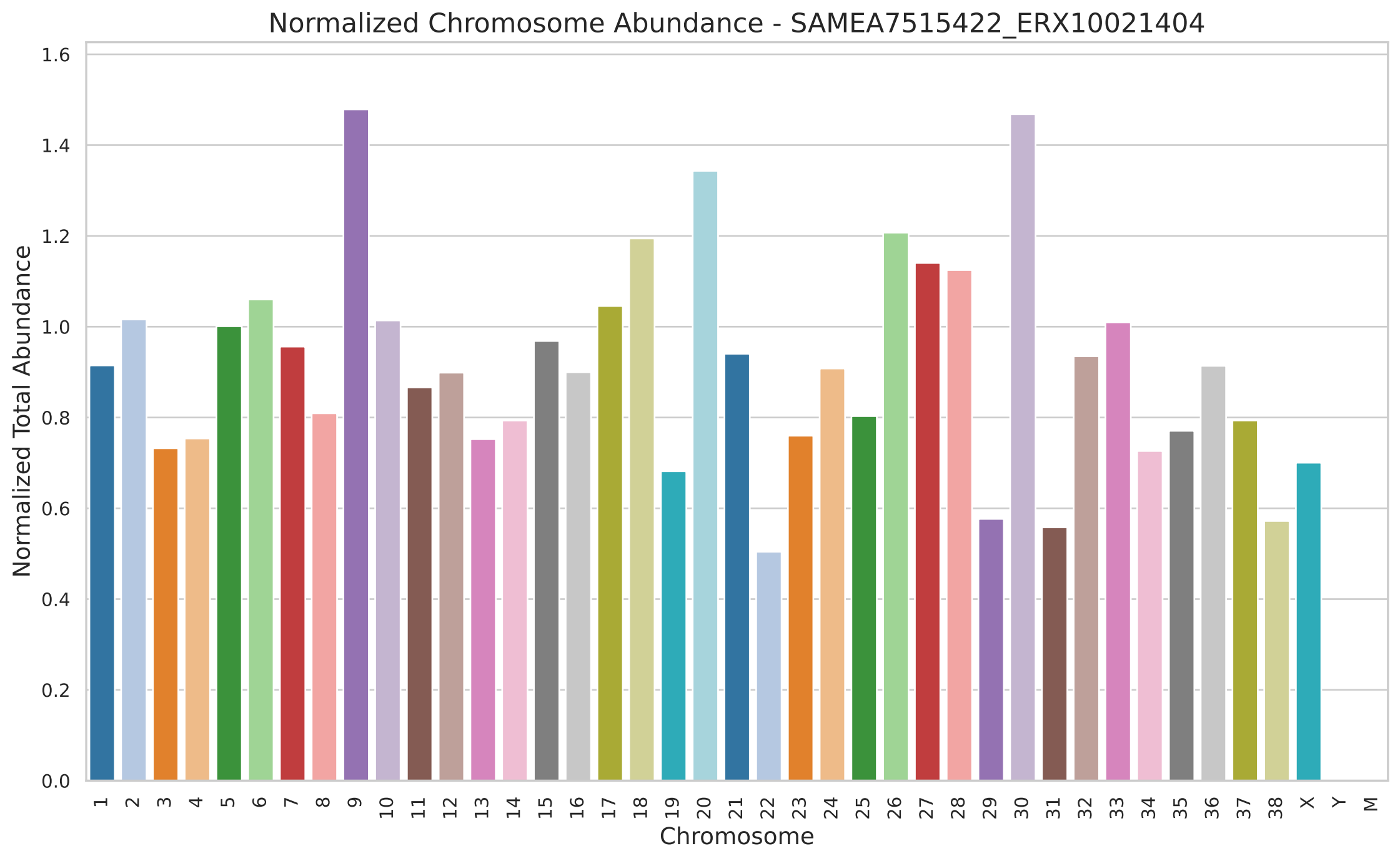

Normalized Chromosome Abundance - SAMEA7515427_ERX10021407
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

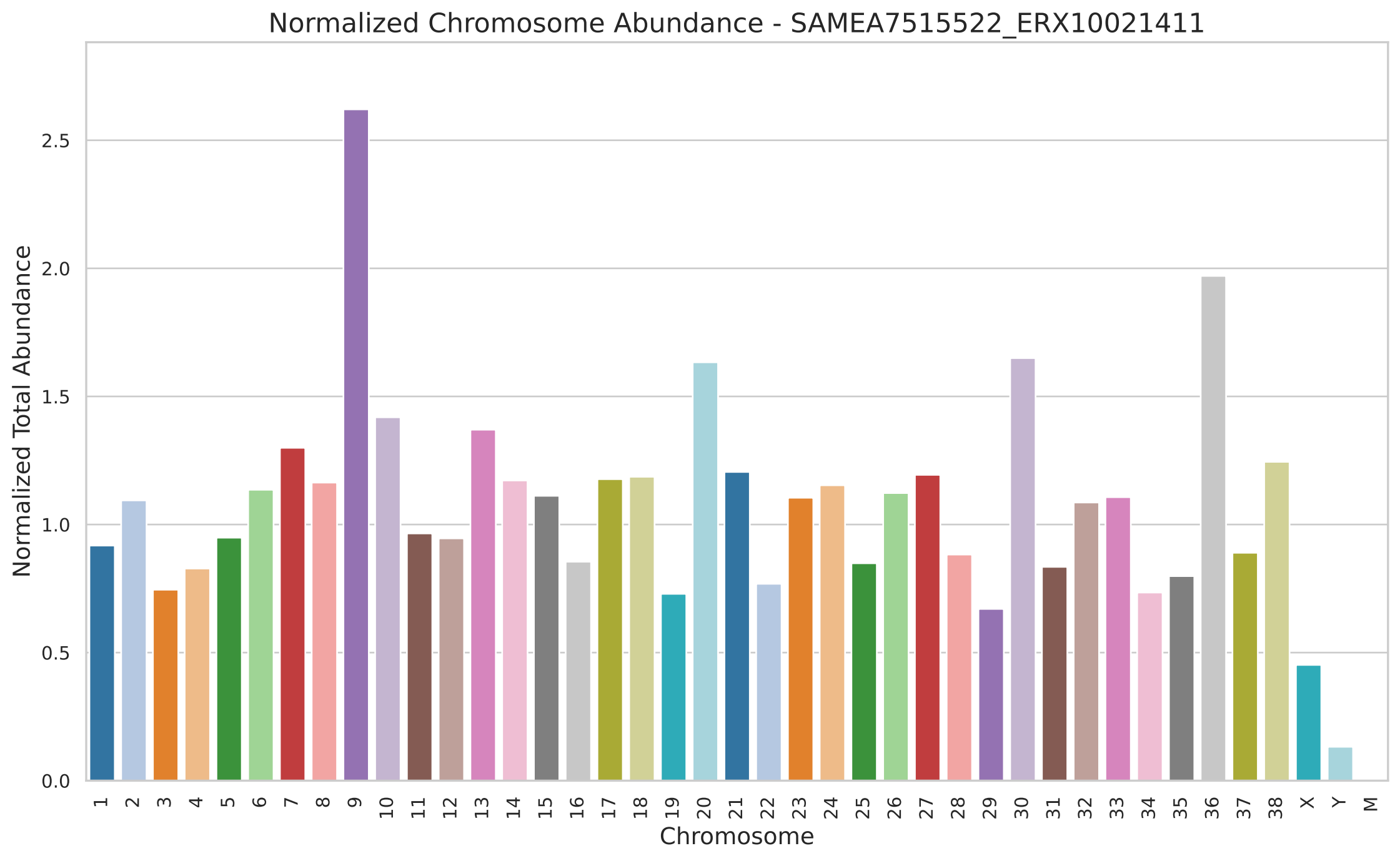

Normalized Chromosome Abundance - SAMEA7515578_ERX10021412
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

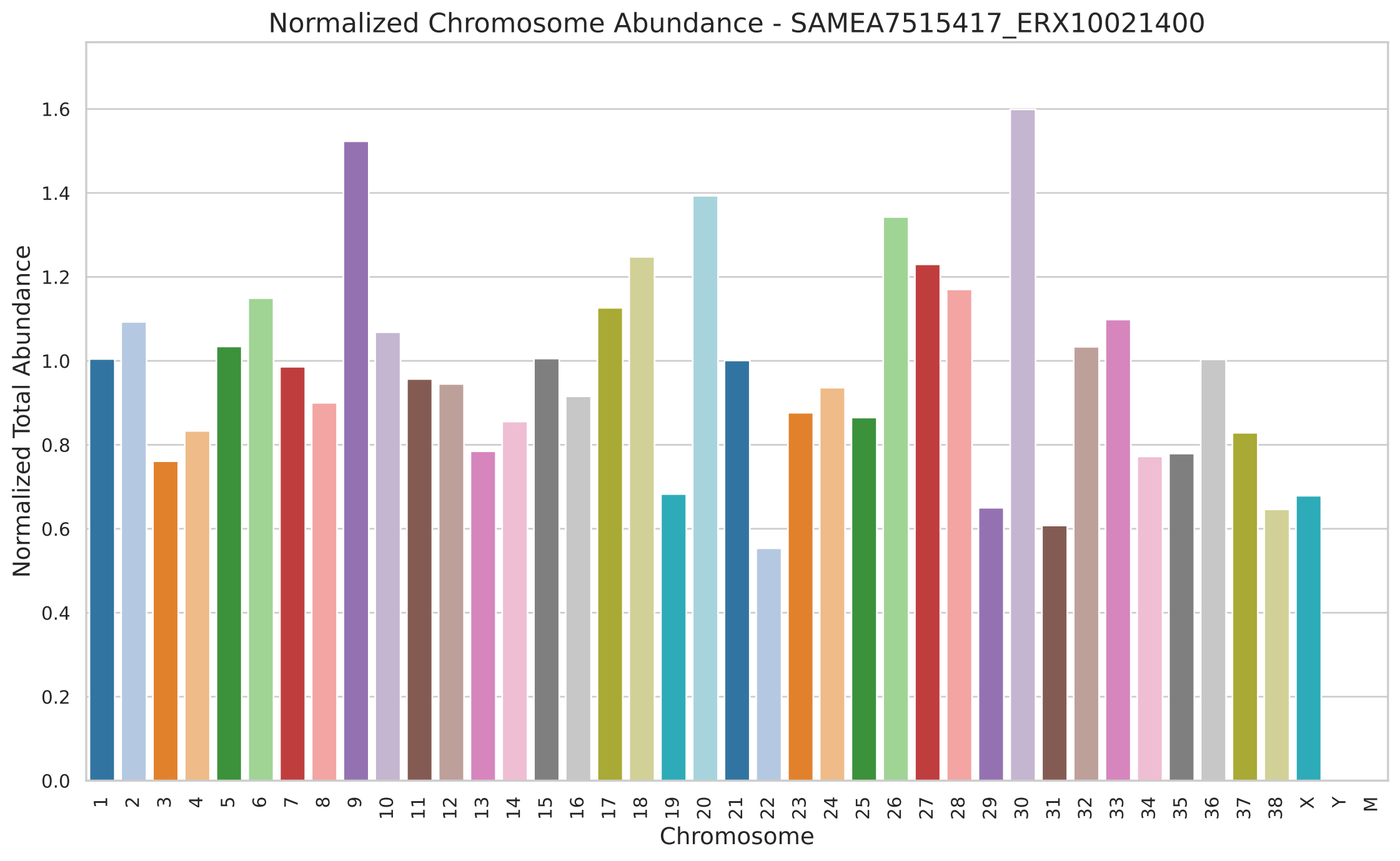

Normalized Chromosome Abundance - SAMEA7515548_ERX10021397
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

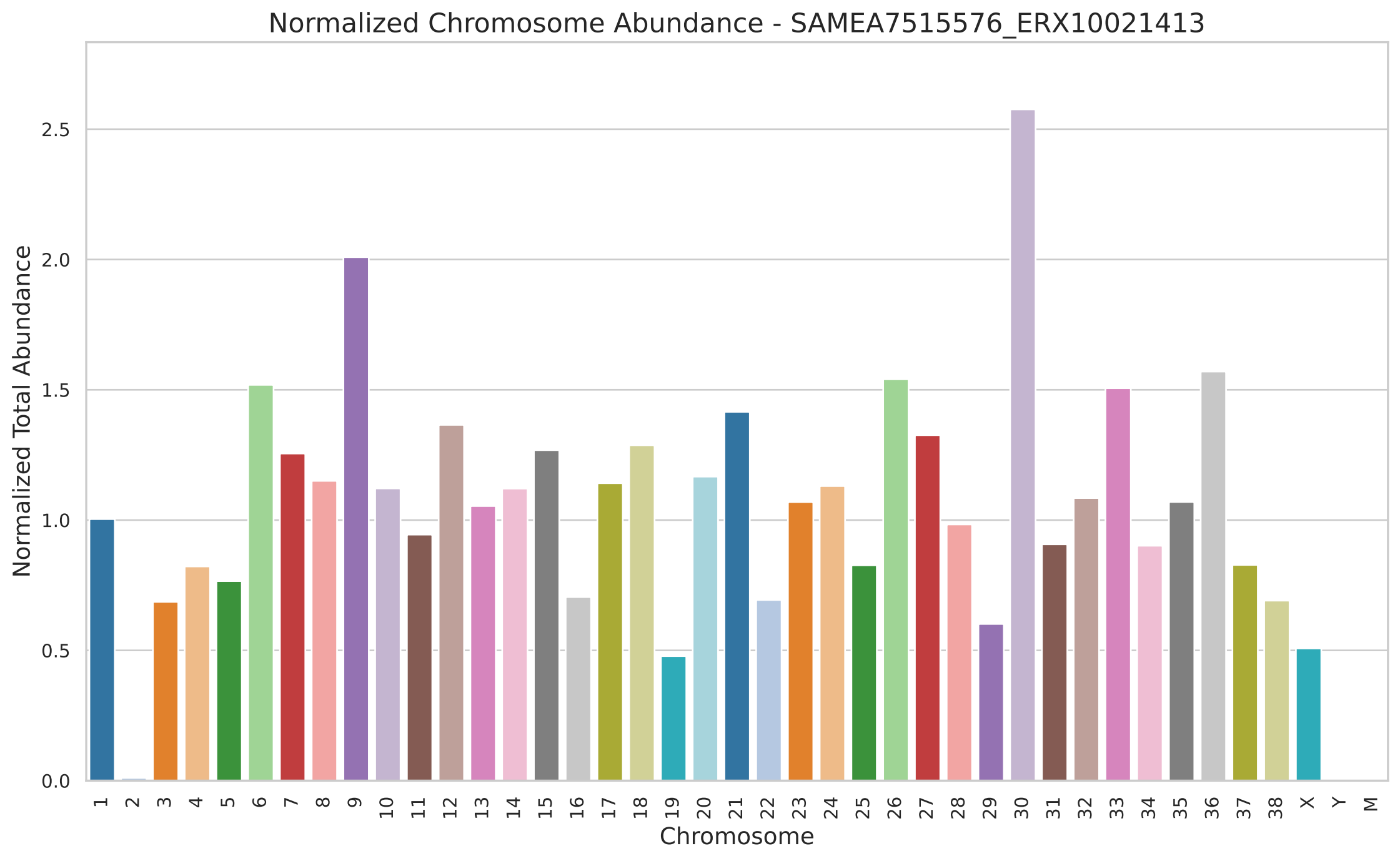

Normalized Chromosome Abundance - SAMEA7515582_ERX10021417
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

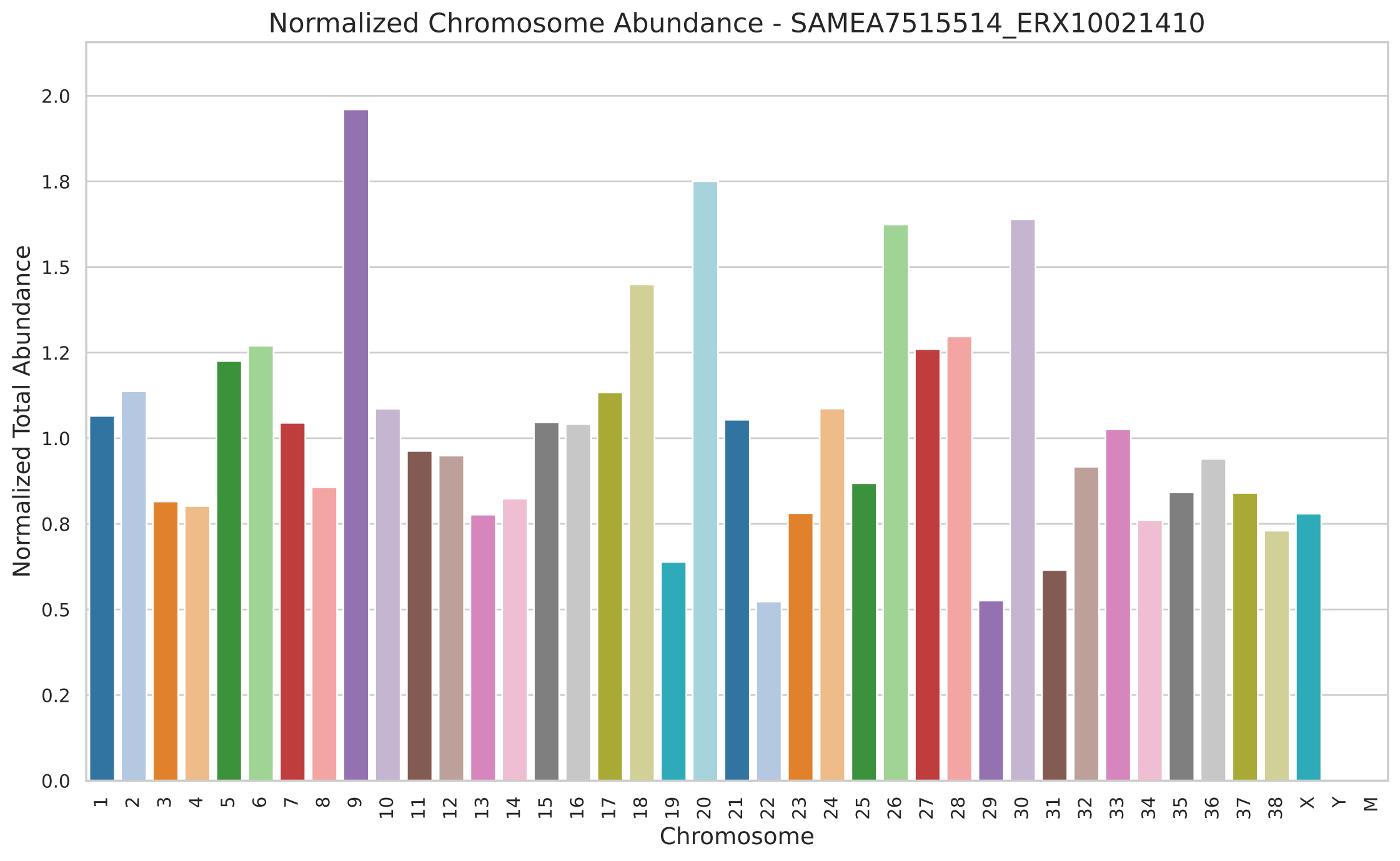

Normalized Chromosome Abundance - SAMEA110220232_ERX9466800
Normalized Total Abundance
20.0
17.5
15.0
12.5
10.0
7.5
5.0
2.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

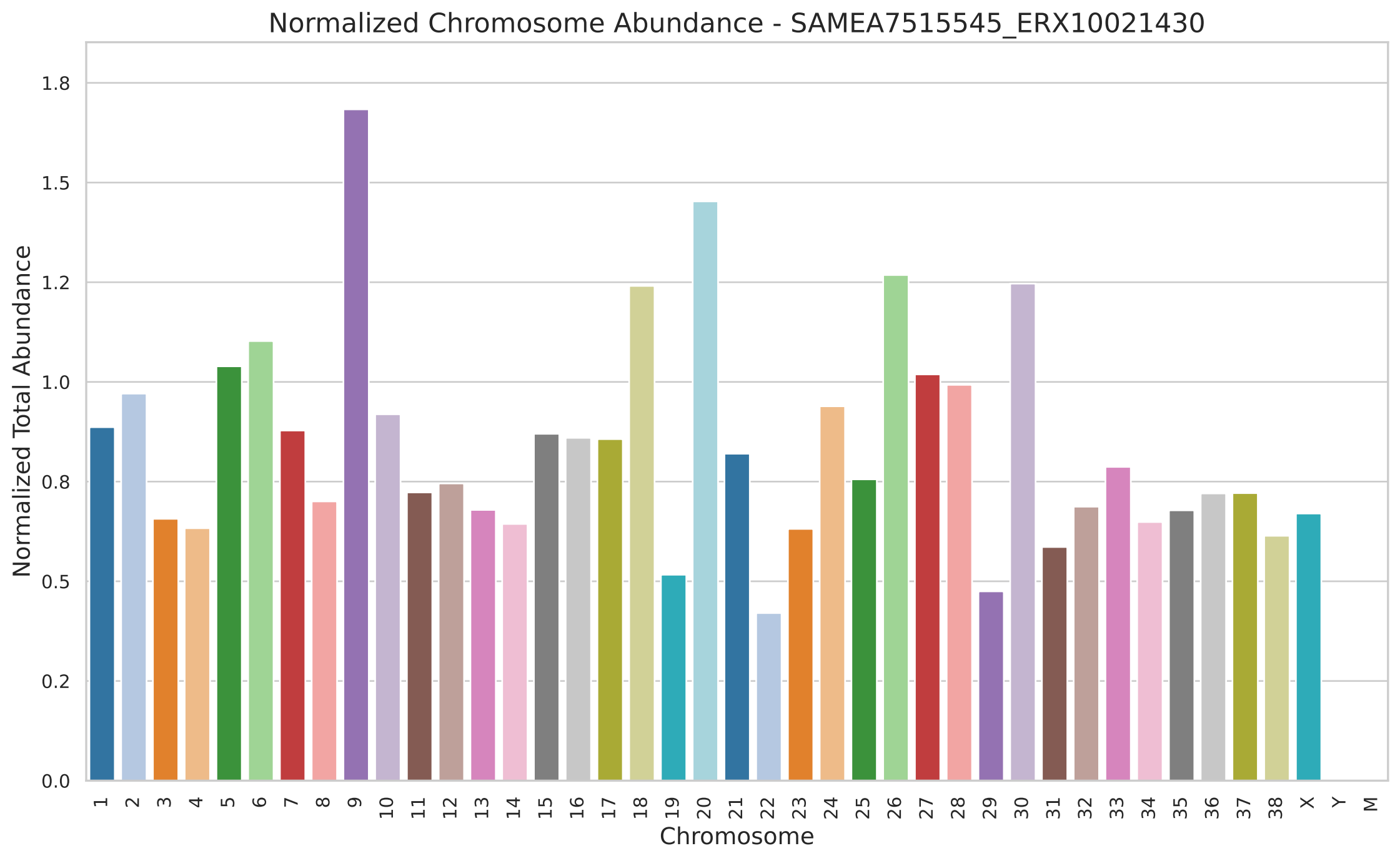

Normalized Chromosome Abundance - SAMEA7515422_ERX10021404
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

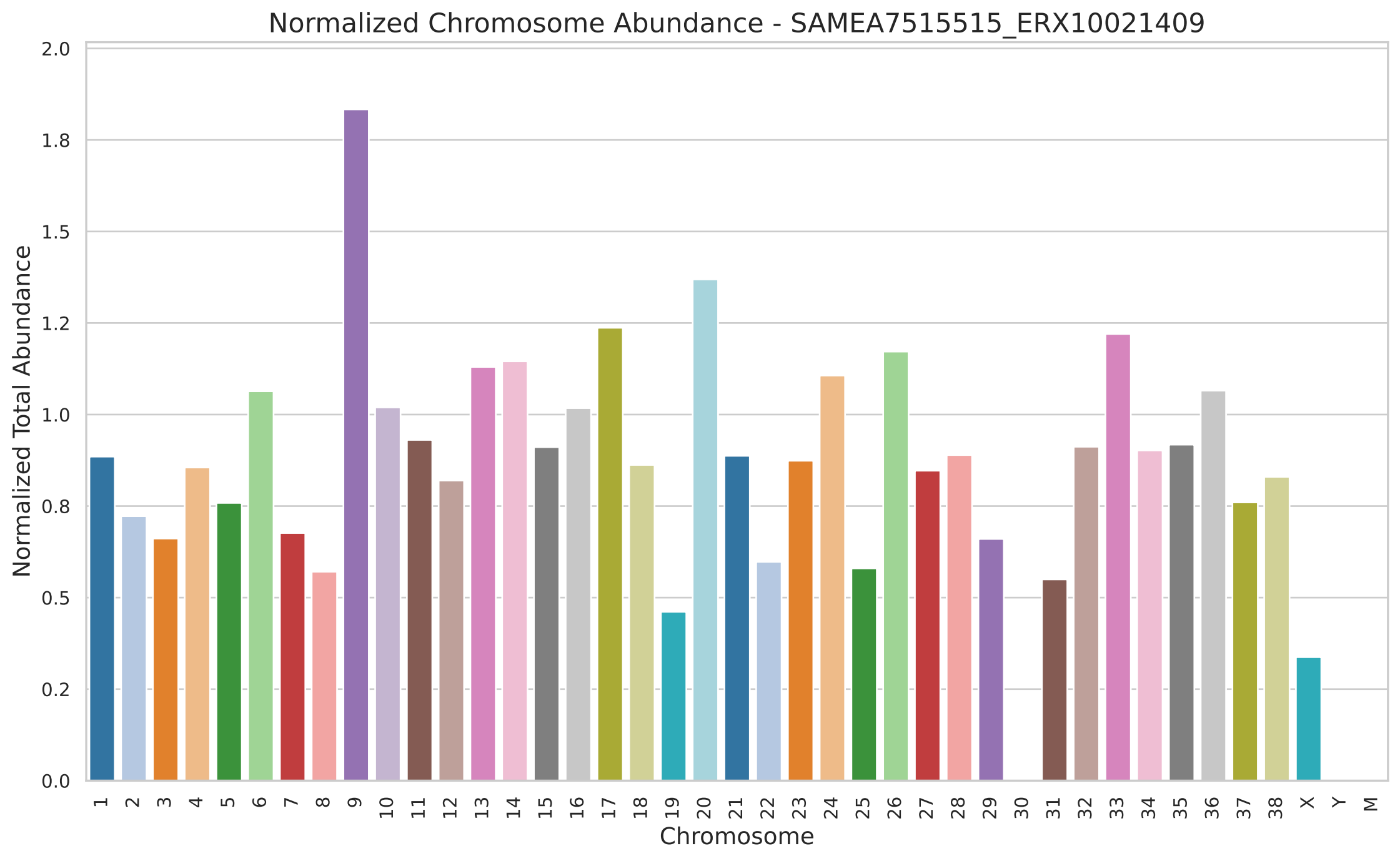

Normalized Chromosome Abundance - SAMEA7515522_ERX10021411
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

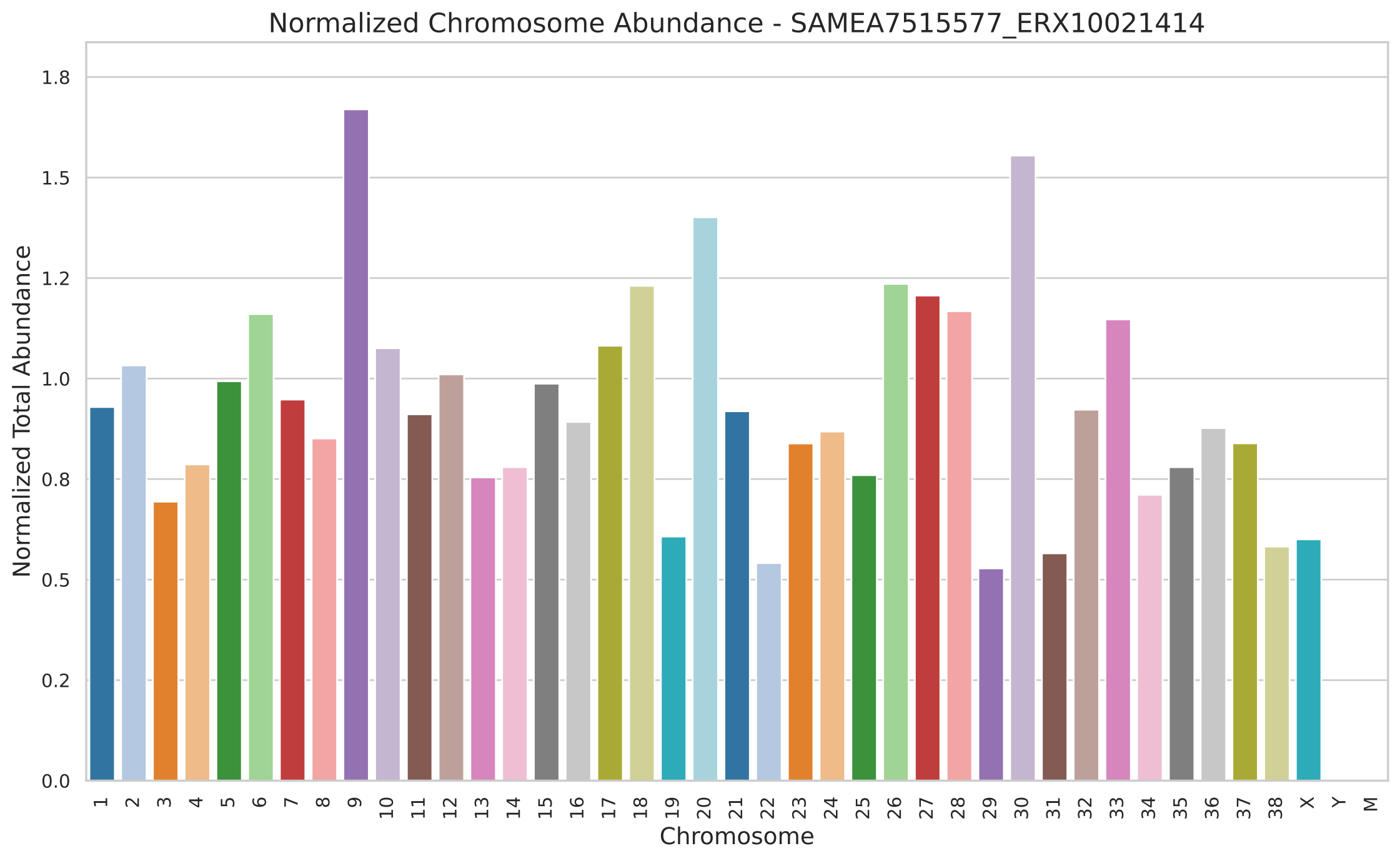

Normalized Chromosome Abundance - SAMEA7515417_ERX10021400
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

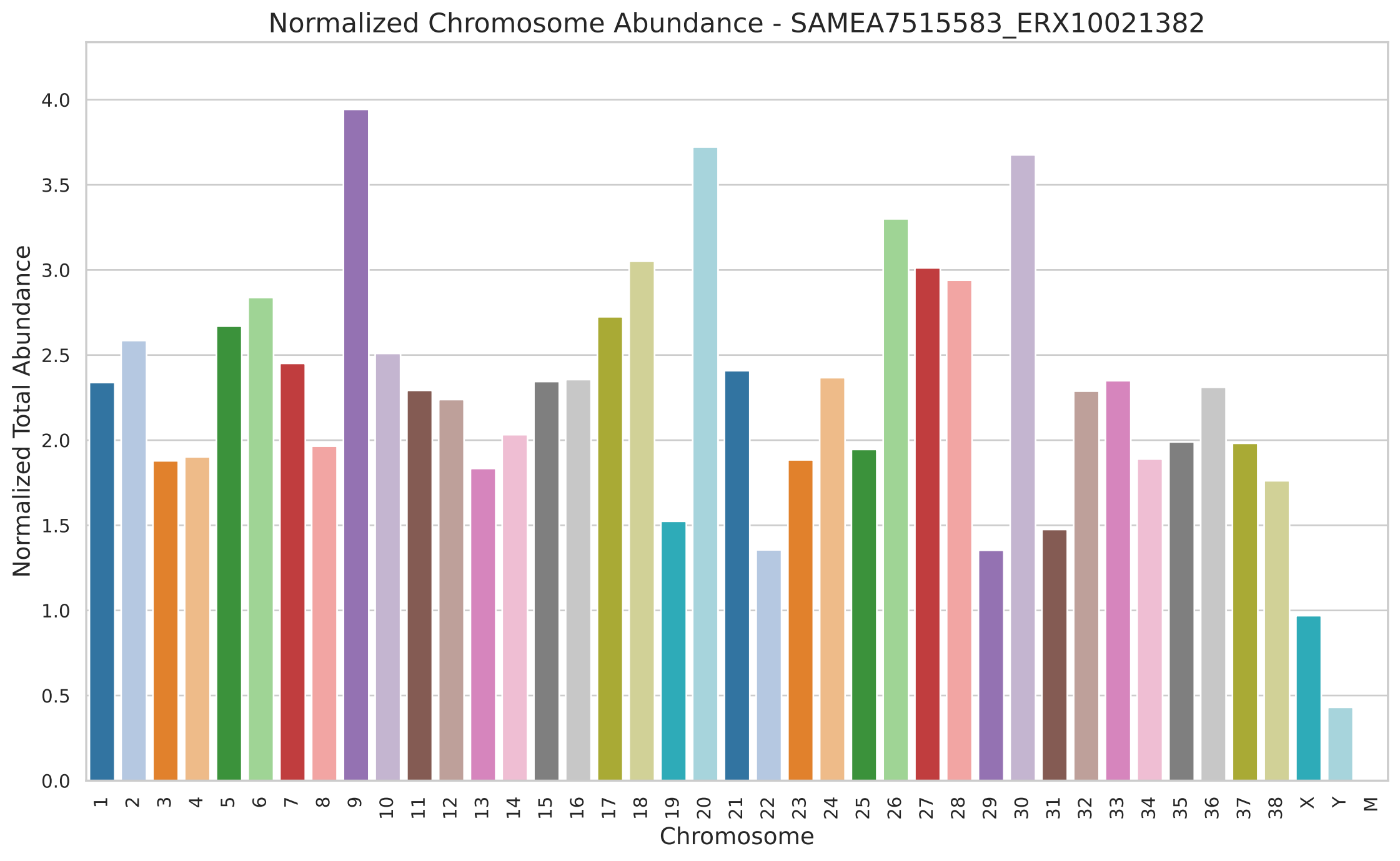

Normalized Chromosome Abundance - SAMEA7515576_ERX10021413
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

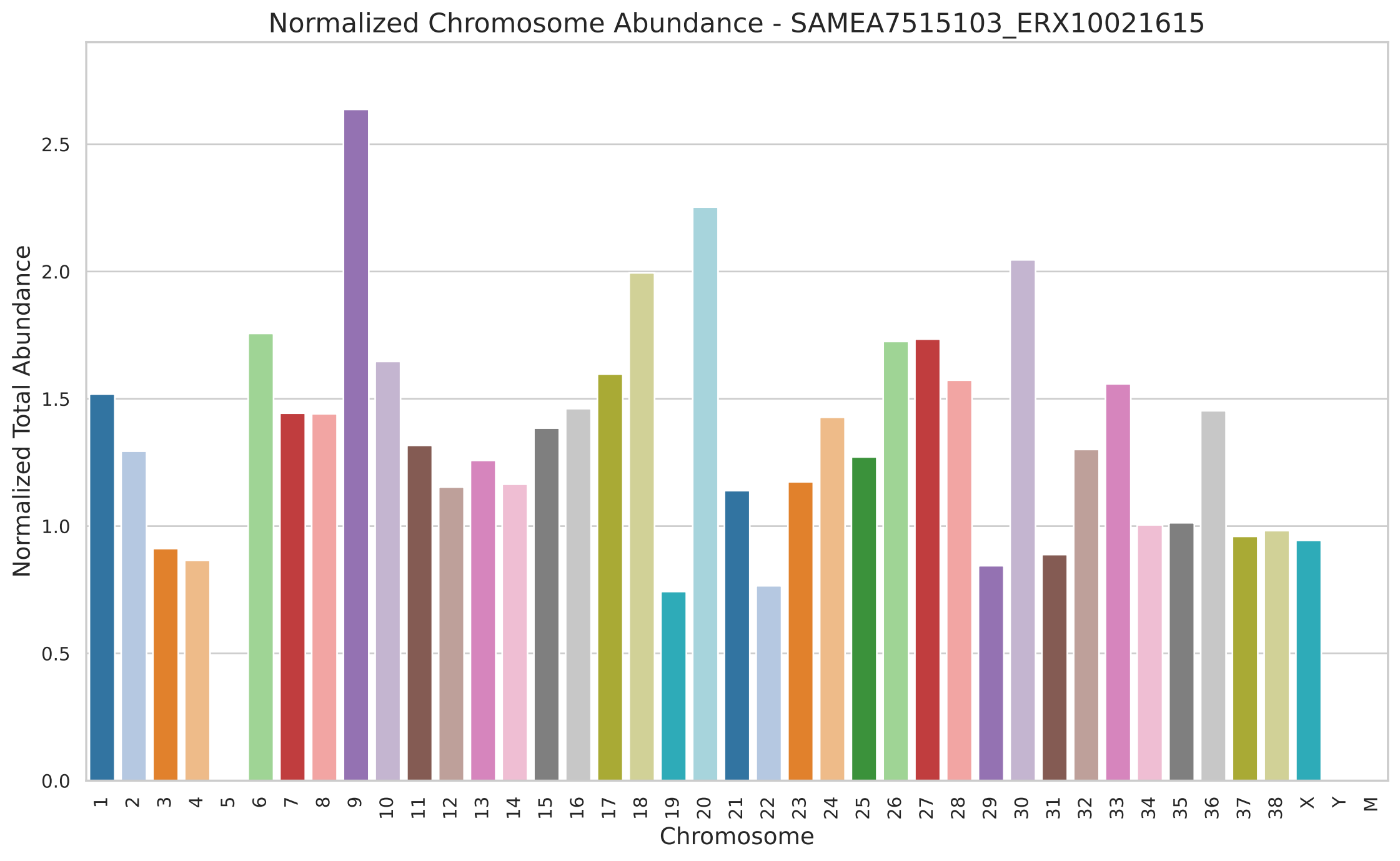

Normalized Chromosome Abundance - SAMEA7515514_ERX10021410
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

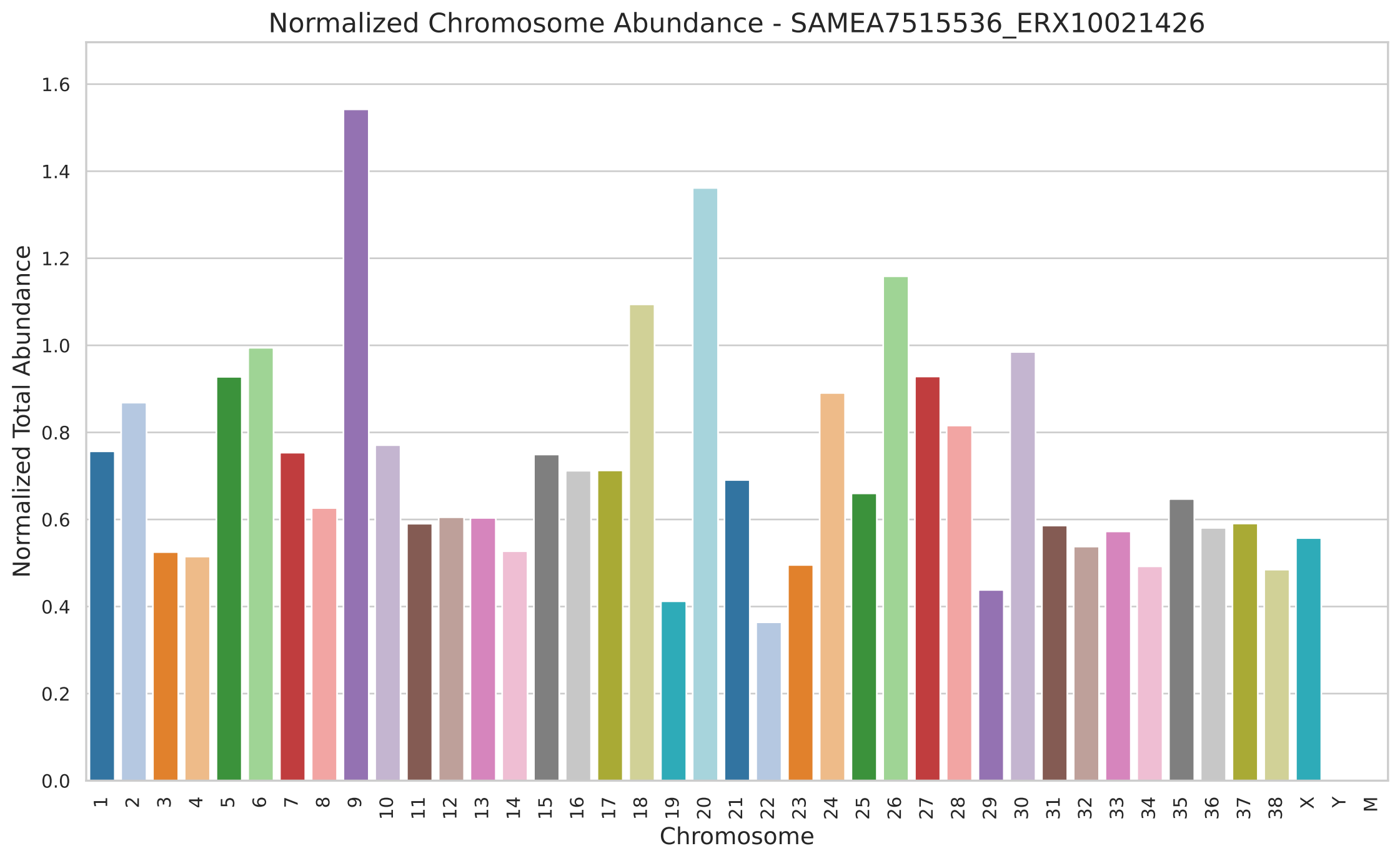

Normalized Chromosome Abundance - SAMEA7515545_ERX10021430
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

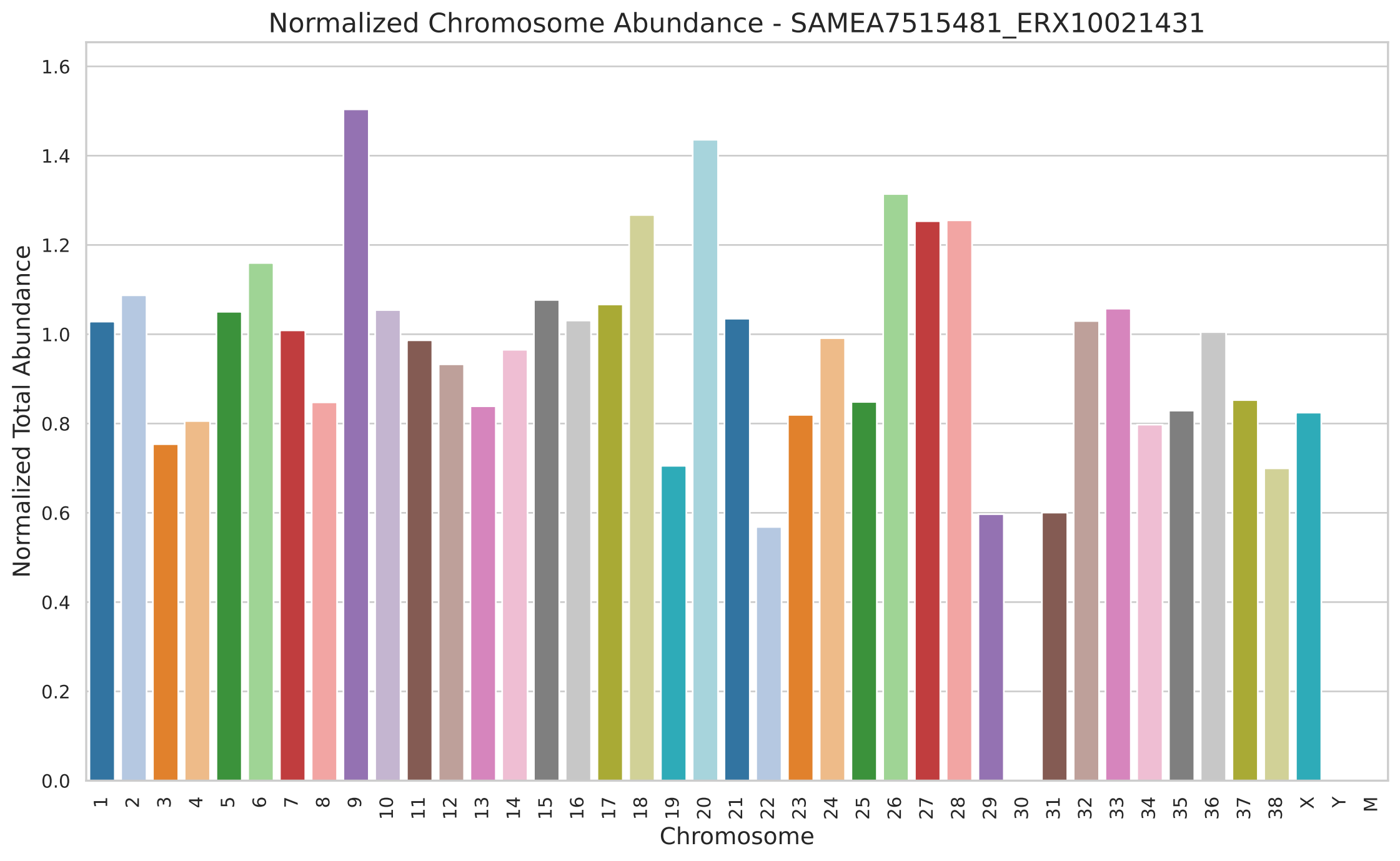

Normalized Chromosome Abundance - SAMEA7515515_ERX10021409
Normalized Total Abundance
2.0
1.8
1.5
1.2
1.0
0.8
0.5
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

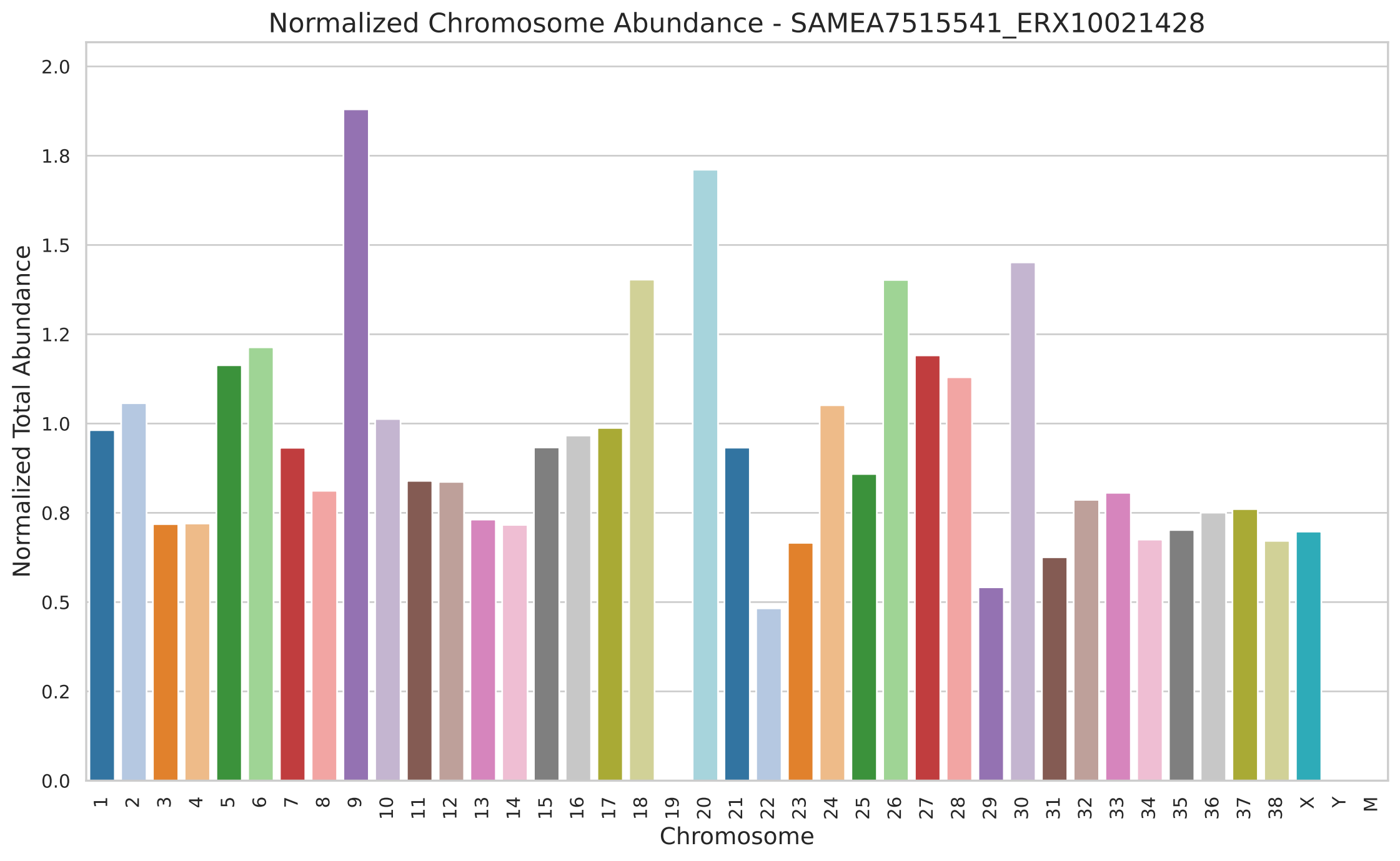

Normalized Chromosome Abundance - SAMEA7515577_ERX10021414
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

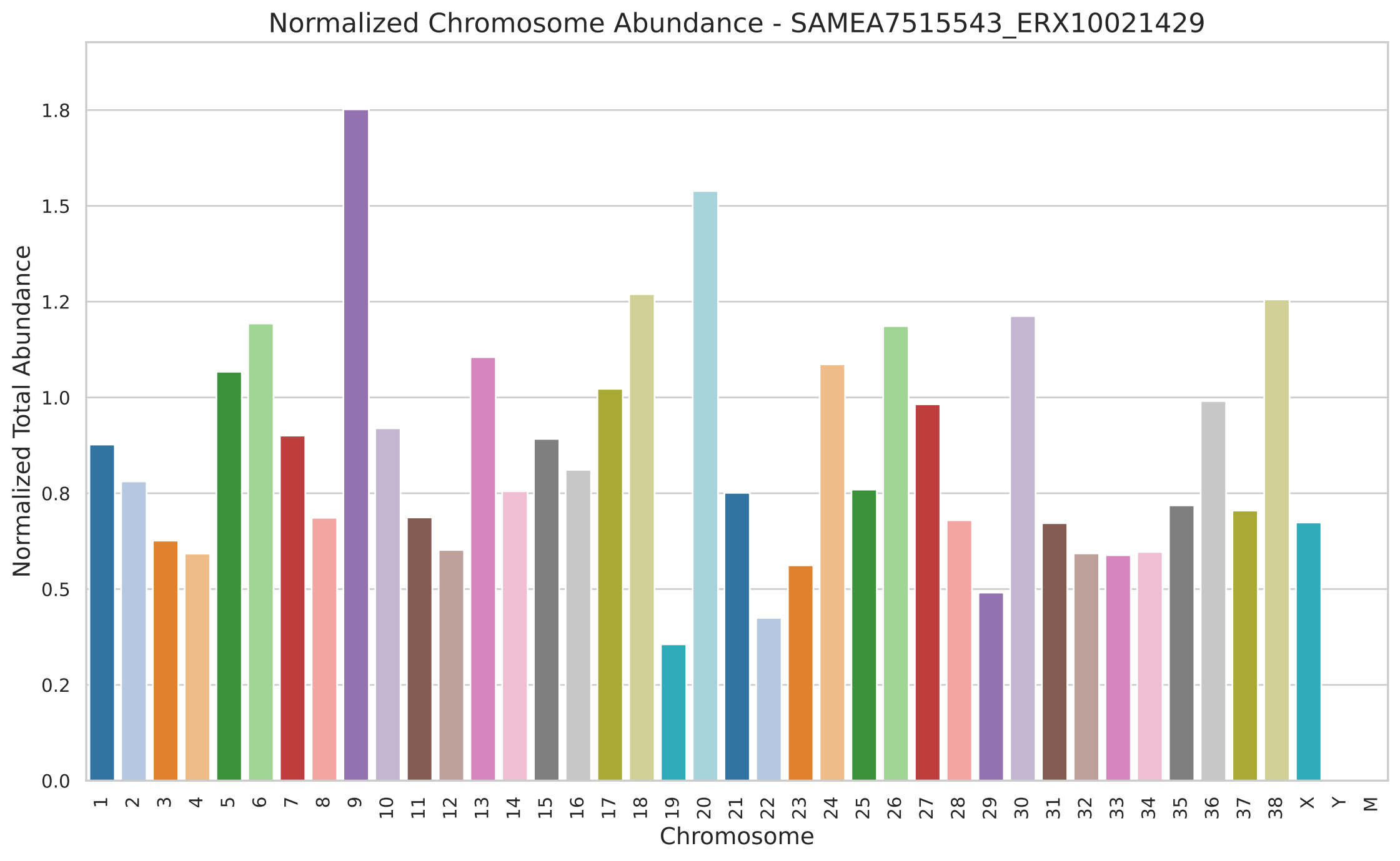

Normalized Chromosome Abundance - SAMEA7515583_ERX10021382
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

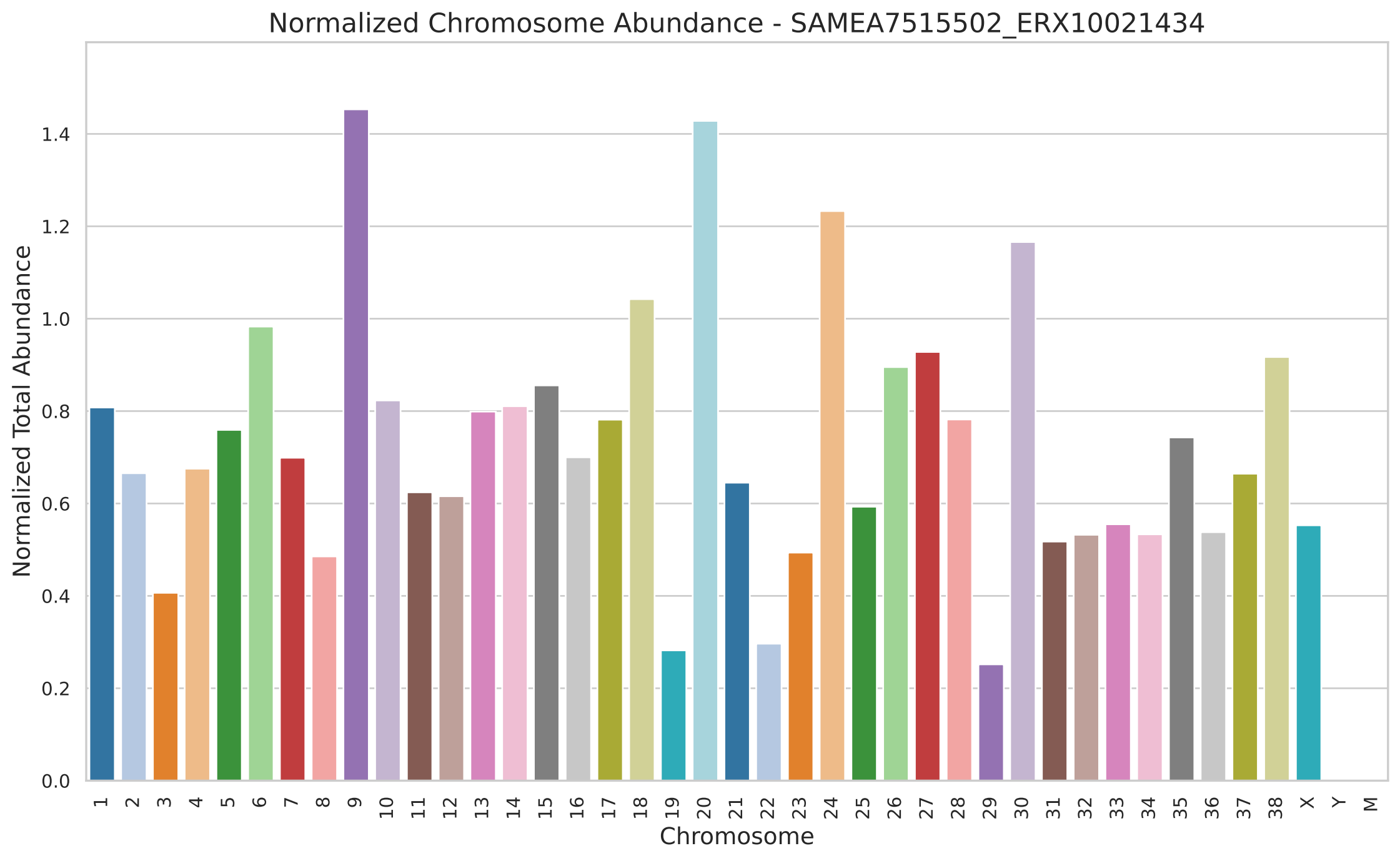

Normalized Chromosome Abundance - SAMEA7515103_ERX10021615
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

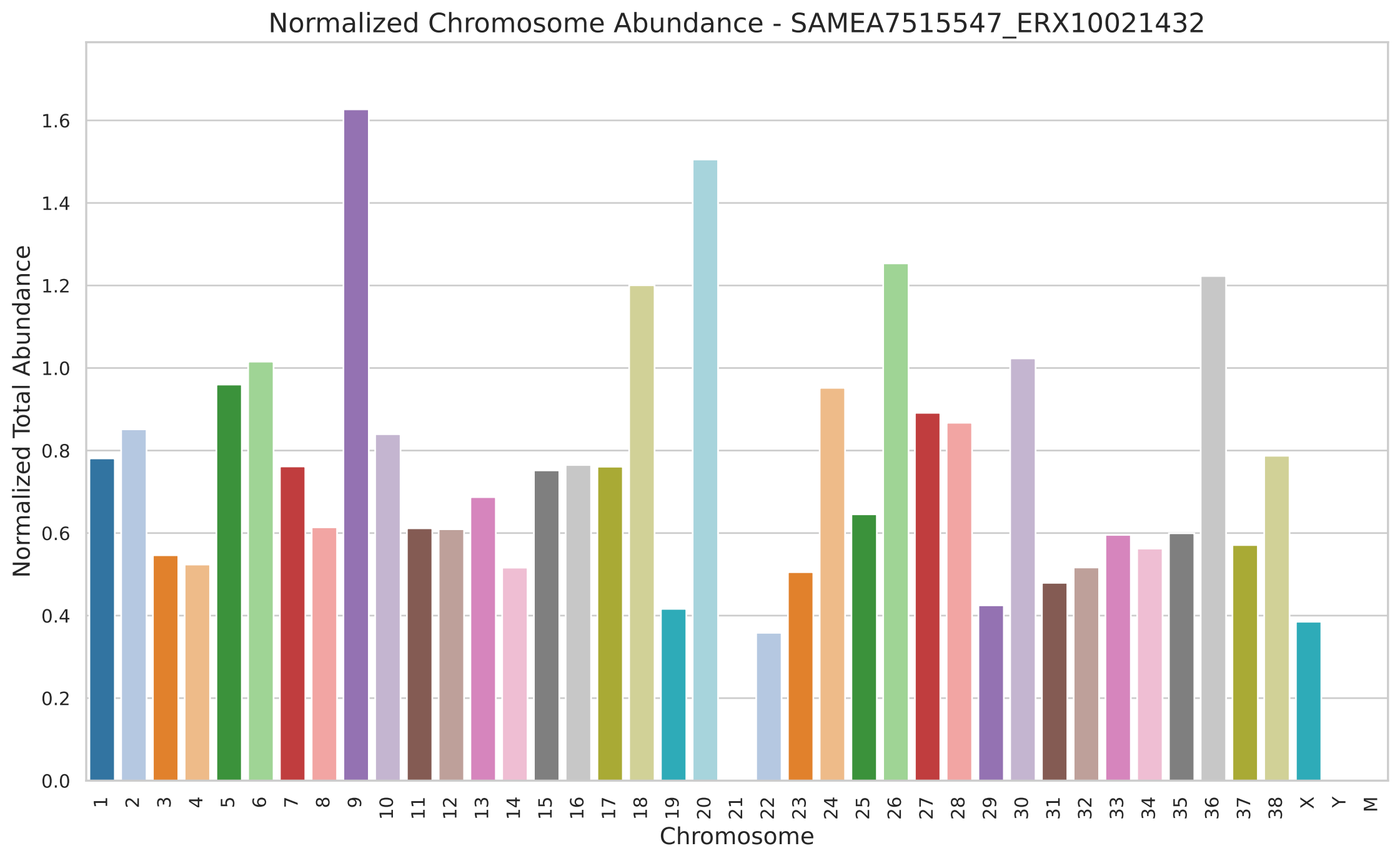

Normalized Chromosome Abundance - SAMEA7515536_ERX10021426
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

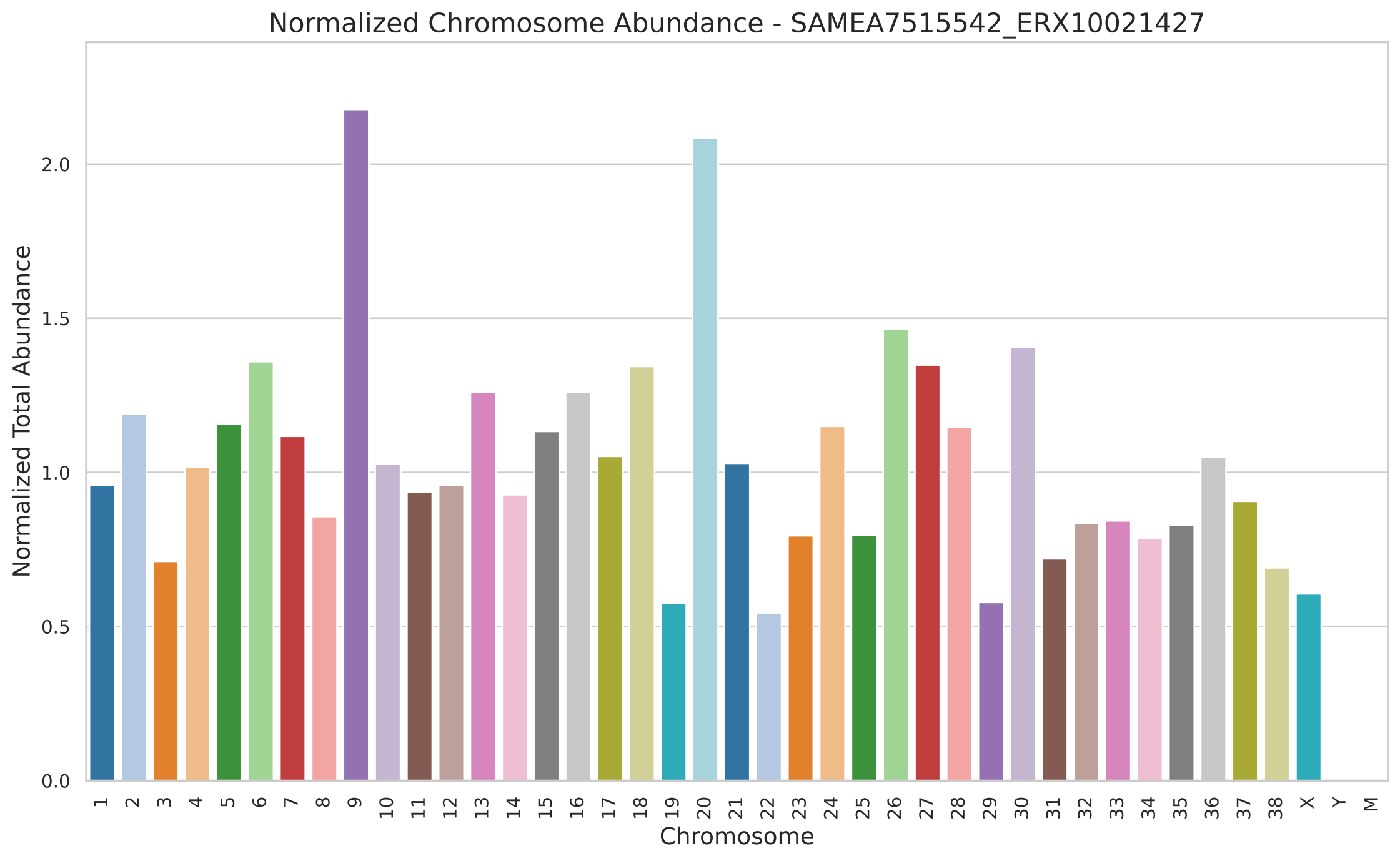

Normalized Chromosome Abundance - SAMEA7515481_ERX10021431
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

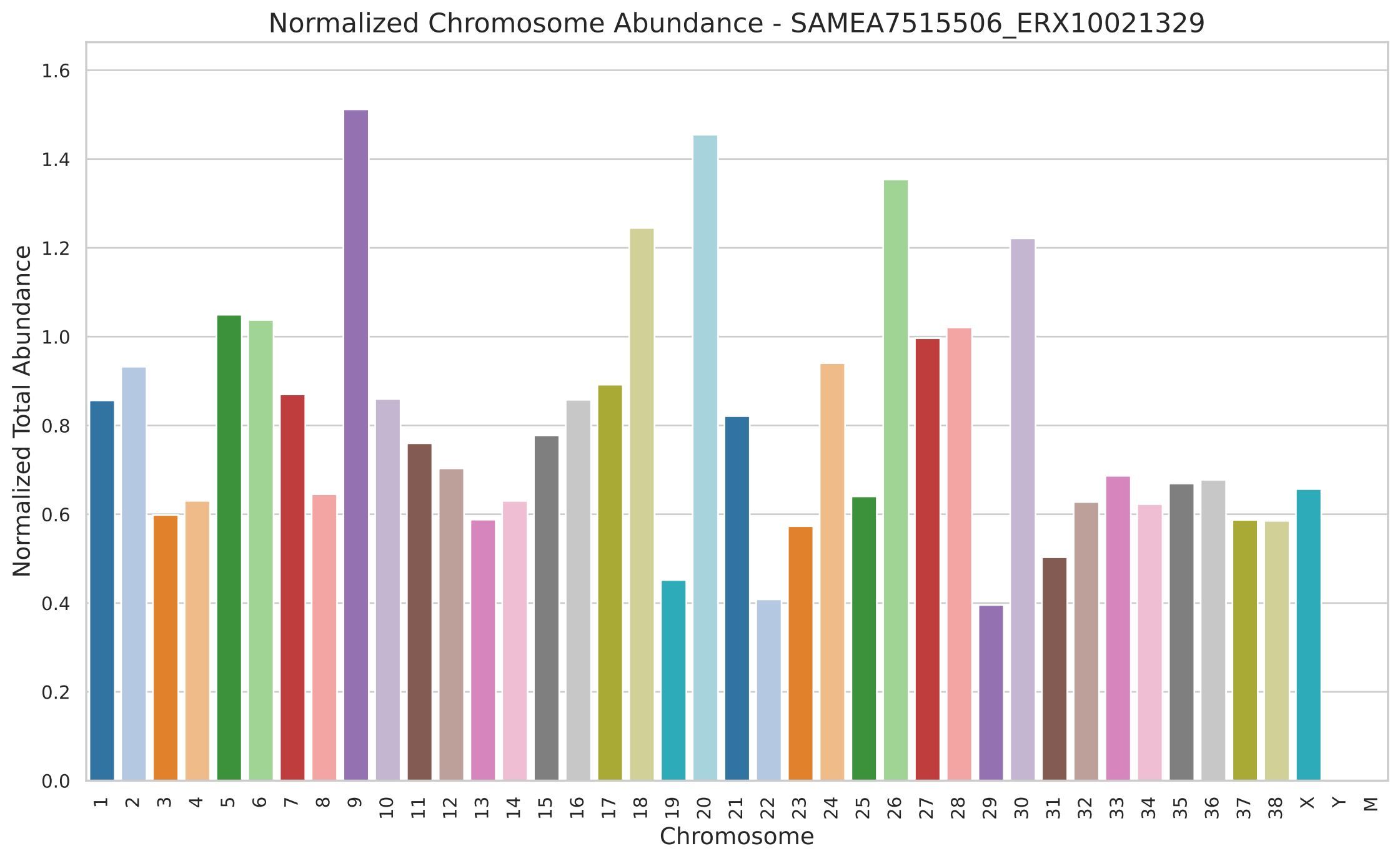

Normalized Chromosome Abundance - SAMEA7515541_ERX10021428
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

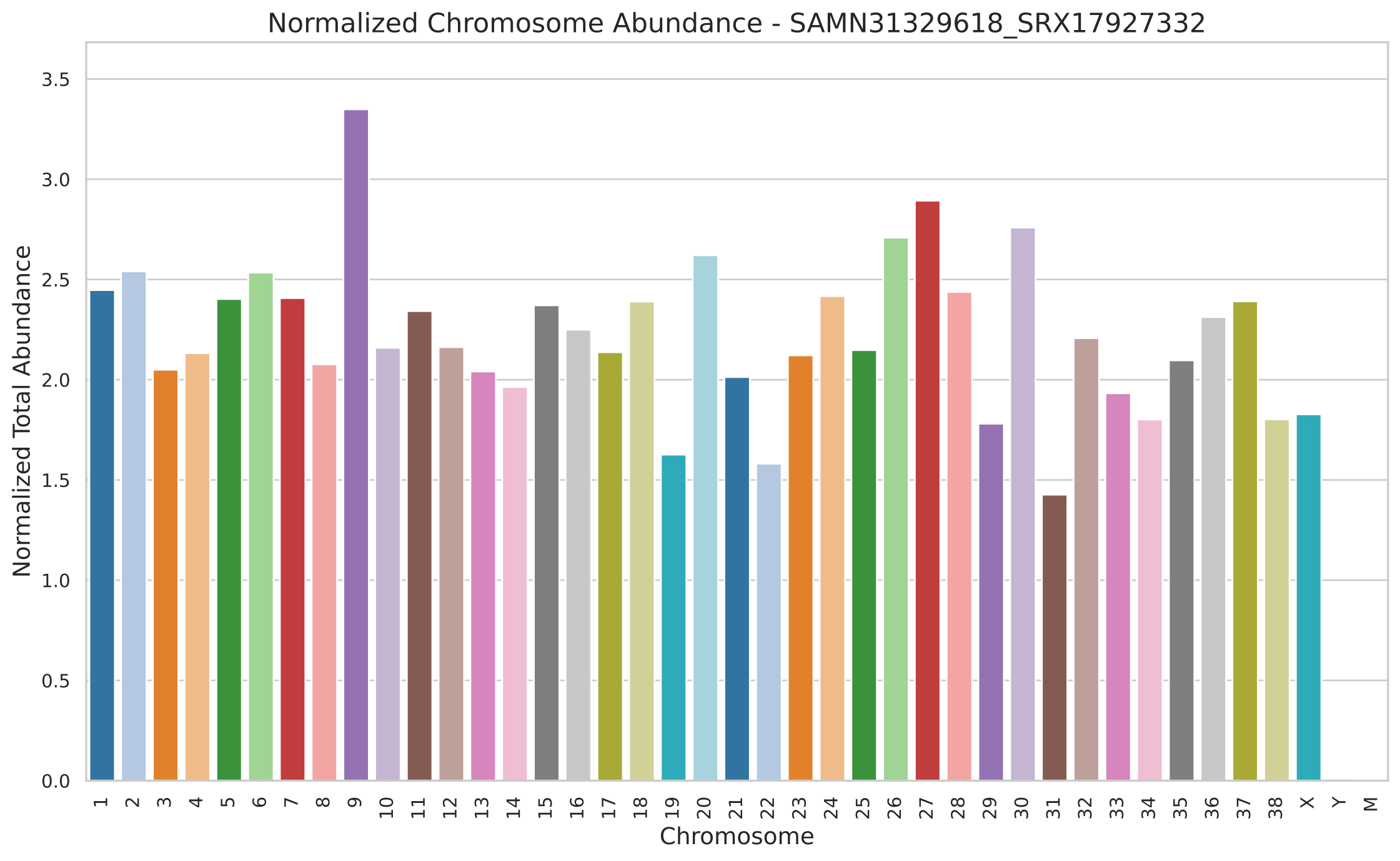

Normalized Chromosome Abundance - SAMEA7515543_ERX10021429
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

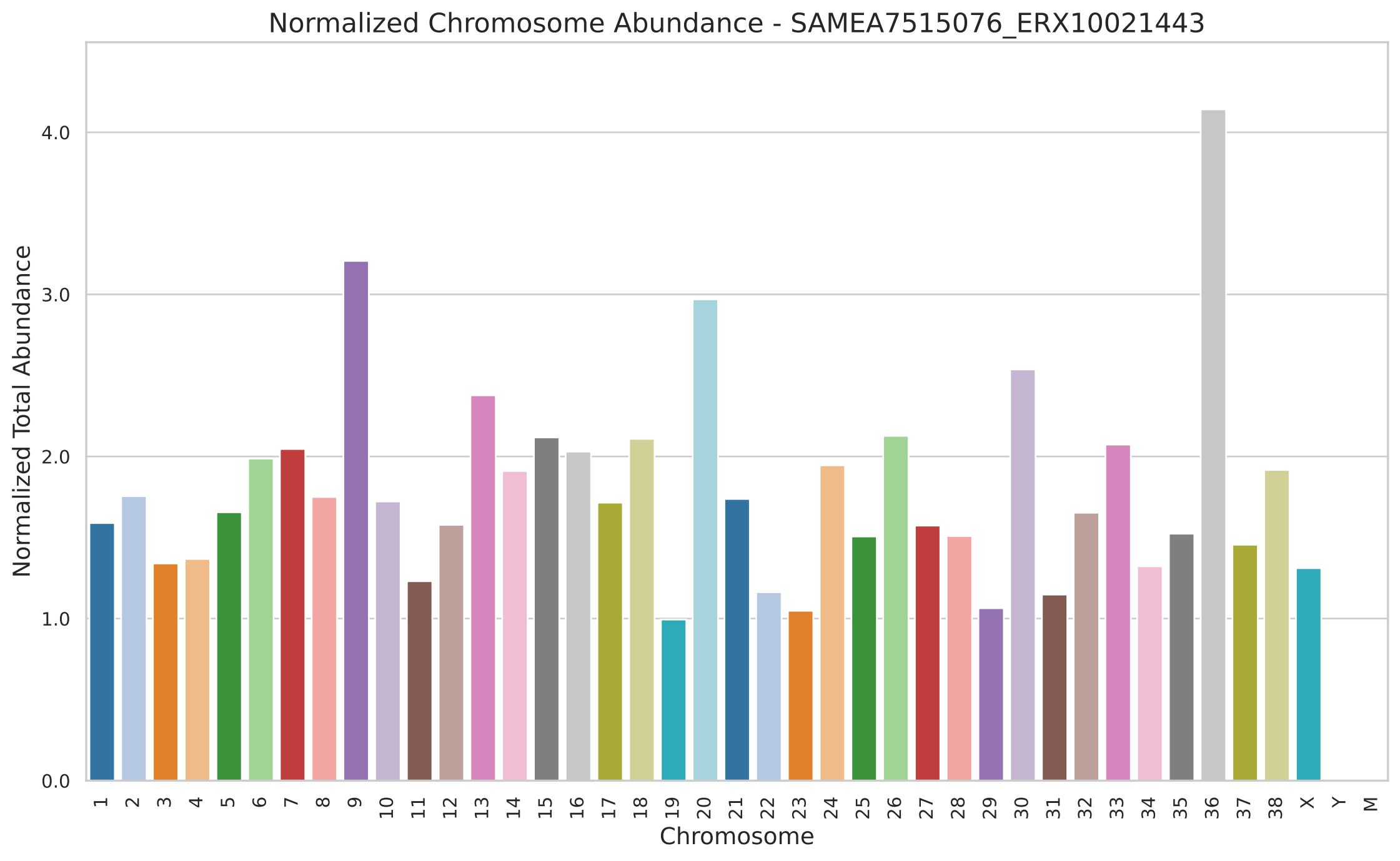

Normalized Chromosome Abundance - SAMEA7515502_ERX10021434
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

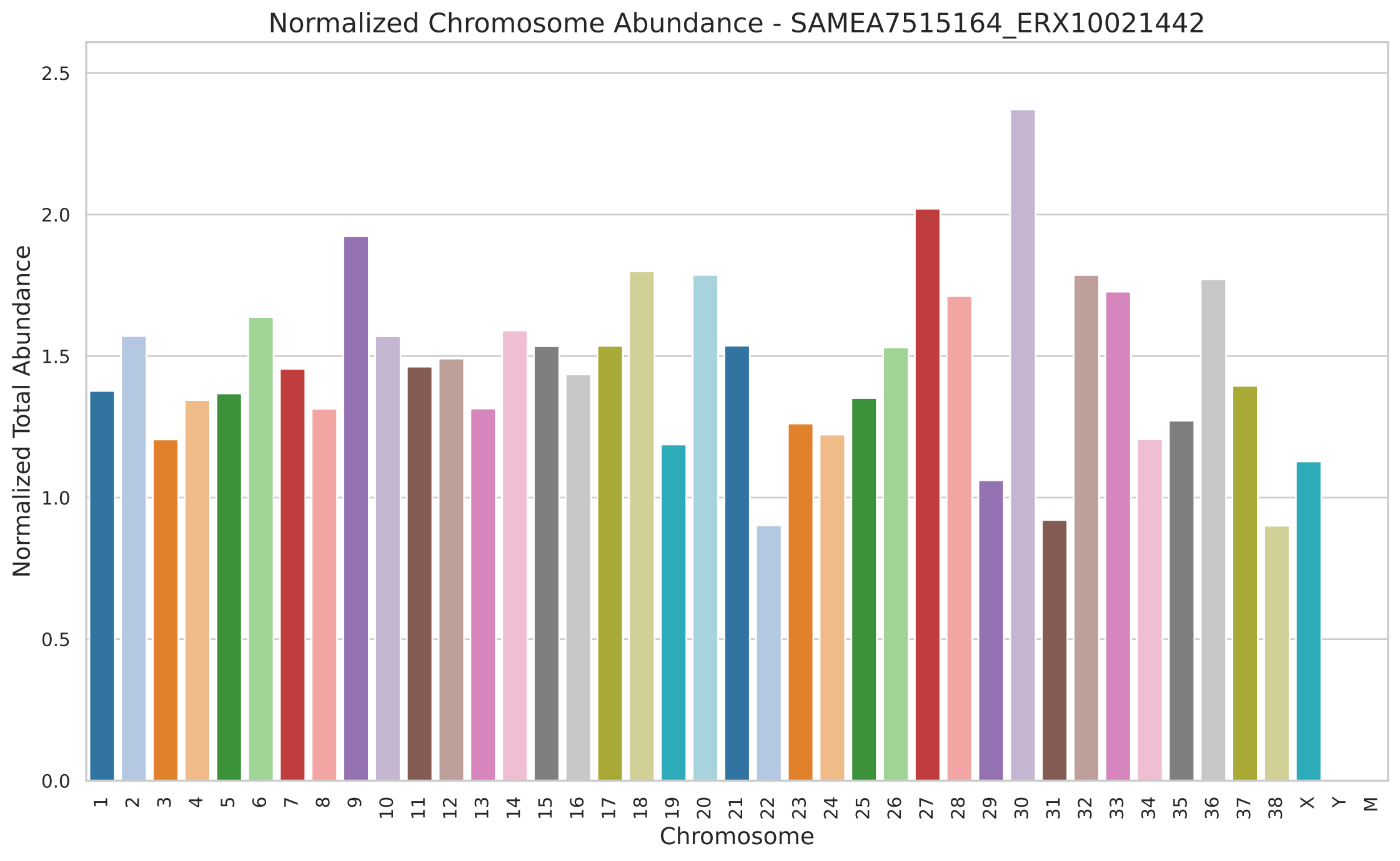

Normalized Chromosome Abundance - SAMEA7515547_ERX10021432
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

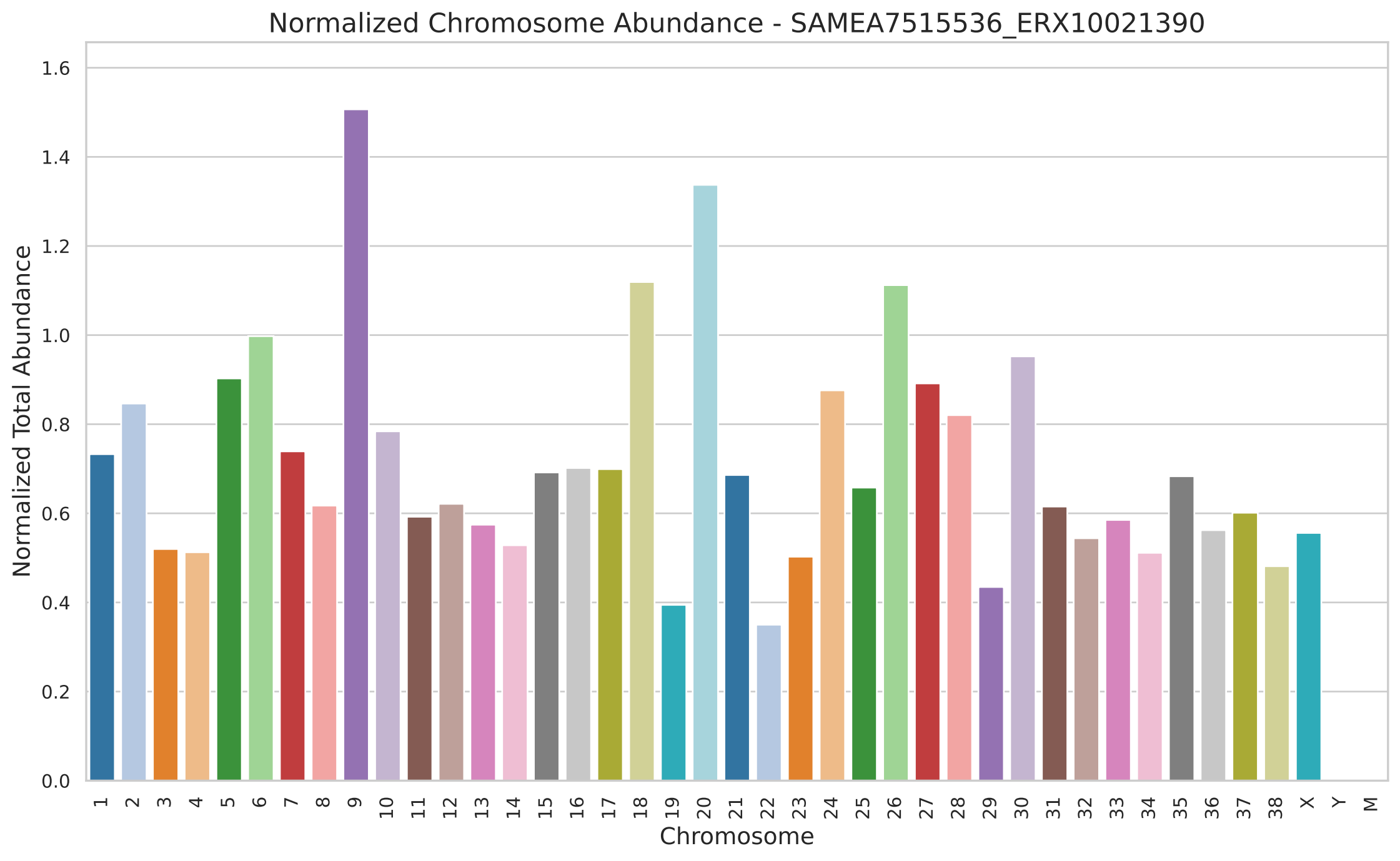

Normalized Chromosome Abundance - SAMEA7515542_ERX10021427
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

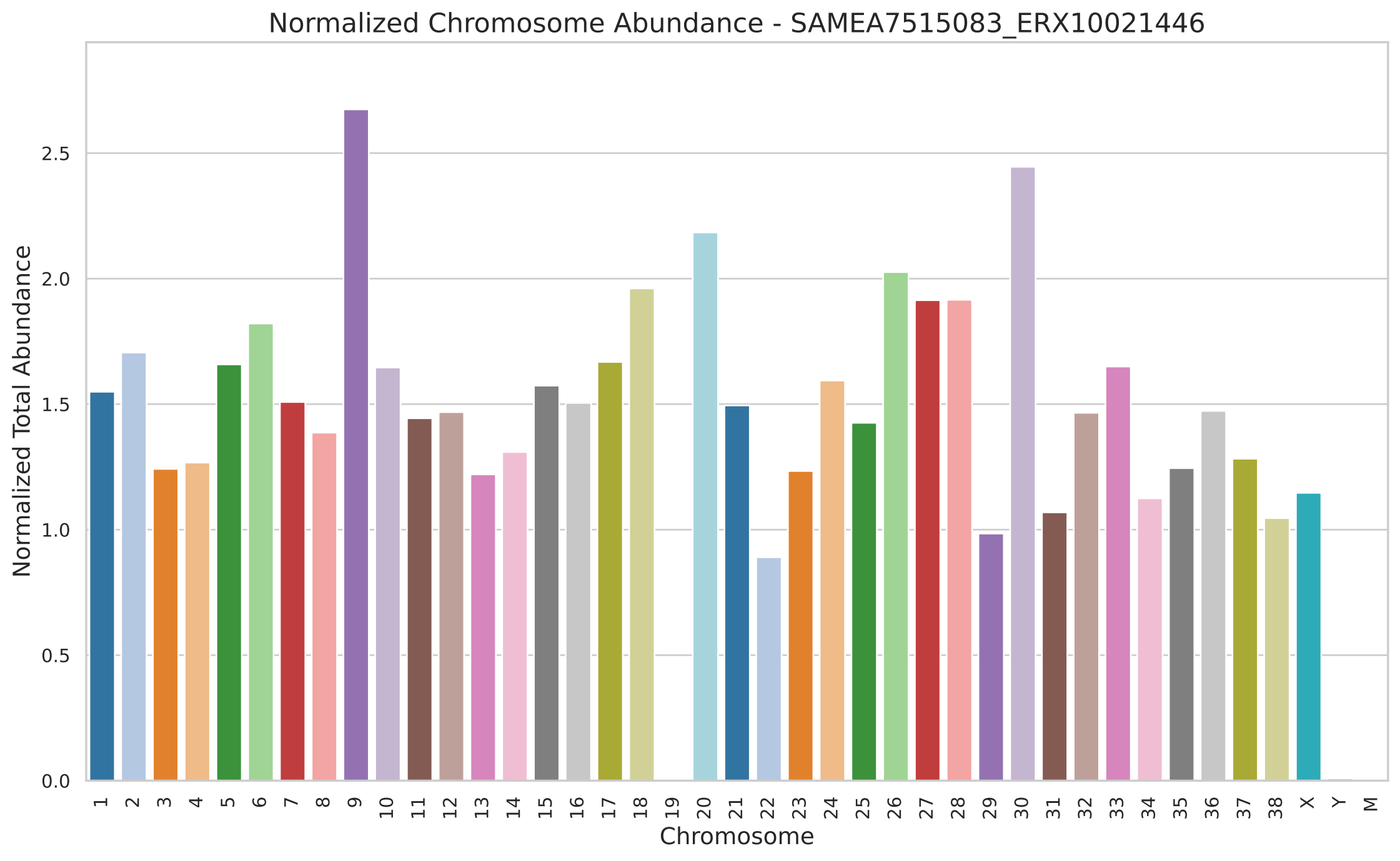

Normalized Chromosome Abundance - SAMEA7515506_ERX10021329
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

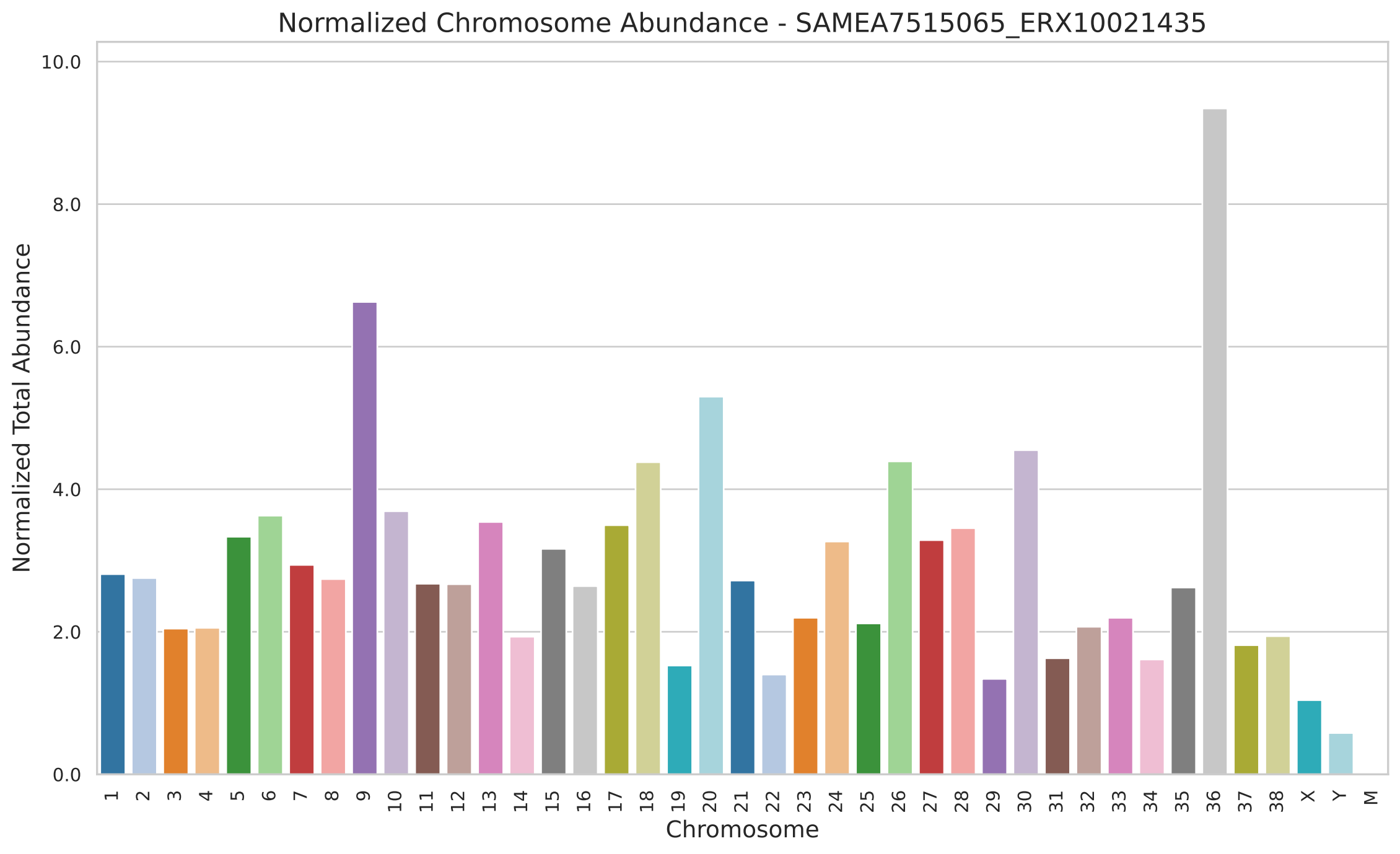

Normalized Chromosome Abundance - SAMN31329618_SRX17927332
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

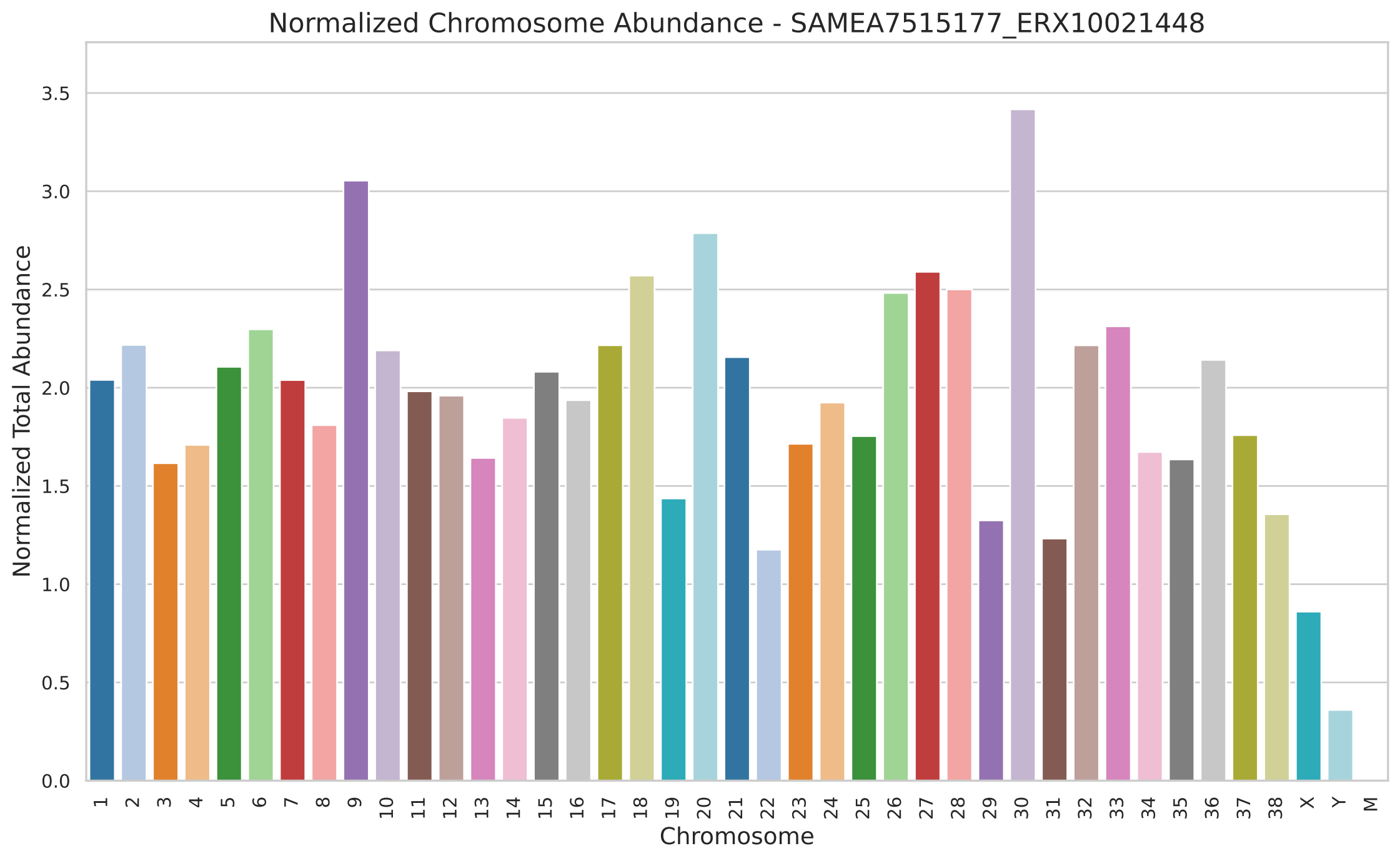

Normalized Chromosome Abundance - SAMEA7515076_ERX10021443
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

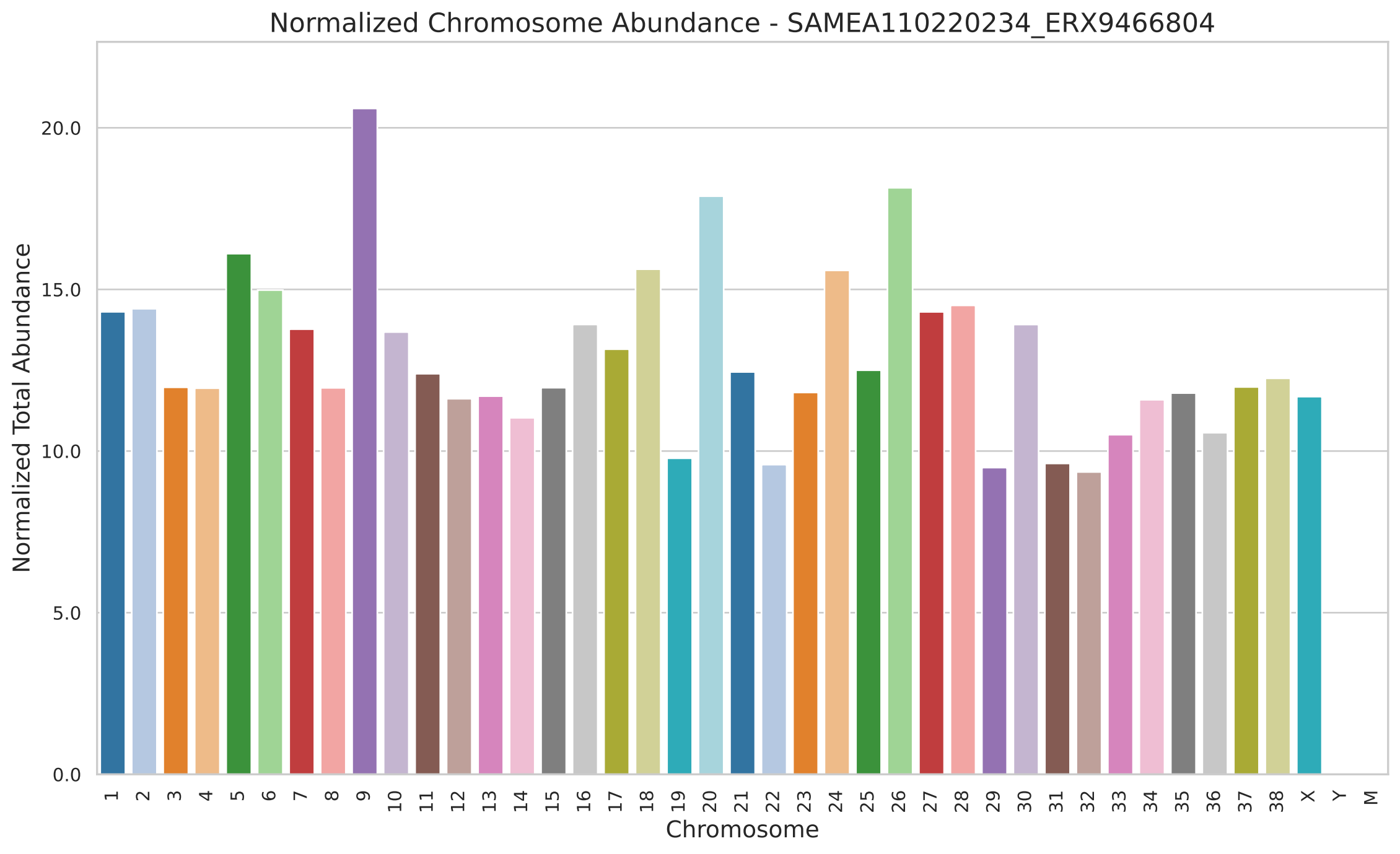

Normalized Chromosome Abundance - SAMEA7515164_ERX10021442
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

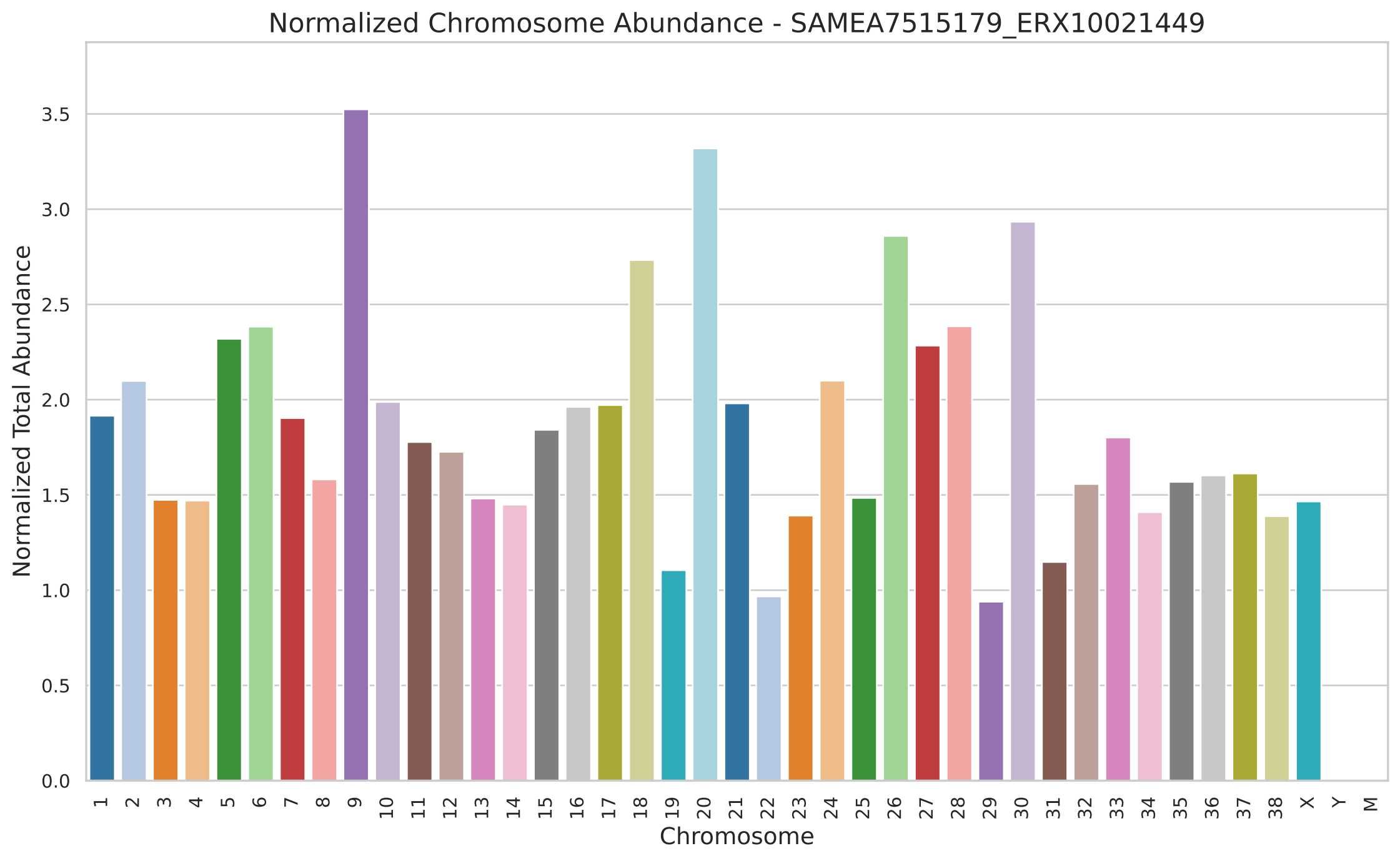

Normalized Chromosome Abundance - SAMEA7515536_ERX10021390
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

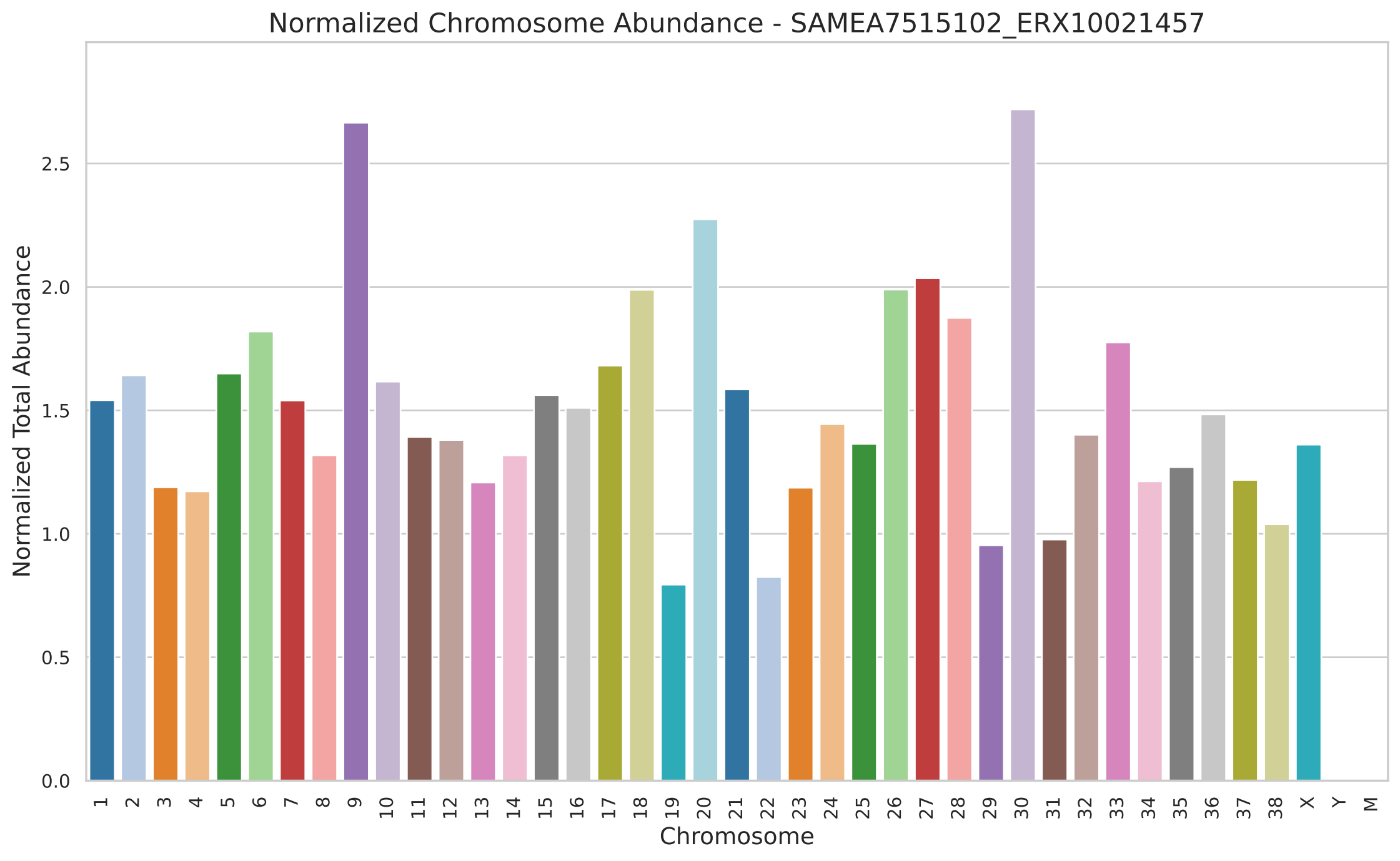

Normalized Chromosome Abundance - SAMEA7515083_ERX10021446
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

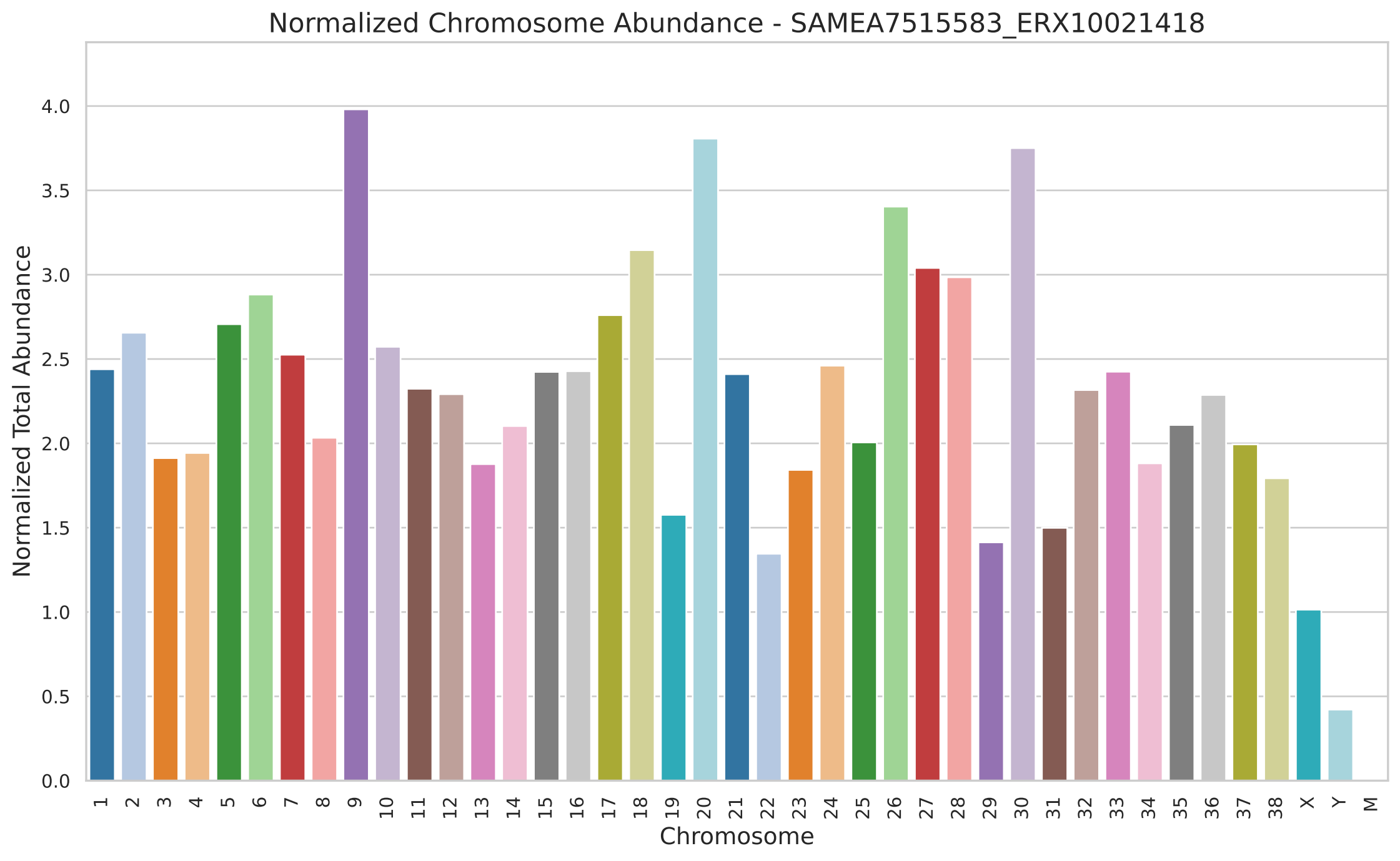

Normalized Chromosome Abundance - SAMEA7515065_ERX10021435
Normalized Total Abundance
10.0
8.0
6.0
4.0
2.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

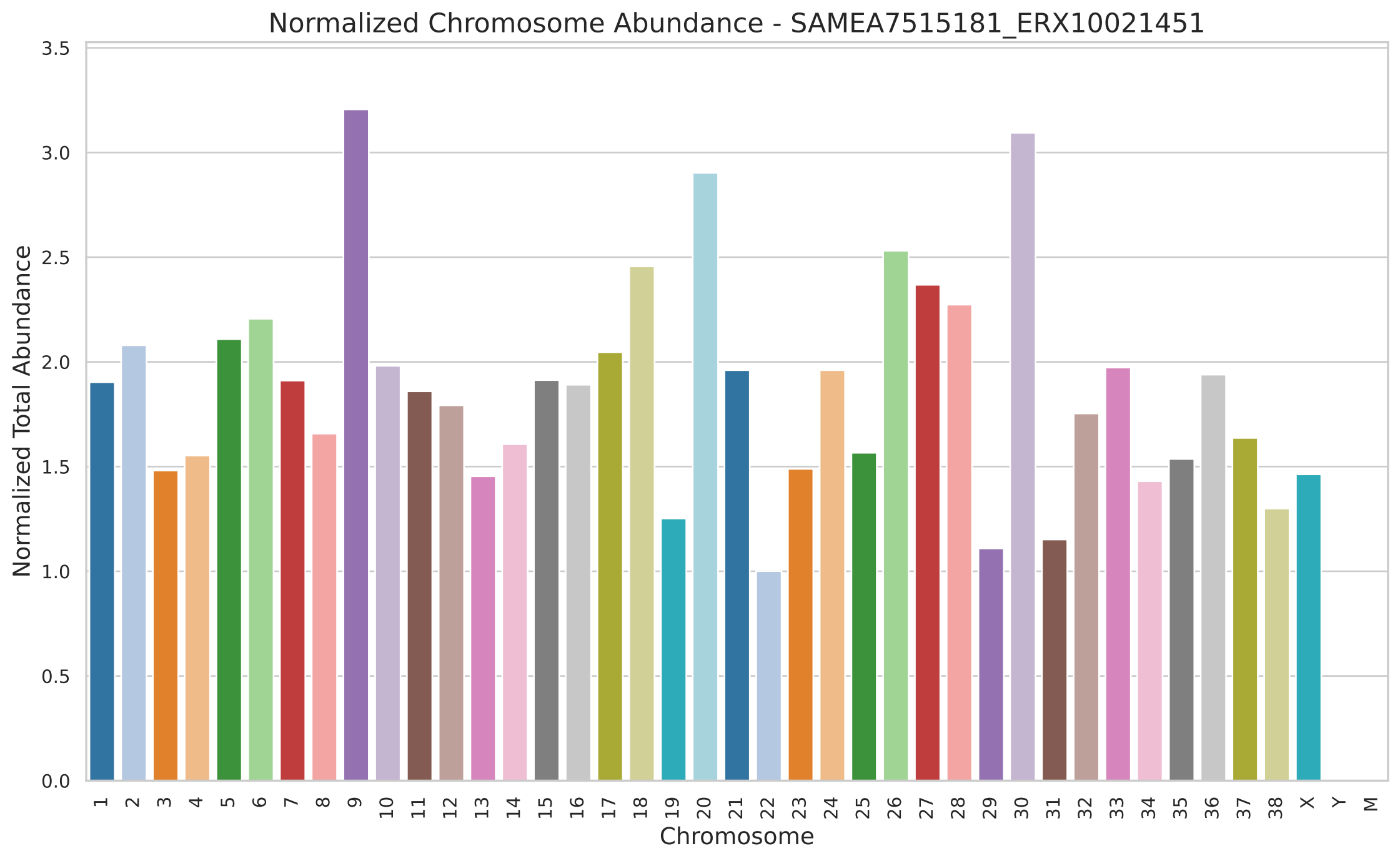

Normalized Chromosome Abundance - SAMEA7515177_ERX10021448
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

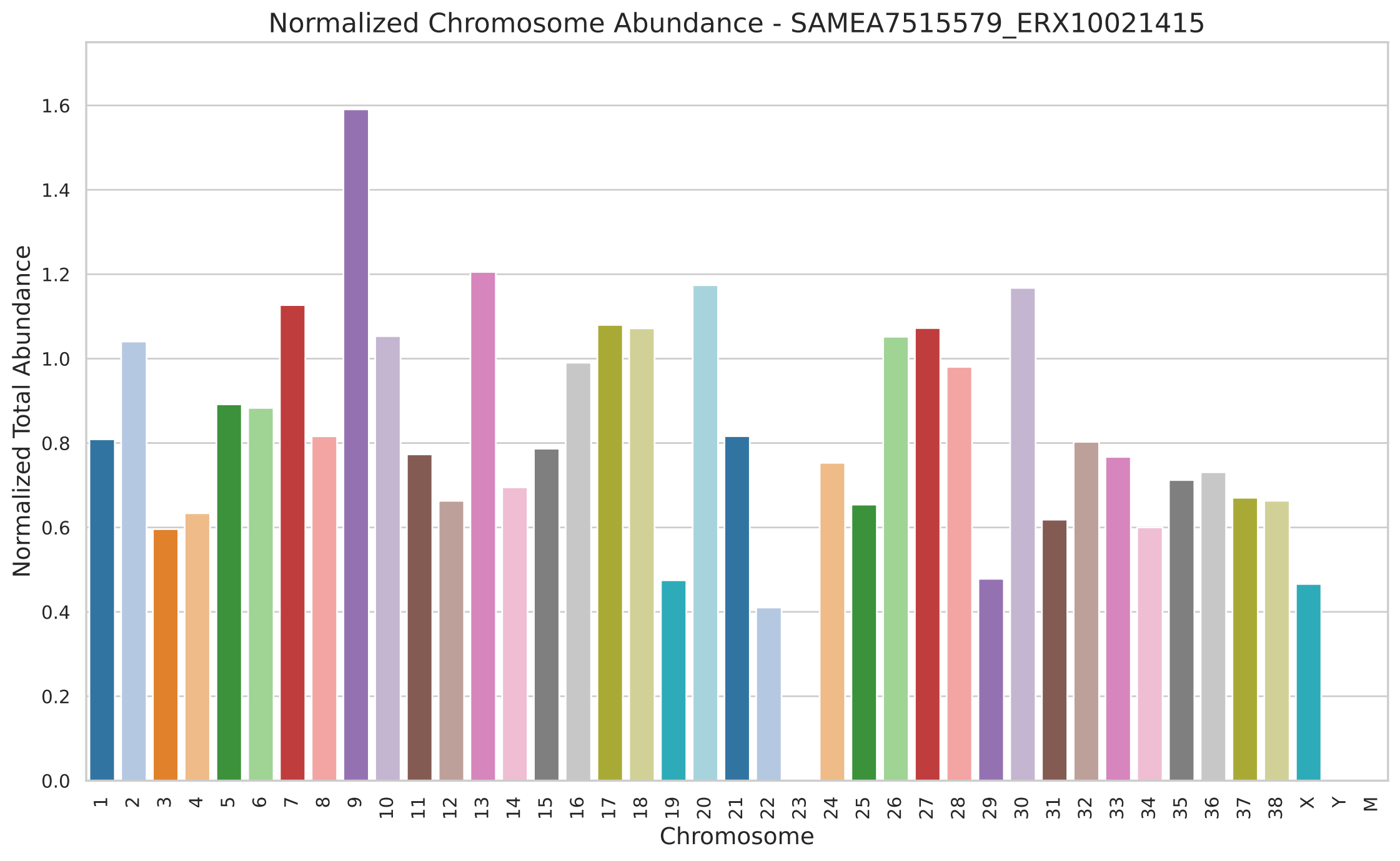

Normalized Chromosome Abundance - SAMEA110220234_ERX9466804
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

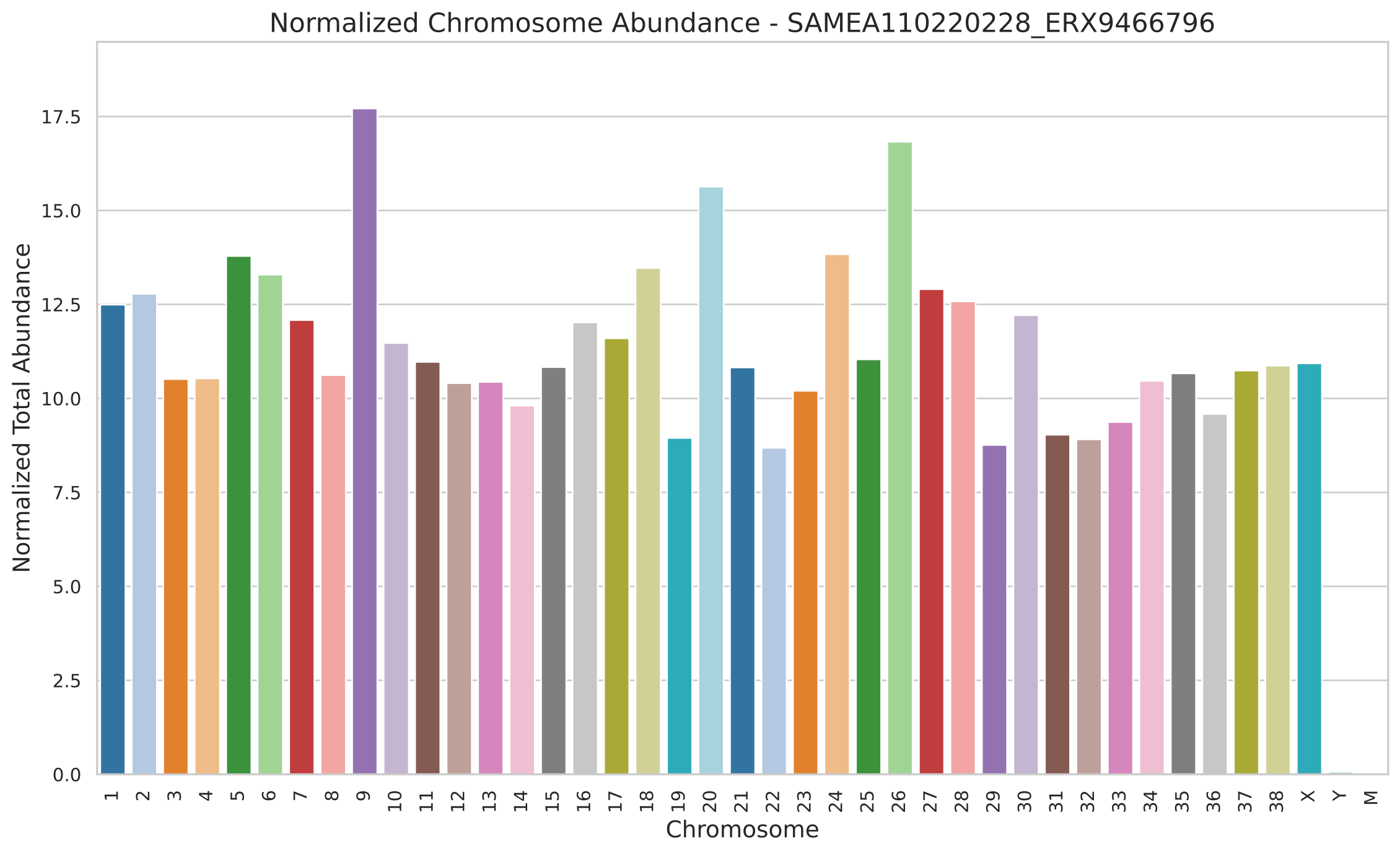

Normalized Chromosome Abundance - SAMEA7515179_ERX10021449
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

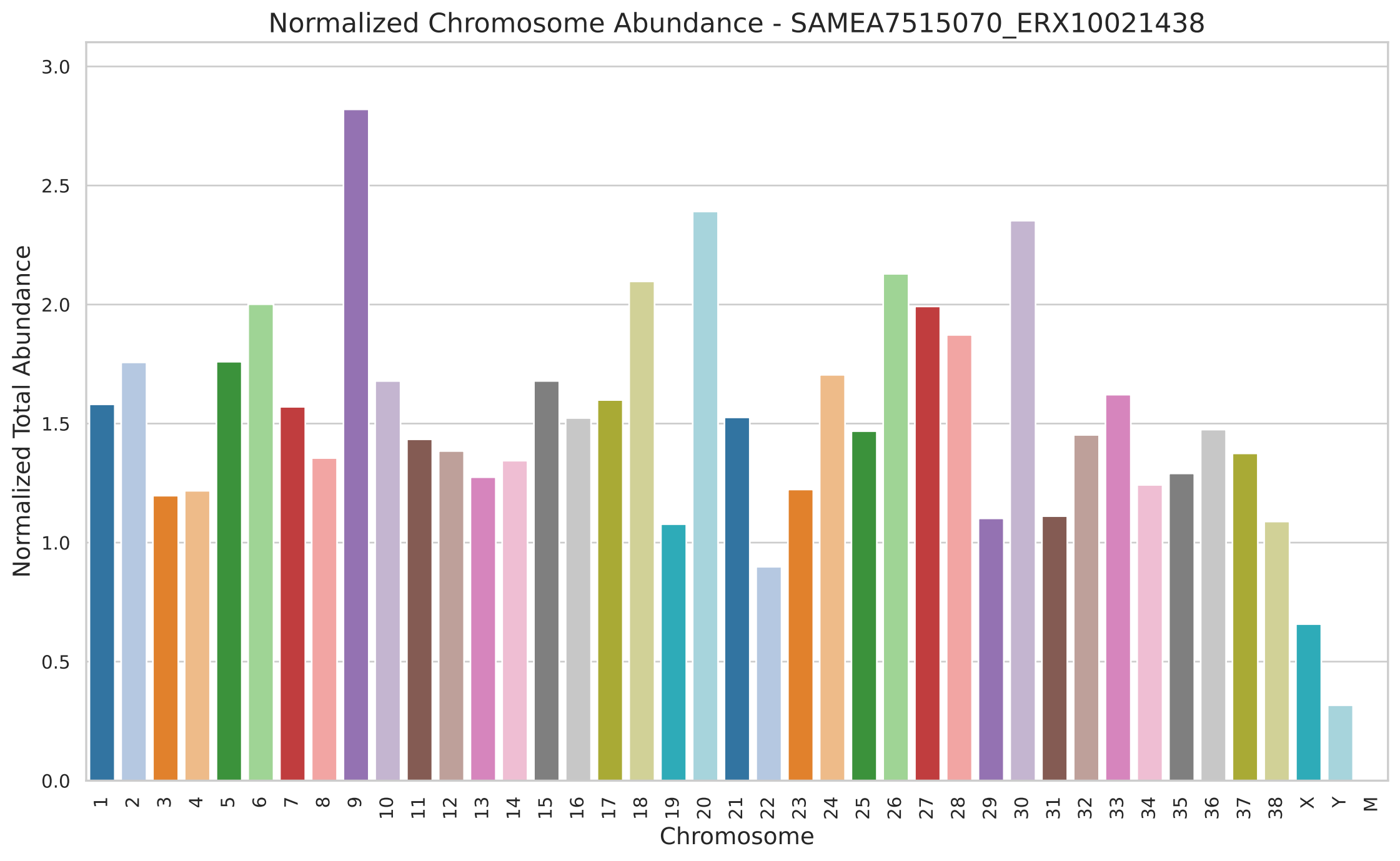

Normalized Chromosome Abundance - SAMEA7515102_ERX10021457
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

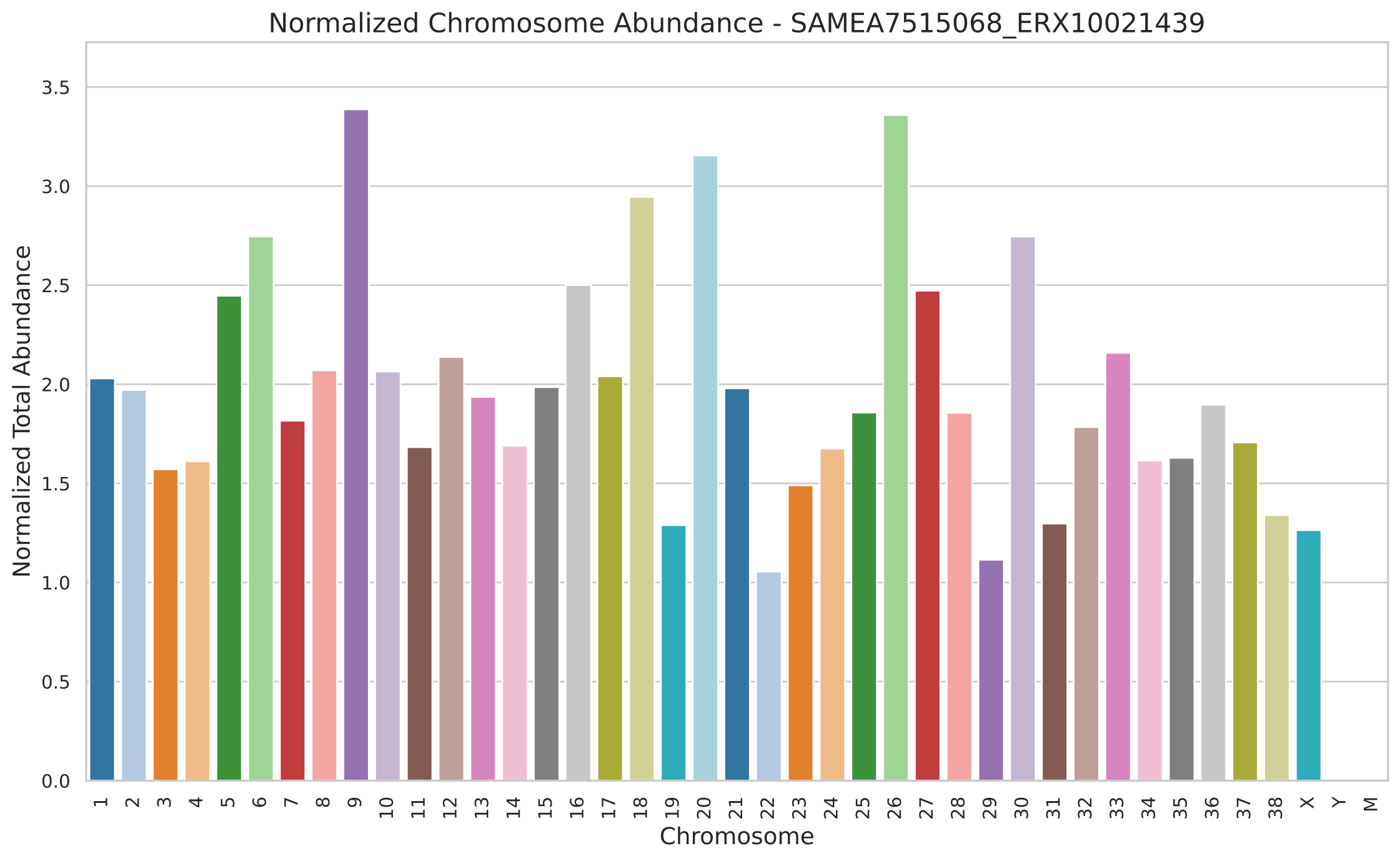

Normalized Chromosome Abundance - SAMEA7515583_ERX10021418
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

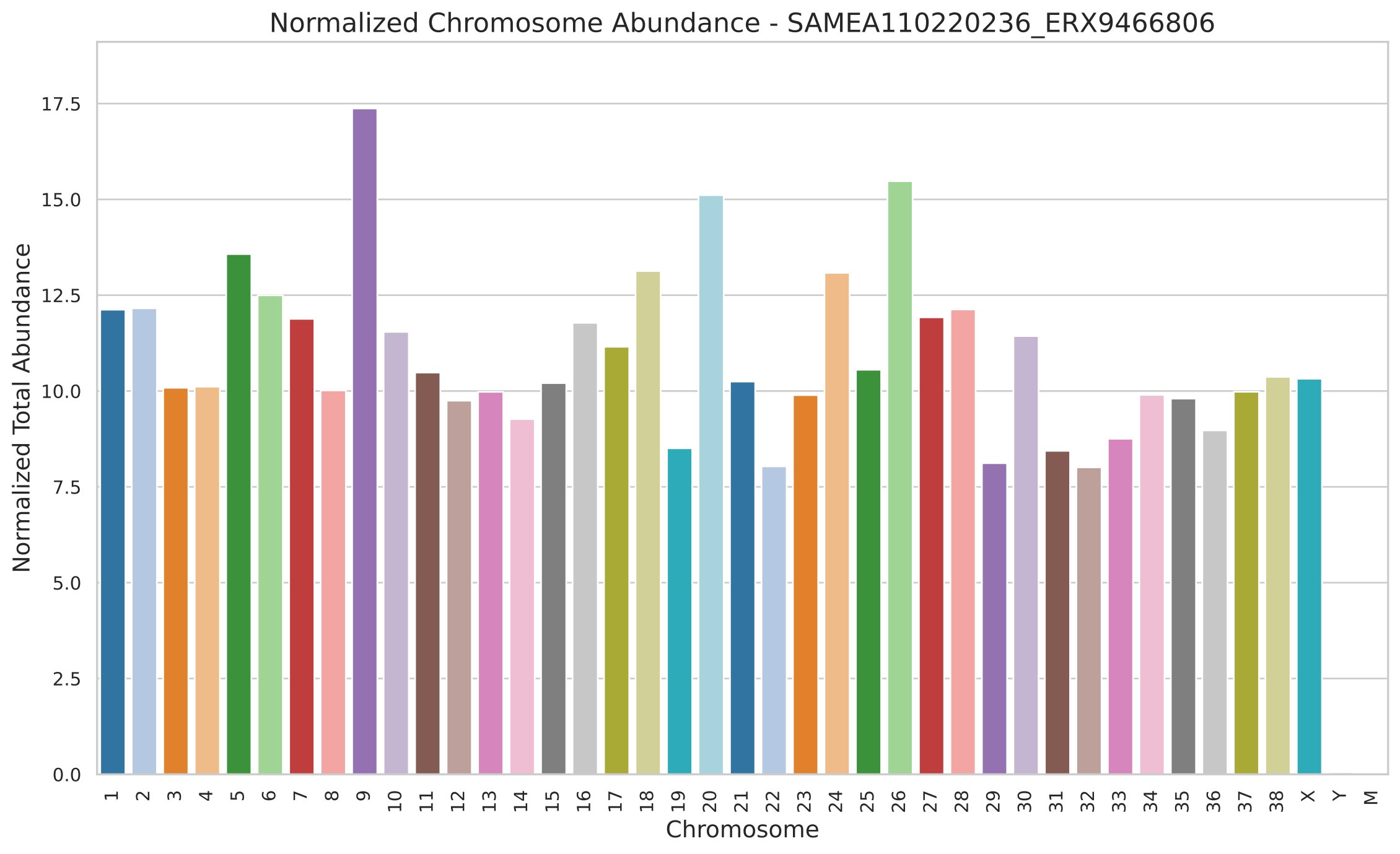

Normalized Chromosome Abundance - SAMEA7515181_ERX10021451
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

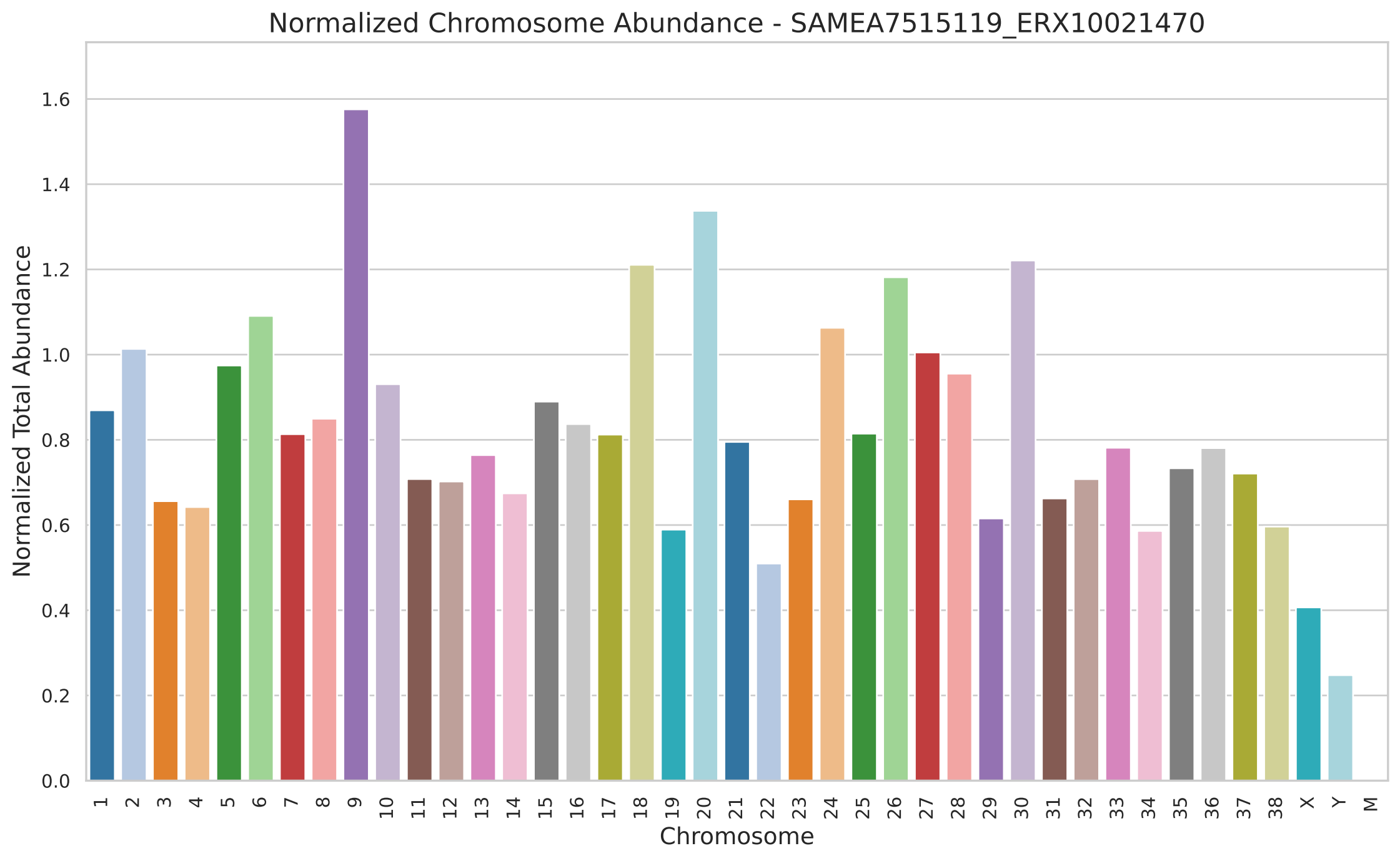

Normalized Chromosome Abundance - SAMEA7515579_ERX10021415
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

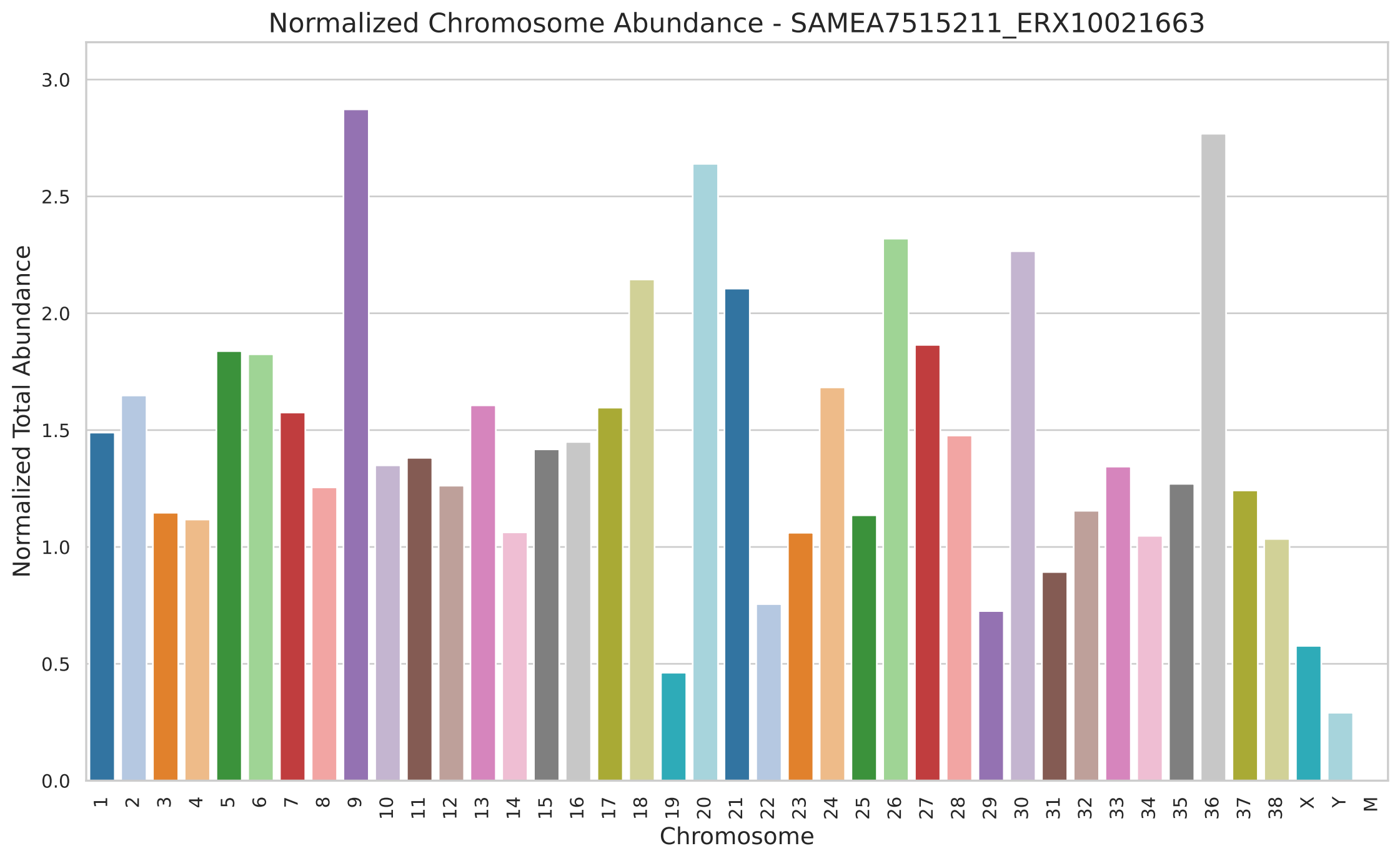

Normalized Chromosome Abundance - SAMEA110220228_ERX9466796
Normalized Total Abundance
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

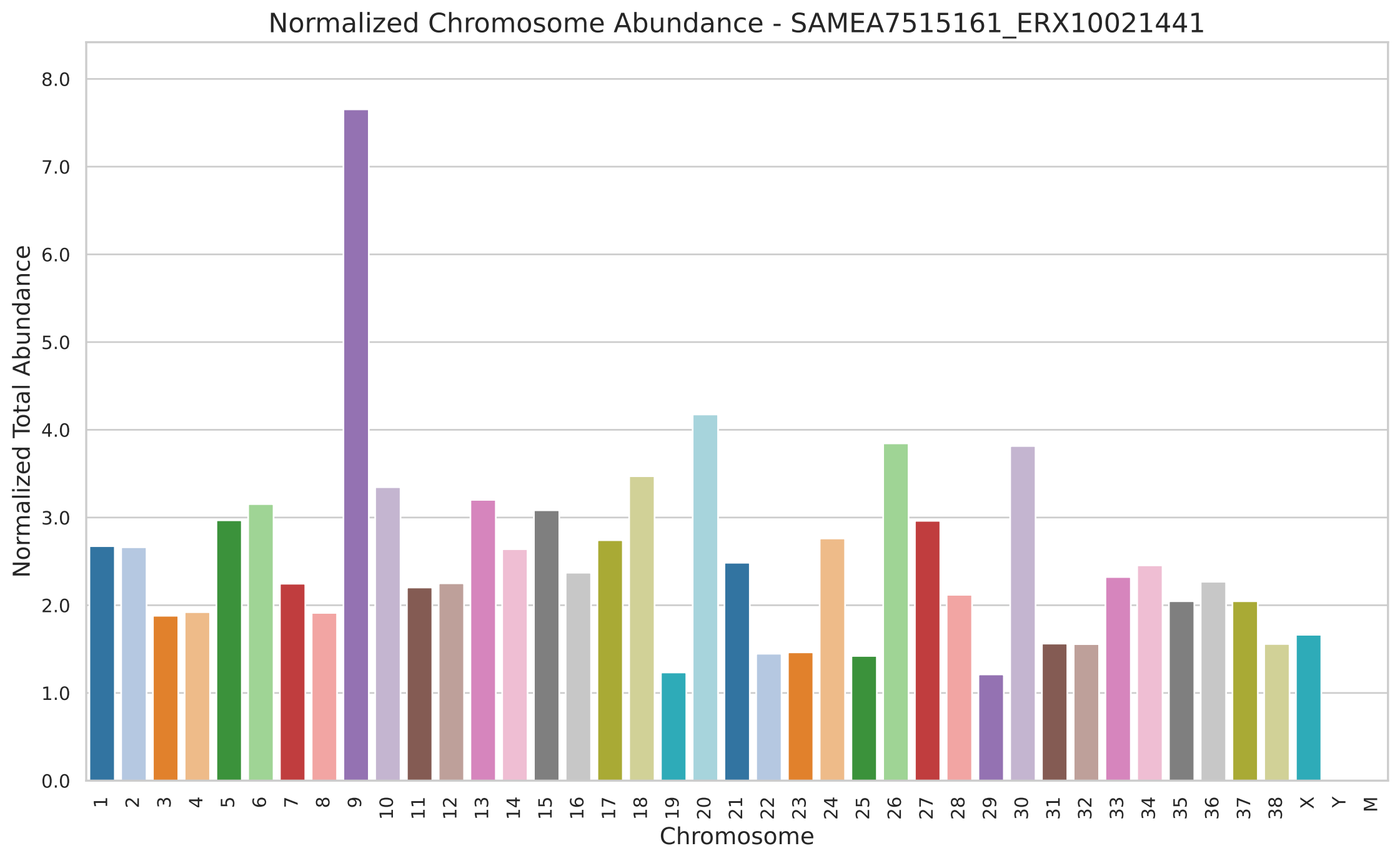

Normalized Chromosome Abundance - SAMEA7515070_ERX10021438
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

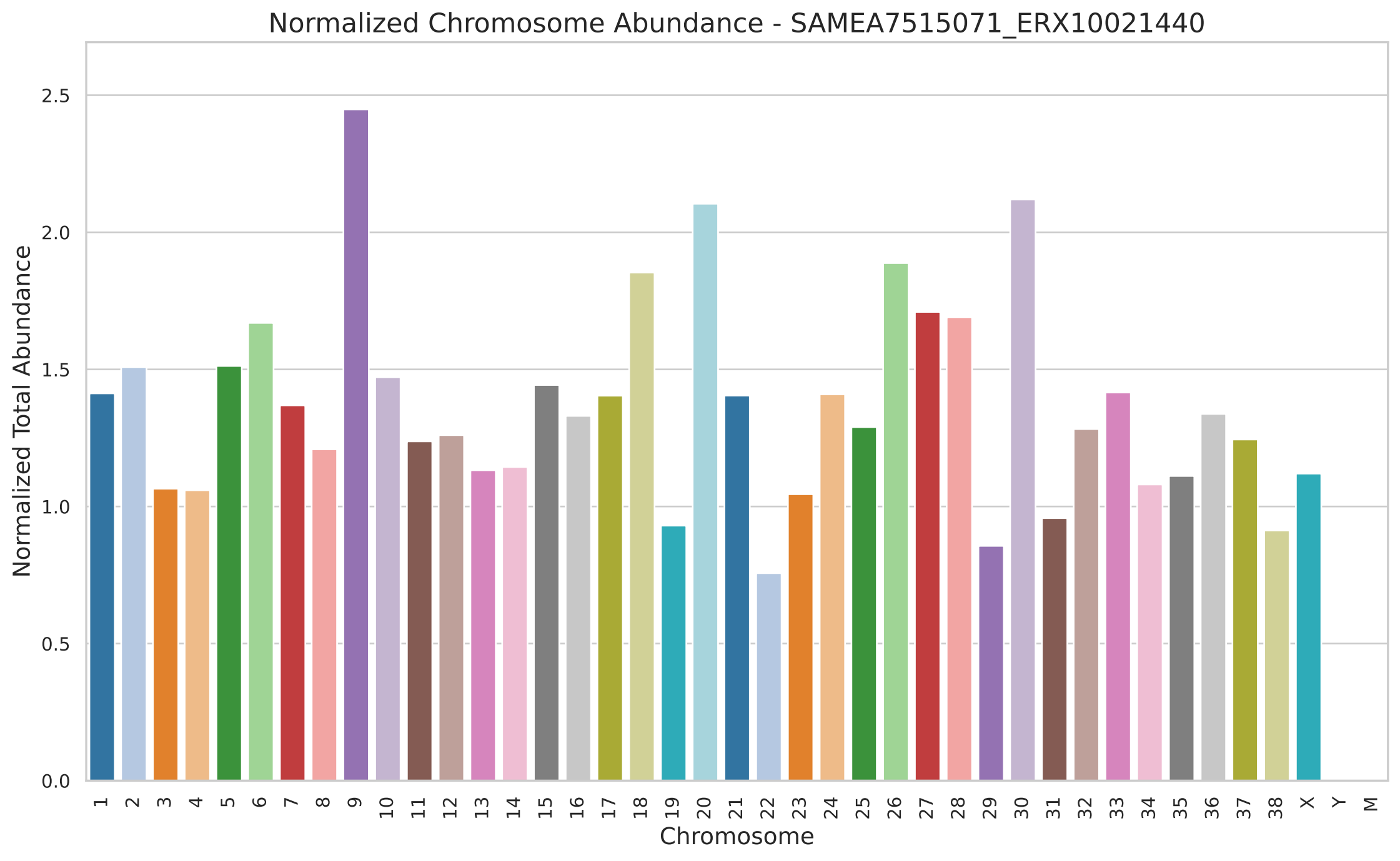

Normalized Chromosome Abundance - SAMEA7515068_ERX10021439
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

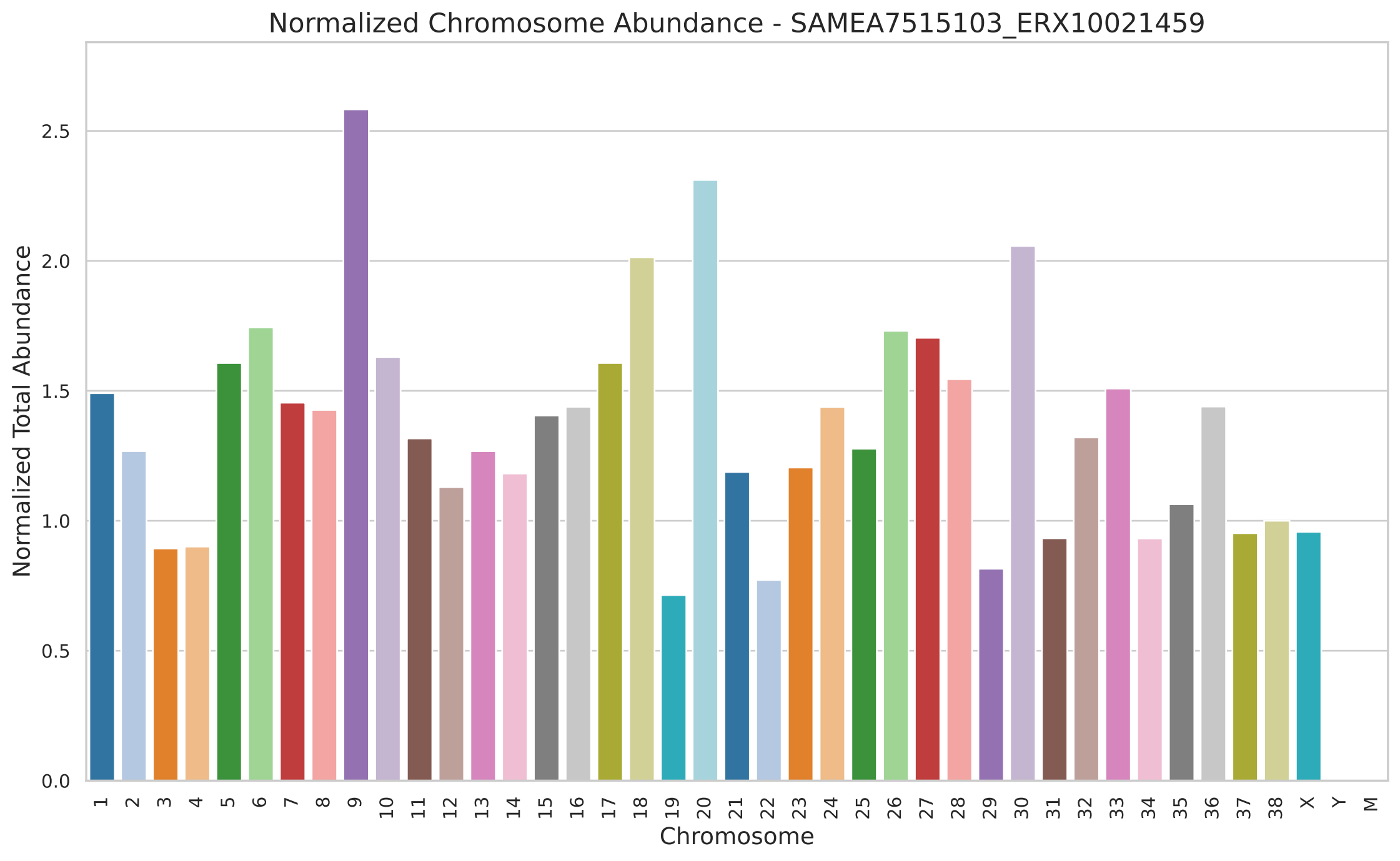

Normalized Chromosome Abundance - SAMEA110220236_ERX9466806
Normalized Total Abundance
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

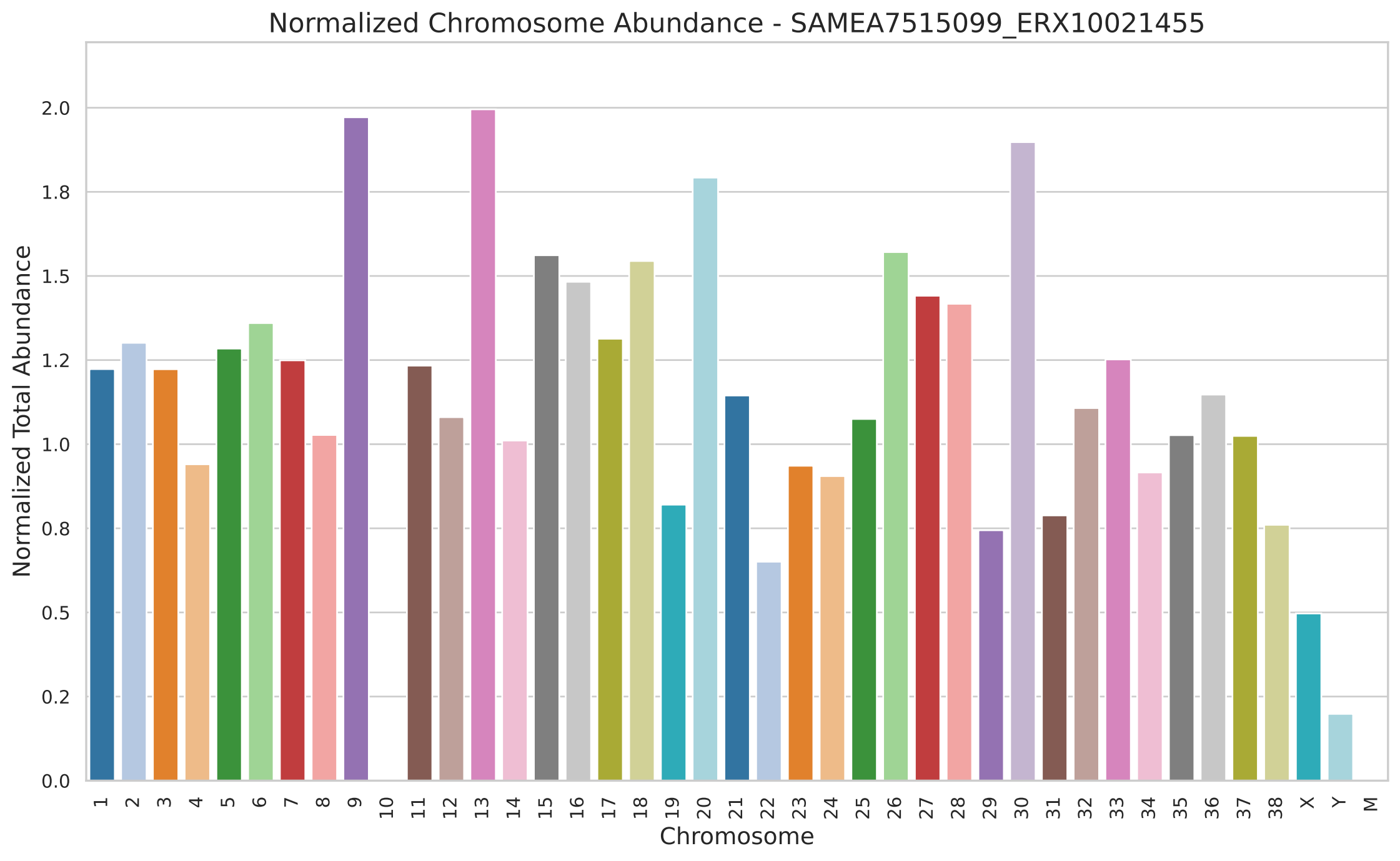

Normalized Chromosome Abundance - SAMEA7515119_ERX10021470
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

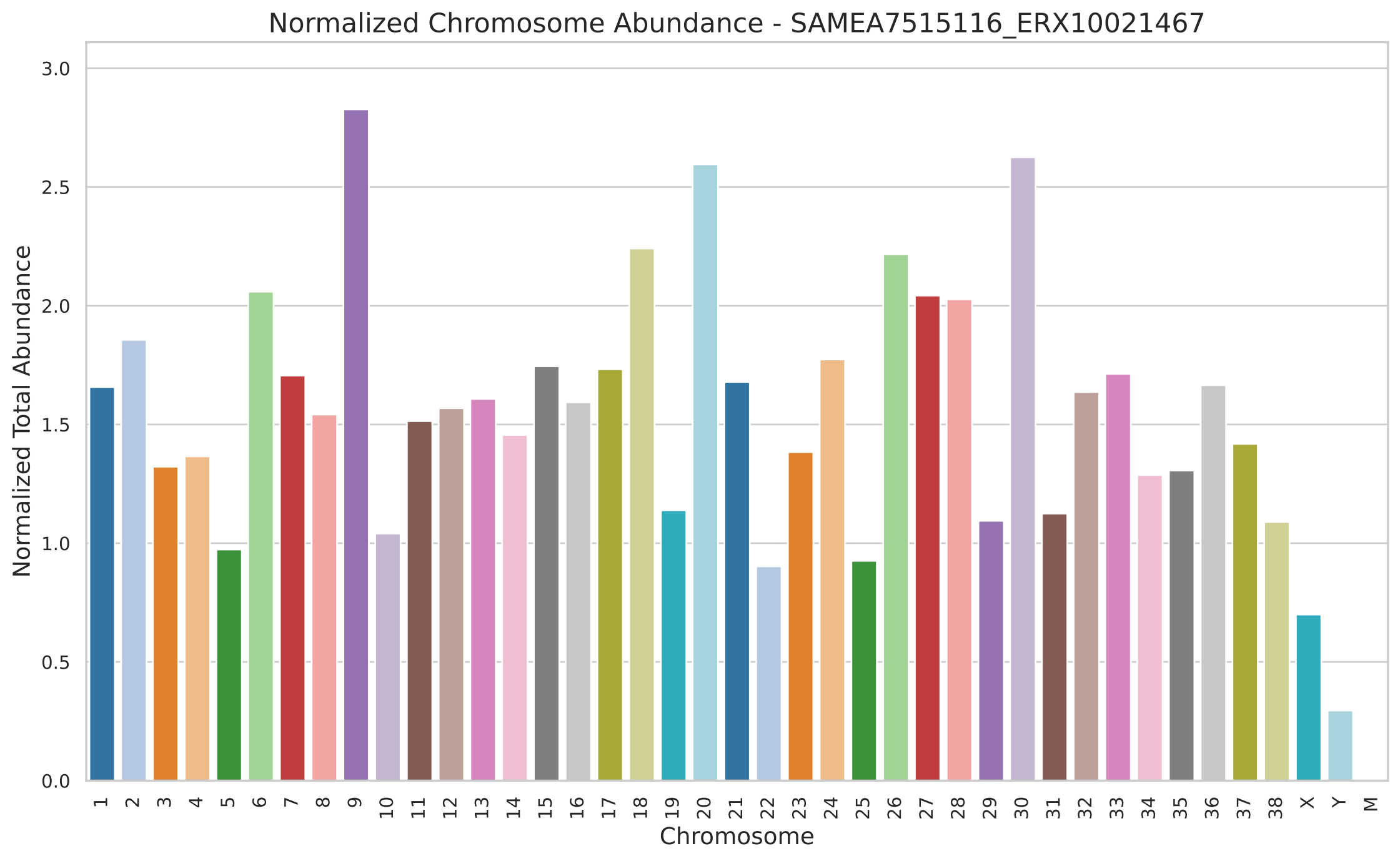

Normalized Chromosome Abundance - SAMEA7515211_ERX10021663
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

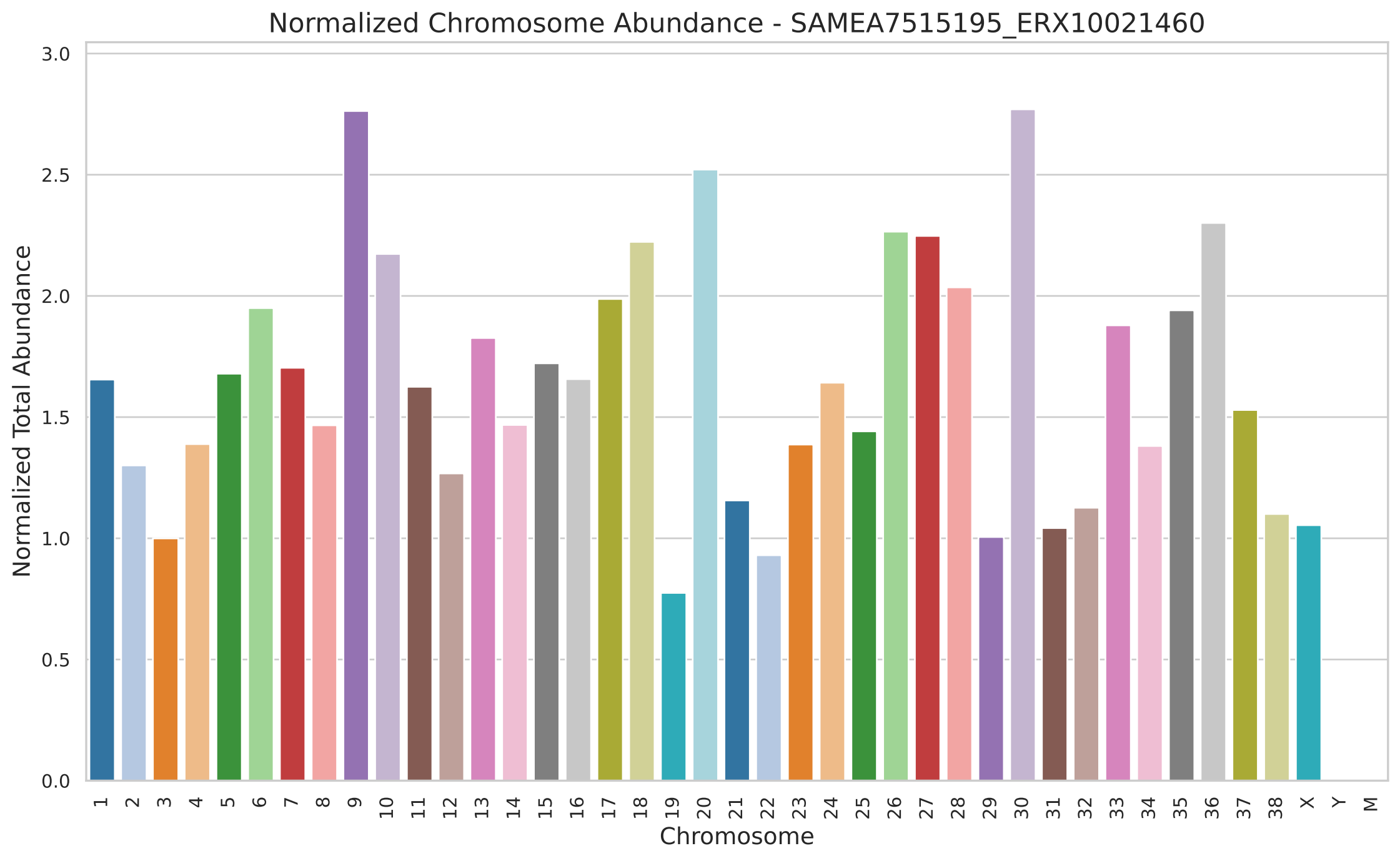

Normalized Chromosome Abundance - SAMEA7515161_ERX10021441
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

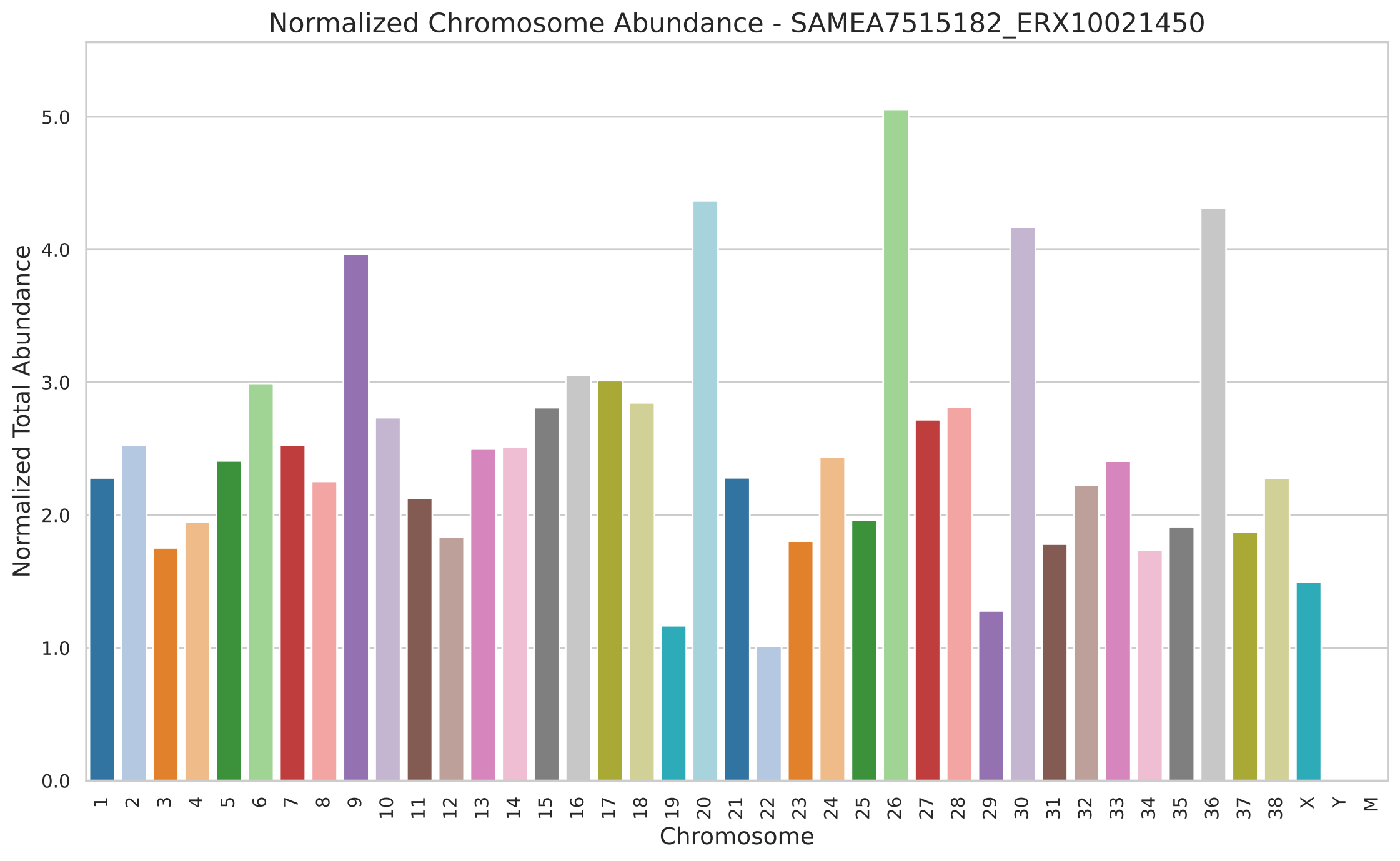

Normalized Chromosome Abundance - SAMEA7515071_ERX10021440
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

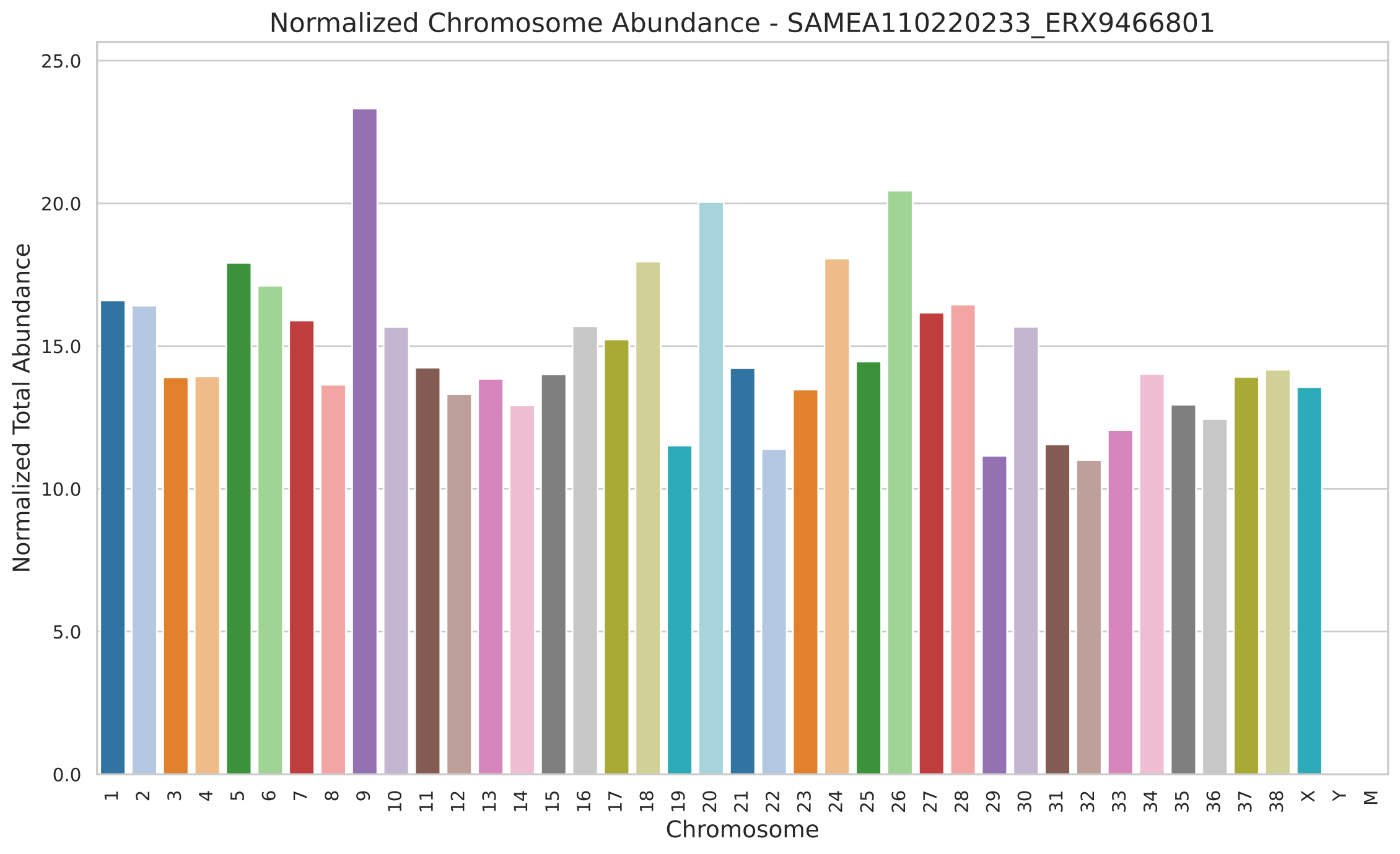

Normalized Chromosome Abundance - SAMEA7515103_ERX10021459
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

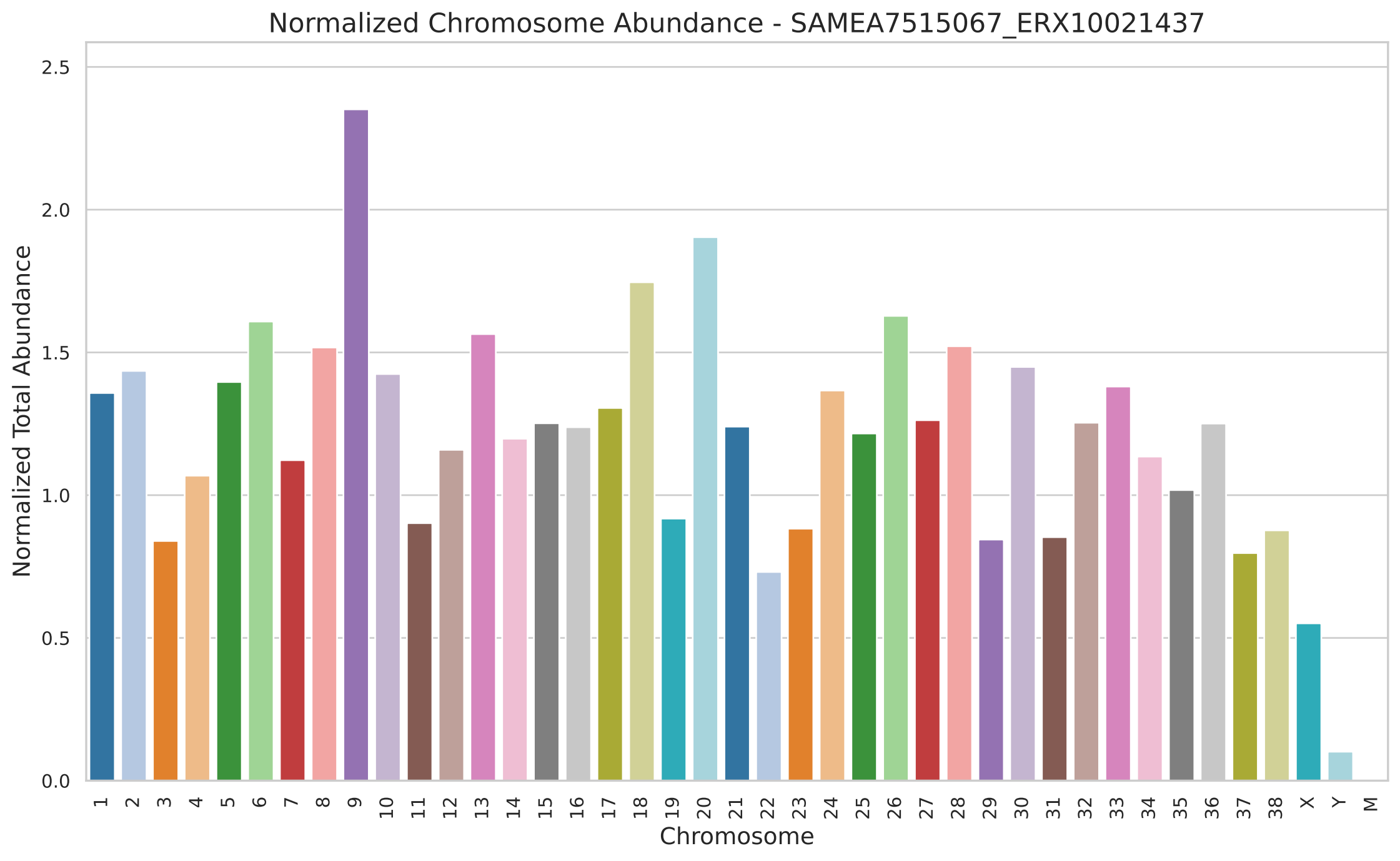

Normalized Chromosome Abundance - SAMEA7515099_ERX10021455
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

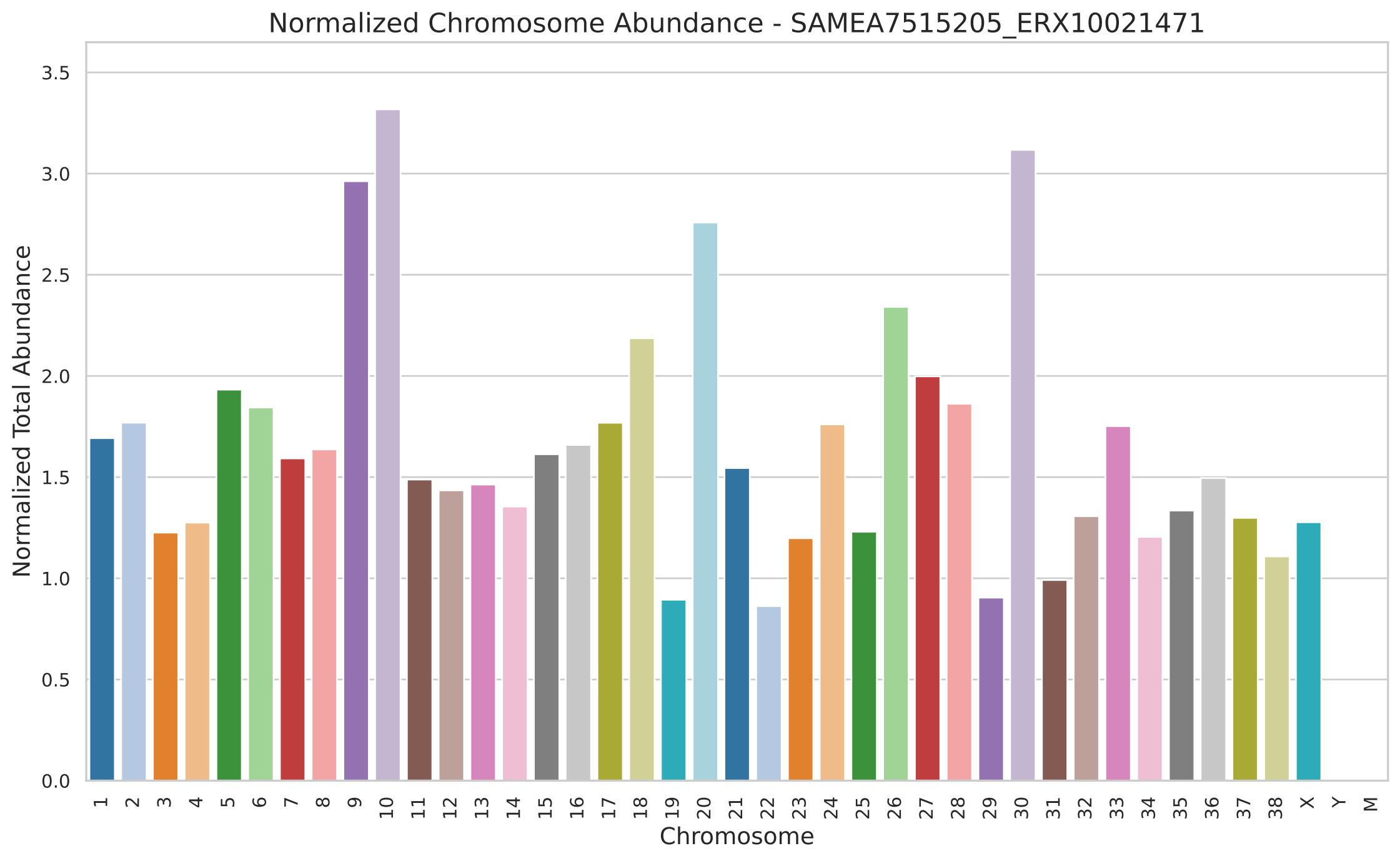

Normalized Chromosome Abundance - SAMEA7515116_ERX10021467
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

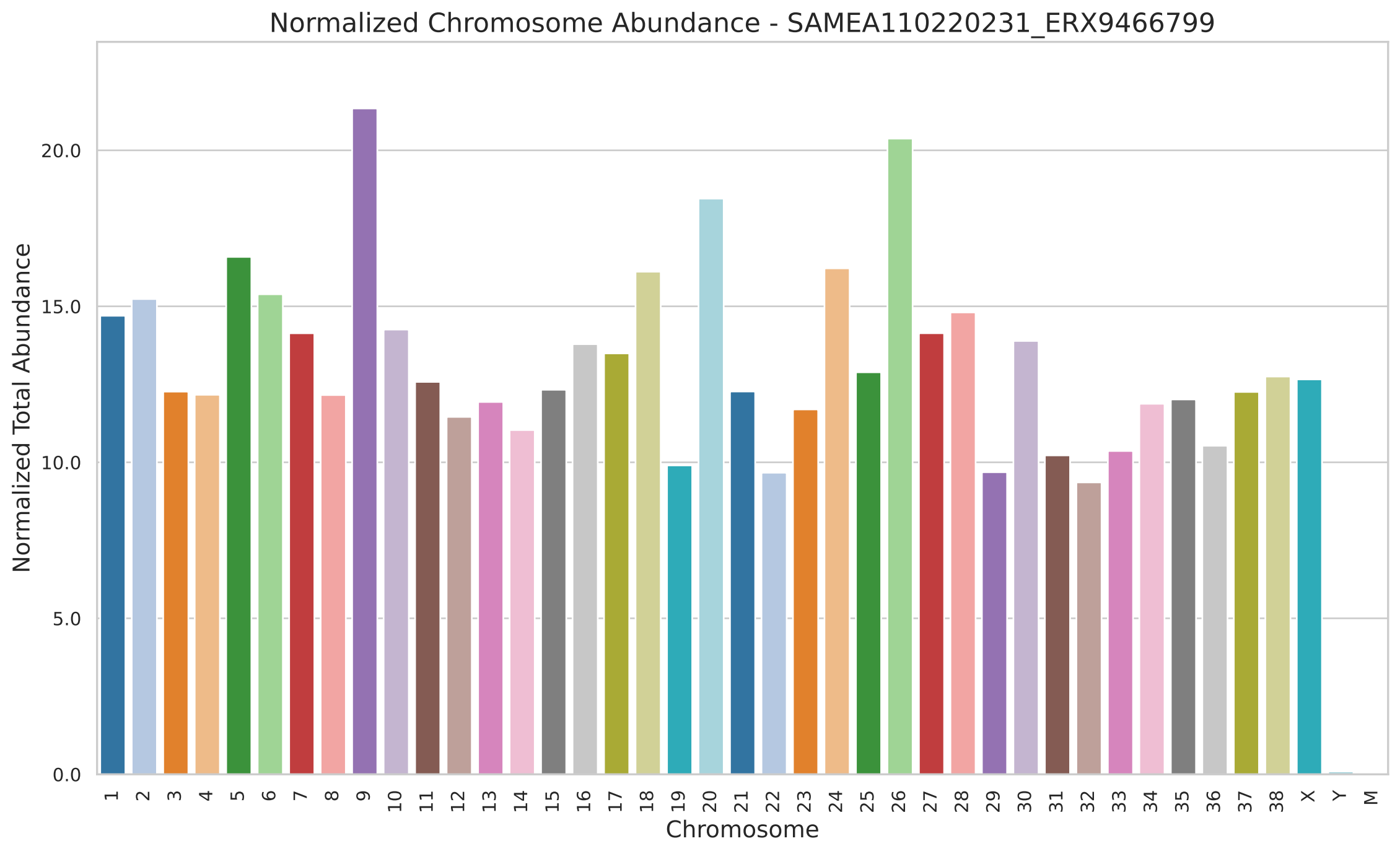

Normalized Chromosome Abundance - SAMEA7515195_ERX10021460
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

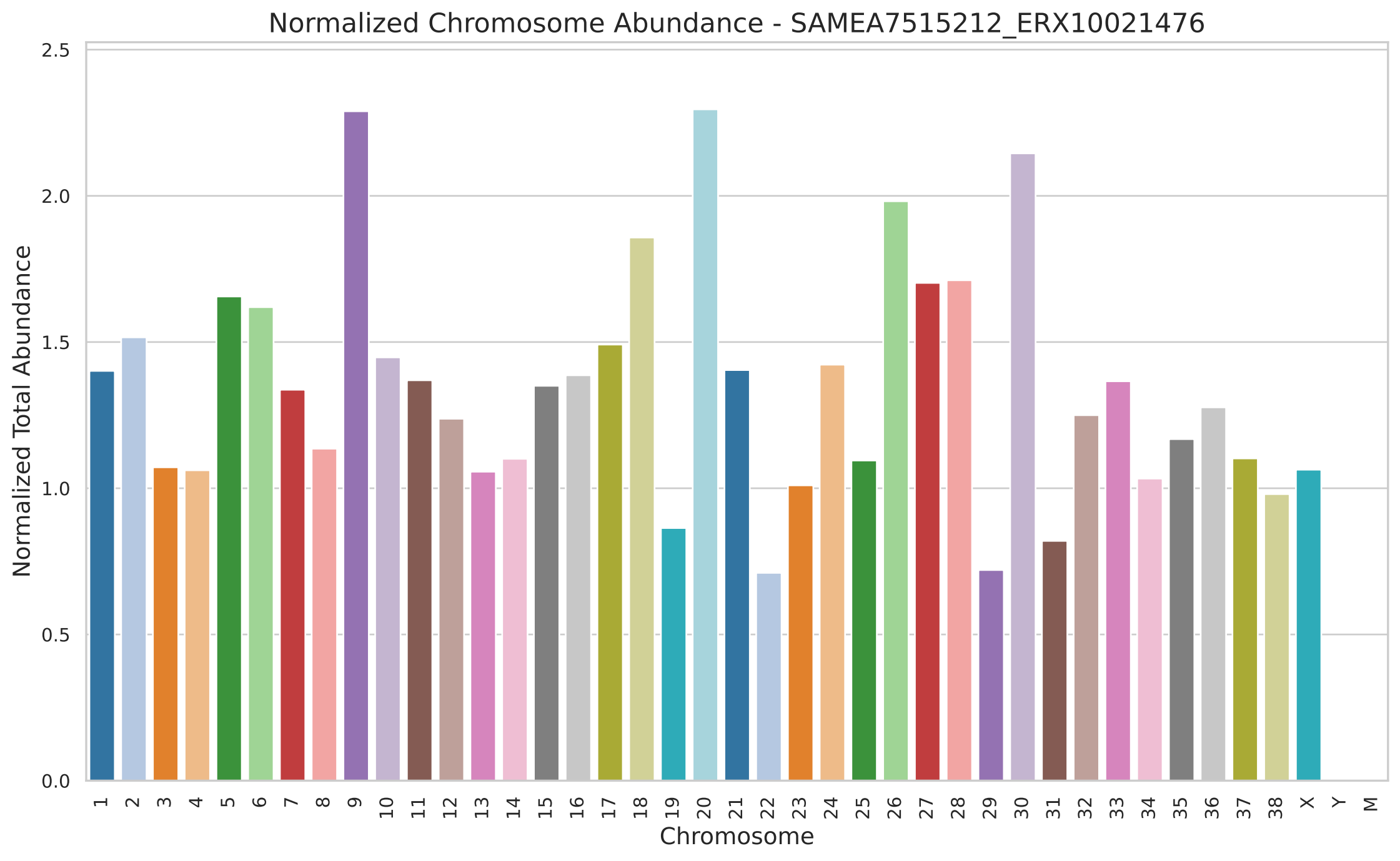

Normalized Chromosome Abundance - SAMEA7515182_ERX10021450
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

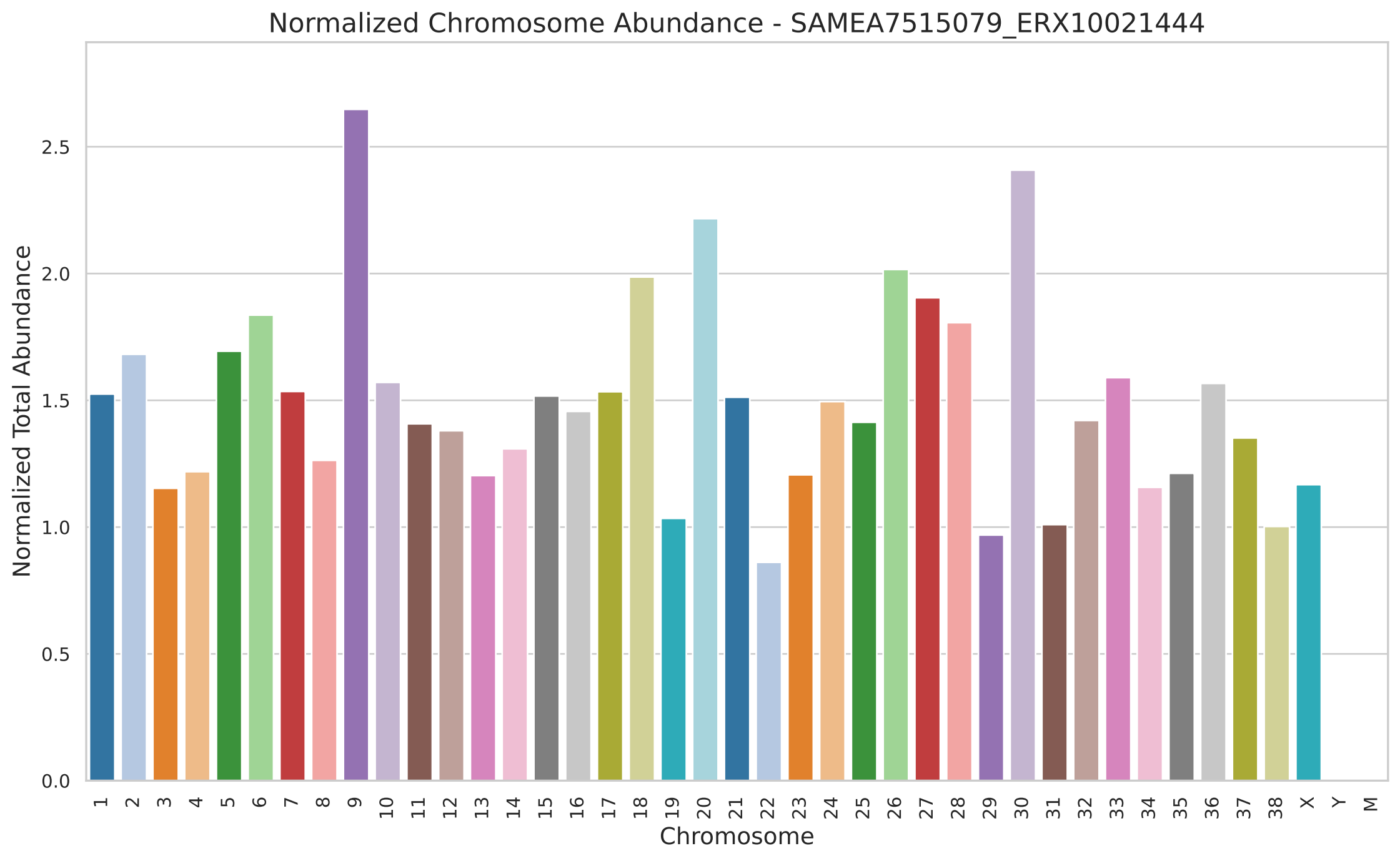

Normalized Chromosome Abundance - SAMEA110220233_ERX9466801
Normalized Total Abundance
25.0
20.0
15.0
10.0
5.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

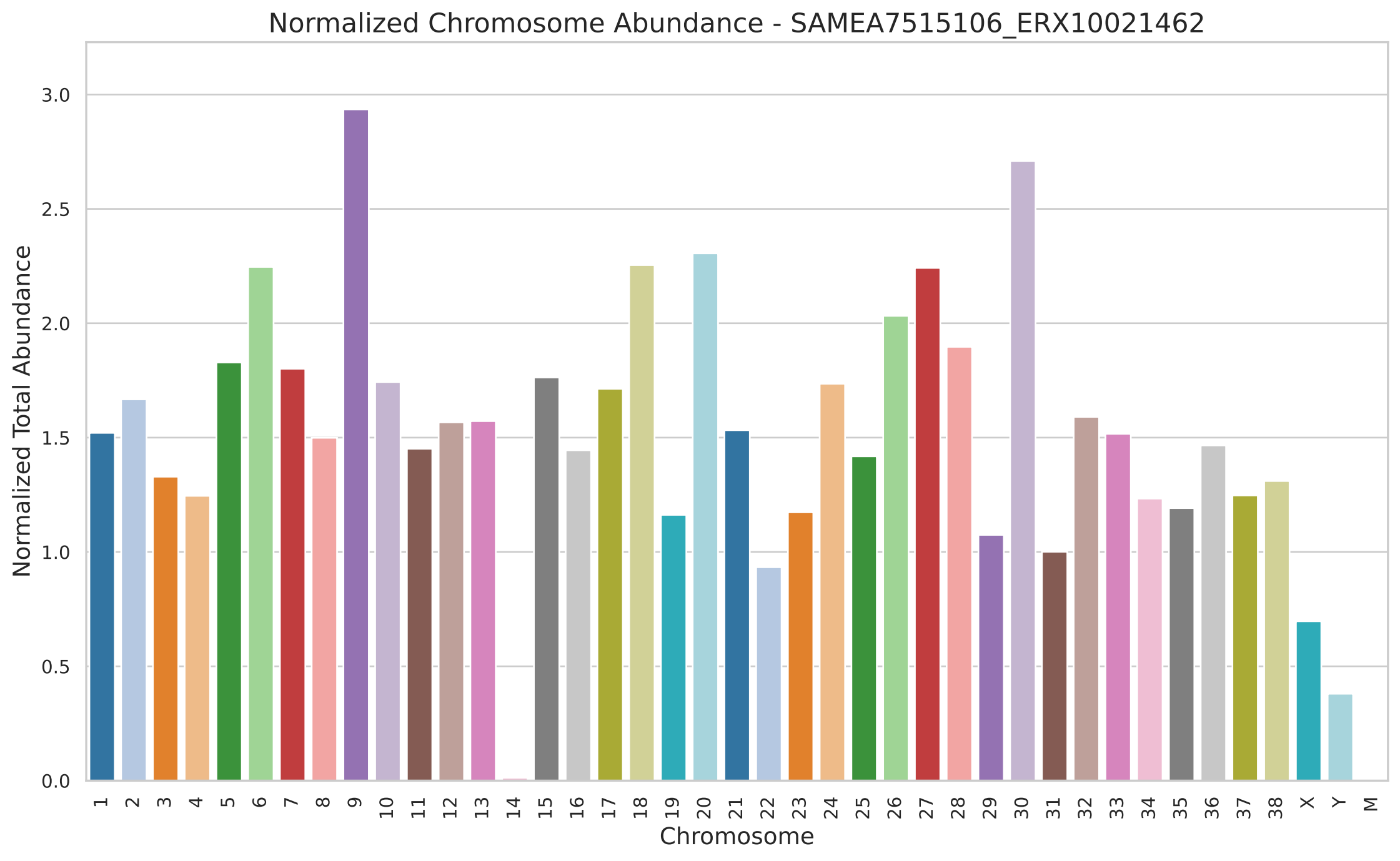

Normalized Chromosome Abundance - SAMEA7515067_ERX10021437
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

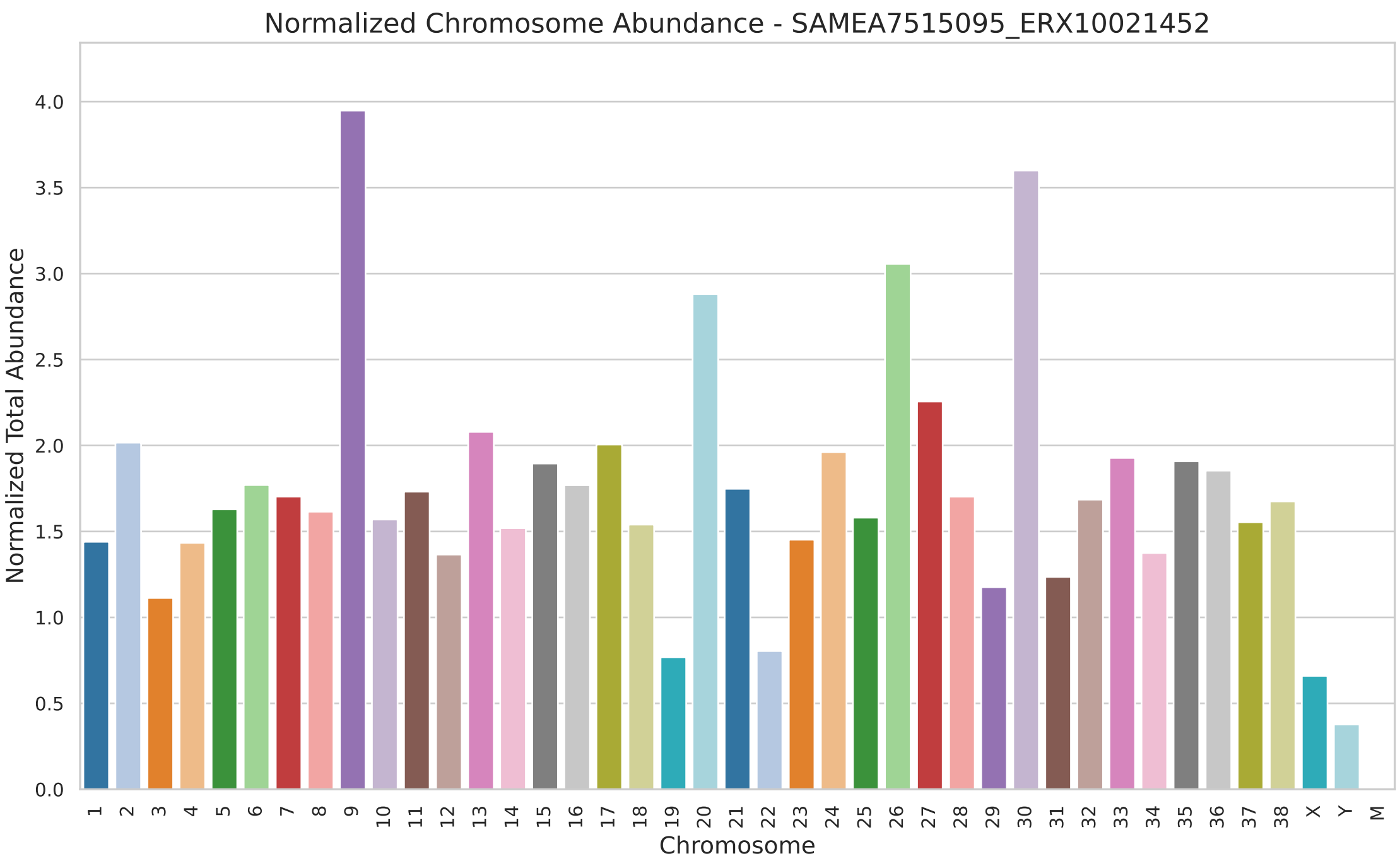

Normalized Chromosome Abundance - SAMEA7515205_ERX10021471
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

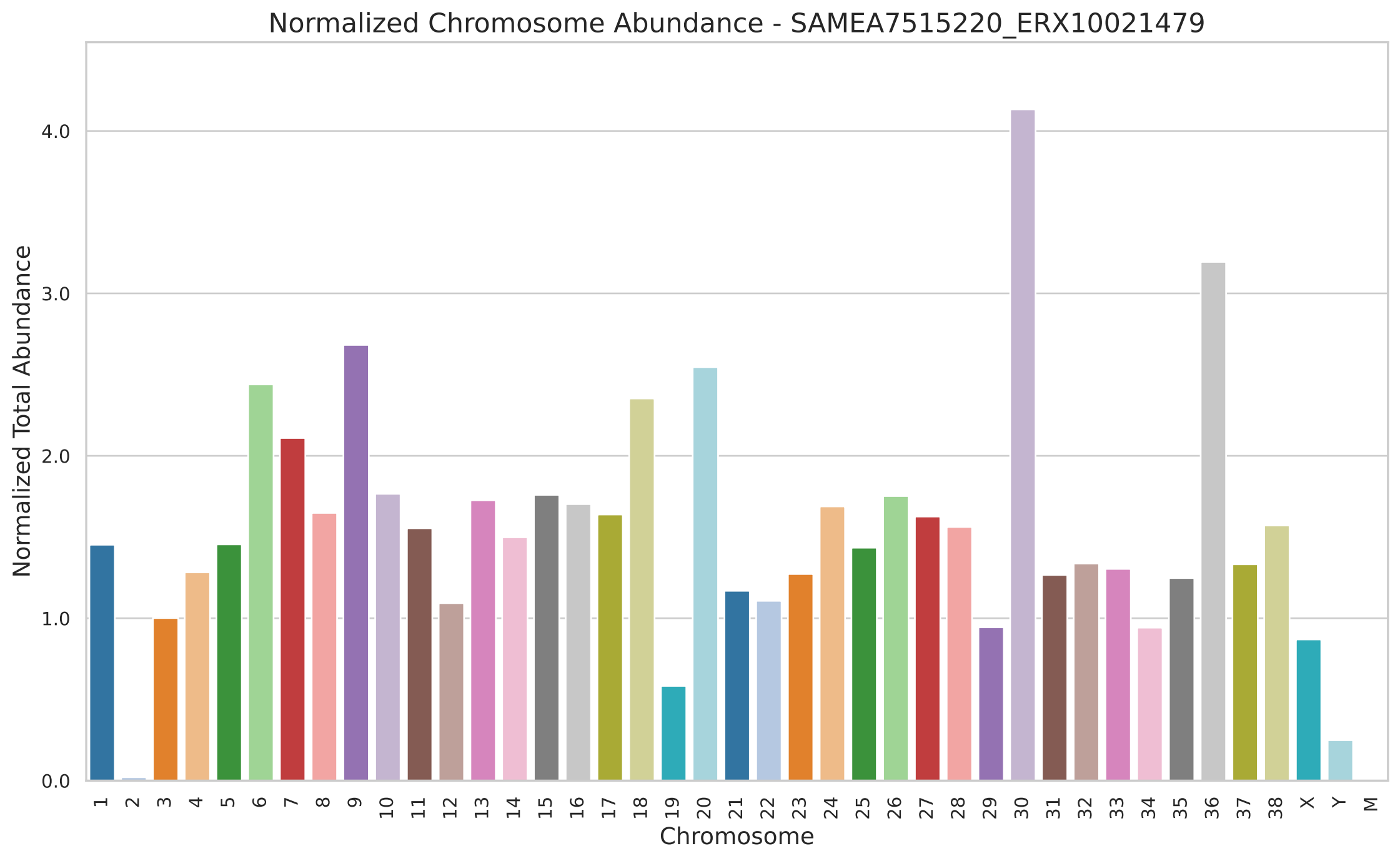

Normalized Chromosome Abundance - SAMEA110220231_ERX9466799
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

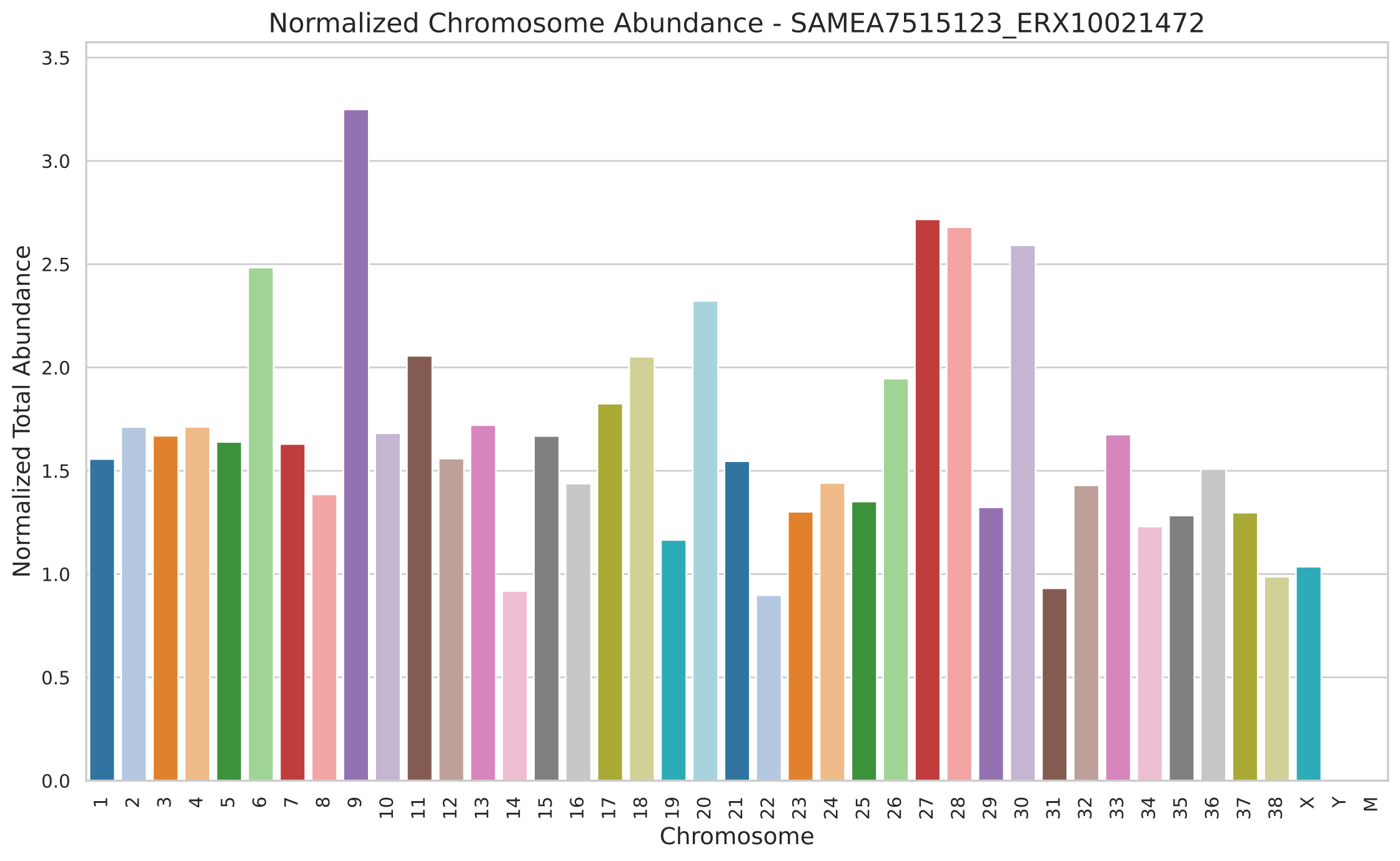

Normalized Chromosome Abundance - SAMEA7515212_ERX10021476
Normalized Total Abundance
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

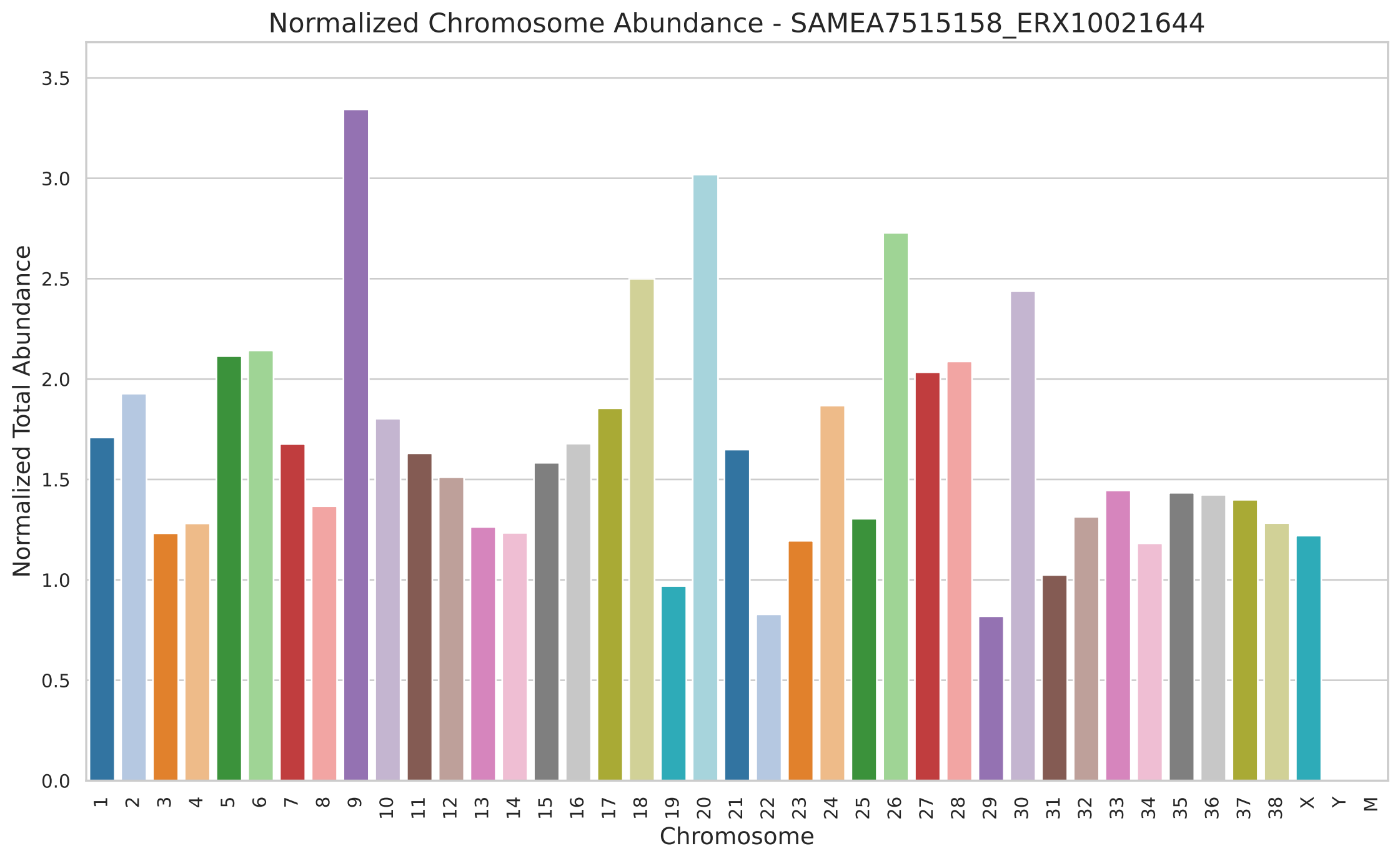

Normalized Chromosome Abundance - SAMEA7515079_ERX10021444
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

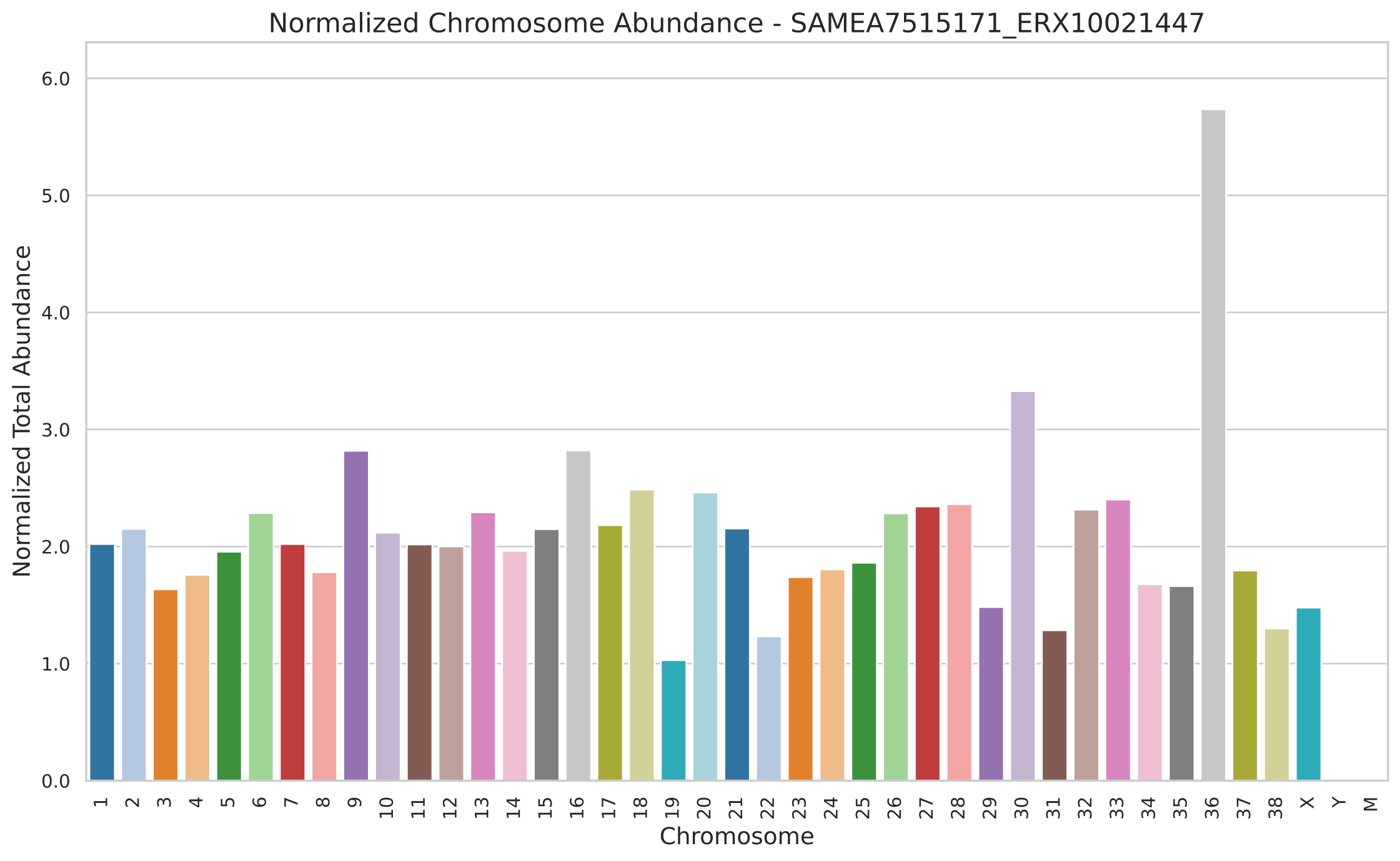

Normalized Chromosome Abundance - SAMEA7515106_ERX10021462
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

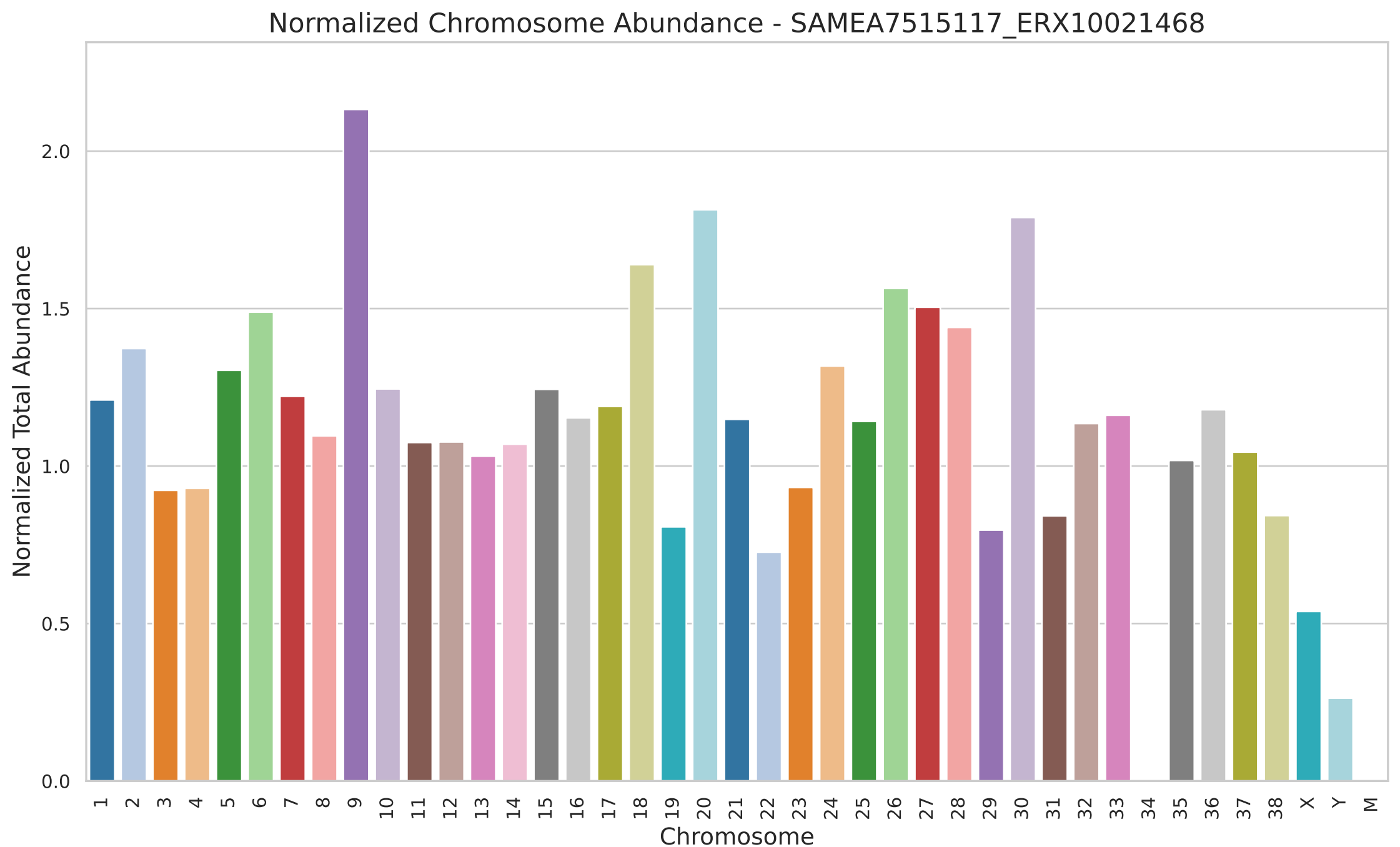

Normalized Chromosome Abundance - SAMEA7515095_ERX10021452
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

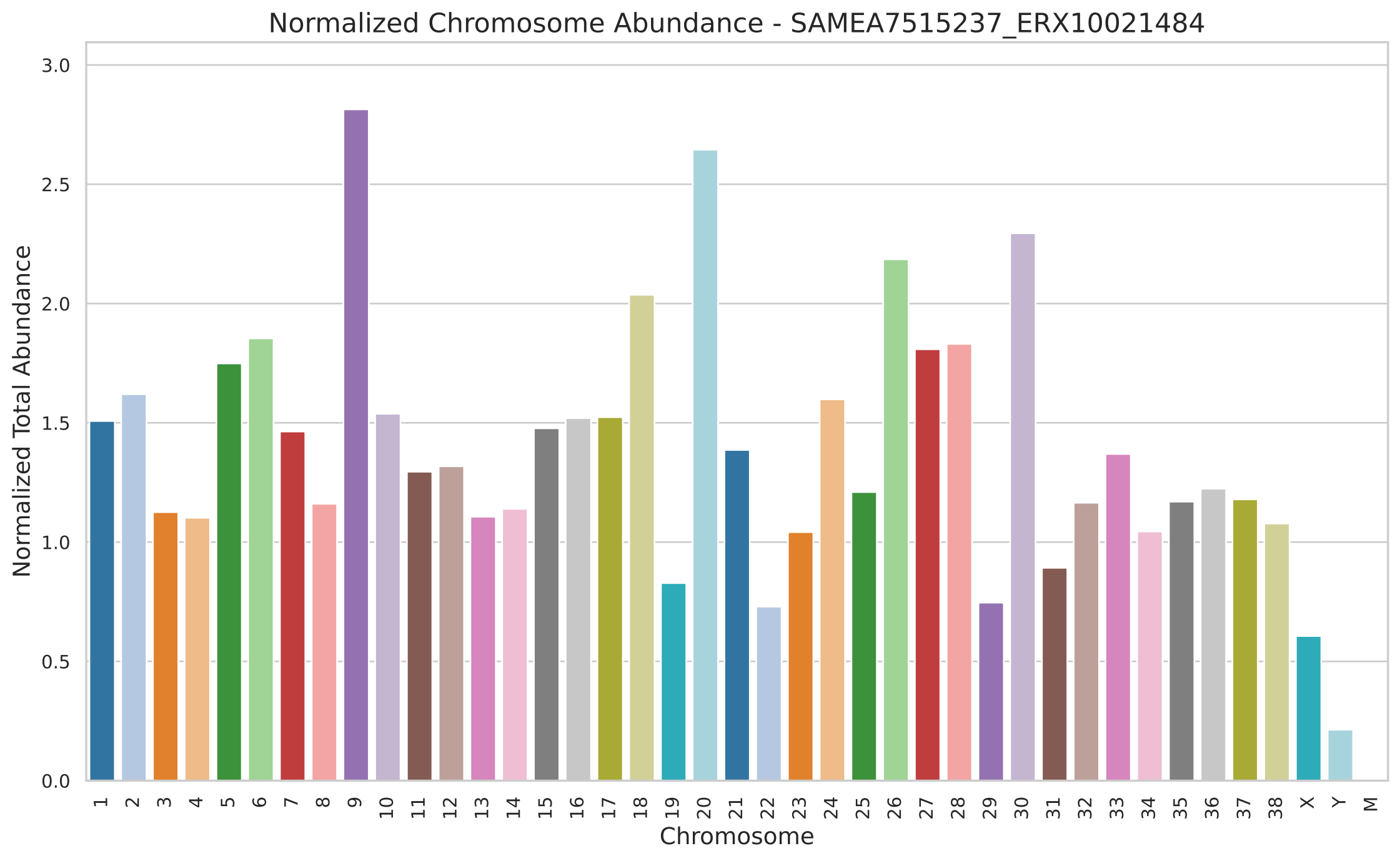

Normalized Chromosome Abundance - SAMEA7515220_ERX10021479
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

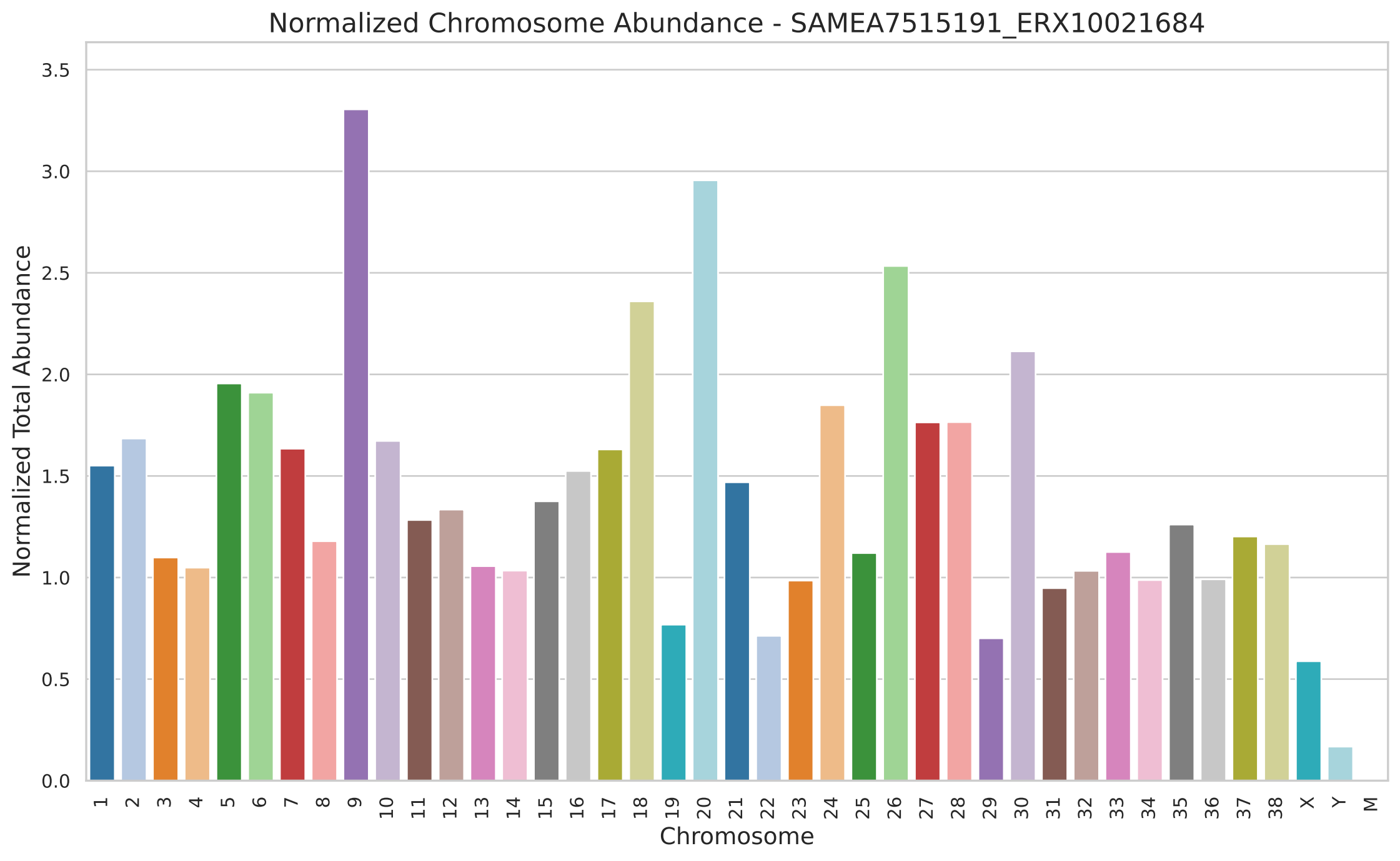

Normalized Chromosome Abundance - SAMEA7515123_ERX10021472
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

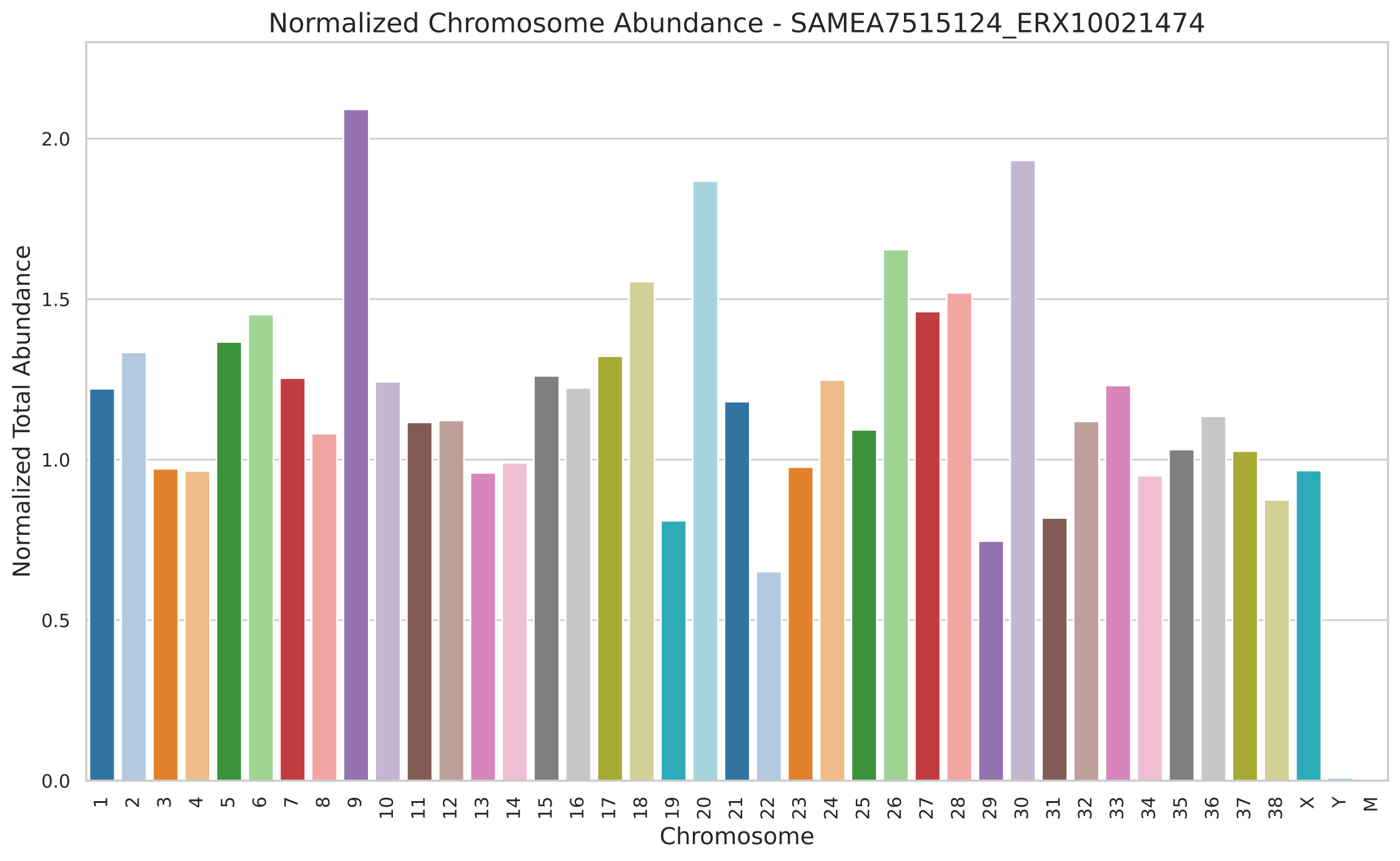

Normalized Chromosome Abundance - SAMEA7515158_ERX10021644
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

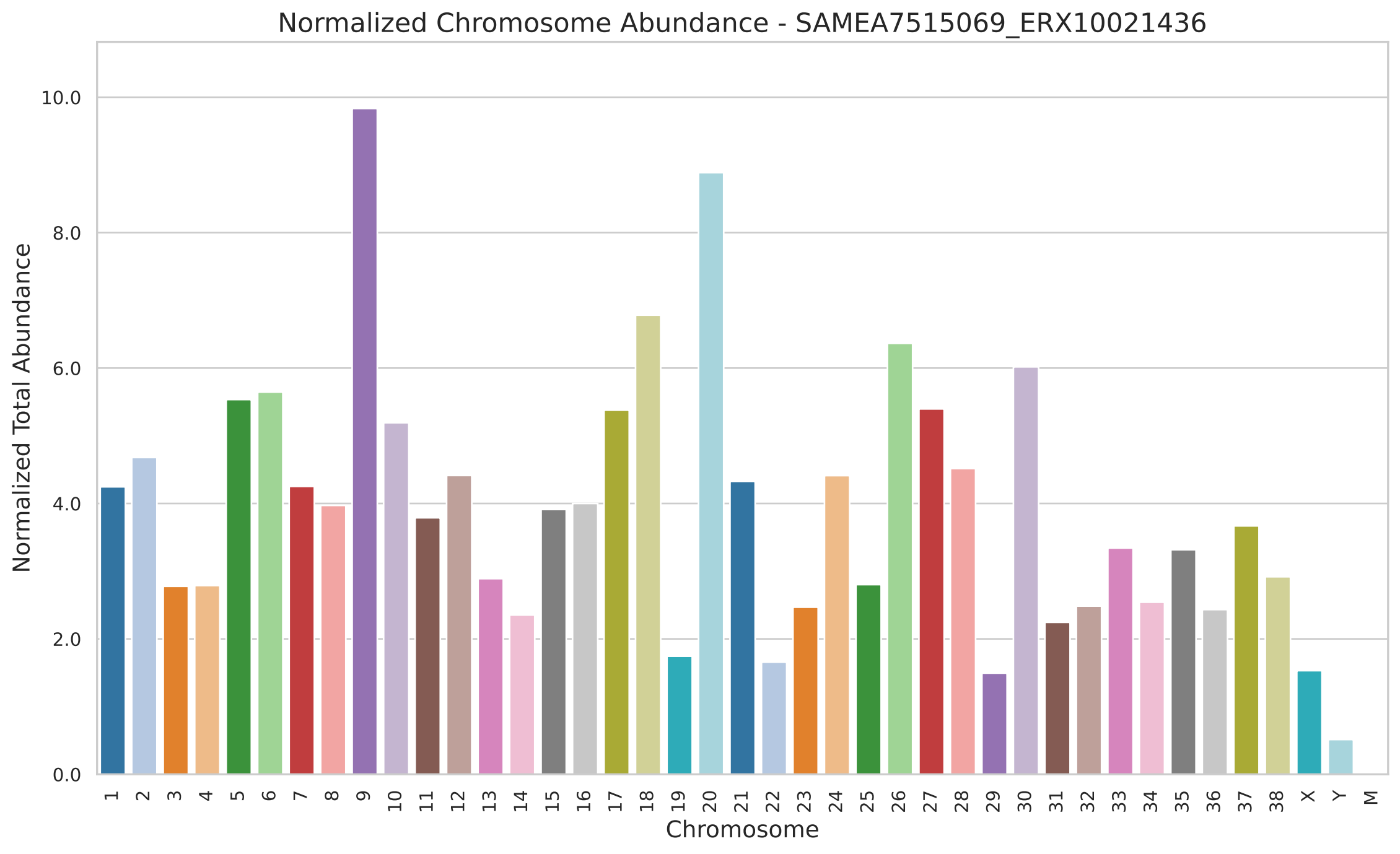

Normalized Chromosome Abundance - SAMEA7515171_ERX10021447
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

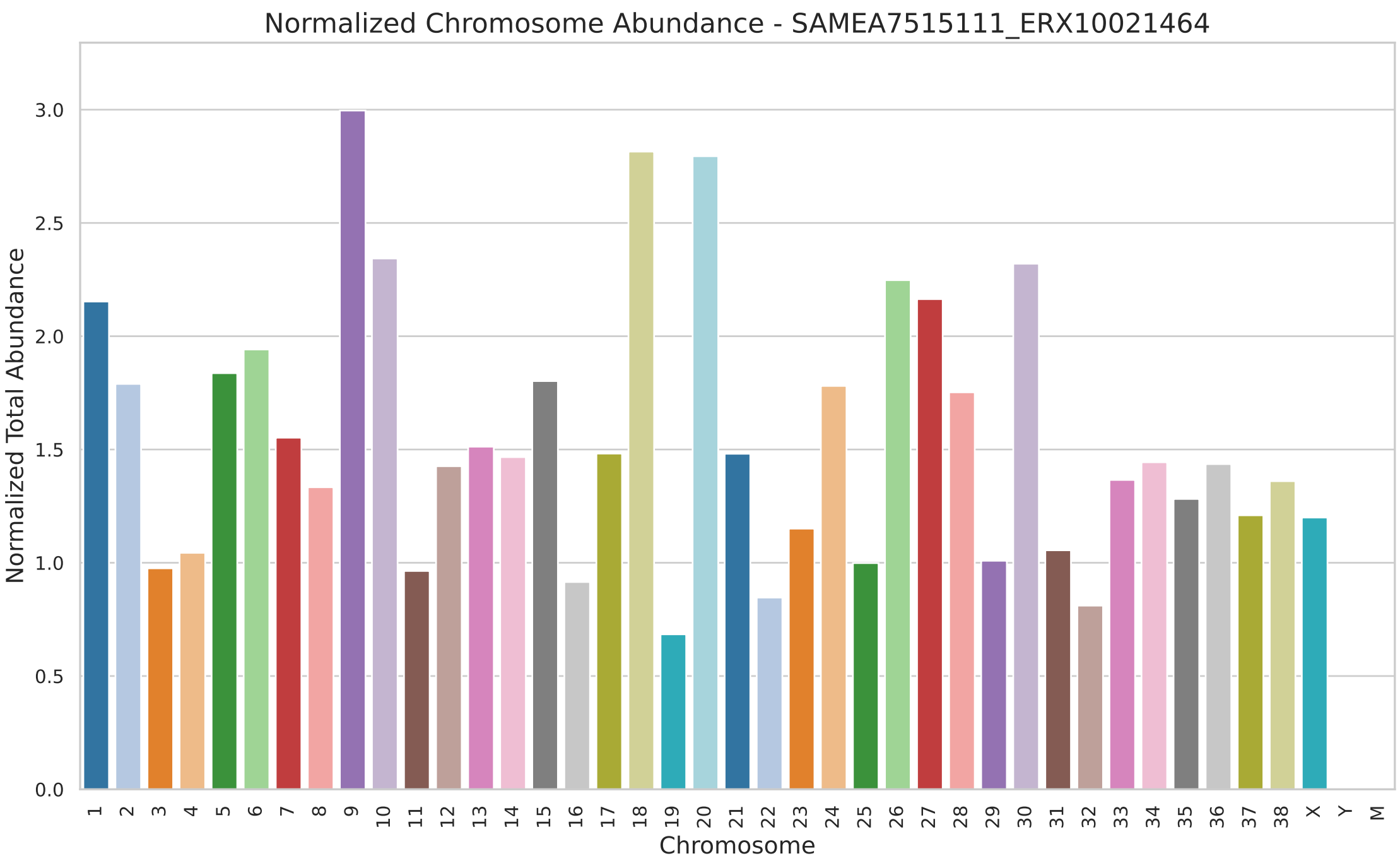

Normalized Chromosome Abundance - SAMEA7515117_ERX10021468
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

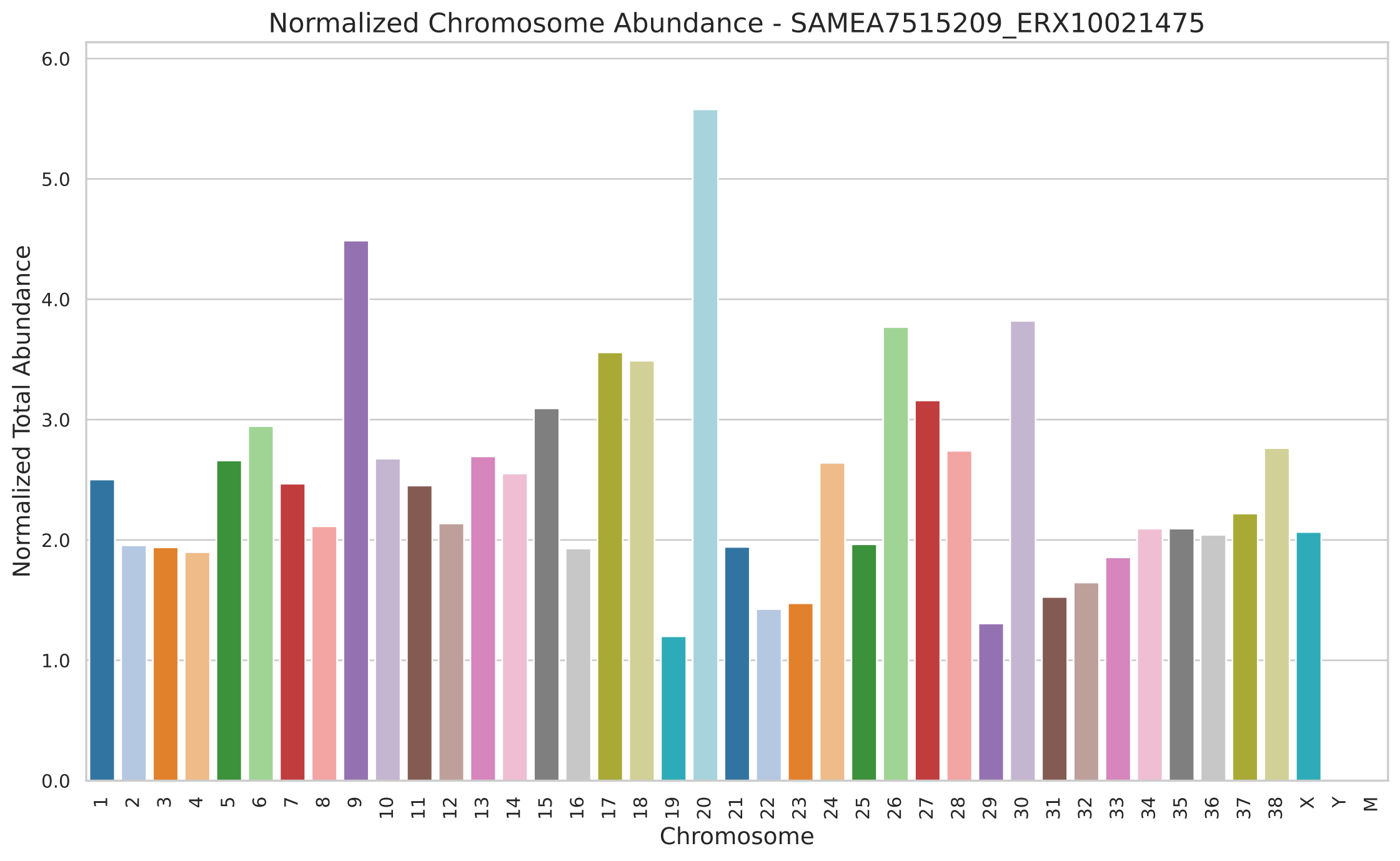

Normalized Chromosome Abundance - SAMEA7515237_ERX10021484
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

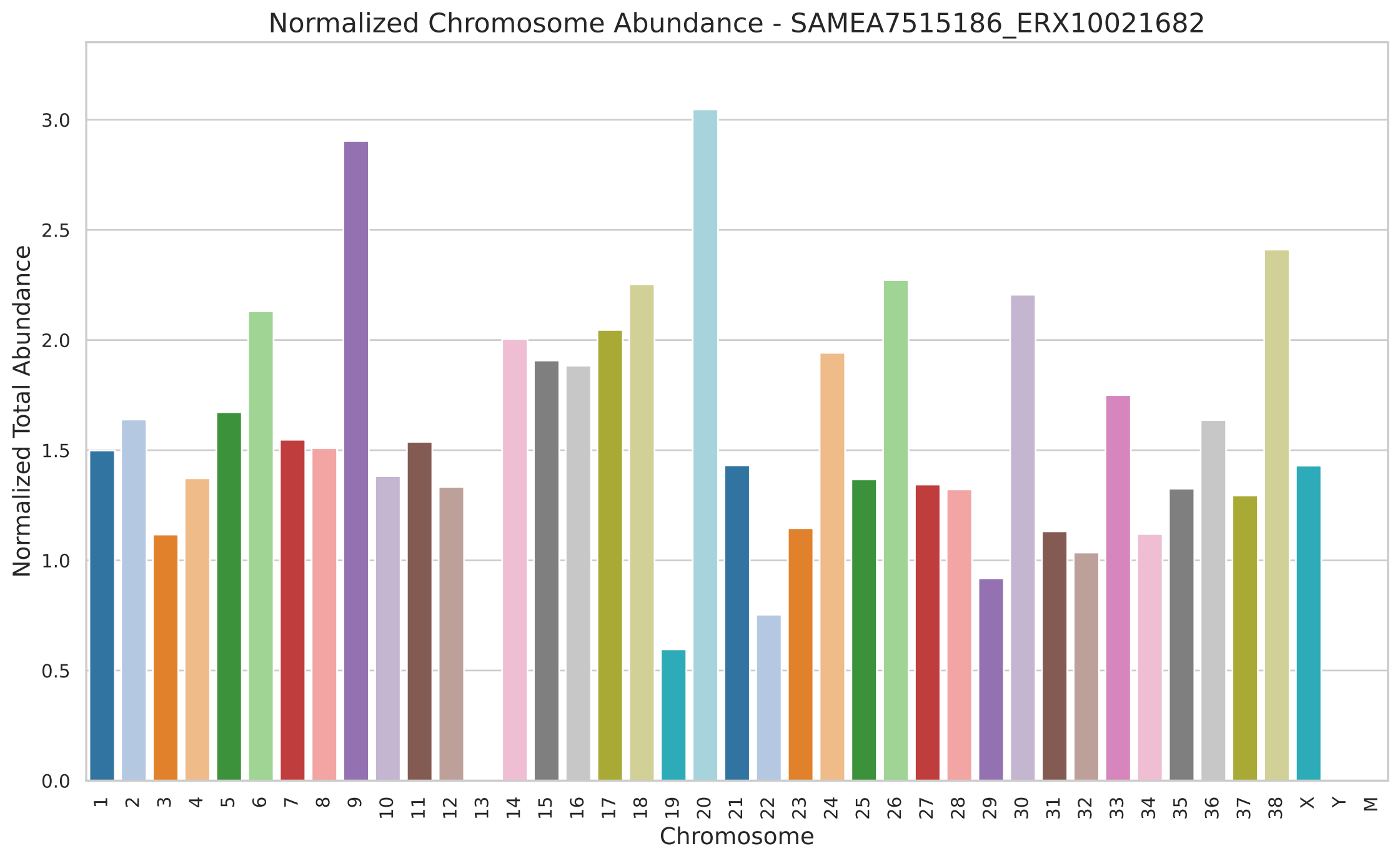

Normalized Chromosome Abundance - SAMEA7515191_ERX10021684
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

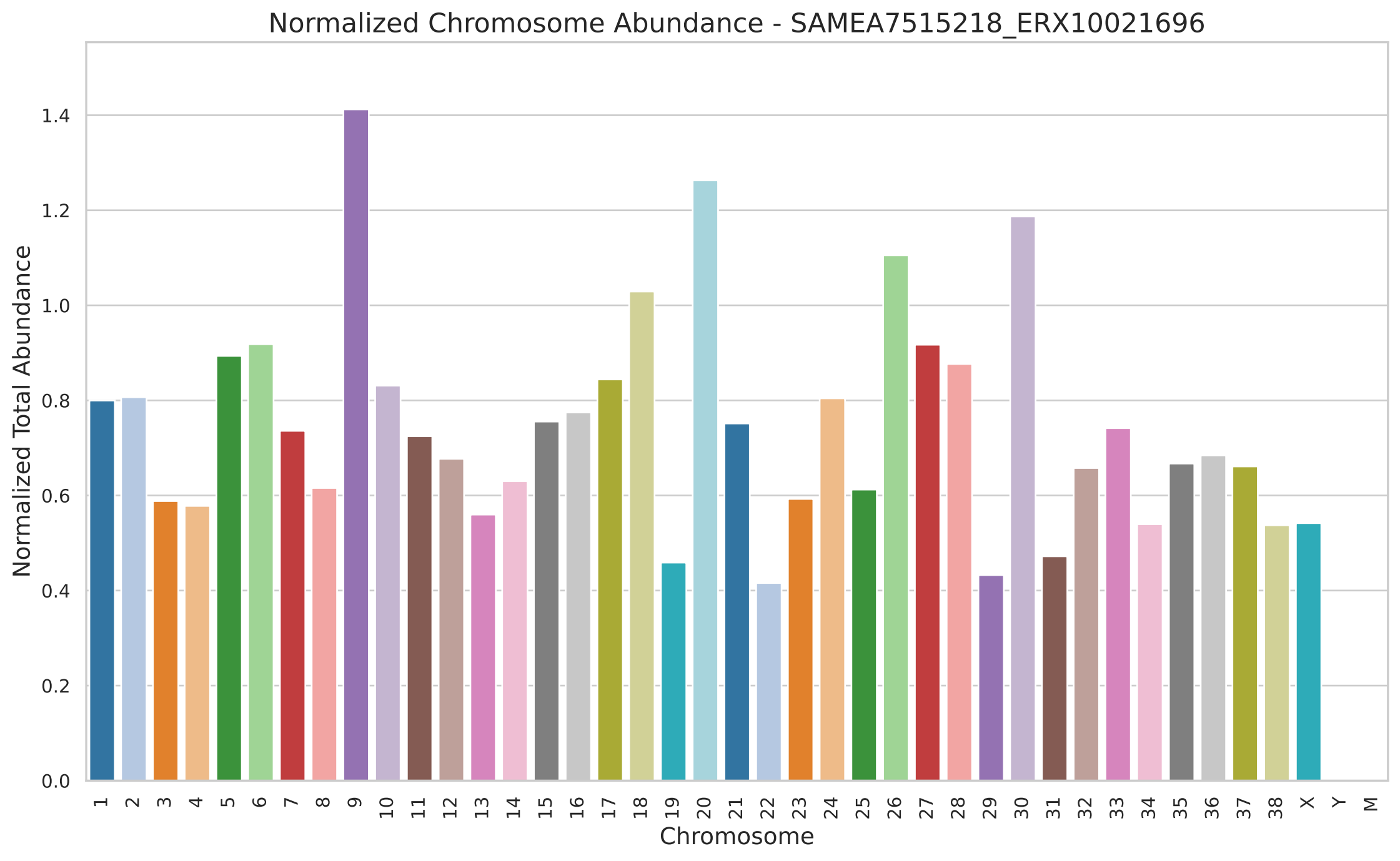

Normalized Chromosome Abundance - SAMEA7515124_ERX10021474
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

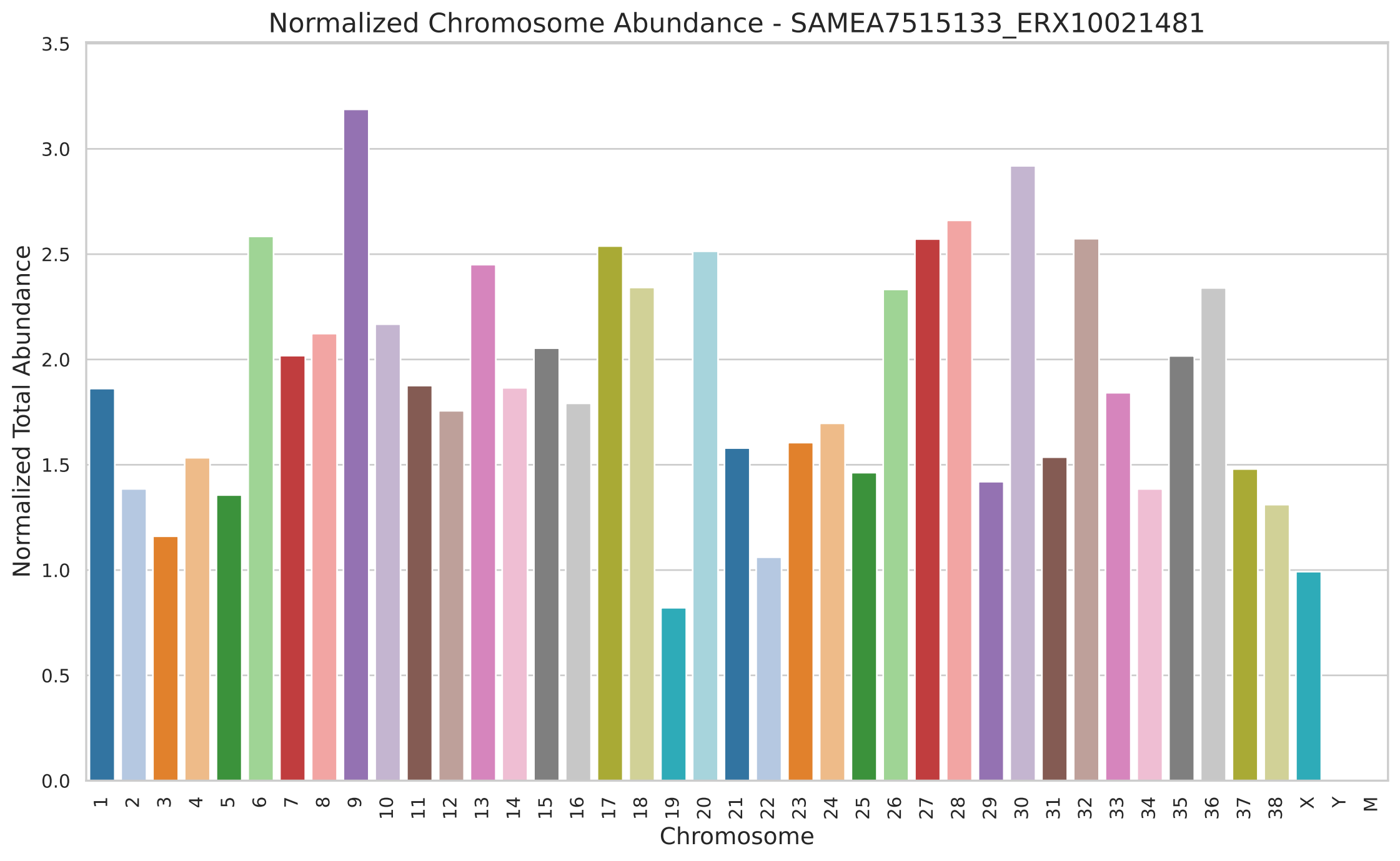

Normalized Chromosome Abundance - SAMEA7515069_ERX10021436
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

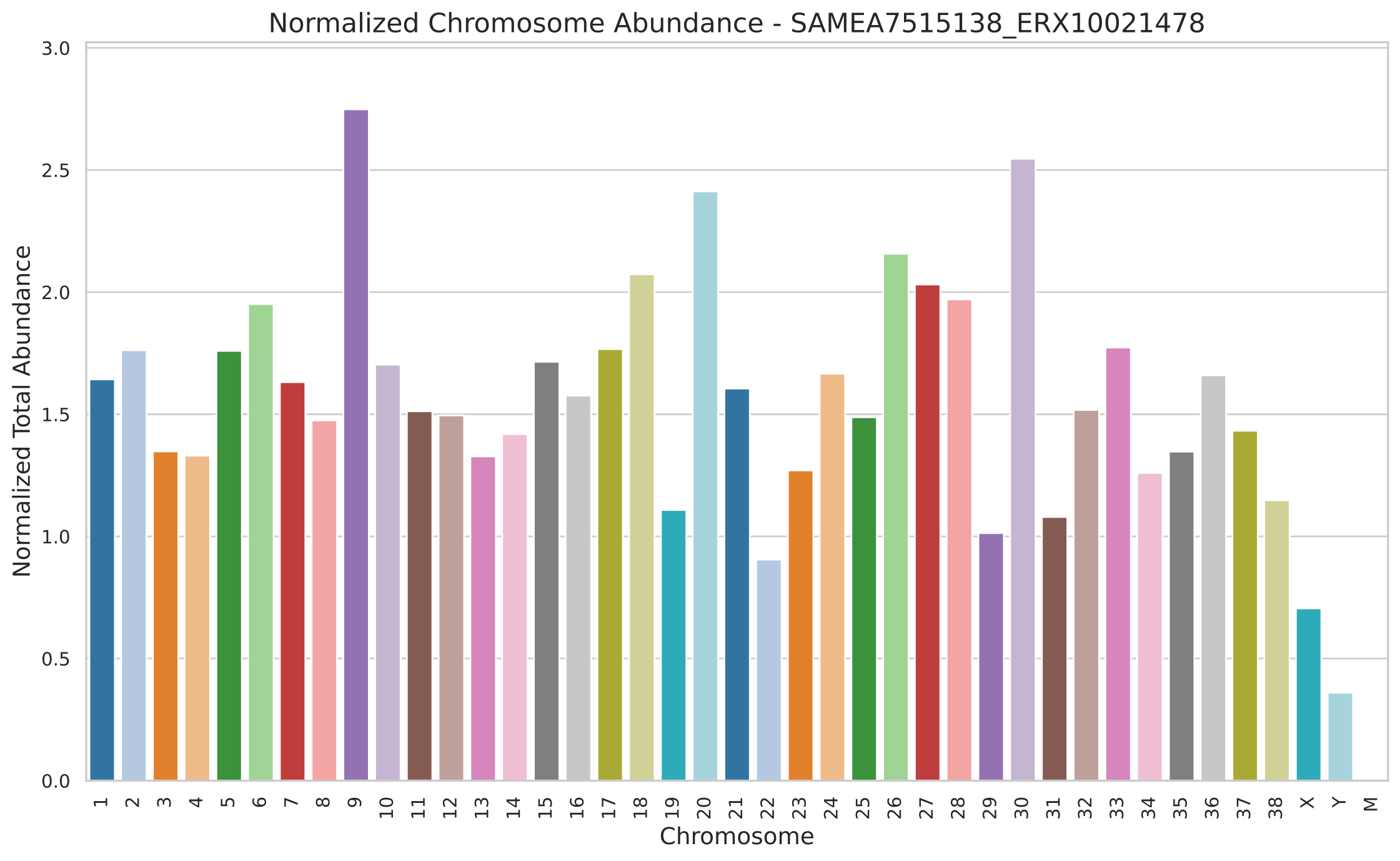

Normalized Chromosome Abundance - SAMEA7515111_ERX10021464
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

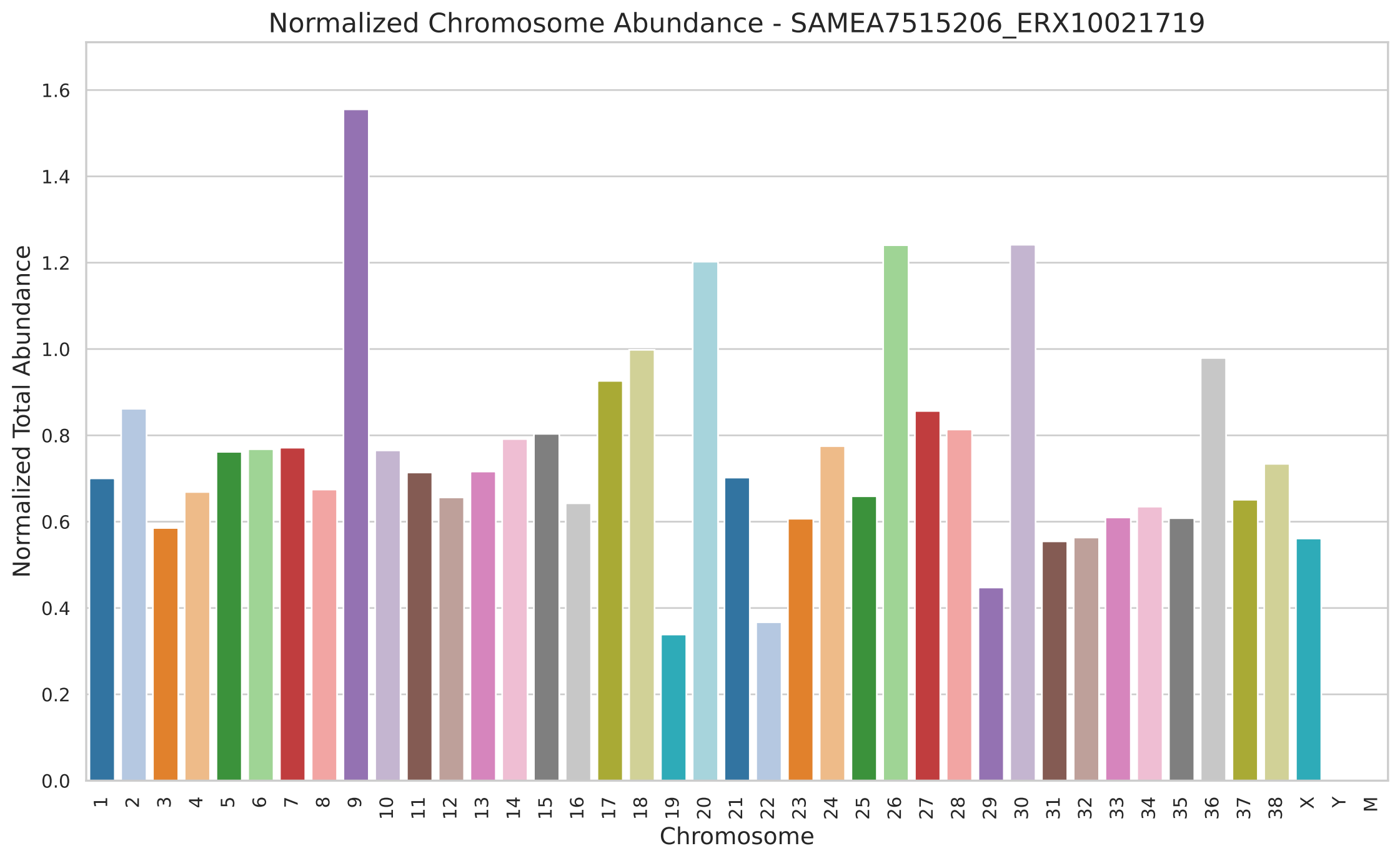

Normalized Chromosome Abundance - SAMEA7515209_ERX10021475
Normalized Total Abundance
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

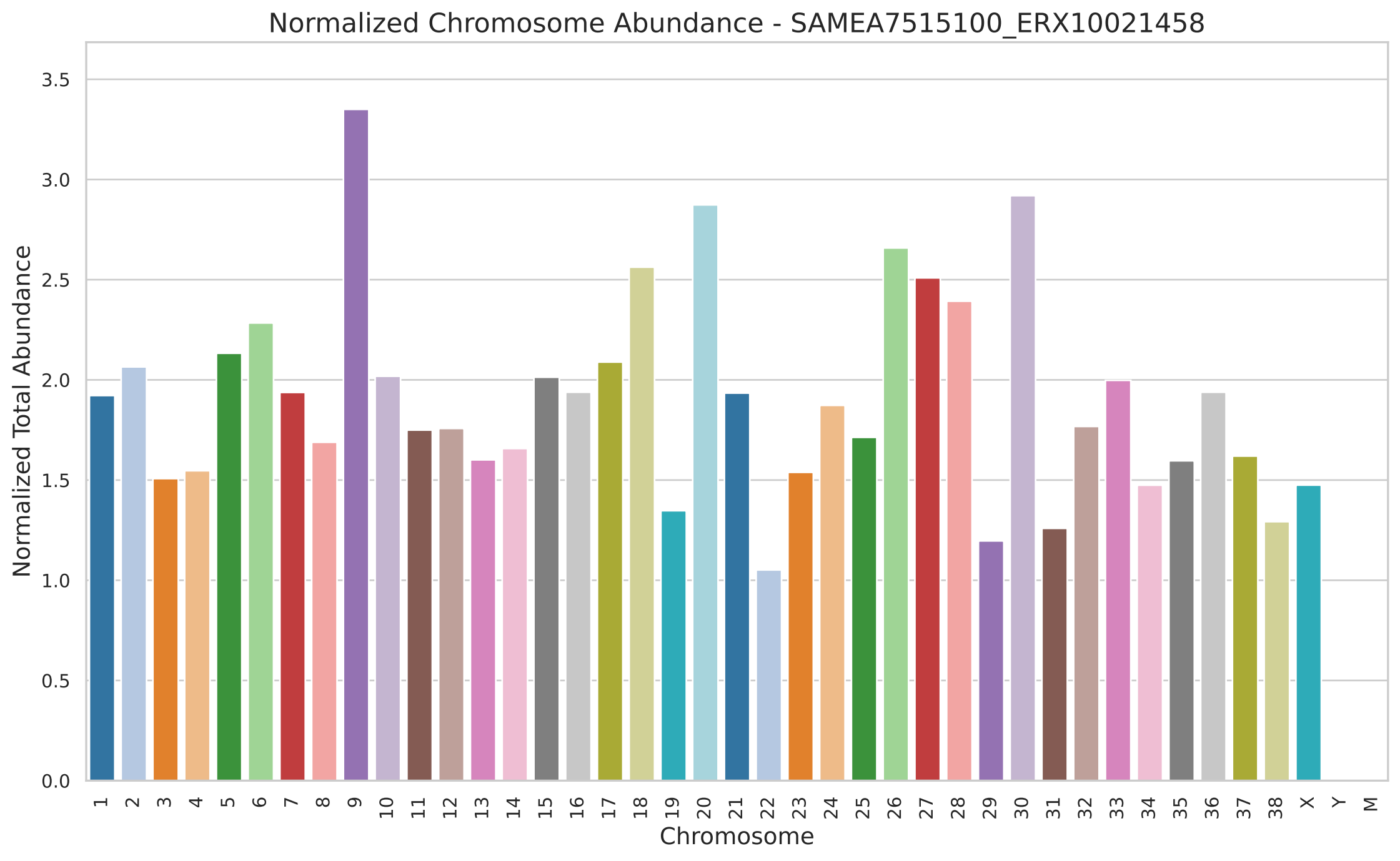

Normalized Chromosome Abundance - SAMEA7515186_ERX10021682
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

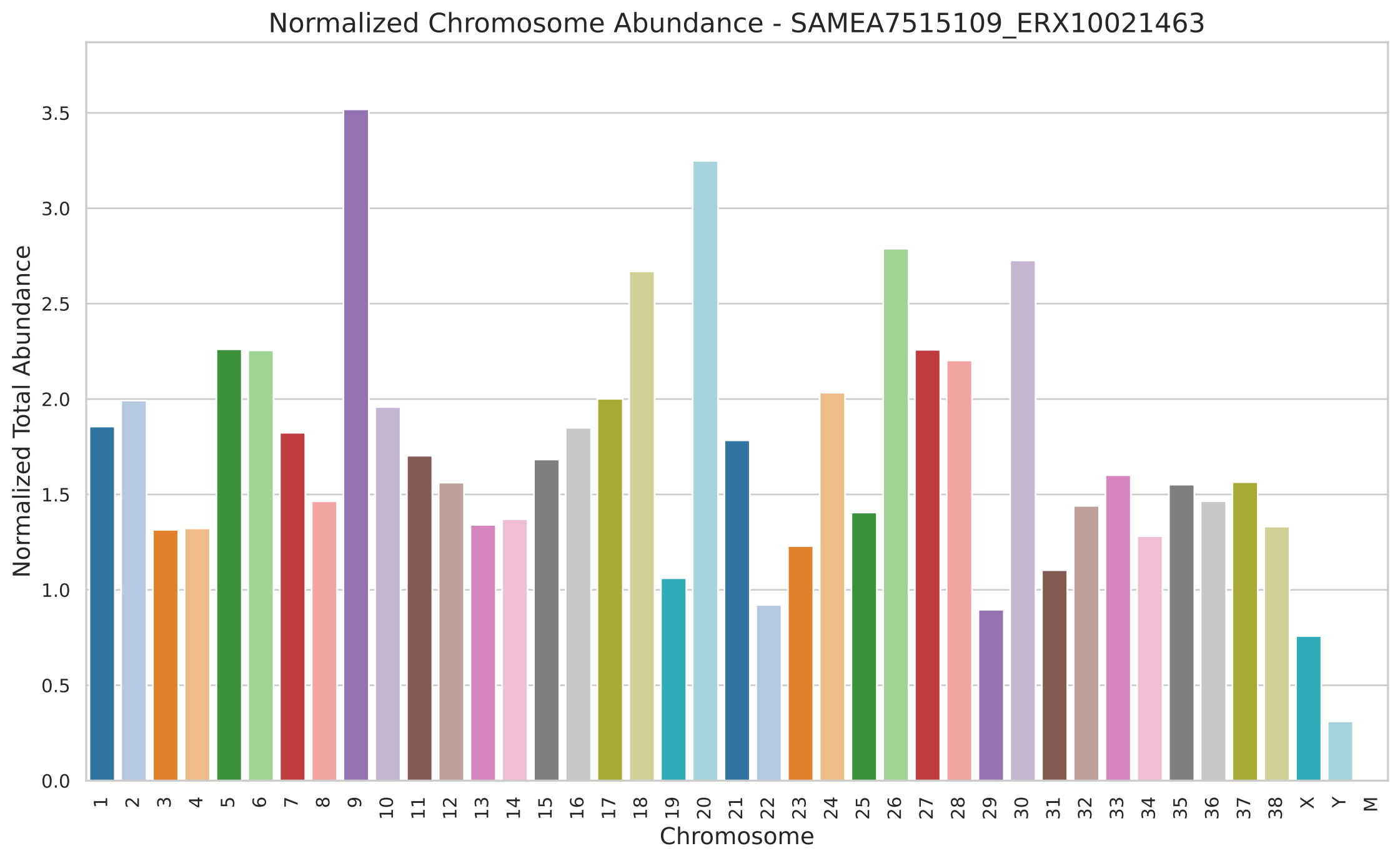

Normalized Chromosome Abundance - SAMEA7515218_ERX10021696
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

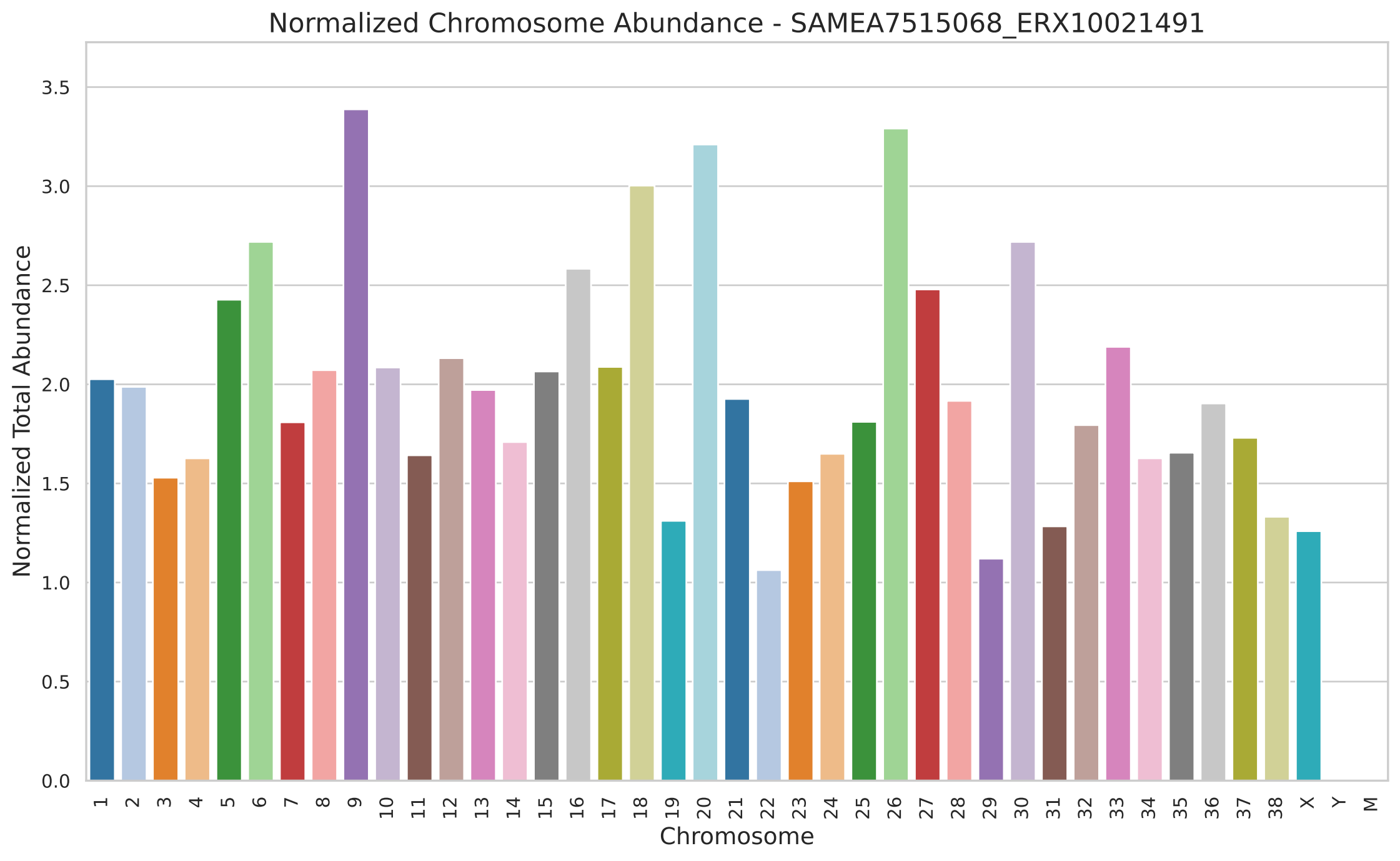

Normalized Chromosome Abundance - SAMEA7515133_ERX10021481
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

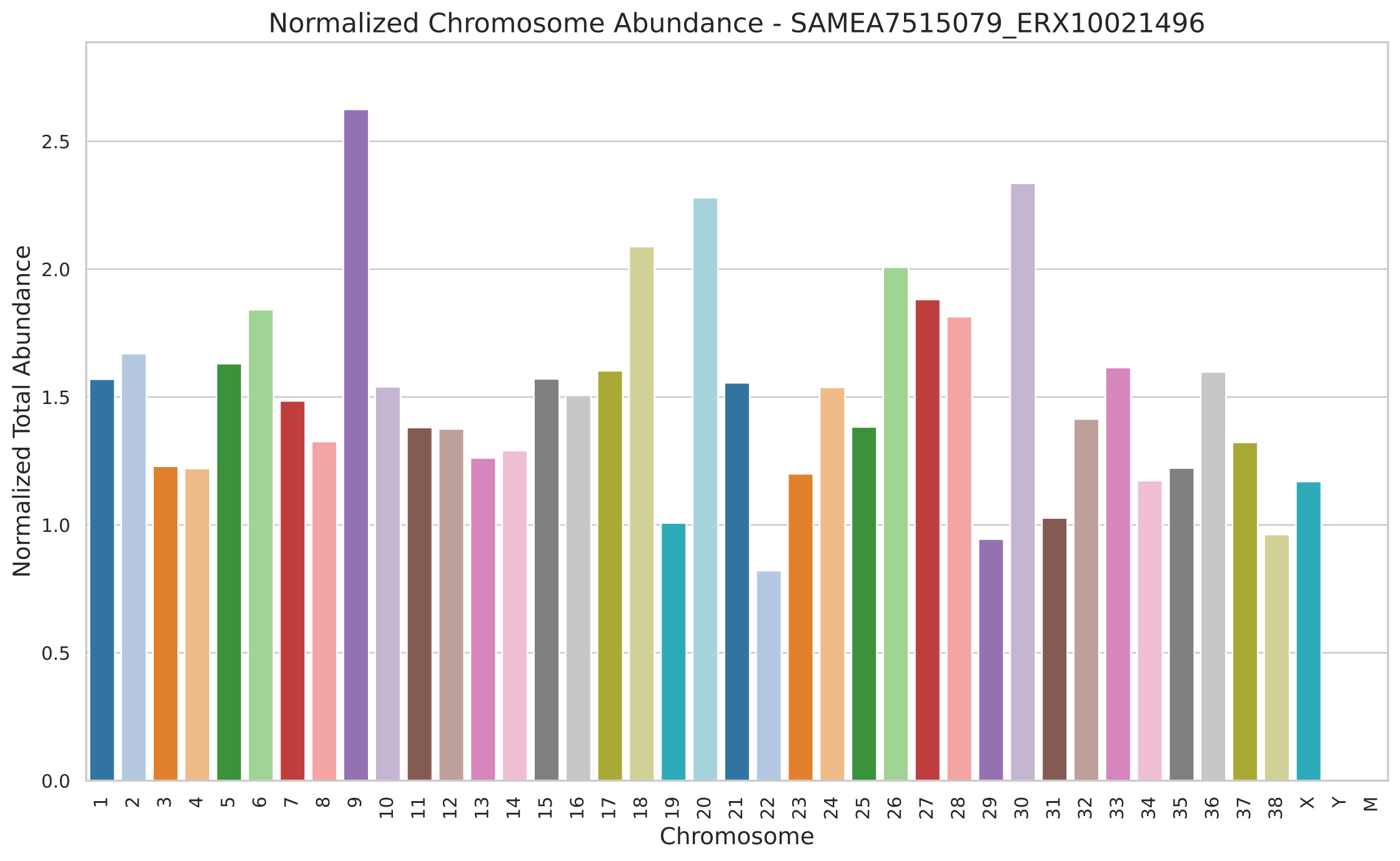

Normalized Chromosome Abundance - SAMEA7515138_ERX10021478
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

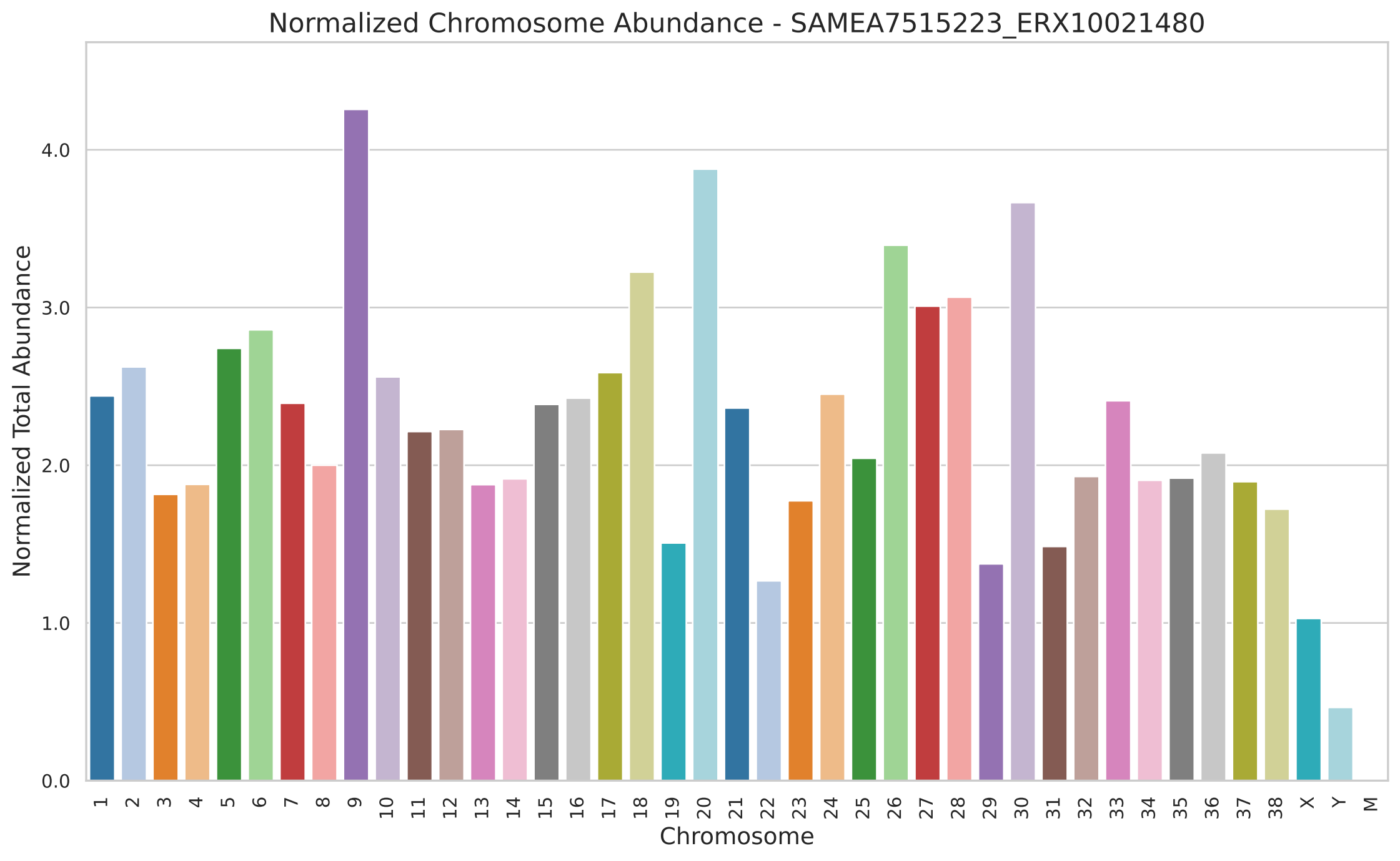

Normalized Chromosome Abundance - SAMEA7515206_ERX10021719
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

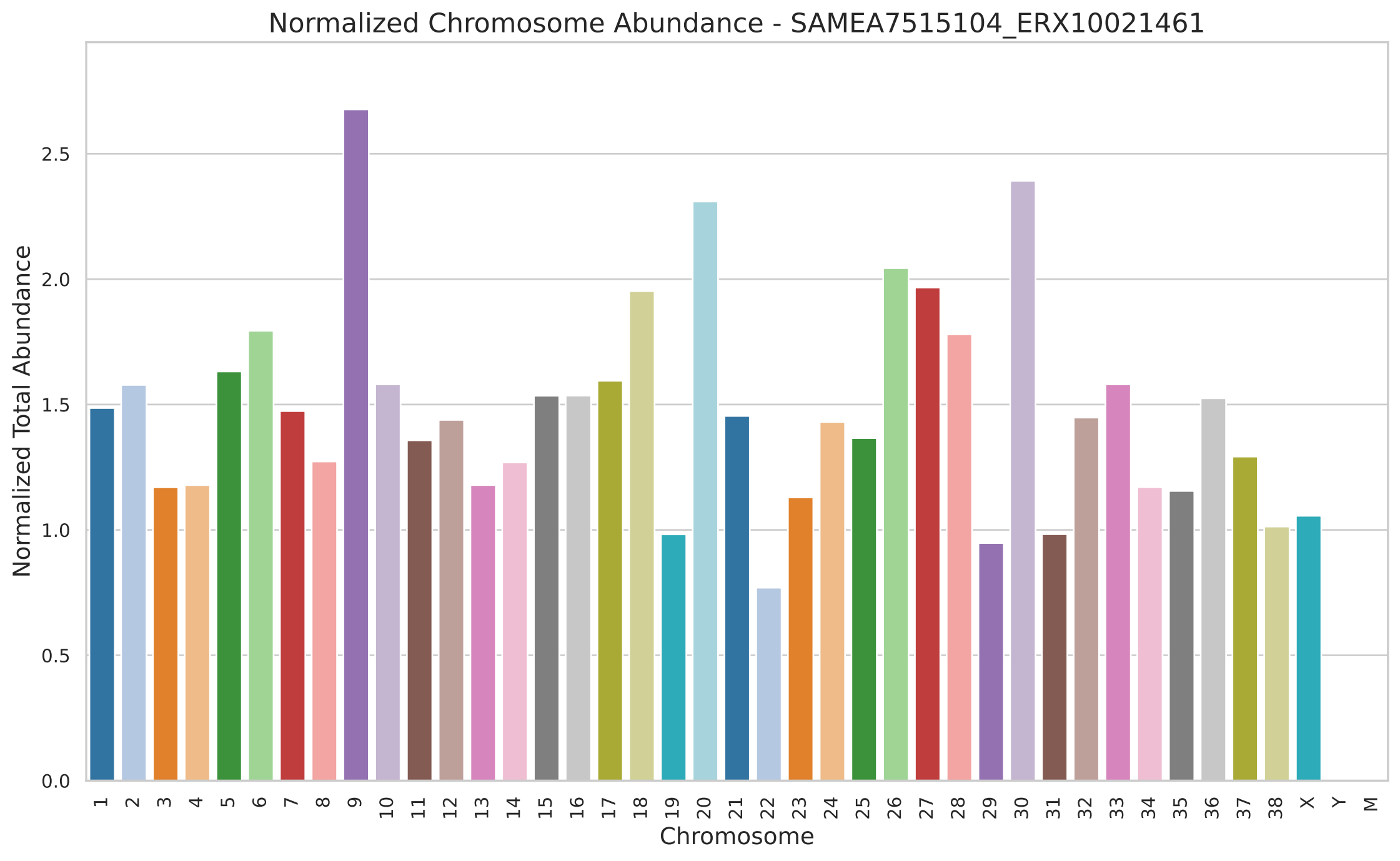

Normalized Chromosome Abundance - SAMEA7515100_ERX10021458
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

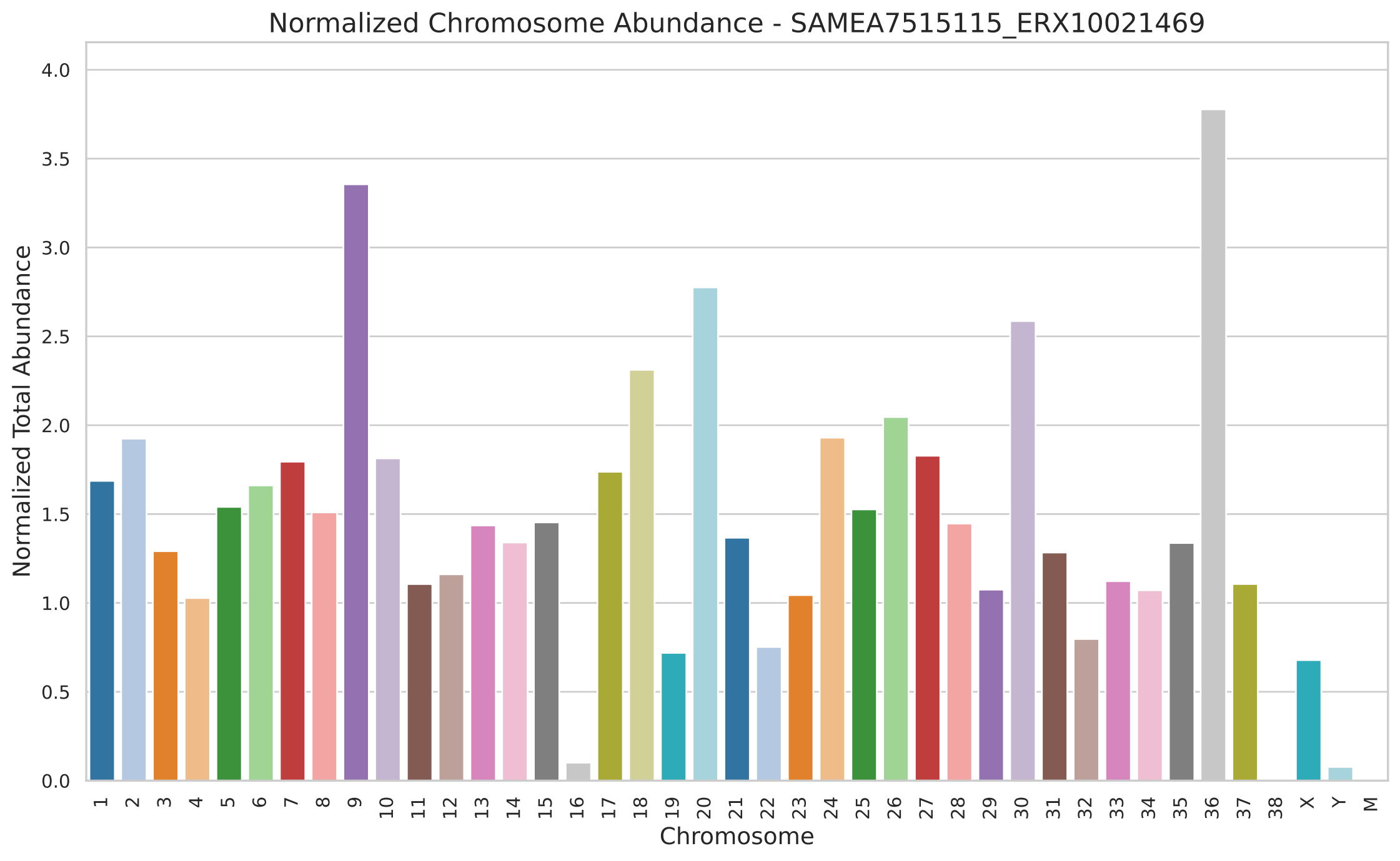

Normalized Chromosome Abundance - SAMEA7515109_ERX10021463
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

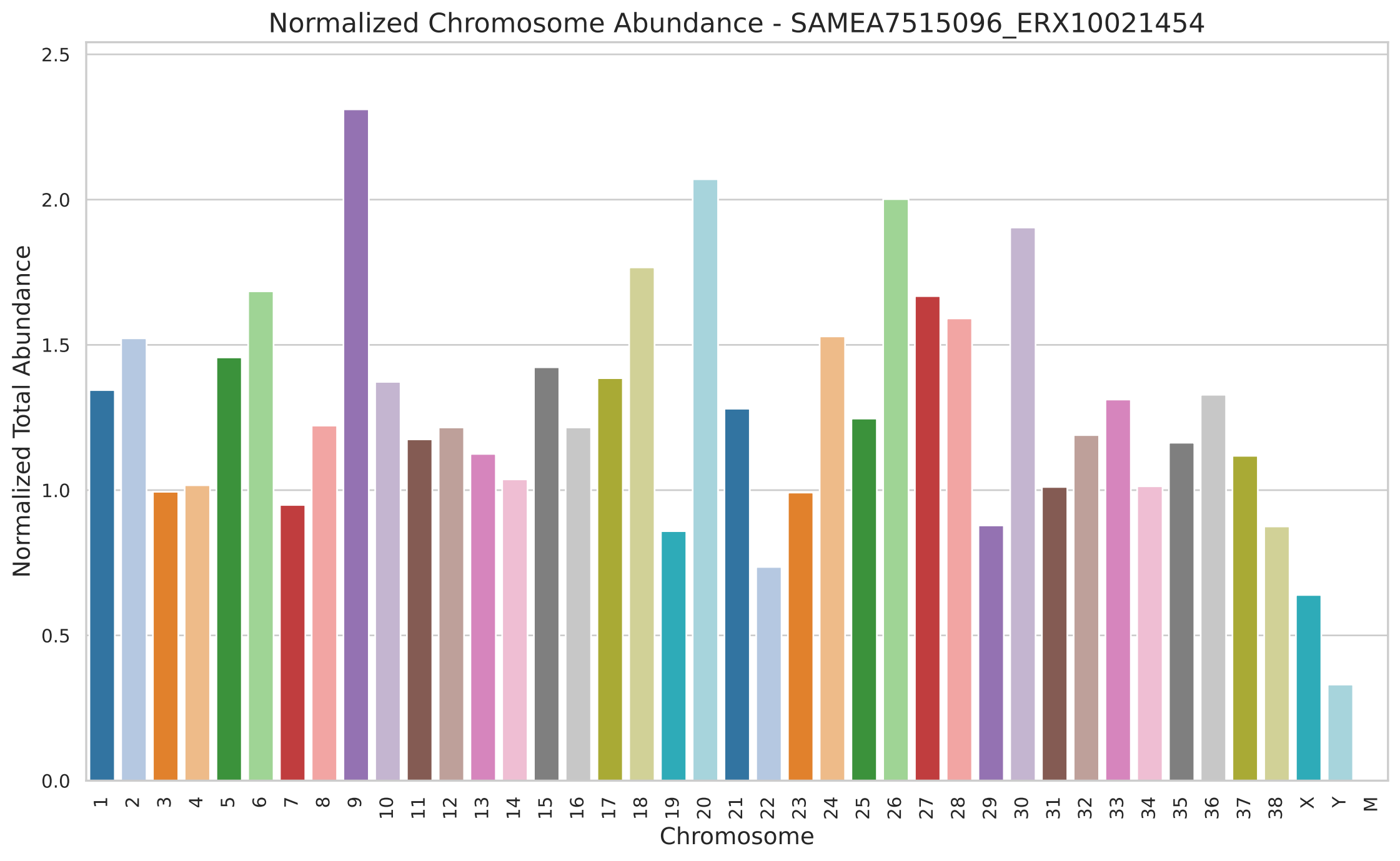

Normalized Chromosome Abundance - SAMEA7515068_ERX10021491
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

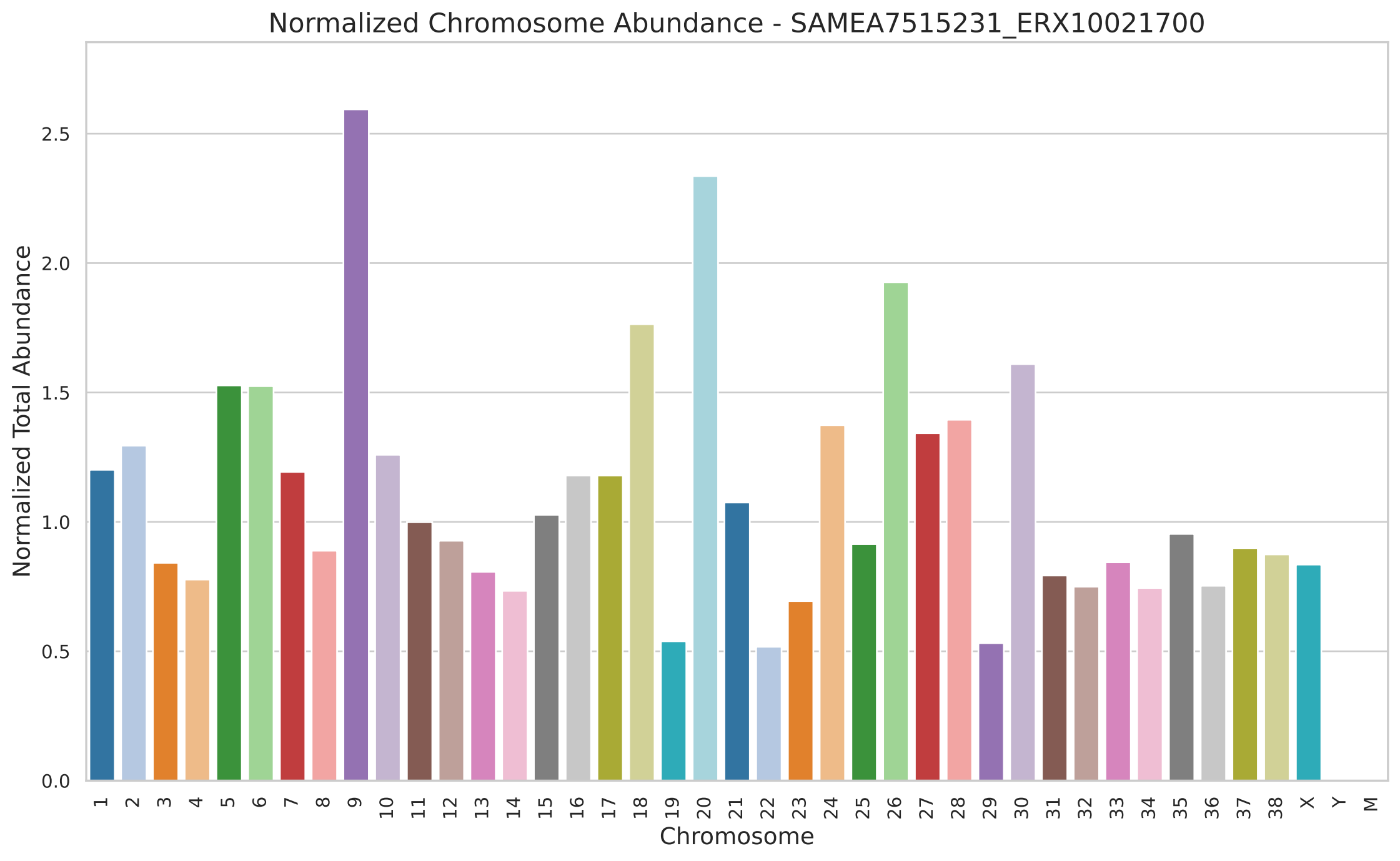

Normalized Chromosome Abundance - SAMEA7515079_ERX10021496
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

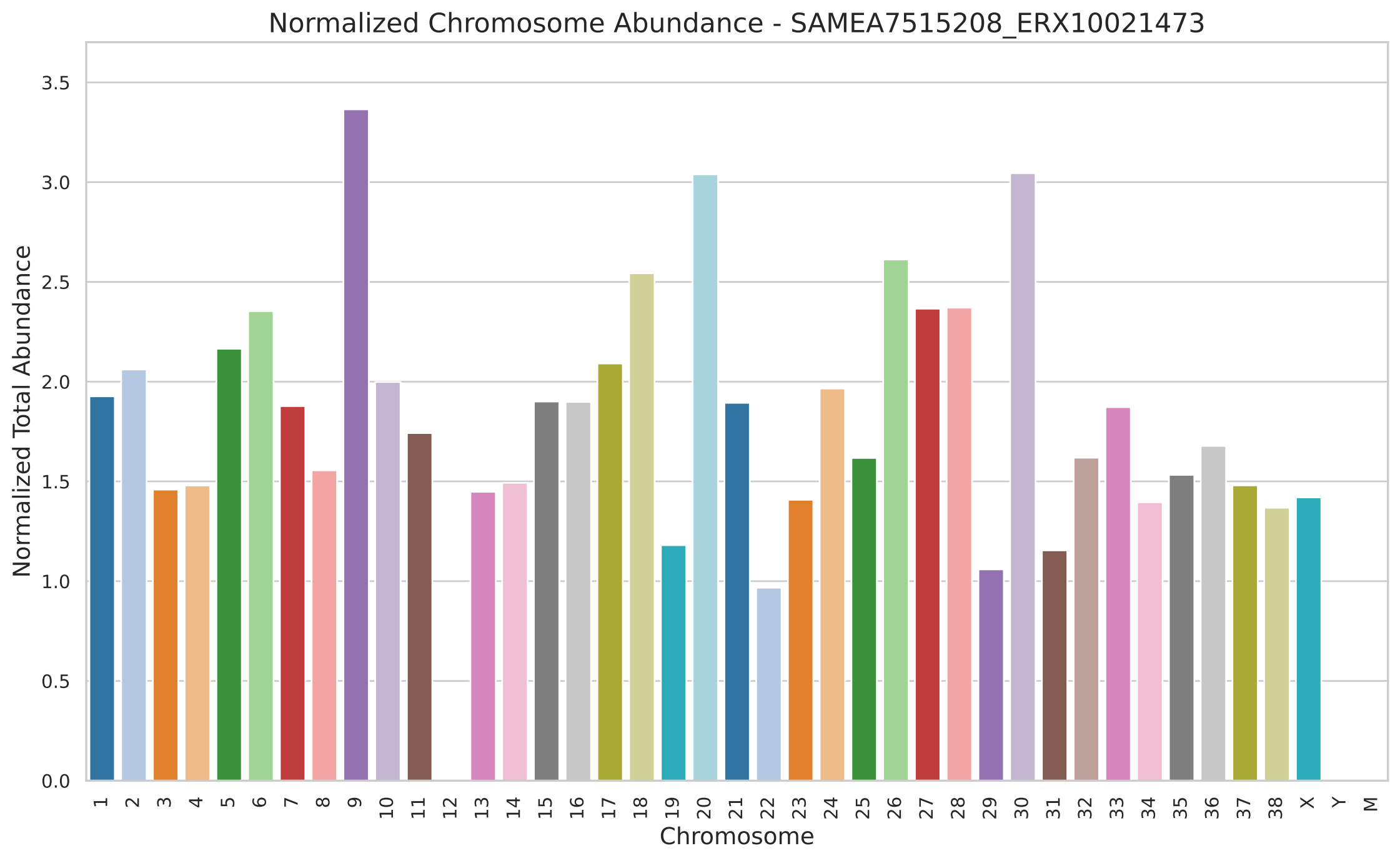

Normalized Chromosome Abundance - SAMEA7515223_ERX10021480
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

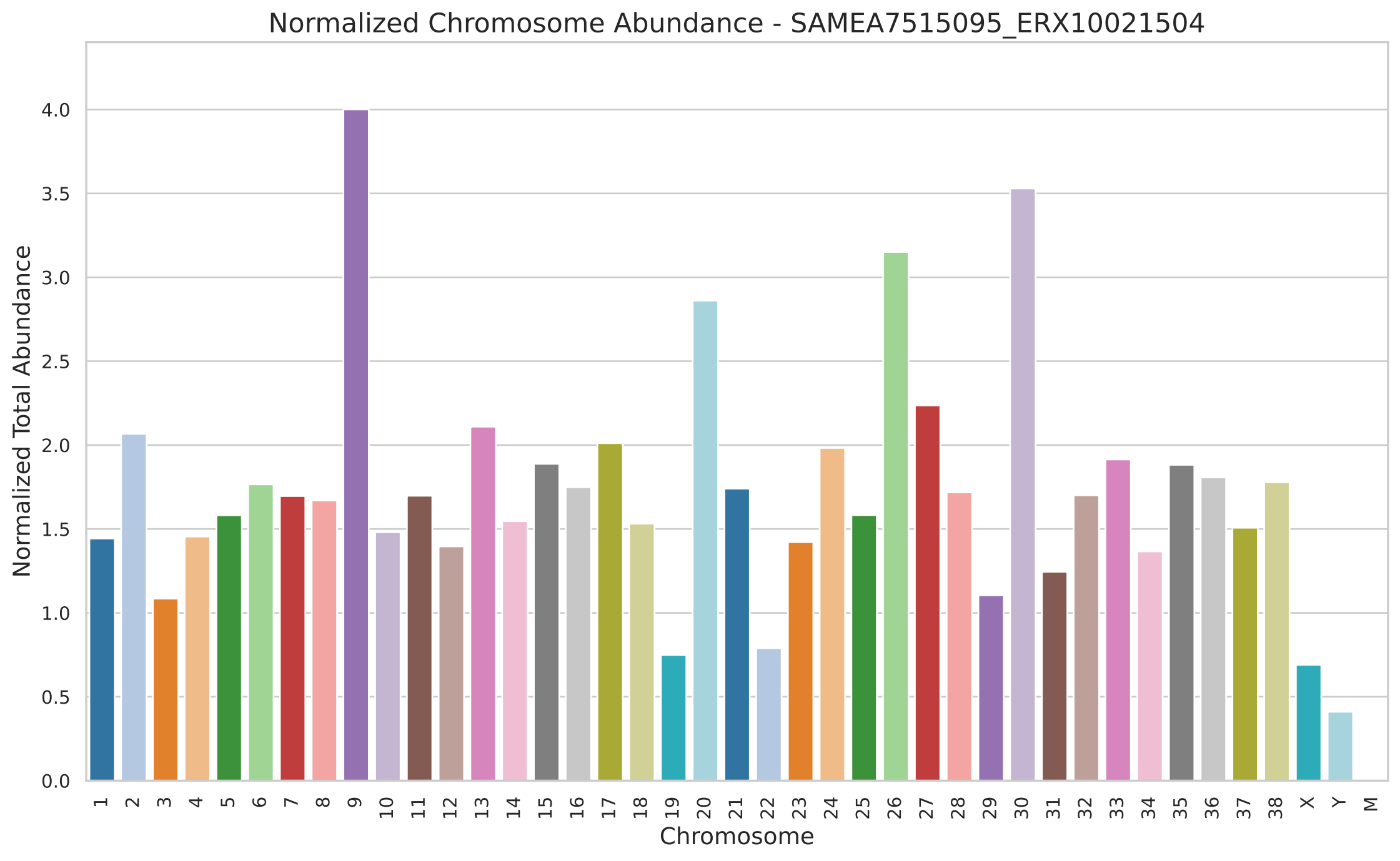

Normalized Chromosome Abundance - SAMEA7515104_ERX10021461
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

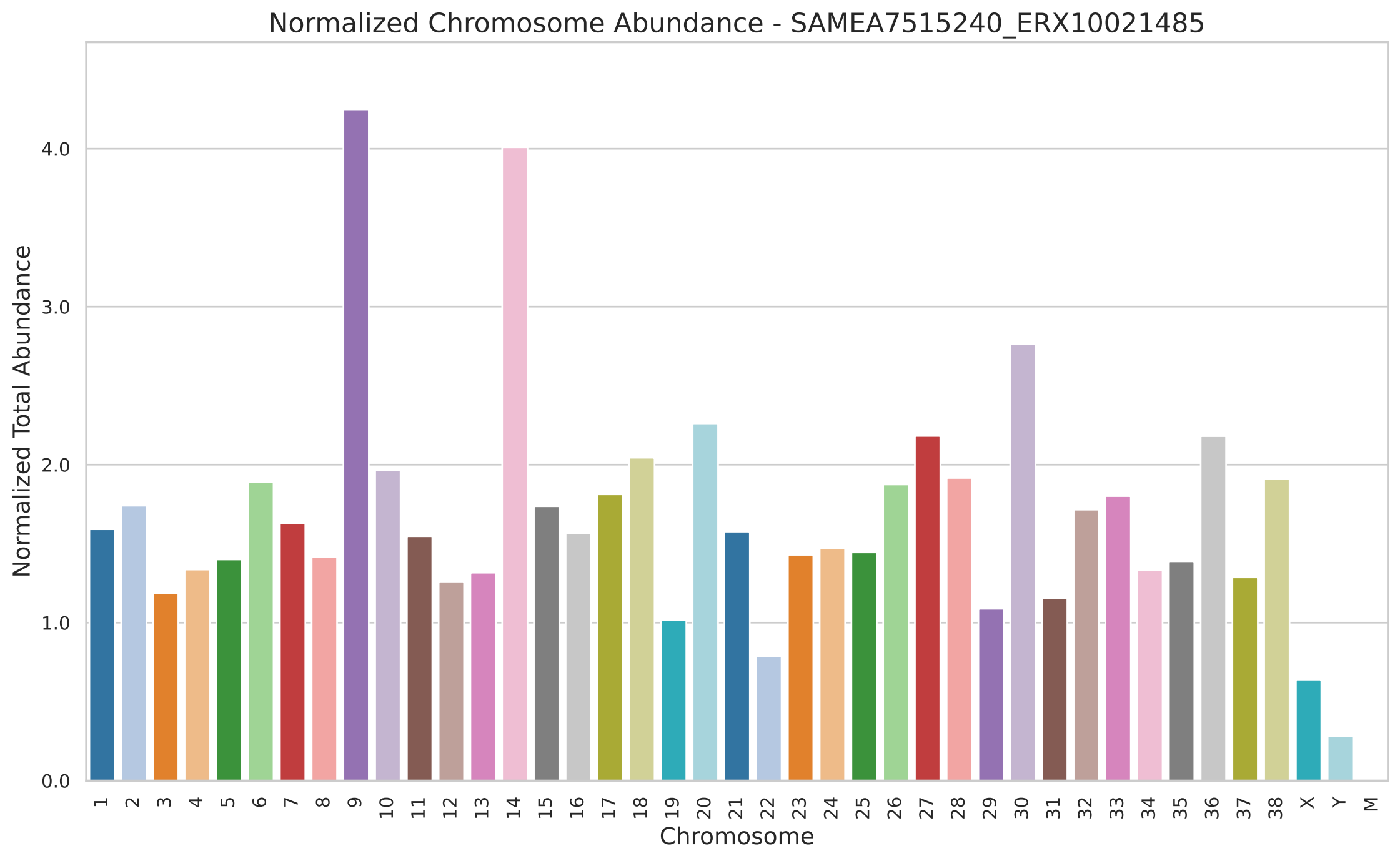

Normalized Chromosome Abundance - SAMEA7515115_ERX10021469
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

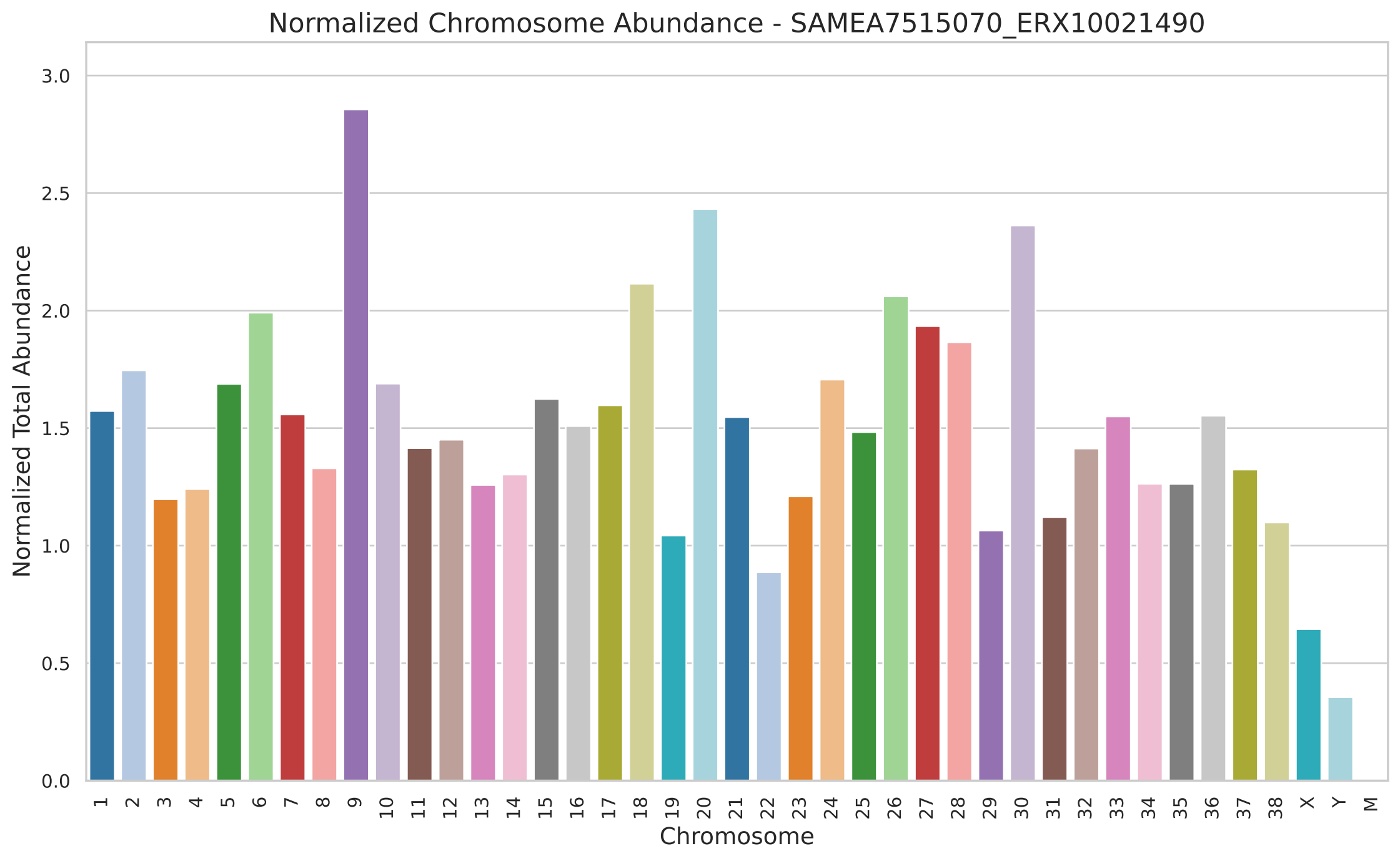

Normalized Chromosome Abundance - SAMEA7515096_ERX10021454
Normalized Total Abundance
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

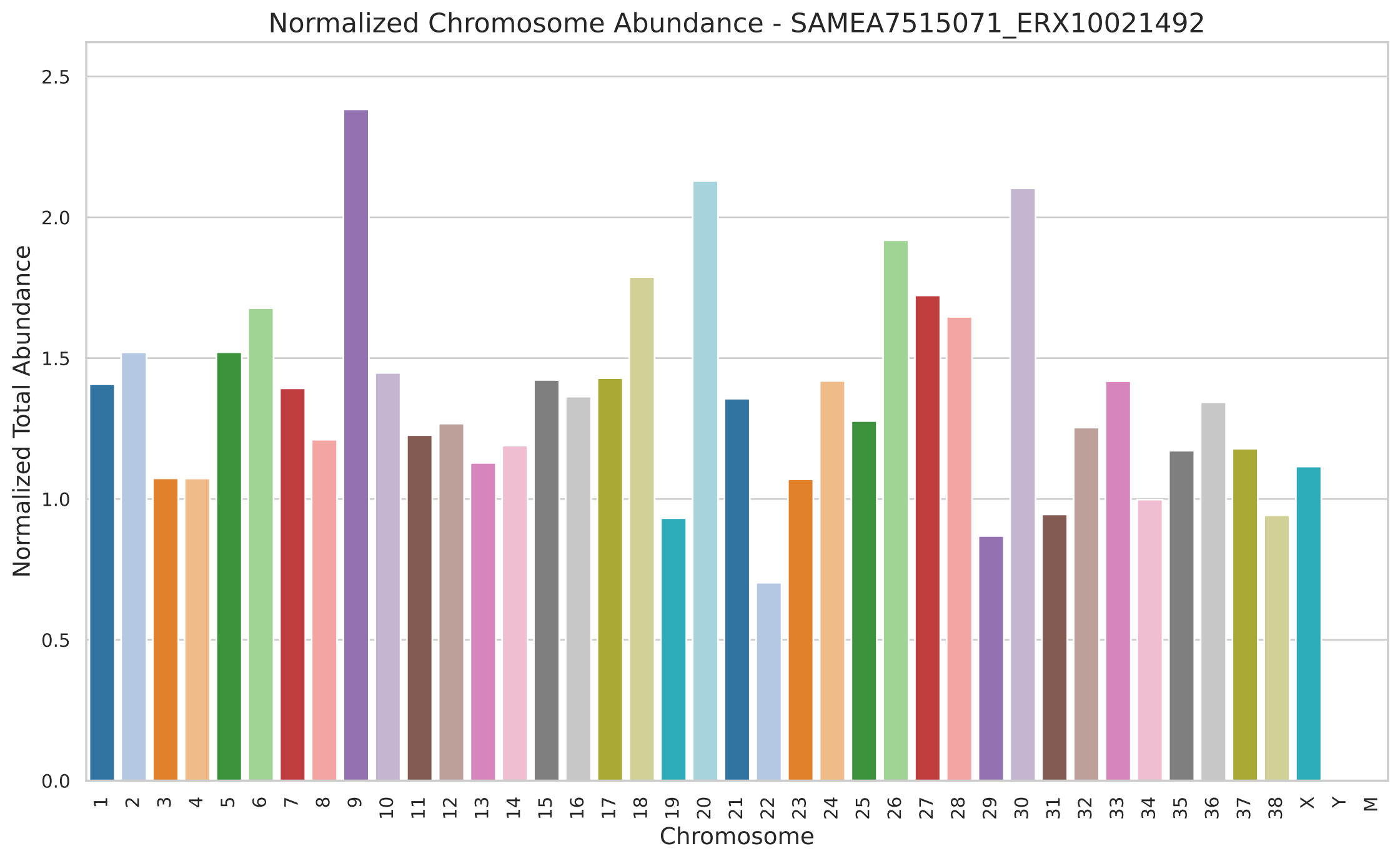

Normalized Chromosome Abundance - SAMEA7515231_ERX10021700
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

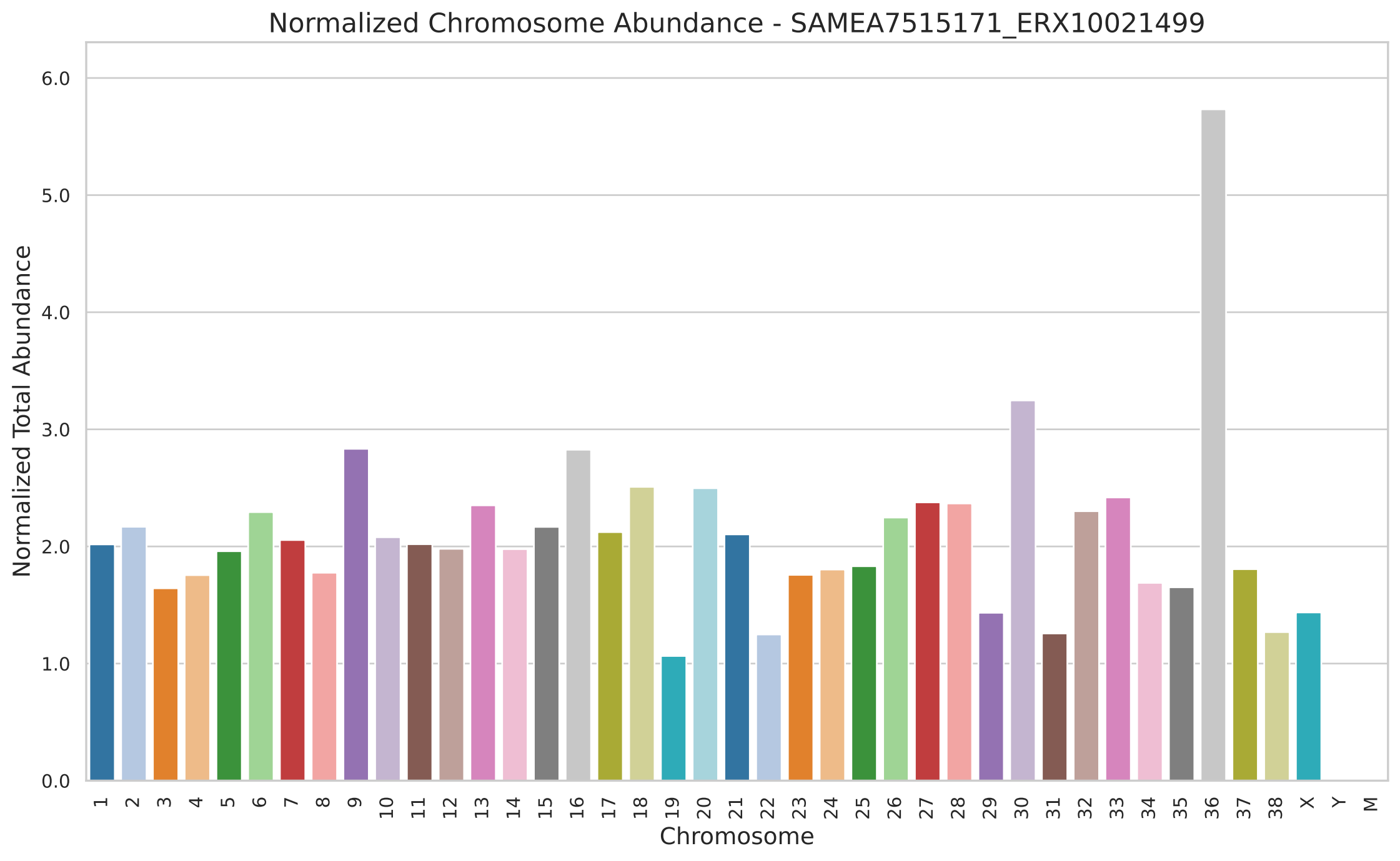

Normalized Chromosome Abundance - SAMEA7515208_ERX10021473
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

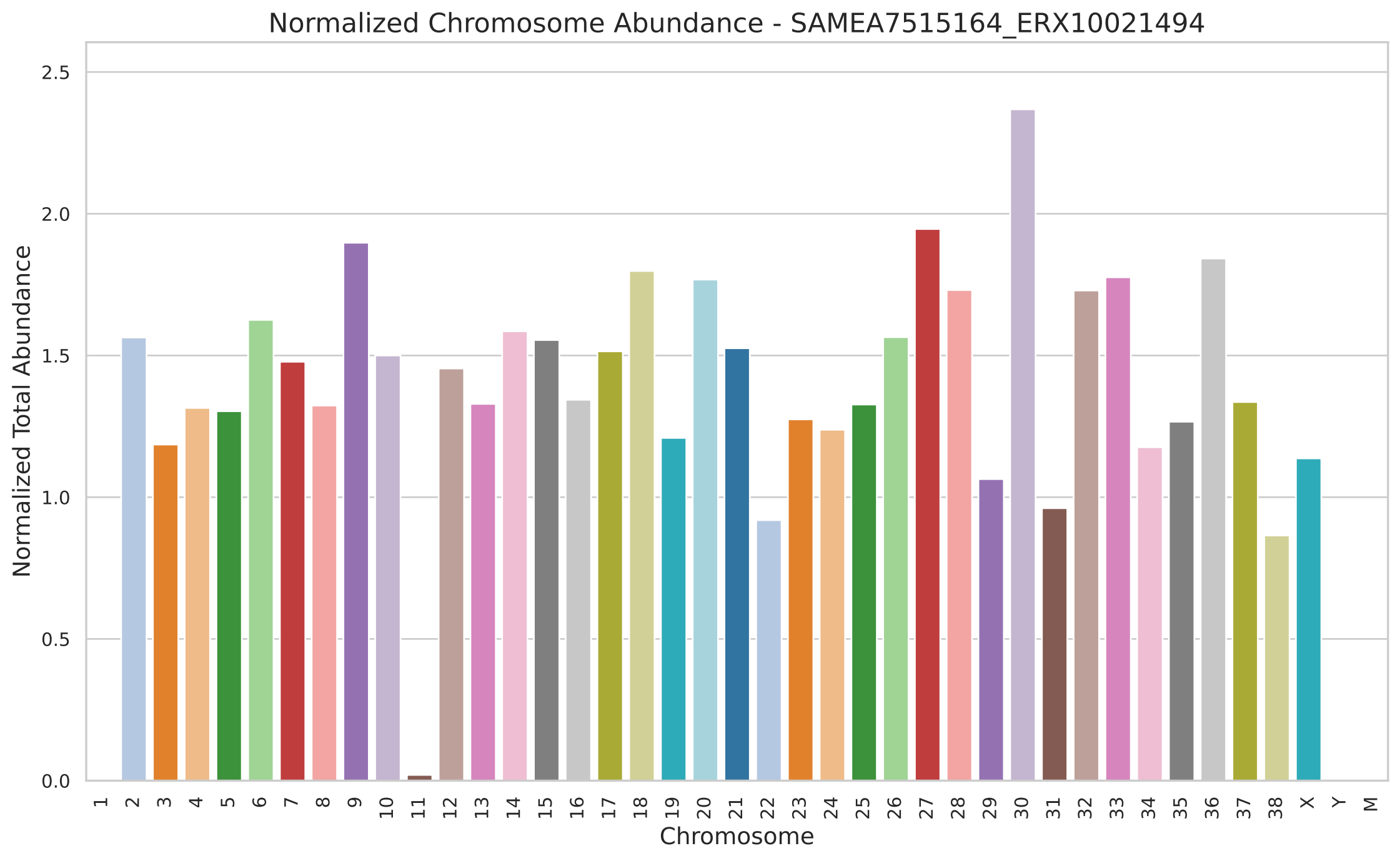

Normalized Chromosome Abundance - SAMEA7515095_ERX10021504
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

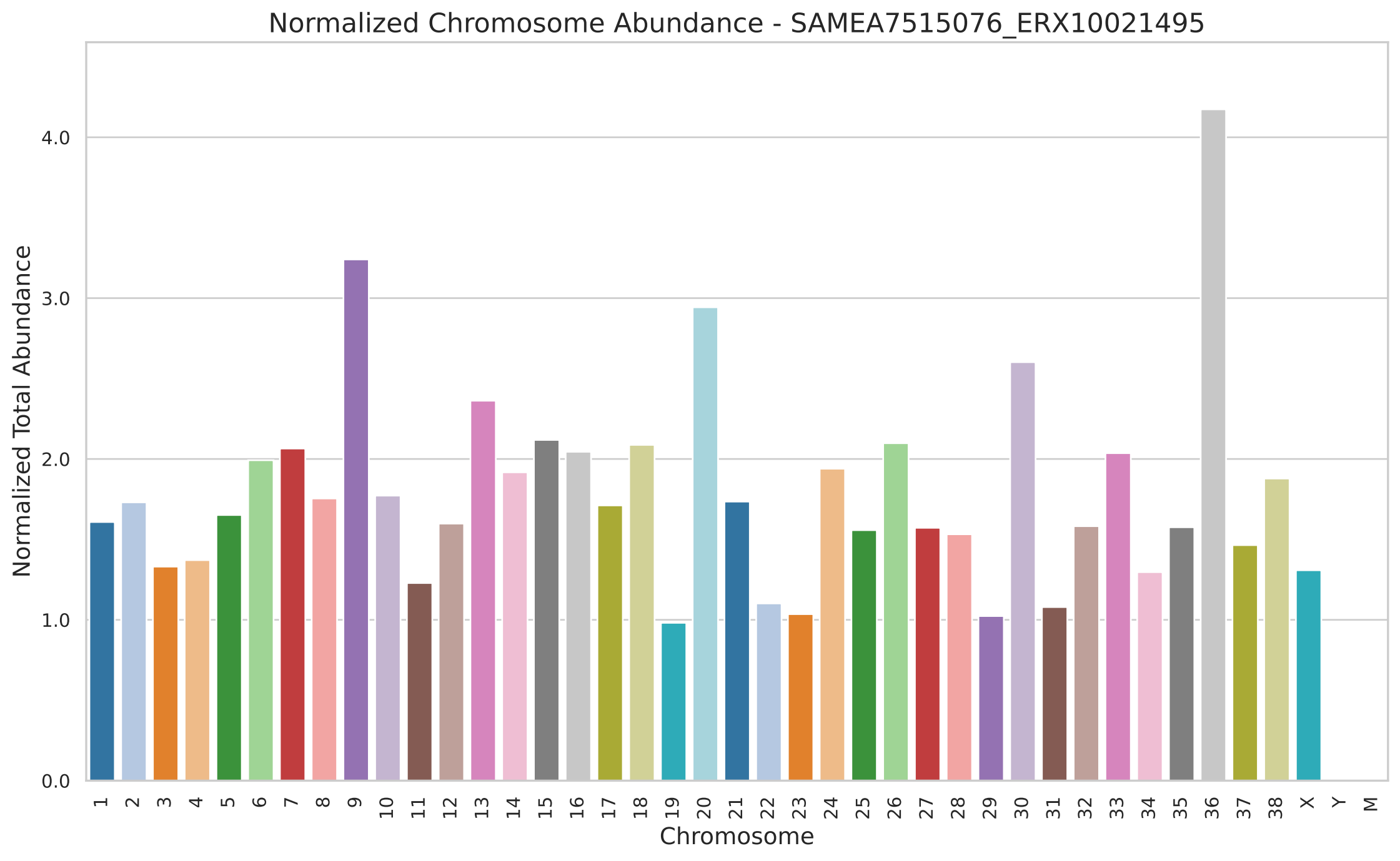

Normalized Chromosome Abundance - SAMEA7515240_ERX10021485
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

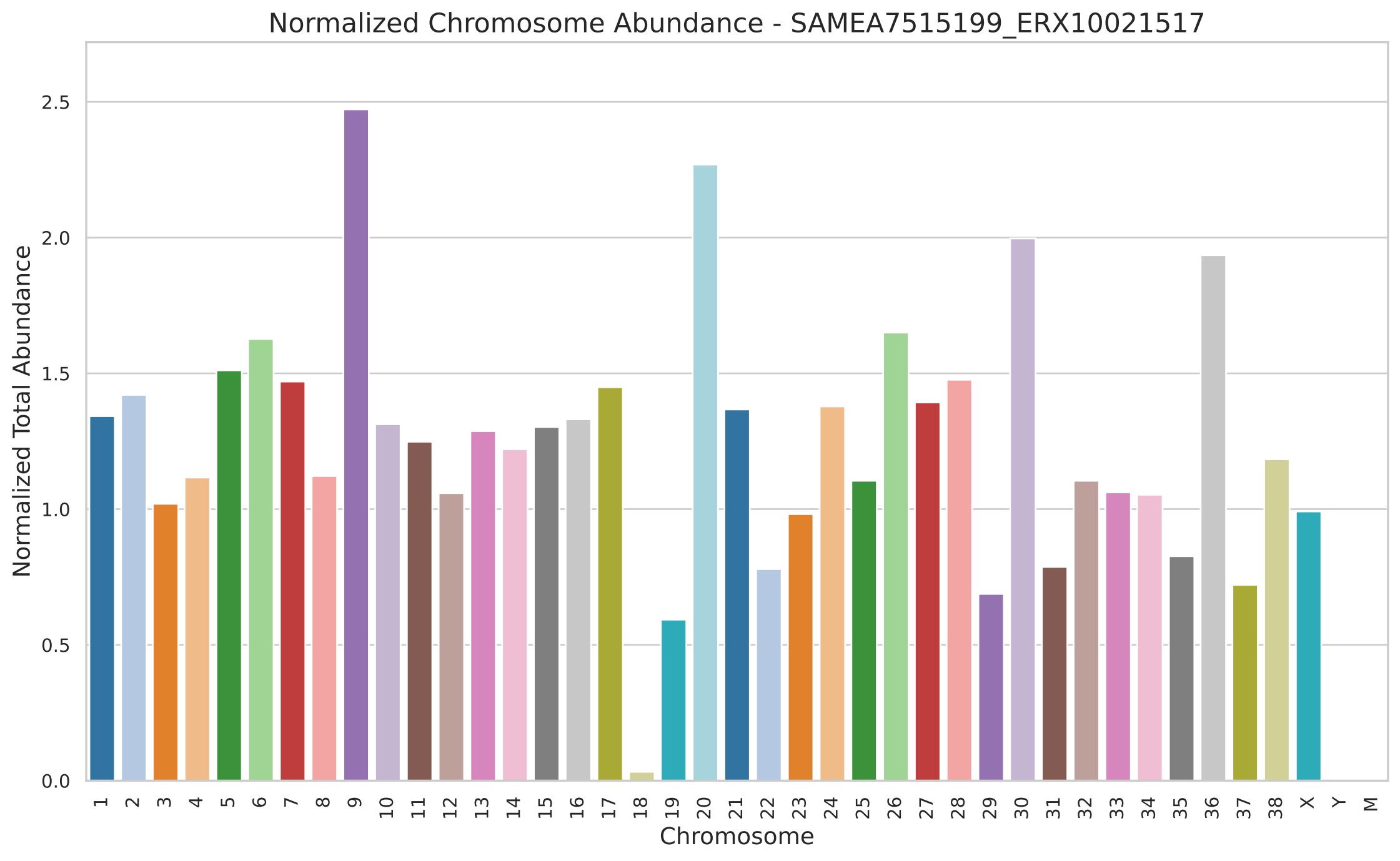

Normalized Chromosome Abundance - SAMEA7515070_ERX10021490
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

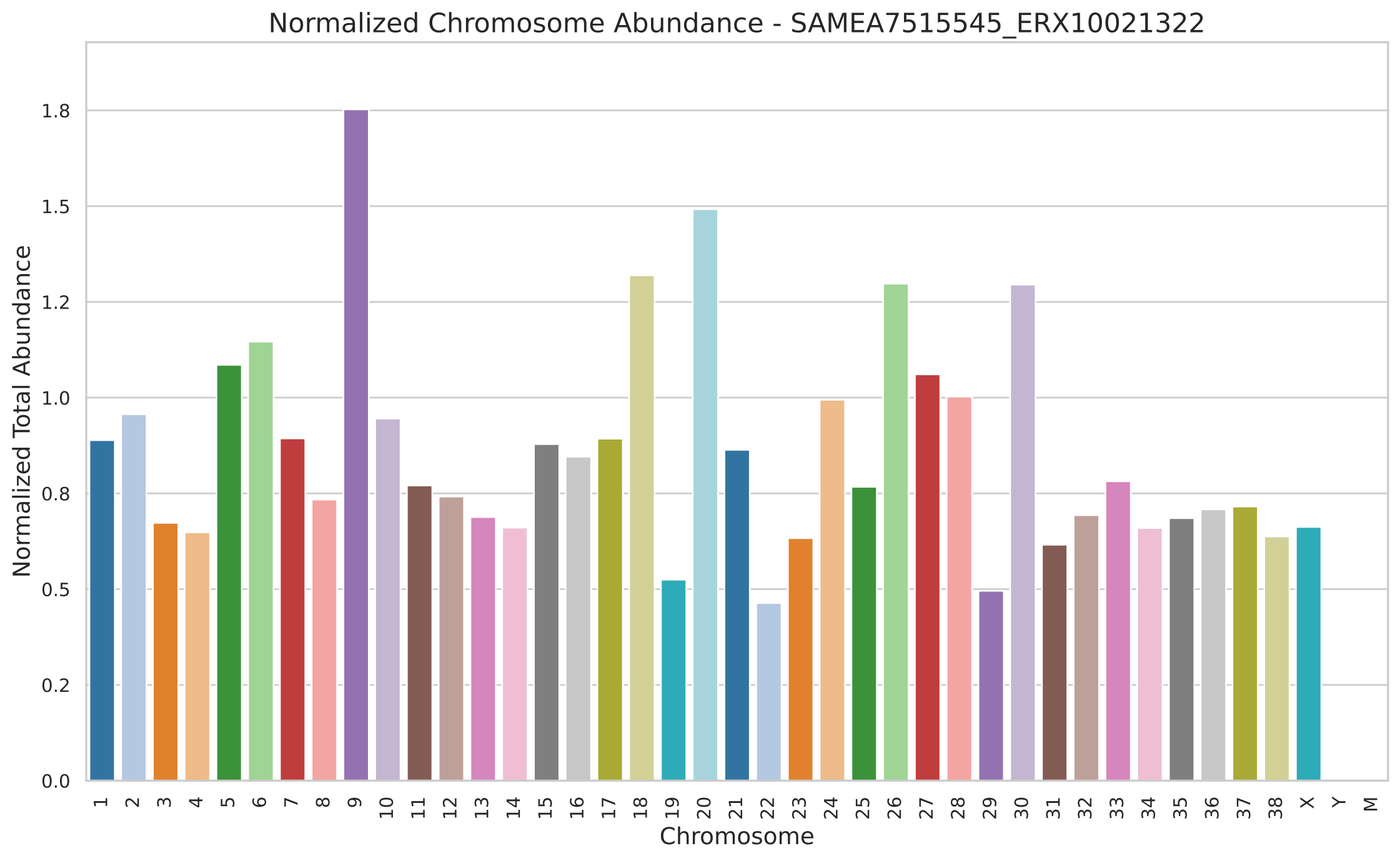

Normalized Chromosome Abundance - SAMEA7515071_ERX10021492
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

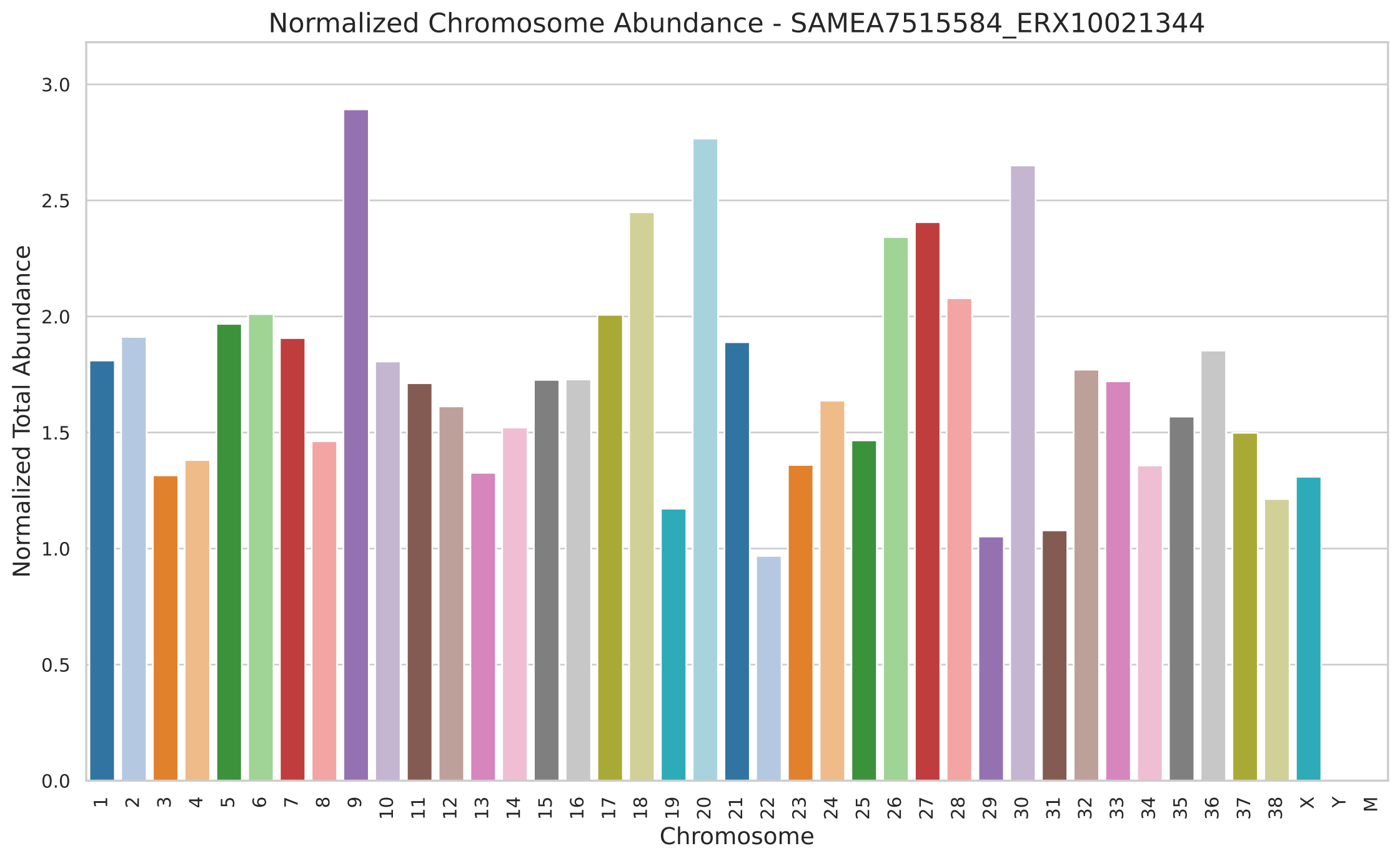

Normalized Chromosome Abundance - SAMEA7515171_ERX10021499
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

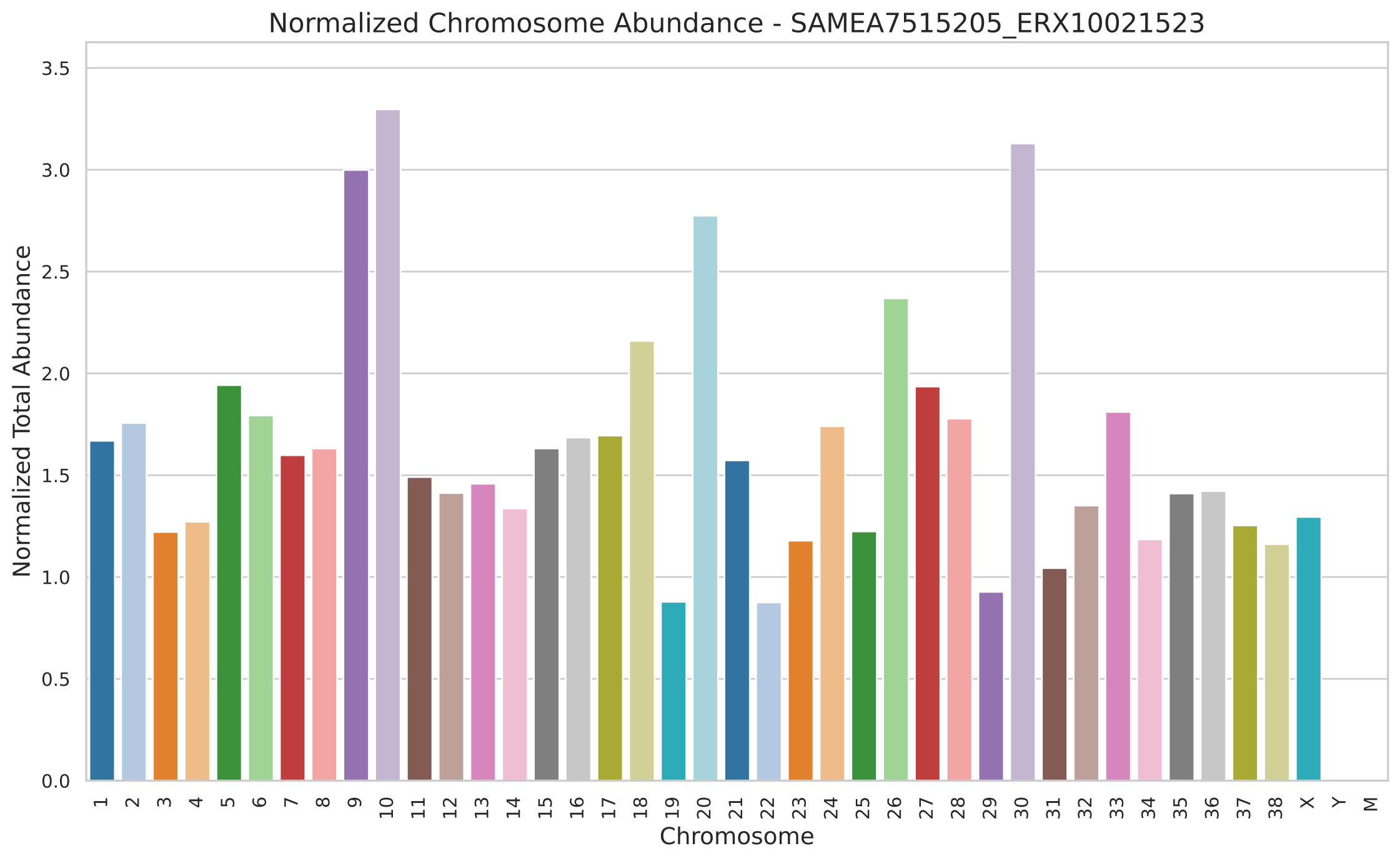

Normalized Chromosome Abundance - SAMEA7515164_ERX10021494
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

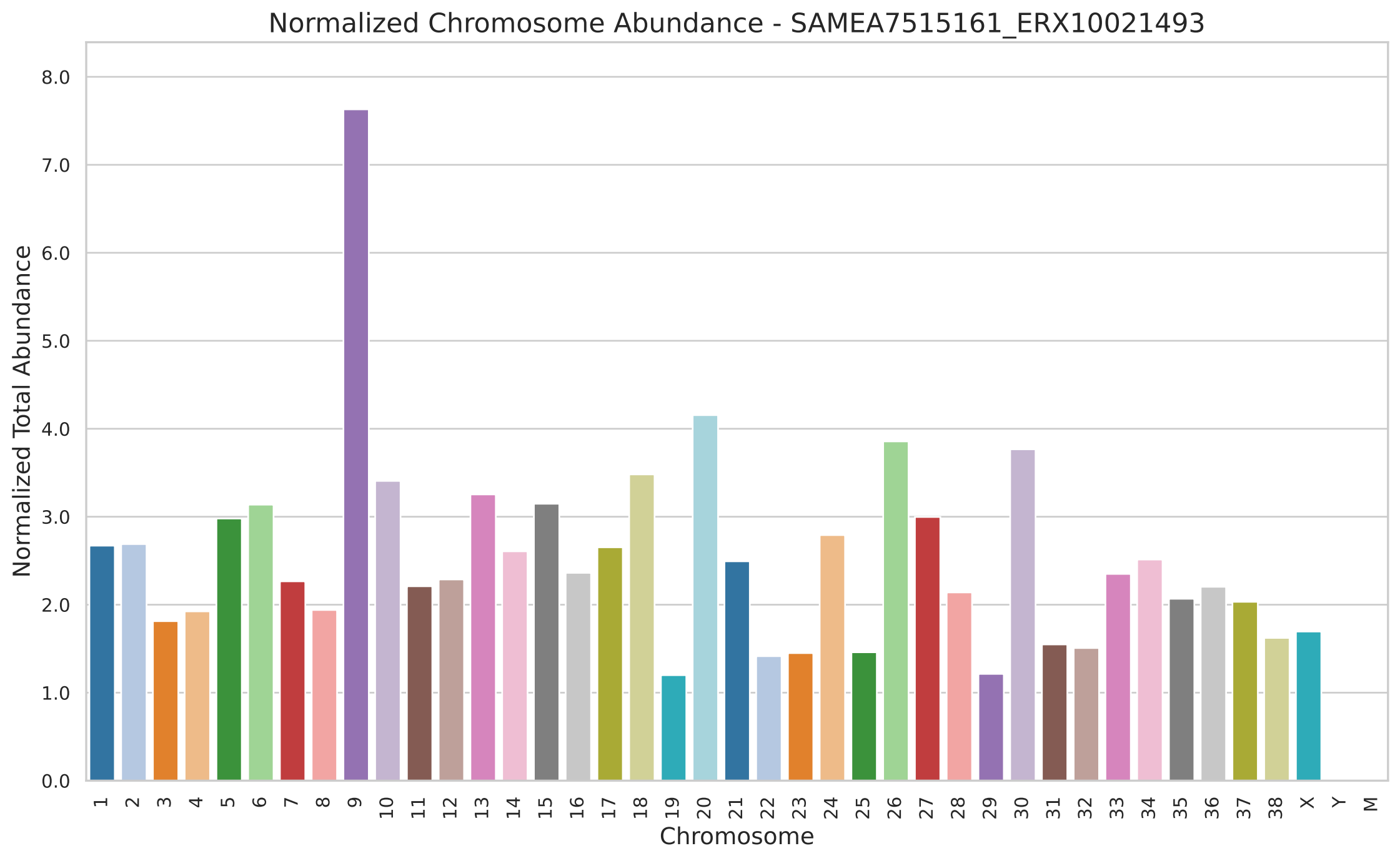

Normalized Chromosome Abundance - SAMEA7515076_ERX10021495
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

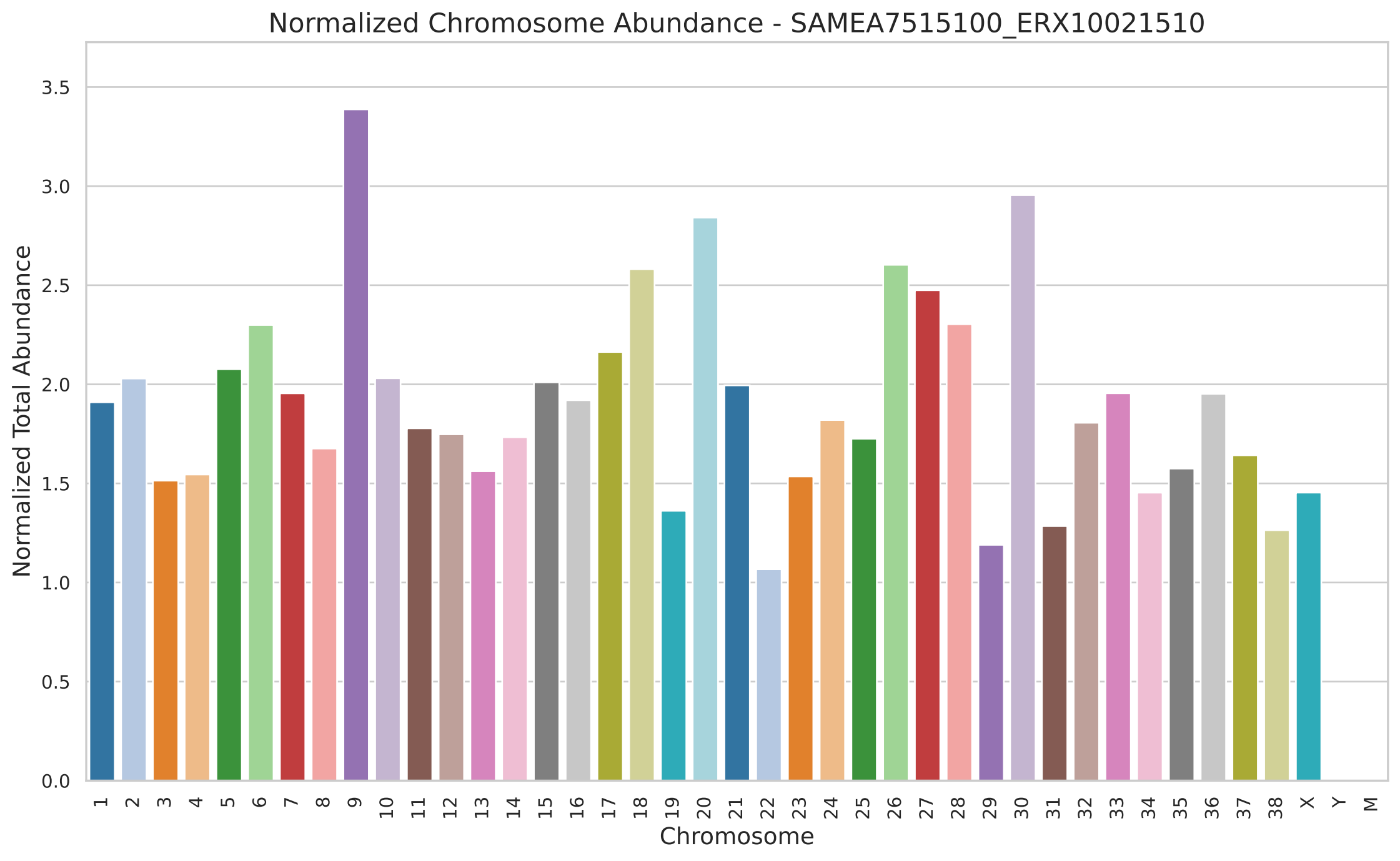

Normalized Chromosome Abundance - SAMEA7515199_ERX10021517
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

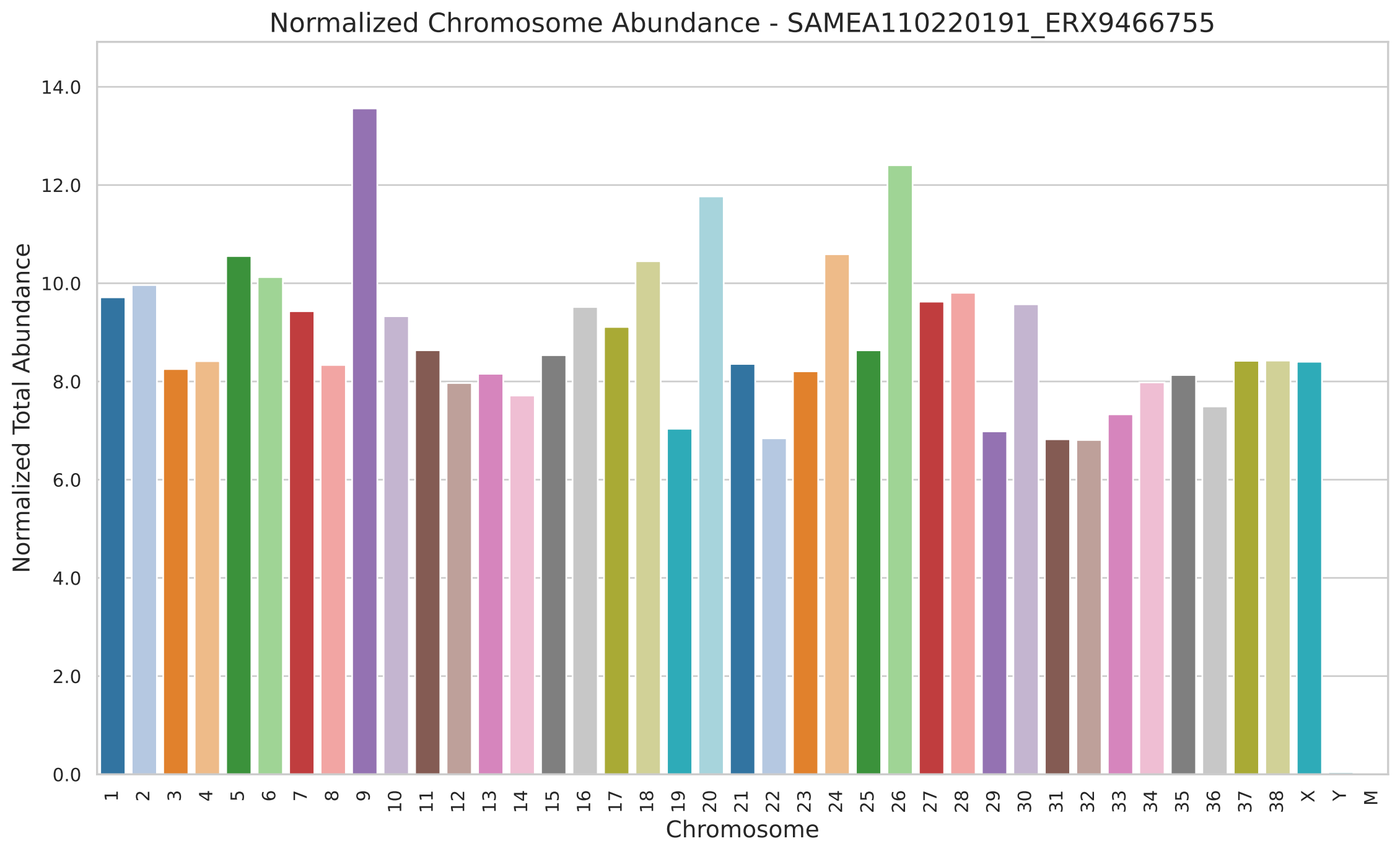

Normalized Chromosome Abundance - SAMEA7515545_ERX10021322
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

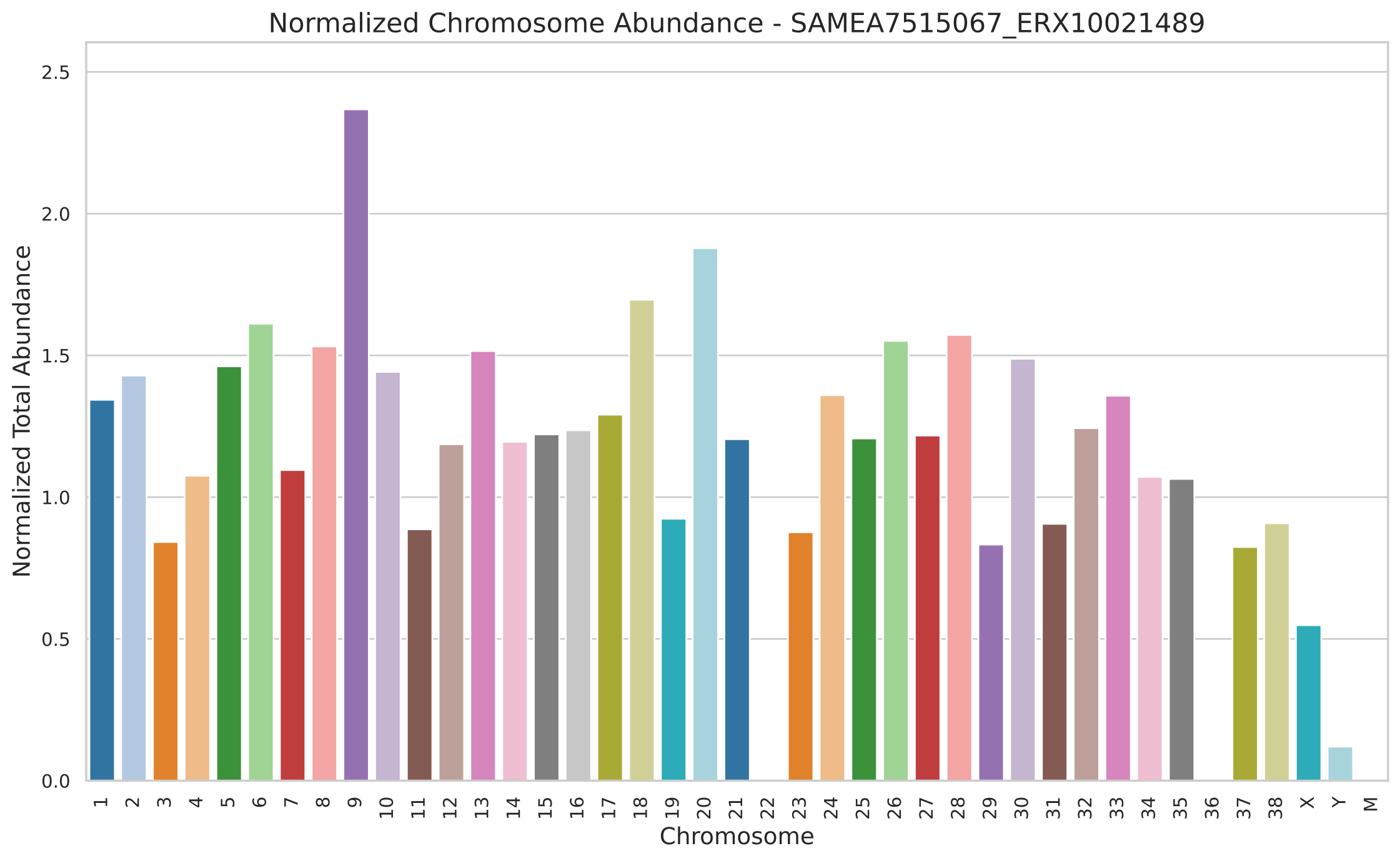

Normalized Chromosome Abundance - SAMEA7515584_ERX10021344
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

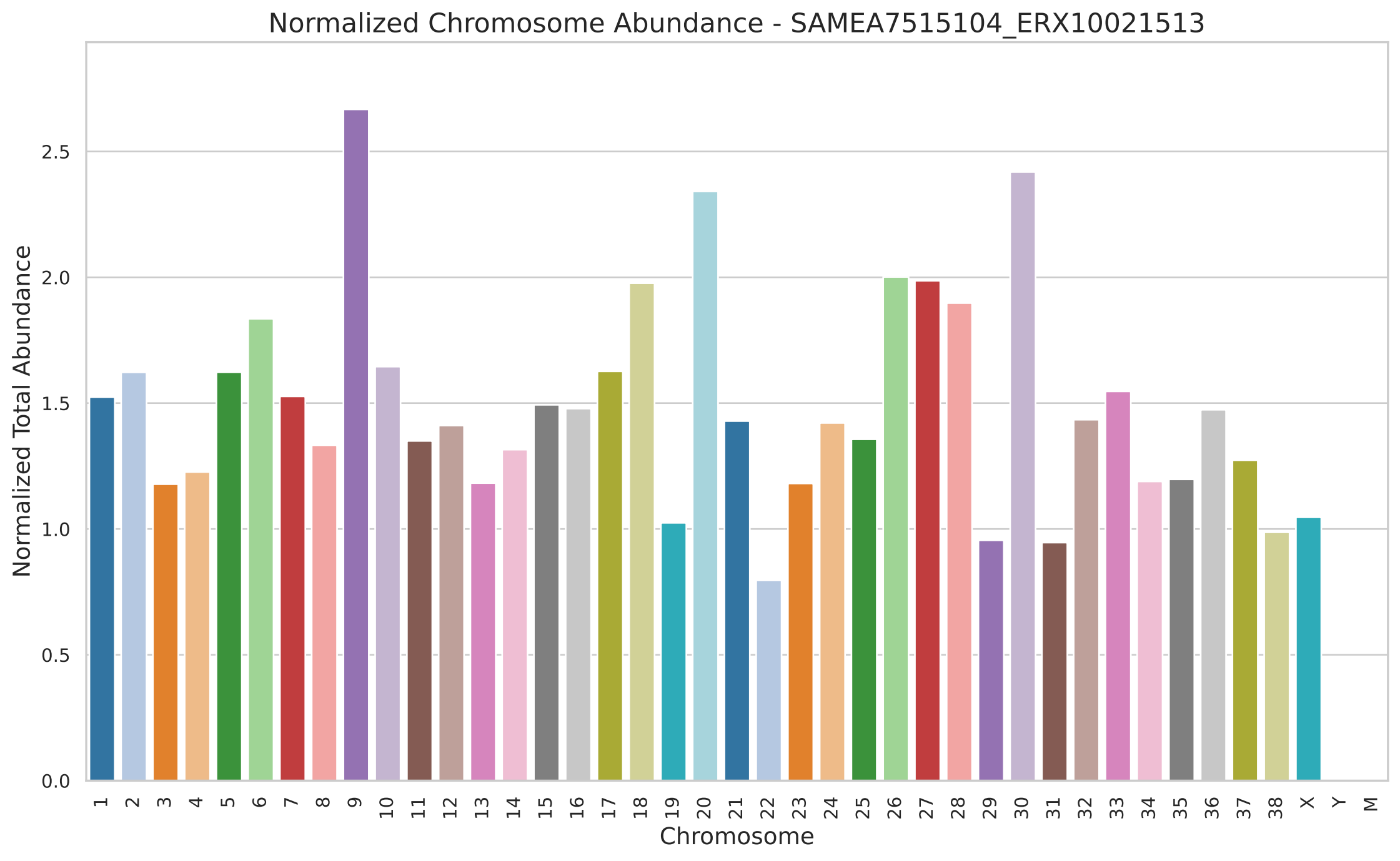

Normalized Chromosome Abundance - SAMEA7515205_ERX10021523
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

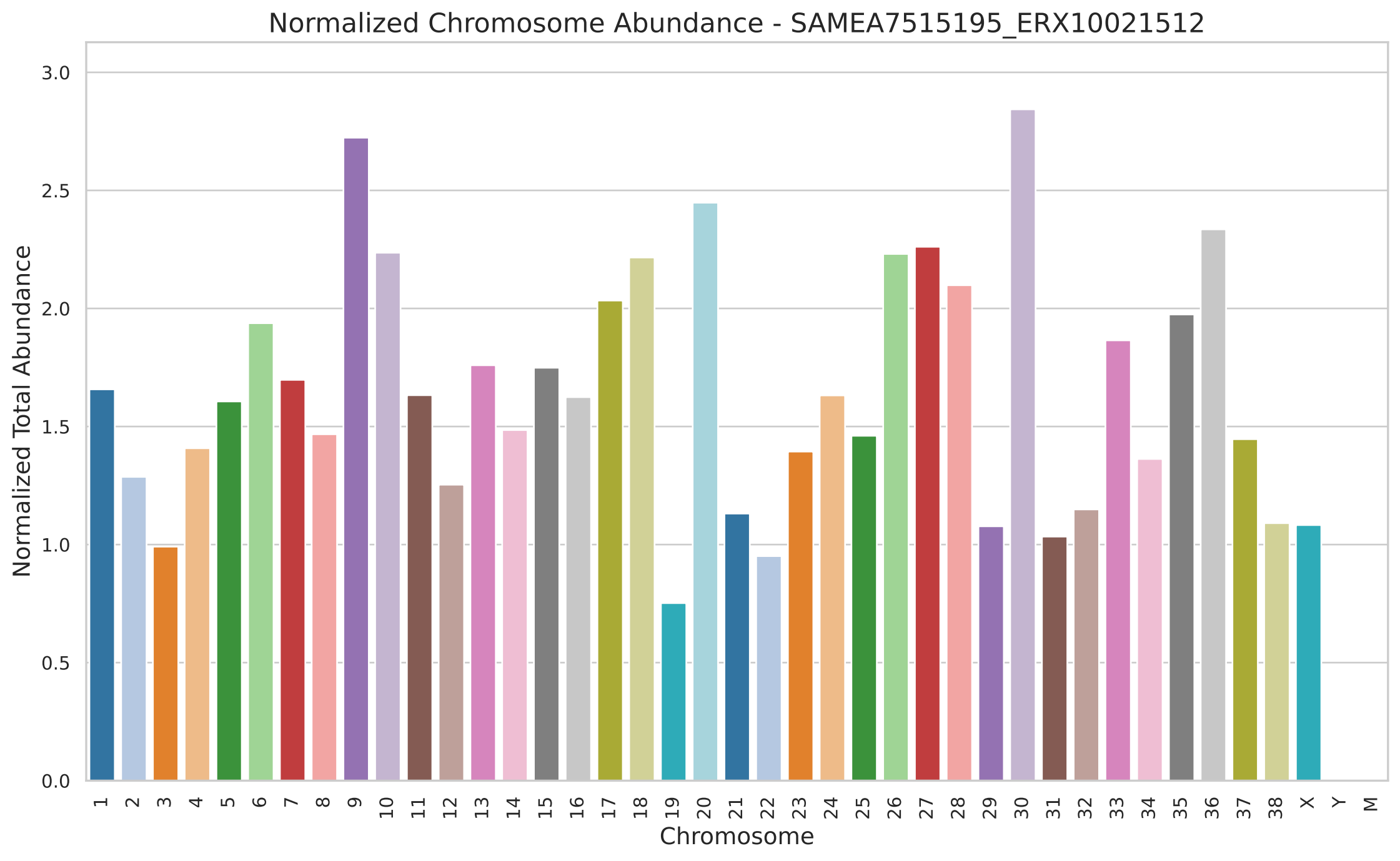

Normalized Chromosome Abundance - SAMEA7515161_ERX10021493
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

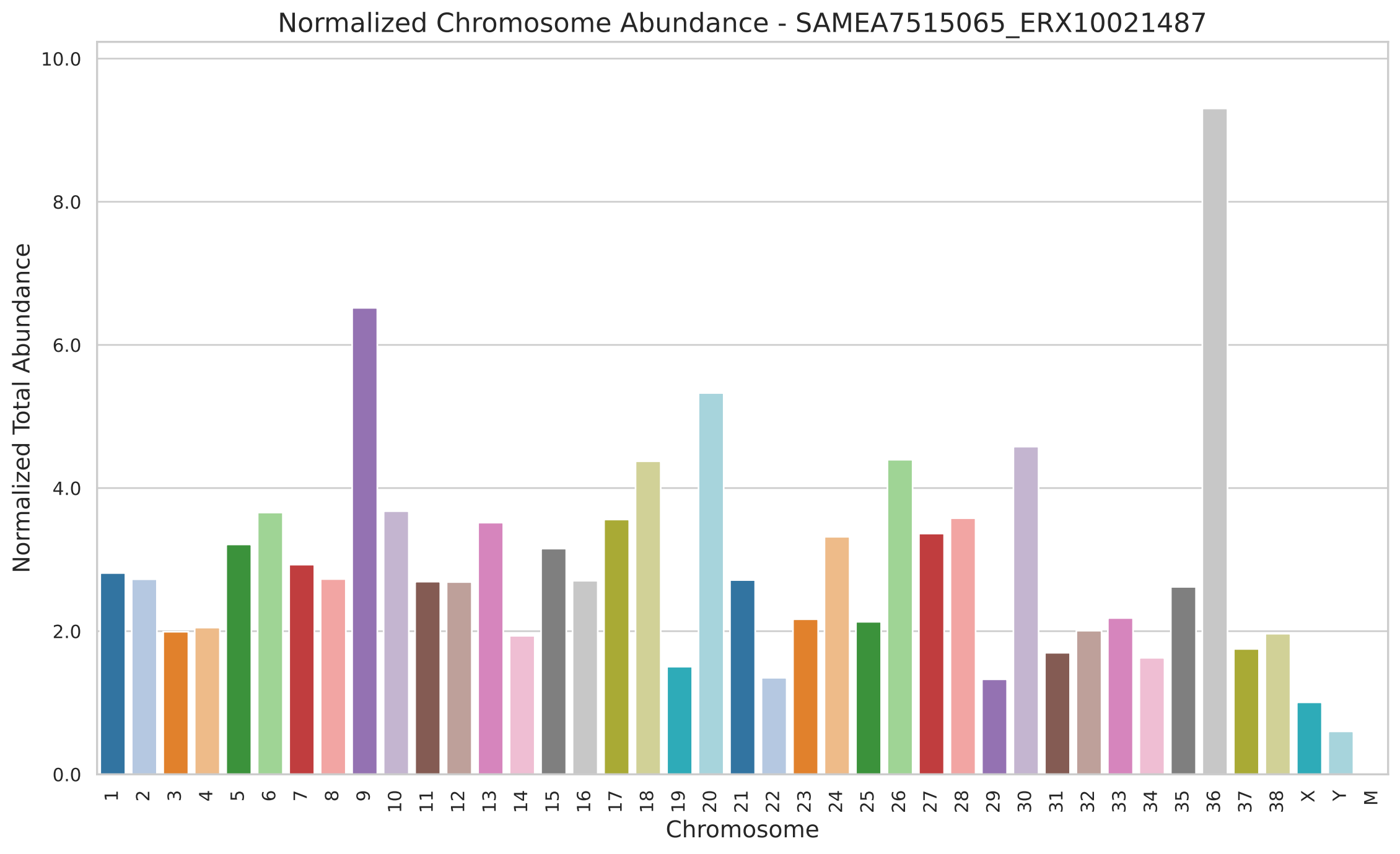

Normalized Chromosome Abundance - SAMEA7515100_ERX10021510
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

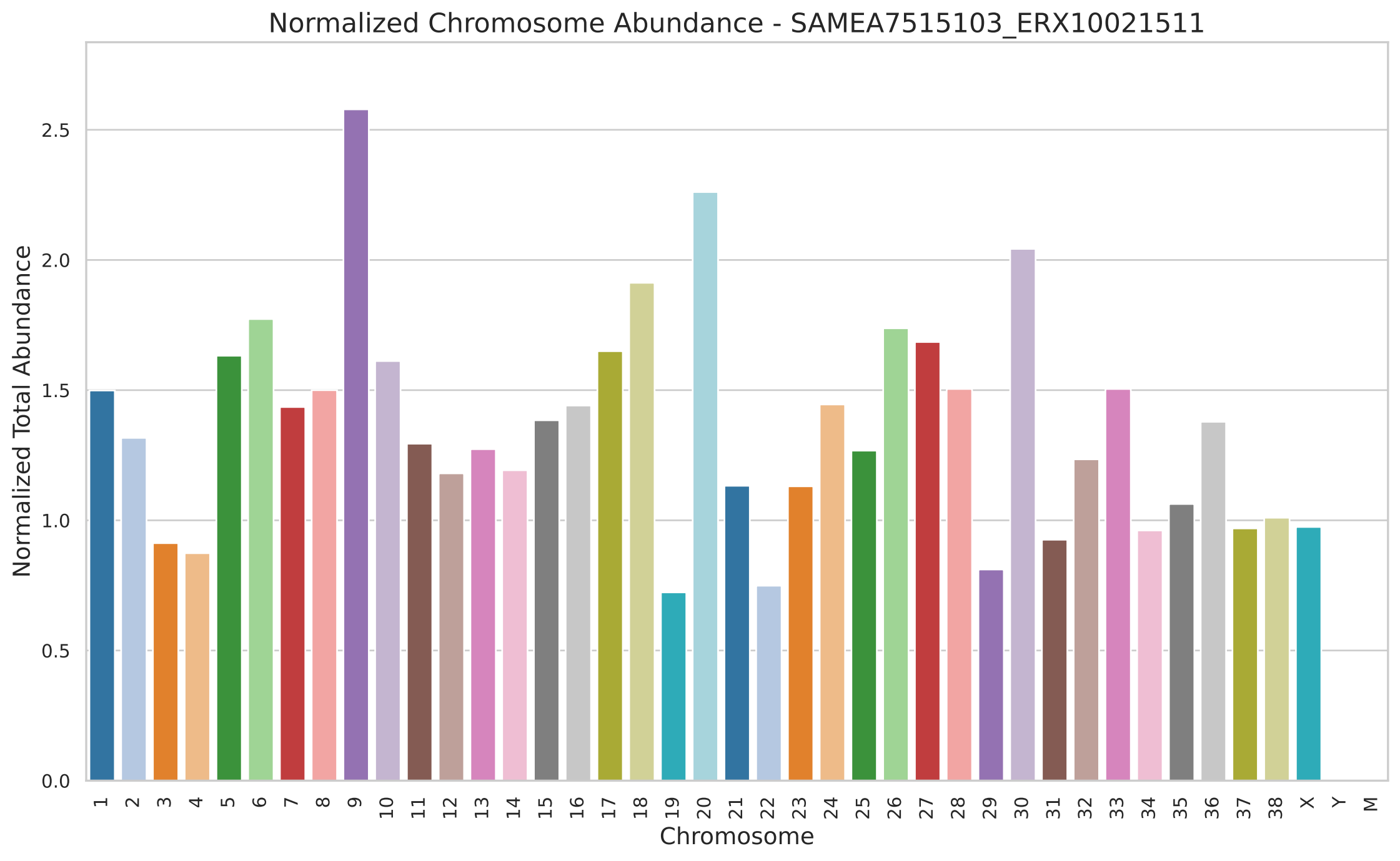

Normalized Chromosome Abundance - SAMEA110220191_ERX9466755
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
12.0
14.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

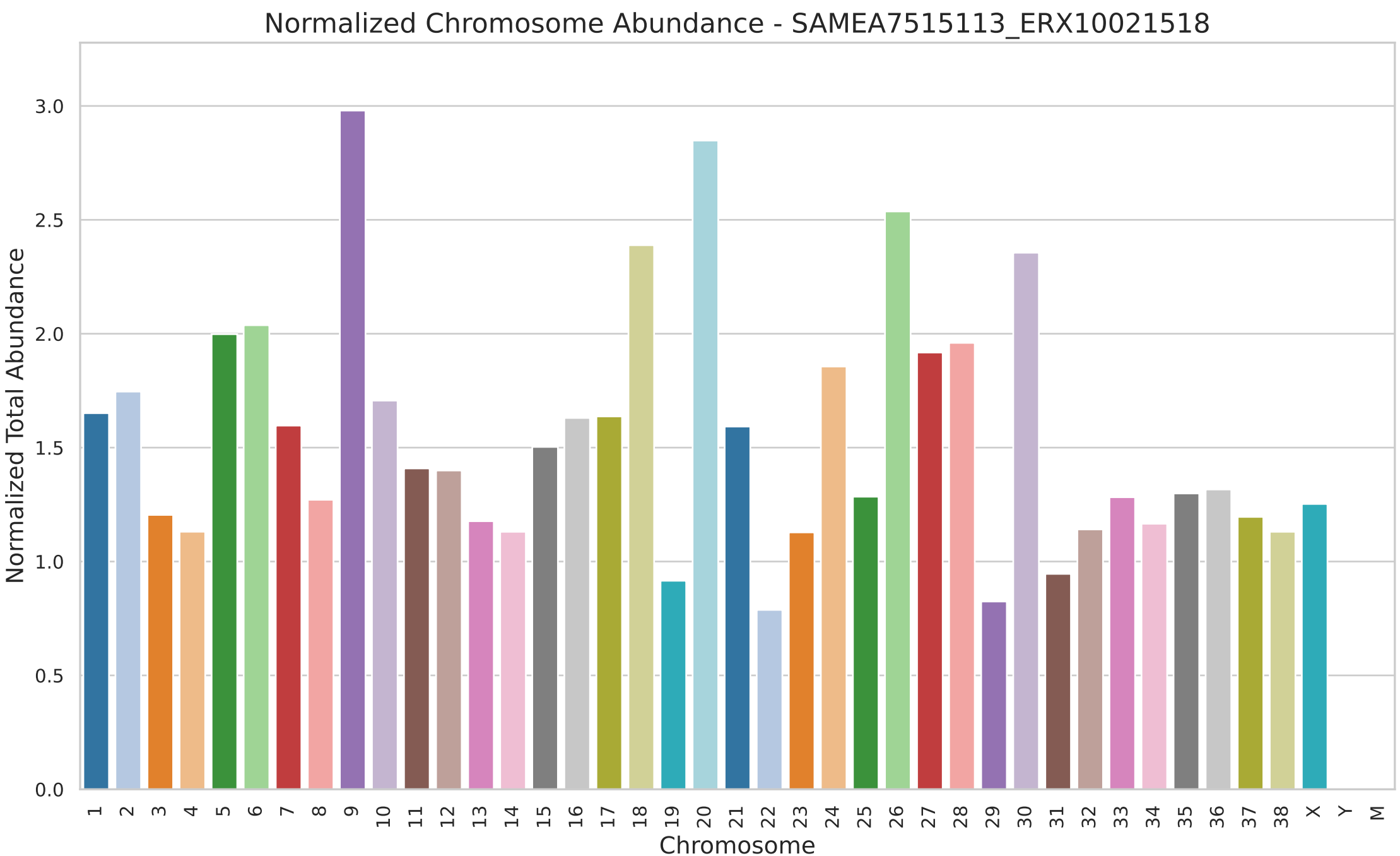

Normalized Chromosome Abundance - SAMEA7515067_ERX10021489
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

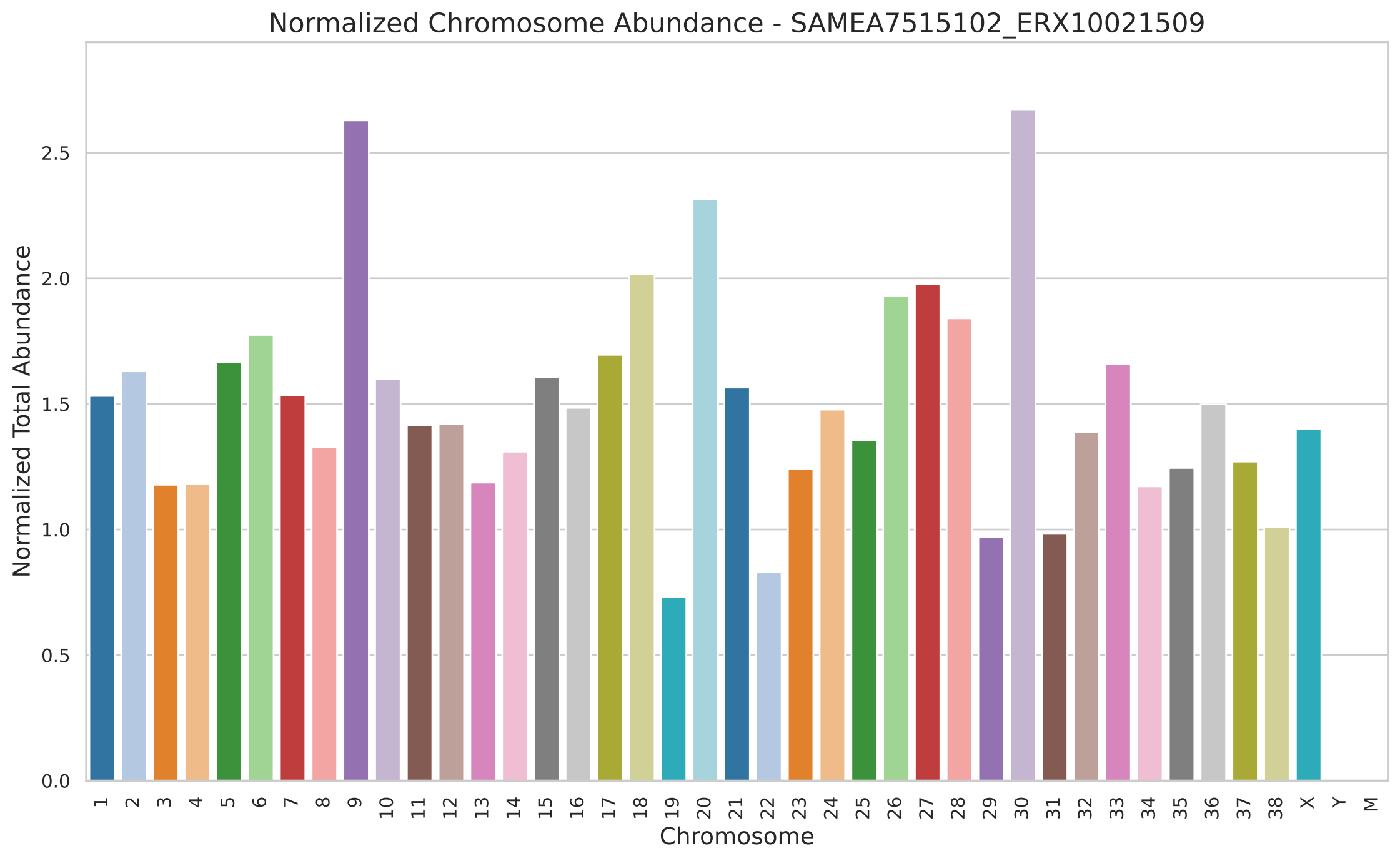

Normalized Chromosome Abundance - SAMEA7515104_ERX10021513
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

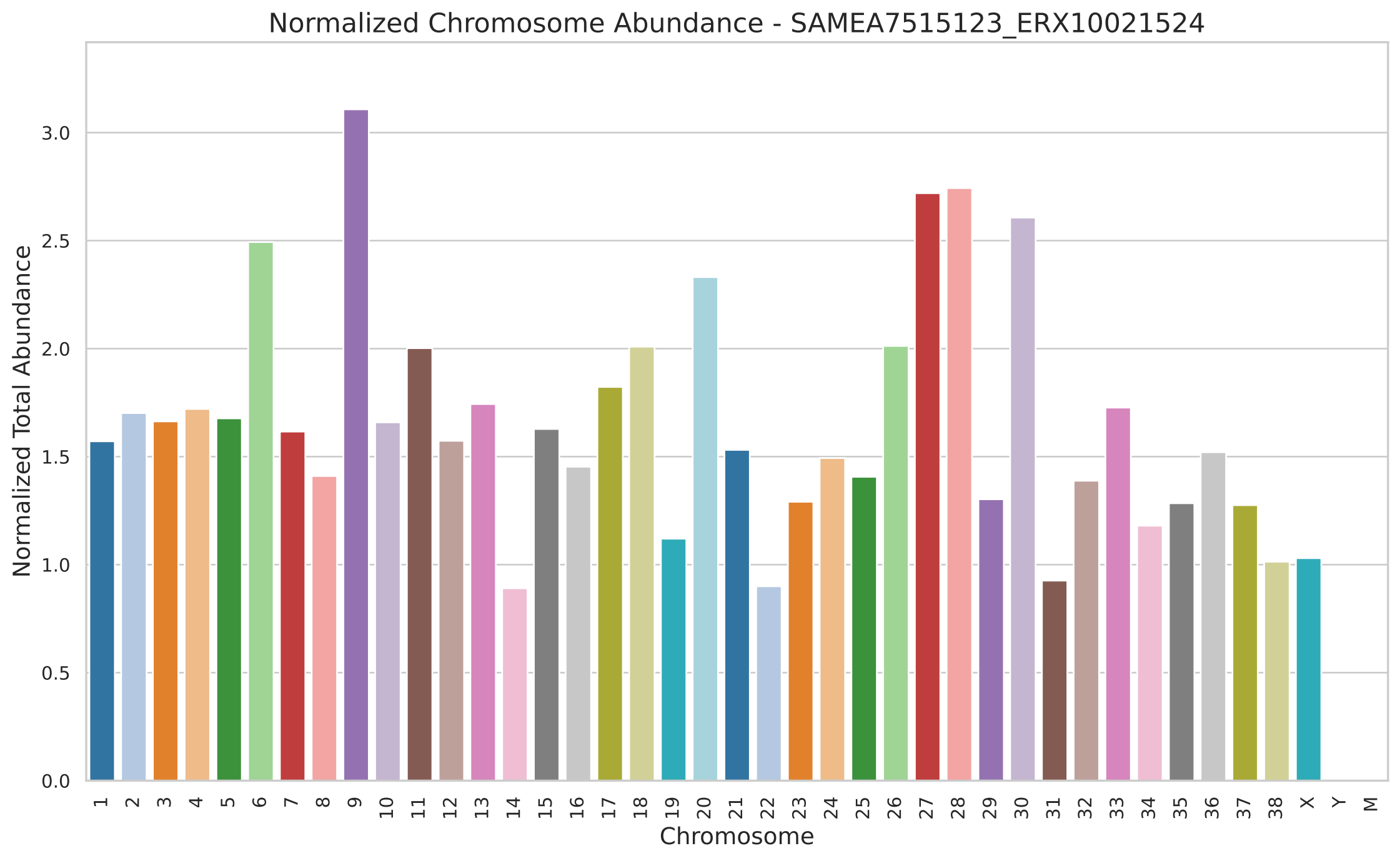

Normalized Chromosome Abundance - SAMEA7515195_ERX10021512
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

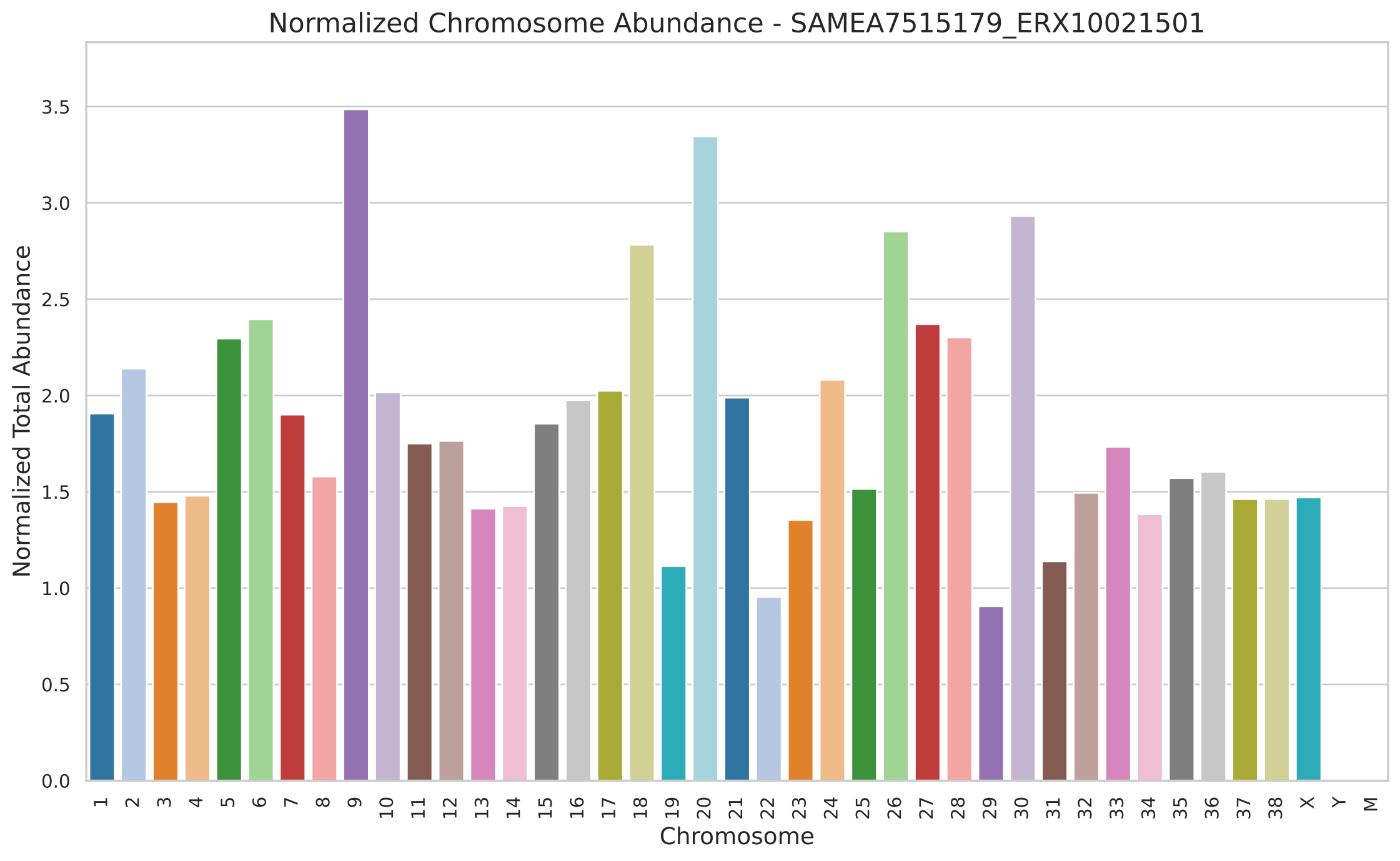

Normalized Chromosome Abundance - SAMEA7515065_ERX10021487
Normalized Total Abundance
10.0
8.0
6.0
4.0
2.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

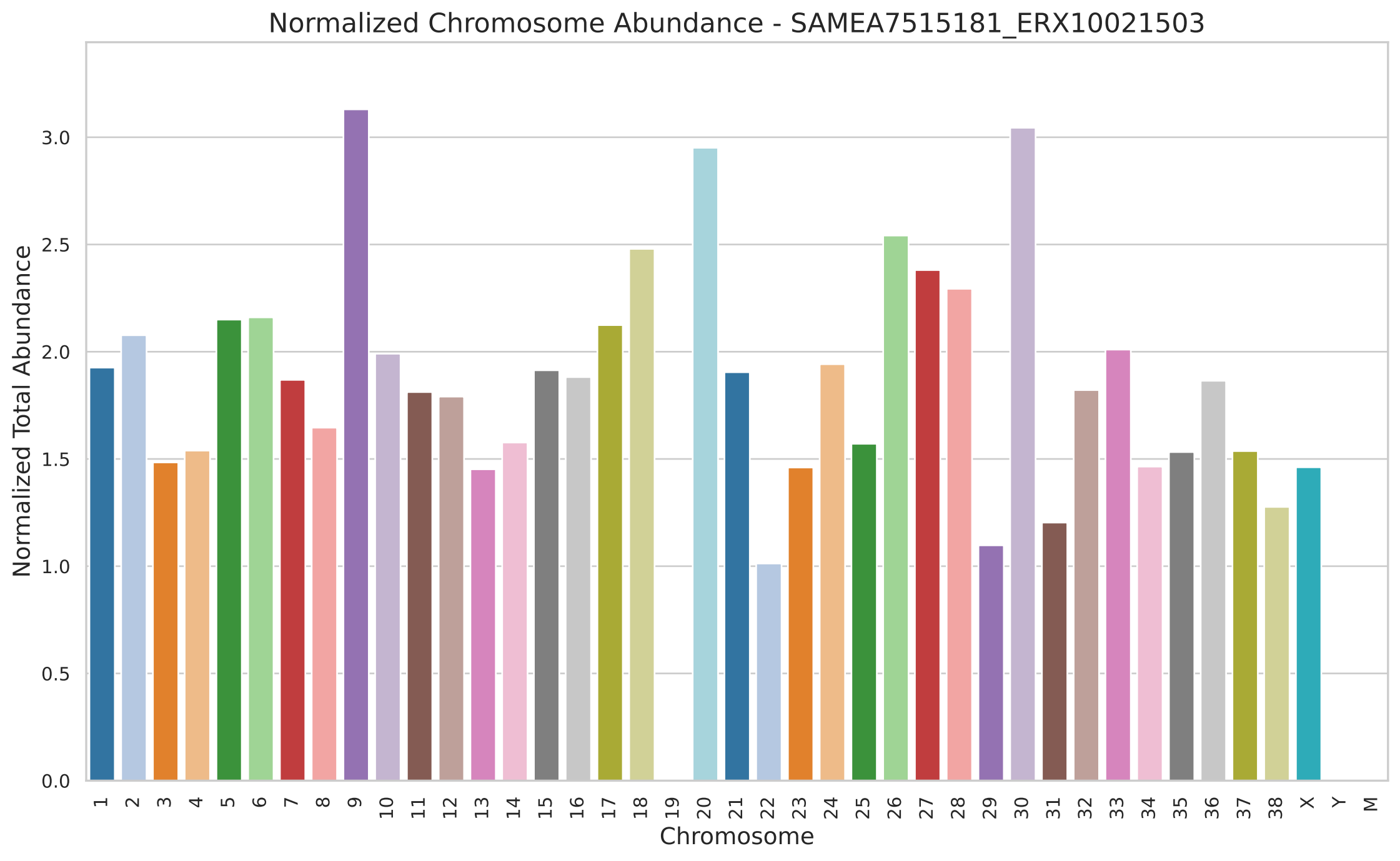

Normalized Chromosome Abundance - SAMEA7515103_ERX10021511
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

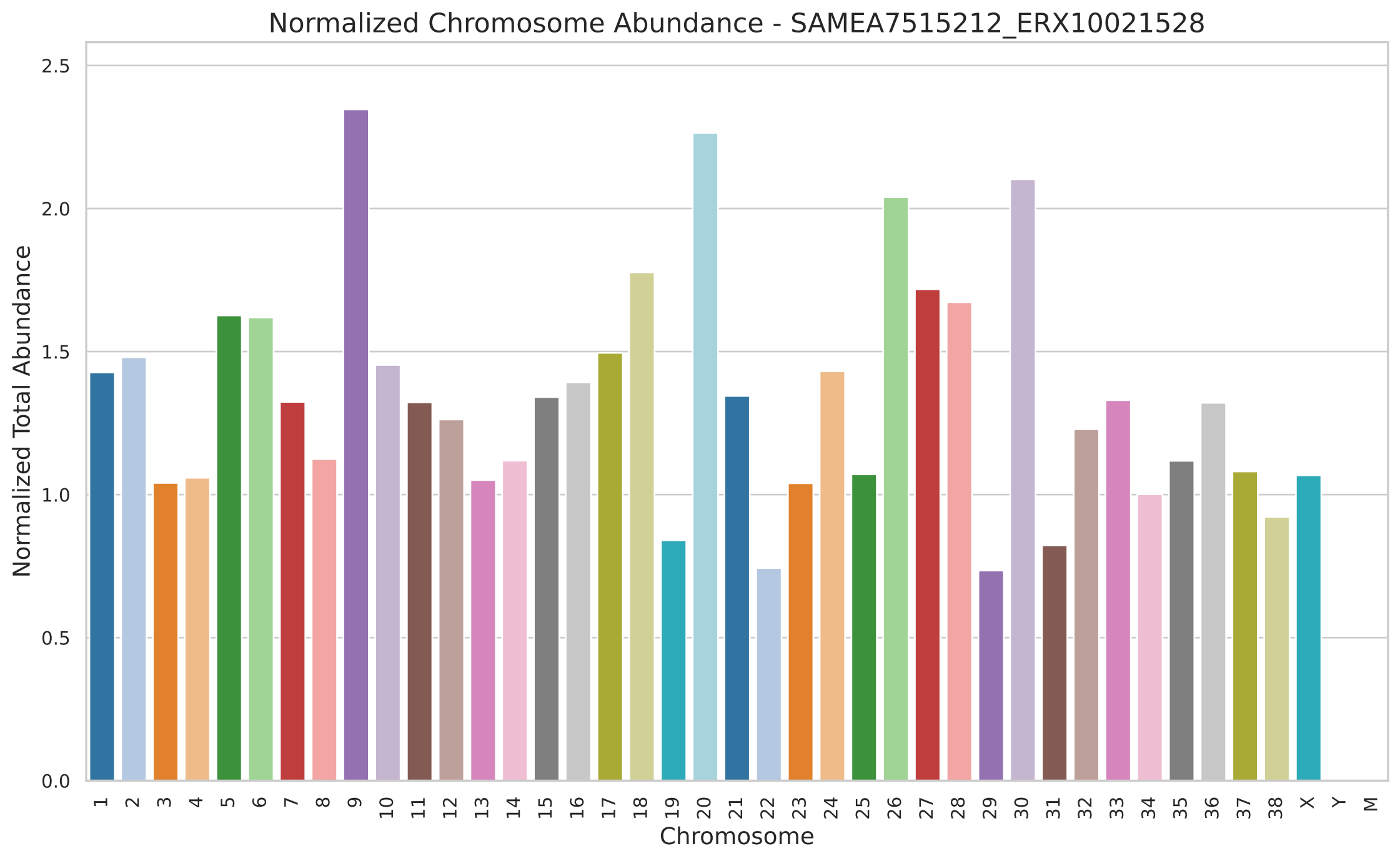

Normalized Chromosome Abundance - SAMEA7515113_ERX10021518
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

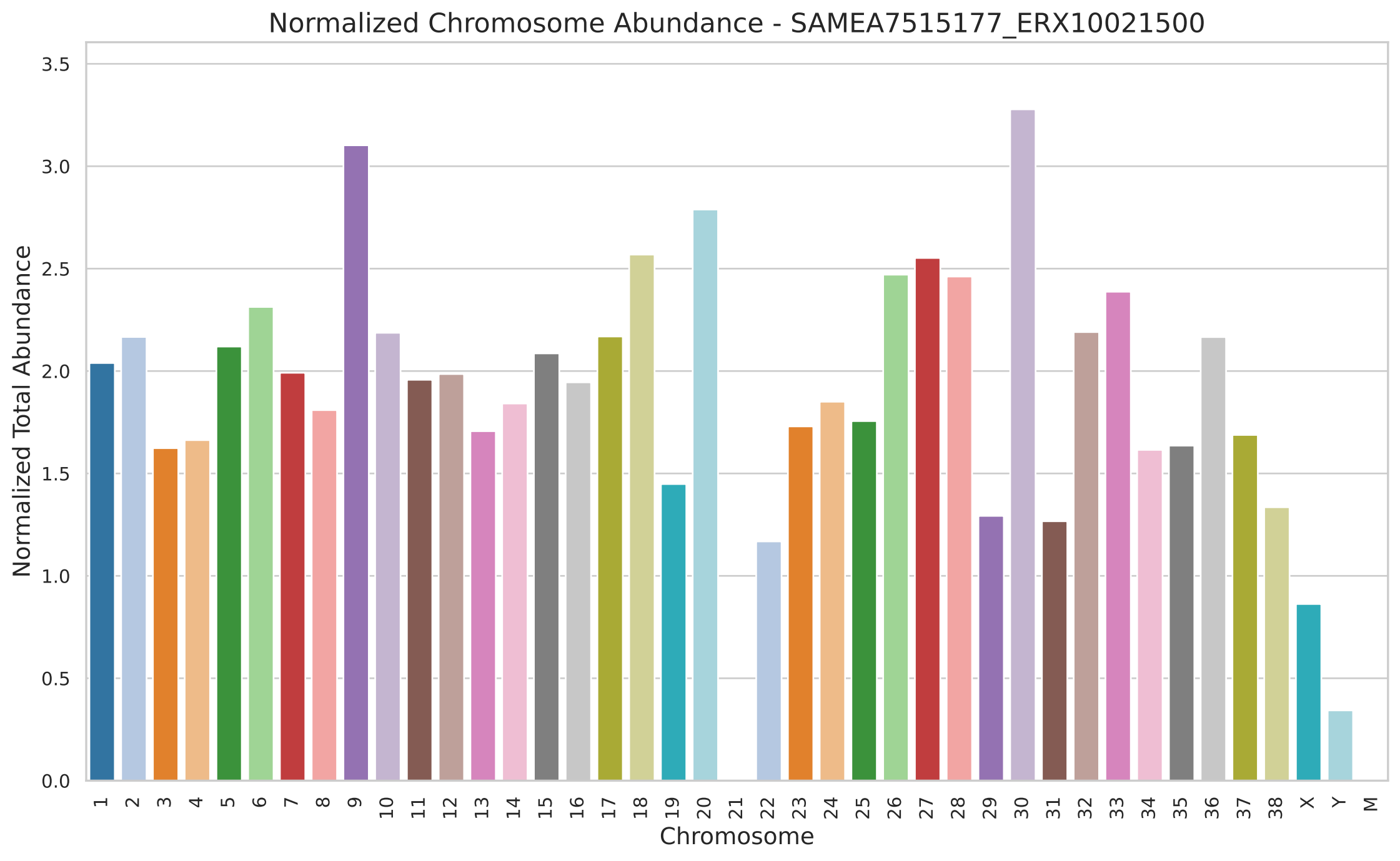

Normalized Chromosome Abundance - SAMEA7515102_ERX10021509
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

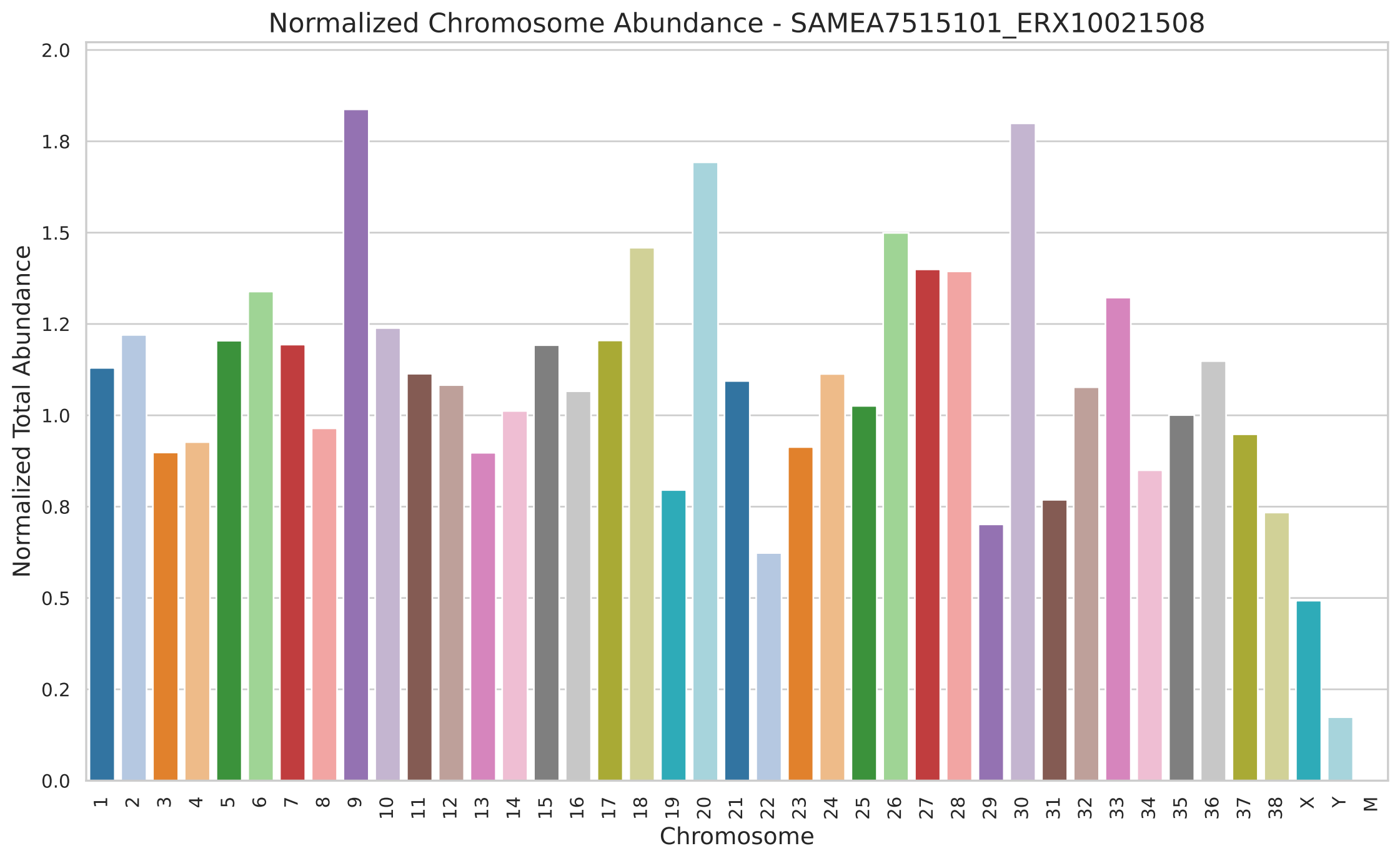

Normalized Chromosome Abundance - SAMEA7515123_ERX10021524
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

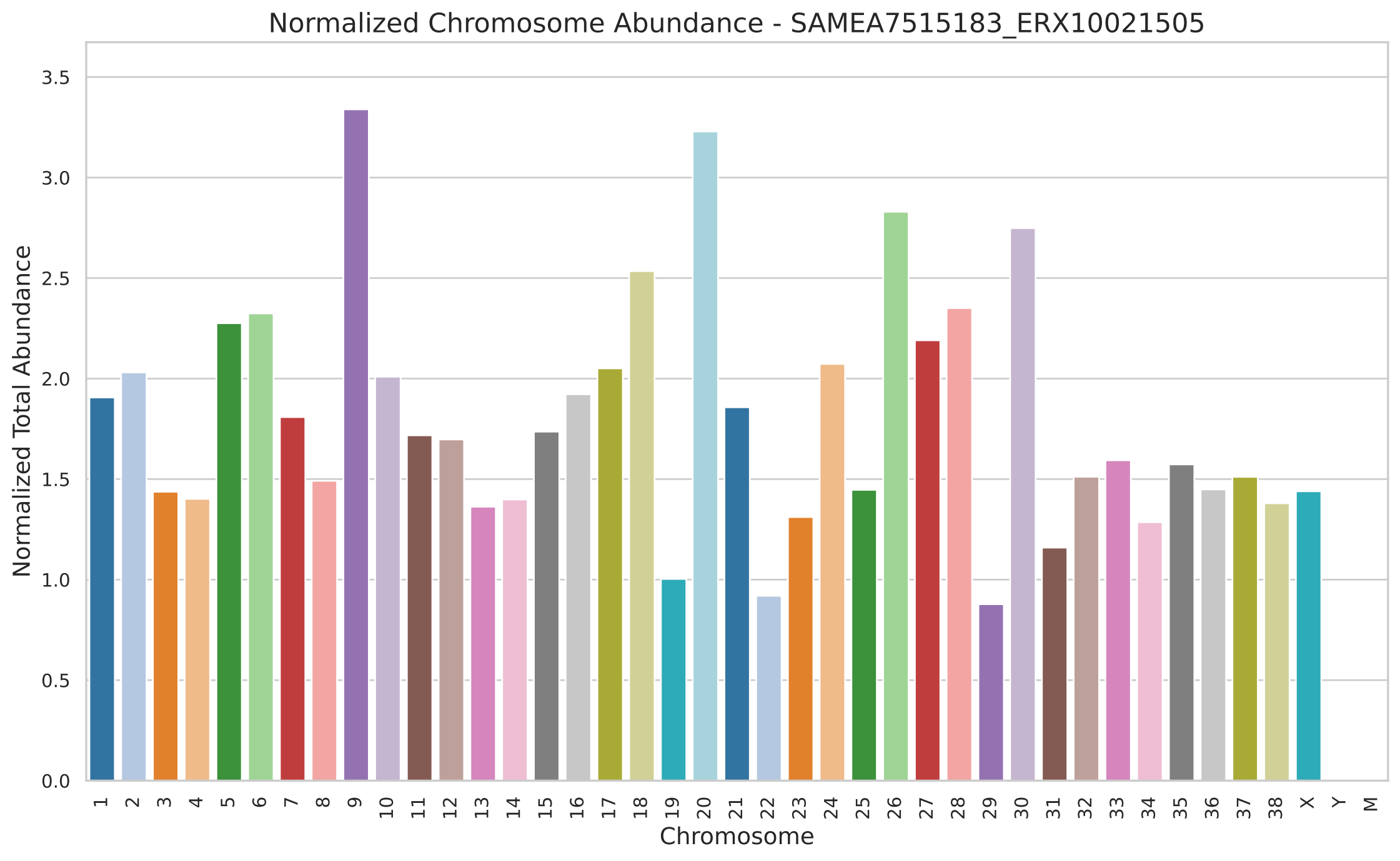

Normalized Chromosome Abundance - SAMEA7515179_ERX10021501
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

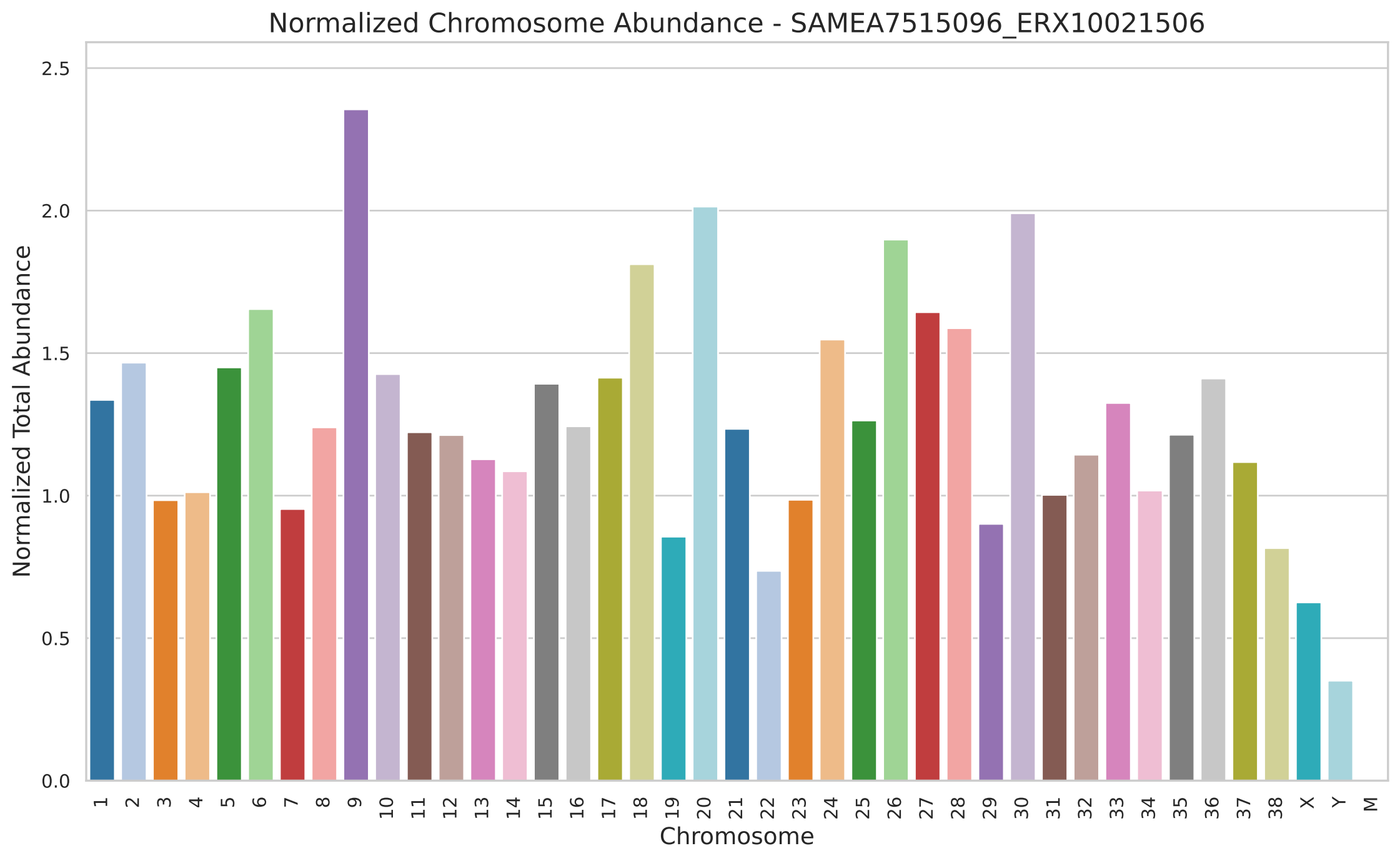

Normalized Chromosome Abundance - SAMEA7515181_ERX10021503
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

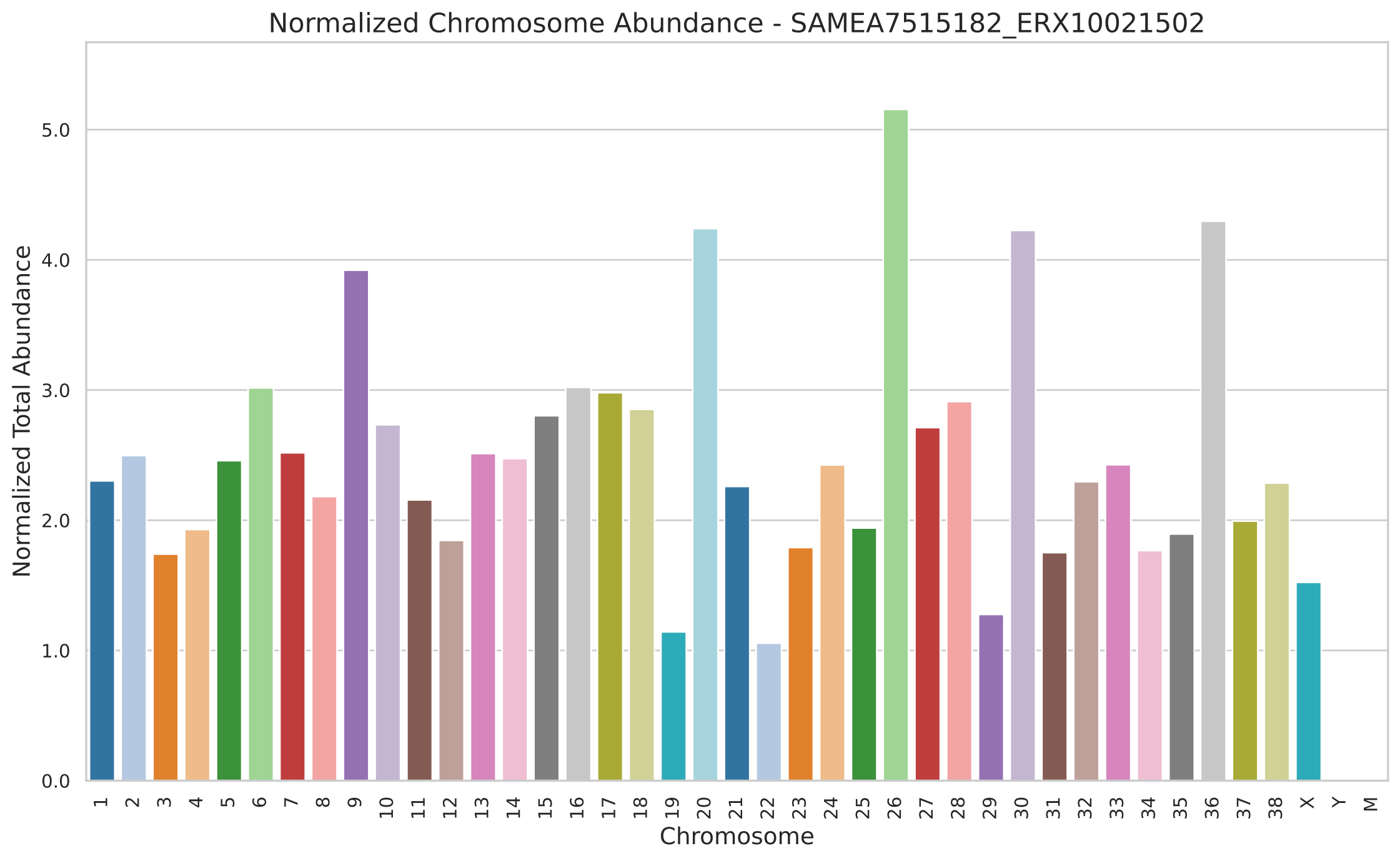

Normalized Chromosome Abundance - SAMEA7515212_ERX10021528
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

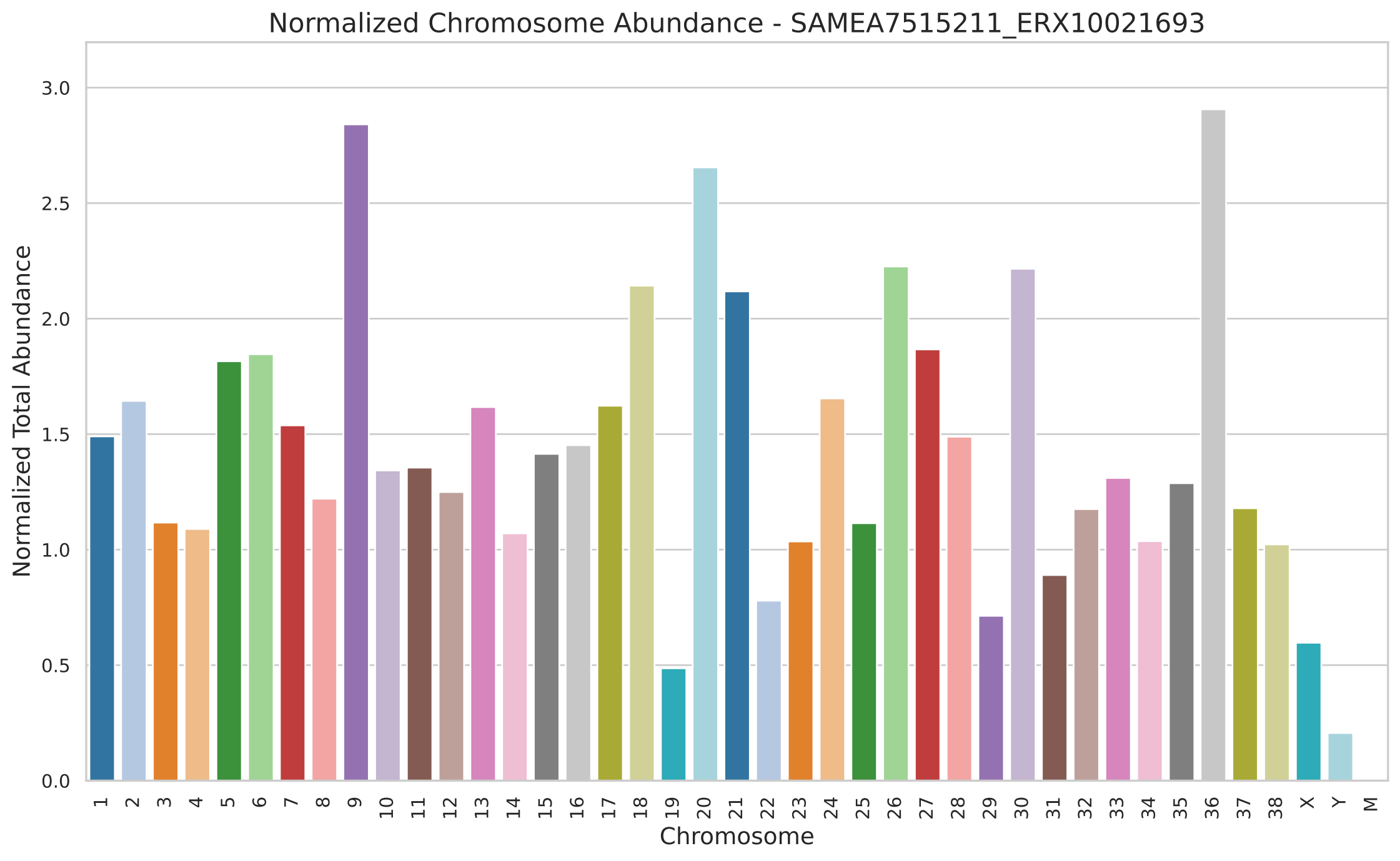

Normalized Chromosome Abundance - SAMEA7515177_ERX10021500
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

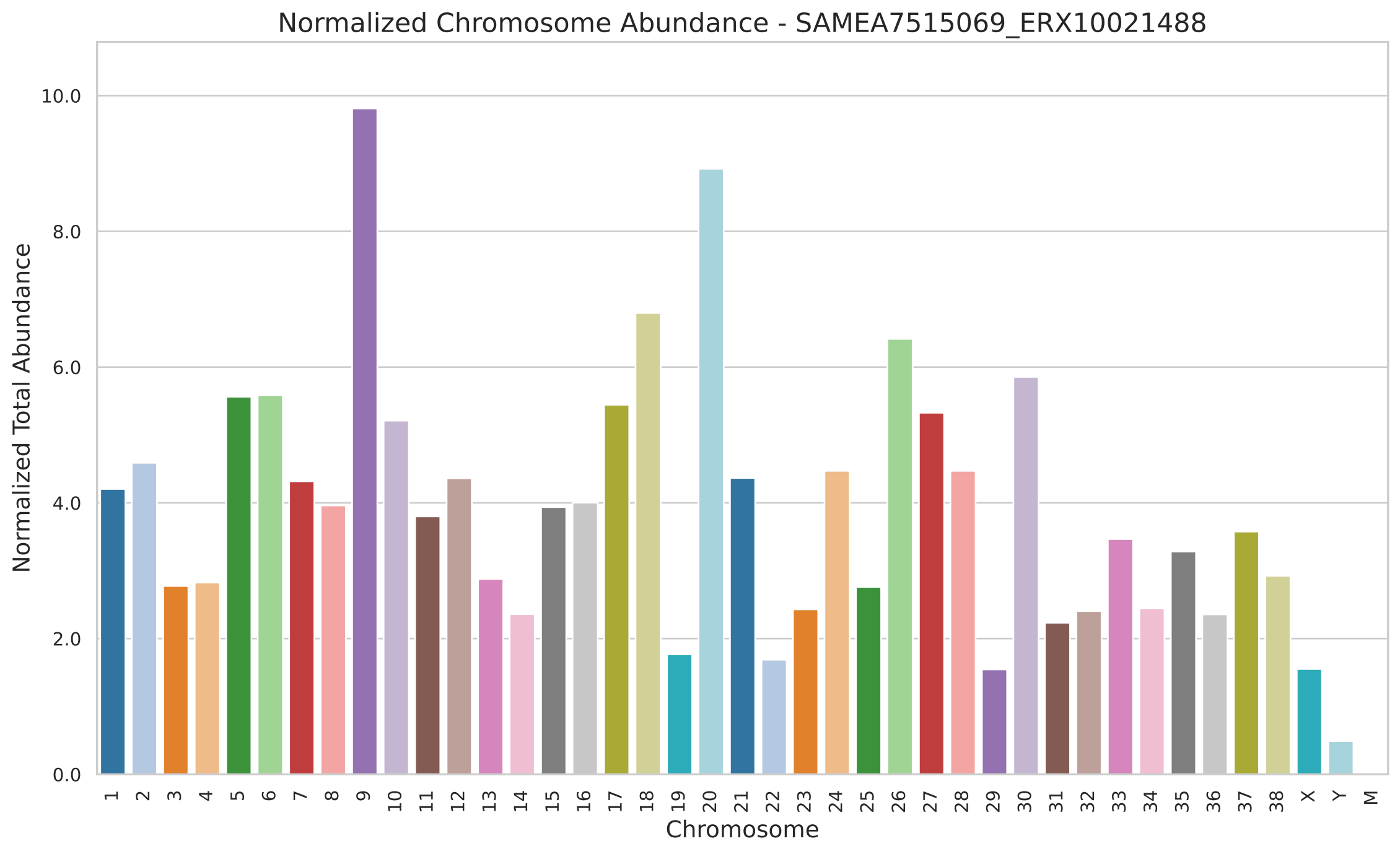

Normalized Chromosome Abundance - SAMEA7515101_ERX10021508
Normalized Total Abundance
2.0
1.8
1.5
1.2
1.0
0.8
0.5
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

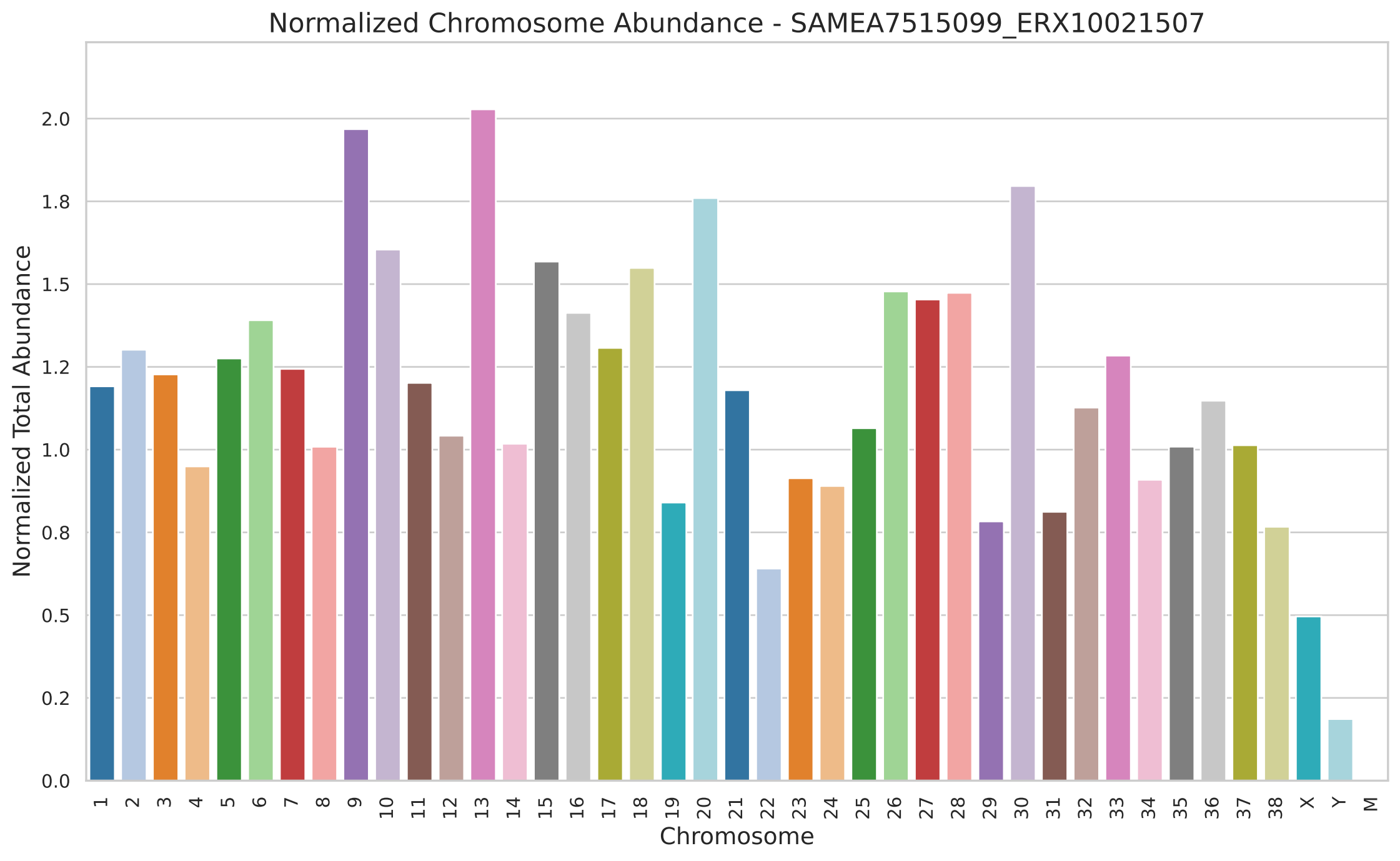

Normalized Chromosome Abundance - SAMEA7515183_ERX10021505
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

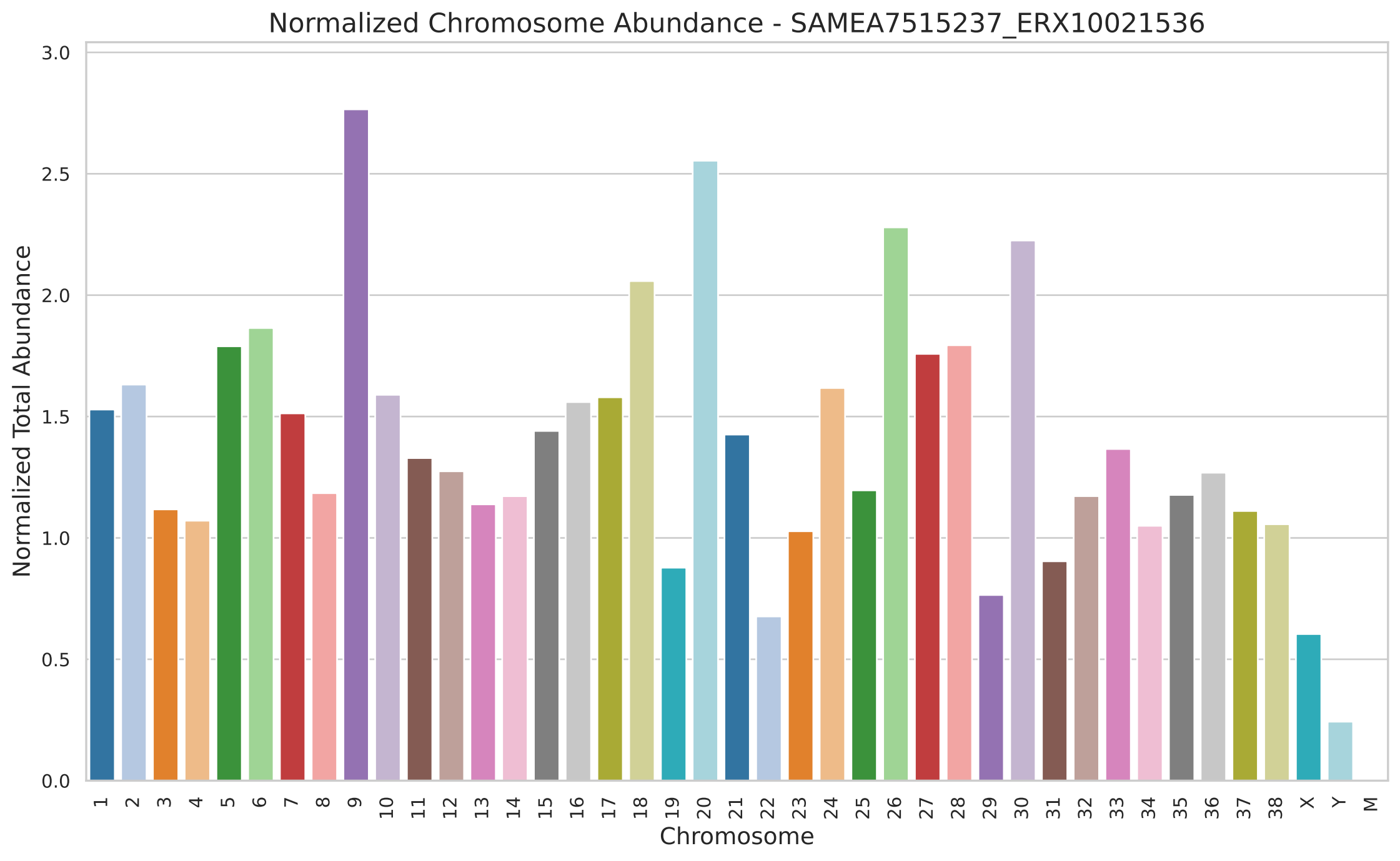

Normalized Chromosome Abundance - SAMEA7515096_ERX10021506
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

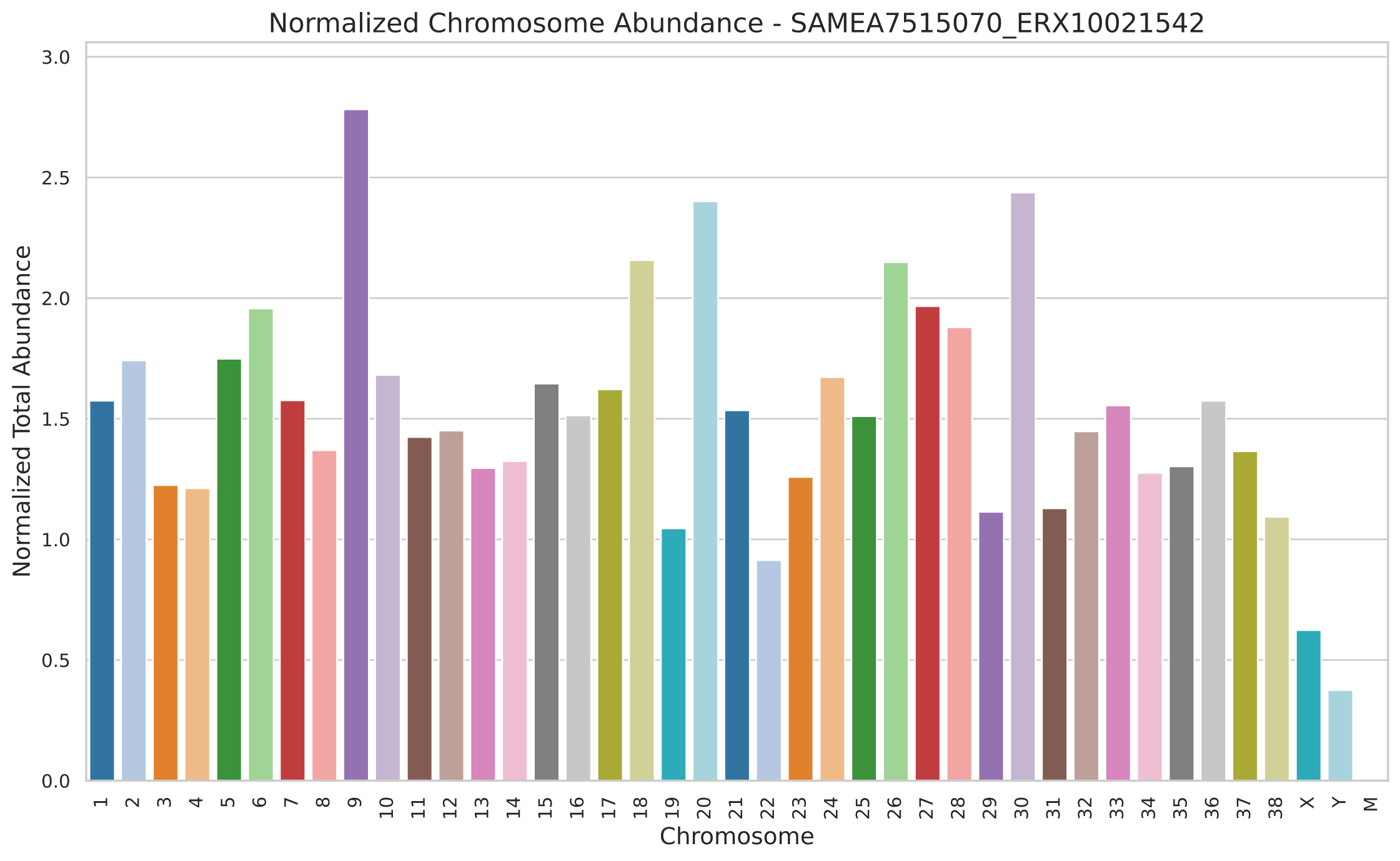

Normalized Chromosome Abundance - SAMEA7515182_ERX10021502
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

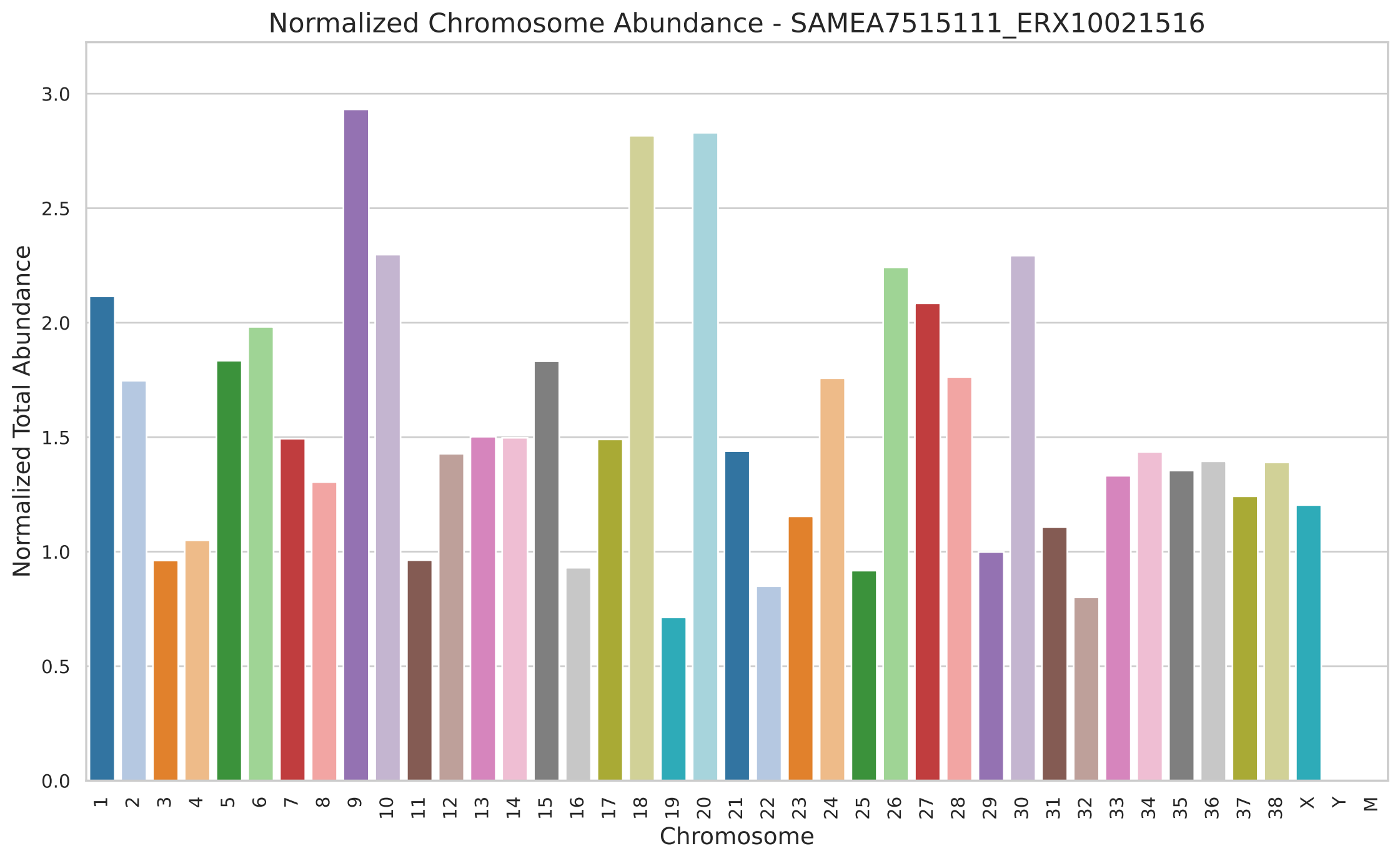

Normalized Chromosome Abundance - SAMEA7515211_ERX10021693
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

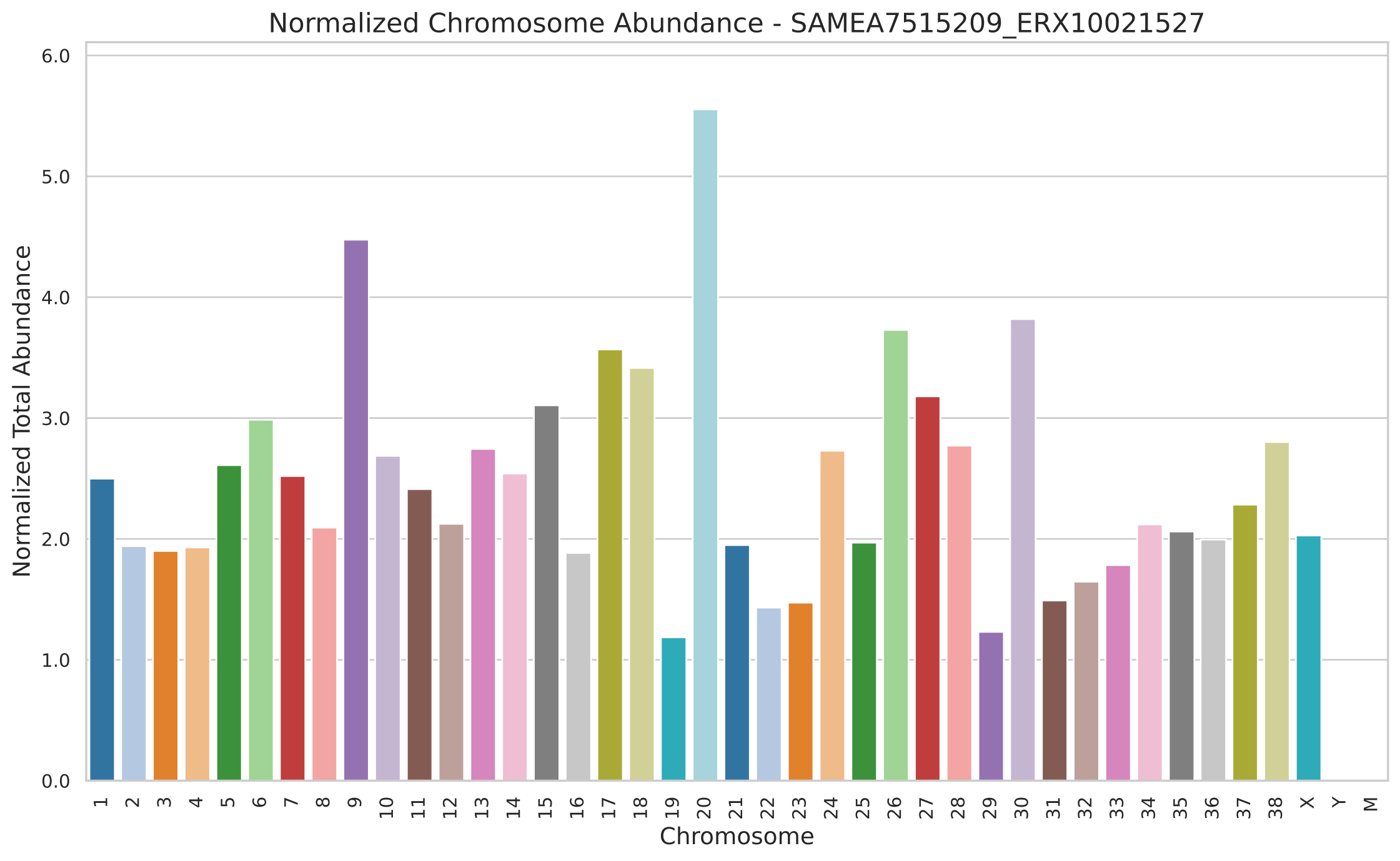

Normalized Chromosome Abundance - SAMEA7515069_ERX10021488
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

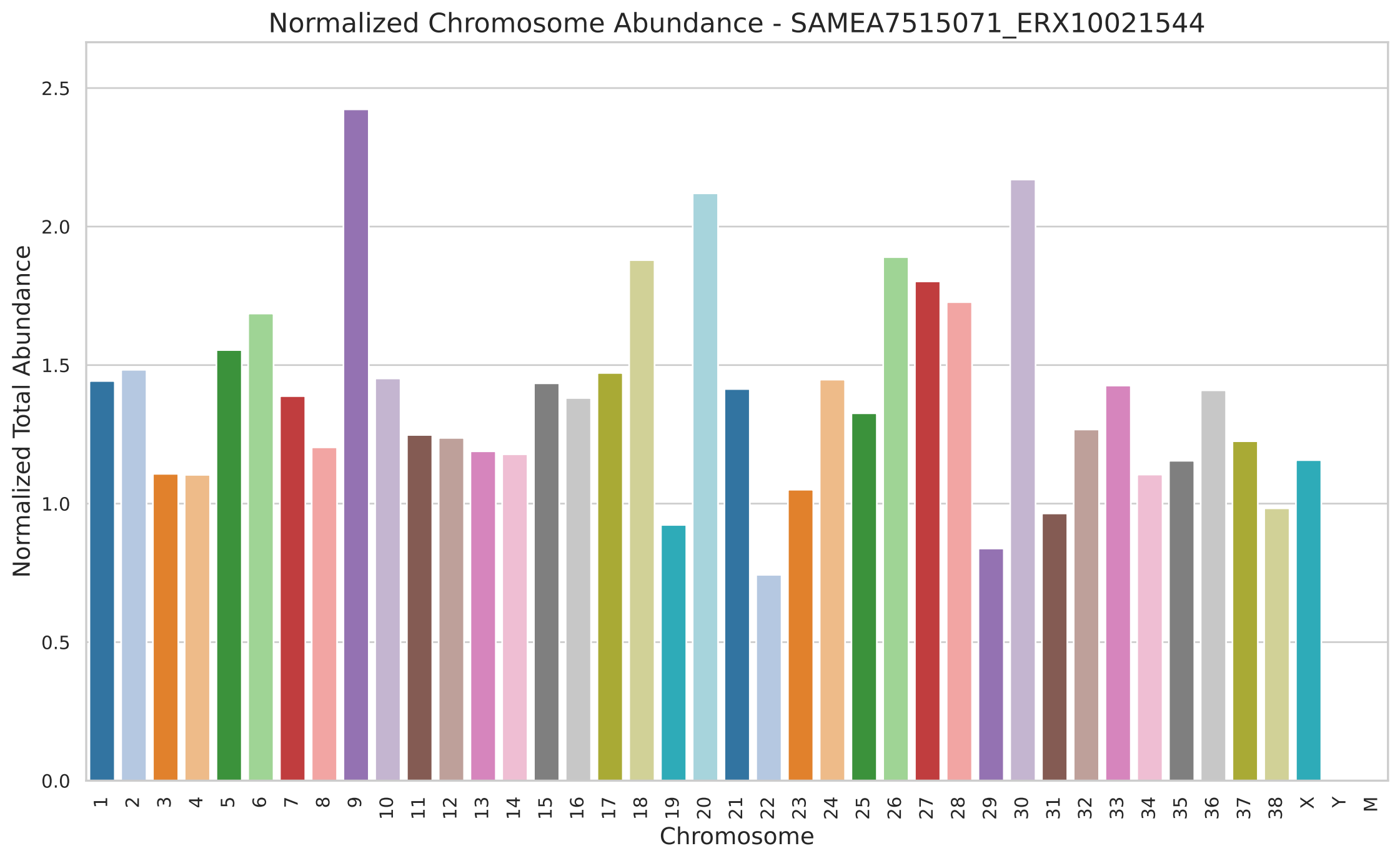

Normalized Chromosome Abundance - SAMEA7515099_ERX10021507
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

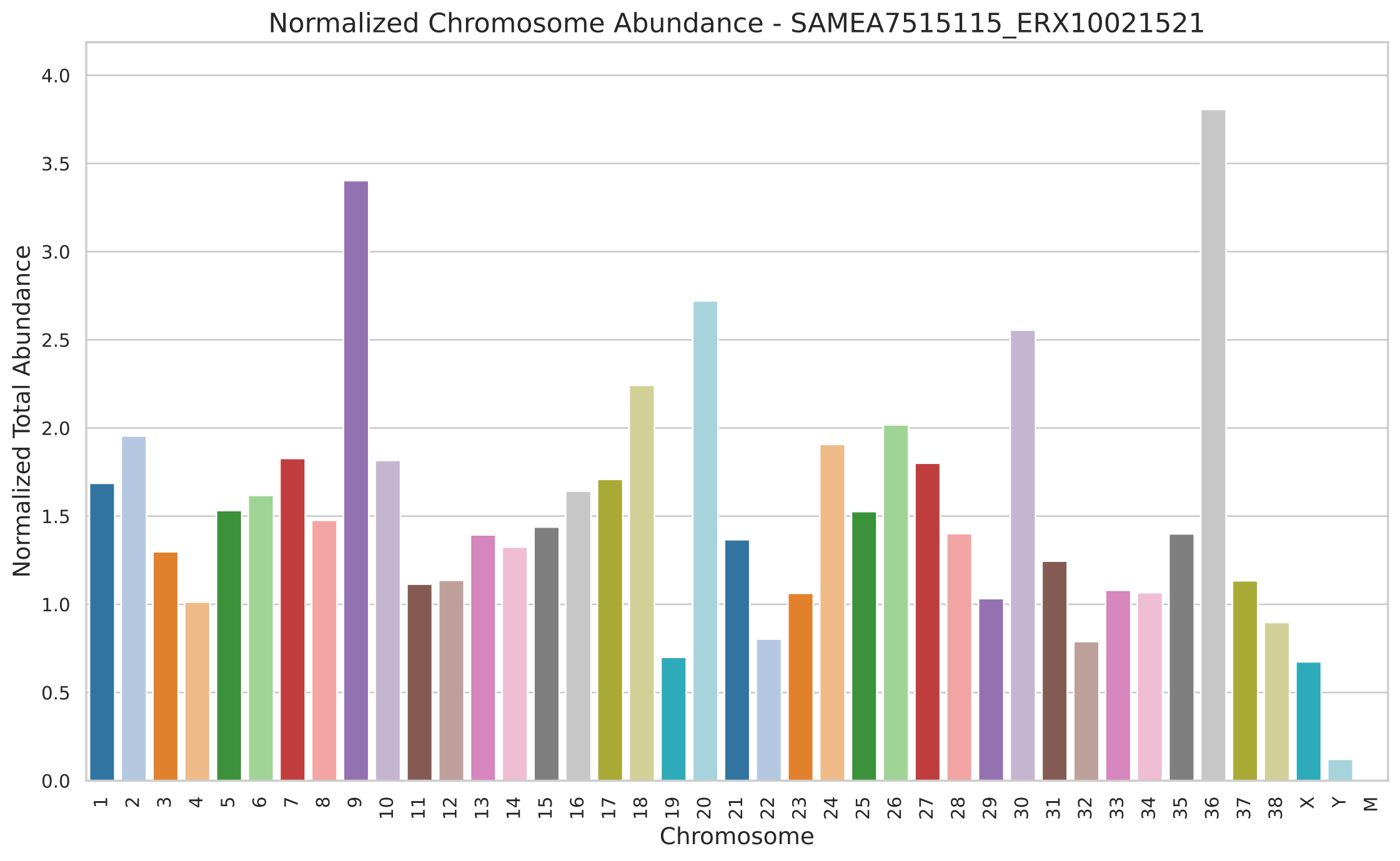

Normalized Chromosome Abundance - SAMEA7515237_ERX10021536
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

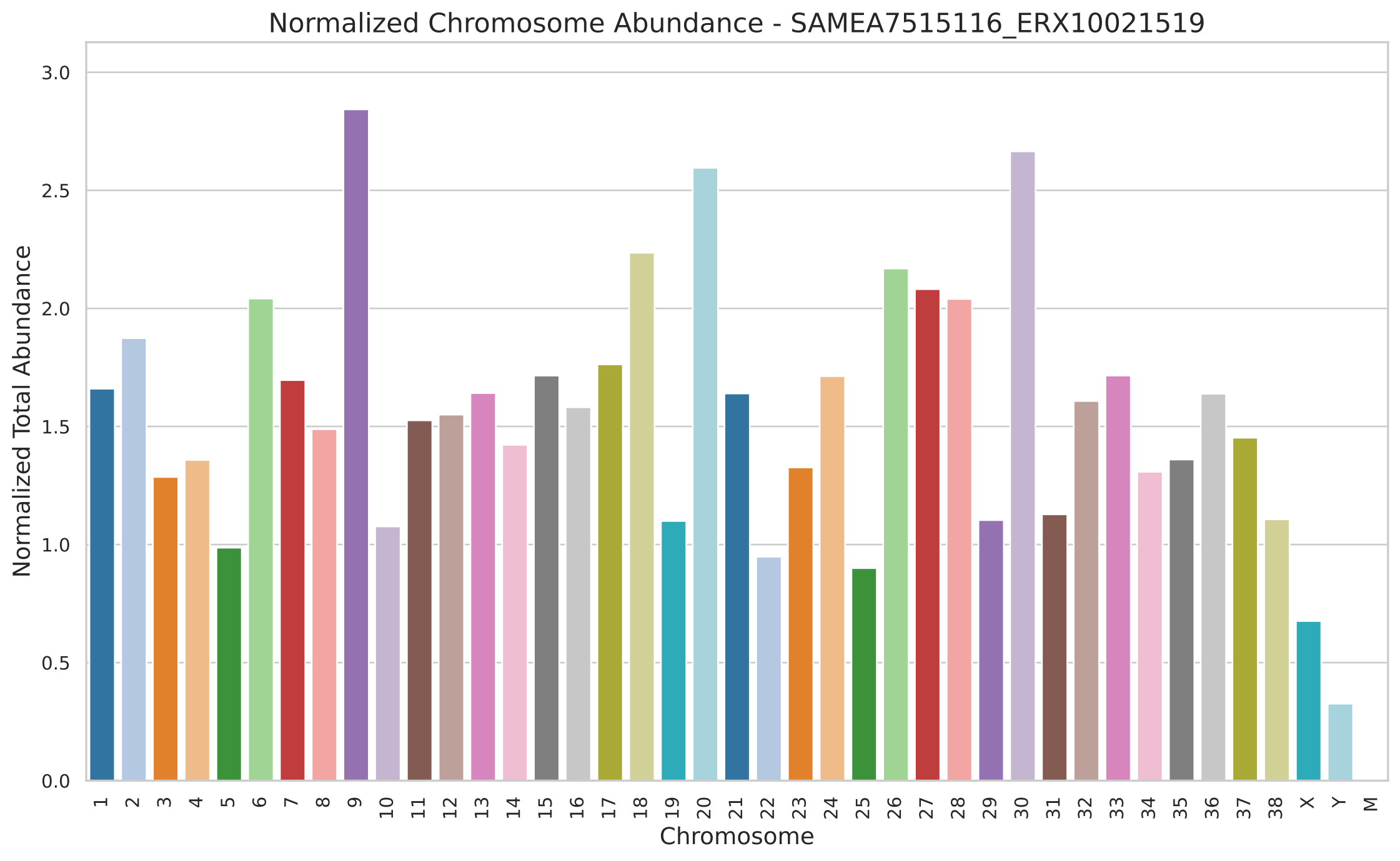

Normalized Chromosome Abundance - SAMEA7515070_ERX10021542
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

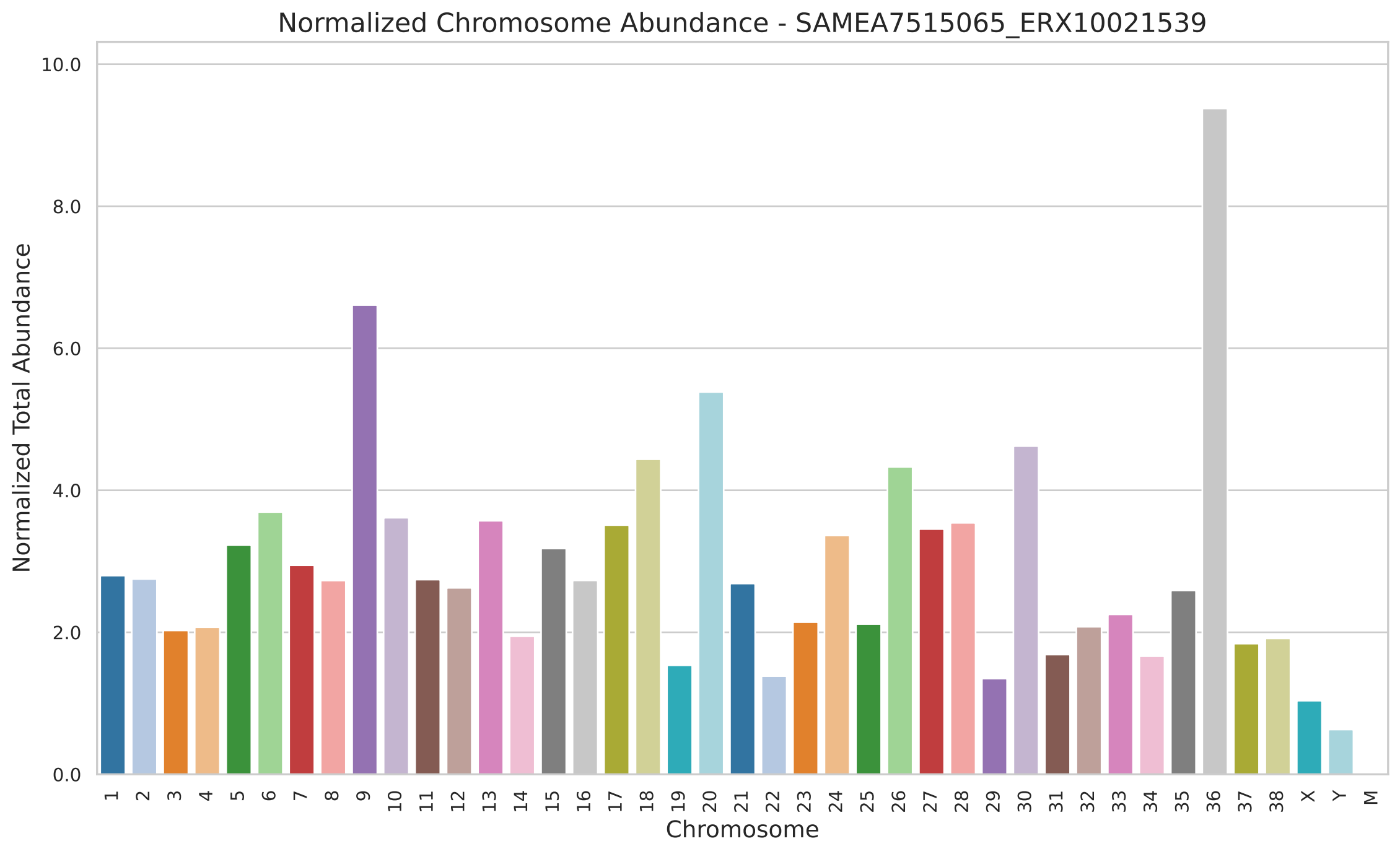

Normalized Chromosome Abundance - SAMEA7515111_ERX10021516
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

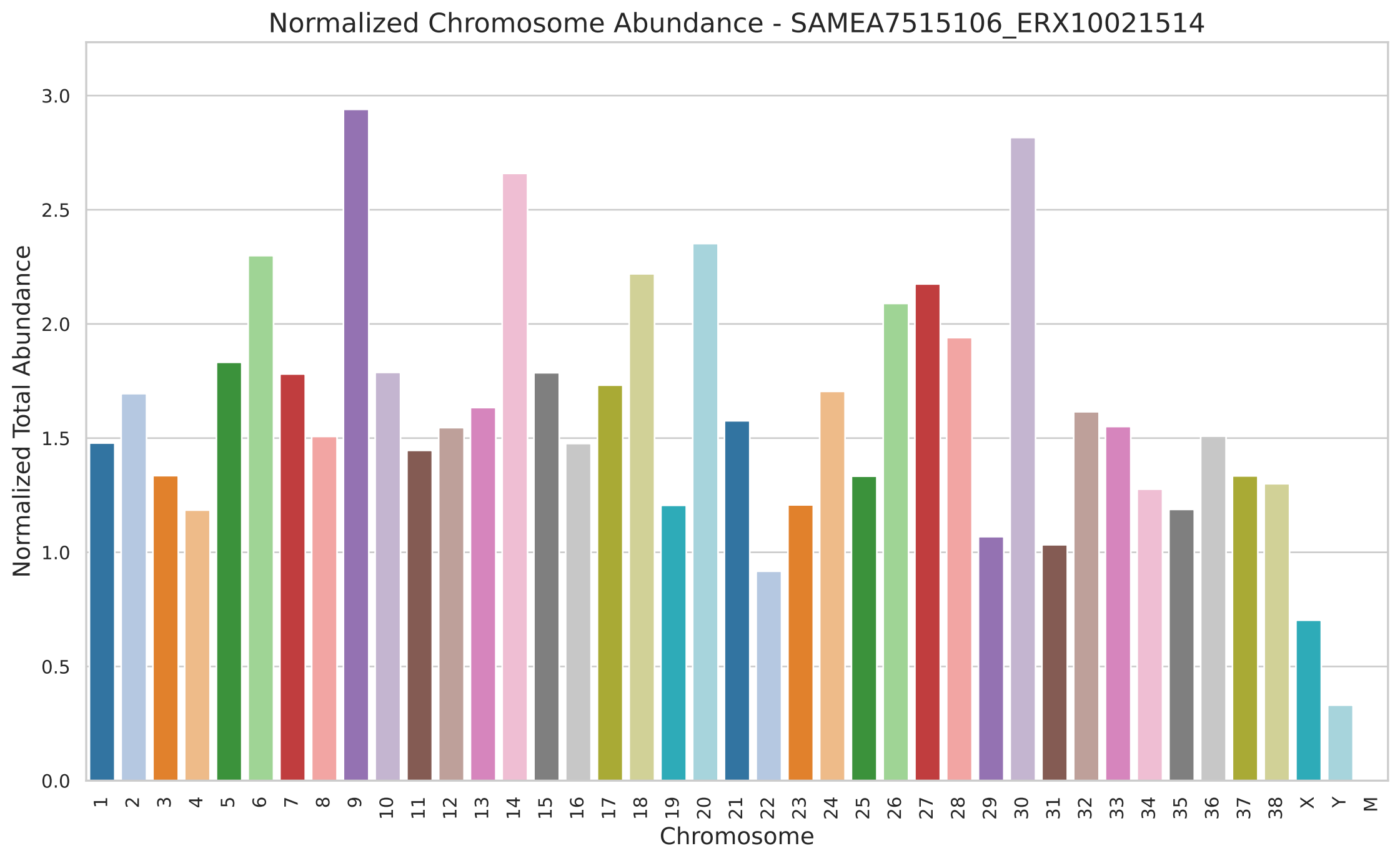

Normalized Chromosome Abundance - SAMEA7515209_ERX10021527
Normalized Total Abundance
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

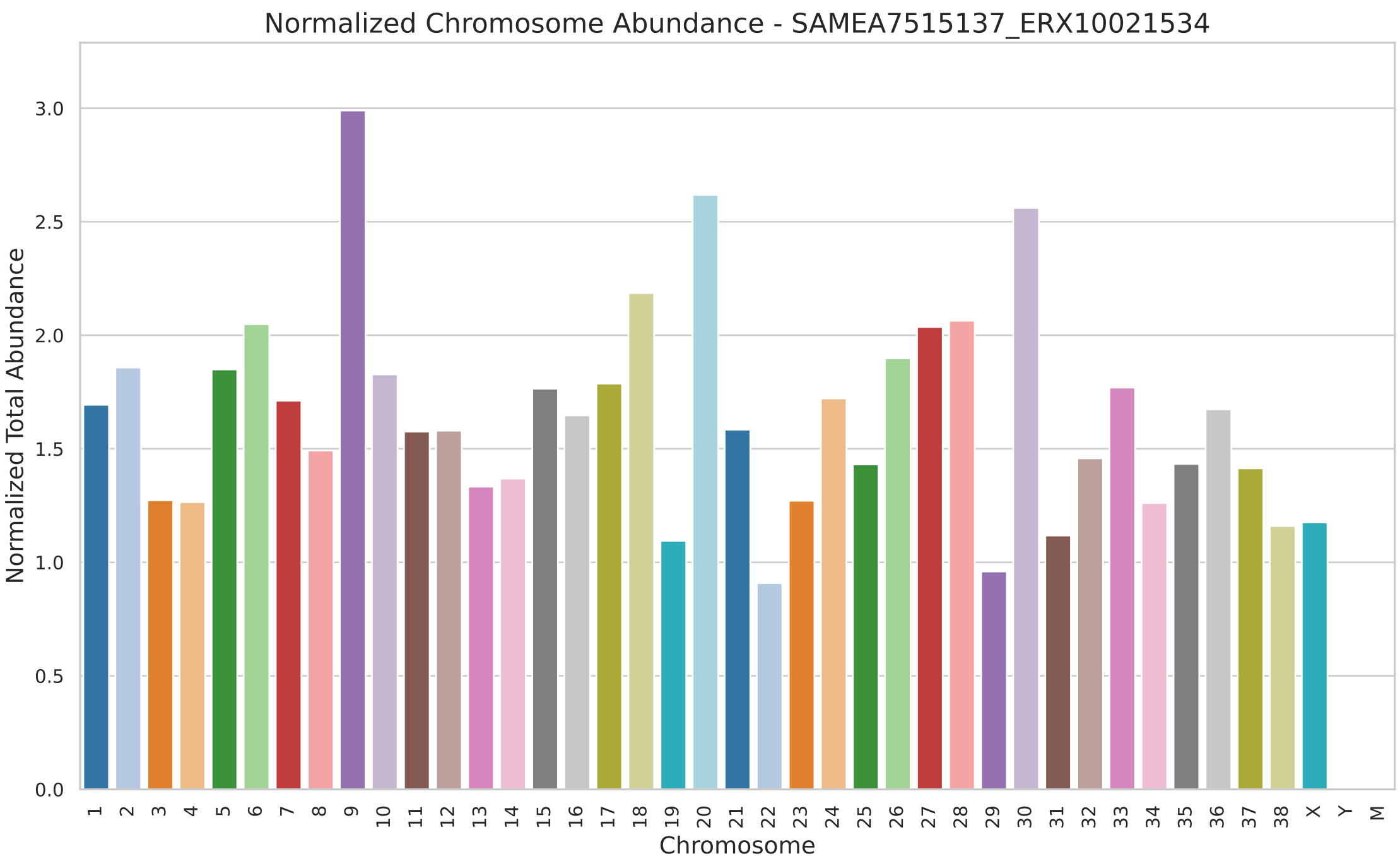

Normalized Chromosome Abundance - SAMEA7515071_ERX10021544
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

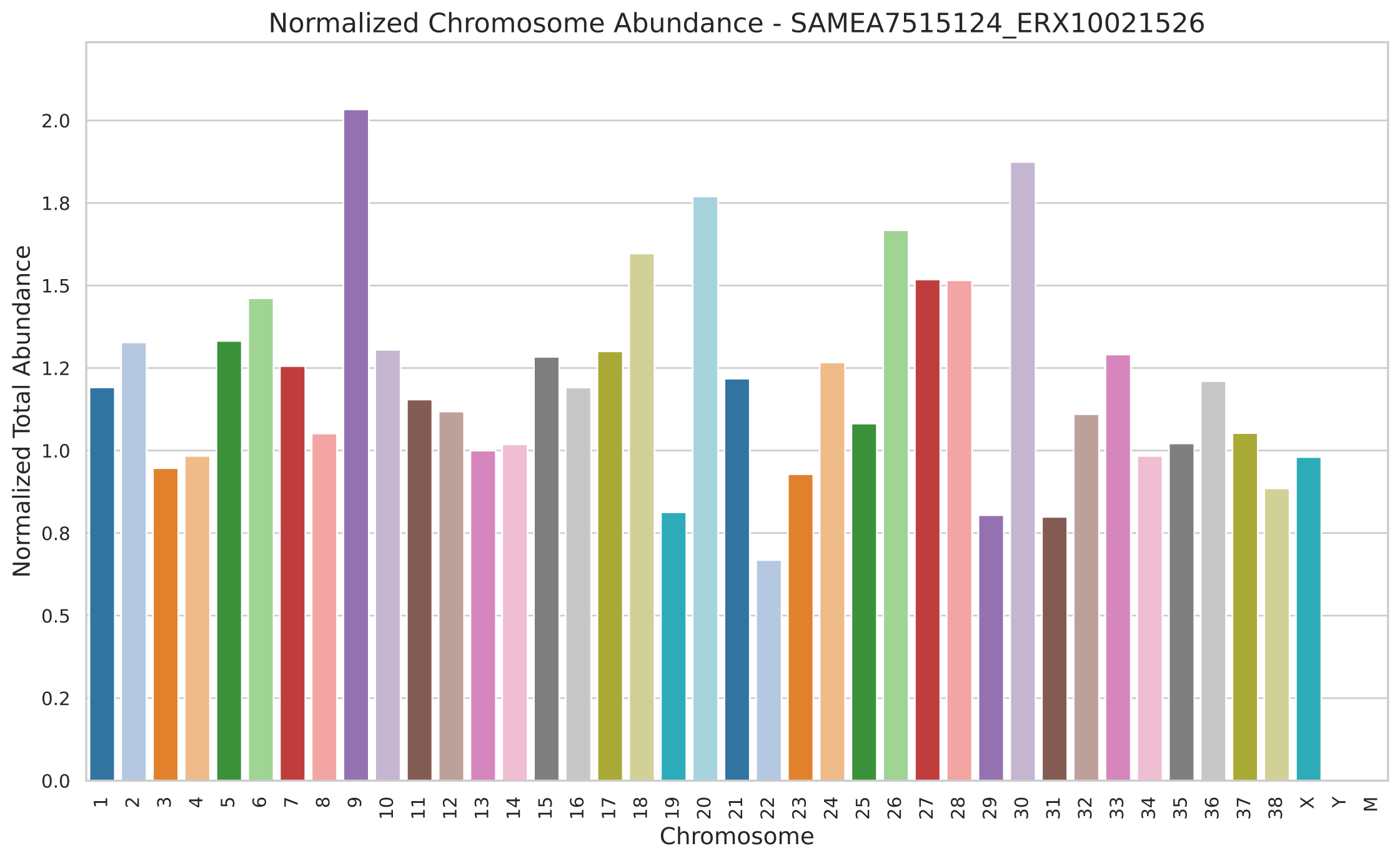

Normalized Chromosome Abundance - SAMEA7515115_ERX10021521
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

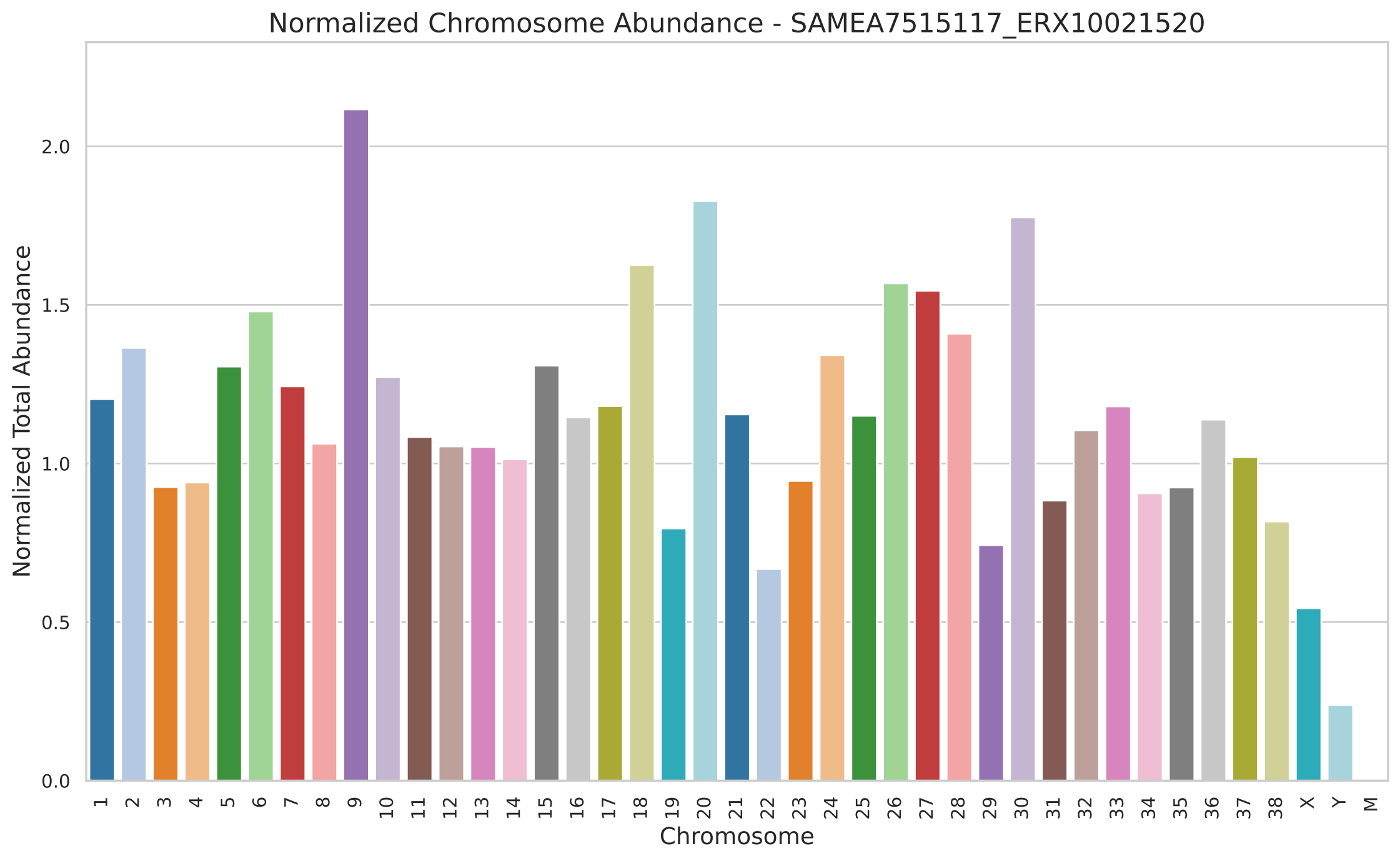

Normalized Chromosome Abundance - SAMEA7515116_ERX10021519
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

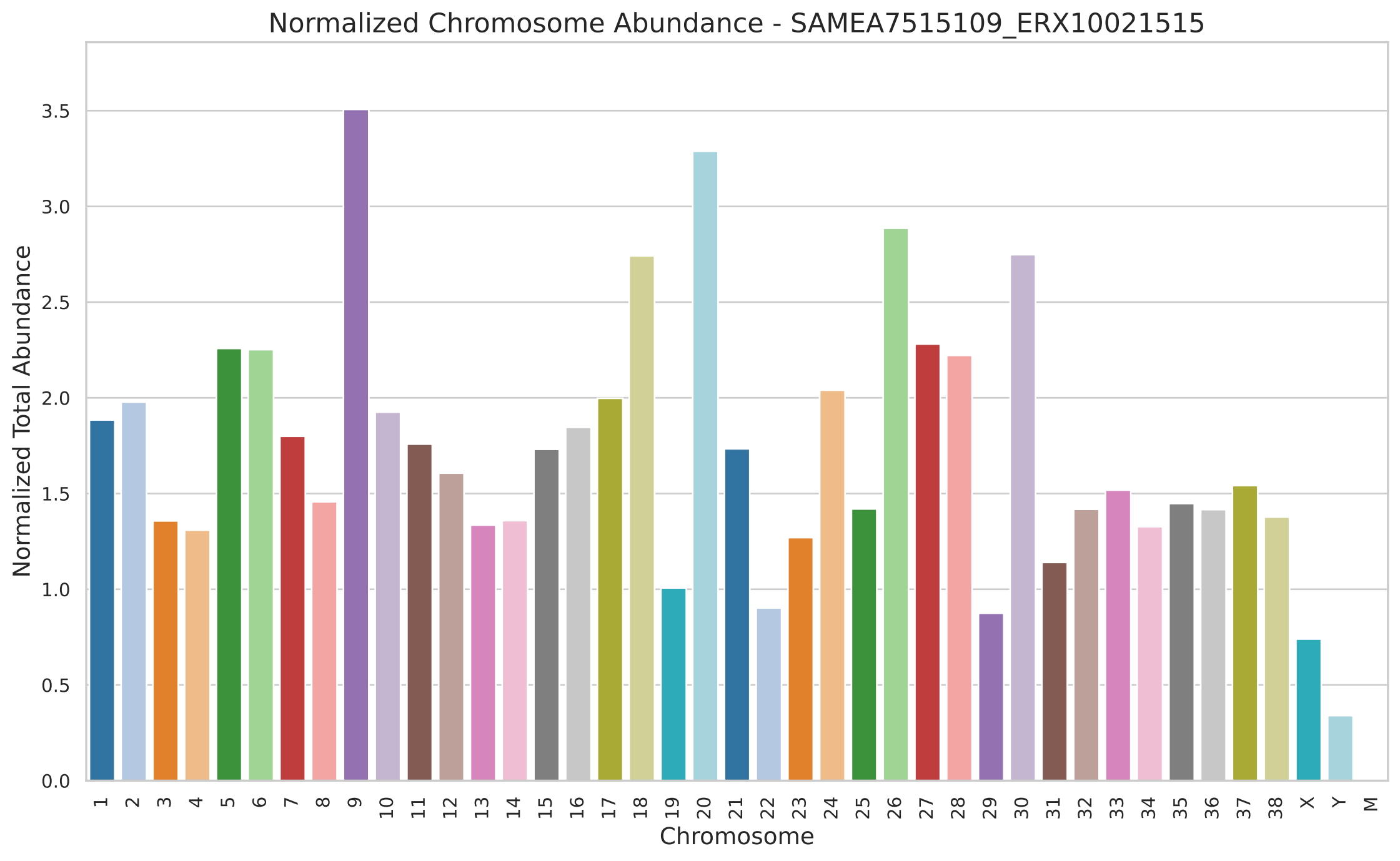

Normalized Chromosome Abundance - SAMEA7515065_ERX10021539
Normalized Total Abundance
10.0
8.0
6.0
4.0
2.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

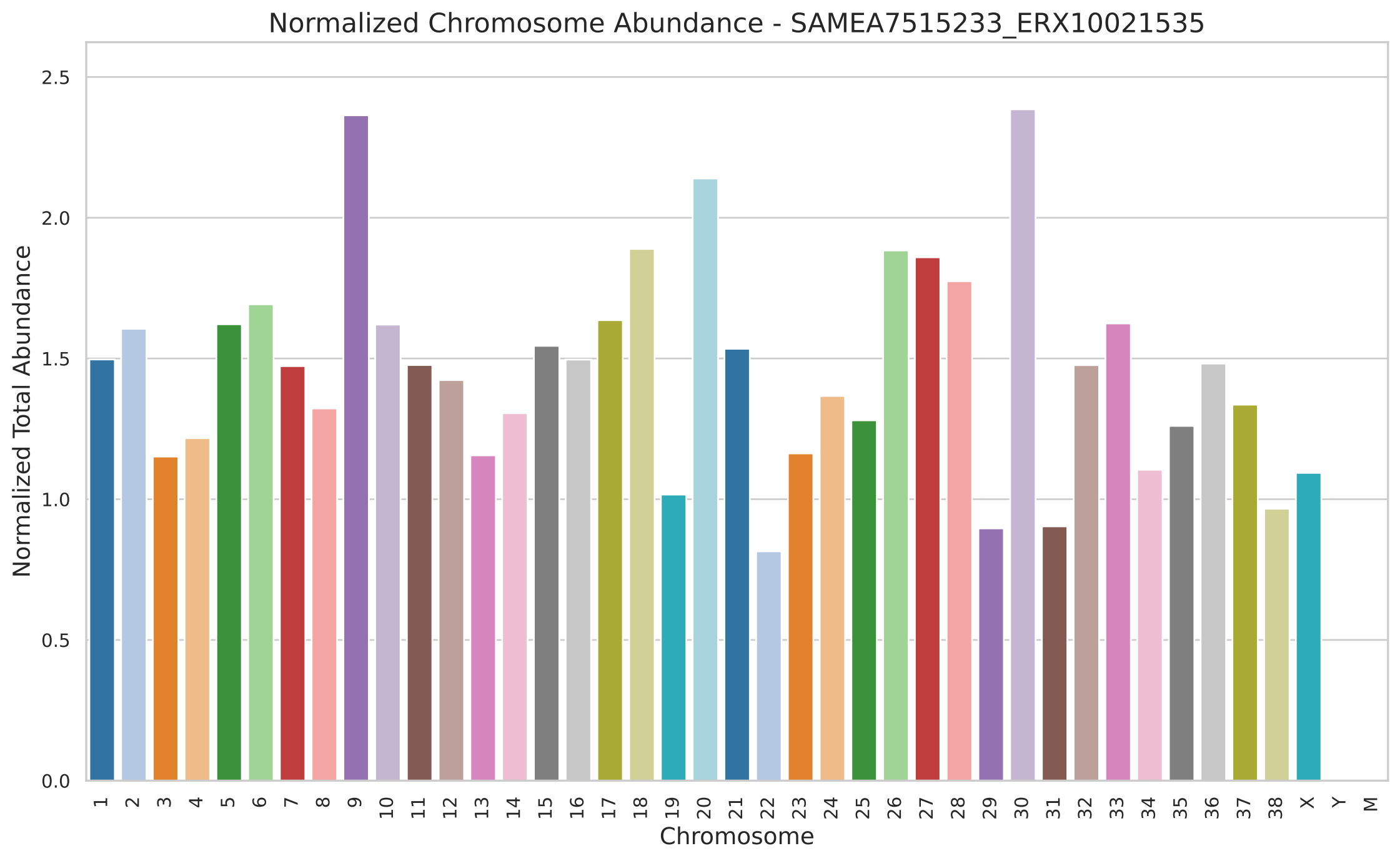

Normalized Chromosome Abundance - SAMEA7515106_ERX10021514
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

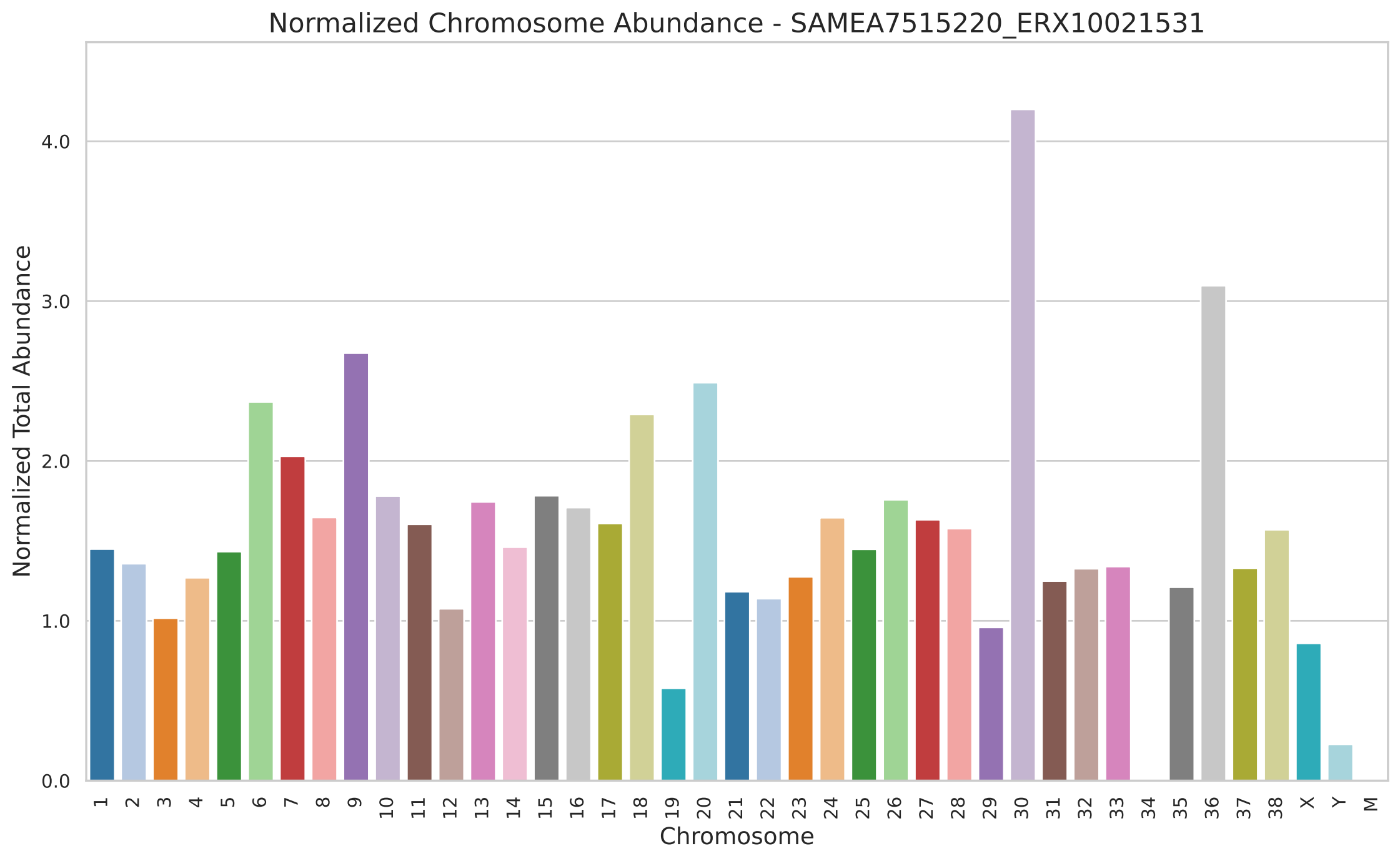

Normalized Chromosome Abundance - SAMEA7515137_ERX10021534
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

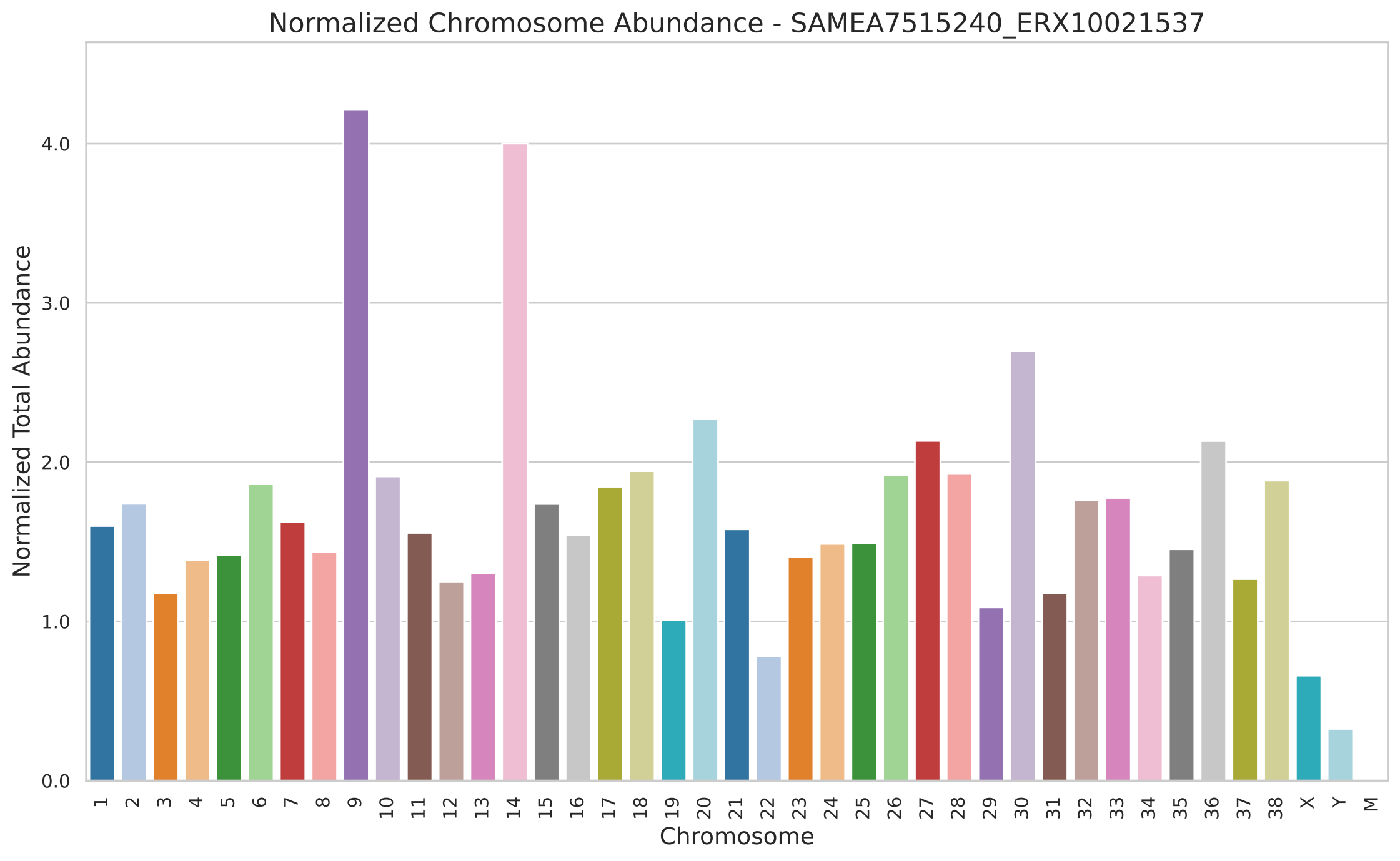

Normalized Chromosome Abundance - SAMEA7515124_ERX10021526
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

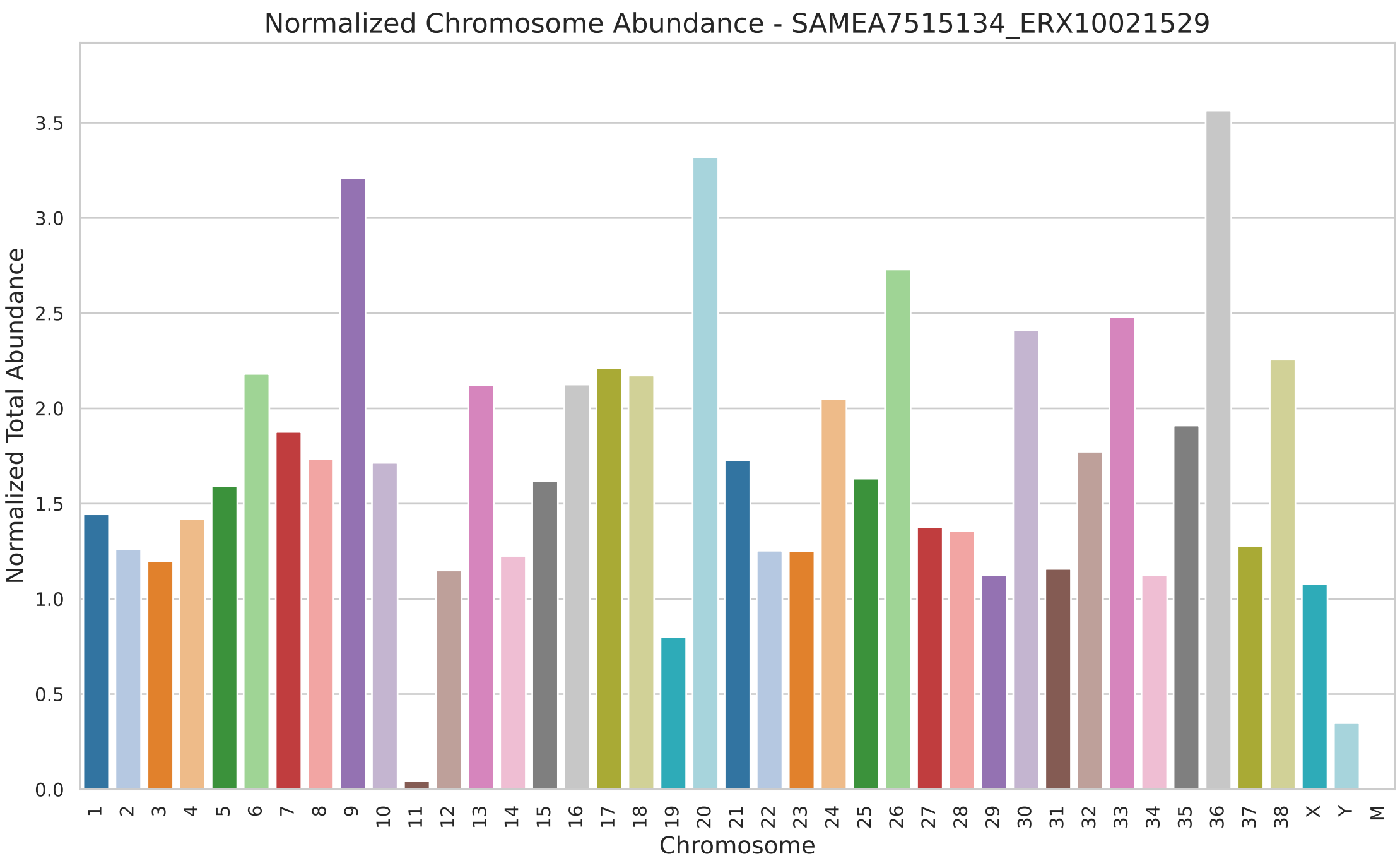

Normalized Chromosome Abundance - SAMEA7515117_ERX10021520
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

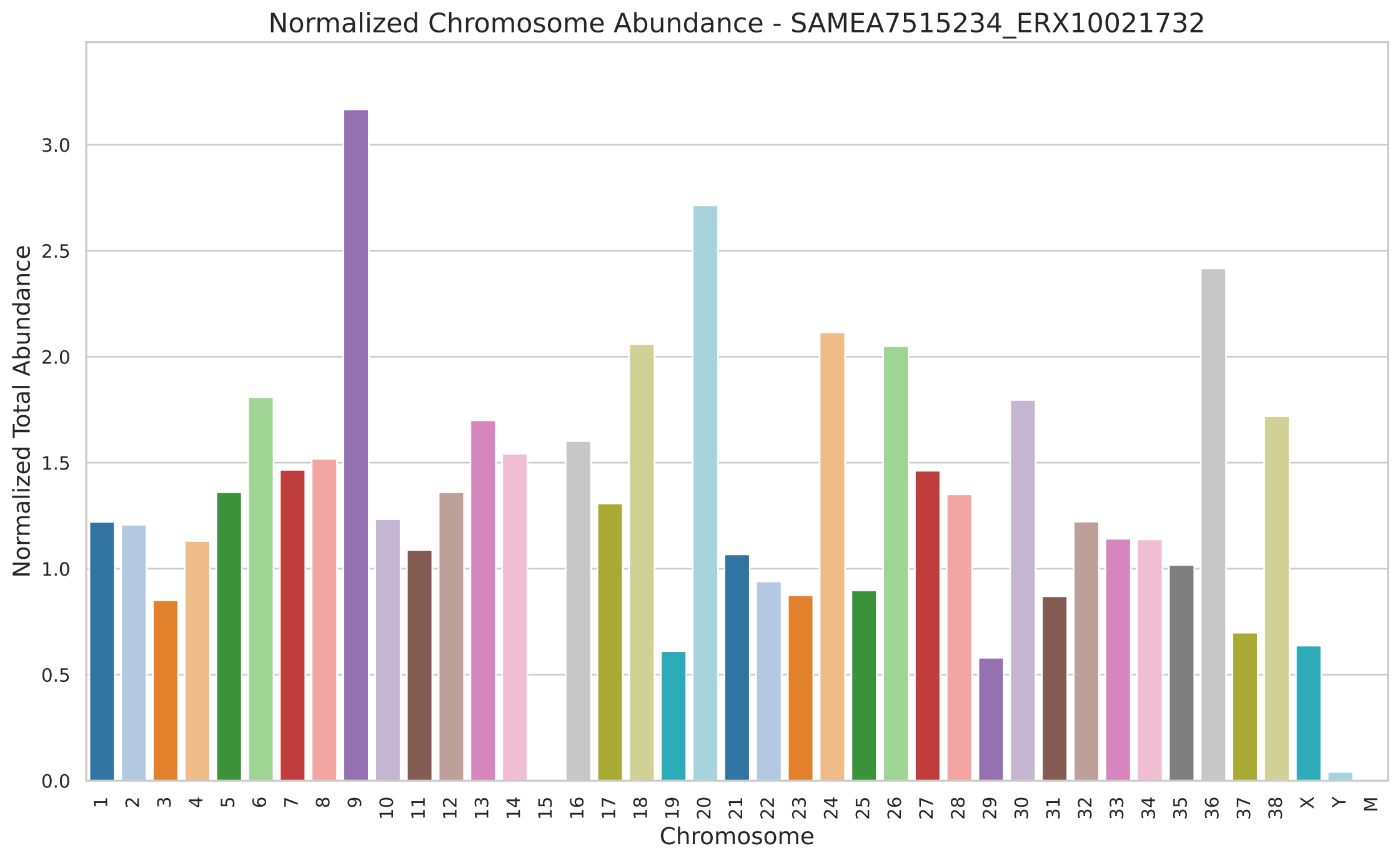

Normalized Chromosome Abundance - SAMEA7515109_ERX10021515
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

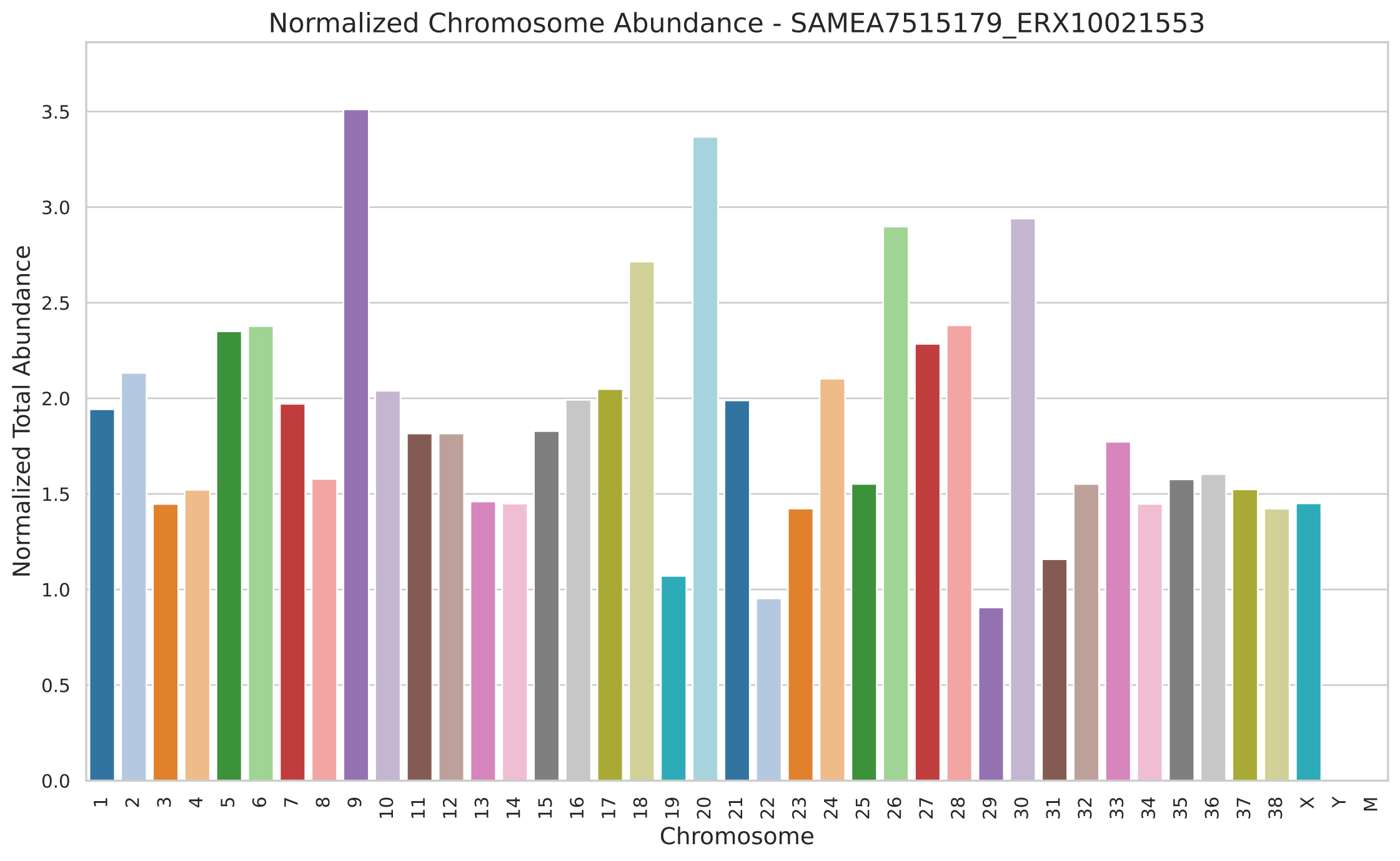

Normalized Chromosome Abundance - SAMEA7515233_ERX10021535
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

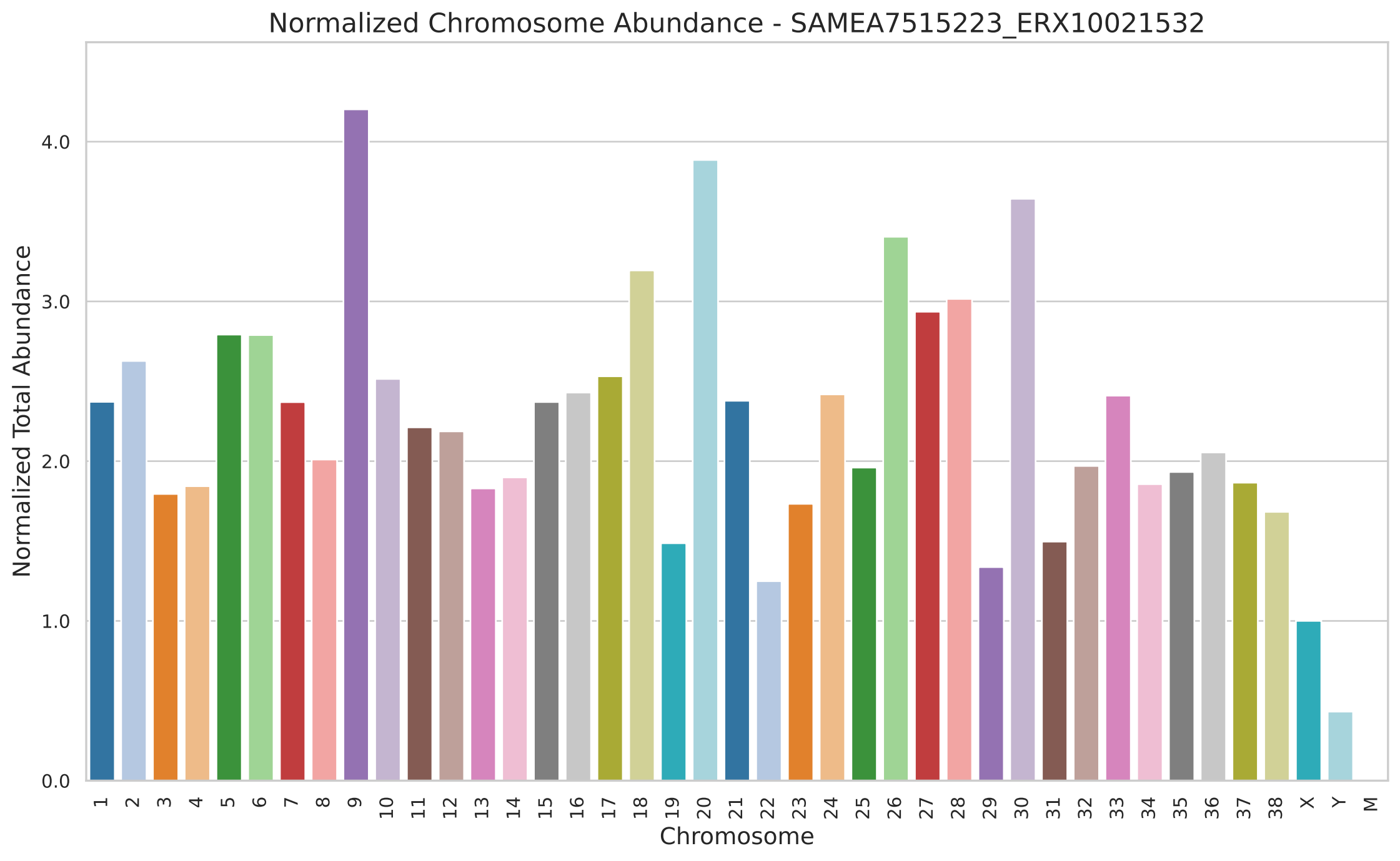

Normalized Chromosome Abundance - SAMEA7515220_ERX10021531
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

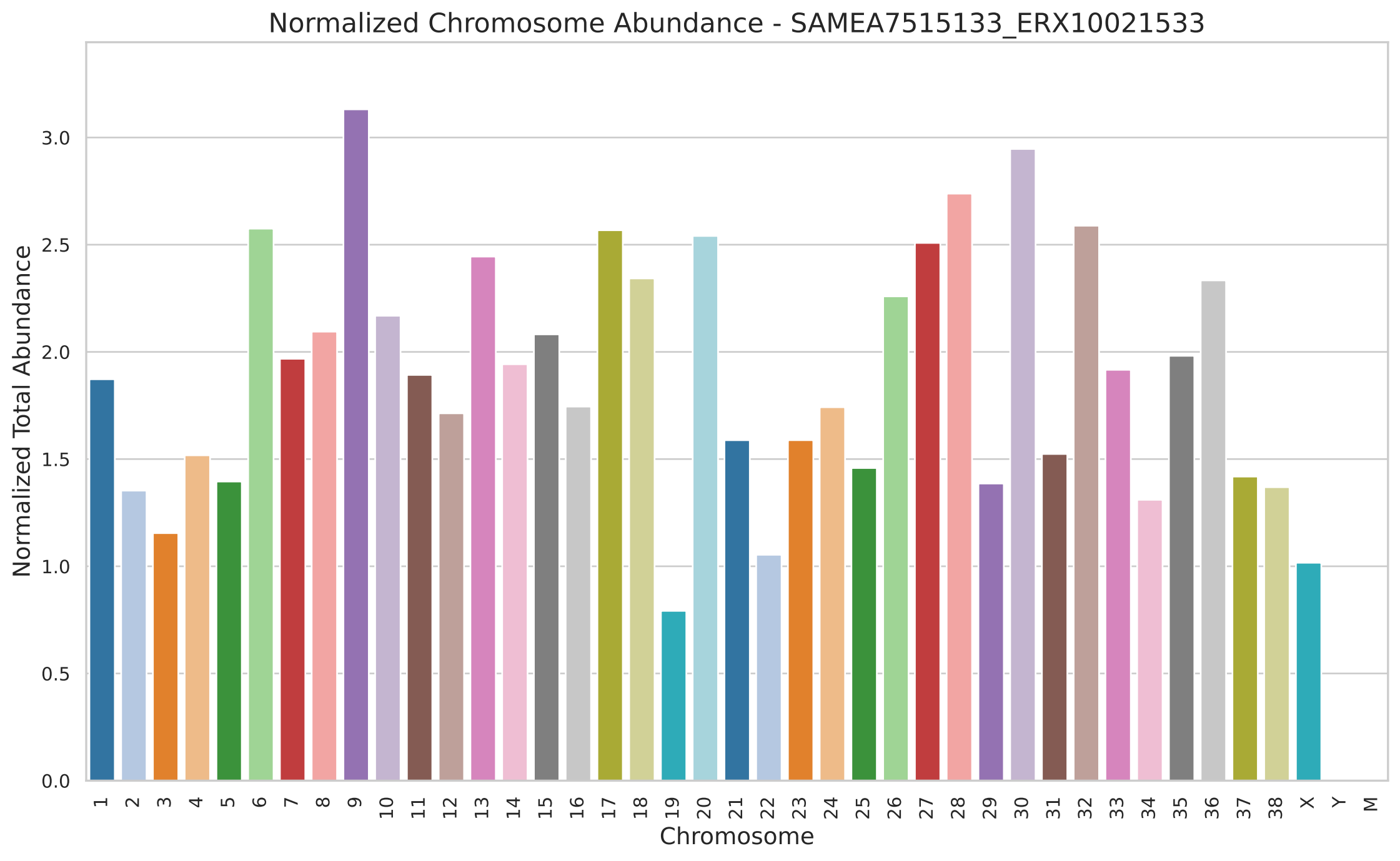

Normalized Chromosome Abundance - SAMEA7515240_ERX10021537
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

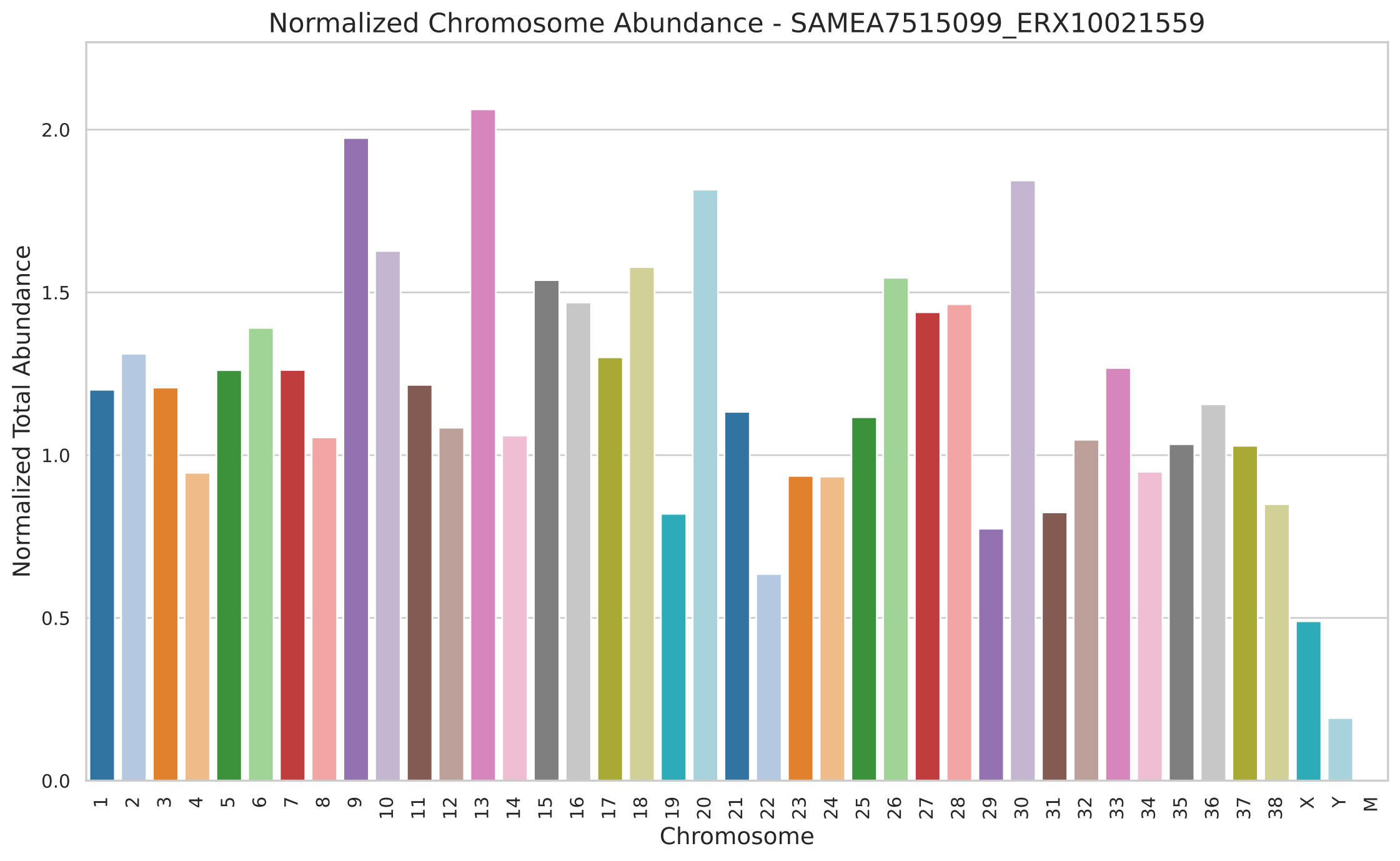

Normalized Chromosome Abundance - SAMEA7515134_ERX10021529
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

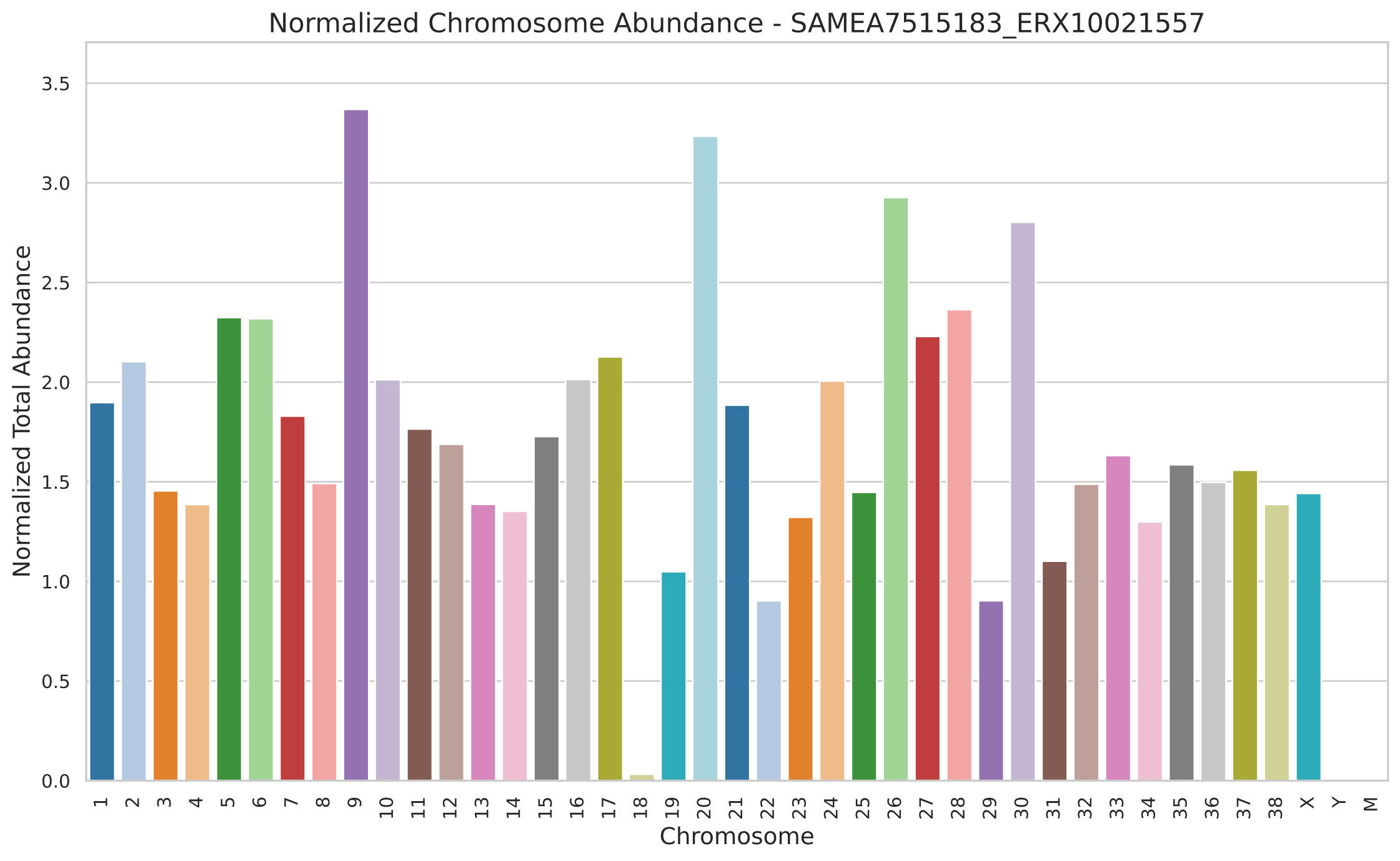

Normalized Chromosome Abundance - SAMEA7515234_ERX10021732
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

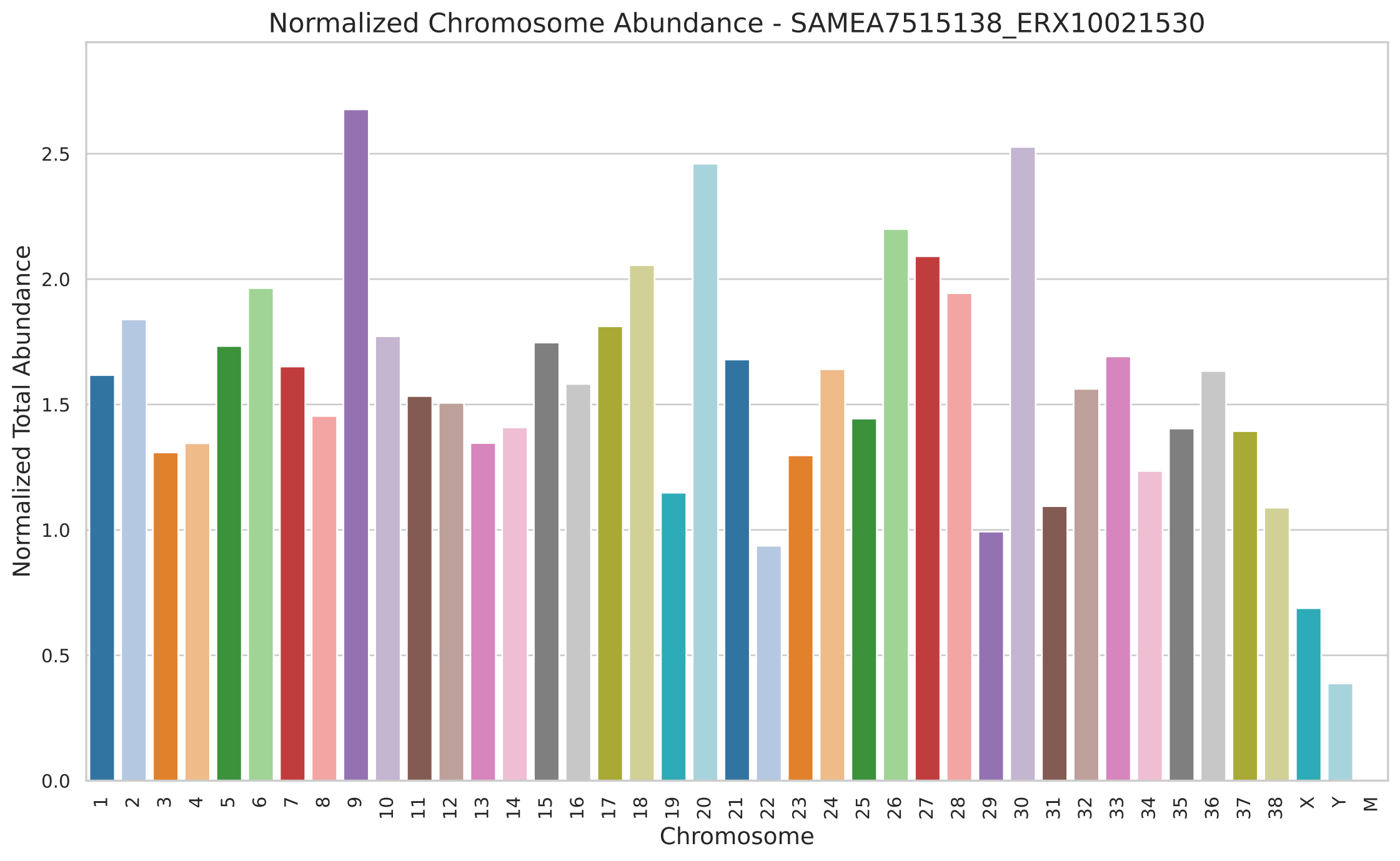

Normalized Chromosome Abundance - SAMEA7515179_ERX10021553
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

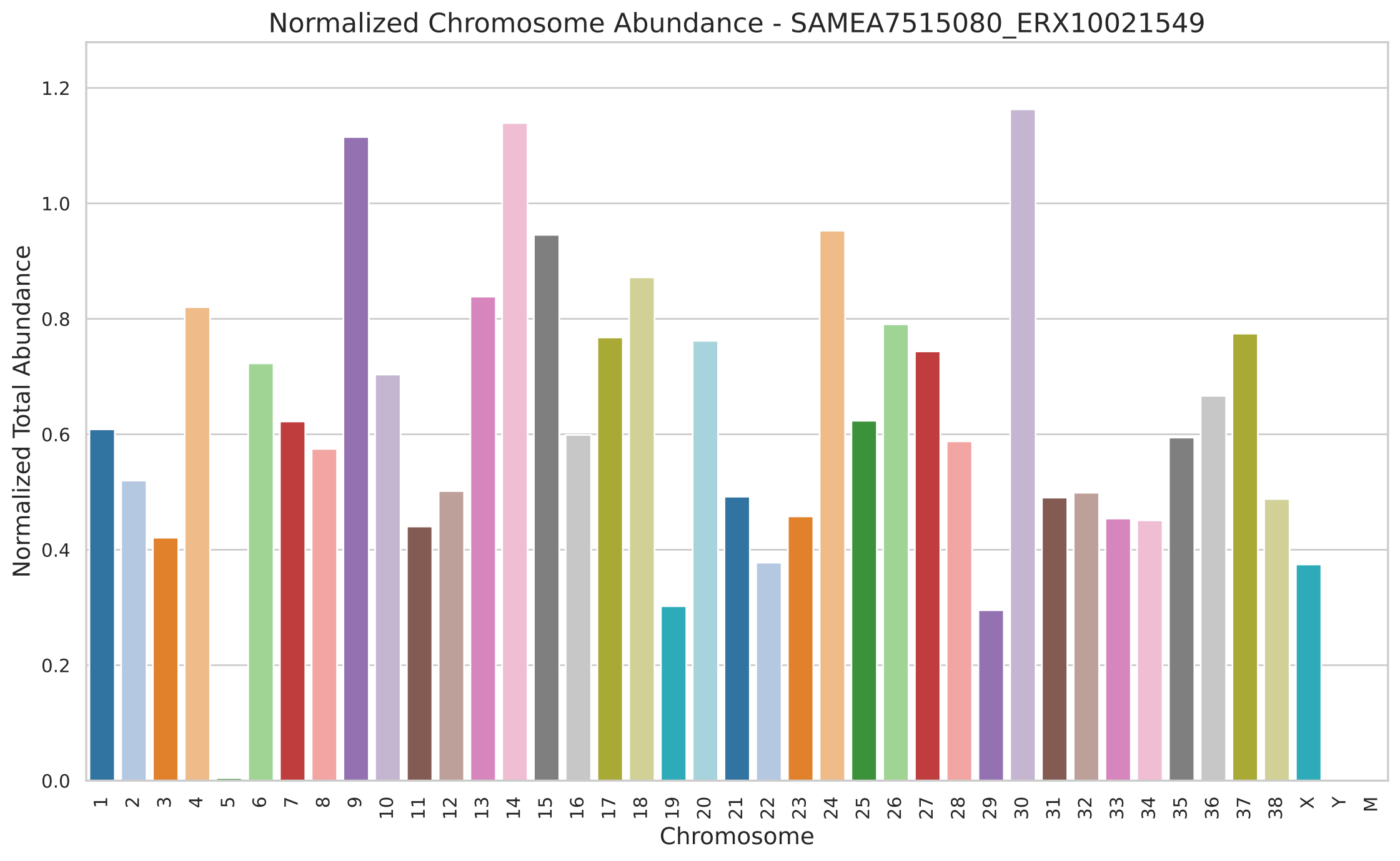

Normalized Chromosome Abundance - SAMEA7515223_ERX10021532
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

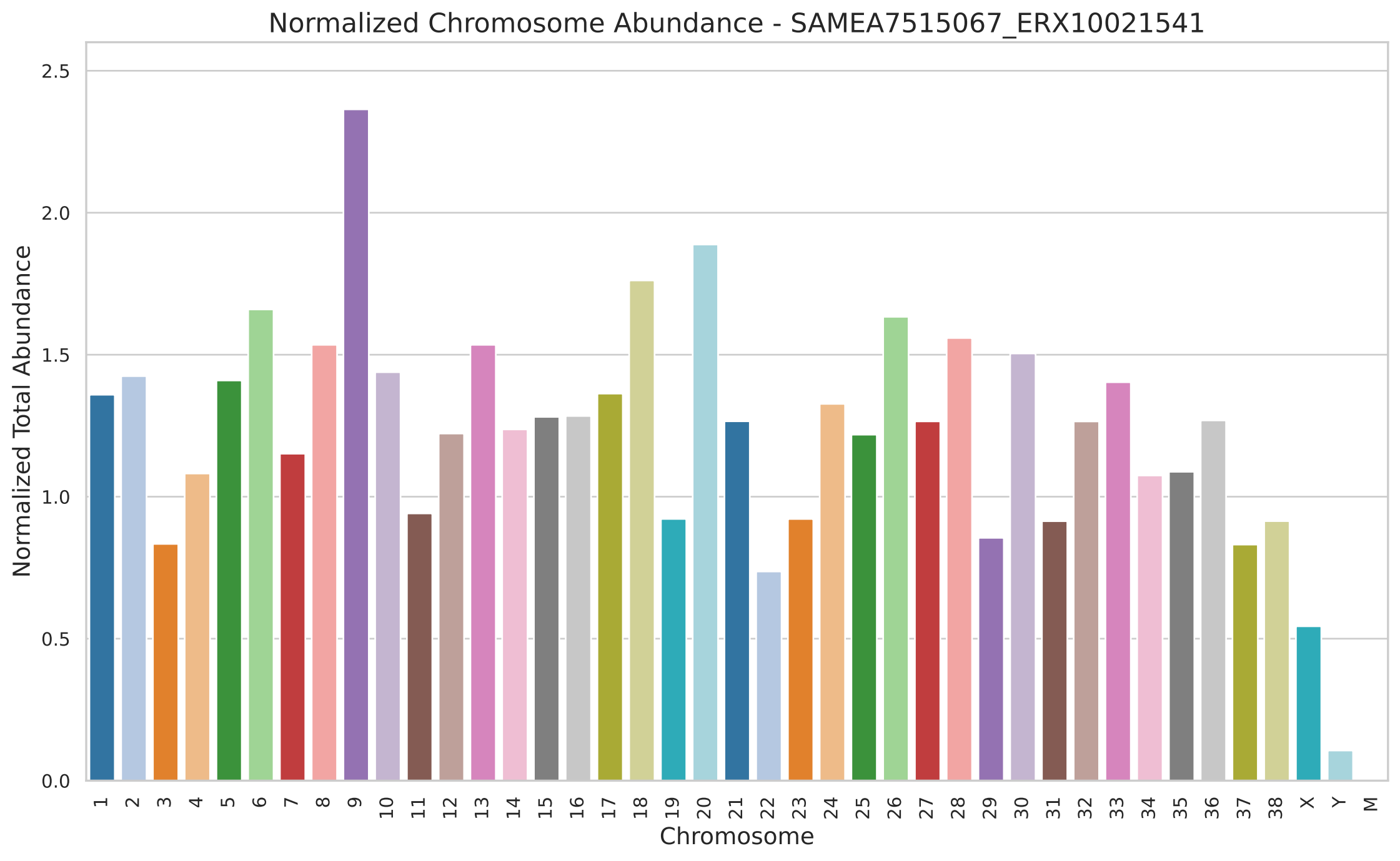

Normalized Chromosome Abundance - SAMEA7515133_ERX10021533
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

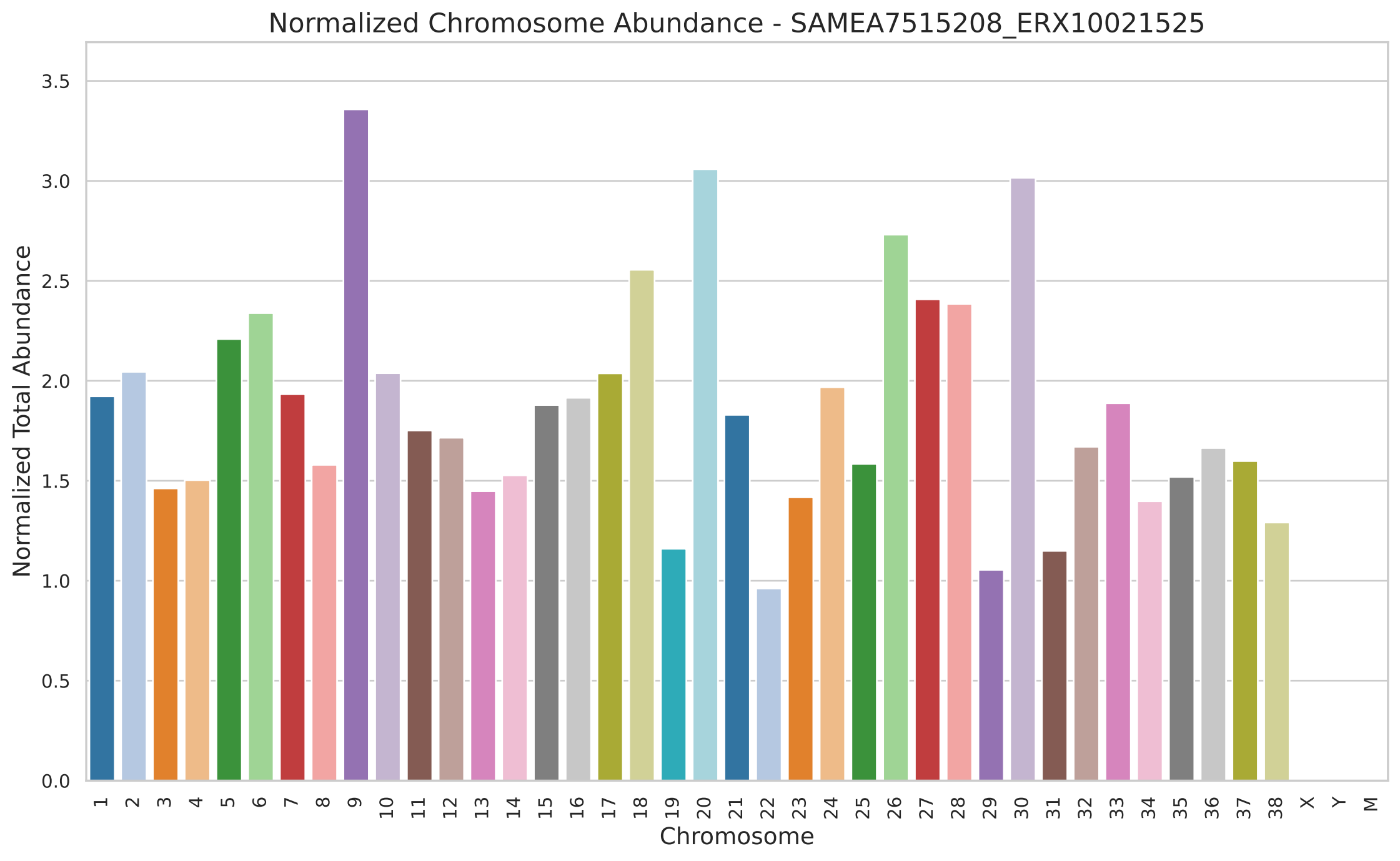

Normalized Chromosome Abundance - SAMEA7515099_ERX10021559
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

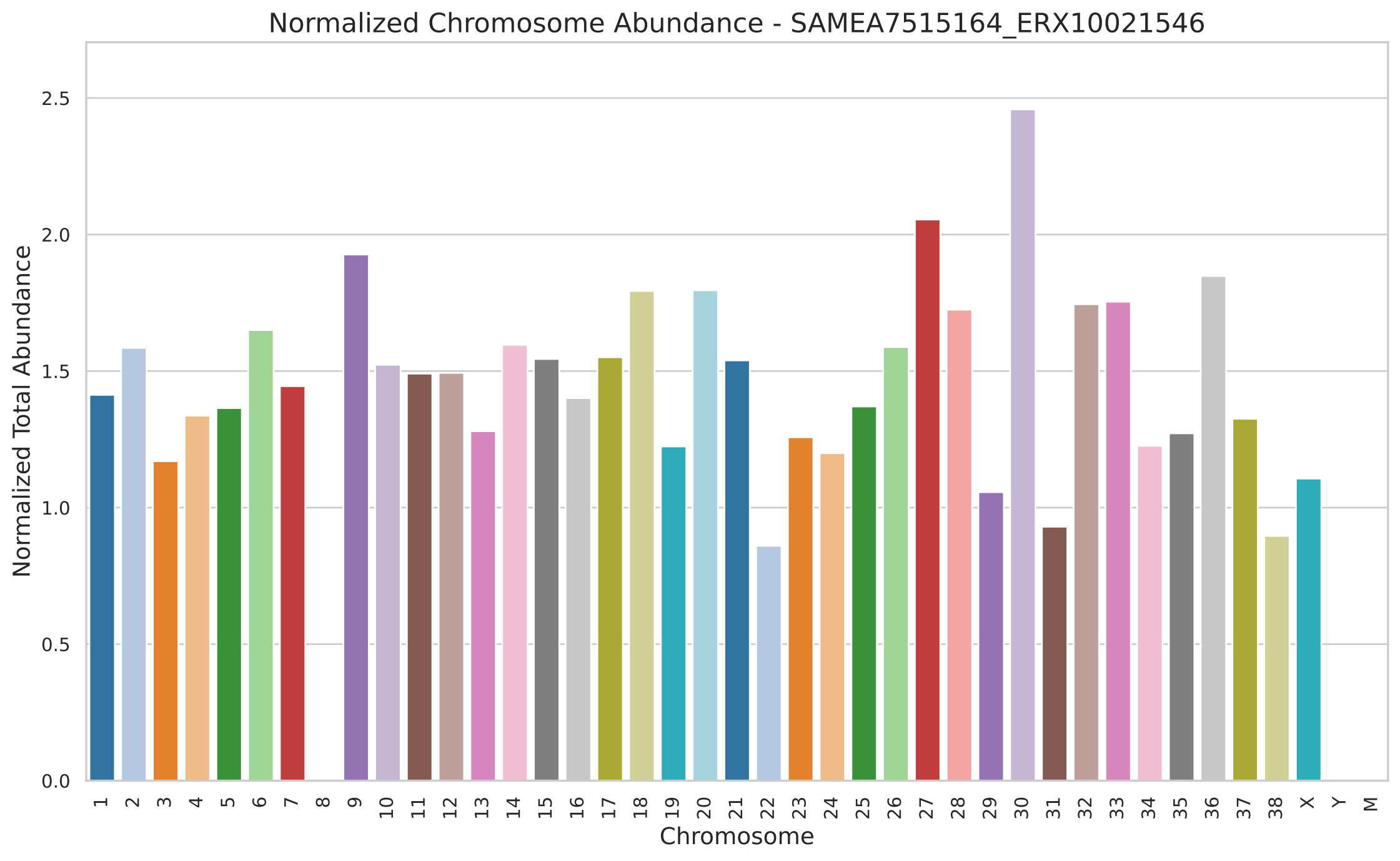

Normalized Chromosome Abundance - SAMEA7515183_ERX10021557
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

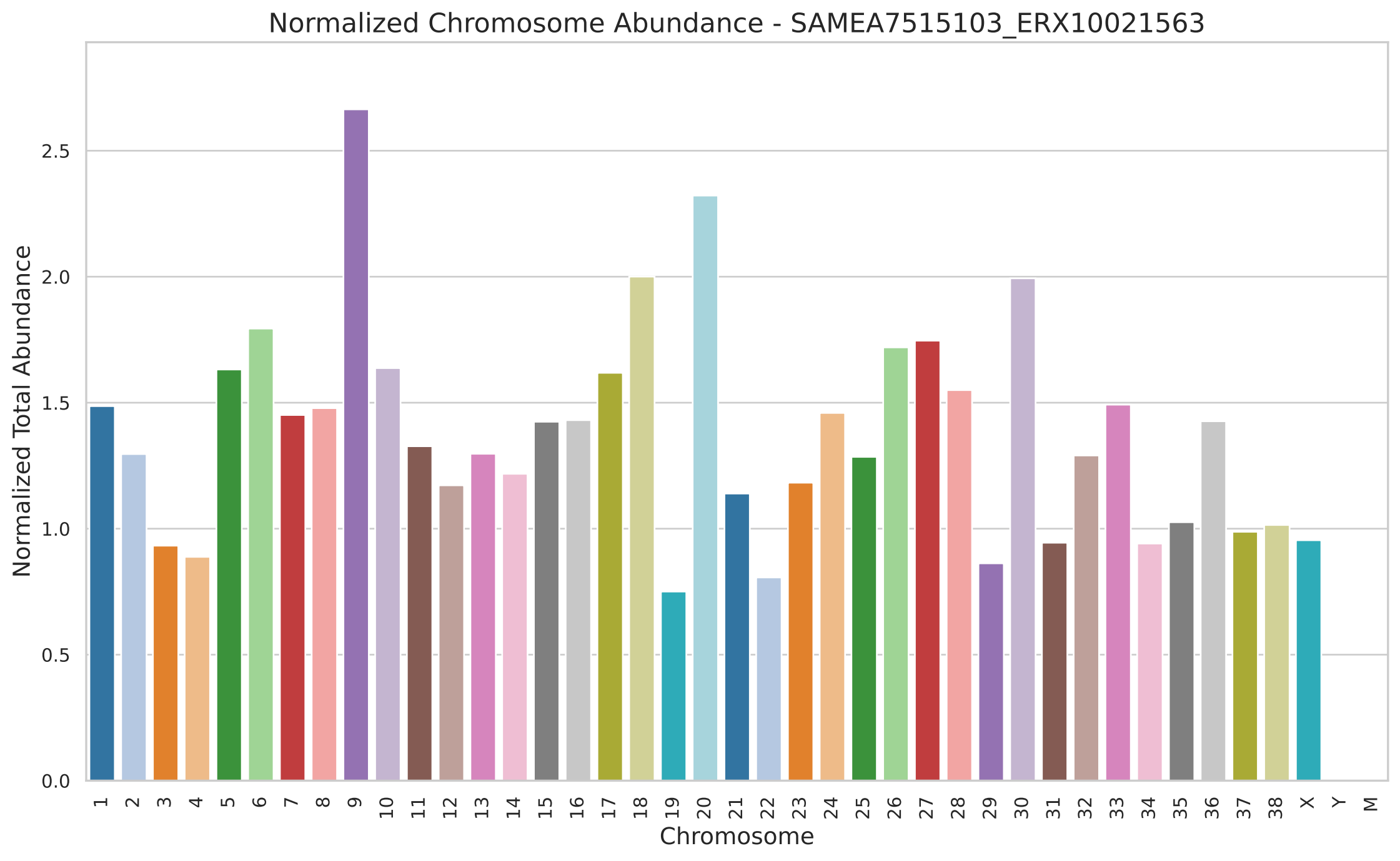

Normalized Chromosome Abundance - SAMEA7515138_ERX10021530
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

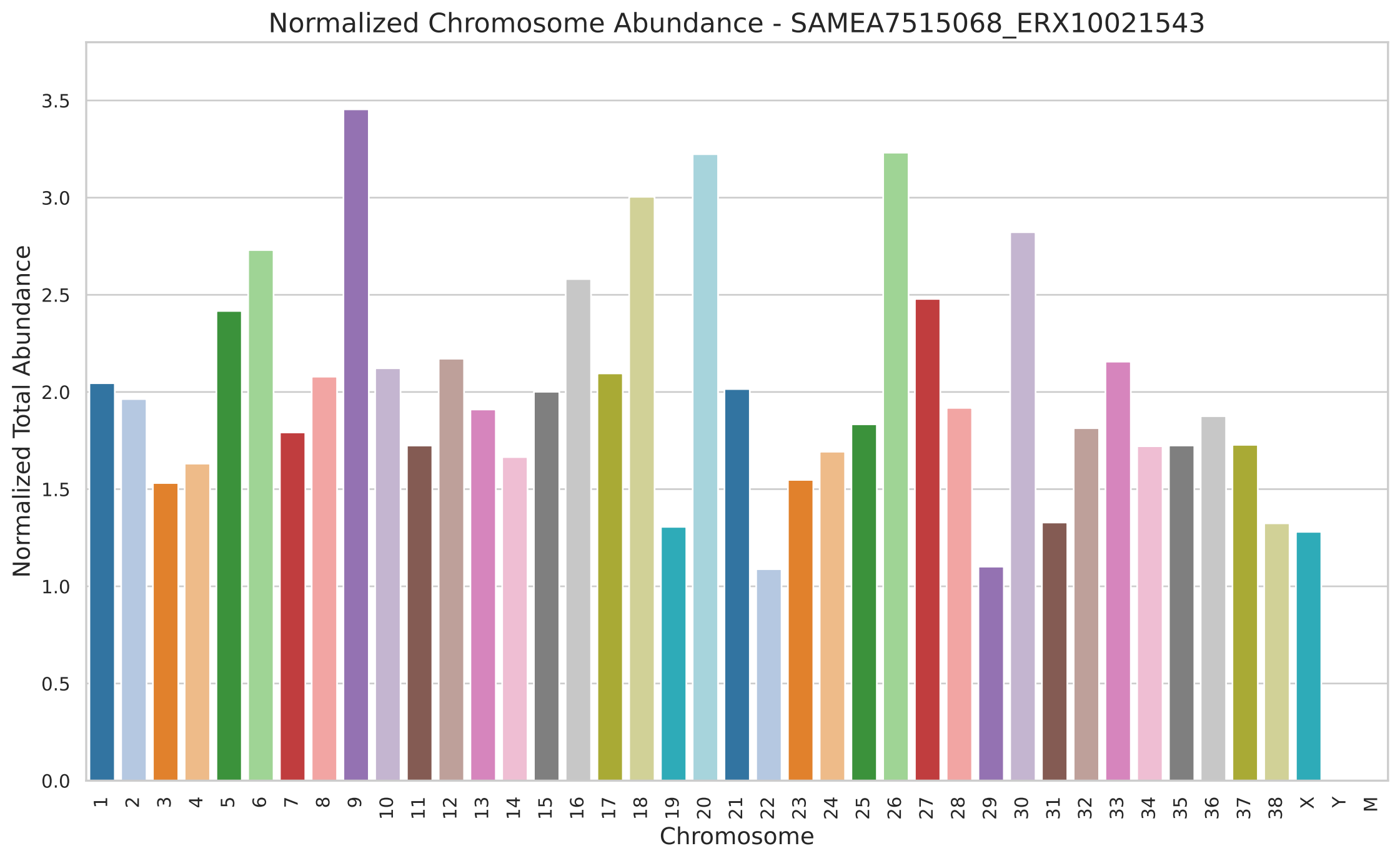

Normalized Chromosome Abundance - SAMEA7515080_ERX10021549
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

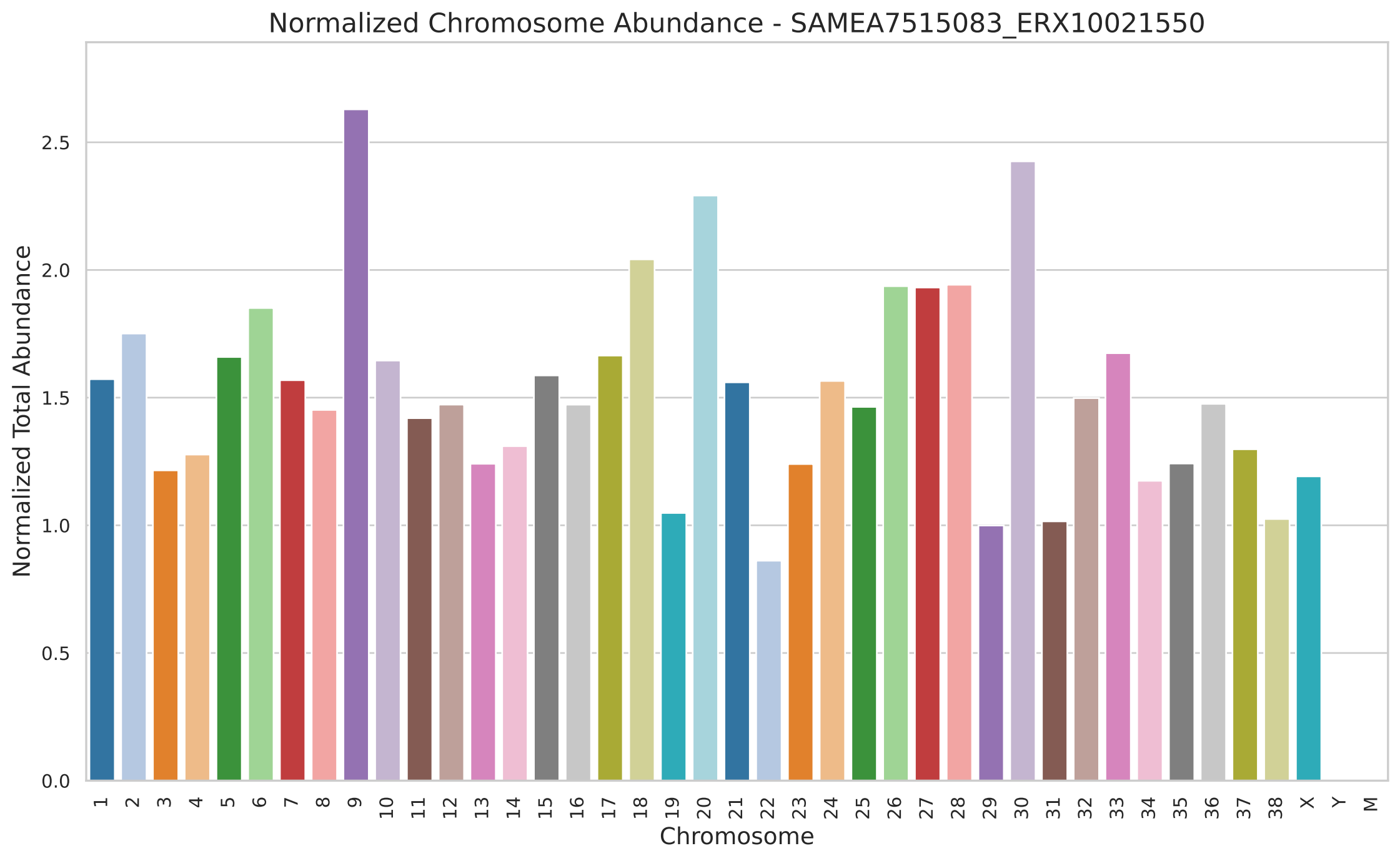

Normalized Chromosome Abundance - SAMEA7515067_ERX10021541
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

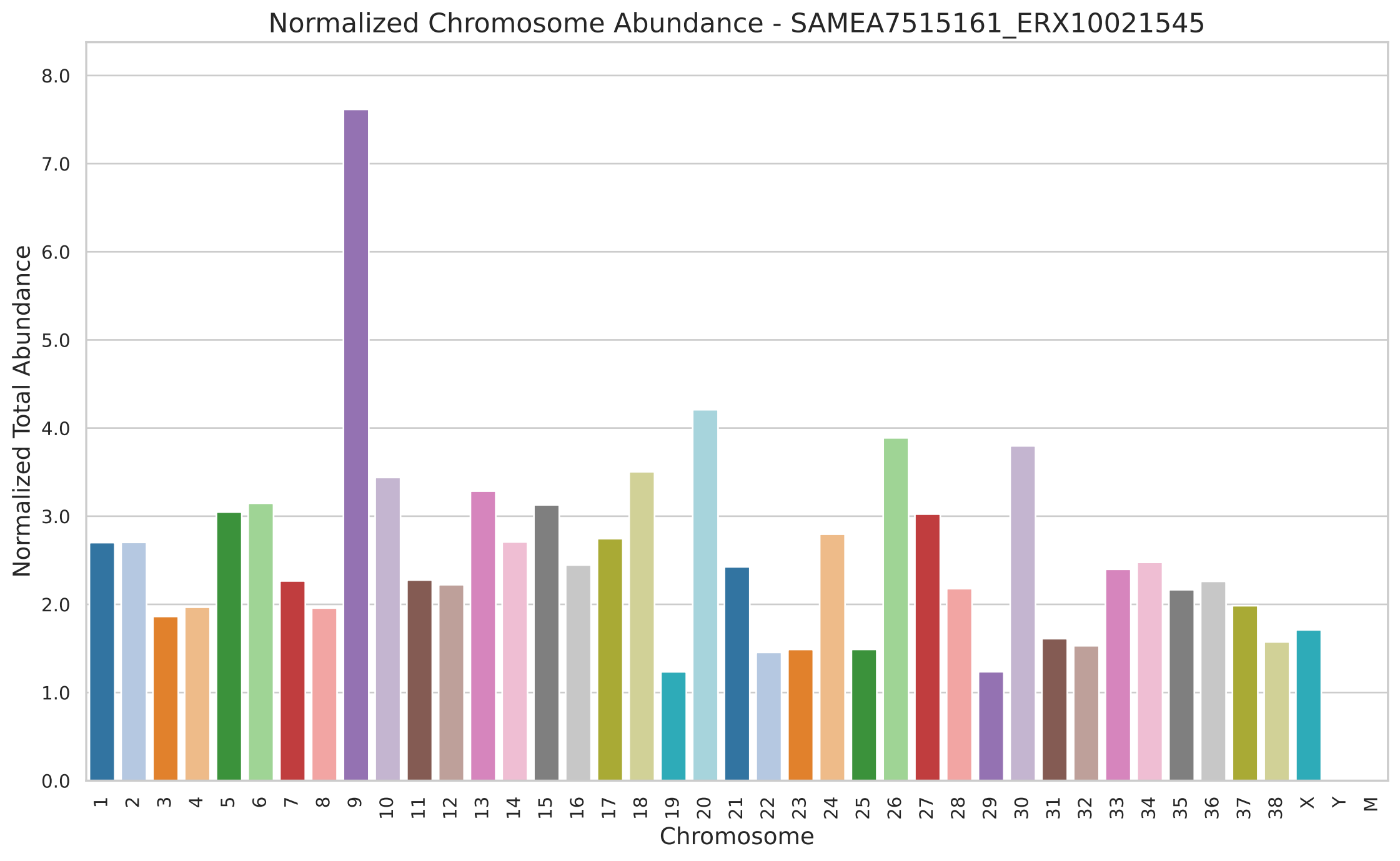

Normalized Chromosome Abundance - SAMEA7515208_ERX10021525
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

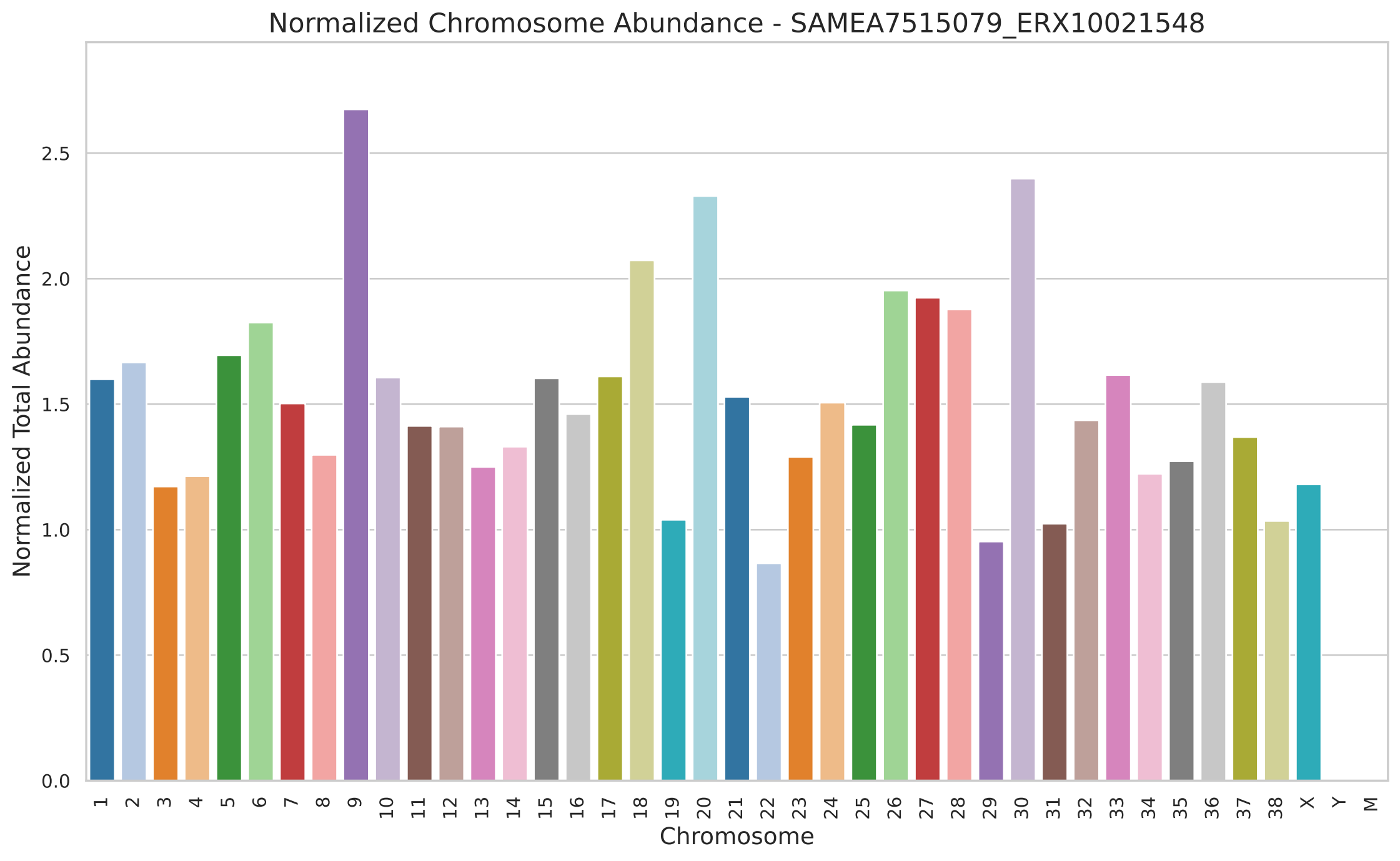

Normalized Chromosome Abundance - SAMEA7515164_ERX10021546
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

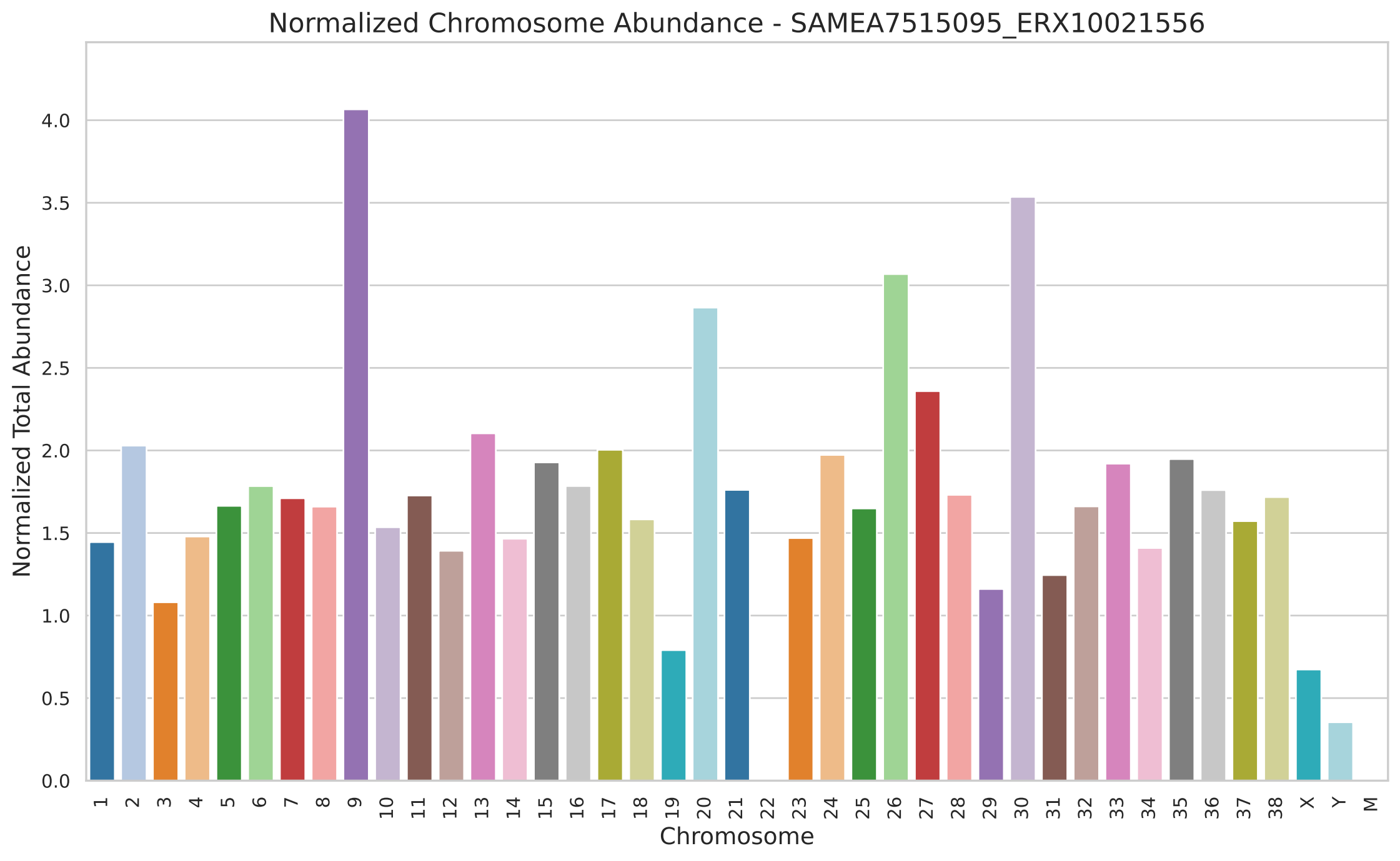

Normalized Chromosome Abundance - SAMEA7515103_ERX10021563
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

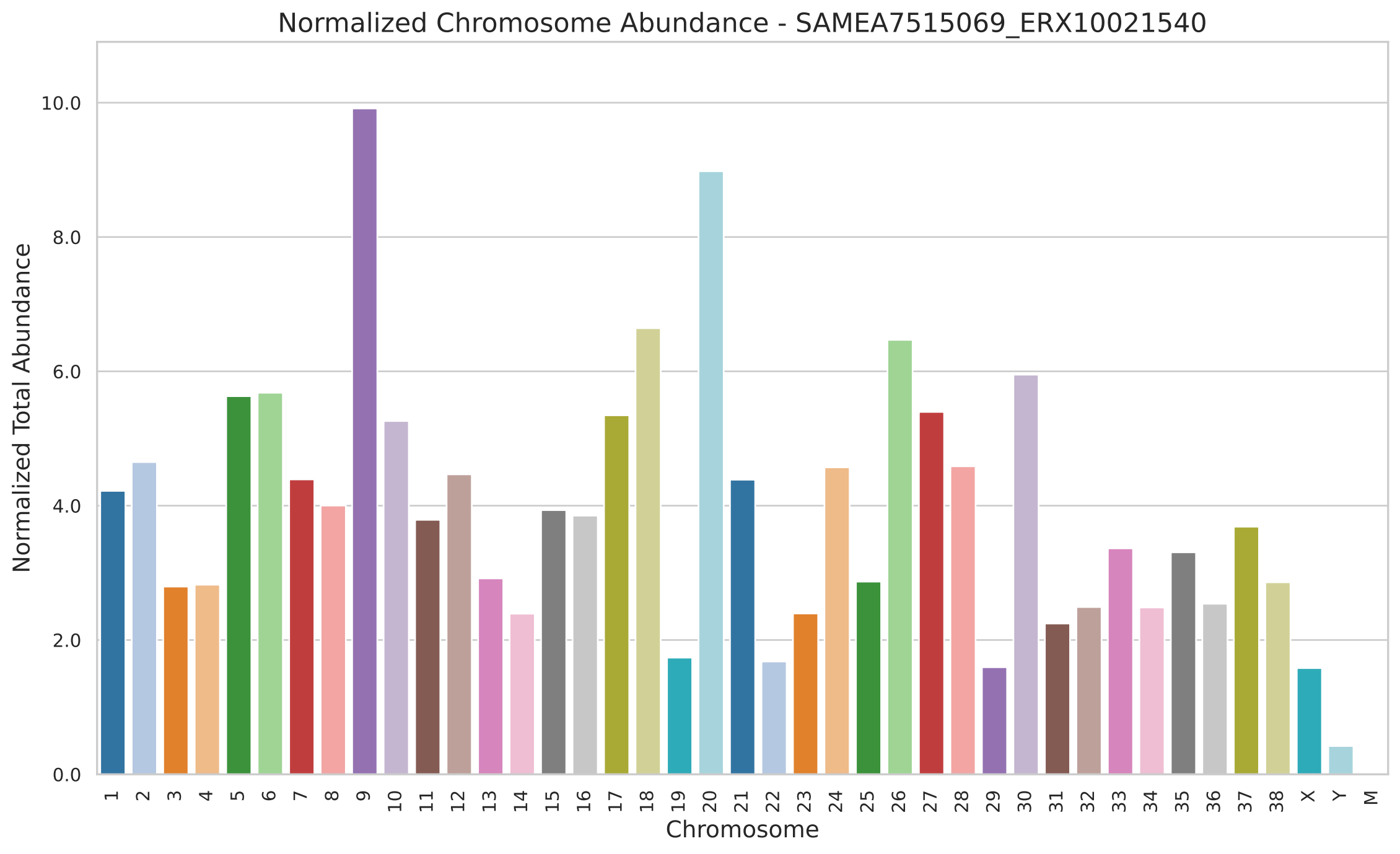

Normalized Chromosome Abundance - SAMEA7515068_ERX10021543
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

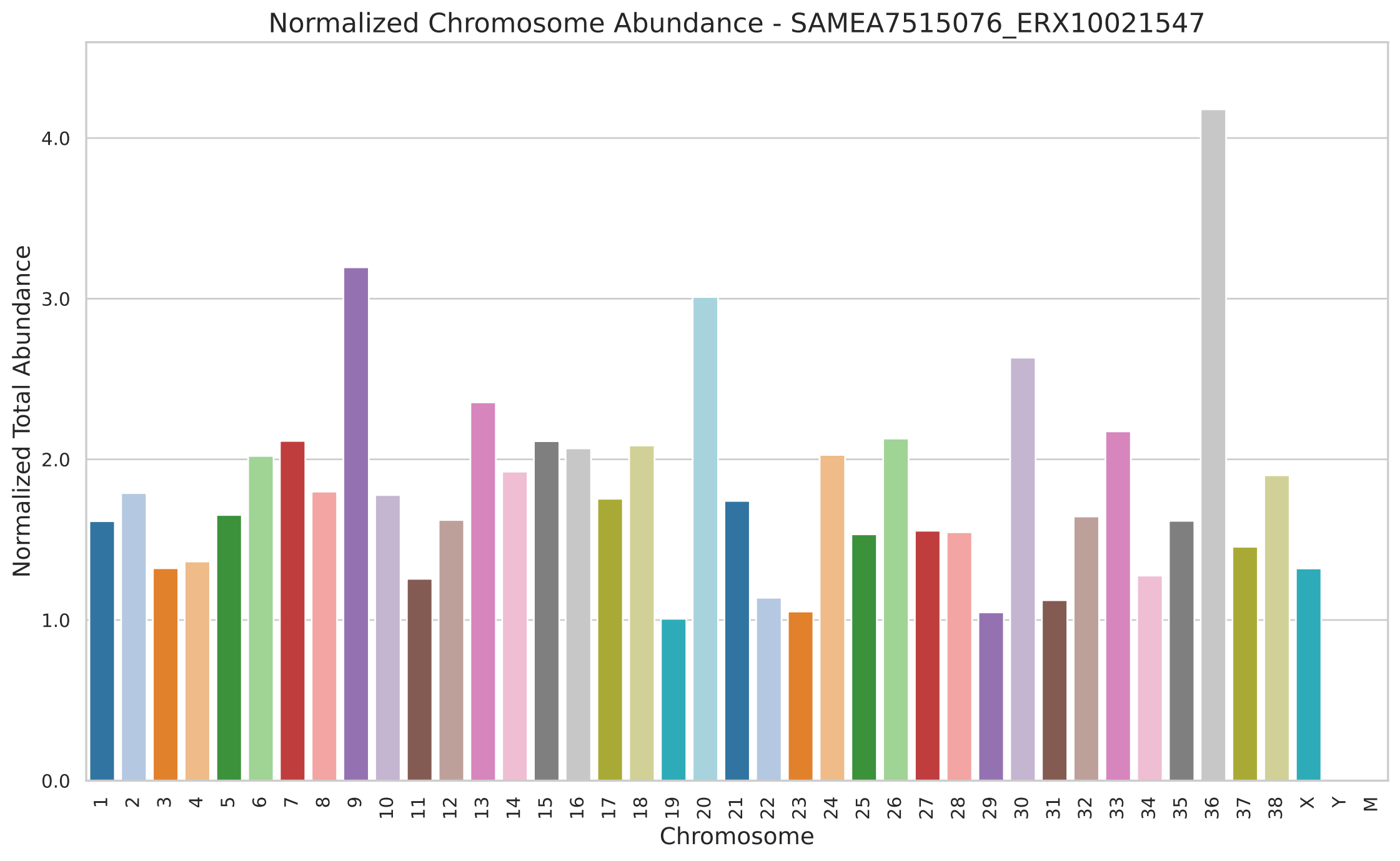

Normalized Chromosome Abundance - SAMEA7515083_ERX10021550
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

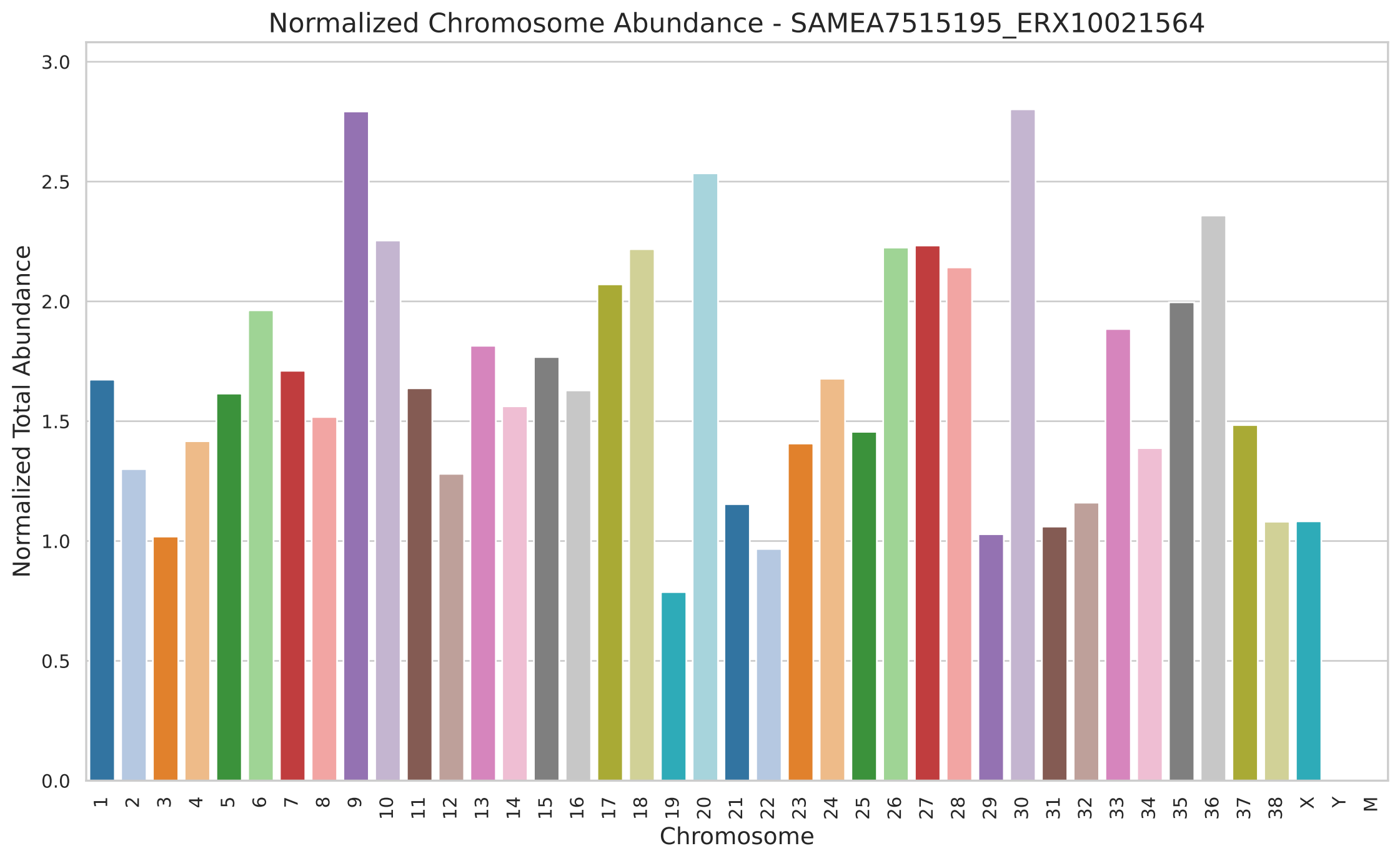

Normalized Chromosome Abundance - SAMEA7515161_ERX10021545
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

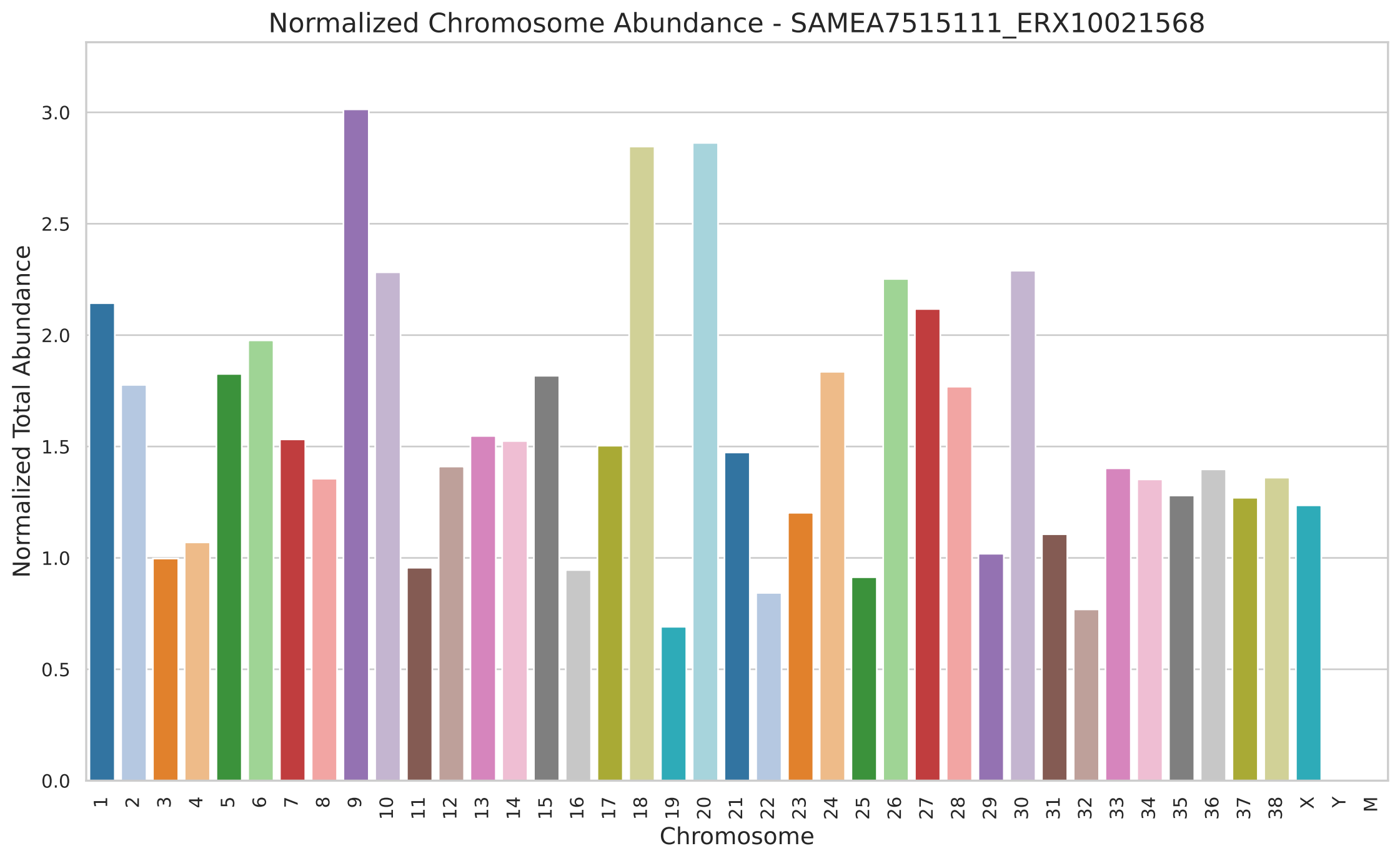

Normalized Chromosome Abundance - SAMEA7515079_ERX10021548
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

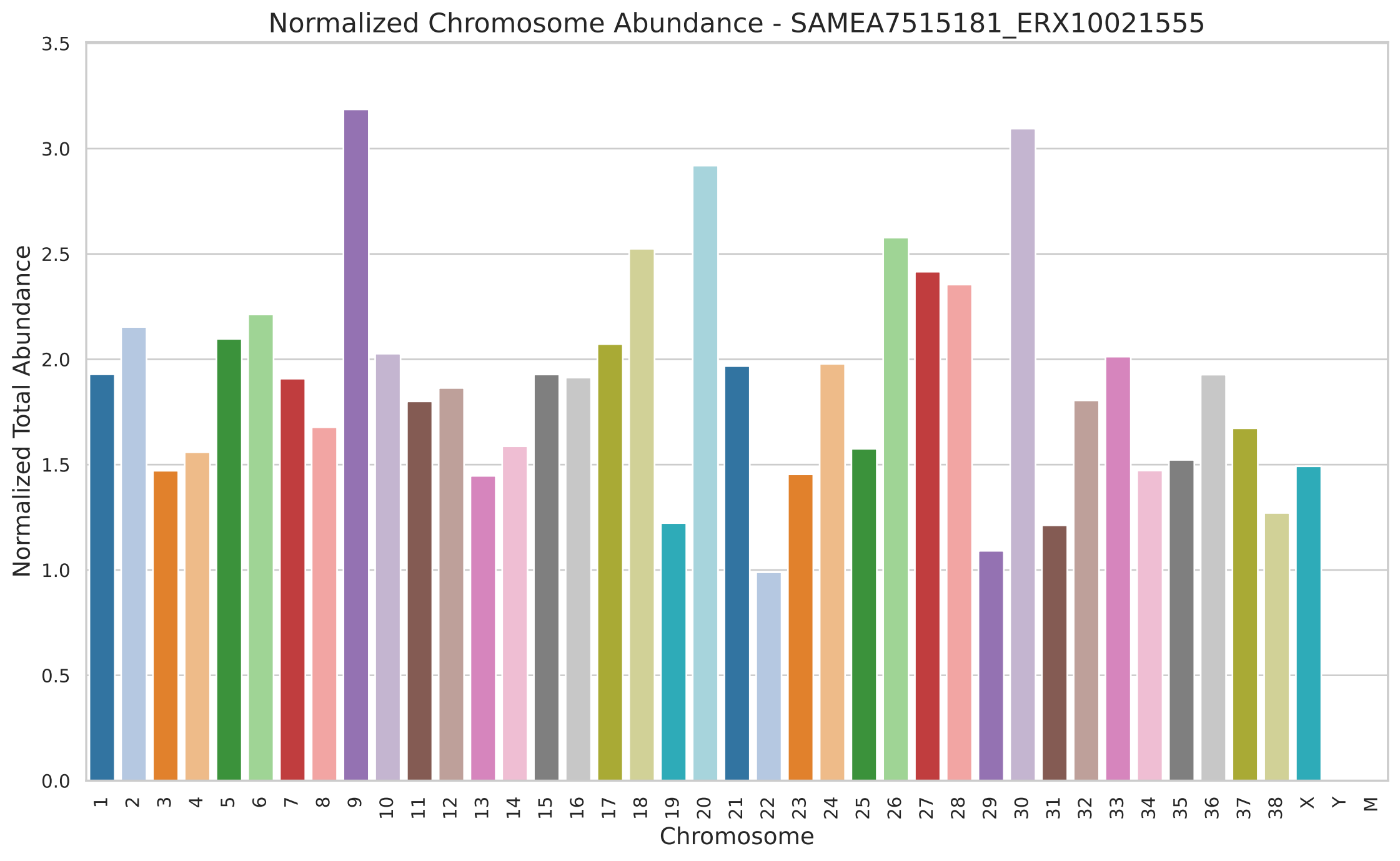

Normalized Chromosome Abundance - SAMEA7515095_ERX10021556
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

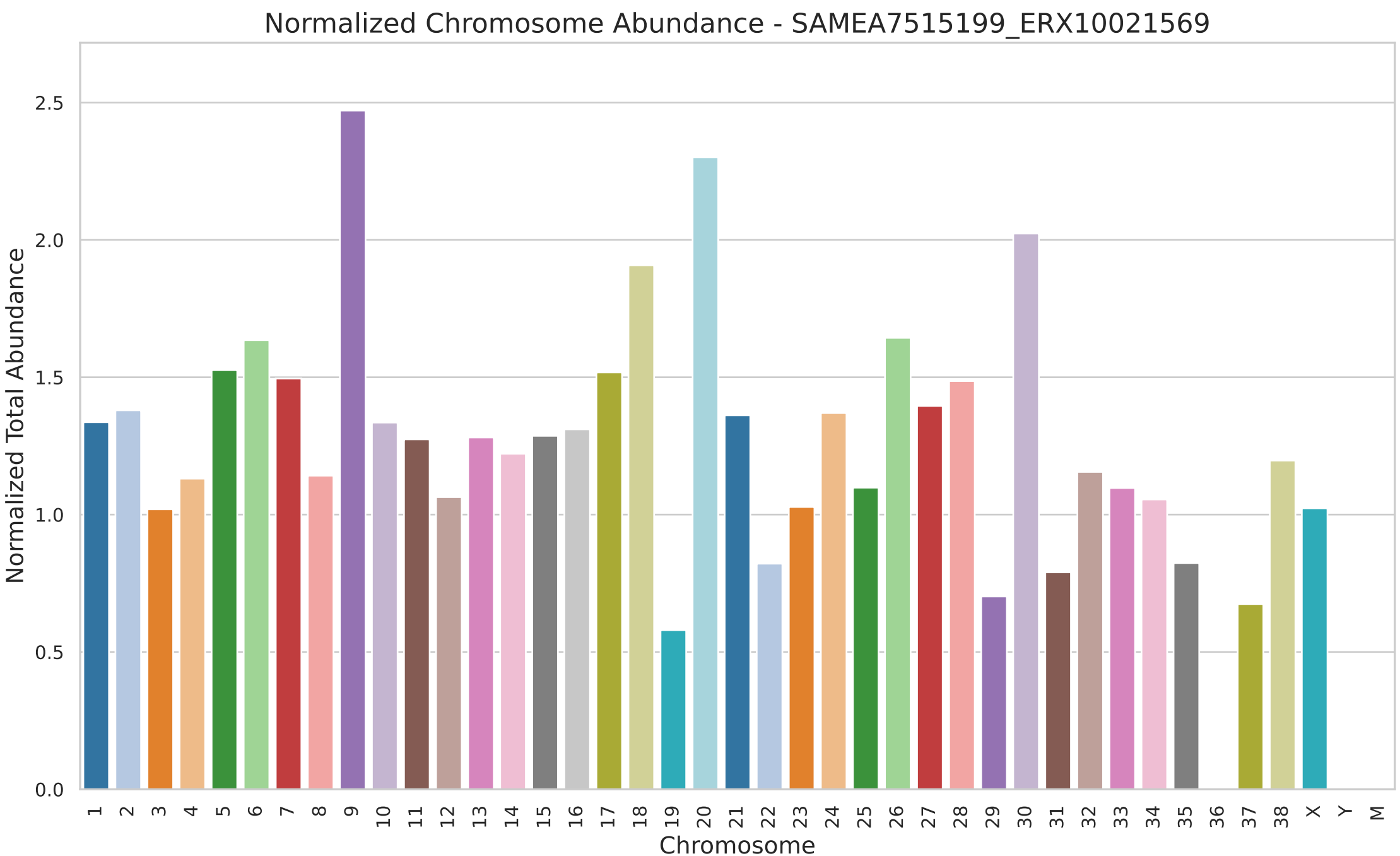

Normalized Chromosome Abundance - SAMEA7515069_ERX10021540
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

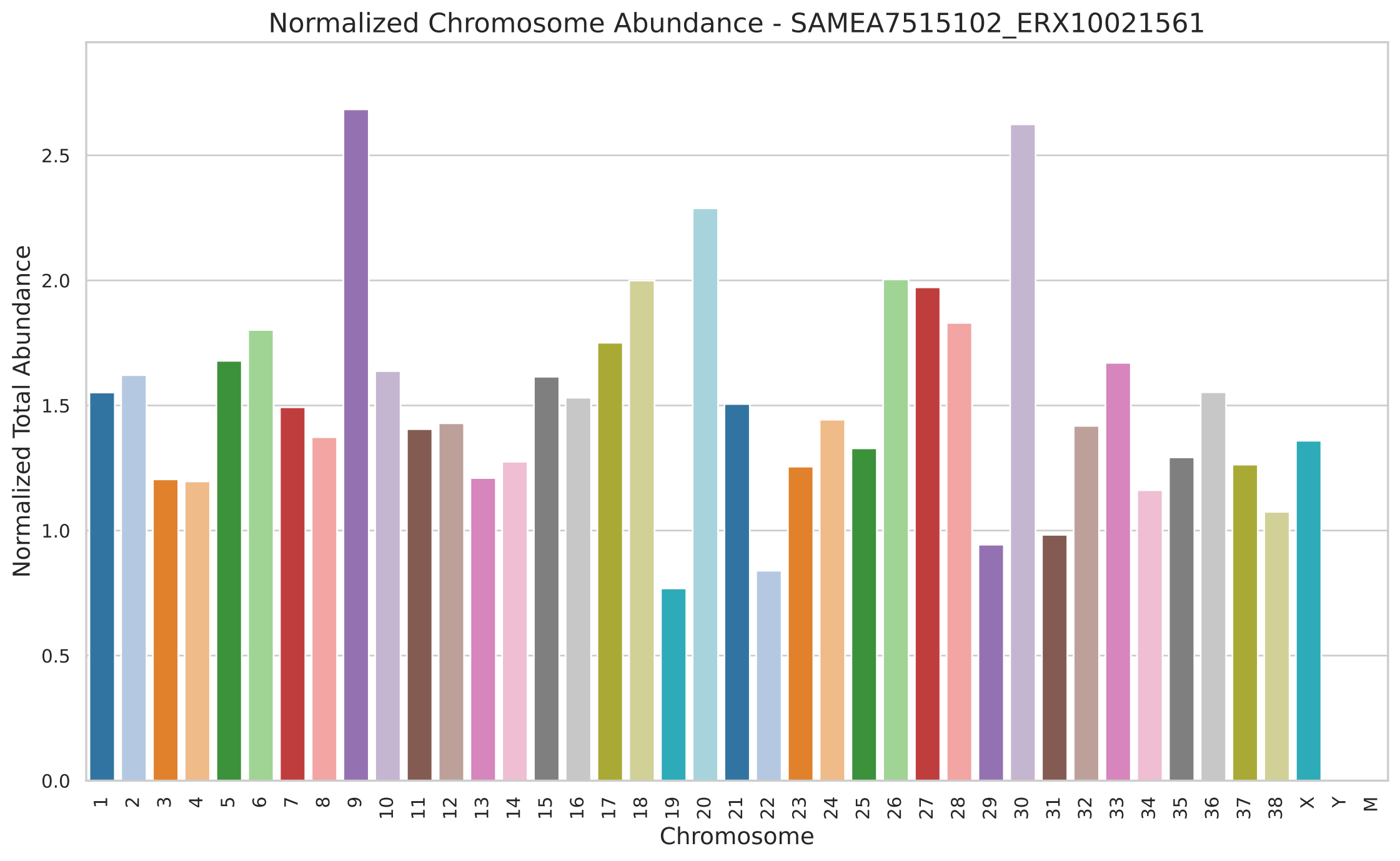

Normalized Chromosome Abundance - SAMEA7515076_ERX10021547
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

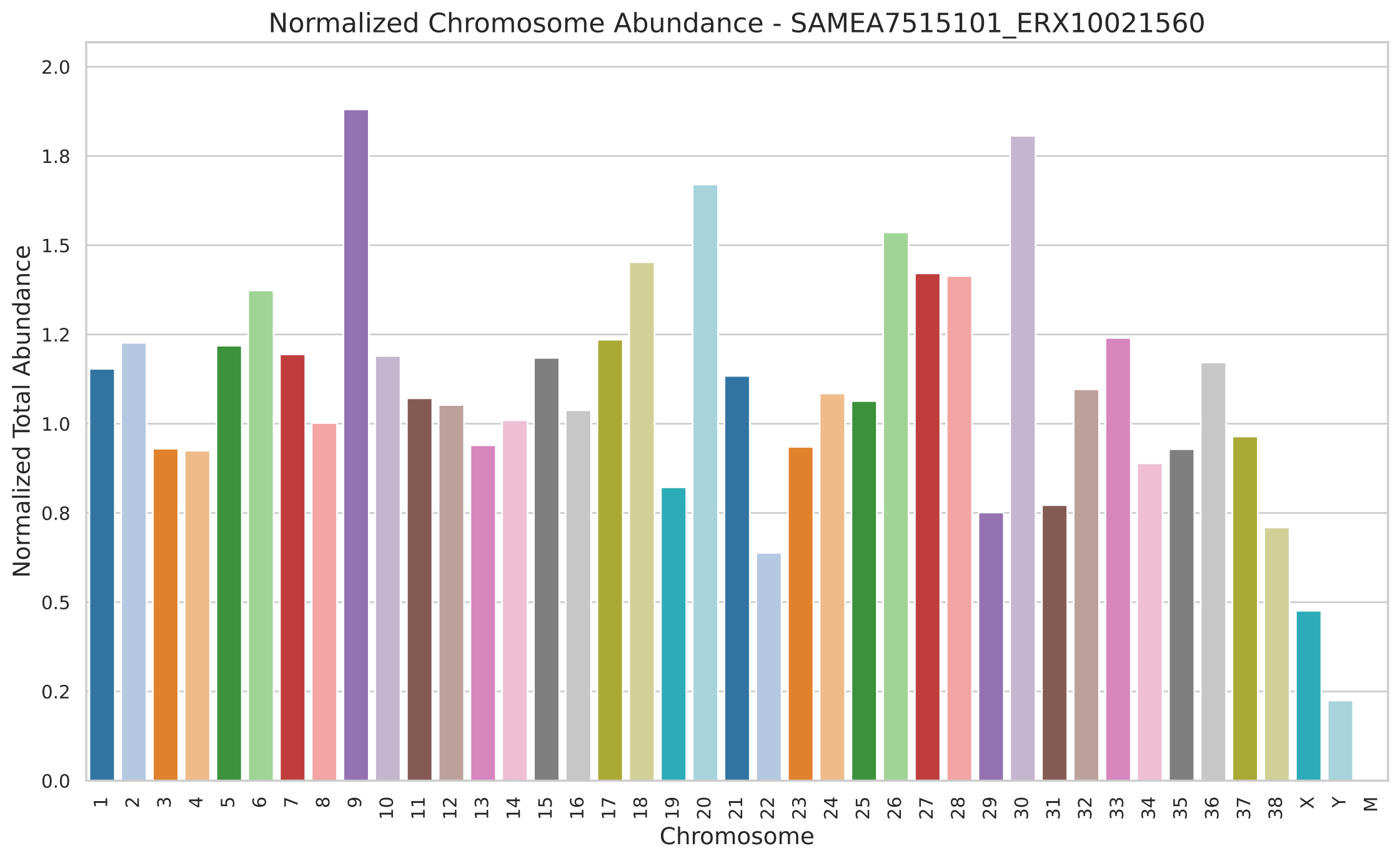

Normalized Chromosome Abundance - SAMEA7515195_ERX10021564
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

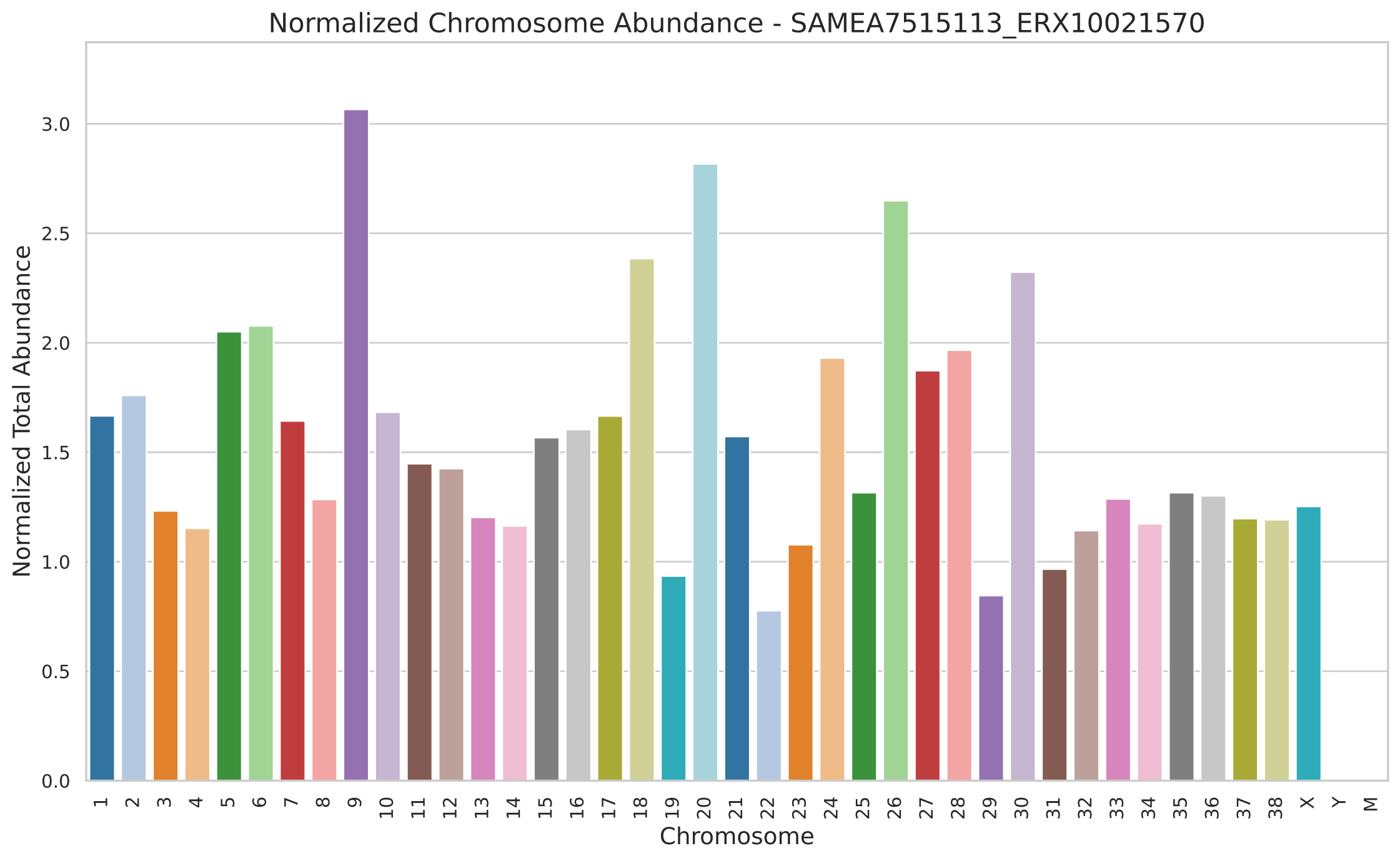

Normalized Chromosome Abundance - SAMEA7515111_ERX10021568
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

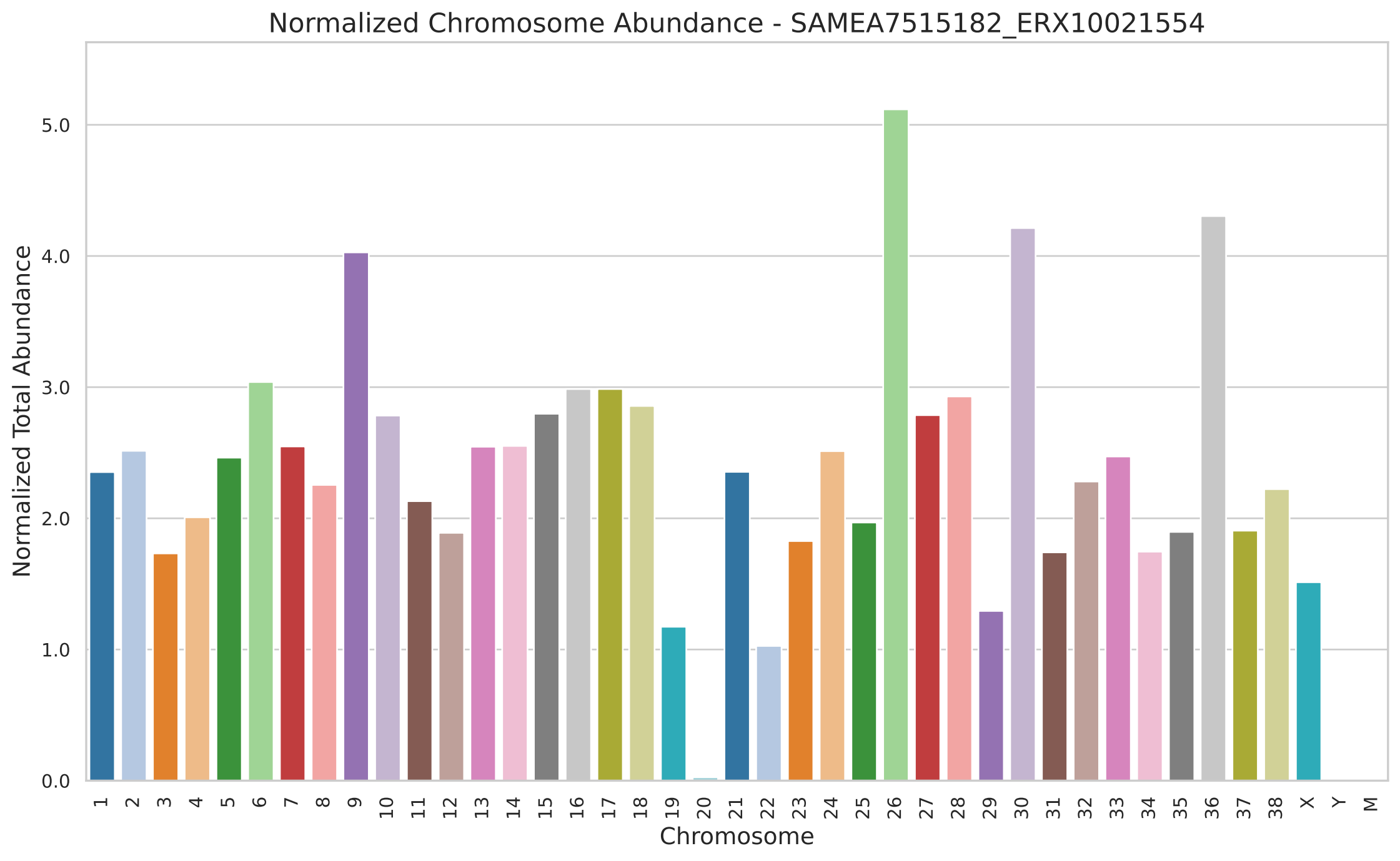

Normalized Chromosome Abundance - SAMEA7515181_ERX10021555
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

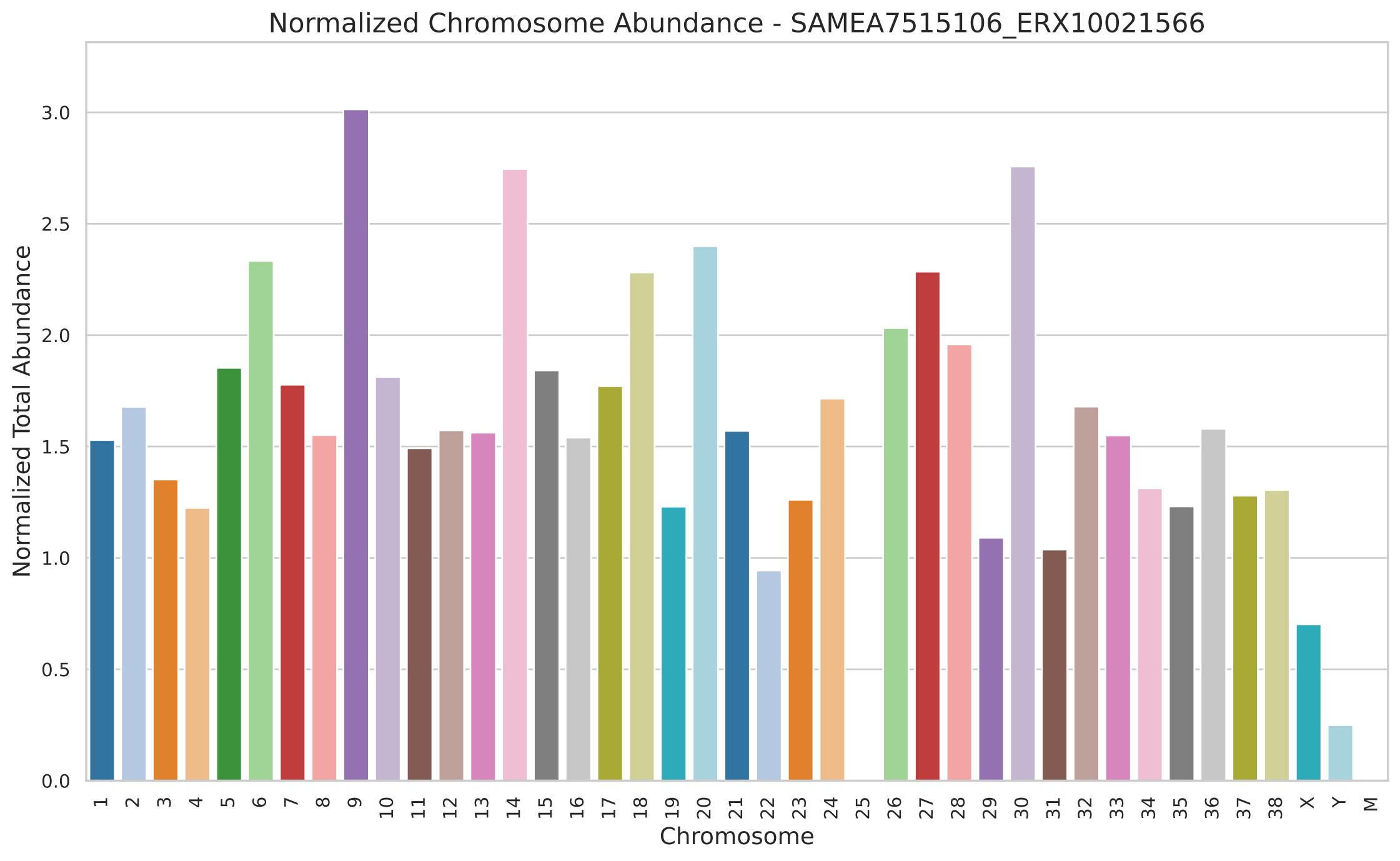

Normalized Chromosome Abundance - SAMEA7515199_ERX10021569
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

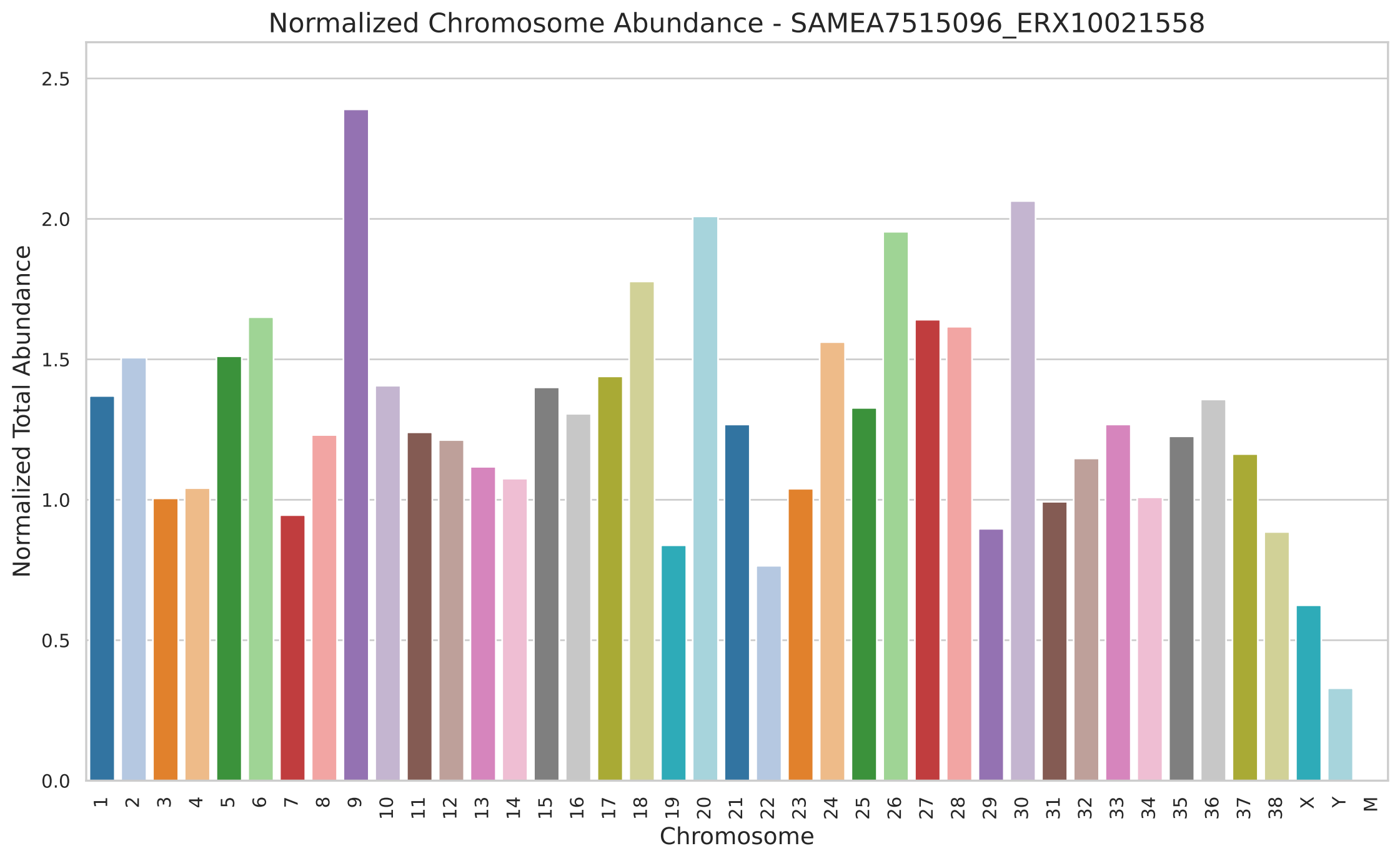

Normalized Chromosome Abundance - SAMEA7515102_ERX10021561
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

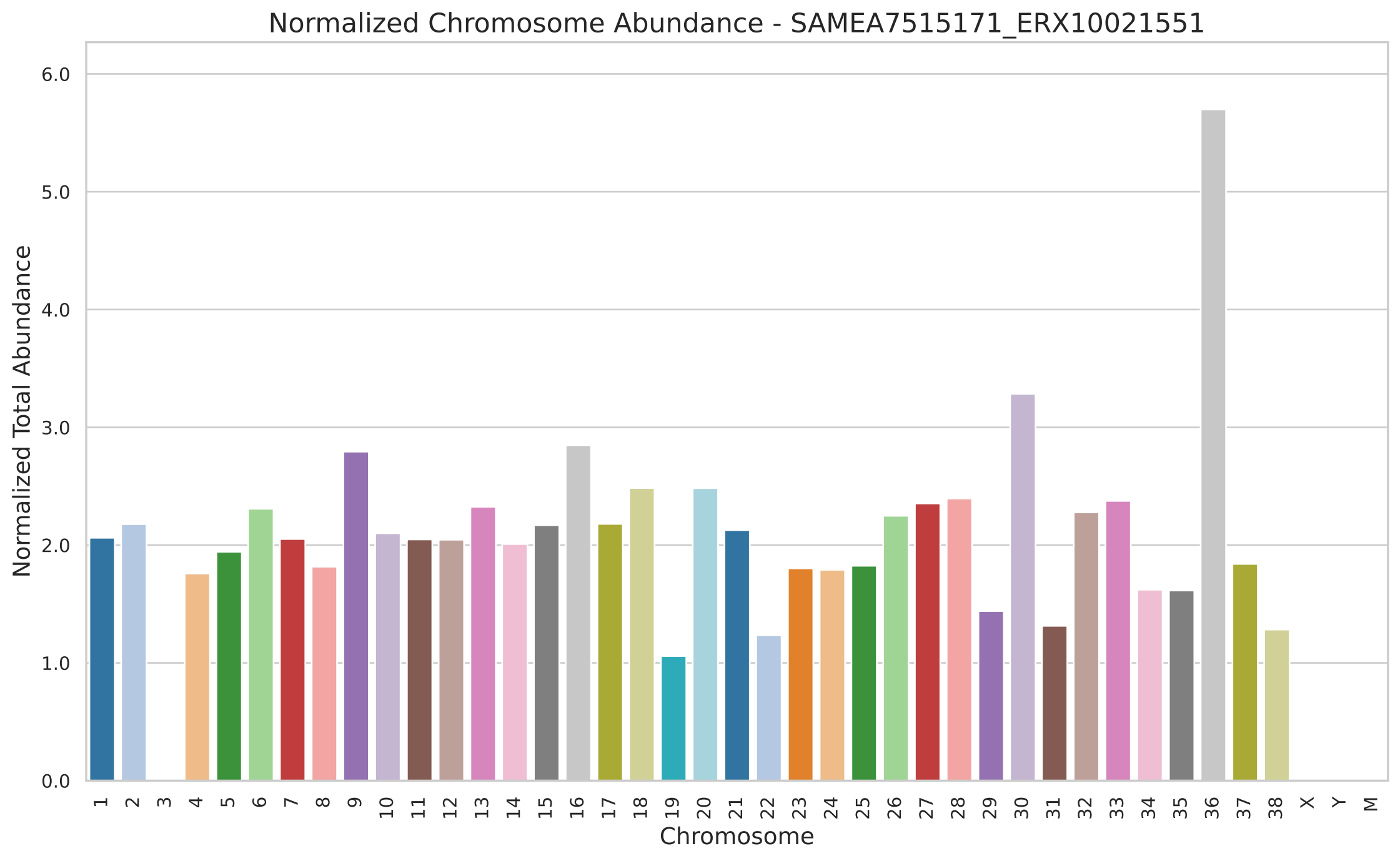

Normalized Chromosome Abundance - SAMEA7515101_ERX10021560
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

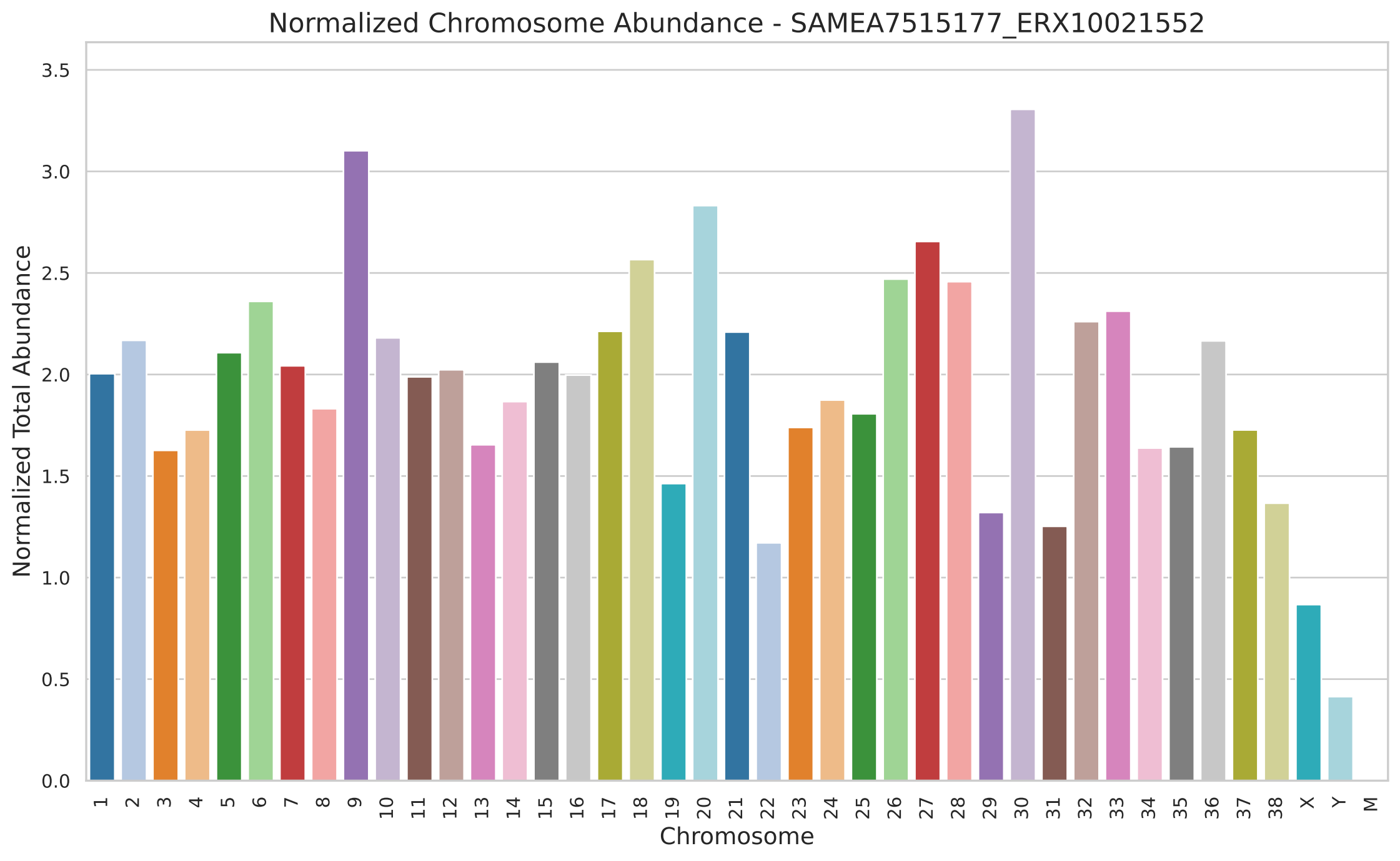

Normalized Chromosome Abundance - SAMEA7515113_ERX10021570
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

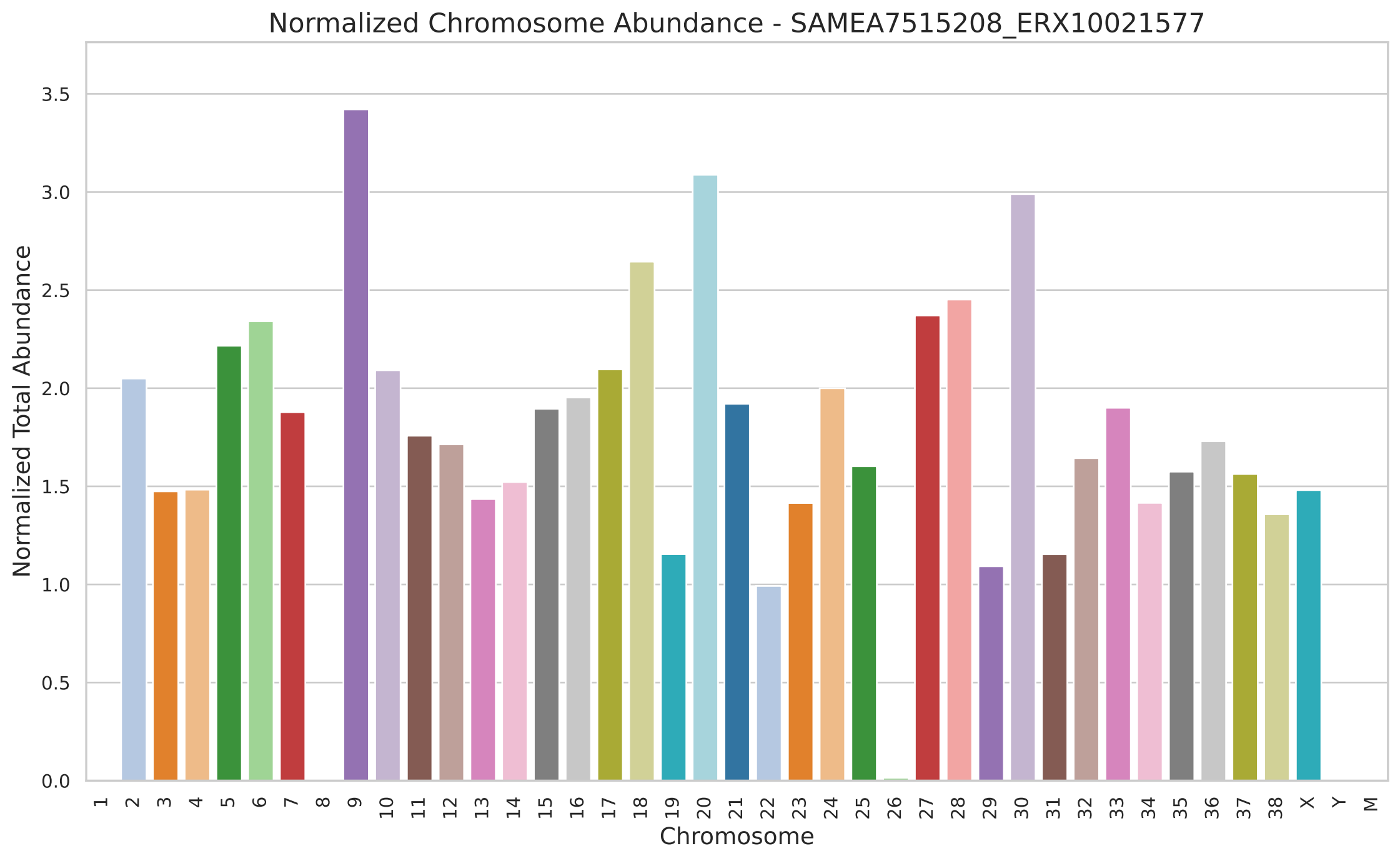

Normalized Chromosome Abundance - SAMEA7515182_ERX10021554
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

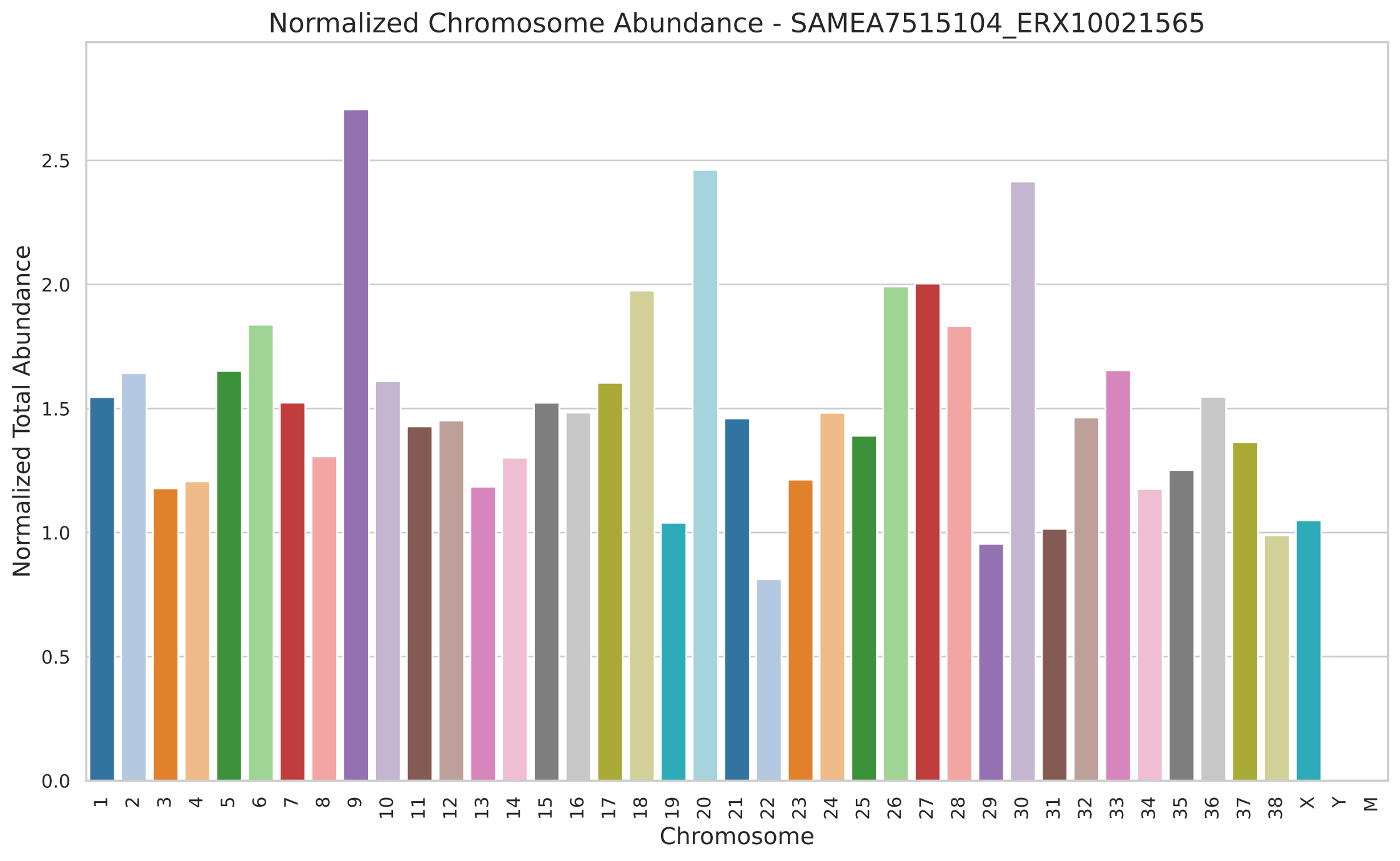

Normalized Chromosome Abundance - SAMEA7515106_ERX10021566
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

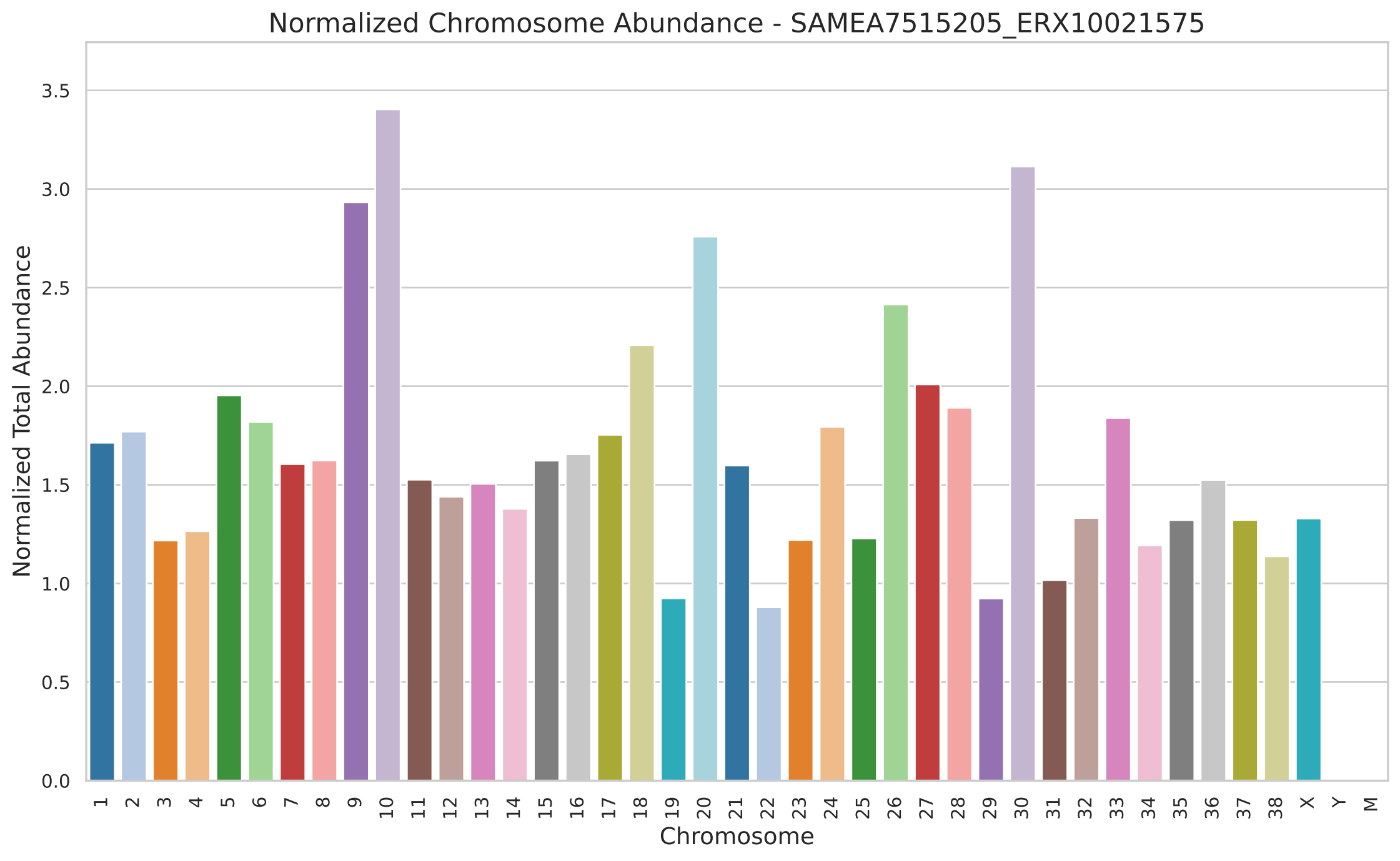

Normalized Chromosome Abundance - SAMEA7515096_ERX10021558
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

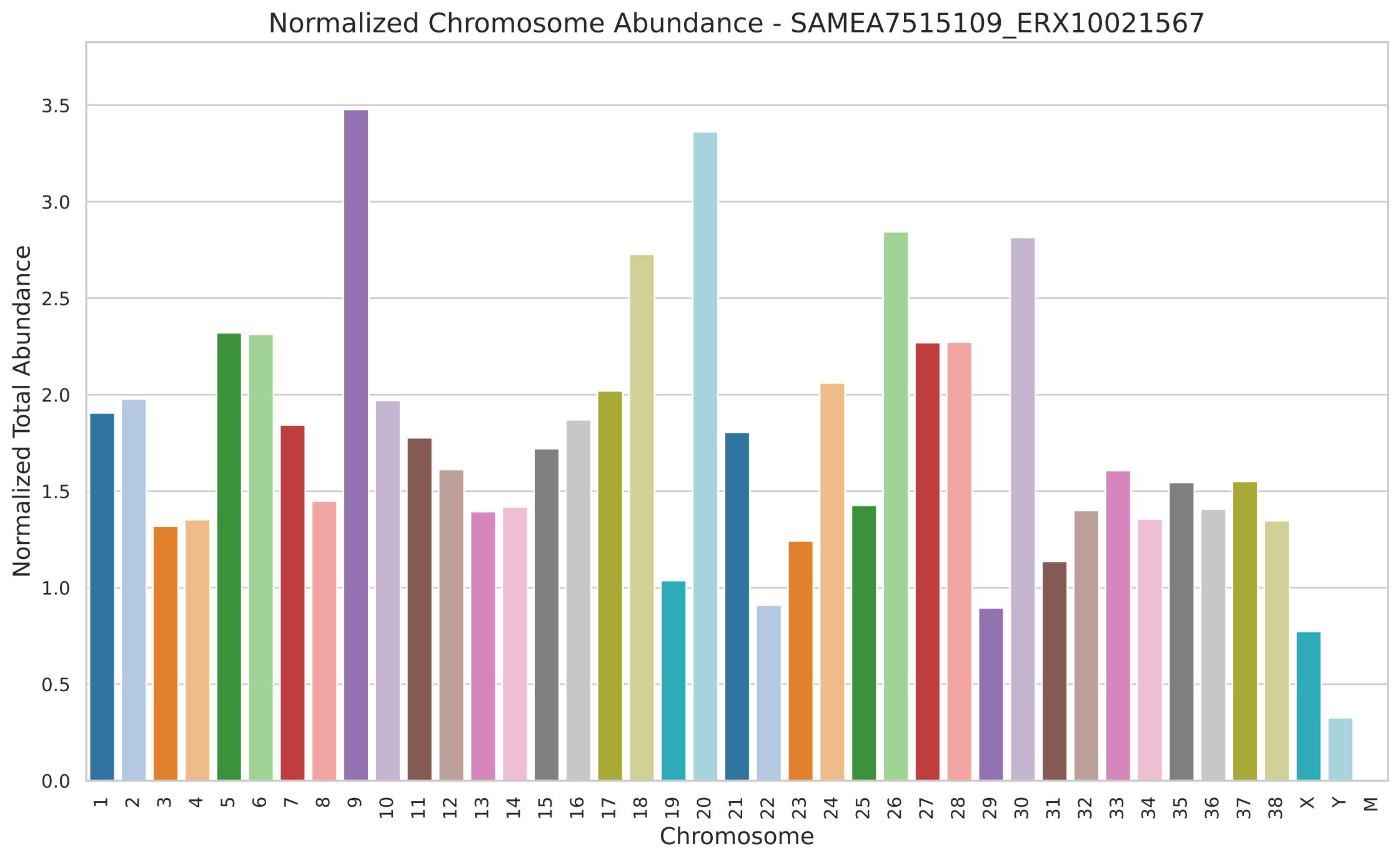

Normalized Chromosome Abundance - SAMEA7515171_ERX10021551
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

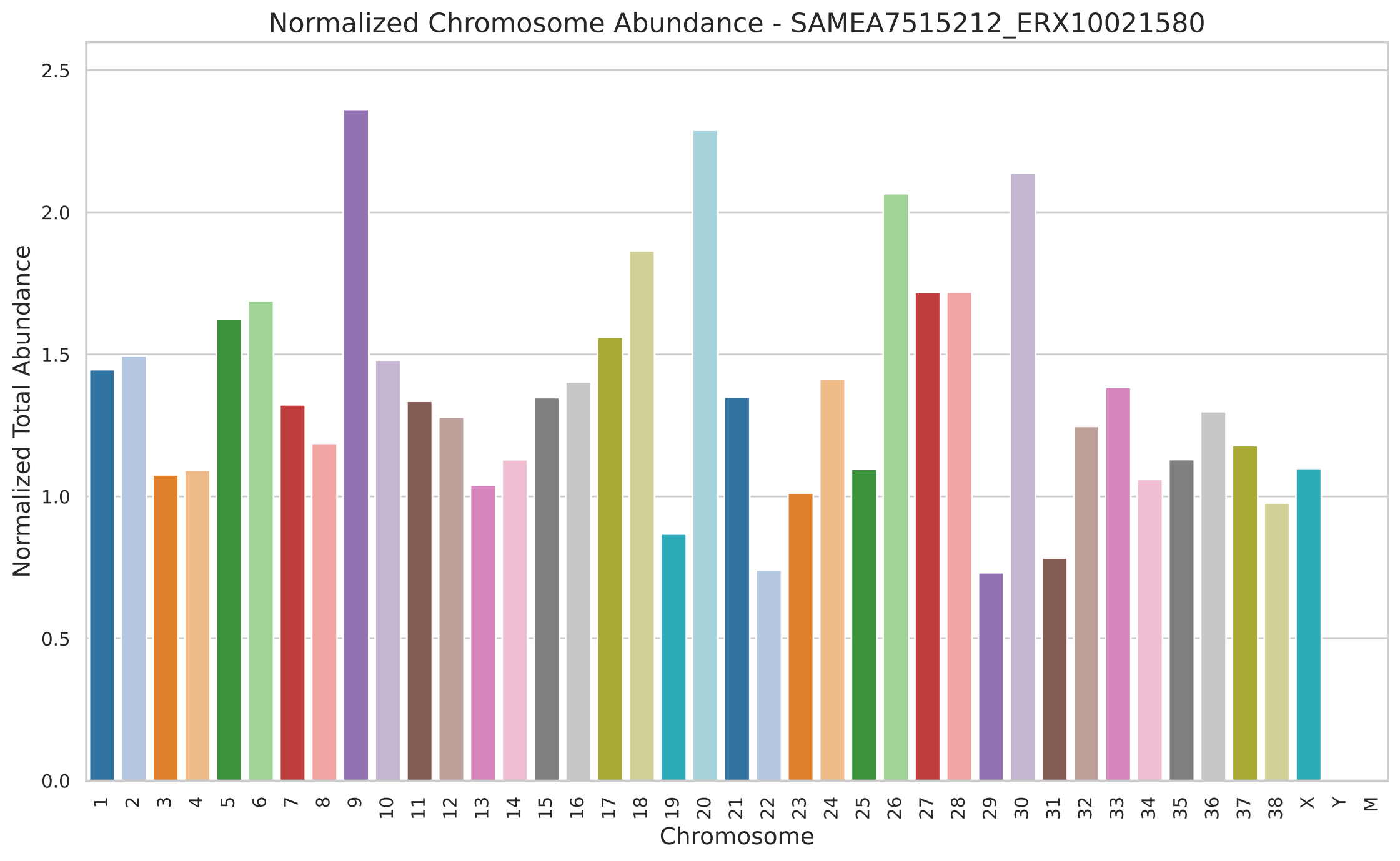

Normalized Chromosome Abundance - SAMEA7515177_ERX10021552
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

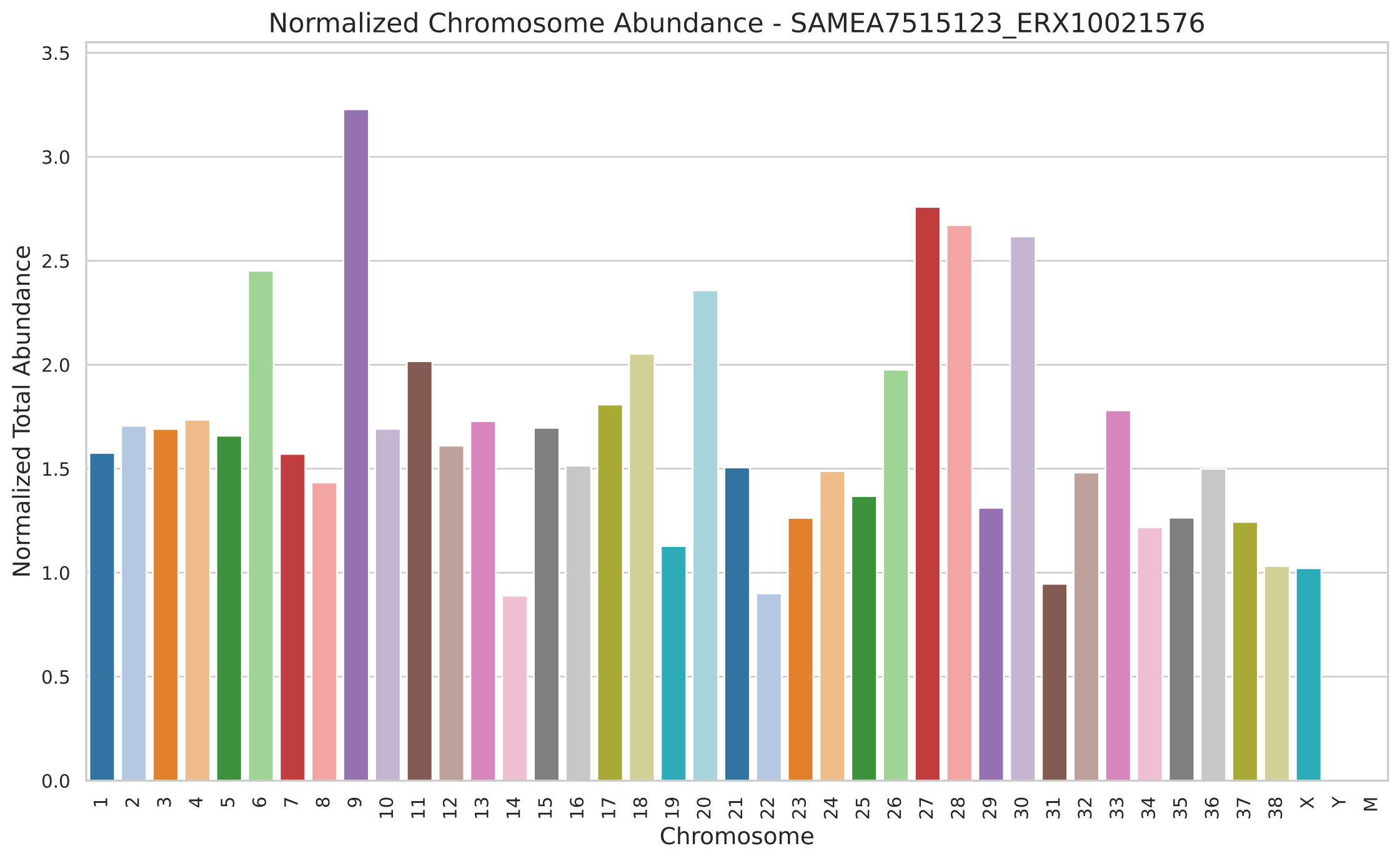

Normalized Chromosome Abundance - SAMEA7515208_ERX10021577
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

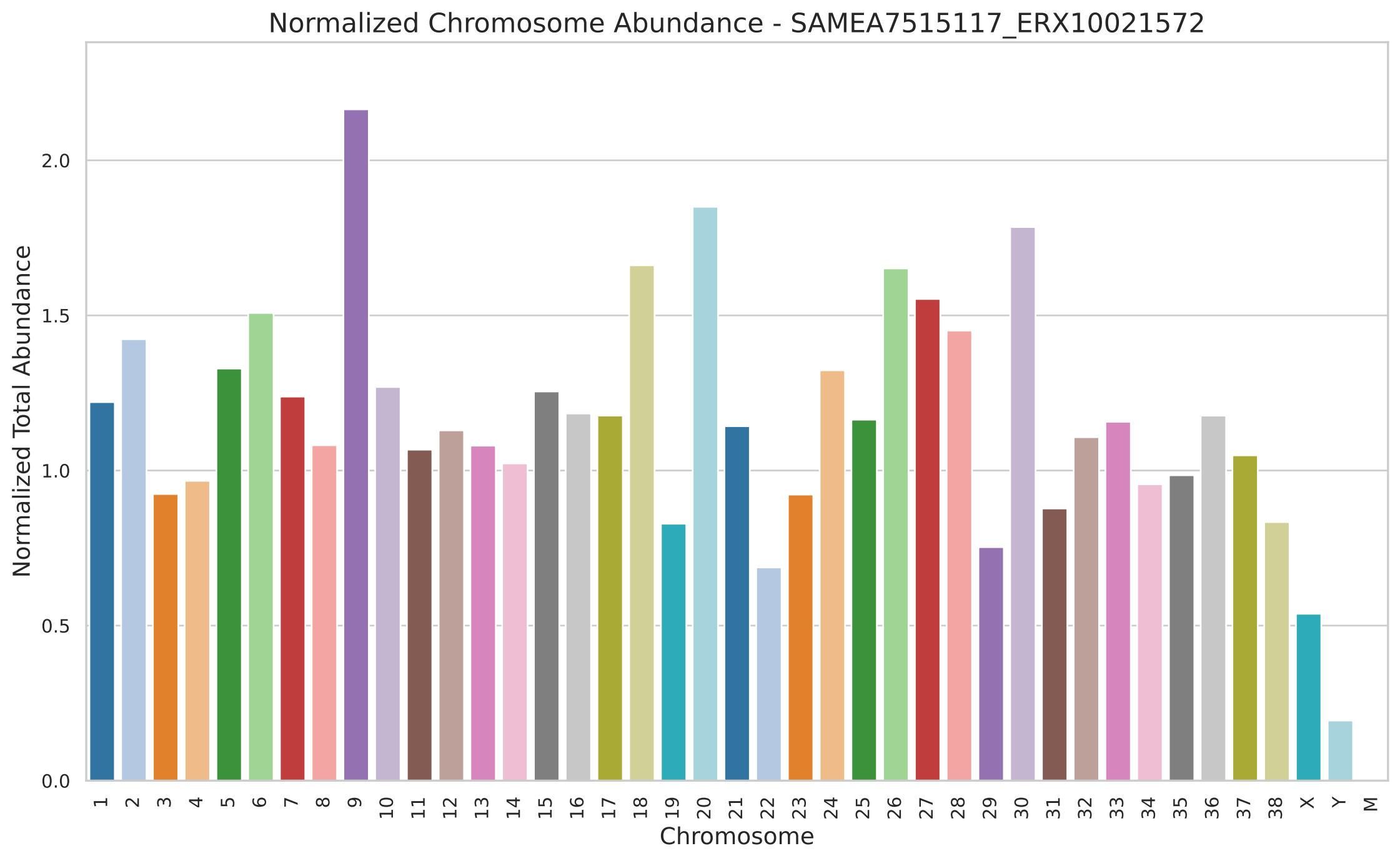

Normalized Chromosome Abundance - SAMEA7515104_ERX10021565
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

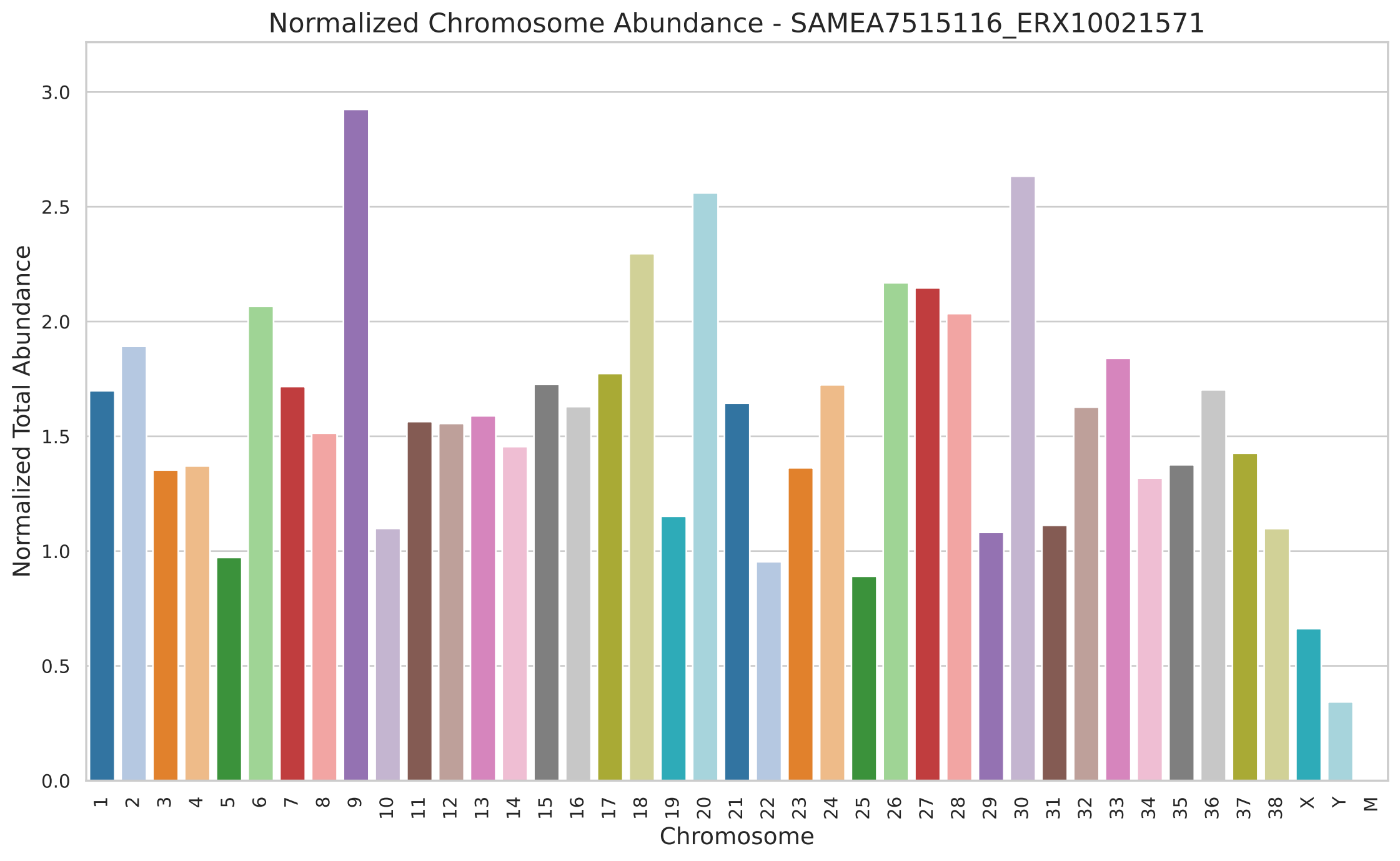

Normalized Chromosome Abundance - SAMEA7515205_ERX10021575
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

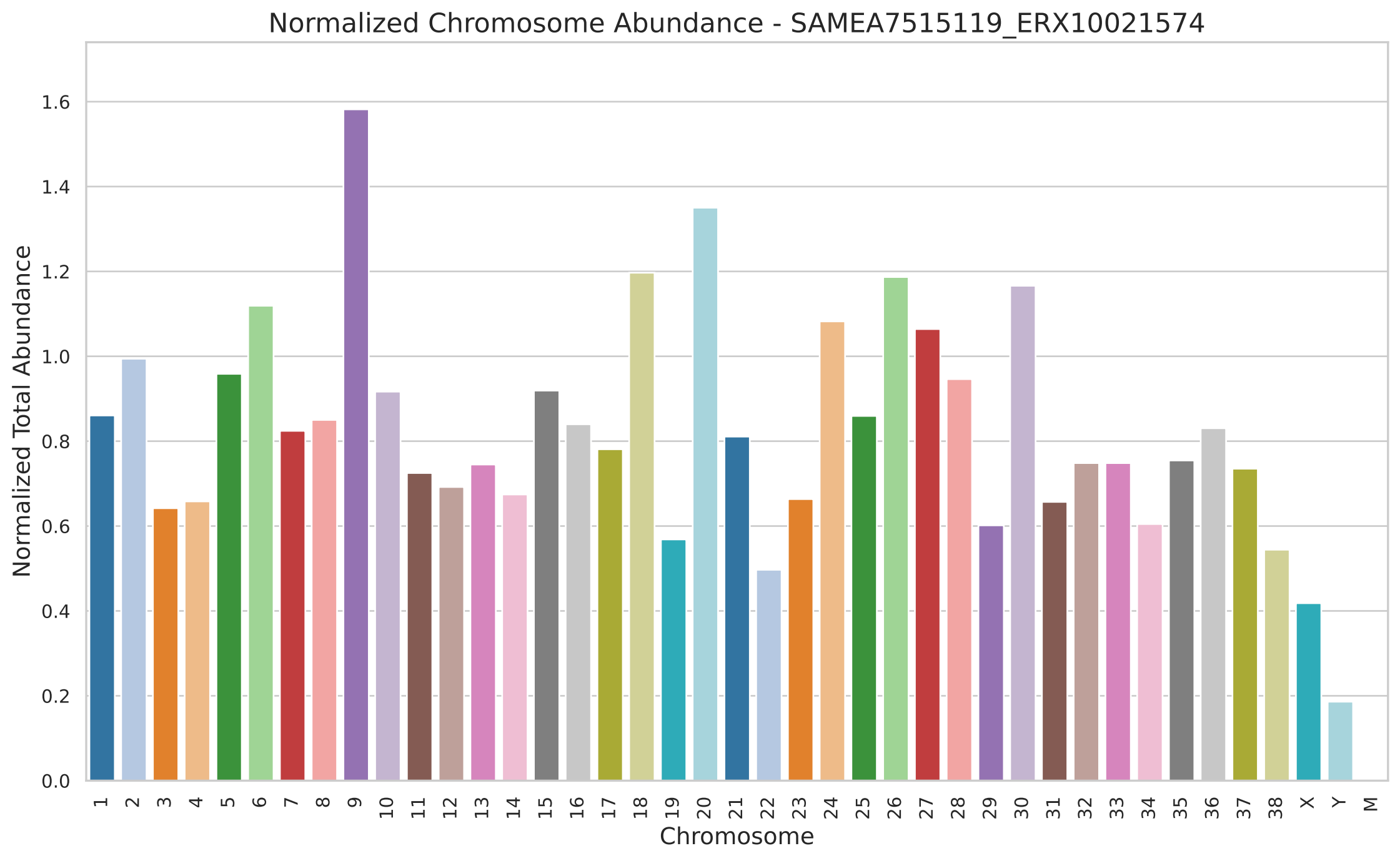

Normalized Chromosome Abundance - SAMEA7515109_ERX10021567
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

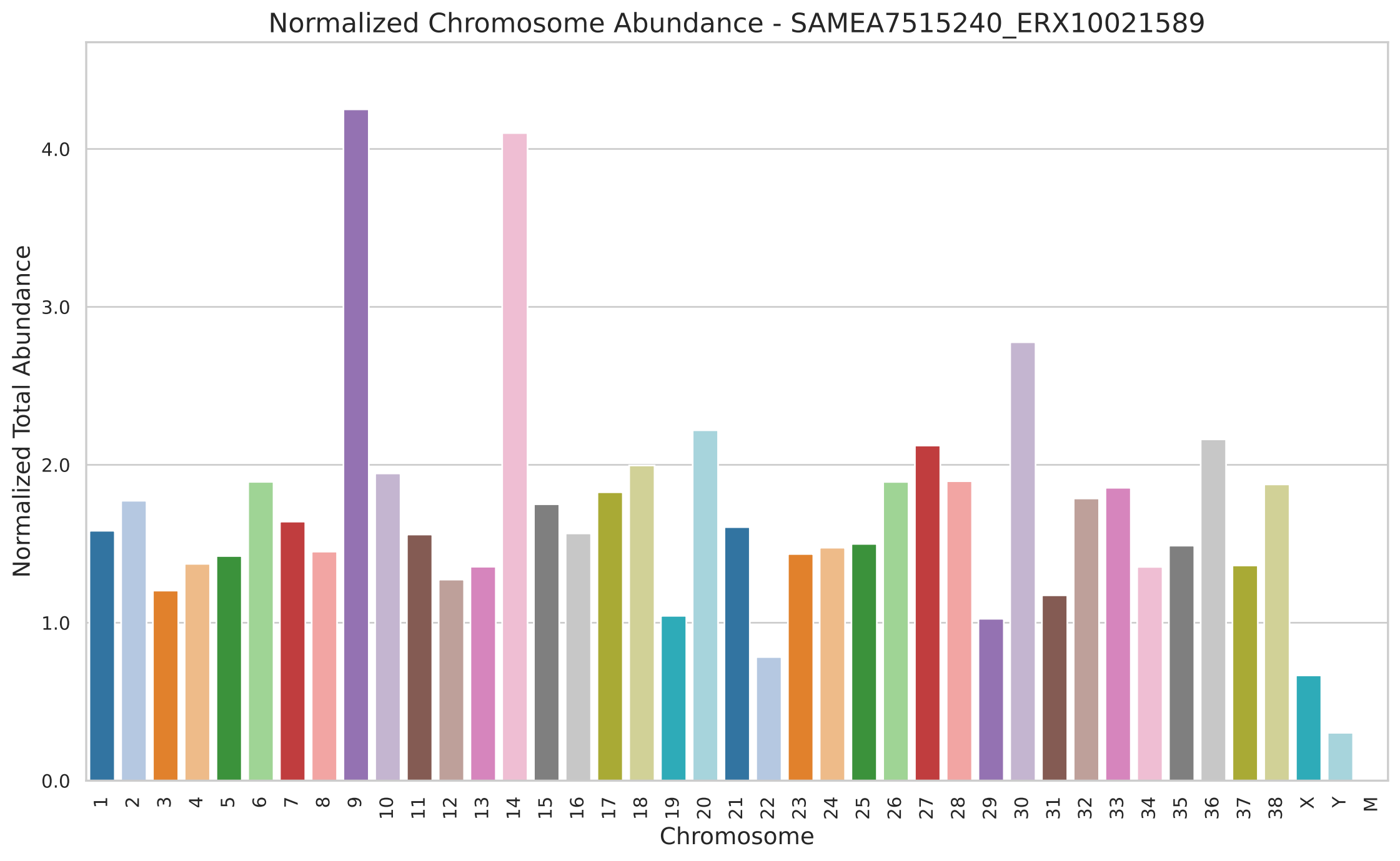

Normalized Chromosome Abundance - SAMEA7515212_ERX10021580
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

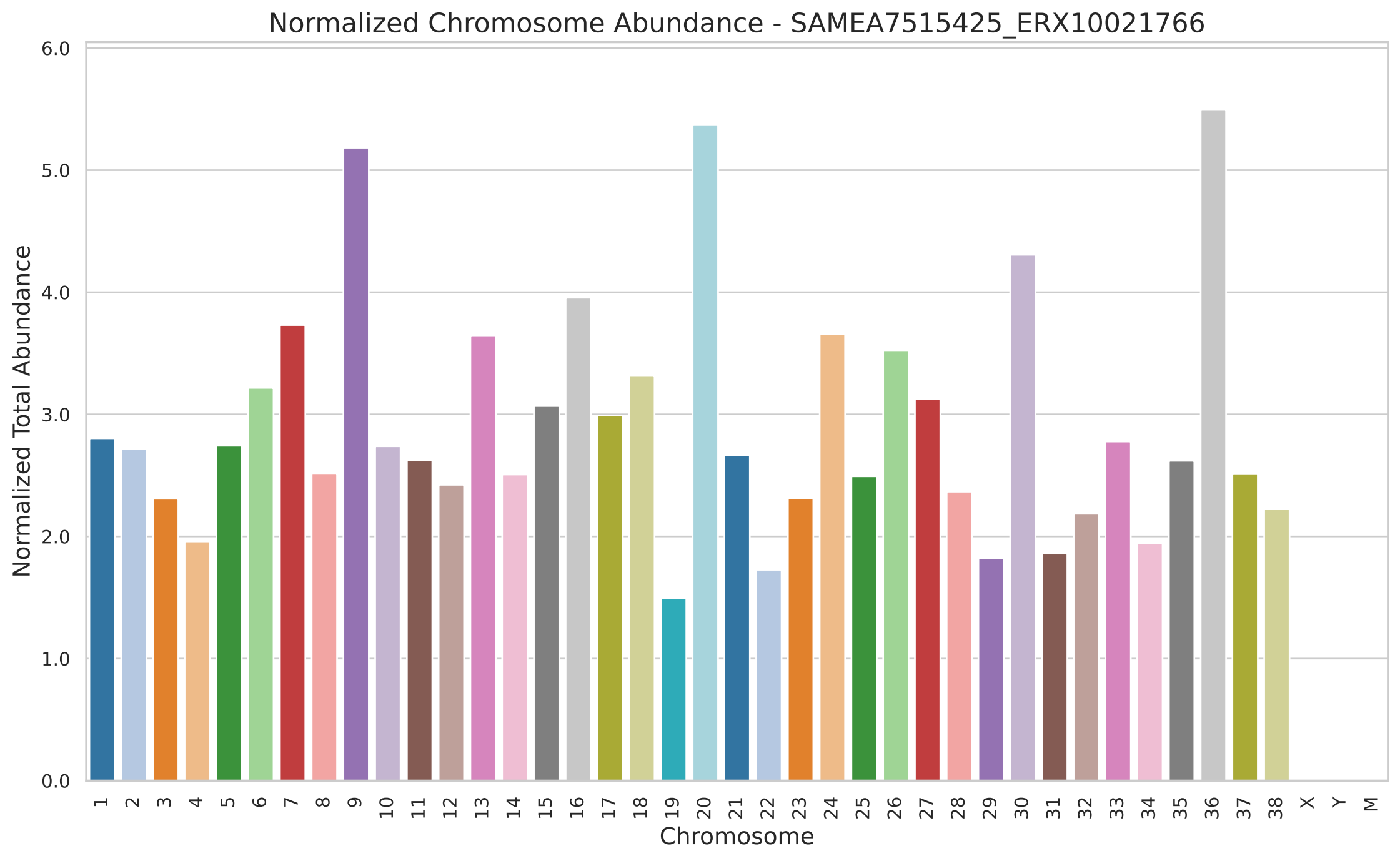

Normalized Chromosome Abundance - SAMEA7515123_ERX10021576
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

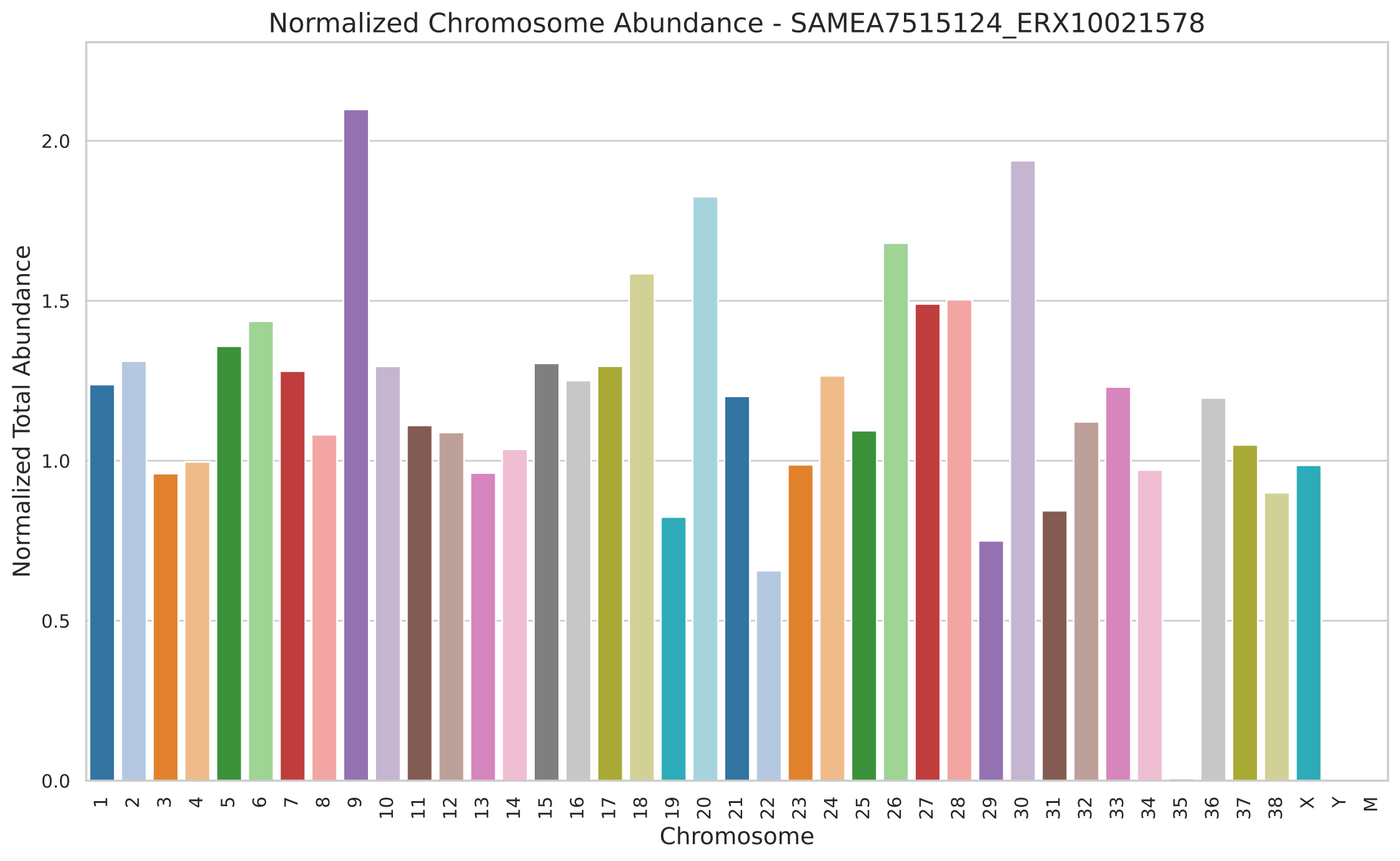

Normalized Chromosome Abundance - SAMEA7515117_ERX10021572
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

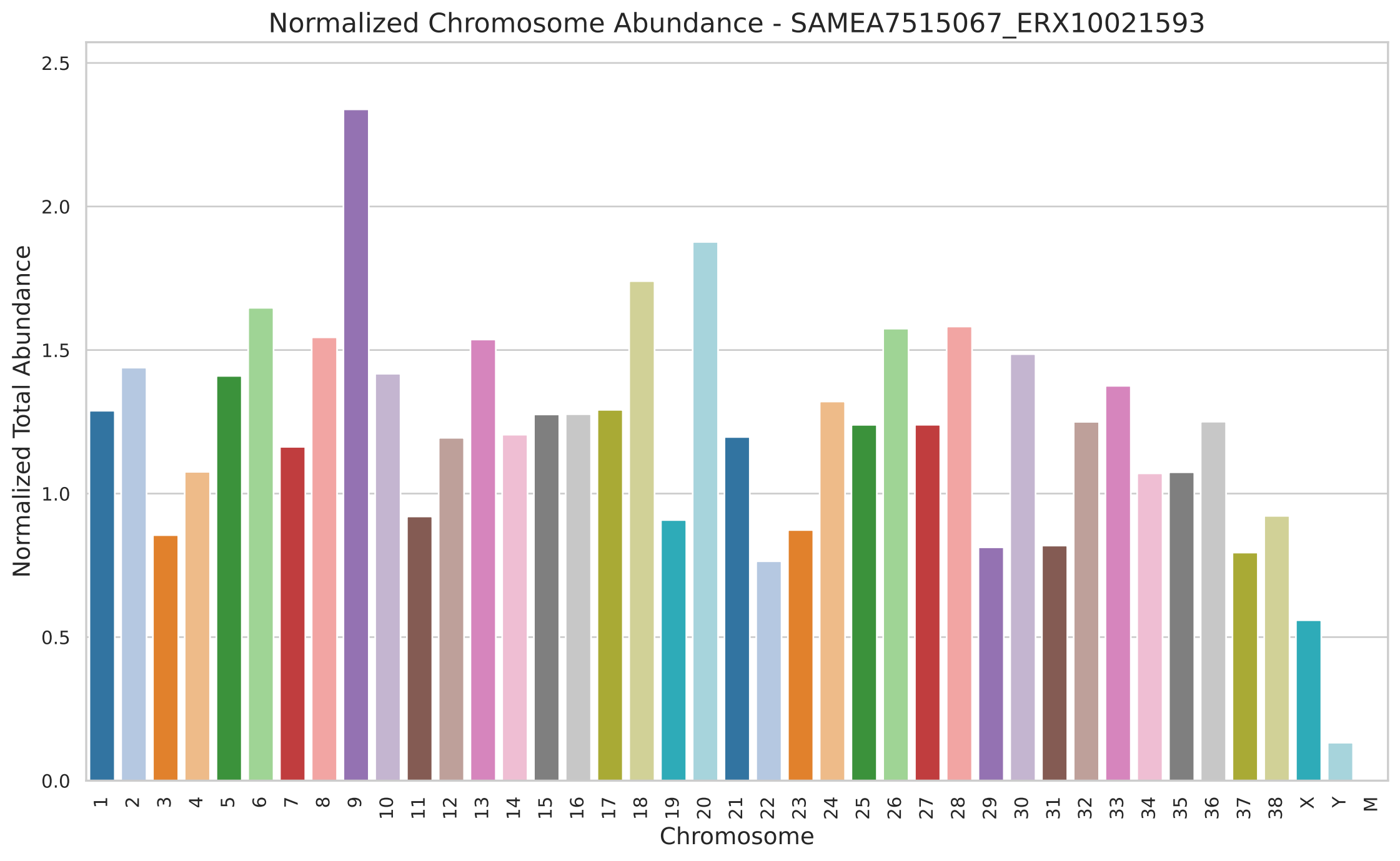

Normalized Chromosome Abundance - SAMEA7515116_ERX10021571
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

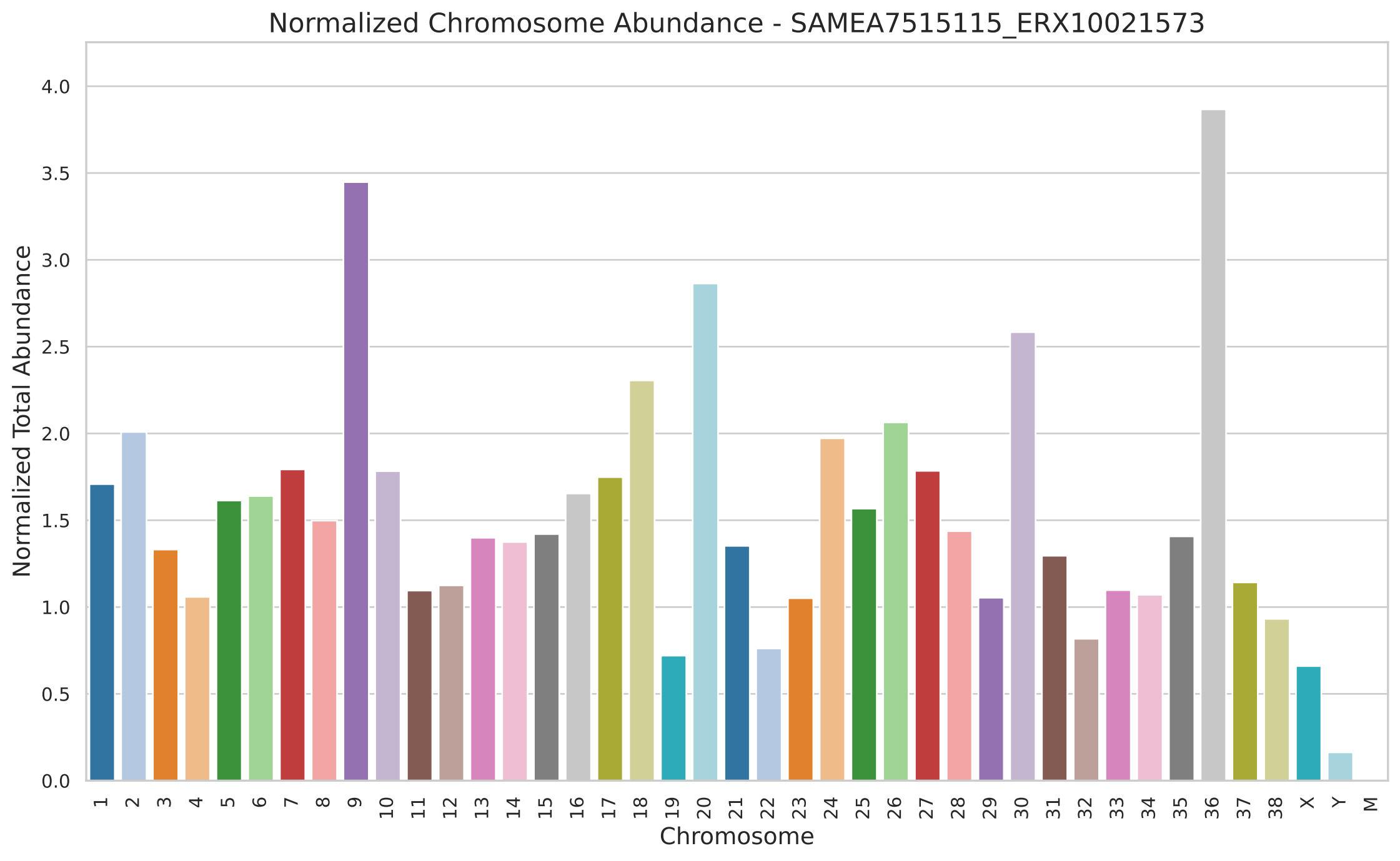

Normalized Chromosome Abundance - SAMEA7515119_ERX10021574
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

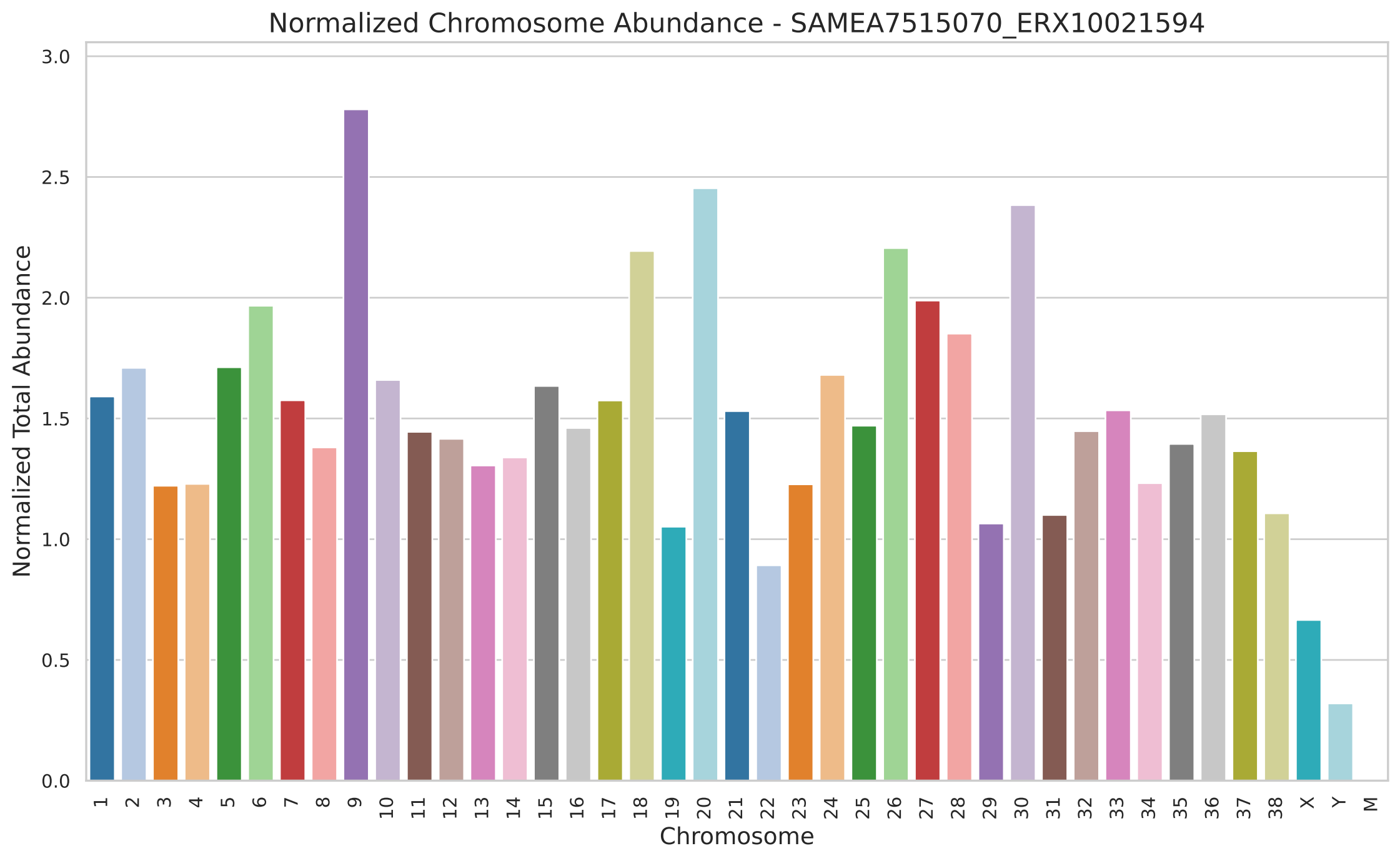

Normalized Chromosome Abundance - SAMEA7515240_ERX10021589
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

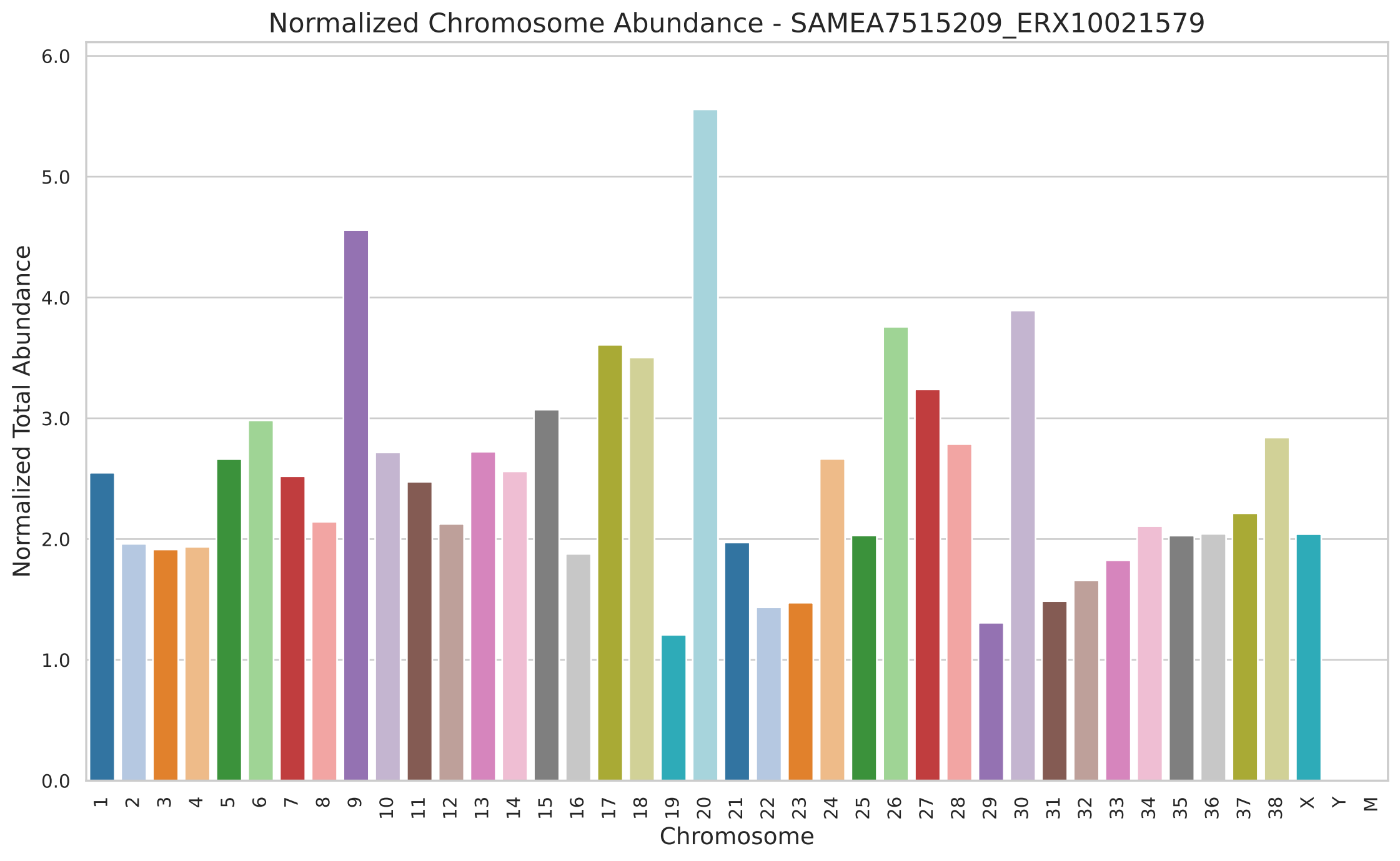

Normalized Chromosome Abundance - SAMEA7515425_ERX10021766
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

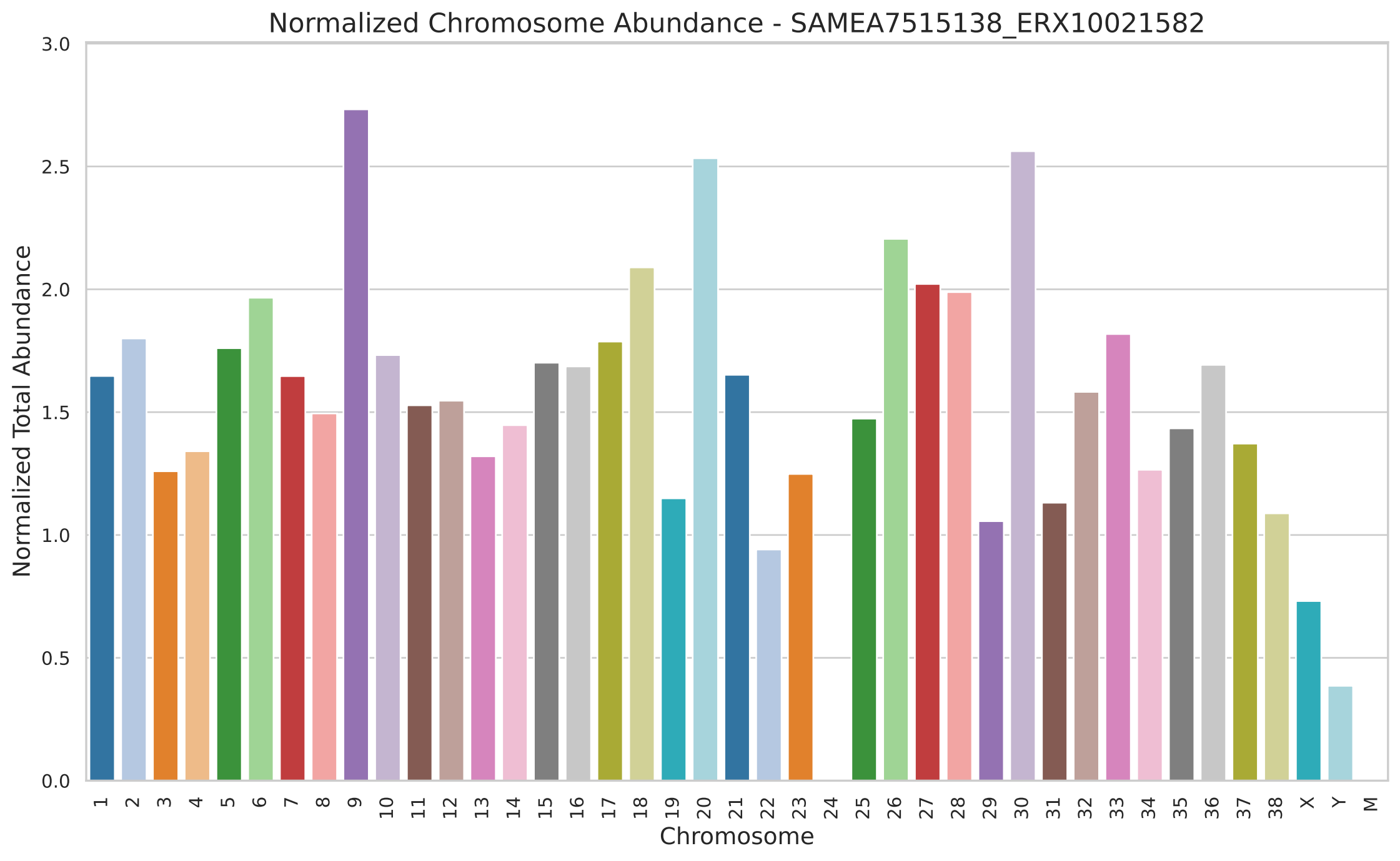

Normalized Chromosome Abundance - SAMEA7515124_ERX10021578
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

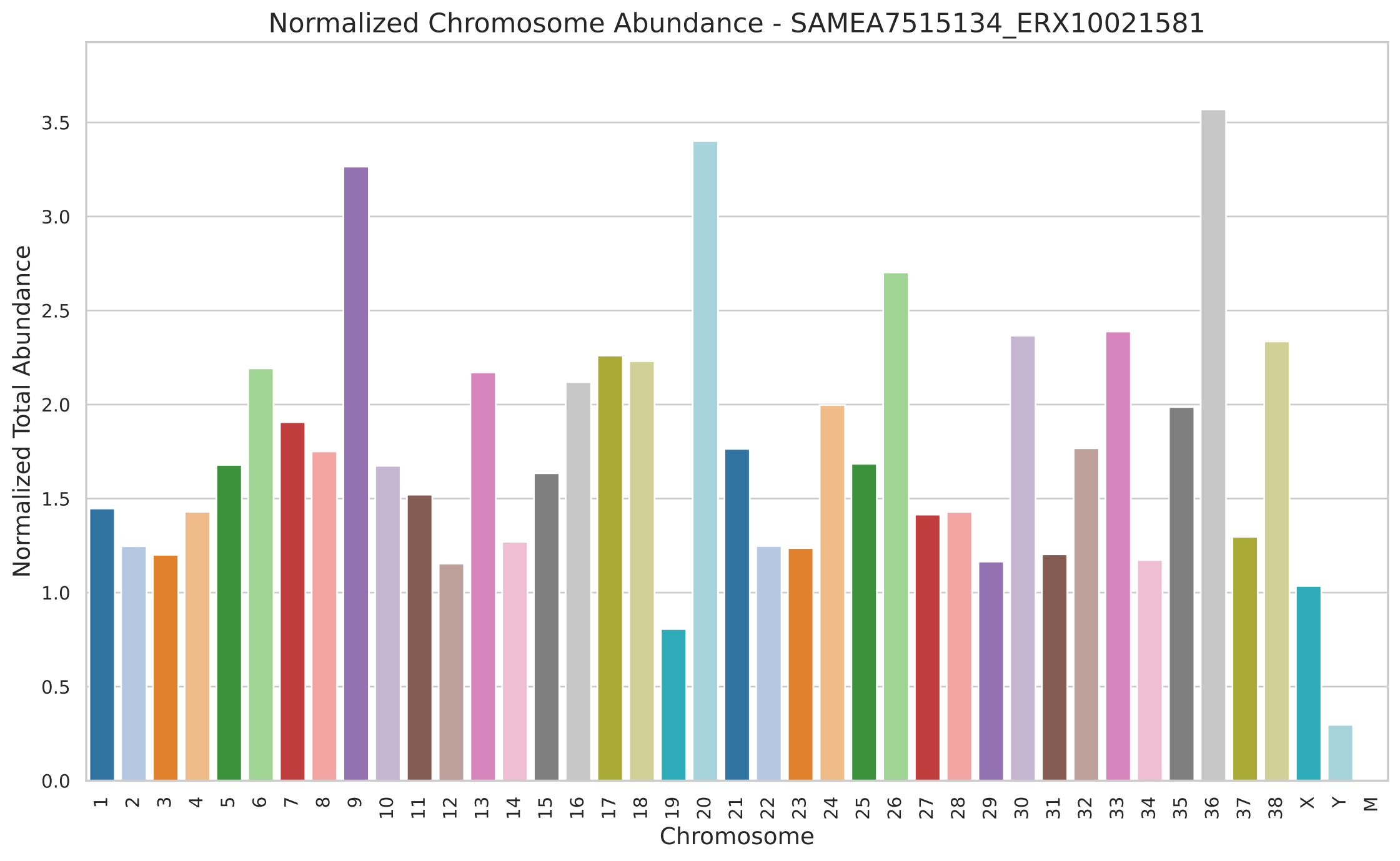

Normalized Chromosome Abundance - SAMEA7515067_ERX10021593
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

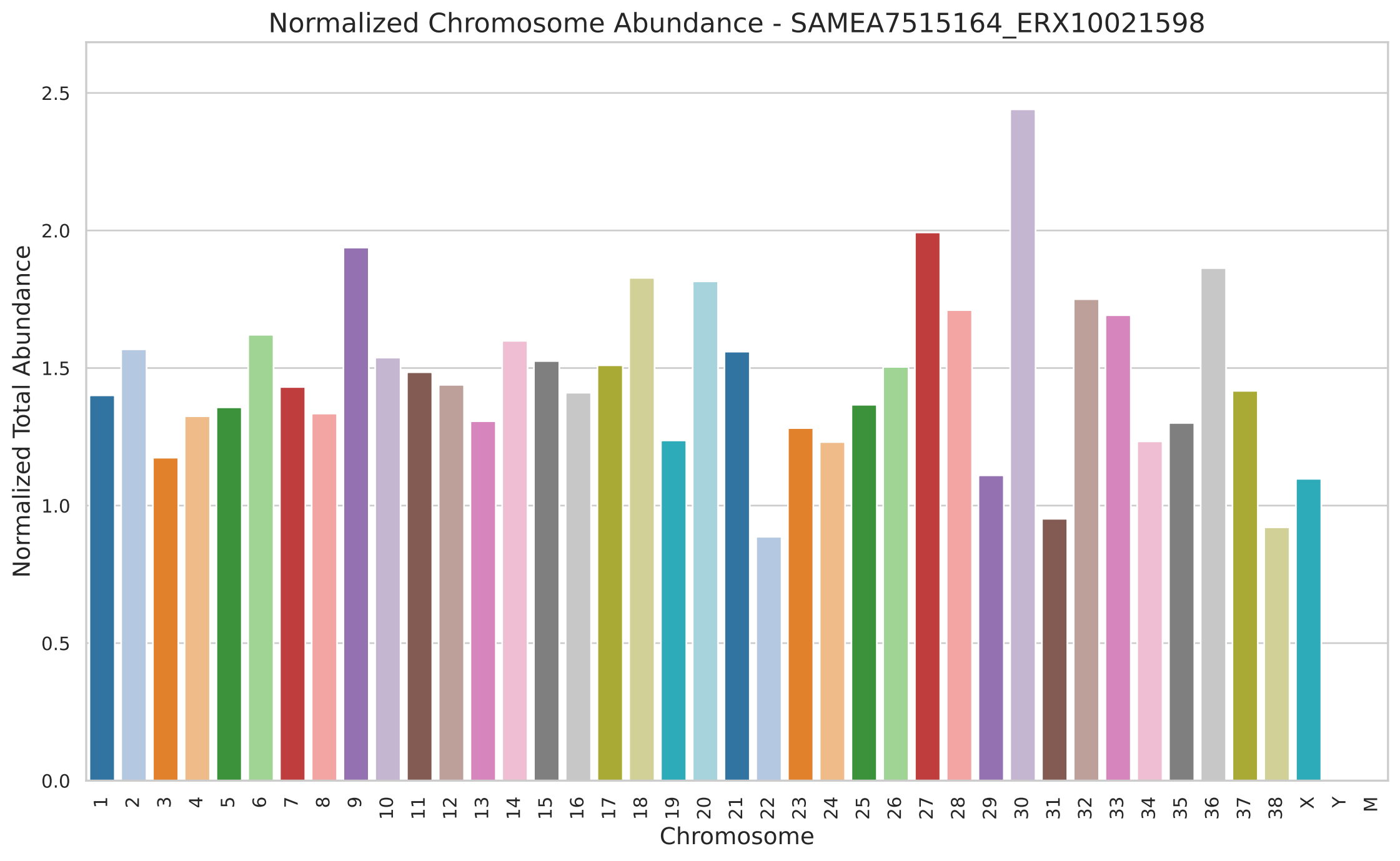

Normalized Chromosome Abundance - SAMEA7515115_ERX10021573
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

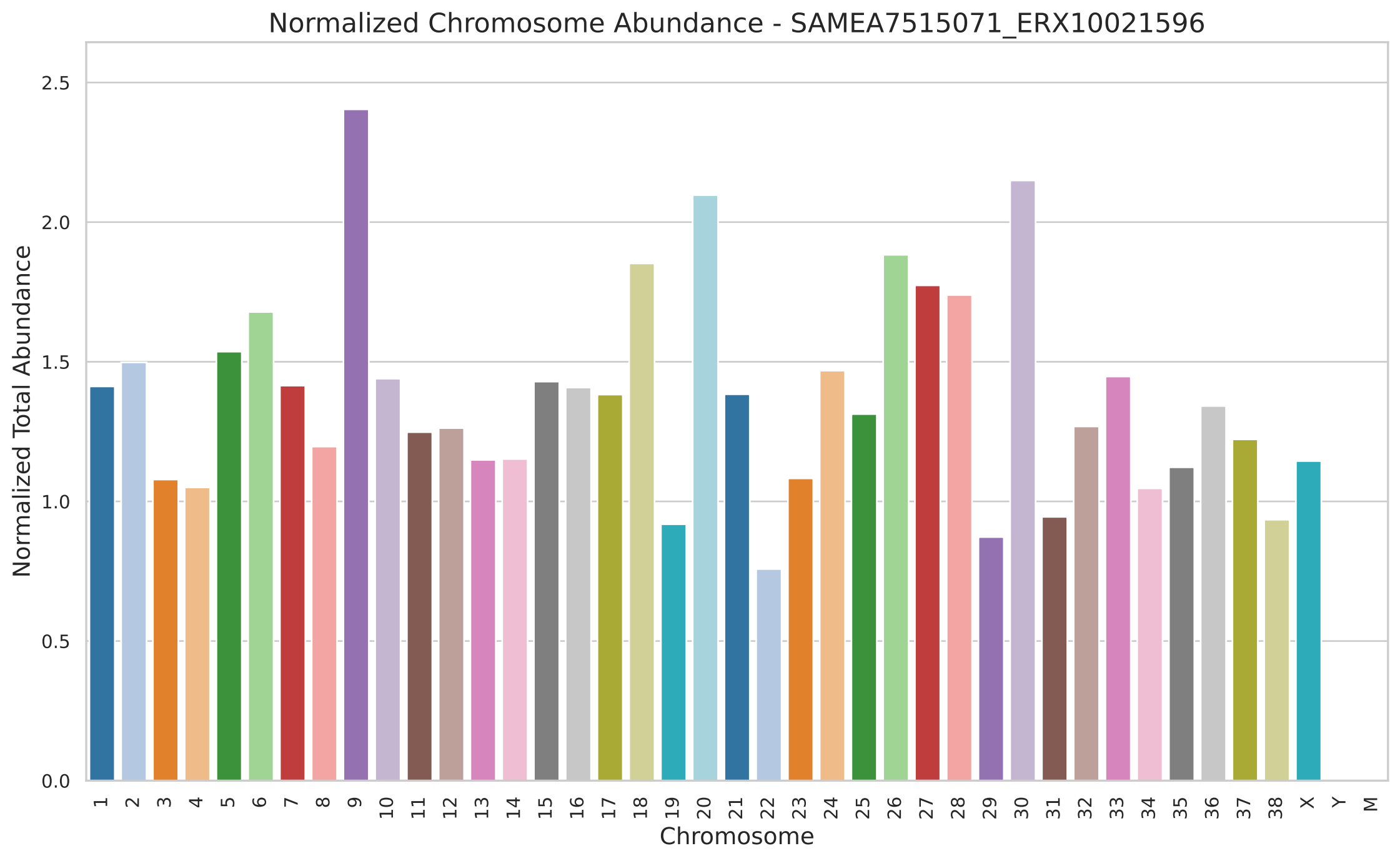

Normalized Chromosome Abundance - SAMEA7515070_ERX10021594
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

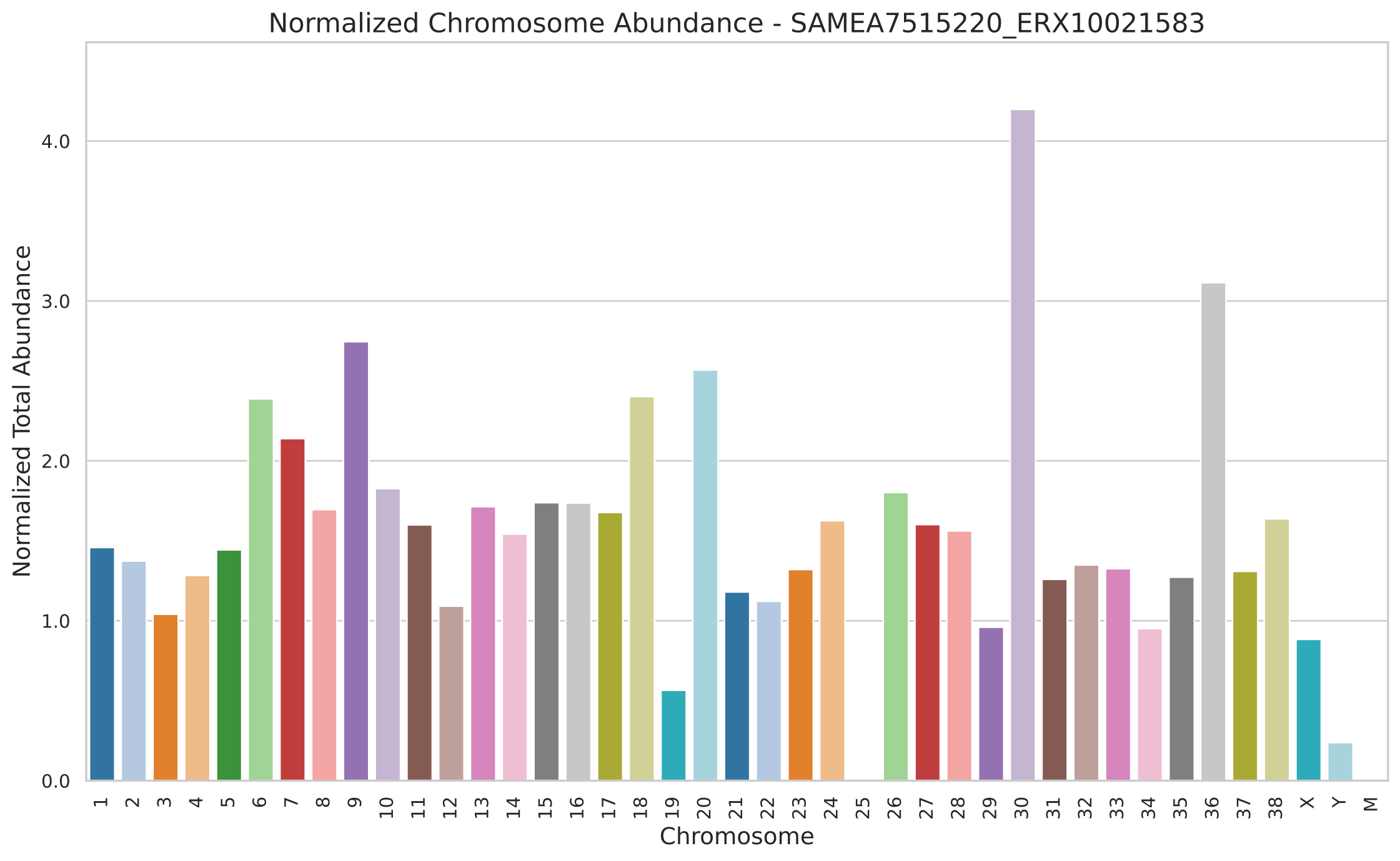

Normalized Chromosome Abundance - SAMEA7515209_ERX10021579
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

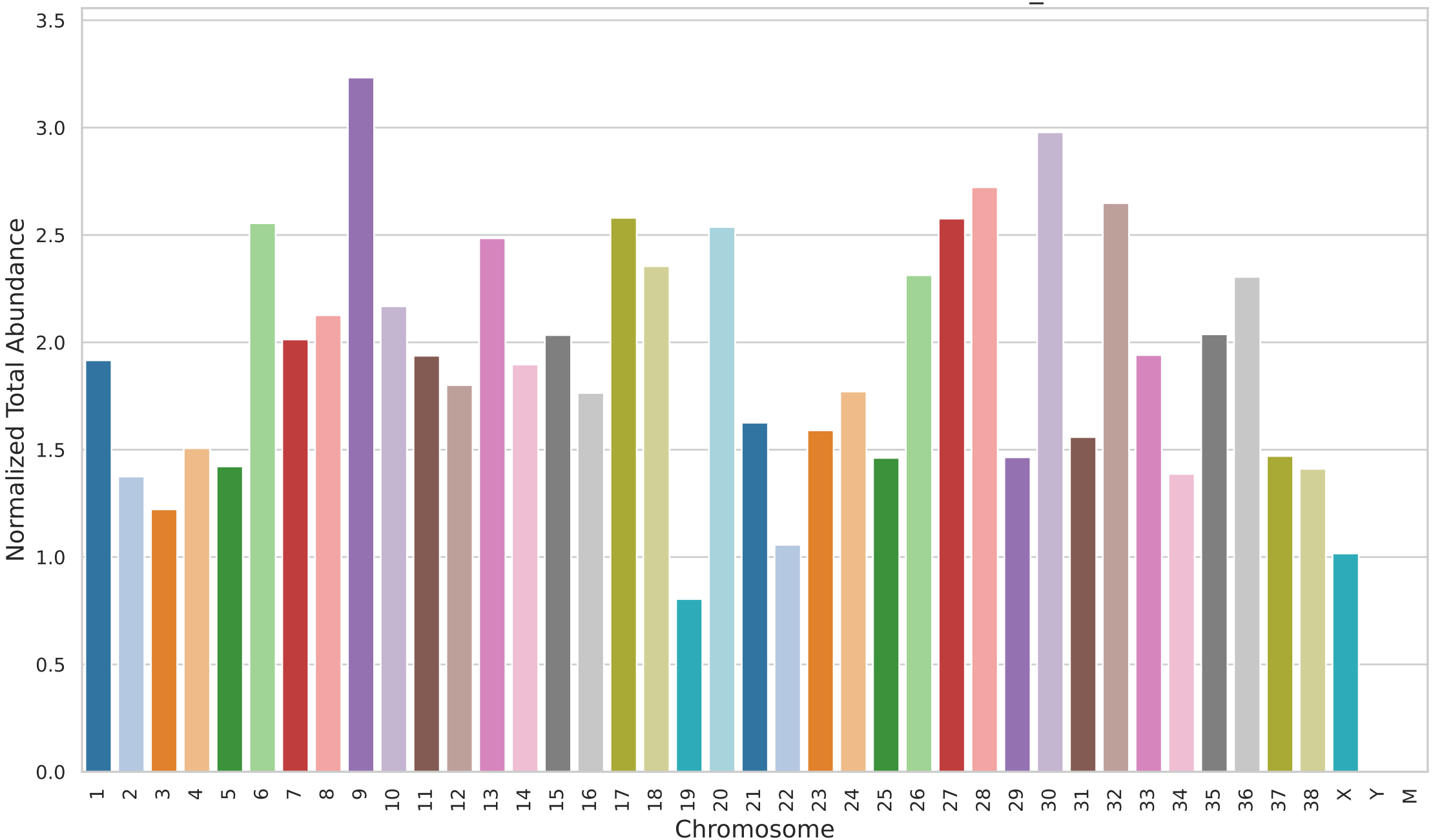

Normalized Chromosome Abundance - SAMEA7515138_ERX10021582
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

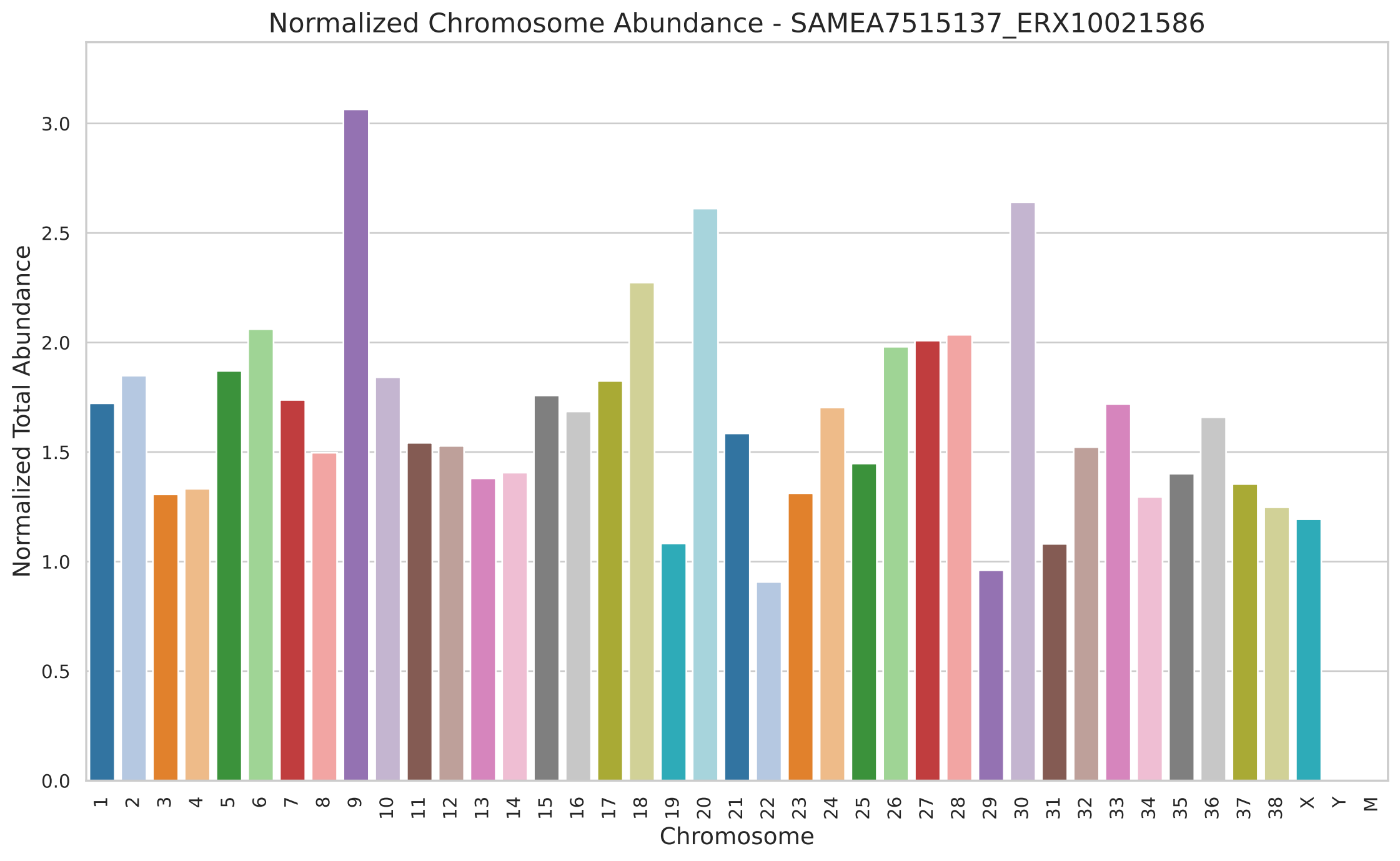

Normalized Chromosome Abundance - SAMEA7515134_ERX10021581
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

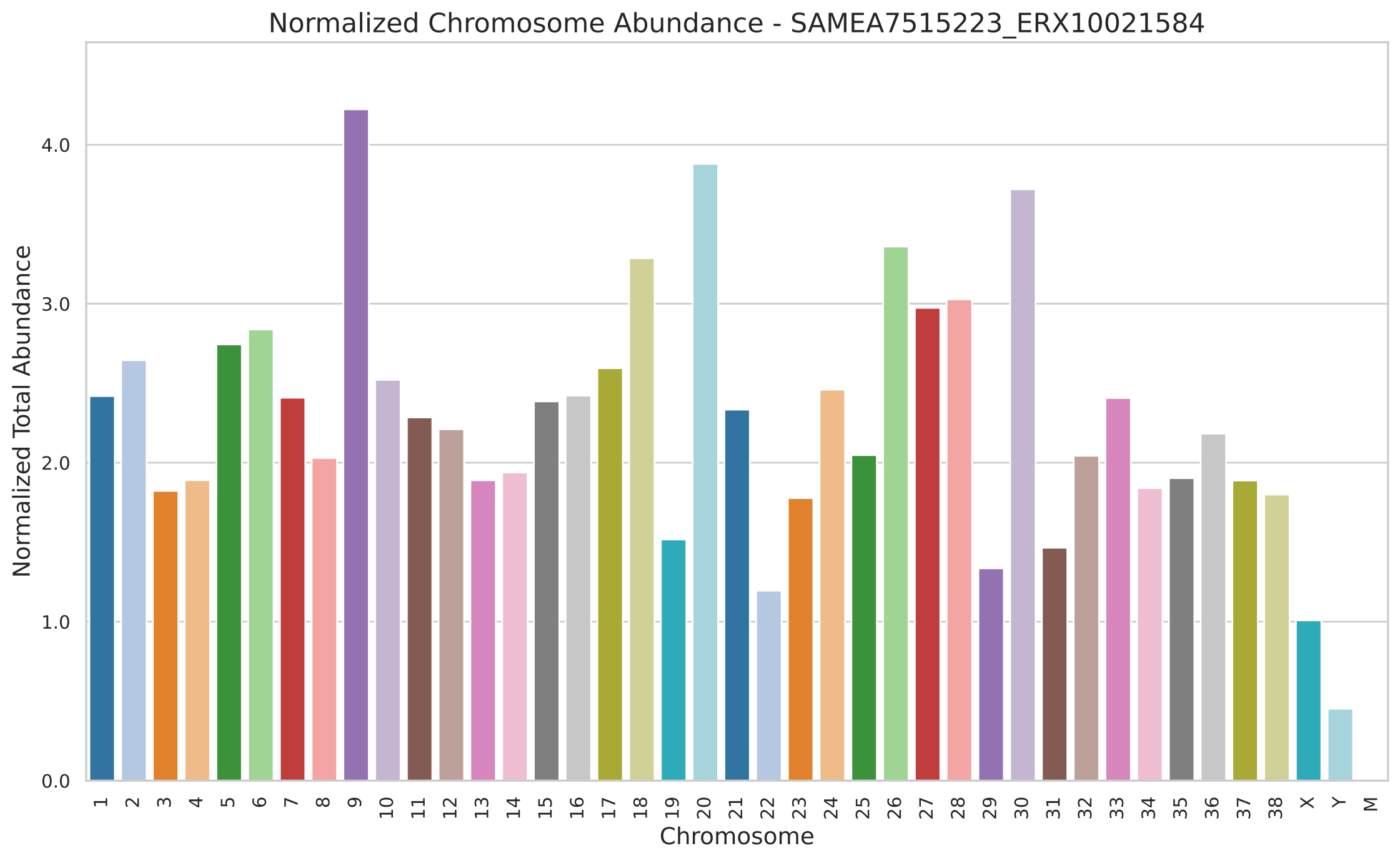

Normalized Chromosome Abundance - SAMEA7515164_ERX10021598
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

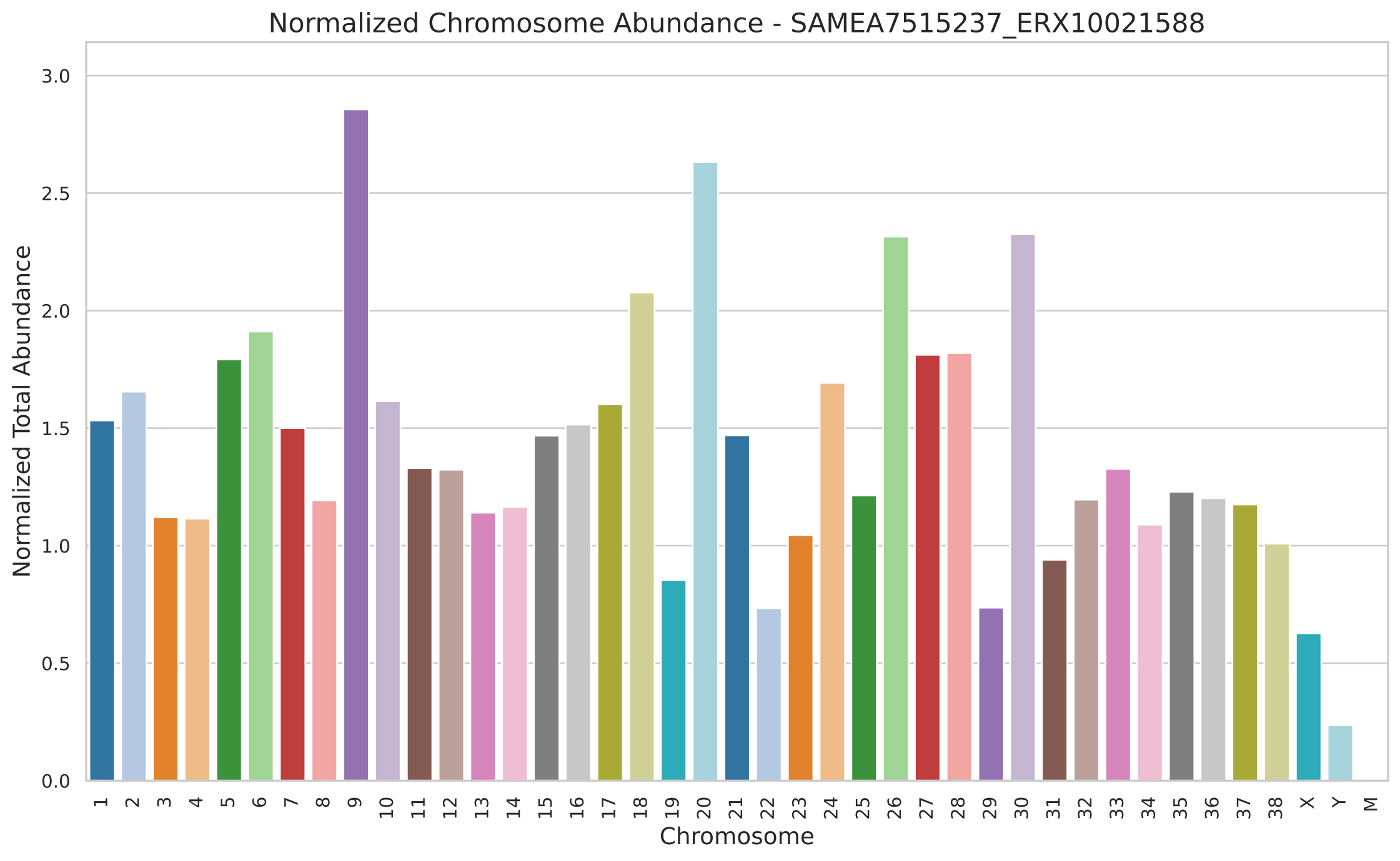

Normalized Chromosome Abundance - SAMEA7515071_ERX10021596
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

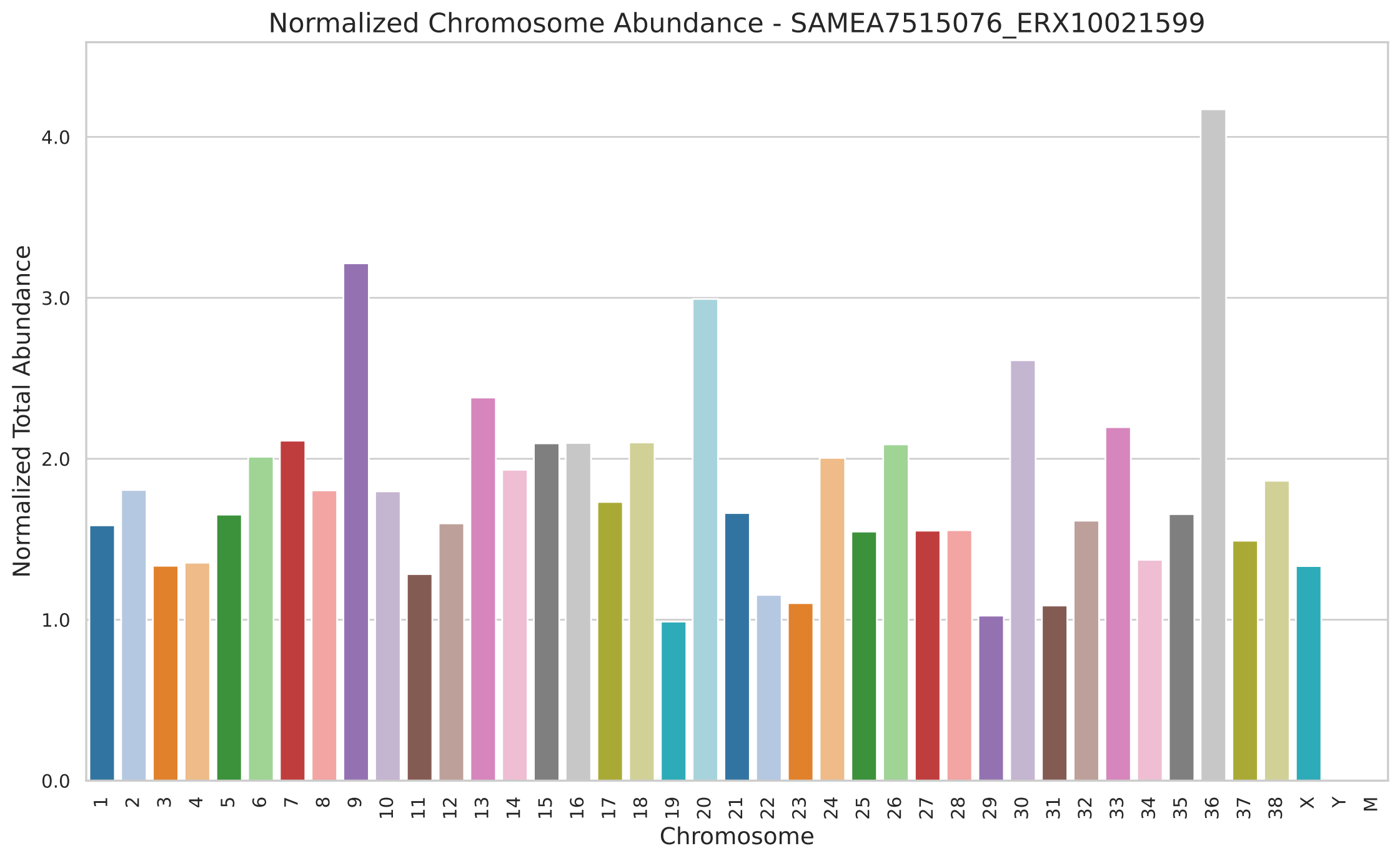

Normalized Chromosome Abundance - SAMEA7515220_ERX10021583
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

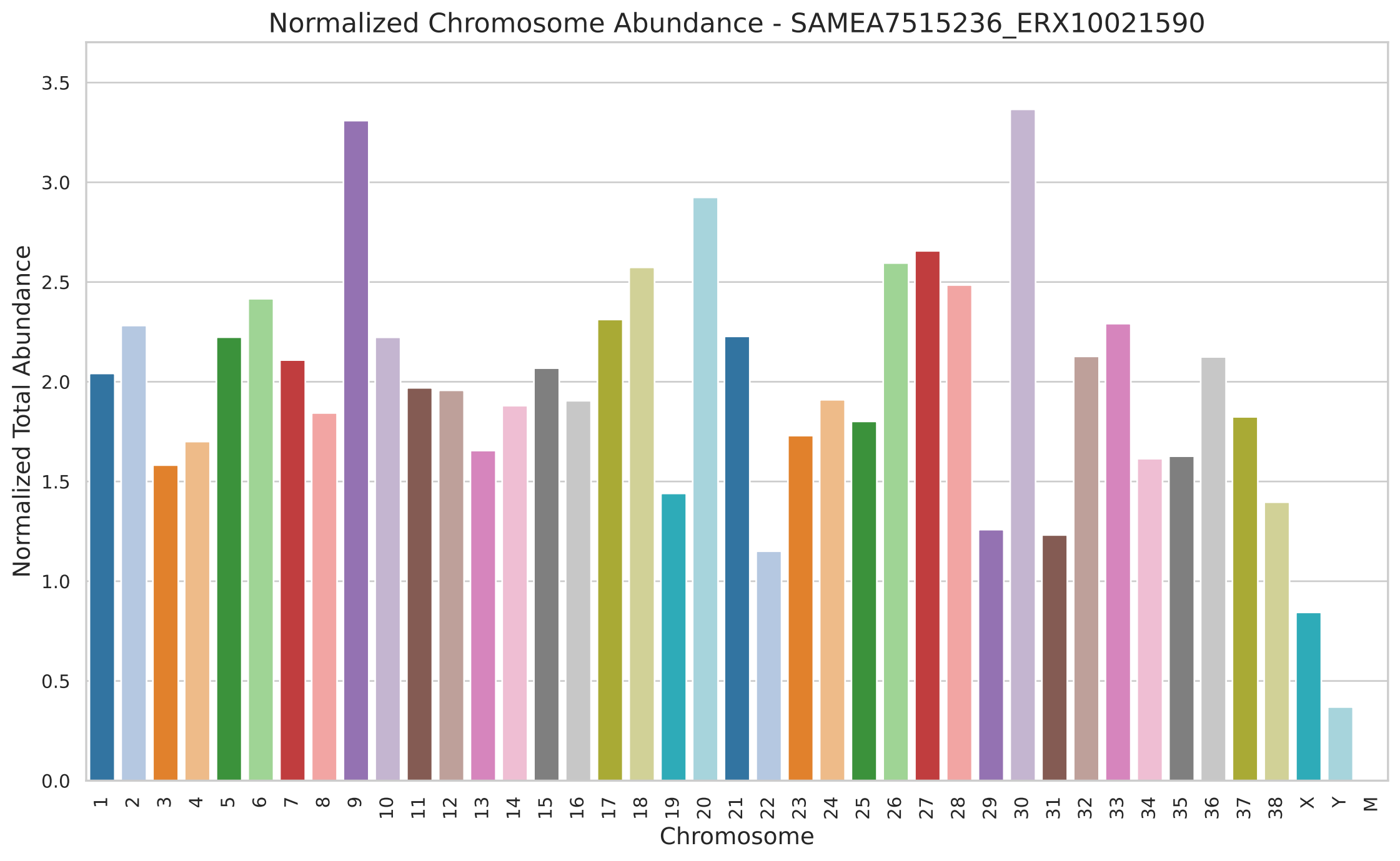

Normalized Chromosome Abundance - SAMEA7515133_ERX10021585
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

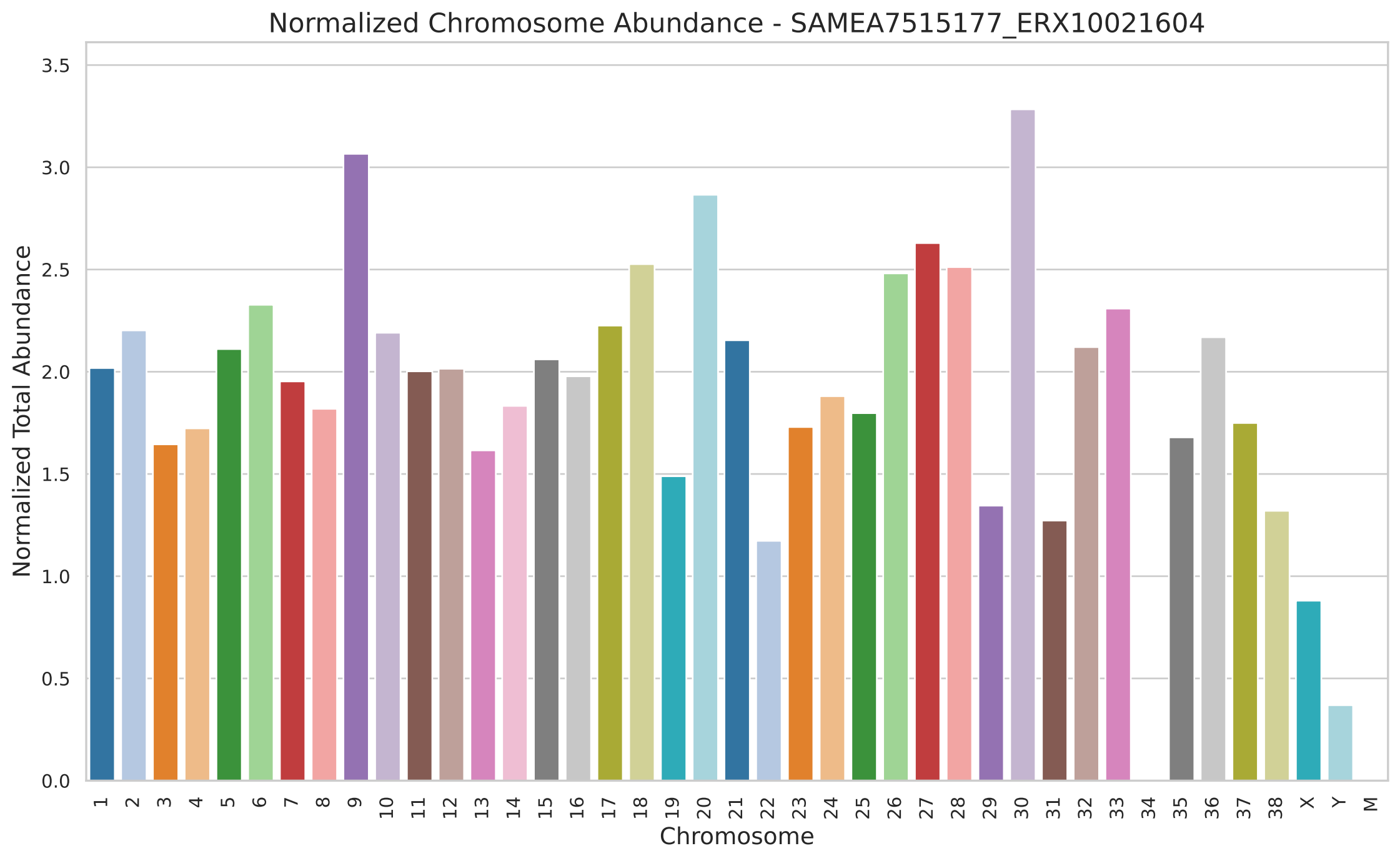

Normalized Chromosome Abundance - SAMEA7515137_ERX10021586
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

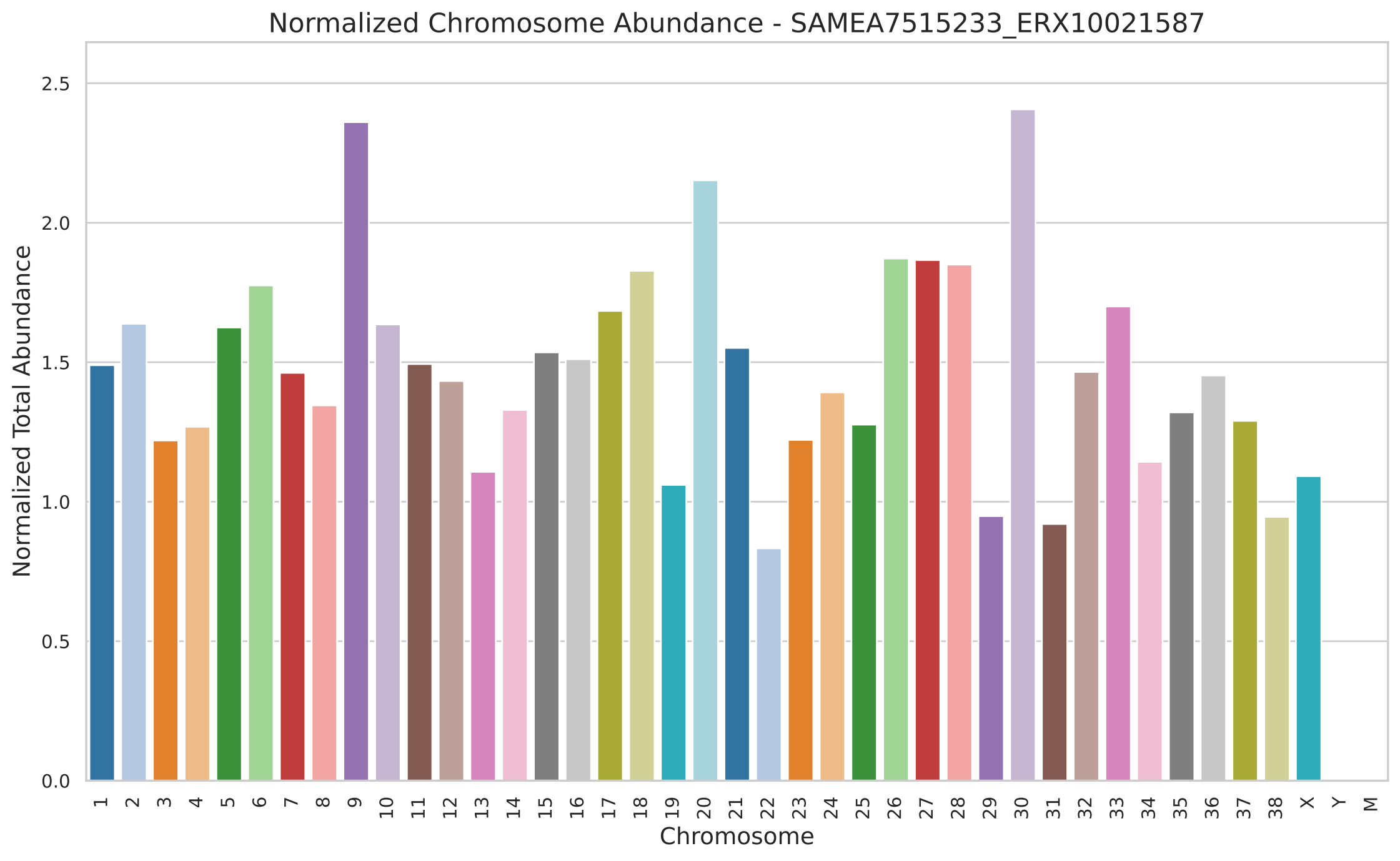

Normalized Chromosome Abundance - SAMEA7515223_ERX10021584
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

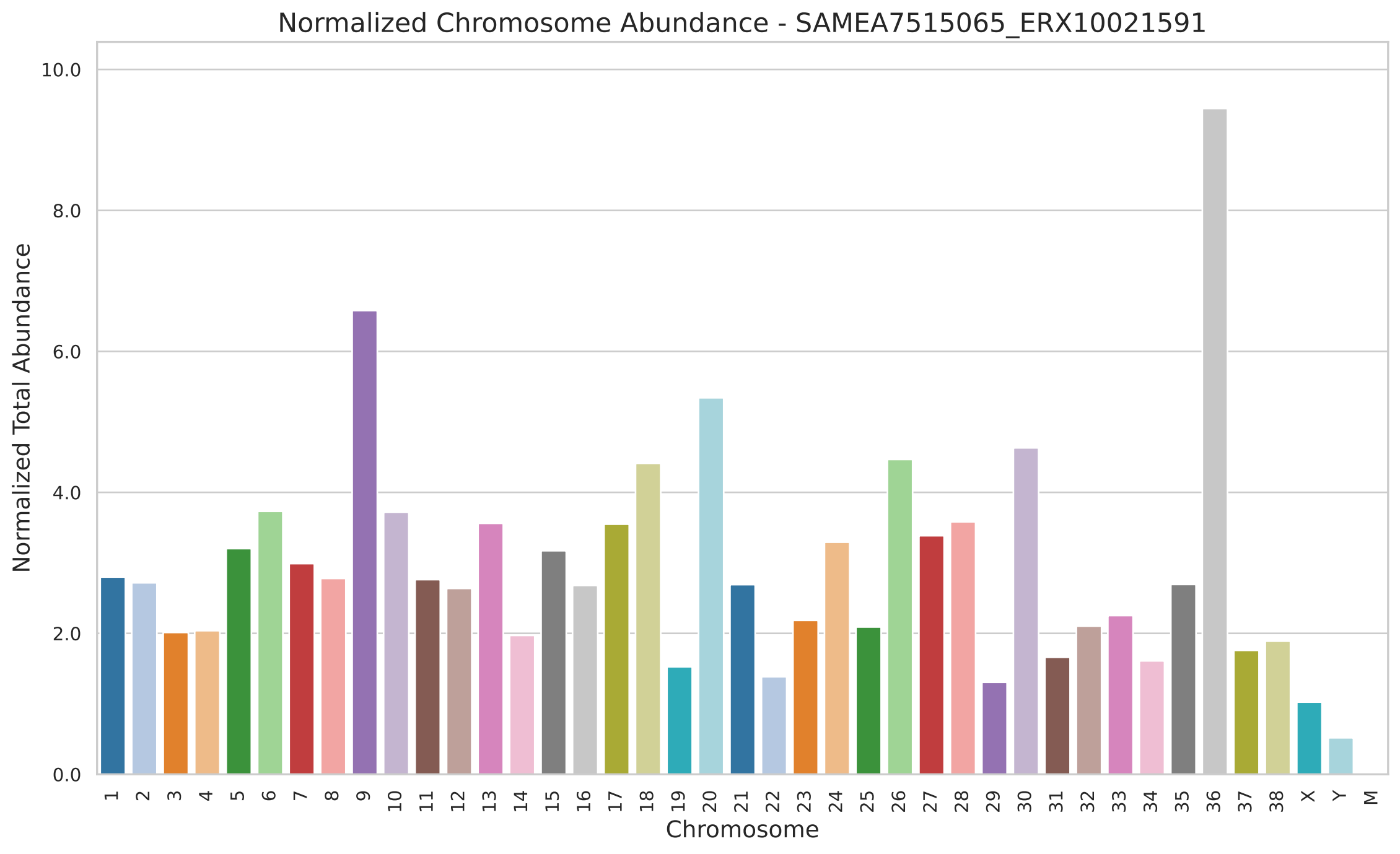

Normalized Chromosome Abundance - SAMEA7515237_ERX10021588
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

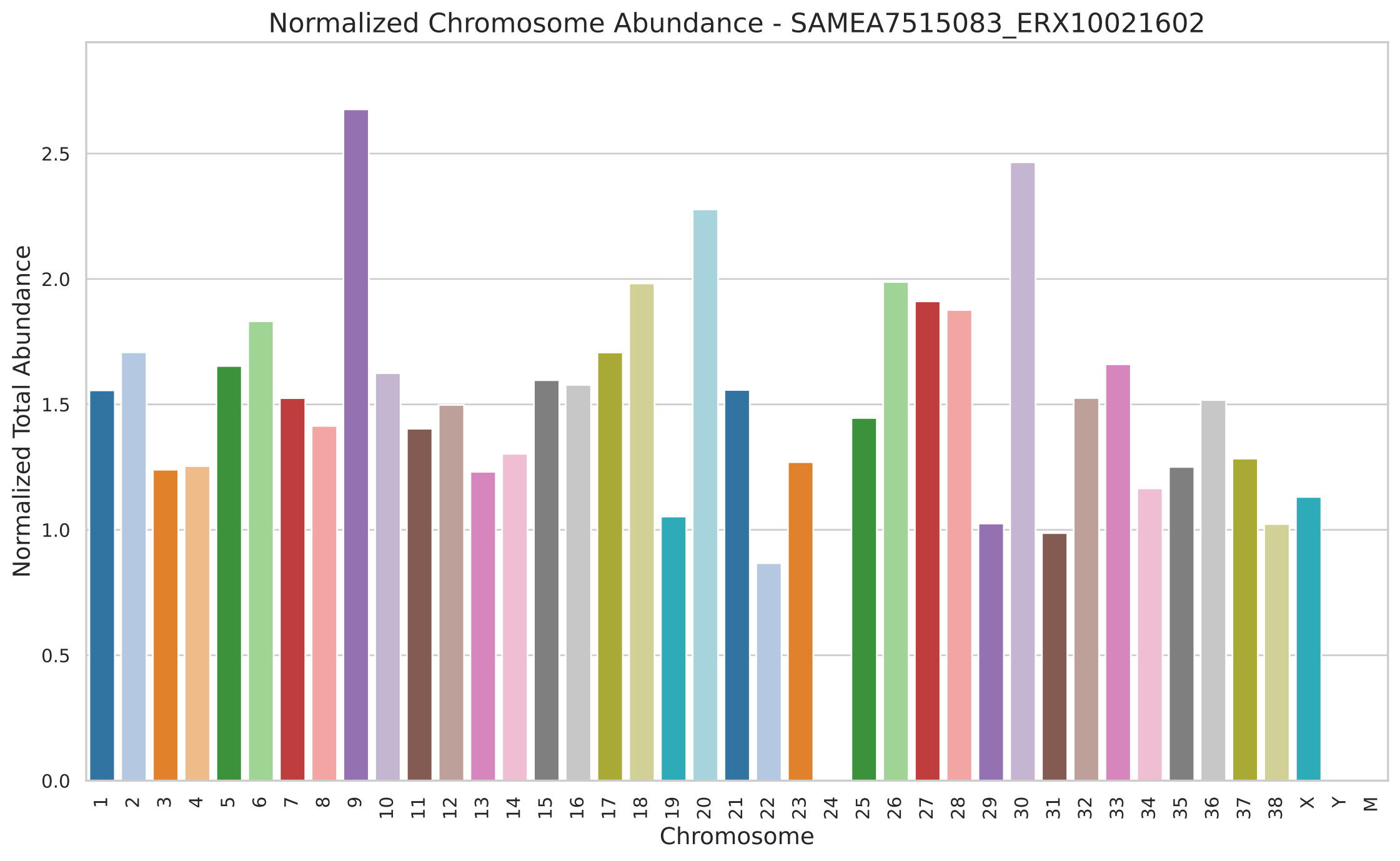

Normalized Chromosome Abundance - SAMEA7515076_ERX10021599
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

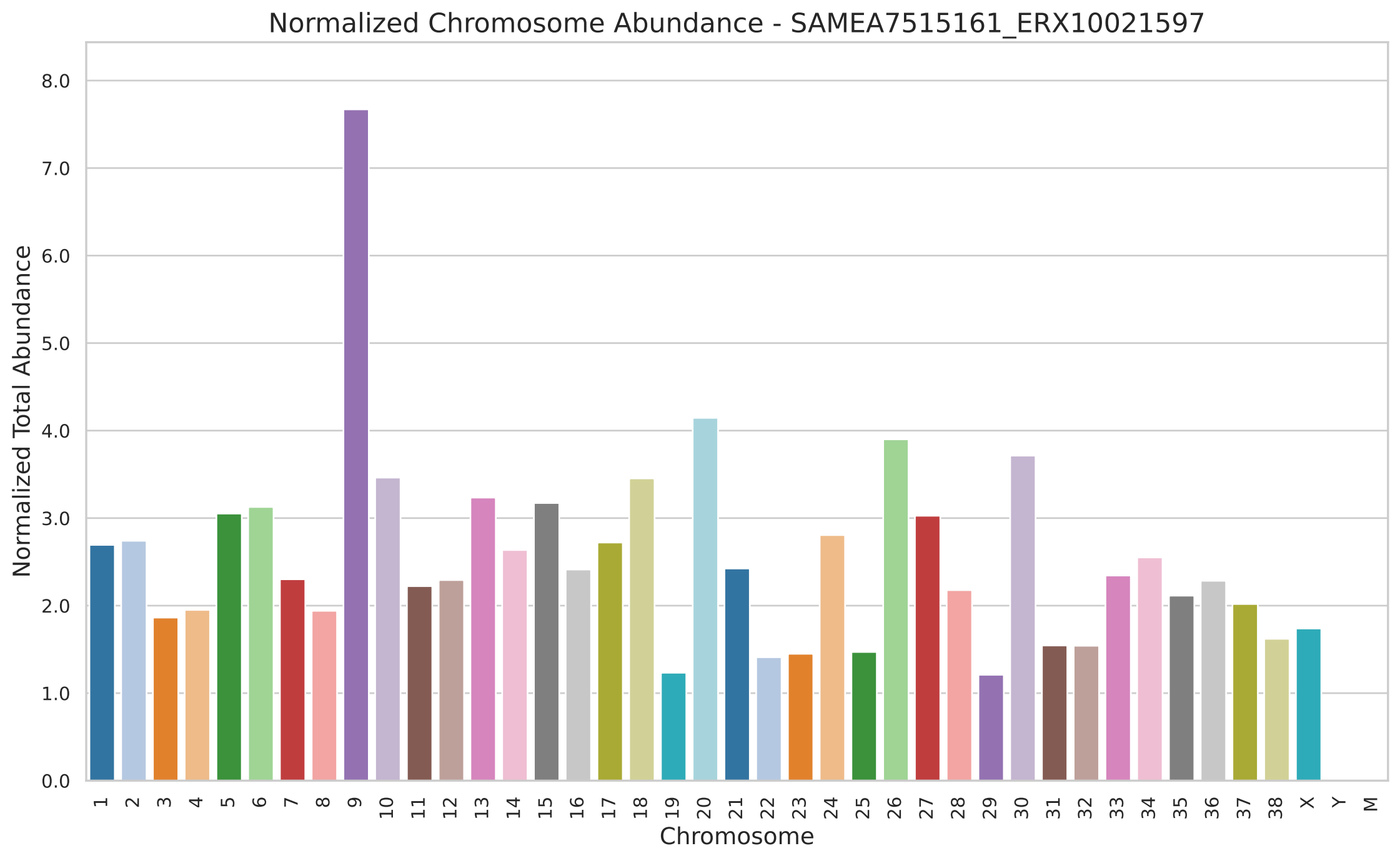

Normalized Chromosome Abundance - SAMEA7515236_ERX10021590
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

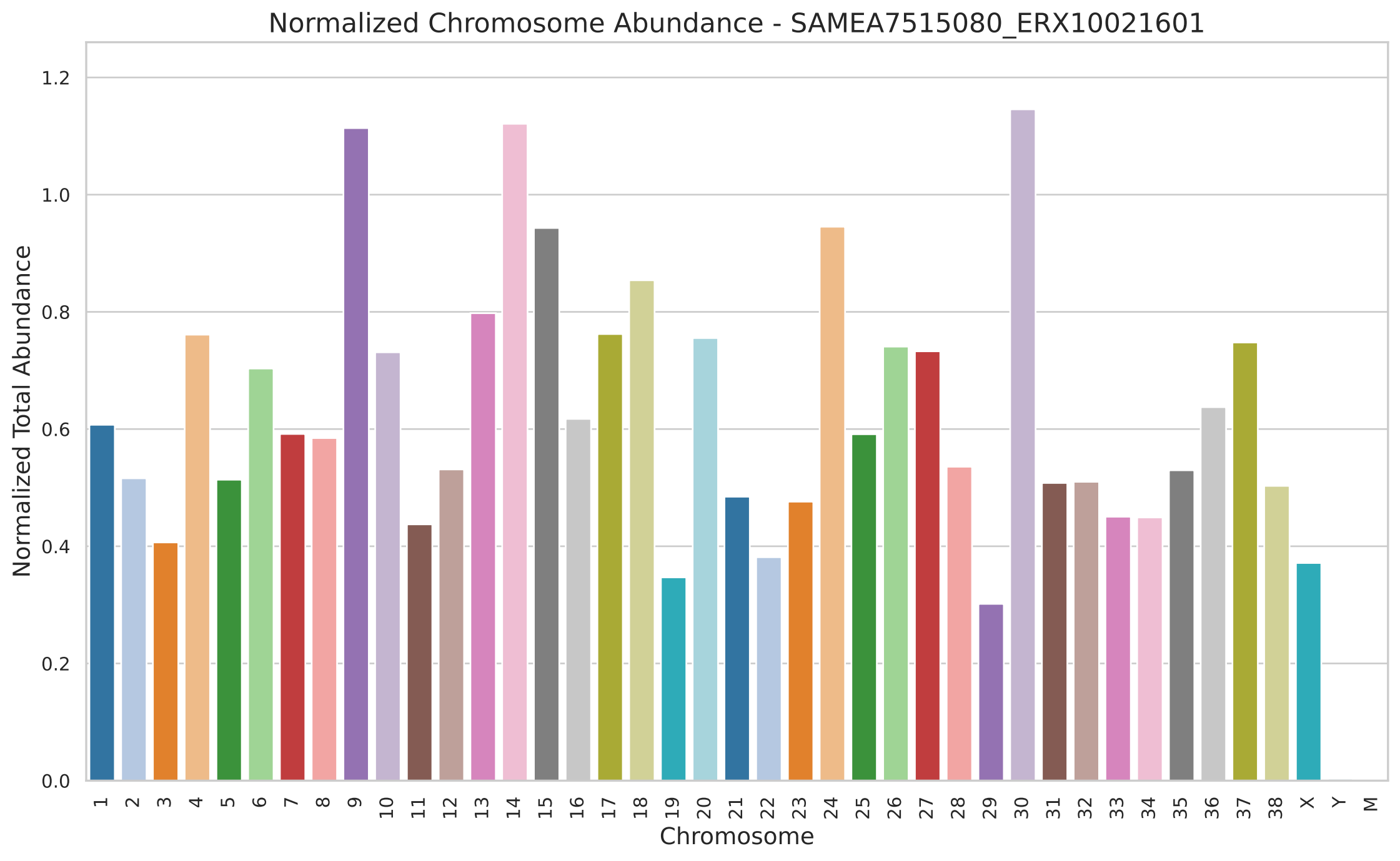

Normalized Chromosome Abundance - SAMEA7515177_ERX10021604
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

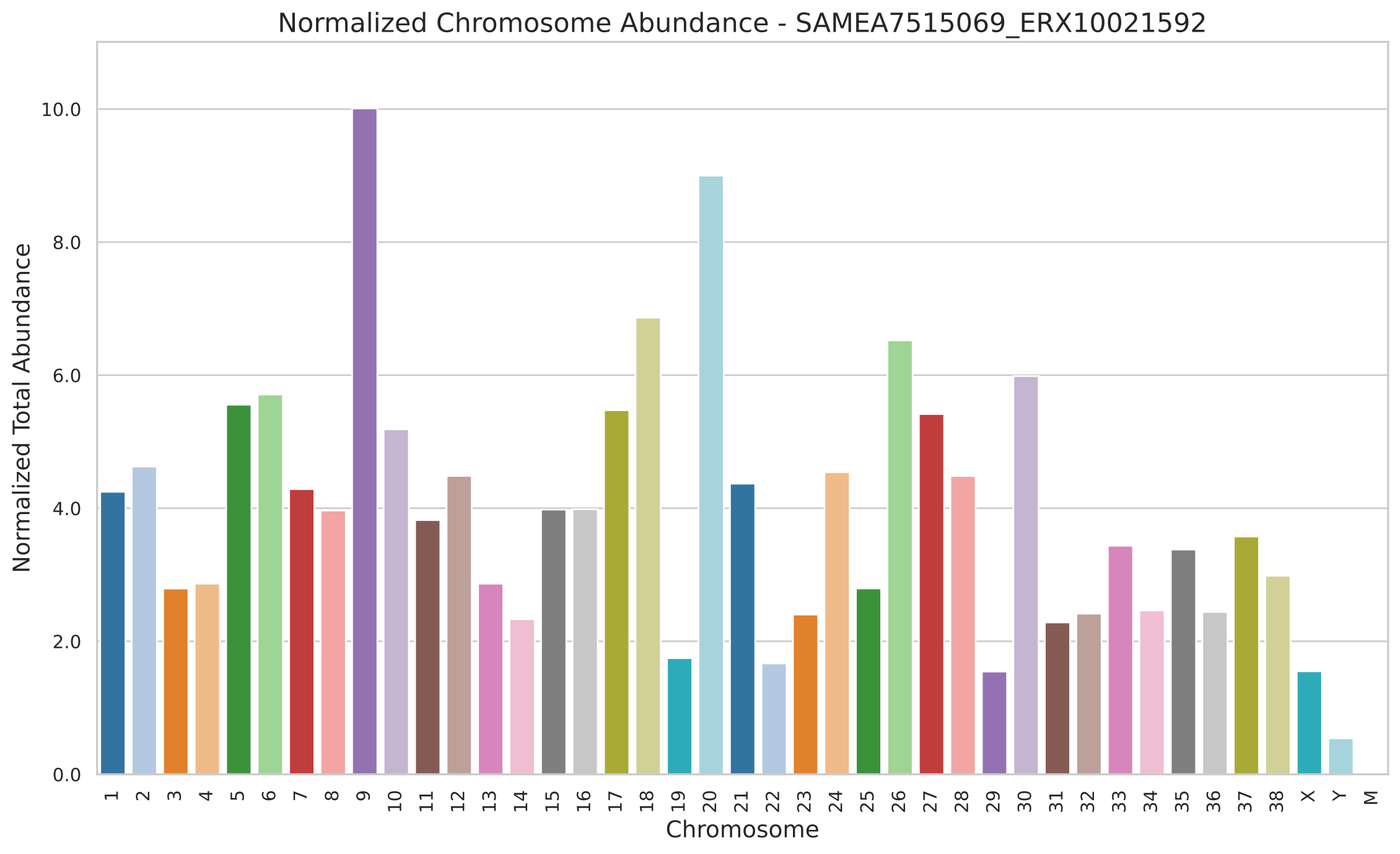

Normalized Chromosome Abundance - SAMEA7515233_ERX10021587
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

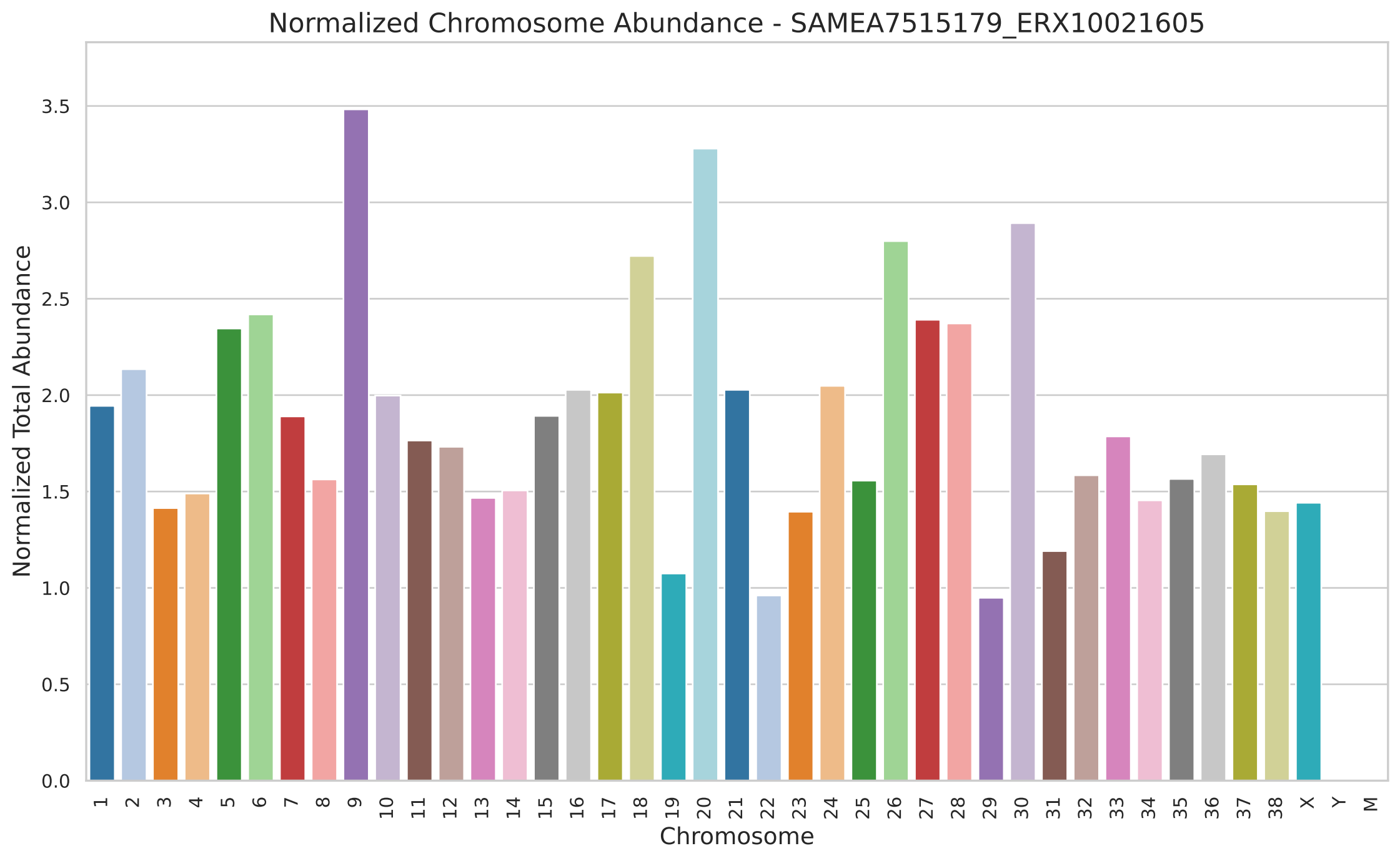

Normalized Chromosome Abundance - SAMEA7515065_ERX10021591
Normalized Total Abundance
10.0
8.0
6.0
4.0
2.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

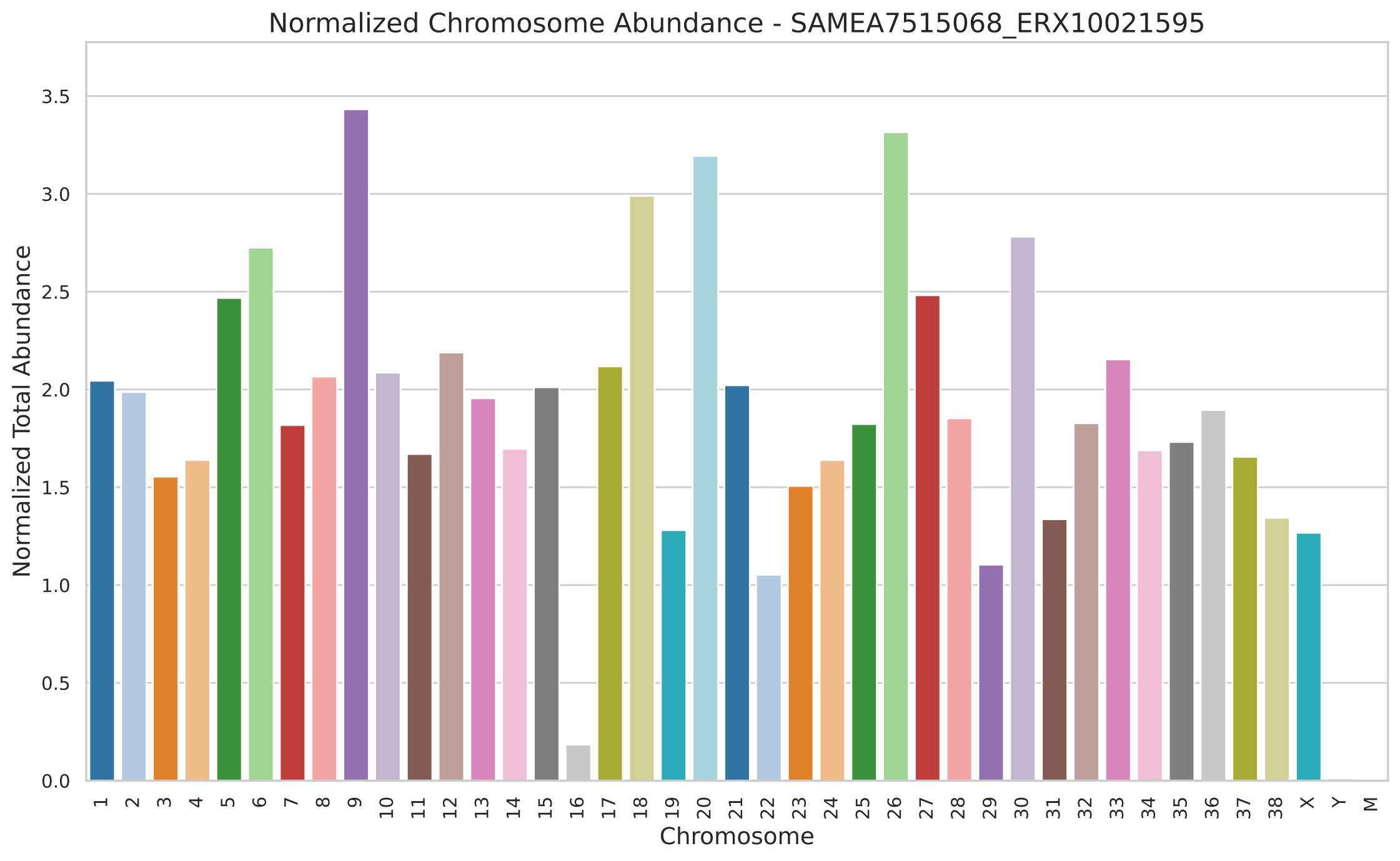

Normalized Chromosome Abundance - SAMEA7515083_ERX10021602
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

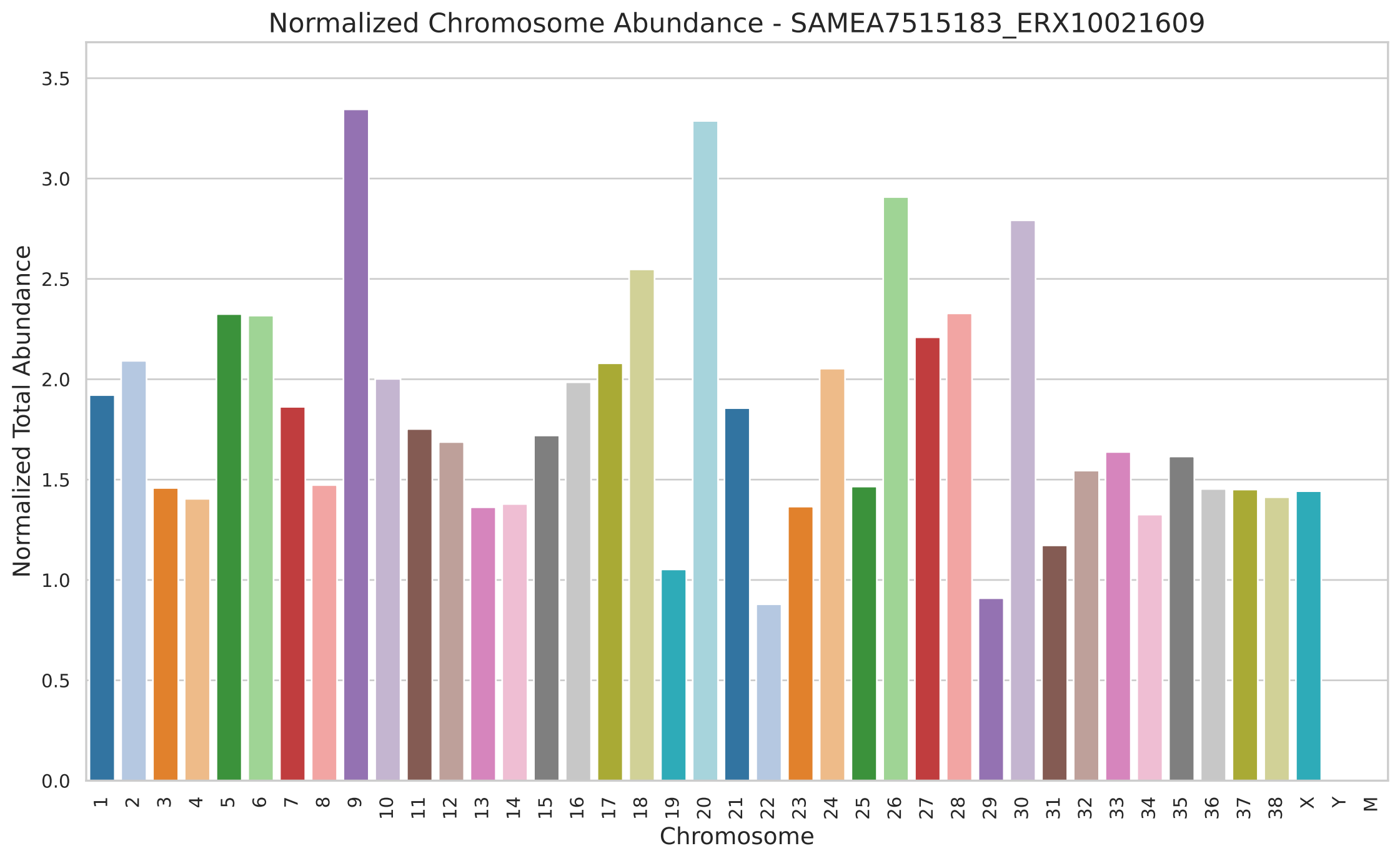

Normalized Chromosome Abundance - SAMEA7515161_ERX10021597
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

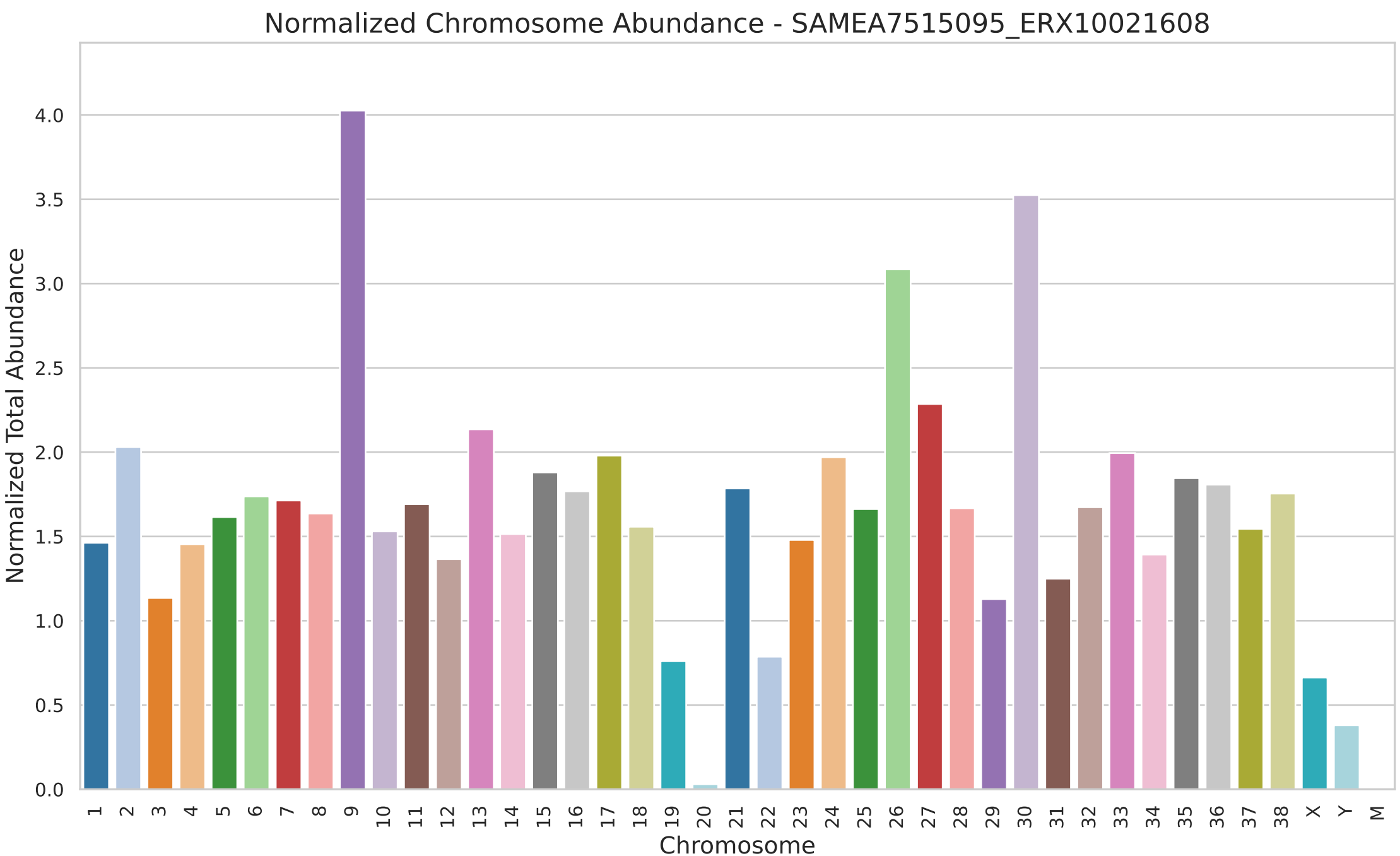

Normalized Chromosome Abundance - SAMEA7515080_ERX10021601
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

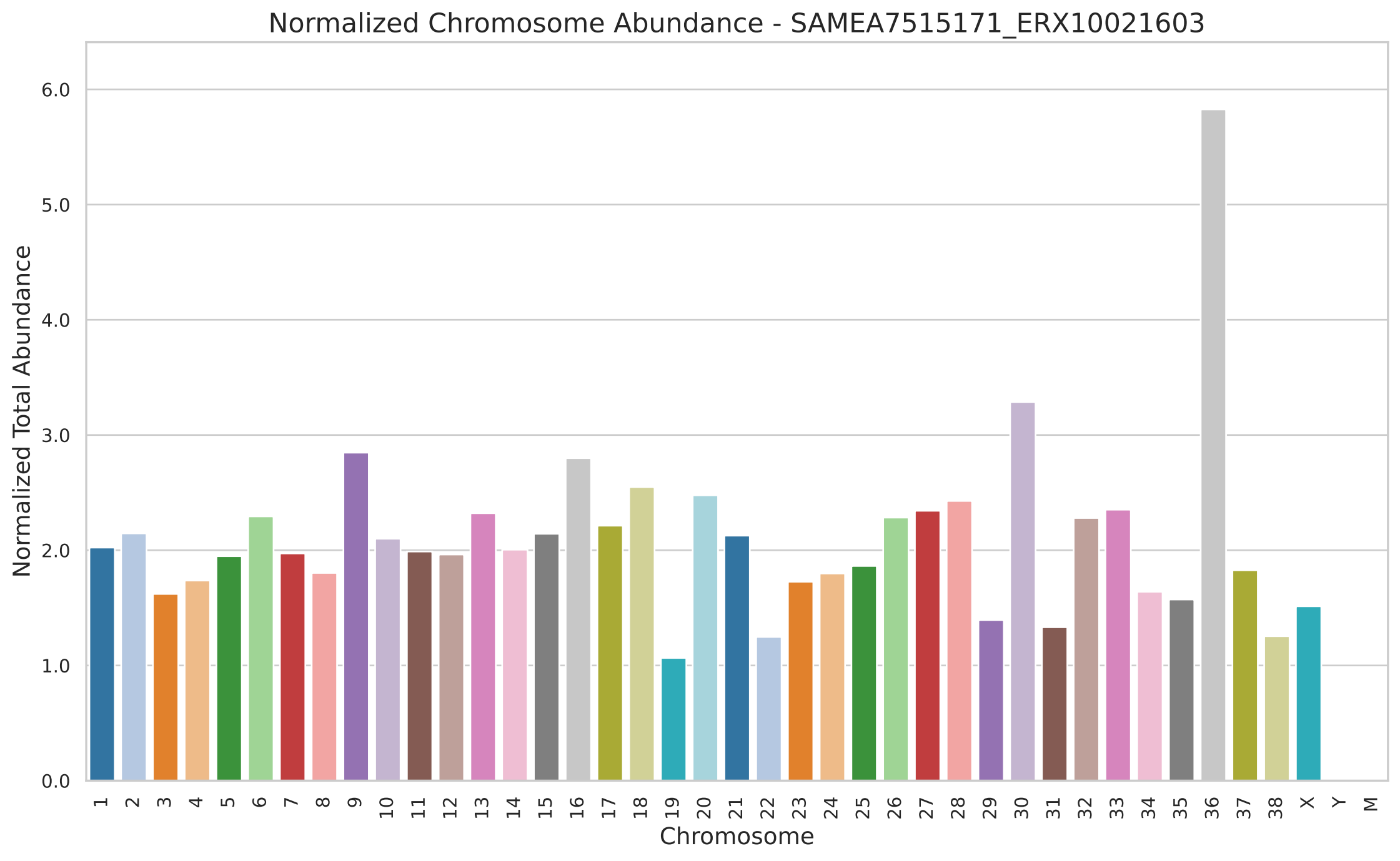

Normalized Chromosome Abundance - SAMEA7515069_ERX10021592
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

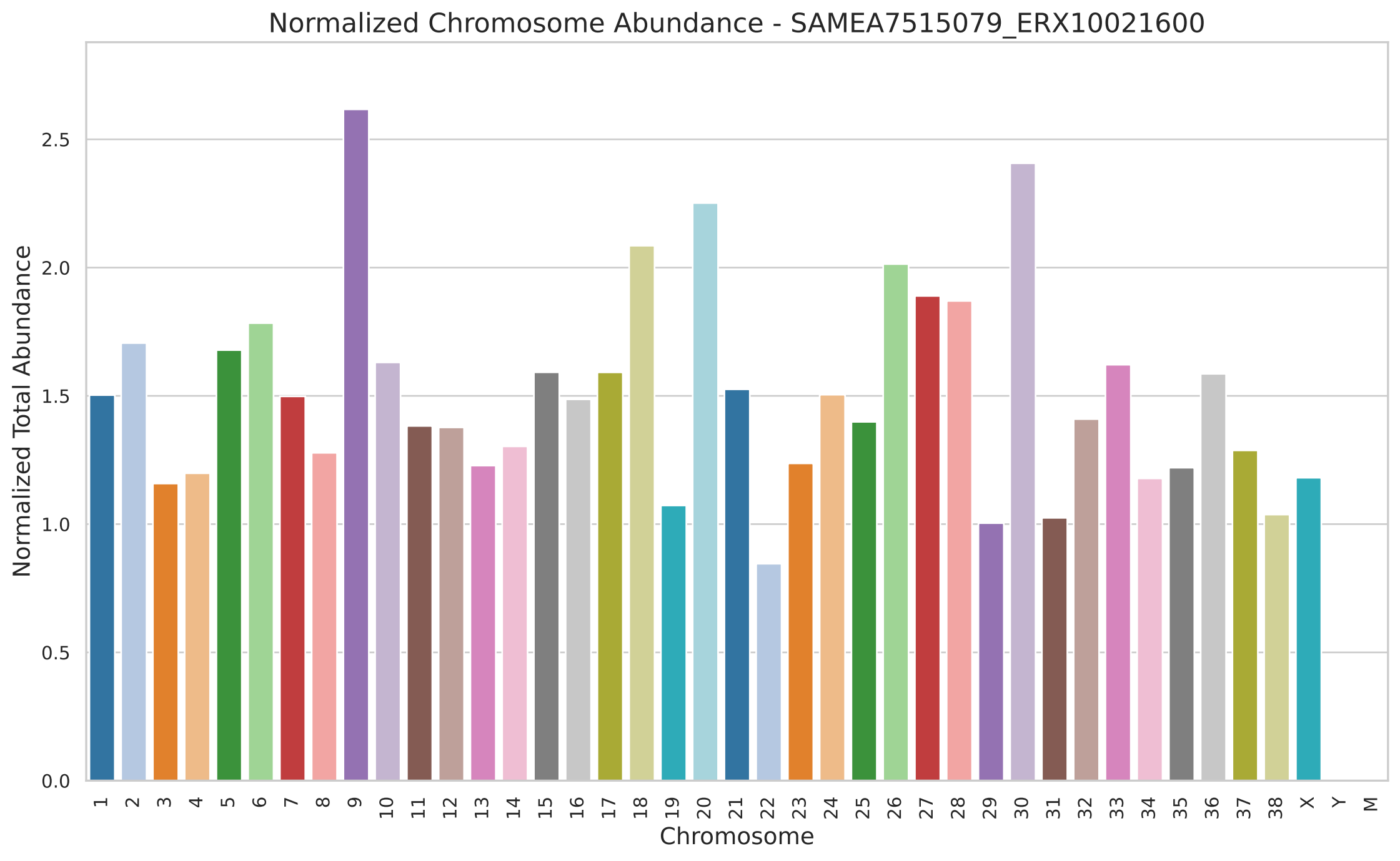

Normalized Chromosome Abundance - SAMEA7515179_ERX10021605
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

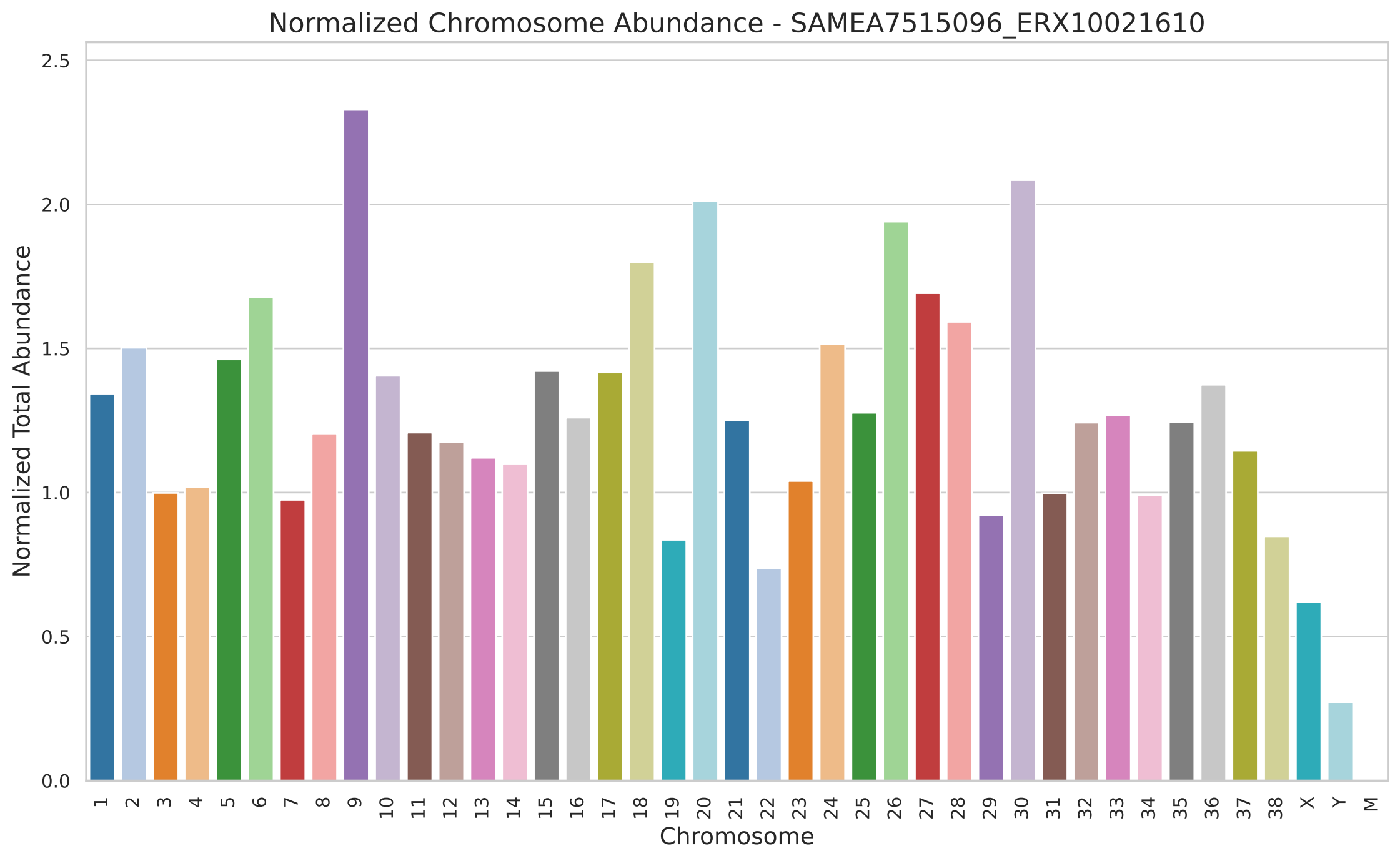

Normalized Chromosome Abundance - SAMEA7515068_ERX10021595
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

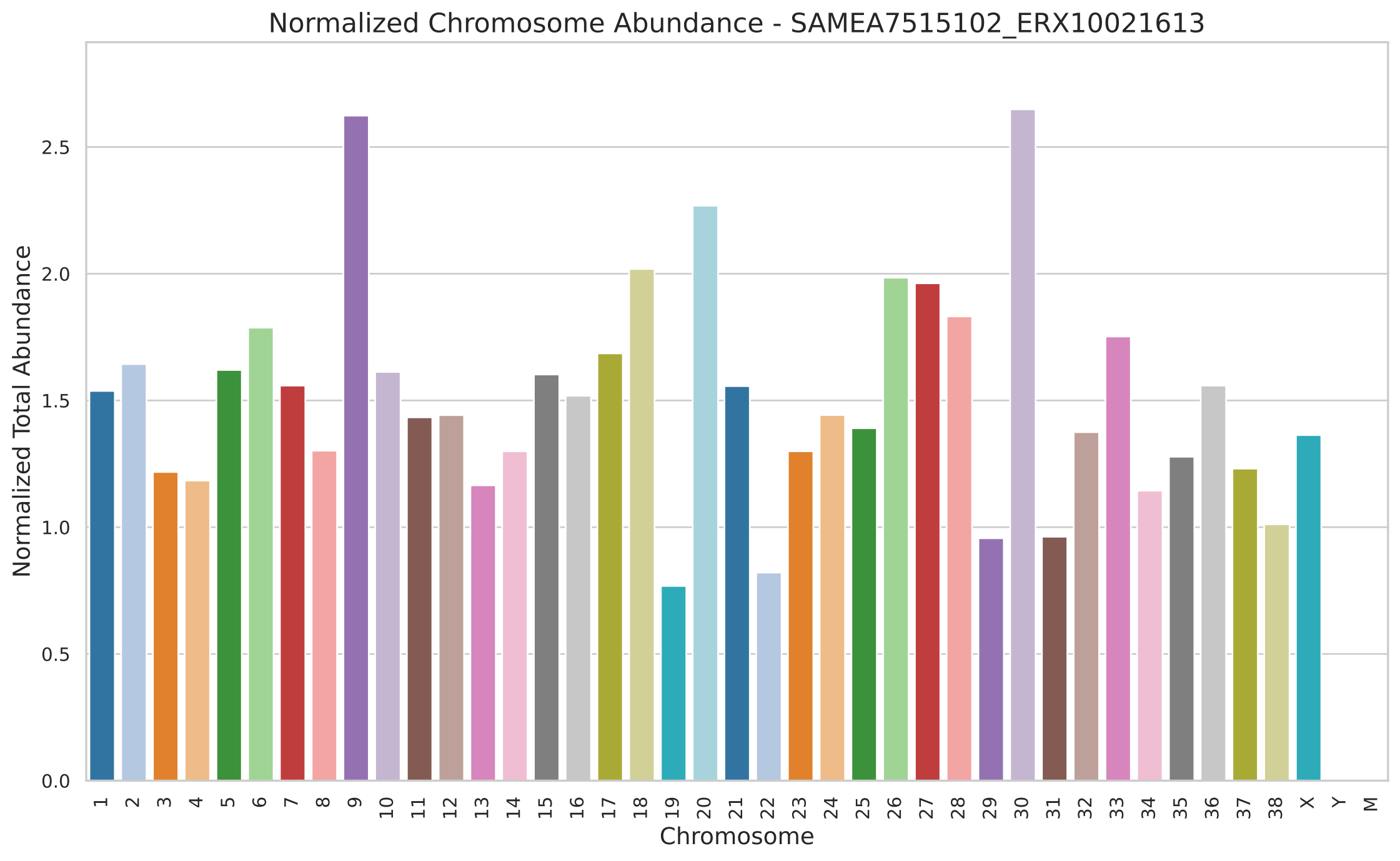

Normalized Chromosome Abundance - SAMEA7515183_ERX10021609
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

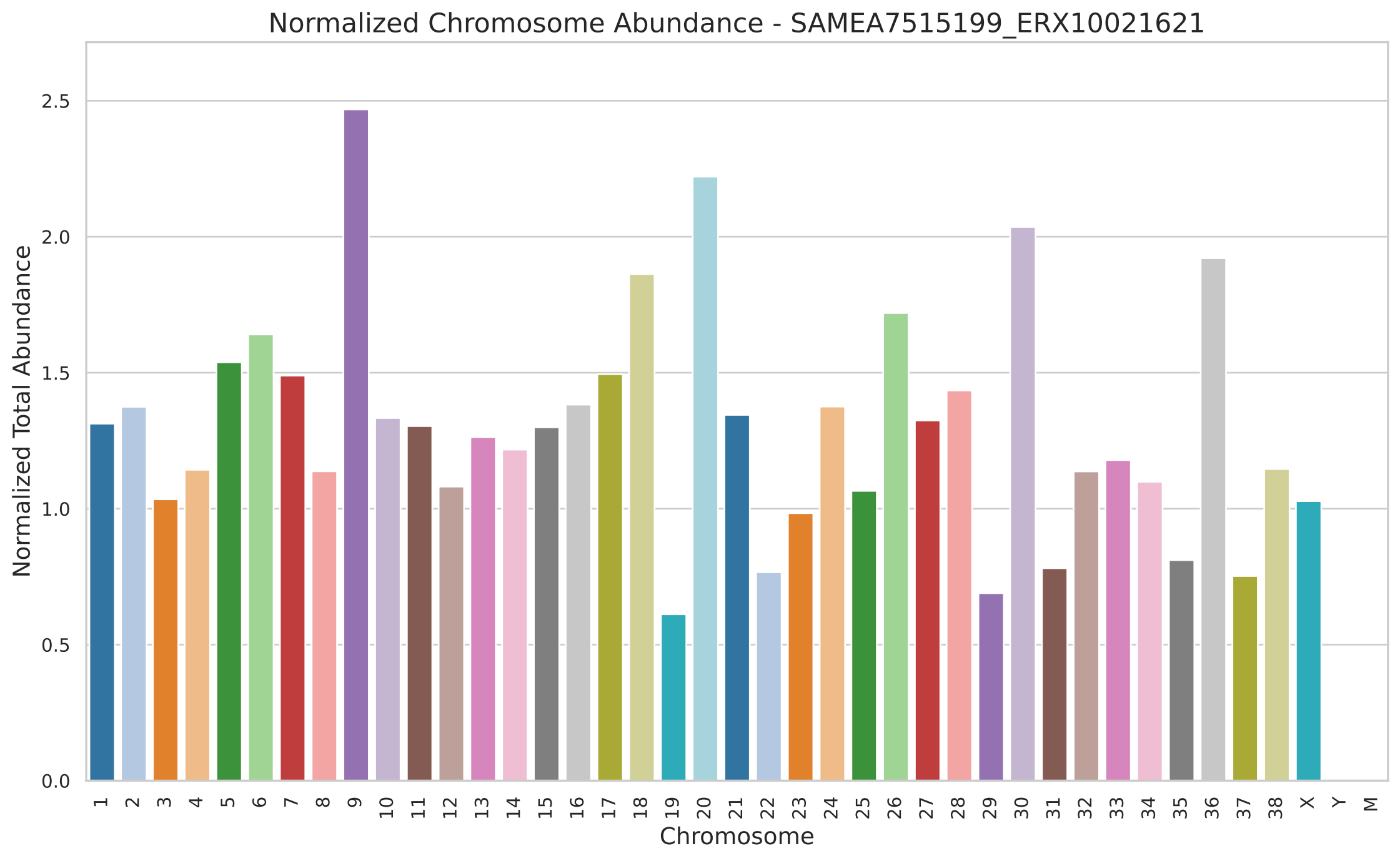

Normalized Chromosome Abundance - SAMEA7515095_ERX10021608
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

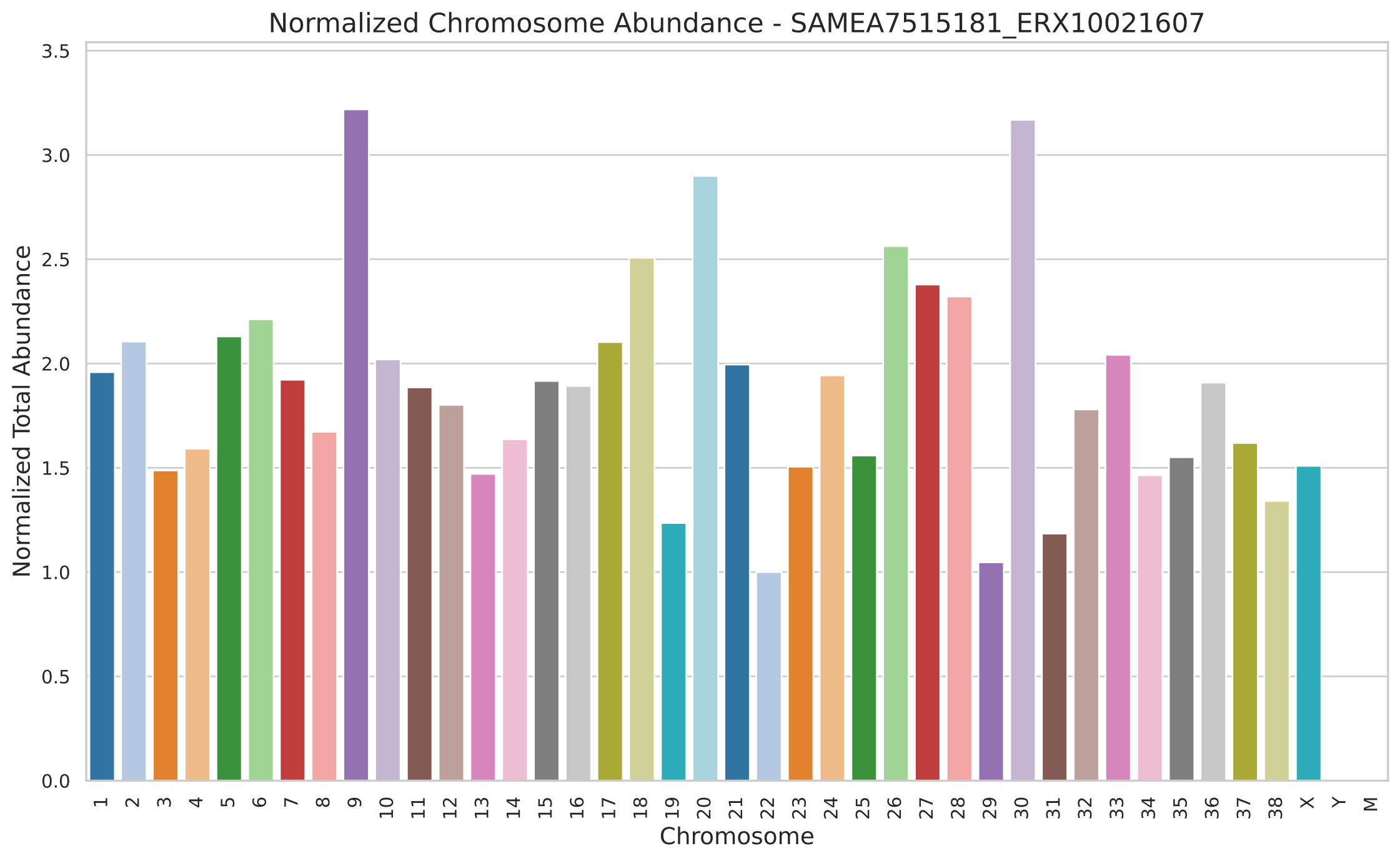

Normalized Chromosome Abundance - SAMEA7515171_ERX10021603
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

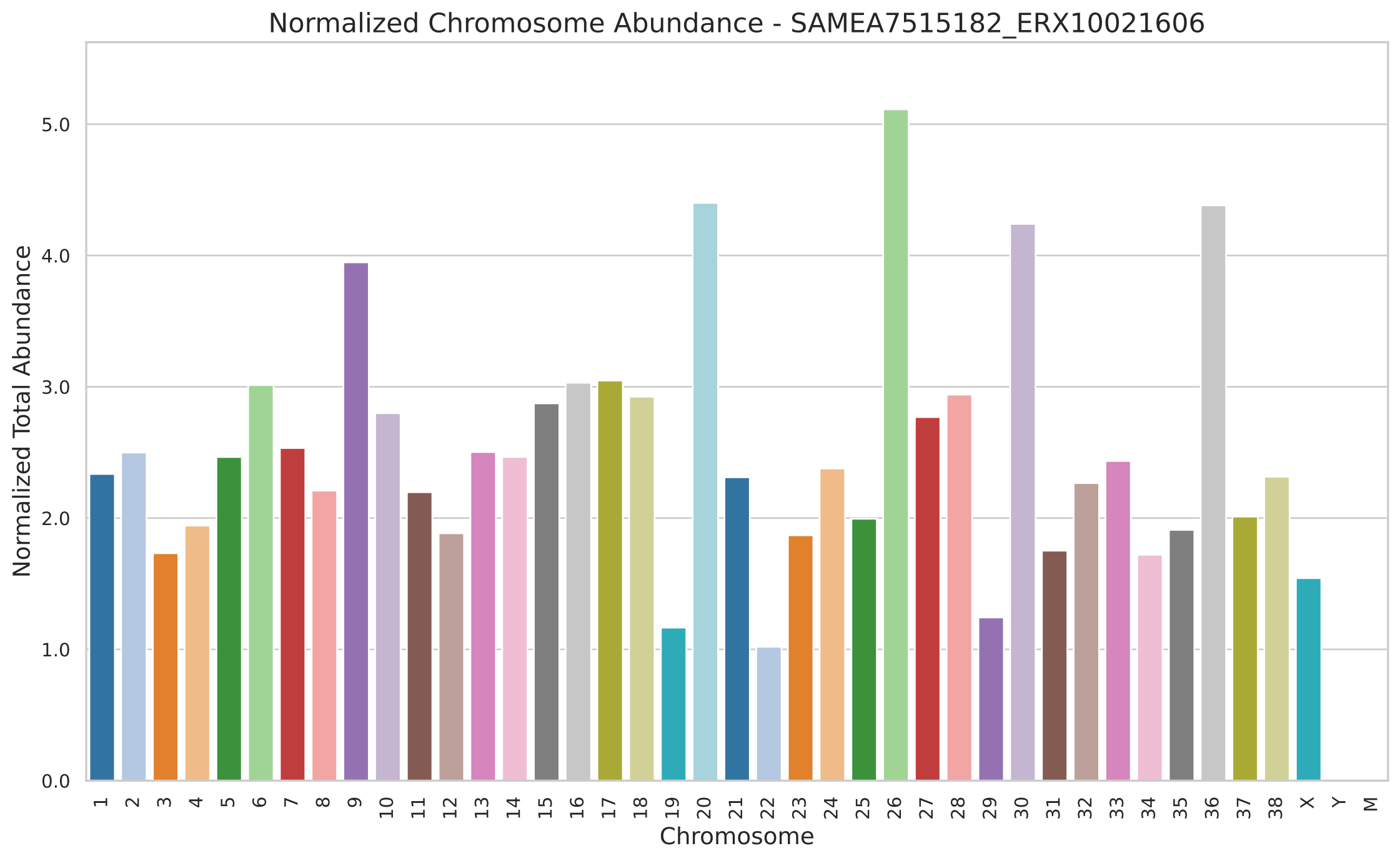

Normalized Chromosome Abundance - SAMEA7515079_ERX10021600
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

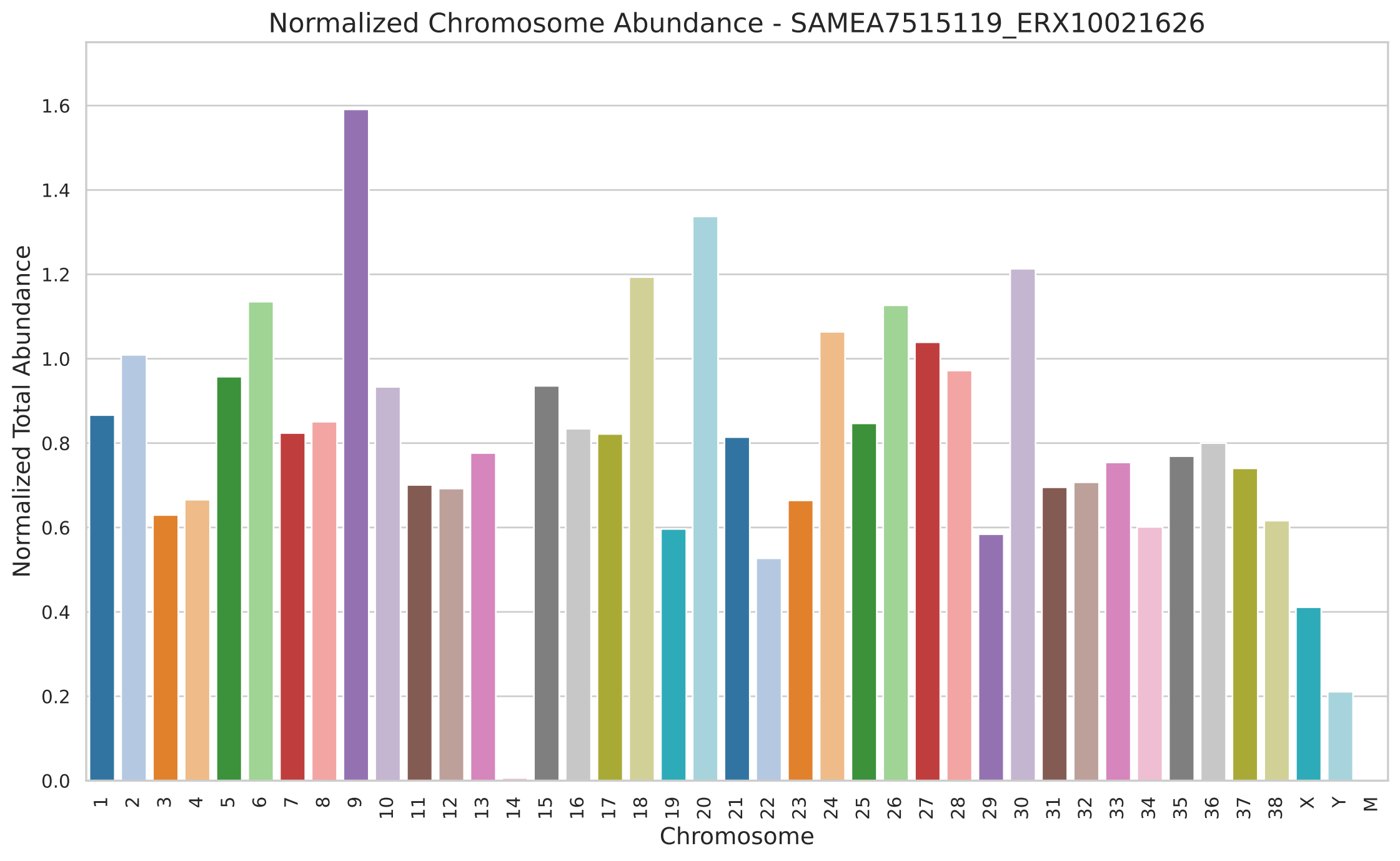

Normalized Chromosome Abundance - SAMEA7515096_ERX10021610
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

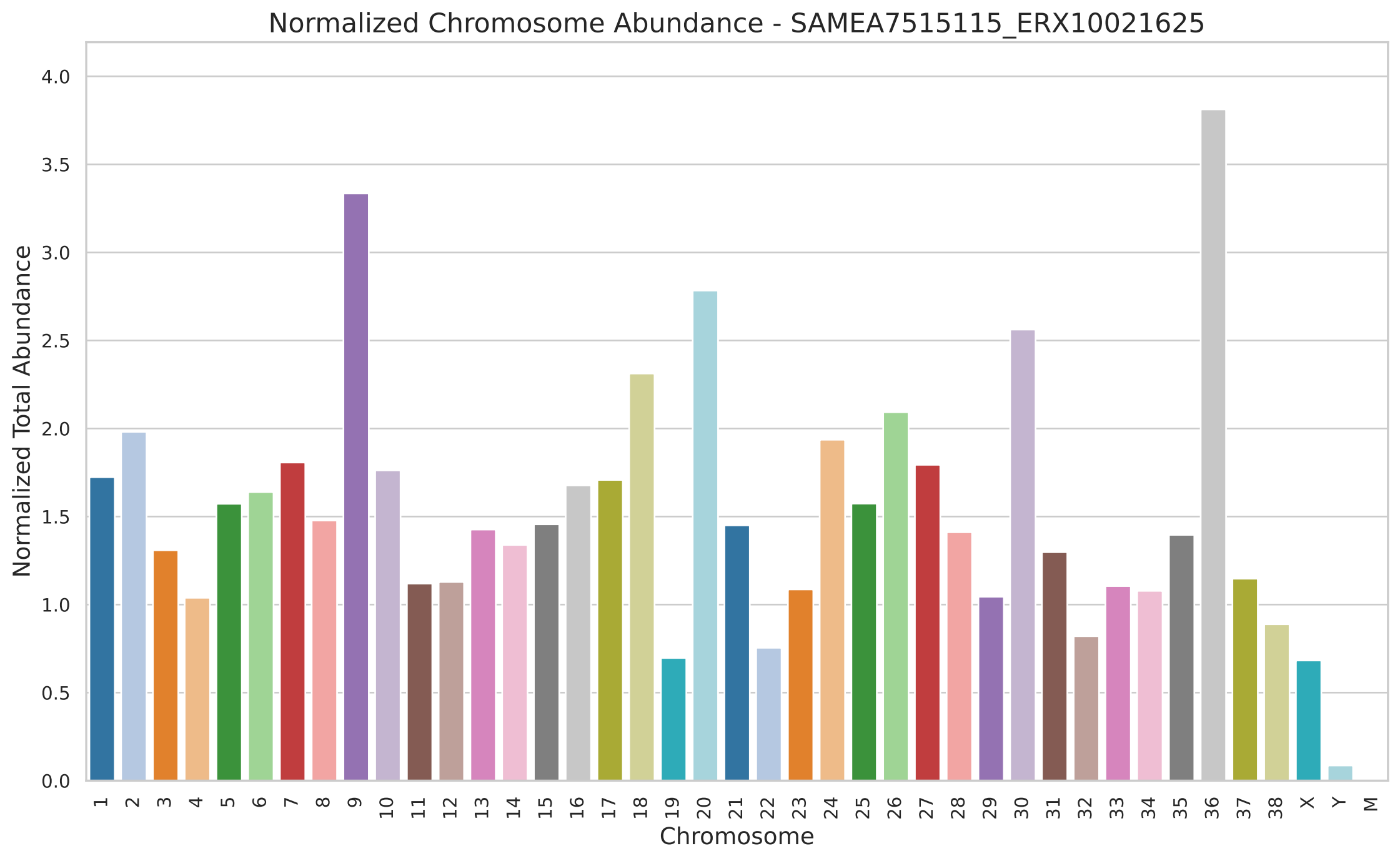

Normalized Chromosome Abundance - SAMEA7515102_ERX10021613
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

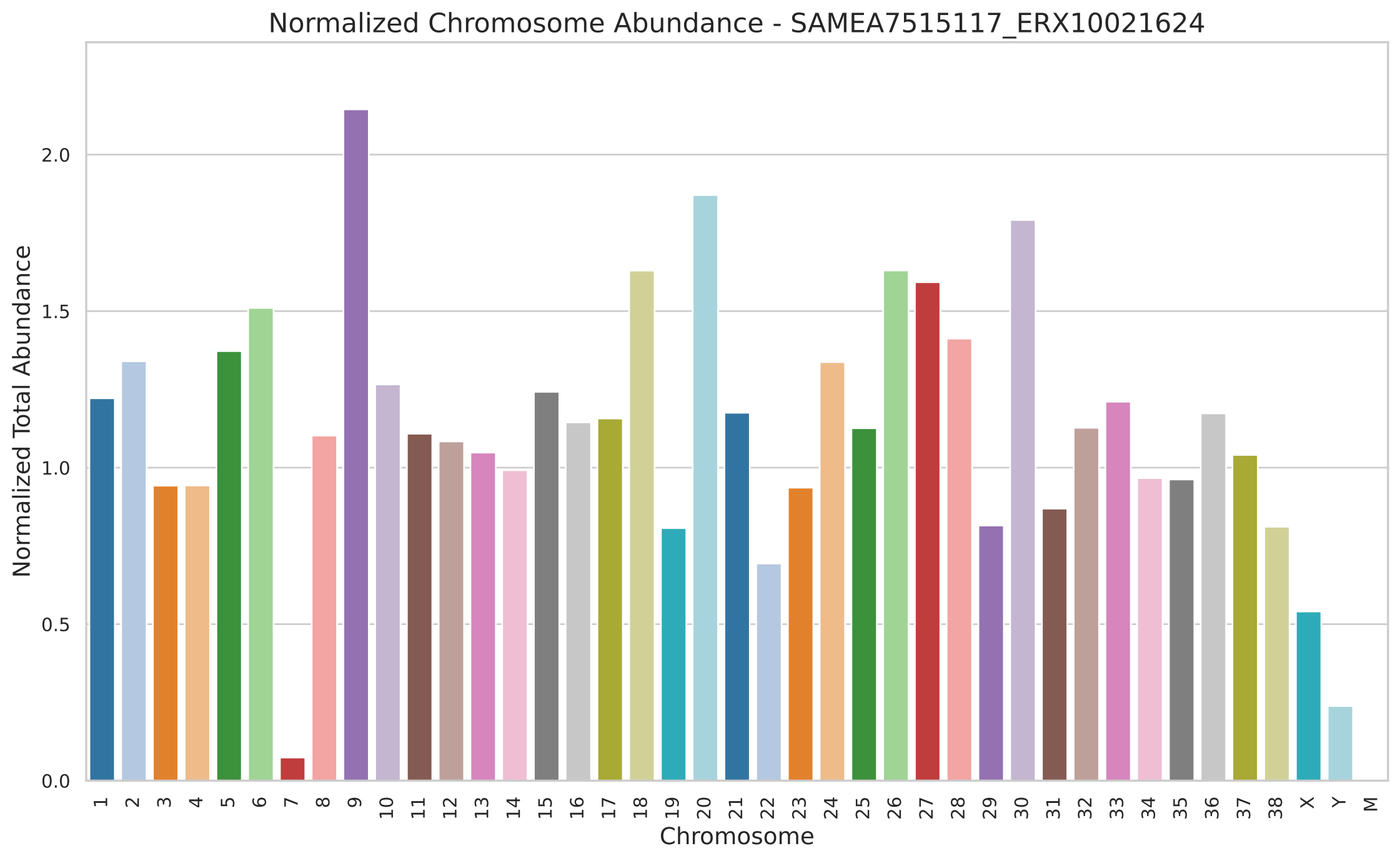

Normalized Chromosome Abundance - SAMEA7515199_ERX10021621
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

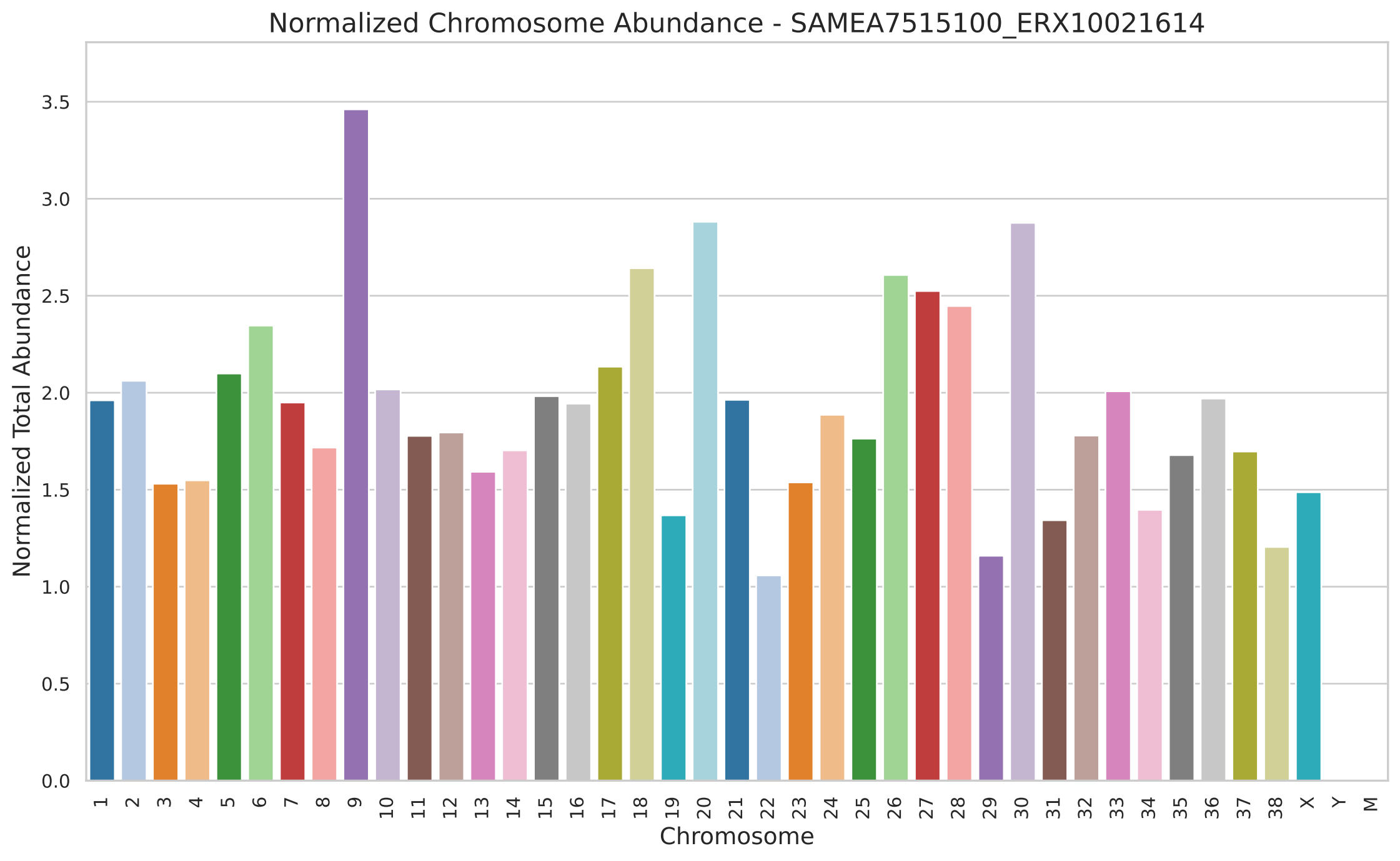

Normalized Chromosome Abundance - SAMEA7515181_ERX10021607
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

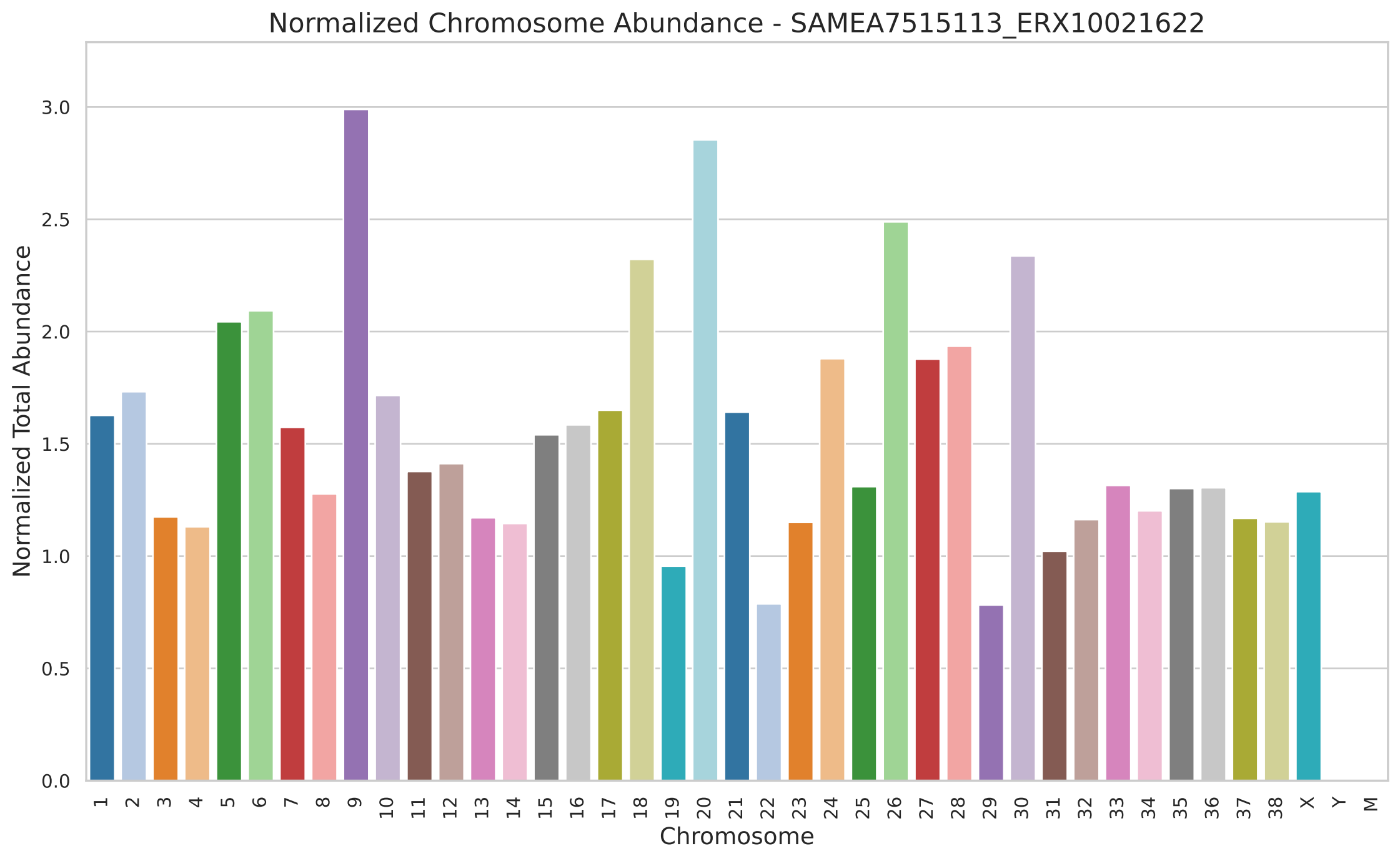

Normalized Chromosome Abundance - SAMEA7515182_ERX10021606
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

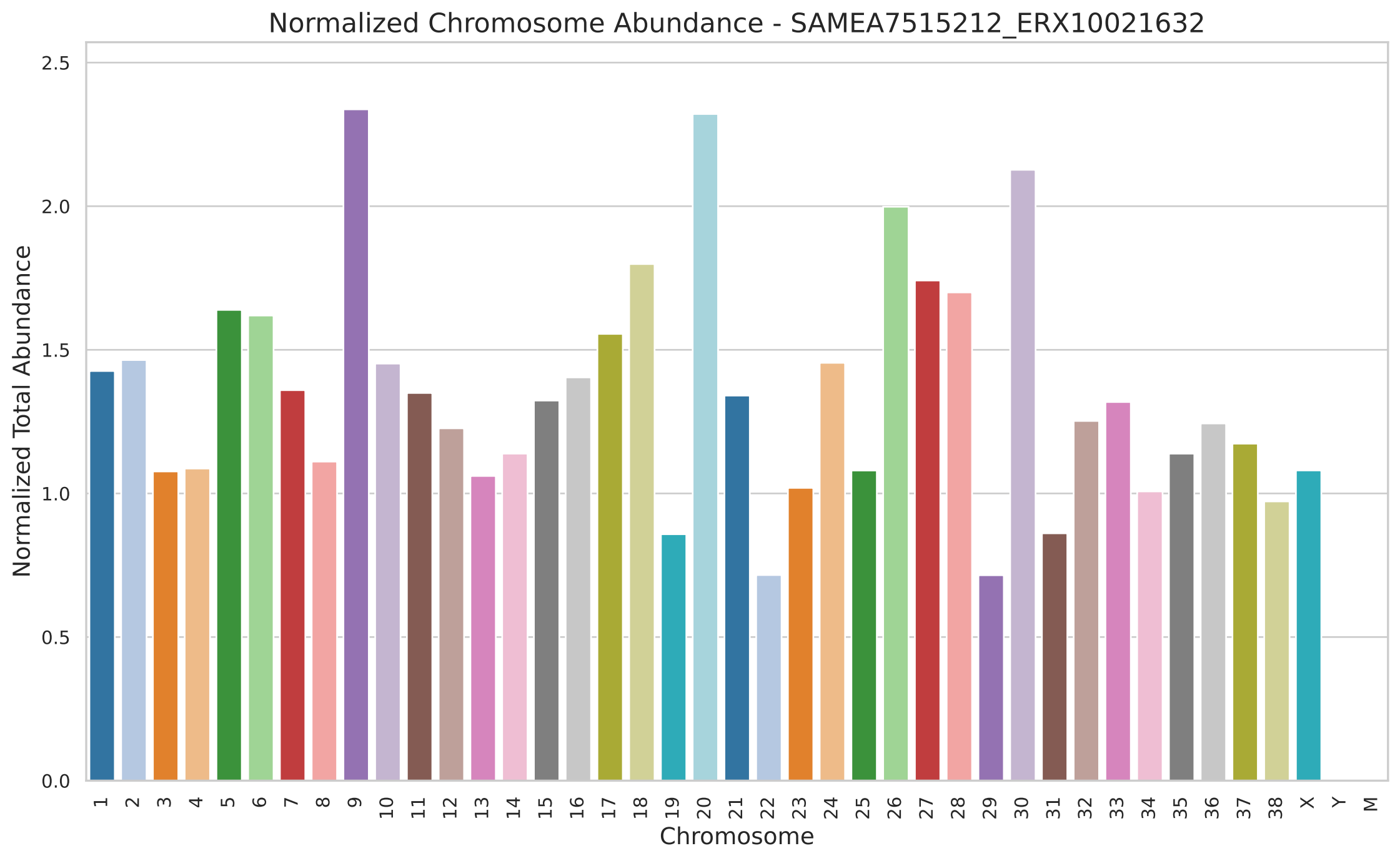

Normalized Chromosome Abundance - SAMEA7515119_ERX10021626
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

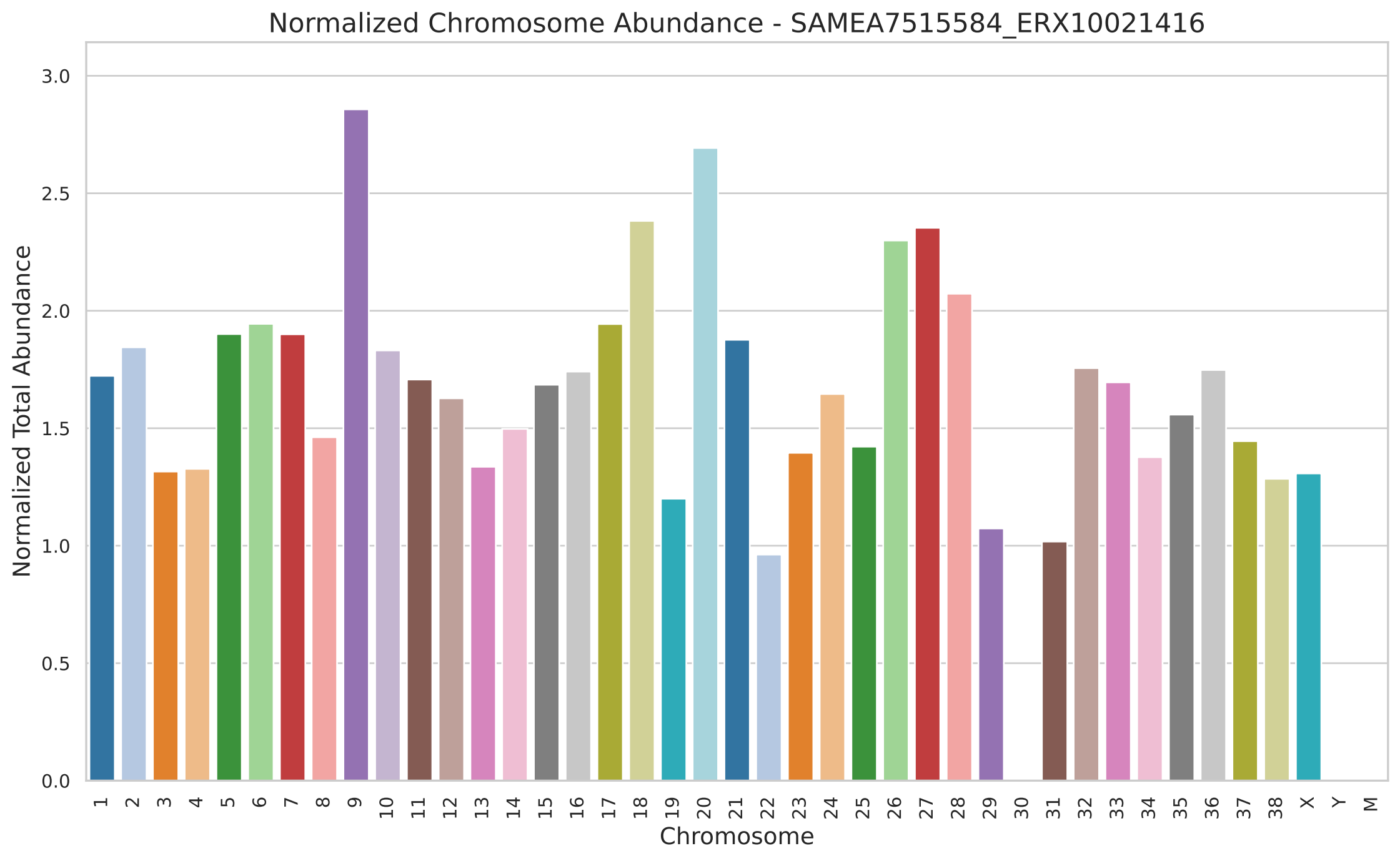

Normalized Chromosome Abundance - SAMEA7515115_ERX10021625
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

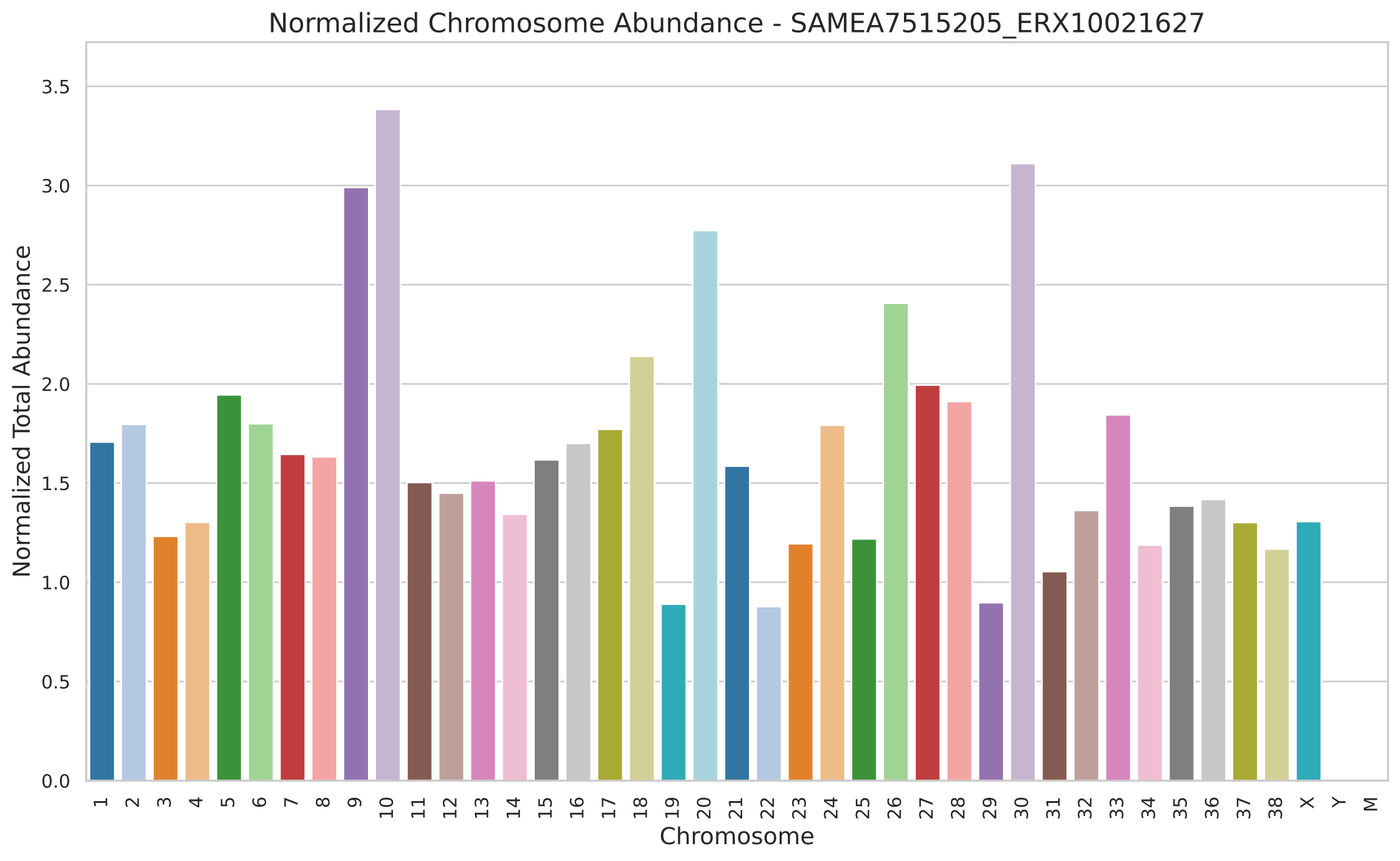

Normalized Chromosome Abundance - SAMEA7515117_ERX10021624
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

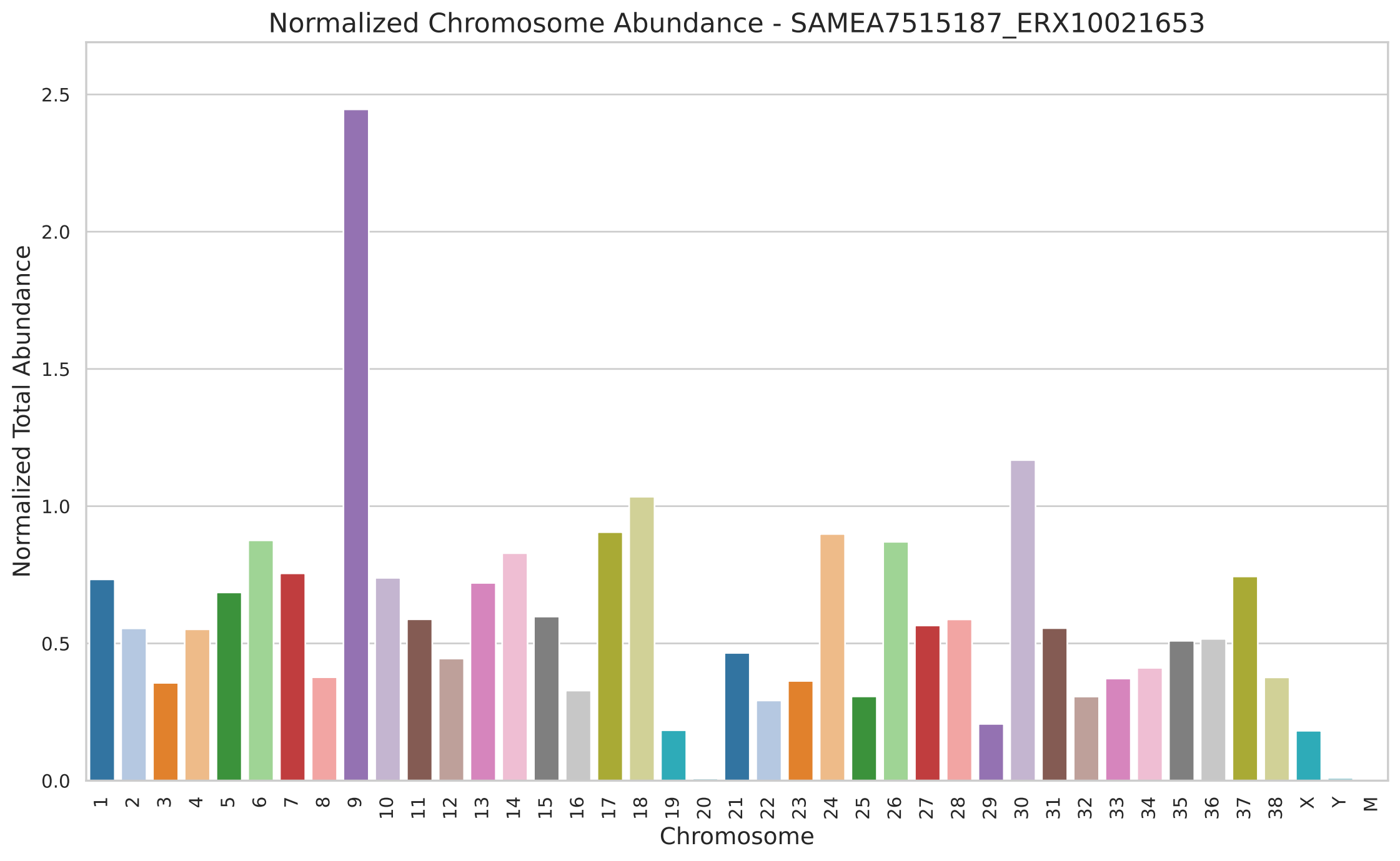

Normalized Chromosome Abundance - SAMEA7515100_ERX10021614
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

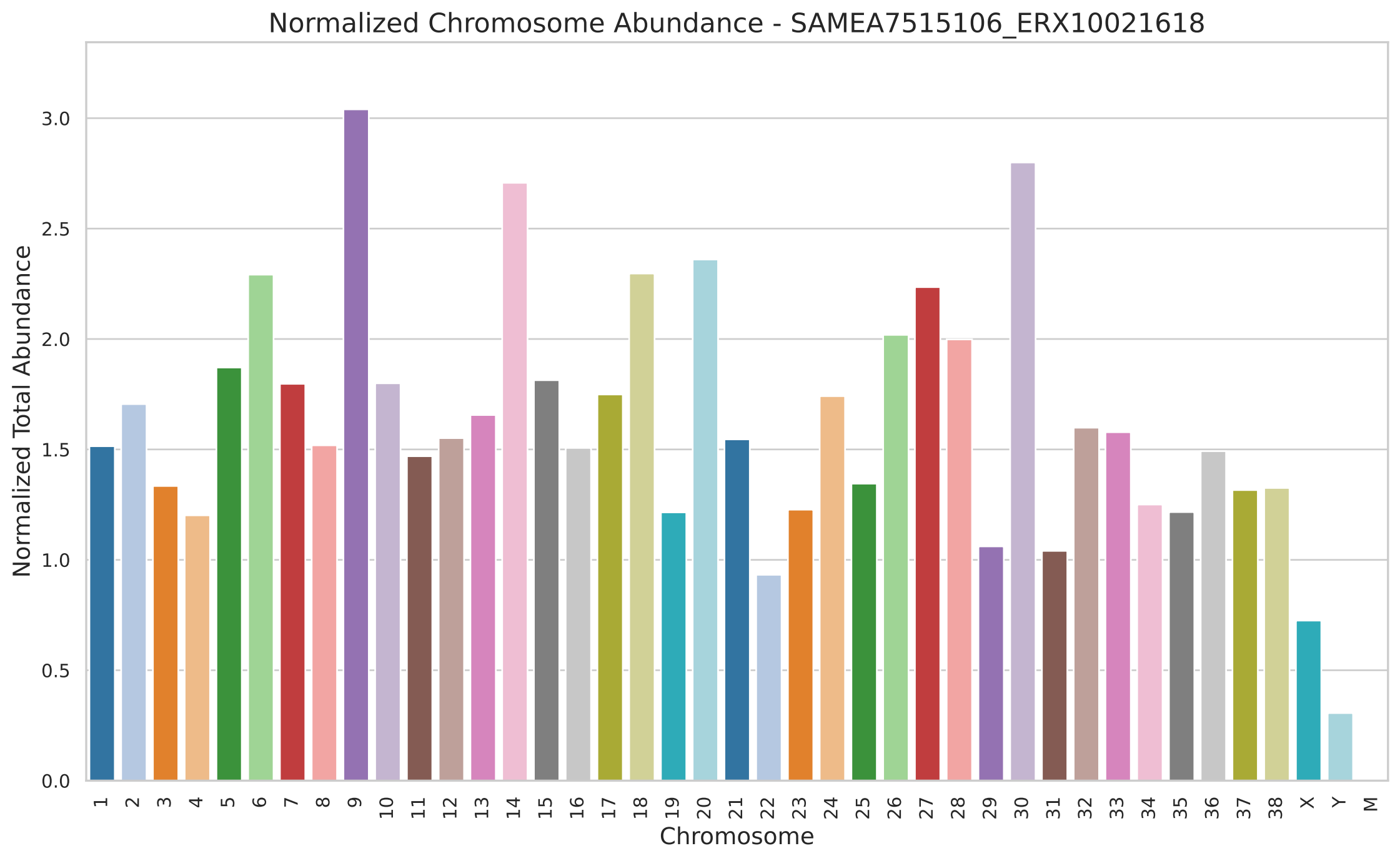

Normalized Chromosome Abundance - SAMEA7515113_ERX10021622
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

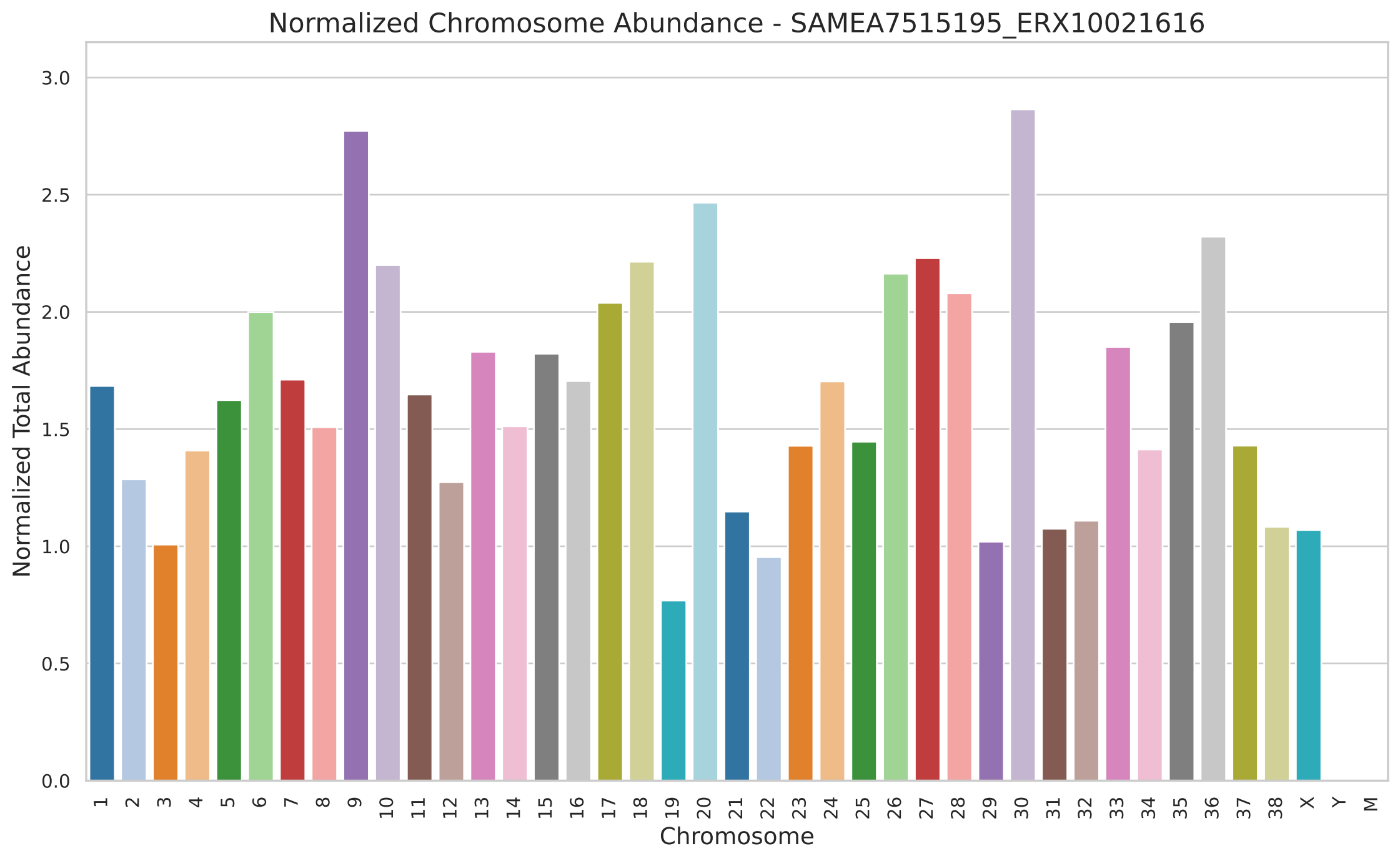

Normalized Chromosome Abundance - SAMEA7515212_ERX10021632
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

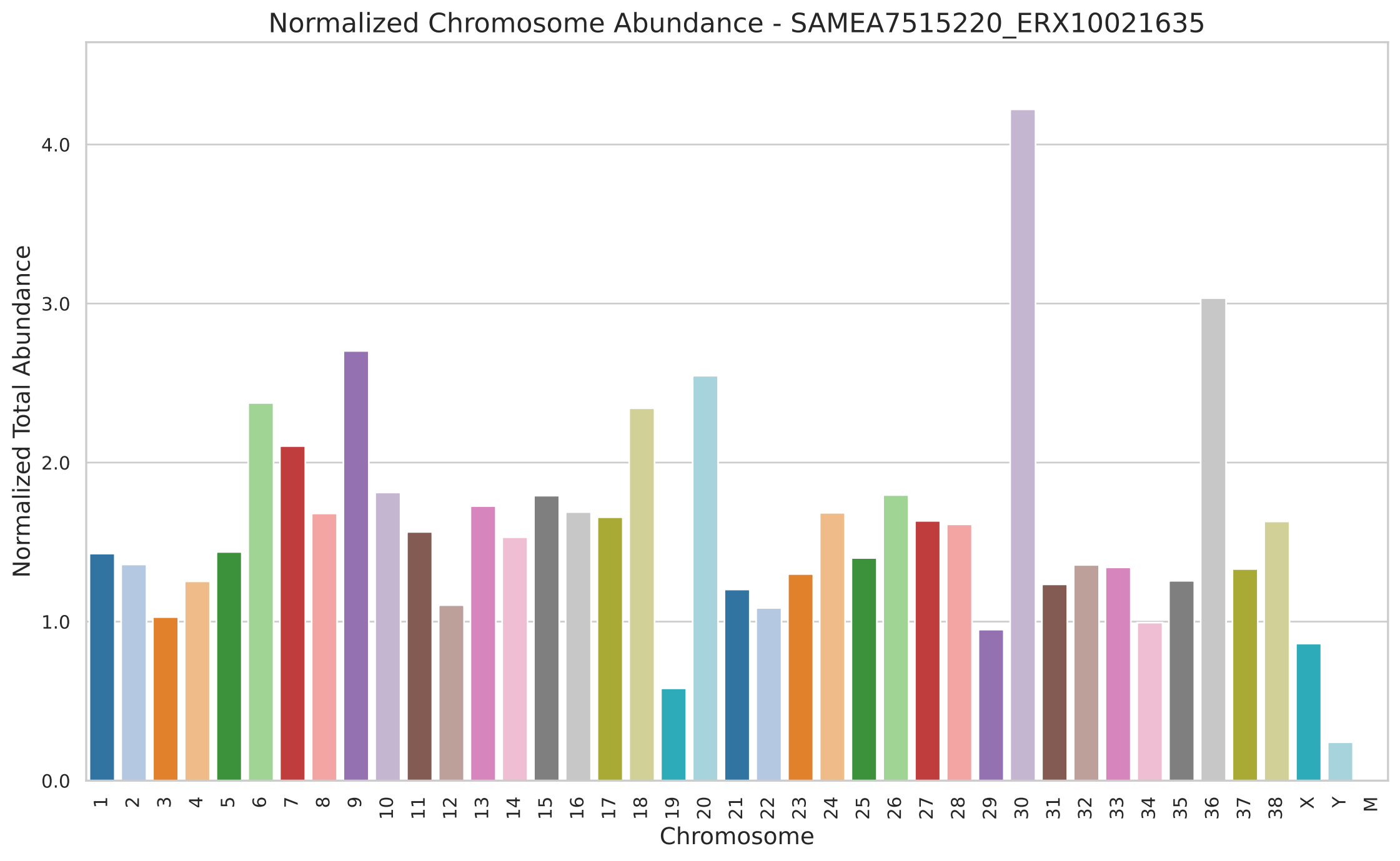

Normalized Chromosome Abundance - SAMEA7515584_ERX10021416
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

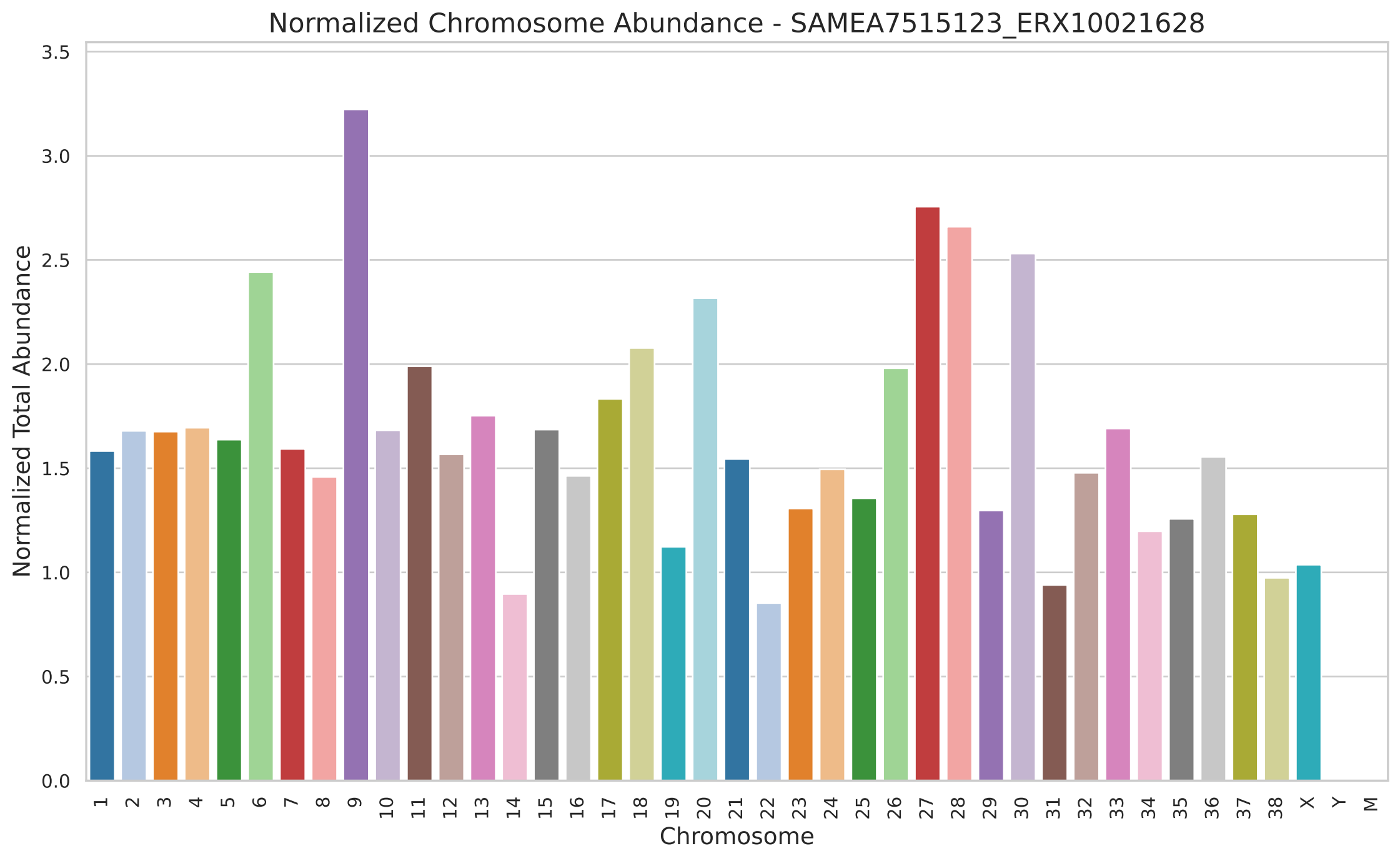

Normalized Chromosome Abundance - SAMEA7515205_ERX10021627
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

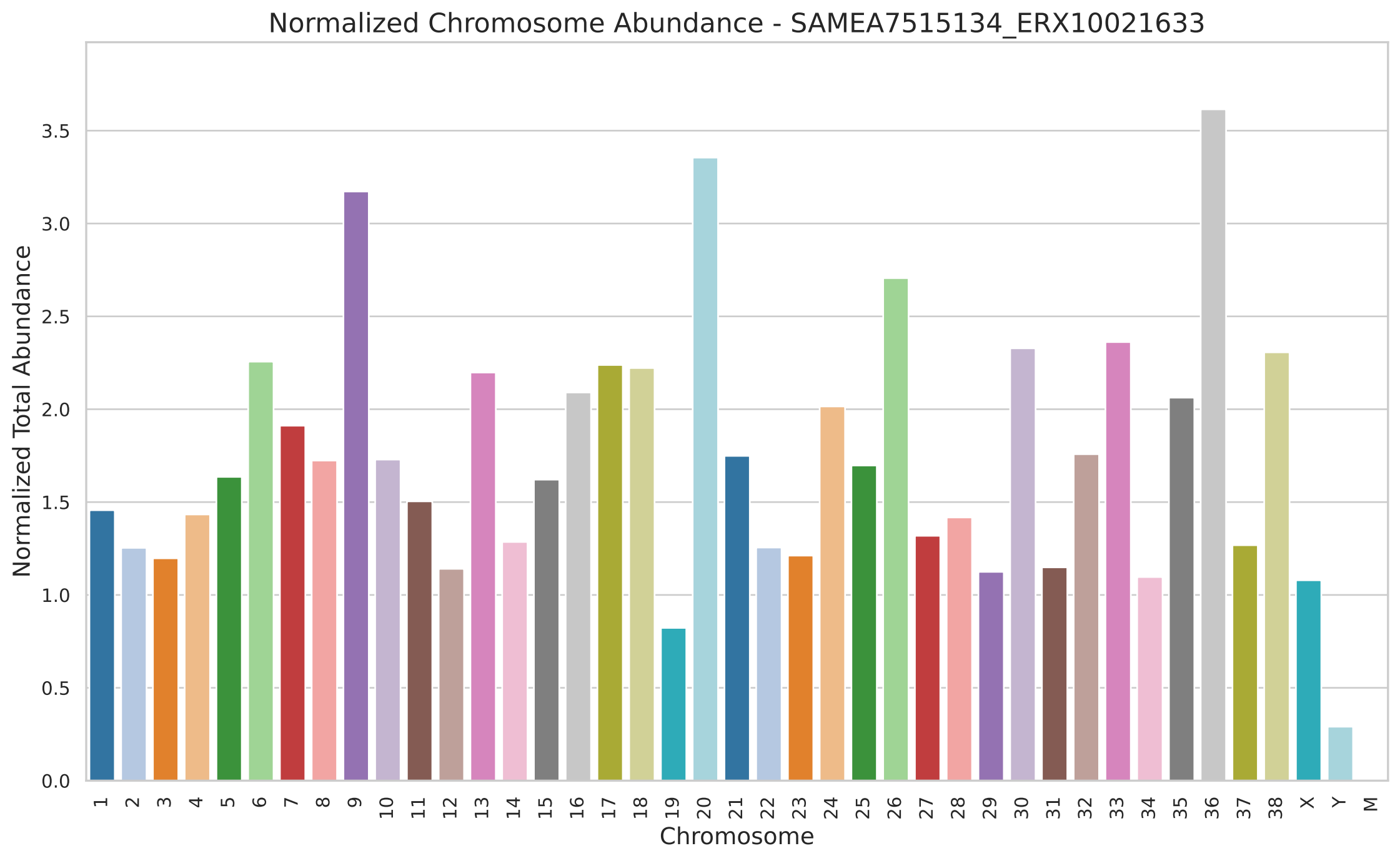

Normalized Chromosome Abundance - SAMEA7515187_ERX10021653
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

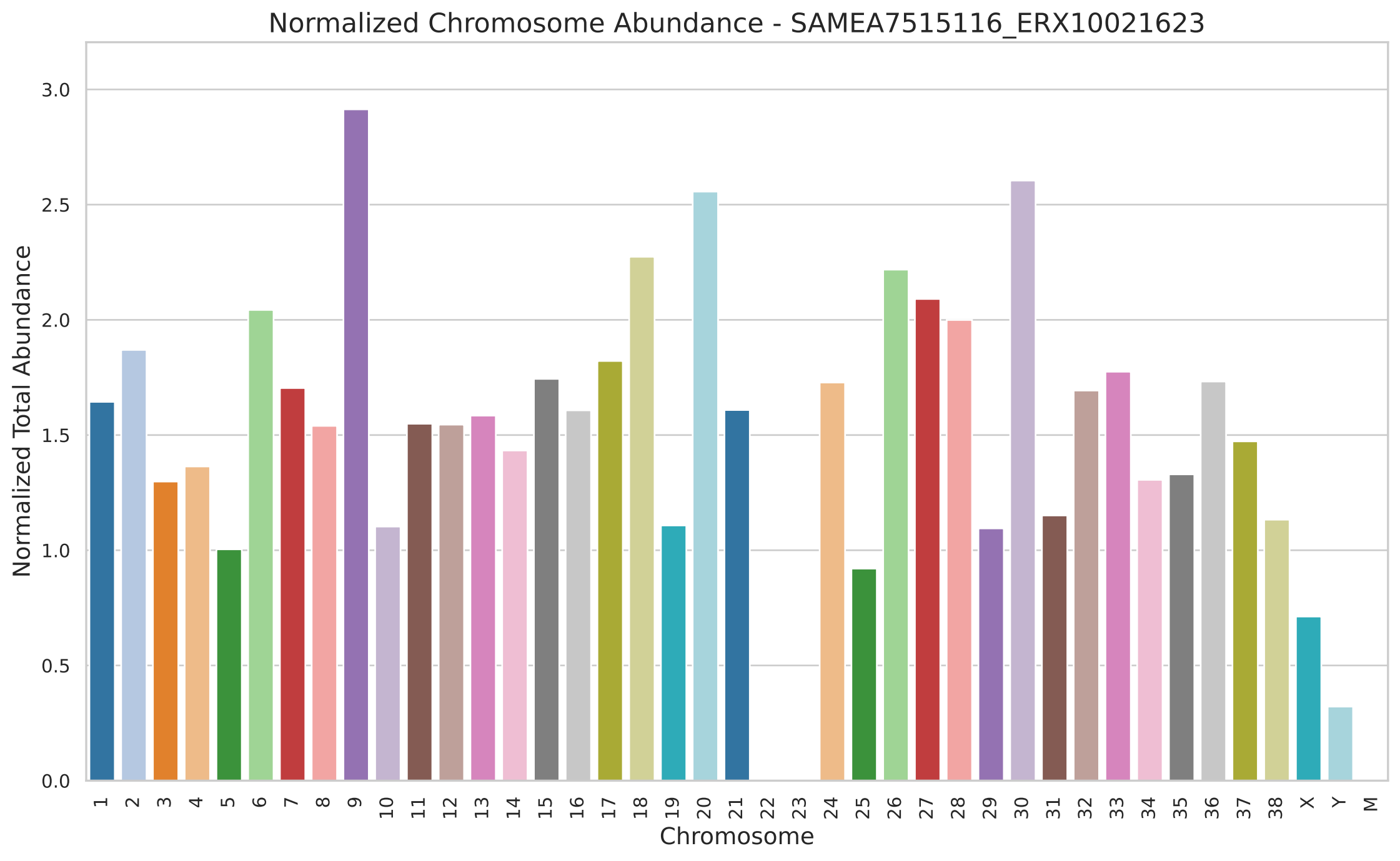

Normalized Chromosome Abundance - SAMEA7515106_ERX10021618
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

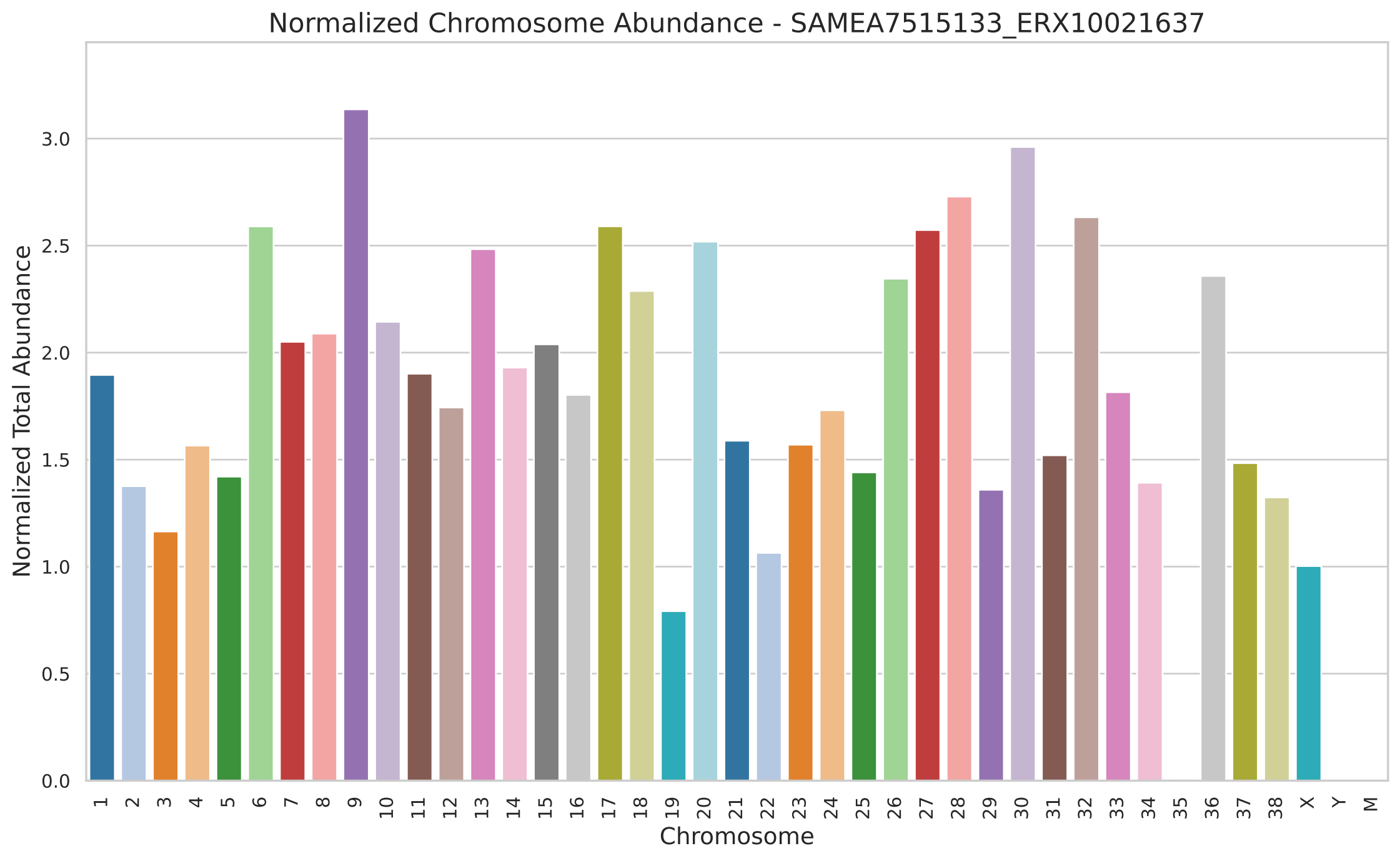

Normalized Chromosome Abundance - SAMEA7515195_ERX10021616
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

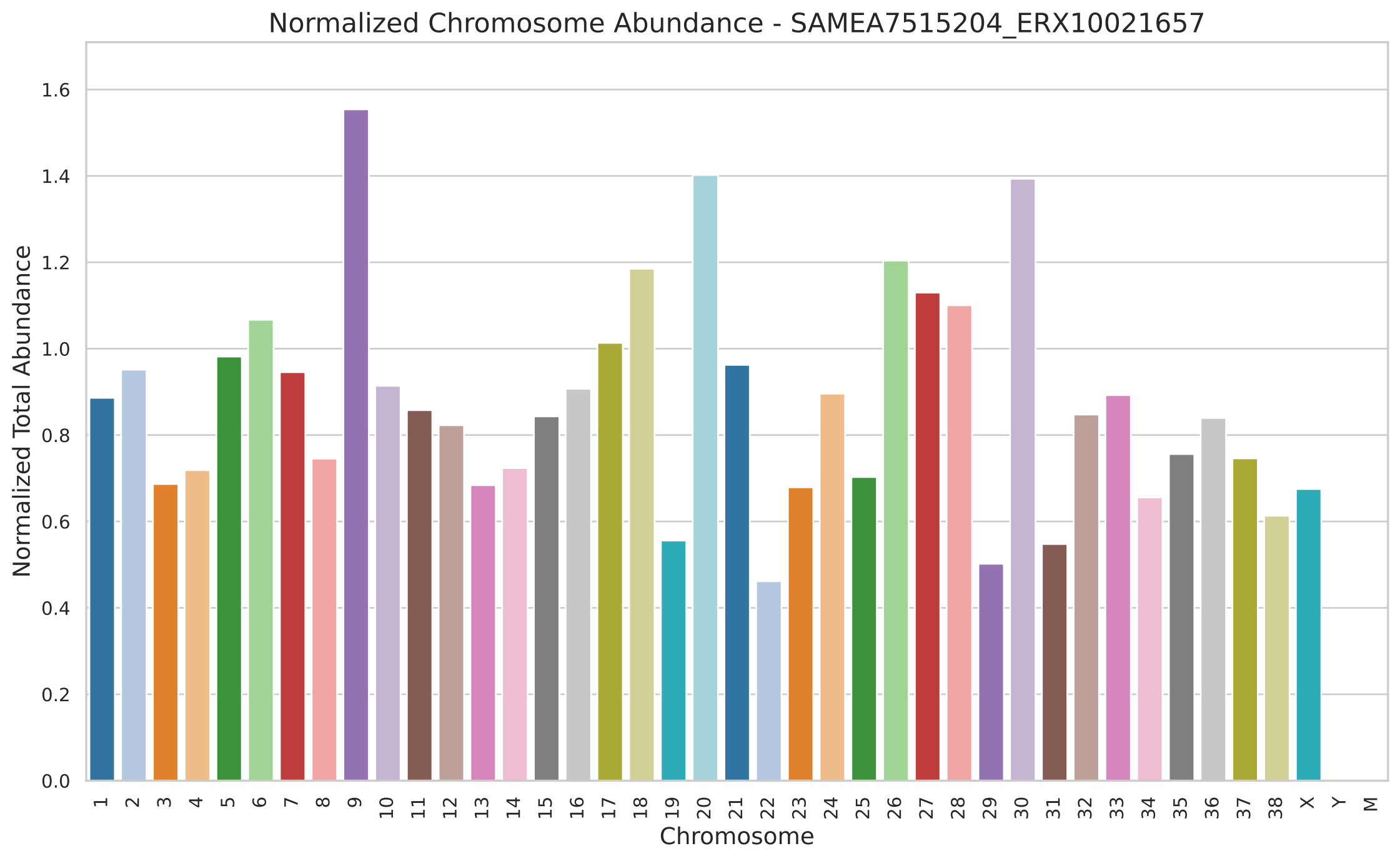

Normalized Chromosome Abundance - SAMEA7515220_ERX10021635
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

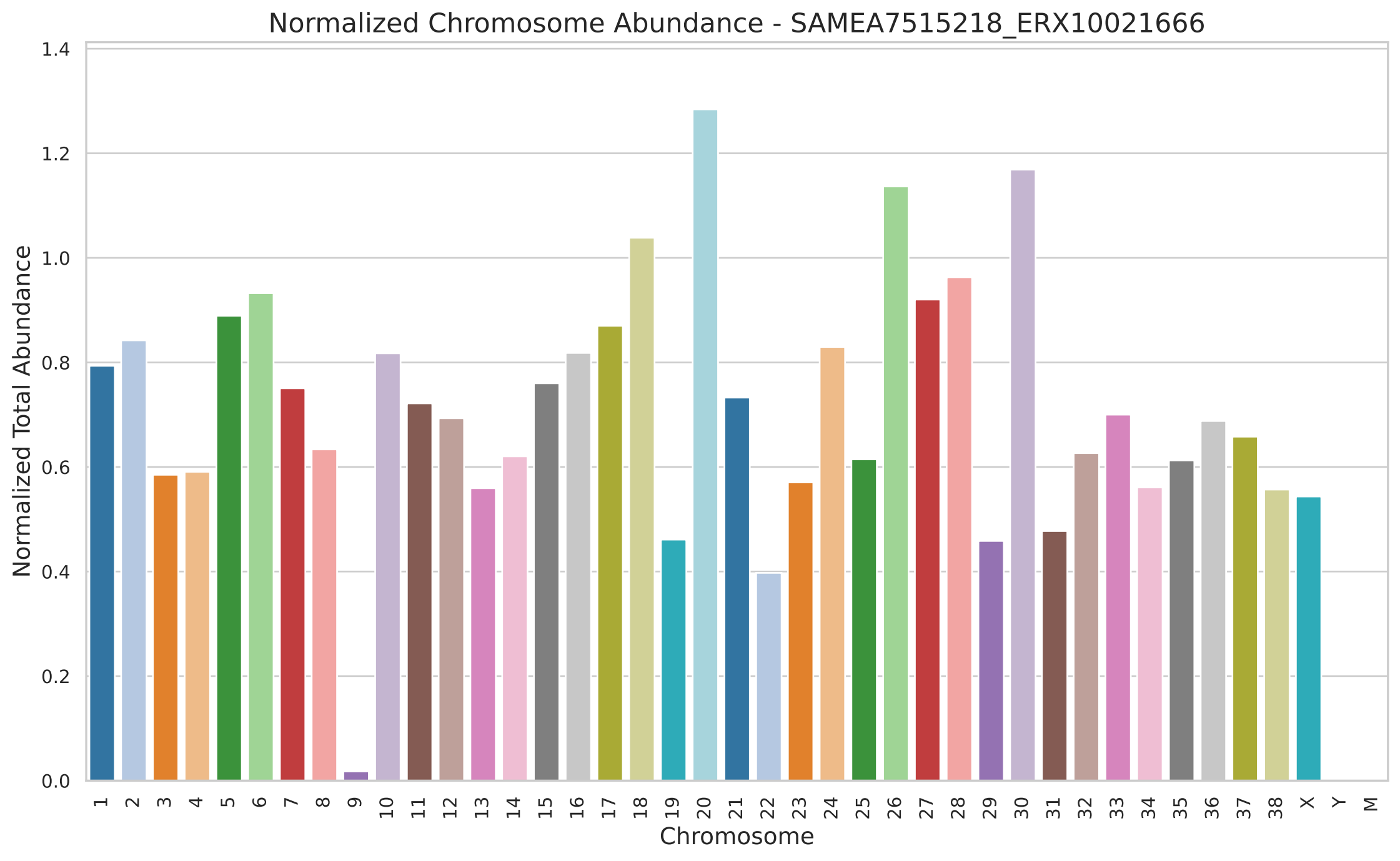

Normalized Chromosome Abundance - SAMEA7515123_ERX10021628
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

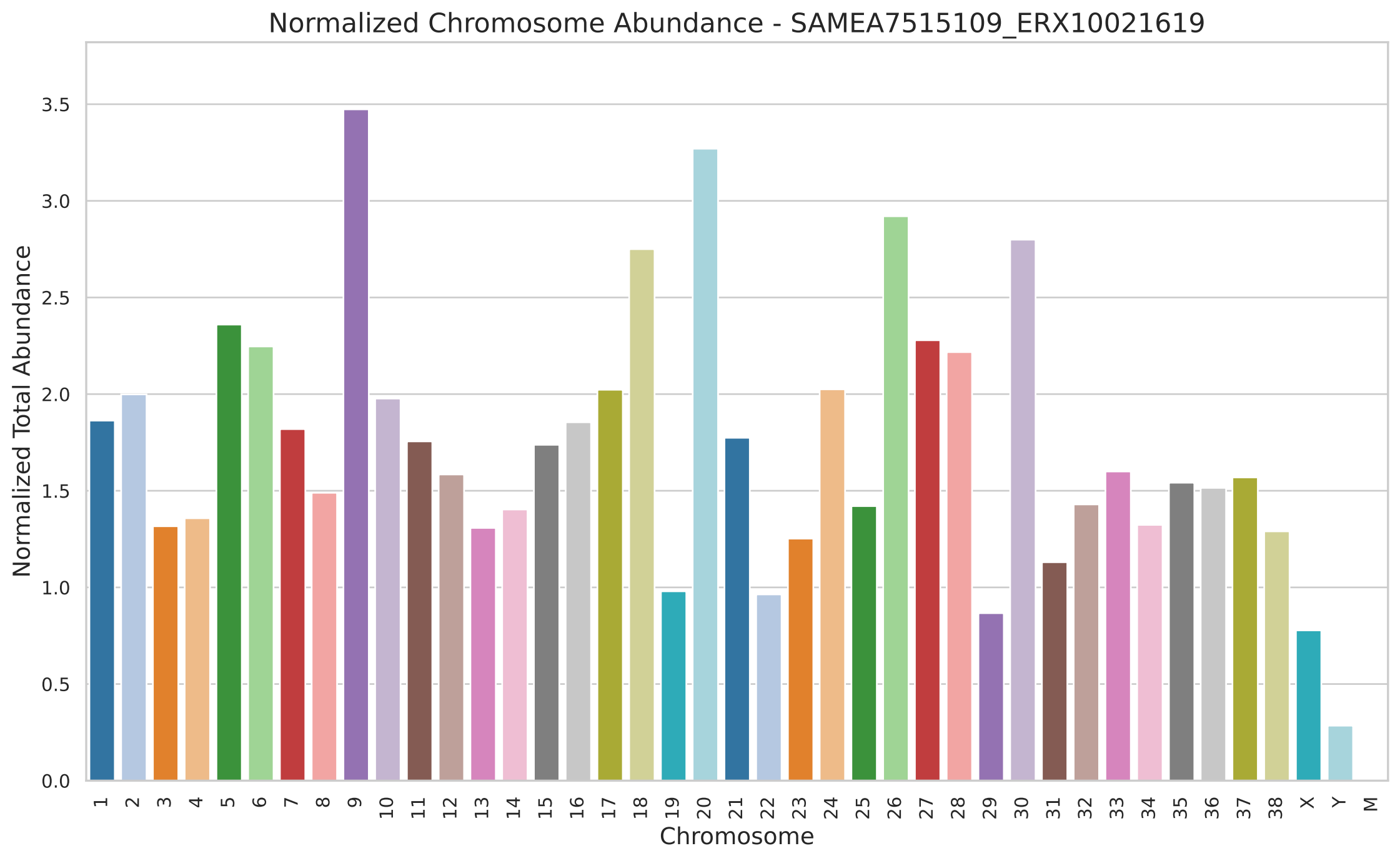

Normalized Chromosome Abundance - SAMEA7515134_ERX10021633
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

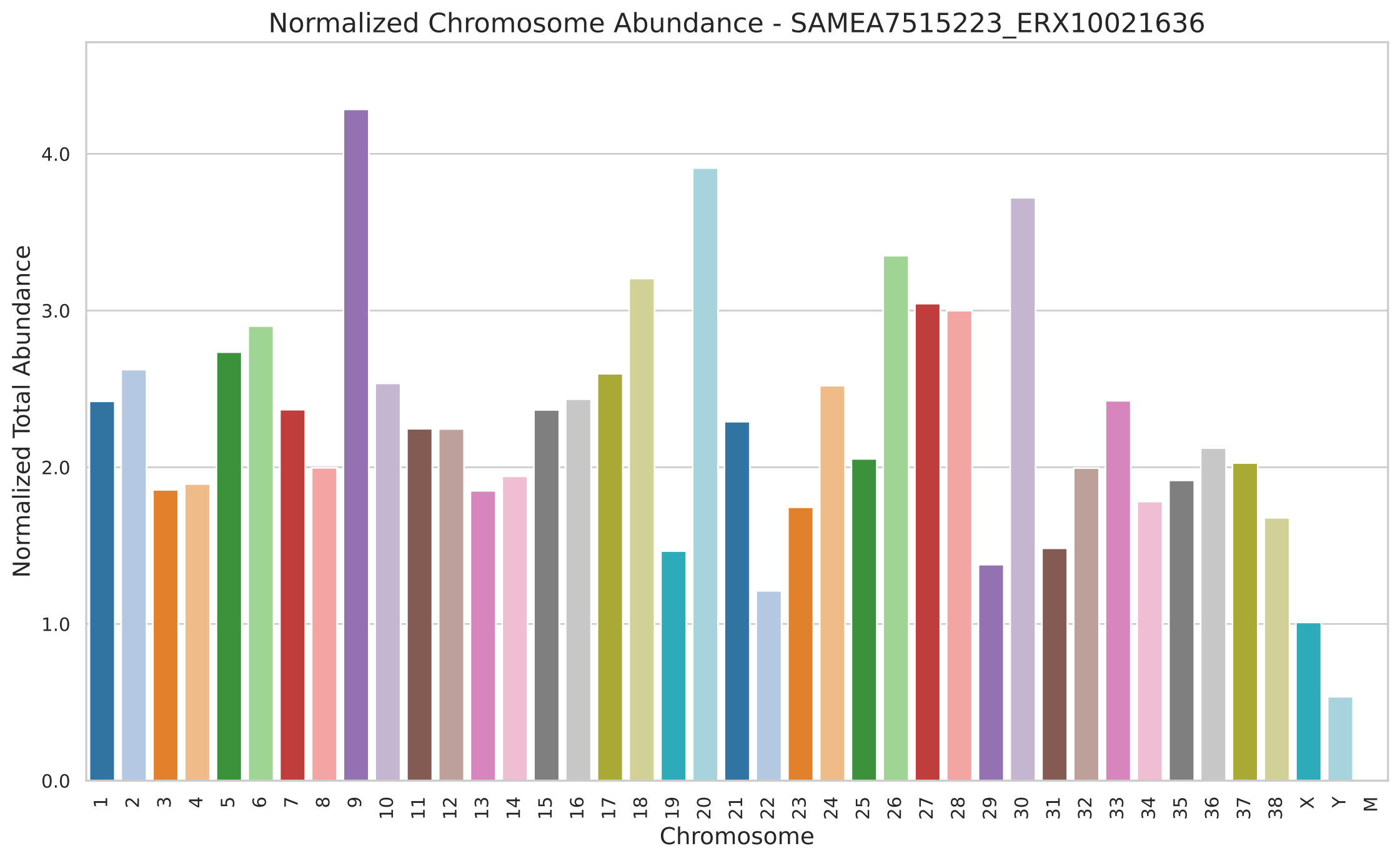

Normalized Chromosome Abundance - SAMEA7515116_ERX10021623
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

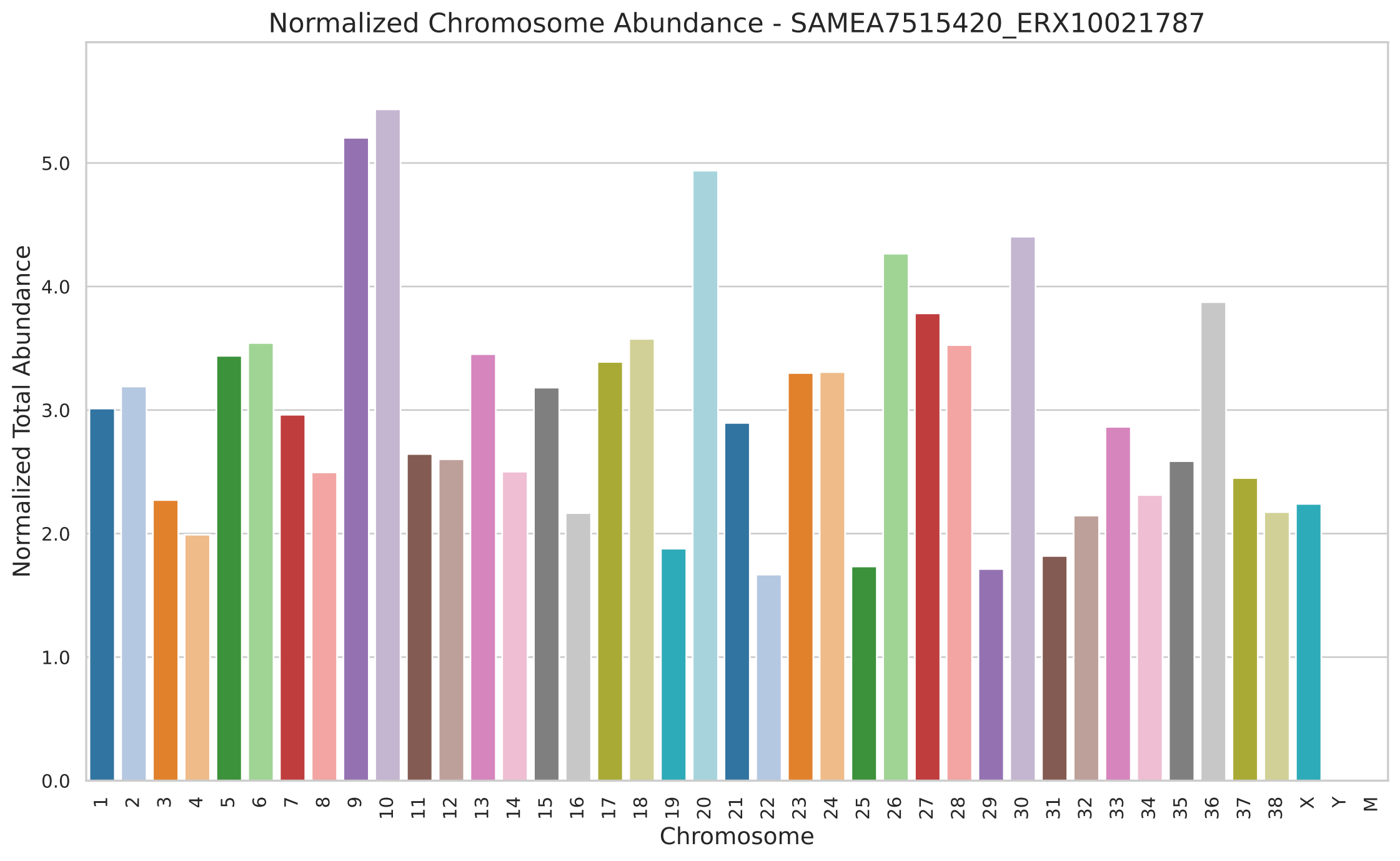

Normalized Chromosome Abundance - SAMEA7515133_ERX10021637
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

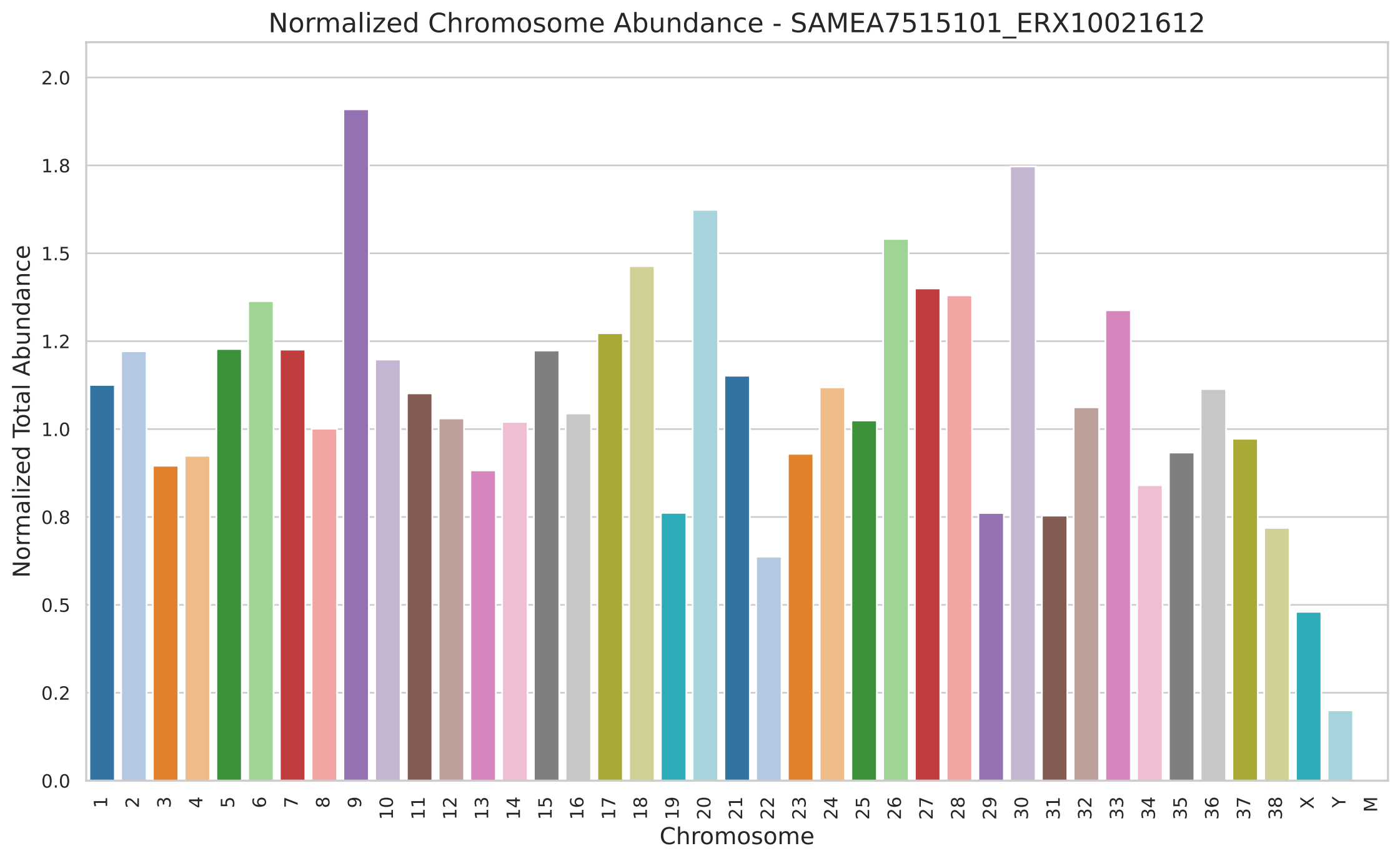

Normalized Chromosome Abundance - SAMEA7515204_ERX10021657
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

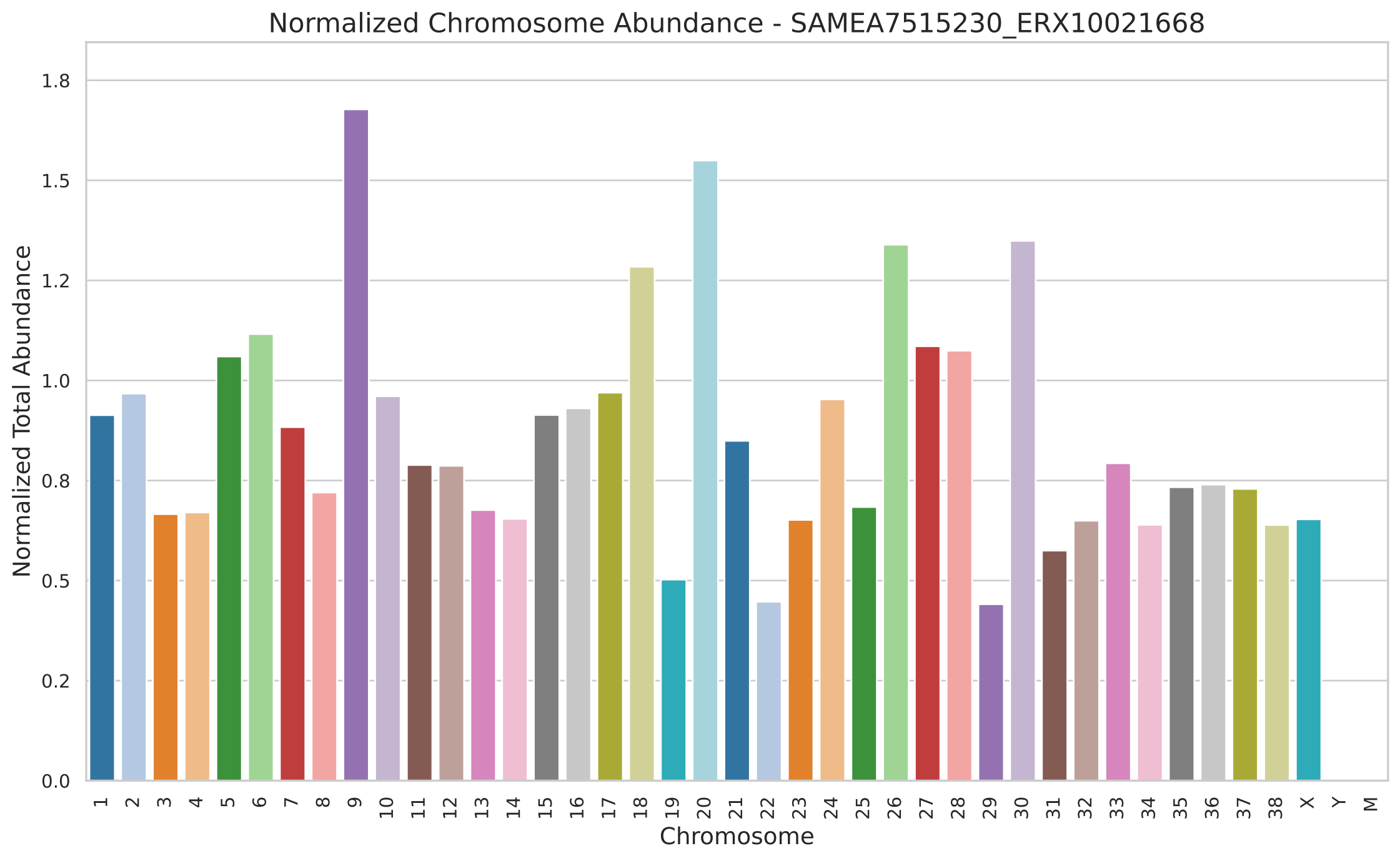

Normalized Chromosome Abundance - SAMEA7515218_ERX10021666
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

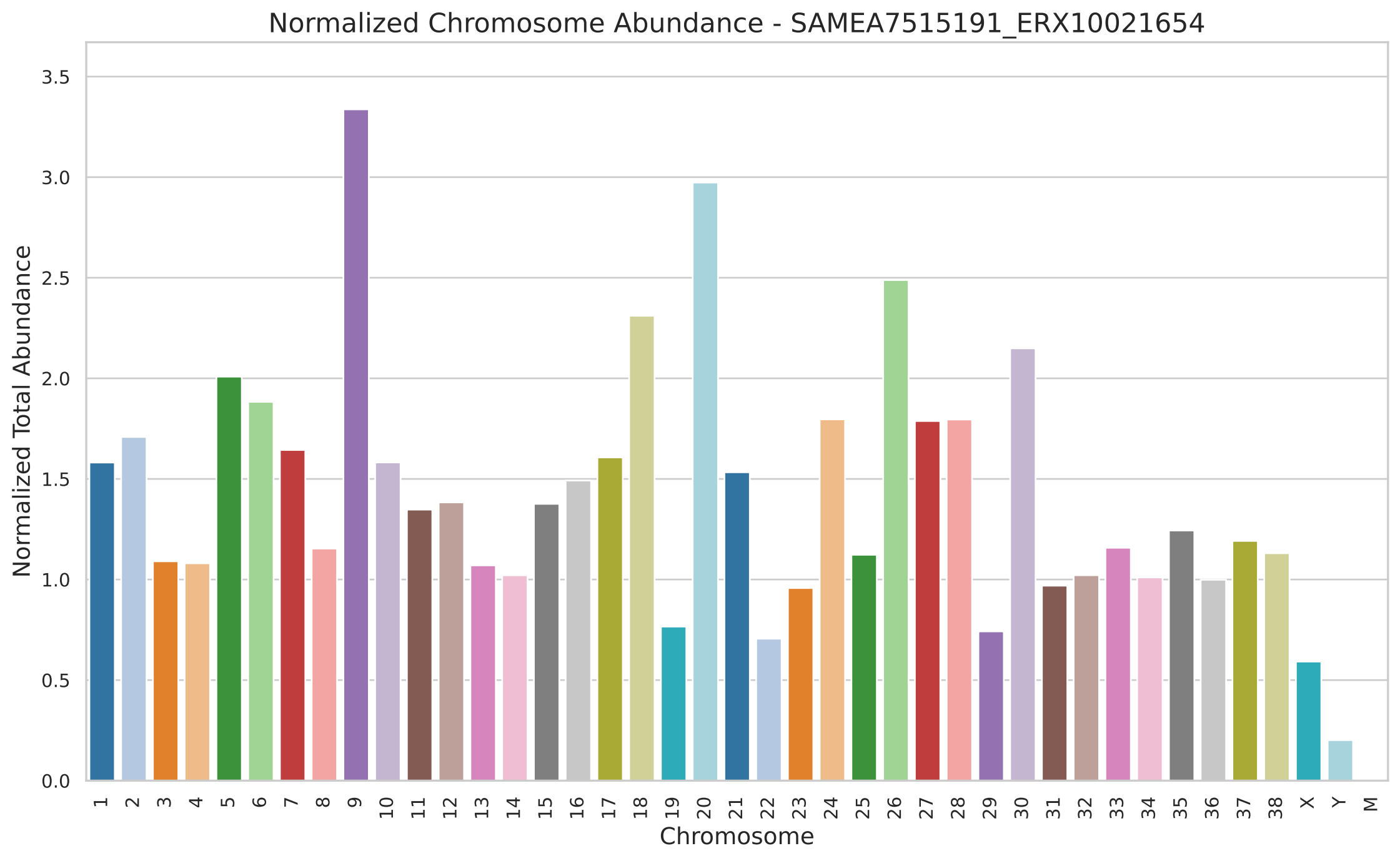

Normalized Chromosome Abundance - SAMEA7515109_ERX10021619
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

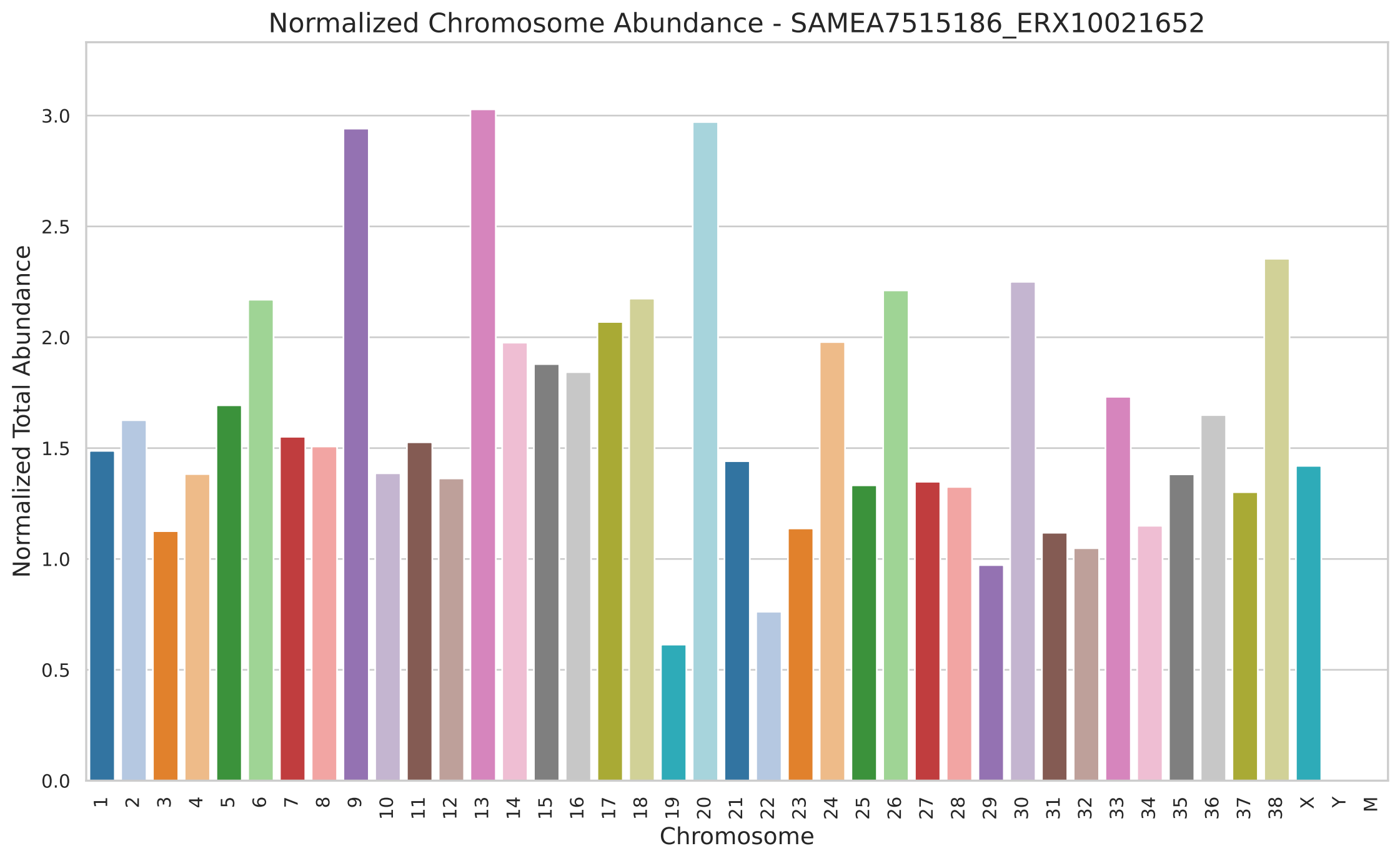

Normalized Chromosome Abundance - SAMEA7515223_ERX10021636
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

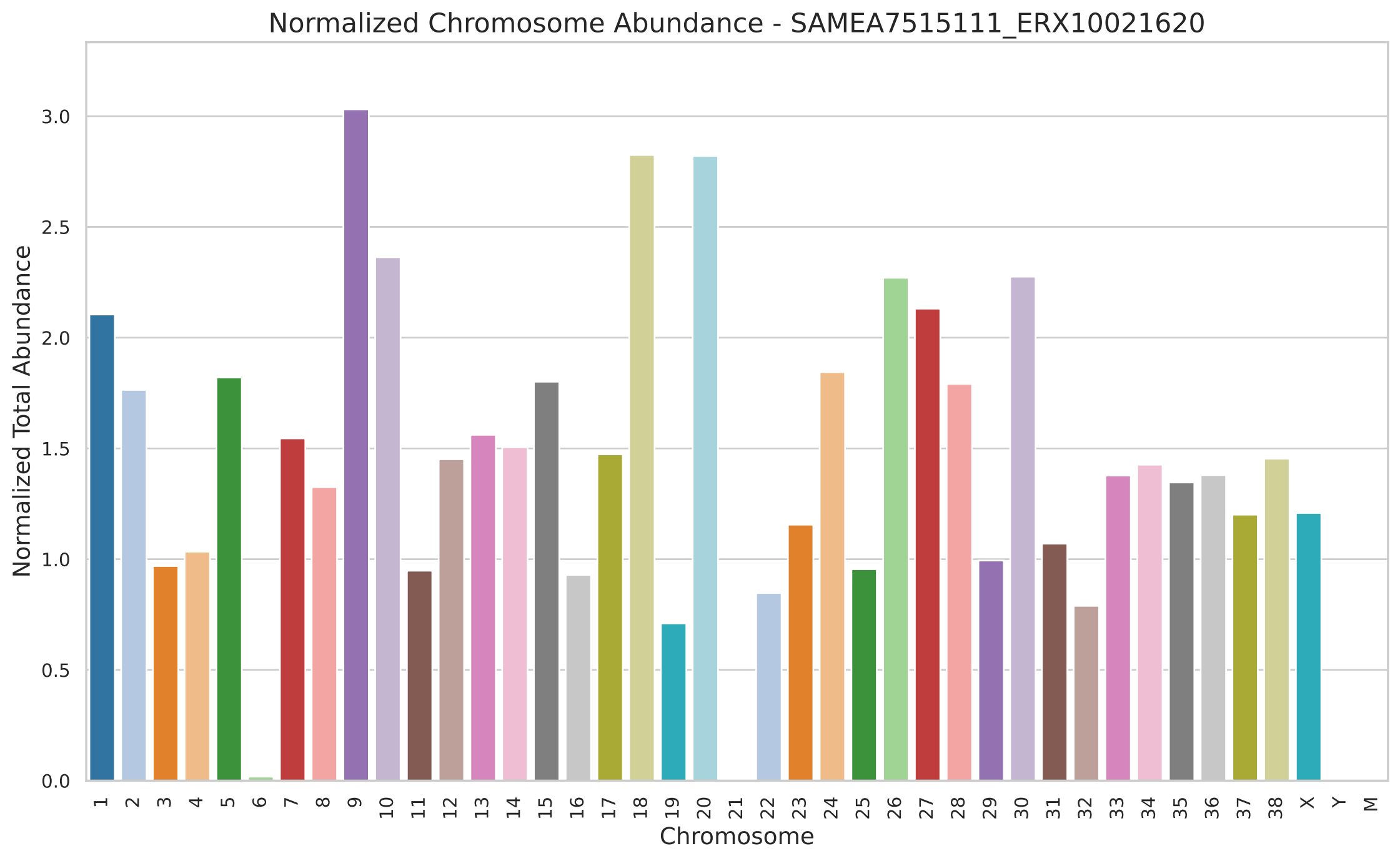

Normalized Chromosome Abundance - SAMEA7515420_ERX10021787
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

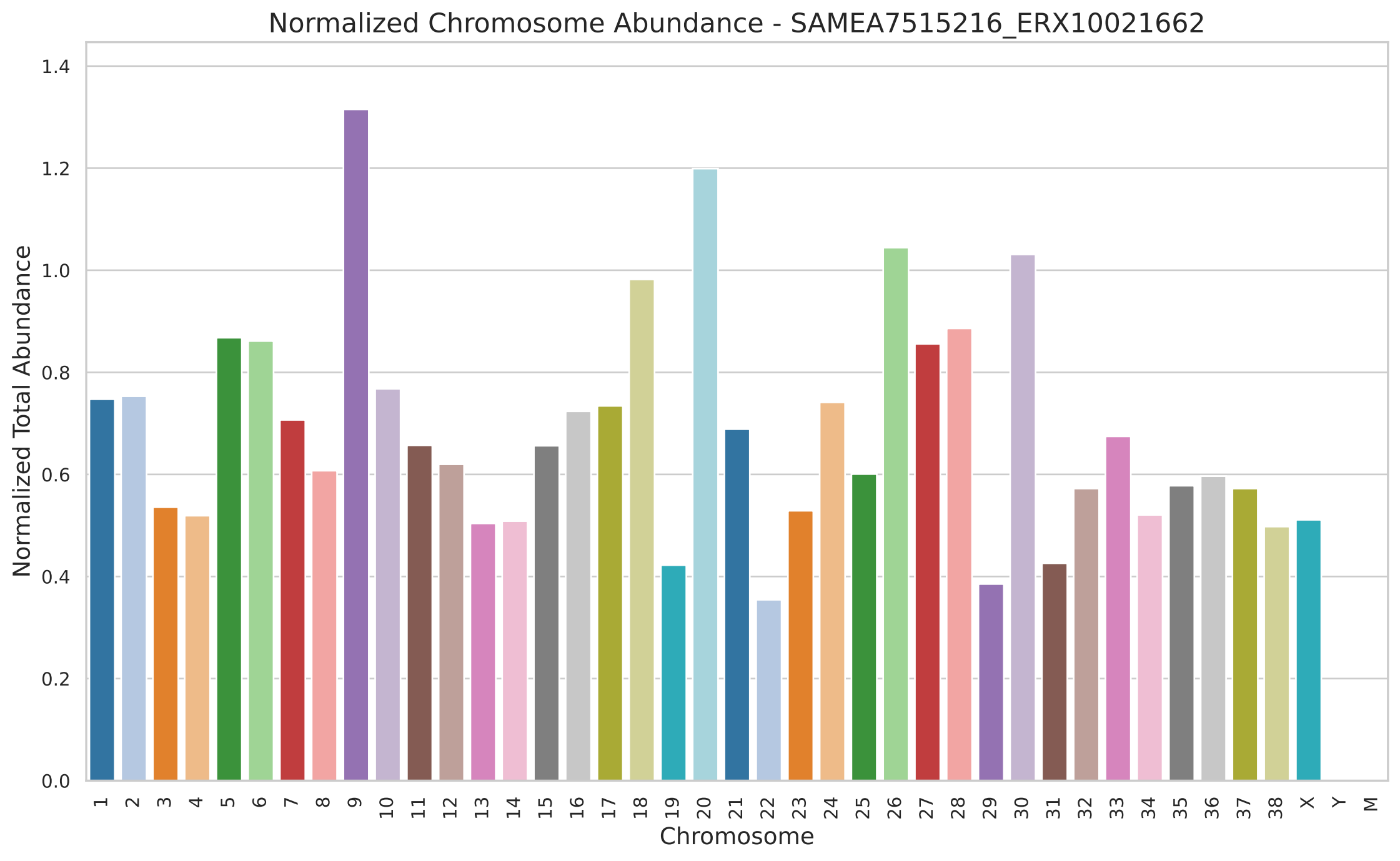

Normalized Chromosome Abundance - SAMEA7515101_ERX10021612
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

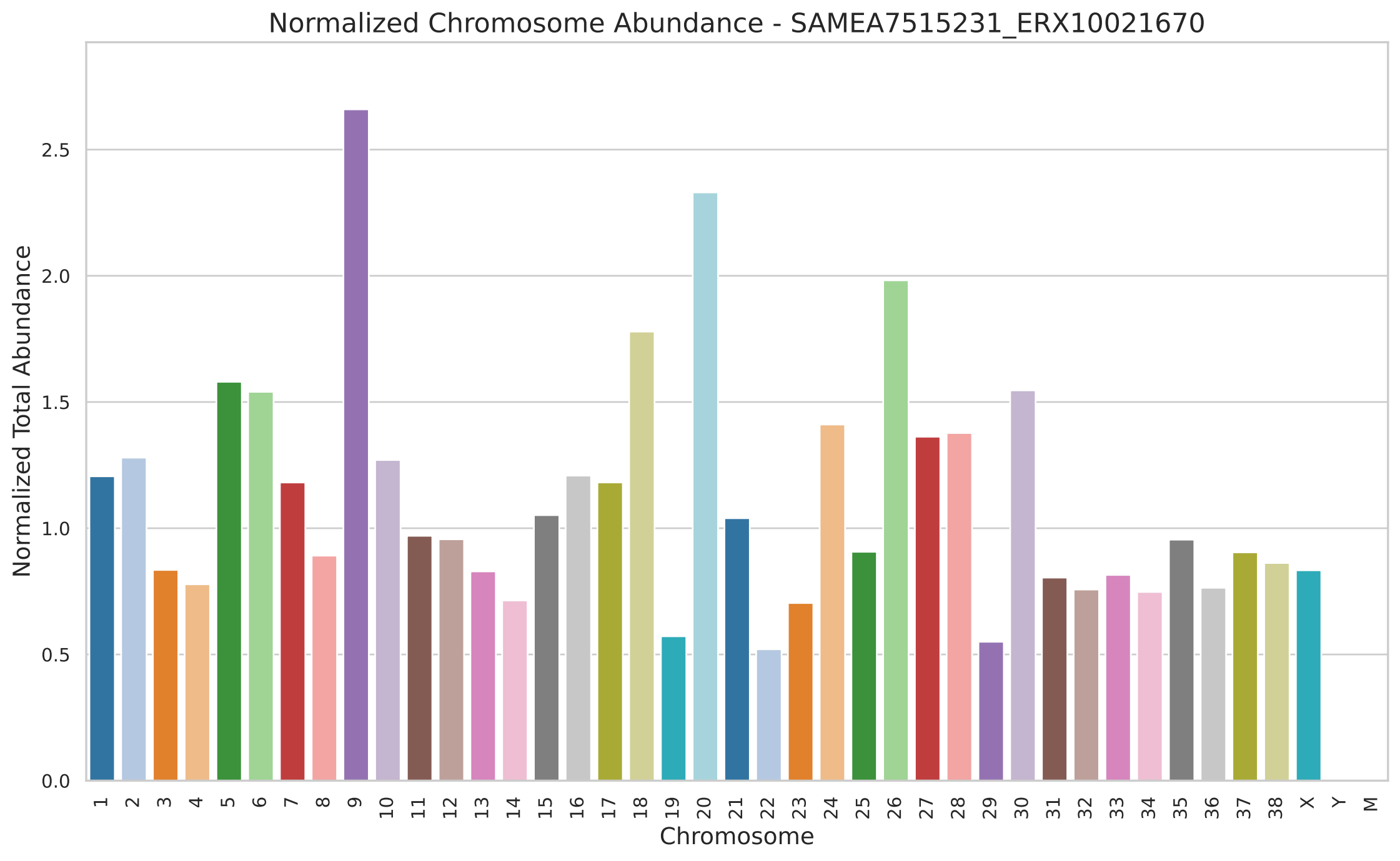

Normalized Chromosome Abundance - SAMEA7515230_ERX10021668
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

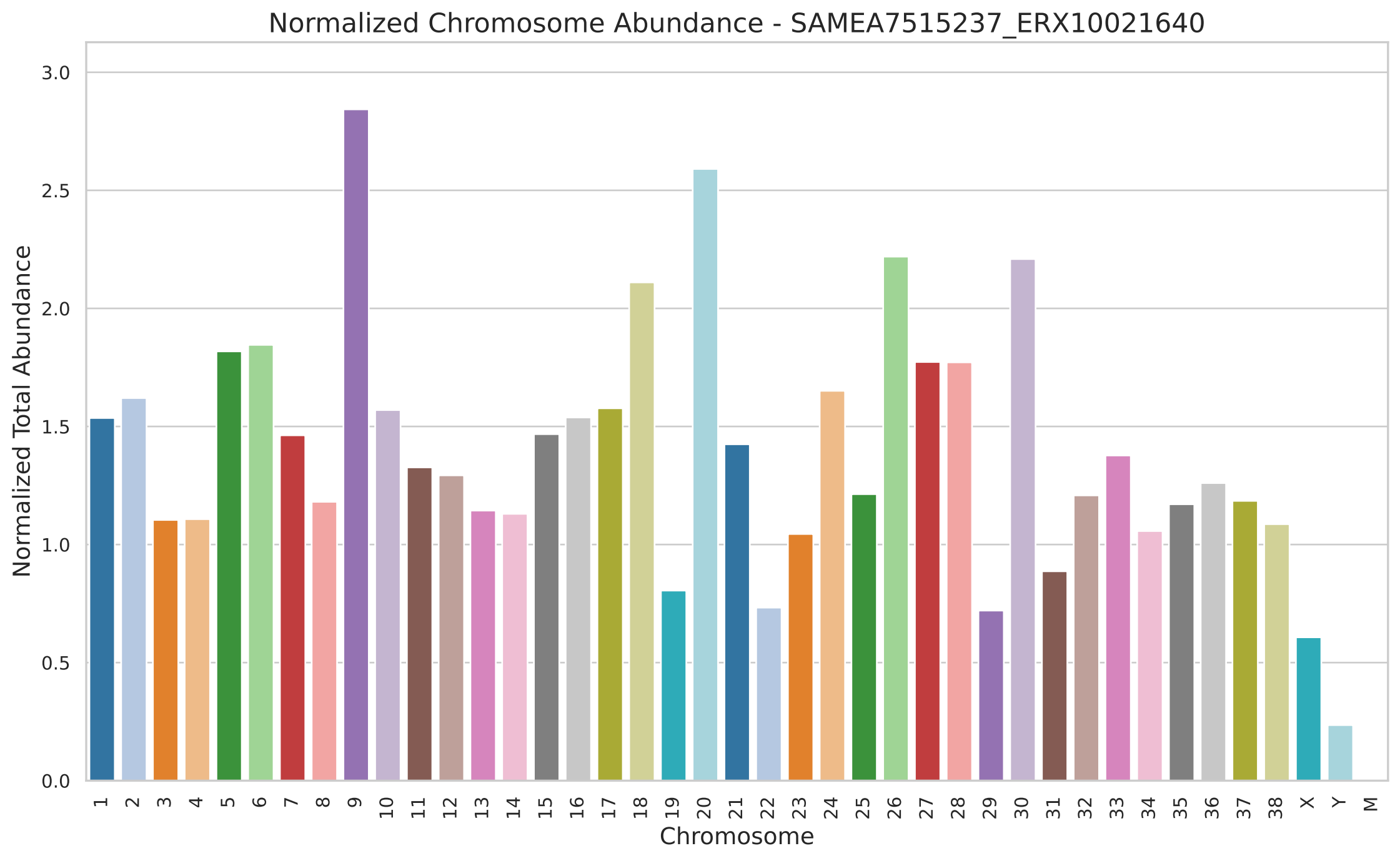

Normalized Chromosome Abundance - SAMEA7515191_ERX10021654
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

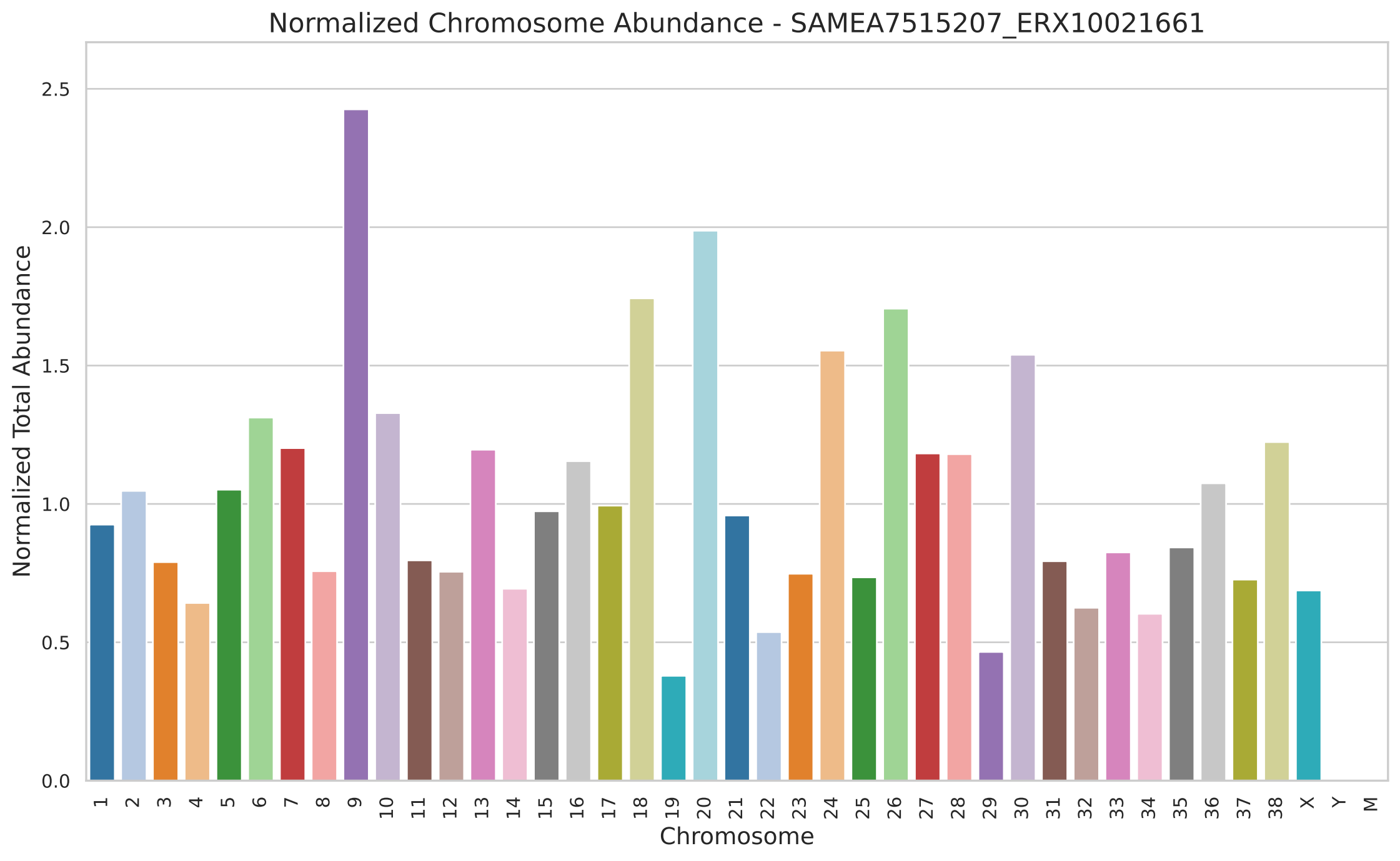

Normalized Chromosome Abundance - SAMEA7515186_ERX10021652
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

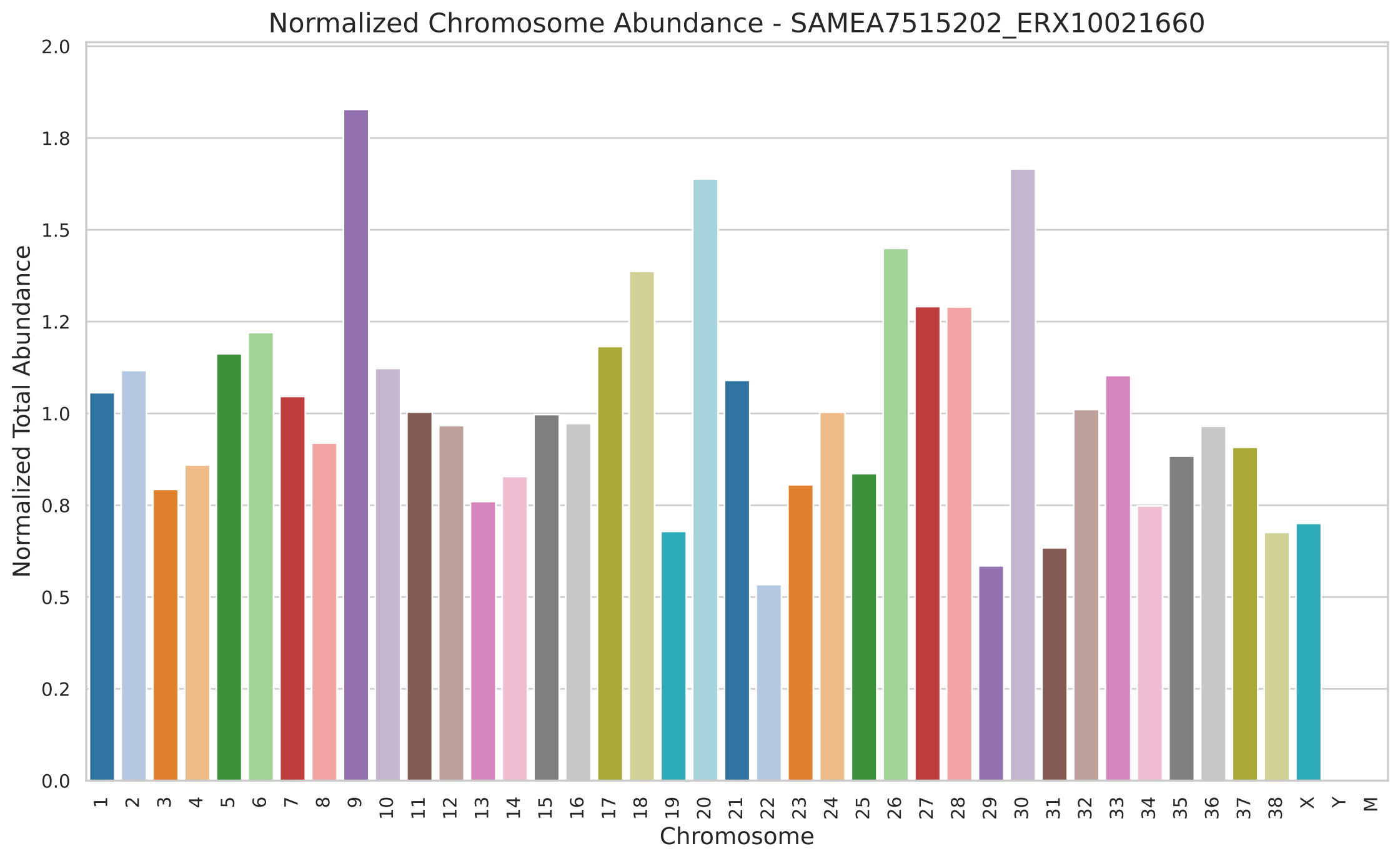

Normalized Chromosome Abundance - SAMEA7515111_ERX10021620
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

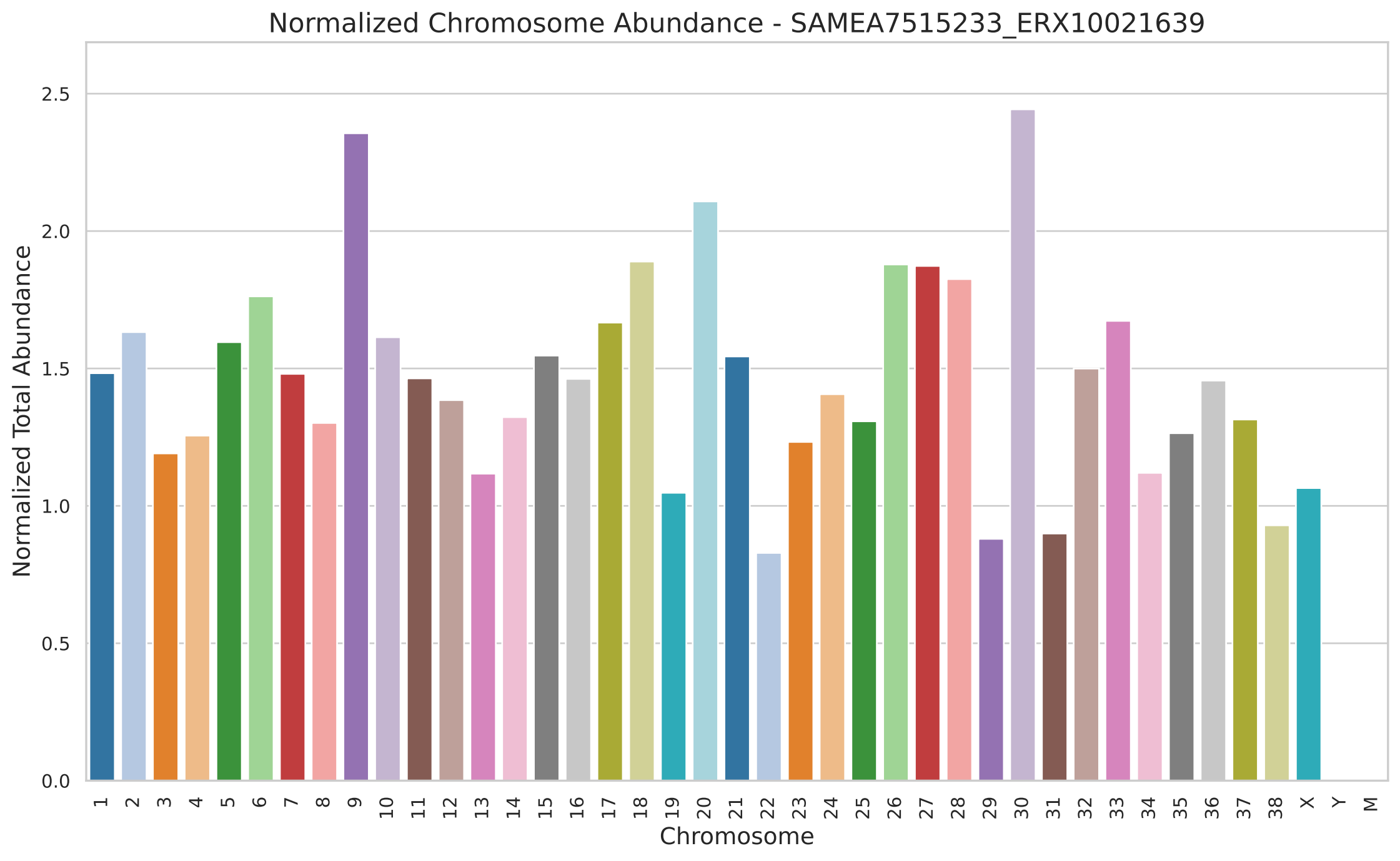

Normalized Chromosome Abundance - SAMEA7515216_ERX10021662
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

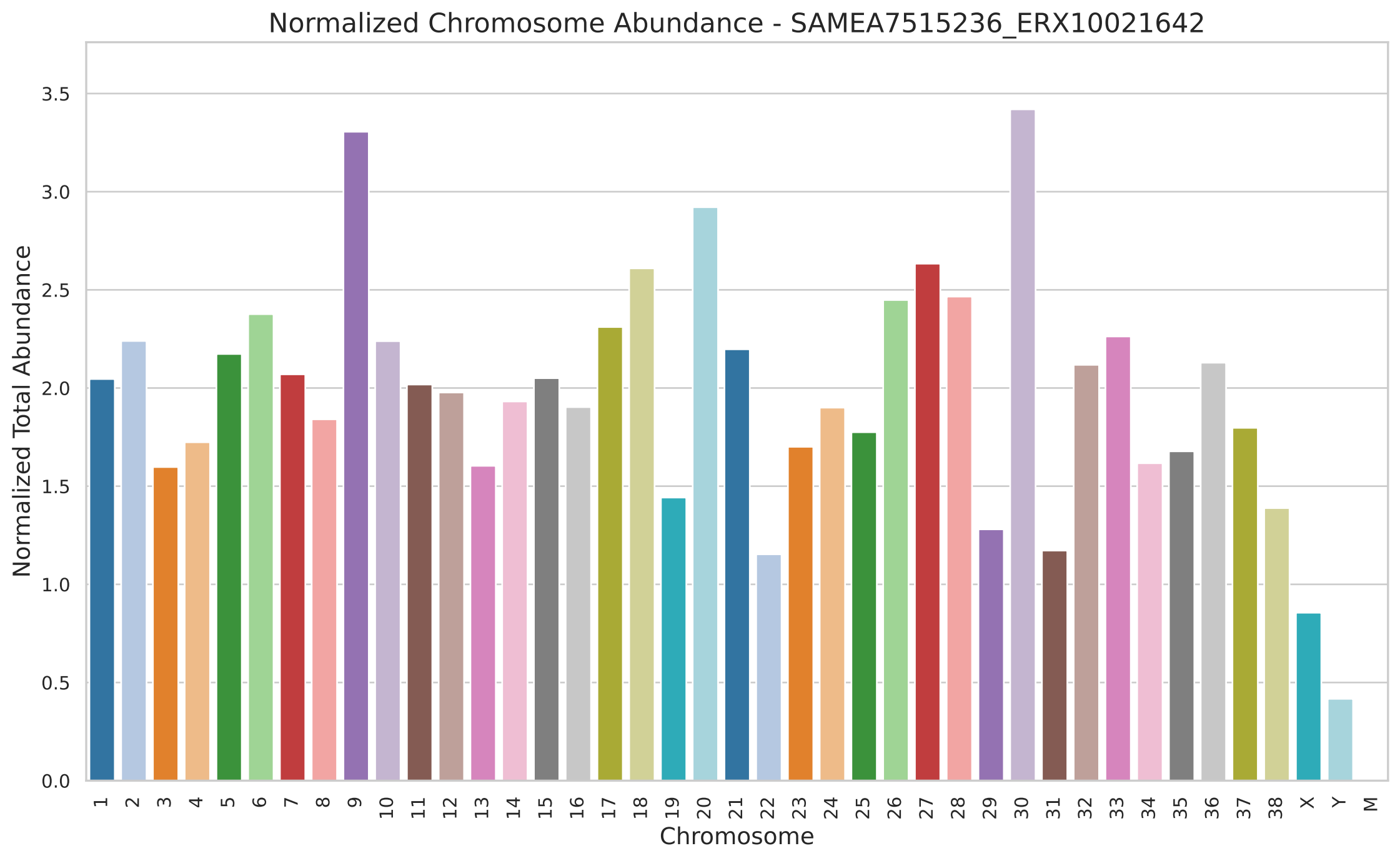

Normalized Chromosome Abundance - SAMEA7515231_ERX10021670
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

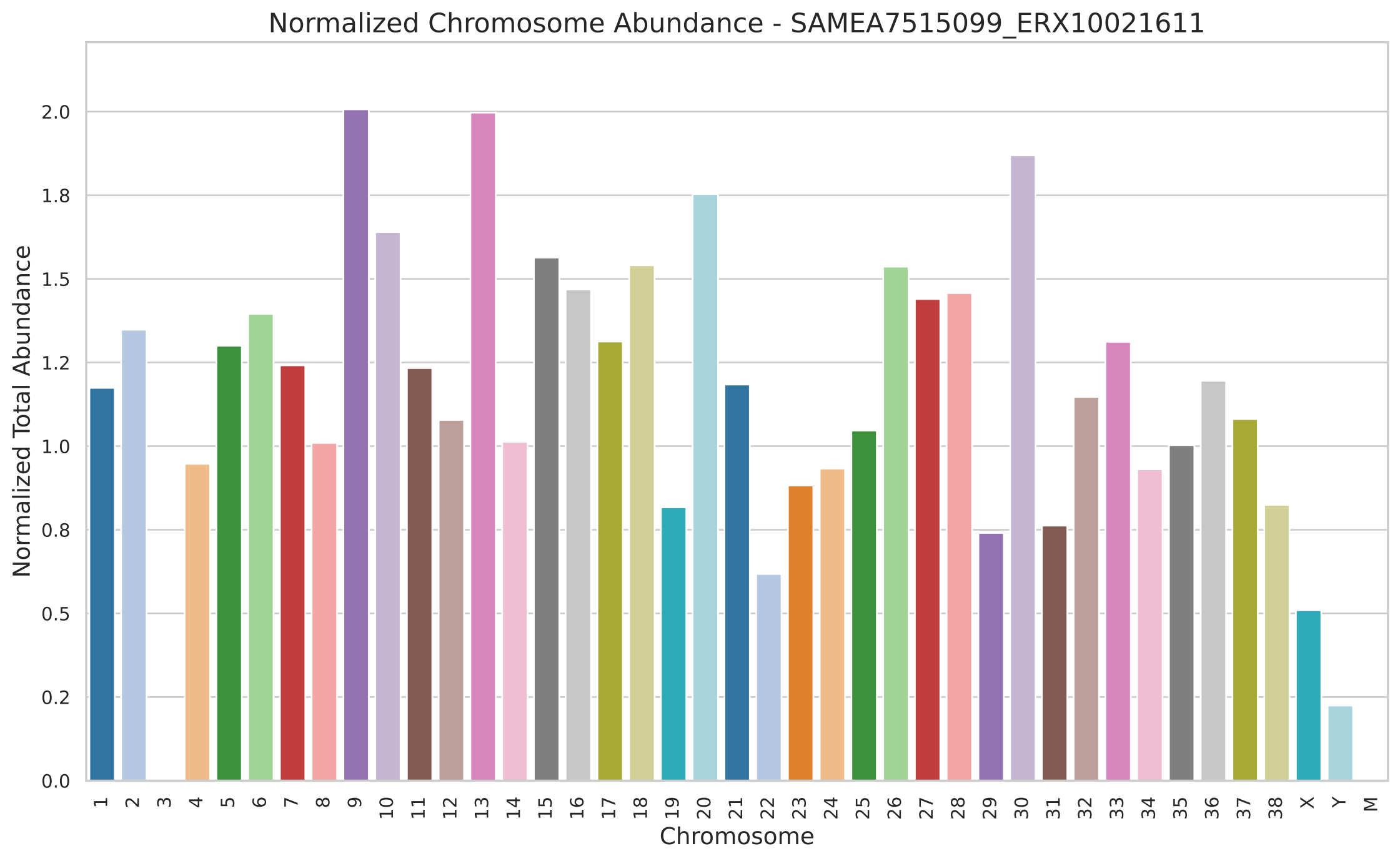

Normalized Chromosome Abundance - SAMEA7515237_ERX10021640
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

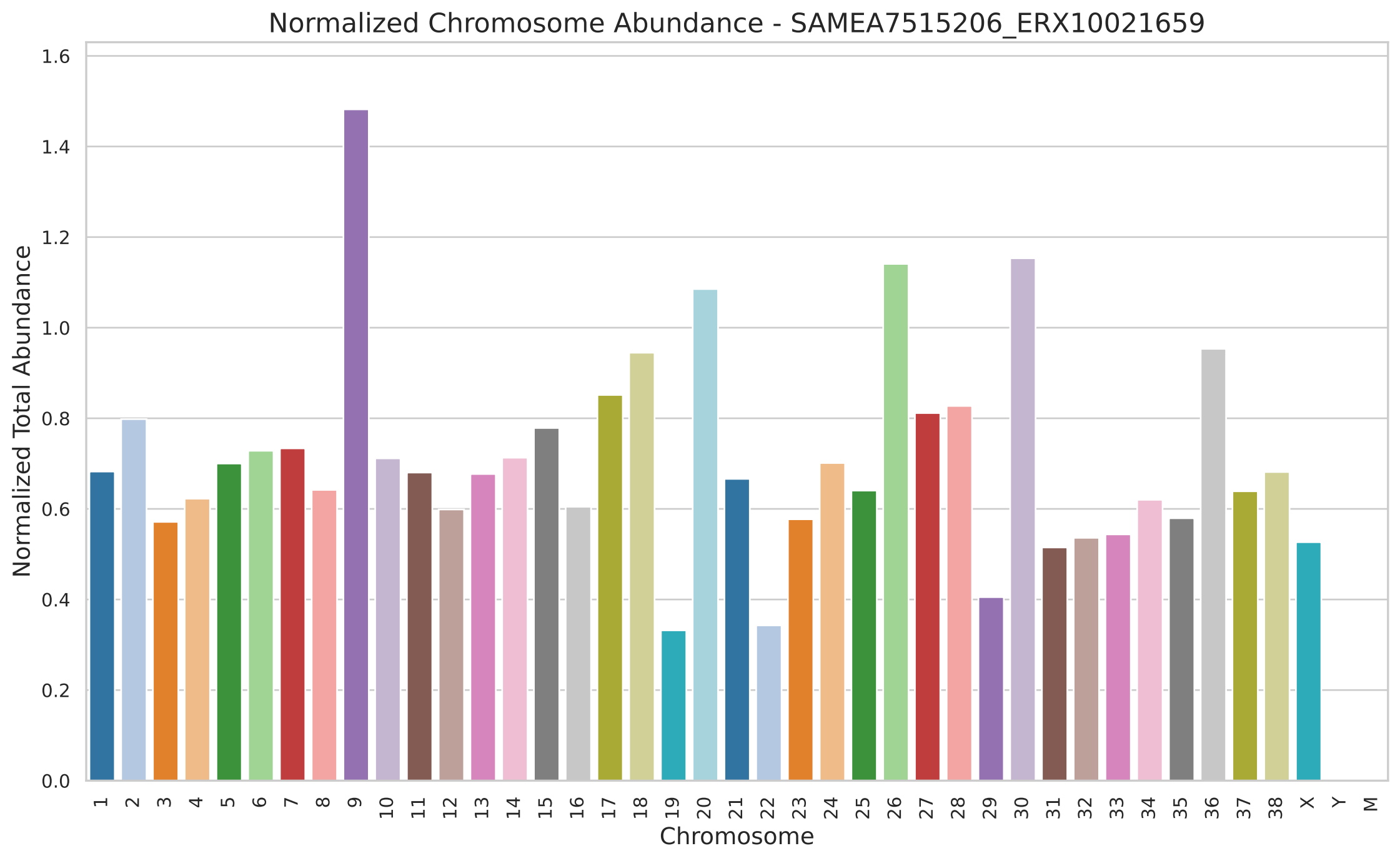

Normalized Chromosome Abundance - SAMEA7515207_ERX10021661
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

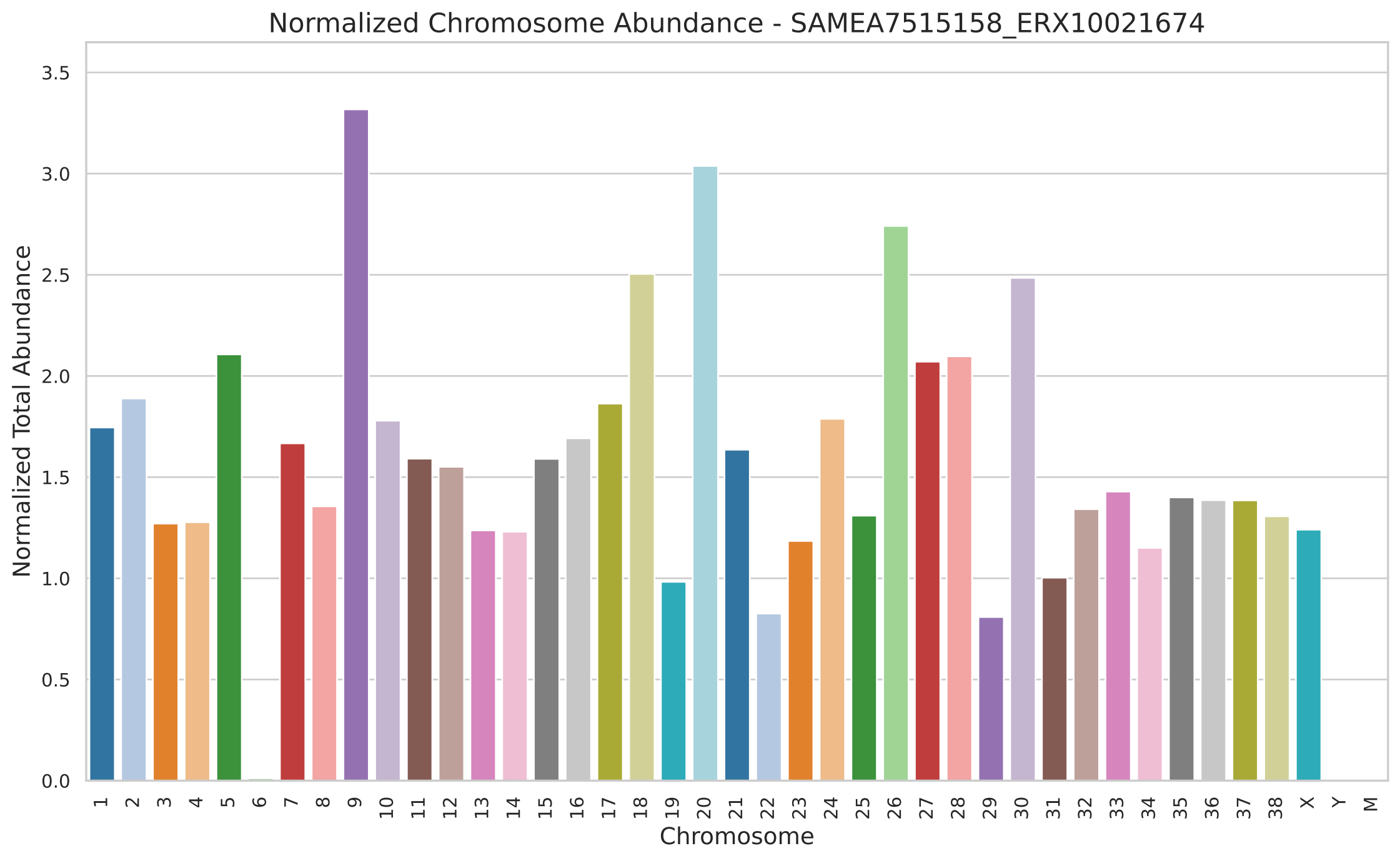

Normalized Chromosome Abundance - SAMEA7515202_ERX10021660
Normalized Total Abundance
2.0
1.8
1.5
1.2
1.0
0.8
0.5
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

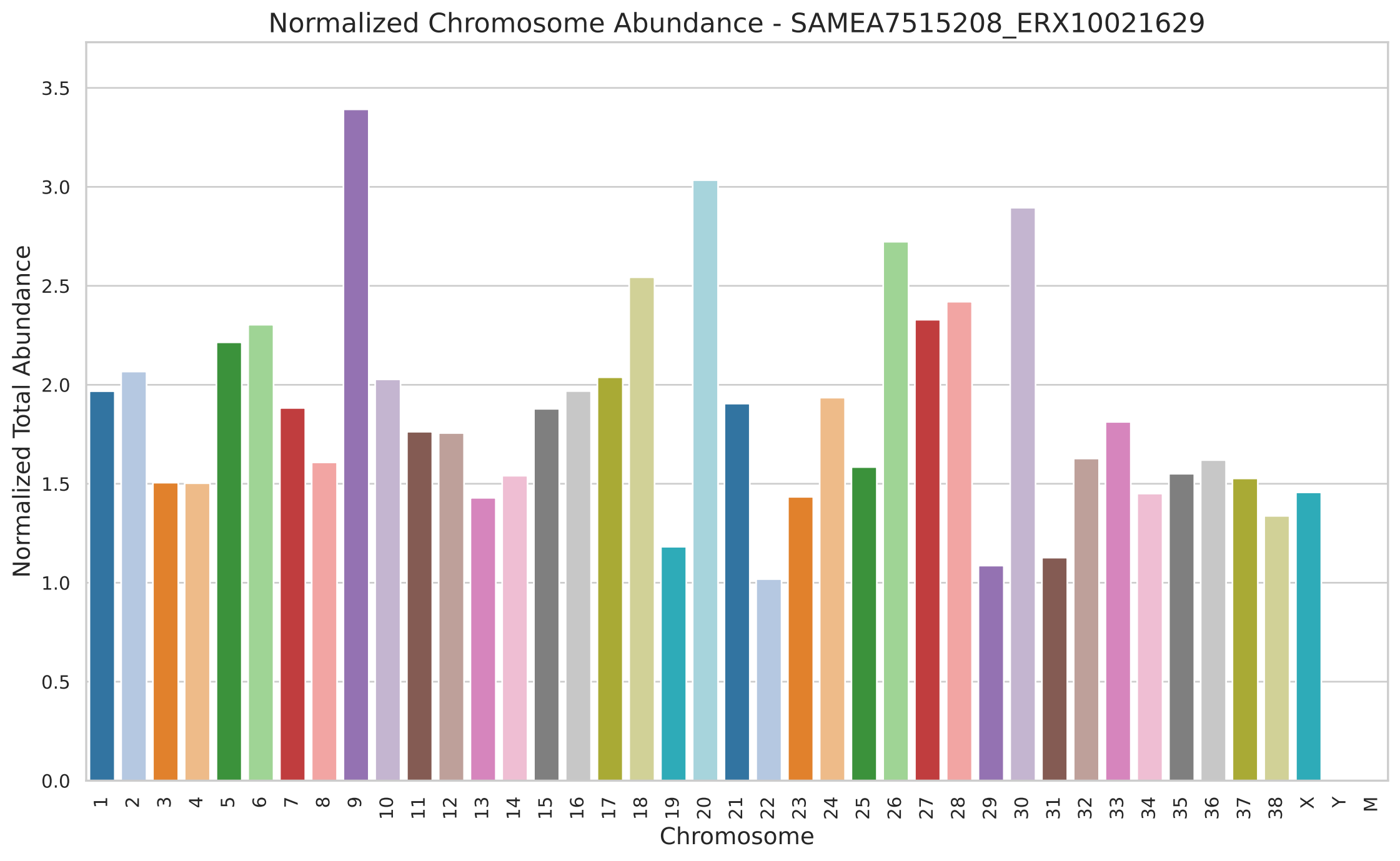

Normalized Chromosome Abundance - SAMEA7515233_ERX10021639
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

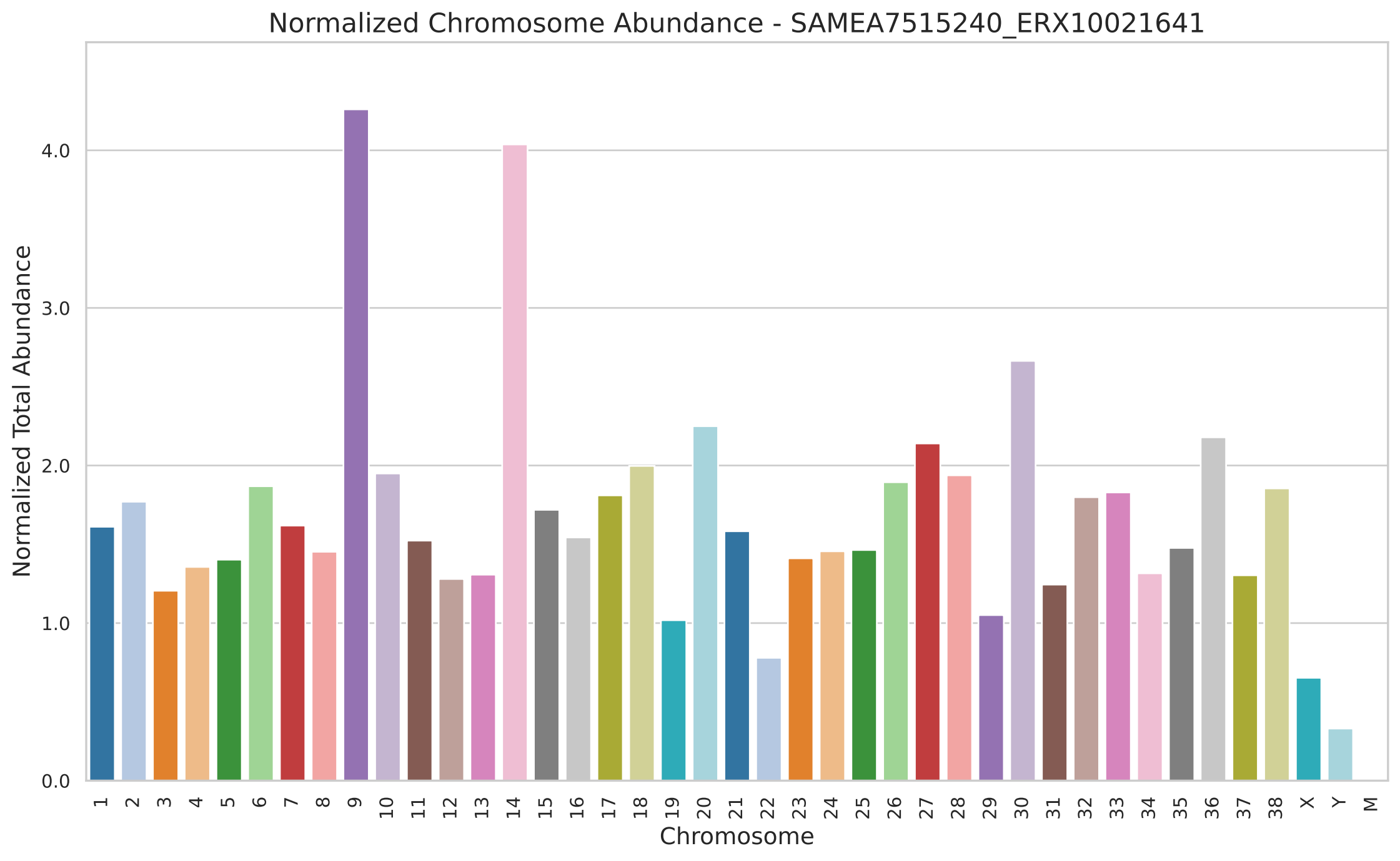

Normalized Chromosome Abundance - SAMEA7515236_ERX10021642
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

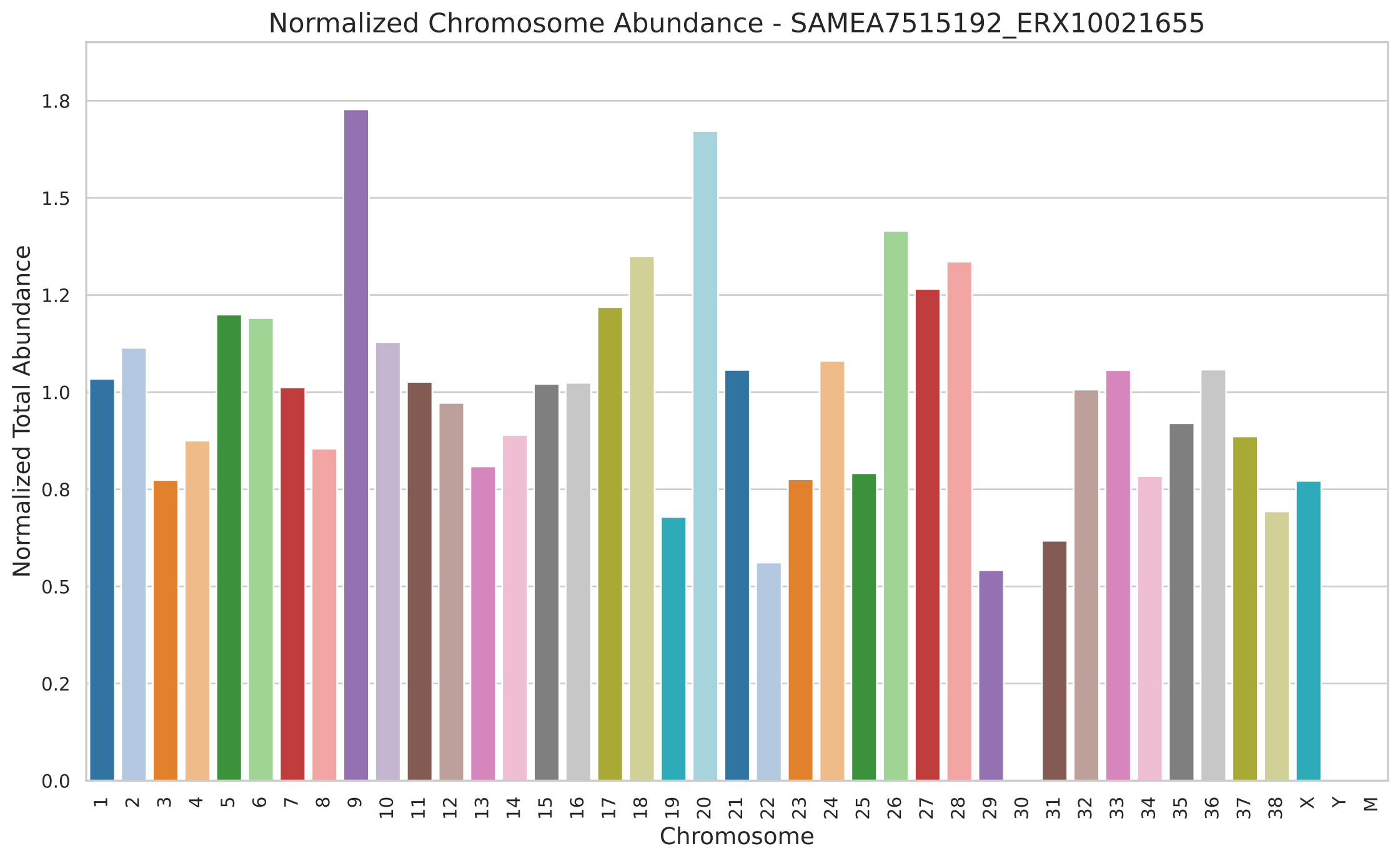

Normalized Chromosome Abundance - SAMEA7515099_ERX10021611
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

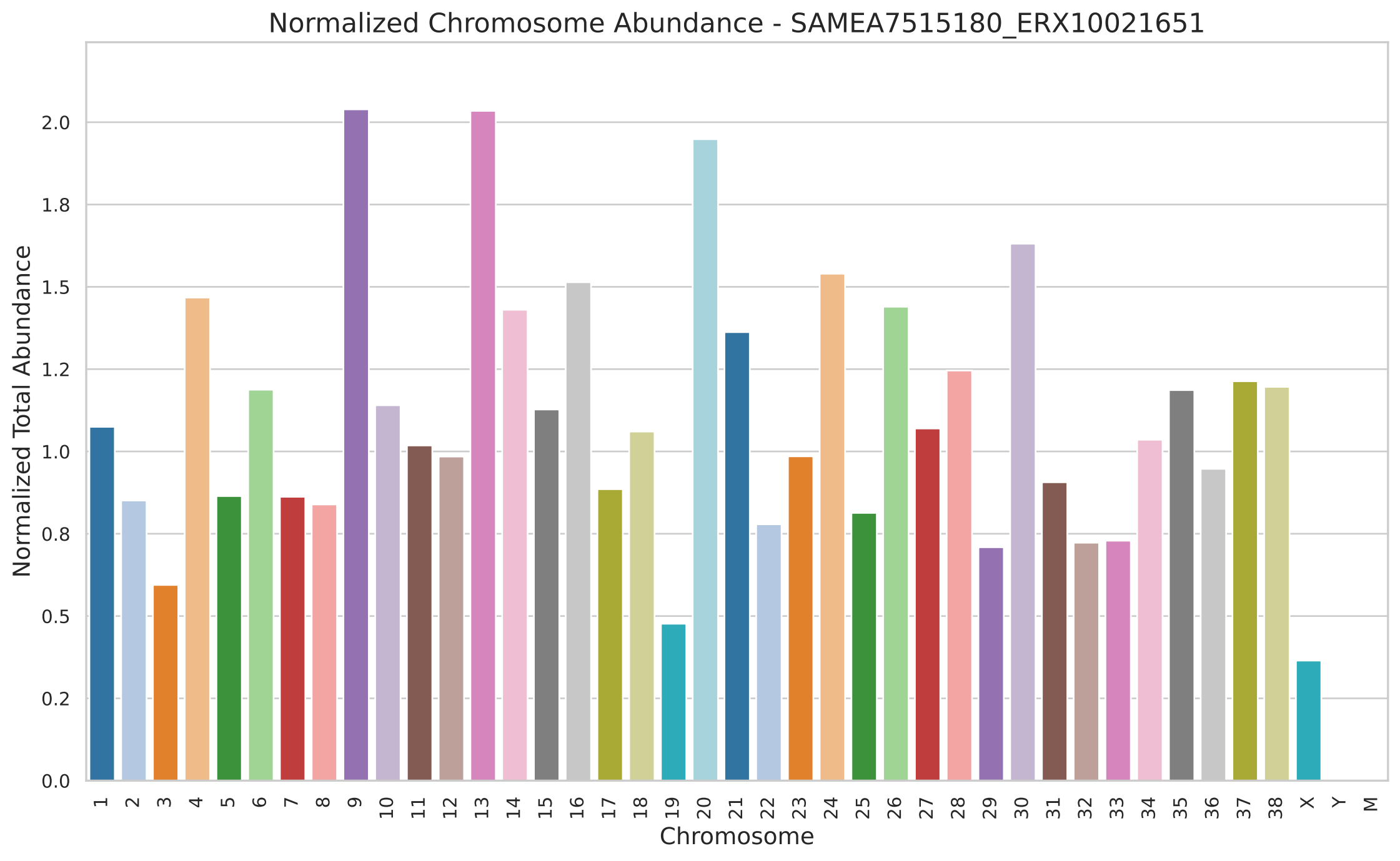

Normalized Chromosome Abundance - SAMEA7515206_ERX10021659
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

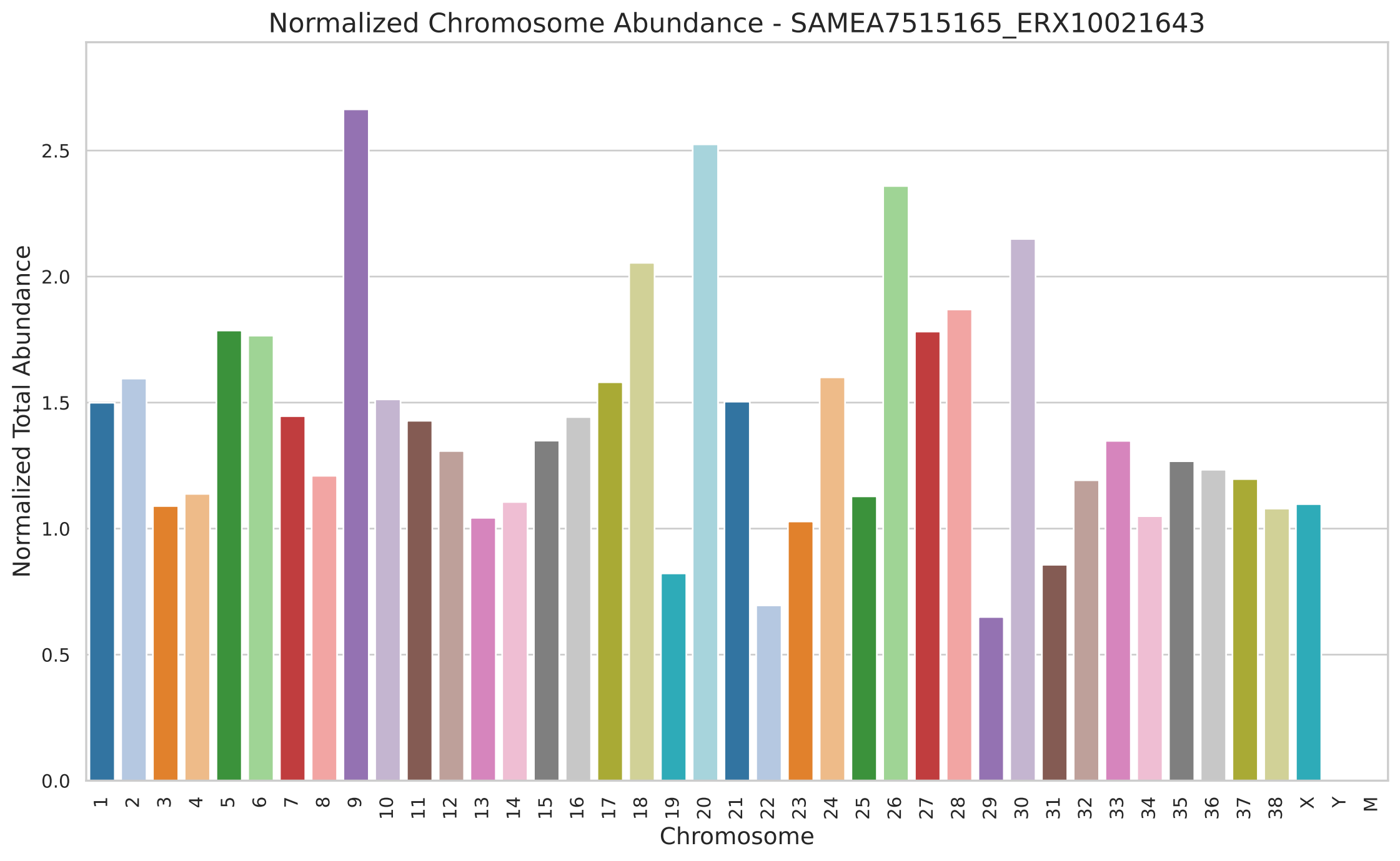

Normalized Chromosome Abundance - SAMEA7515158_ERX10021674
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

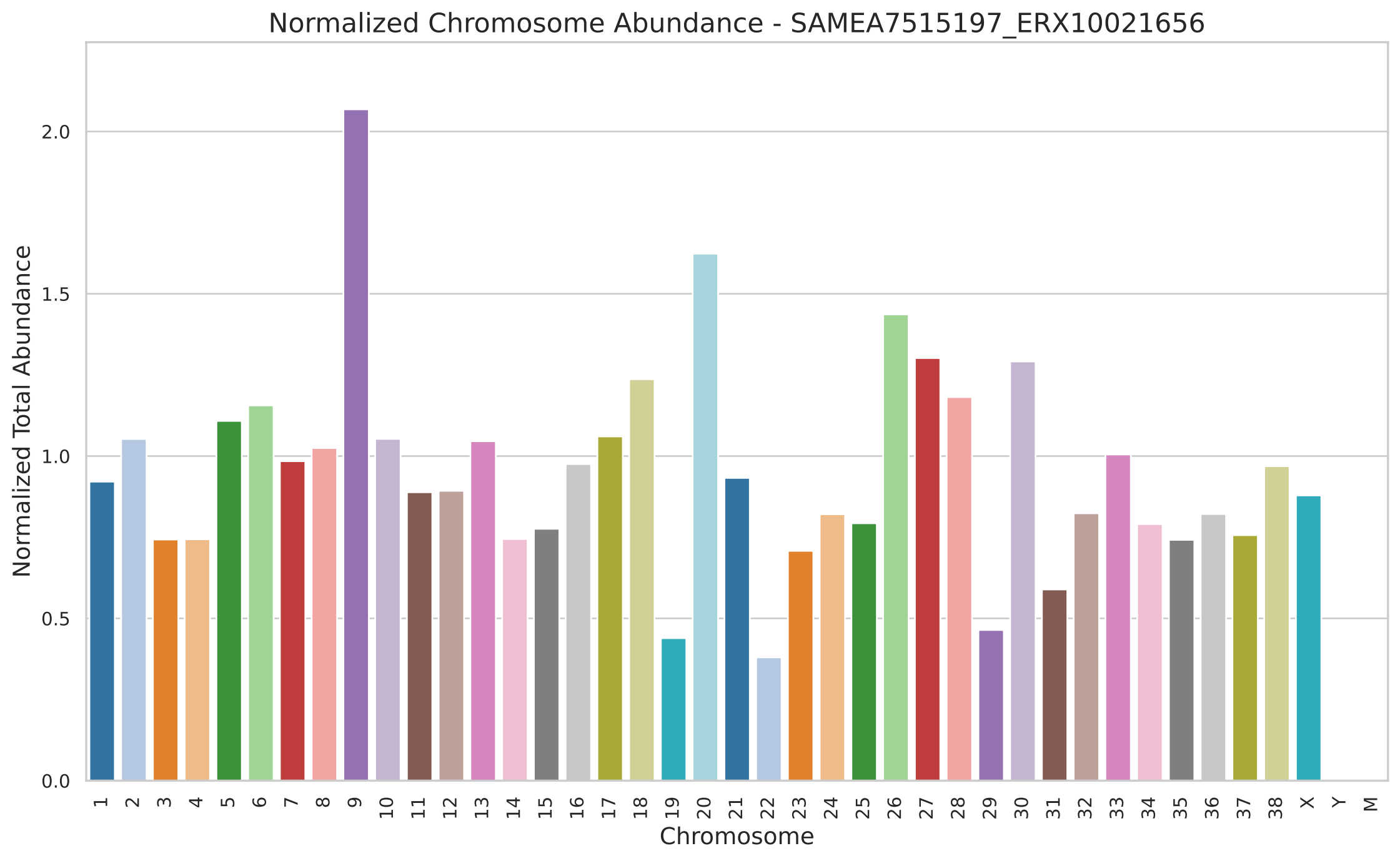

Normalized Chromosome Abundance - SAMEA7515208_ERX10021629
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

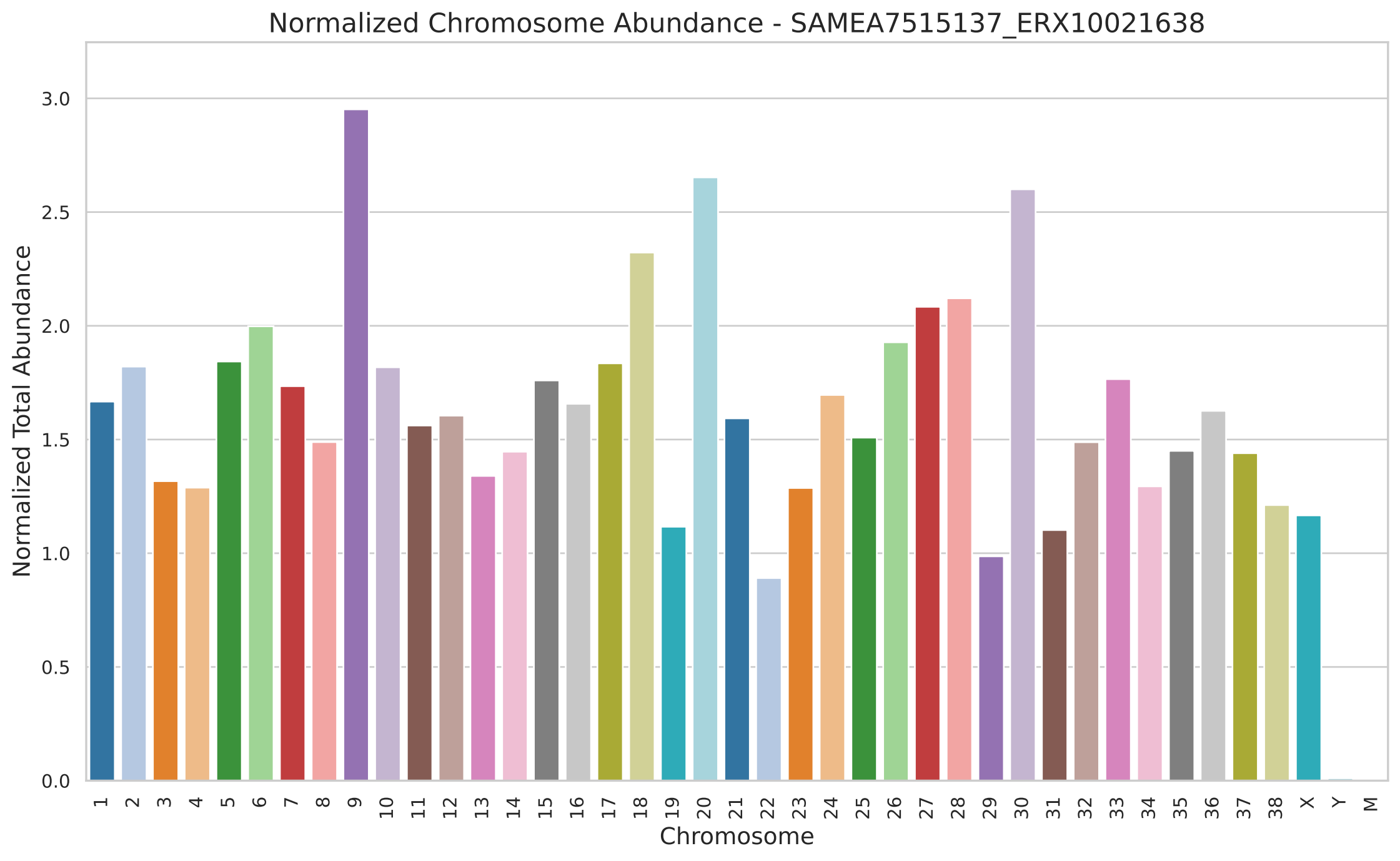

Normalized Chromosome Abundance - SAMEA7515240_ERX10021641
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

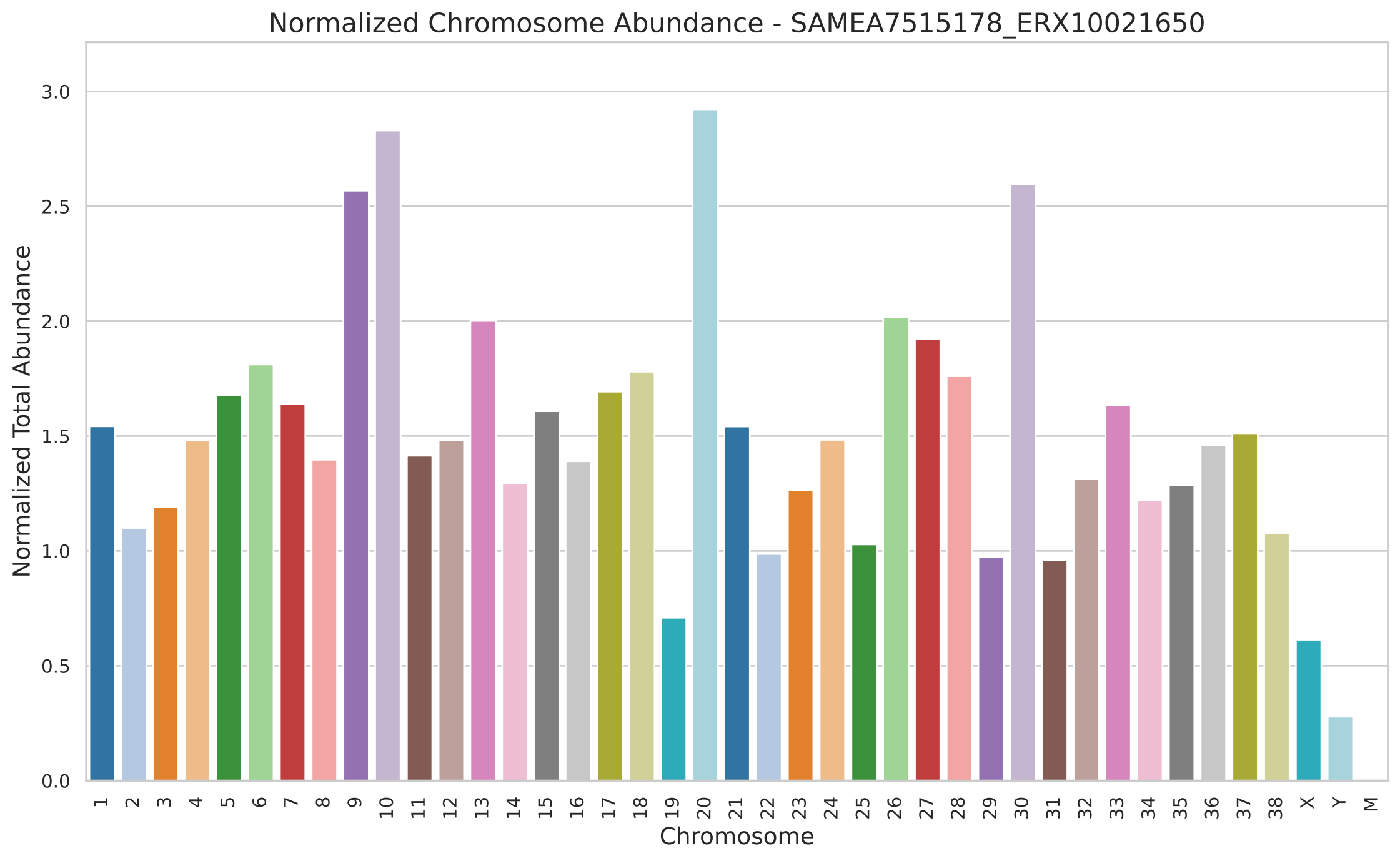

Normalized Chromosome Abundance - SAMEA7515192_ERX10021655
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

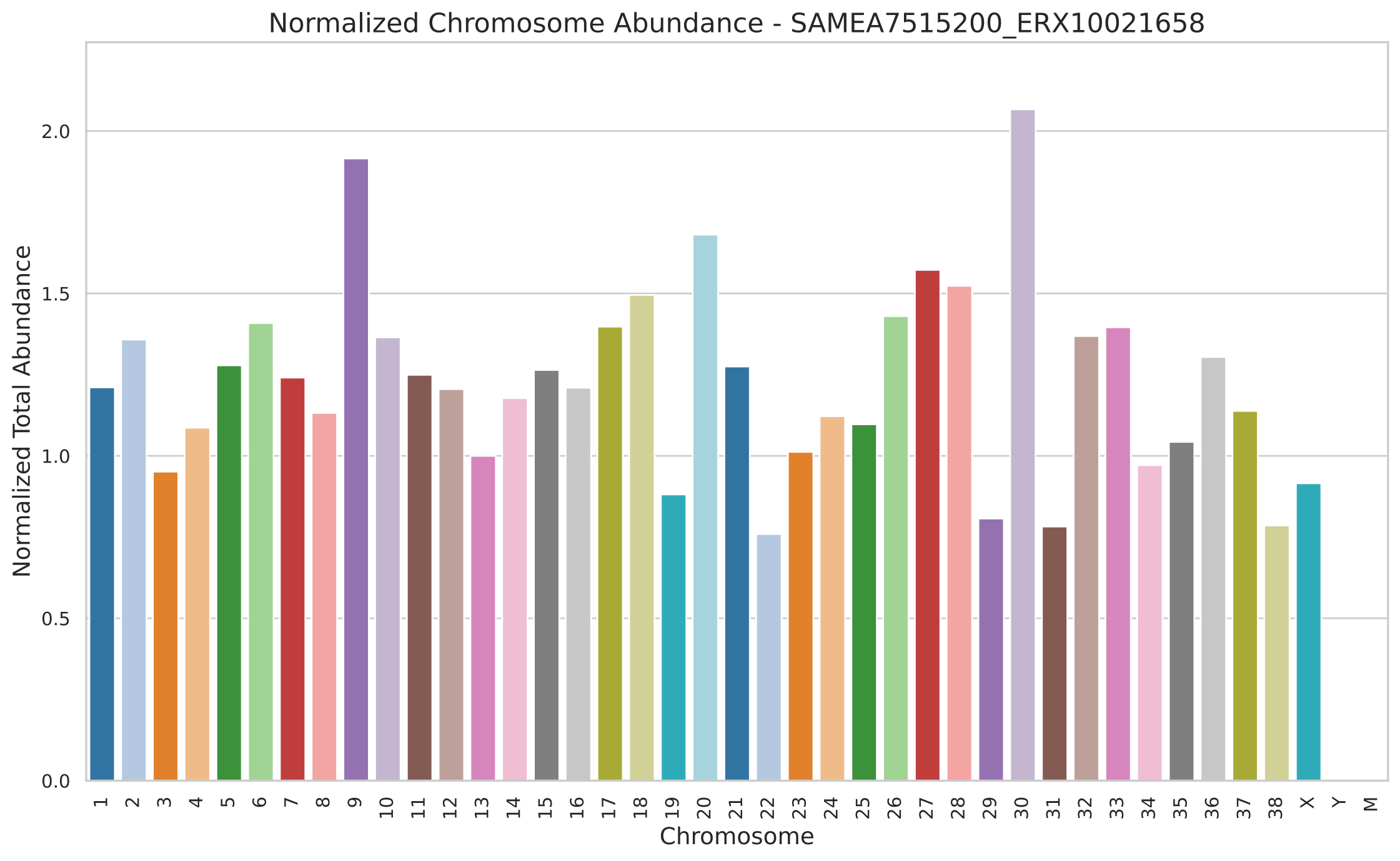

Normalized Chromosome Abundance - SAMEA7515180_ERX10021651
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

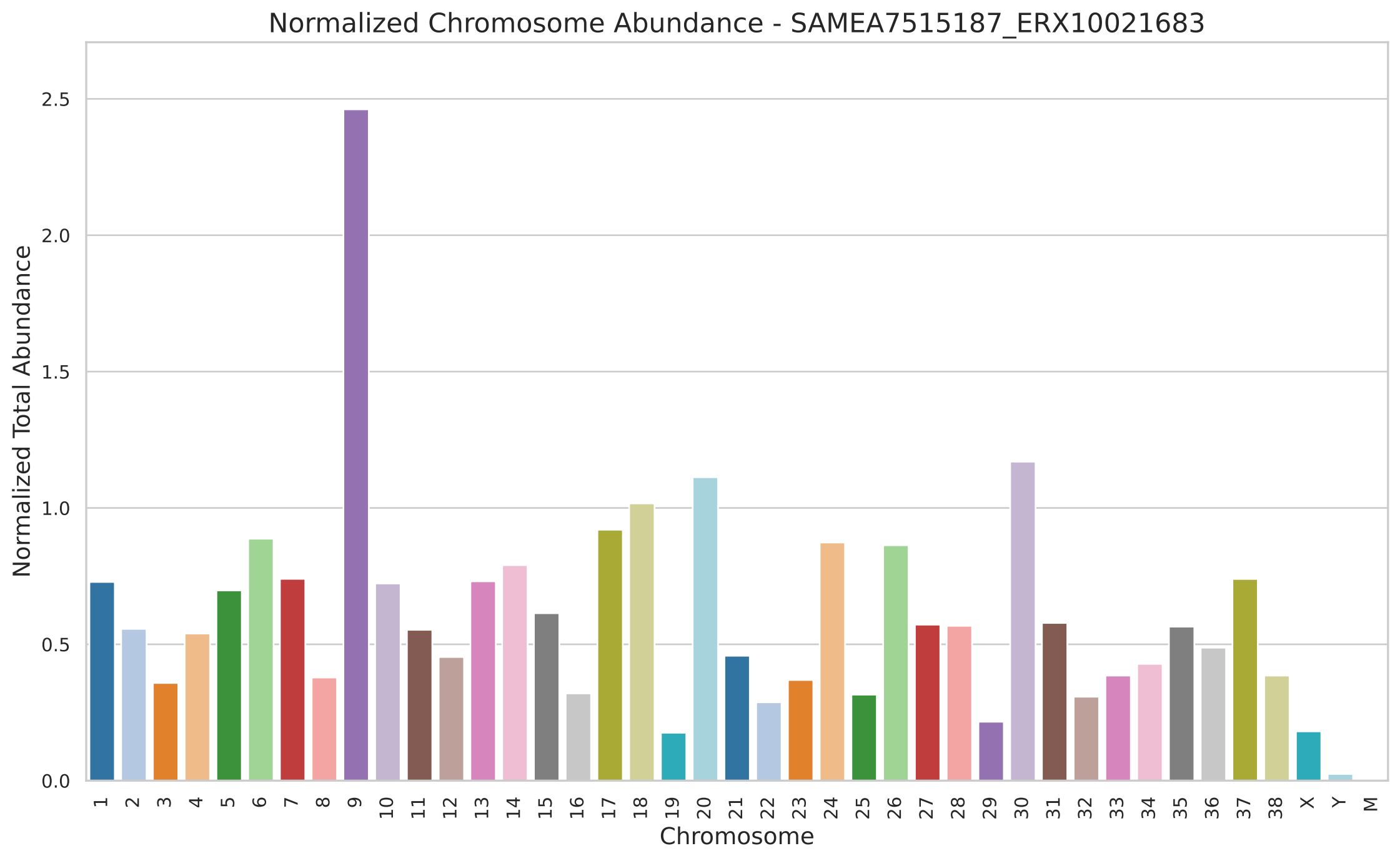

Normalized Chromosome Abundance - SAMEA7515165_ERX10021643
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

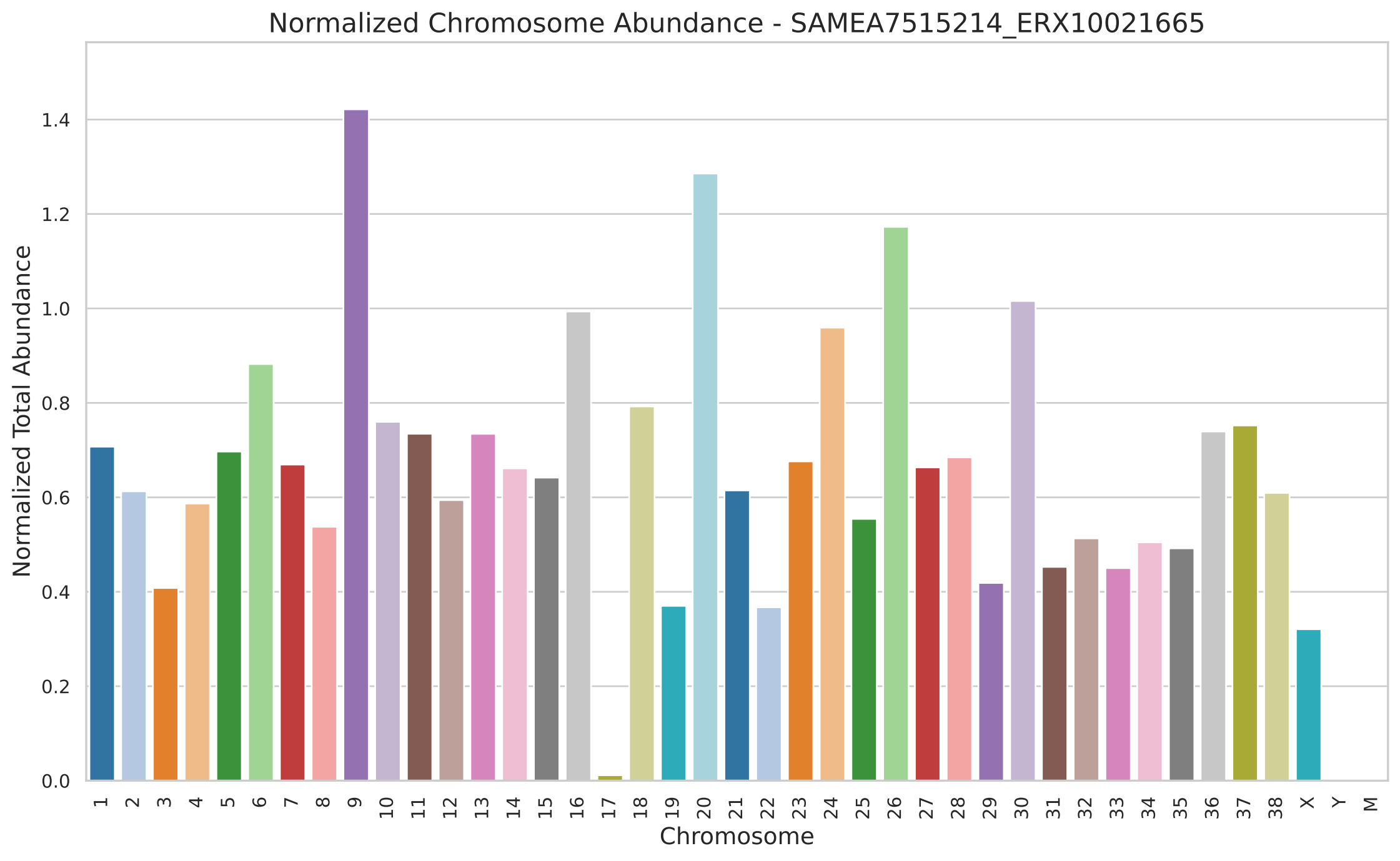

Normalized Chromosome Abundance - SAMEA7515197_ERX10021656
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

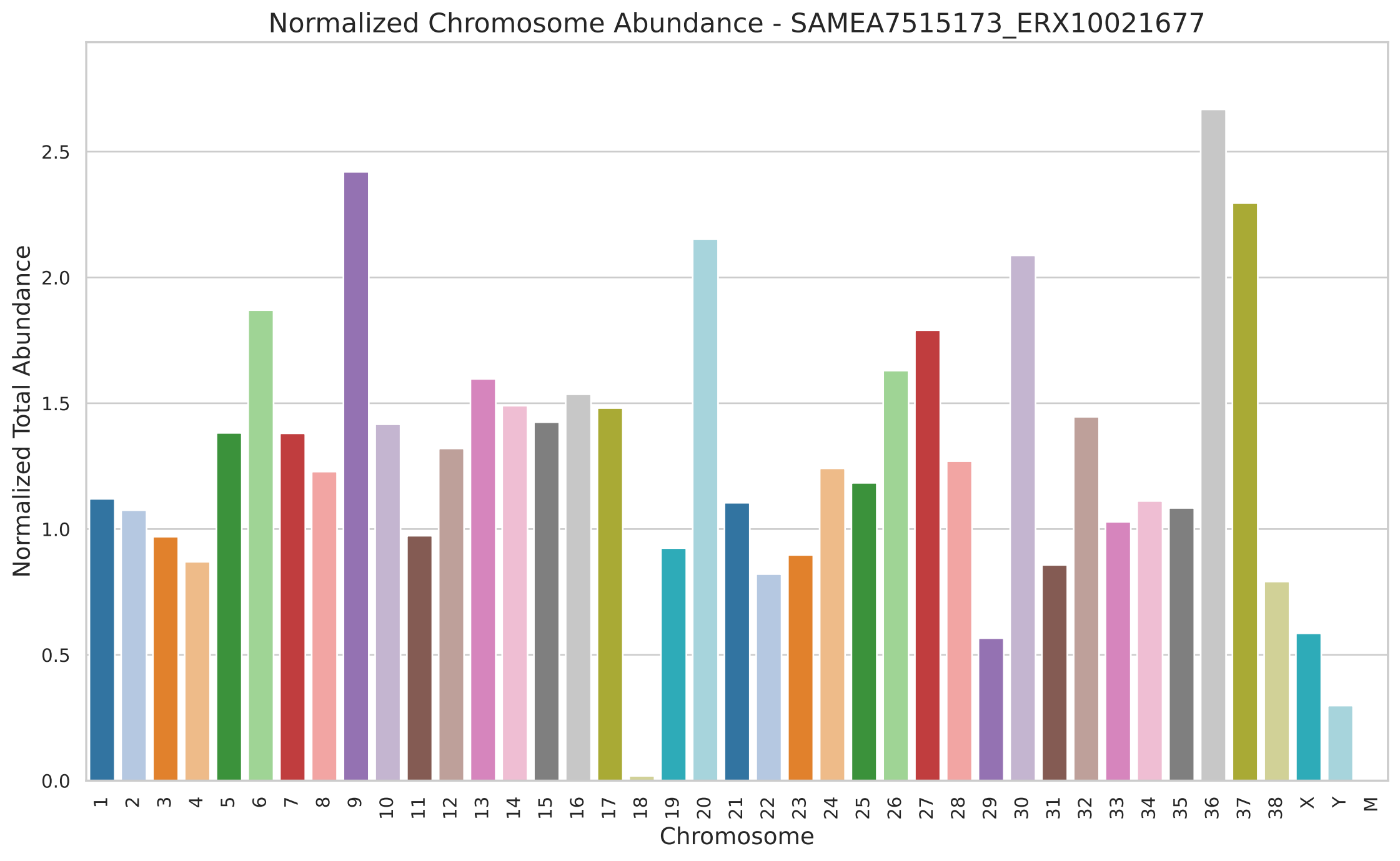

Normalized Chromosome Abundance - SAMEA7515137_ERX10021638
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

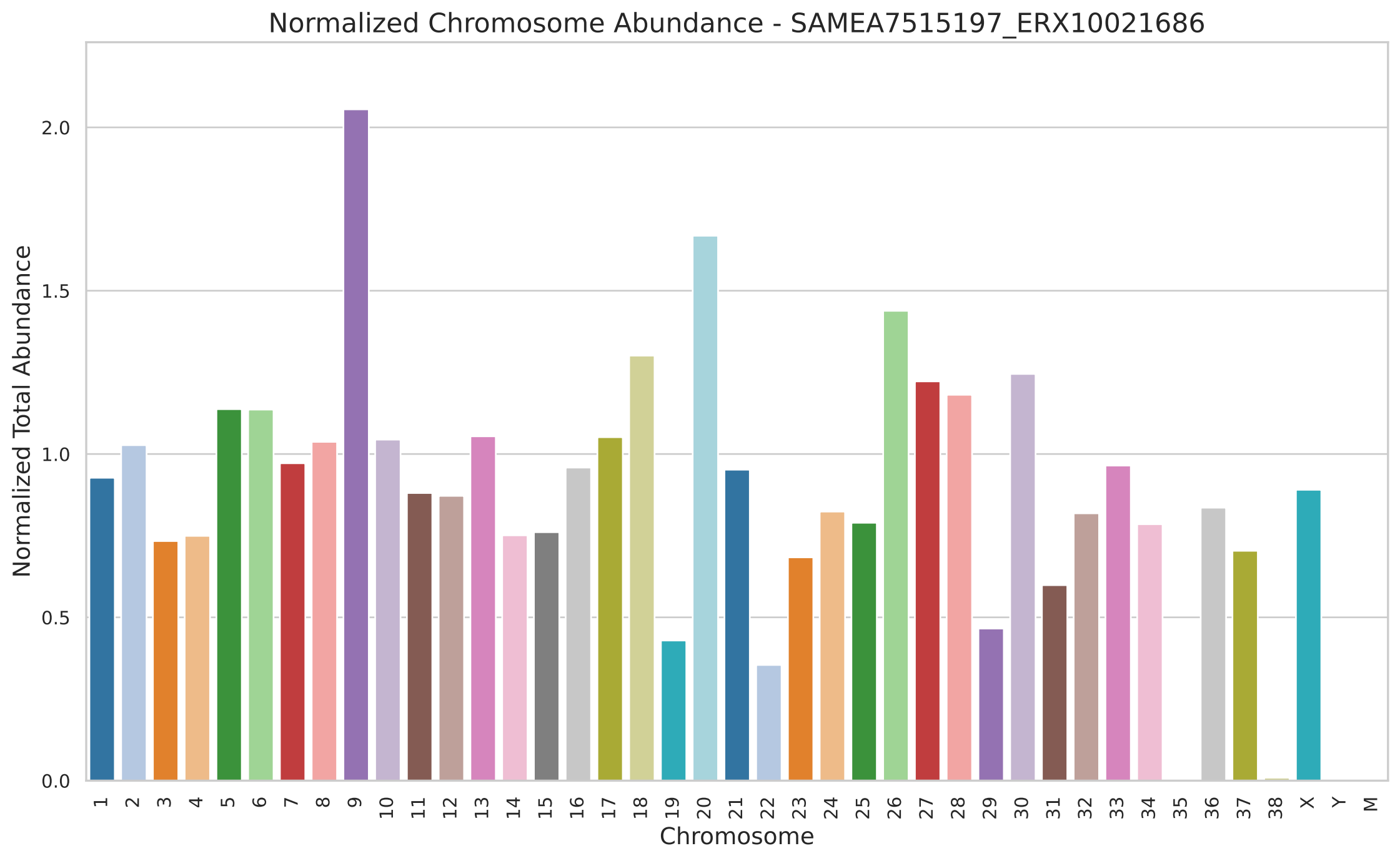

Normalized Chromosome Abundance - SAMEA7515178_ERX10021650
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

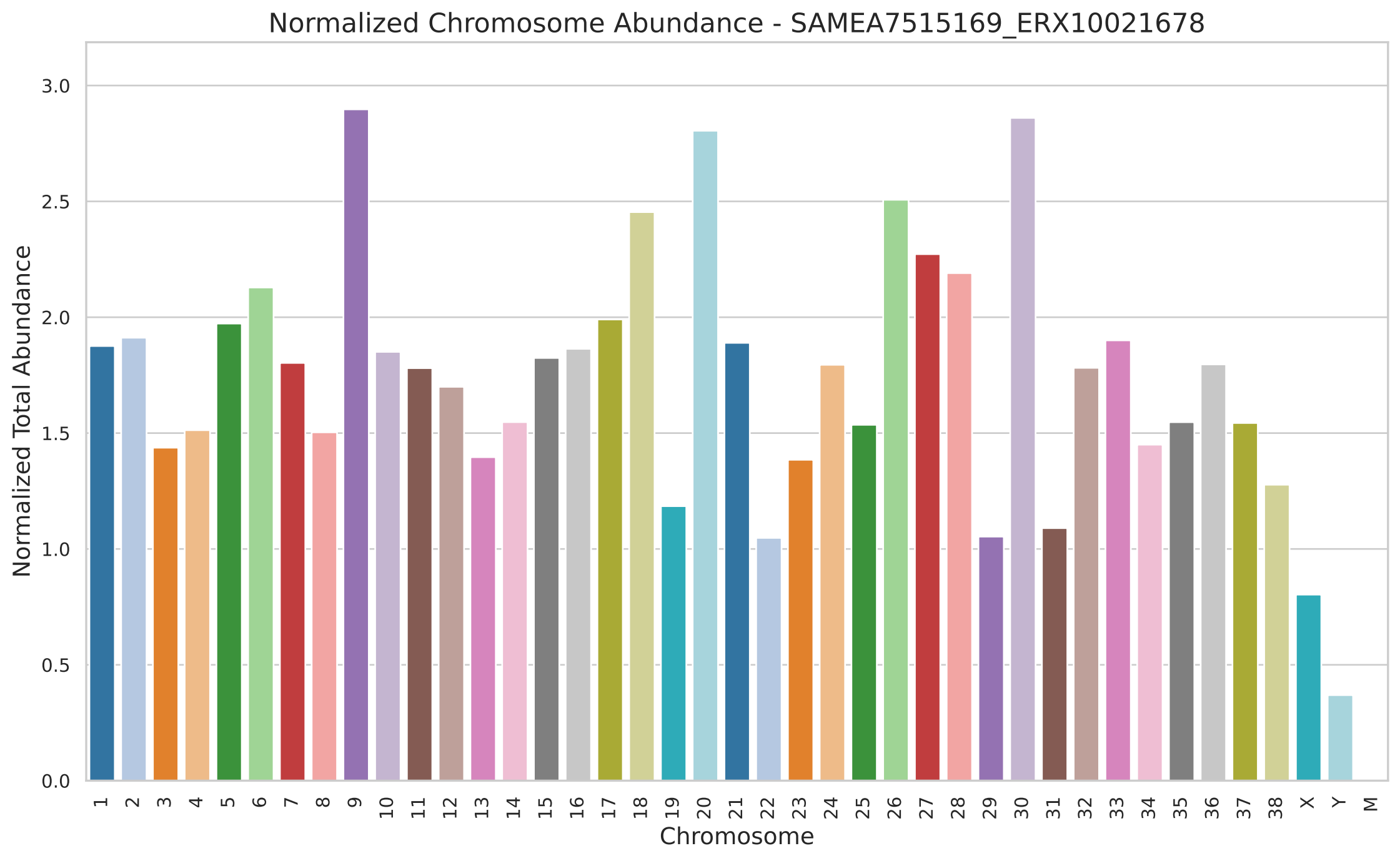

Normalized Chromosome Abundance - SAMEA7515200_ERX10021658
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

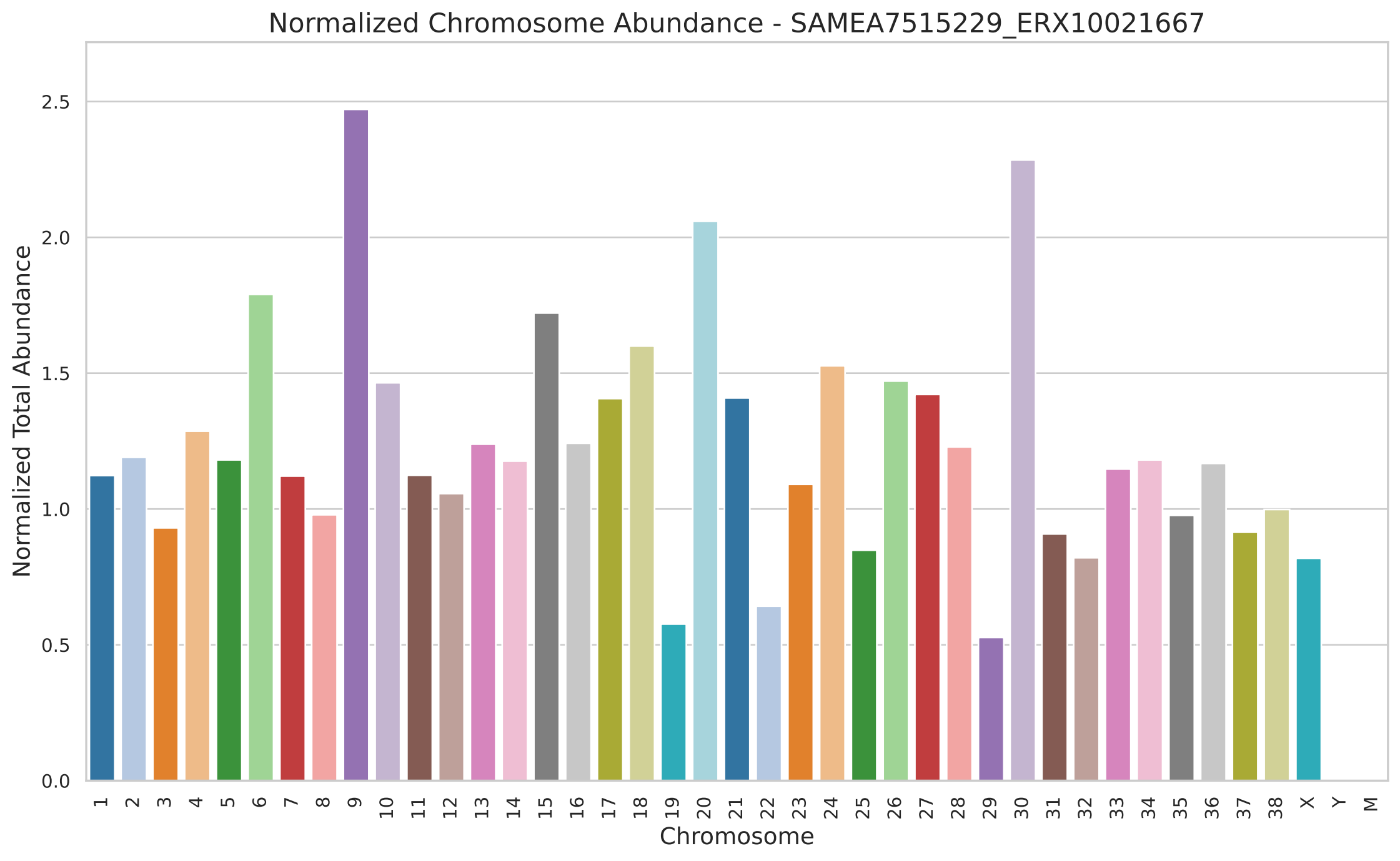

Normalized Chromosome Abundance - SAMEA7515187_ERX10021683
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

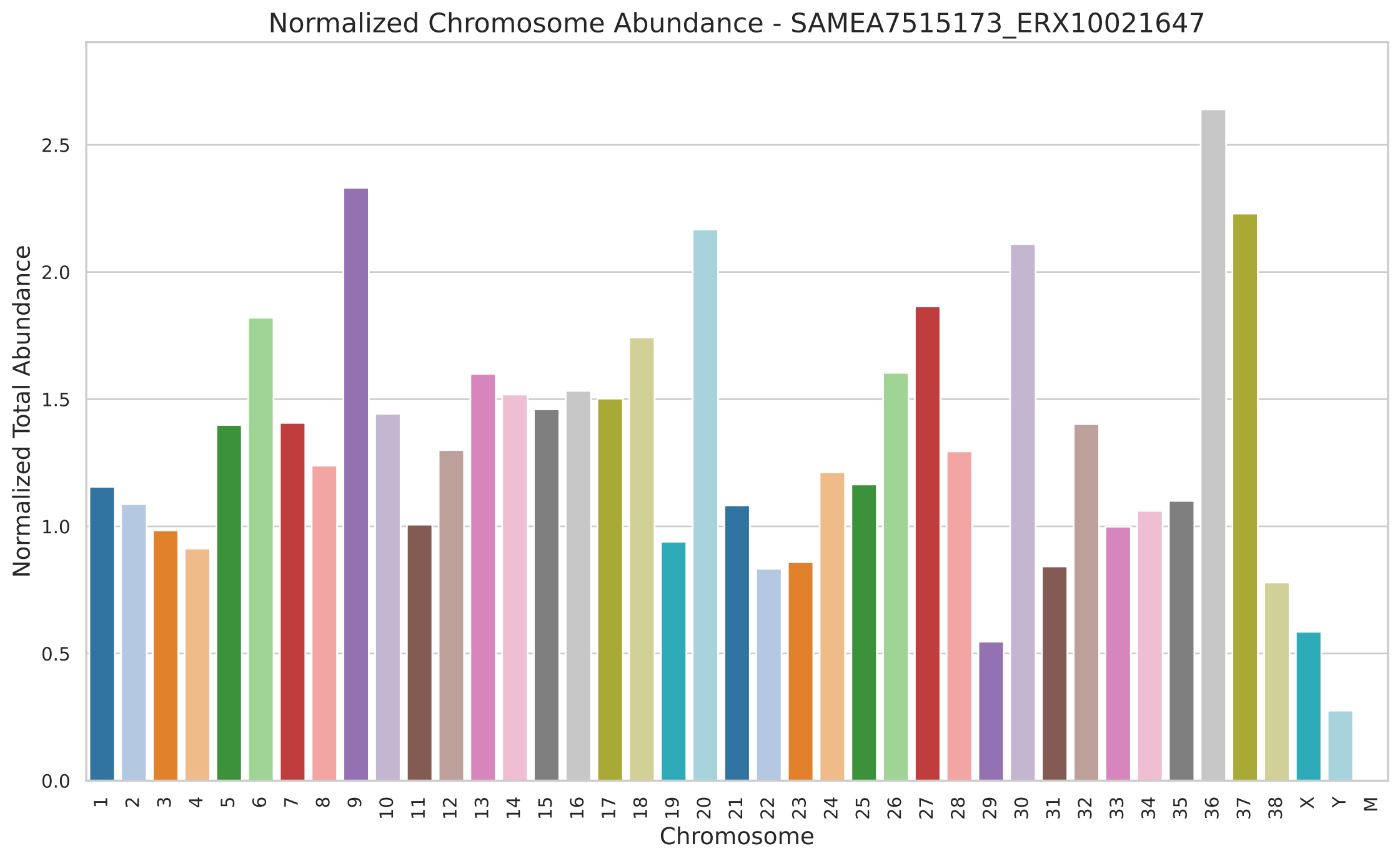

Normalized Chromosome Abundance - SAMEA7515214_ERX10021665
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

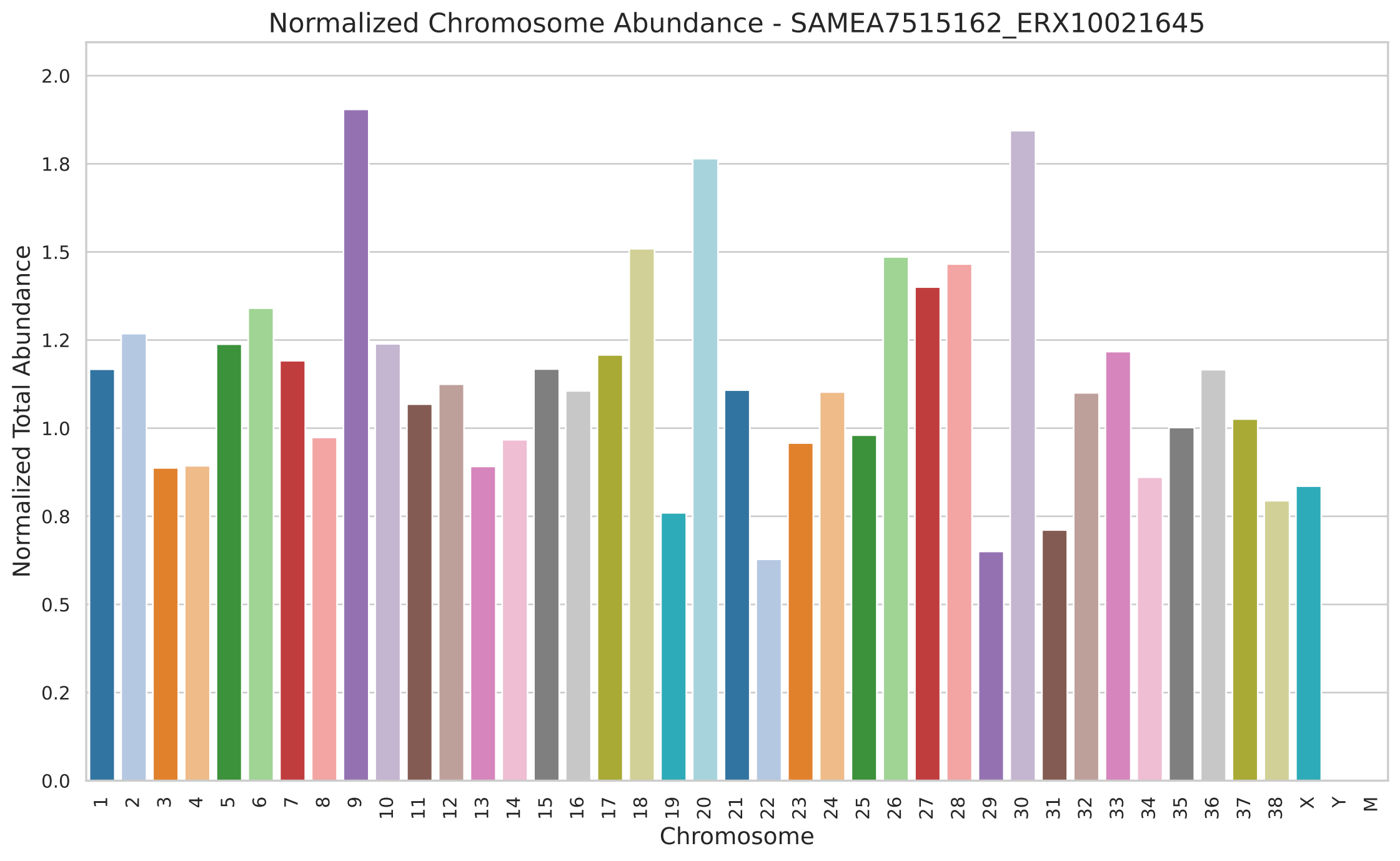

Normalized Chromosome Abundance - SAMEA7515173_ERX10021677
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

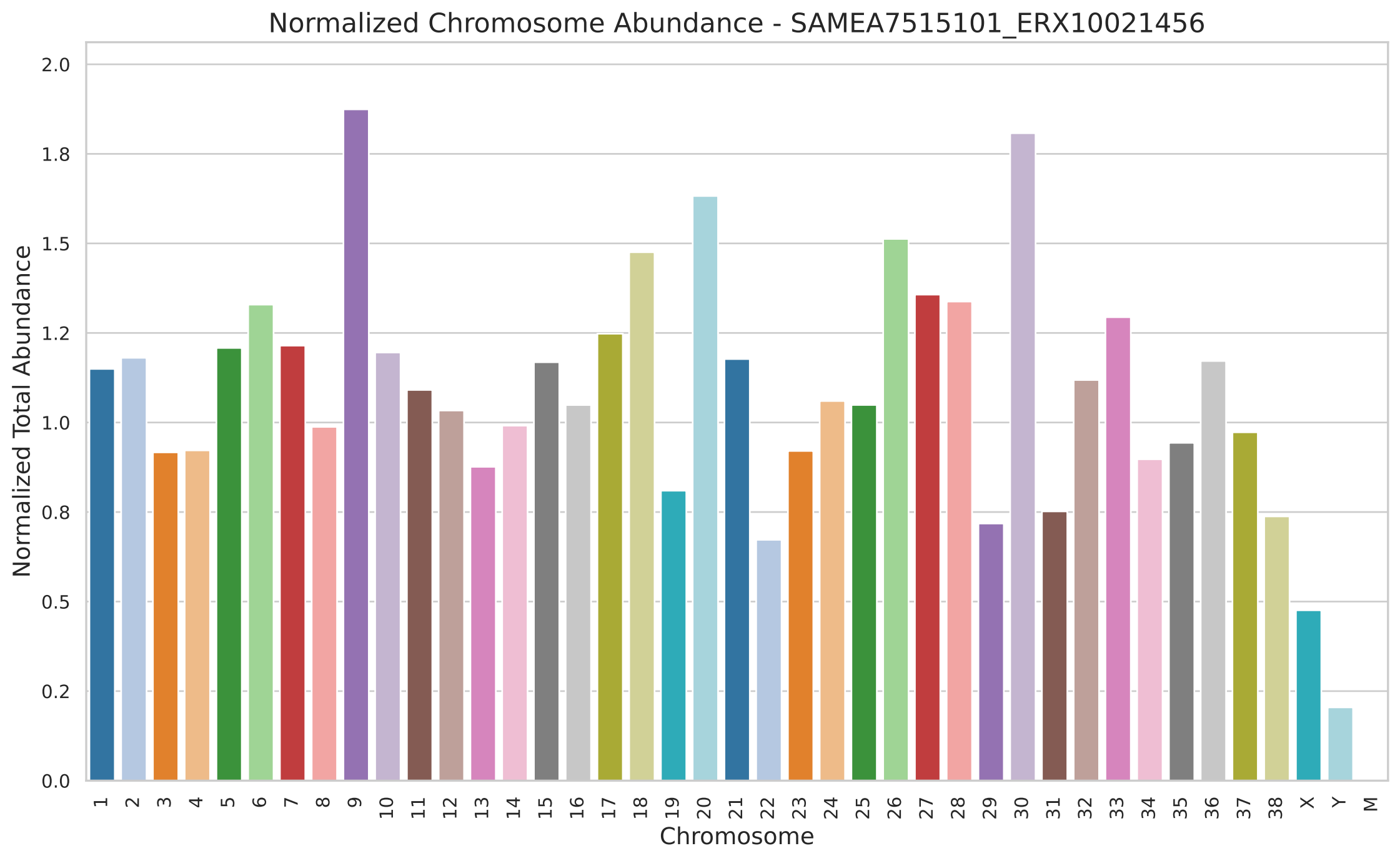

Normalized Chromosome Abundance - SAMEA7515197_ERX10021686
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

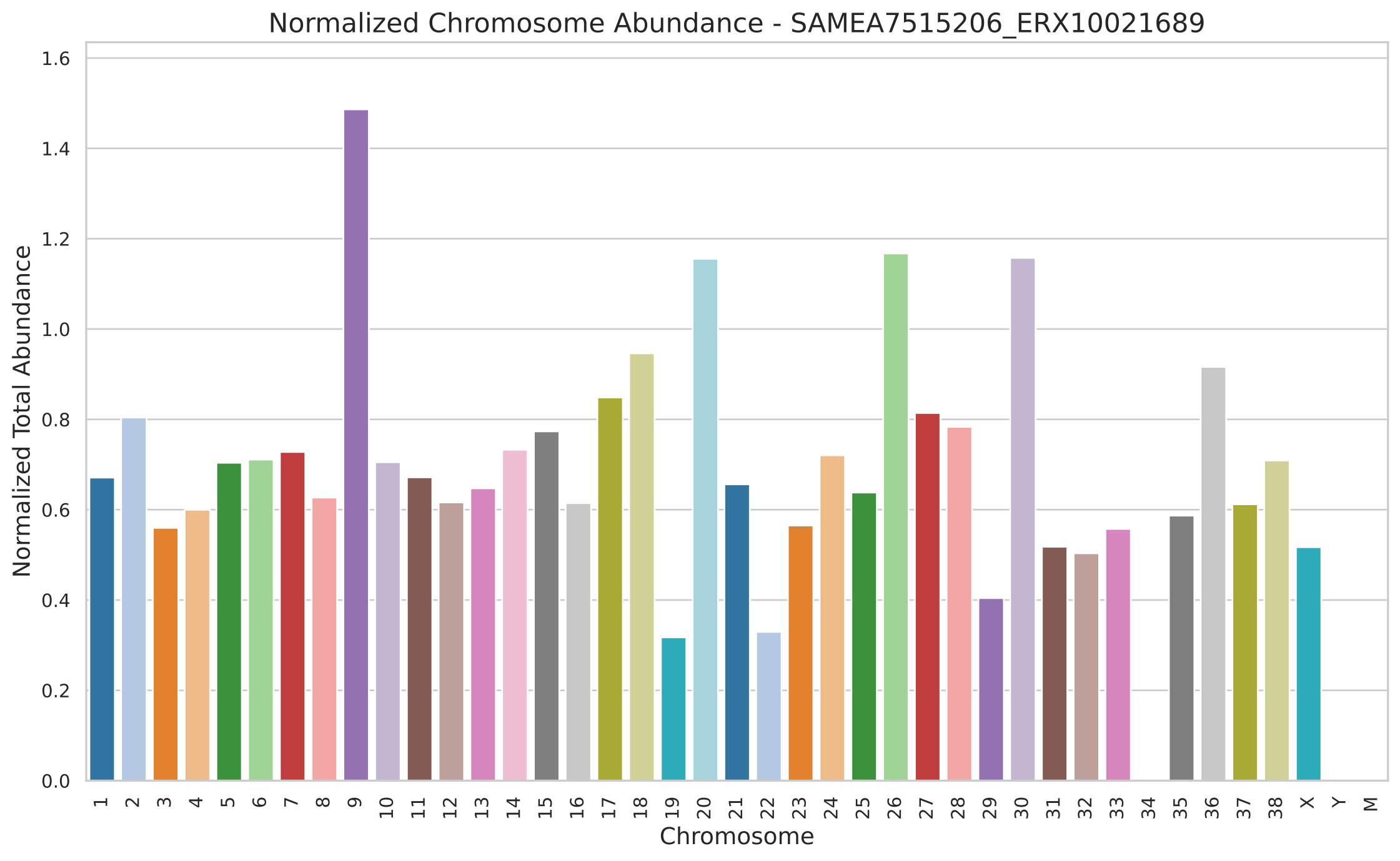

Normalized Chromosome Abundance - SAMEA7515169_ERX10021678
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

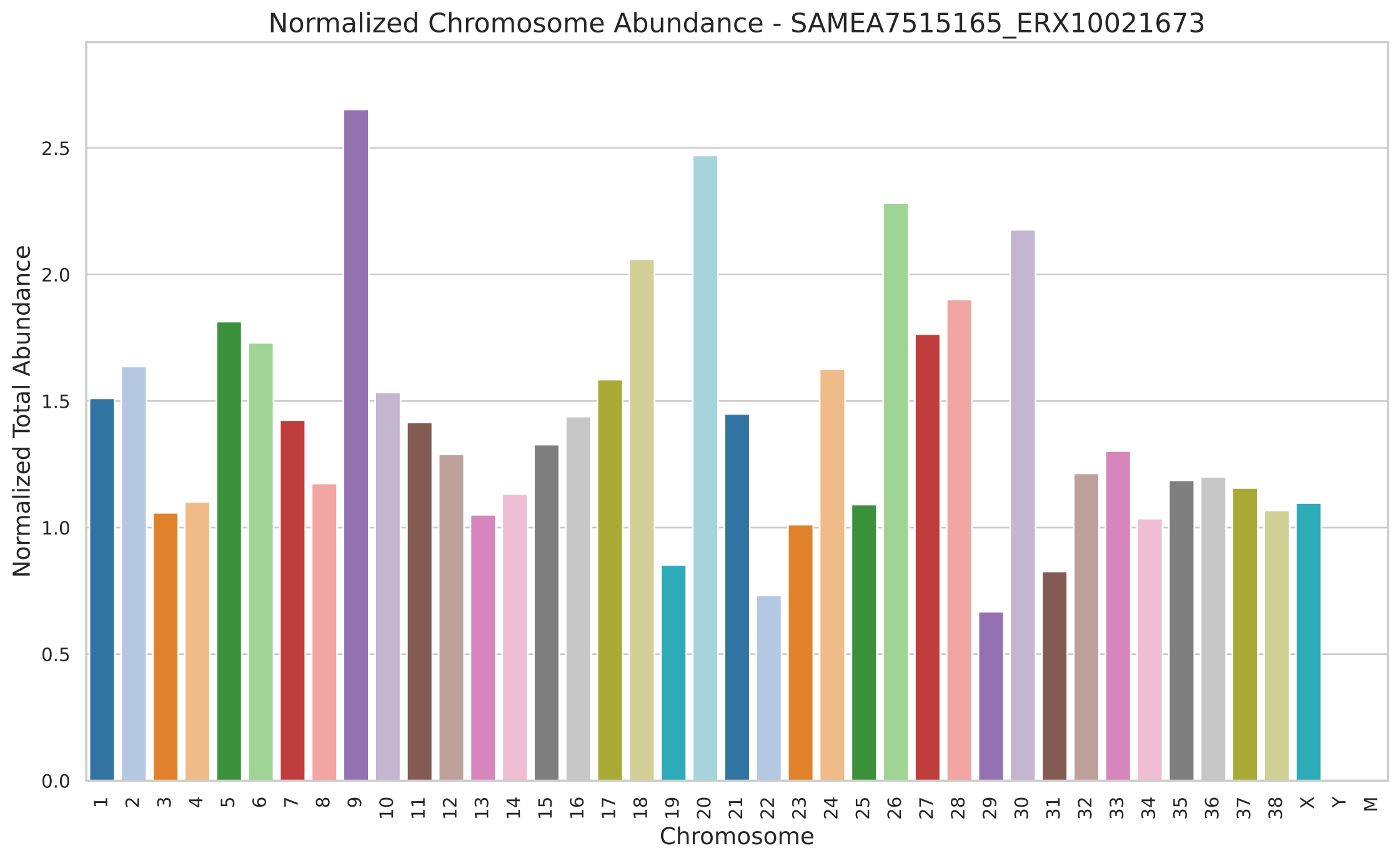

Normalized Chromosome Abundance - SAMEA7515229_ERX10021667
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

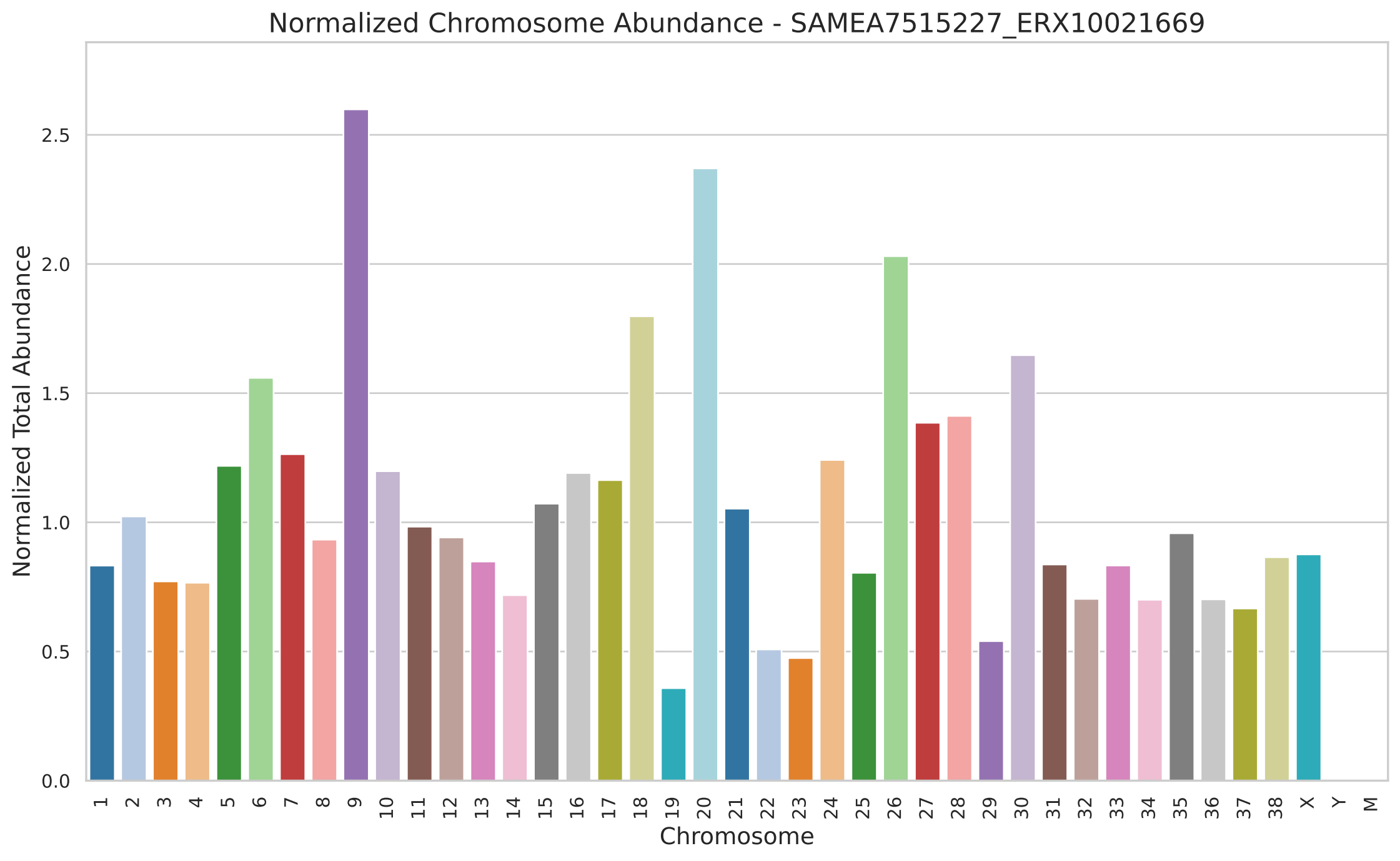

Normalized Chromosome Abundance - SAMEA7515173_ERX10021647
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

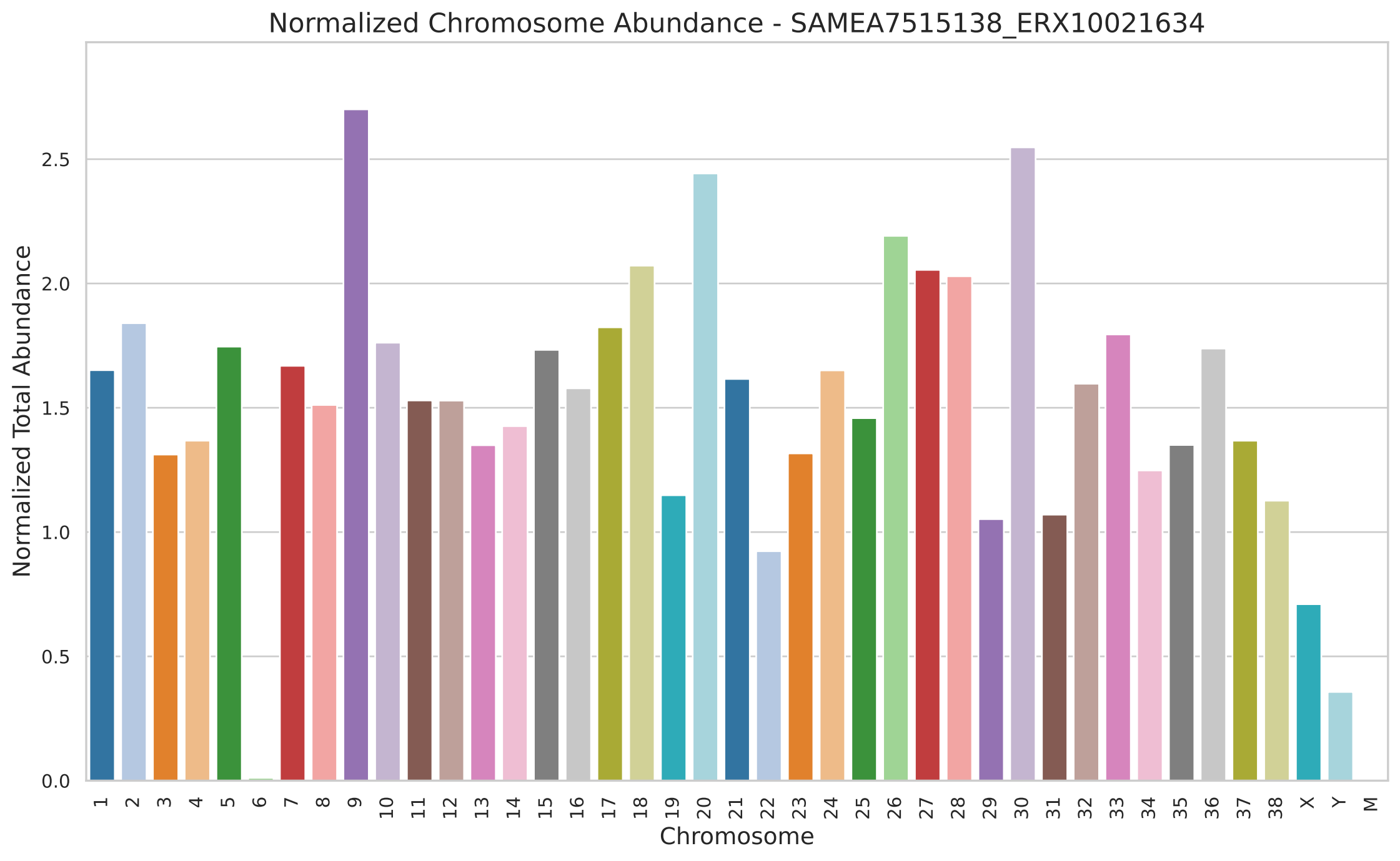

Normalized Chromosome Abundance - SAMEA7515162_ERX10021645
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

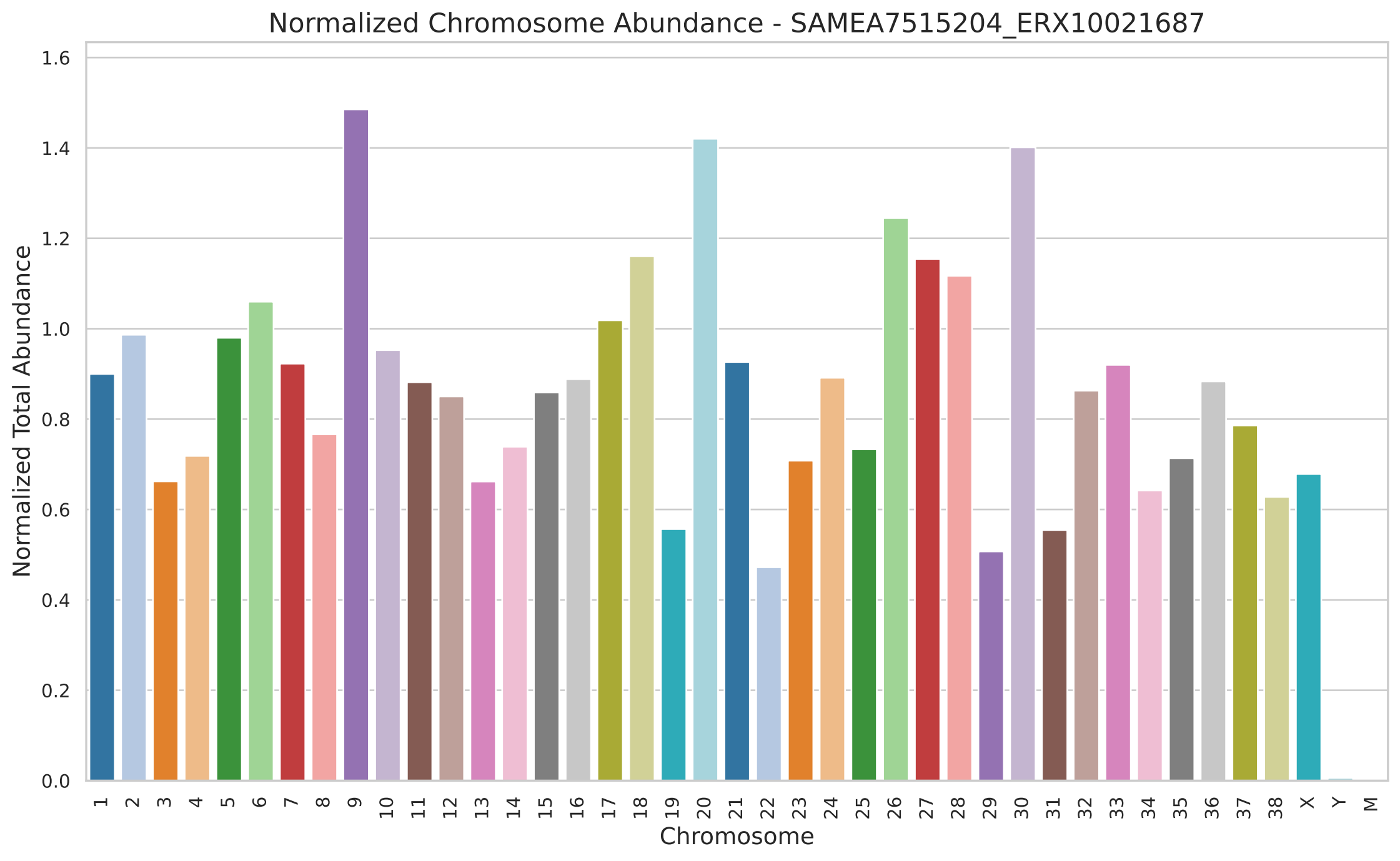

Normalized Chromosome Abundance - SAMEA7515101_ERX10021456
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

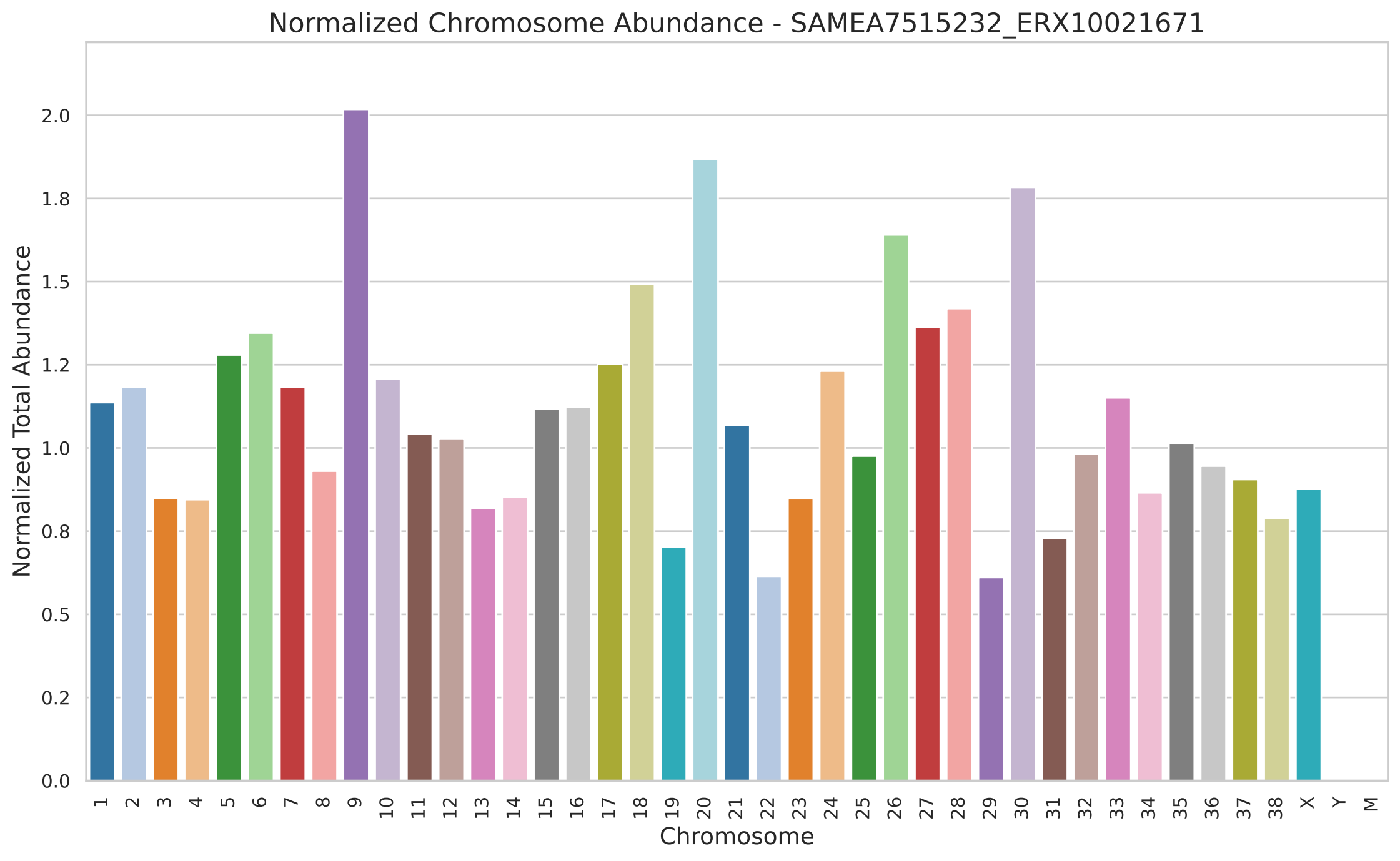

Normalized Chromosome Abundance - SAMEA7515206_ERX10021689
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

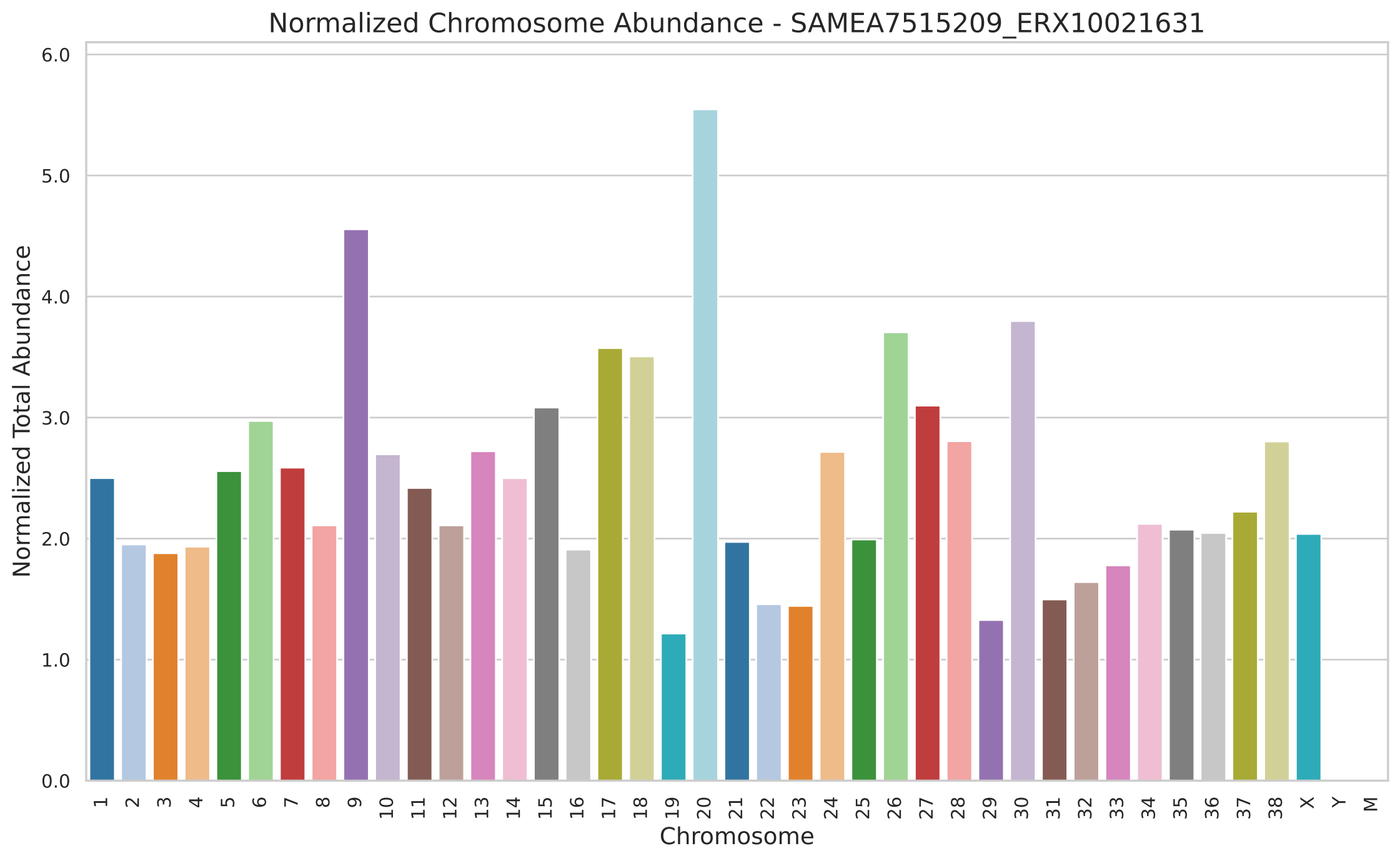

Normalized Chromosome Abundance - SAMEA7515165_ERX10021673
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

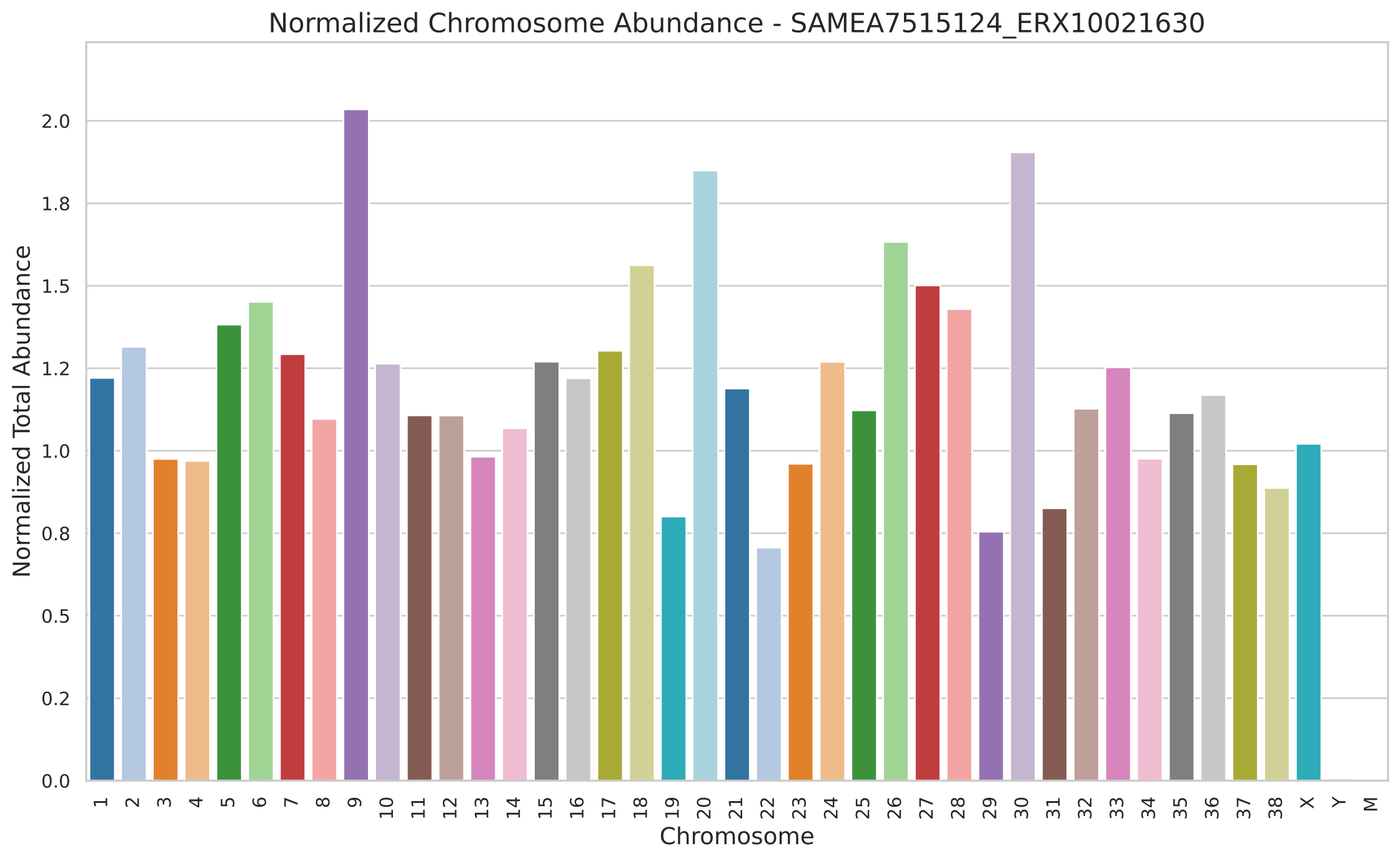

Normalized Chromosome Abundance - SAMEA7515227_ERX10021669
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

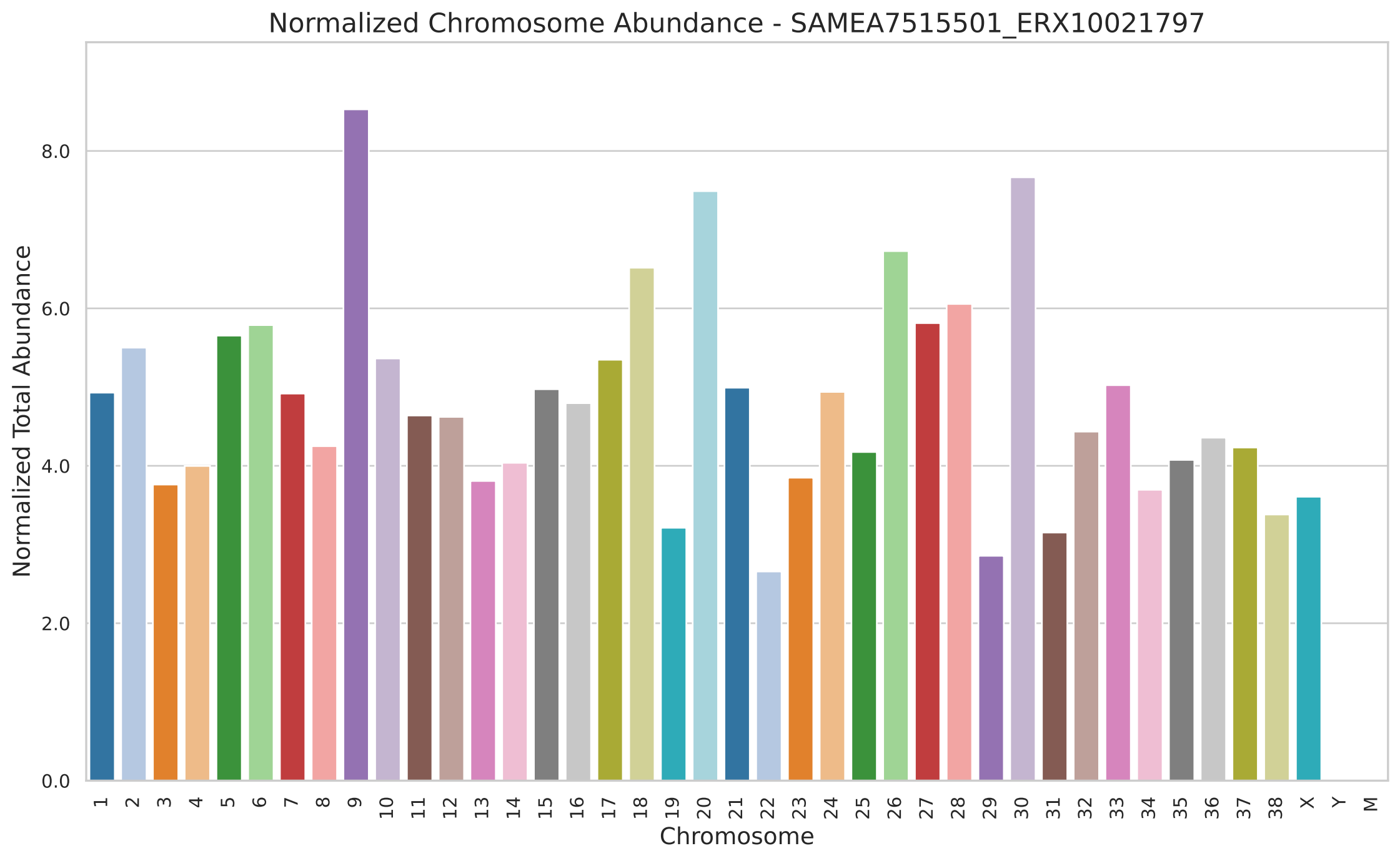

Normalized Chromosome Abundance - SAMEA7515138_ERX10021634
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

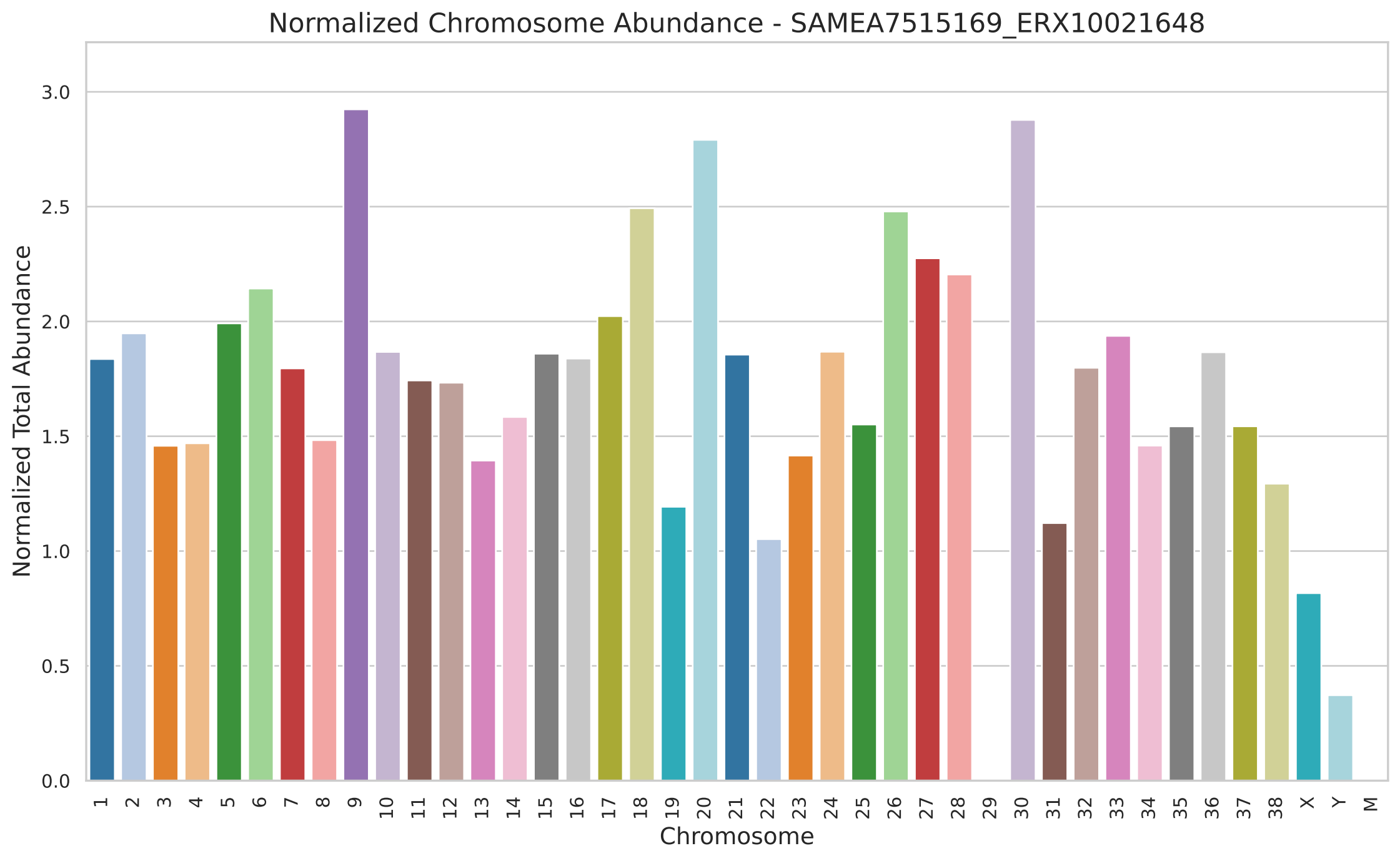

Normalized Chromosome Abundance - SAMEA7515204_ERX10021687
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

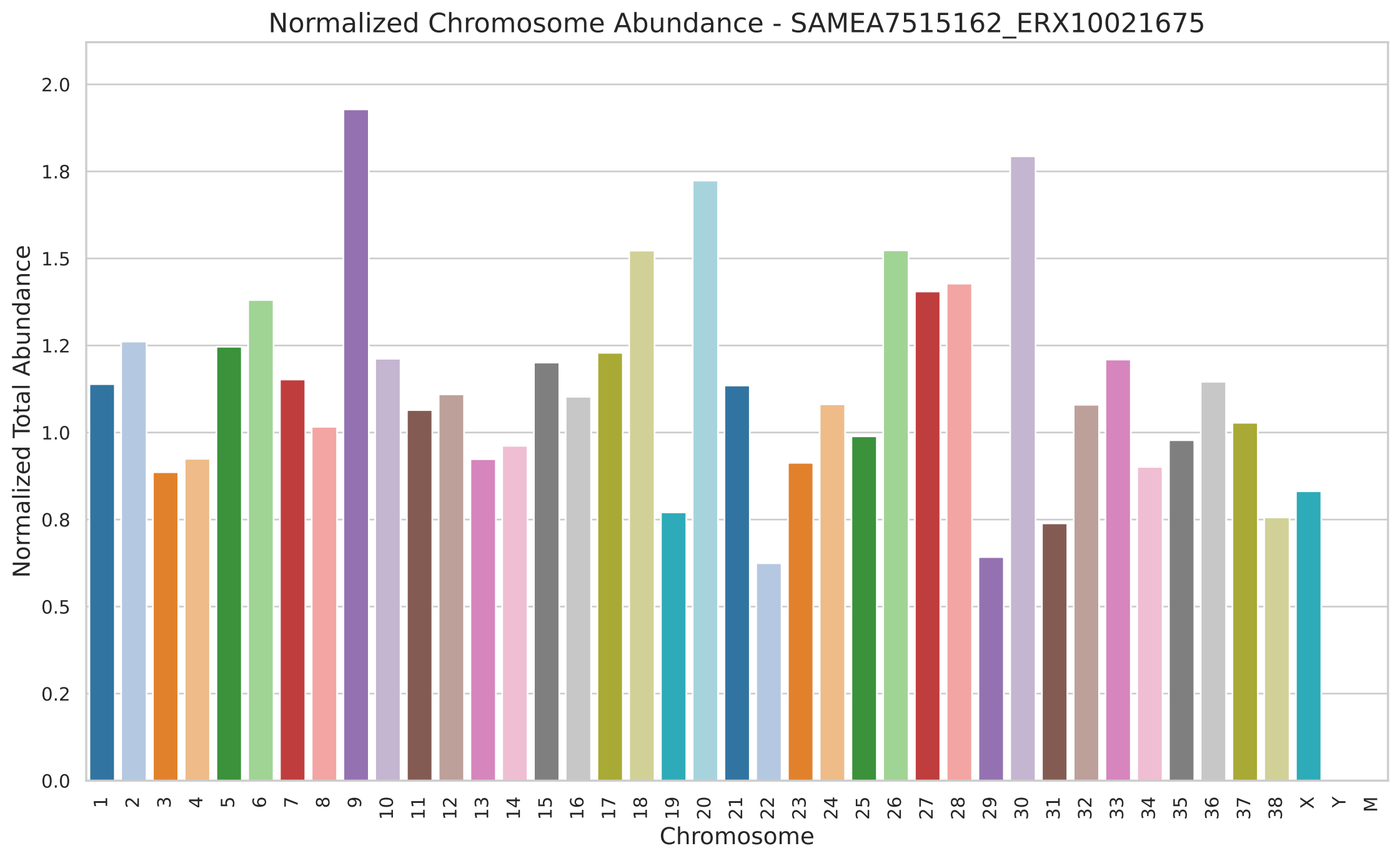

Normalized Chromosome Abundance - SAMEA7515232_ERX10021671
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

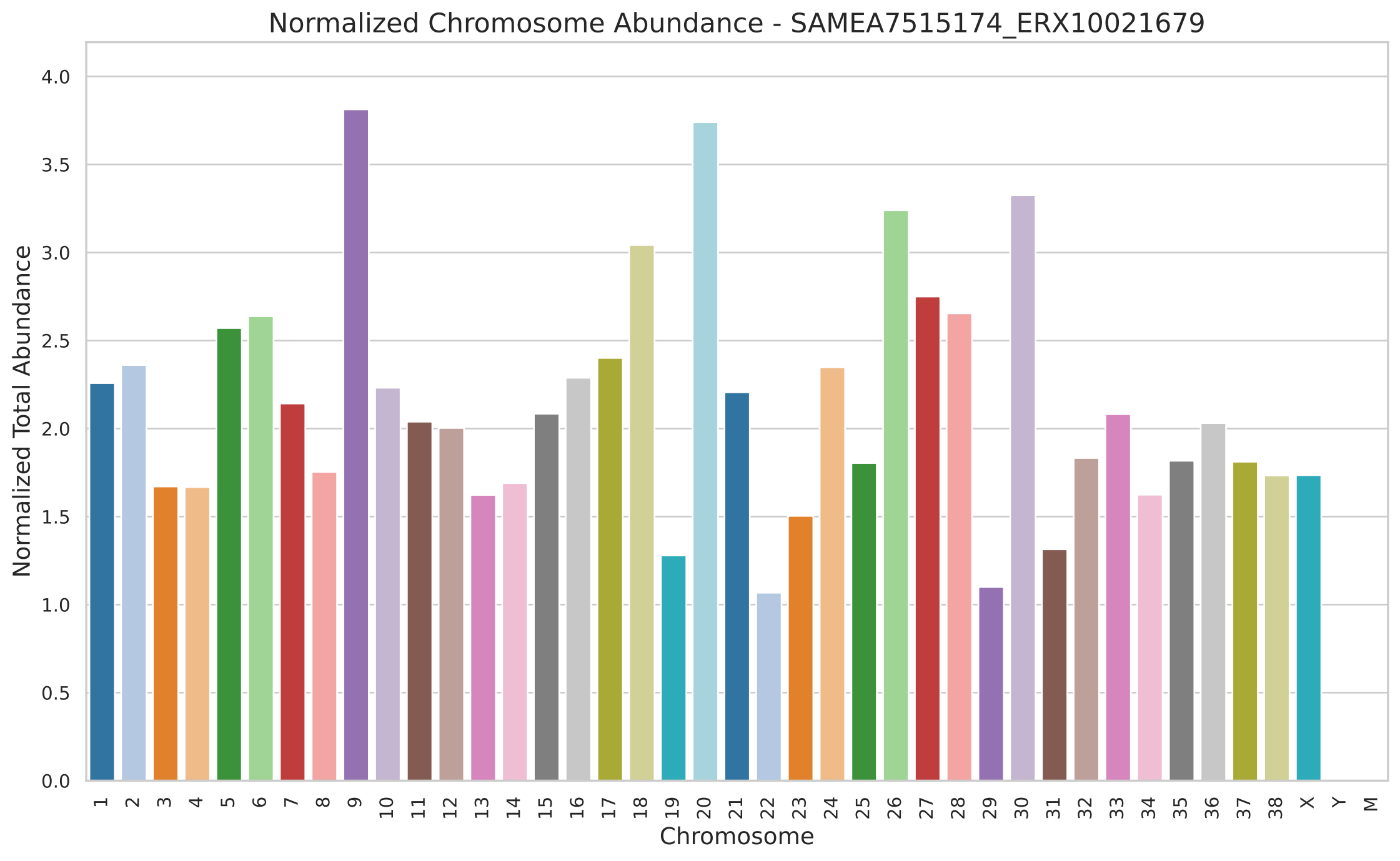

Normalized Chromosome Abundance - SAMEA7515209_ERX10021631
Normalized Total Abundance
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

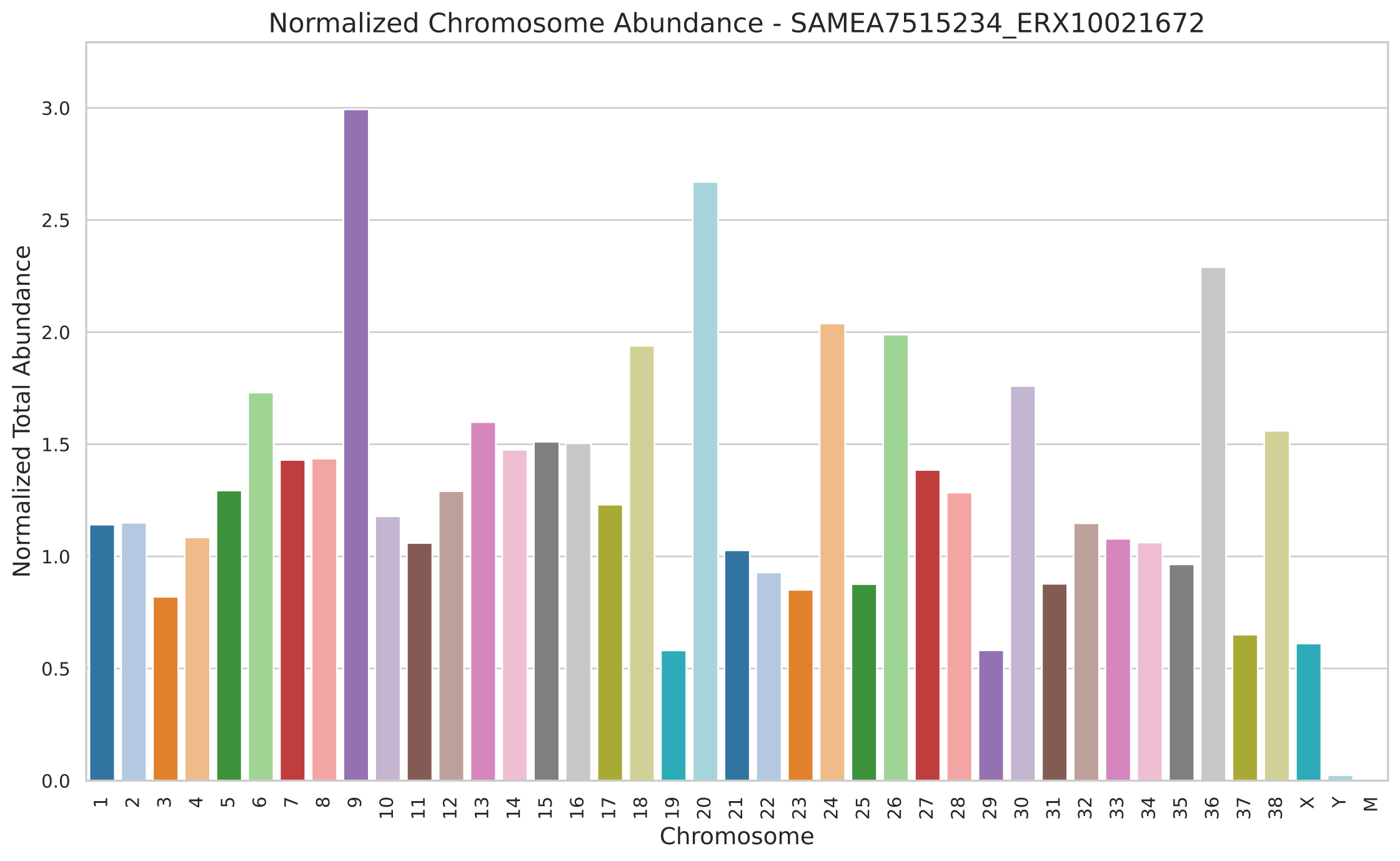

Normalized Chromosome Abundance - SAMEA7515124_ERX10021630
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

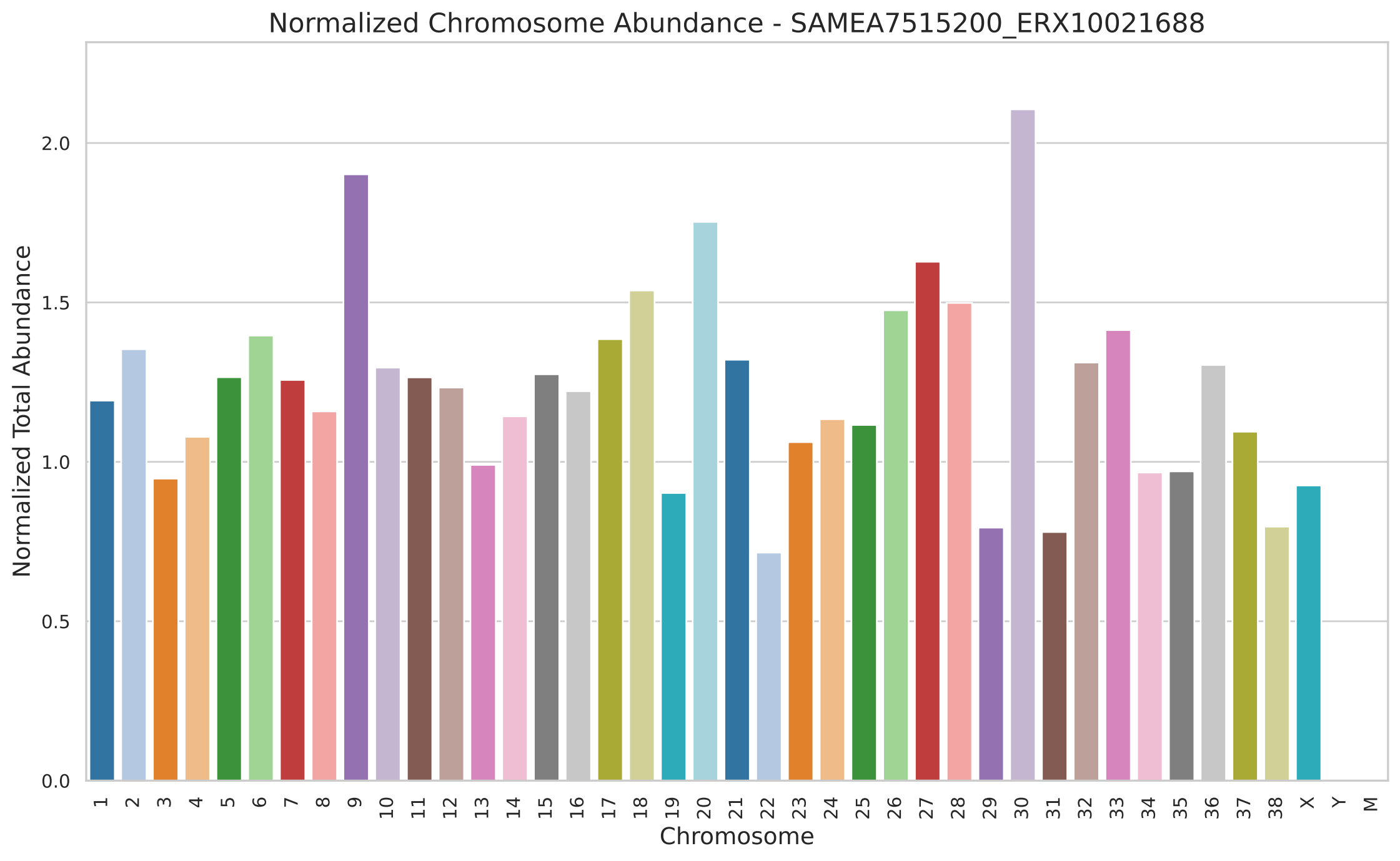

Normalized Chromosome Abundance - SAMEA7515501_ERX10021797
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

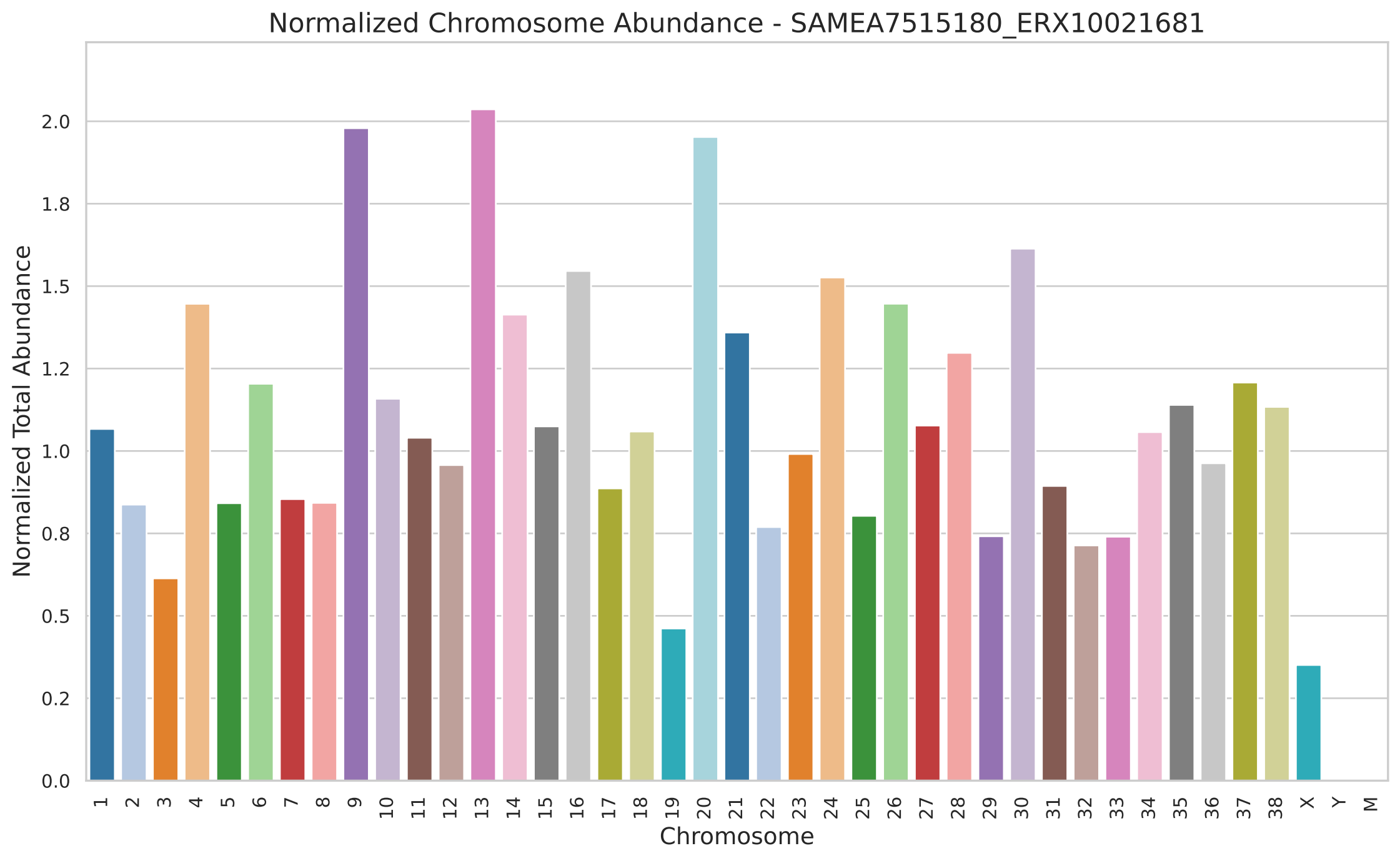

Normalized Chromosome Abundance - SAMEA7515169_ERX10021648
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

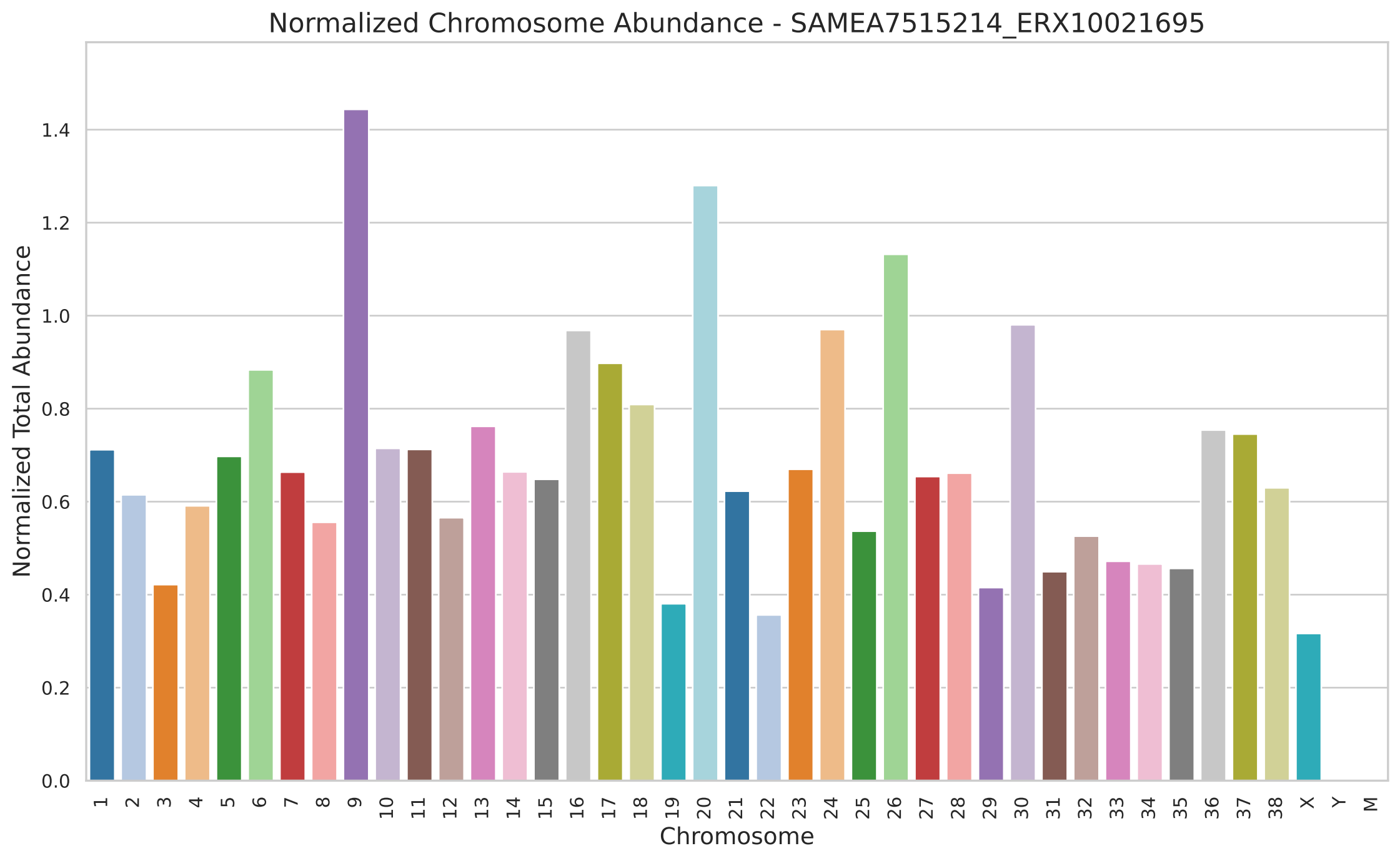

Normalized Chromosome Abundance - SAMEA7515162_ERX10021675
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

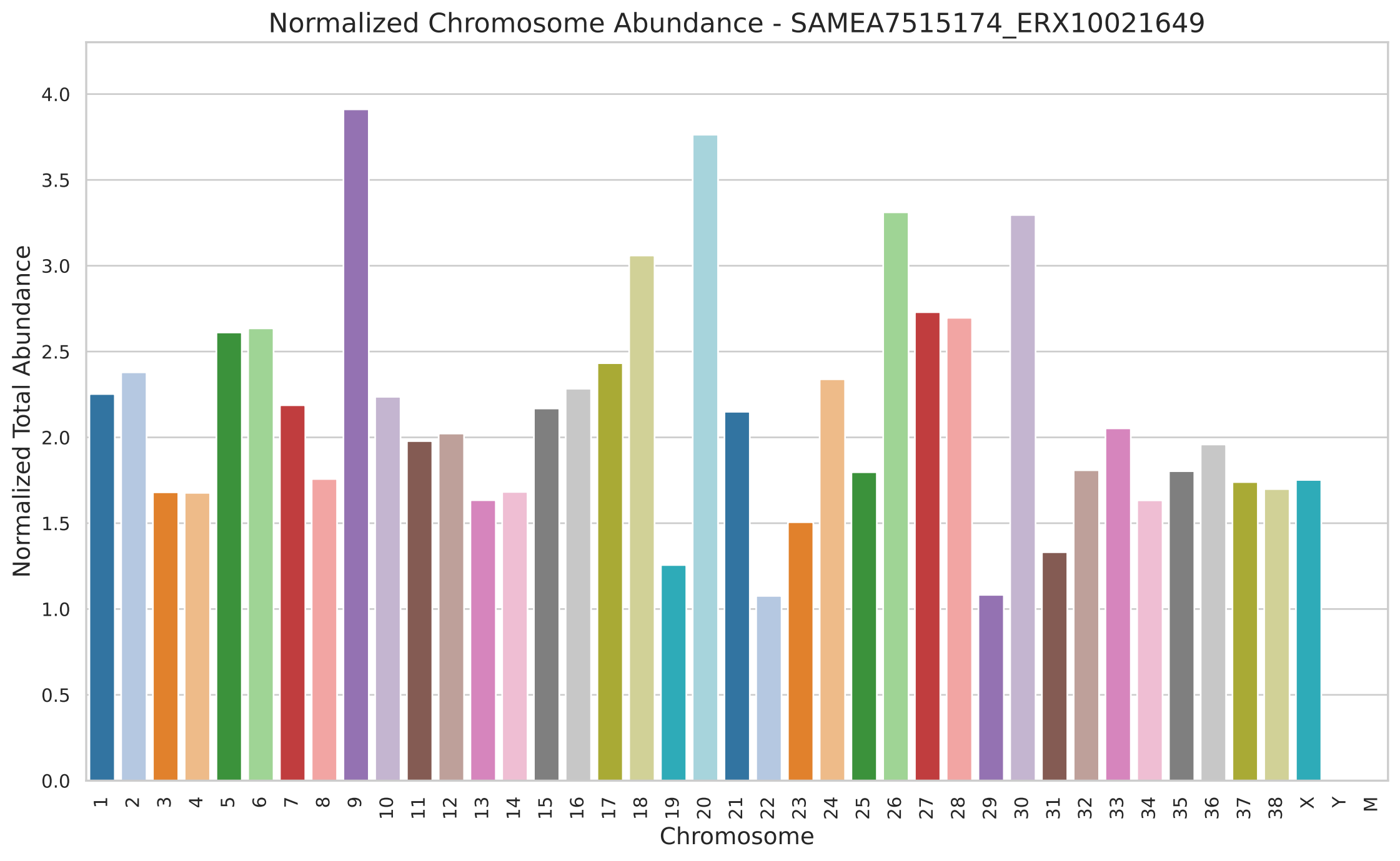

Normalized Chromosome Abundance - SAMEA7515174_ERX10021679
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

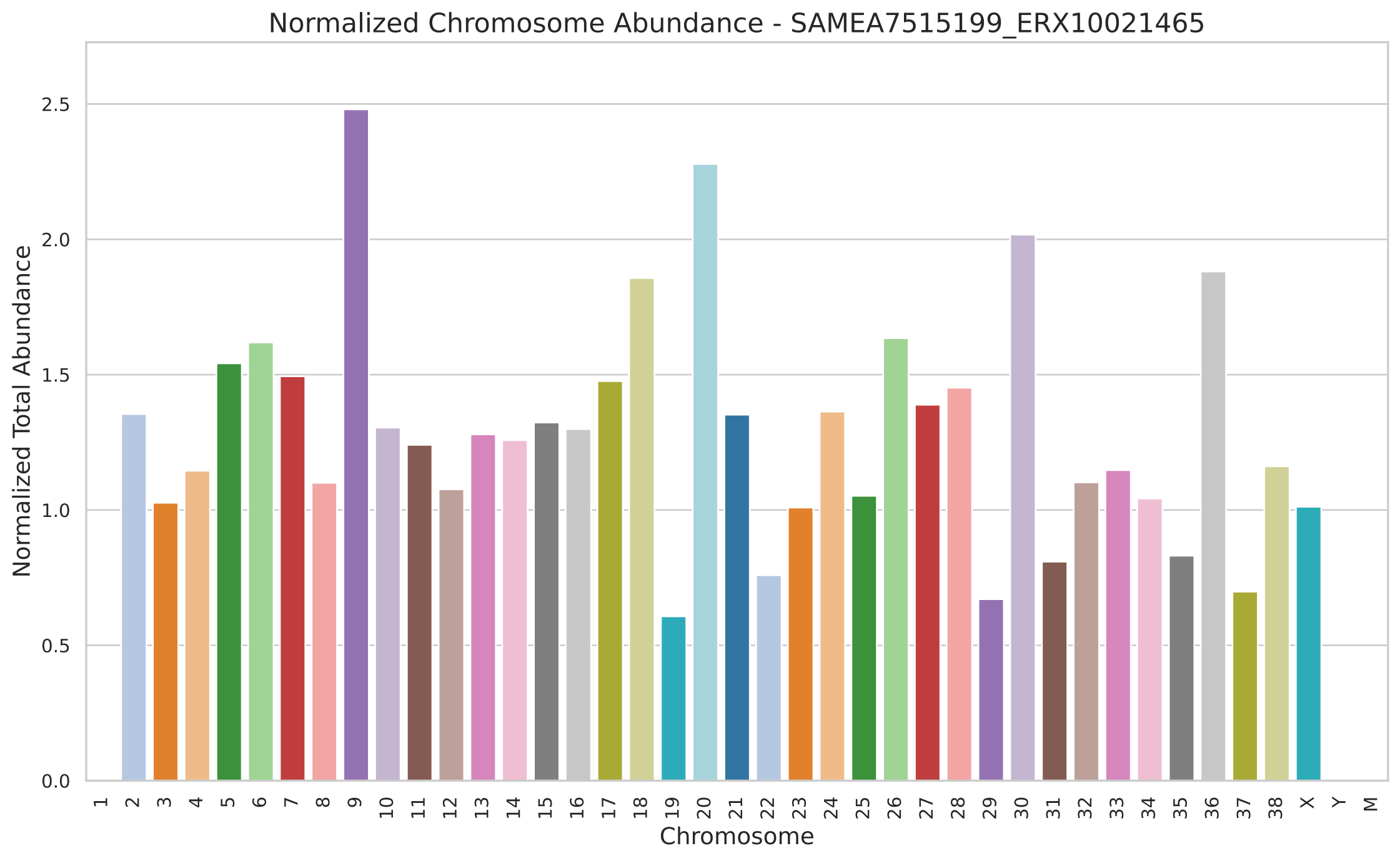

Normalized Chromosome Abundance - SAMEA7515234_ERX10021672
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

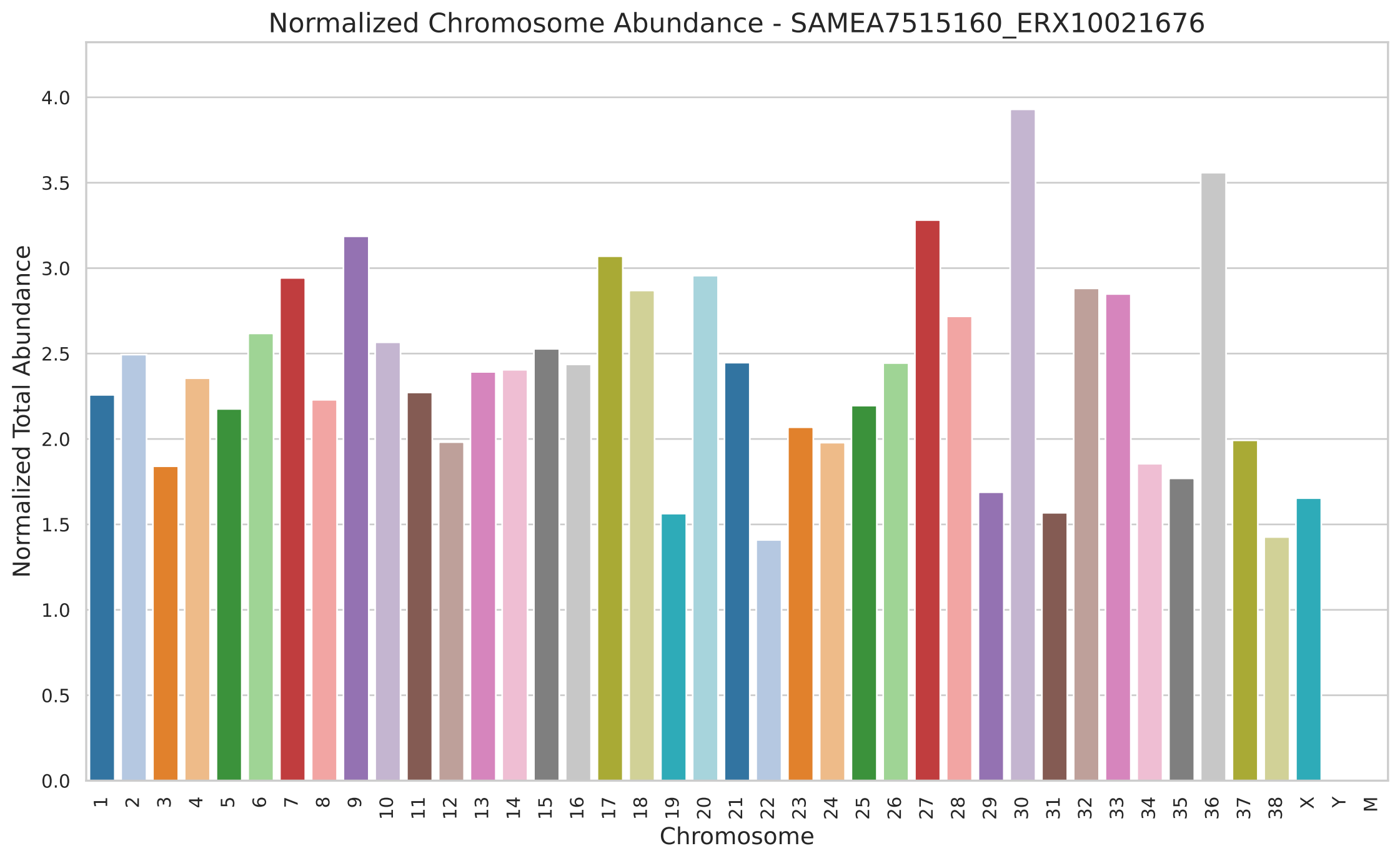

Normalized Chromosome Abundance - SAMEA7515200_ERX10021688
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

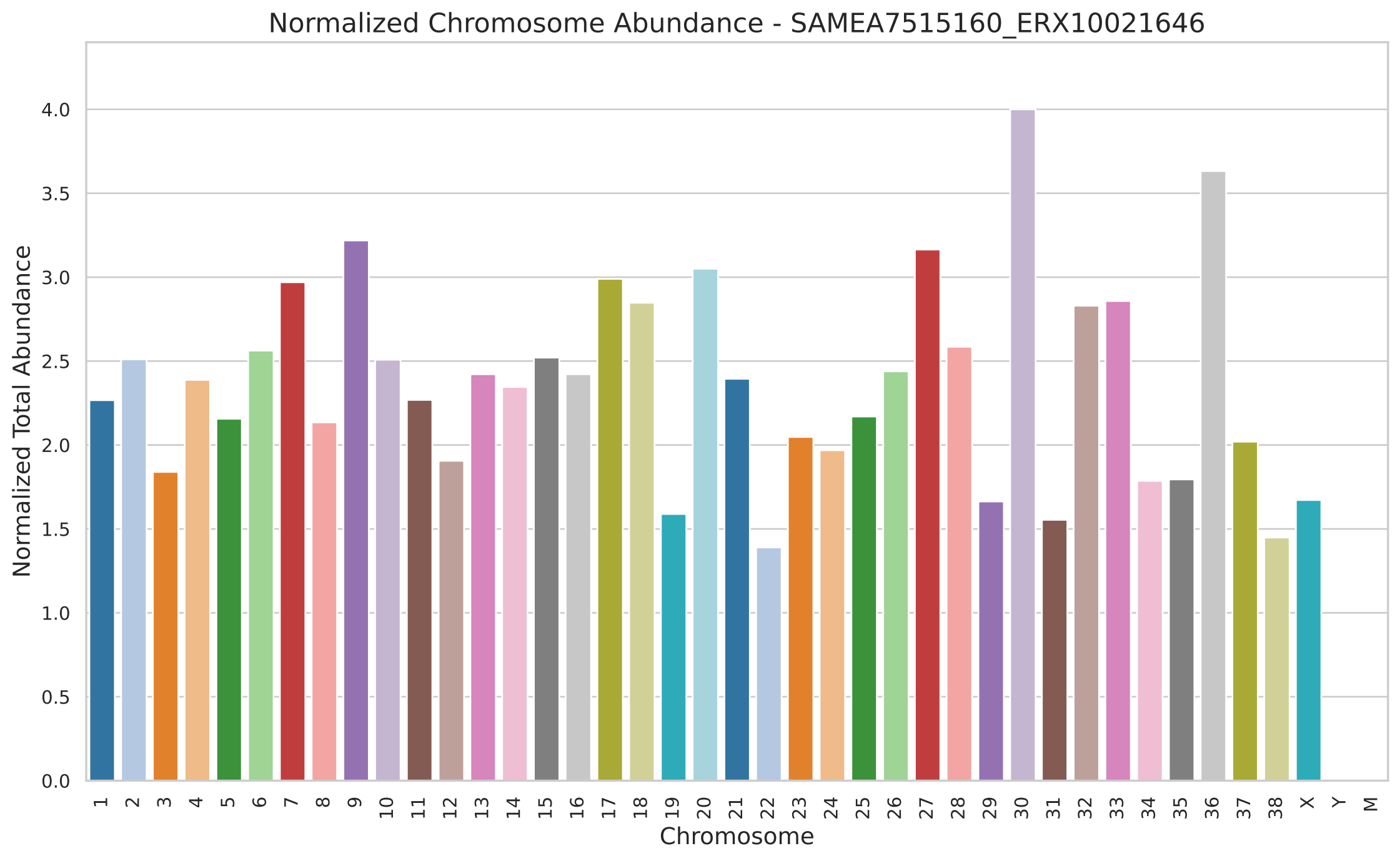

Normalized Chromosome Abundance - SAMEA7515180_ERX10021681
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

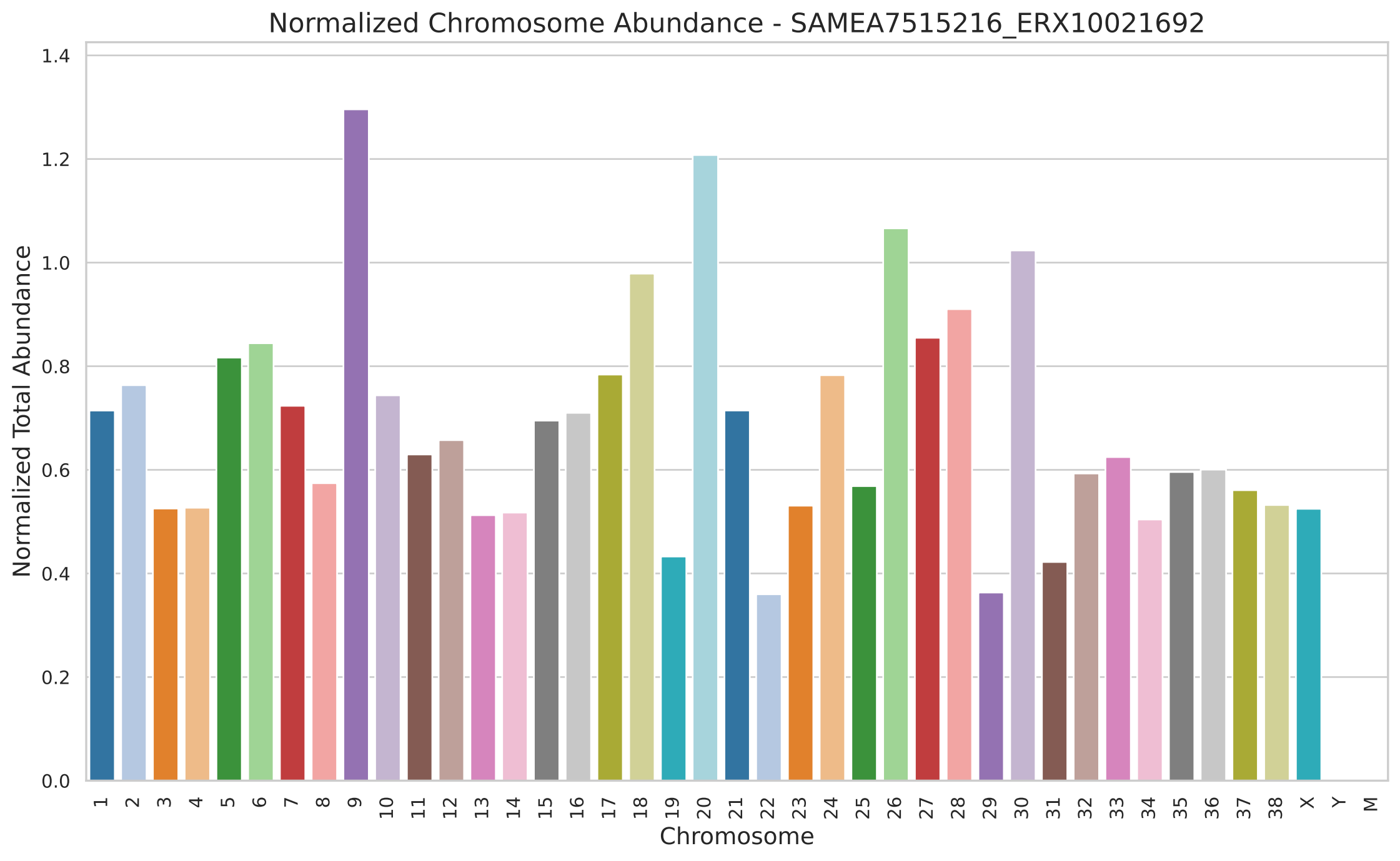

Normalized Chromosome Abundance - SAMEA7515214_ERX10021695
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

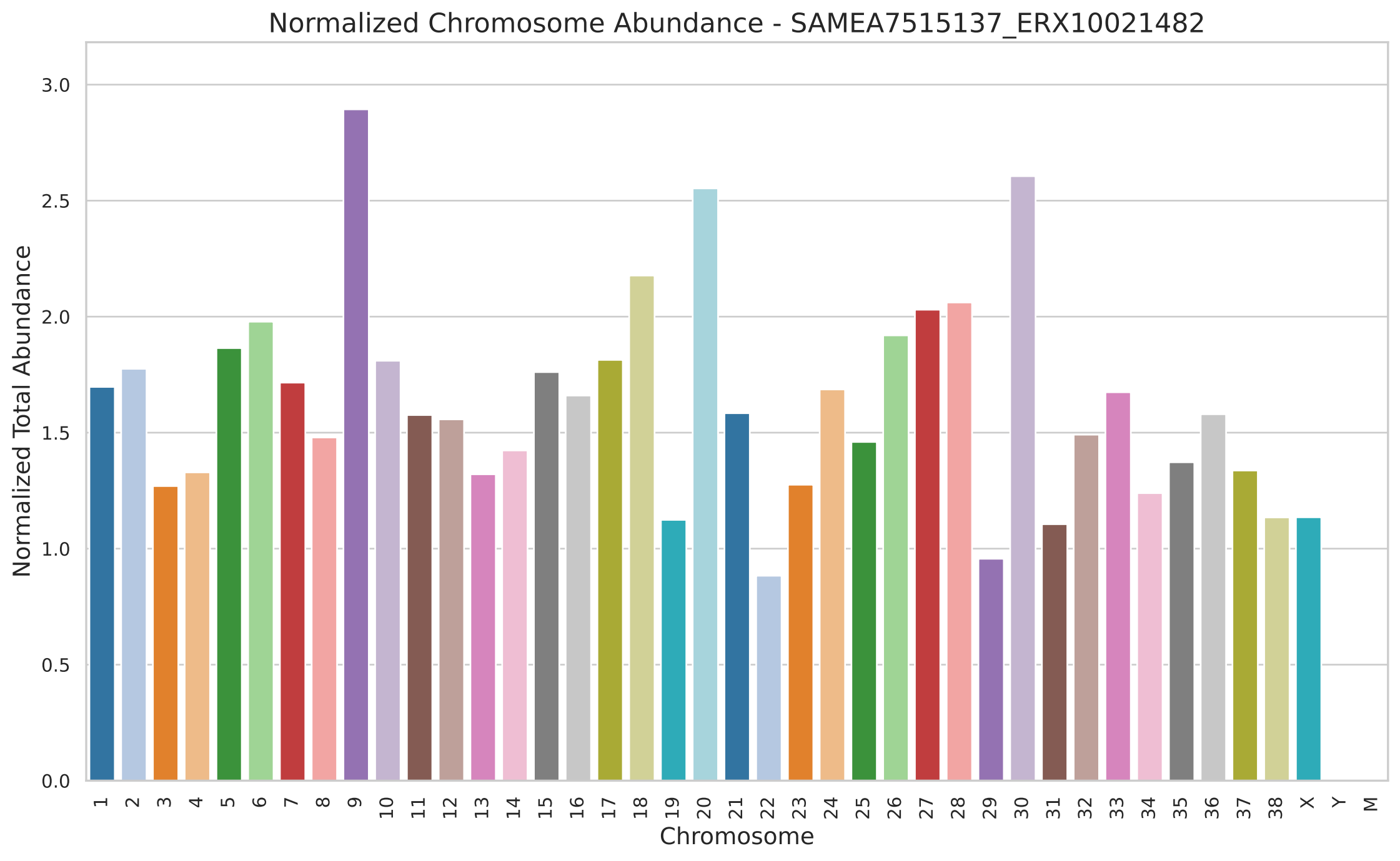

Normalized Chromosome Abundance - SAMEA7515174_ERX10021649
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

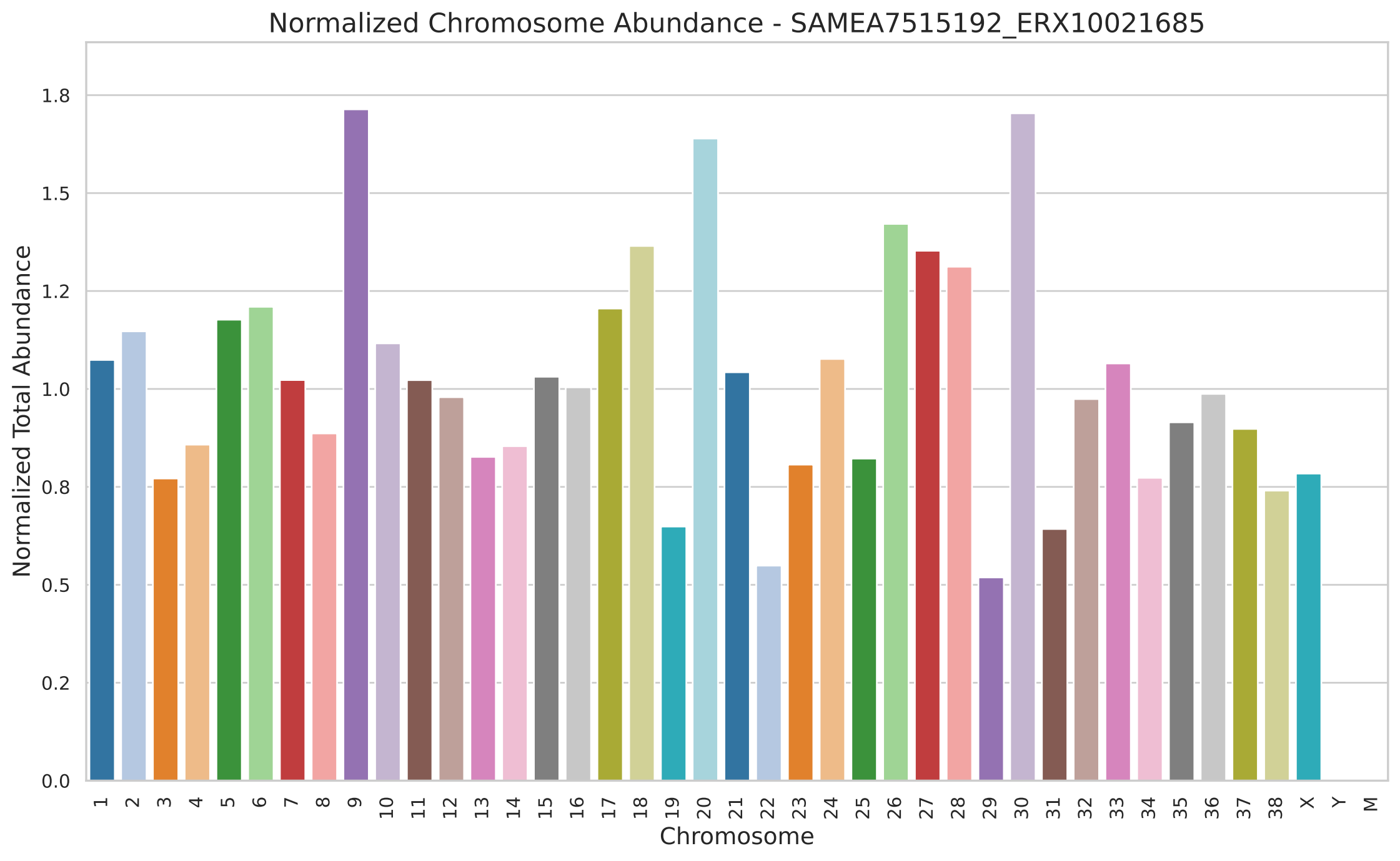

Normalized Chromosome Abundance - SAMEA7515199_ERX10021465
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

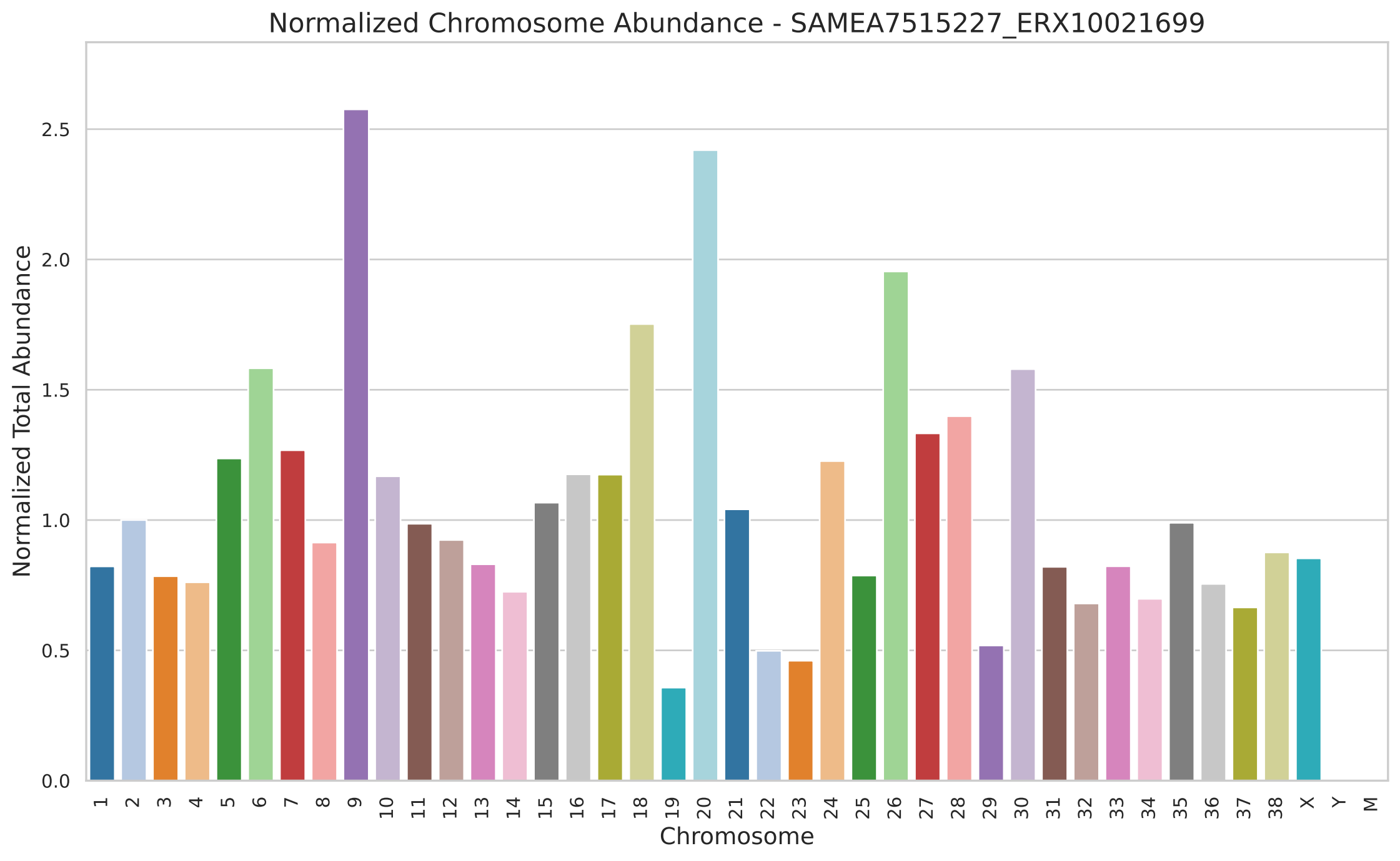

Normalized Chromosome Abundance - SAMEA7515160_ERX10021676
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

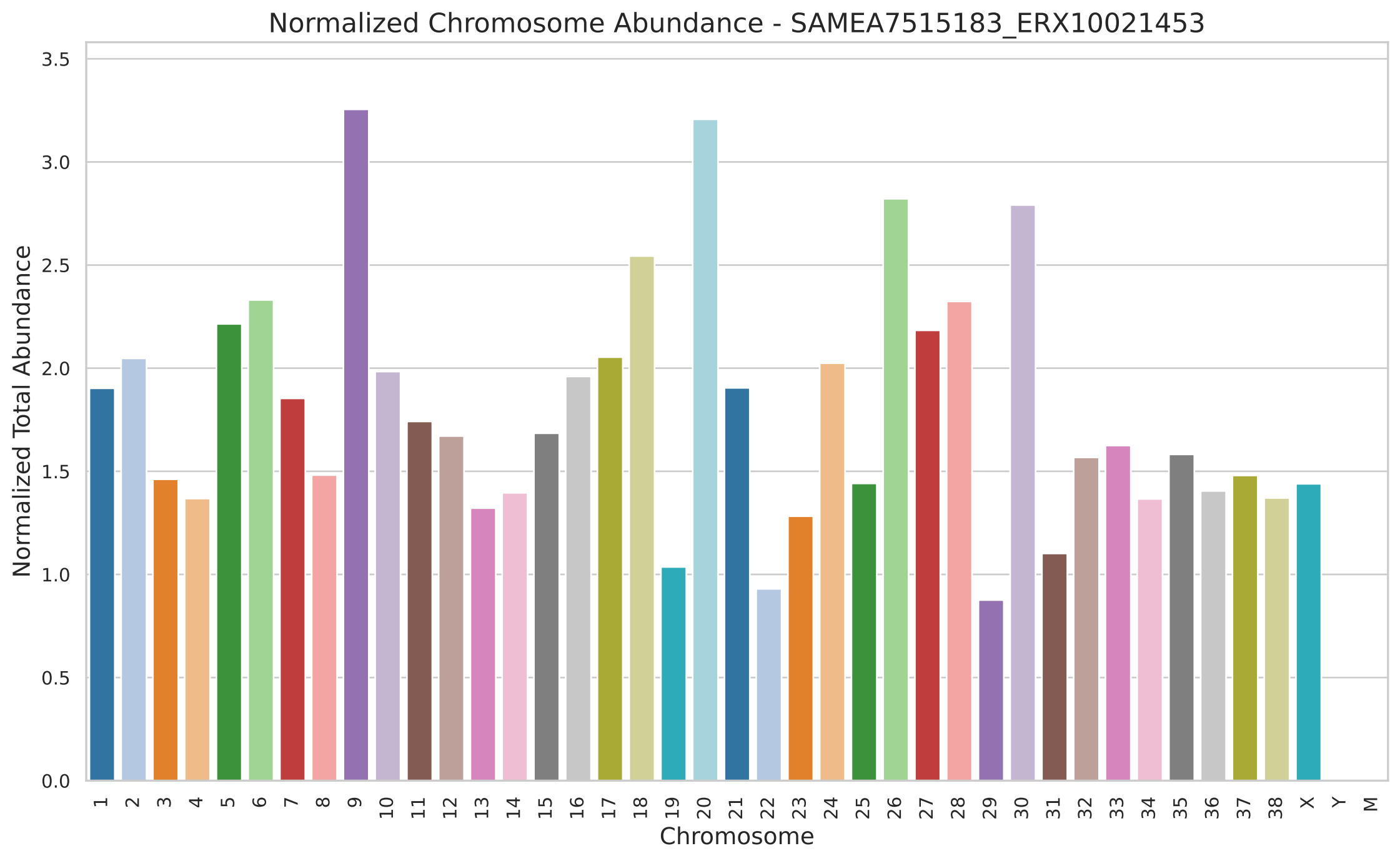

Normalized Chromosome Abundance - SAMEA7515160_ERX10021646
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

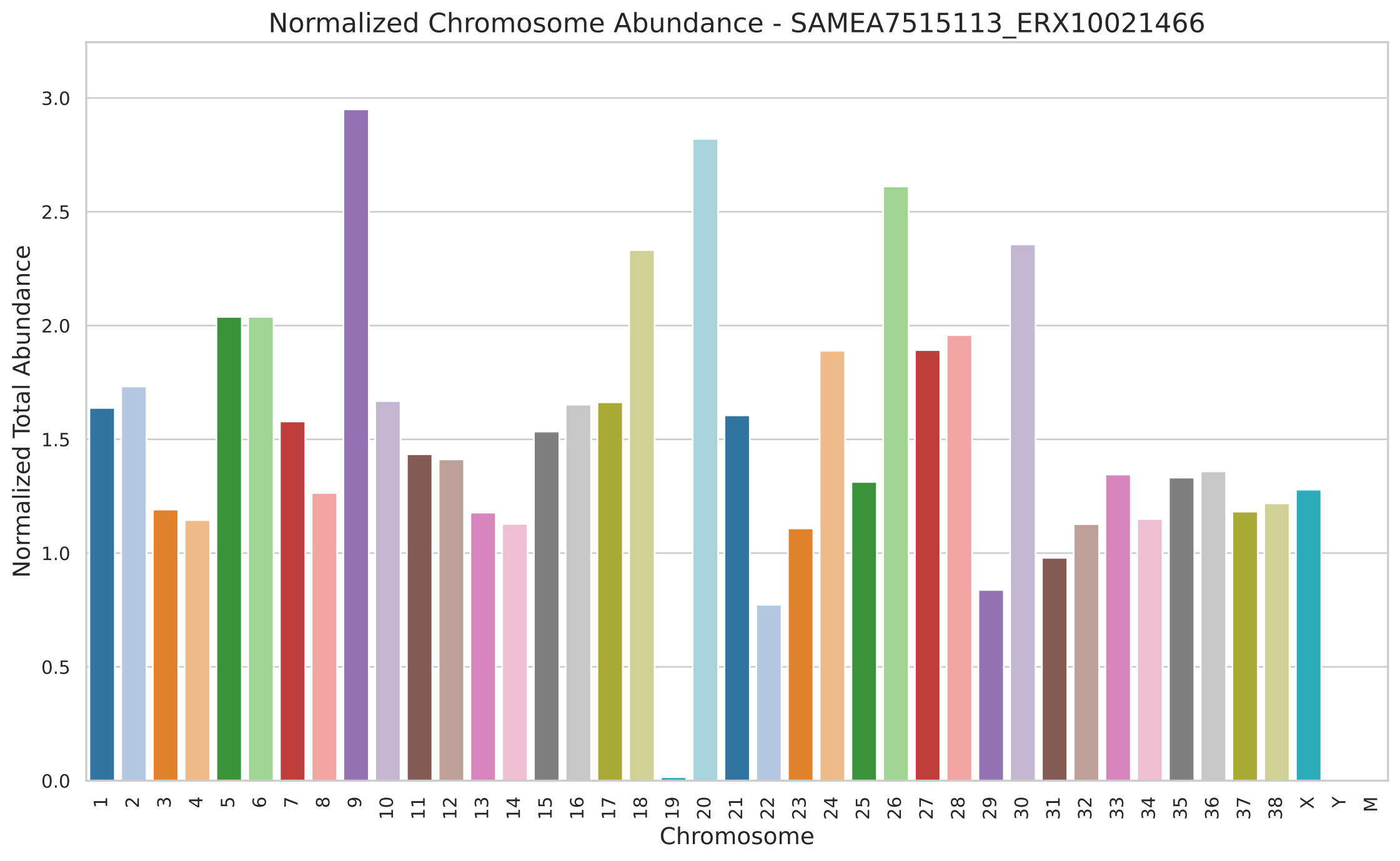

Normalized Chromosome Abundance - SAMEA7515216_ERX10021692
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

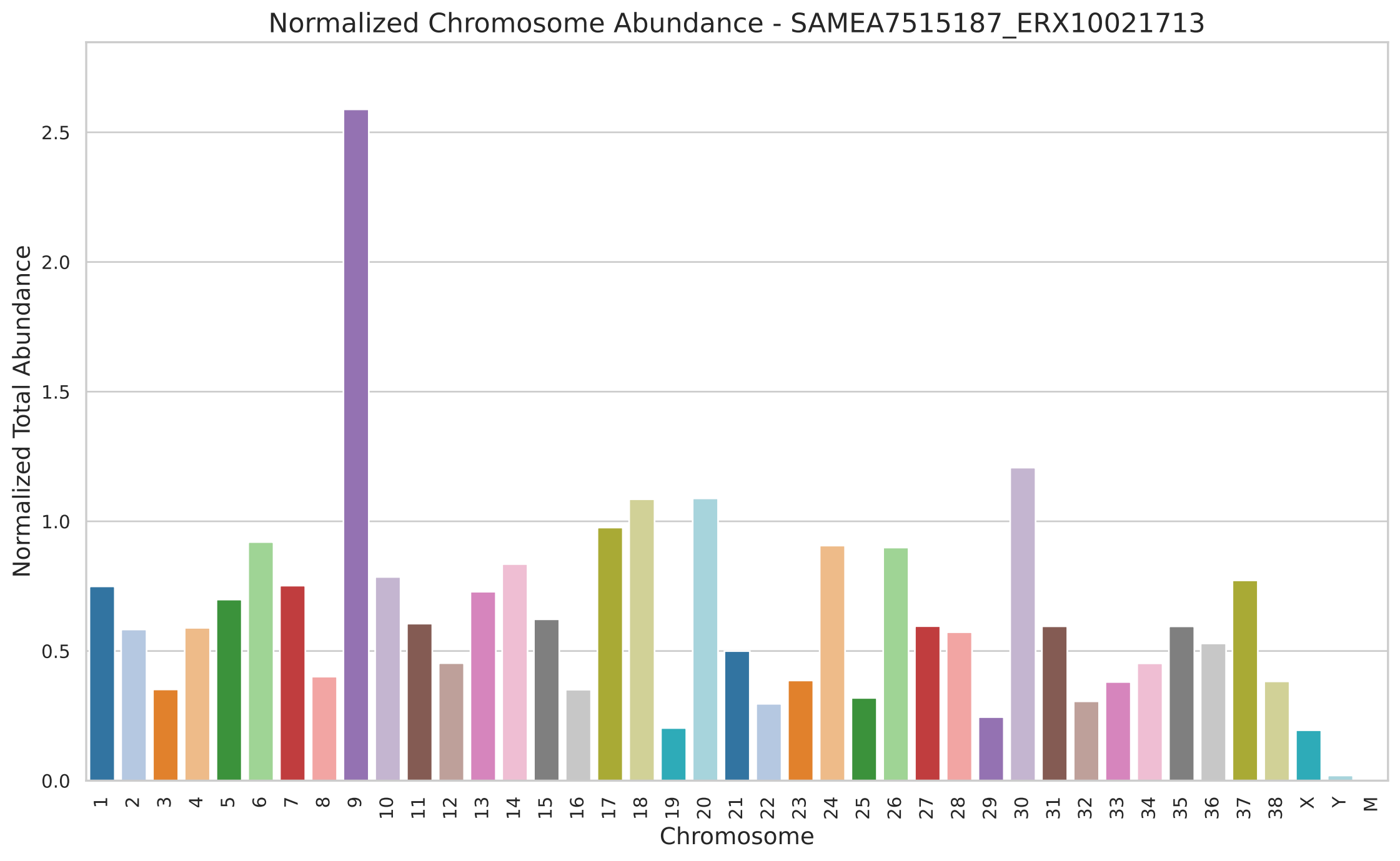

Normalized Chromosome Abundance - SAMEA7515137_ERX10021482
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

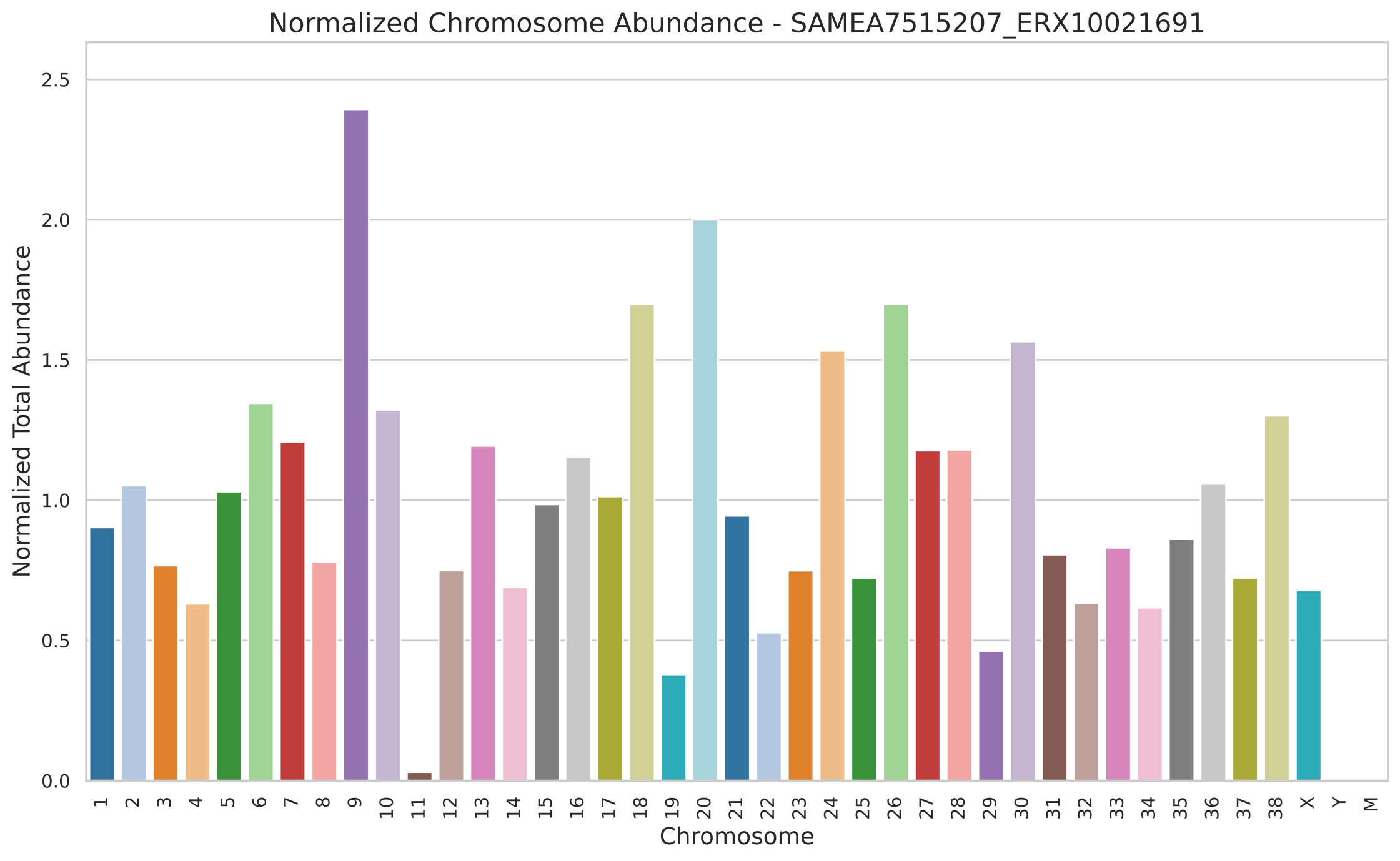

Normalized Chromosome Abundance - SAMEA7515192_ERX10021685
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

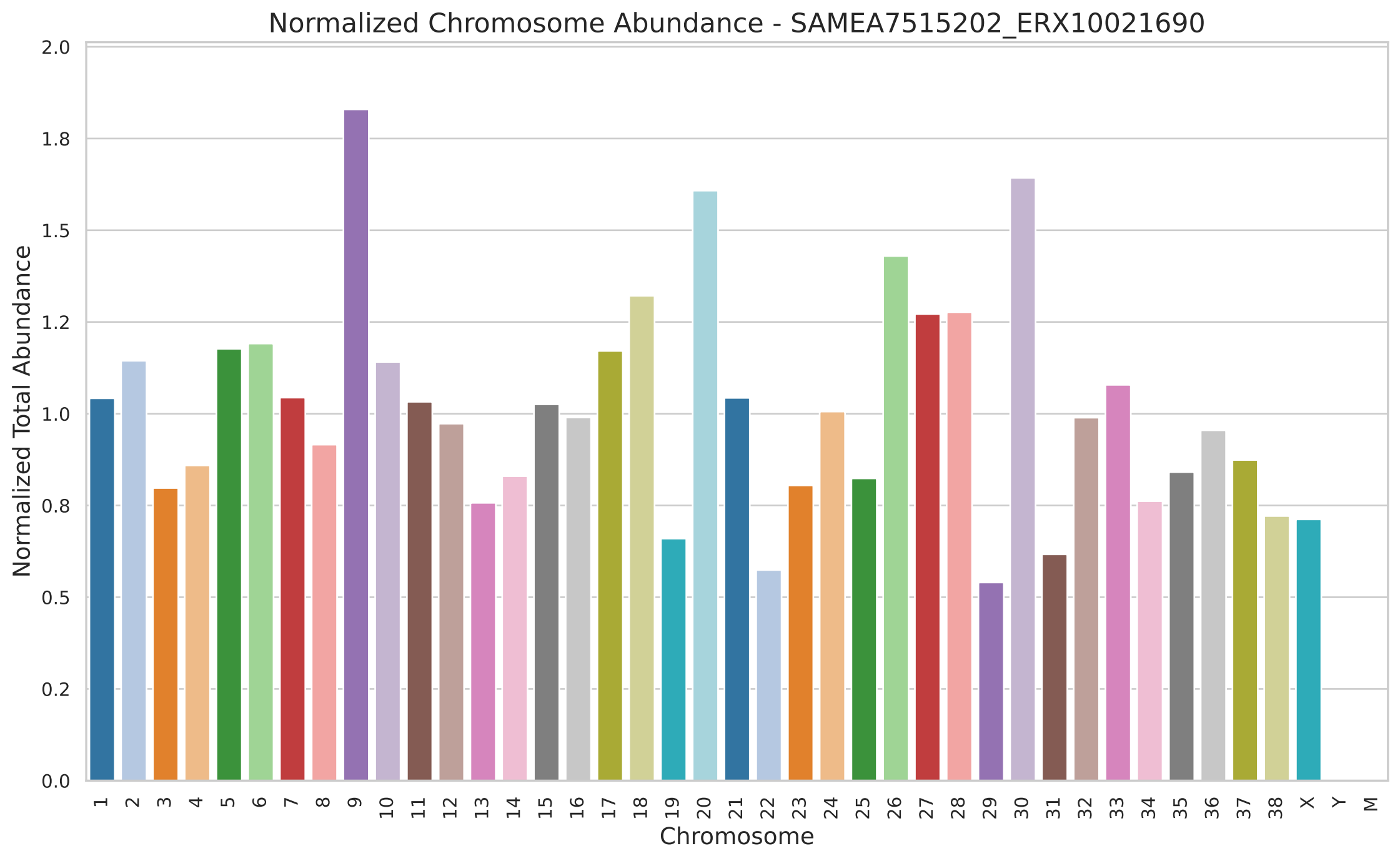

Normalized Chromosome Abundance - SAMEA7515227_ERX10021699
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

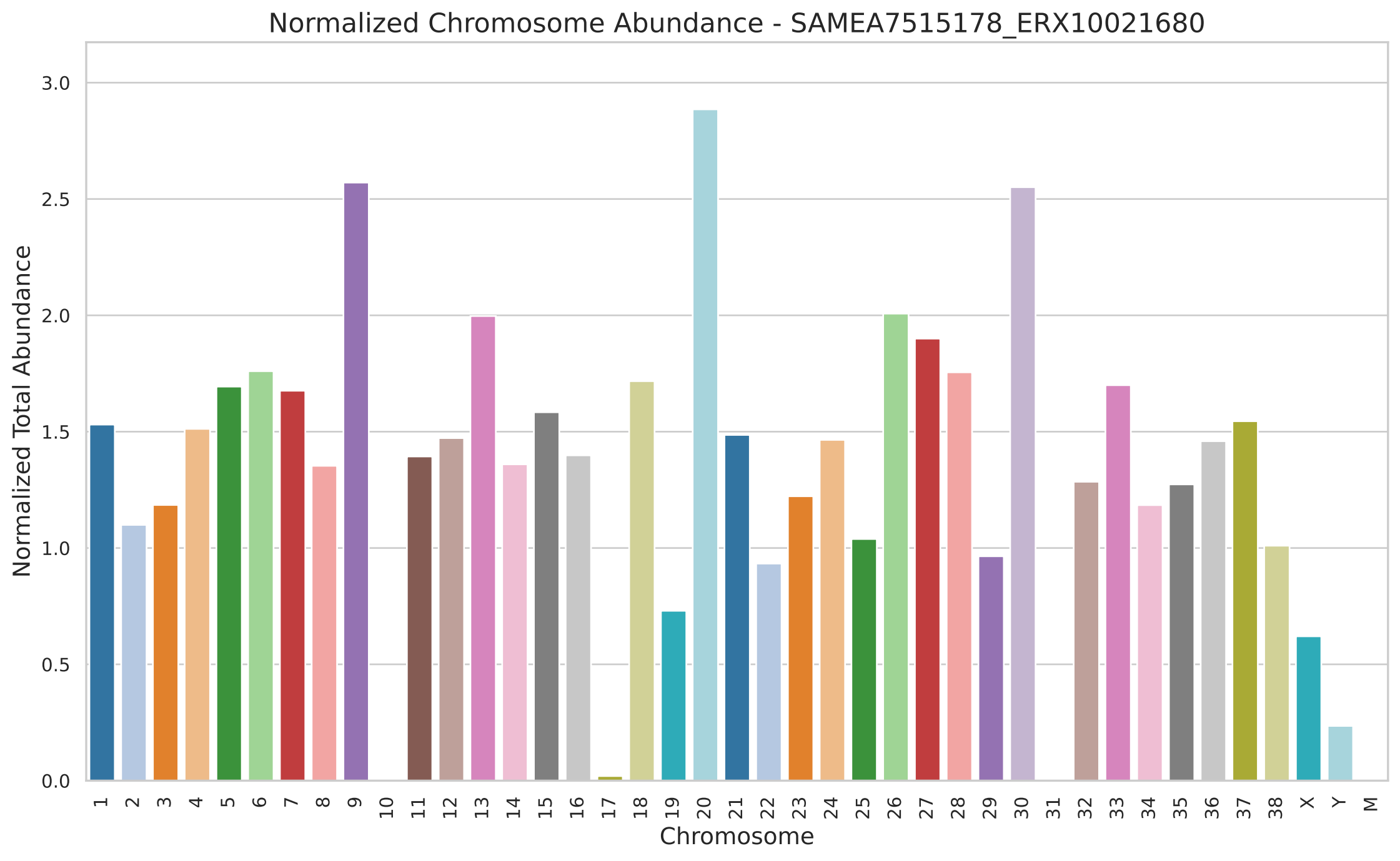

Normalized Chromosome Abundance - SAMEA7515183_ERX10021453
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

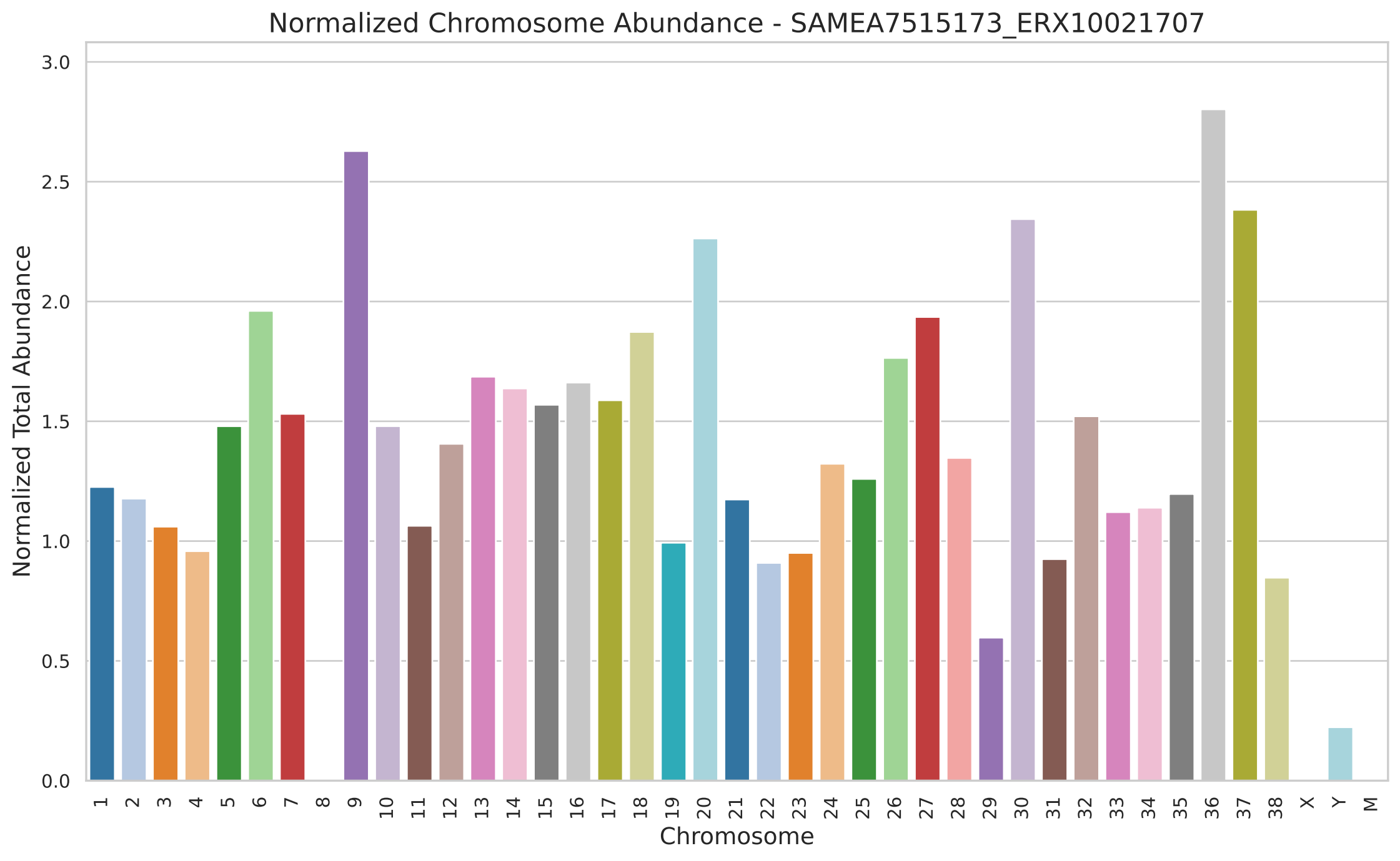

Normalized Chromosome Abundance - SAMEA7515113_ERX10021466
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

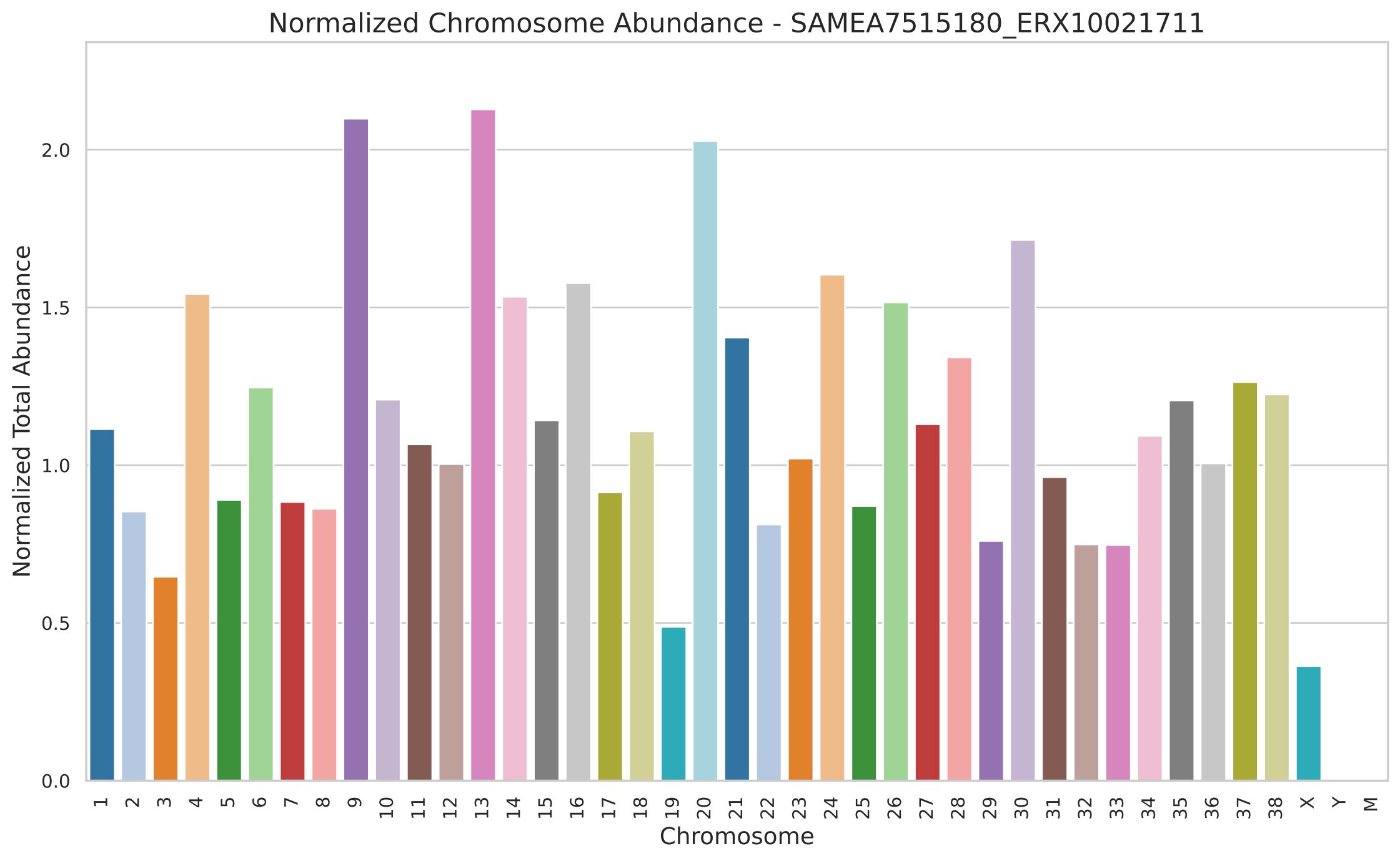

Normalized Chromosome Abundance - SAMEA7515187_ERX10021713
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

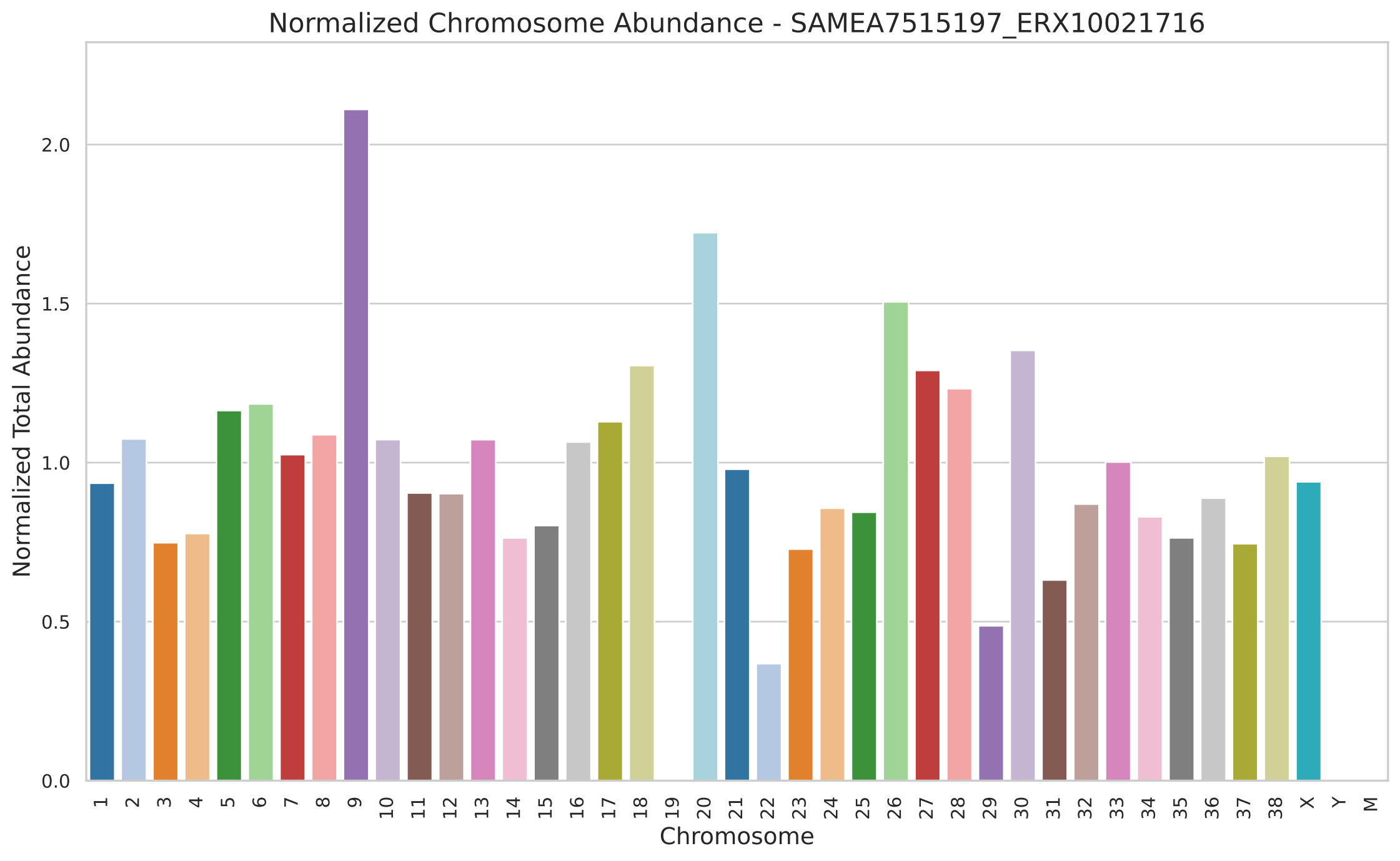

Normalized Chromosome Abundance - SAMEA7515207_ERX10021691
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

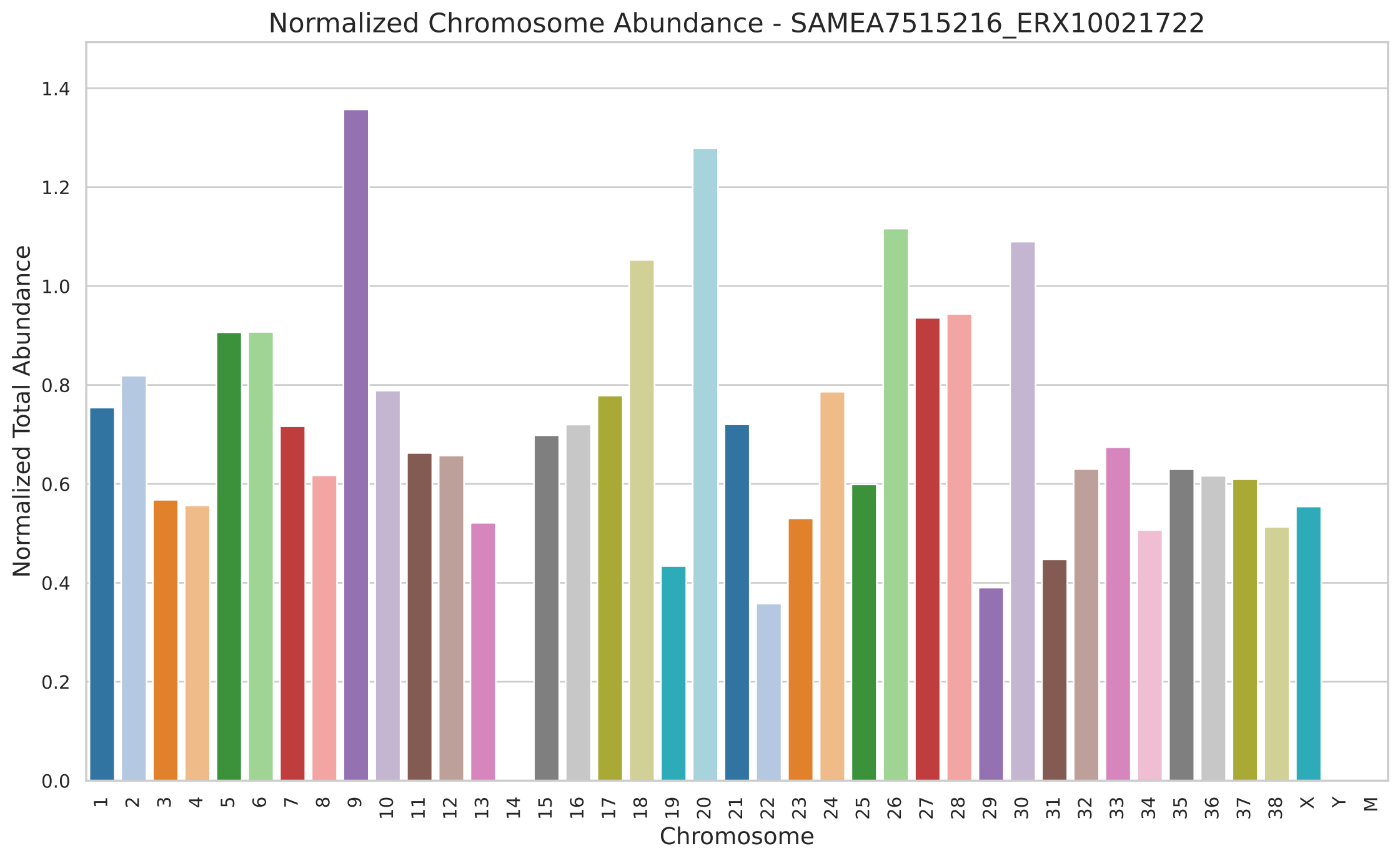

Normalized Chromosome Abundance - SAMEA7515202_ERX10021690
Normalized Total Abundance
2.0
1.8
1.5
1.2
1.0
0.8
0.5
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

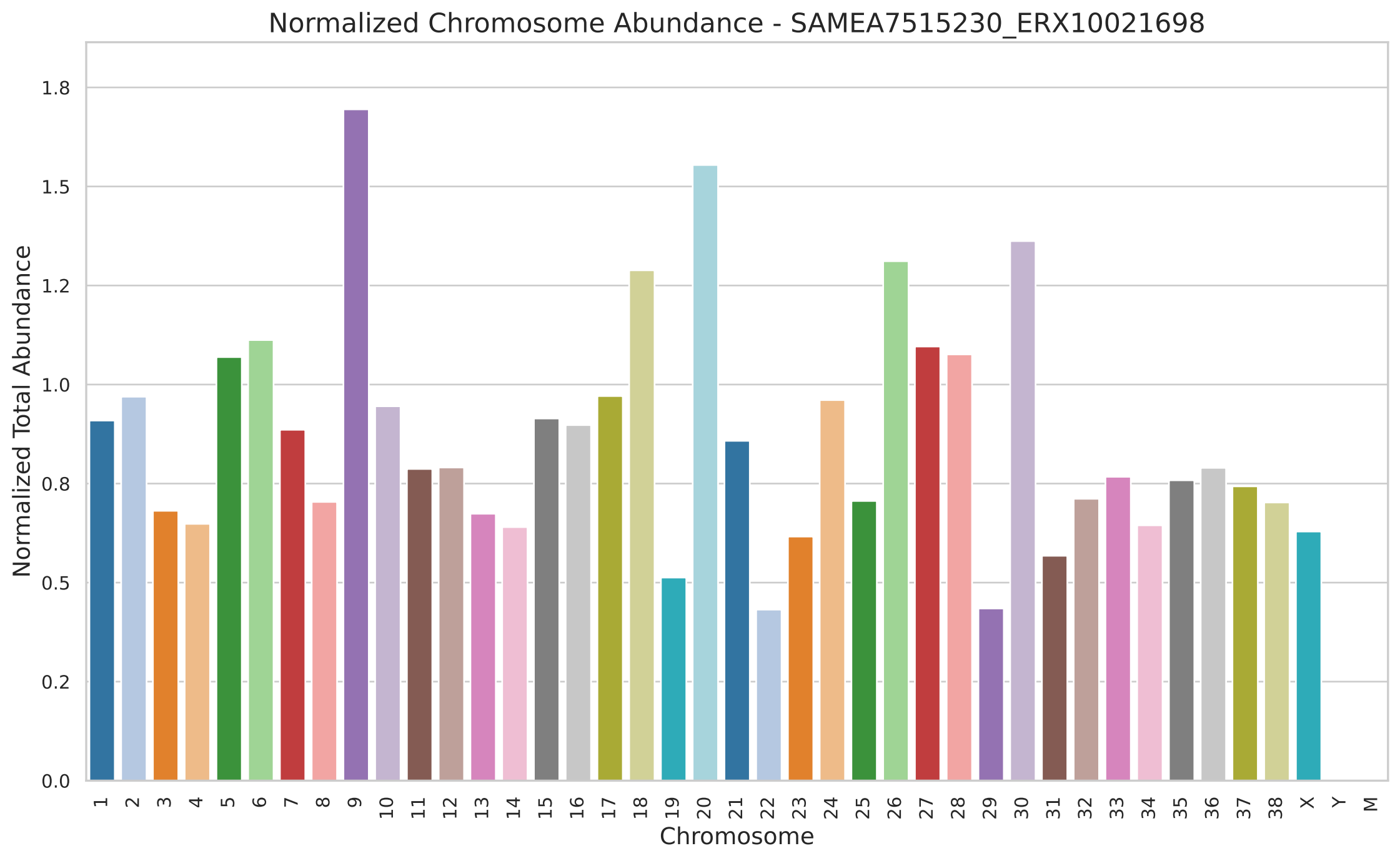

Normalized Chromosome Abundance - SAMEA7515178_ERX10021680
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

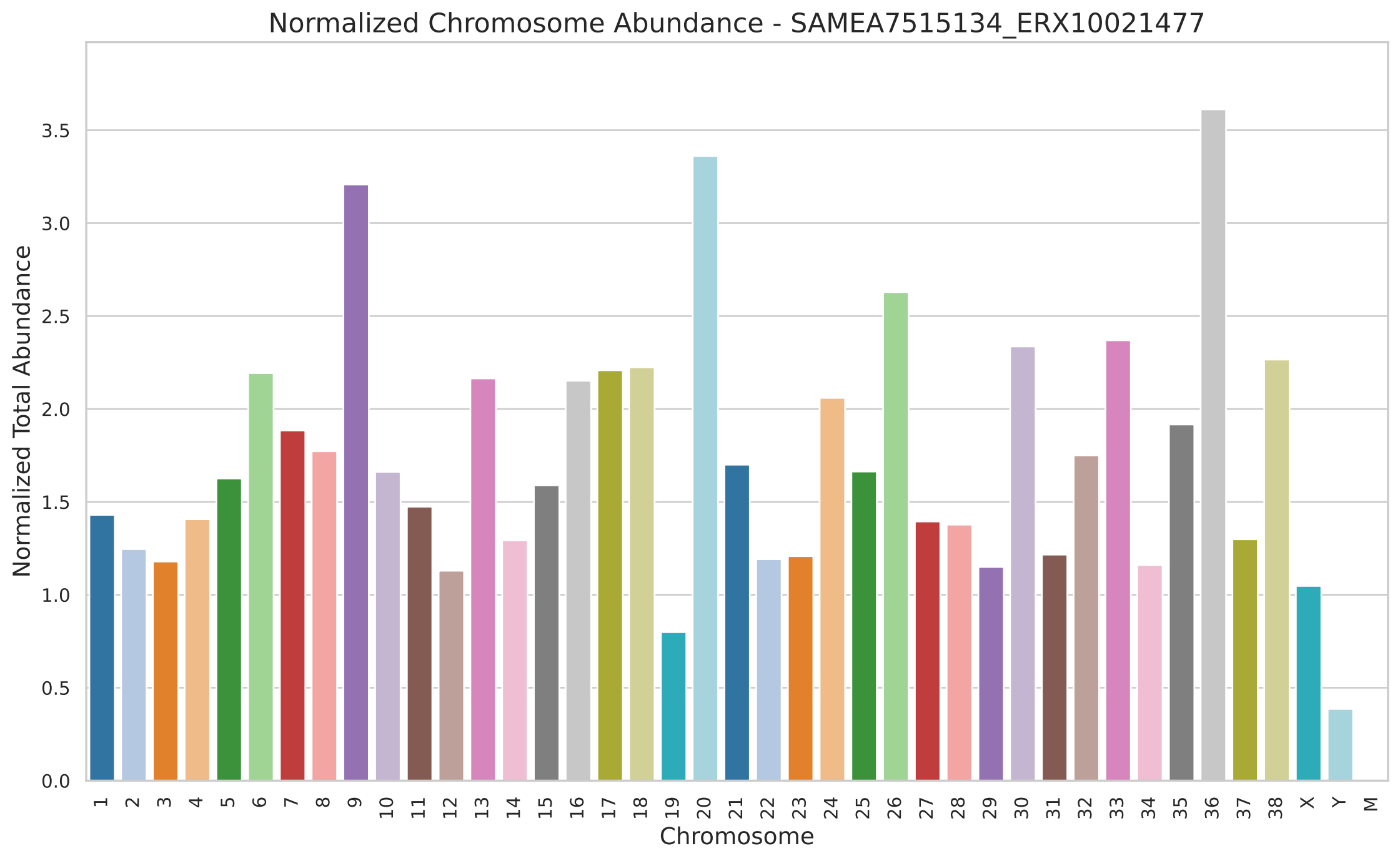

Normalized Chromosome Abundance - SAMEA7515173_ERX10021707
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

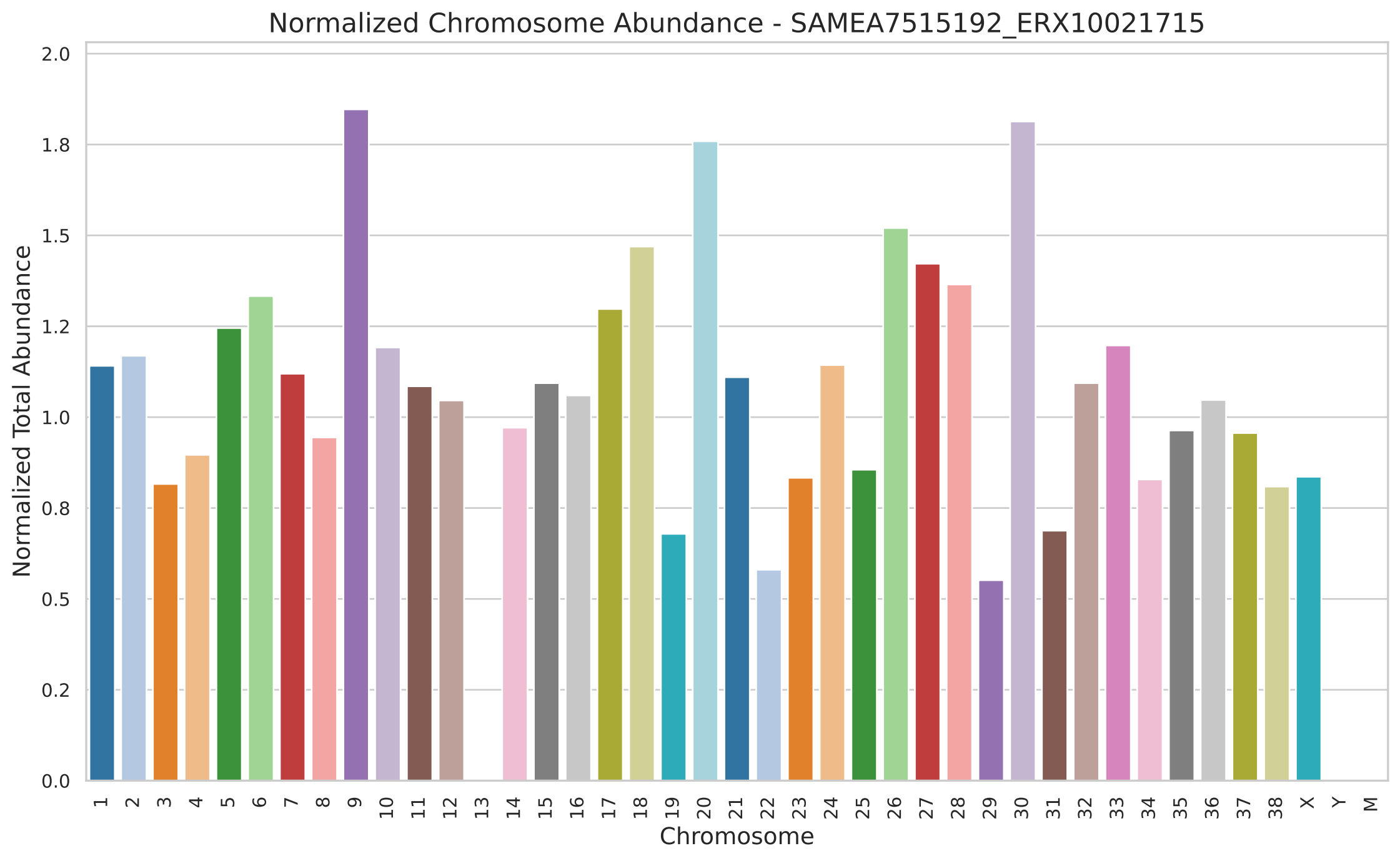

Normalized Chromosome Abundance - SAMEA7515180_ERX10021711
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

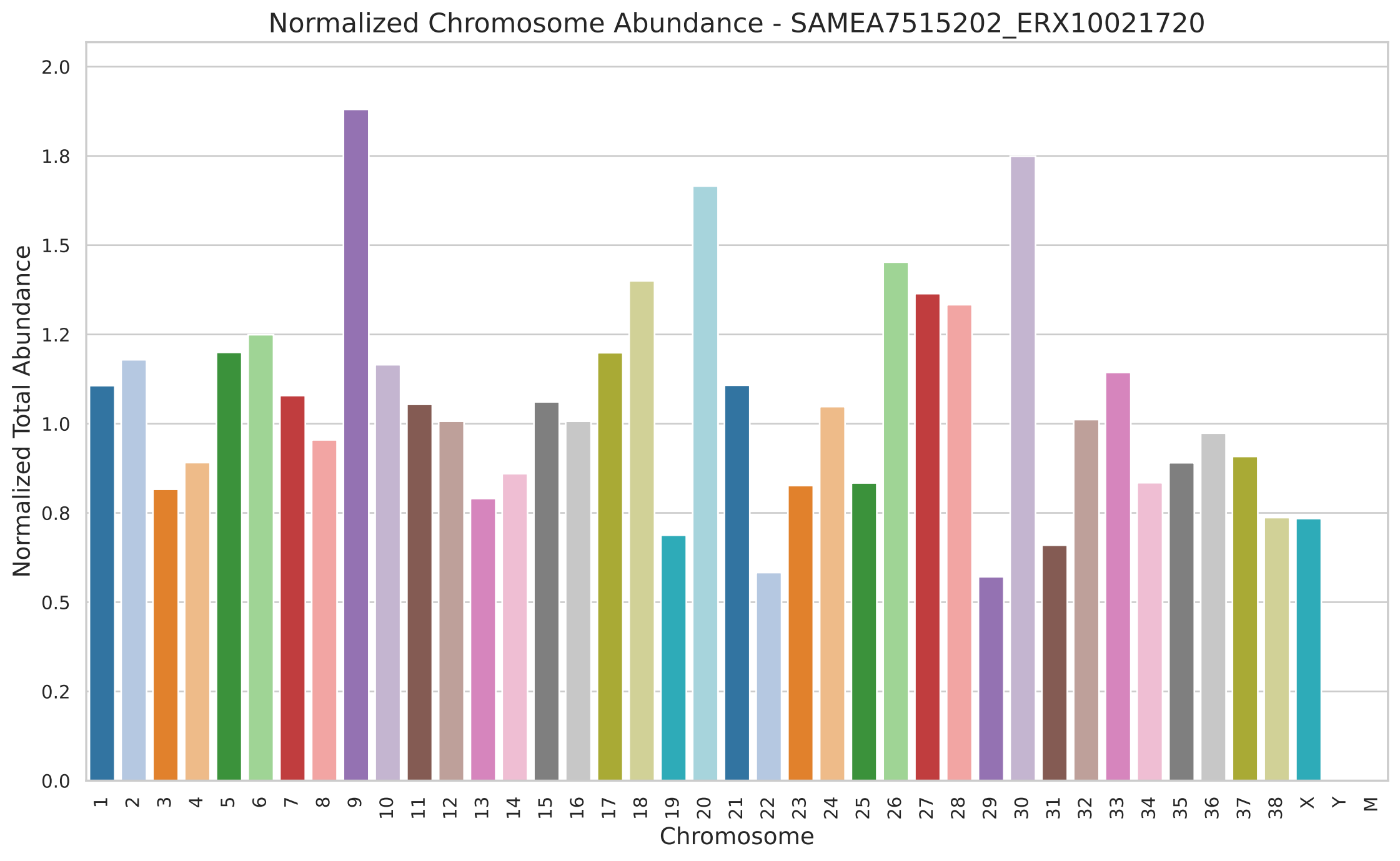

Normalized Chromosome Abundance - SAMEA7515197_ERX10021716
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

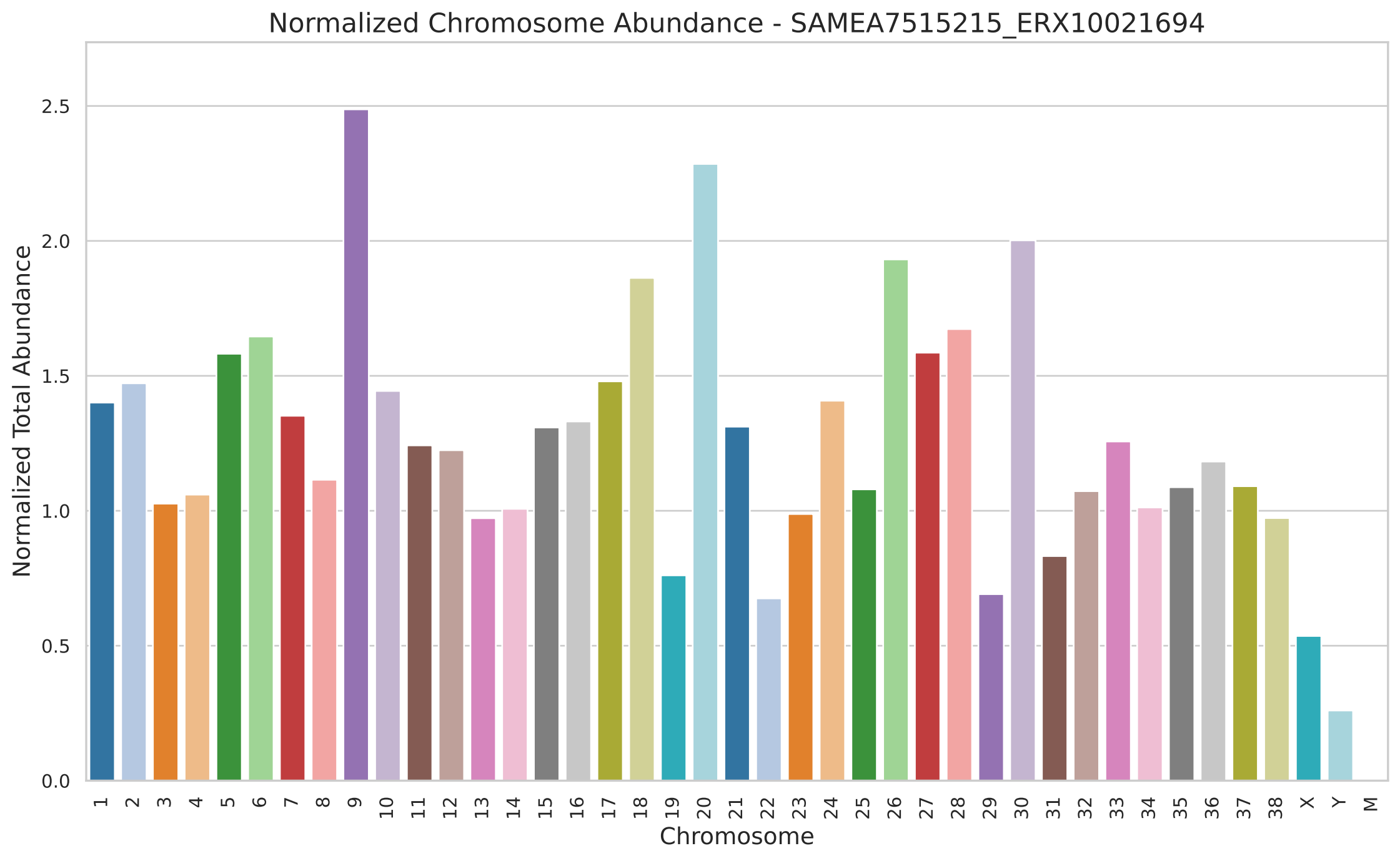

Normalized Chromosome Abundance - SAMEA7515216_ERX10021722
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

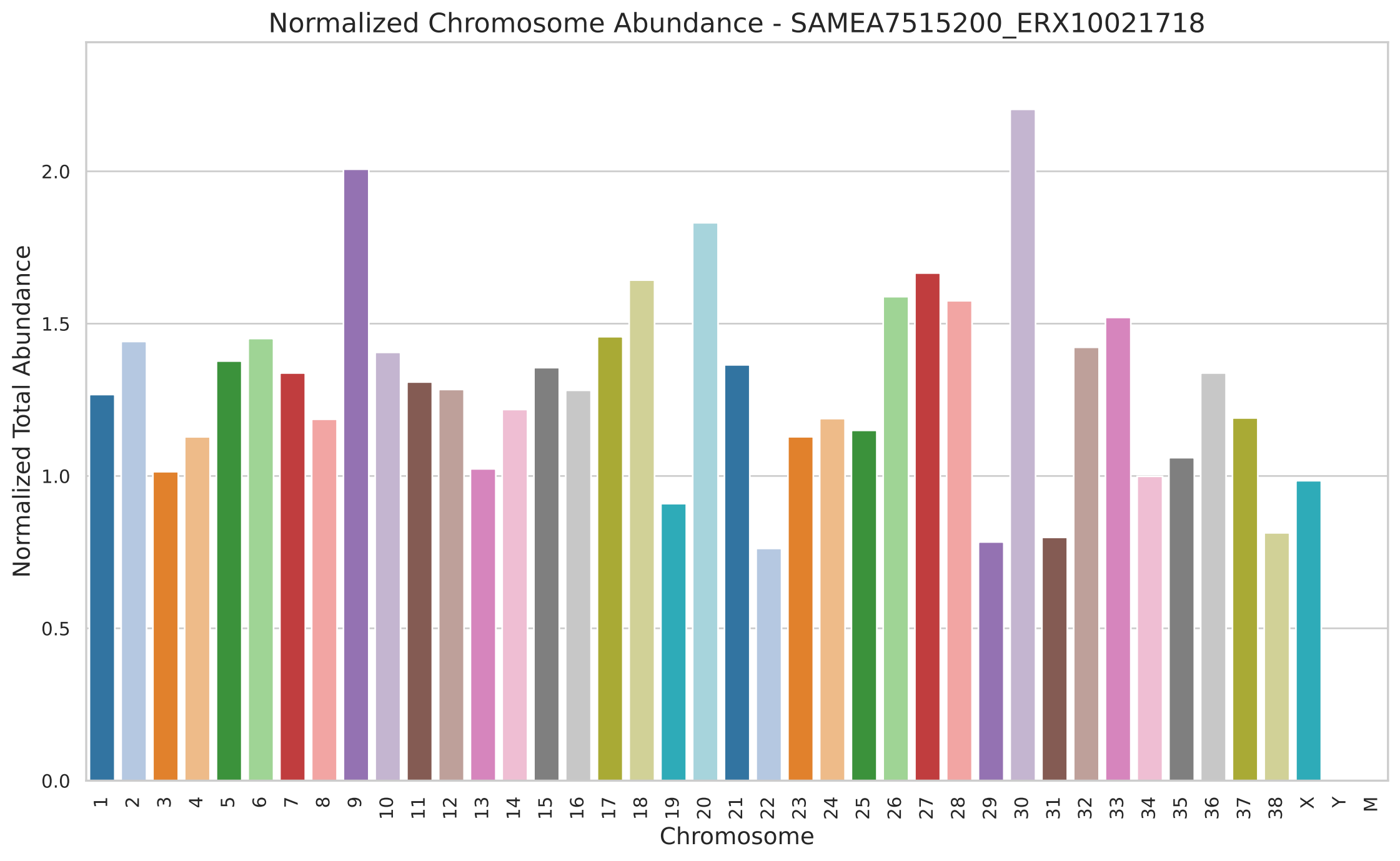

Normalized Chromosome Abundance - SAMEA7515230_ERX10021698
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

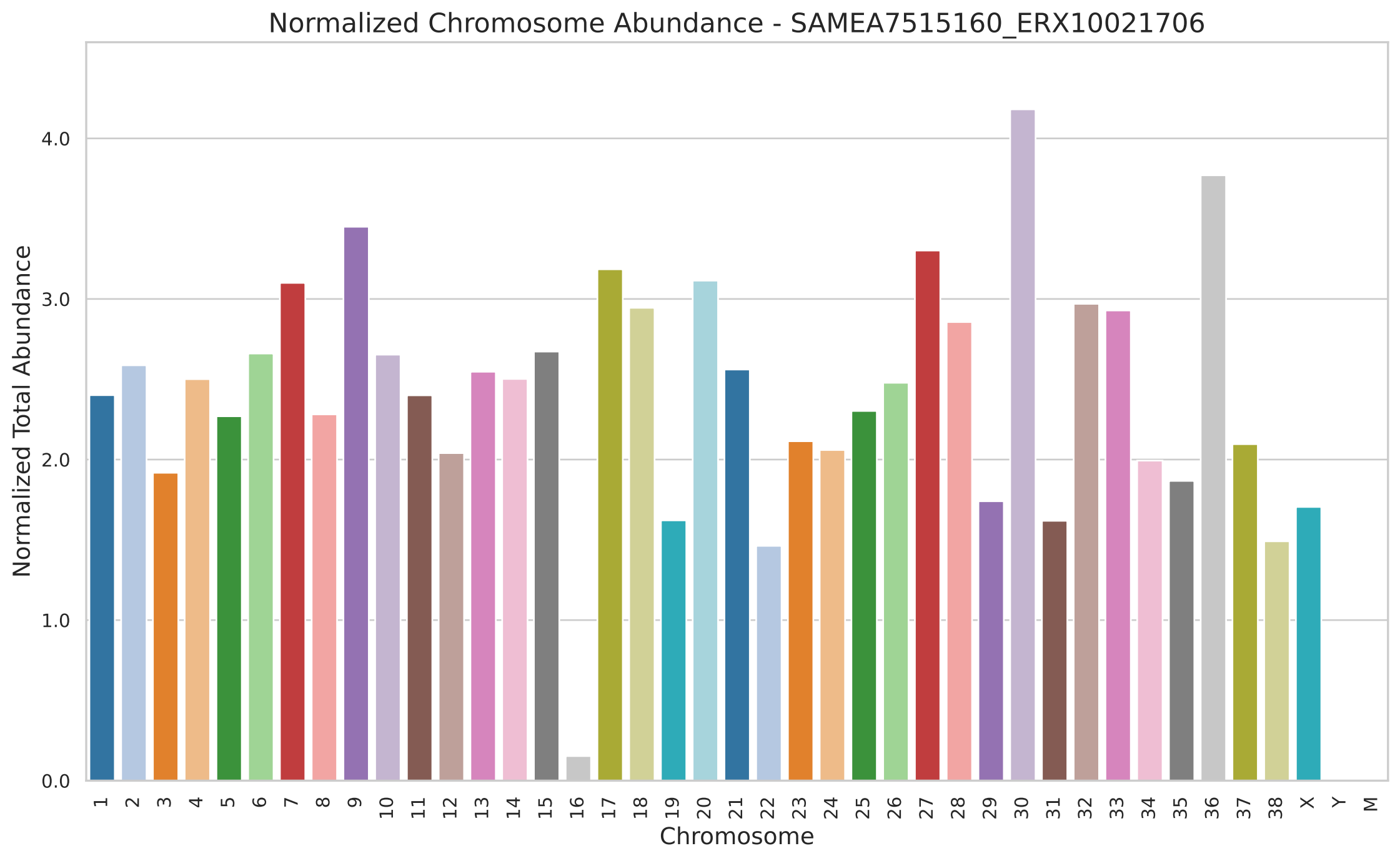

Normalized Chromosome Abundance - SAMEA7515134_ERX10021477
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

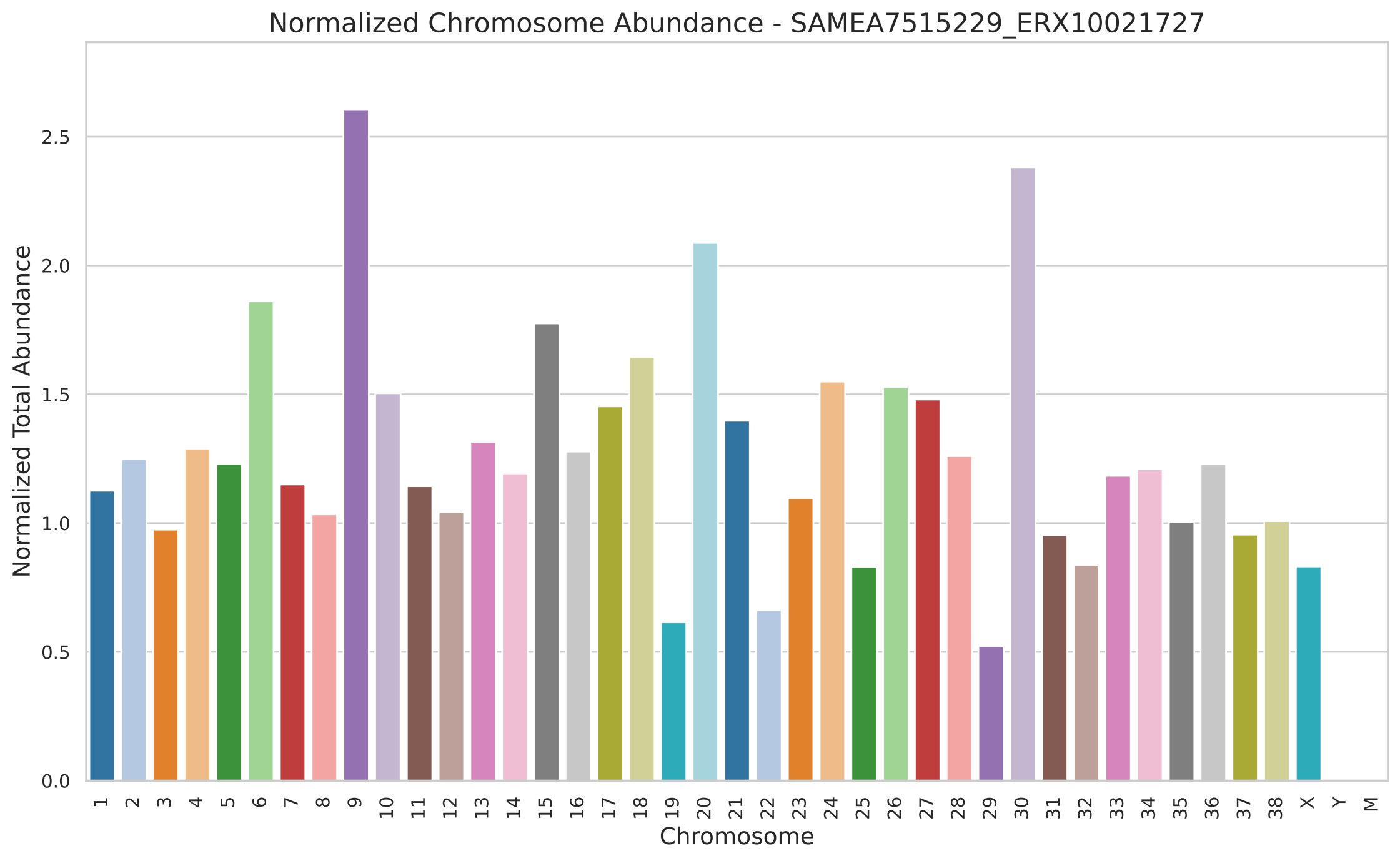

Normalized Chromosome Abundance - SAMEA7515192_ERX10021715
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

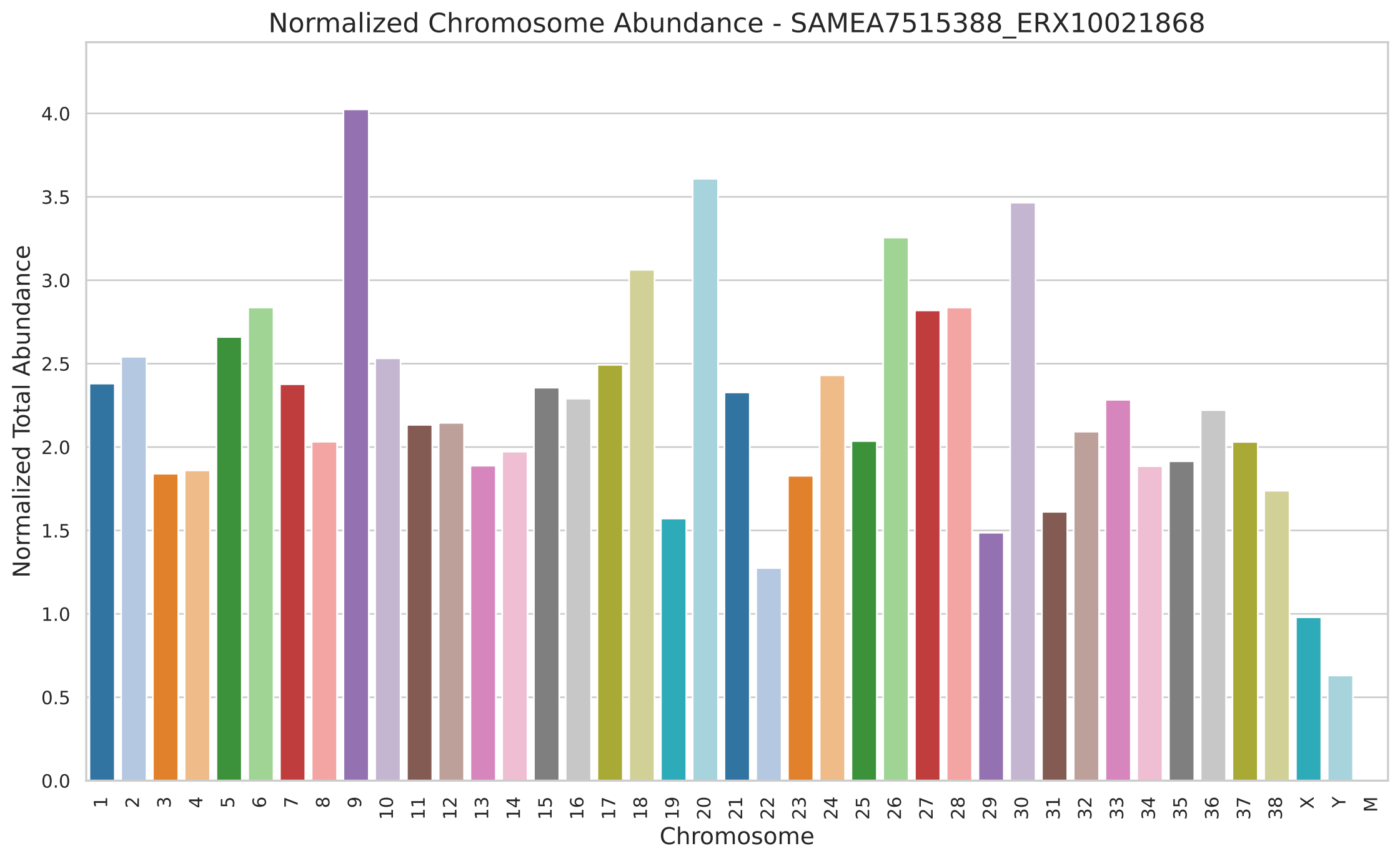

Normalized Chromosome Abundance - SAMEA7515202_ERX10021720
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

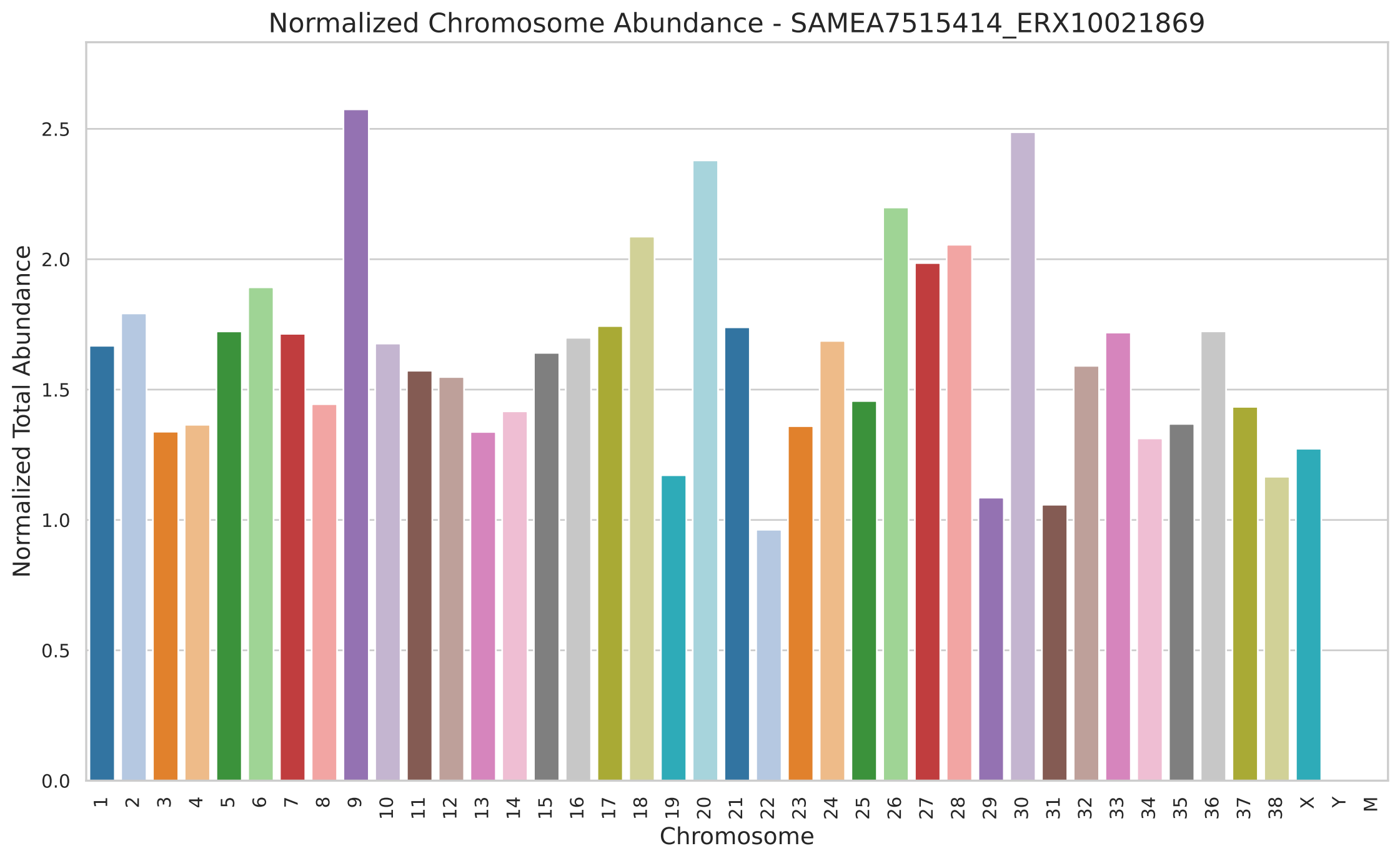

Normalized Chromosome Abundance - SAMEA7515215_ERX10021694
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

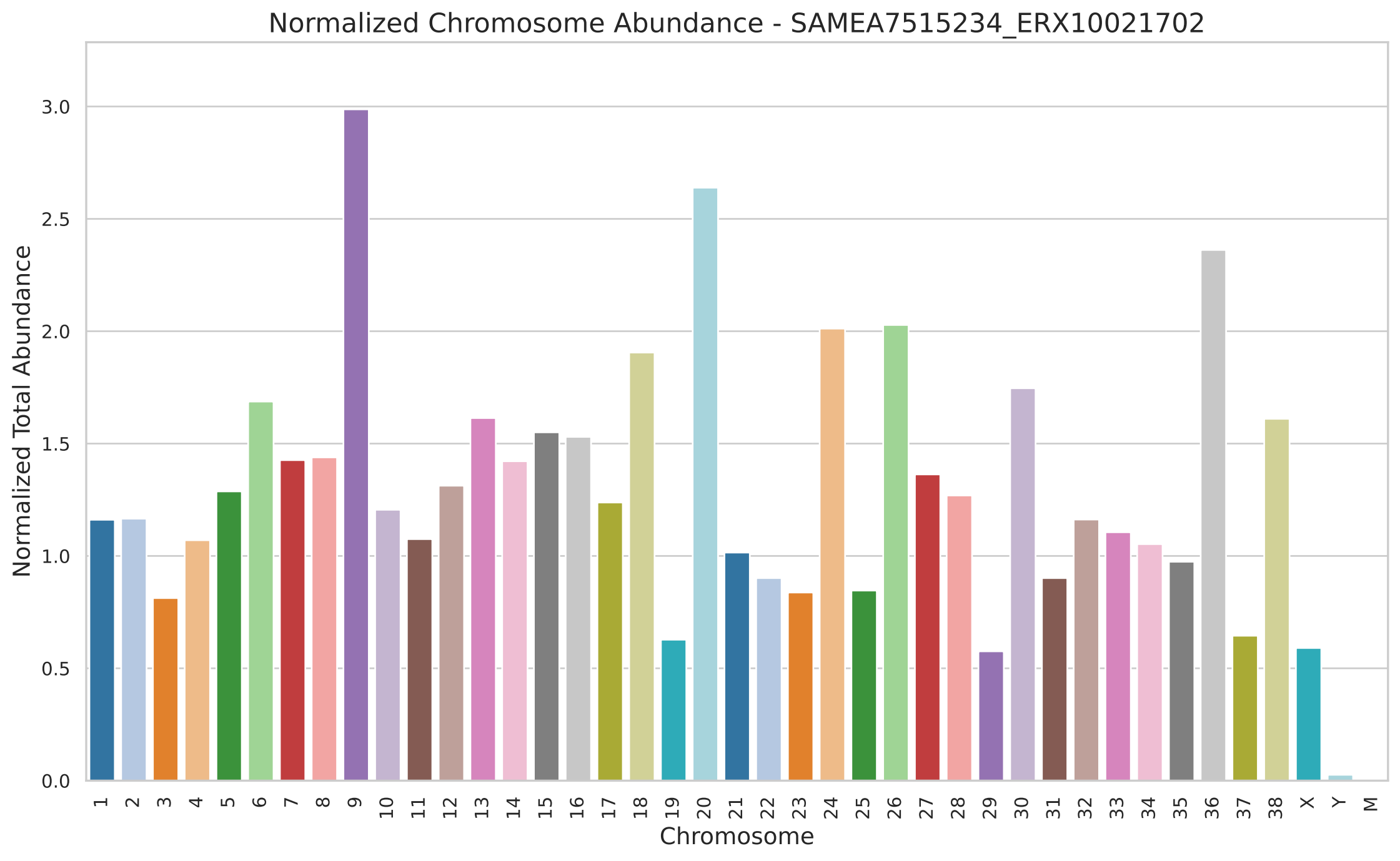

Normalized Chromosome Abundance - SAMEA7515200_ERX10021718
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

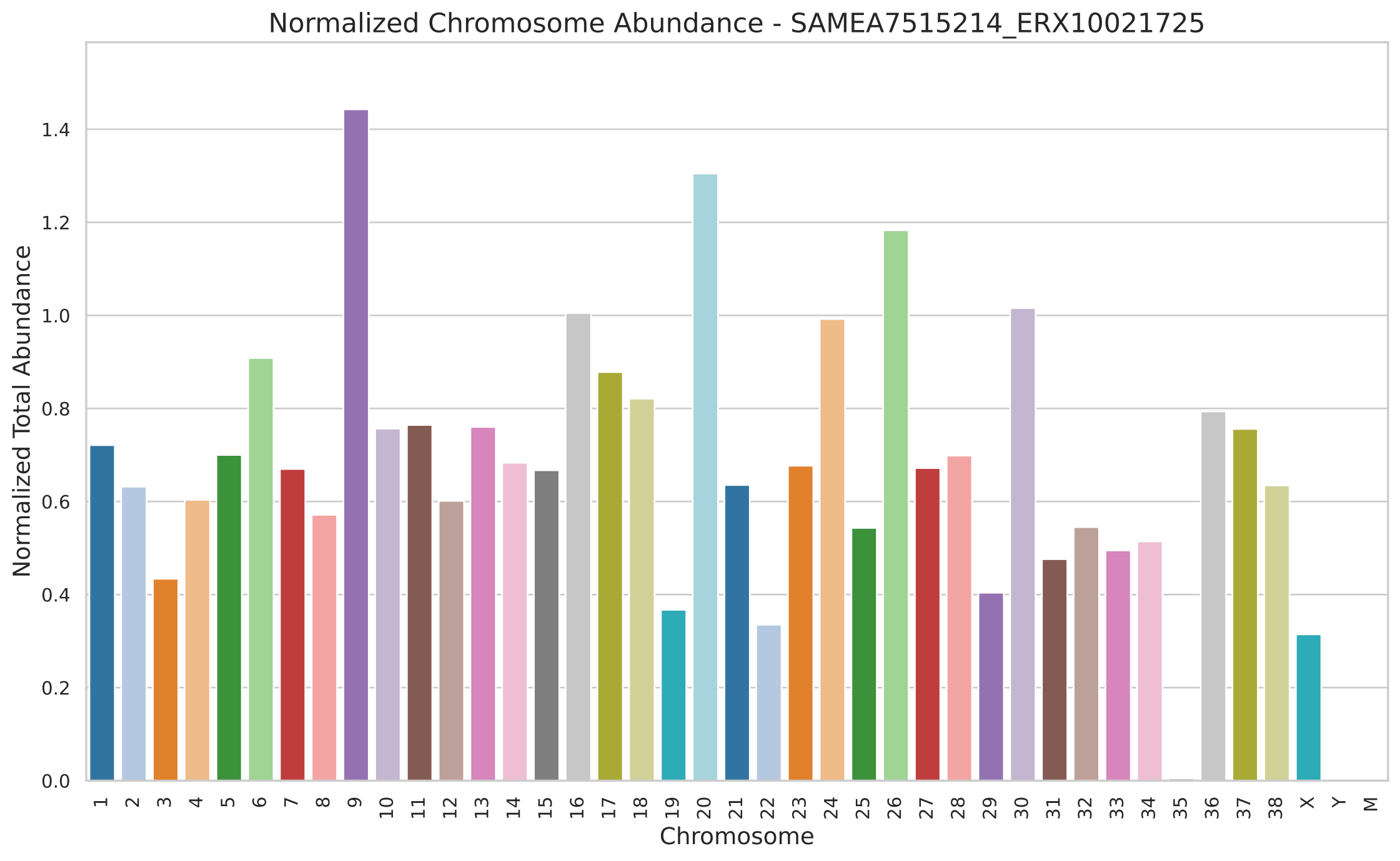

Normalized Chromosome Abundance - SAMEA7515160_ERX10021706
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

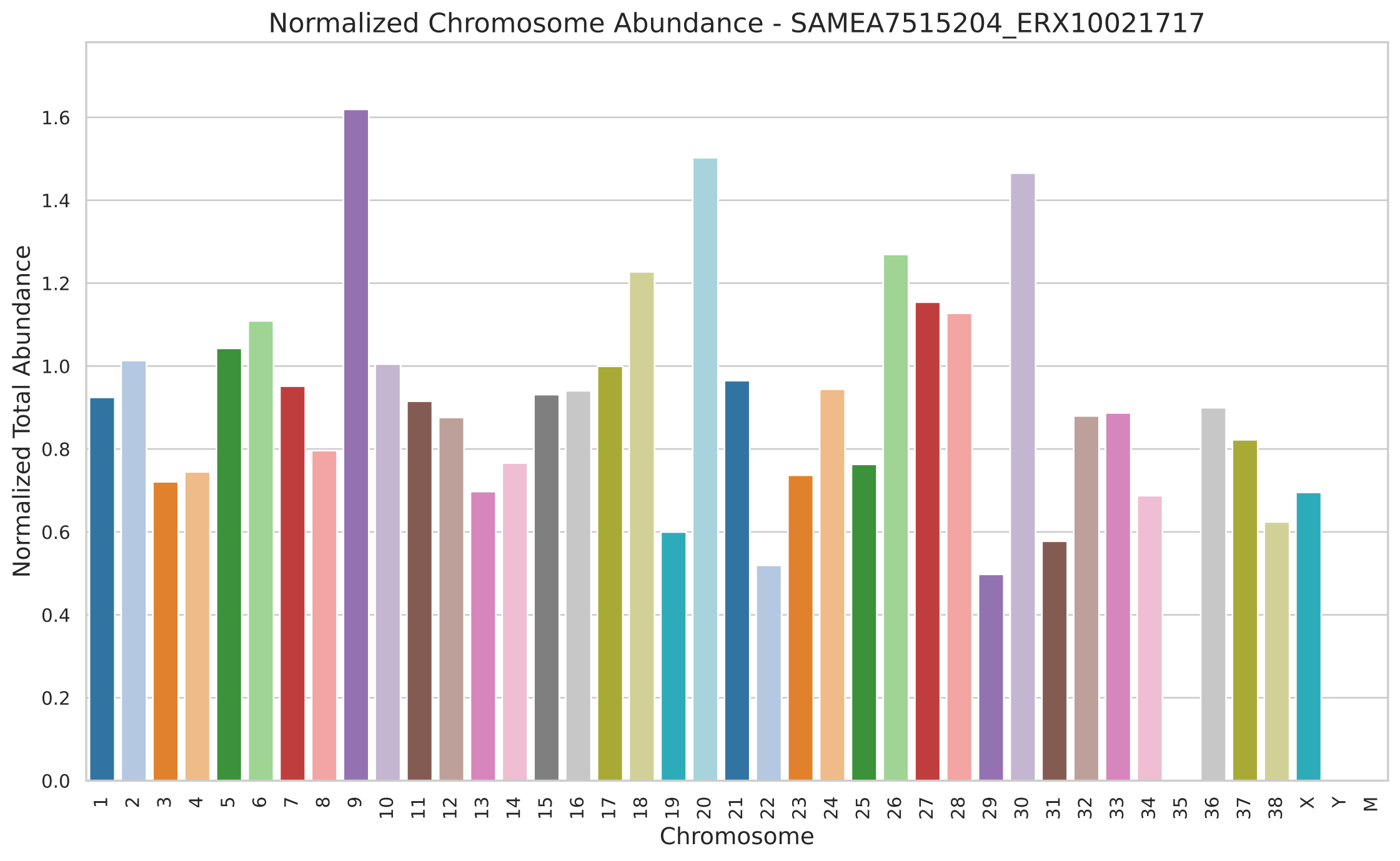

Normalized Chromosome Abundance - SAMEA7515229_ERX10021727
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

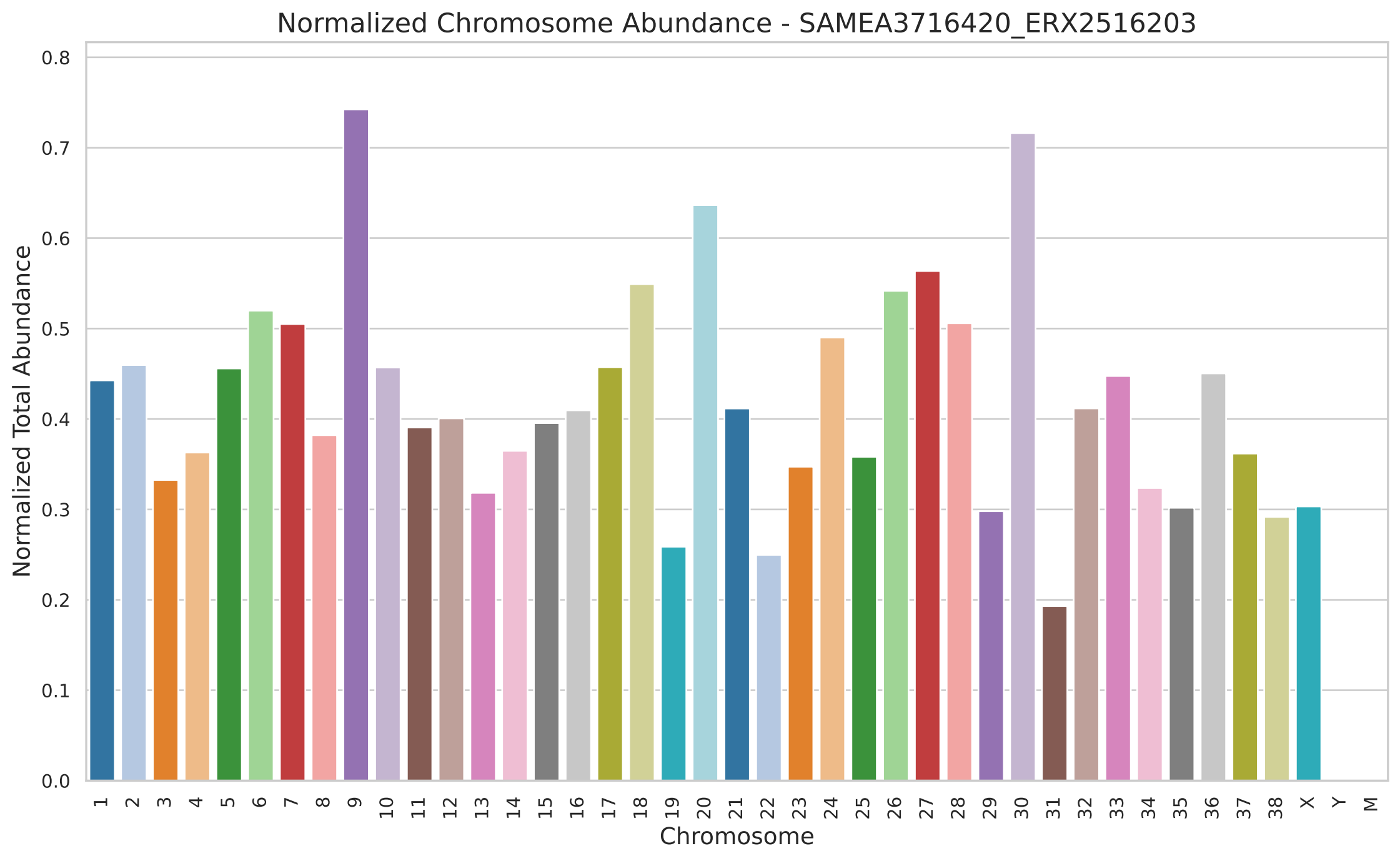

Normalized Chromosome Abundance - SAMEA7515388_ERX10021868
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

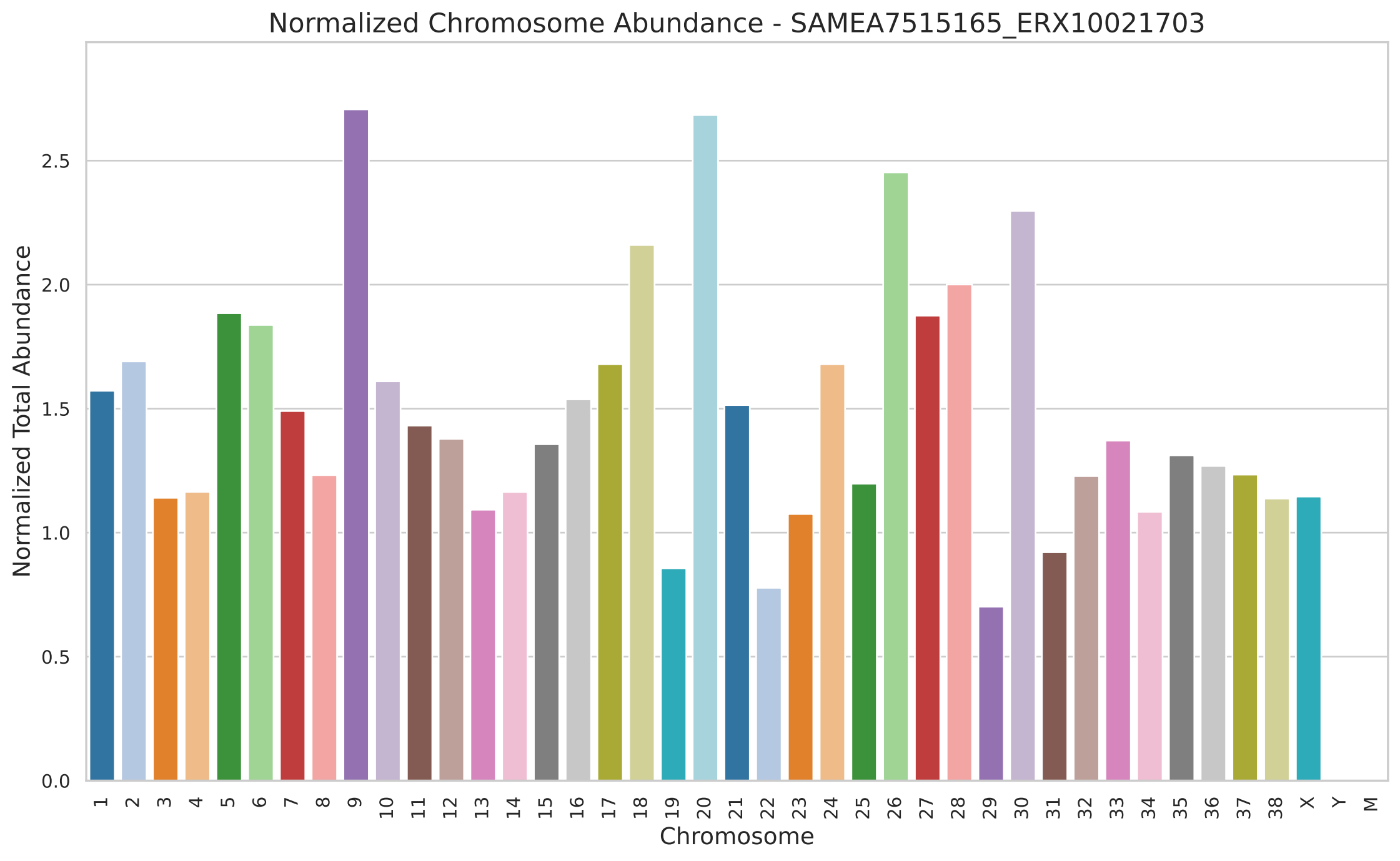

Normalized Chromosome Abundance - SAMEA7515414_ERX10021869
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

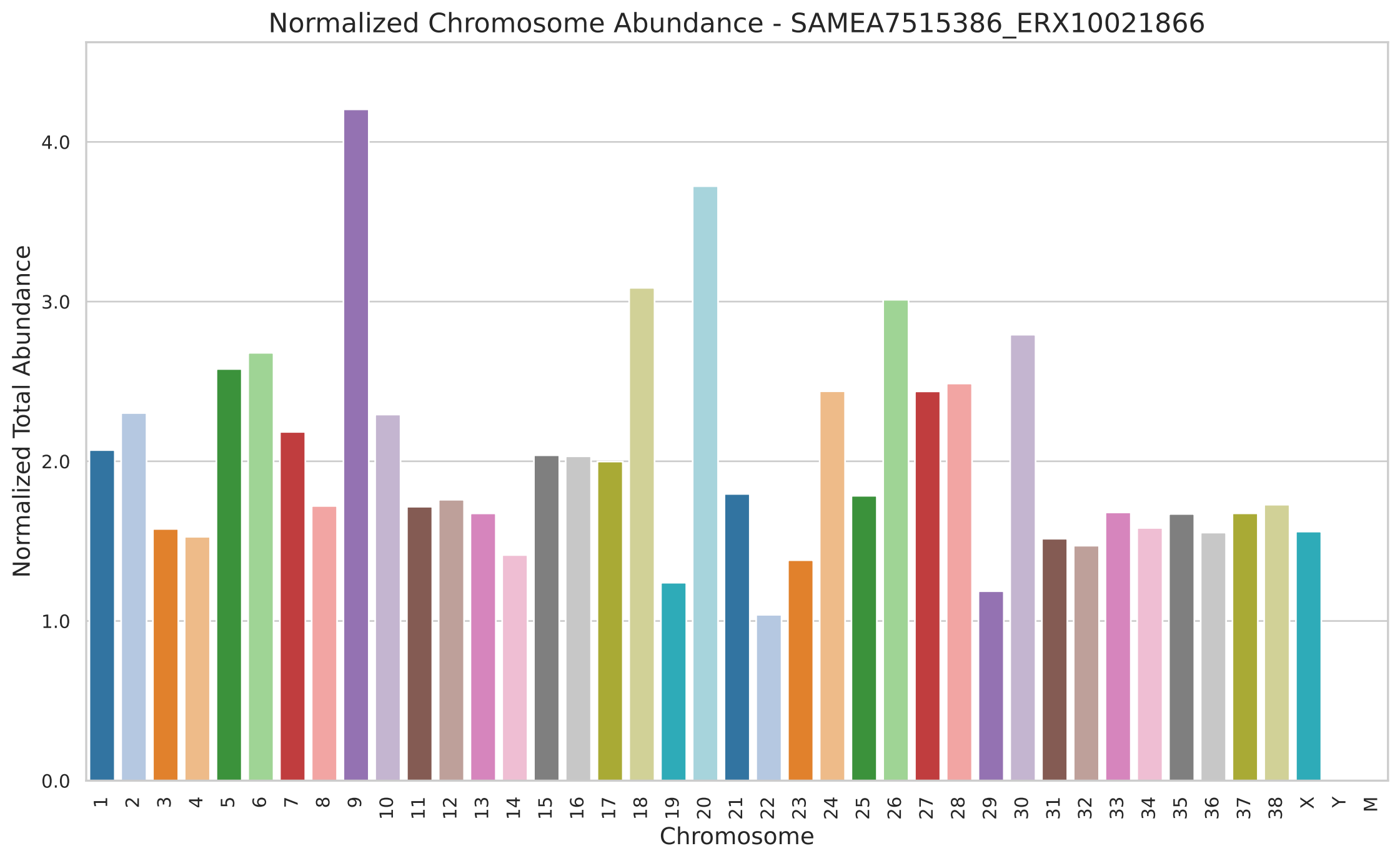

Normalized Chromosome Abundance - SAMEA7515234_ERX10021702
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

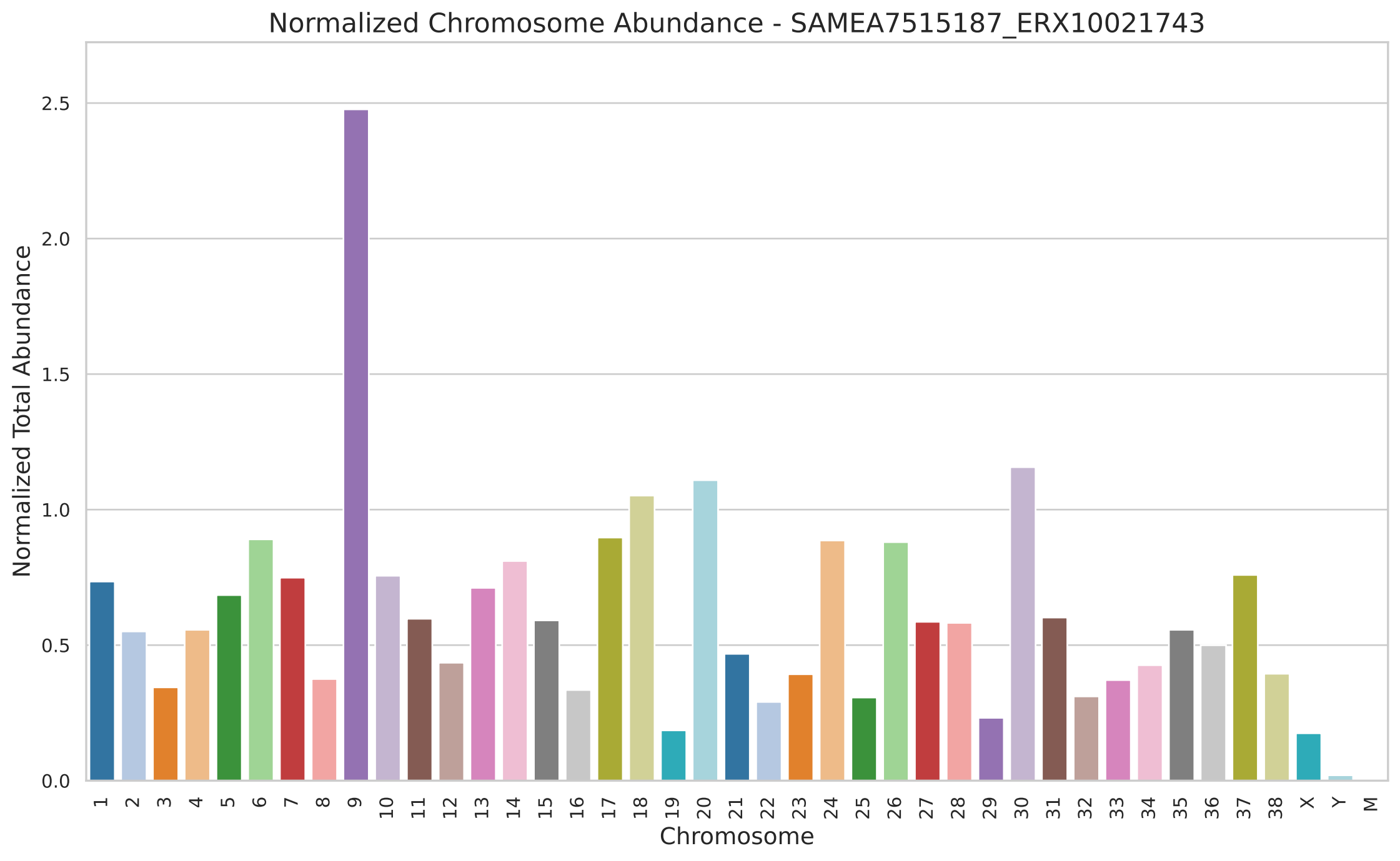

Normalized Chromosome Abundance - SAMEA7515214_ERX10021725
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

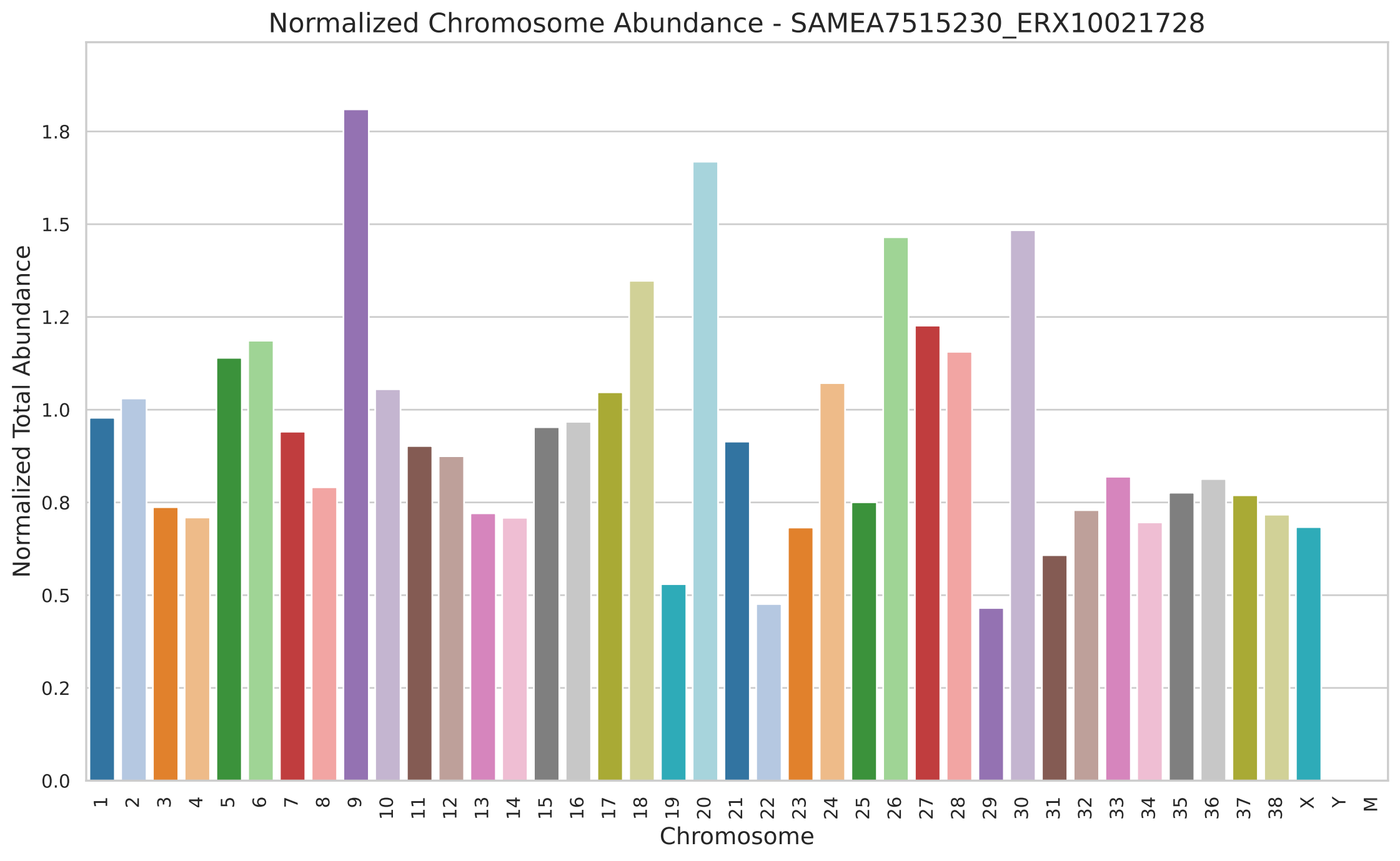

Normalized Chromosome Abundance - SAMEA7515204_ERX10021717
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

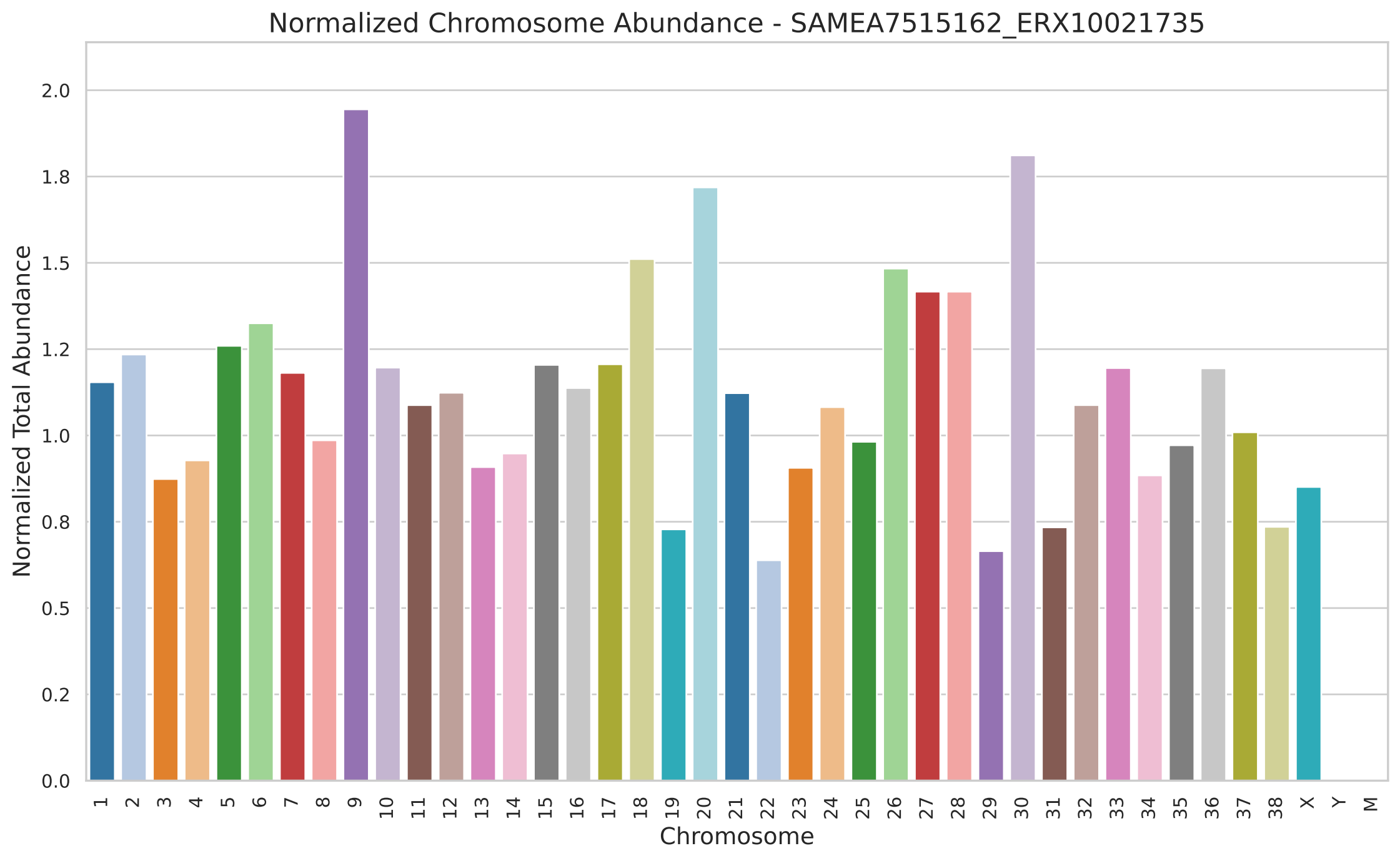

Normalized Chromosome Abundance - SAMEA3716420_ERX2516203
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

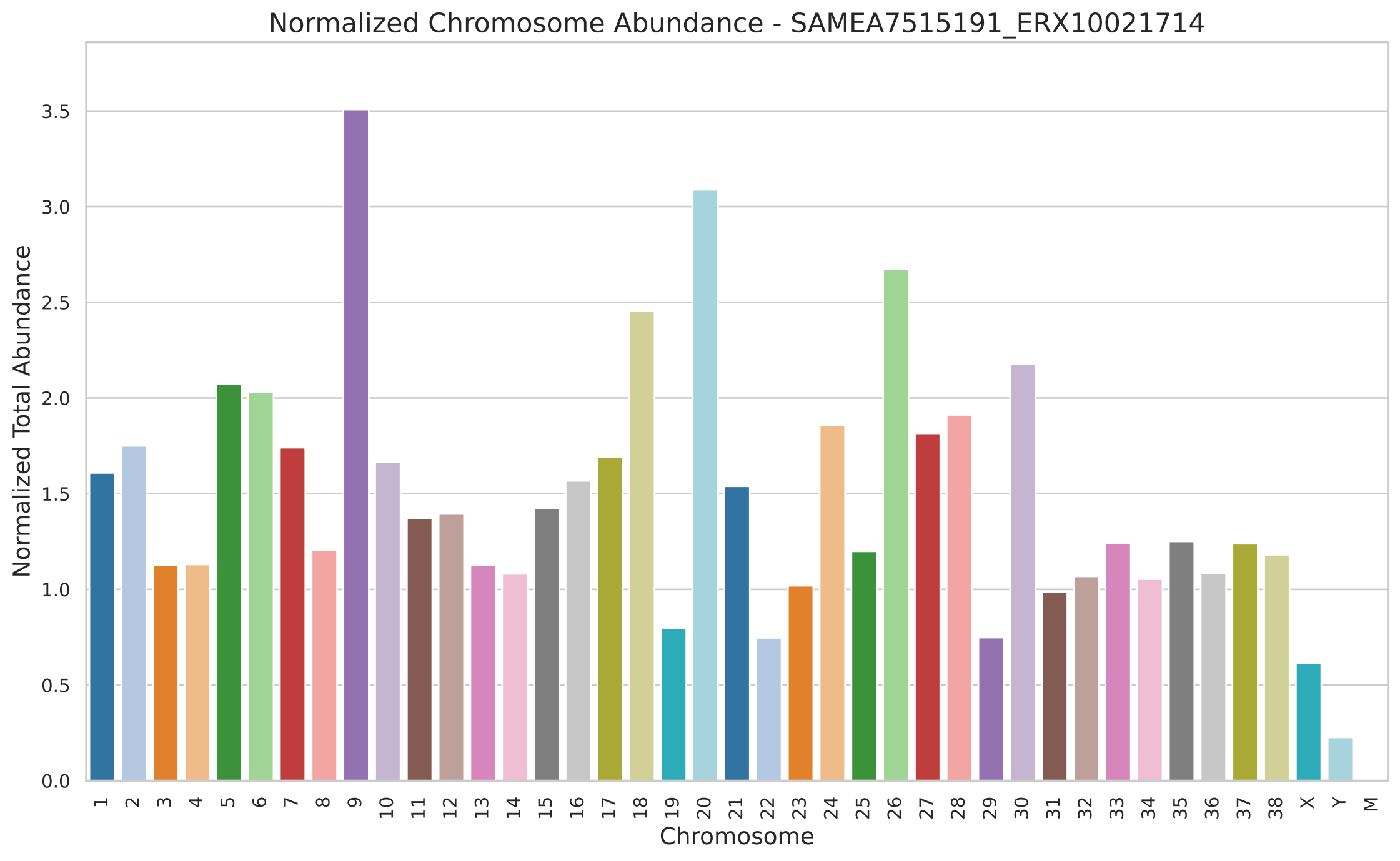

Normalized Chromosome Abundance - SAMEA7515165_ERX10021703
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

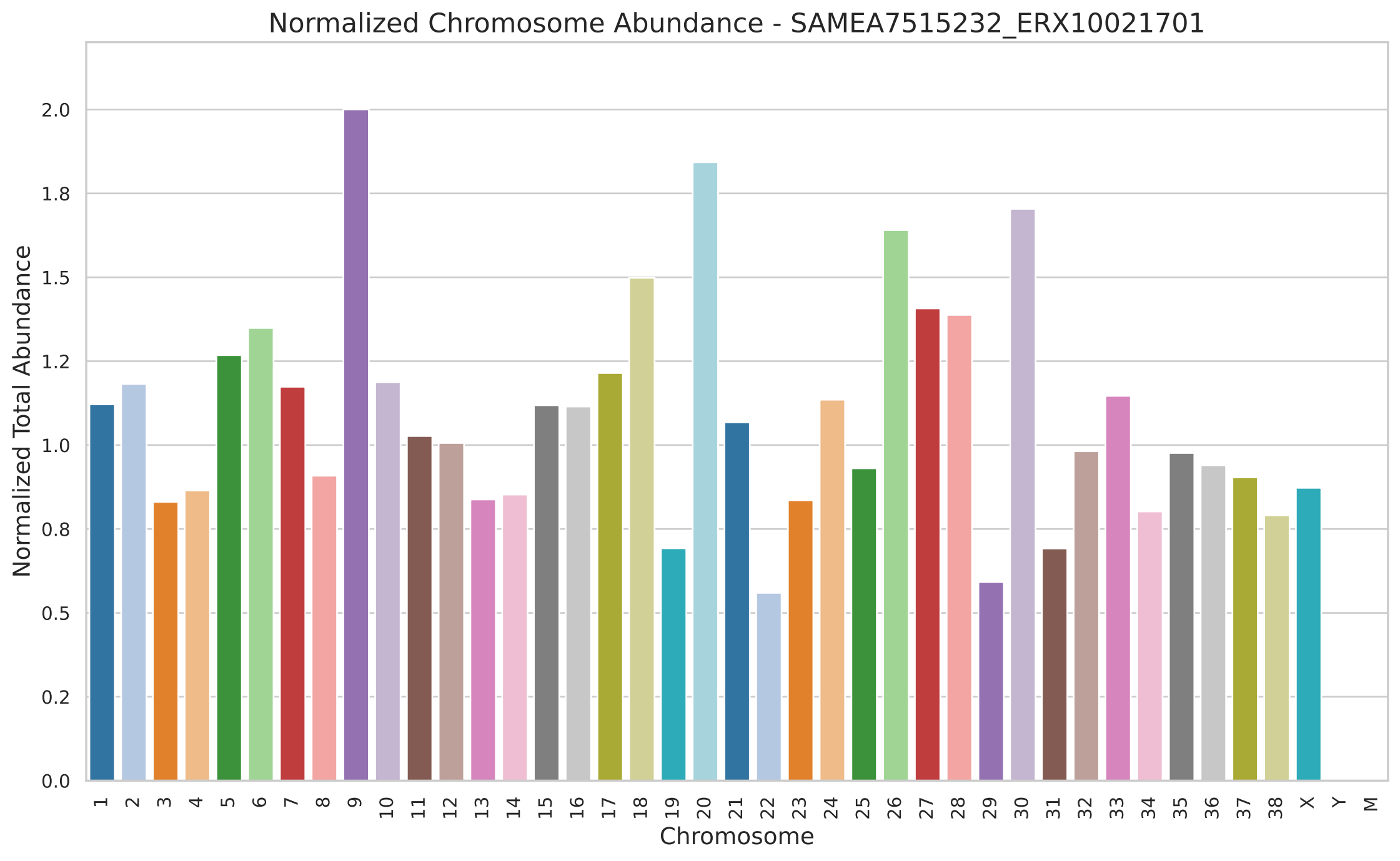

Normalized Chromosome Abundance - SAMEA7515386_ERX10021866
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

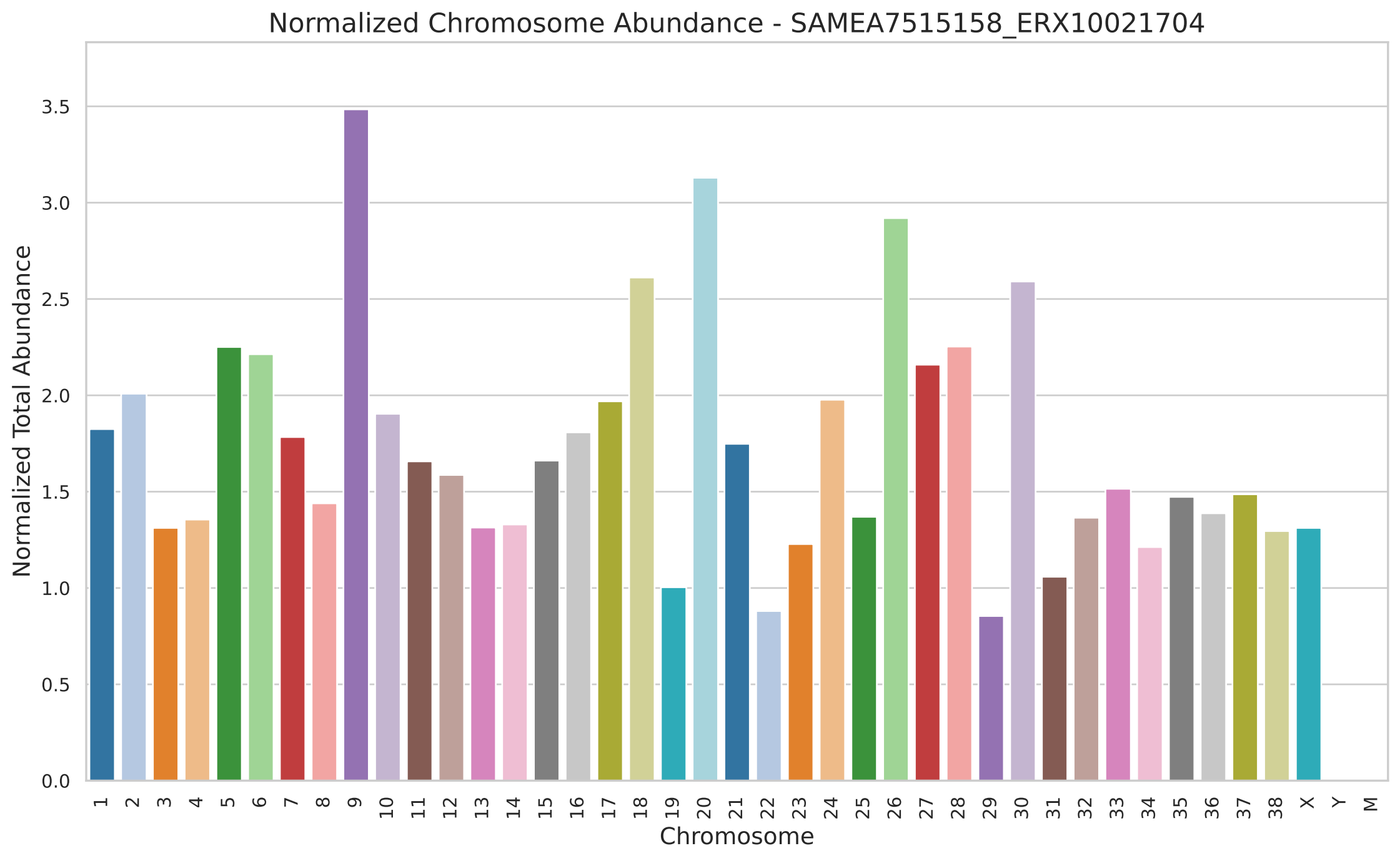

Normalized Chromosome Abundance - SAMEA7515187_ERX10021743
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

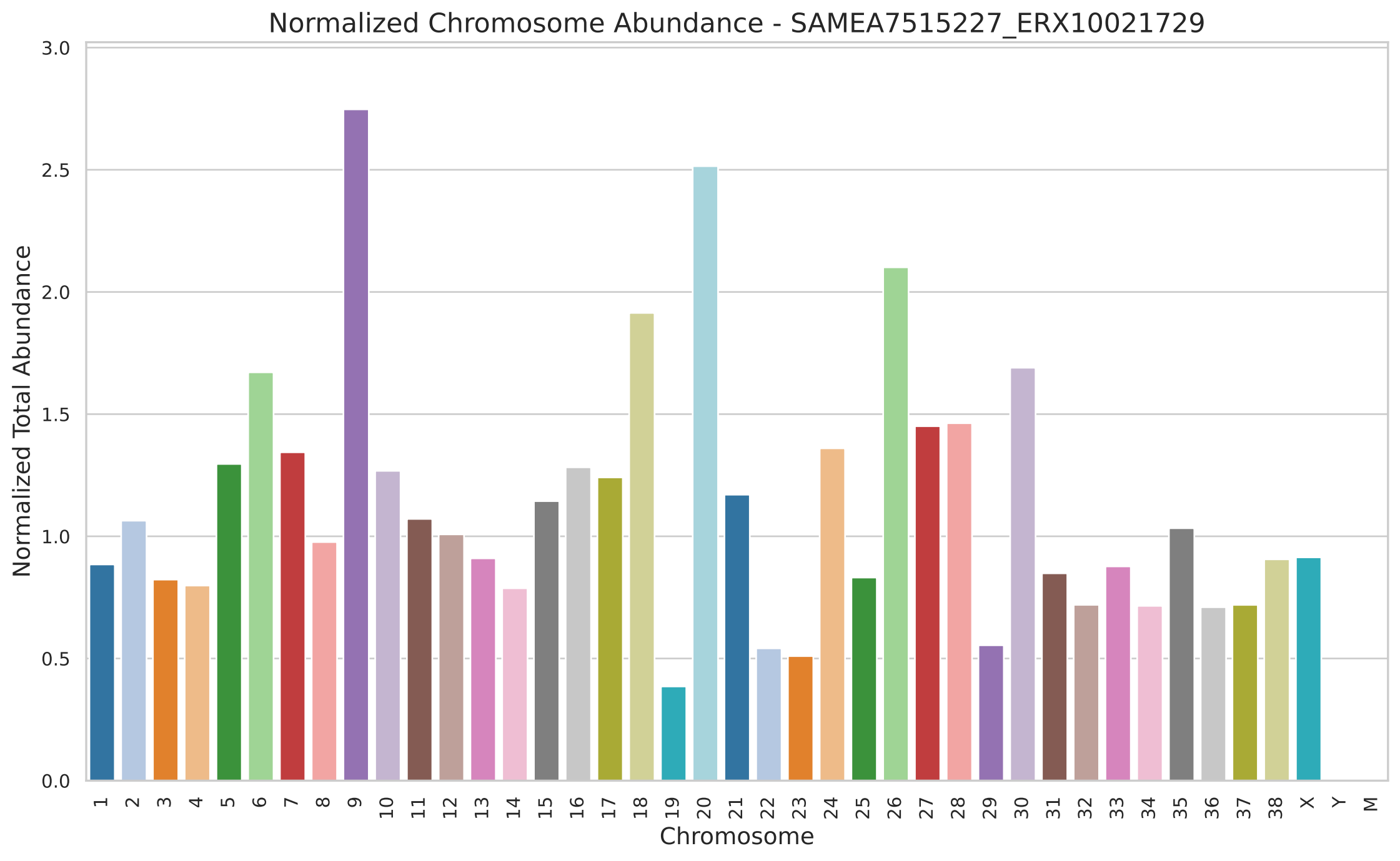

Normalized Chromosome Abundance - SAMEA7515230_ERX10021728
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

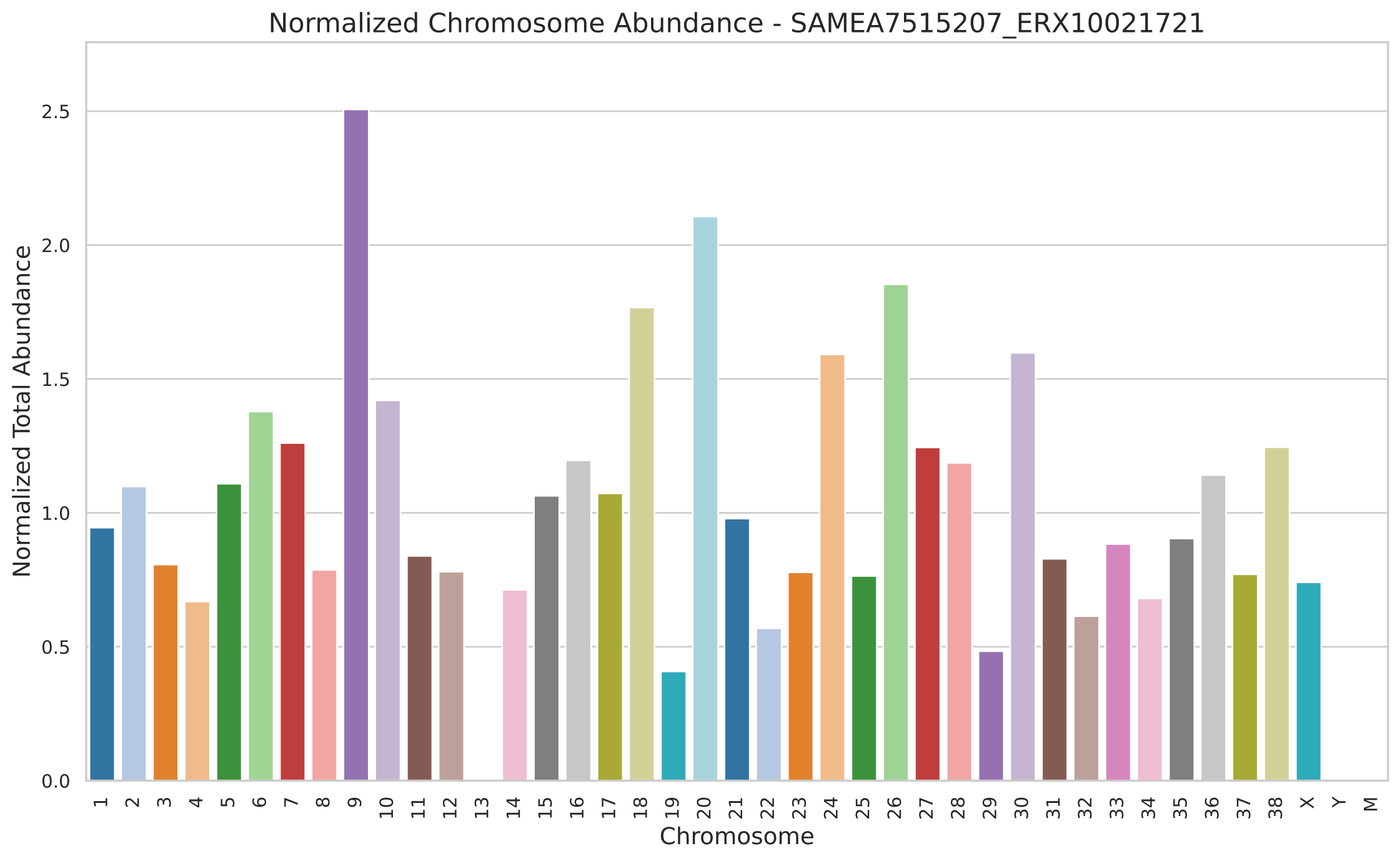

Normalized Chromosome Abundance - SAMEA7515162_ERX10021735
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

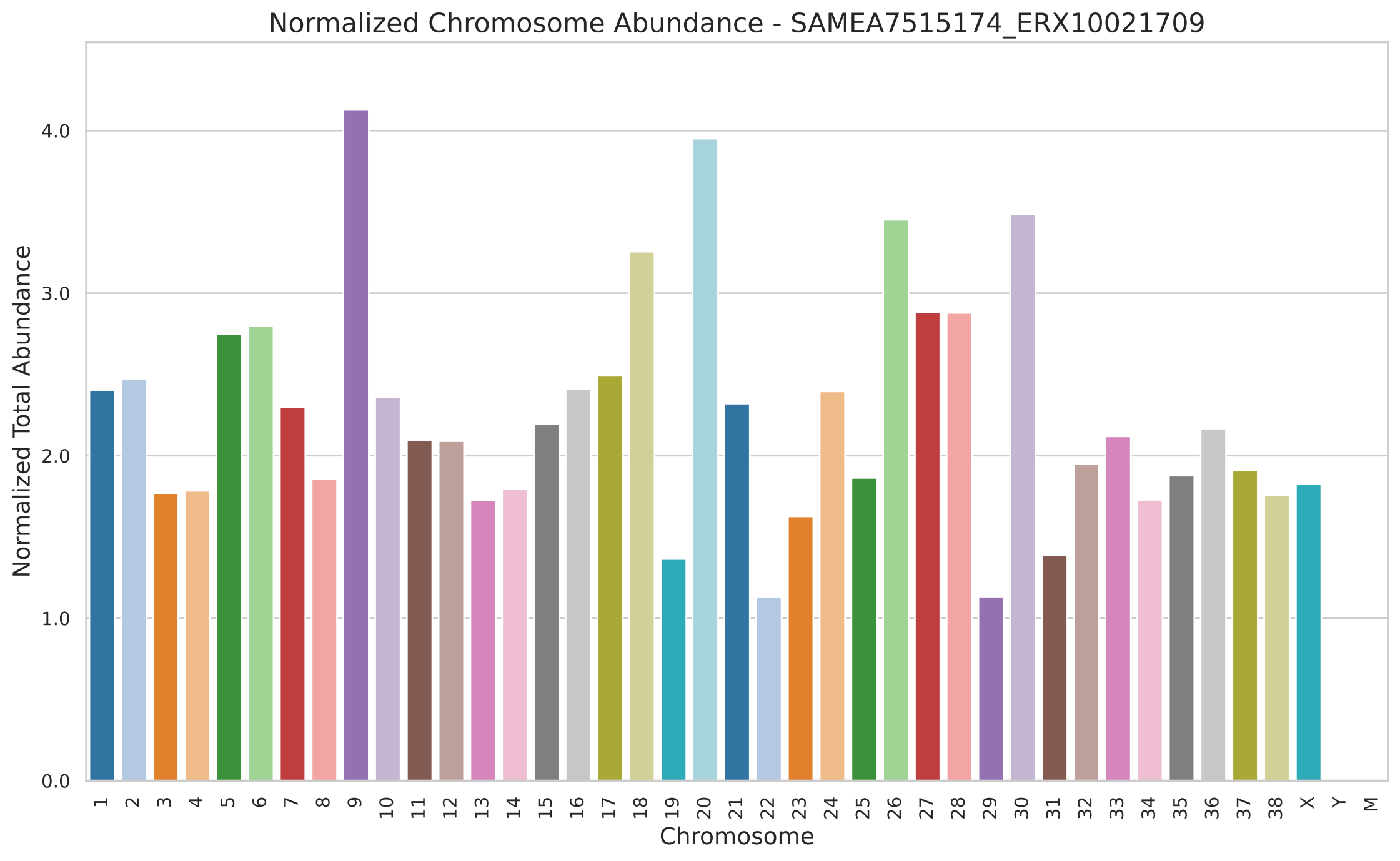

Normalized Chromosome Abundance - SAMEA7515191_ERX10021714
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

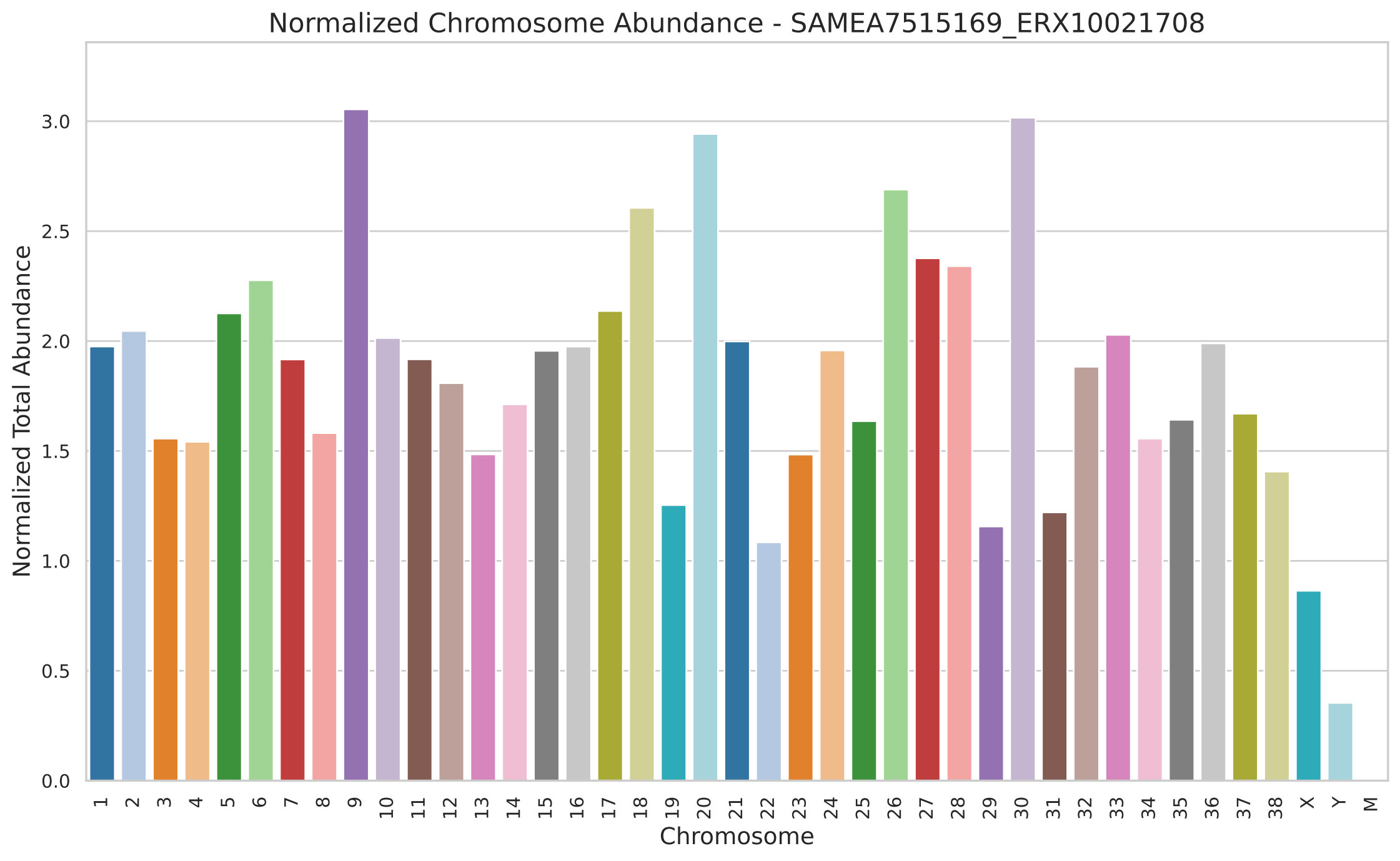

Normalized Chromosome Abundance - SAMEA7515232_ERX10021701
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

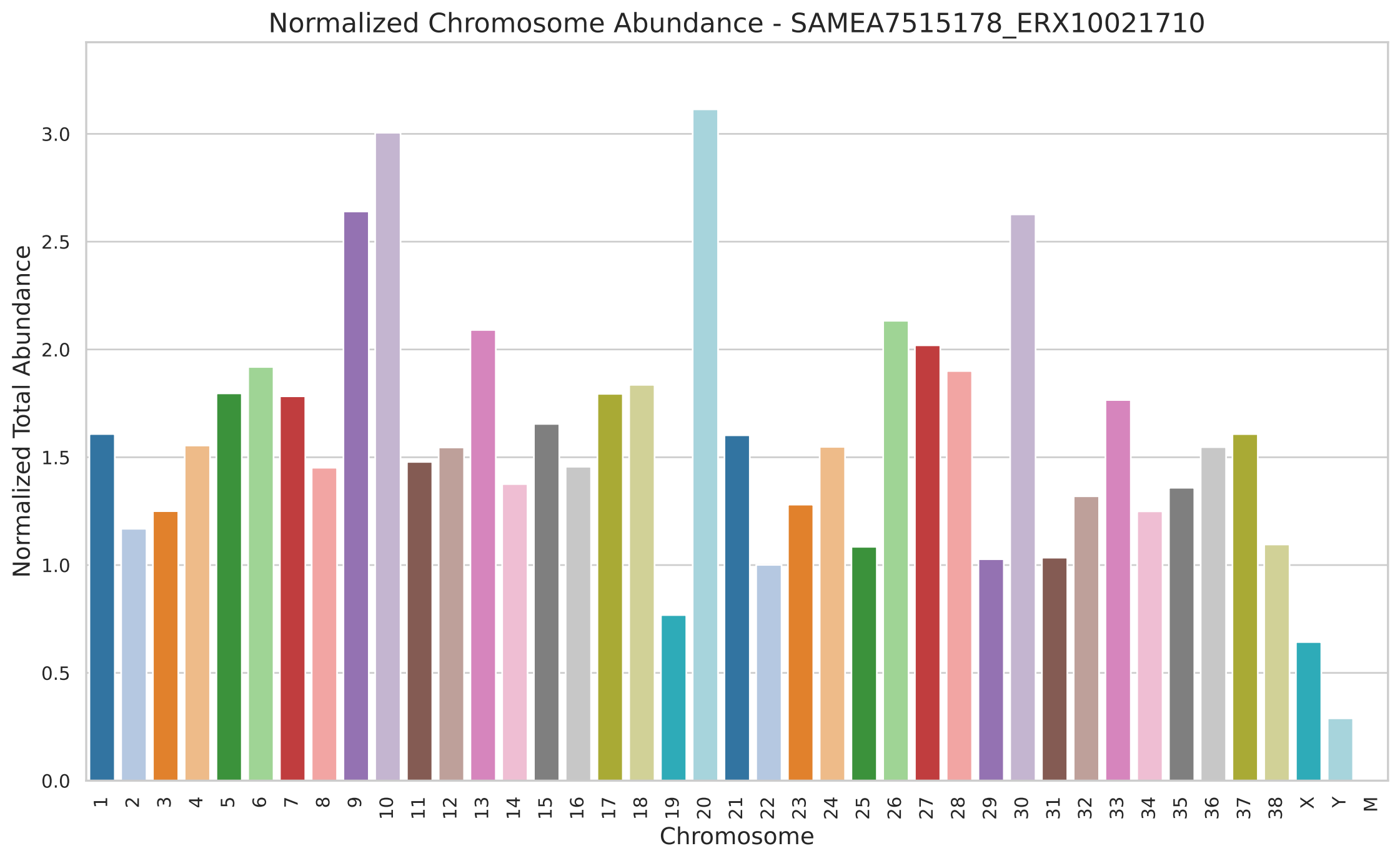

Normalized Chromosome Abundance - SAMEA7515158_ERX10021704
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

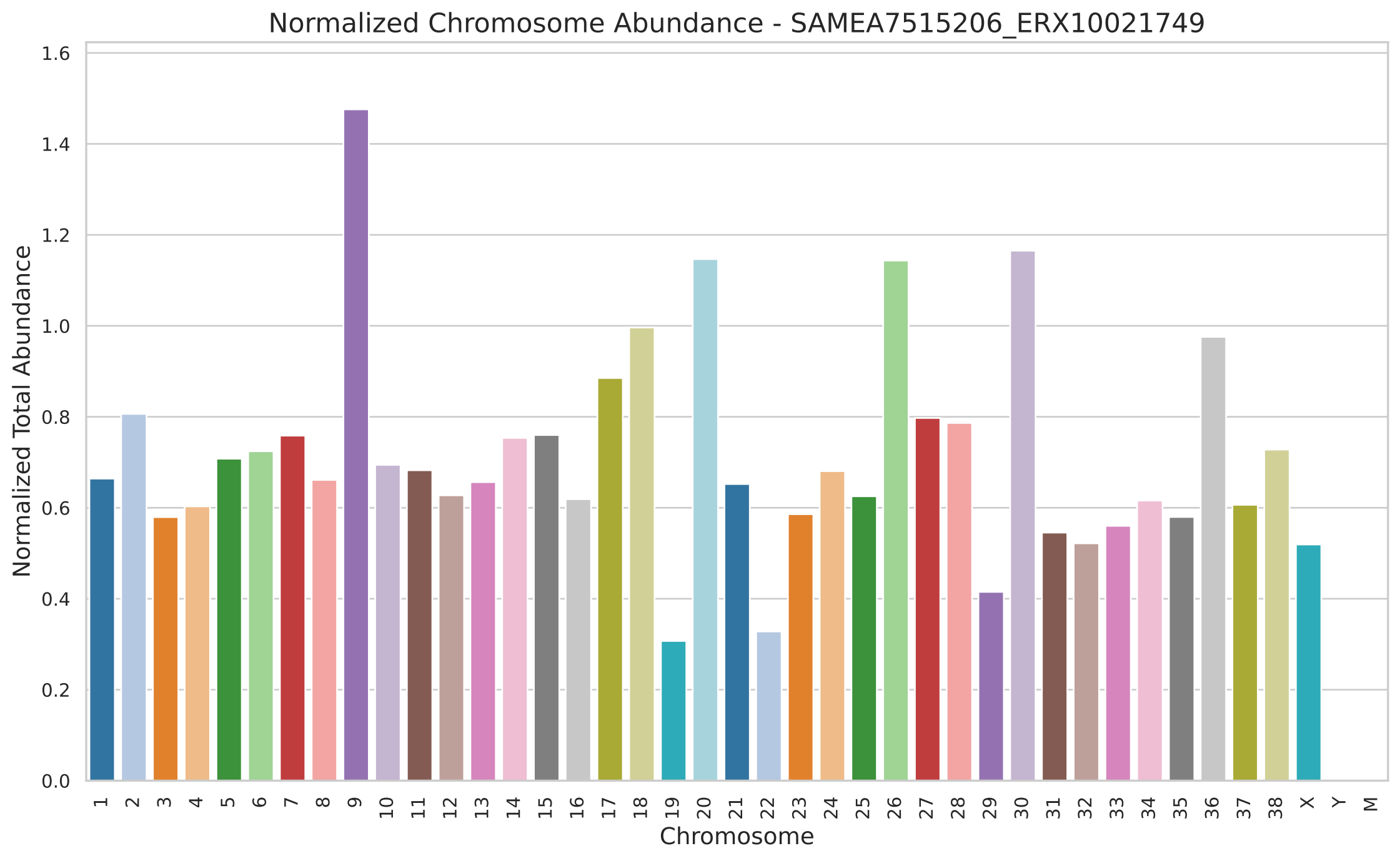

Normalized Chromosome Abundance - SAMEA7515227_ERX10021729
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

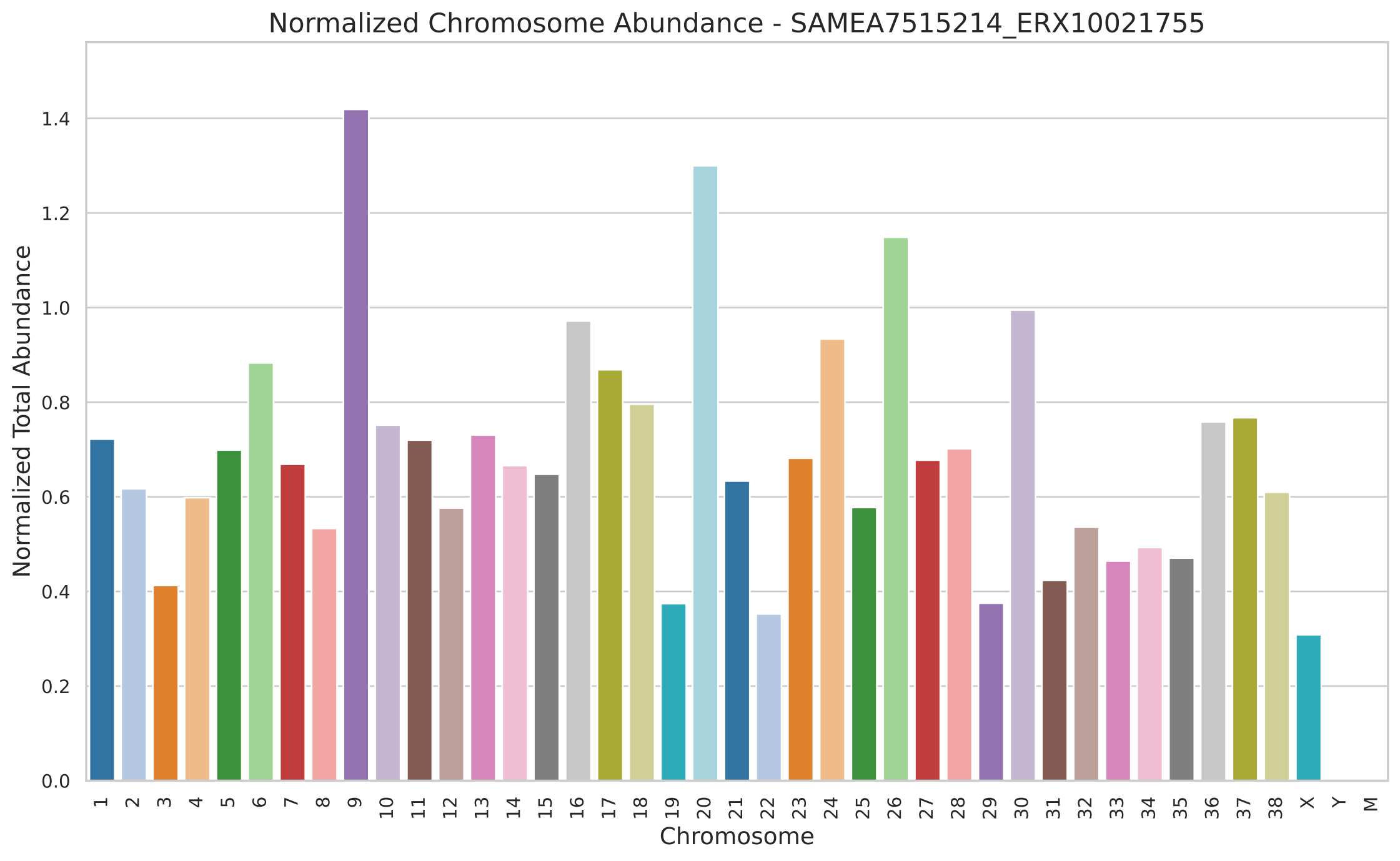

Normalized Chromosome Abundance - SAMEA7515207_ERX10021721
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

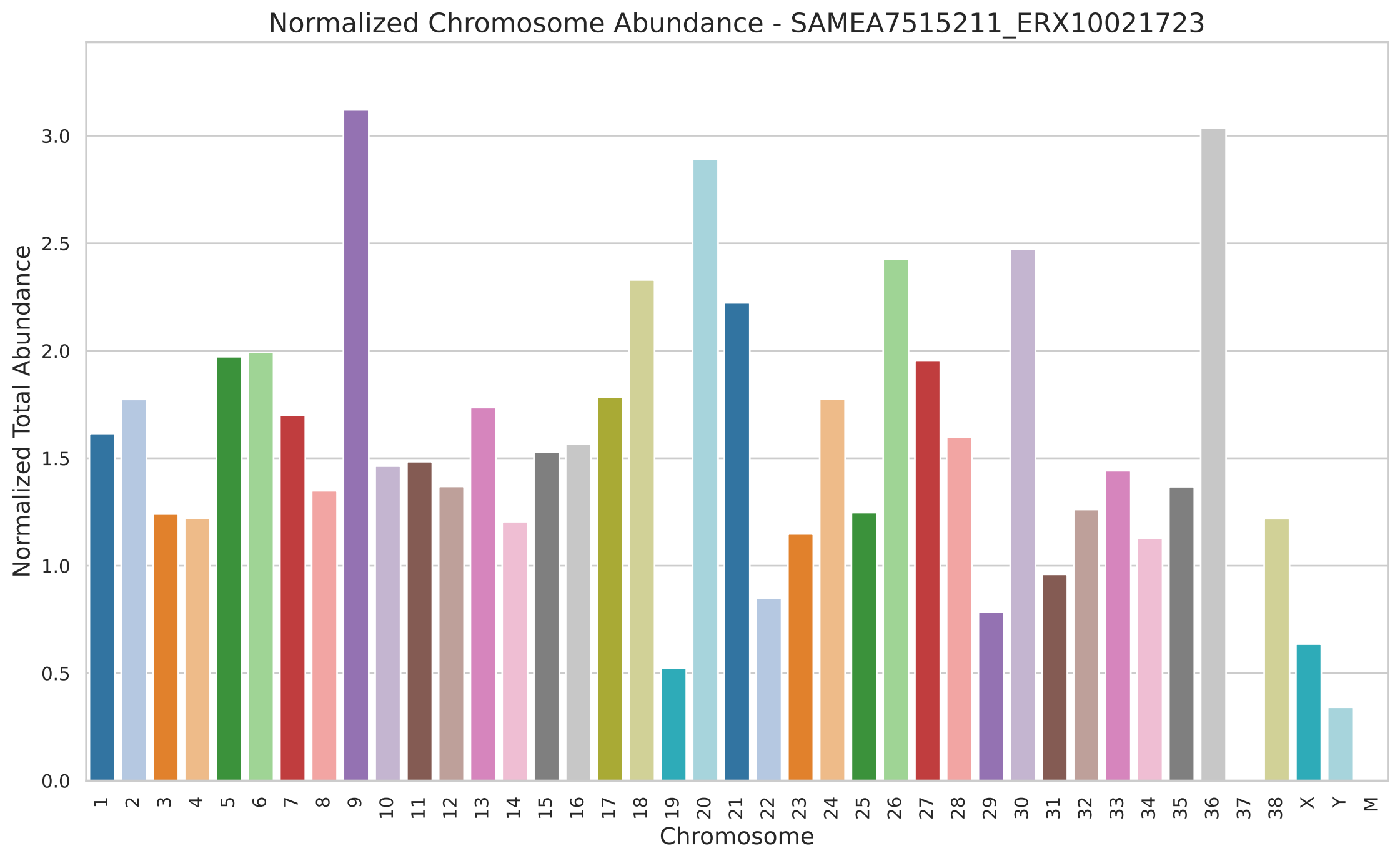

Normalized Chromosome Abundance - SAMEA7515174_ERX10021709
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

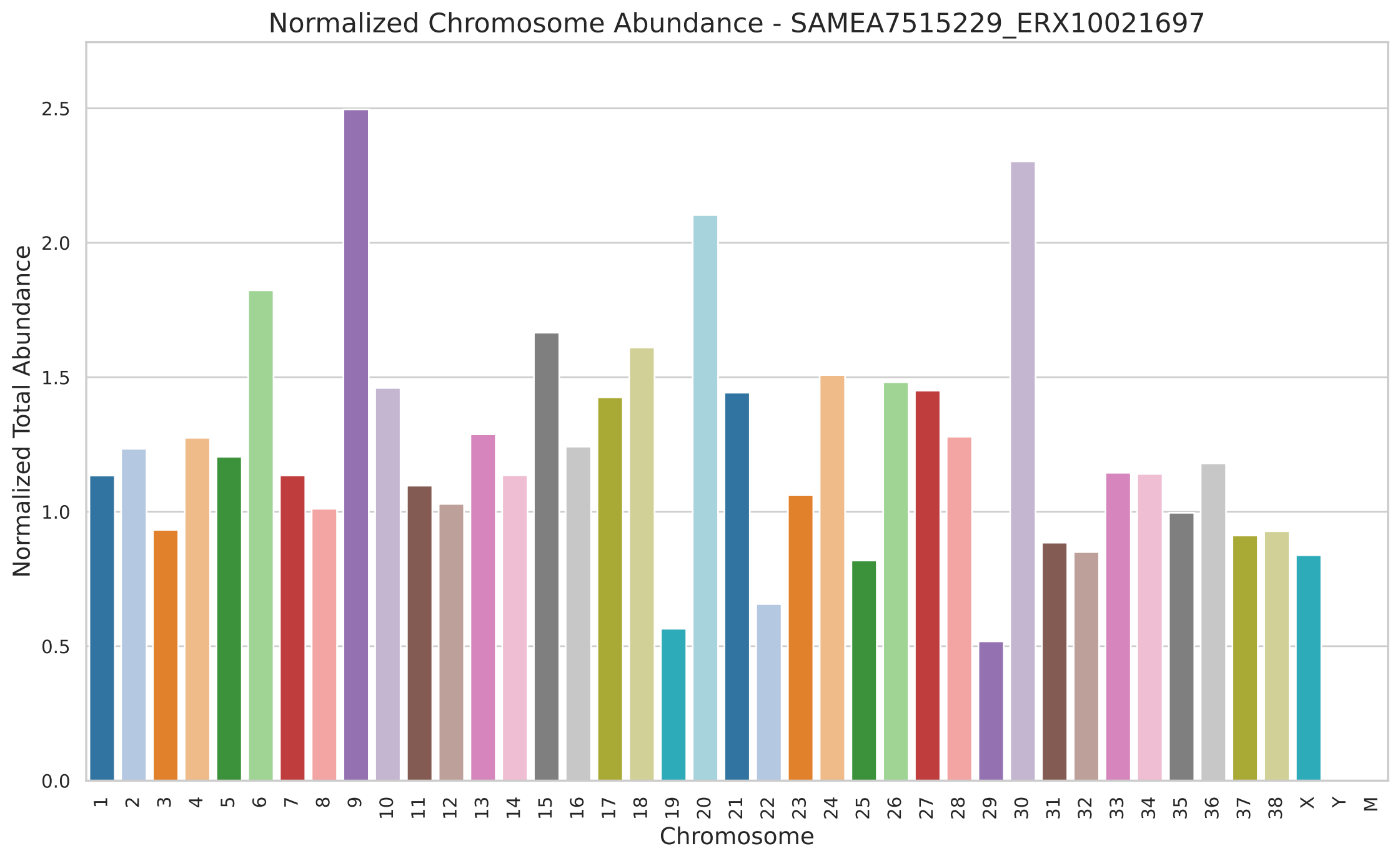

Normalized Chromosome Abundance - SAMEA7515169_ERX10021708
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

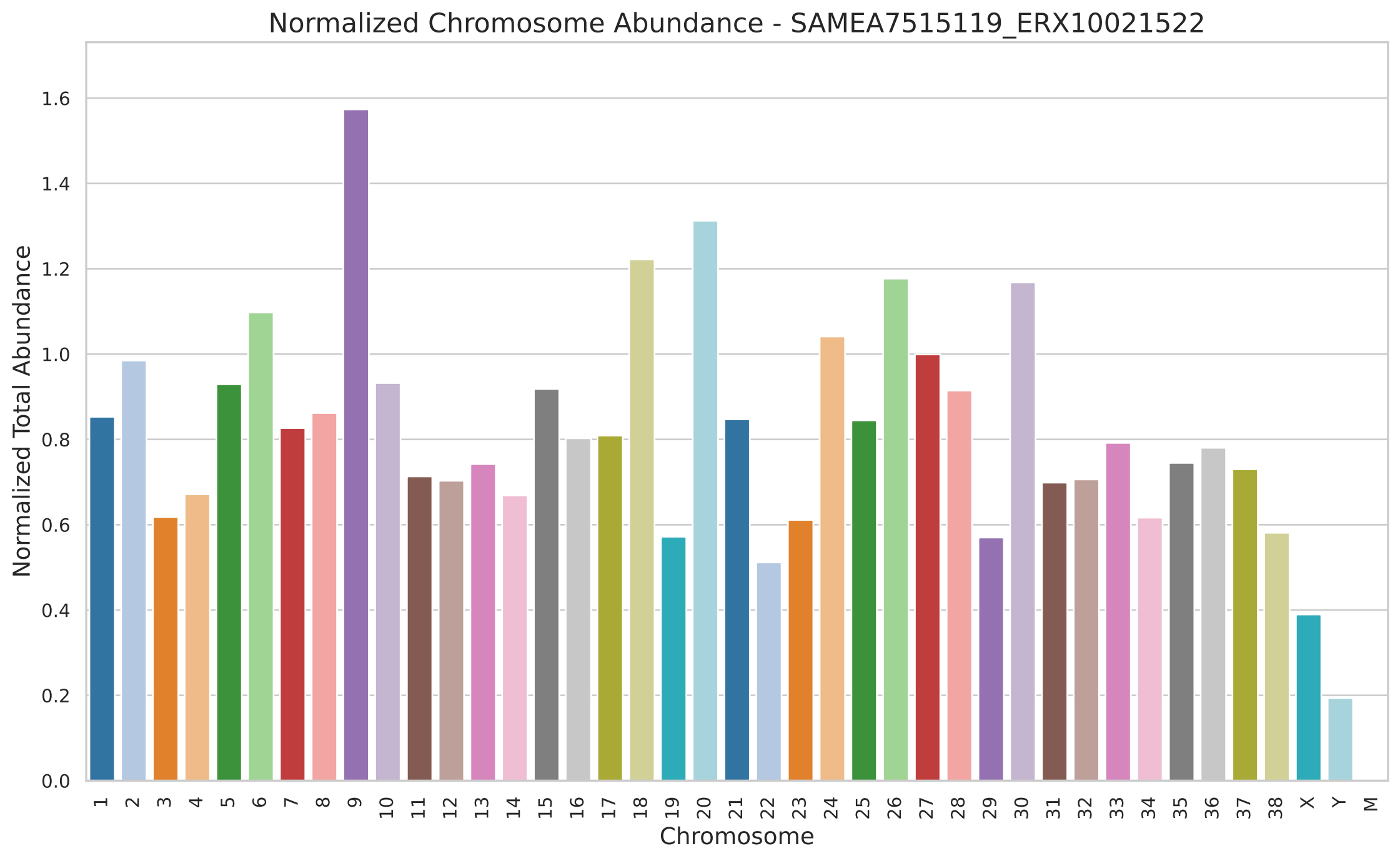

Normalized Chromosome Abundance - SAMEA7515178_ERX10021710
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

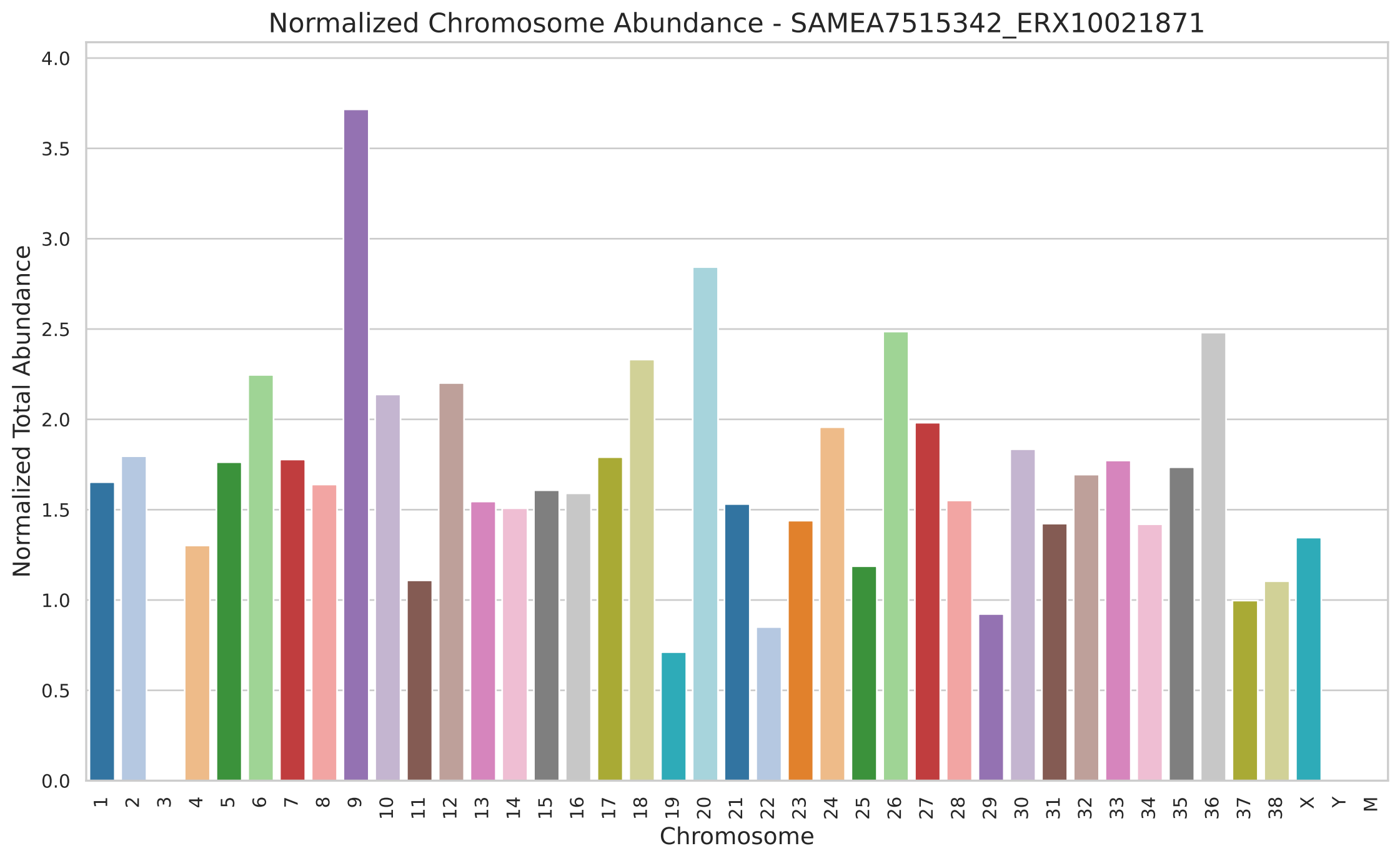

Normalized Chromosome Abundance - SAMEA7515206_ERX10021749
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

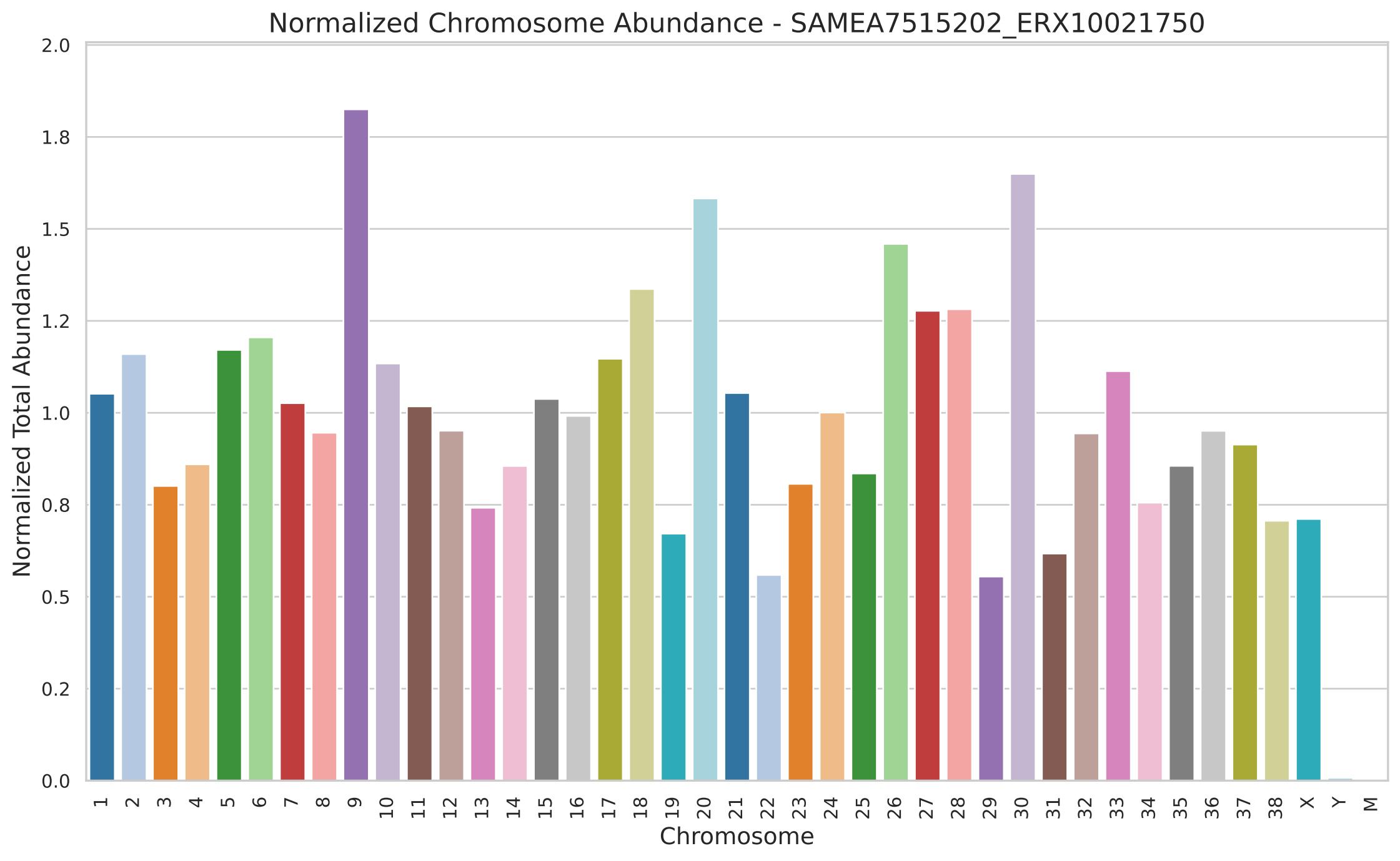

Normalized Chromosome Abundance - SAMEA7515214_ERX10021755
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

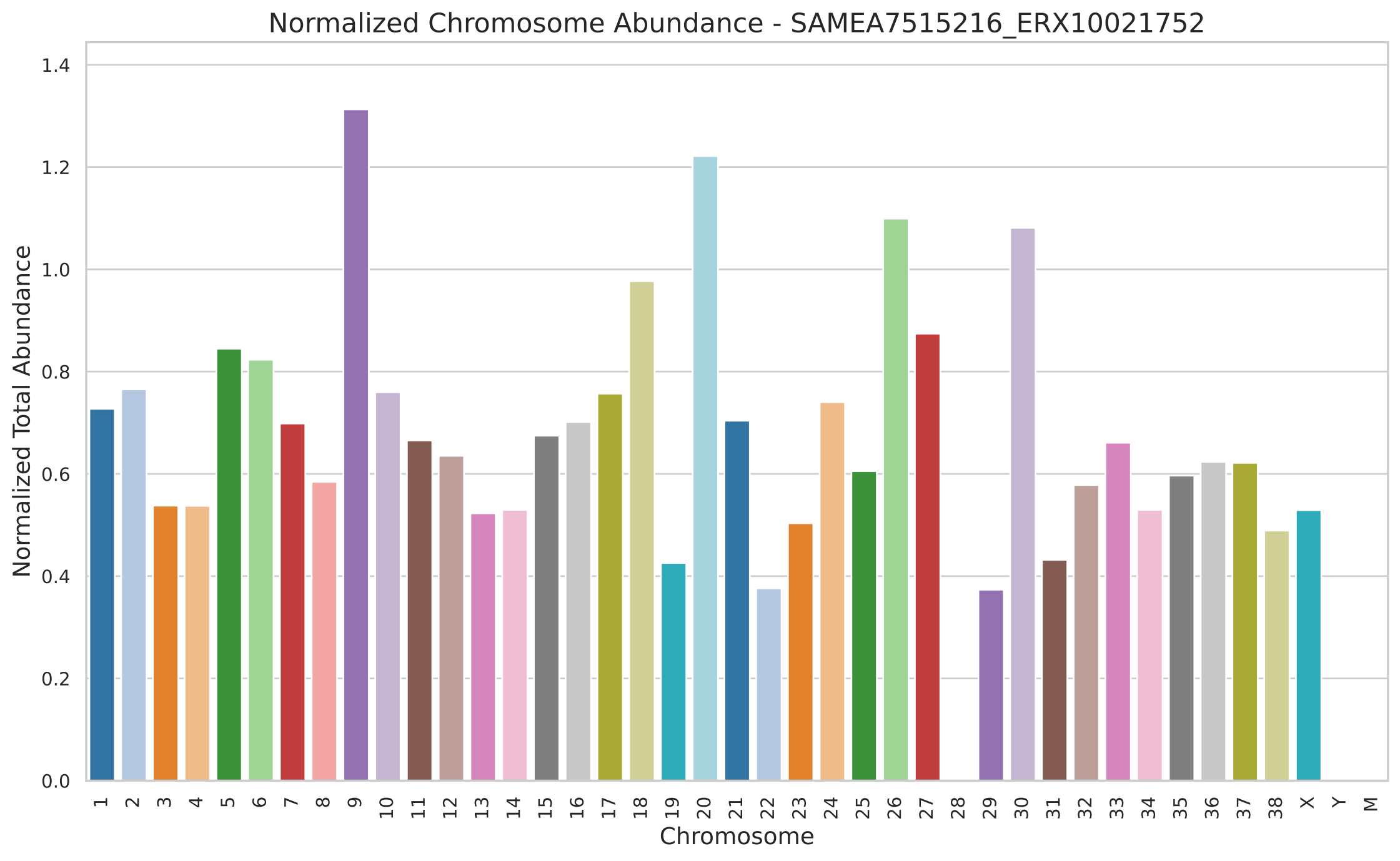

Normalized Chromosome Abundance - SAMEA7515211_ERX10021723
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

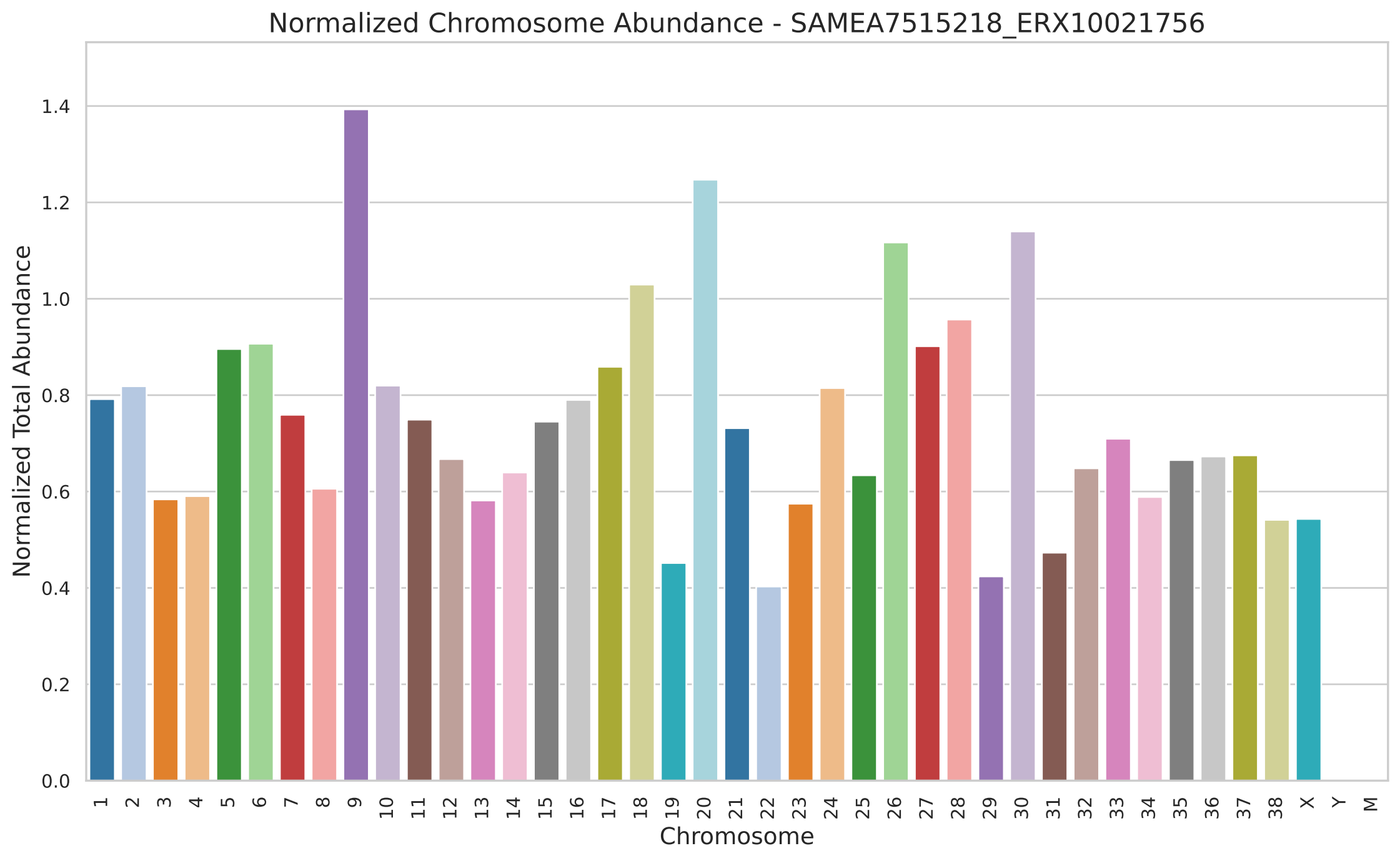

Normalized Chromosome Abundance - SAMEA7515229_ERX10021697
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

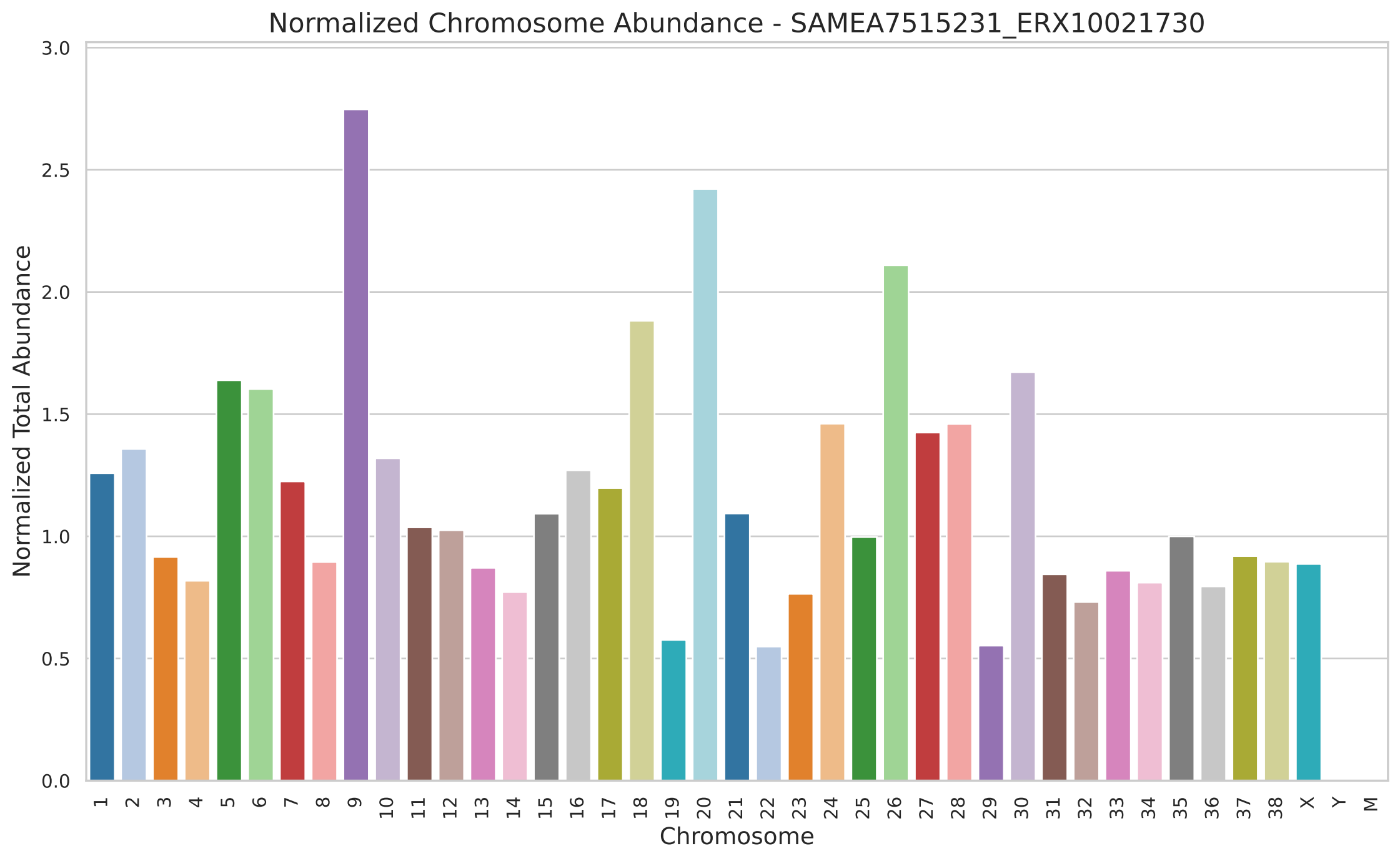

Normalized Chromosome Abundance - SAMEA7515119_ERX10021522
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

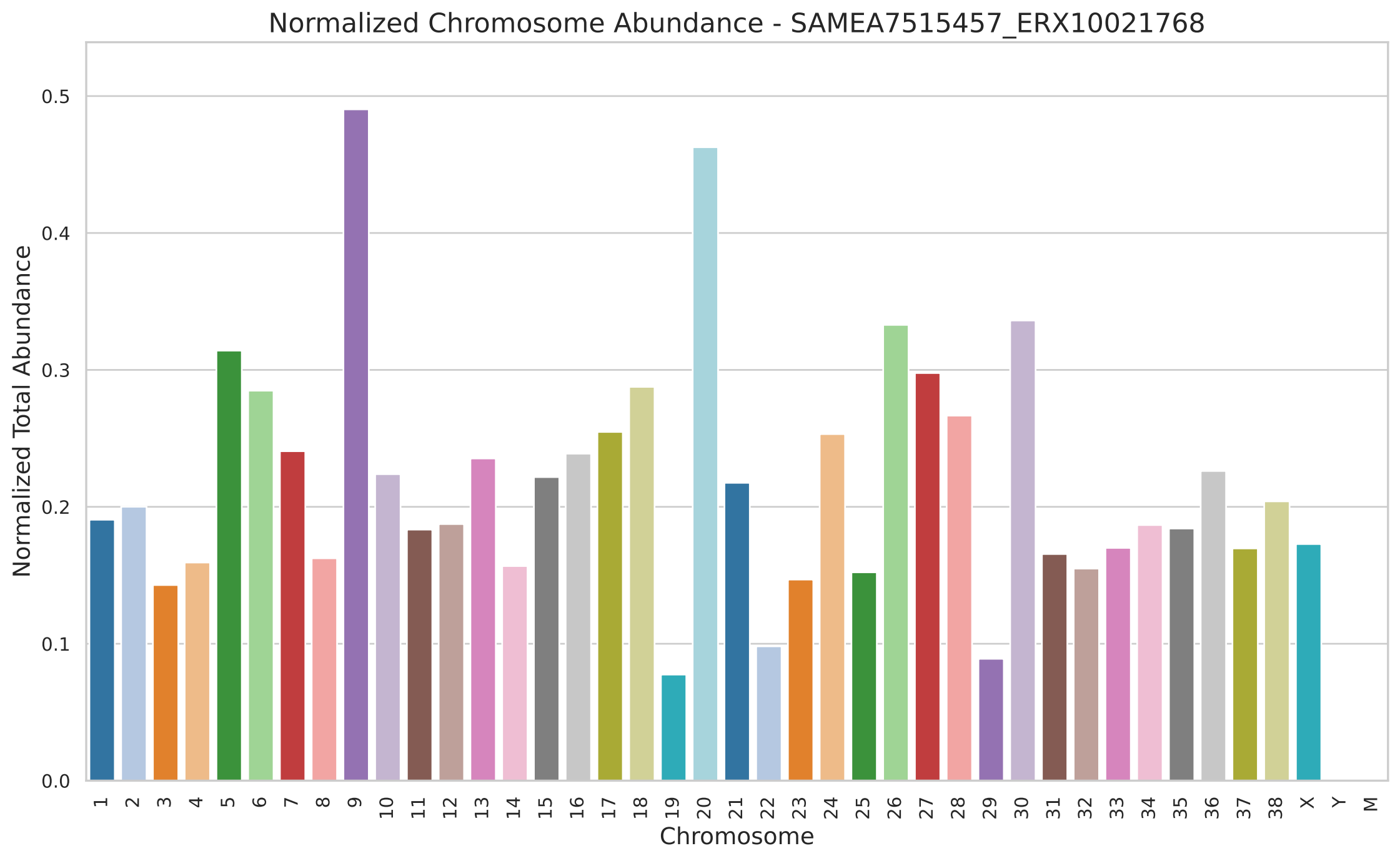

Normalized Chromosome Abundance - SAMEA7515342_ERX10021871
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

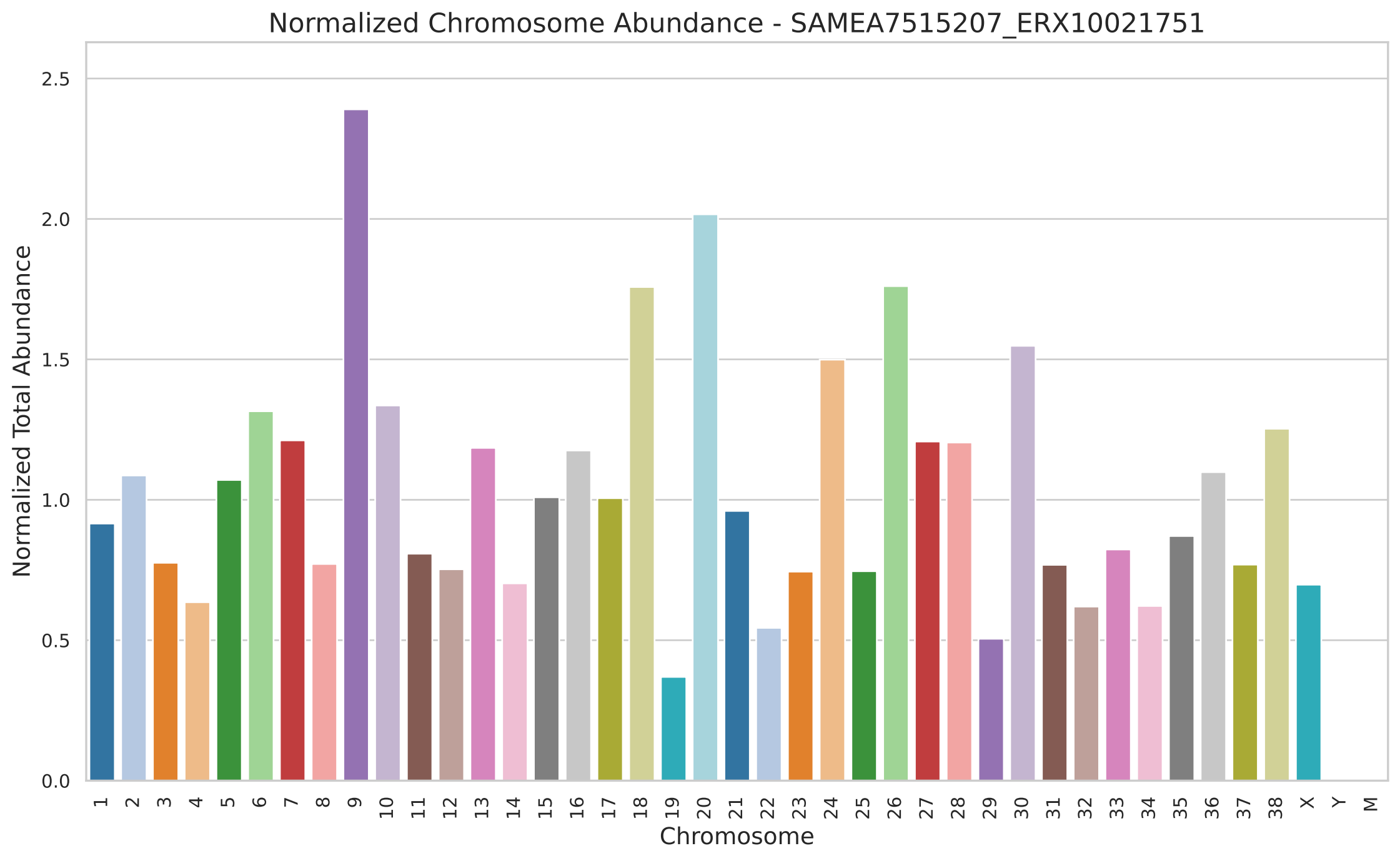

Normalized Chromosome Abundance - SAMEA7515202_ERX10021750
Normalized Total Abundance
2.0
1.8
1.5
1.2
1.0
0.8
0.5
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

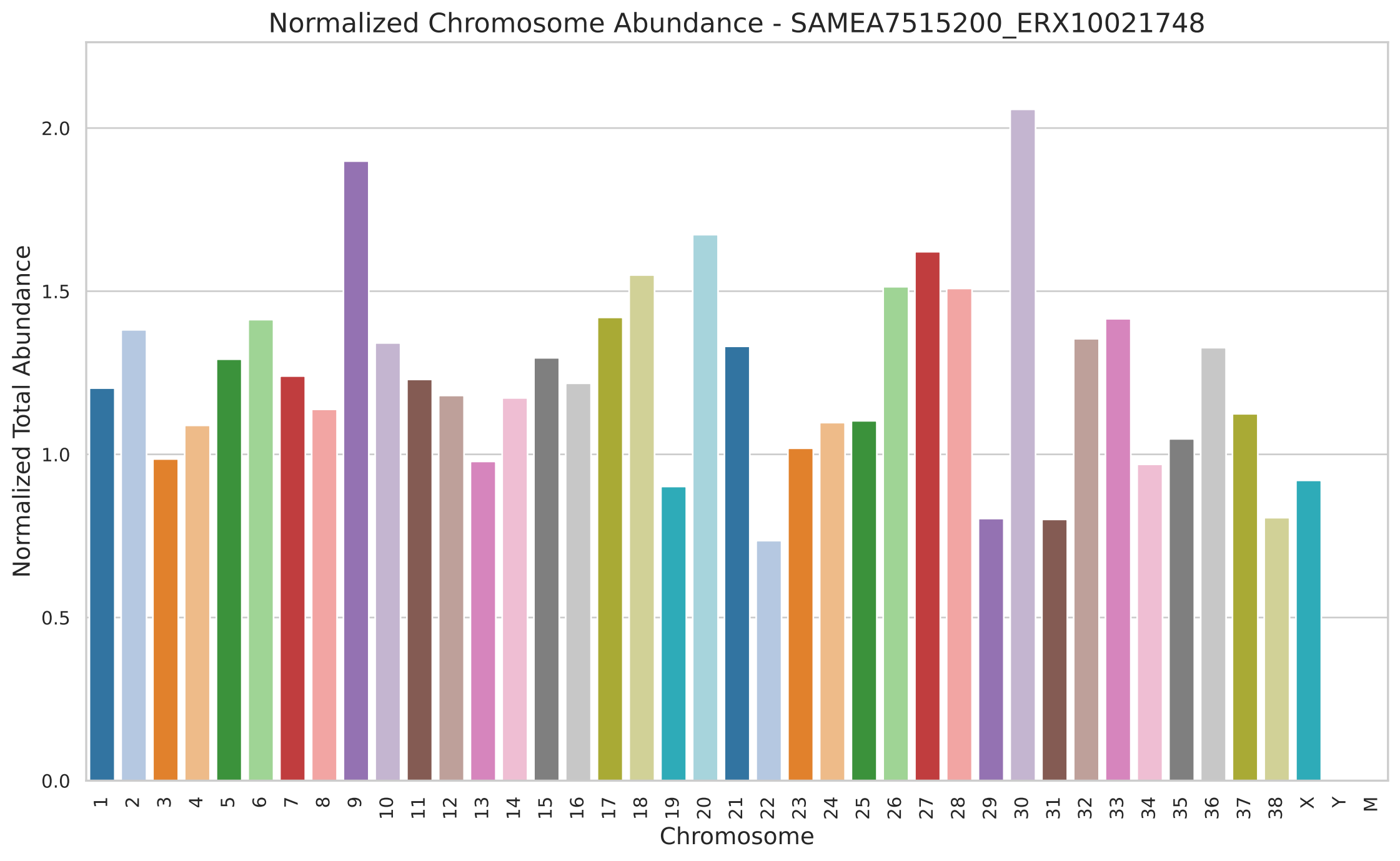

Normalized Chromosome Abundance - SAMEA7515216_ERX10021752
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

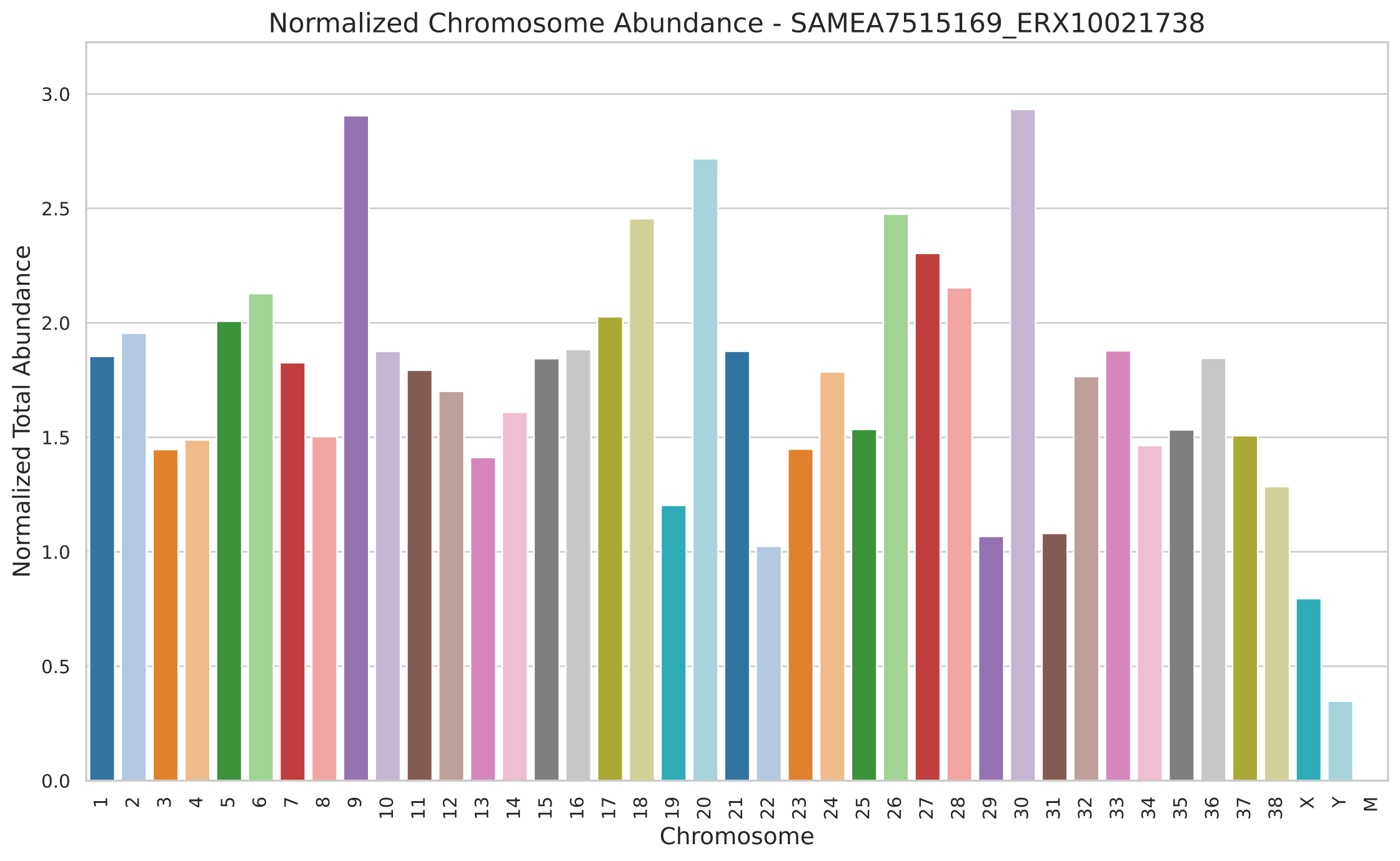

Normalized Chromosome Abundance - SAMEA7515218_ERX10021756
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

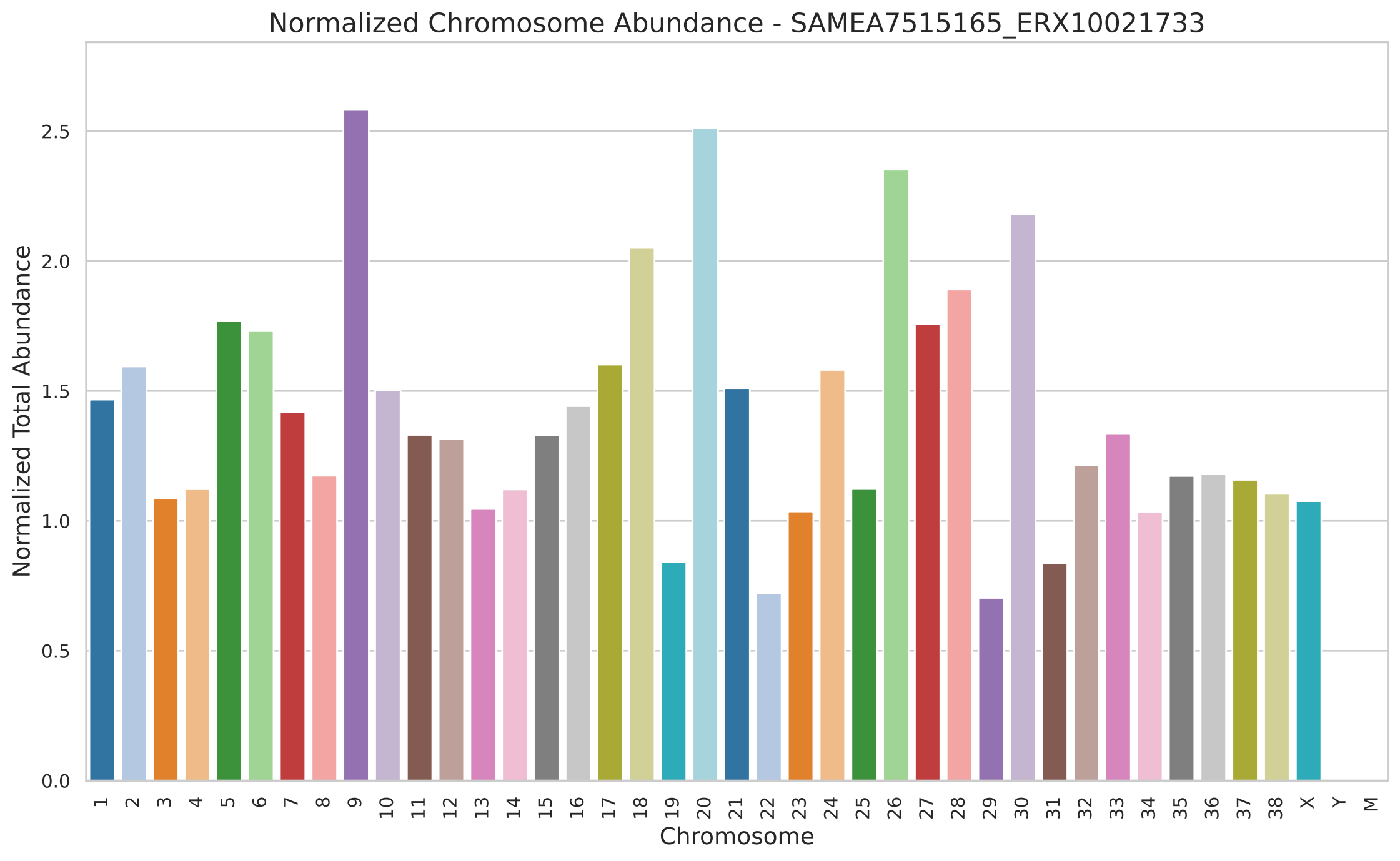

Normalized Chromosome Abundance - SAMEA7515231_ERX10021730
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

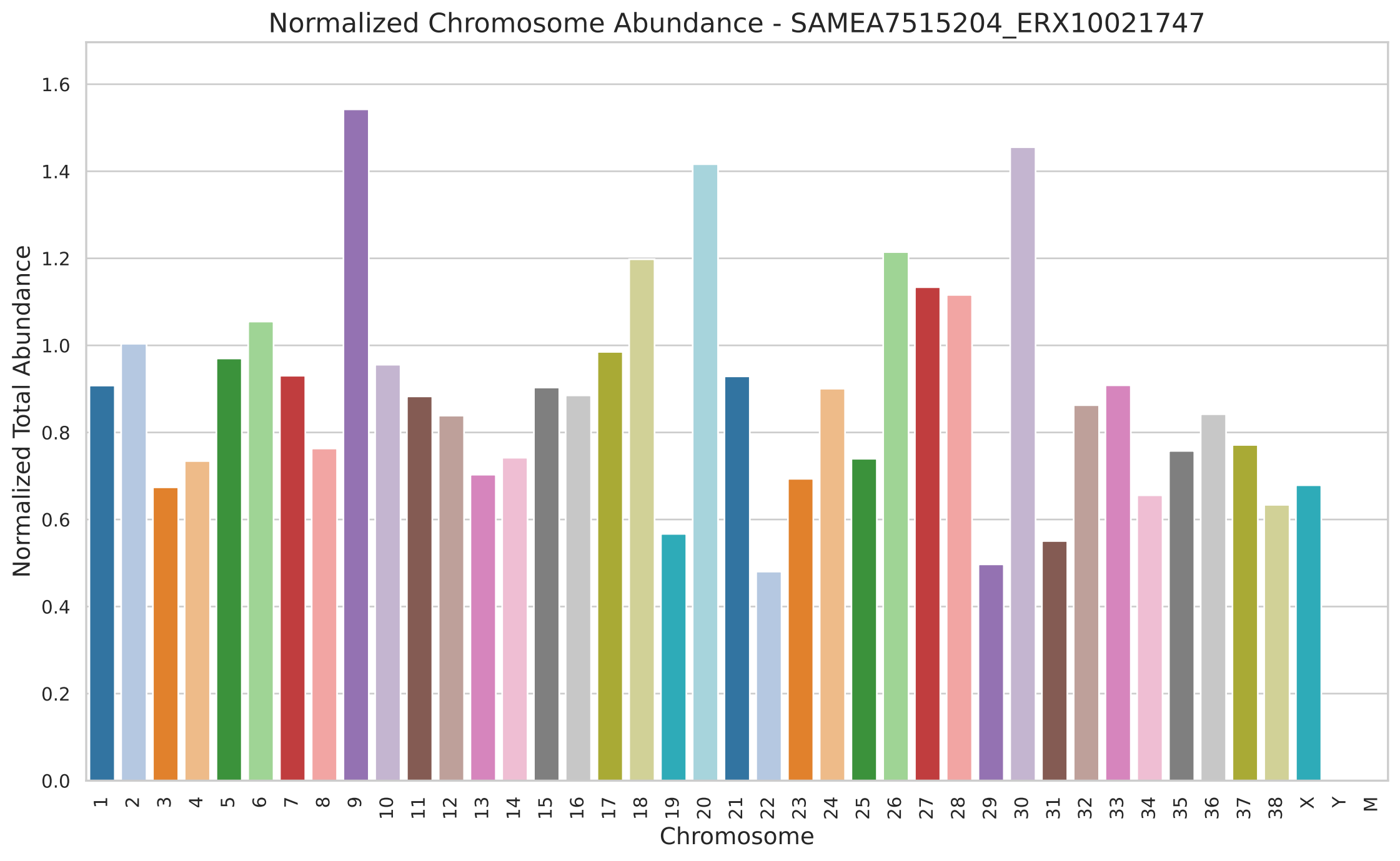

Normalized Chromosome Abundance - SAMEA7515457_ERX10021768
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

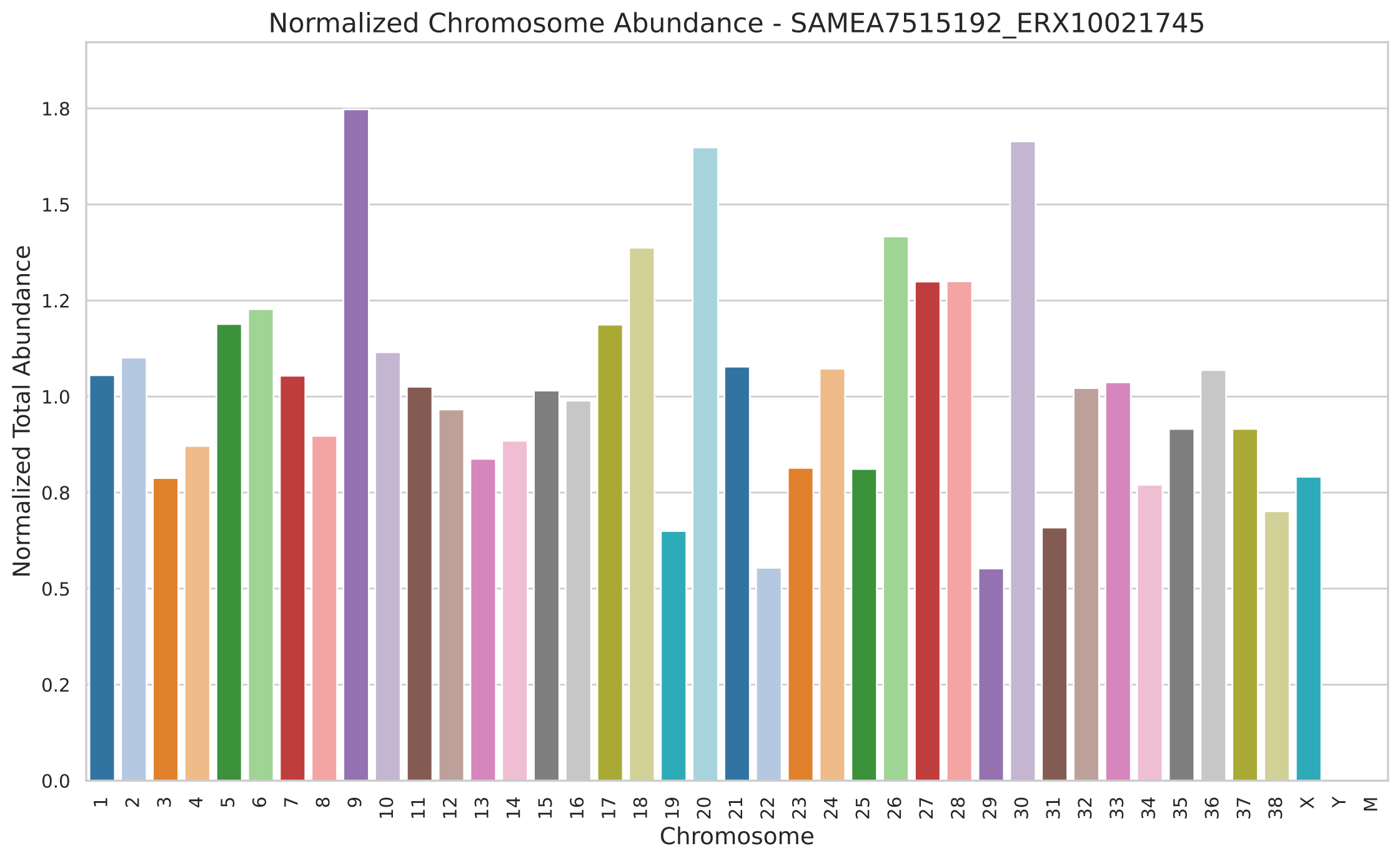

Normalized Chromosome Abundance - SAMEA7515207_ERX10021751
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

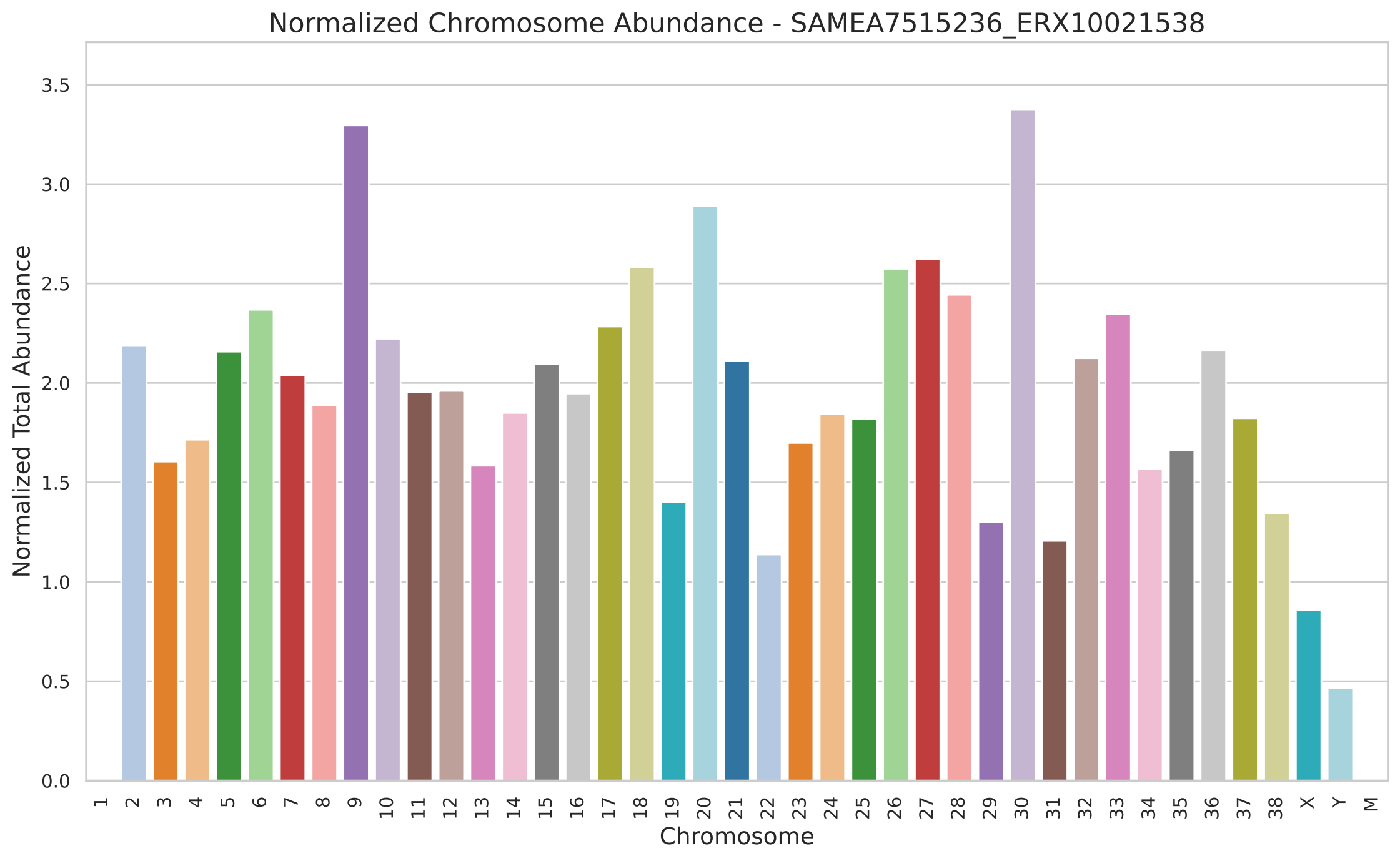

Normalized Chromosome Abundance - SAMEA7515200_ERX10021748
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

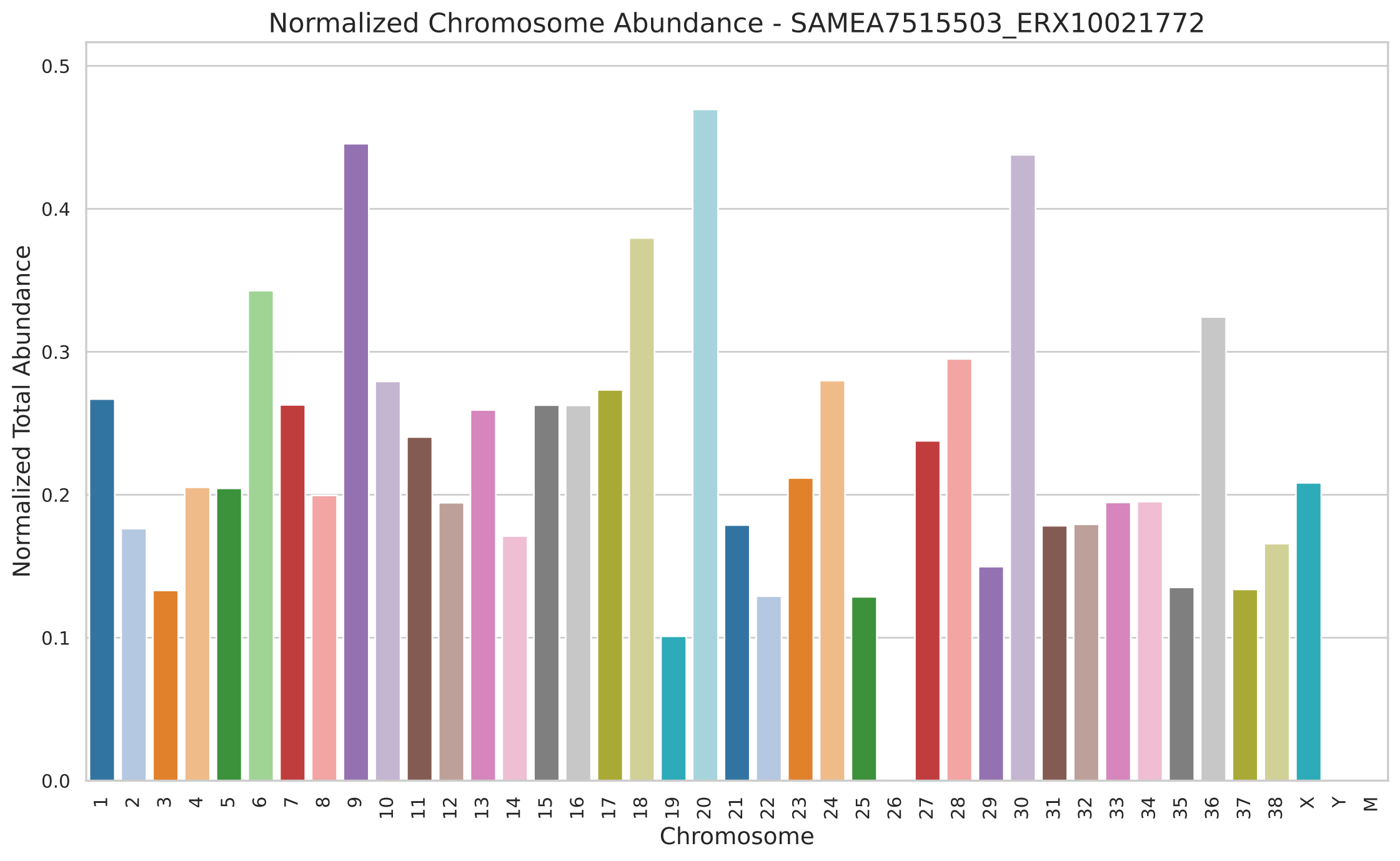

Normalized Chromosome Abundance - SAMEA7515169_ERX10021738
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

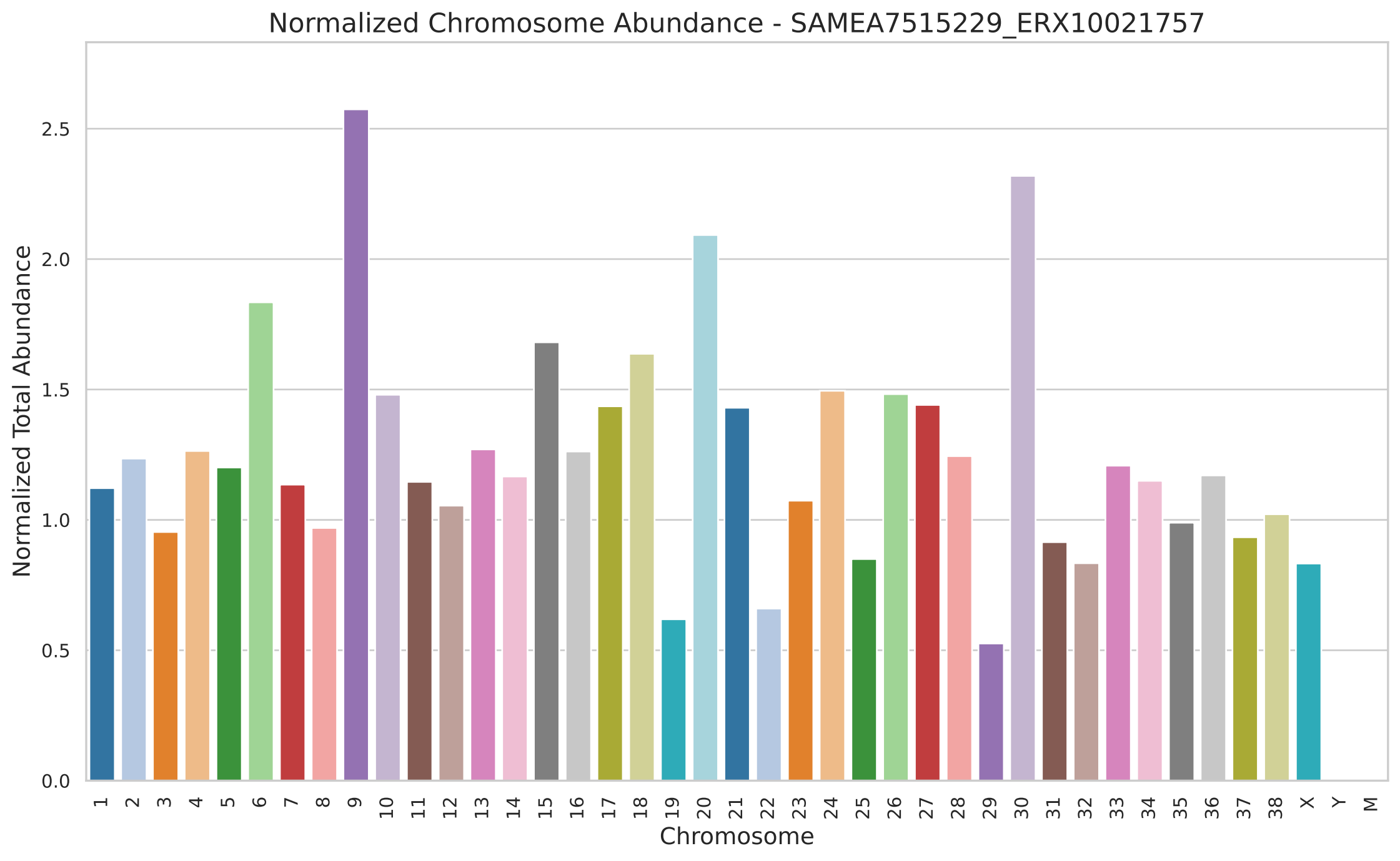

Normalized Chromosome Abundance - SAMEA7515165_ERX10021733
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

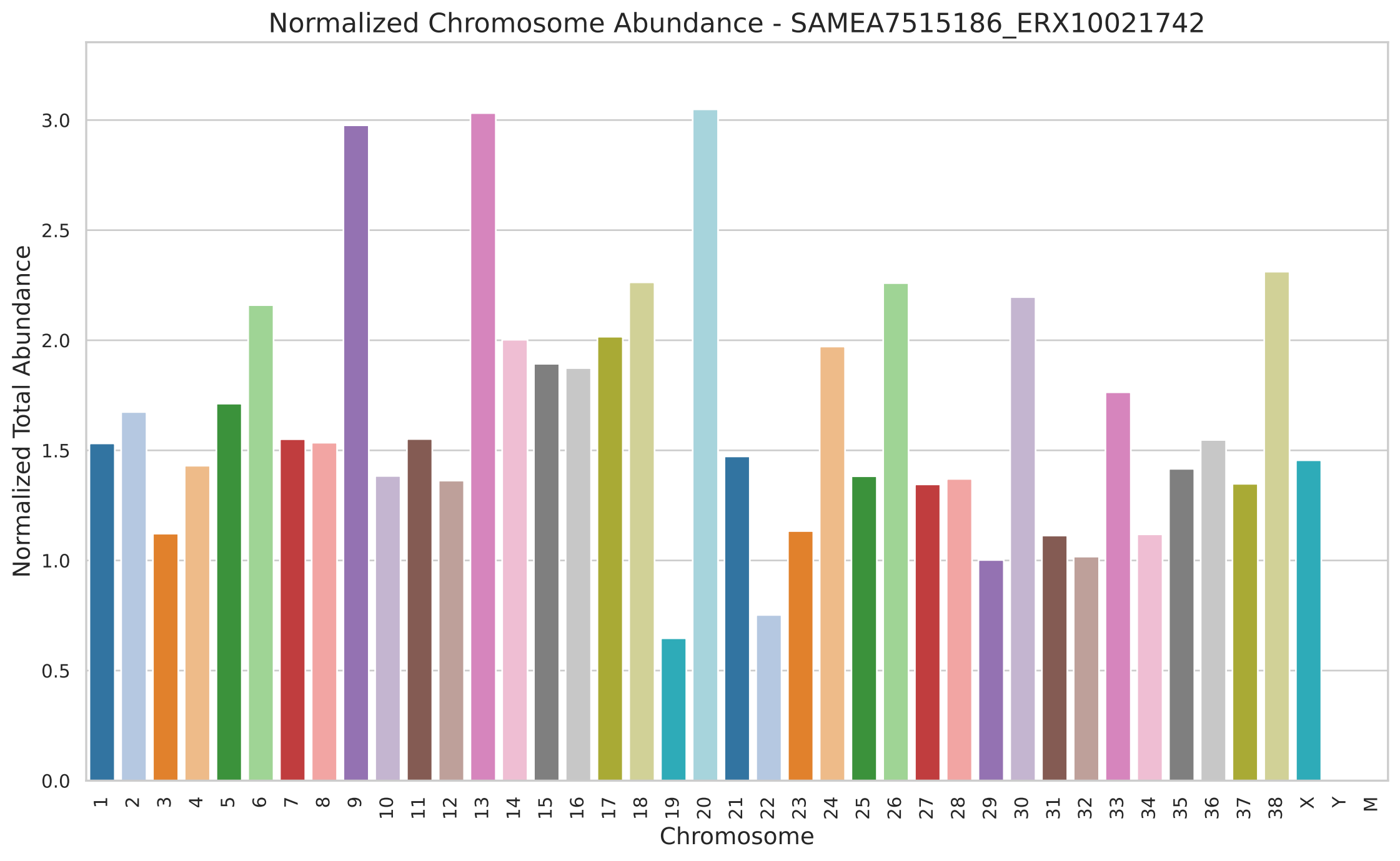

Normalized Chromosome Abundance - SAMEA7515204_ERX10021747
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

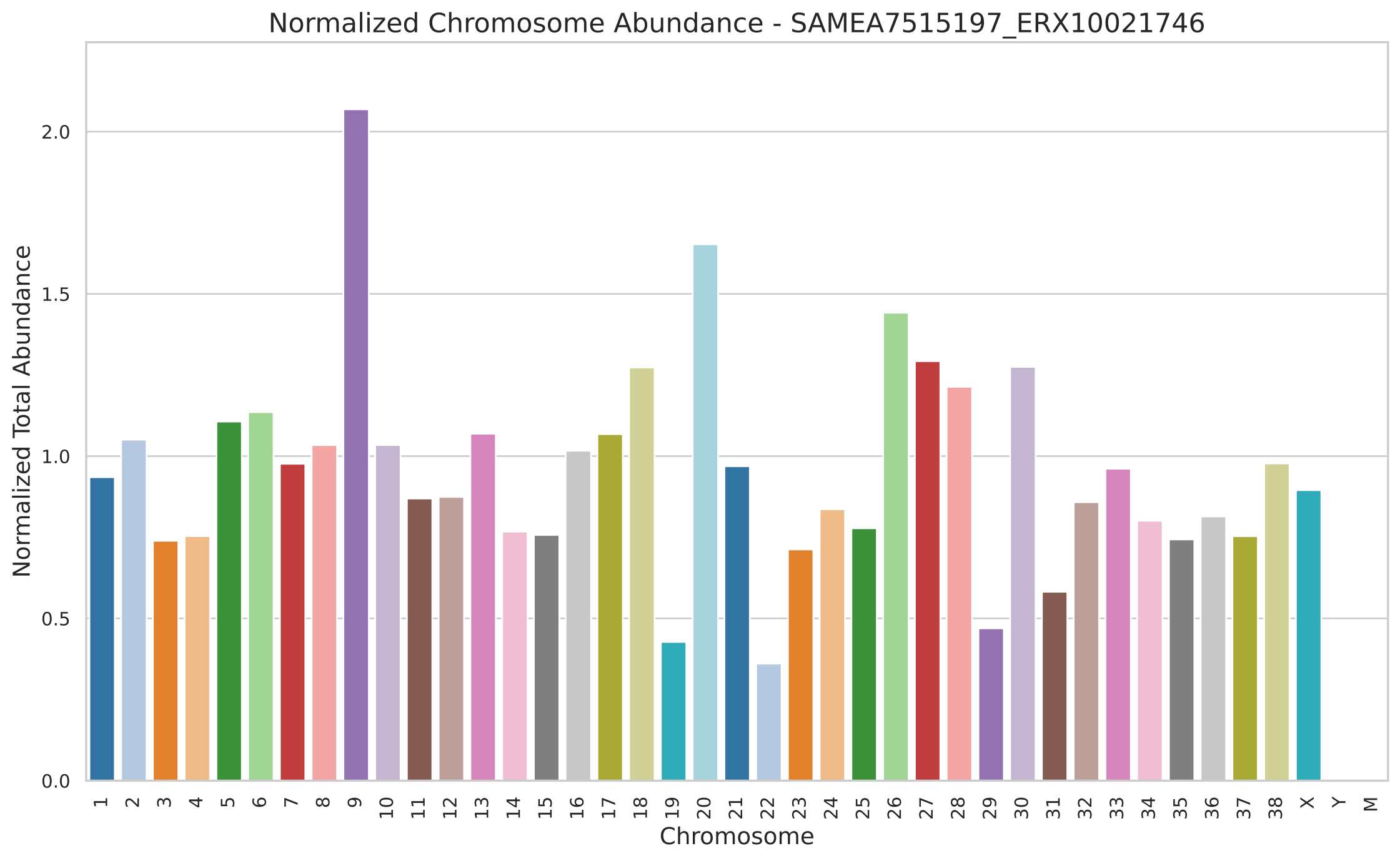

Normalized Chromosome Abundance - SAMEA7515192_ERX10021745
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

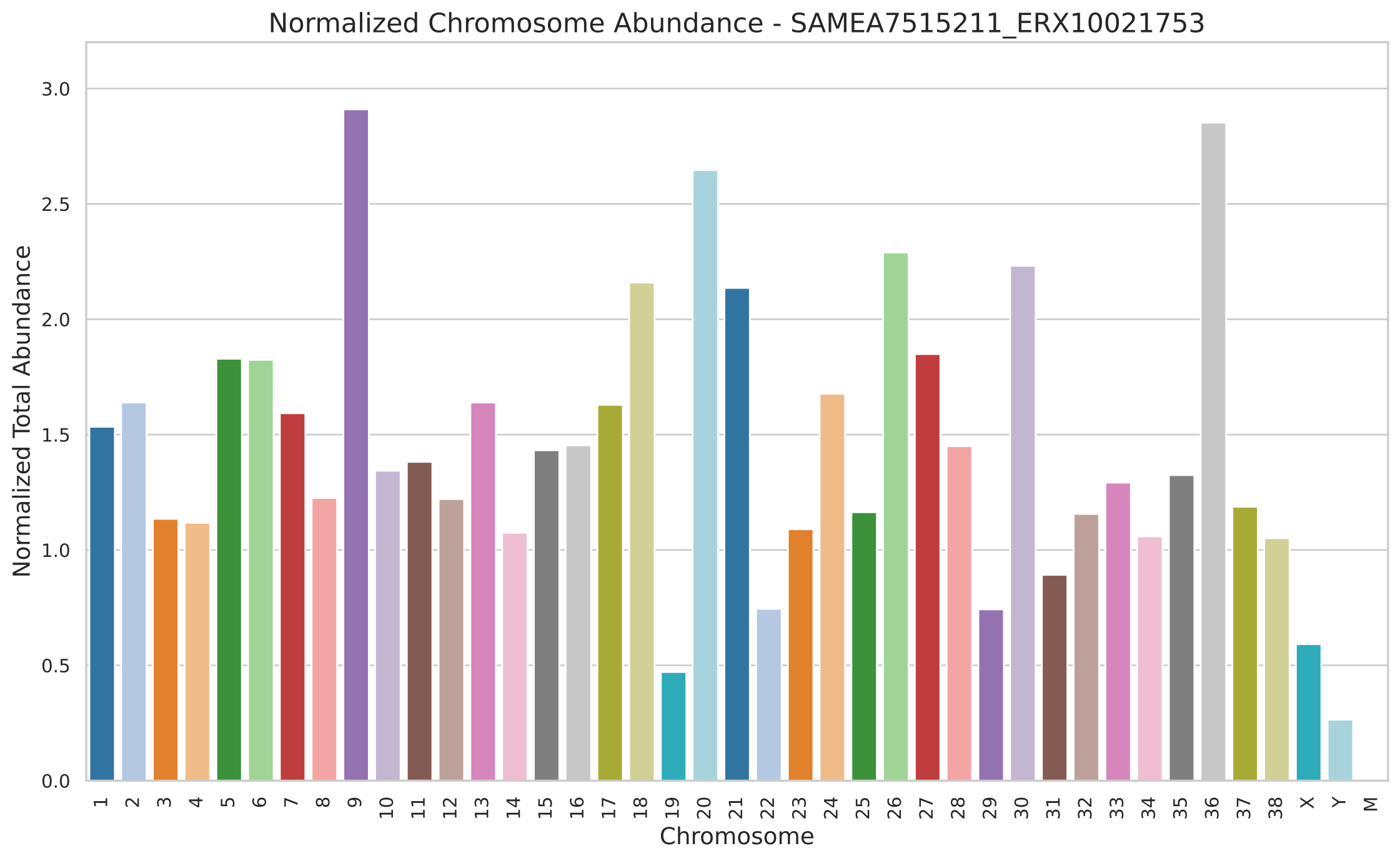

Normalized Chromosome Abundance - SAMEA7515236_ERX10021538
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

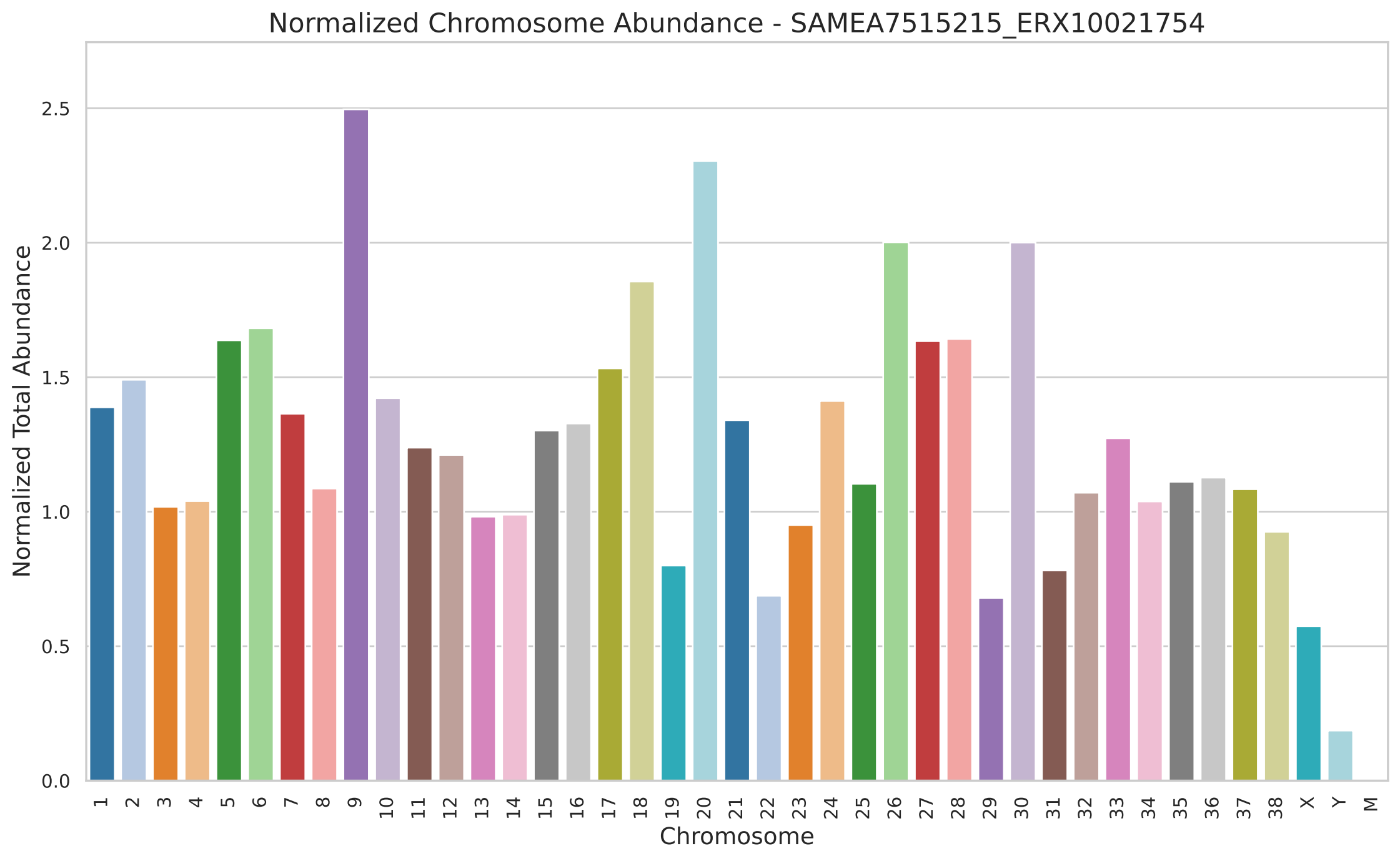

Normalized Chromosome Abundance - SAMEA7515503_ERX10021772
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

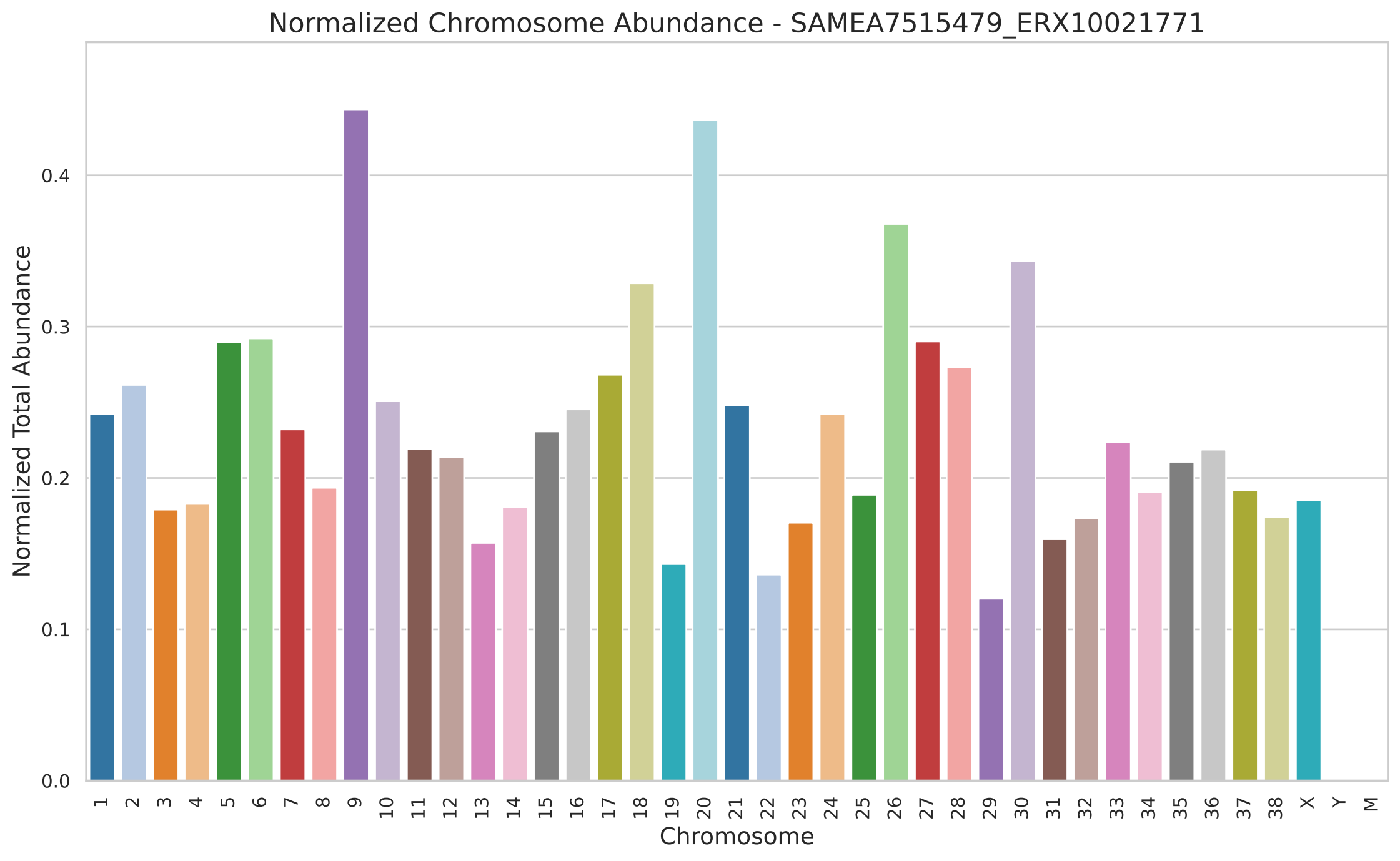

Normalized Chromosome Abundance - SAMEA7515229_ERX10021757
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

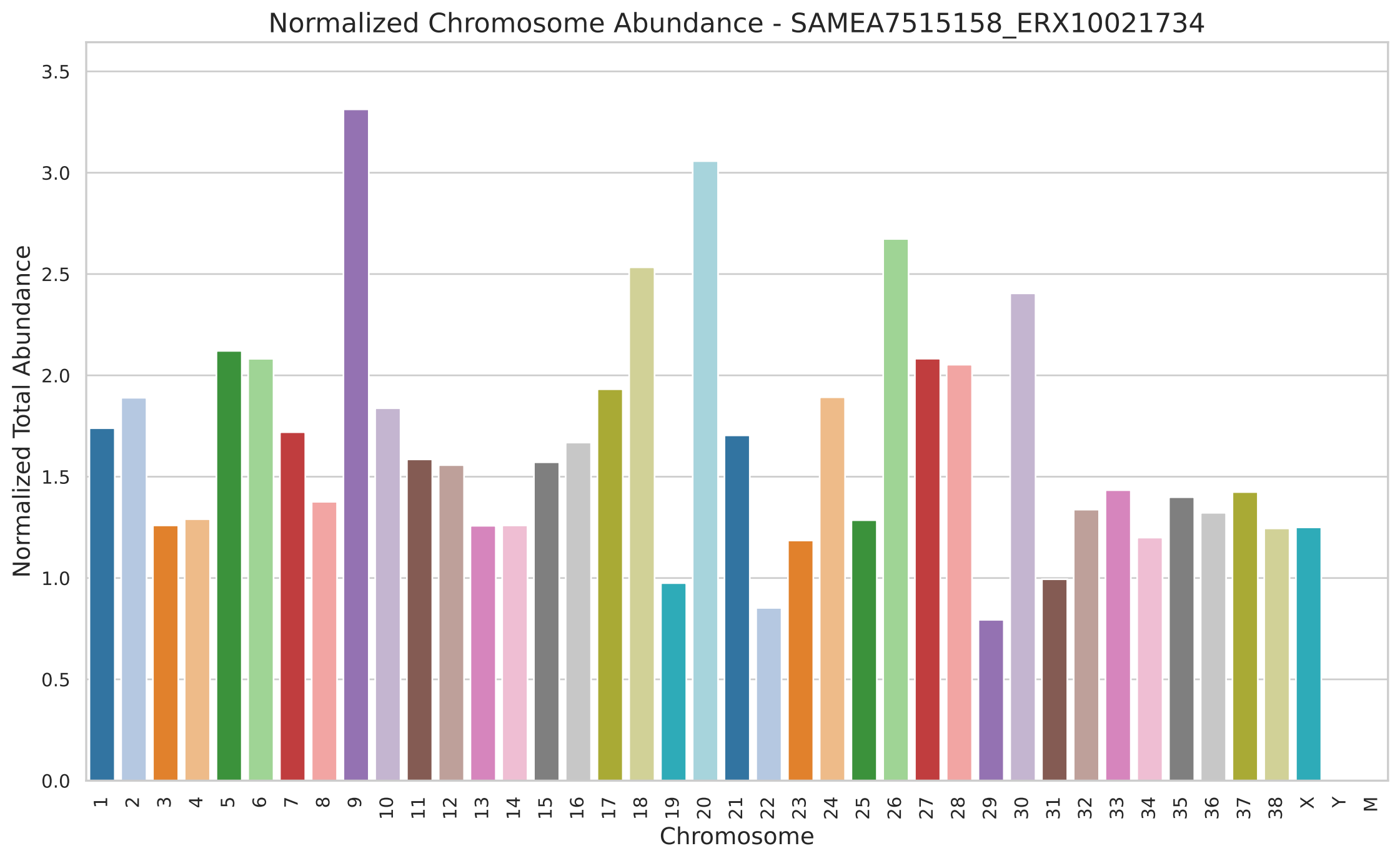

Normalized Chromosome Abundance - SAMEA7515186_ERX10021742
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

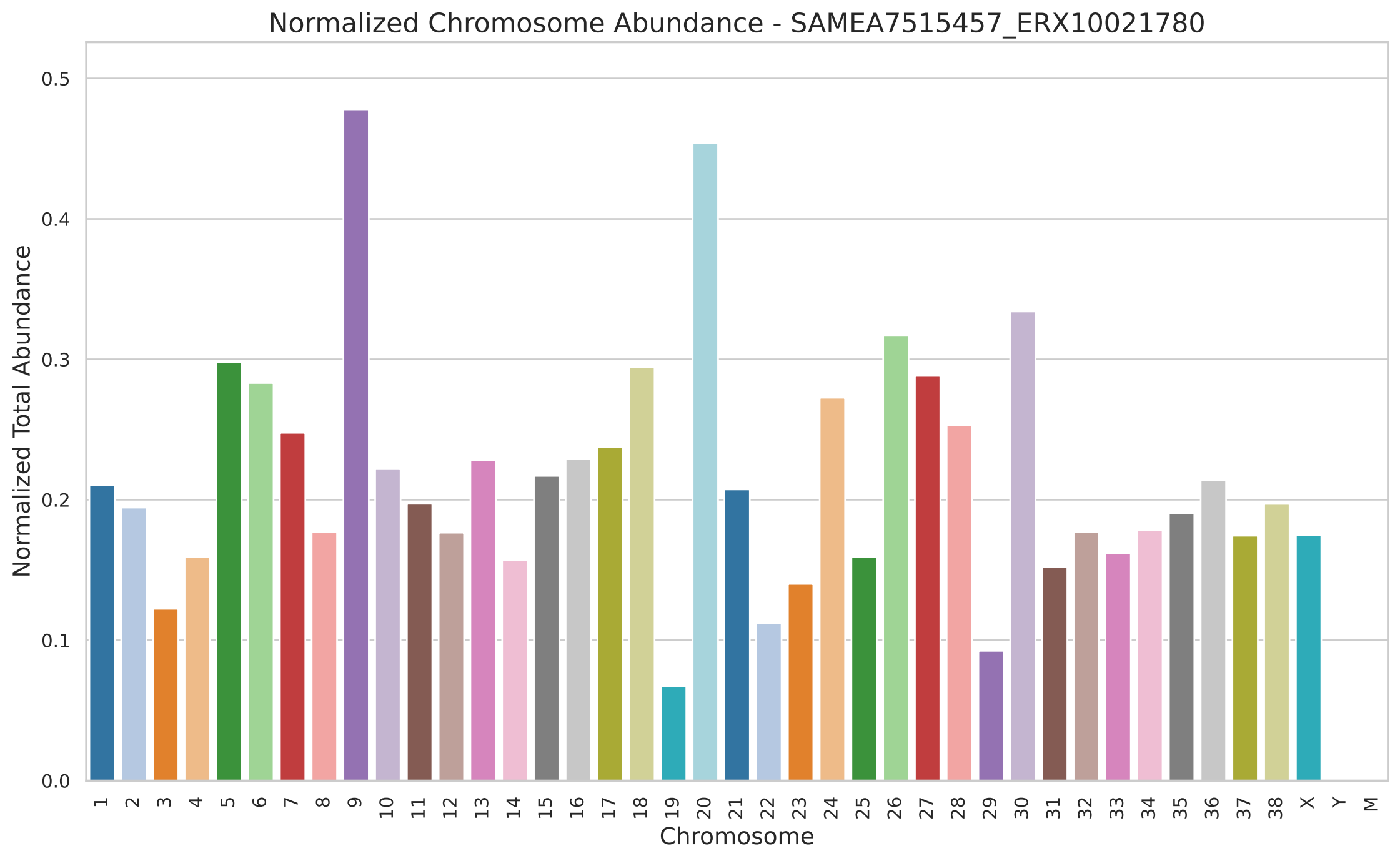

Normalized Chromosome Abundance - SAMEA7515197_ERX10021746
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

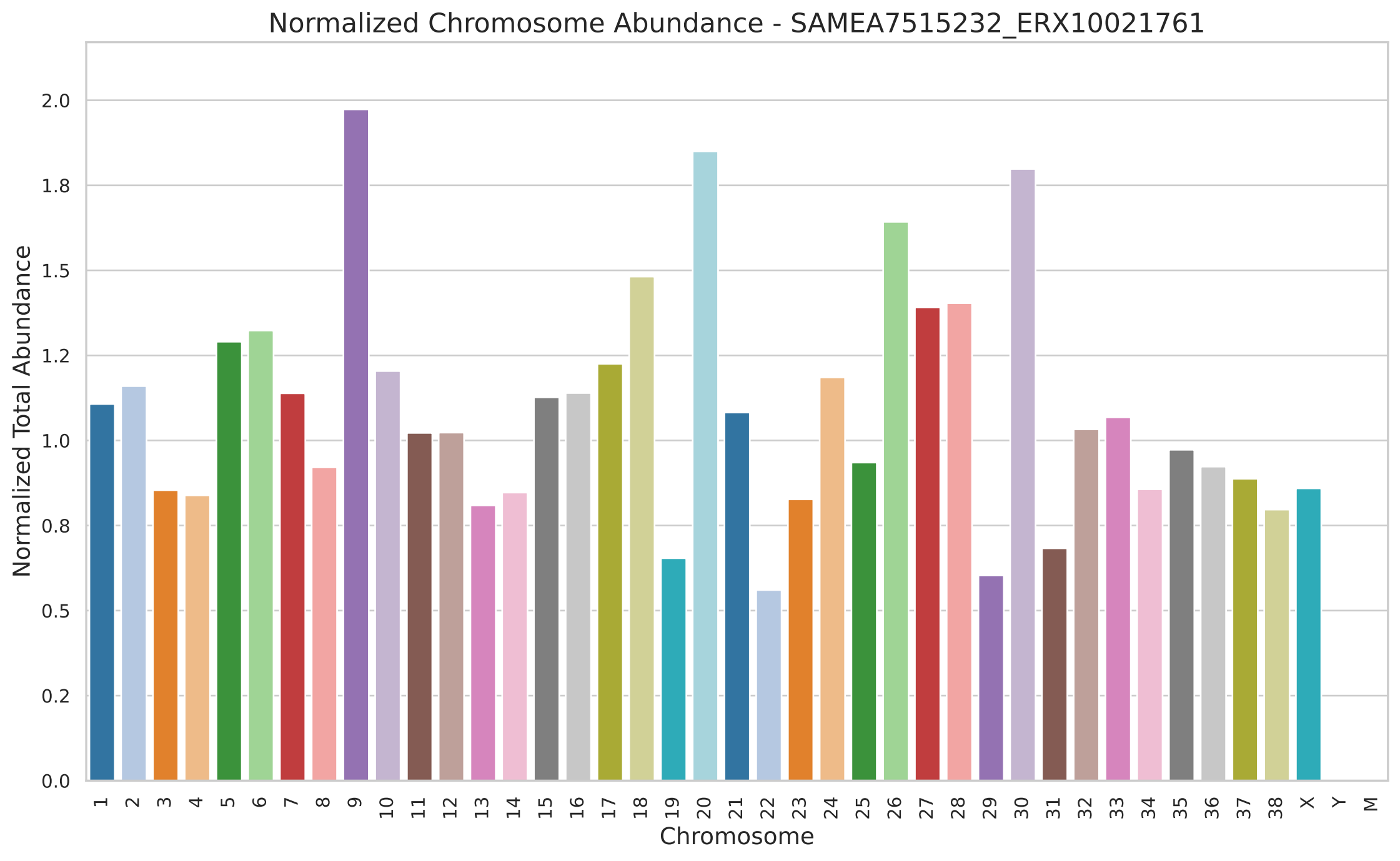

Normalized Chromosome Abundance - SAMEA7515211_ERX10021753
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

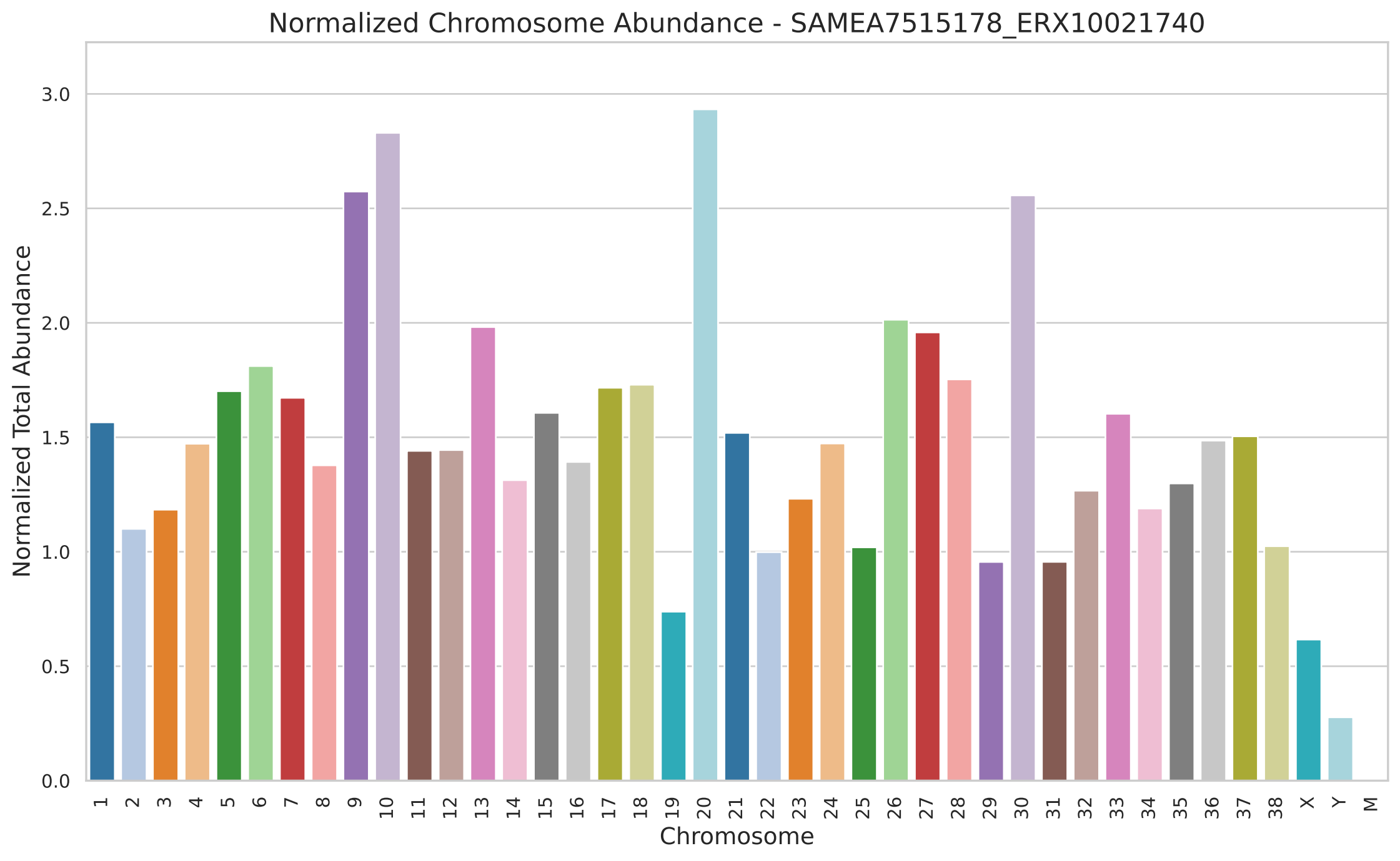

Normalized Chromosome Abundance - SAMEA7515215_ERX10021754
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

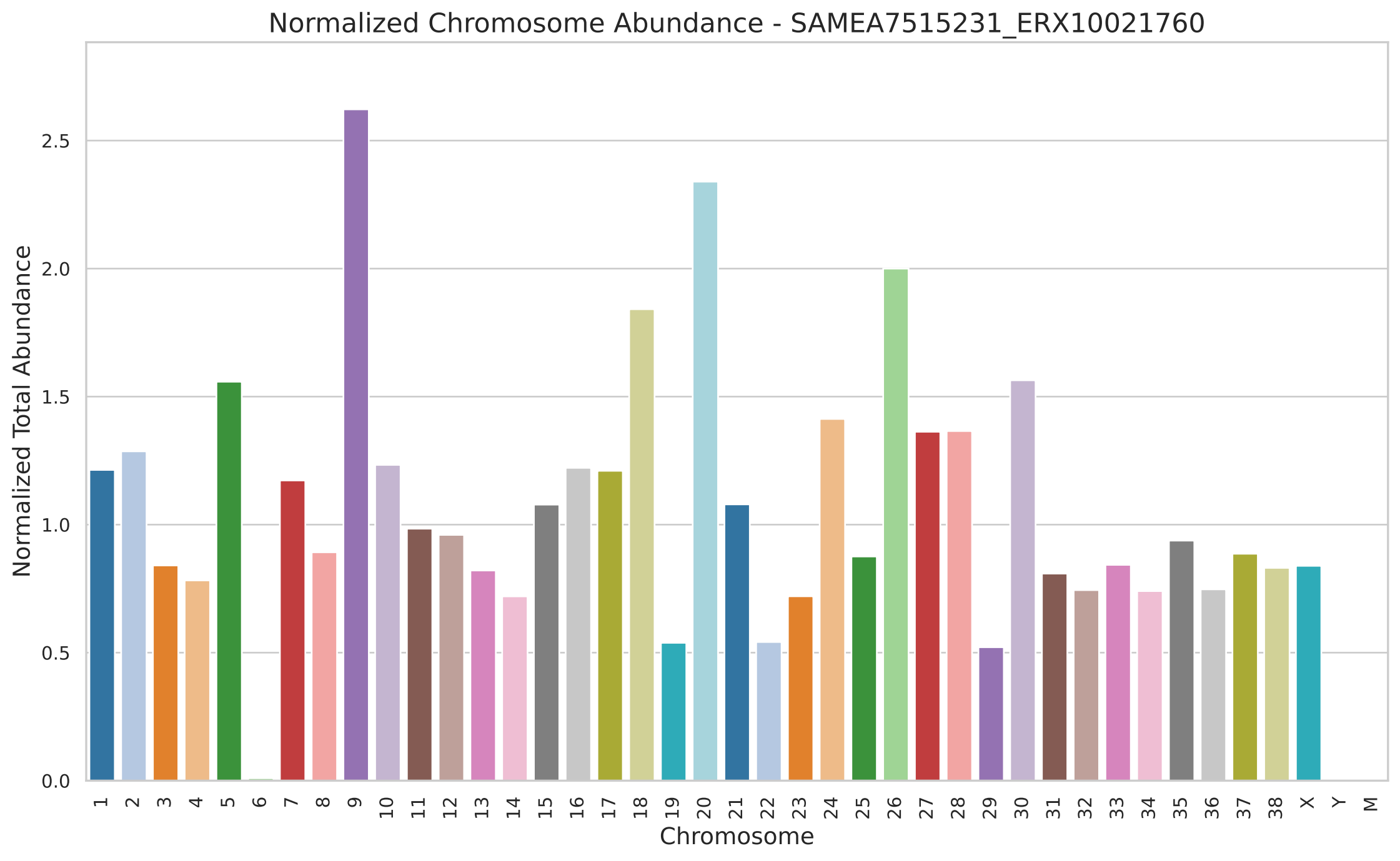

Normalized Chromosome Abundance - SAMEA7515479_ERX10021771
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

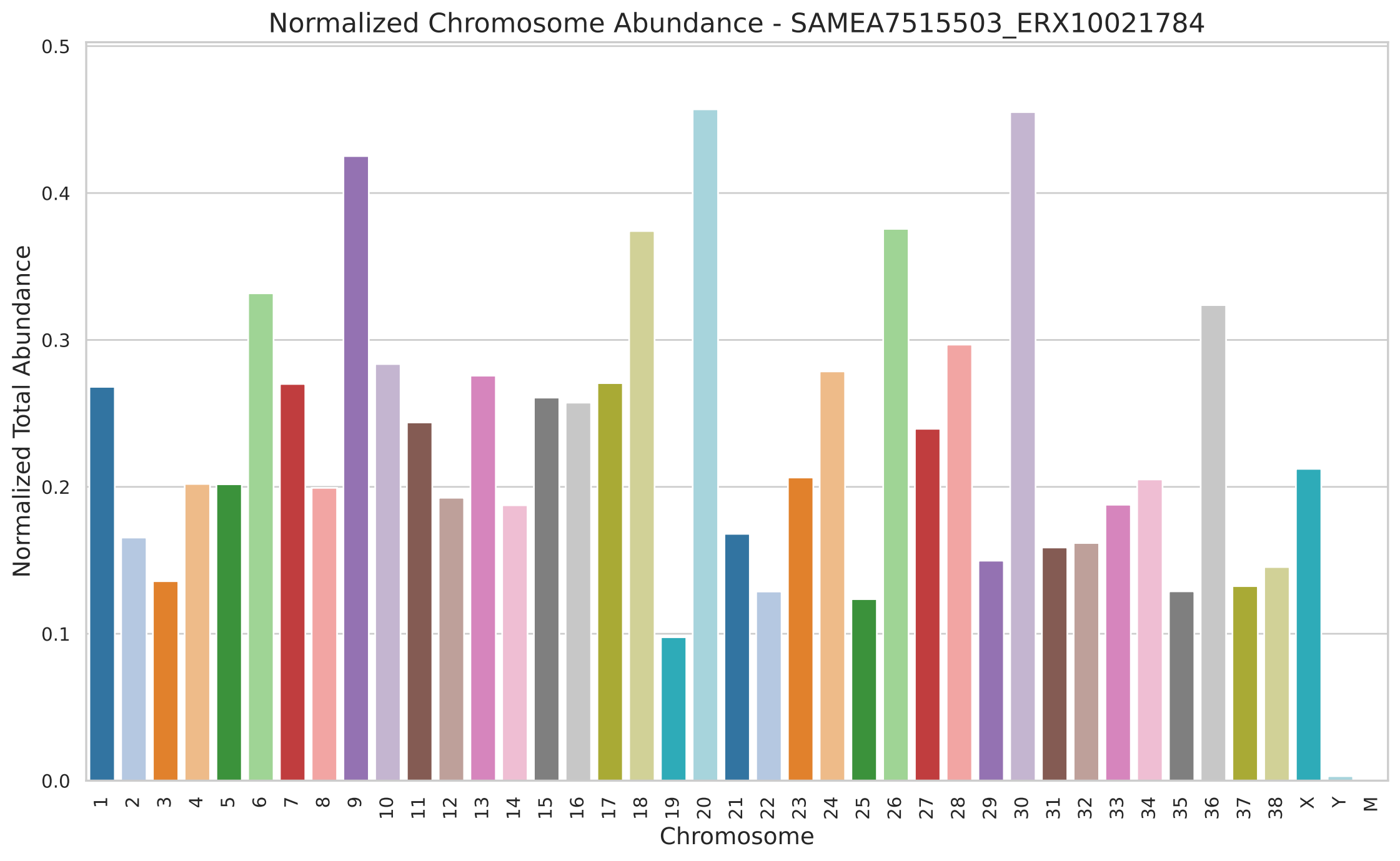

Normalized Chromosome Abundance - SAMEA7515158_ERX10021734
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

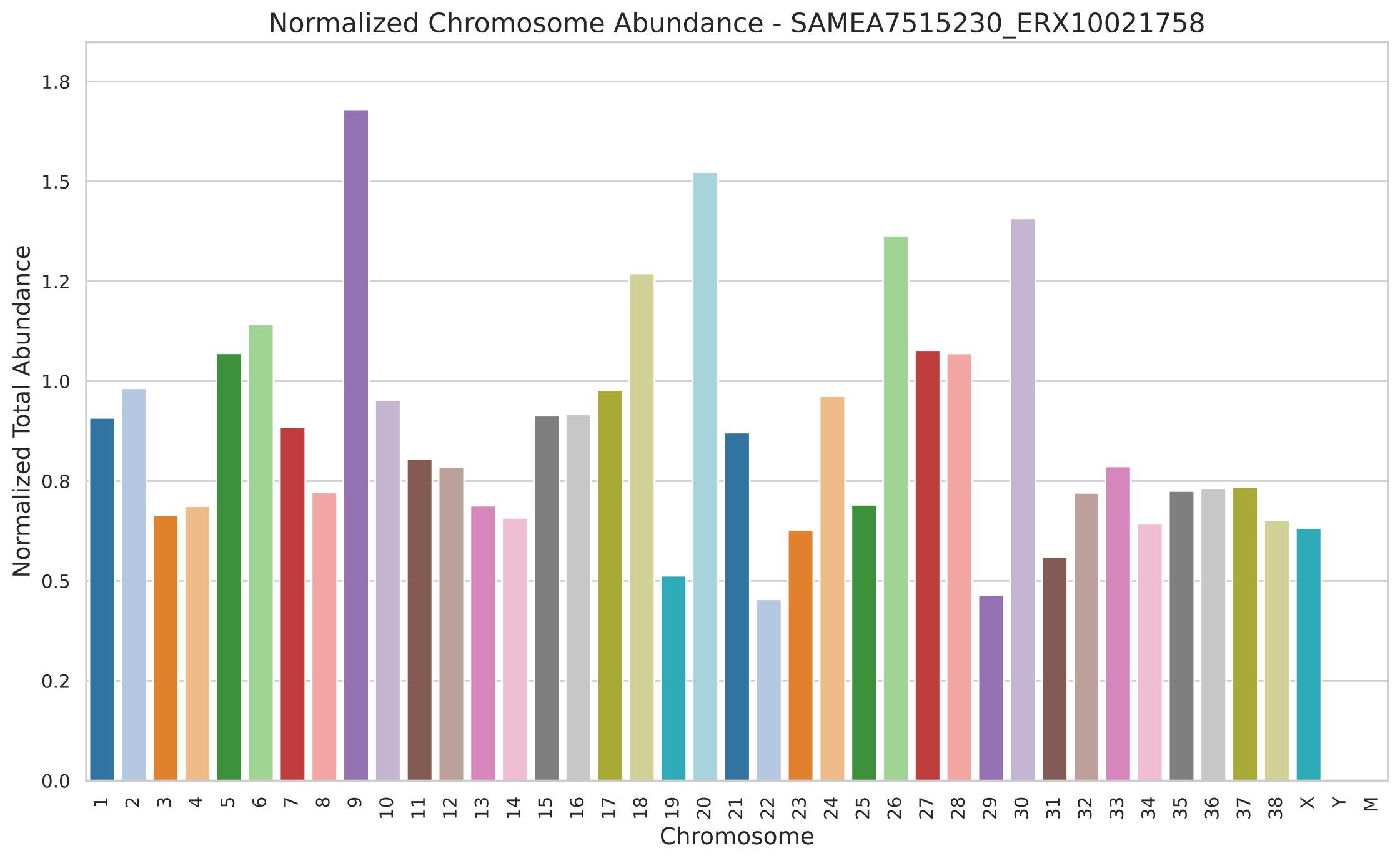

Normalized Chromosome Abundance - SAMEA7515457_ERX10021780
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

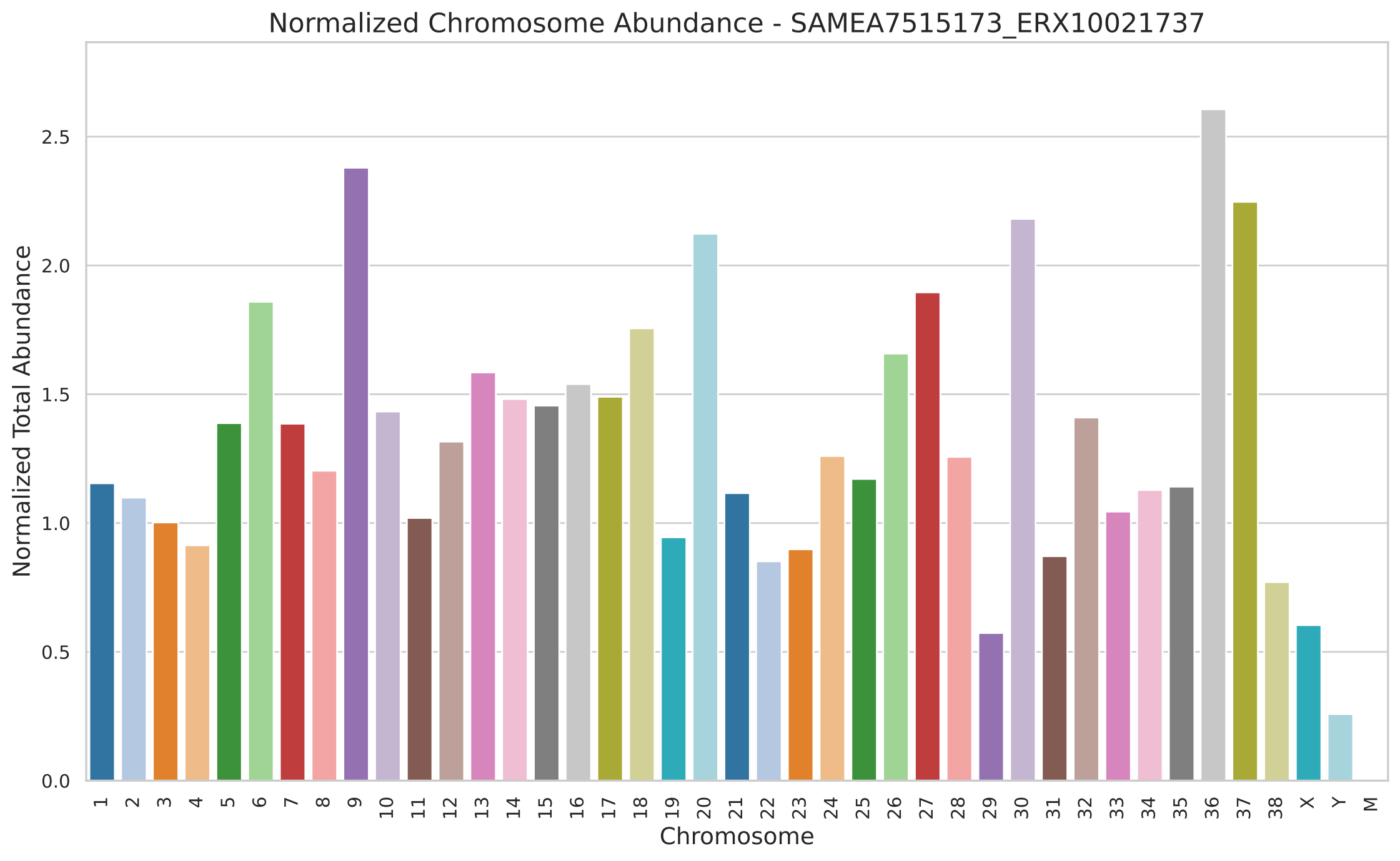

Normalized Chromosome Abundance - SAMEA7515232_ERX10021761
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

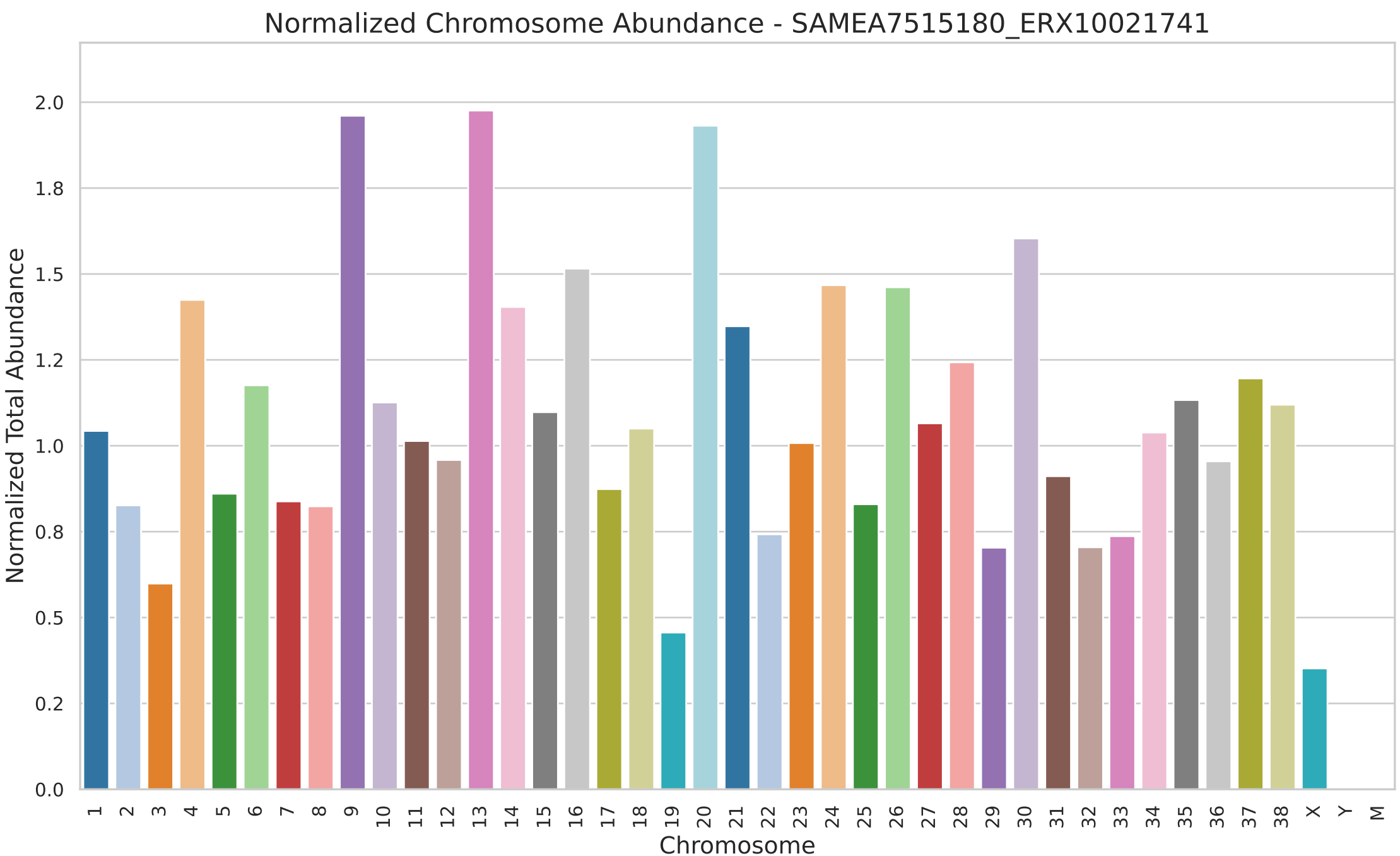

Normalized Chromosome Abundance - SAMEA7515178_ERX10021740
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

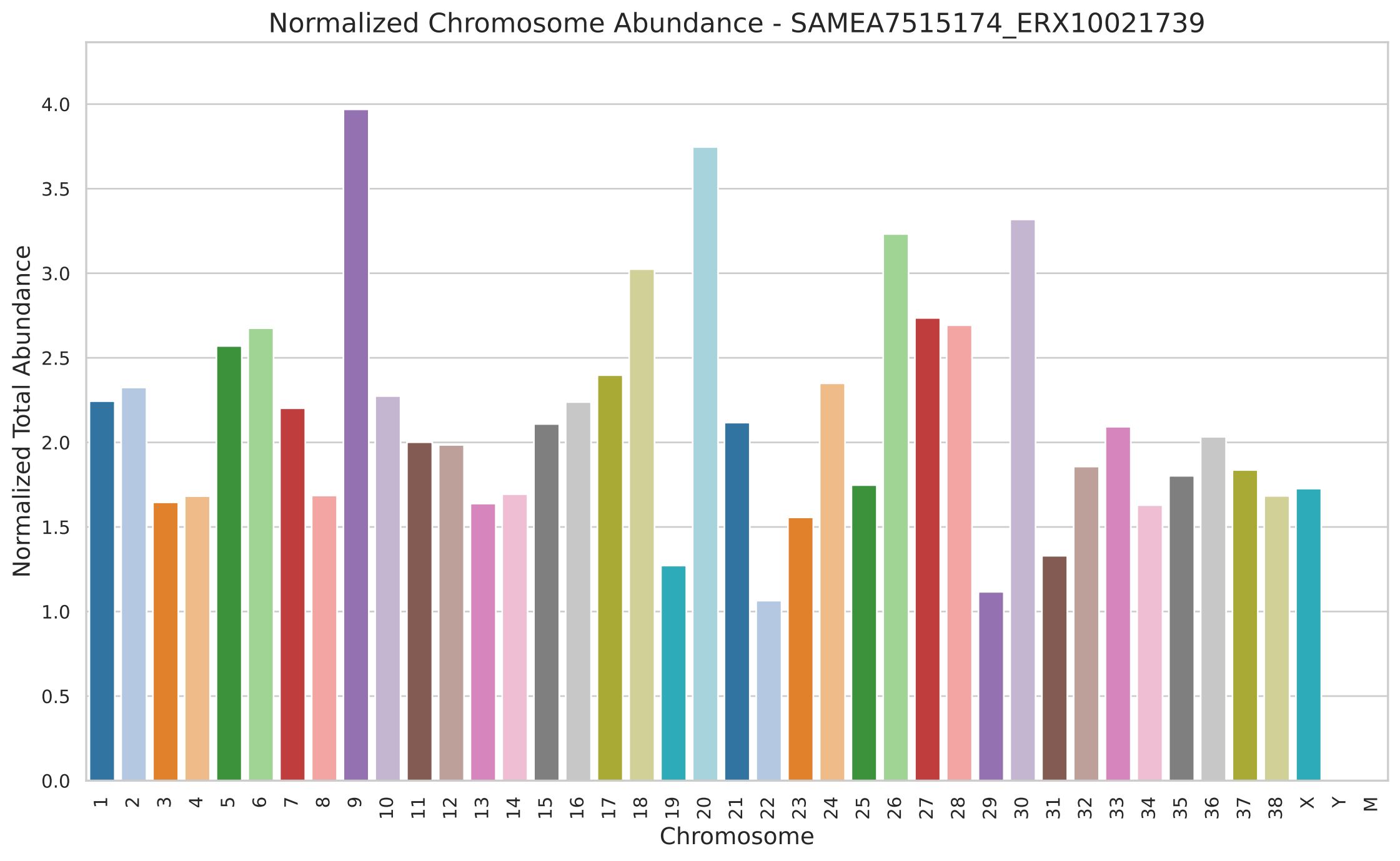

Normalized Chromosome Abundance - SAMEA7515231_ERX10021760
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

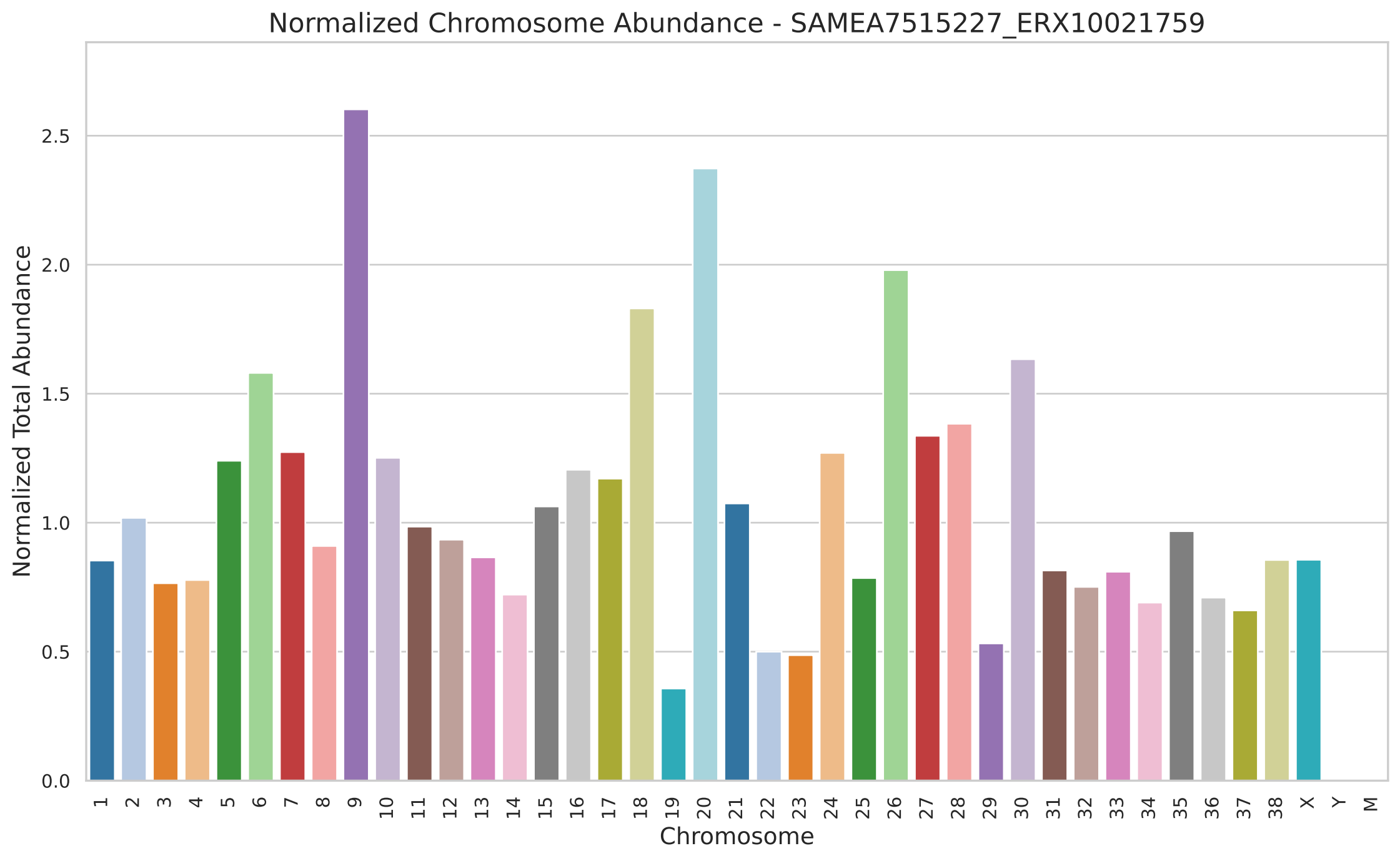

Normalized Chromosome Abundance - SAMEA7515503_ERX10021784
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

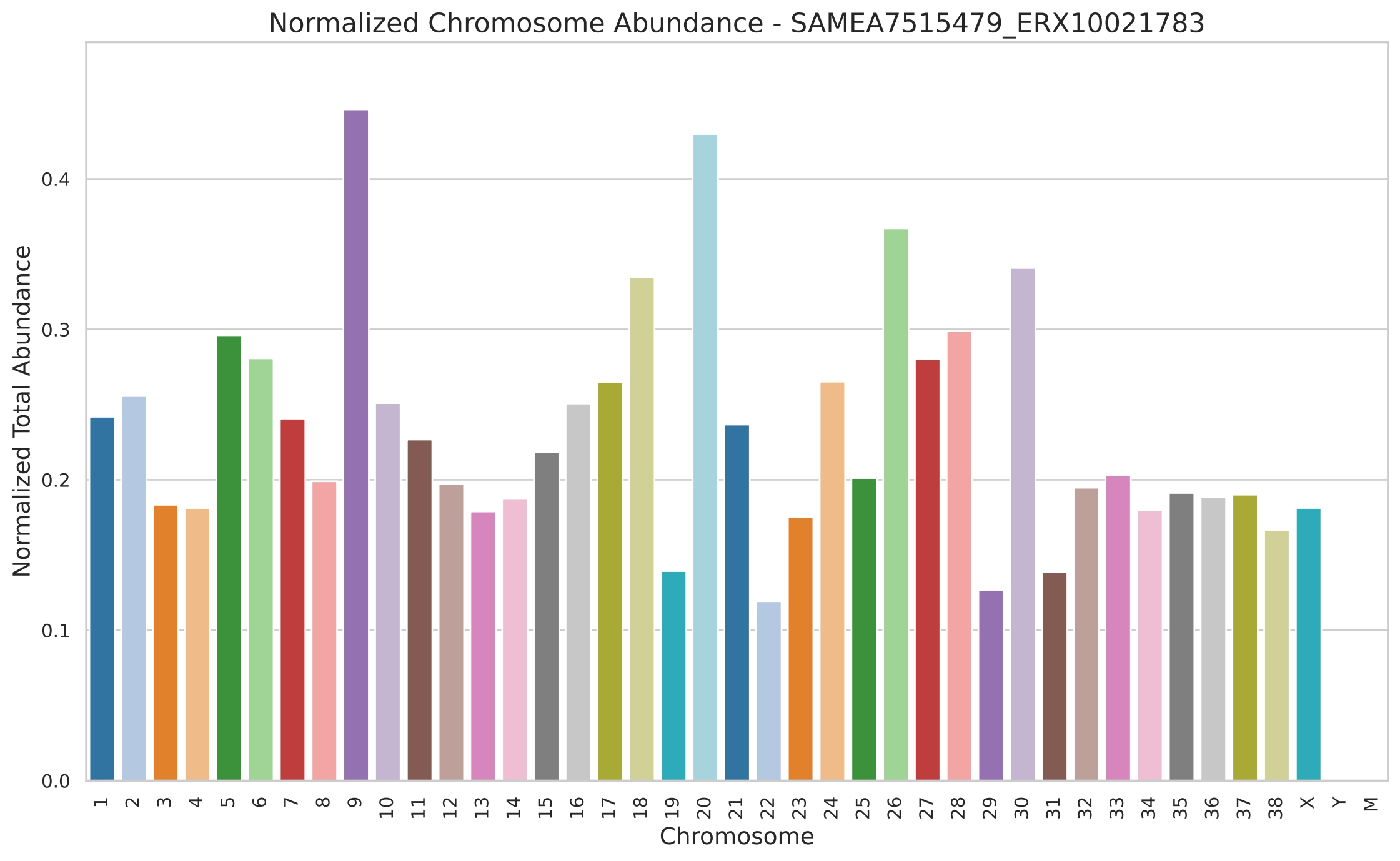

Normalized Chromosome Abundance - SAMEA7515230_ERX10021758
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

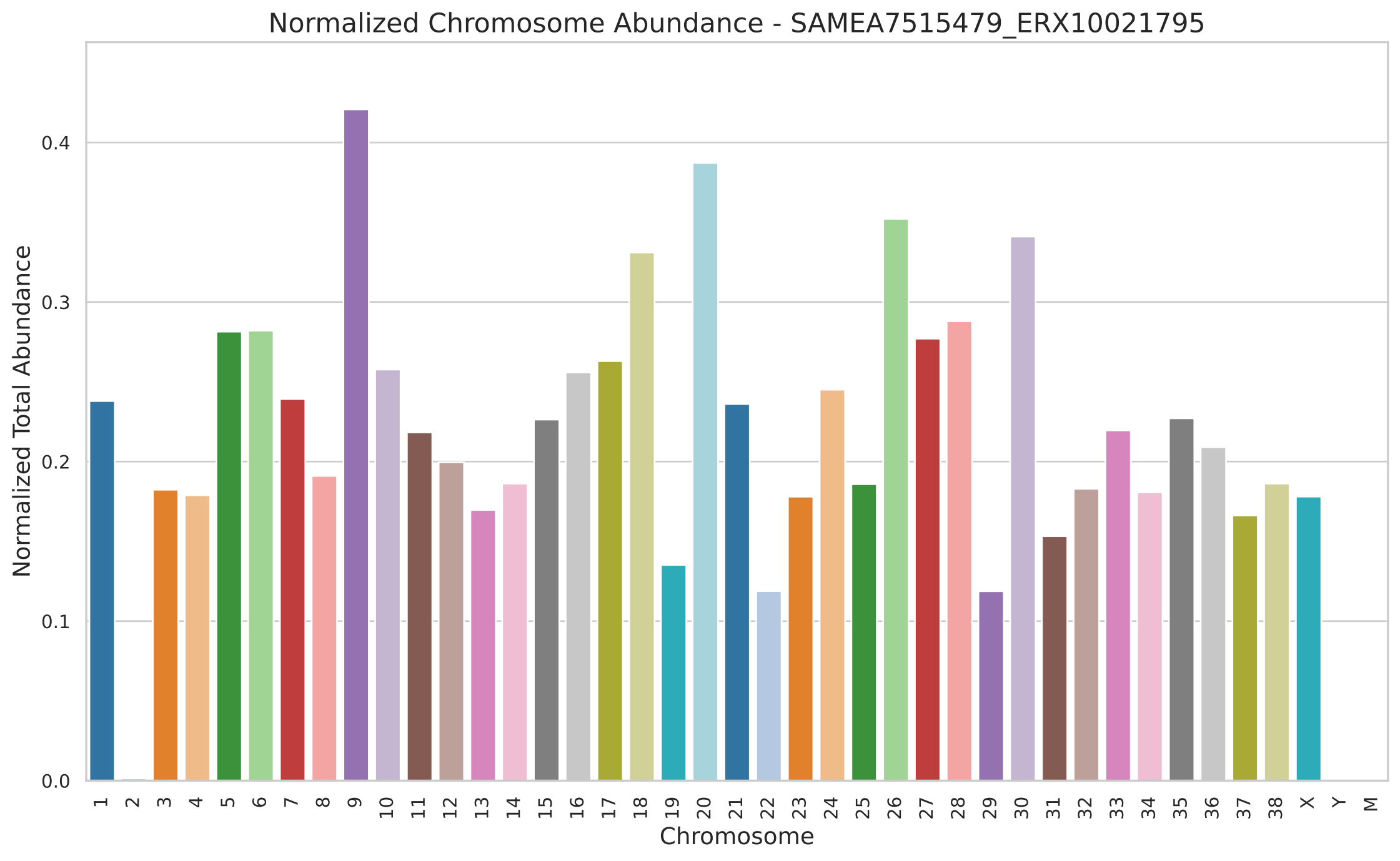

Normalized Chromosome Abundance - SAMEA7515173_ERX10021737
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

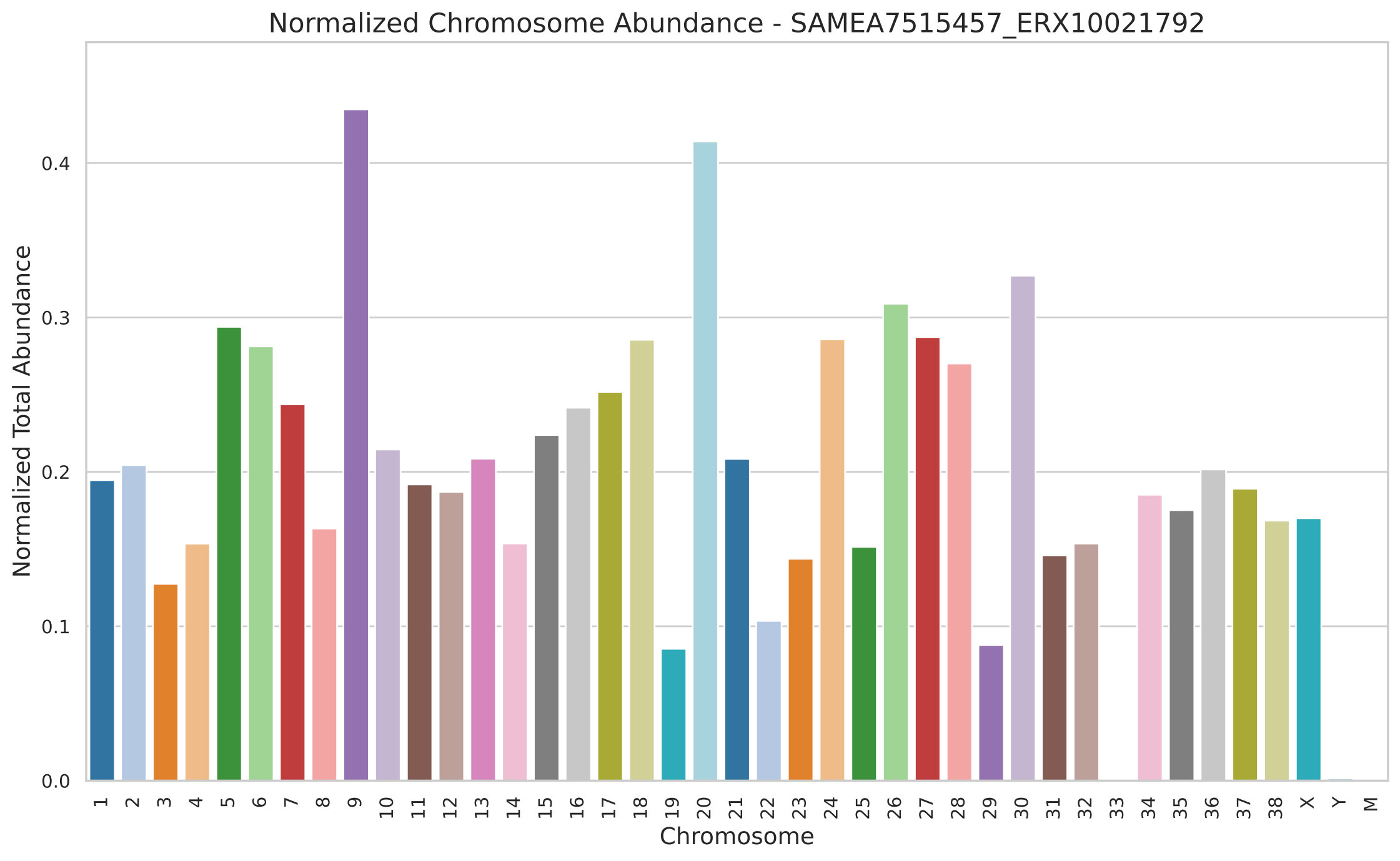

Normalized Chromosome Abundance - SAMEA7515180_ERX10021741
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

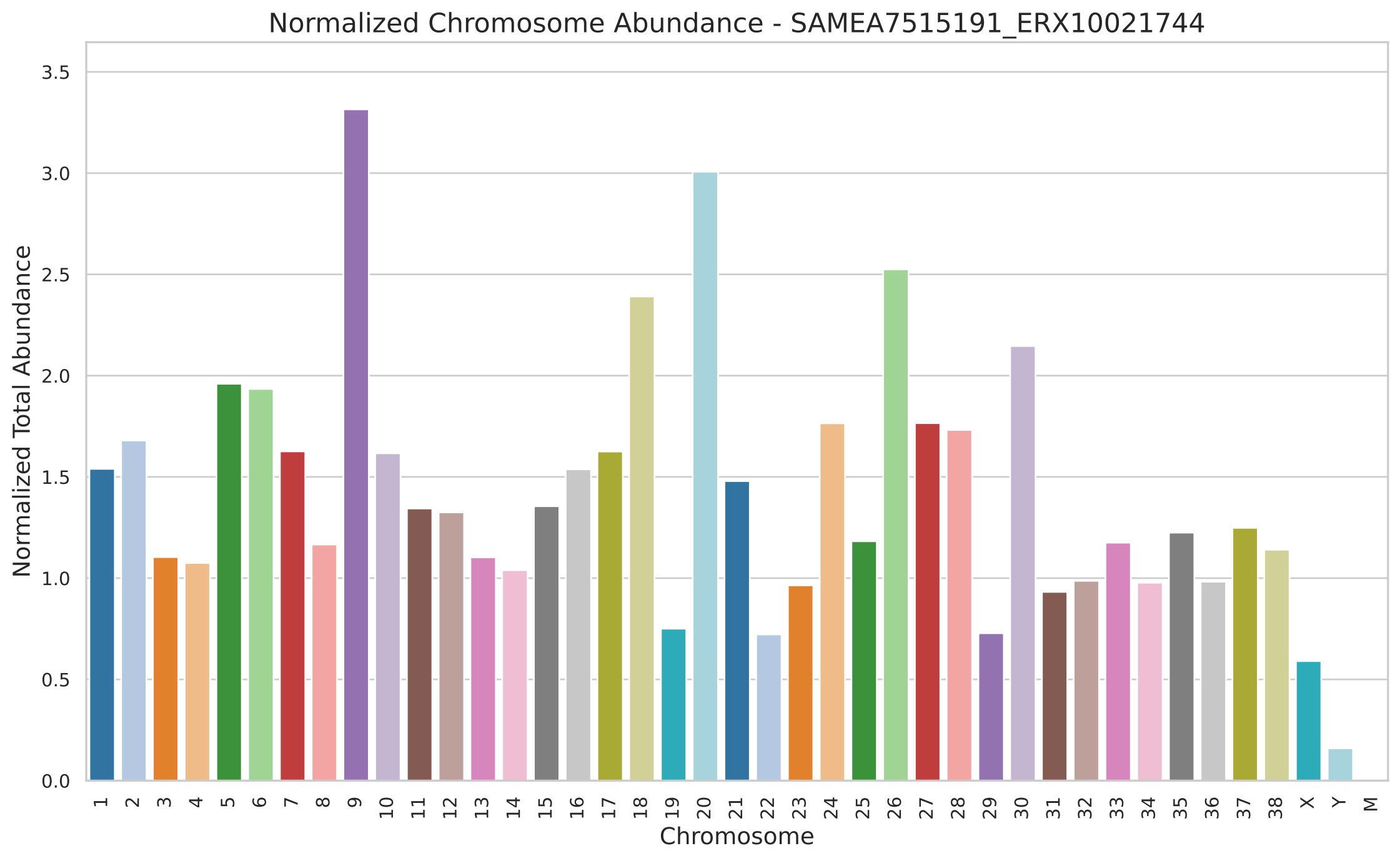

Normalized Chromosome Abundance - SAMEA7515174_ERX10021739
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

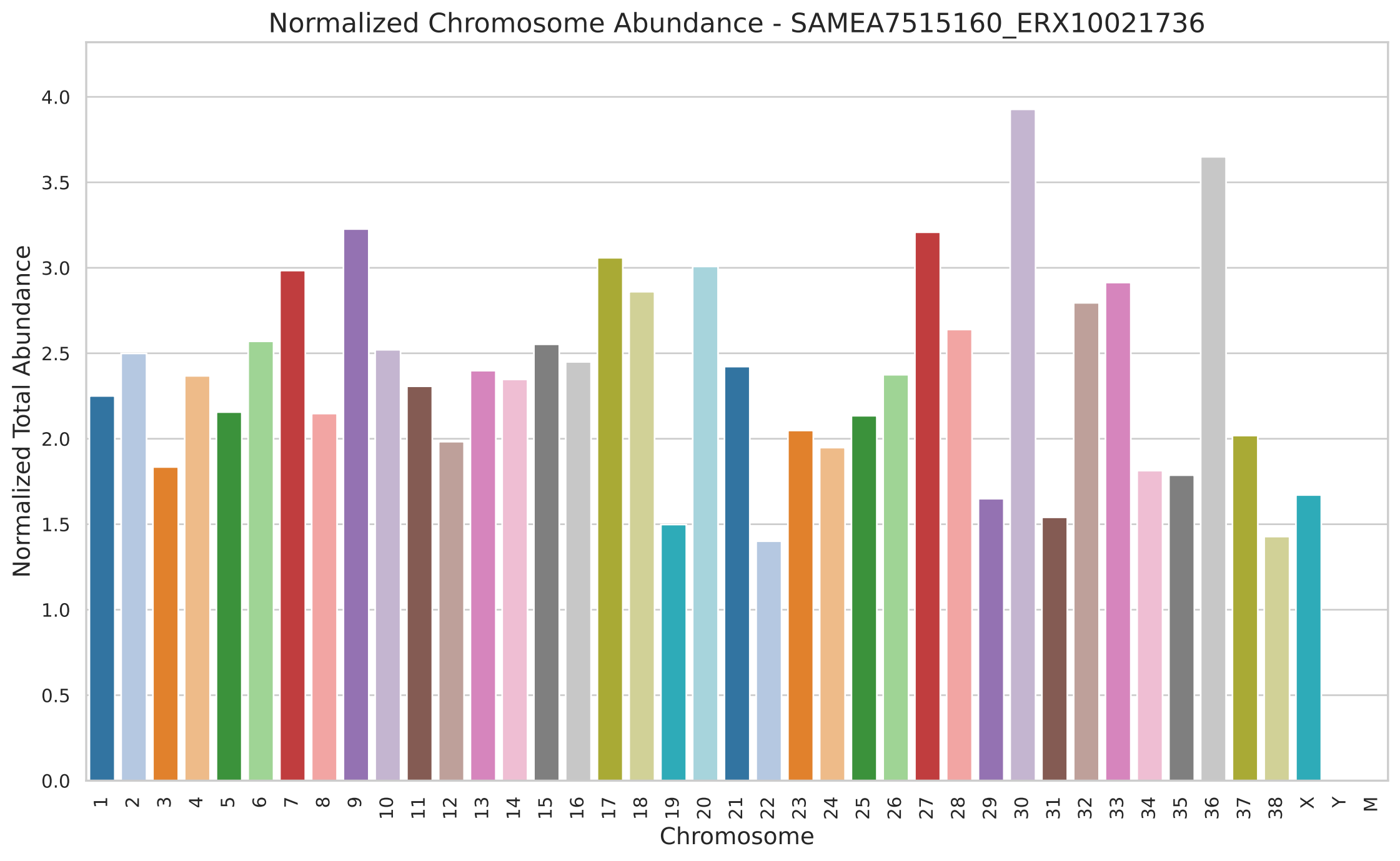

Normalized Chromosome Abundance - SAMEA7515227_ERX10021759
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

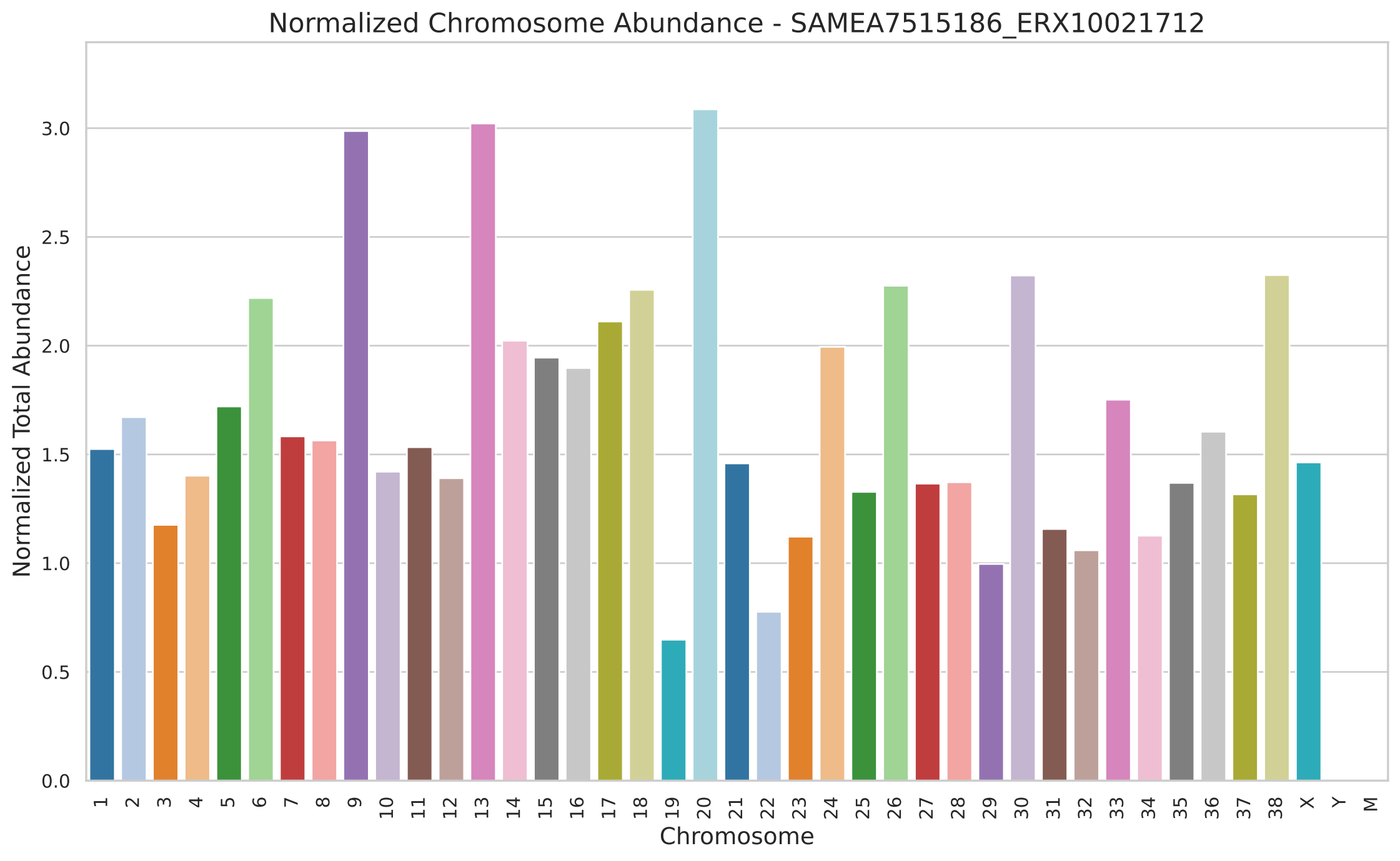

Normalized Chromosome Abundance - SAMEA7515479_ERX10021783
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

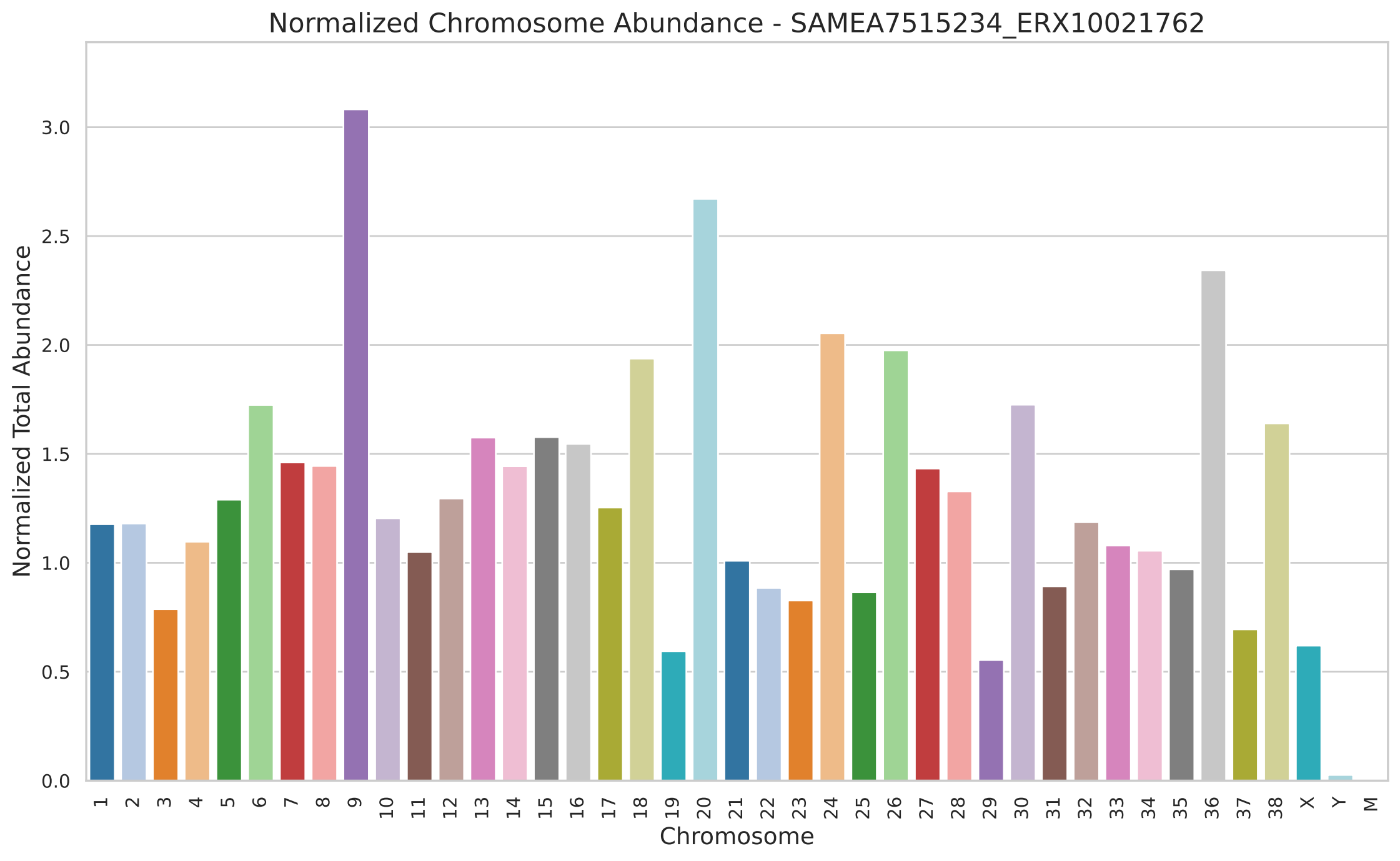

Normalized Chromosome Abundance - SAMEA7515479_ERX10021795
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

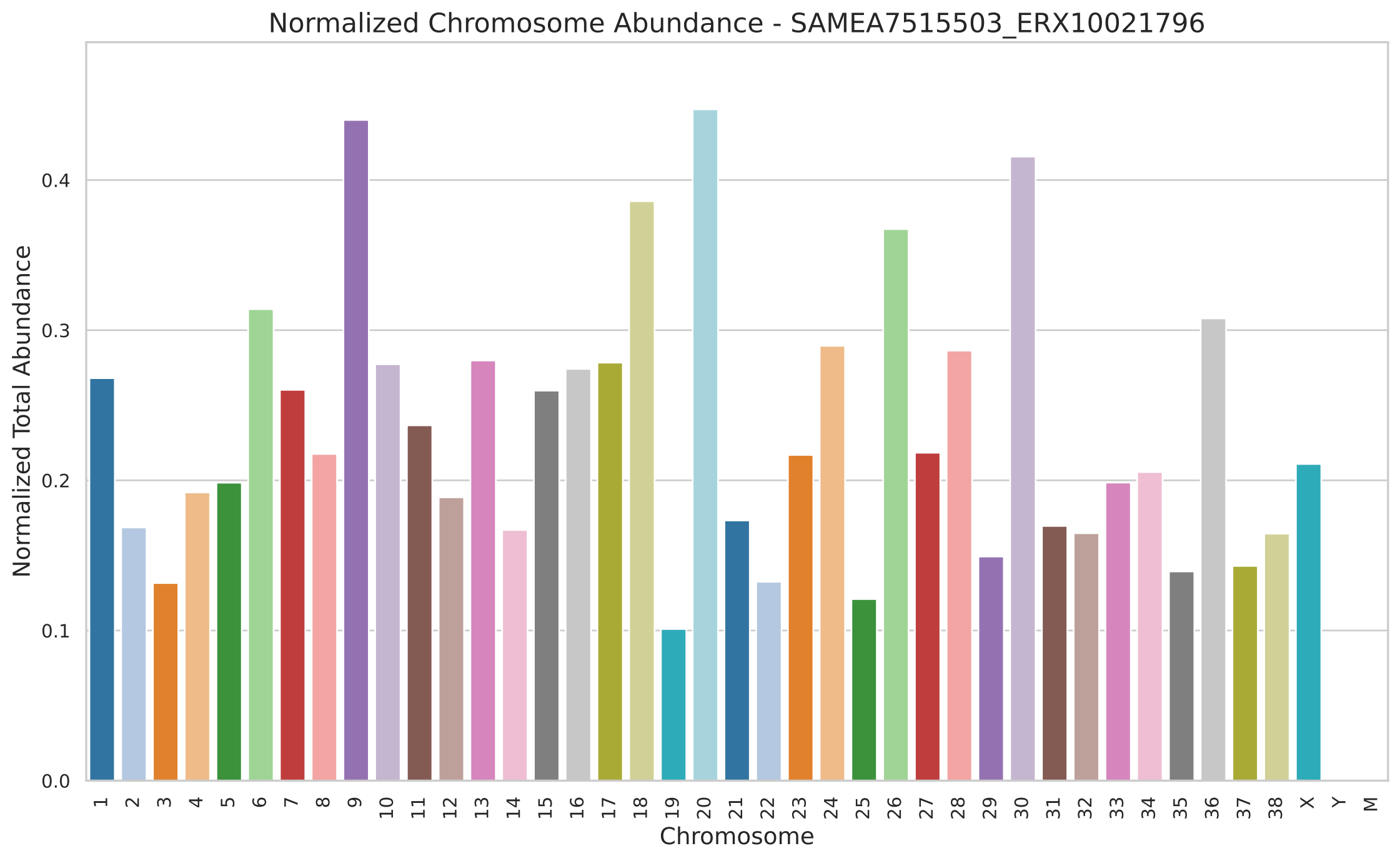

Normalized Chromosome Abundance - SAMEA7515457_ERX10021792
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

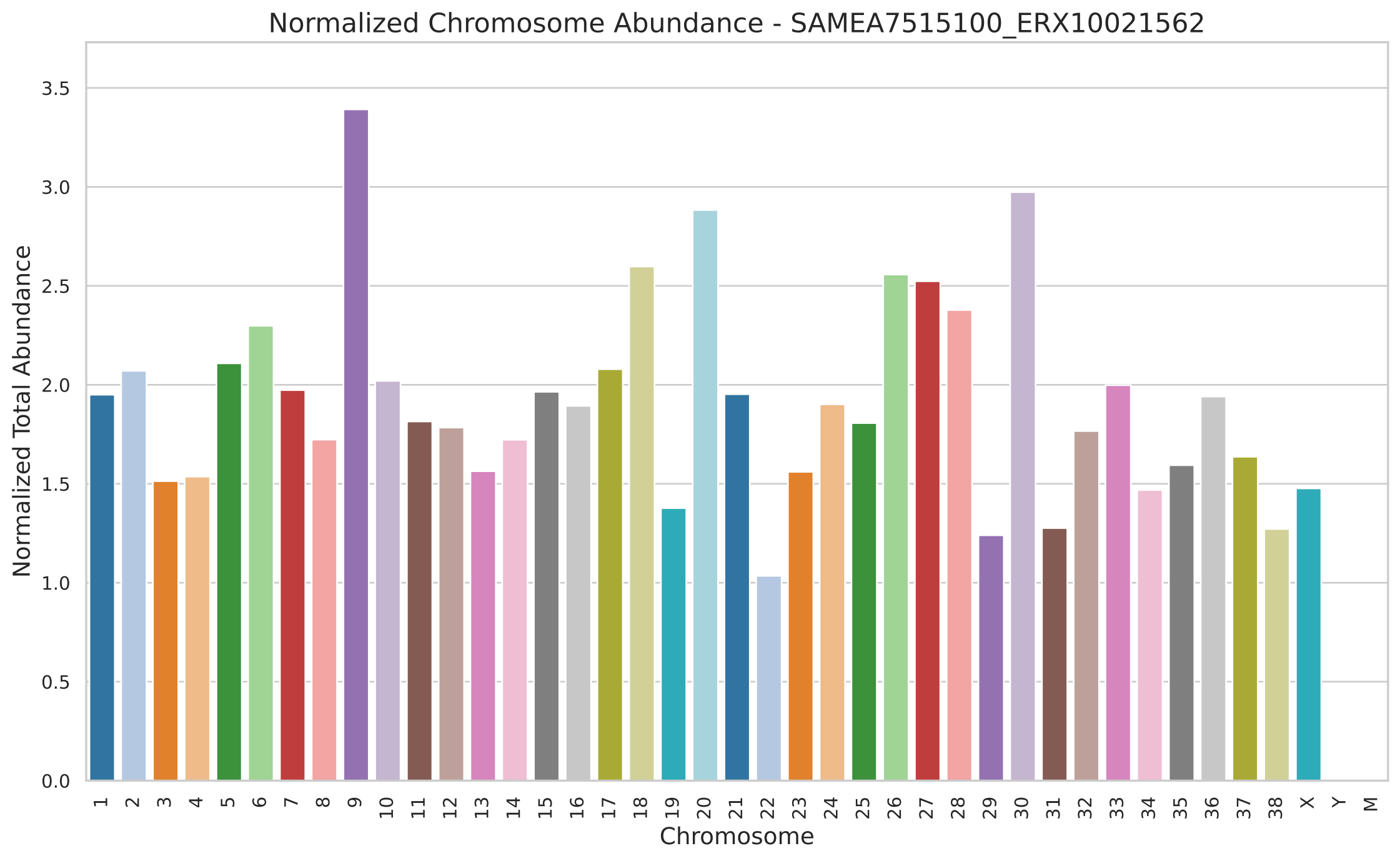

Normalized Chromosome Abundance - SAMEA7515191_ERX10021744
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

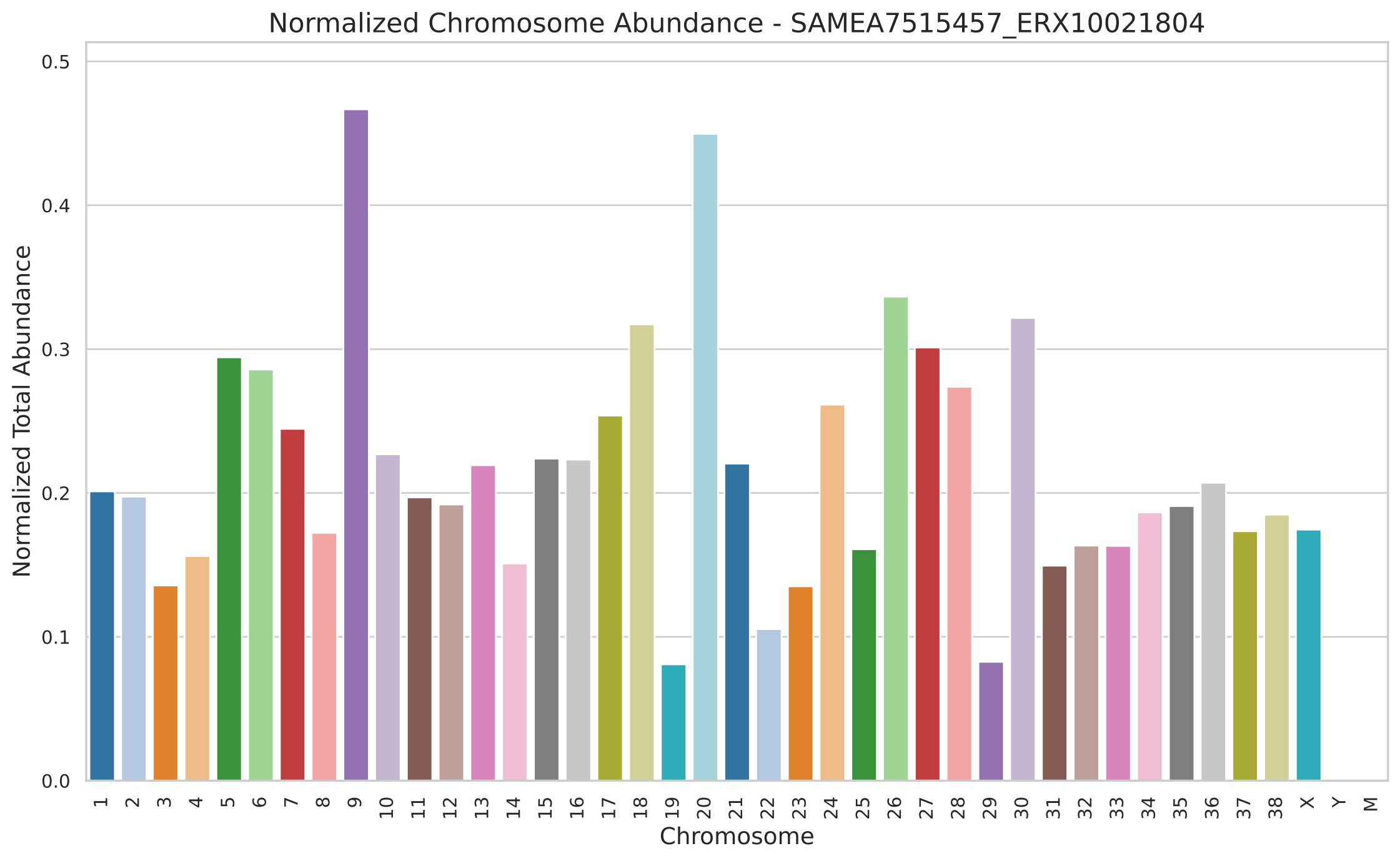

Normalized Chromosome Abundance - SAMEA7515160_ERX10021736
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

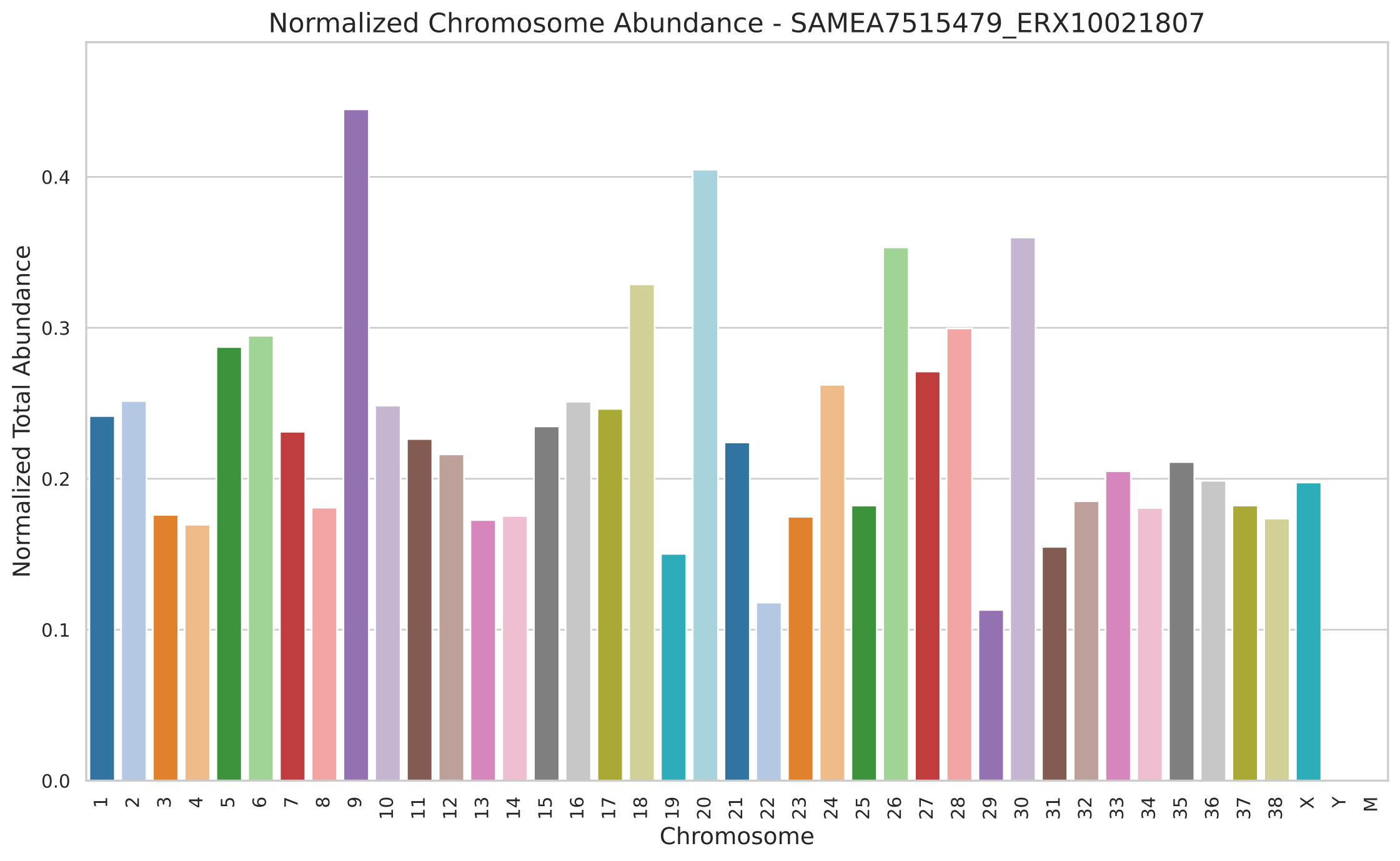

Normalized Chromosome Abundance - SAMEA7515186_ERX10021712
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

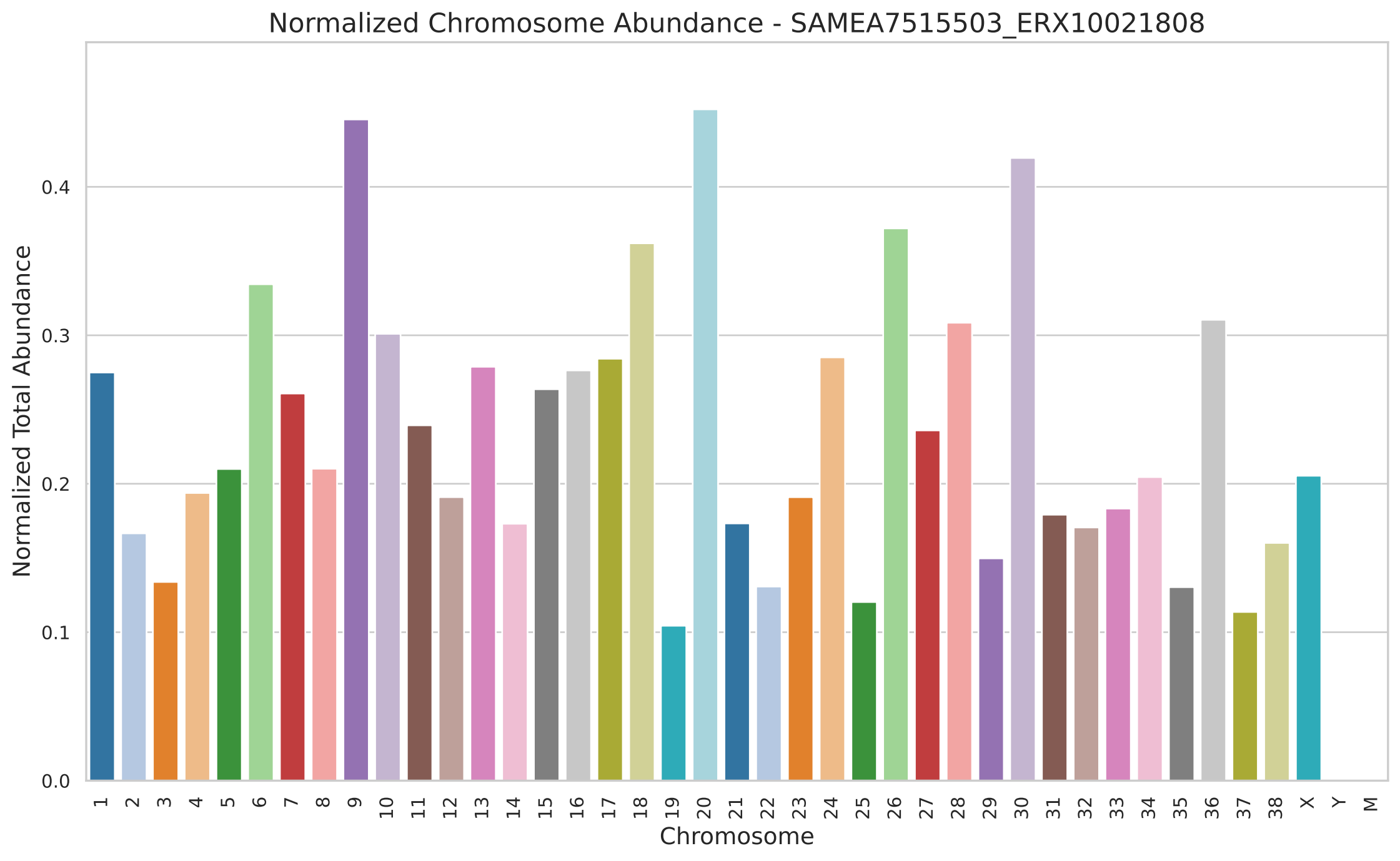

Normalized Chromosome Abundance - SAMEA7515234_ERX10021762
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

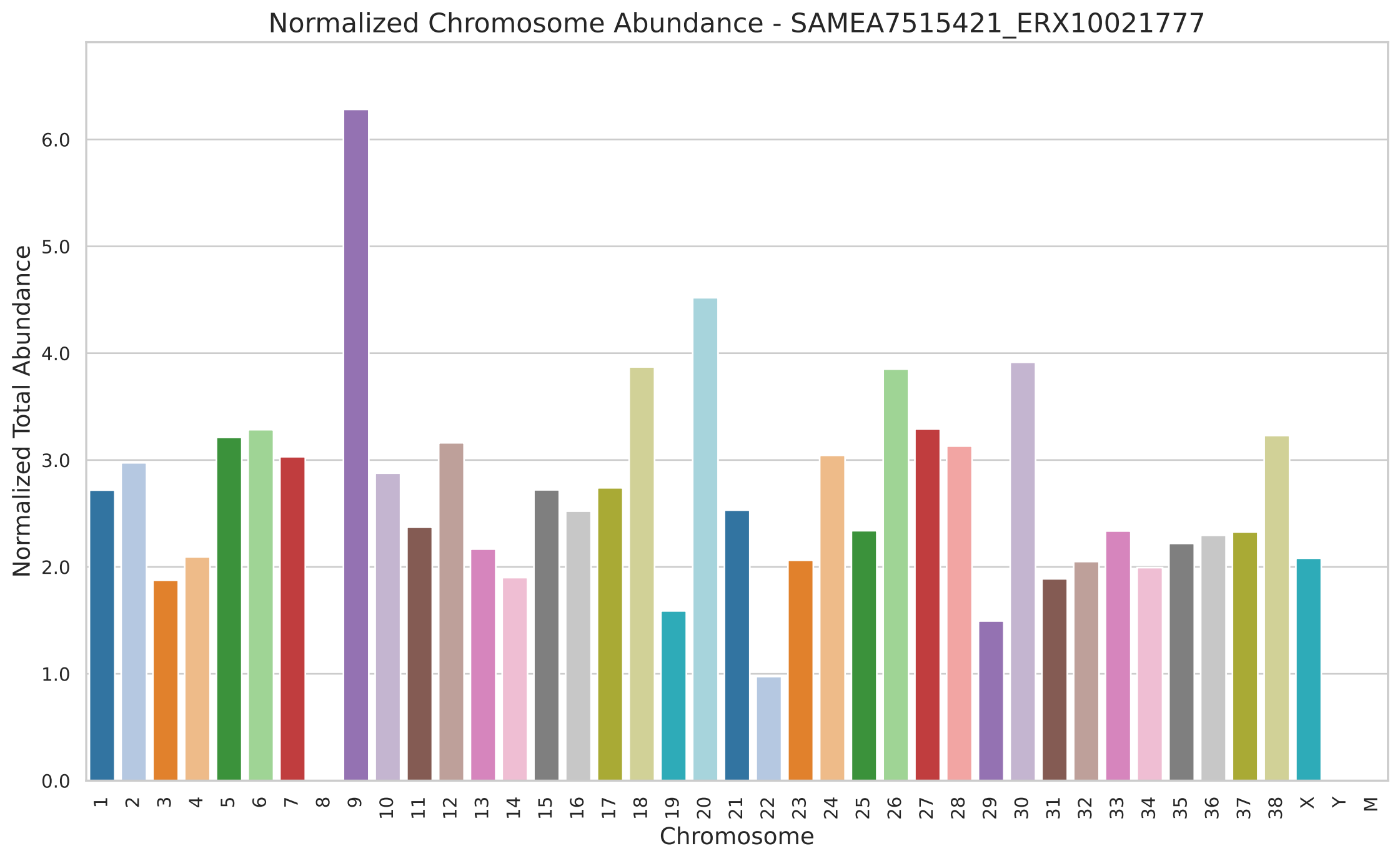

Normalized Chromosome Abundance - SAMEA7515503_ERX10021796
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

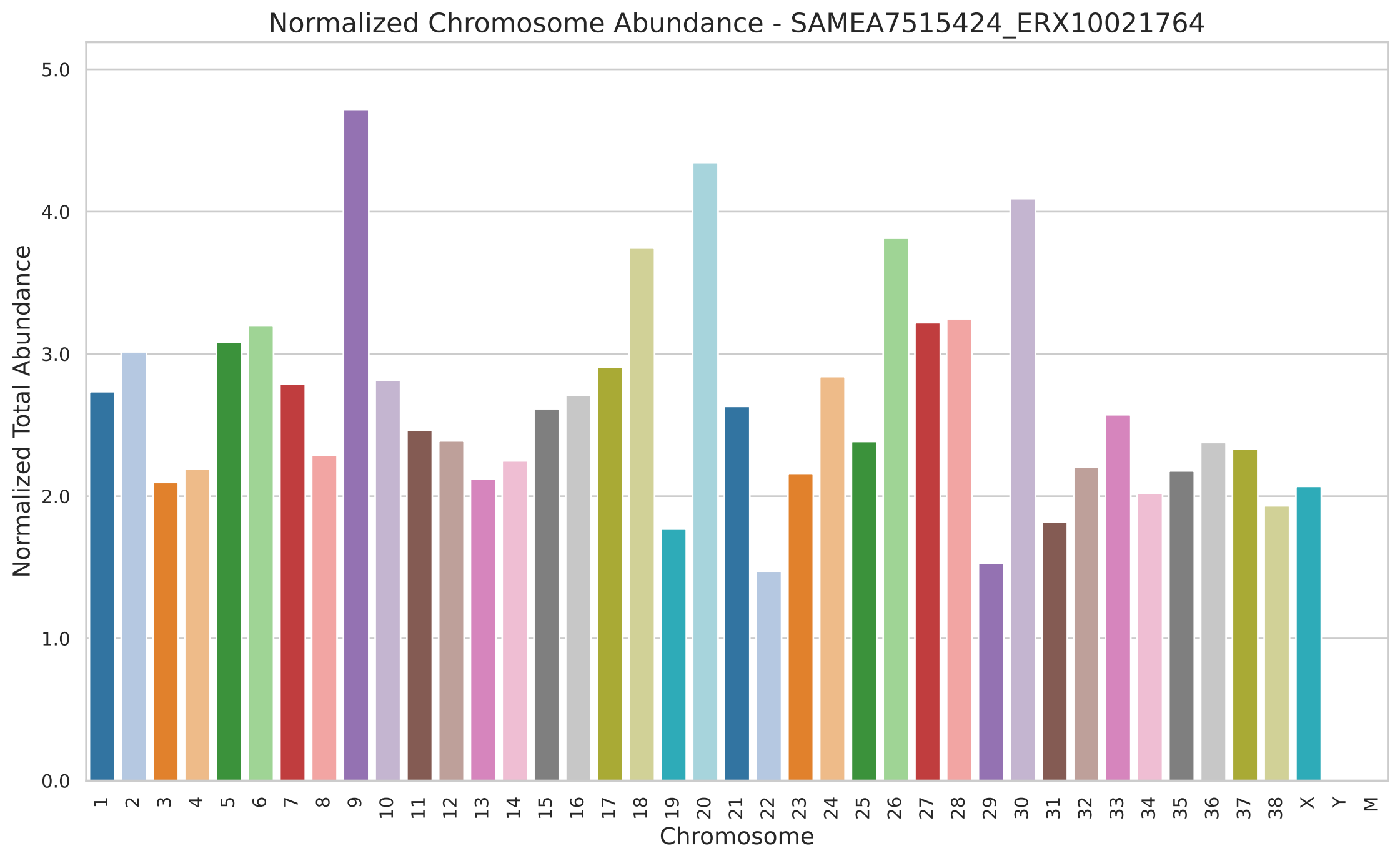

Normalized Chromosome Abundance - SAMEA7515100_ERX10021562
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

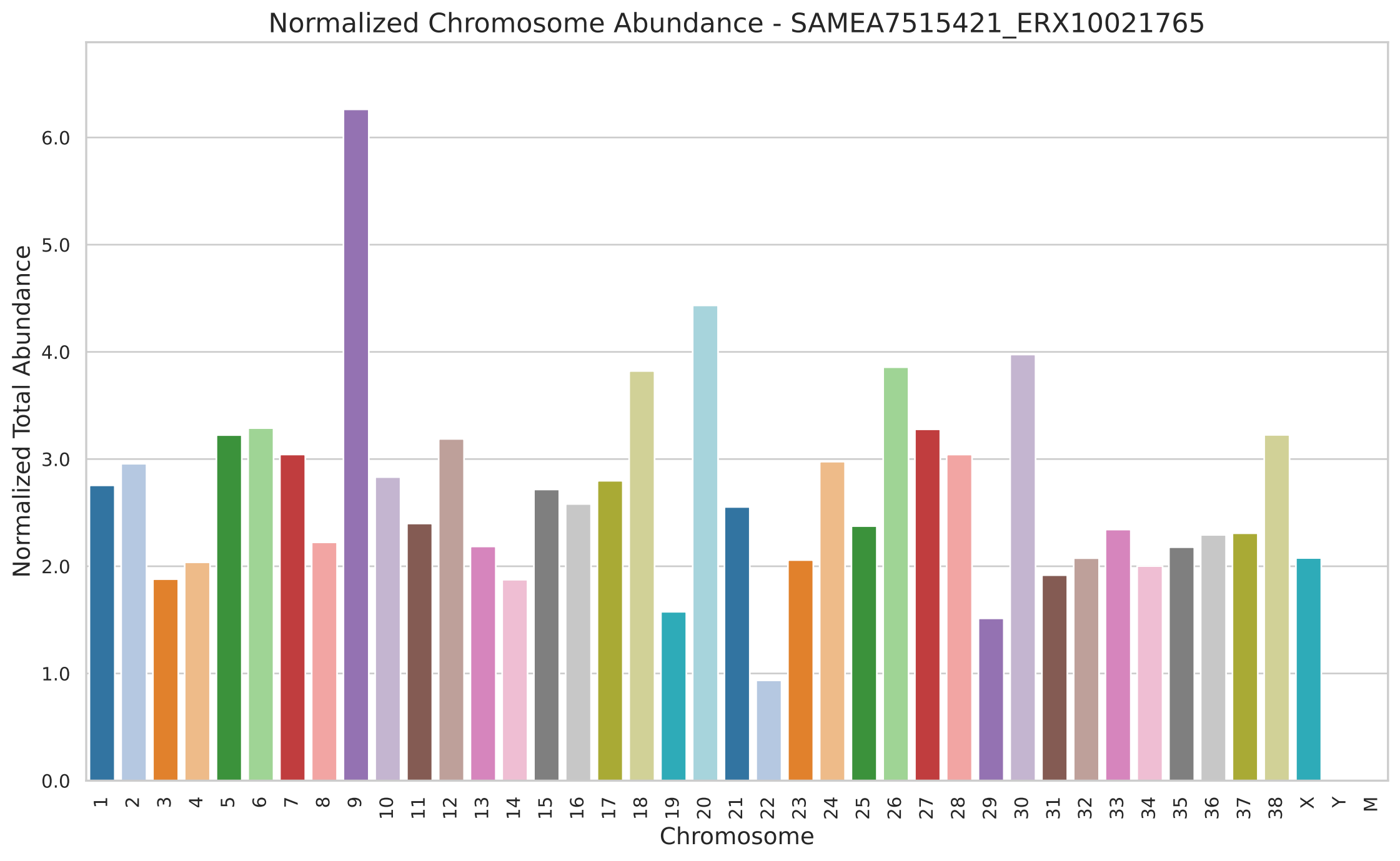

Normalized Chromosome Abundance - SAMEA7515457_ERX10021804
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

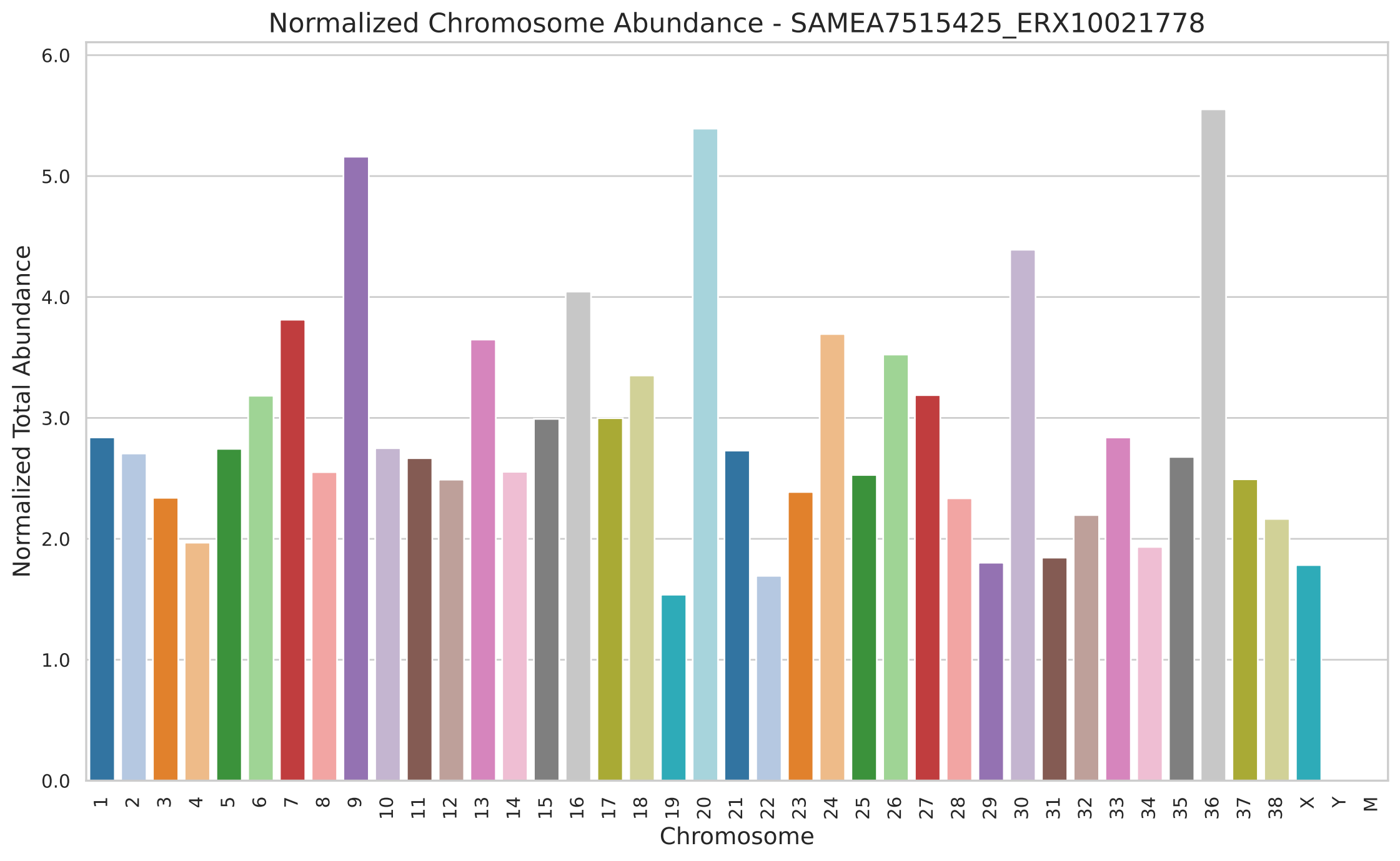

Normalized Chromosome Abundance - SAMEA7515479_ERX10021807
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

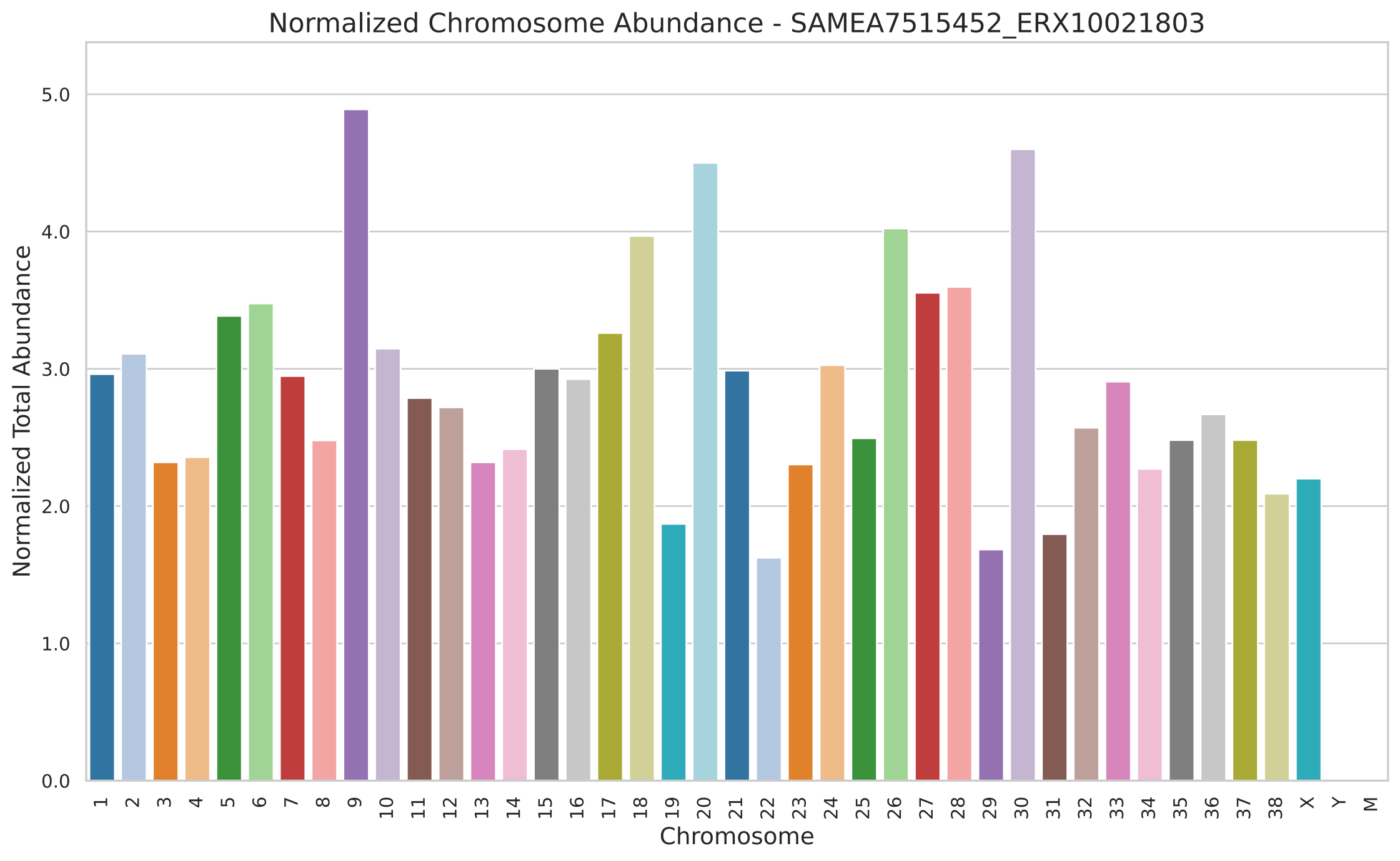

Normalized Chromosome Abundance - SAMEA7515503_ERX10021808
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

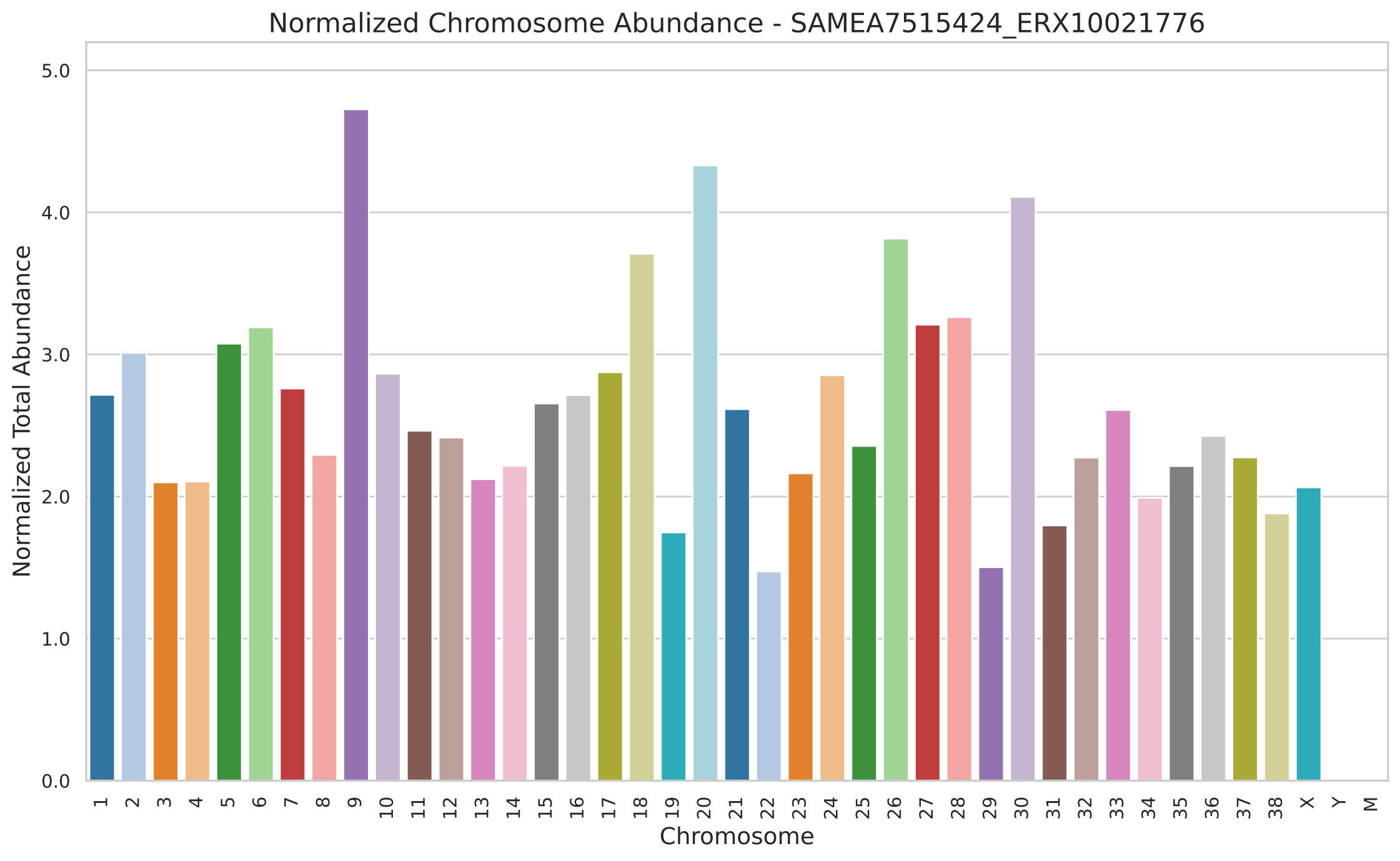

Normalized Chromosome Abundance - SAMEA7515421_ERX10021777
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

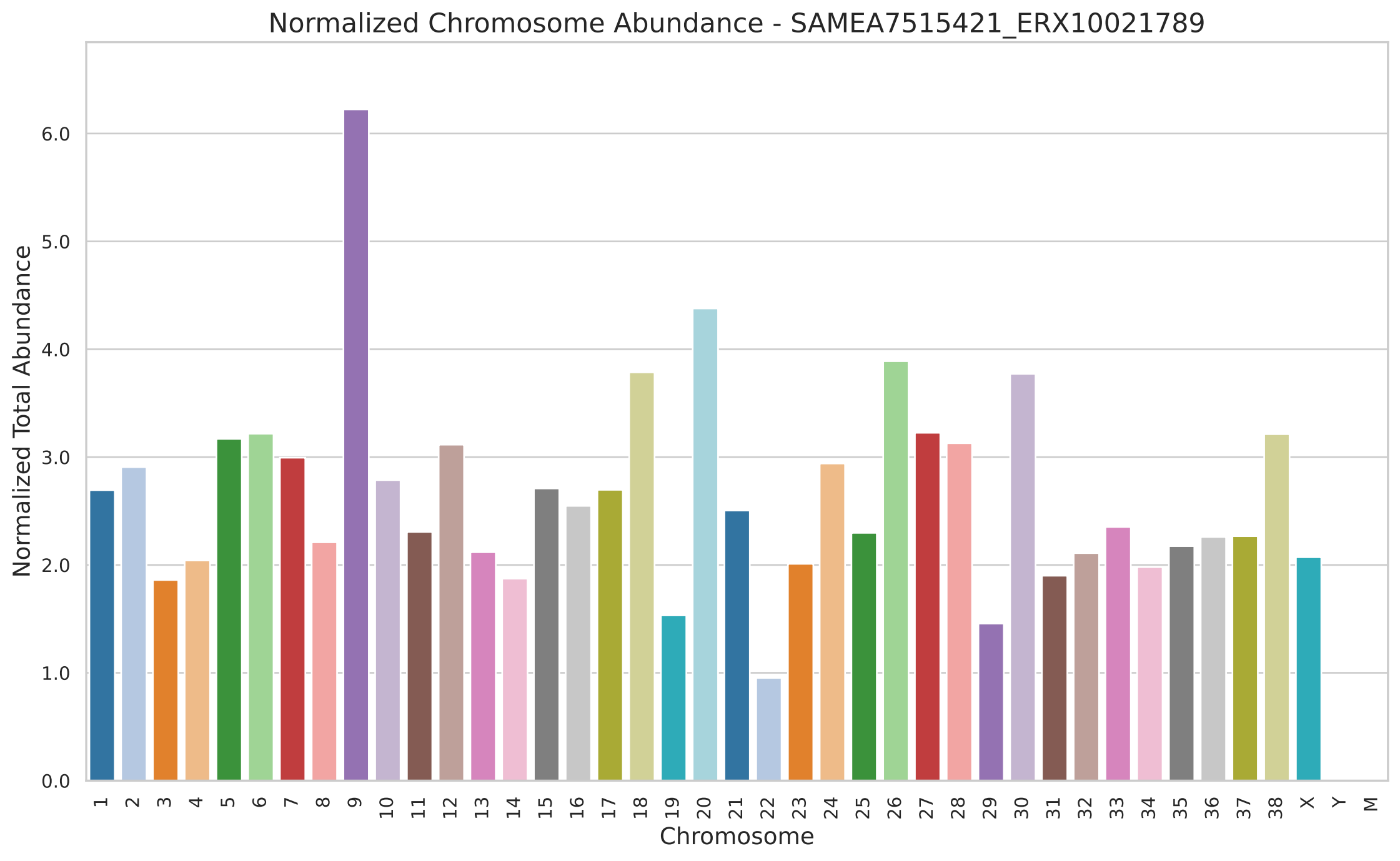

Normalized Chromosome Abundance - SAMEA7515424_ERX10021764
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

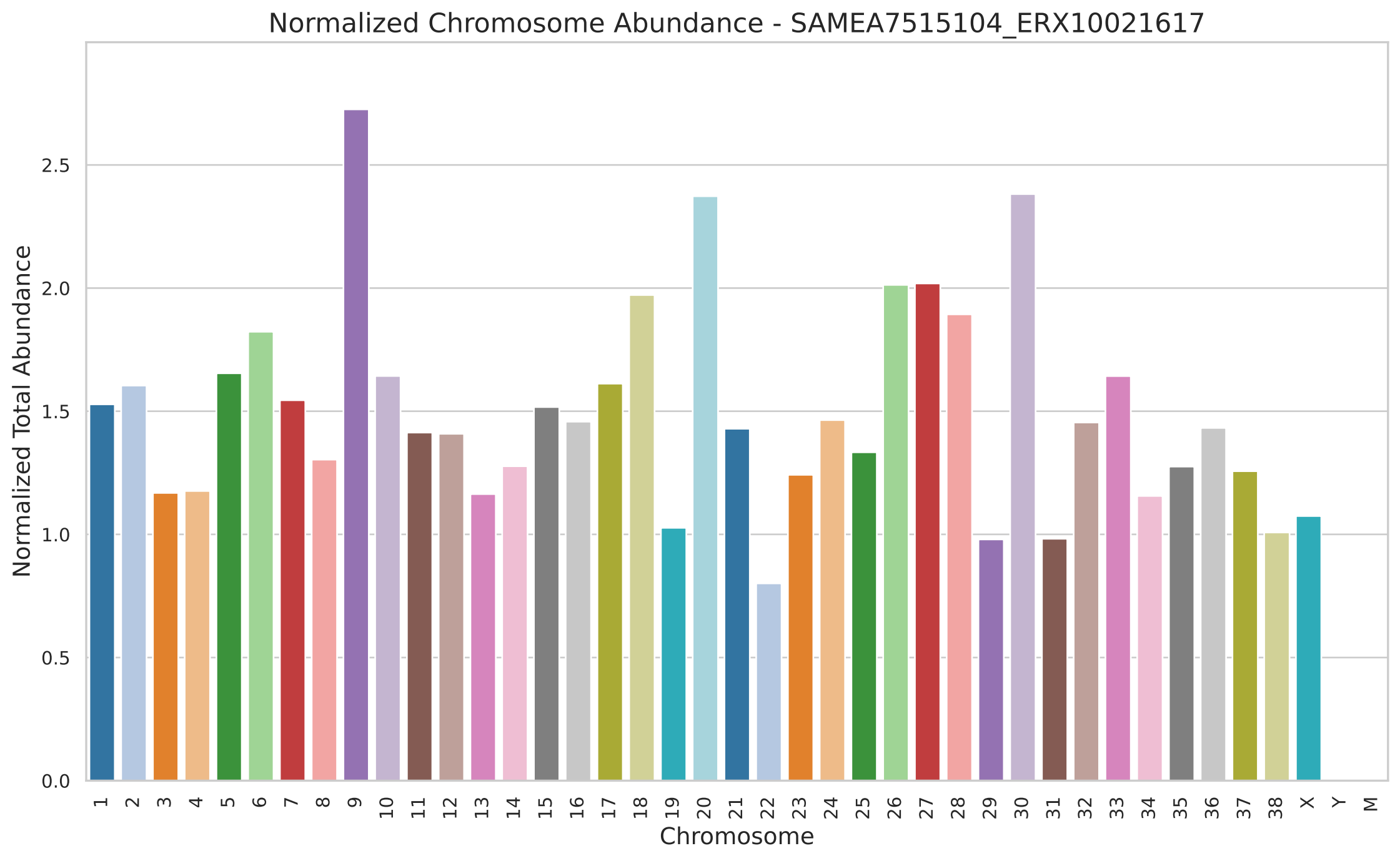

Normalized Chromosome Abundance - SAMEA7515421_ERX10021765
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

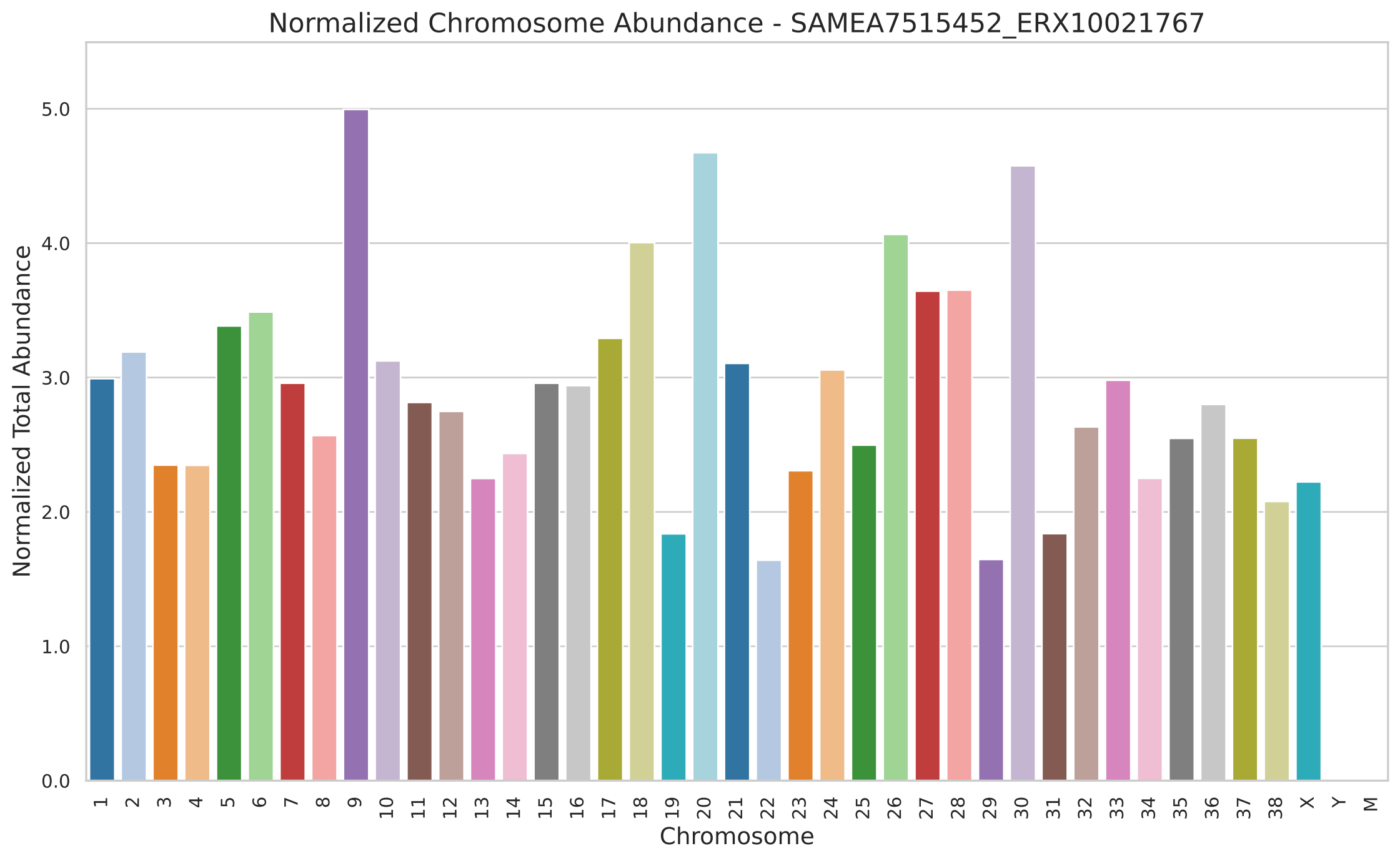

Normalized Chromosome Abundance - SAMEA7515425_ERX10021778
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

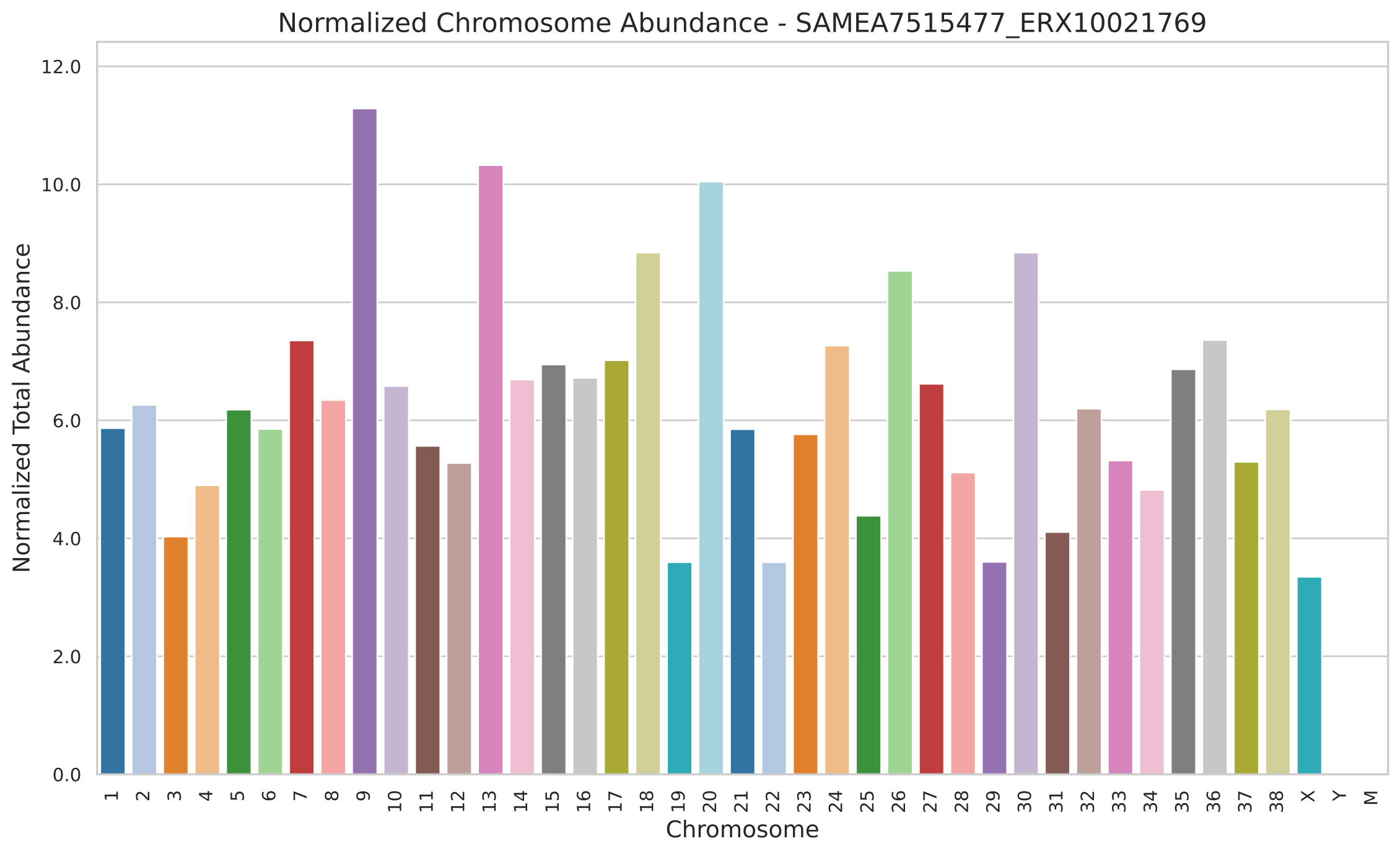

Normalized Chromosome Abundance - SAMEA7515452_ERX10021803
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

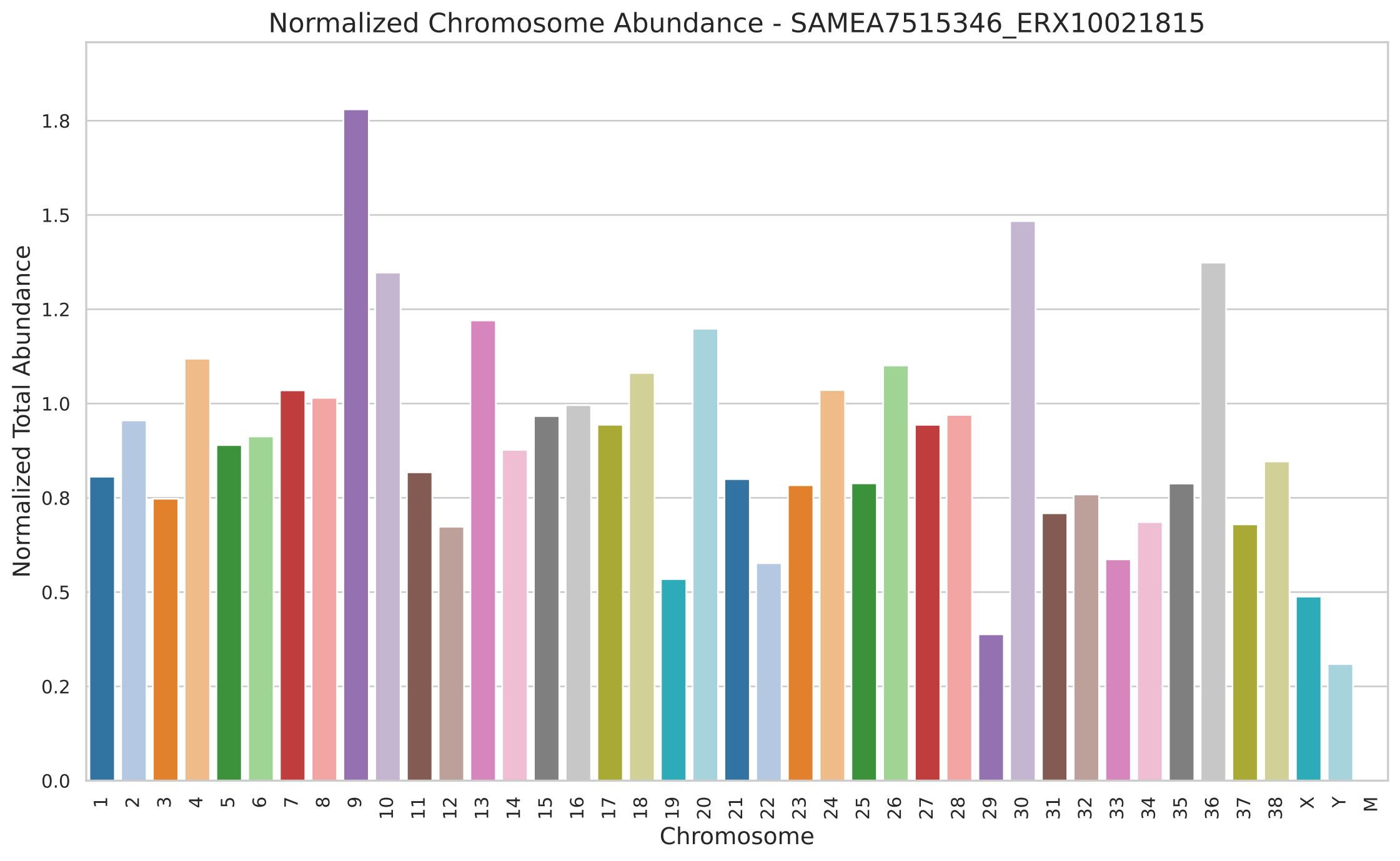

Normalized Chromosome Abundance - SAMEA7515424_ERX10021776
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

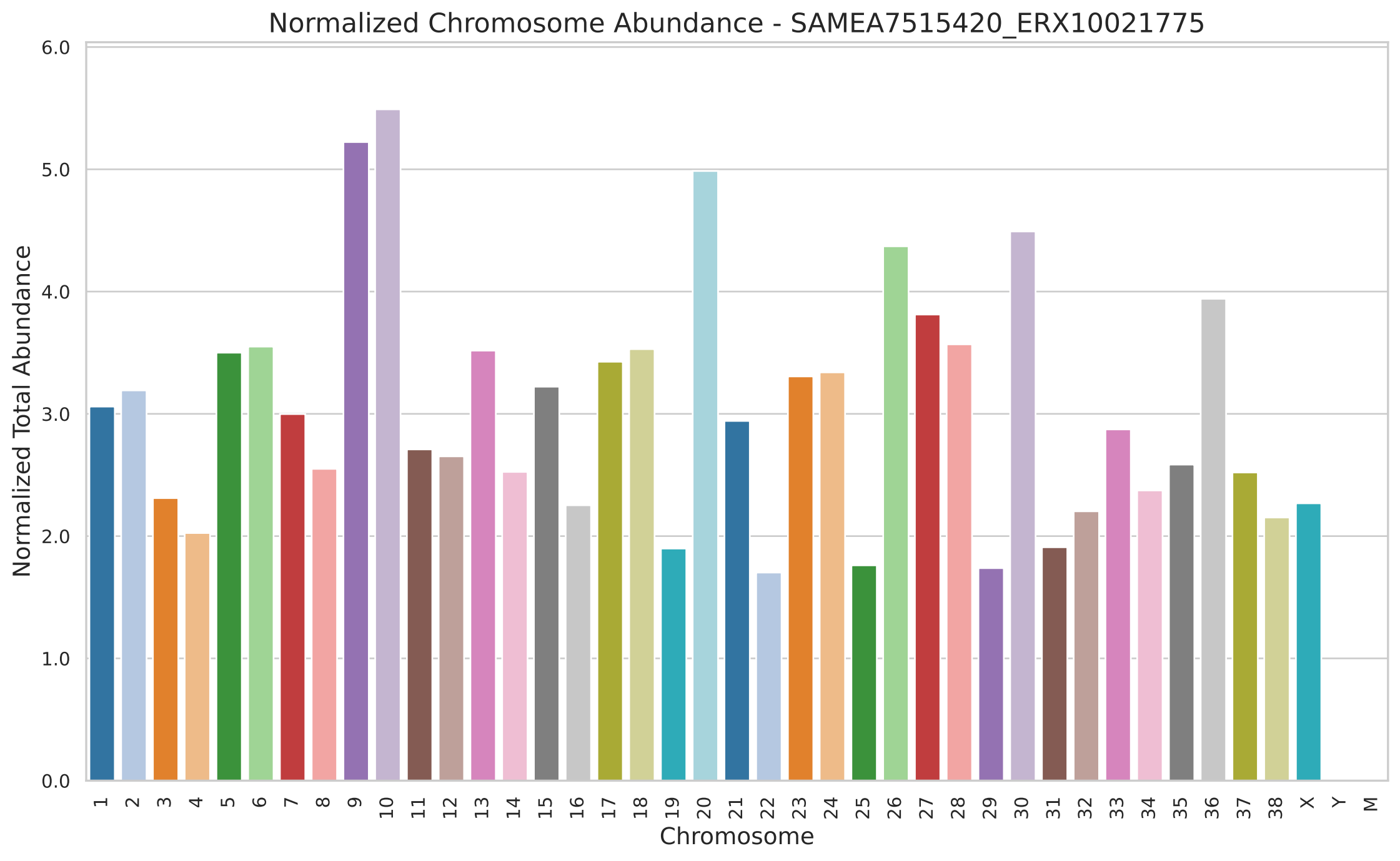

Normalized Chromosome Abundance - SAMEA7515421_ERX10021789
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

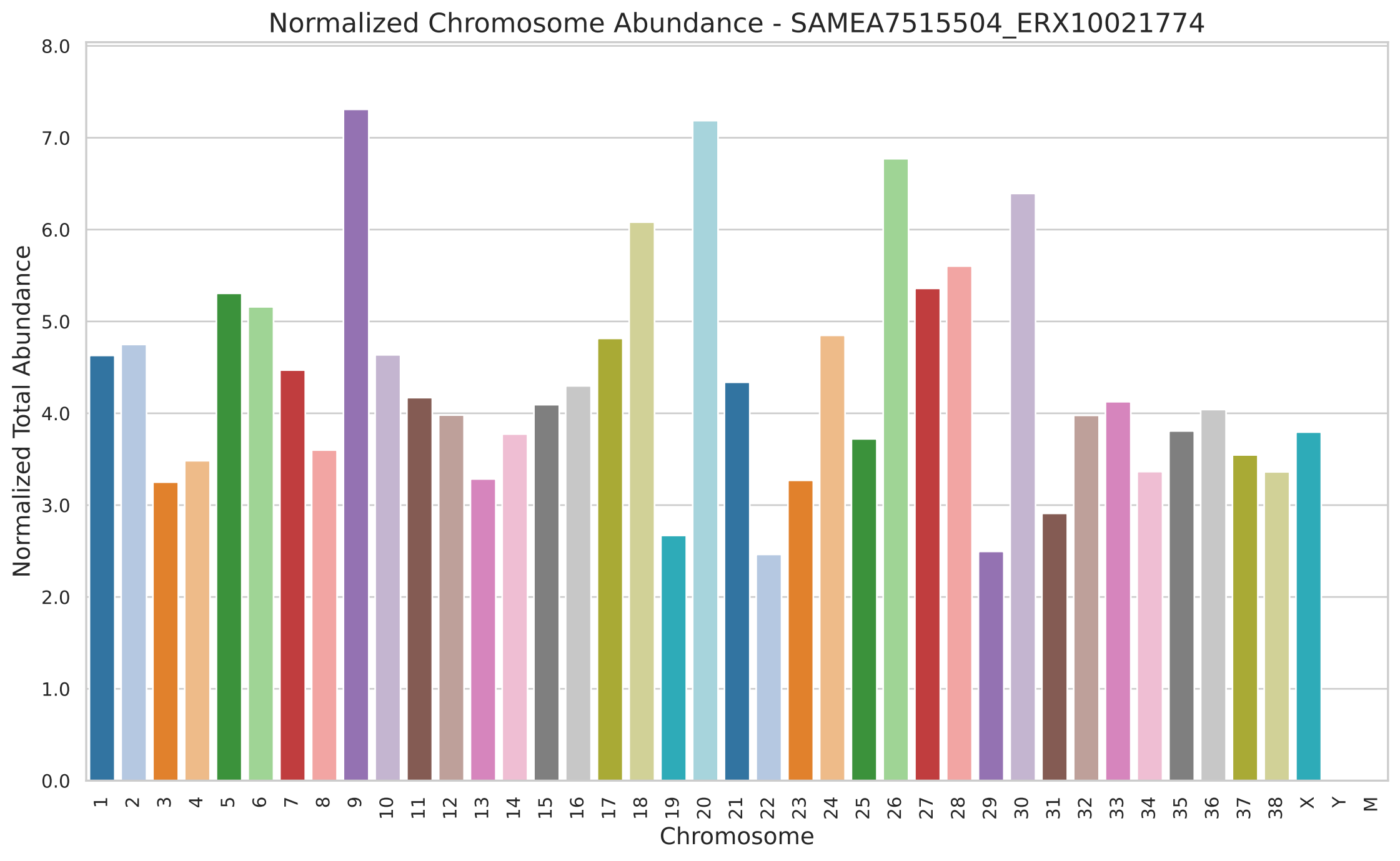

Normalized Chromosome Abundance - SAMEA7515104_ERX10021617
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

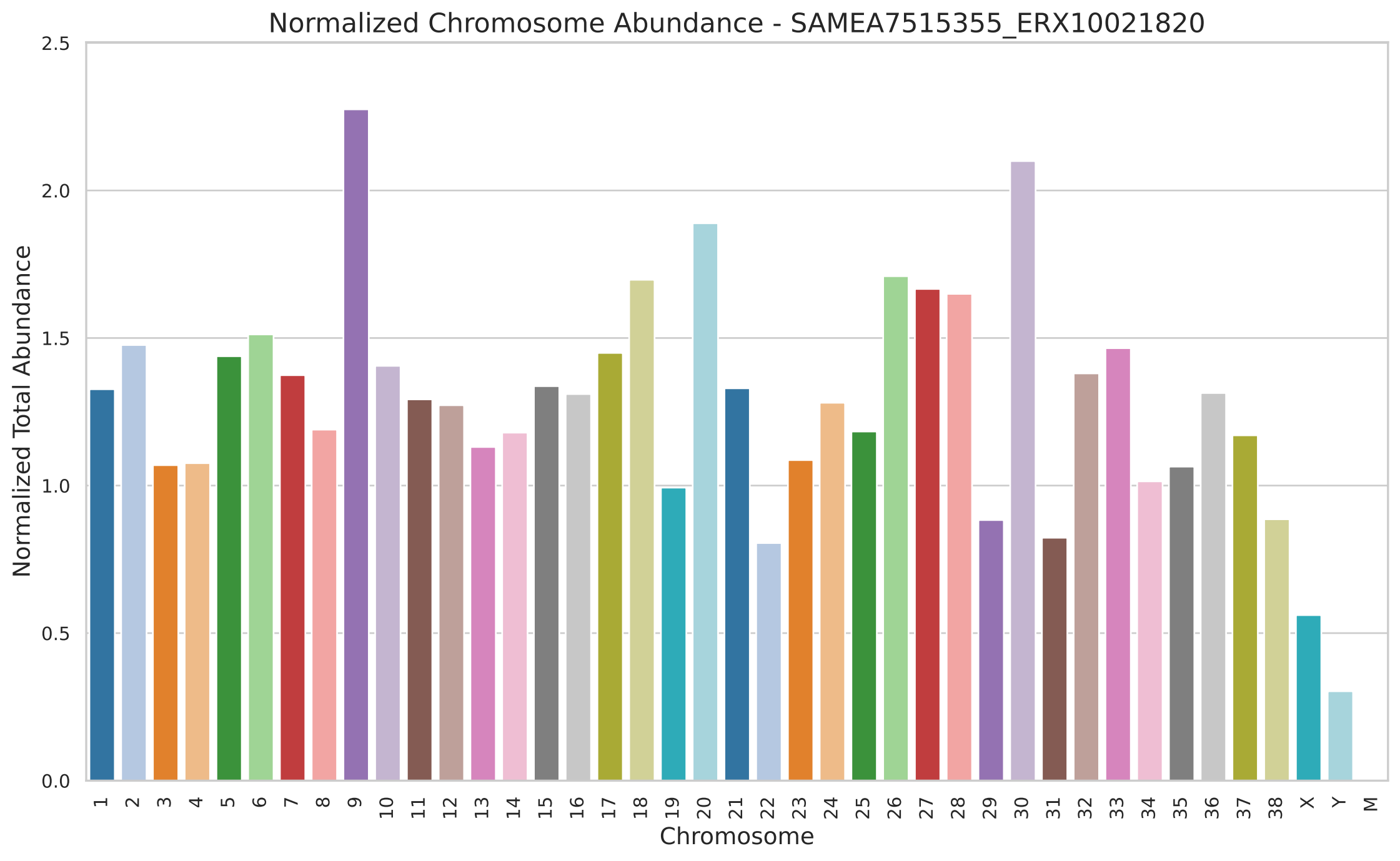

Normalized Chromosome Abundance - SAMEA7515452_ERX10021767
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

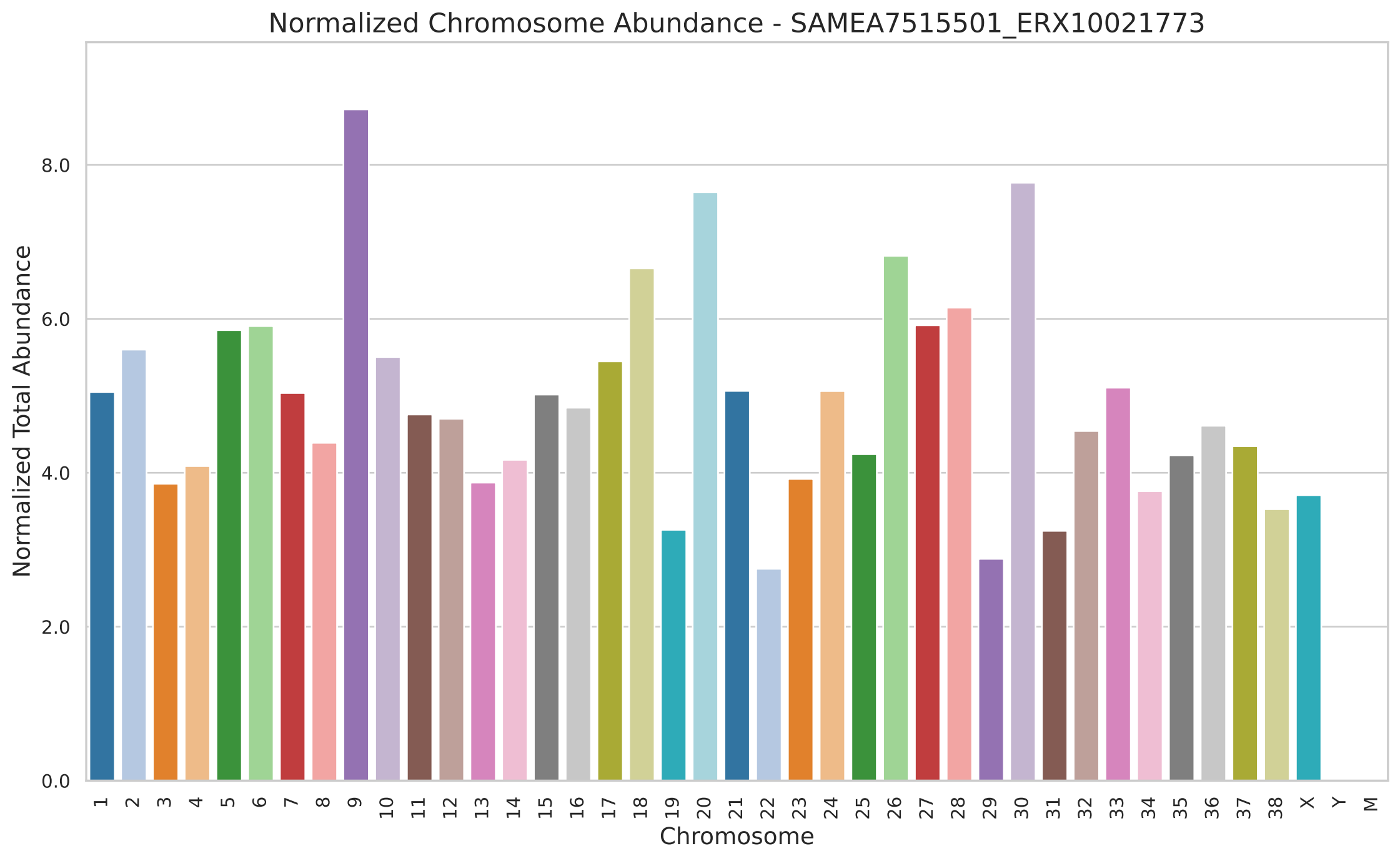

Normalized Chromosome Abundance - SAMEA7515477_ERX10021769
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
12.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

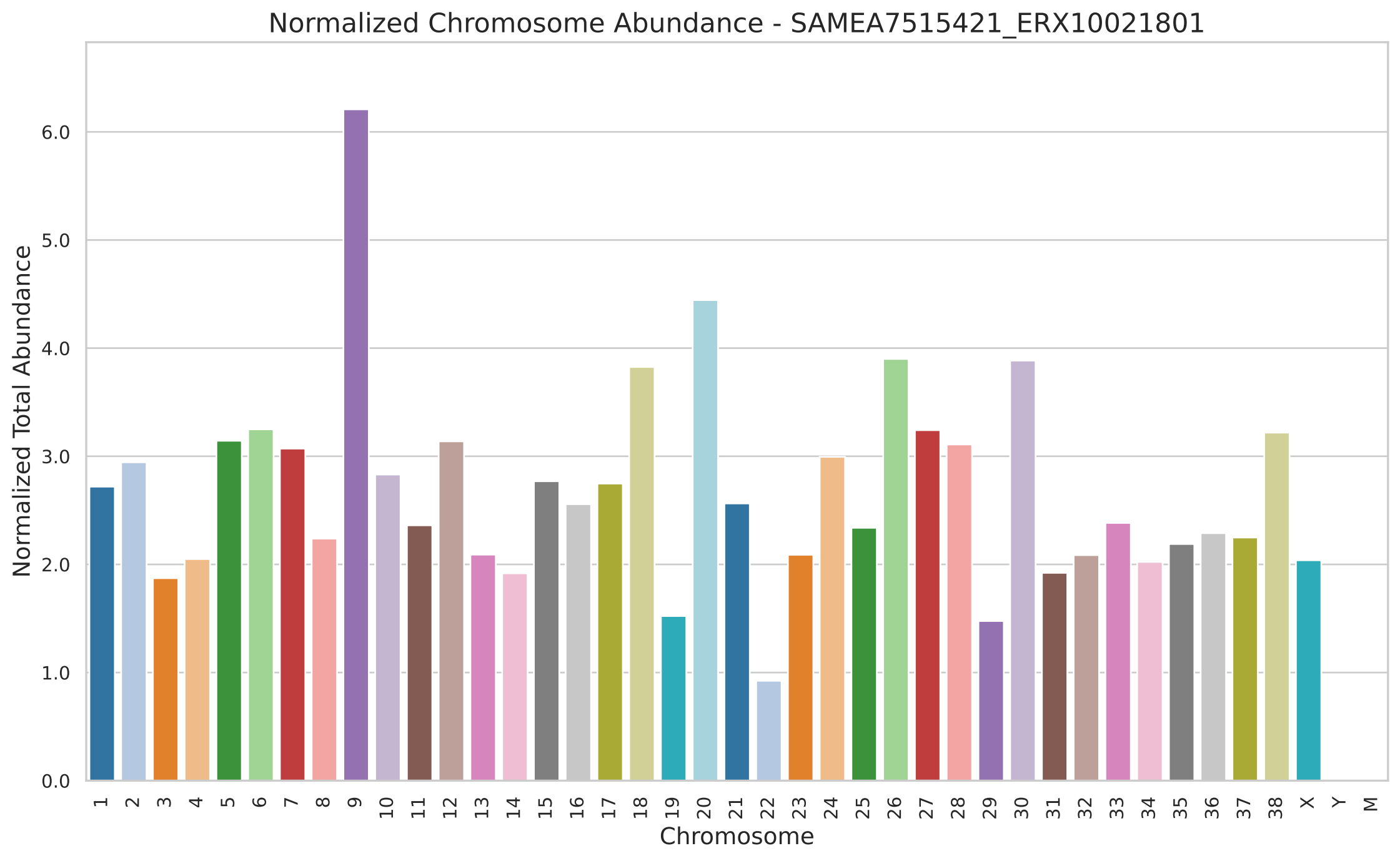

Normalized Chromosome Abundance - SAMEA7515346_ERX10021815
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

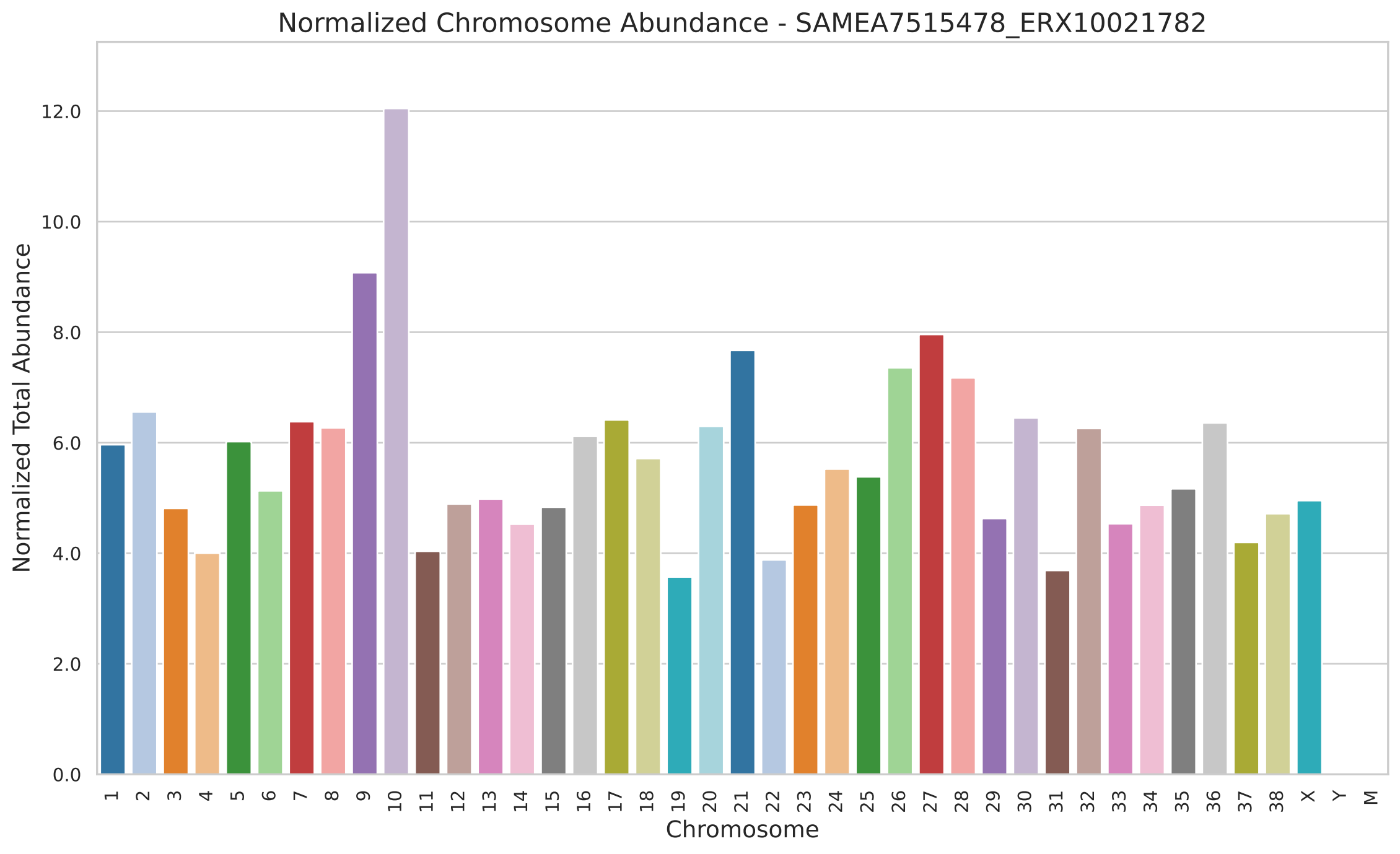

Normalized Chromosome Abundance - SAMEA7515420_ERX10021775
Normalized Total Abundance
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

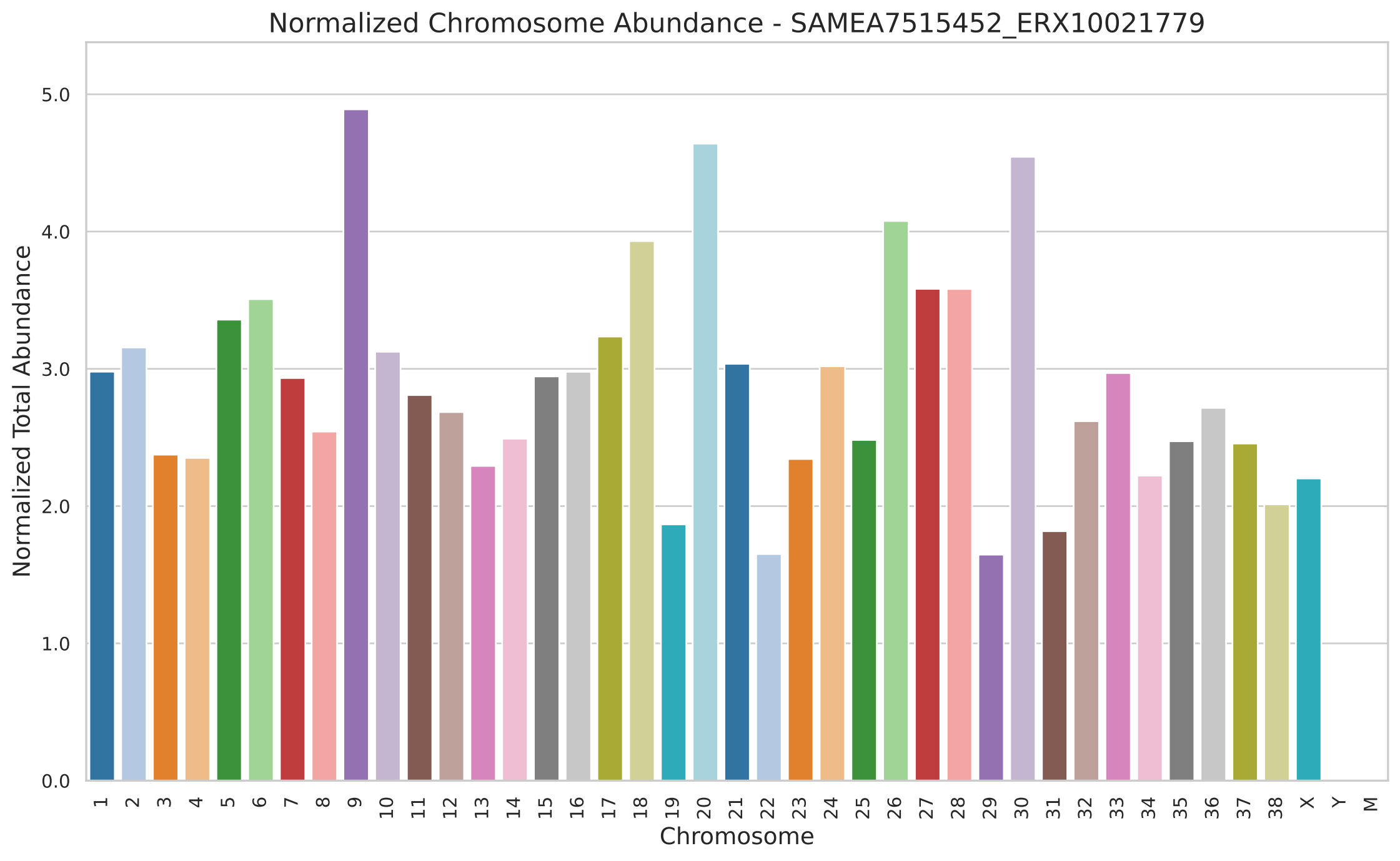

Normalized Chromosome Abundance - SAMEA7515504_ERX10021774
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

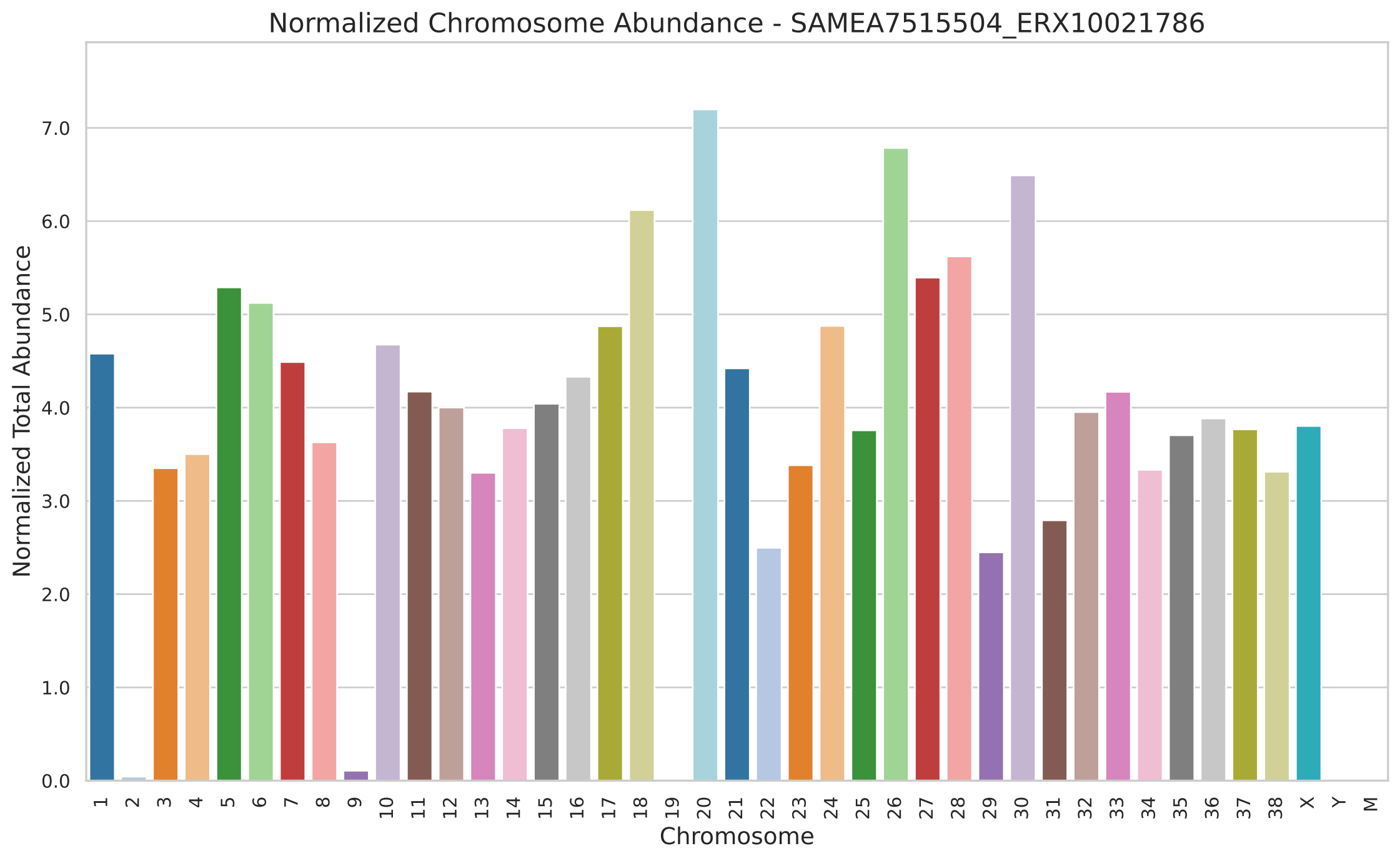

Normalized Chromosome Abundance - SAMEA7515355_ERX10021820
Normalized Total Abundance
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

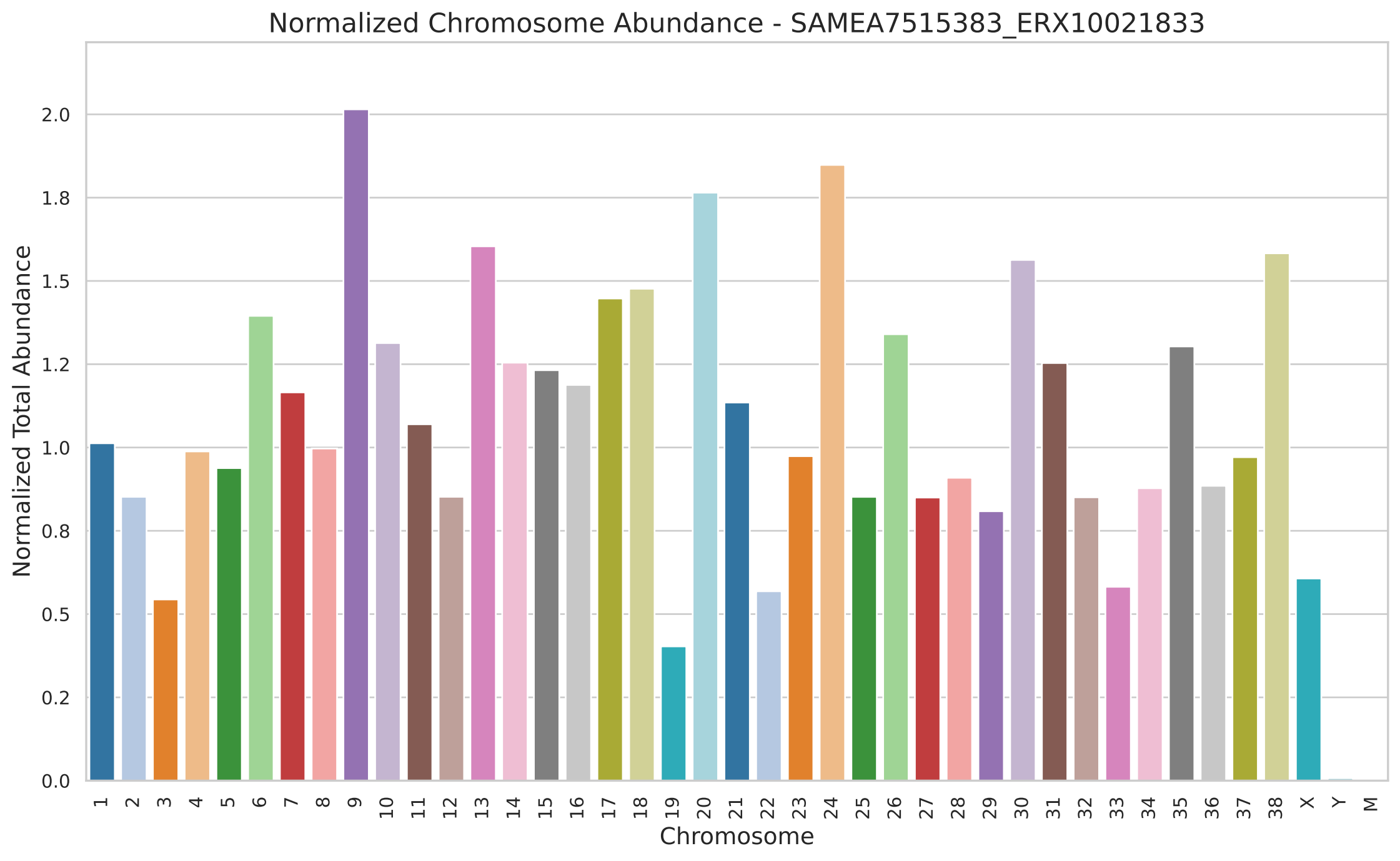

Normalized Chromosome Abundance - SAMEA7515501_ERX10021773
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

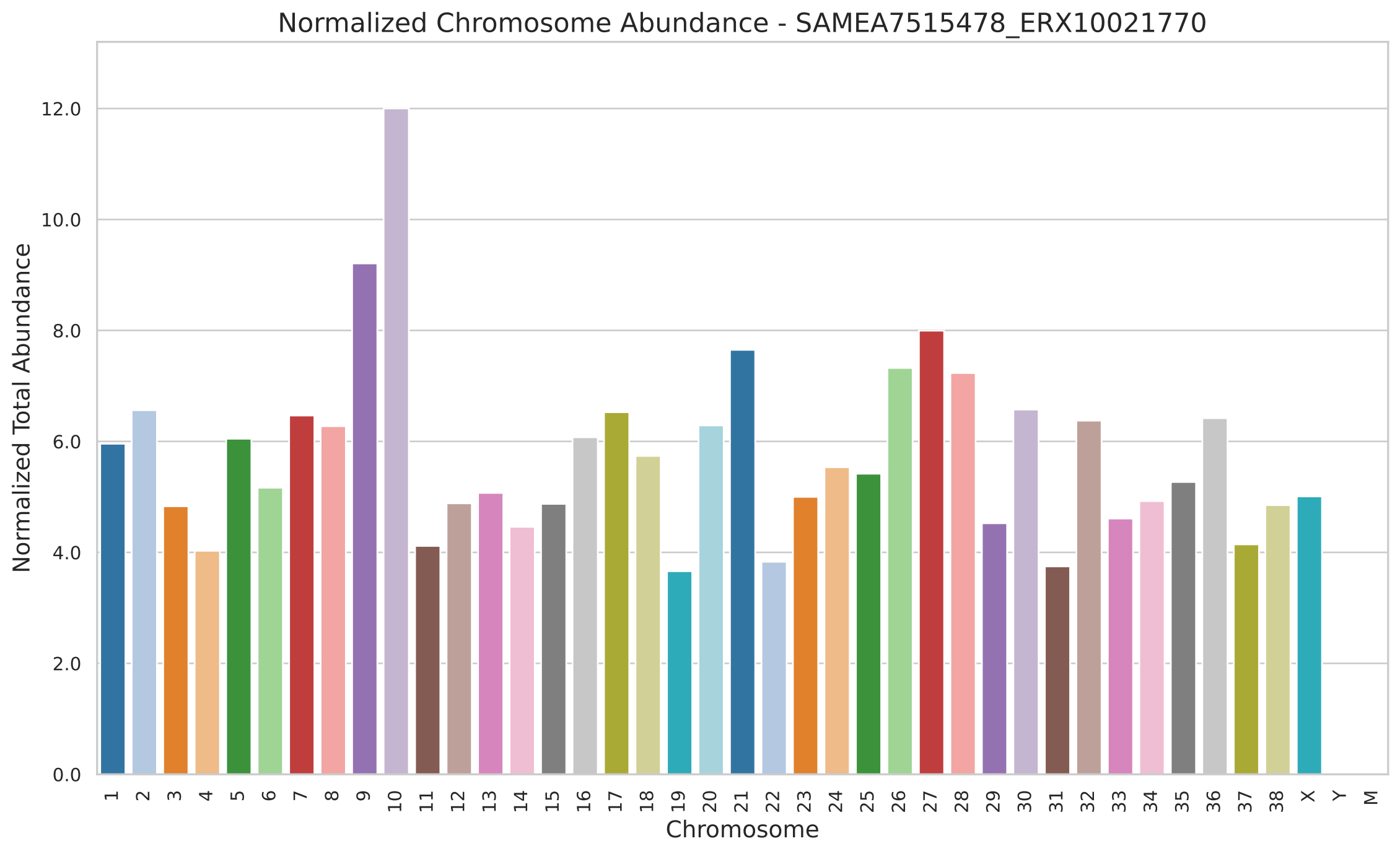

Normalized Chromosome Abundance - SAMEA7515421_ERX10021801
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

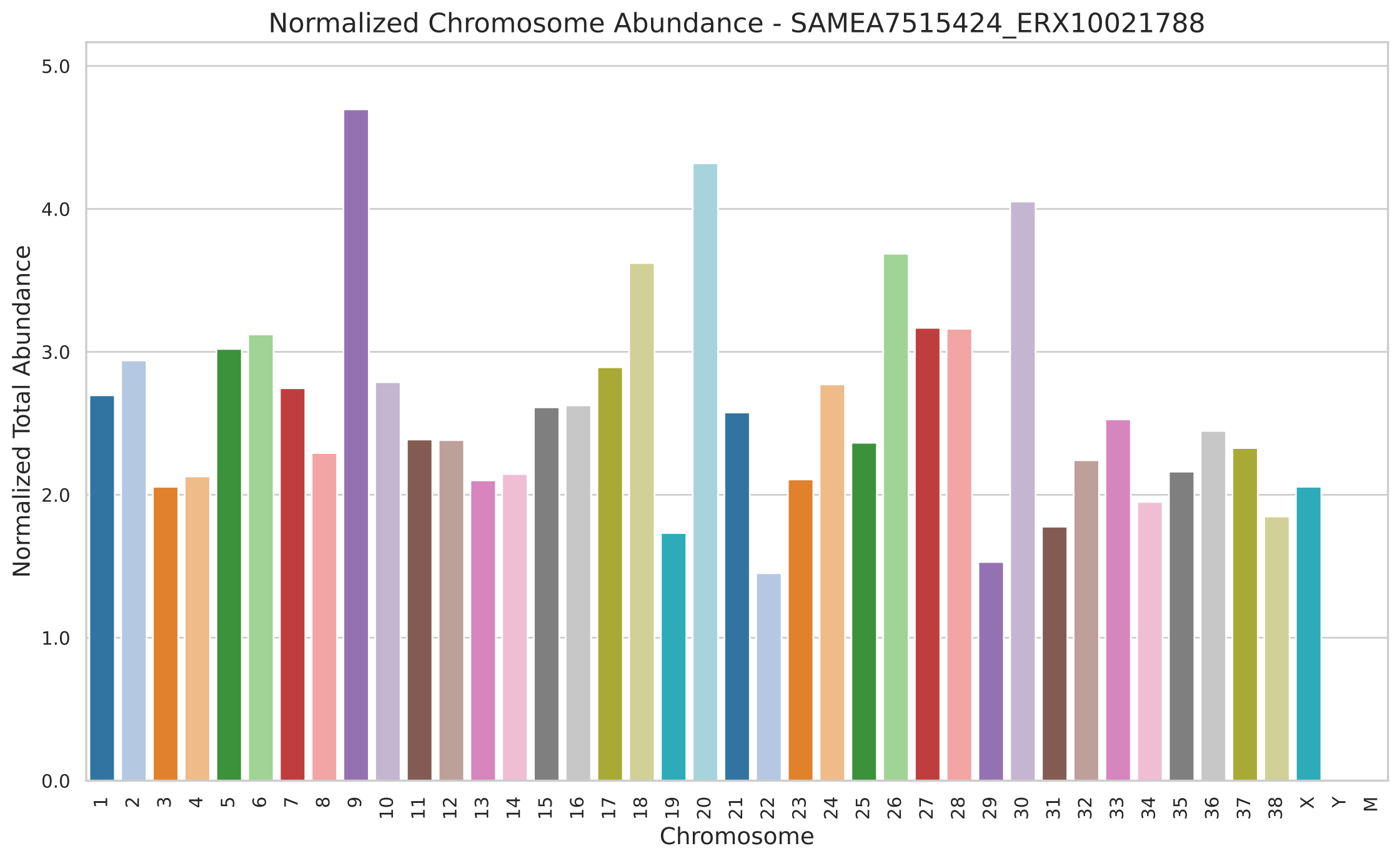

Normalized Chromosome Abundance - SAMEA7515478_ERX10021782
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
12.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

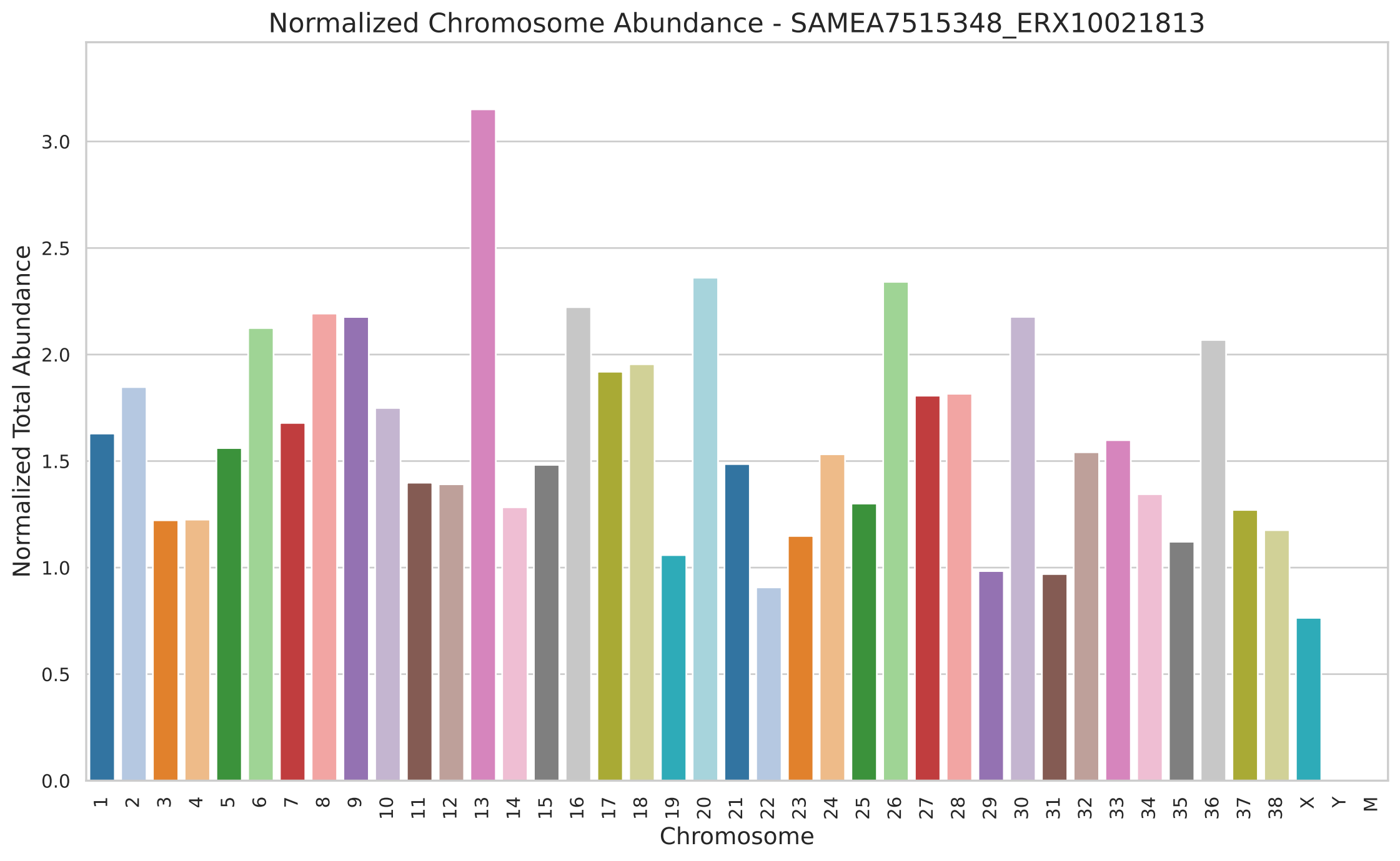

Normalized Chromosome Abundance - SAMEA7515452_ERX10021779
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

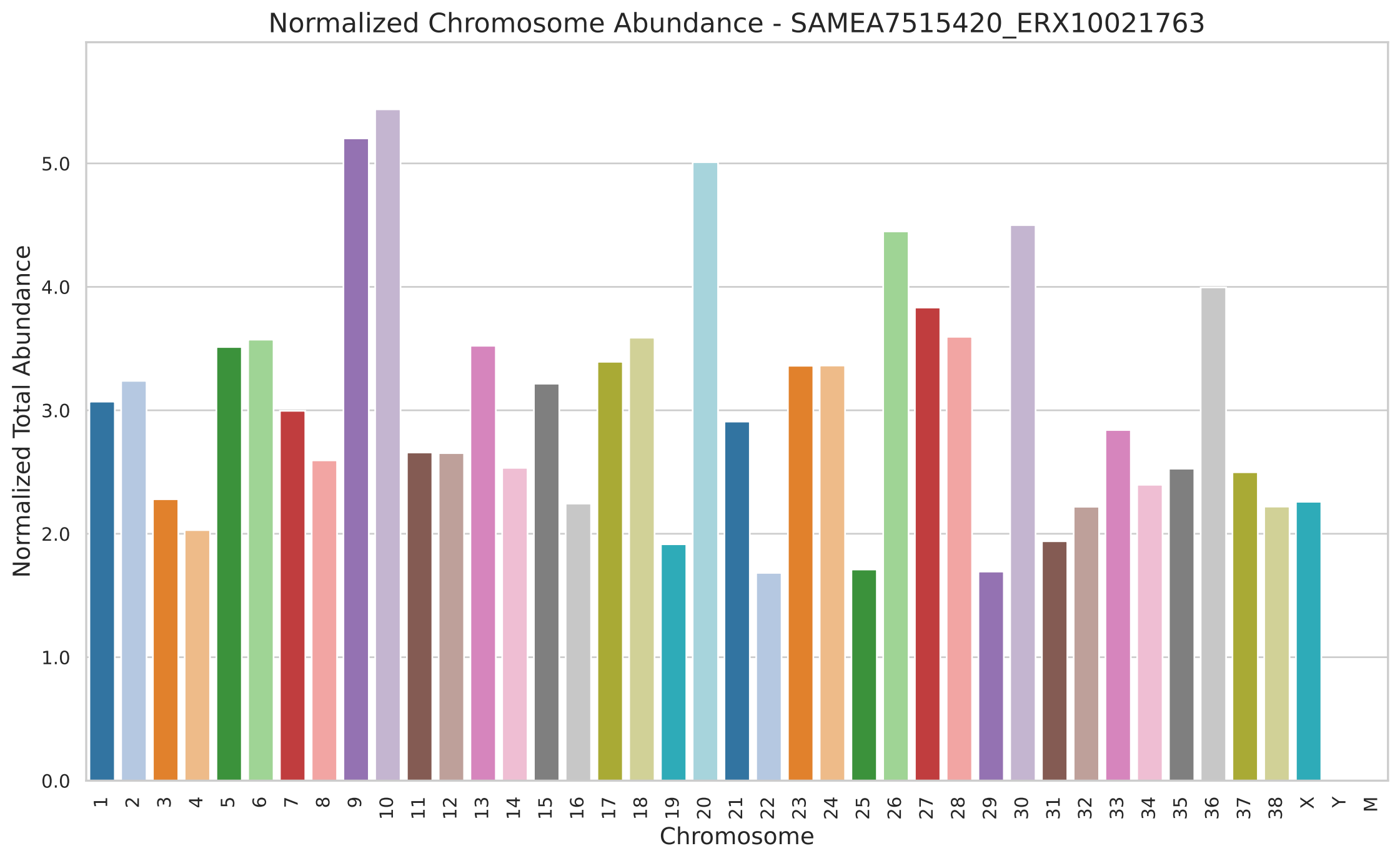

Normalized Chromosome Abundance - SAMEA7515504_ERX10021786
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

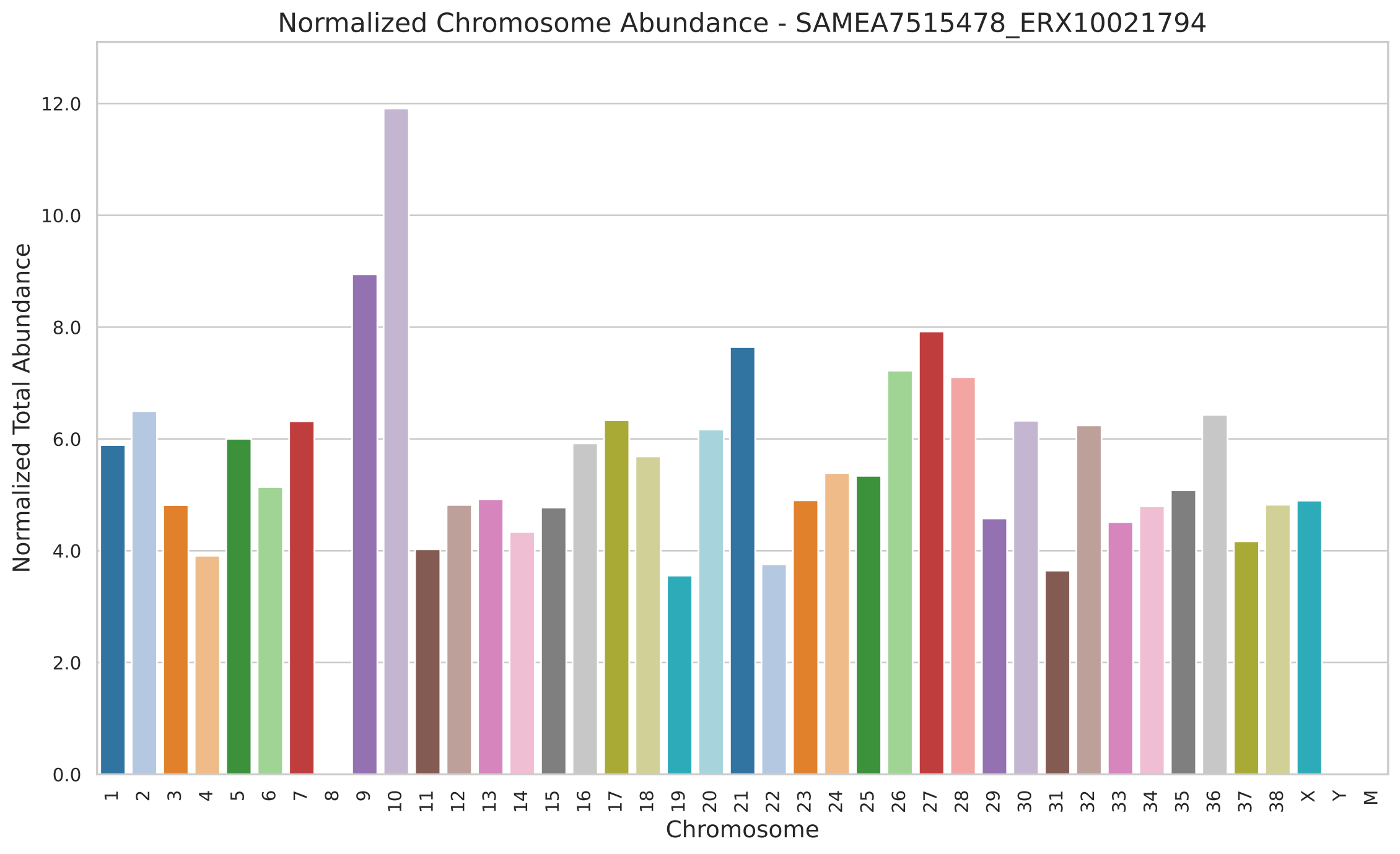

Normalized Chromosome Abundance - SAMEA7515383_ERX10021833
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

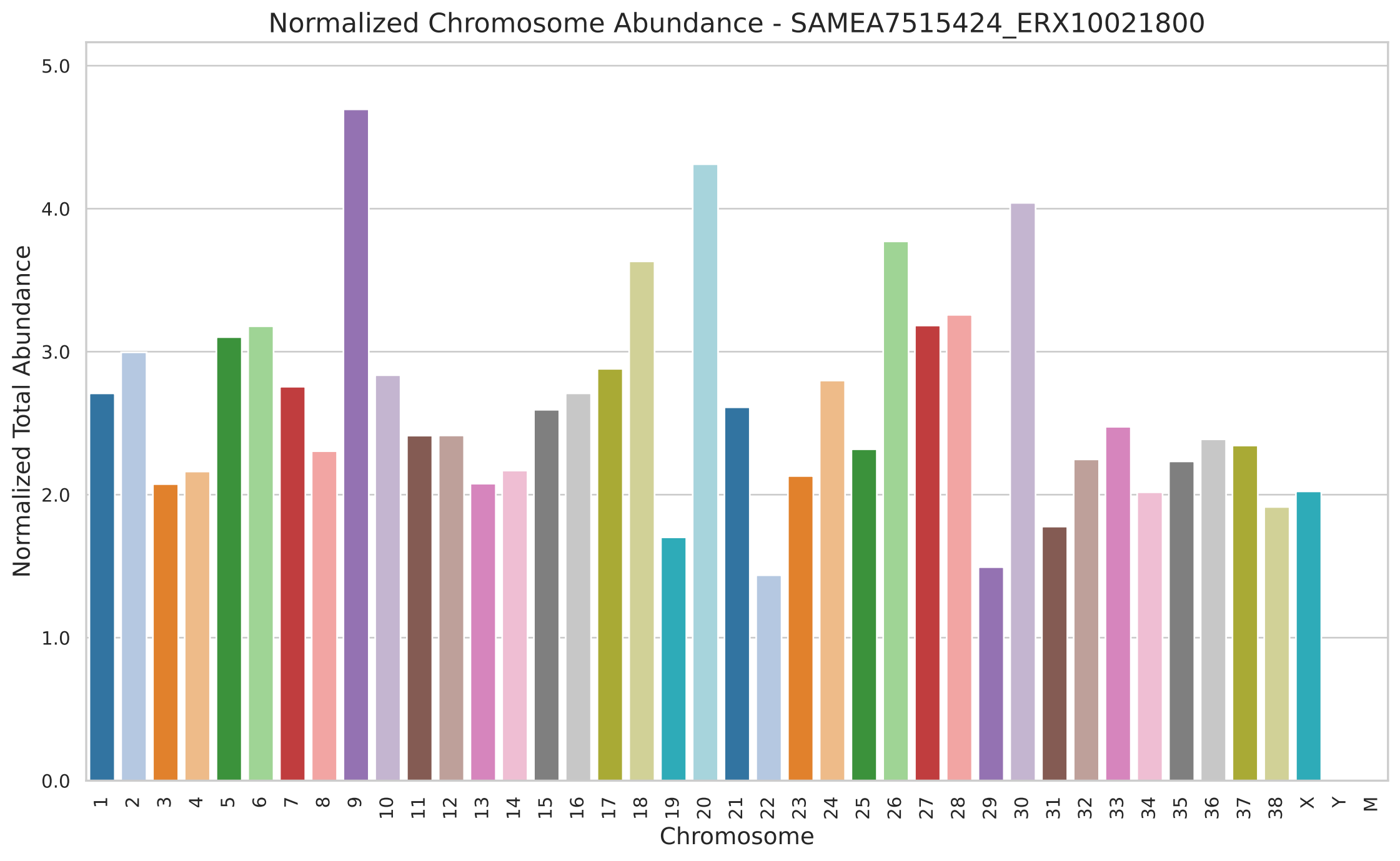

Normalized Chromosome Abundance - SAMEA7515478_ERX10021770
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
12.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

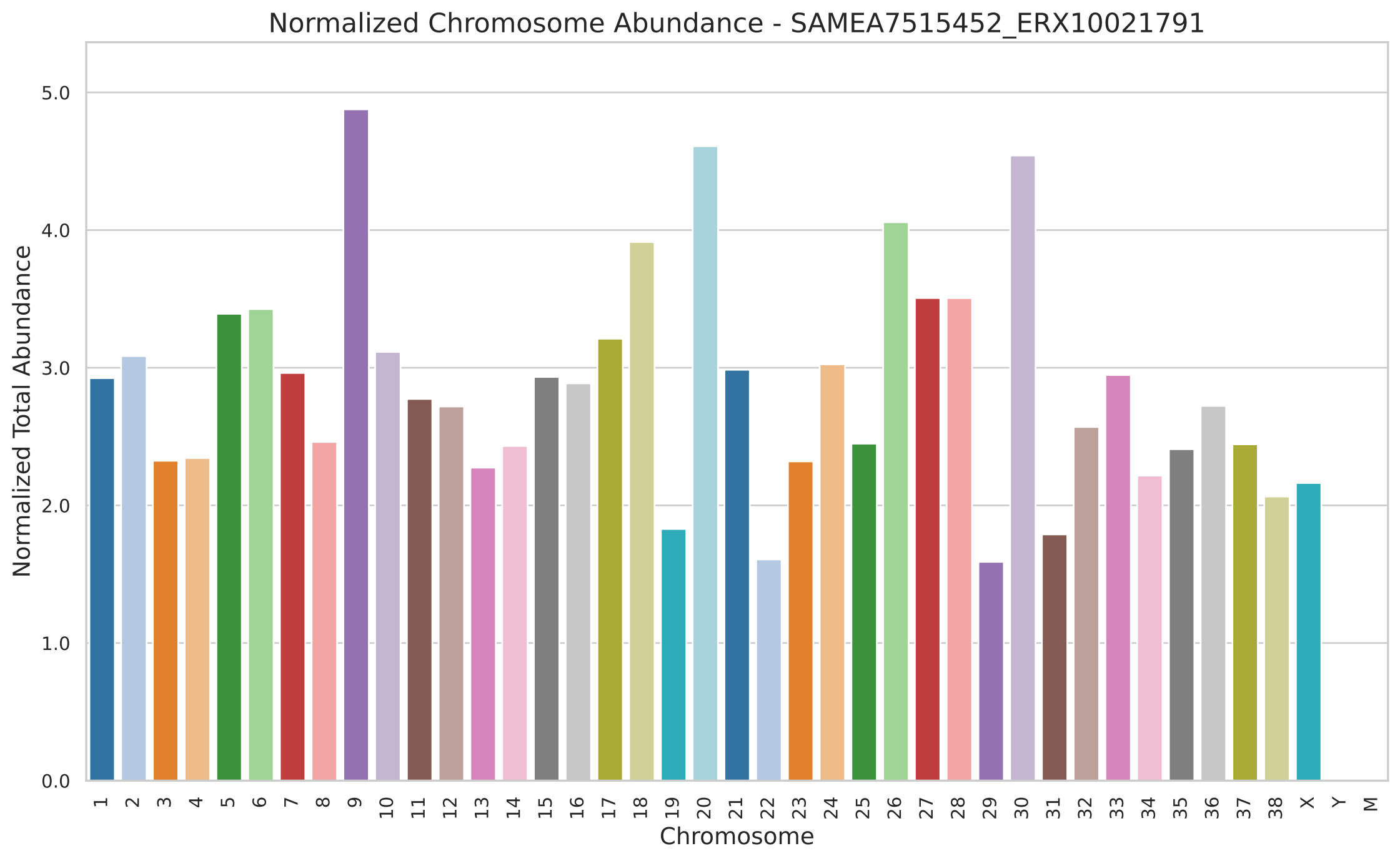

Normalized Chromosome Abundance - SAMEA7515424_ERX10021788
Normalized Total Abundance
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

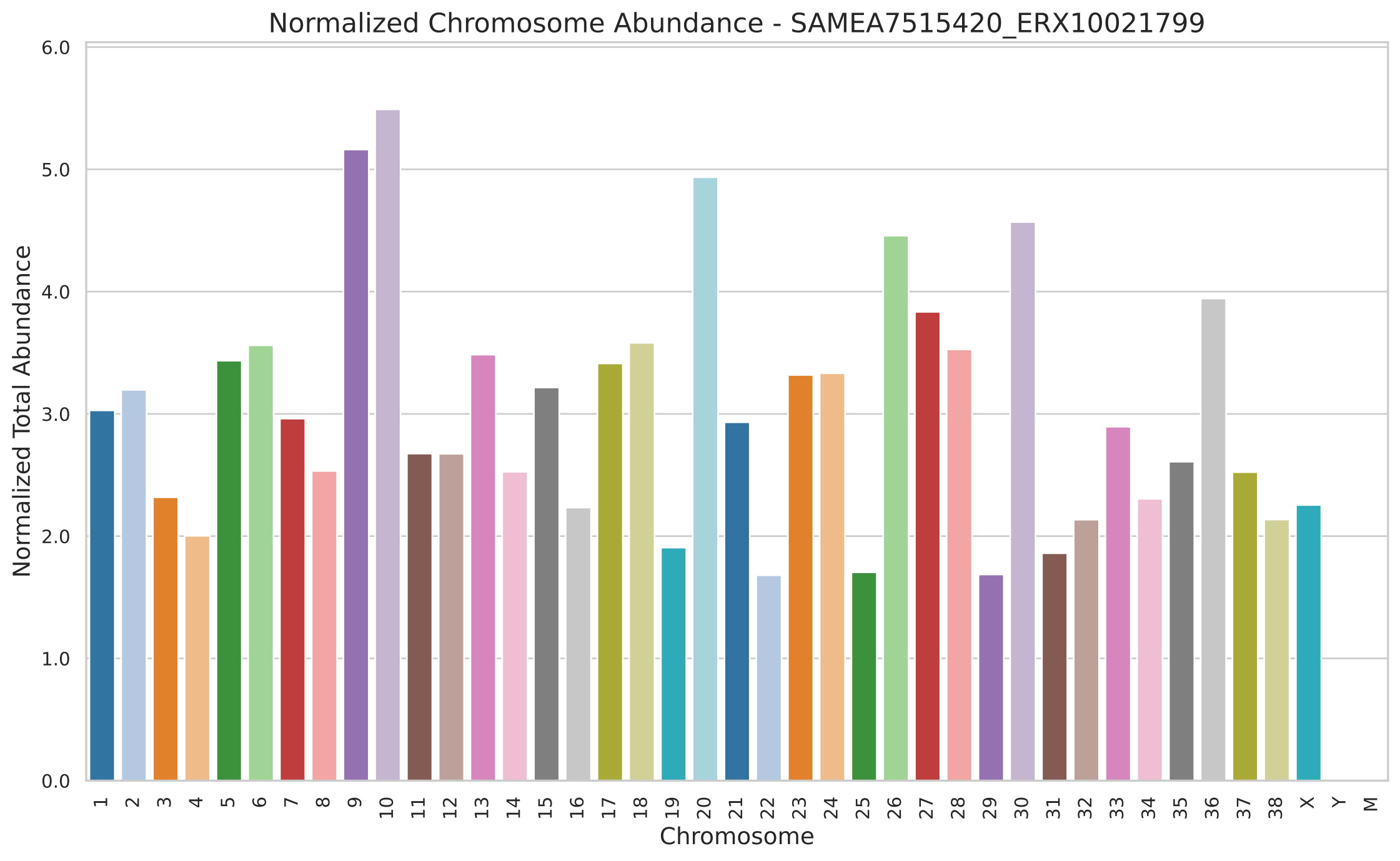

Normalized Chromosome Abundance - SAMEA7515348_ERX10021813
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

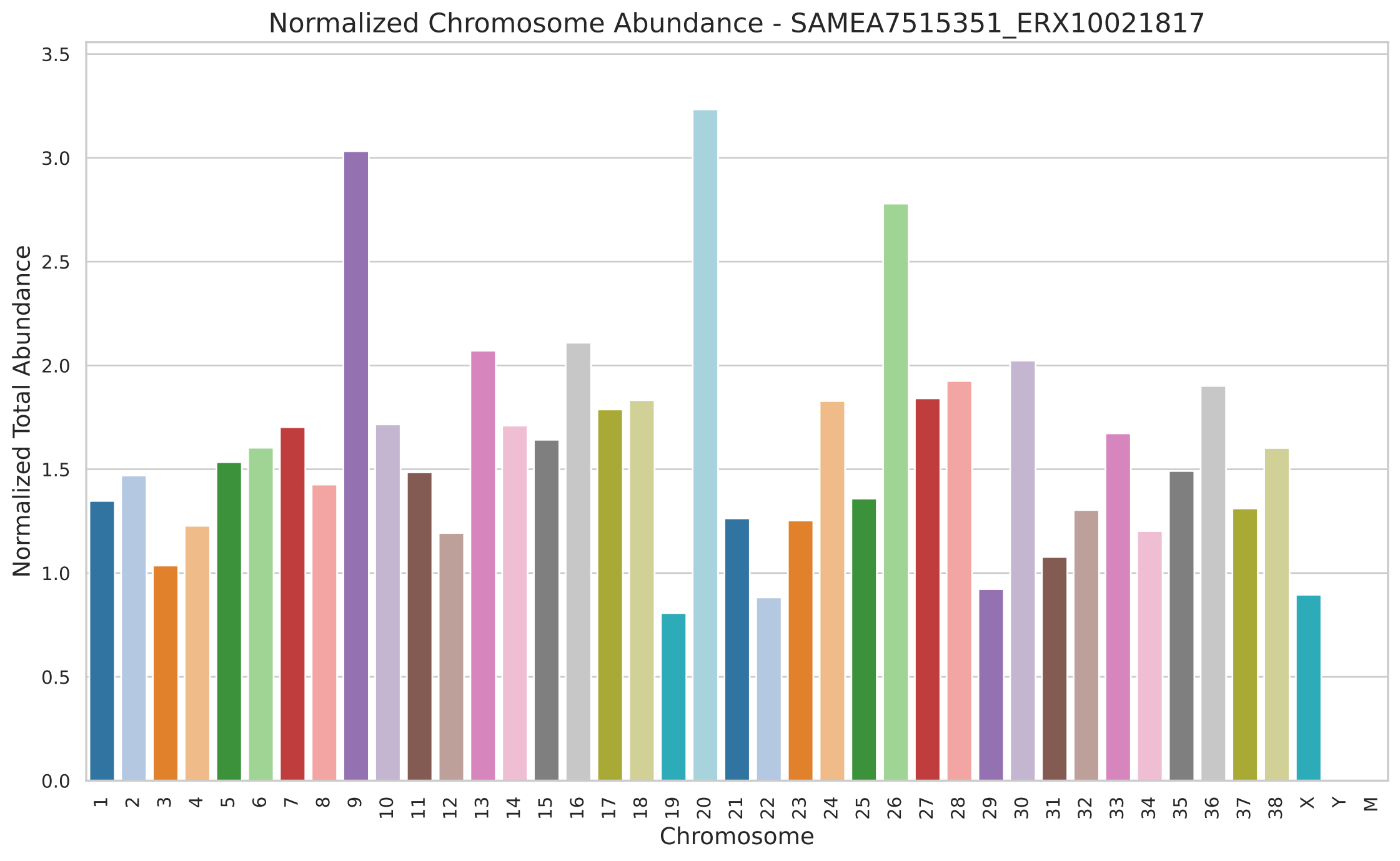

Normalized Chromosome Abundance - SAMEA7515420_ERX10021763
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

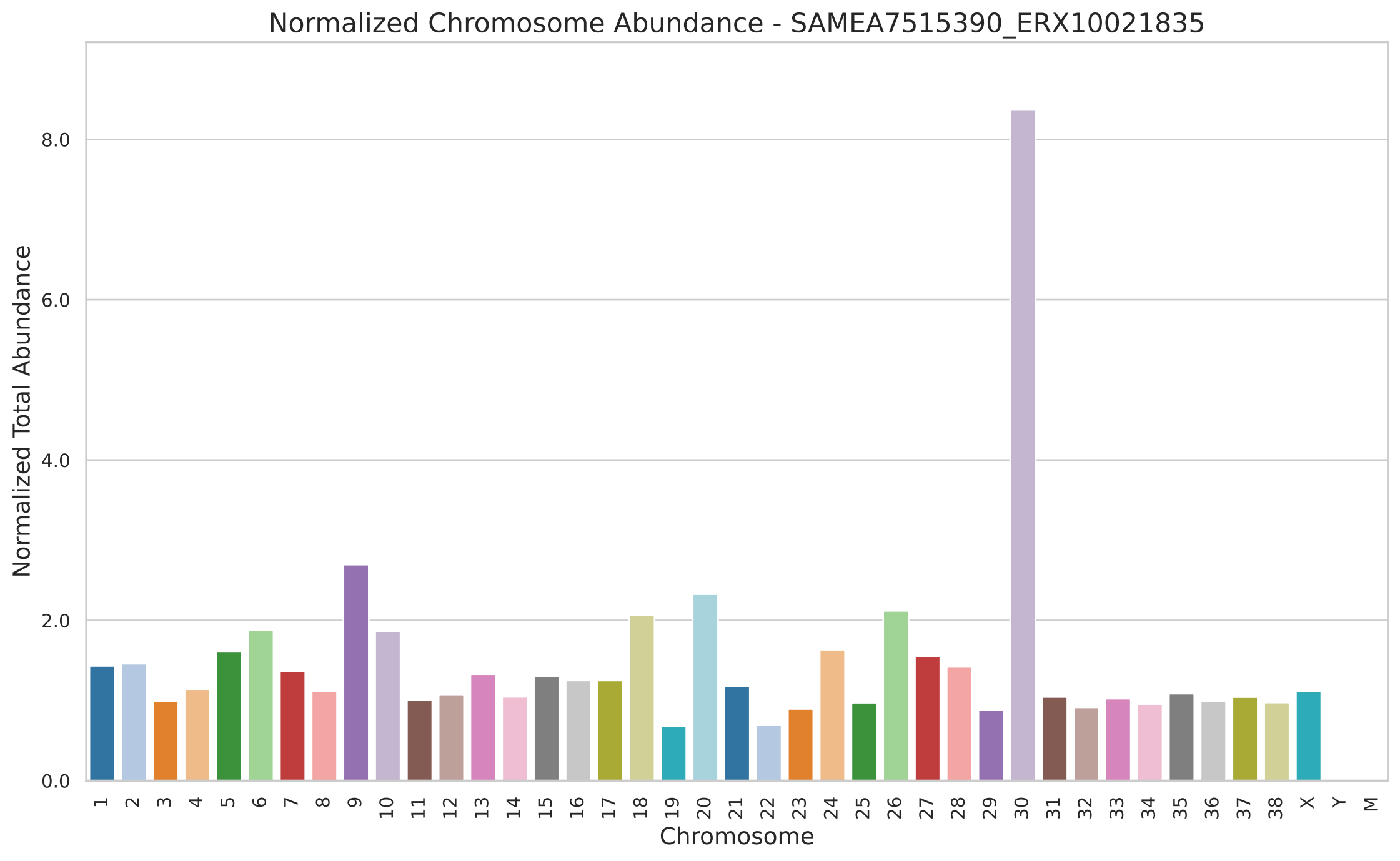

Normalized Chromosome Abundance - SAMEA7515478_ERX10021794
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
12.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

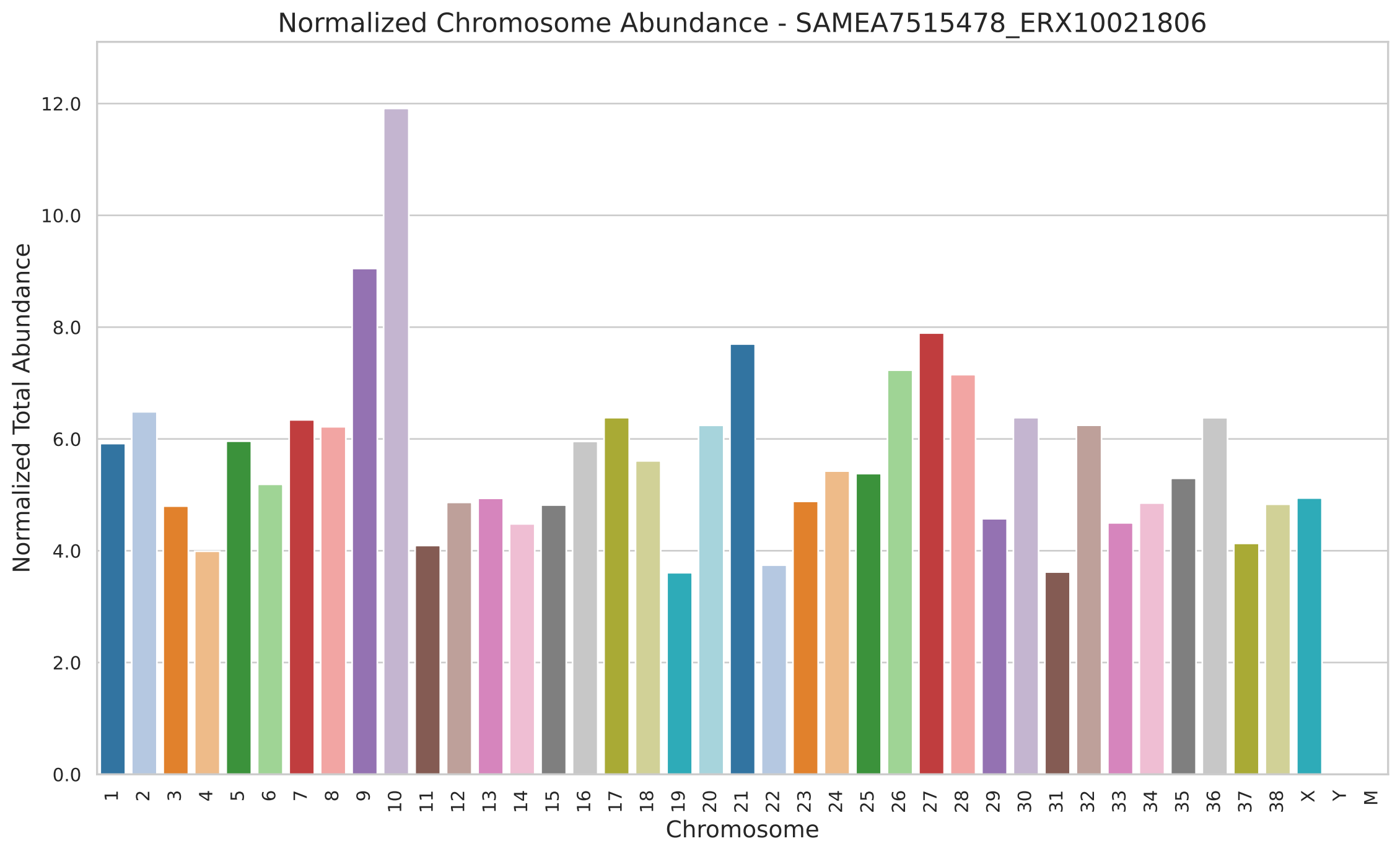

Normalized Chromosome Abundance - SAMEA7515424_ERX10021800
Normalized Total Abundance
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

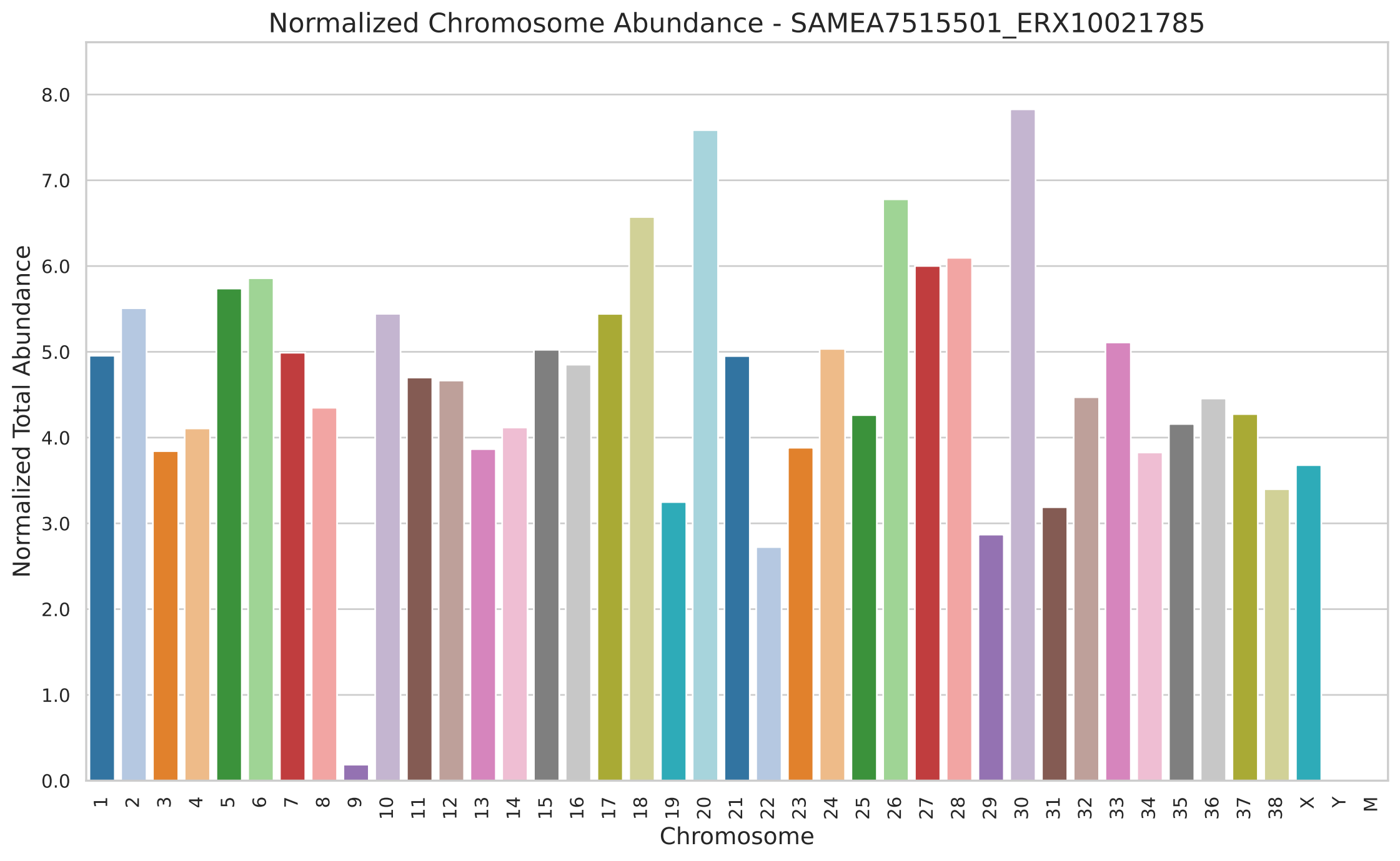

Normalized Chromosome Abundance - SAMEA7515452_ERX10021791
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

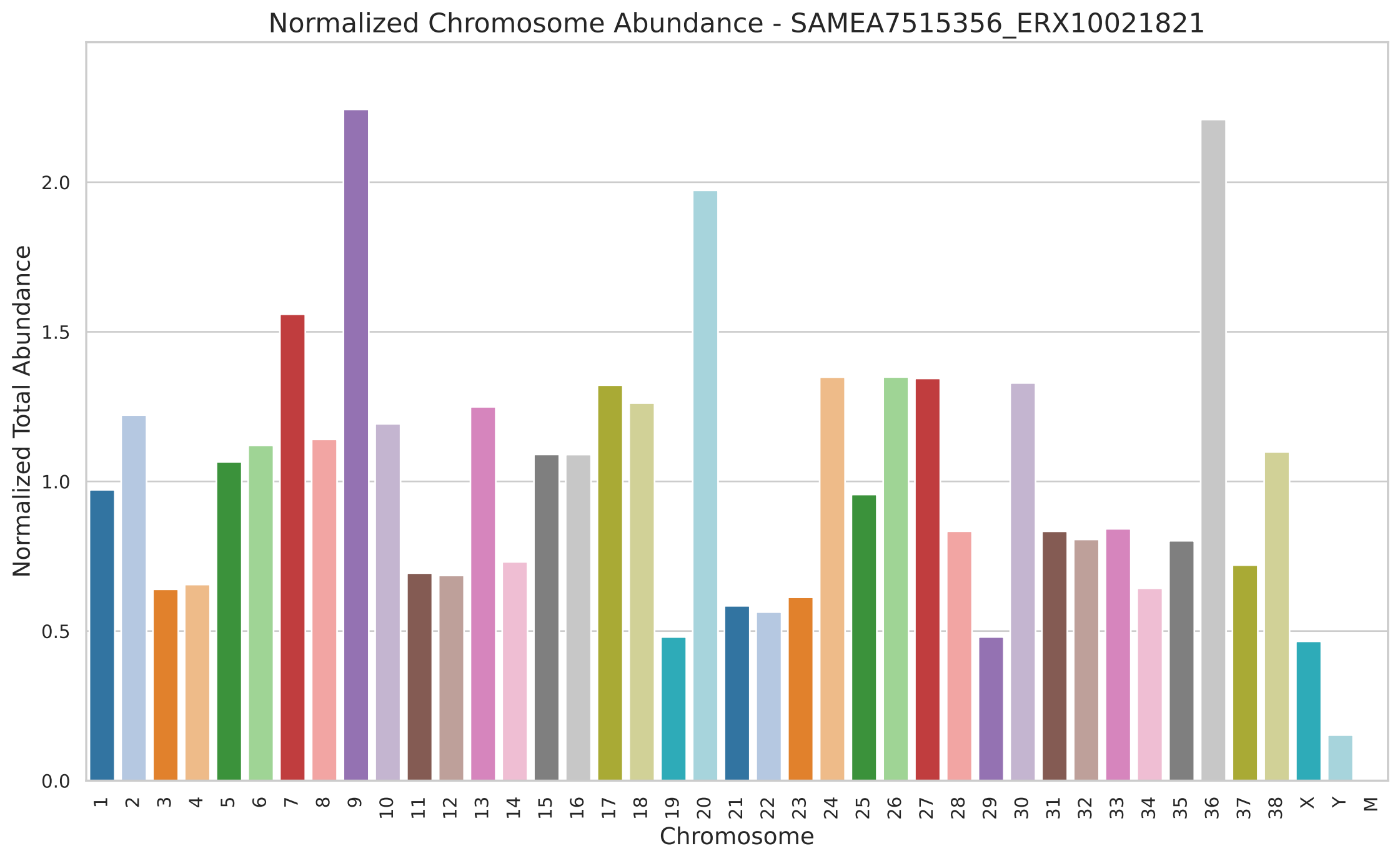

Normalized Chromosome Abundance - SAMEA7515420_ERX10021799
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

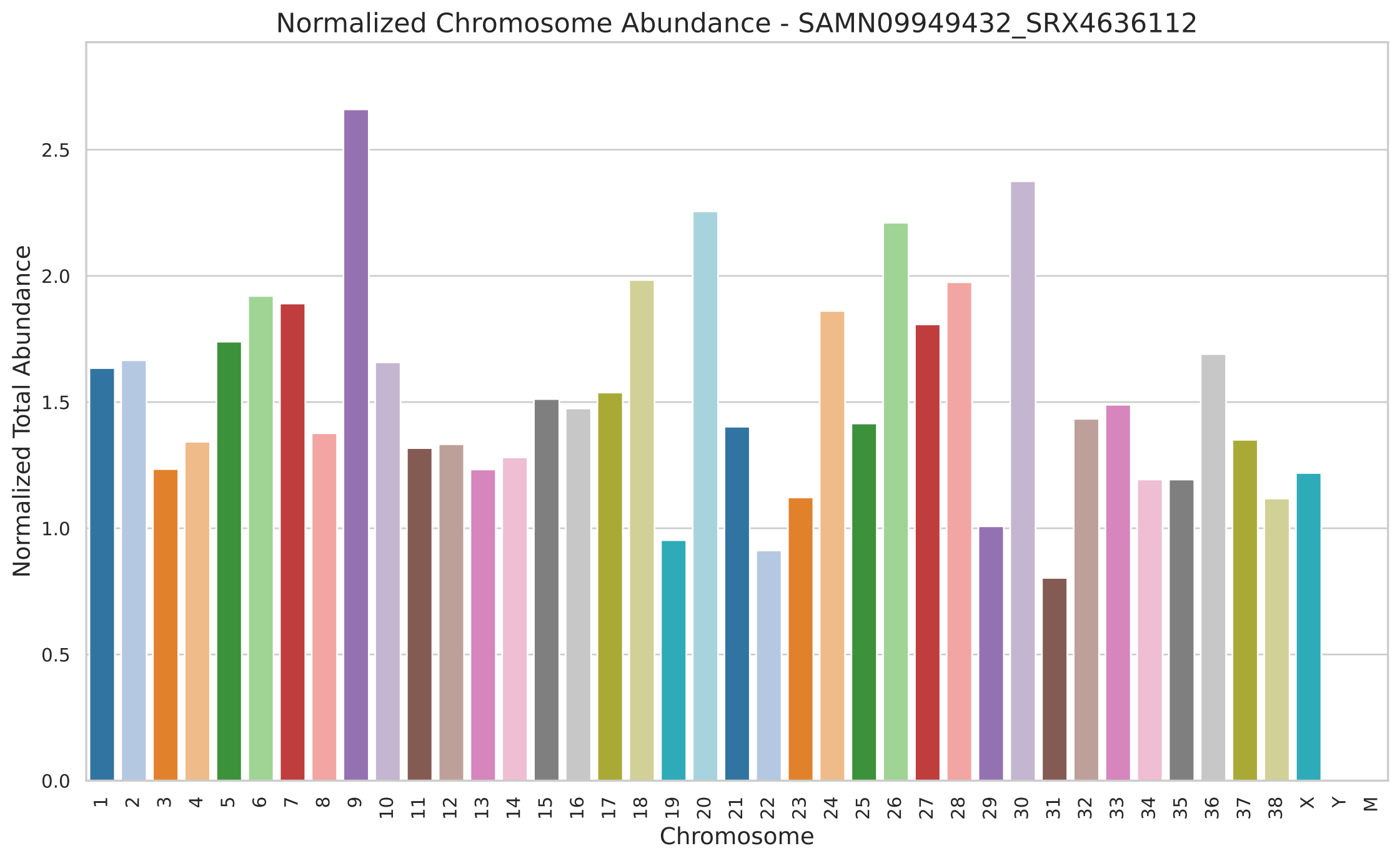

Normalized Chromosome Abundance - SAMEA7515351_ERX10021817
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

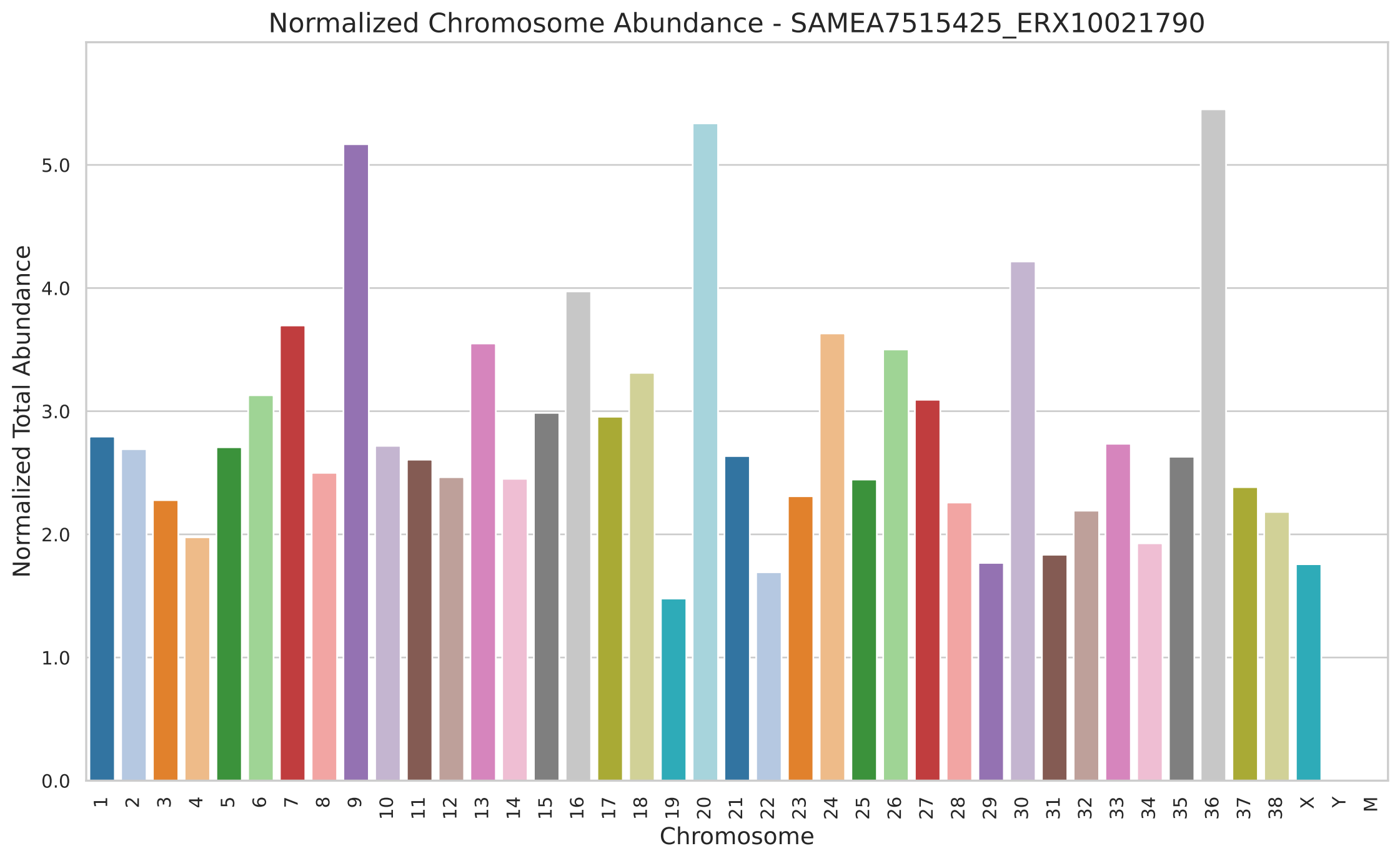

Normalized Chromosome Abundance - SAMEA7515390_ERX10021835
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

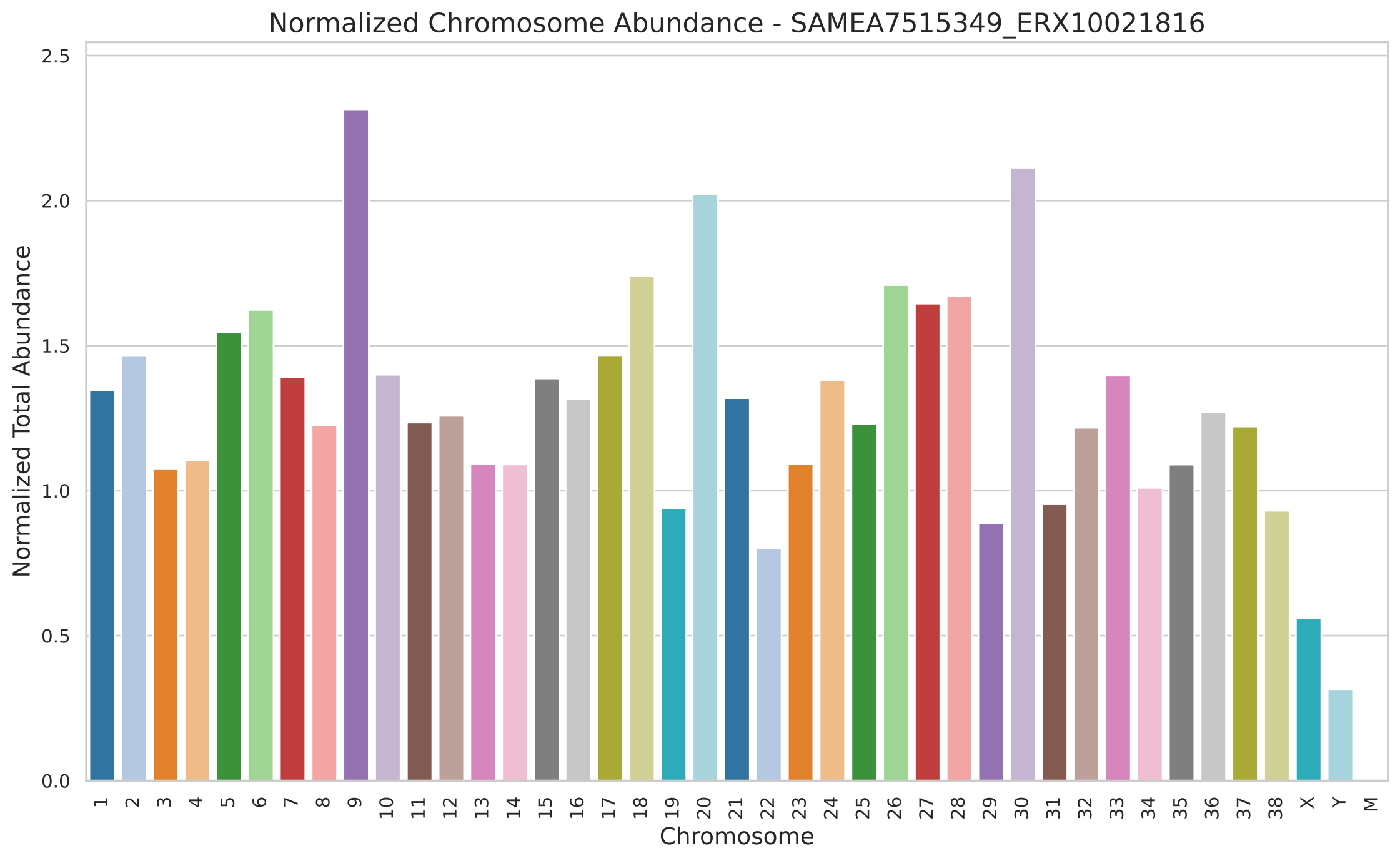

Normalized Chromosome Abundance - SAMEA7515478_ERX10021806
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
12.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

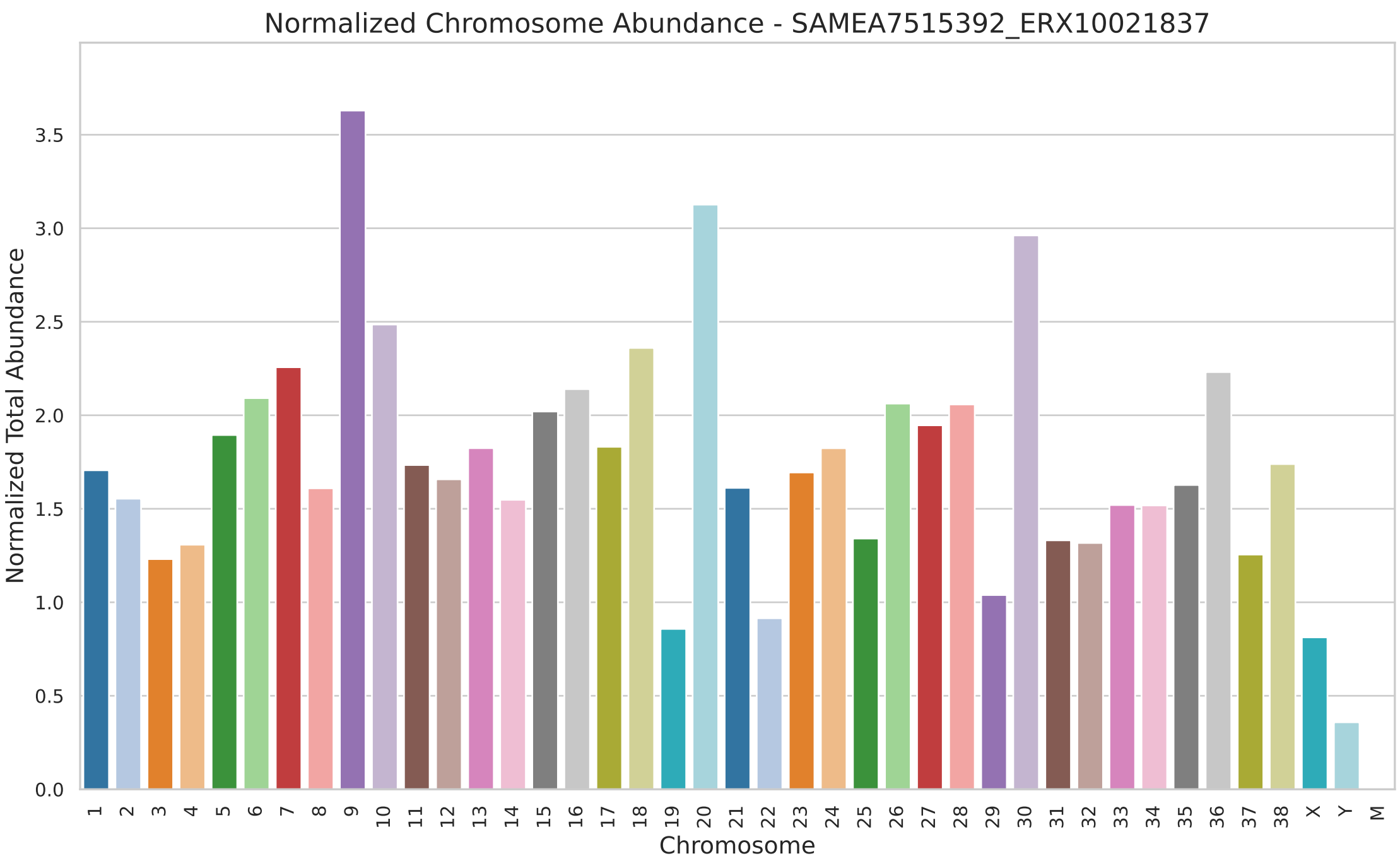

Normalized Chromosome Abundance - SAMEA7515501_ERX10021785
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

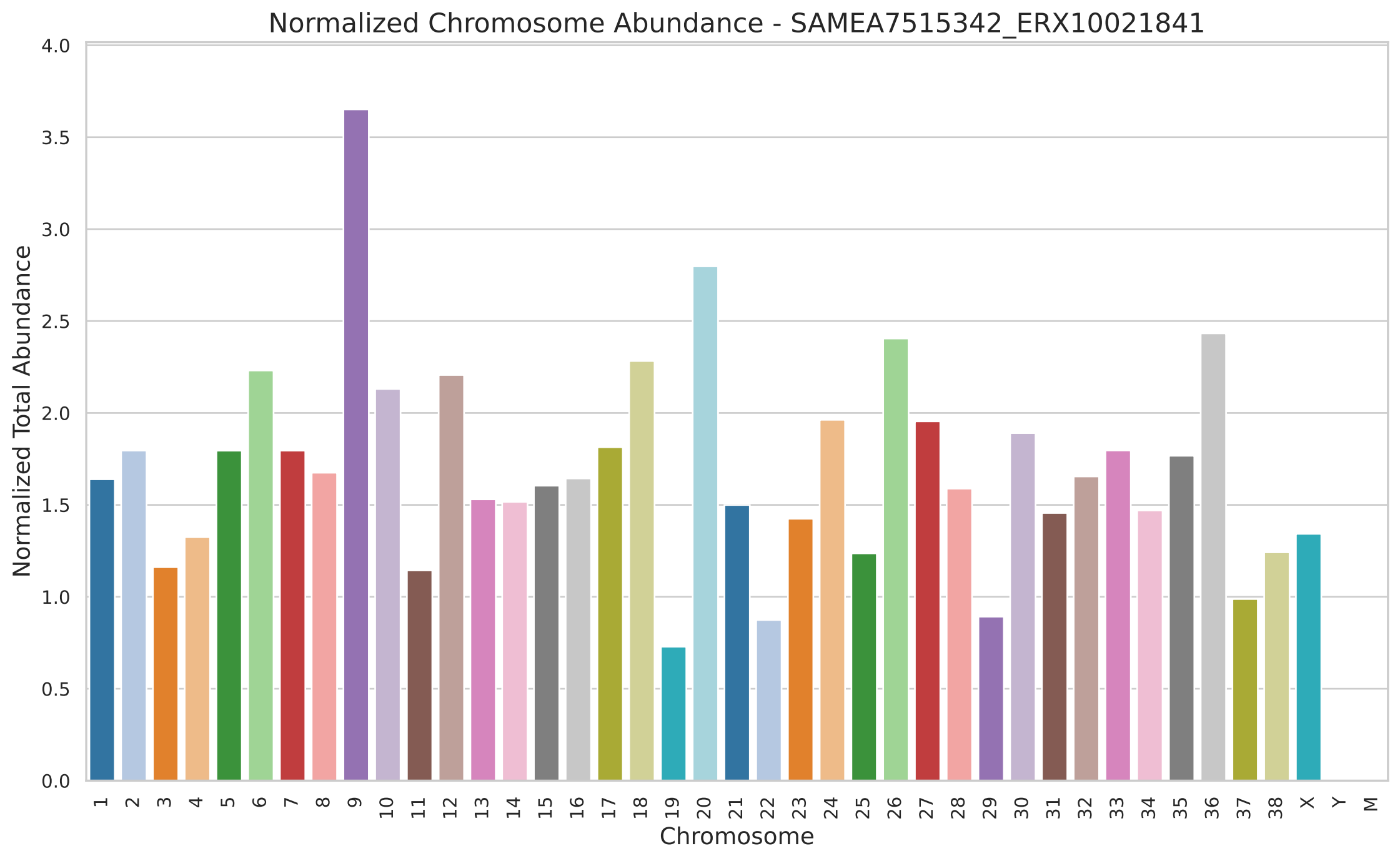

Normalized Chromosome Abundance - SAMEA7515356_ERX10021821
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

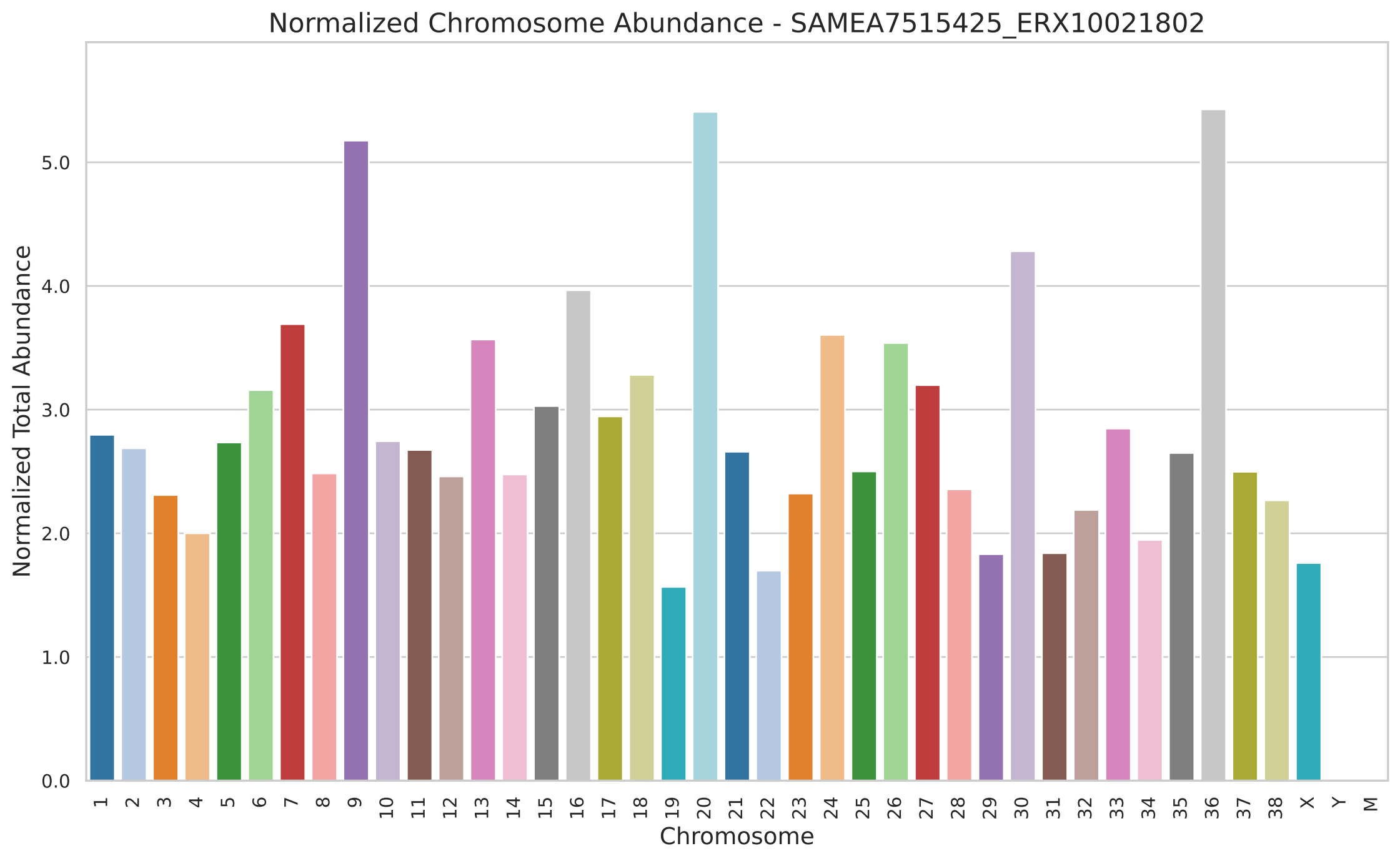

Normalized Chromosome Abundance - SAMN09949432_SRX4636112
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

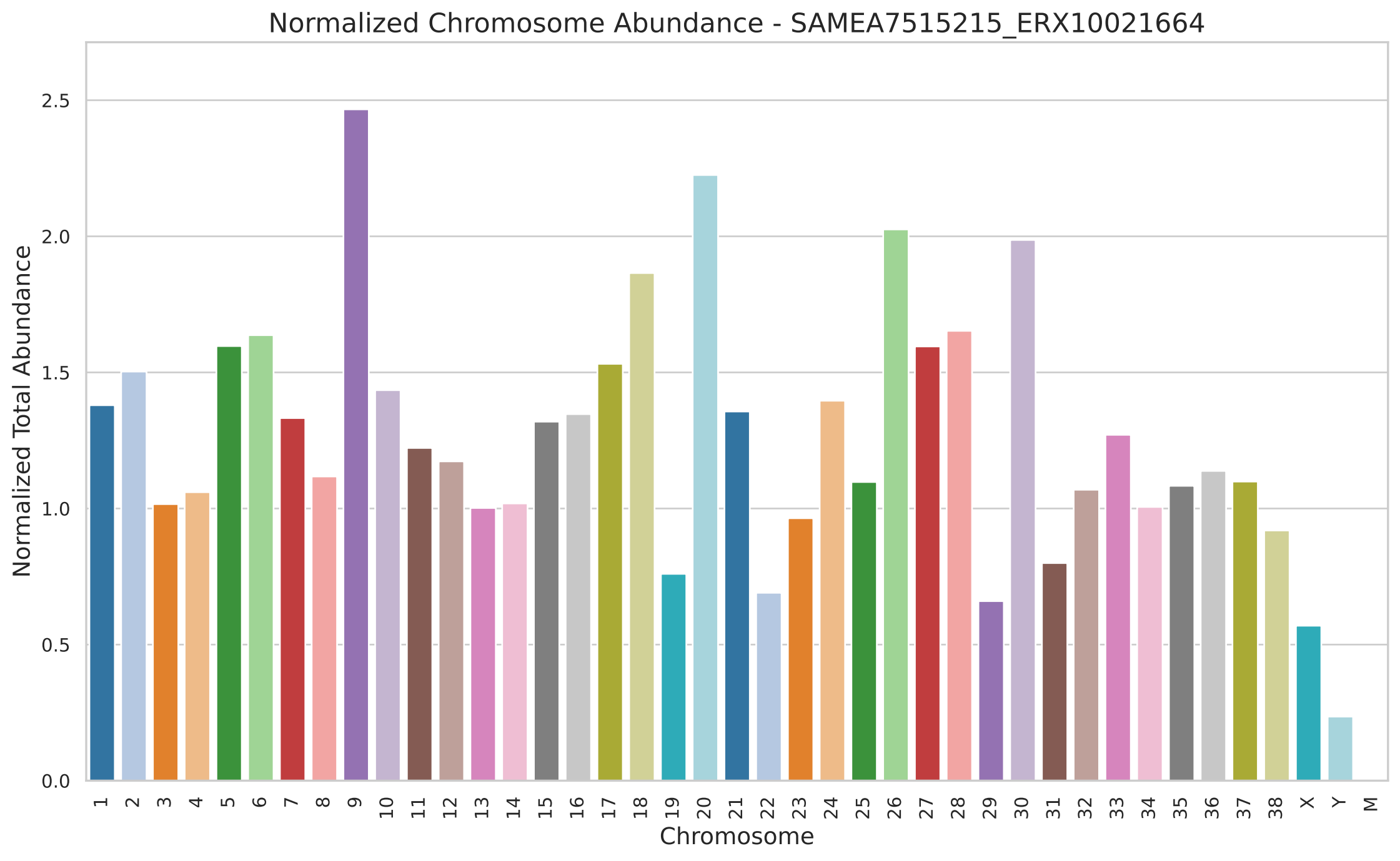

Normalized Chromosome Abundance - SAMEA7515425_ERX10021790
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

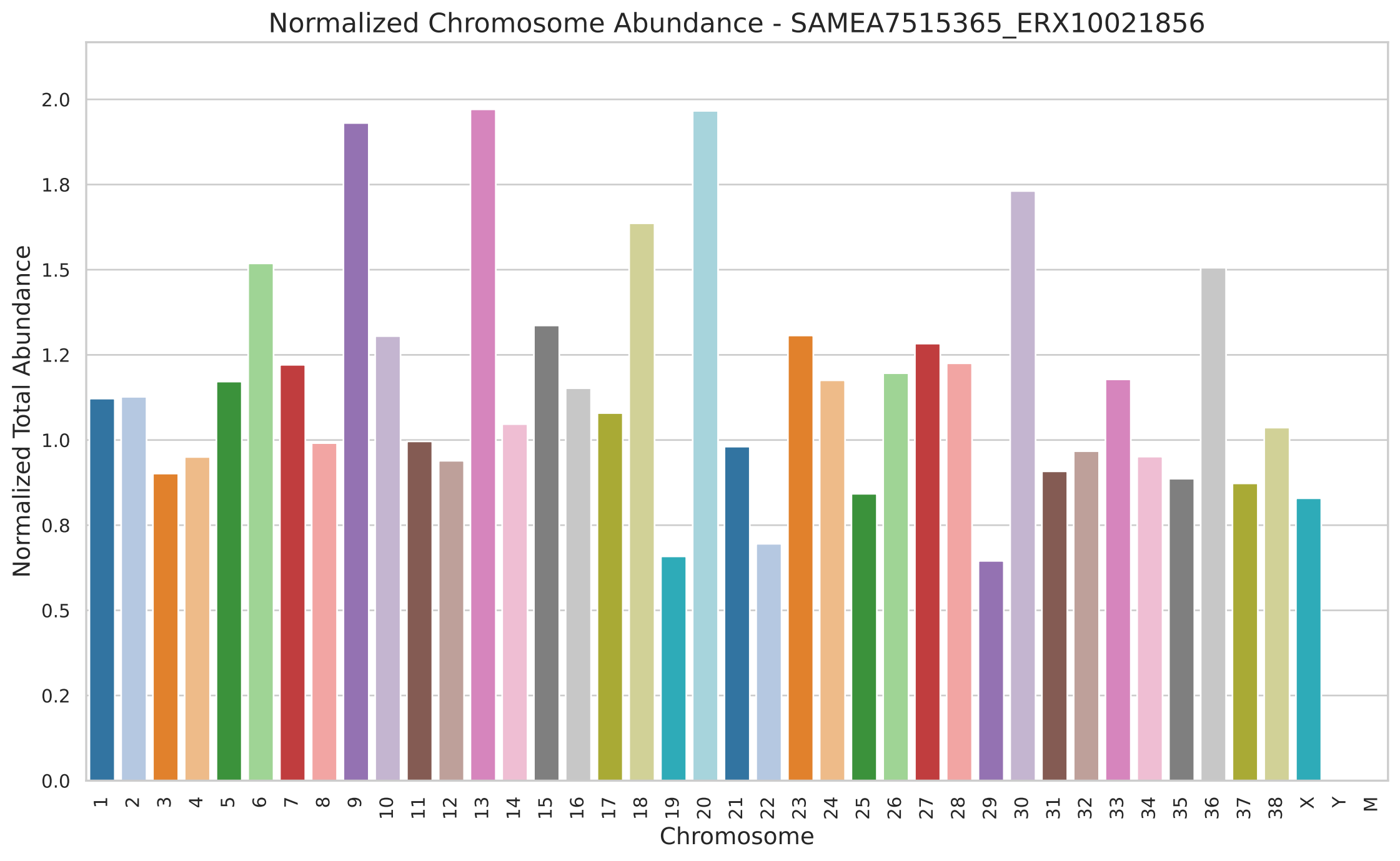

Normalized Chromosome Abundance - SAMEA7515349_ERX10021816
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

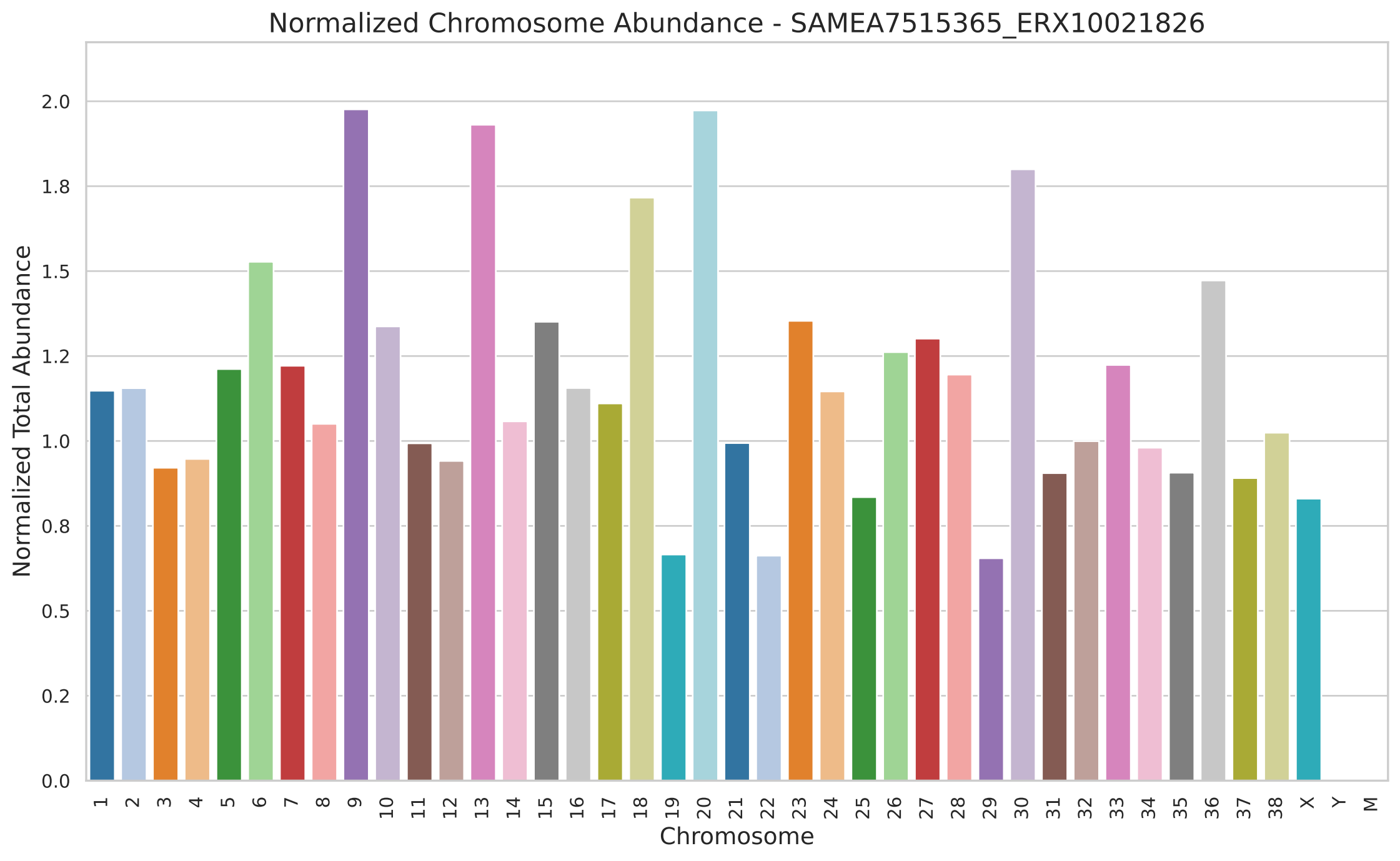

Normalized Chromosome Abundance - SAMEA7515392_ERX10021837
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

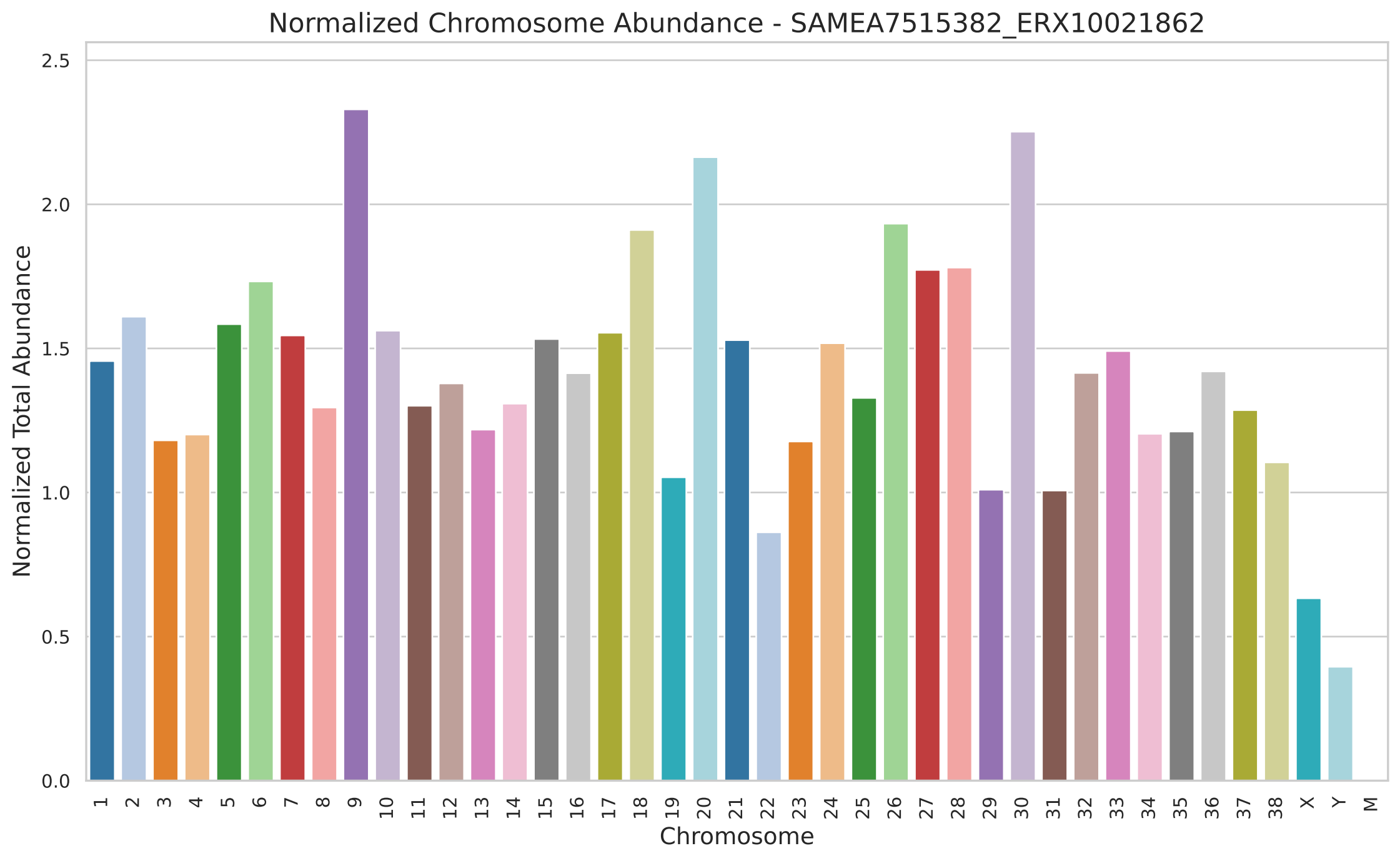

Normalized Chromosome Abundance - SAMEA7515342_ERX10021841
Normalized Total Abundance
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

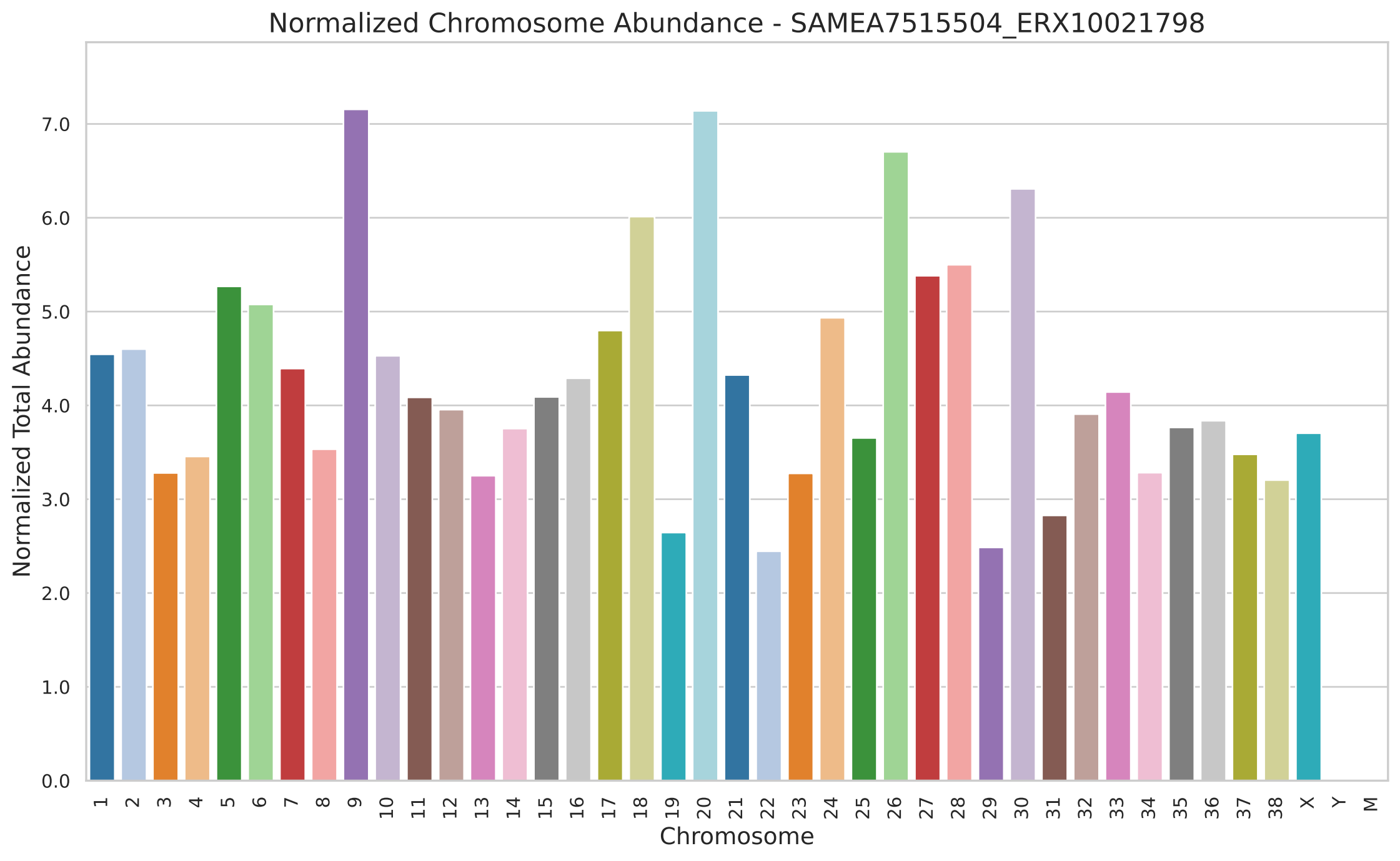

Normalized Chromosome Abundance - SAMEA7515425_ERX10021802
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

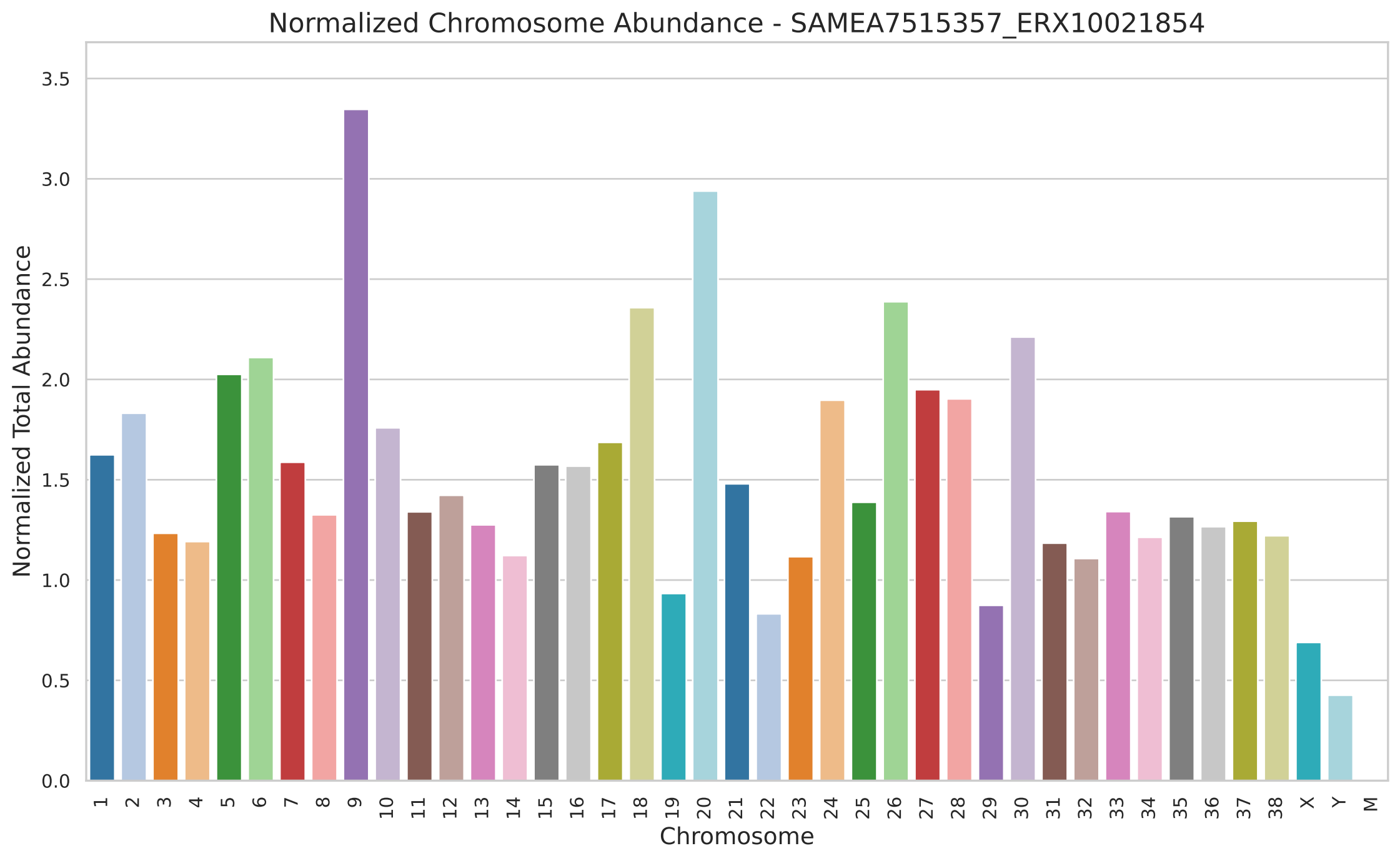

Normalized Chromosome Abundance - SAMEA7515215_ERX10021664
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

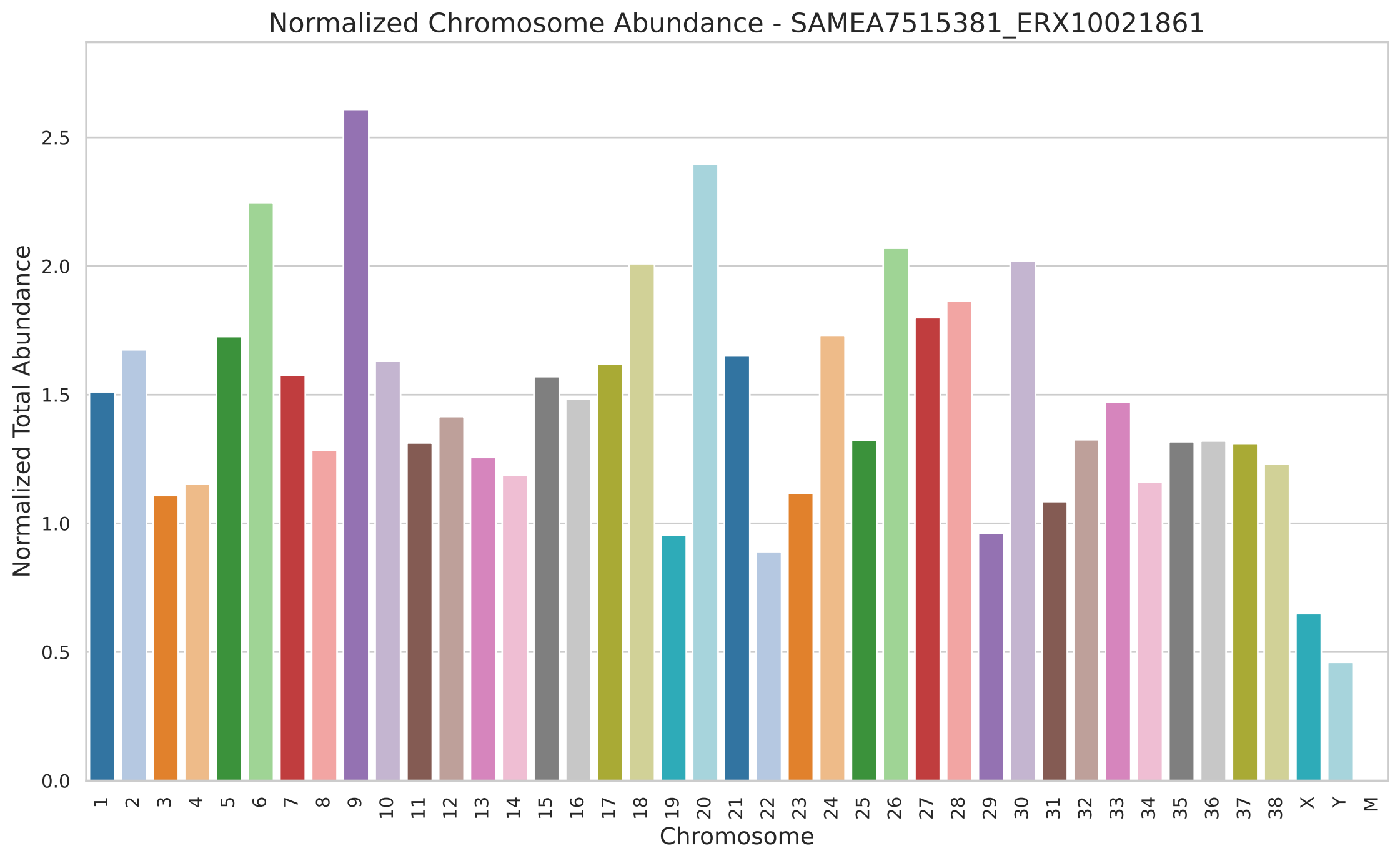

Normalized Chromosome Abundance - SAMEA7515365_ERX10021856
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

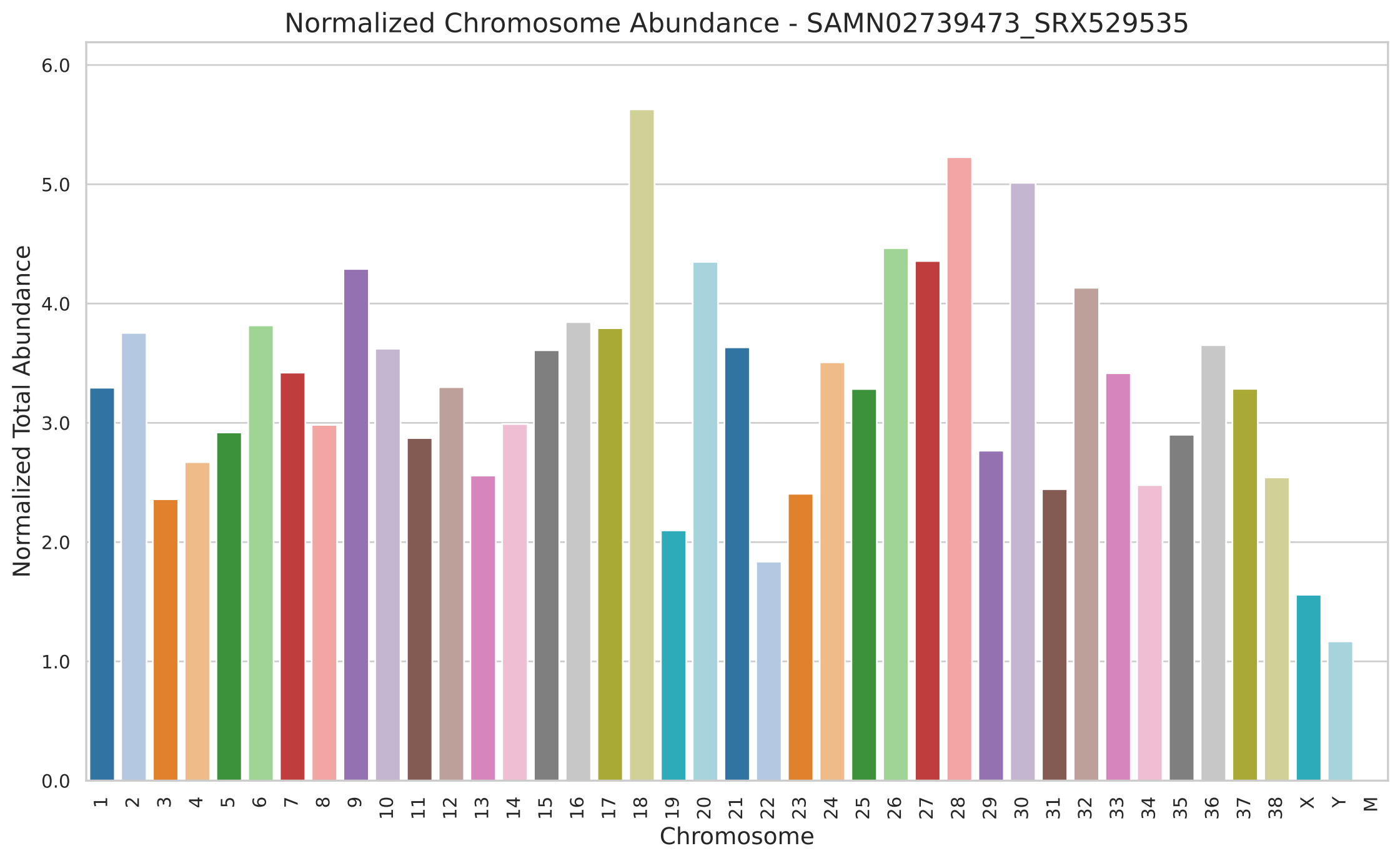

Normalized Chromosome Abundance - SAMEA7515365_ERX10021826
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

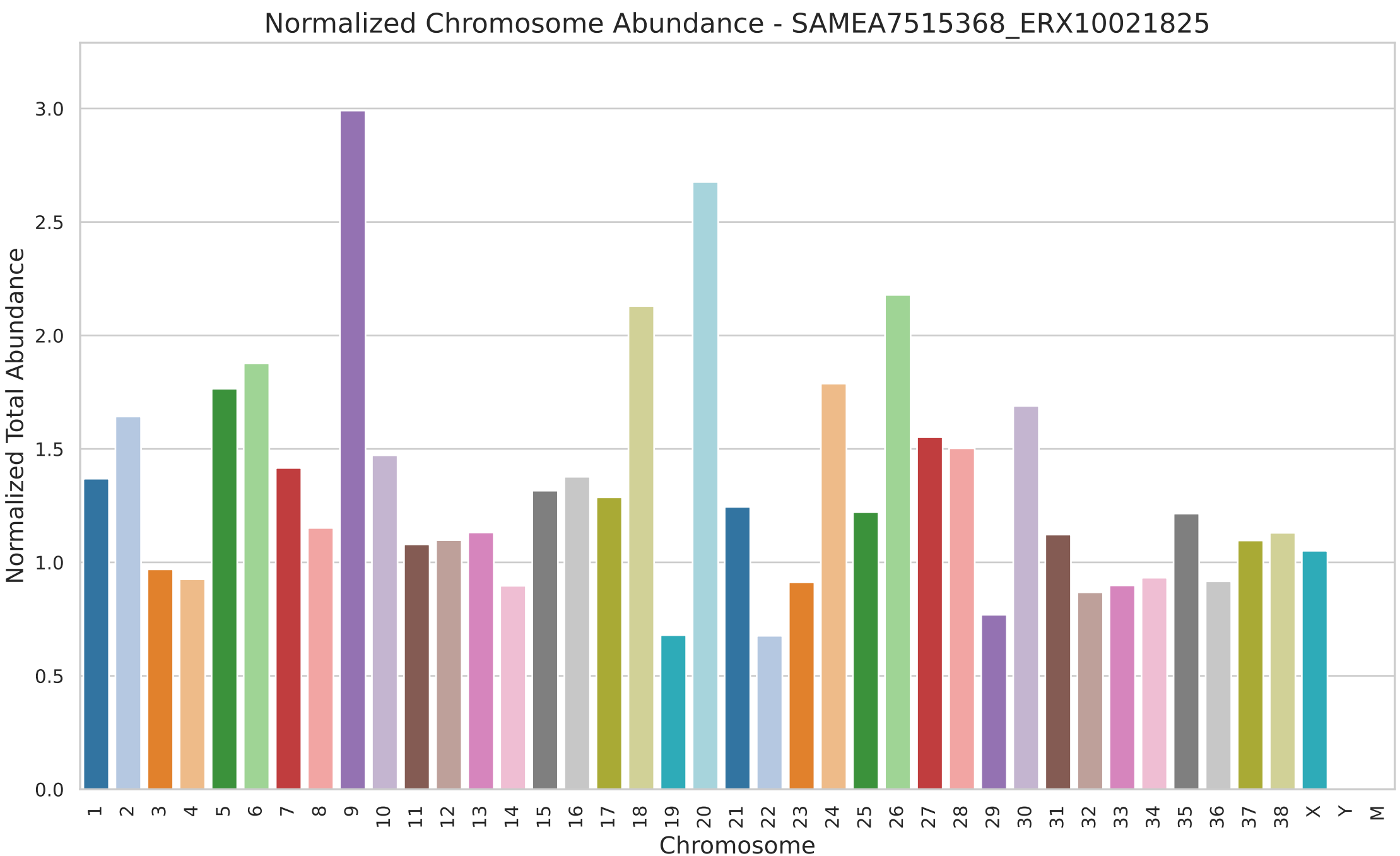

Normalized Chromosome Abundance - SAMEA7515382_ERX10021862
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

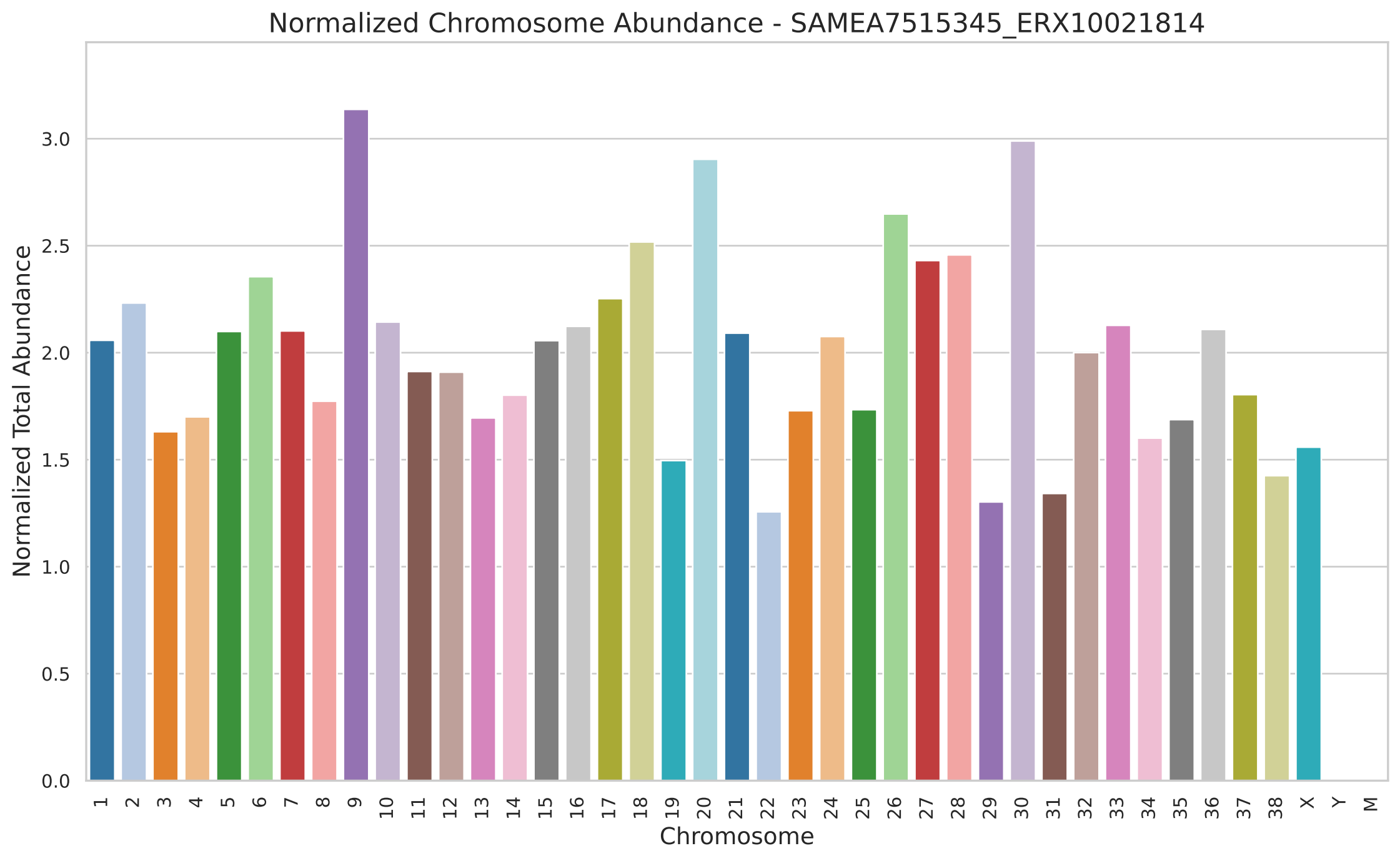

Normalized Chromosome Abundance - SAMEA7515504_ERX10021798
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

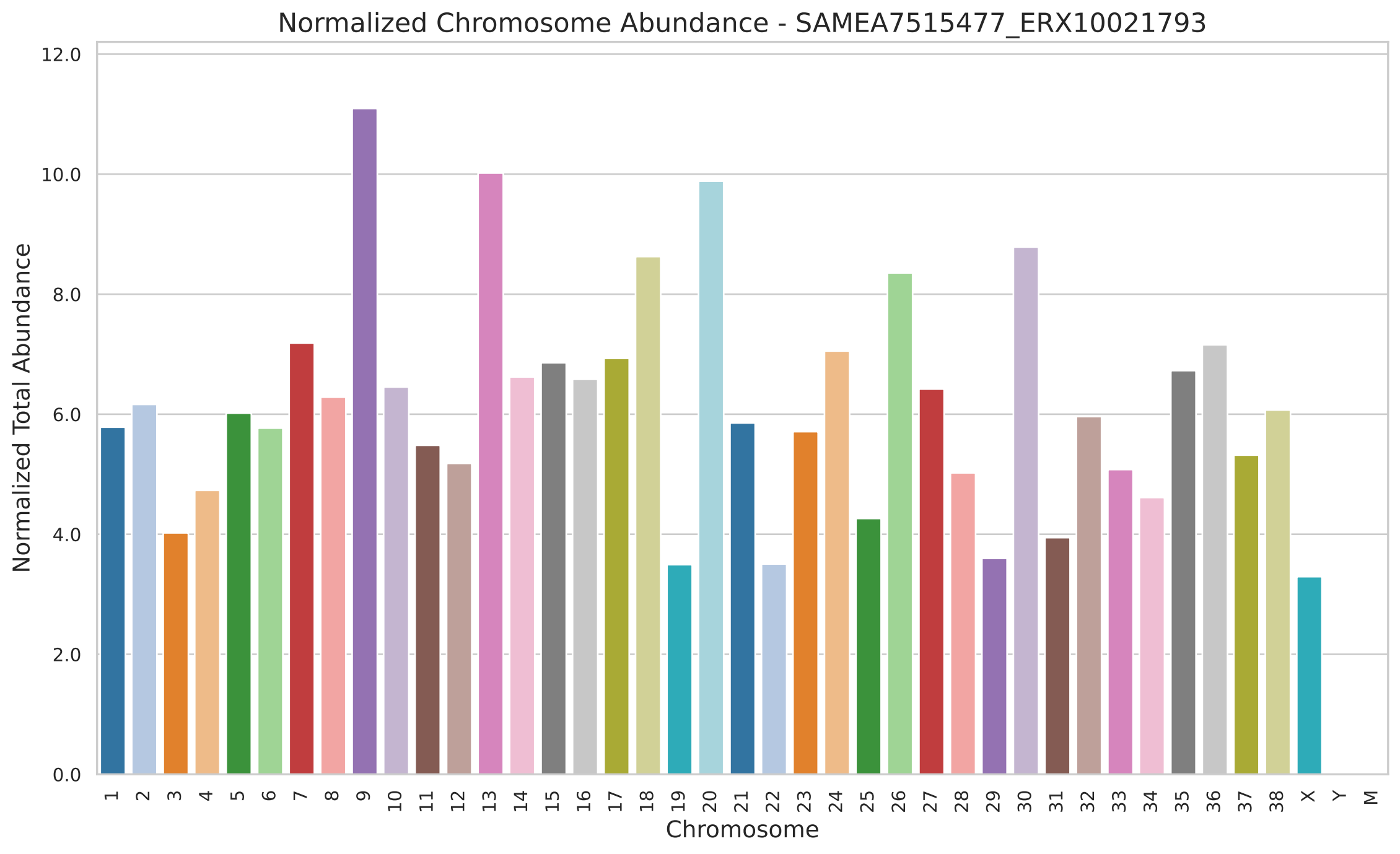

Normalized Chromosome Abundance - SAMEA7515357_ERX10021854
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

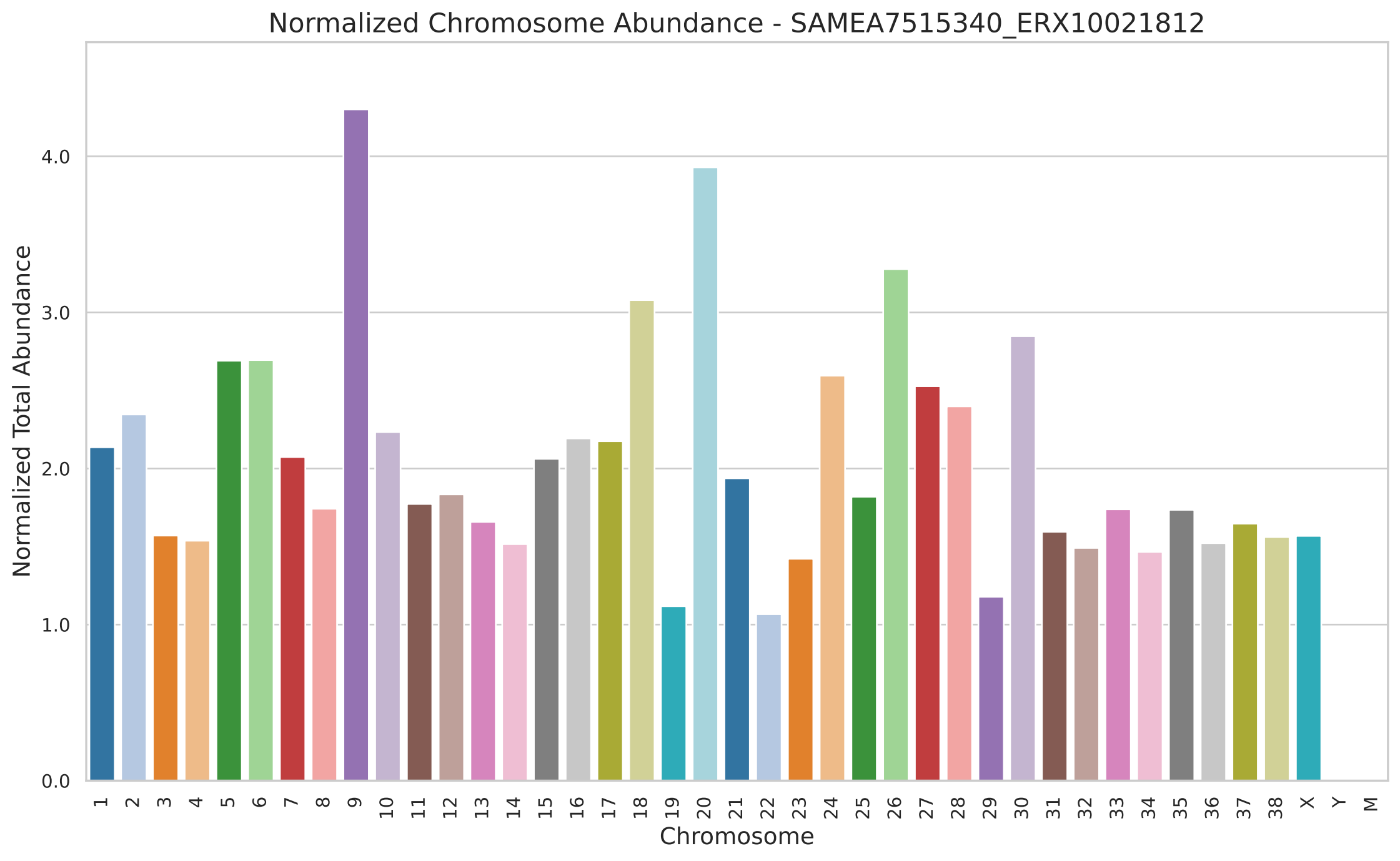

Normalized Chromosome Abundance - SAMEA7515381_ERX10021861
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

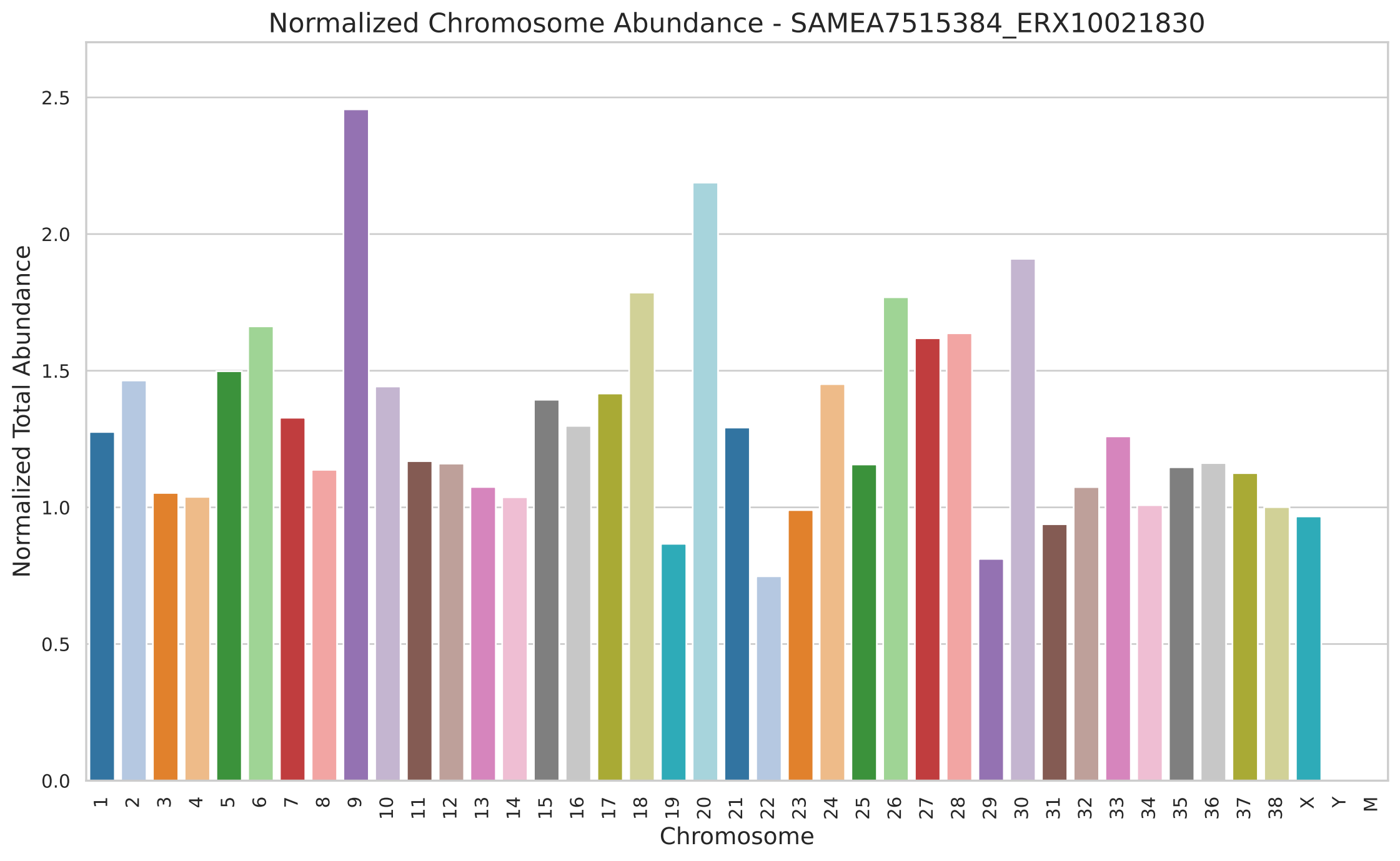

Normalized Chromosome Abundance - SAMN02739473_SRX529535
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

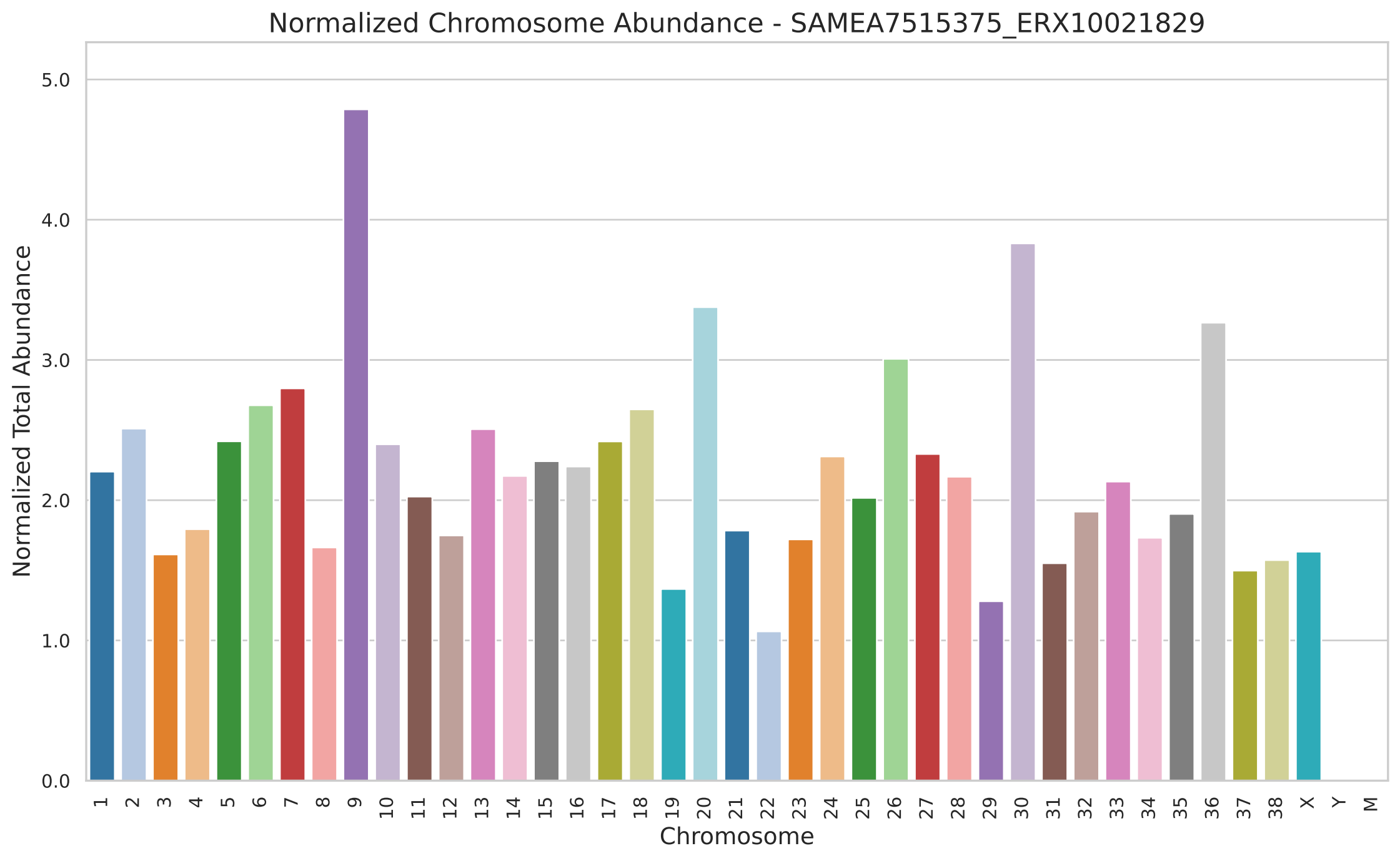

Normalized Chromosome Abundance - SAMEA7515368_ERX10021825
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

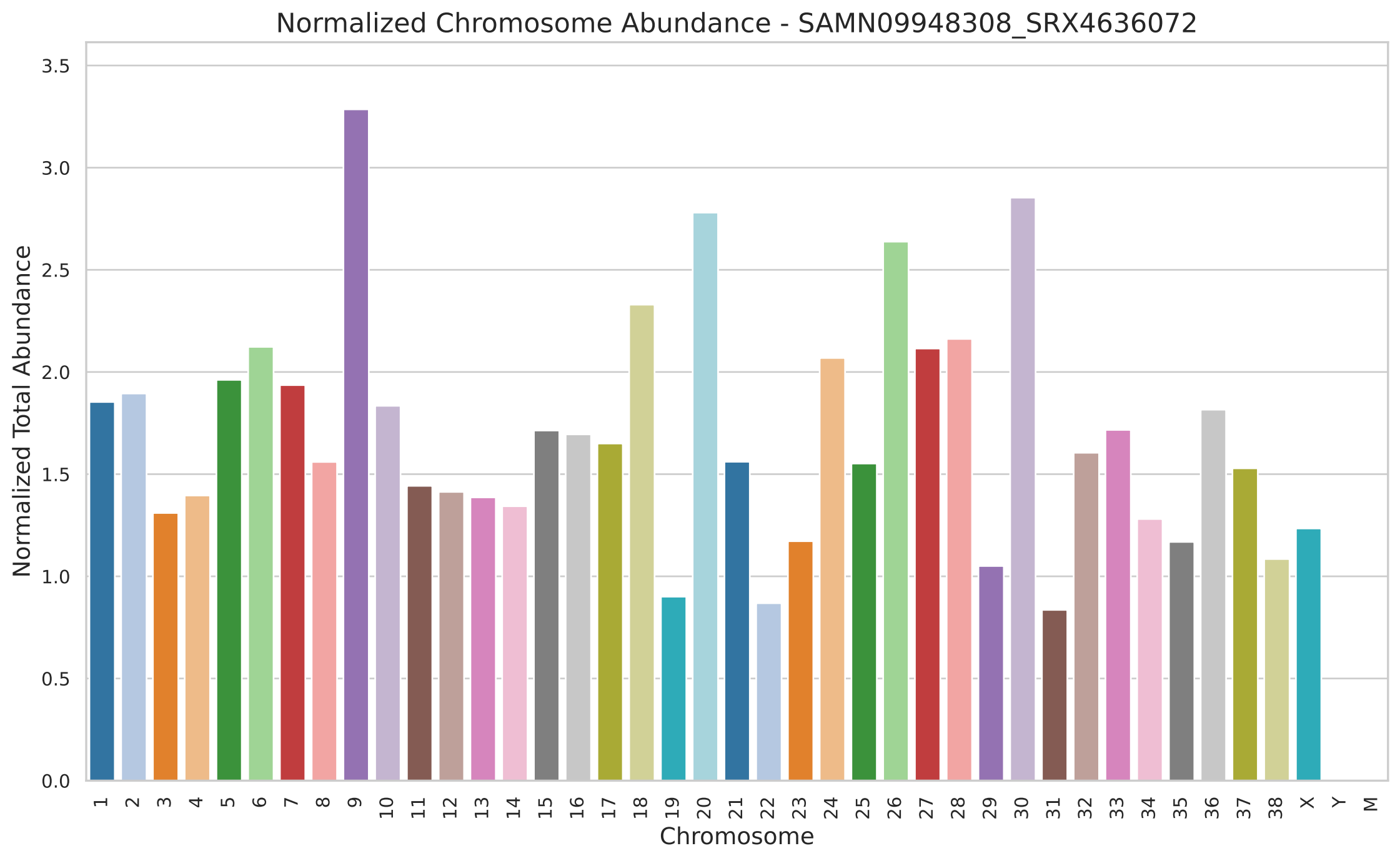

Normalized Chromosome Abundance - SAMEA7515345_ERX10021814
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

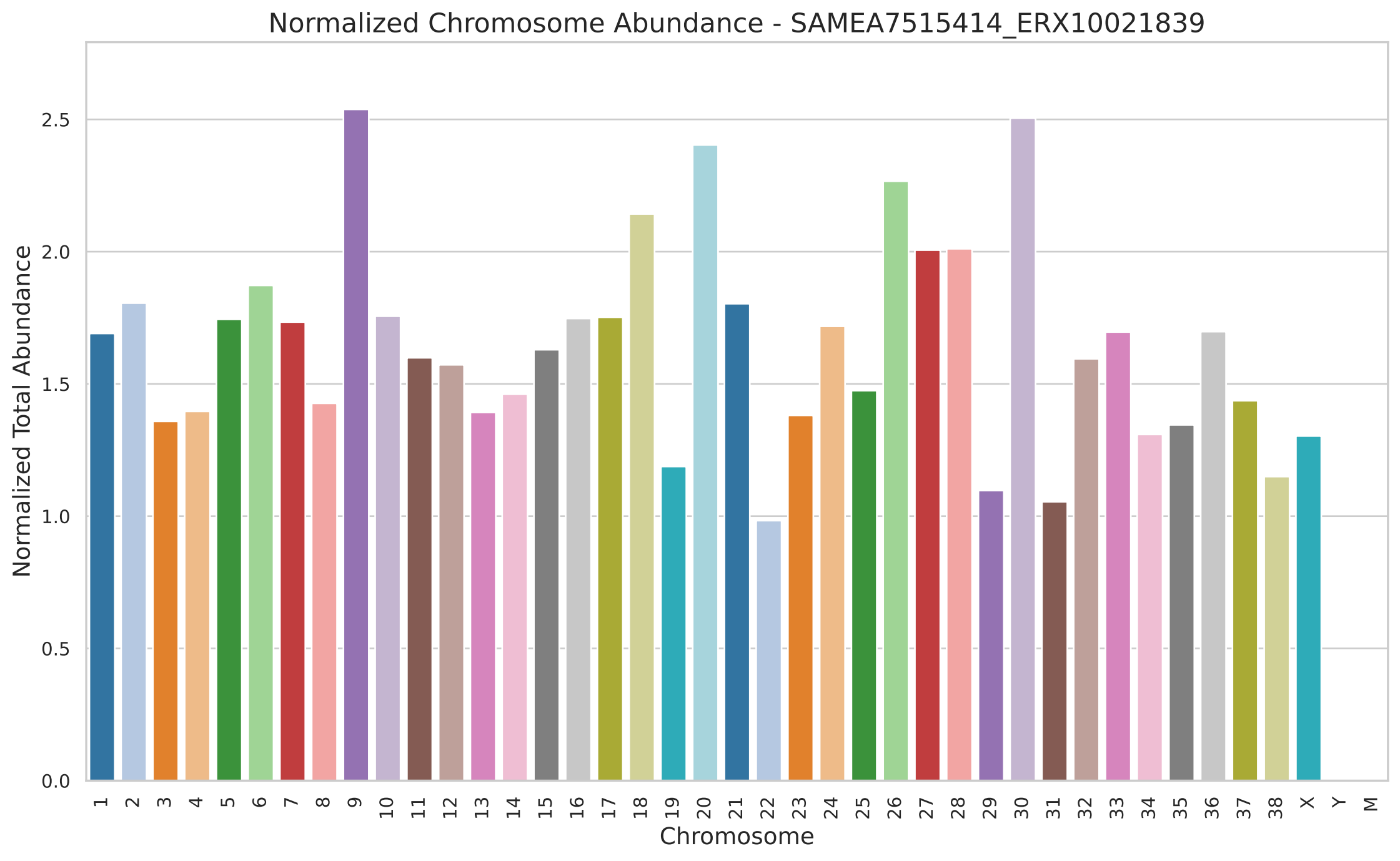

Normalized Chromosome Abundance - SAMEA7515477_ERX10021793
Normalized Total Abundance
12.0
10.0
8.0
6.0
4.0
2.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

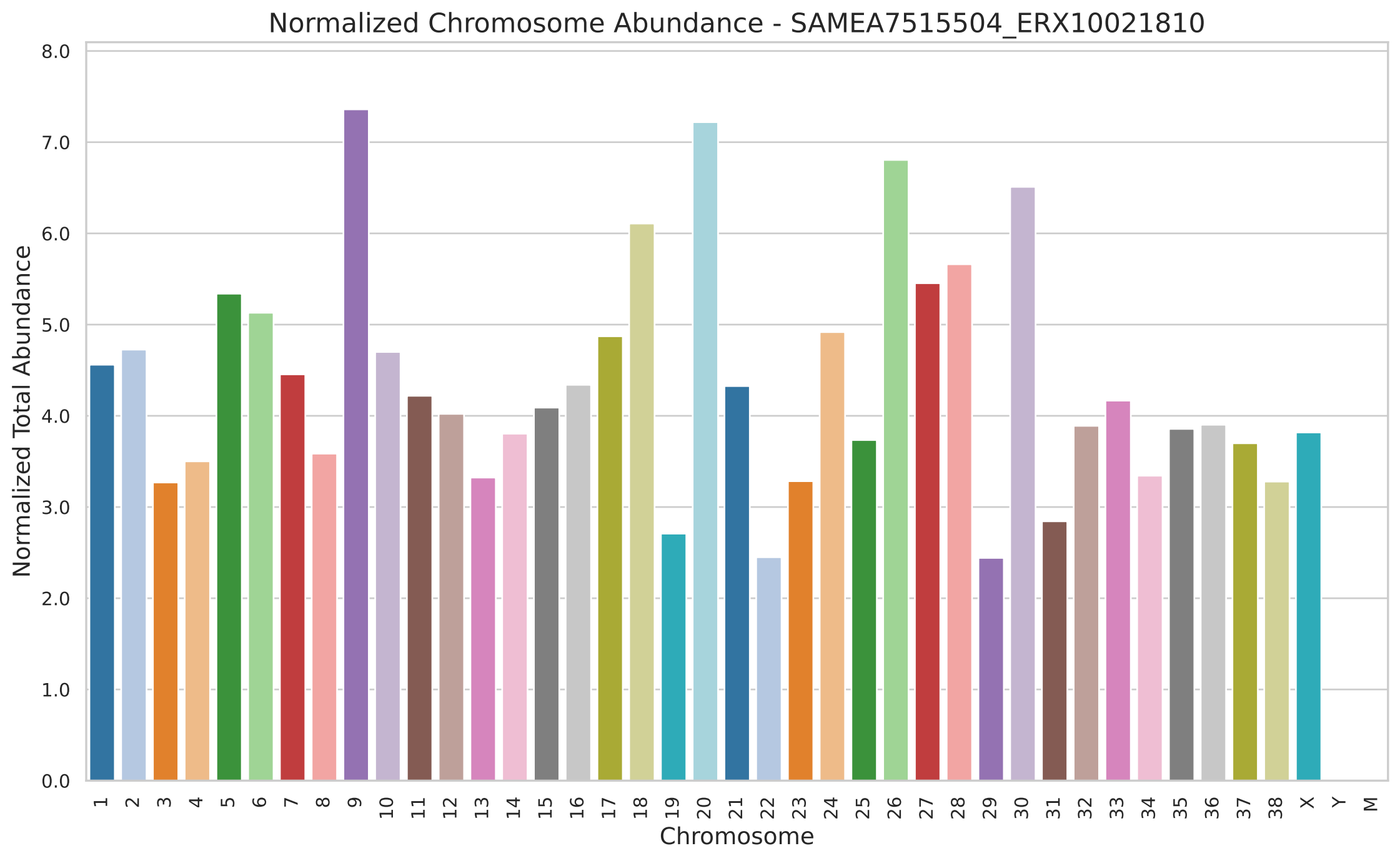

Normalized Chromosome Abundance - SAMEA7515340_ERX10021812
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

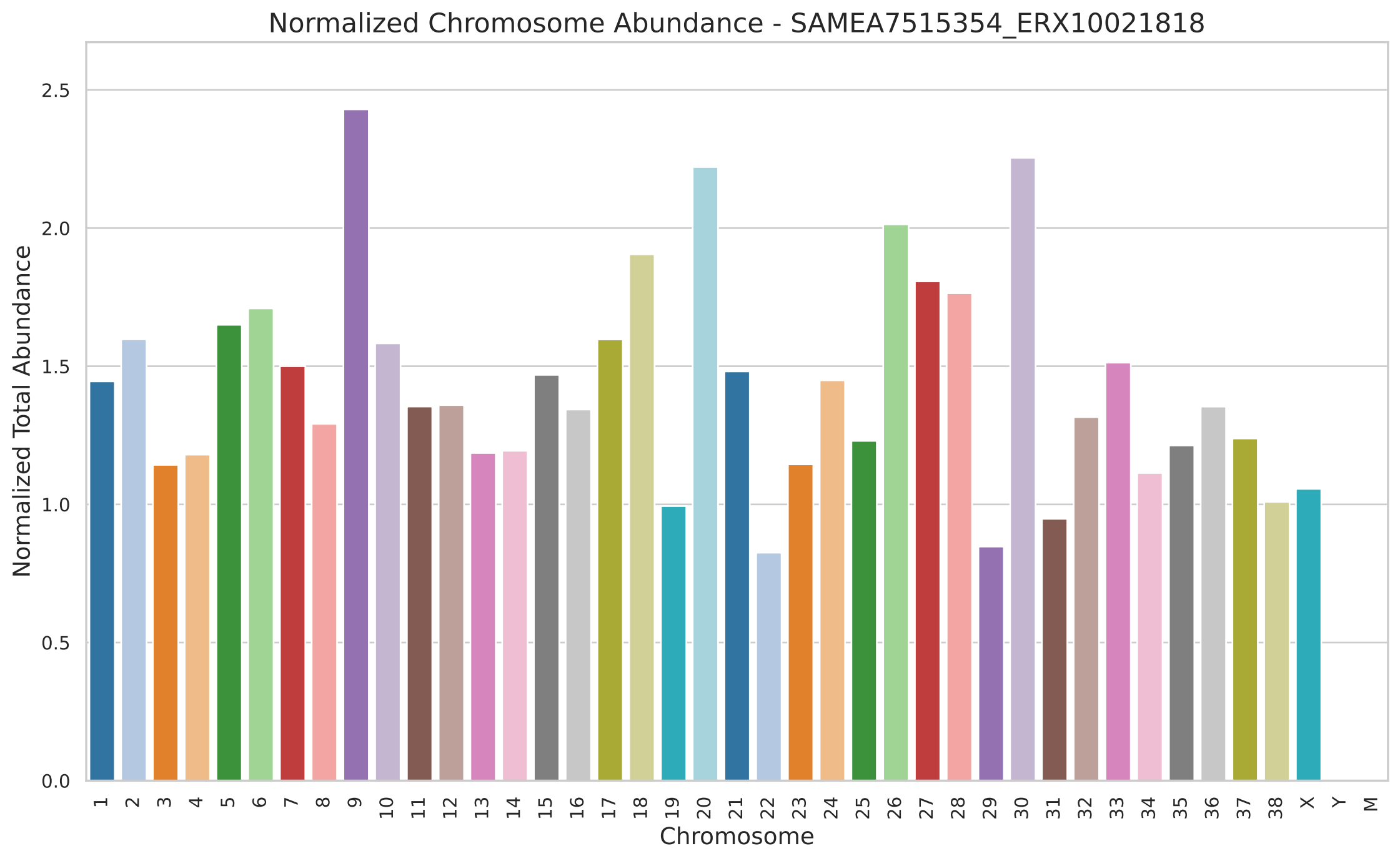

Normalized Chromosome Abundance - SAMEA7515384_ERX10021830
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

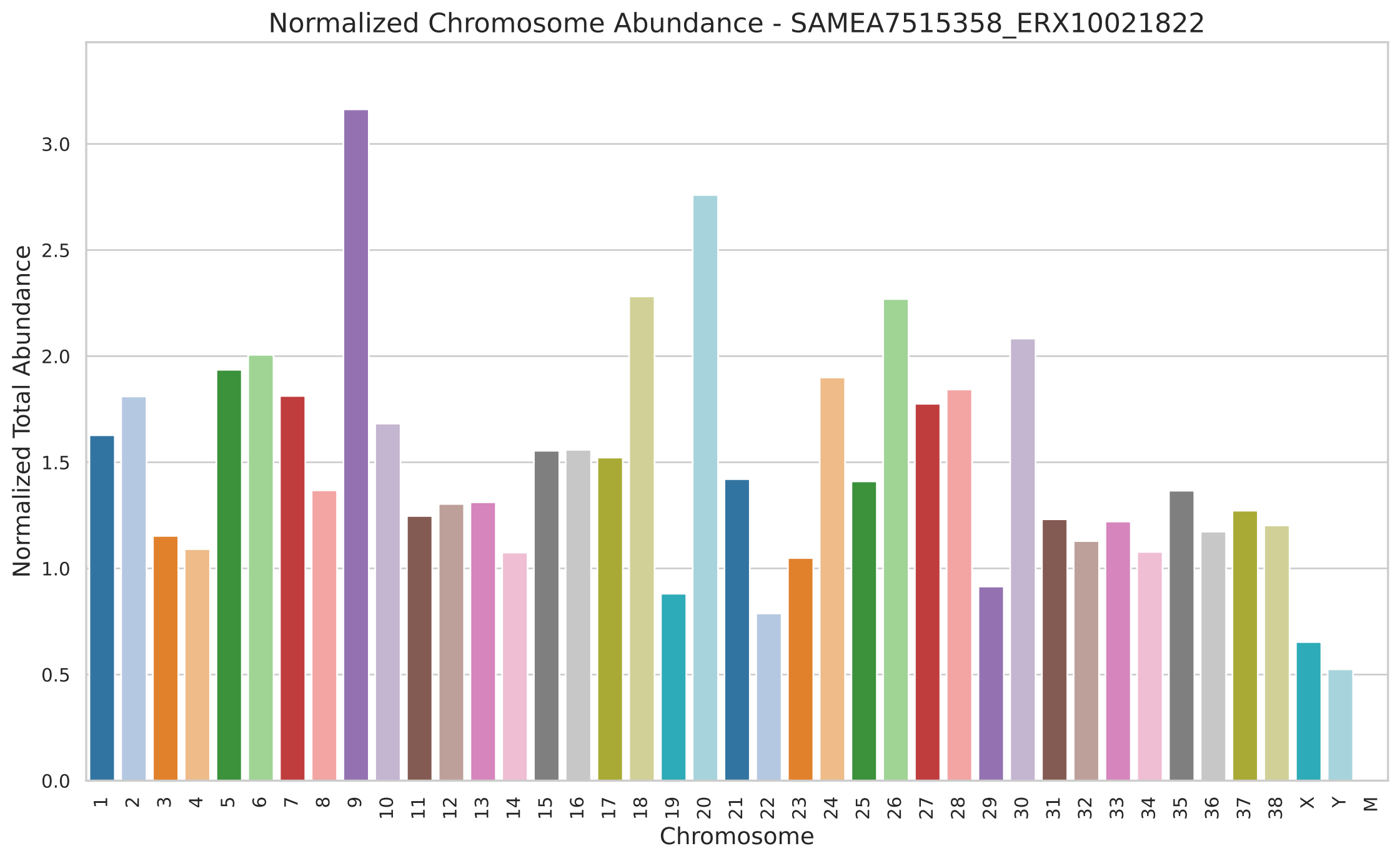

Normalized Chromosome Abundance - SAMEA7515375_ERX10021829
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

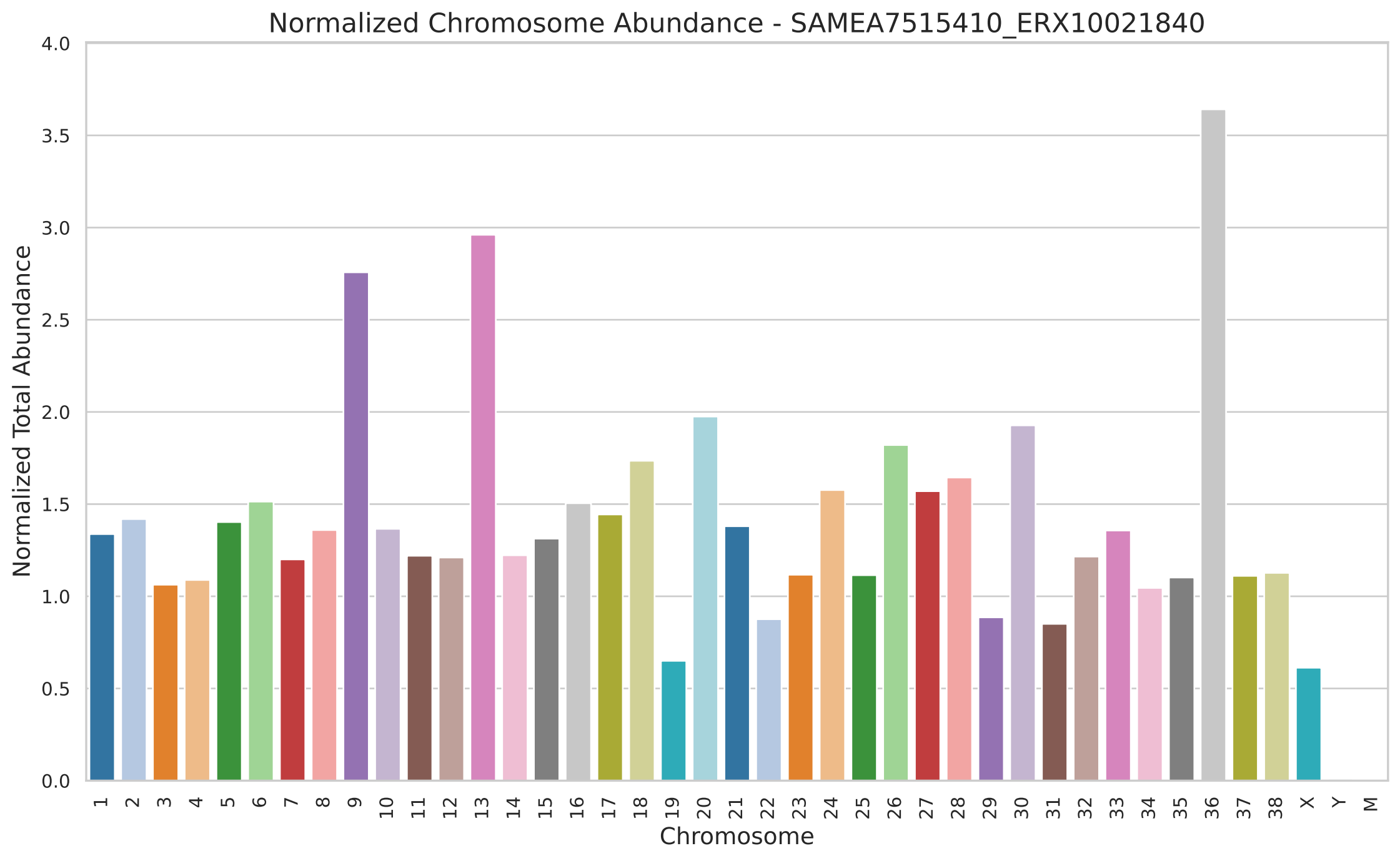

Normalized Chromosome Abundance - SAMN09948308_SRX4636072
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

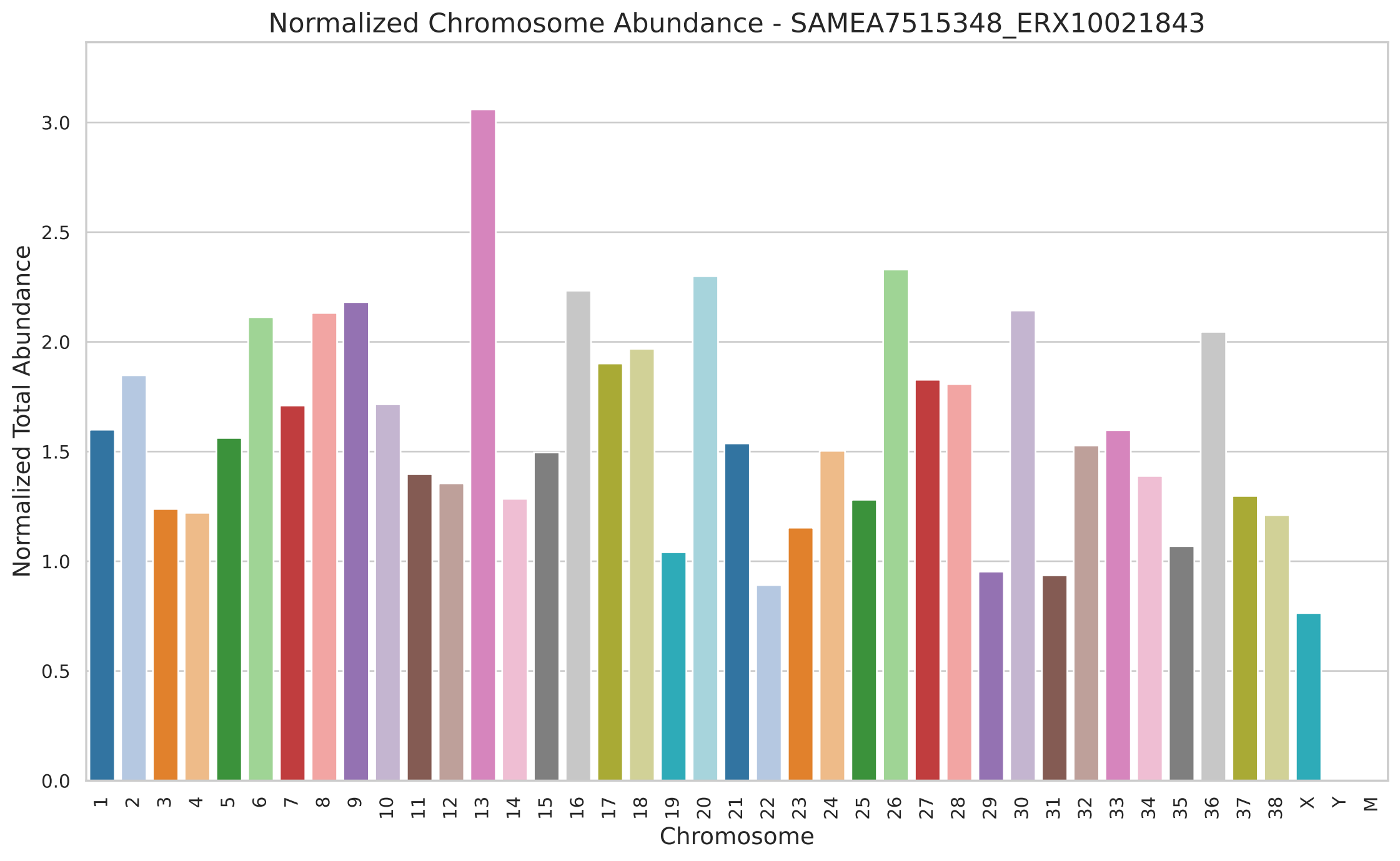

Normalized Chromosome Abundance - SAMEA7515414_ERX10021839
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

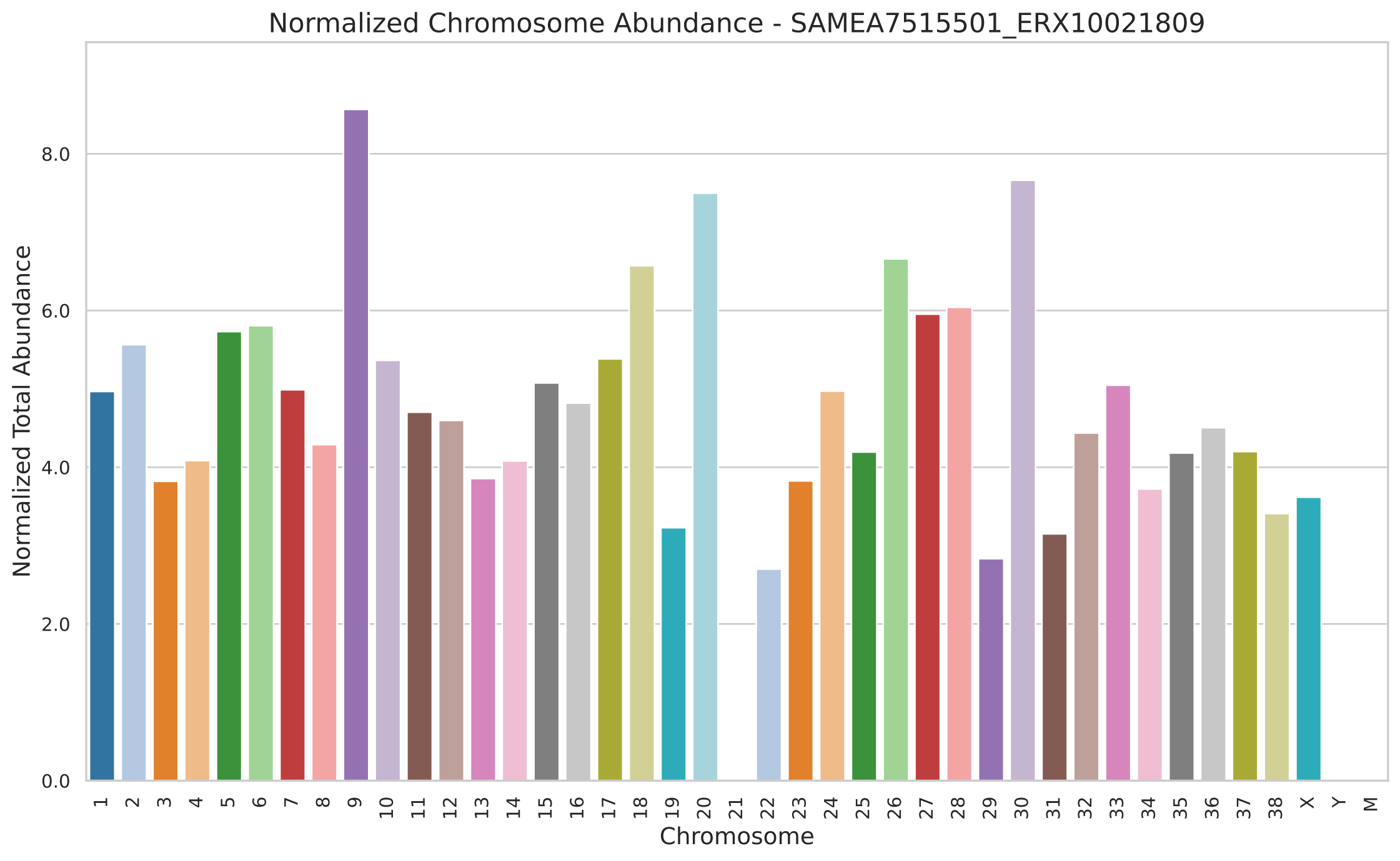

Normalized Chromosome Abundance - SAMEA7515504_ERX10021810
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

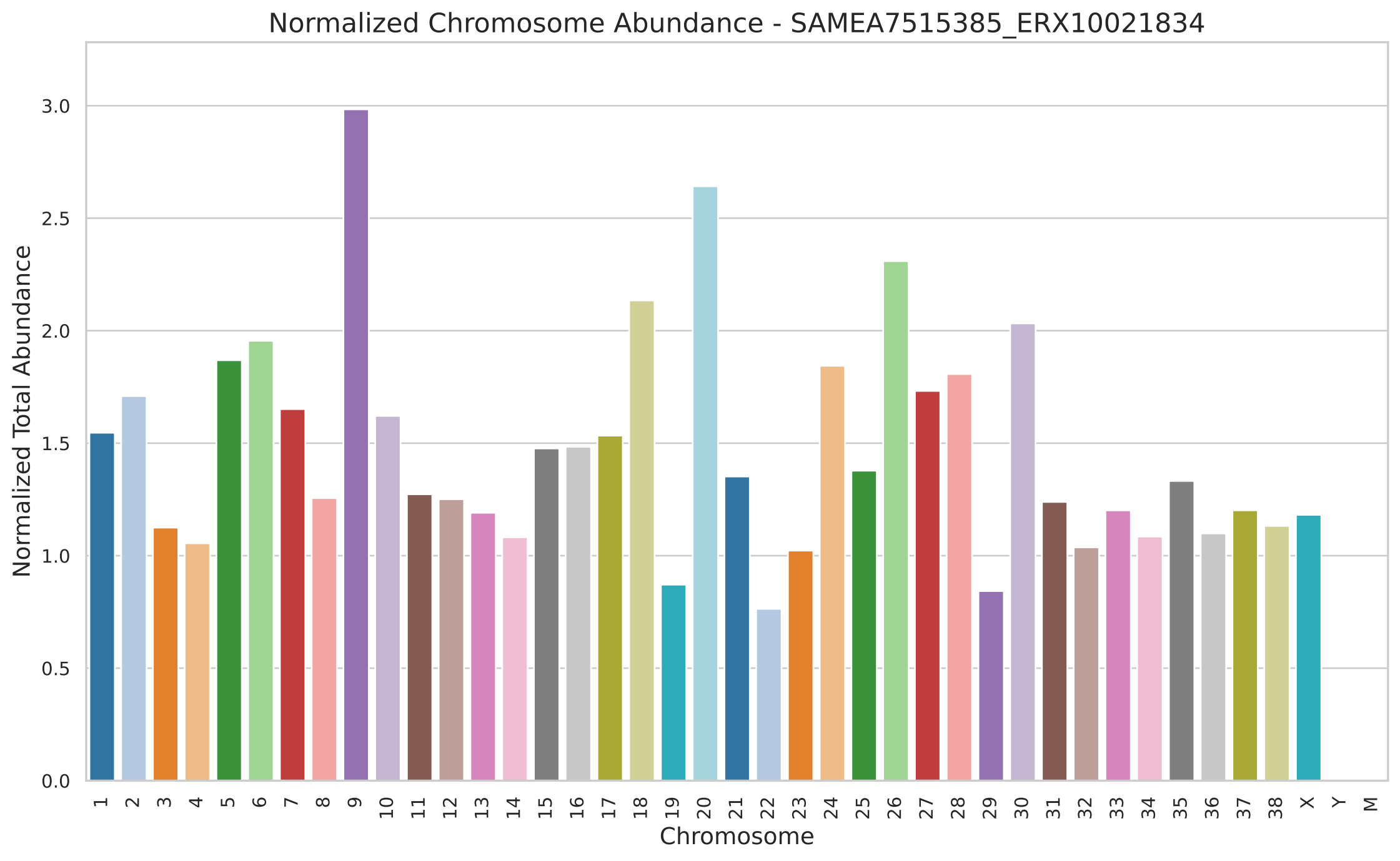

Normalized Chromosome Abundance - SAMEA7515354_ERX10021818
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

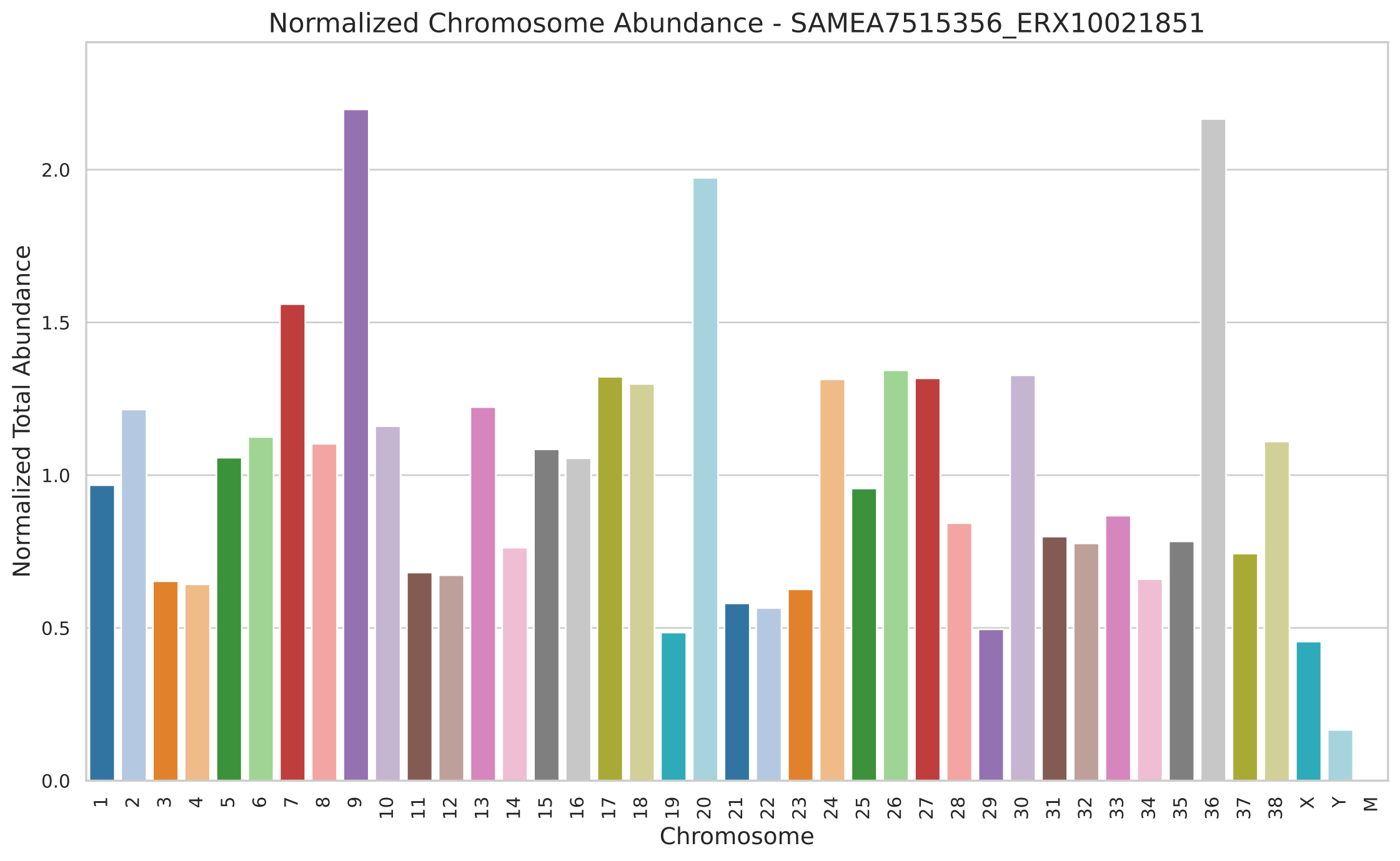

Normalized Chromosome Abundance - SAMEA7515358_ERX10021822
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

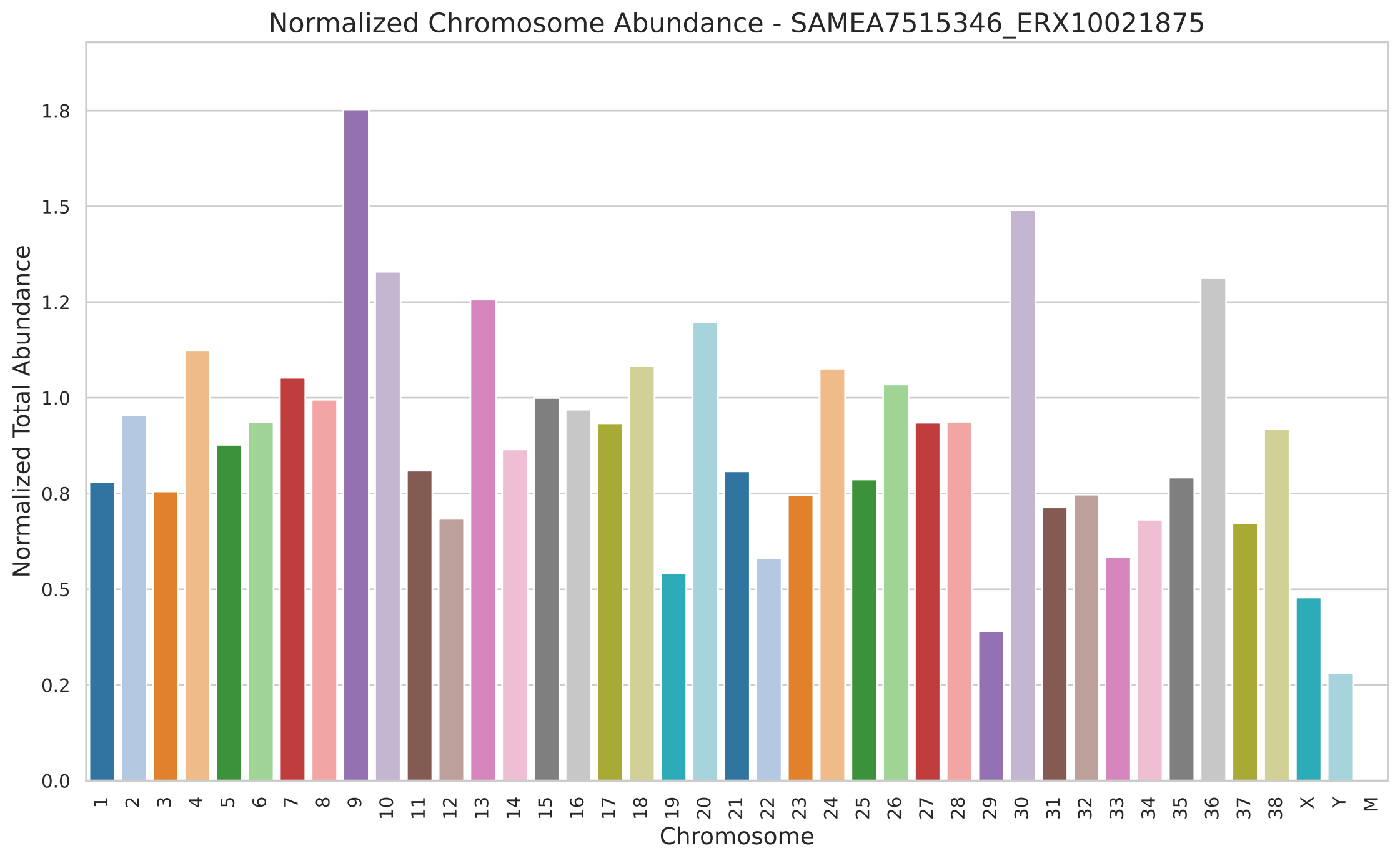

Normalized Chromosome Abundance - SAMEA7515410_ERX10021840
Normalized Total Abundance
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

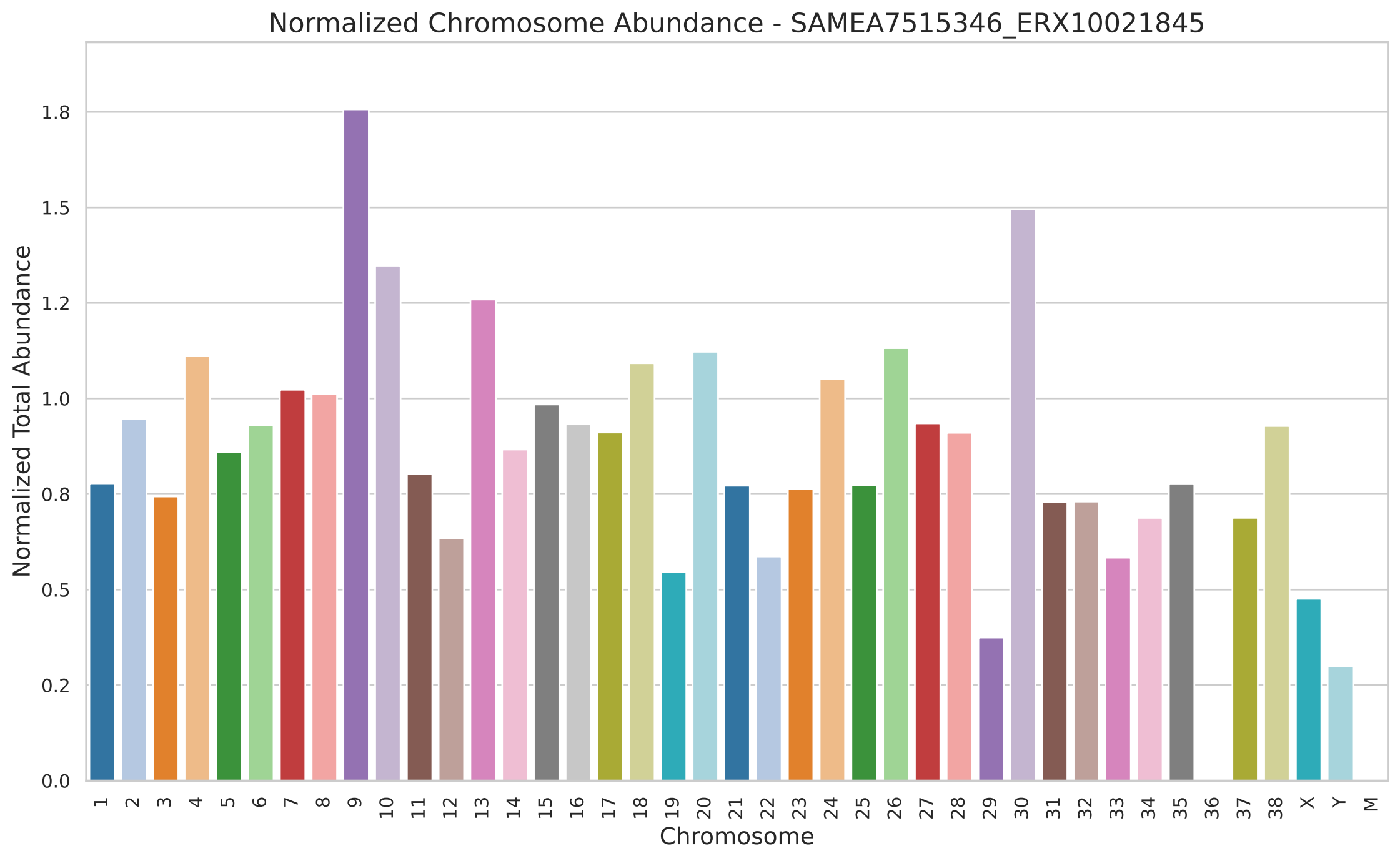

Normalized Chromosome Abundance - SAMEA7515348_ERX10021843
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

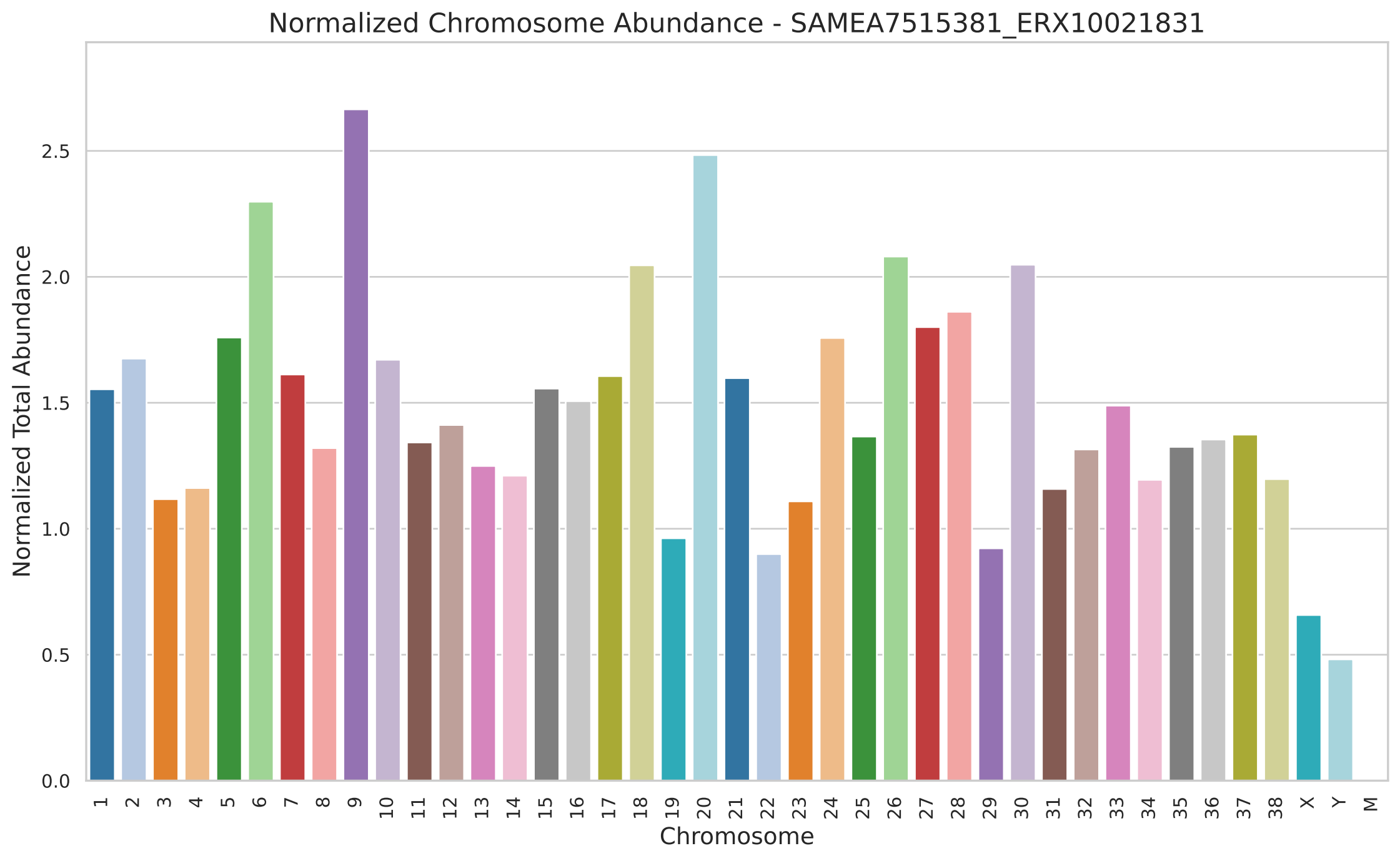

Normalized Chromosome Abundance - SAMEA7515501_ERX10021809
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

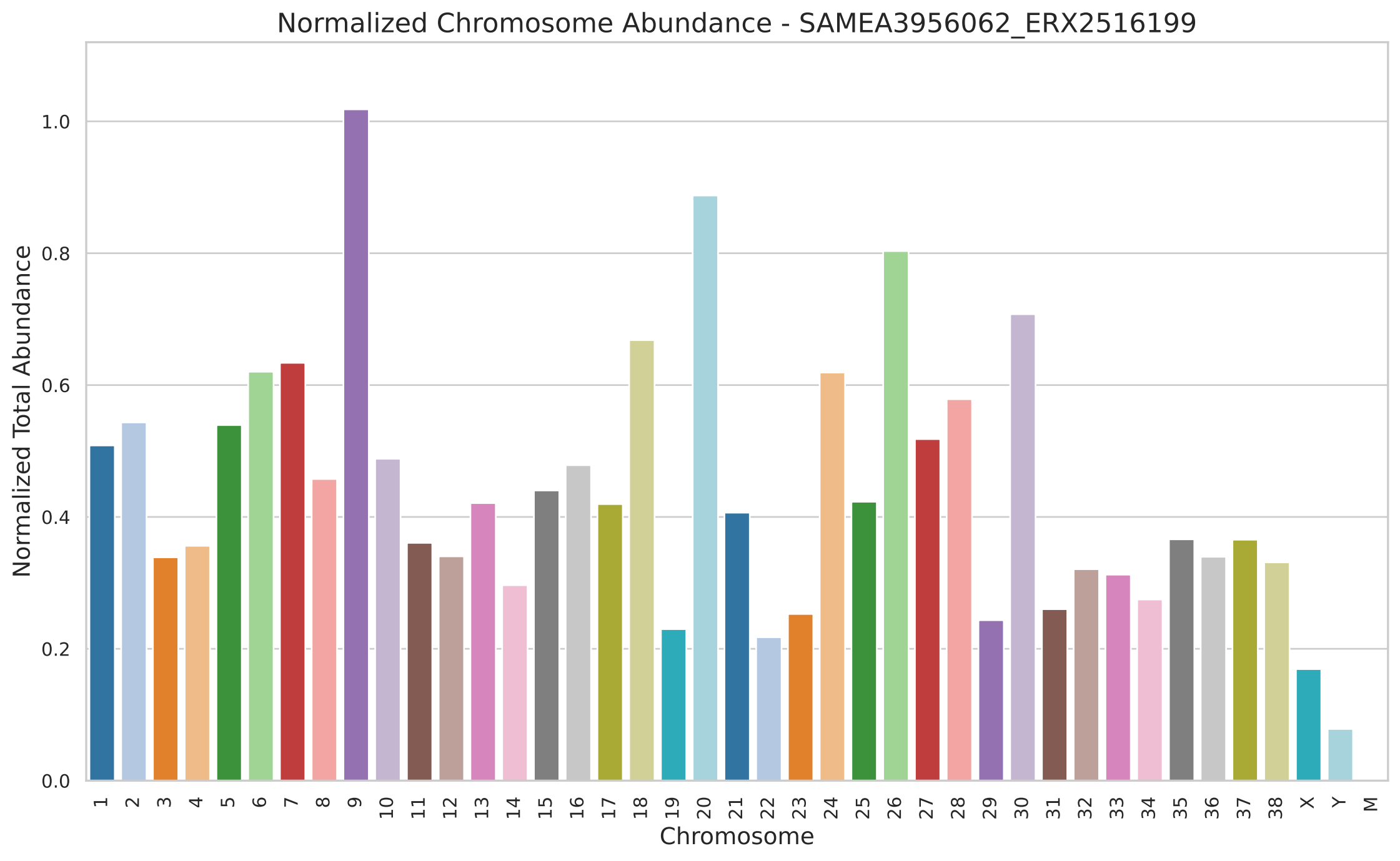

Normalized Chromosome Abundance - SAMEA7515385_ERX10021834
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

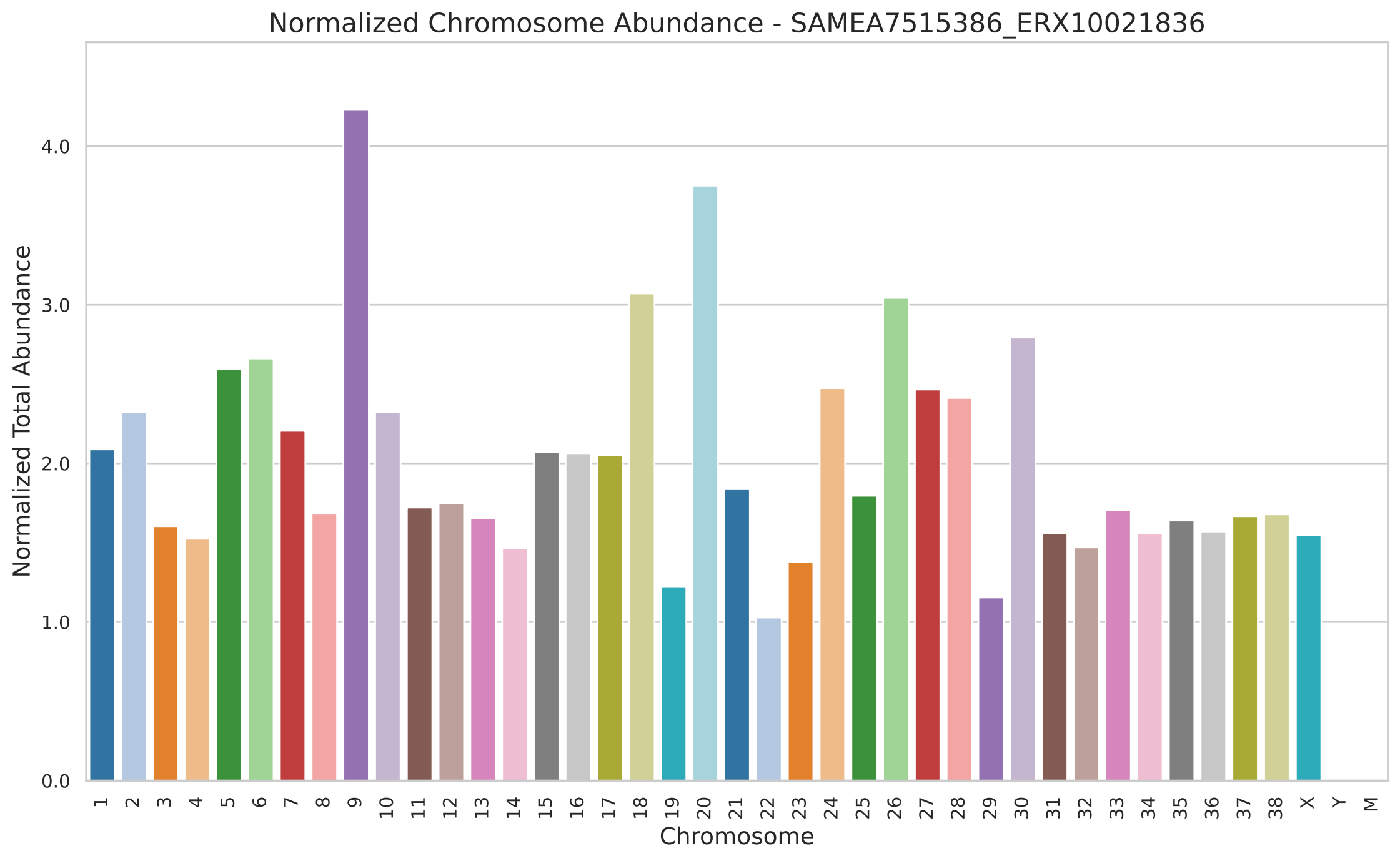

Normalized Chromosome Abundance - SAMEA7515356_ERX10021851
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

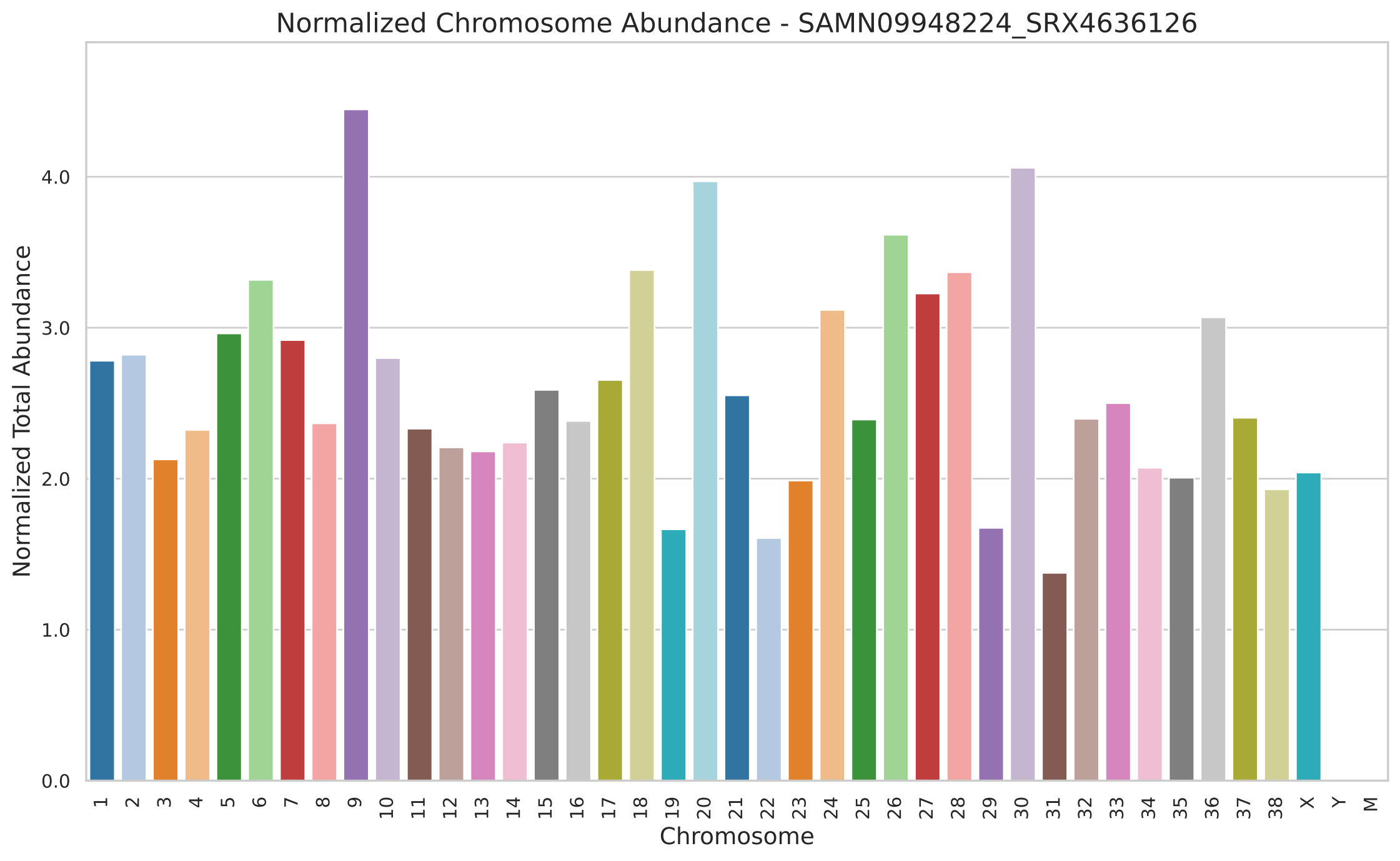

Normalized Chromosome Abundance - SAMEA7515346_ERX10021875
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

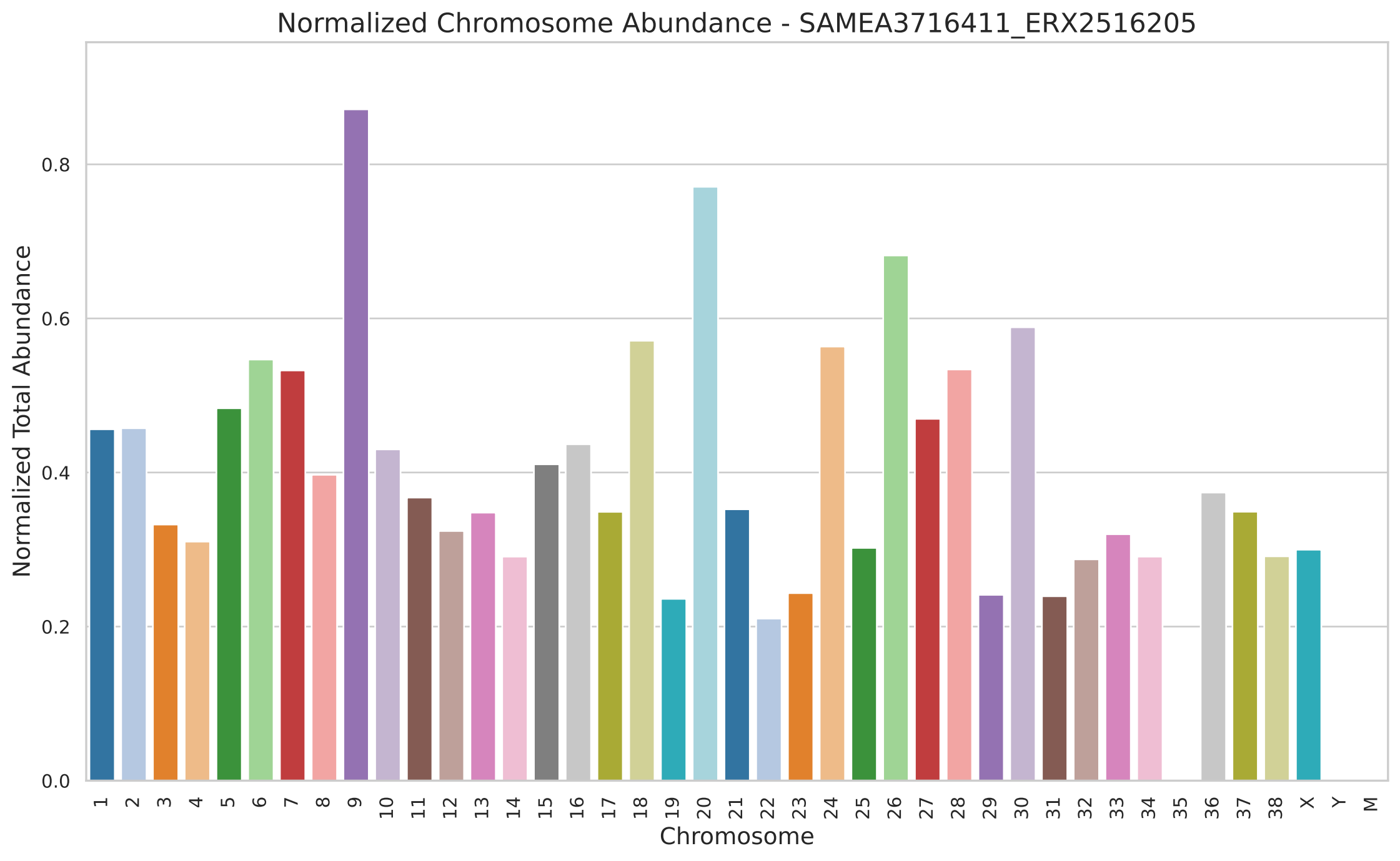

Normalized Chromosome Abundance - SAMEA7515346_ERX10021845
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

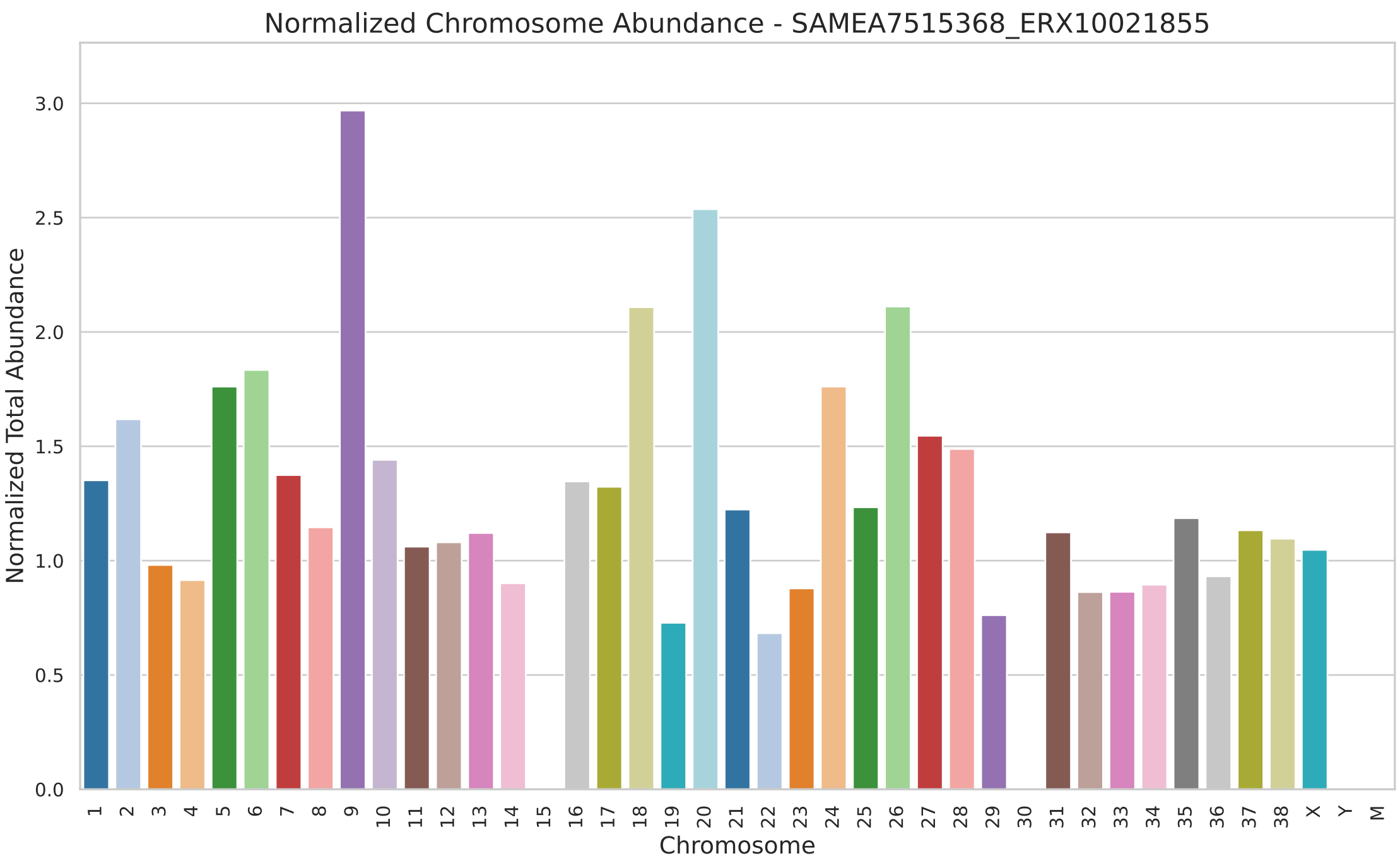

Normalized Chromosome Abundance - SAMEA7515381_ERX10021831
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

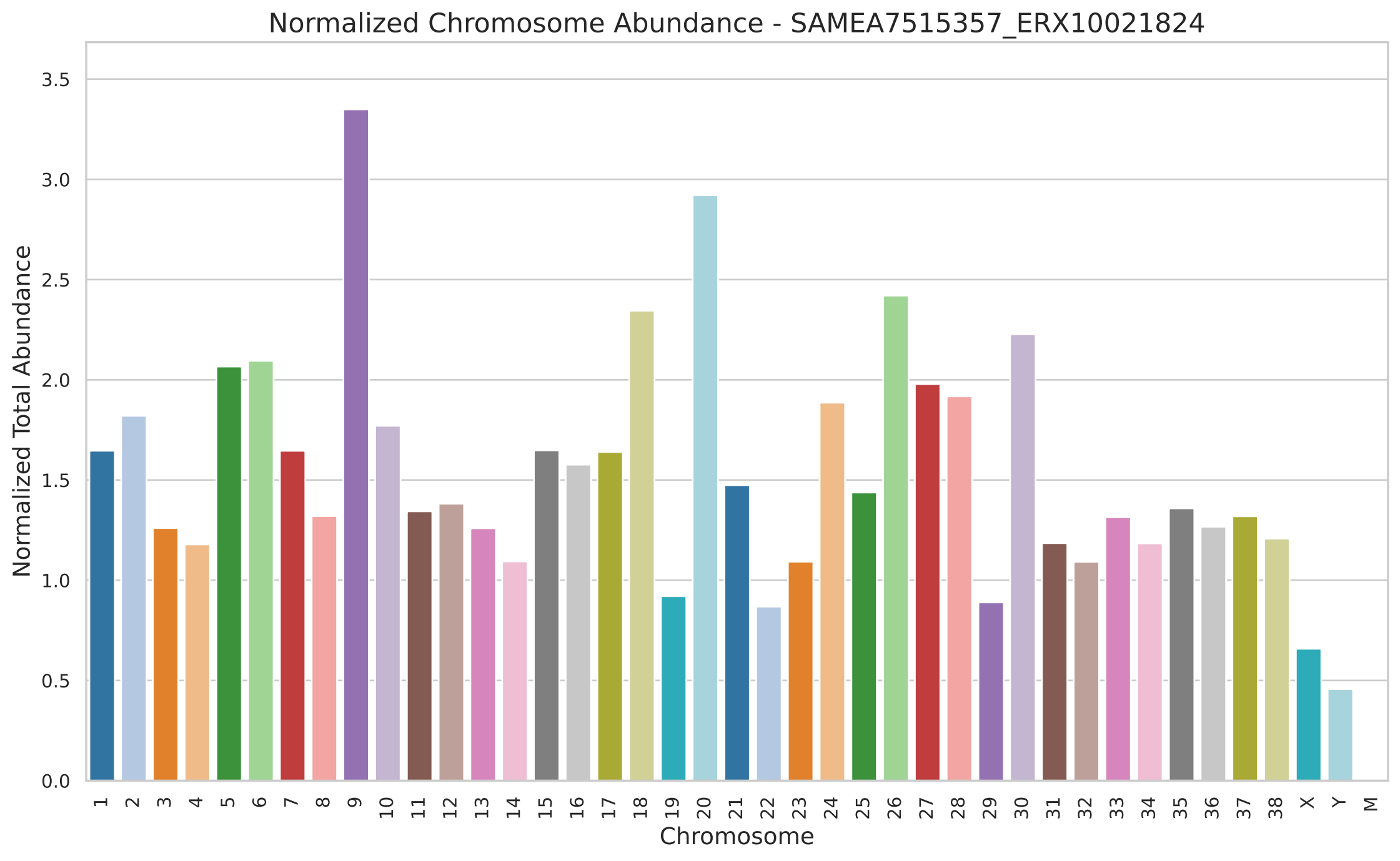

Normalized Chromosome Abundance - SAMEA3956062_ERX2516199
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

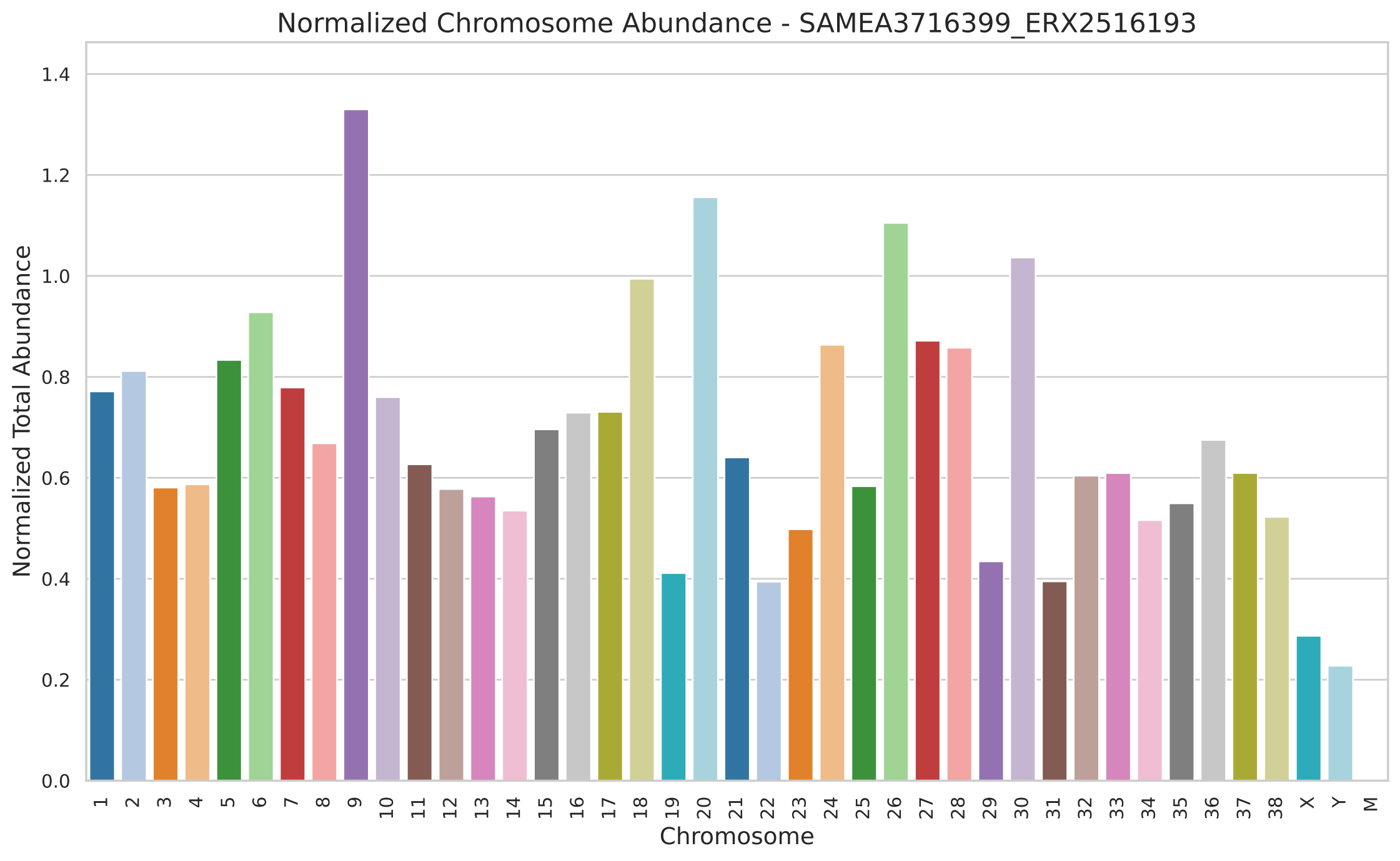

Normalized Chromosome Abundance - SAMEA7515386_ERX10021836
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

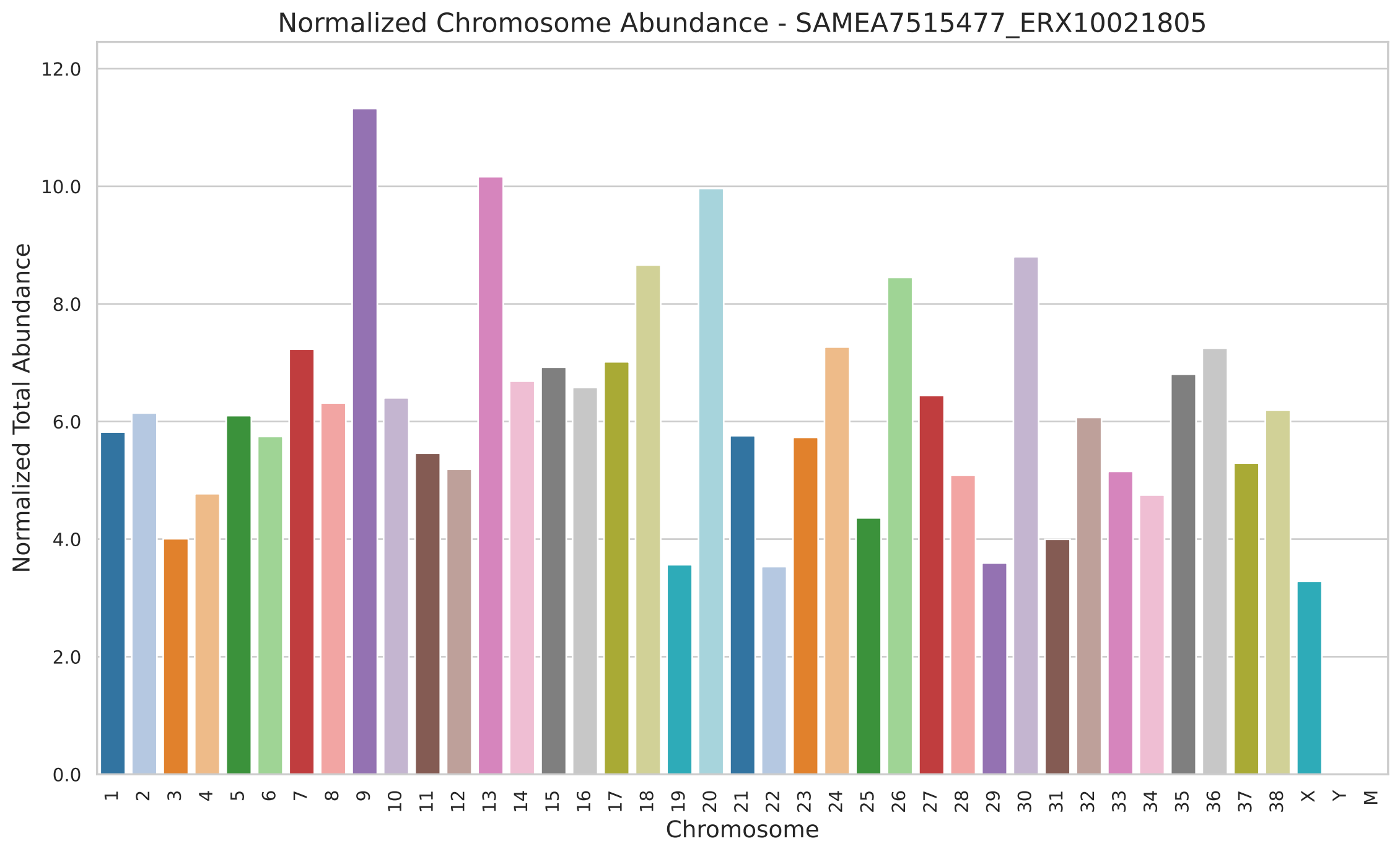

Normalized Chromosome Abundance - SAMN09948224_SRX4636126
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

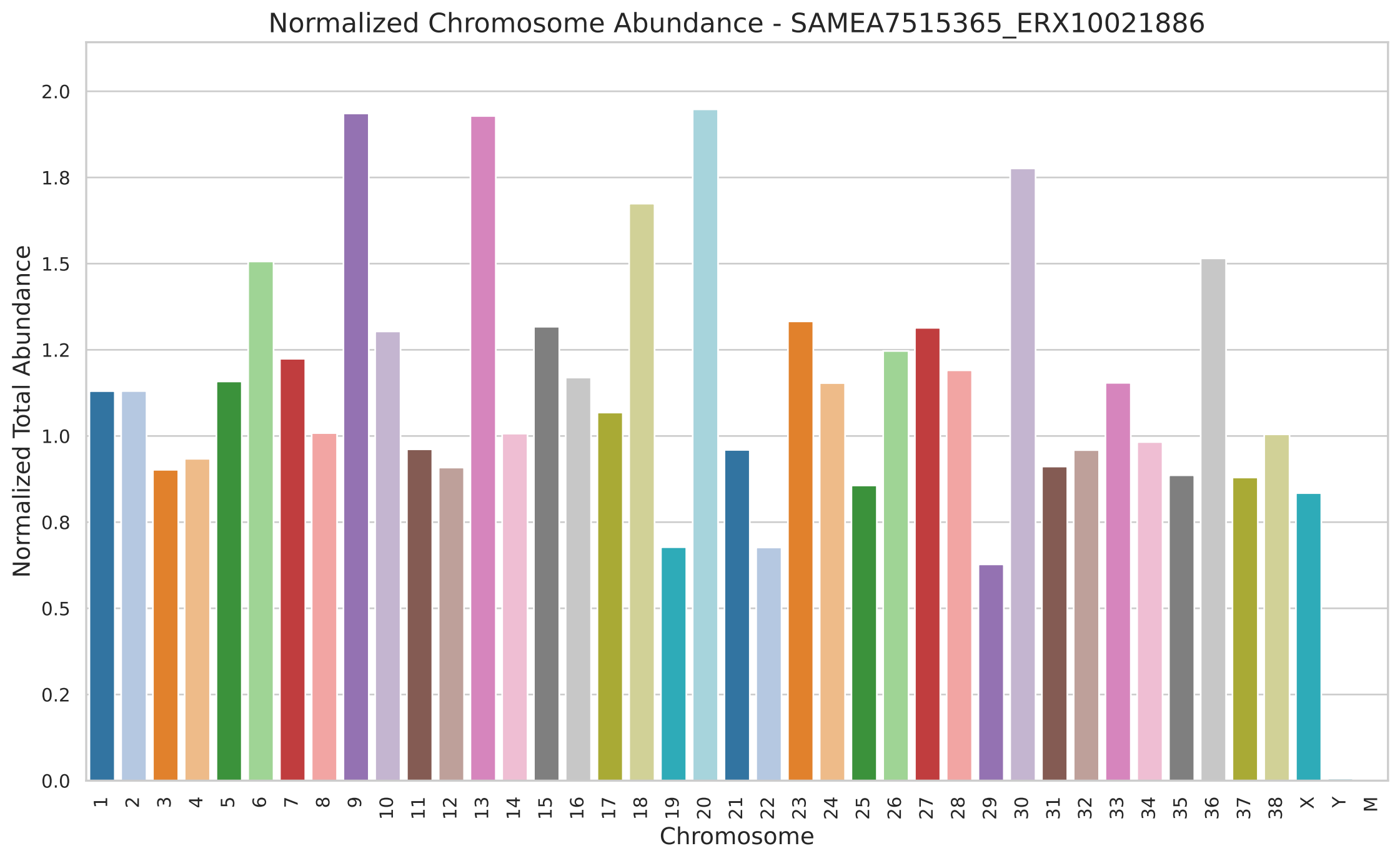

Normalized Chromosome Abundance - SAMEA3716411_ERX2516205
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

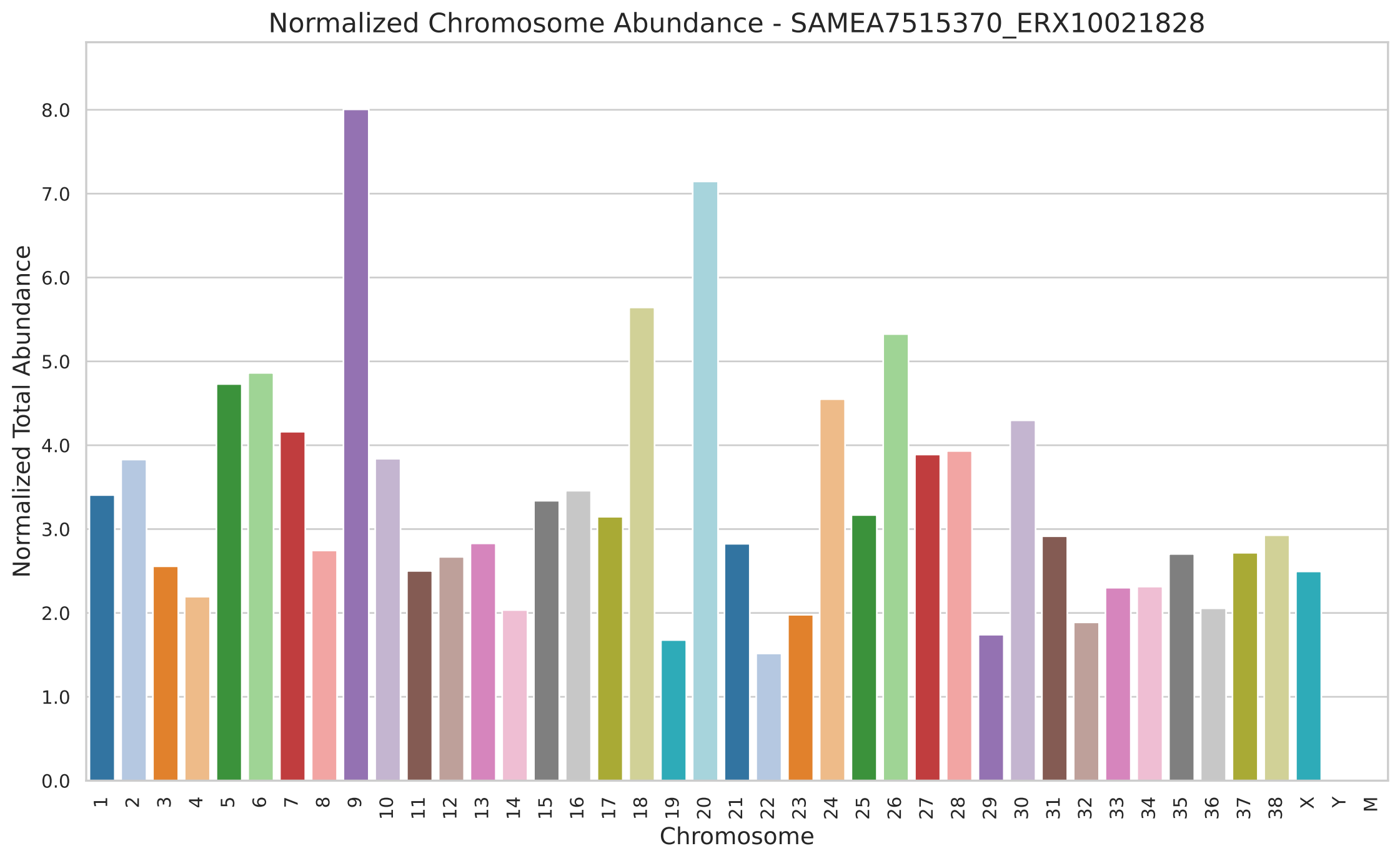

Normalized Chromosome Abundance - SAMEA7515368_ERX10021855
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

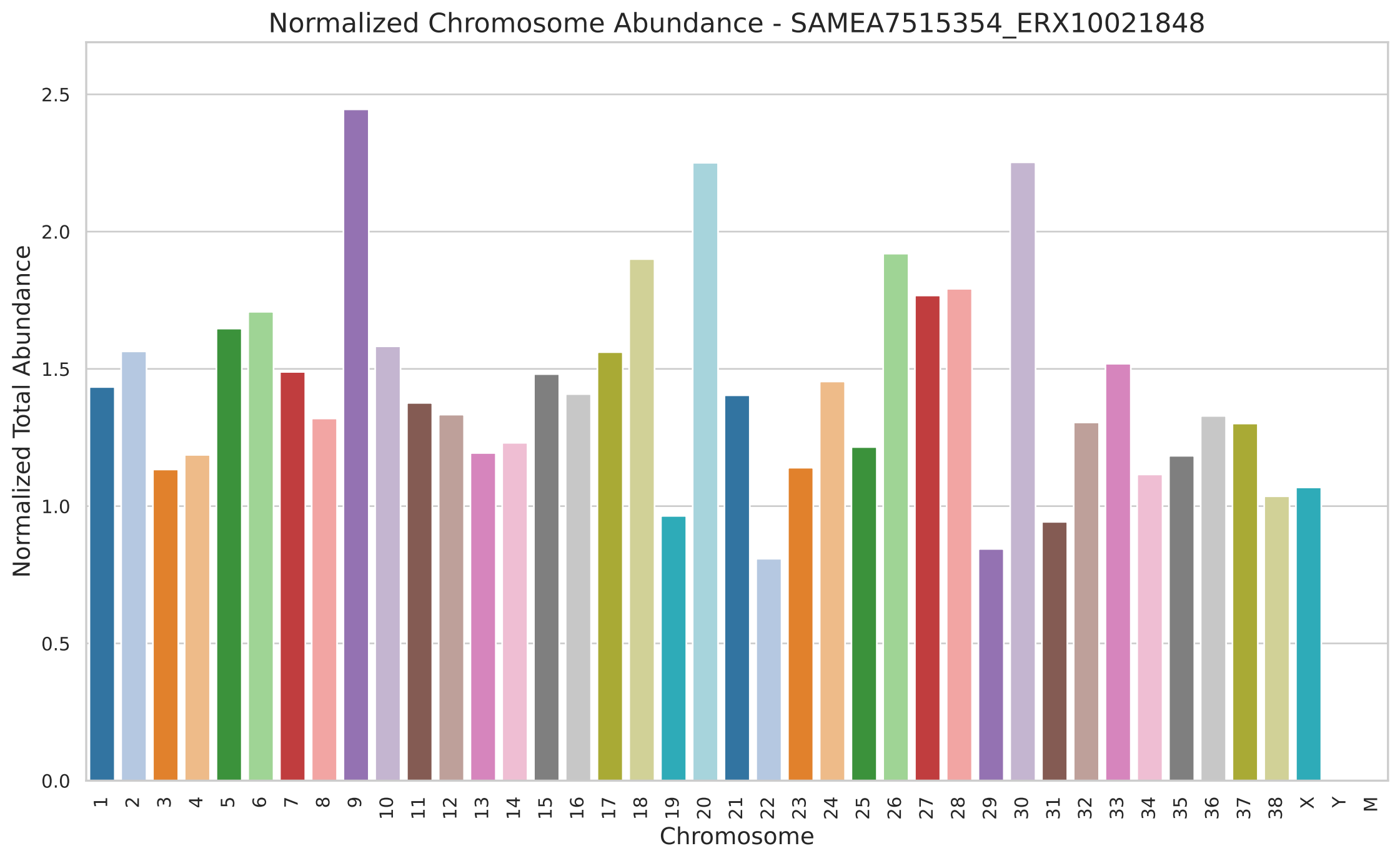

Normalized Chromosome Abundance - SAMEA7515357_ERX10021824
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

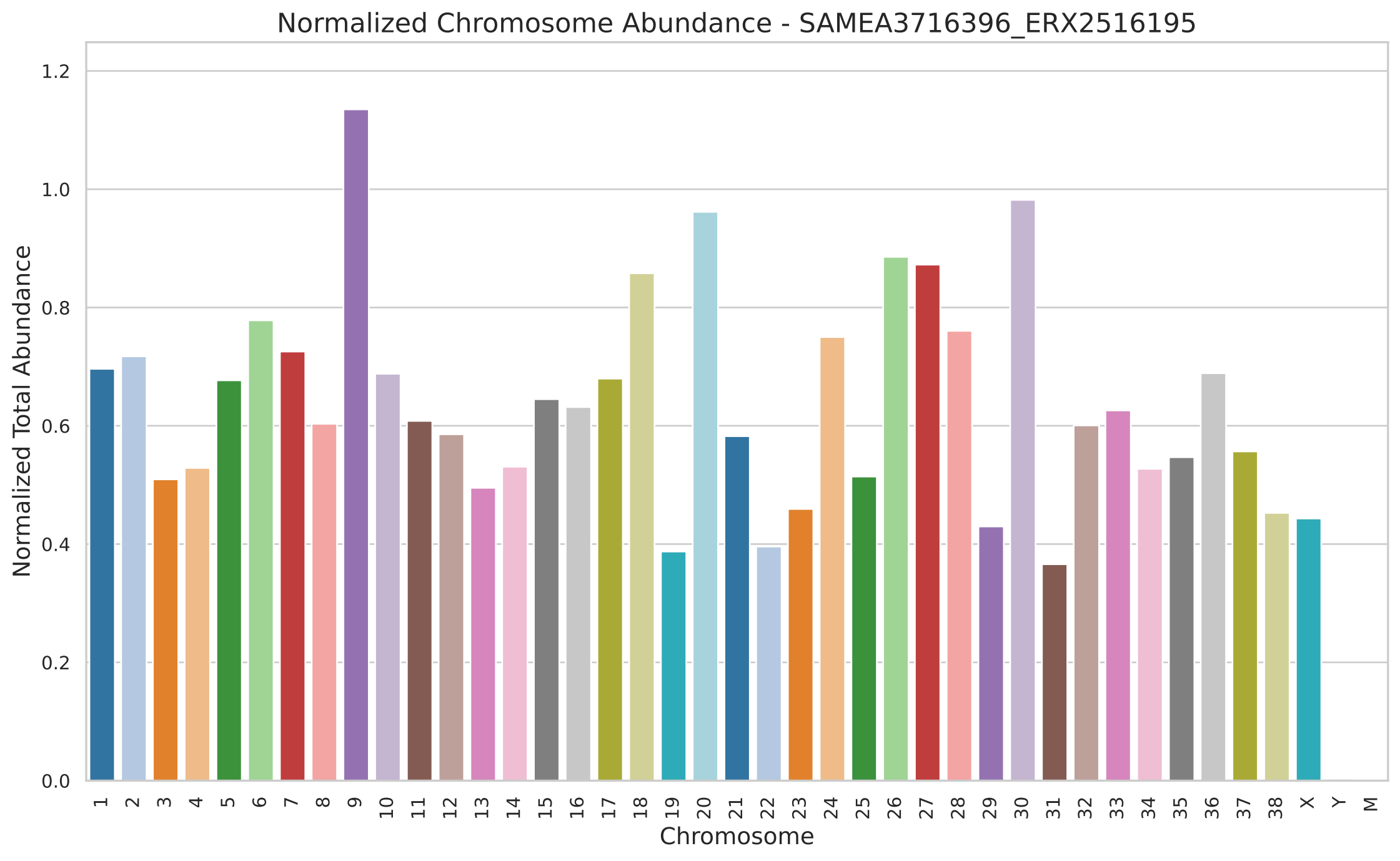

Normalized Chromosome Abundance - SAMEA3716399_ERX2516193
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

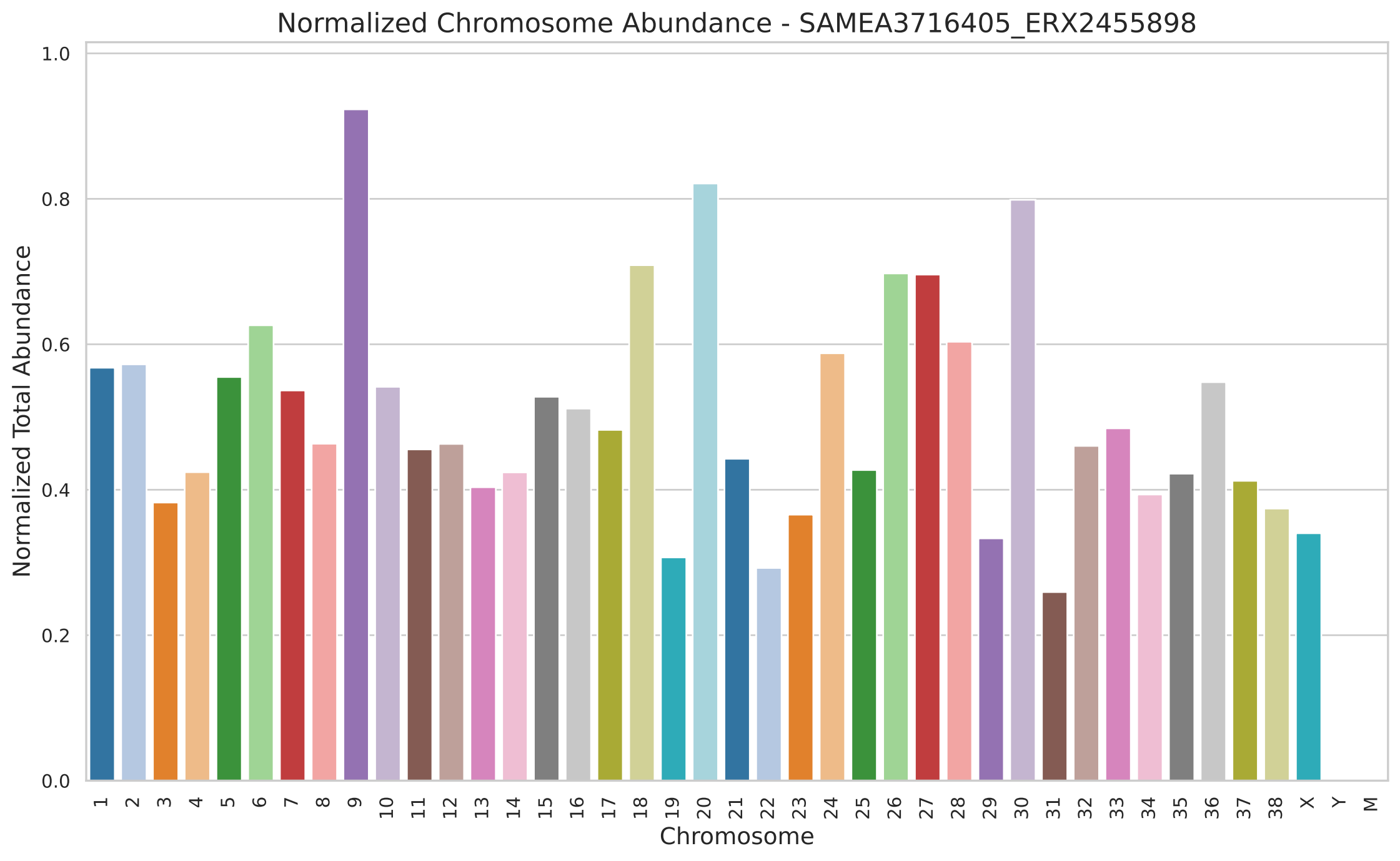

Normalized Chromosome Abundance - SAMEA7515477_ERX10021805
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
12.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

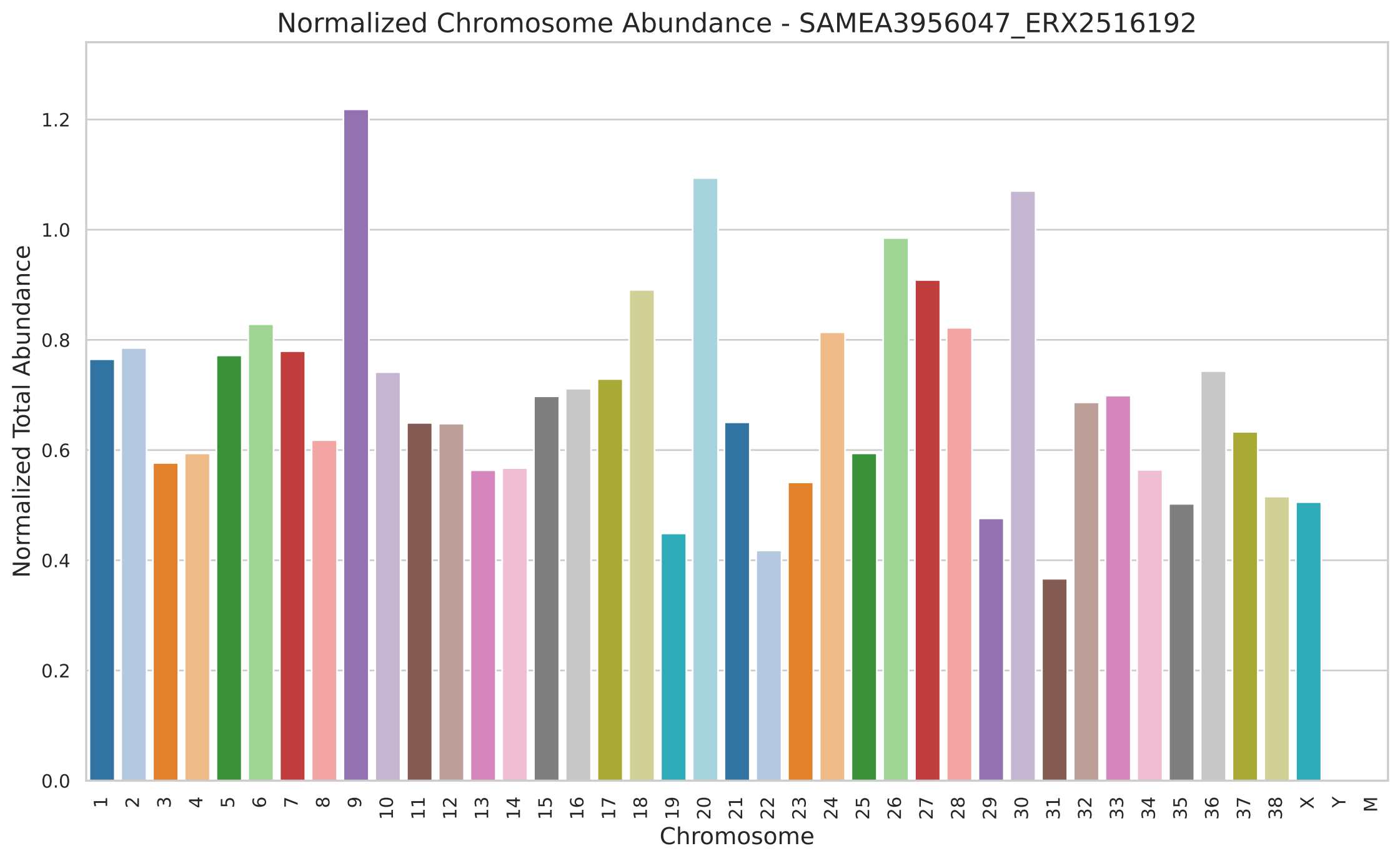

Normalized Chromosome Abundance - SAMEA7515365_ERX10021886
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

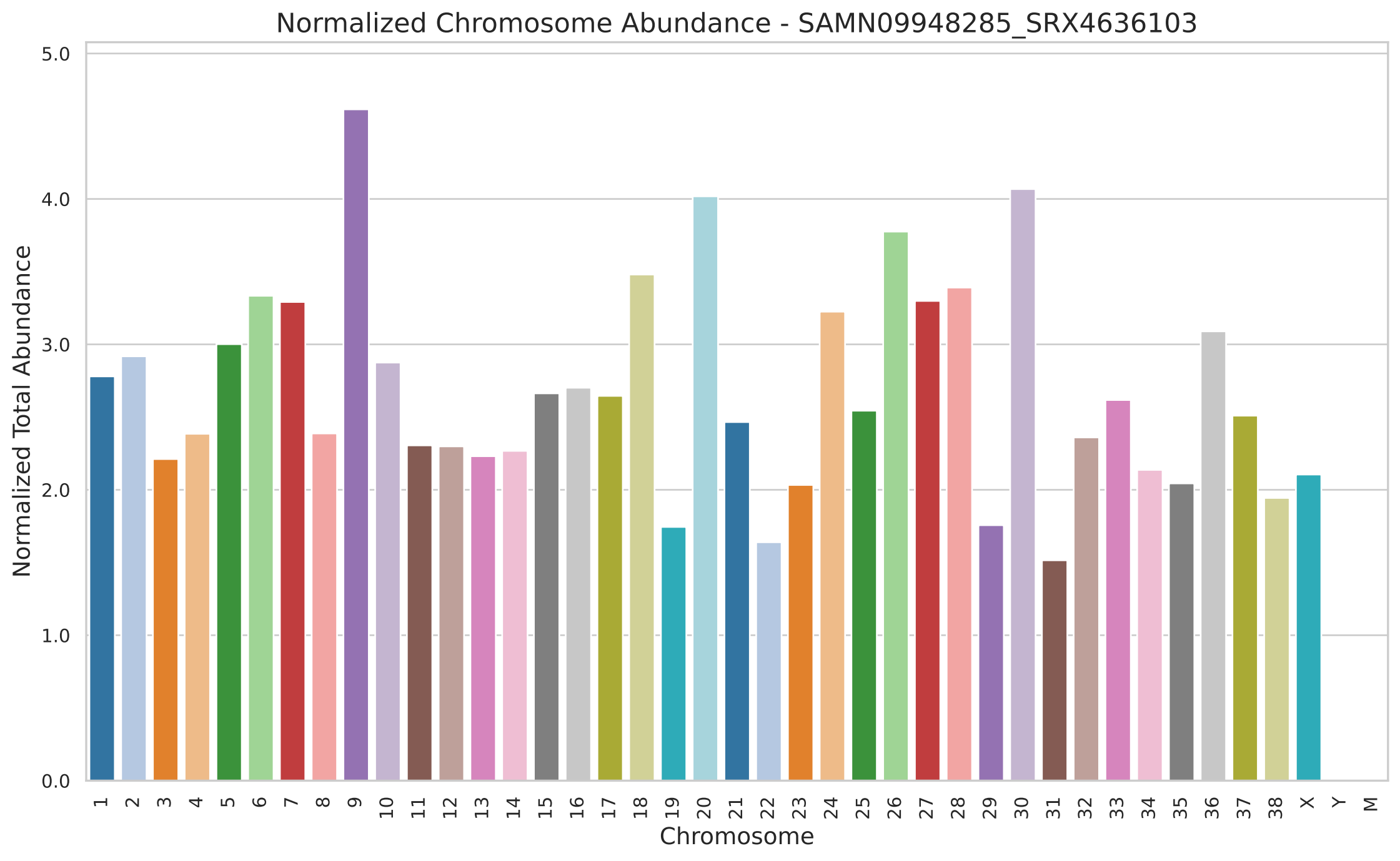

Normalized Chromosome Abundance - SAMEA7515370_ERX10021828
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

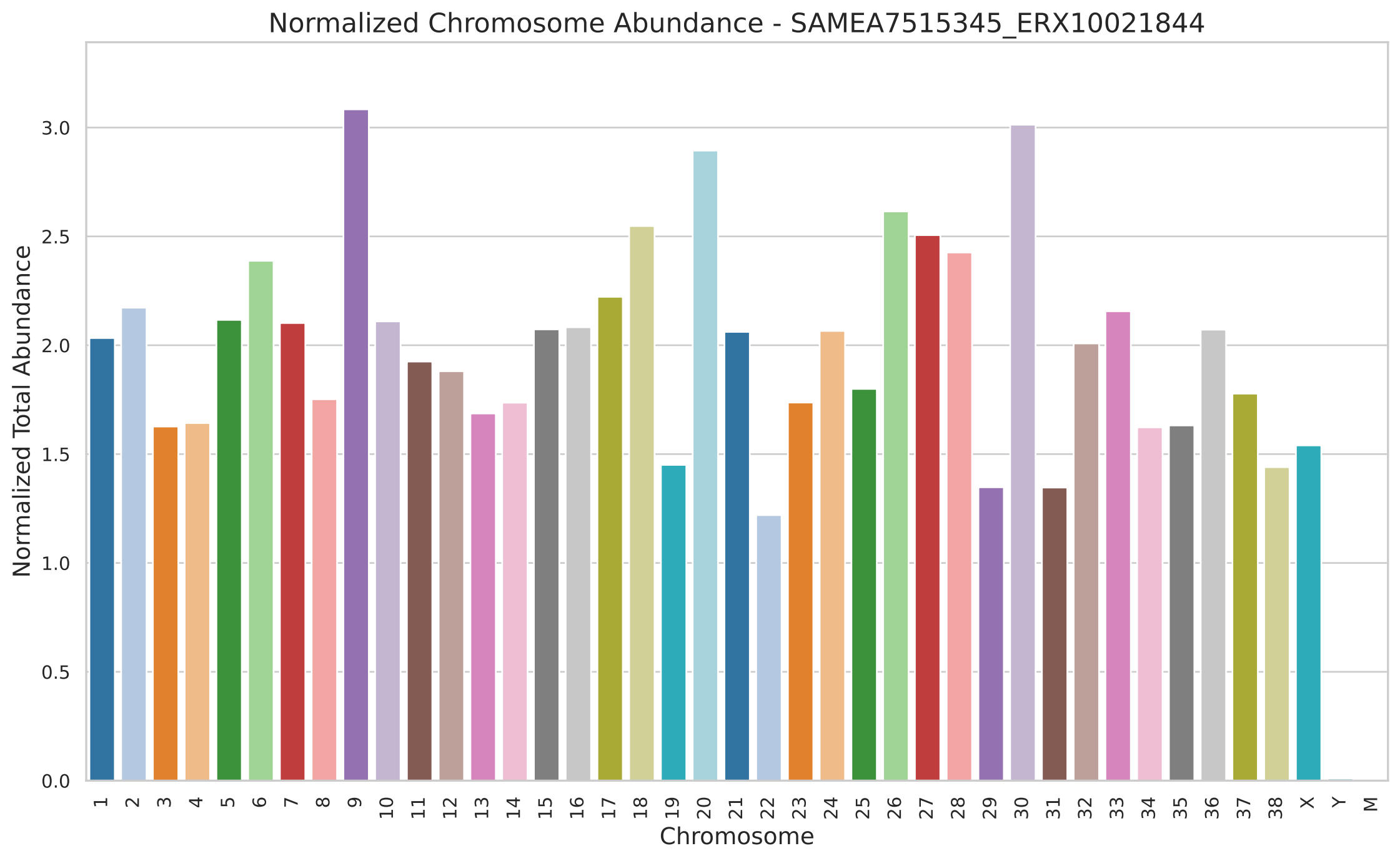

Normalized Chromosome Abundance - SAMEA7515354_ERX10021848
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

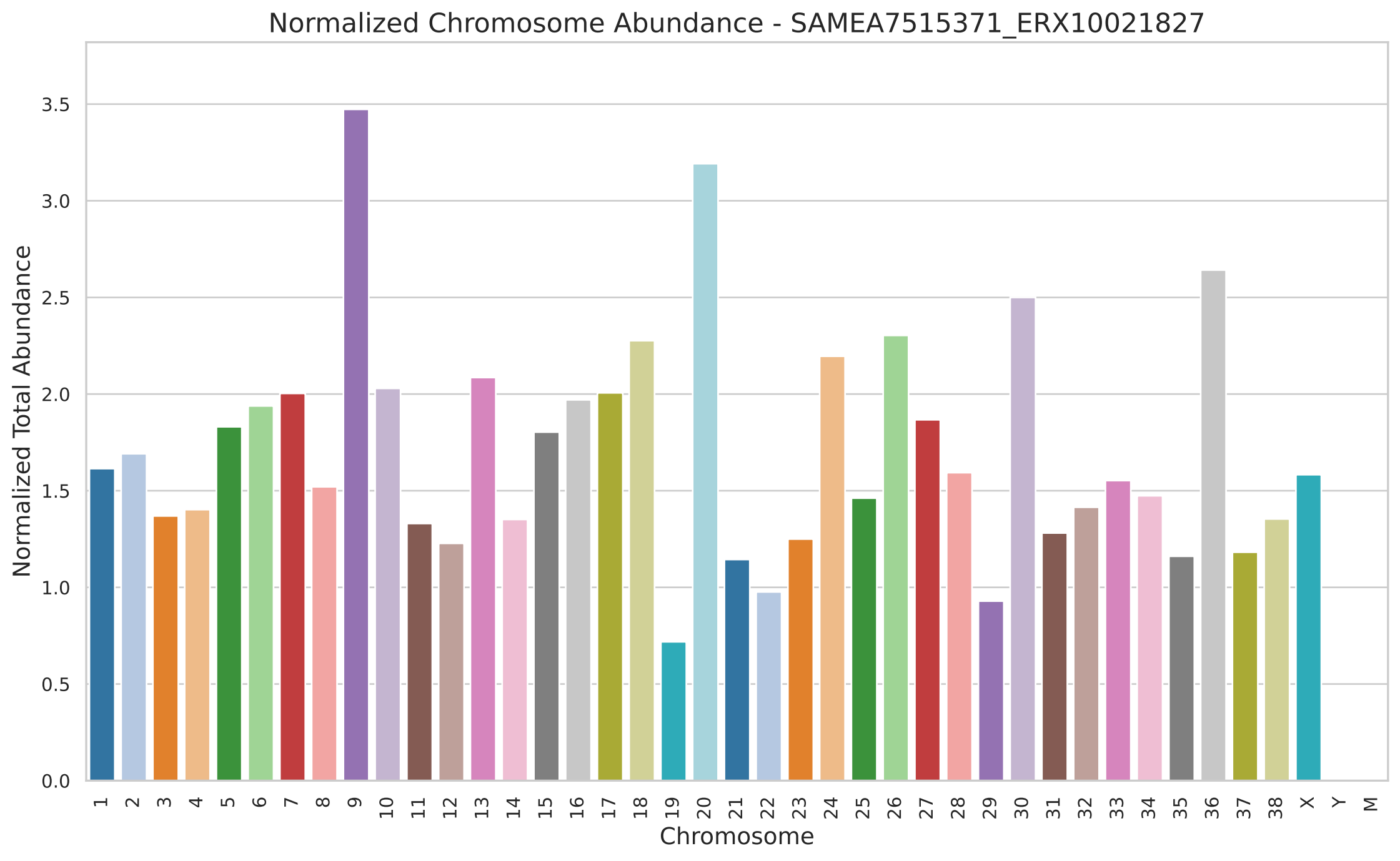

Normalized Chromosome Abundance - SAMEA3716396_ERX2516195
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

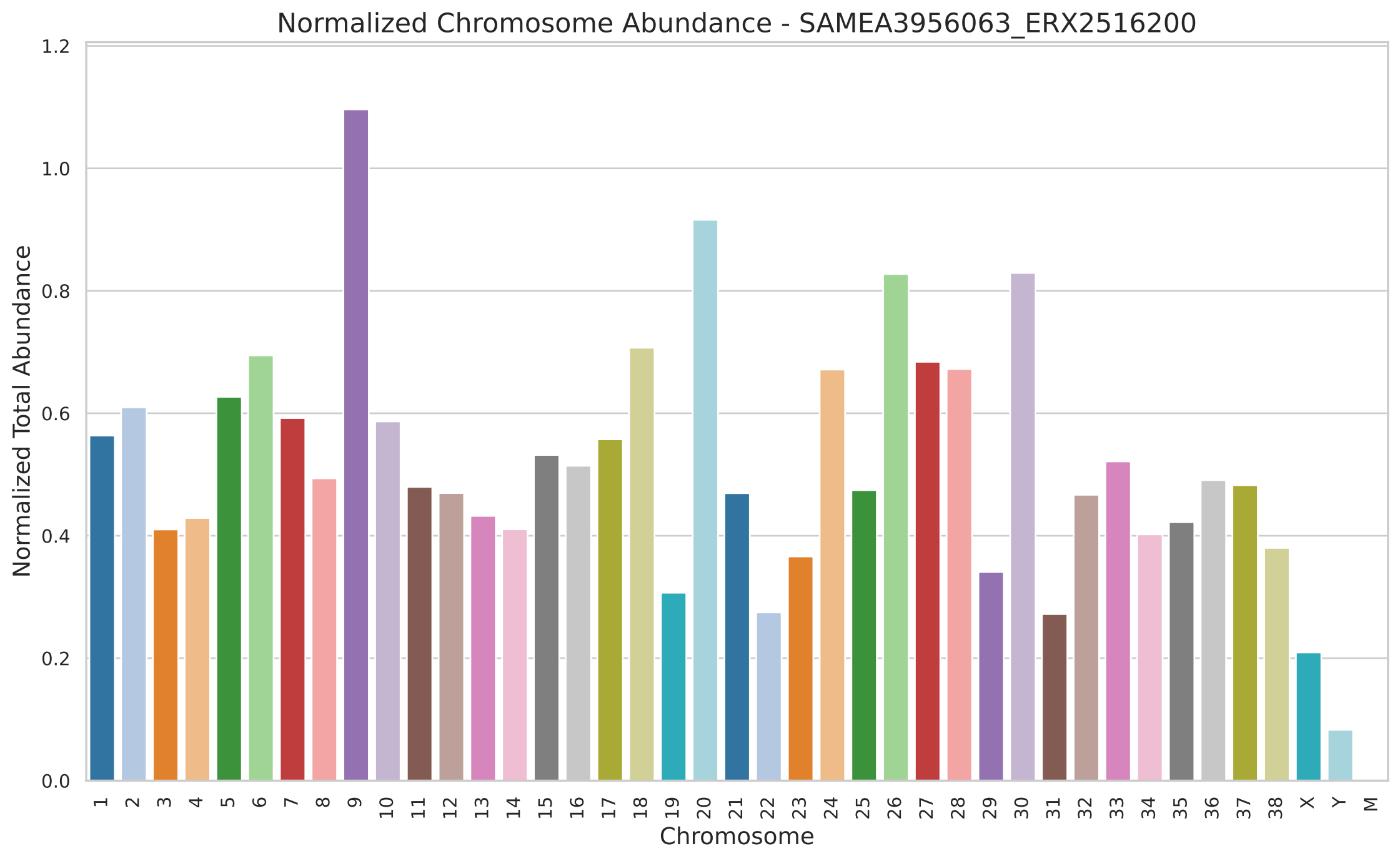

Normalized Chromosome Abundance - SAMEA3716405_ERX2455898
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

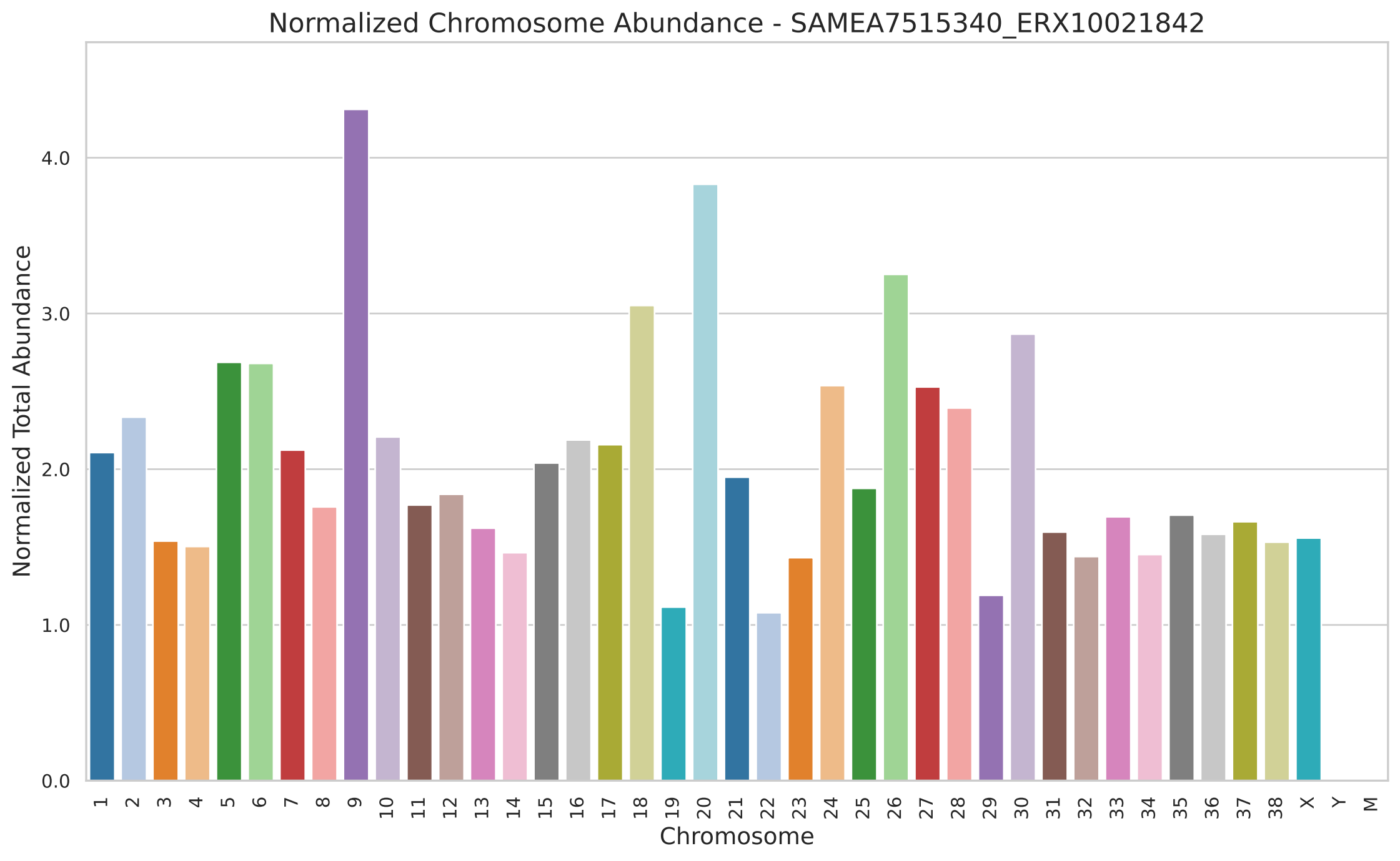

Normalized Chromosome Abundance - SAMEA3956047_ERX2516192
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

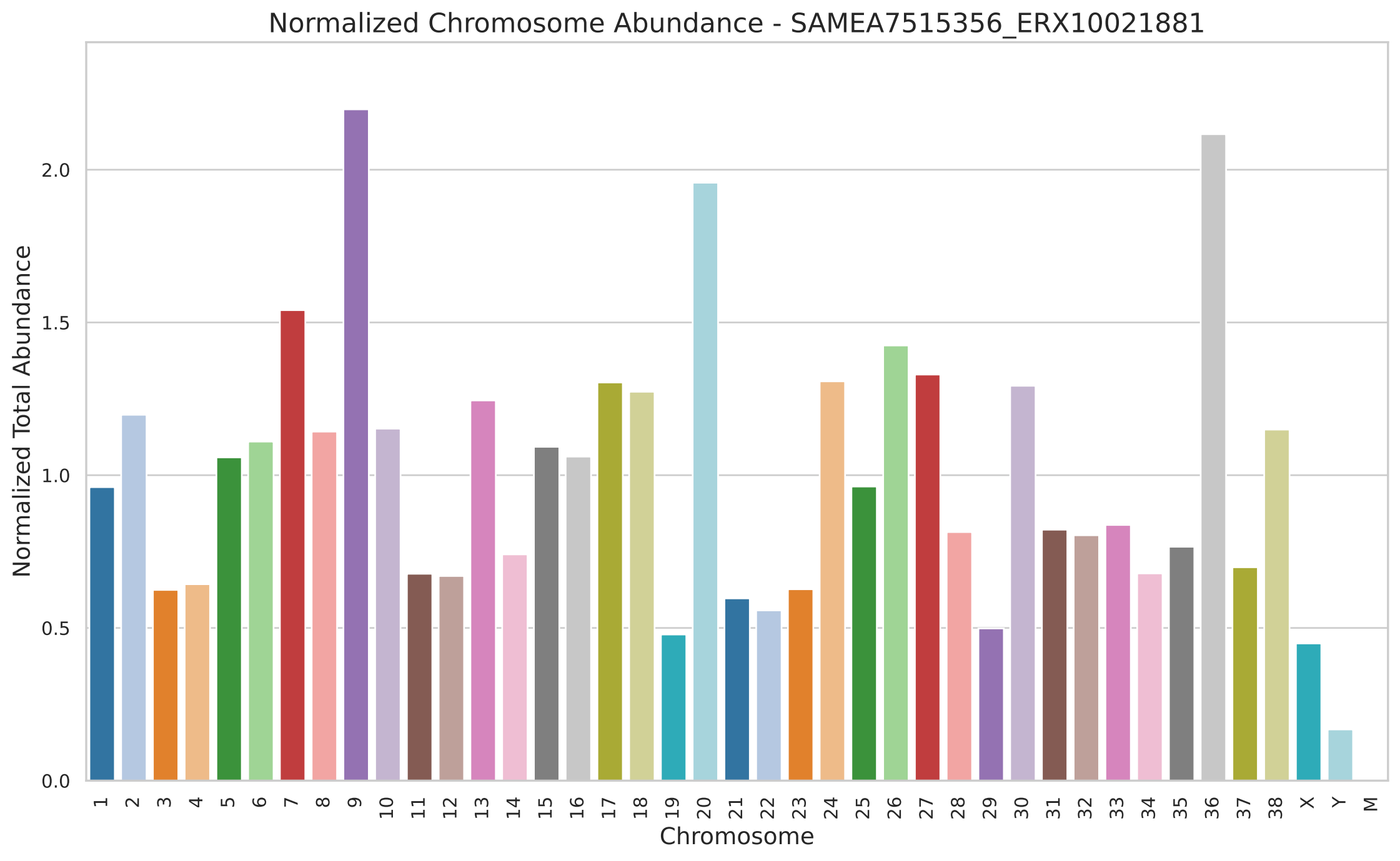

Normalized Chromosome Abundance - SAMN09948285_SRX4636103
Normalized Total Abundance
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

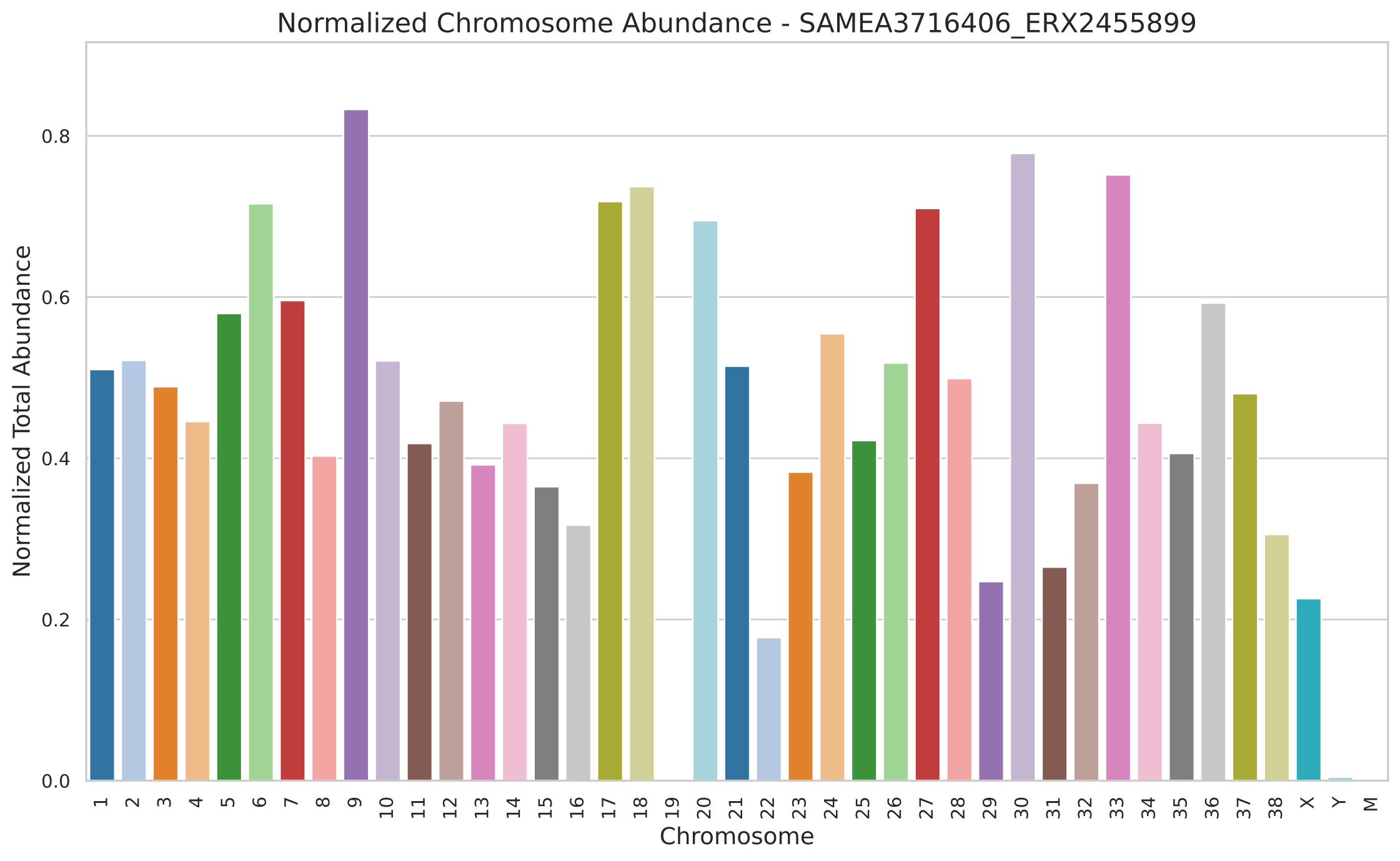

Normalized Chromosome Abundance - SAMEA7515345_ERX10021844
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

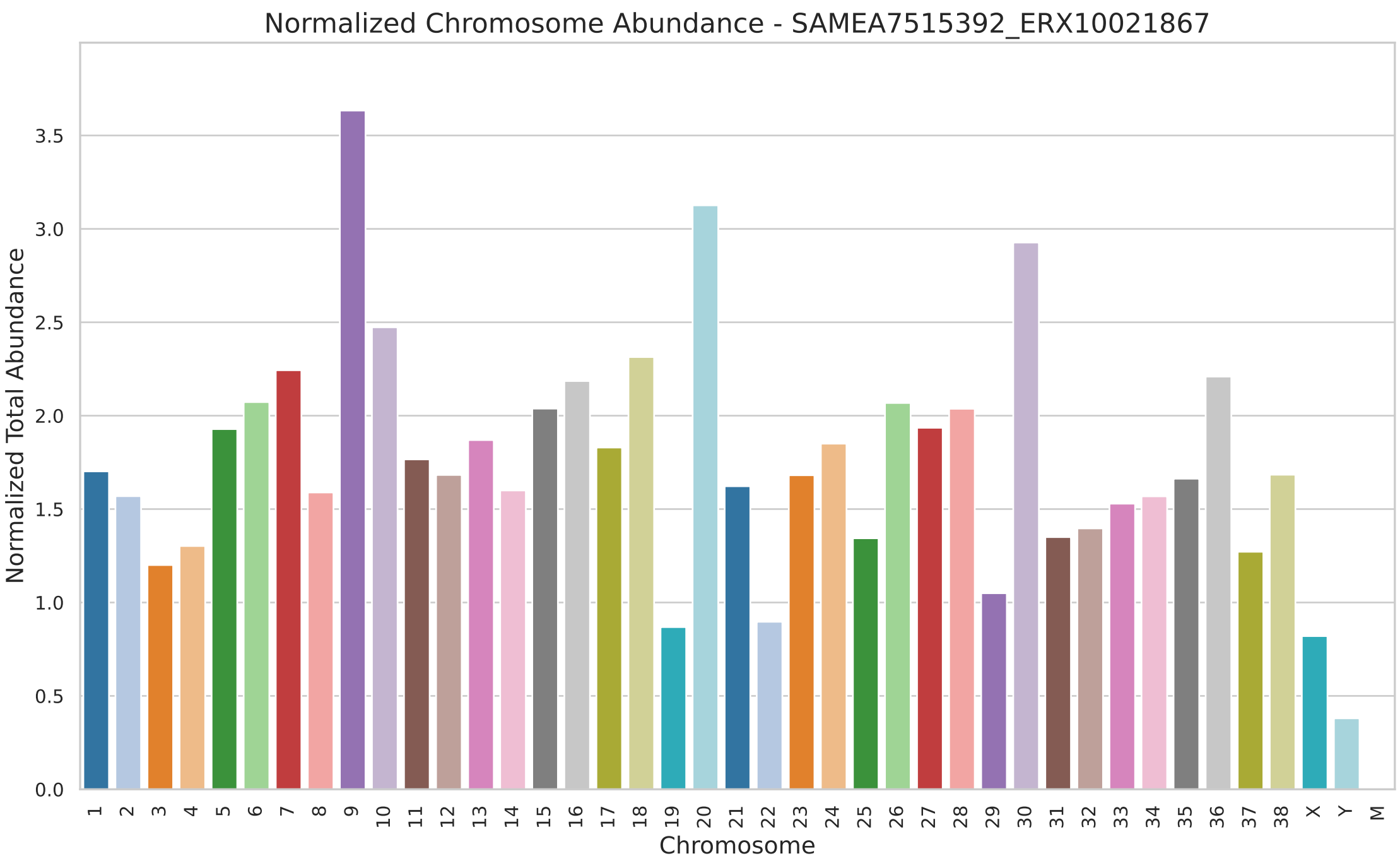

Normalized Chromosome Abundance - SAMEA7515371_ERX10021827
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

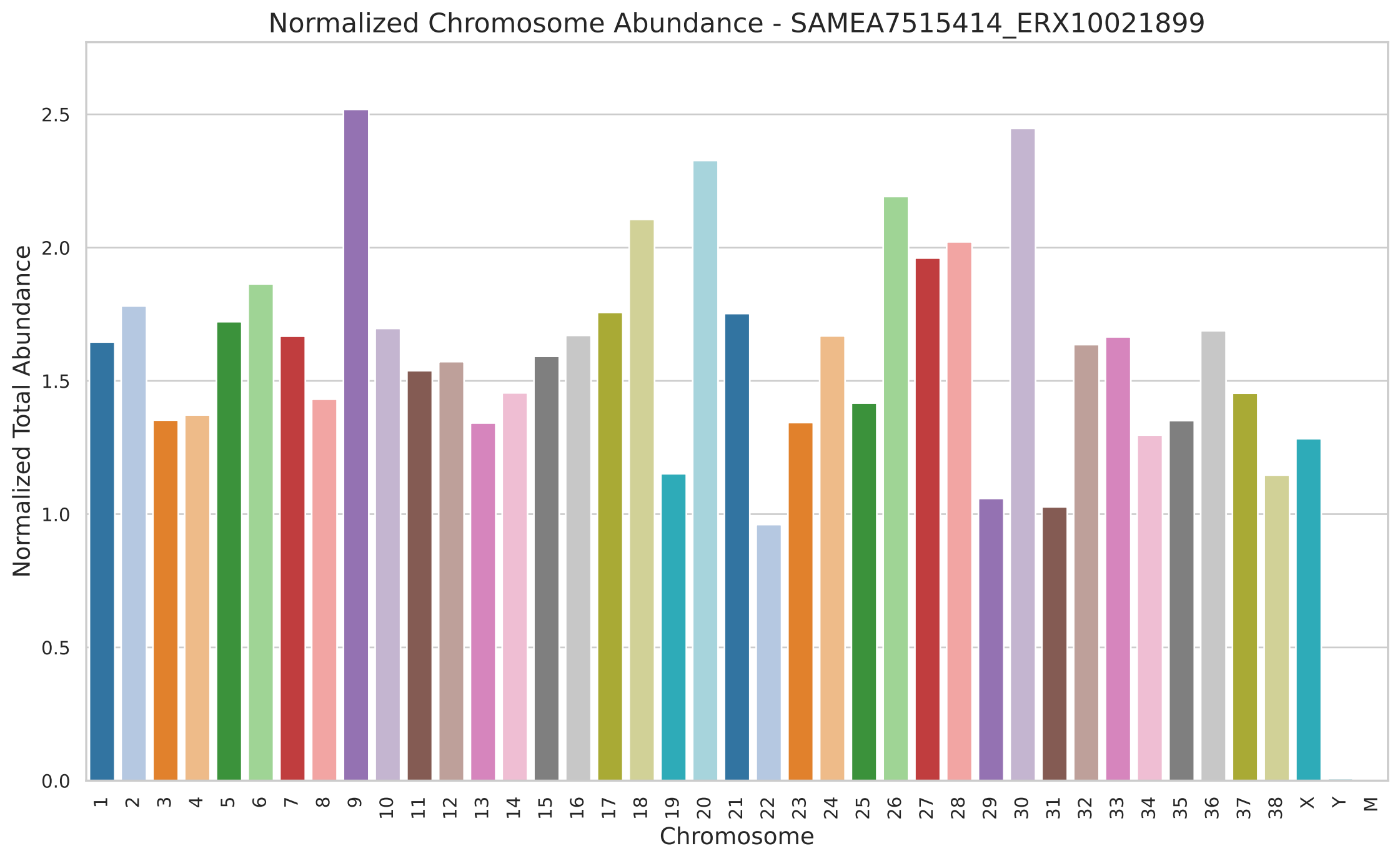

Normalized Chromosome Abundance - SAMEA3956063_ERX2516200
Normalized Total Abundance
1.2
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

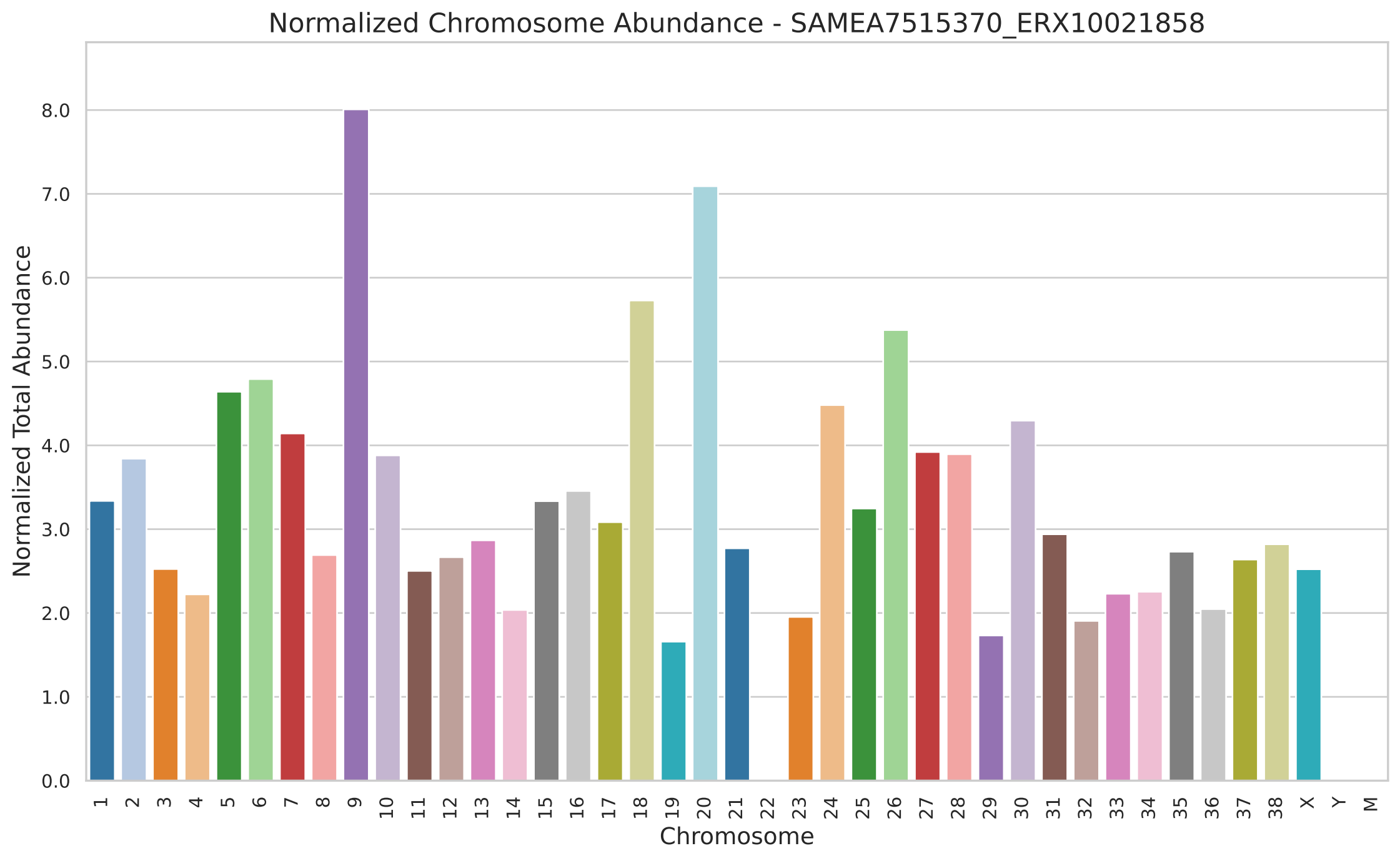

Normalized Chromosome Abundance - SAMEA7515340_ERX10021842
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

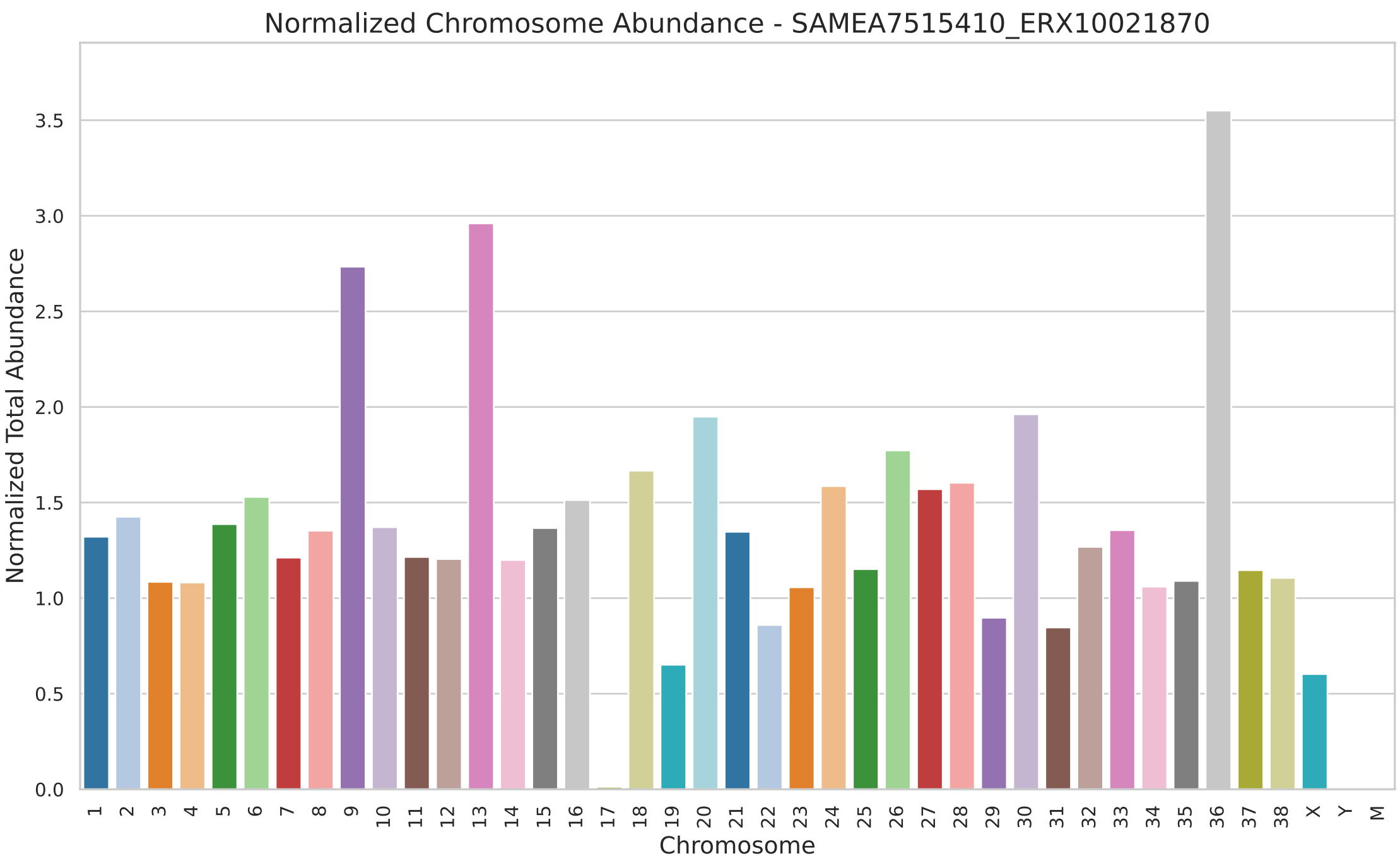

Normalized Chromosome Abundance - SAMEA7515356_ERX10021881
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

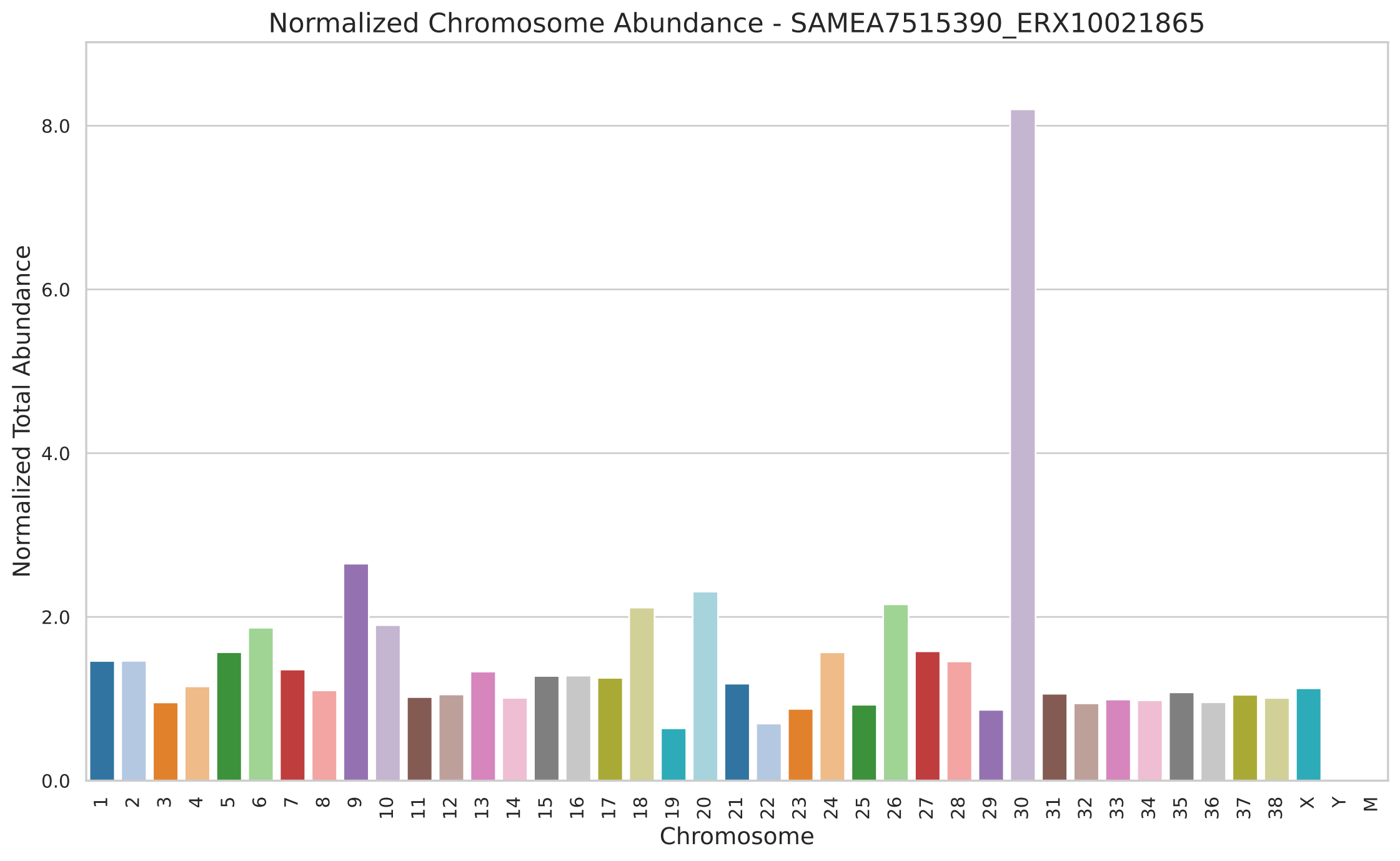

Normalized Chromosome Abundance - SAMEA3716406_ERX2455899
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

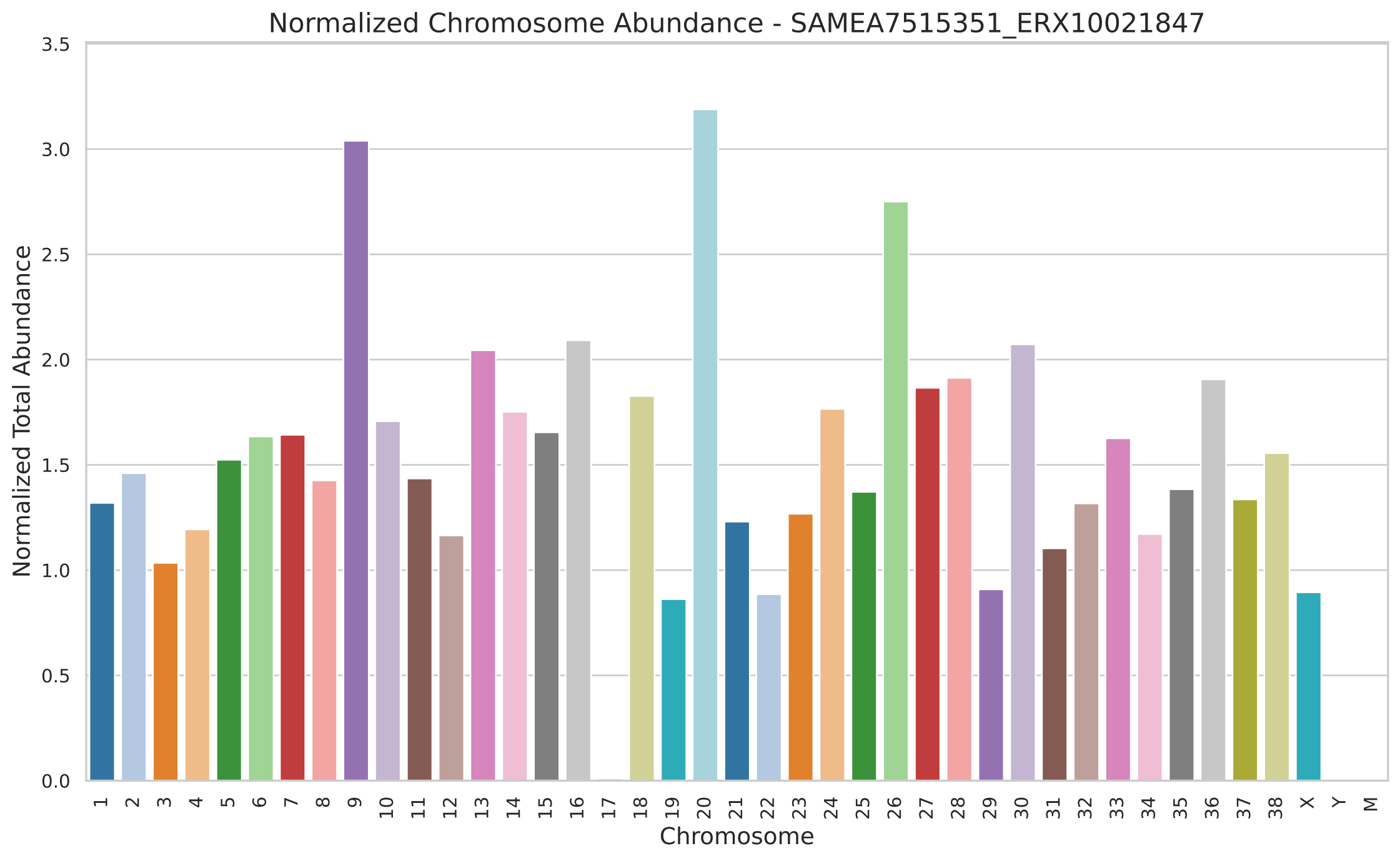

Normalized Chromosome Abundance - SAMEA7515392_ERX10021867
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

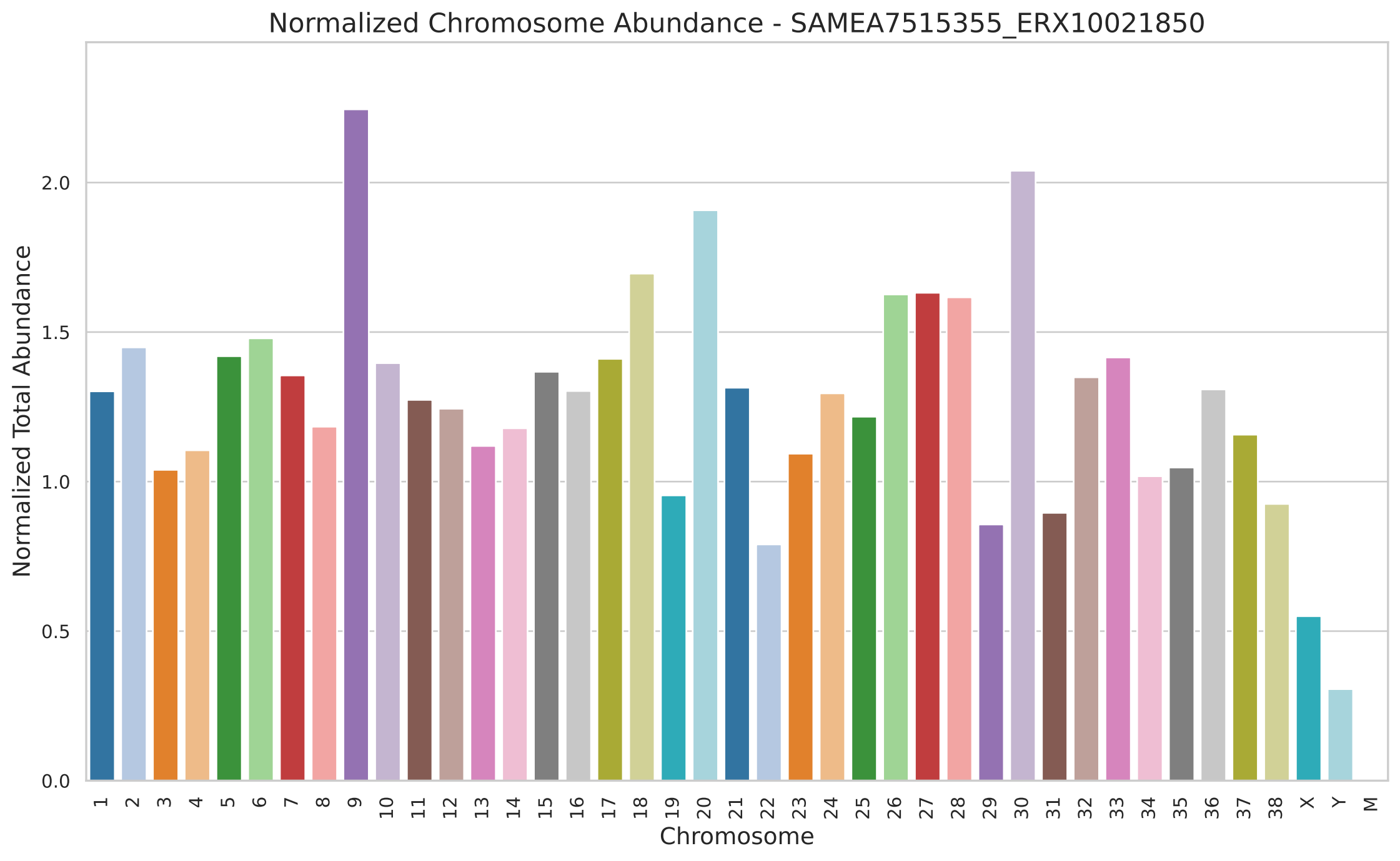

Normalized Chromosome Abundance - SAMEA7515414_ERX10021899
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

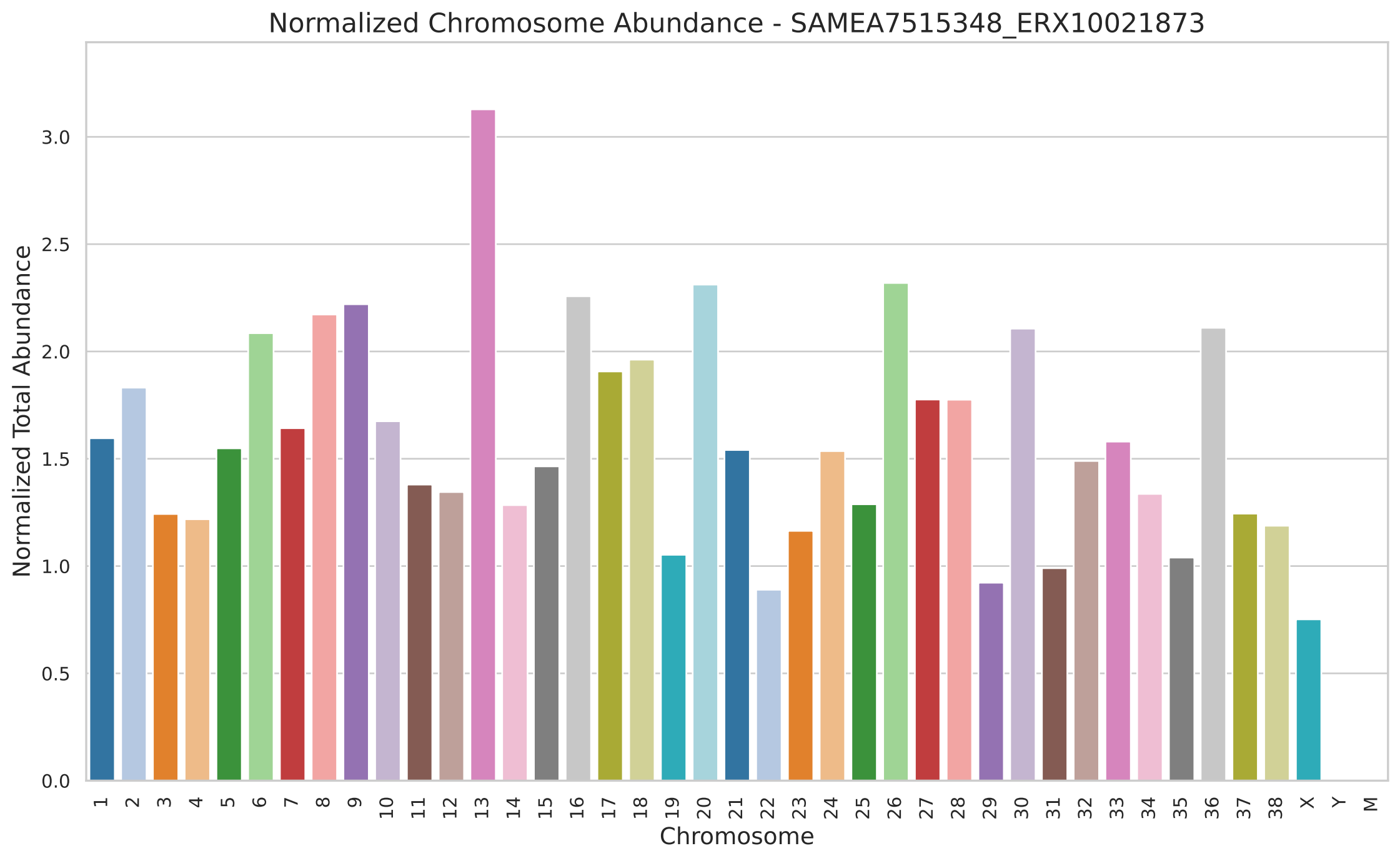

Normalized Chromosome Abundance - SAMEA7515370_ERX10021858
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

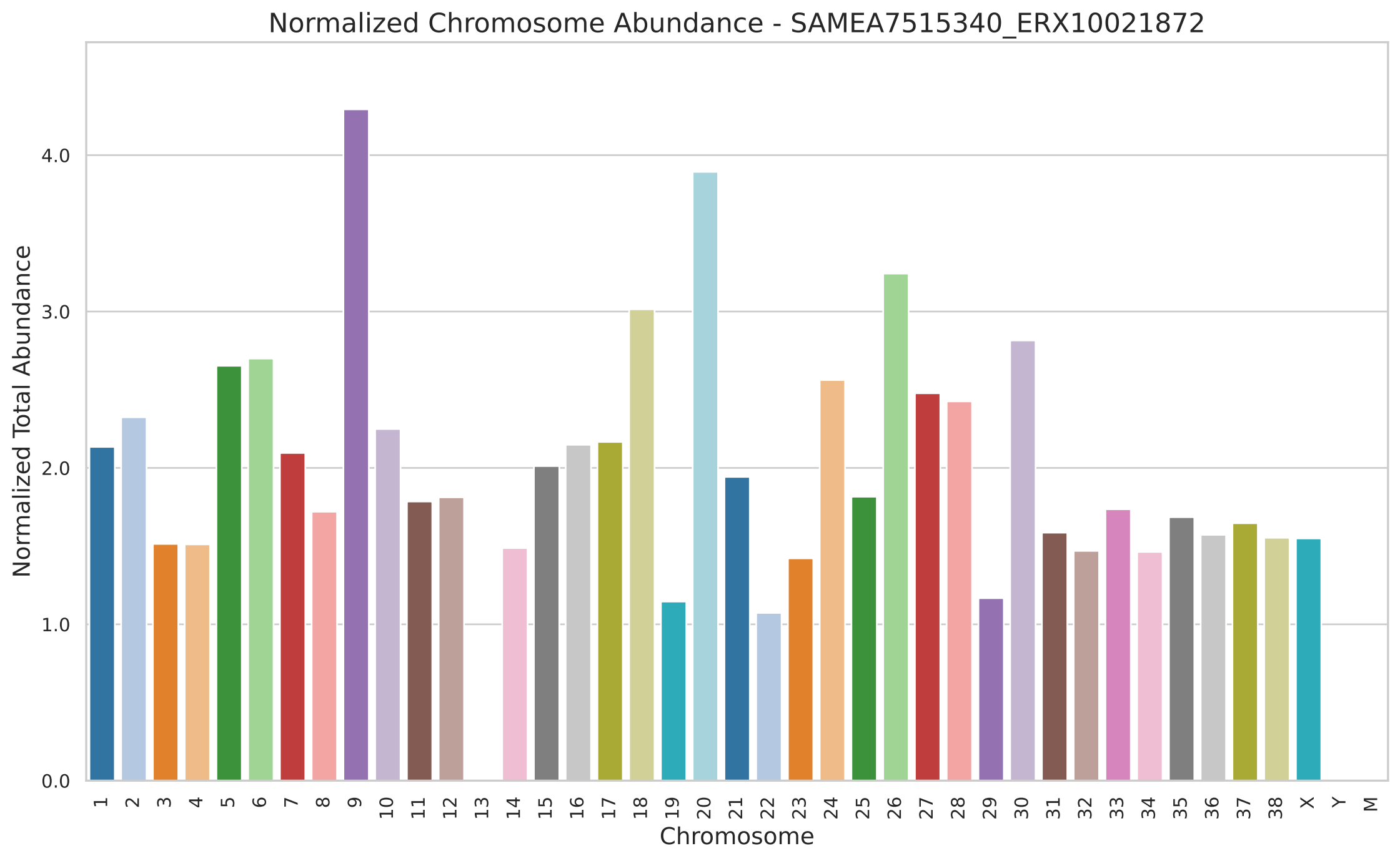

Normalized Chromosome Abundance - SAMEA7515410_ERX10021870
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

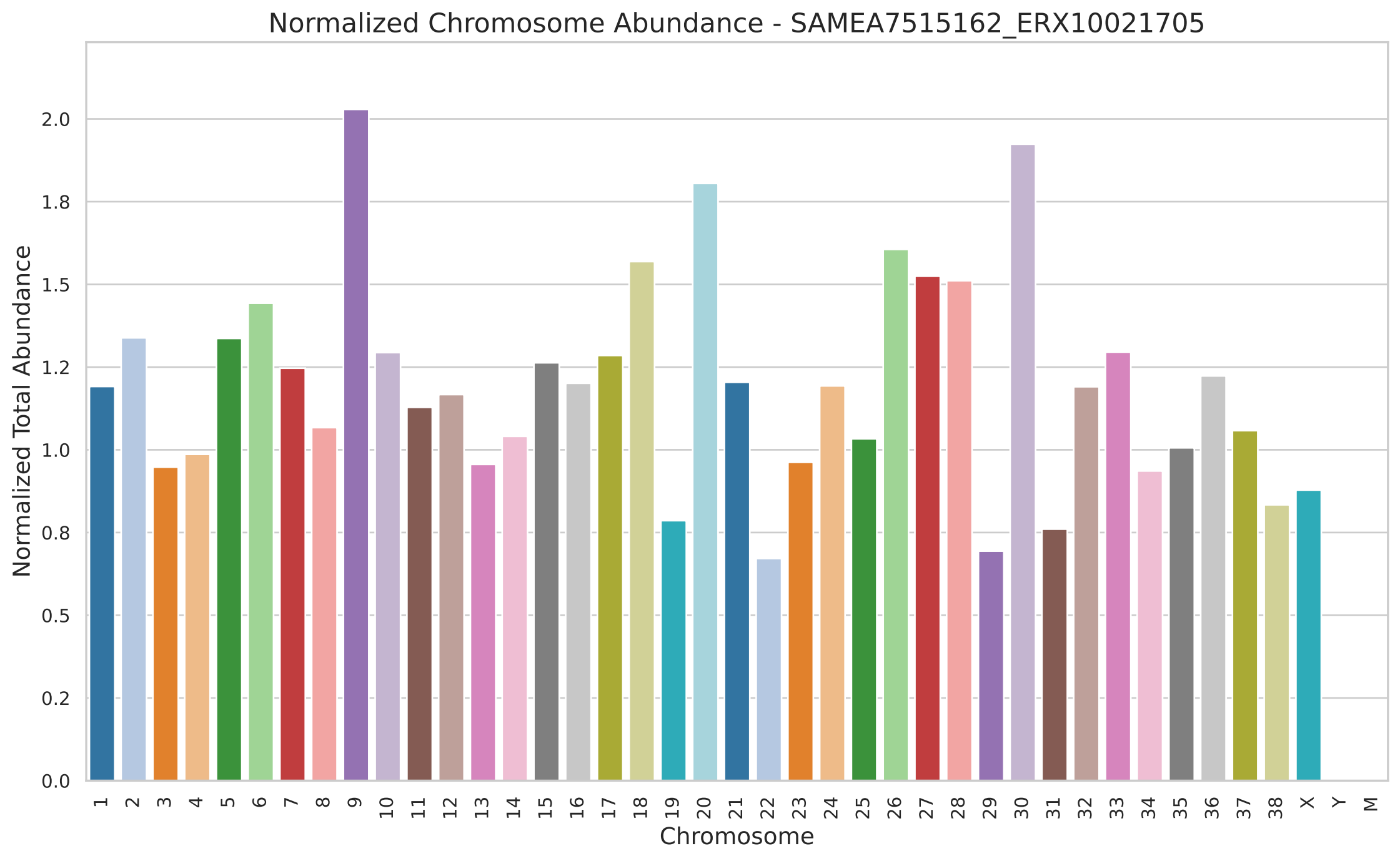

Normalized Chromosome Abundance - SAMEA7515390_ERX10021865
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

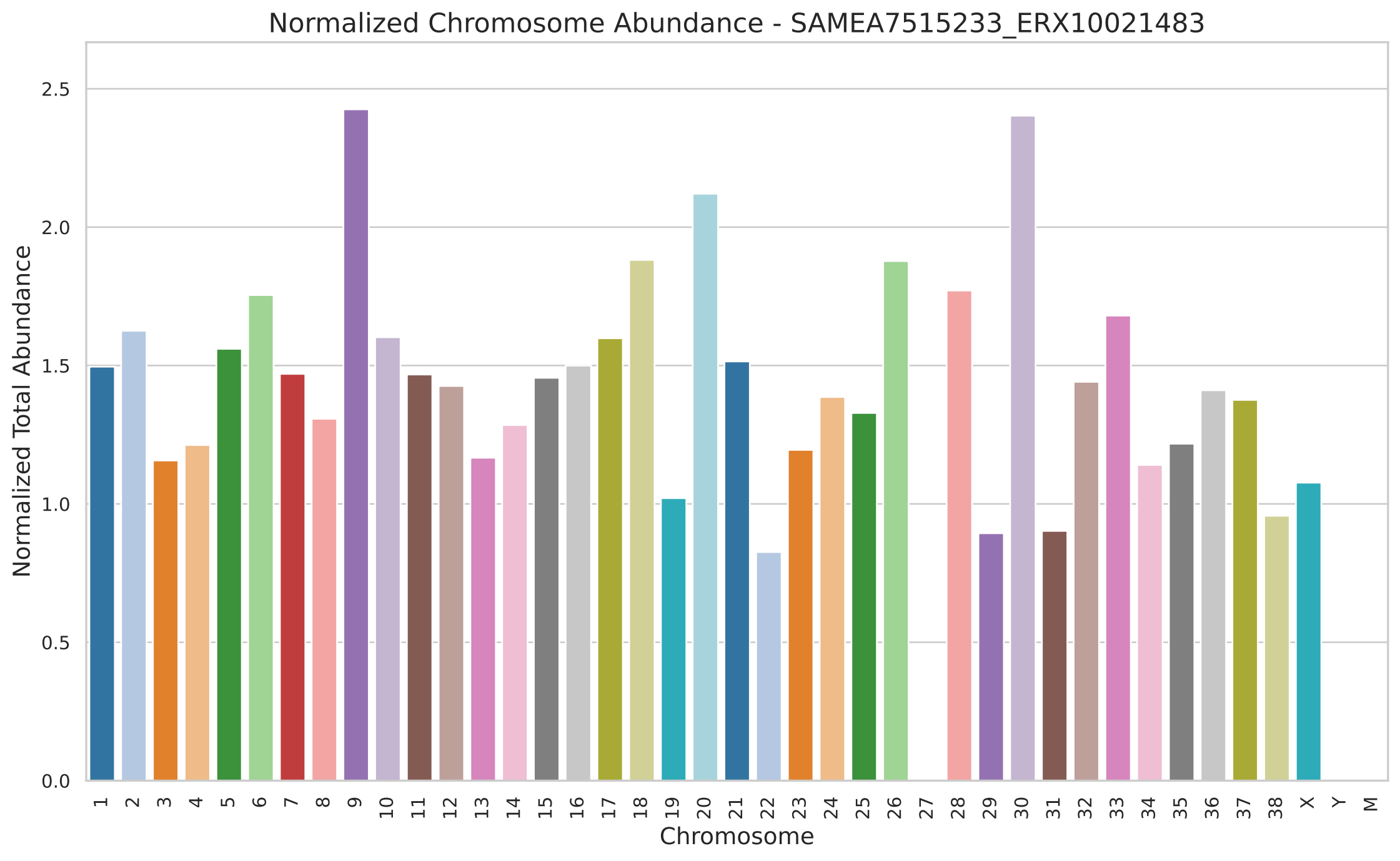

Normalized Chromosome Abundance - SAMEA7515351_ERX10021847
Normalized Total Abundance
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

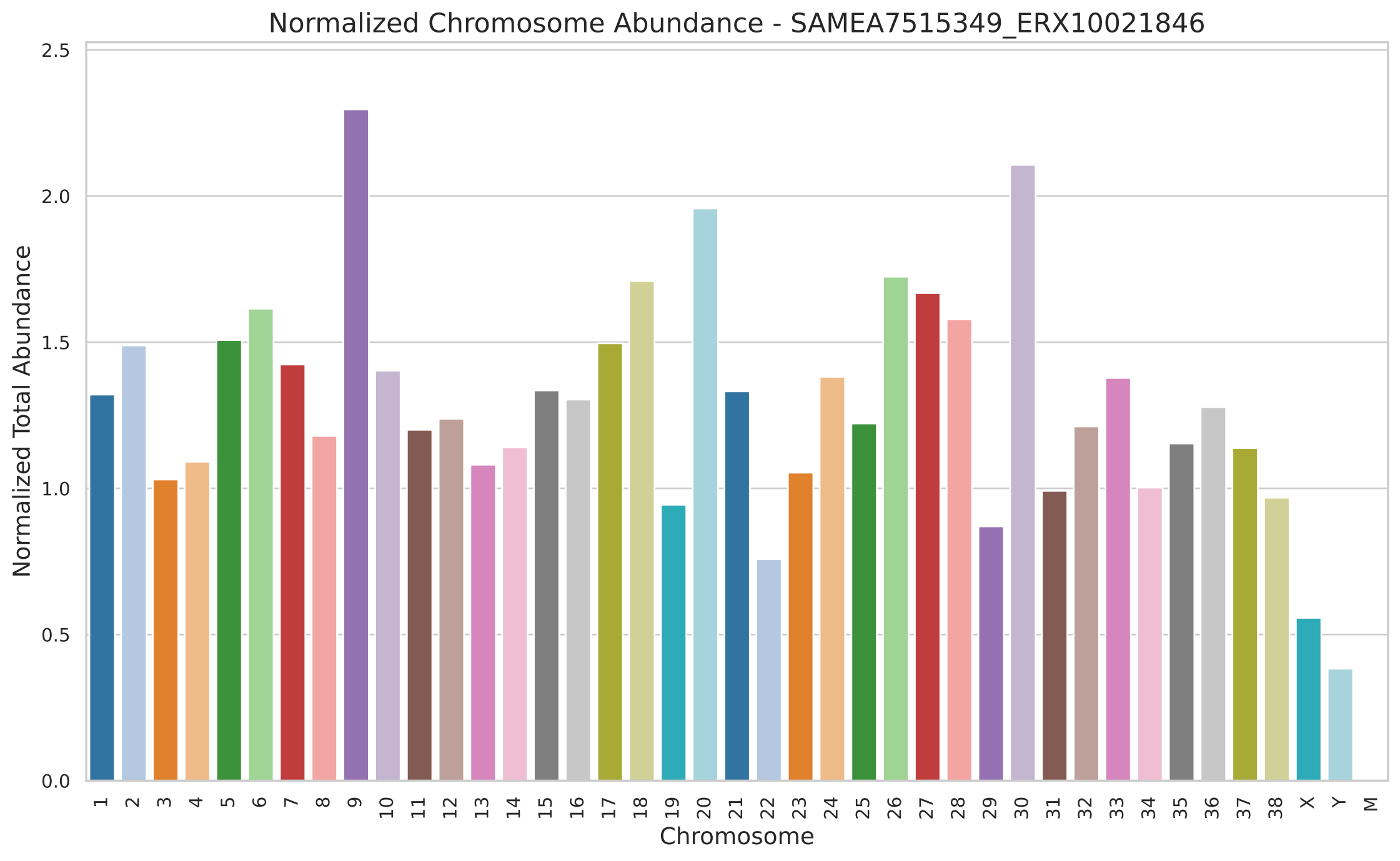

Normalized Chromosome Abundance - SAMEA7515355_ERX10021850
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

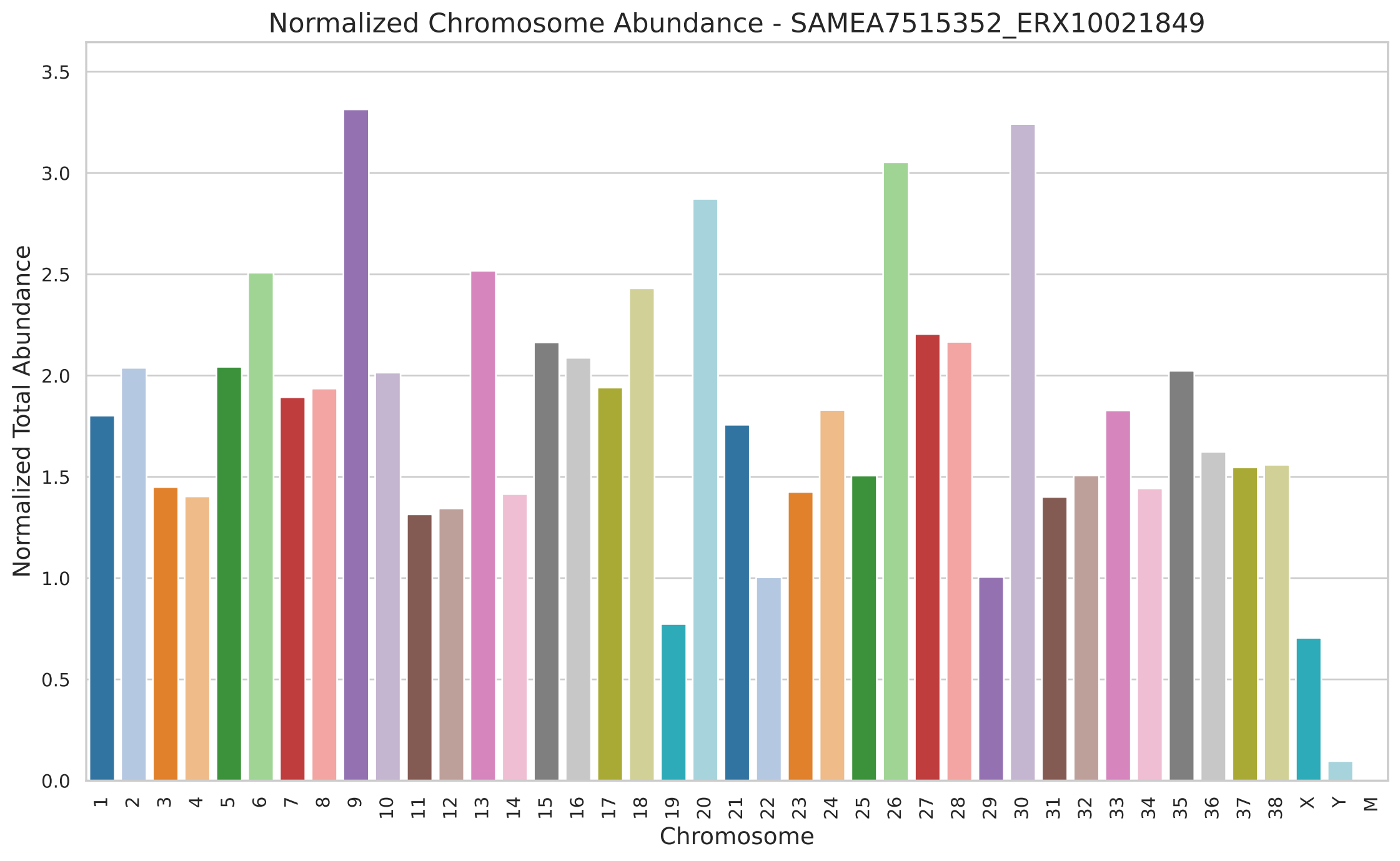

Normalized Chromosome Abundance - SAMEA7515348_ERX10021873
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

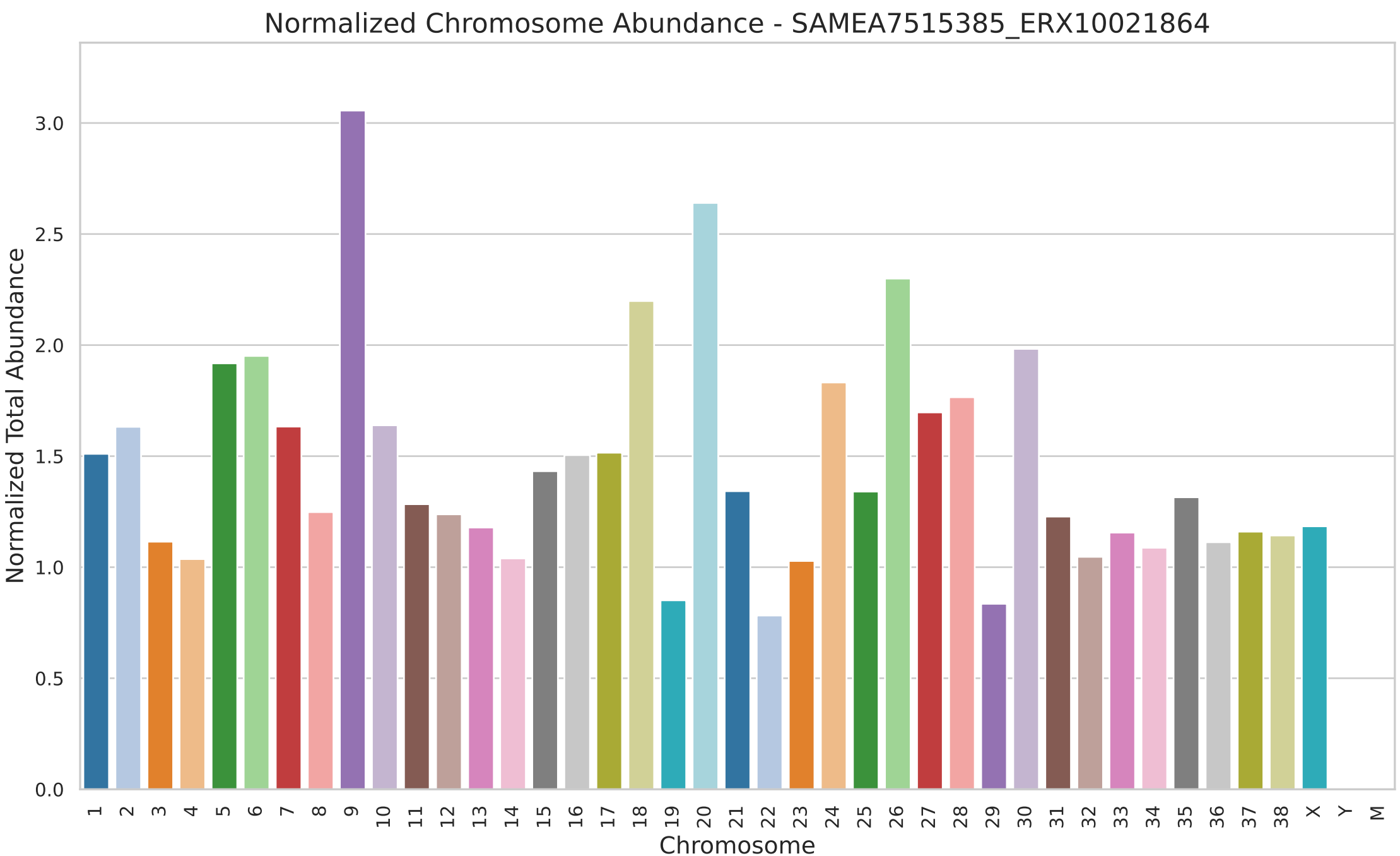

Normalized Chromosome Abundance - SAMEA7515340_ERX10021872
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

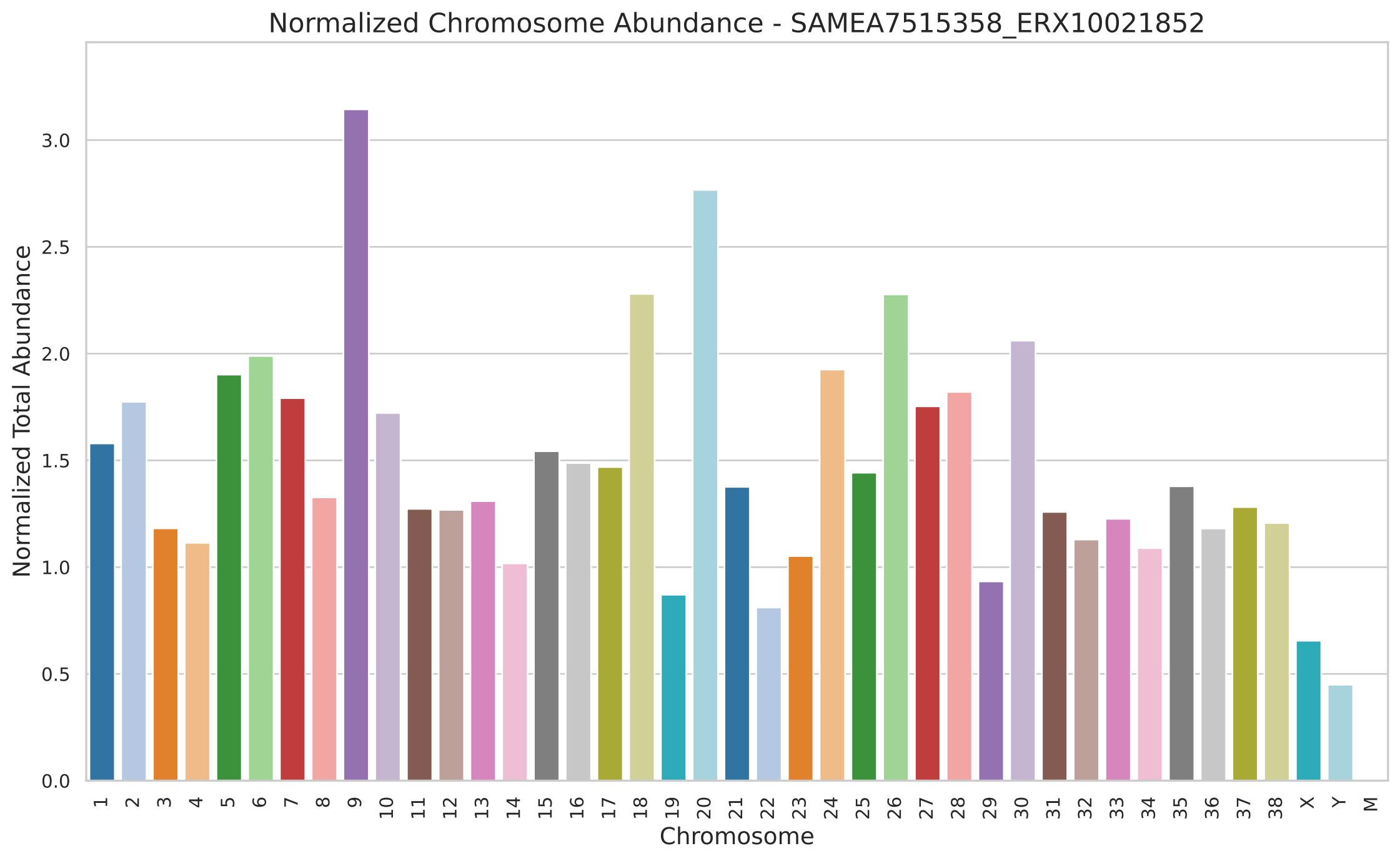

Normalized Chromosome Abundance - SAMEA7515162_ERX10021705
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

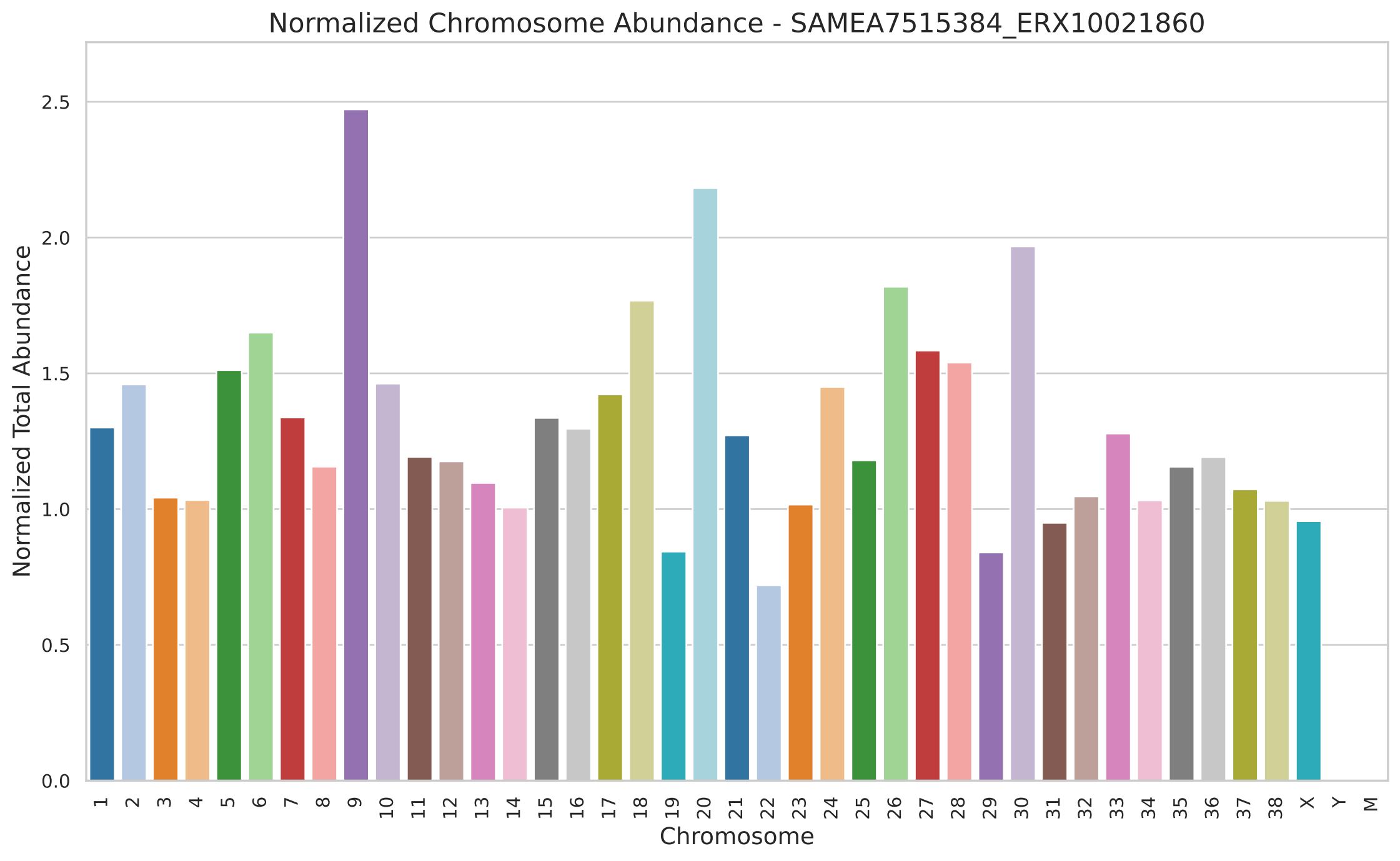

Normalized Chromosome Abundance - SAMEA7515233_ERX10021483
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

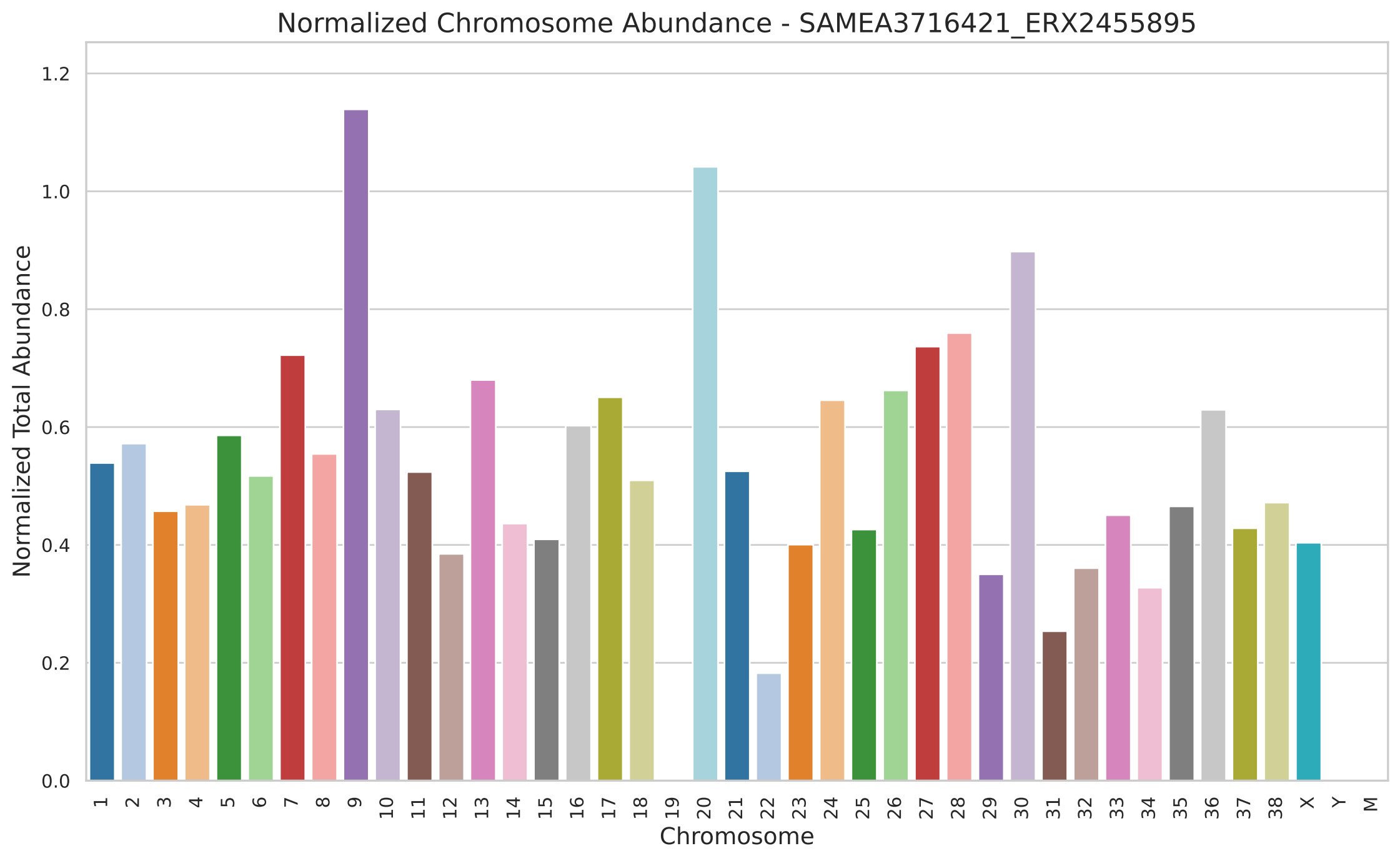

Normalized Chromosome Abundance - SAMEA7515349_ERX10021846
Normalized Total Abundance
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

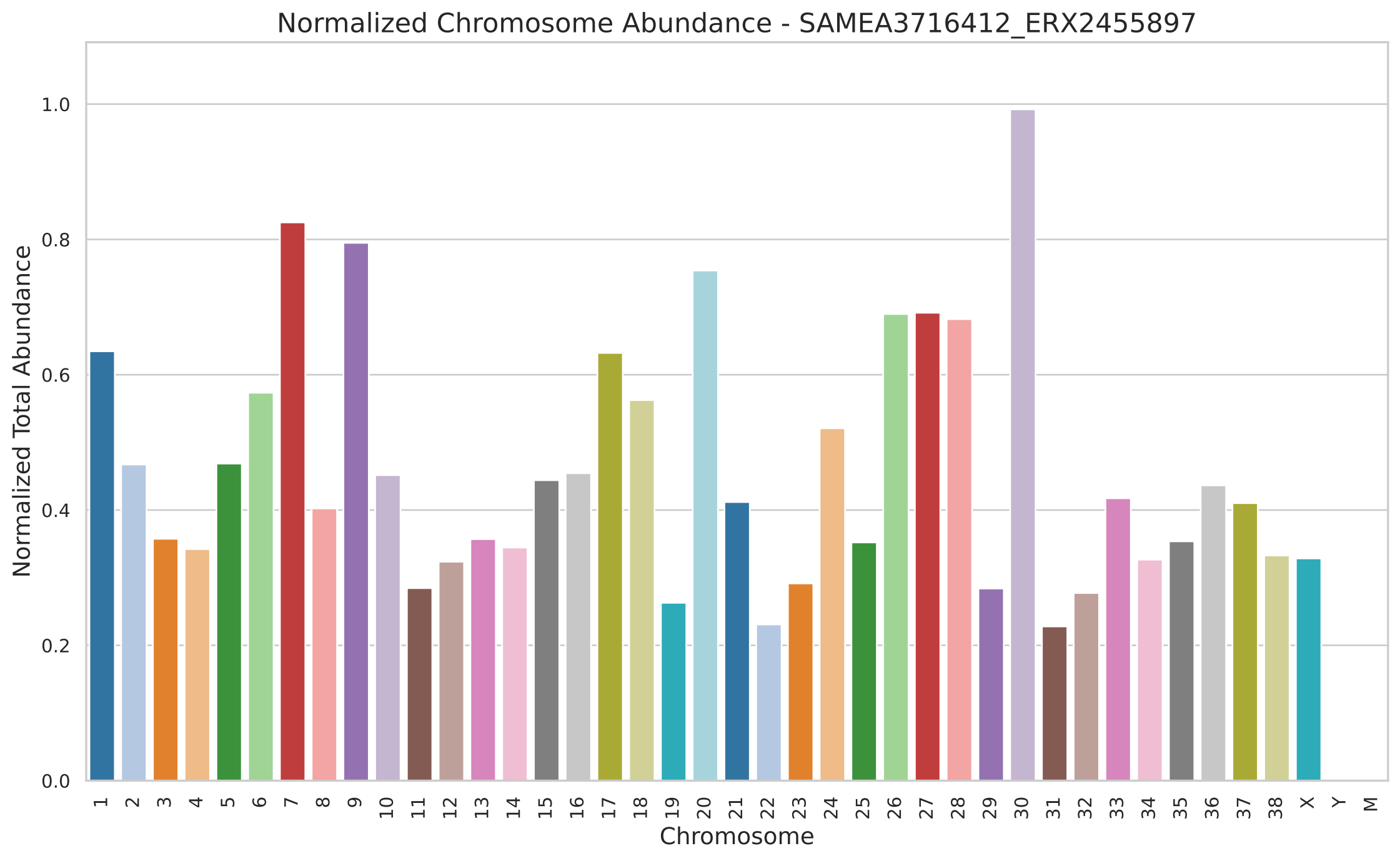

Normalized Chromosome Abundance - SAMEA7515352_ERX10021849
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

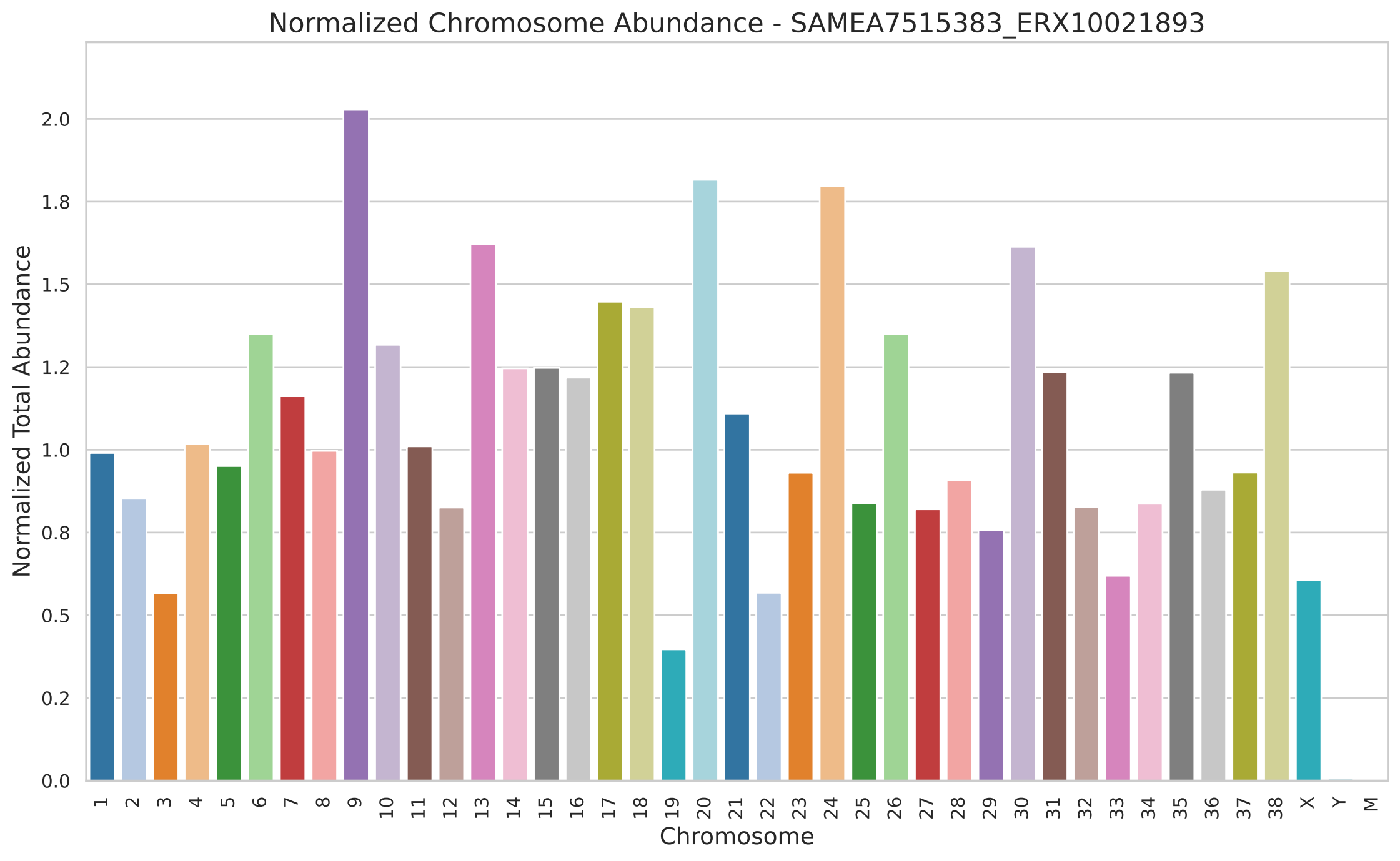

Normalized Chromosome Abundance - SAMEA7515385_ERX10021864
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

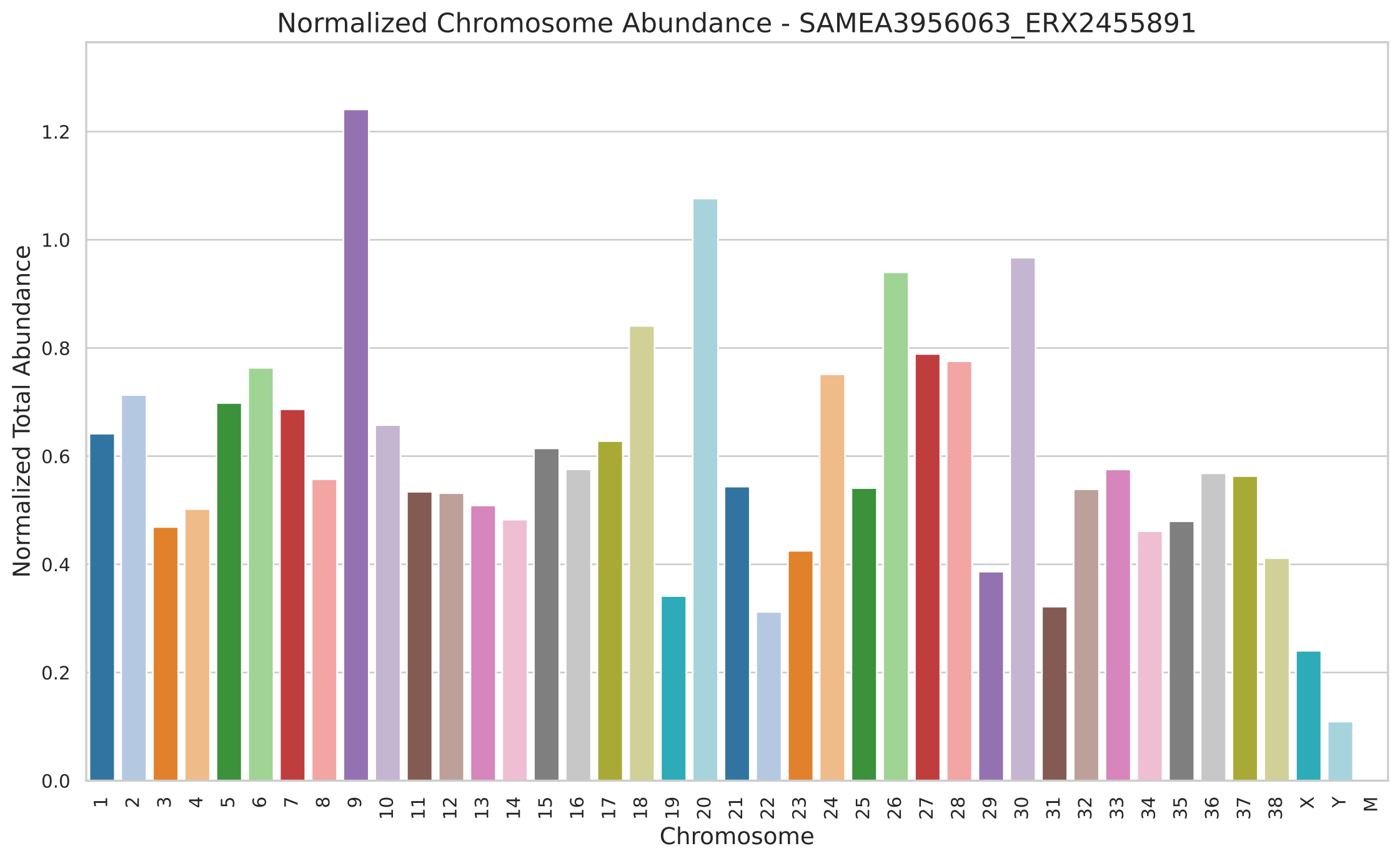

Normalized Chromosome Abundance - SAMEA7515358_ERX10021852
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

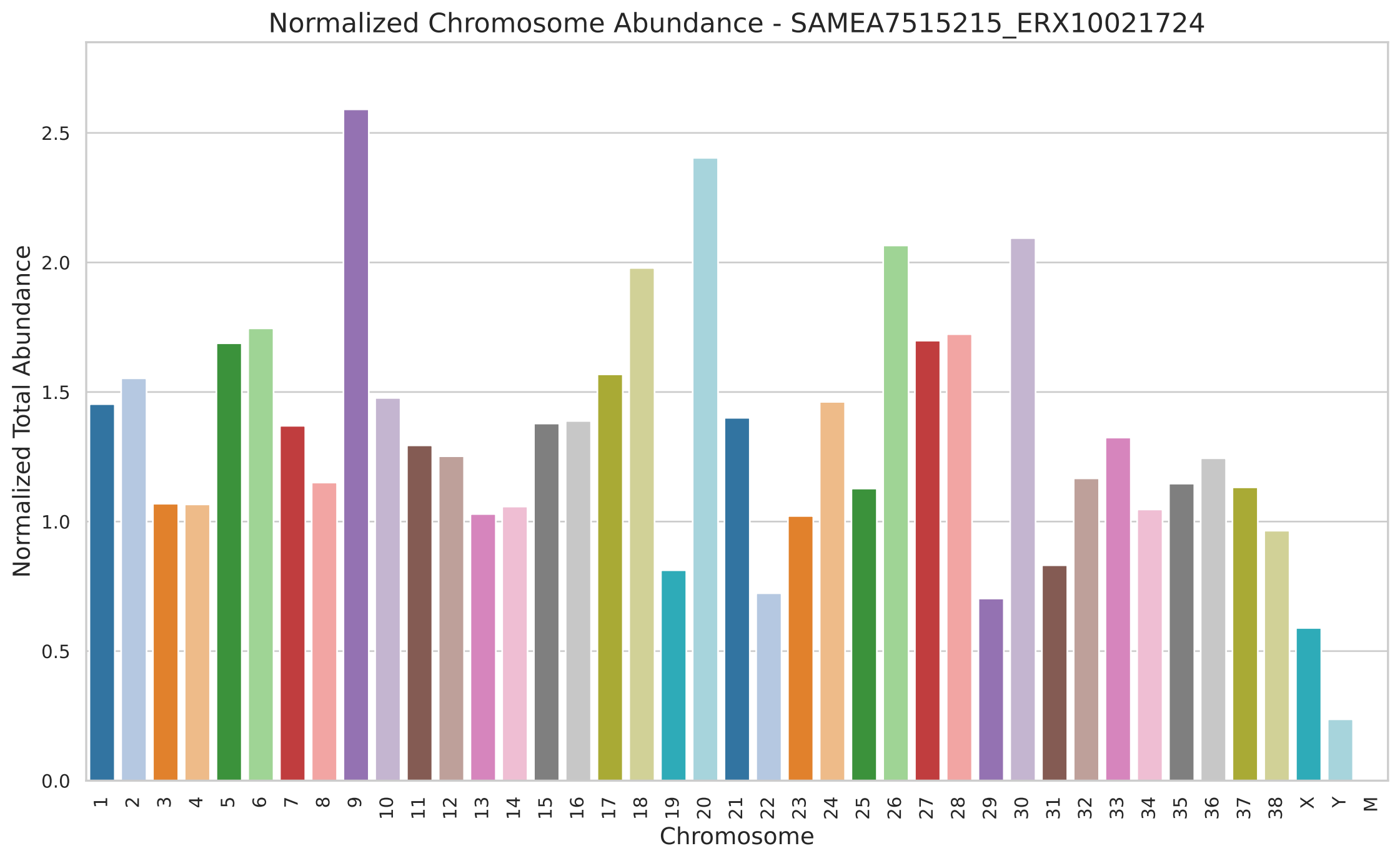

Normalized Chromosome Abundance - SAMEA7515384_ERX10021860
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

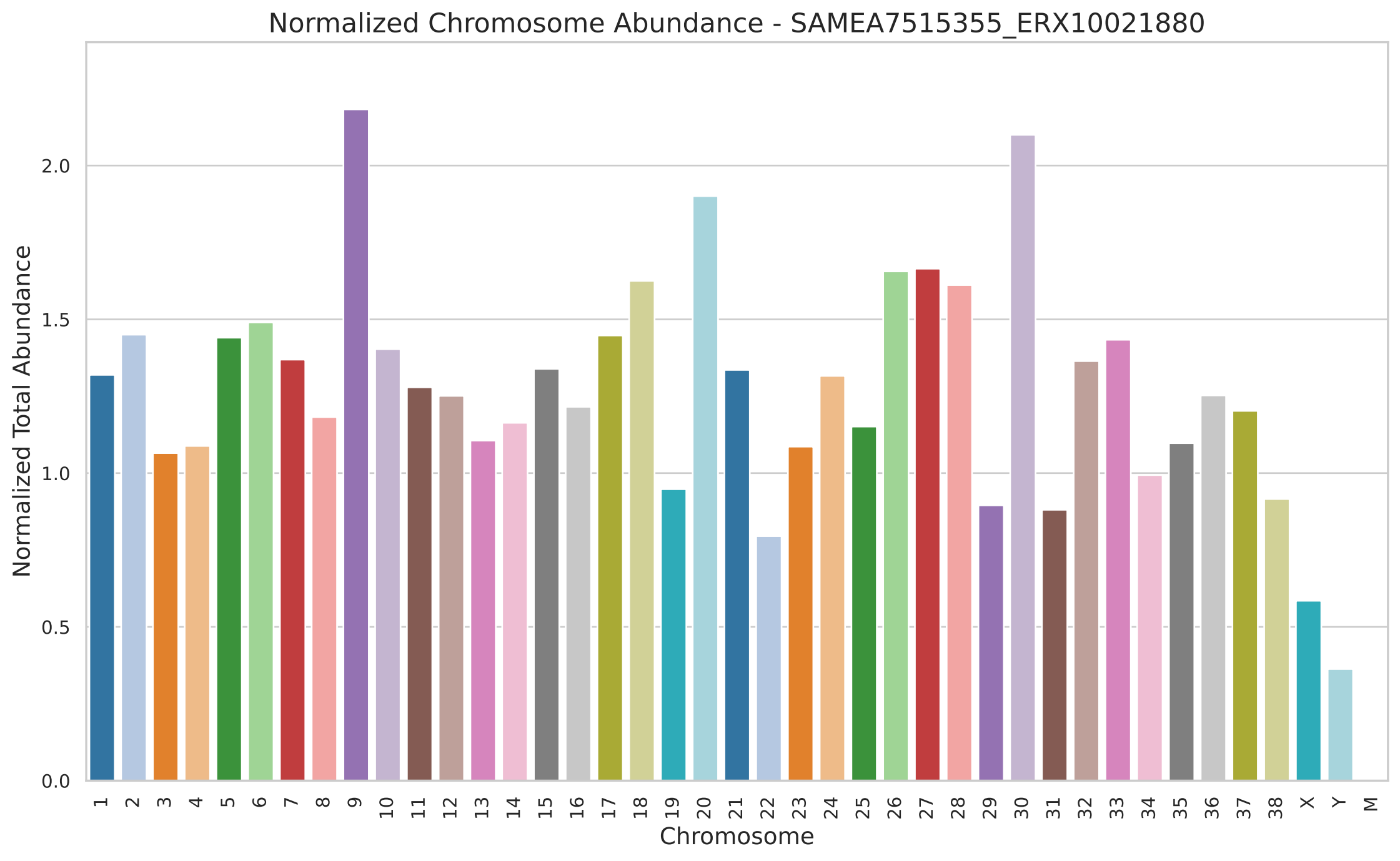

Normalized Chromosome Abundance - SAMEA3716421_ERX2455895
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

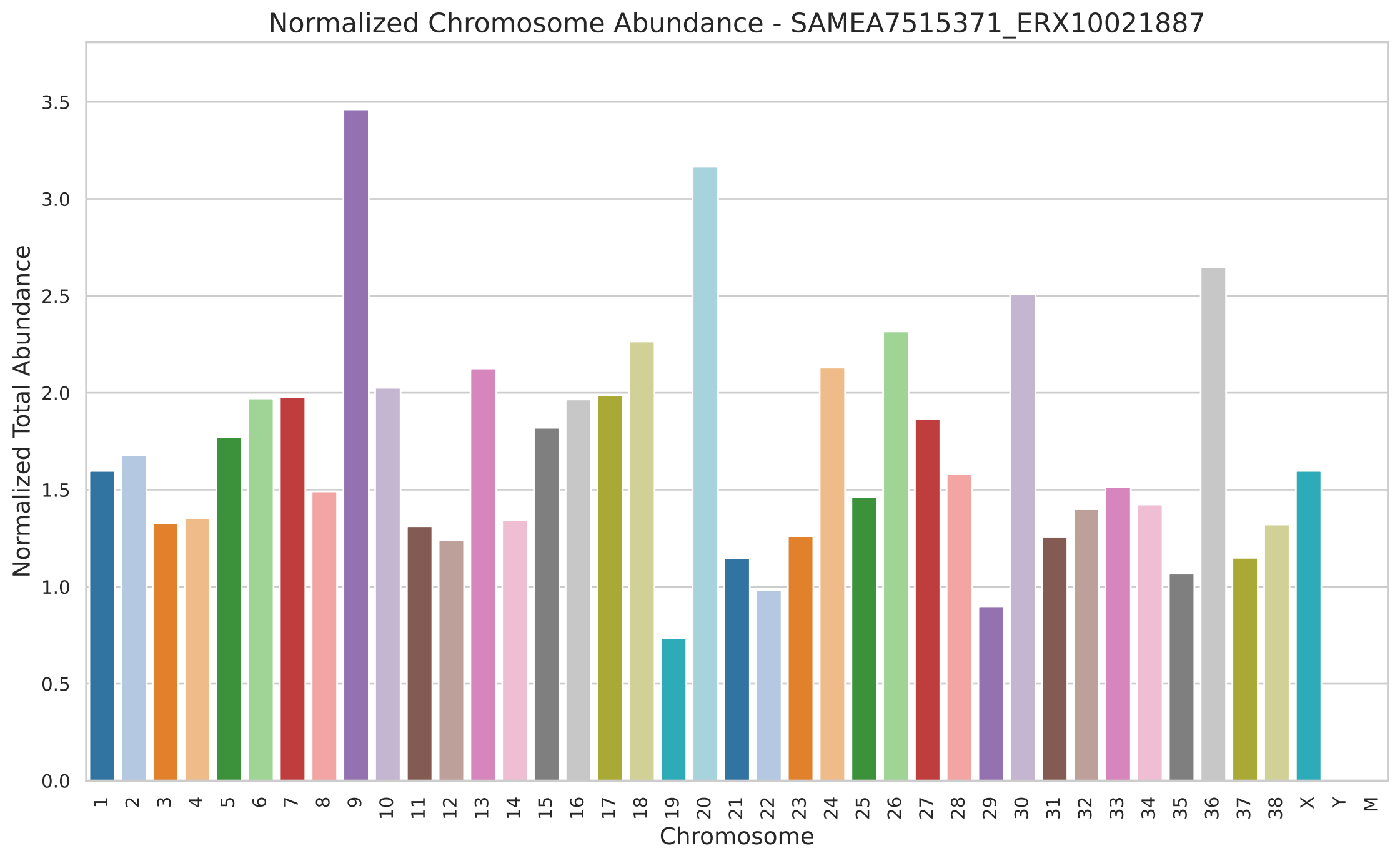

Normalized Chromosome Abundance - SAMEA3716412_ERX2455897
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

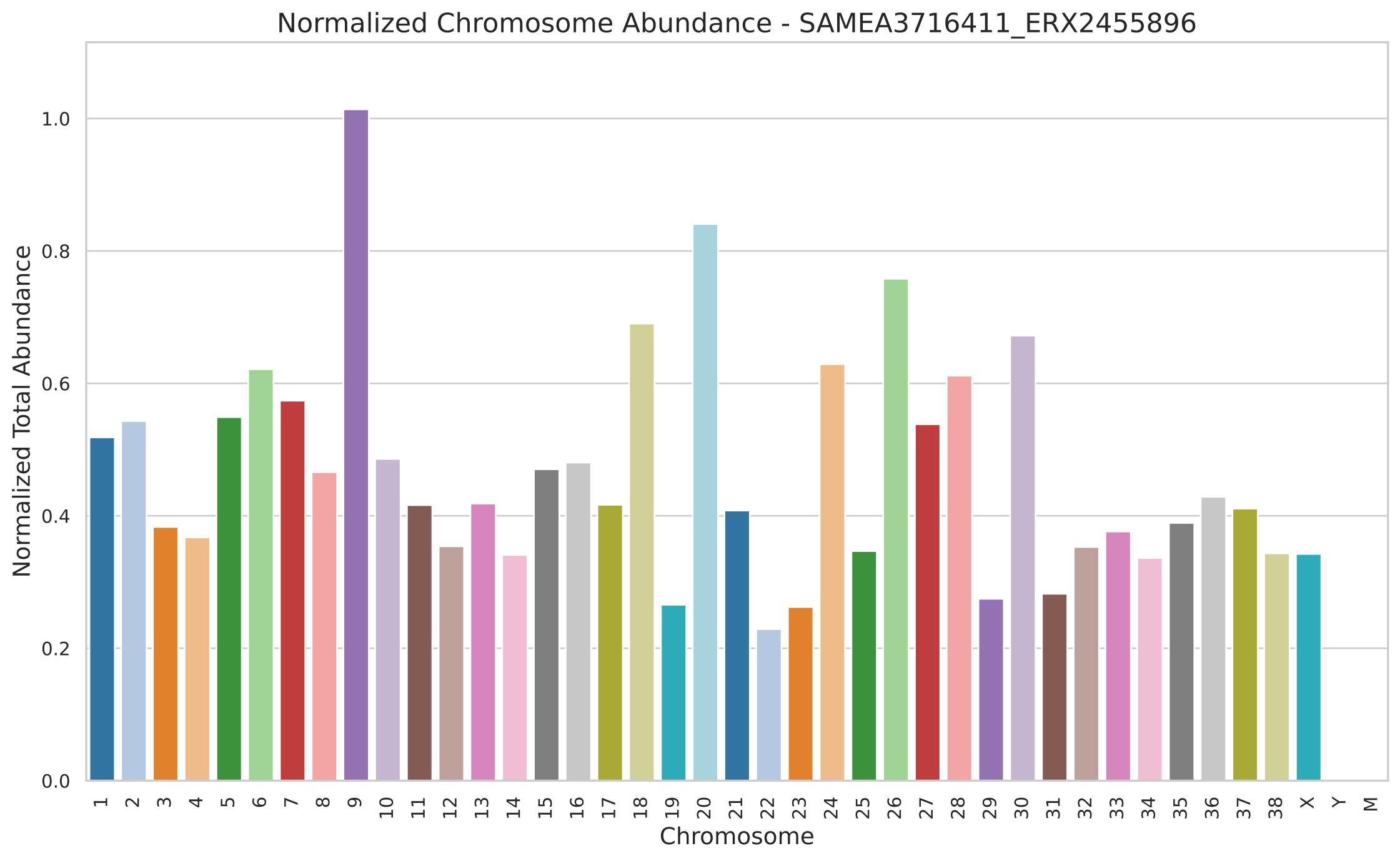

Normalized Chromosome Abundance - SAMEA7515383_ERX10021893
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

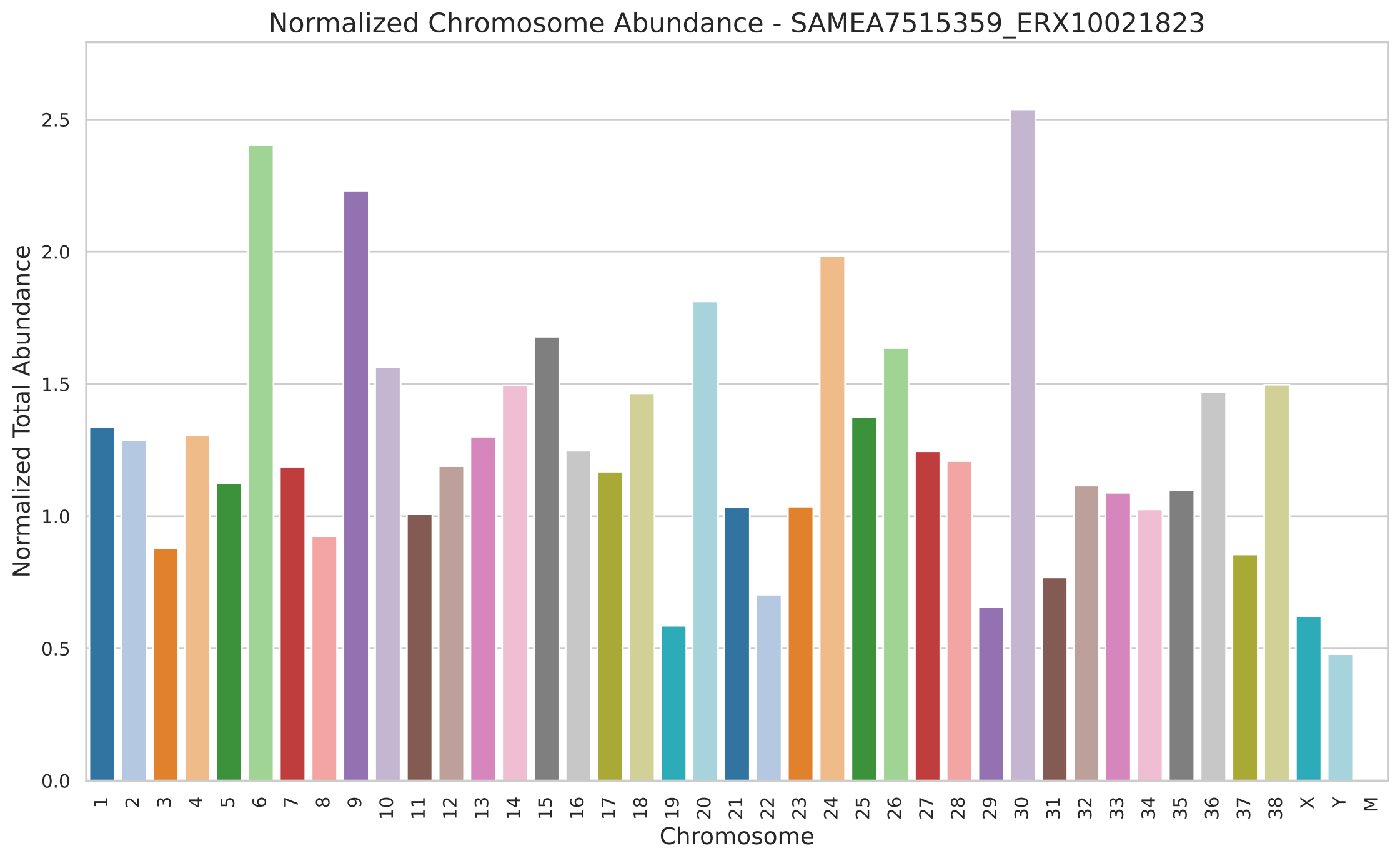

Normalized Chromosome Abundance - SAMEA3956063_ERX2455891
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

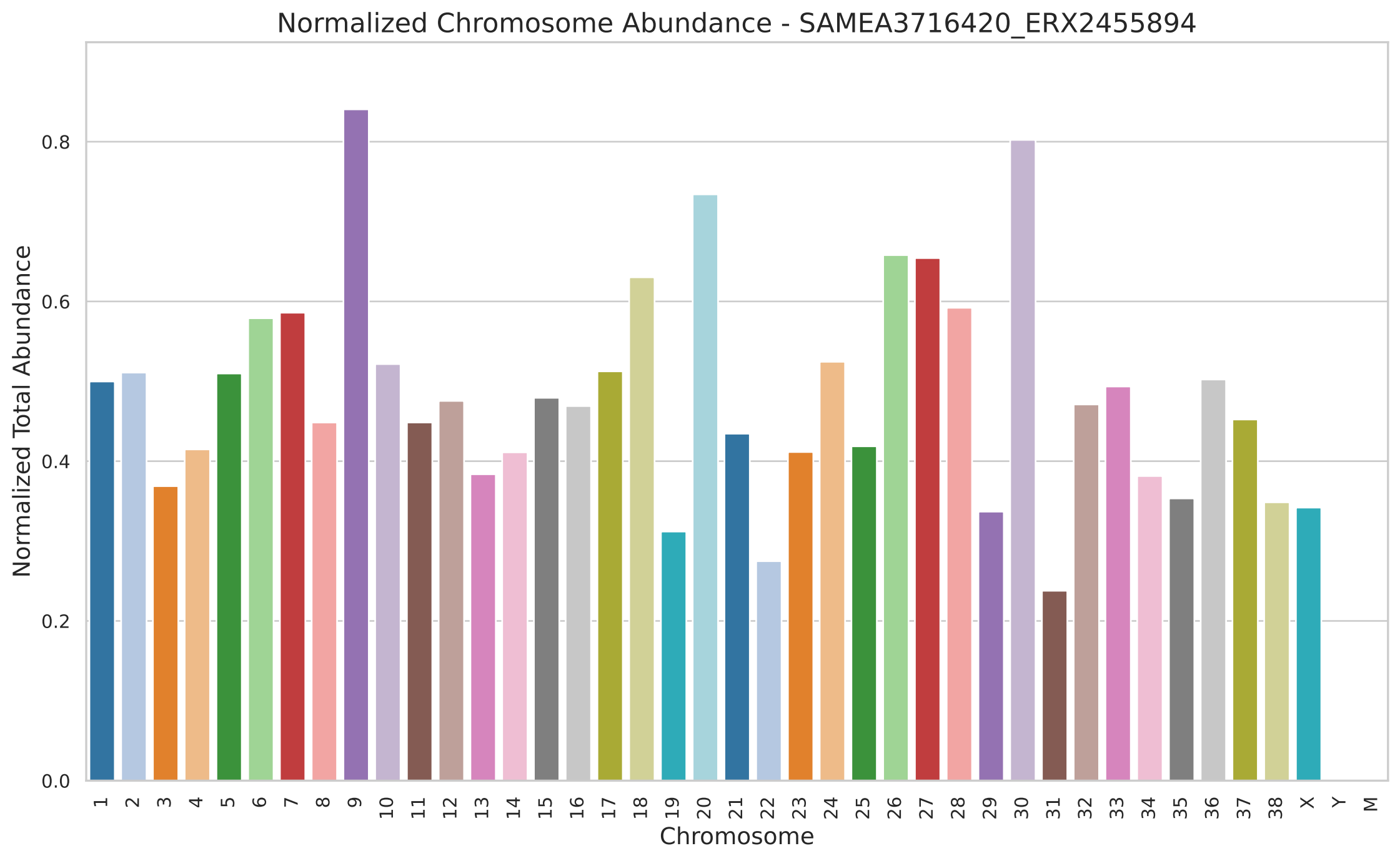

Normalized Chromosome Abundance - SAMEA7515215_ERX10021724
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

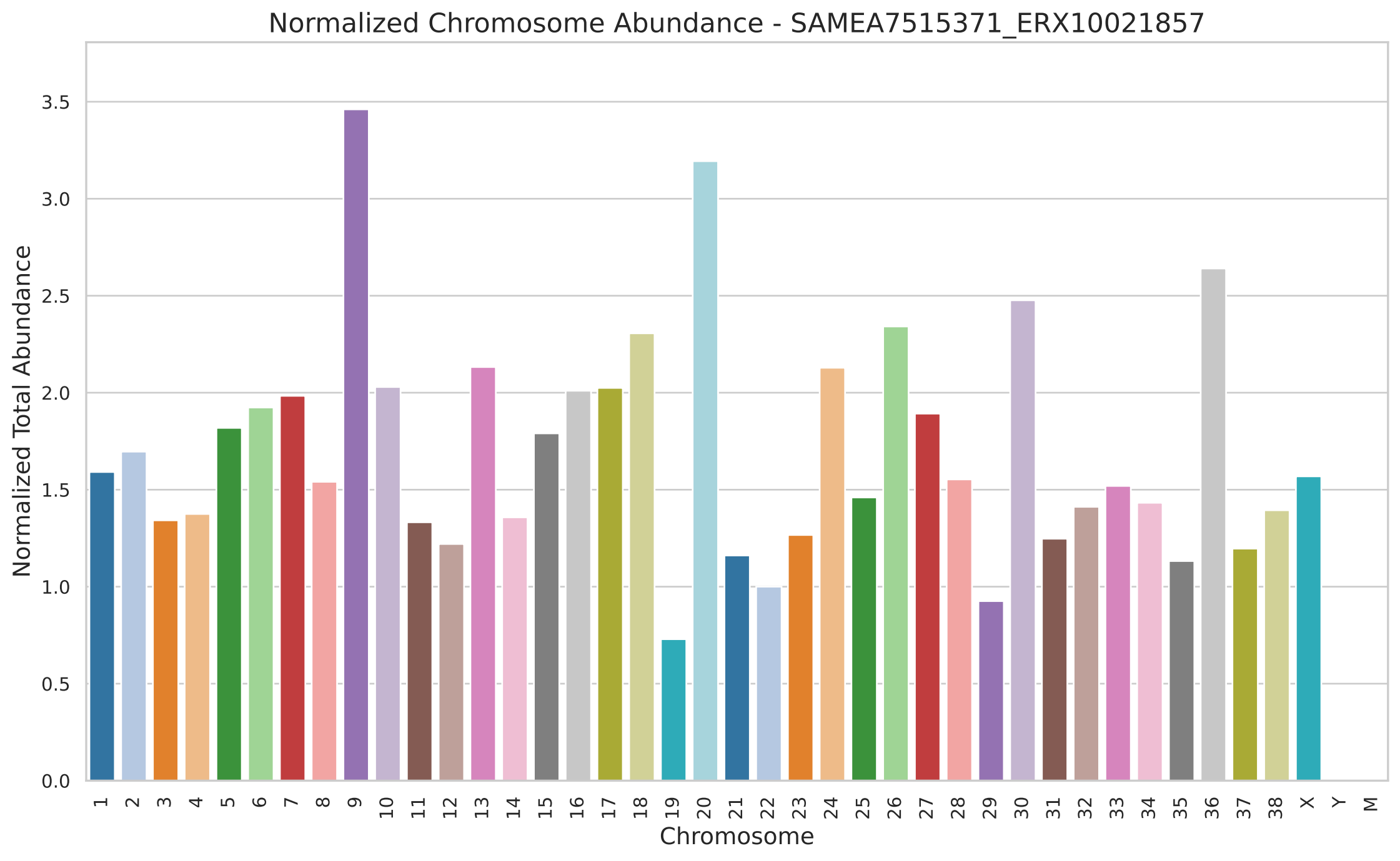

Normalized Chromosome Abundance - SAMEA7515355_ERX10021880
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

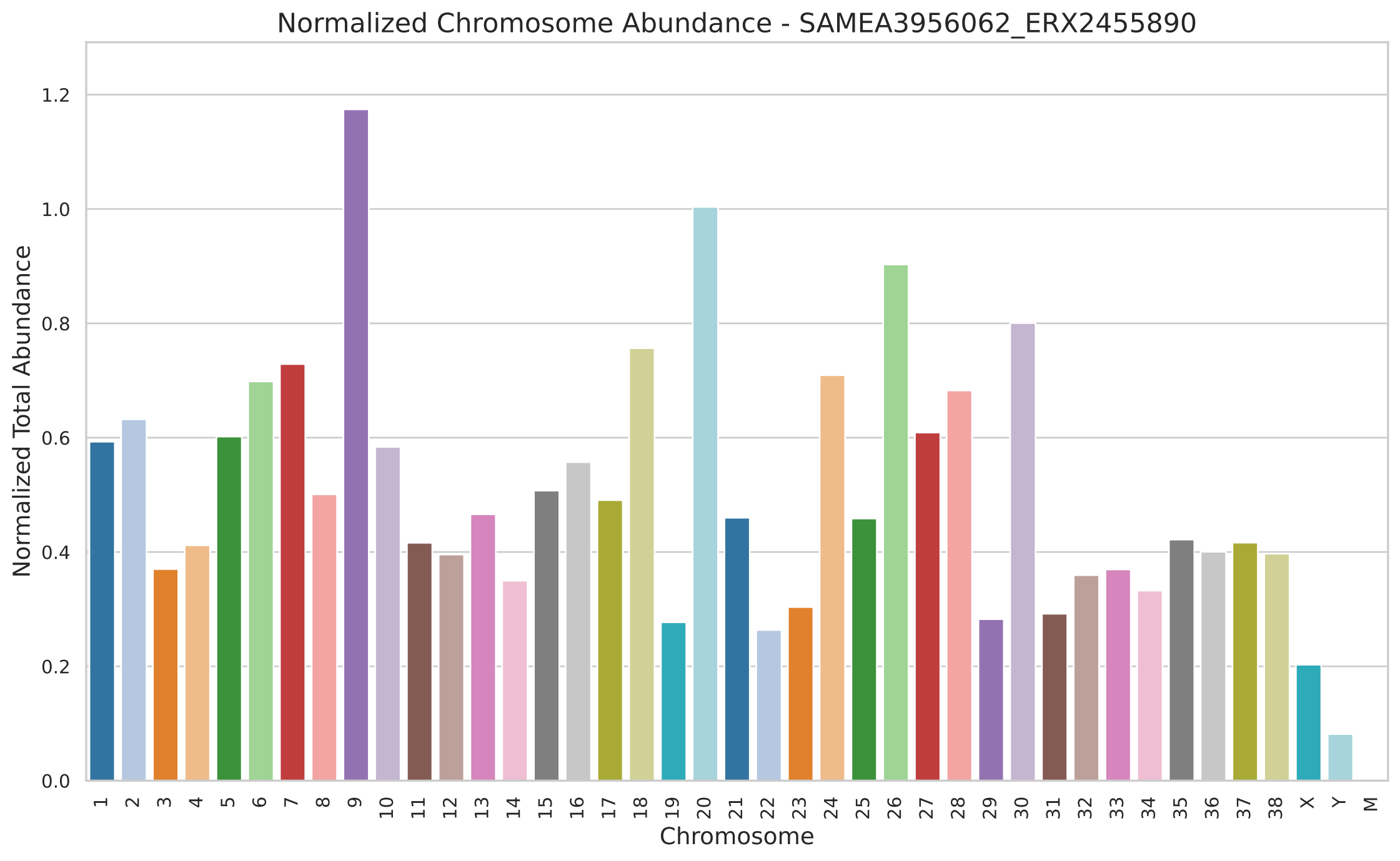

Normalized Chromosome Abundance - SAMEA7515371_ERX10021887
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

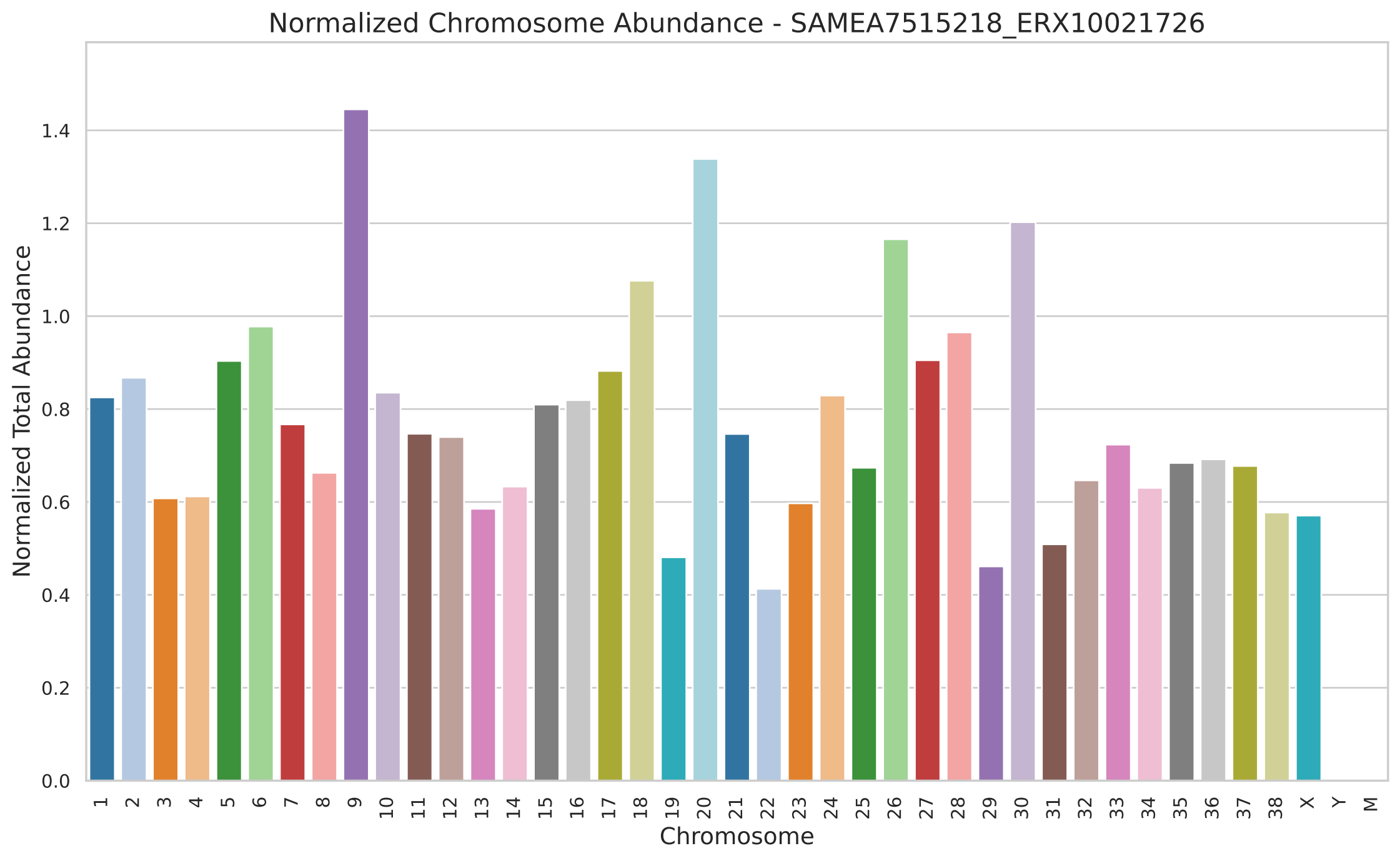

Normalized Chromosome Abundance - SAMEA3716411_ERX2455896
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

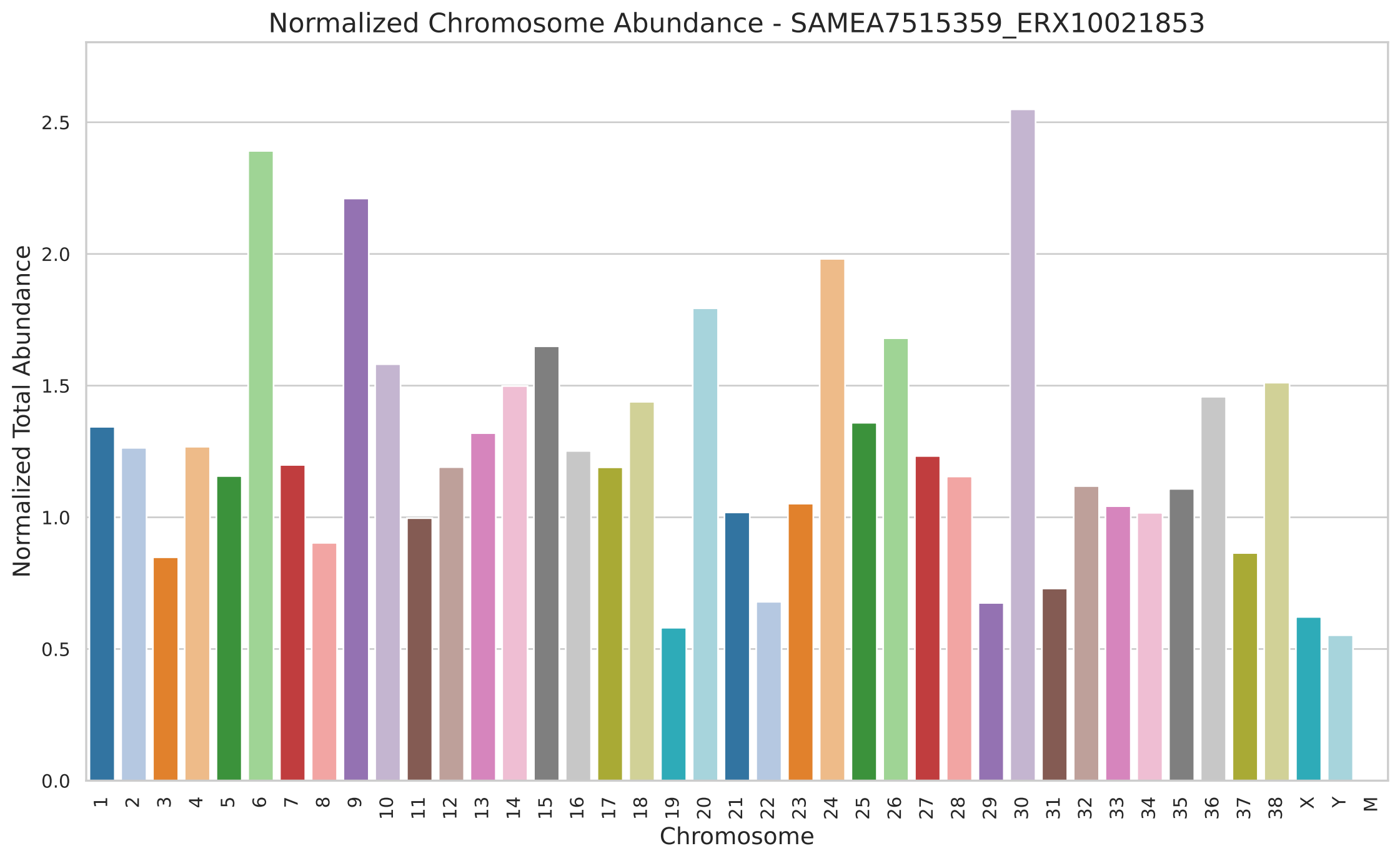

Normalized Chromosome Abundance - SAMEA7515359_ERX10021823
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

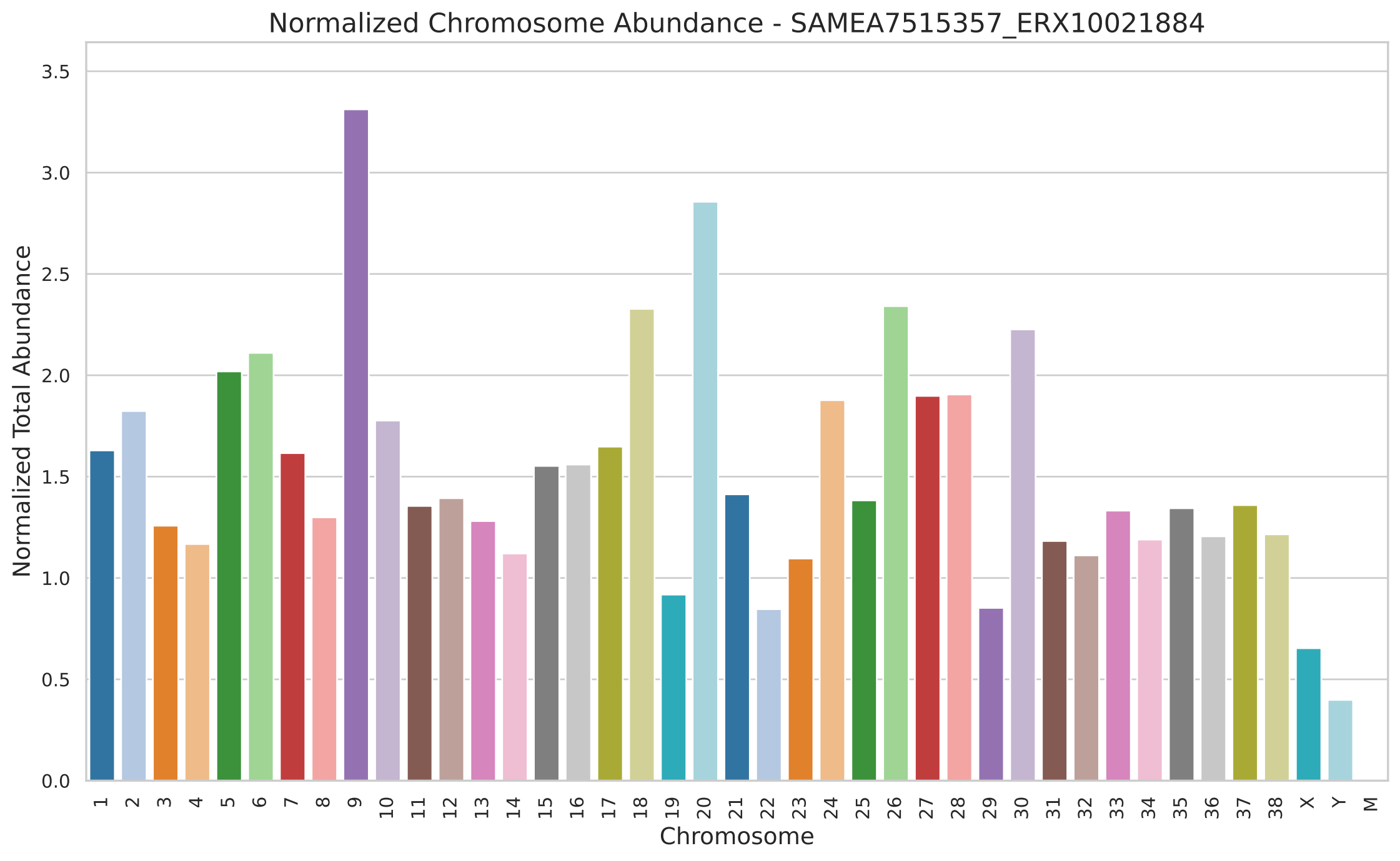

Normalized Chromosome Abundance - SAMEA3716420_ERX2455894
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

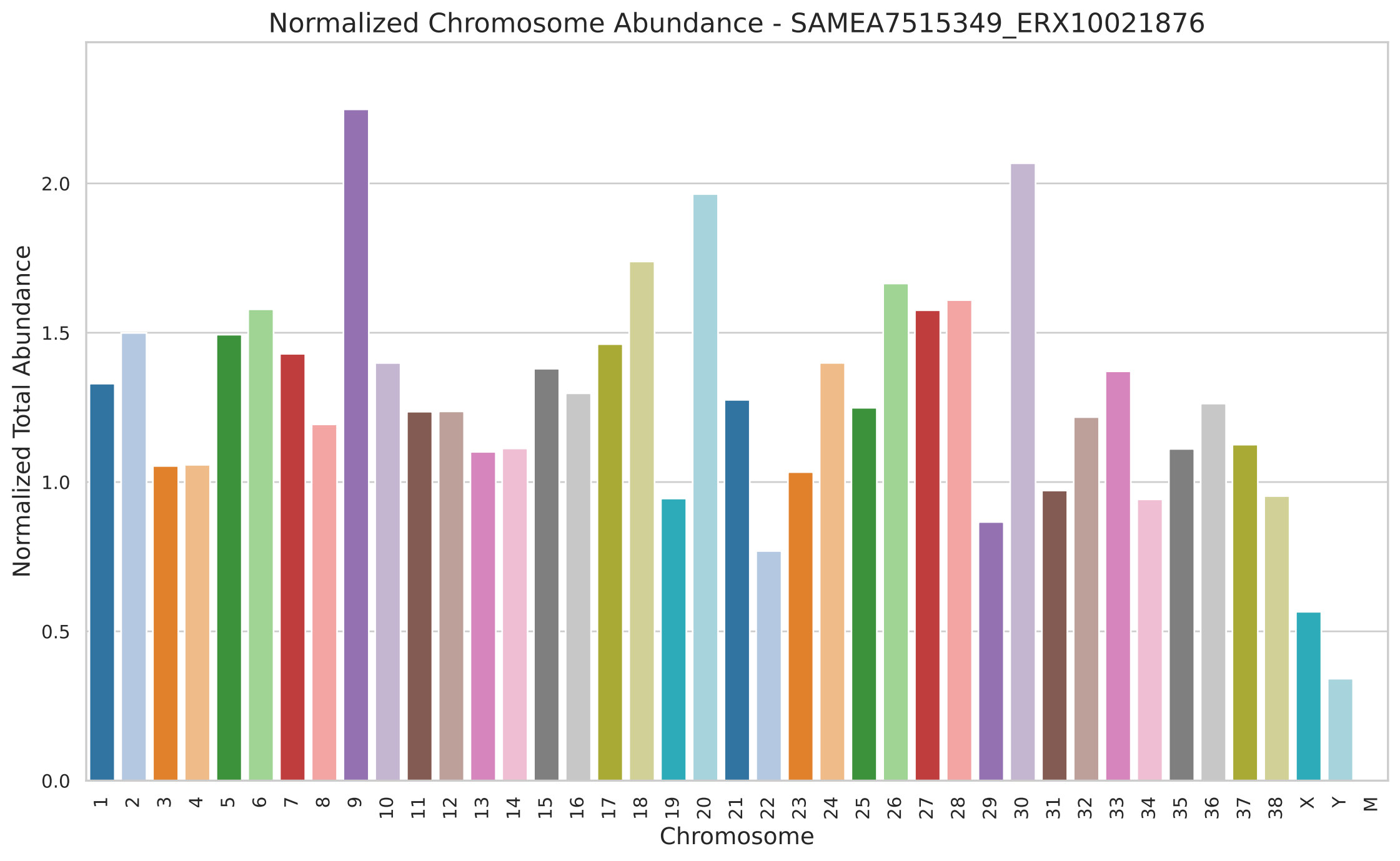

Normalized Chromosome Abundance - SAMEA7515371_ERX10021857
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

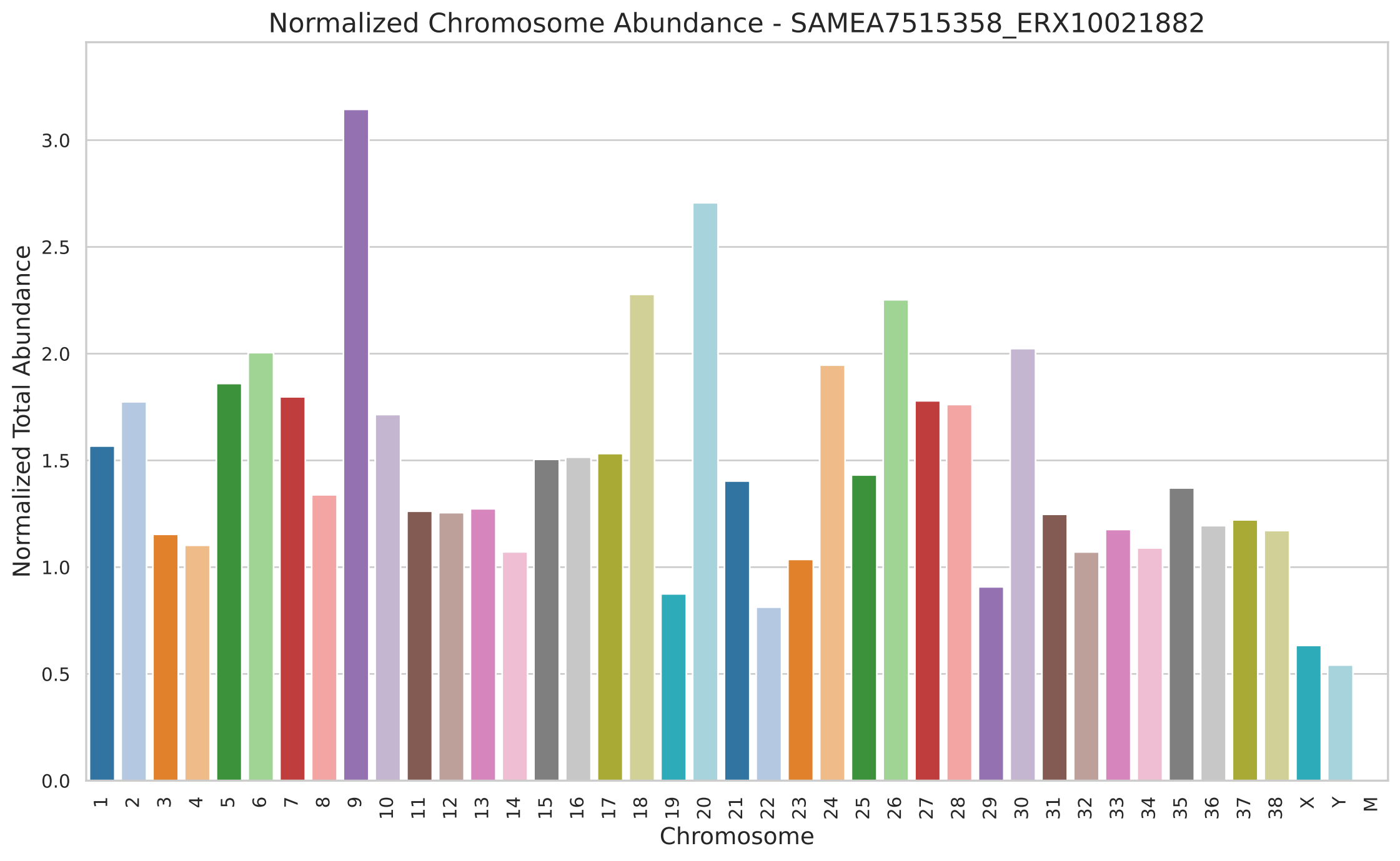

Normalized Chromosome Abundance - SAMEA3956062_ERX2455890
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

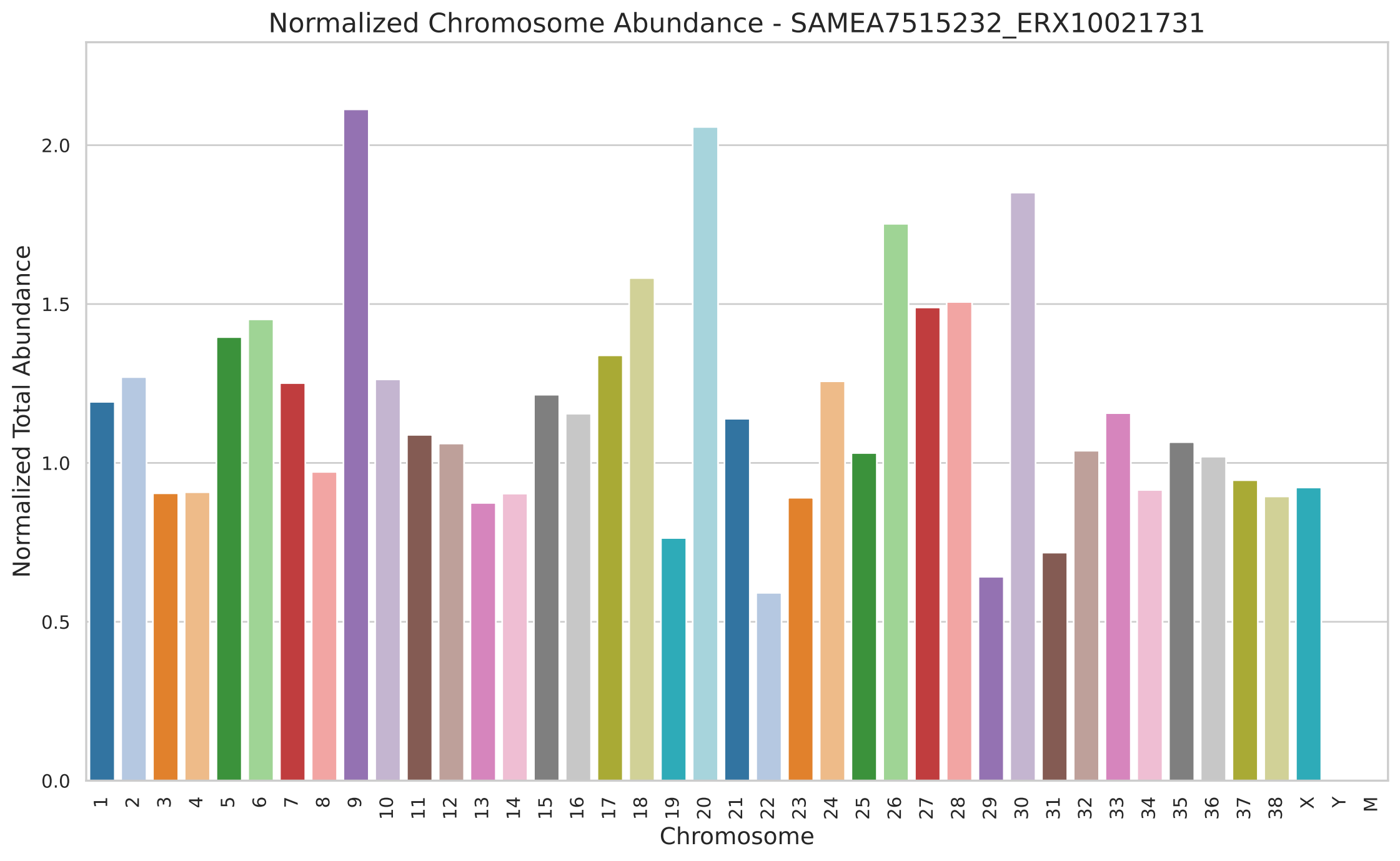

Normalized Chromosome Abundance - SAMEA7515218_ERX10021726
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

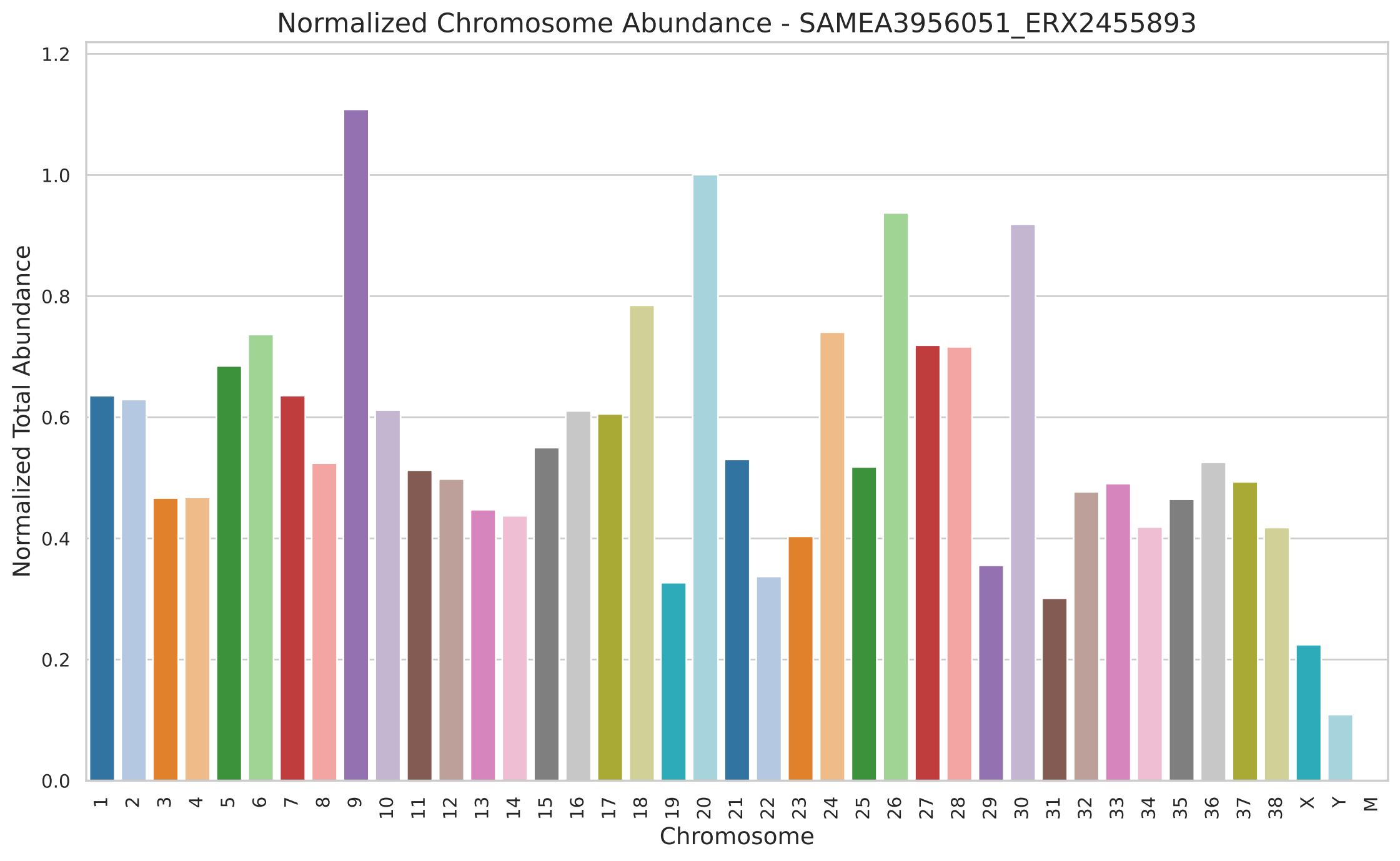

Normalized Chromosome Abundance - SAMEA7515359_ERX10021853
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

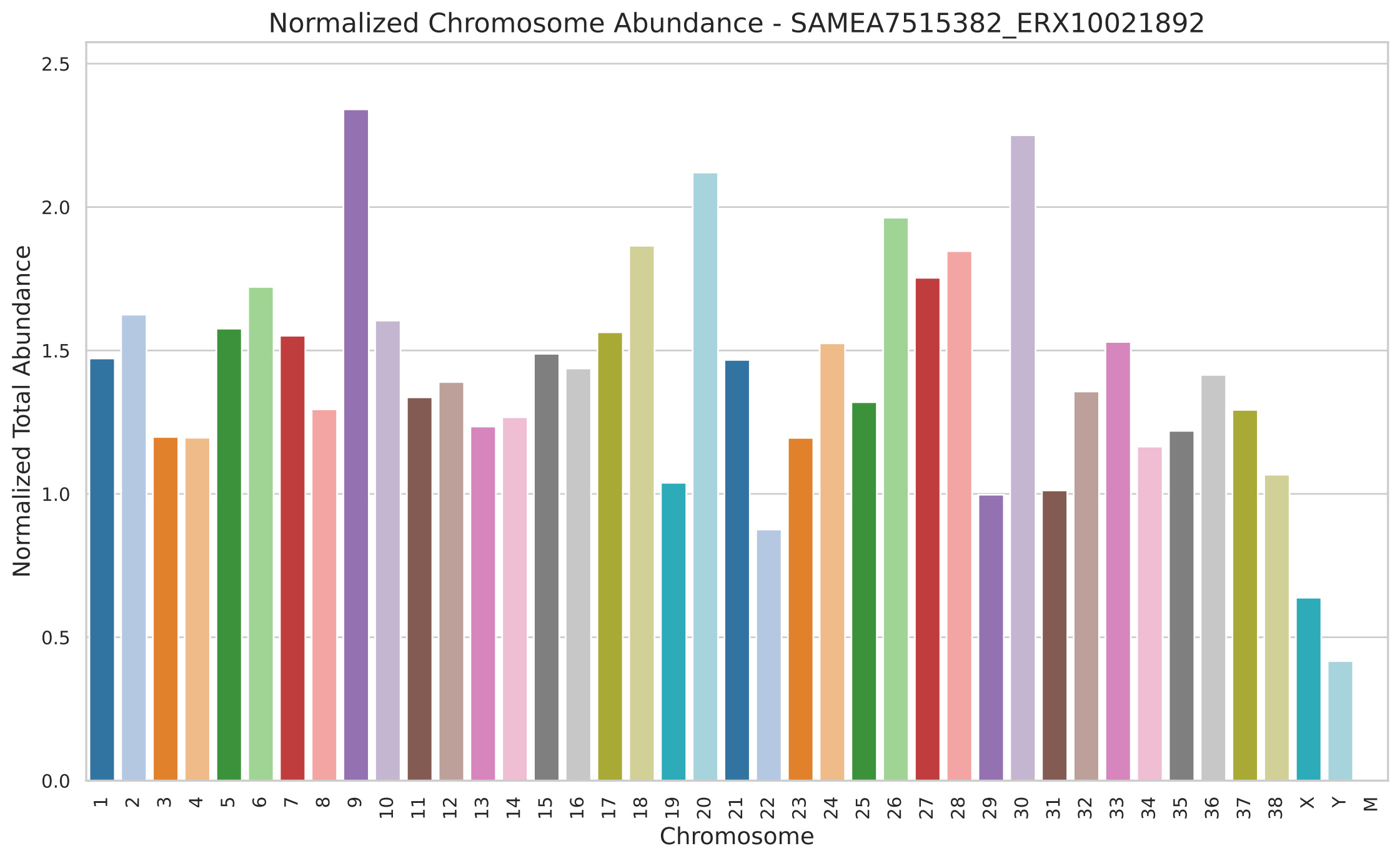

Normalized Chromosome Abundance - SAMEA7515357_ERX10021884
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

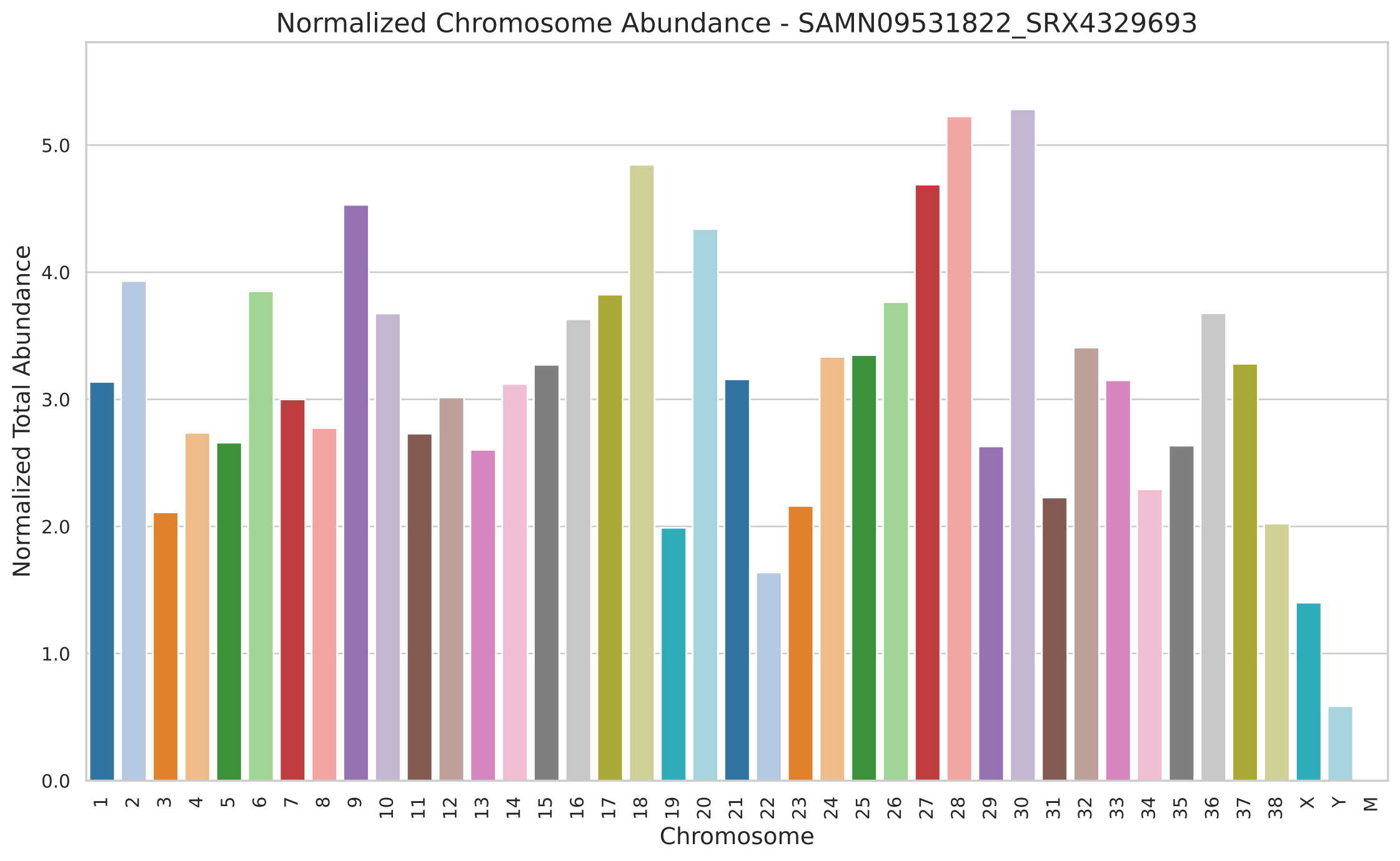

Normalized Chromosome Abundance - SAMEA7515349_ERX10021876
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

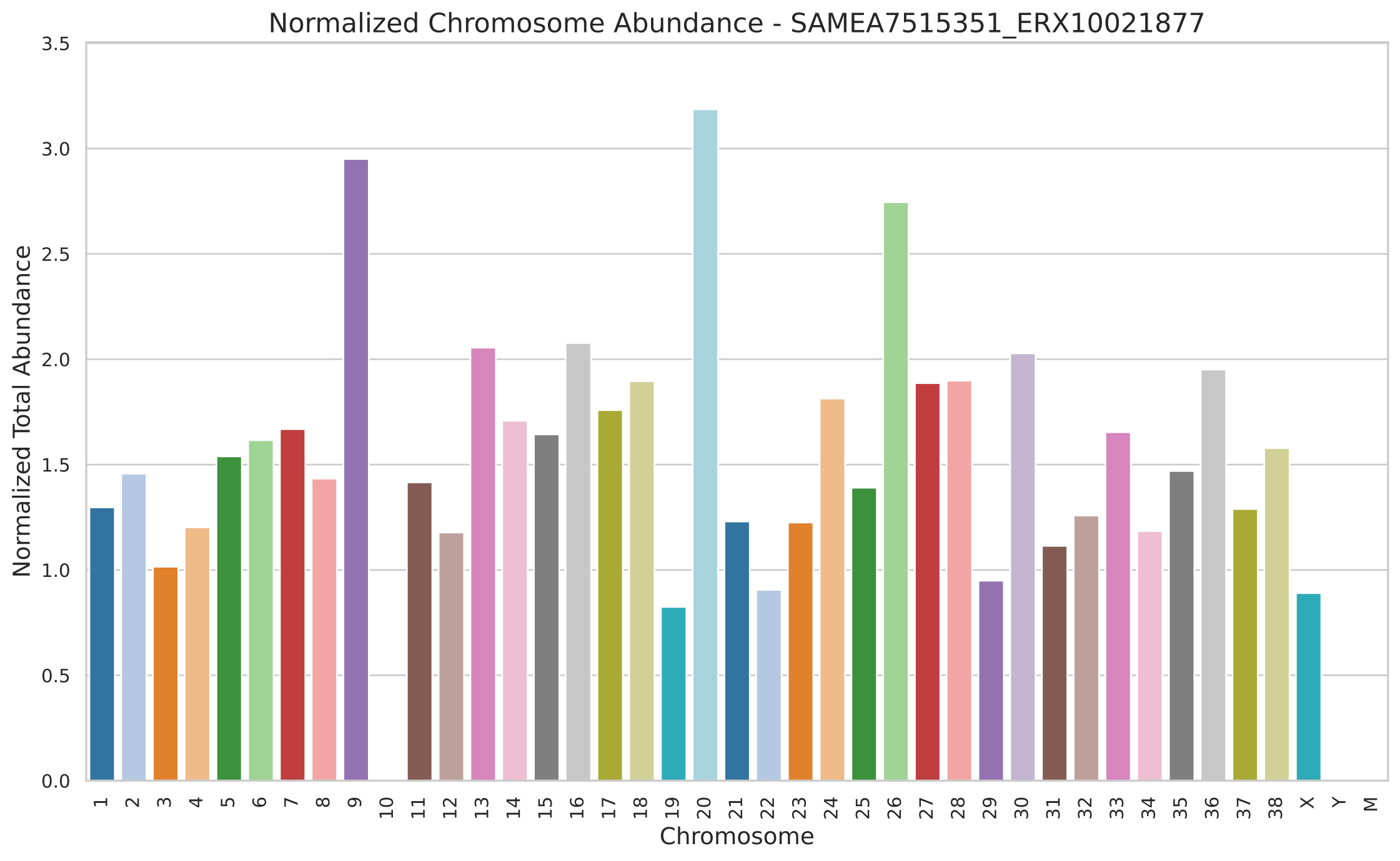

Normalized Chromosome Abundance - SAMEA7515358_ERX10021882
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

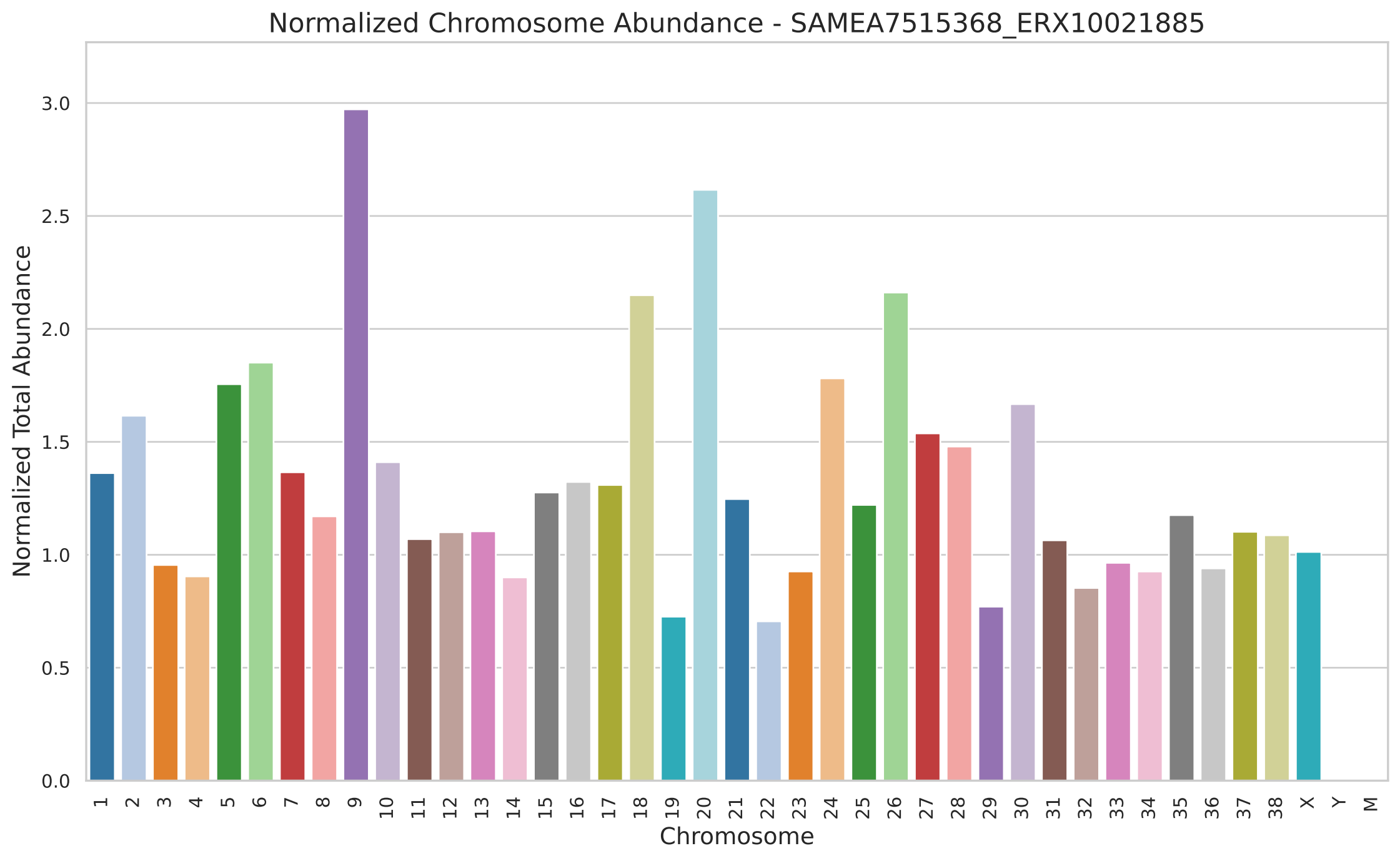

Normalized Chromosome Abundance - SAMEA7515232_ERX10021731
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

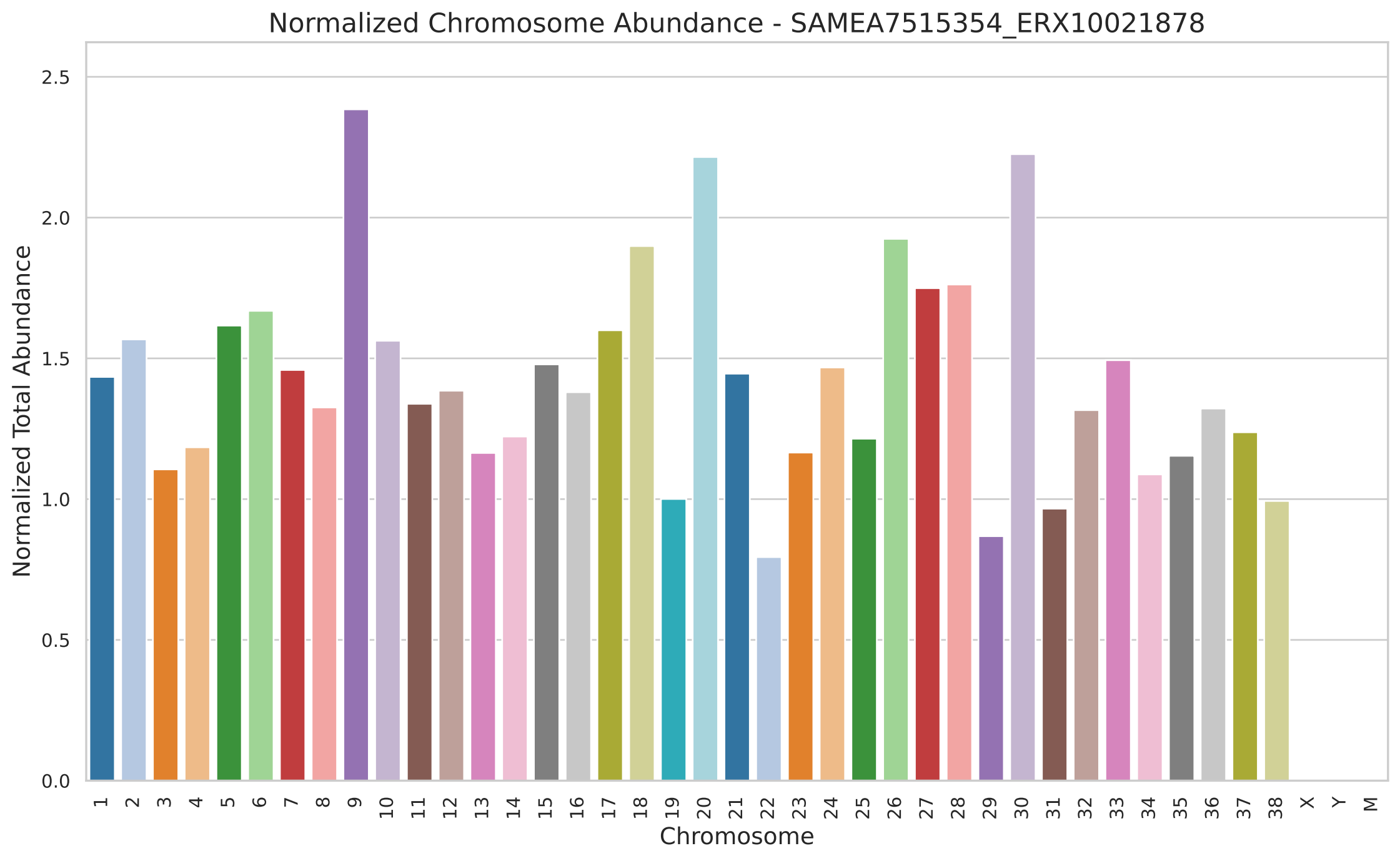

Normalized Chromosome Abundance - SAMEA3956051_ERX2455893
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

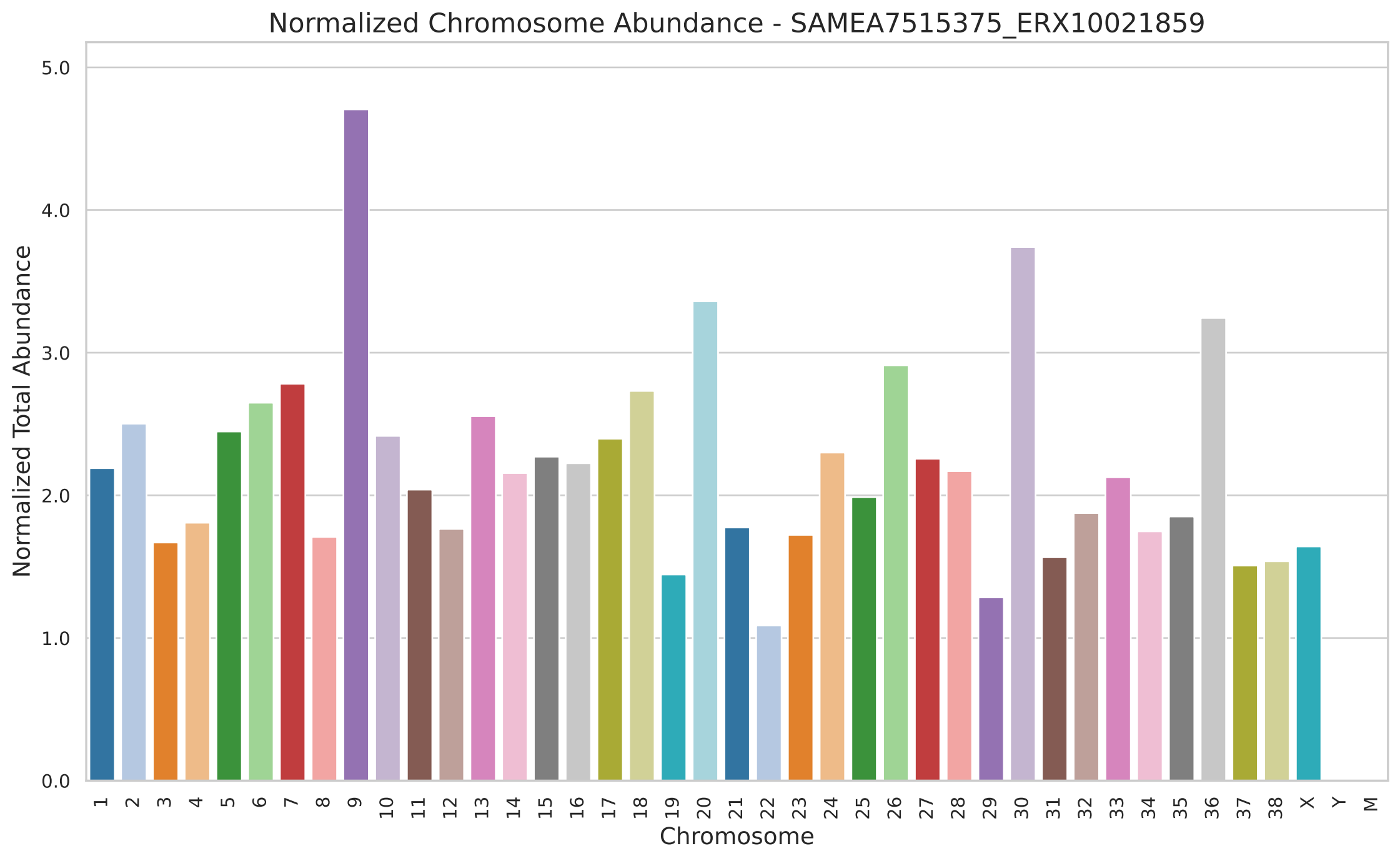

Normalized Chromosome Abundance - SAMEA7515382_ERX10021892
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

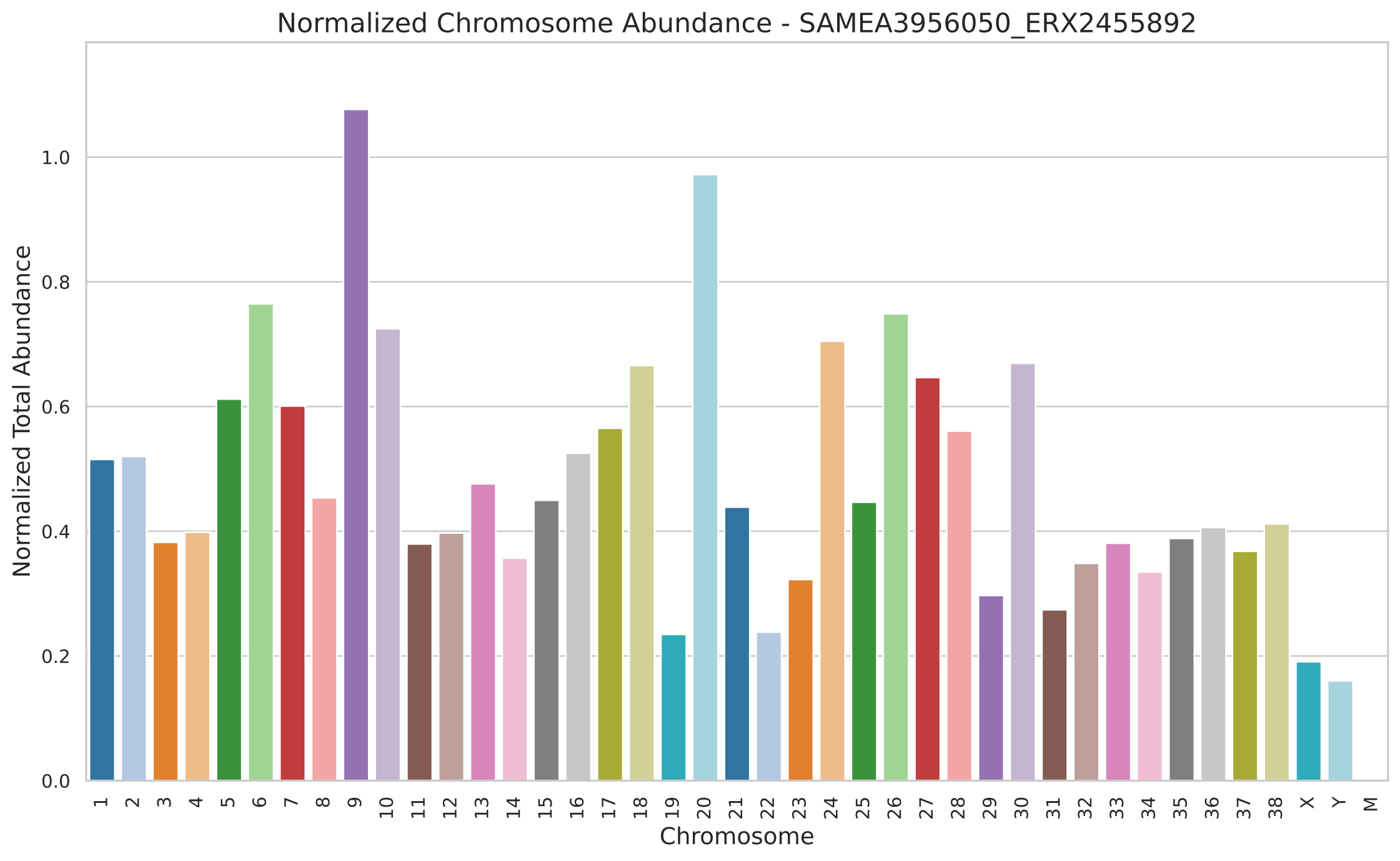

Normalized Chromosome Abundance - SAMN09531822_SRX4329693
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

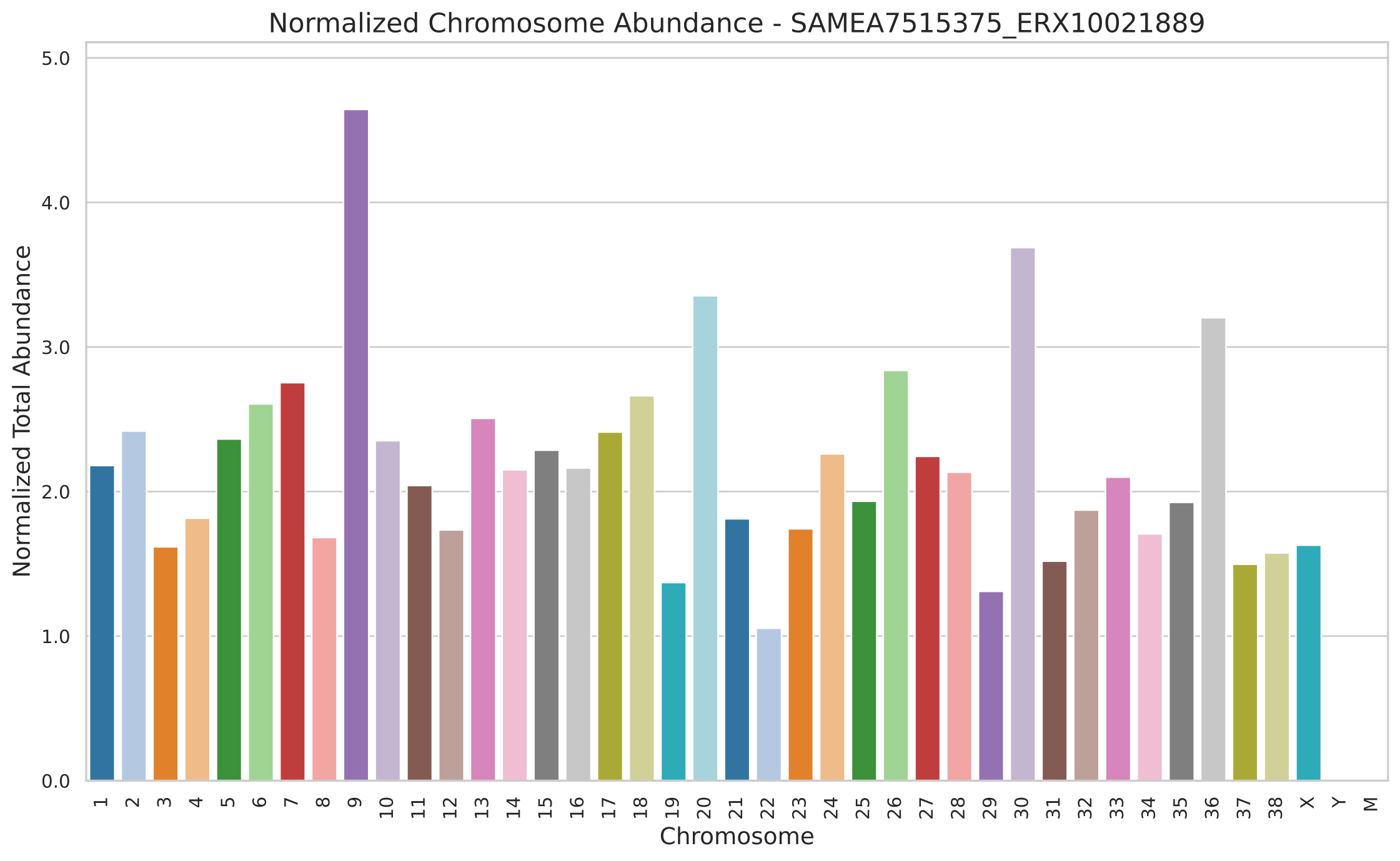

Normalized Chromosome Abundance - SAMEA7515351_ERX10021877
Normalized Total Abundance
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

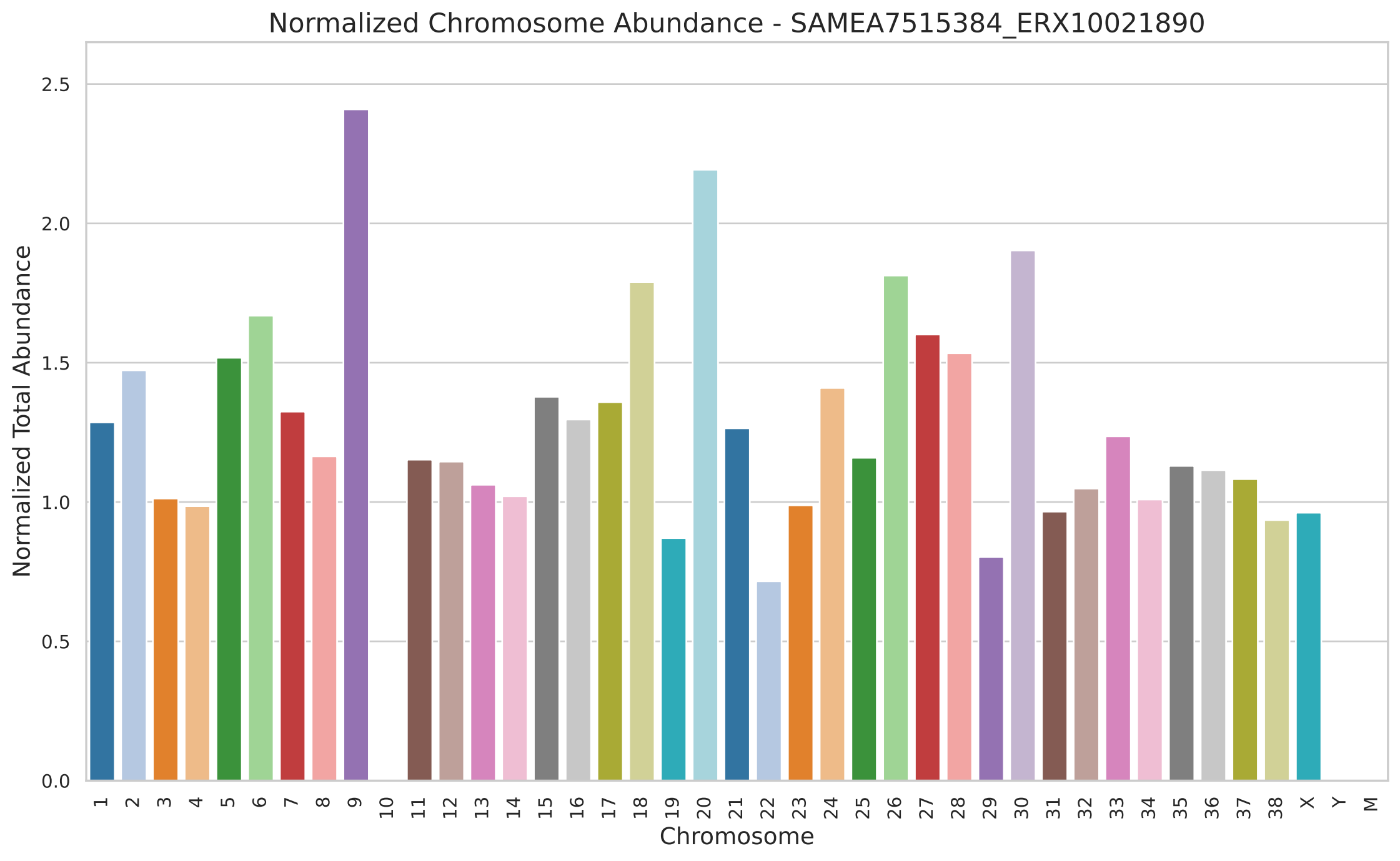

Normalized Chromosome Abundance - SAMEA7515368_ERX10021885
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

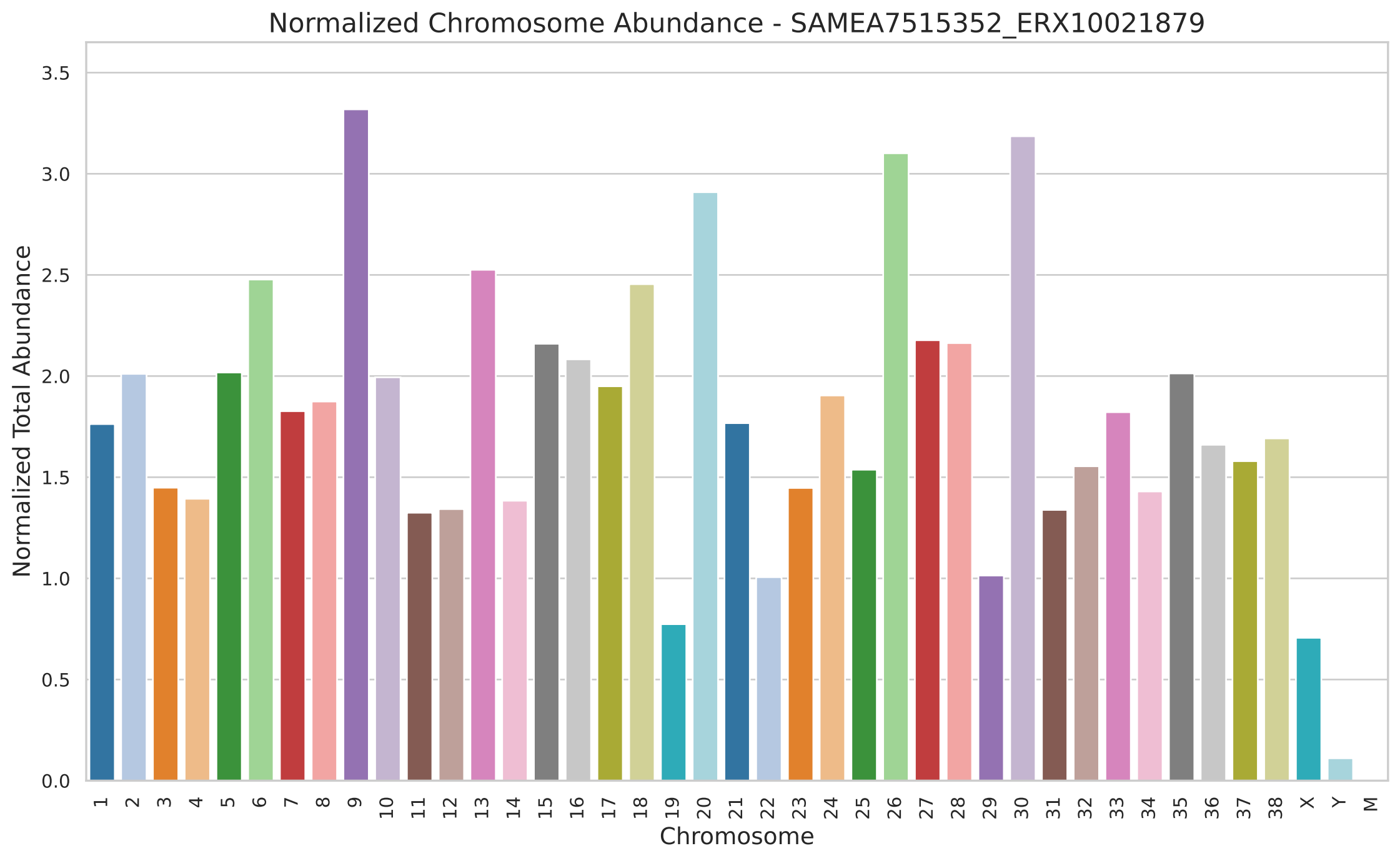

Normalized Chromosome Abundance - SAMEA7515354_ERX10021878
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

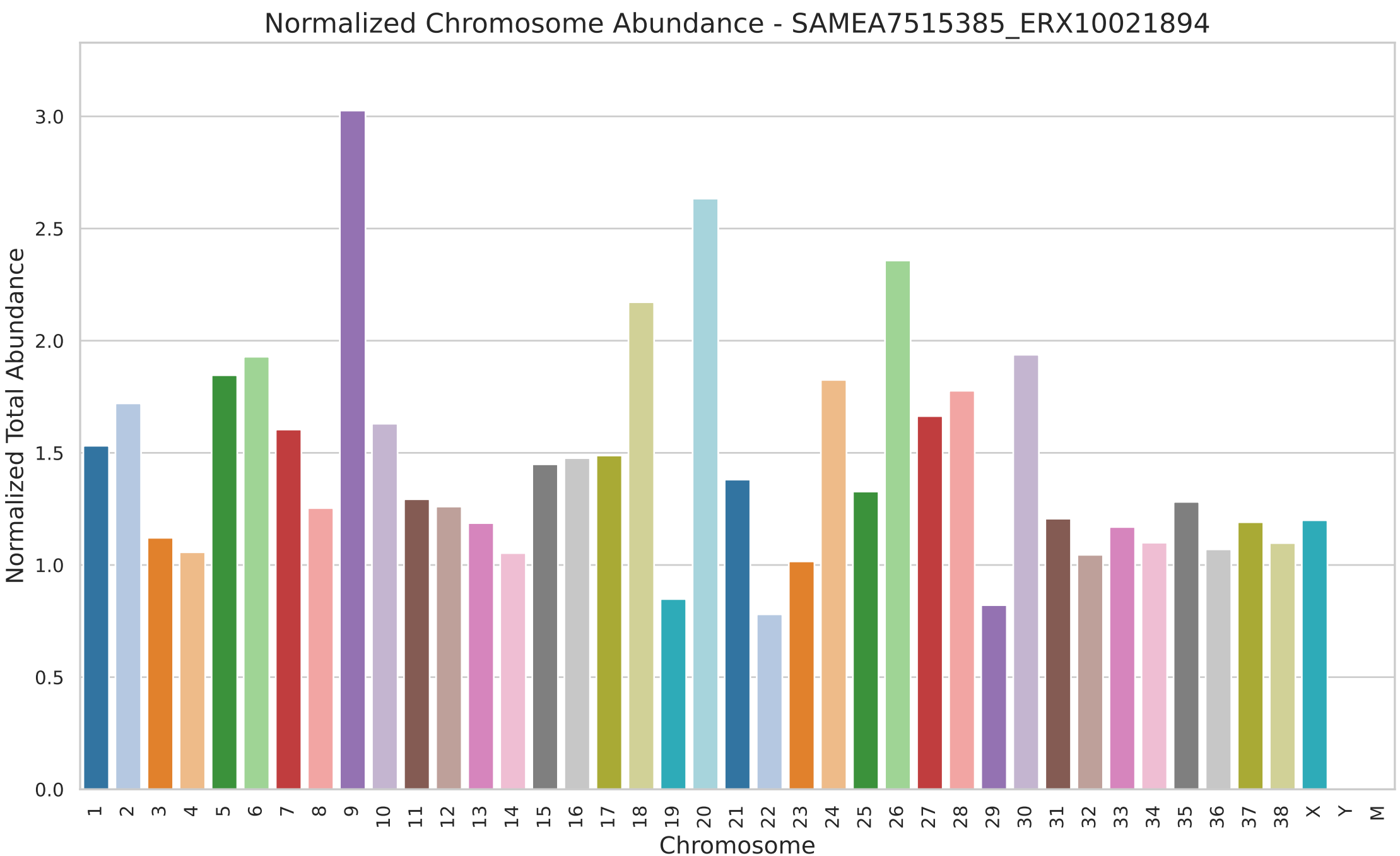

Normalized Chromosome Abundance - SAMEA7515375_ERX10021859
Normalized Total Abundance
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

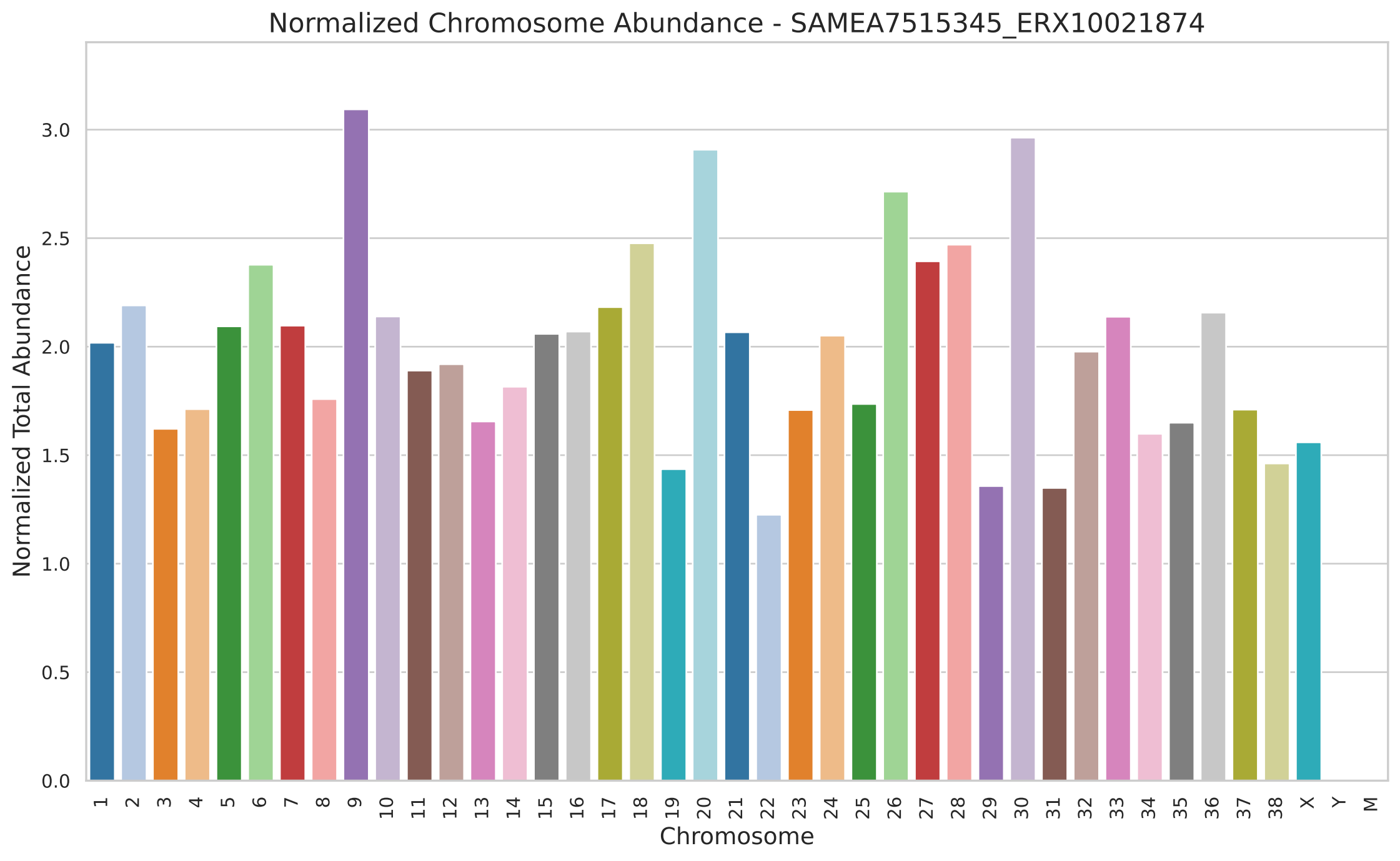

Normalized Chromosome Abundance - SAMEA3956050_ERX2455892
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

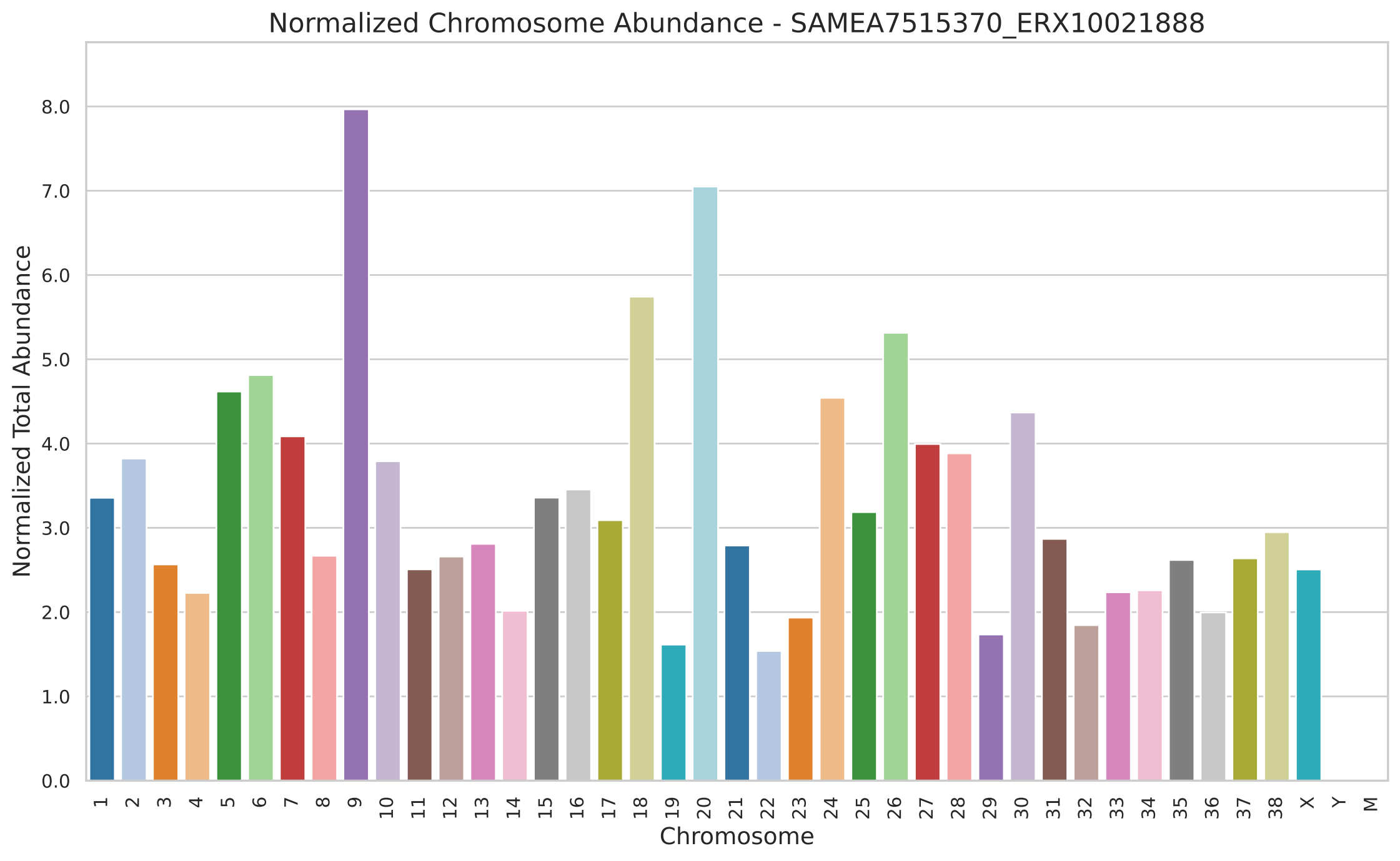

Normalized Chromosome Abundance - SAMEA7515375_ERX10021889
Normalized Total Abundance
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

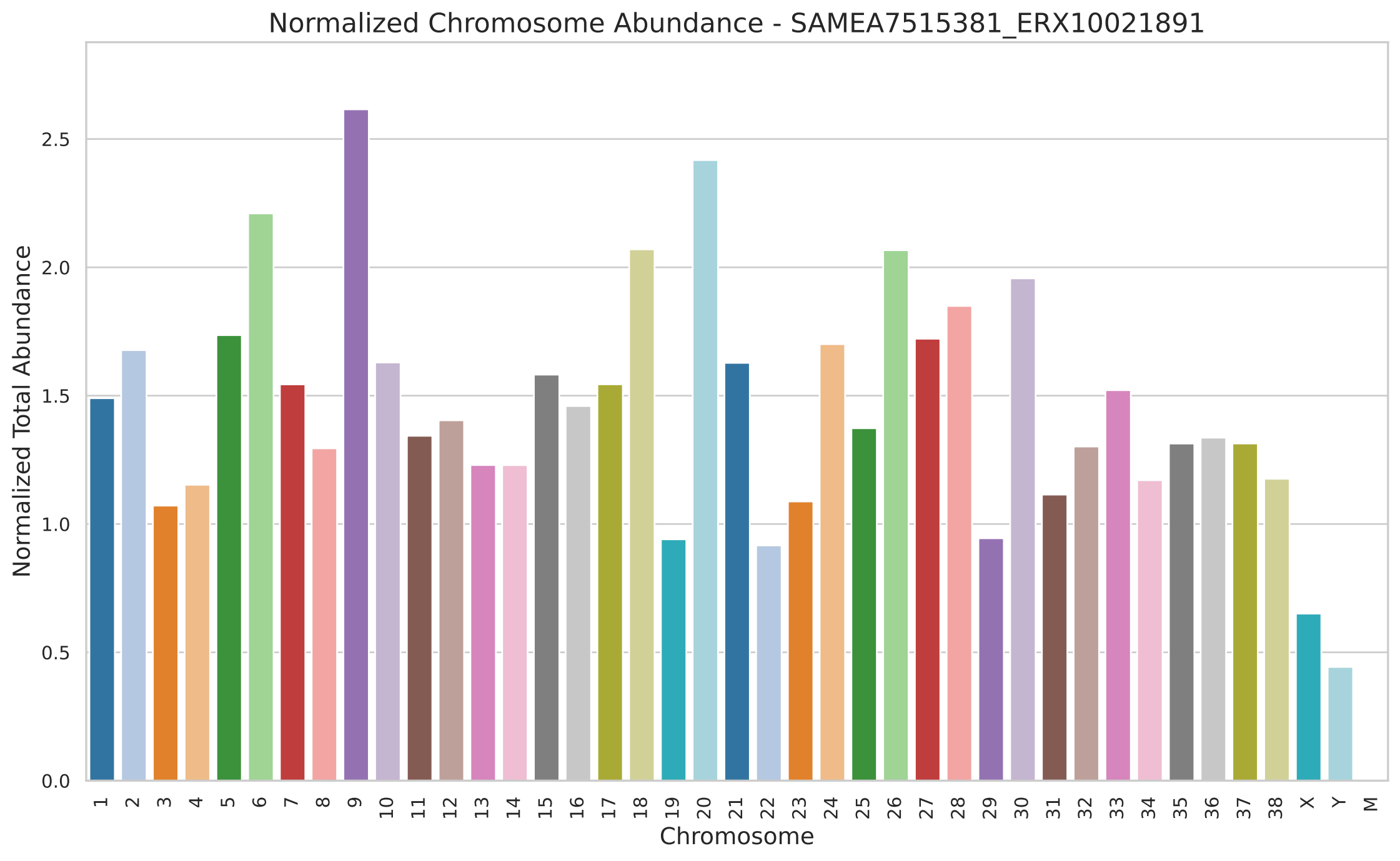

Normalized Chromosome Abundance - SAMEA7515384_ERX10021890
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

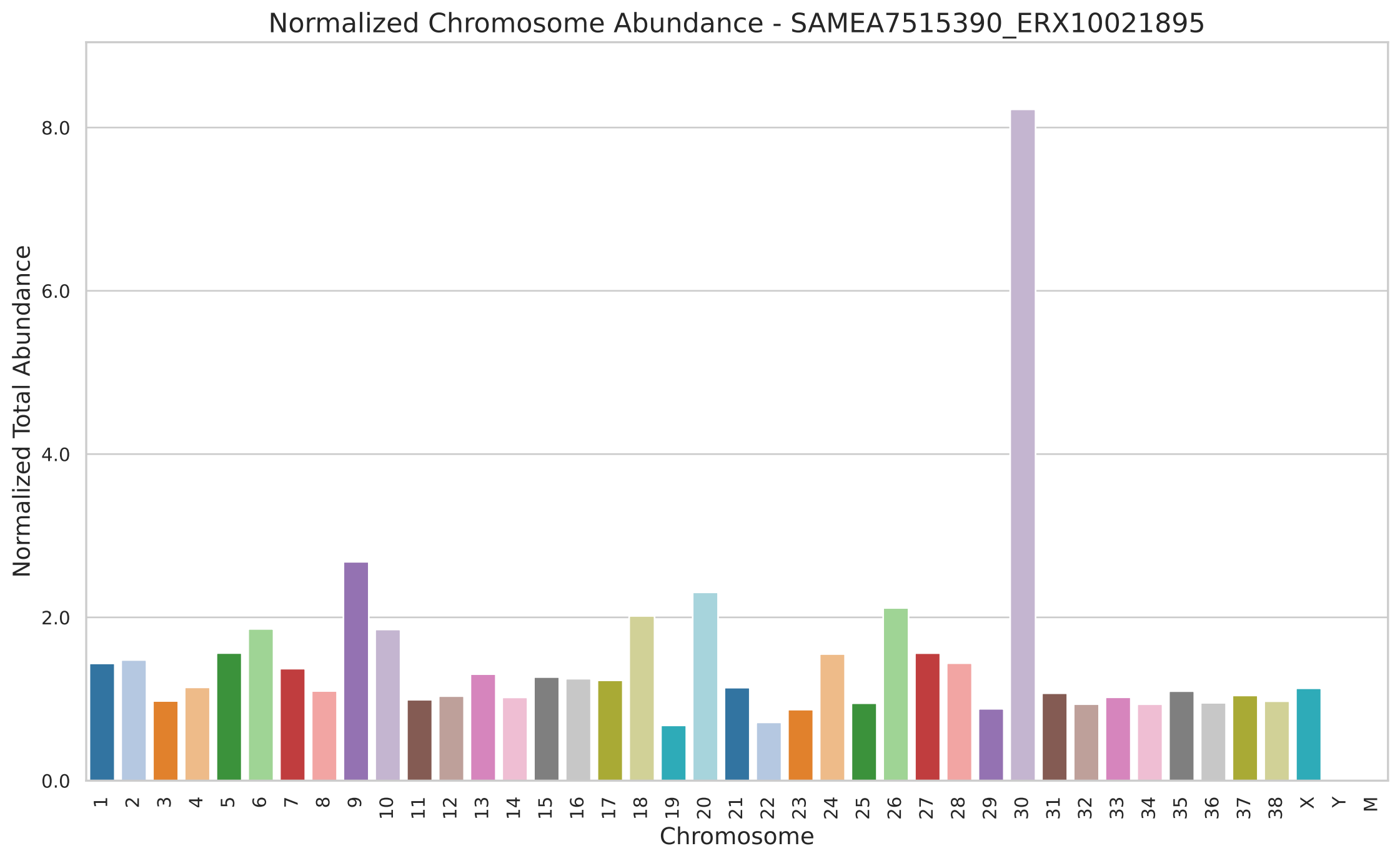

Normalized Chromosome Abundance - SAMEA7515352_ERX10021879
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

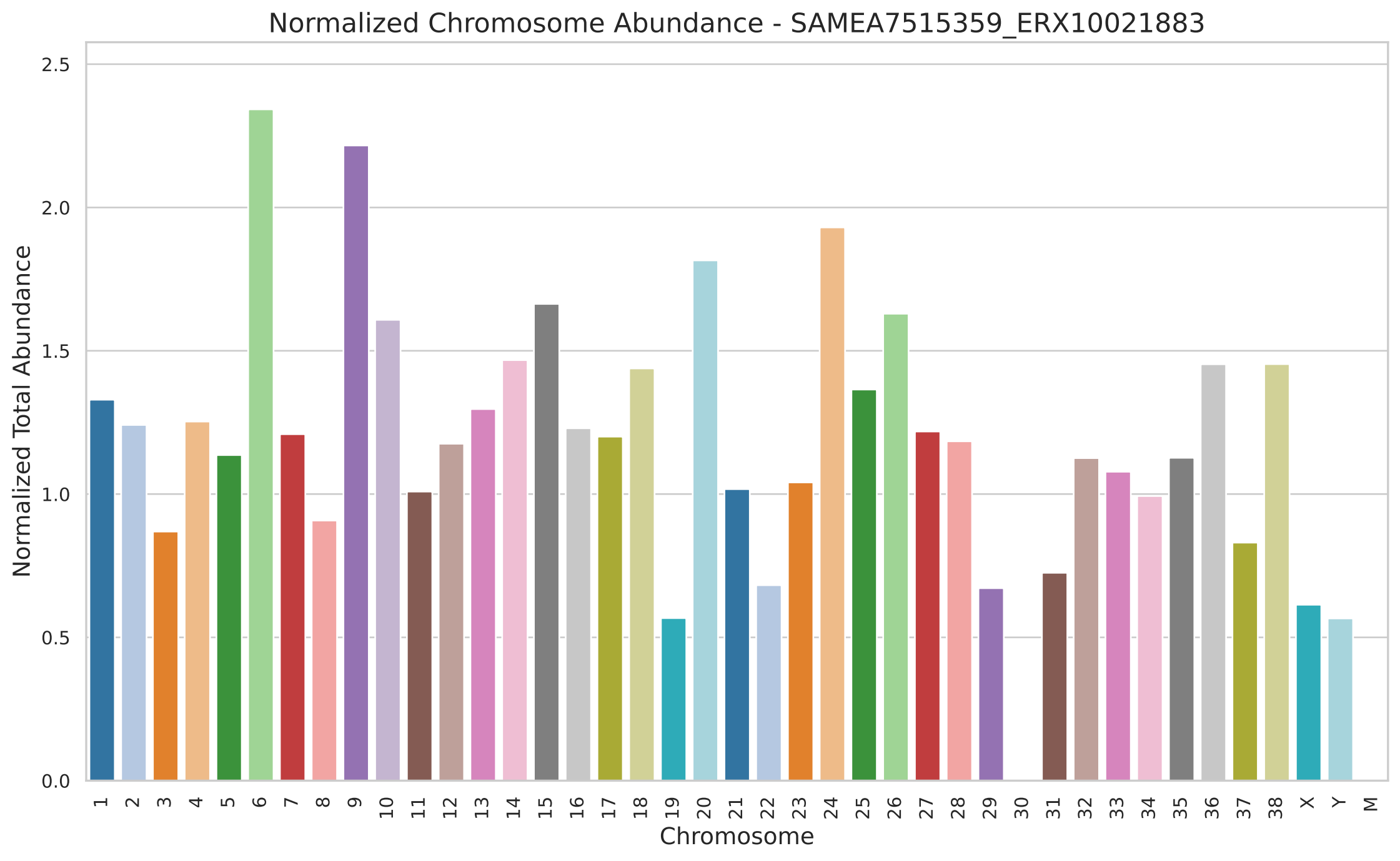

Normalized Chromosome Abundance - SAMEA7515385_ERX10021894
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

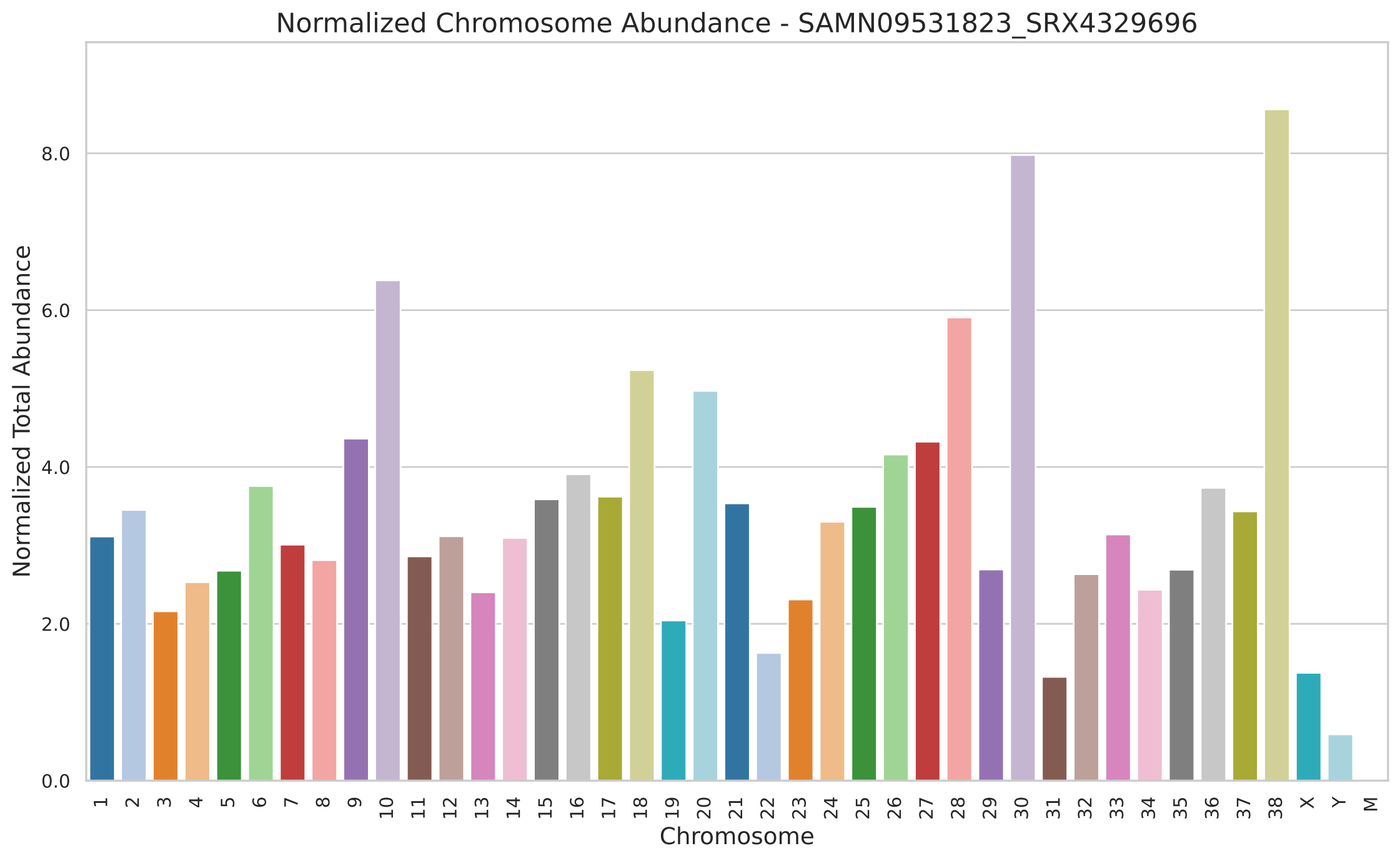

Normalized Chromosome Abundance - SAMEA7515345_ERX10021874
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

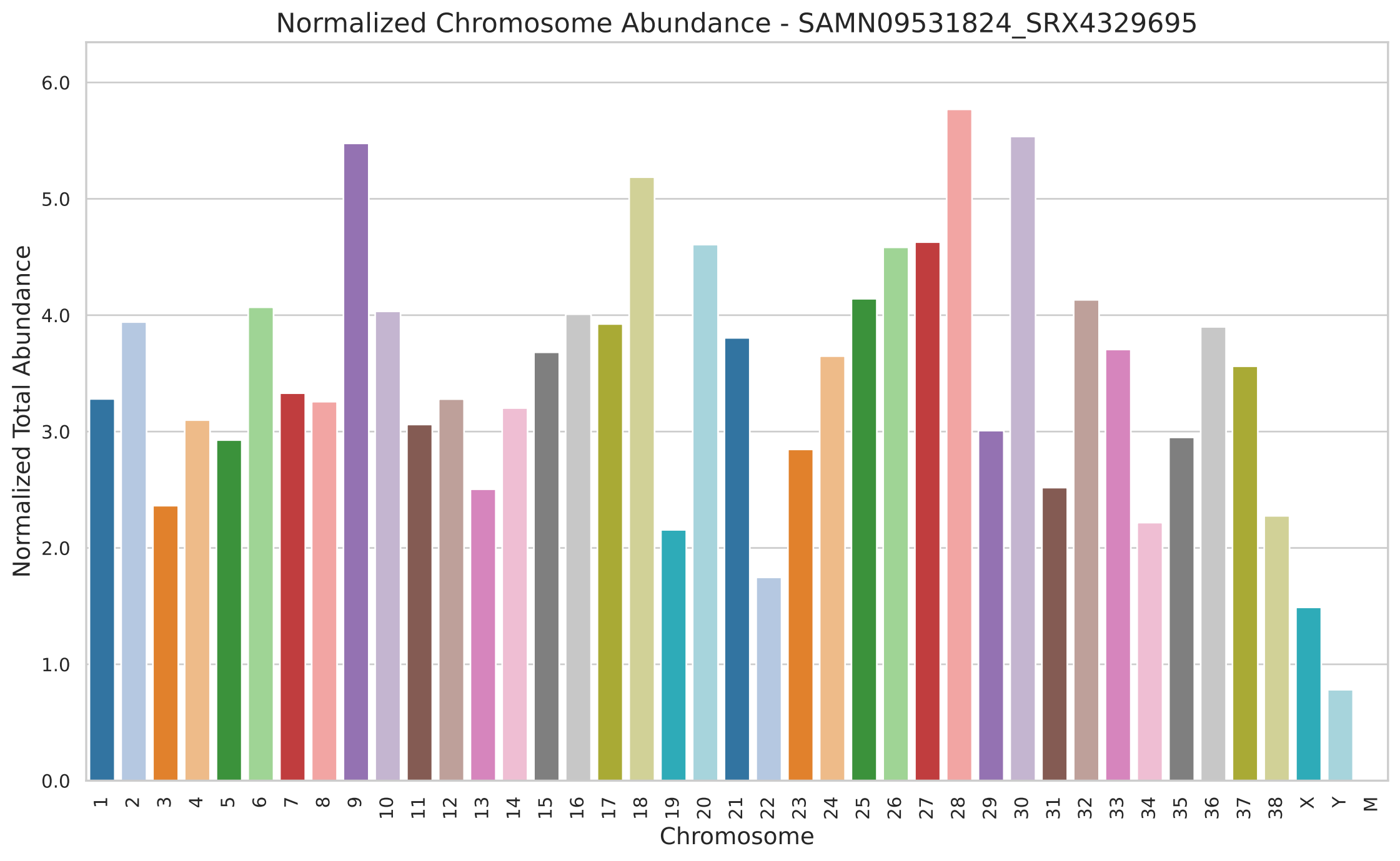

Normalized Chromosome Abundance - SAMEA7515370_ERX10021888
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

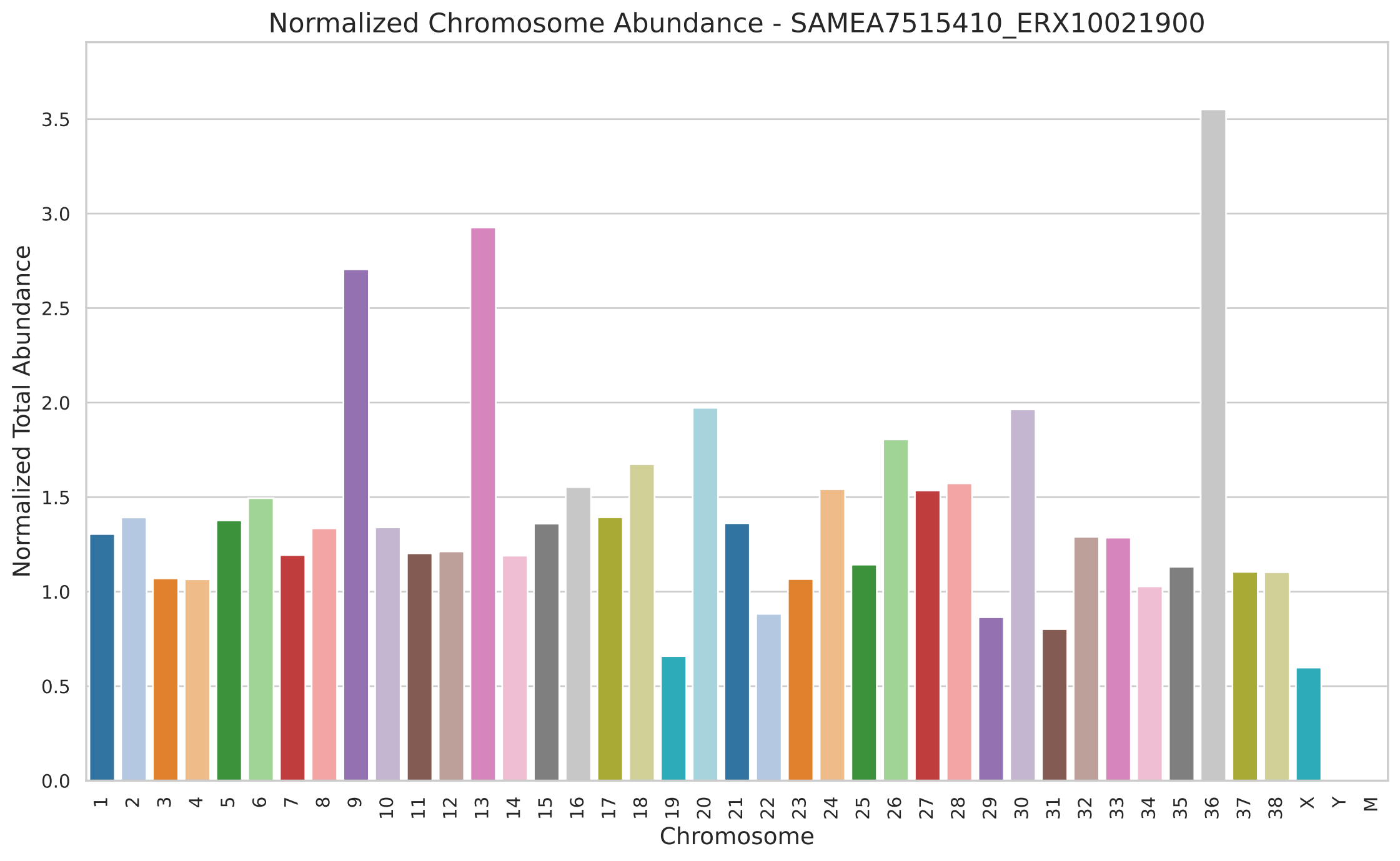

Normalized Chromosome Abundance - SAMEA7515381_ERX10021891
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

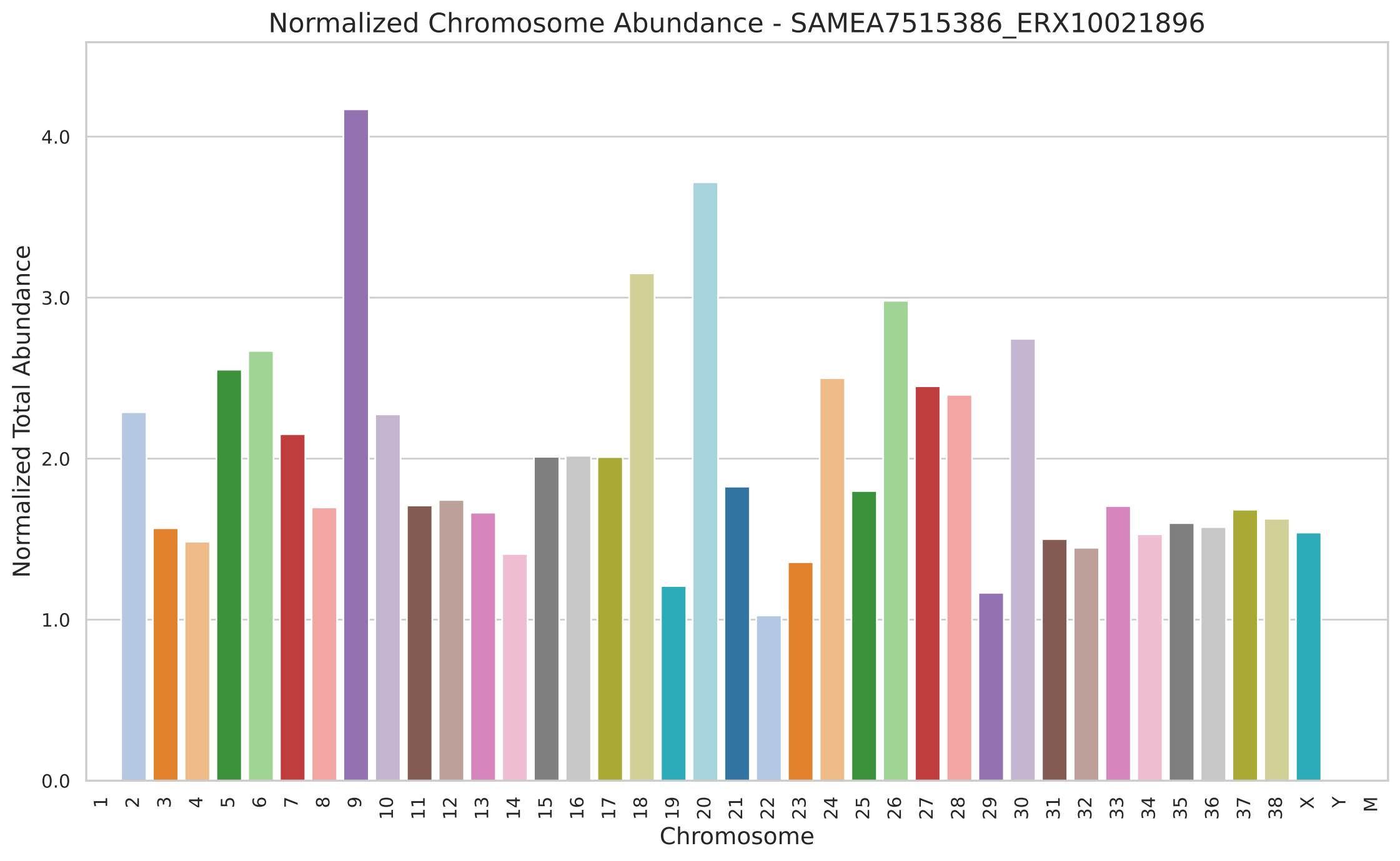

Normalized Chromosome Abundance - SAMEA7515390_ERX10021895
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

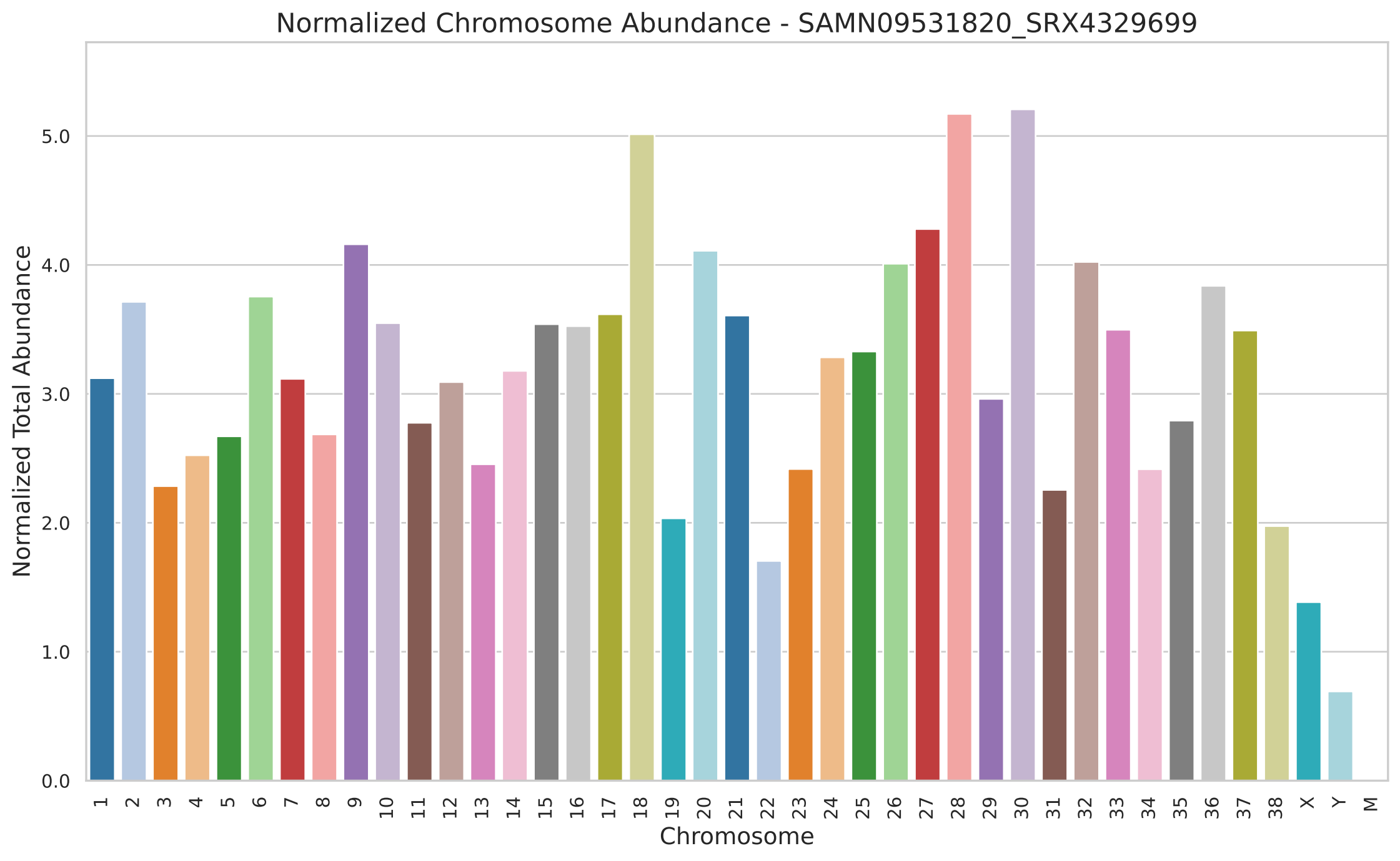

Normalized Chromosome Abundance - SAMEA7515359_ERX10021883
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

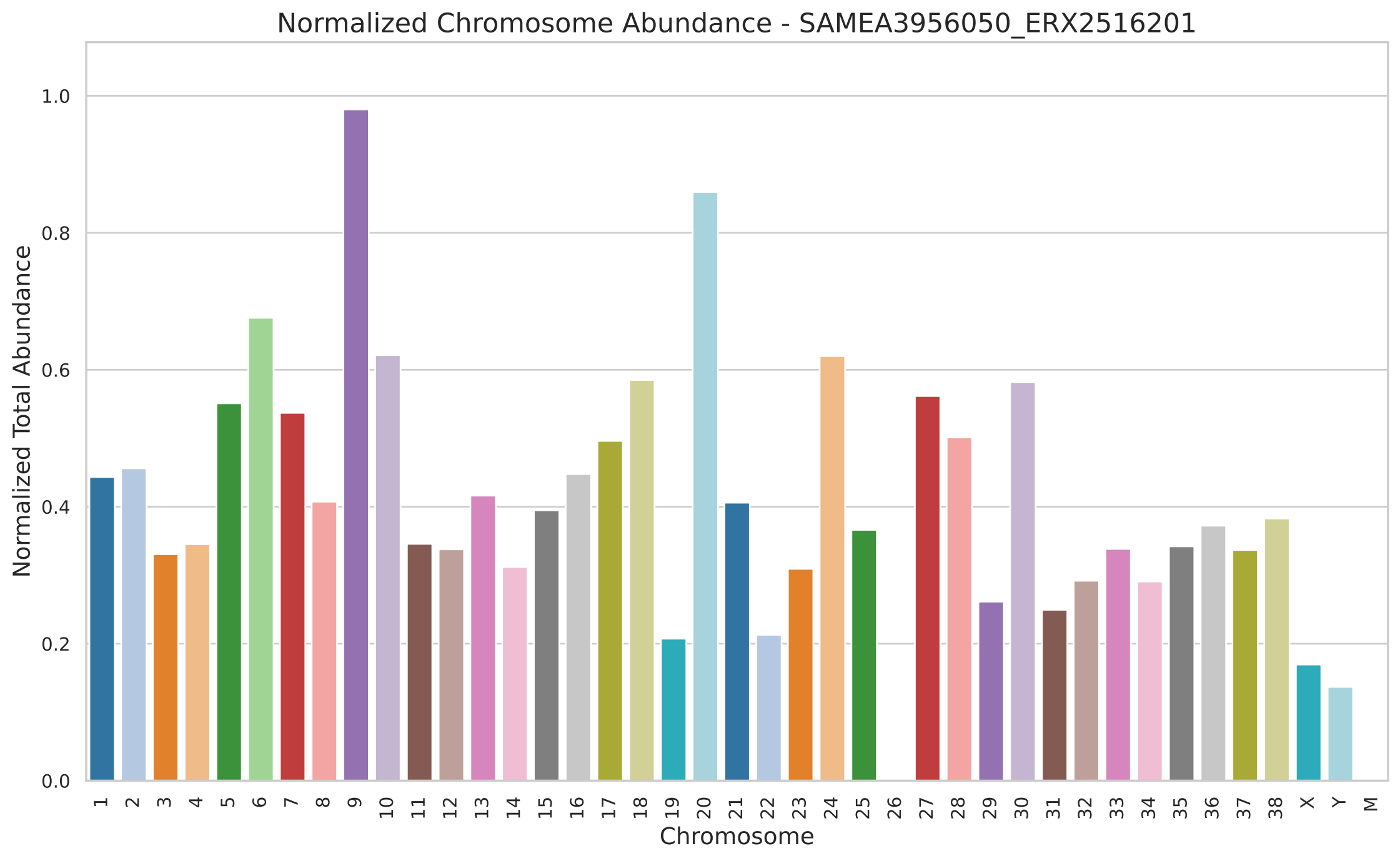

Normalized Chromosome Abundance - SAMN09531823_SRX4329696
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

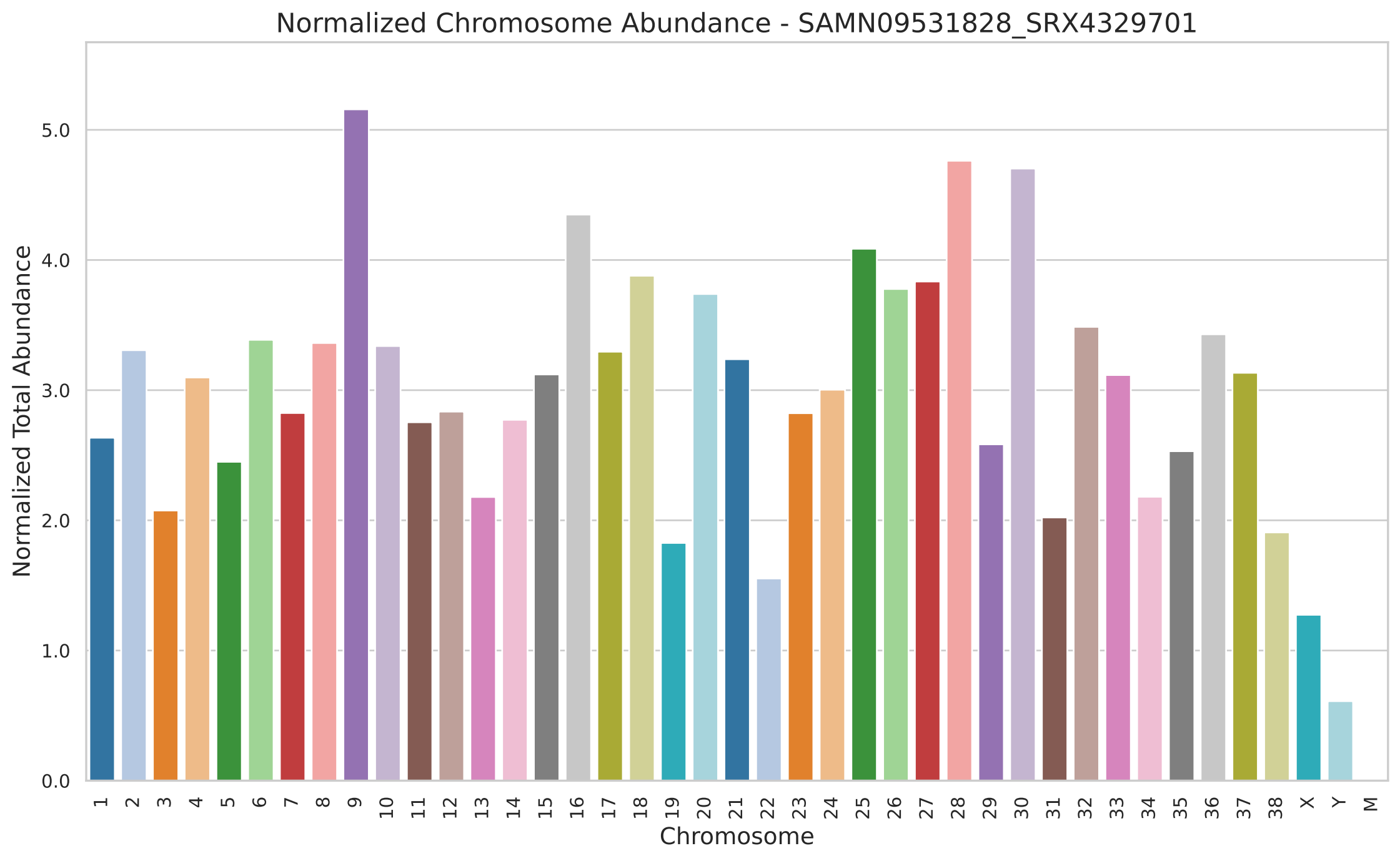

Normalized Chromosome Abundance - SAMN09531824_SRX4329695
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

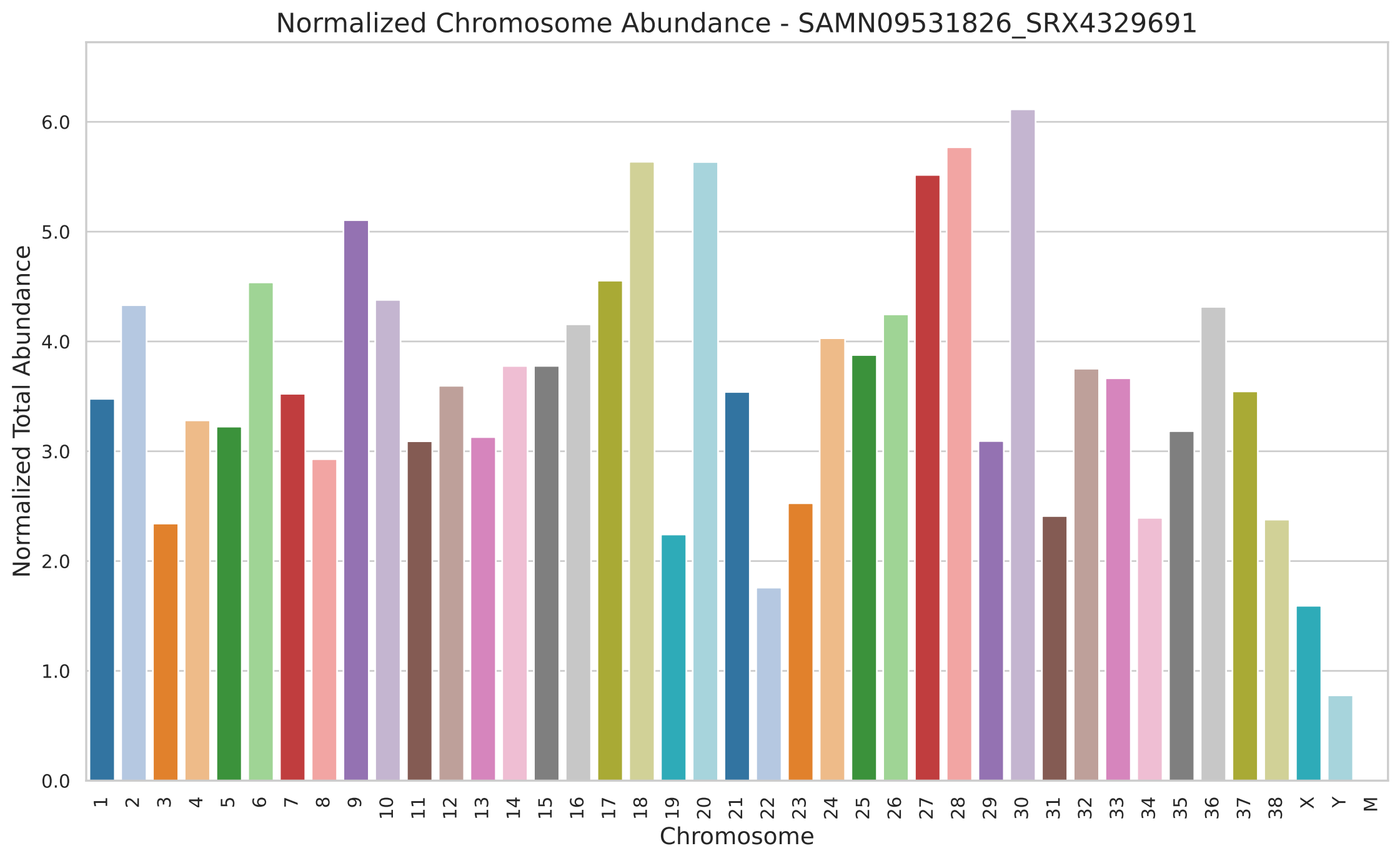

Normalized Chromosome Abundance - SAMEA7515410_ERX10021900
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

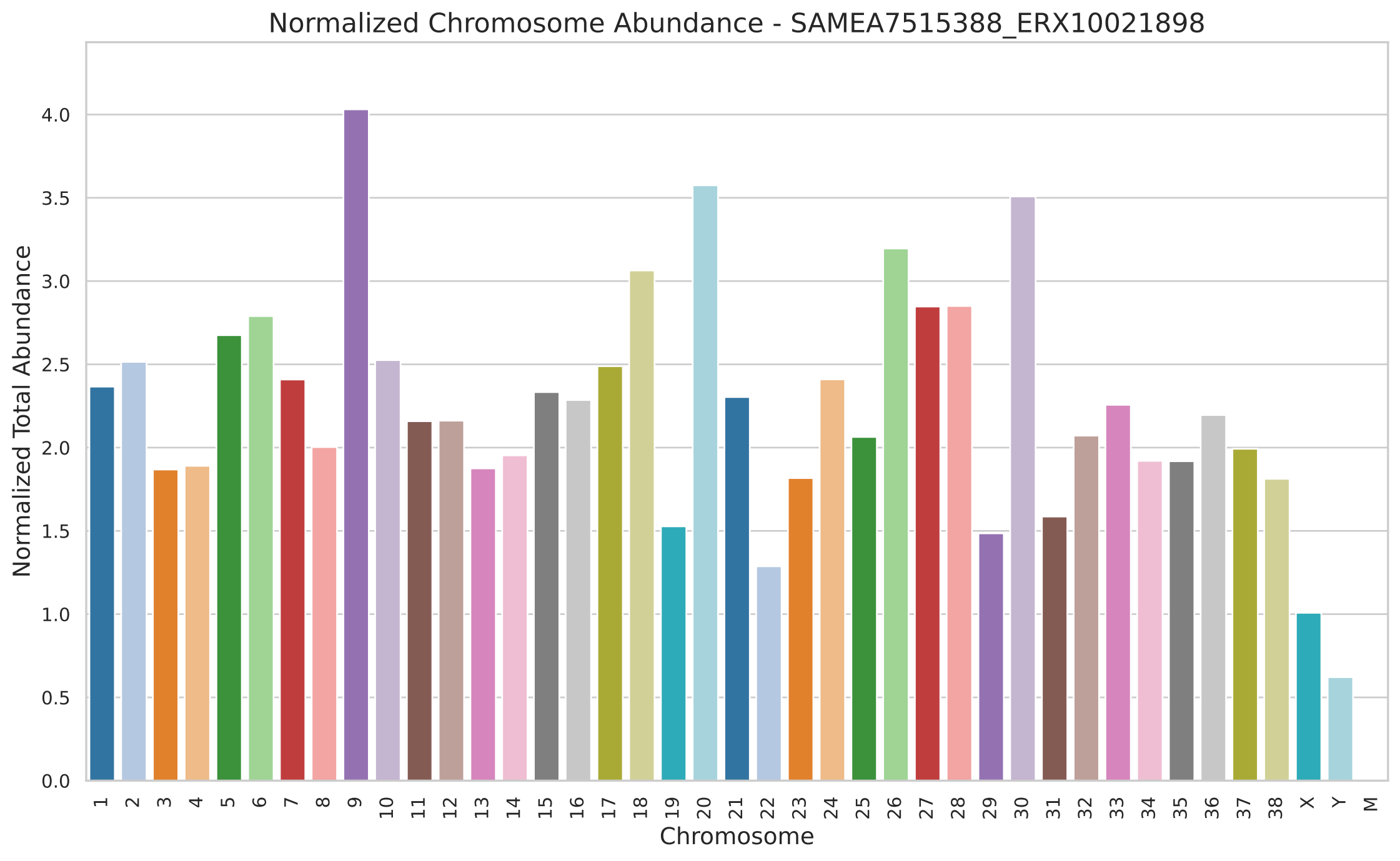

Normalized Chromosome Abundance - SAMEA7515386_ERX10021896
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

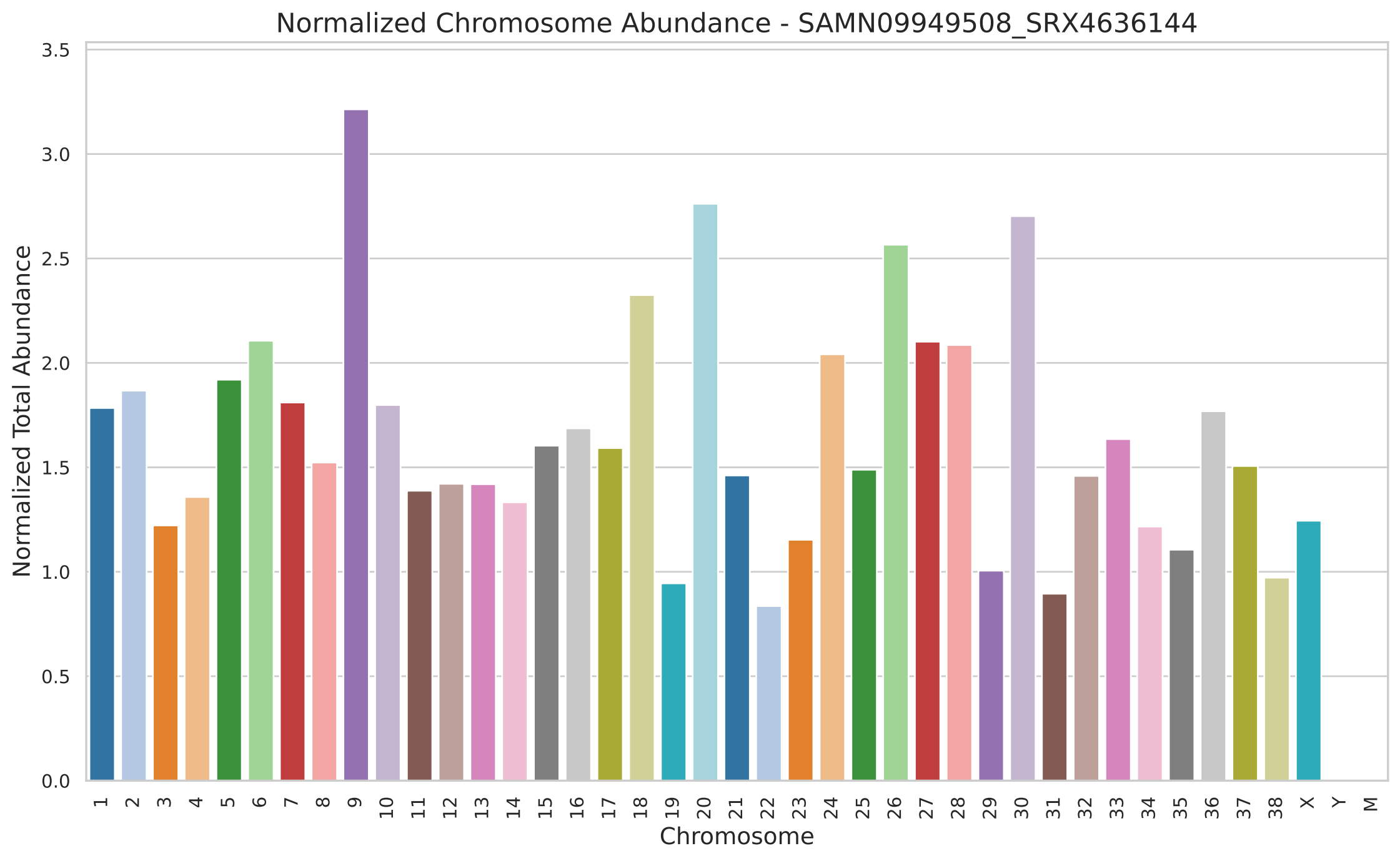

Normalized Chromosome Abundance - SAMN09531820_SRX4329699
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

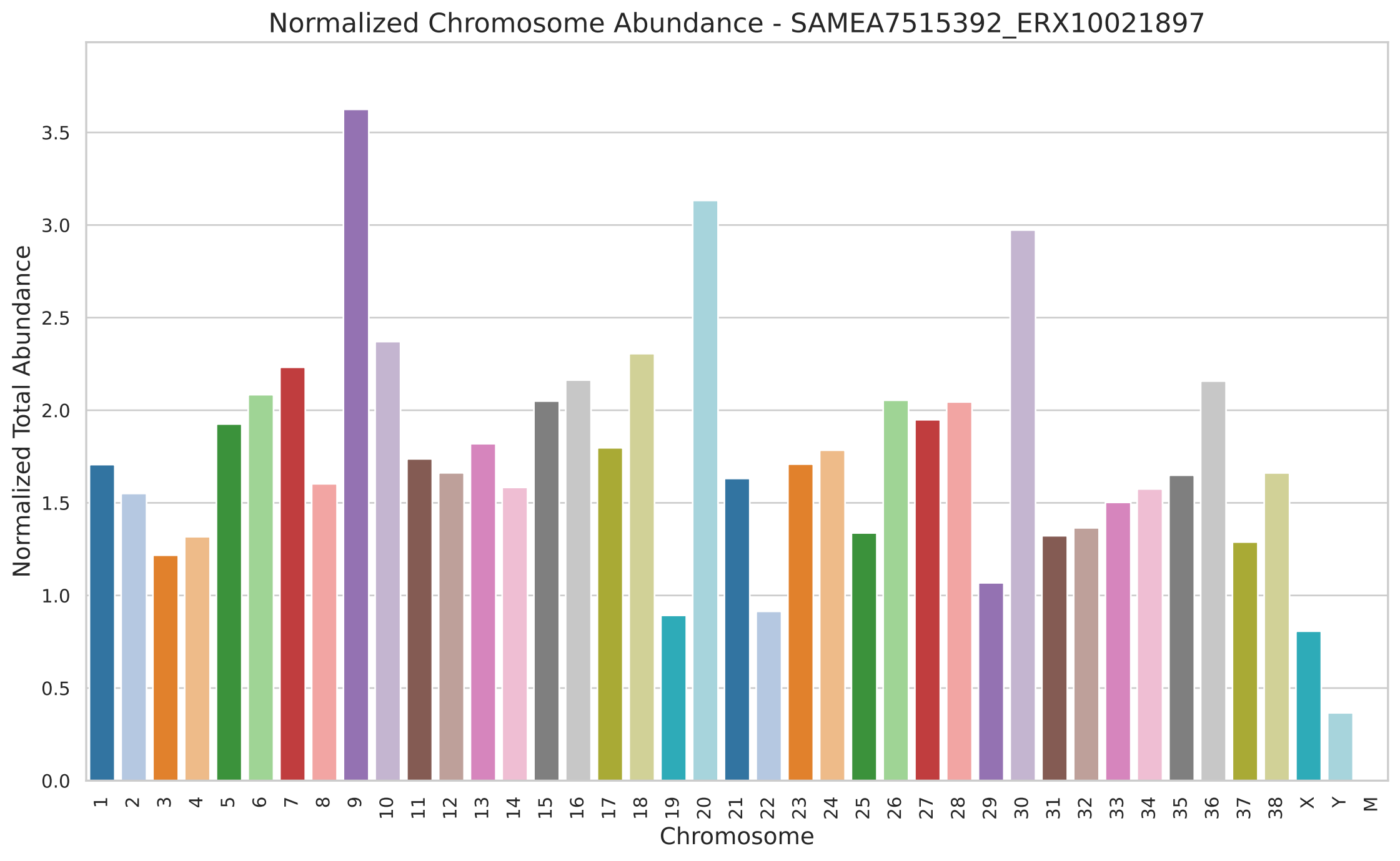

Normalized Chromosome Abundance - SAMEA3956050_ERX2516201
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

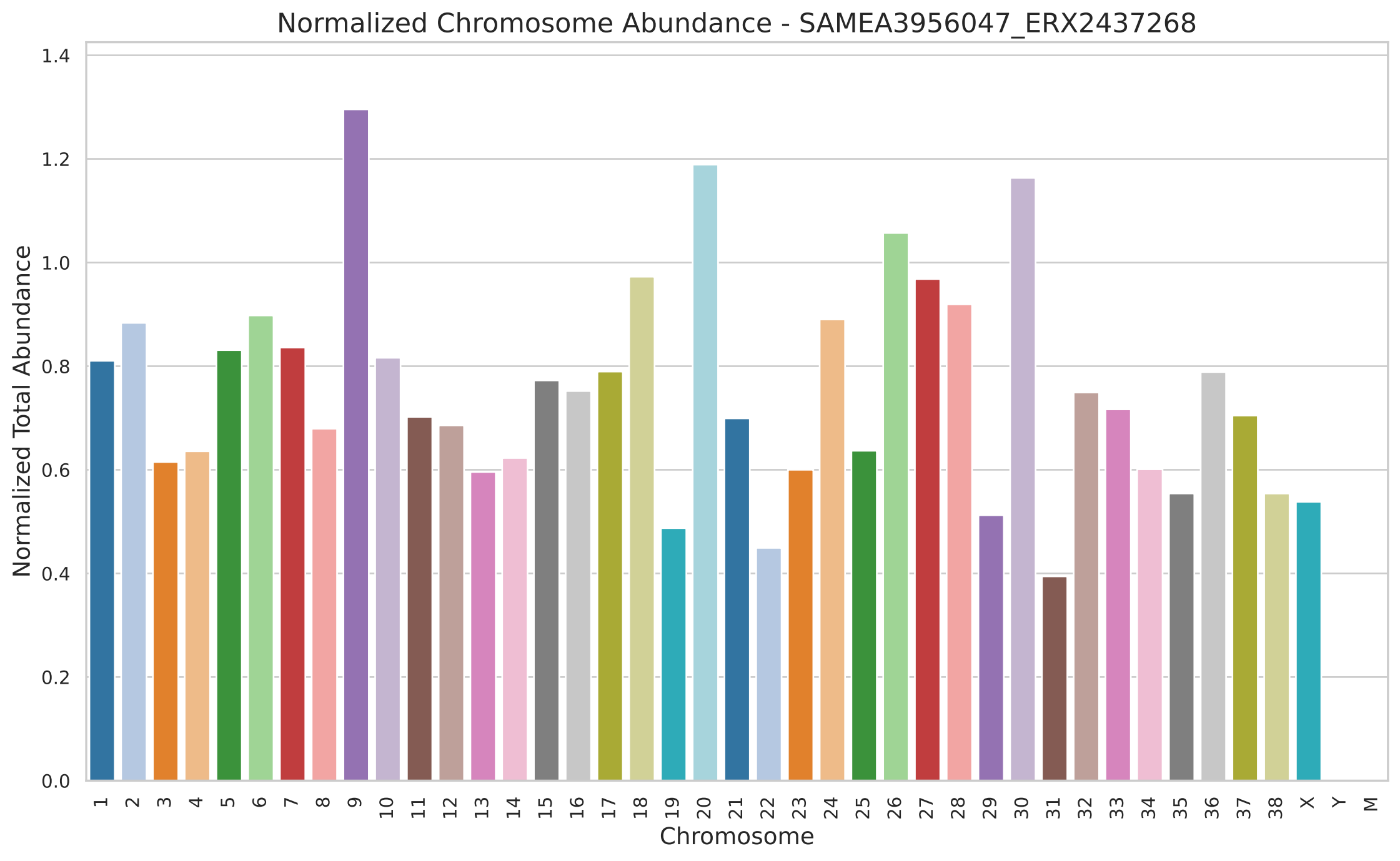

Normalized Chromosome Abundance - SAMN09531828_SRX4329701
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

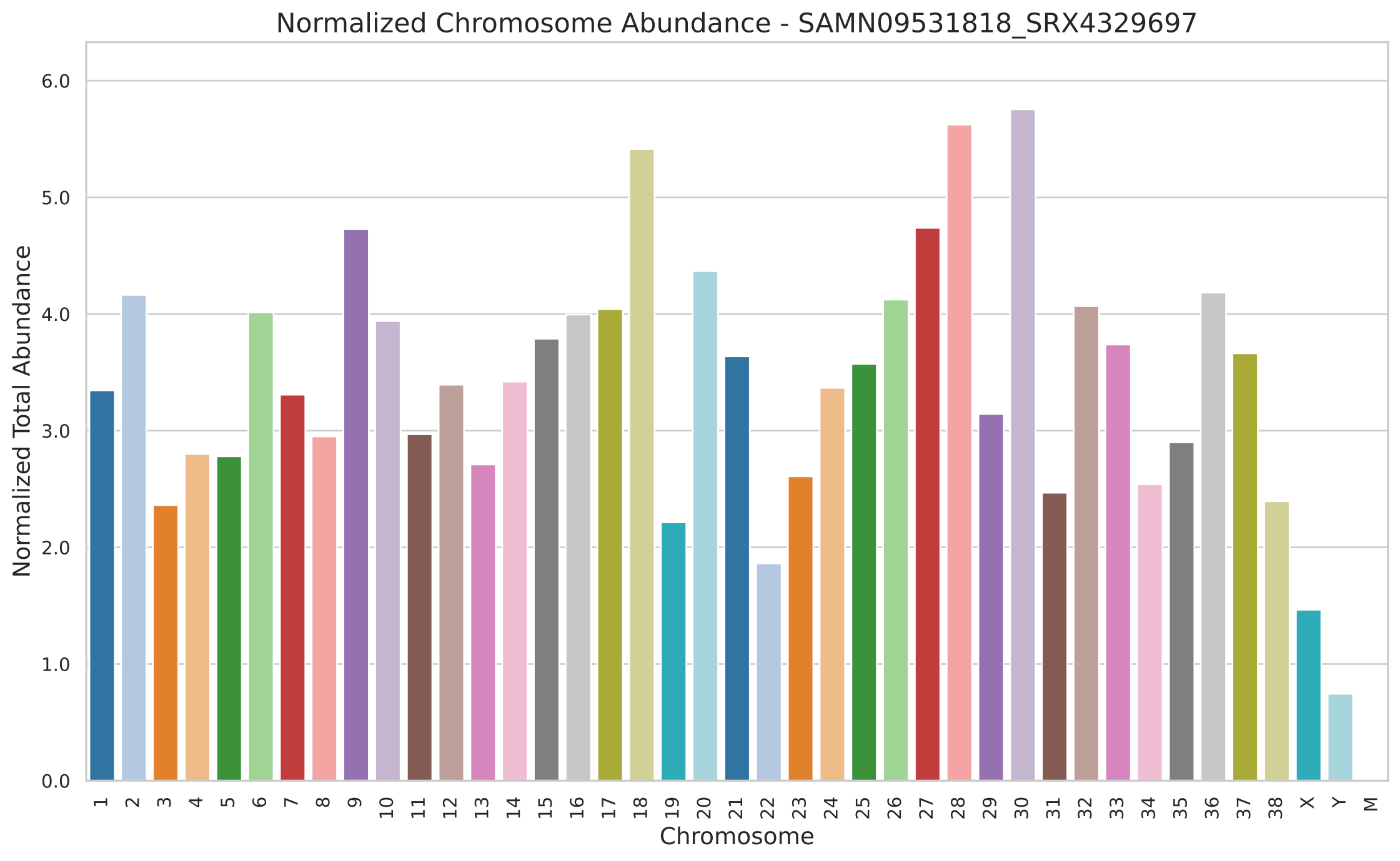

Normalized Chromosome Abundance - SAMN09531826_SRX4329691
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

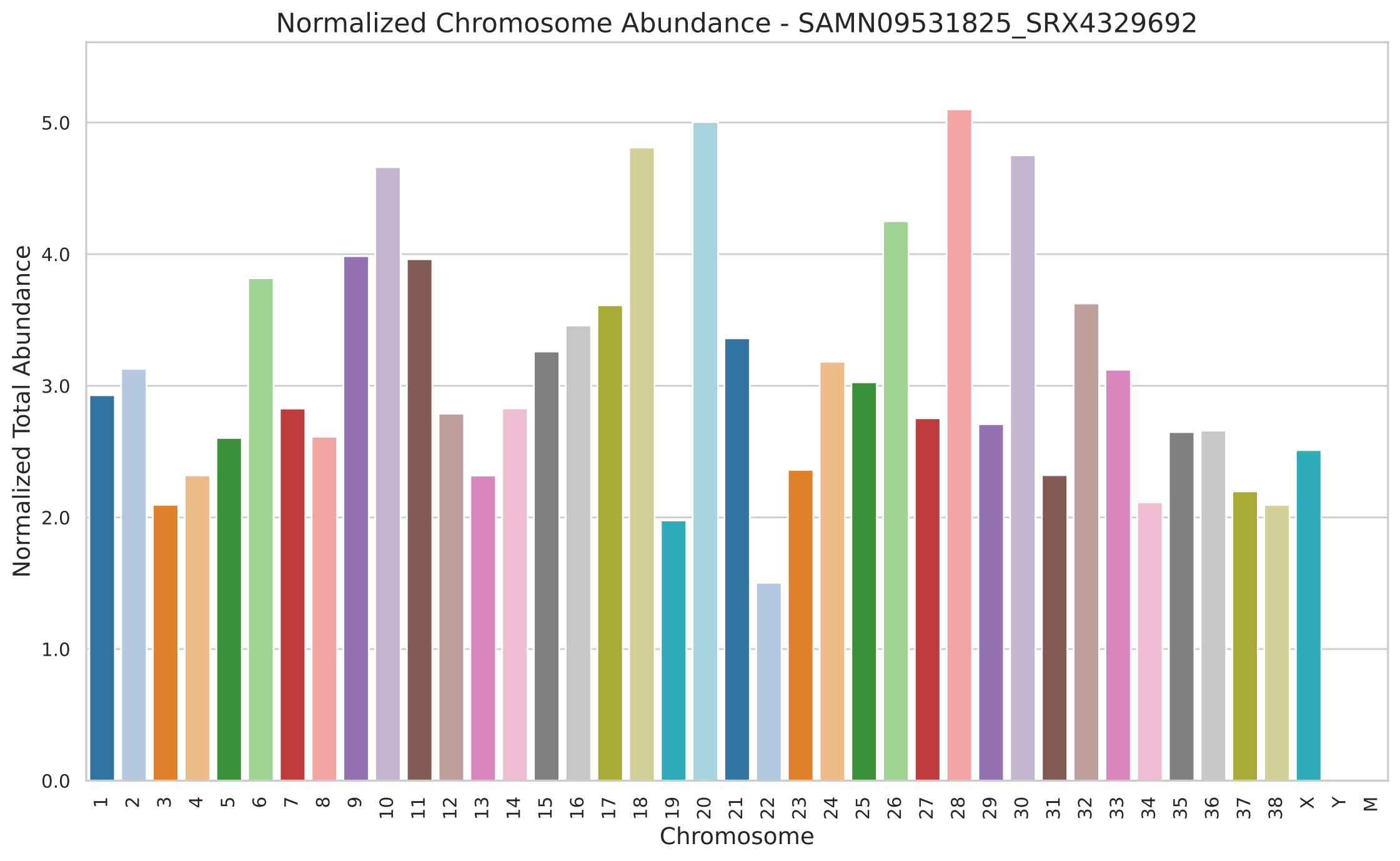

Normalized Chromosome Abundance - SAMEA7515388_ERX10021898
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

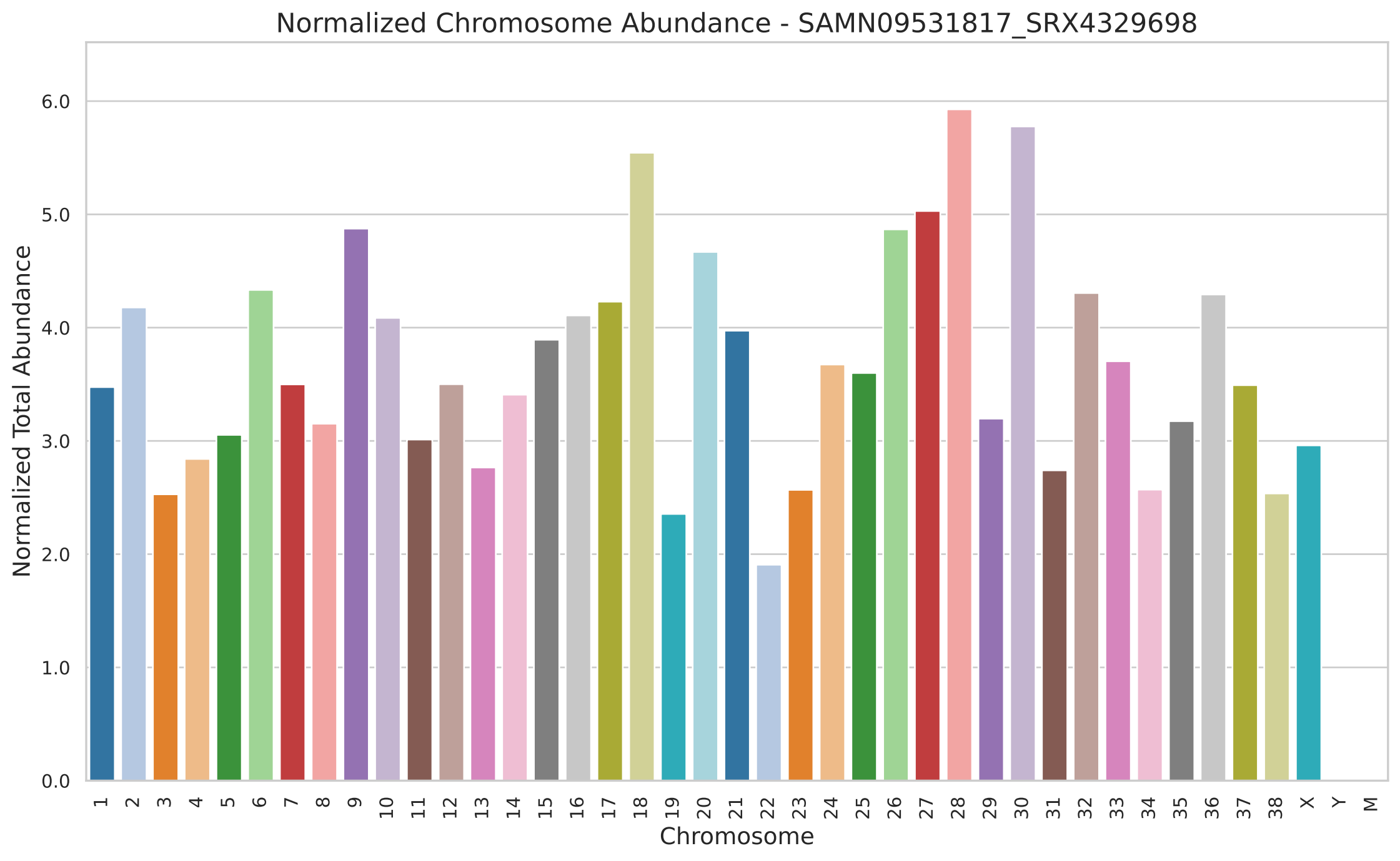

Normalized Chromosome Abundance - SAMN09949508_SRX4636144
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

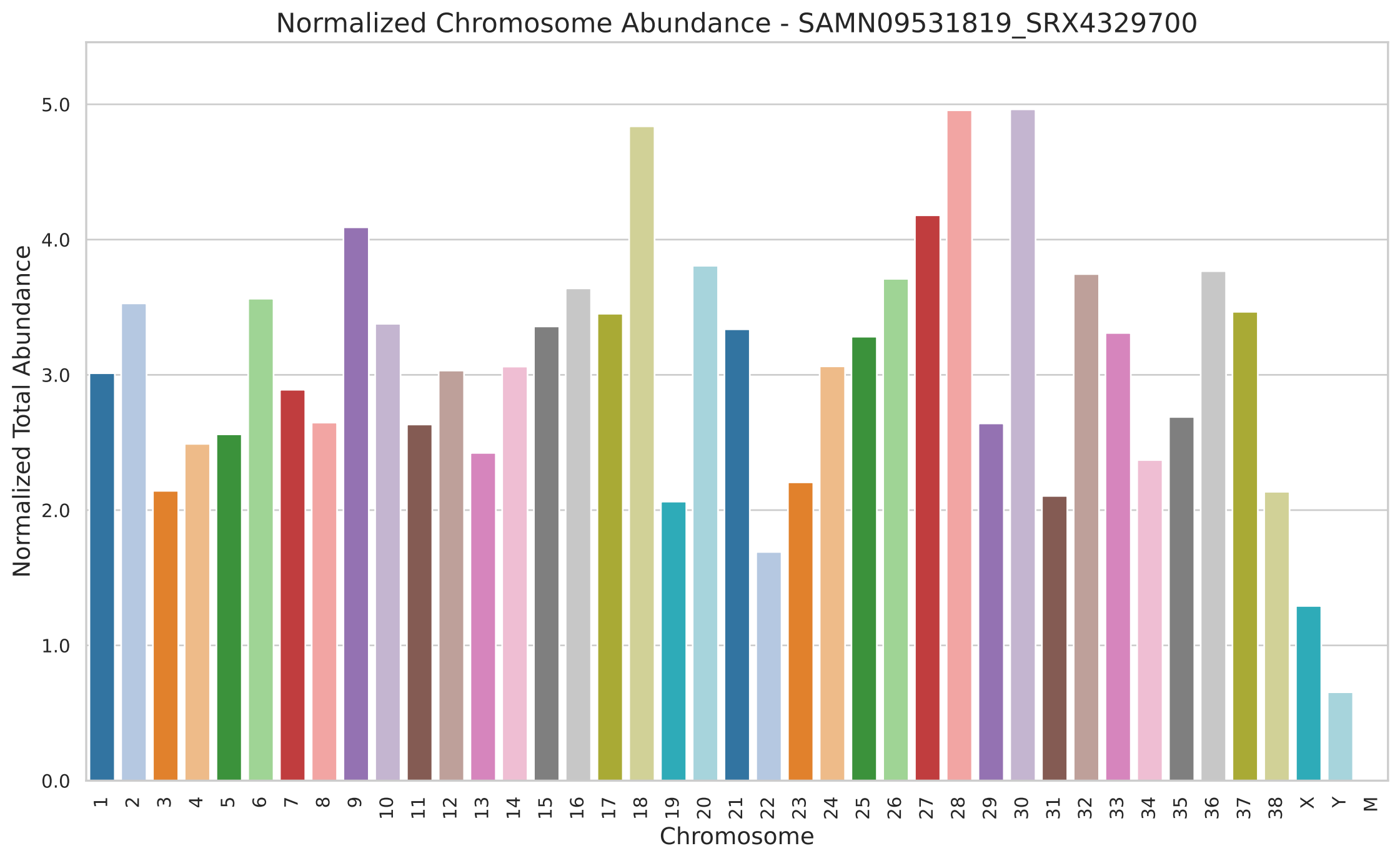

Normalized Chromosome Abundance - SAMEA7515392_ERX10021897
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

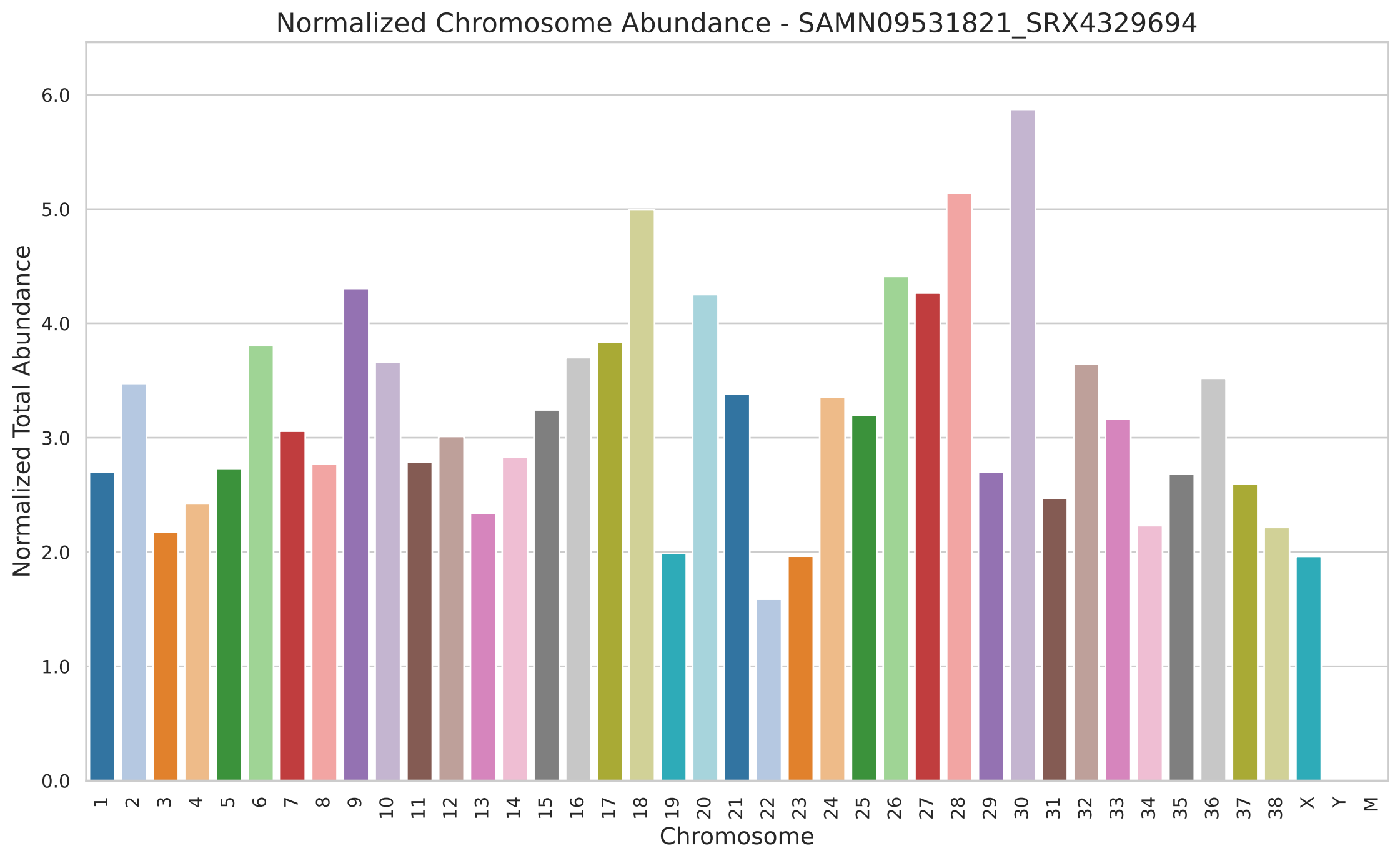

Normalized Chromosome Abundance - SAMEA3956047_ERX2437268
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

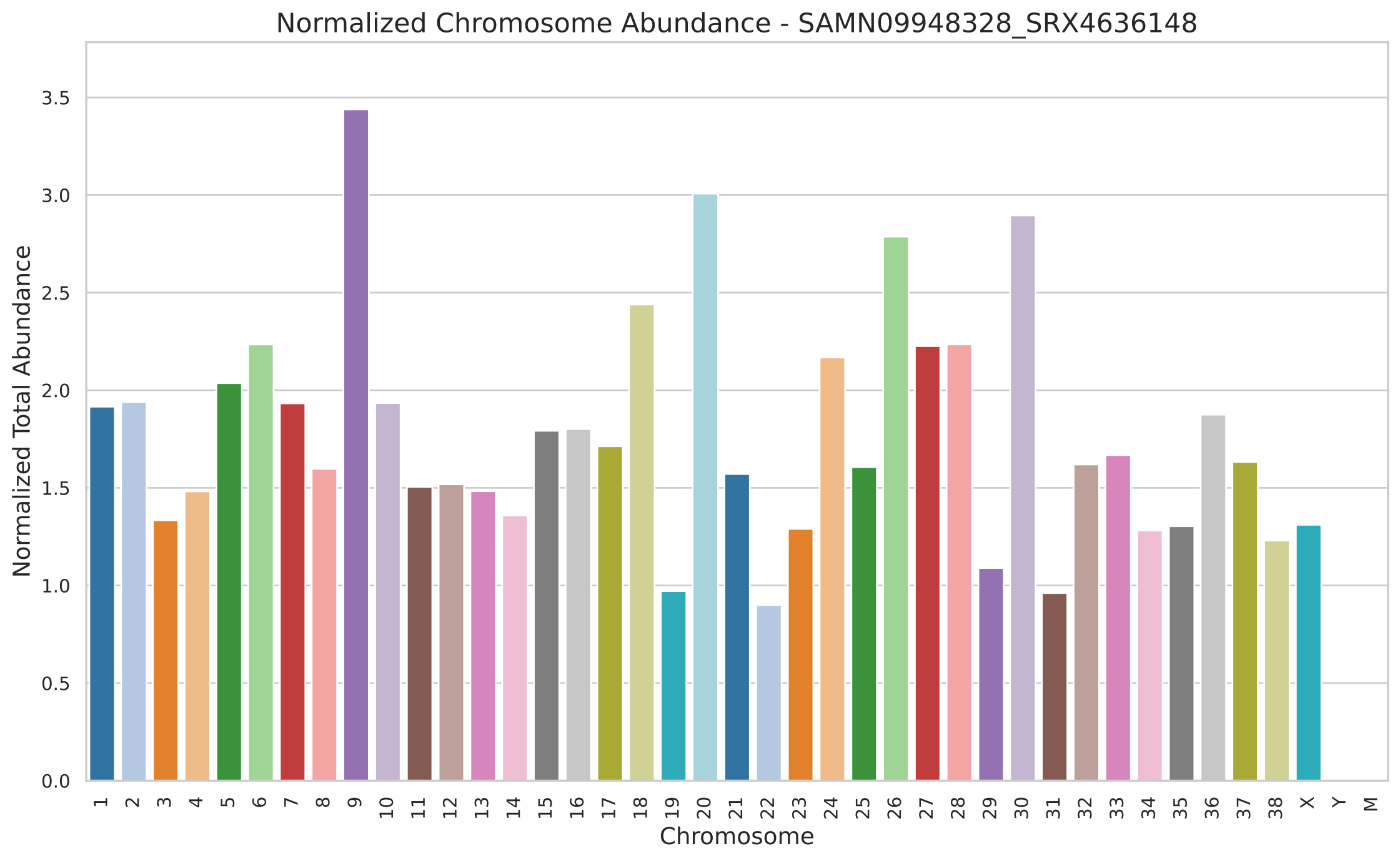

Normalized Chromosome Abundance - SAMN09531818_SRX4329697
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

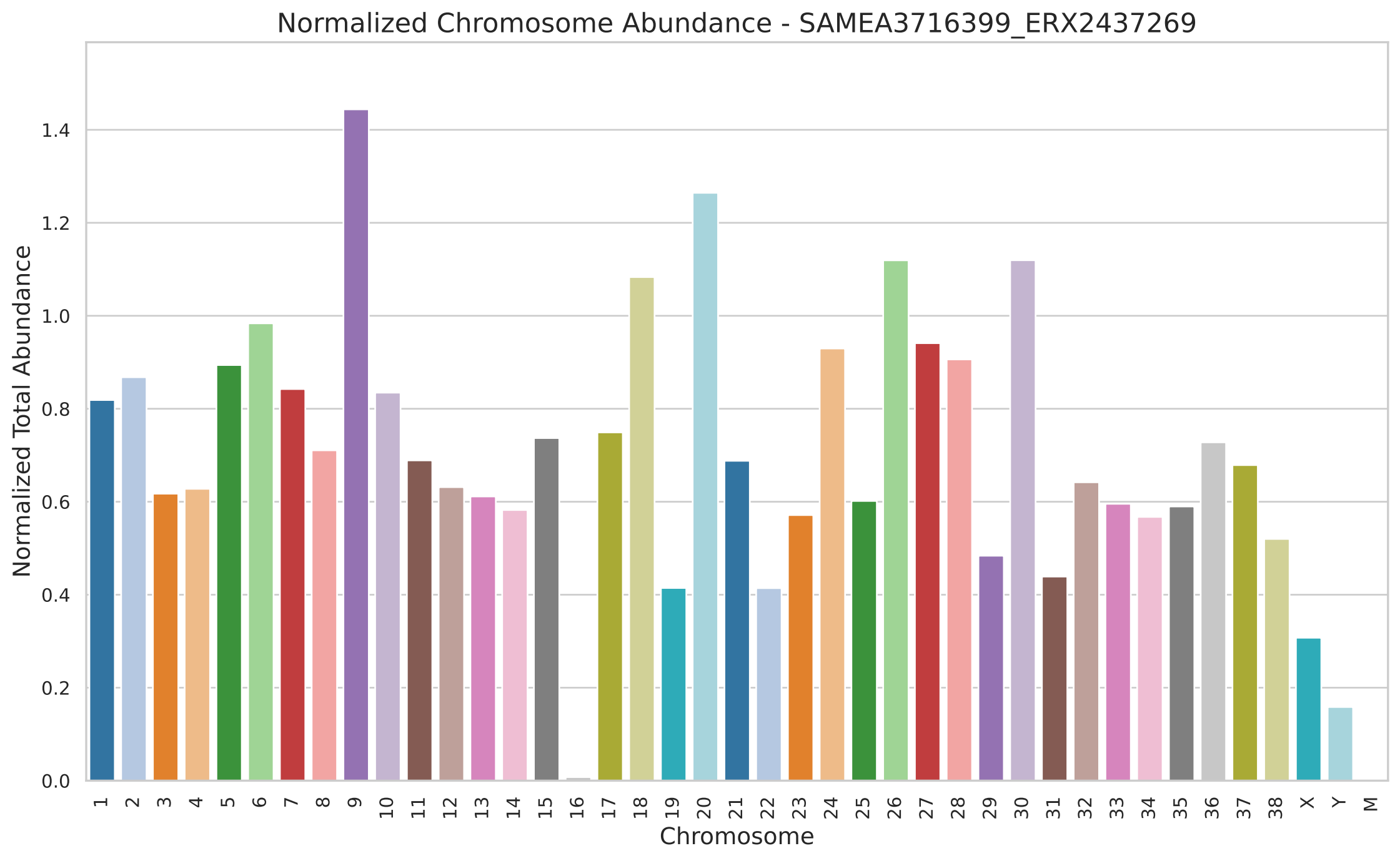

Normalized Chromosome Abundance - SAMN09531825_SRX4329692
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

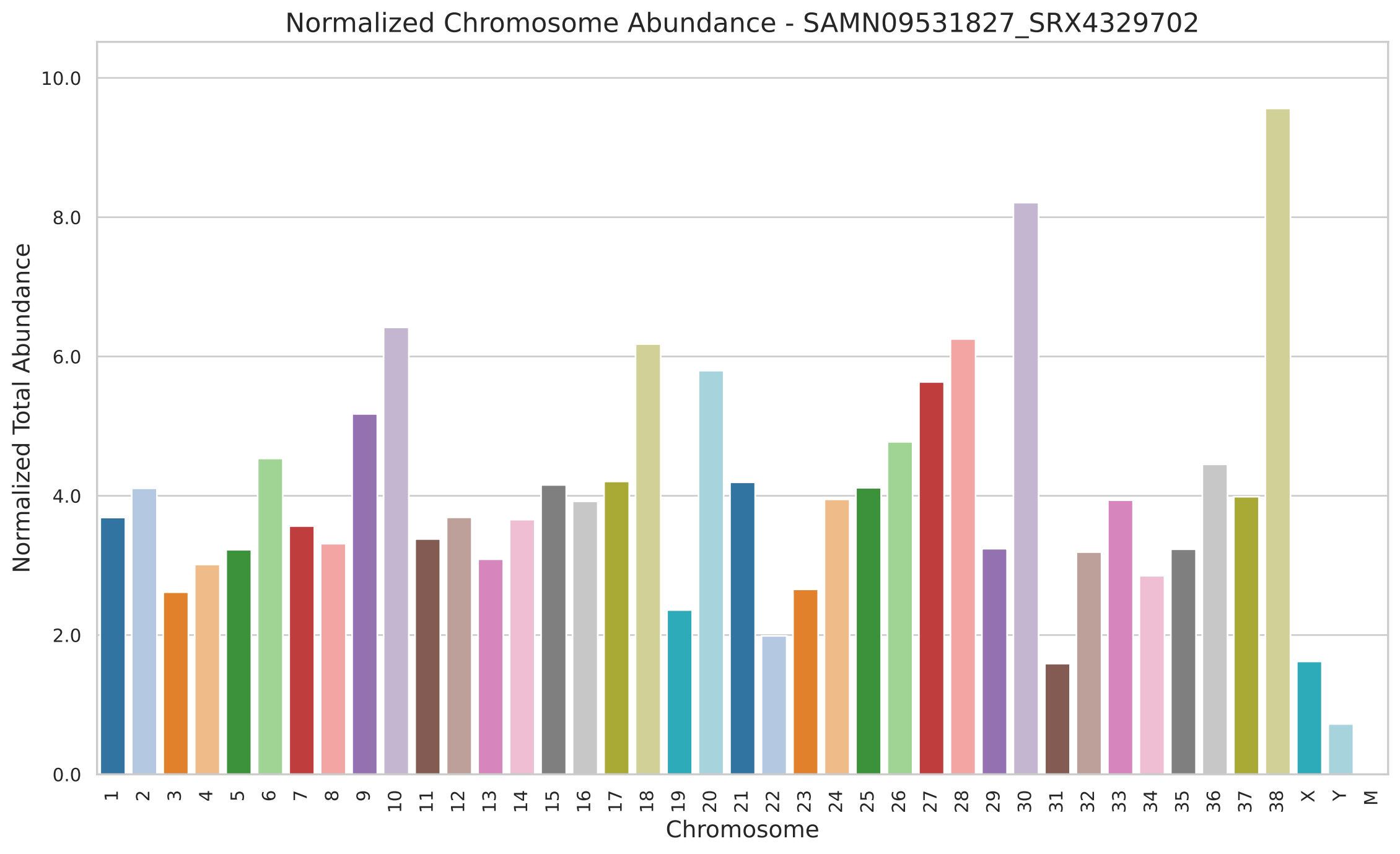

Normalized Chromosome Abundance - SAMN09531817_SRX4329698
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

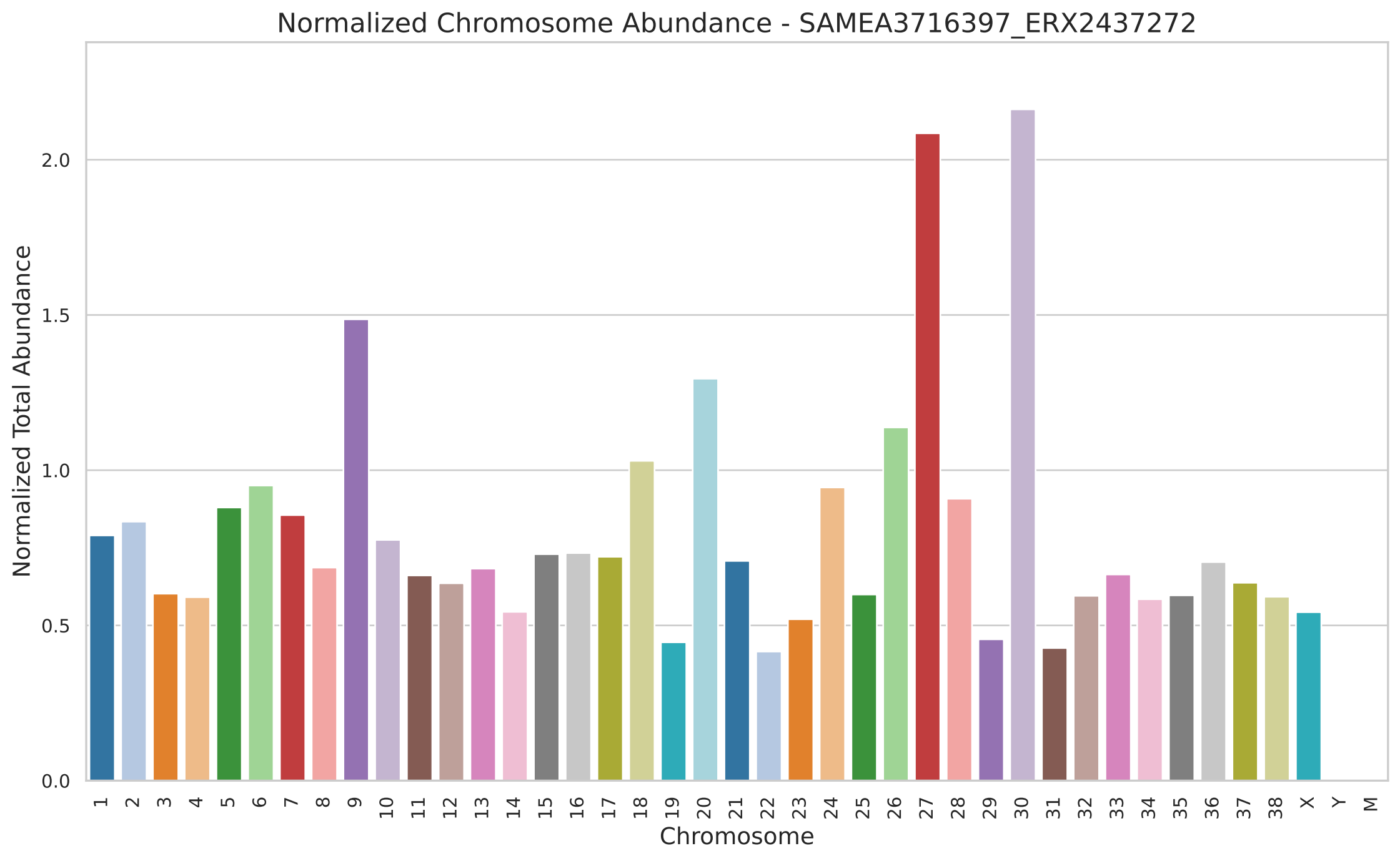

Normalized Chromosome Abundance - SAMN09531819_SRX4329700
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

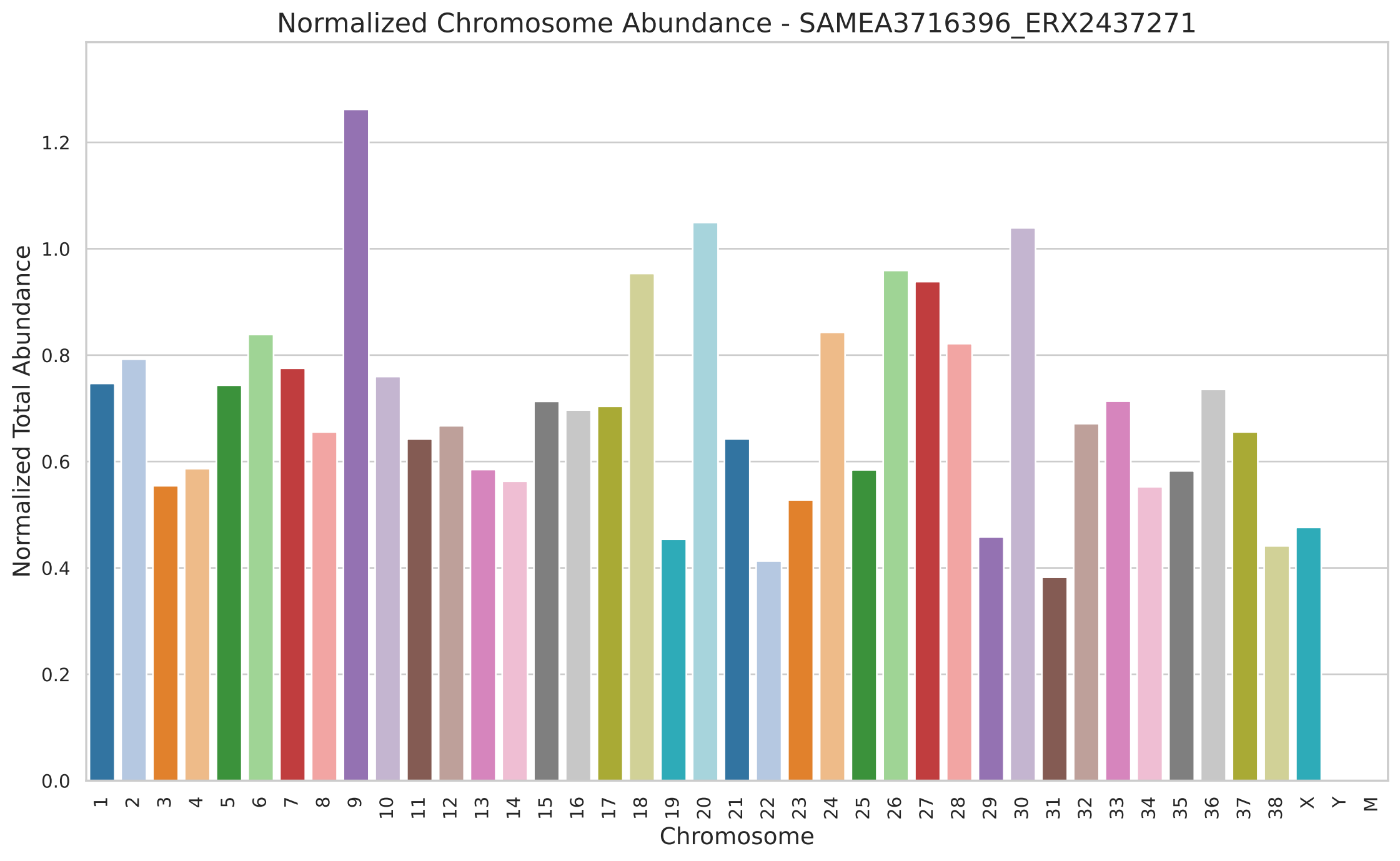

Normalized Chromosome Abundance - SAMN09531821_SRX4329694
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

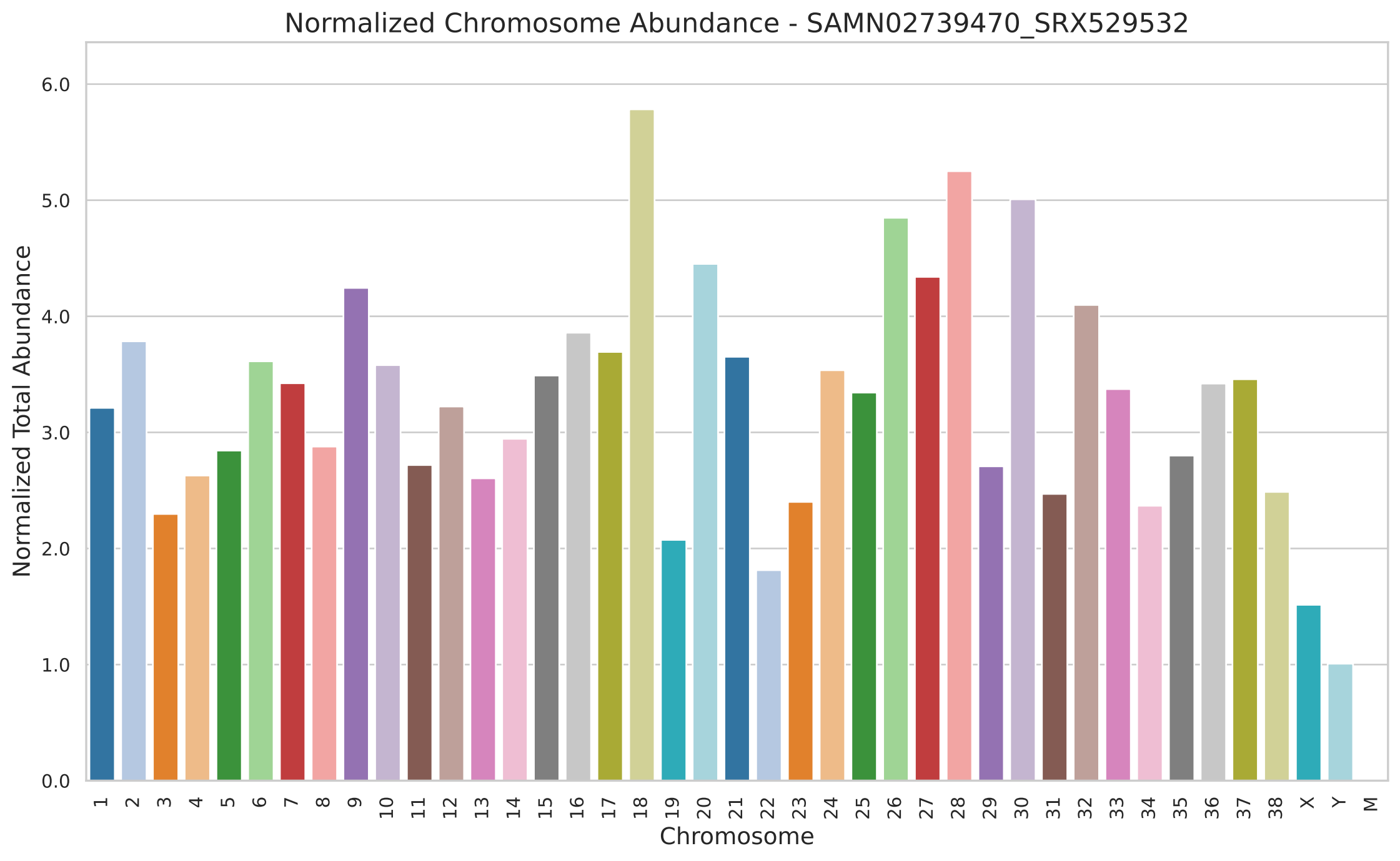

Normalized Chromosome Abundance - SAMN09948328_SRX4636148
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

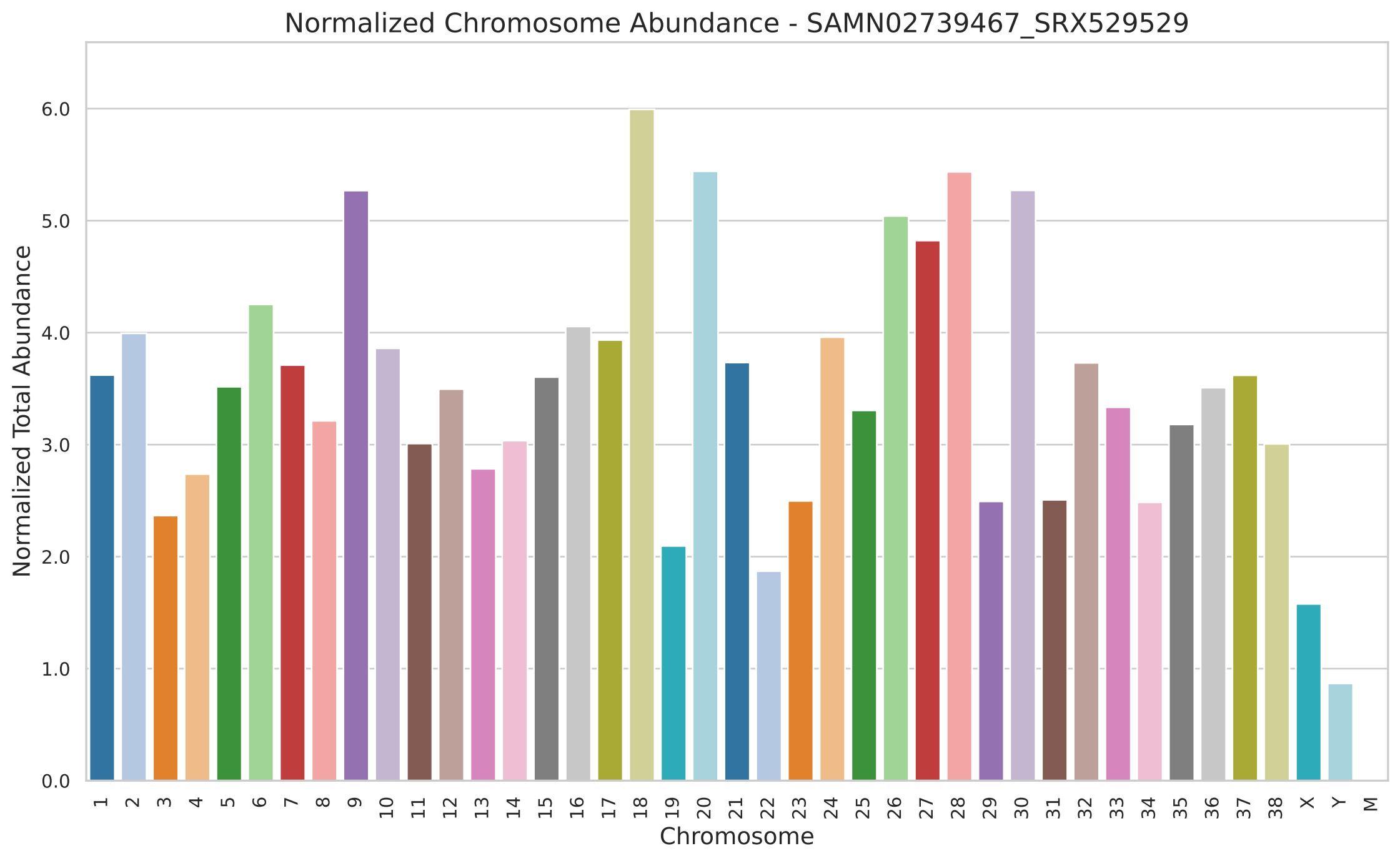

Normalized Chromosome Abundance - SAMEA3716399_ERX2437269
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

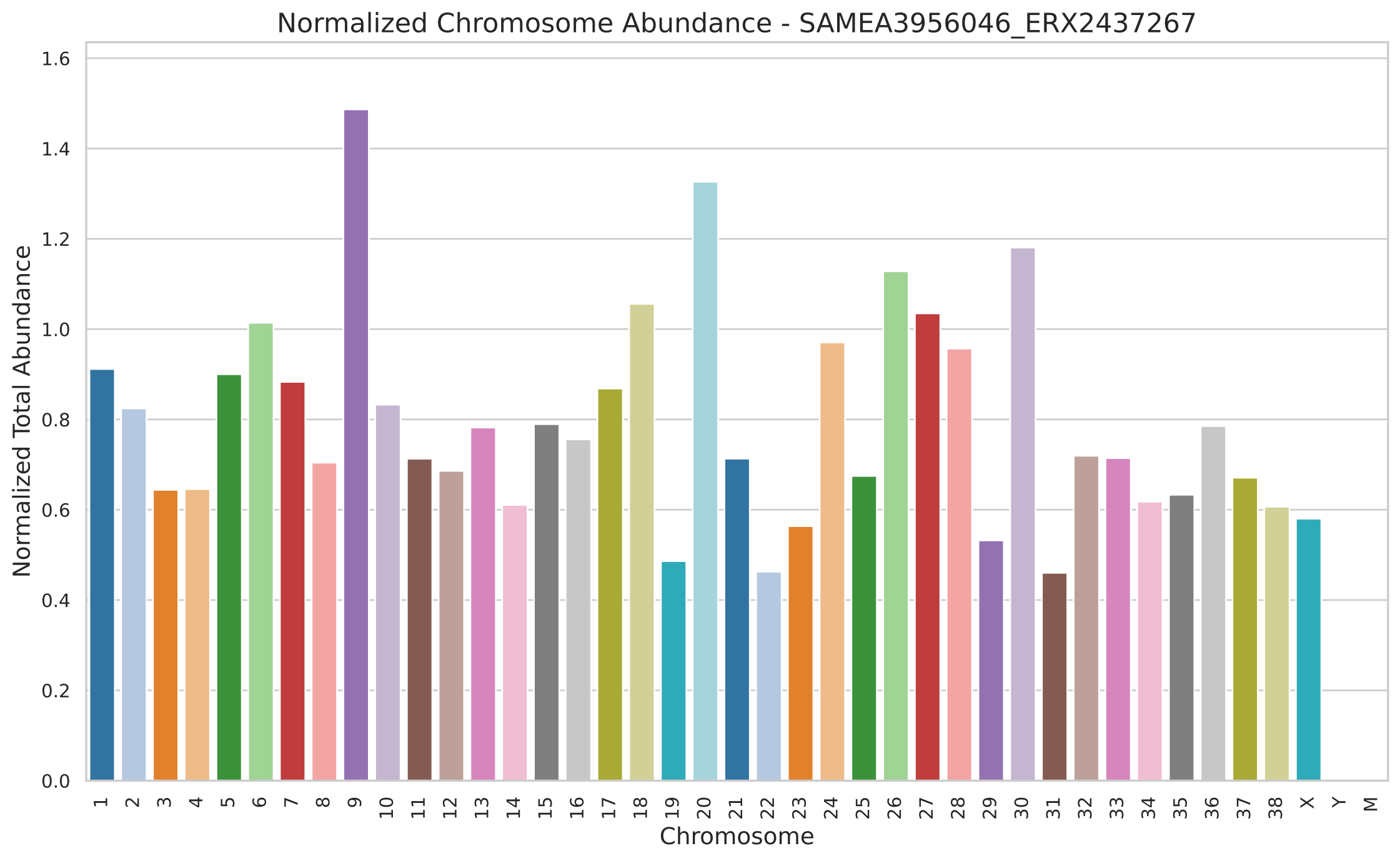

Normalized Chromosome Abundance - SAMN09531827_SRX4329702
Normalized Total Abundance
10.0
8.0
6.0
4.0
2.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

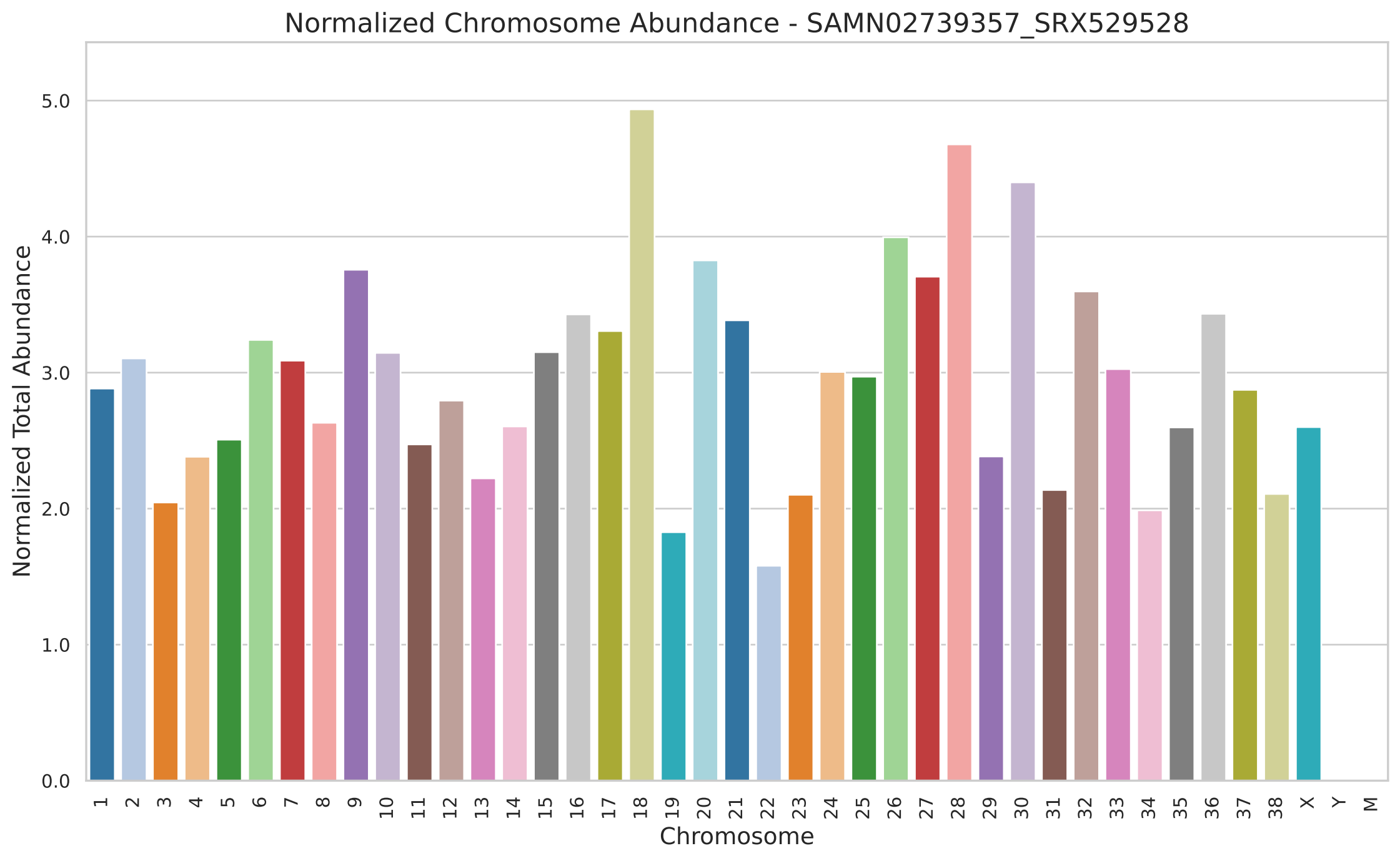

Normalized Chromosome Abundance - SAMEA3716397_ERX2437272
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

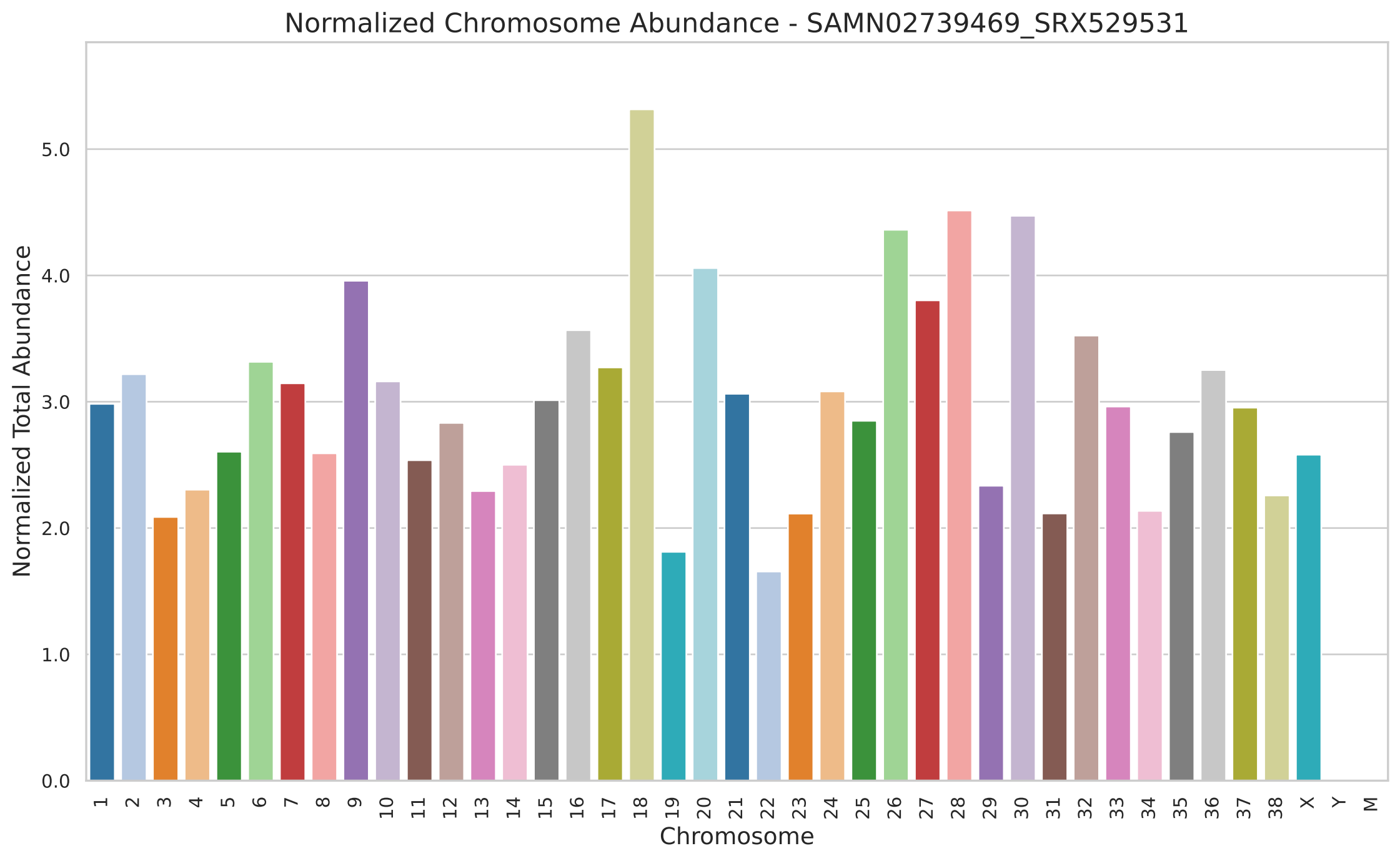

Normalized Chromosome Abundance - SAMEA3716396_ERX2437271
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

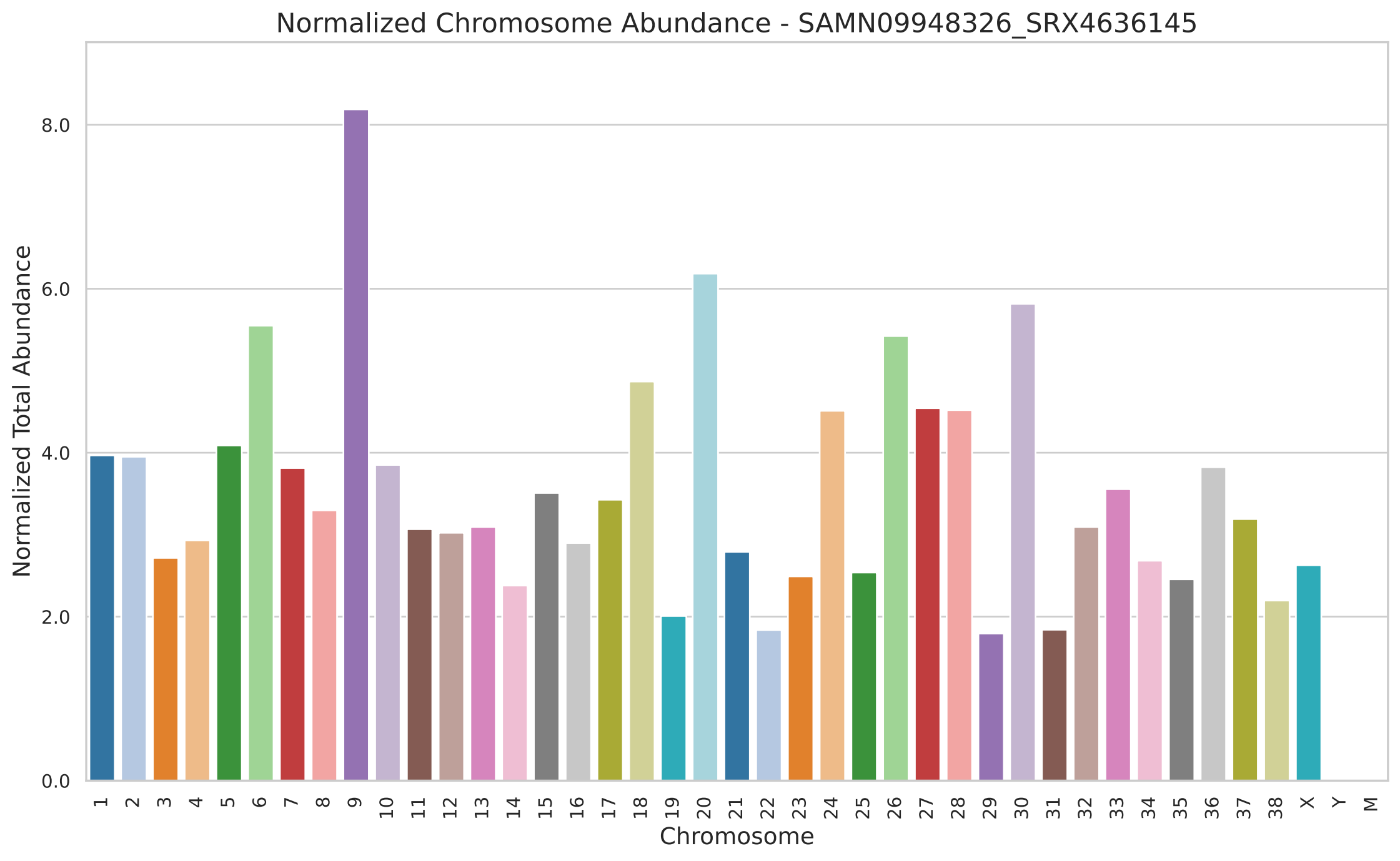

Normalized Chromosome Abundance - SAMN02739470_SRX529532
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

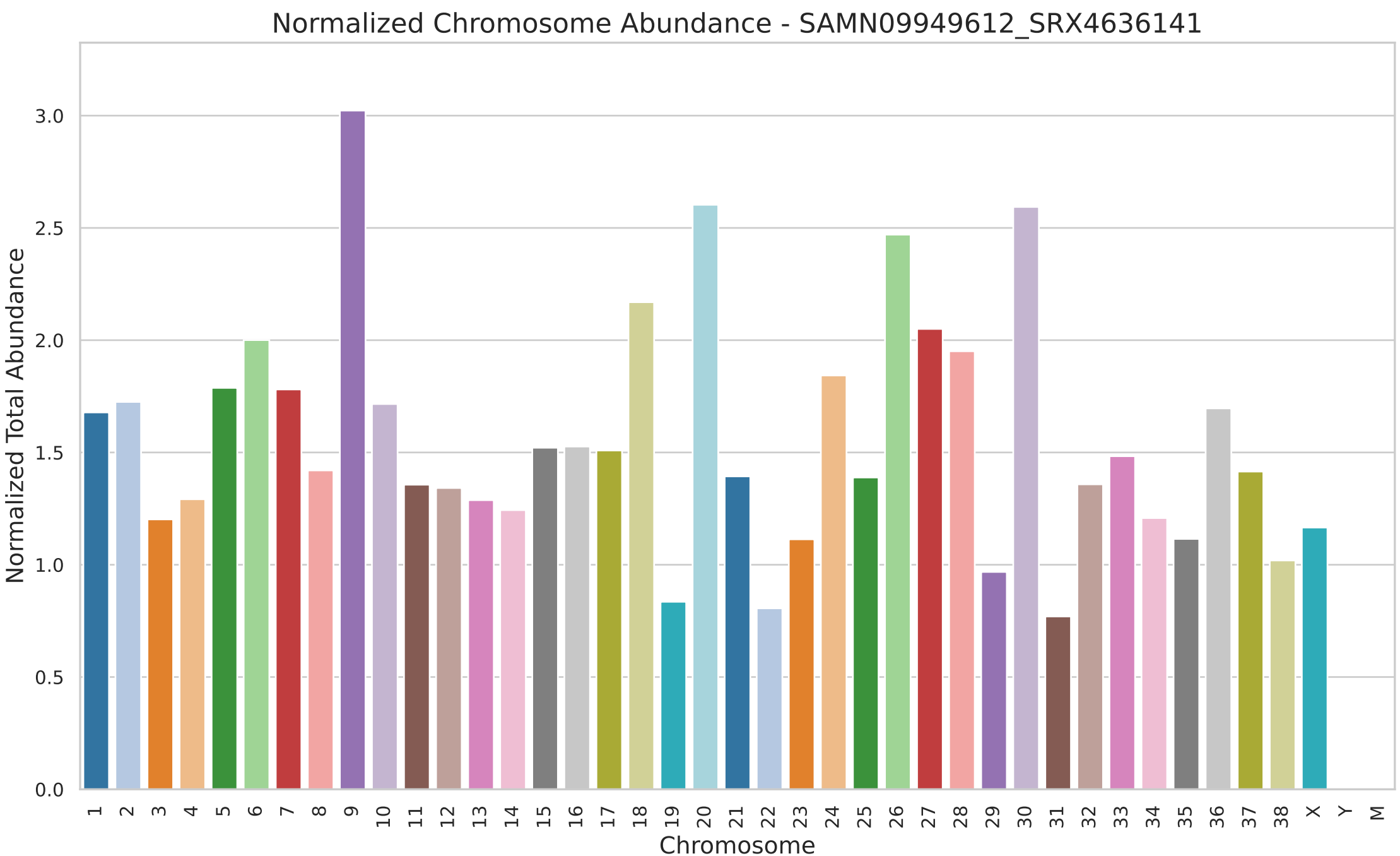

Normalized Chromosome Abundance - SAMN02739467_SRX529529
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

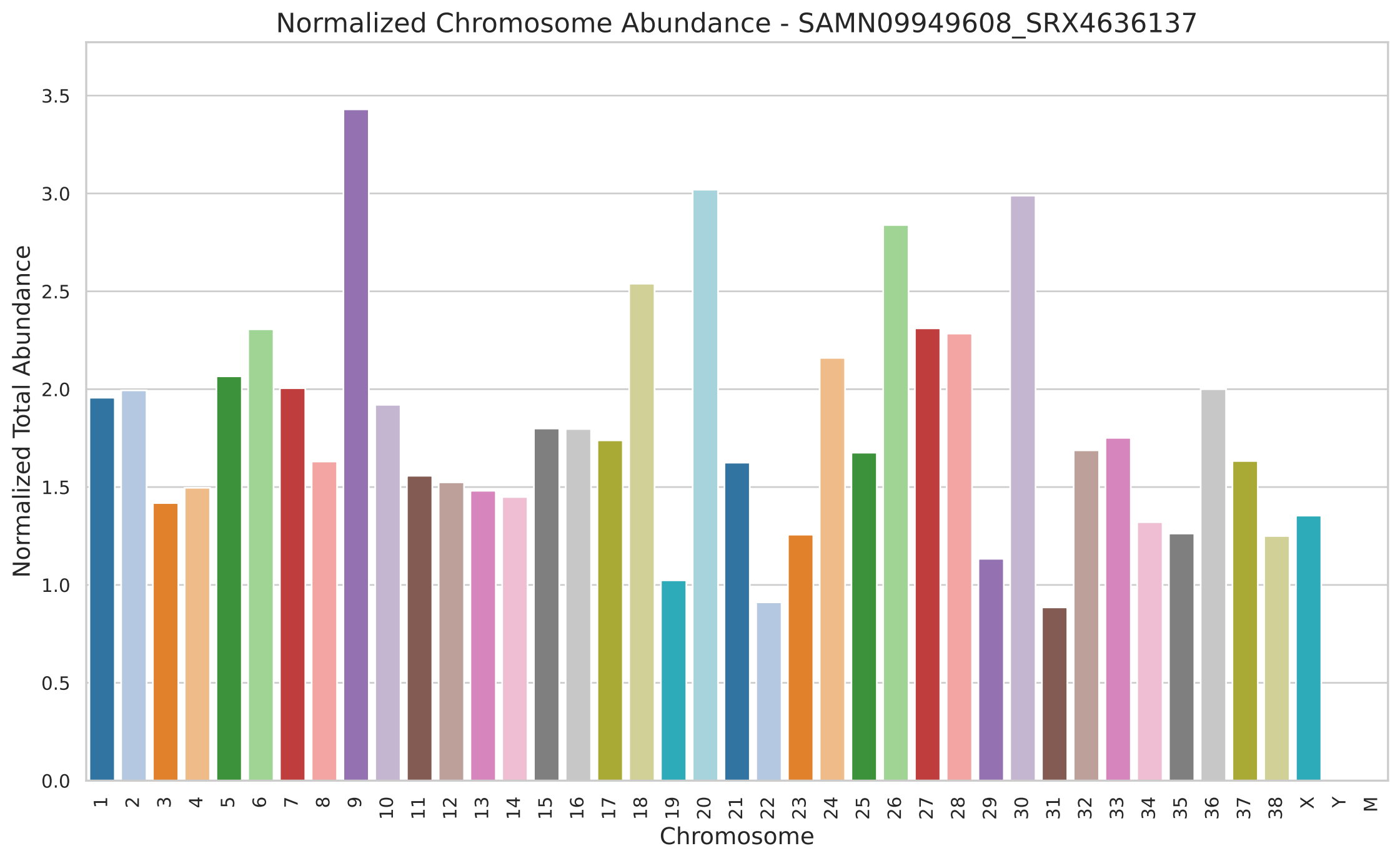

Normalized Chromosome Abundance - SAMEA3956046_ERX2437267
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

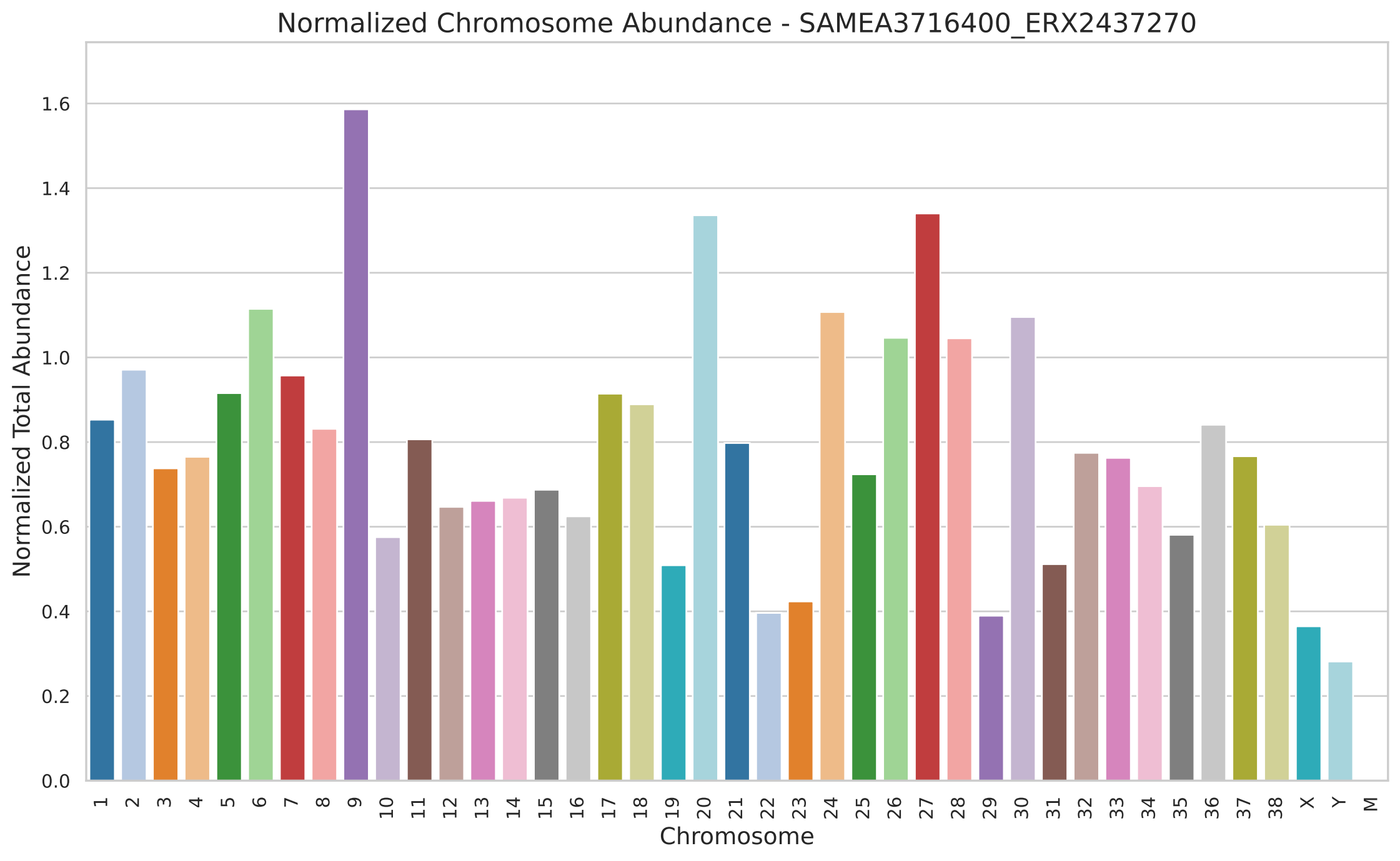

Normalized Chromosome Abundance - SAMN02739357_SRX529528
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

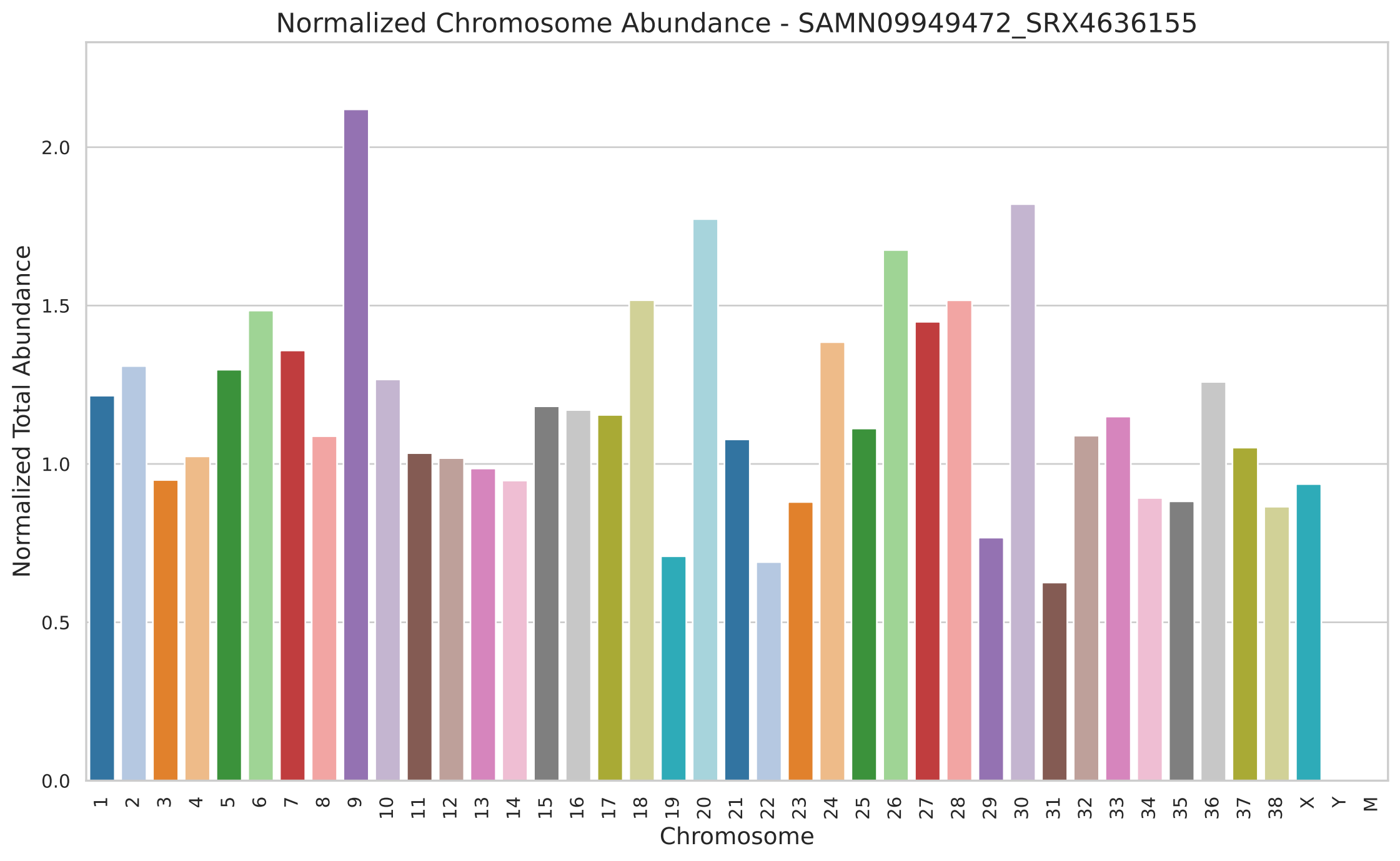

Normalized Chromosome Abundance - SAMN02739469_SRX529531
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

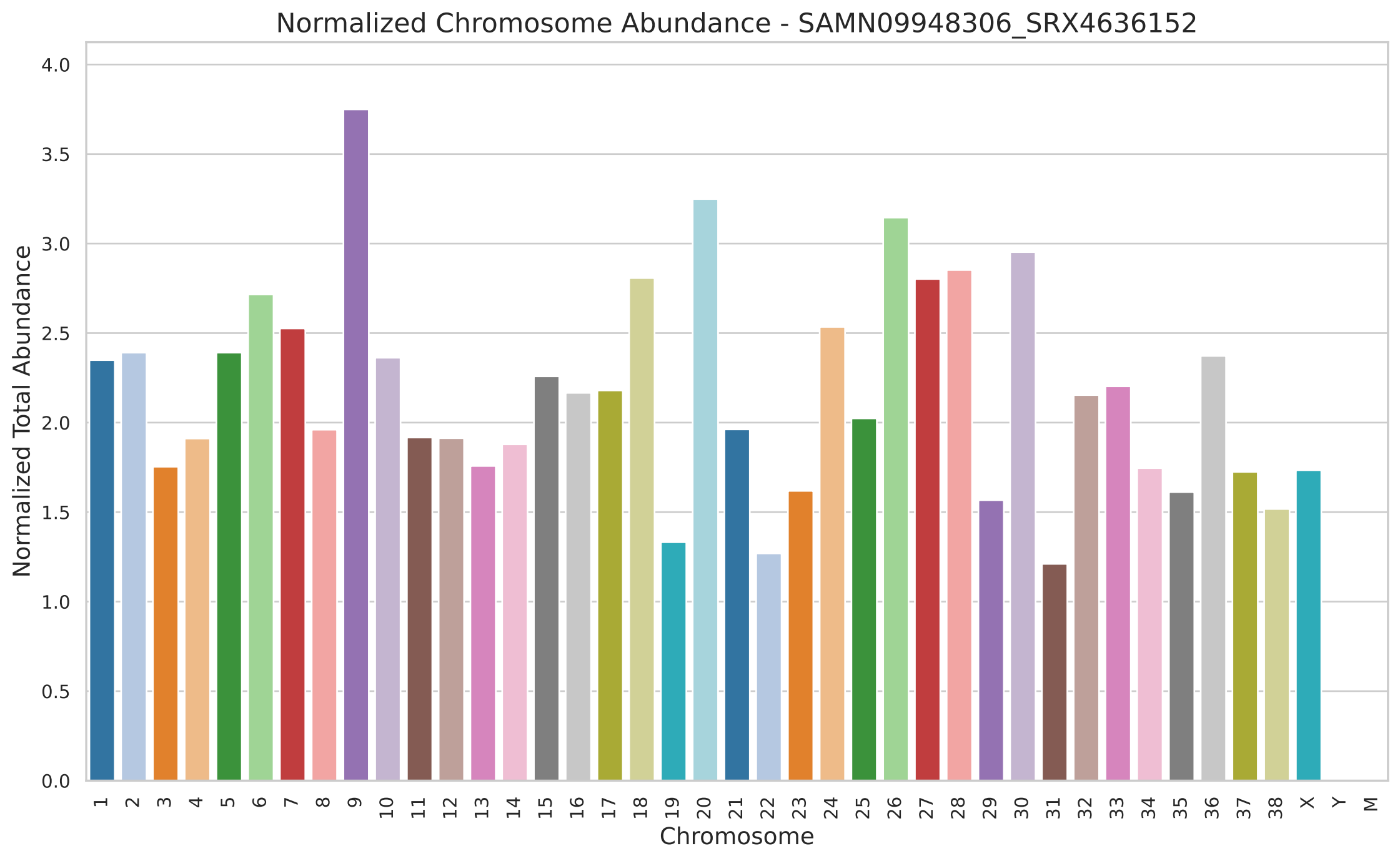

Normalized Chromosome Abundance - SAMN09948326_SRX4636145
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

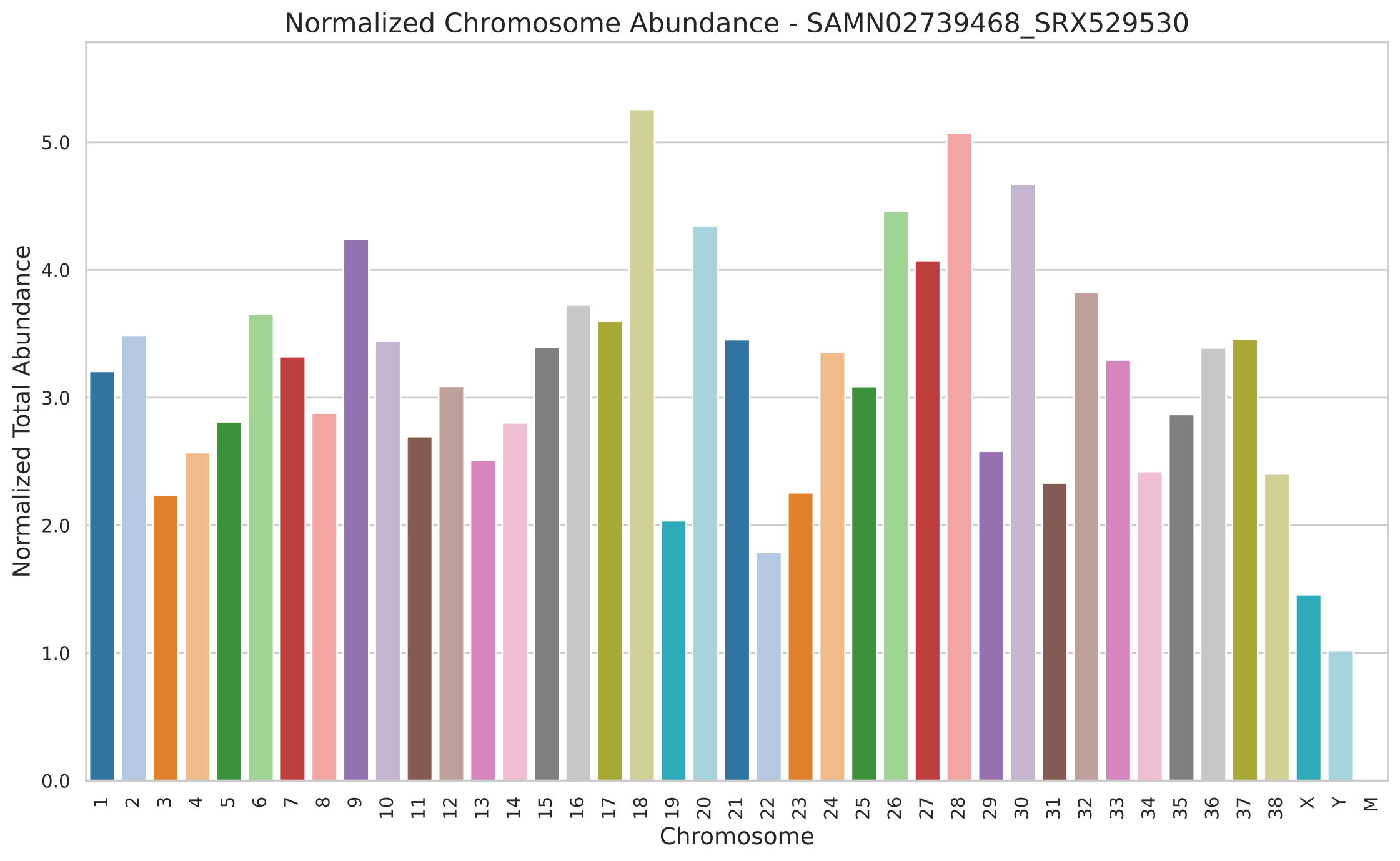

Normalized Chromosome Abundance - SAMN09949612_SRX4636141
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

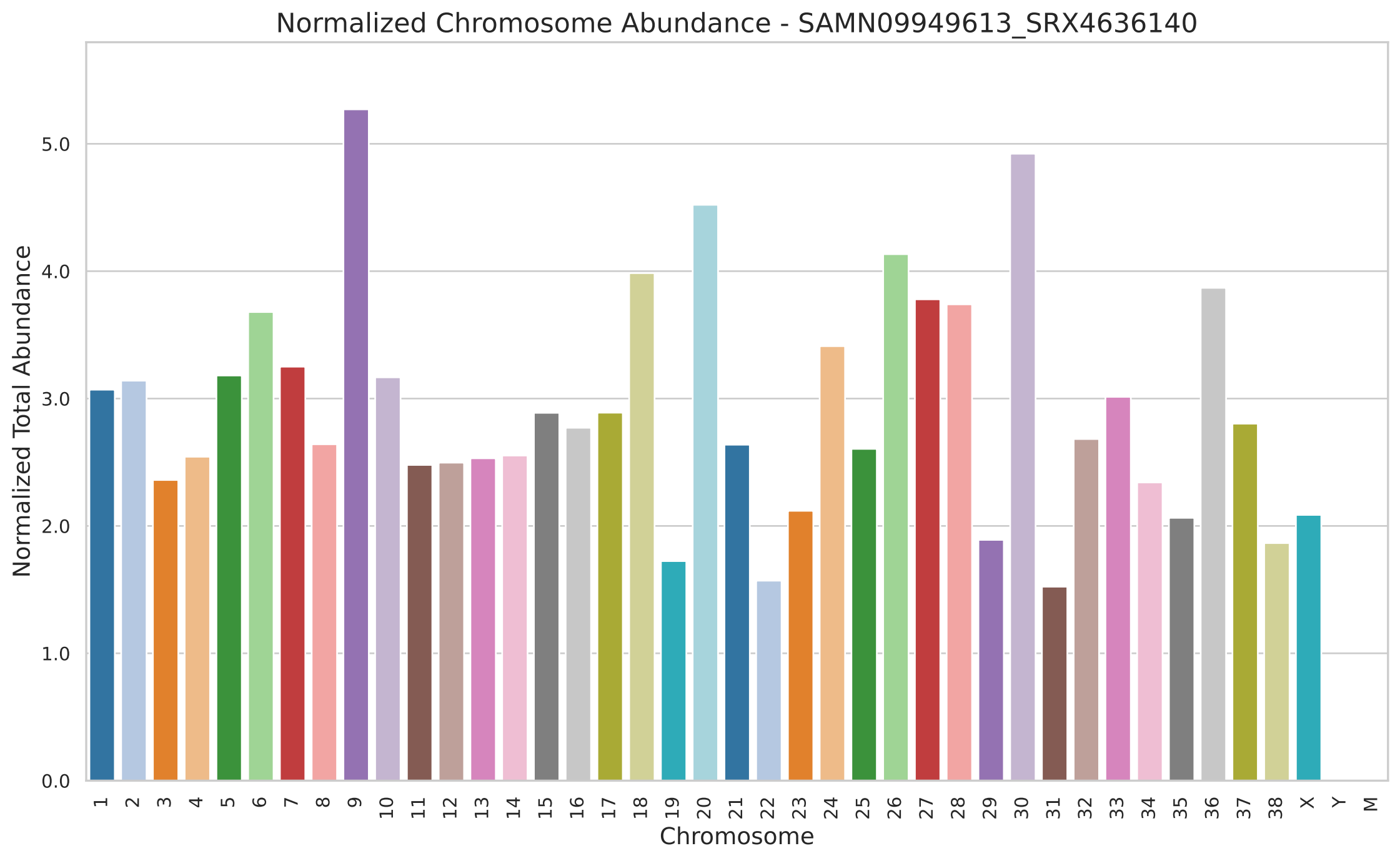

Normalized Chromosome Abundance - SAMN09949608_SRX4636137
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

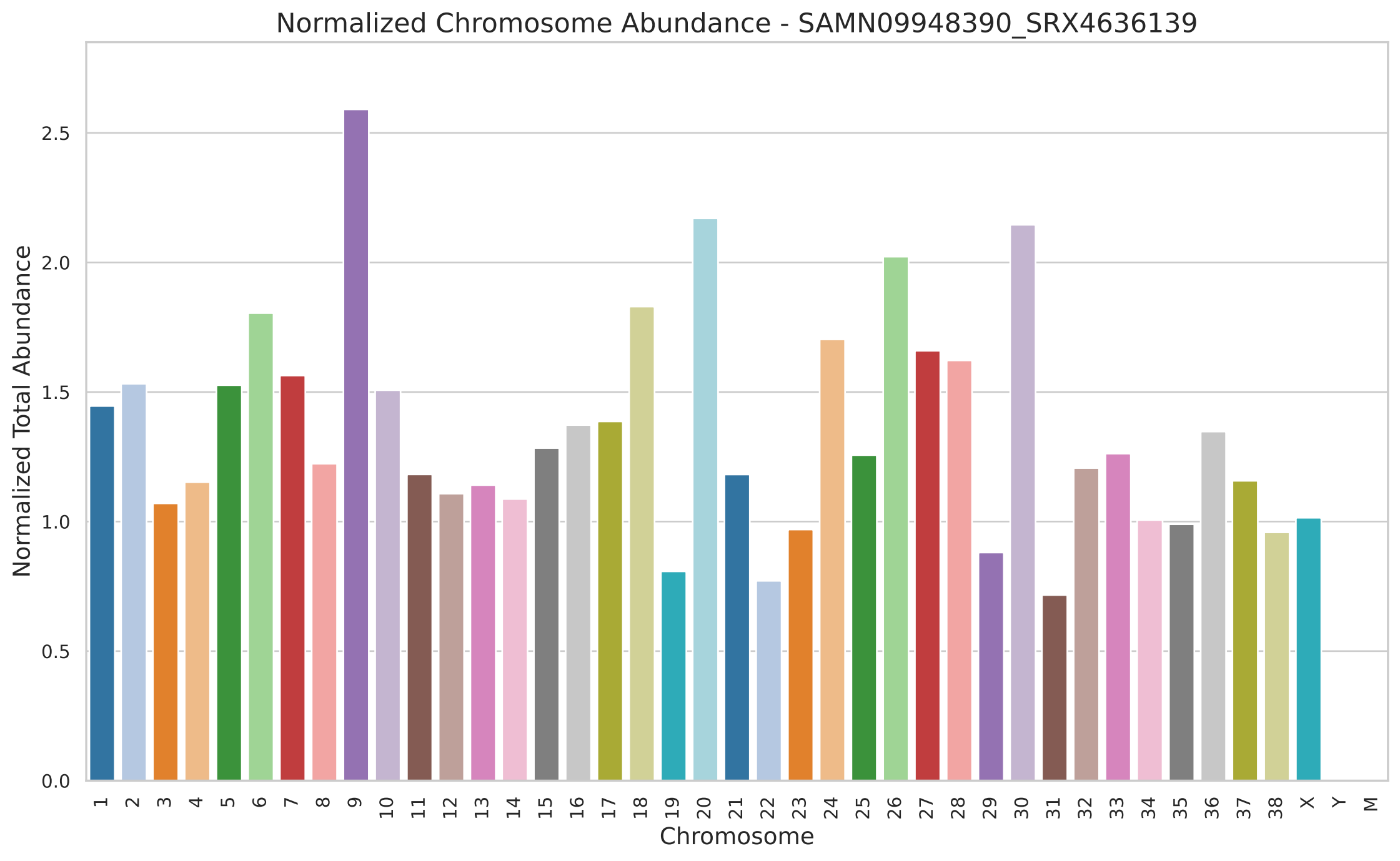

Normalized Chromosome Abundance - SAMEA3716400_ERX2437270
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

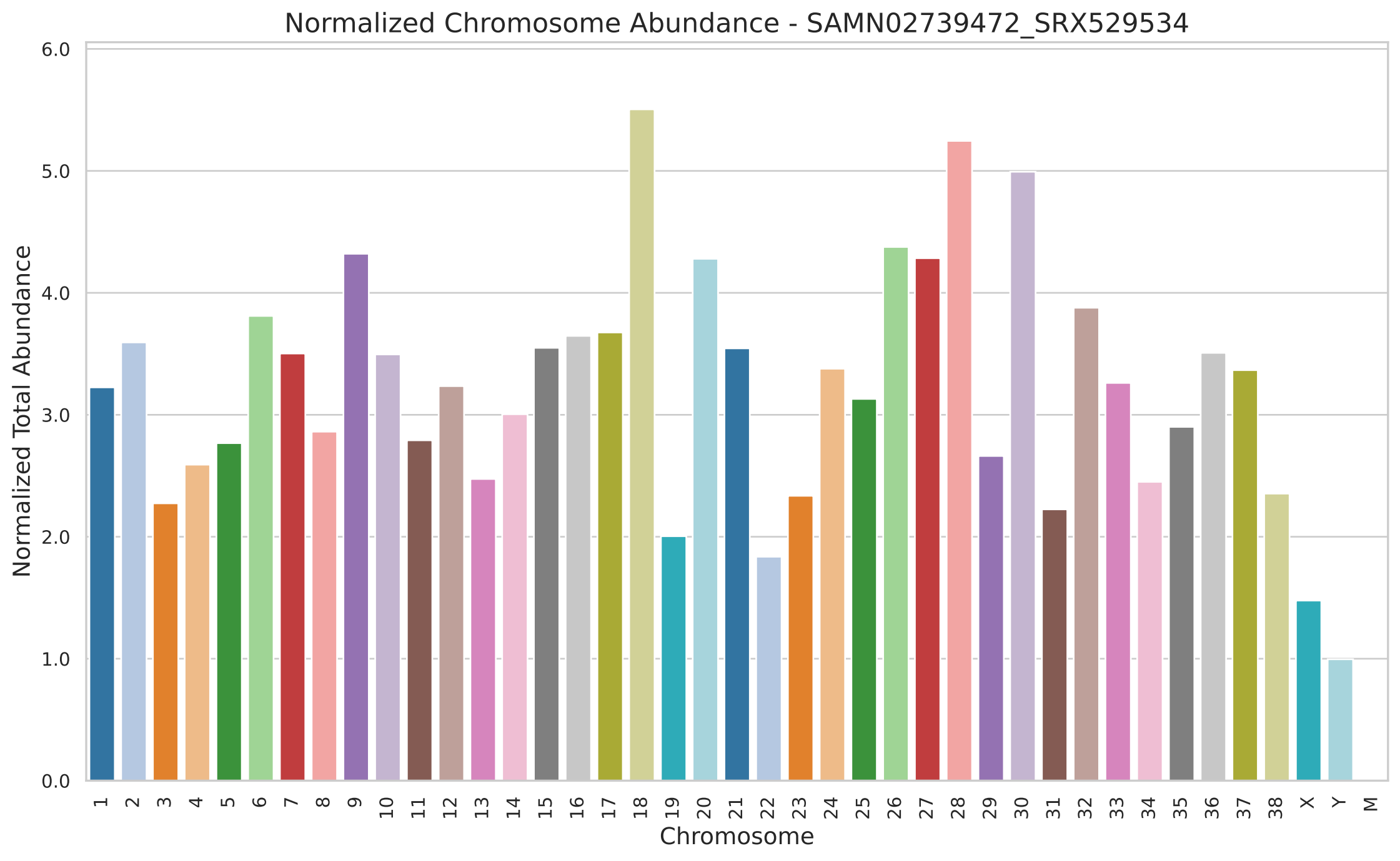

Normalized Chromosome Abundance - SAMN09949472_SRX4636155
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

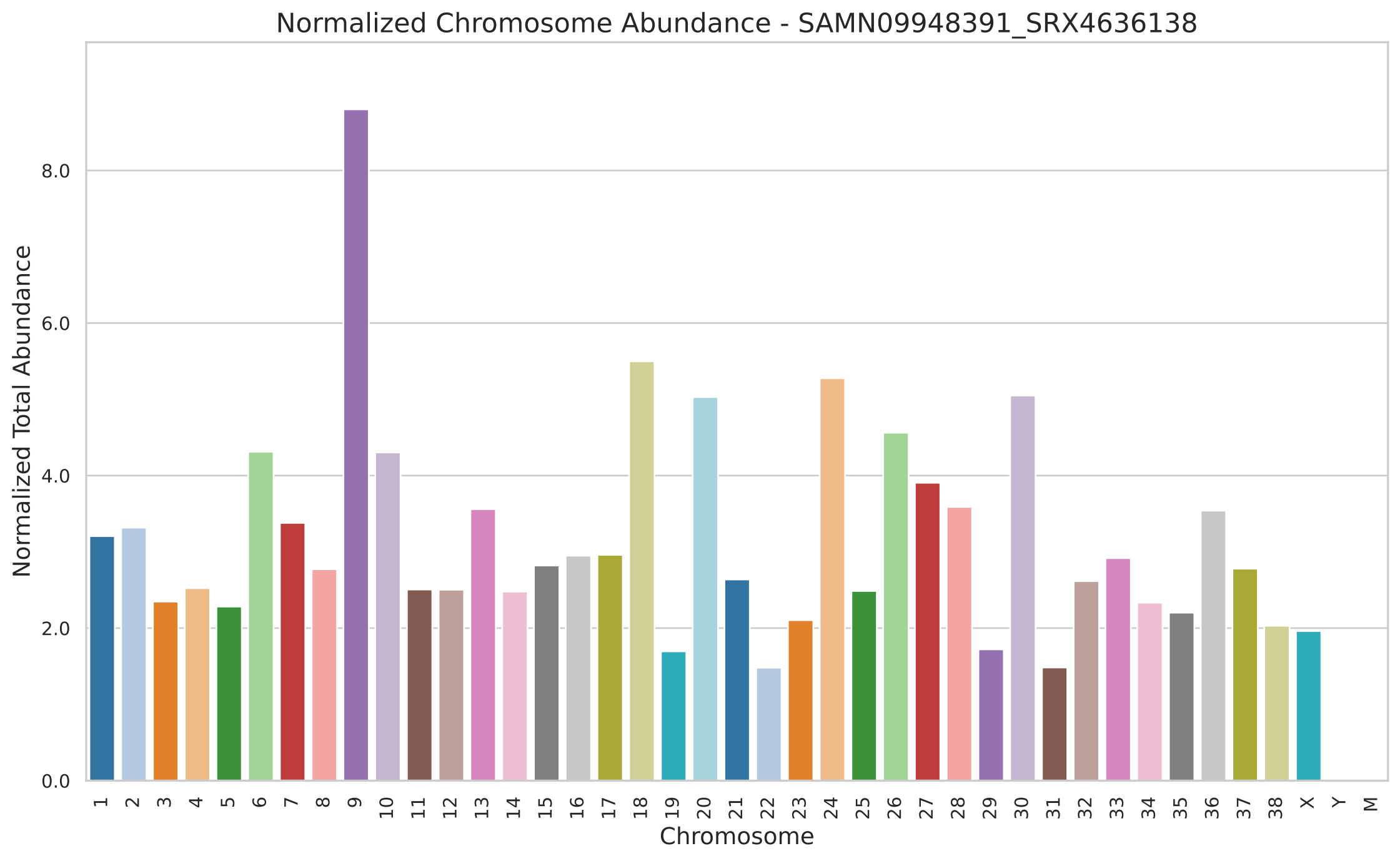

Normalized Chromosome Abundance - SAMN09948306_SRX4636152
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

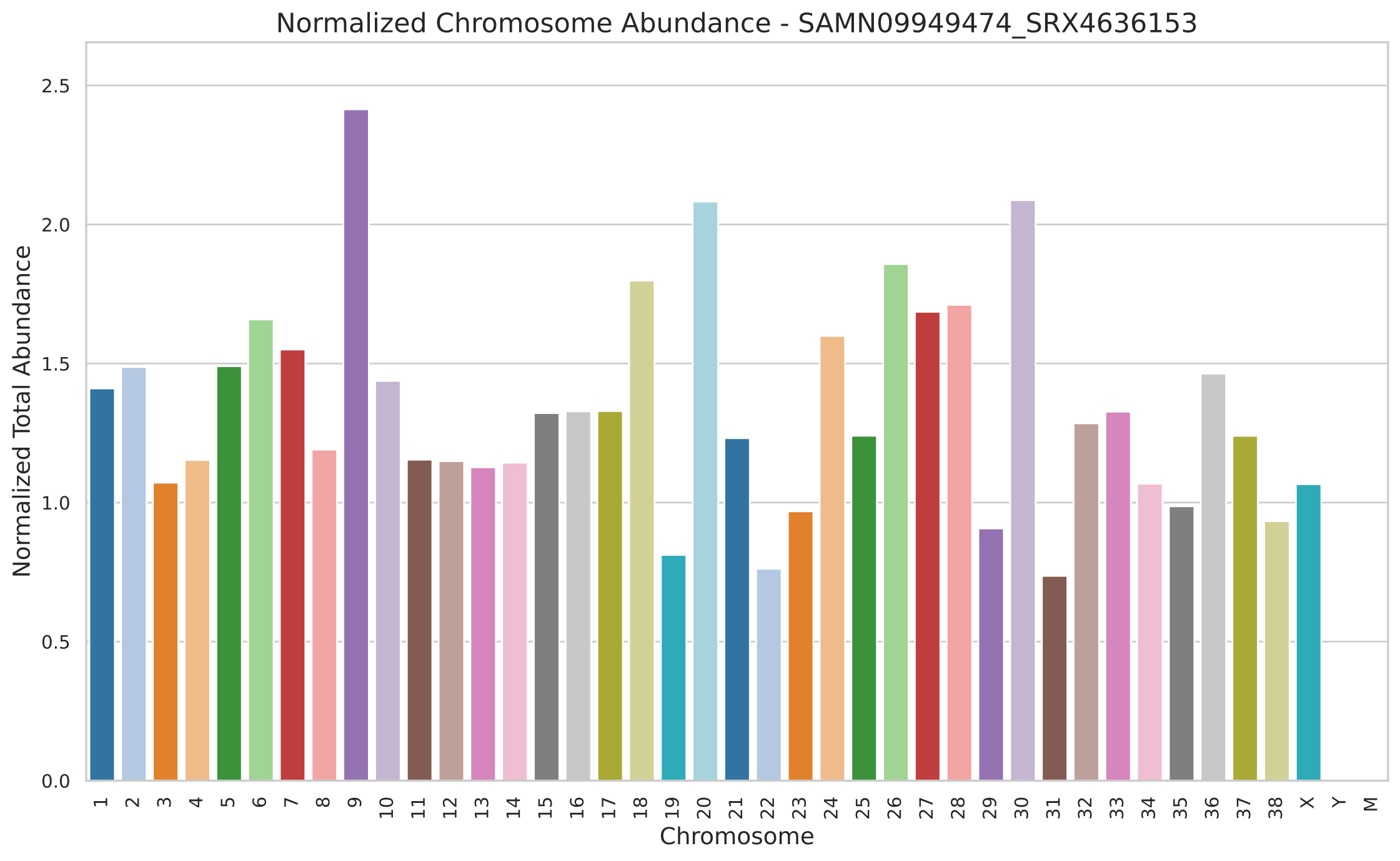

Normalized Chromosome Abundance - SAMN02739468_SRX529530
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

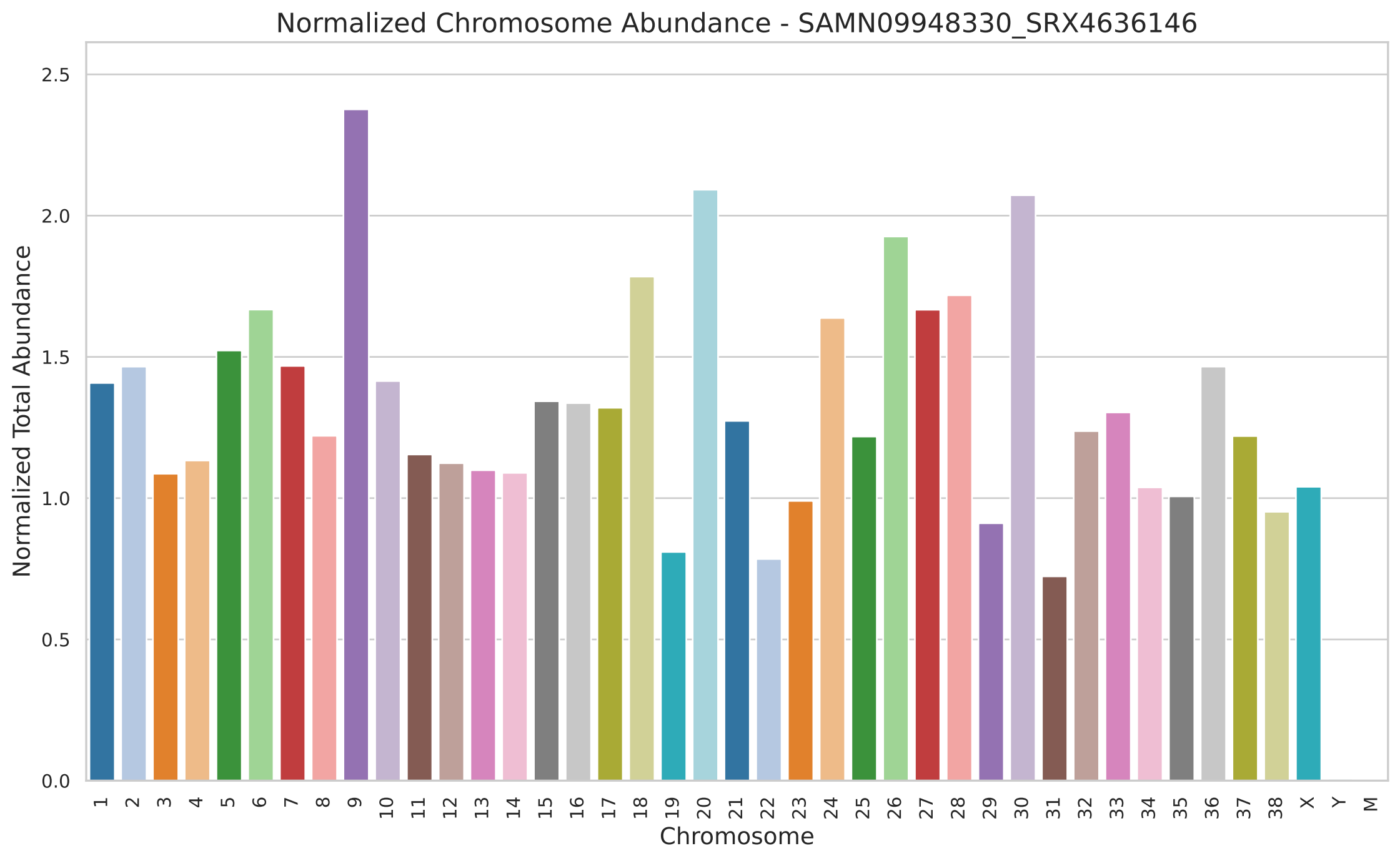

Normalized Chromosome Abundance - SAMN09949613_SRX4636140
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

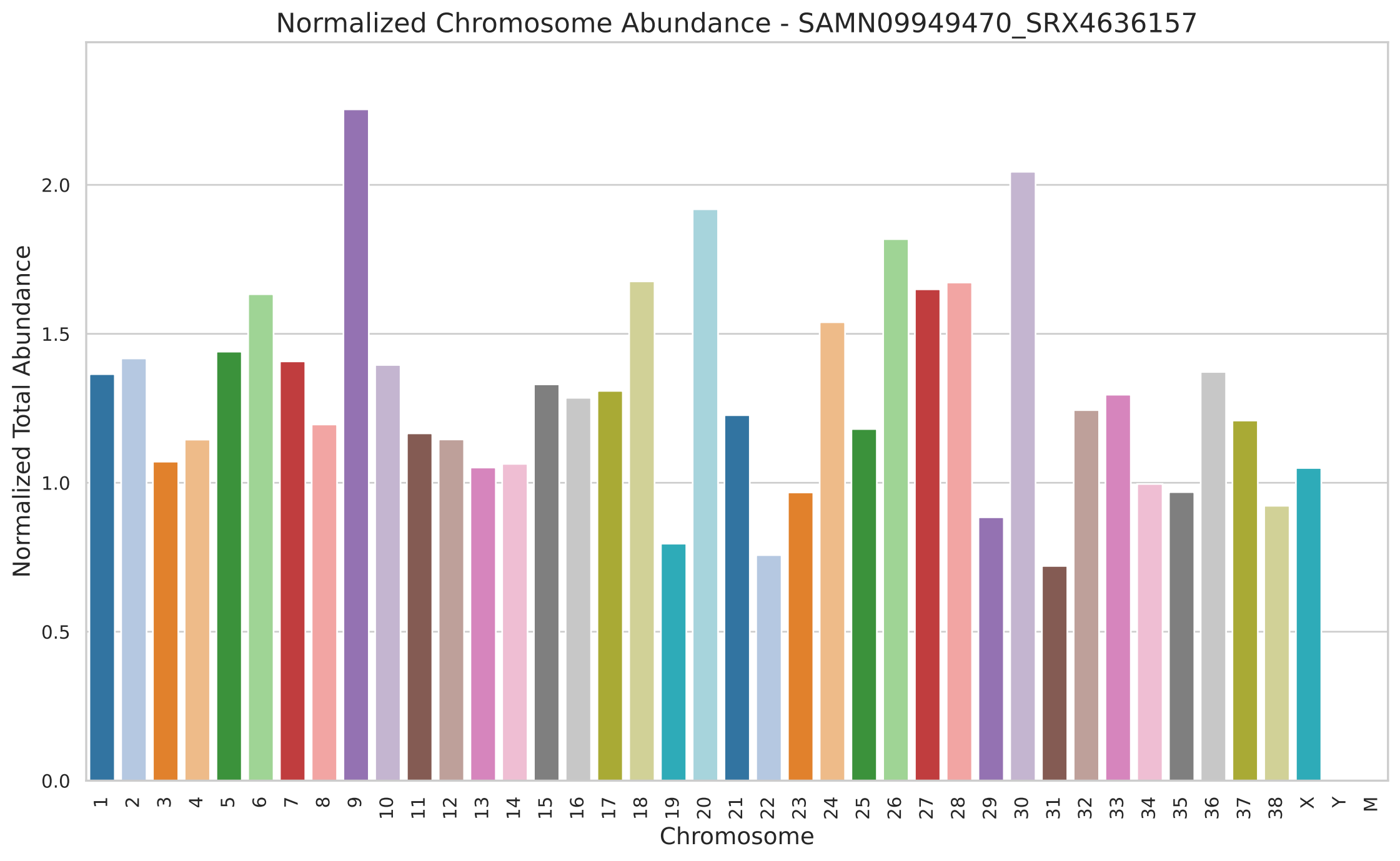

Normalized Chromosome Abundance - SAMN09948390_SRX4636139
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

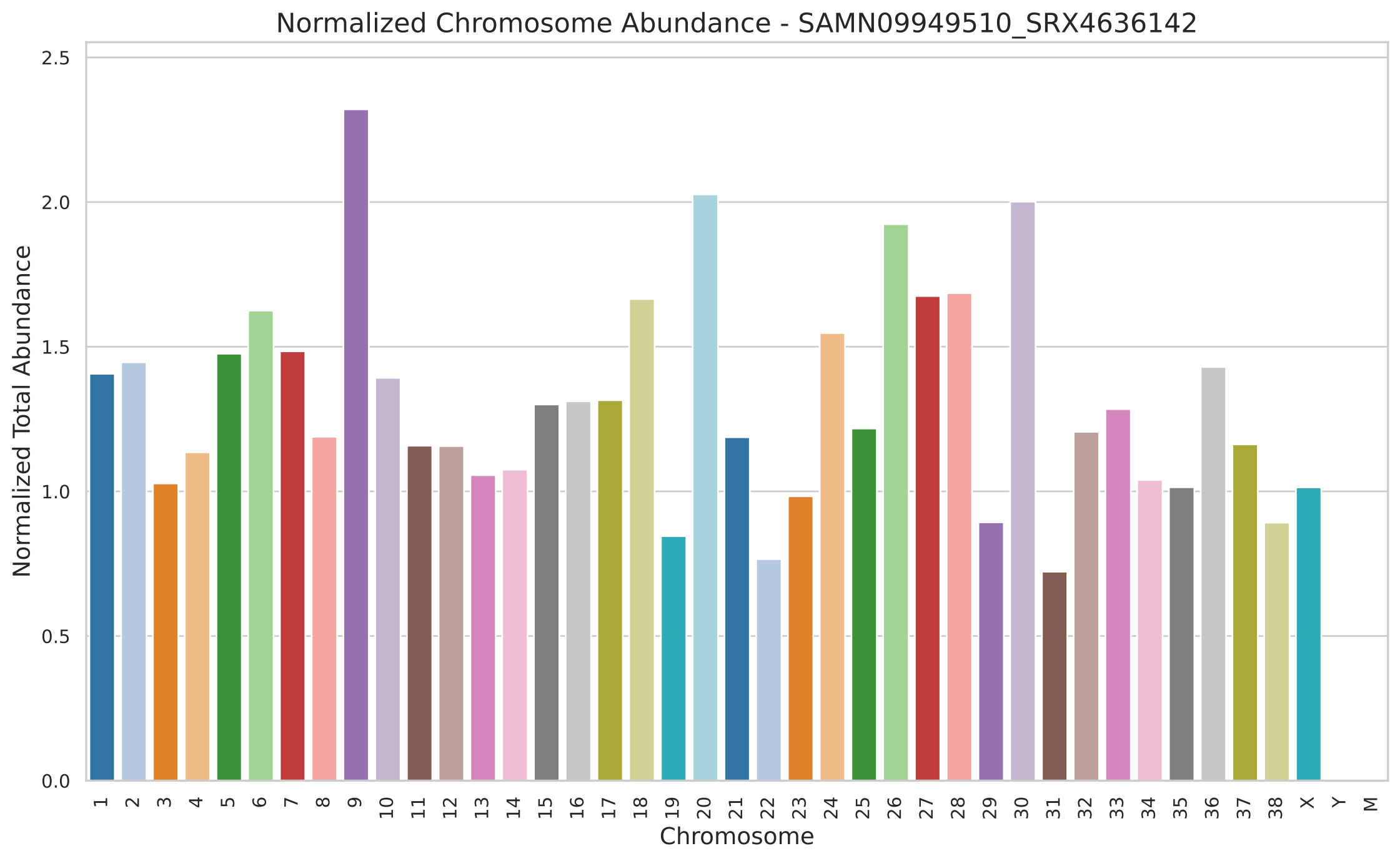

Normalized Chromosome Abundance - SAMN02739472_SRX529534
Normalized Total Abundance
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

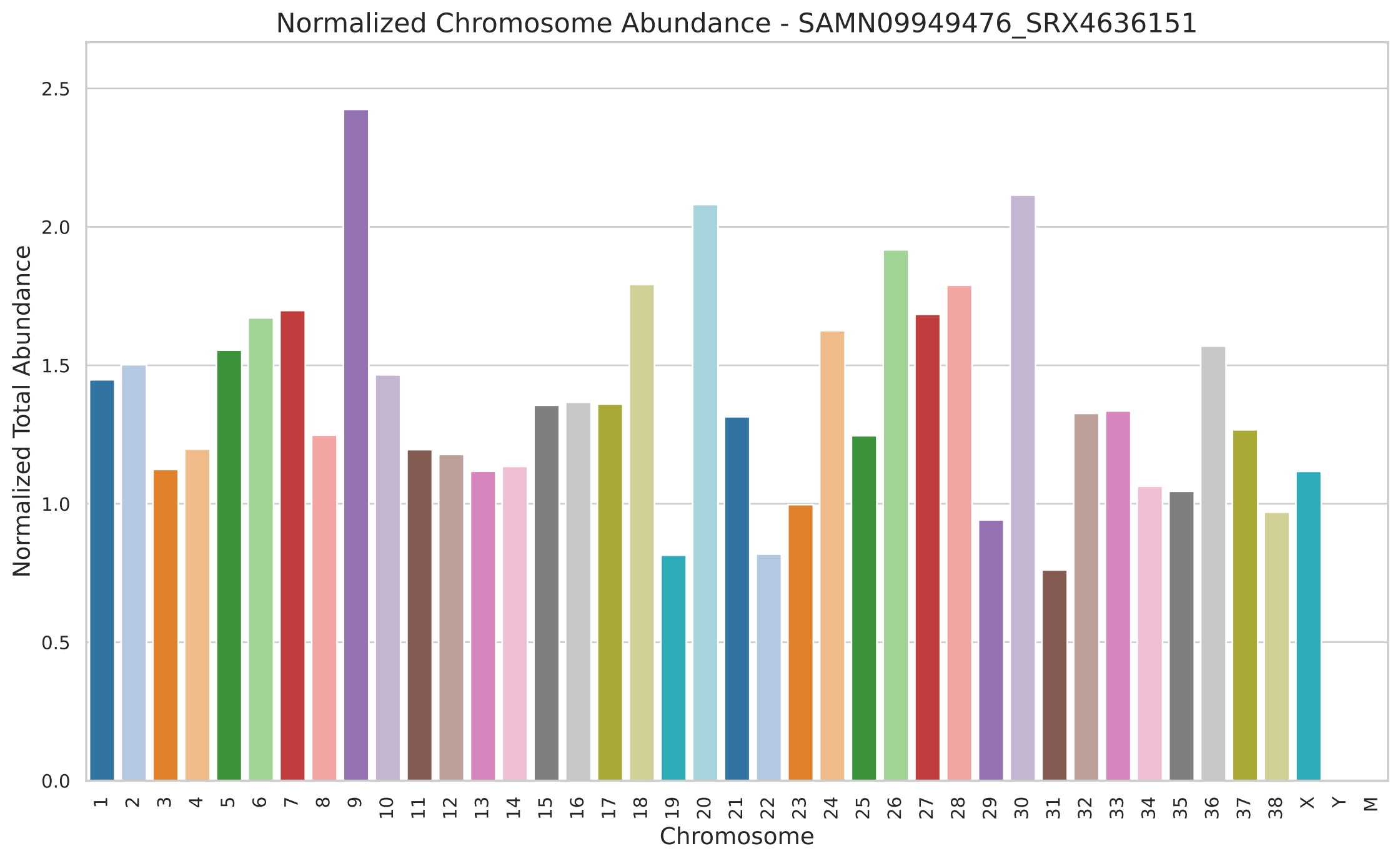

Normalized Chromosome Abundance - SAMN09948391_SRX4636138
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

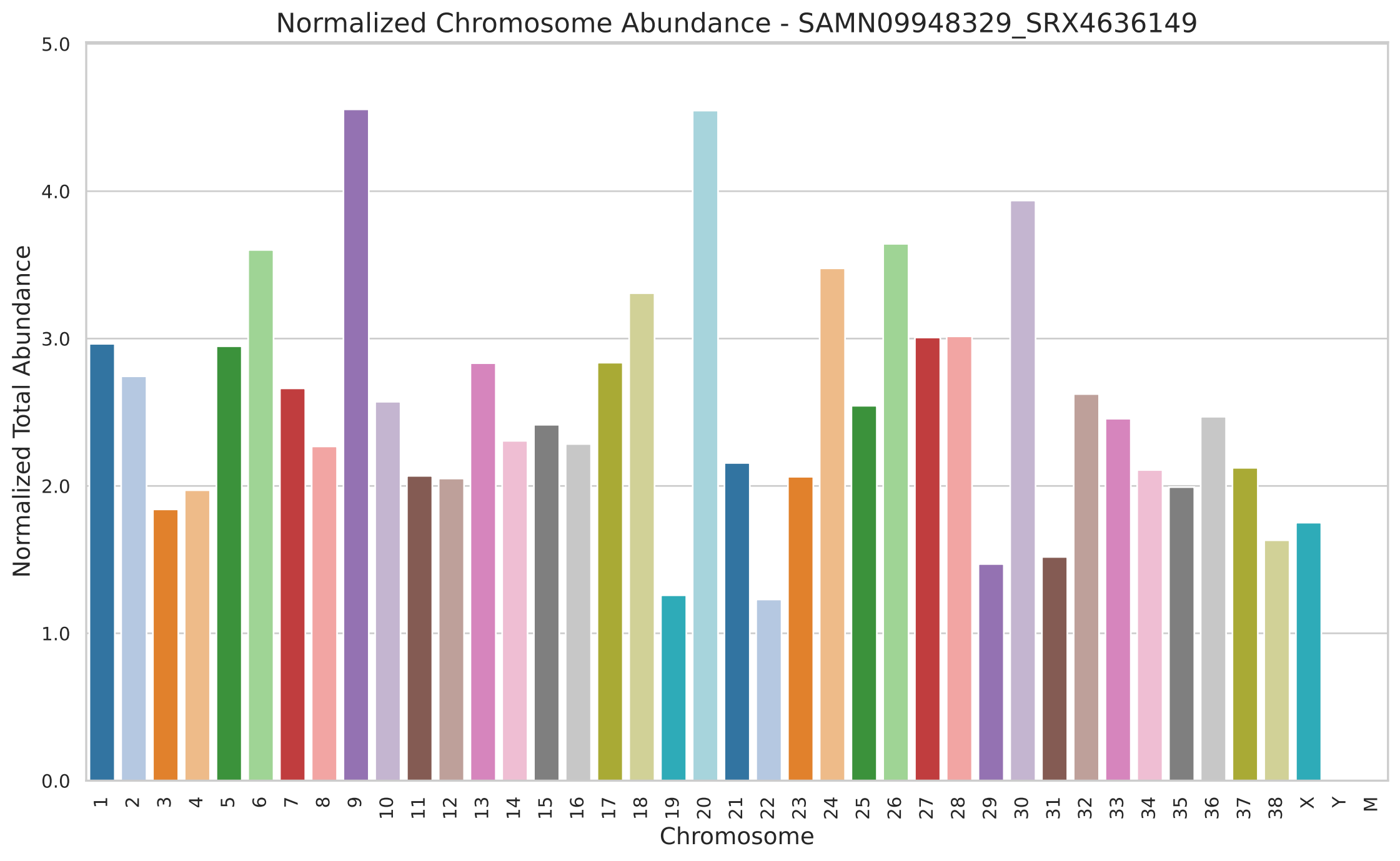

Normalized Chromosome Abundance - SAMN09949474_SRX4636153
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

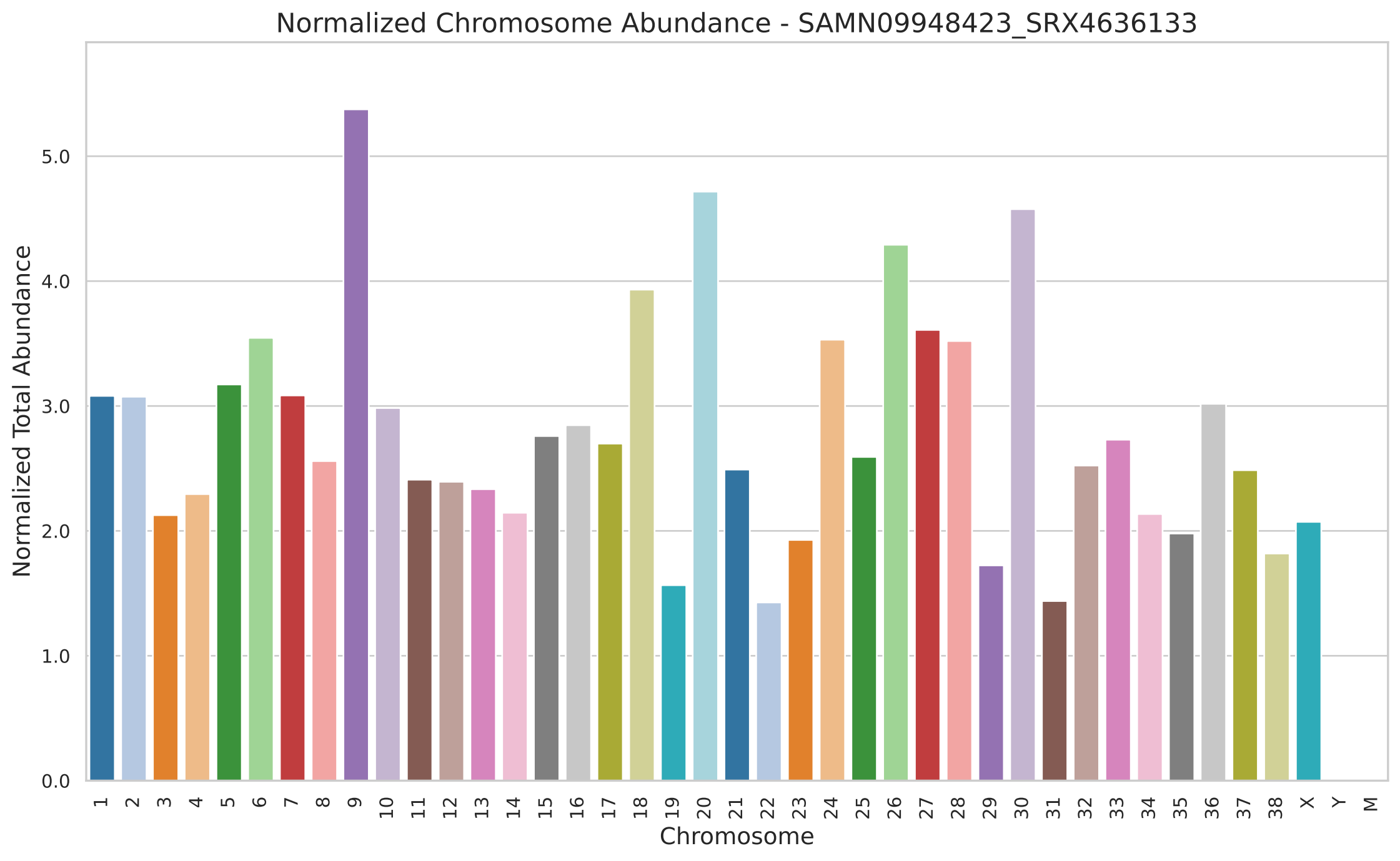

Normalized Chromosome Abundance - SAMN09948330_SRX4636146
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

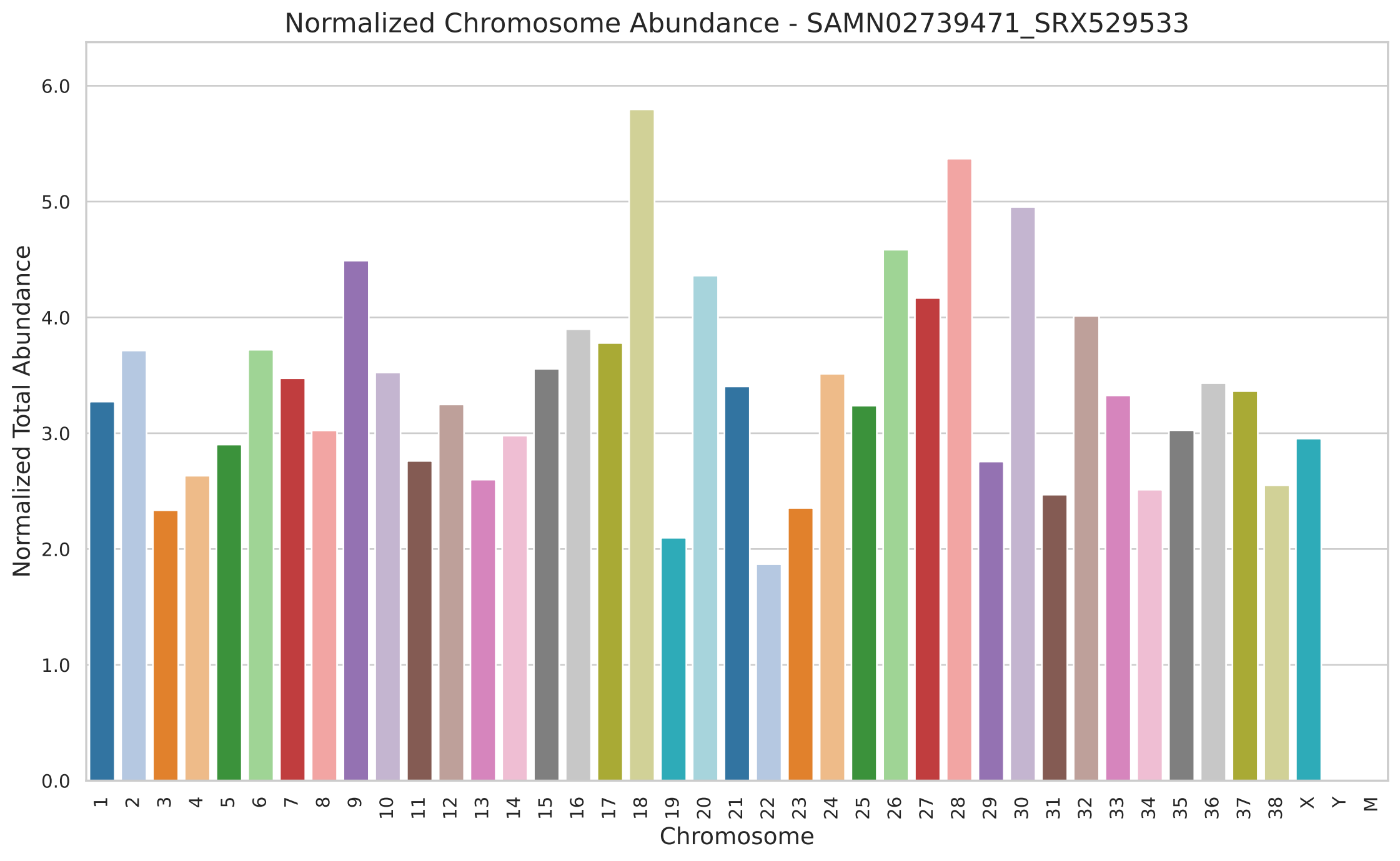

Normalized Chromosome Abundance - SAMN09949470_SRX4636157
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

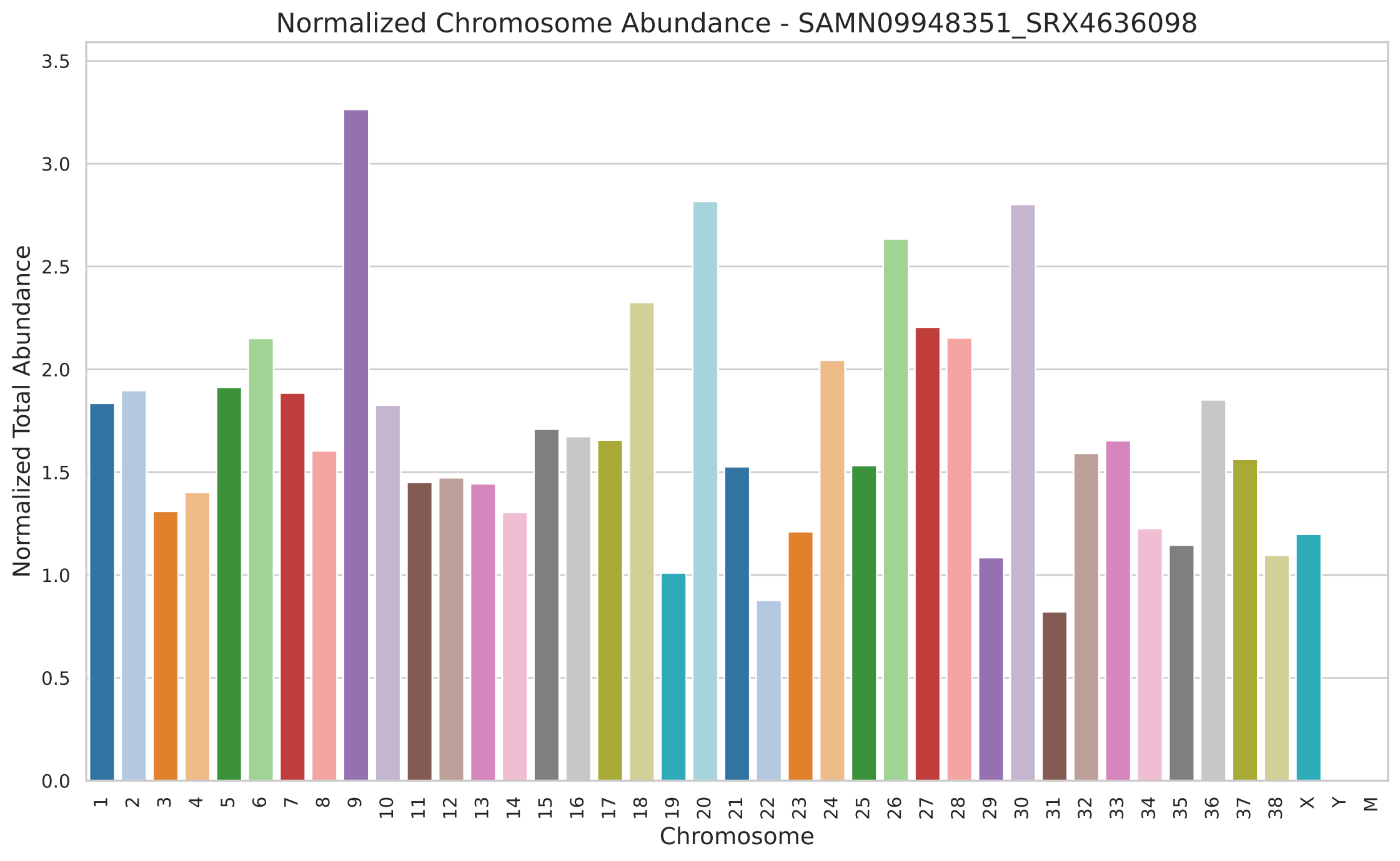

Normalized Chromosome Abundance - SAMN09949510_SRX4636142
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

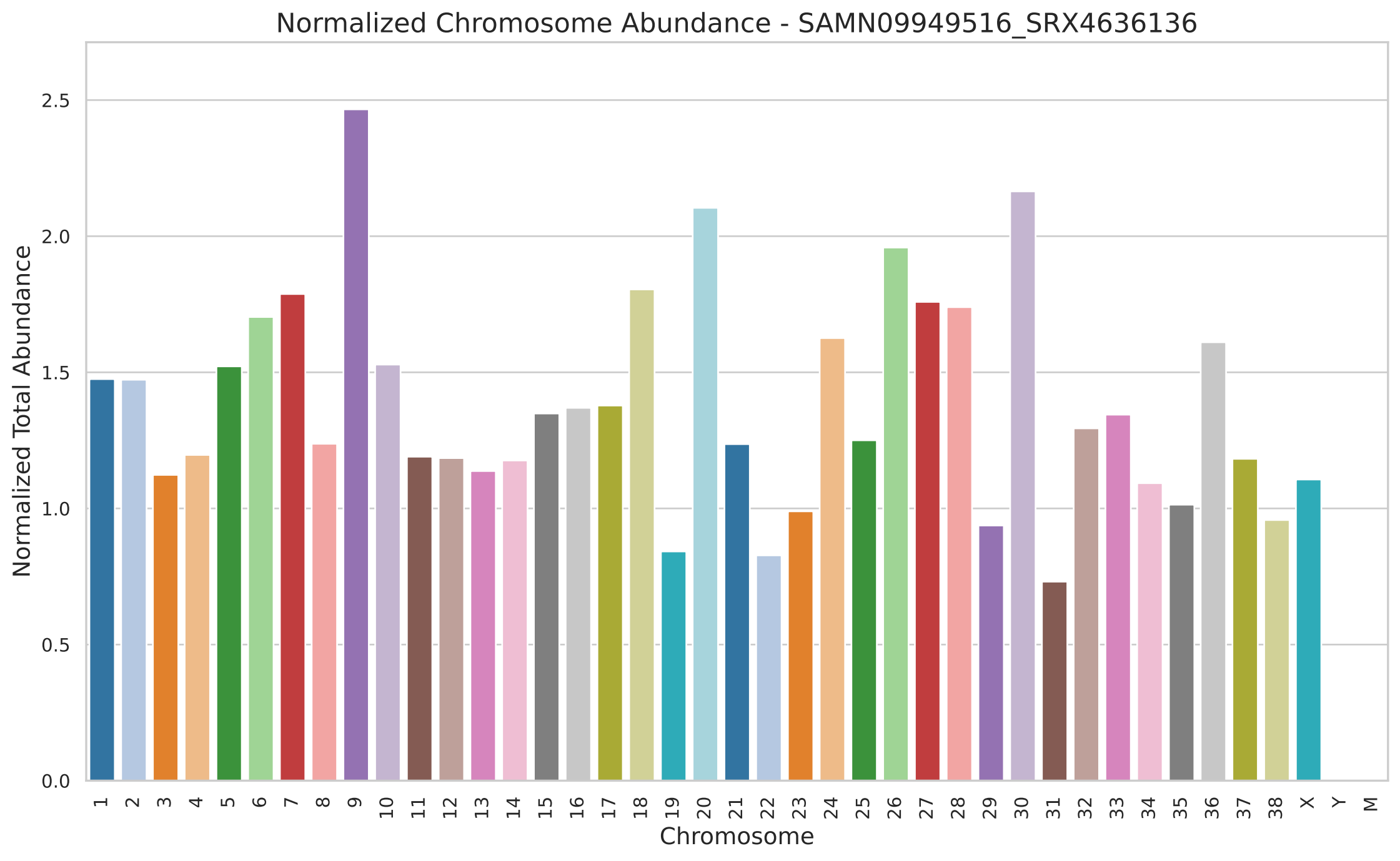

Normalized Chromosome Abundance - SAMN09949476_SRX4636151
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

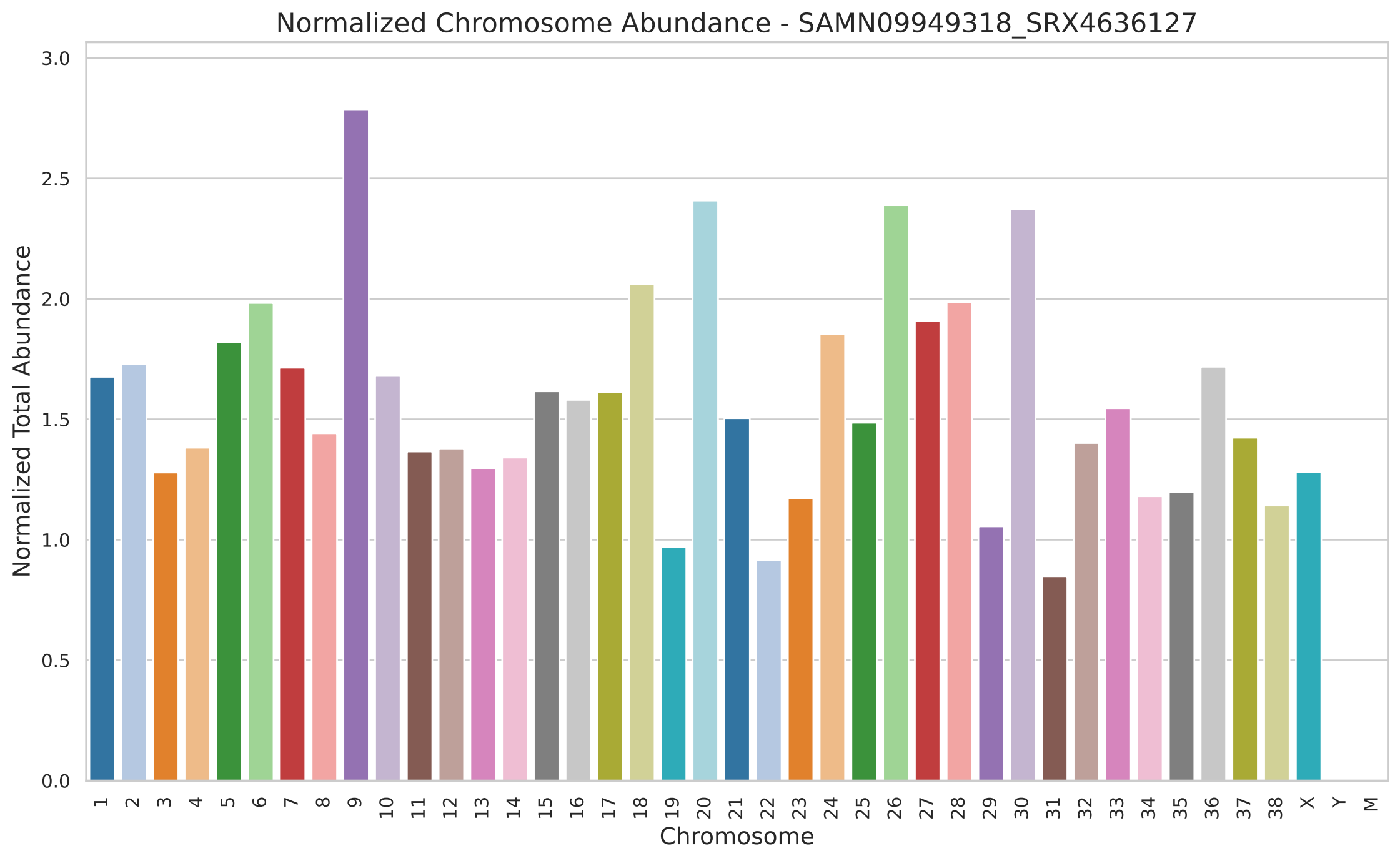

Normalized Chromosome Abundance - SAMN09948329_SRX4636149
Normalized Total Abundance
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

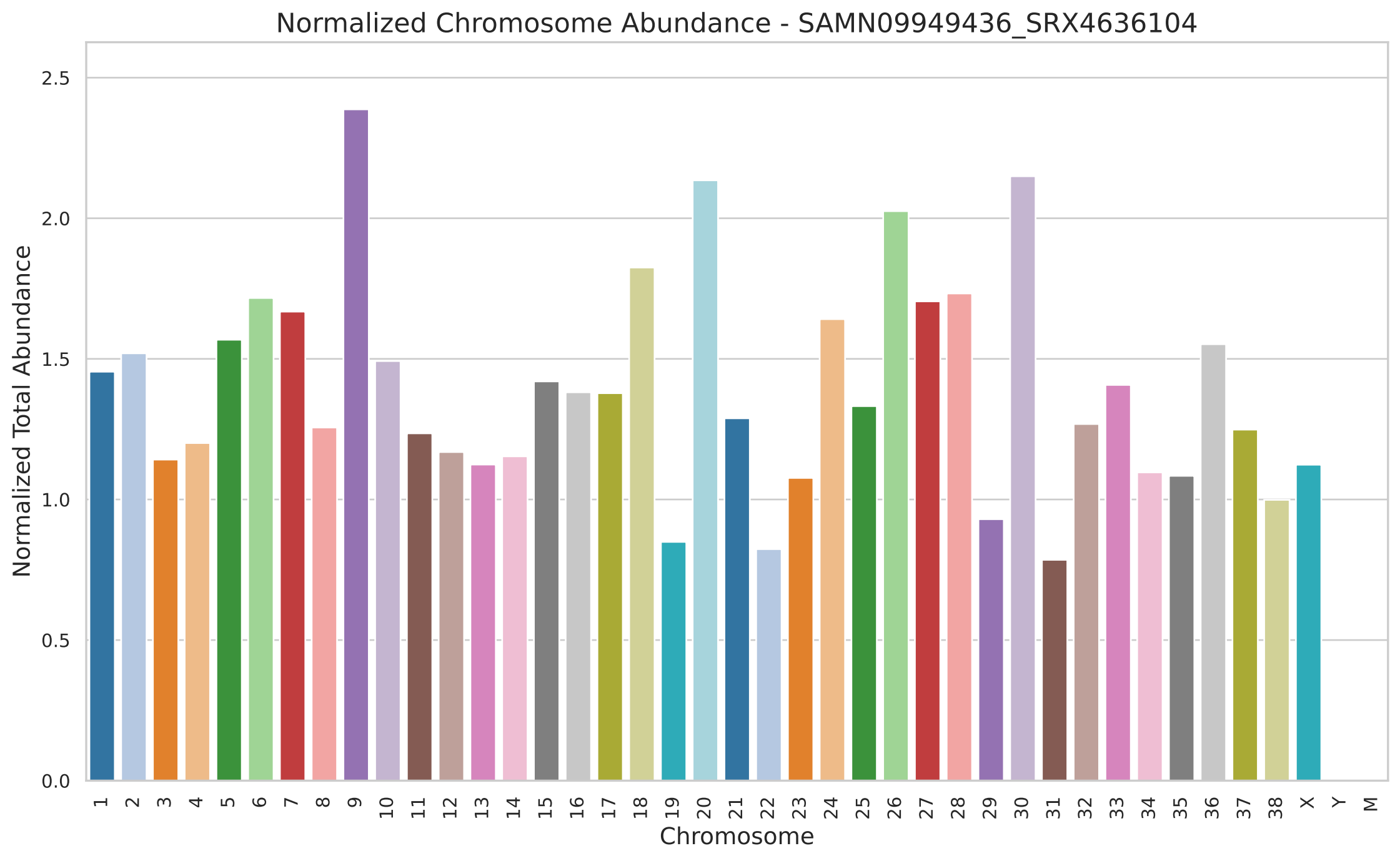

Normalized Chromosome Abundance - SAMN09948423_SRX4636133
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

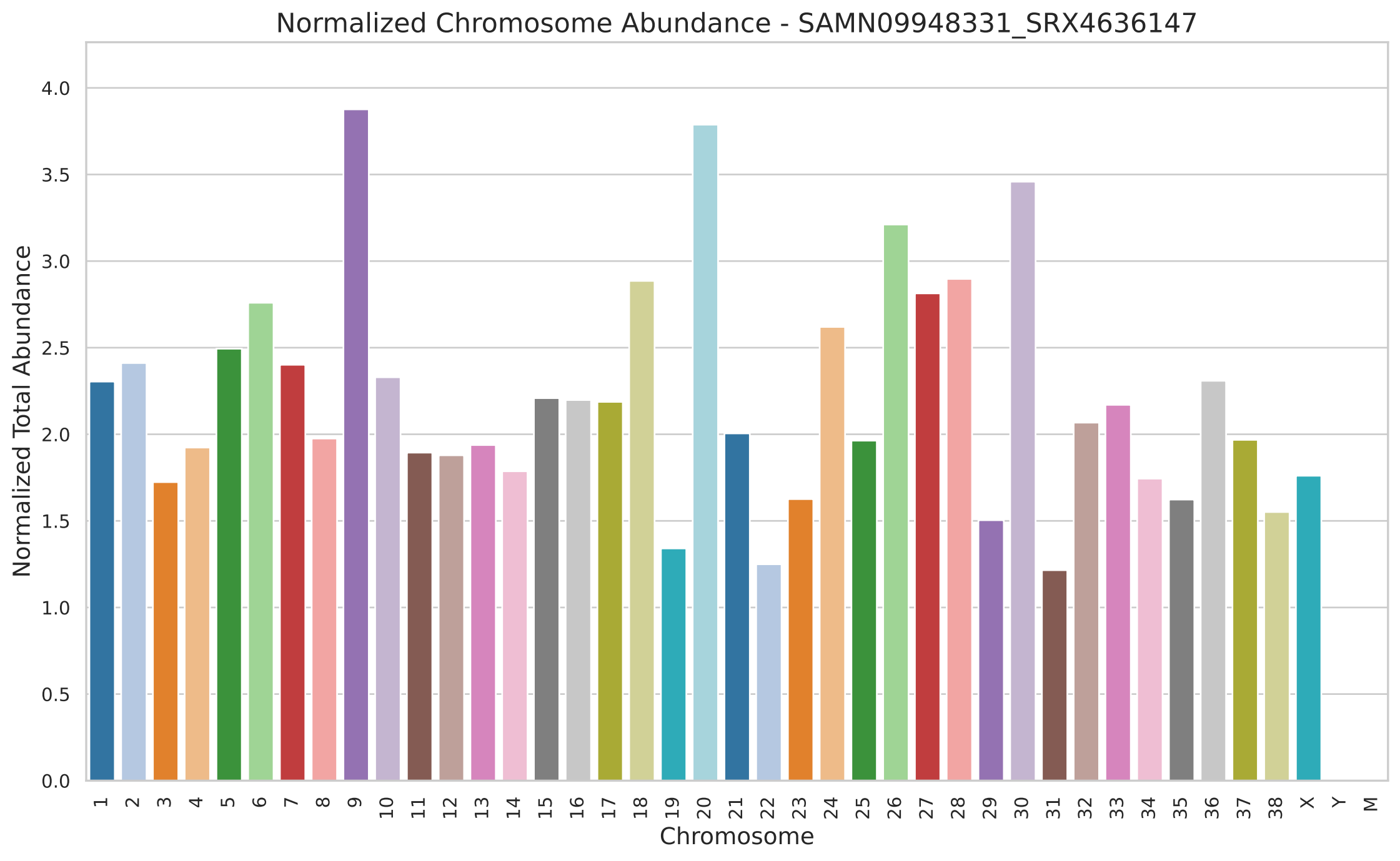

Normalized Chromosome Abundance - SAMN02739471_SRX529533
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

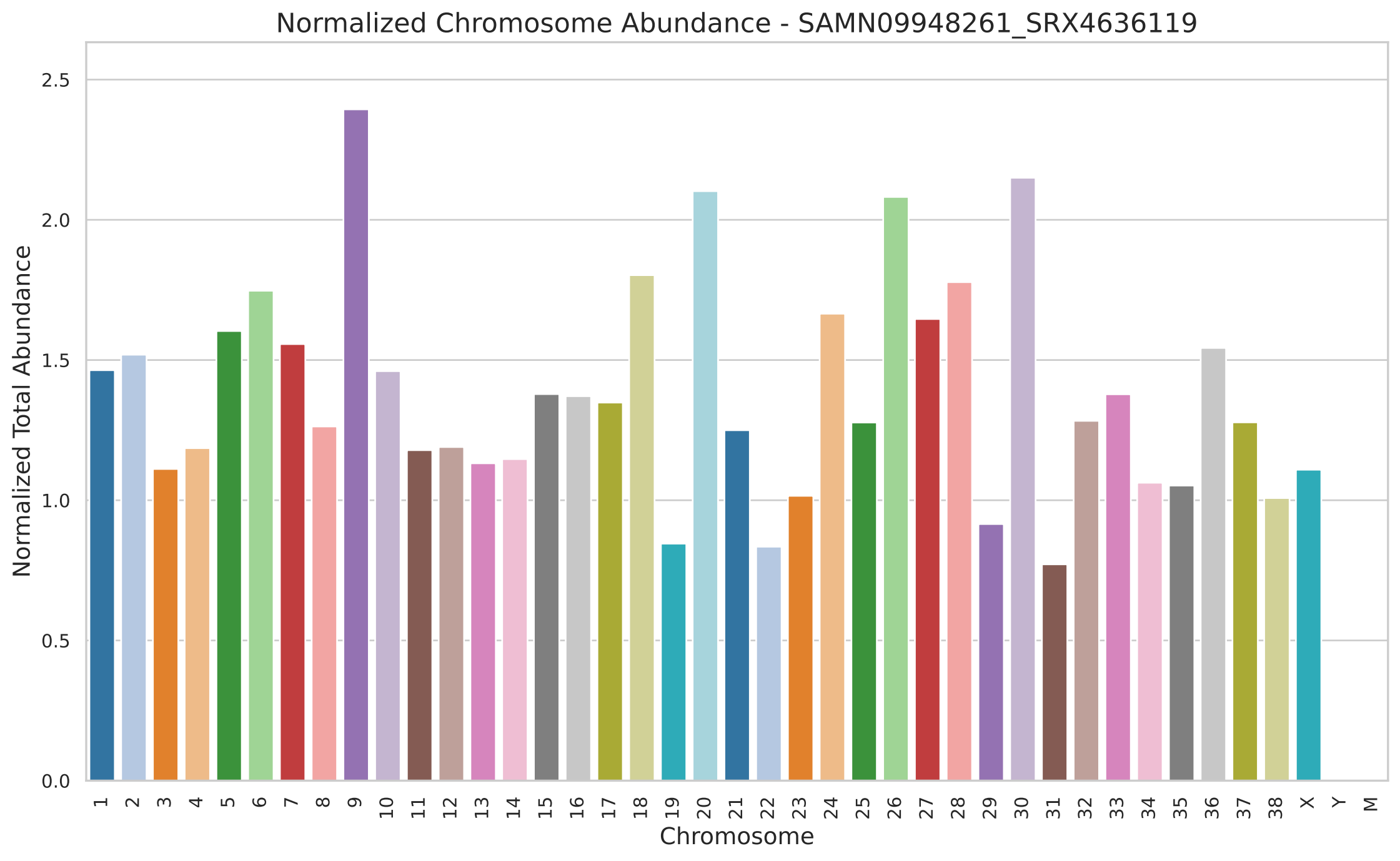

Normalized Chromosome Abundance - SAMN09948351_SRX4636098
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

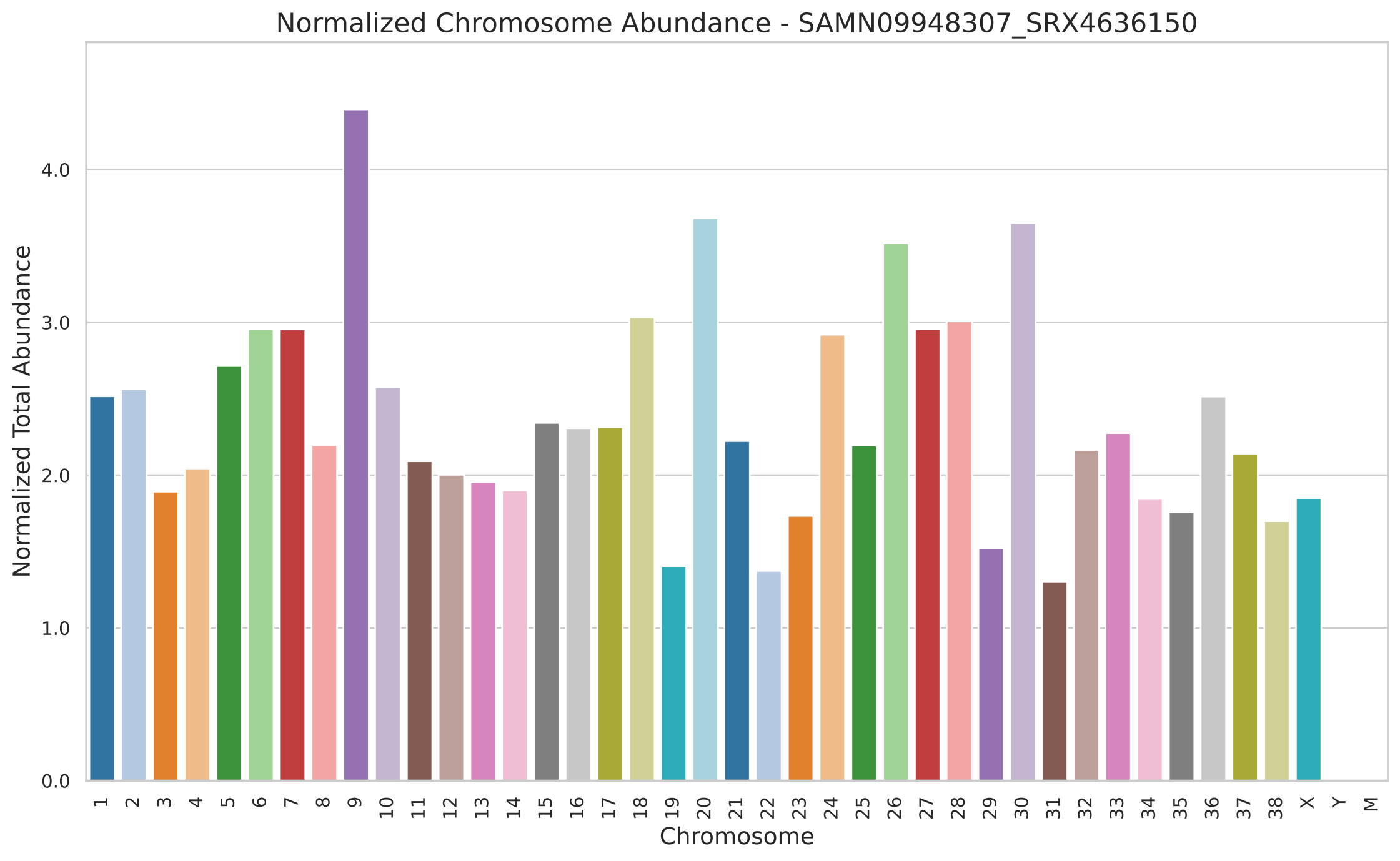

Normalized Chromosome Abundance - SAMN09949516_SRX4636136
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

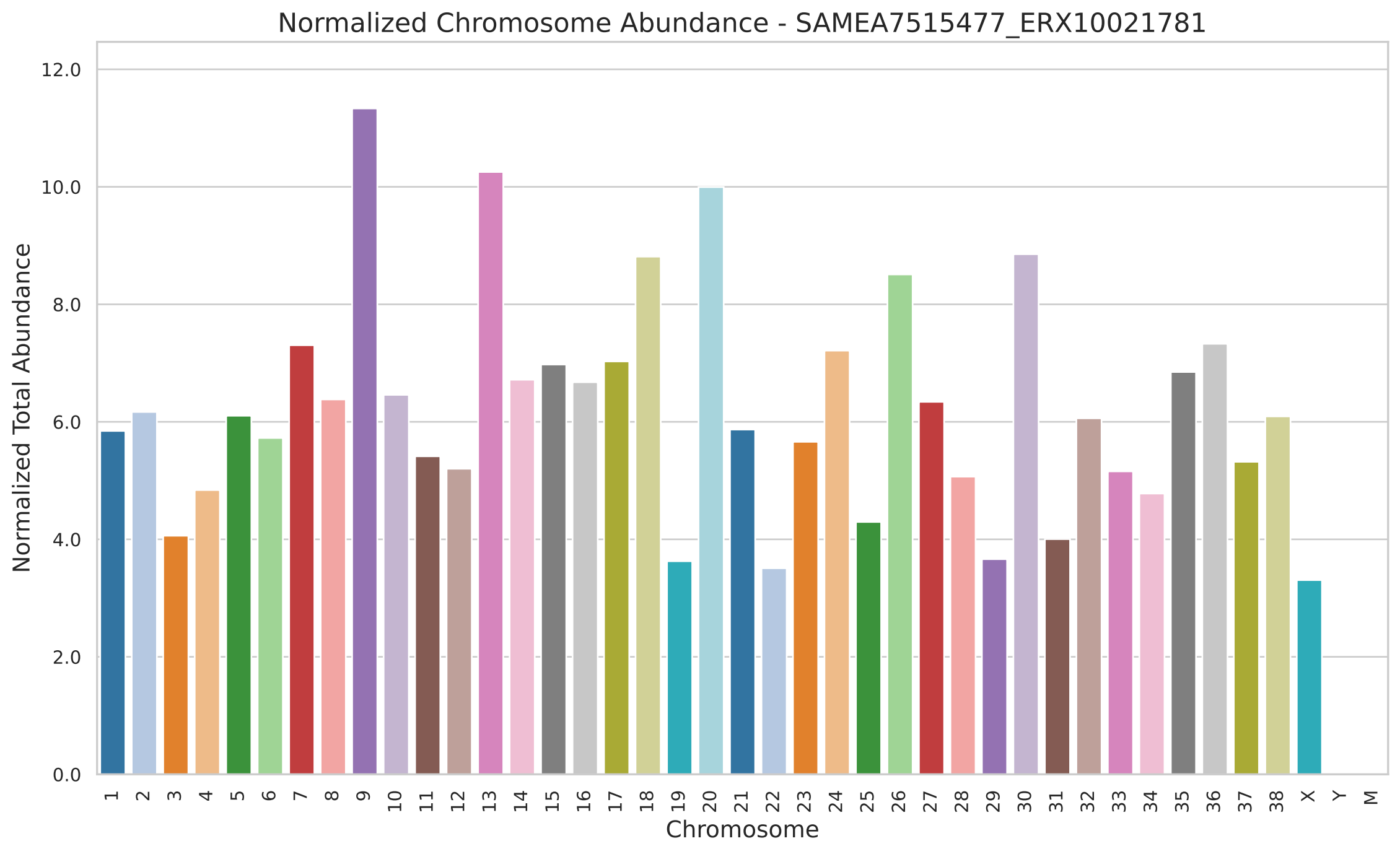

Normalized Chromosome Abundance - SAMN09949318_SRX4636127
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

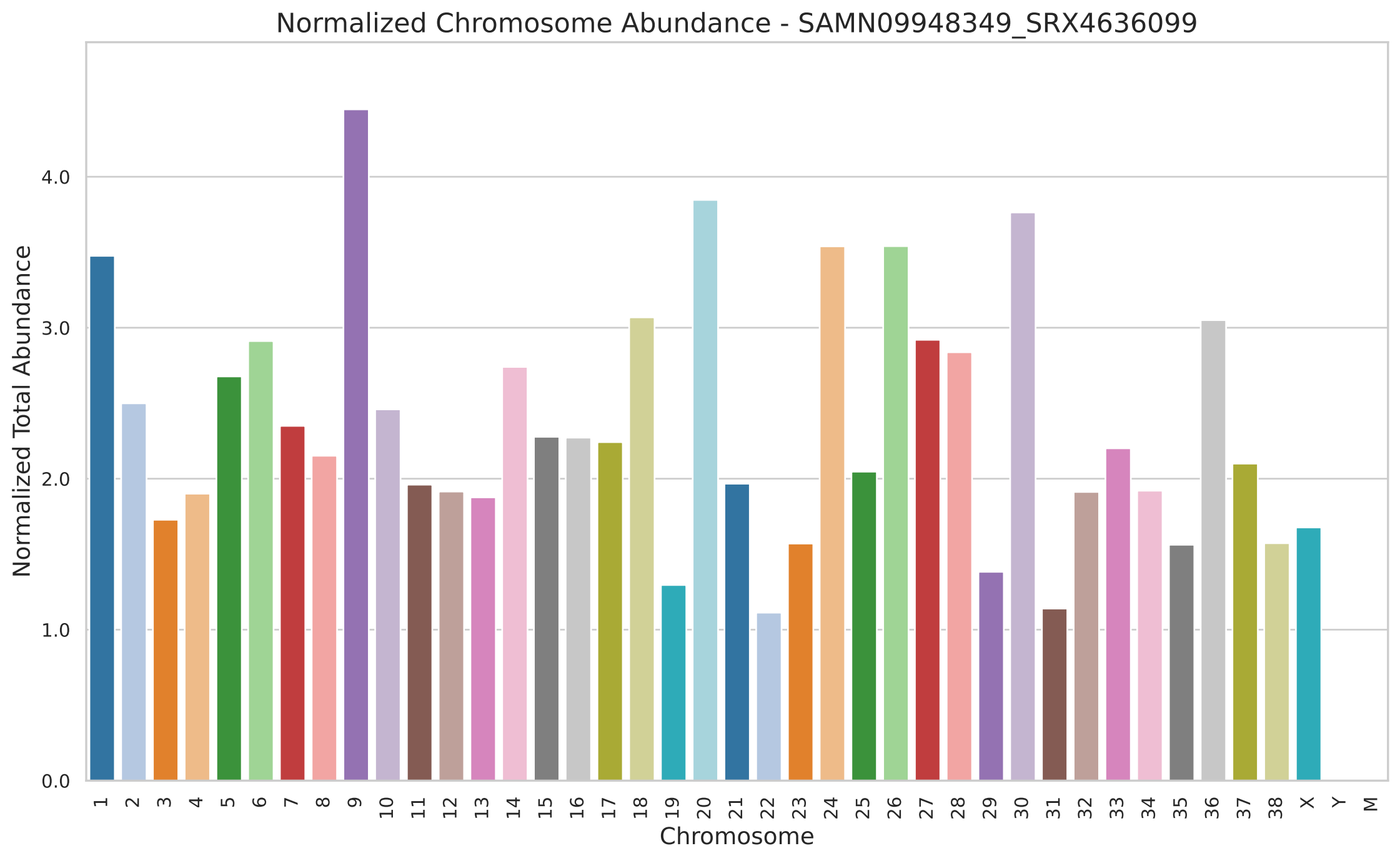

Normalized Chromosome Abundance - SAMN09949436_SRX4636104
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

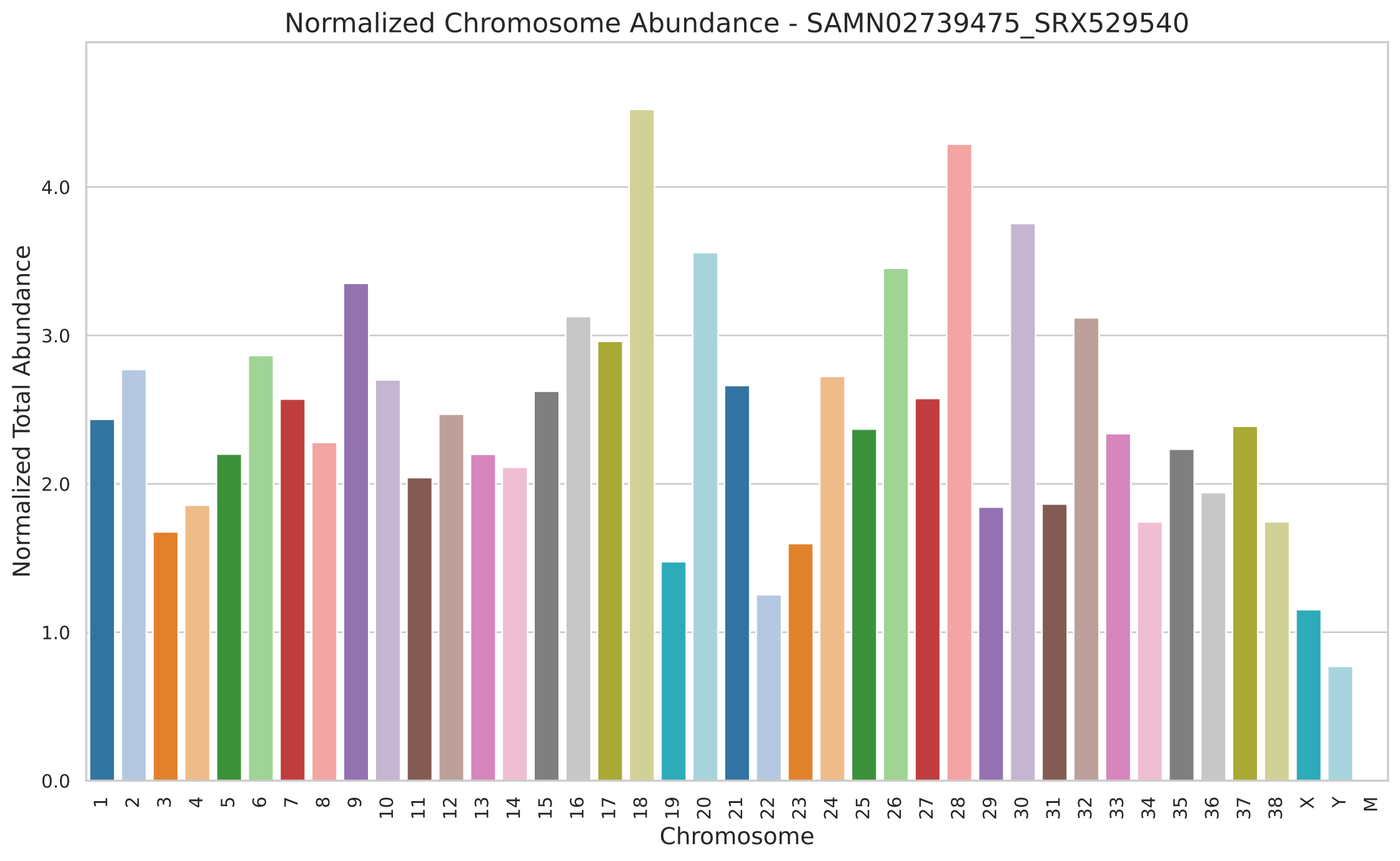

Normalized Chromosome Abundance - SAMN09948331_SRX4636147
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

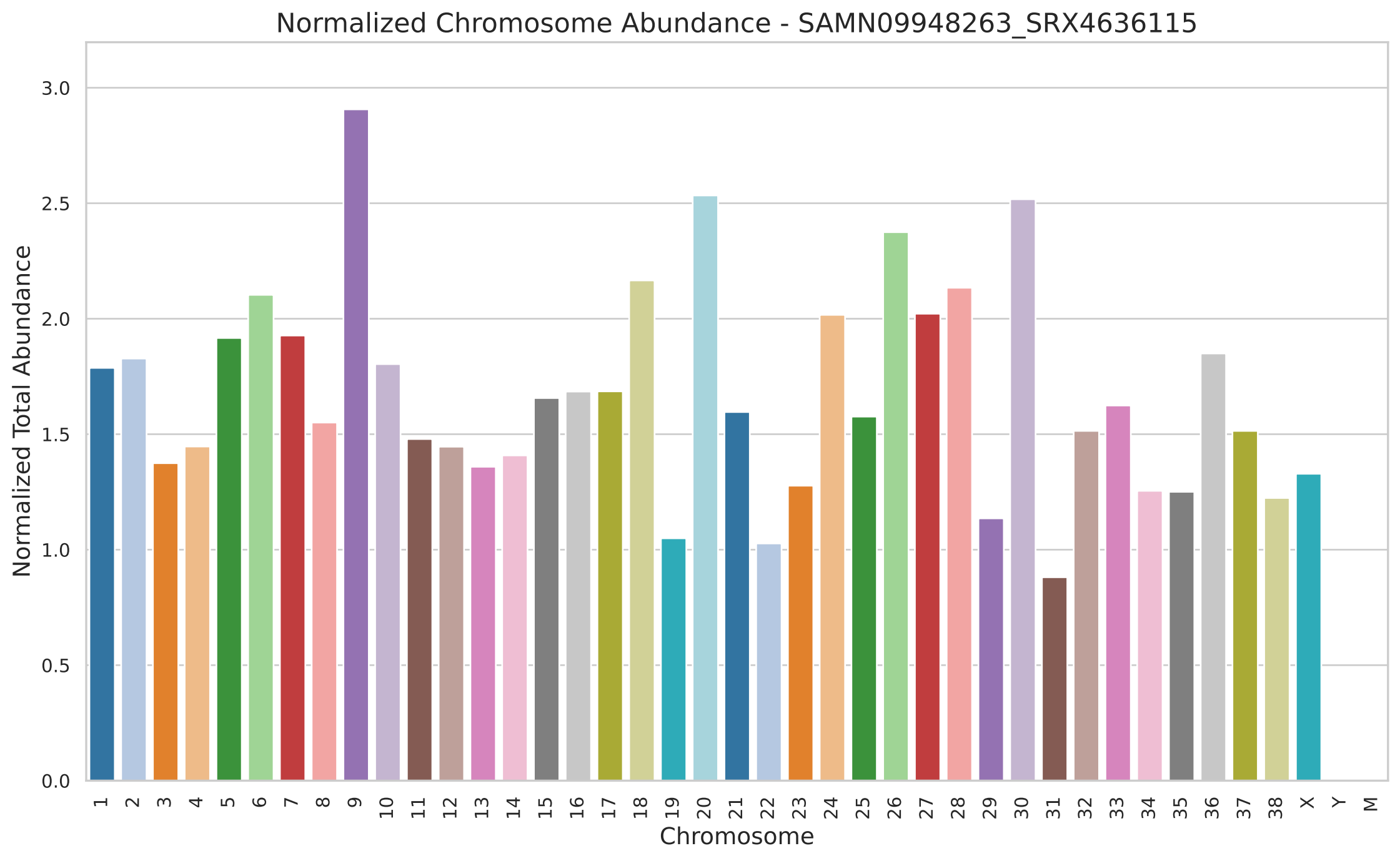

Normalized Chromosome Abundance - SAMN09948261_SRX4636119
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

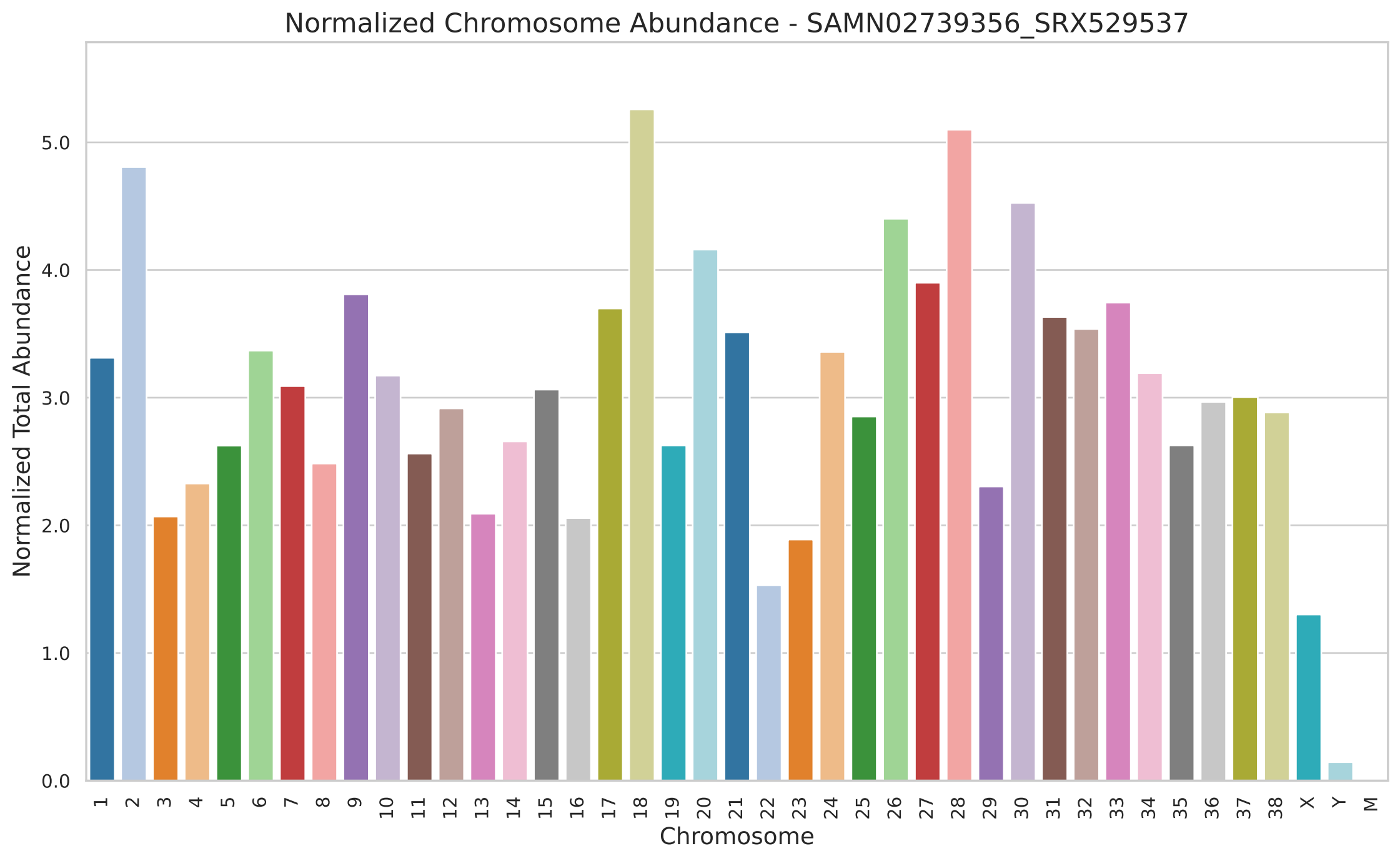

Normalized Chromosome Abundance - SAMN09948307_SRX4636150
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

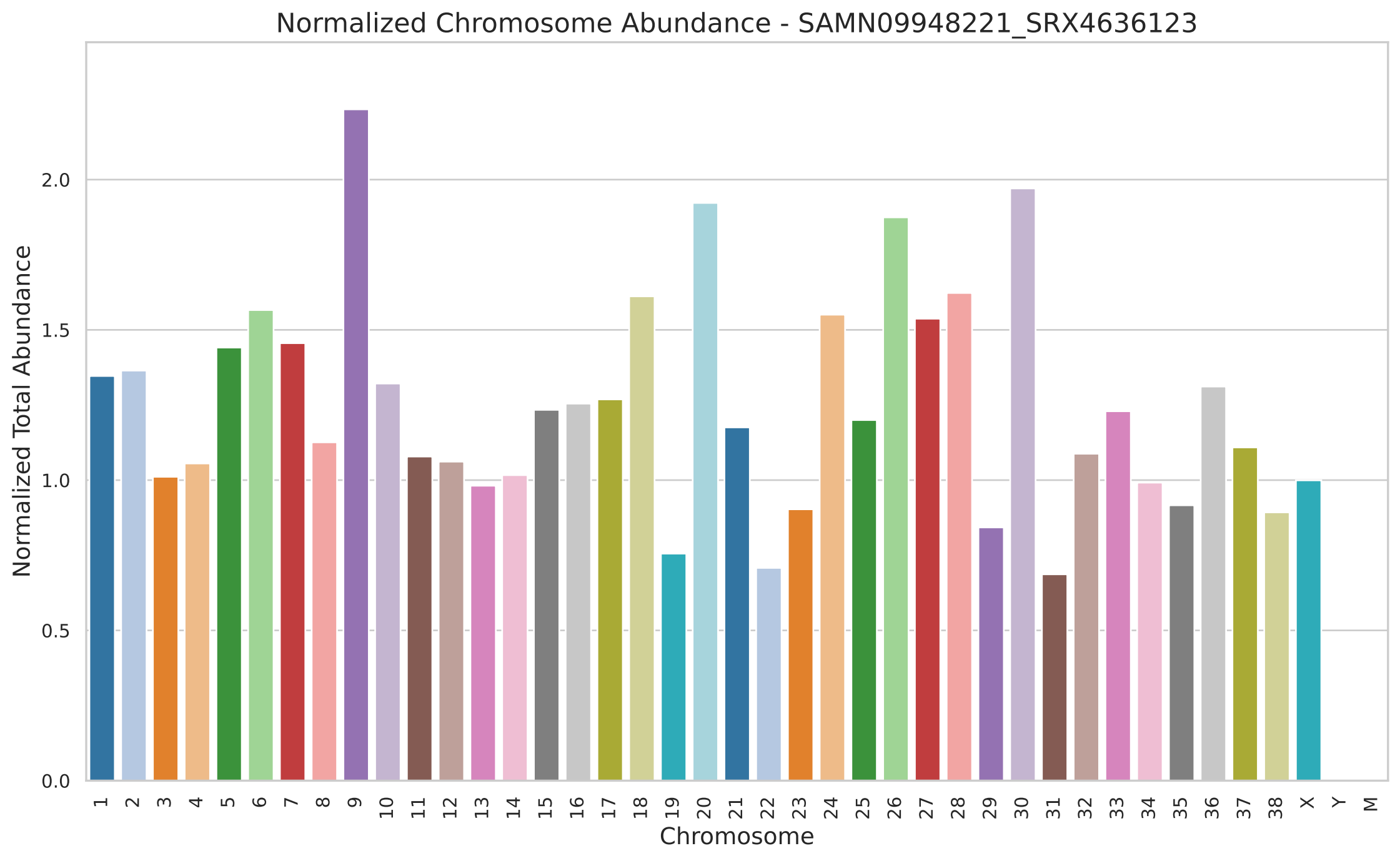

Normalized Chromosome Abundance - SAMEA7515477_ERX10021781
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
12.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

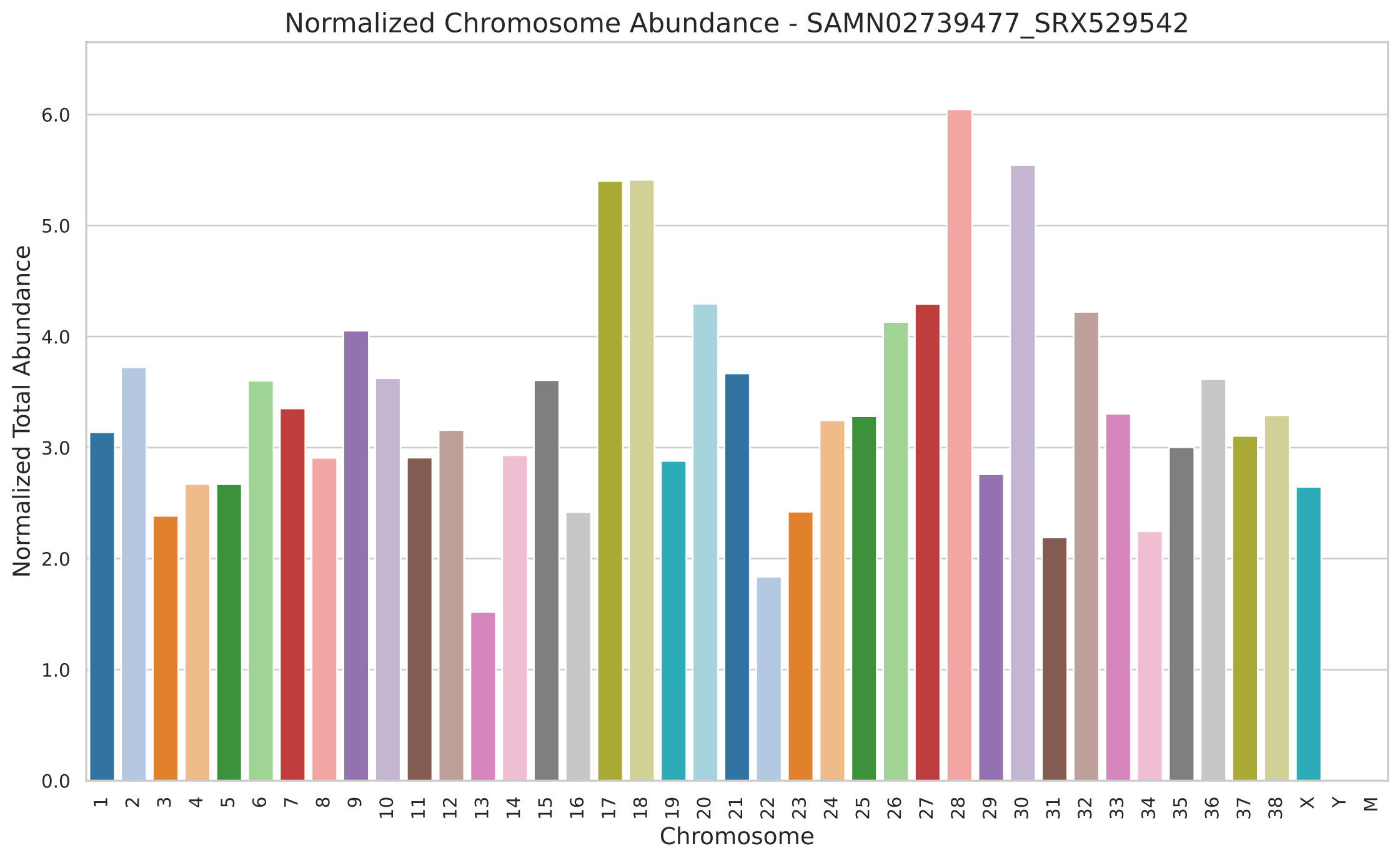

Normalized Chromosome Abundance - SAMN09948349_SRX4636099
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

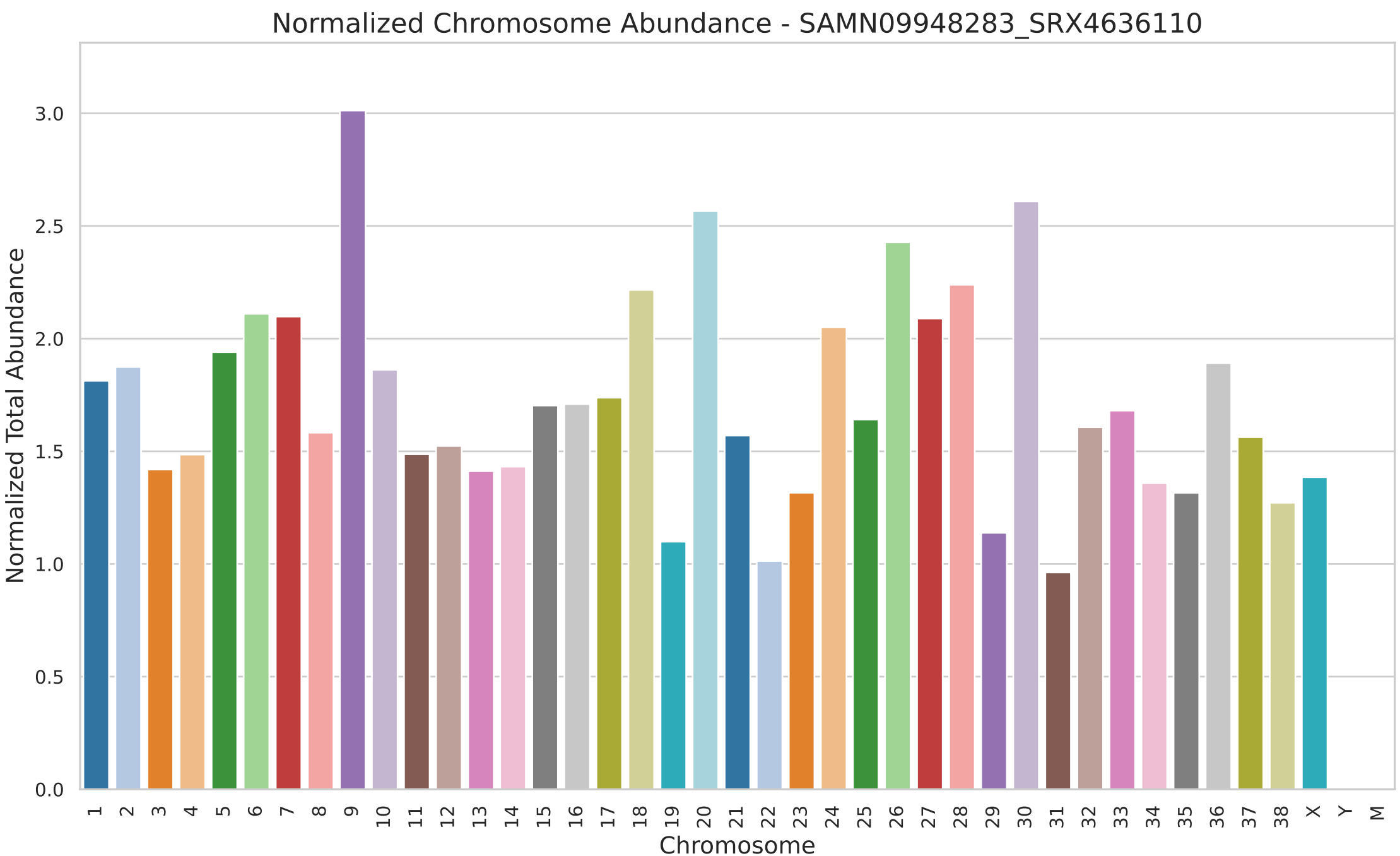

Normalized Chromosome Abundance - SAMN02739475_SRX529540
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

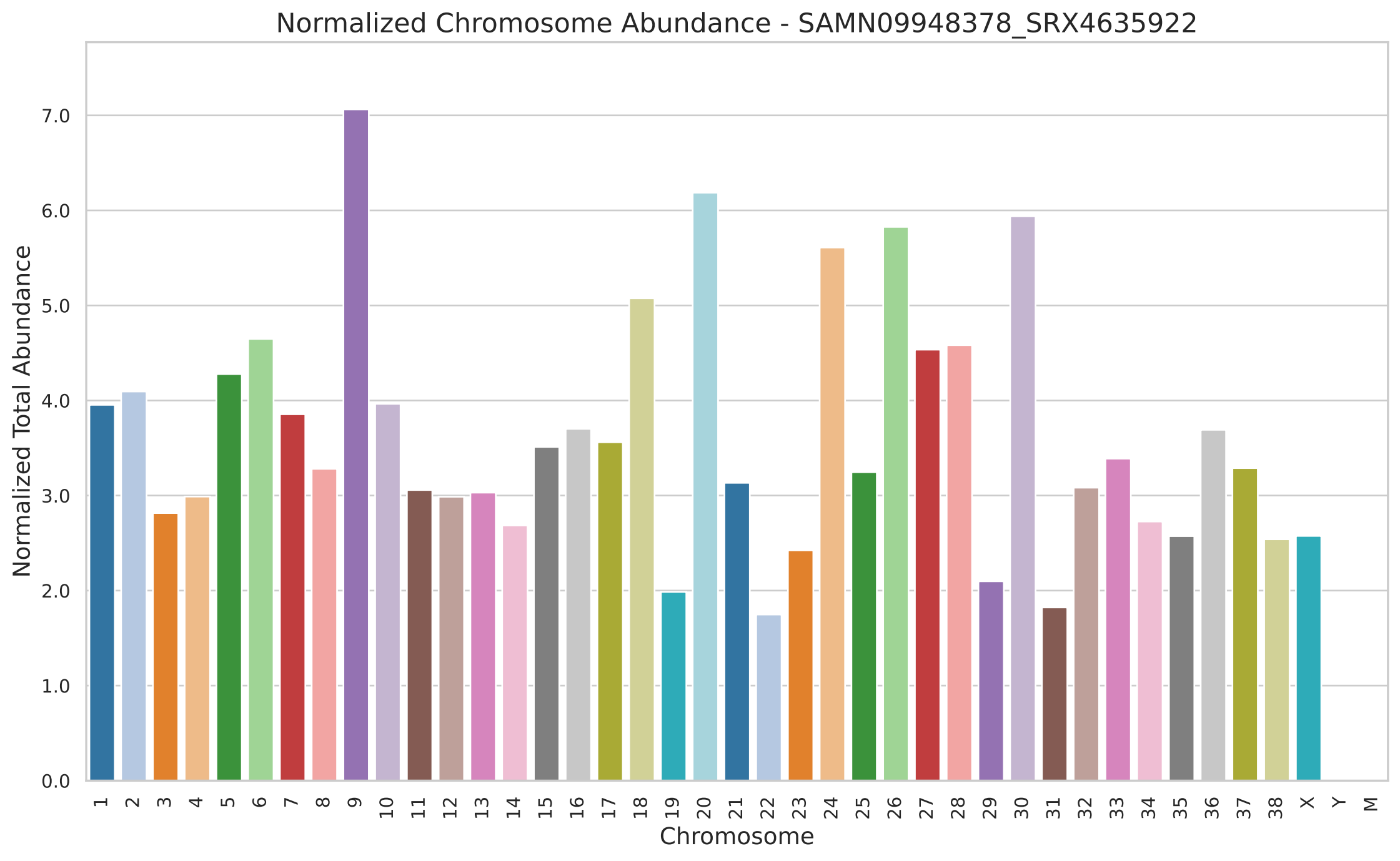

Normalized Chromosome Abundance - SAMN09948263_SRX4636115
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

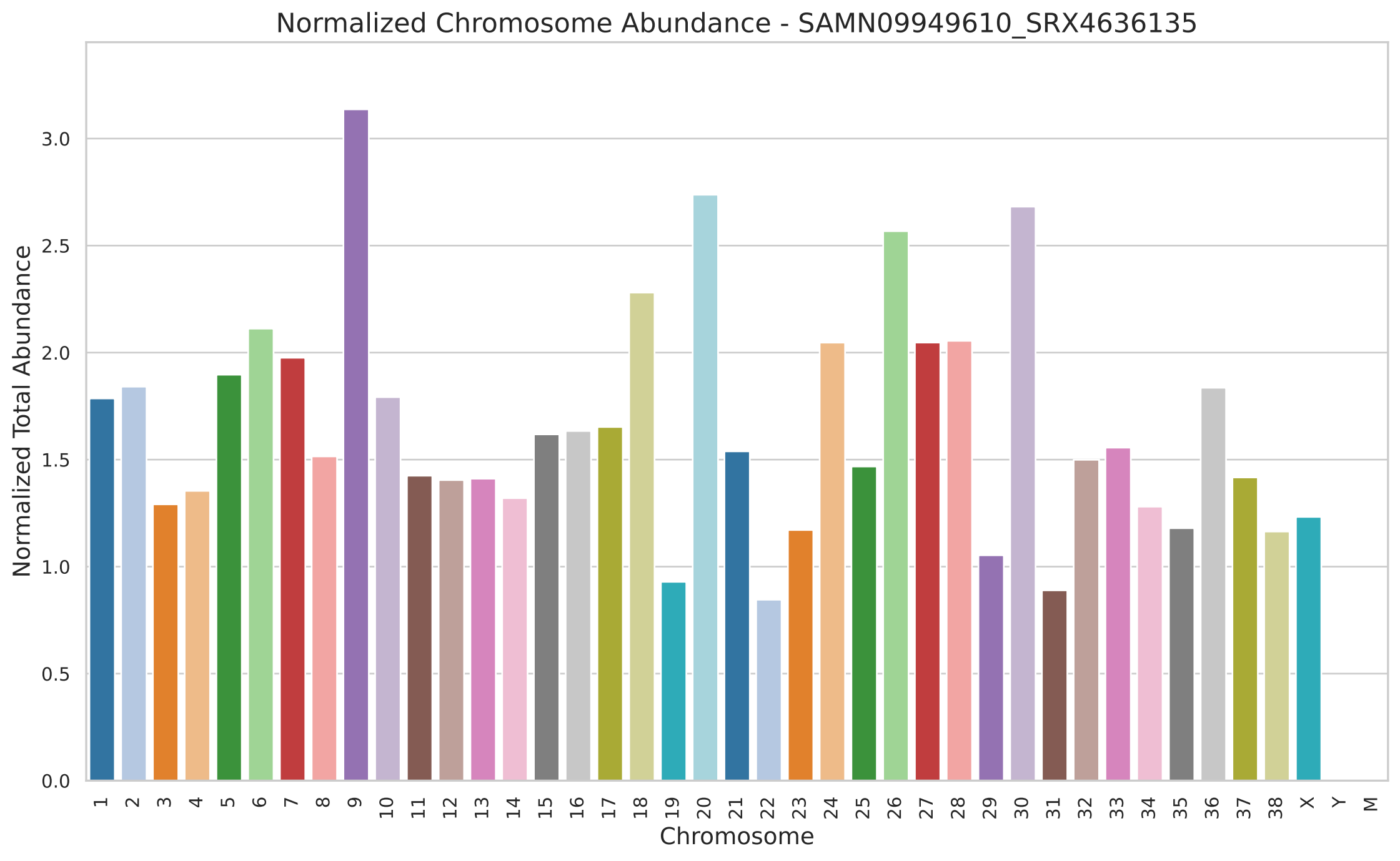

Normalized Chromosome Abundance - SAMN02739356_SRX529537
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

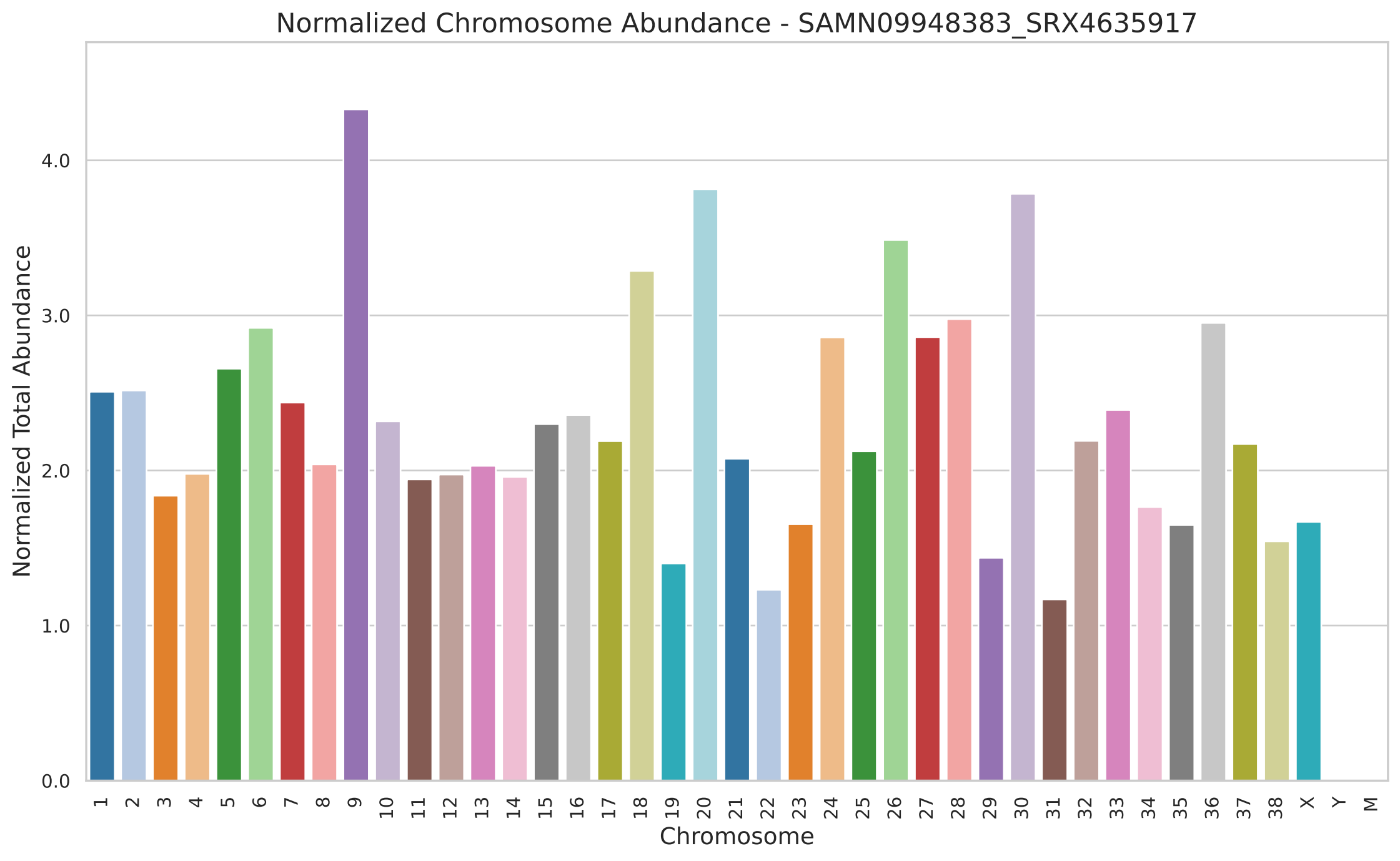

Normalized Chromosome Abundance - SAMN09948221_SRX4636123
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

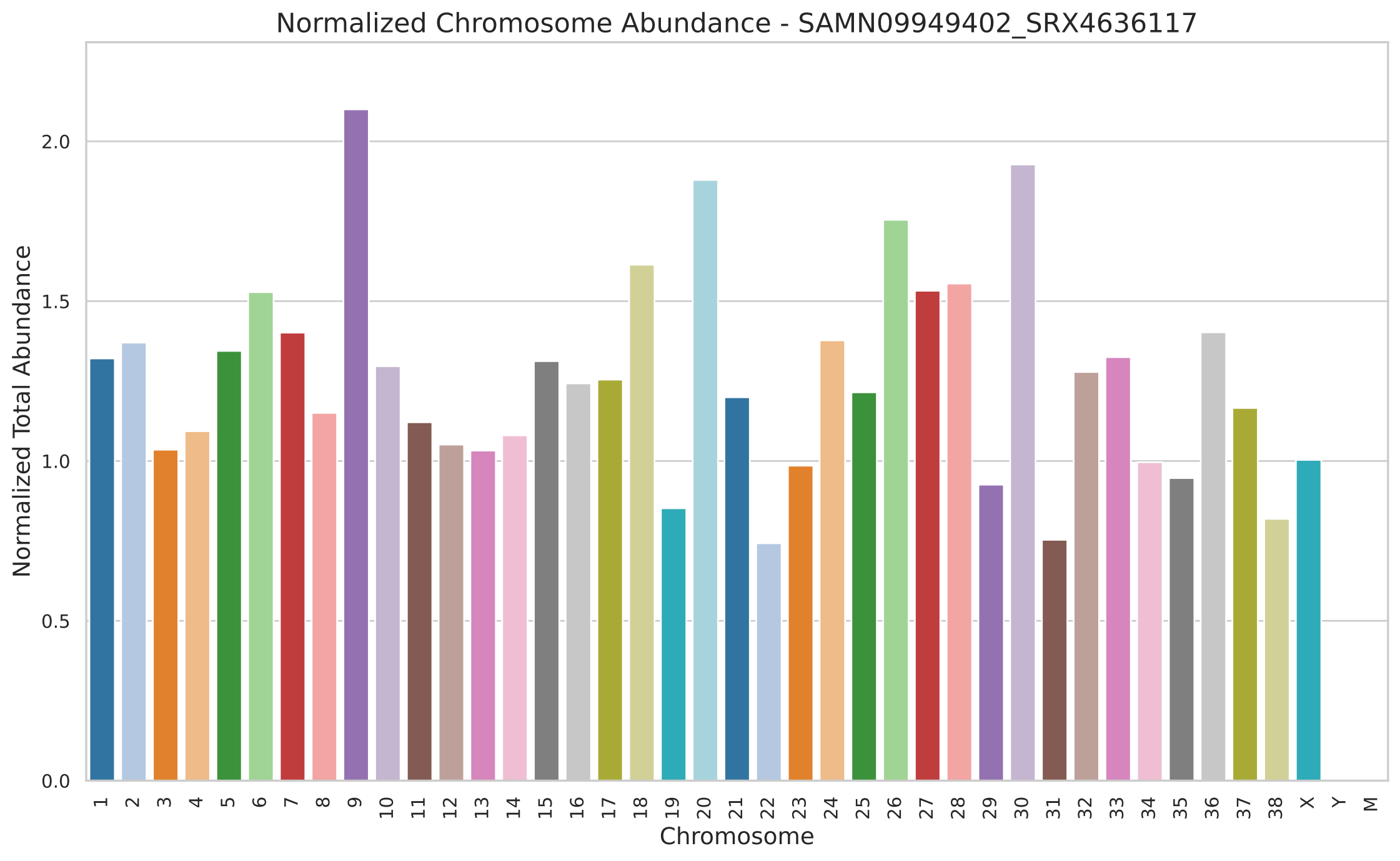

Normalized Chromosome Abundance - SAMN02739477_SRX529542
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

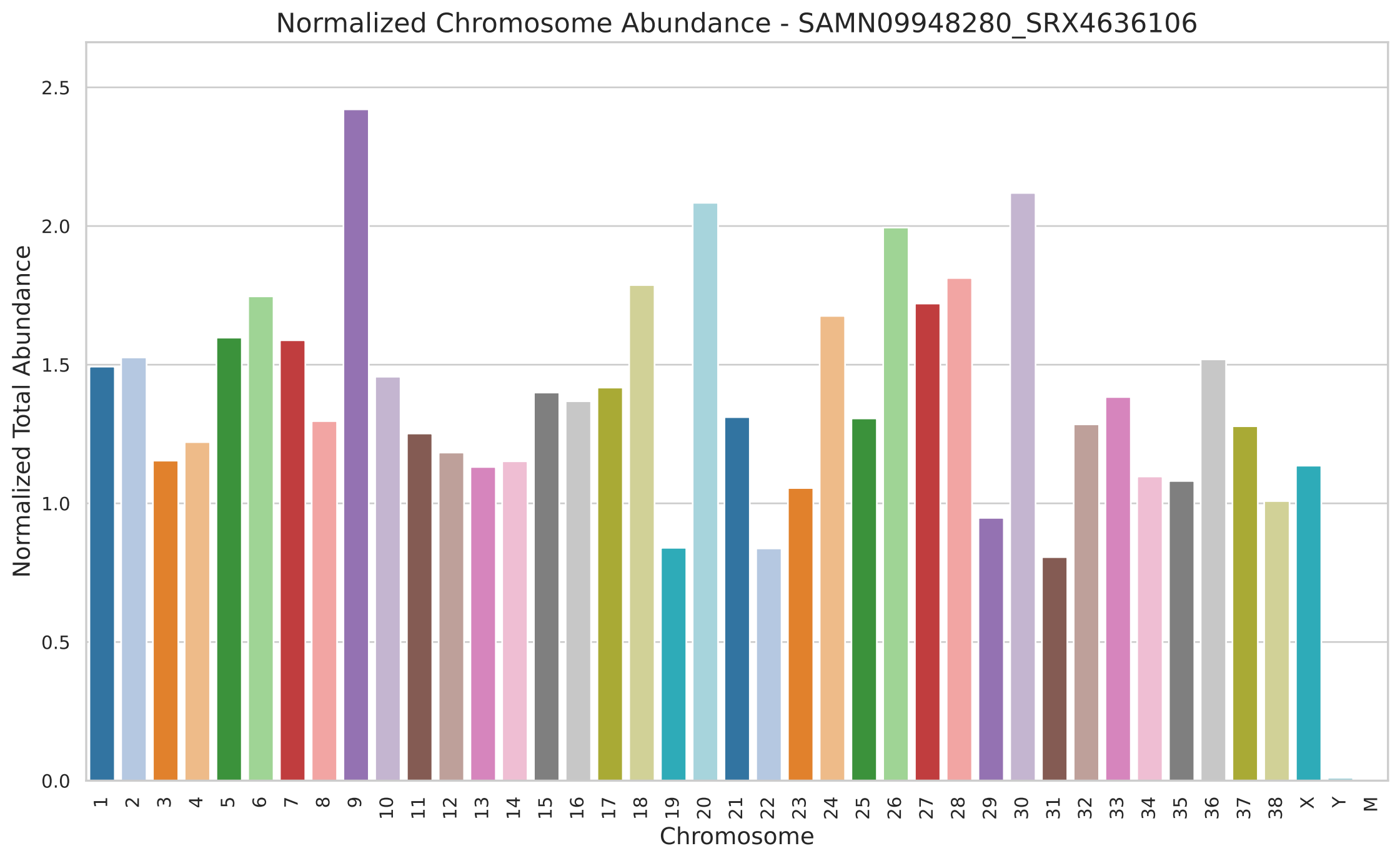

Normalized Chromosome Abundance - SAMN09948283_SRX4636110
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

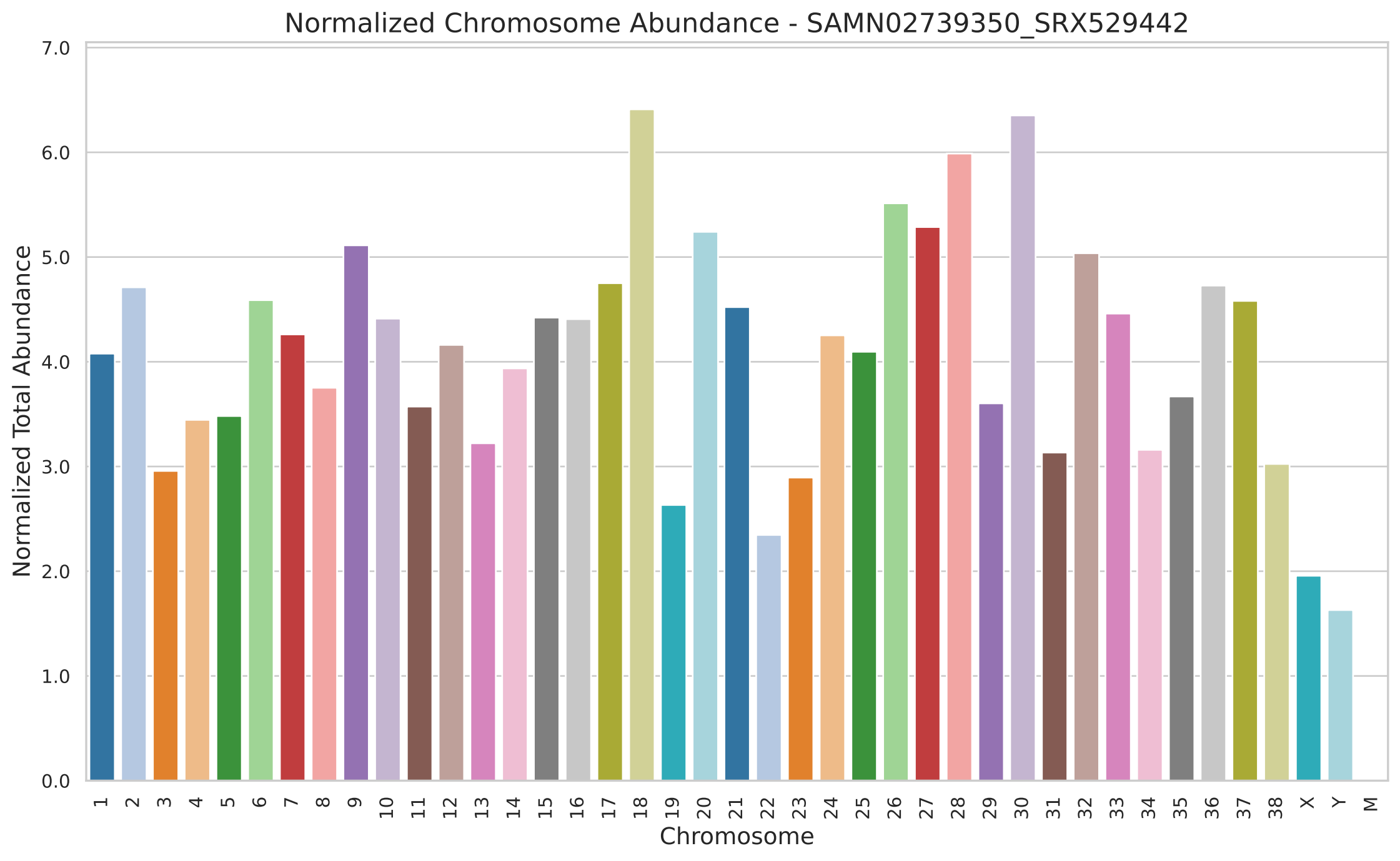

Normalized Chromosome Abundance - SAMN09948378_SRX4635922
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

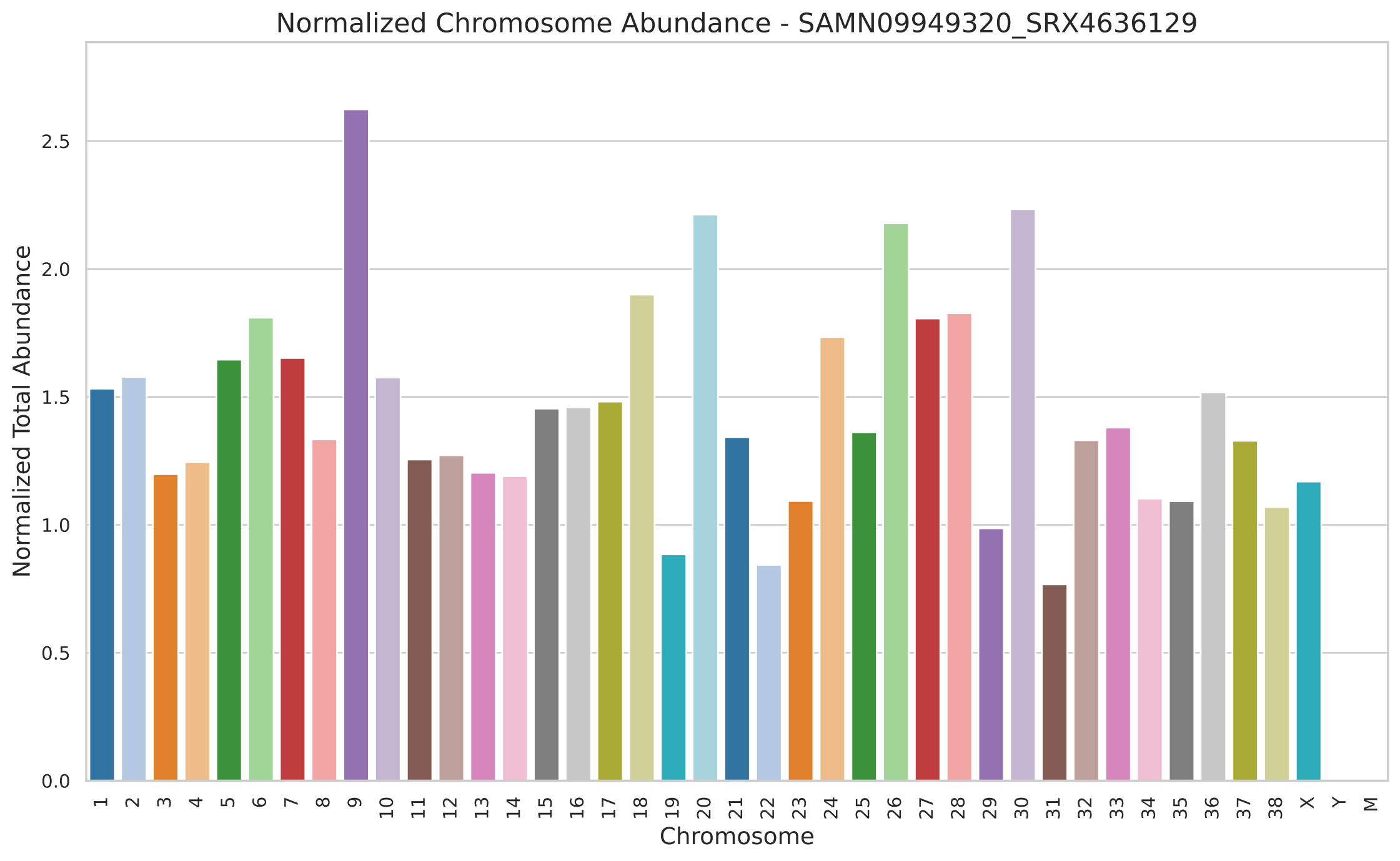

Normalized Chromosome Abundance - SAMN09949610_SRX4636135
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

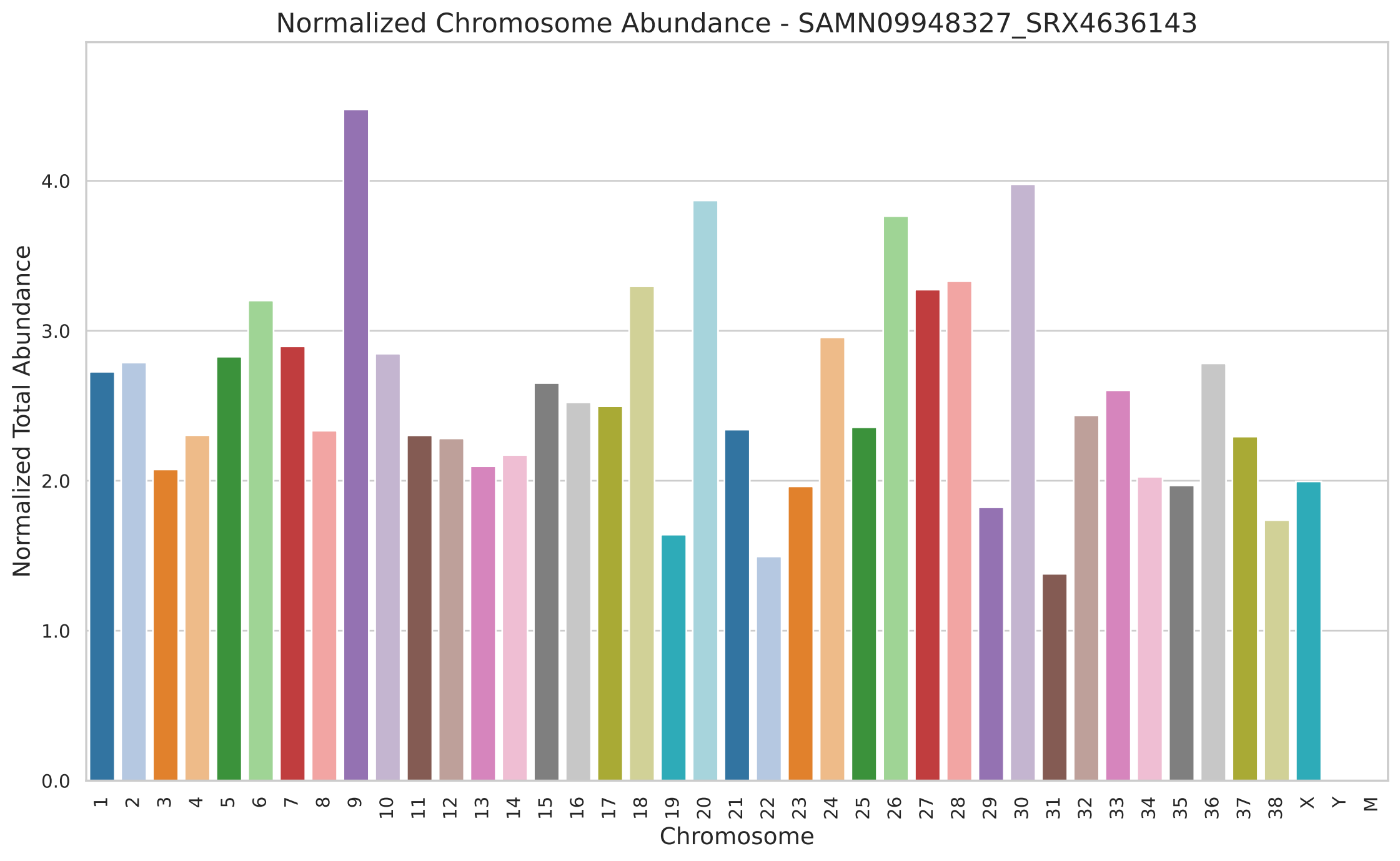

Normalized Chromosome Abundance - SAMN09948383_SRX4635917
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

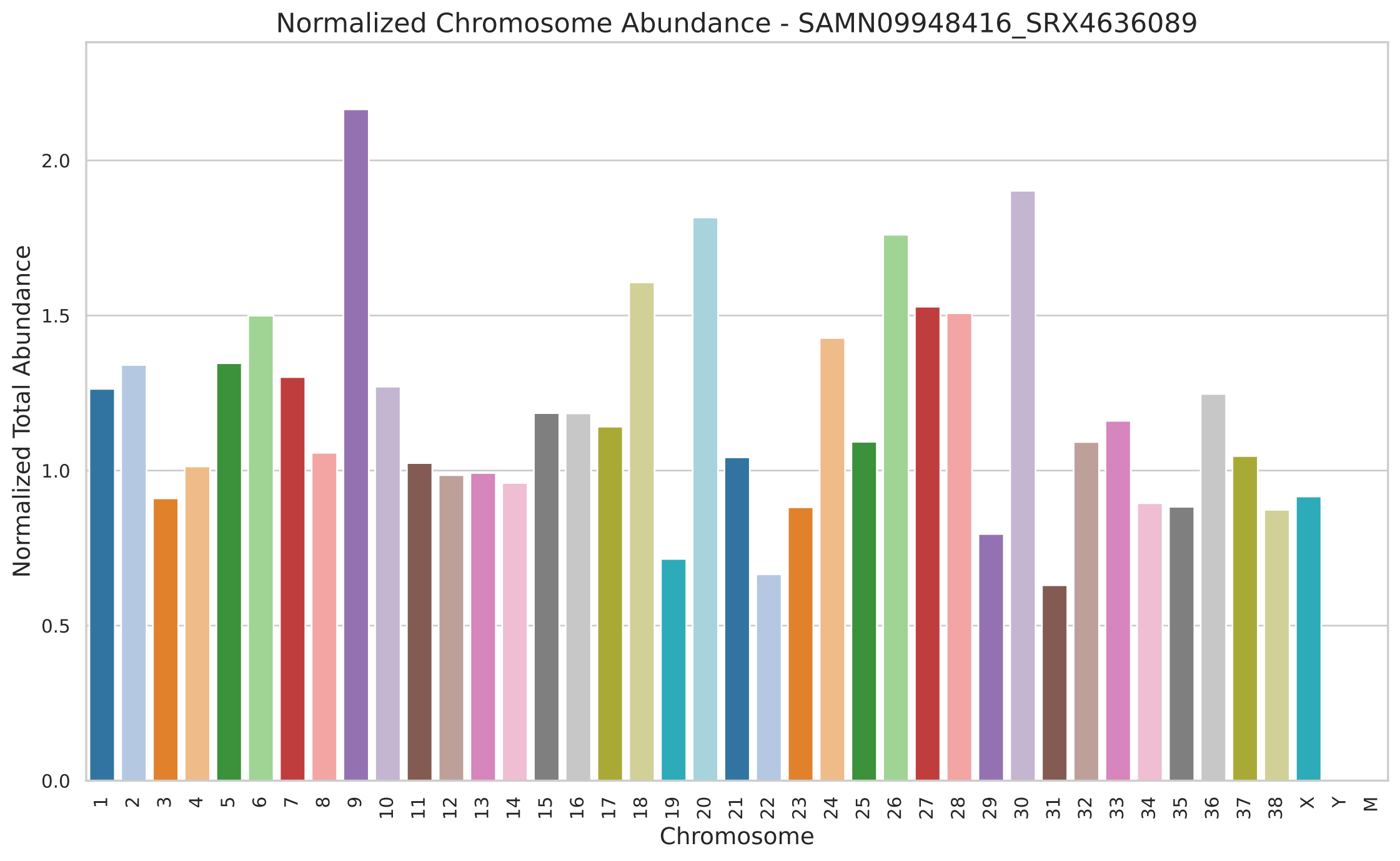

Normalized Chromosome Abundance - SAMN09949402_SRX4636117
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

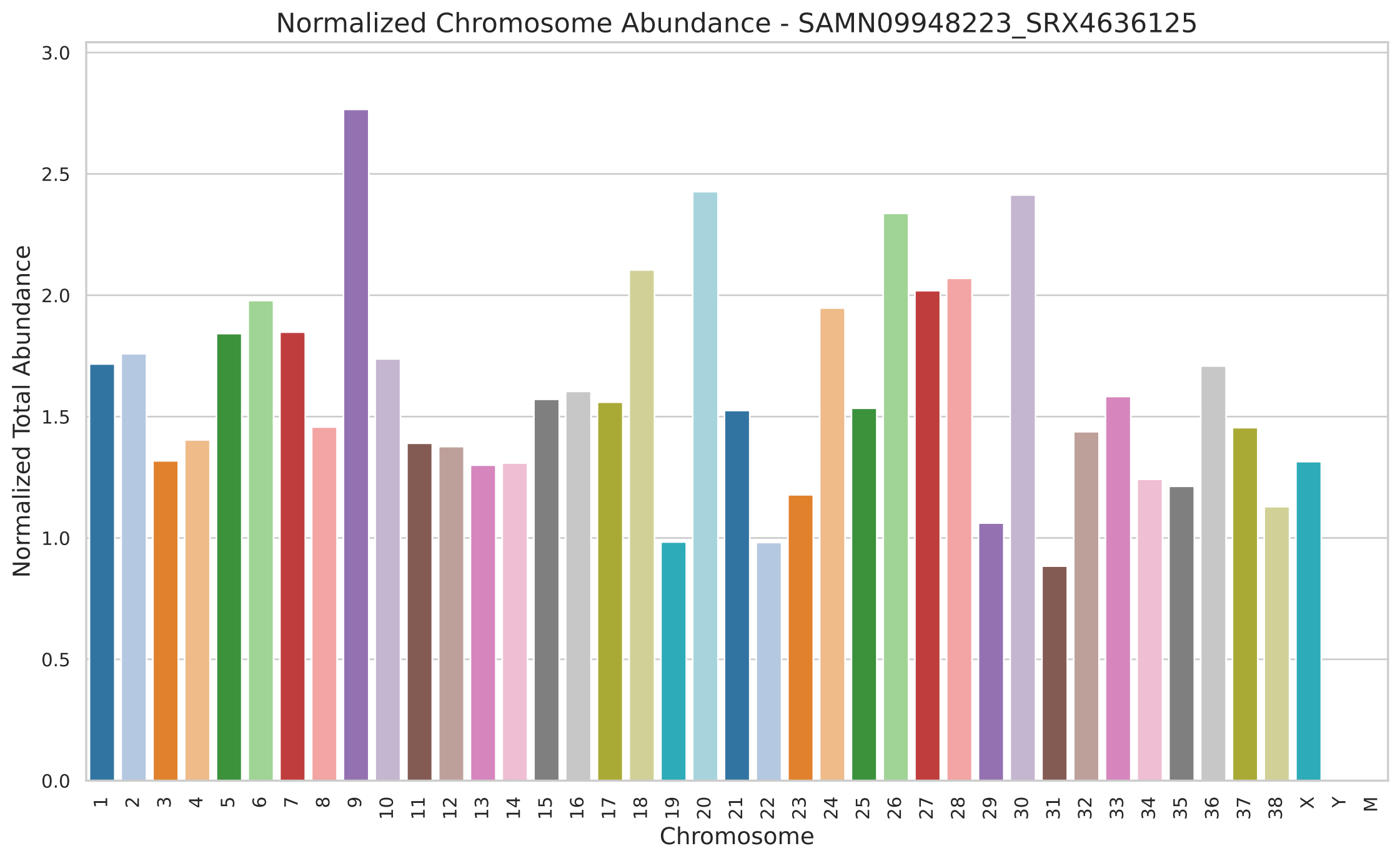

Normalized Chromosome Abundance - SAMN09948280_SRX4636106
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

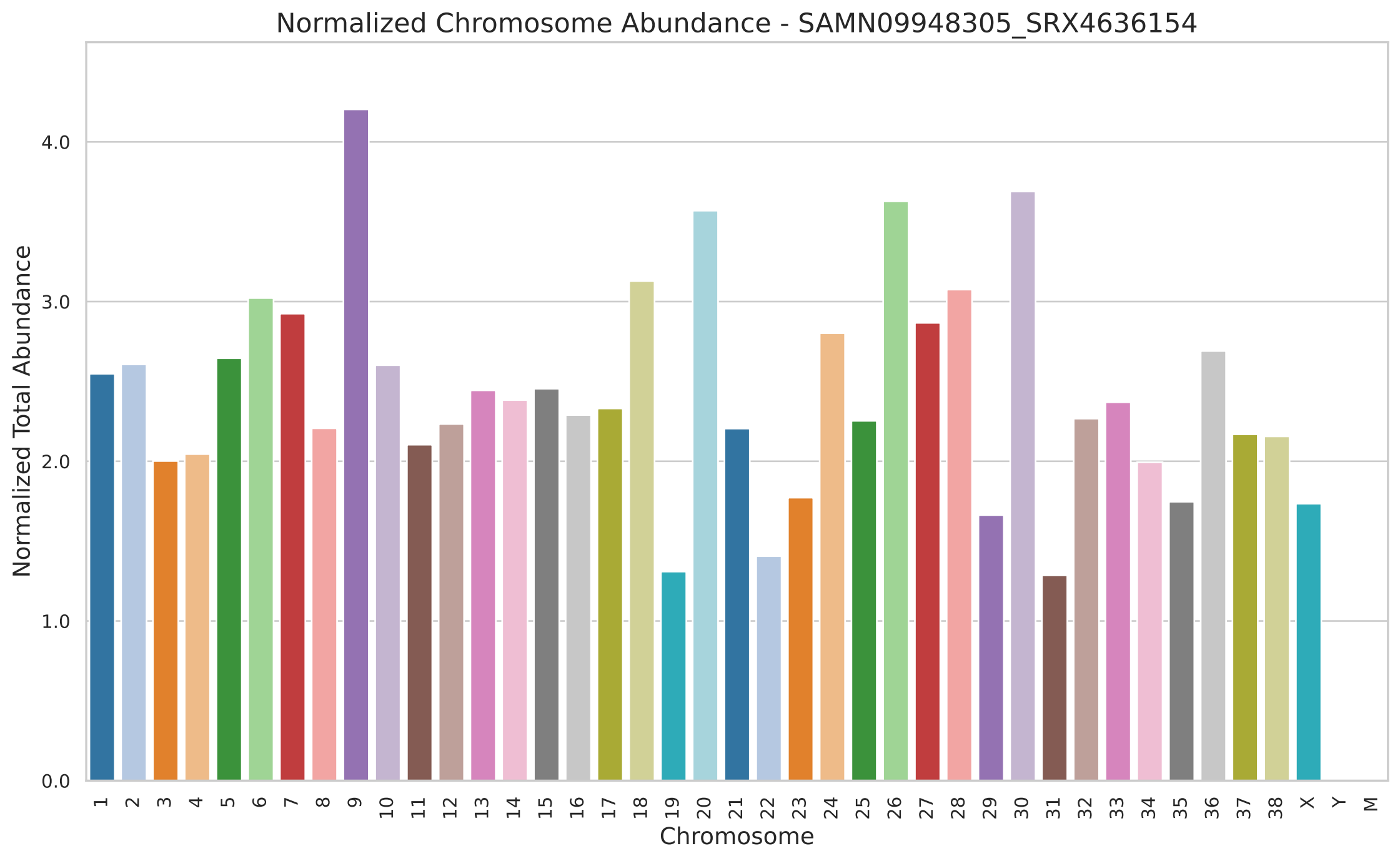

Normalized Chromosome Abundance - SAMN02739350_SRX529442
Normalized Total Abundance
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

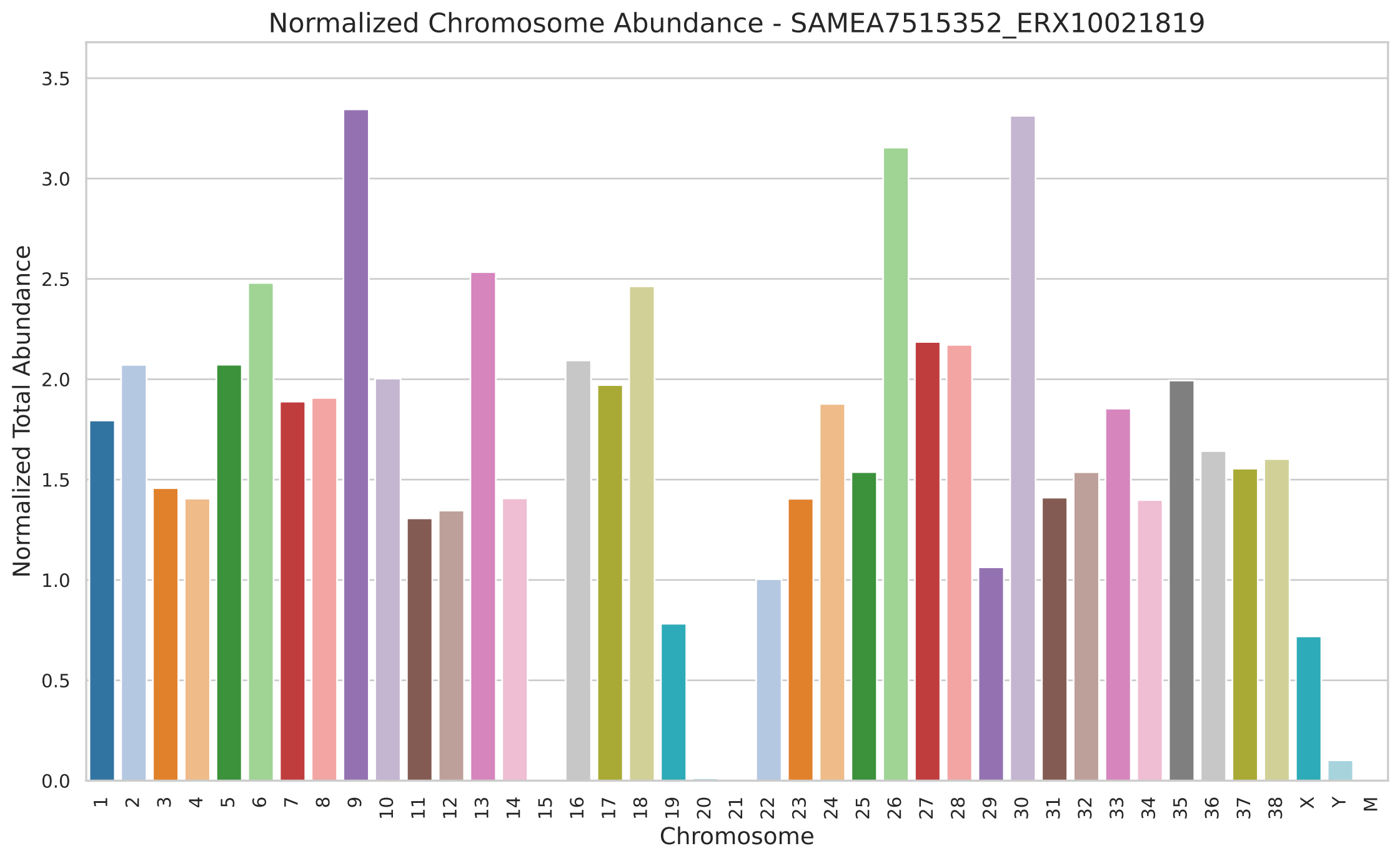

Normalized Chromosome Abundance - SAMN09949320_SRX4636129
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

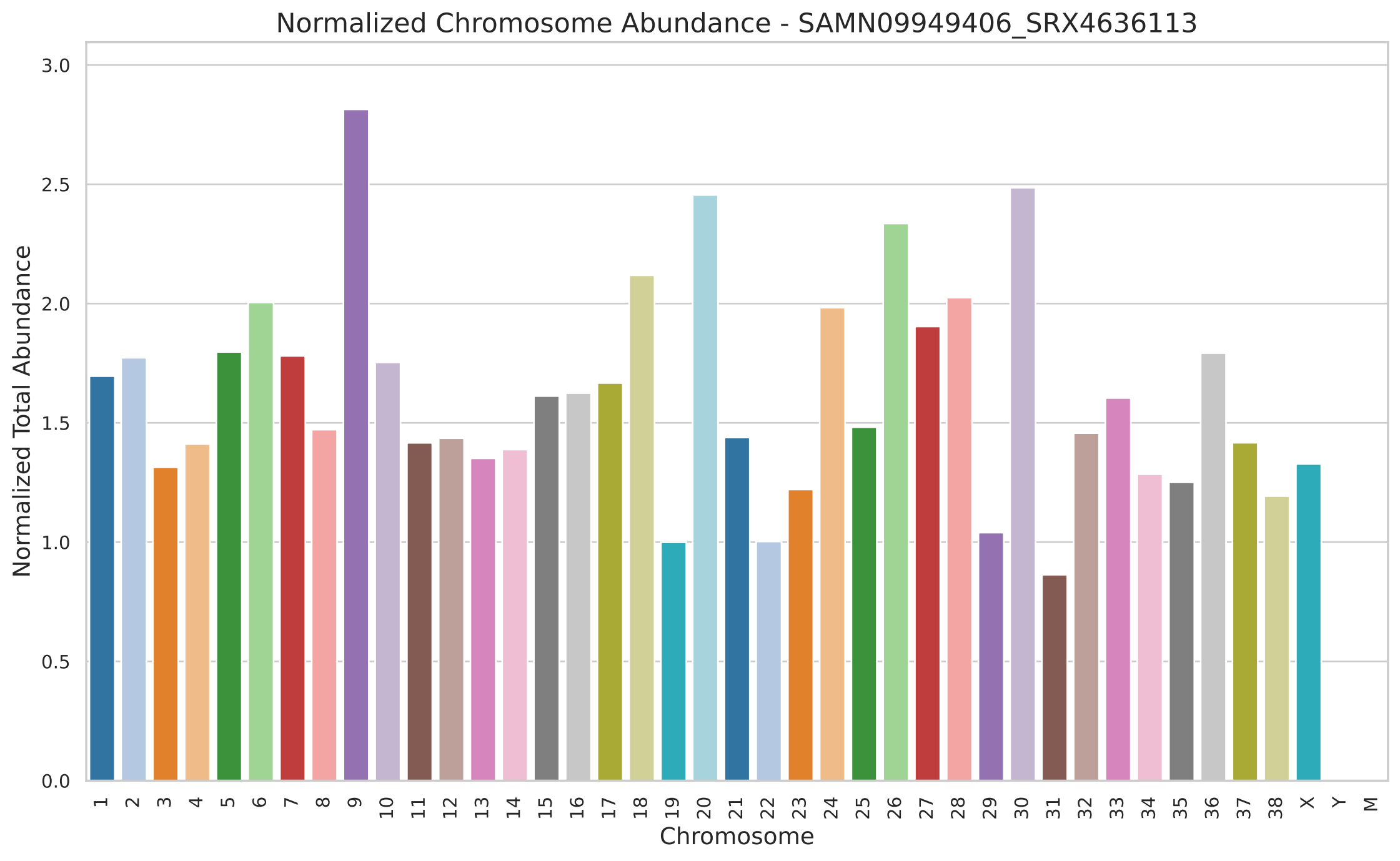

Normalized Chromosome Abundance - SAMN09948327_SRX4636143
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

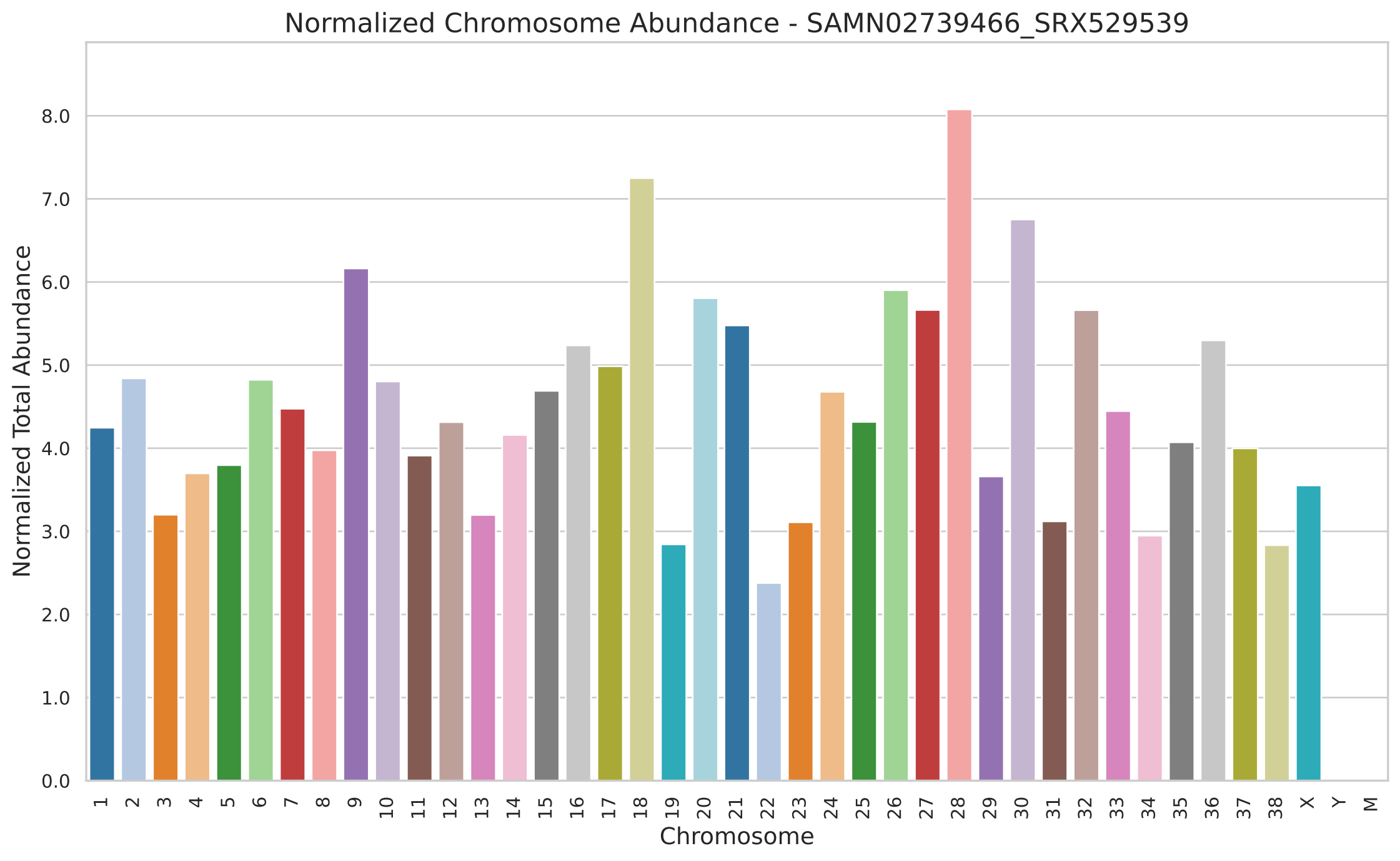

Normalized Chromosome Abundance - SAMN09948416_SRX4636089
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

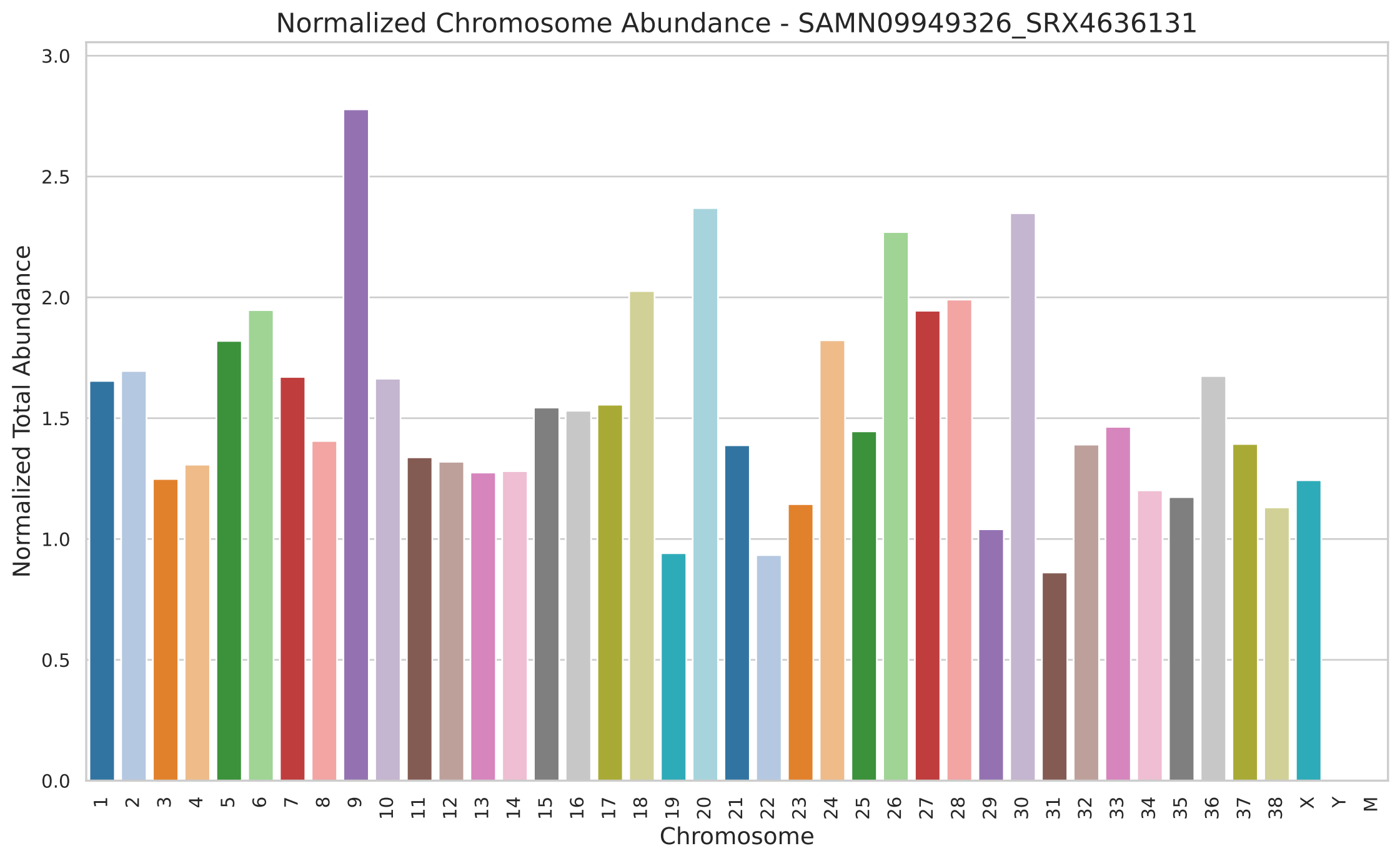

Normalized Chromosome Abundance - SAMN09948223_SRX4636125
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

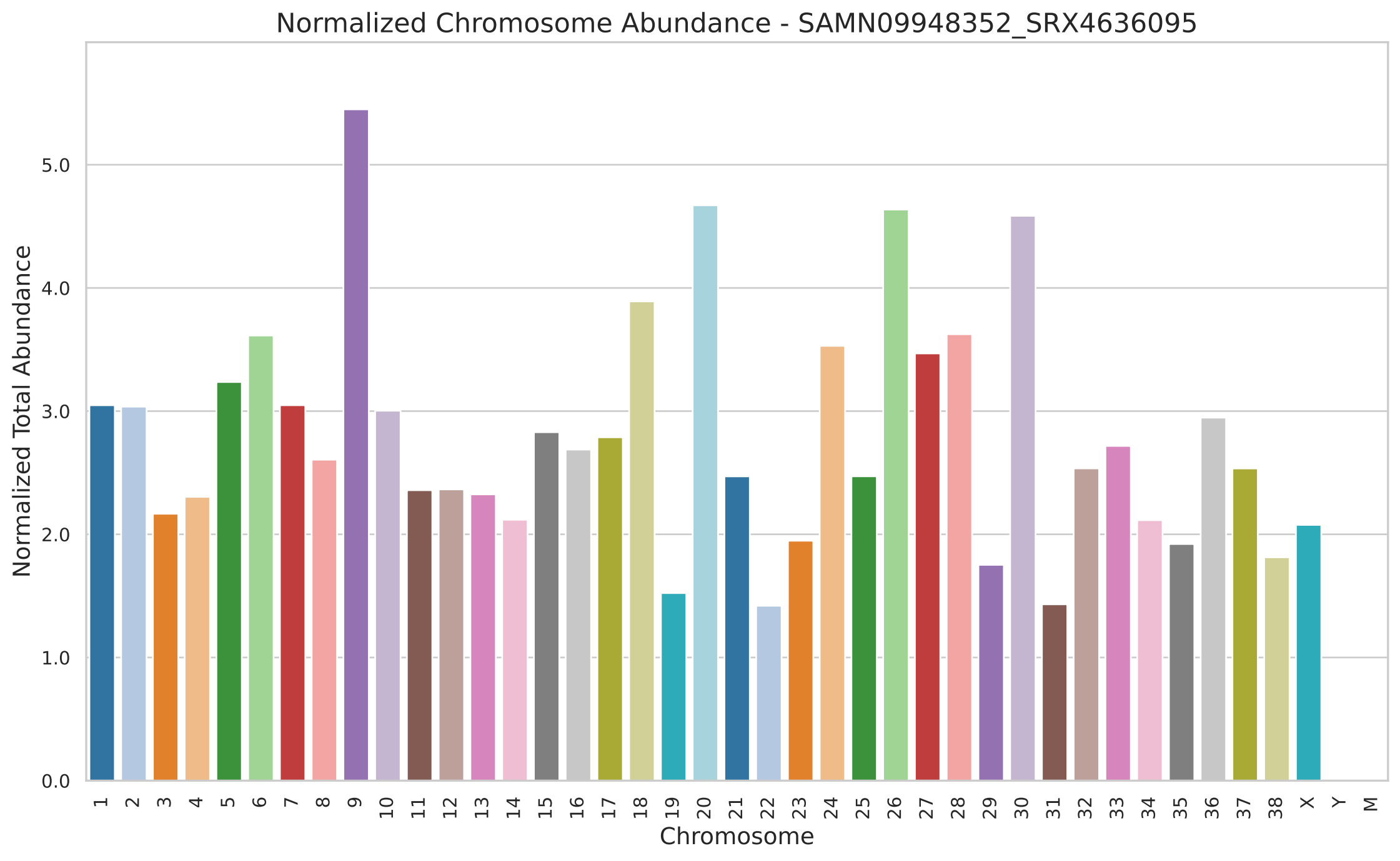

Normalized Chromosome Abundance - SAMN09948305_SRX4636154
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

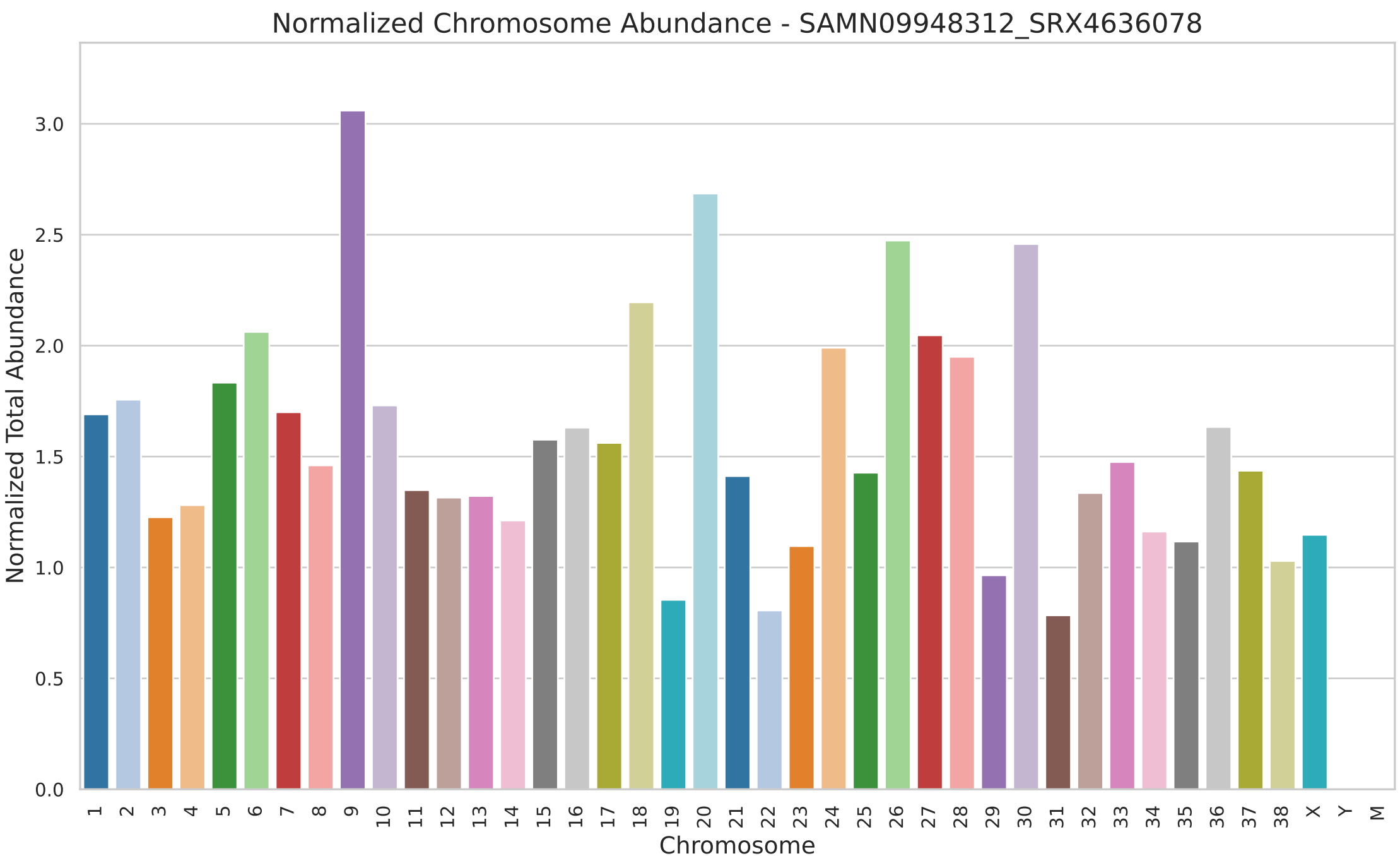

Normalized Chromosome Abundance - SAMEA7515352_ERX10021819
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

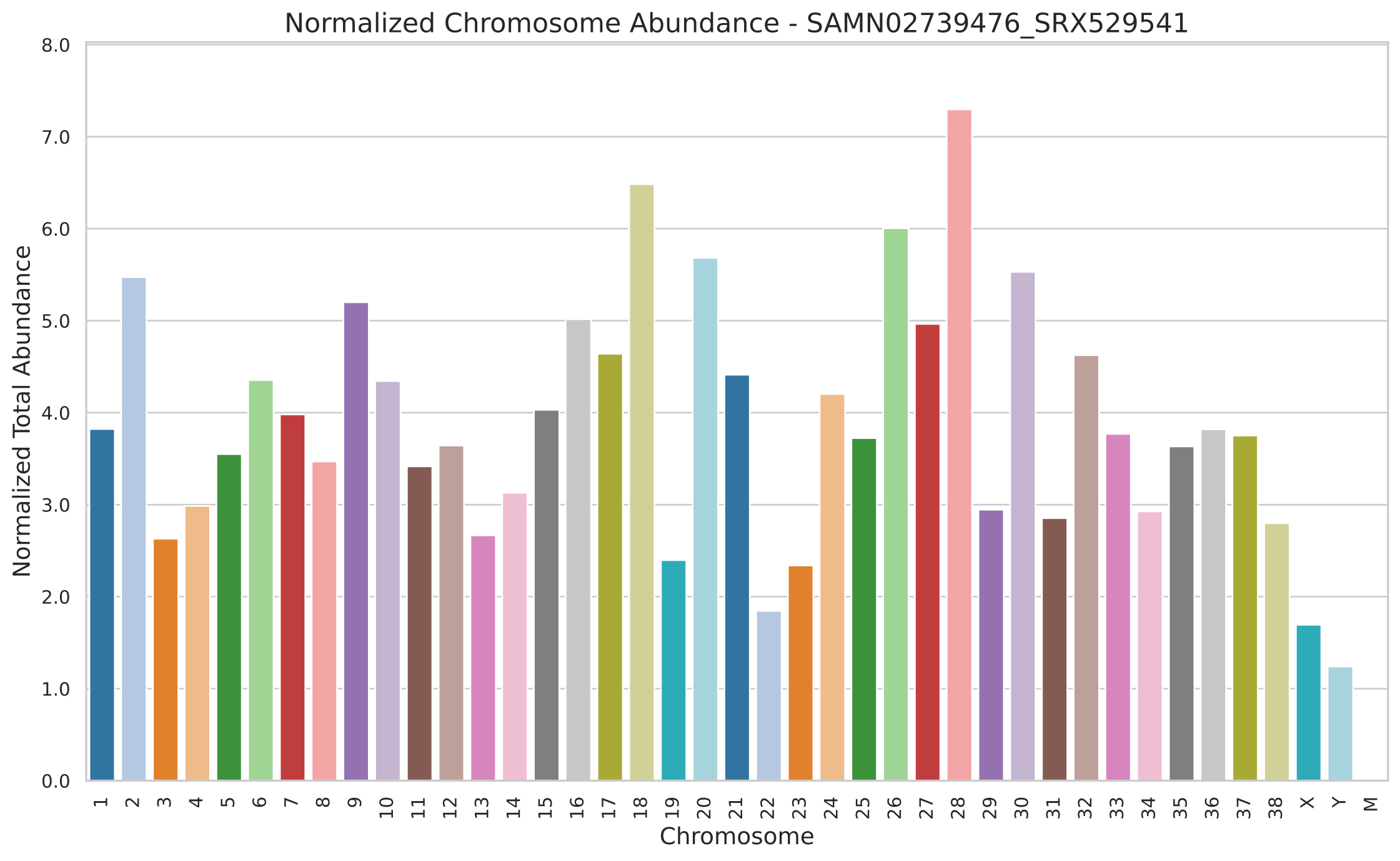

Normalized Chromosome Abundance - SAMN09949406_SRX4636113
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

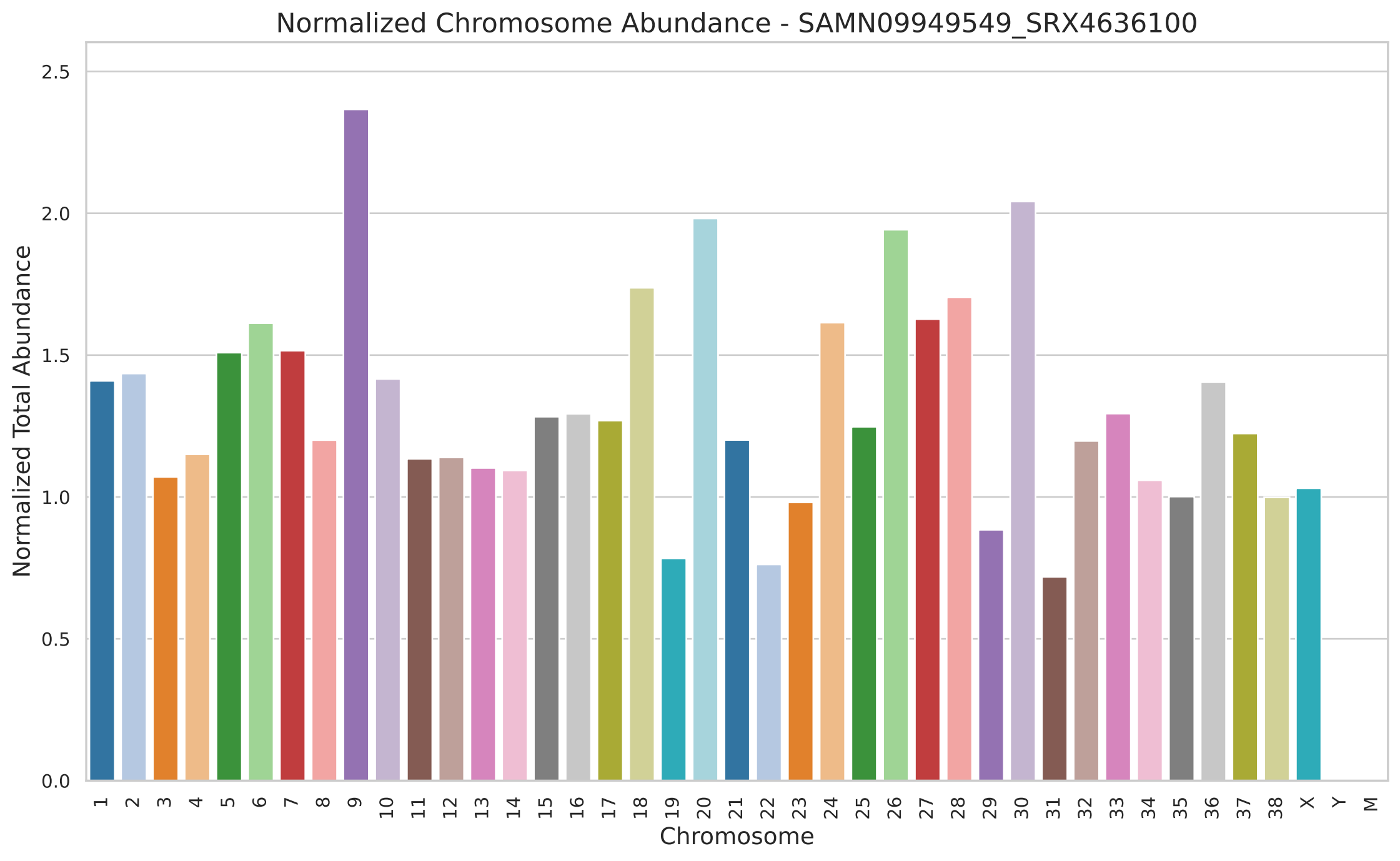

Normalized Chromosome Abundance - SAMN02739466_SRX529539
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

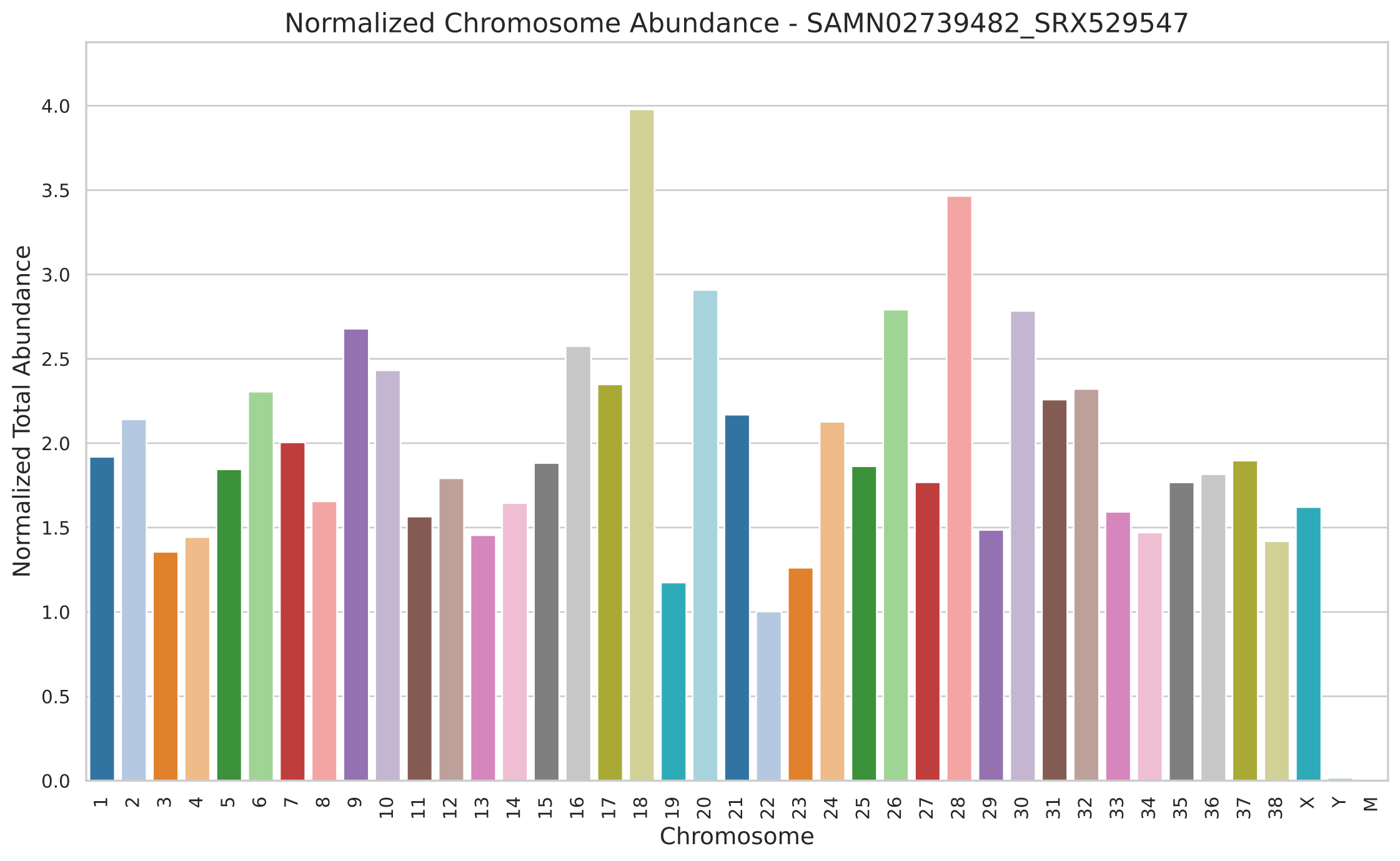

Normalized Chromosome Abundance - SAMN09949326_SRX4636131
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

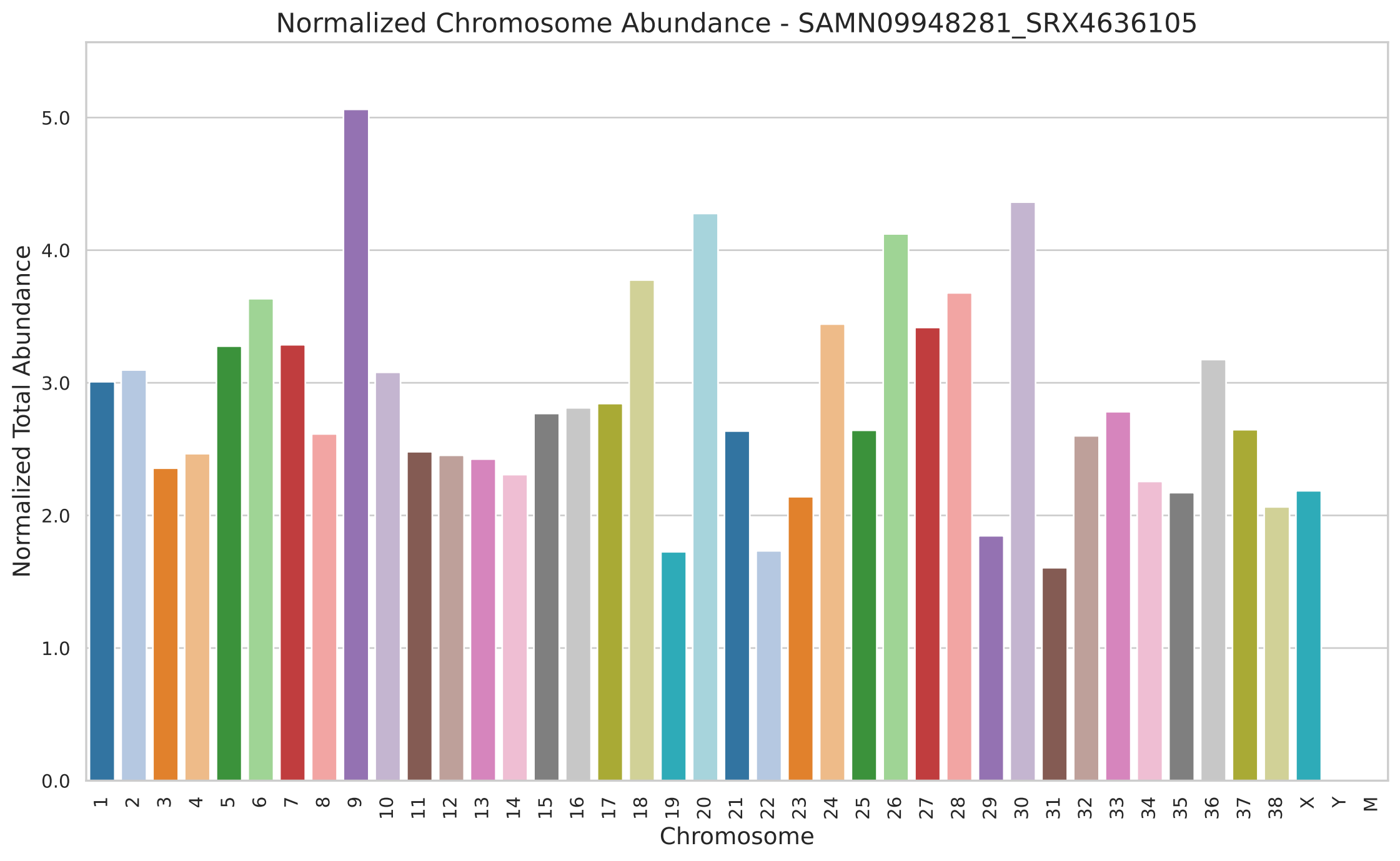

Normalized Chromosome Abundance - SAMN09948352_SRX4636095
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

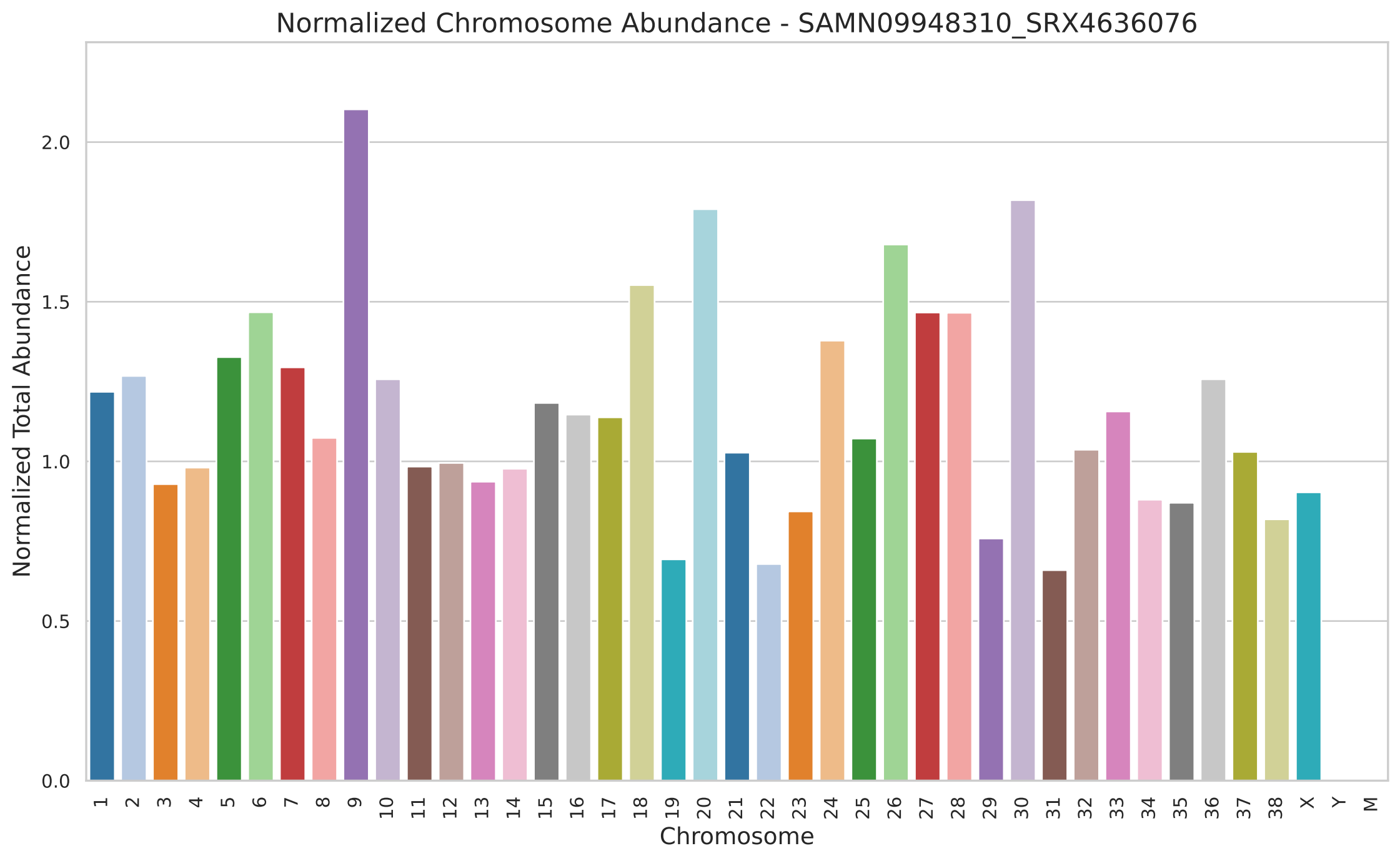

Normalized Chromosome Abundance - SAMN09948312_SRX4636078
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

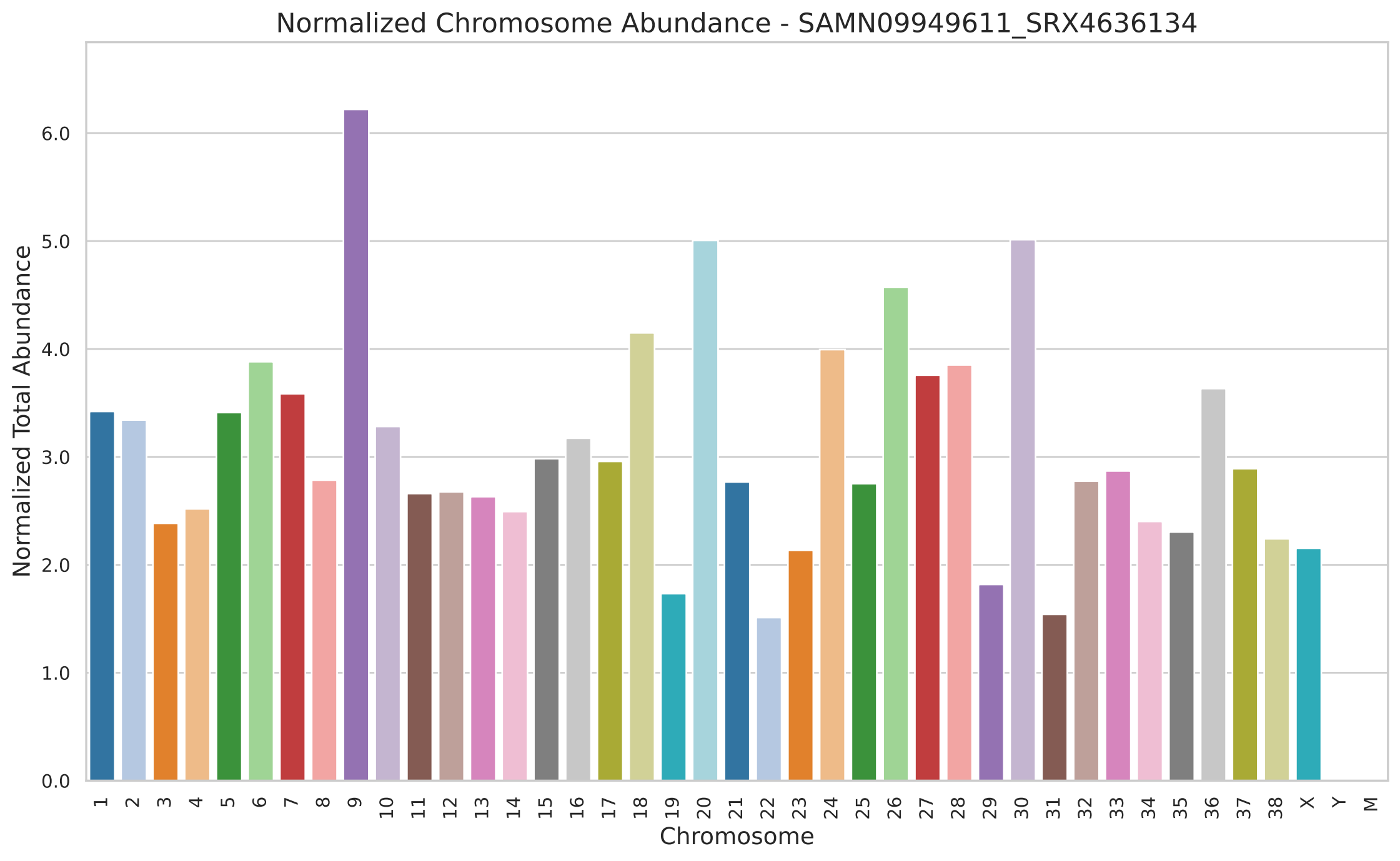

Normalized Chromosome Abundance - SAMN02739476_SRX529541
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

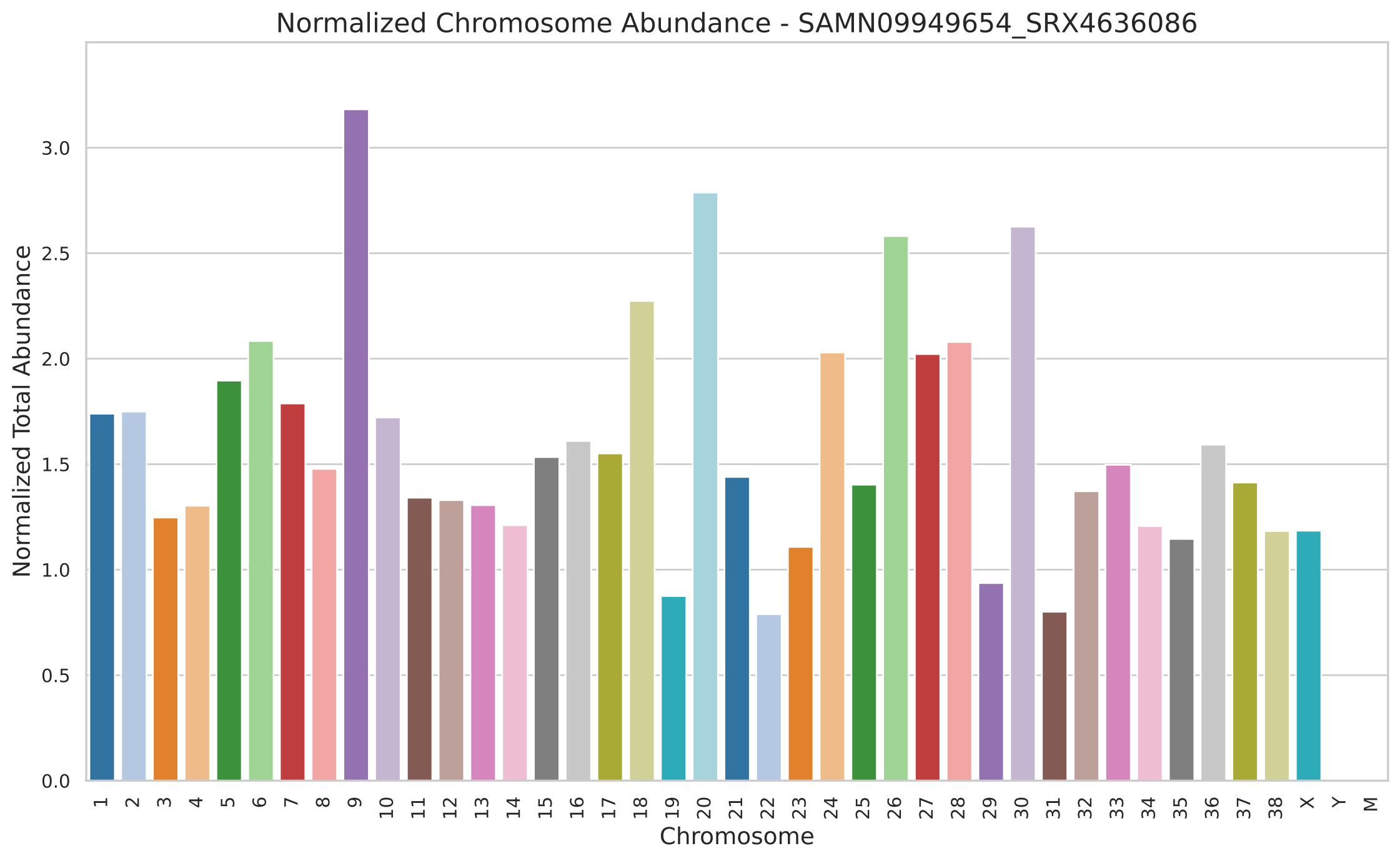

Normalized Chromosome Abundance - SAMN09949549_SRX4636100
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

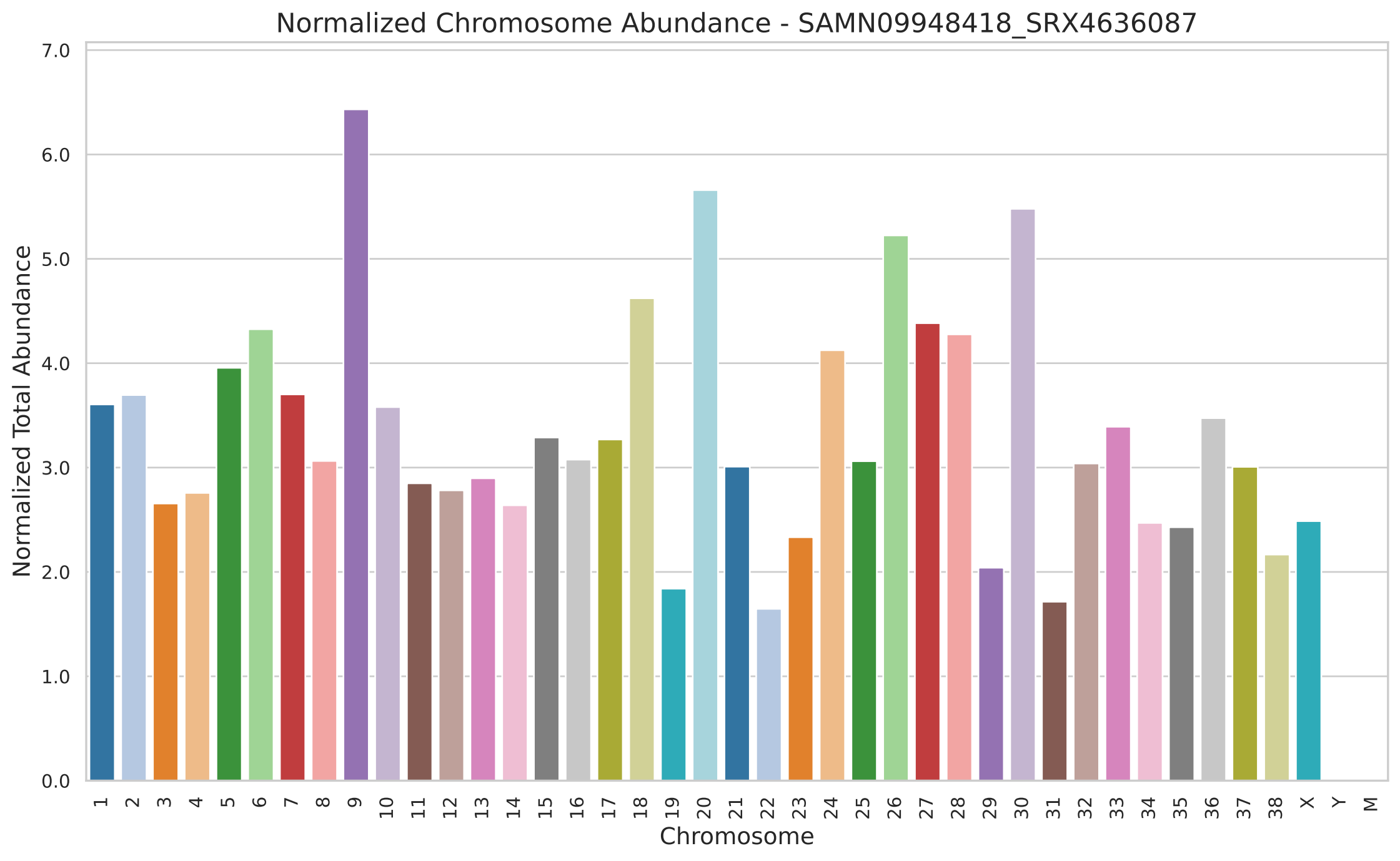

Normalized Chromosome Abundance - SAMN02739482_SRX529547
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

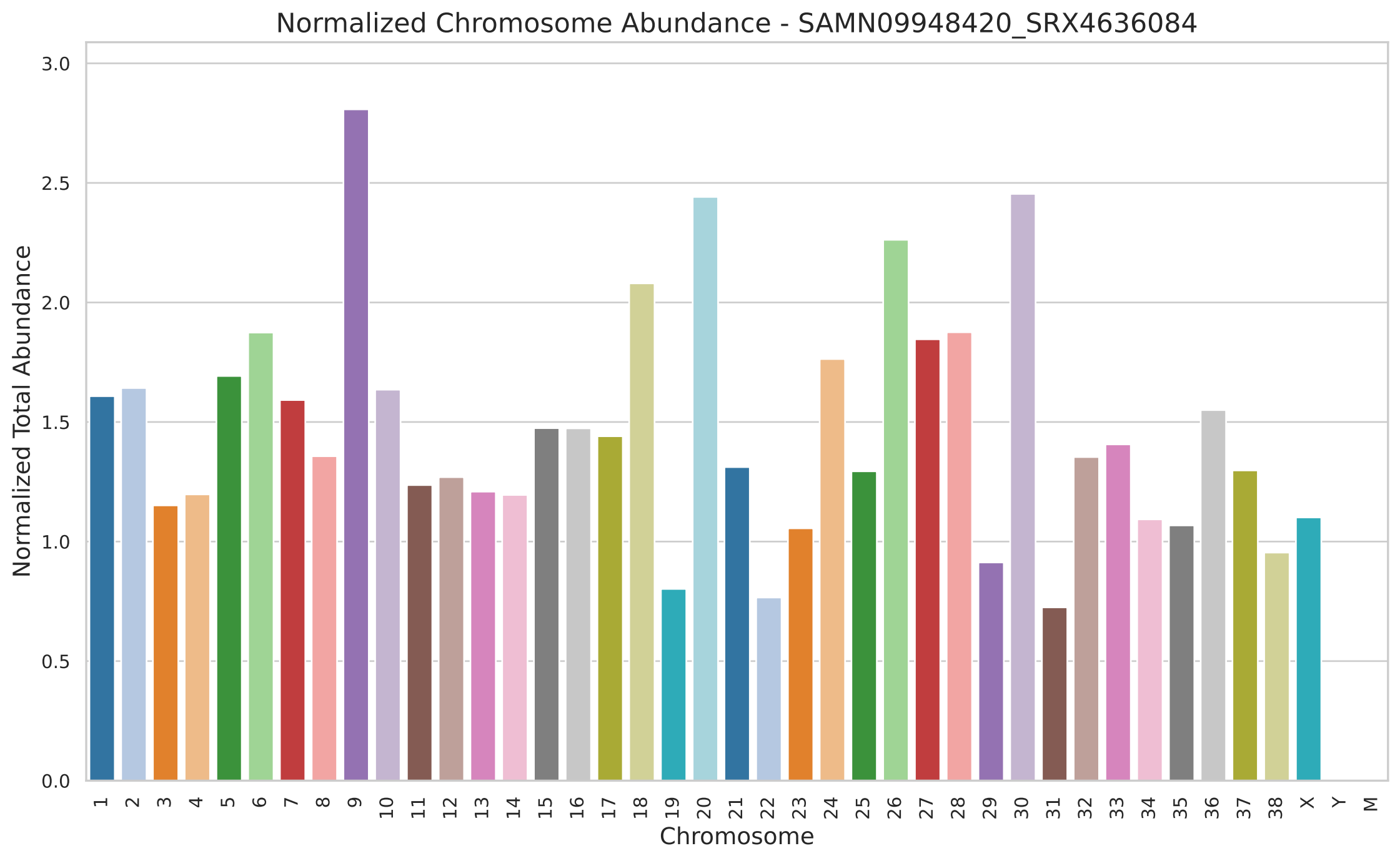

Normalized Chromosome Abundance - SAMN09948281_SRX4636105
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

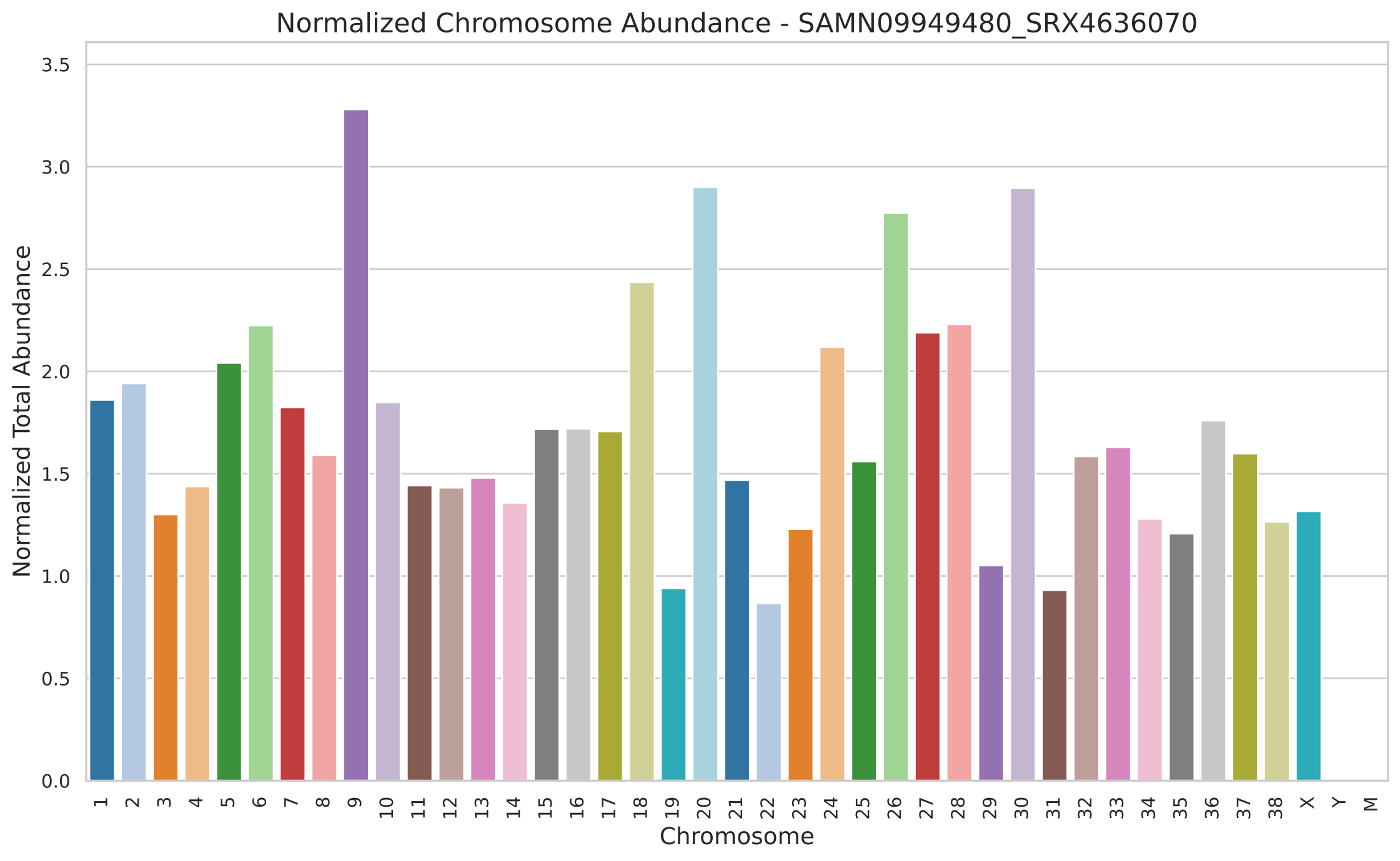

Normalized Chromosome Abundance - SAMN09948310_SRX4636076
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

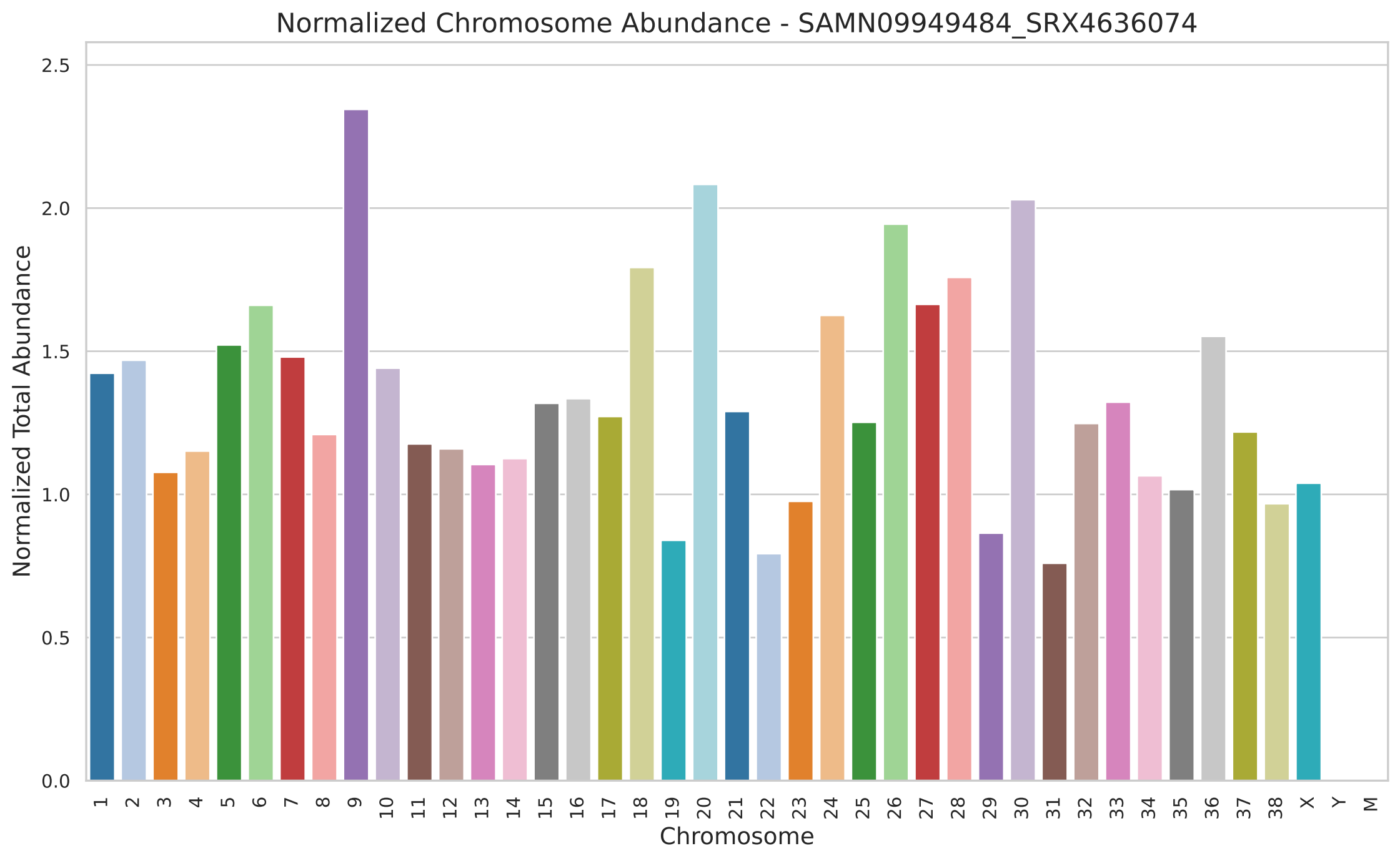

Normalized Chromosome Abundance - SAMN09949611_SRX4636134
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

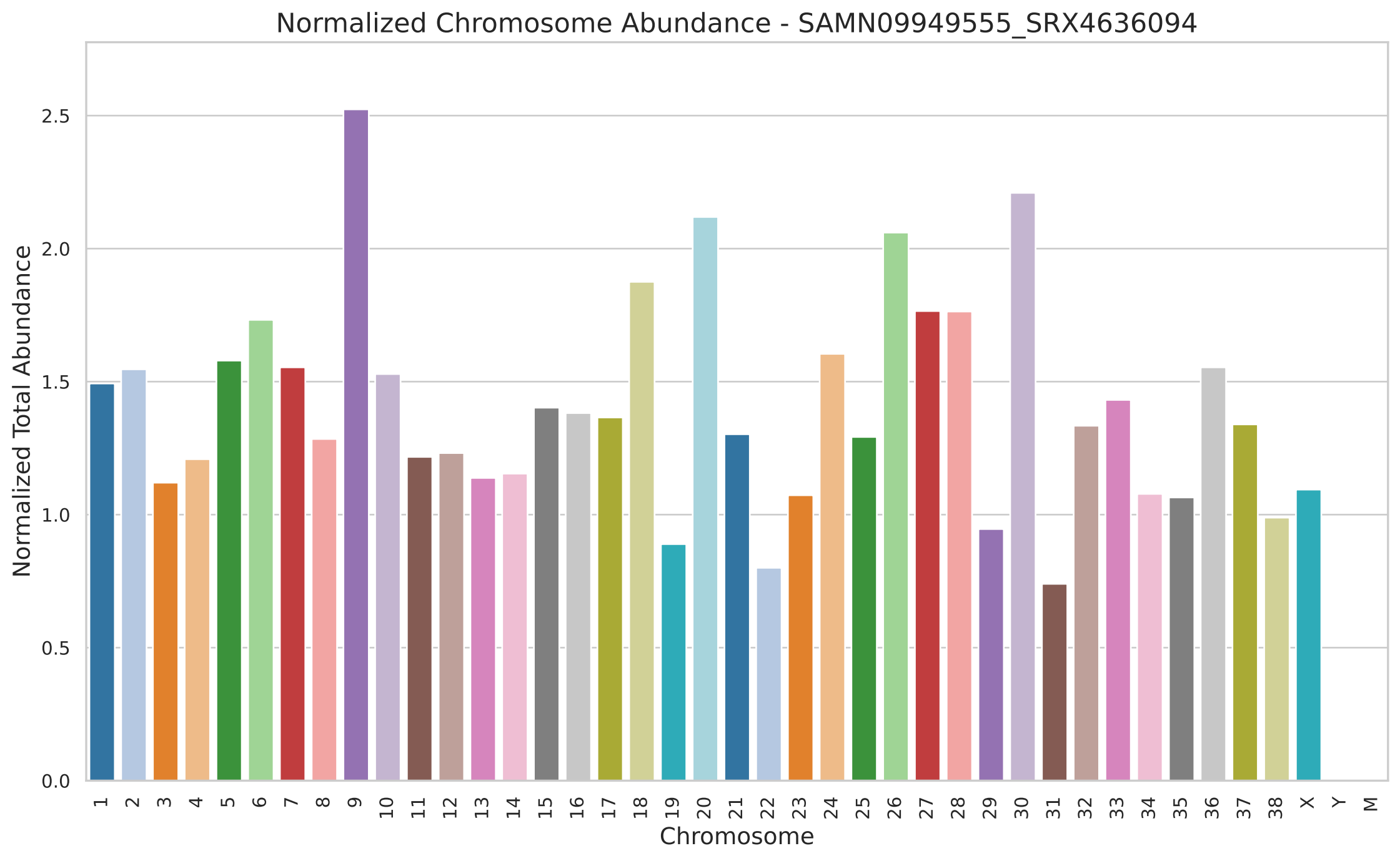

Normalized Chromosome Abundance - SAMN09949654_SRX4636086
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

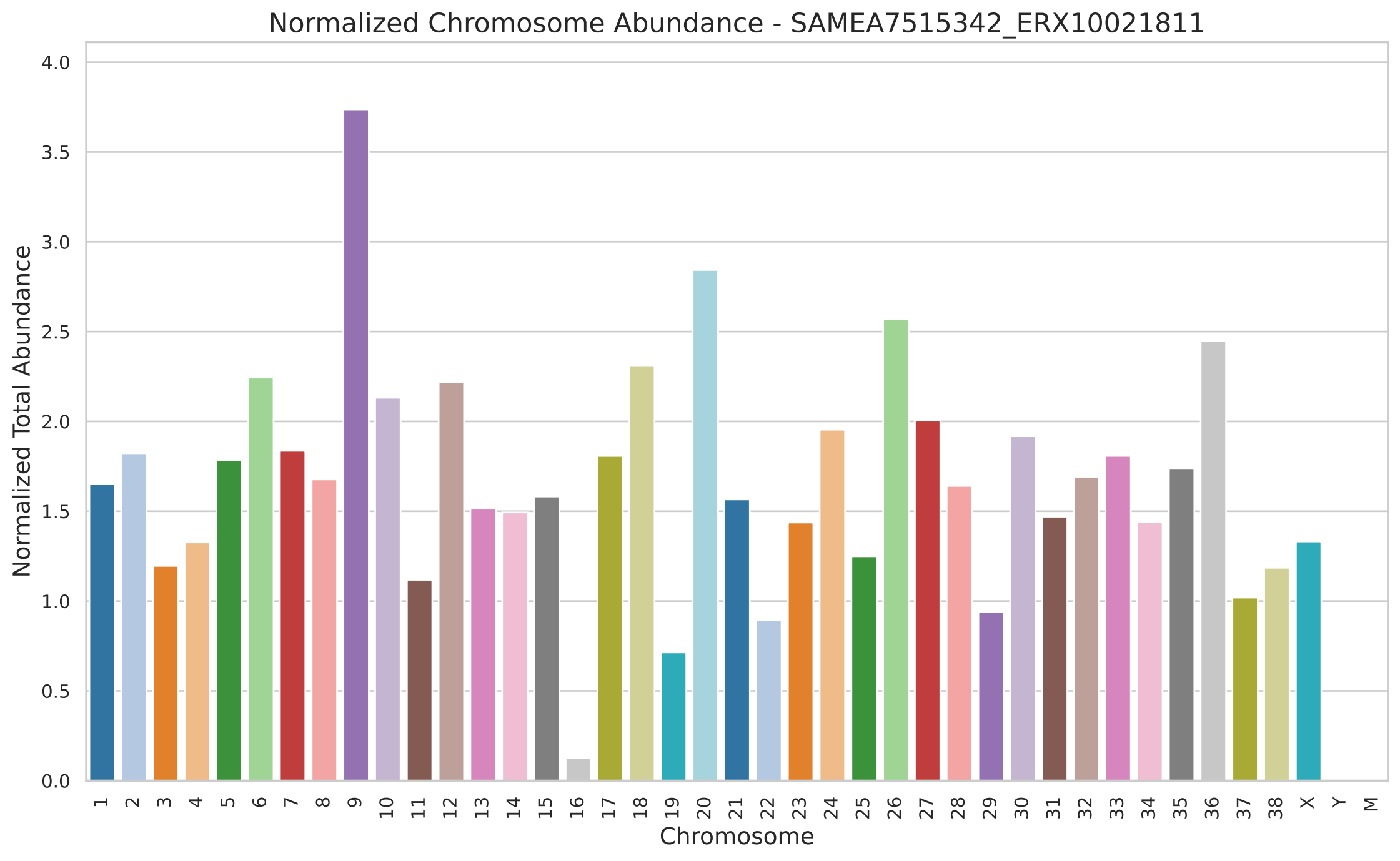

Normalized Chromosome Abundance - SAMN09948418_SRX4636087
Normalized Total Abundance
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

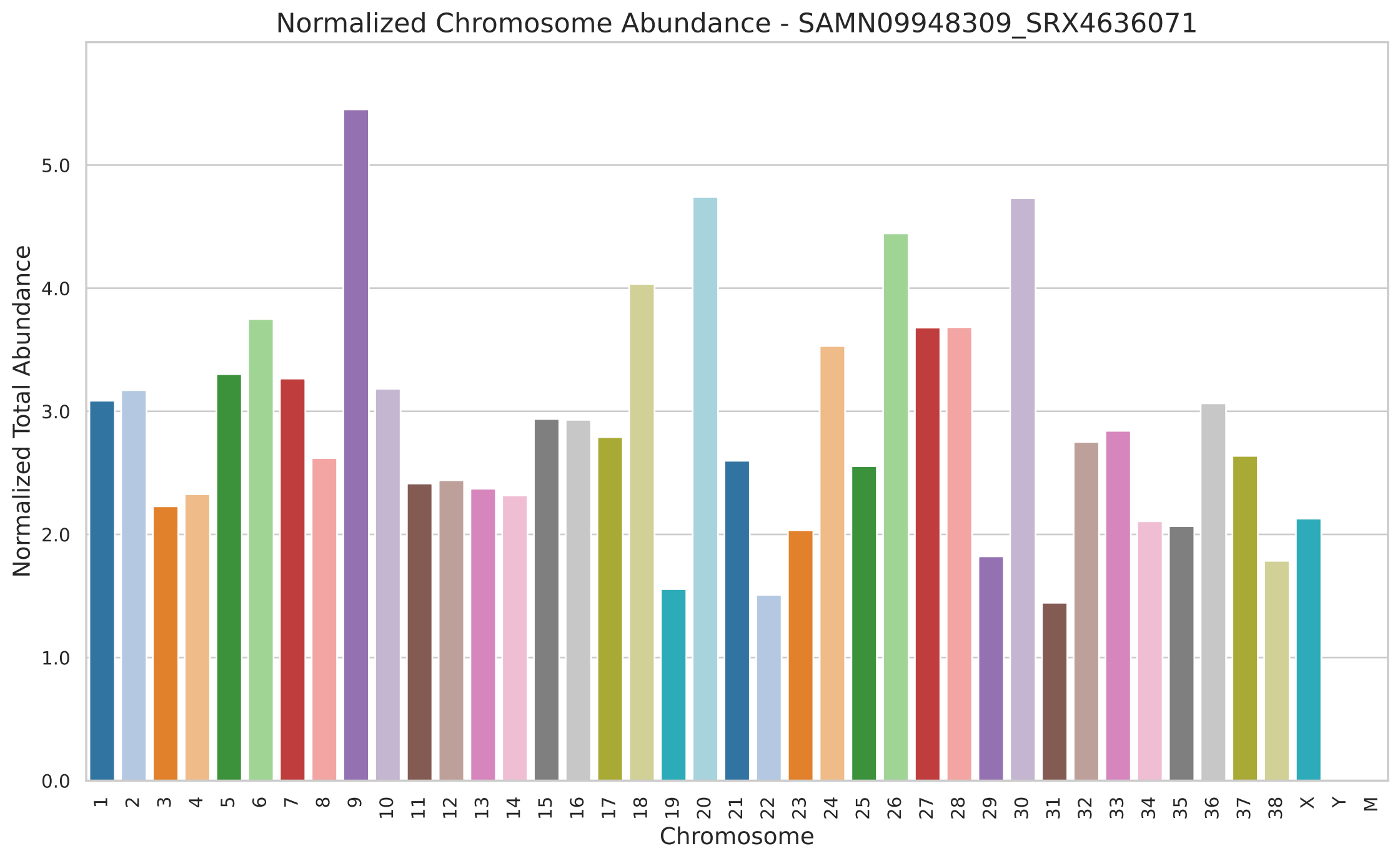

Normalized Chromosome Abundance - SAMN09948420_SRX4636084
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

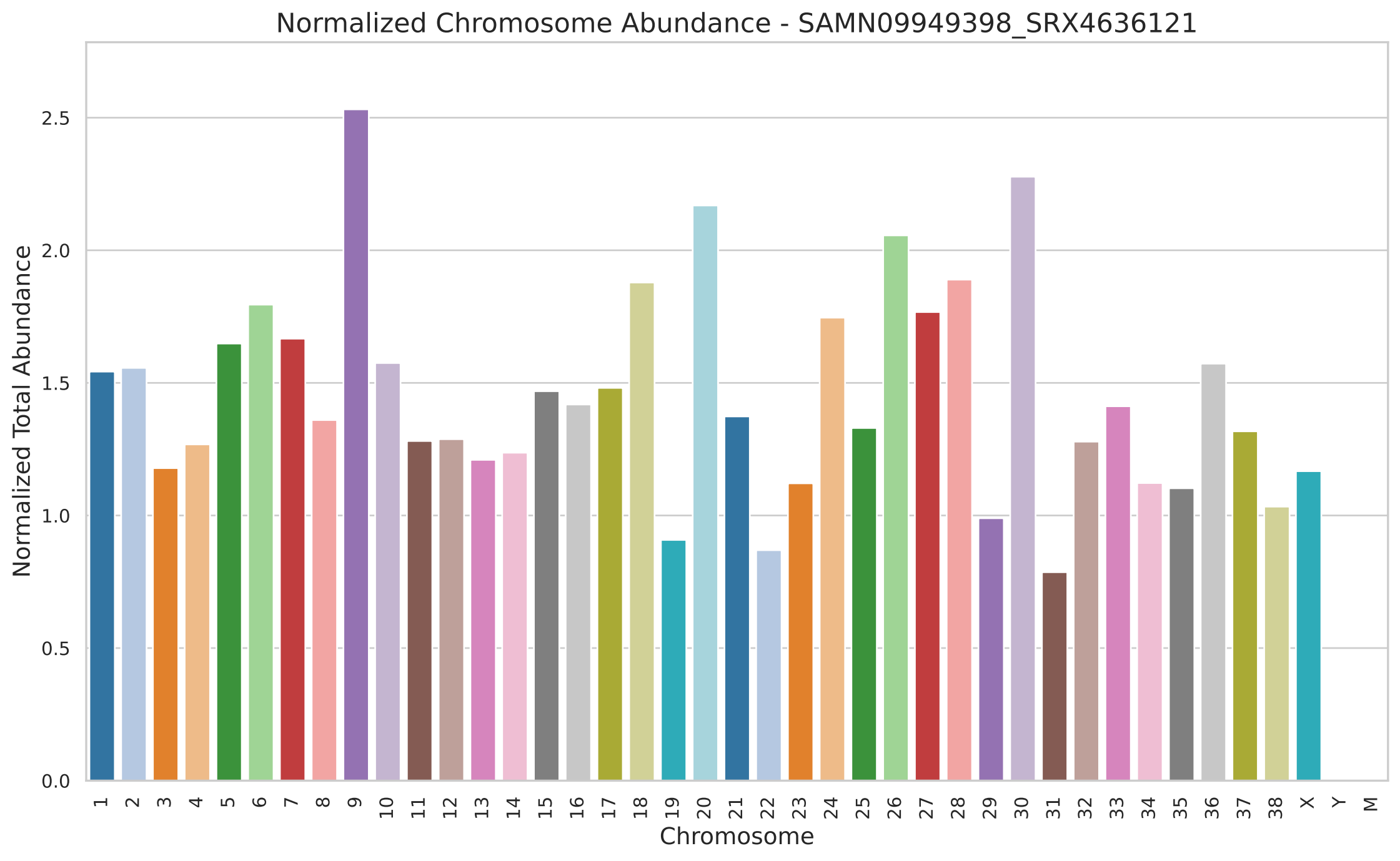

Normalized Chromosome Abundance - SAMN09949480_SRX4636070
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

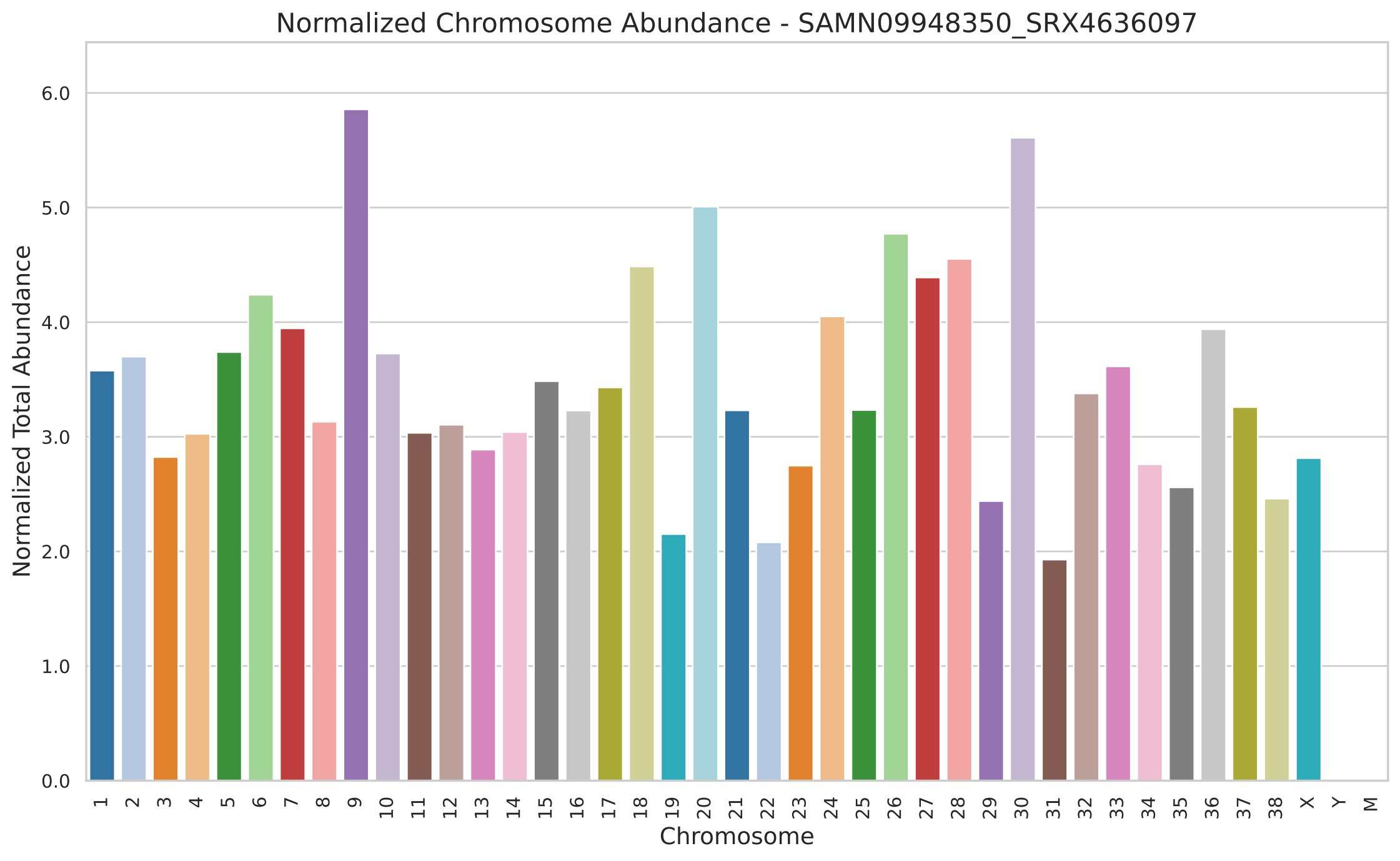

Normalized Chromosome Abundance - SAMN09949484_SRX4636074
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

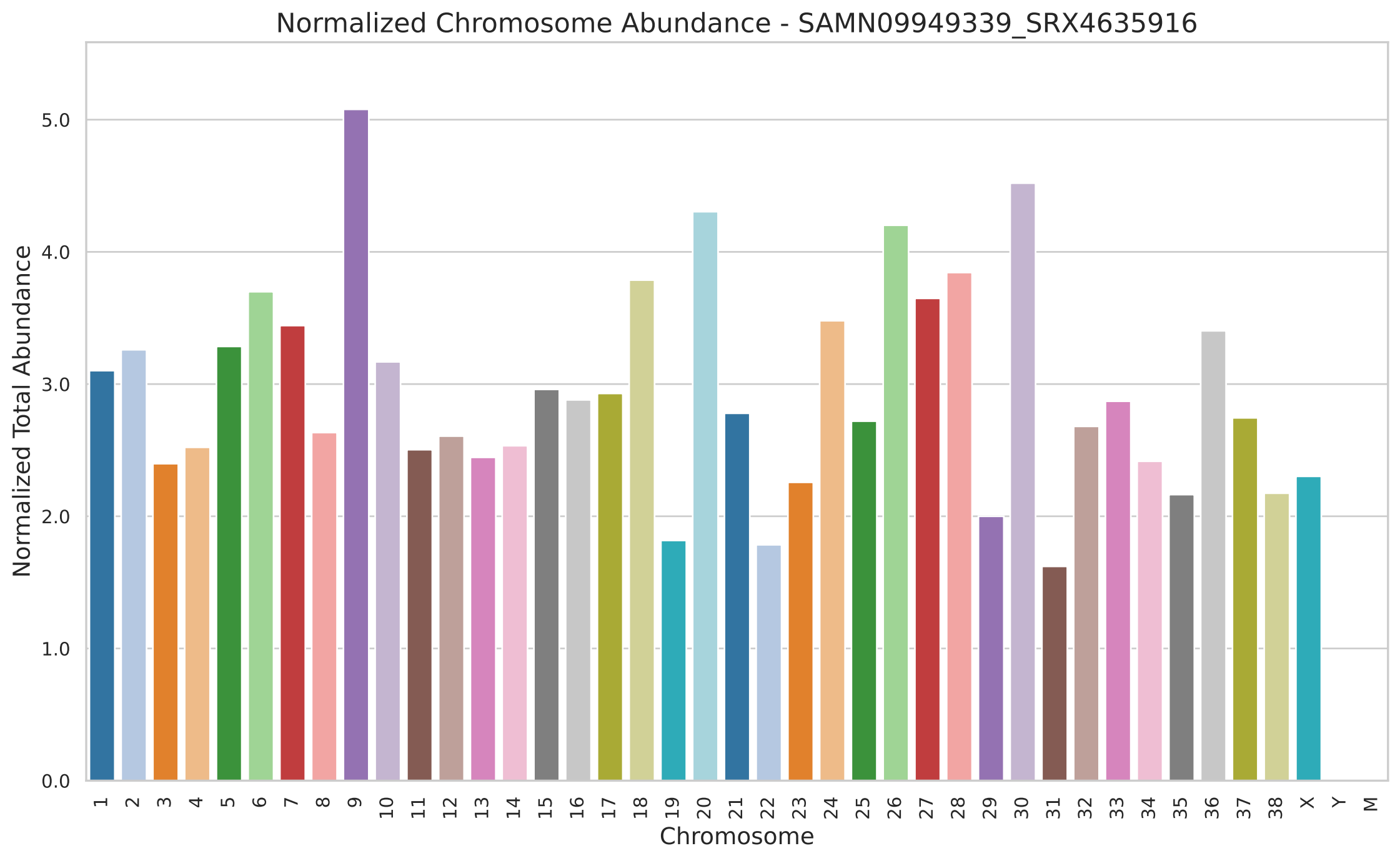

Normalized Chromosome Abundance - SAMN09949555_SRX4636094
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

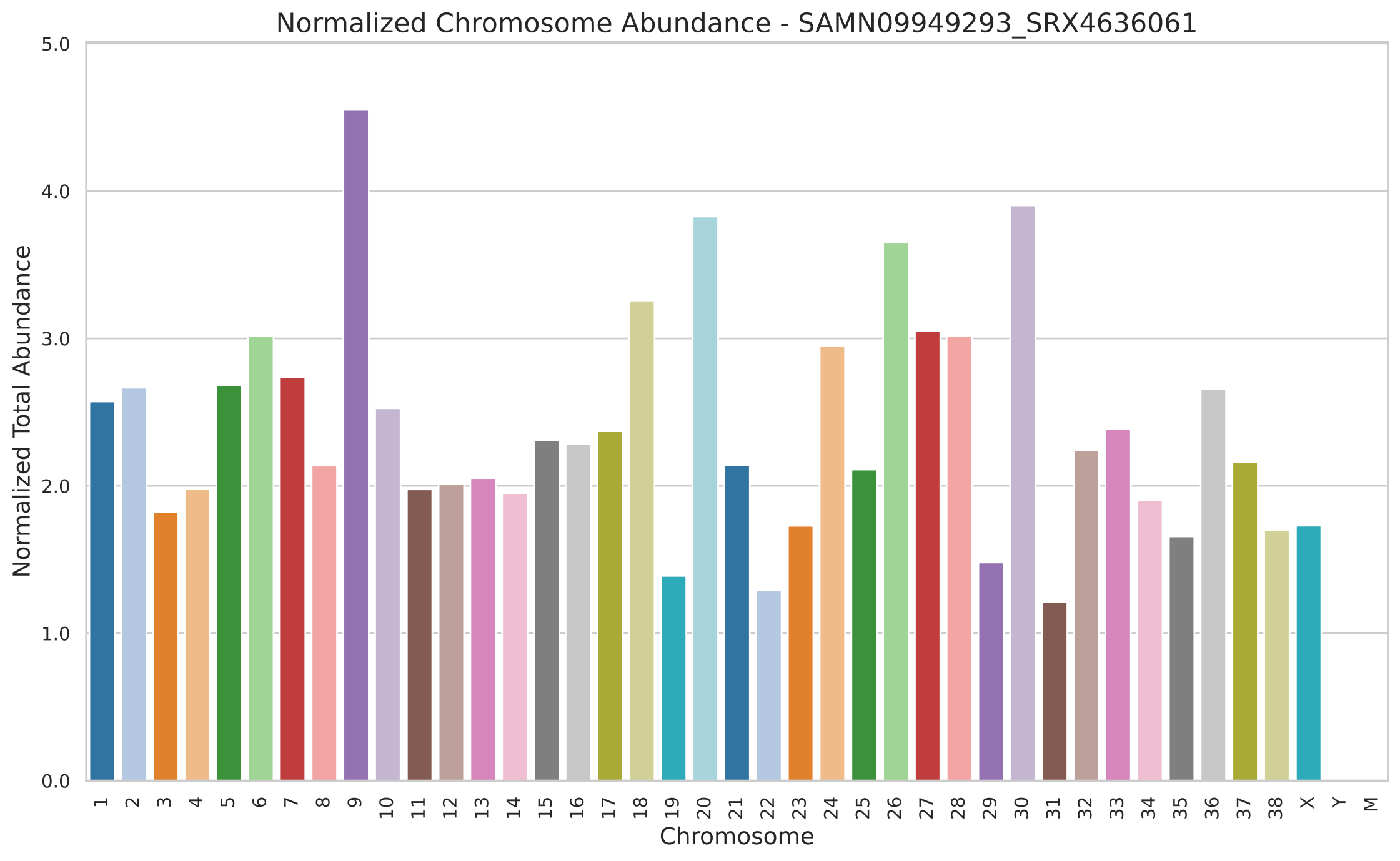

Normalized Chromosome Abundance - SAMEA7515342_ERX10021811
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

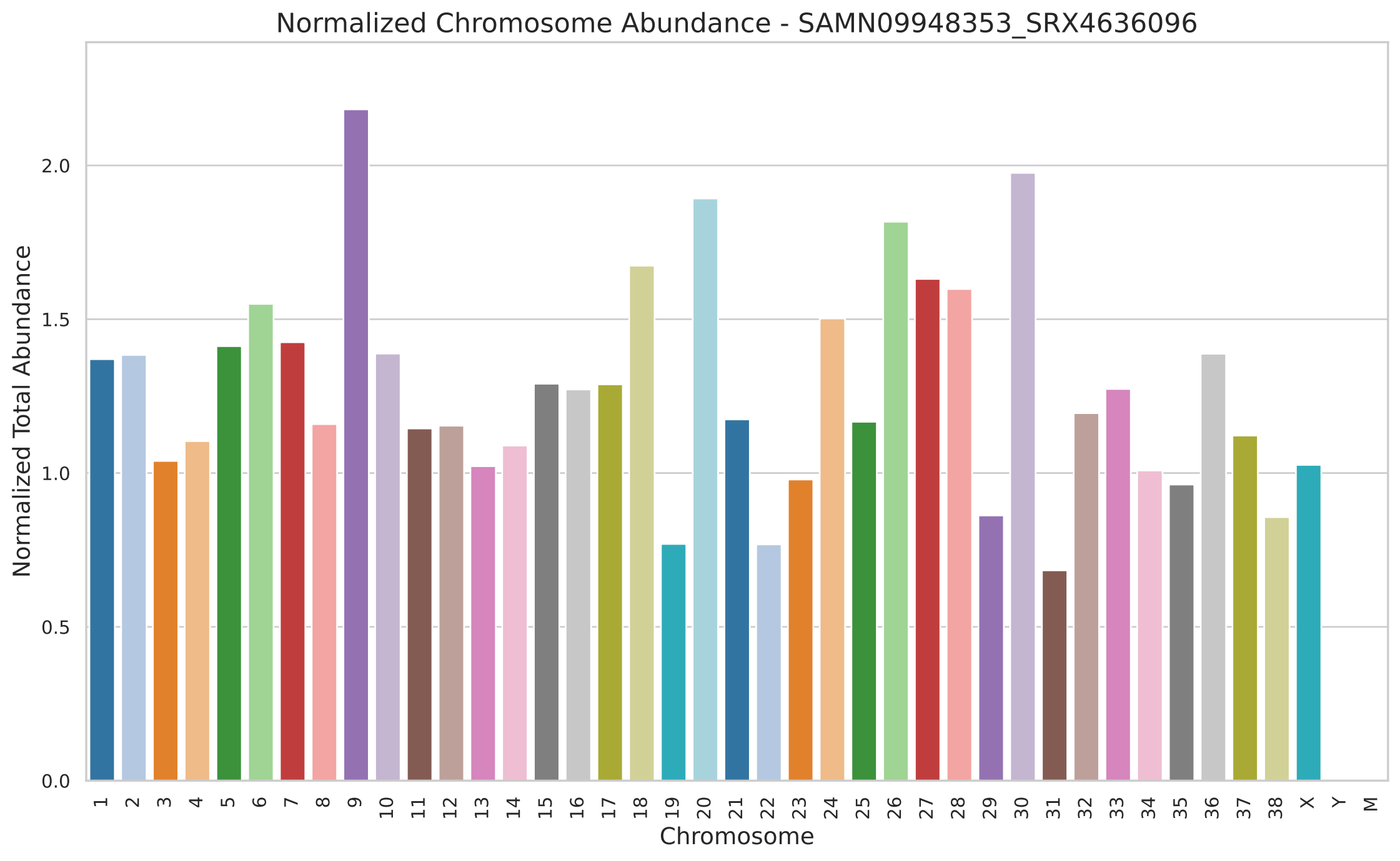

Normalized Chromosome Abundance - SAMN09948309_SRX4636071
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

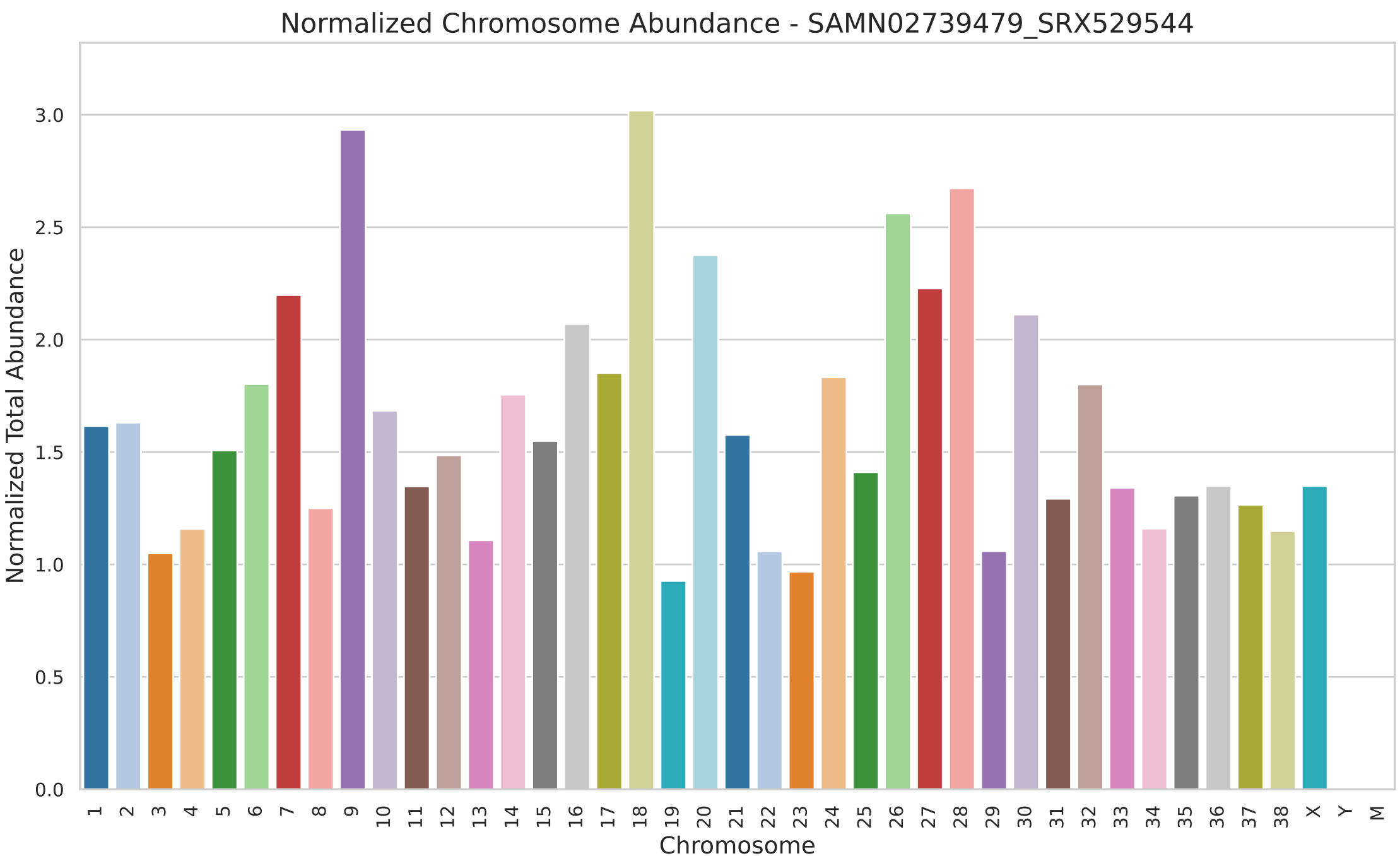

Normalized Chromosome Abundance - SAMN09949398_SRX4636121
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

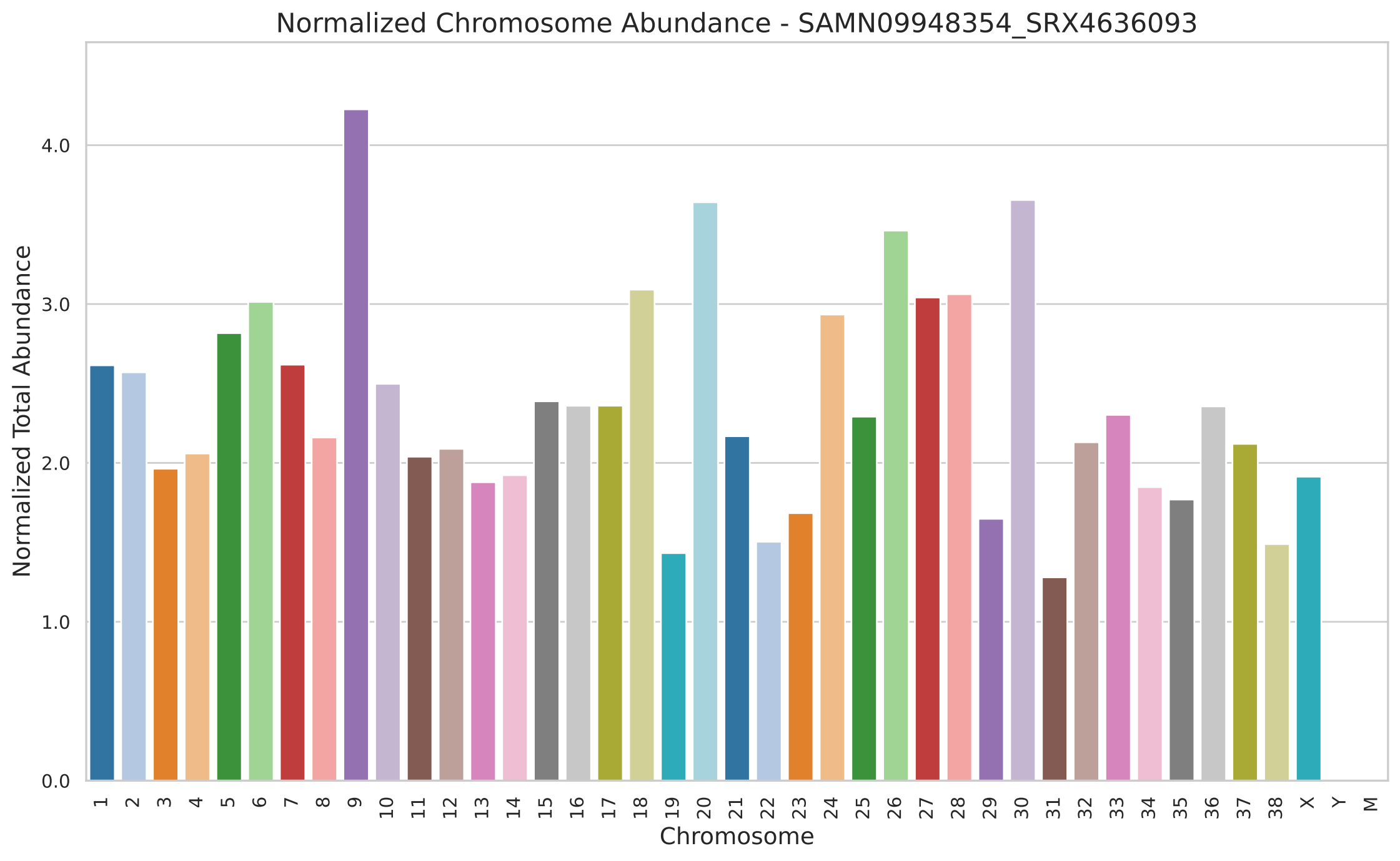

Normalized Chromosome Abundance - SAMN09948350_SRX4636097
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

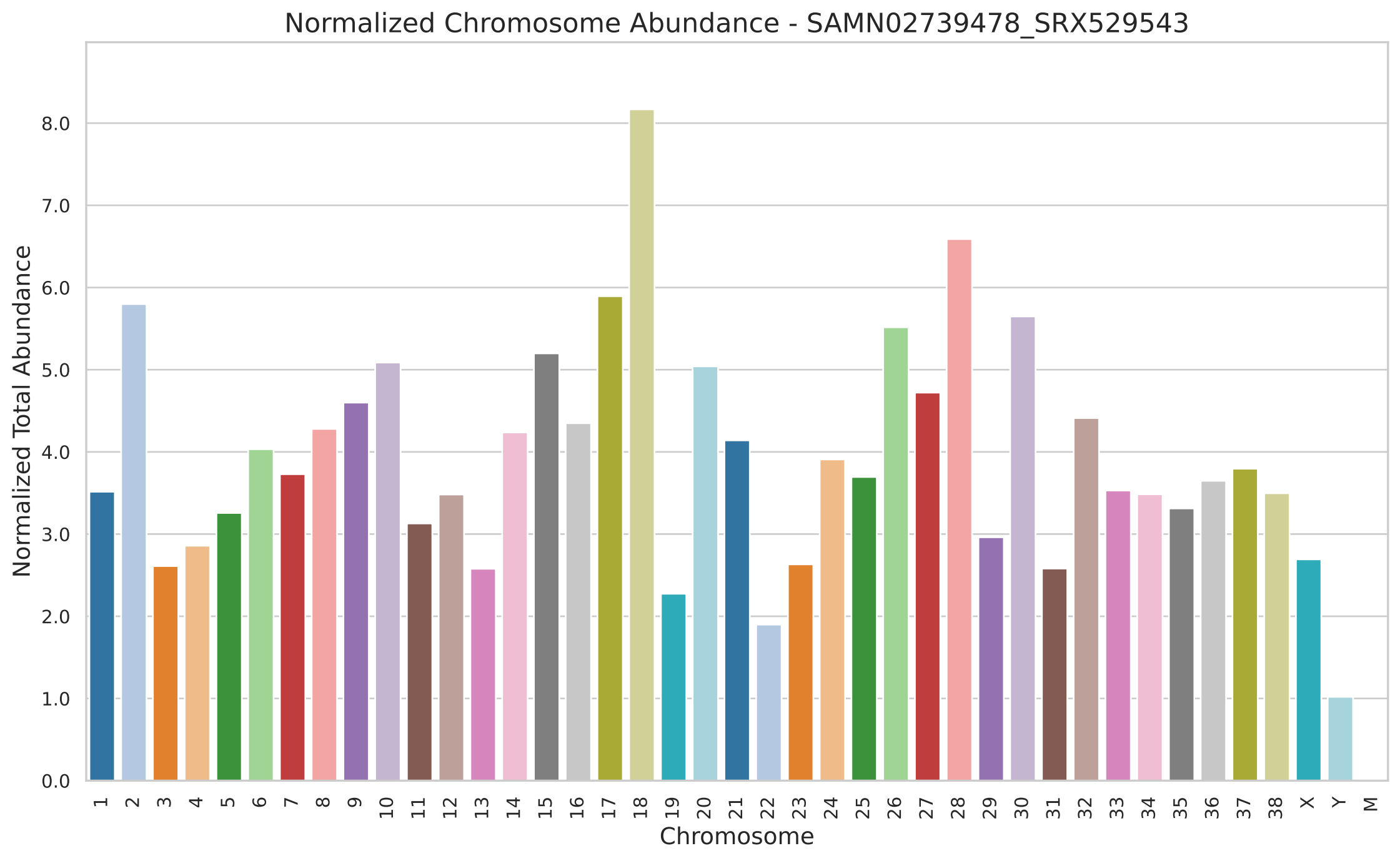

Normalized Chromosome Abundance - SAMN09949339_SRX4635916
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

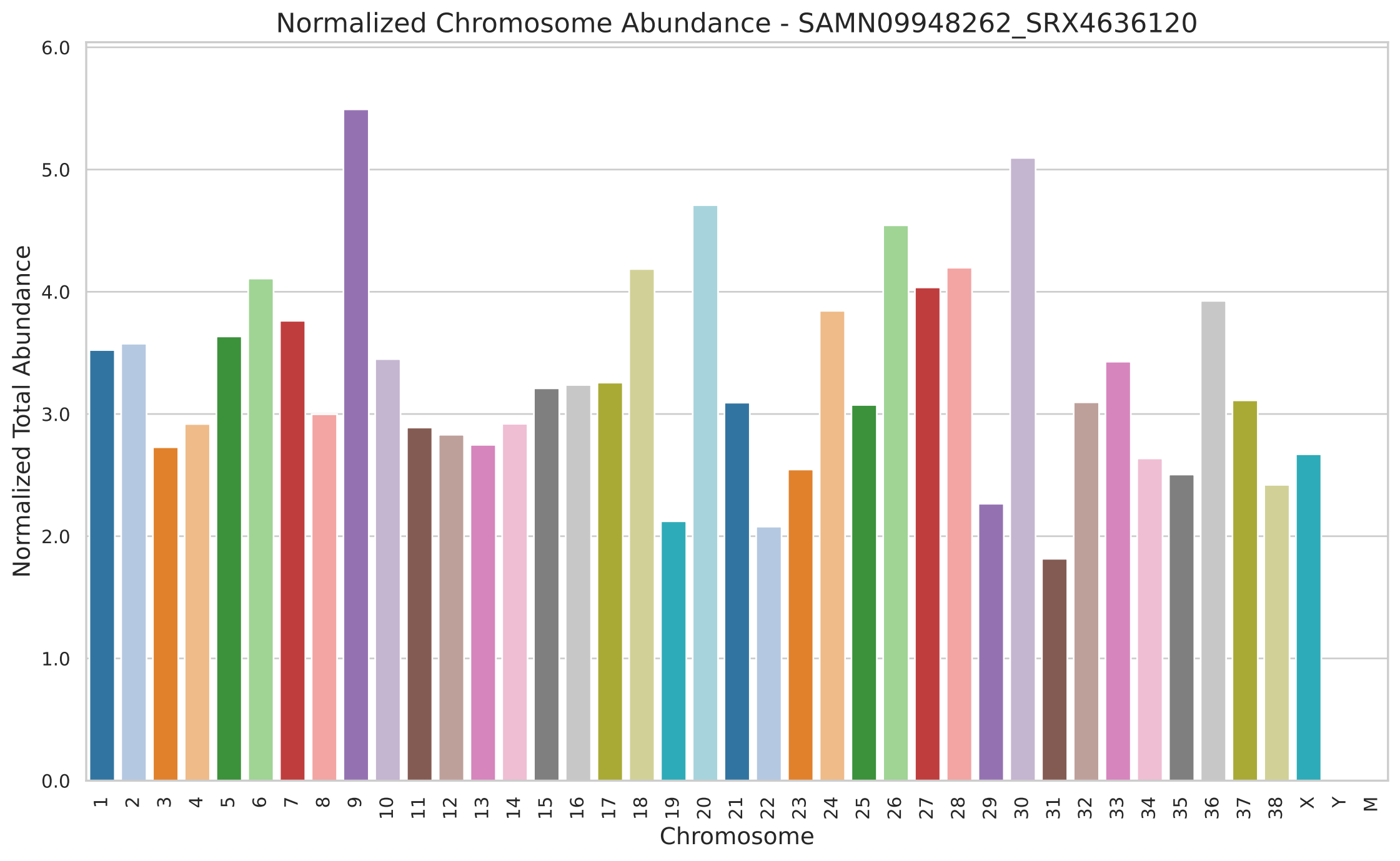

Normalized Chromosome Abundance - SAMN09949293_SRX4636061
Normalized Total Abundance
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

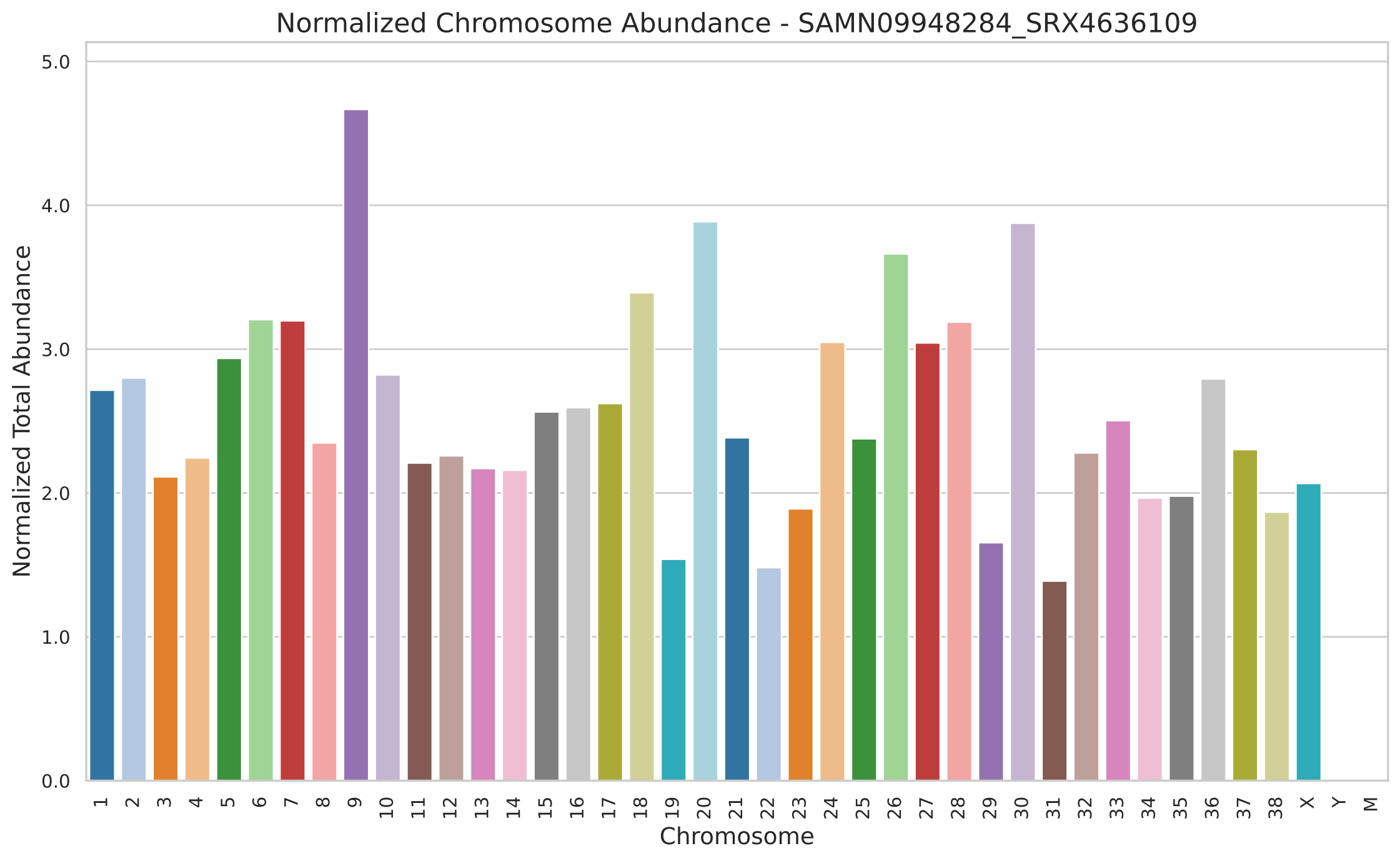

Normalized Chromosome Abundance - SAMN09948353_SRX4636096
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

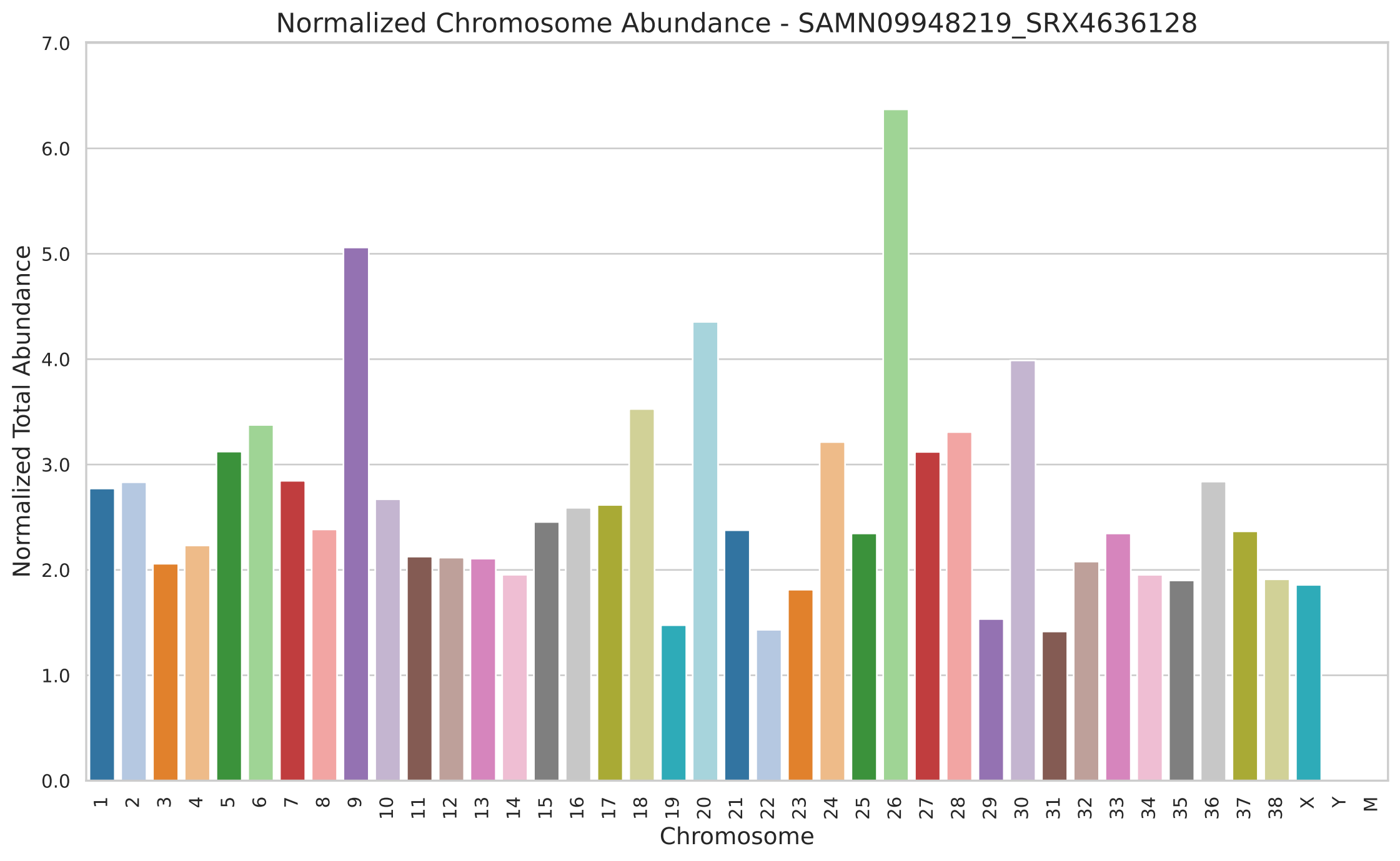

Normalized Chromosome Abundance - SAMN02739479_SRX529544
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

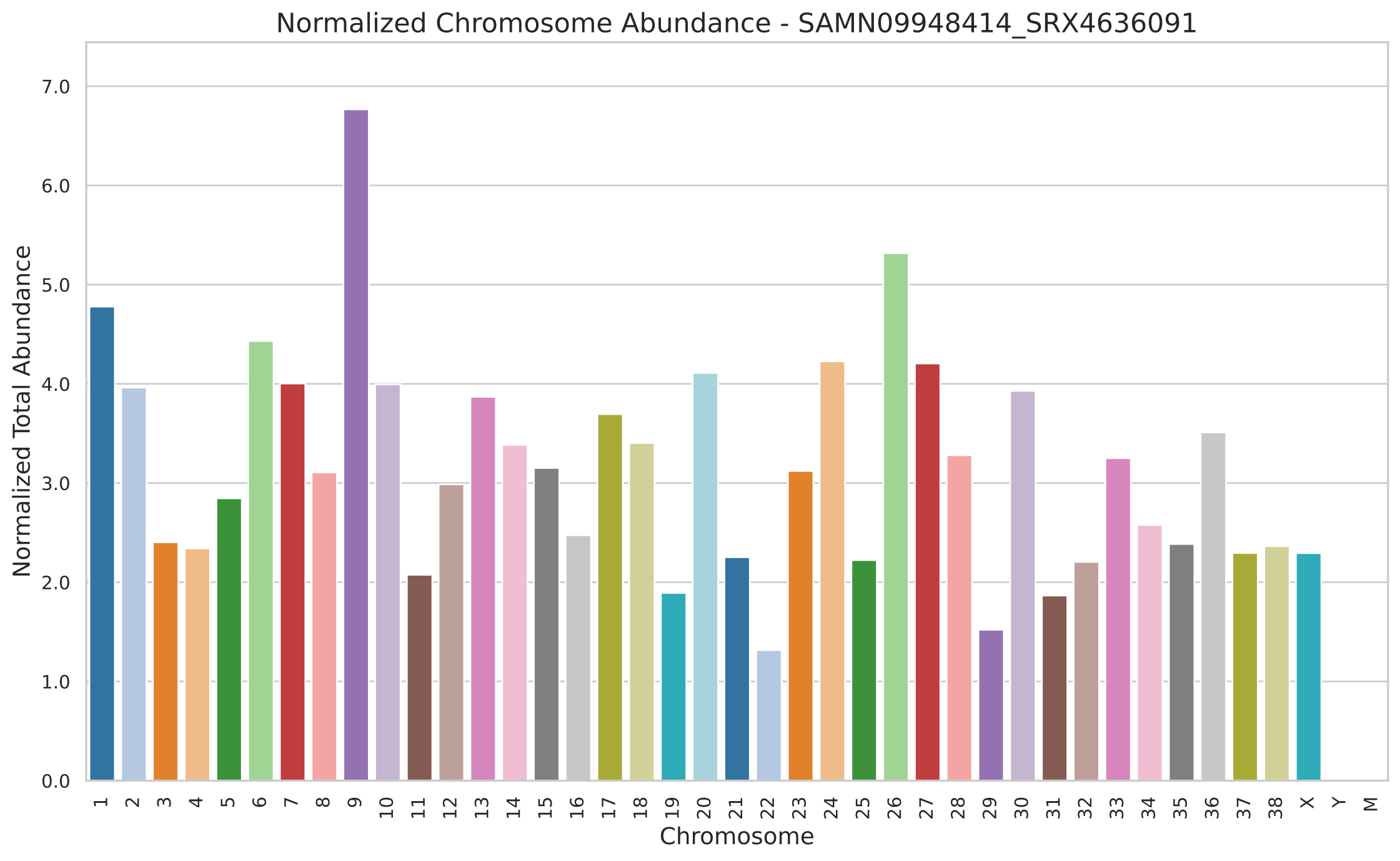

Normalized Chromosome Abundance - SAMN09948354_SRX4636093
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

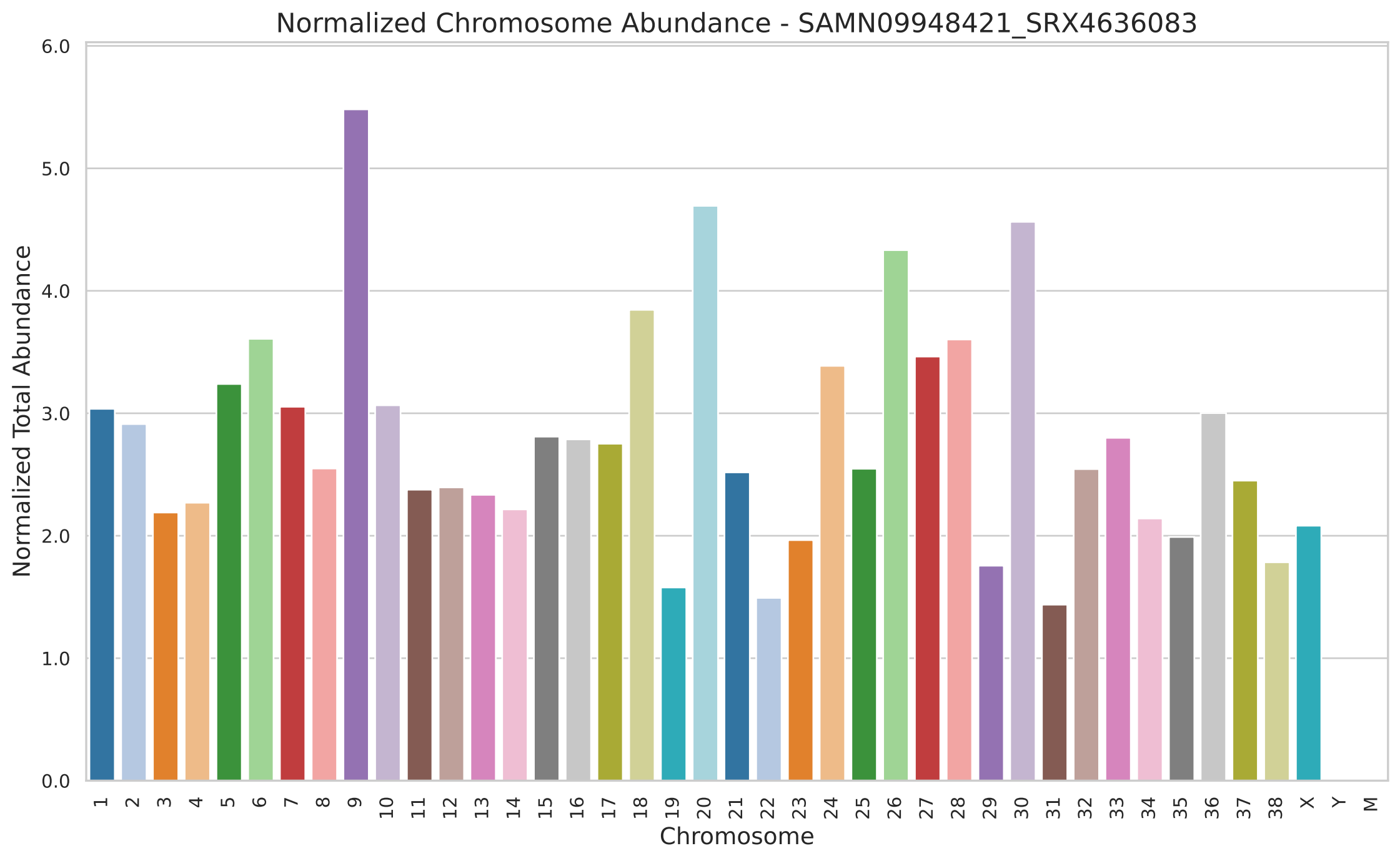

Normalized Chromosome Abundance - SAMN02739478_SRX529543
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

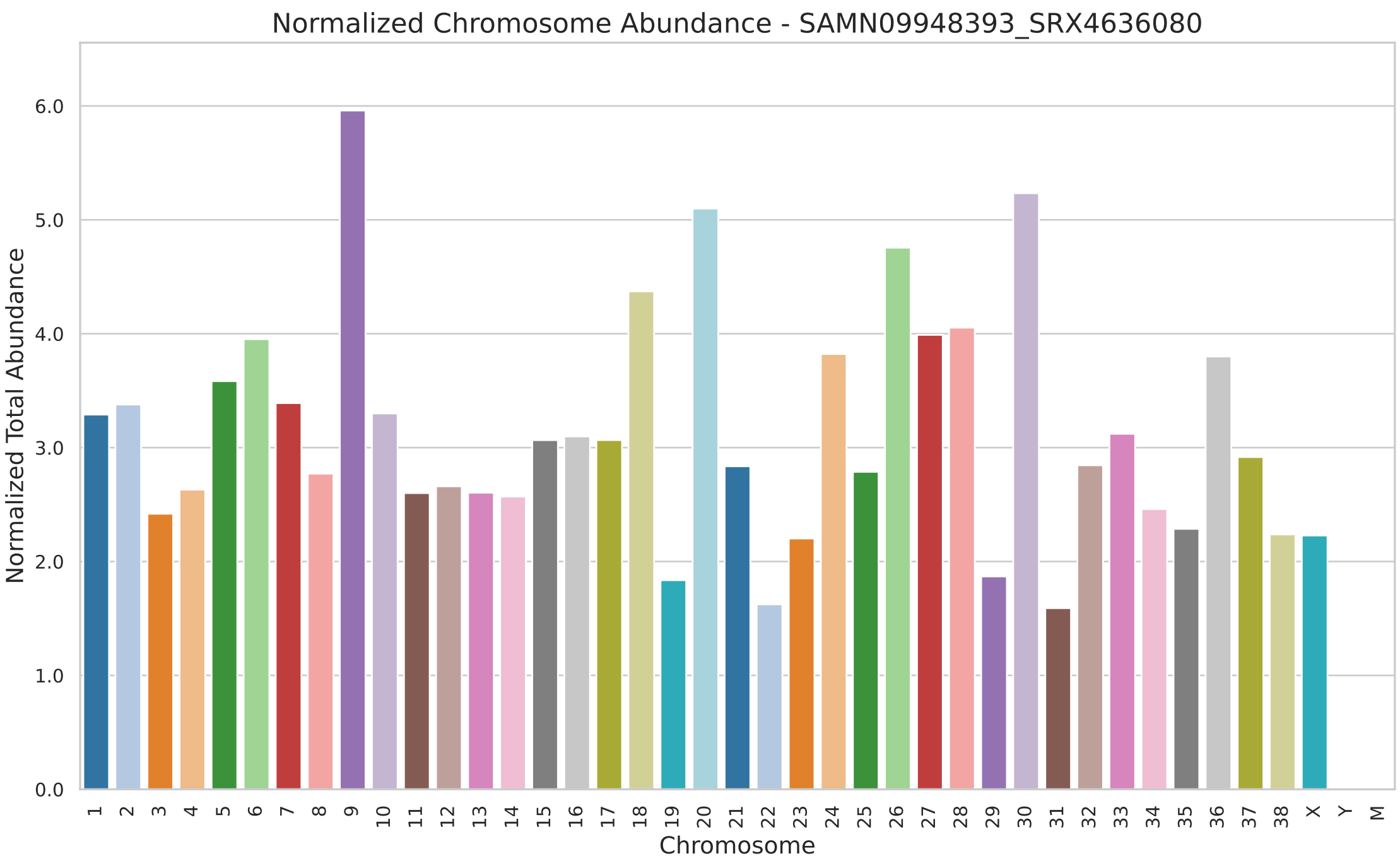

Normalized Chromosome Abundance - SAMN09948262_SRX4636120
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

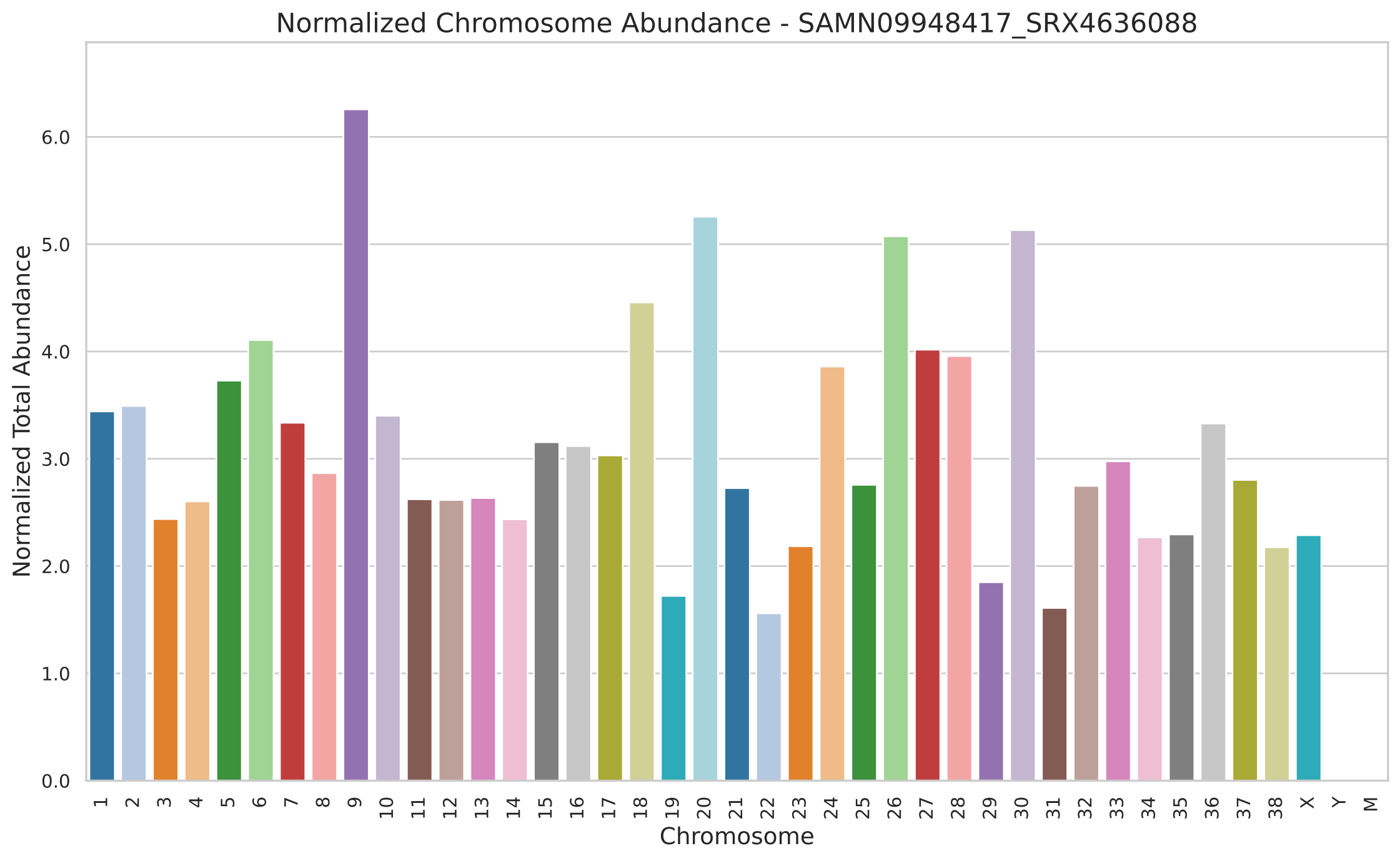

Normalized Chromosome Abundance - SAMN09948284_SRX4636109
Normalized Total Abundance
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

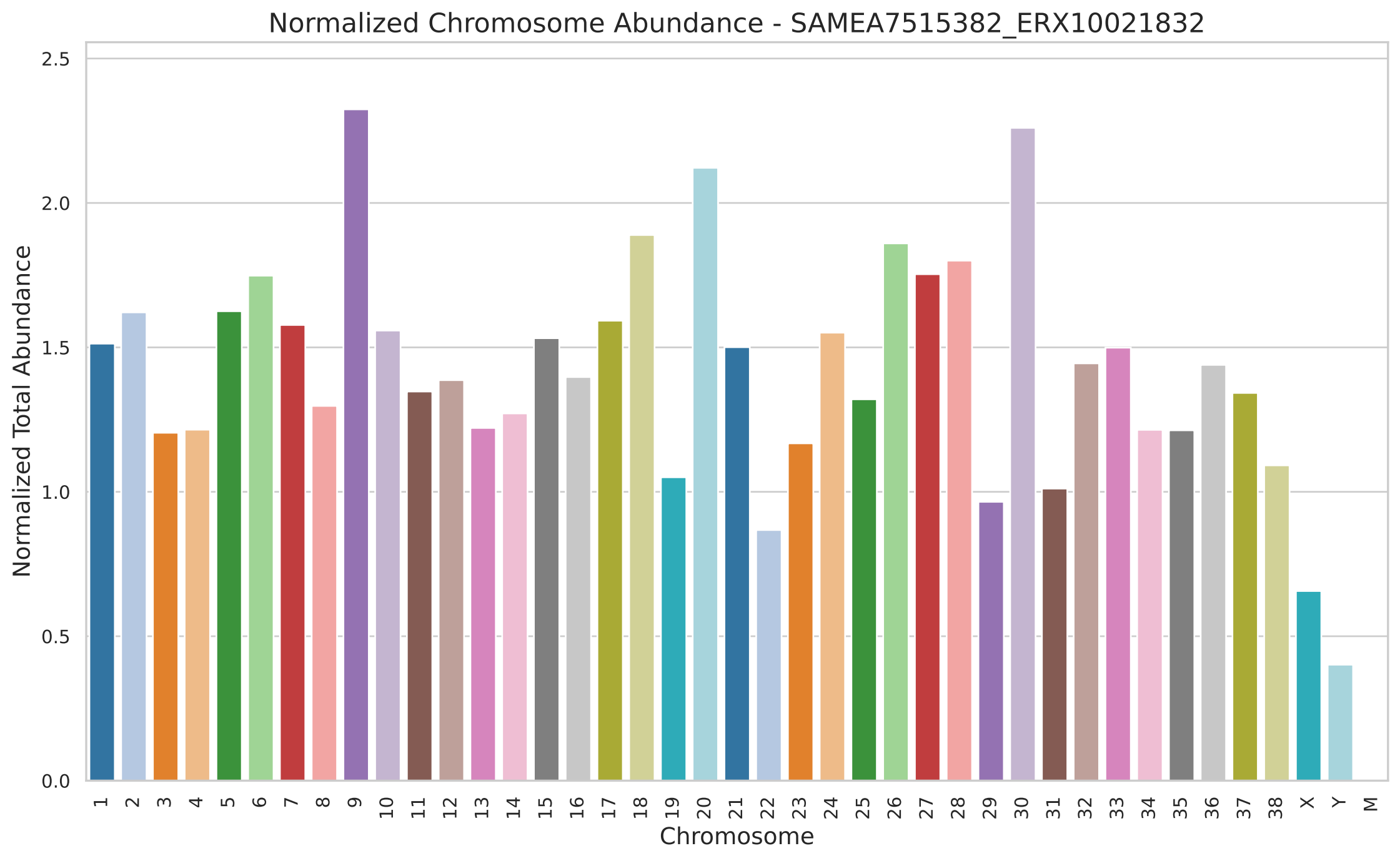

Normalized Chromosome Abundance - SAMN09948219_SRX4636128
Normalized Total Abundance
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

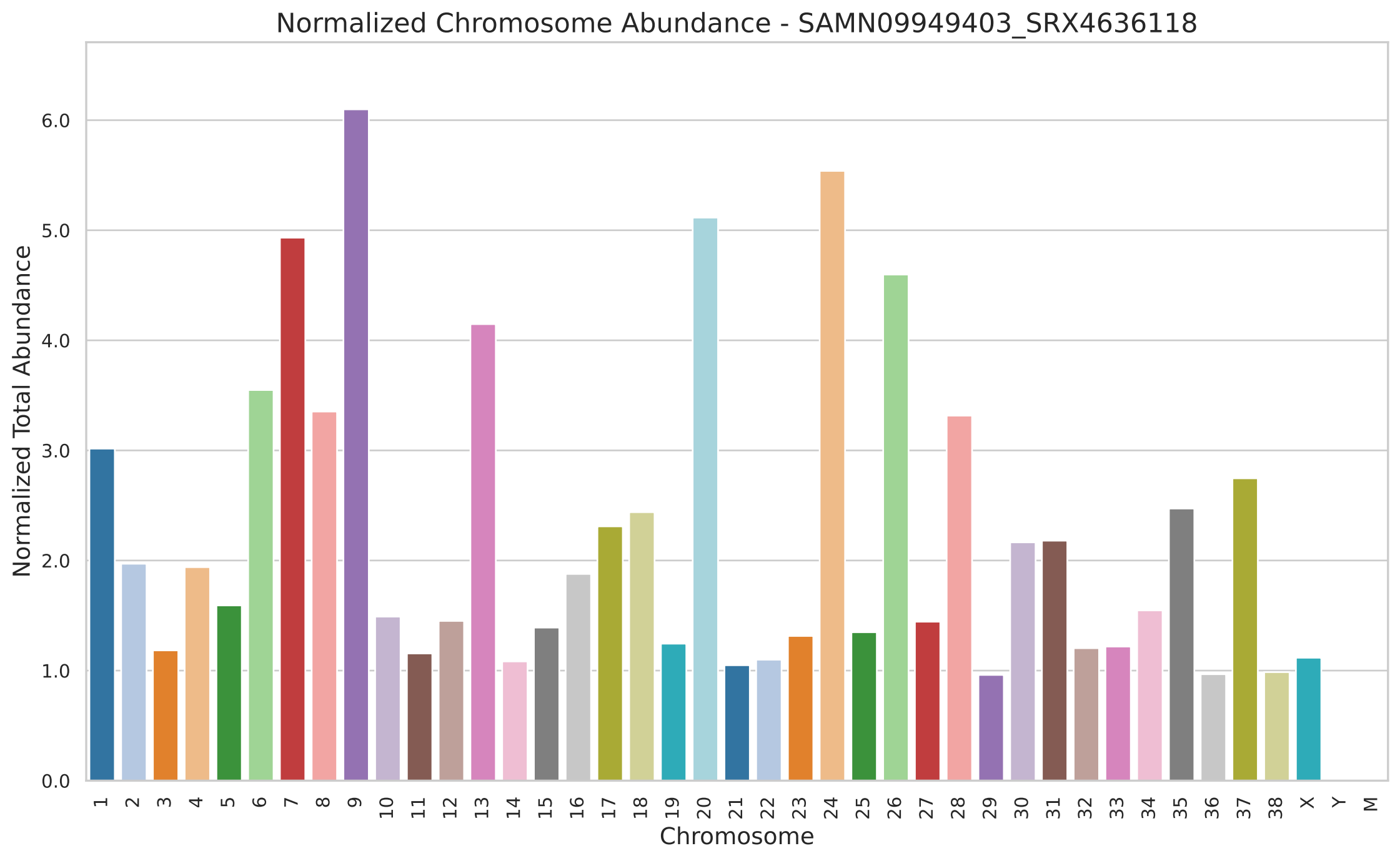

Normalized Chromosome Abundance - SAMN09948414_SRX4636091
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

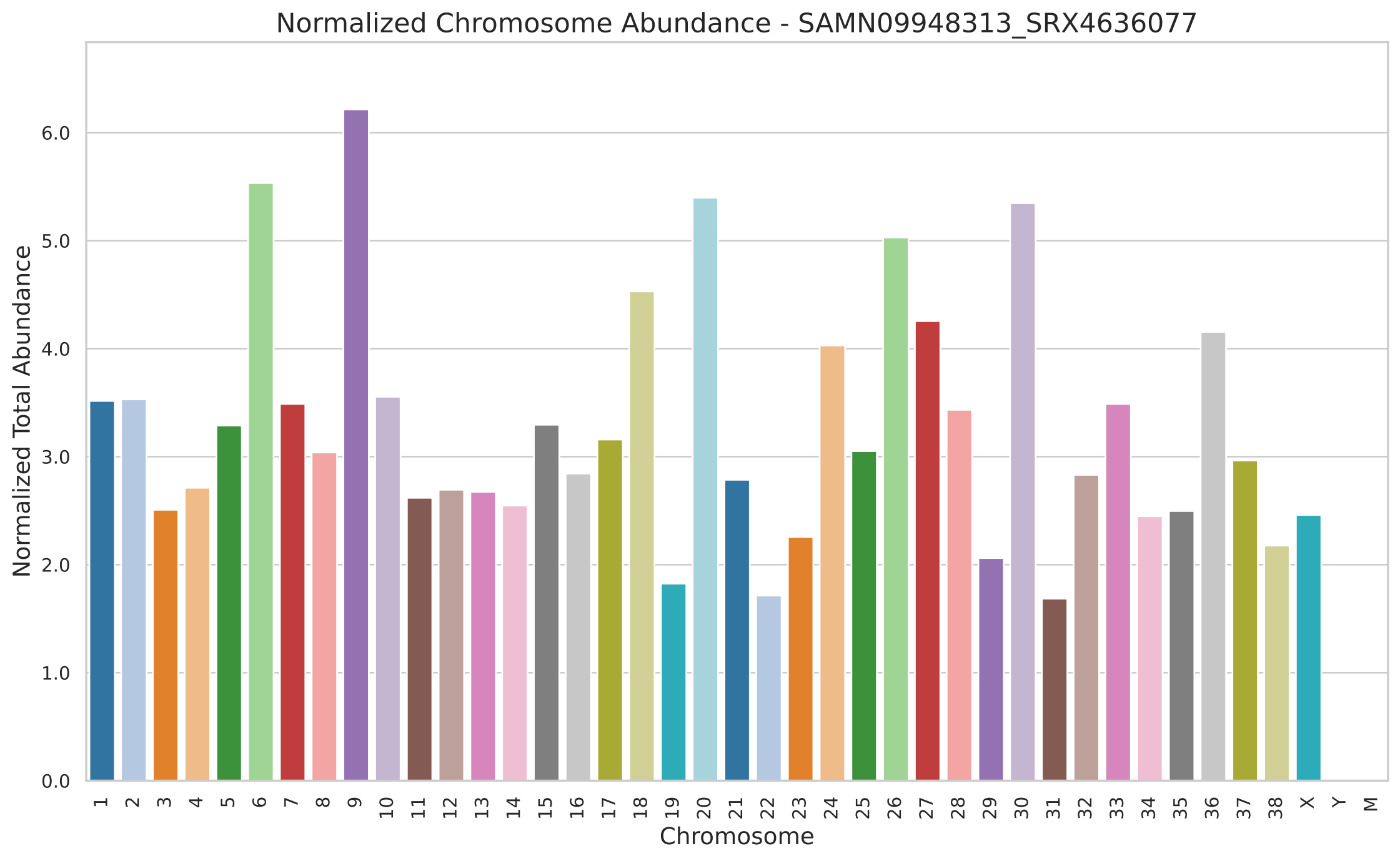

Normalized Chromosome Abundance - SAMN09948421_SRX4636083
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

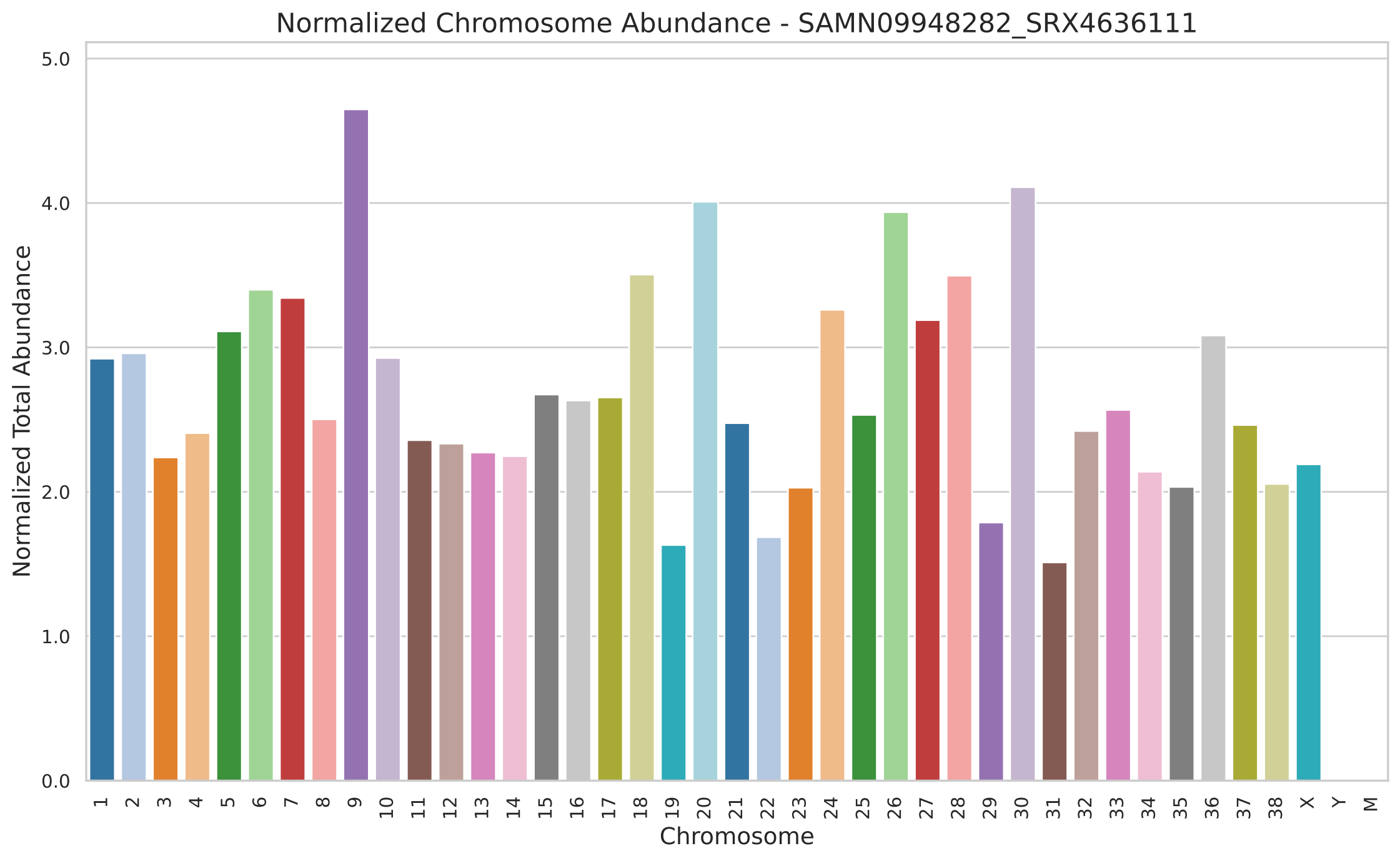

Normalized Chromosome Abundance - SAMN09948393_SRX4636080
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

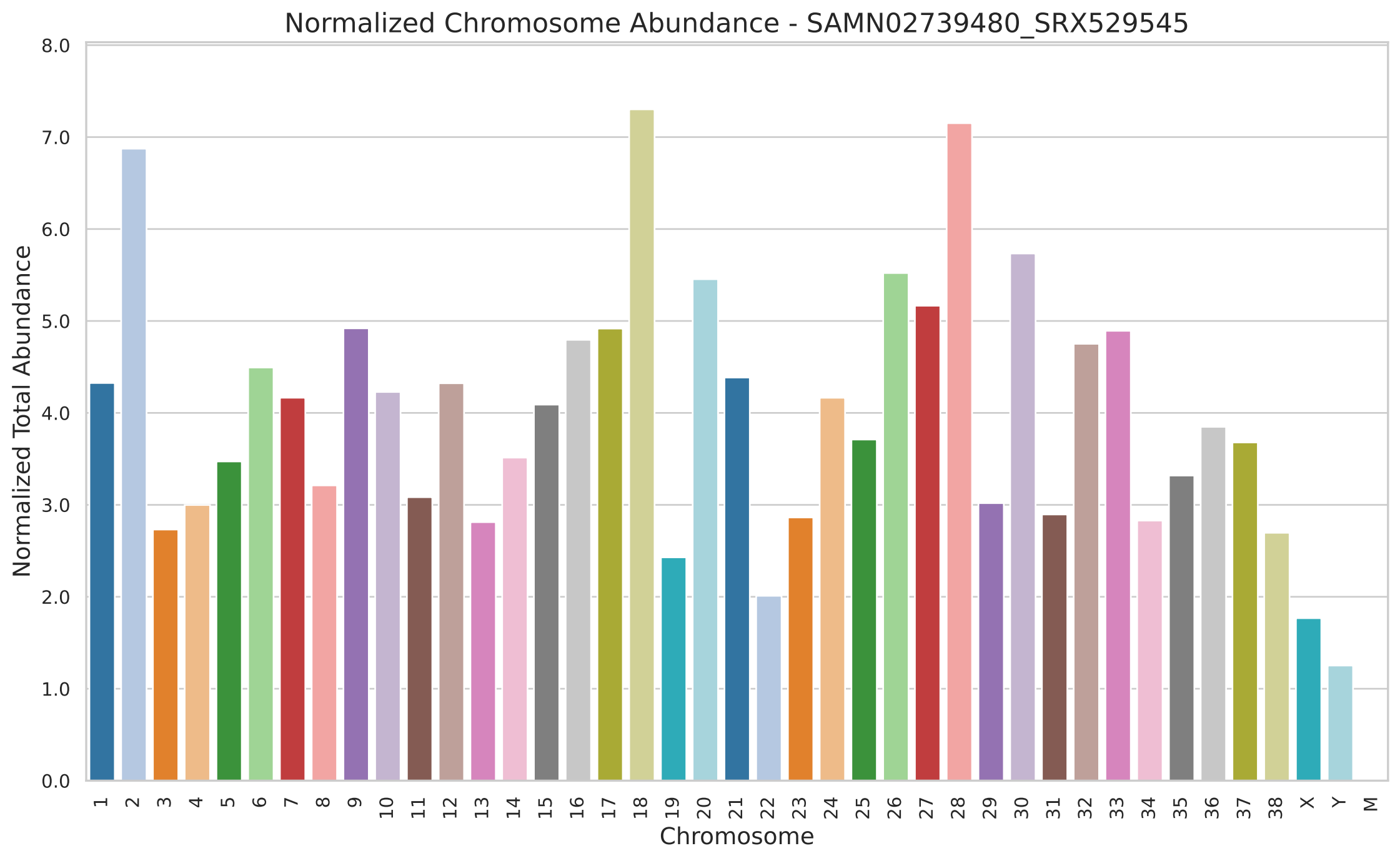

Normalized Chromosome Abundance - SAMN09948417_SRX4636088
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

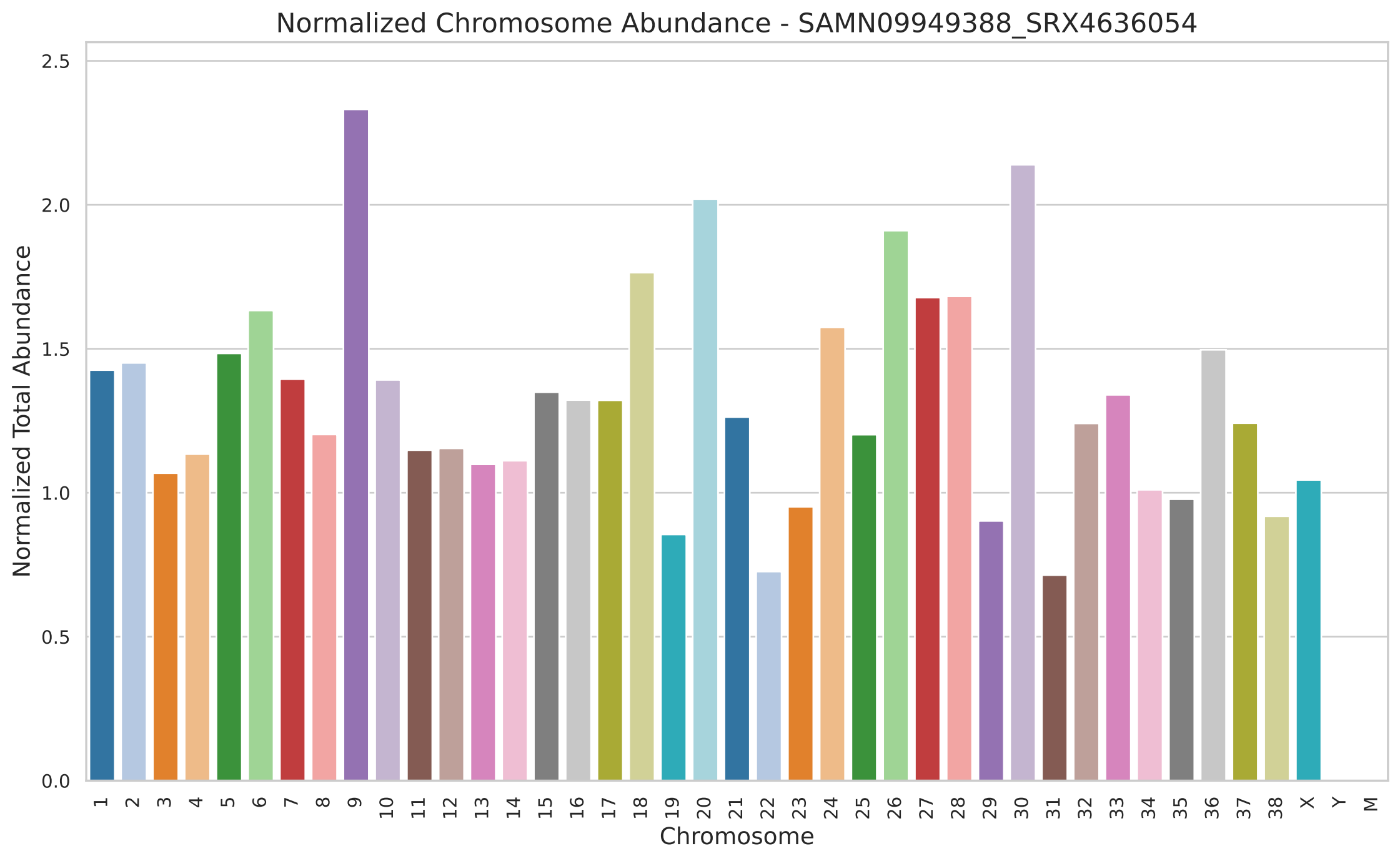

Normalized Chromosome Abundance - SAMEA7515382_ERX10021832
Normalized Total Abundance
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

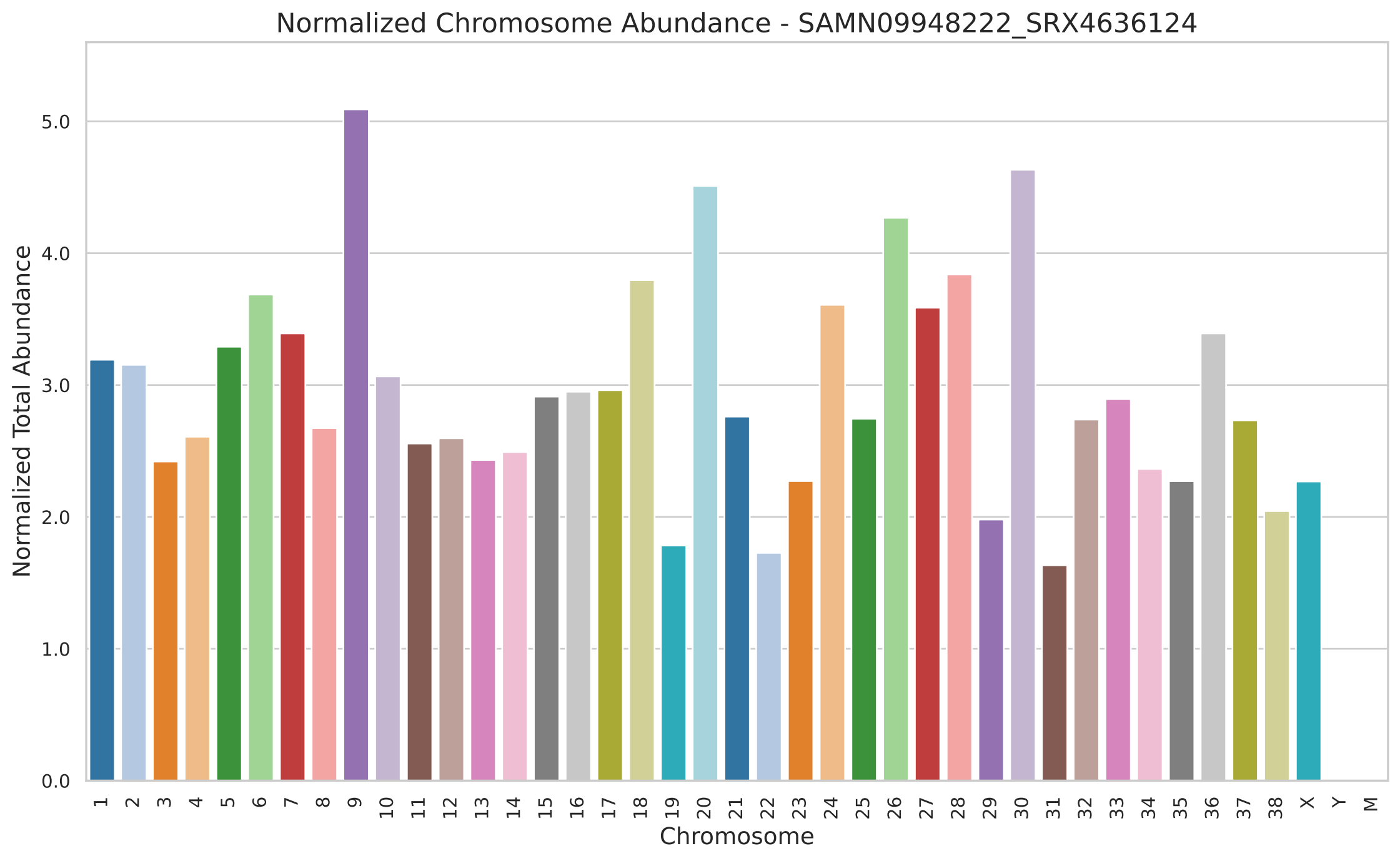

Normalized Chromosome Abundance - SAMN09949403_SRX4636118
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

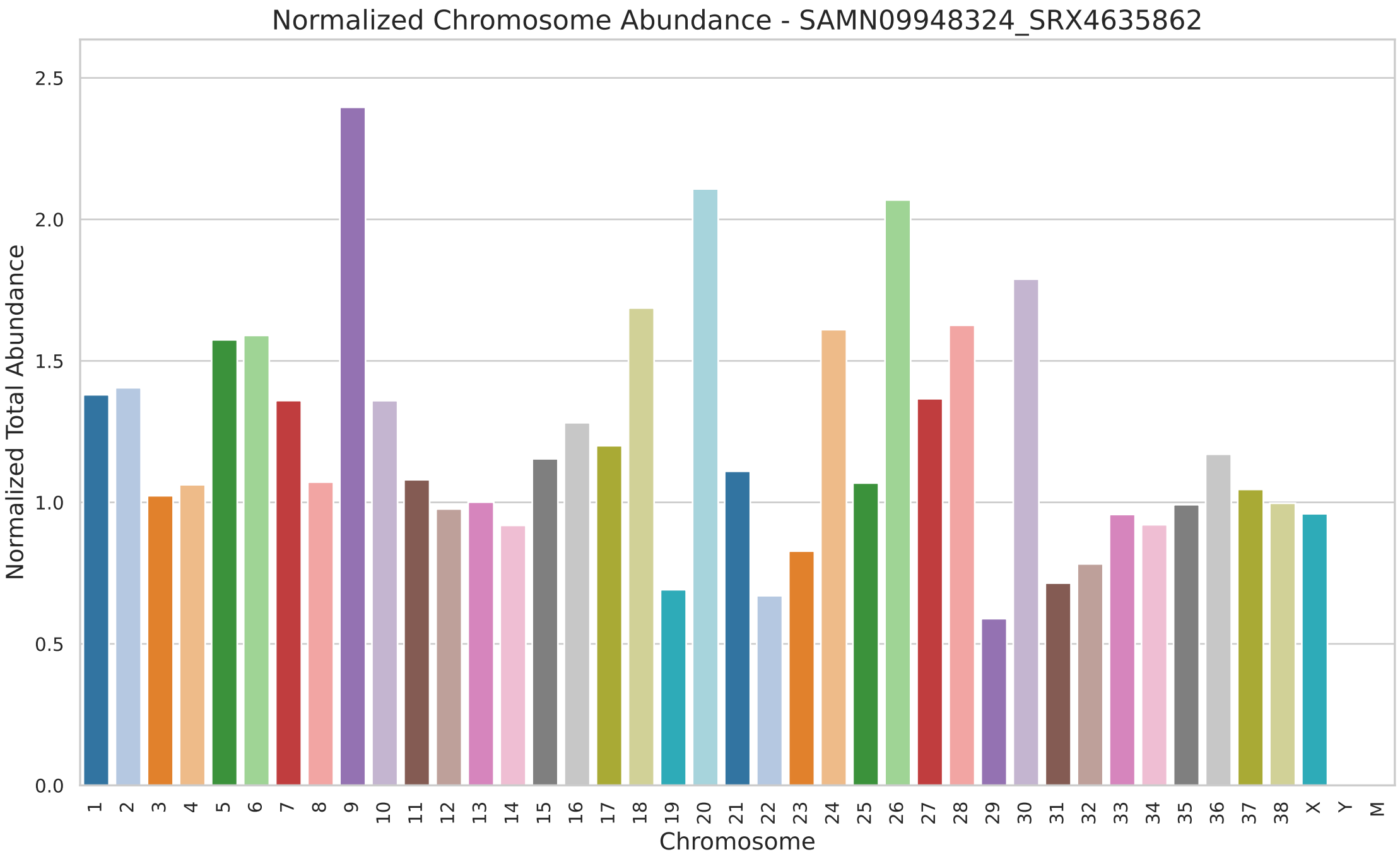

Normalized Chromosome Abundance - SAMN09948313_SRX4636077
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

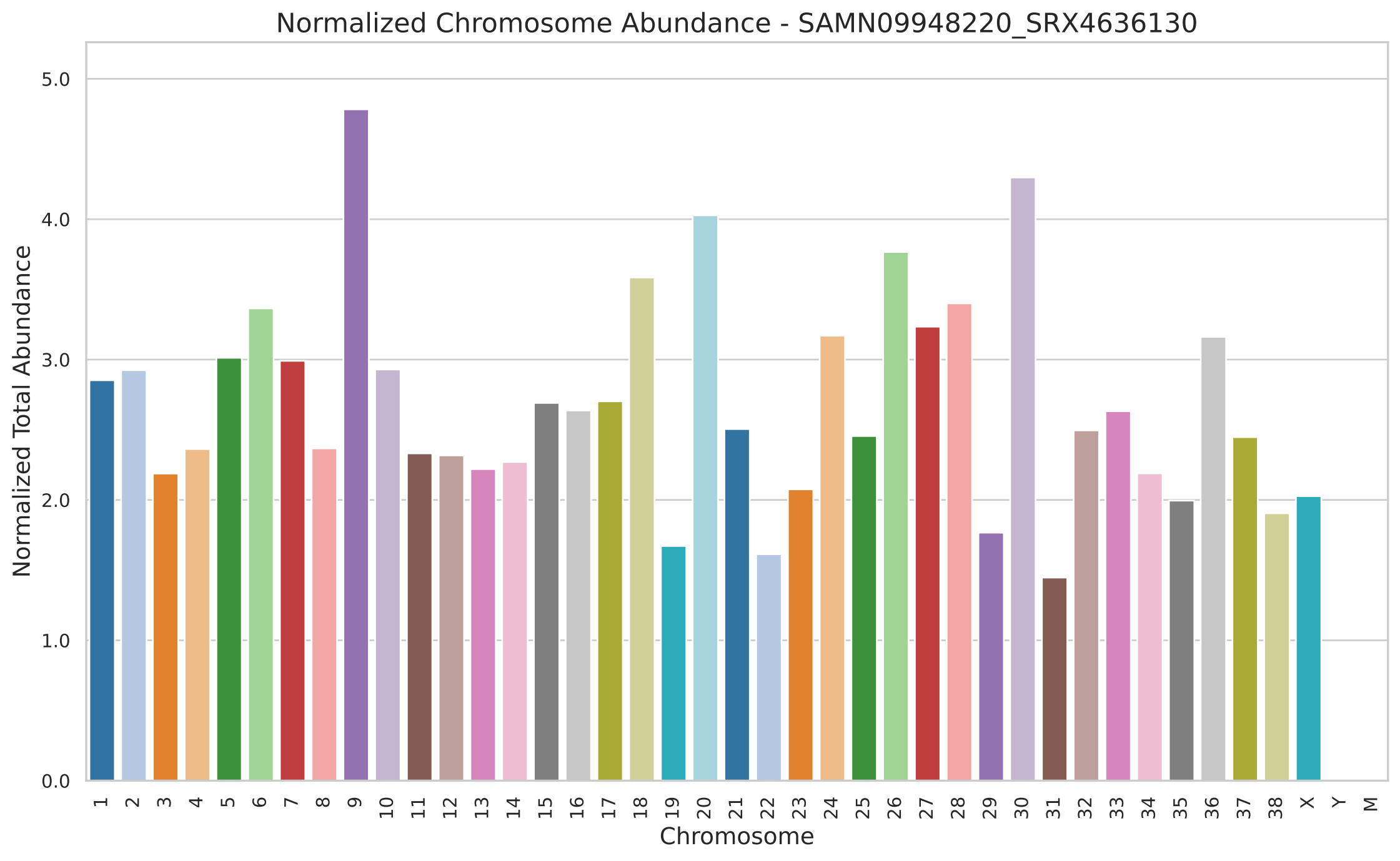

Normalized Chromosome Abundance - SAMN09948282_SRX4636111
Normalized Total Abundance
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

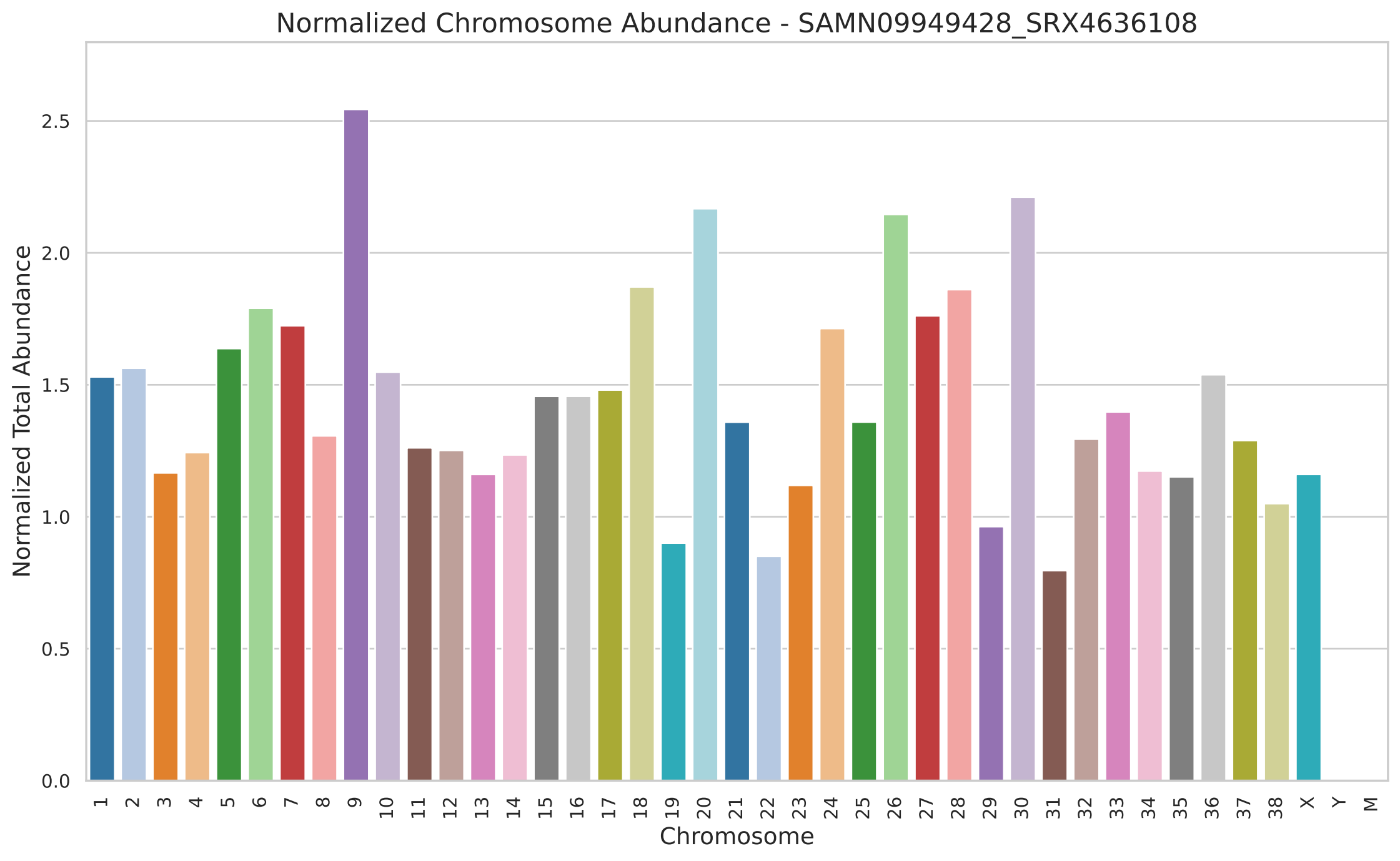

Normalized Chromosome Abundance - SAMN02739480_SRX529545
Normalized Total Abundance
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

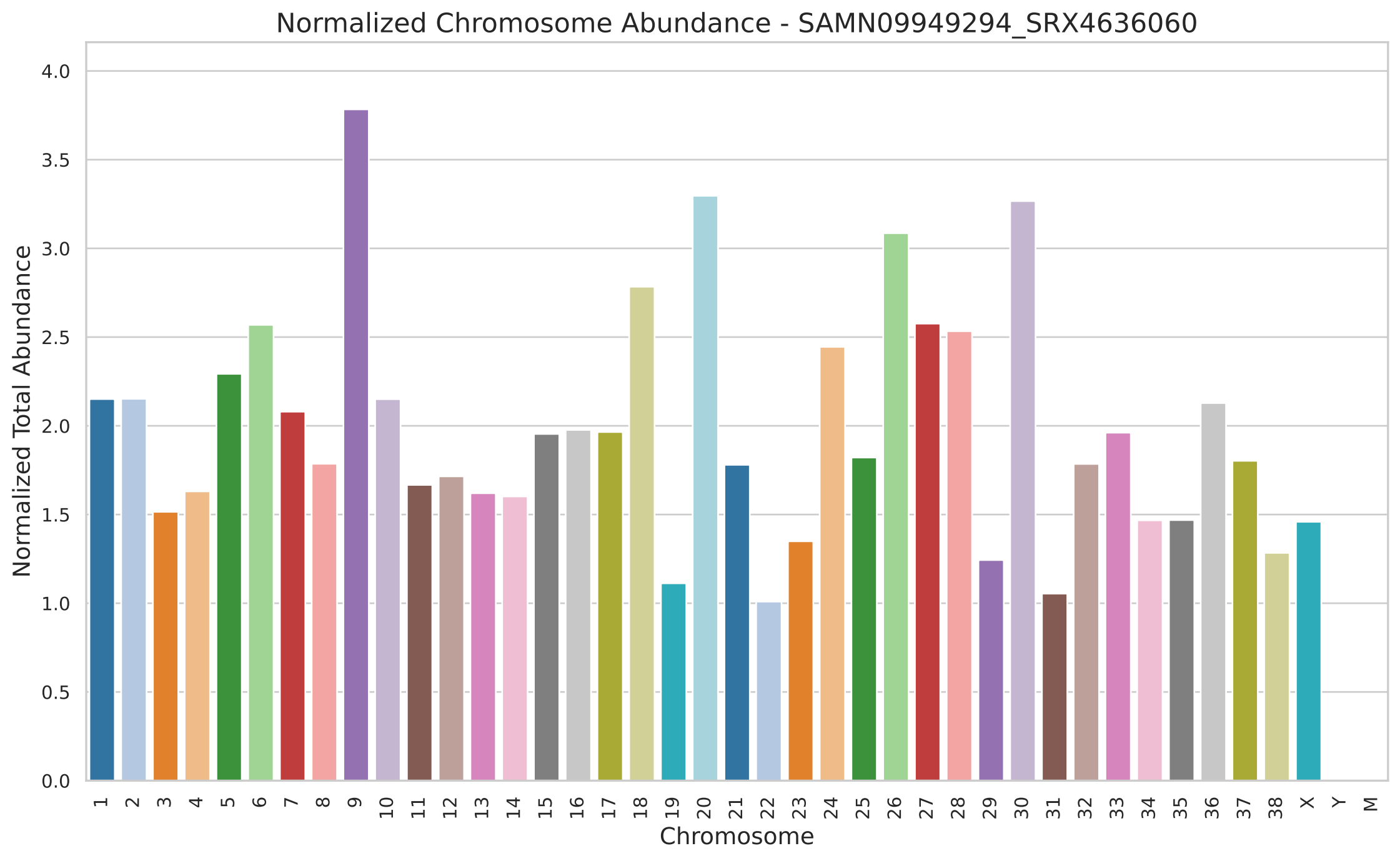

Normalized Chromosome Abundance - SAMN09949388_SRX4636054
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

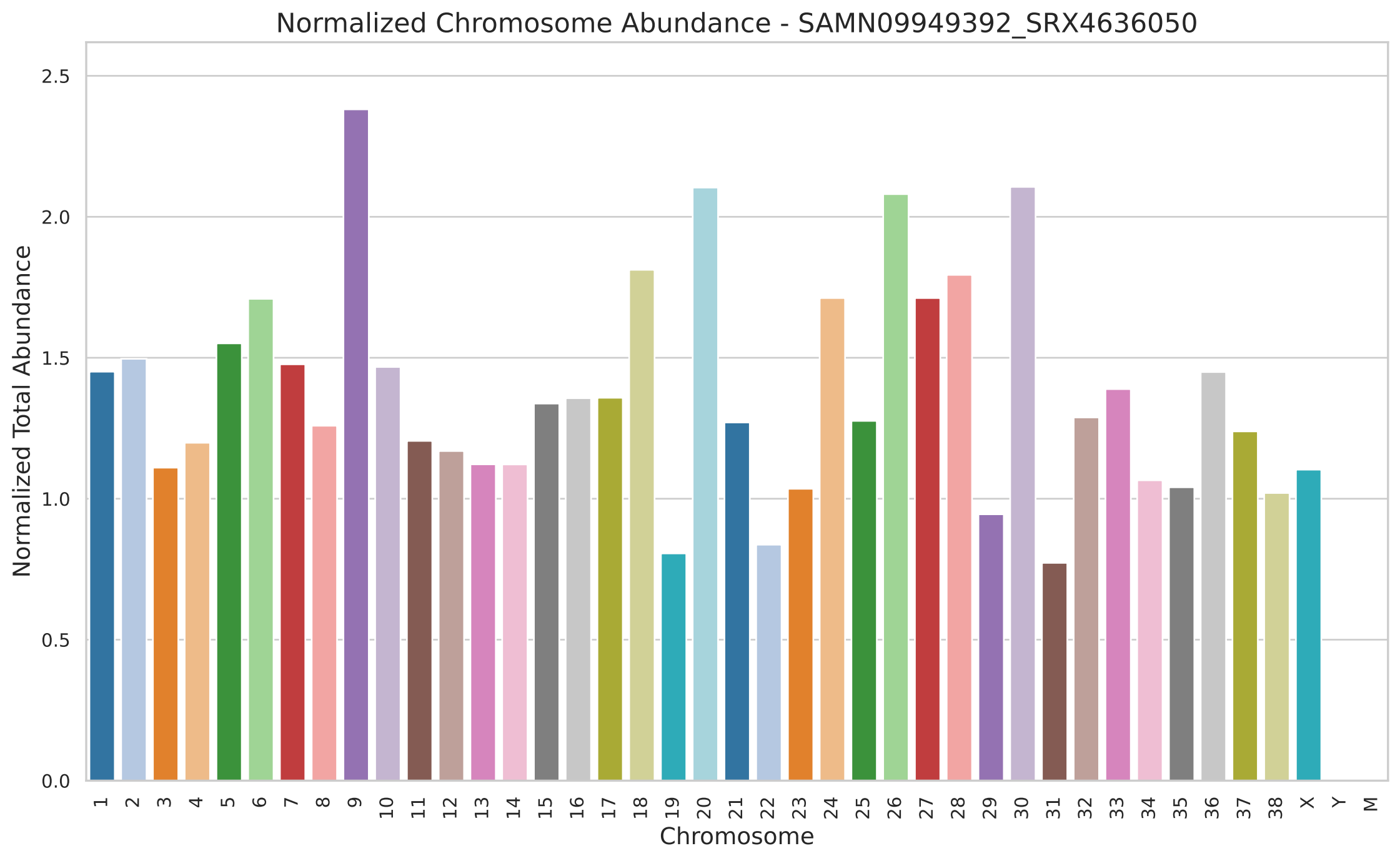

Normalized Chromosome Abundance - SAMN09948222_SRX4636124
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

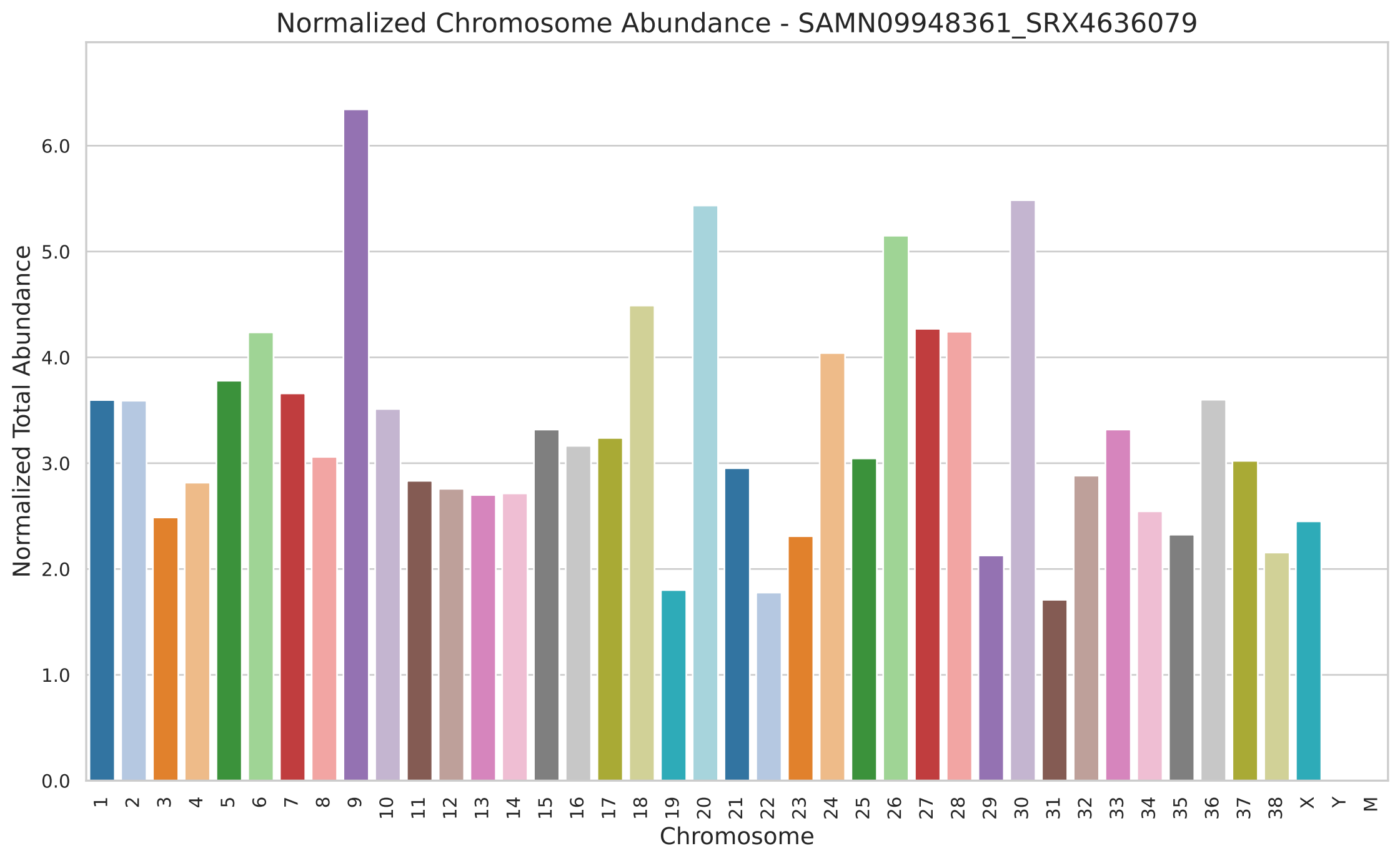

Normalized Chromosome Abundance - SAMN09948324_SRX4635862
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

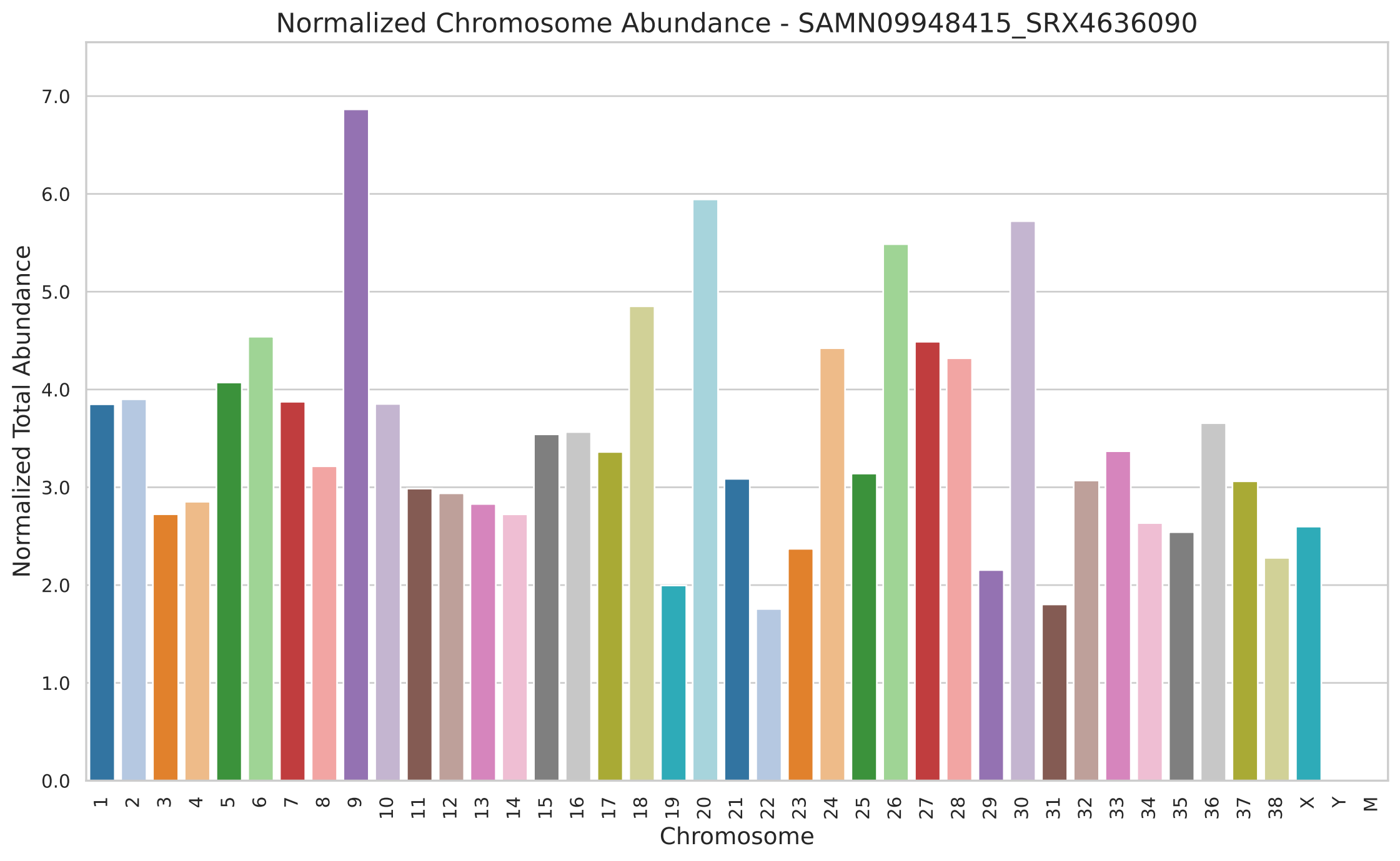

Normalized Chromosome Abundance - SAMN09948220_SRX4636130
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

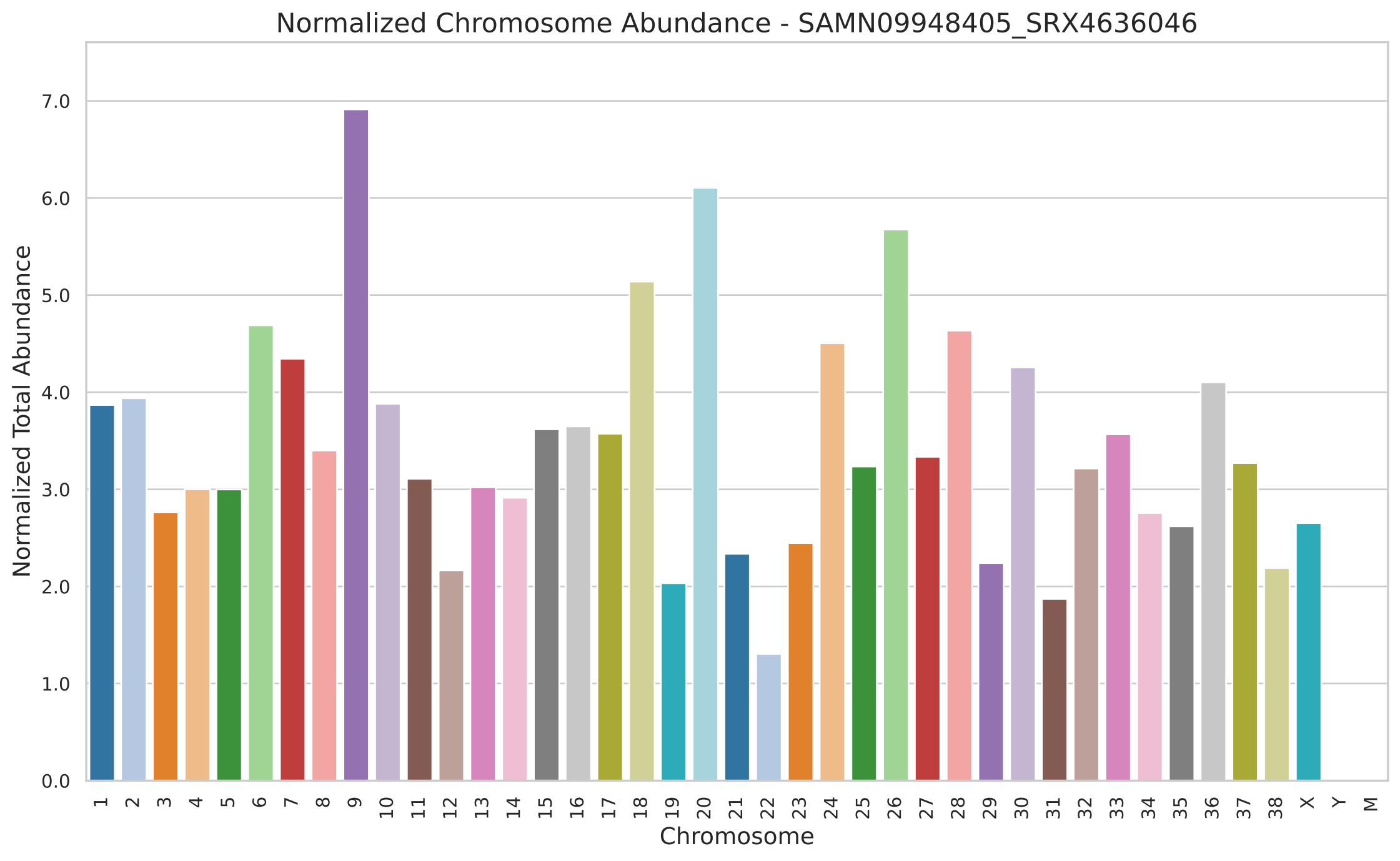

Normalized Chromosome Abundance - SAMN09949428_SRX4636108
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

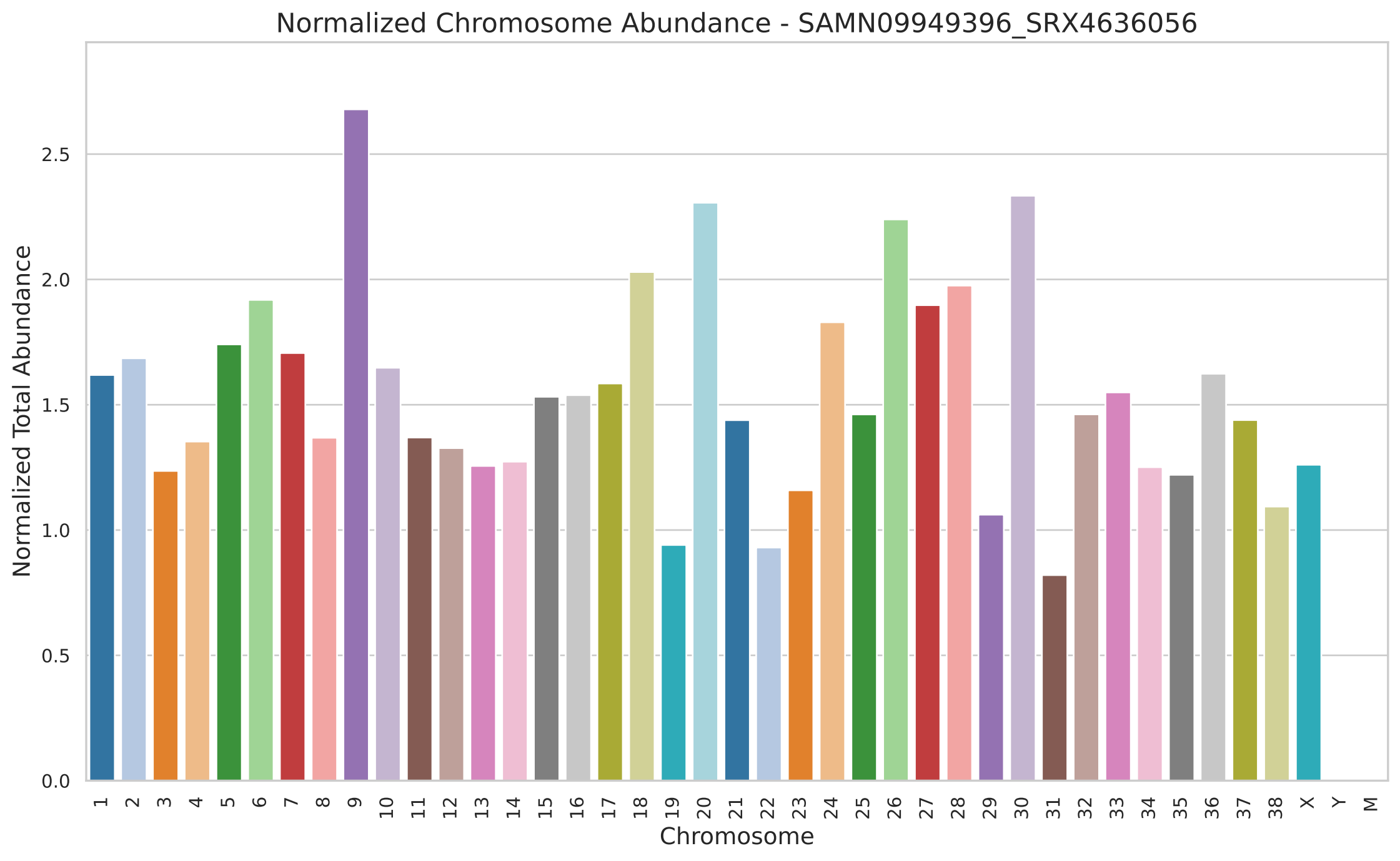

Normalized Chromosome Abundance - SAMN09949294_SRX4636060
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

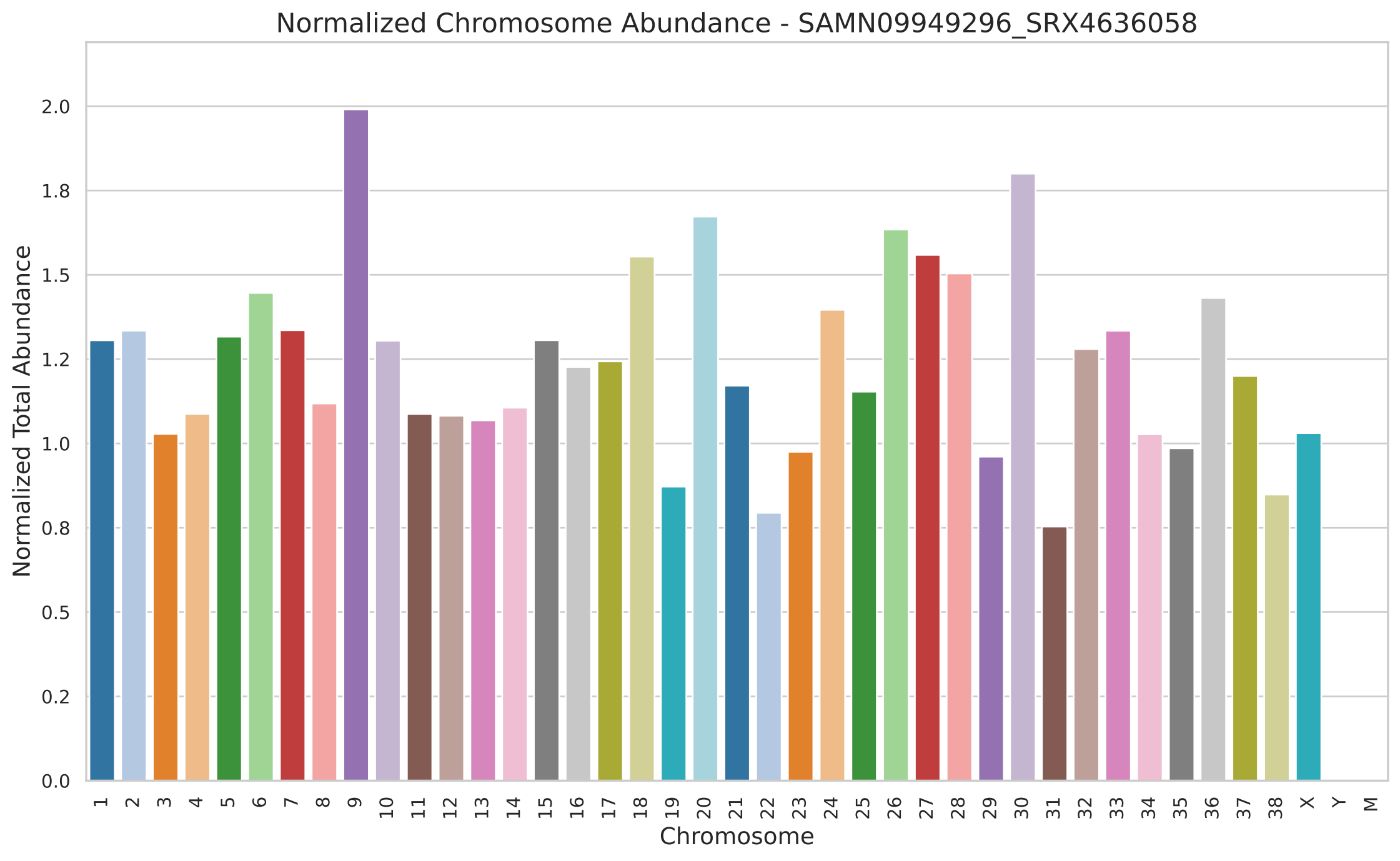

Normalized Chromosome Abundance - SAMN09949392_SRX4636050
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

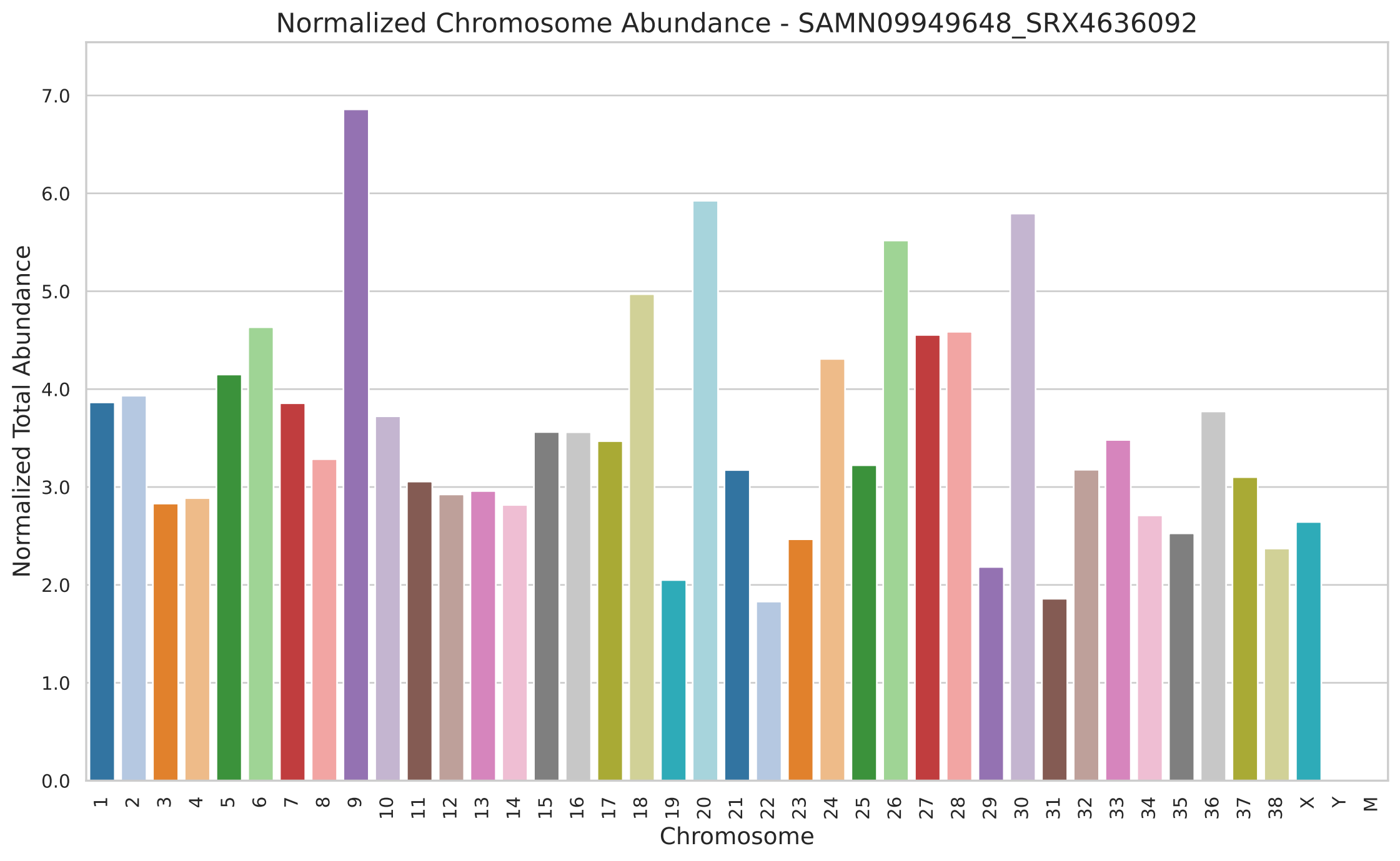

Normalized Chromosome Abundance - SAMN09948361_SRX4636079
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

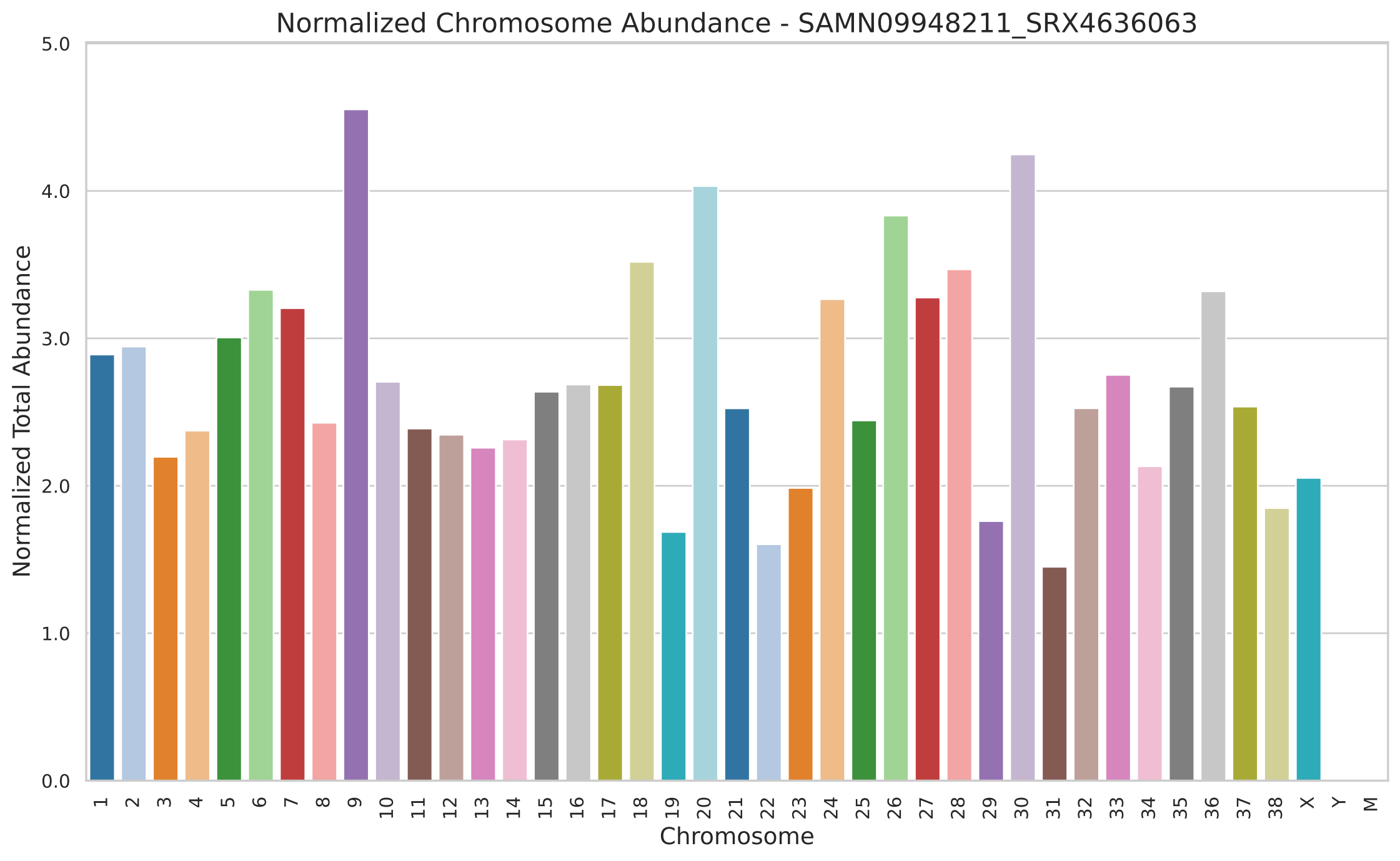

Normalized Chromosome Abundance - SAMN09948415_SRX4636090
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

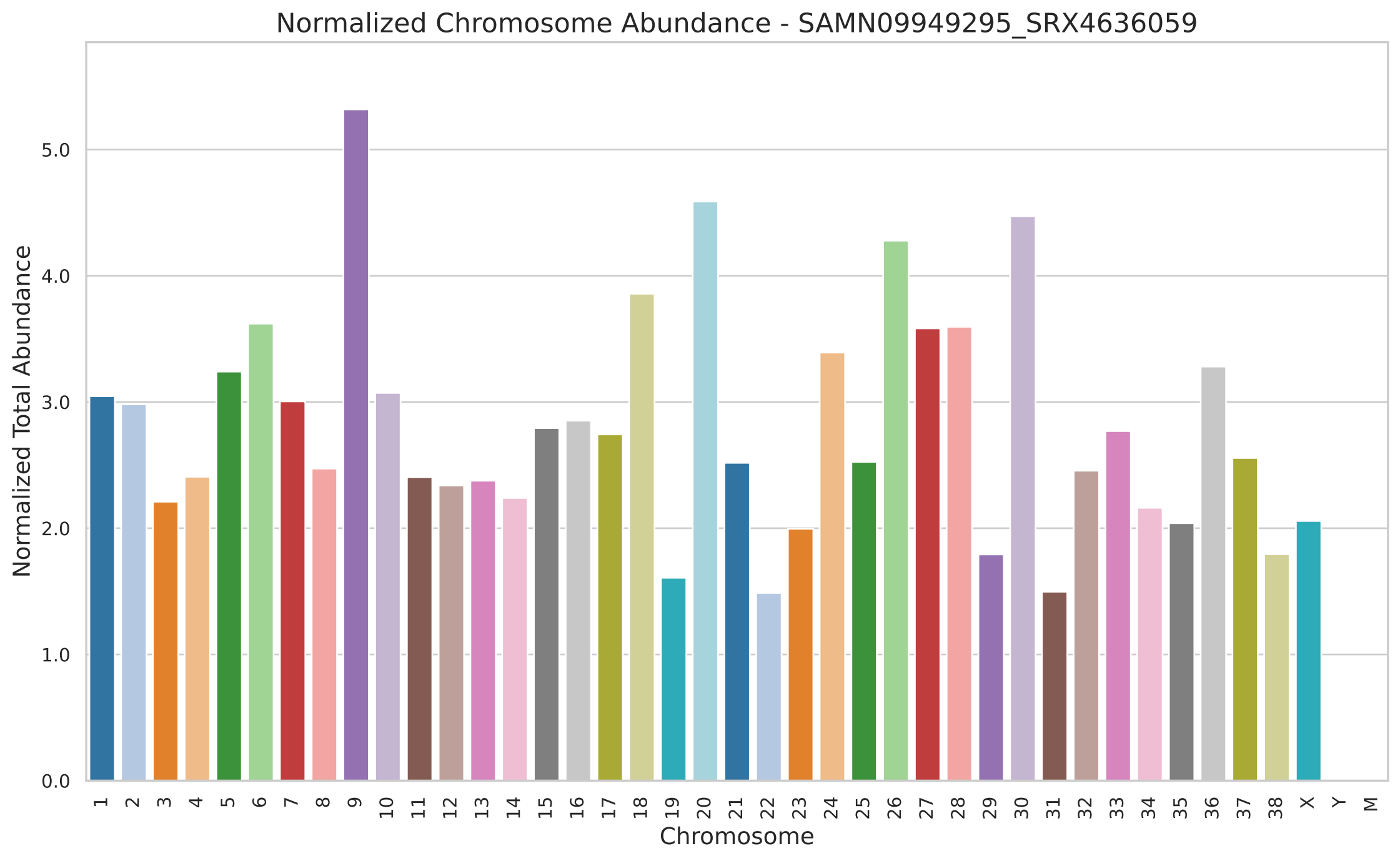

Normalized Chromosome Abundance - SAMN09948405_SRX4636046
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

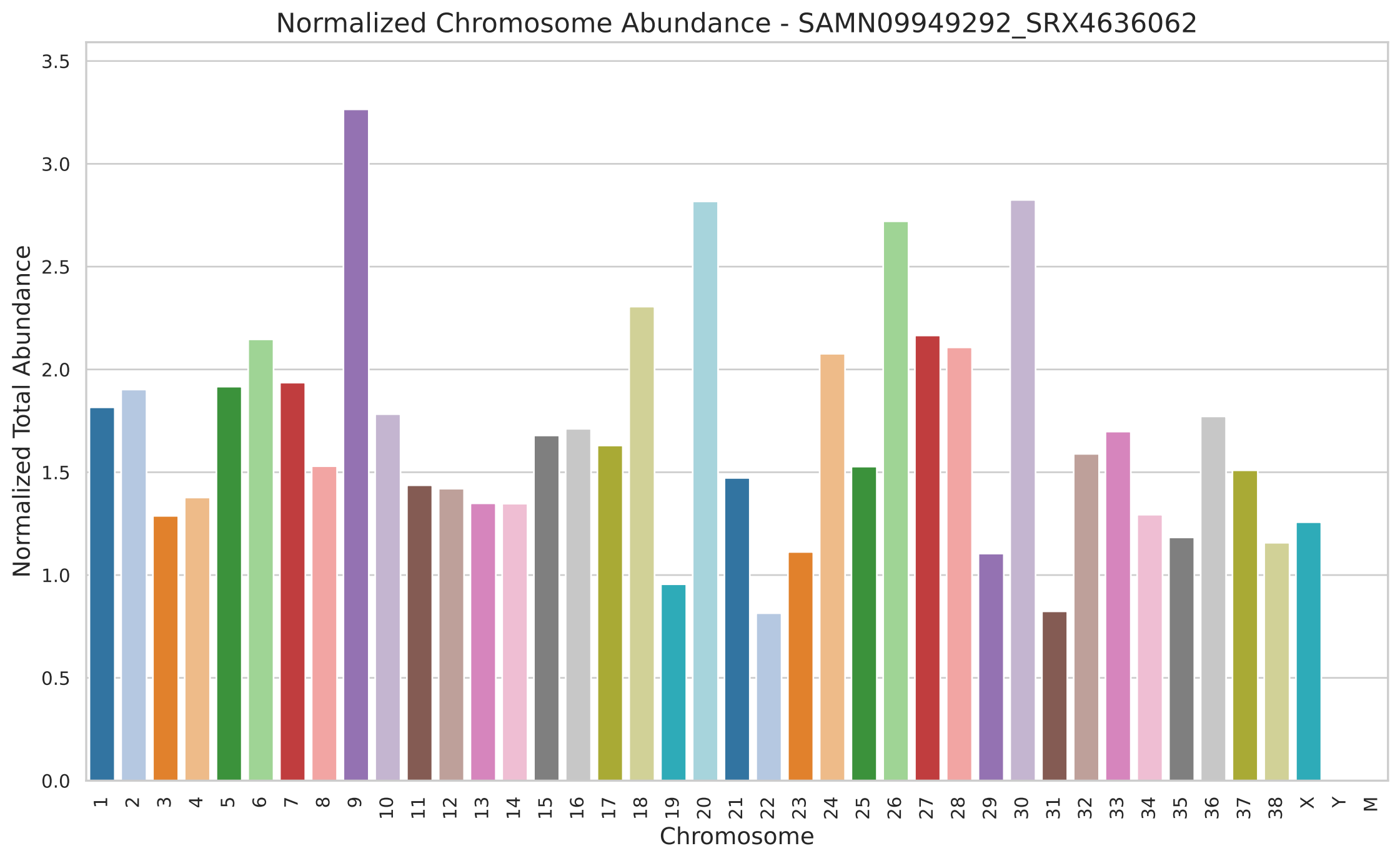

Normalized Chromosome Abundance - SAMN09949396_SRX4636056
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

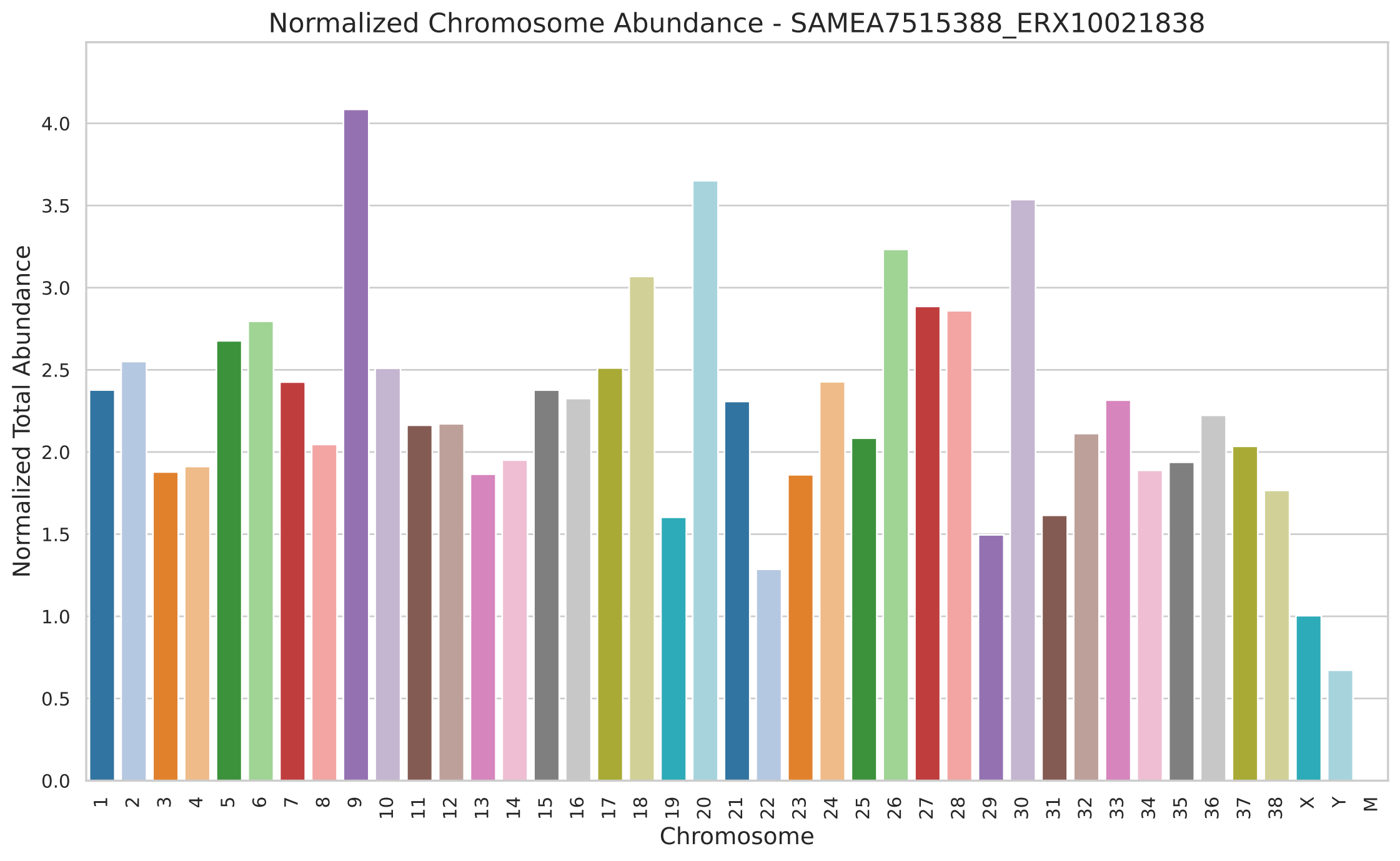

Normalized Chromosome Abundance - SAMN09949296_SRX4636058
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

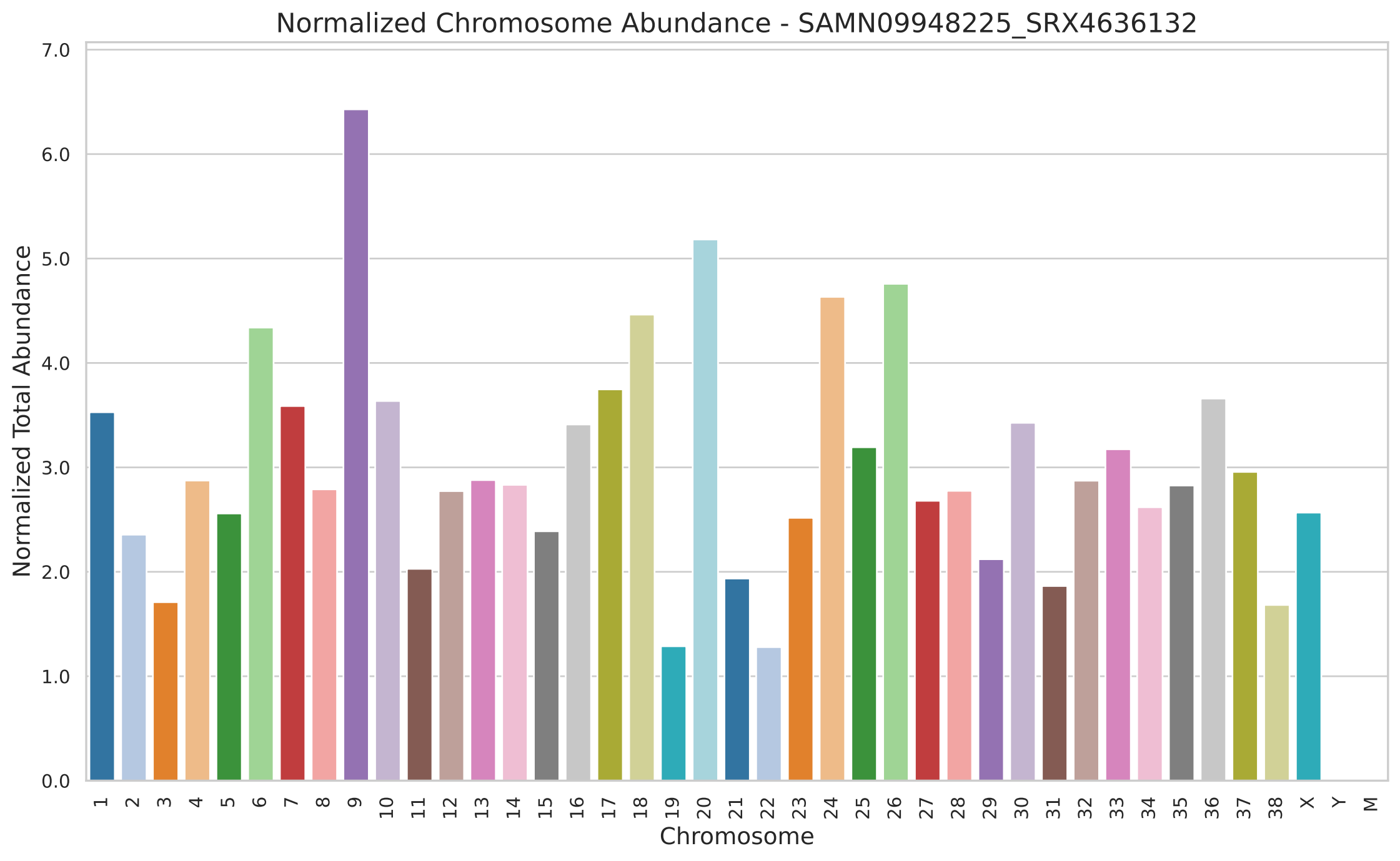

Normalized Chromosome Abundance - SAMN09949648_SRX4636092
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

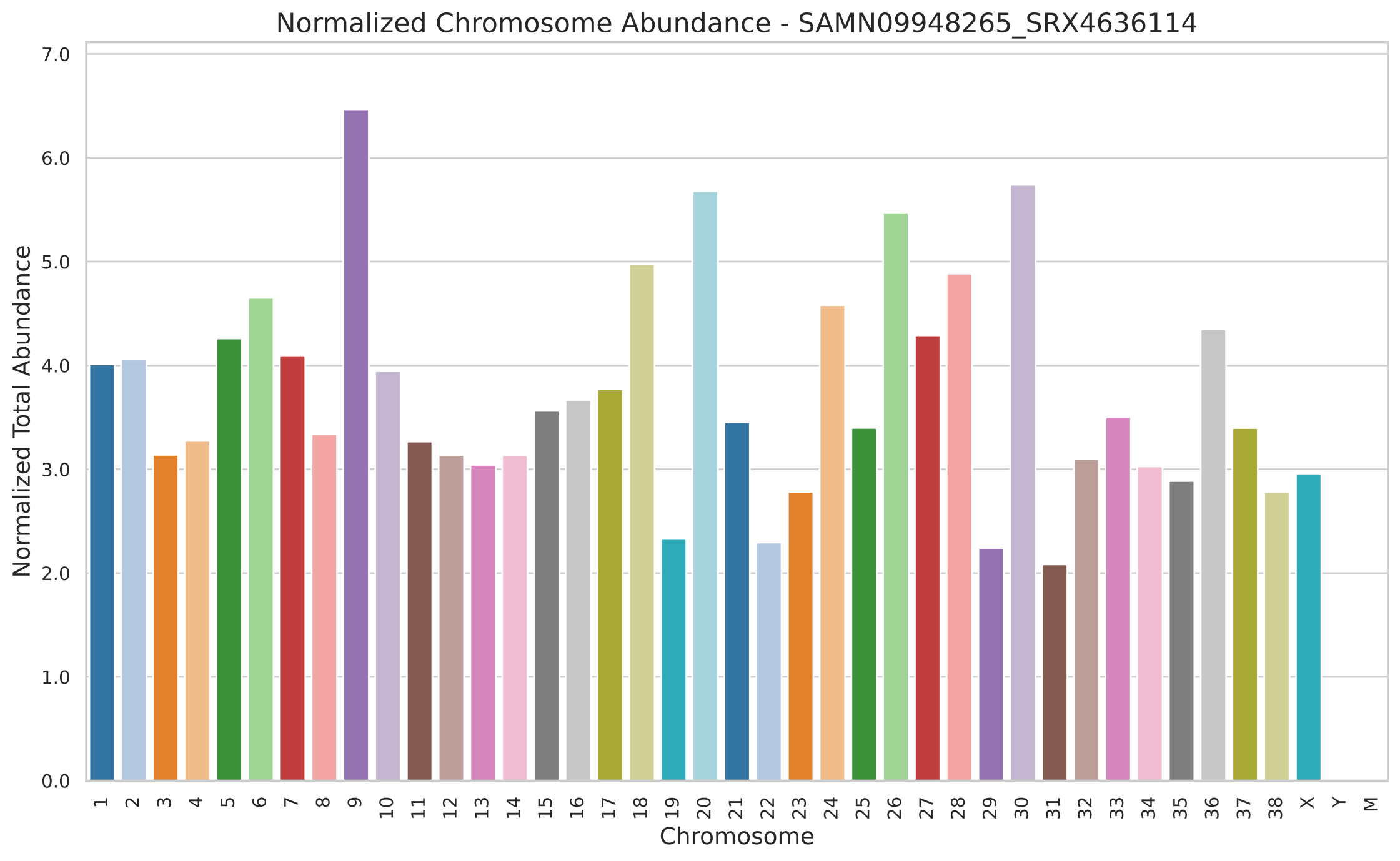

Normalized Chromosome Abundance - SAMN09948211_SRX4636063
Normalized Total Abundance
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

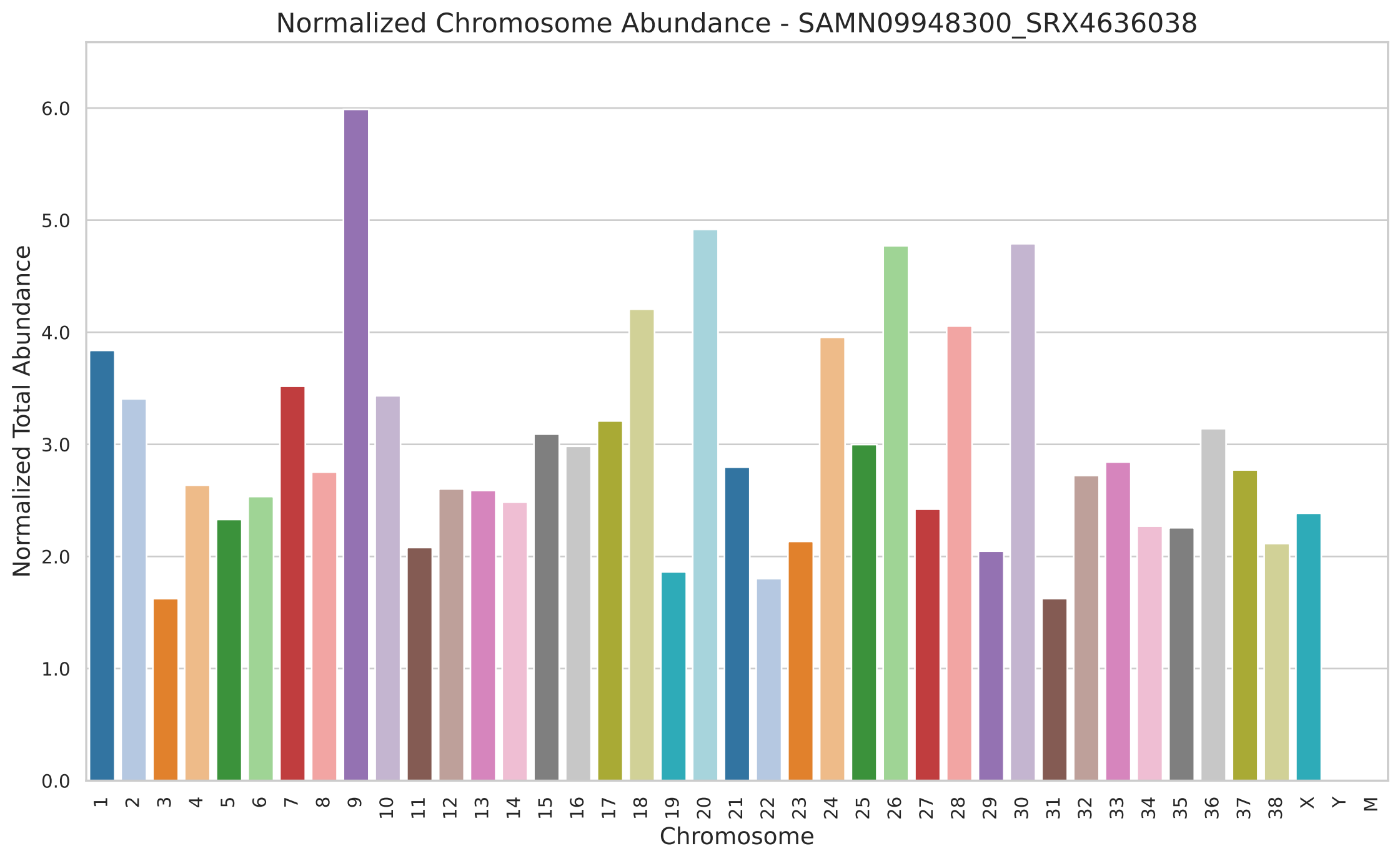

Normalized Chromosome Abundance - SAMN09949295_SRX4636059
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

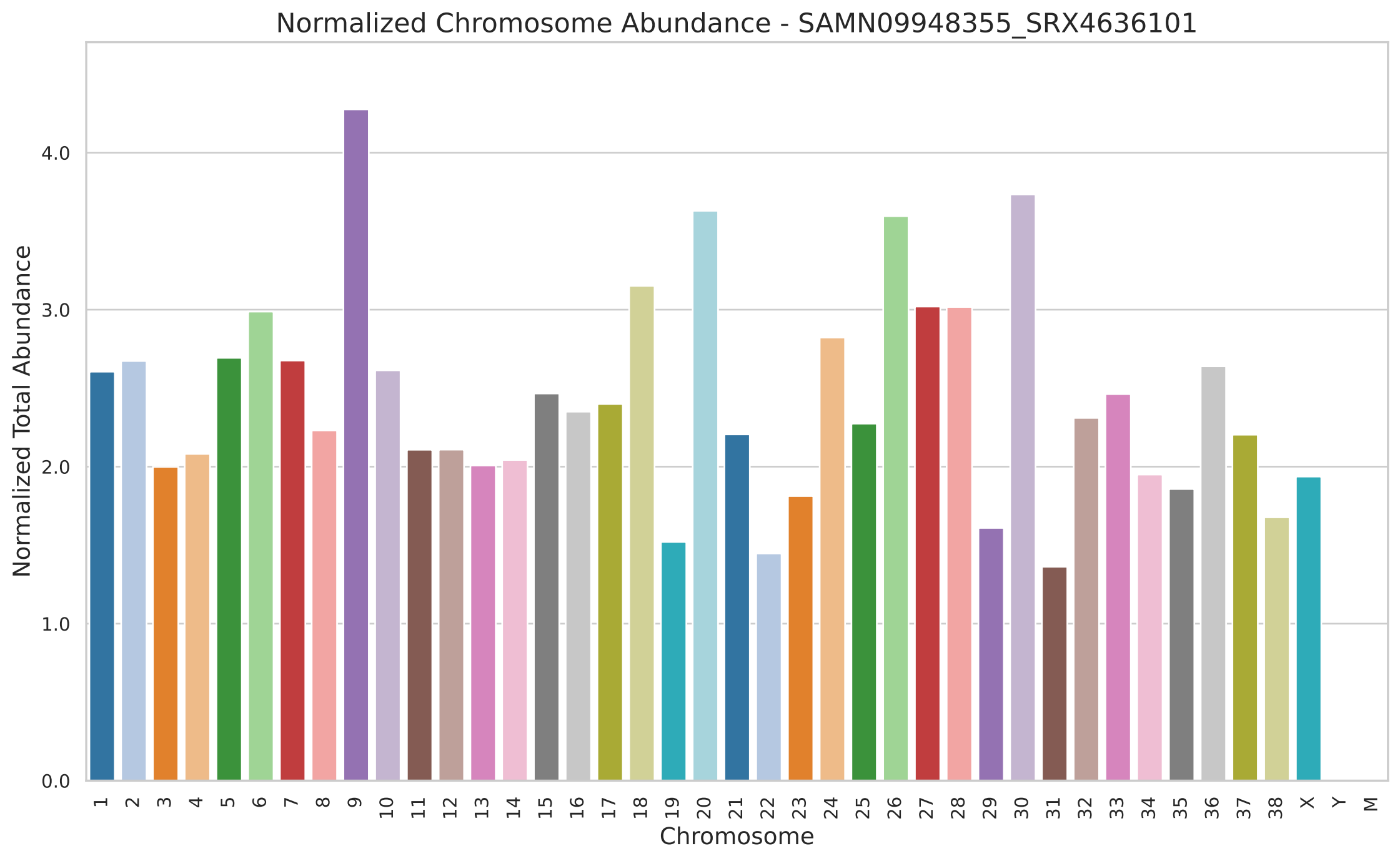

Normalized Chromosome Abundance - SAMN09949292_SRX4636062
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

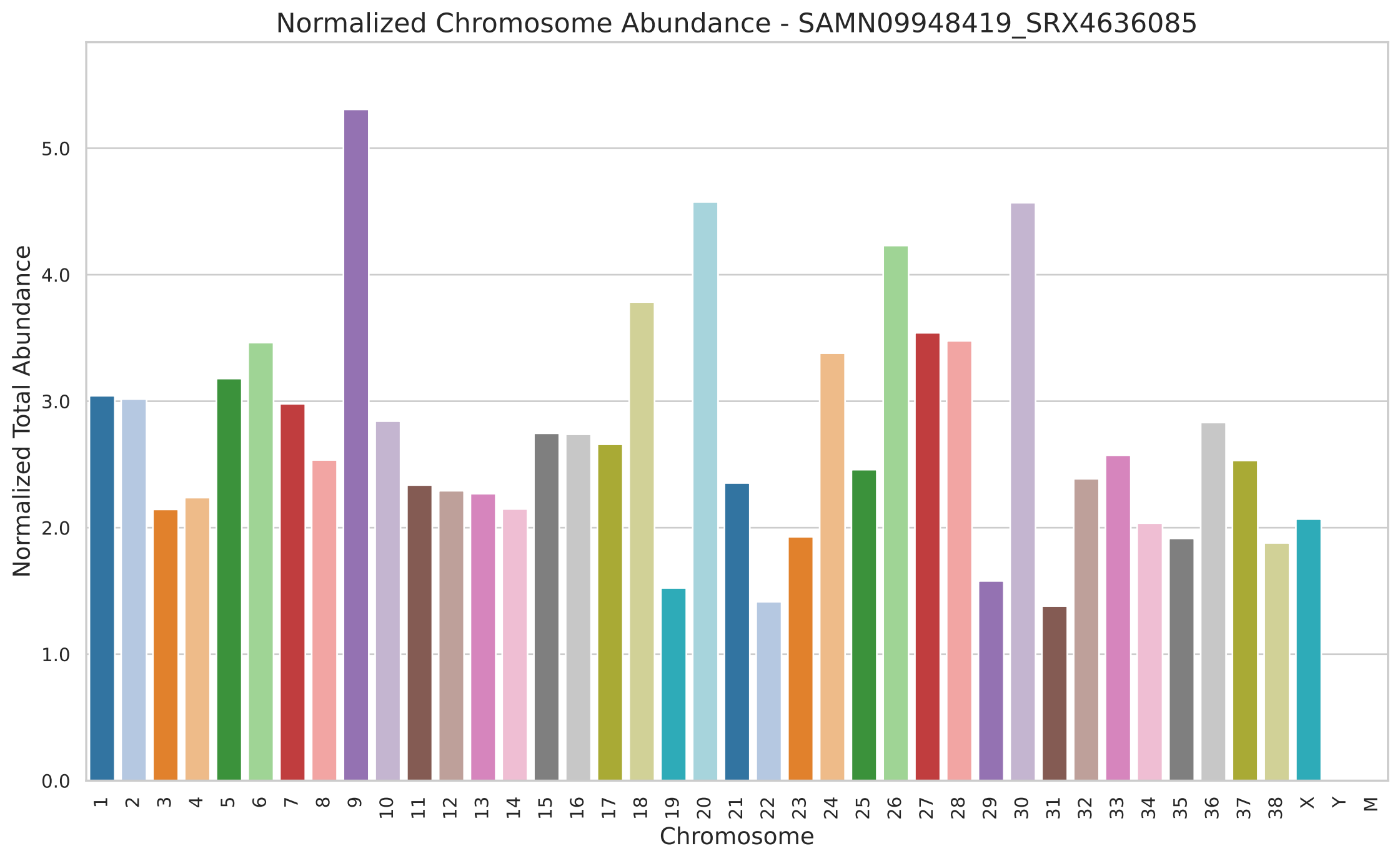

Normalized Chromosome Abundance - SAMEA7515388_ERX10021838
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

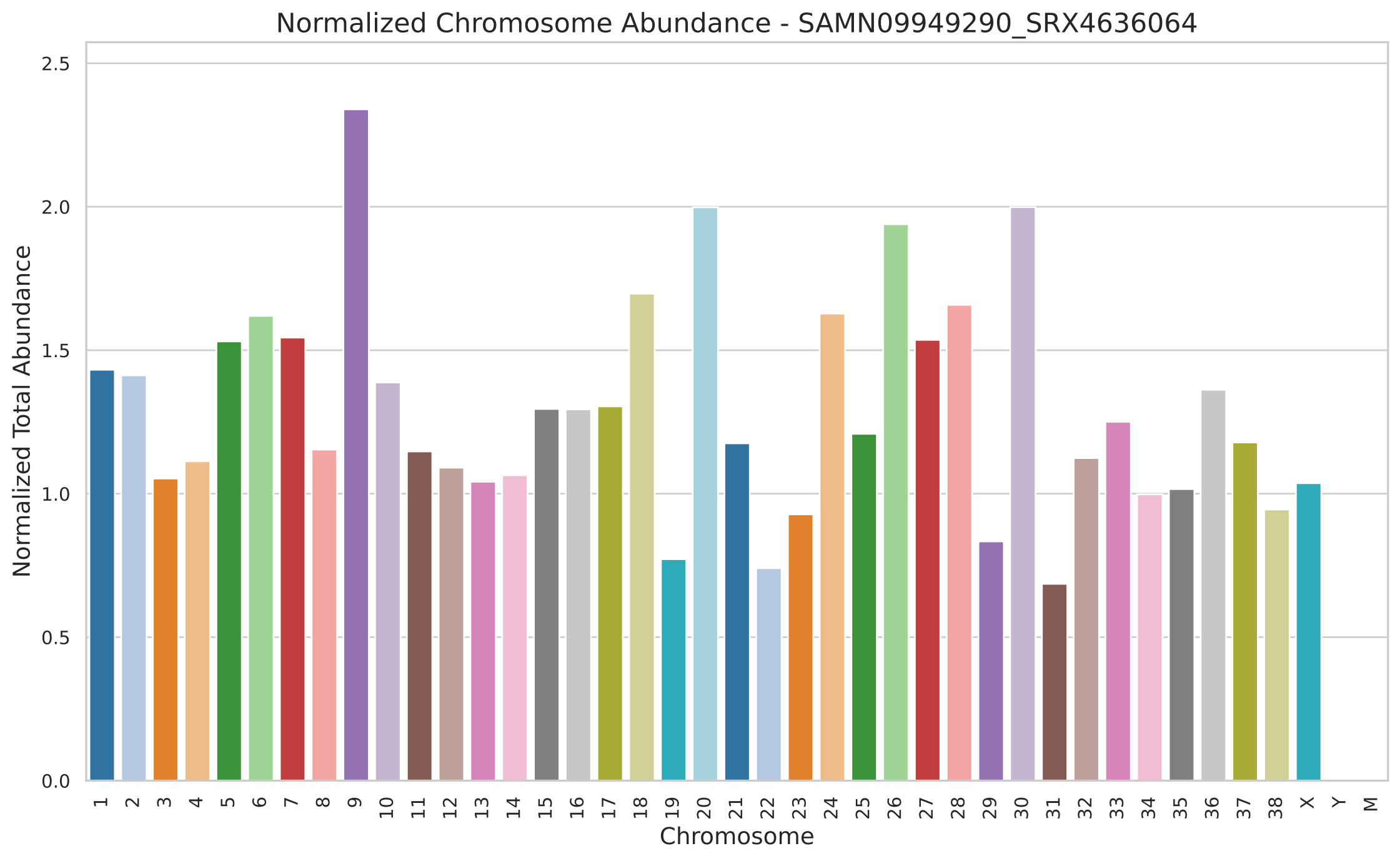

Normalized Chromosome Abundance - SAMN09948225_SRX4636132
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

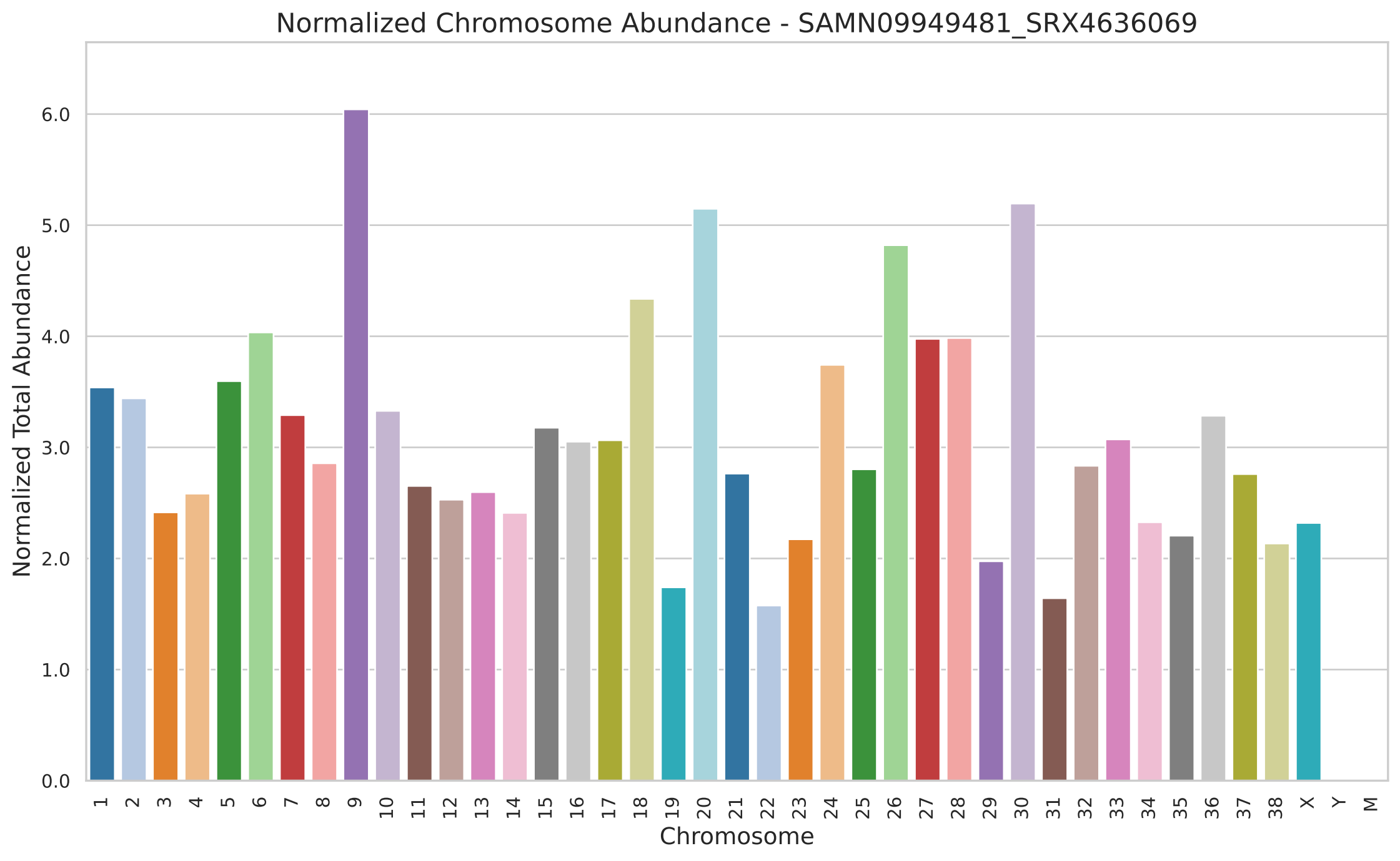

Normalized Chromosome Abundance - SAMN09948265_SRX4636114
Normalized Total Abundance
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

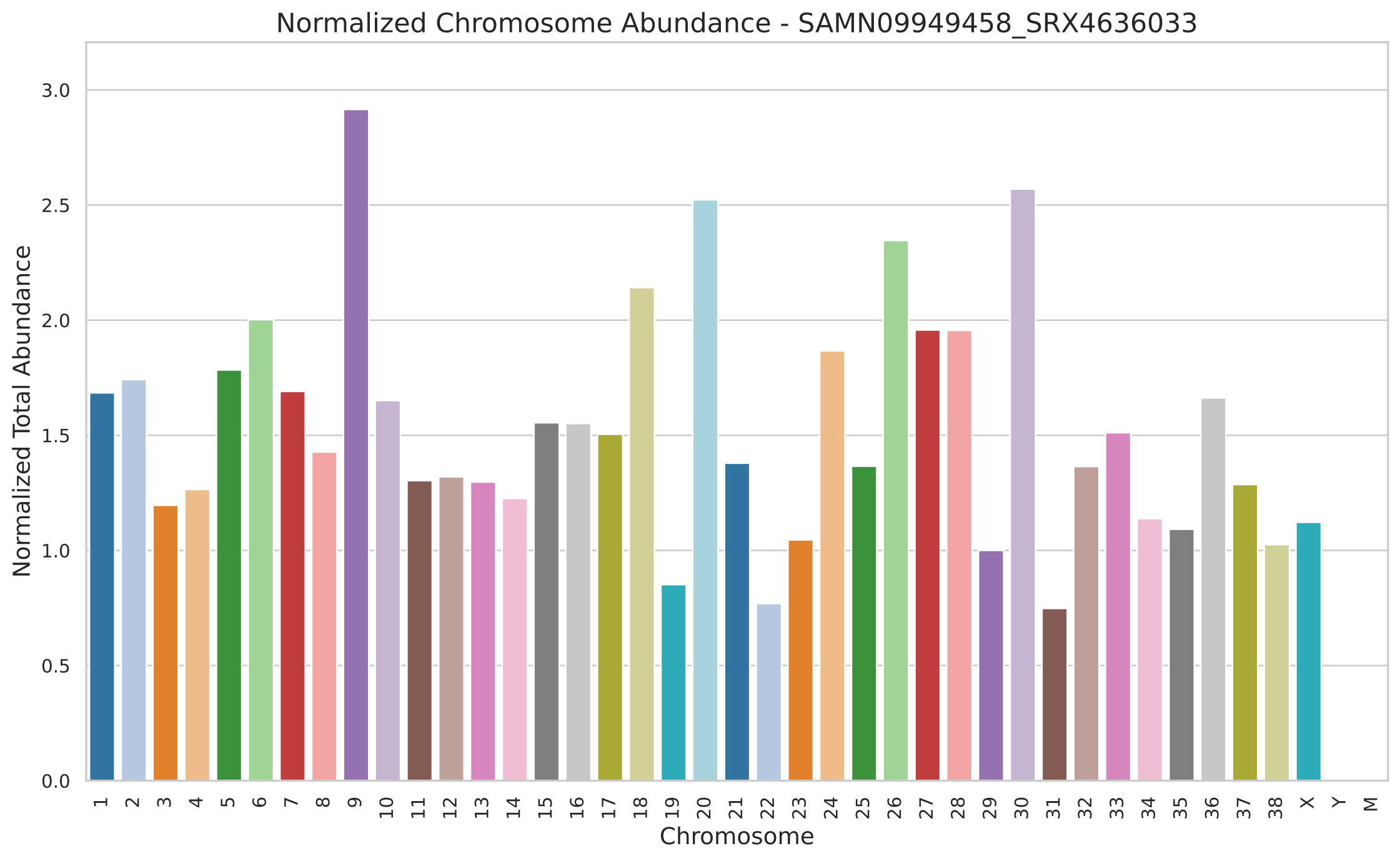

Normalized Chromosome Abundance - SAMN09948300_SRX4636038
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

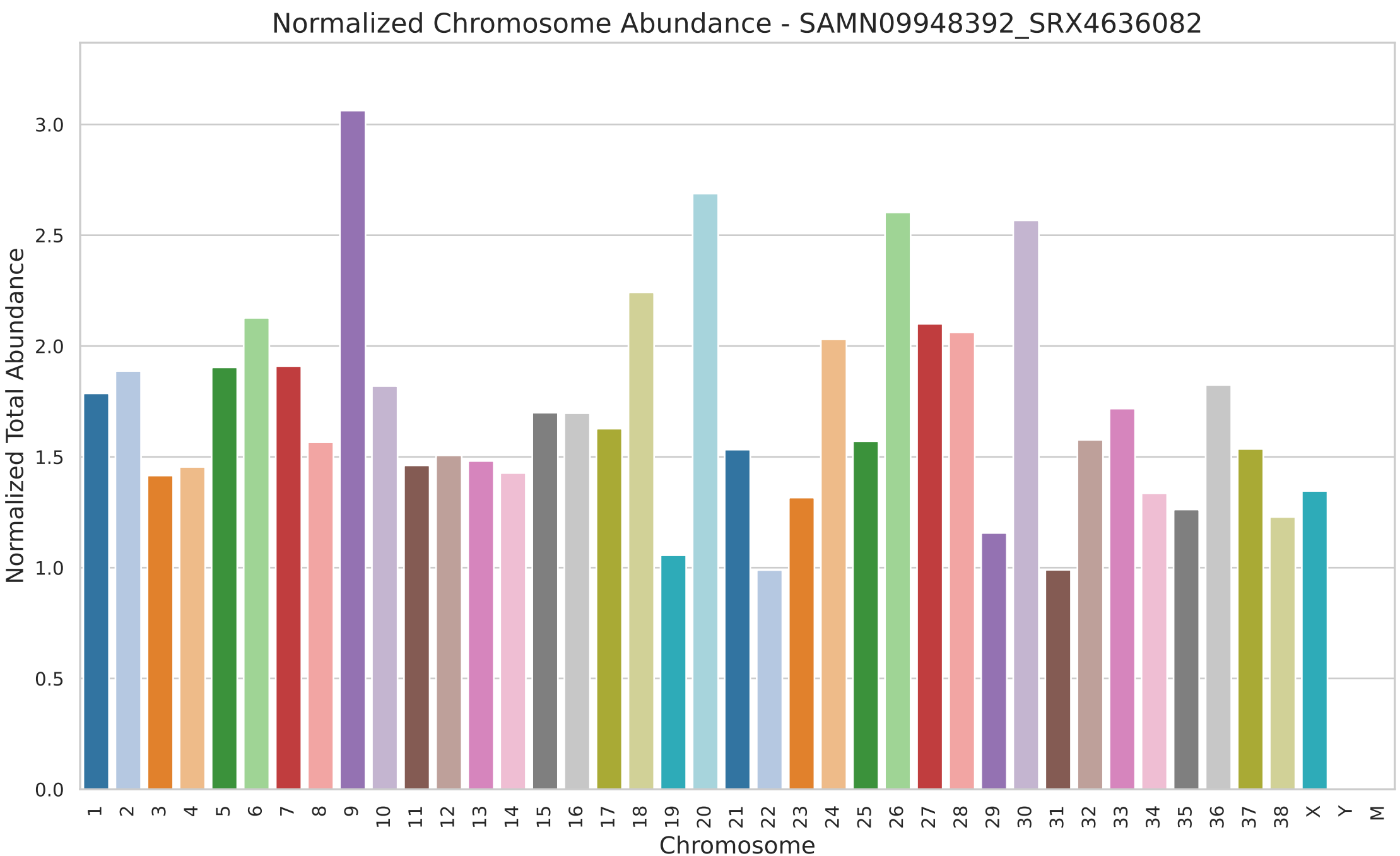

Normalized Chromosome Abundance - SAMN09948355_SRX4636101
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

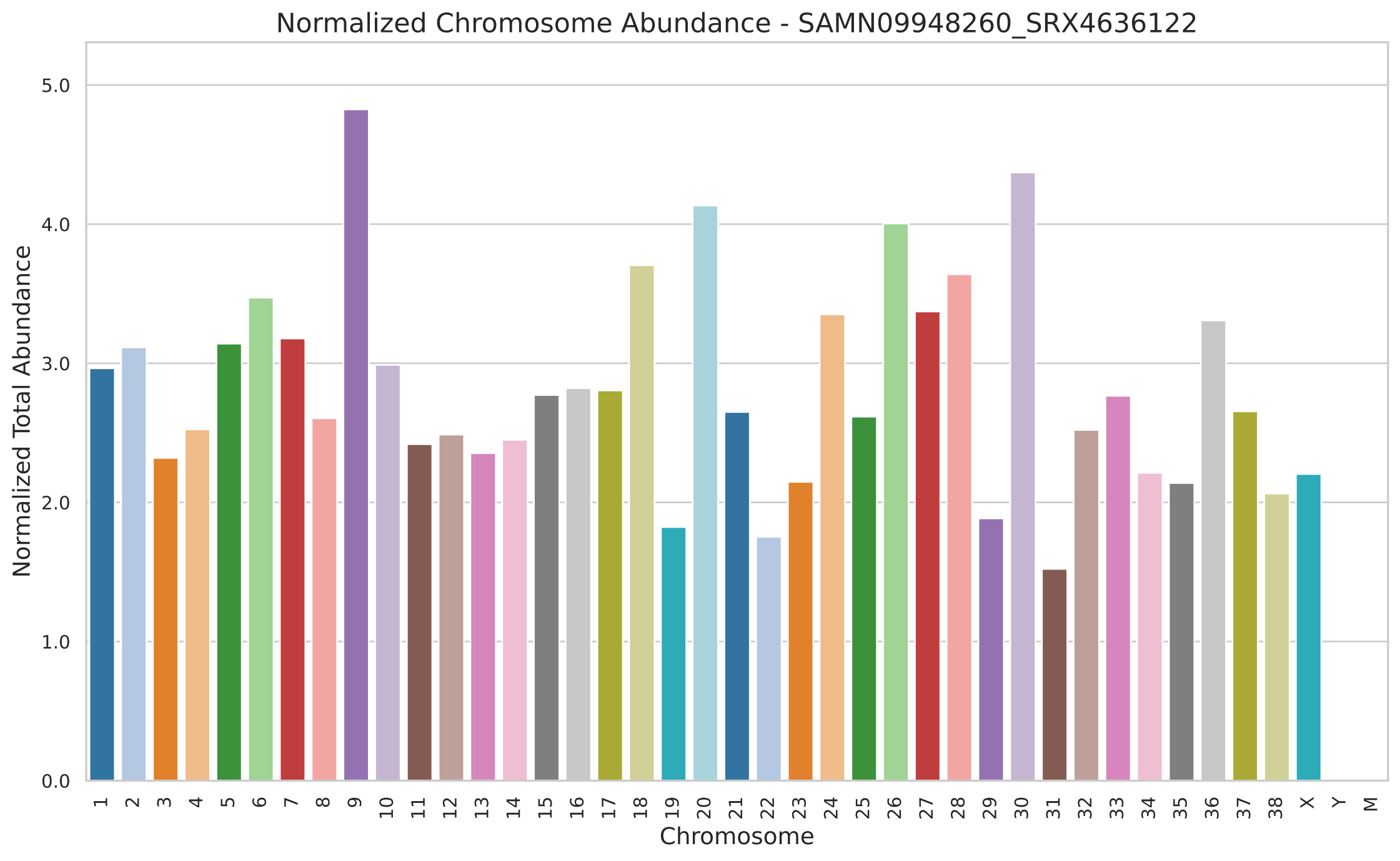

Normalized Chromosome Abundance - SAMN09948419_SRX4636085
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

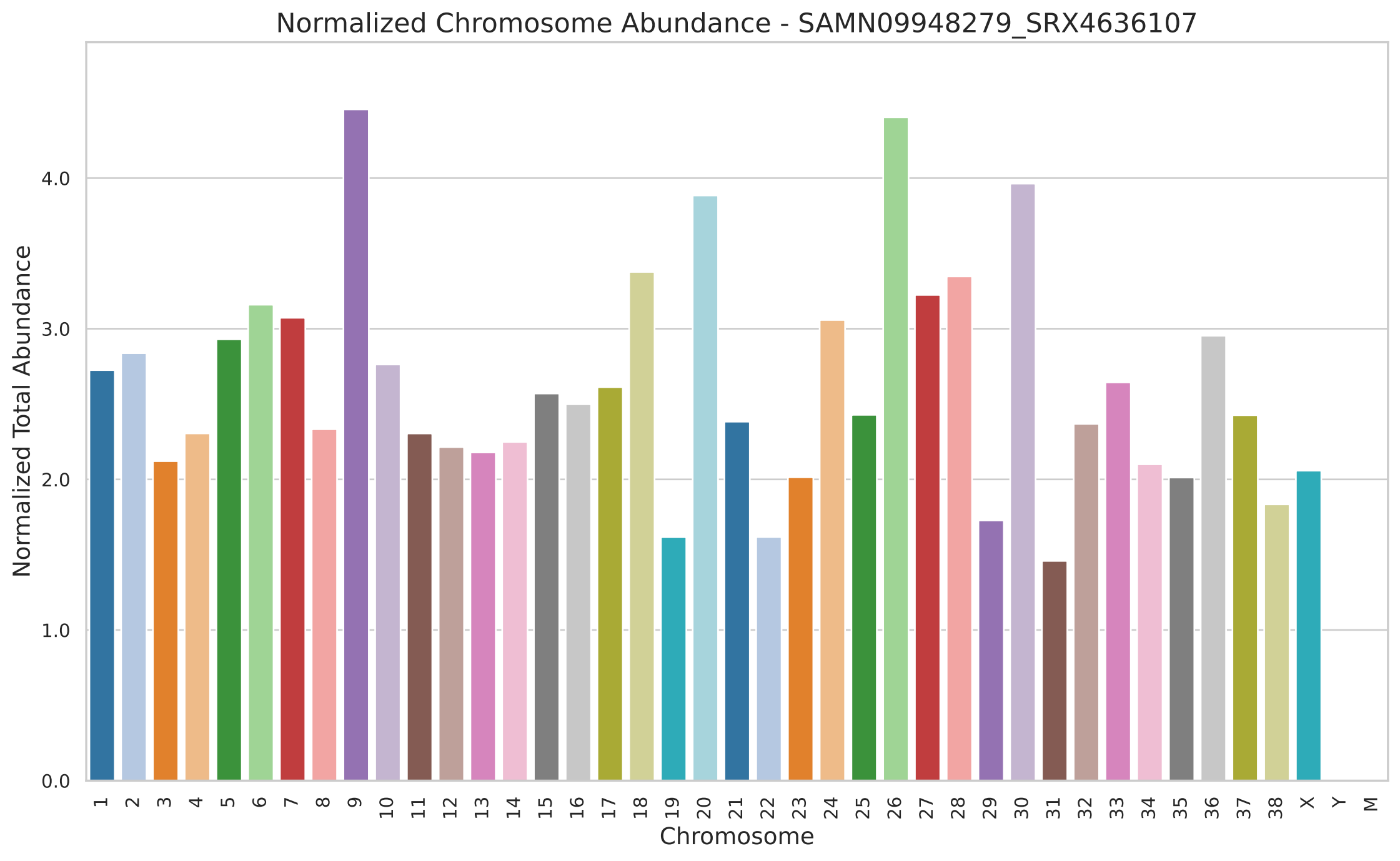

Normalized Chromosome Abundance - SAMN09949290_SRX4636064
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

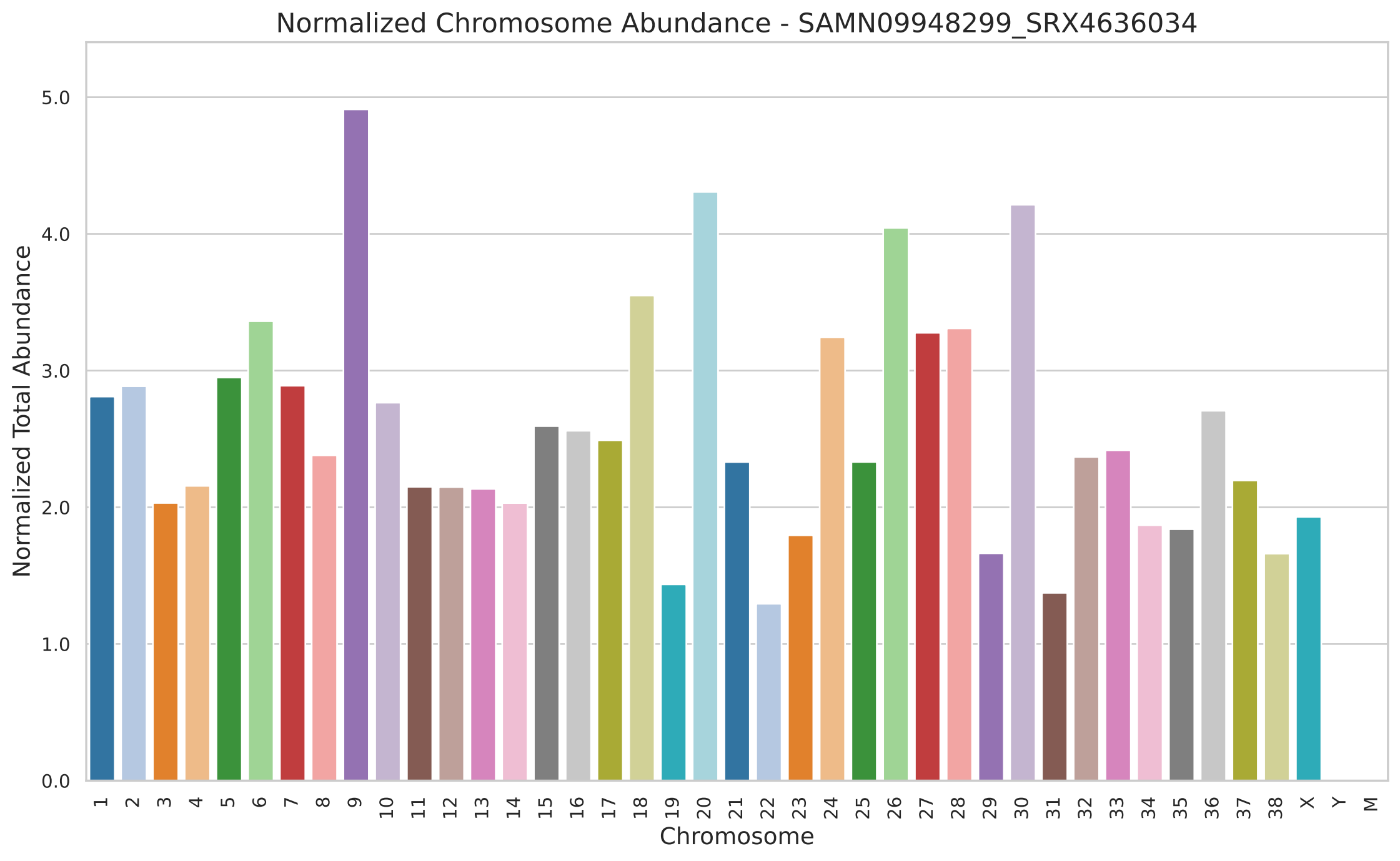

Normalized Chromosome Abundance - SAMN09949481_SRX4636069
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

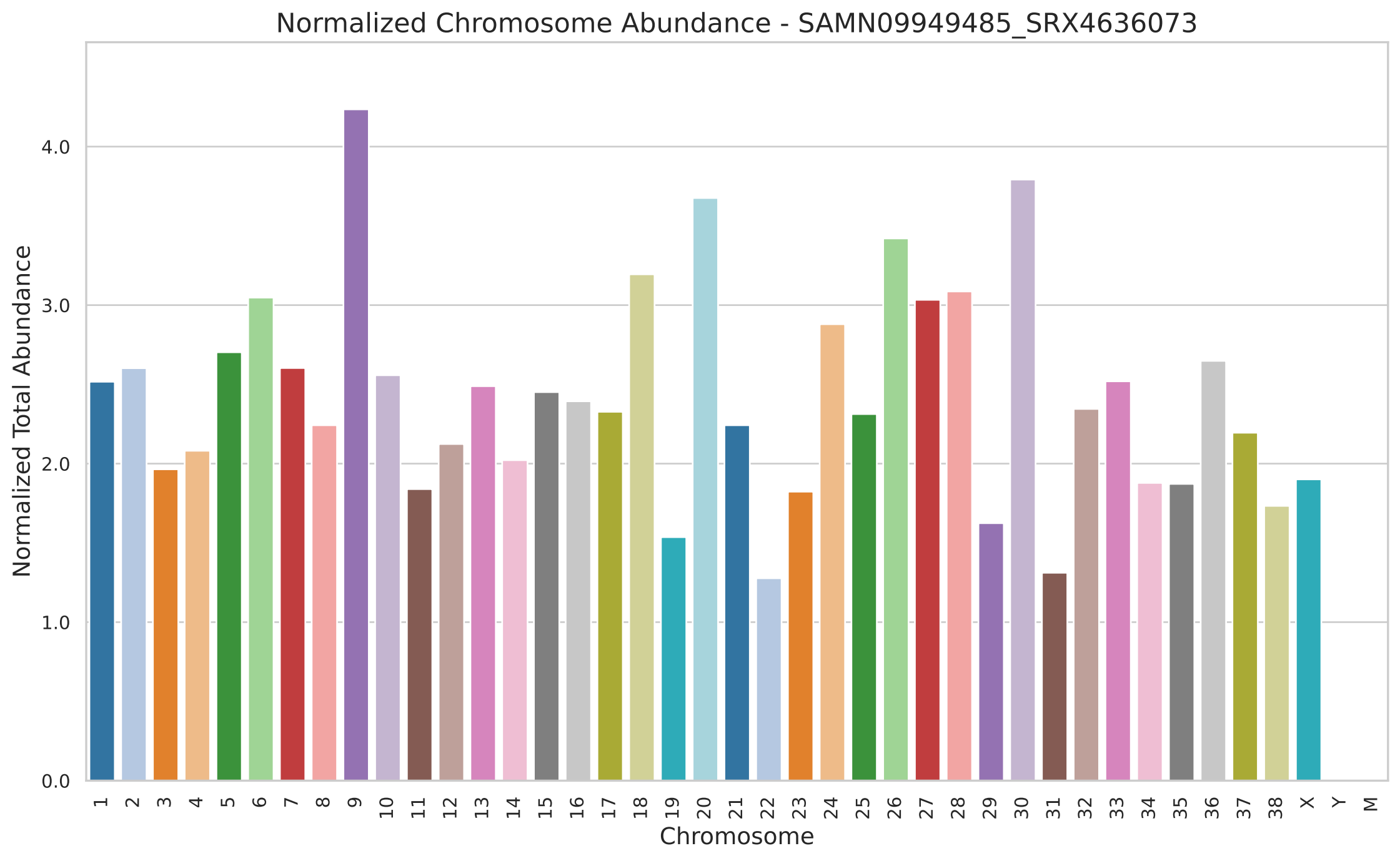

Normalized Chromosome Abundance - SAMN09949458_SRX4636033
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

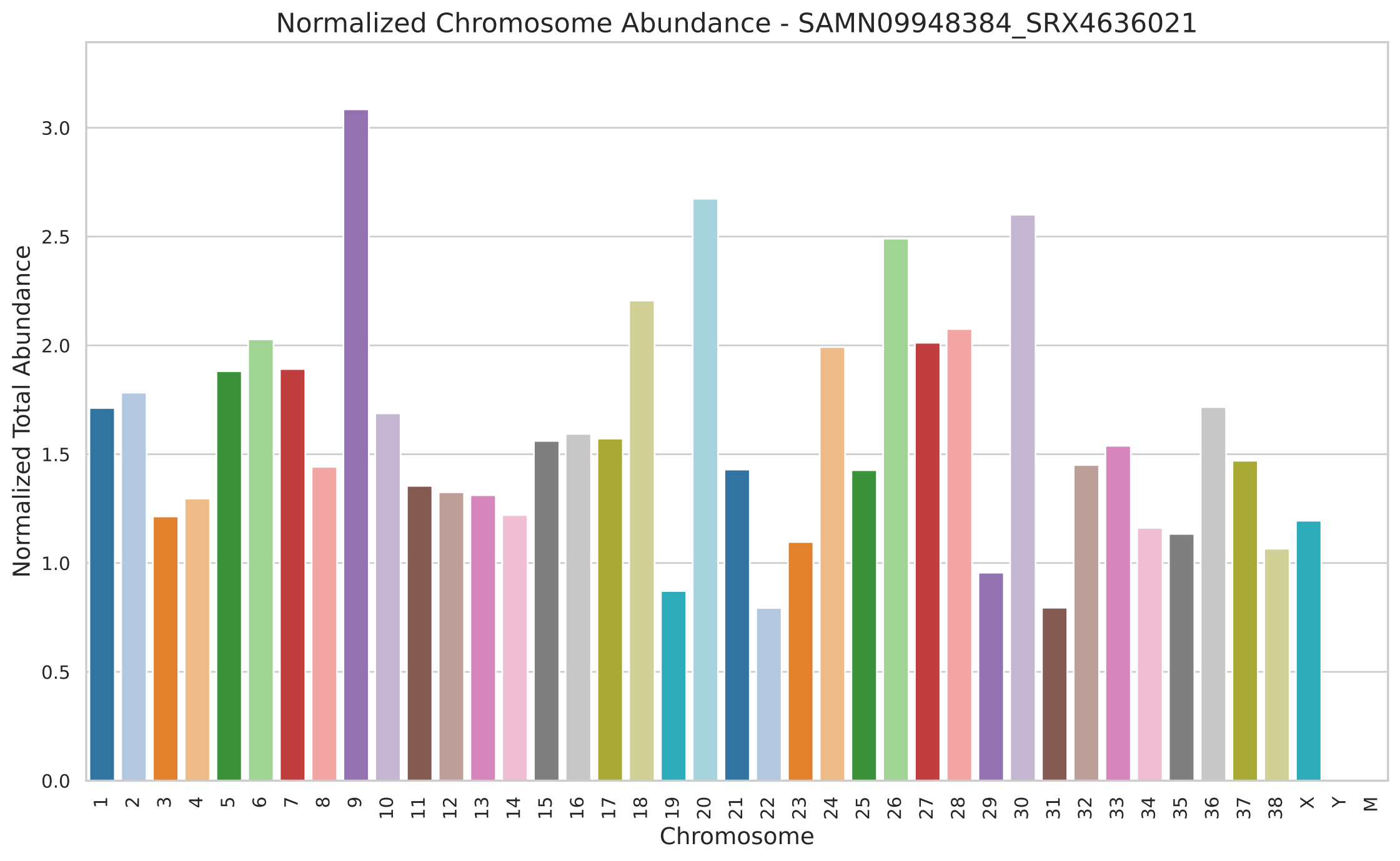

Normalized Chromosome Abundance - SAMN09948392_SRX4636082
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

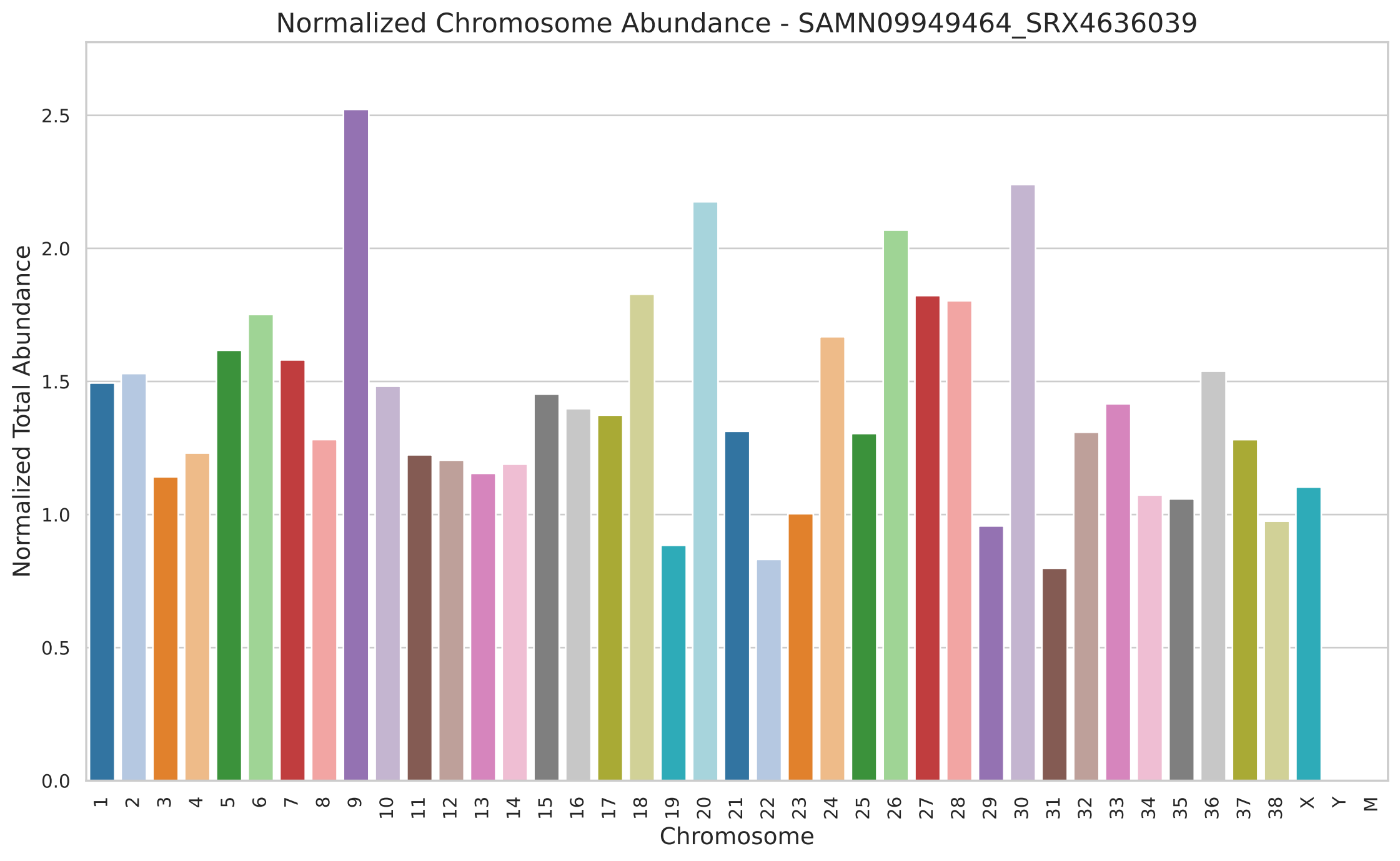

Normalized Chromosome Abundance - SAMN09948260_SRX4636122
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

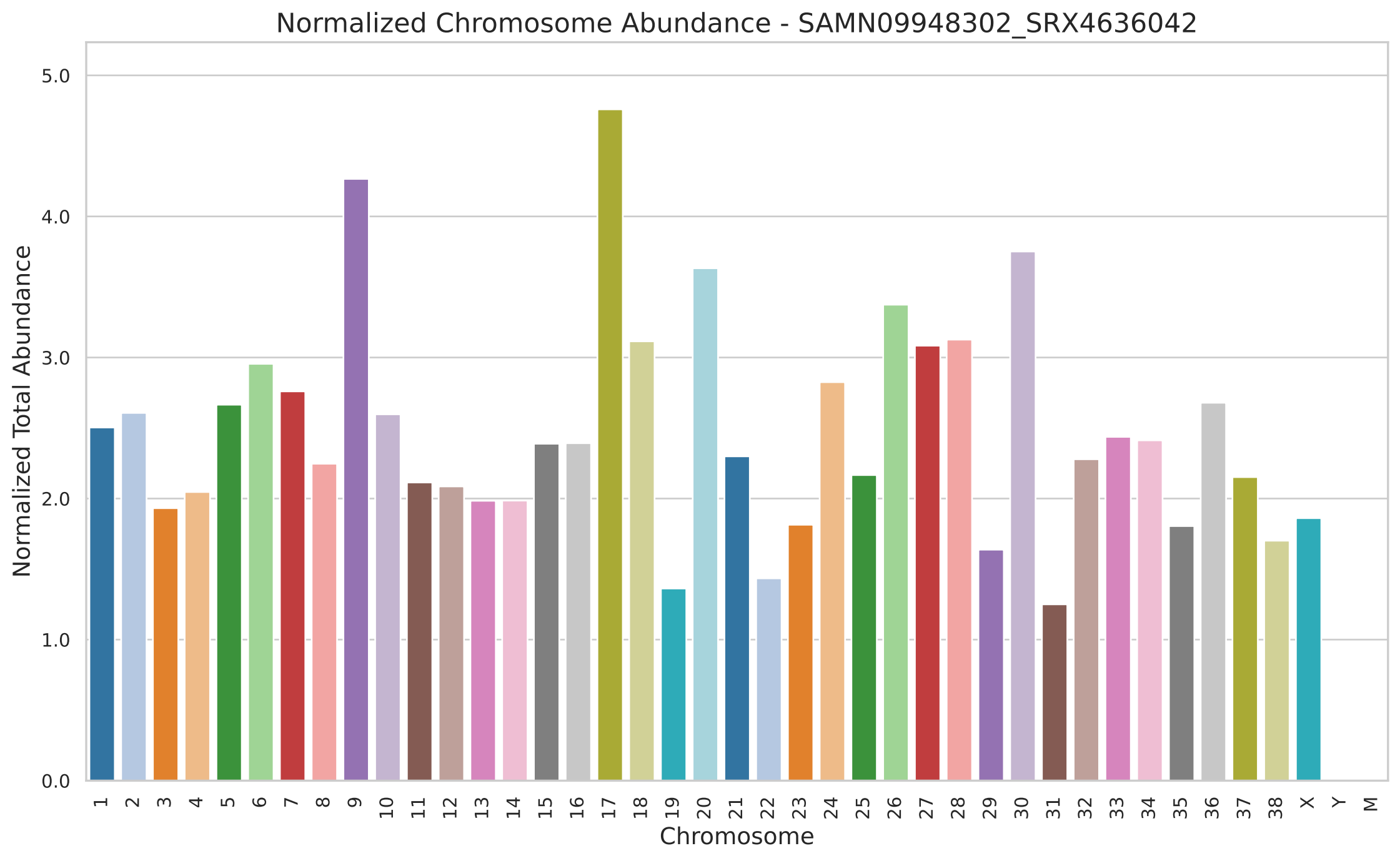

Normalized Chromosome Abundance - SAMN09948279_SRX4636107
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

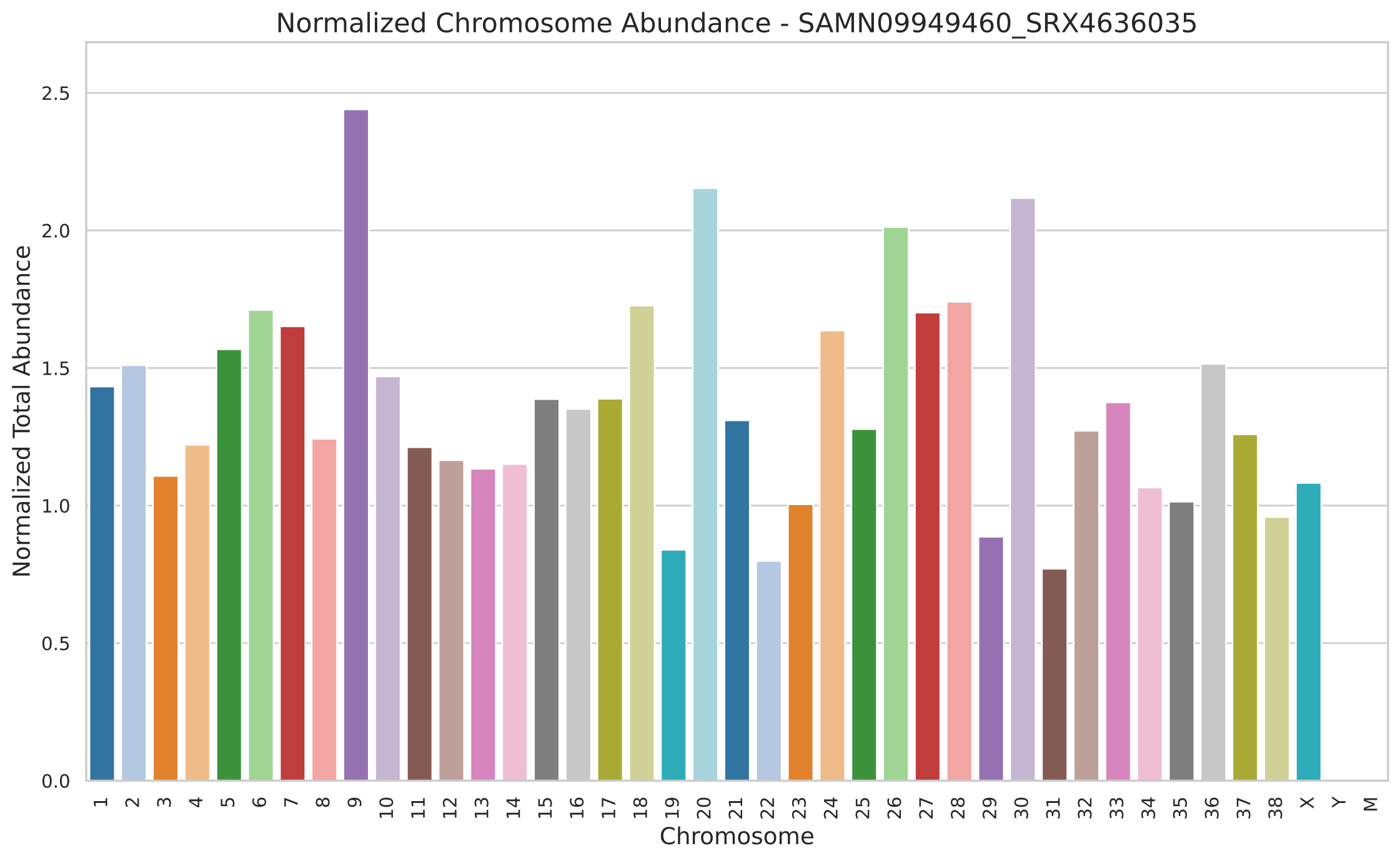

Normalized Chromosome Abundance - SAMN09948299_SRX4636034
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

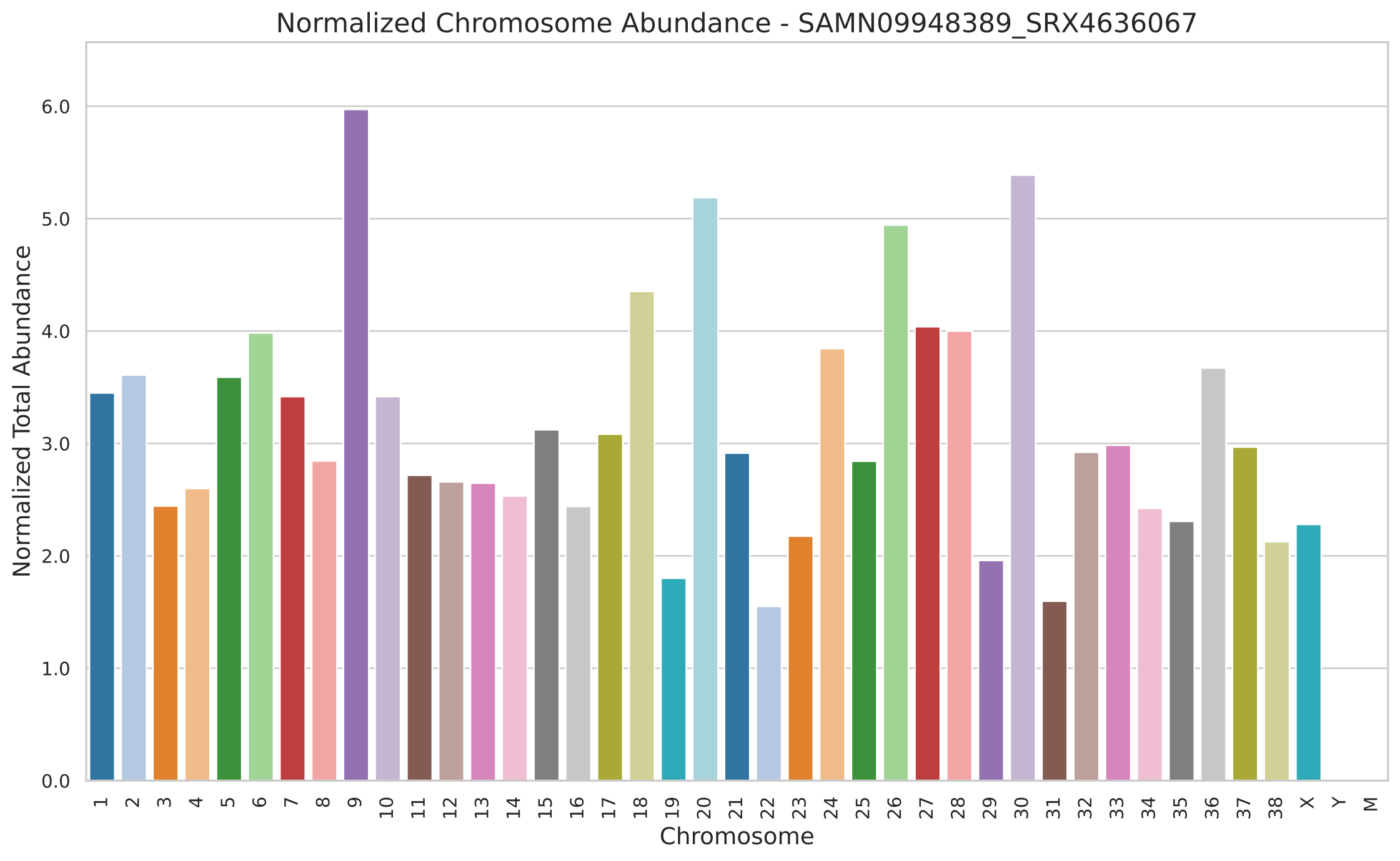

Normalized Chromosome Abundance - SAMN09949485_SRX4636073
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

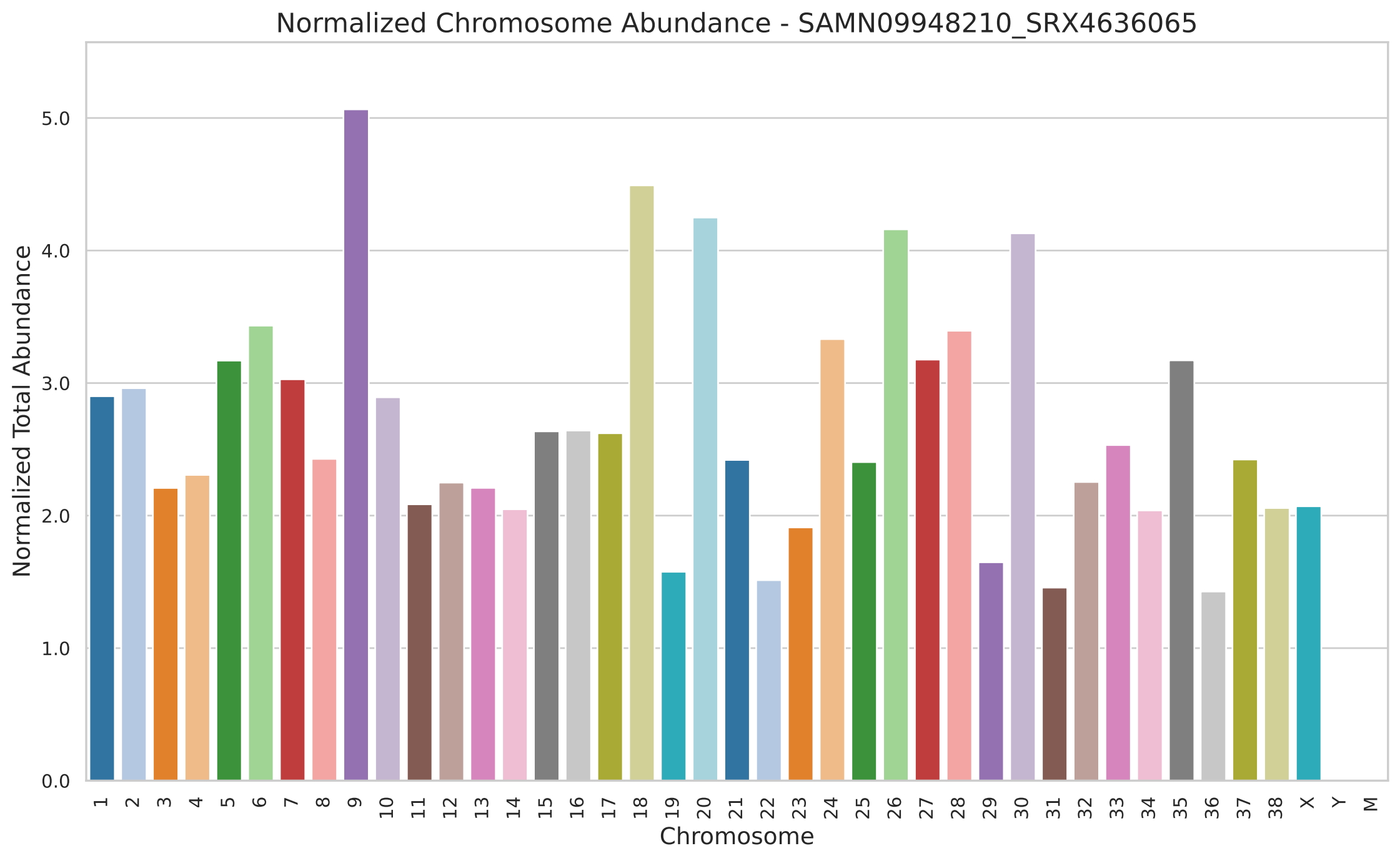

Normalized Chromosome Abundance - SAMN09948384_SRX4636021
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

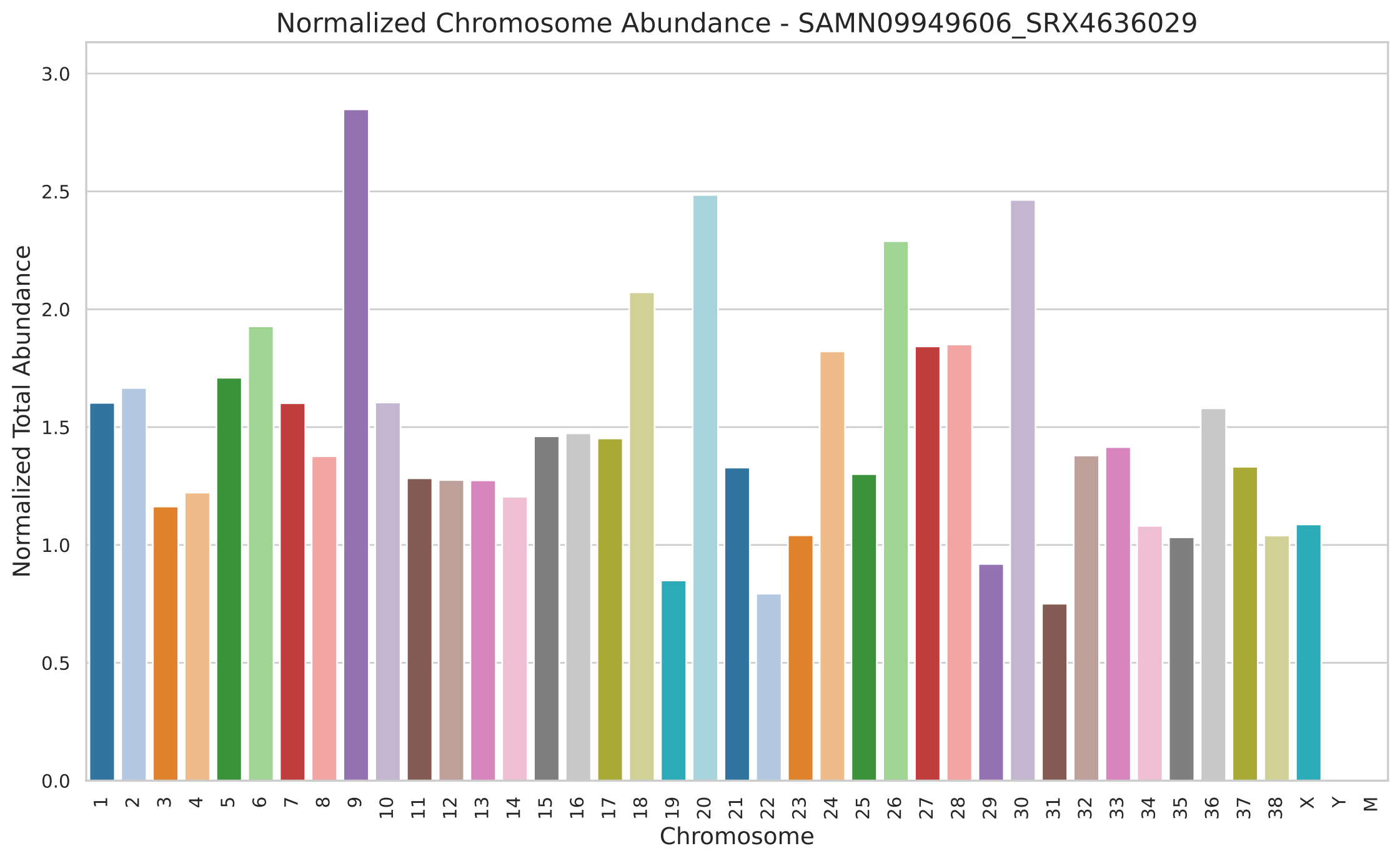

Normalized Chromosome Abundance - SAMN09949464_SRX4636039
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

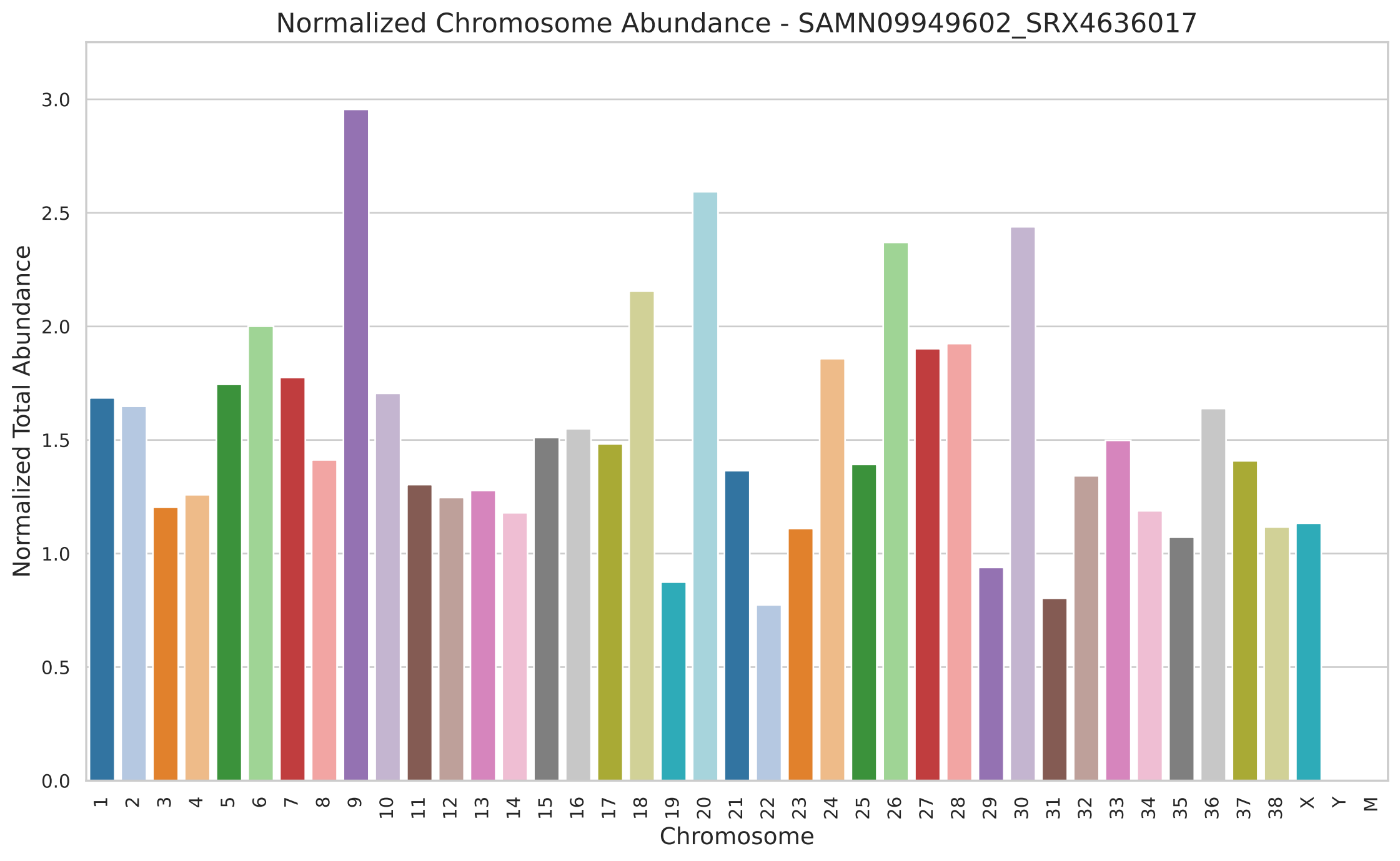

Normalized Chromosome Abundance - SAMN09948302_SRX4636042
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

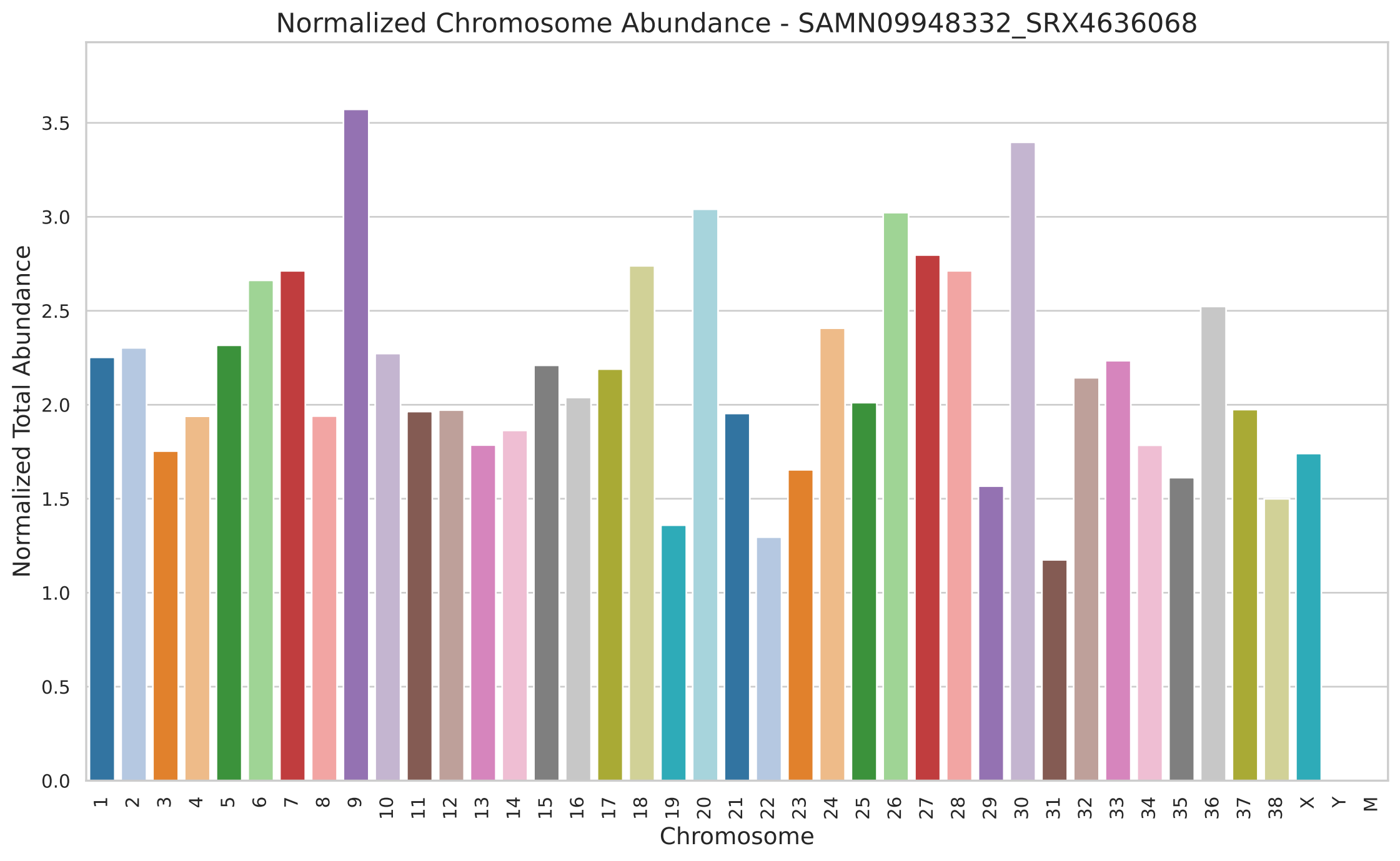

Normalized Chromosome Abundance - SAMN09949460_SRX4636035
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

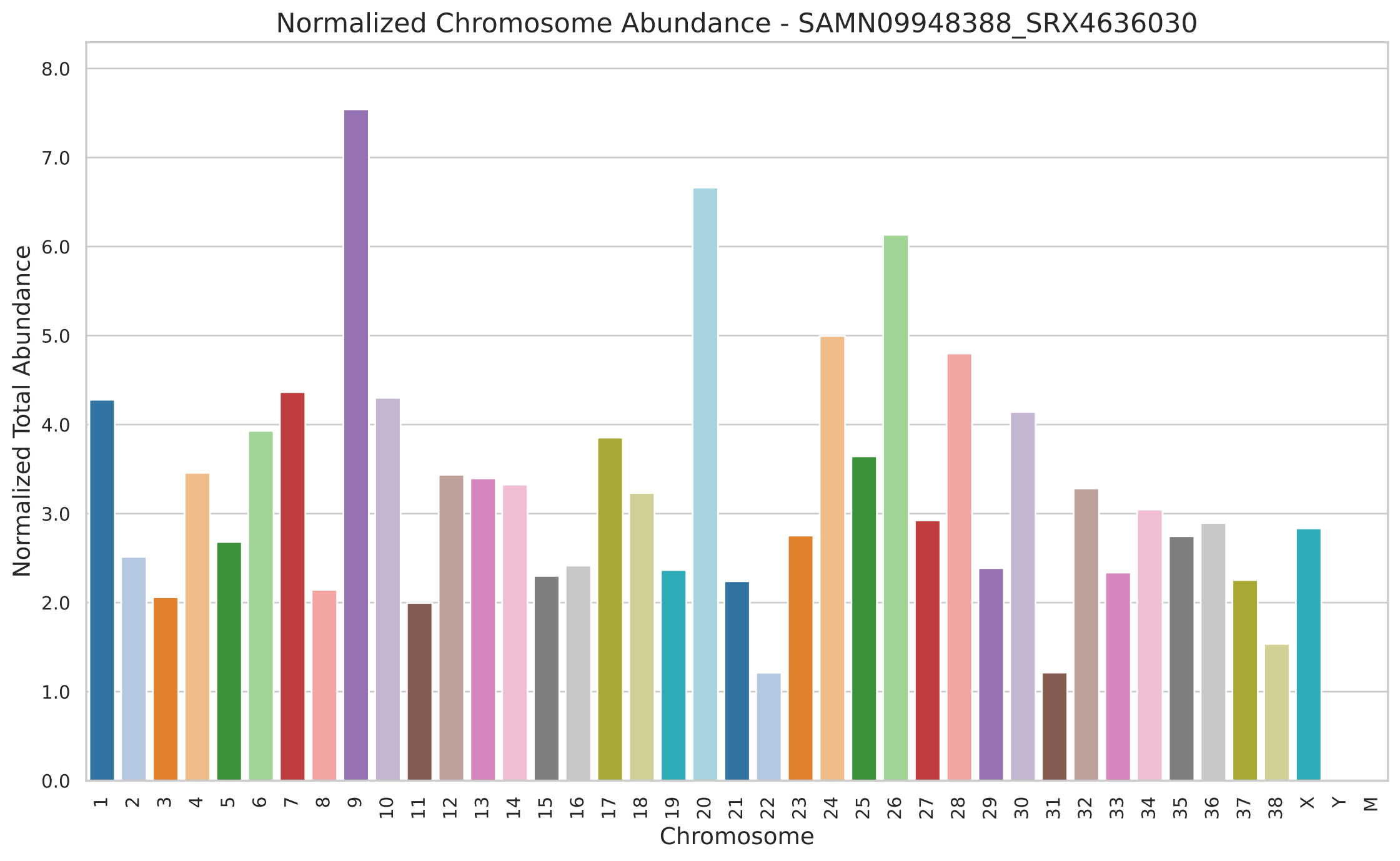

Normalized Chromosome Abundance - SAMN09948389_SRX4636067
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

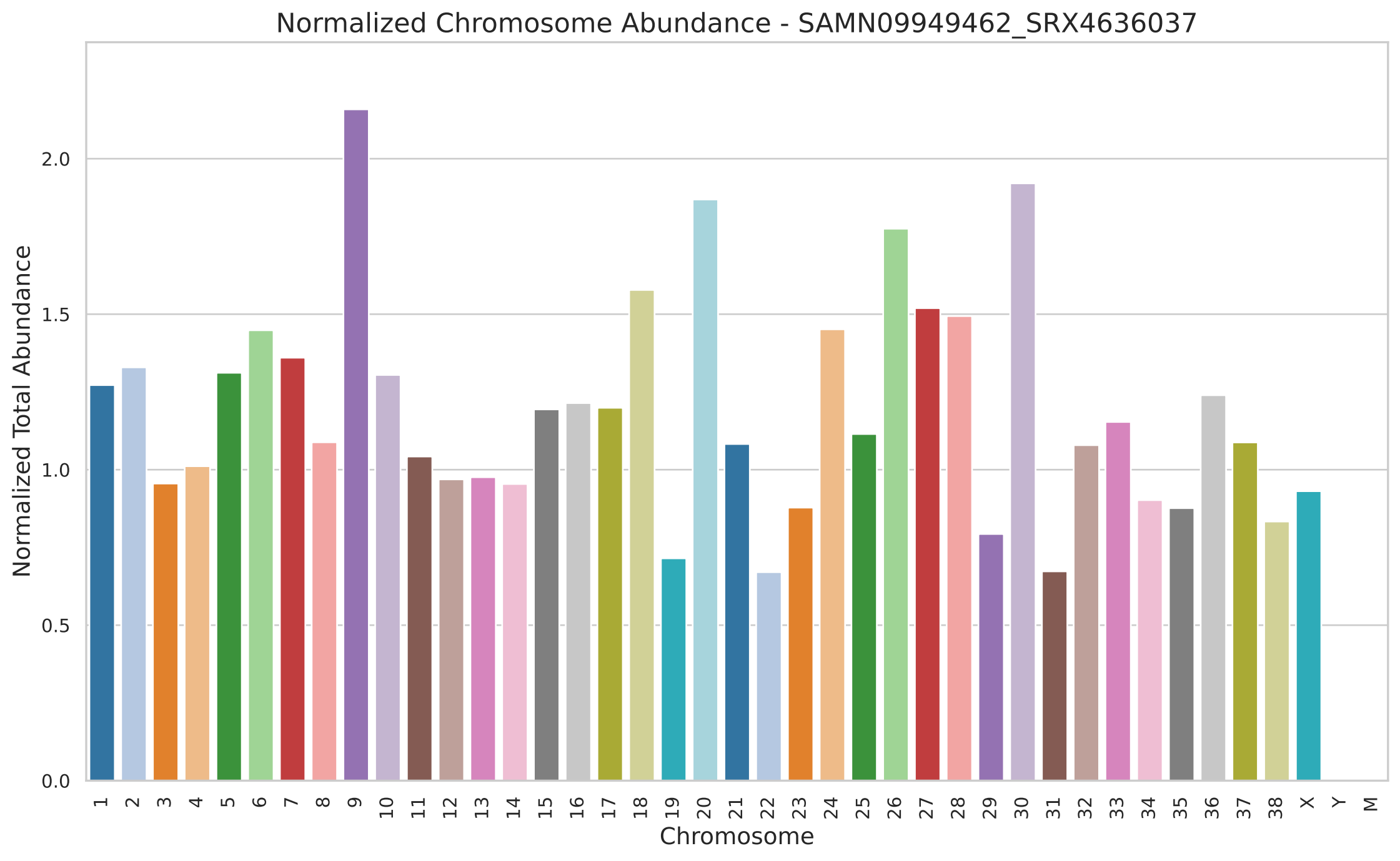

Normalized Chromosome Abundance - SAMN09948210_SRX4636065
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

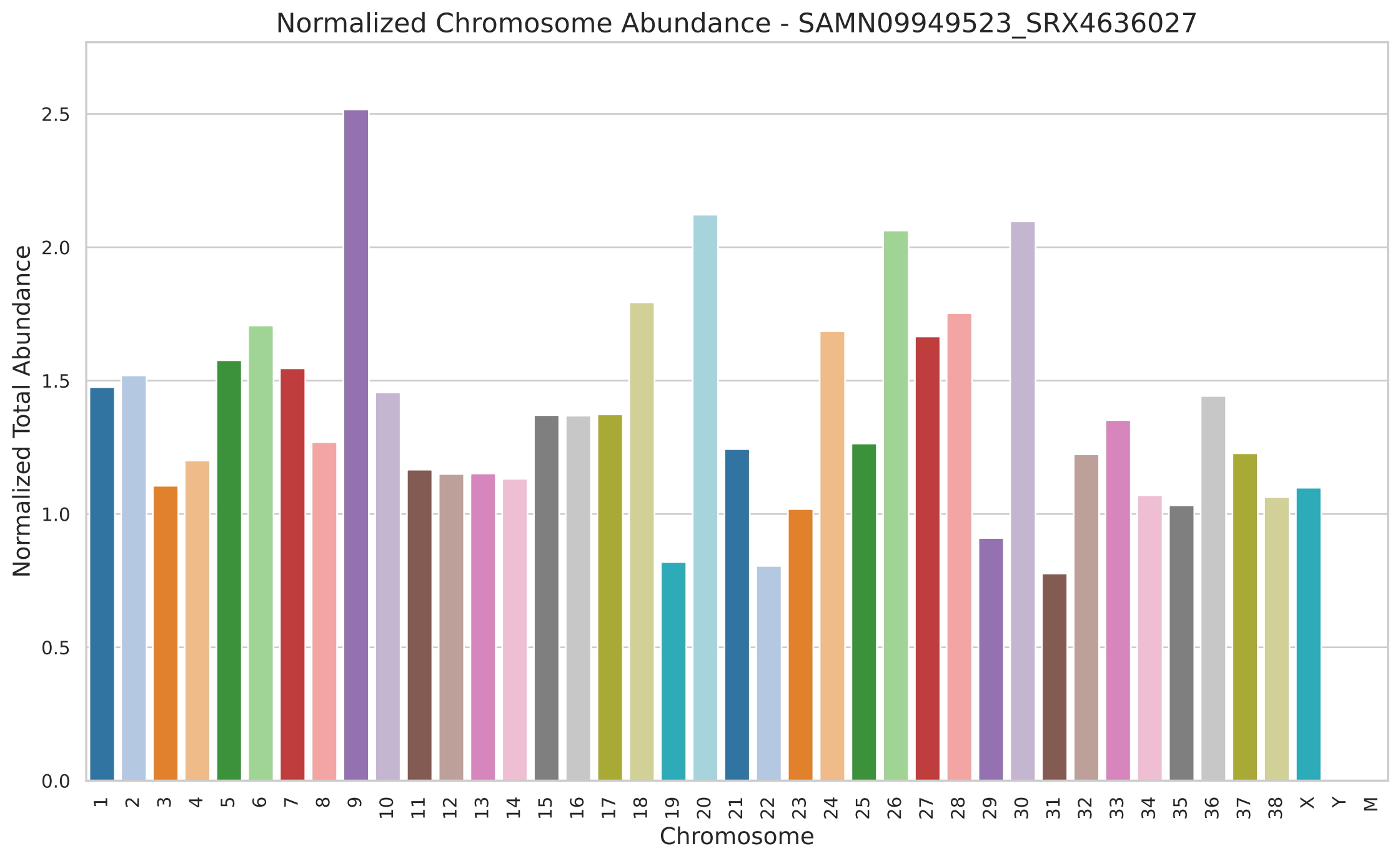

Normalized Chromosome Abundance - SAMN09949606_SRX4636029
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

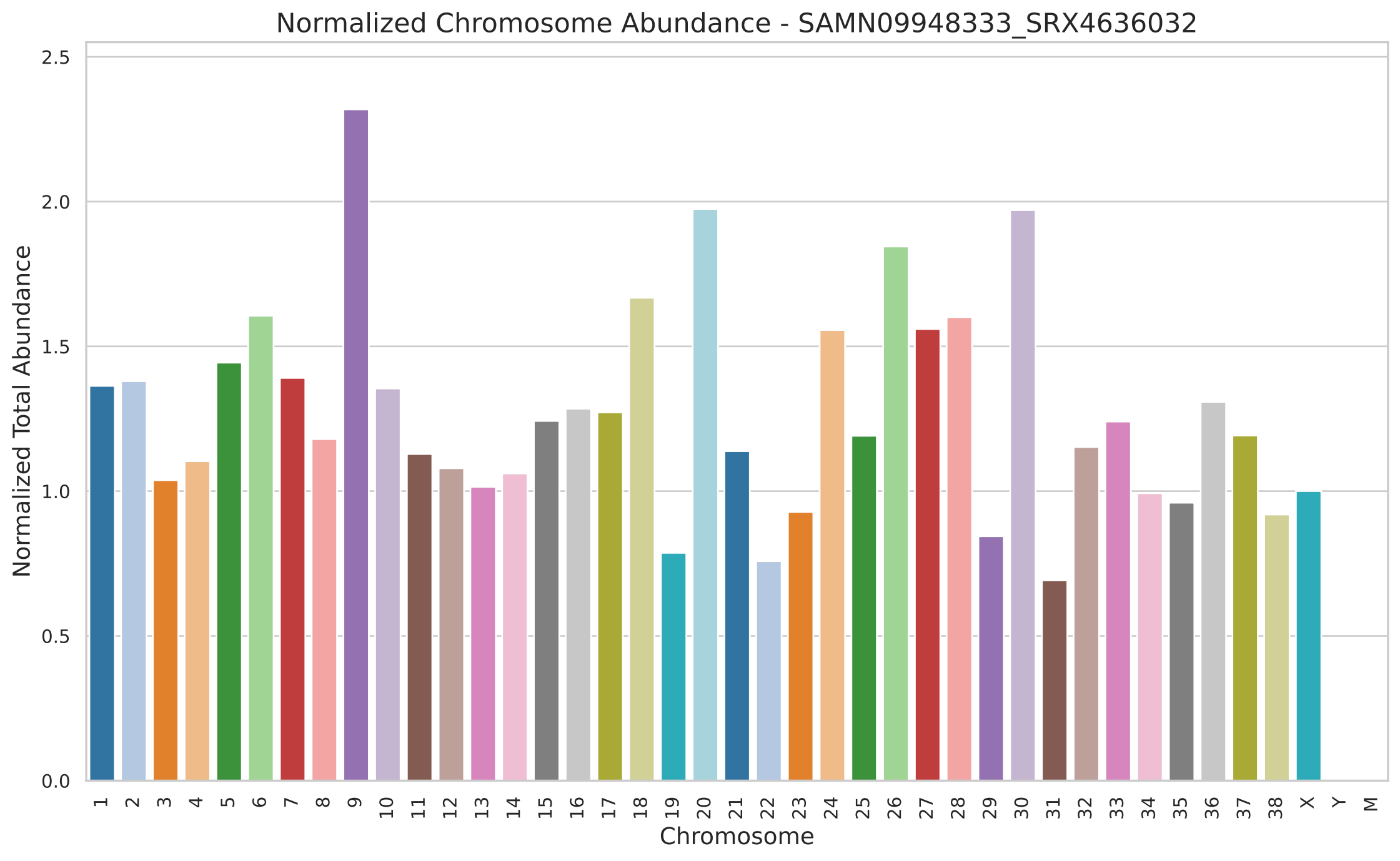

Normalized Chromosome Abundance - SAMN09949602_SRX4636017
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

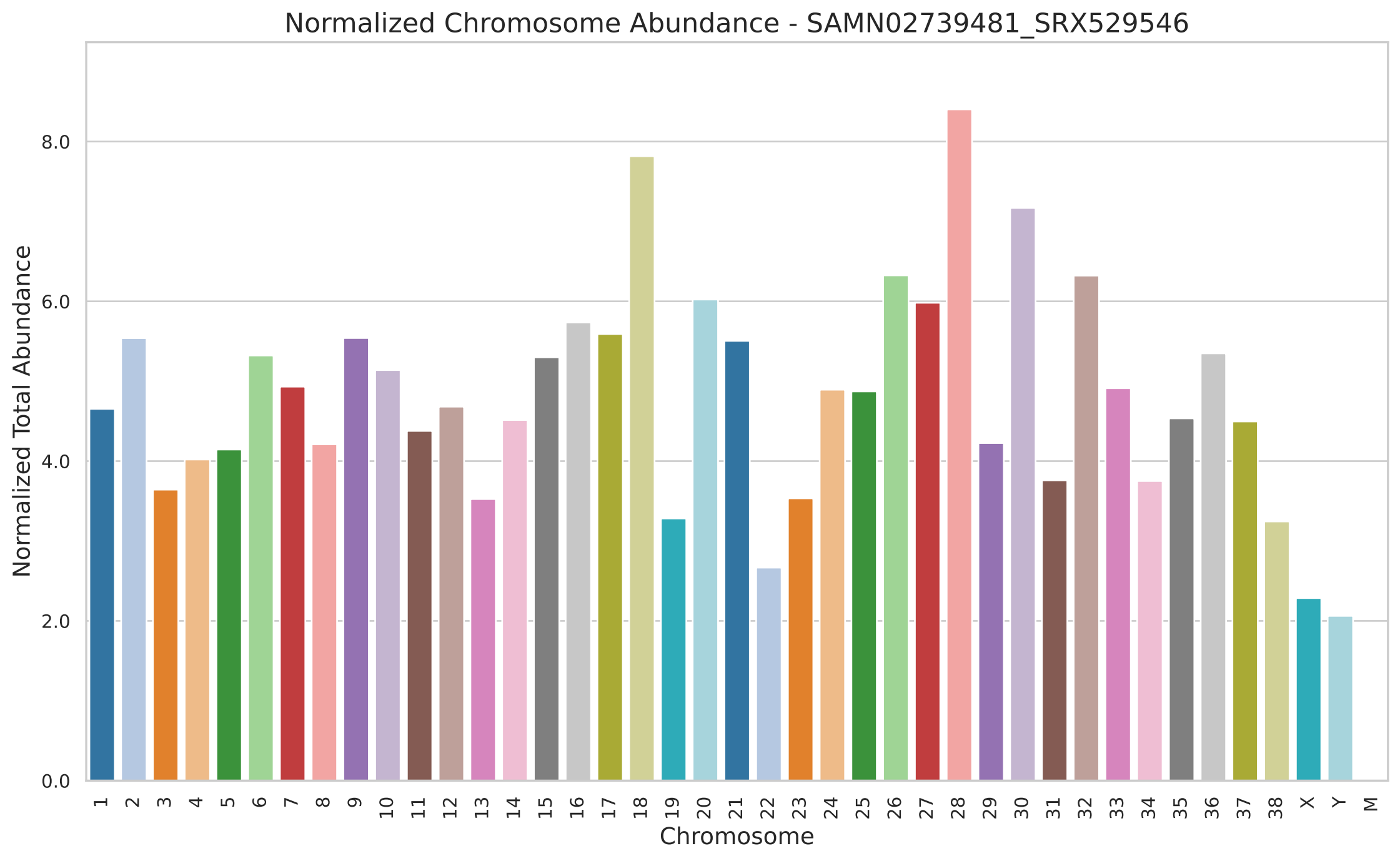

Normalized Chromosome Abundance - SAMN09948332_SRX4636068
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

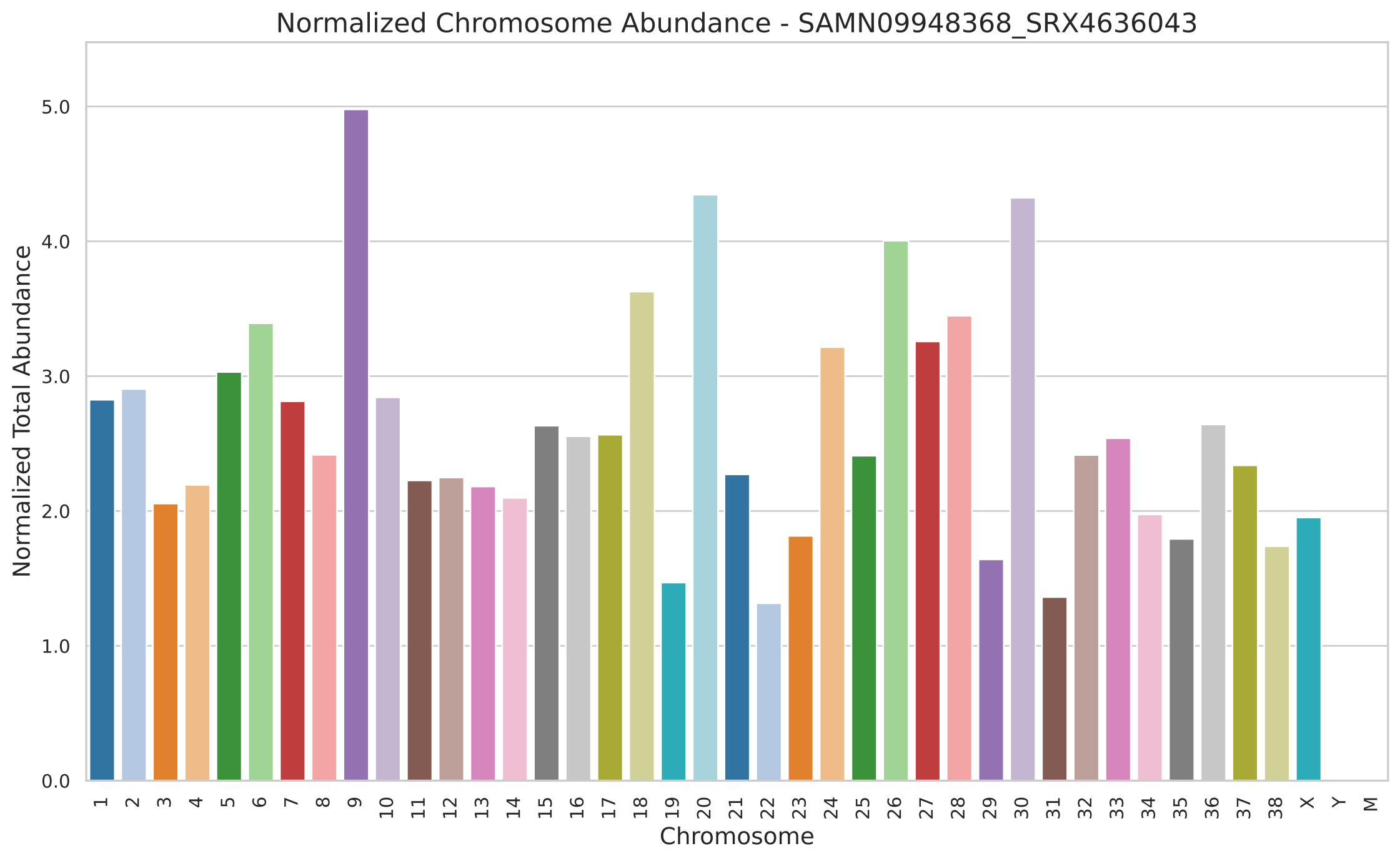

Normalized Chromosome Abundance - SAMN09948388_SRX4636030
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

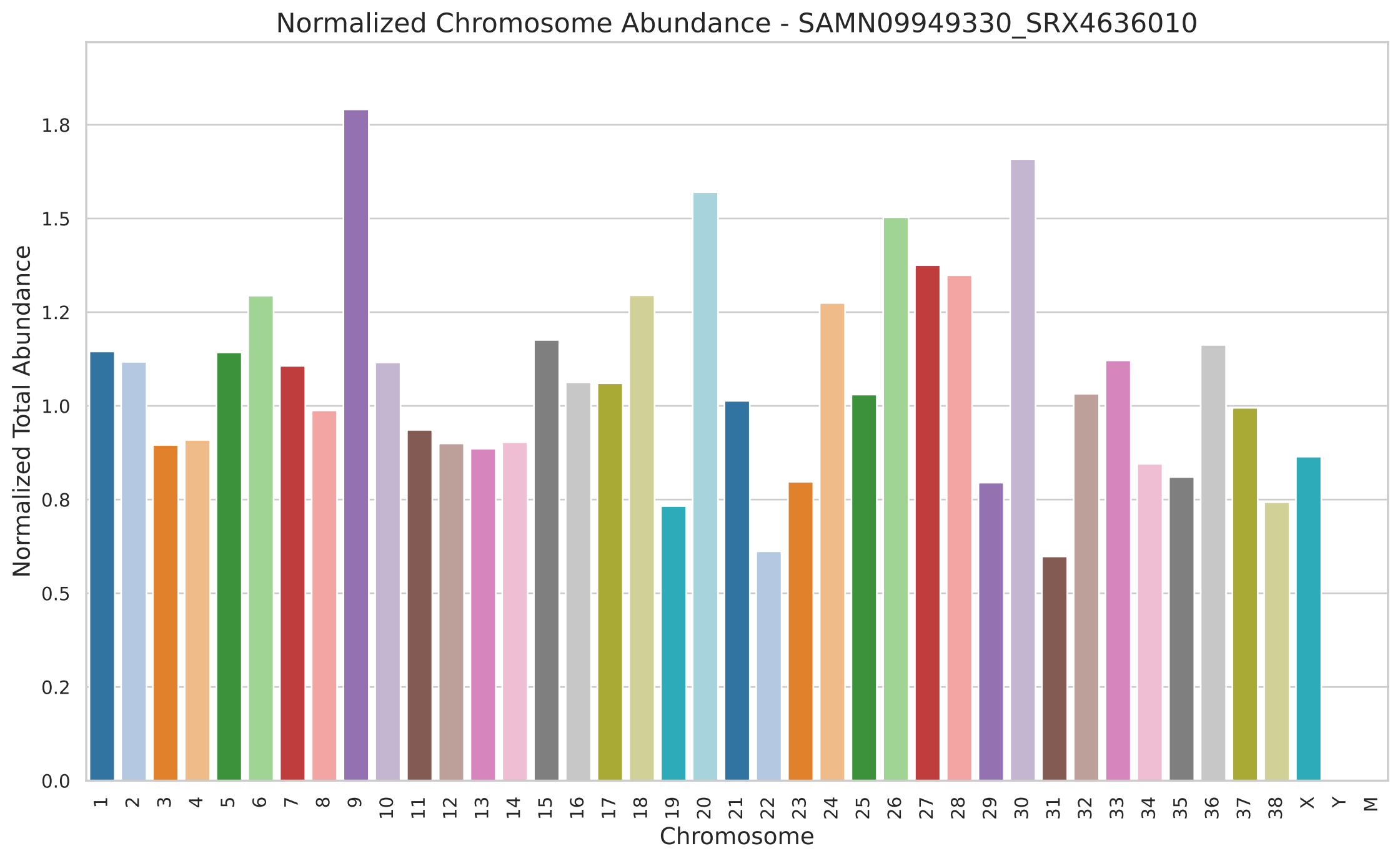

Normalized Chromosome Abundance - SAMN09949462_SRX4636037
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

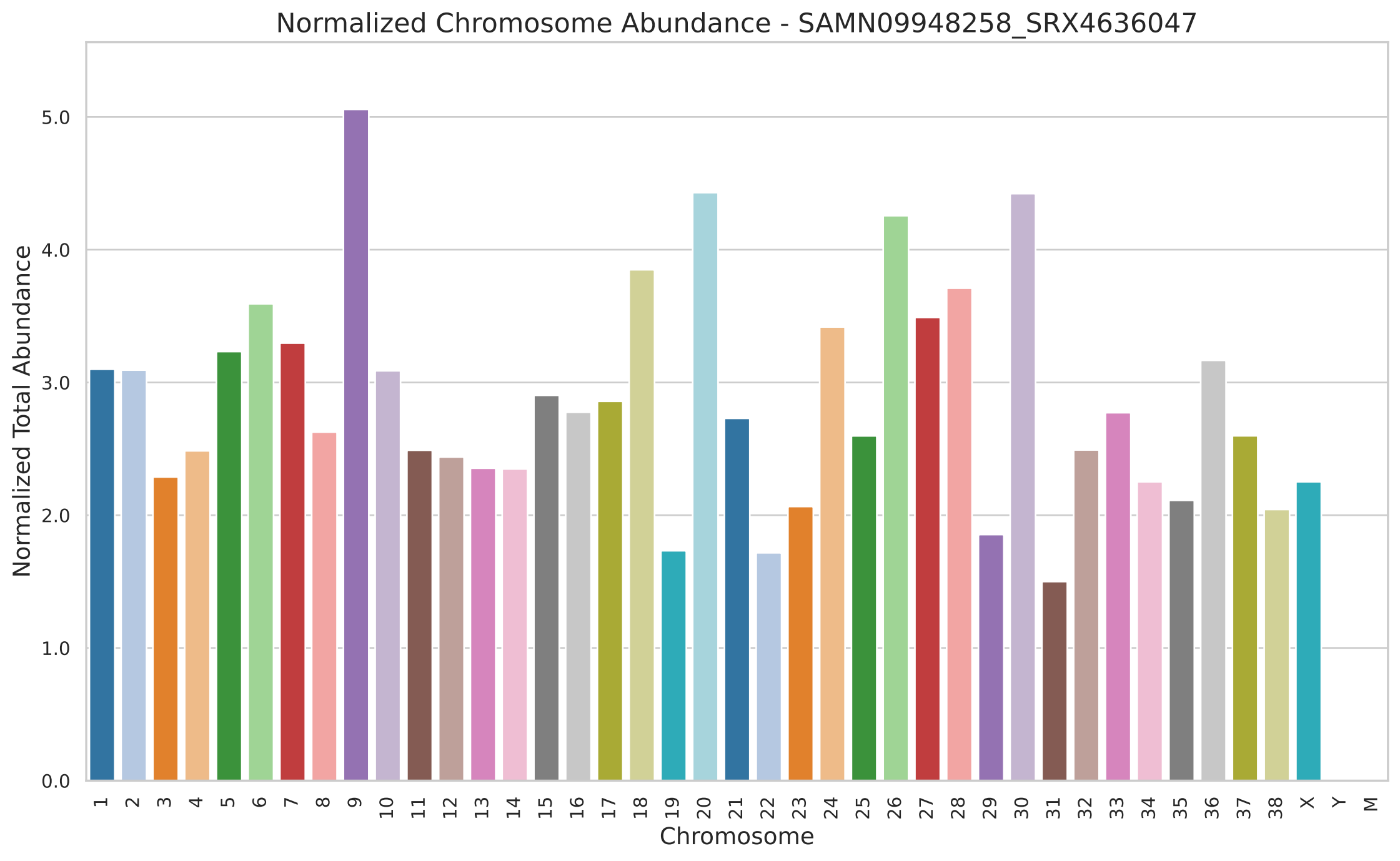

Normalized Chromosome Abundance - SAMN09949523_SRX4636027
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

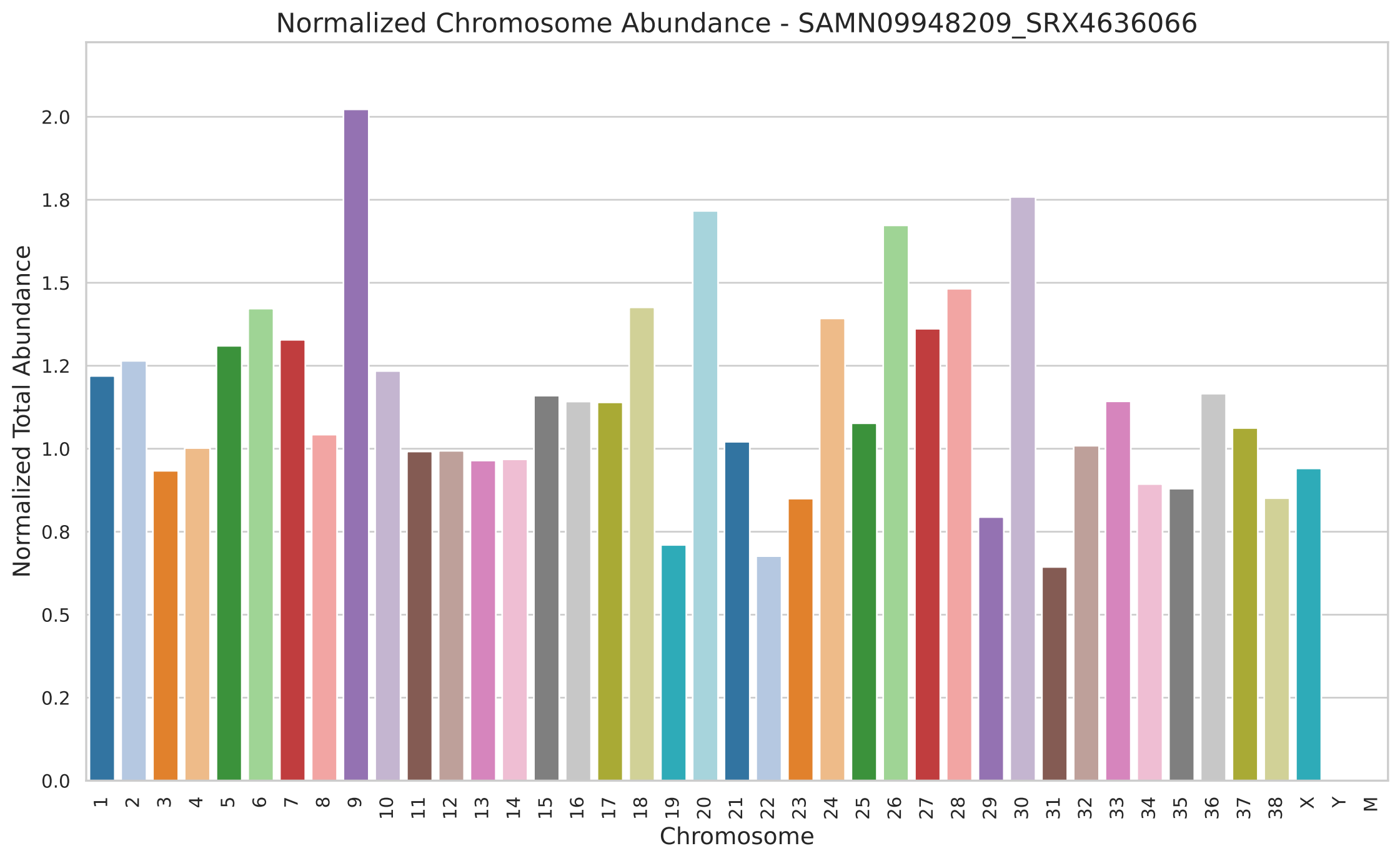

Normalized Chromosome Abundance - SAMN09948333_SRX4636032
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

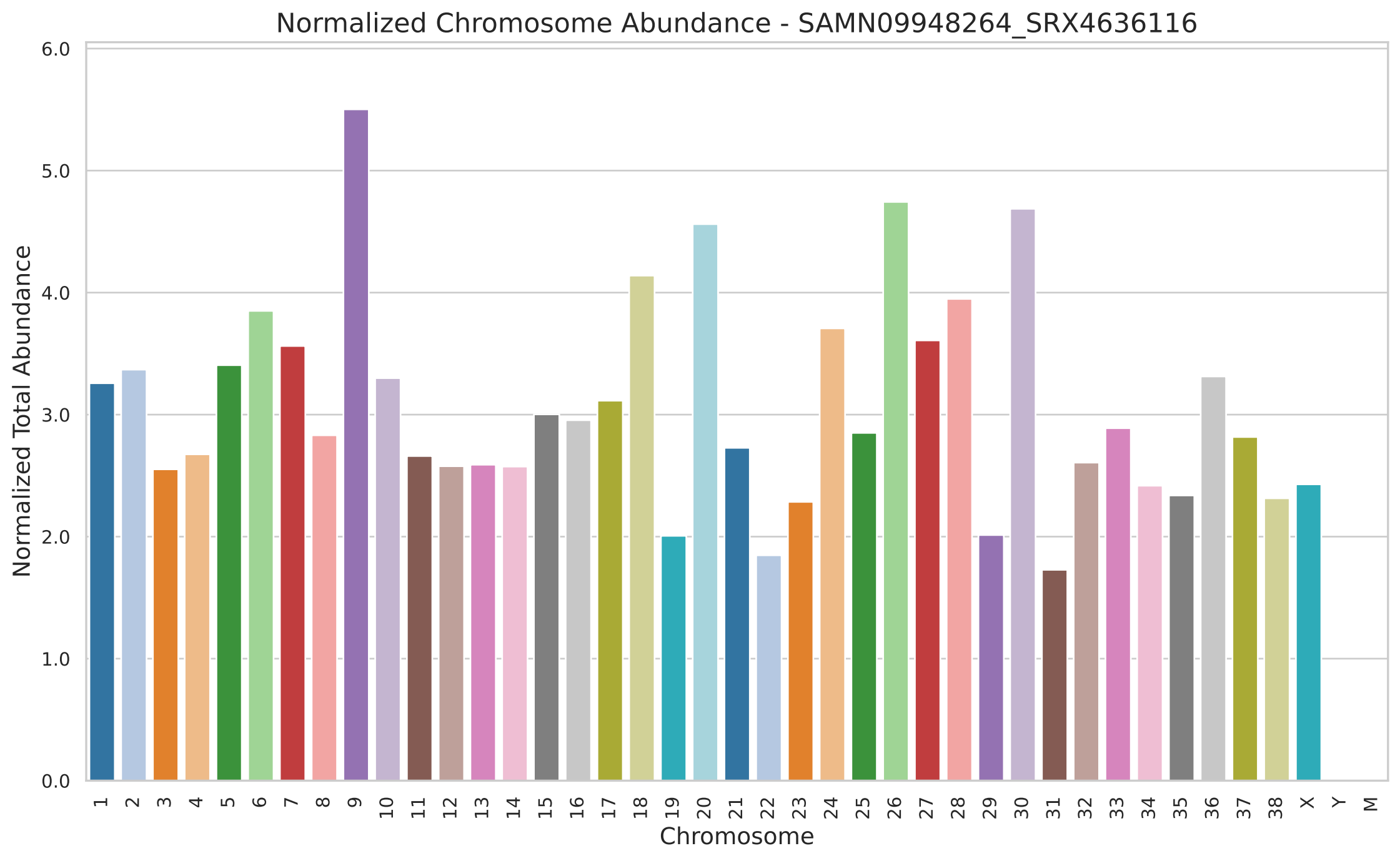

Normalized Chromosome Abundance - SAMN02739481_SRX529546
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

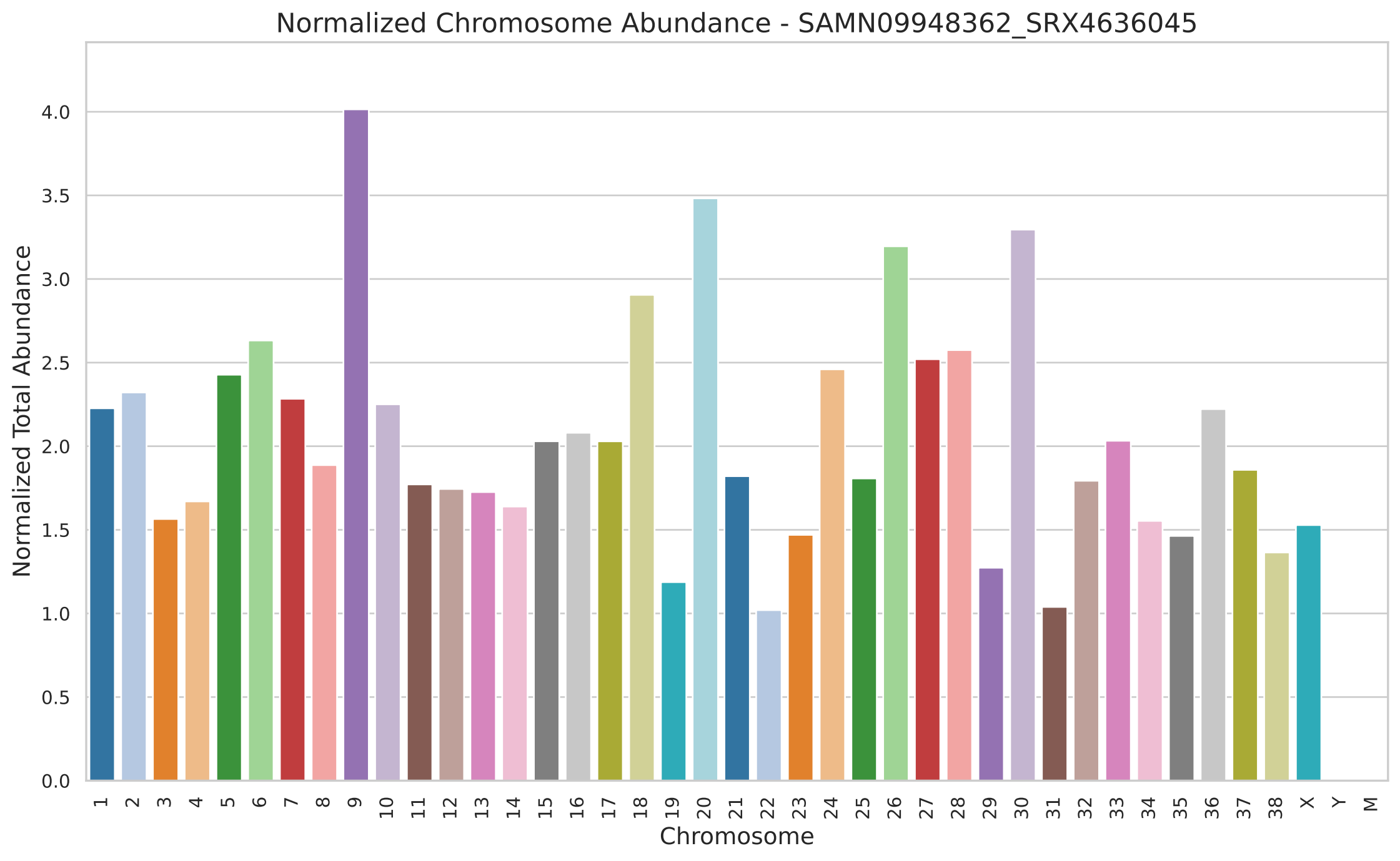

Normalized Chromosome Abundance - SAMN09948368_SRX4636043
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

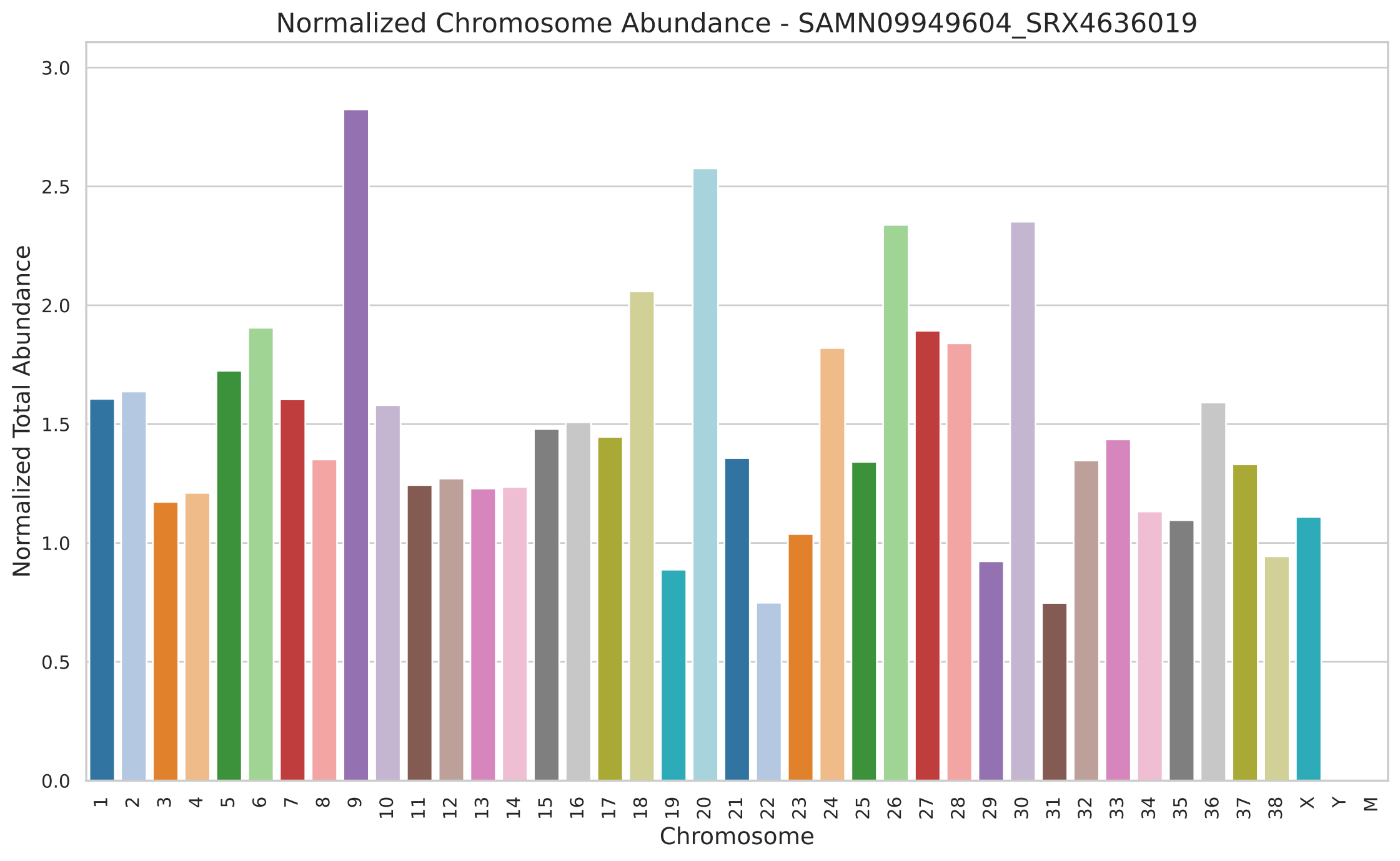

Normalized Chromosome Abundance - SAMN09949330_SRX4636010
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

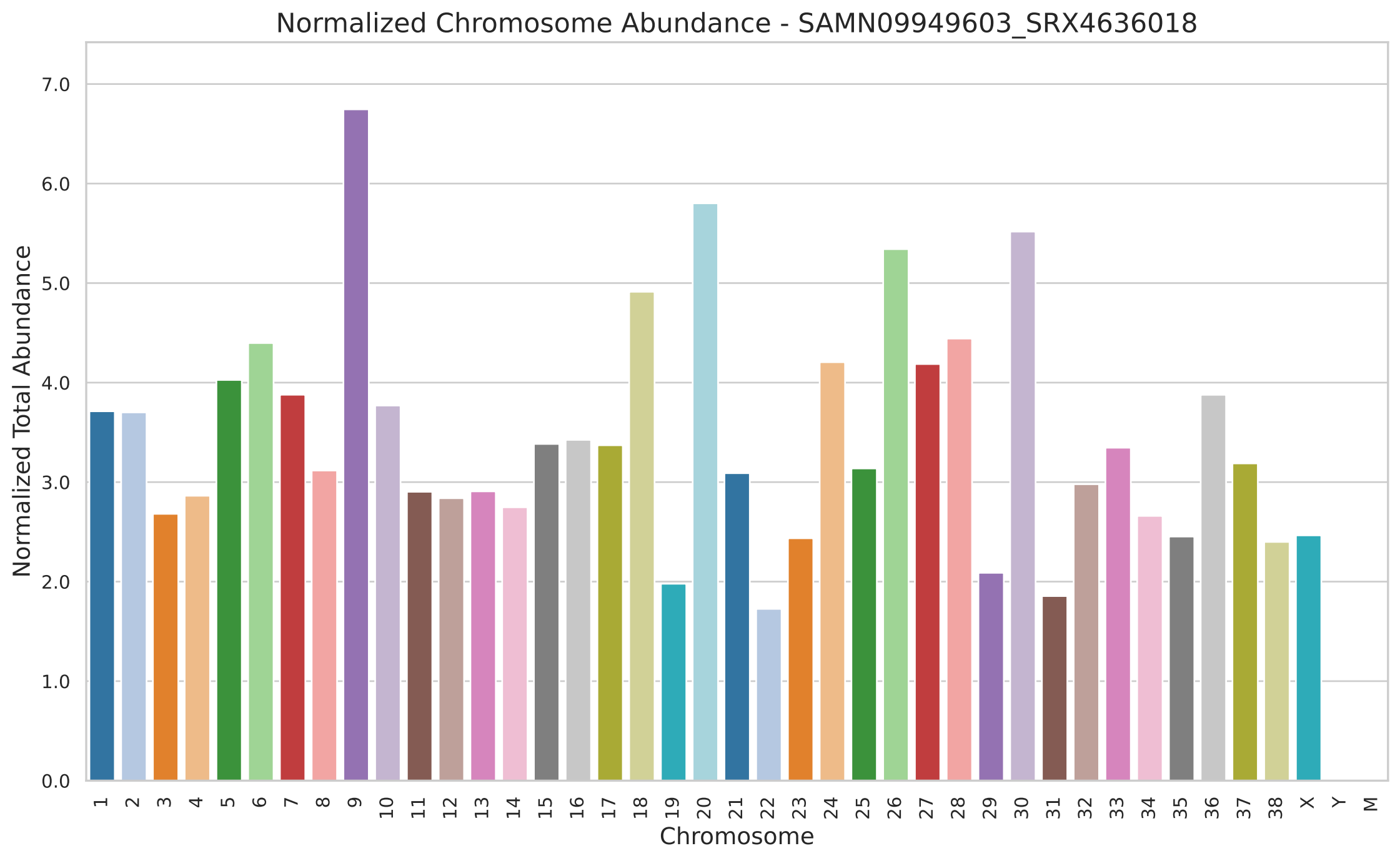

Normalized Chromosome Abundance - SAMN09948258_SRX4636047
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

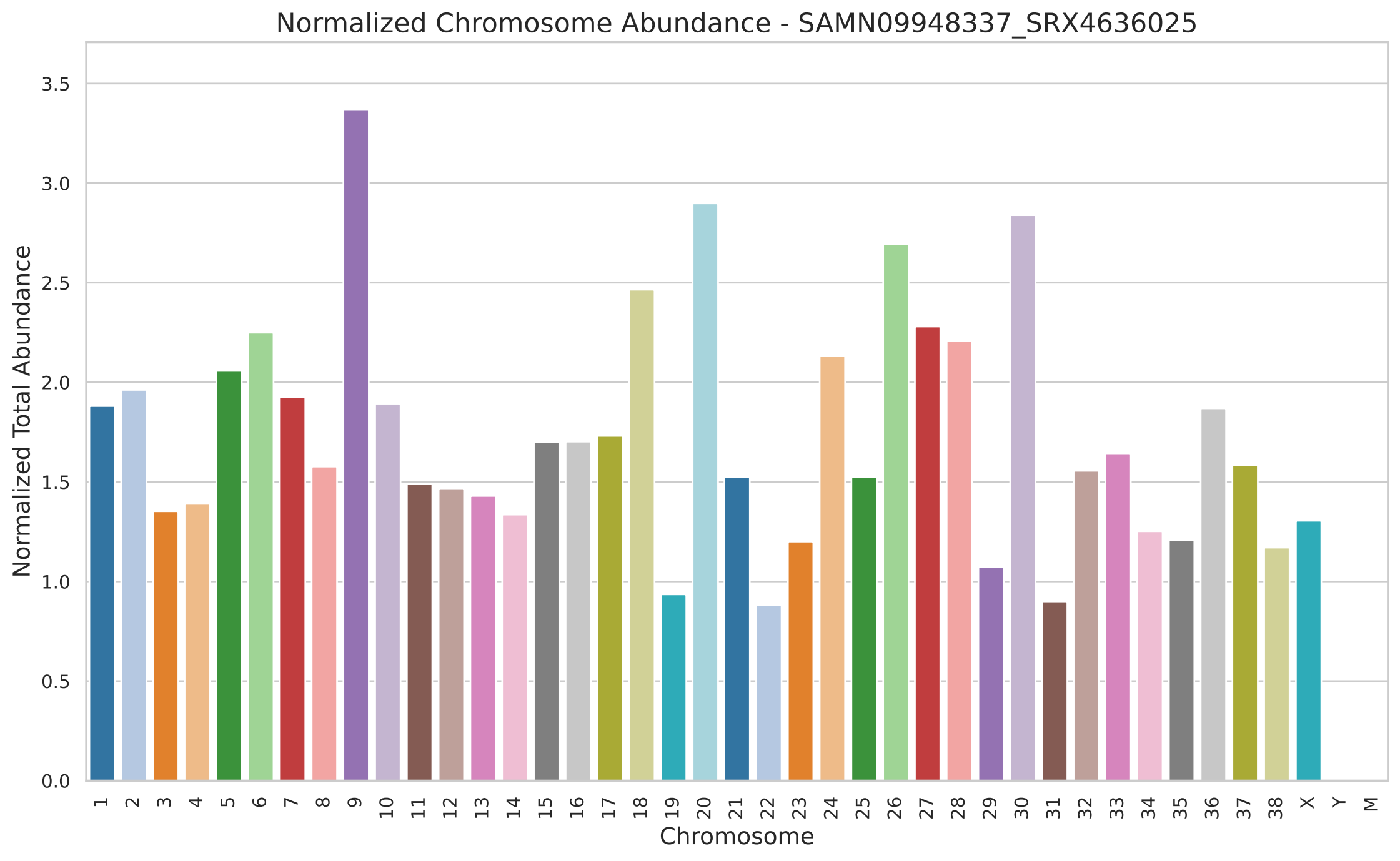

Normalized Chromosome Abundance - SAMN09948209_SRX4636066
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

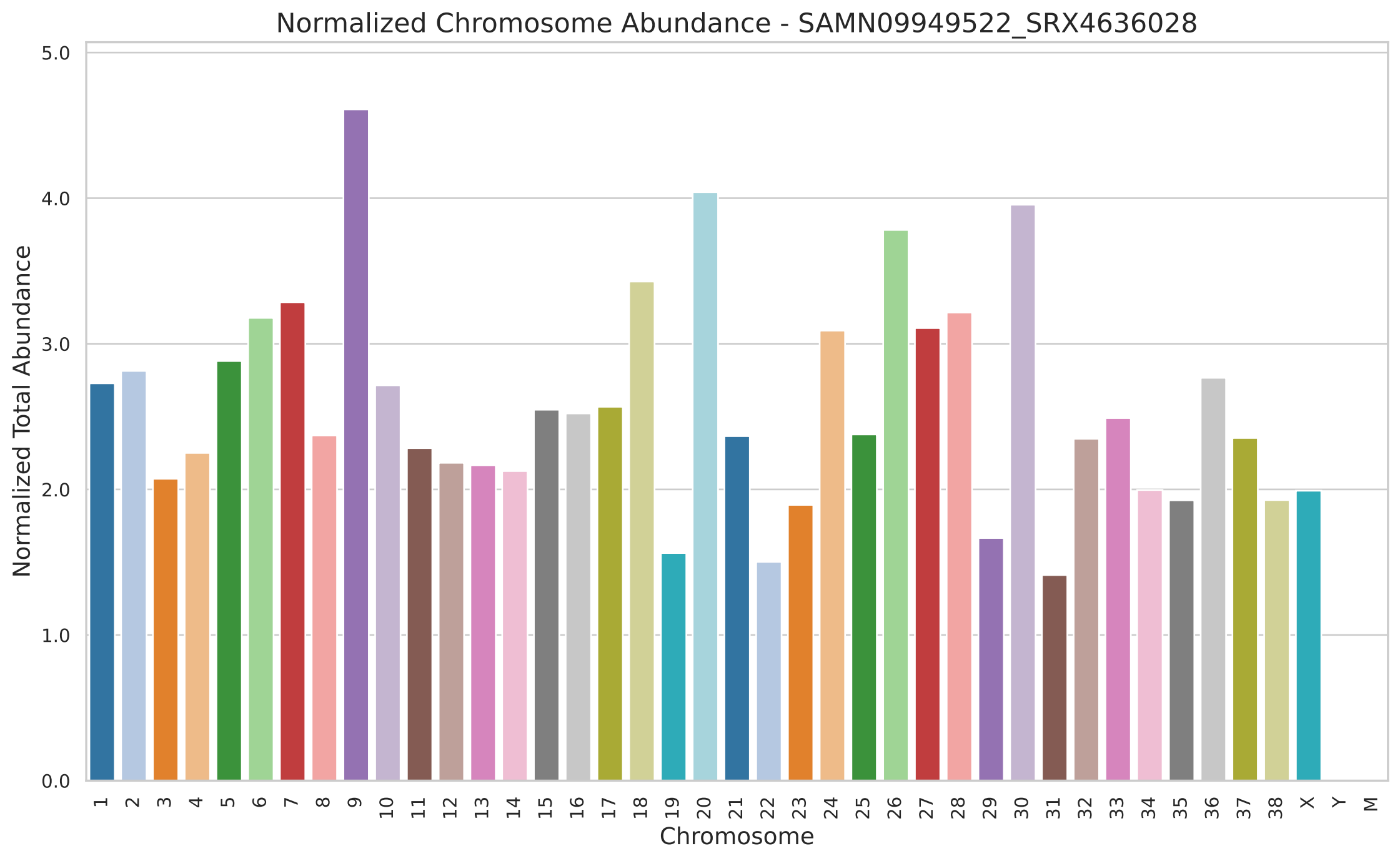

Normalized Chromosome Abundance - SAMN09948264_SRX4636116
Normalized Total Abundance
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

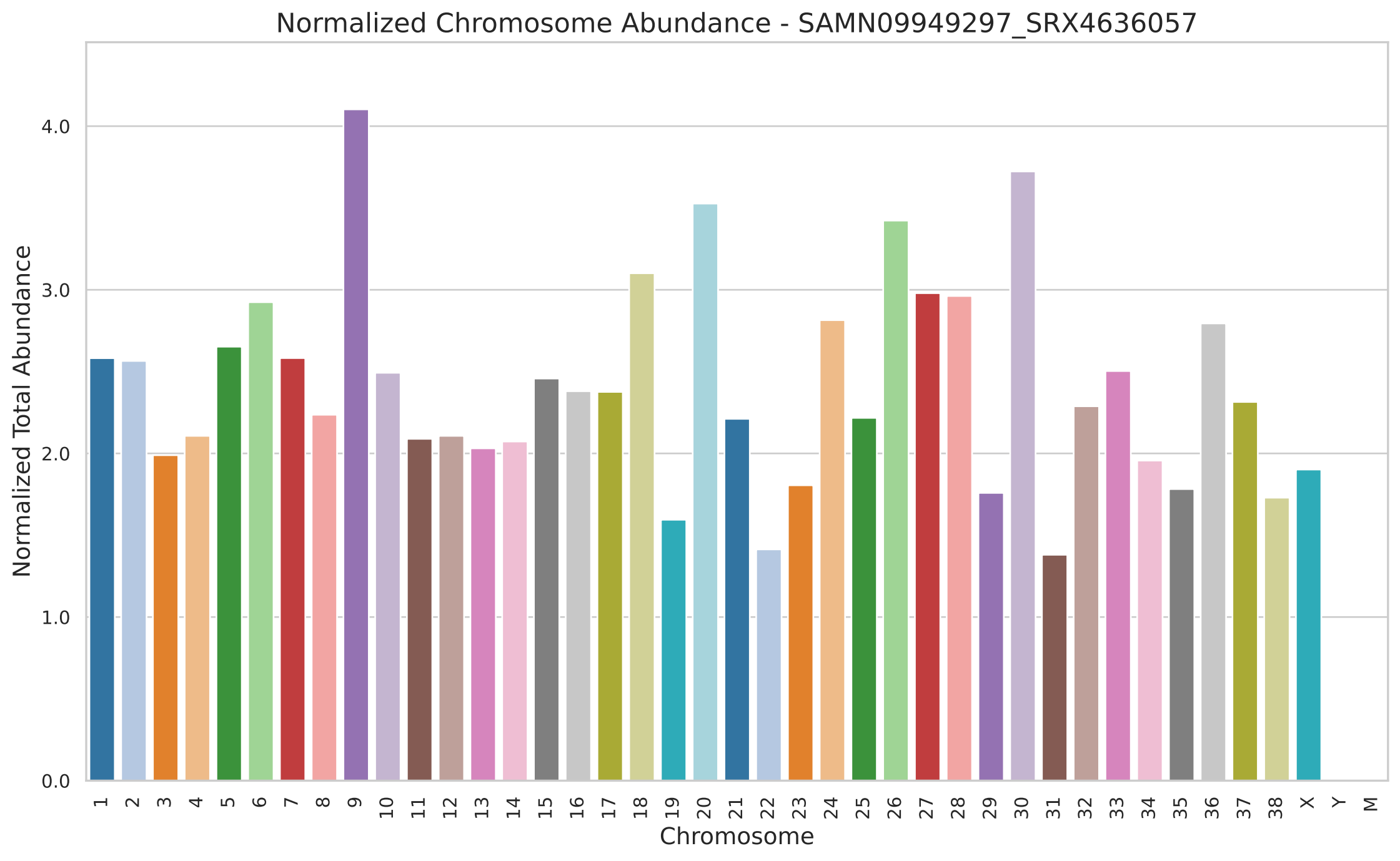

Normalized Chromosome Abundance - SAMN09948362_SRX4636045
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

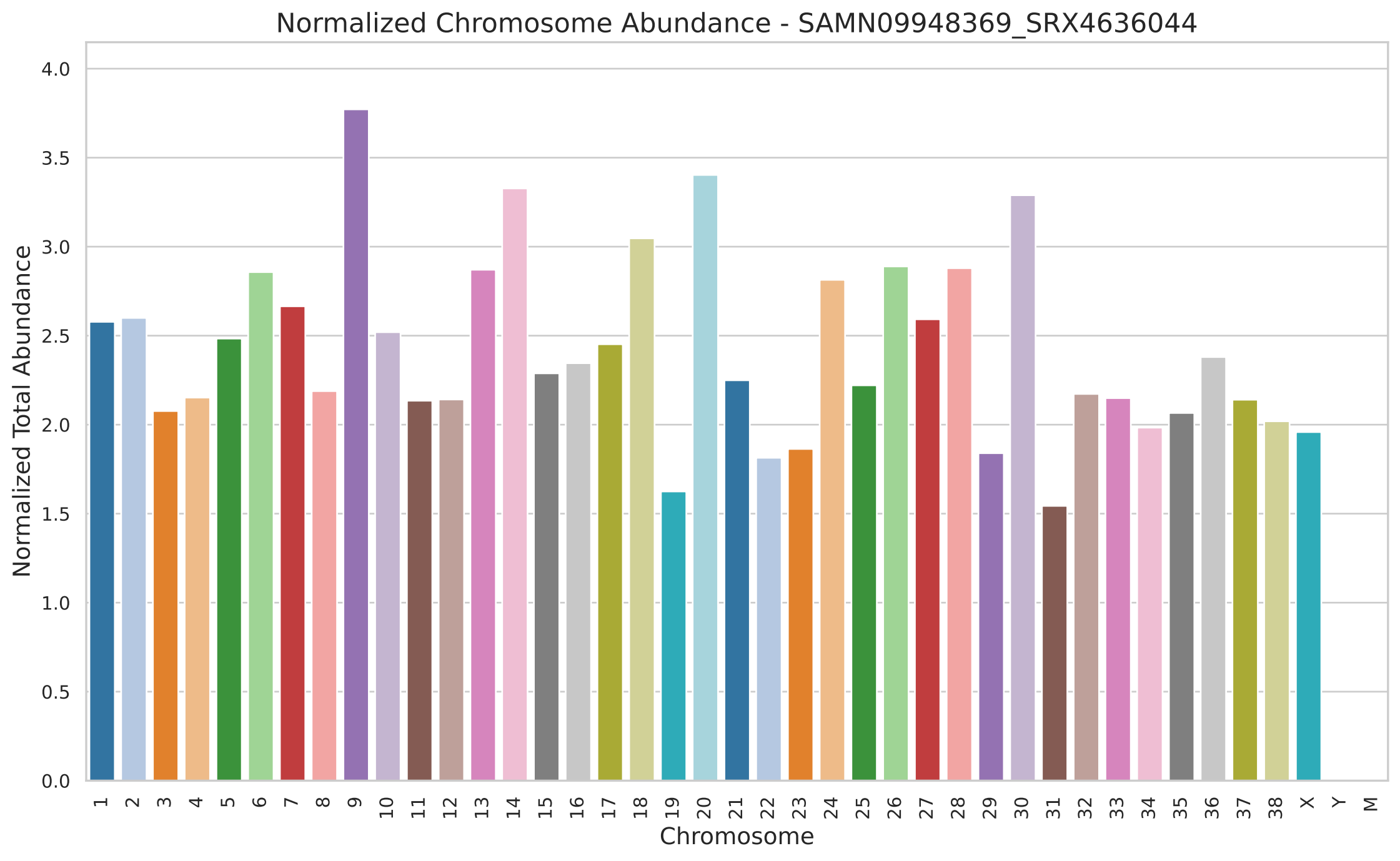

Normalized Chromosome Abundance - SAMN09949604_SRX4636019
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

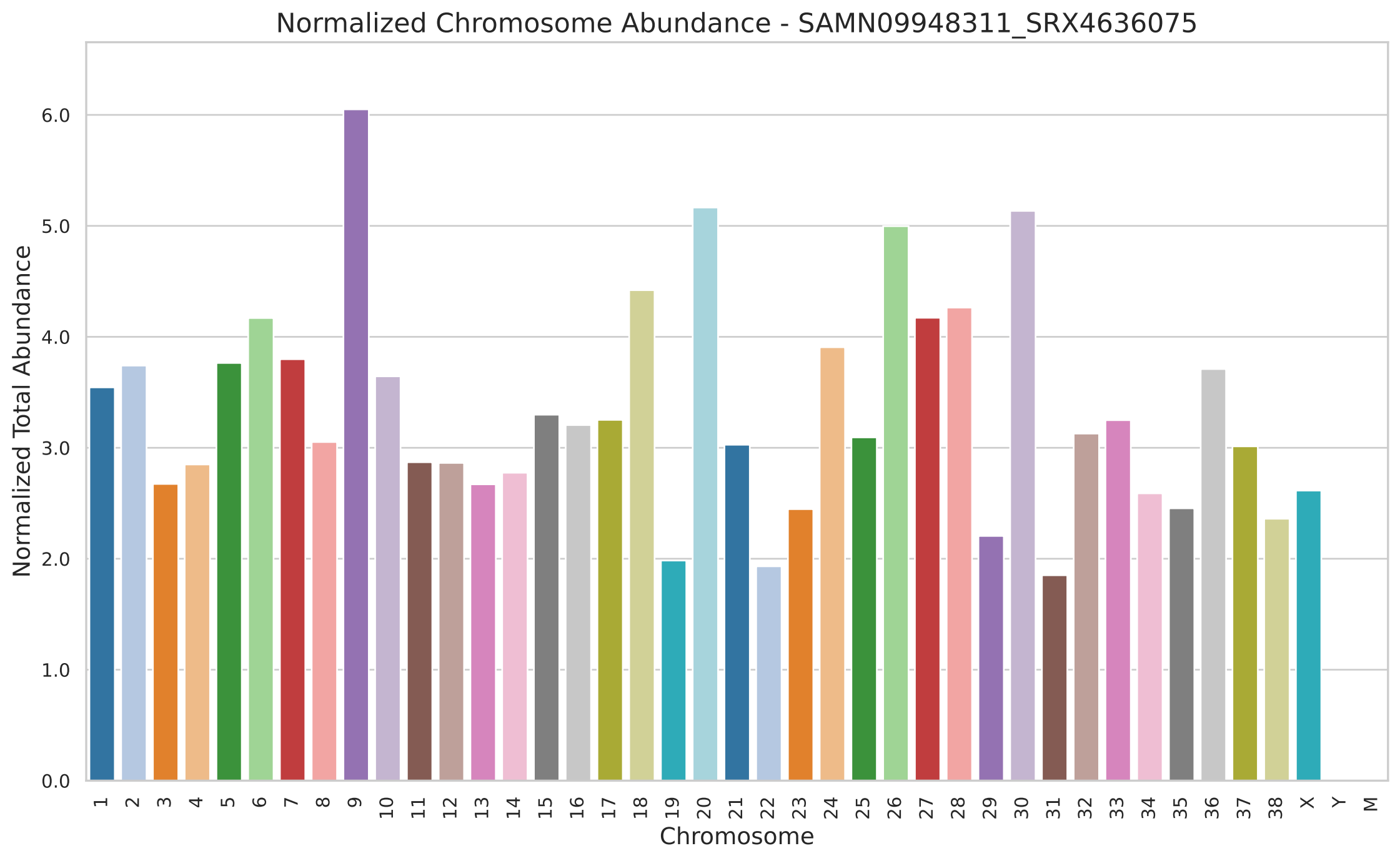

Normalized Chromosome Abundance - SAMN09949603_SRX4636018
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

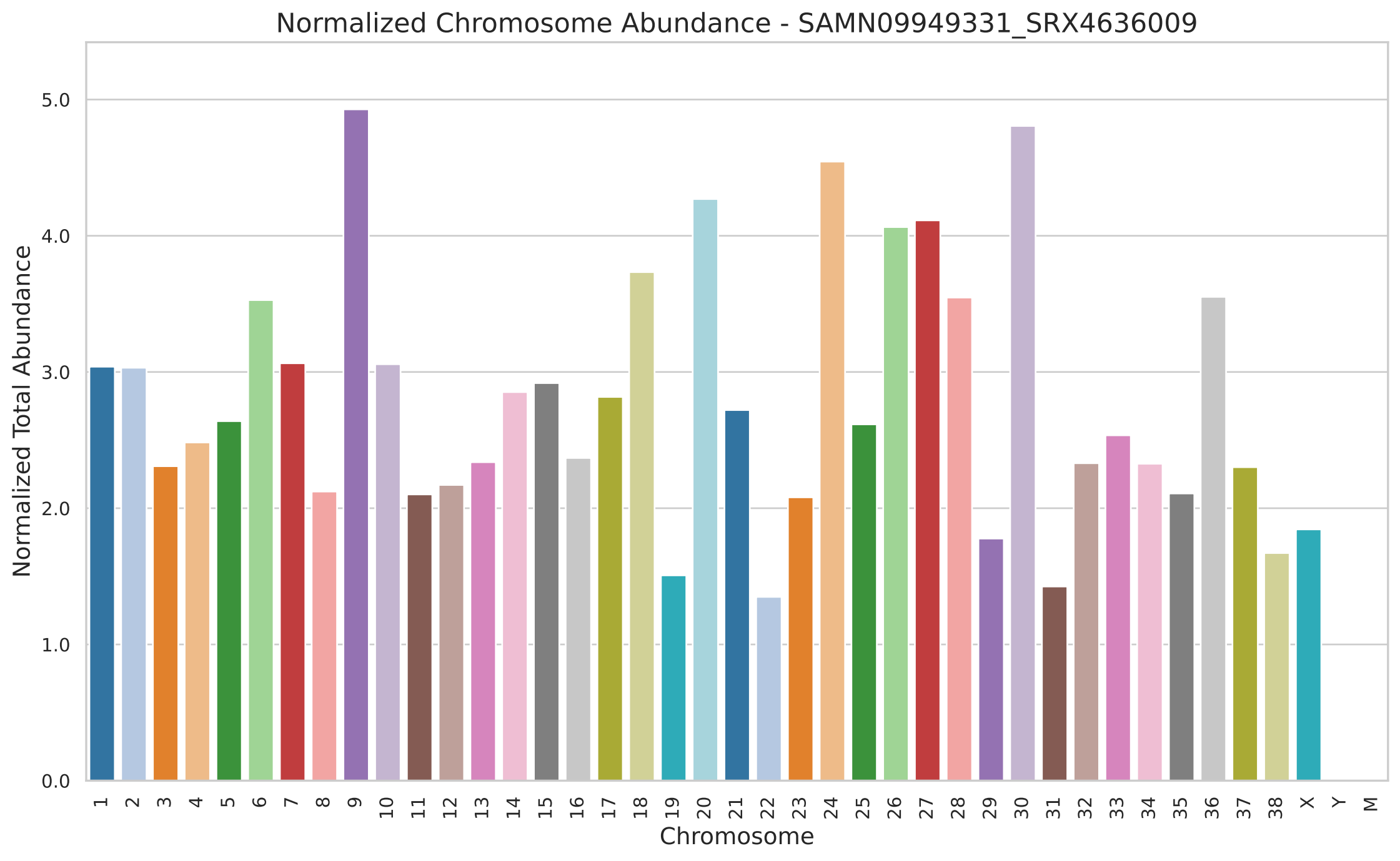

Normalized Chromosome Abundance - SAMN09948337_SRX4636025
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

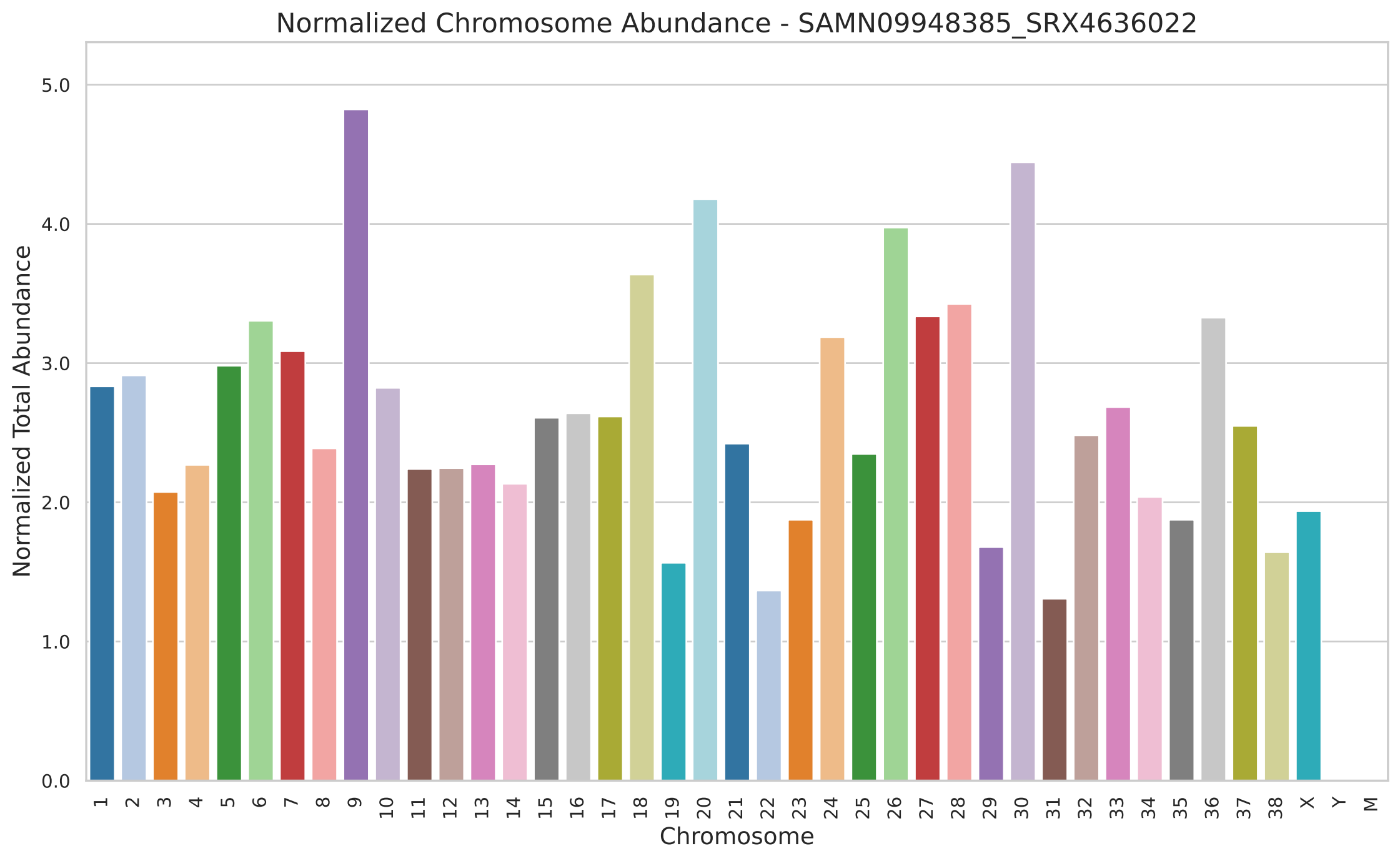

Normalized Chromosome Abundance - SAMN09949522_SRX4636028
Normalized Total Abundance
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

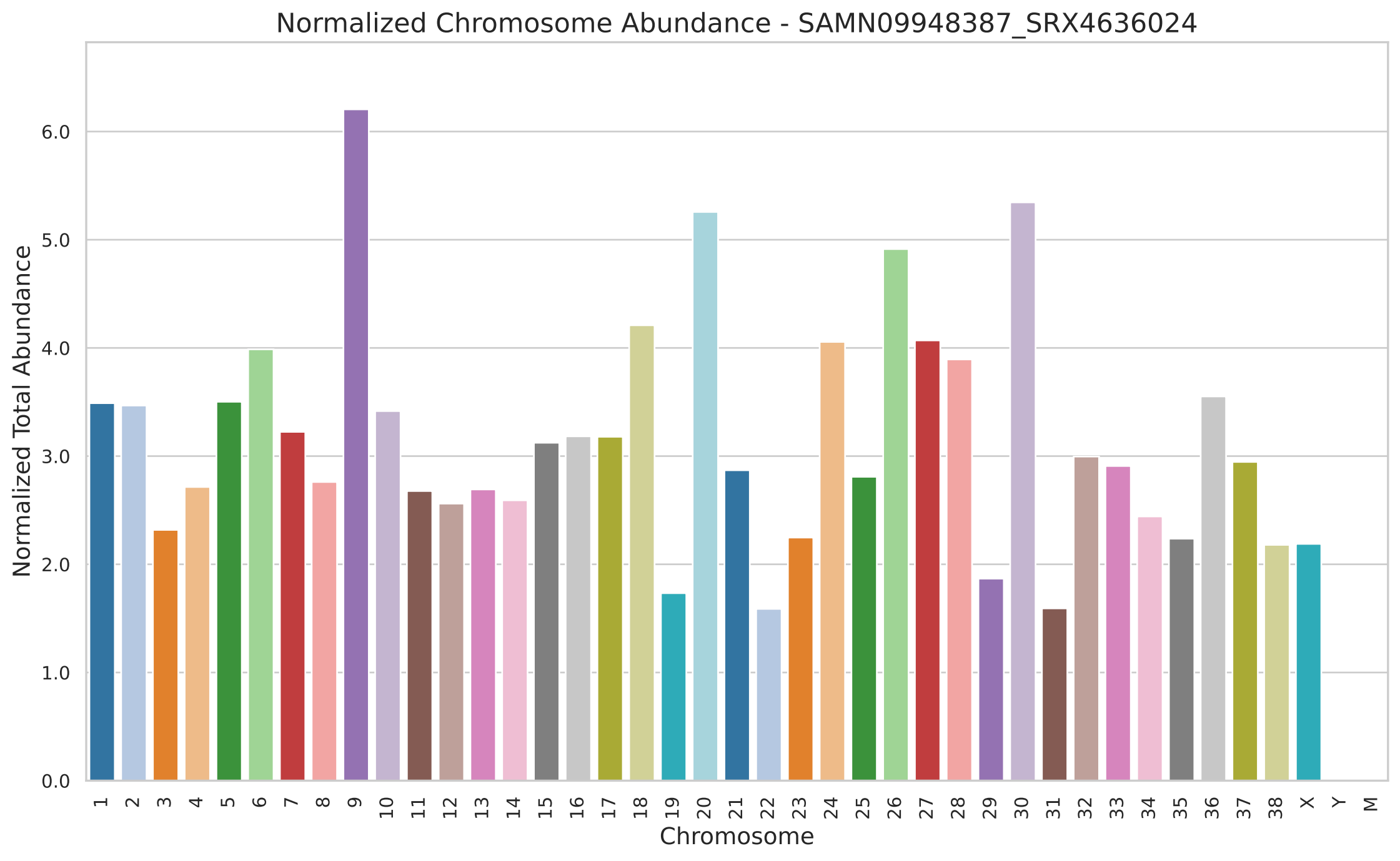

Normalized Chromosome Abundance - SAMN09949297_SRX4636057
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

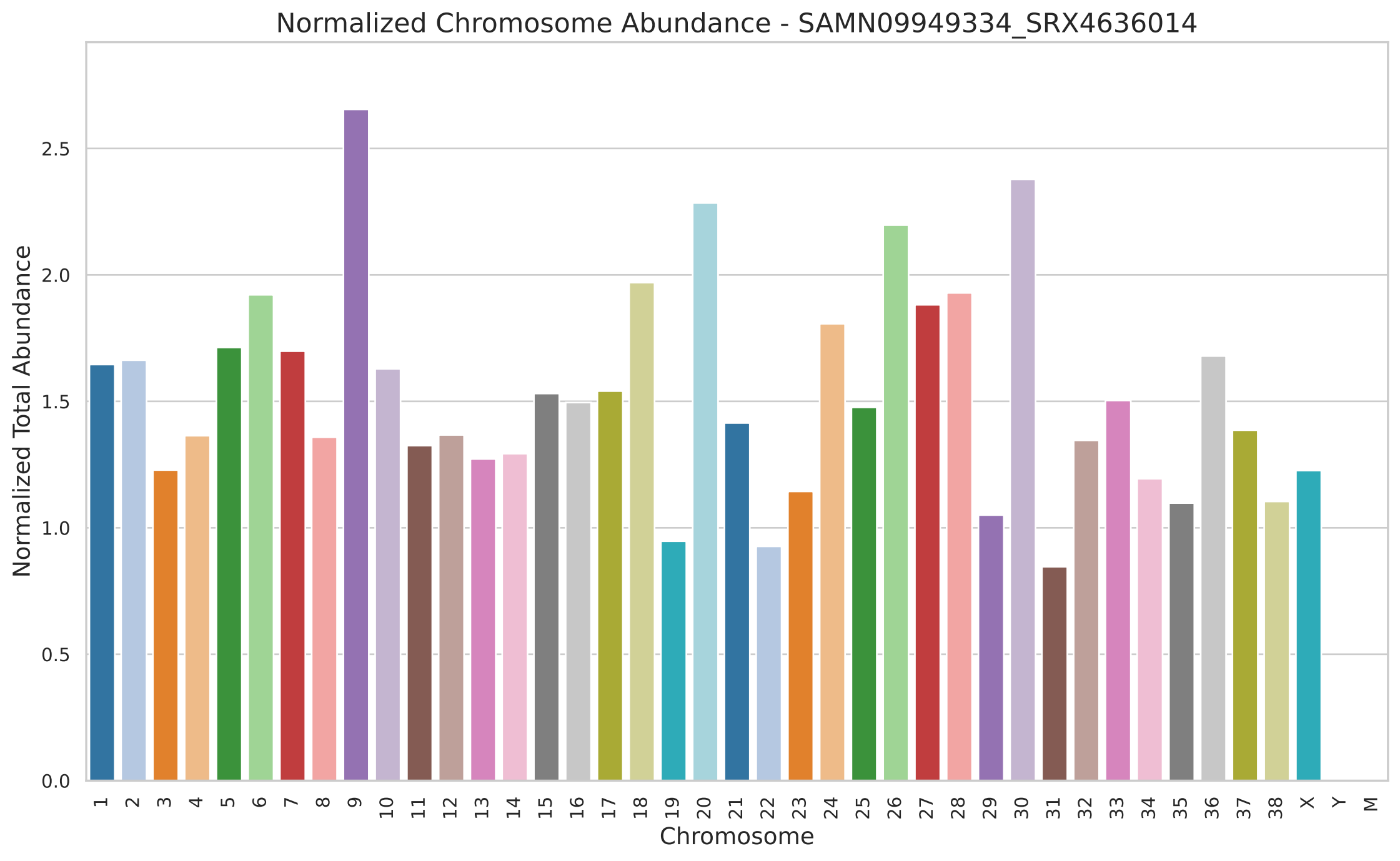

Normalized Chromosome Abundance - SAMN09948369_SRX4636044
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

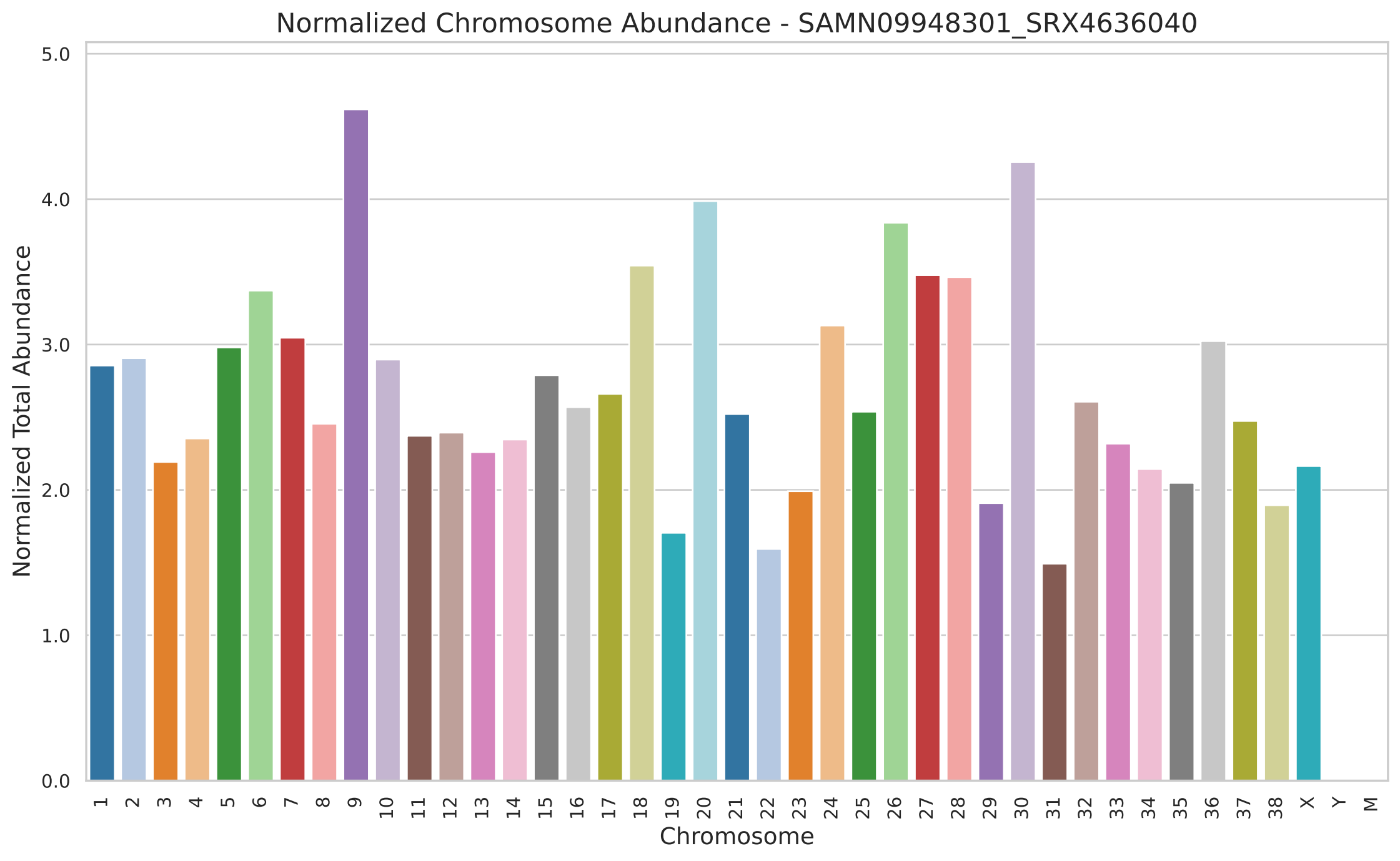

Normalized Chromosome Abundance - SAMN09948311_SRX4636075
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

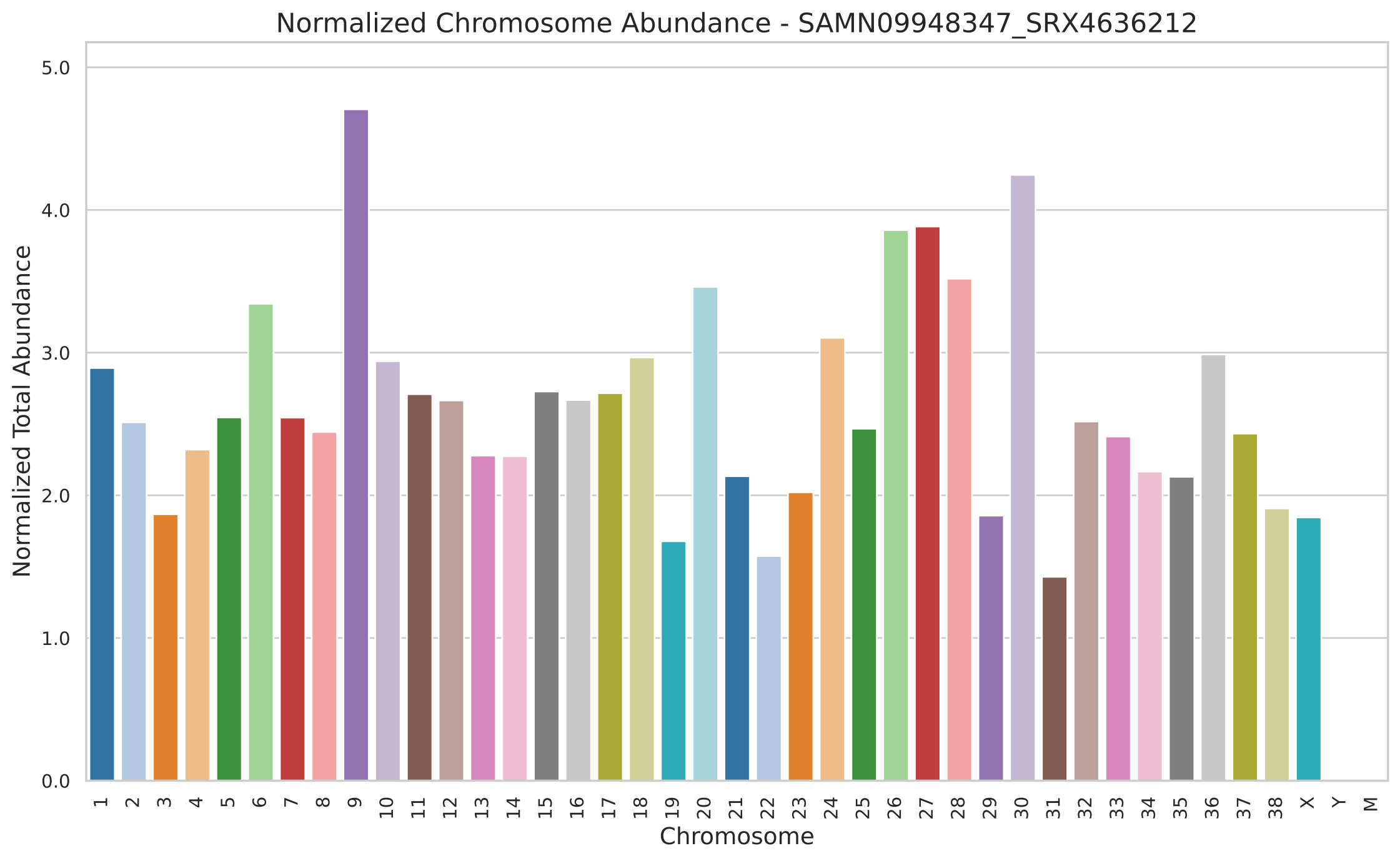

Normalized Chromosome Abundance - SAMN09949331_SRX4636009
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

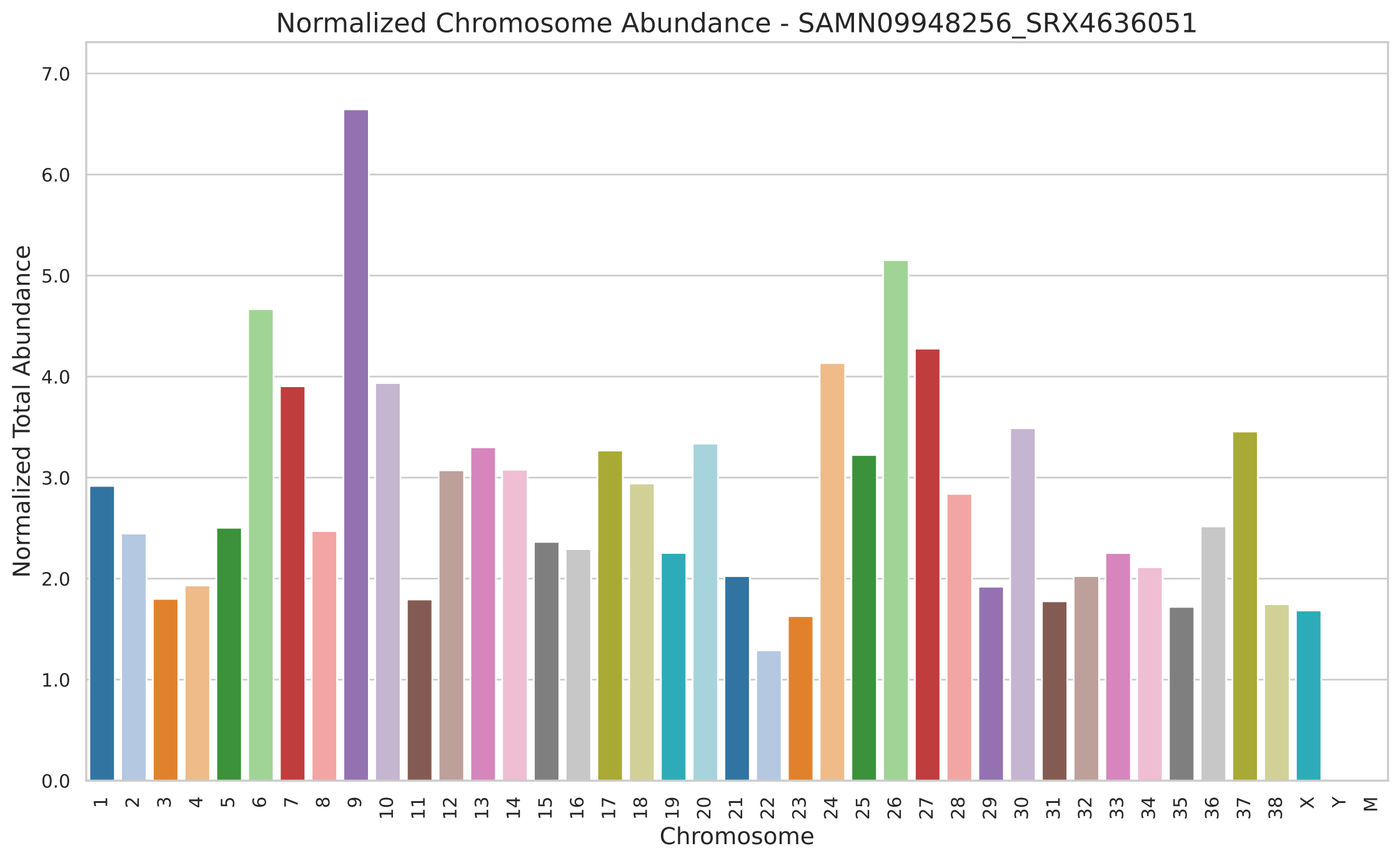

Normalized Chromosome Abundance - SAMN09948385_SRX4636022
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

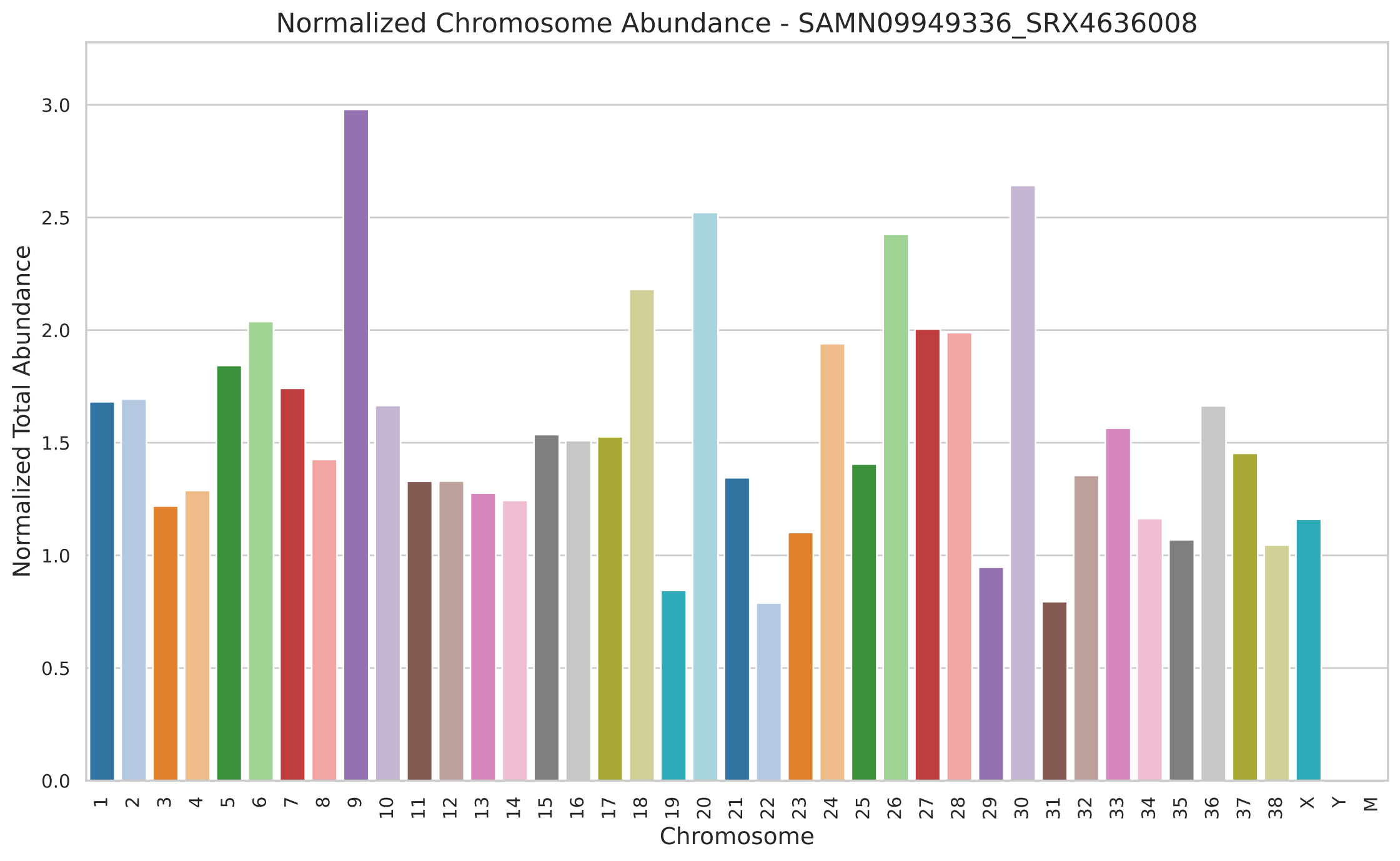

Normalized Chromosome Abundance - SAMN09948387_SRX4636024
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

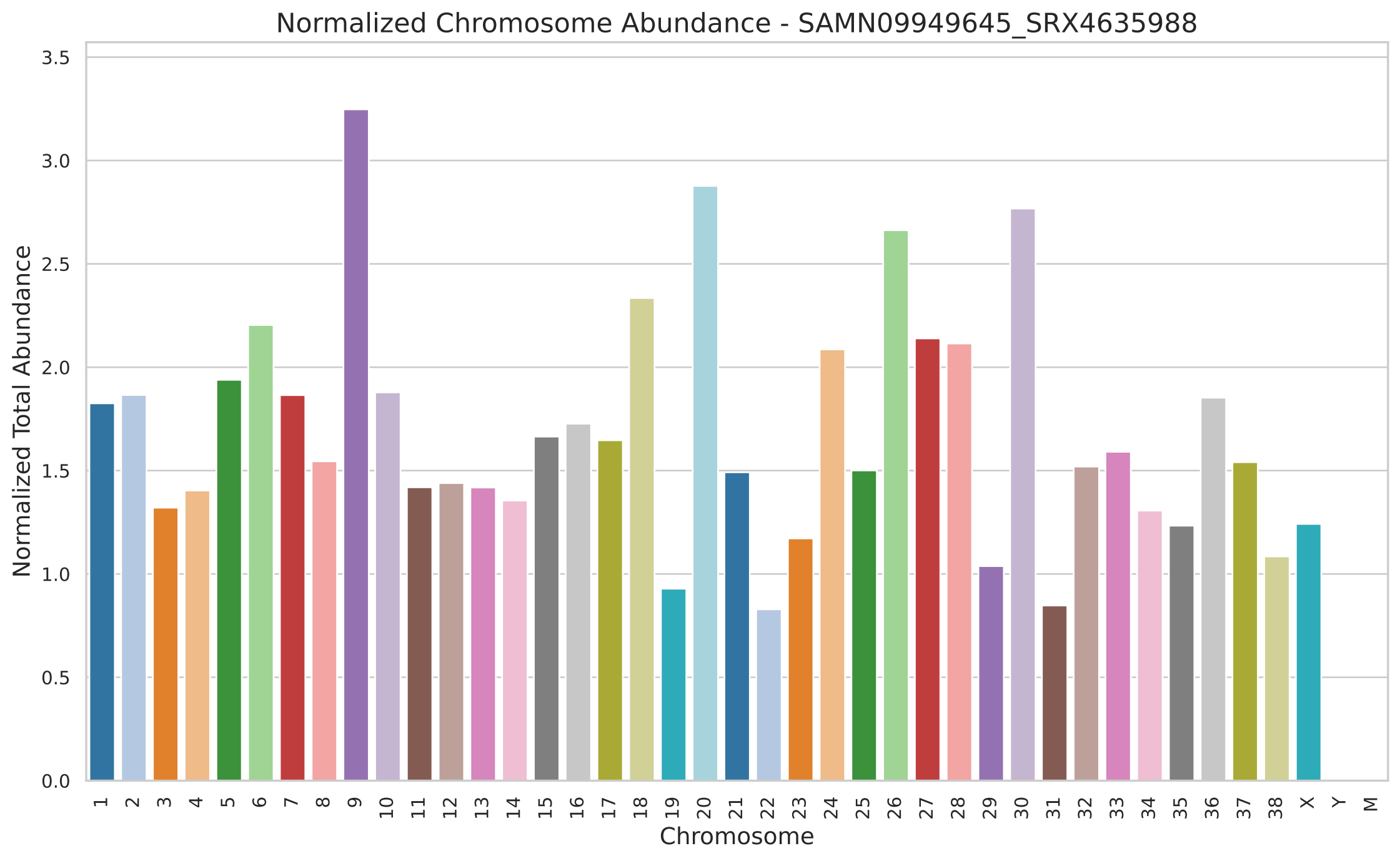

Normalized Chromosome Abundance - SAMN09949334_SRX4636014
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

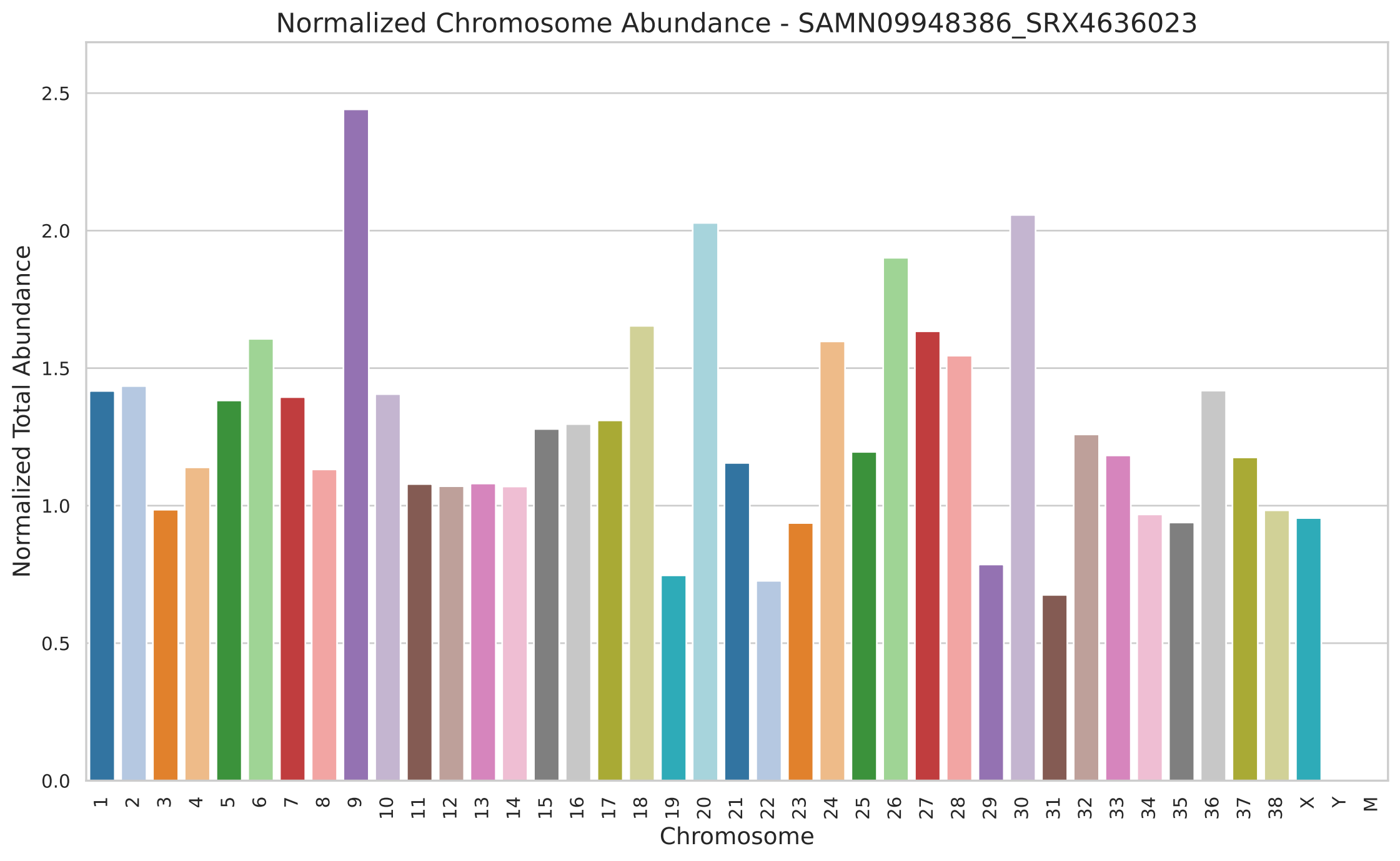

Normalized Chromosome Abundance - SAMN09948301_SRX4636040
Normalized Total Abundance
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

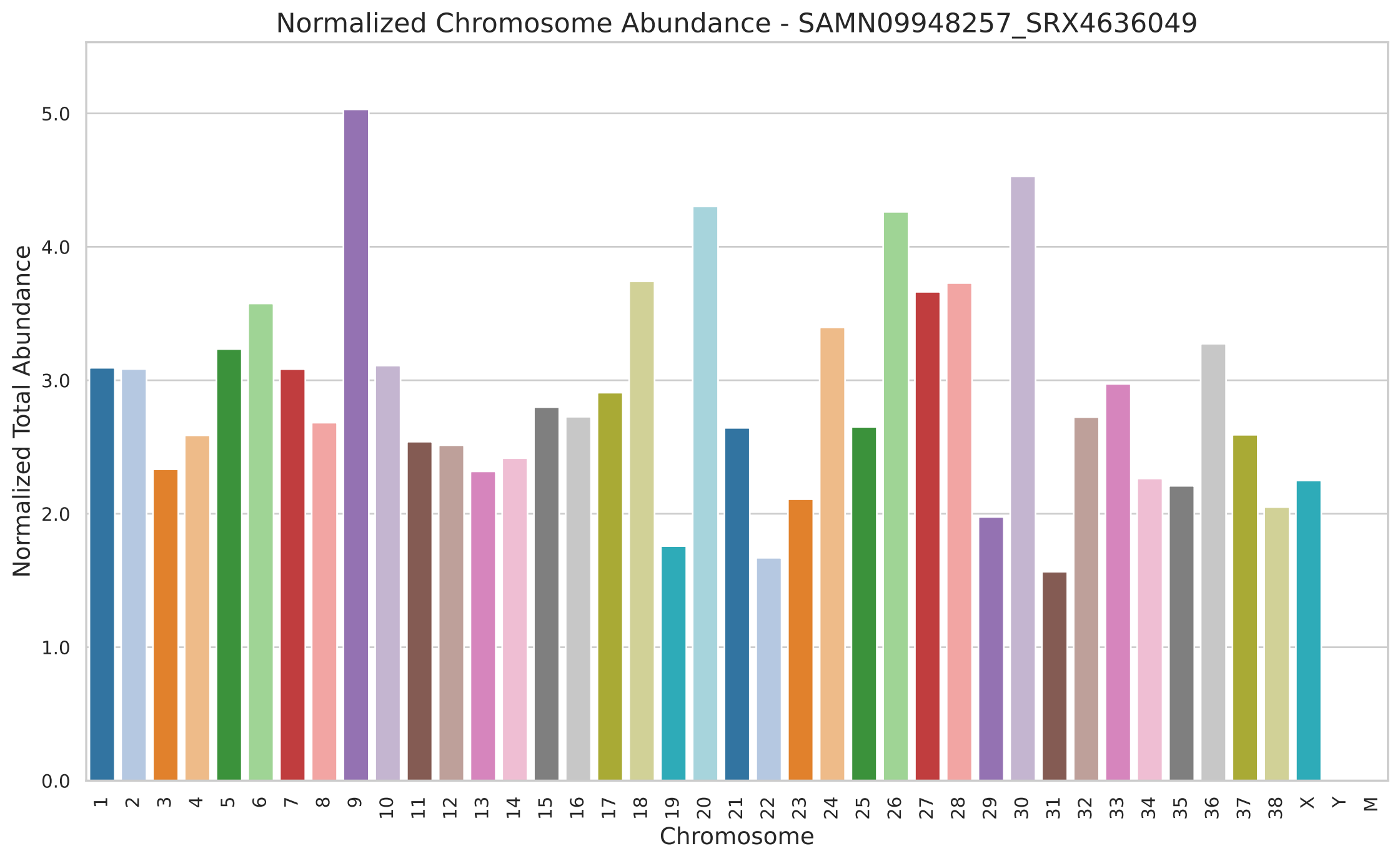

Normalized Chromosome Abundance - SAMN09948347_SRX4636212
Normalized Total Abundance
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

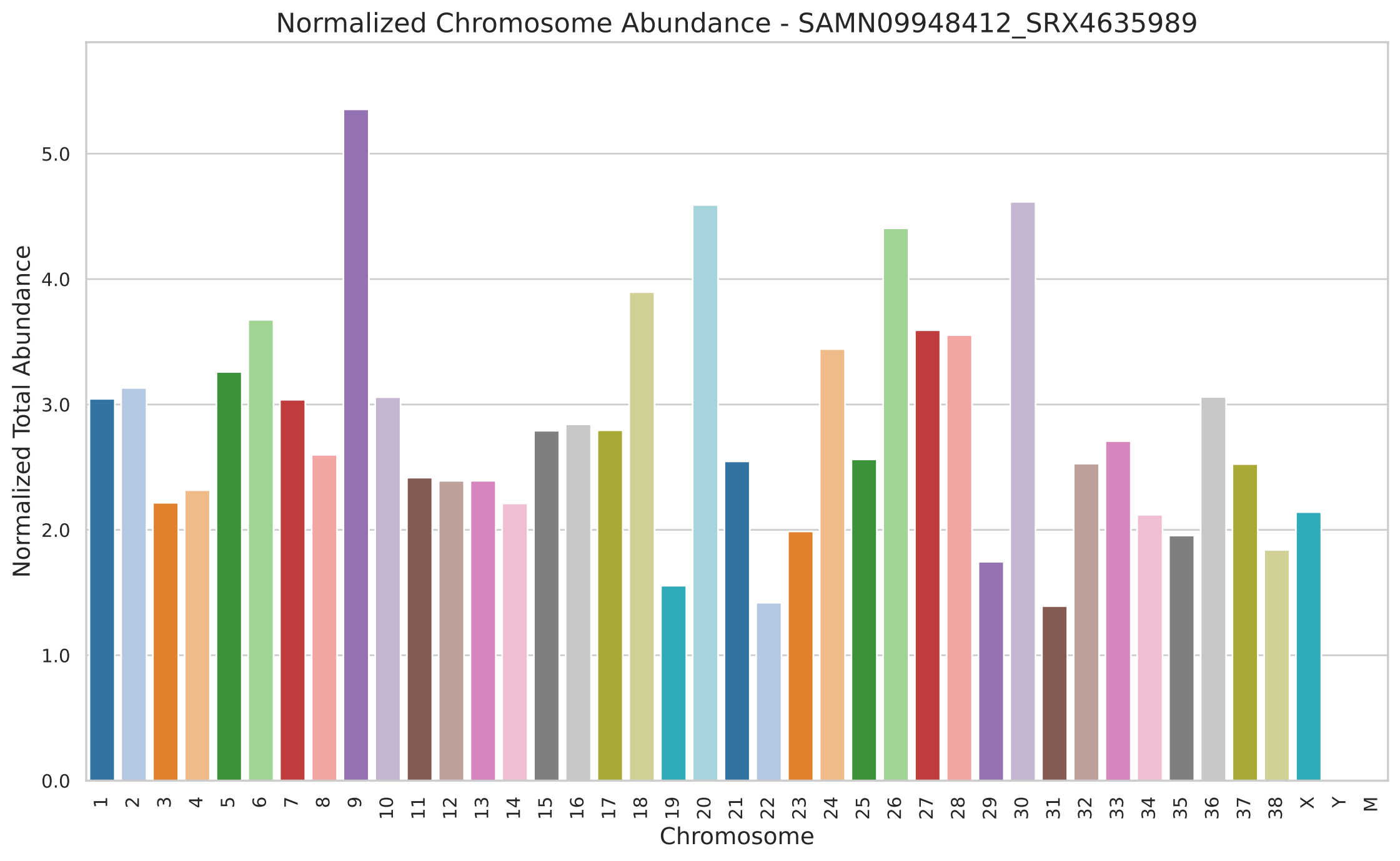

Normalized Chromosome Abundance - SAMN09948256_SRX4636051
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

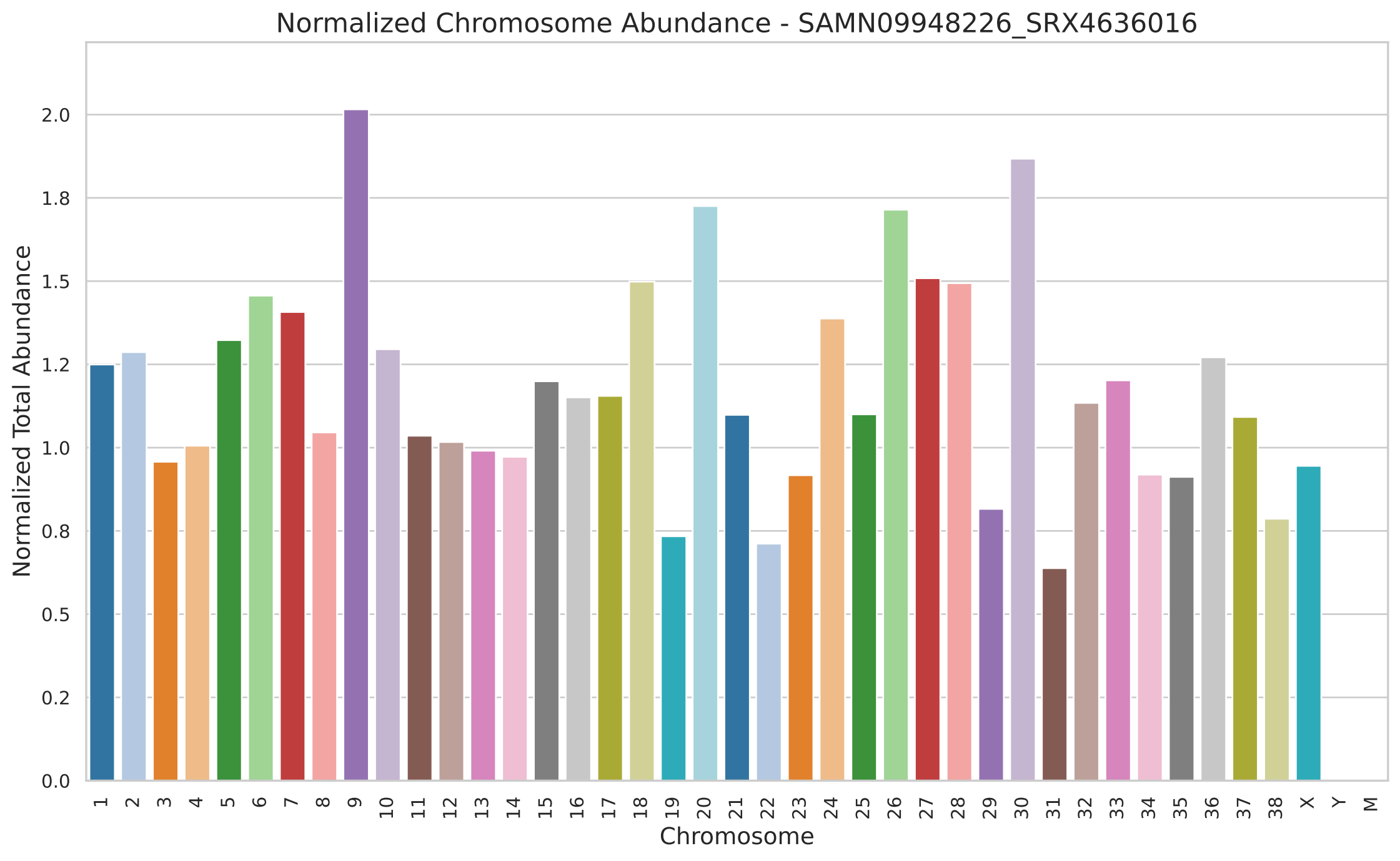

Normalized Chromosome Abundance - SAMN09949336_SRX4636008
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

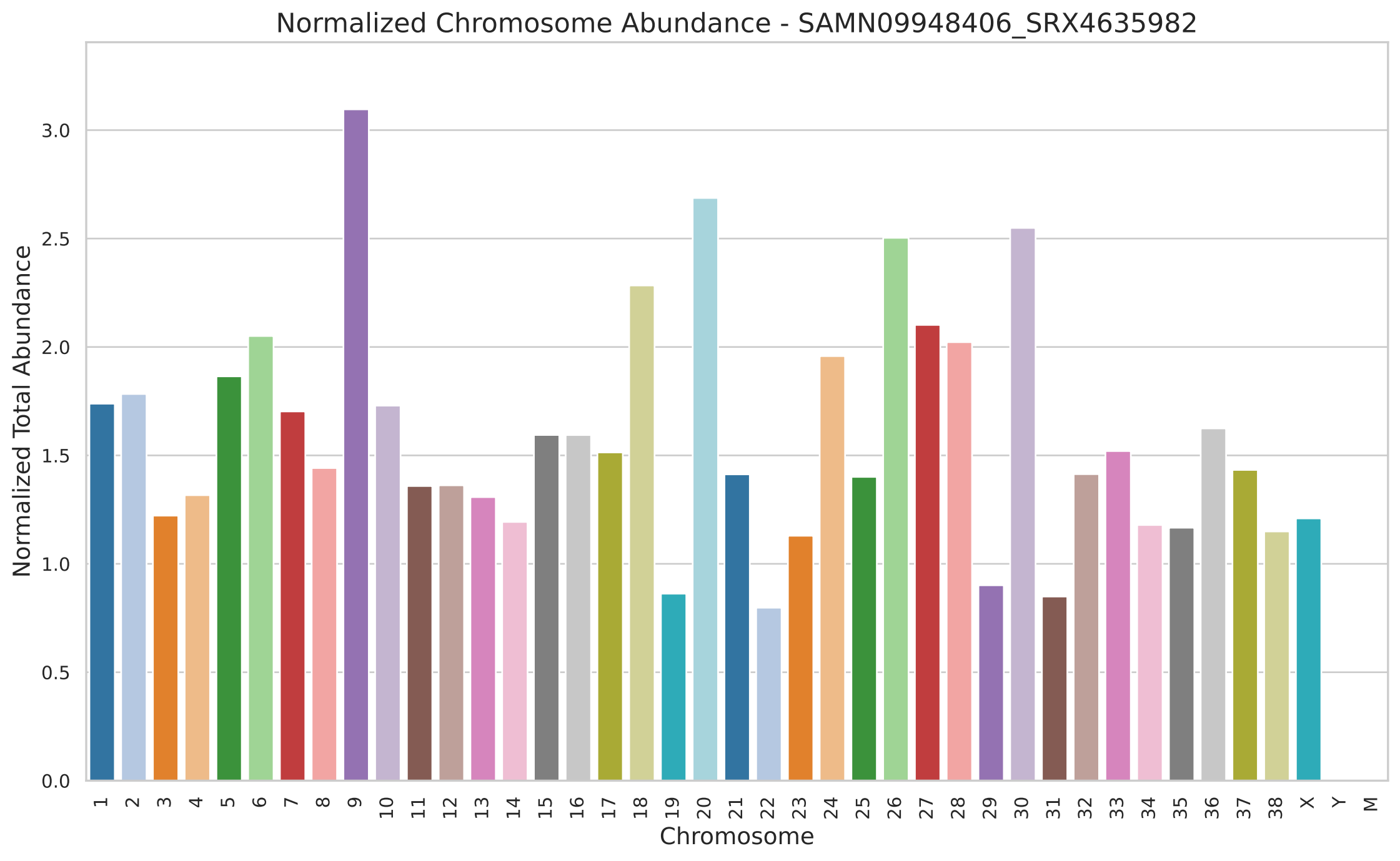

Normalized Chromosome Abundance - SAMN09949645_SRX4635988
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

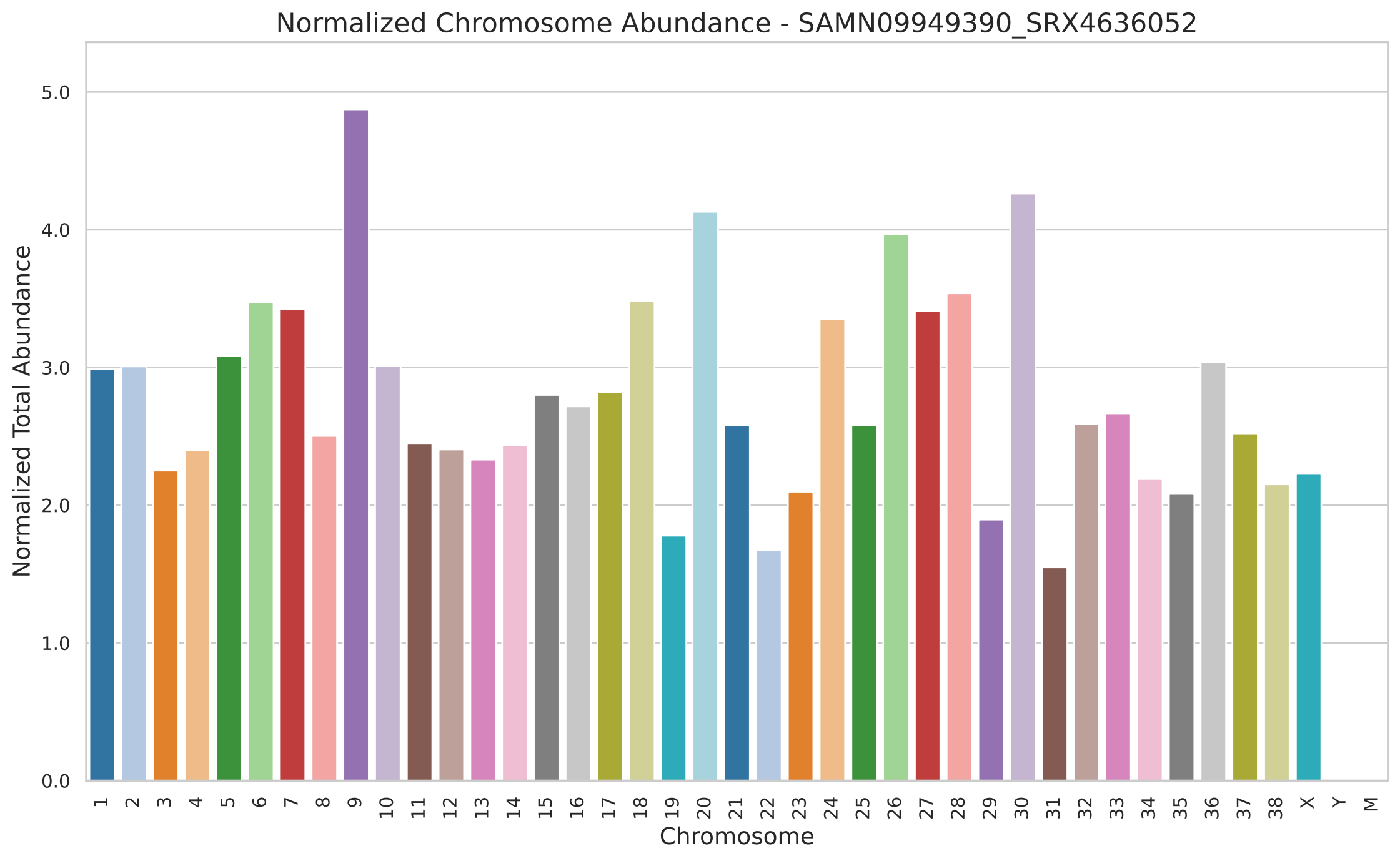

Normalized Chromosome Abundance - SAMN09948386_SRX4636023
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

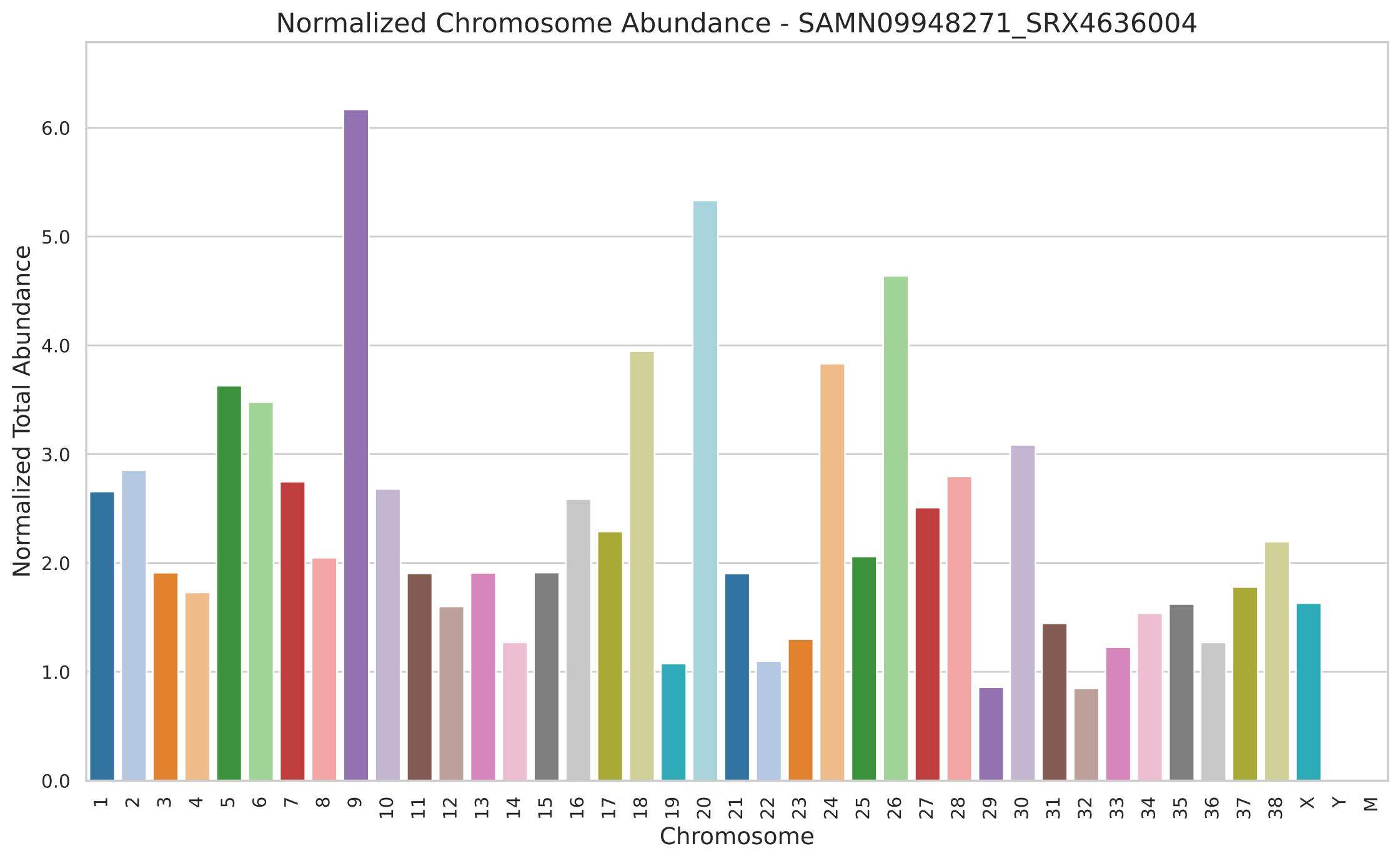

Normalized Chromosome Abundance - SAMN09948257_SRX4636049
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

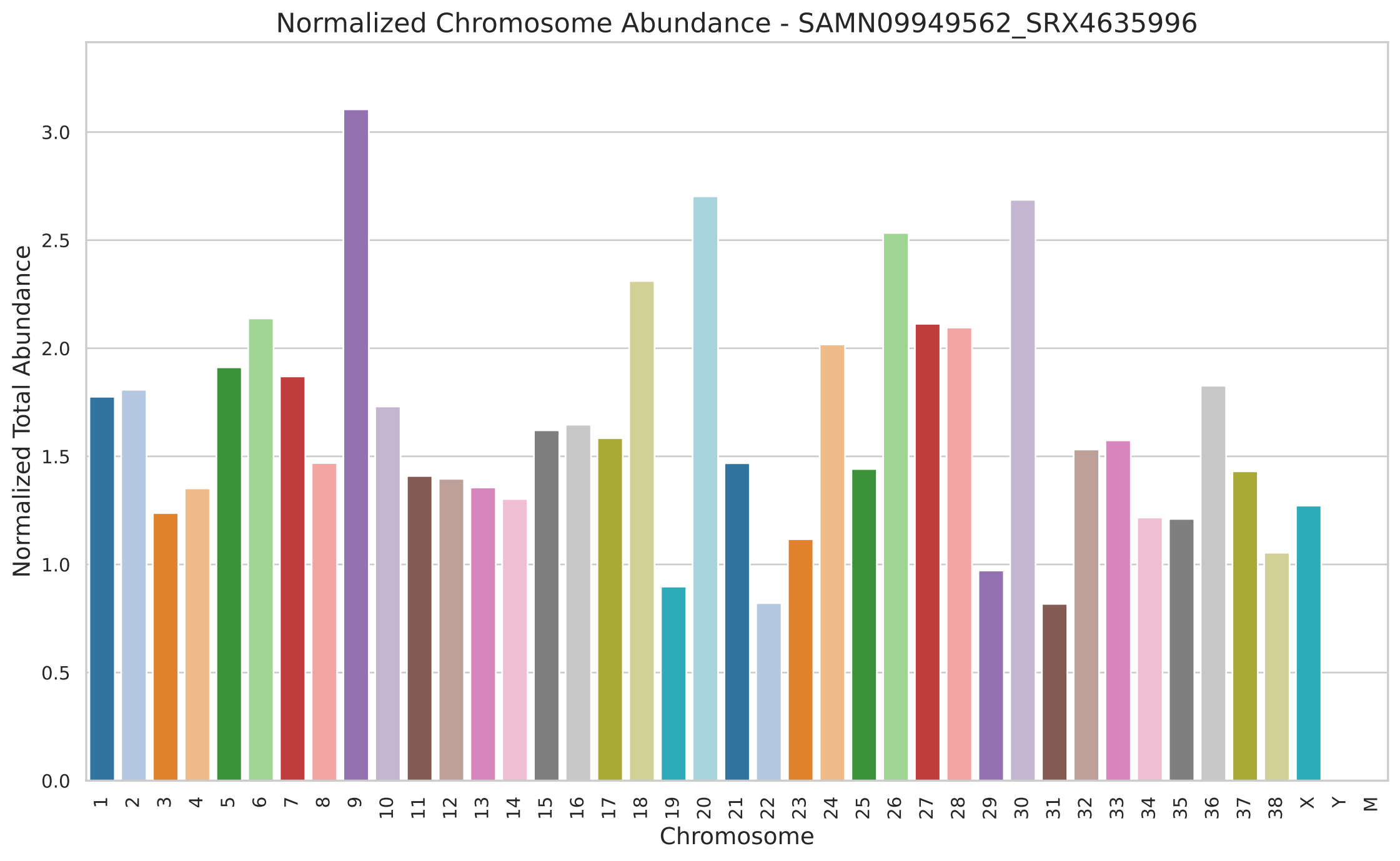

Normalized Chromosome Abundance - SAMN09948412_SRX4635989
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

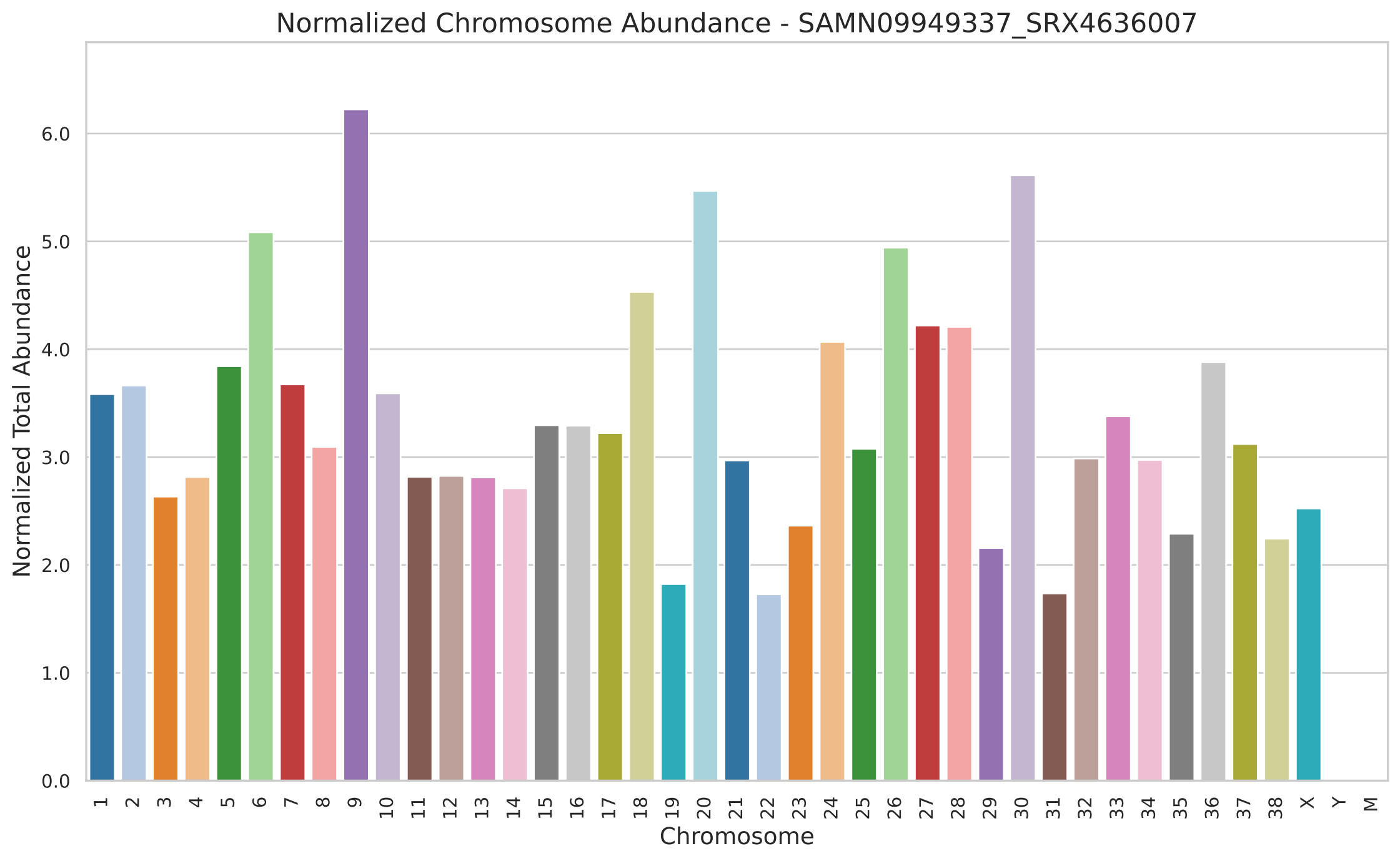

Normalized Chromosome Abundance - SAMN09948226_SRX4636016
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

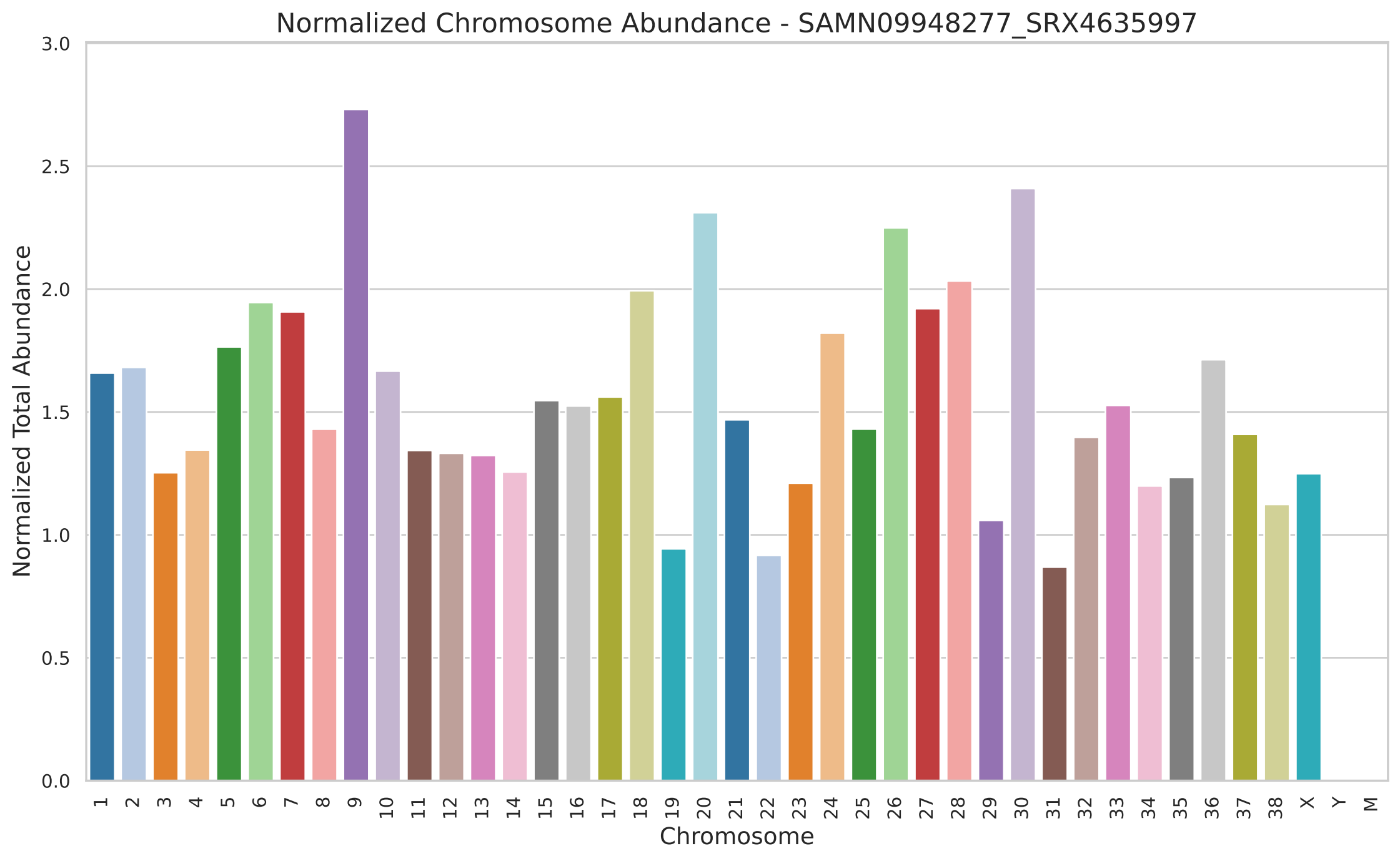

Normalized Chromosome Abundance - SAMN09948406_SRX4635982
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

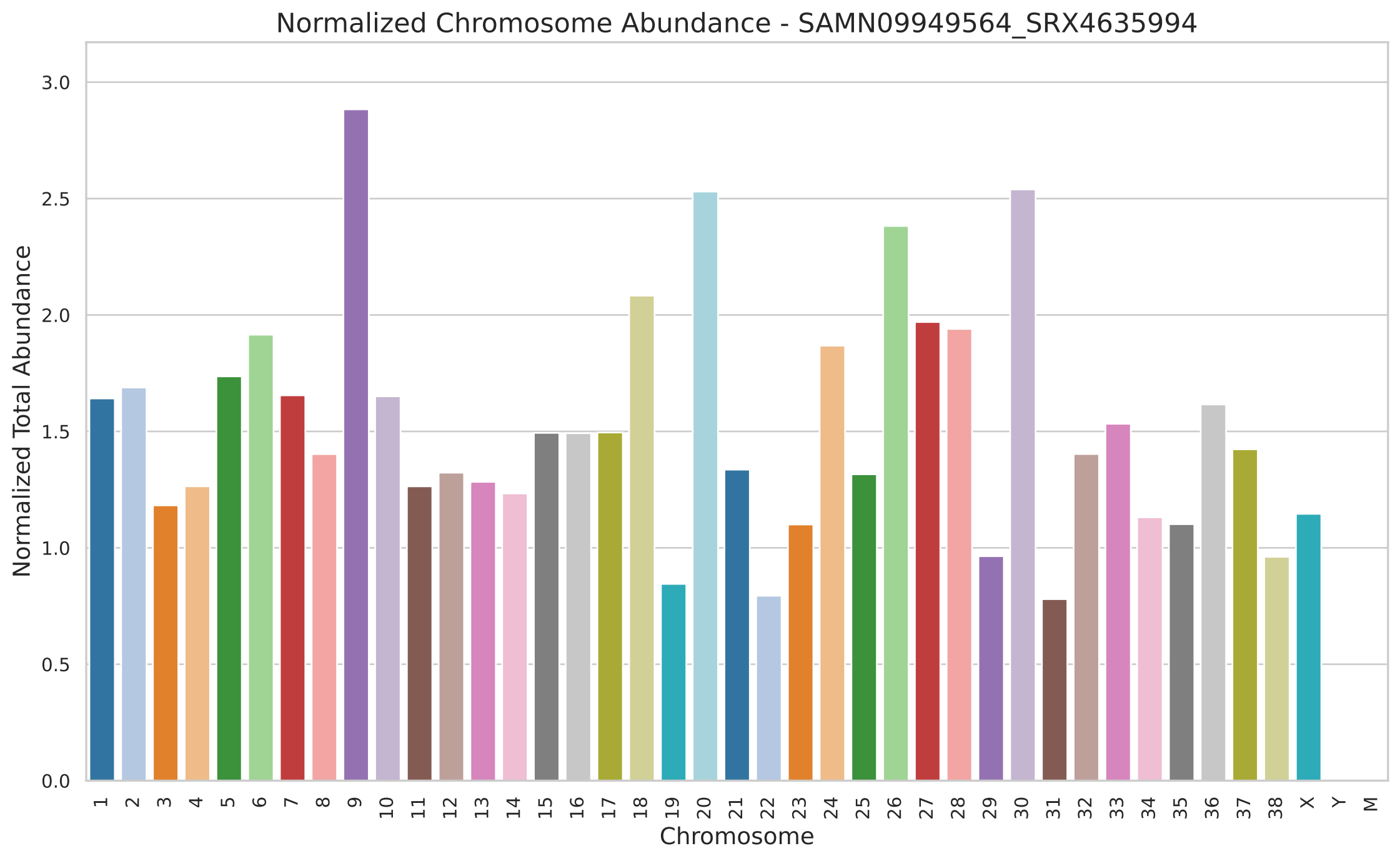

Normalized Chromosome Abundance - SAMN09949390_SRX4636052
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

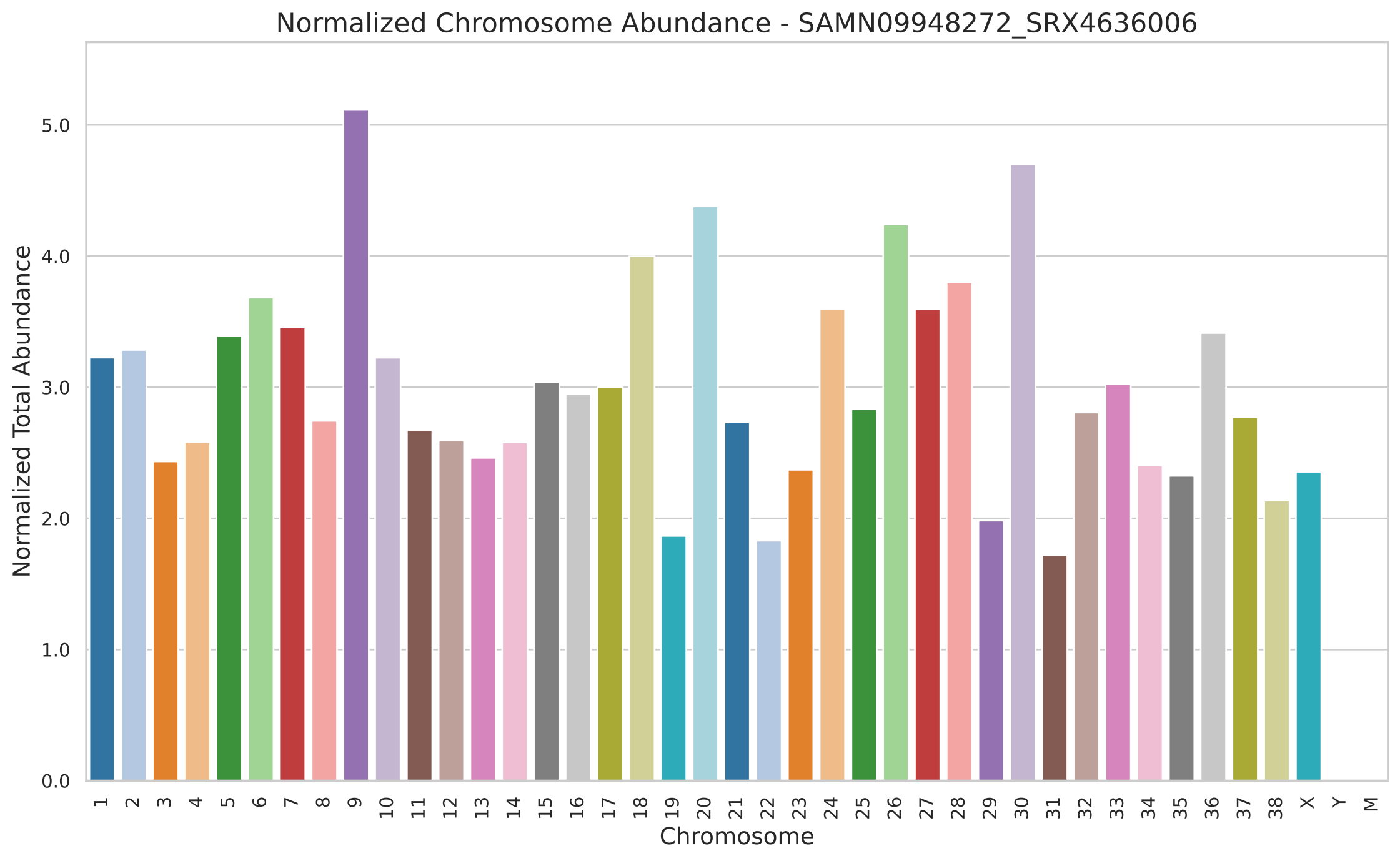

Normalized Chromosome Abundance - SAMN09948271_SRX4636004
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

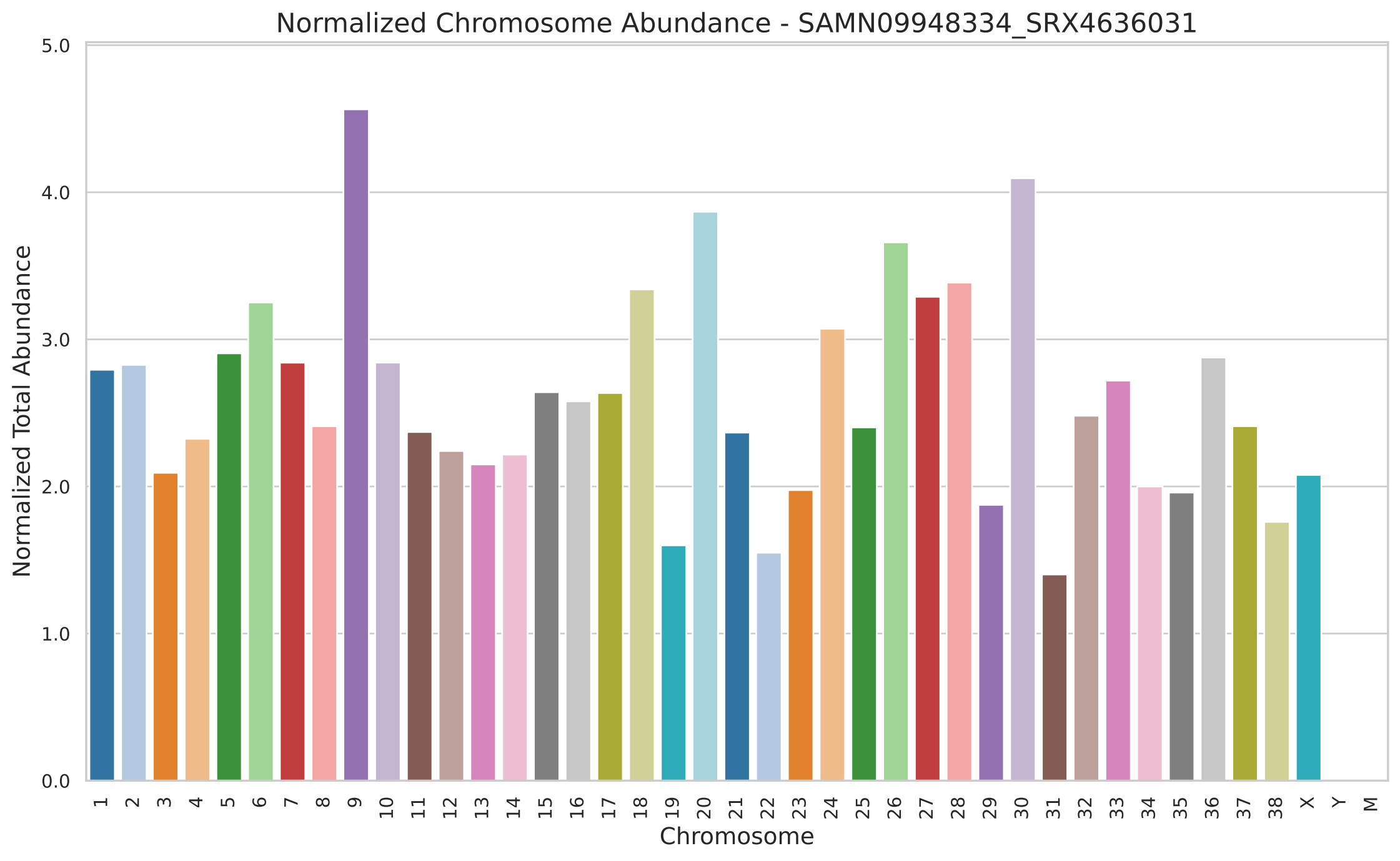

Normalized Chromosome Abundance - SAMN09949562_SRX4635996
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

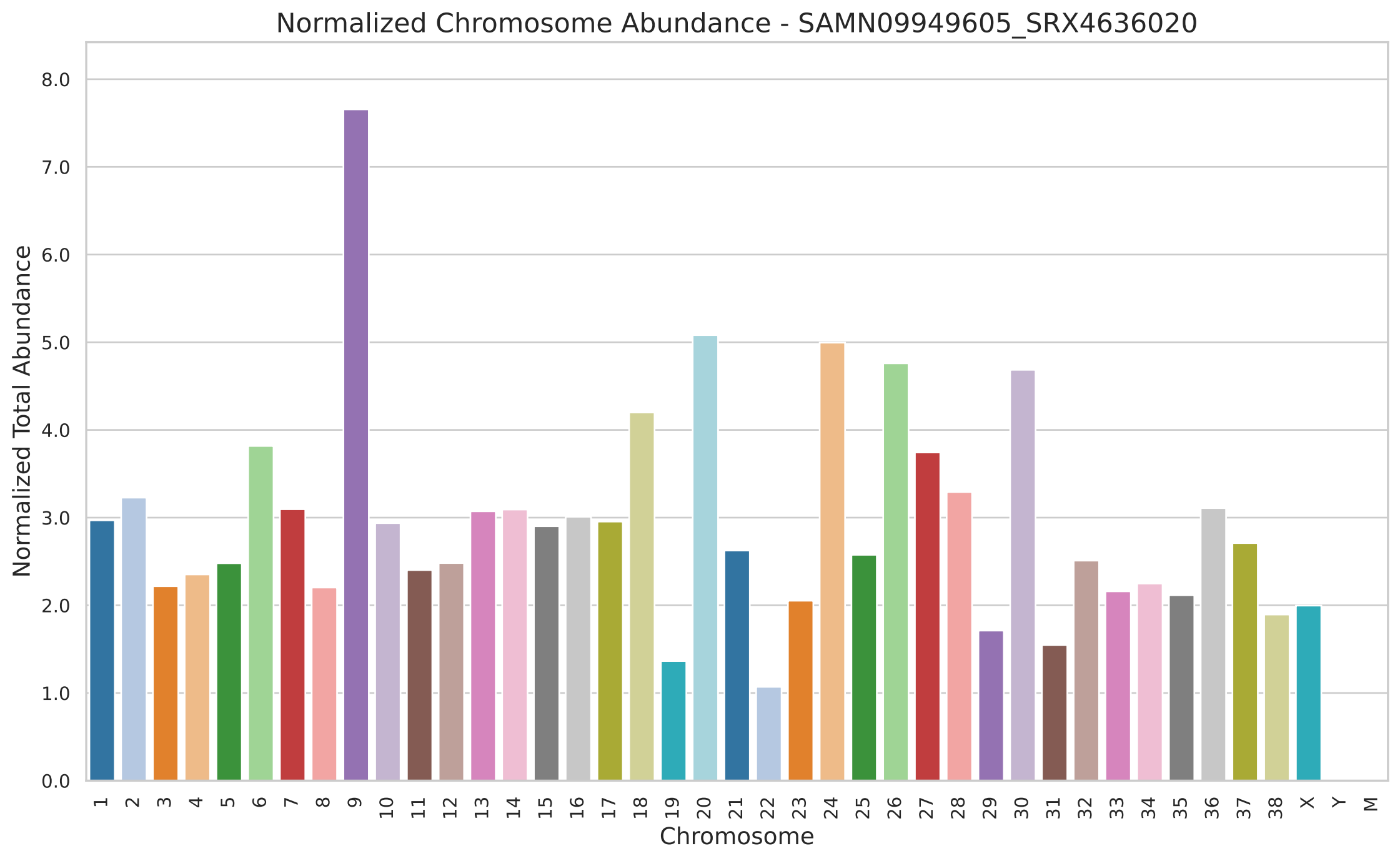

Normalized Chromosome Abundance - SAMN09949337_SRX4636007
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

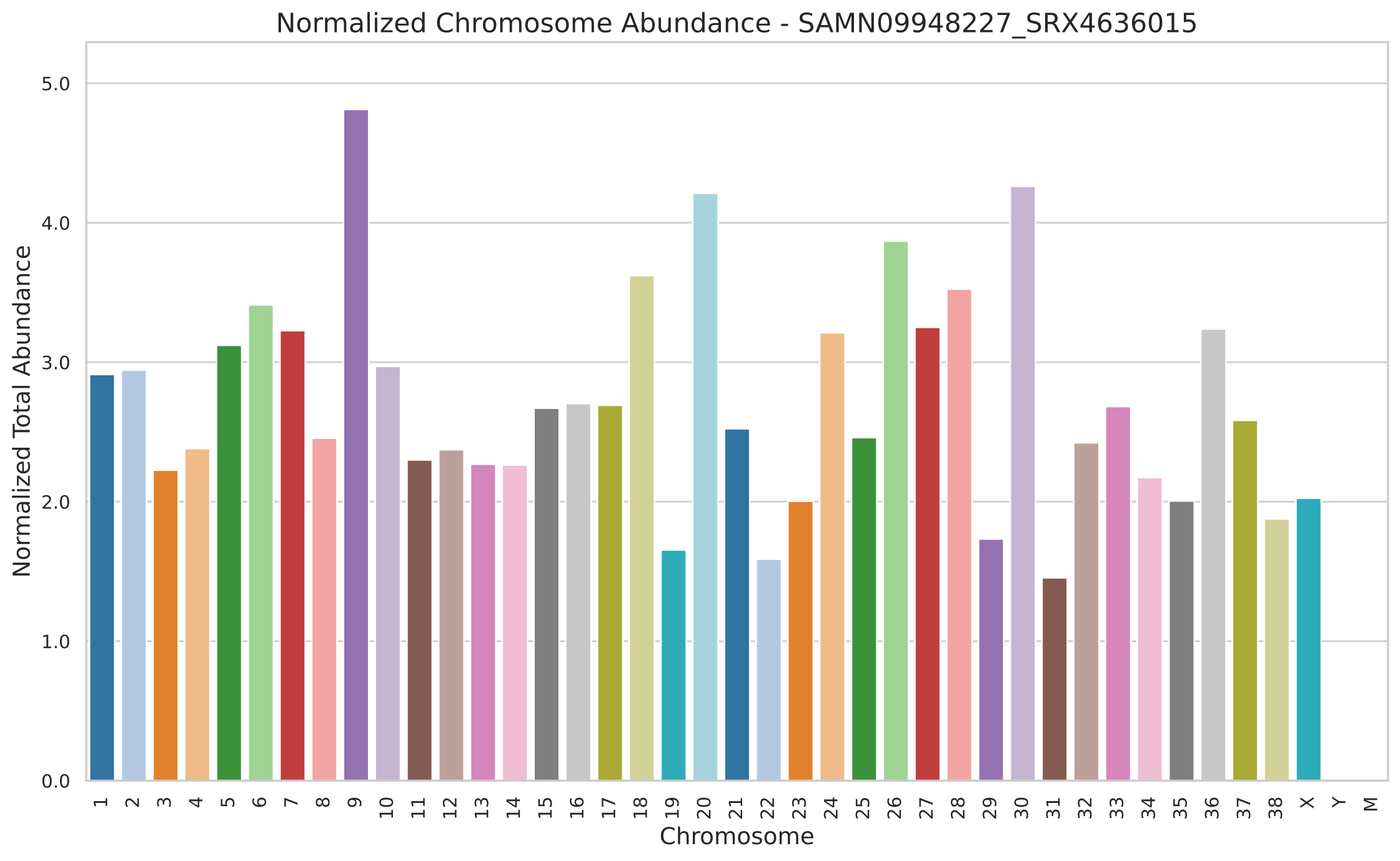

Normalized Chromosome Abundance - SAMN09948277_SRX4635997
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

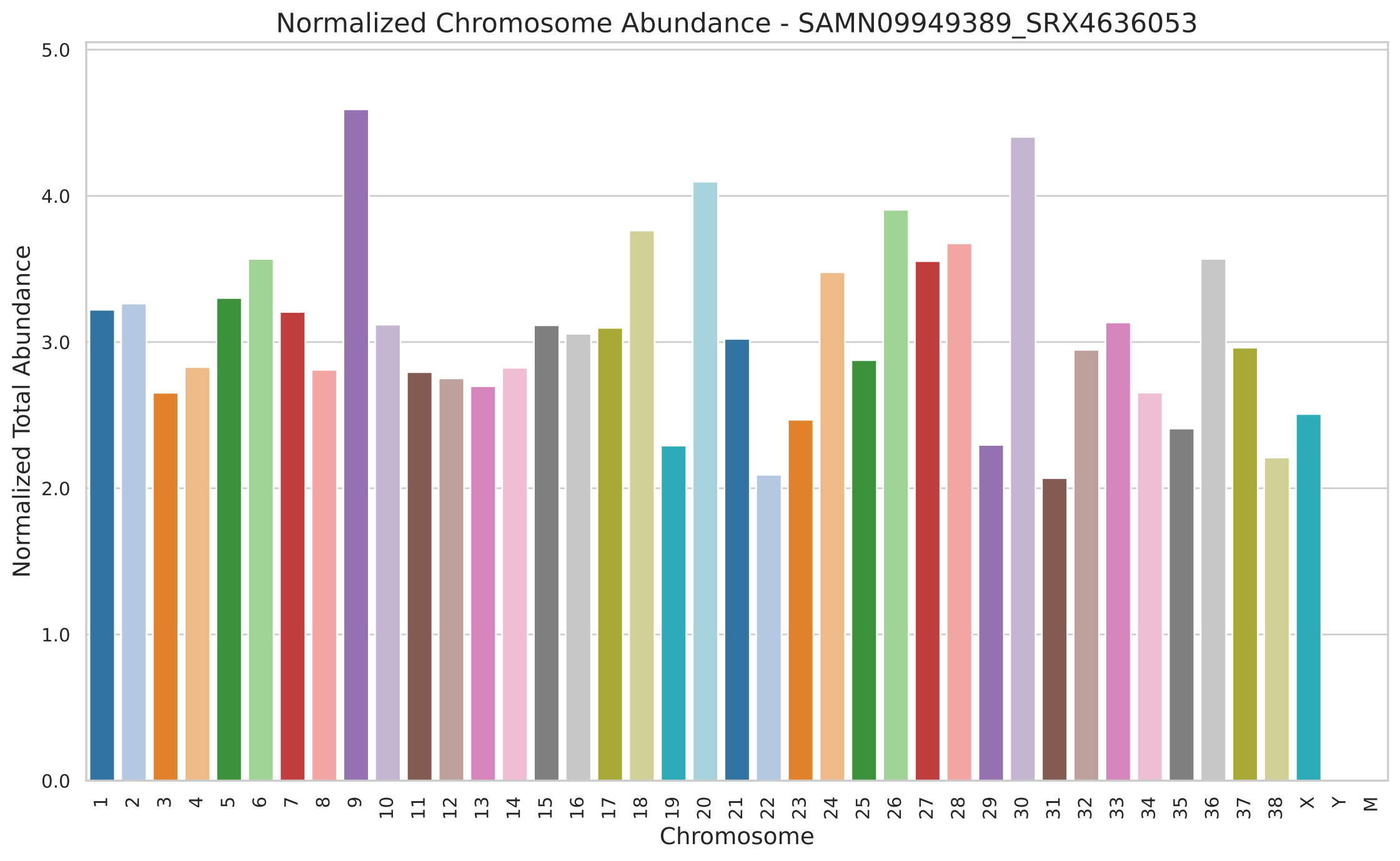

Normalized Chromosome Abundance - SAMN09949564_SRX4635994
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

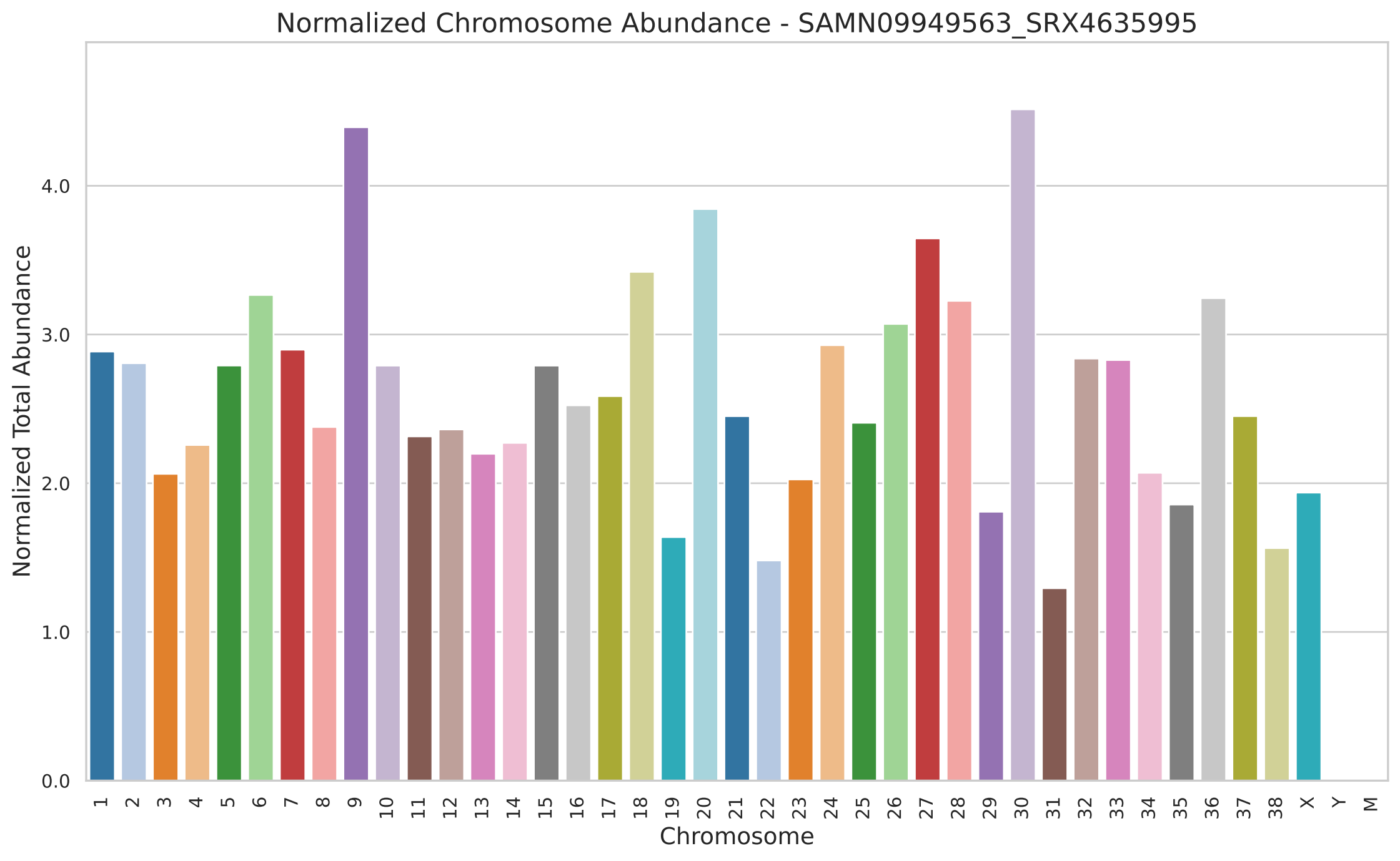

Normalized Chromosome Abundance - SAMN09948272_SRX4636006
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

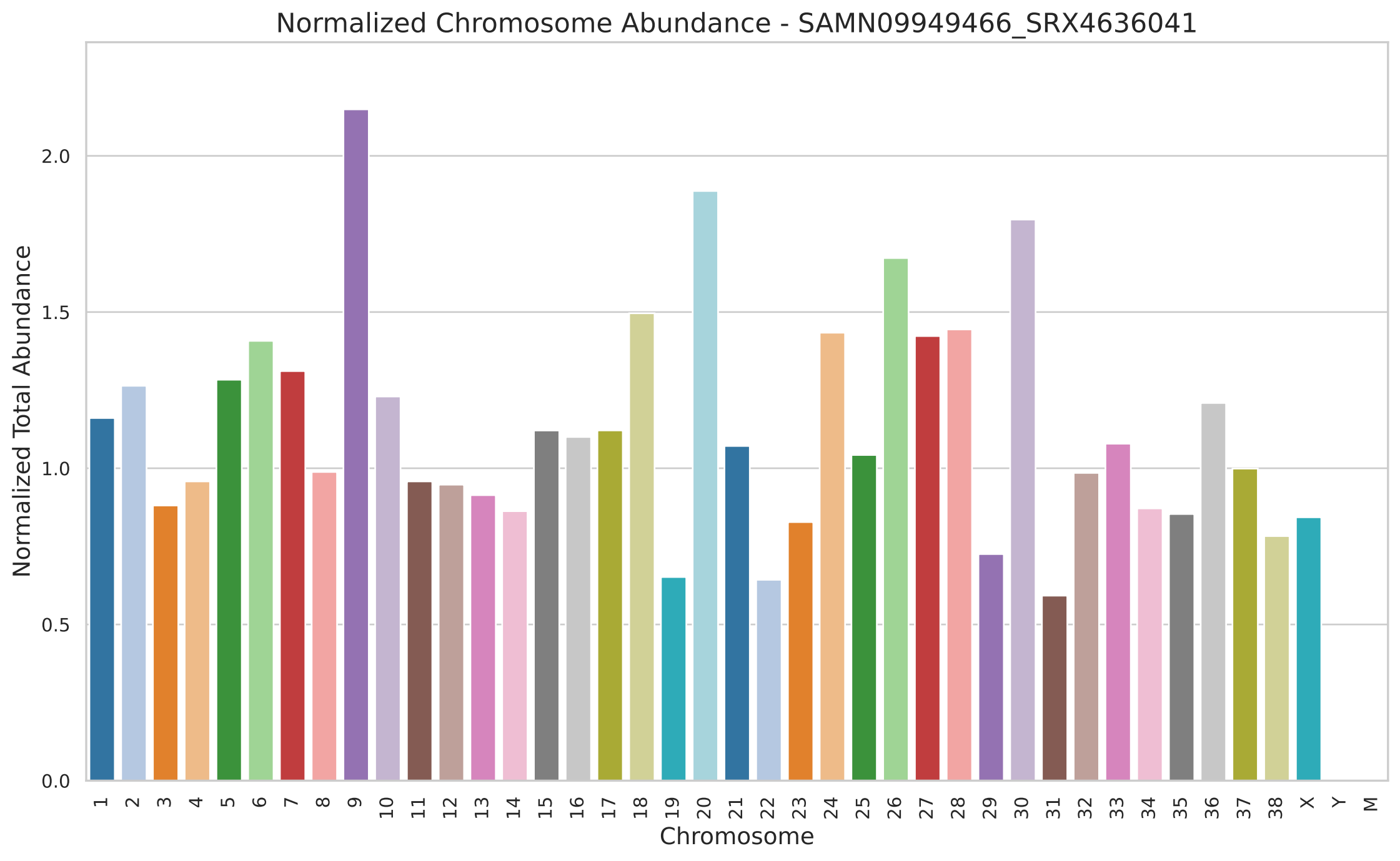

Normalized Chromosome Abundance - SAMN09948334_SRX4636031
Normalized Total Abundance
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

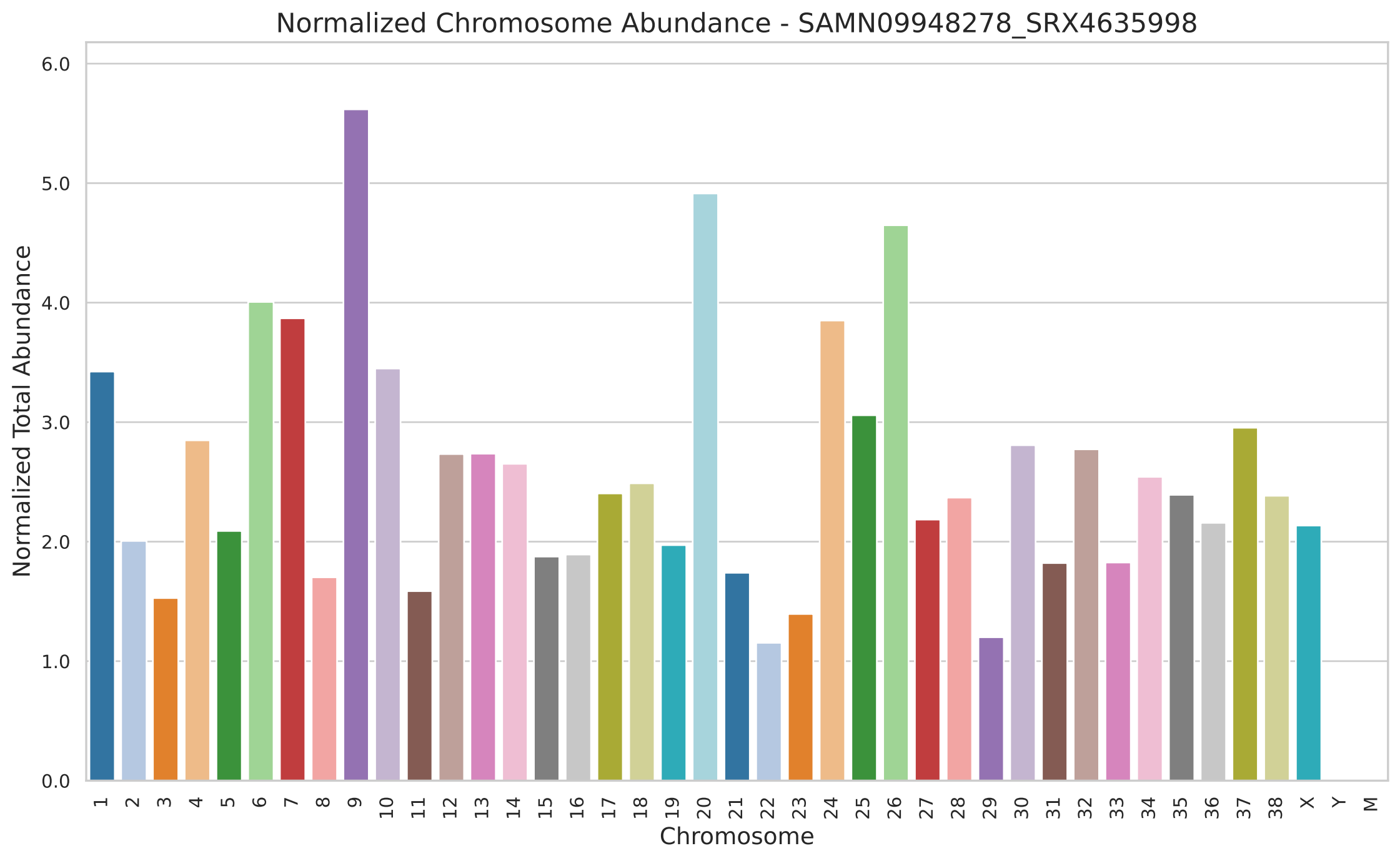

Normalized Chromosome Abundance - SAMN09949605_SRX4636020
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

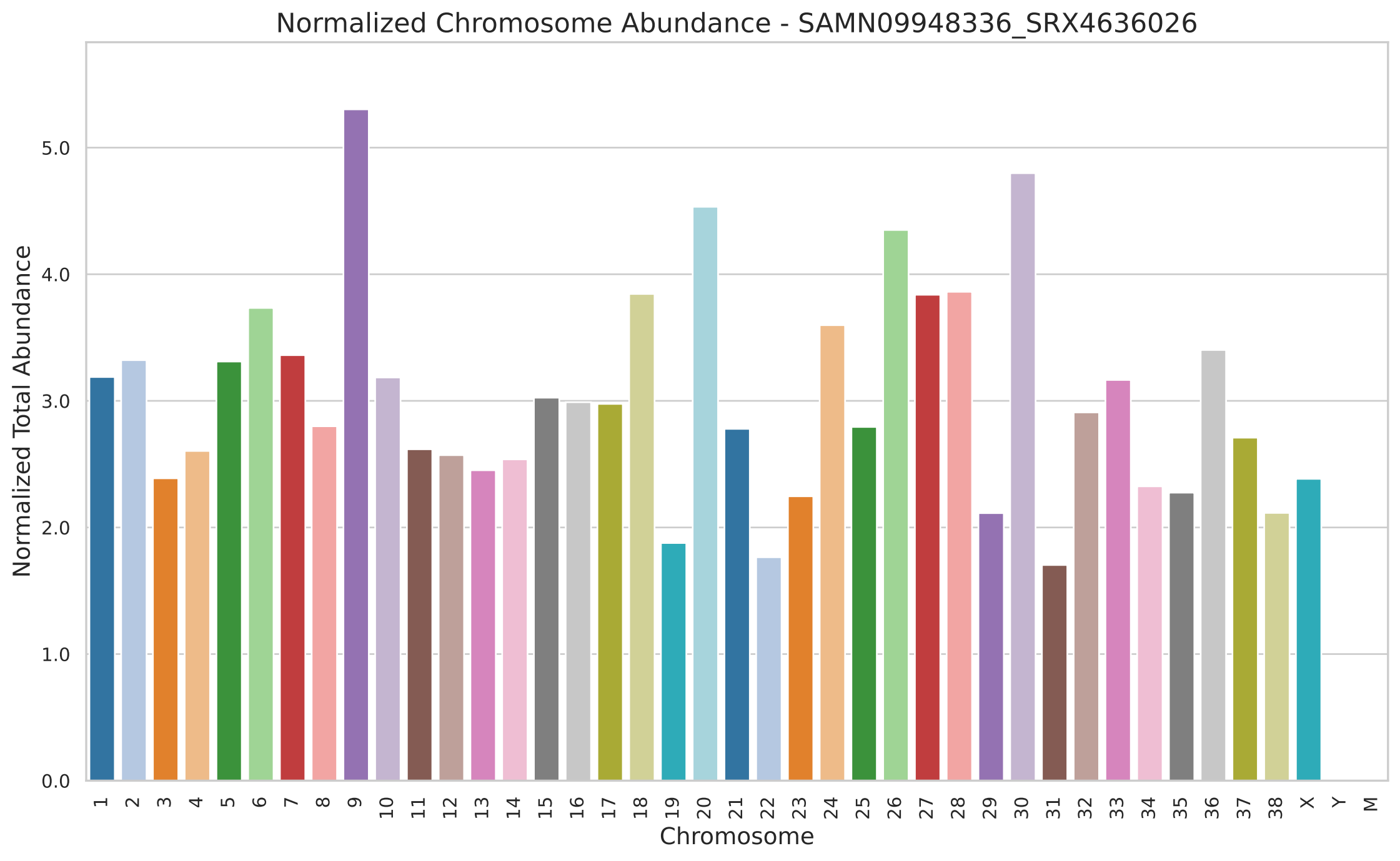

Normalized Chromosome Abundance - SAMN09948227_SRX4636015
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

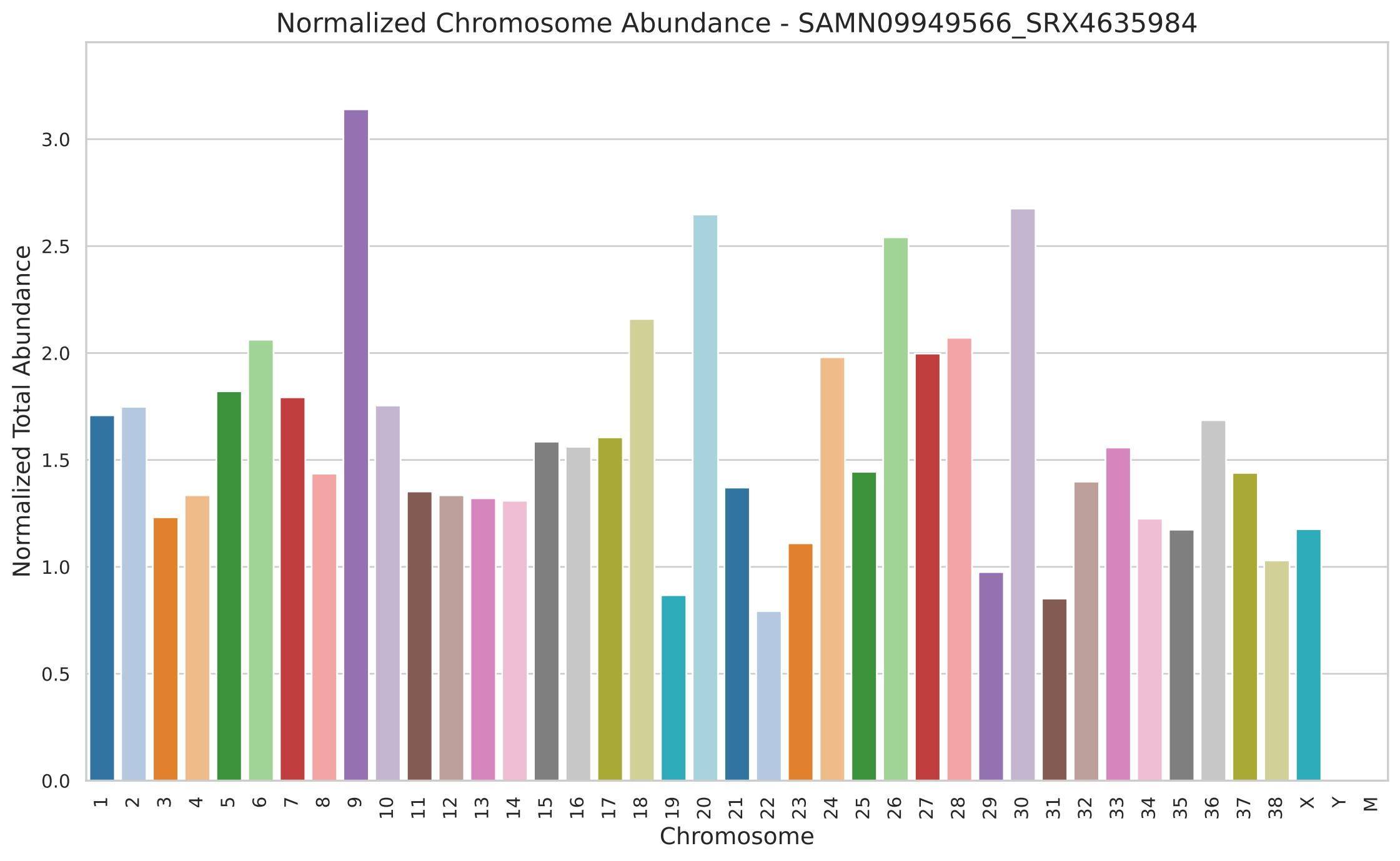

Normalized Chromosome Abundance - SAMN09949389_SRX4636053
Normalized Total Abundance
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

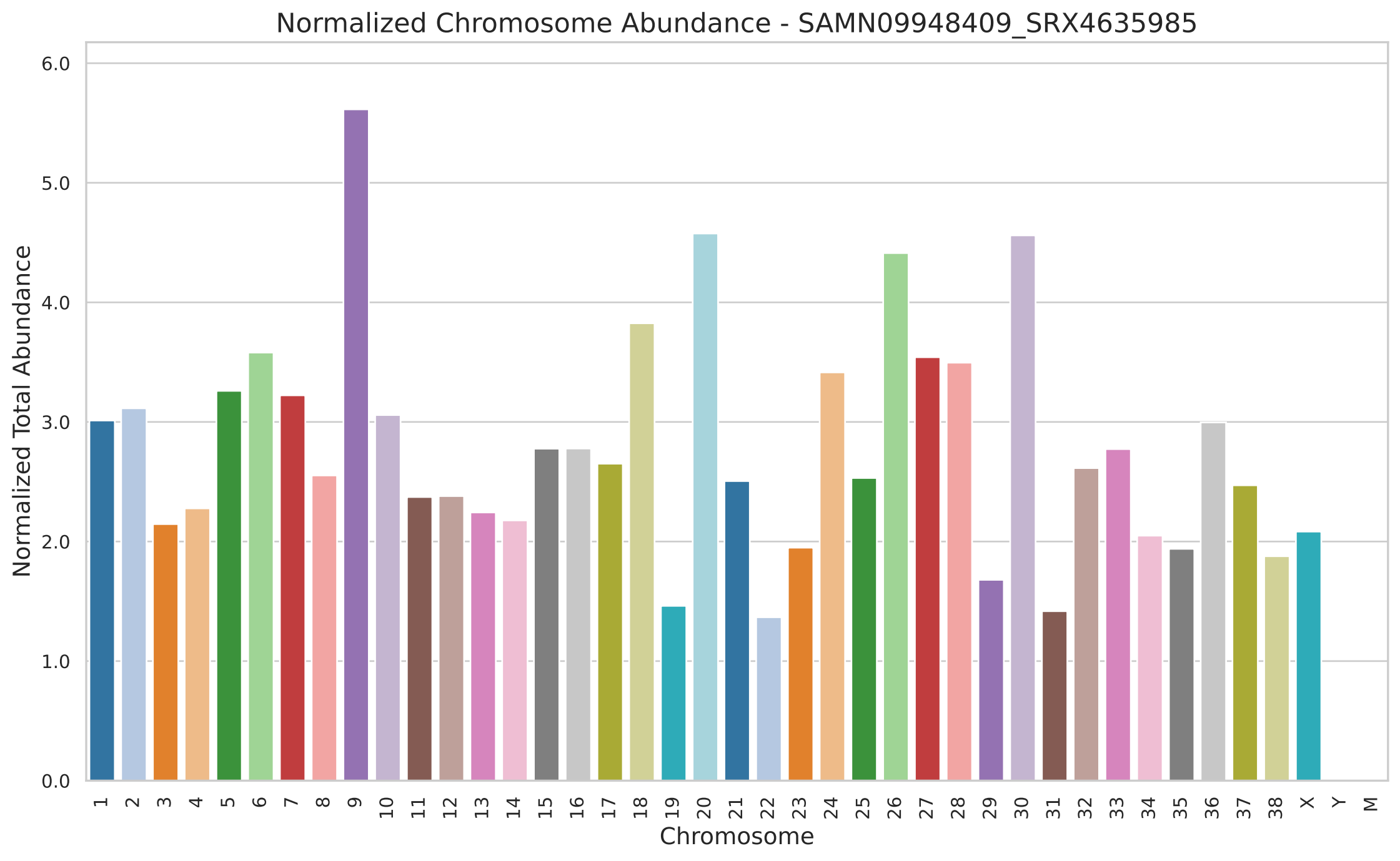

Normalized Chromosome Abundance - SAMN09949563_SRX4635995
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

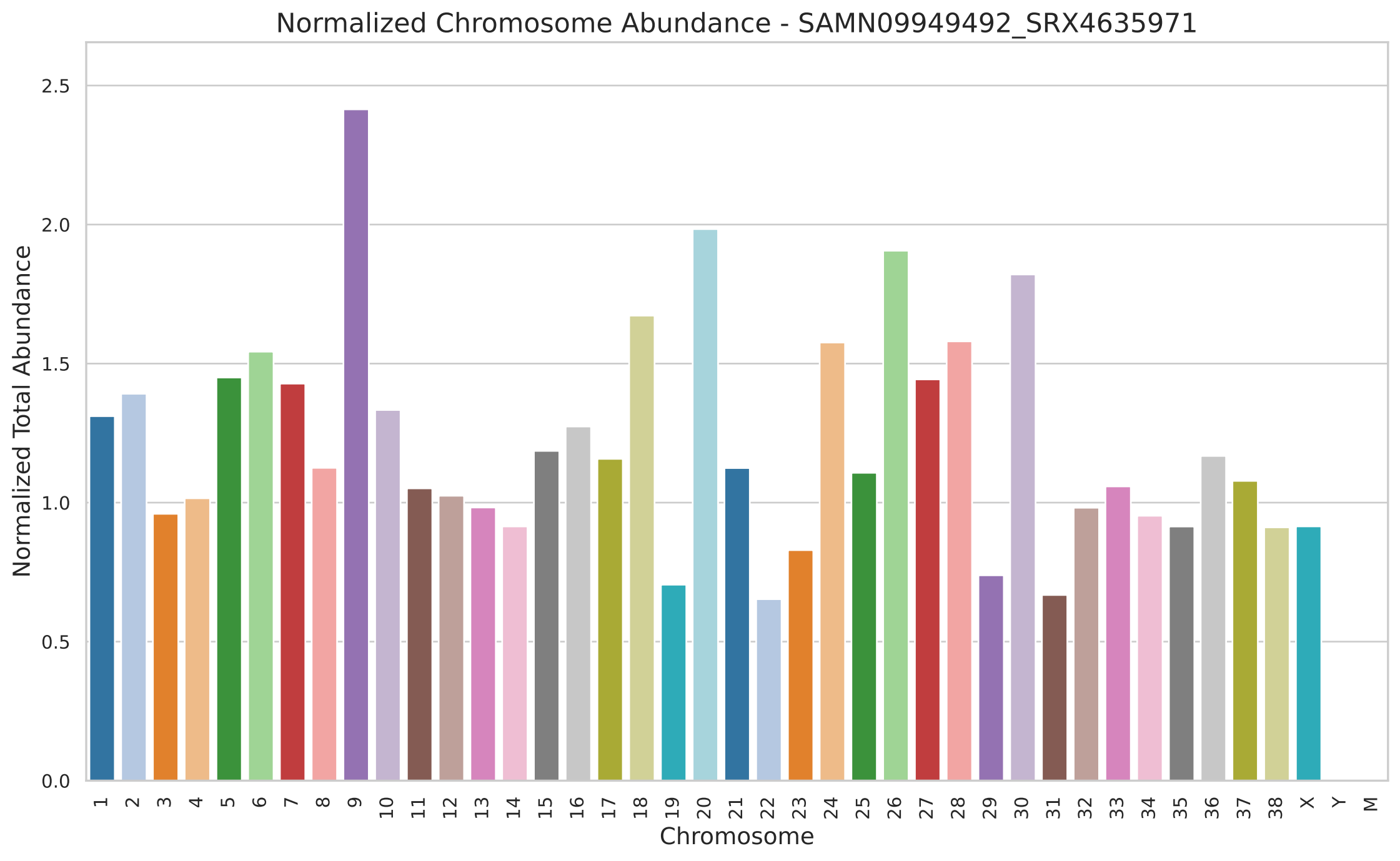

Normalized Chromosome Abundance - SAMN09949466_SRX4636041
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

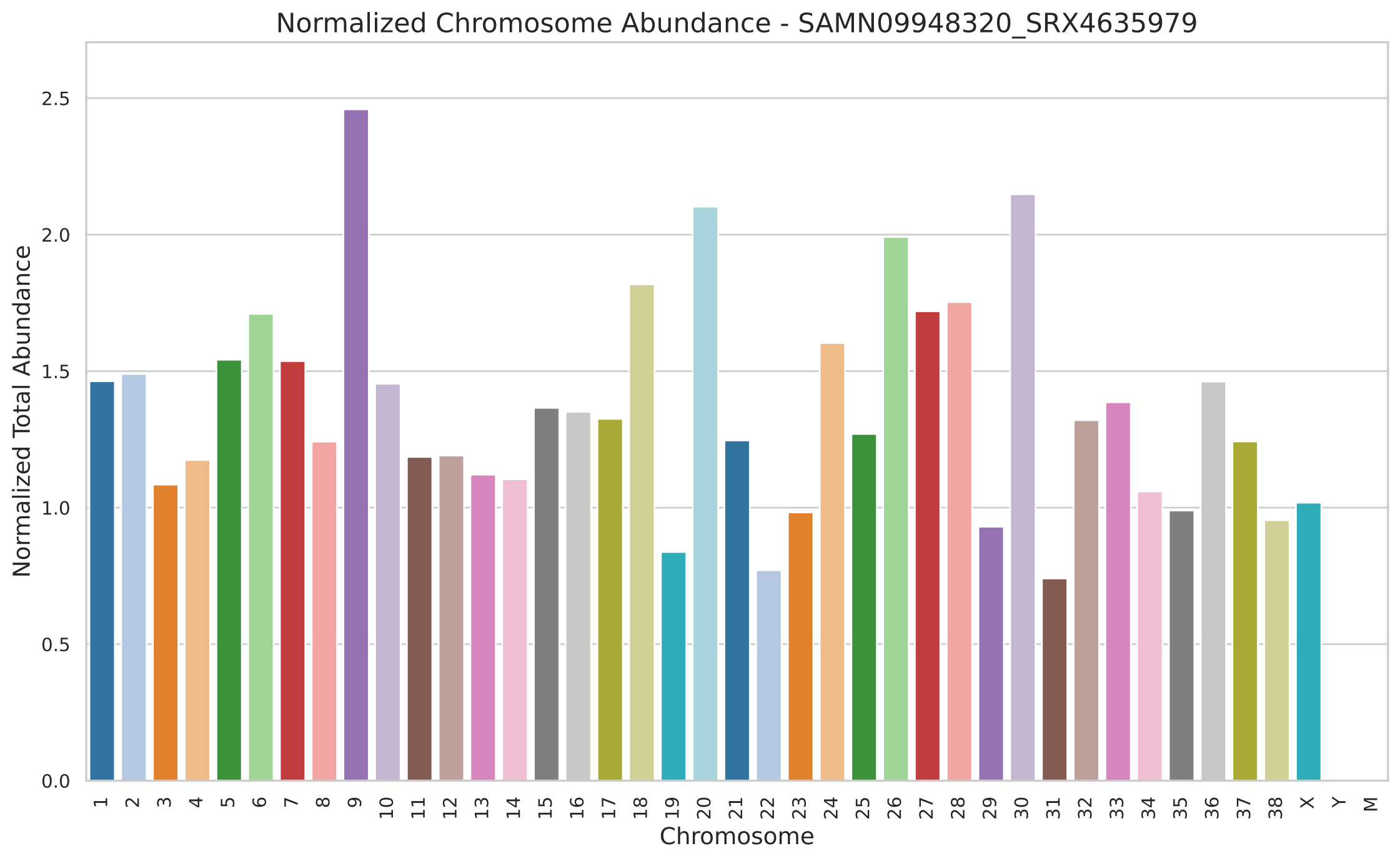

Normalized Chromosome Abundance - SAMN09948278_SRX4635998
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

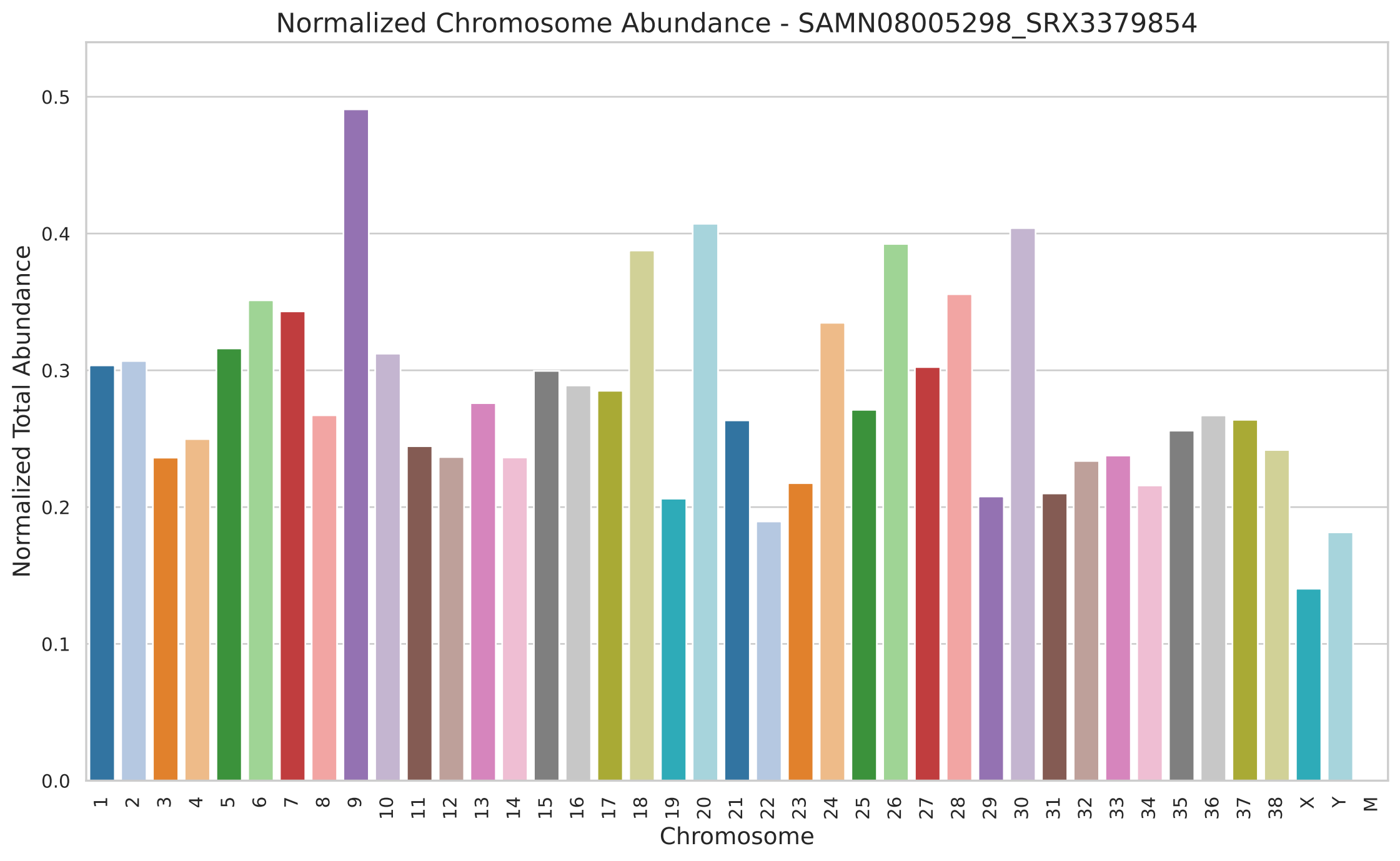

Normalized Chromosome Abundance - SAMN09948336_SRX4636026
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

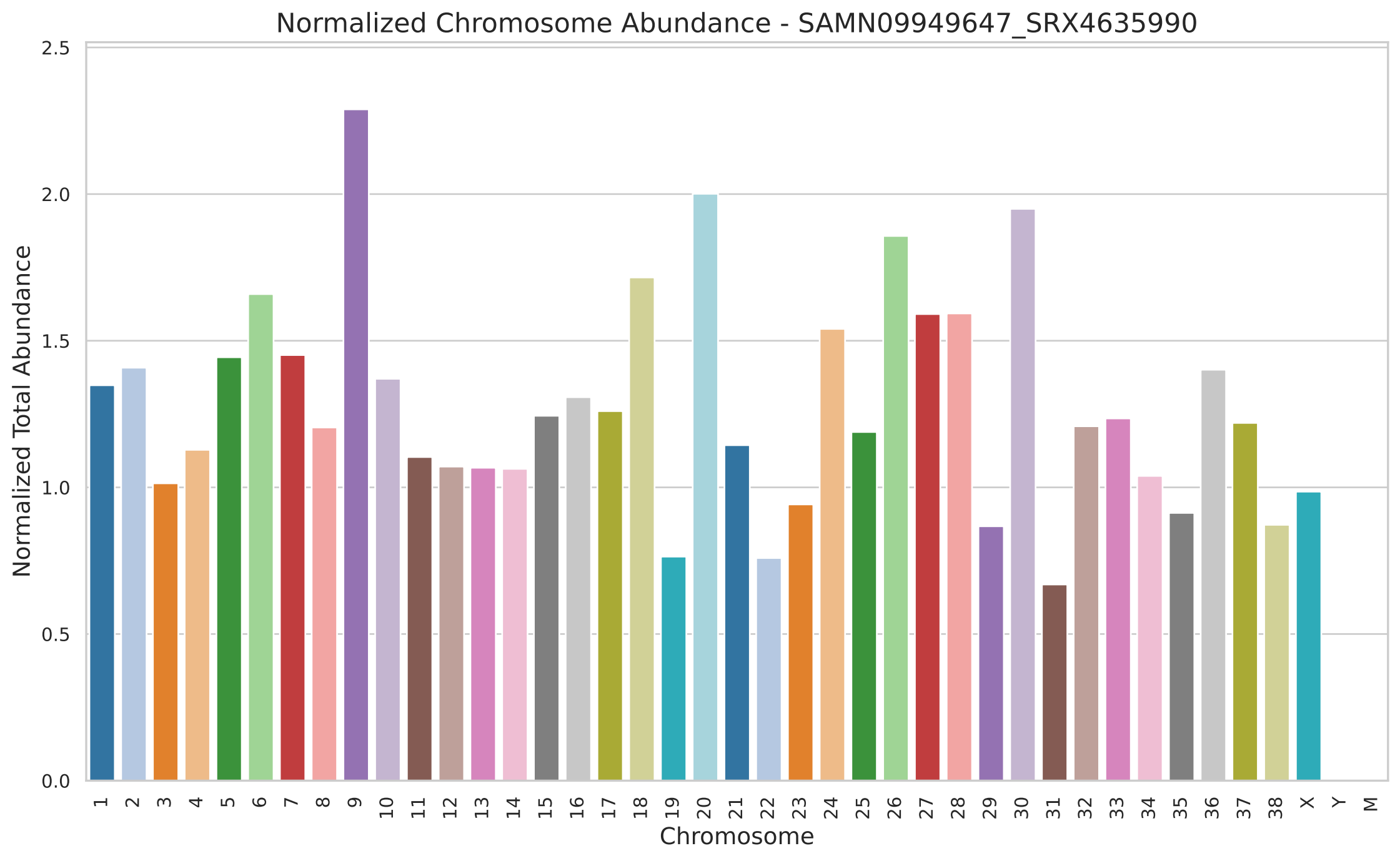

Normalized Chromosome Abundance - SAMN09949566_SRX4635984
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

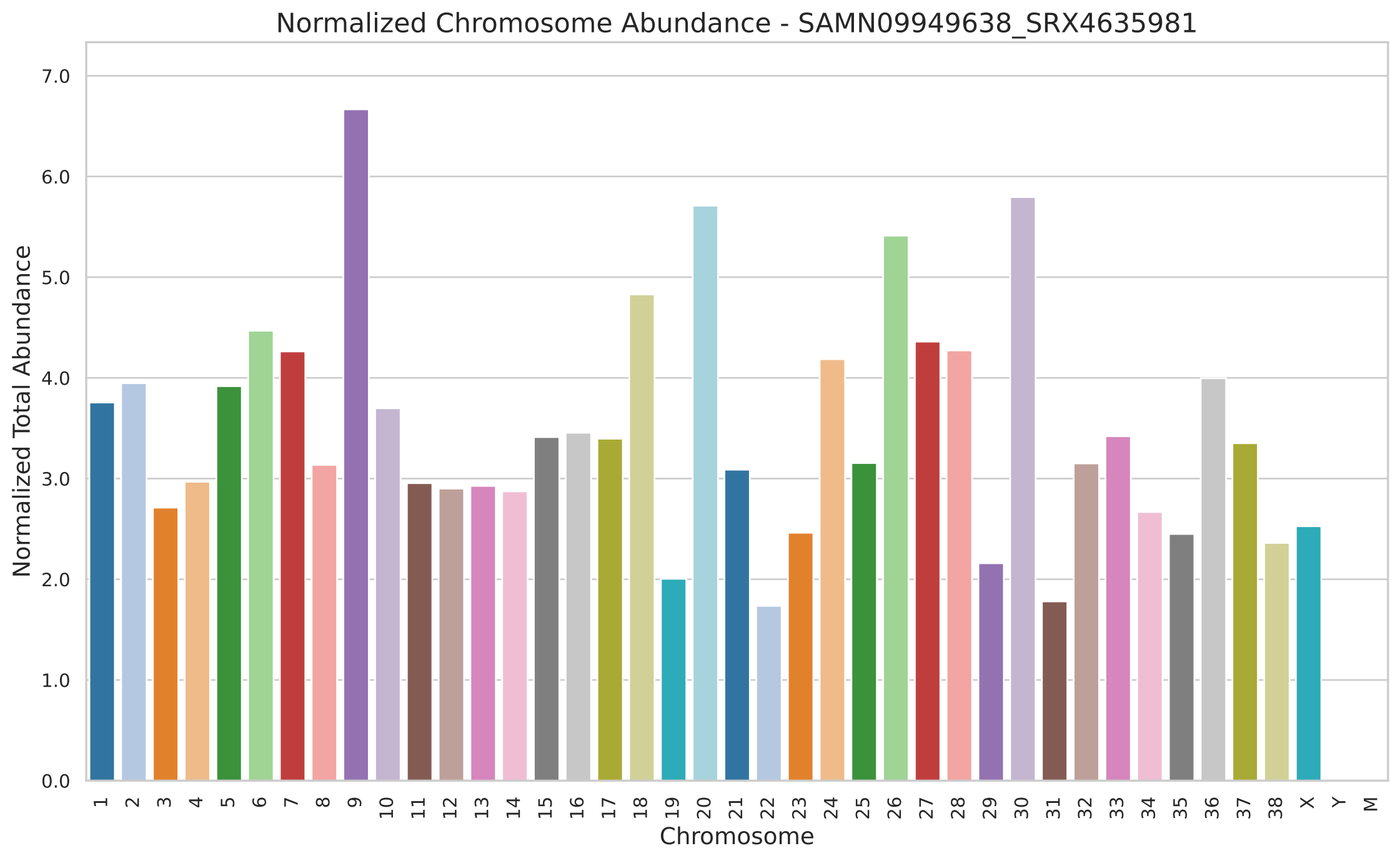

Normalized Chromosome Abundance - SAMN09948409_SRX4635985
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

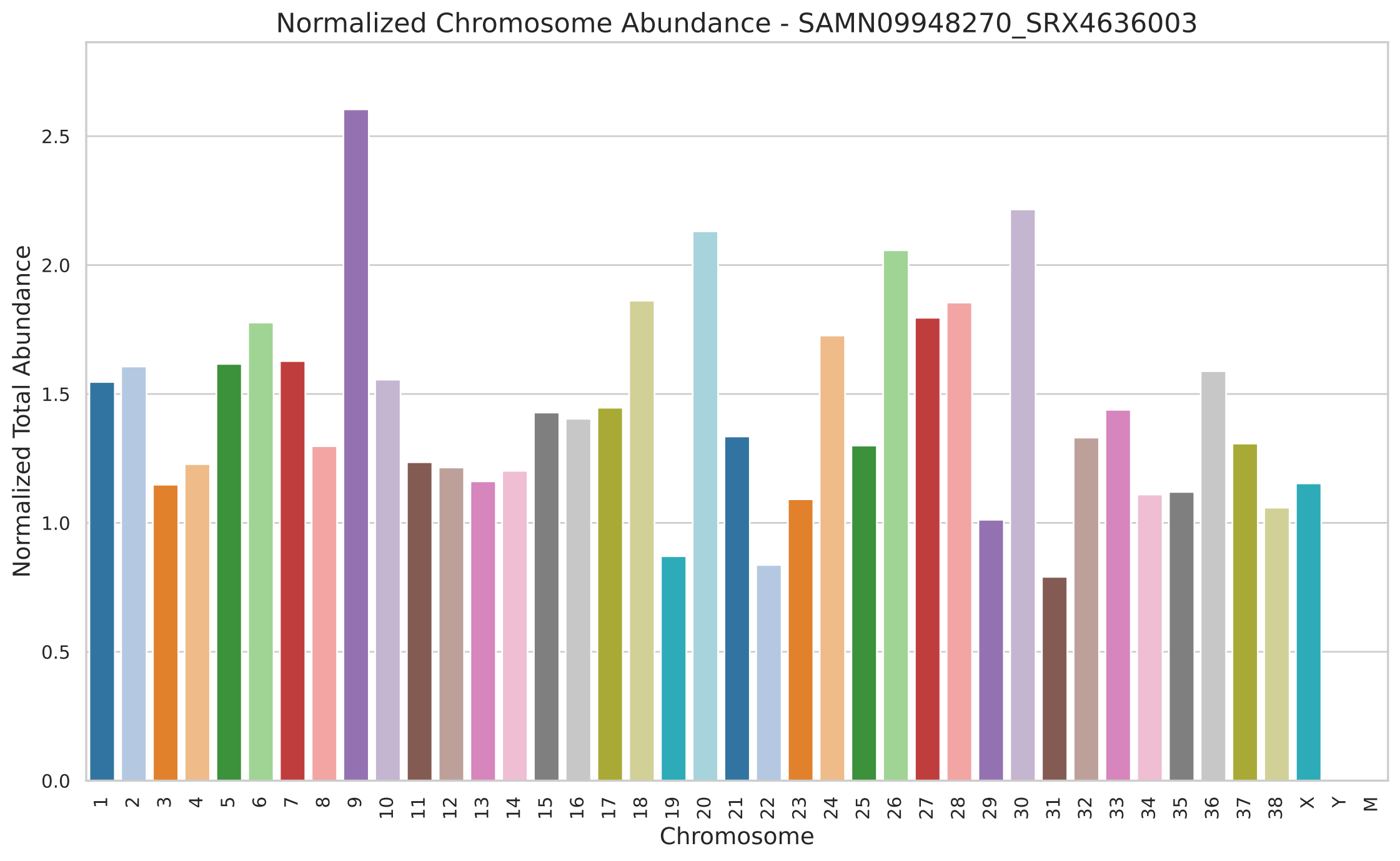

Normalized Chromosome Abundance - SAMN09949492_SRX4635971
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

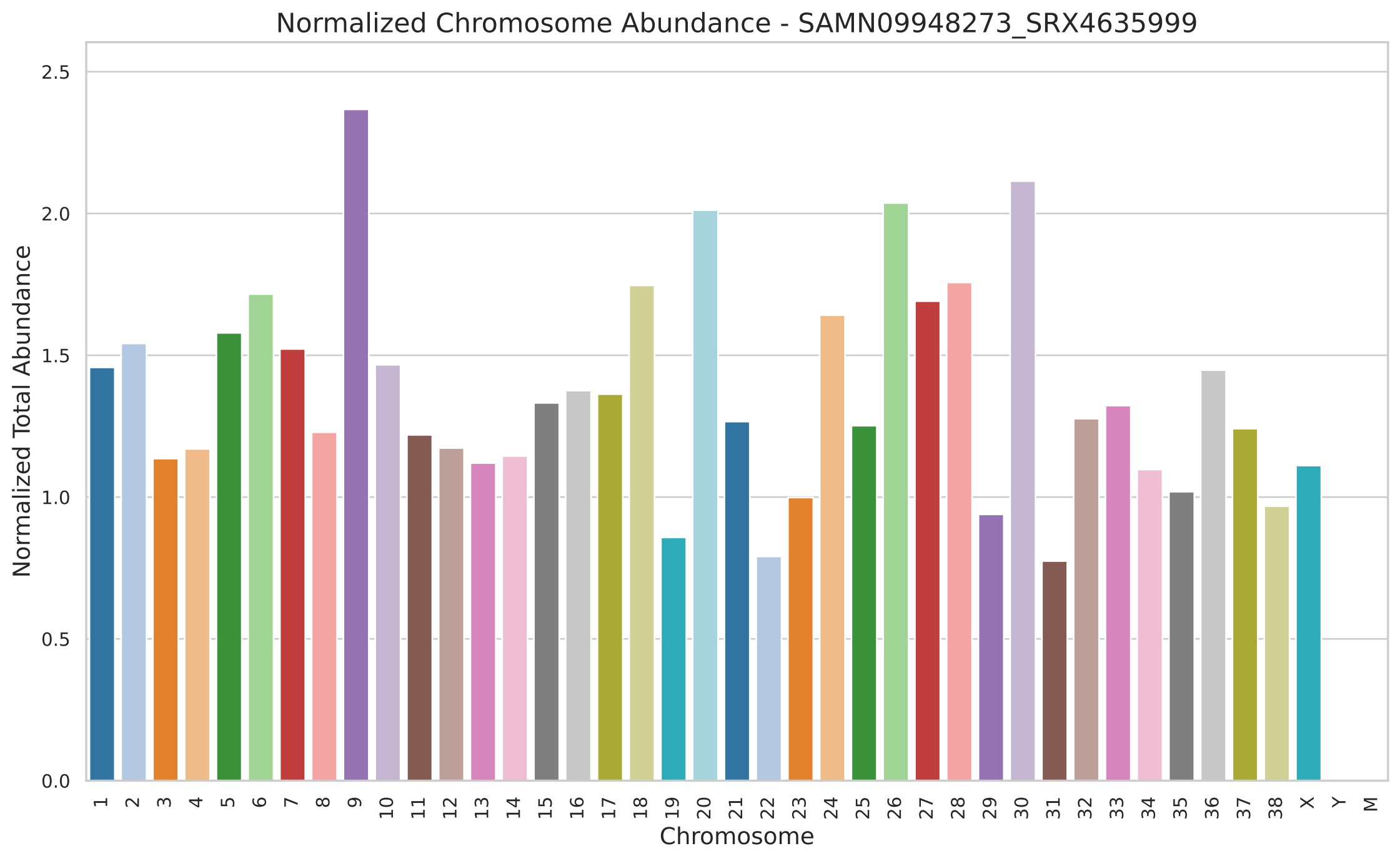

Normalized Chromosome Abundance - SAMN09948320_SRX4635979
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

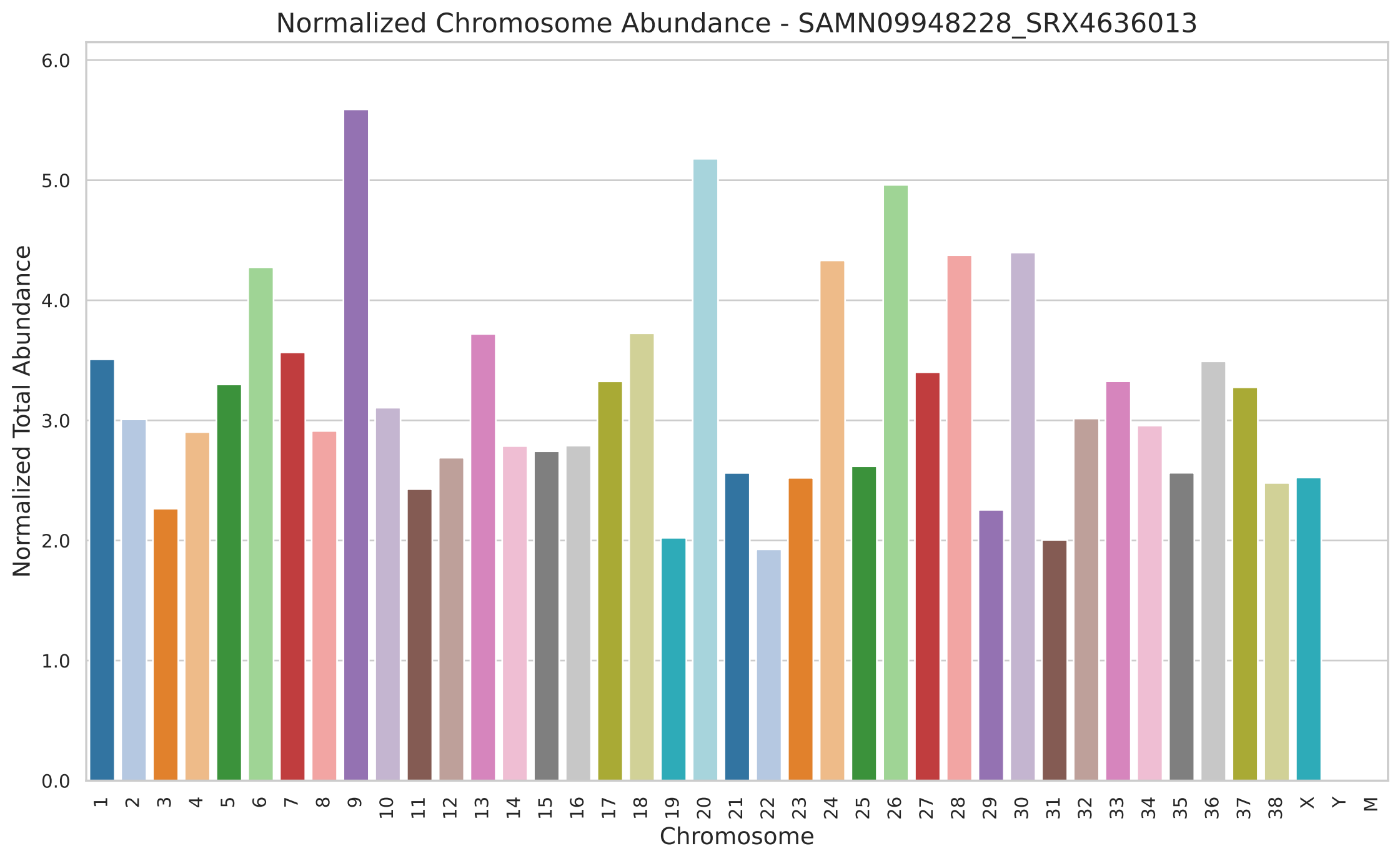

Normalized Chromosome Abundance - SAMN08005298_SRX3379854
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

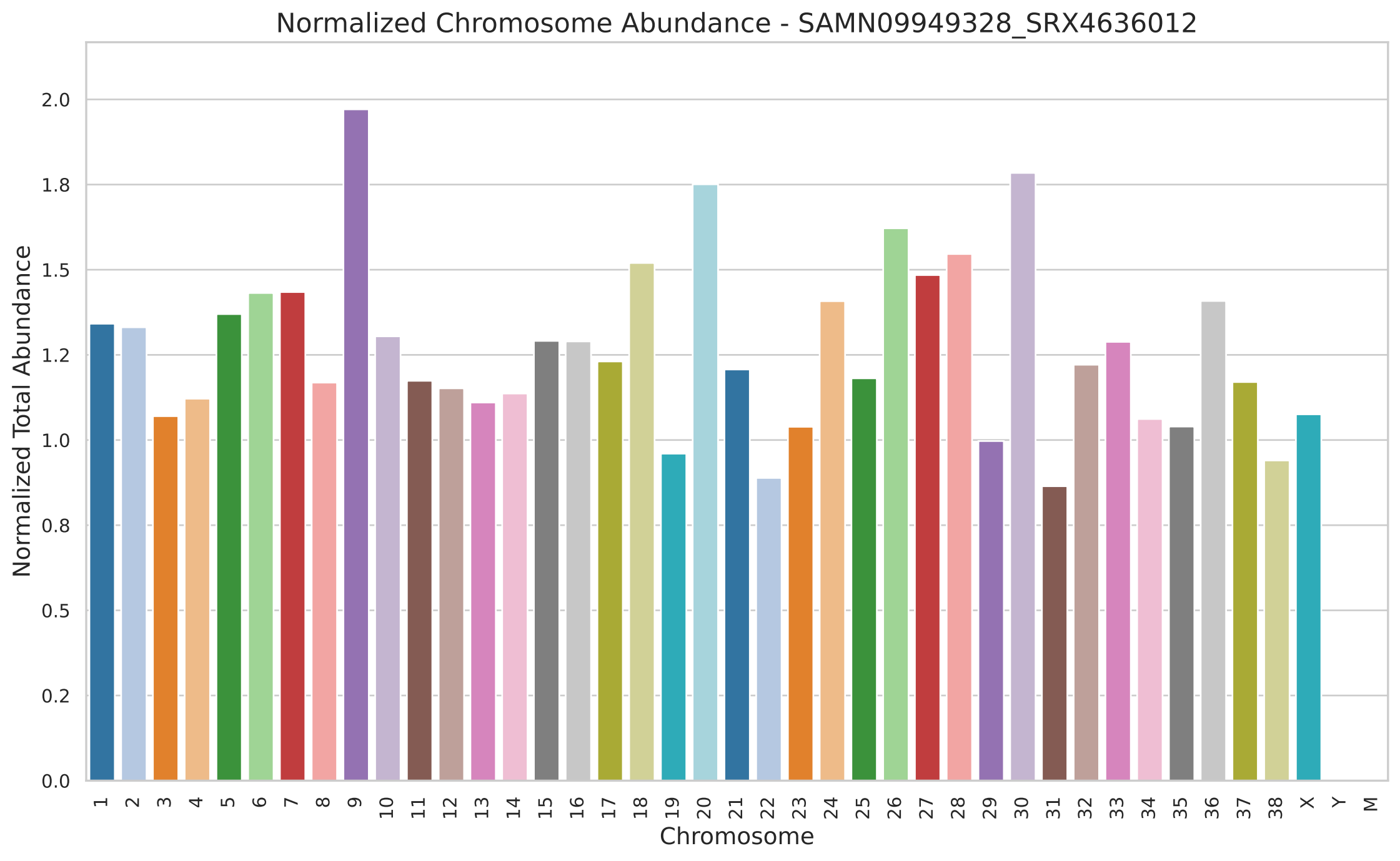

Normalized Chromosome Abundance - SAMN09949647_SRX4635990
Normalized Total Abundance
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

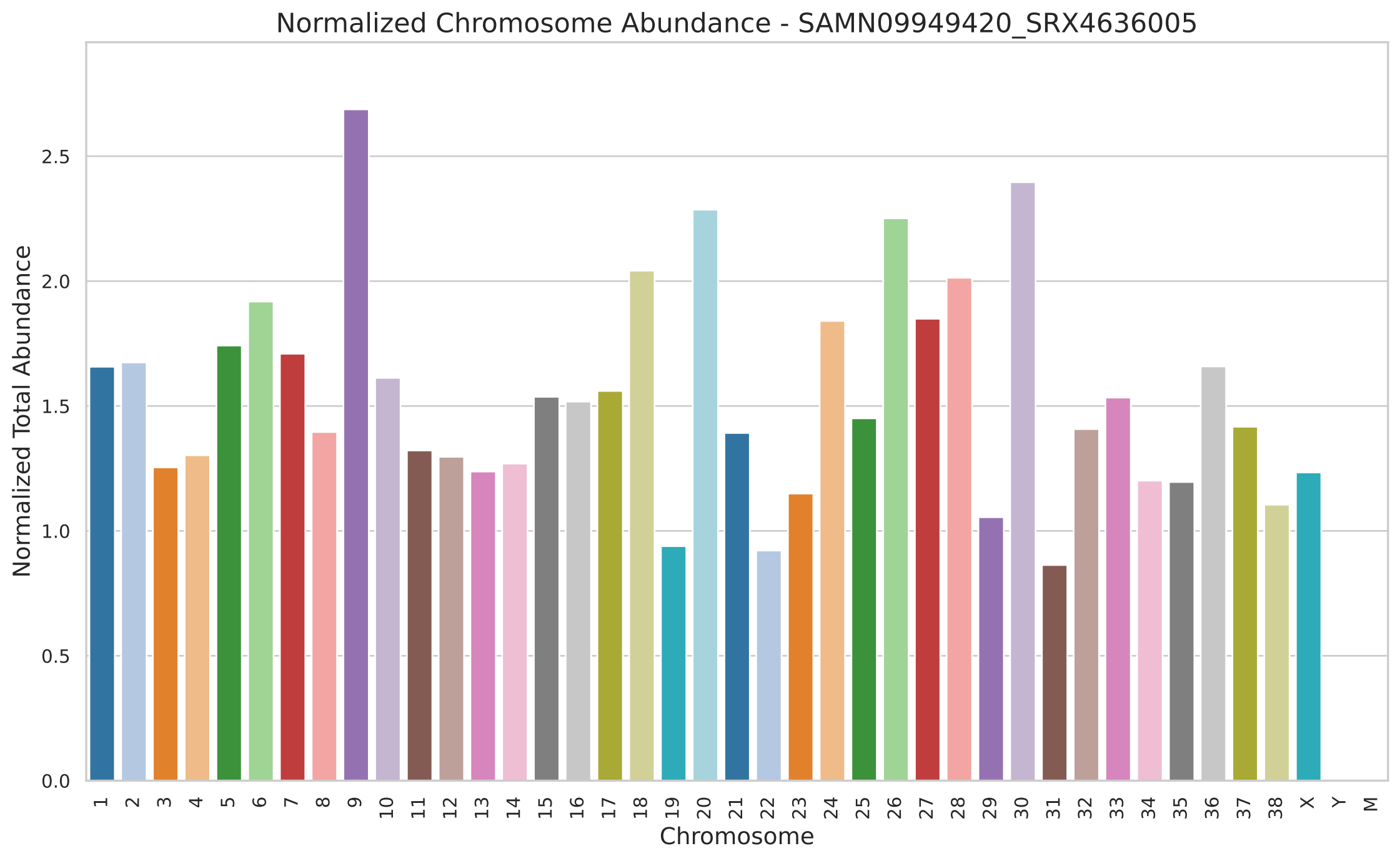

Normalized Chromosome Abundance - SAMN09949638_SRX4635981
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

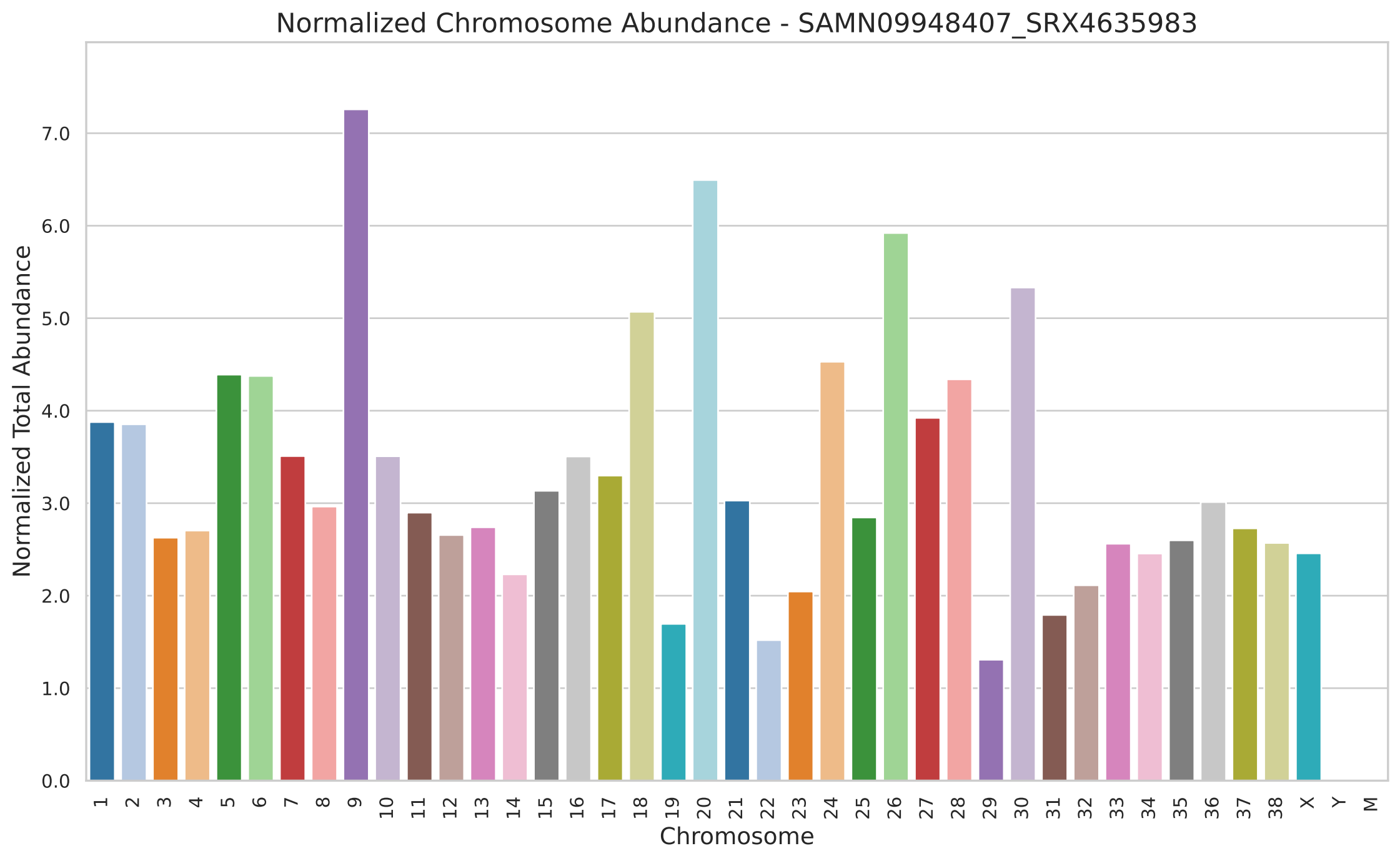

Normalized Chromosome Abundance - SAMN09948270_SRX4636003
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

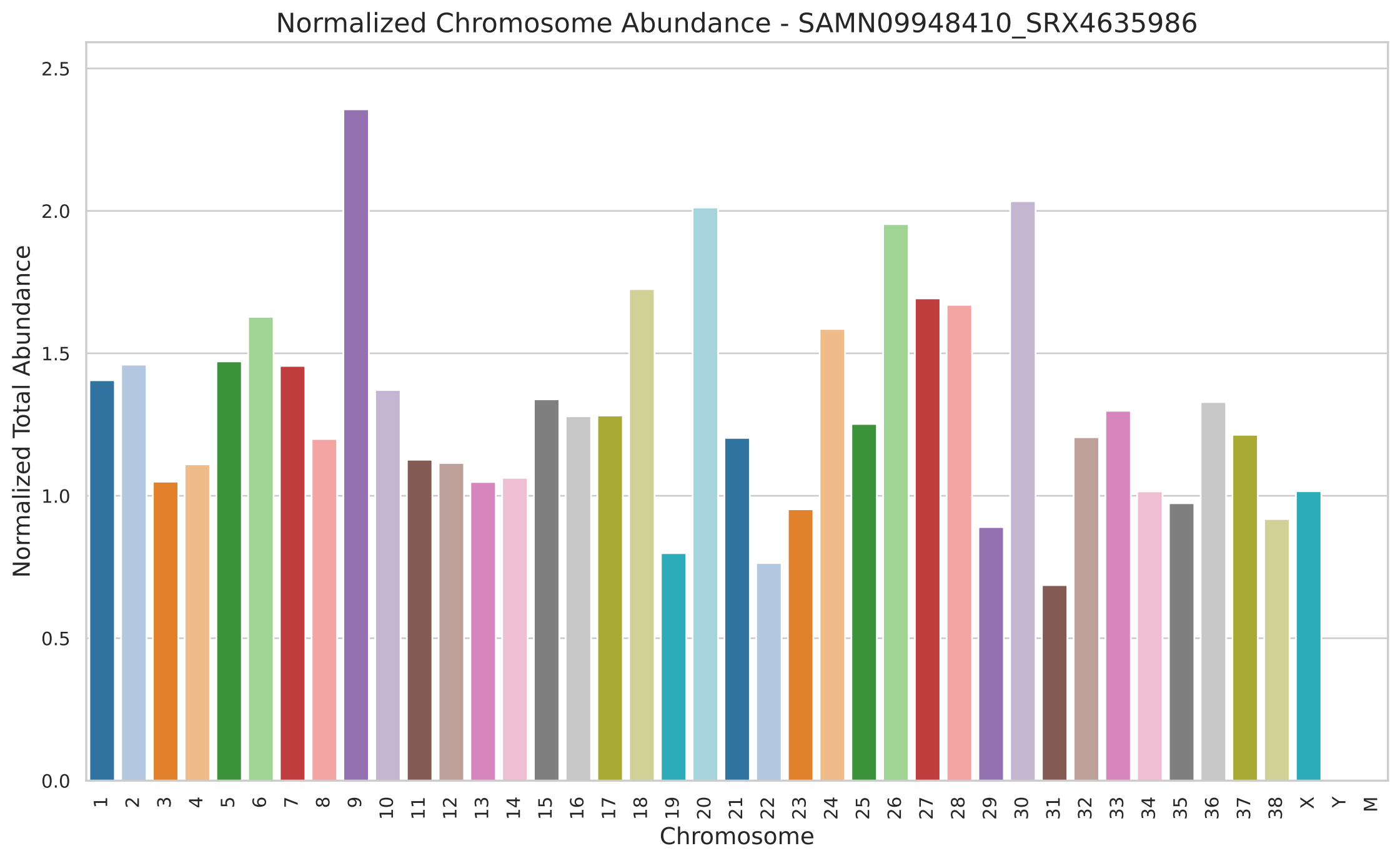

Normalized Chromosome Abundance - SAMN09948273_SRX4635999
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

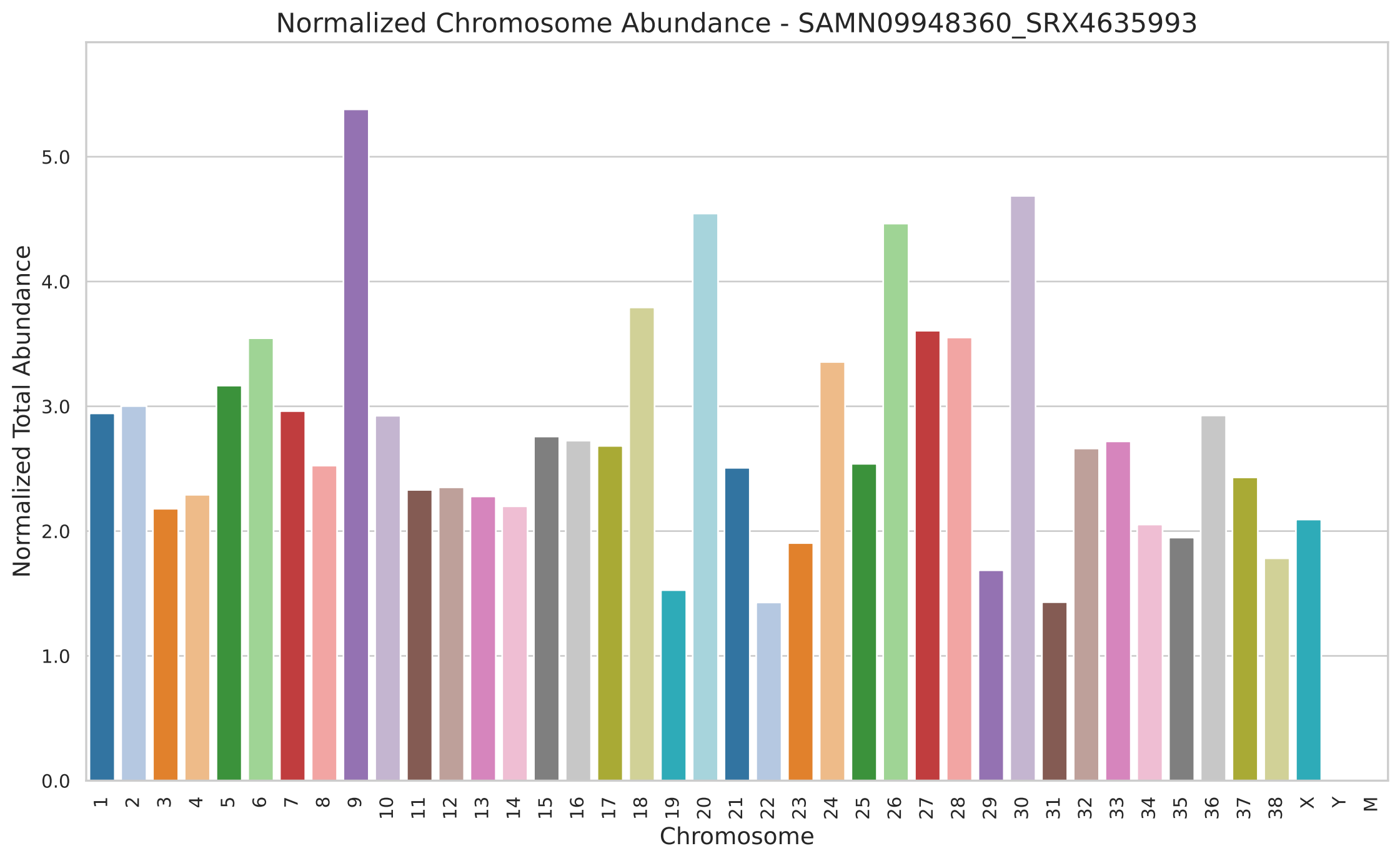

Normalized Chromosome Abundance - SAMN09948228_SRX4636013
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

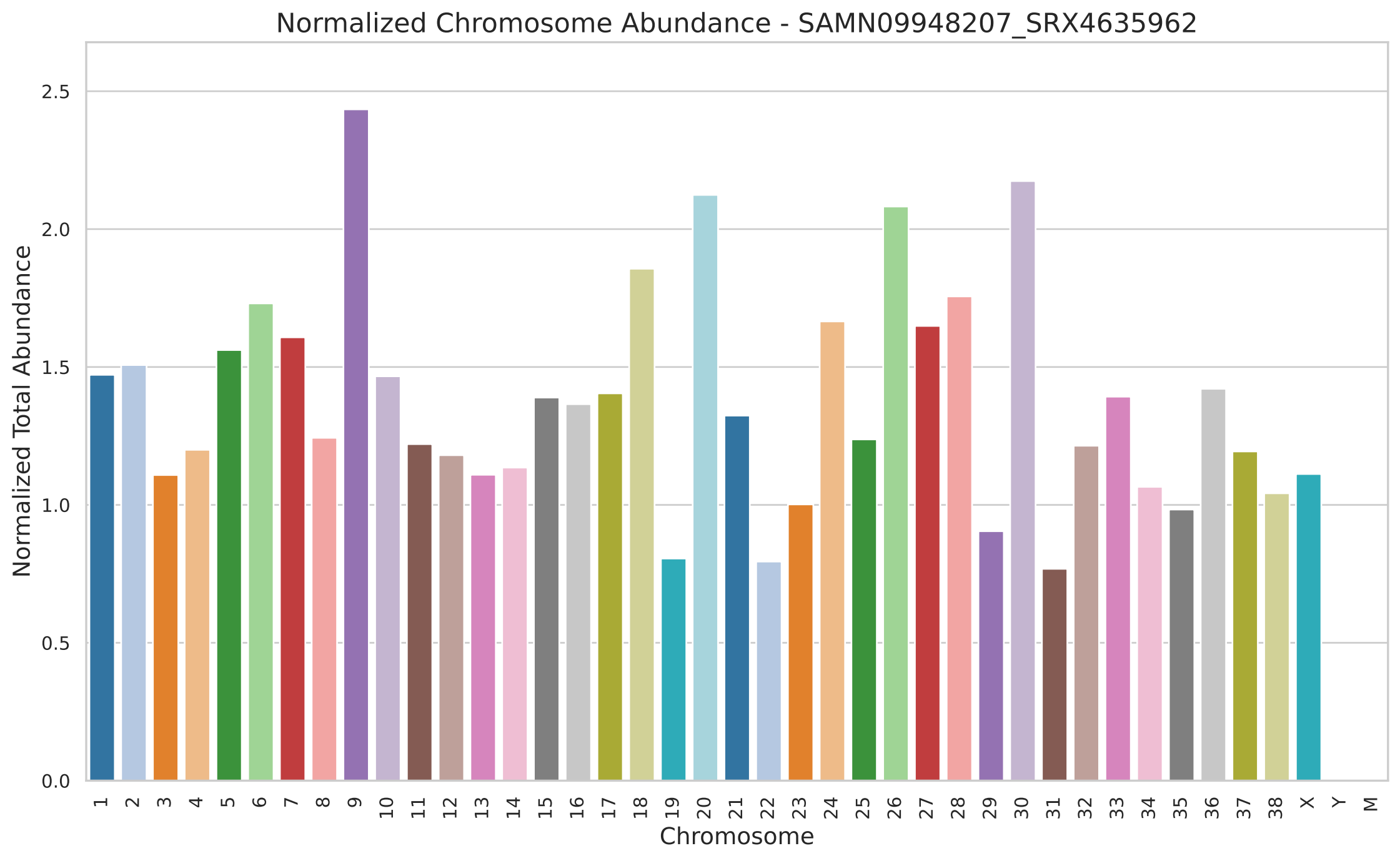

Normalized Chromosome Abundance - SAMN09949328_SRX4636012
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

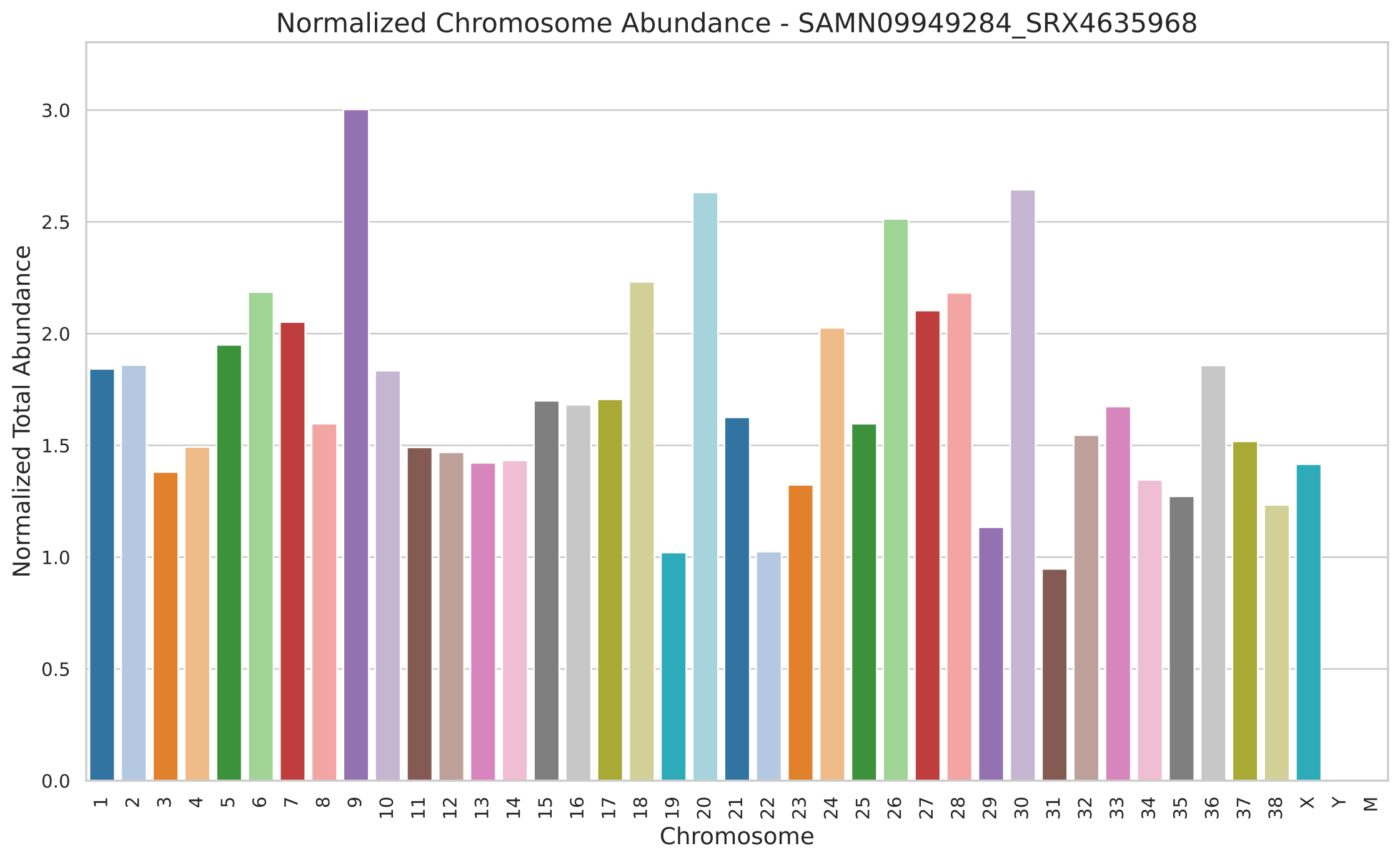

Normalized Chromosome Abundance - SAMN09949420_SRX4636005
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

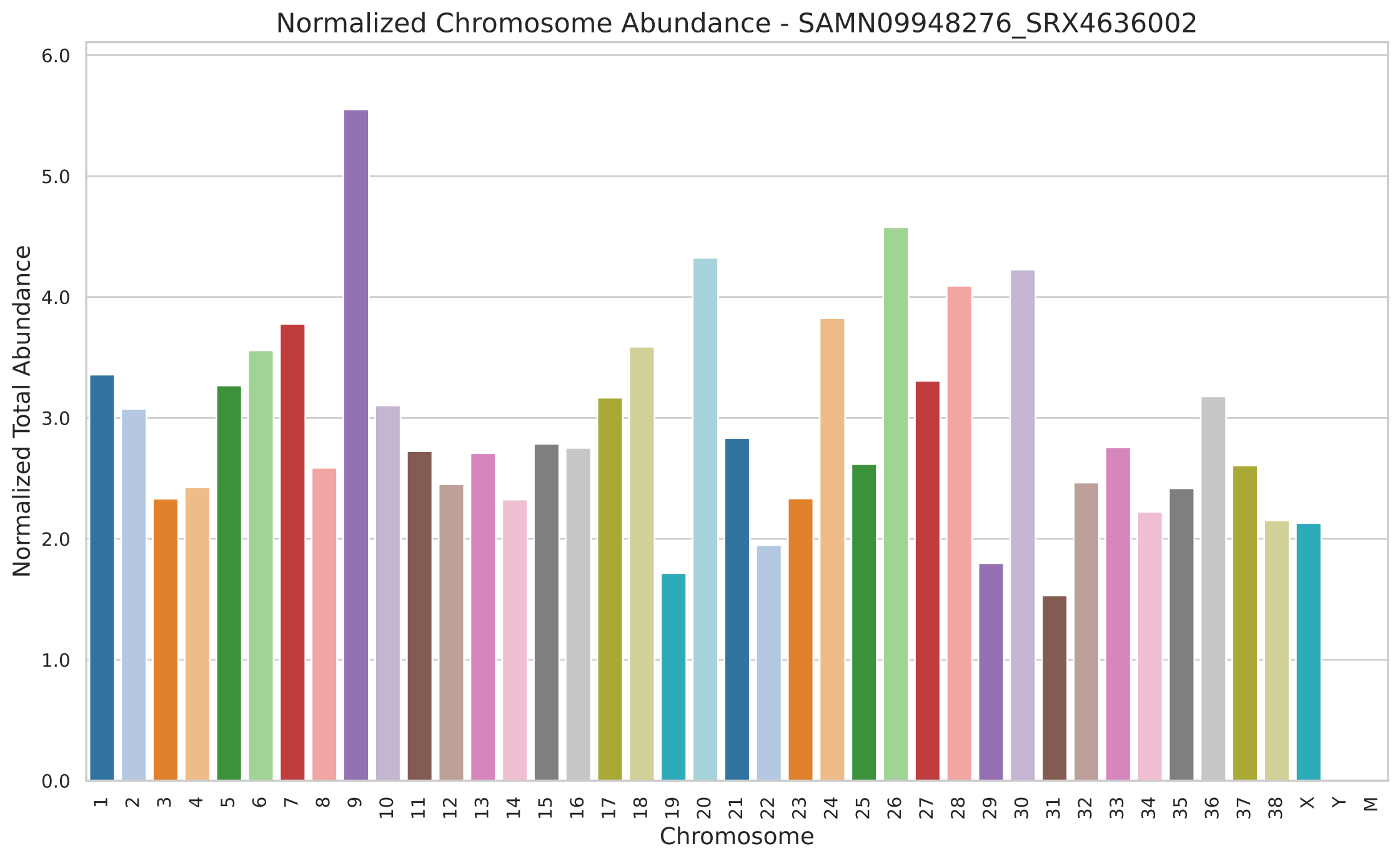

Normalized Chromosome Abundance - SAMN09948407_SRX4635983
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

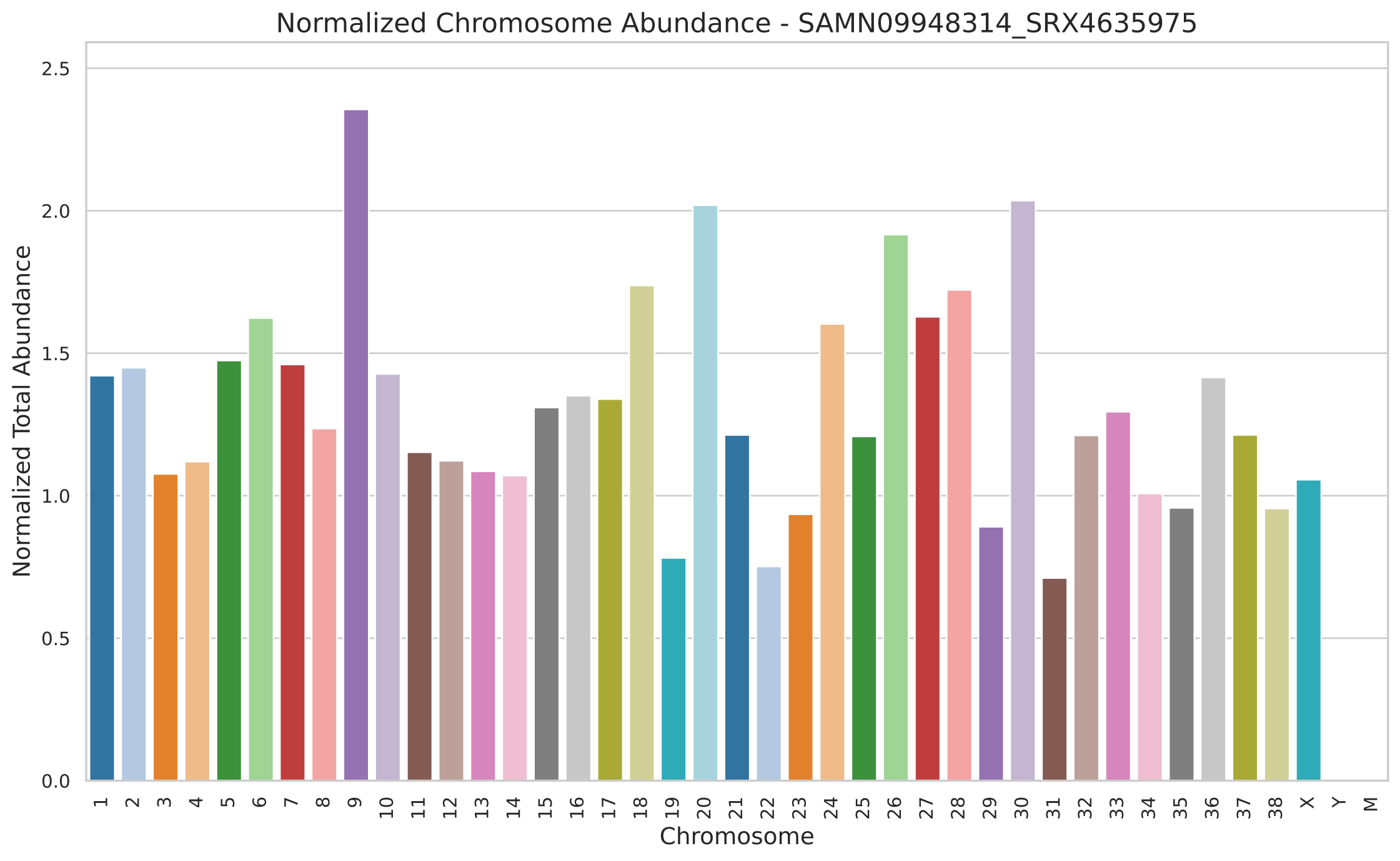

Normalized Chromosome Abundance - SAMN09948410_SRX4635986
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

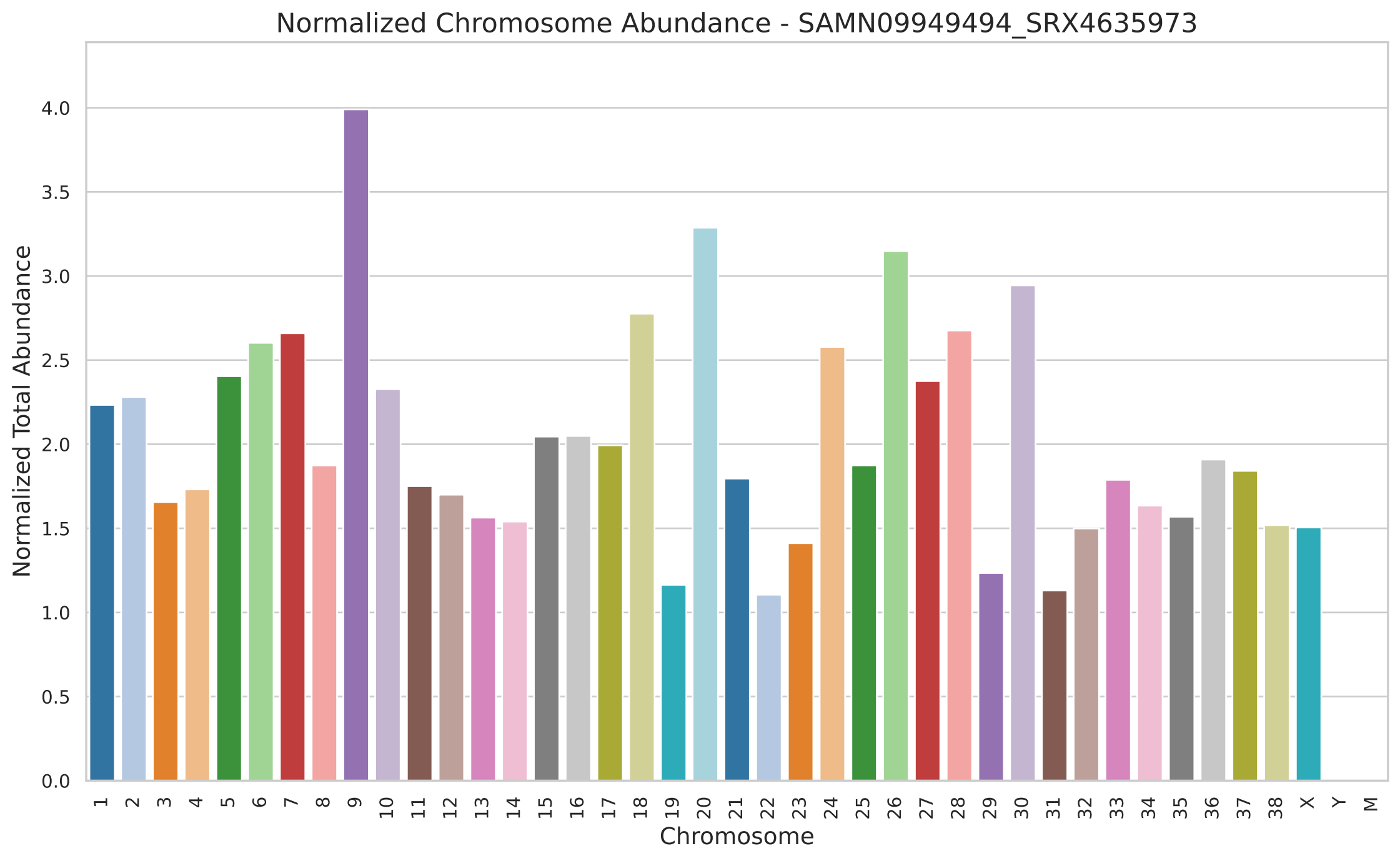

Normalized Chromosome Abundance - SAMN09948360_SRX4635993
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

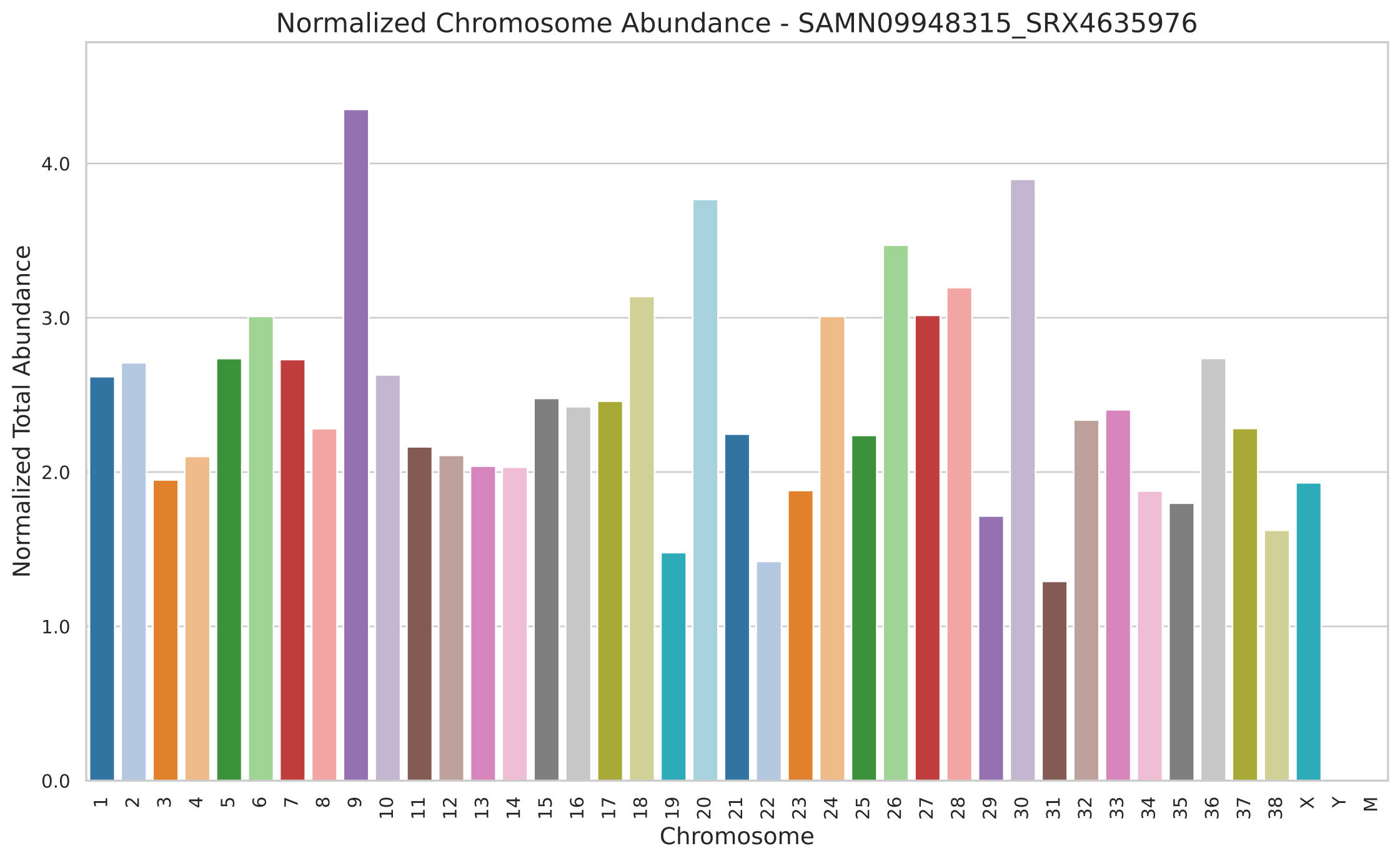

Normalized Chromosome Abundance - SAMN09948207_SRX4635962
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

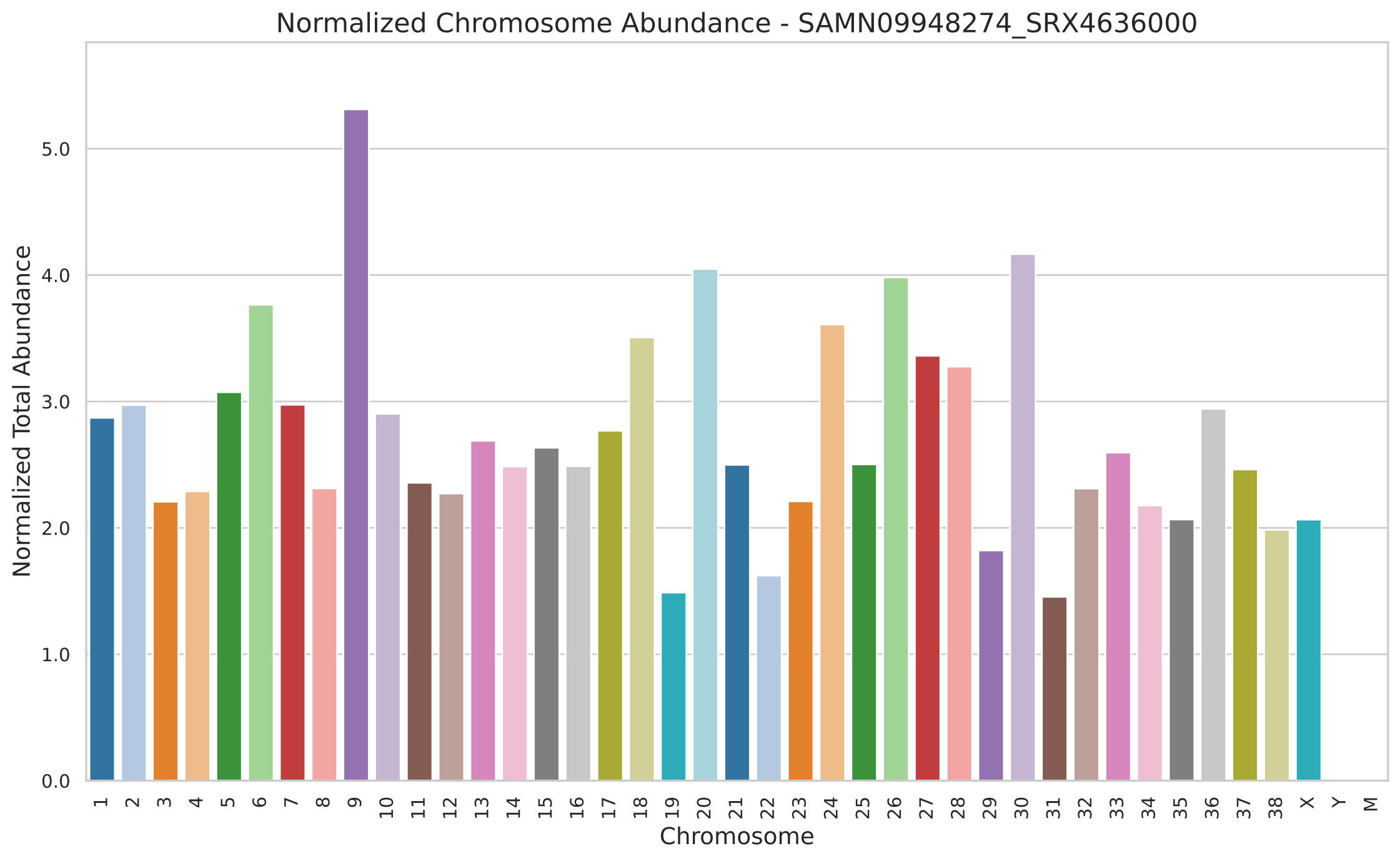

Normalized Chromosome Abundance - SAMN09949284_SRX4635968
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

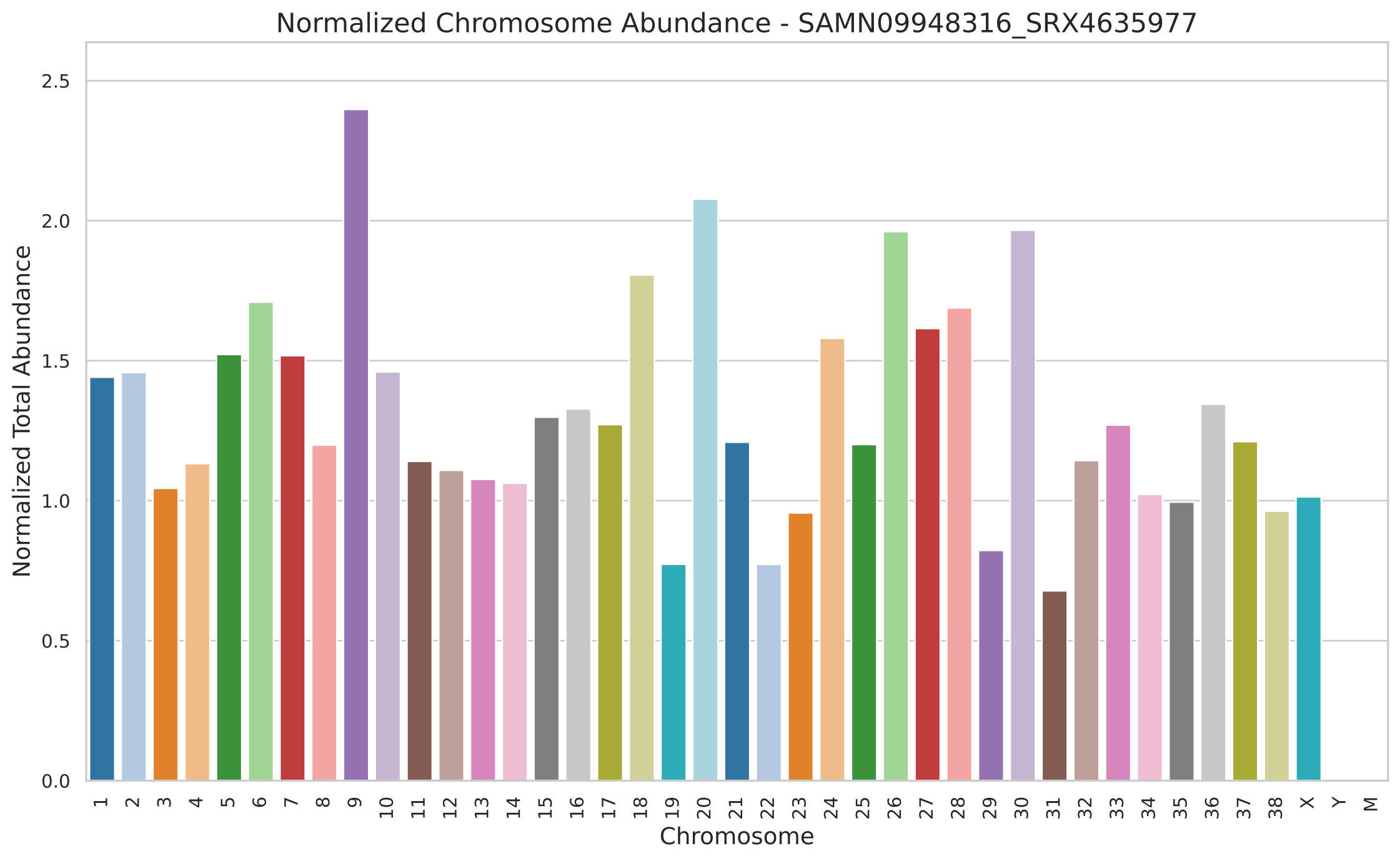

Normalized Chromosome Abundance - SAMN09948276_SRX4636002
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

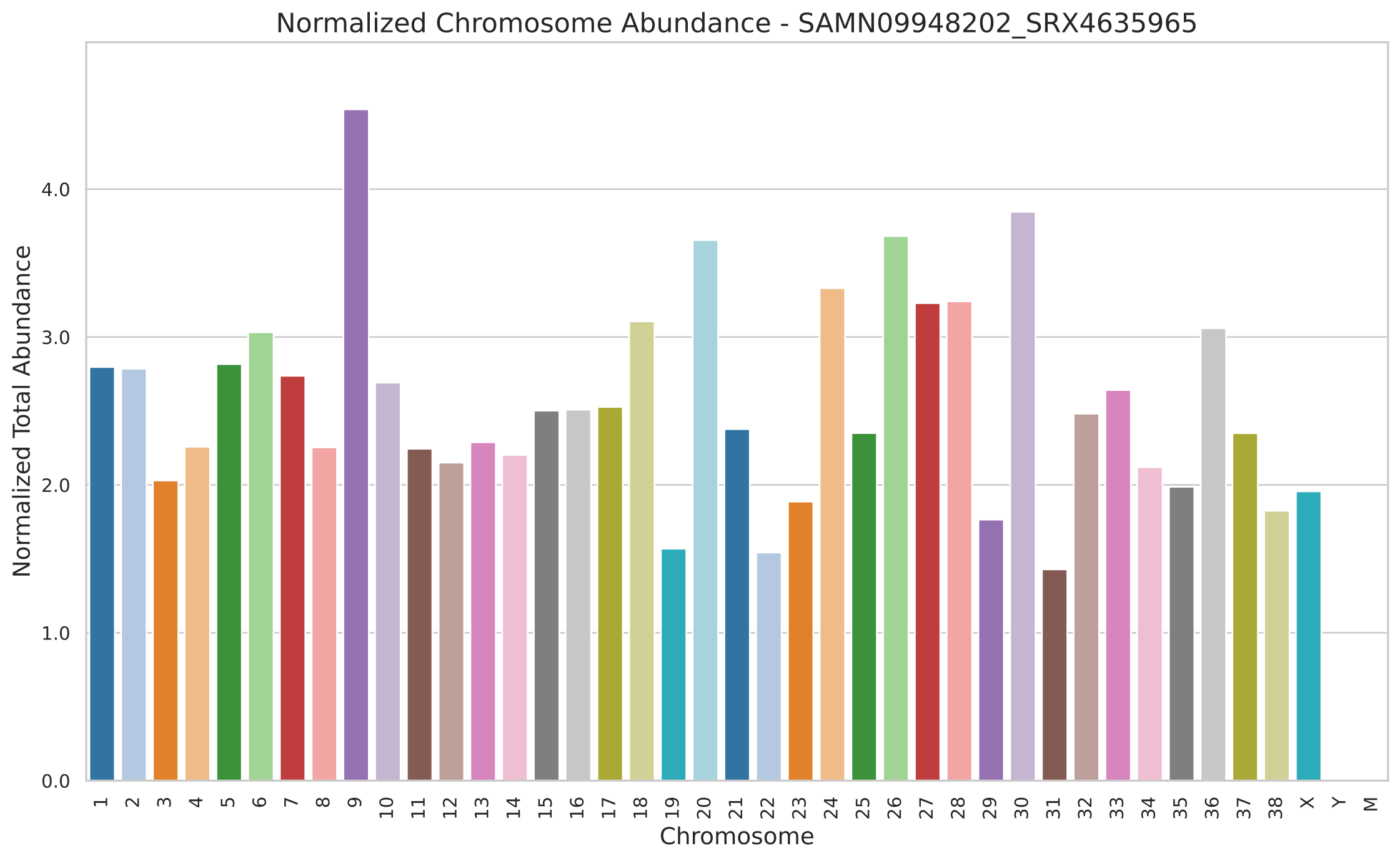

Normalized Chromosome Abundance - SAMN09948314_SRX4635975
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

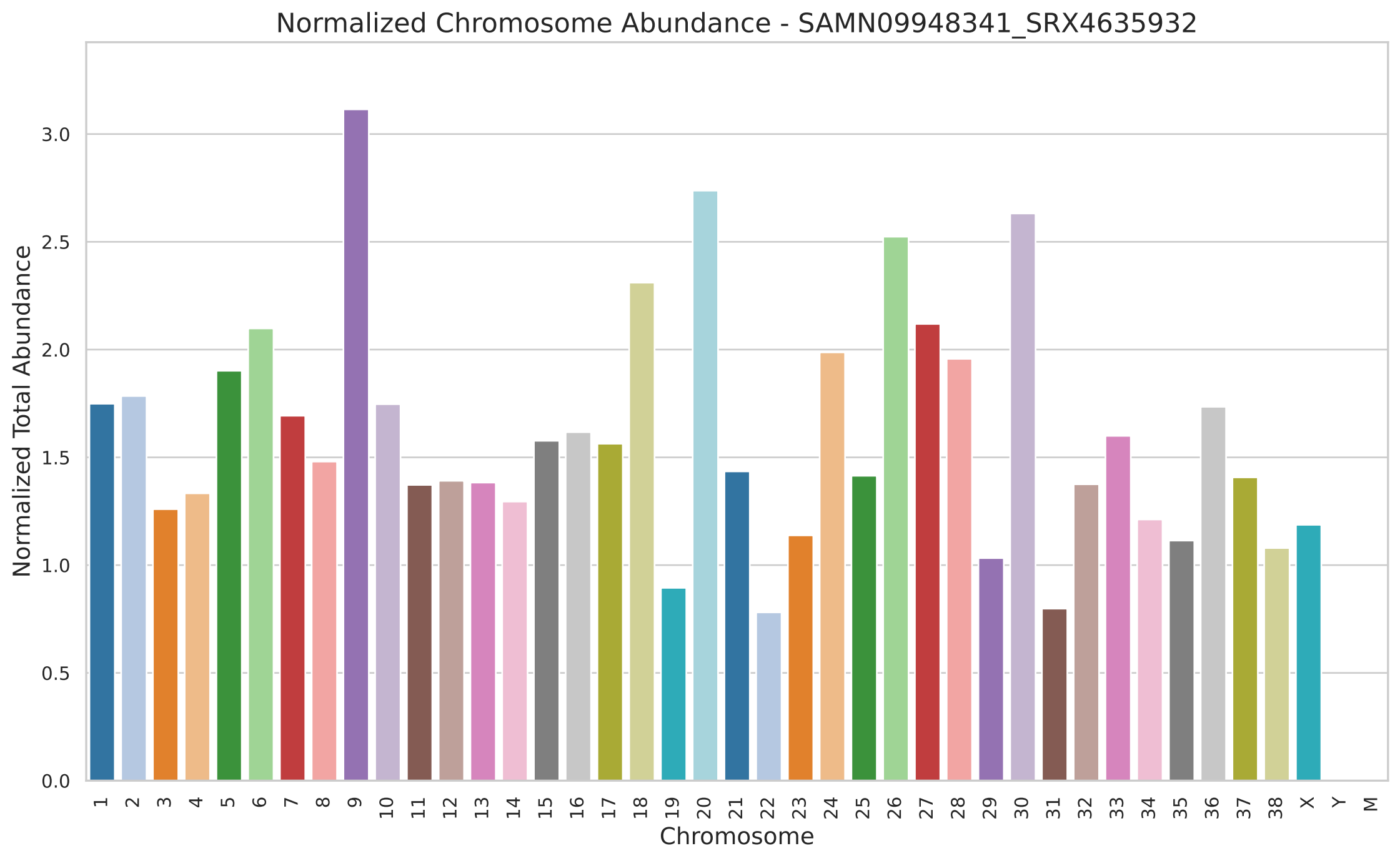

Normalized Chromosome Abundance - SAMN09949494_SRX4635973
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

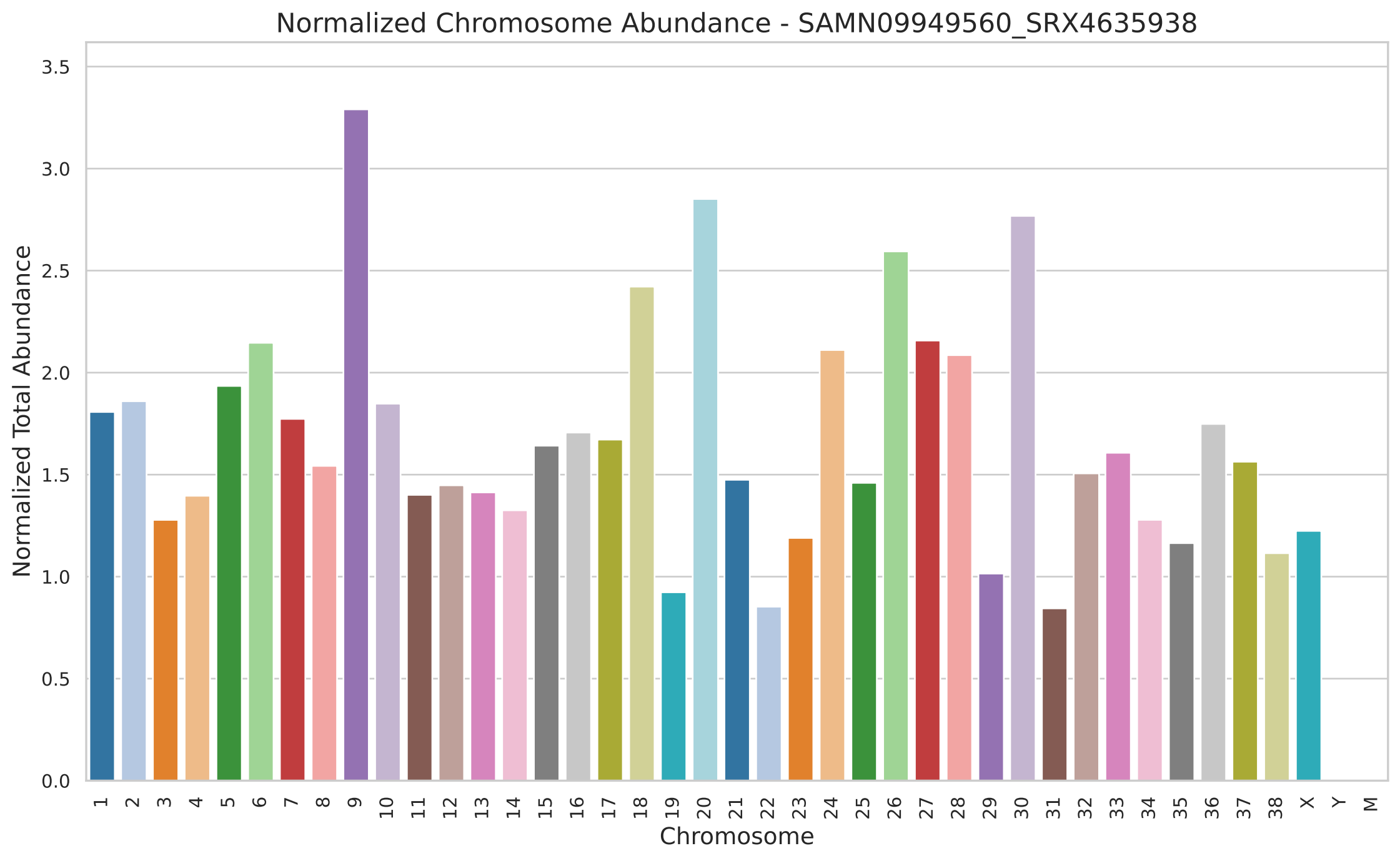

Normalized Chromosome Abundance - SAMN09948315_SRX4635976
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

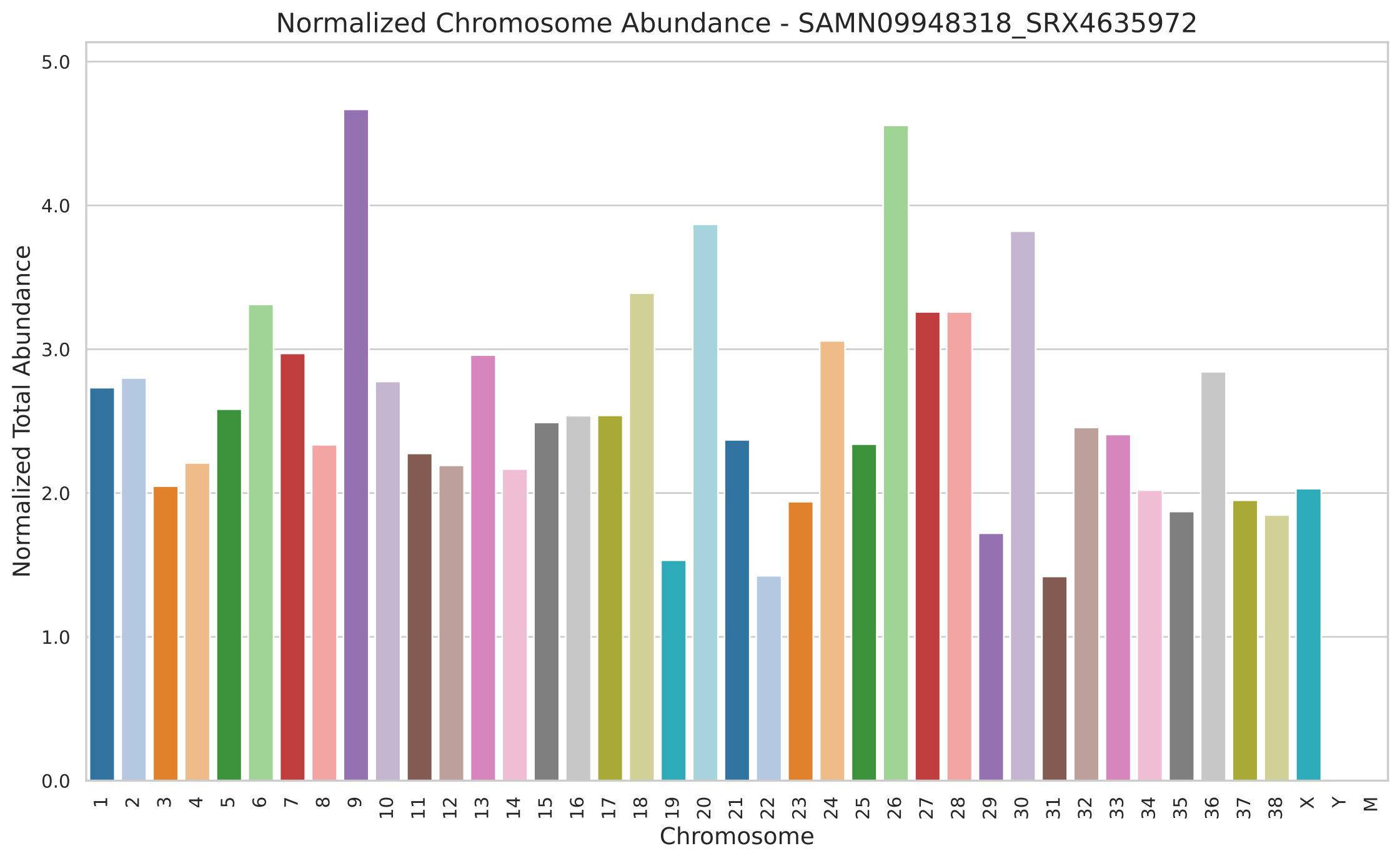

Normalized Chromosome Abundance - SAMN09948274_SRX4636000
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

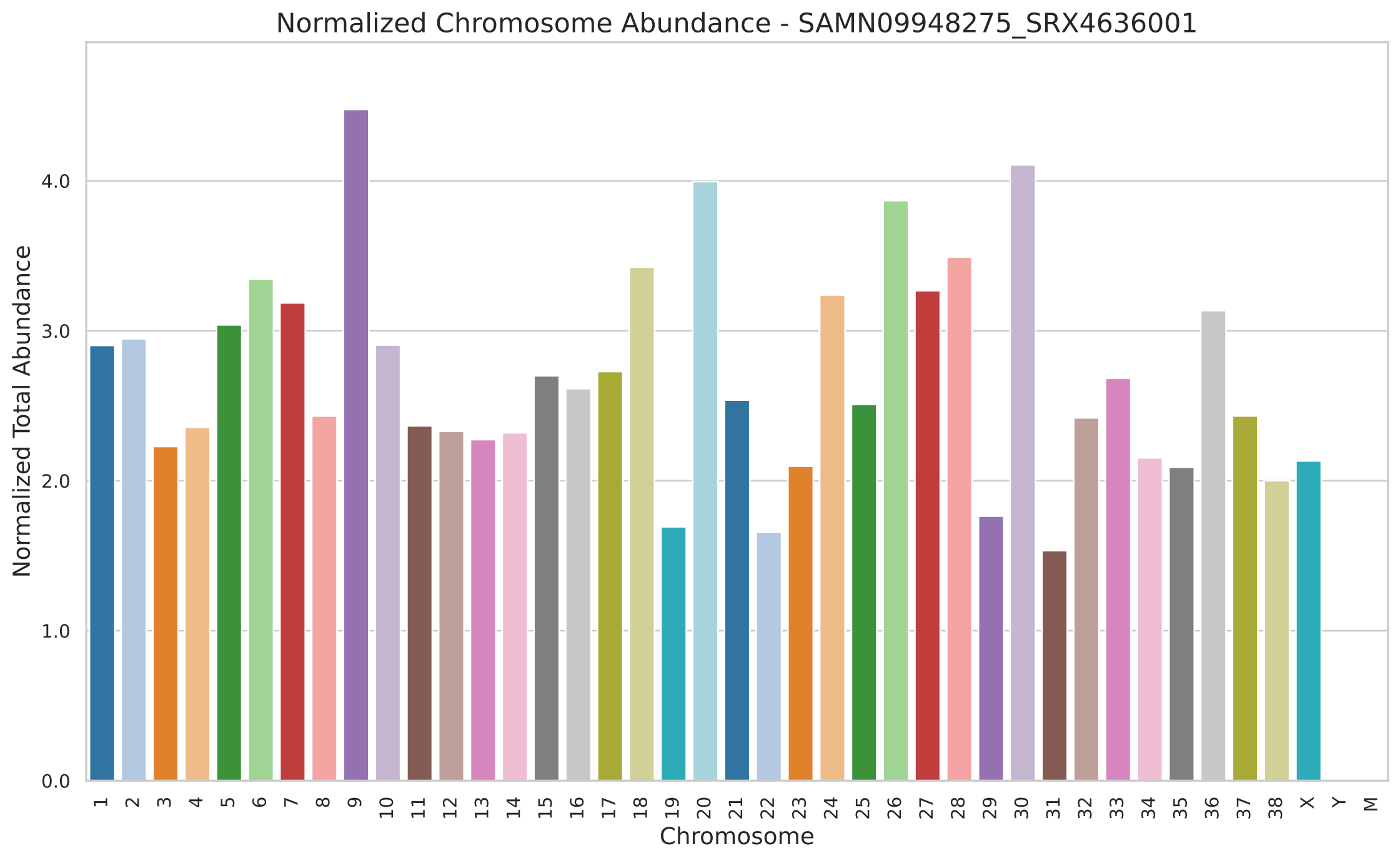

Normalized Chromosome Abundance - SAMN09948316_SRX4635977
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

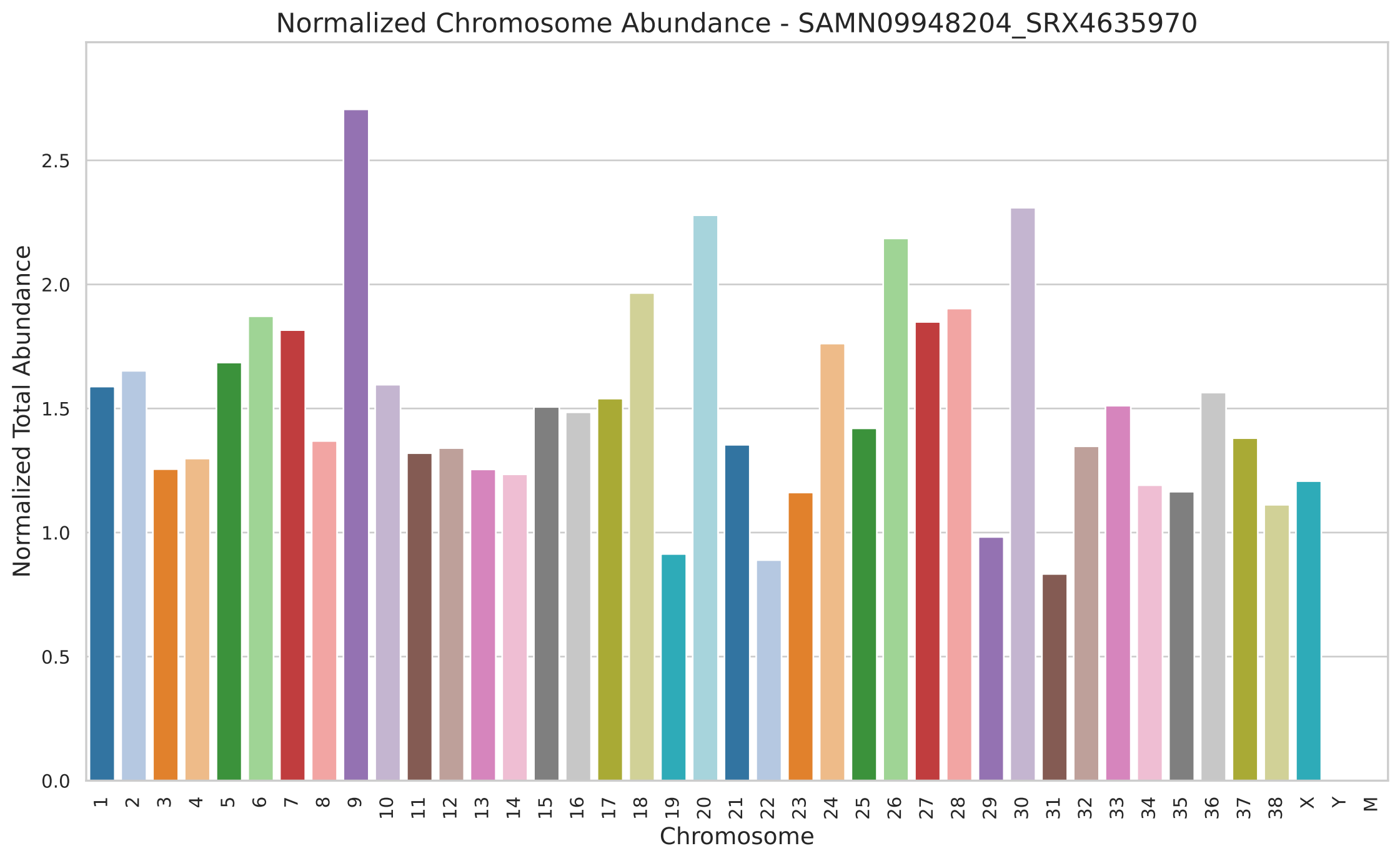

Normalized Chromosome Abundance - SAMN09948202_SRX4635965
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

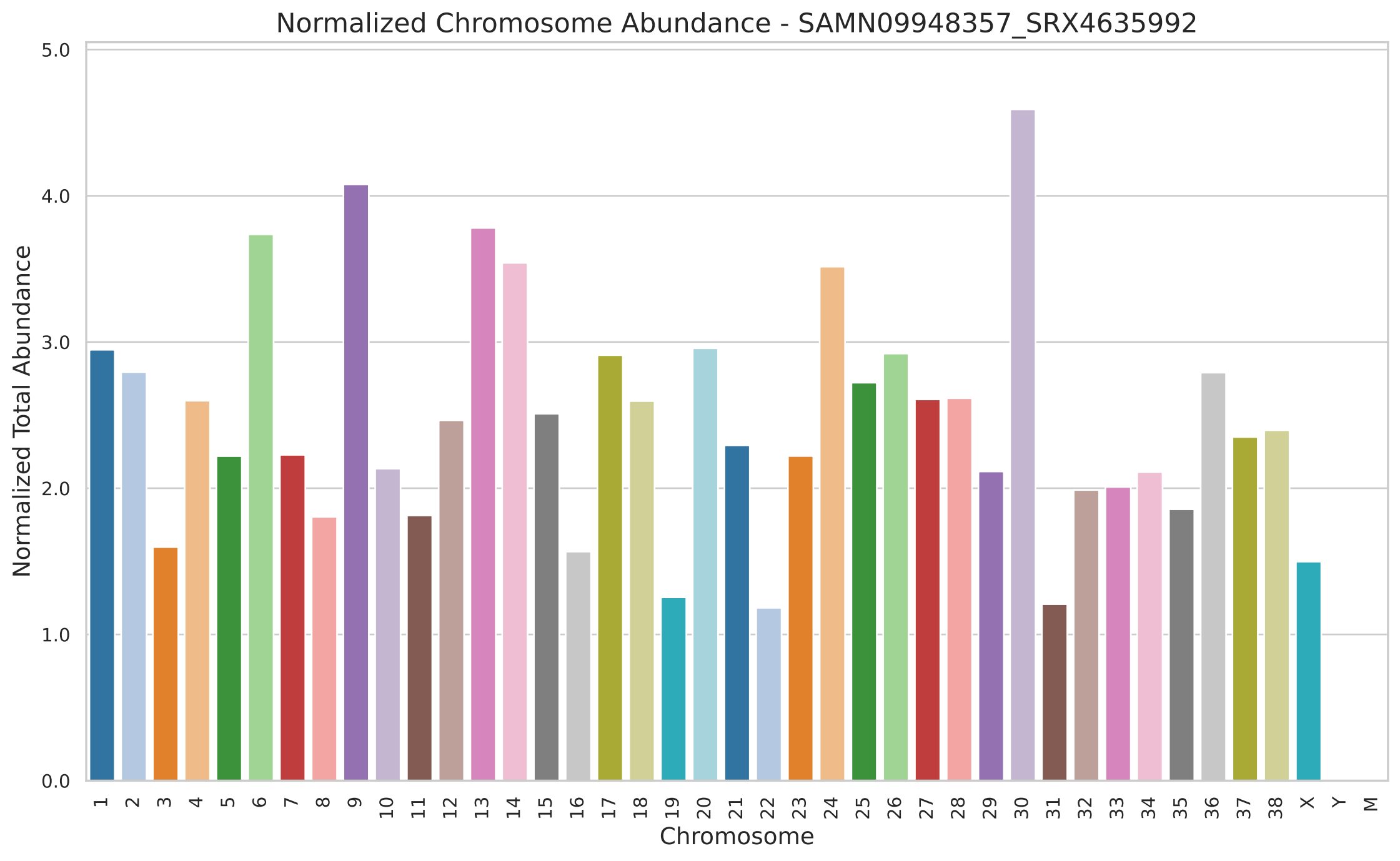

Normalized Chromosome Abundance - SAMN09948341_SRX4635932
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

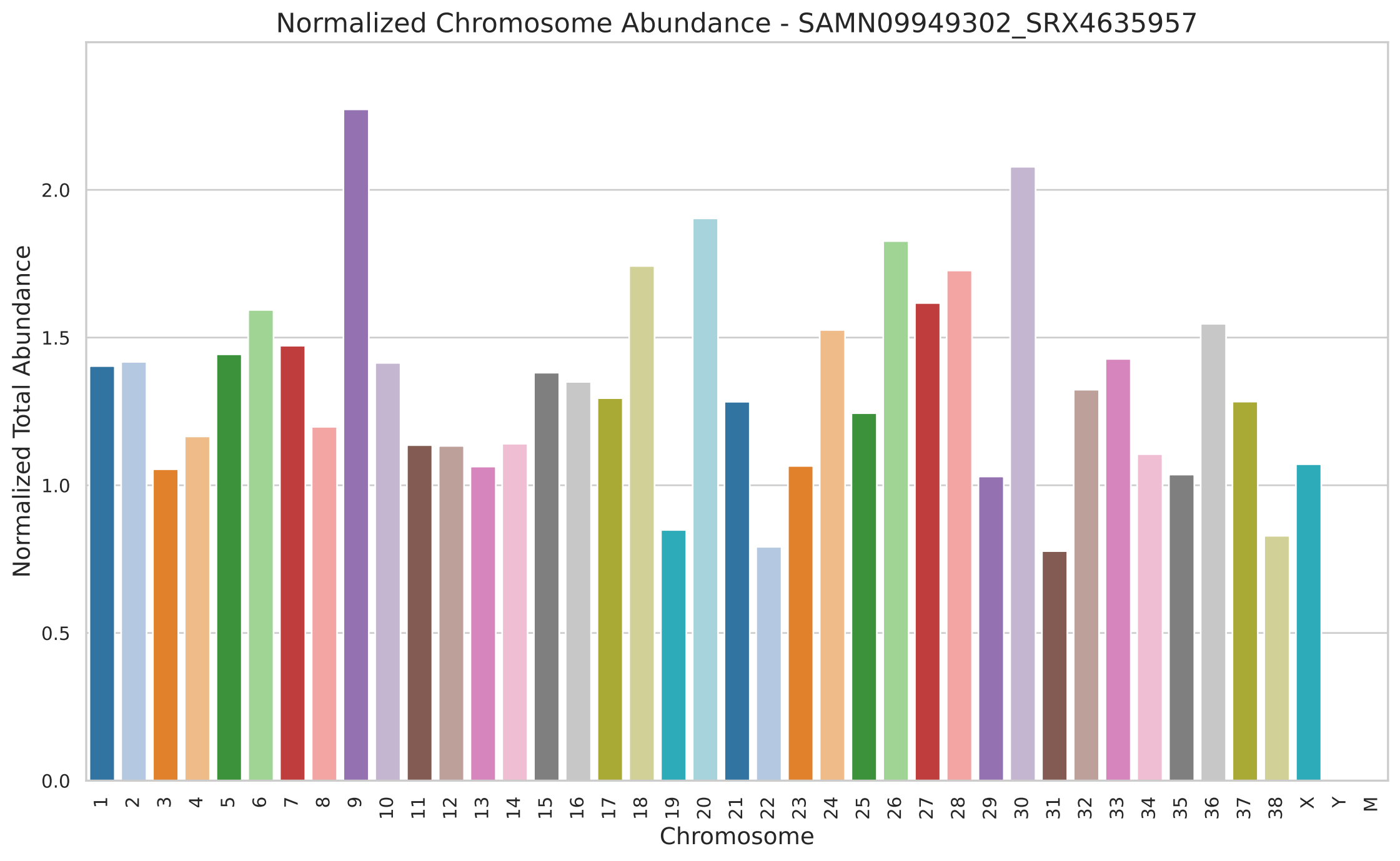

Normalized Chromosome Abundance - SAMN09949560_SRX4635938
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

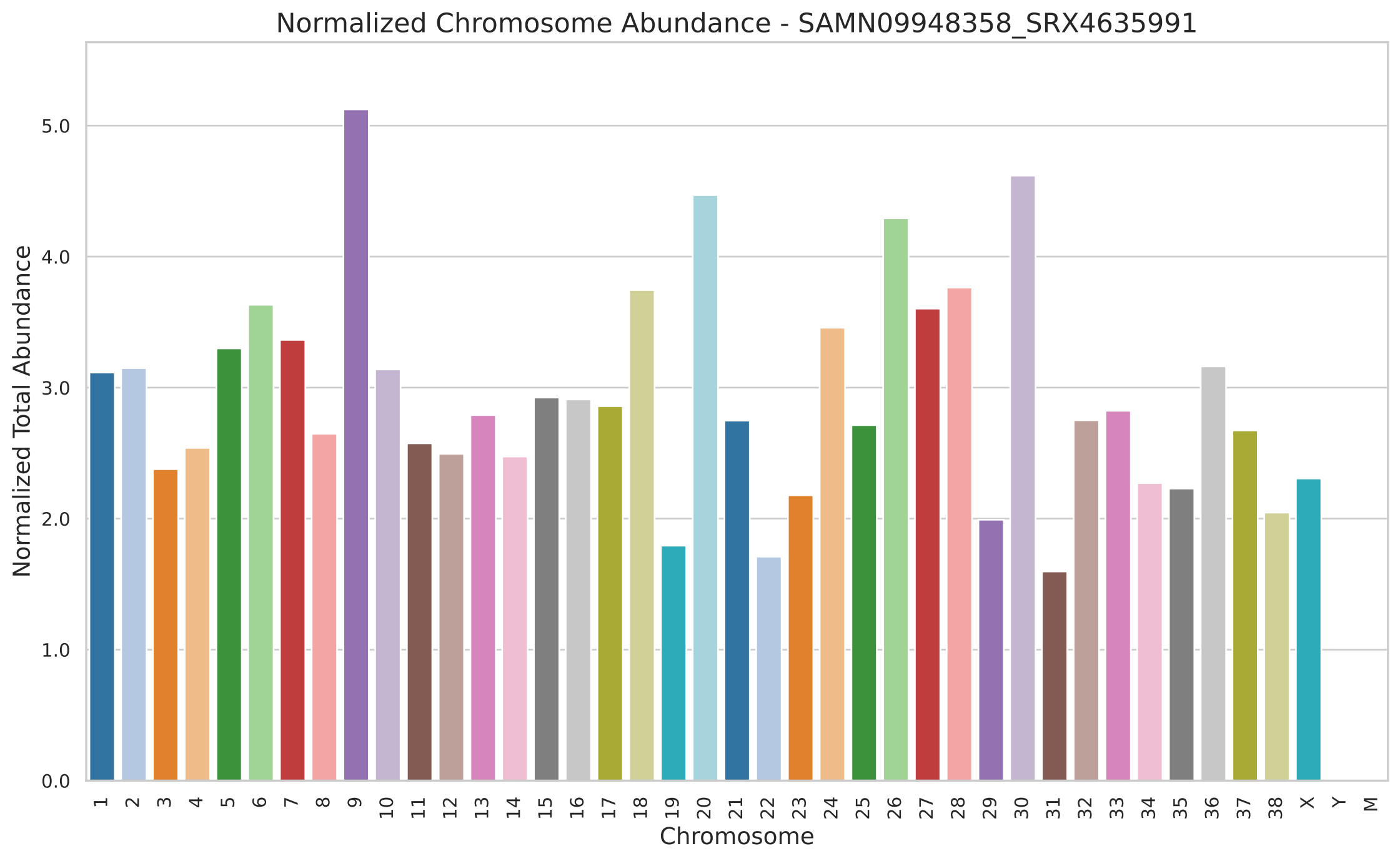

Normalized Chromosome Abundance - SAMN09948318_SRX4635972
Normalized Total Abundance
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

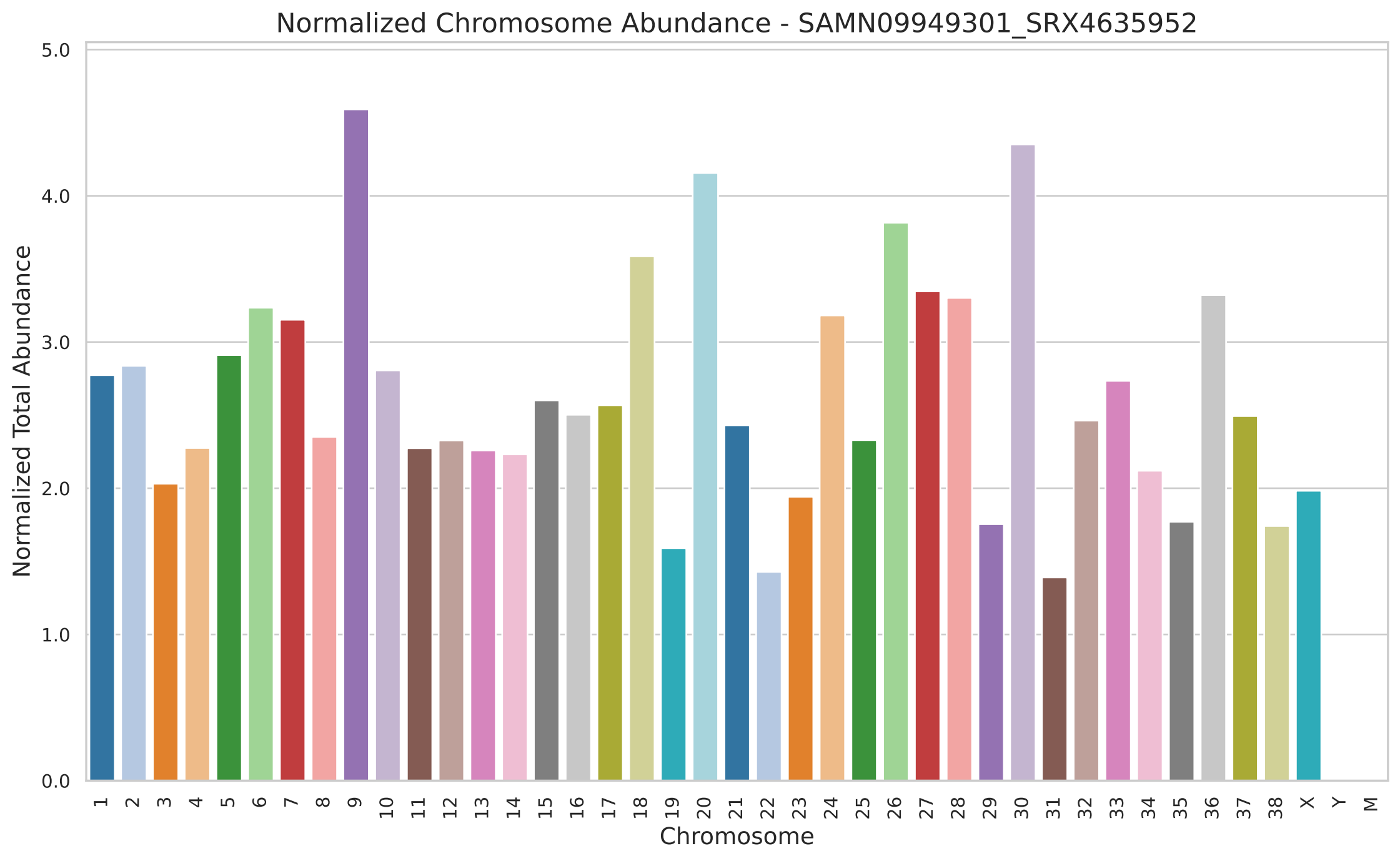

Normalized Chromosome Abundance - SAMN09948275_SRX4636001
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

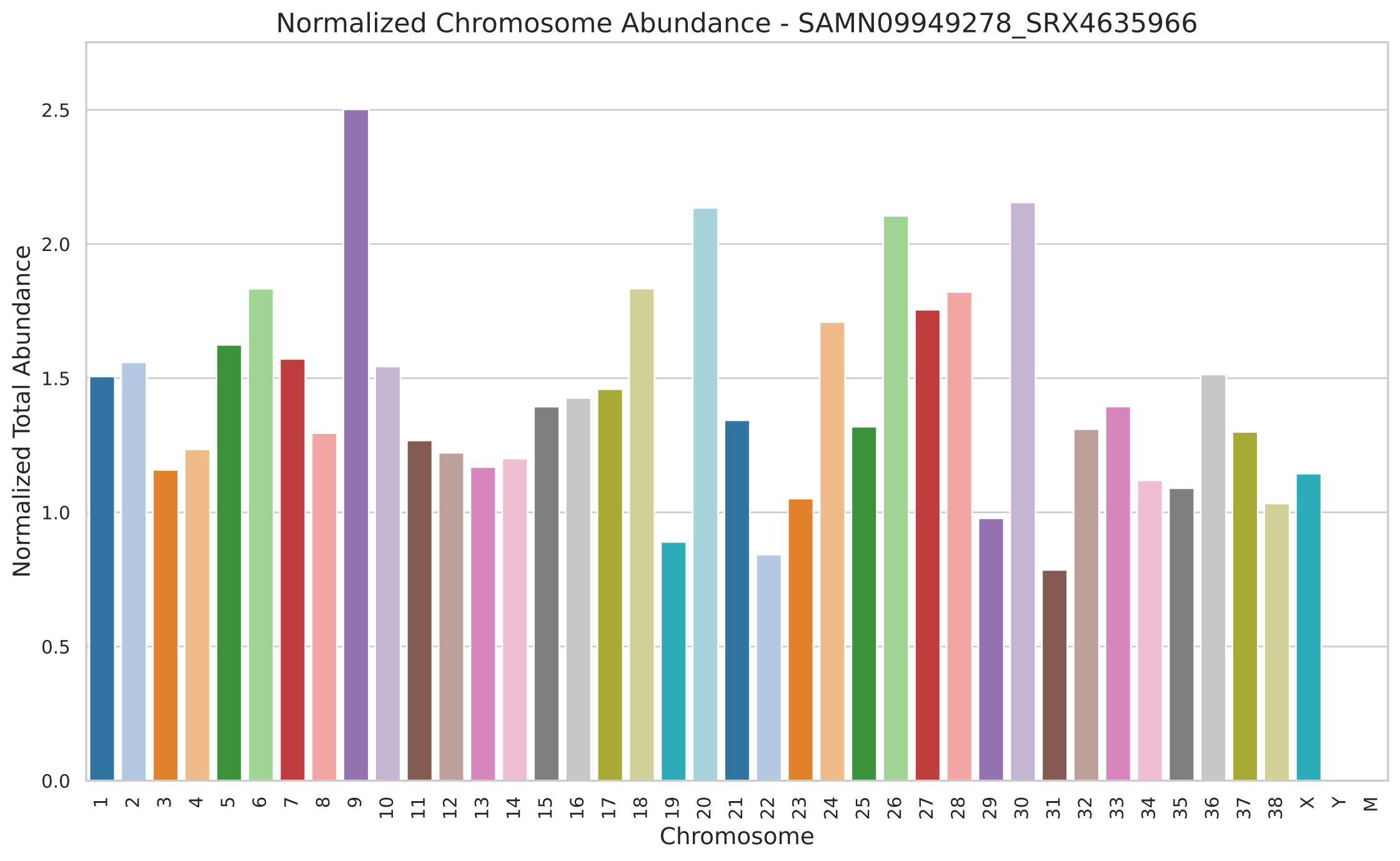

Normalized Chromosome Abundance - SAMN09948204_SRX4635970
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

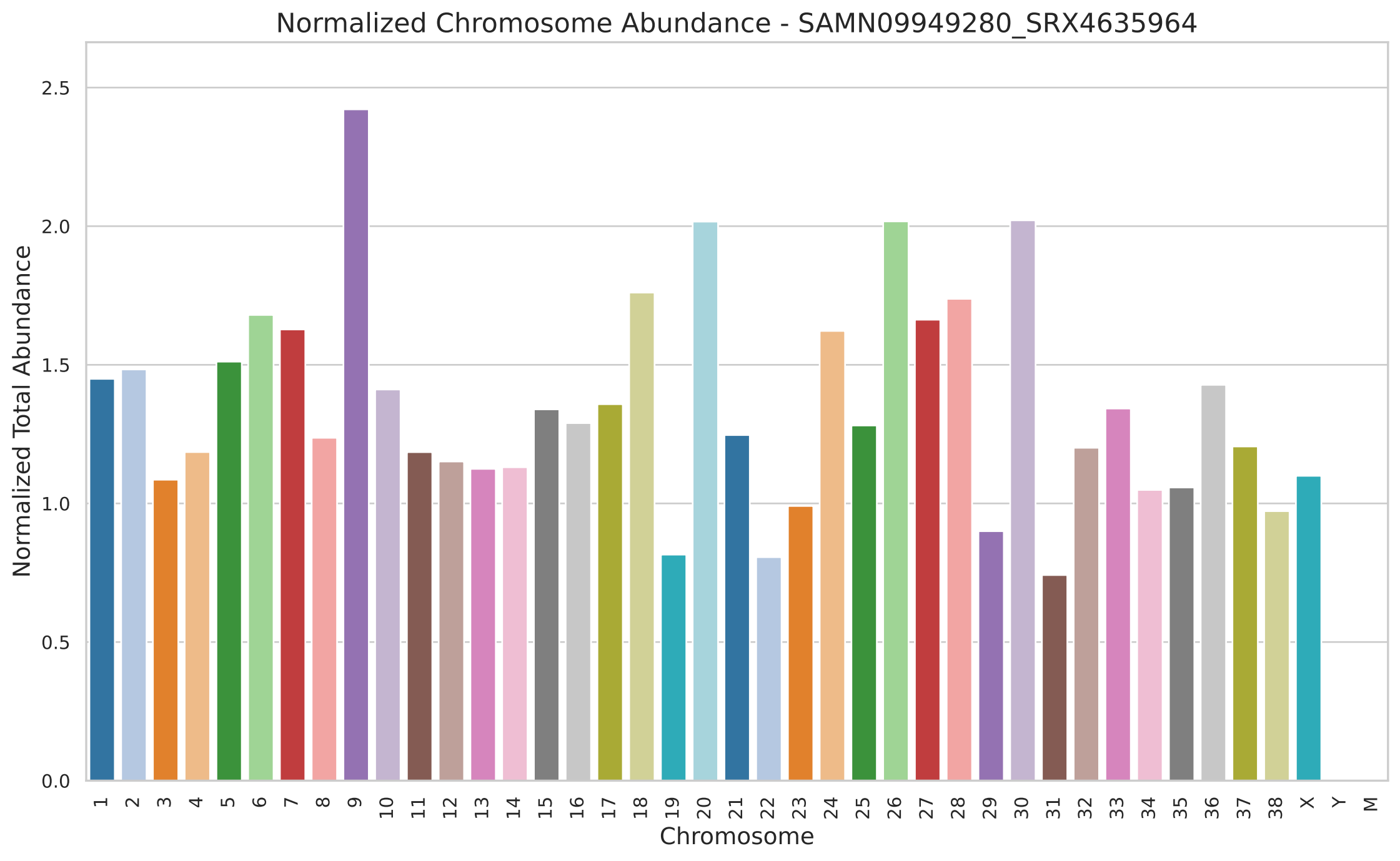

Normalized Chromosome Abundance - SAMN09948357_SRX4635992
Normalized Total Abundance
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

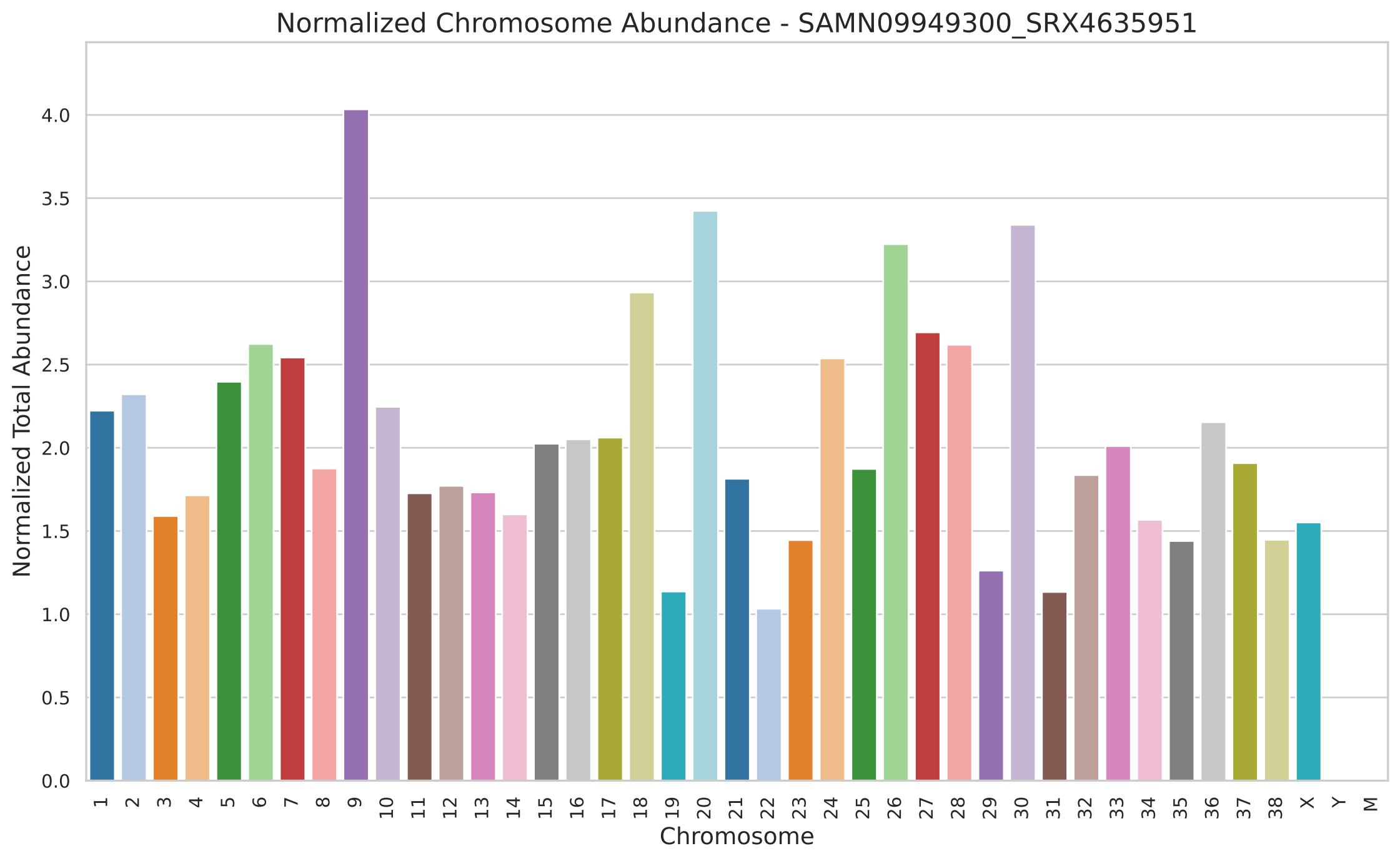

Normalized Chromosome Abundance - SAMN09949302_SRX4635957
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

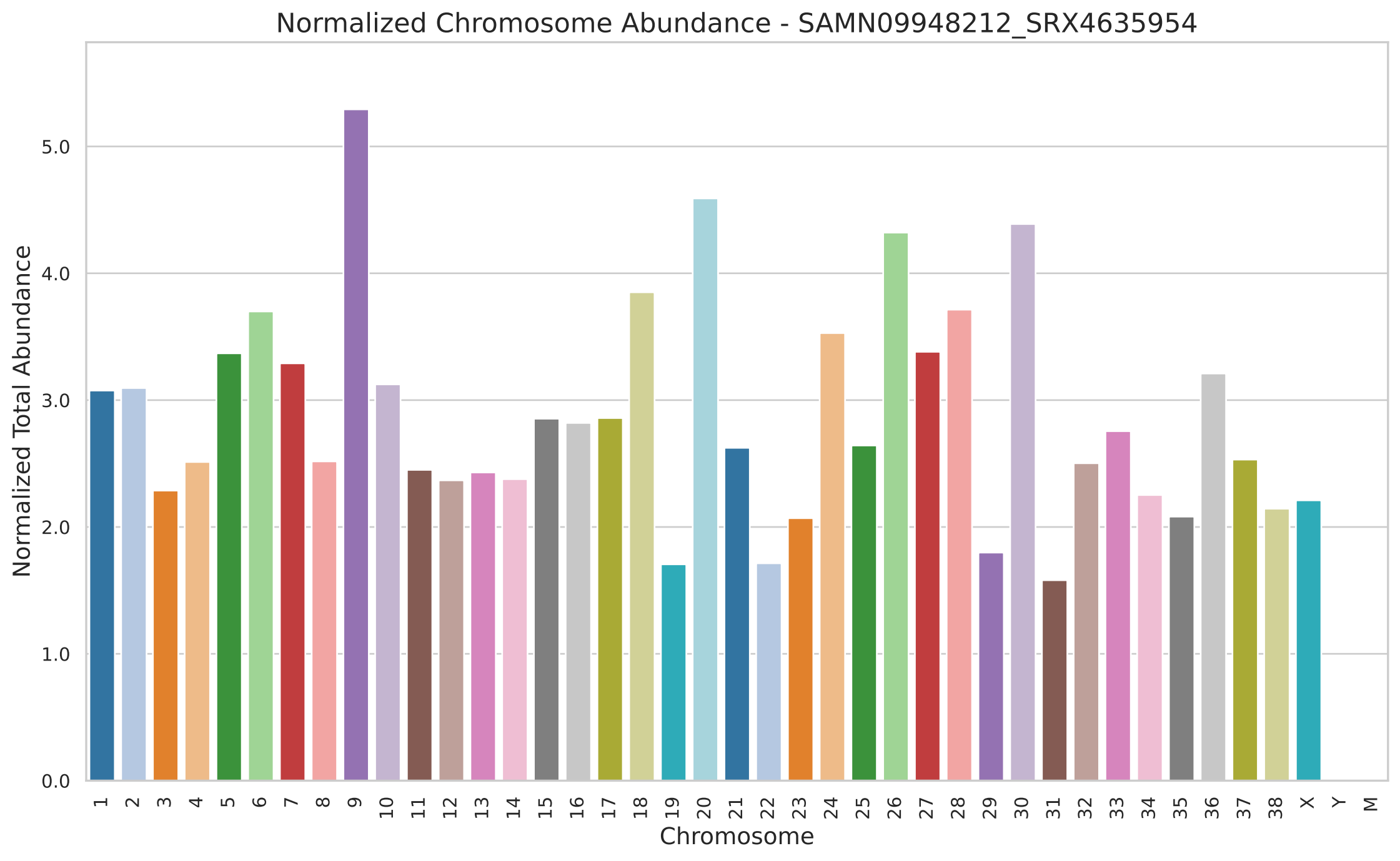

Normalized Chromosome Abundance - SAMN09948358_SRX4635991
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

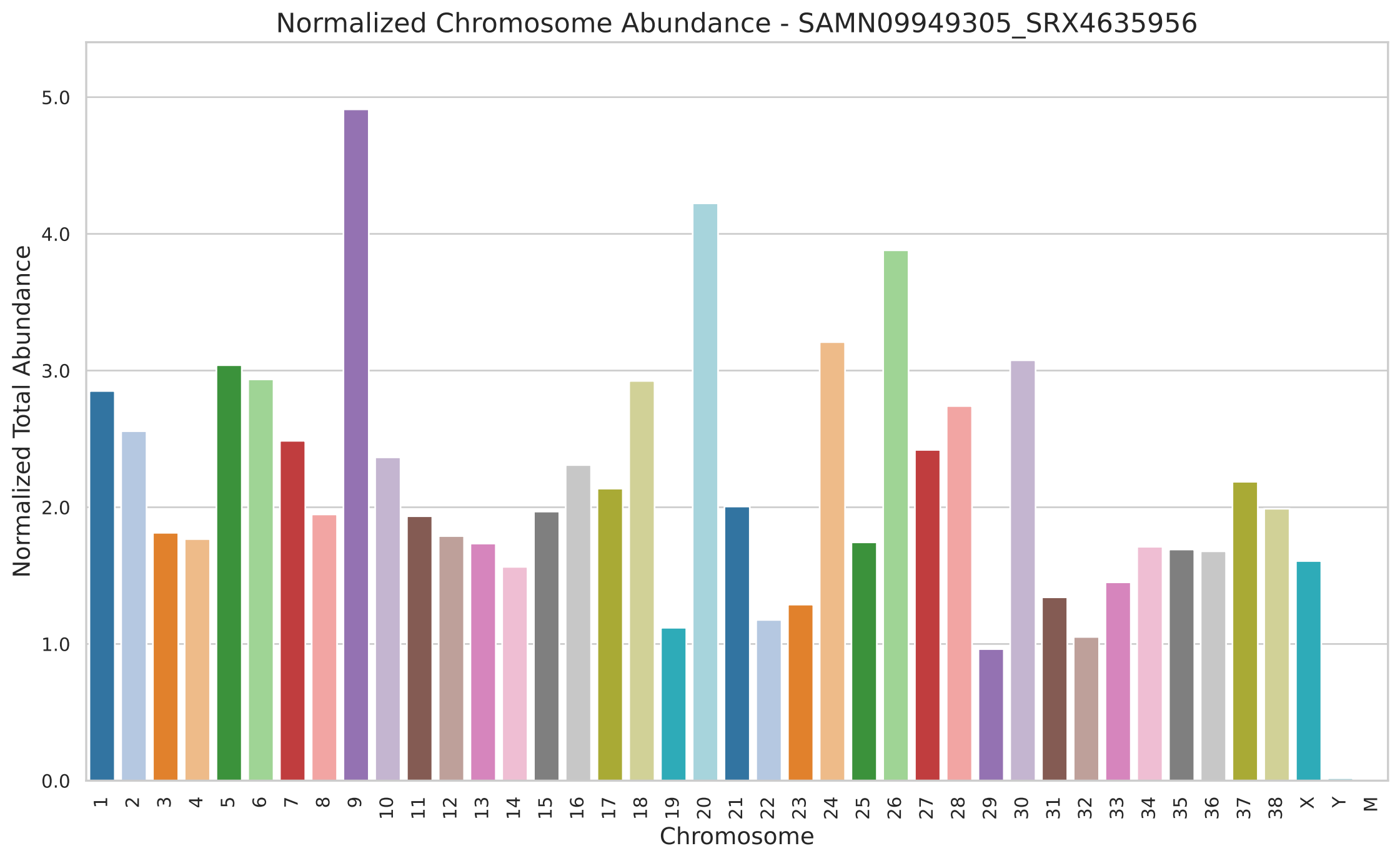

Normalized Chromosome Abundance - SAMN09949301_SRX4635952
Normalized Total Abundance
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

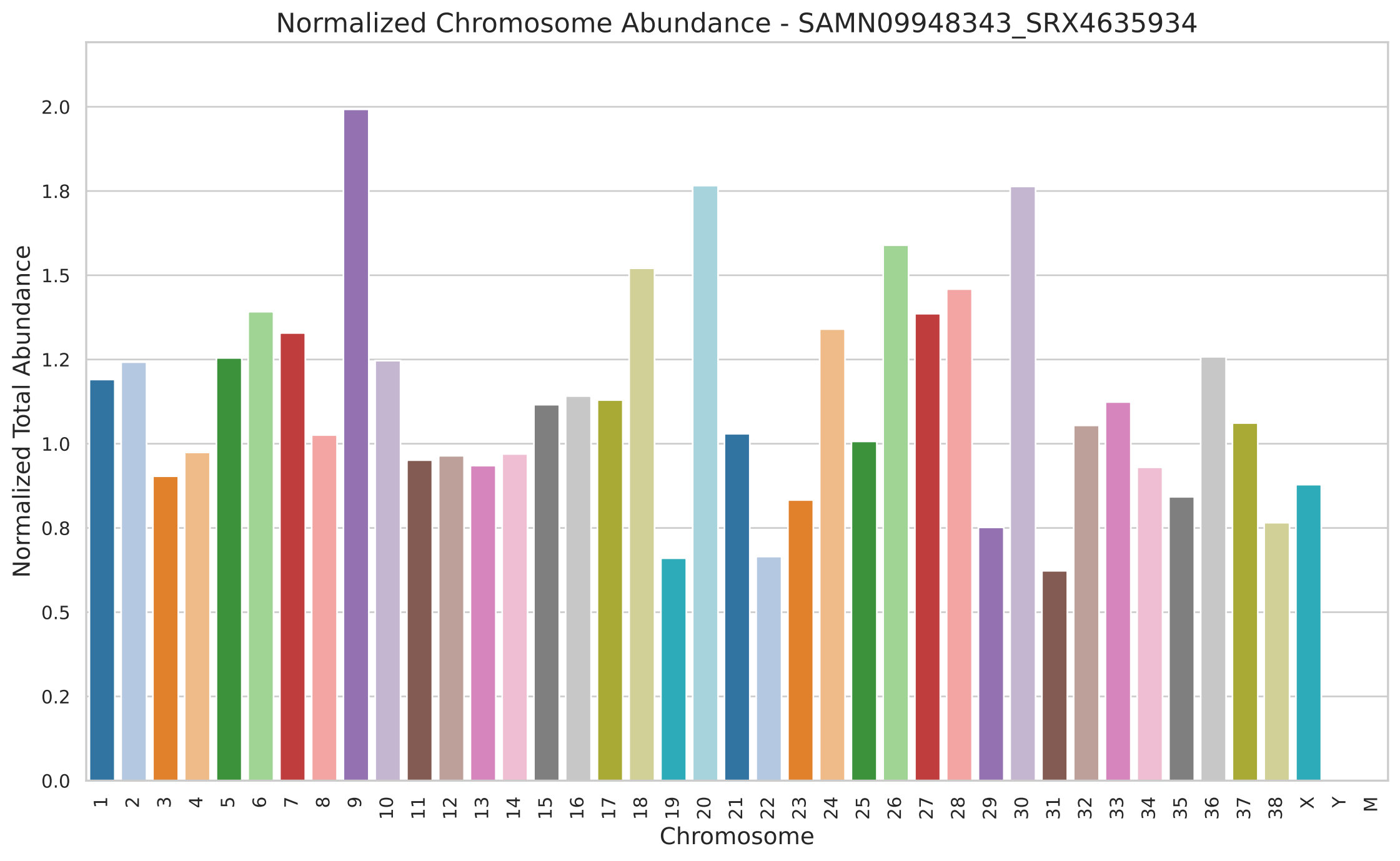

Normalized Chromosome Abundance - SAMN09949278_SRX4635966
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

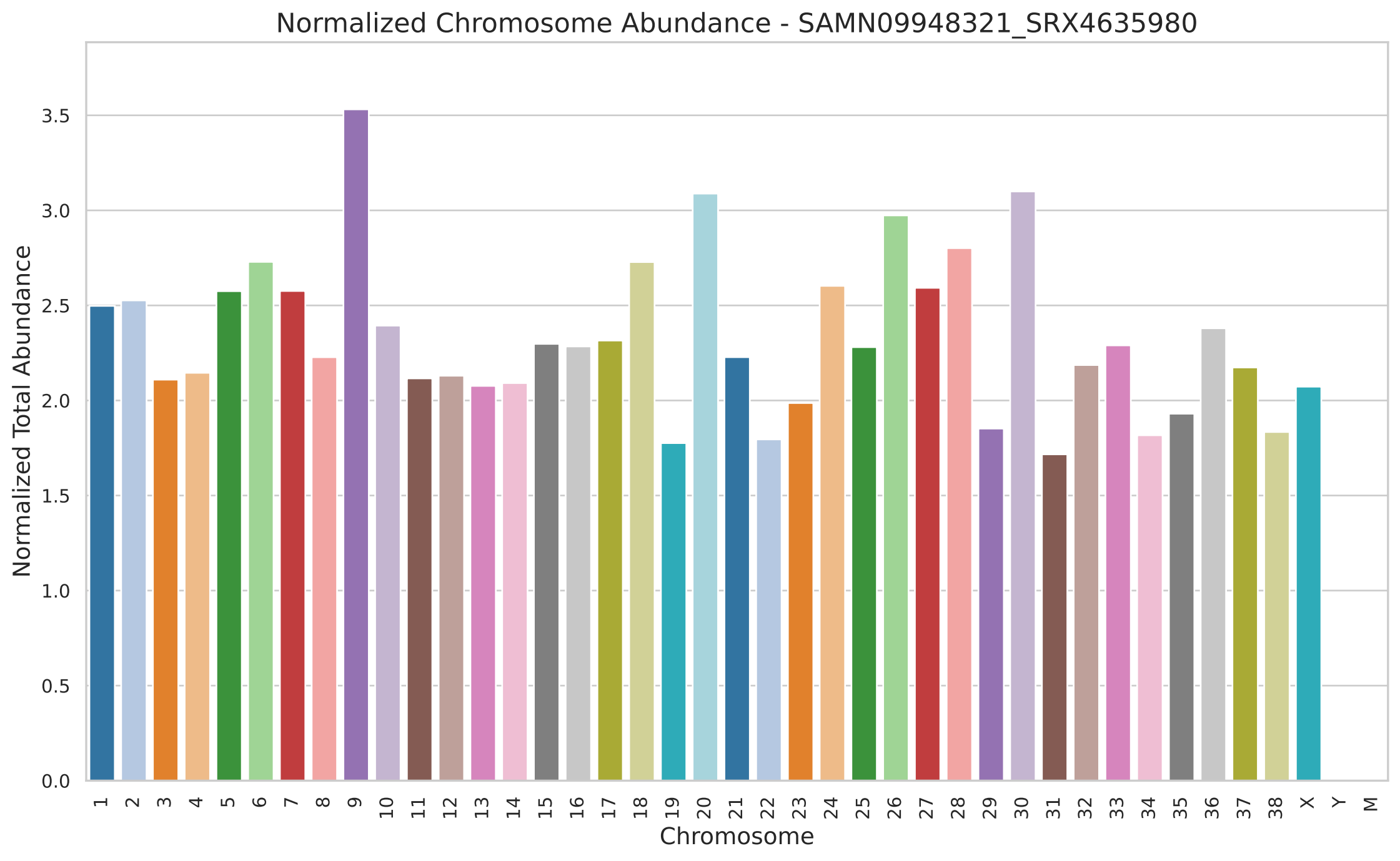

Normalized Chromosome Abundance - SAMN09949280_SRX4635964
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

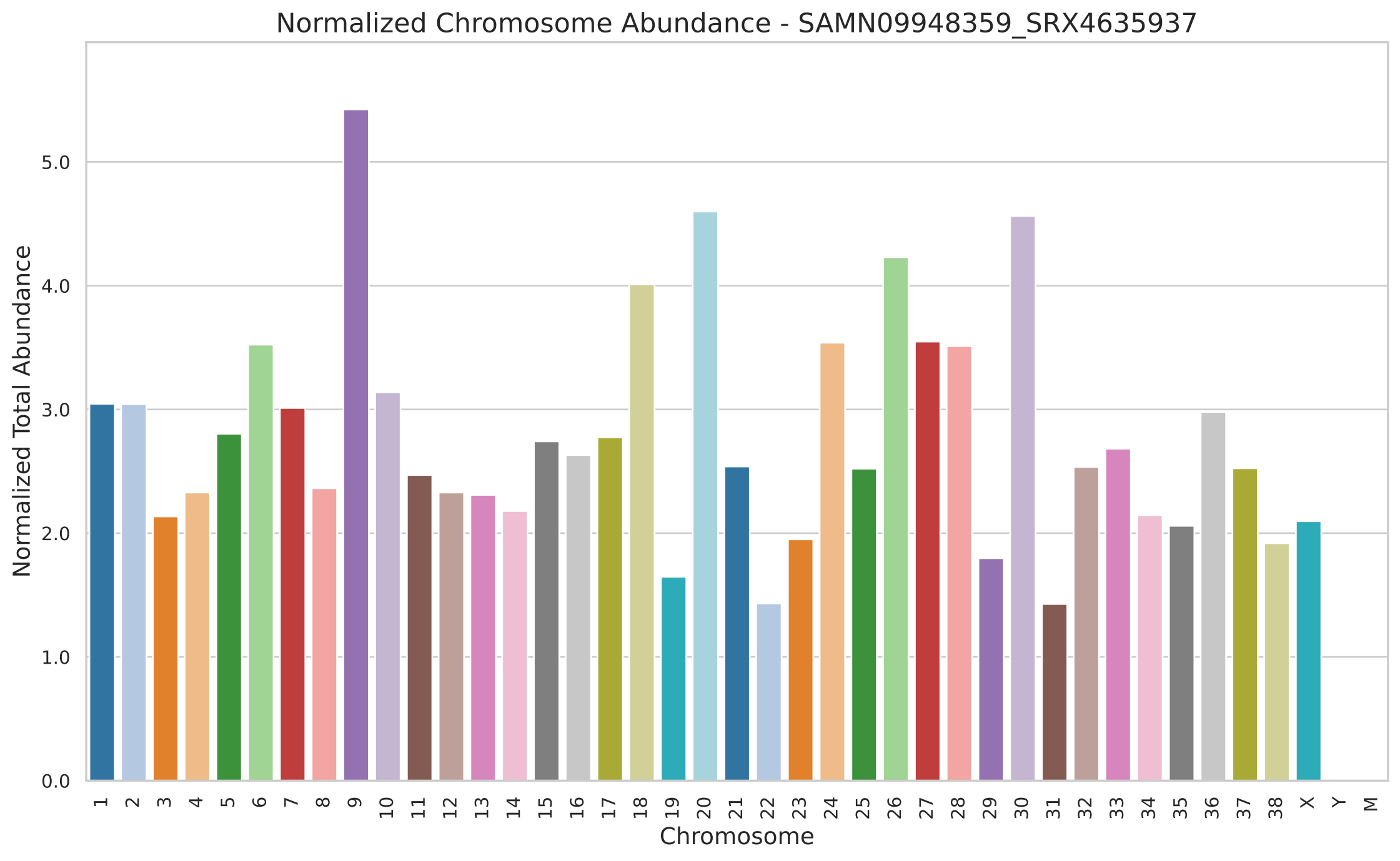

Normalized Chromosome Abundance - SAMN09949300_SRX4635951
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

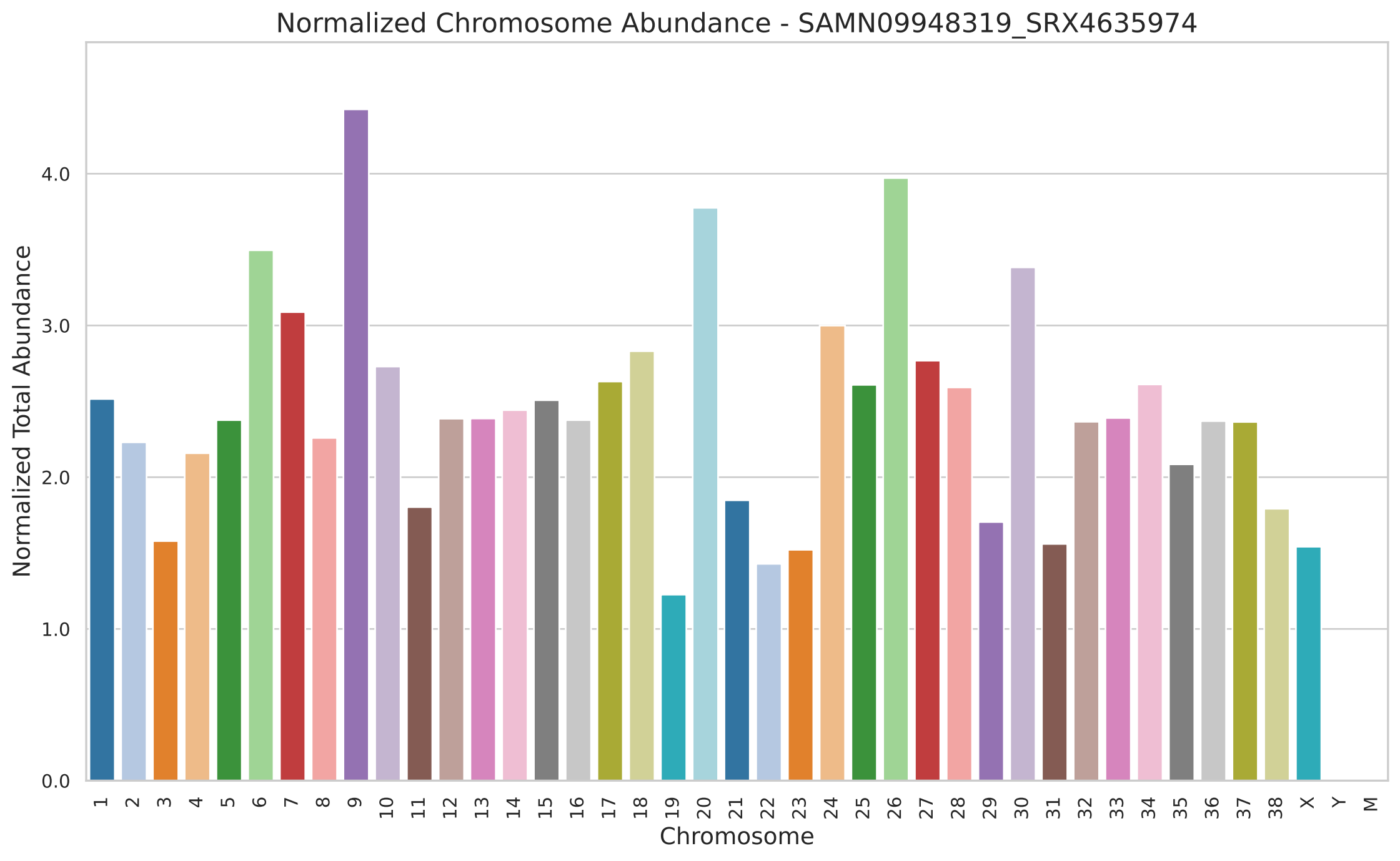

Normalized Chromosome Abundance - SAMN09948212_SRX4635954
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

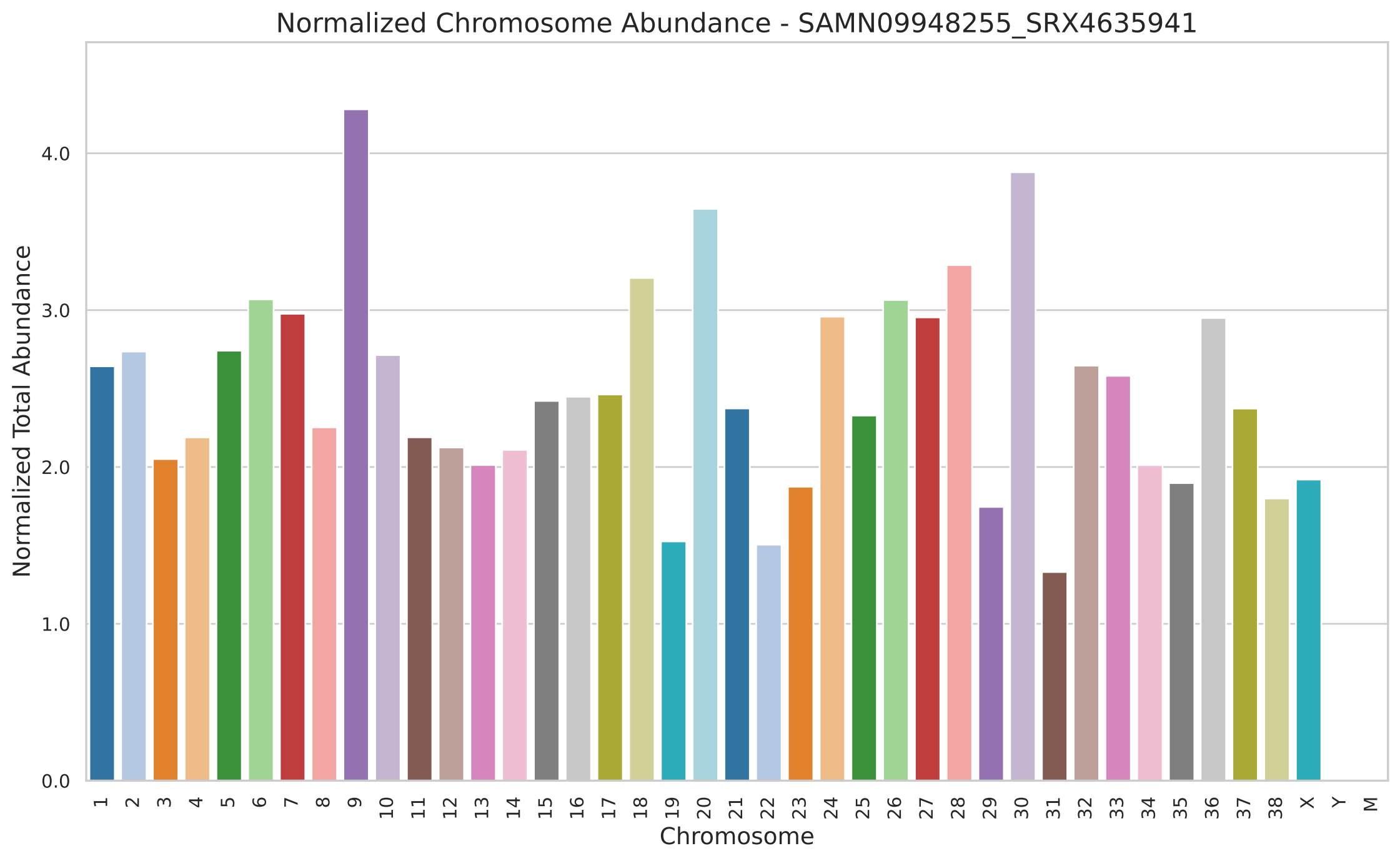

Normalized Chromosome Abundance - SAMN09949305_SRX4635956
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

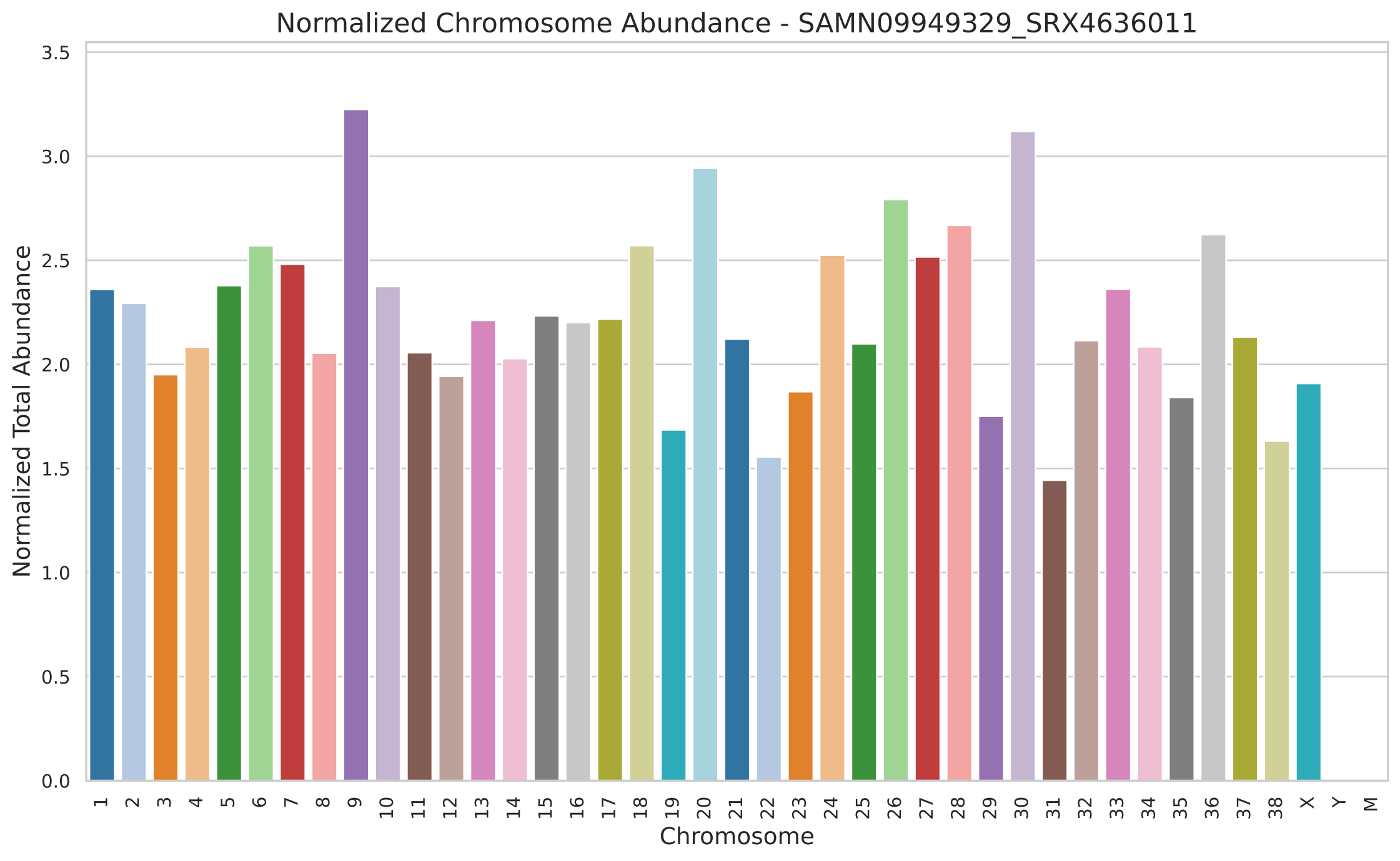

Normalized Chromosome Abundance - SAMN09948343_SRX4635934
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

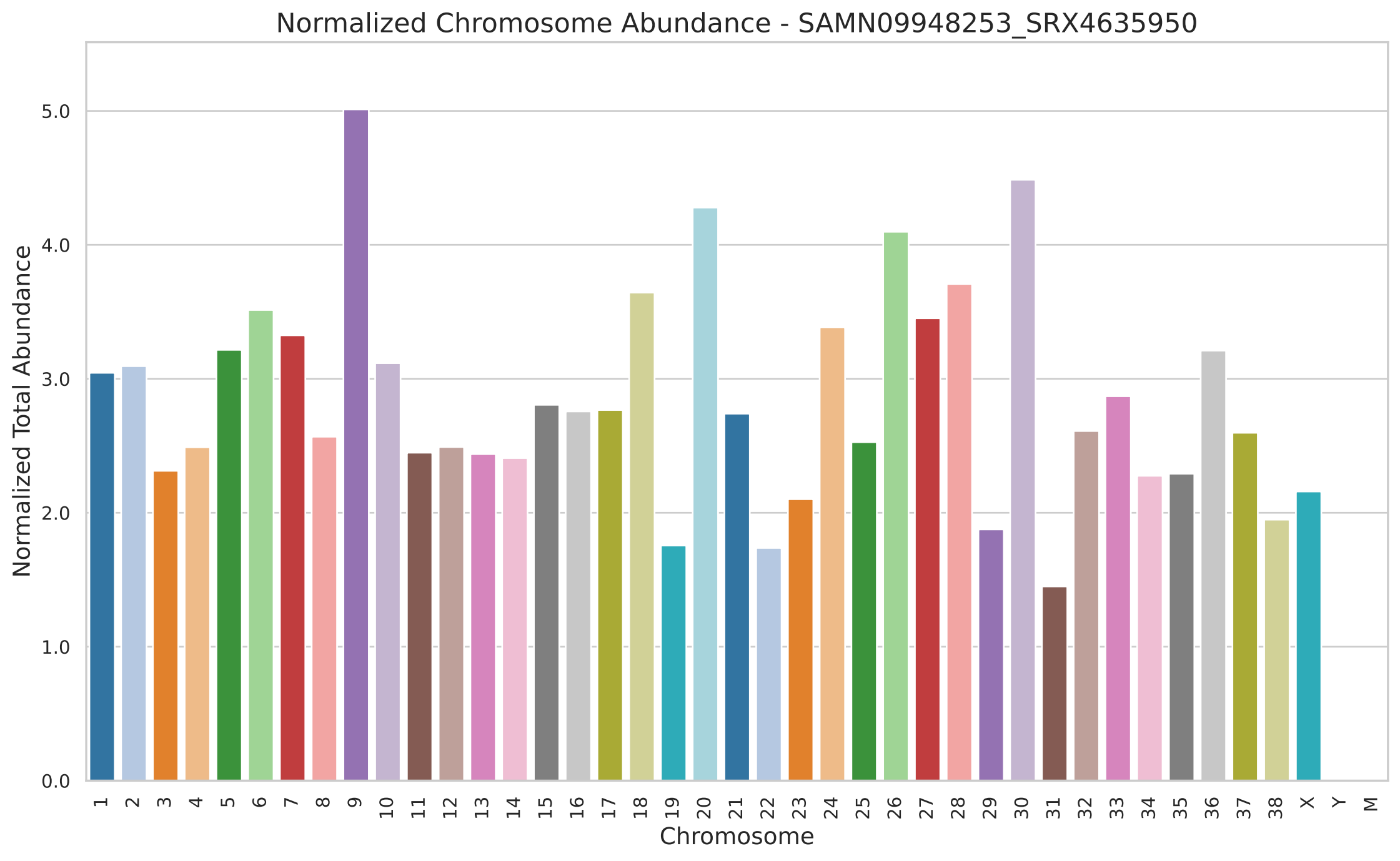

Normalized Chromosome Abundance - SAMN09948321_SRX4635980
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

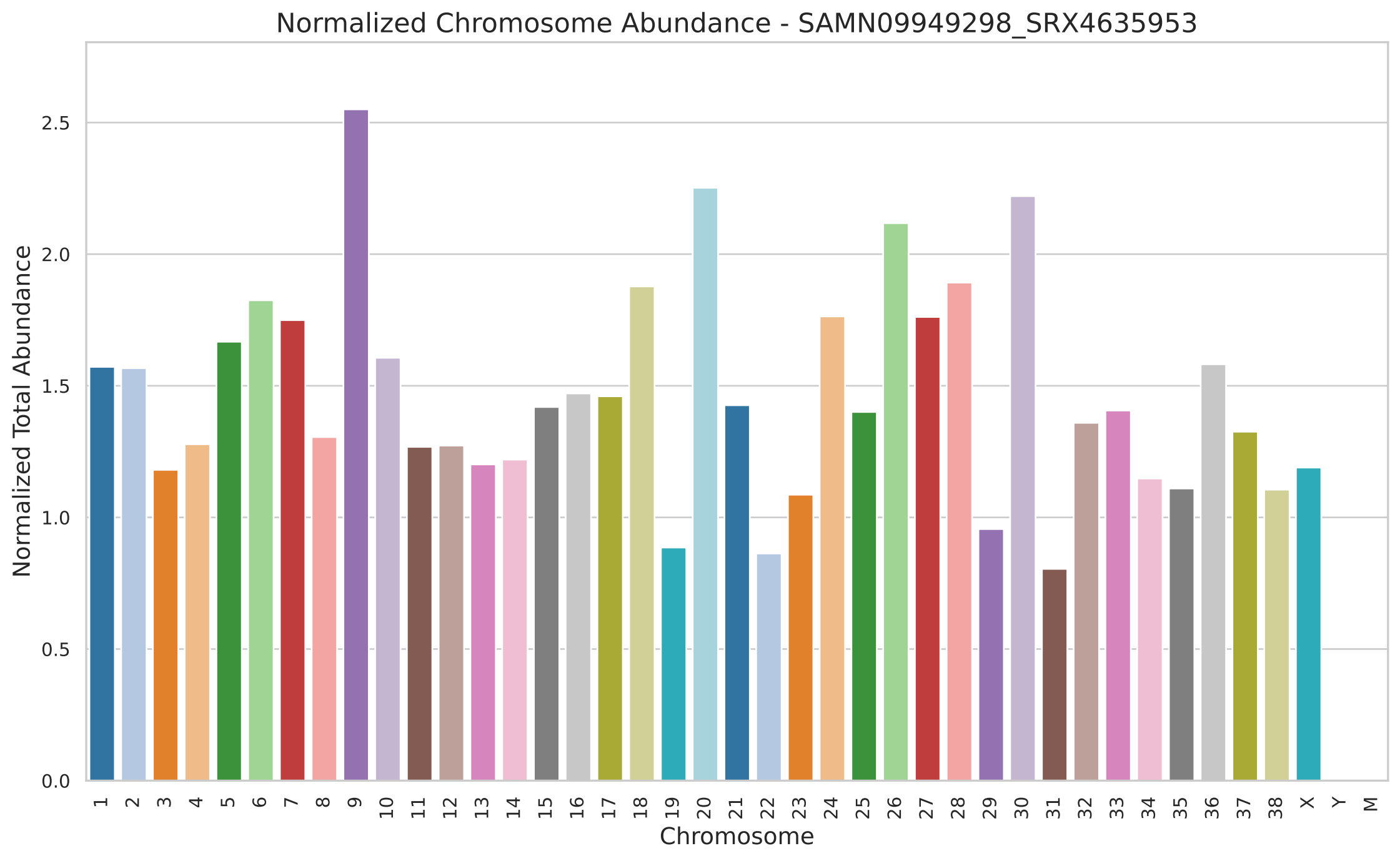

Normalized Chromosome Abundance - SAMN09948359_SRX4635937
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

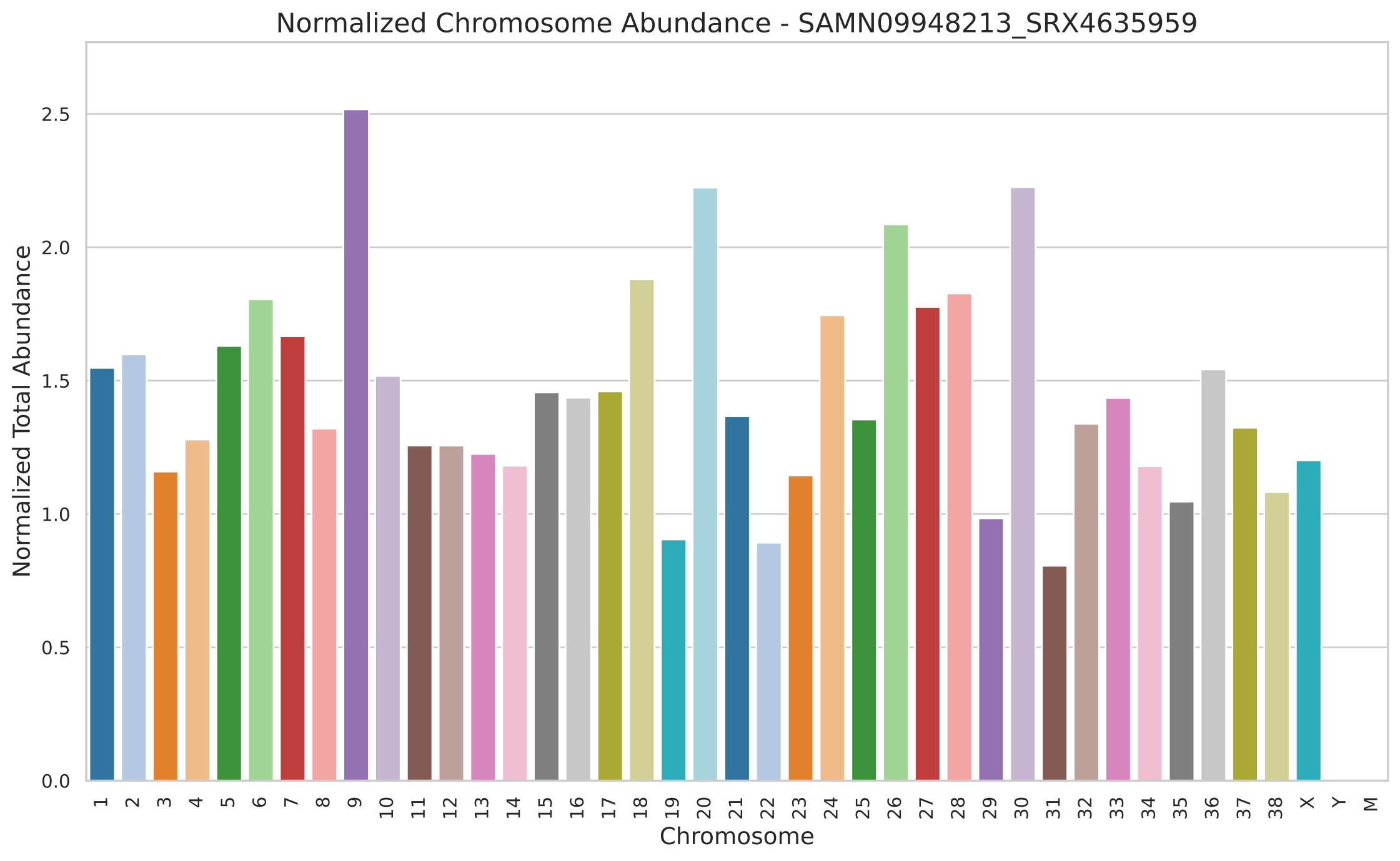

Normalized Chromosome Abundance - SAMN09948319_SRX4635974
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

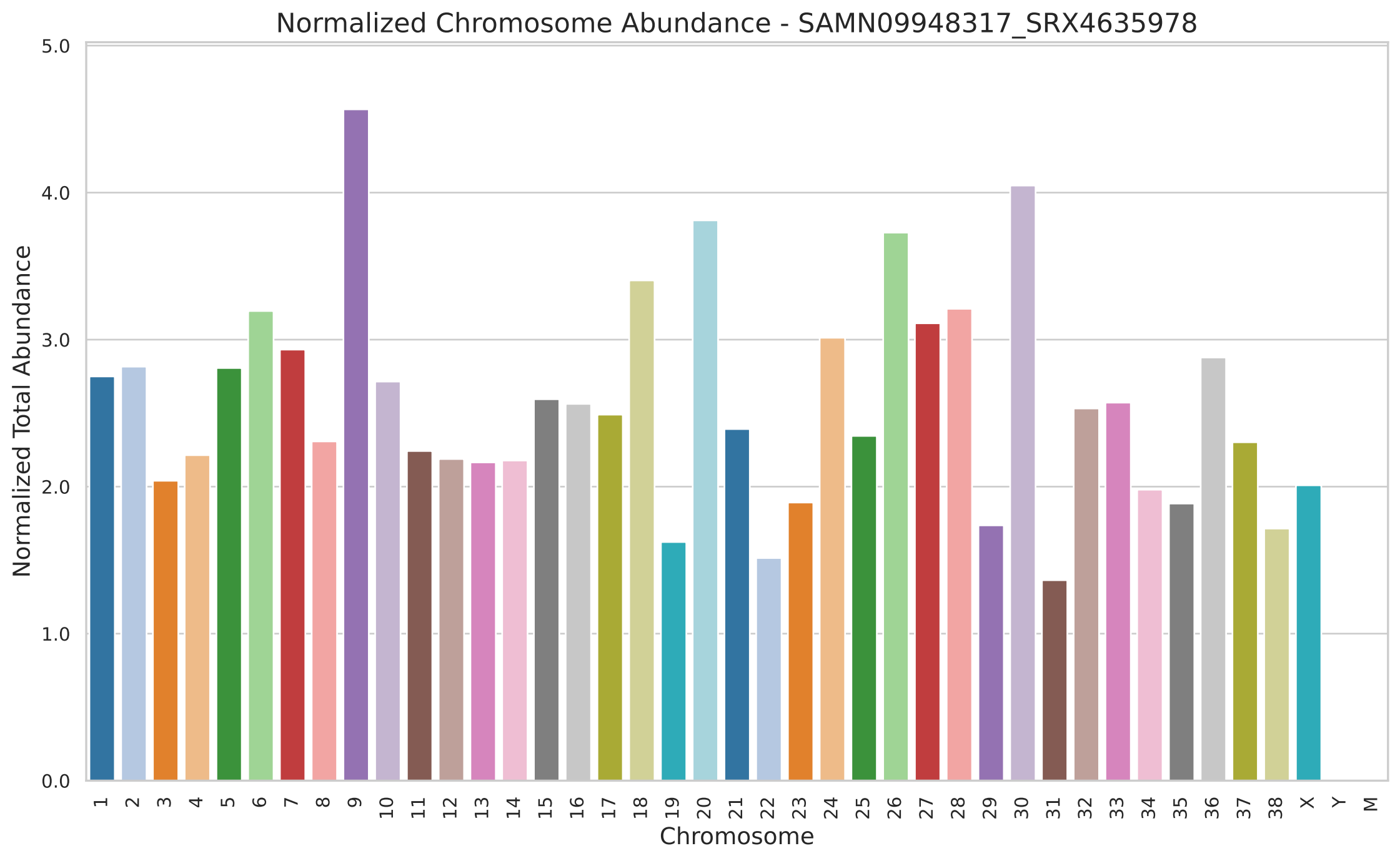

Normalized Chromosome Abundance - SAMN09948255_SRX4635941
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

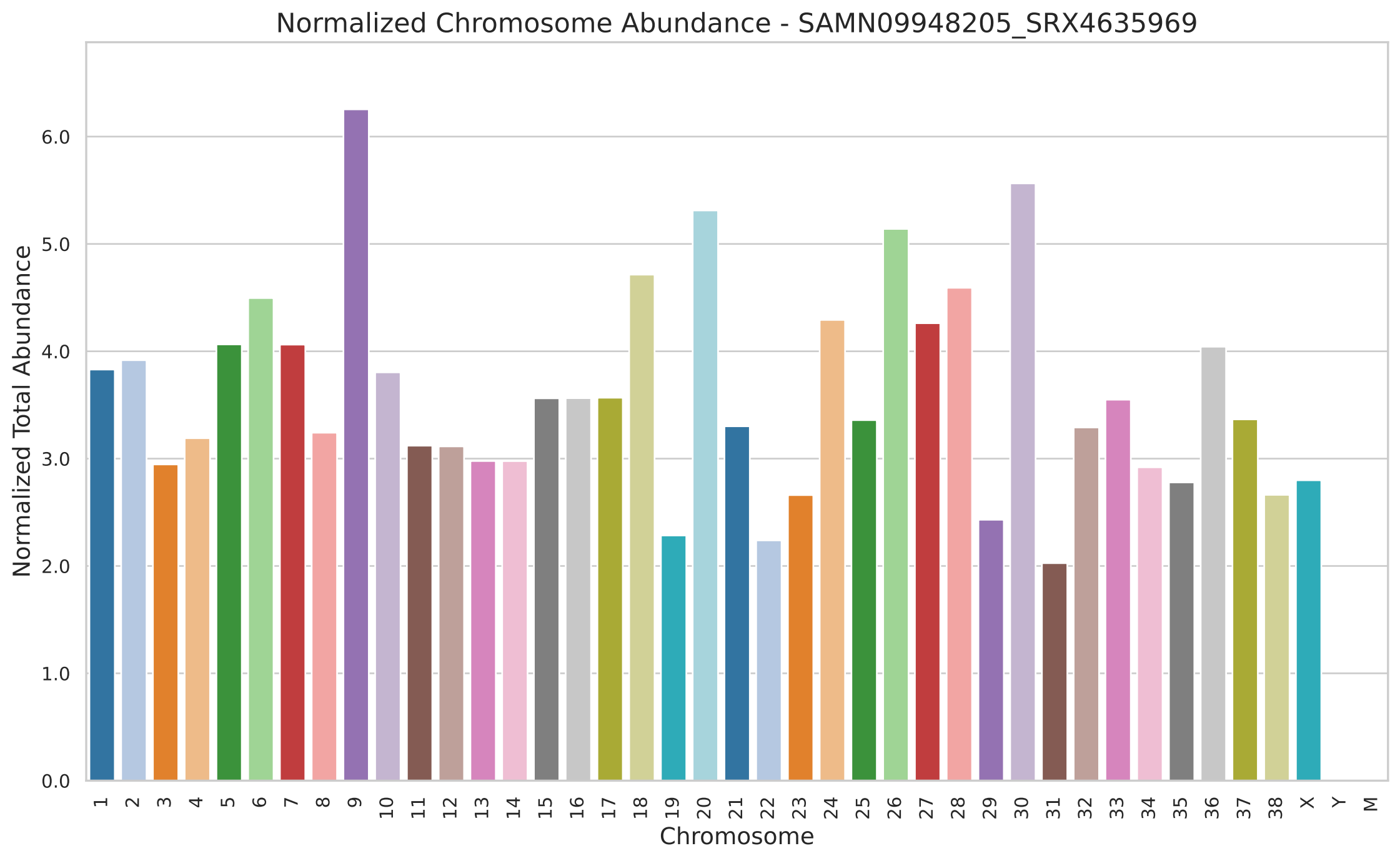

Normalized Chromosome Abundance - SAMN09949329_SRX4636011
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

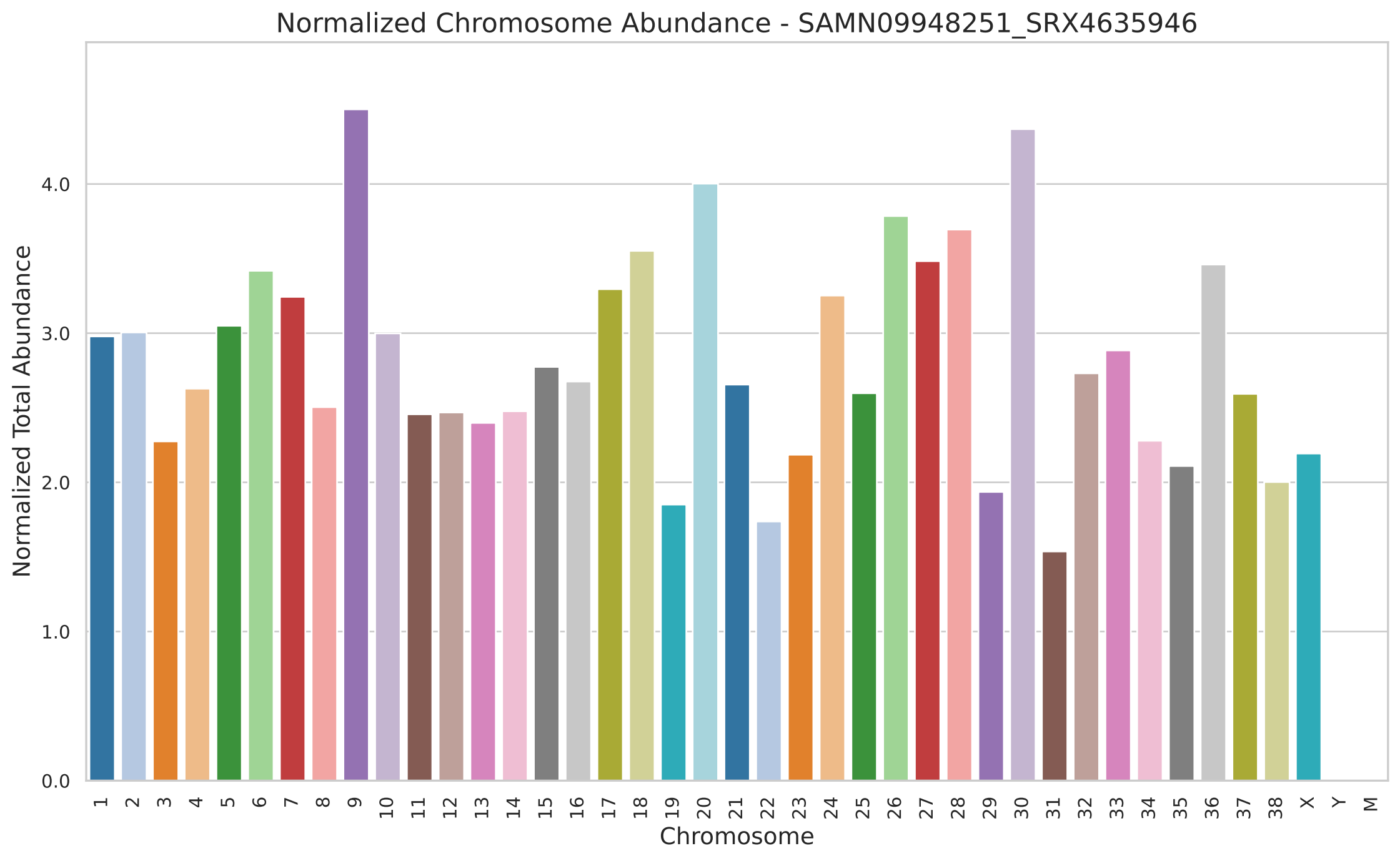

Normalized Chromosome Abundance - SAMN09948253_SRX4635950
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

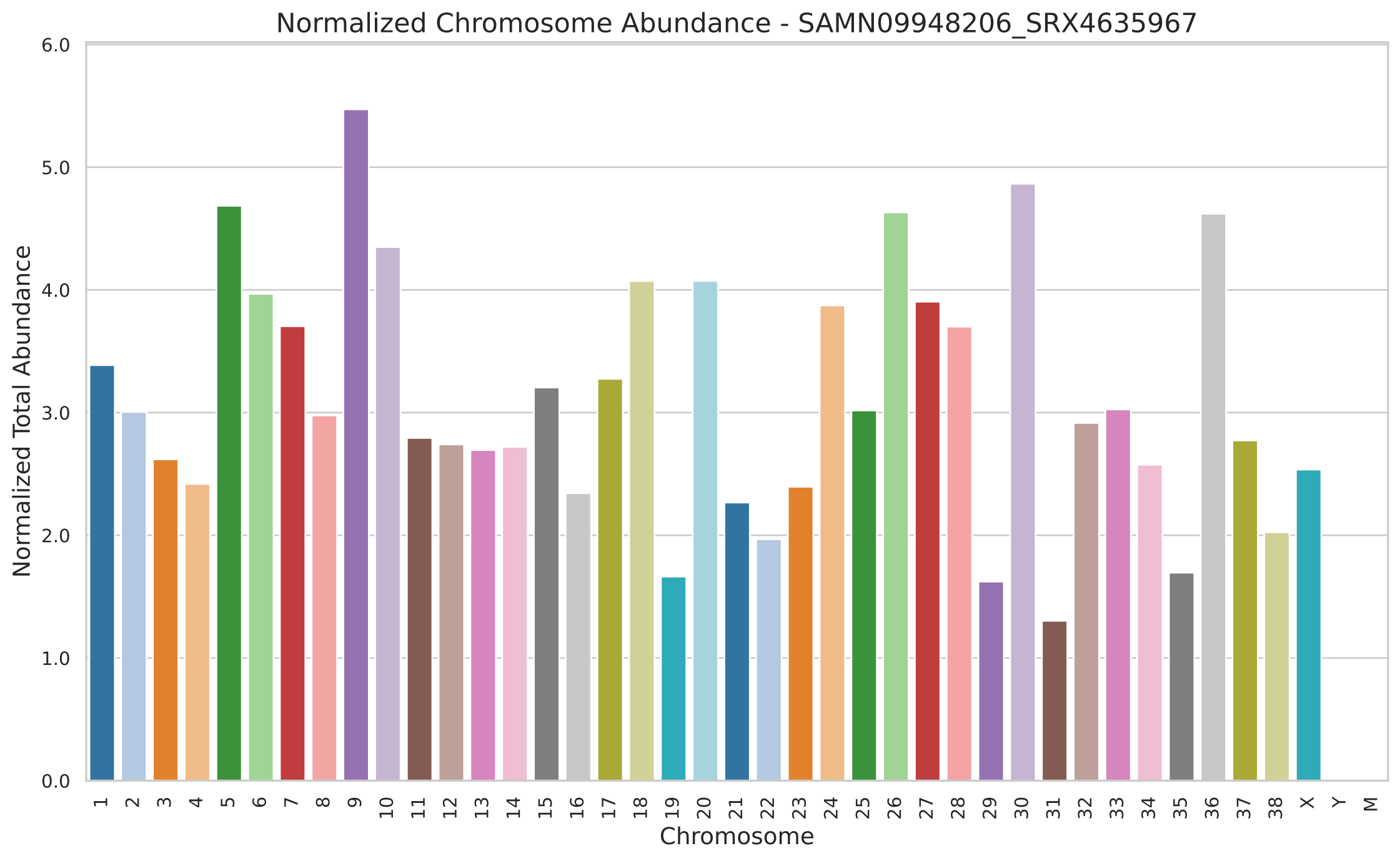

Normalized Chromosome Abundance - SAMN09949298_SRX4635953
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

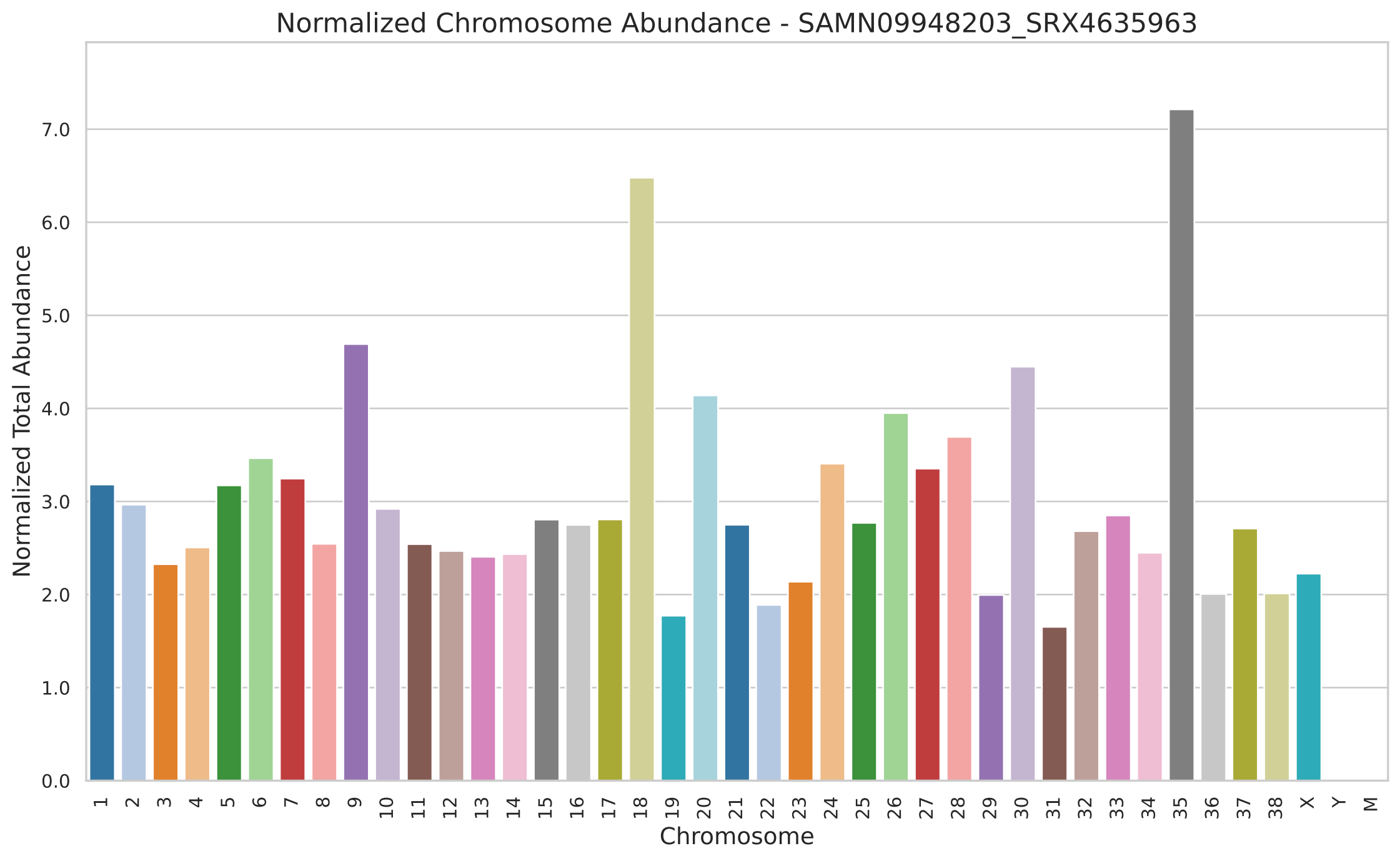

Normalized Chromosome Abundance - SAMN09948213_SRX4635959
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

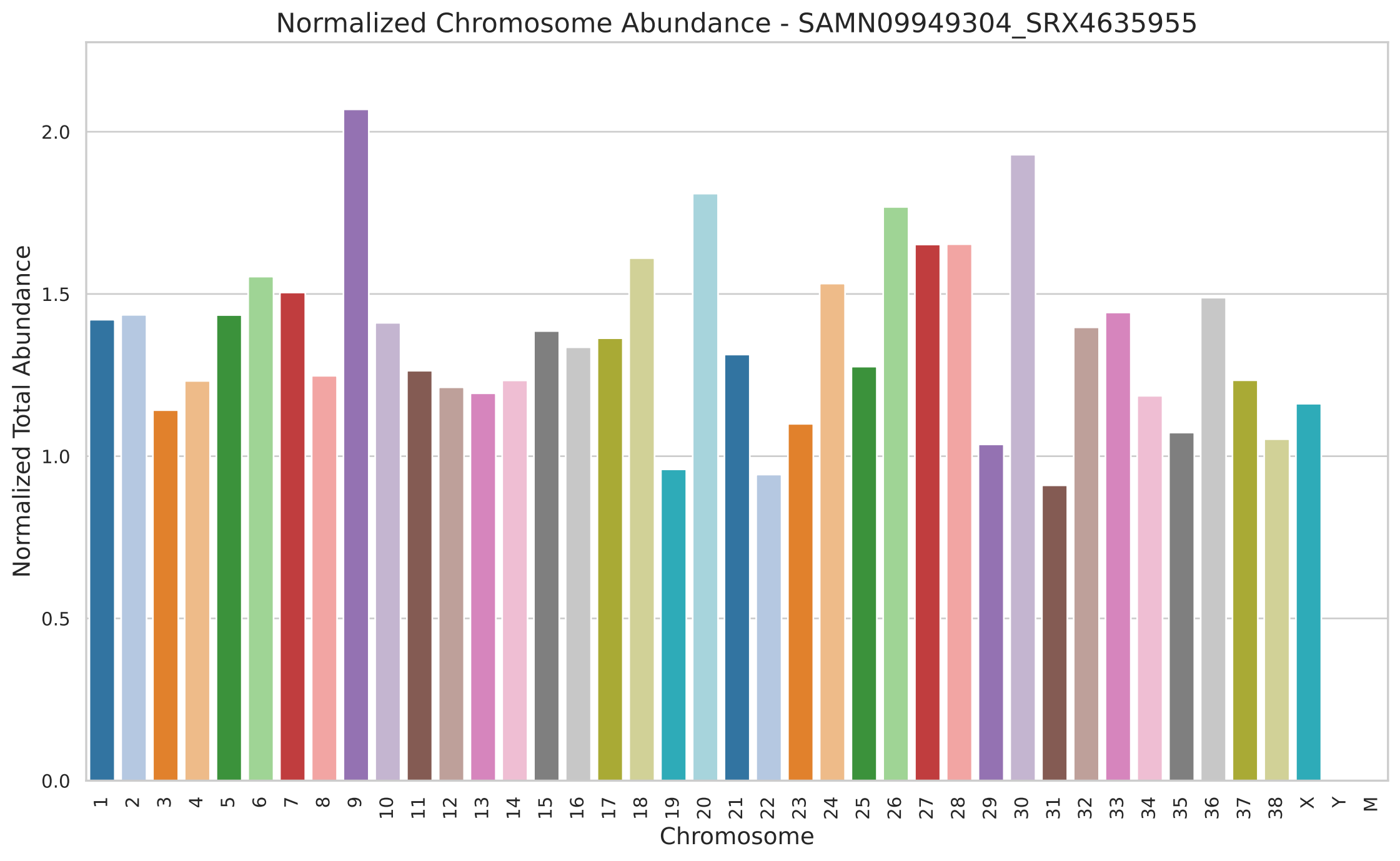

Normalized Chromosome Abundance - SAMN09948317_SRX4635978
Normalized Total Abundance
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

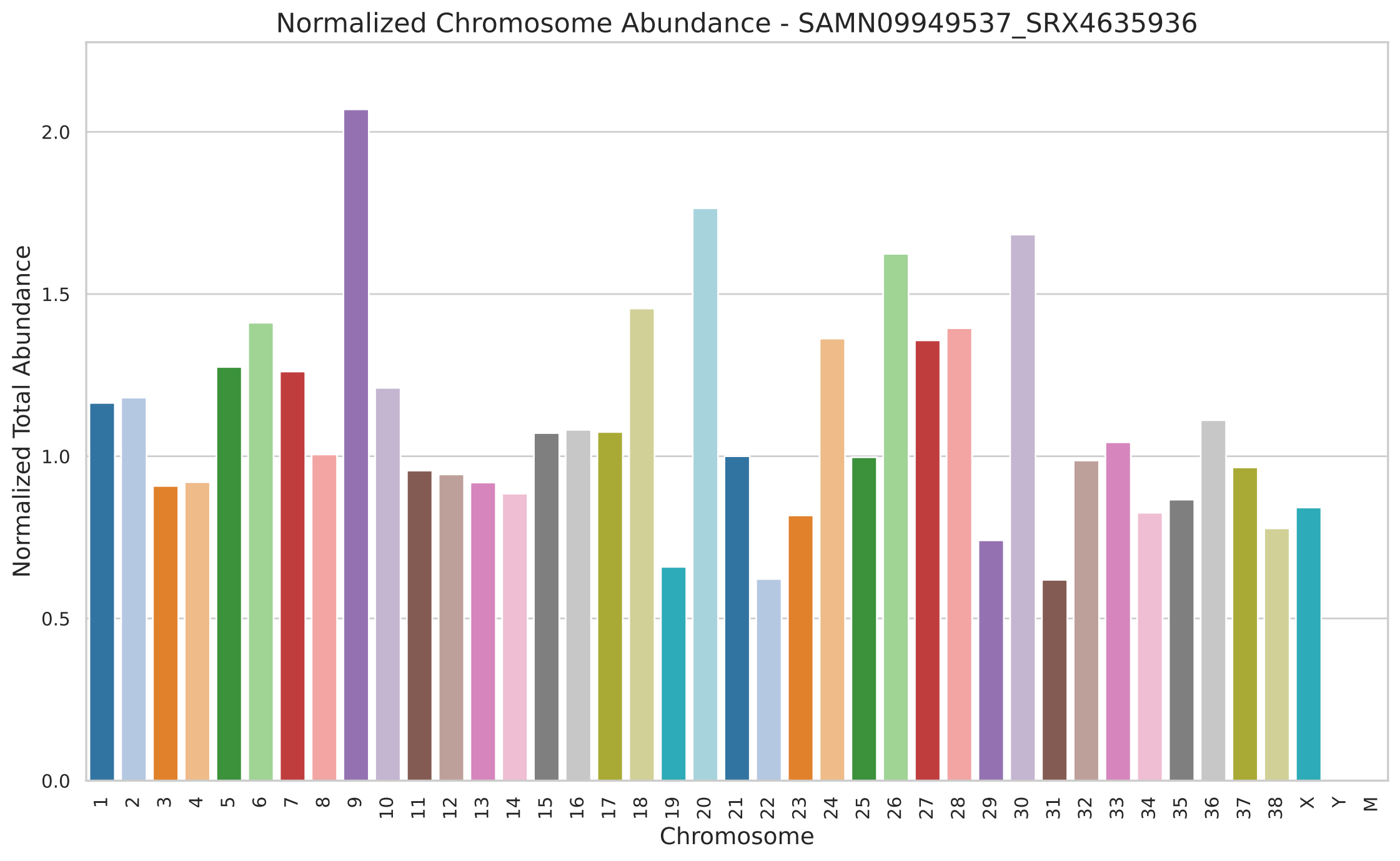

Normalized Chromosome Abundance - SAMN09948205_SRX4635969
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

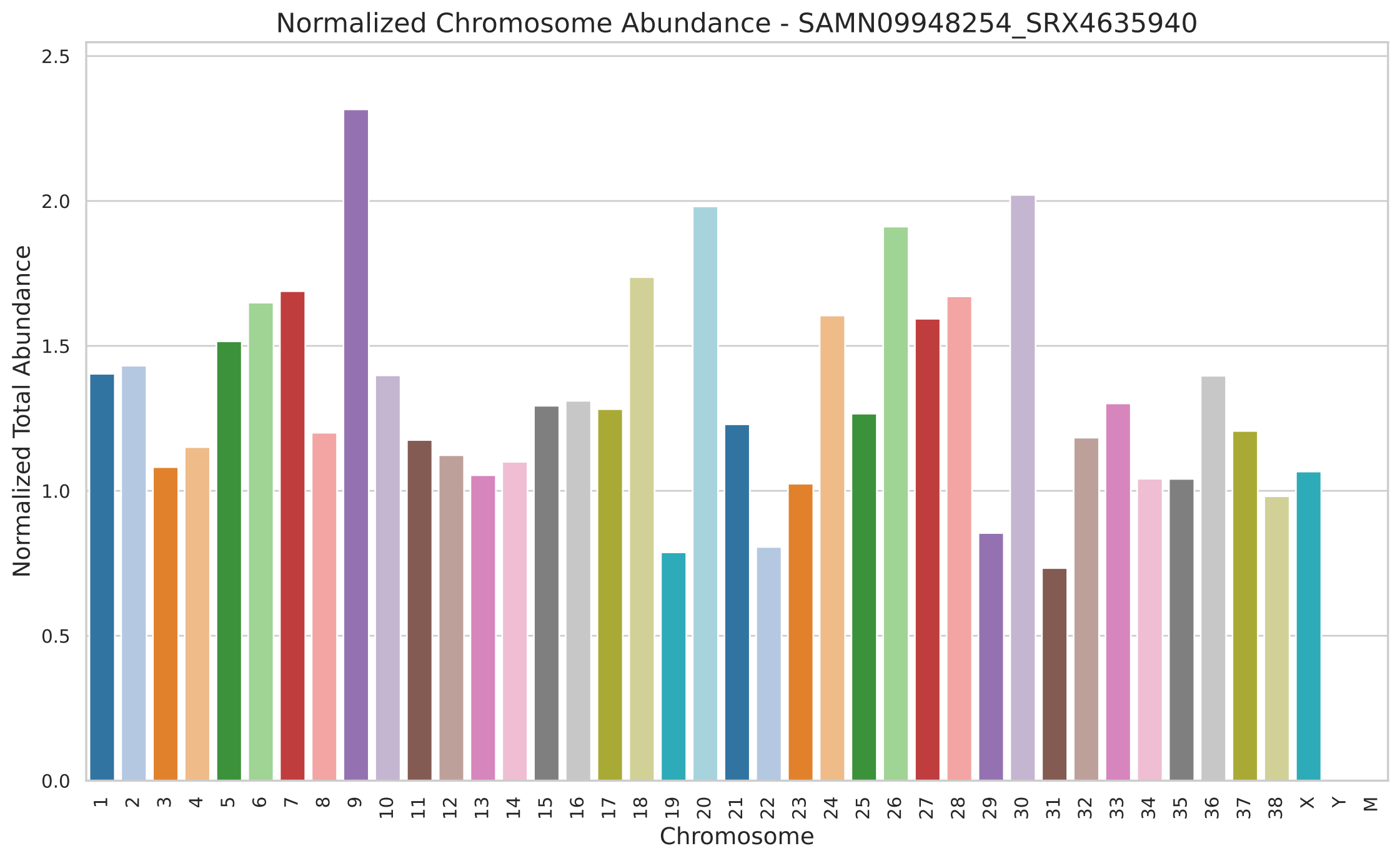

Normalized Chromosome Abundance - SAMN09948251_SRX4635946
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

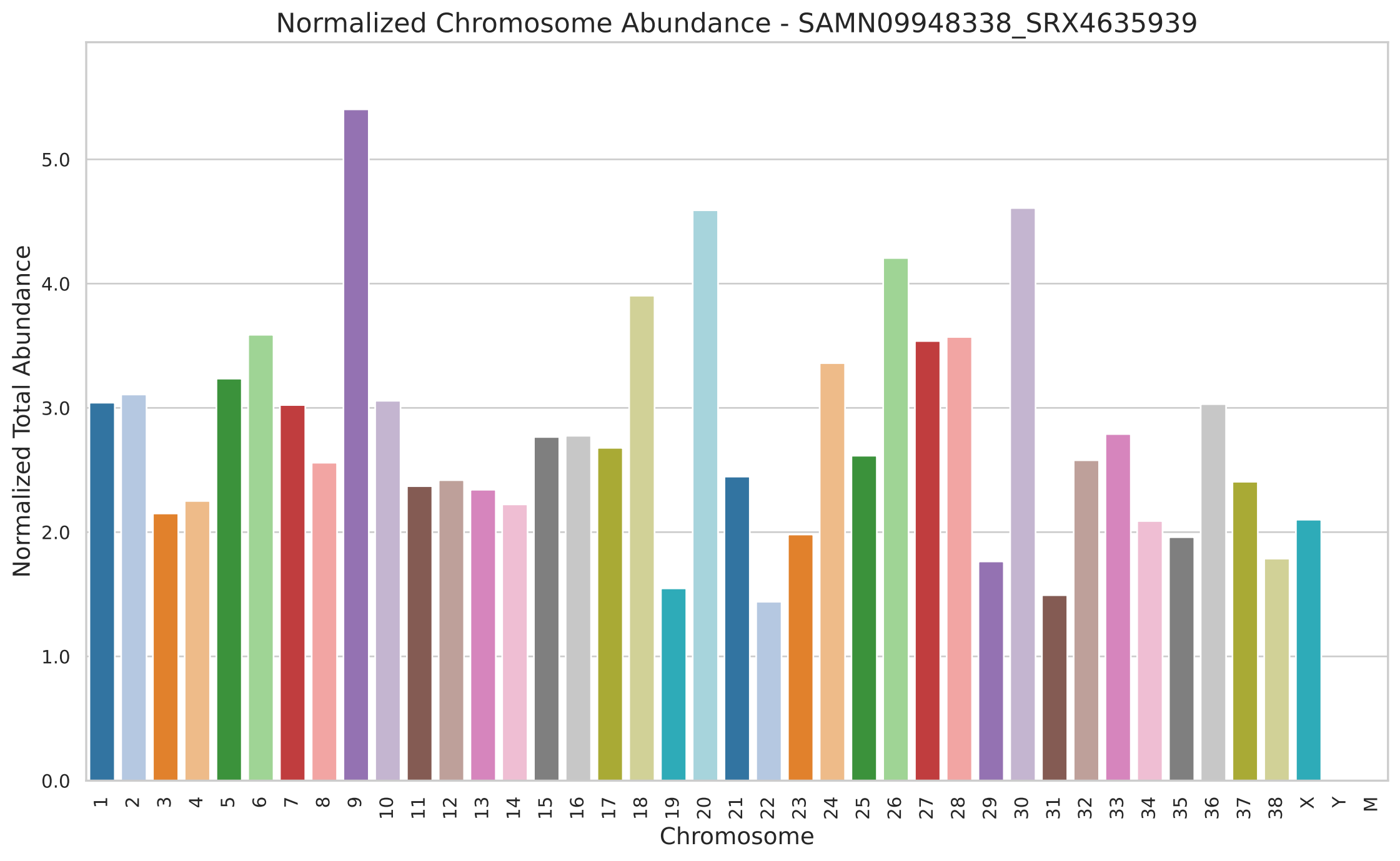

Normalized Chromosome Abundance - SAMN09948206_SRX4635967
Normalized Total Abundance
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

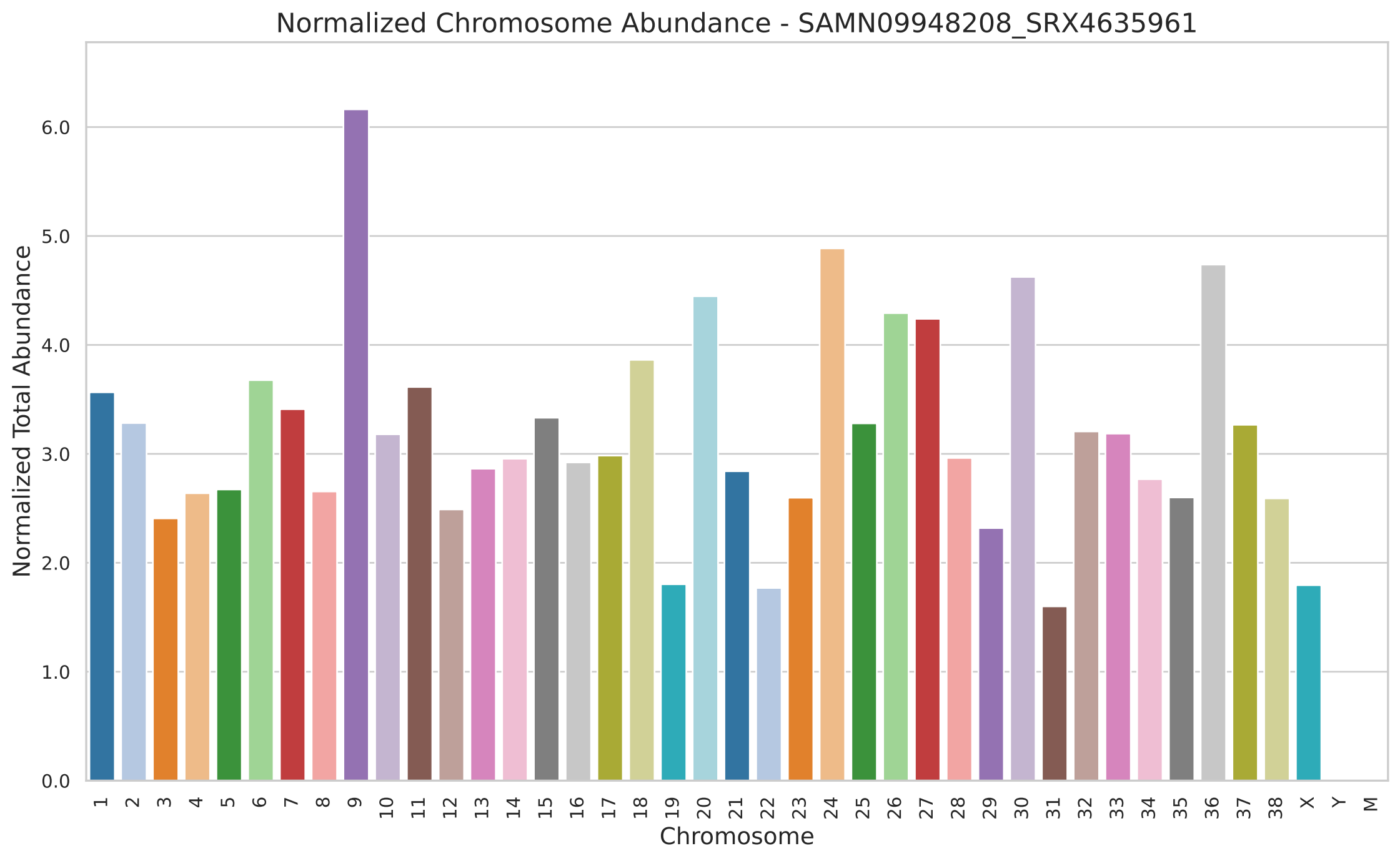

Normalized Chromosome Abundance - SAMN09948203_SRX4635963
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

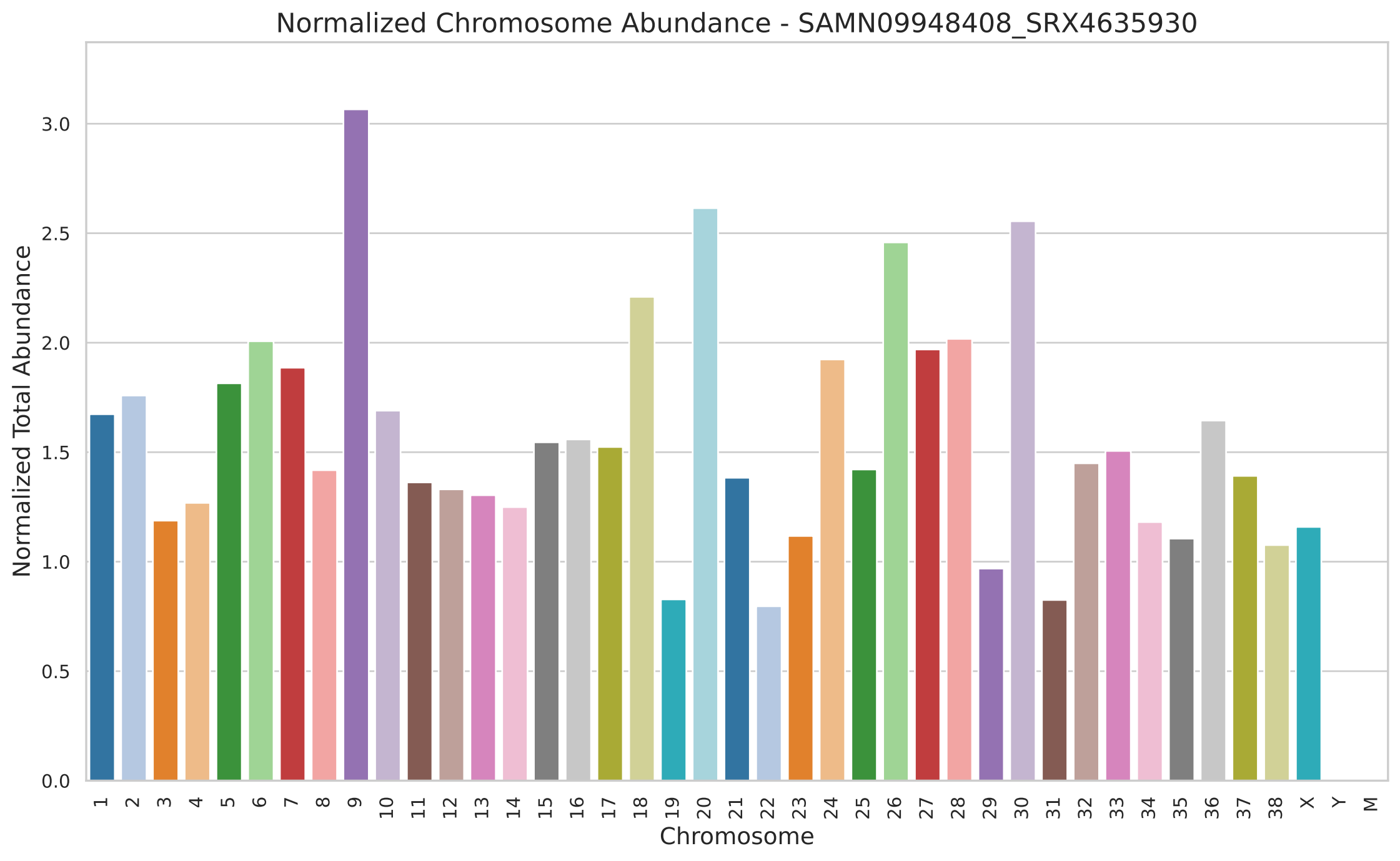

Normalized Chromosome Abundance - SAMN09949304_SRX4635955
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

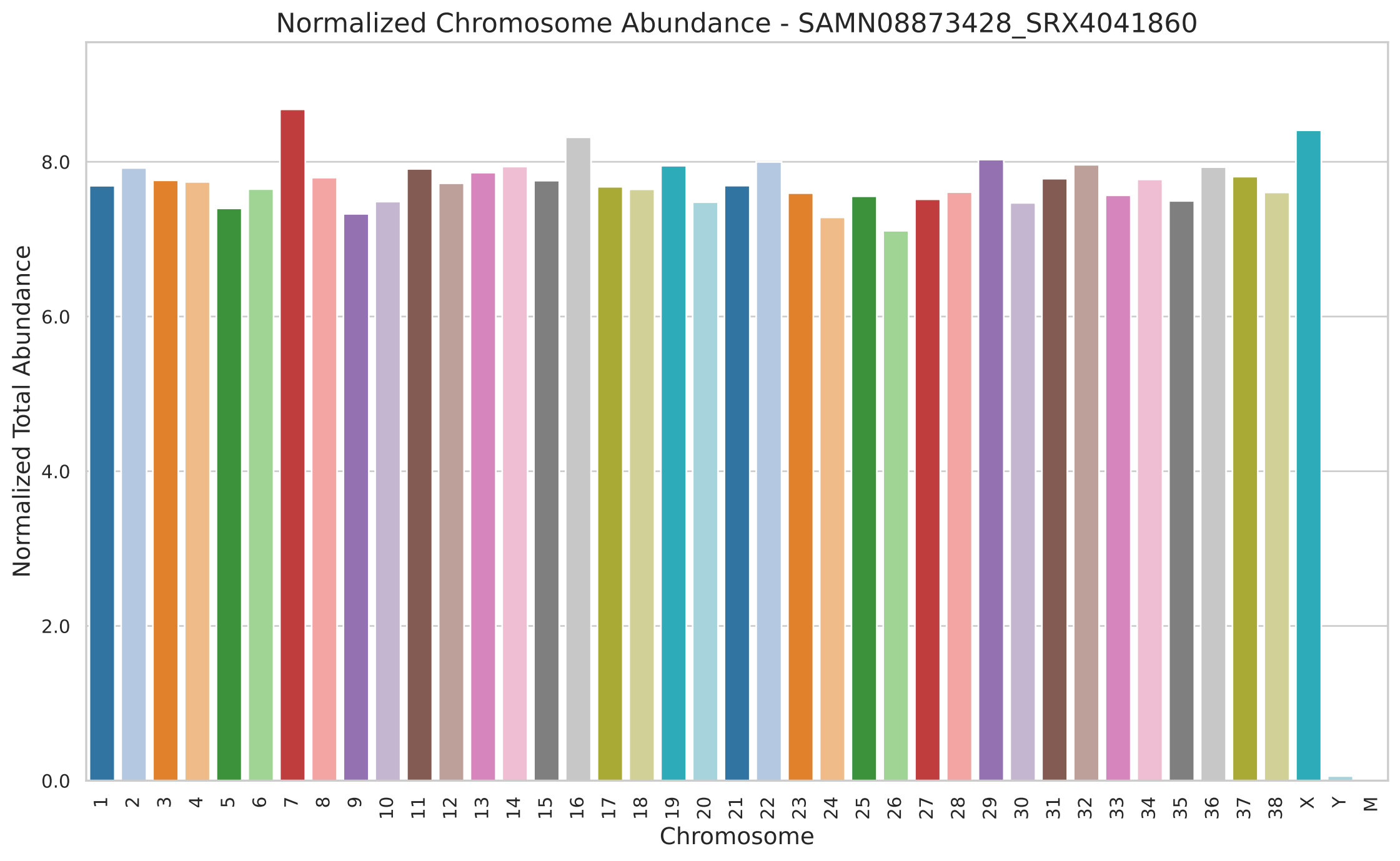

Normalized Chromosome Abundance - SAMN09949537_SRX4635936
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

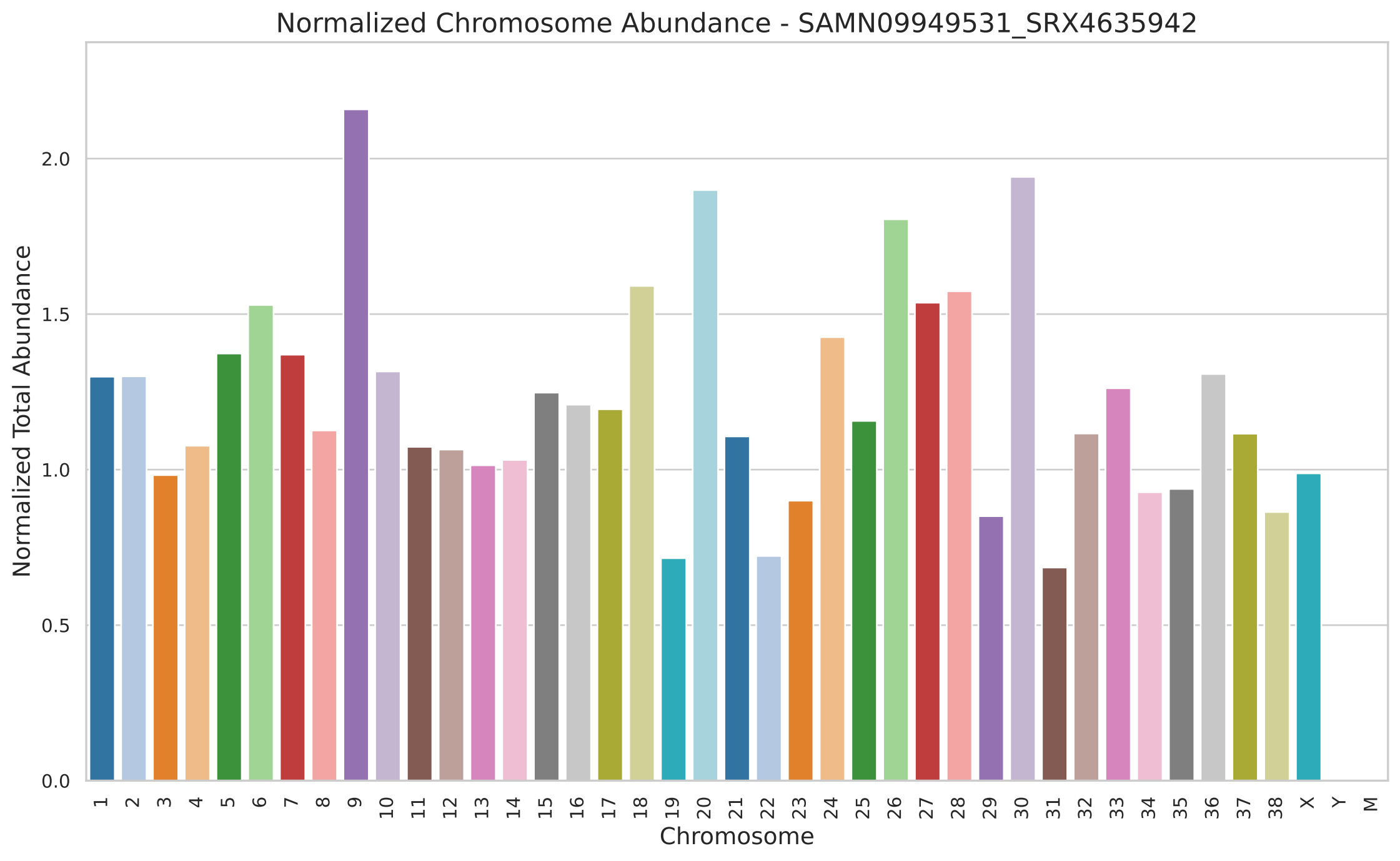

Normalized Chromosome Abundance - SAMN09948254_SRX4635940
Normalized Total Abundance
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

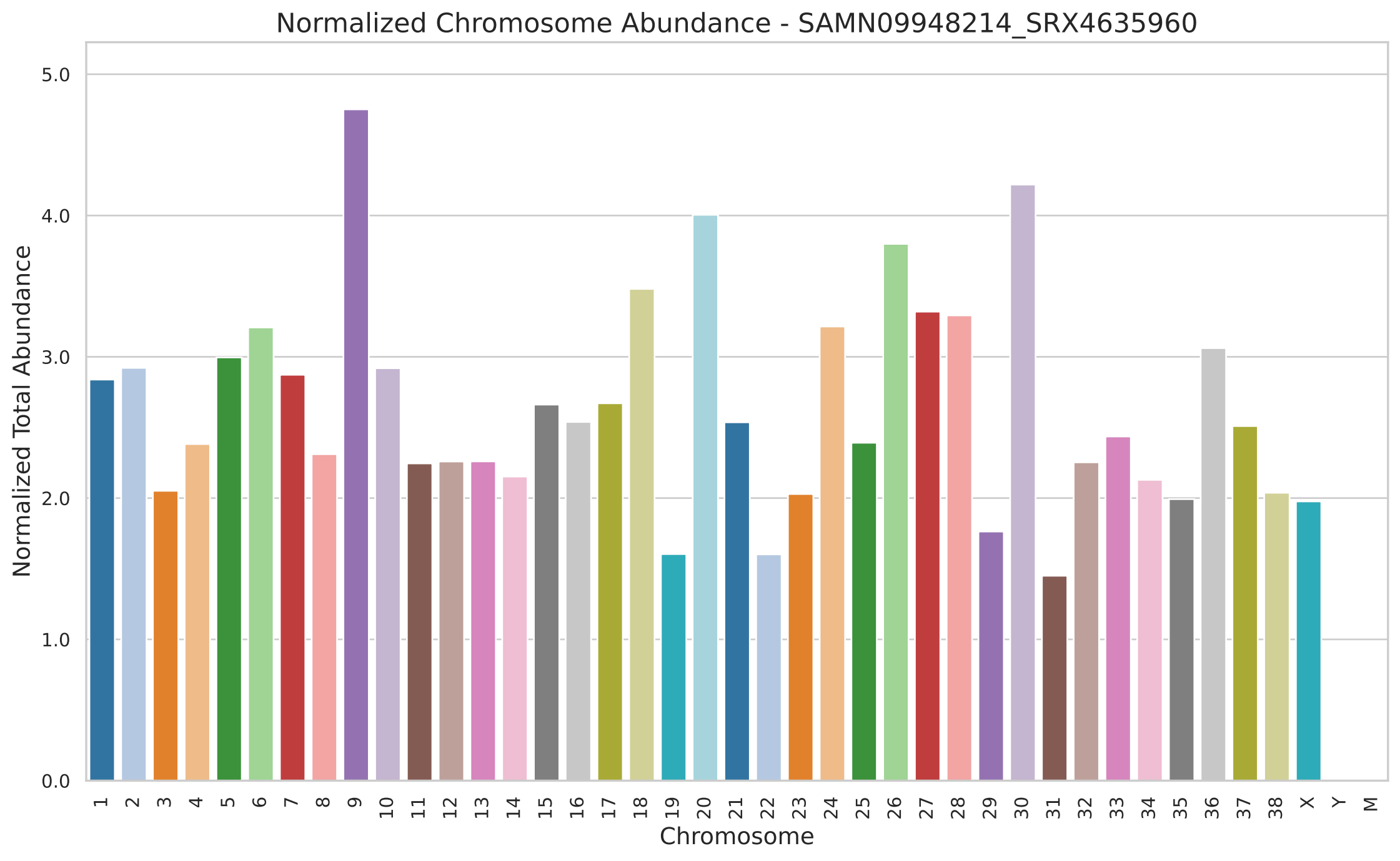

Normalized Chromosome Abundance - SAMN09948338_SRX4635939
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

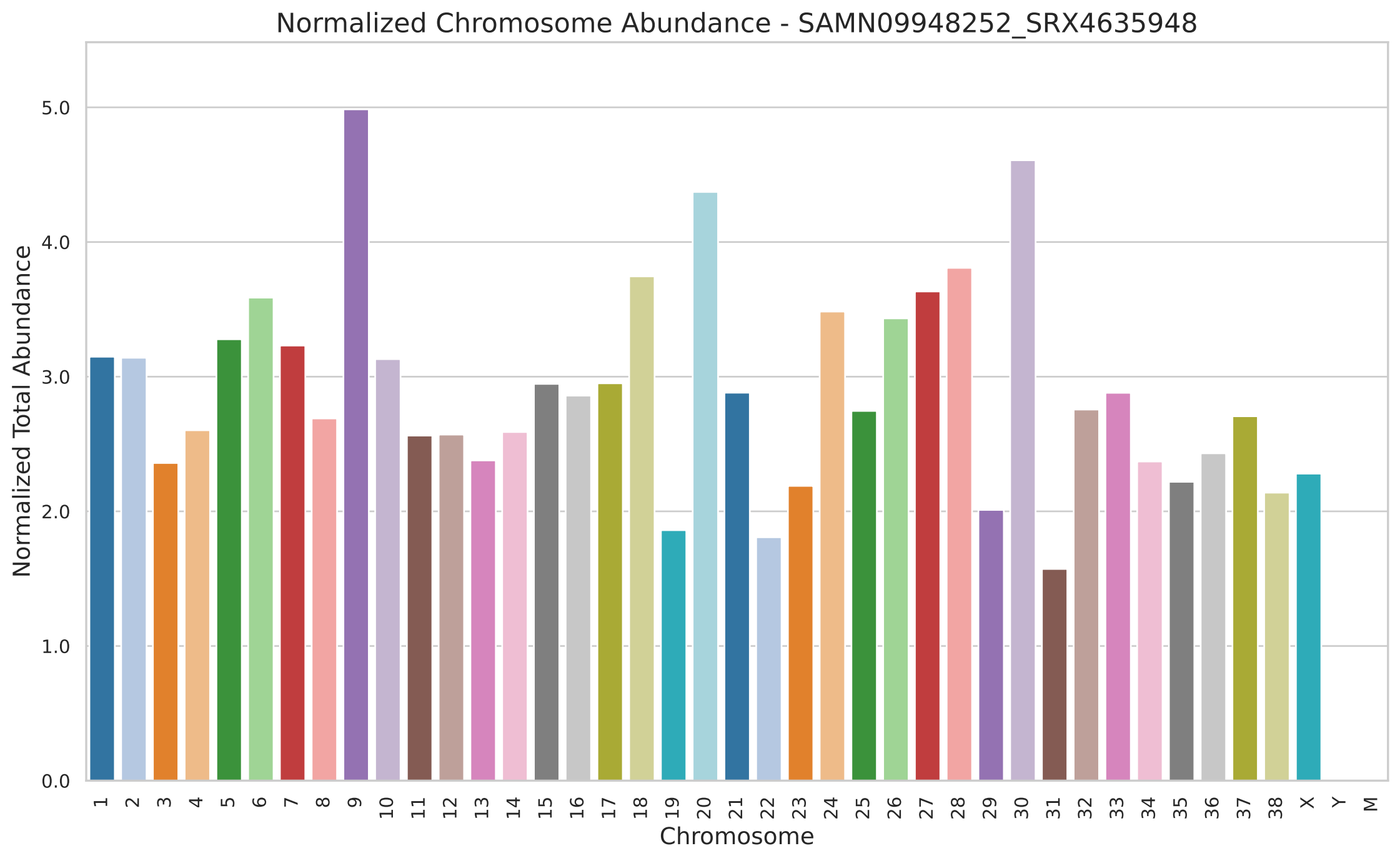

Normalized Chromosome Abundance - SAMN09948208_SRX4635961
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

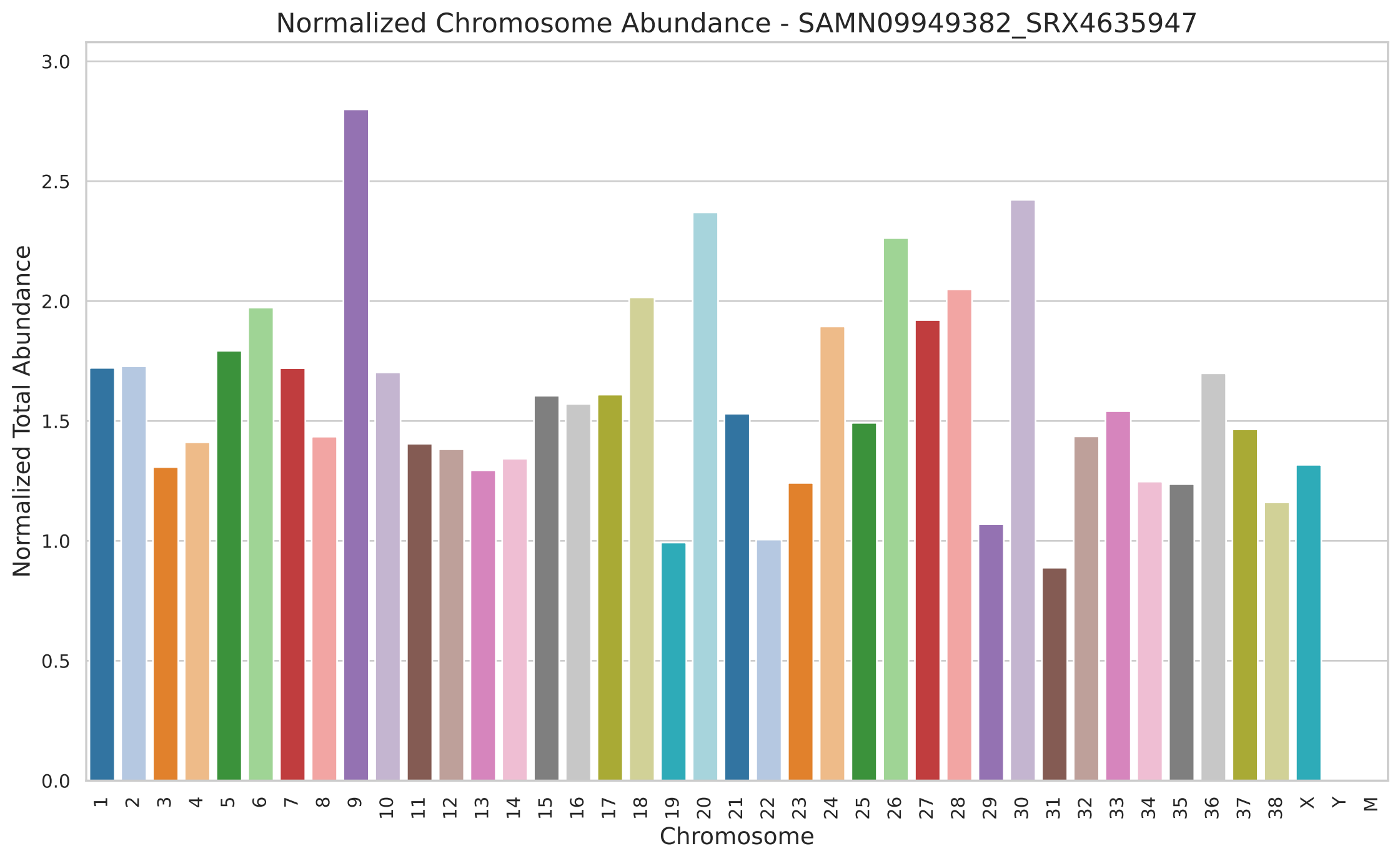

Normalized Chromosome Abundance - SAMN09948408_SRX4635930
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

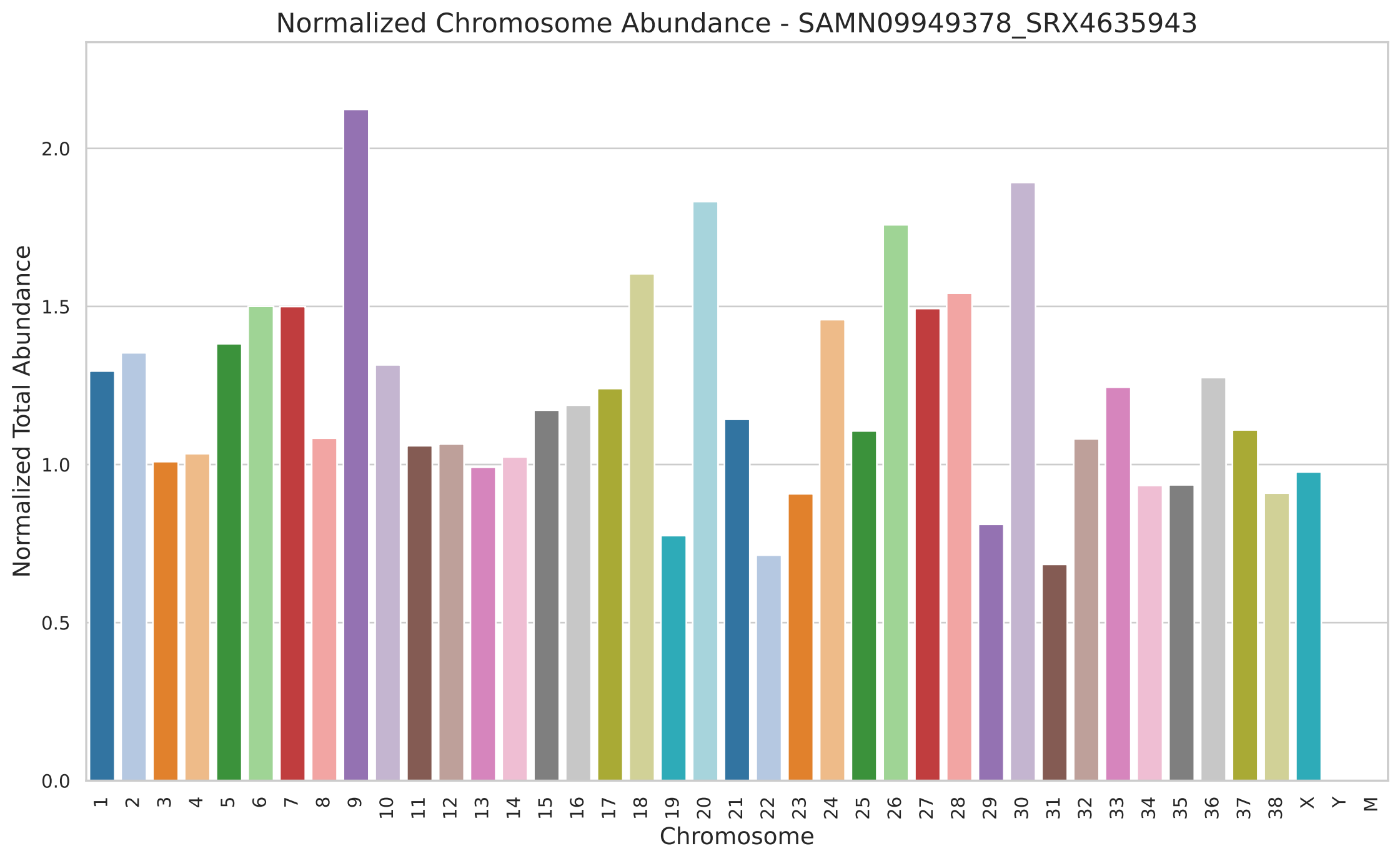

Normalized Chromosome Abundance - SAMN08873428_SRX4041860
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

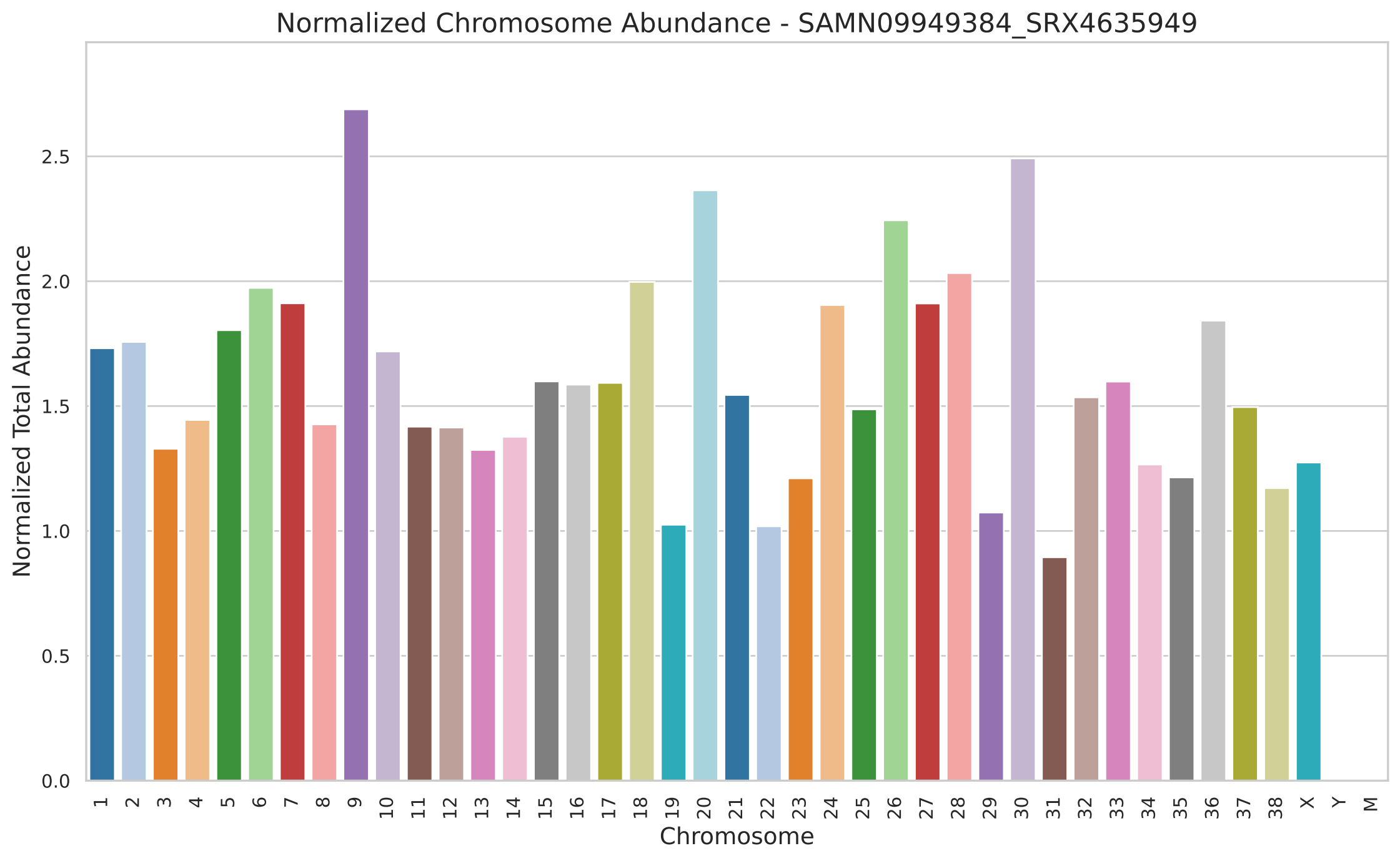

Normalized Chromosome Abundance - SAMN09949531_SRX4635942
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

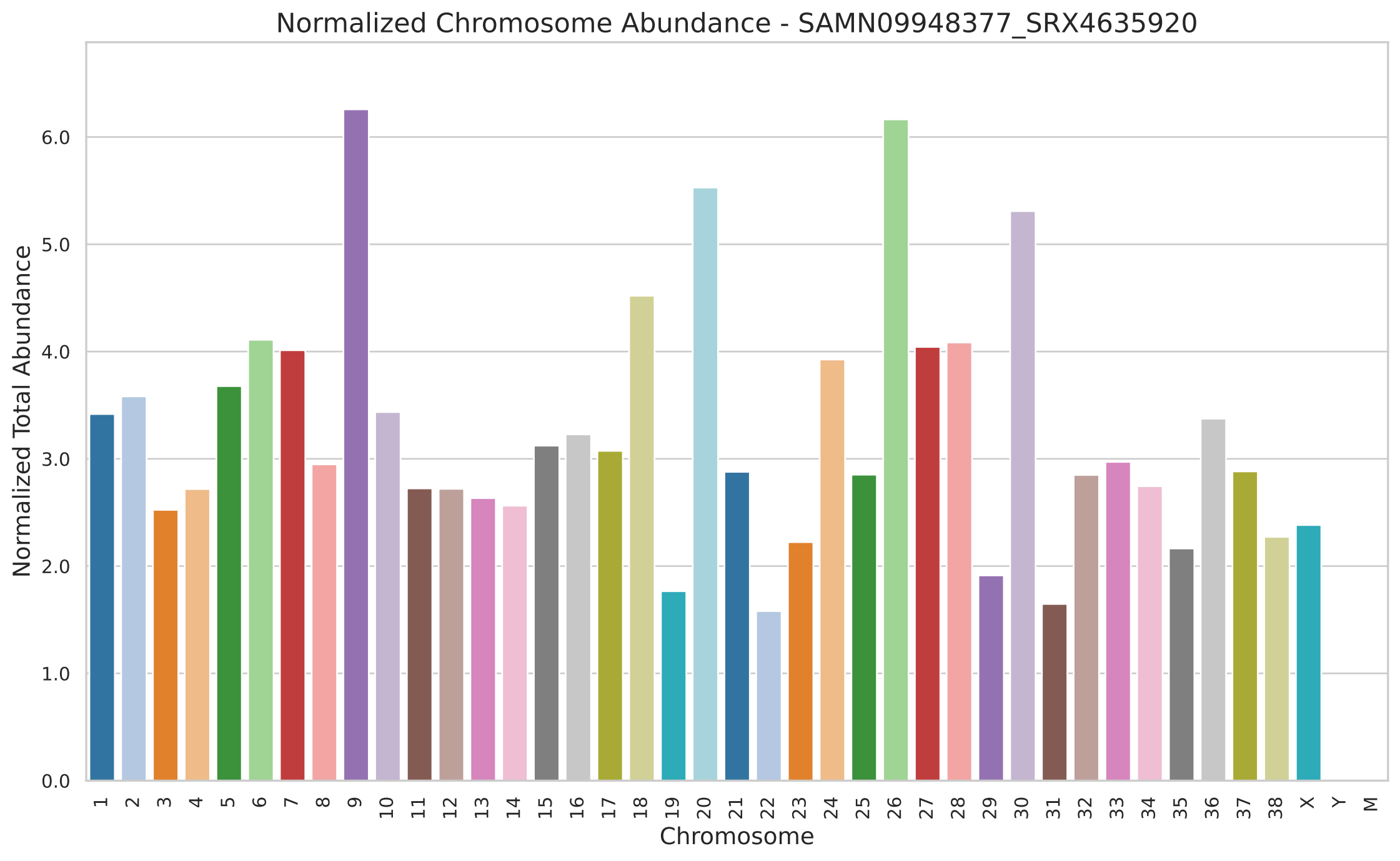

Normalized Chromosome Abundance - SAMN09948214_SRX4635960
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

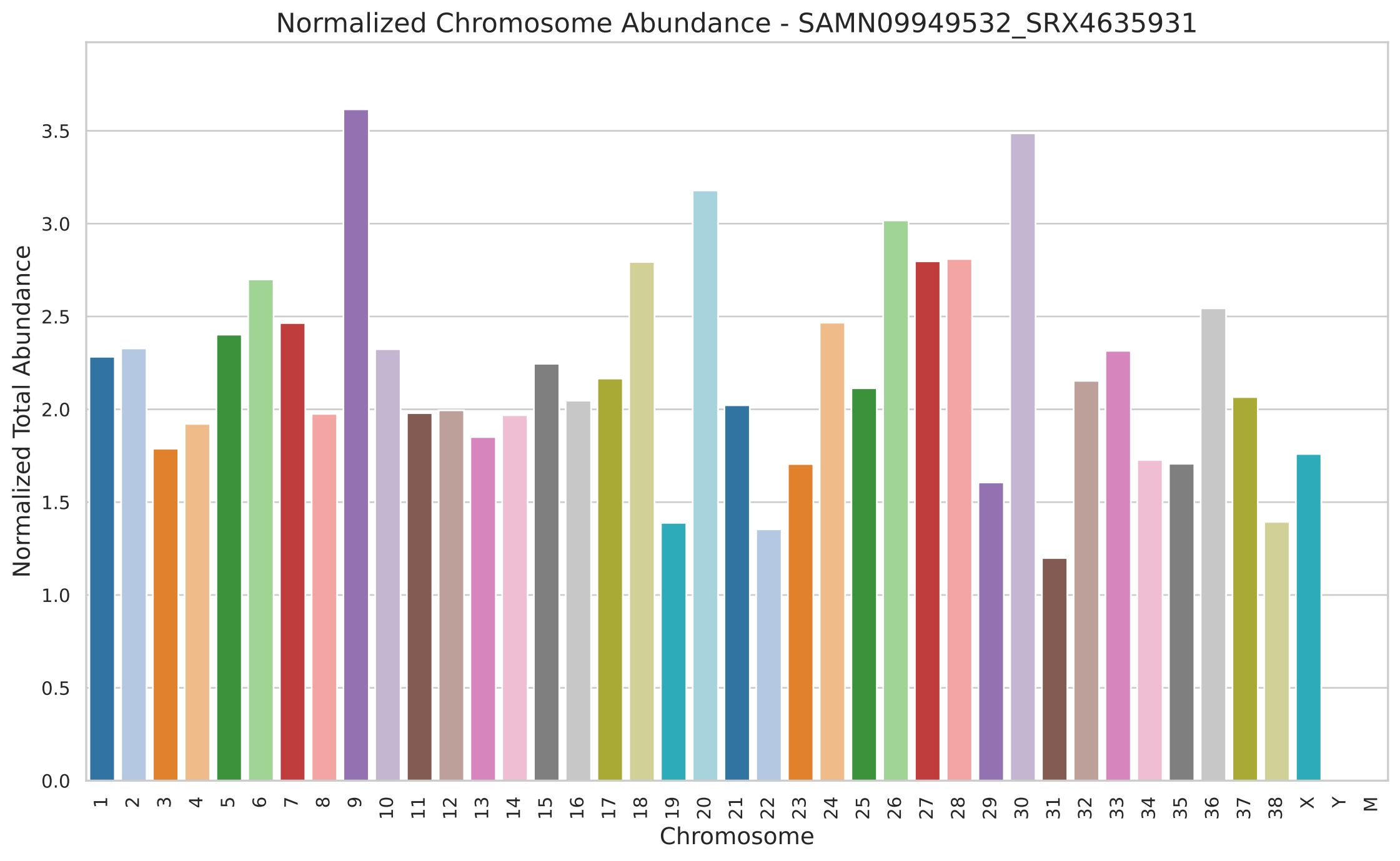

Normalized Chromosome Abundance - SAMN09948252_SRX4635948
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

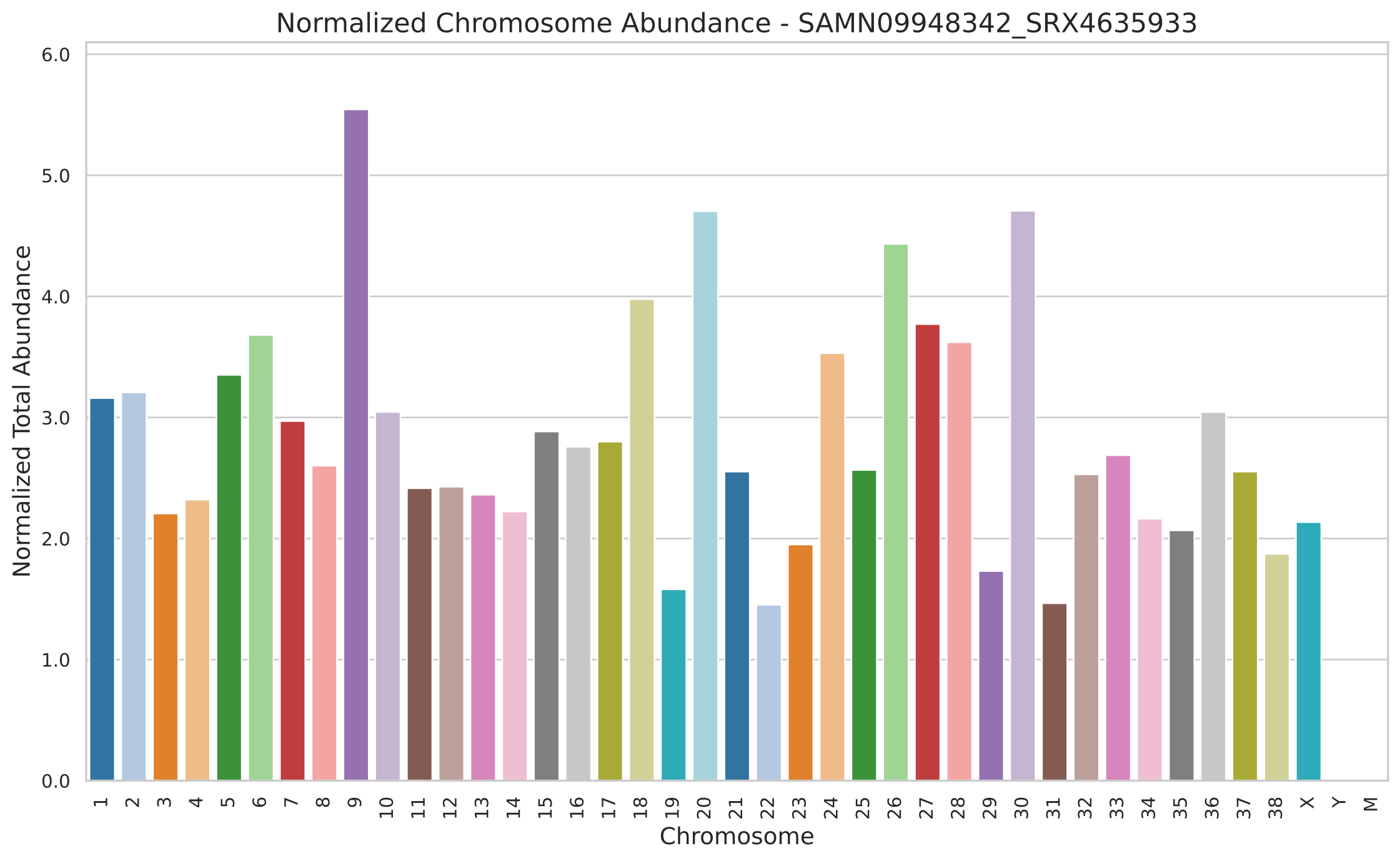

Normalized Chromosome Abundance - SAMN09949382_SRX4635947
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

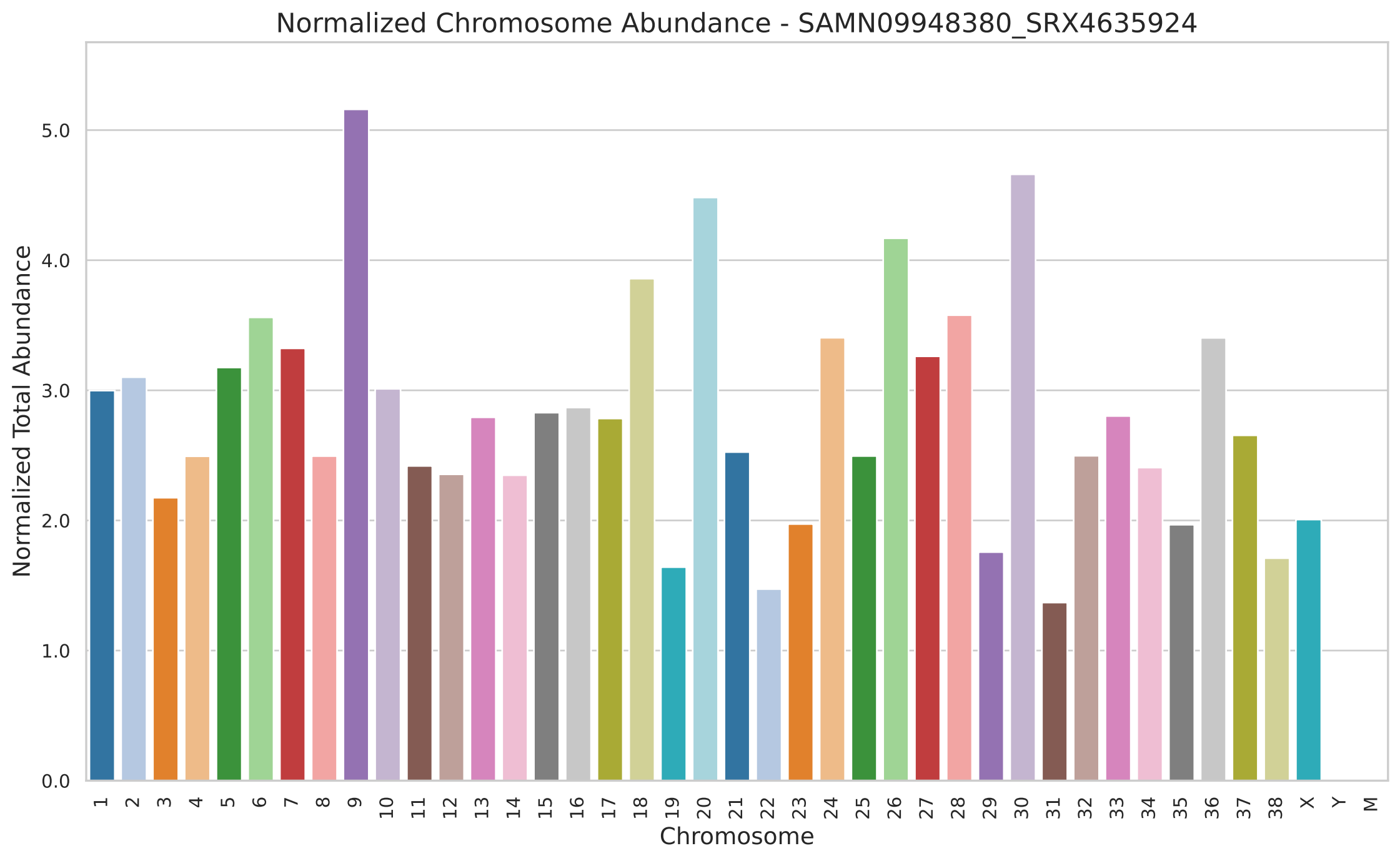

Normalized Chromosome Abundance - SAMN09949378_SRX4635943
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

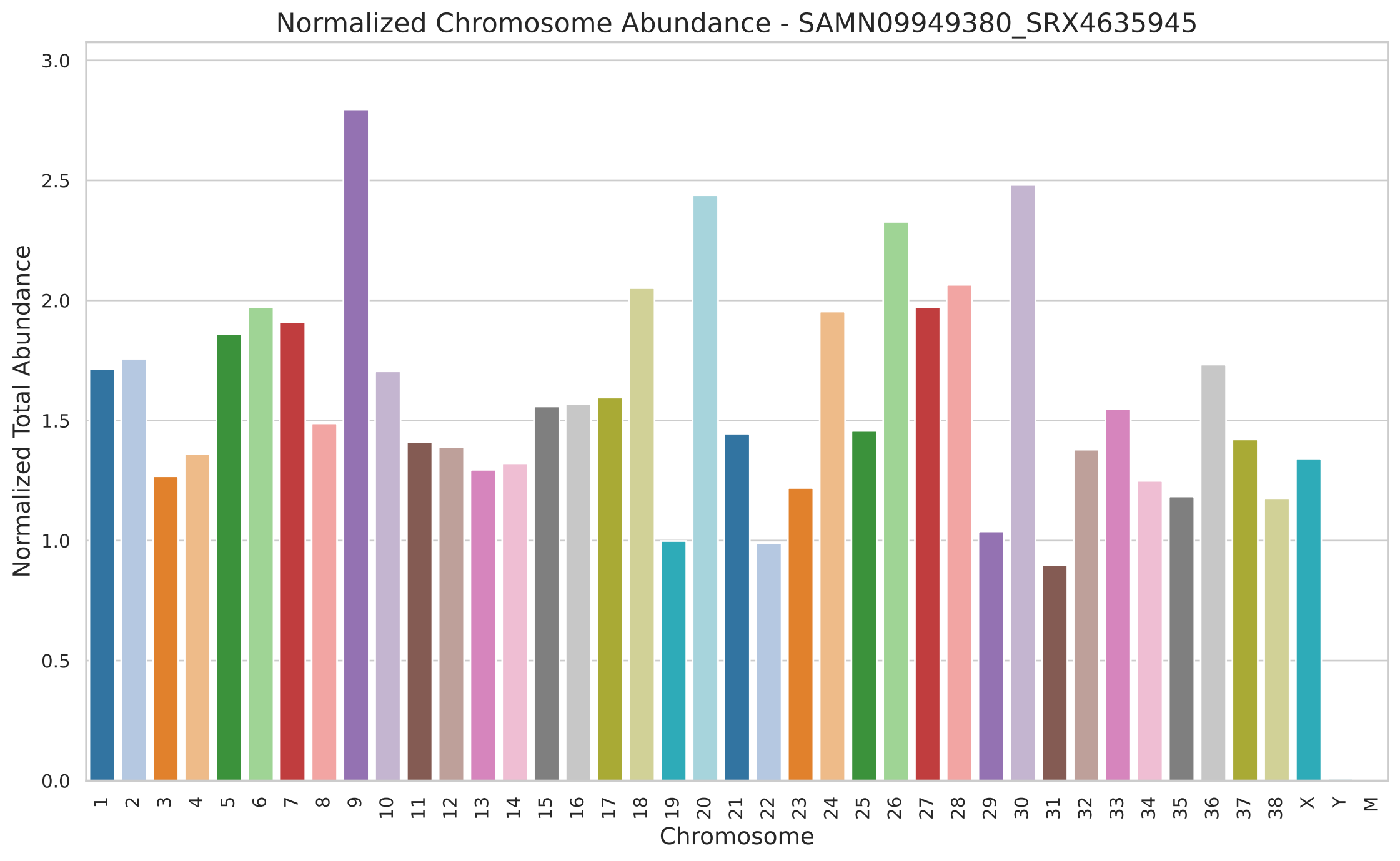

Normalized Chromosome Abundance - SAMN09949384_SRX4635949
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

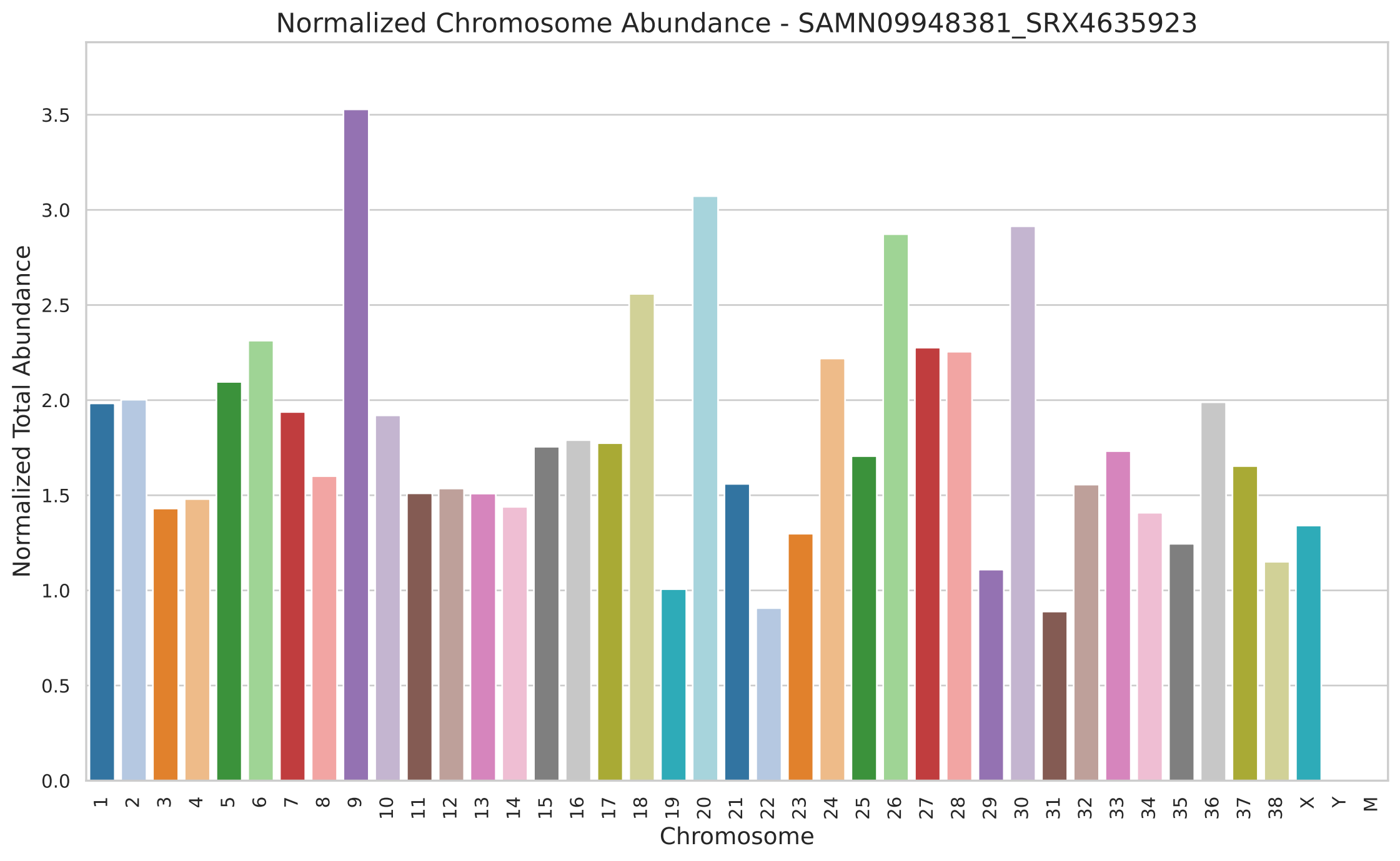

Normalized Chromosome Abundance - SAMN09948377_SRX4635920
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

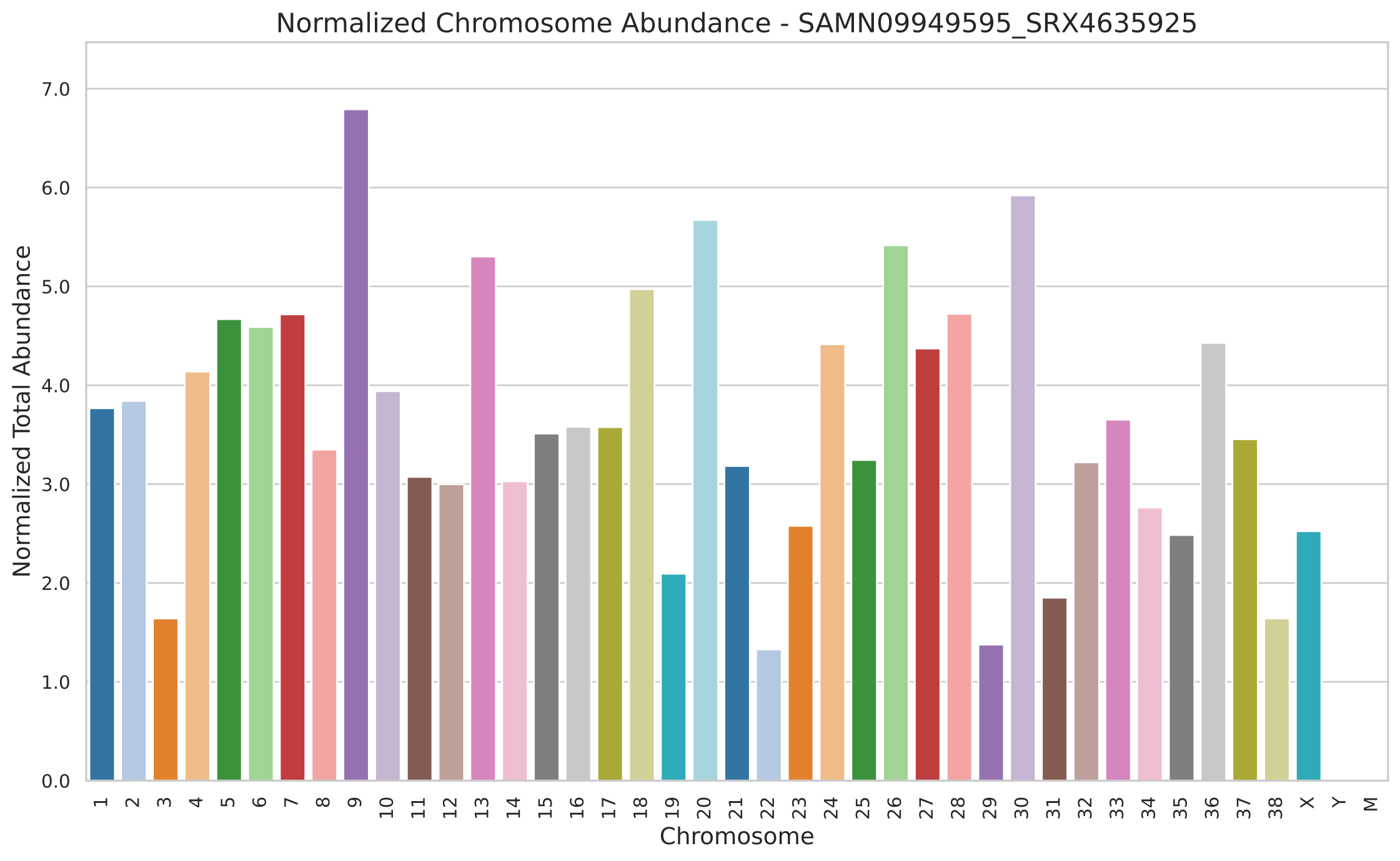

Normalized Chromosome Abundance - SAMN09949532_SRX4635931
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

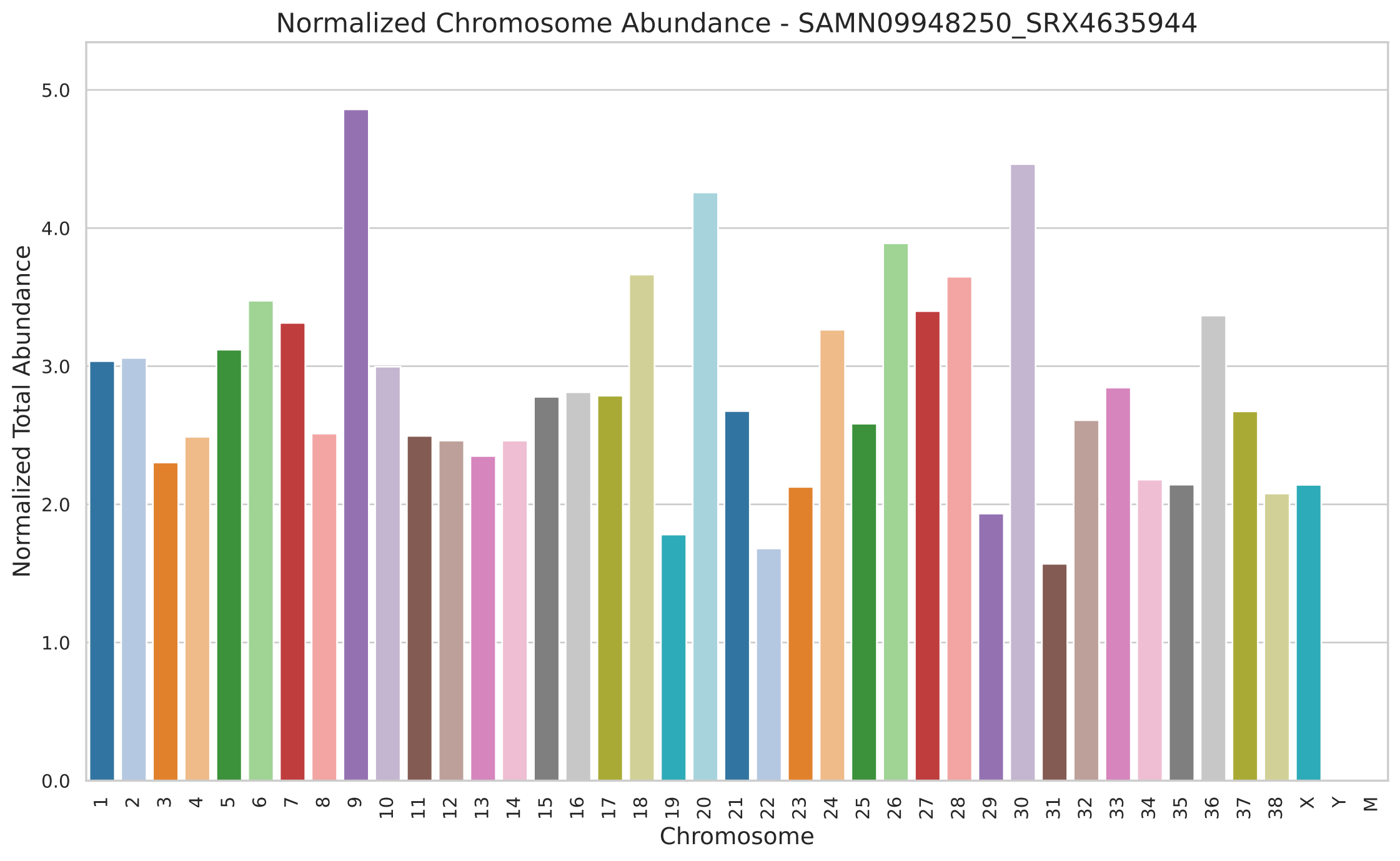

Normalized Chromosome Abundance - SAMN09948342_SRX4635933
Normalized Total Abundance
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

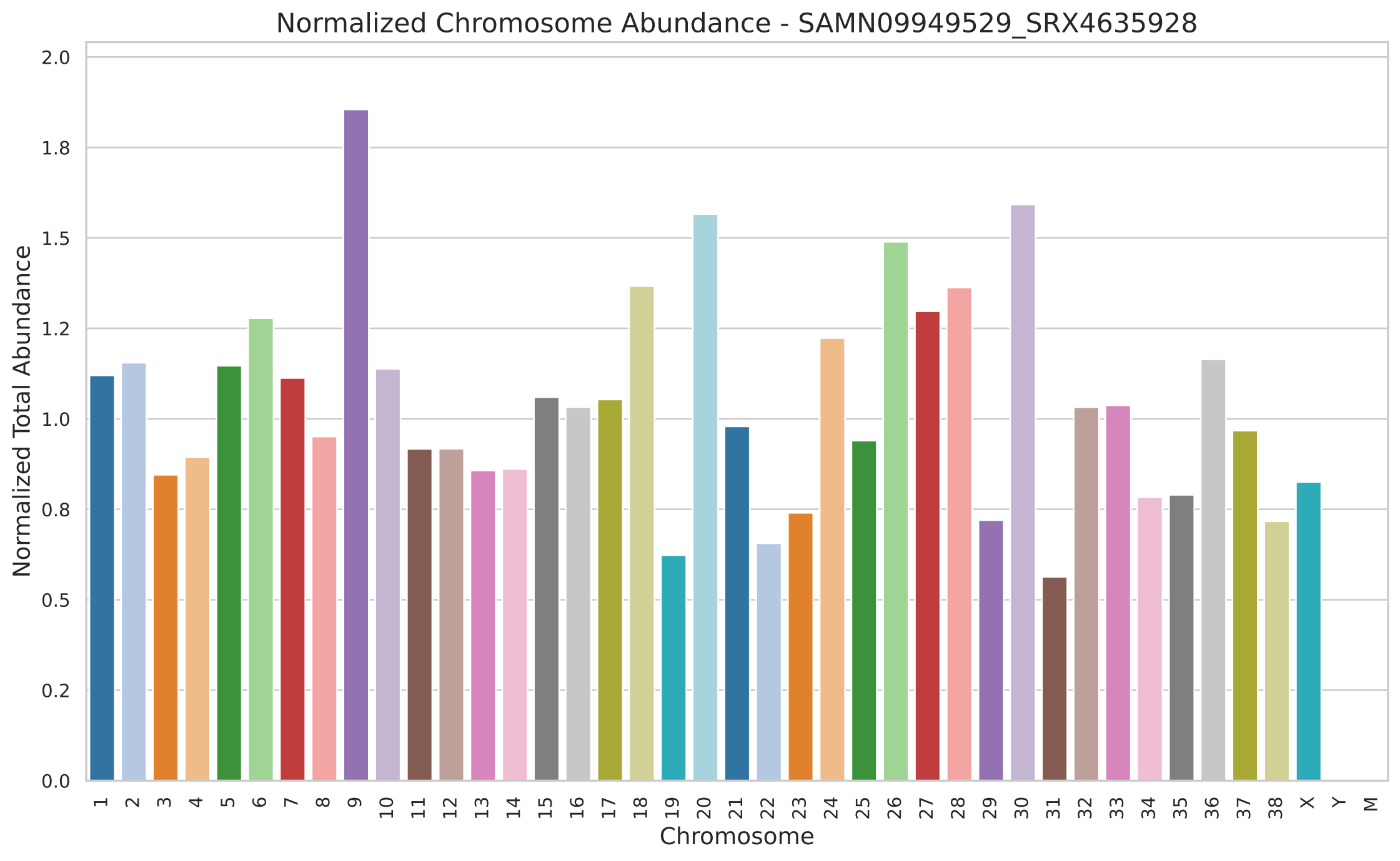

Normalized Chromosome Abundance - SAMN09948380_SRX4635924
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

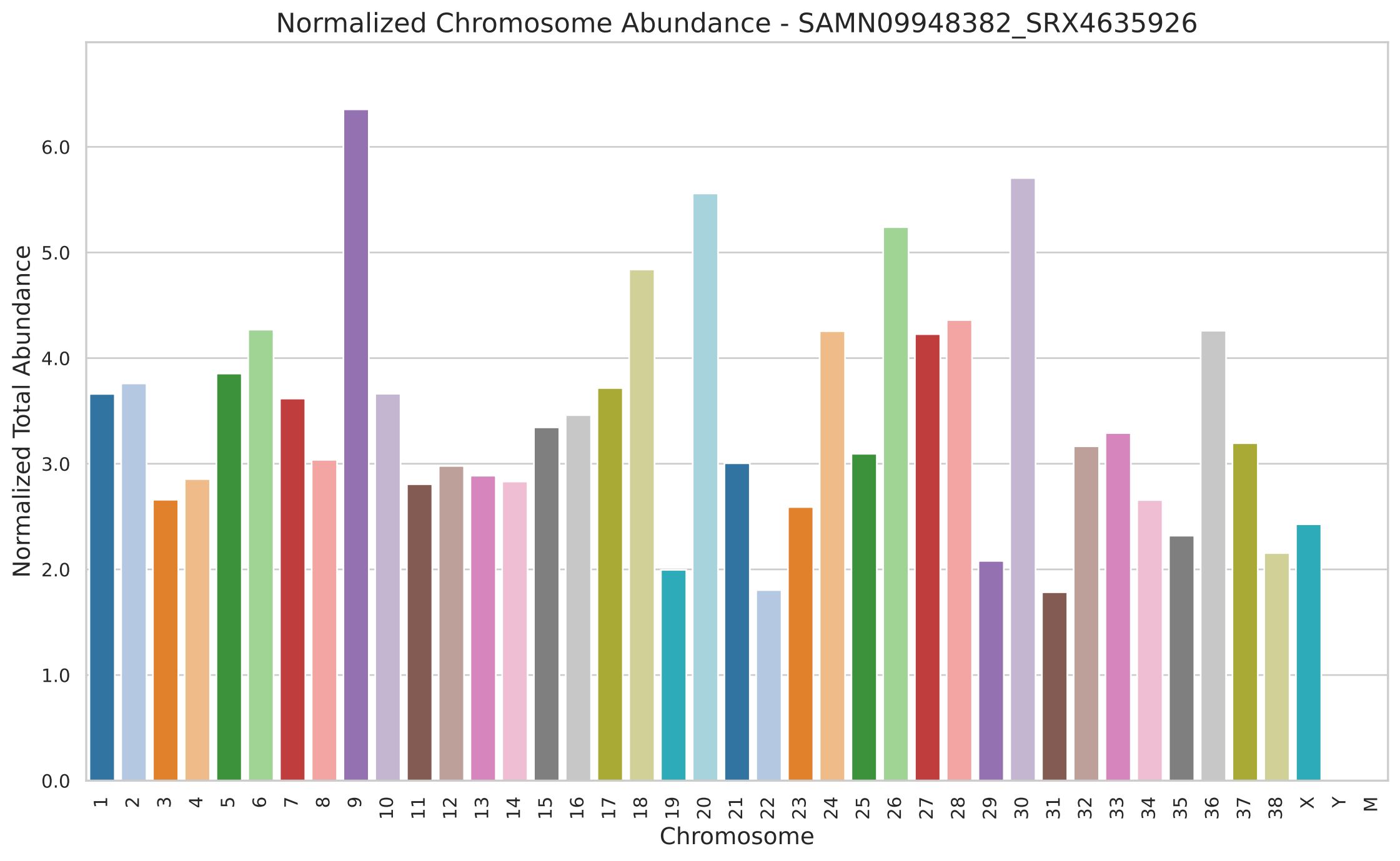

Normalized Chromosome Abundance - SAMN09949380_SRX4635945
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

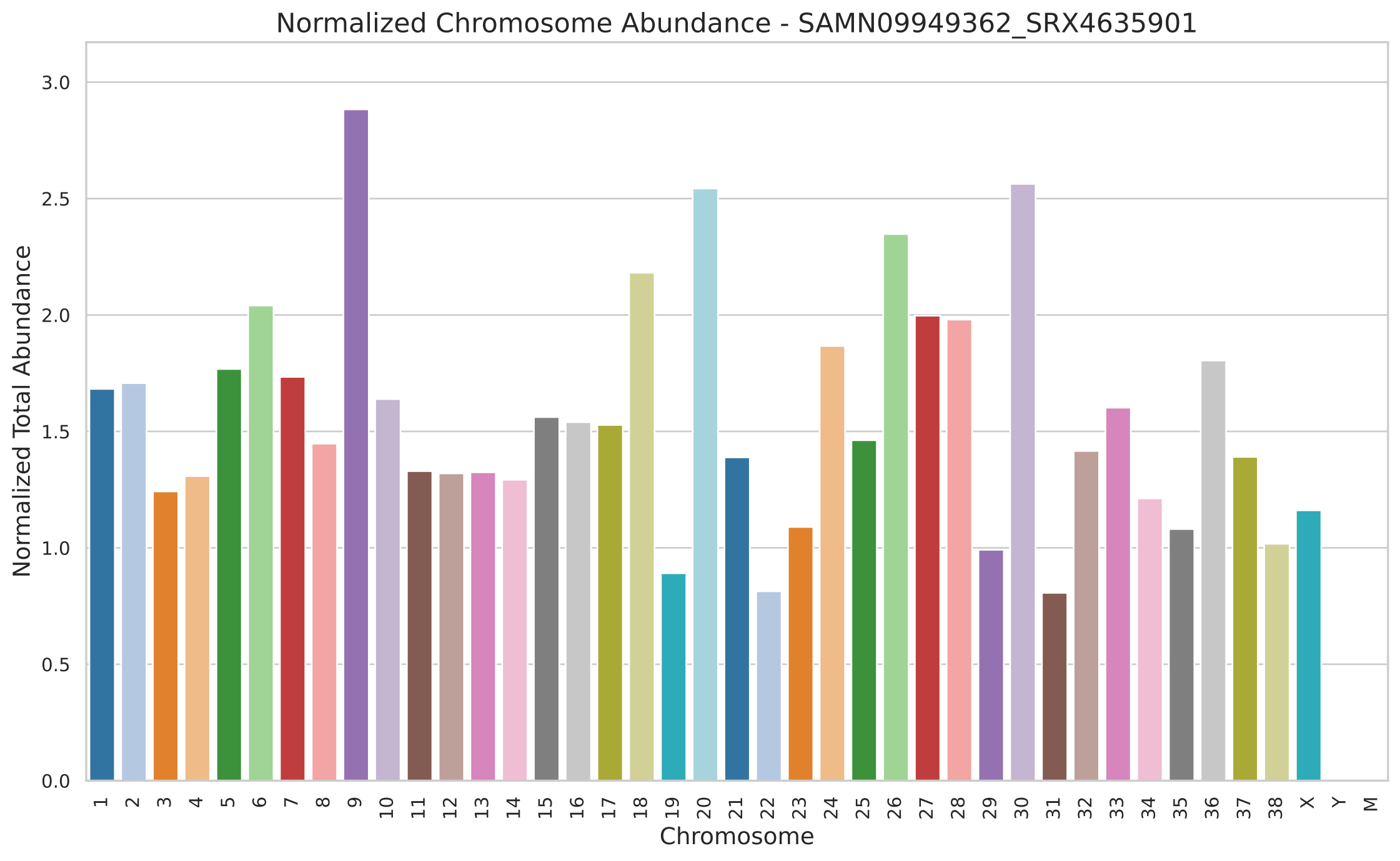

Normalized Chromosome Abundance - SAMN09948381_SRX4635923
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

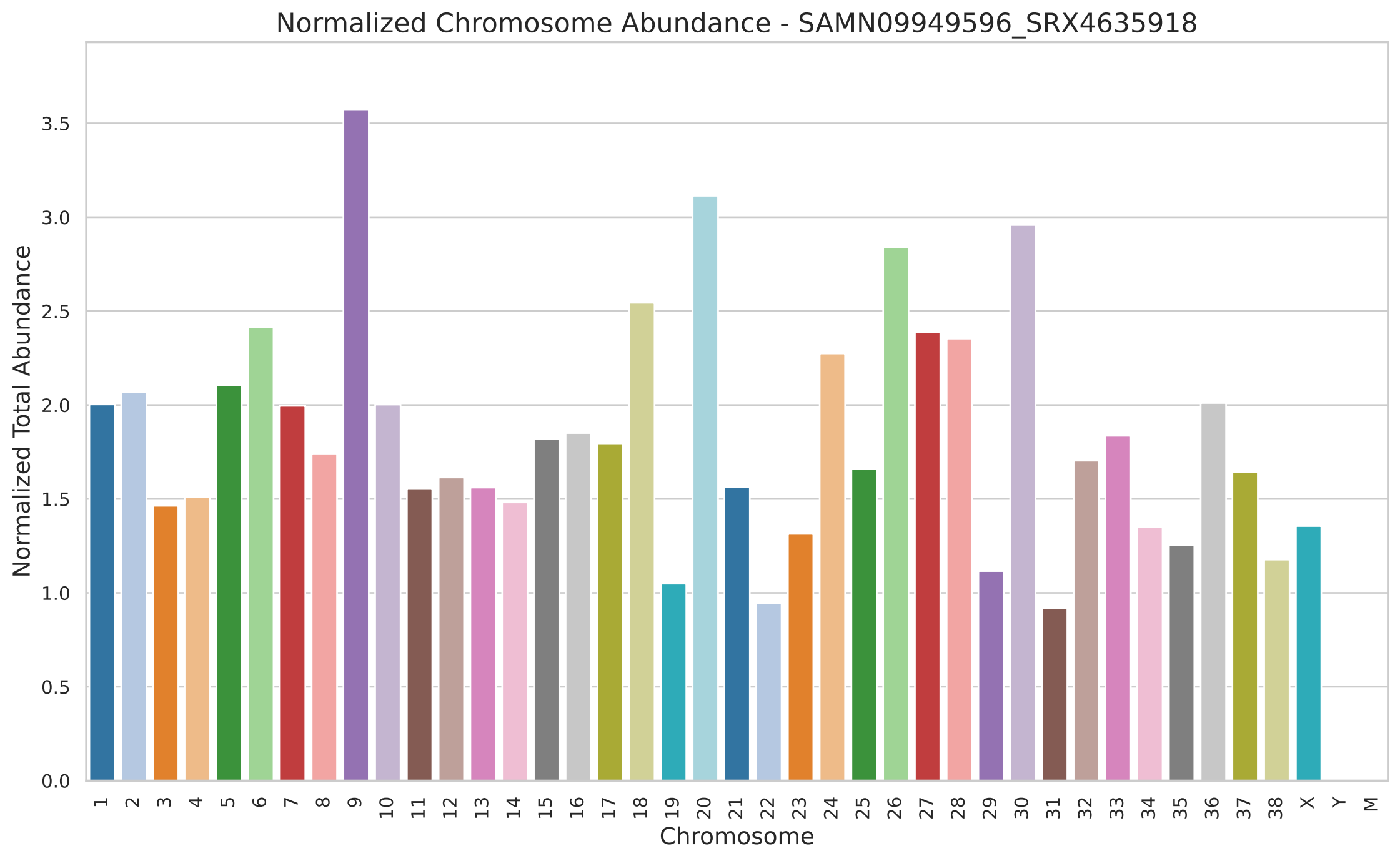

Normalized Chromosome Abundance - SAMN09949595_SRX4635925
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

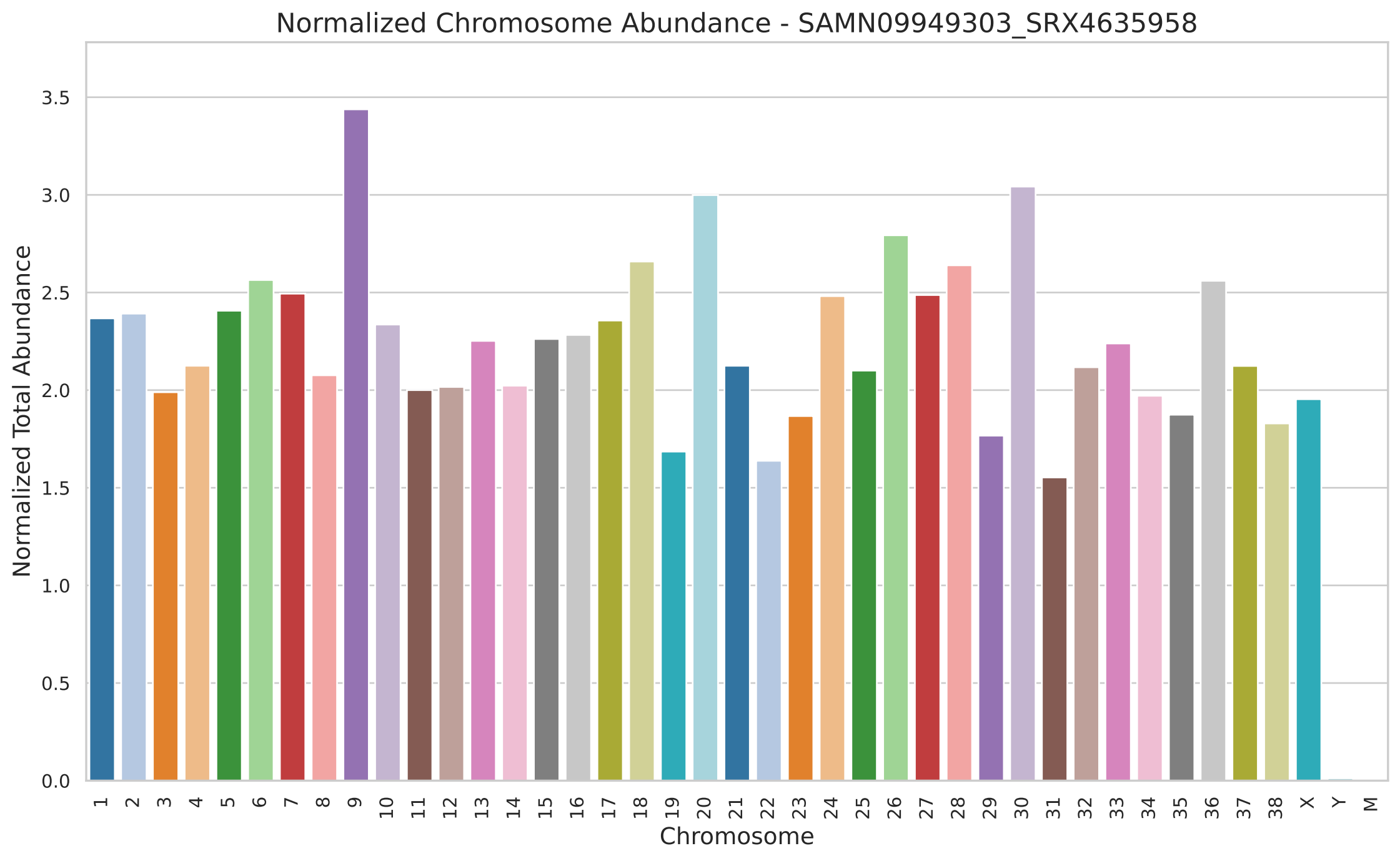

Normalized Chromosome Abundance - SAMN09948250_SRX4635944
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

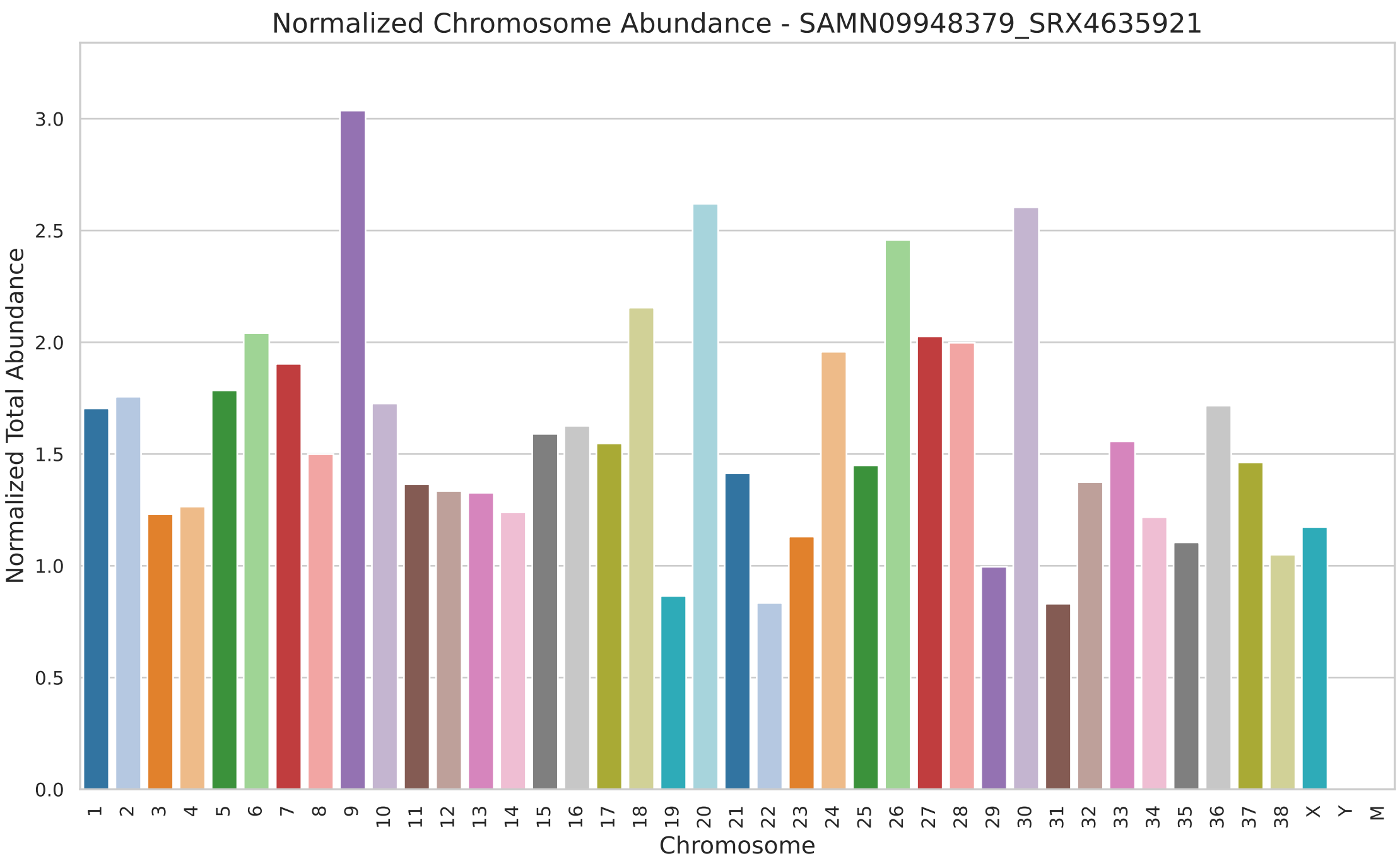

Normalized Chromosome Abundance - SAMN09949529_SRX4635928
Normalized Total Abundance
2.0
1.8
1.5
1.2
1.0
0.8
0.5
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

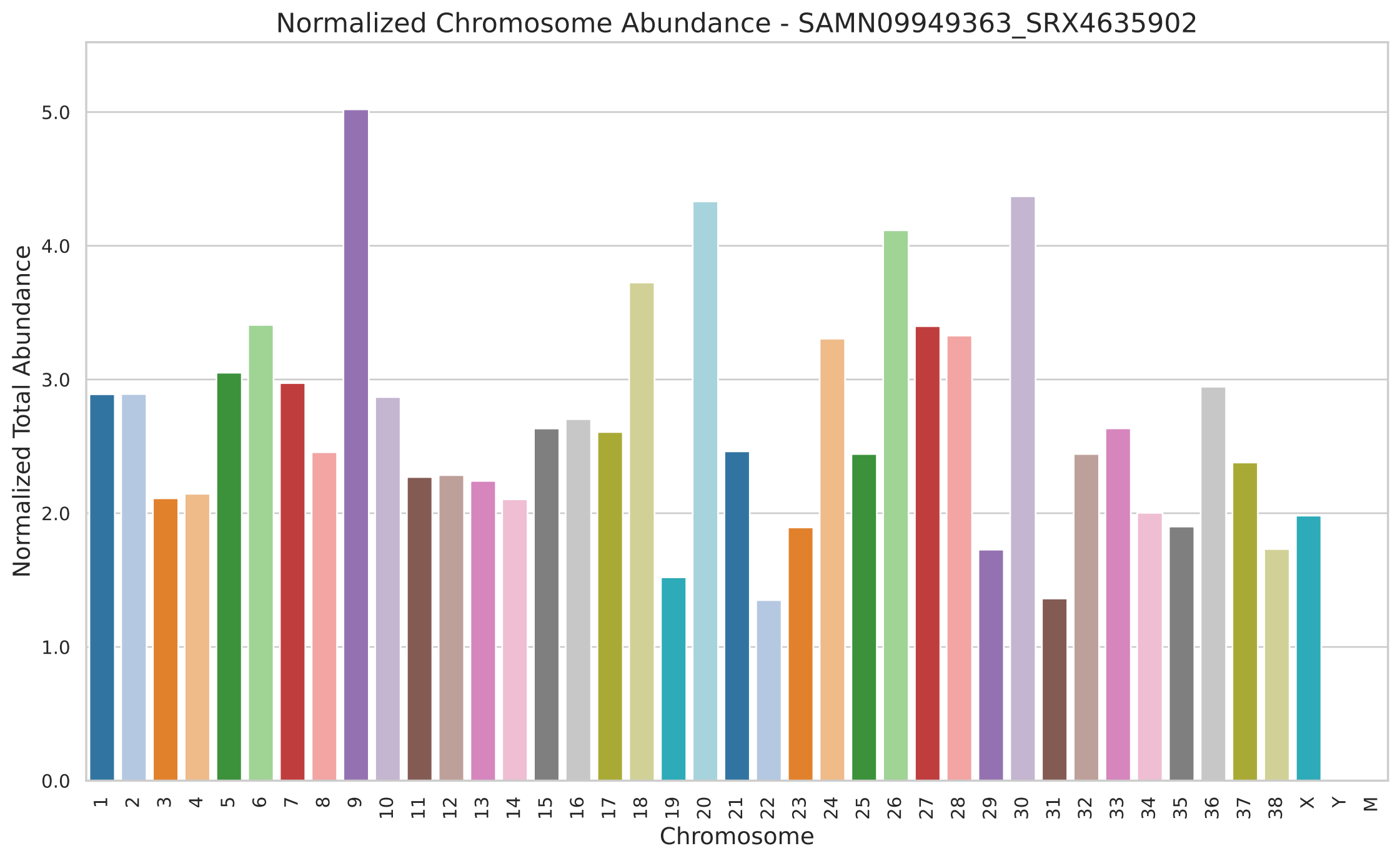

Normalized Chromosome Abundance - SAMN09948382_SRX4635926
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

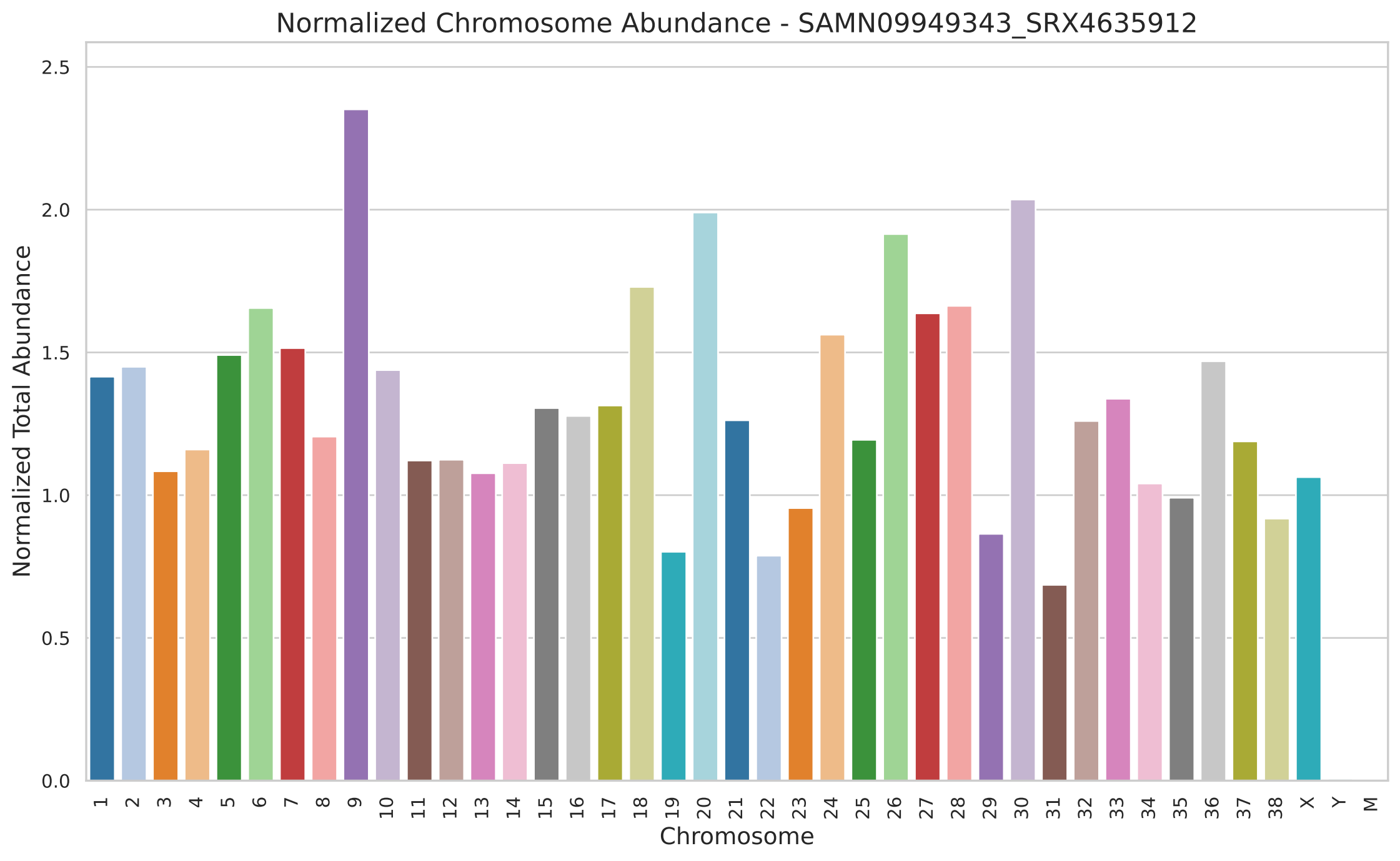

Normalized Chromosome Abundance - SAMN09949362_SRX4635901
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

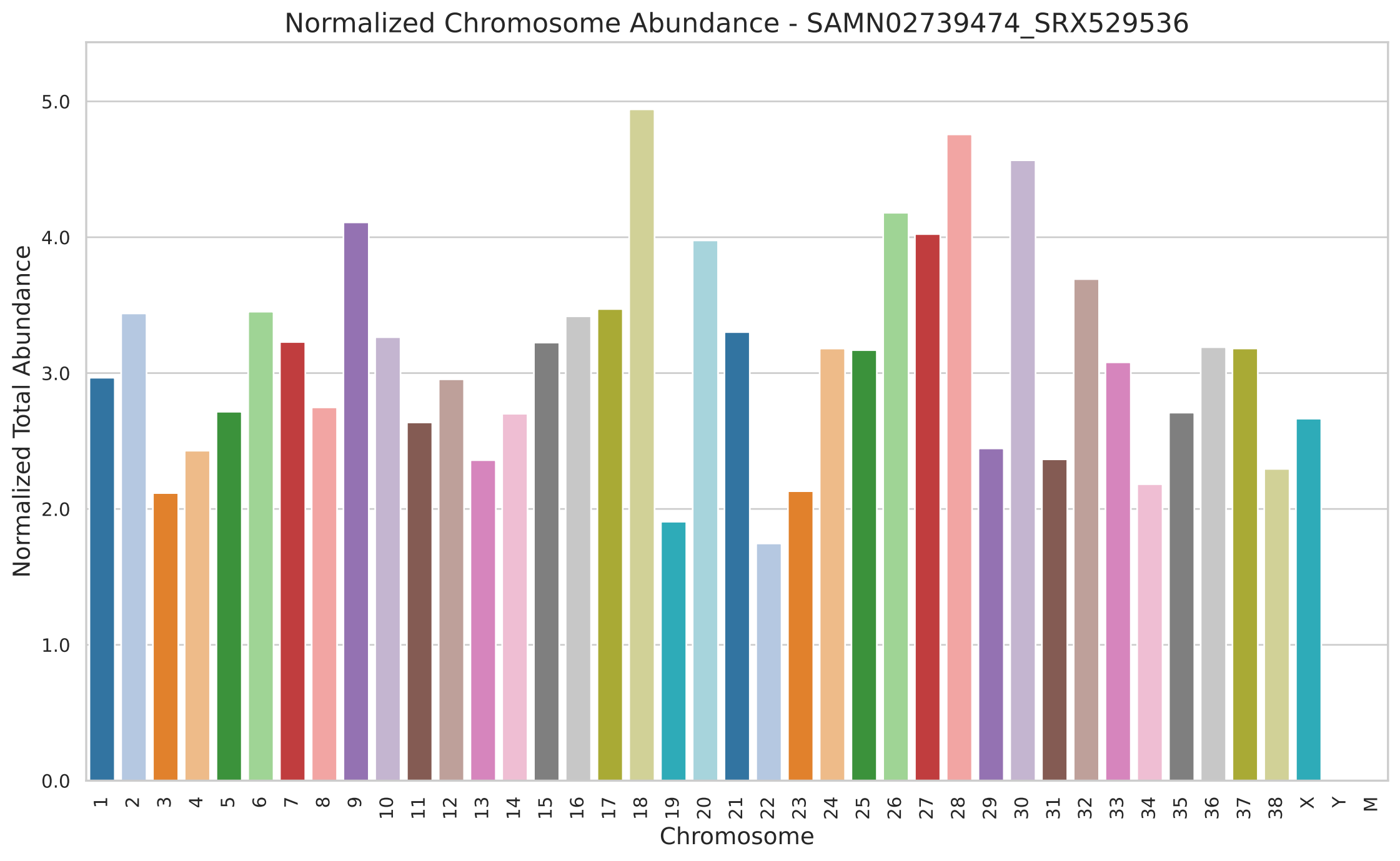

Normalized Chromosome Abundance - SAMN09949596_SRX4635918
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

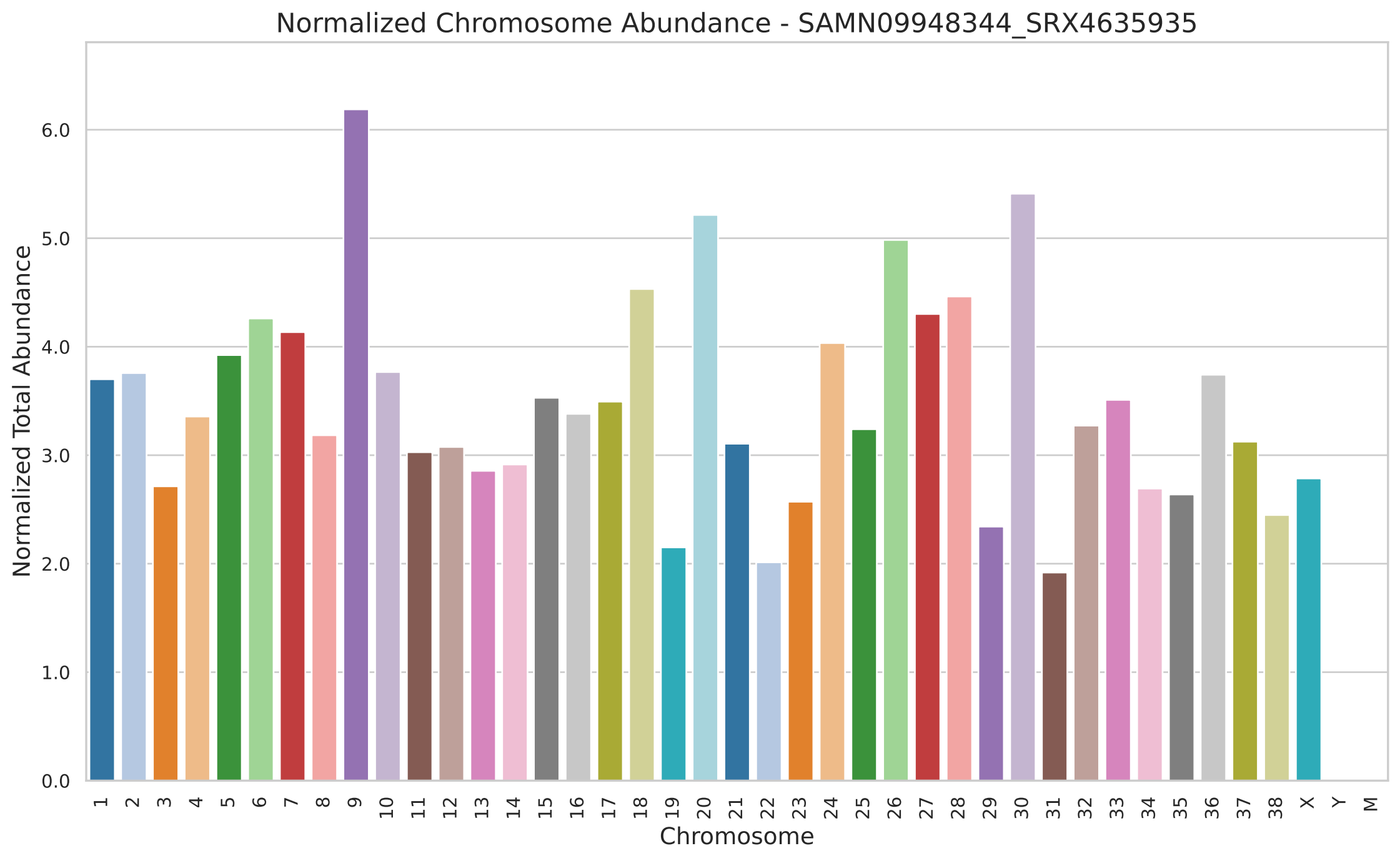

Normalized Chromosome Abundance - SAMN09949303_SRX4635958
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

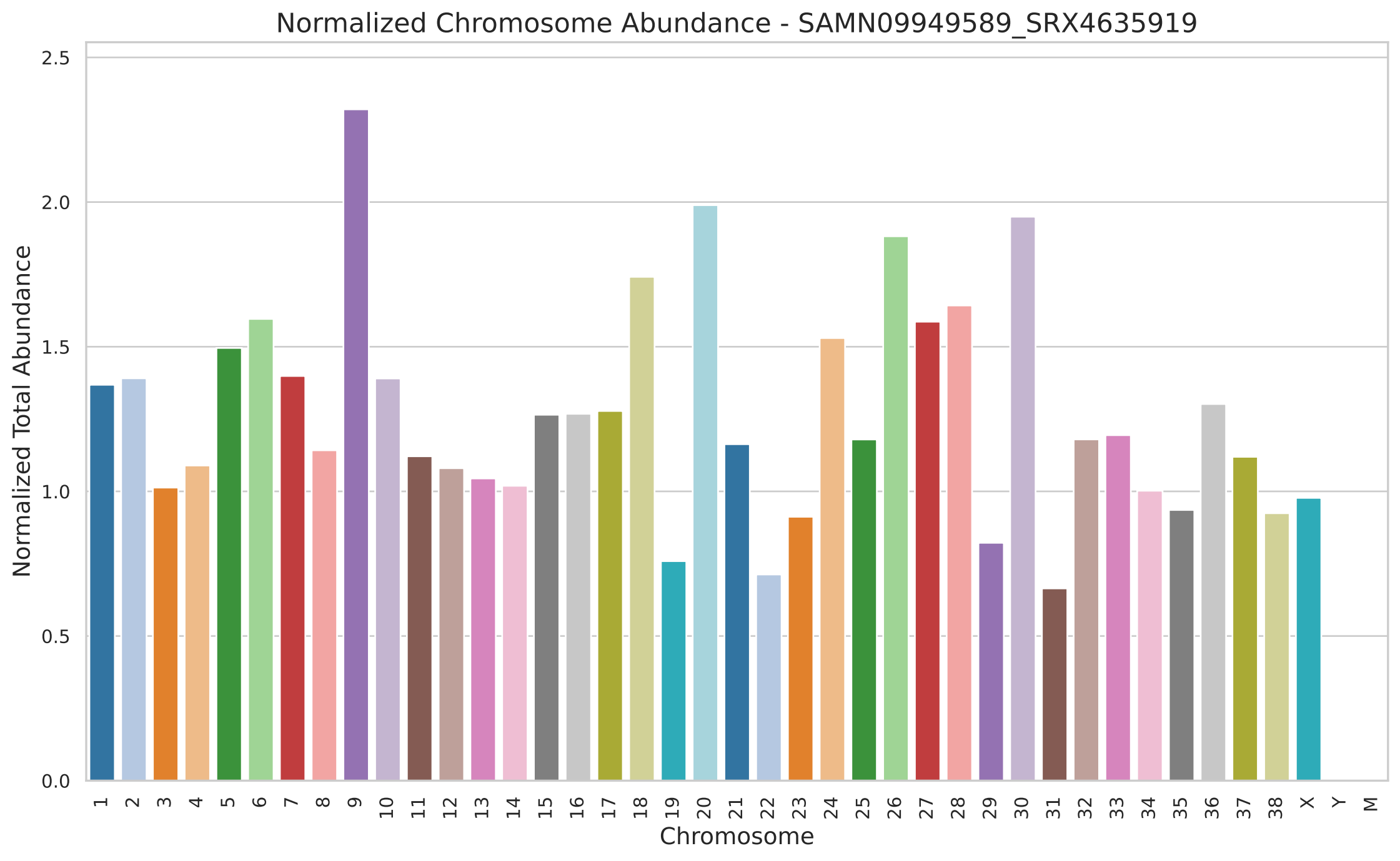

Normalized Chromosome Abundance - SAMN09948379_SRX4635921
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

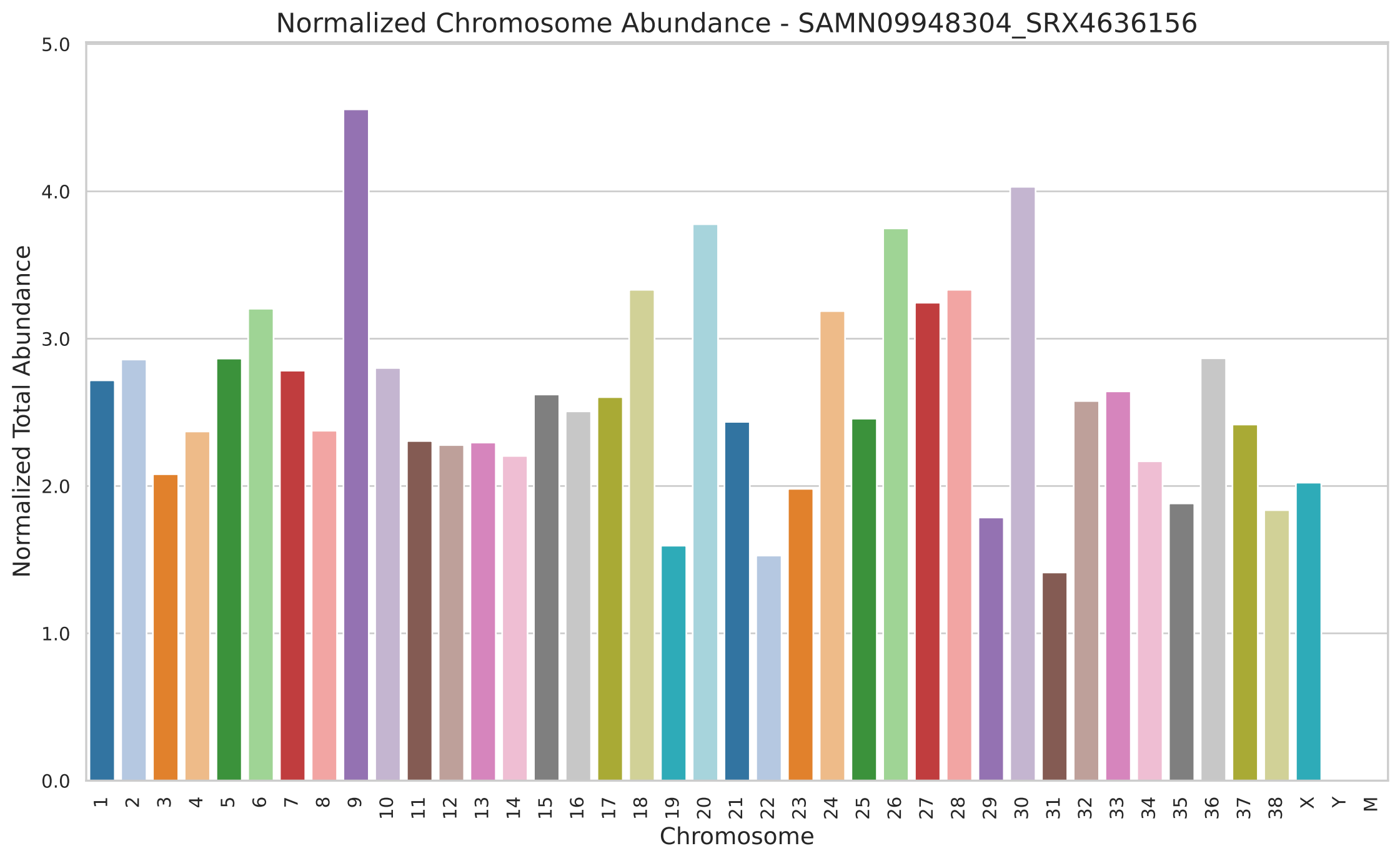

Normalized Chromosome Abundance - SAMN09949363_SRX4635902
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

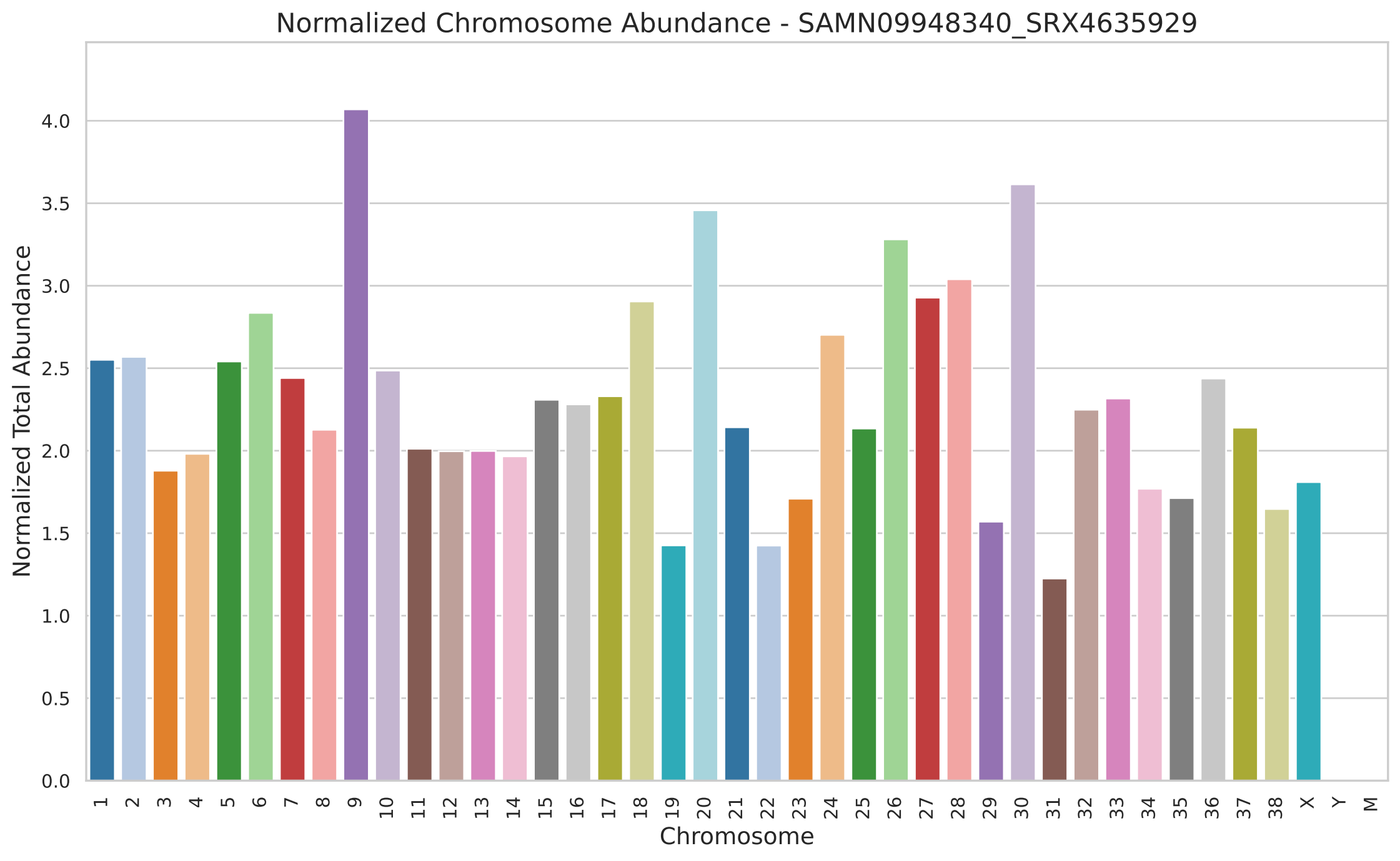

Normalized Chromosome Abundance - SAMN09949343_SRX4635912
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

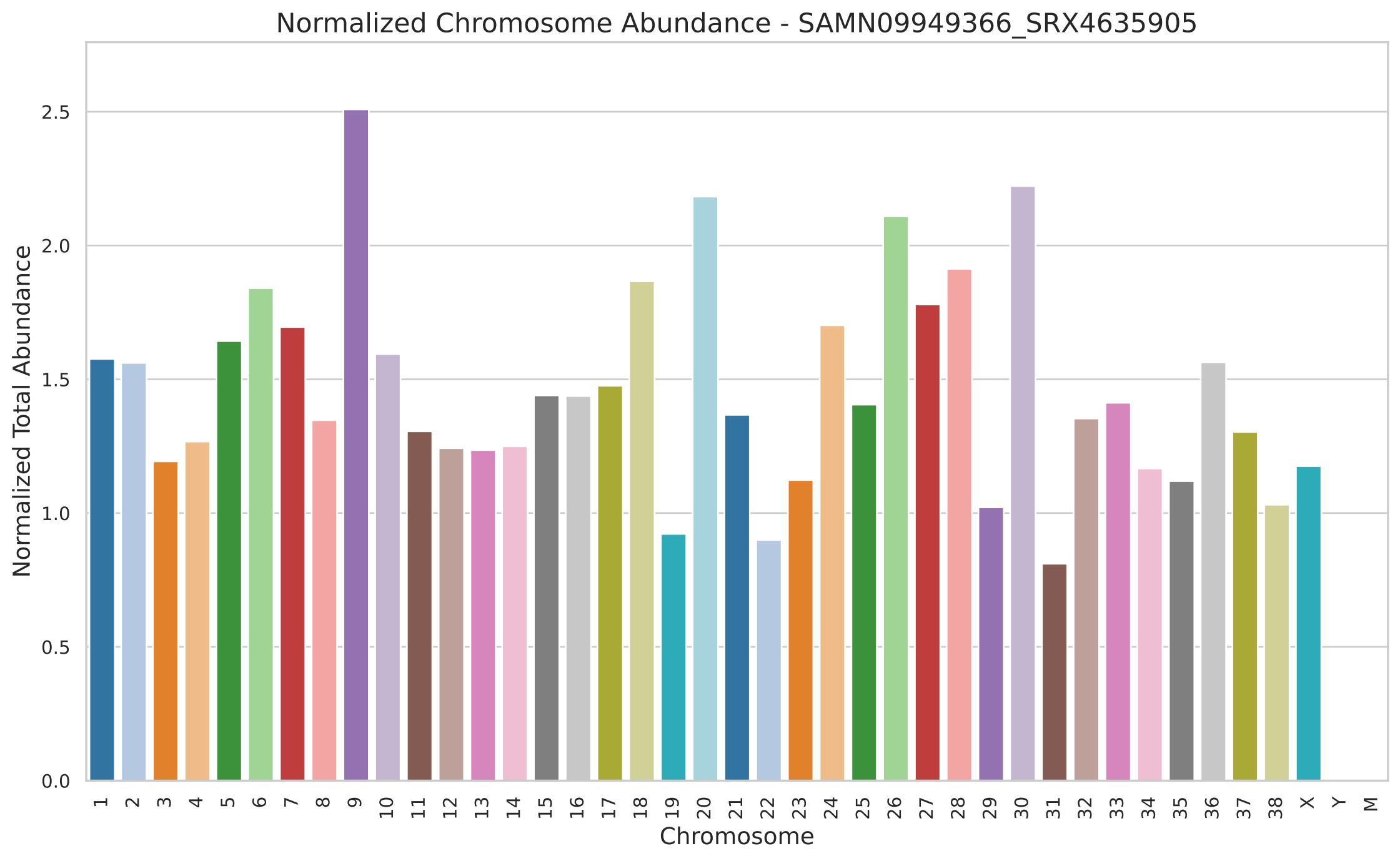

Normalized Chromosome Abundance - SAMN02739474_SRX529536
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

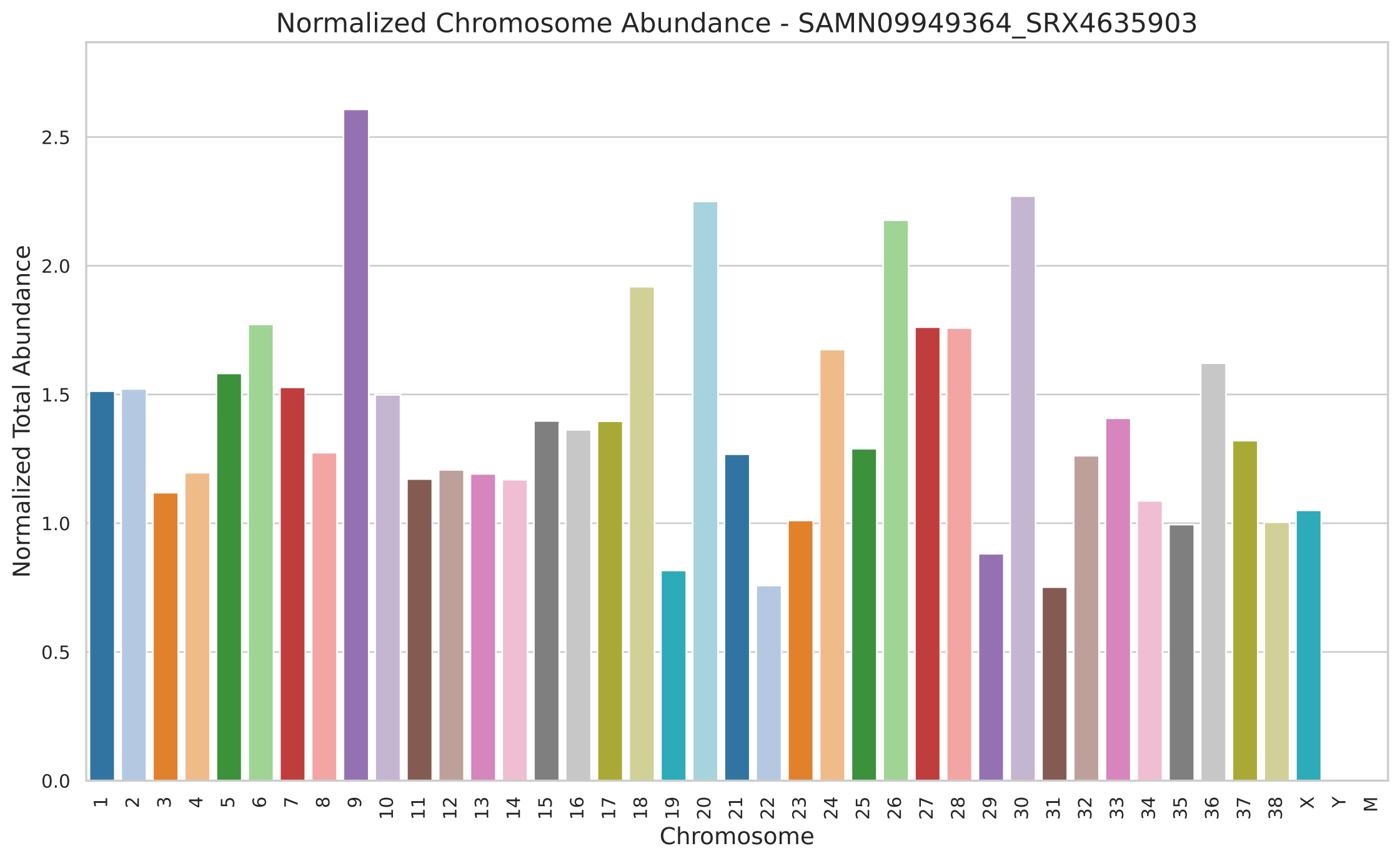

Normalized Chromosome Abundance - SAMN09948344_SRX4635935
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

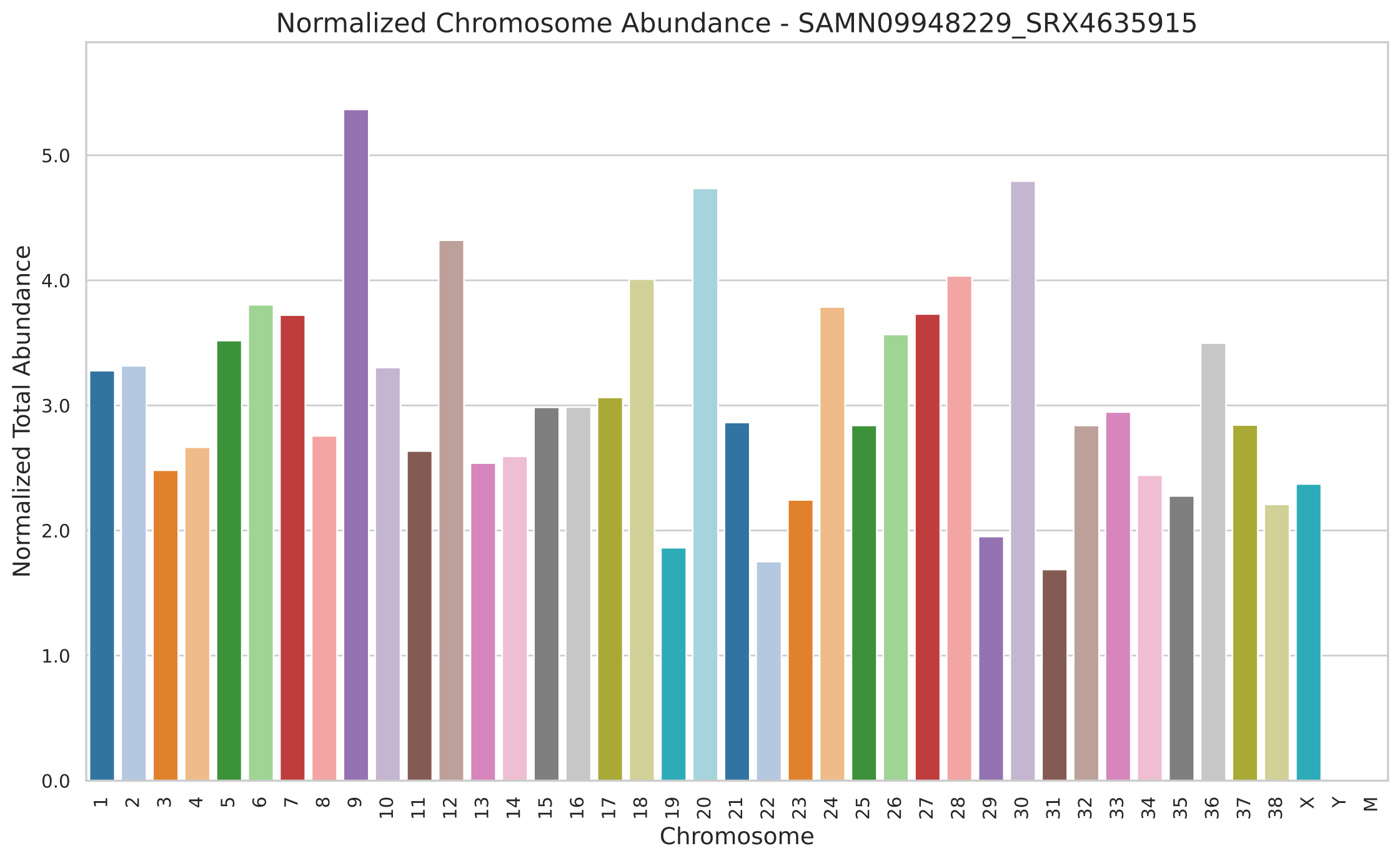

Normalized Chromosome Abundance - SAMN09949589_SRX4635919
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

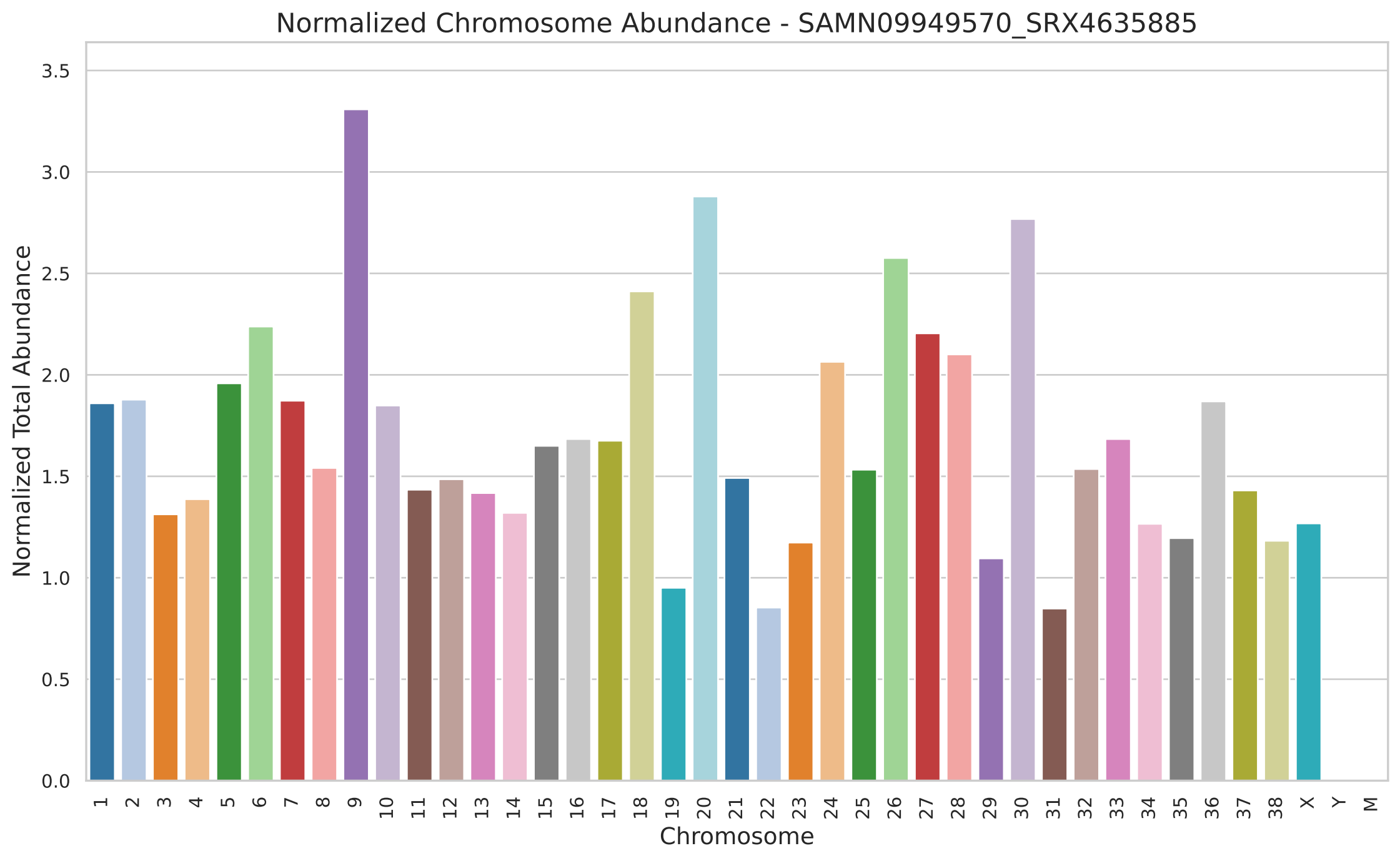

Normalized Chromosome Abundance - SAMN09948304_SRX4636156
Normalized Total Abundance
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

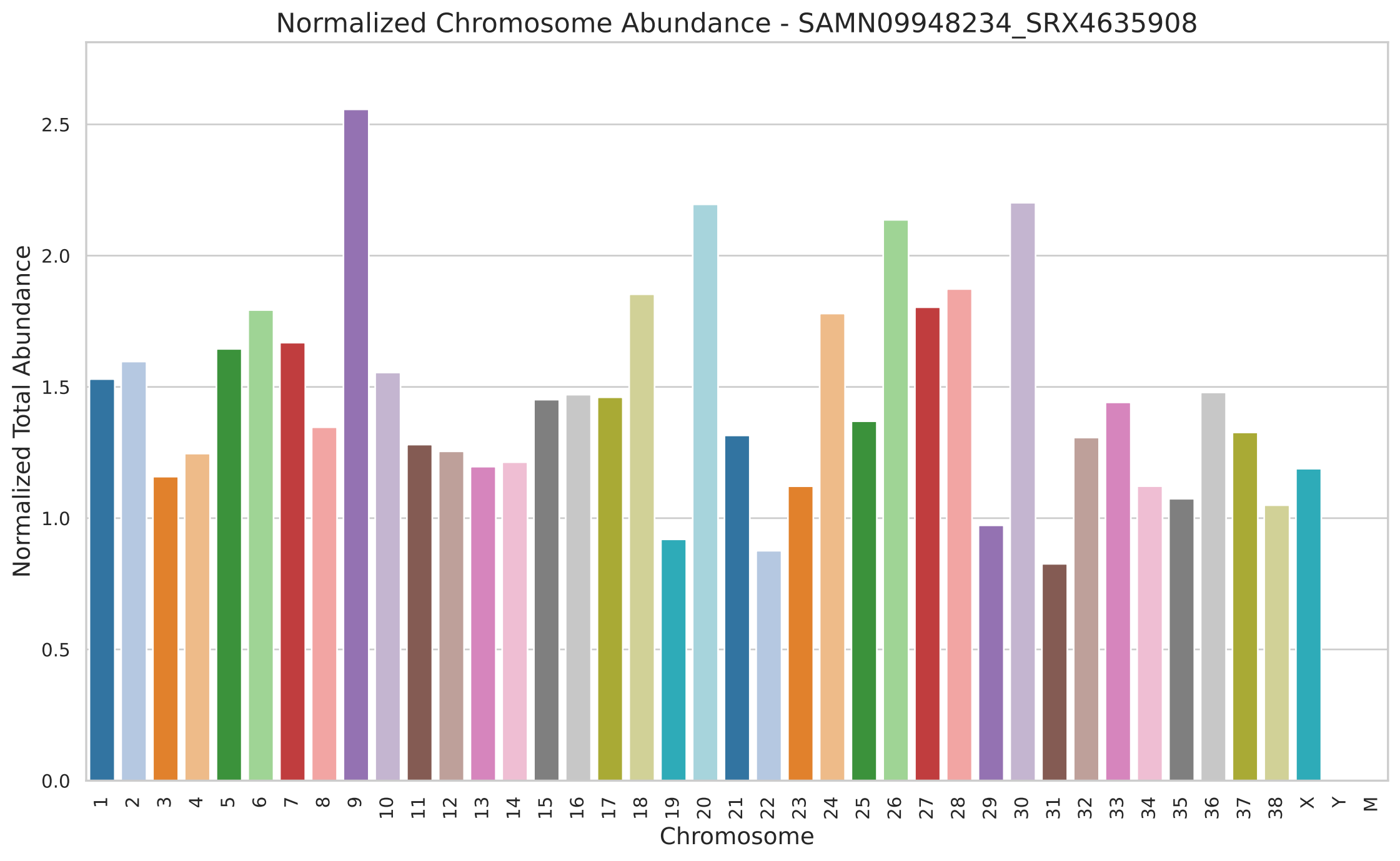

Normalized Chromosome Abundance - SAMN09948340_SRX4635929
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

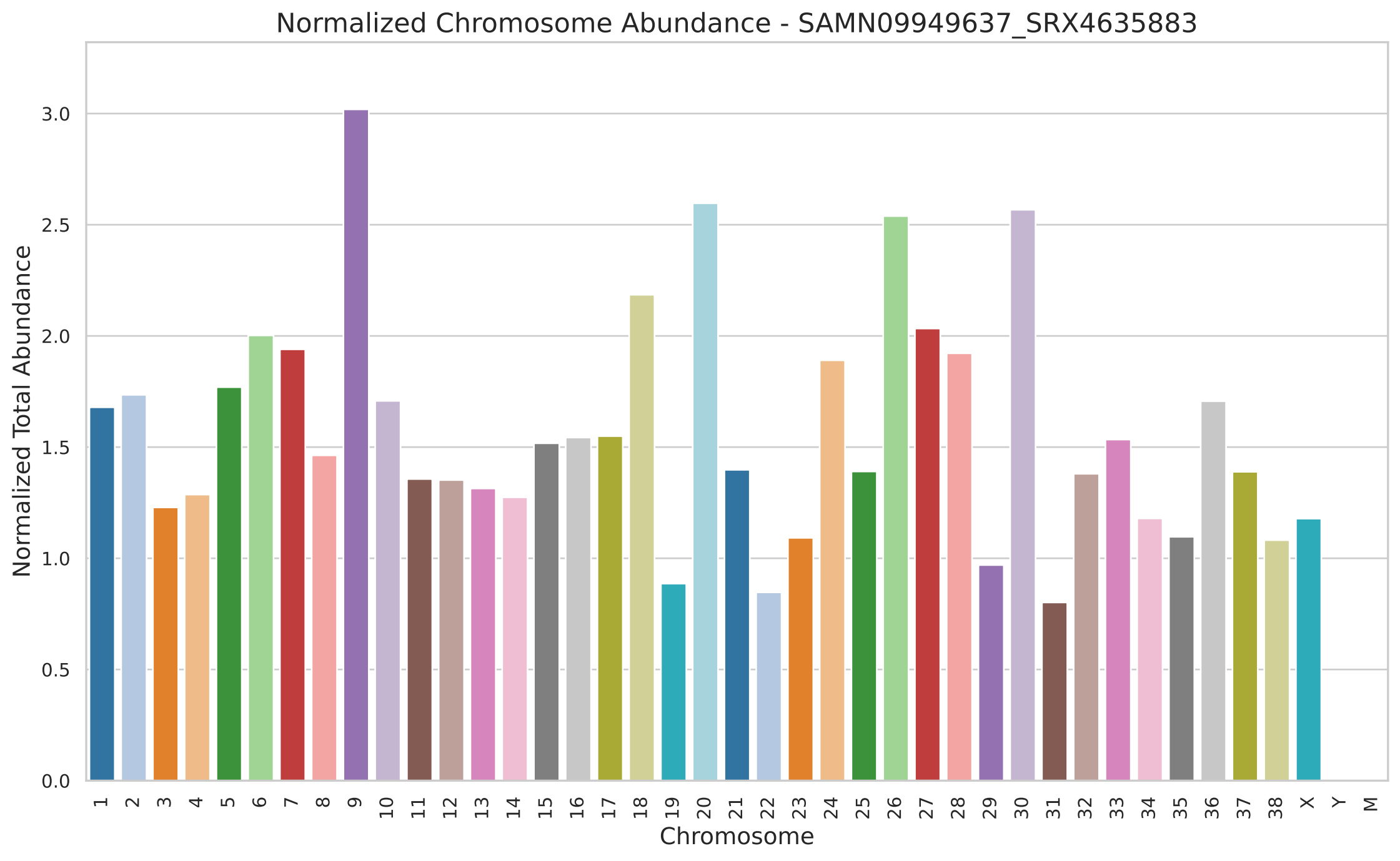

Normalized Chromosome Abundance - SAMN09949366_SRX4635905
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

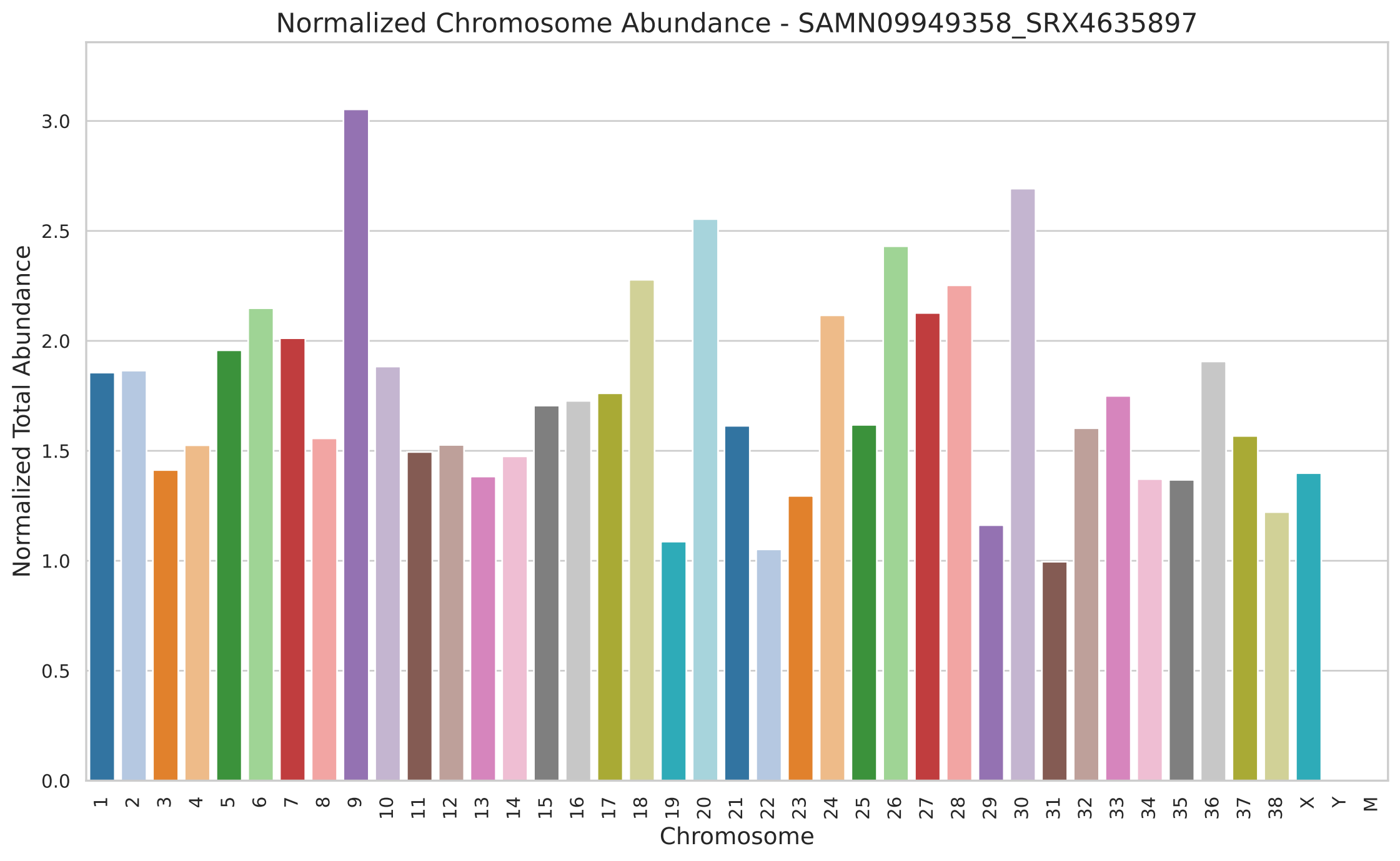

Normalized Chromosome Abundance - SAMN09949364_SRX4635903
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

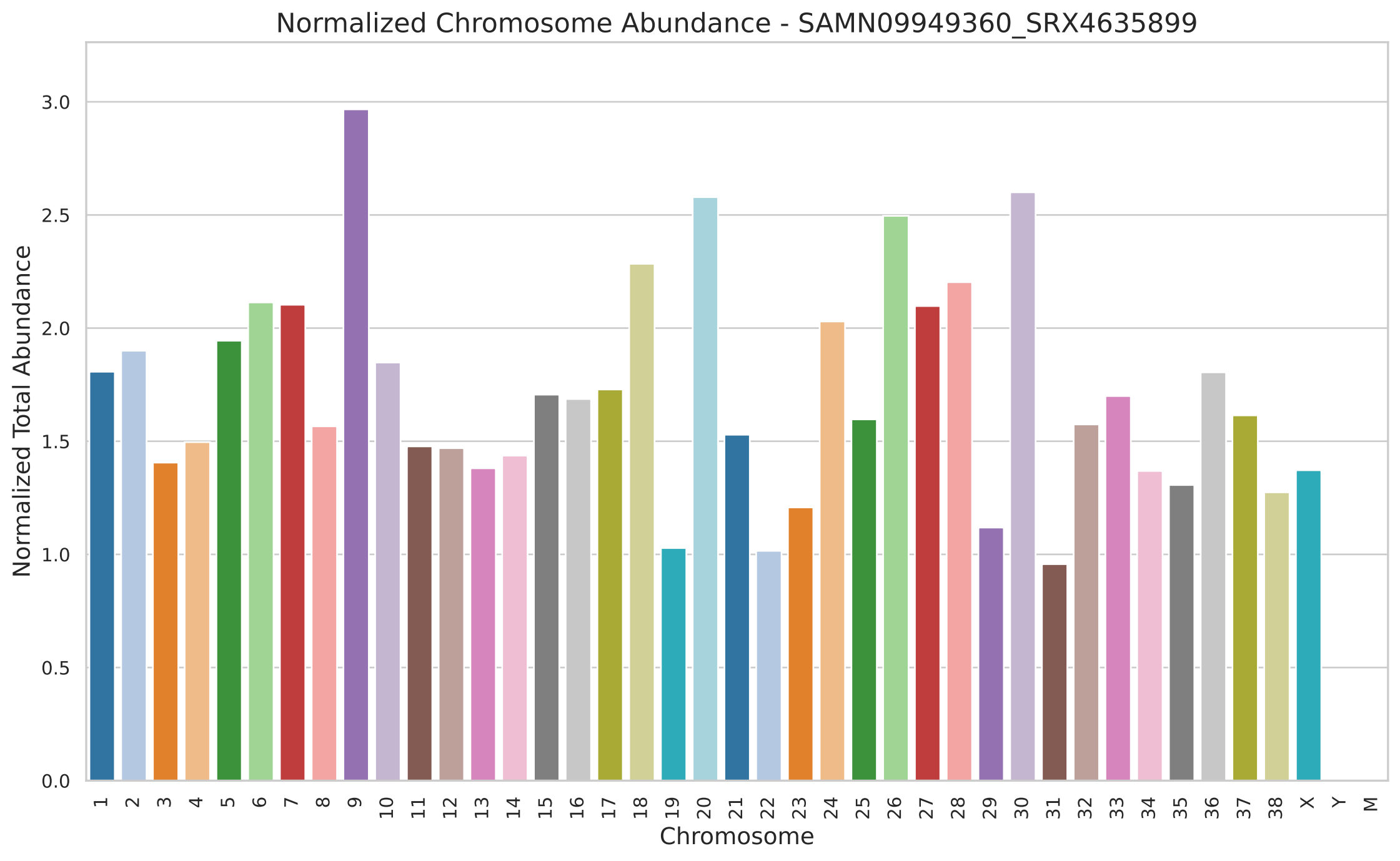

Normalized Chromosome Abundance - SAMN09948229_SRX4635915
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

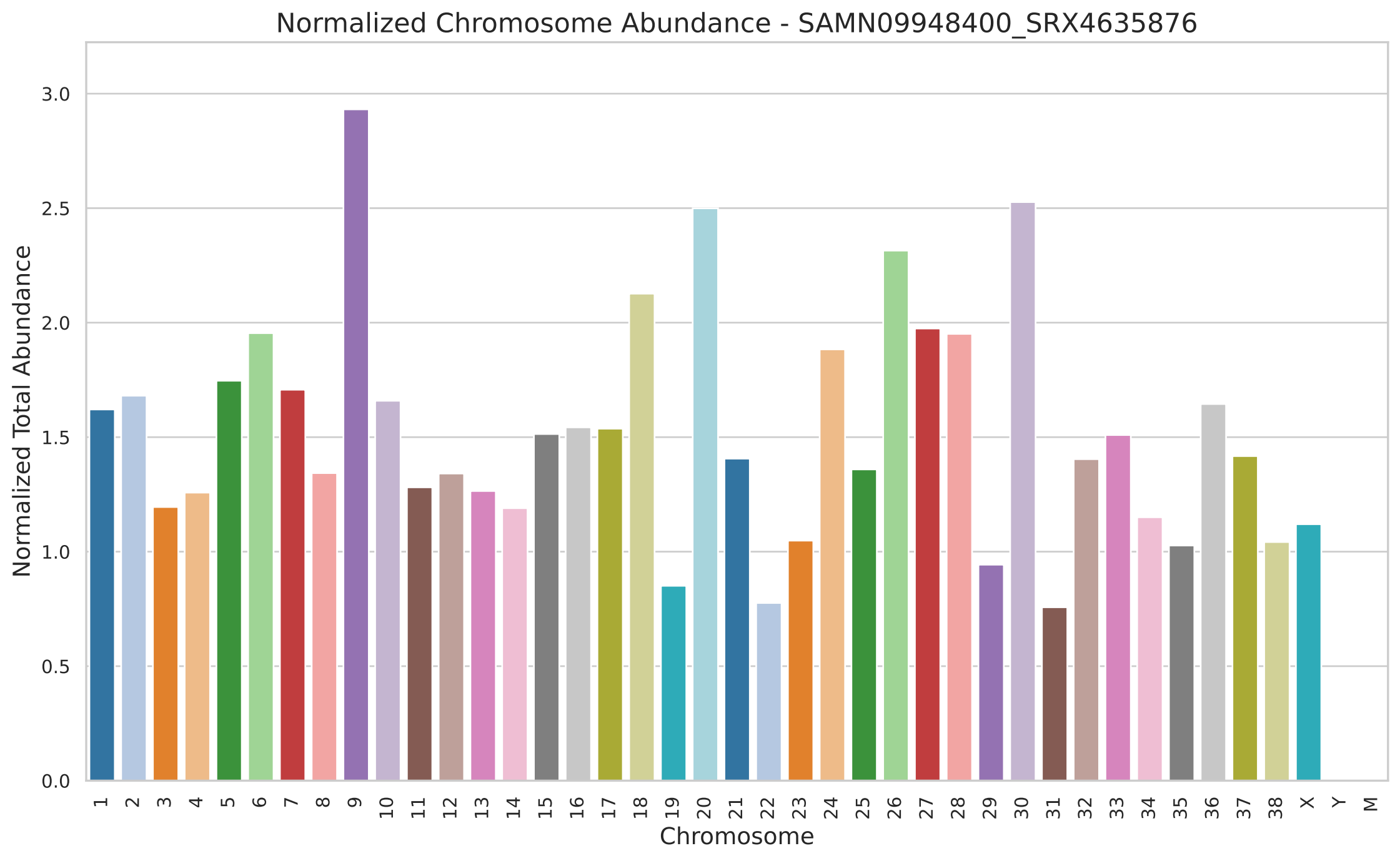

Normalized Chromosome Abundance - SAMN09949570_SRX4635885
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

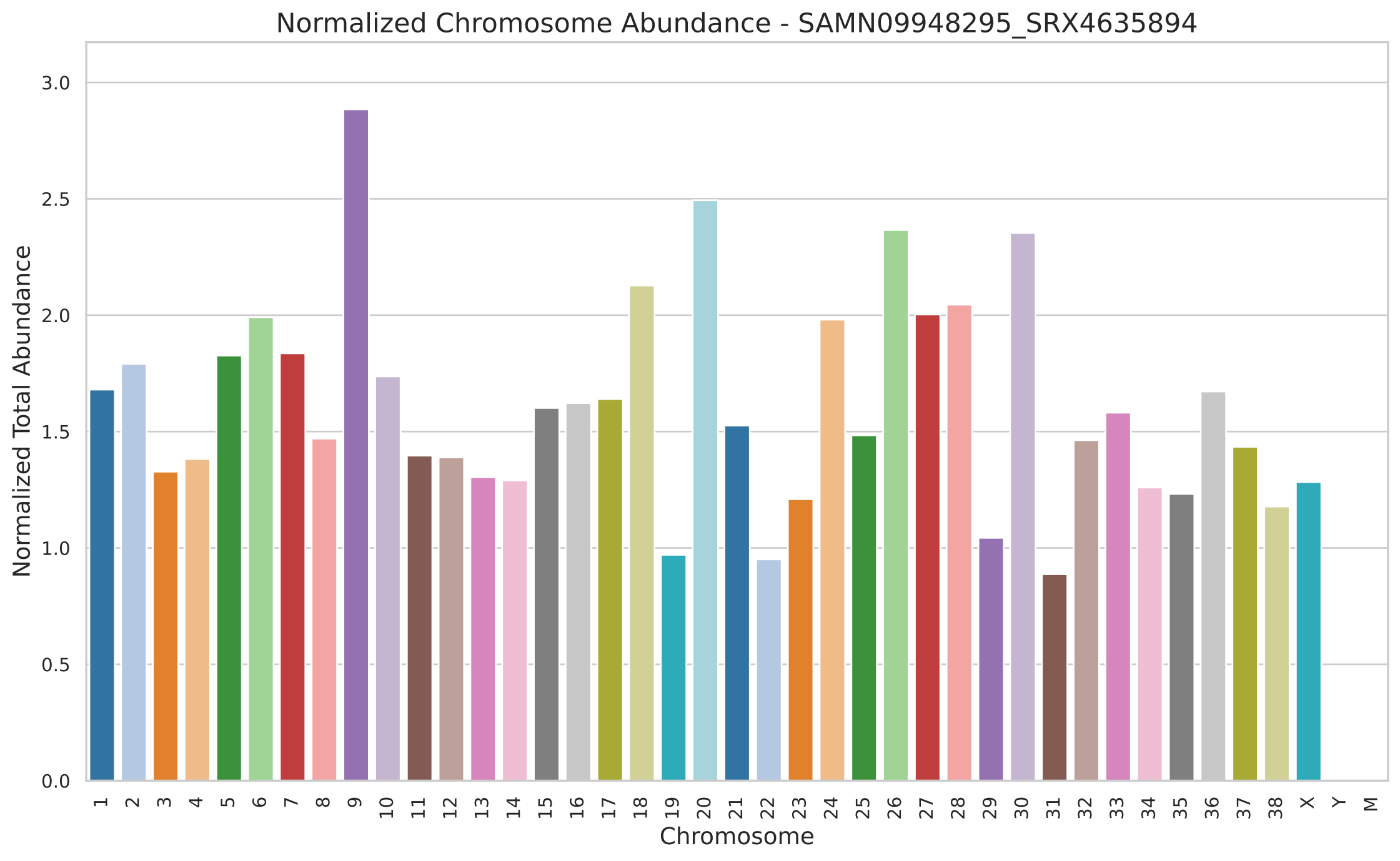

Normalized Chromosome Abundance - SAMN09948234_SRX4635908
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

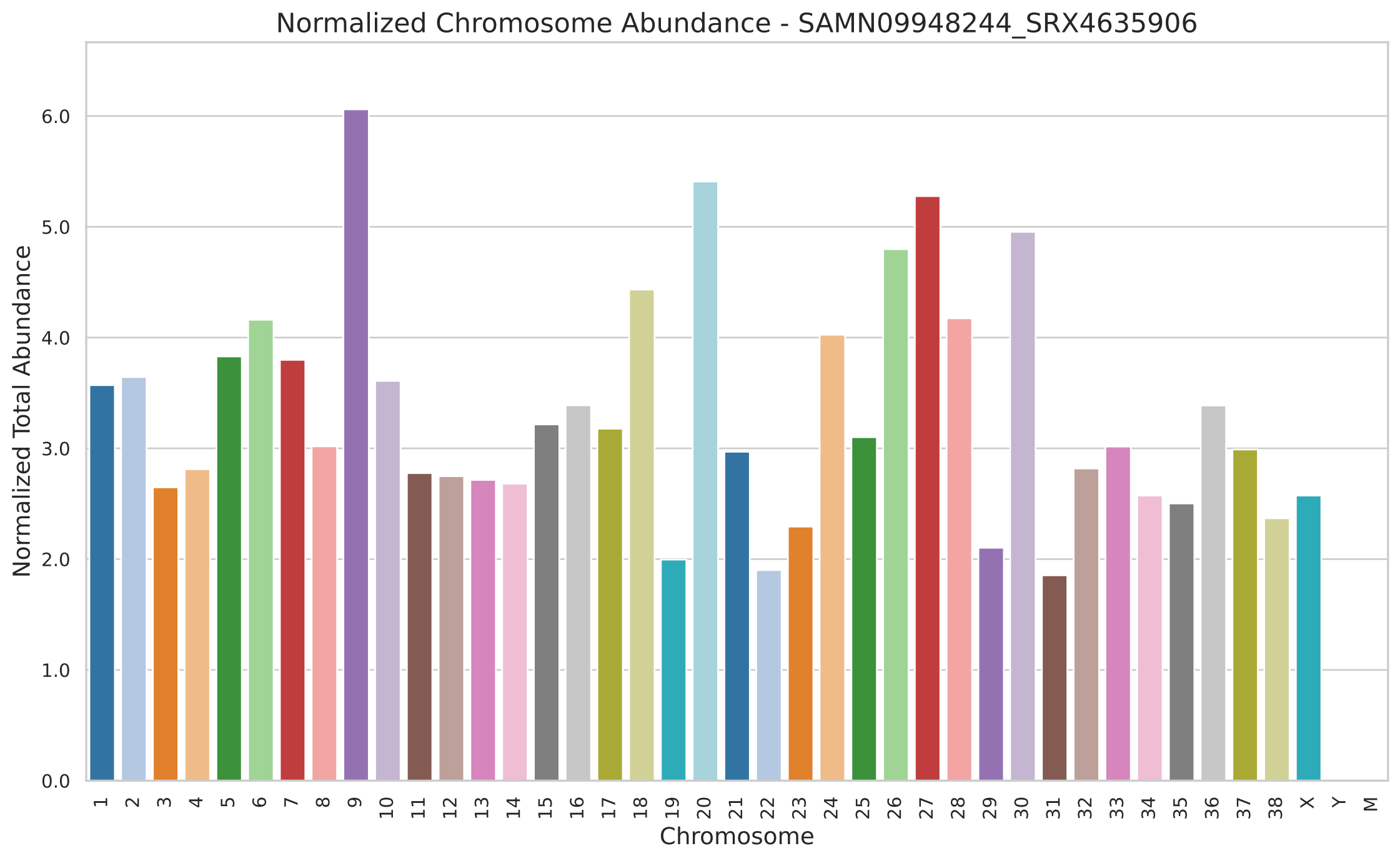

Normalized Chromosome Abundance - SAMN09949637_SRX4635883
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

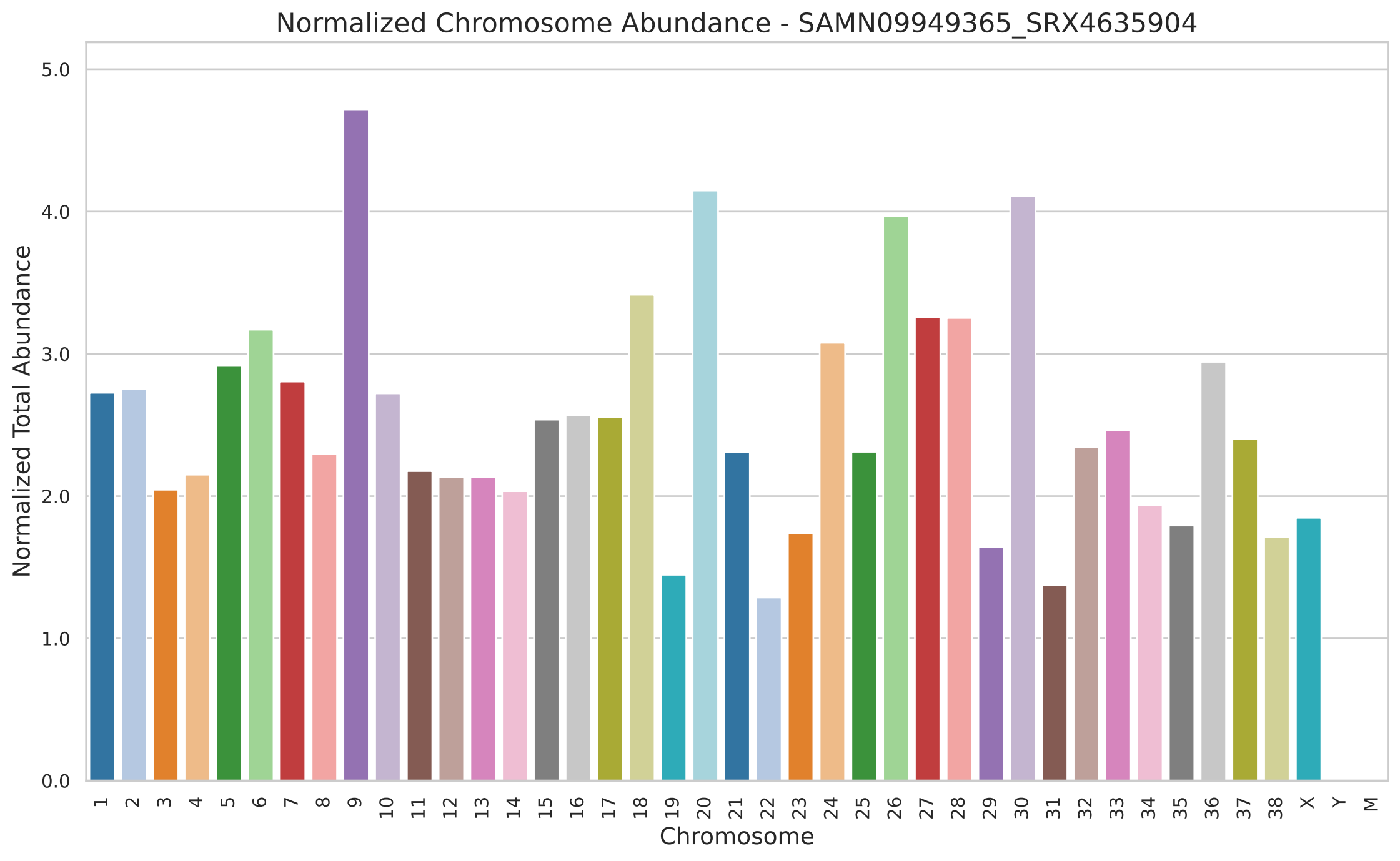

Normalized Chromosome Abundance - SAMN09949358_SRX4635897
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

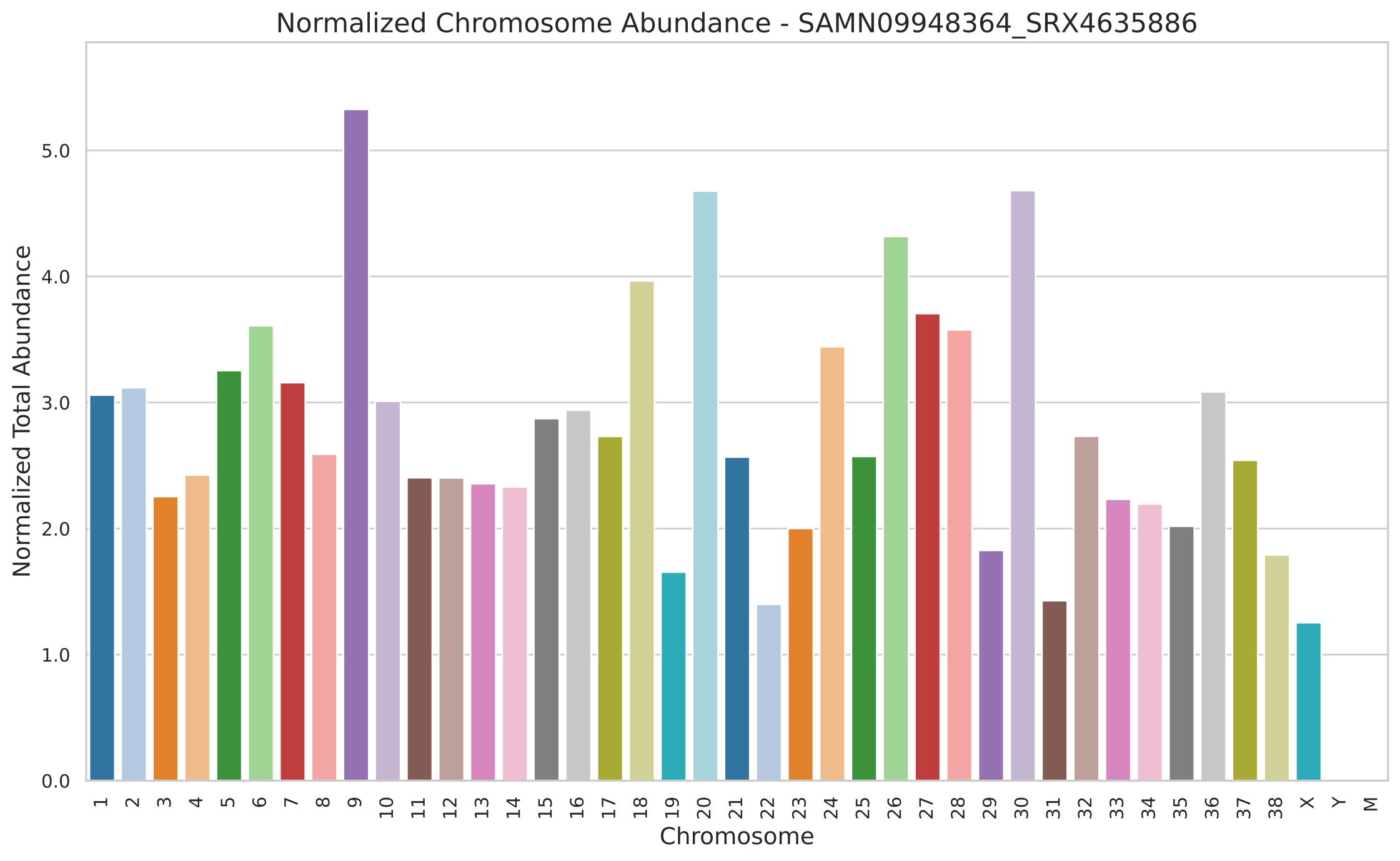

Normalized Chromosome Abundance - SAMN09949360_SRX4635899
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

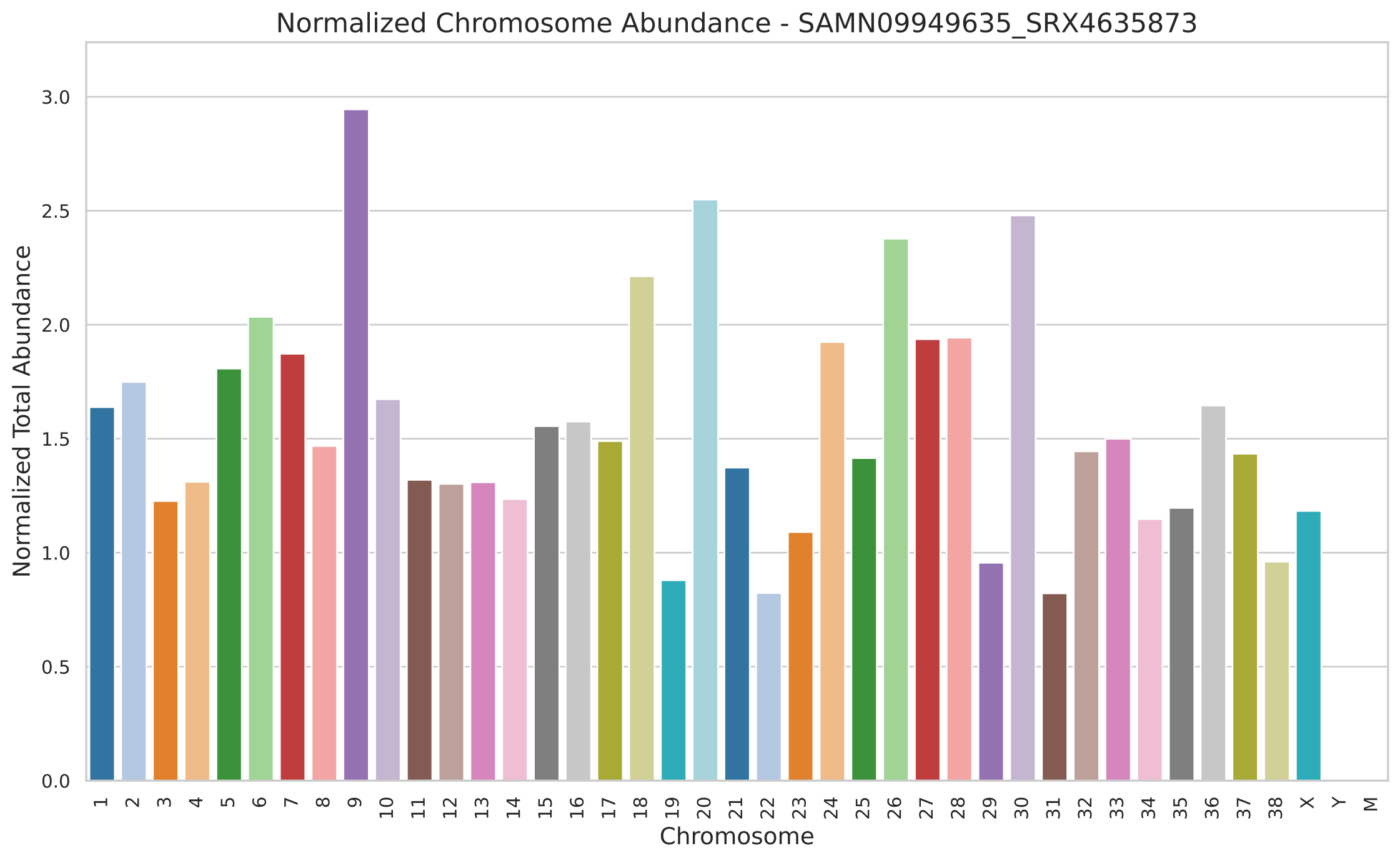

Normalized Chromosome Abundance - SAMN09948400_SRX4635876
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

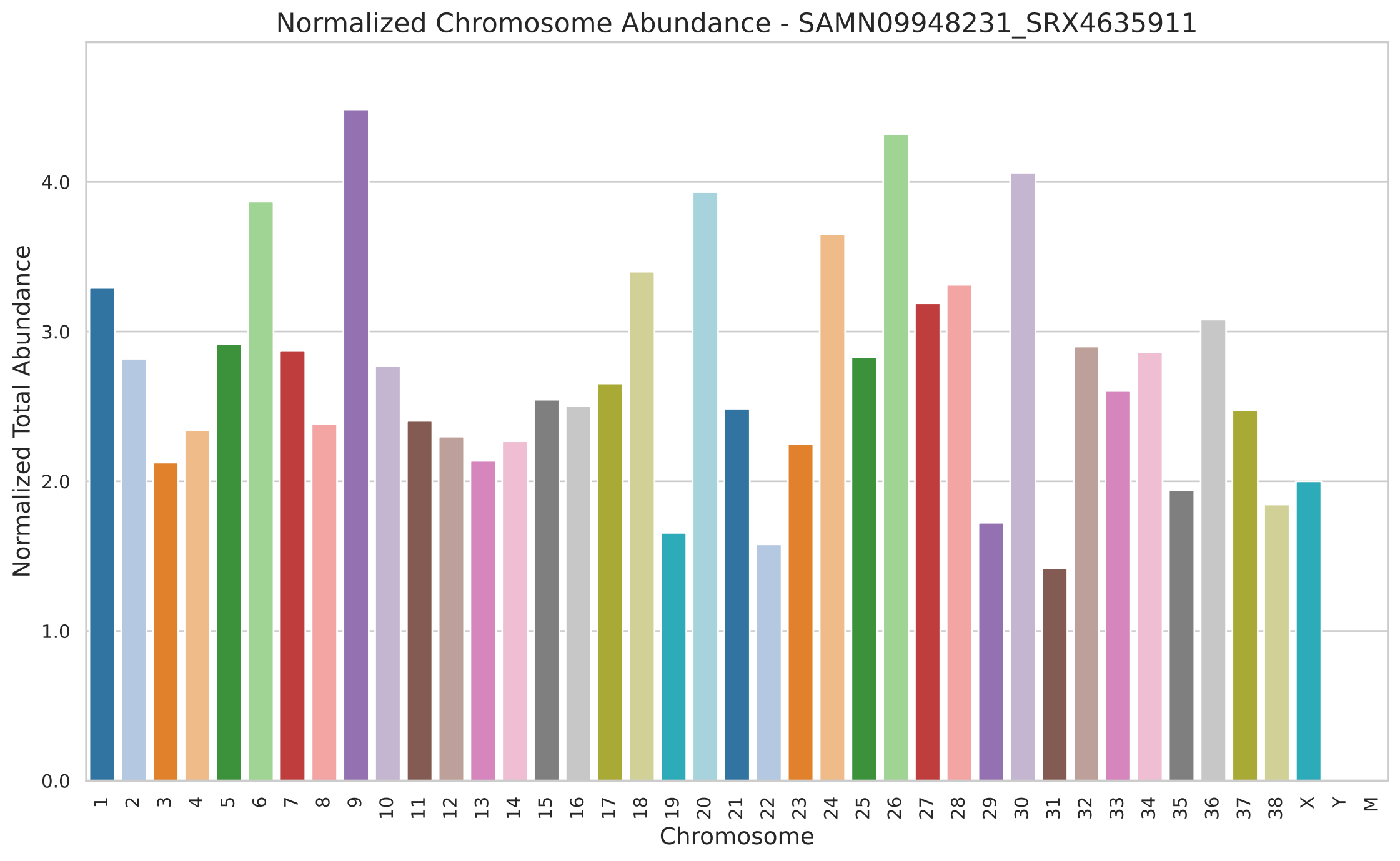

Normalized Chromosome Abundance - SAMN09948295_SRX4635894
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

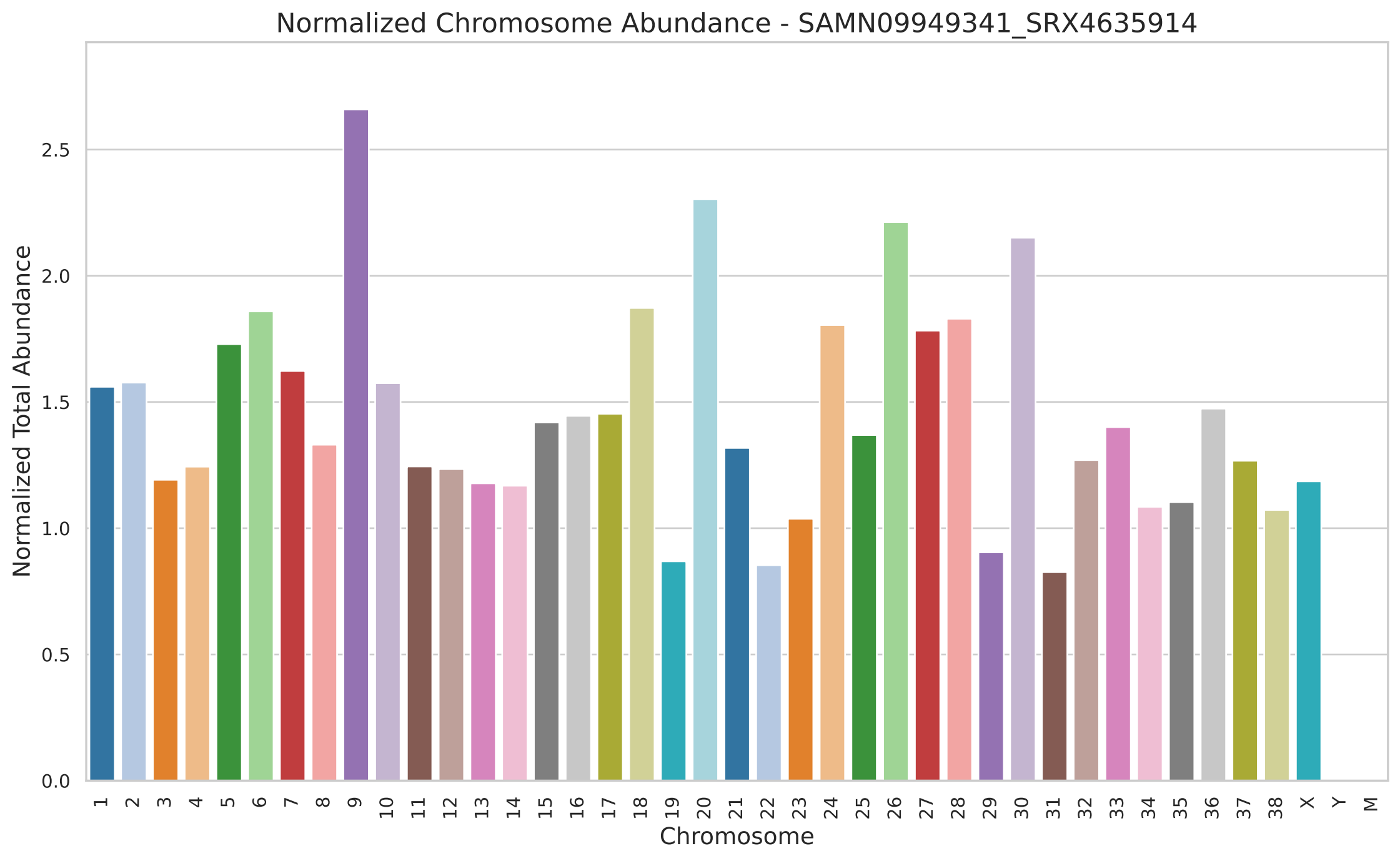

Normalized Chromosome Abundance - SAMN09948244_SRX4635906
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

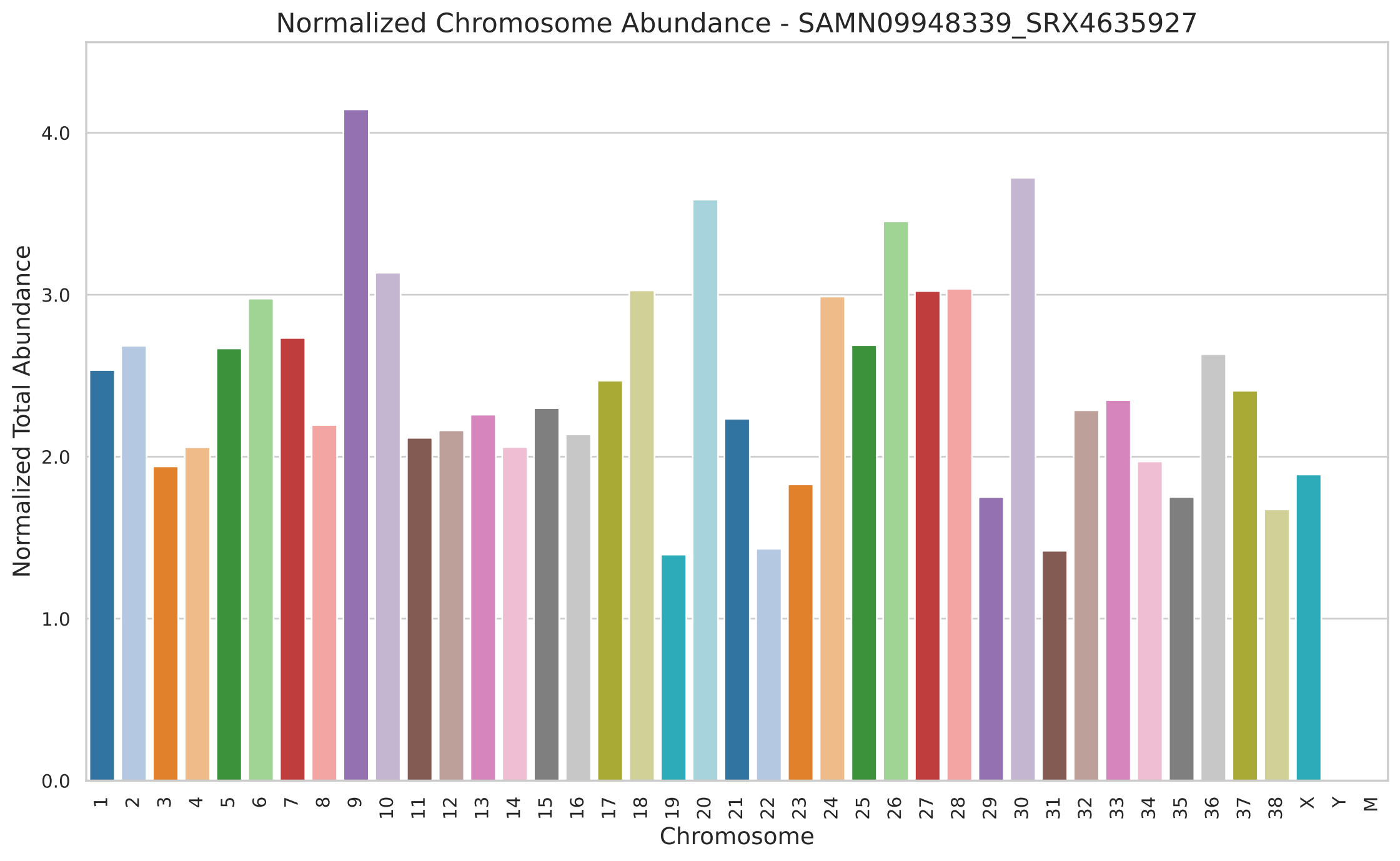

Normalized Chromosome Abundance - SAMN09949365_SRX4635904
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

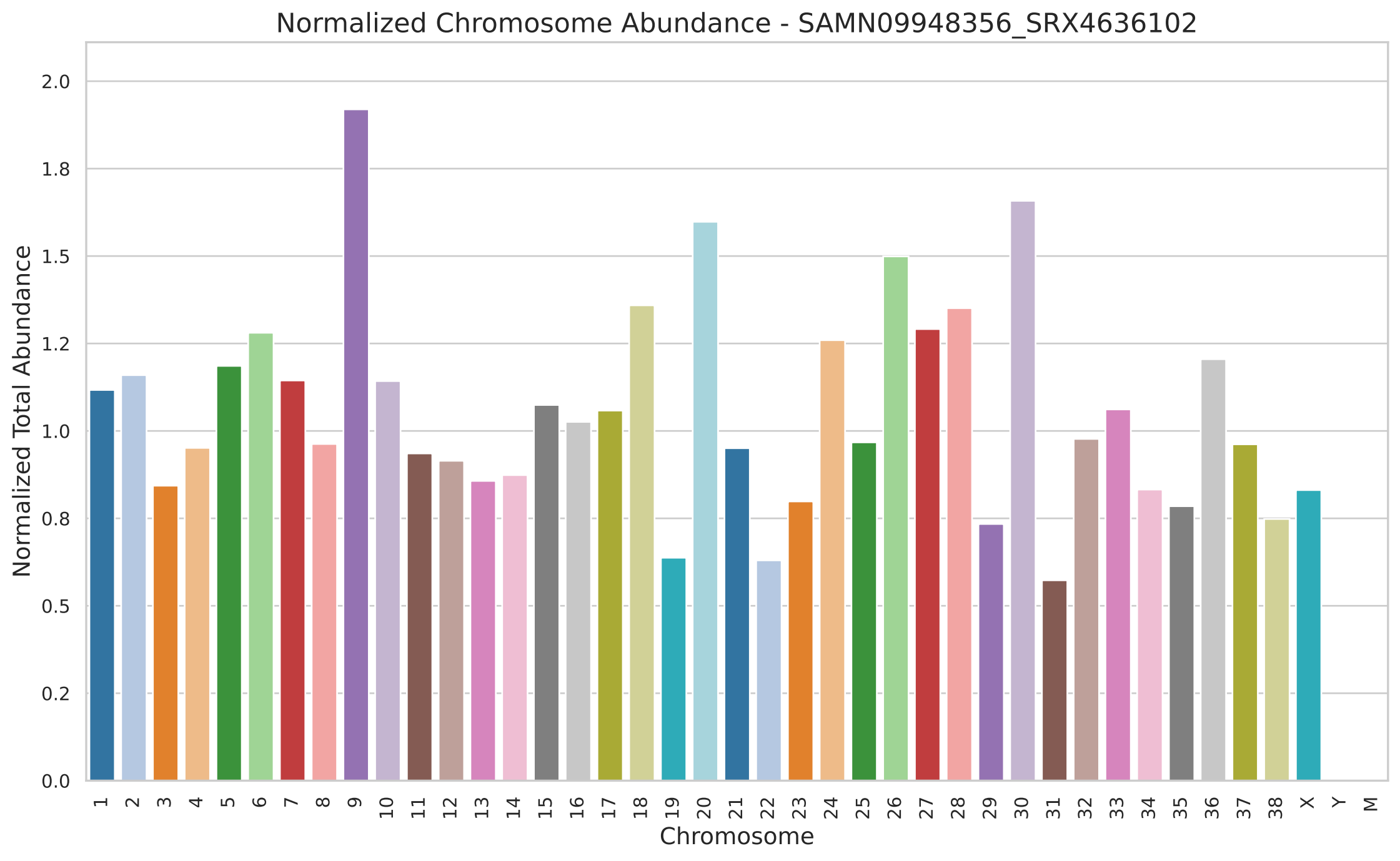

Normalized Chromosome Abundance - SAMN09948364_SRX4635886
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

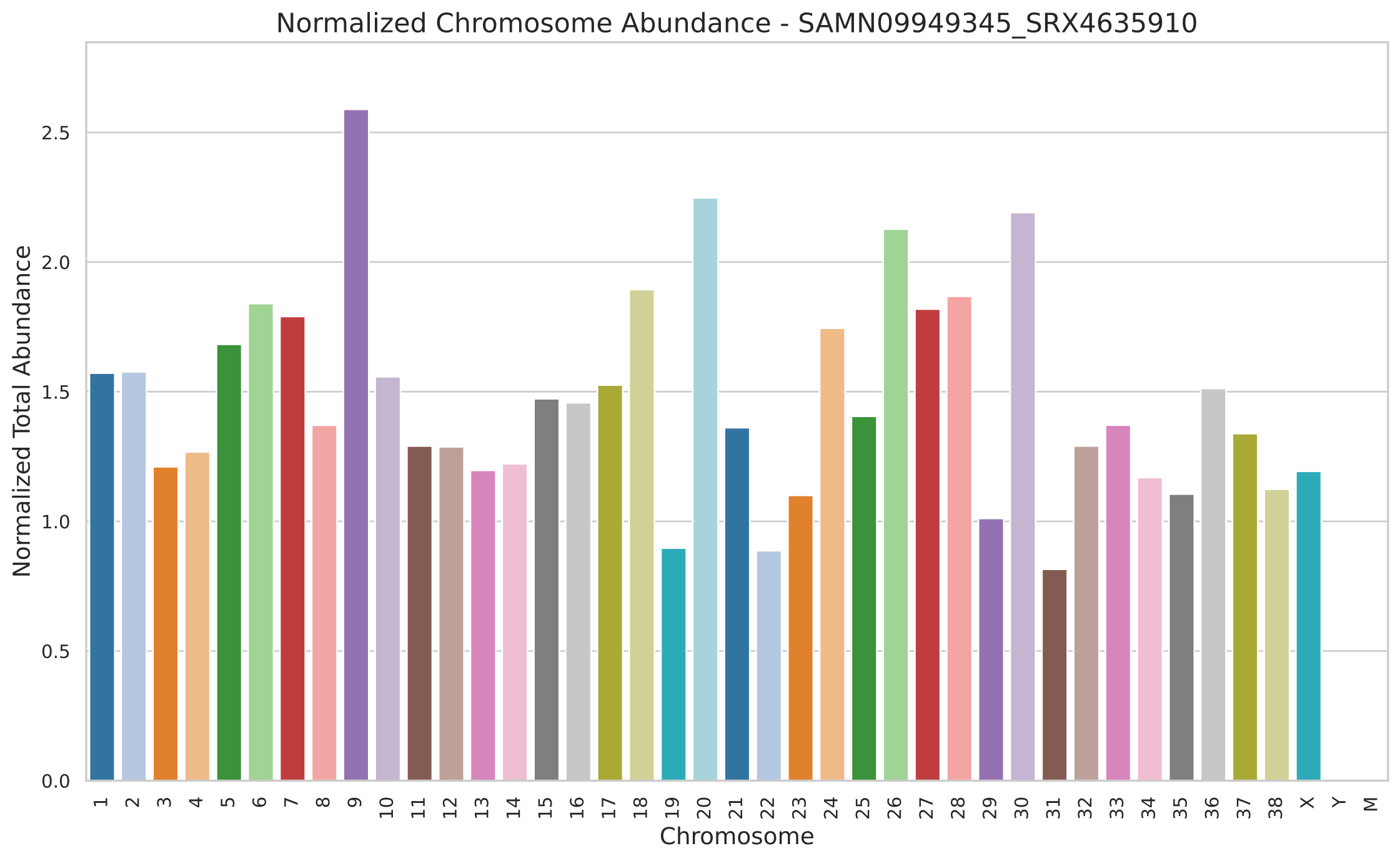

Normalized Chromosome Abundance - SAMN09949635_SRX4635873
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

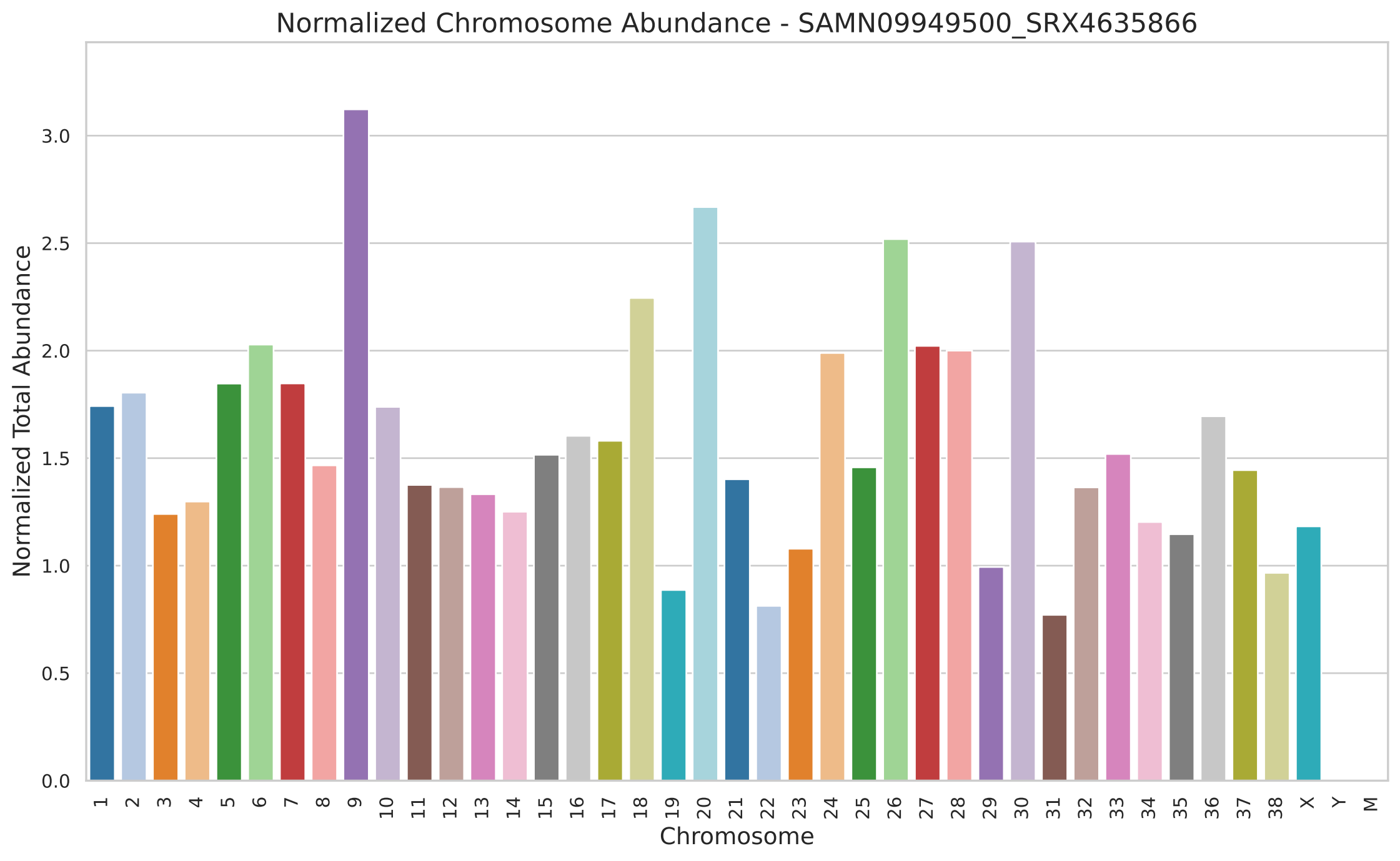

Normalized Chromosome Abundance - SAMN09948231_SRX4635911
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

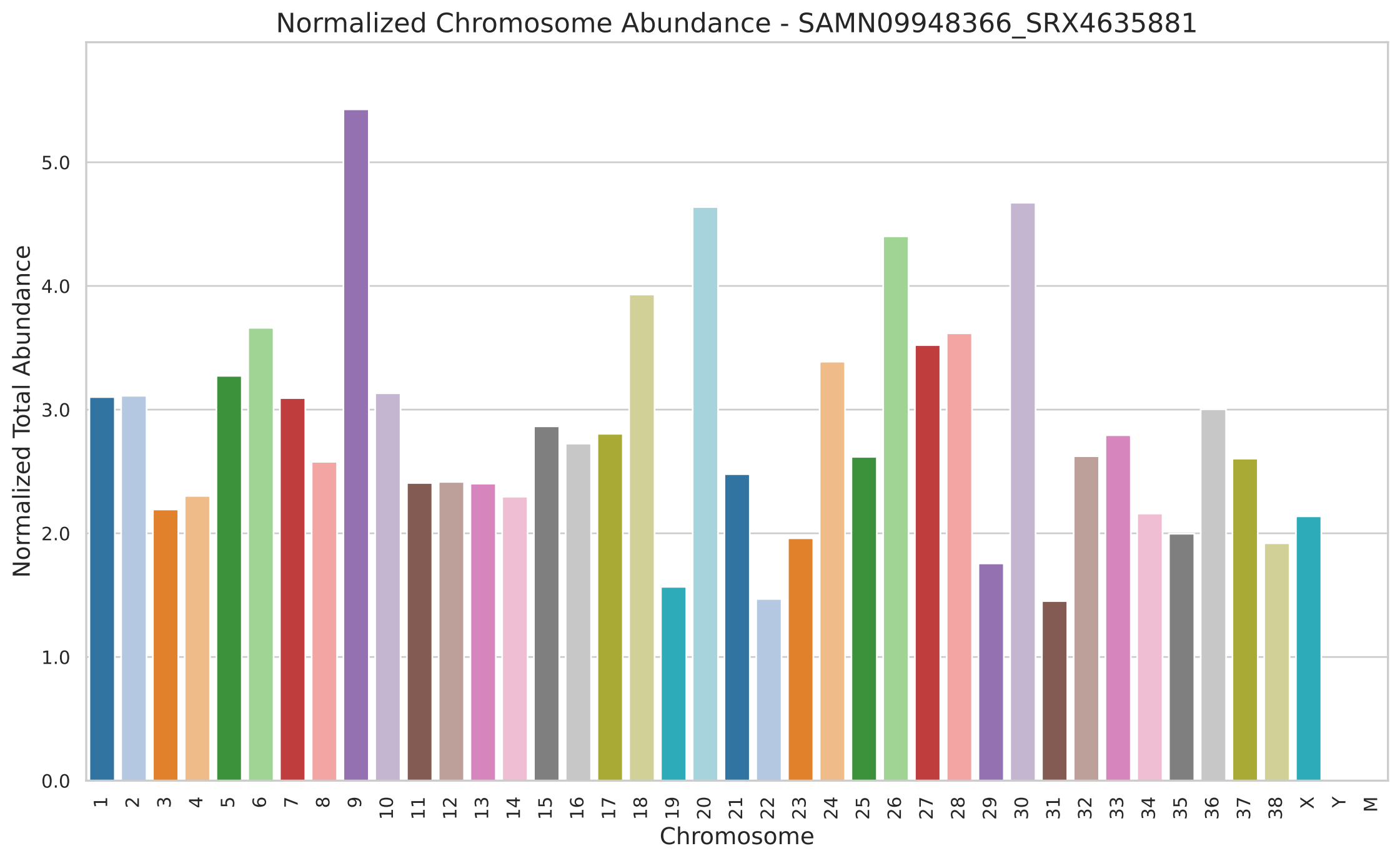

Normalized Chromosome Abundance - SAMN09949341_SRX4635914
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

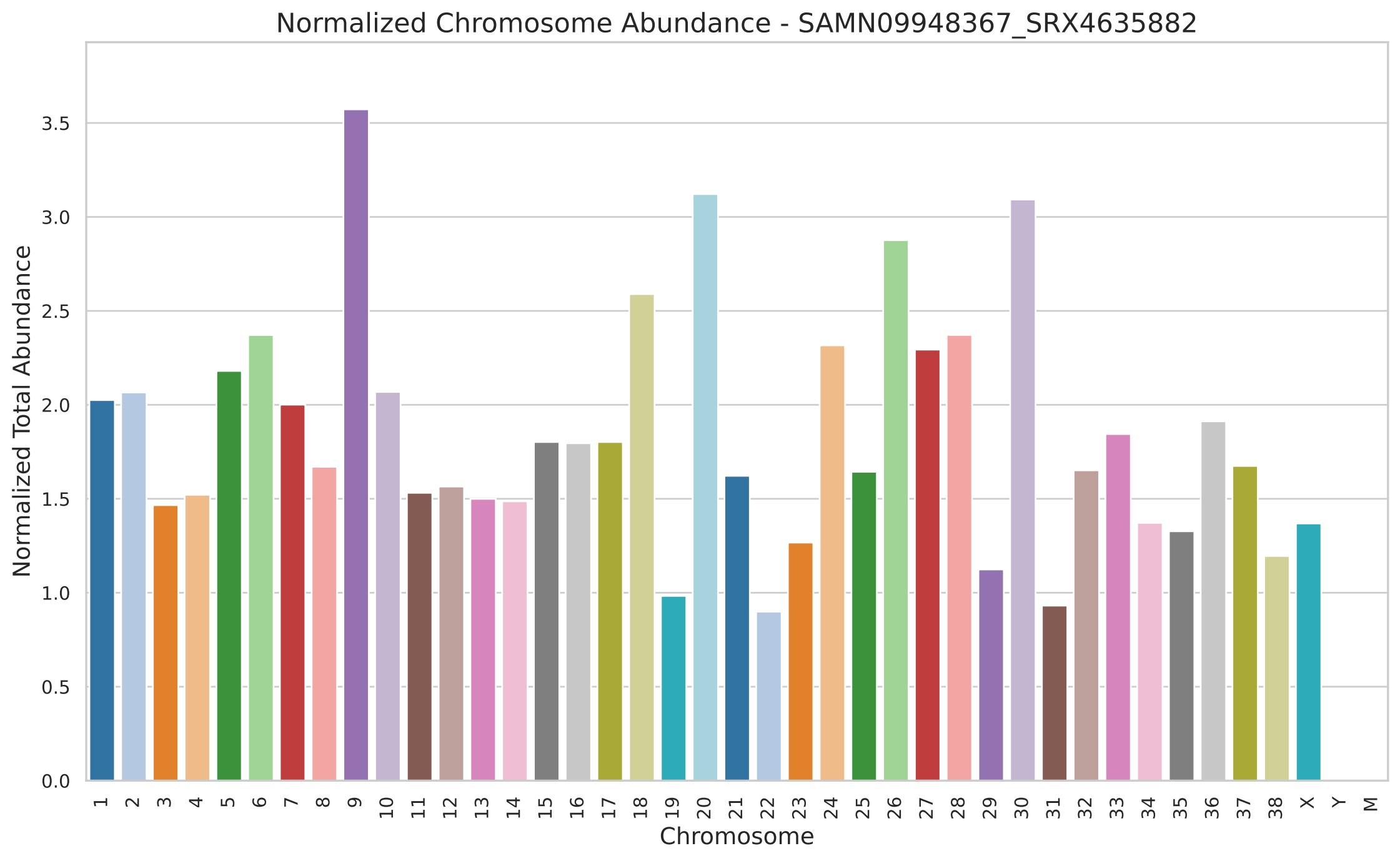

Normalized Chromosome Abundance - SAMN09948339_SRX4635927
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

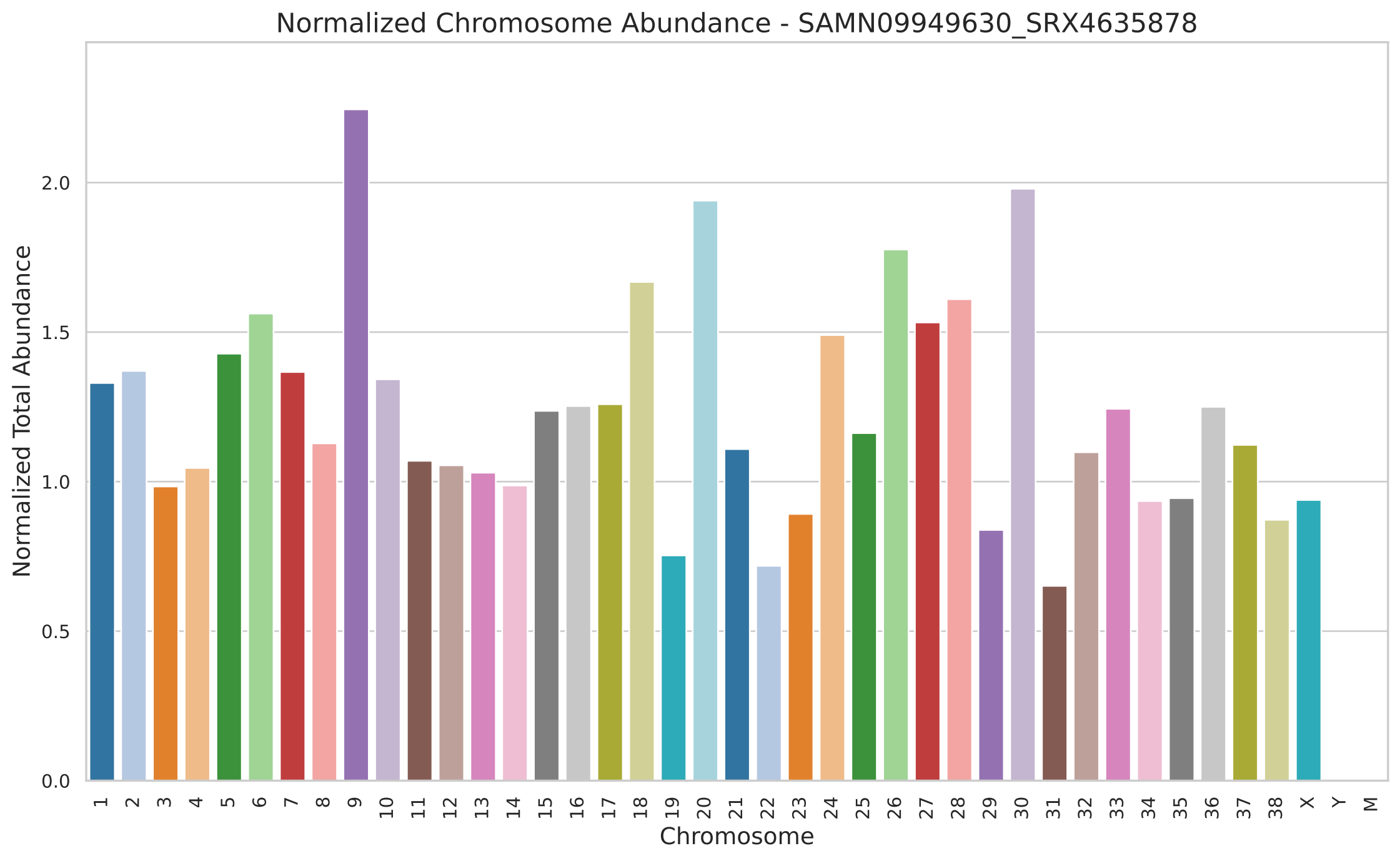

Normalized Chromosome Abundance - SAMN09948356_SRX4636102
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

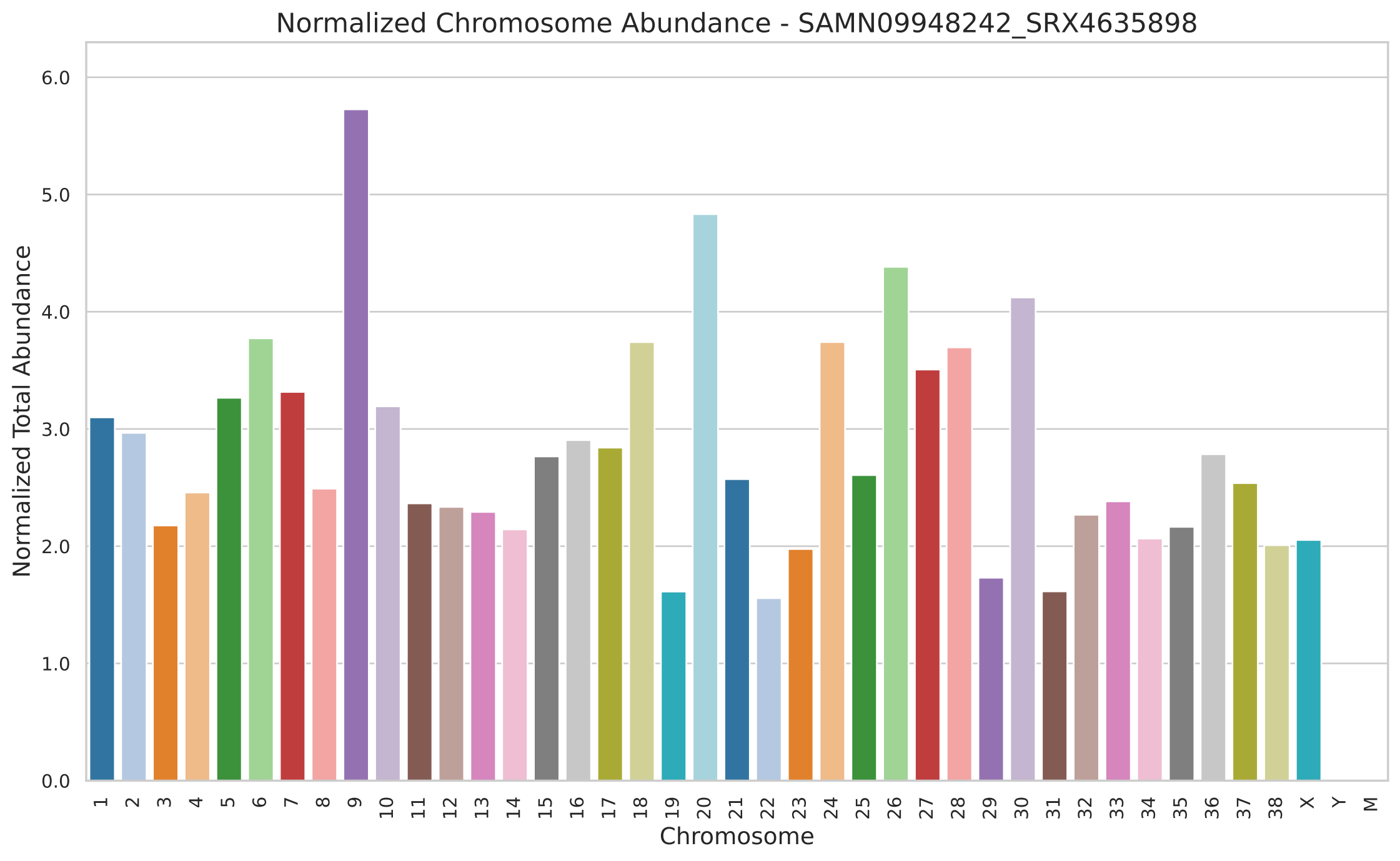

Normalized Chromosome Abundance - SAMN09949345_SRX4635910
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

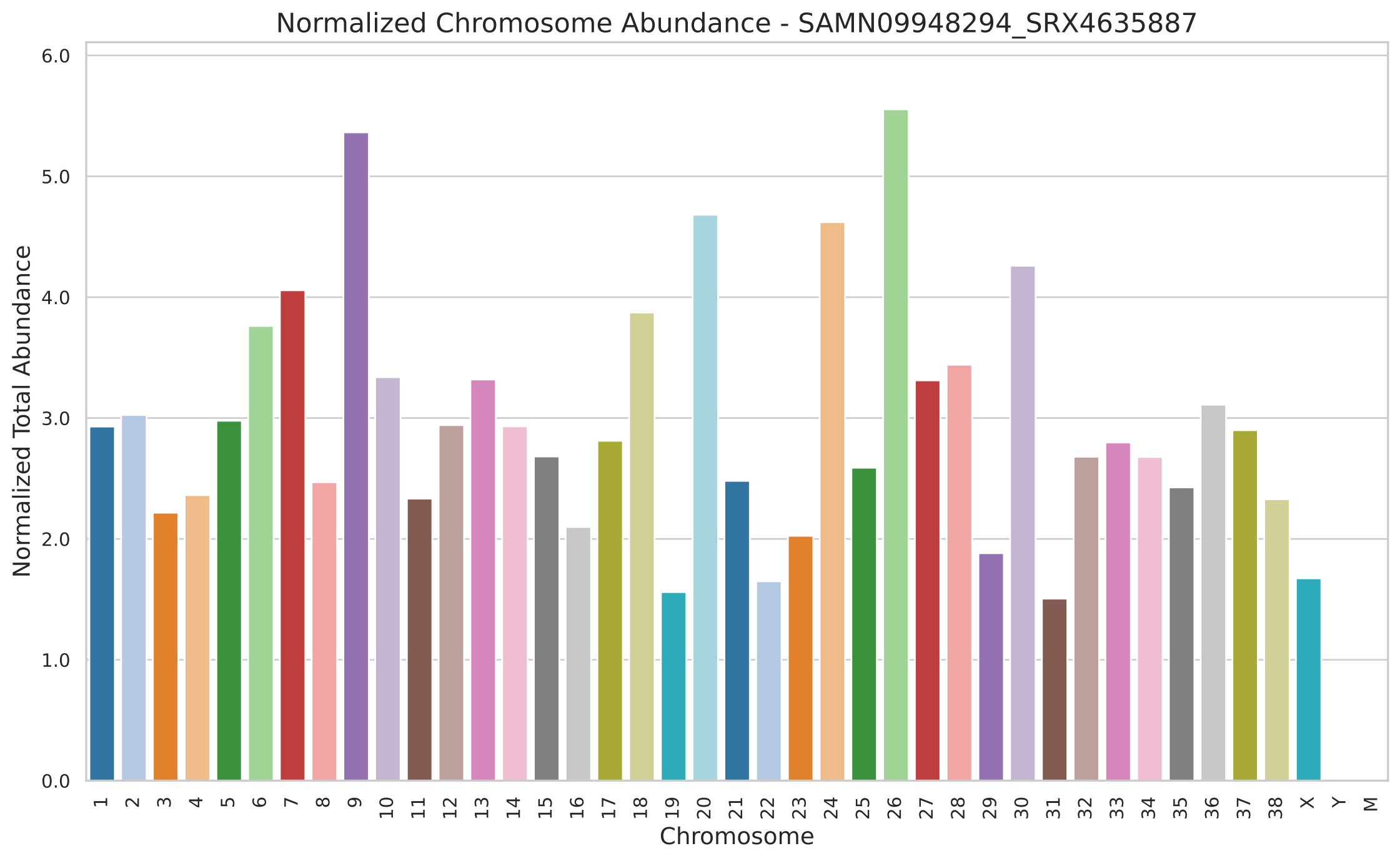

Normalized Chromosome Abundance - SAMN09949500_SRX4635866
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

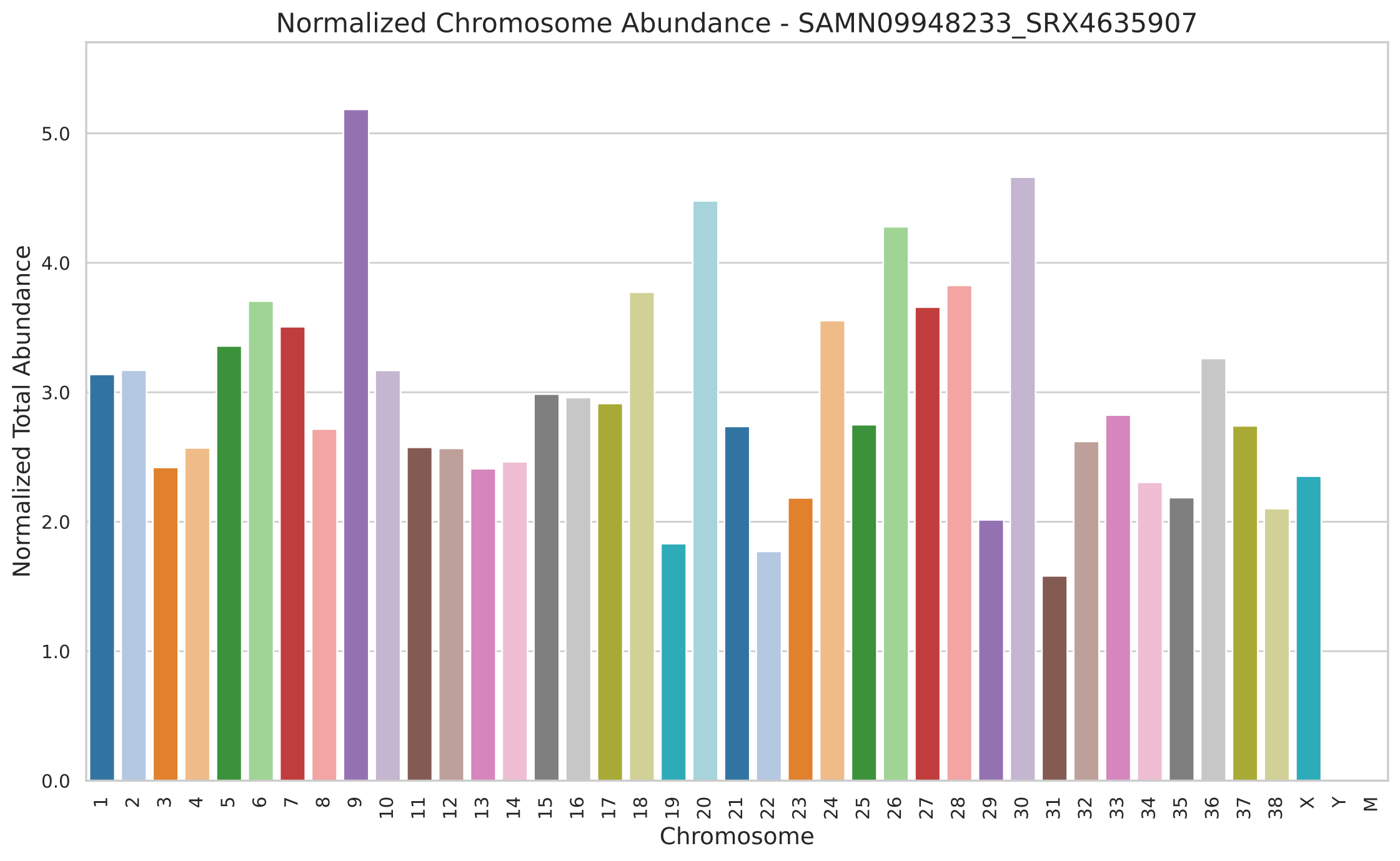

Normalized Chromosome Abundance - SAMN09948366_SRX4635881
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

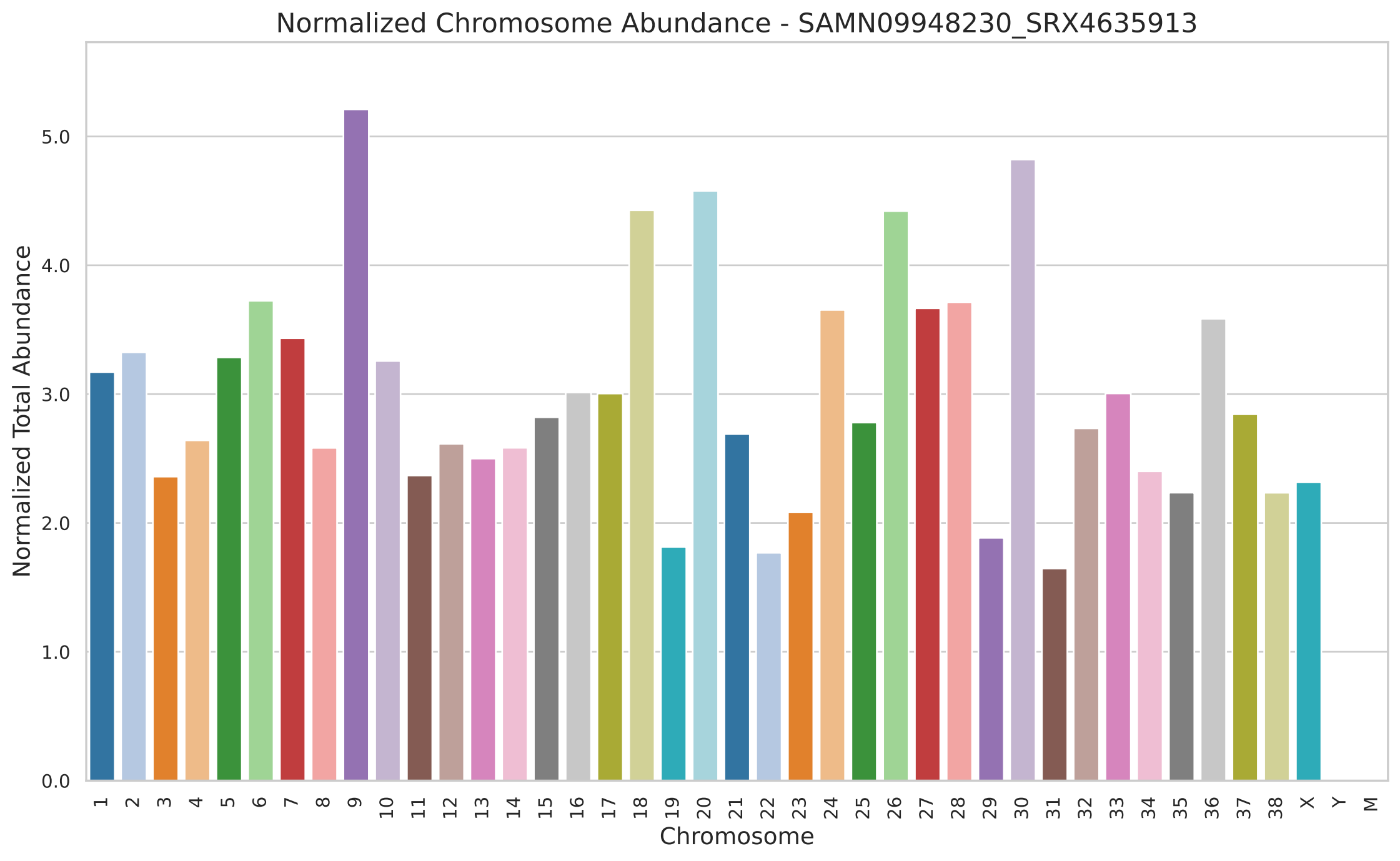

Normalized Chromosome Abundance - SAMN09948367_SRX4635882
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

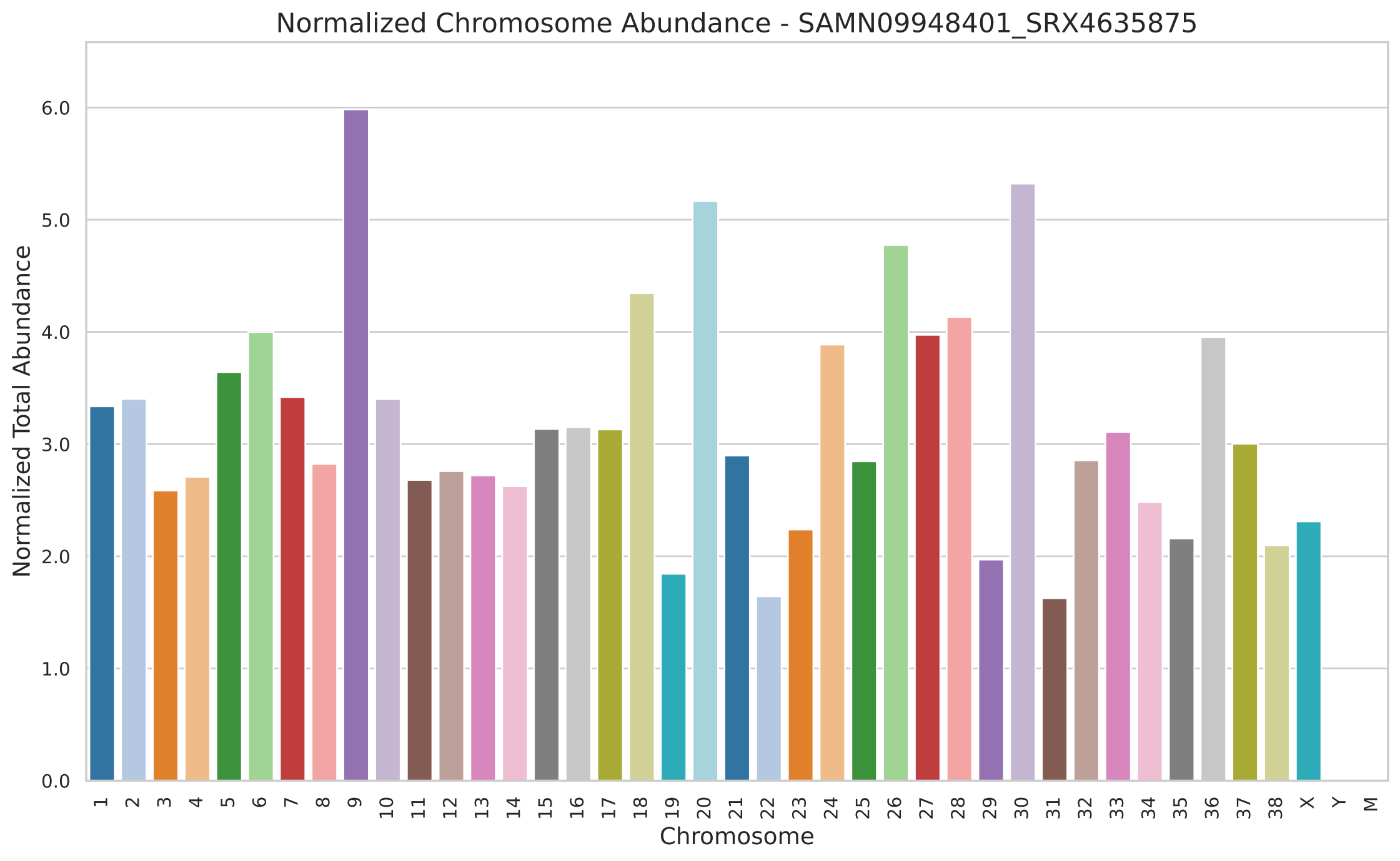

Normalized Chromosome Abundance - SAMN09949630_SRX4635878
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

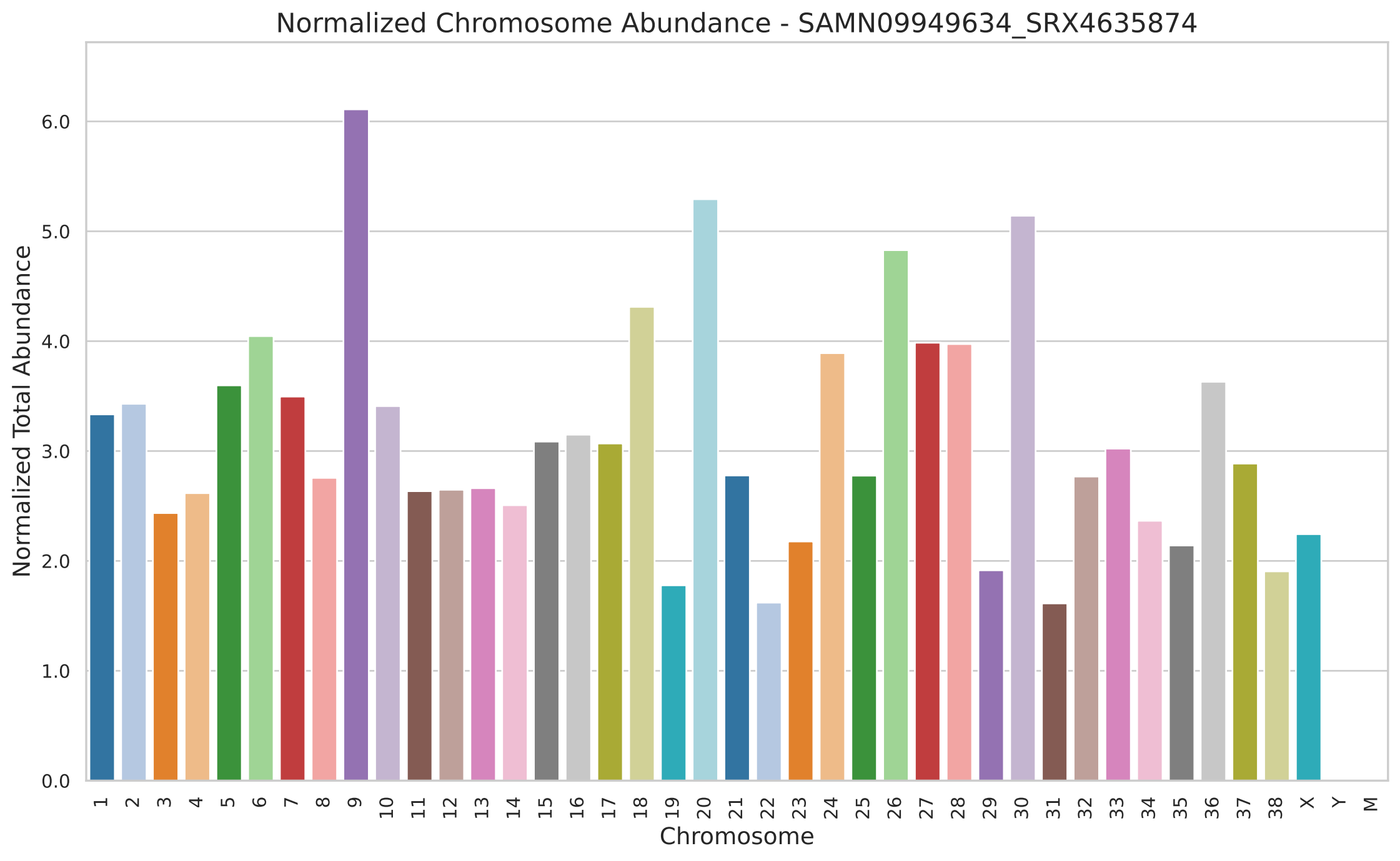

Normalized Chromosome Abundance - SAMN09948242_SRX4635898
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

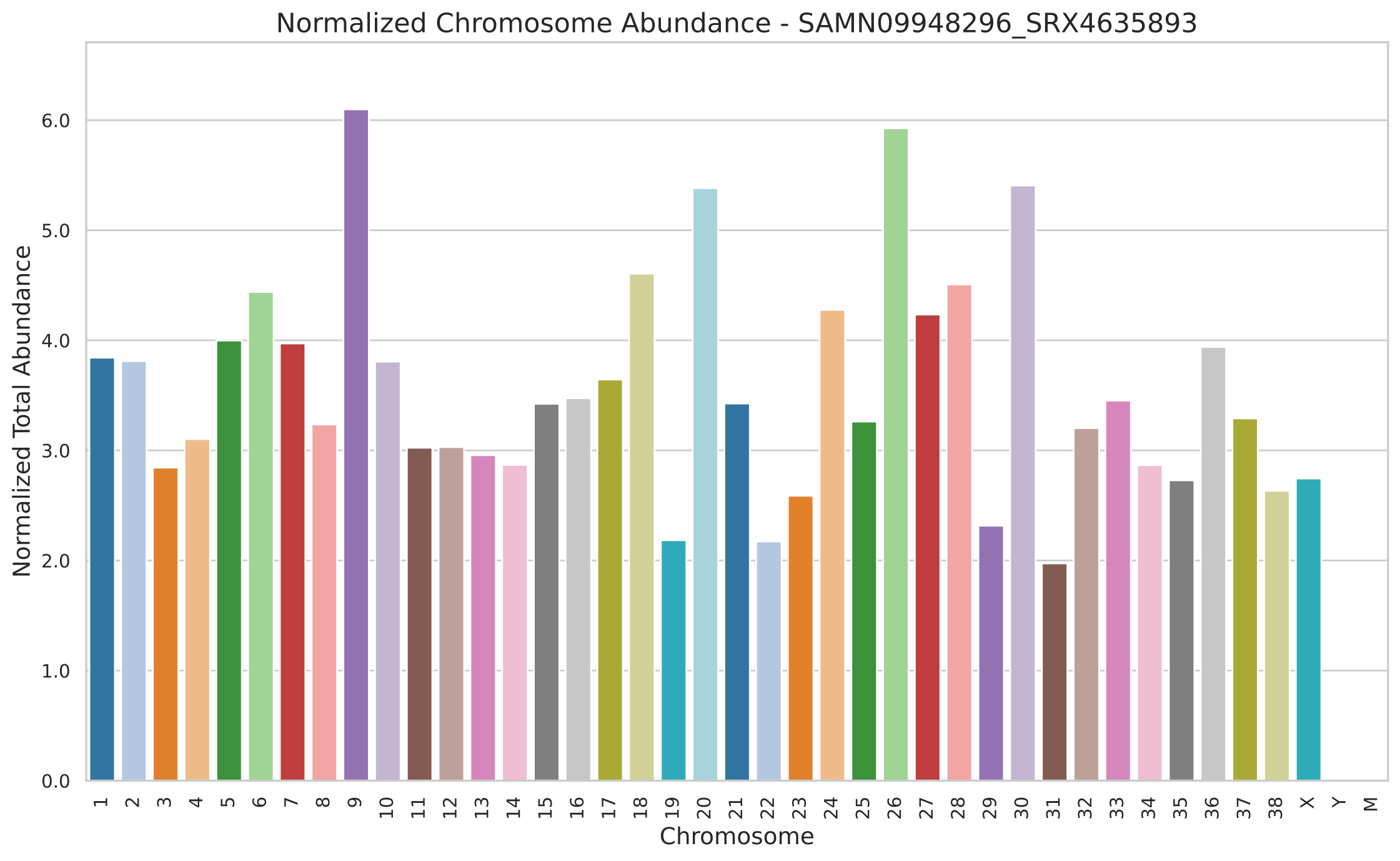

Normalized Chromosome Abundance - SAMN09948294_SRX4635887
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

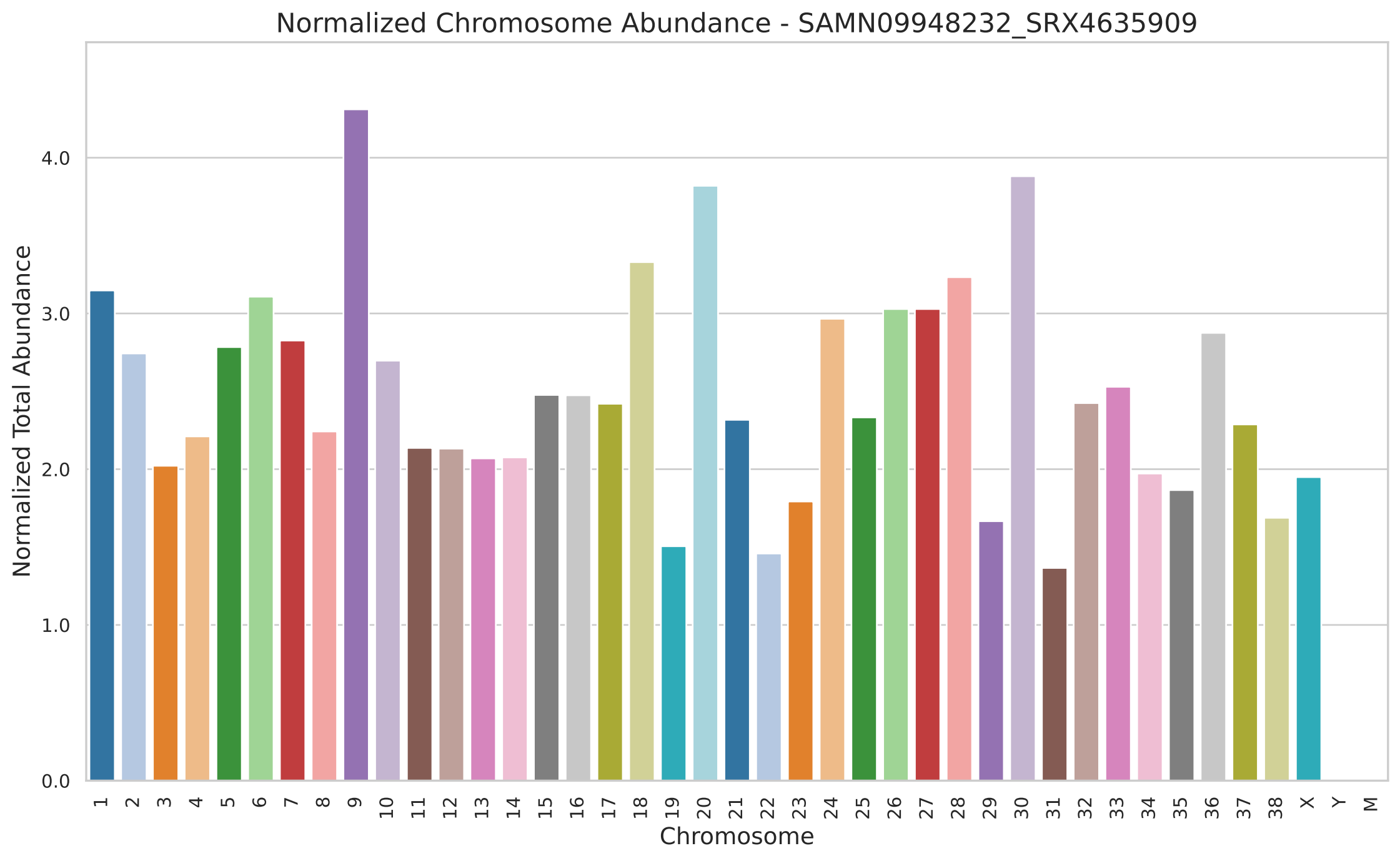

Normalized Chromosome Abundance - SAMN09948233_SRX4635907
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

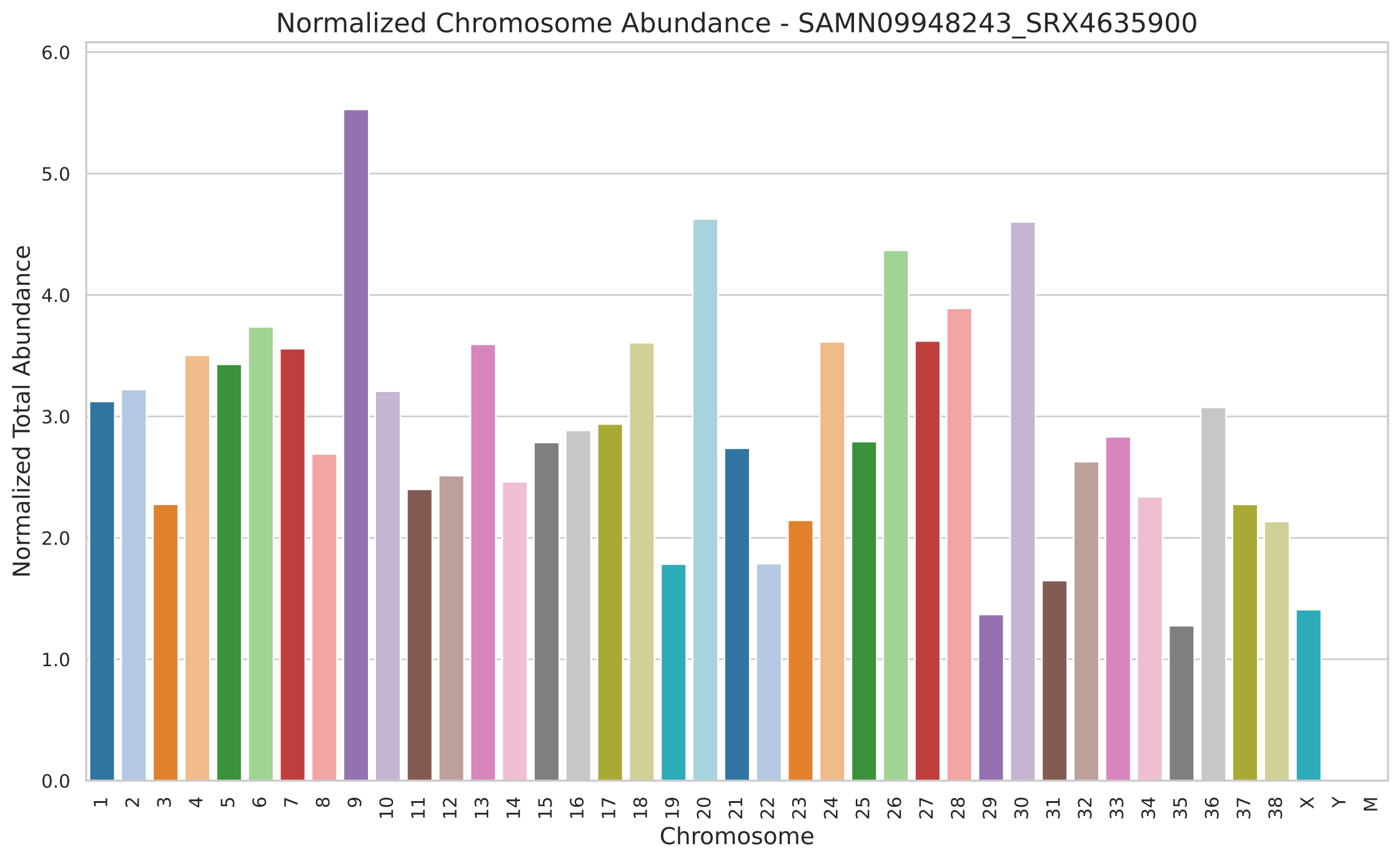

Normalized Chromosome Abundance - SAMN09948230_SRX4635913
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

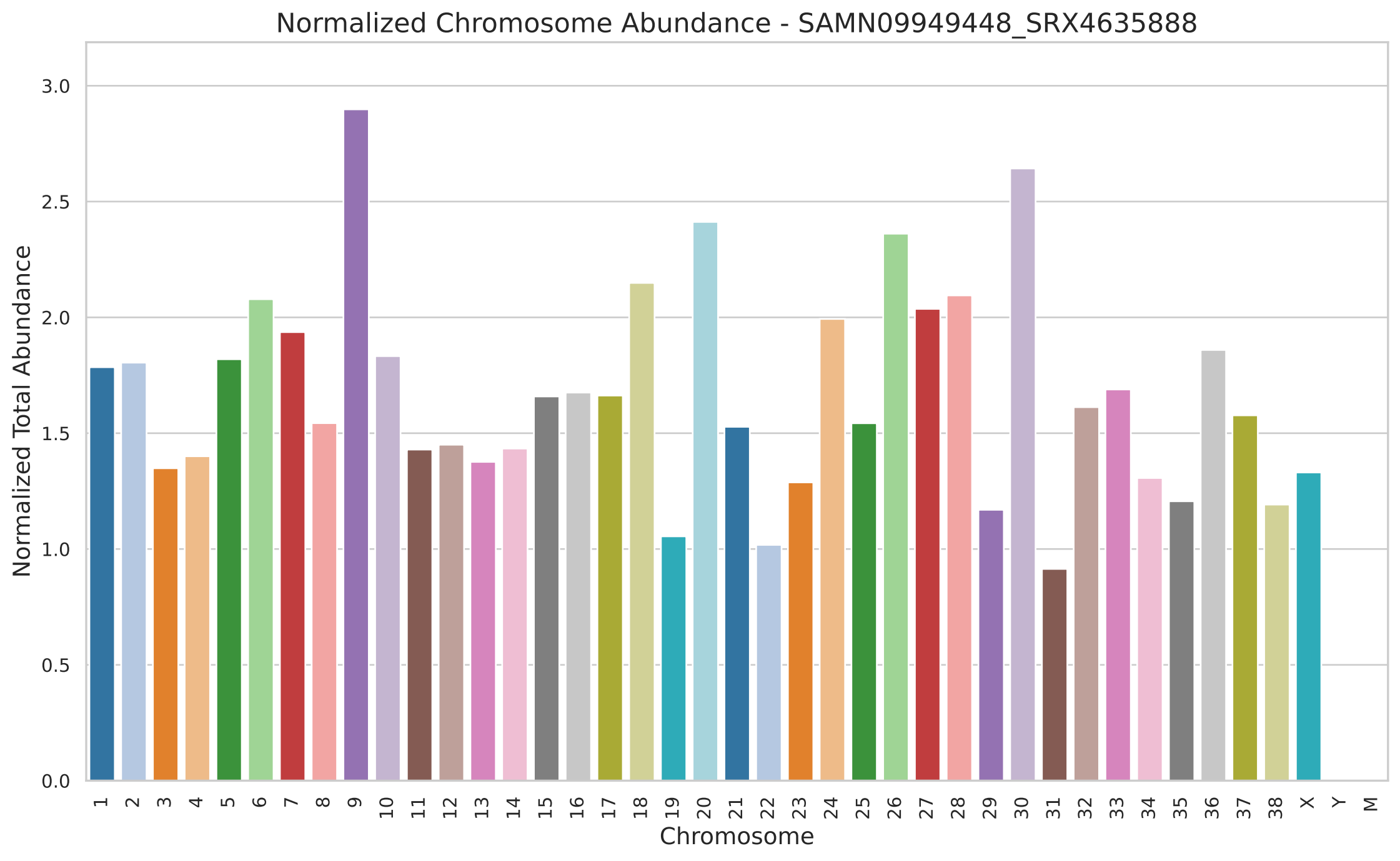

Normalized Chromosome Abundance - SAMN09948401_SRX4635875
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

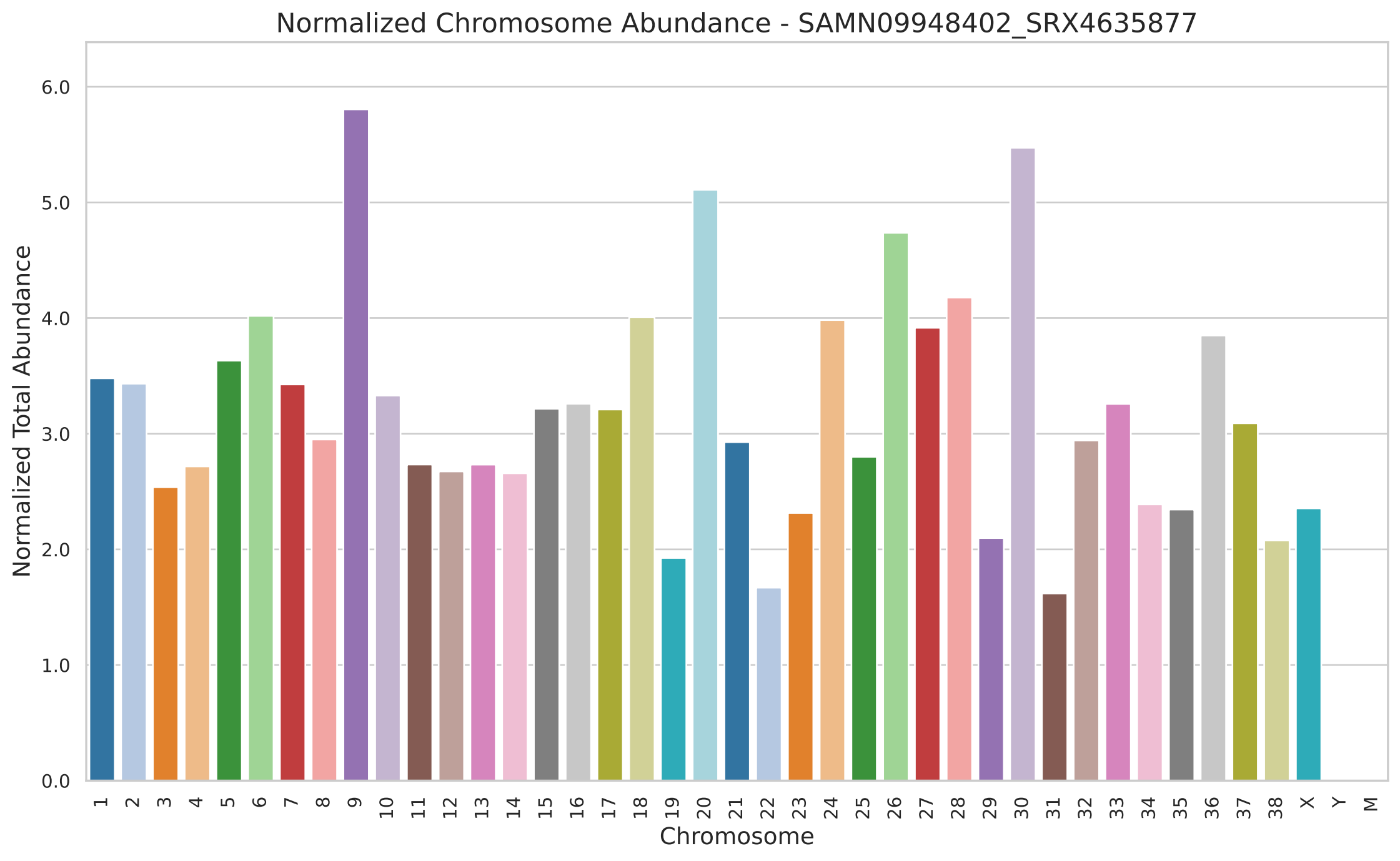

Normalized Chromosome Abundance - SAMN09949634_SRX4635874
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

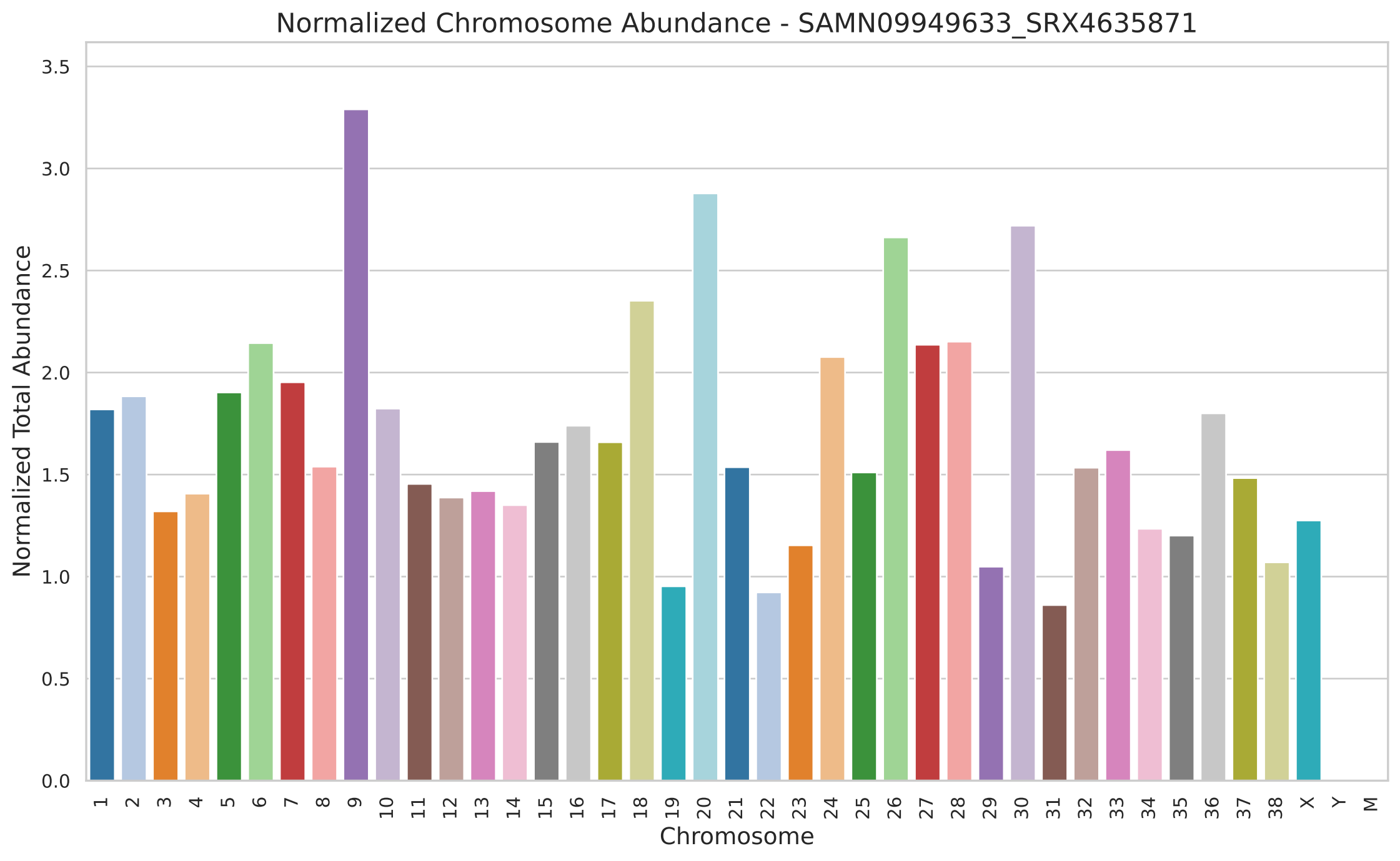

Normalized Chromosome Abundance - SAMN09948296_SRX4635893
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

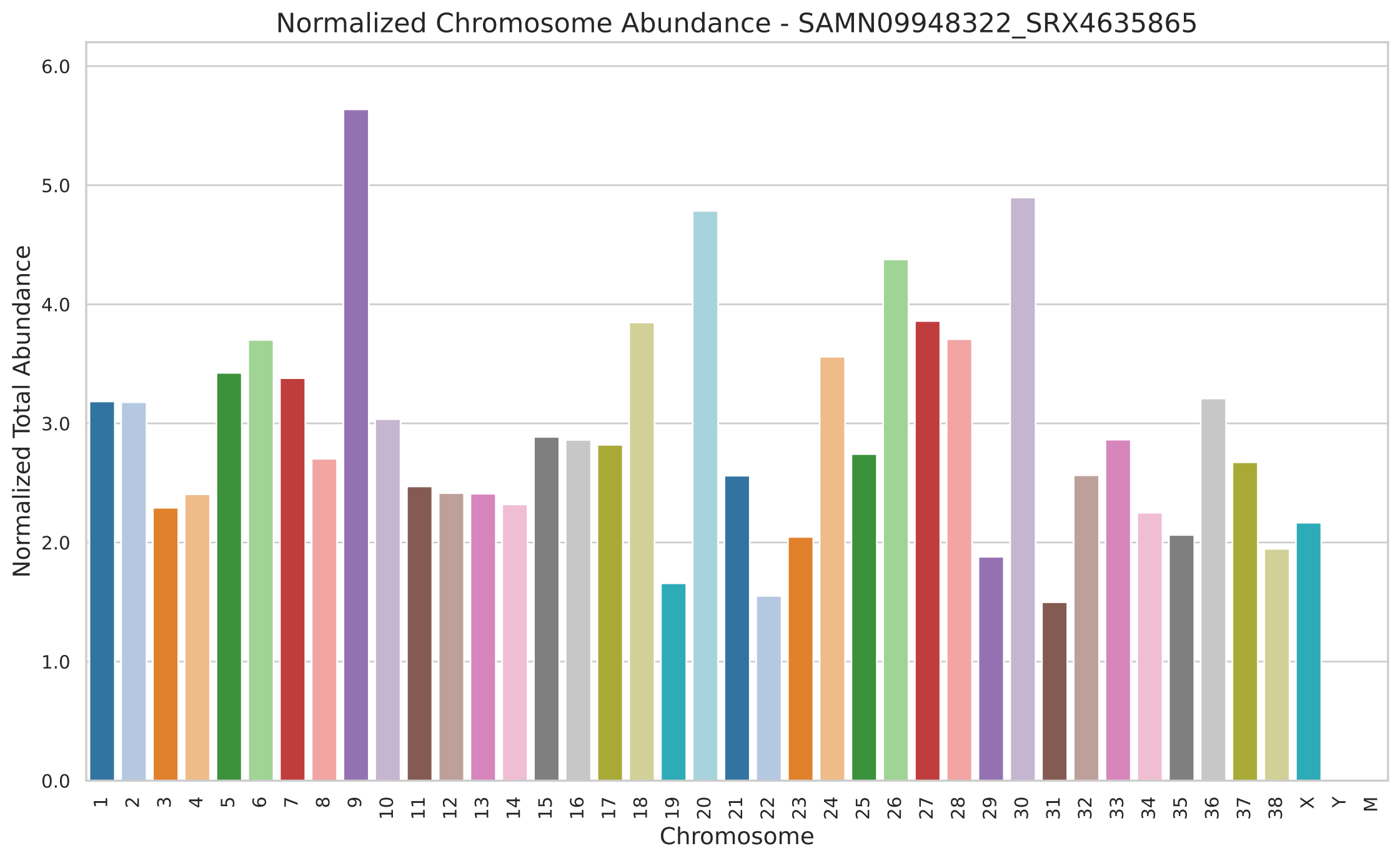

Normalized Chromosome Abundance - SAMN09948232_SRX4635909
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

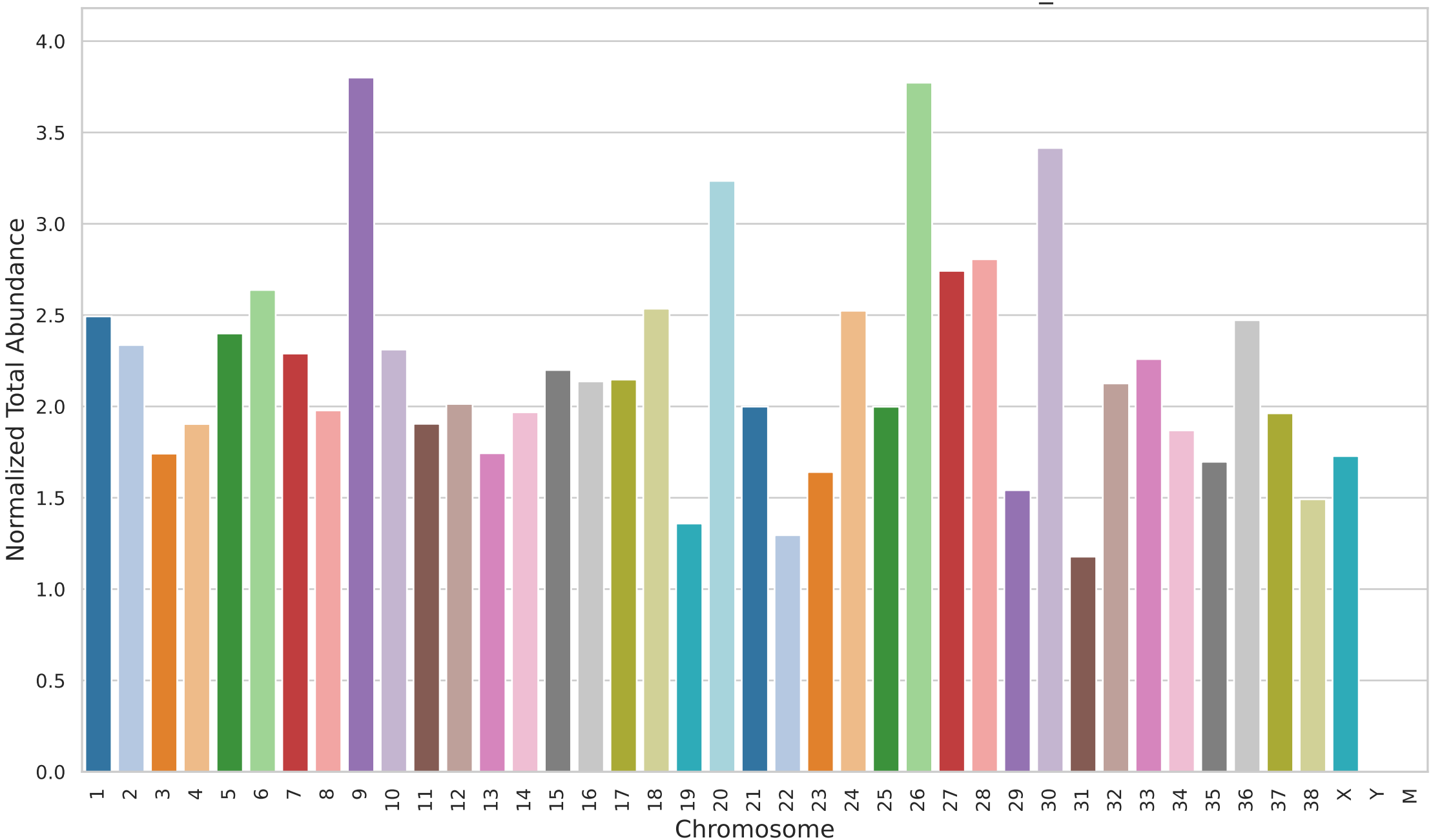

Normalized Chromosome Abundance - SAMN09948243_SRX4635900
Normalized Total Abundance
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

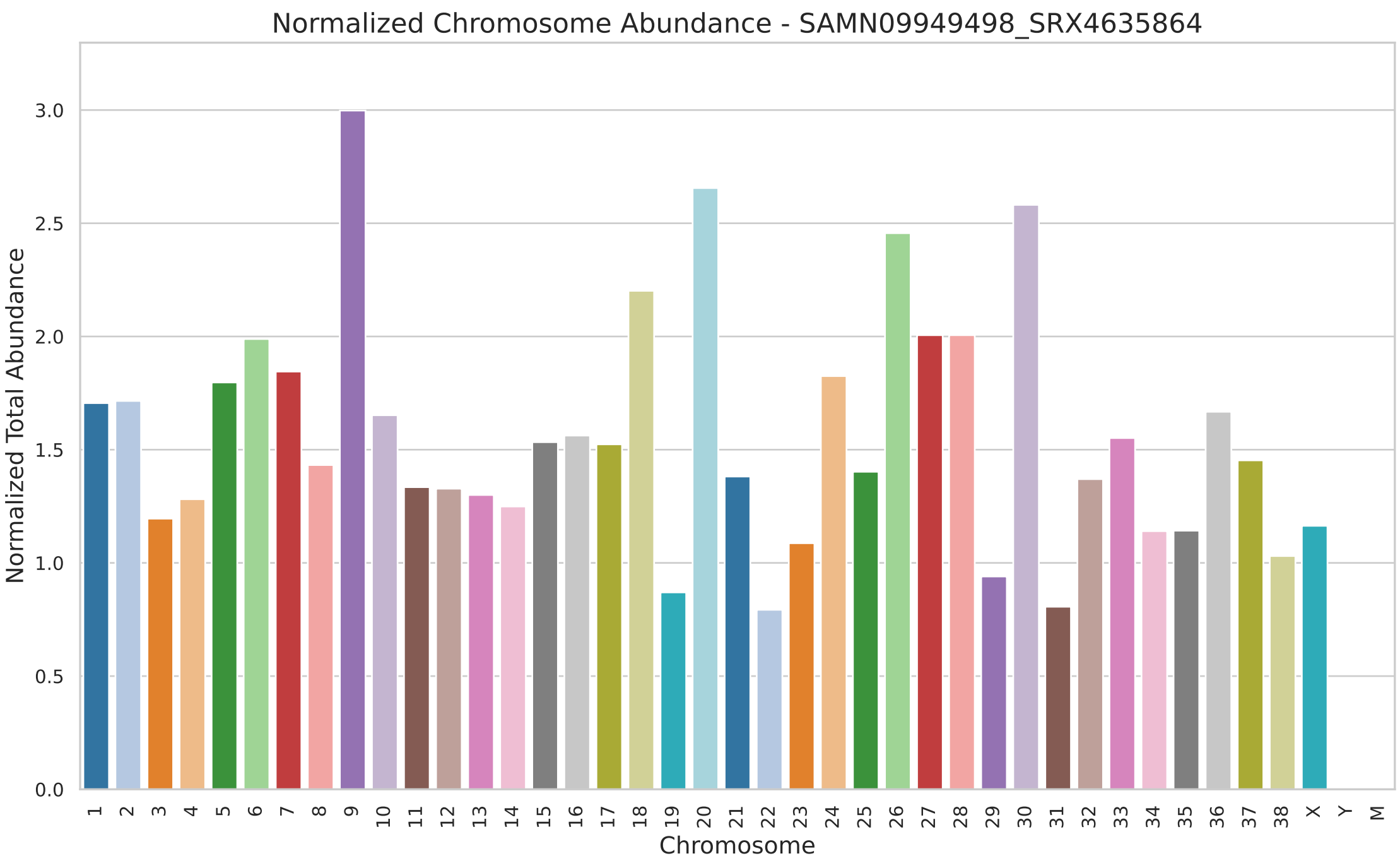

Normalized Chromosome Abundance - SAMN09949448_SRX4635888
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

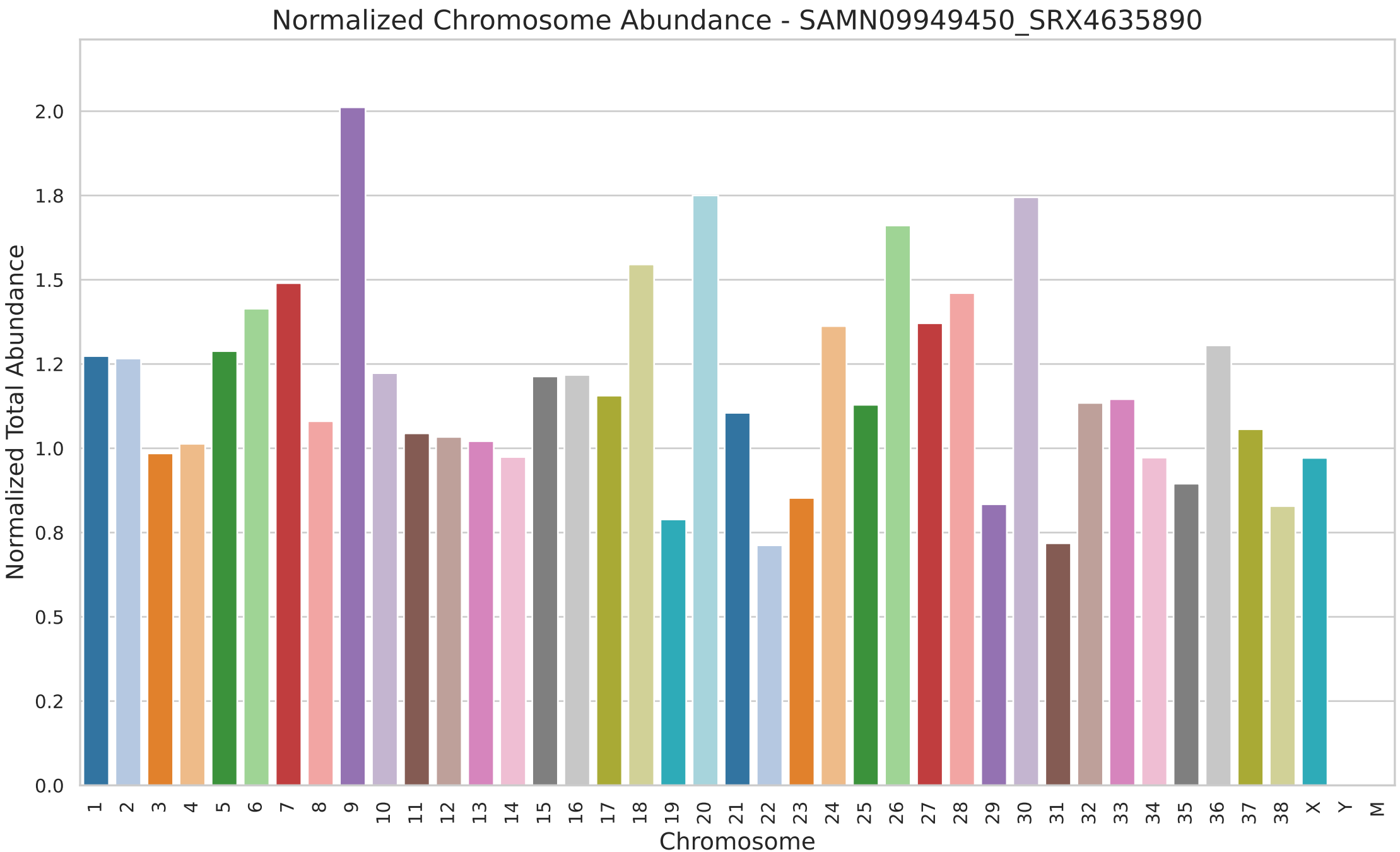

Normalized Chromosome Abundance - SAMN09948402_SRX4635877
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

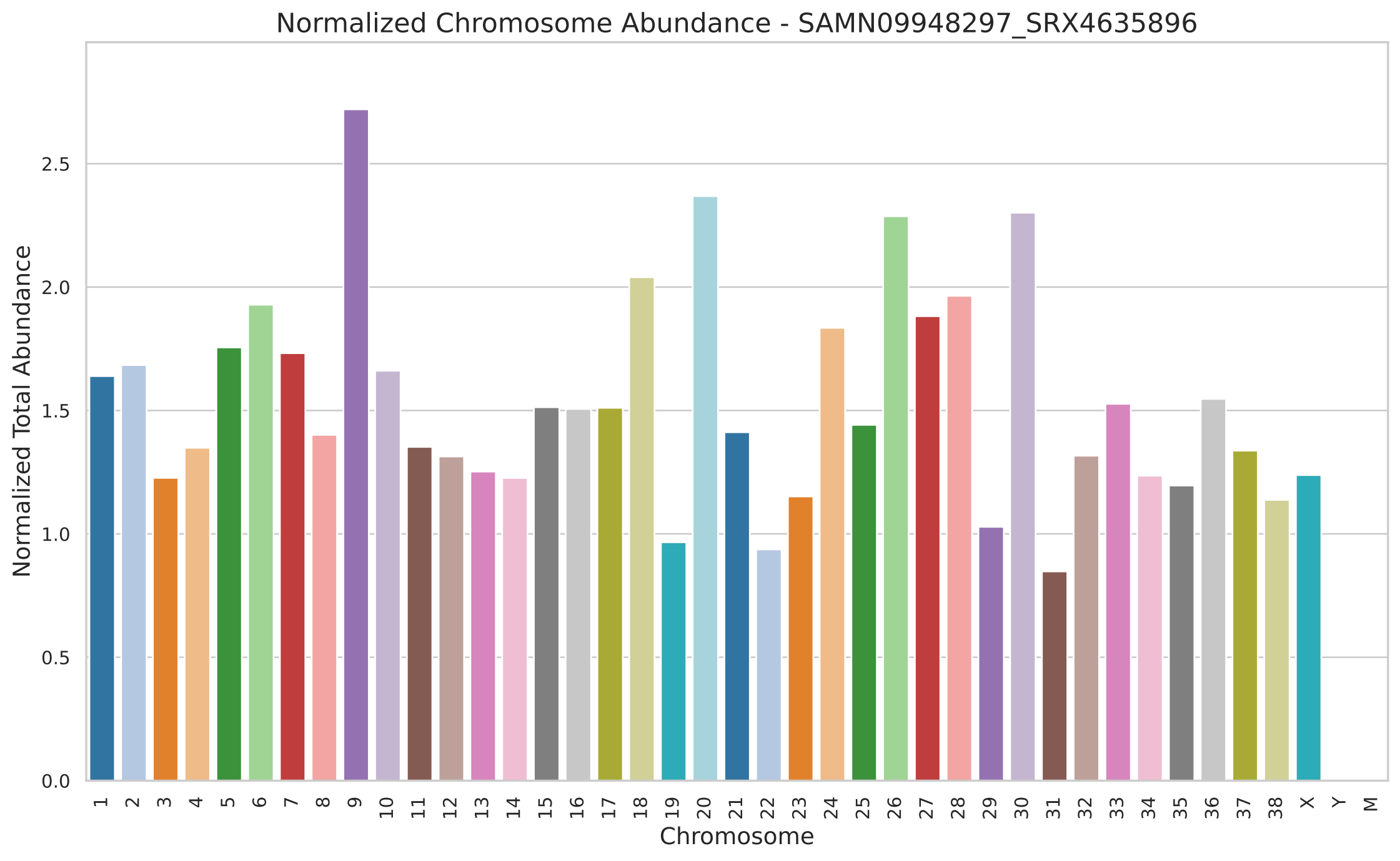

Normalized Chromosome Abundance - SAMN09949633_SRX4635871
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

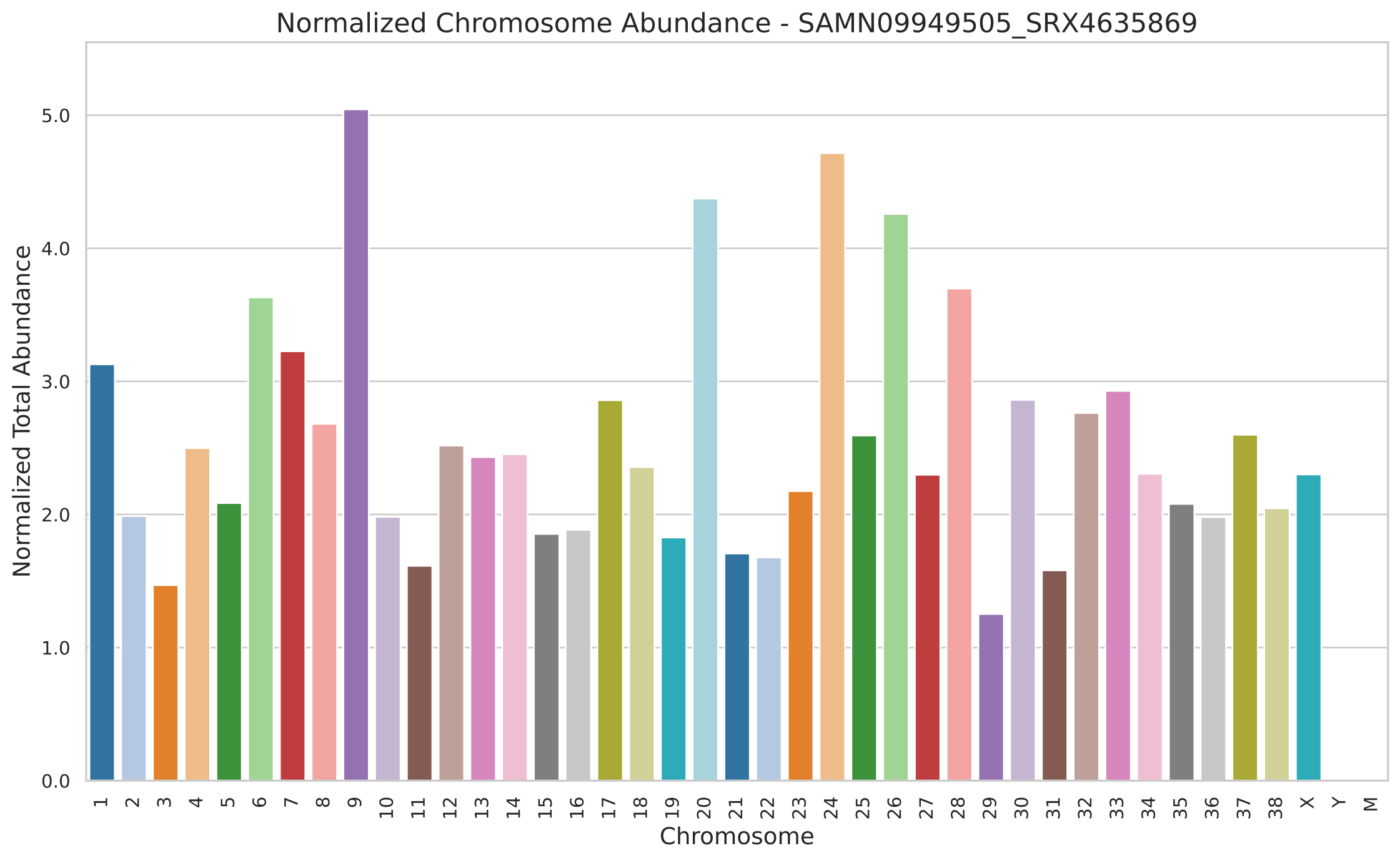

Normalized Chromosome Abundance - SAMN09948322_SRX4635865
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

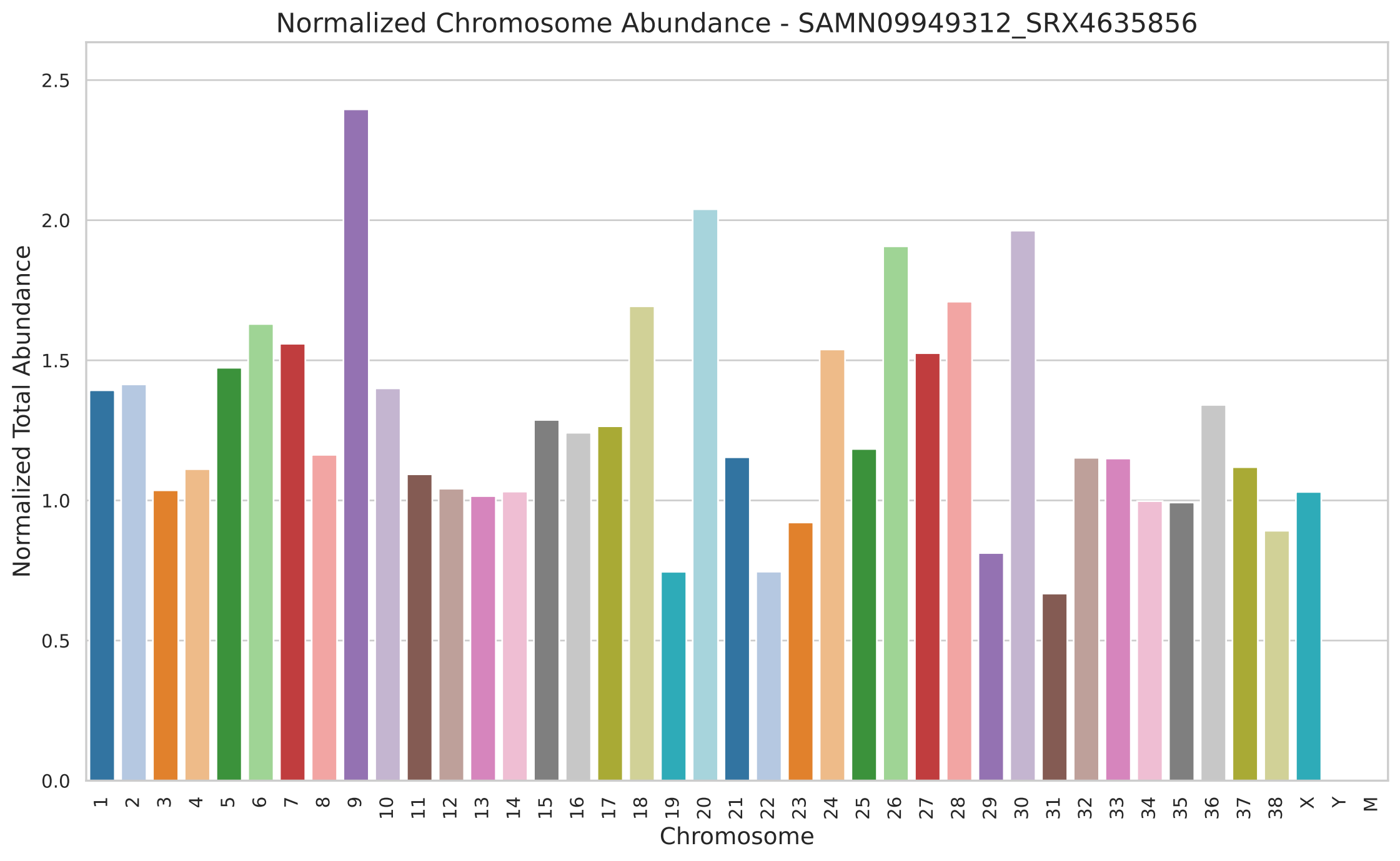

Normalized Chromosome Abundance - SAMN09948365_SRX4635880
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

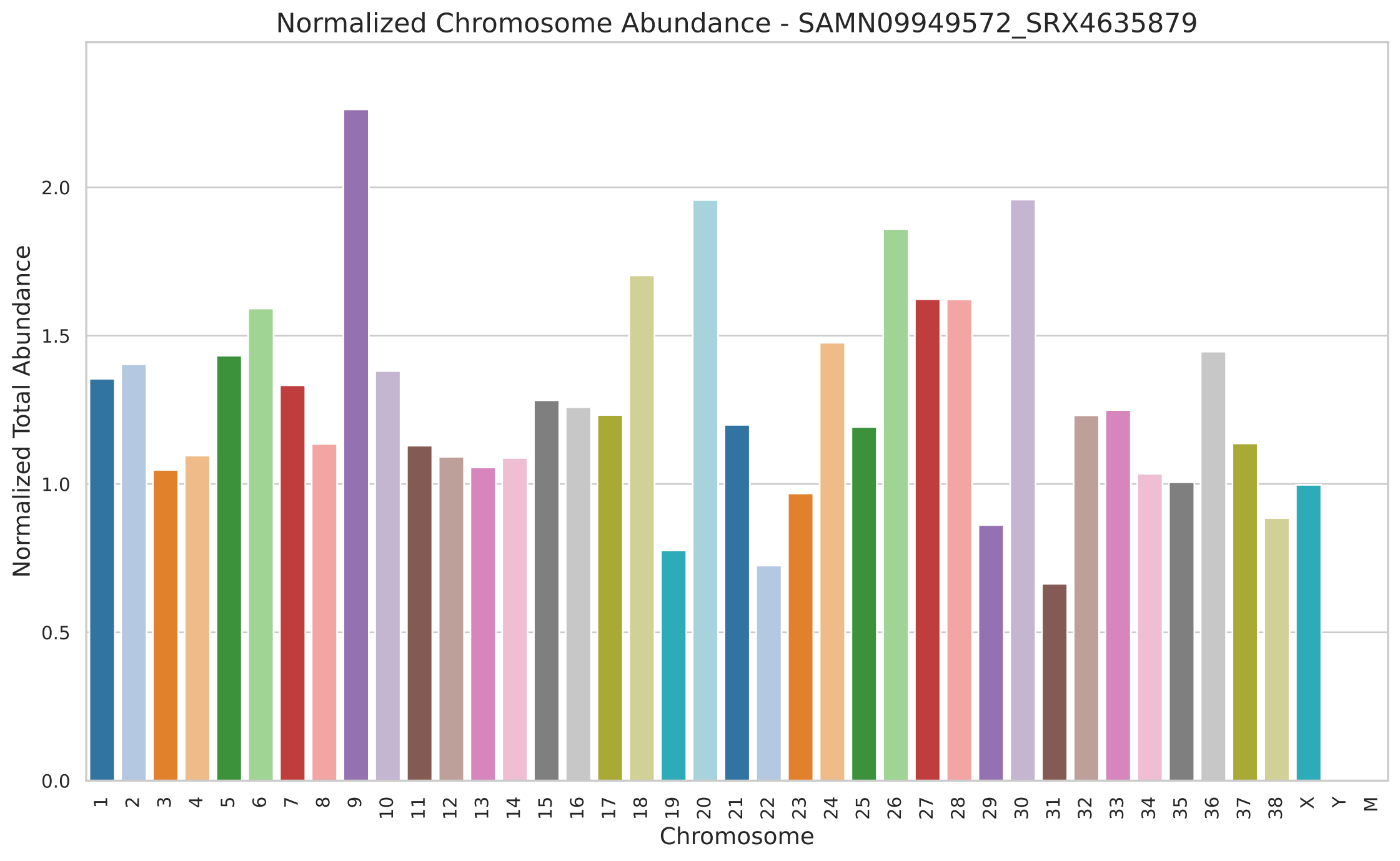

Normalized Chromosome Abundance - SAMN09949498_SRX4635864
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

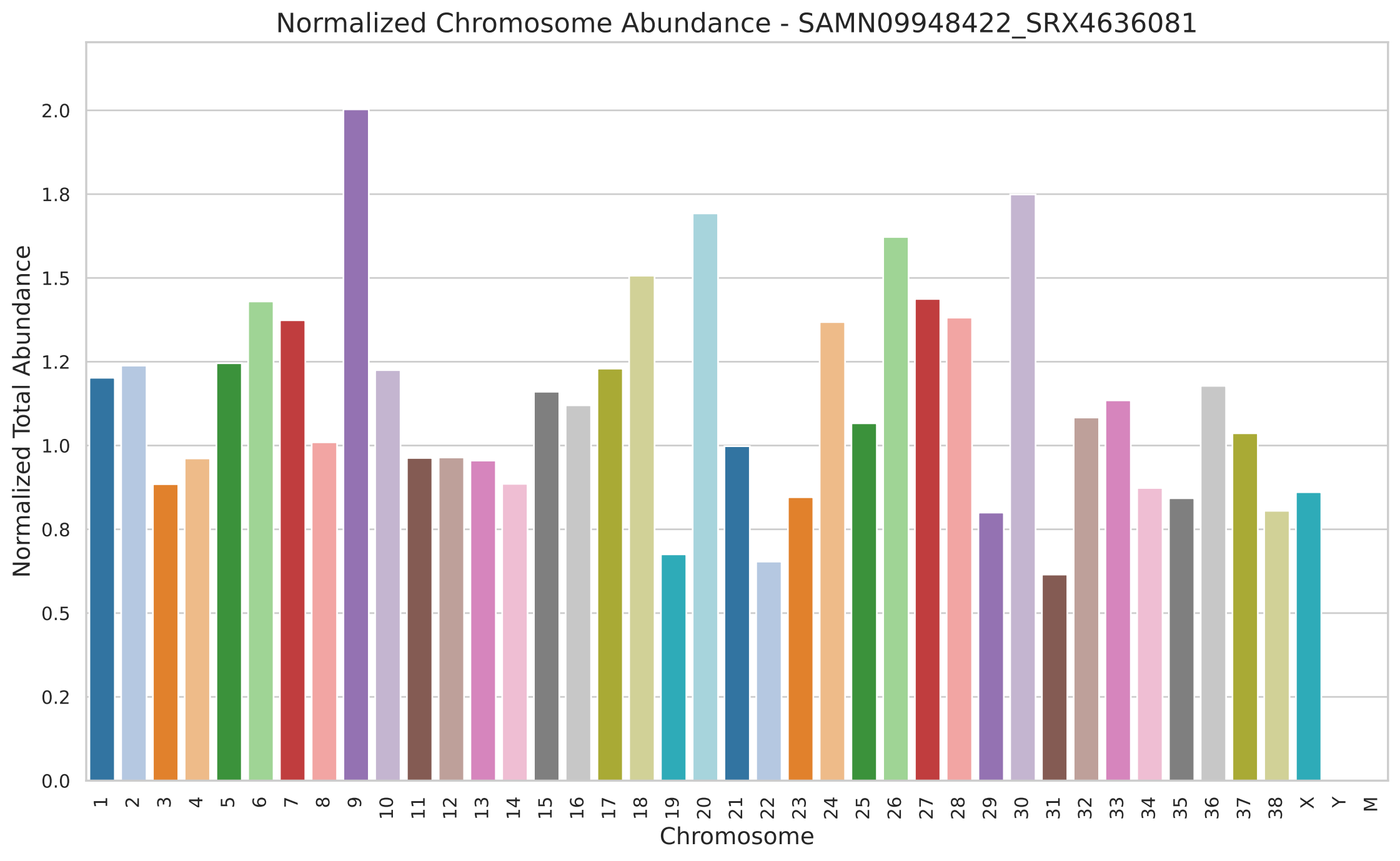

Normalized Chromosome Abundance - SAMN09949450_SRX4635890
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

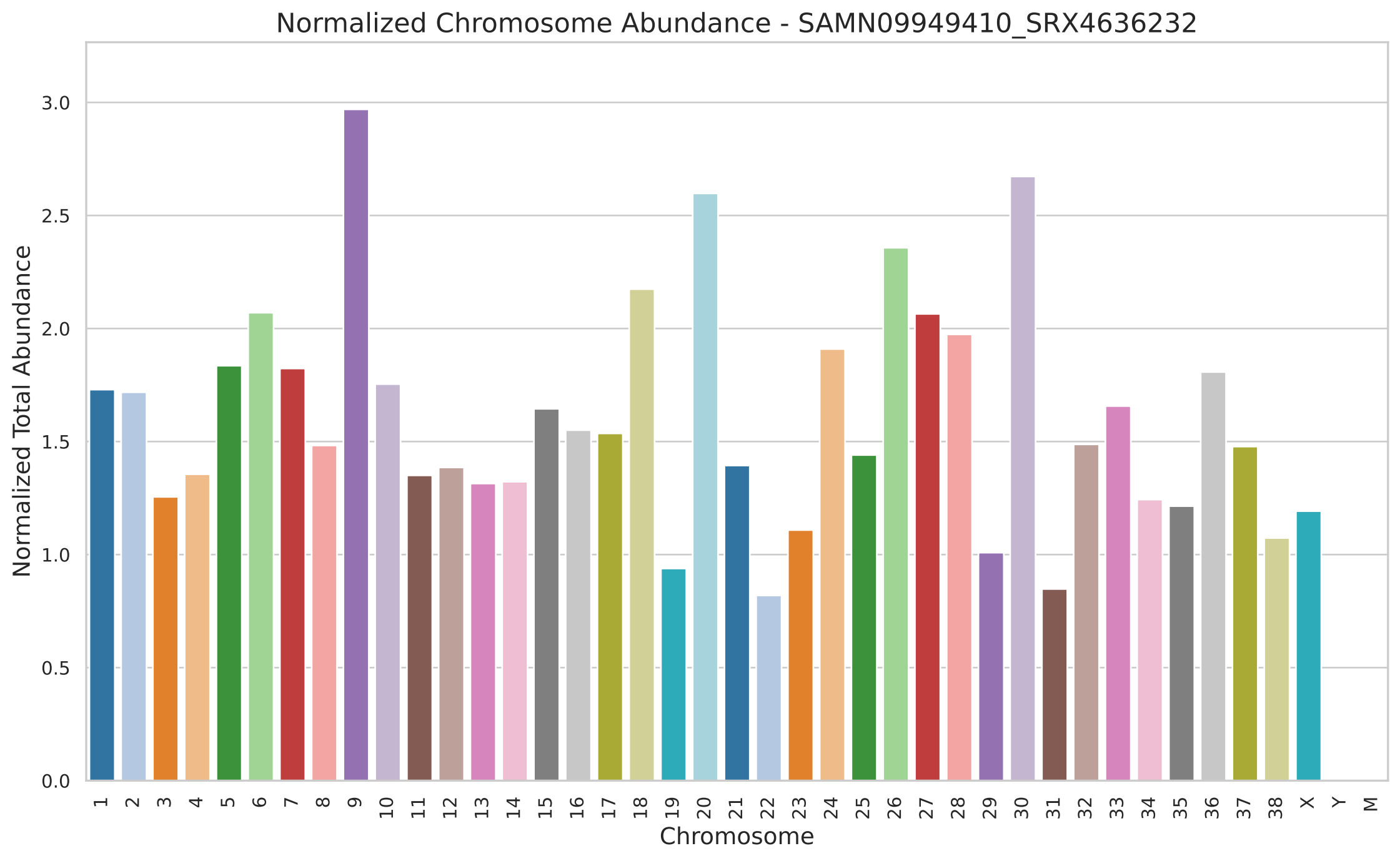

Normalized Chromosome Abundance - SAMN09948297_SRX4635896
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

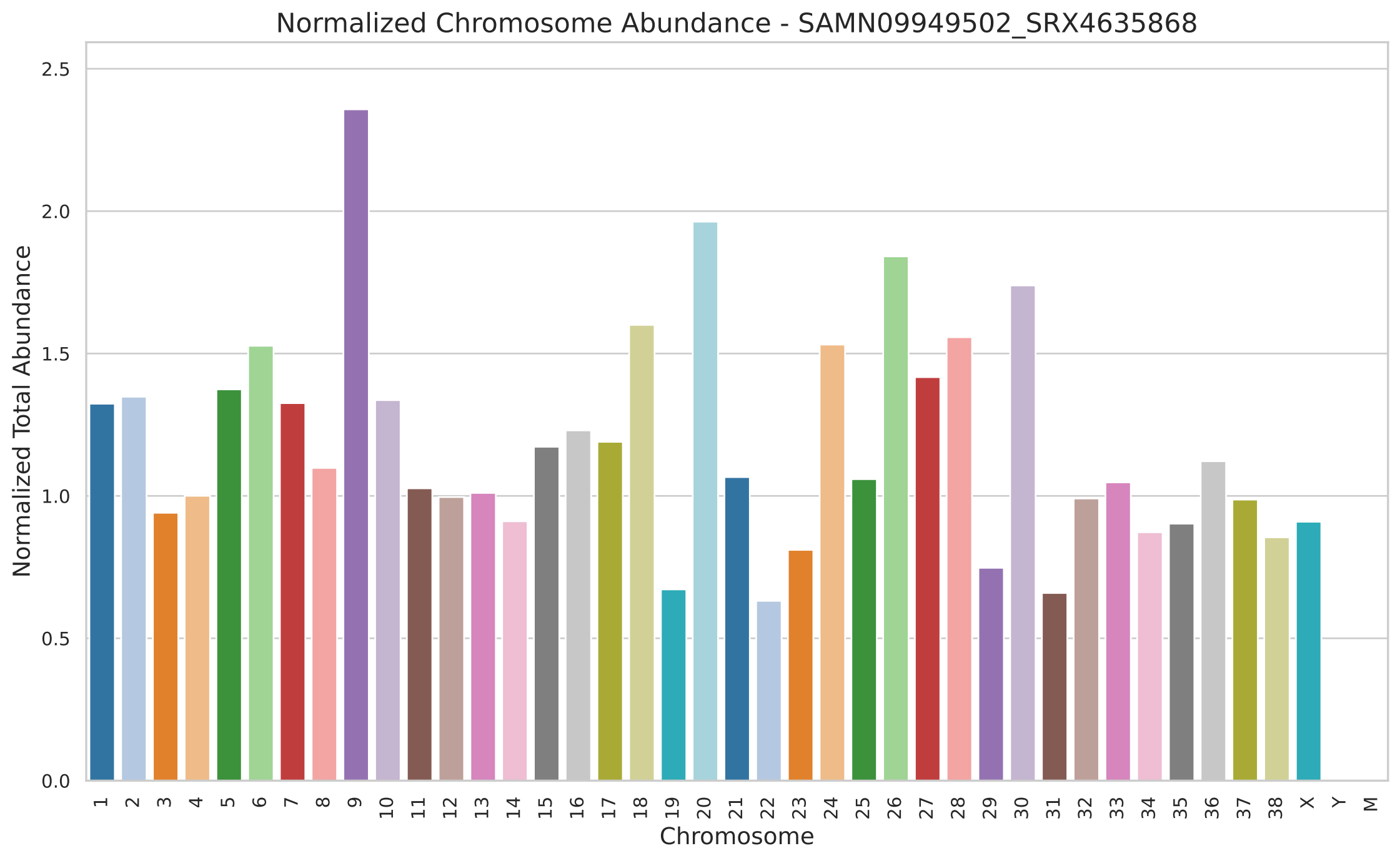

Normalized Chromosome Abundance - SAMN09949505_SRX4635869
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

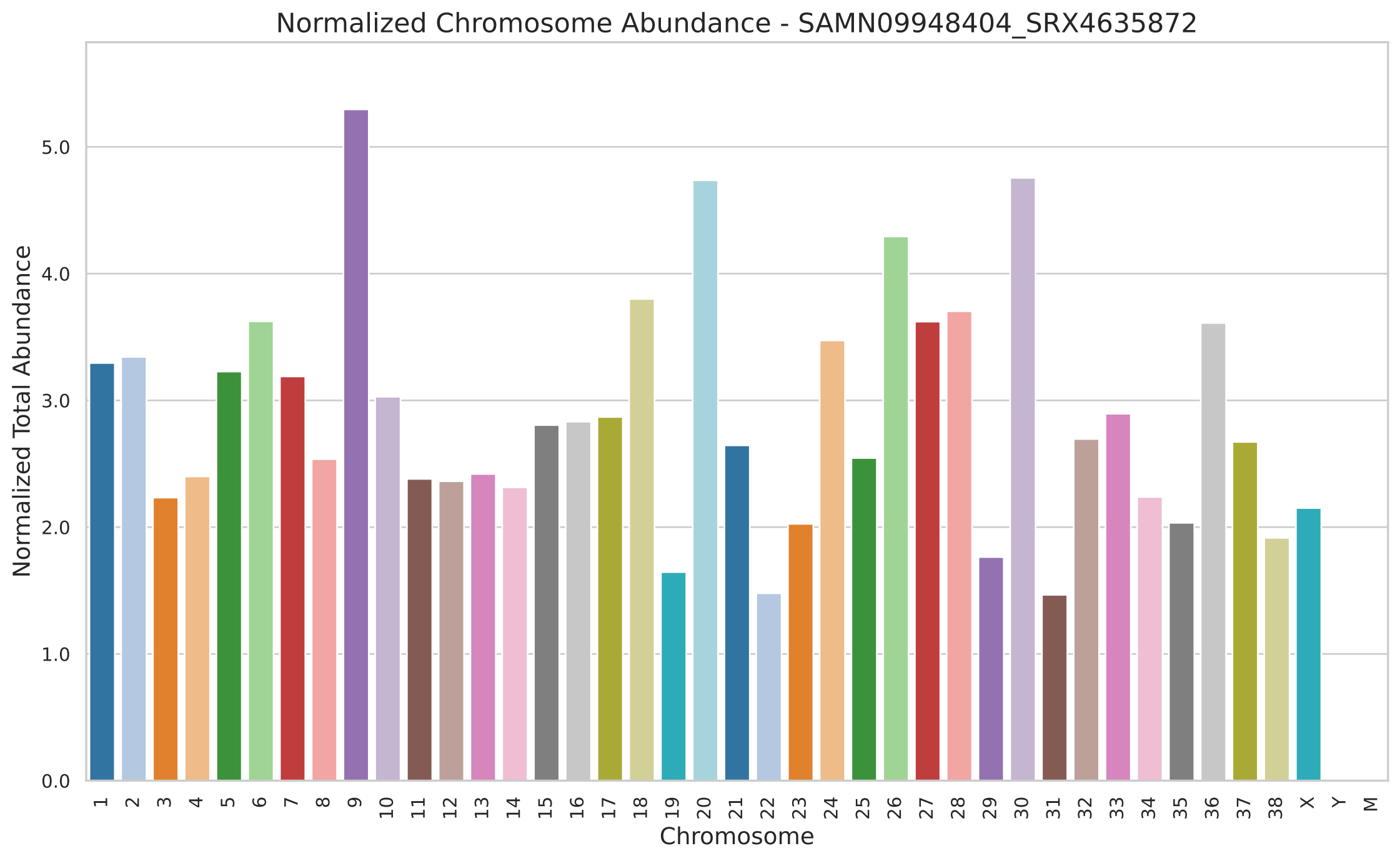

Normalized Chromosome Abundance - SAMN09949312_SRX4635856
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

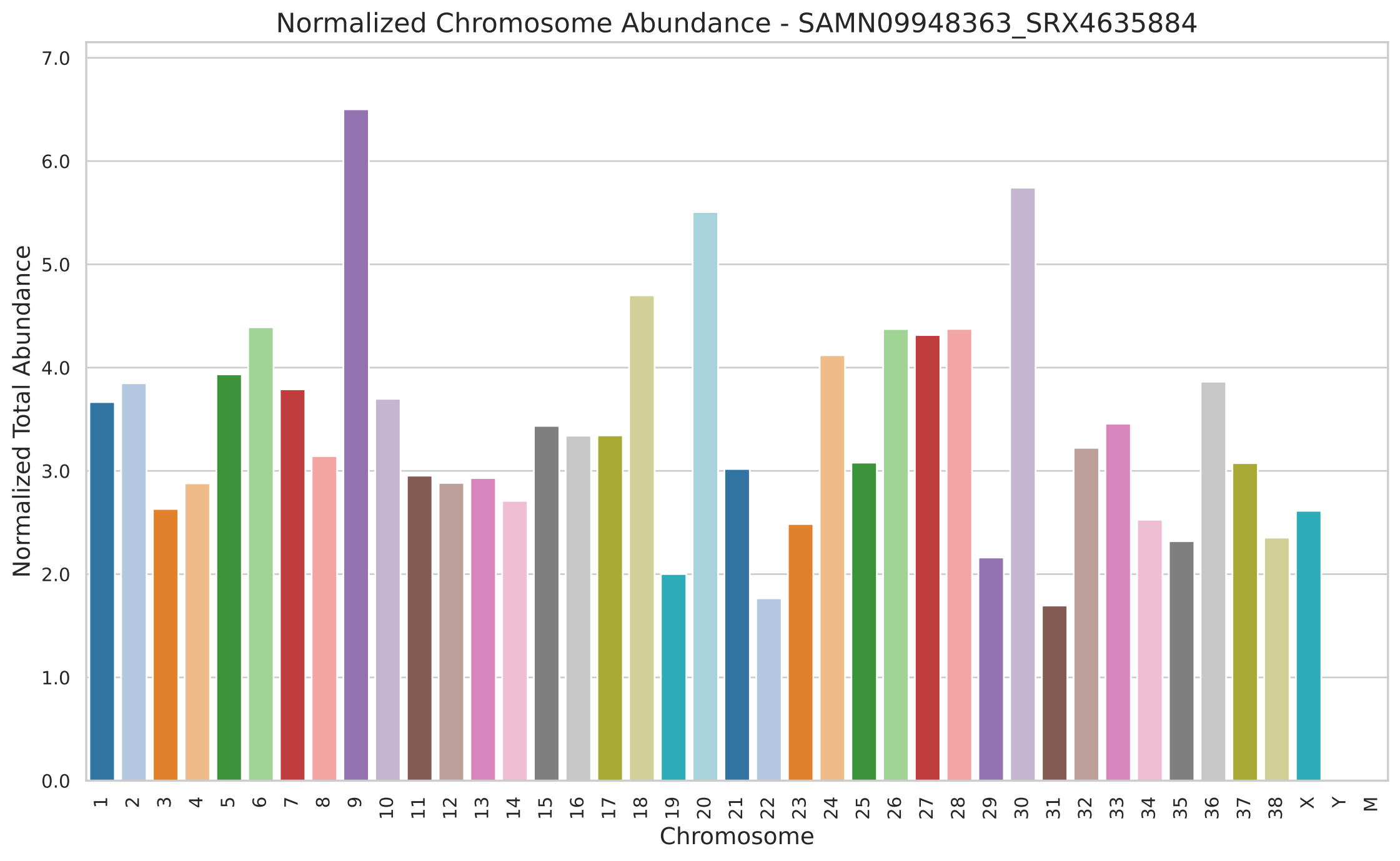

Normalized Chromosome Abundance - SAMN09949572_SRX4635879
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

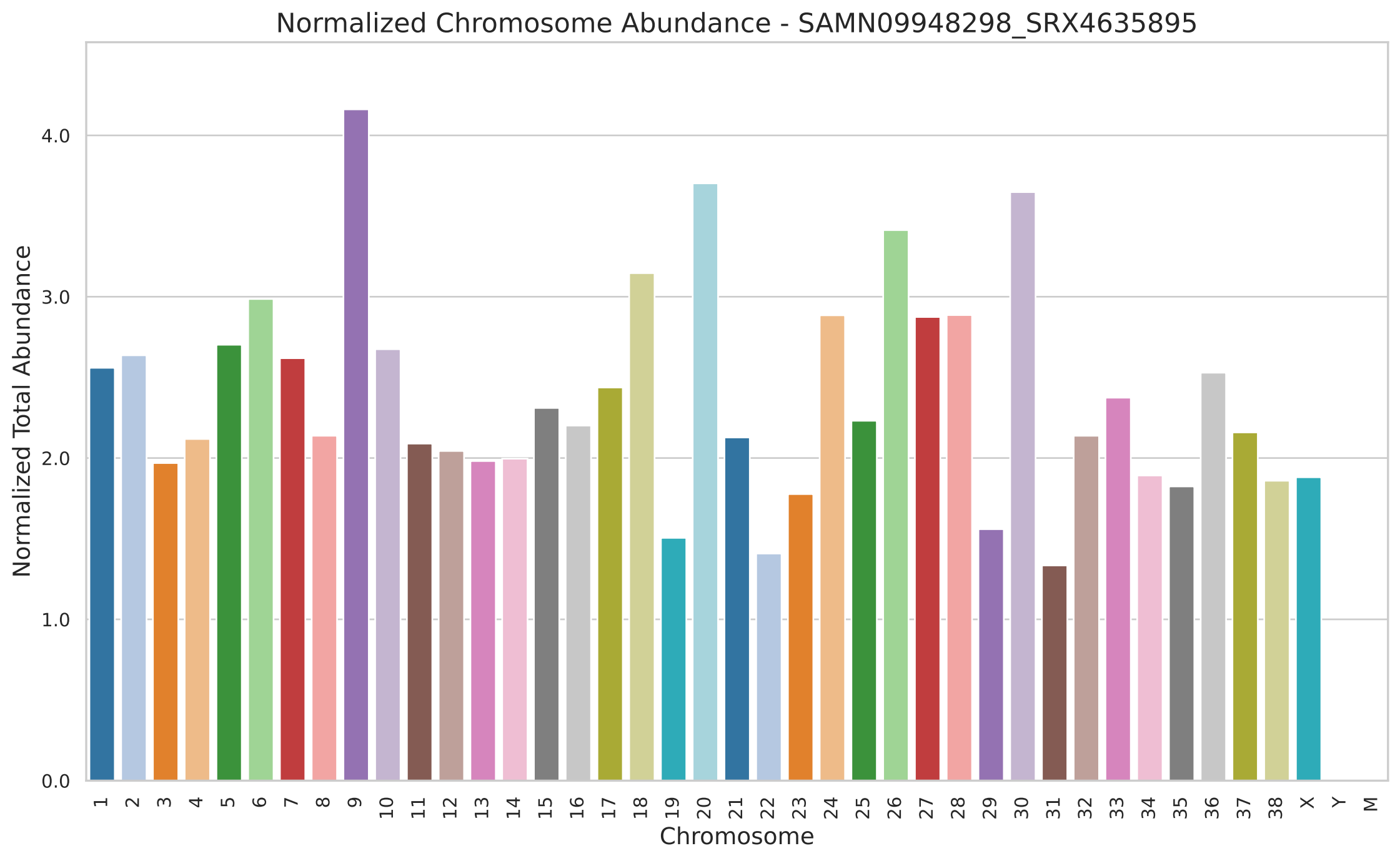

Normalized Chromosome Abundance - SAMN09948422_SRX4636081
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

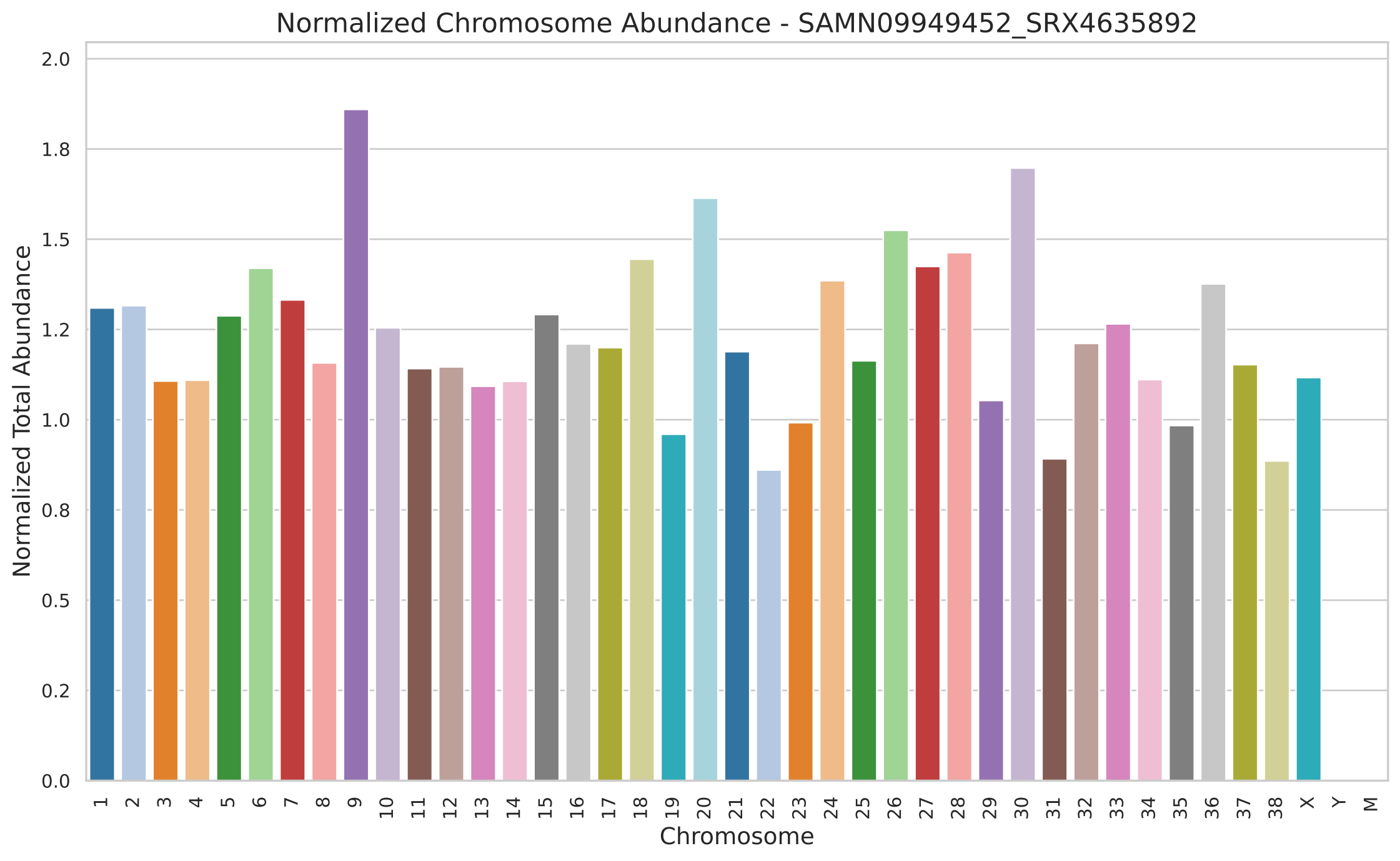

Normalized Chromosome Abundance - SAMN09949410_SRX4636232
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

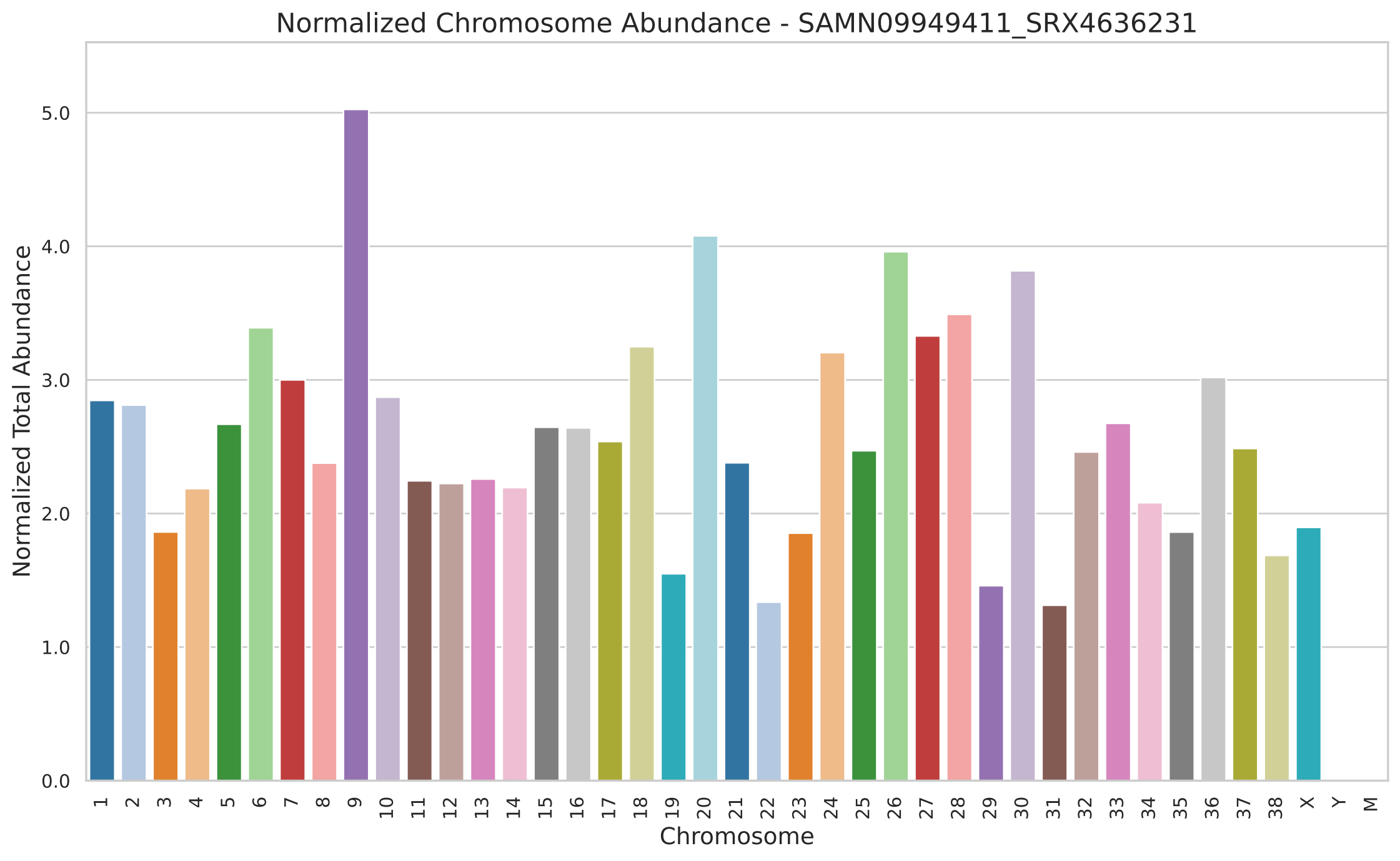

Normalized Chromosome Abundance - SAMN09949502_SRX4635868
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

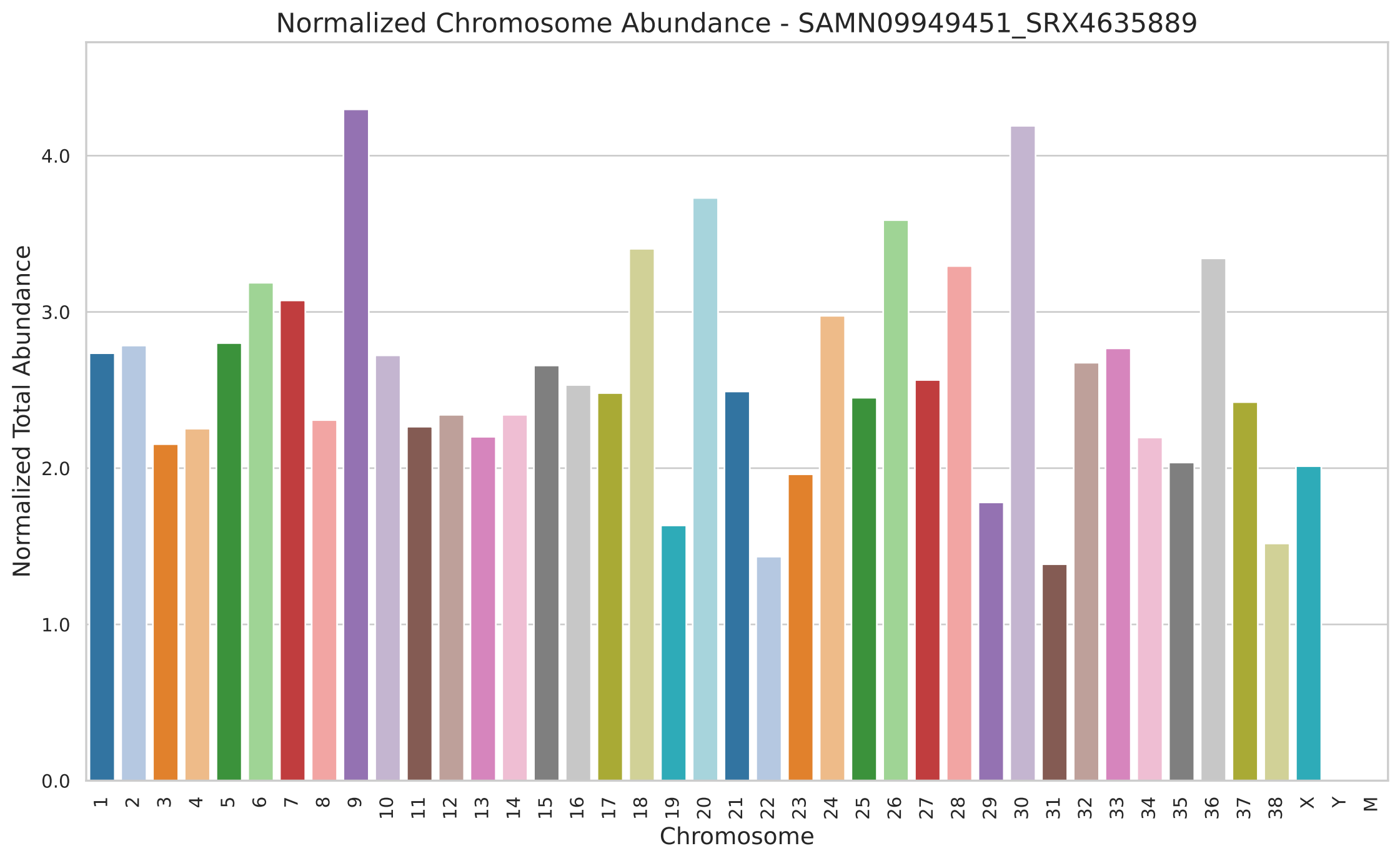

Normalized Chromosome Abundance - SAMN09948404_SRX4635872
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

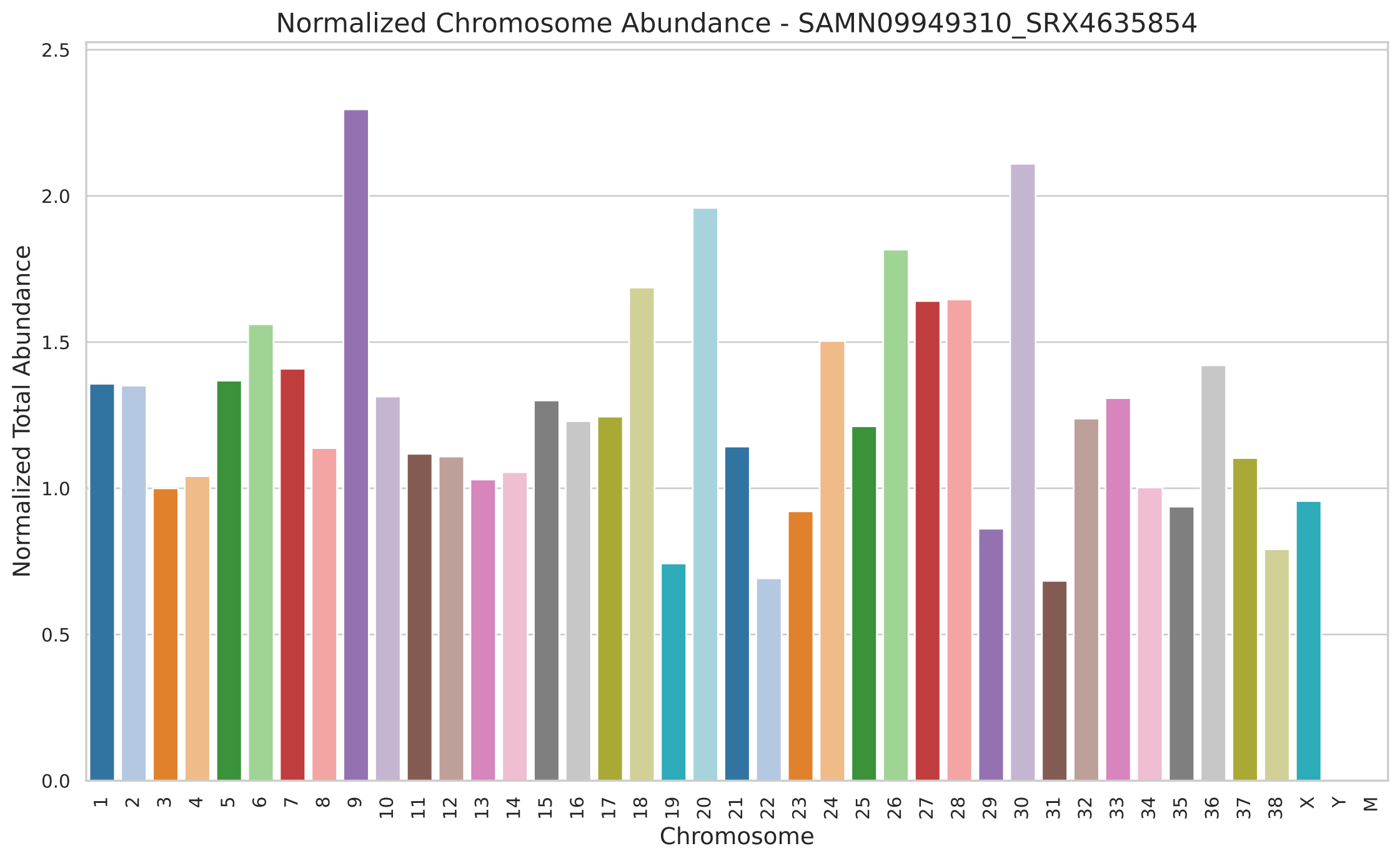

Normalized Chromosome Abundance - SAMN09948363_SRX4635884
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

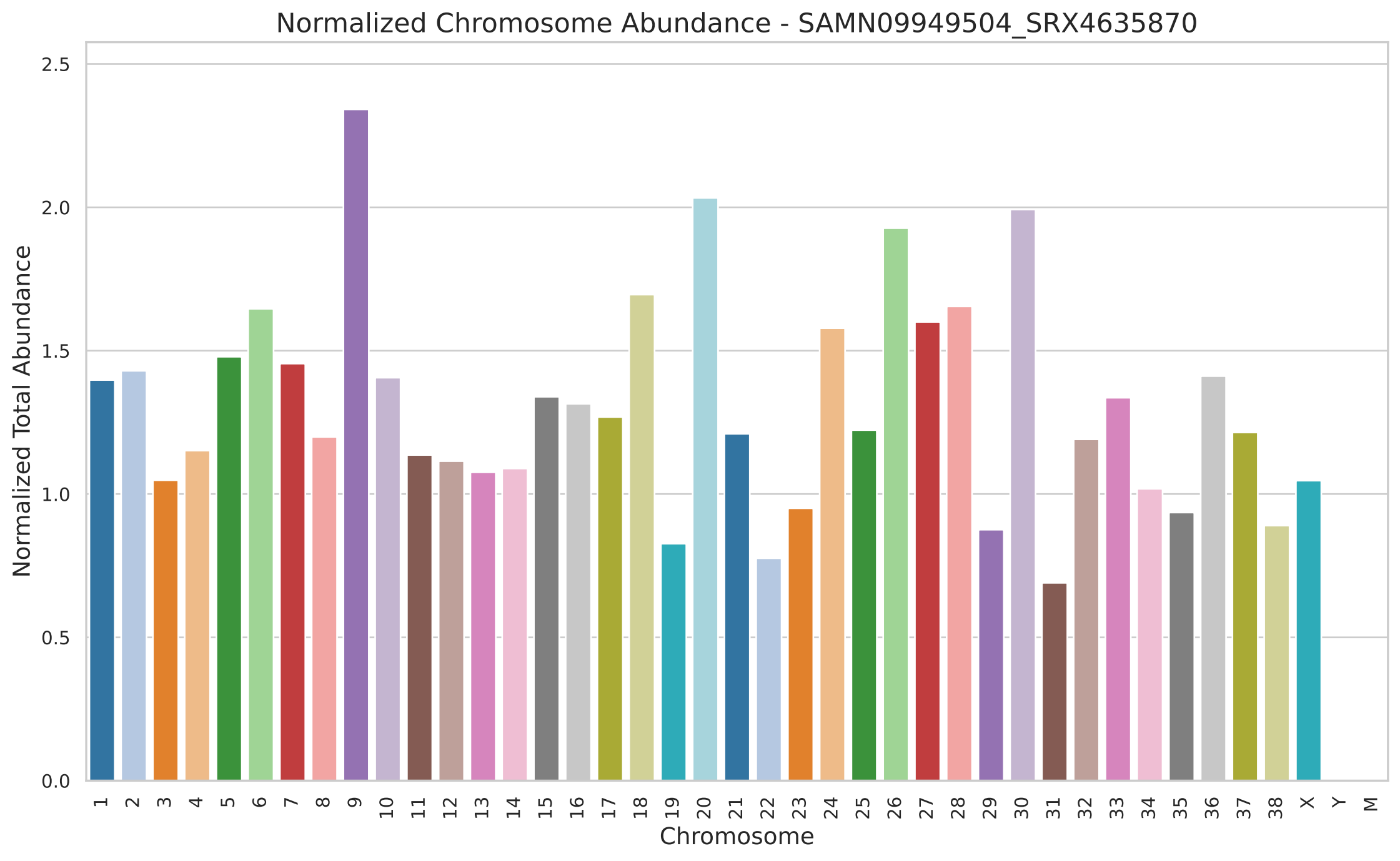

Normalized Chromosome Abundance - SAMN09948298_SRX4635895
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

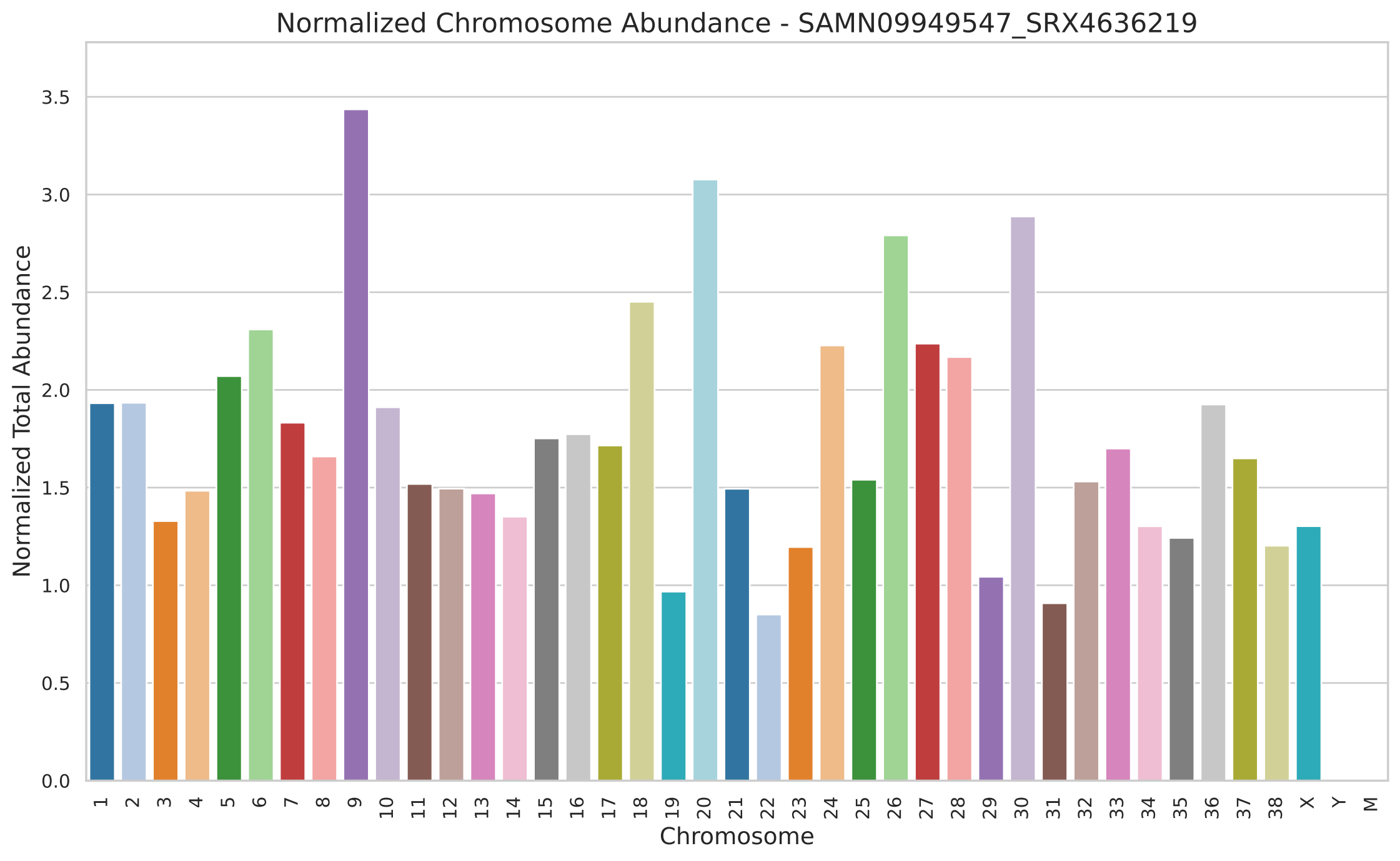

Normalized Chromosome Abundance - SAMN09949452_SRX4635892
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

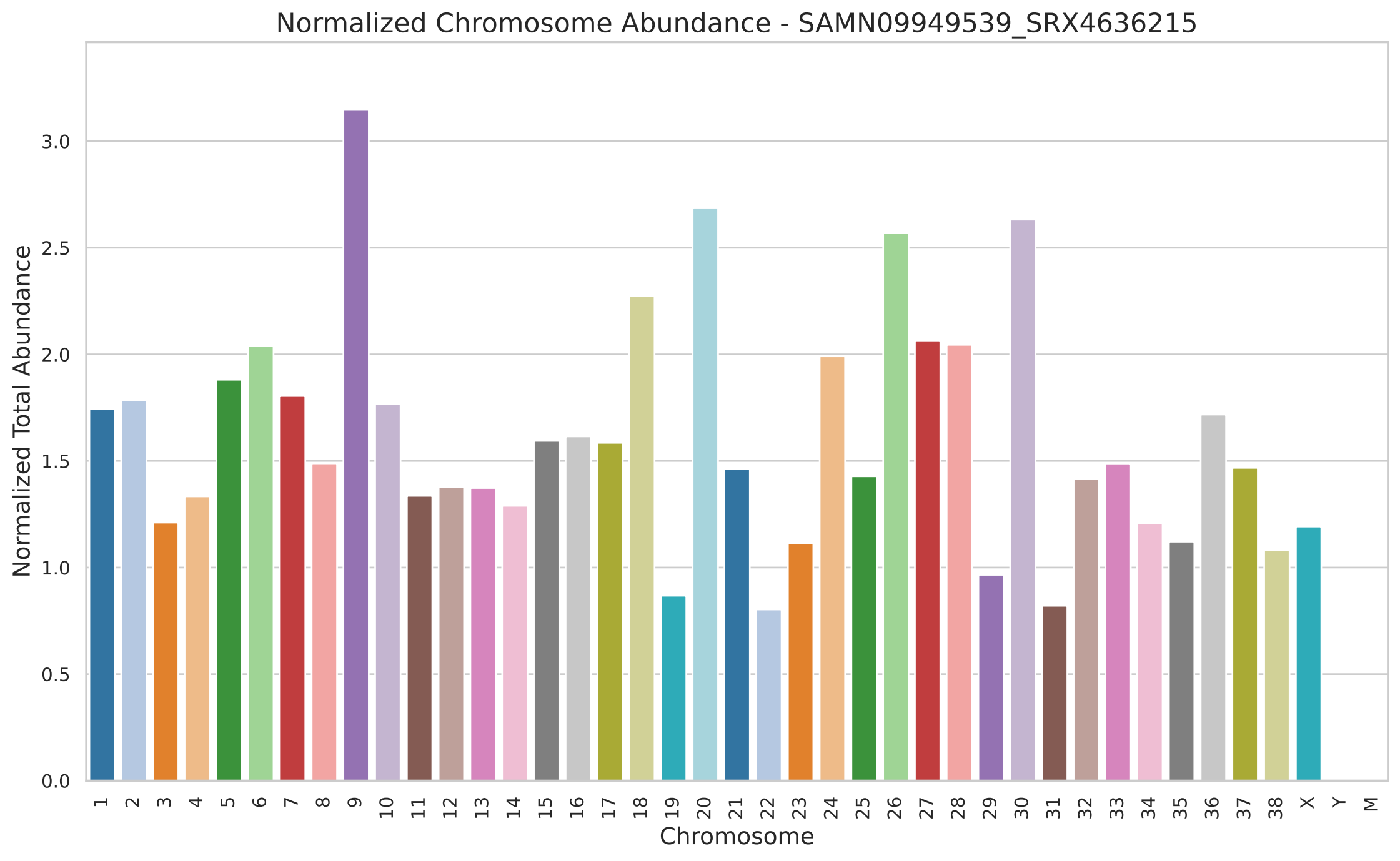

Normalized Chromosome Abundance - SAMN09949411_SRX4636231
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

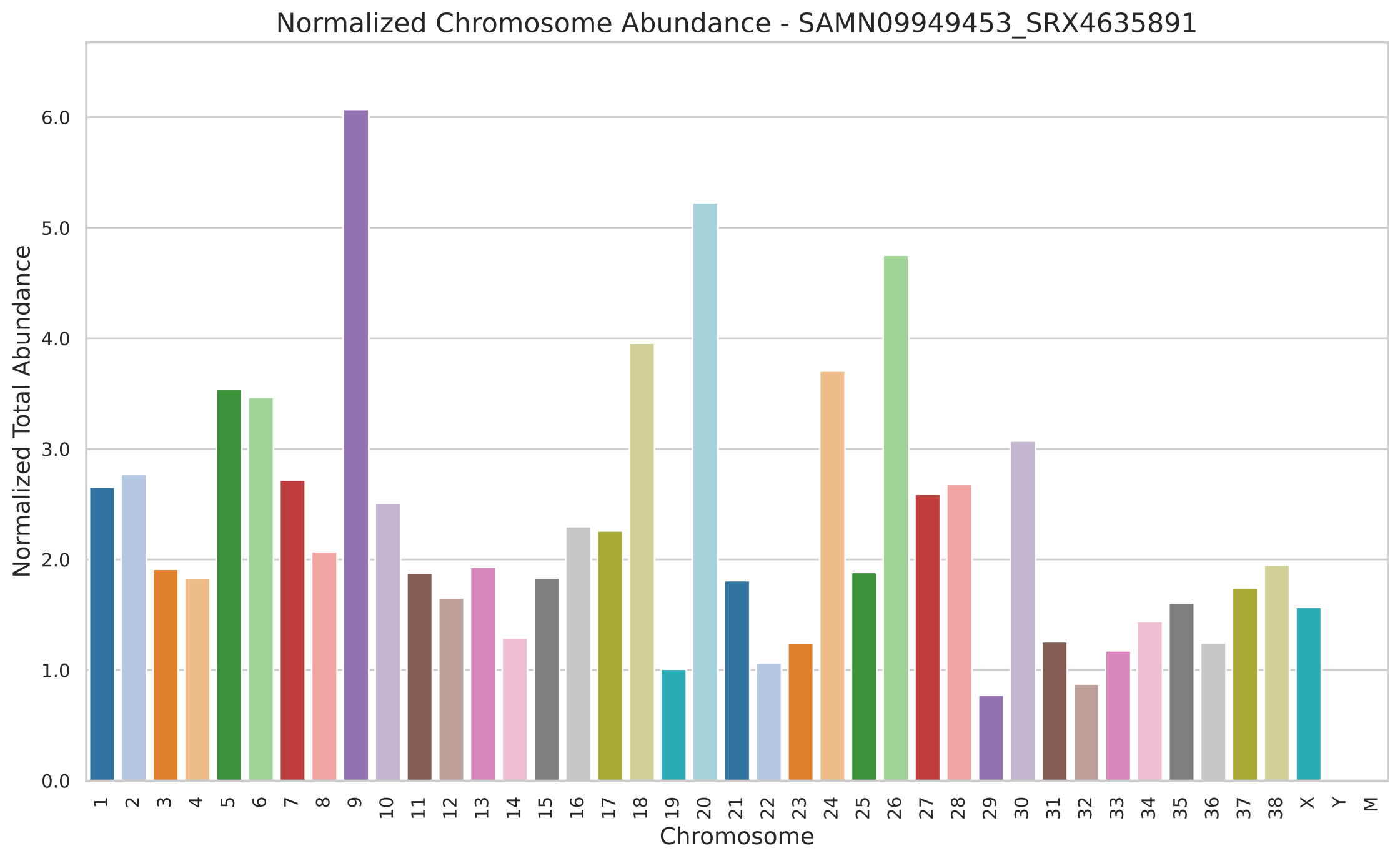

Normalized Chromosome Abundance - SAMN09949451_SRX4635889
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

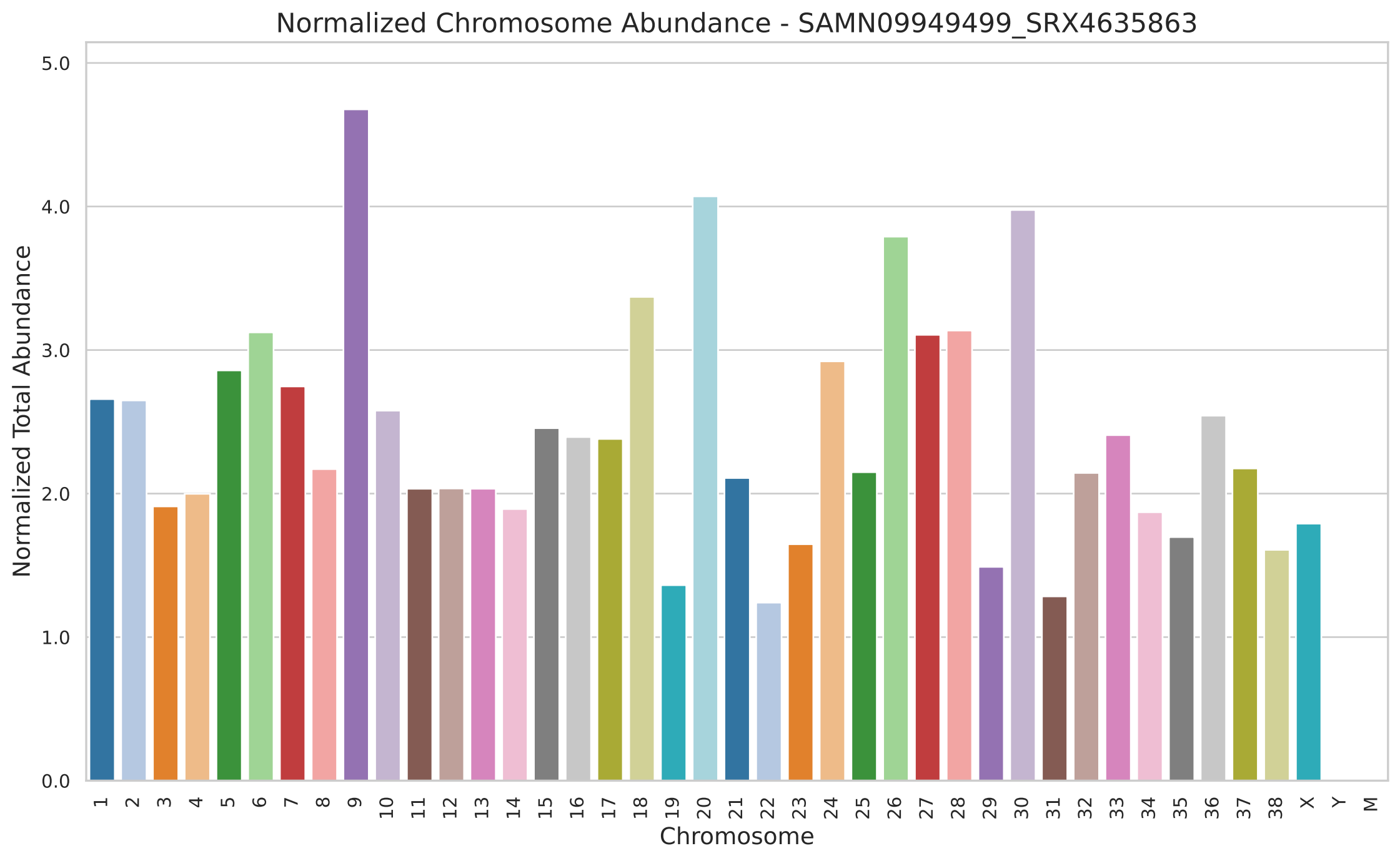

Normalized Chromosome Abundance - SAMN09949310_SRX4635854
Normalized Total Abundance
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

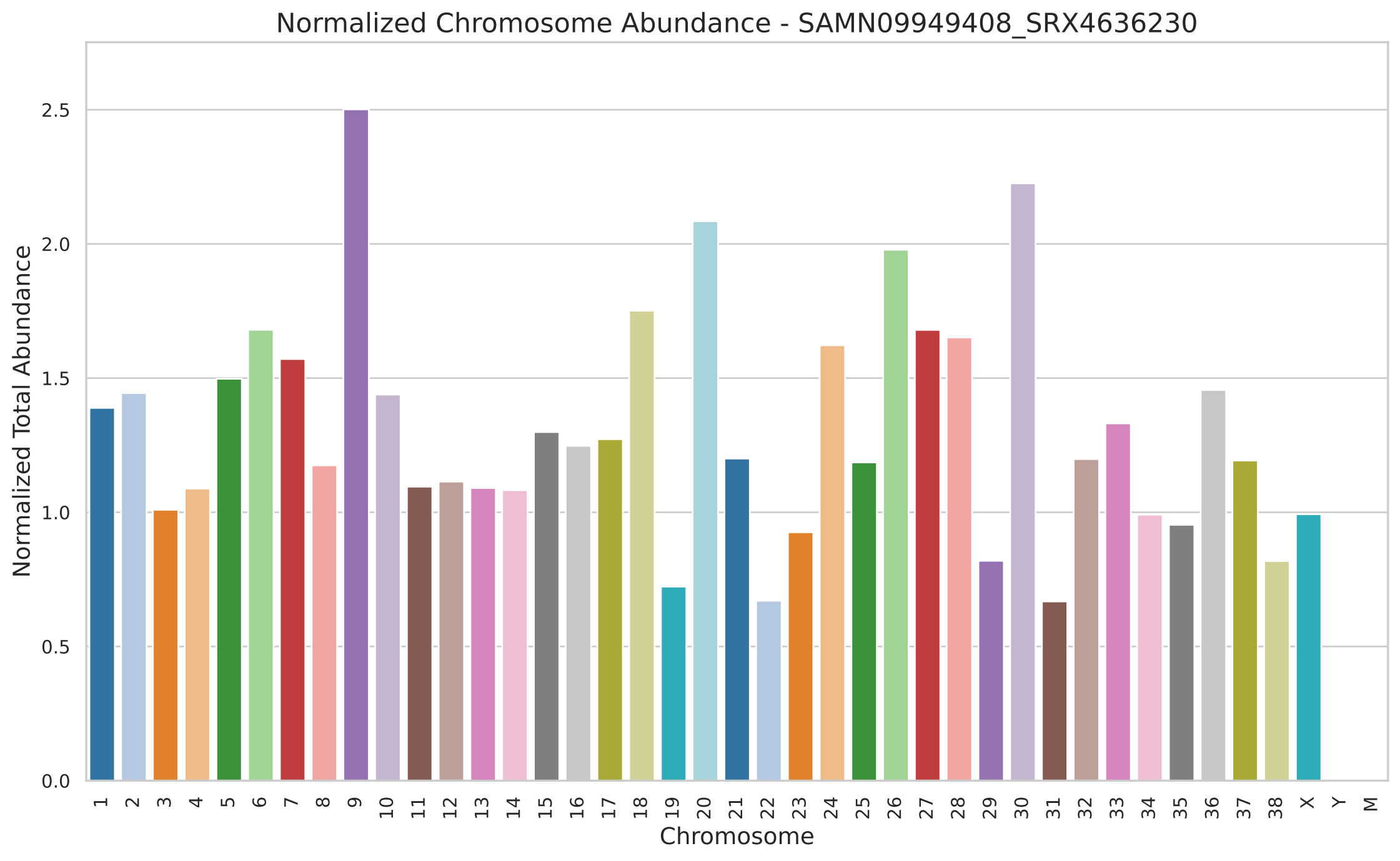

Normalized Chromosome Abundance - SAMN09949504_SRX4635870
Normalized Total Abundance
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

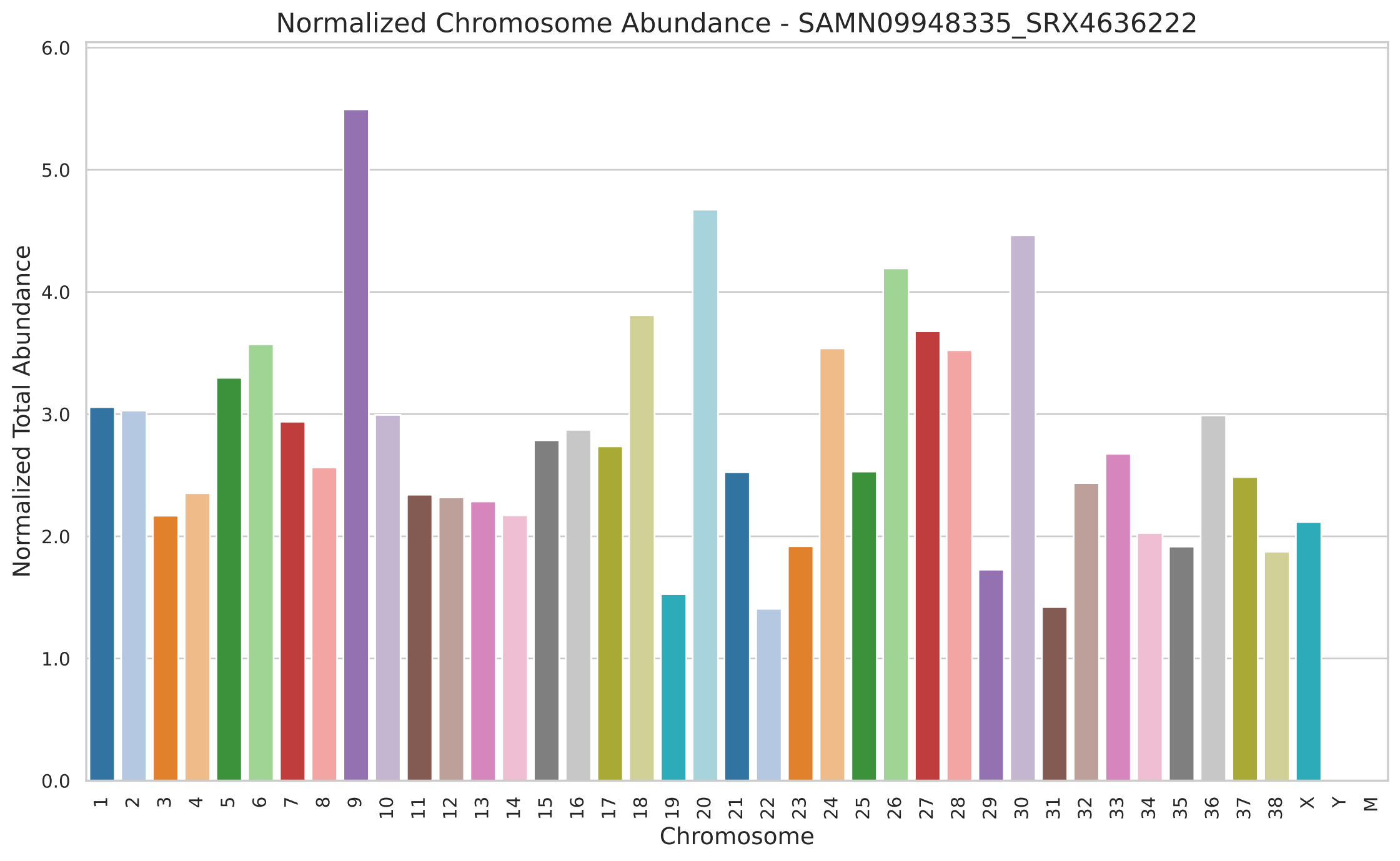

Normalized Chromosome Abundance - SAMN09949547_SRX4636219
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

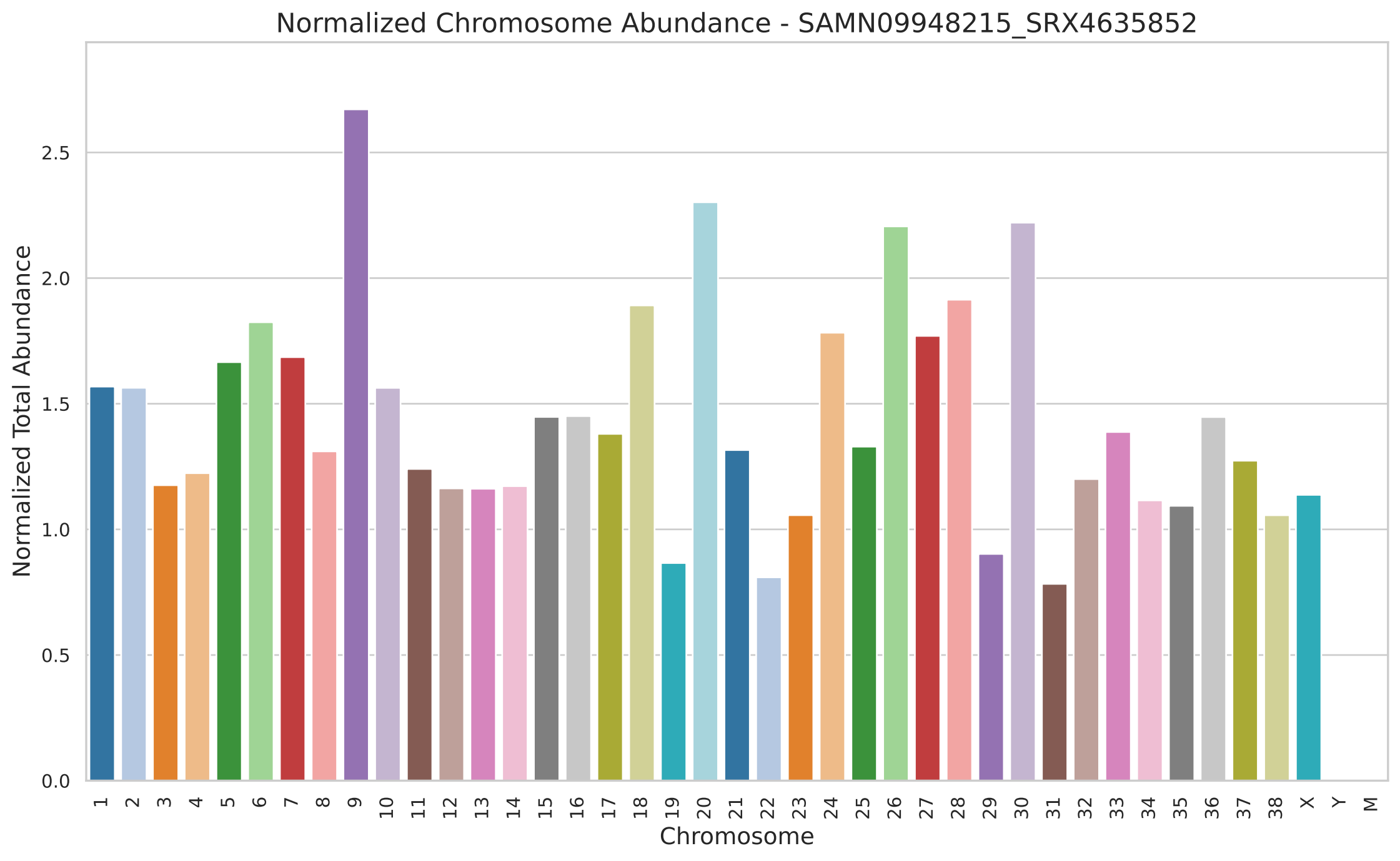

Normalized Chromosome Abundance - SAMN09949539_SRX4636215
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

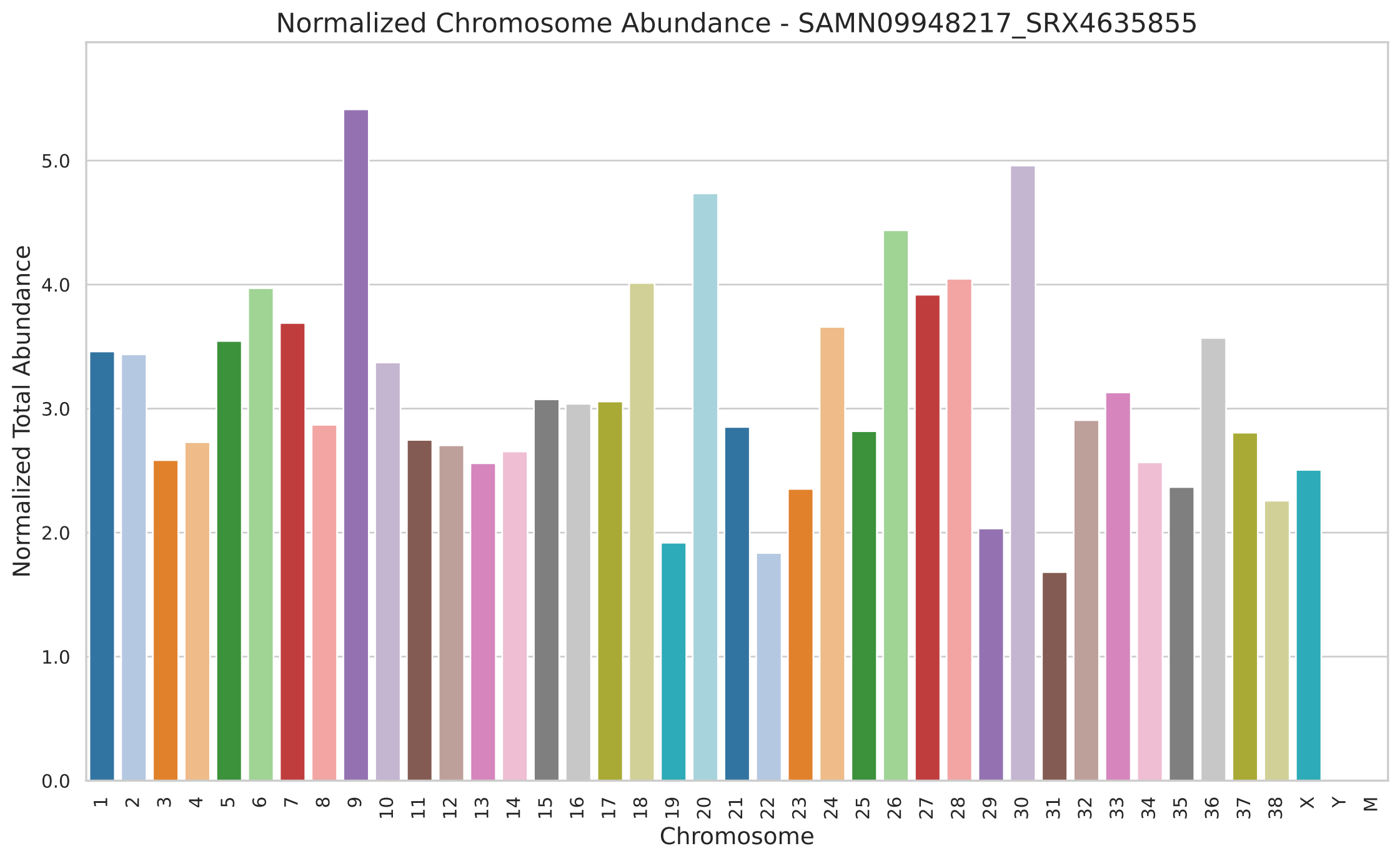

Normalized Chromosome Abundance - SAMN09949453_SRX4635891
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

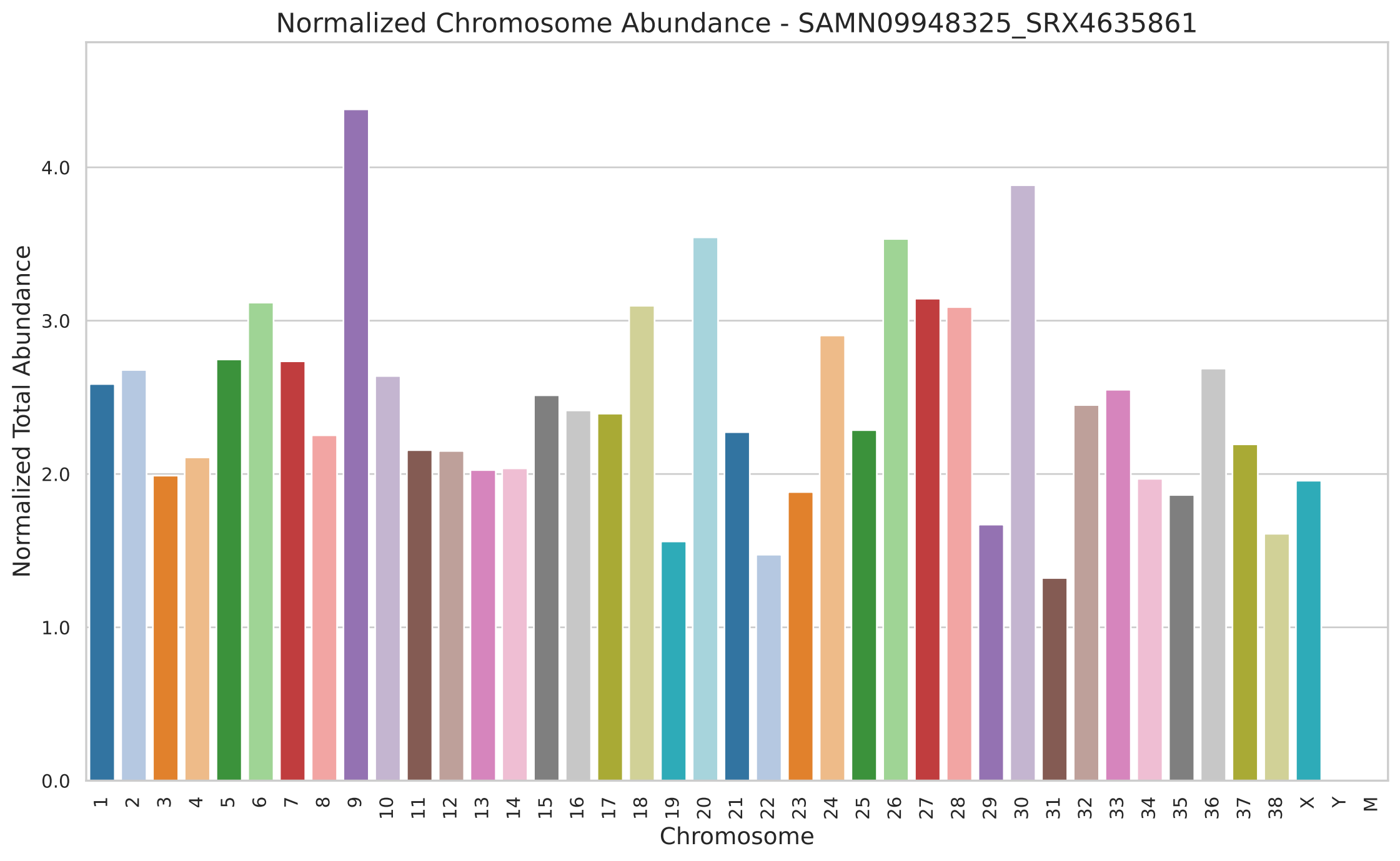

Normalized Chromosome Abundance - SAMN09949499_SRX4635863
Normalized Total Abundance
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

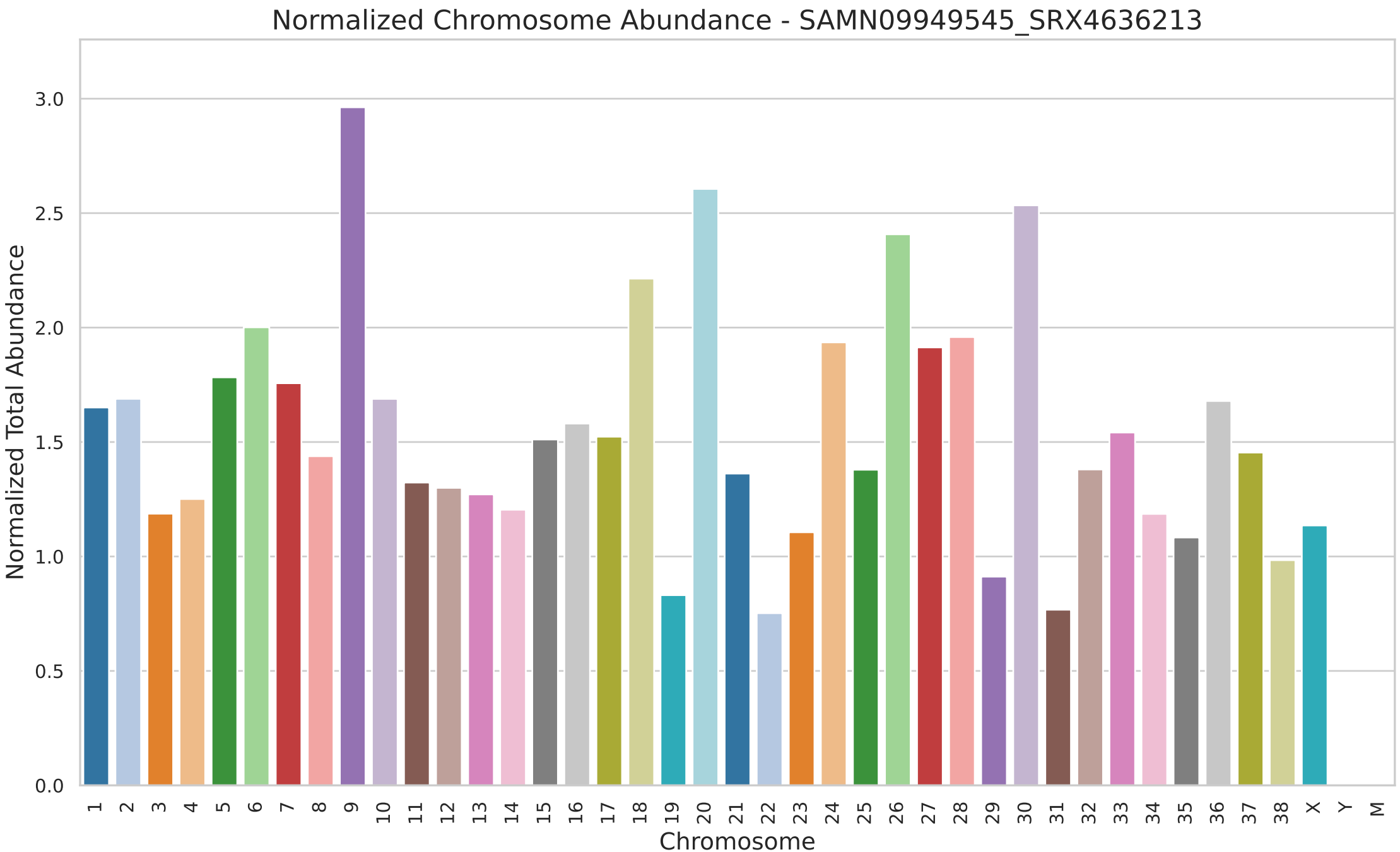

Normalized Chromosome Abundance - SAMN09949408_SRX4636230
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

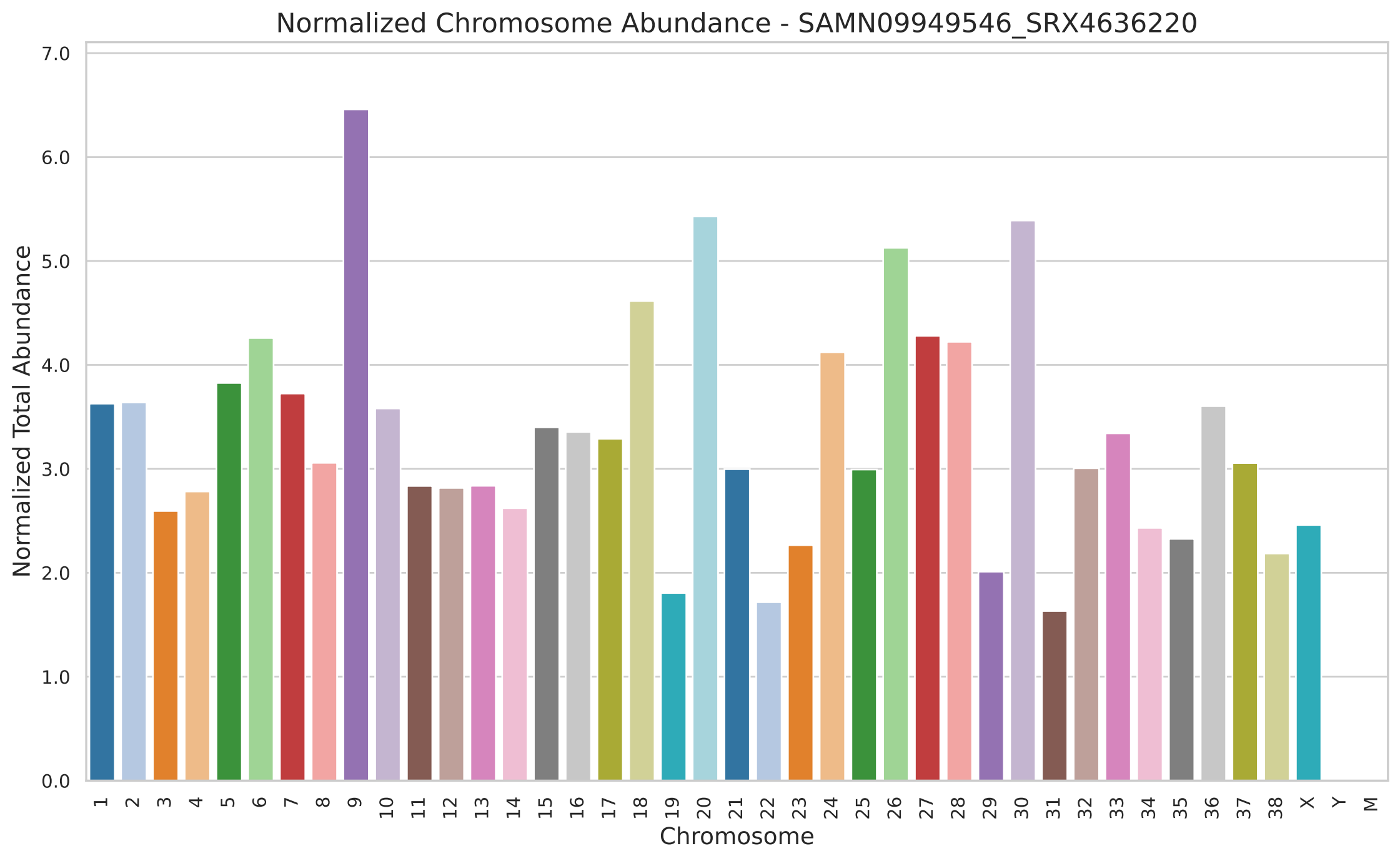

Normalized Chromosome Abundance - SAMN09948335_SRX4636222
Normalized Total Abundance
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

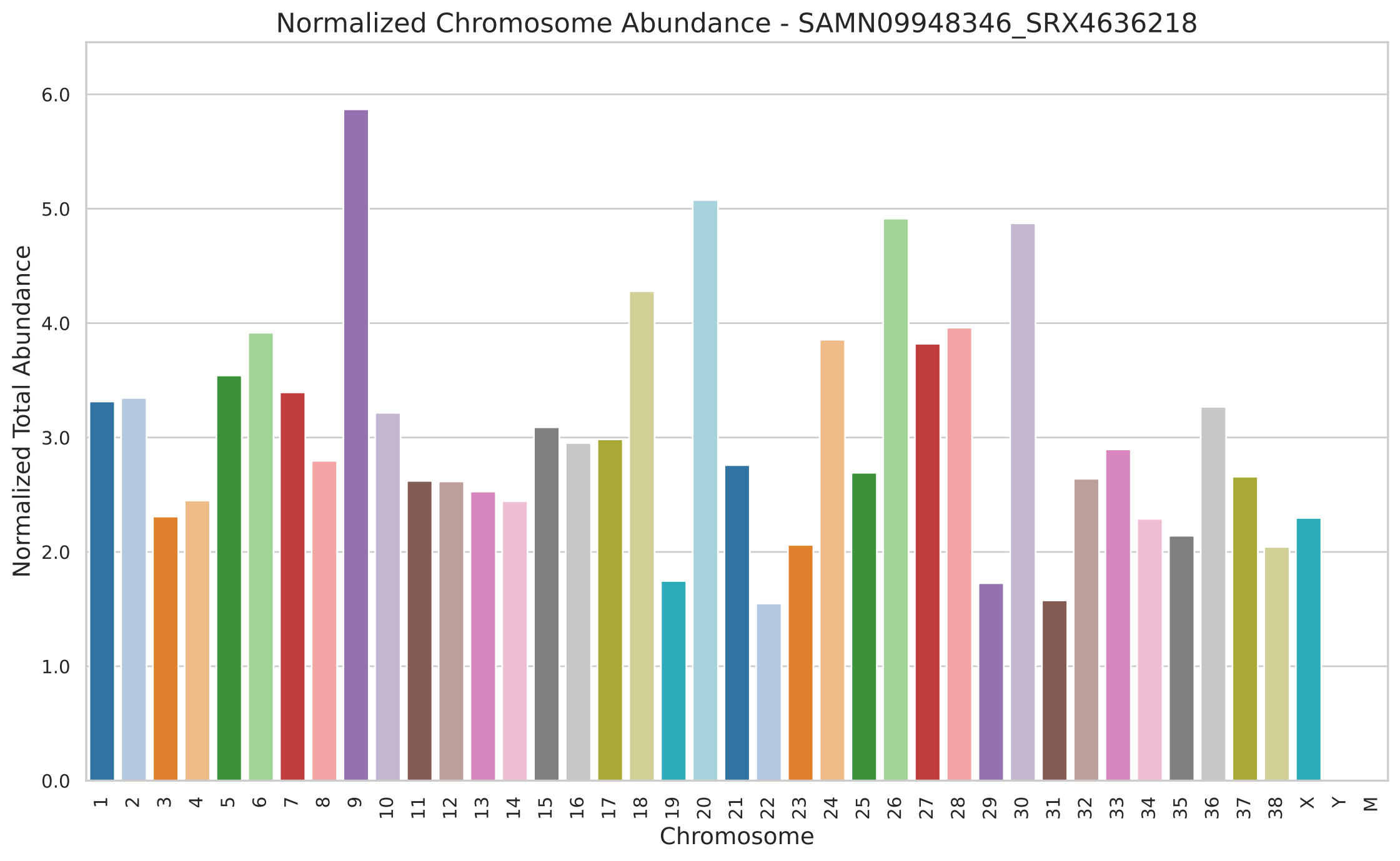

Normalized Chromosome Abundance - SAMN09948215_SRX4635852
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

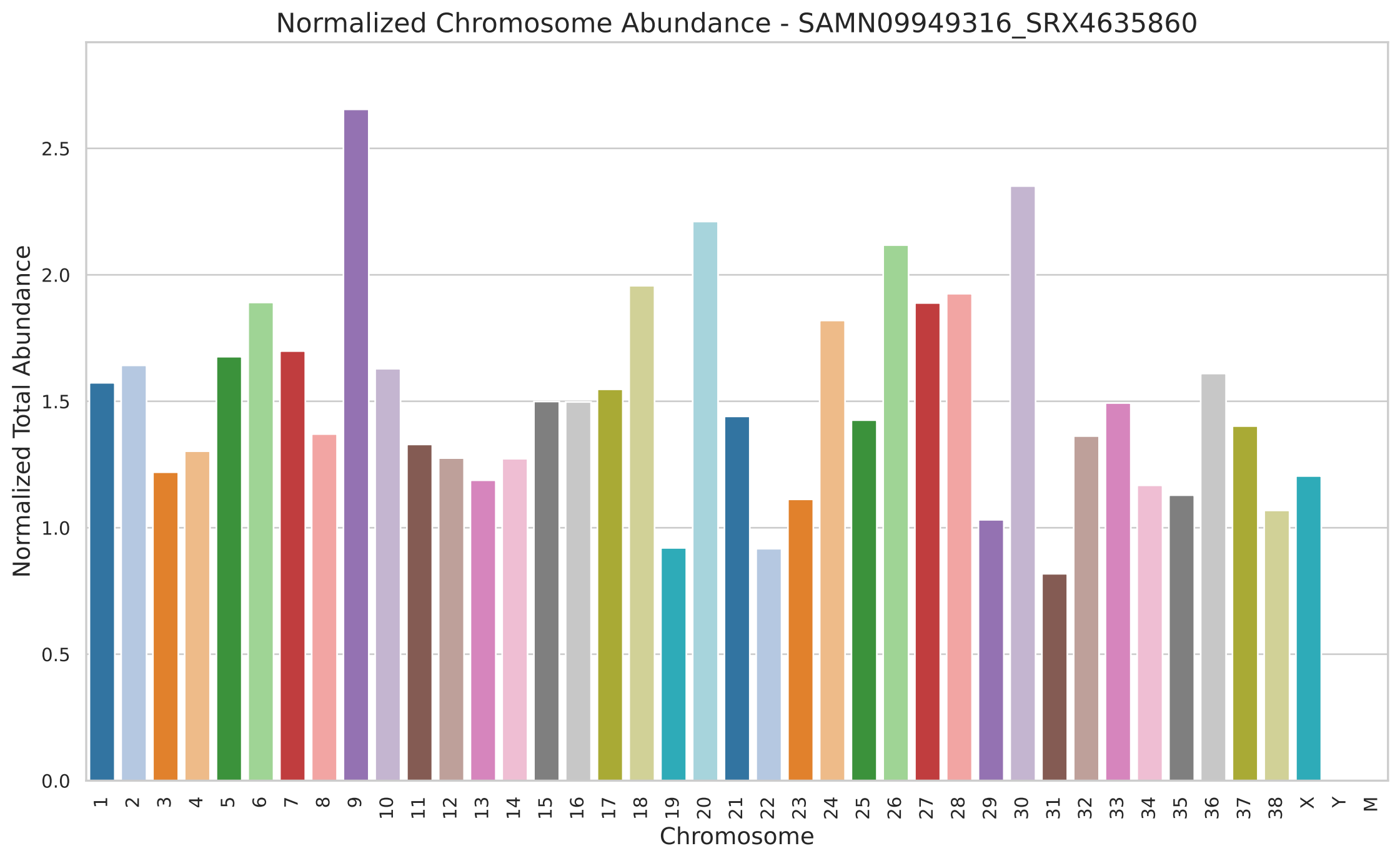

Normalized Chromosome Abundance - SAMN09948217_SRX4635855
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

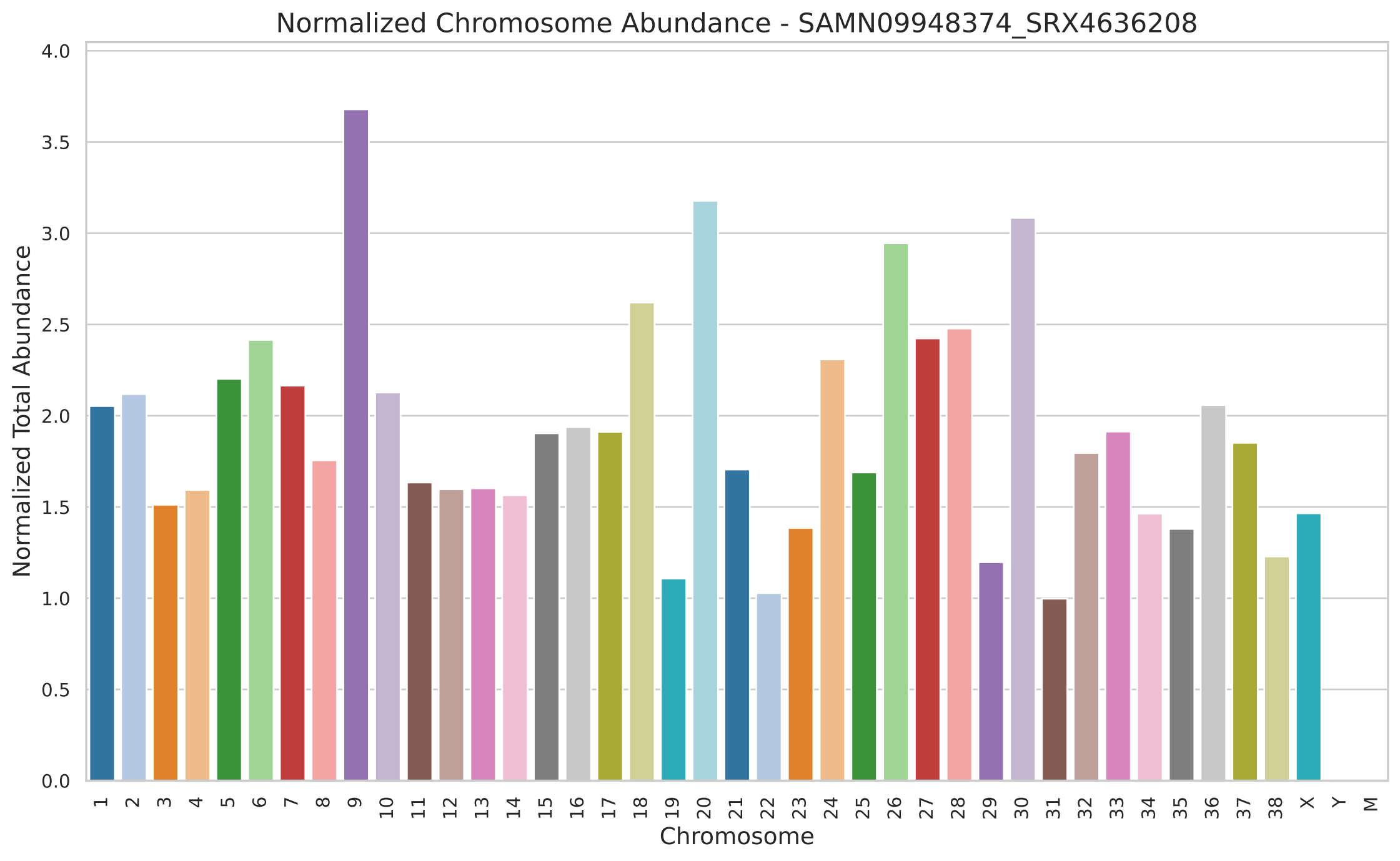

Normalized Chromosome Abundance - SAMN09948325_SRX4635861
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

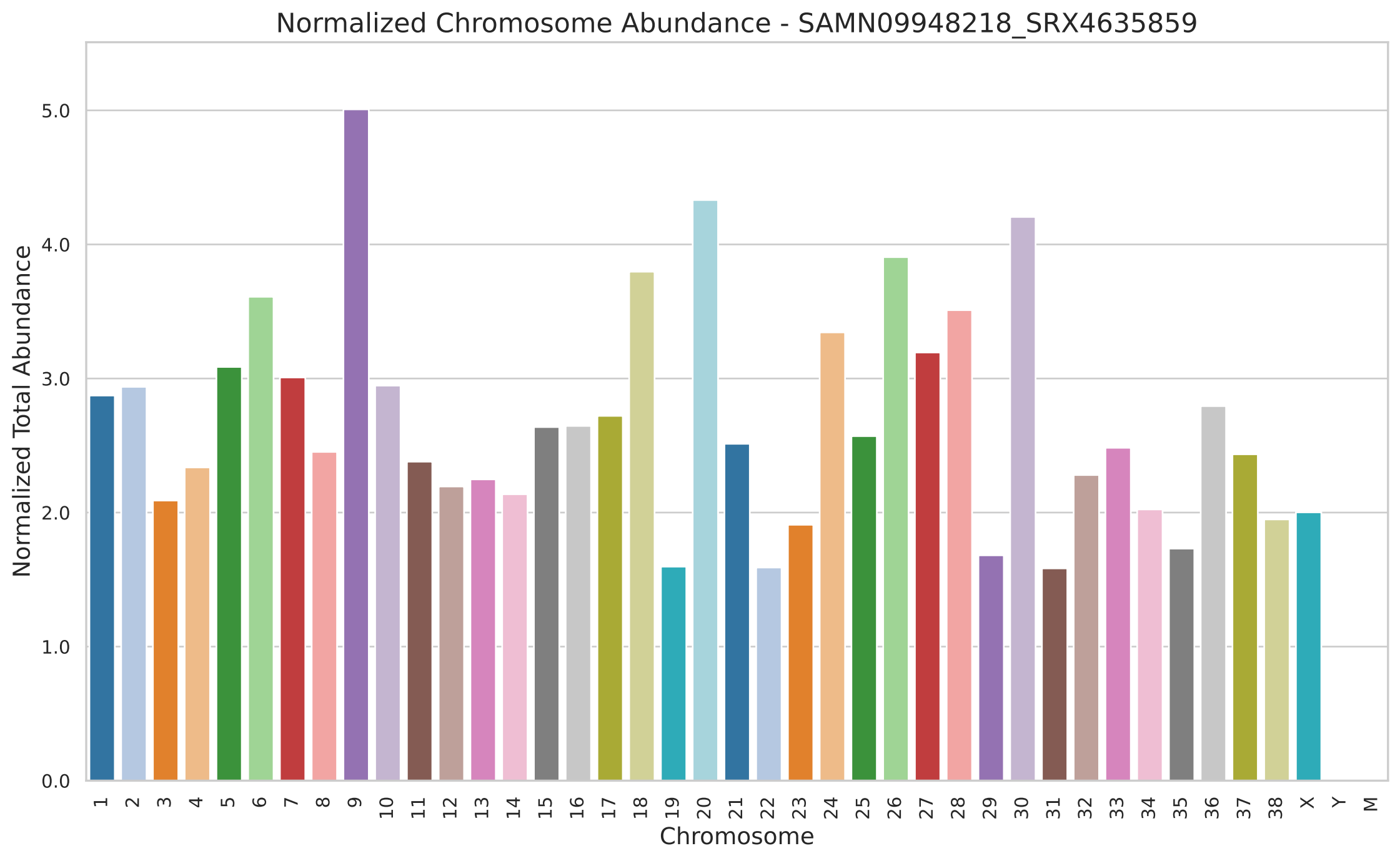

Normalized Chromosome Abundance - SAMN09949545_SRX4636213
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

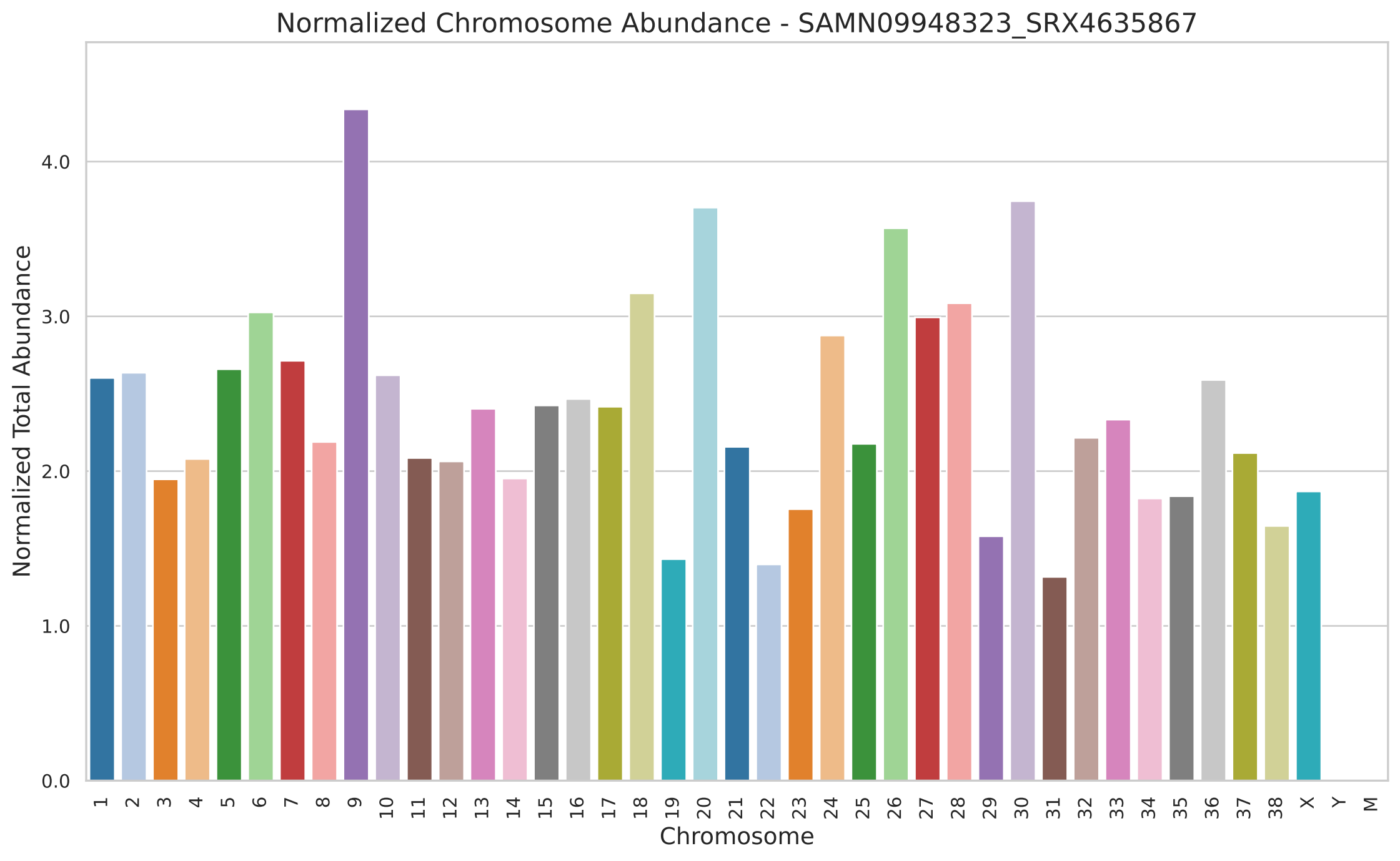

Normalized Chromosome Abundance - SAMN09949546_SRX4636220
Normalized Total Abundance
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

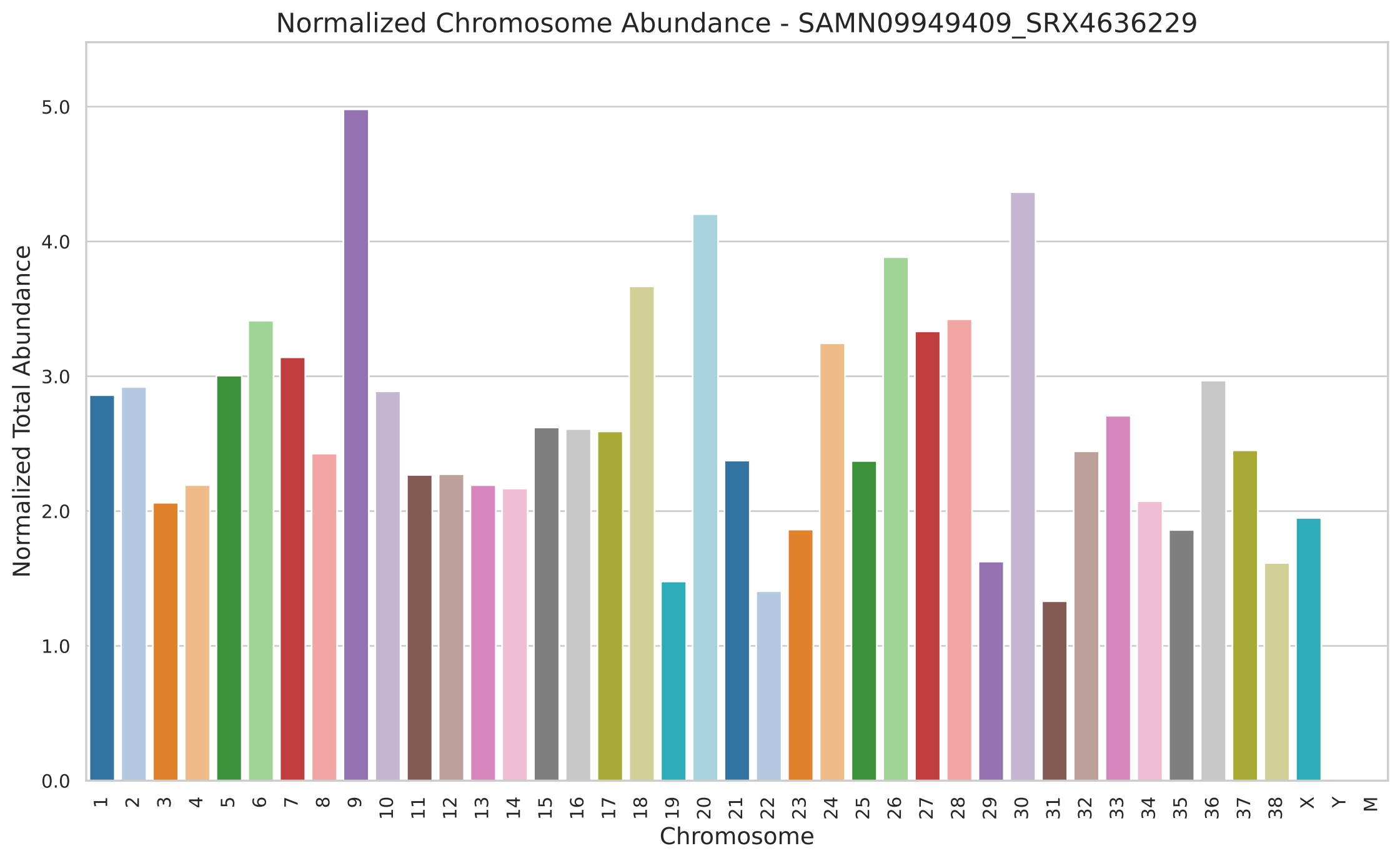

Normalized Chromosome Abundance - SAMN09948346_SRX4636218
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

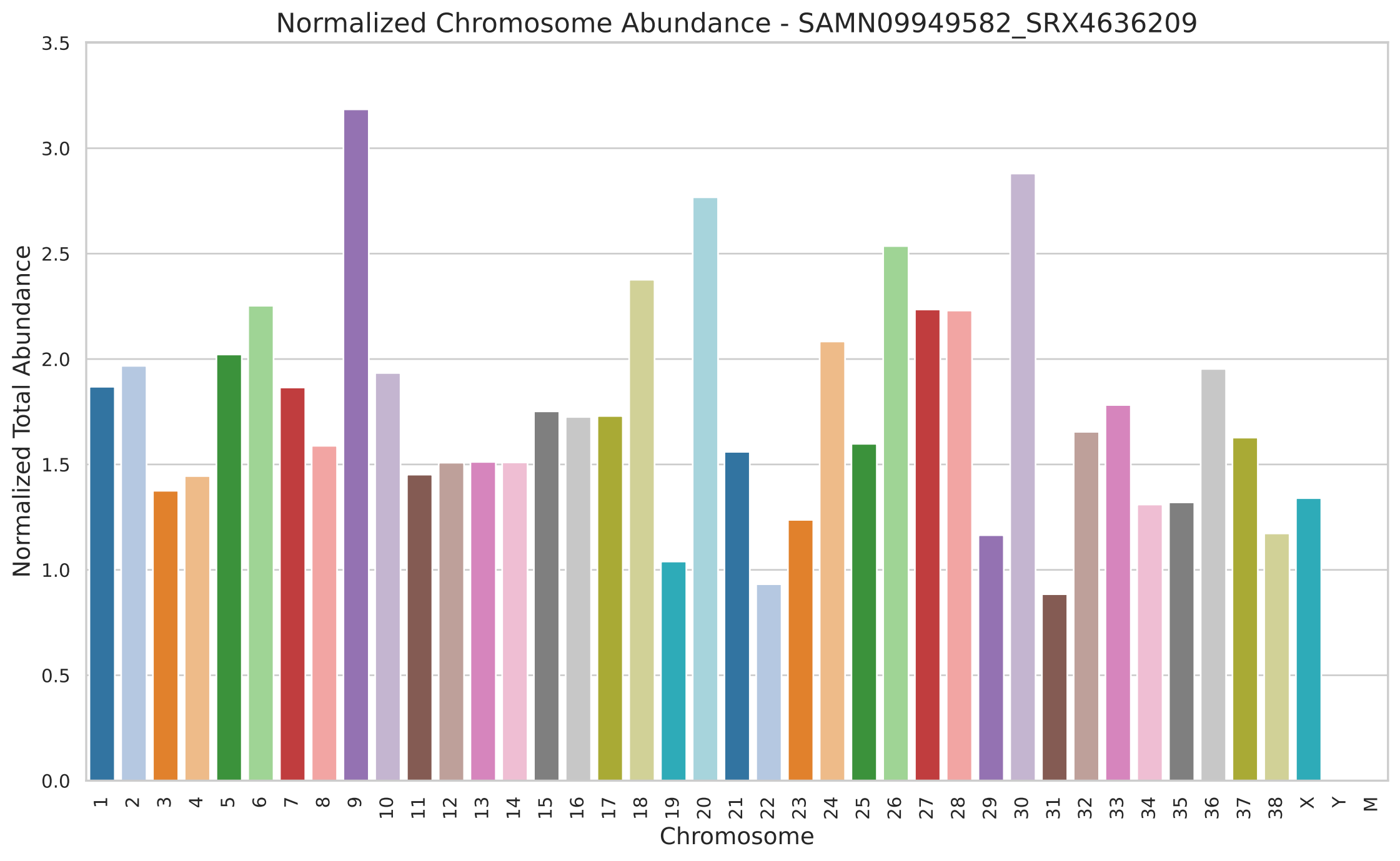

Normalized Chromosome Abundance - SAMN09949316_SRX4635860
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

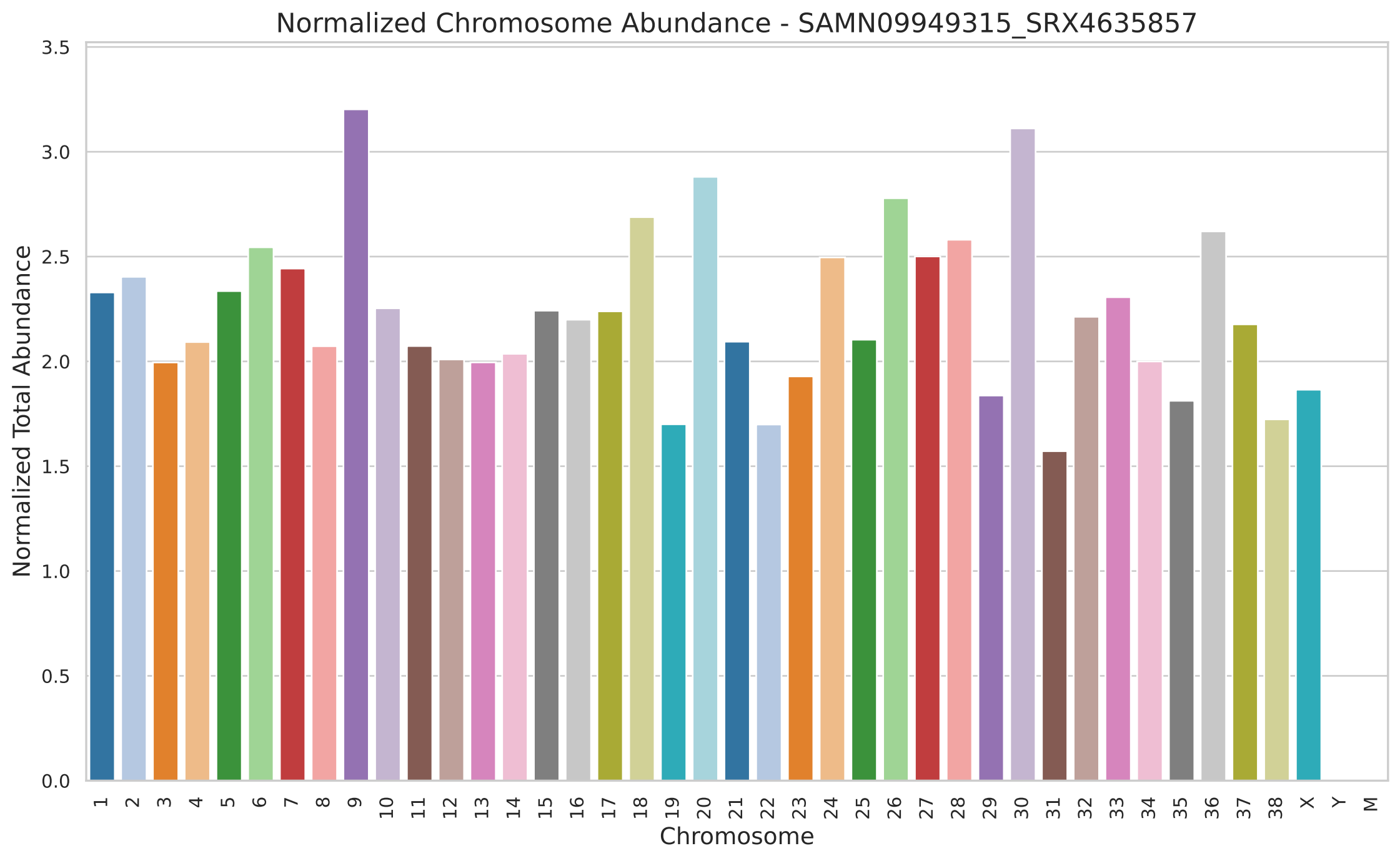

Normalized Chromosome Abundance - SAMN09948374_SRX4636208
Normalized Total Abundance
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

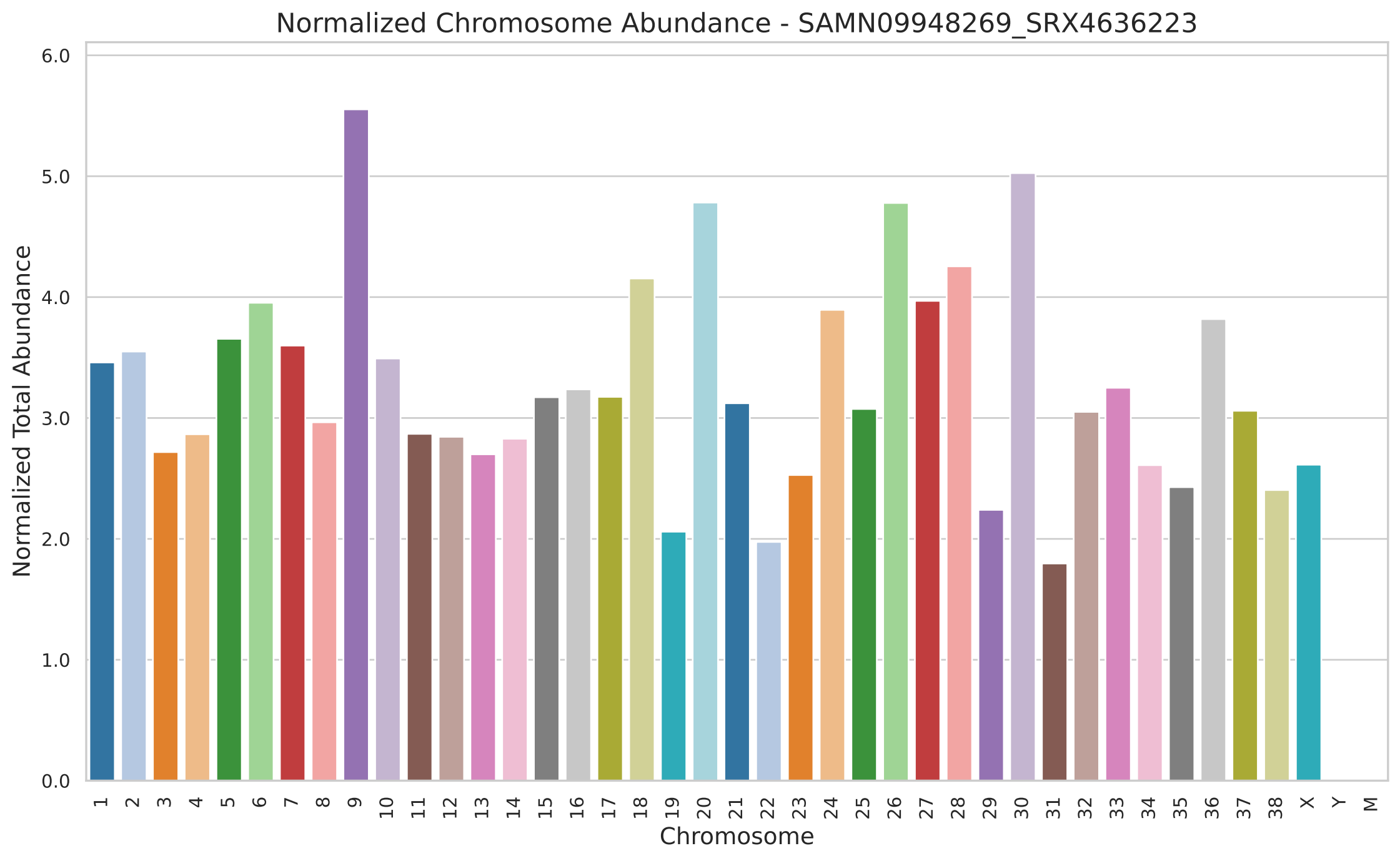

Normalized Chromosome Abundance - SAMN09948218_SRX4635859
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

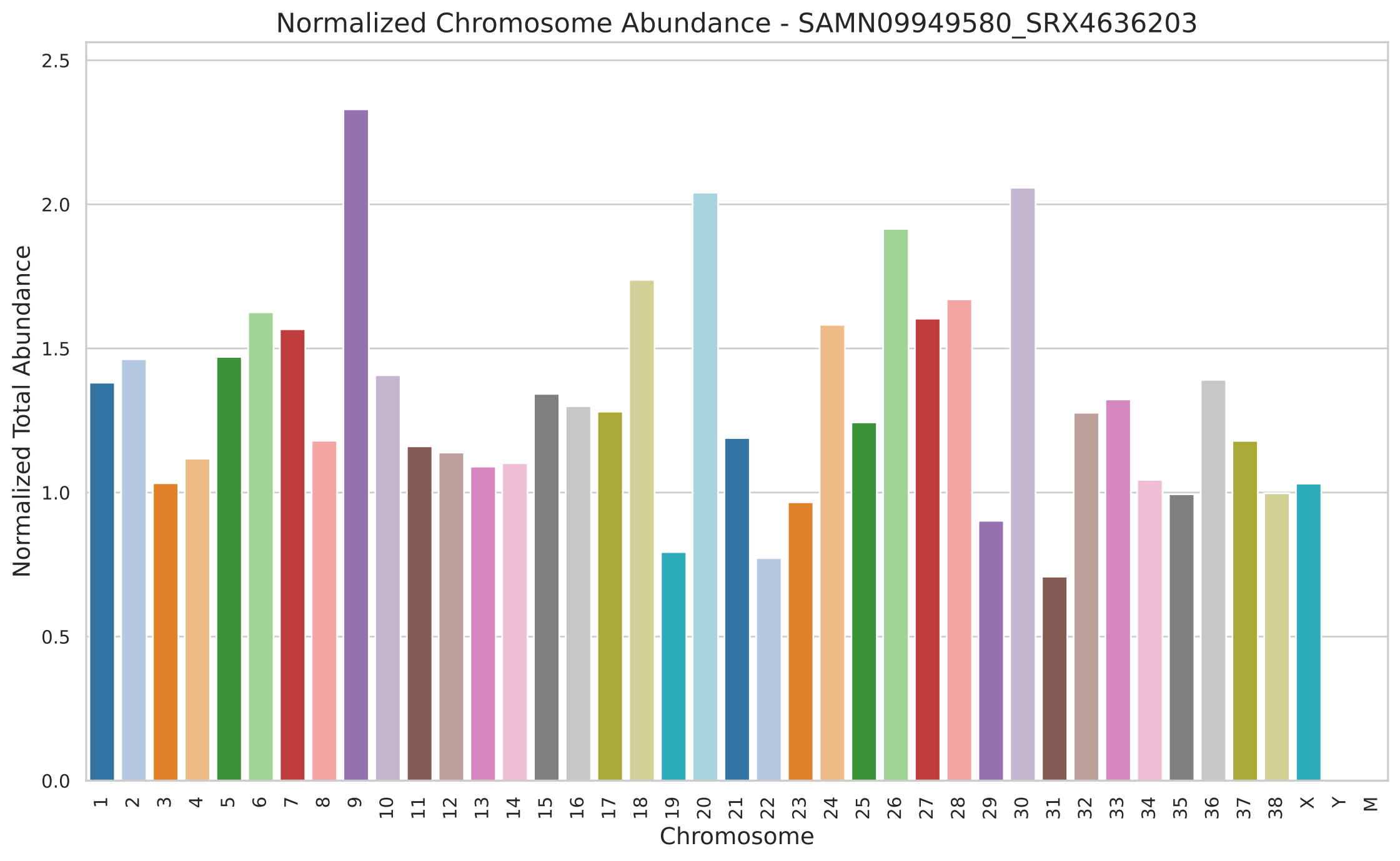

Normalized Chromosome Abundance - SAMN09948323_SRX4635867
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

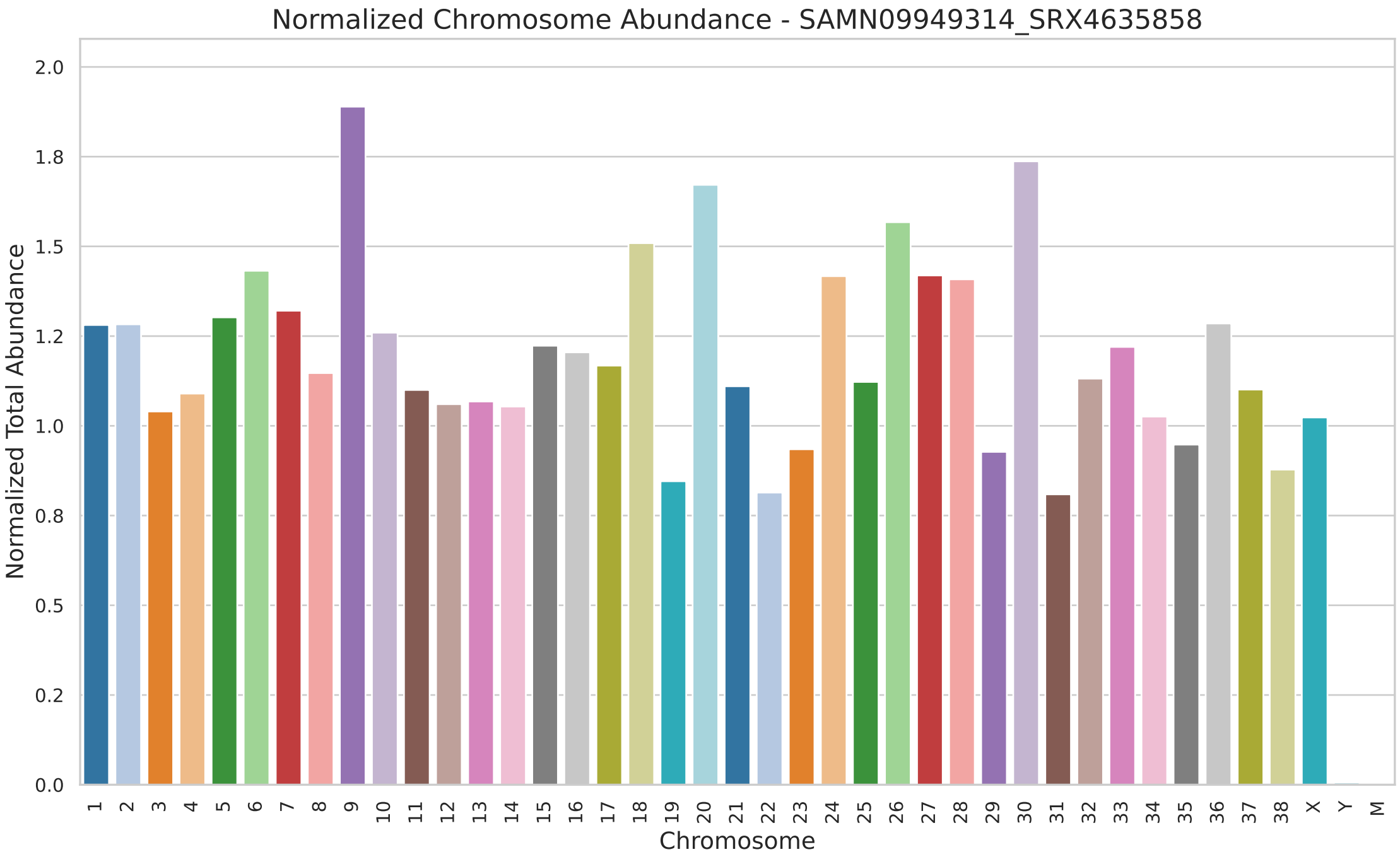

Normalized Chromosome Abundance - SAMN09949409_SRX4636229
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

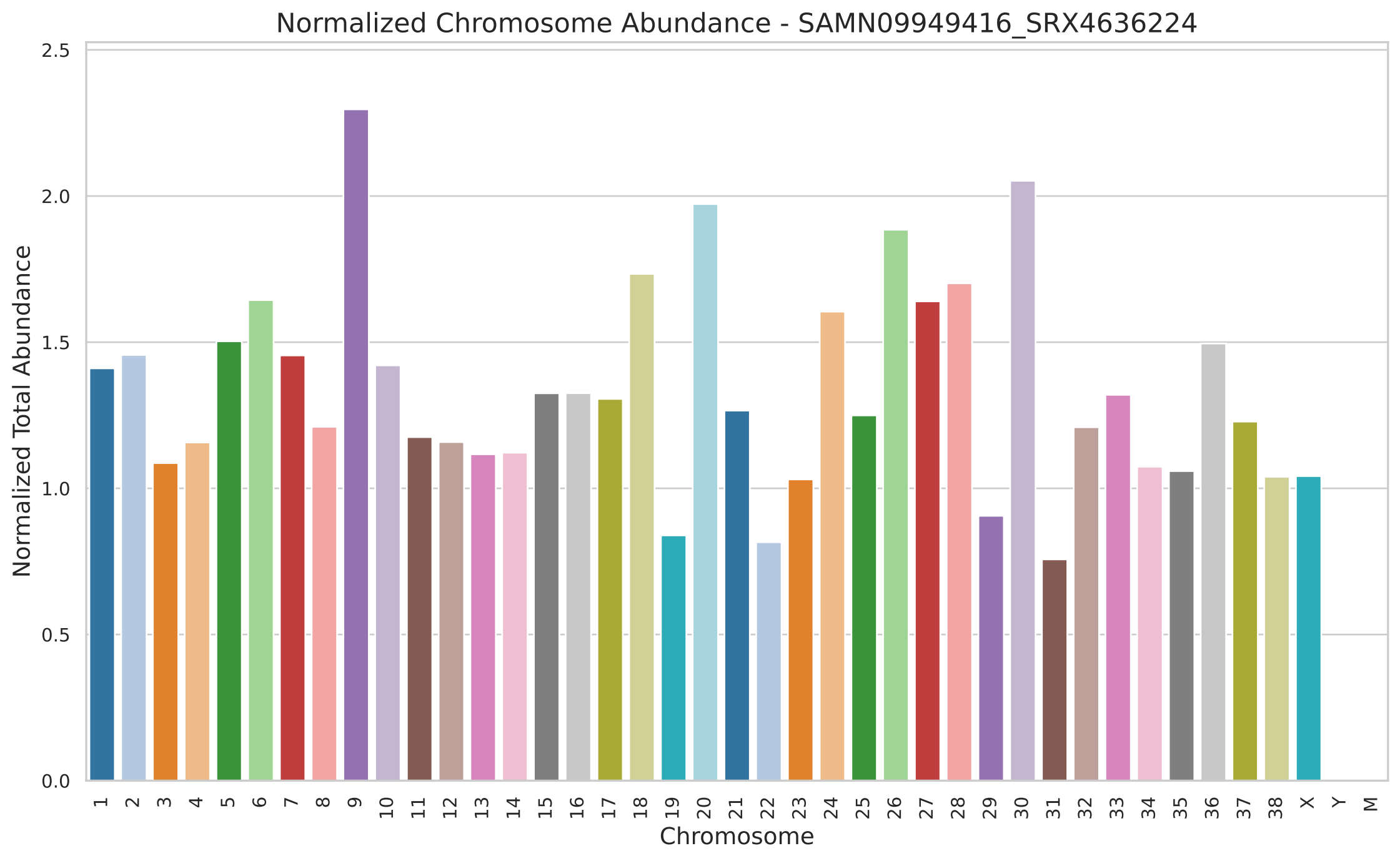

Normalized Chromosome Abundance - SAMN09949582_SRX4636209
Normalized Total Abundance
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

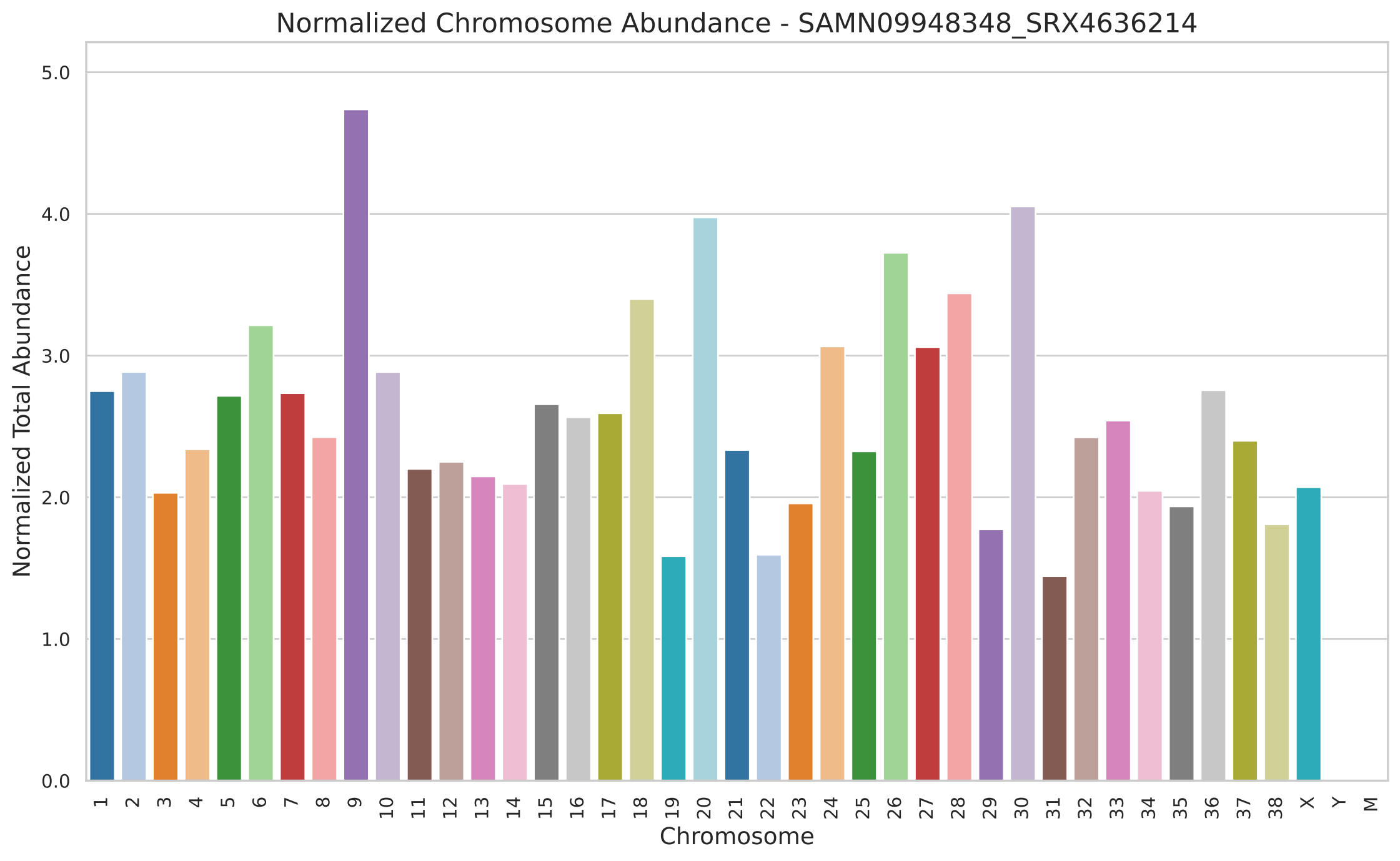

Normalized Chromosome Abundance - SAMN09949315_SRX4635857
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

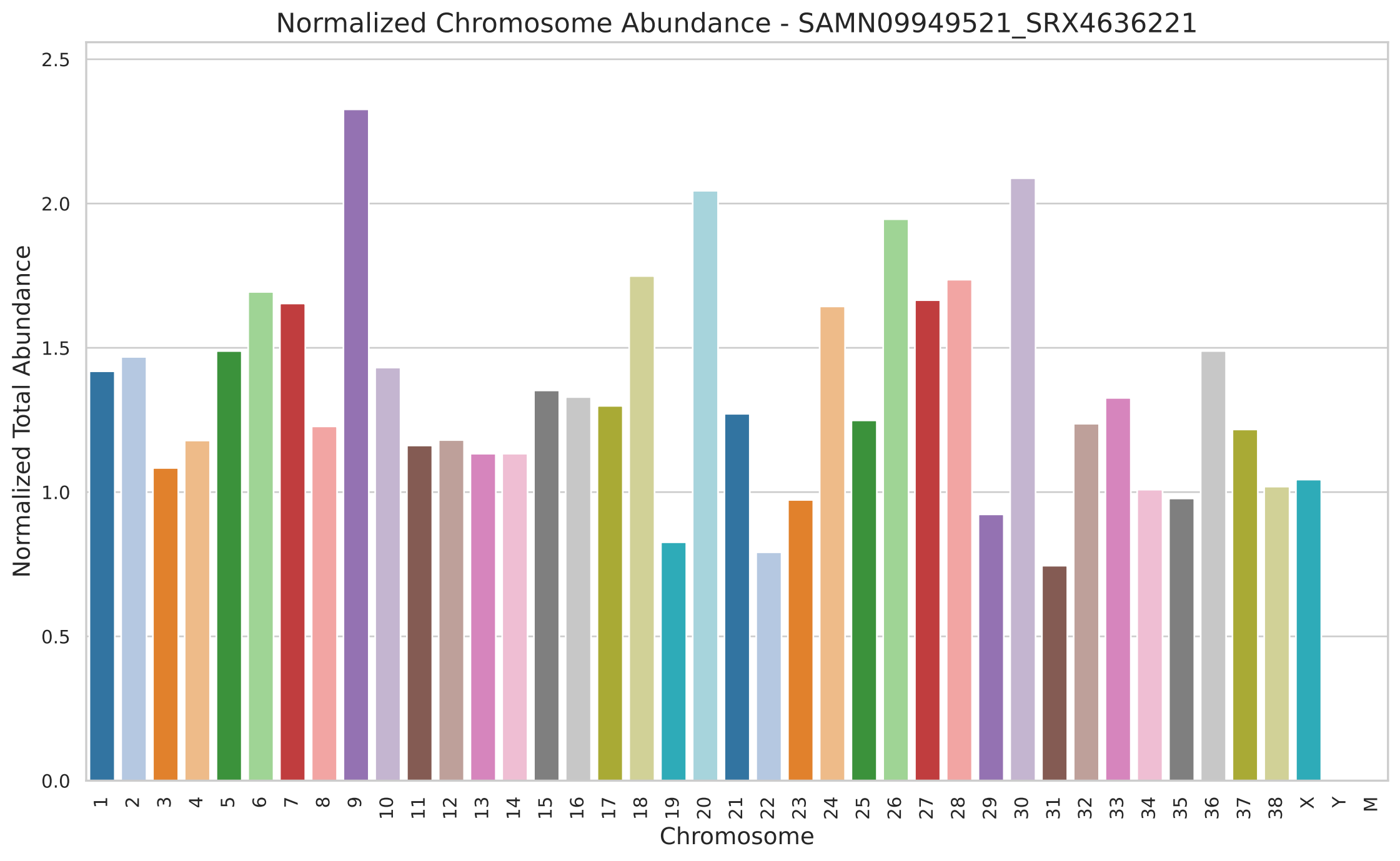

Normalized Chromosome Abundance - SAMN09948269_SRX4636223
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

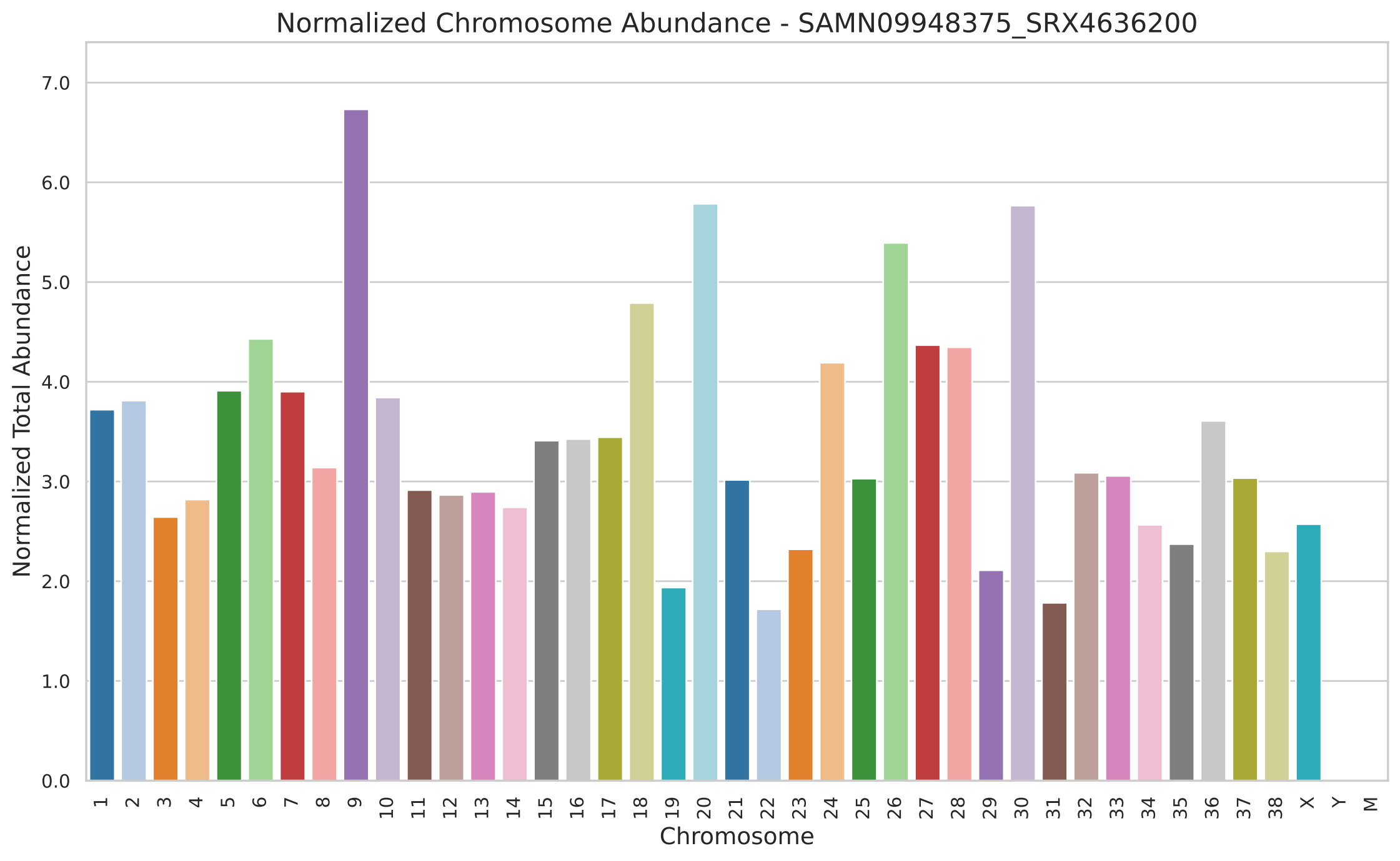

Normalized Chromosome Abundance - SAMN09949580_SRX4636203
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

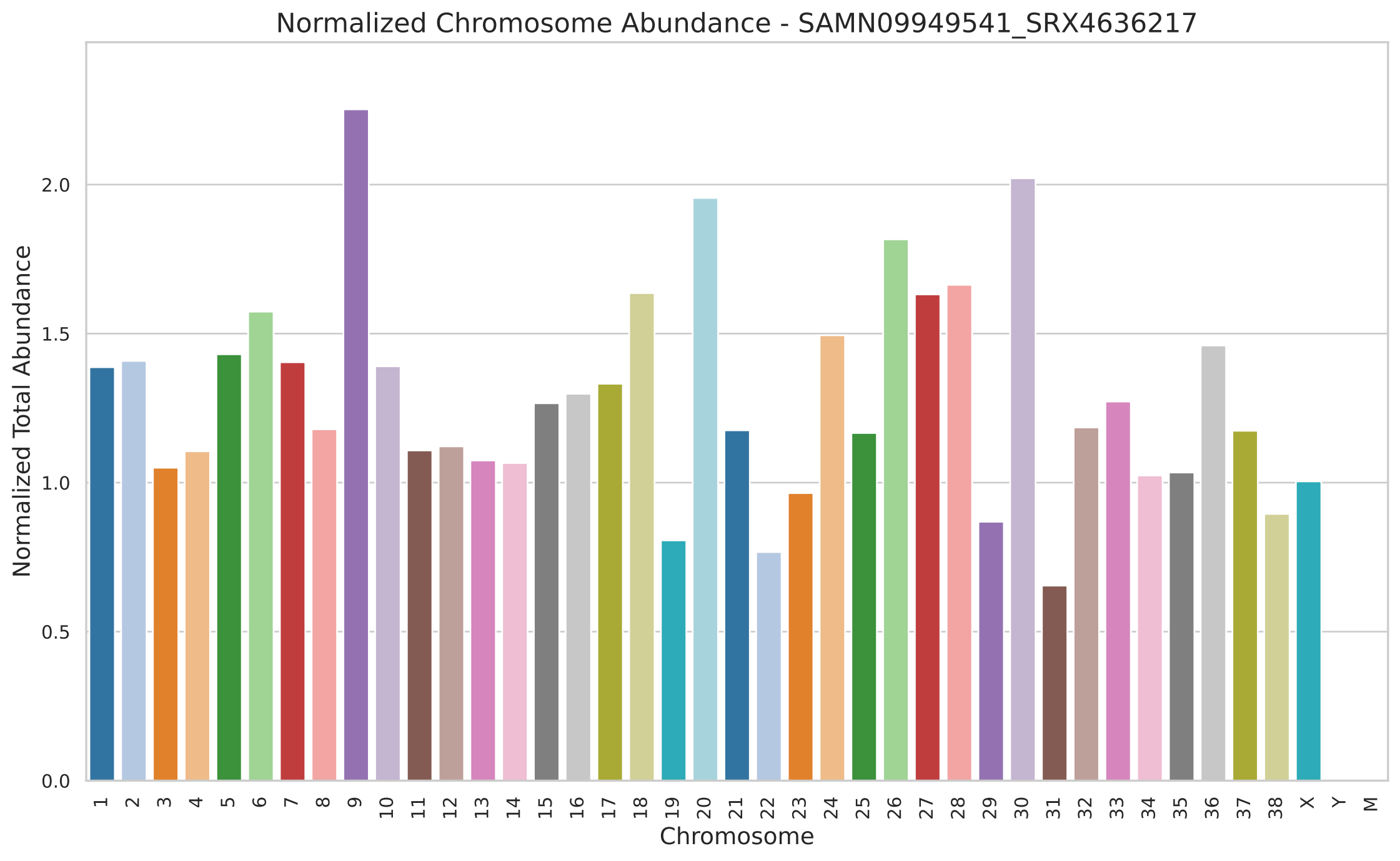

Normalized Chromosome Abundance - SAMN09949314_SRX4635858
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

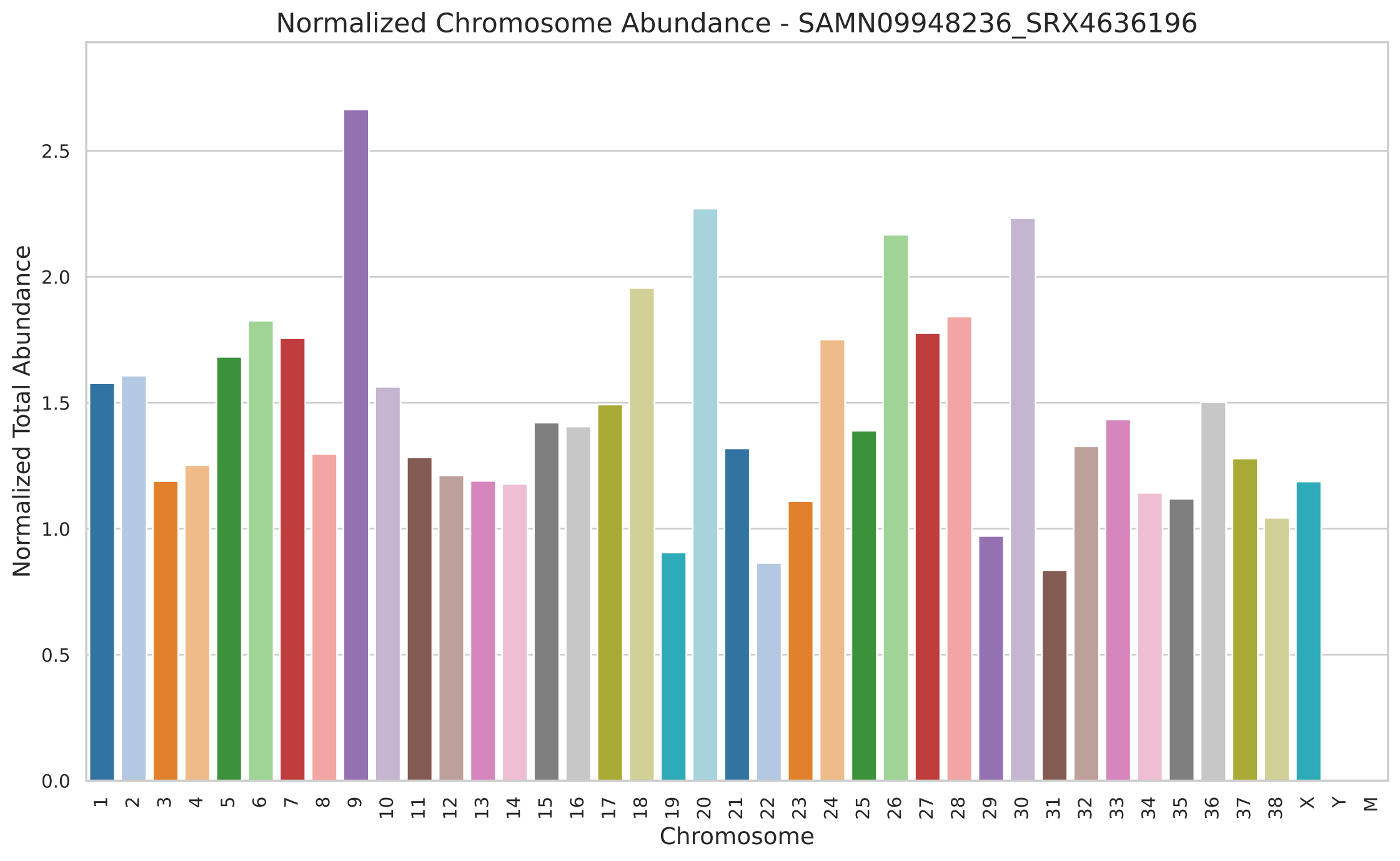

Normalized Chromosome Abundance - SAMN09949416_SRX4636224
Normalized Total Abundance
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

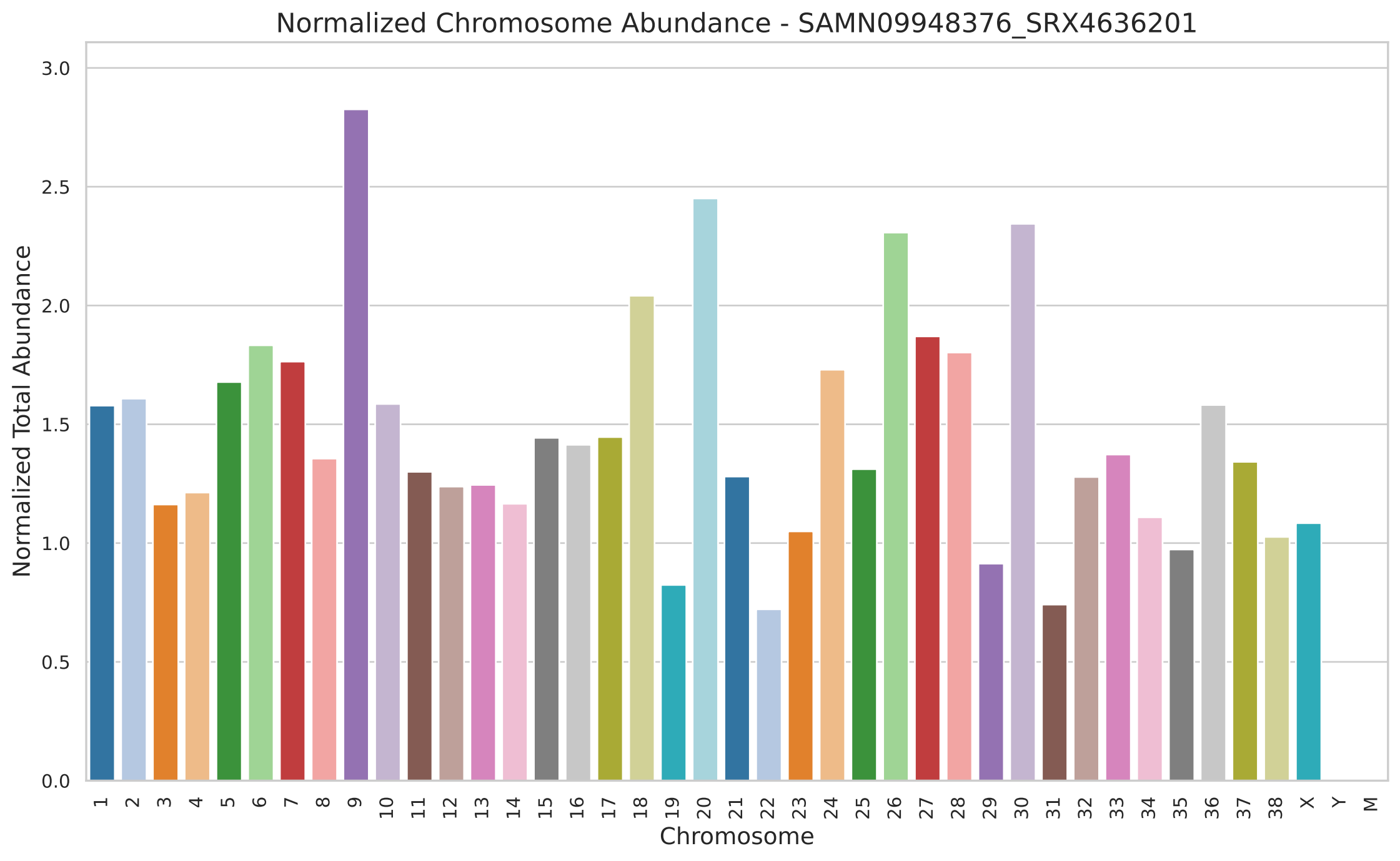

Normalized Chromosome Abundance - SAMN09948348_SRX4636214
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

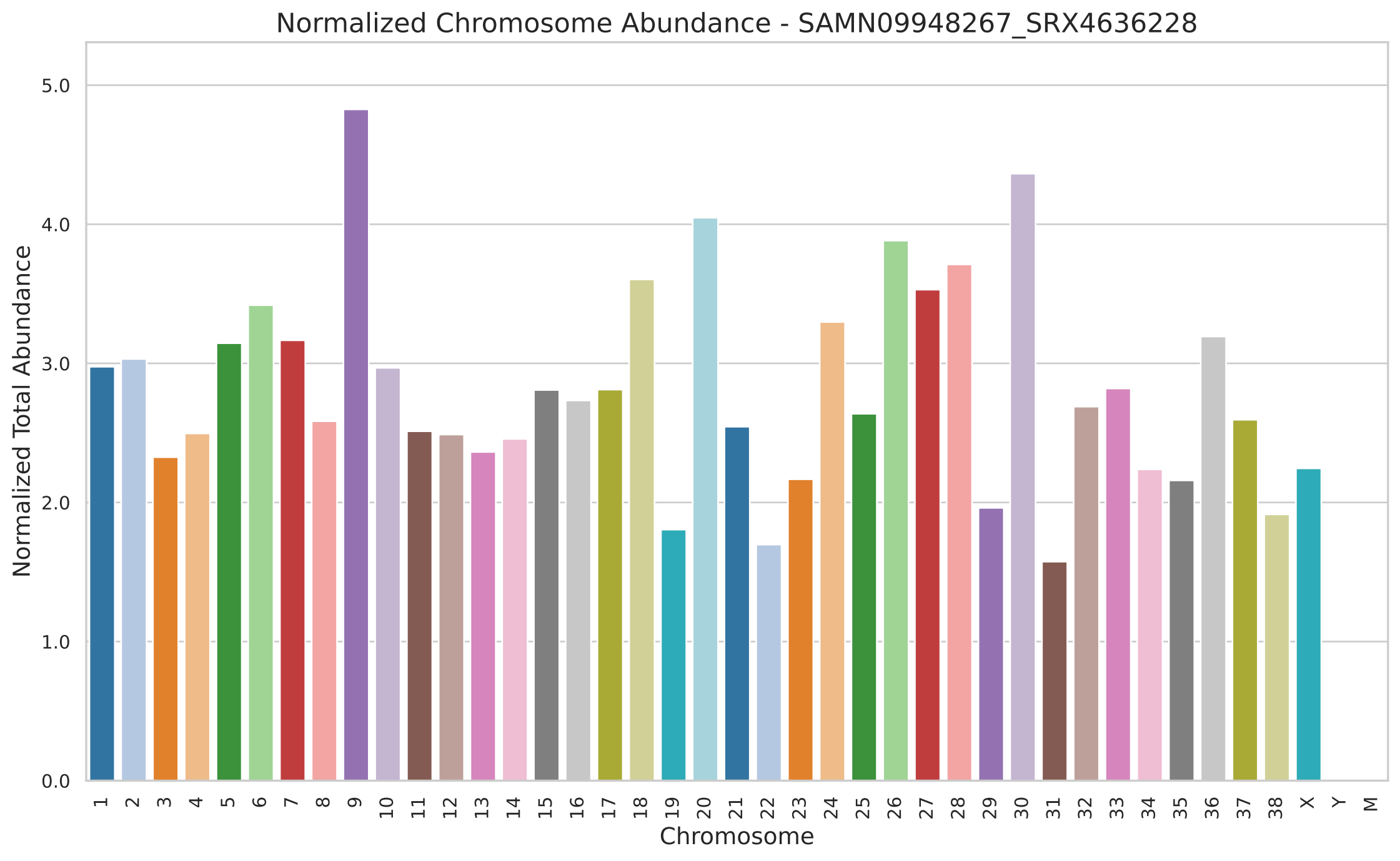

Normalized Chromosome Abundance - SAMN09949521_SRX4636221
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

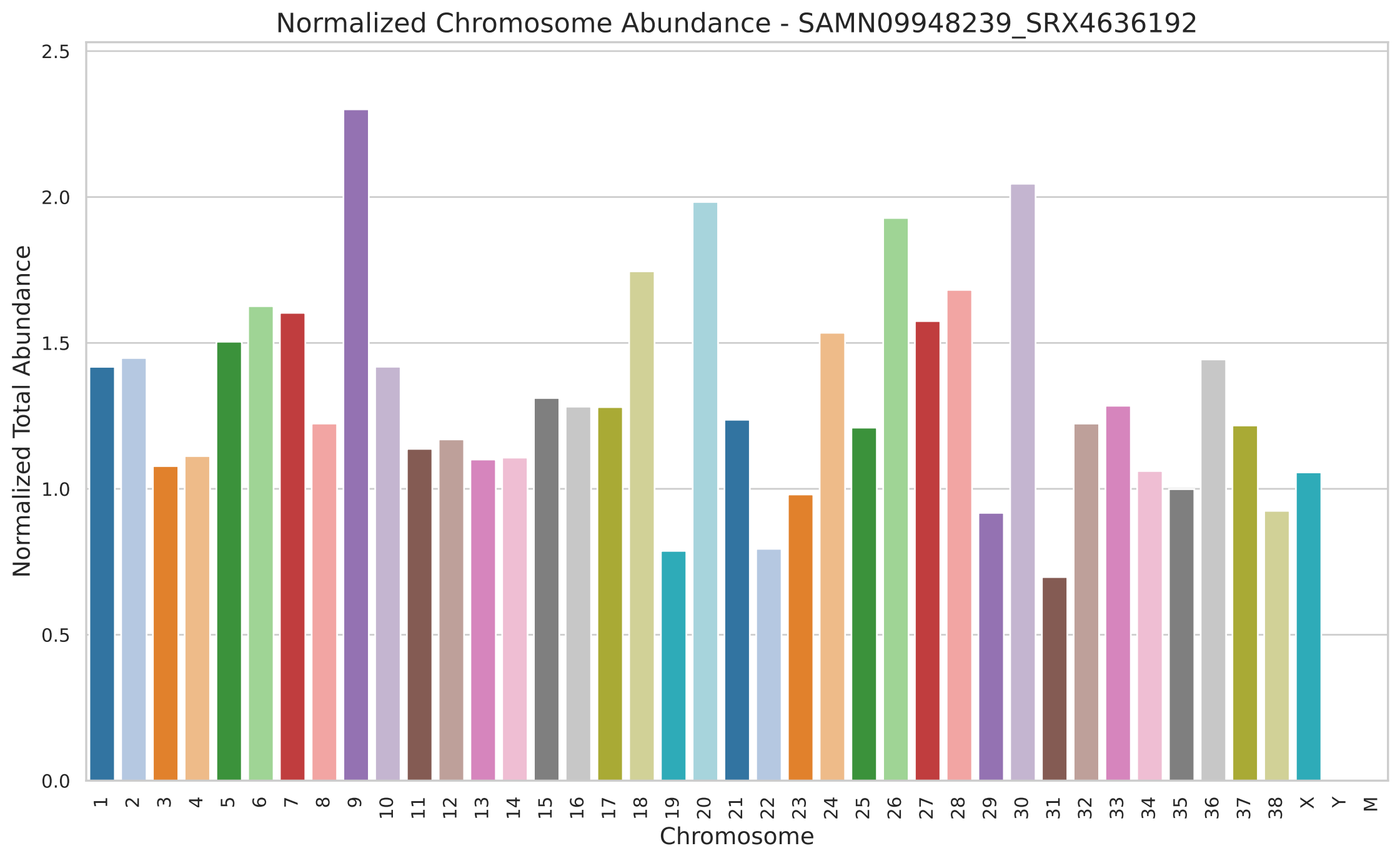

Normalized Chromosome Abundance - SAMN09948375_SRX4636200
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

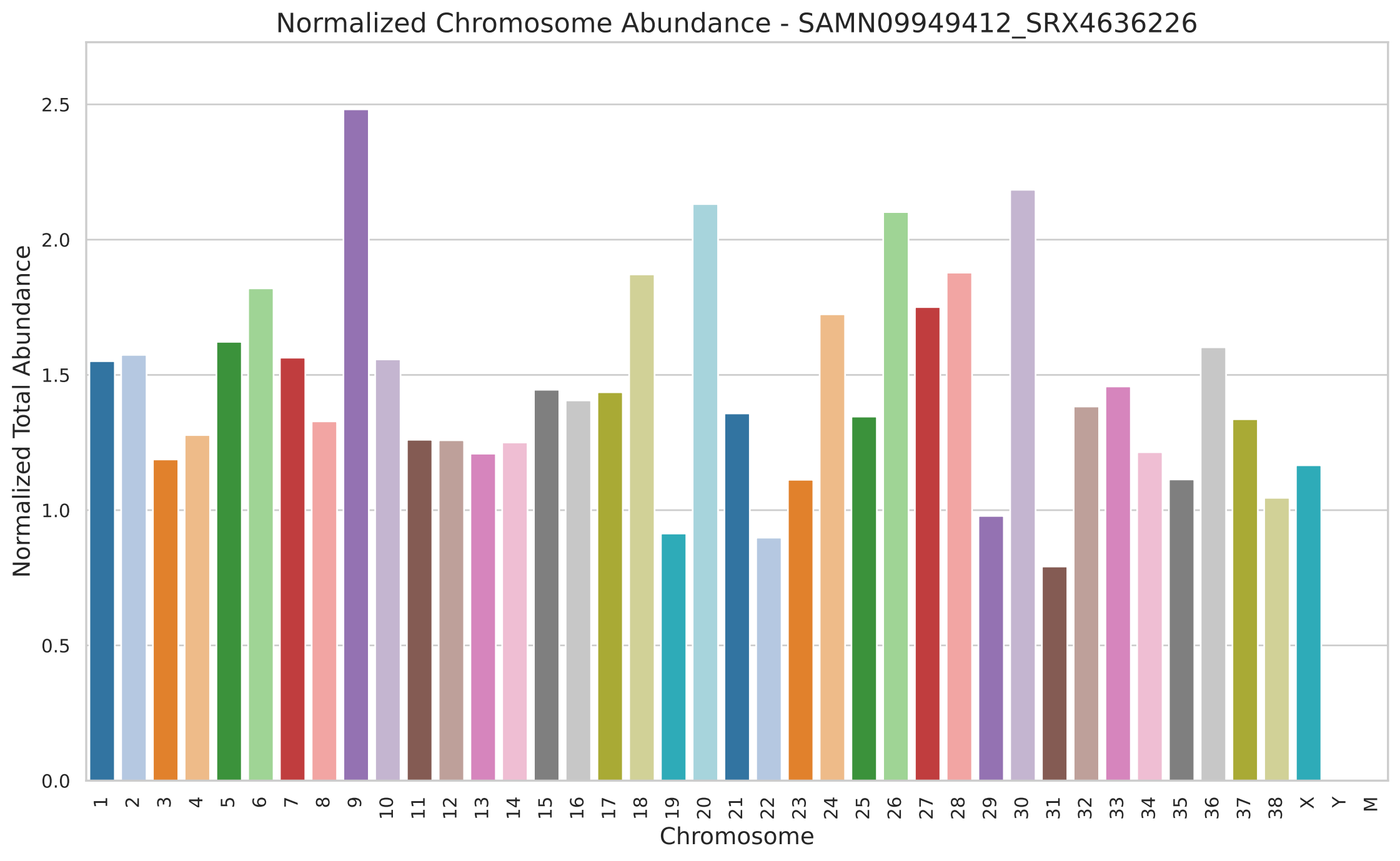

Normalized Chromosome Abundance - SAMN09949541_SRX4636217
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

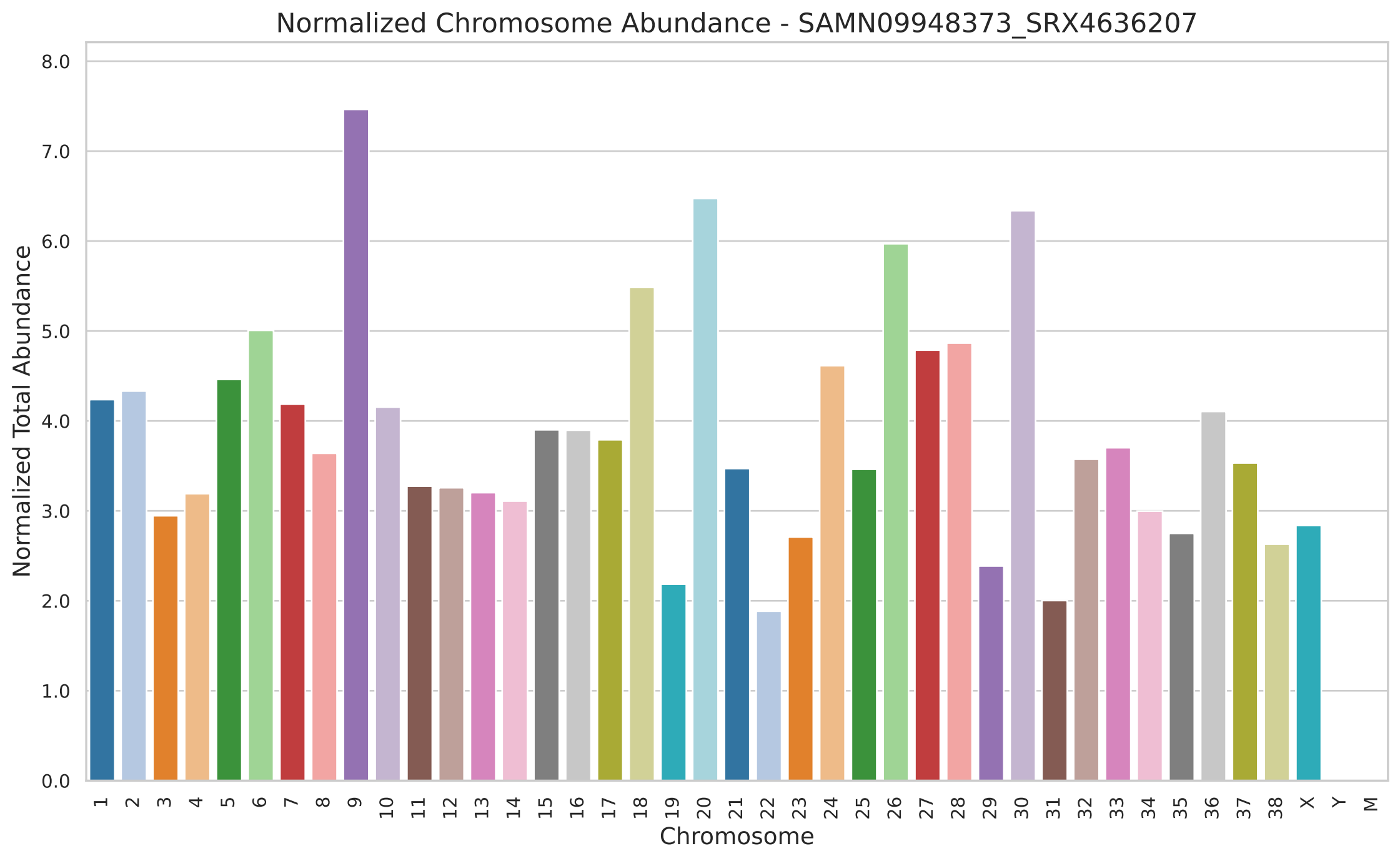

Normalized Chromosome Abundance - SAMN09948236_SRX4636196
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

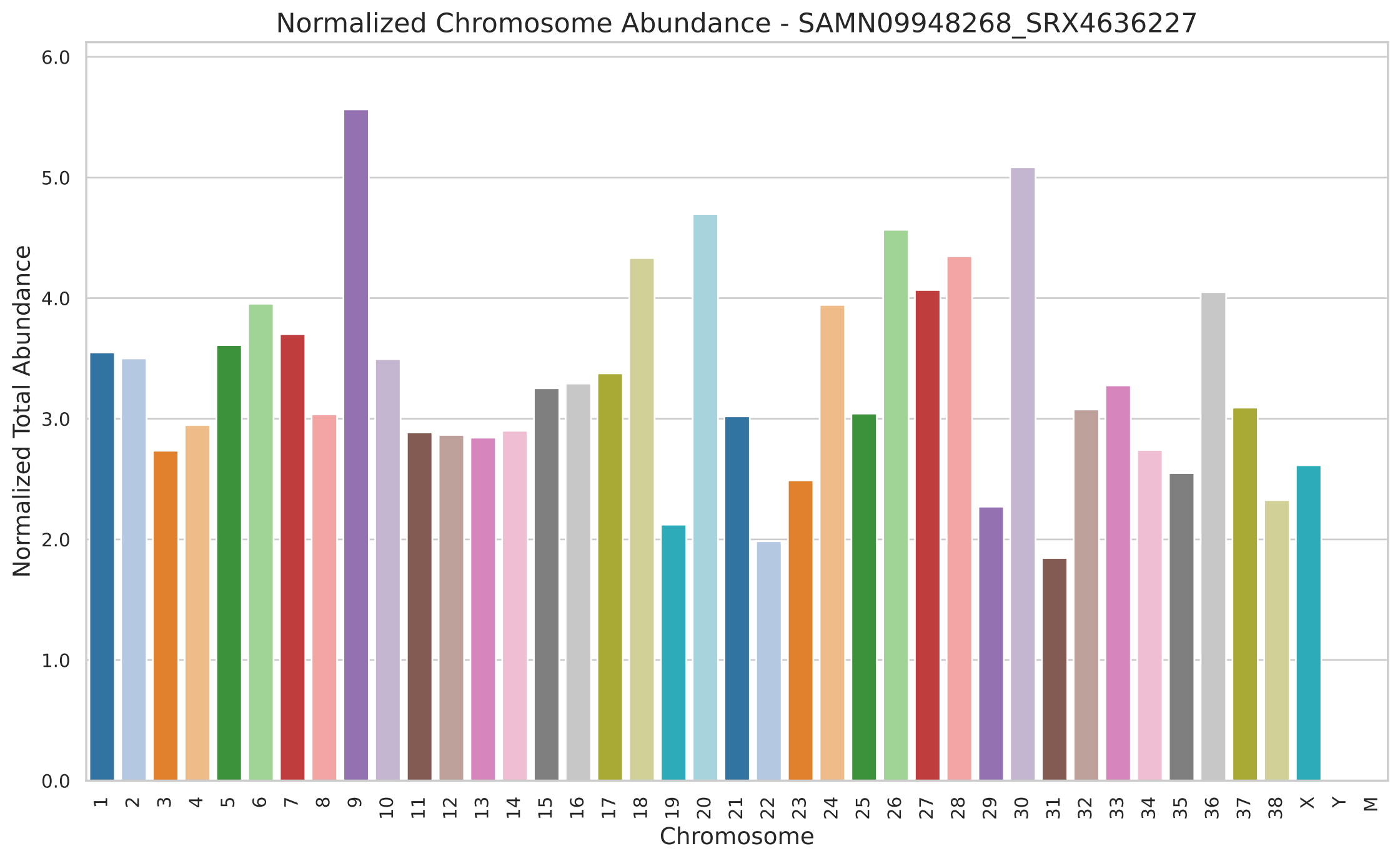

Normalized Chromosome Abundance - SAMN09948376_SRX4636201
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

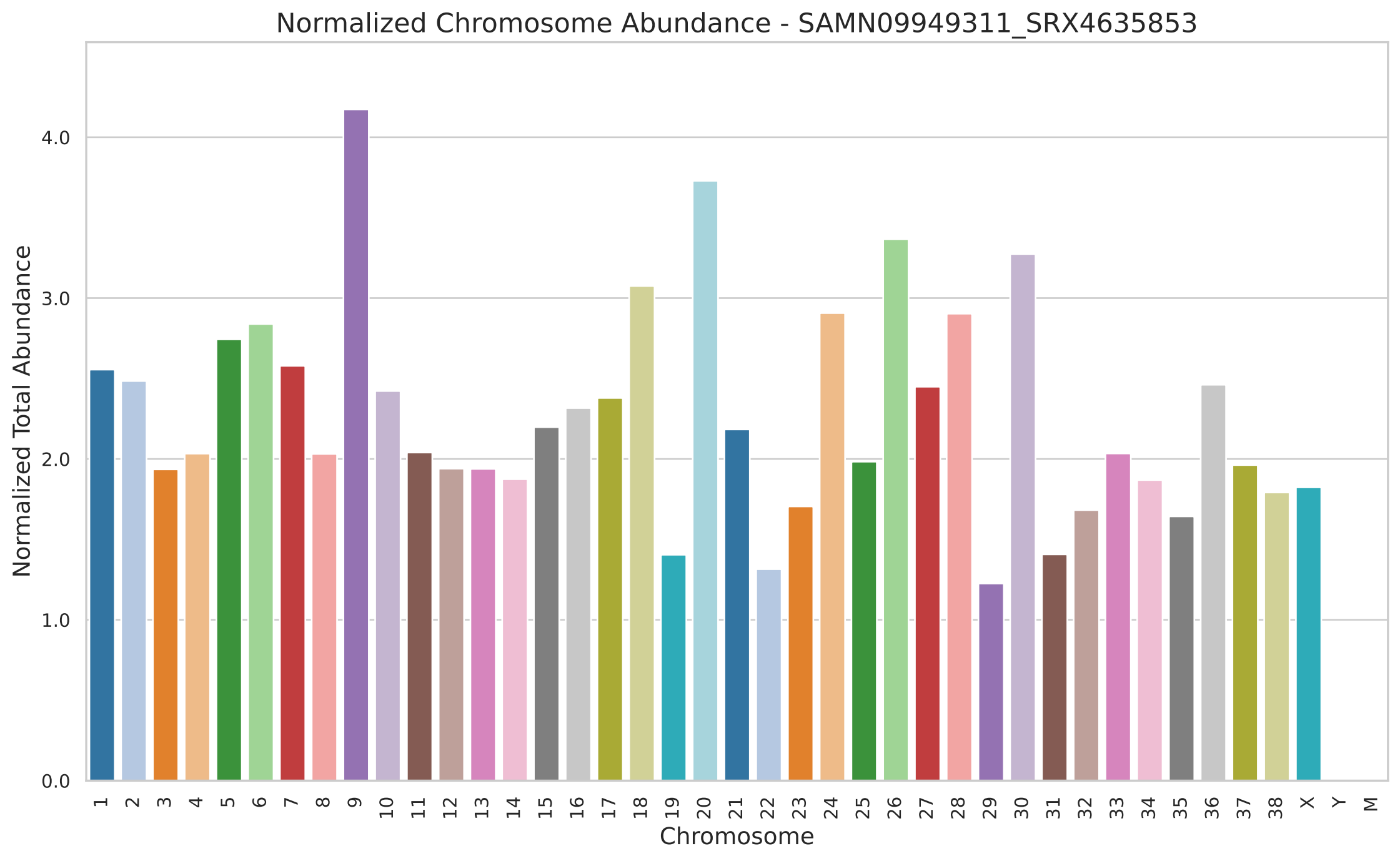

Normalized Chromosome Abundance - SAMN09948267_SRX4636228
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

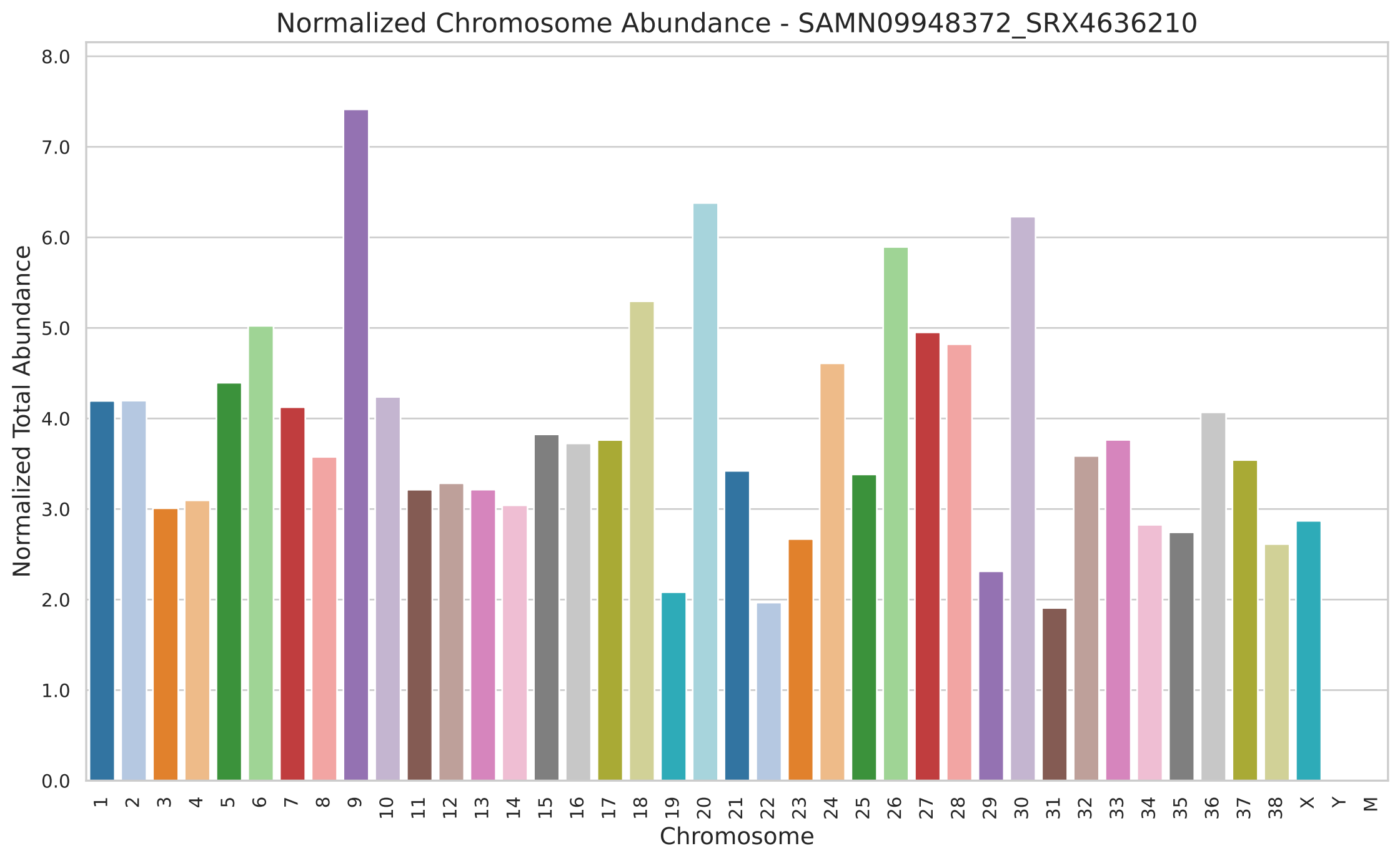

Normalized Chromosome Abundance - SAMN09948239_SRX4636192
Normalized Total Abundance
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

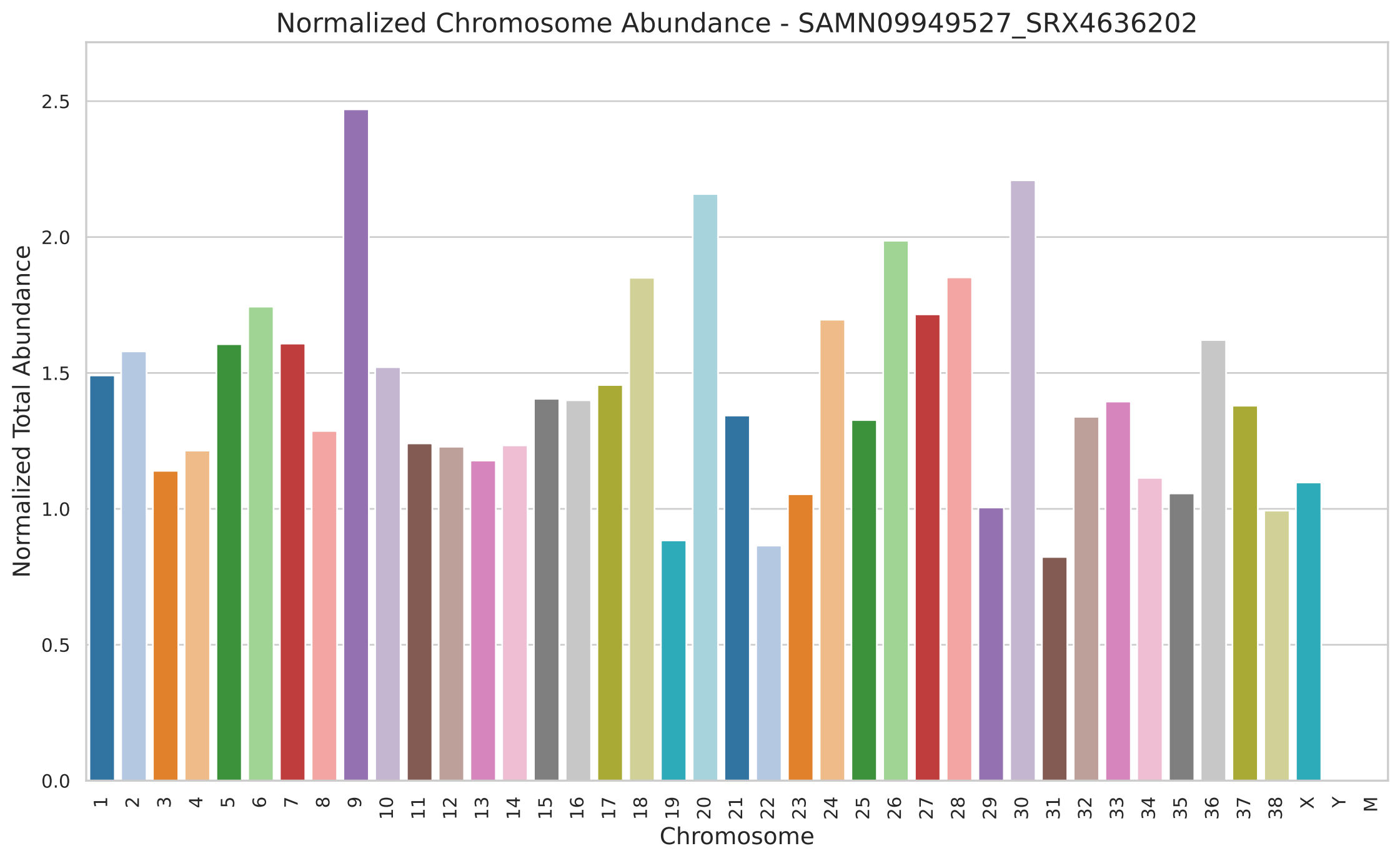

Normalized Chromosome Abundance - SAMN09949412_SRX4636226
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

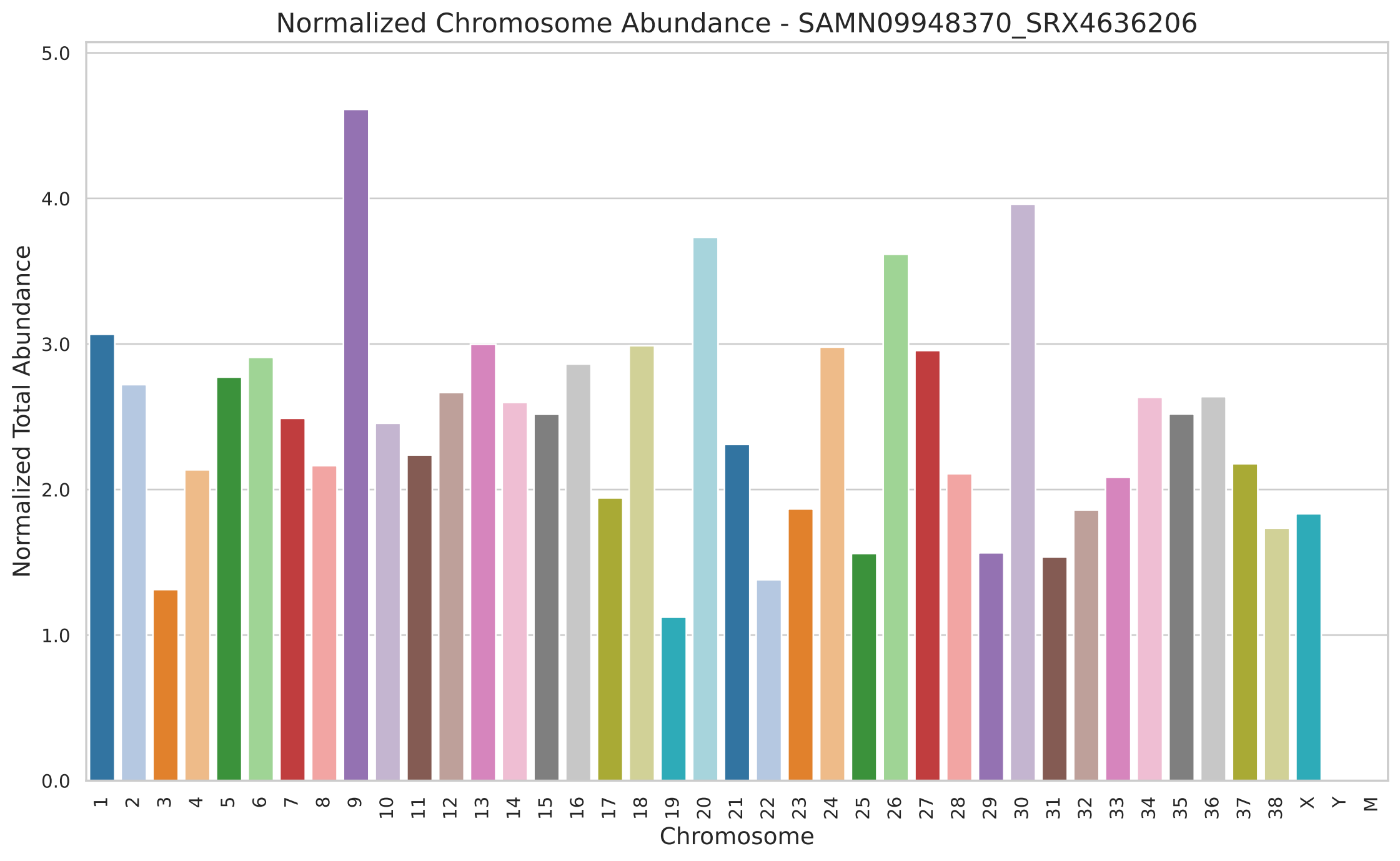

Normalized Chromosome Abundance - SAMN09948373_SRX4636207
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

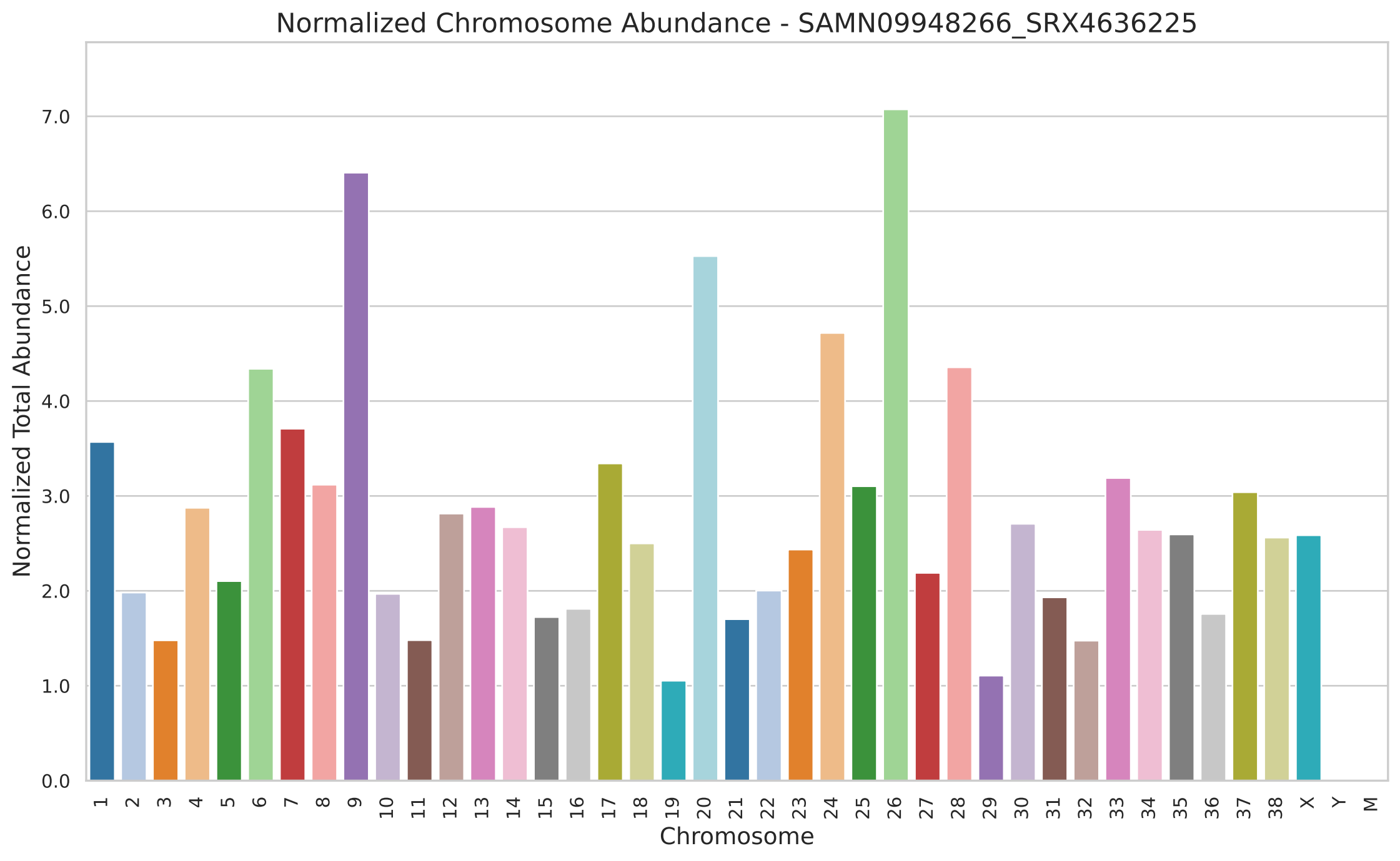

Normalized Chromosome Abundance - SAMN09948268_SRX4636227
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

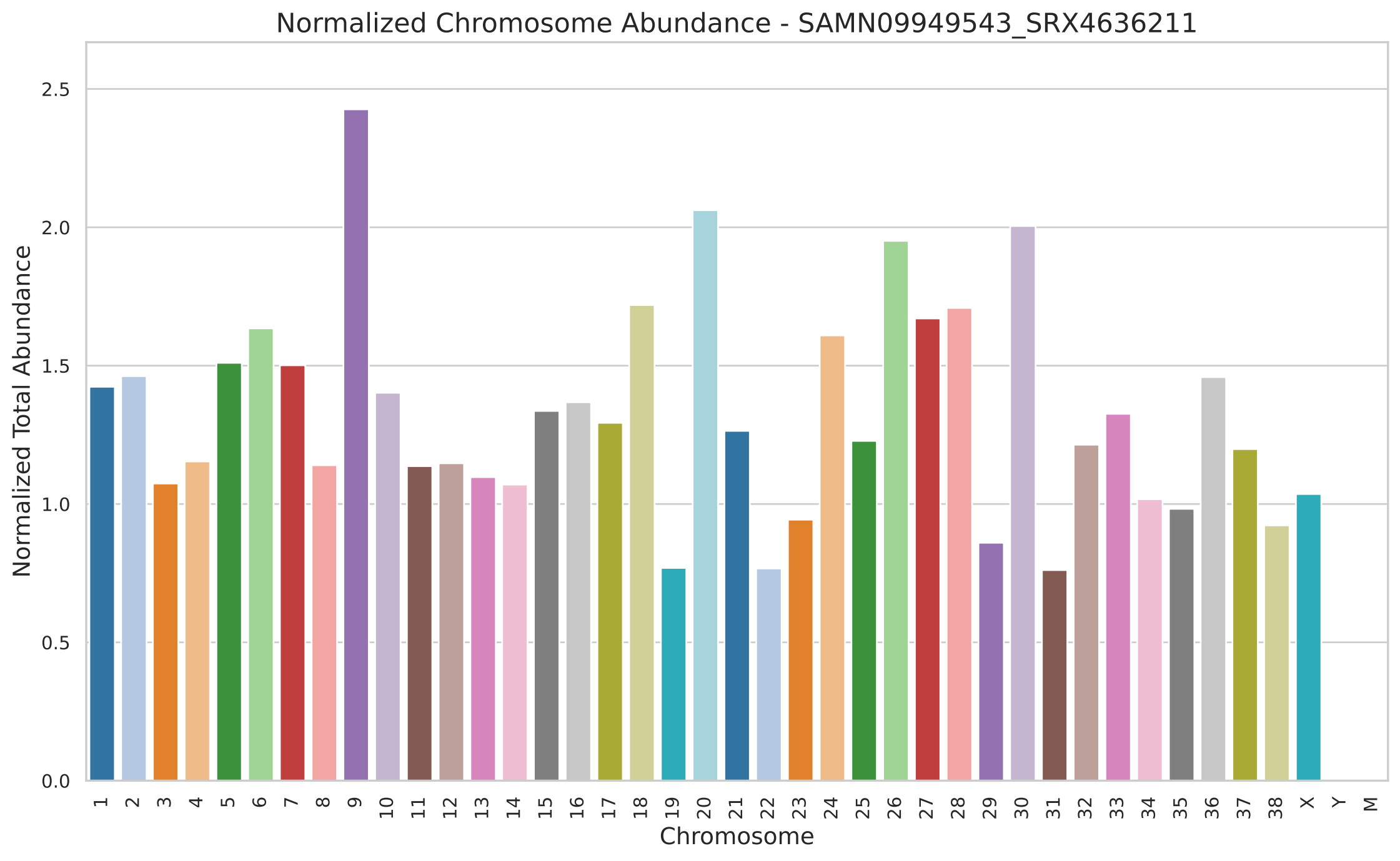

Normalized Chromosome Abundance - SAMN09949311_SRX4635853
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

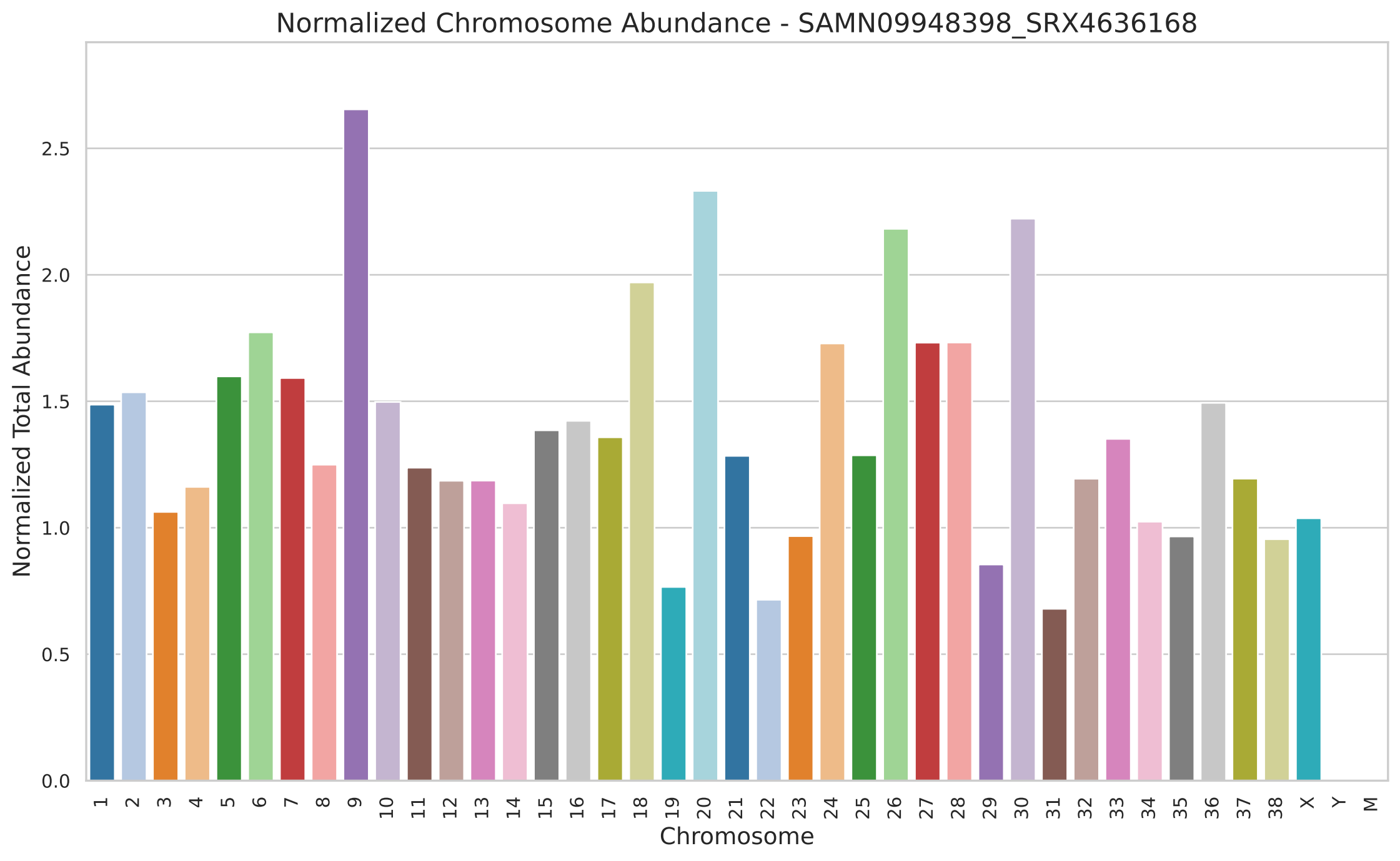

Normalized Chromosome Abundance - SAMN09948372_SRX4636210
Normalized Total Abundance
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

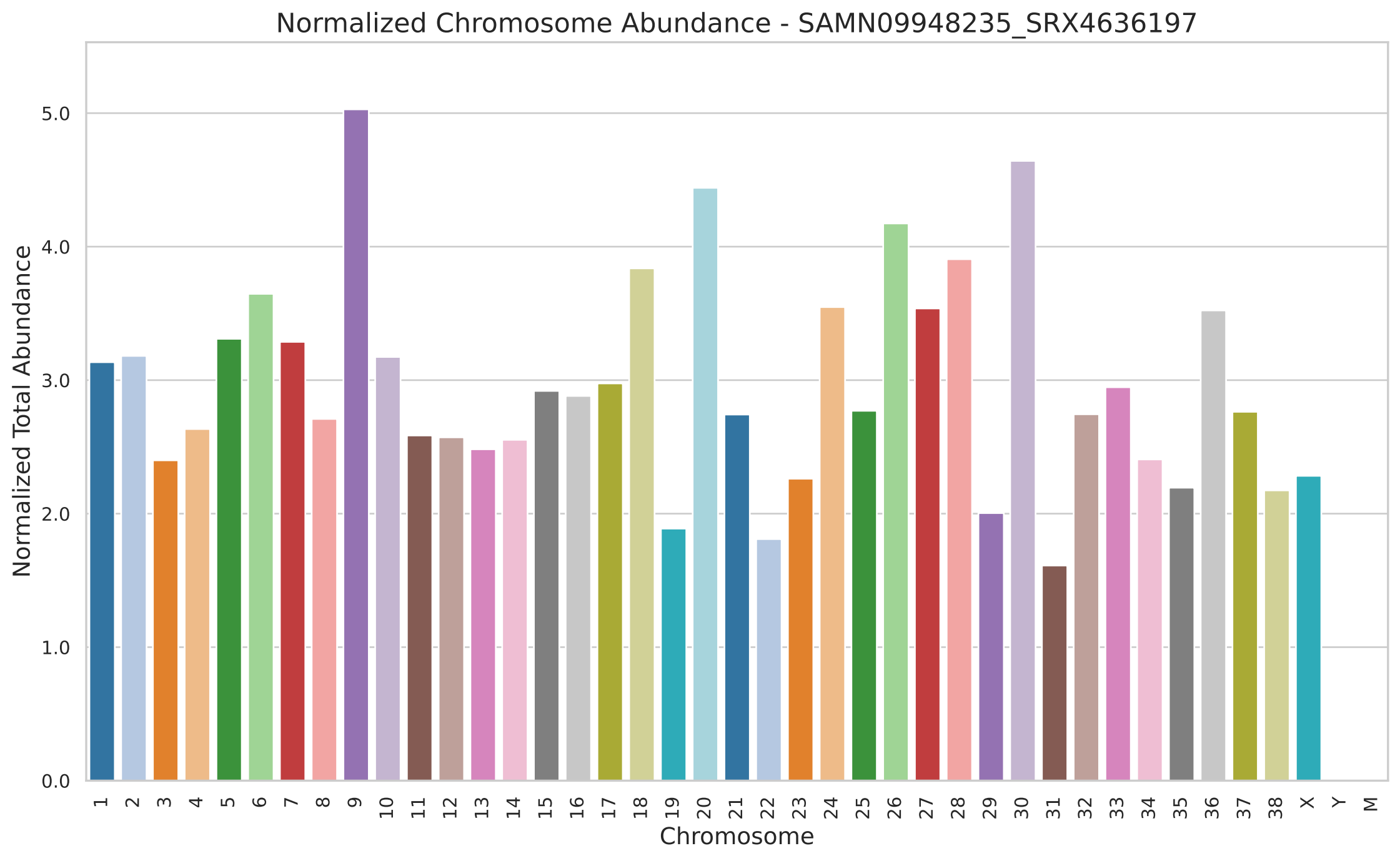

Normalized Chromosome Abundance - SAMN09949527_SRX4636202
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

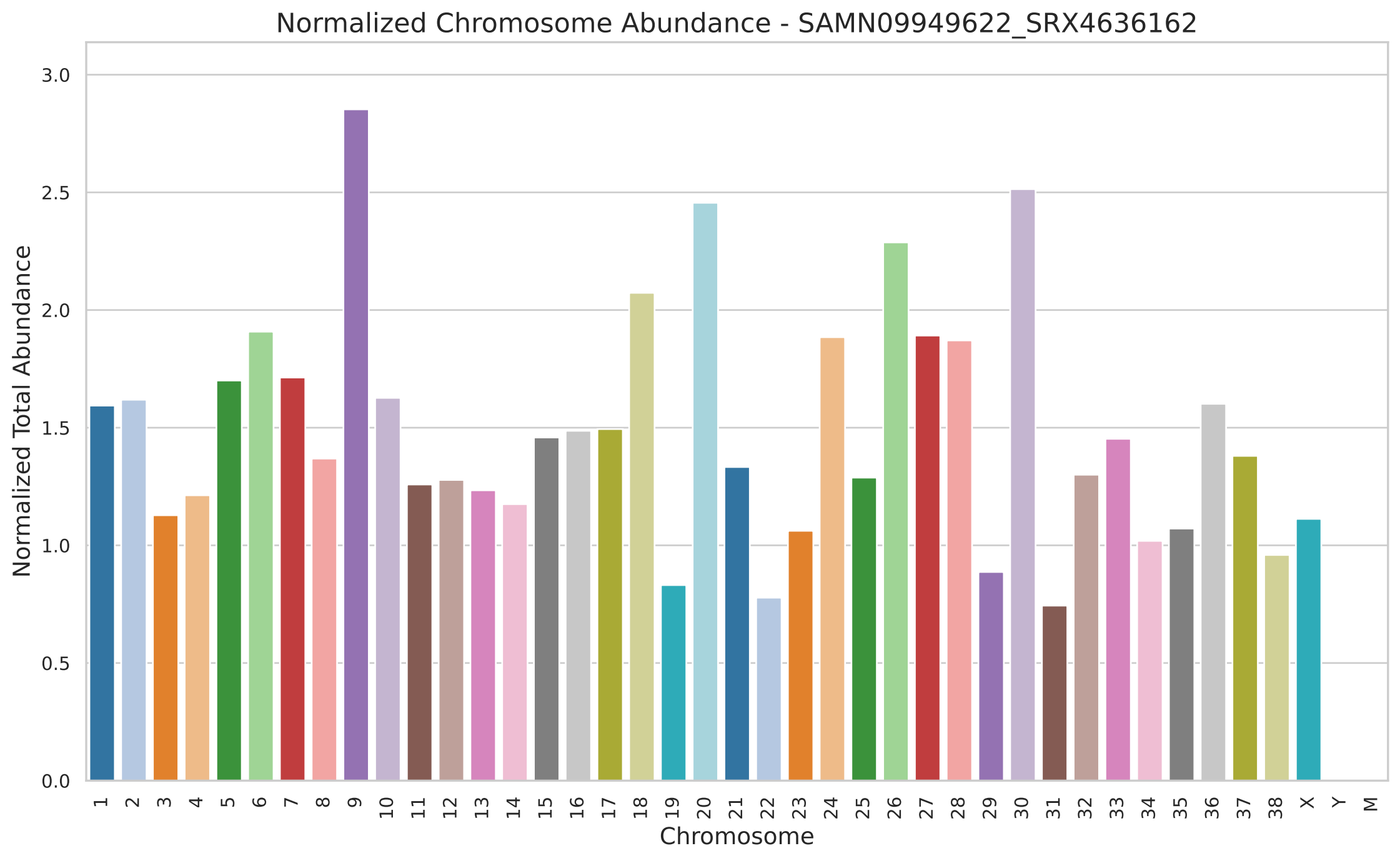

Normalized Chromosome Abundance - SAMN09948370_SRX4636206
Normalized Total Abundance
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

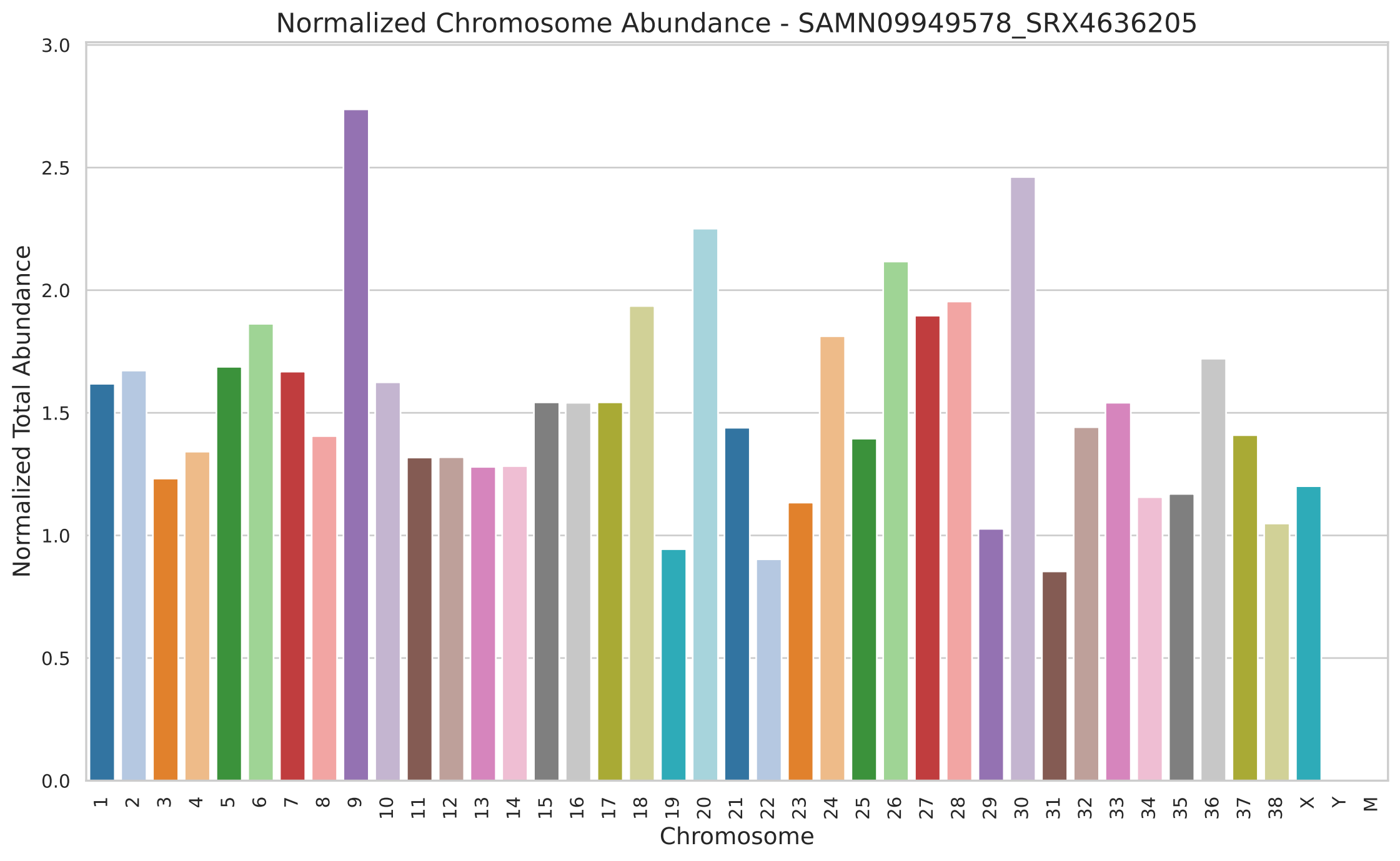

Normalized Chromosome Abundance - SAMN09948266_SRX4636225
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

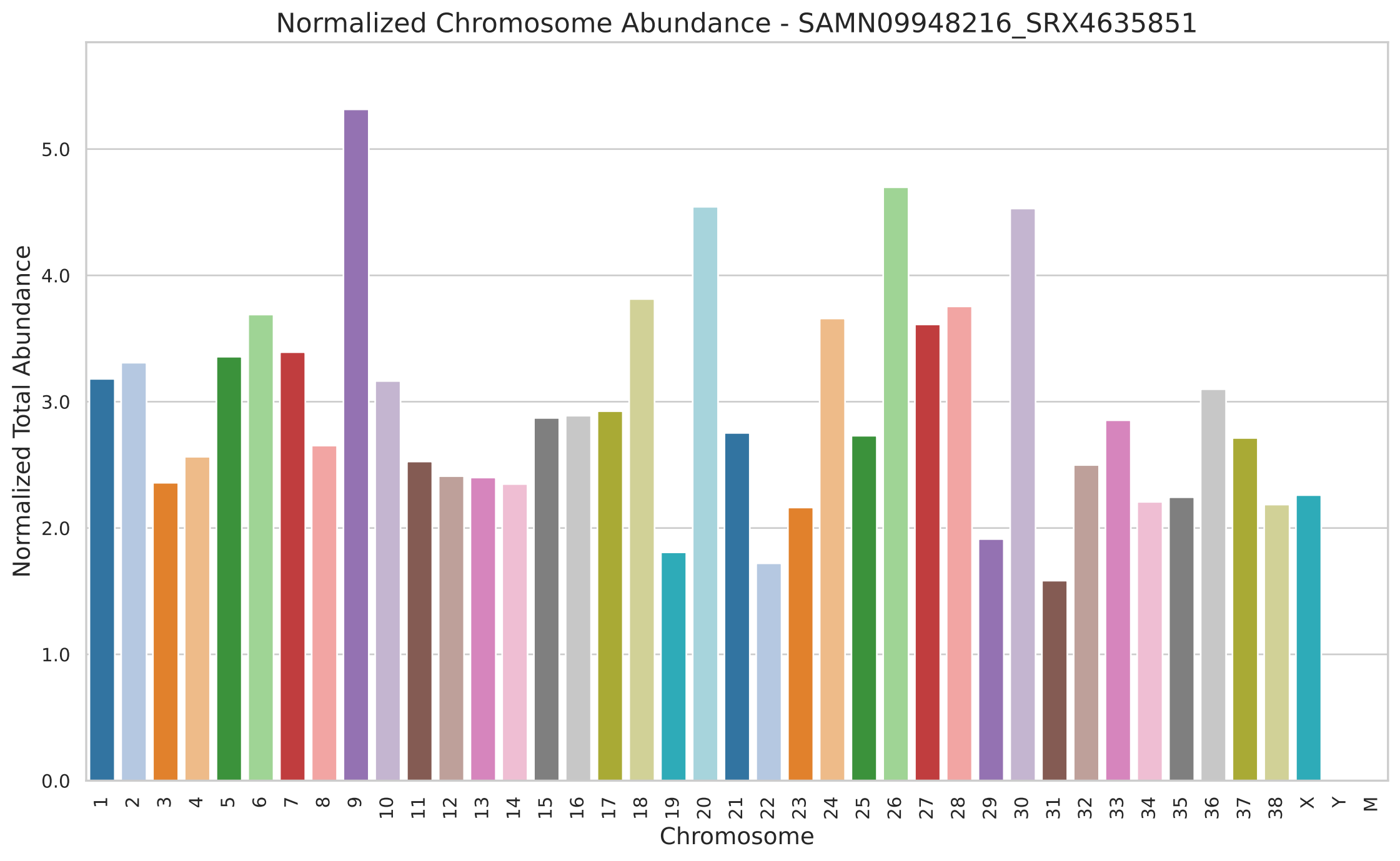

Normalized Chromosome Abundance - SAMN09949543_SRX4636211
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

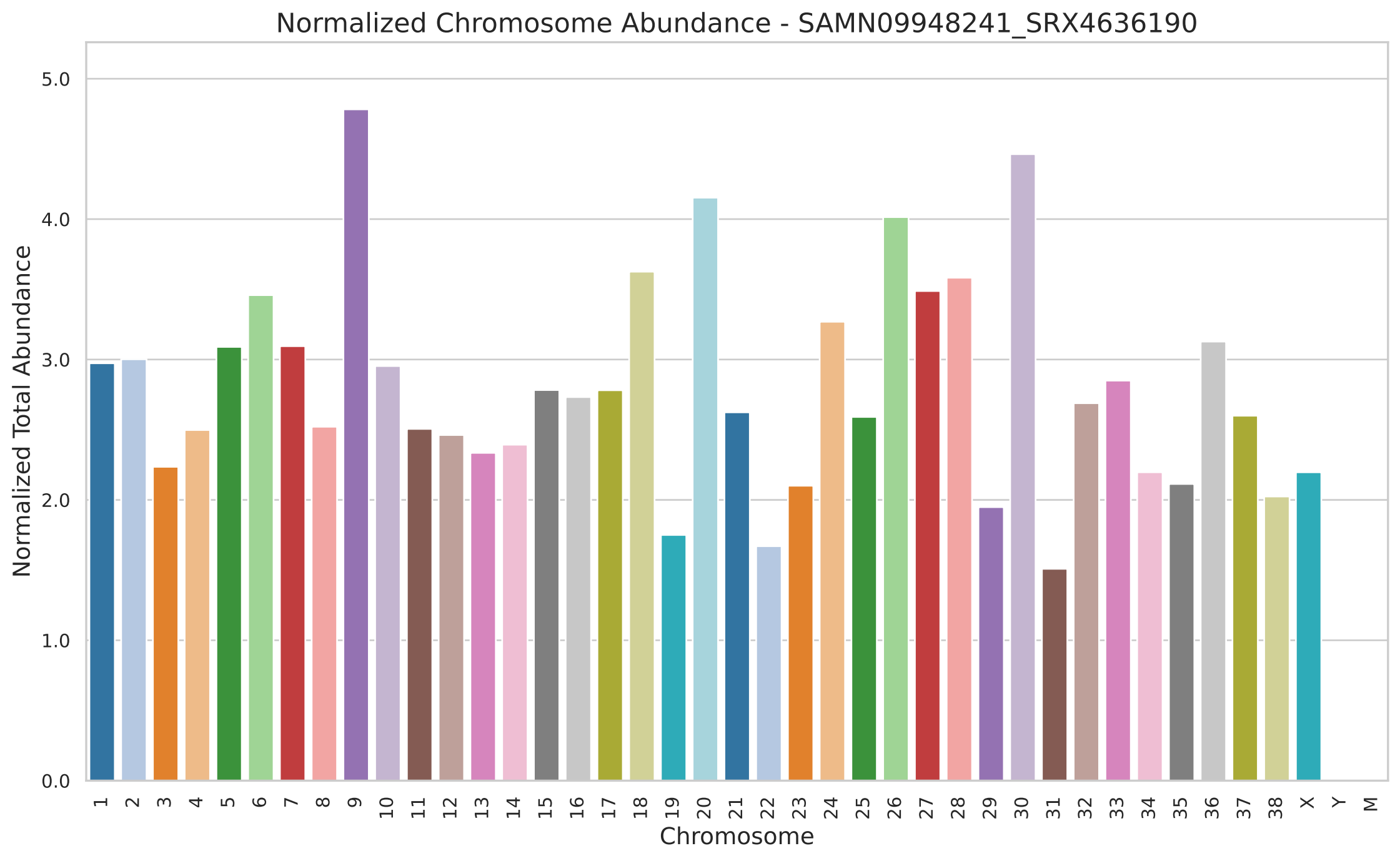

Normalized Chromosome Abundance - SAMN09948398_SRX4636168
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

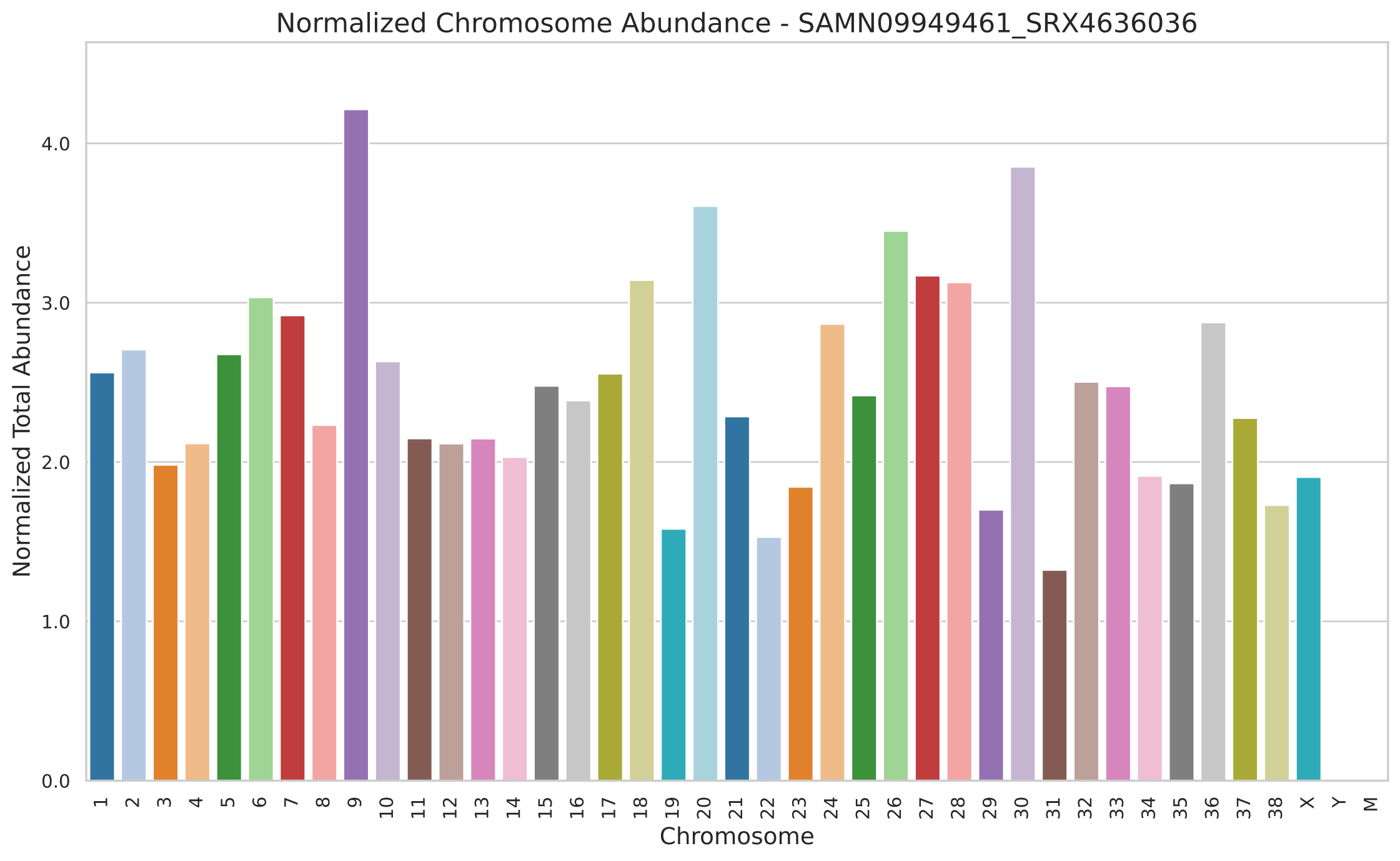

Normalized Chromosome Abundance - SAMN09948235_SRX4636197
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

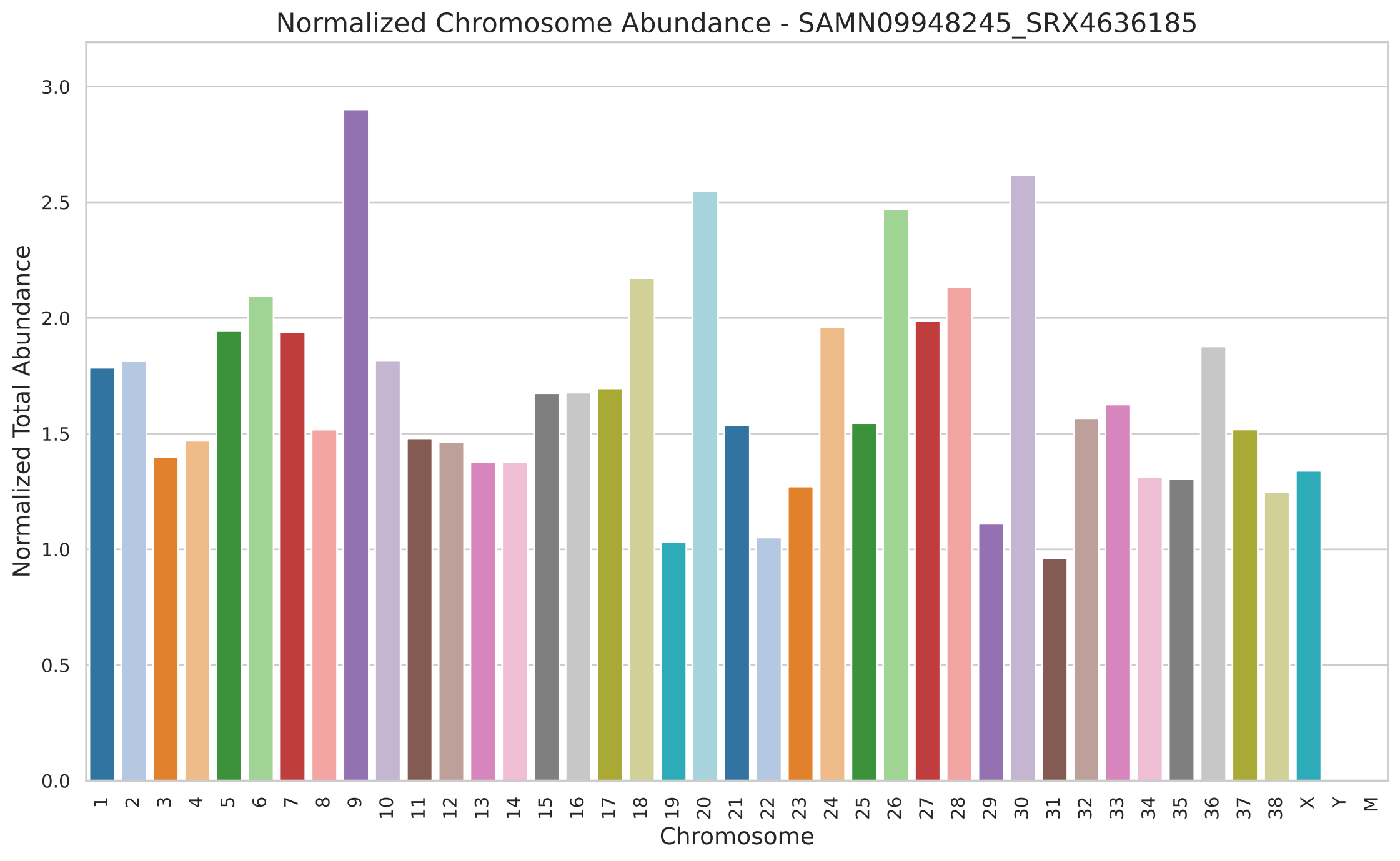

Normalized Chromosome Abundance - SAMN09949622_SRX4636162
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

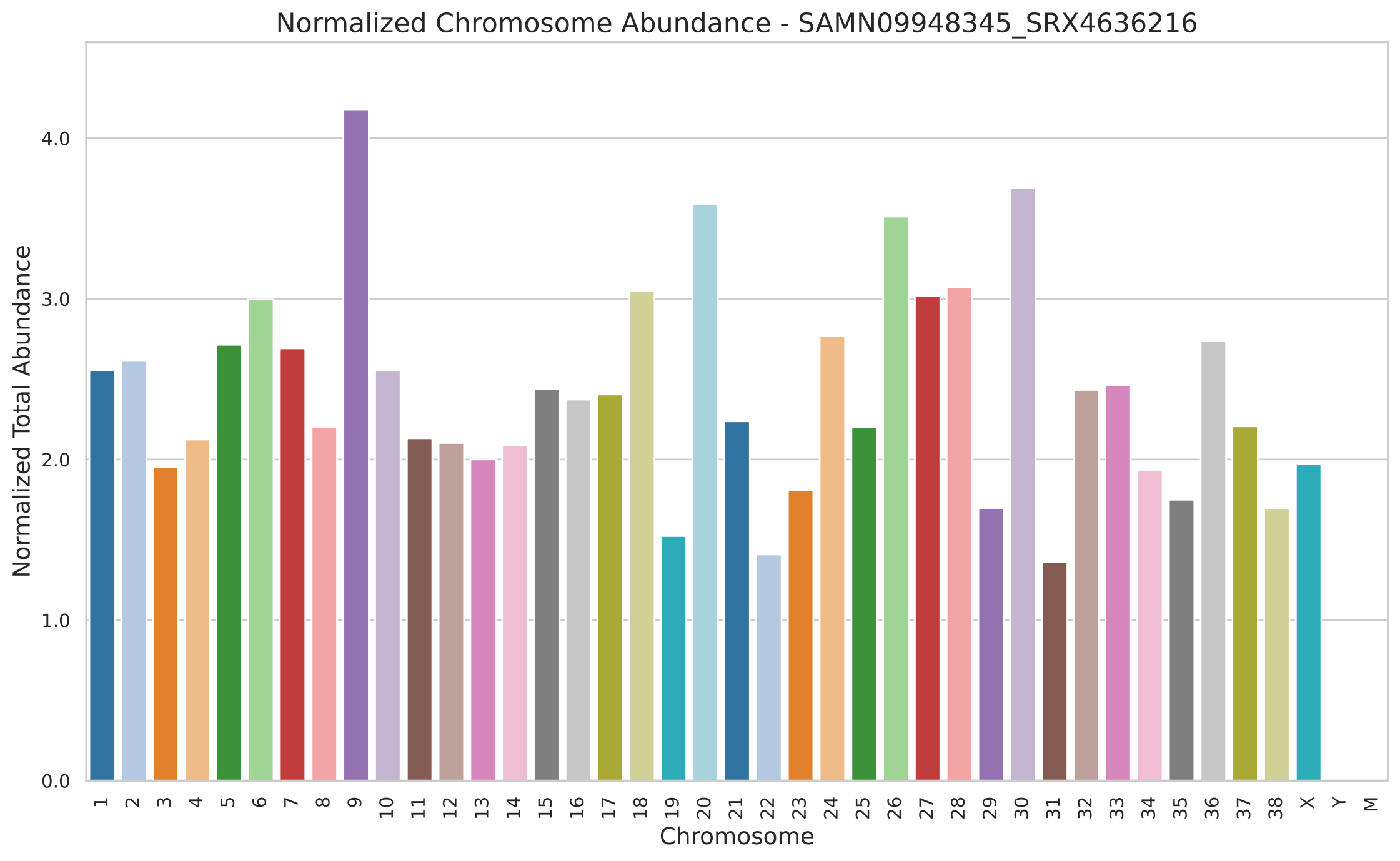

Normalized Chromosome Abundance - SAMN09949578_SRX4636205
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

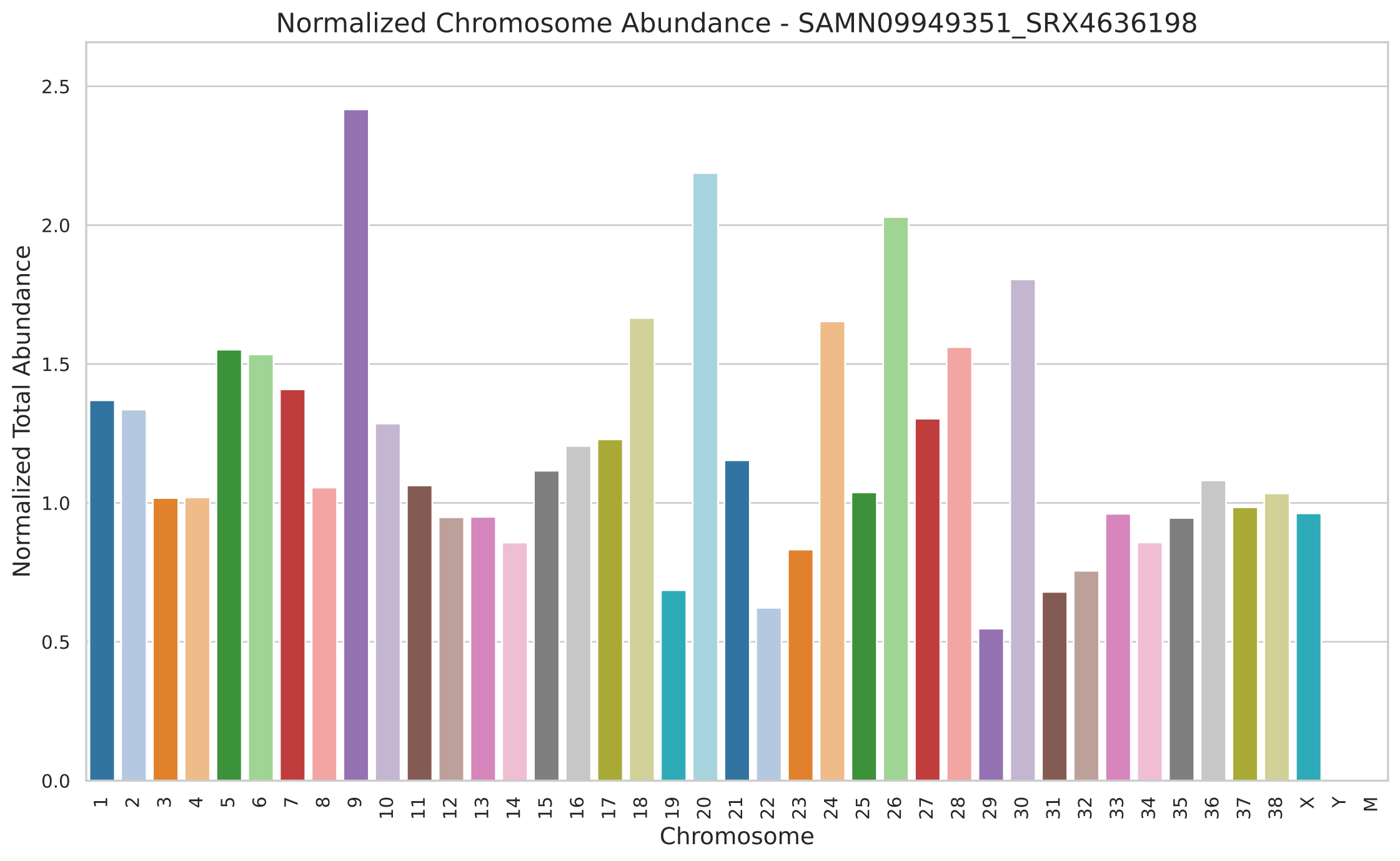

Normalized Chromosome Abundance - SAMN09948216_SRX4635851
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

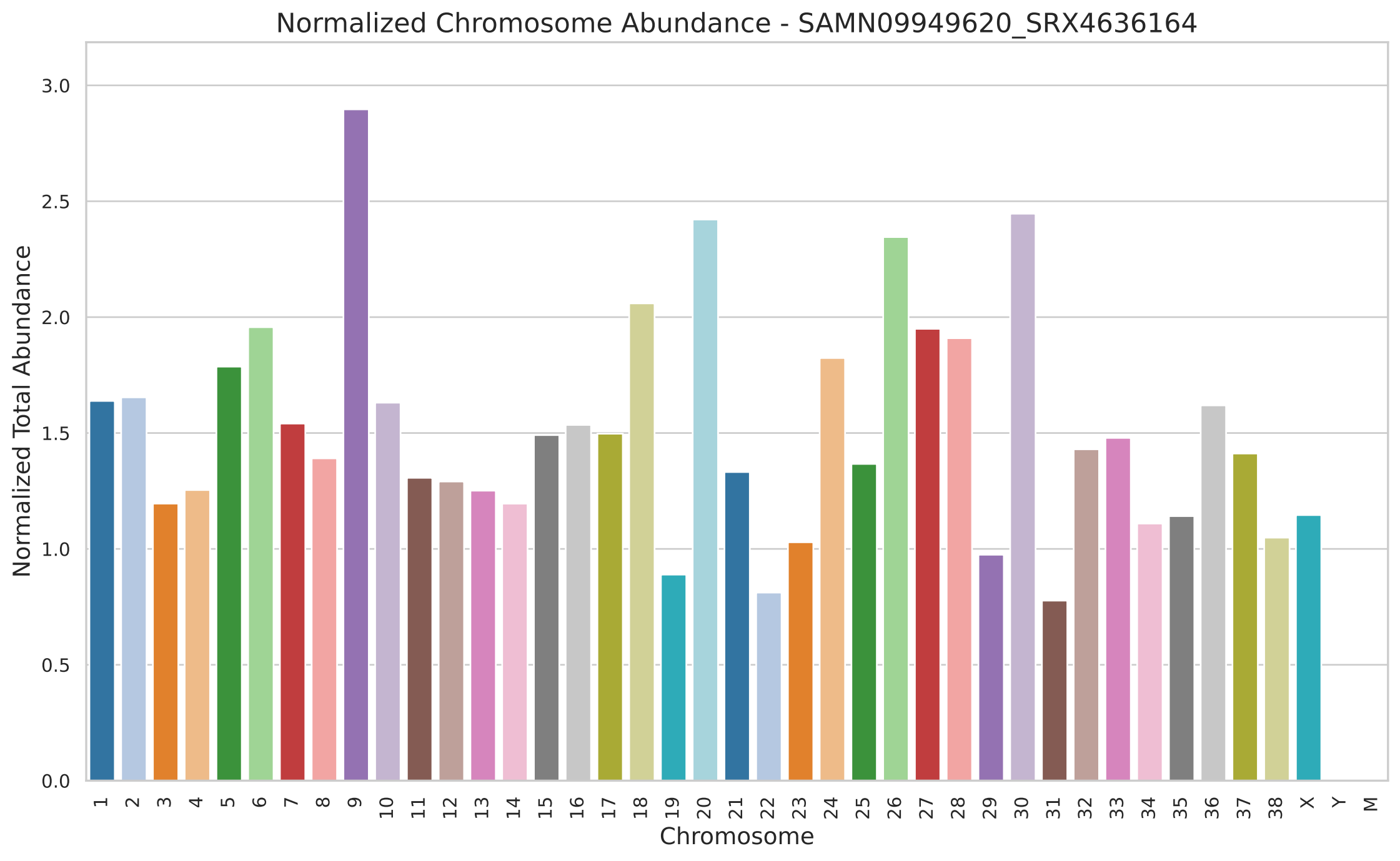

Normalized Chromosome Abundance - SAMN09948241_SRX4636190
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

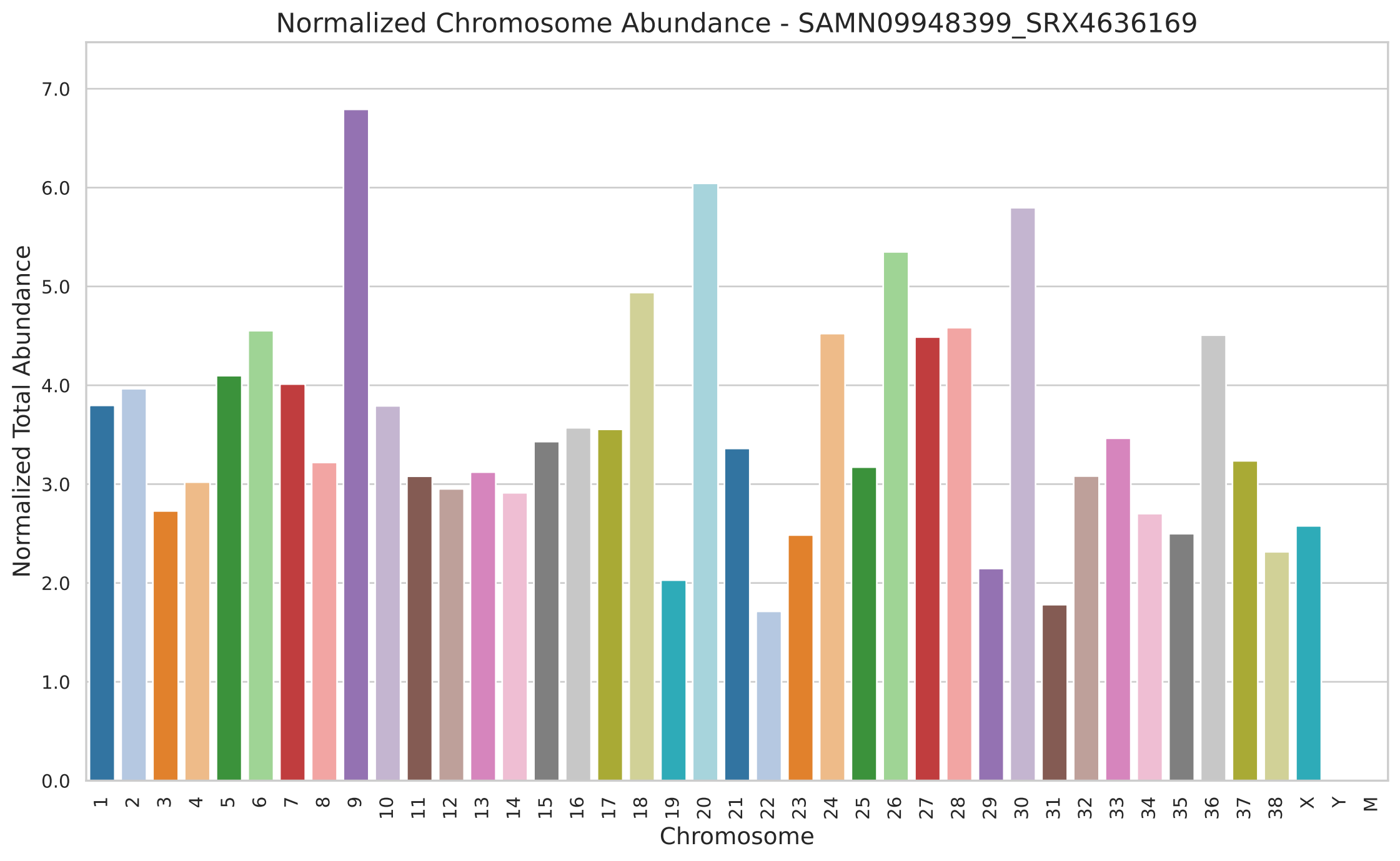

Normalized Chromosome Abundance - SAMN09949461_SRX4636036
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

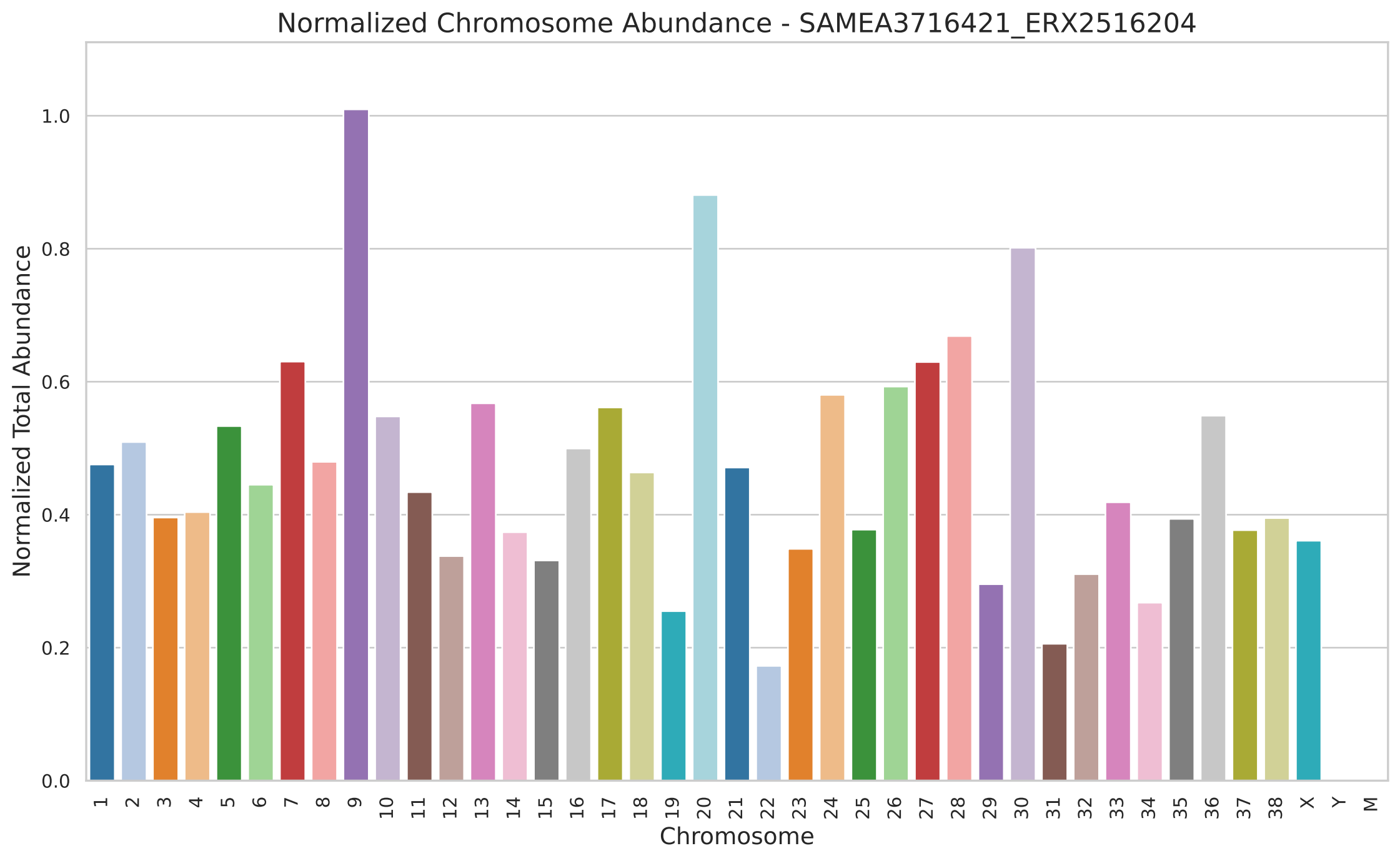

Normalized Chromosome Abundance - SAMN09948245_SRX4636185
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

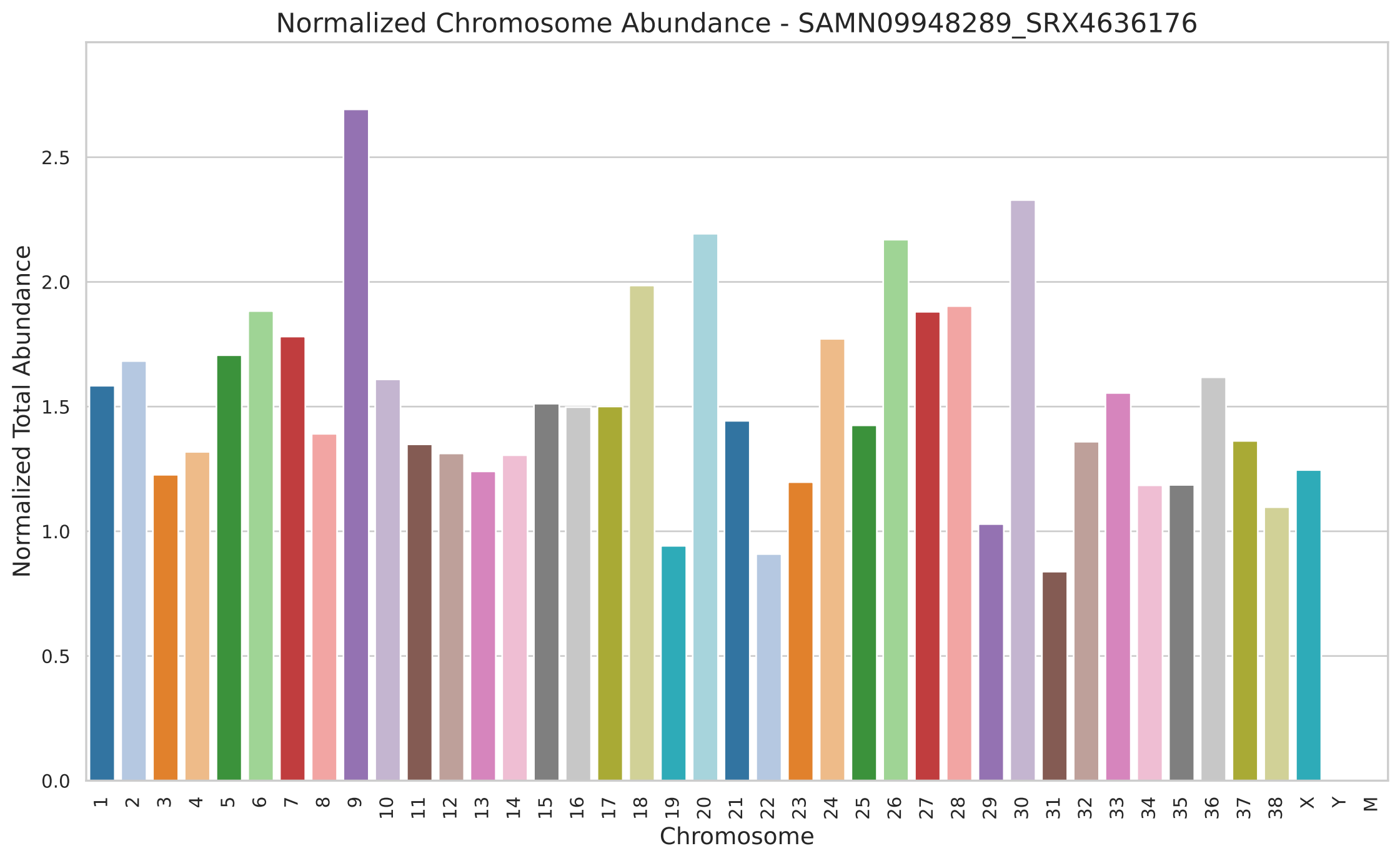

Normalized Chromosome Abundance - SAMN09948345_SRX4636216
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

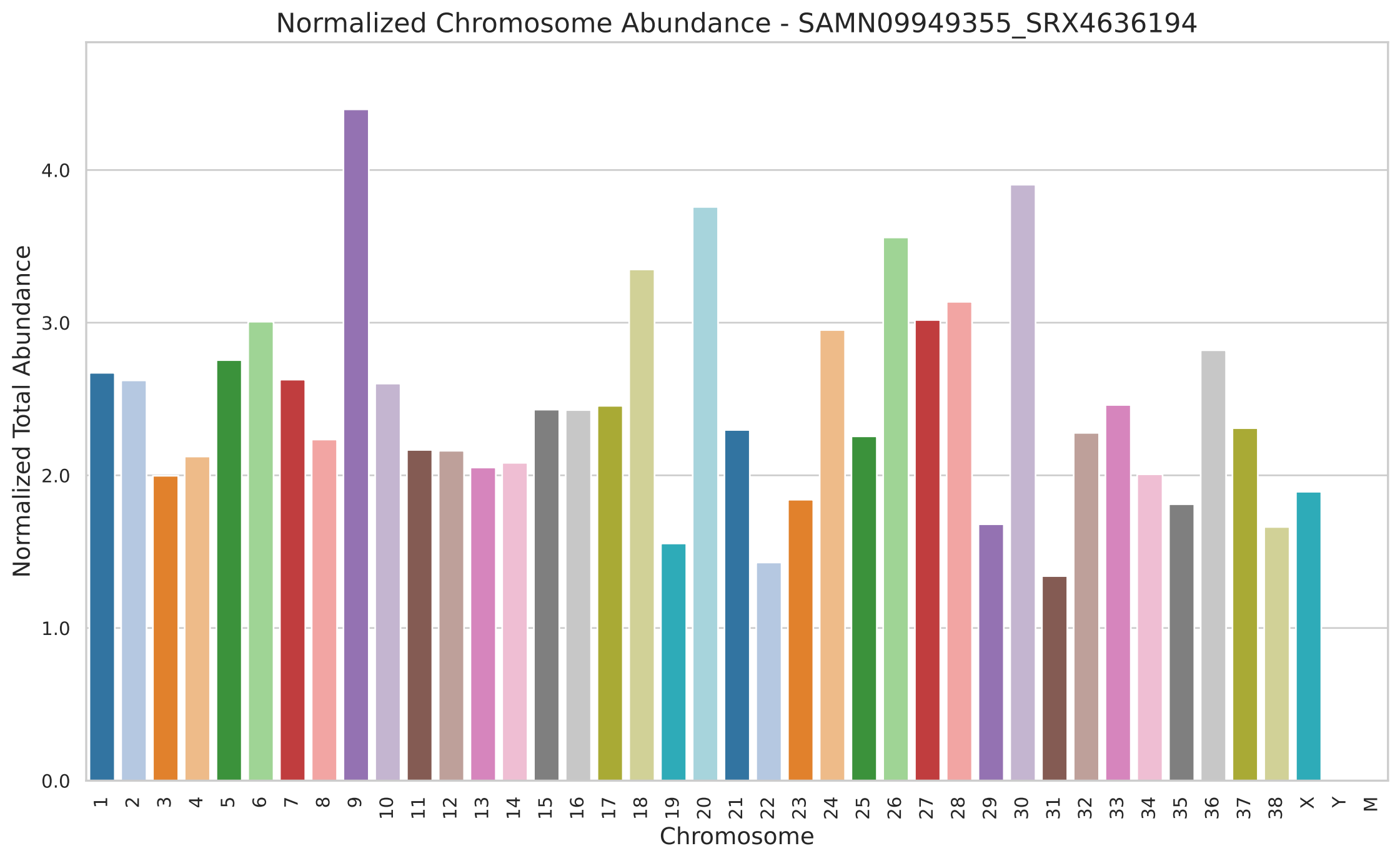

Normalized Chromosome Abundance - SAMN09949351_SRX4636198
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

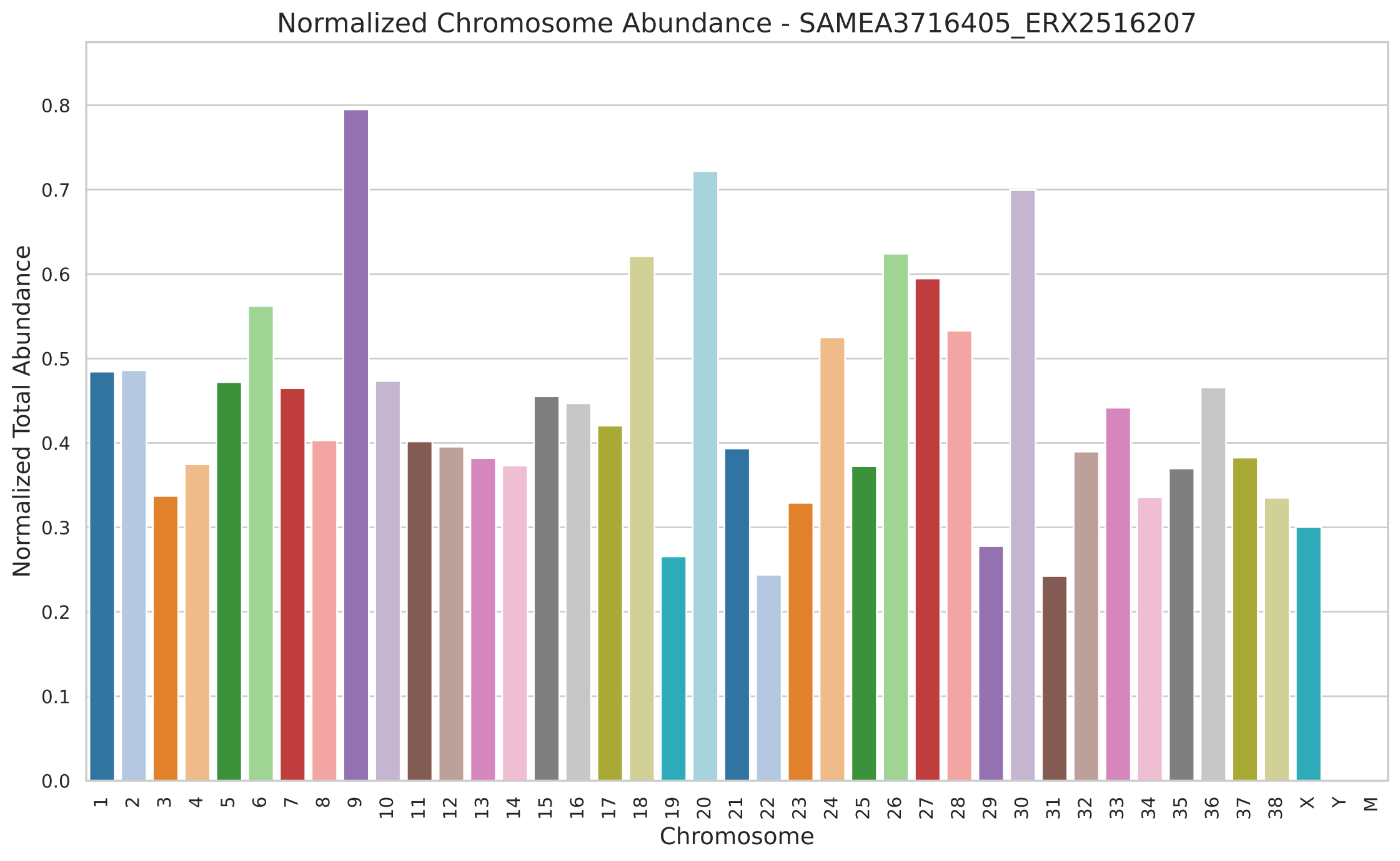

Normalized Chromosome Abundance - SAMN09949620_SRX4636164
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

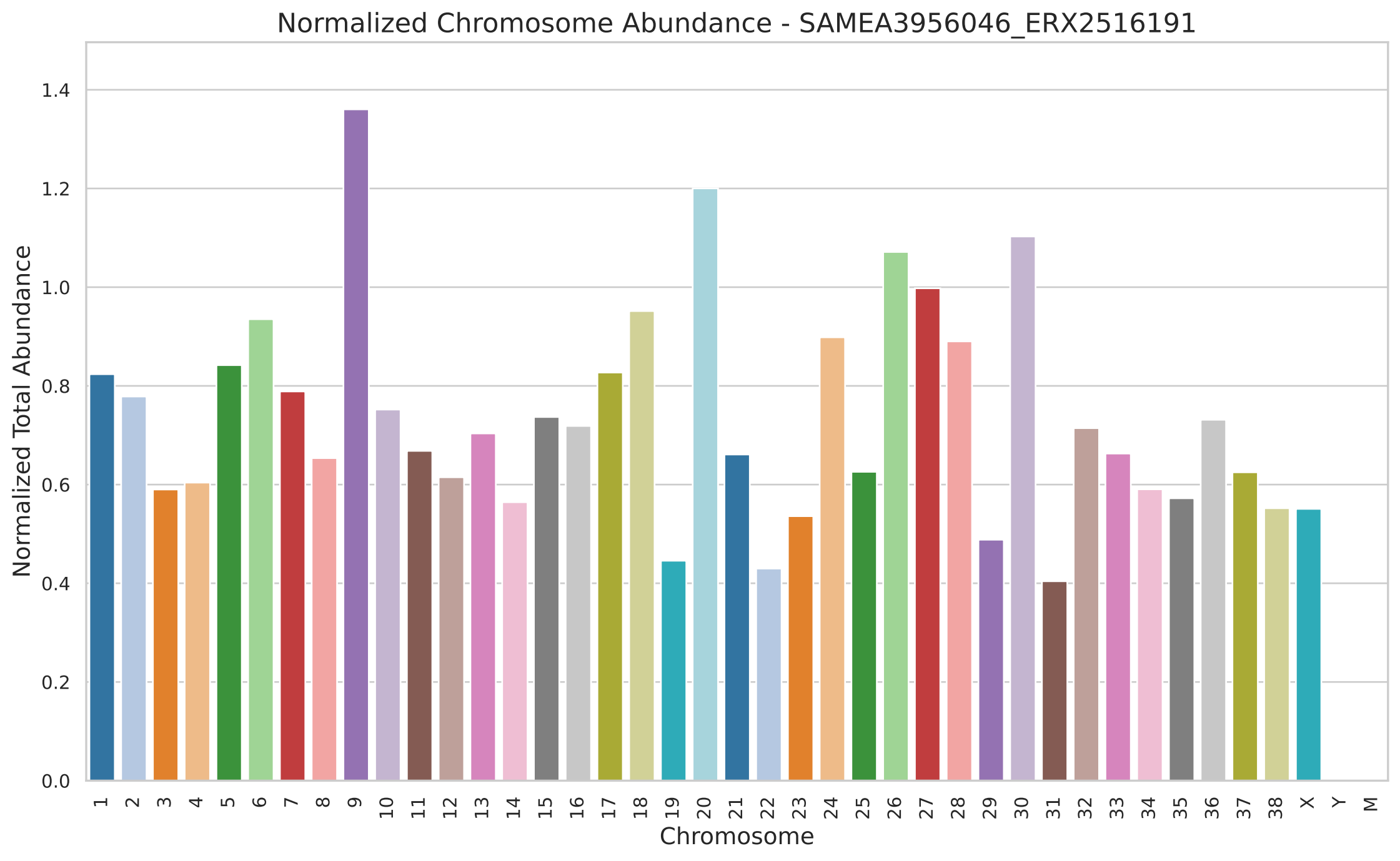

Normalized Chromosome Abundance - SAMN09948399_SRX4636169
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

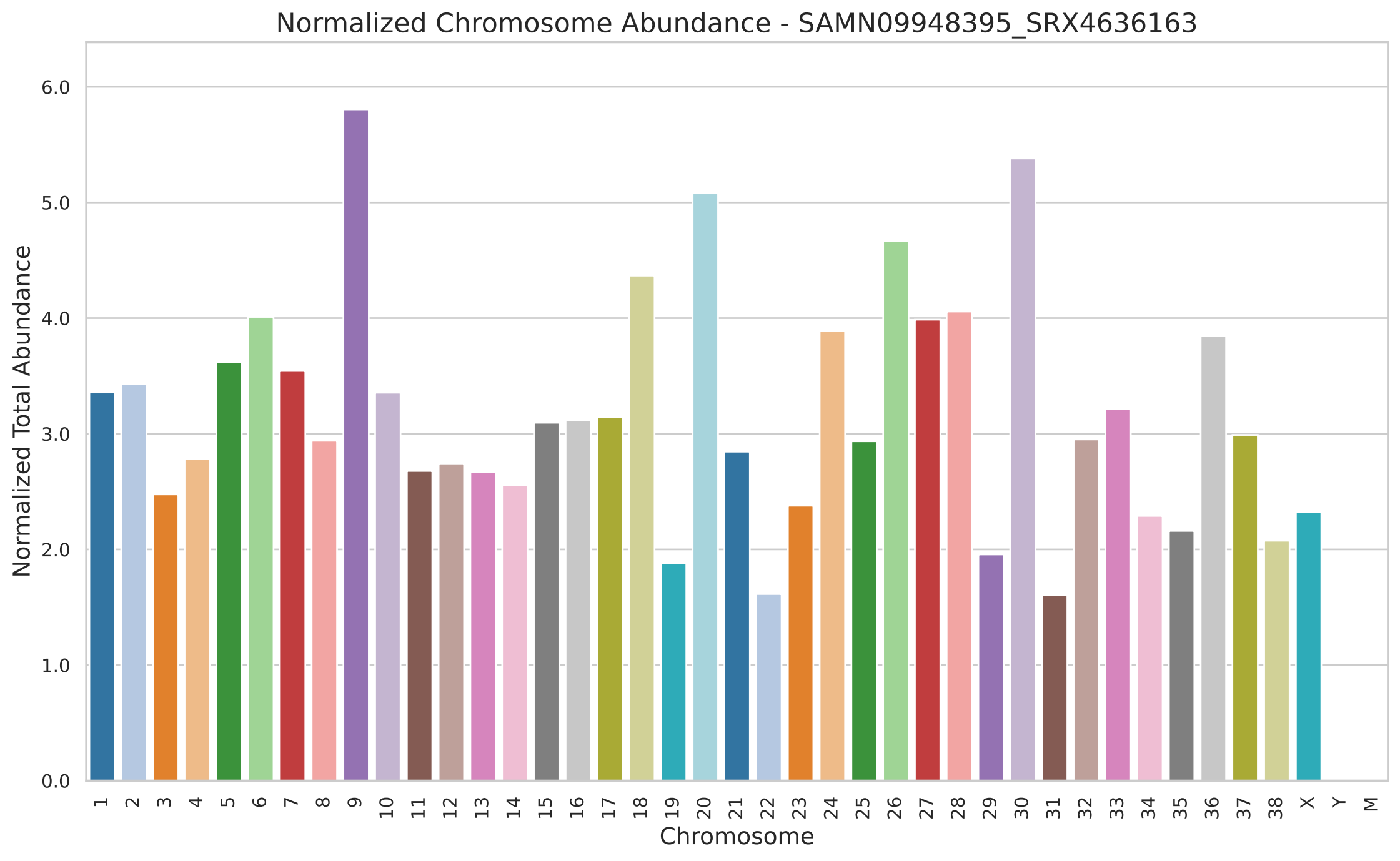

Normalized Chromosome Abundance - SAMEA3716421_ERX2516204
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

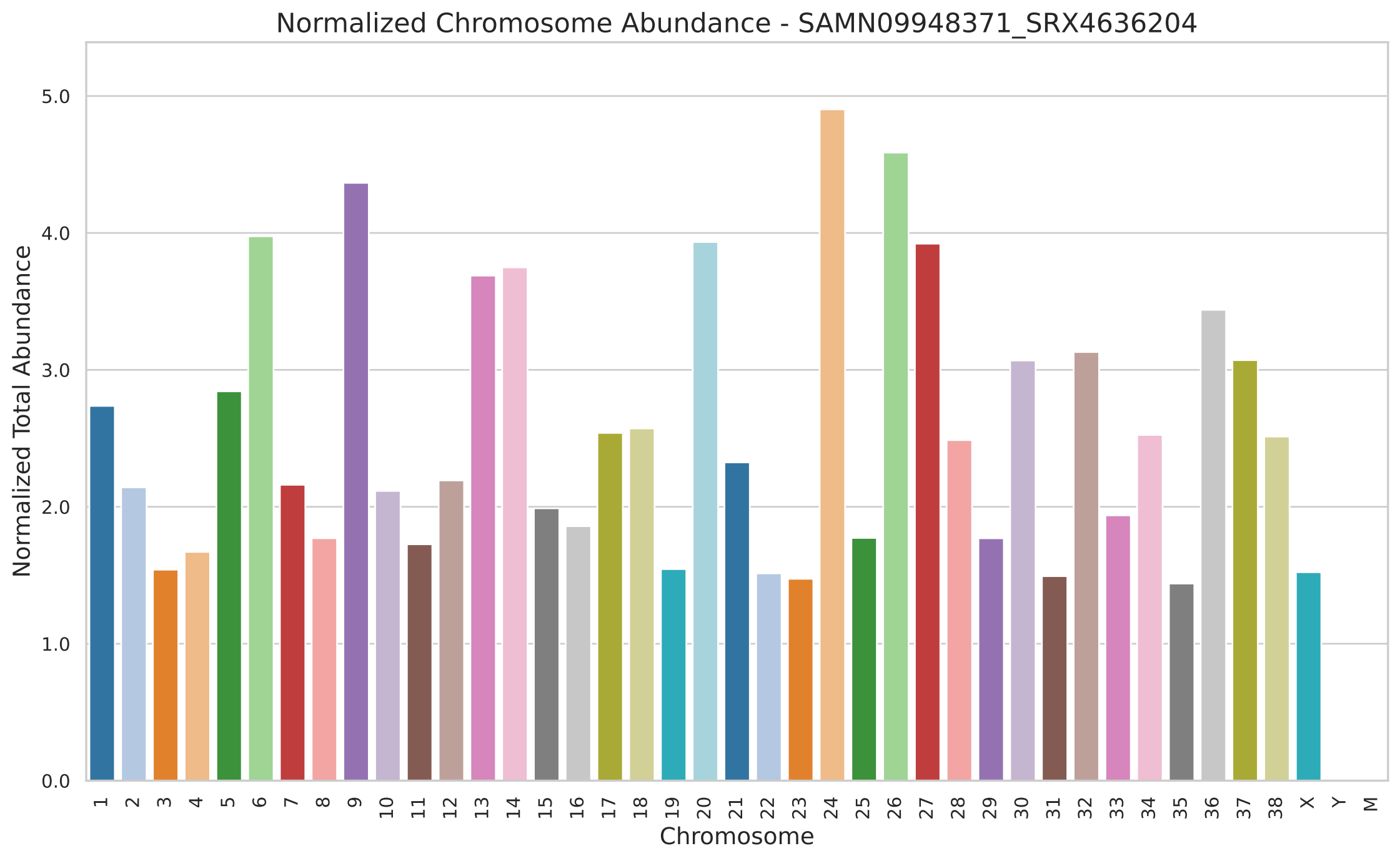

Normalized Chromosome Abundance - SAMN09948289_SRX4636176
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

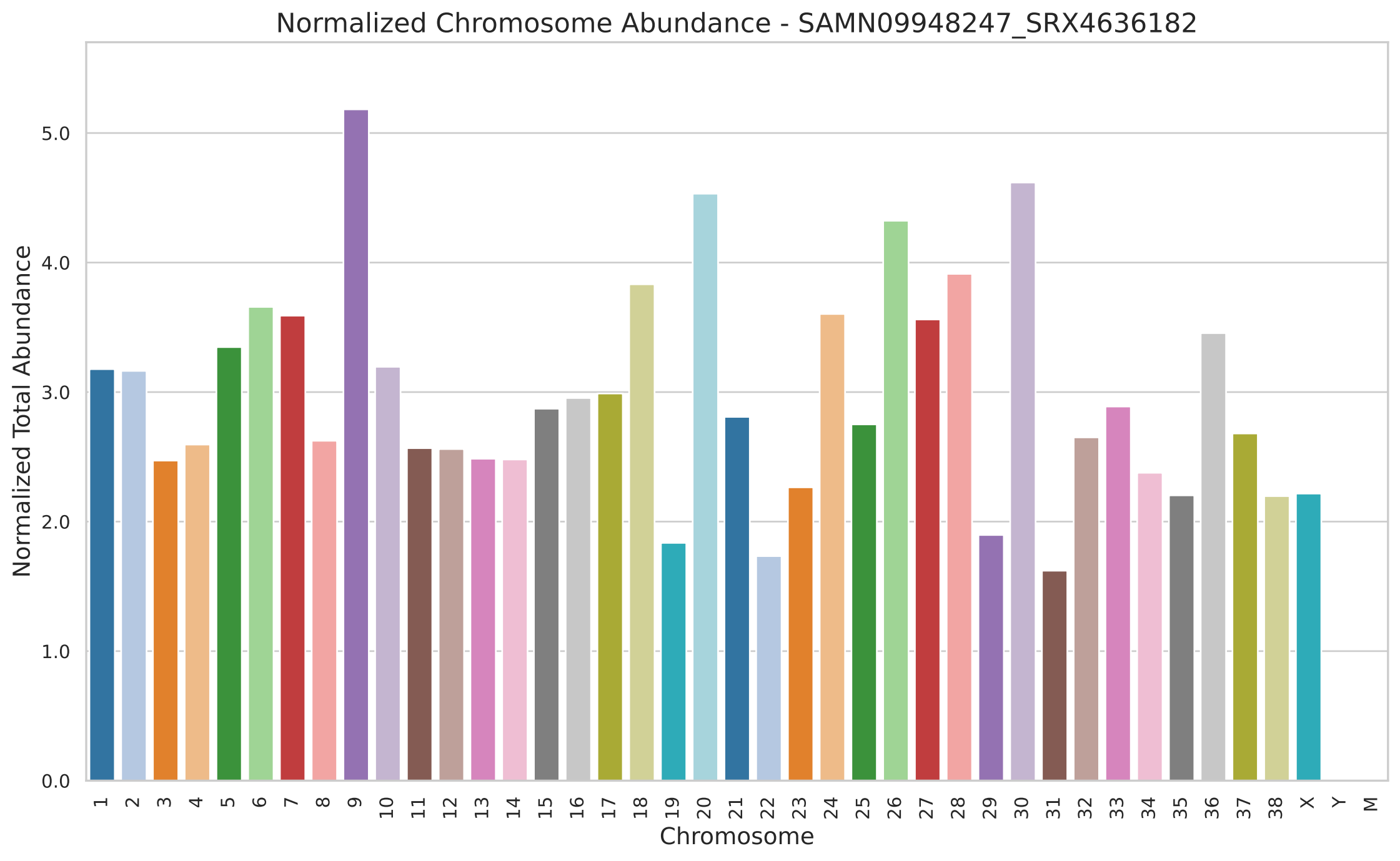

Normalized Chromosome Abundance - SAMN09949355_SRX4636194
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

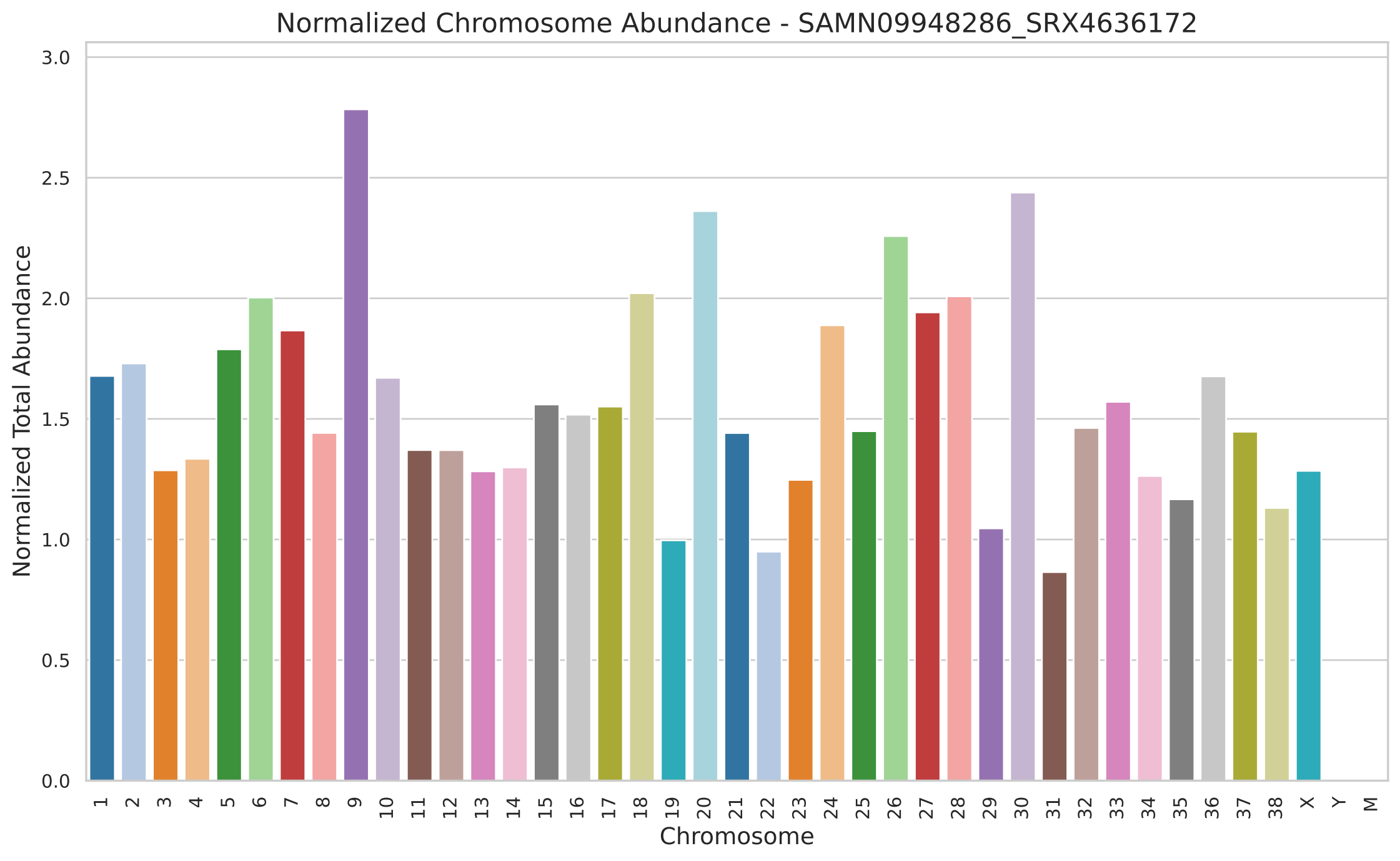

Normalized Chromosome Abundance - SAMEA3716405_ERX2516207
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

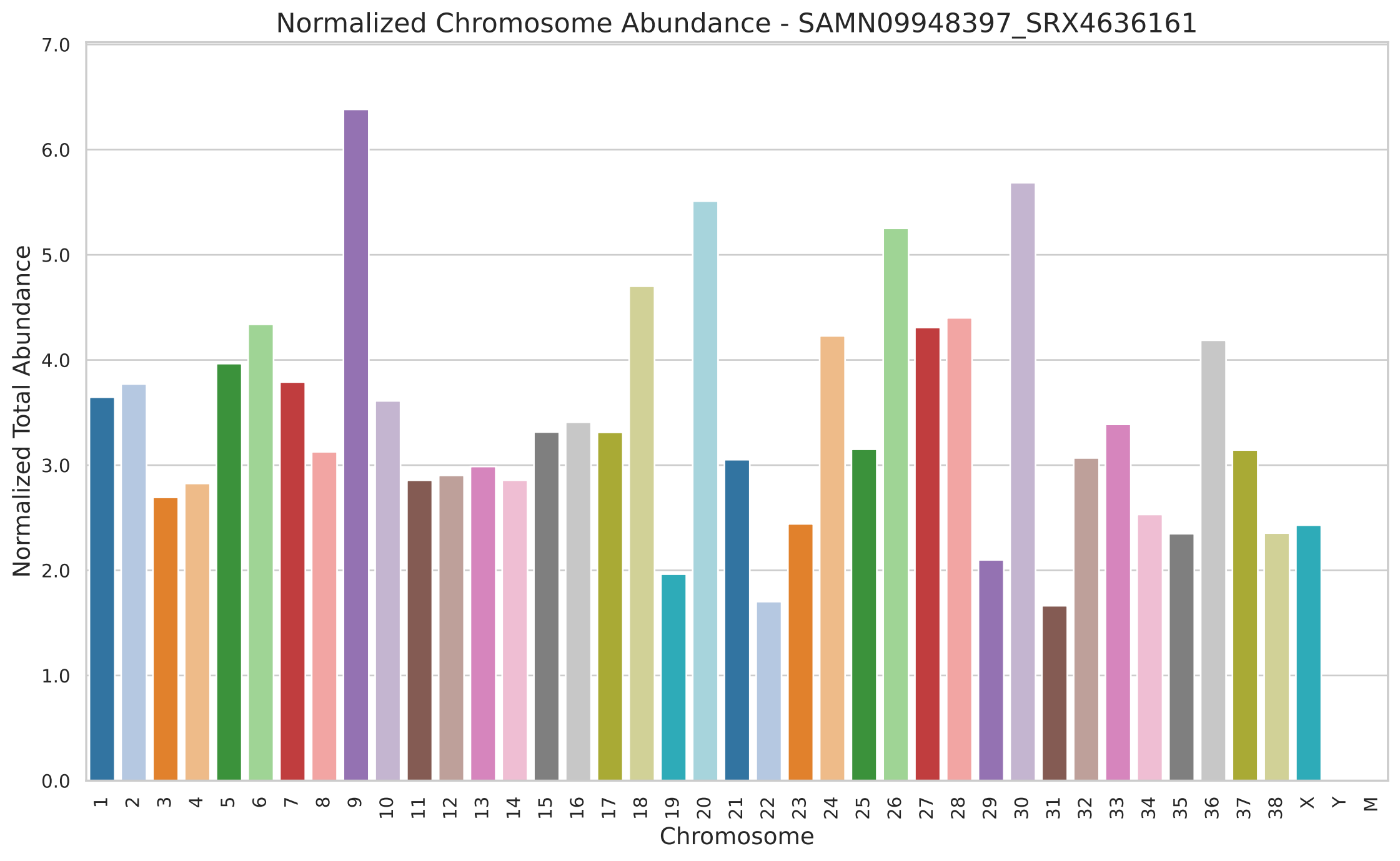

Normalized Chromosome Abundance - SAMEA3956046_ERX2516191
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

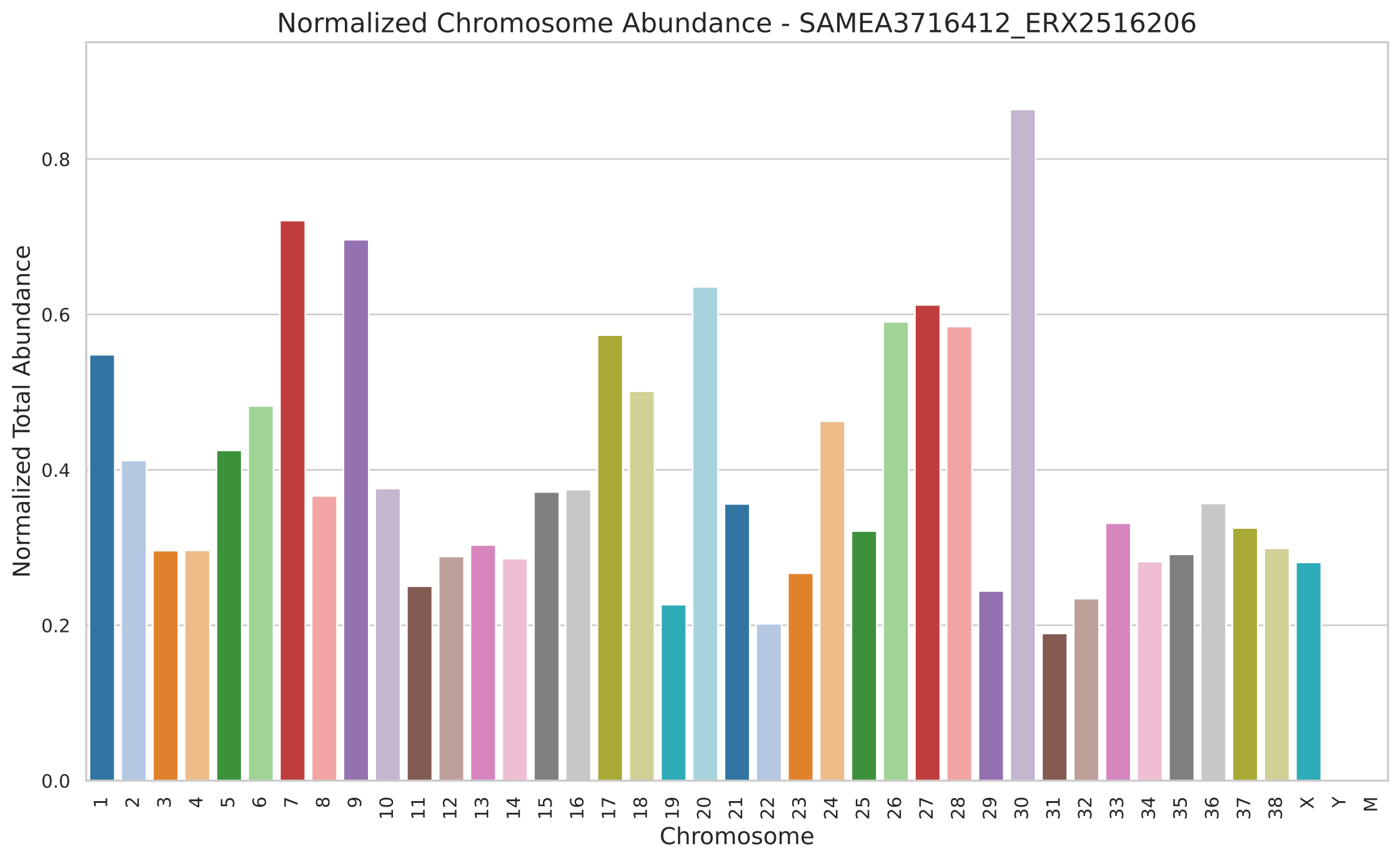

Normalized Chromosome Abundance - SAMN09948395_SRX4636163
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

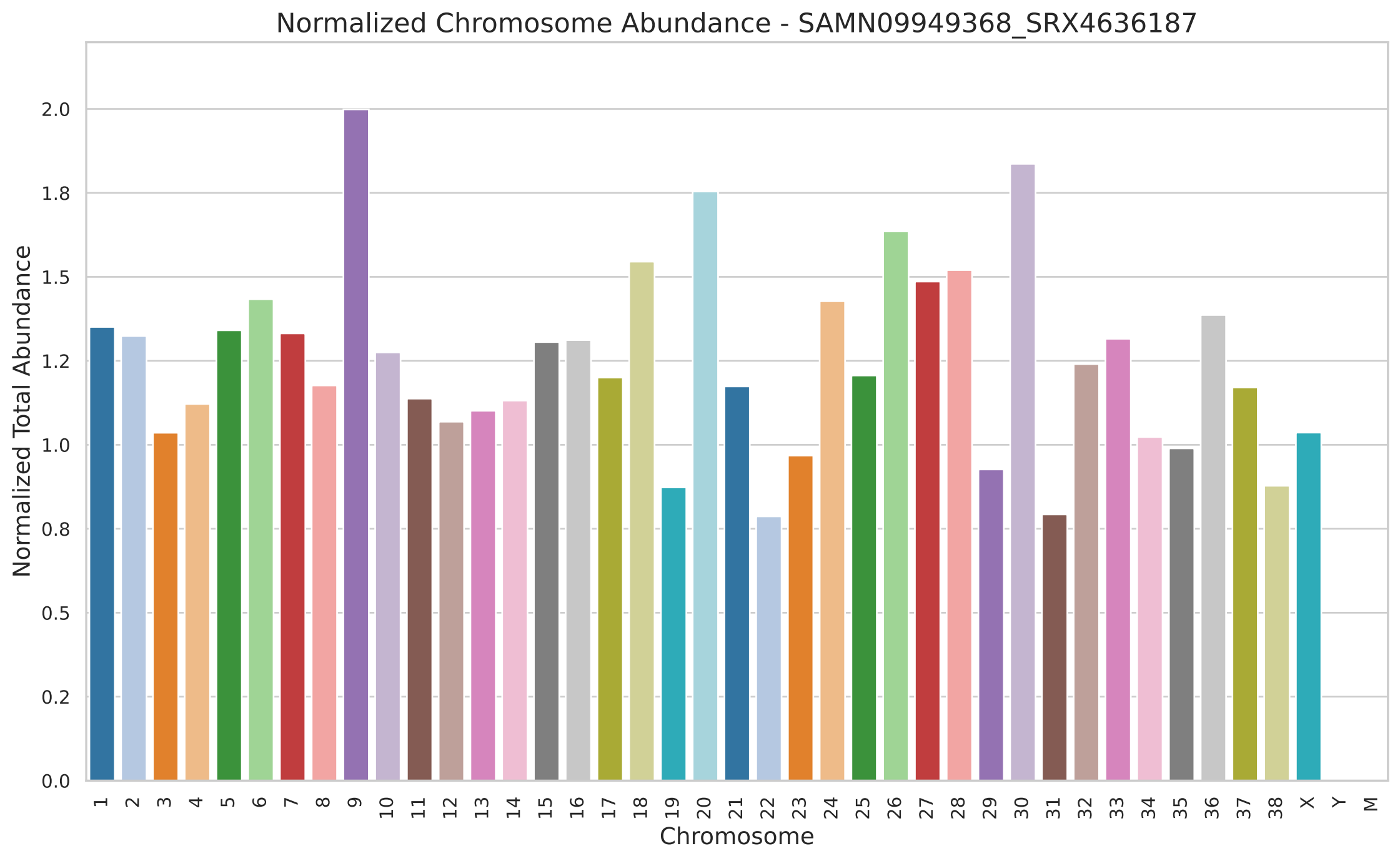

Normalized Chromosome Abundance - SAMN09948371_SRX4636204
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

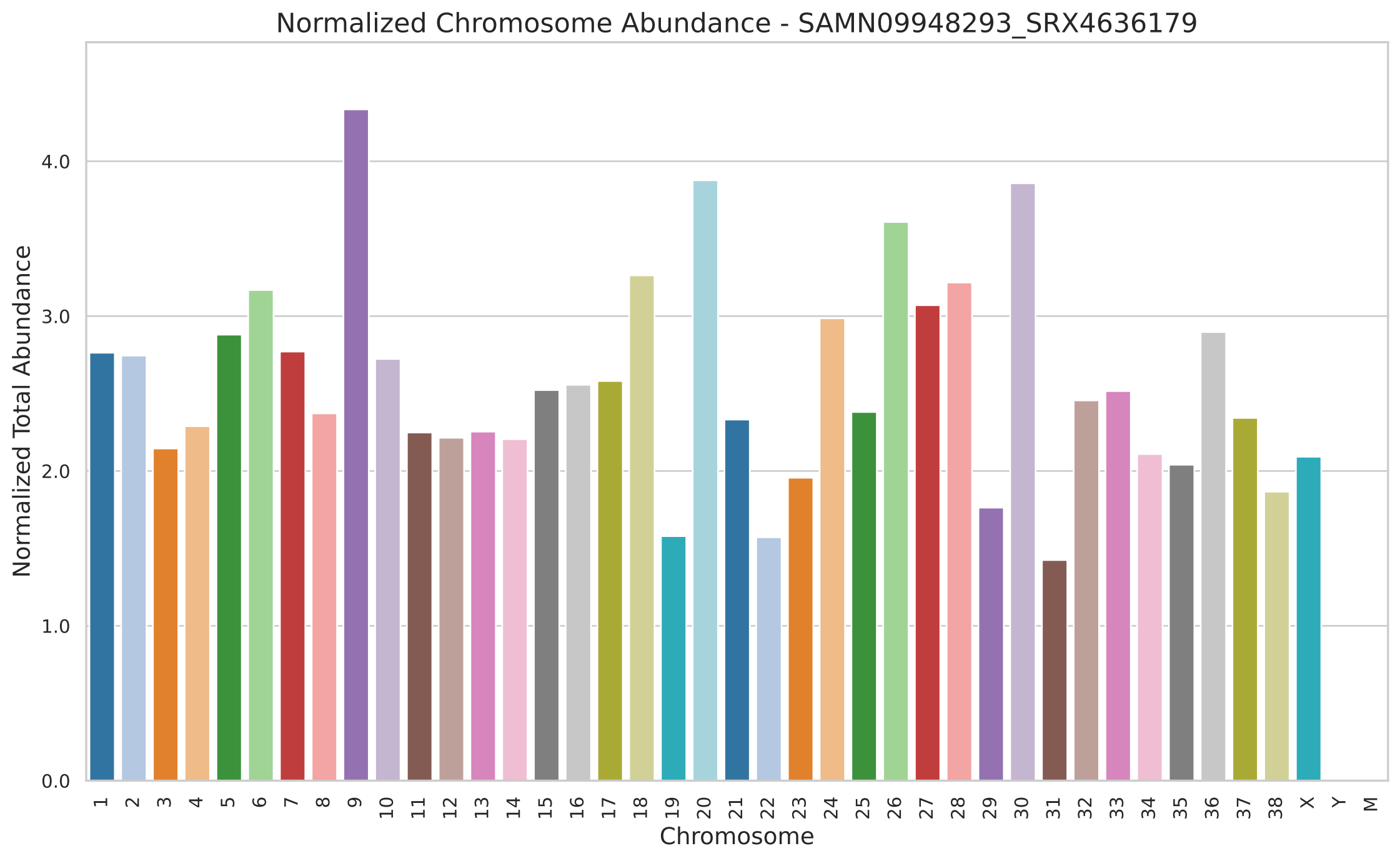

Normalized Chromosome Abundance - SAMN09948247_SRX4636182
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

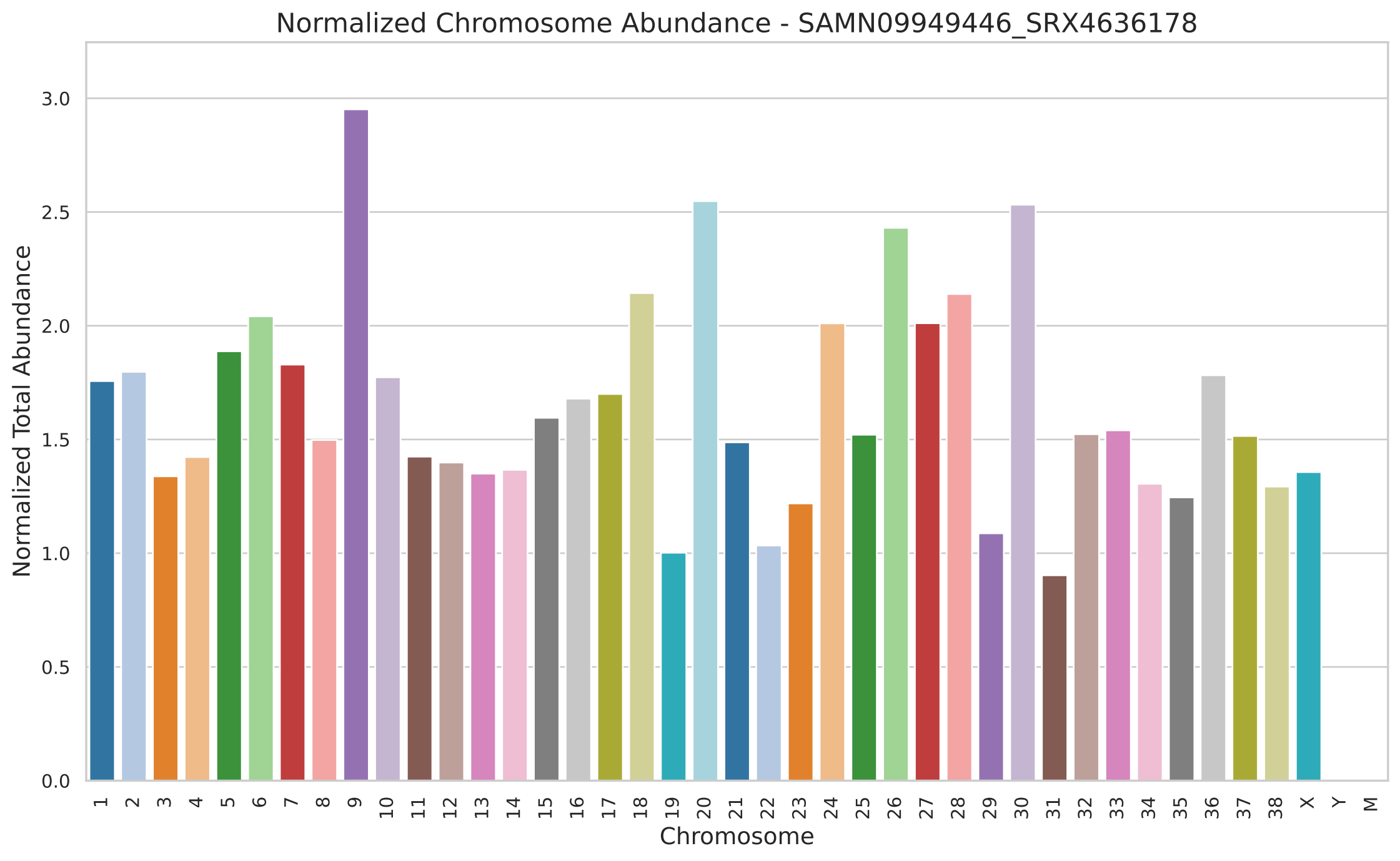

Normalized Chromosome Abundance - SAMN09948286_SRX4636172
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

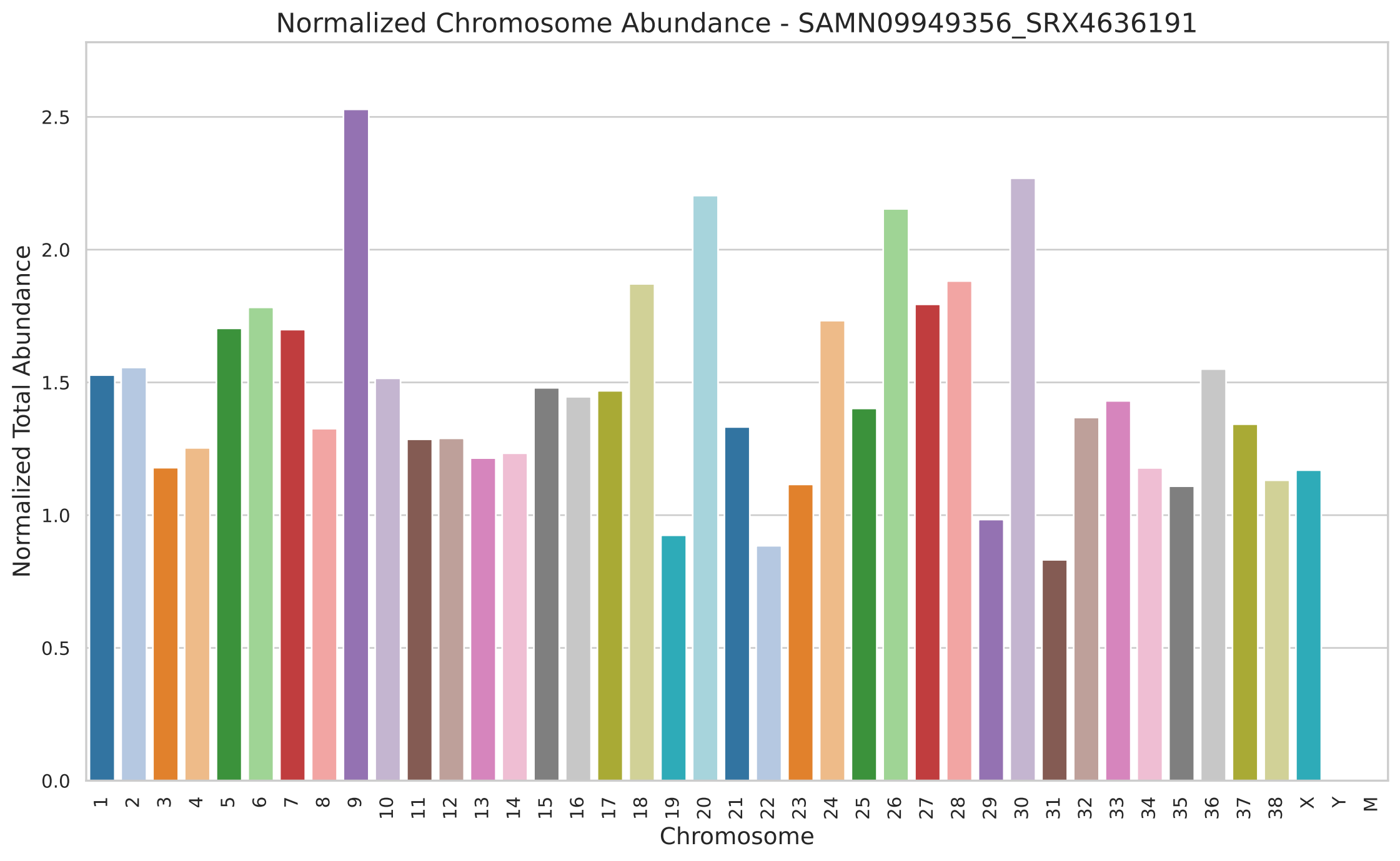

Normalized Chromosome Abundance - SAMN09948397_SRX4636161
Normalized Total Abundance
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

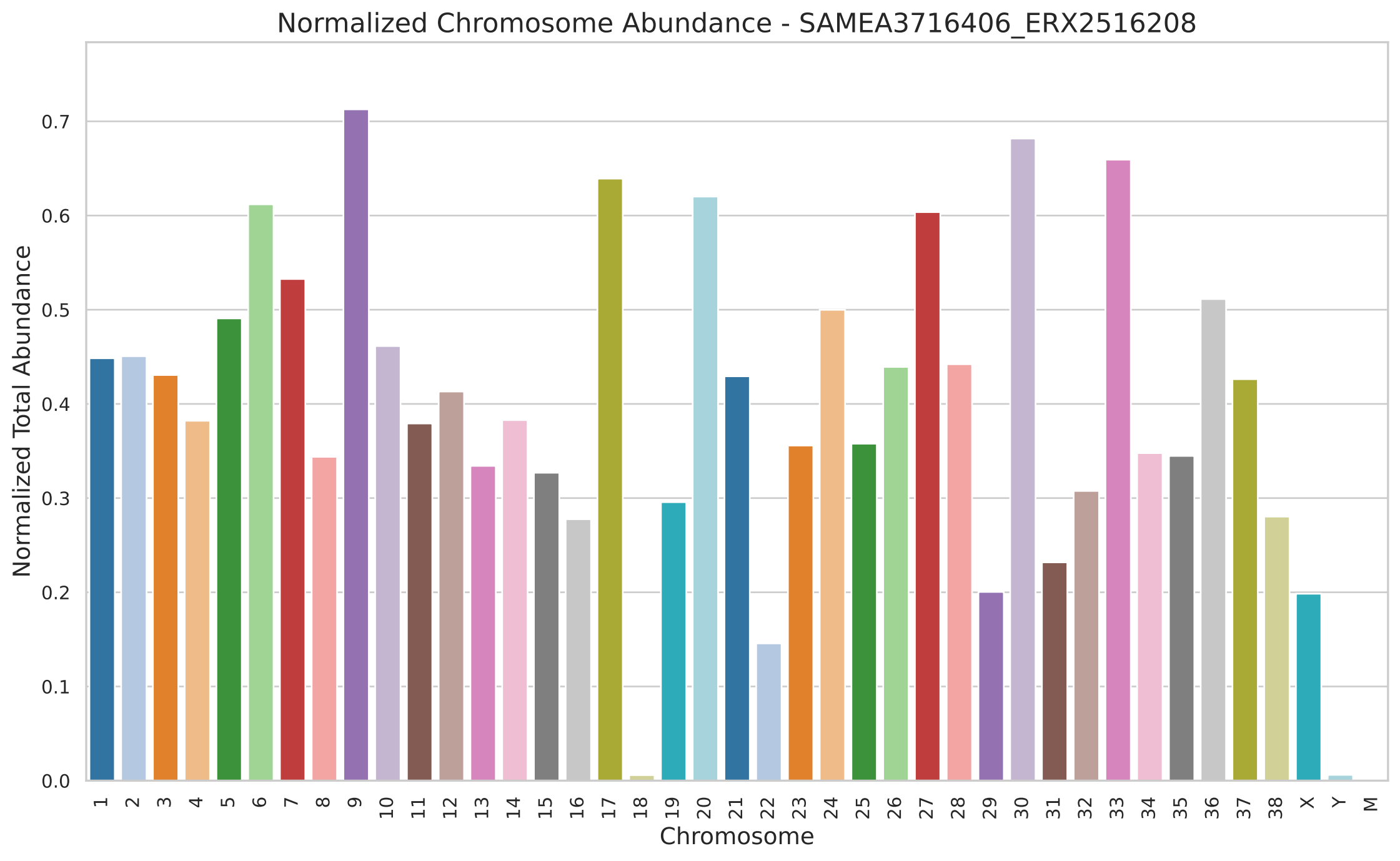

Normalized Chromosome Abundance - SAMEA3716412_ERX2516206
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

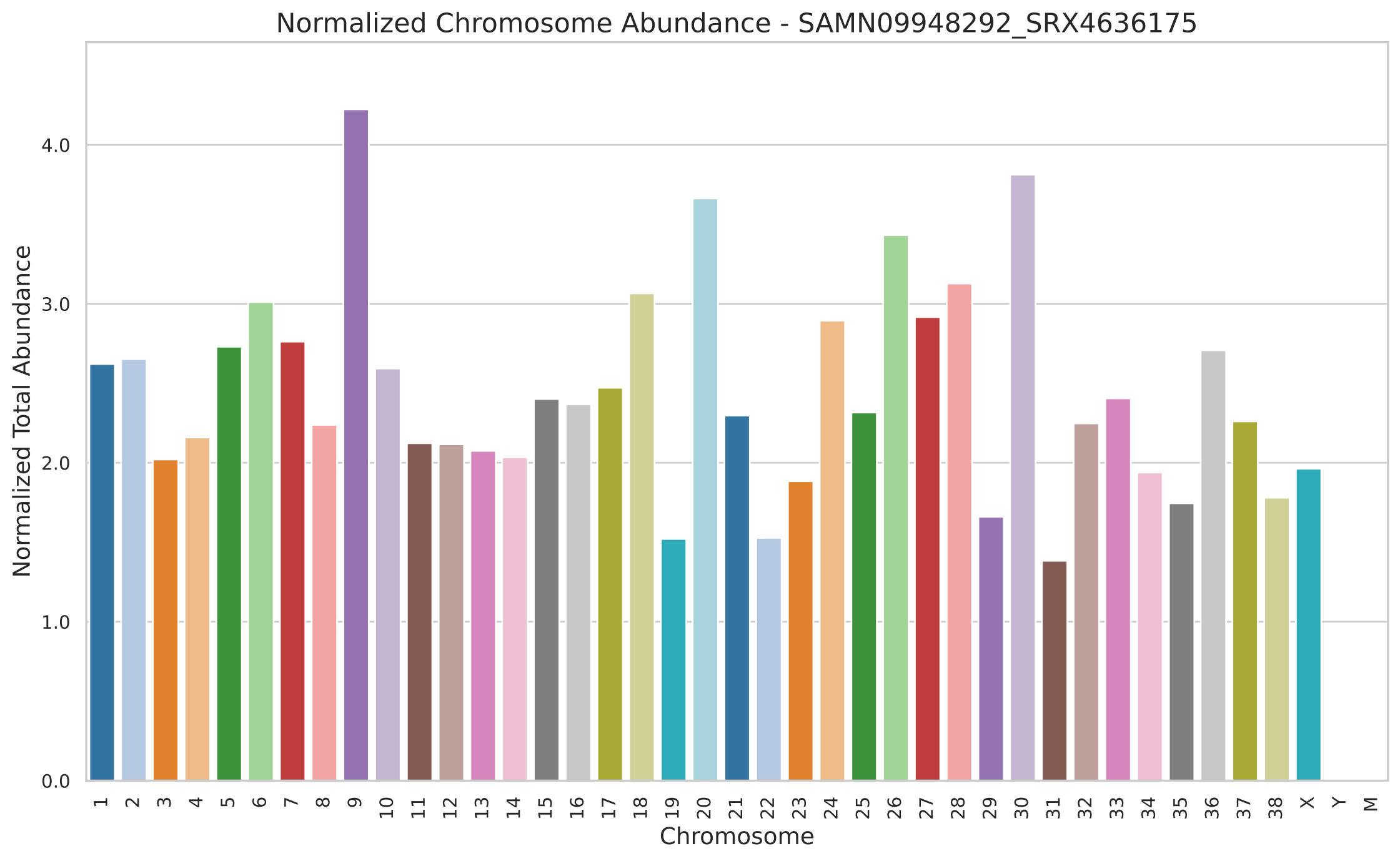

Normalized Chromosome Abundance - SAMN09949368_SRX4636187
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

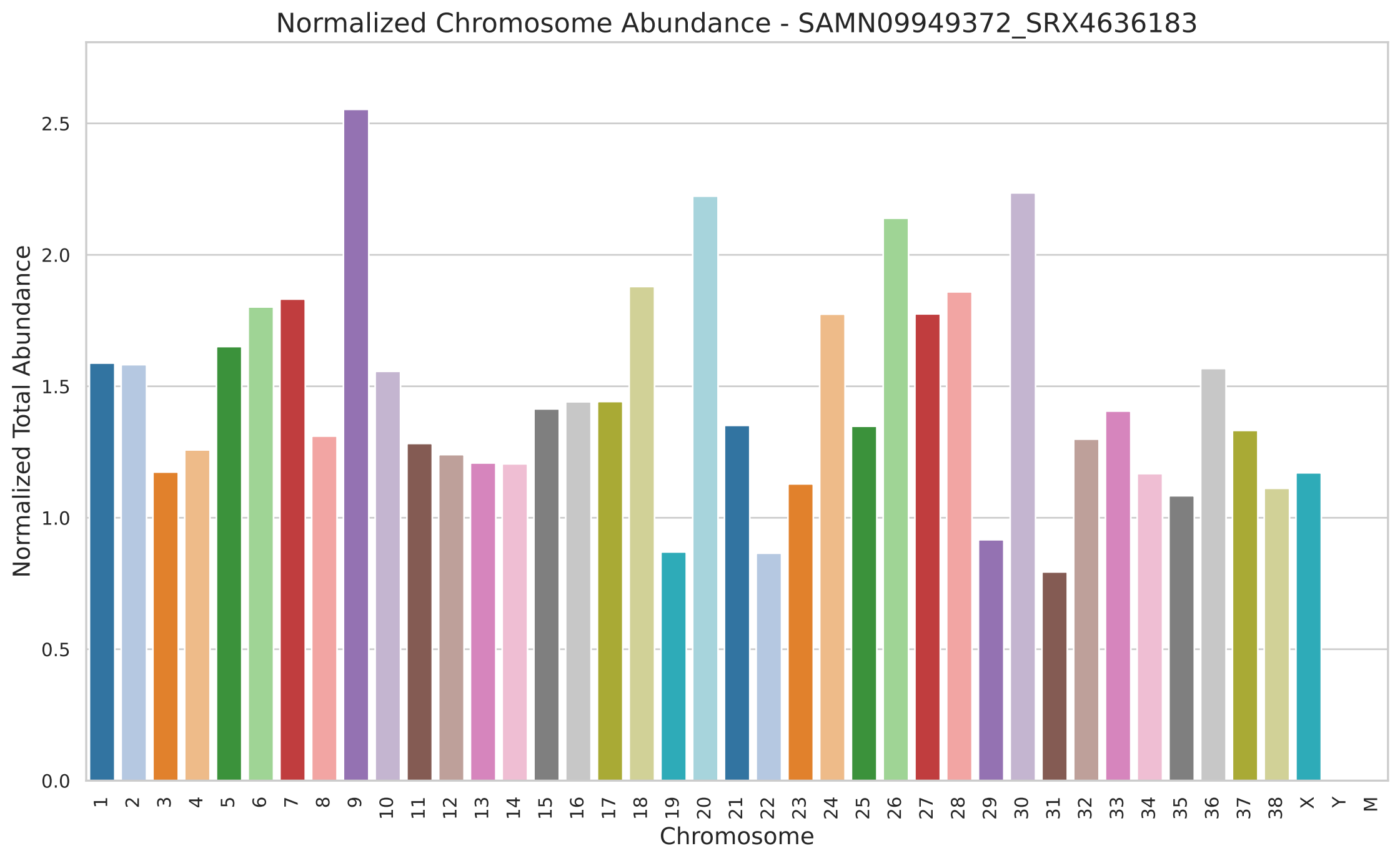

Normalized Chromosome Abundance - SAMN09948293_SRX4636179
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

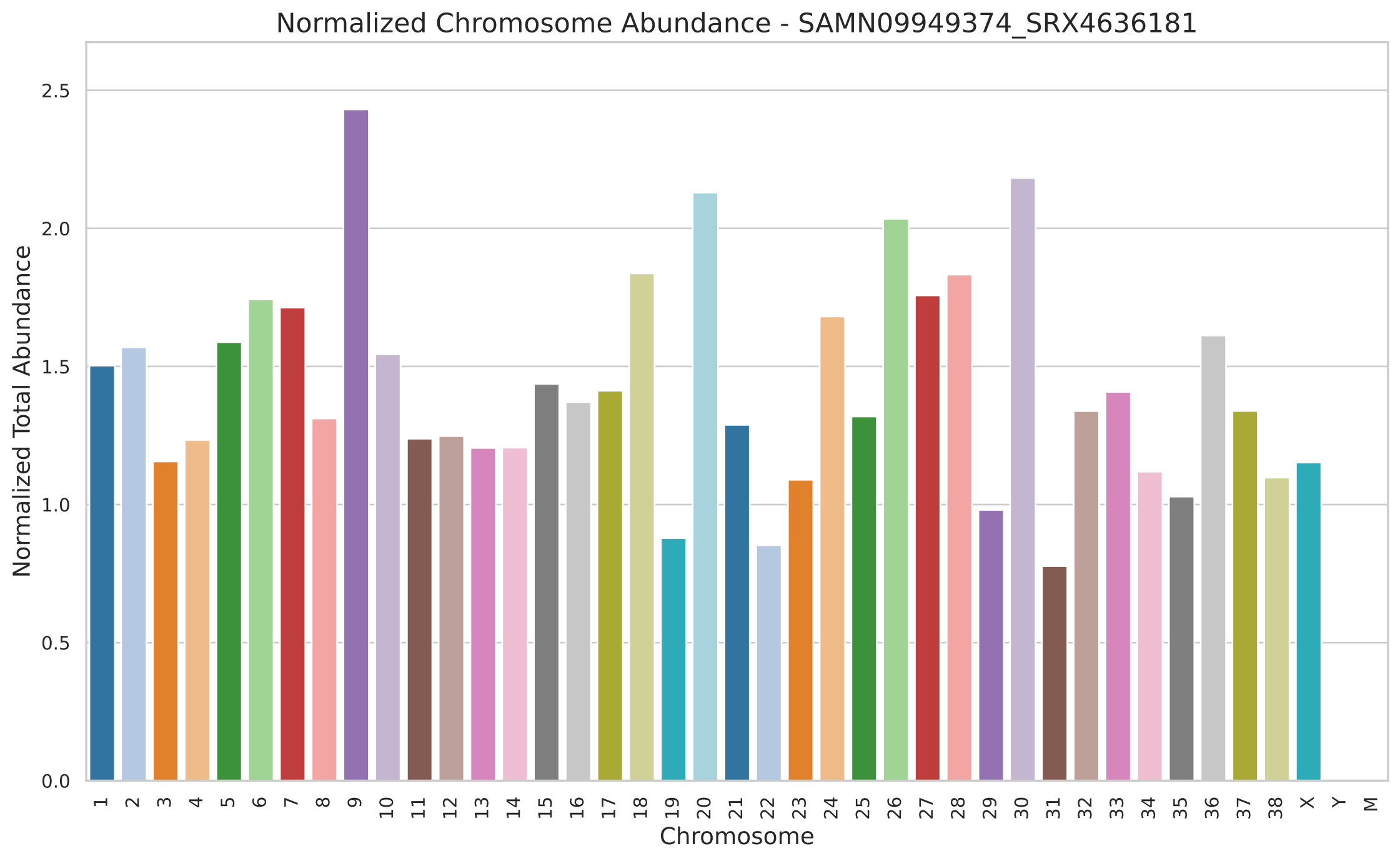

Normalized Chromosome Abundance - SAMN09949446_SRX4636178
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

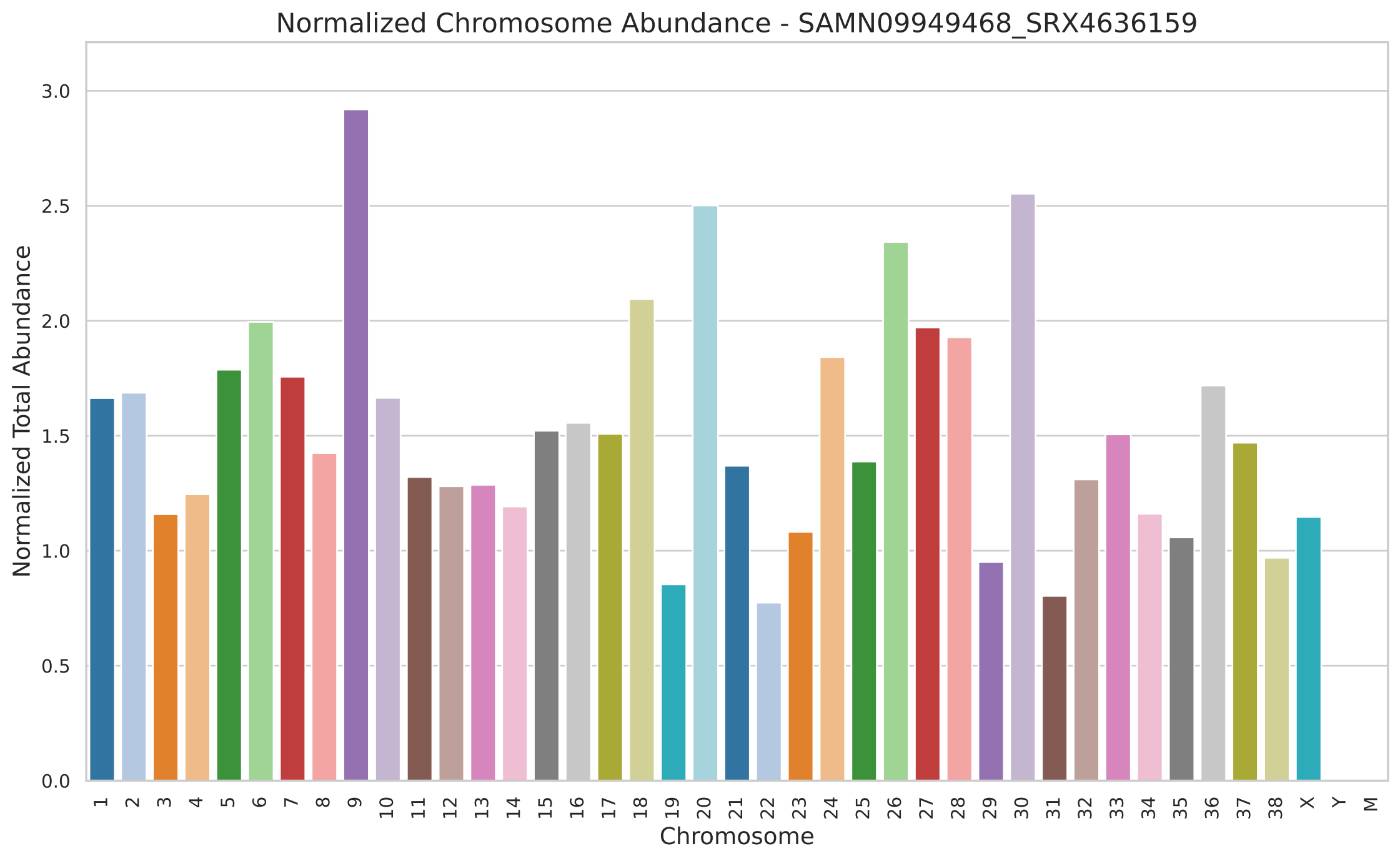

Normalized Chromosome Abundance - SAMN09949356_SRX4636191
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

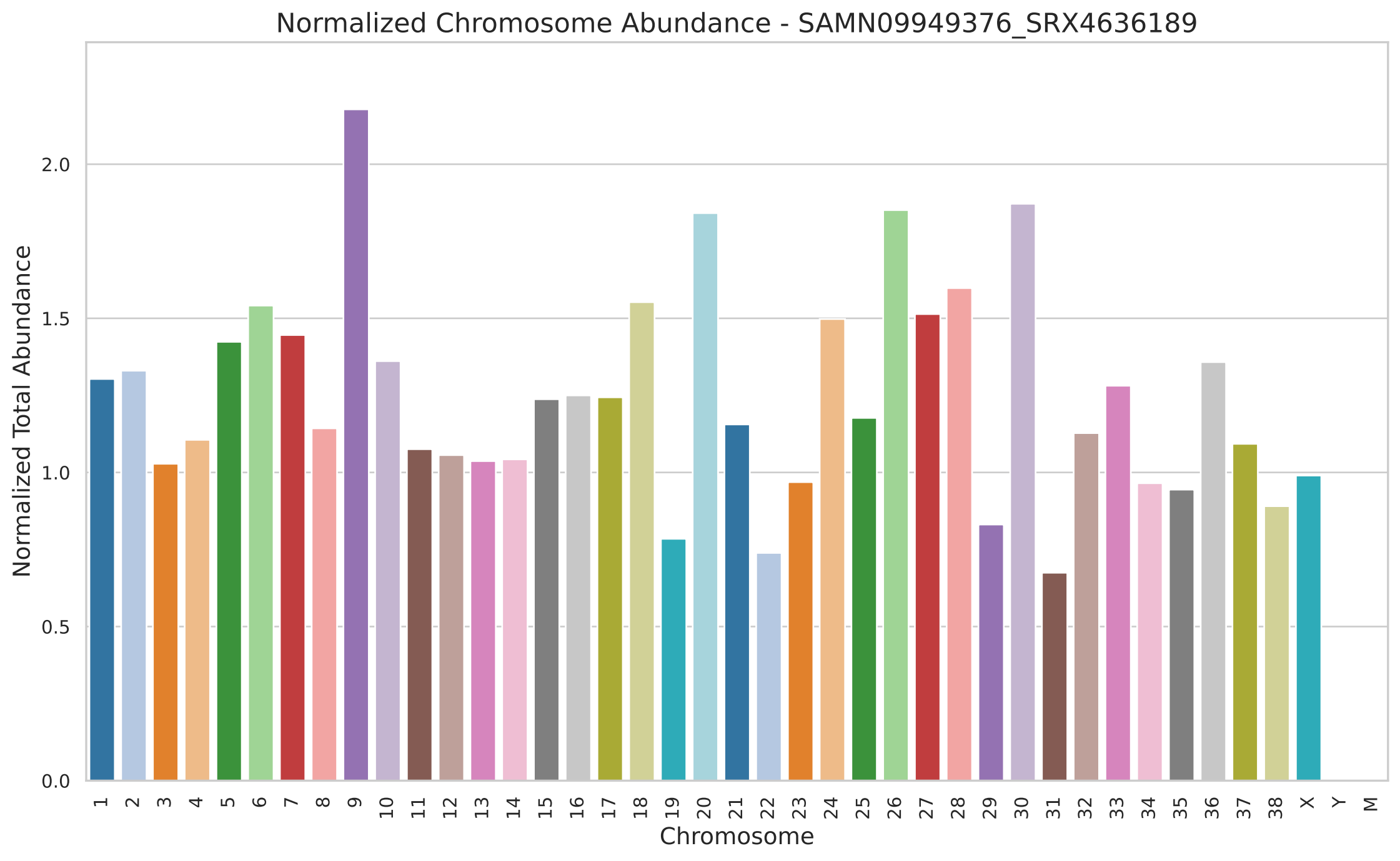

Normalized Chromosome Abundance - SAMEA3716406_ERX2516208
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

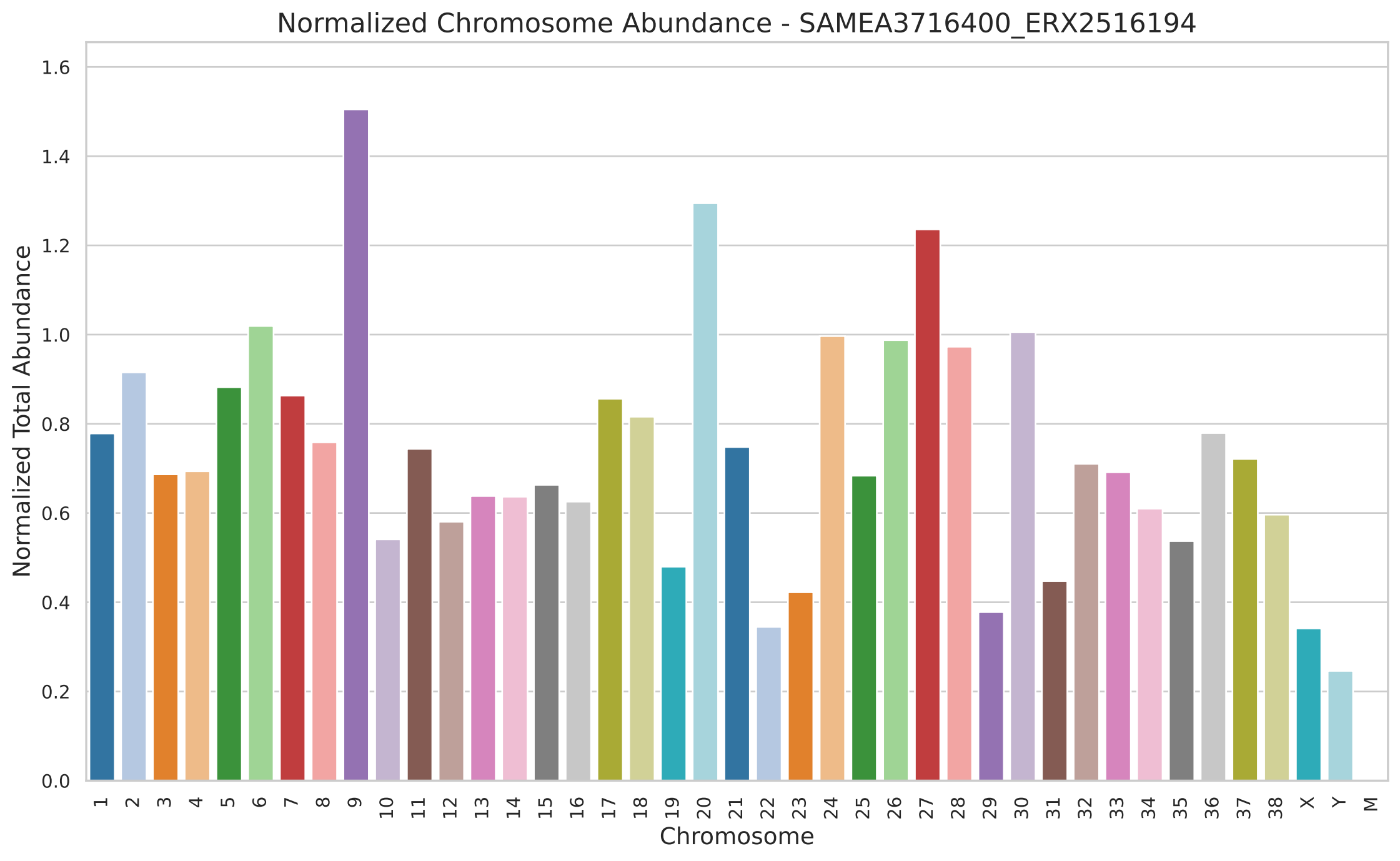

Normalized Chromosome Abundance - SAMN09948292_SRX4636175
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

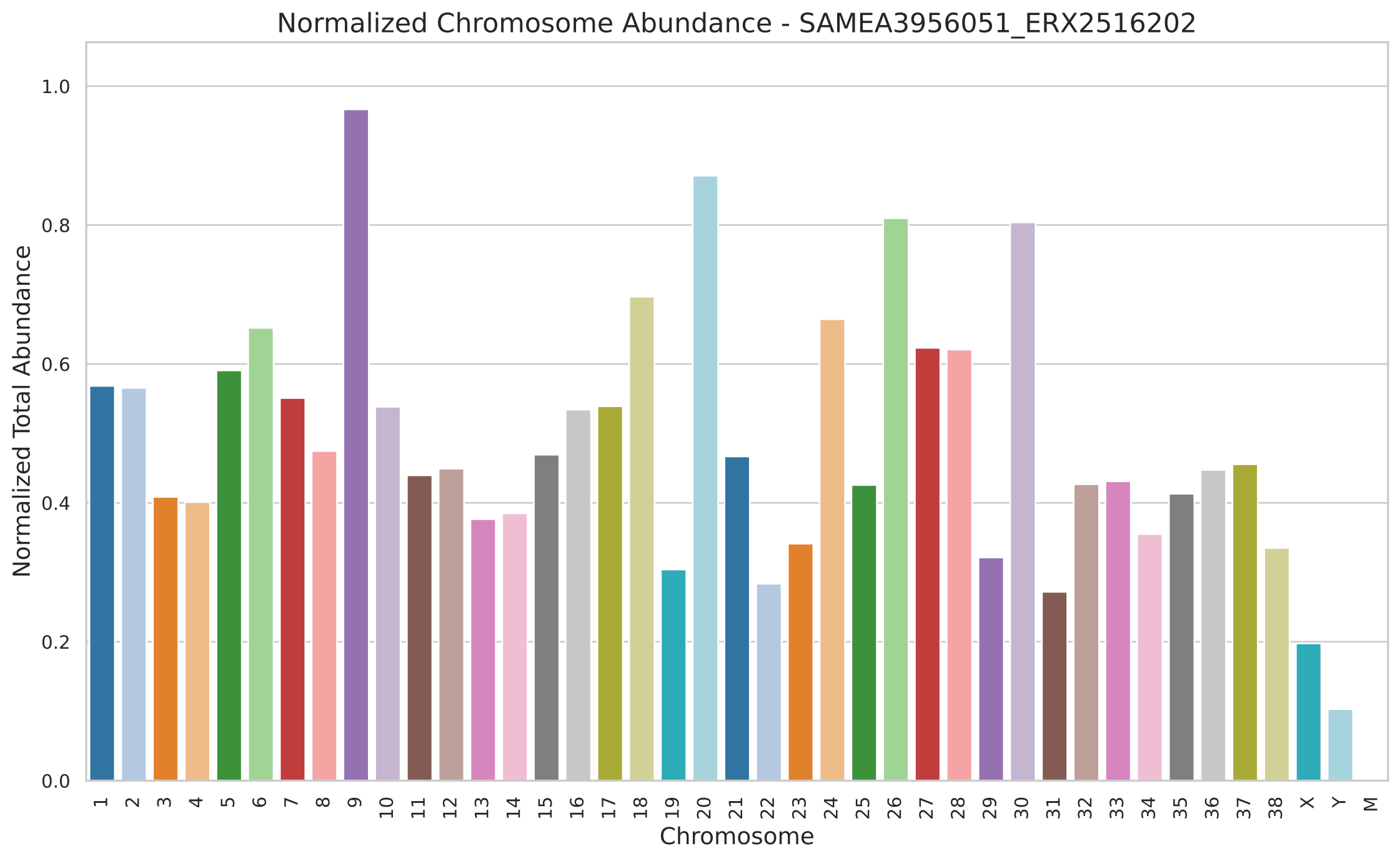

Normalized Chromosome Abundance - SAMN09949372_SRX4636183
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

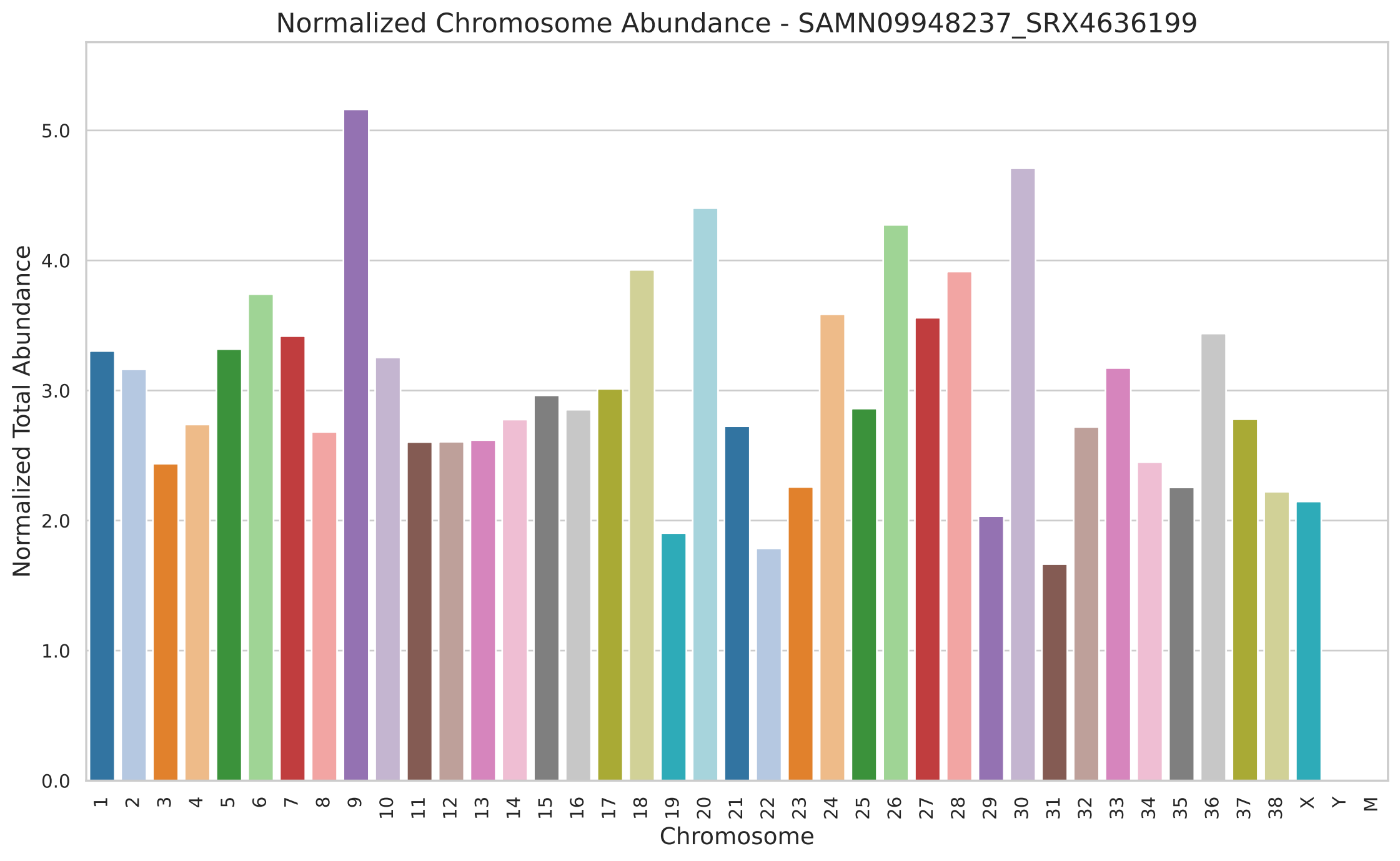

Normalized Chromosome Abundance - SAMN09949374_SRX4636181
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

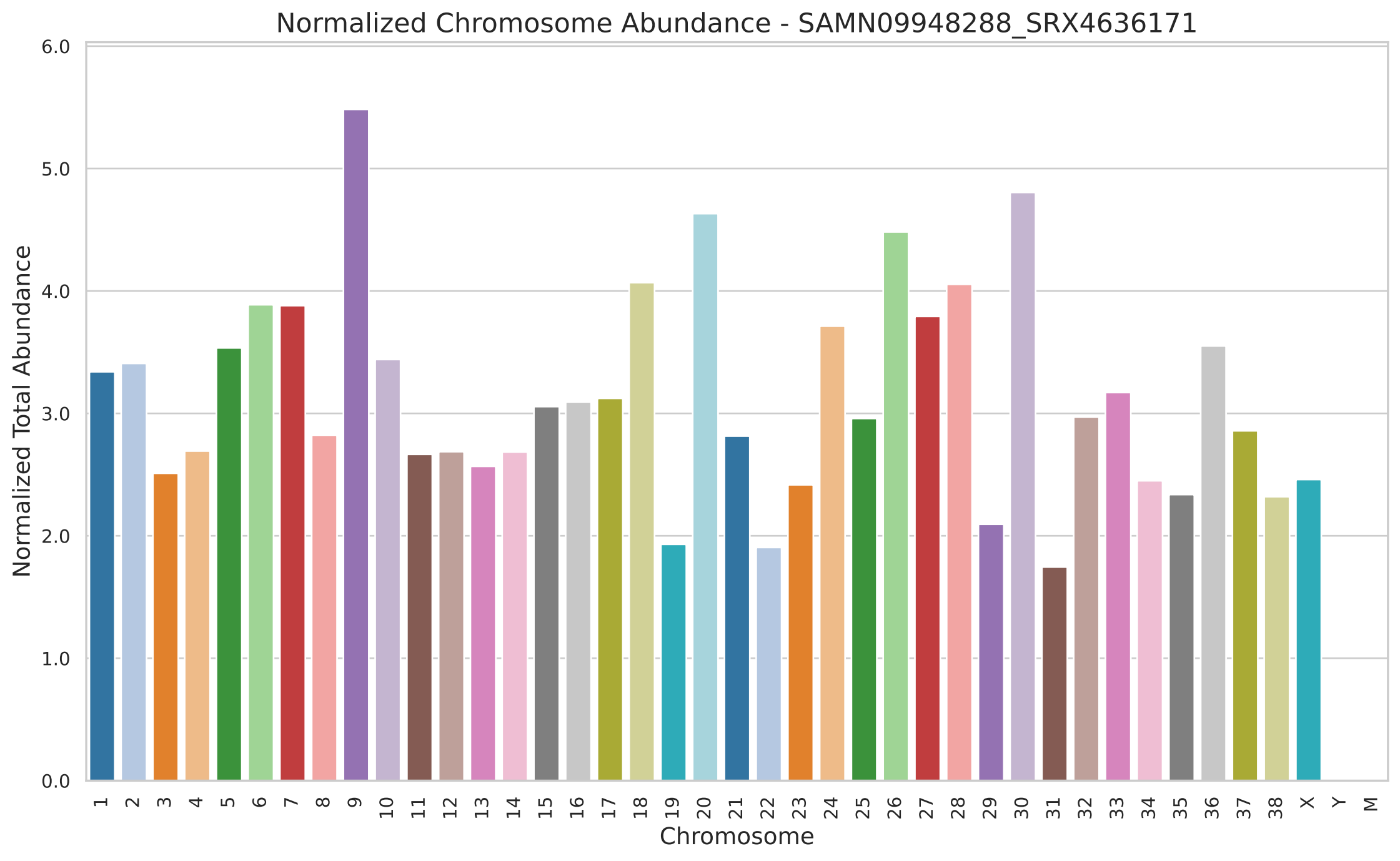

Normalized Chromosome Abundance - SAMN09949468_SRX4636159
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

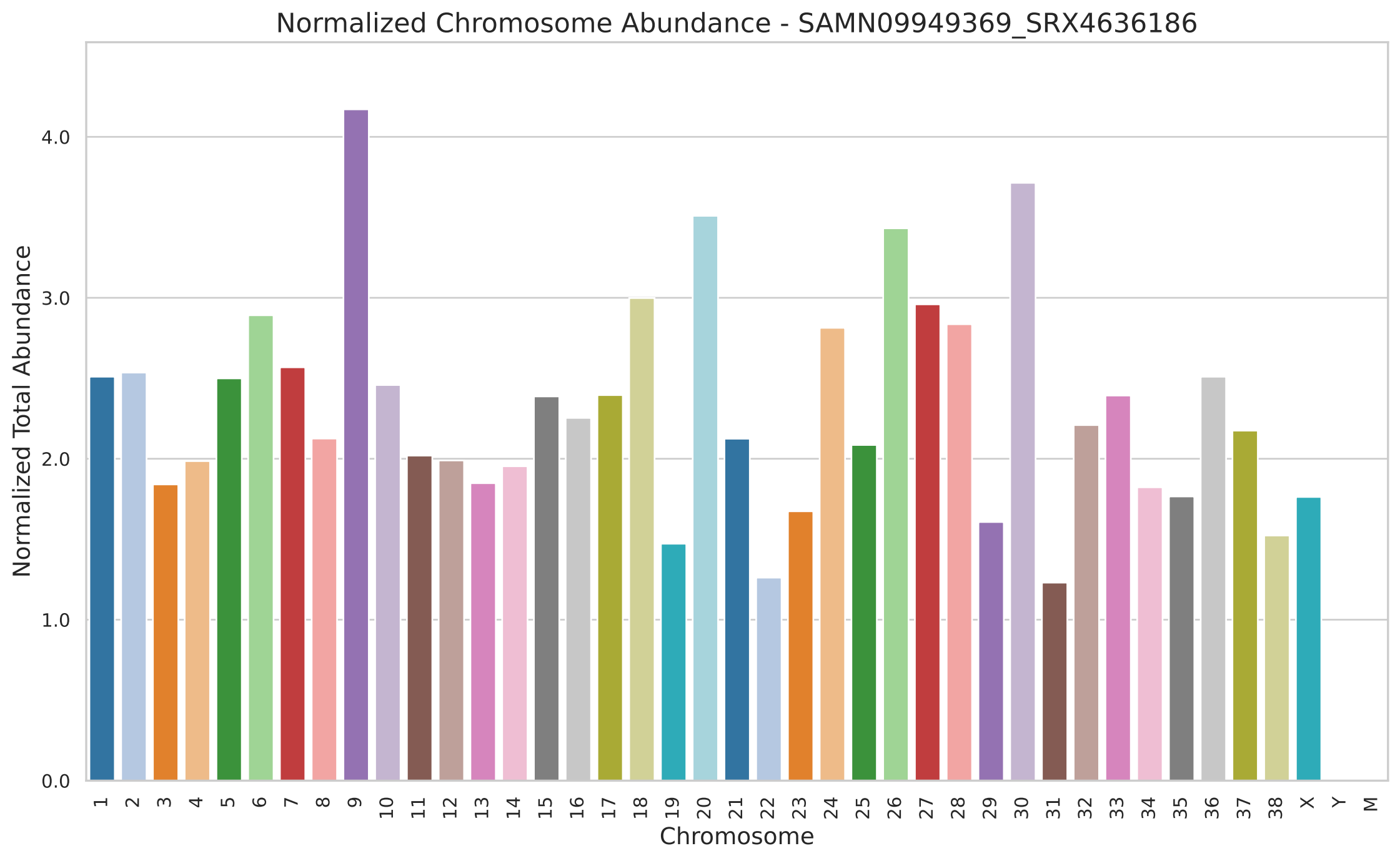

Normalized Chromosome Abundance - SAMN09949376_SRX4636189
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

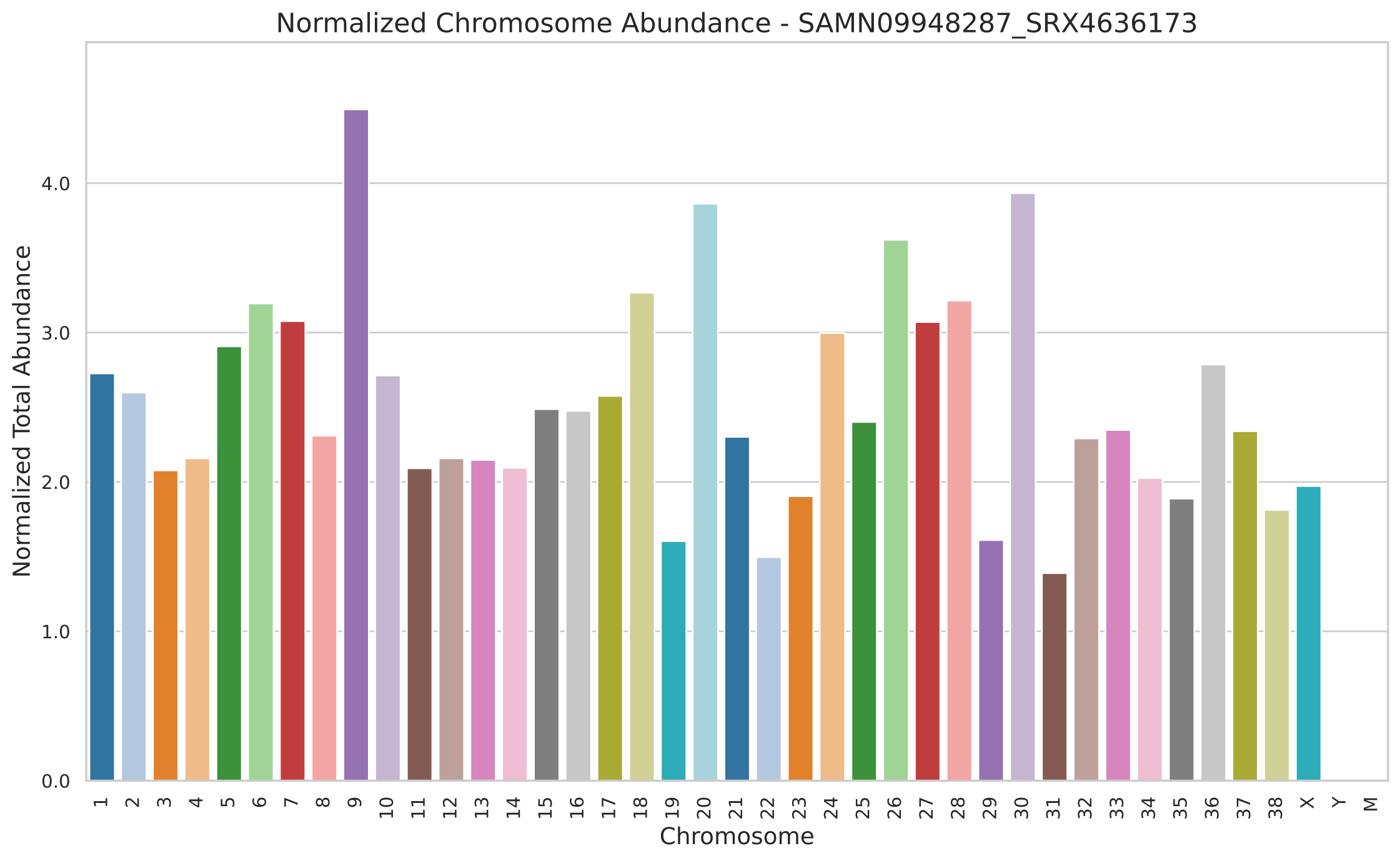

Normalized Chromosome Abundance - SAMEA3716400_ERX2516194
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

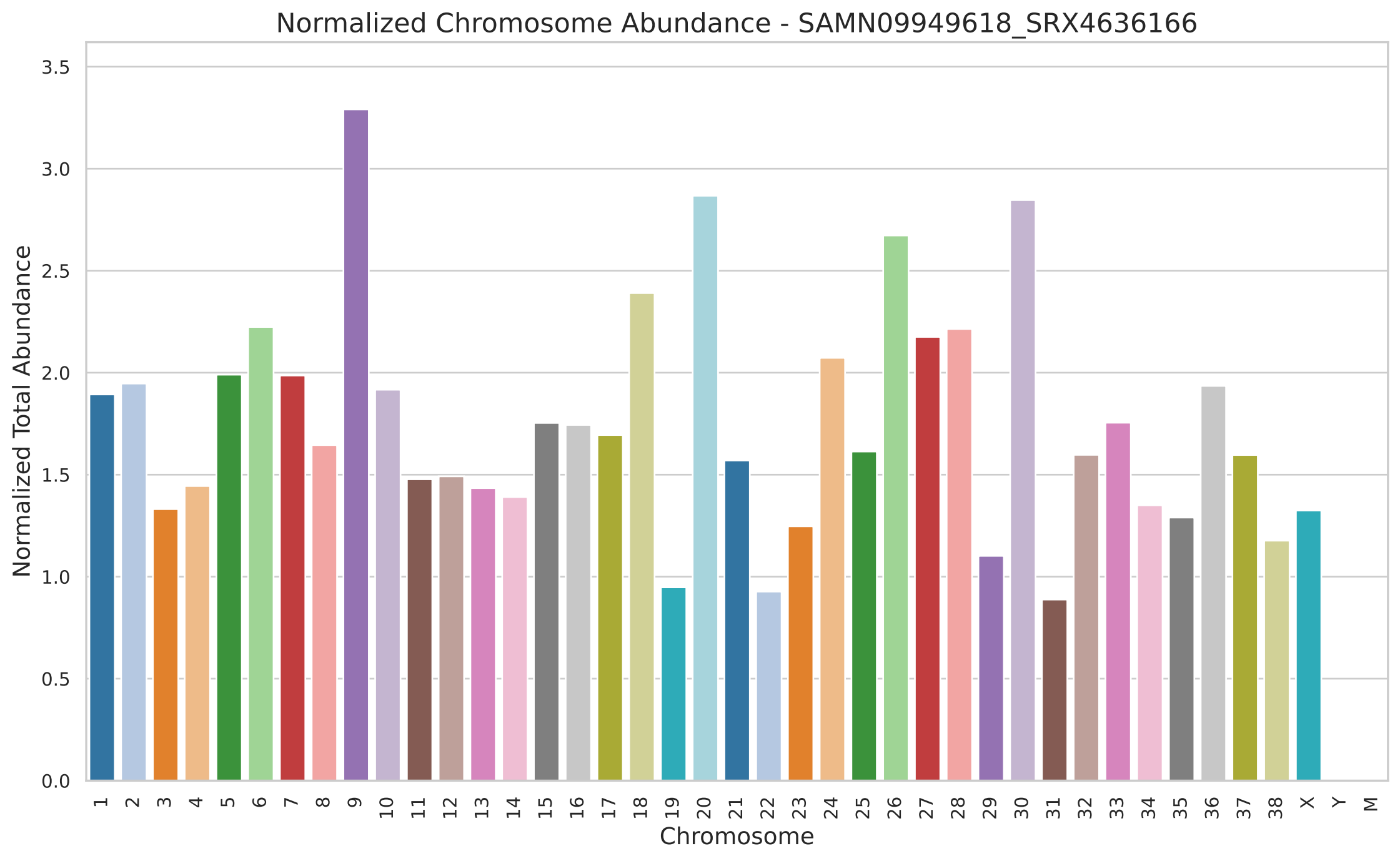

Normalized Chromosome Abundance - SAMEA3956051_ERX2516202
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

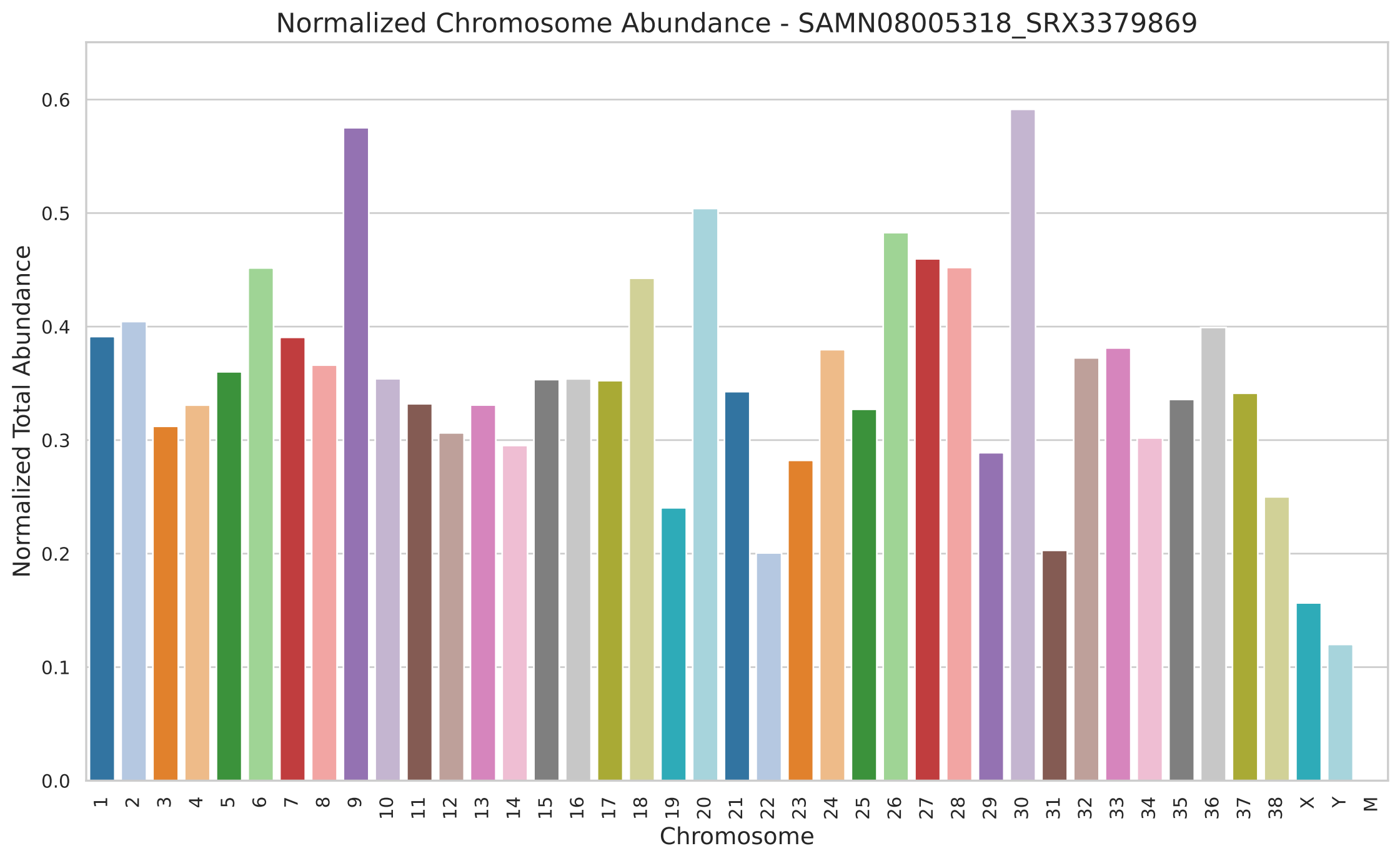

Normalized Chromosome Abundance - SAMN09948237_SRX4636199
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

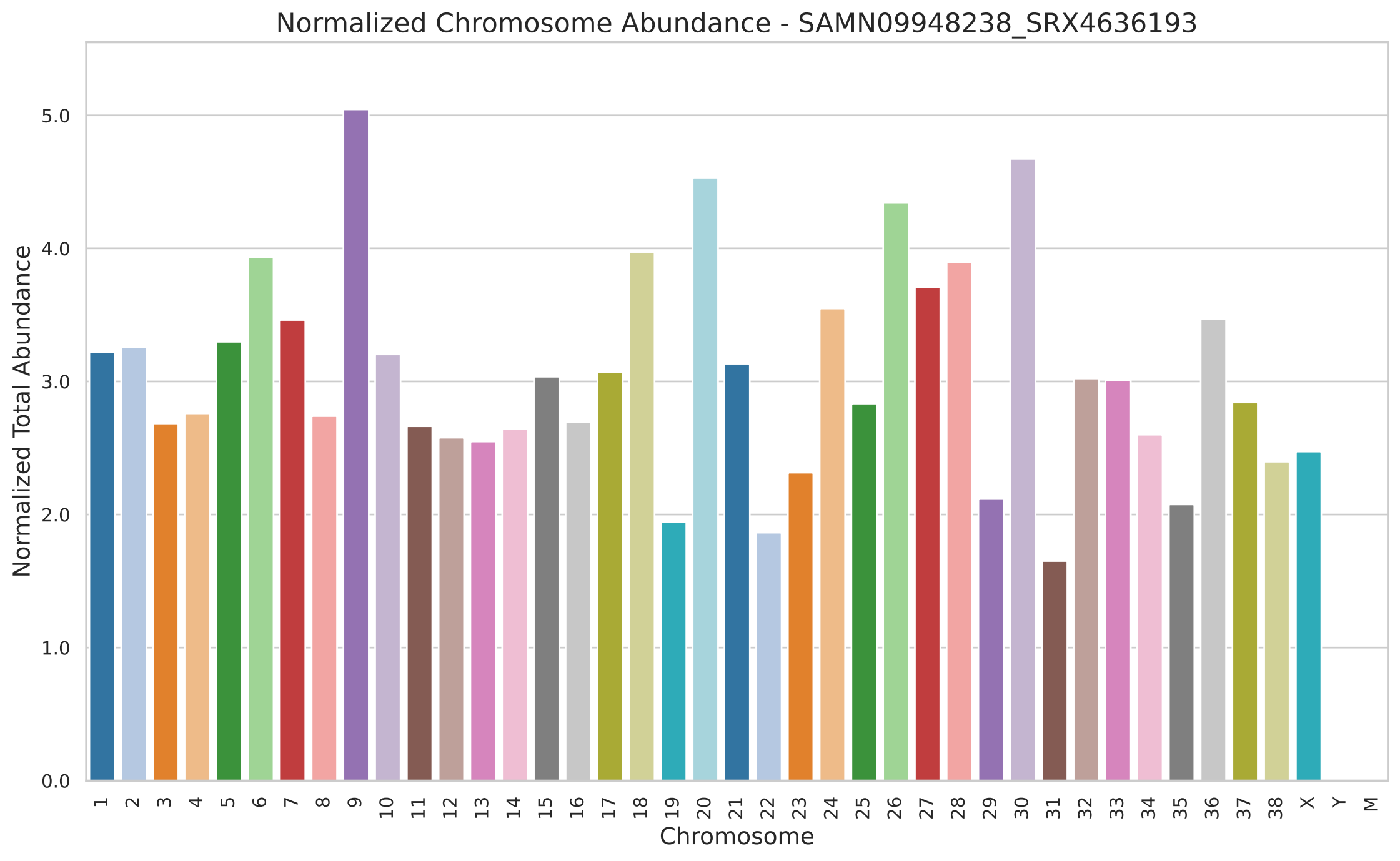

Normalized Chromosome Abundance - SAMN09948288_SRX4636171
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

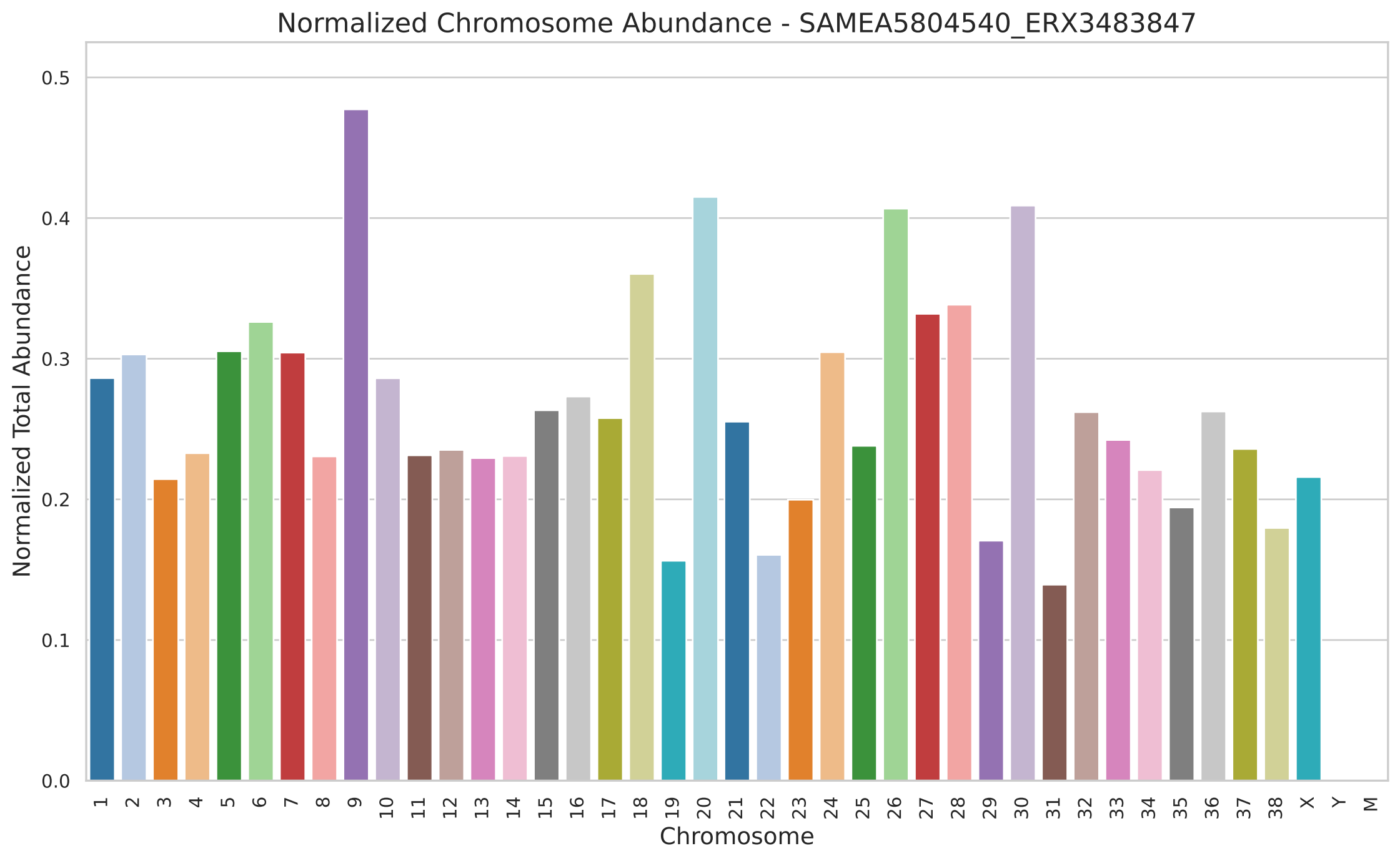

Normalized Chromosome Abundance - SAMN09949369_SRX4636186
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

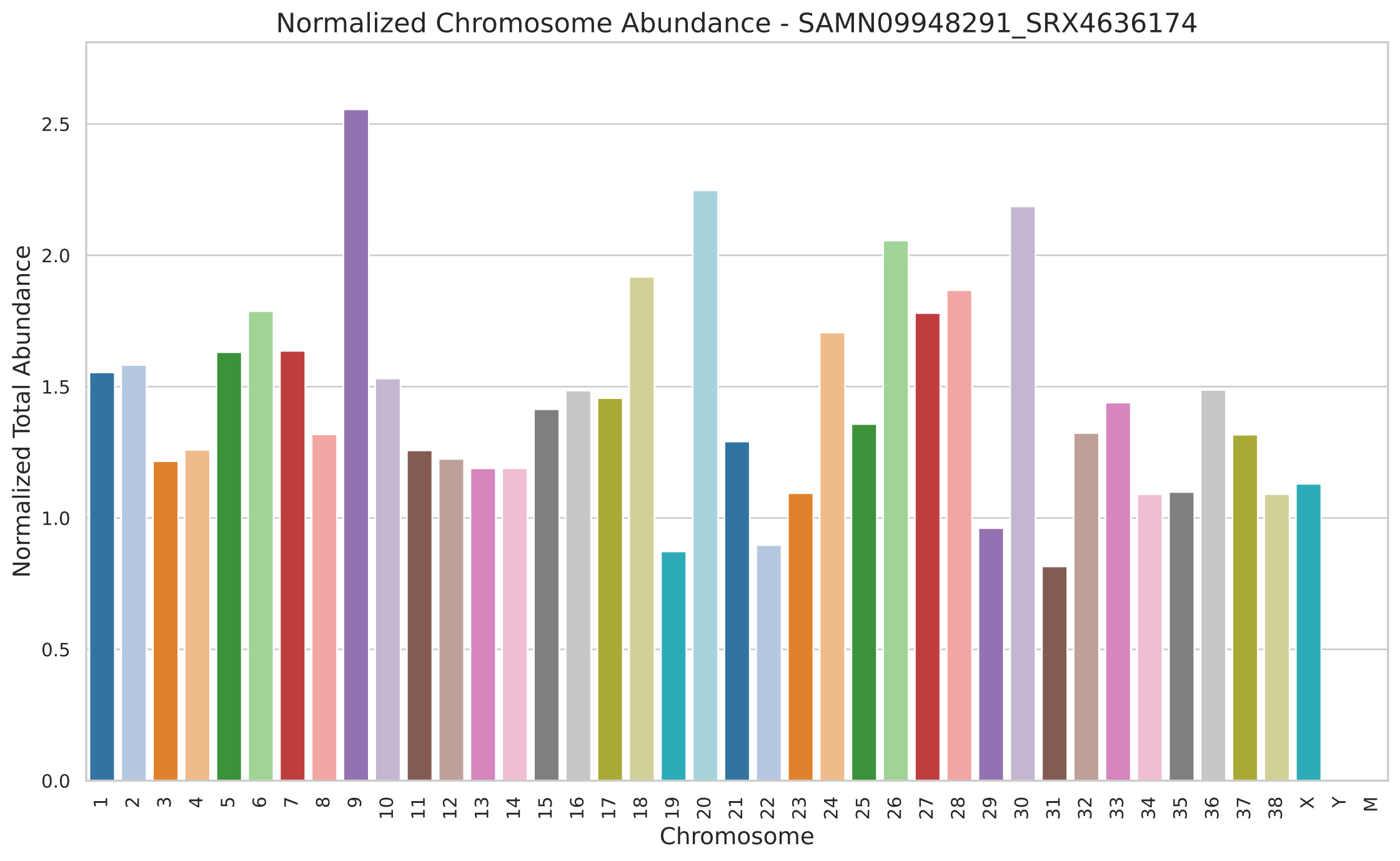

Normalized Chromosome Abundance - SAMN09948287_SRX4636173
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

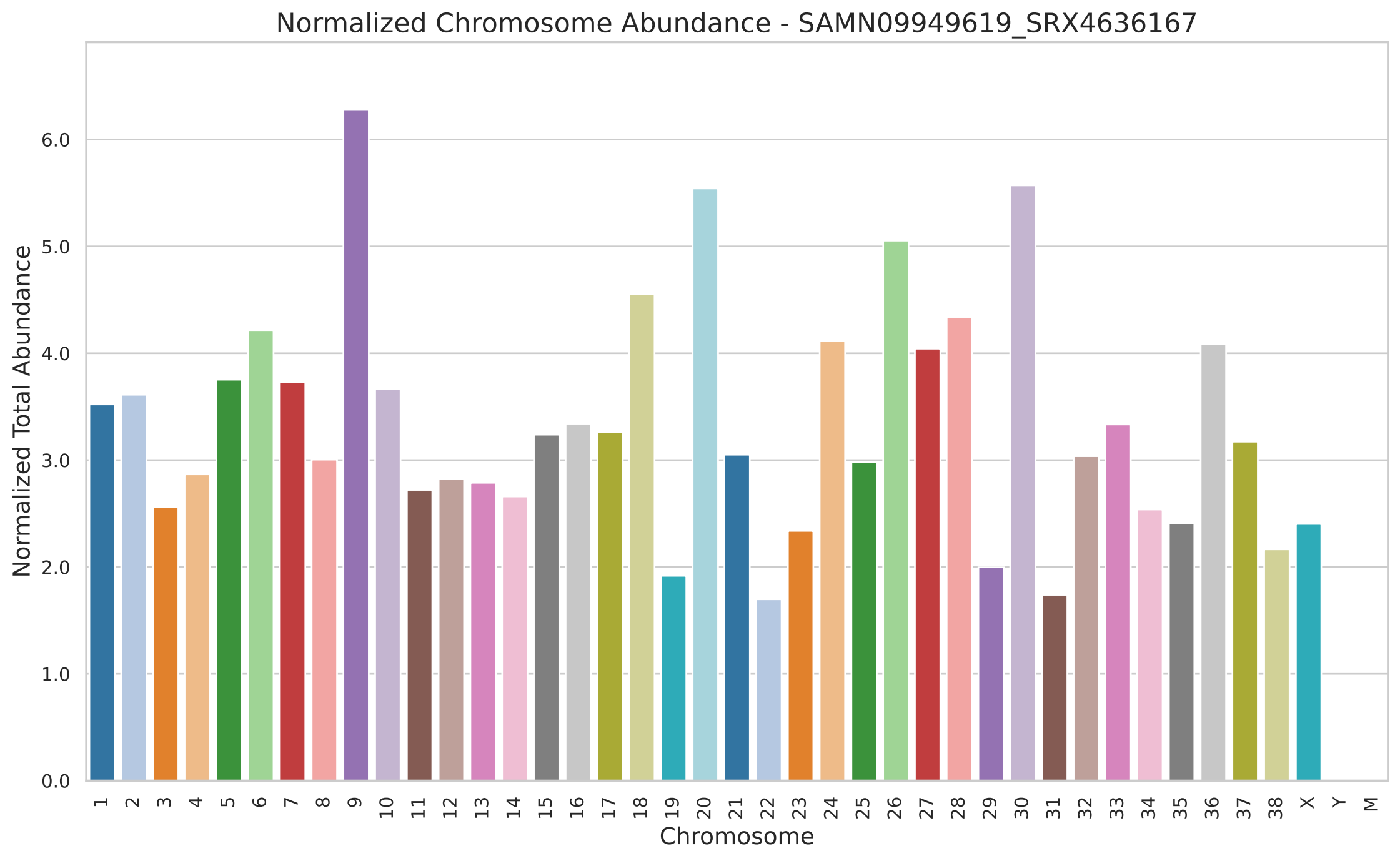

Normalized Chromosome Abundance - SAMN09949618_SRX4636166
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

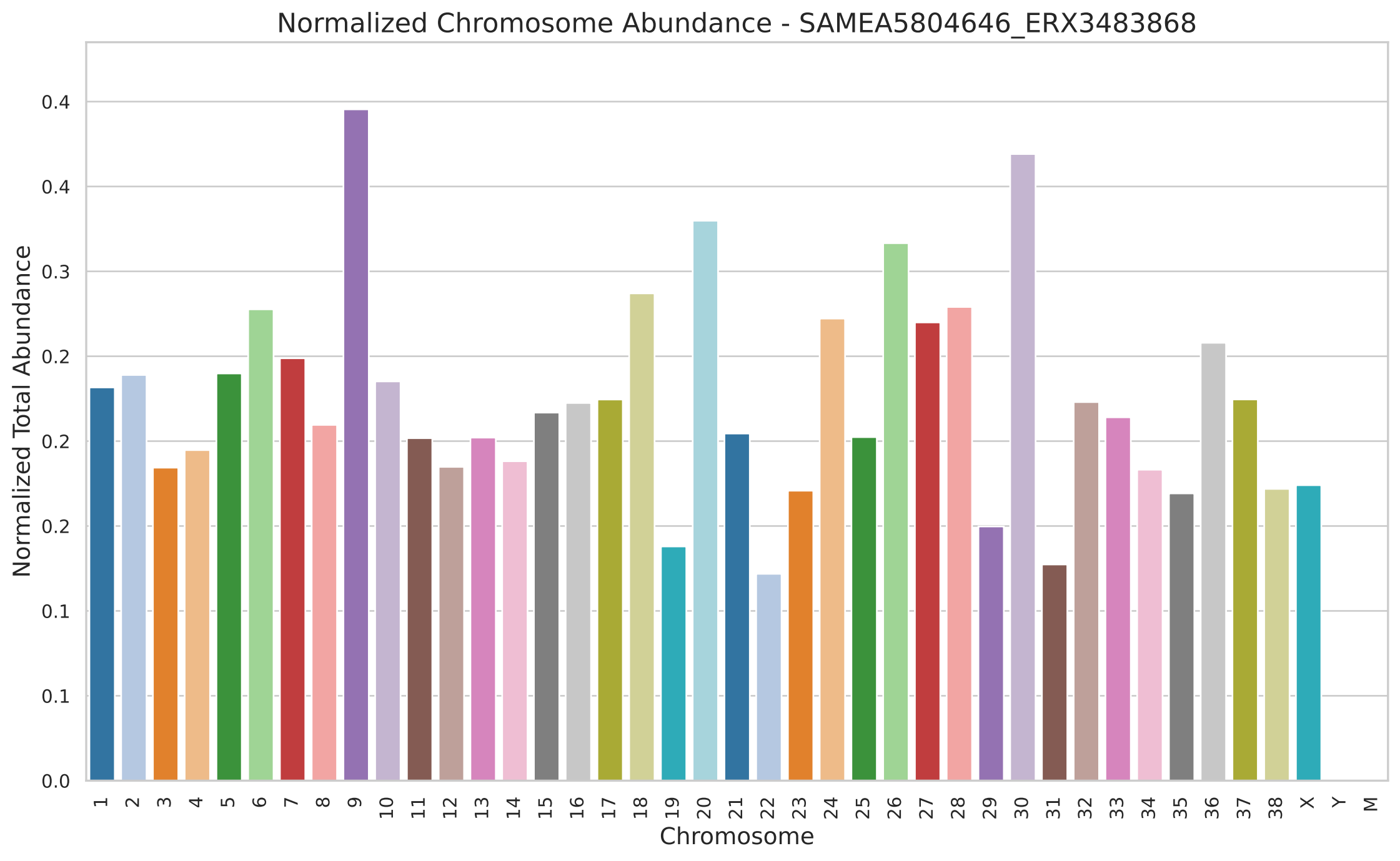

Normalized Chromosome Abundance - SAMN08005318_SRX3379869
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

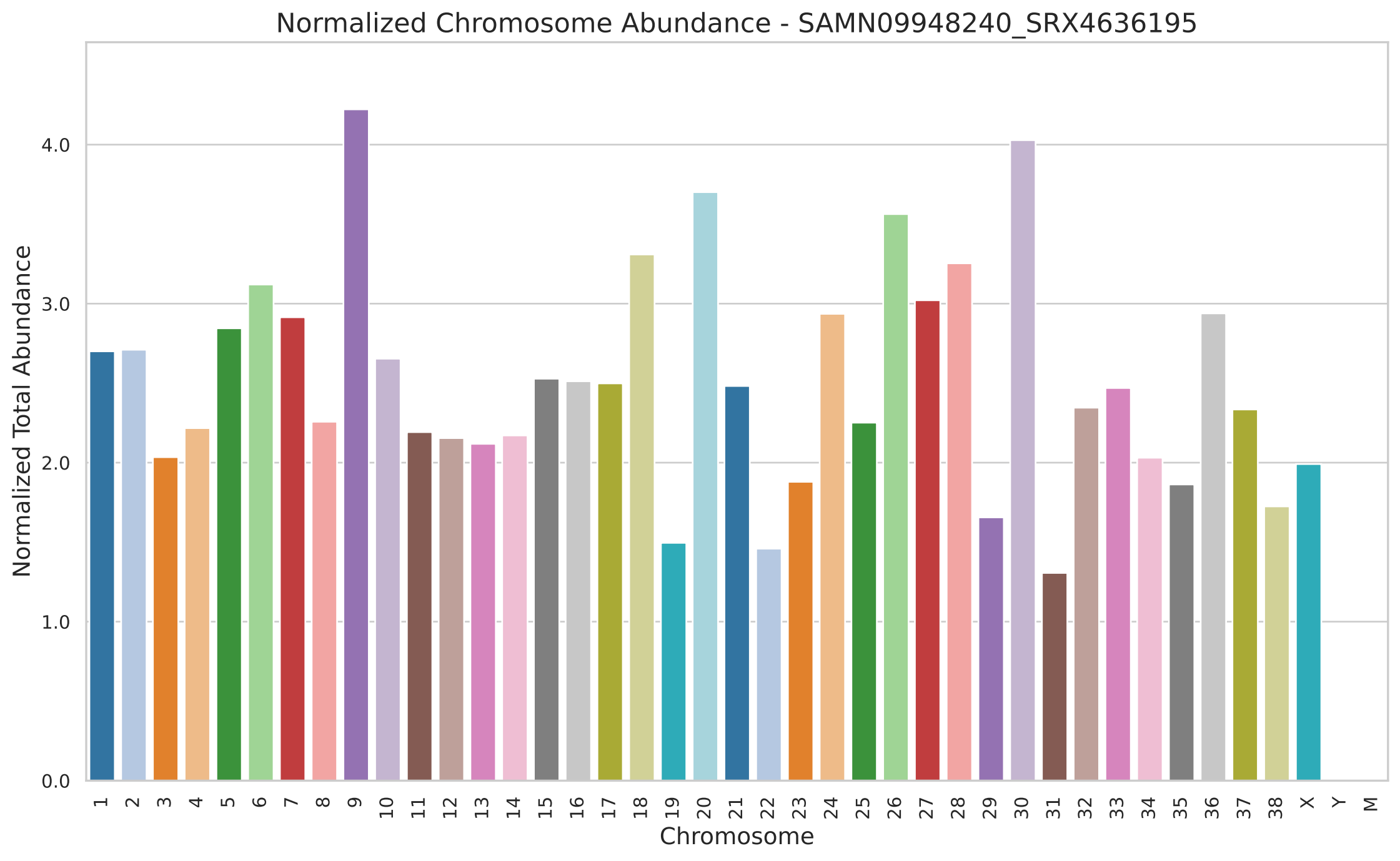

Normalized Chromosome Abundance - SAMN09948238_SRX4636193
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

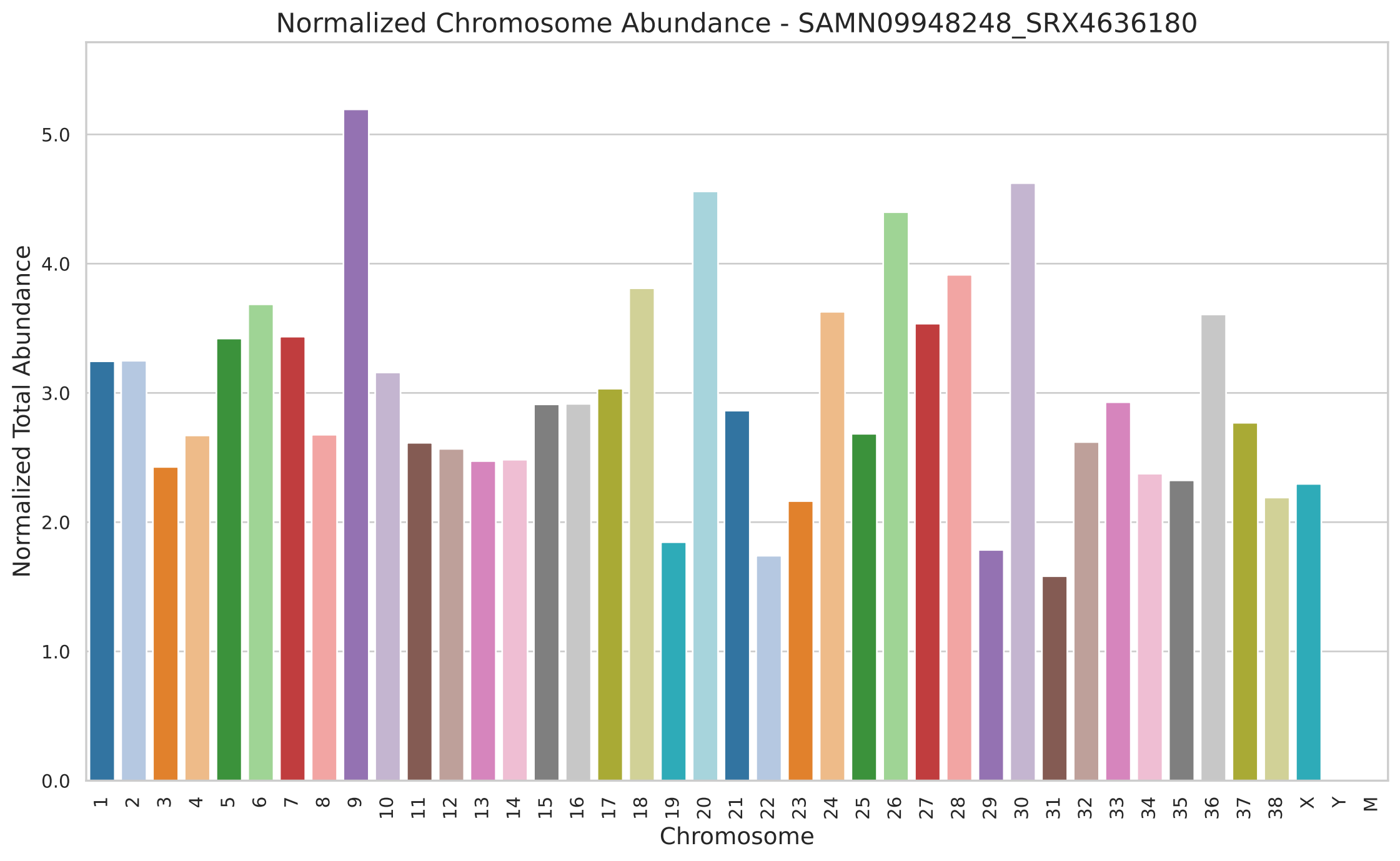

Normalized Chromosome Abundance - SAMEA5804540_ERX3483847
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

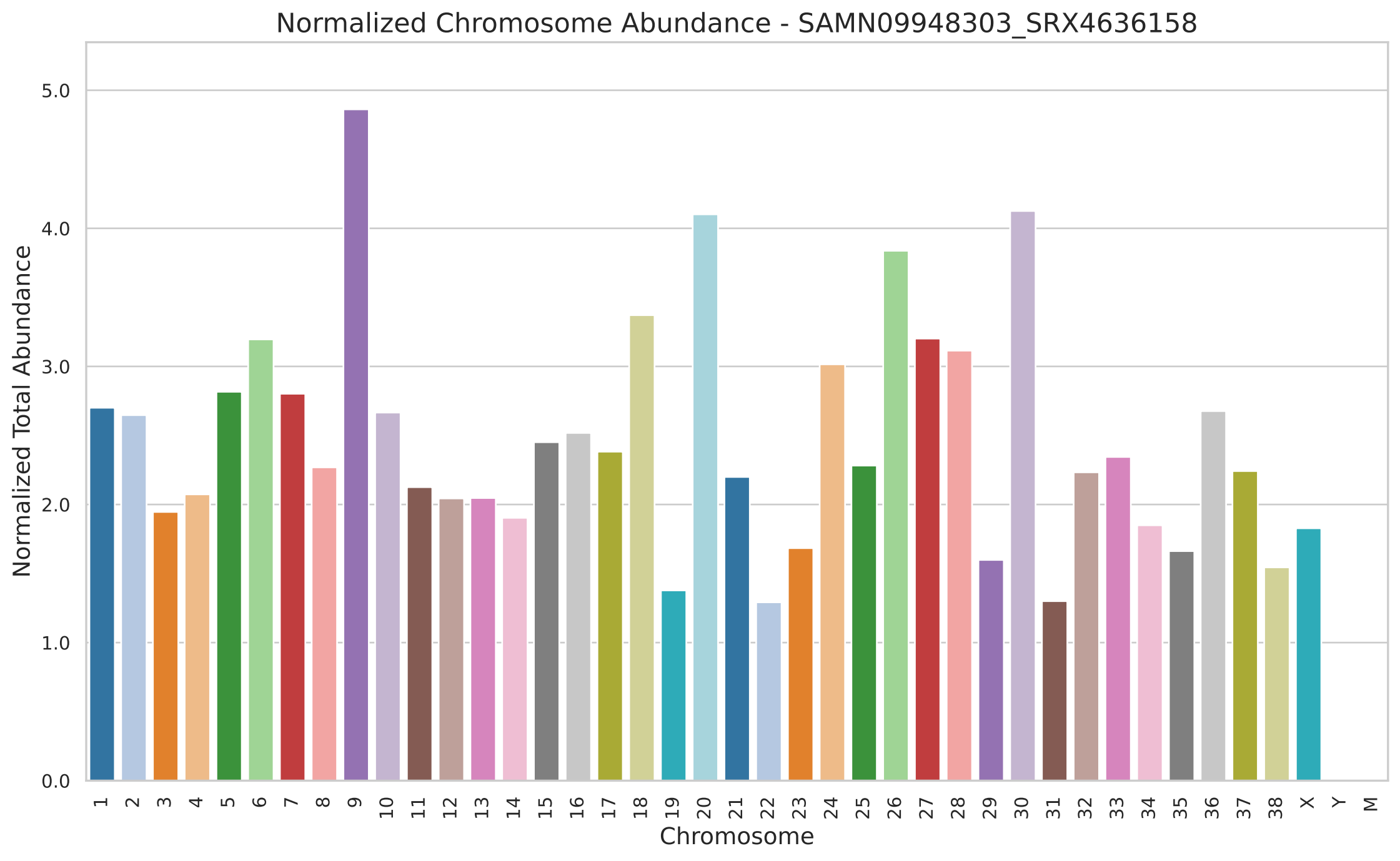

Normalized Chromosome Abundance - SAMN09948291_SRX4636174
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

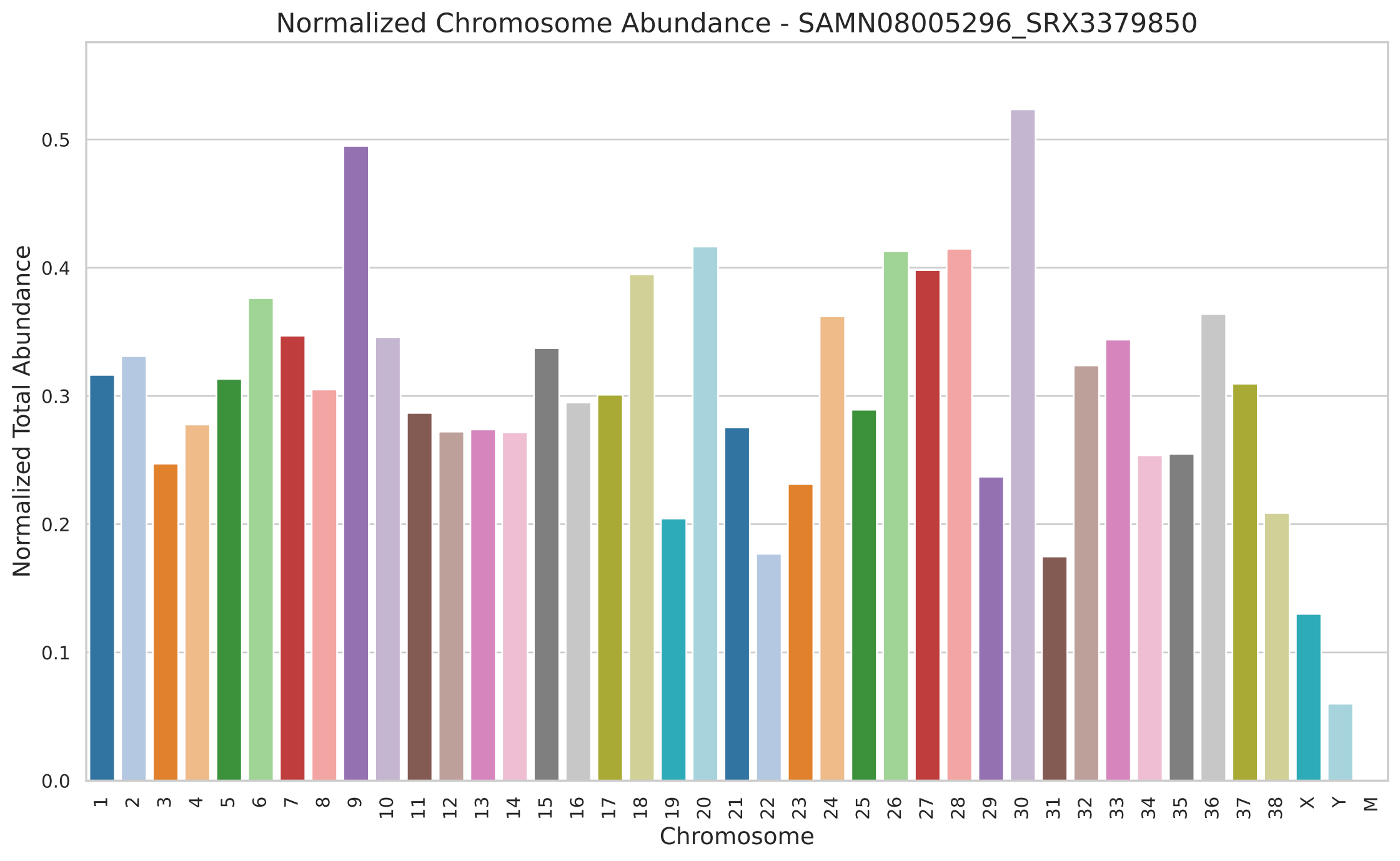

Normalized Chromosome Abundance - SAMN09949619_SRX4636167
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

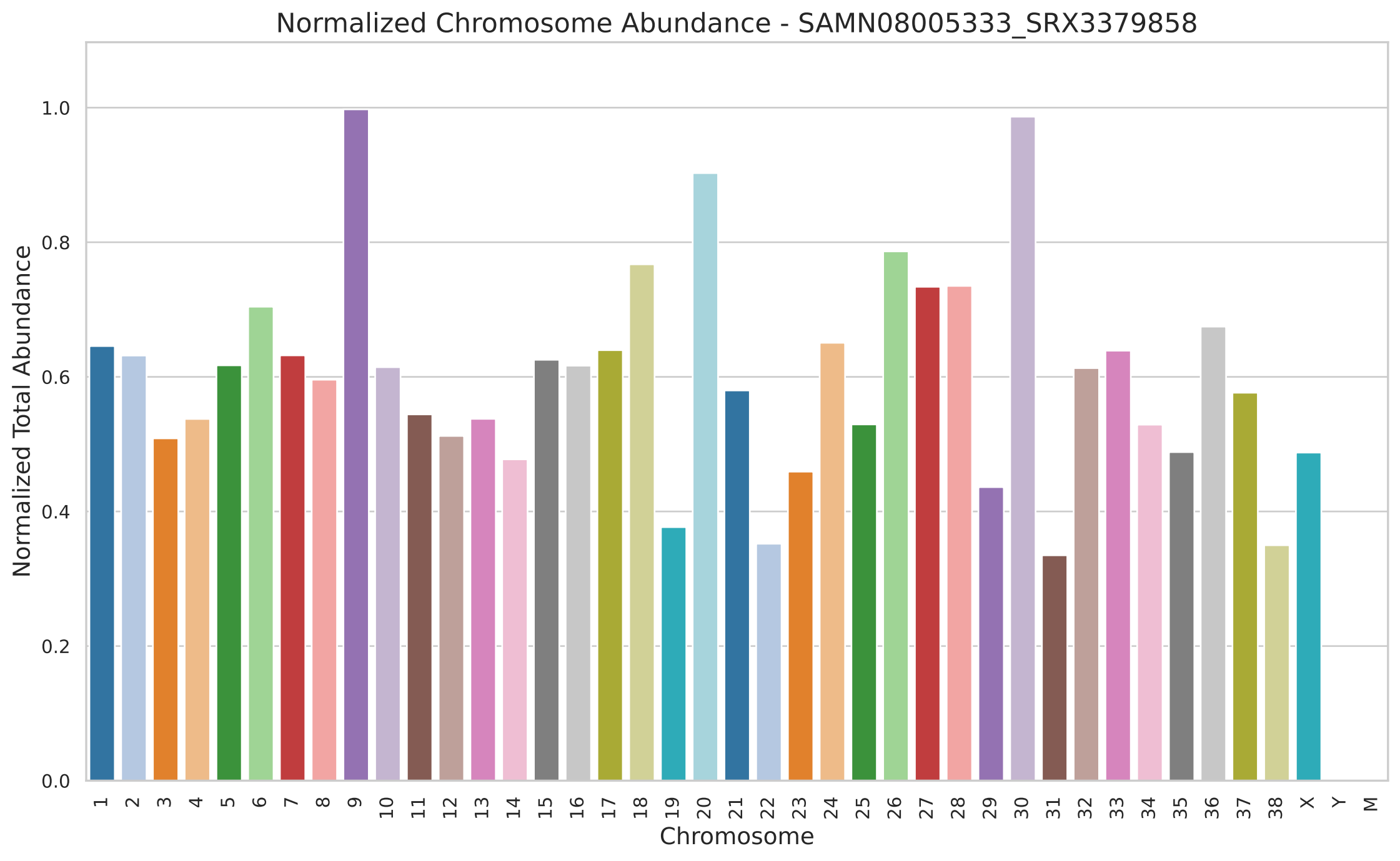

Normalized Chromosome Abundance - SAMEA5804646_ERX3483868
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

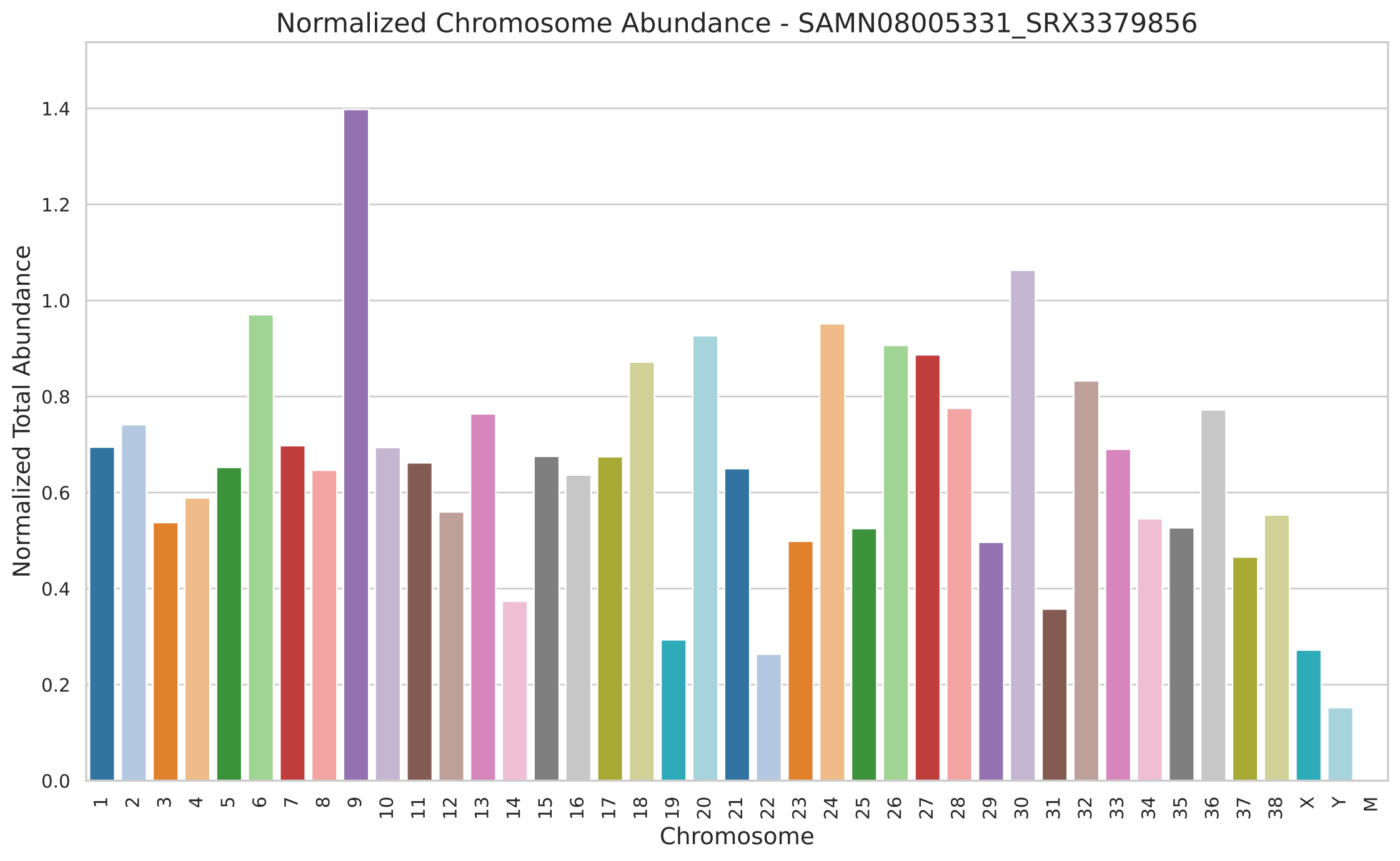

Normalized Chromosome Abundance - SAMN09948240_SRX4636195
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

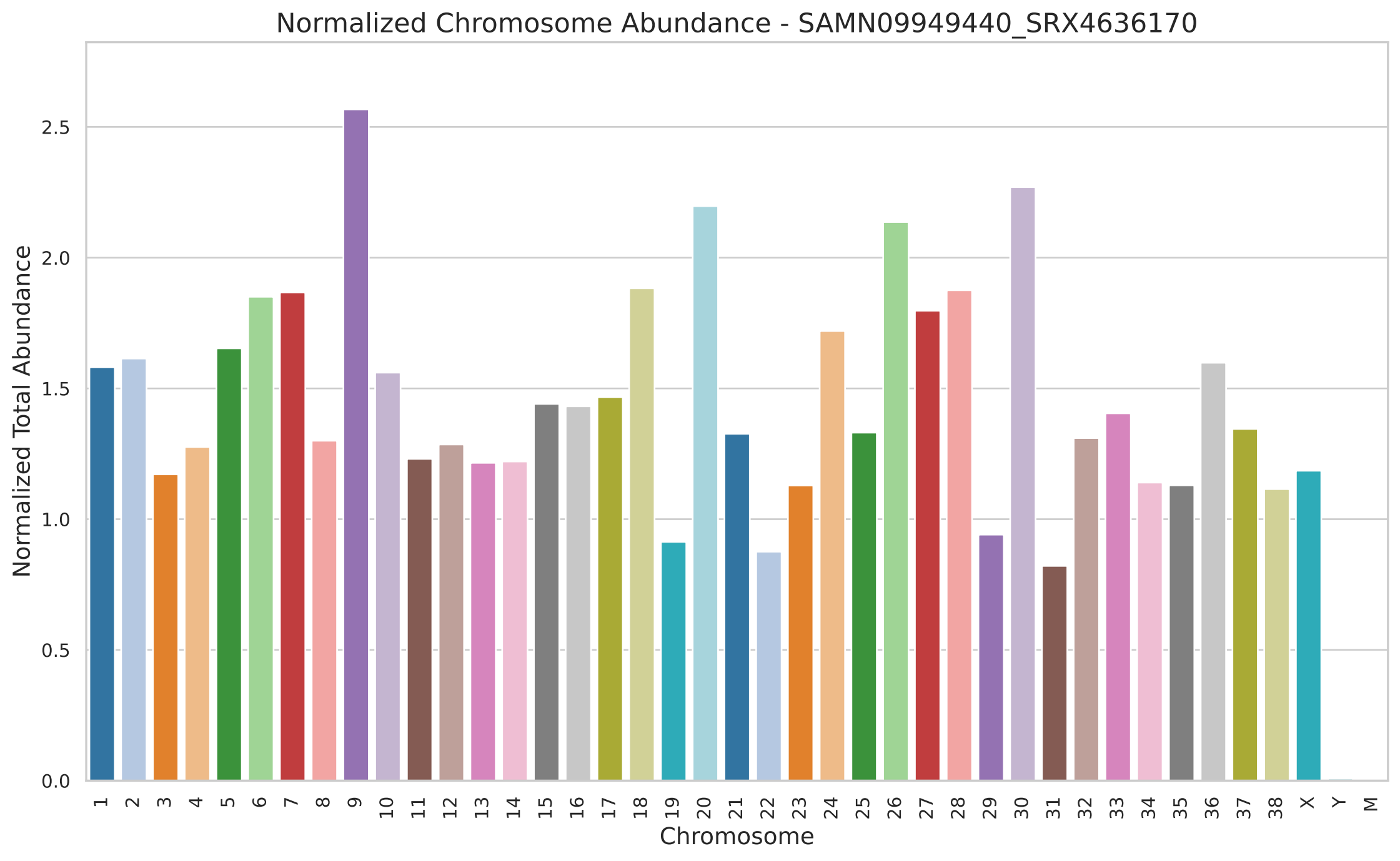

Normalized Chromosome Abundance - SAMN09948248_SRX4636180
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

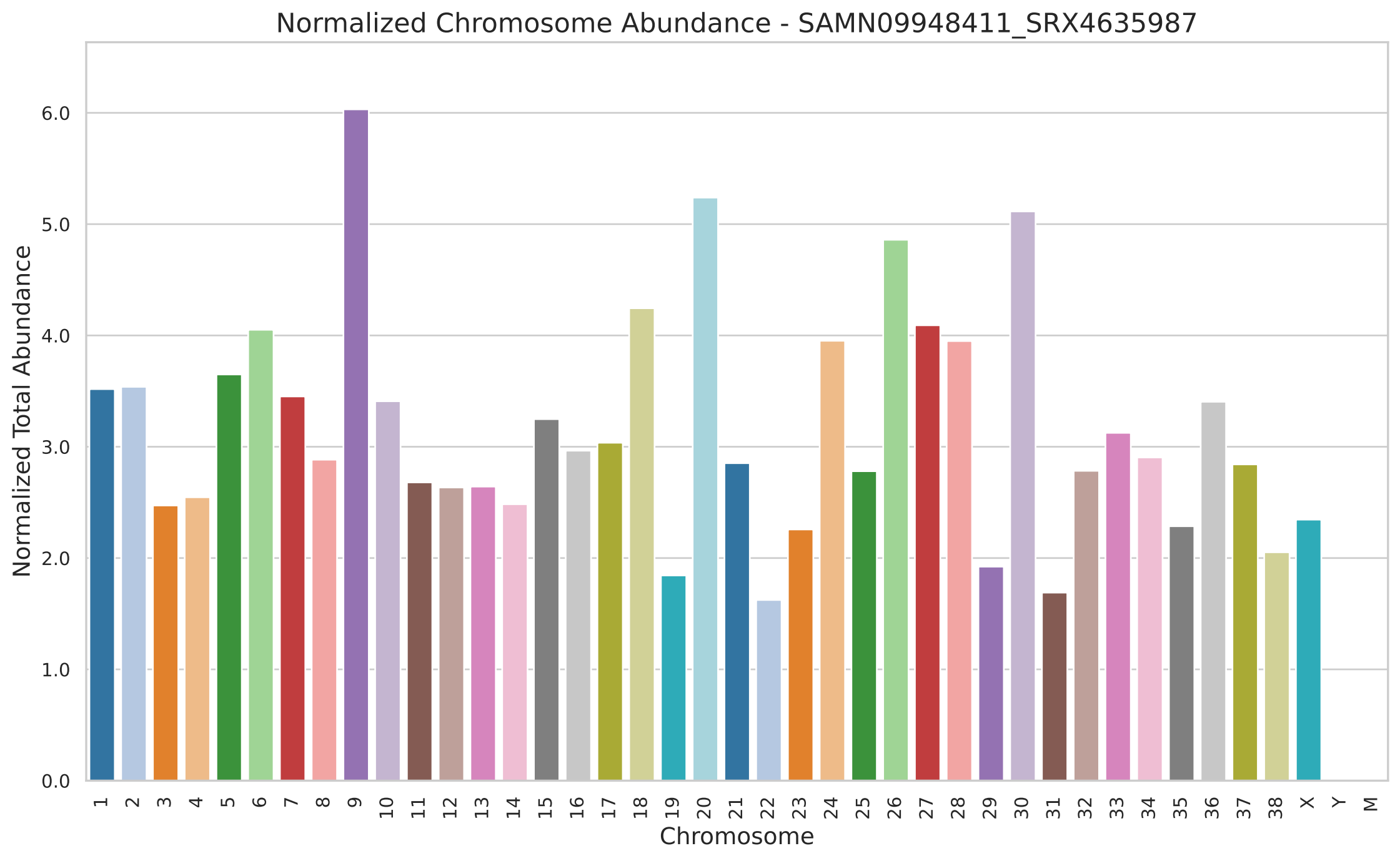

Normalized Chromosome Abundance - SAMN09948303_SRX4636158
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

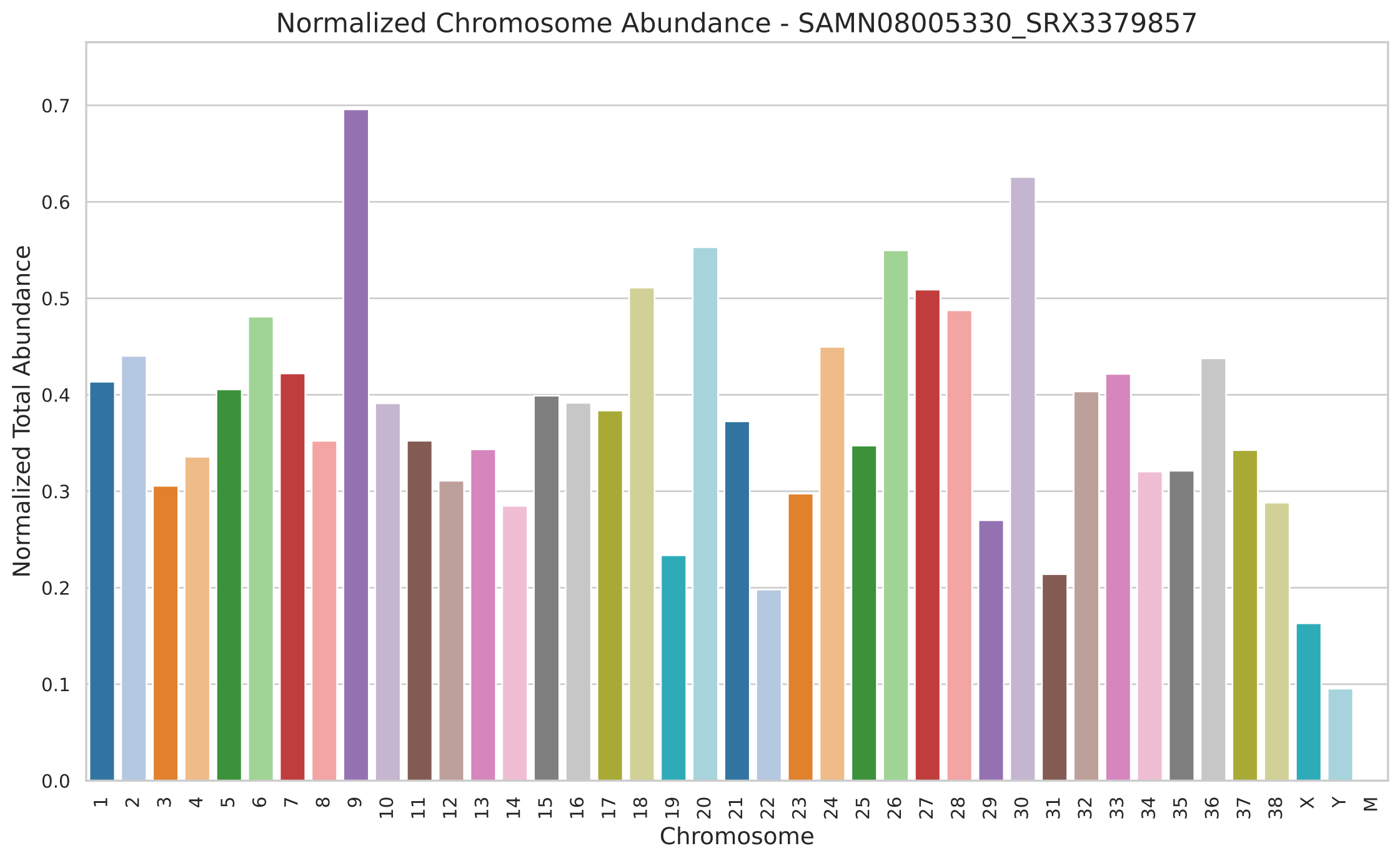

Normalized Chromosome Abundance - SAMN08005296_SRX3379850
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

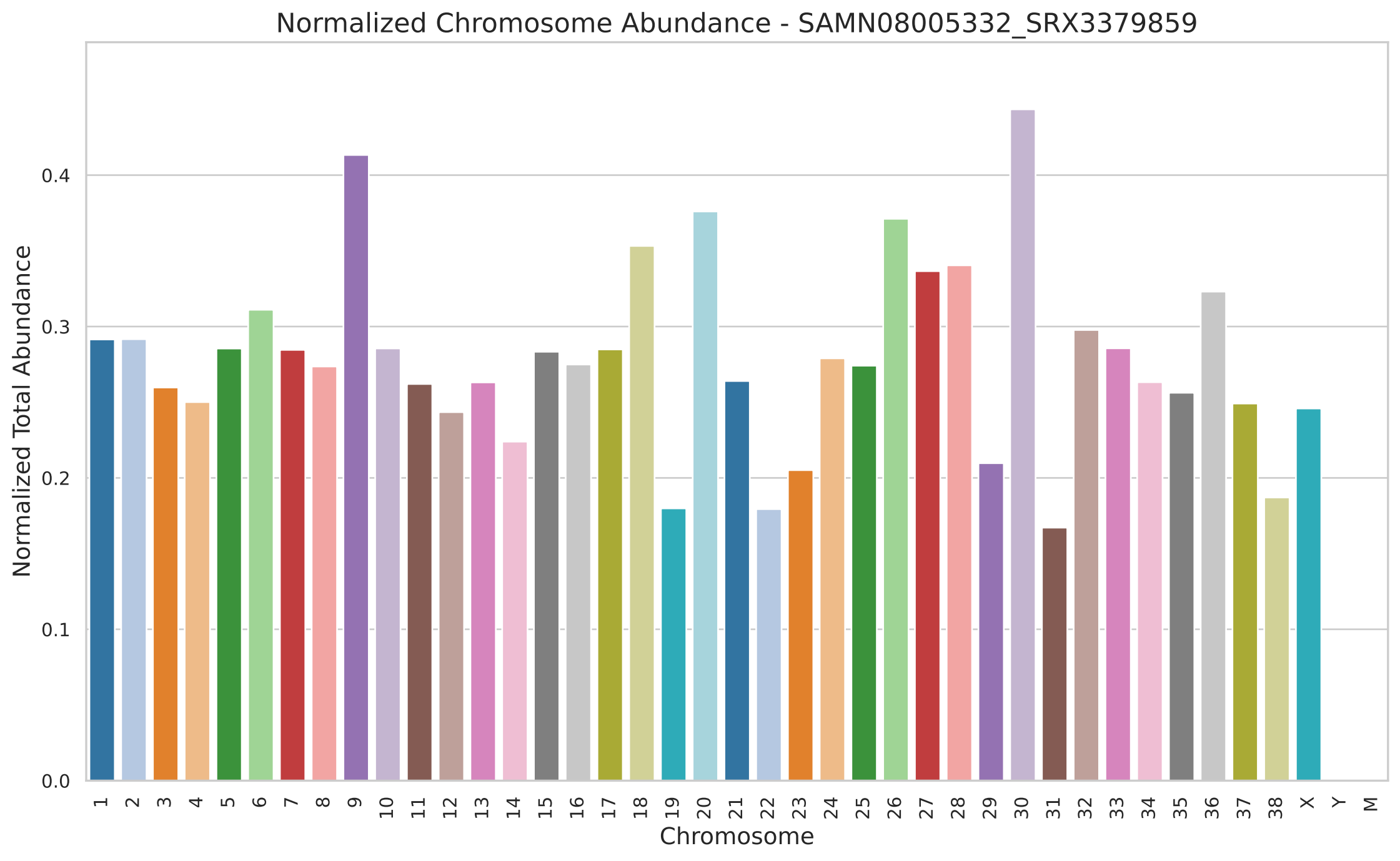

Normalized Chromosome Abundance - SAMN08005333_SRX3379858
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

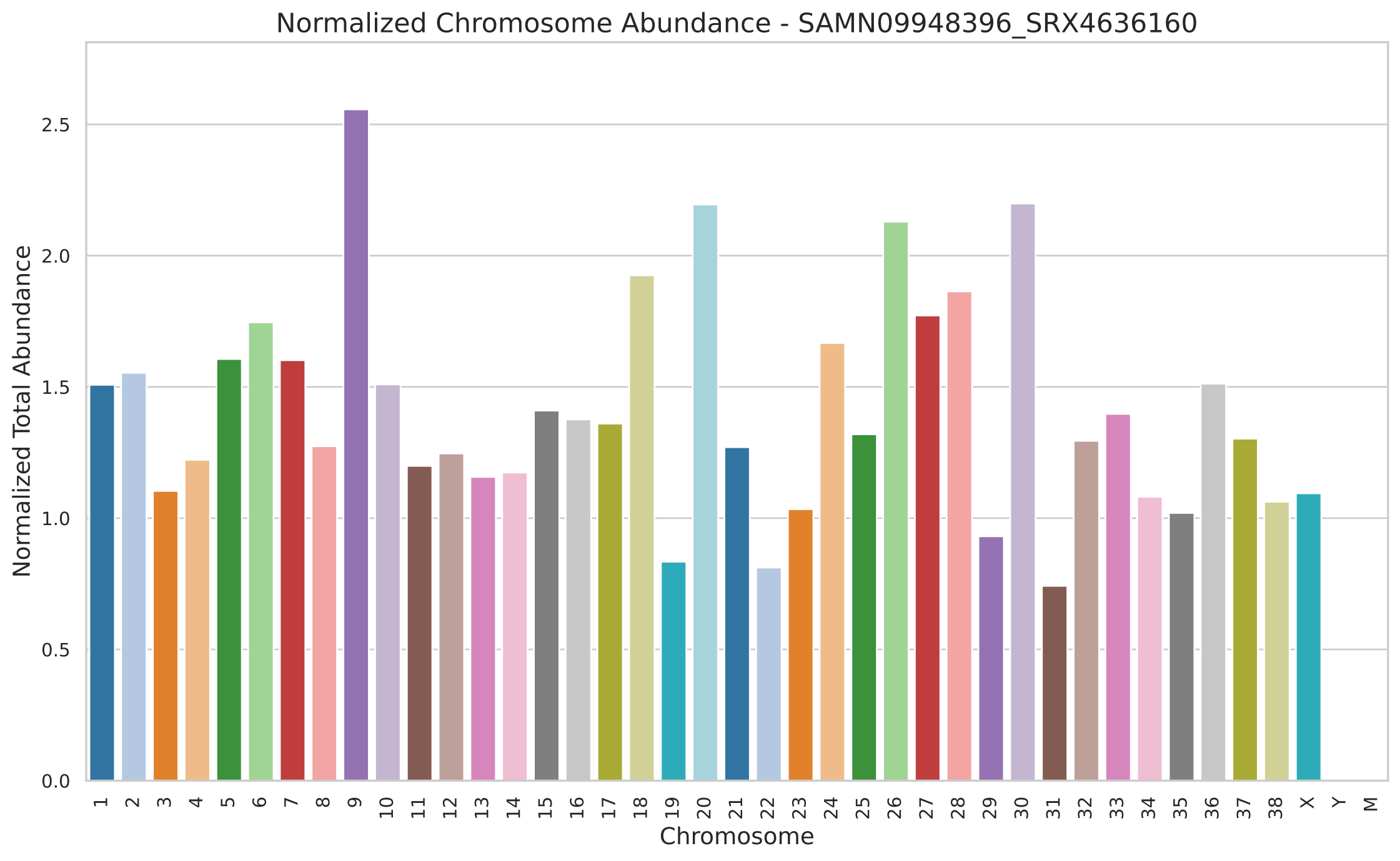

Normalized Chromosome Abundance - SAMN08005331_SRX3379856
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

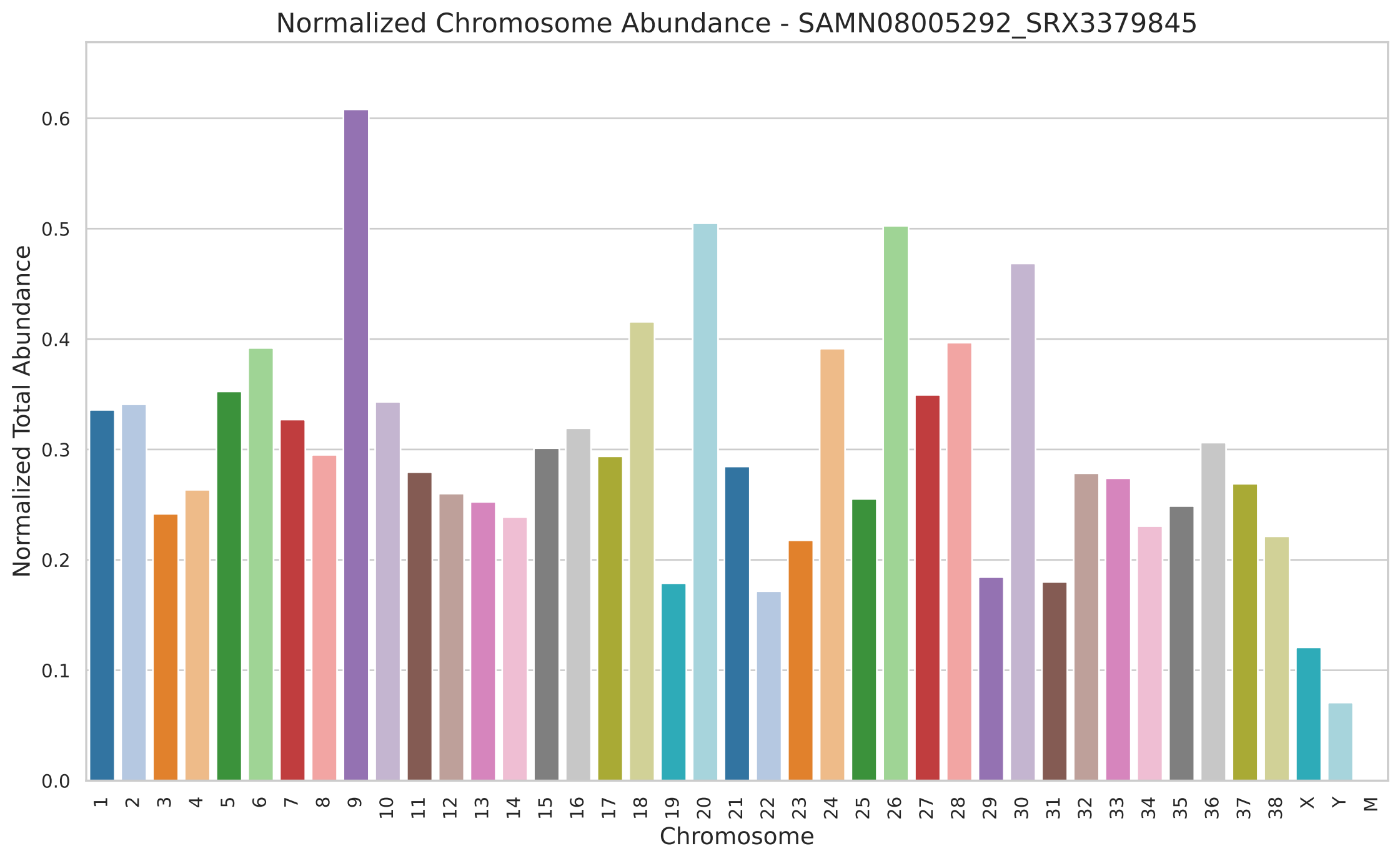

Normalized Chromosome Abundance - SAMN09949440_SRX4636170
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

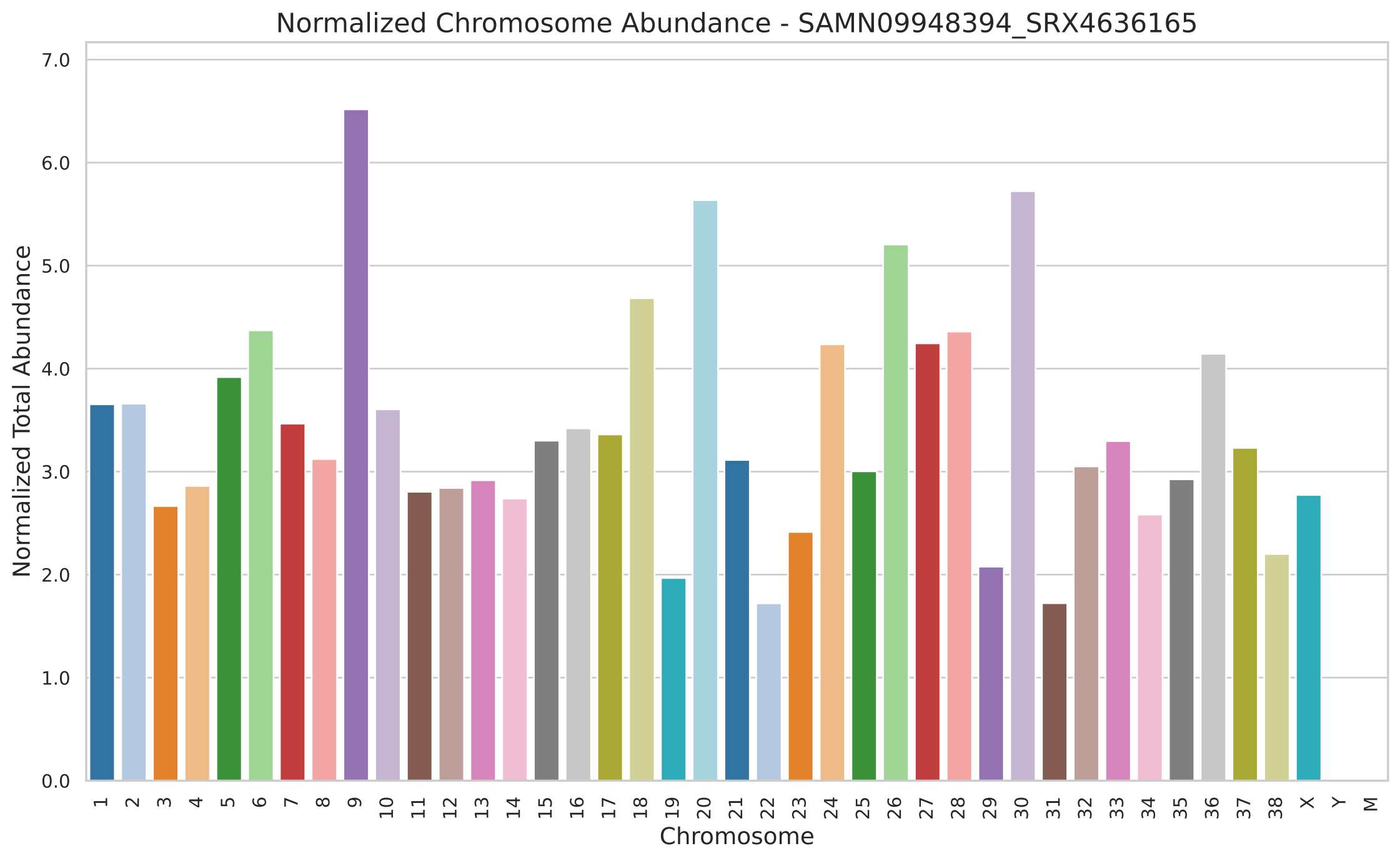

Normalized Chromosome Abundance - SAMN09948411_SRX4635987
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

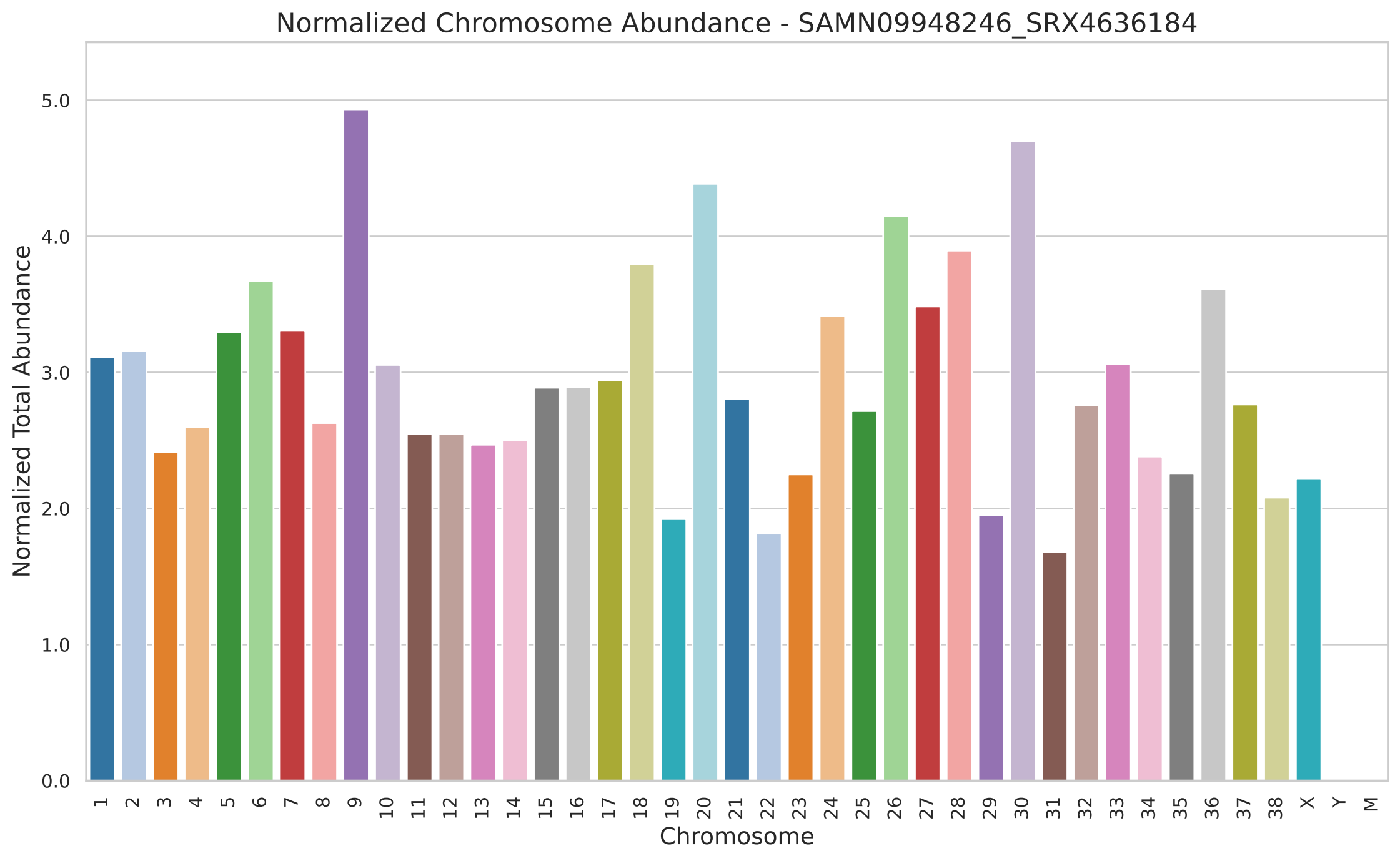

Normalized Chromosome Abundance - SAMN08005330_SRX3379857
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

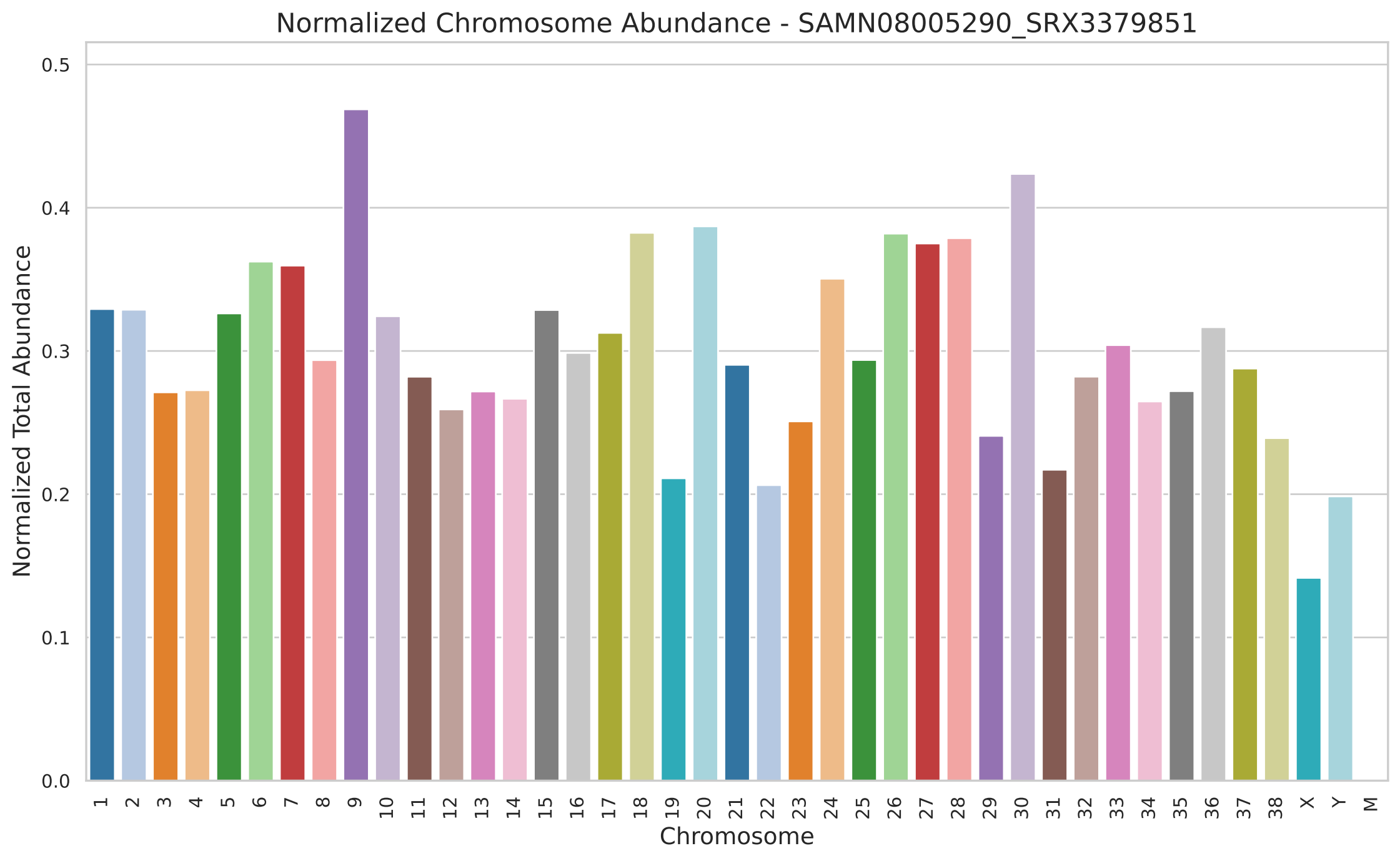

Normalized Chromosome Abundance - SAMN08005332_SRX3379859
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

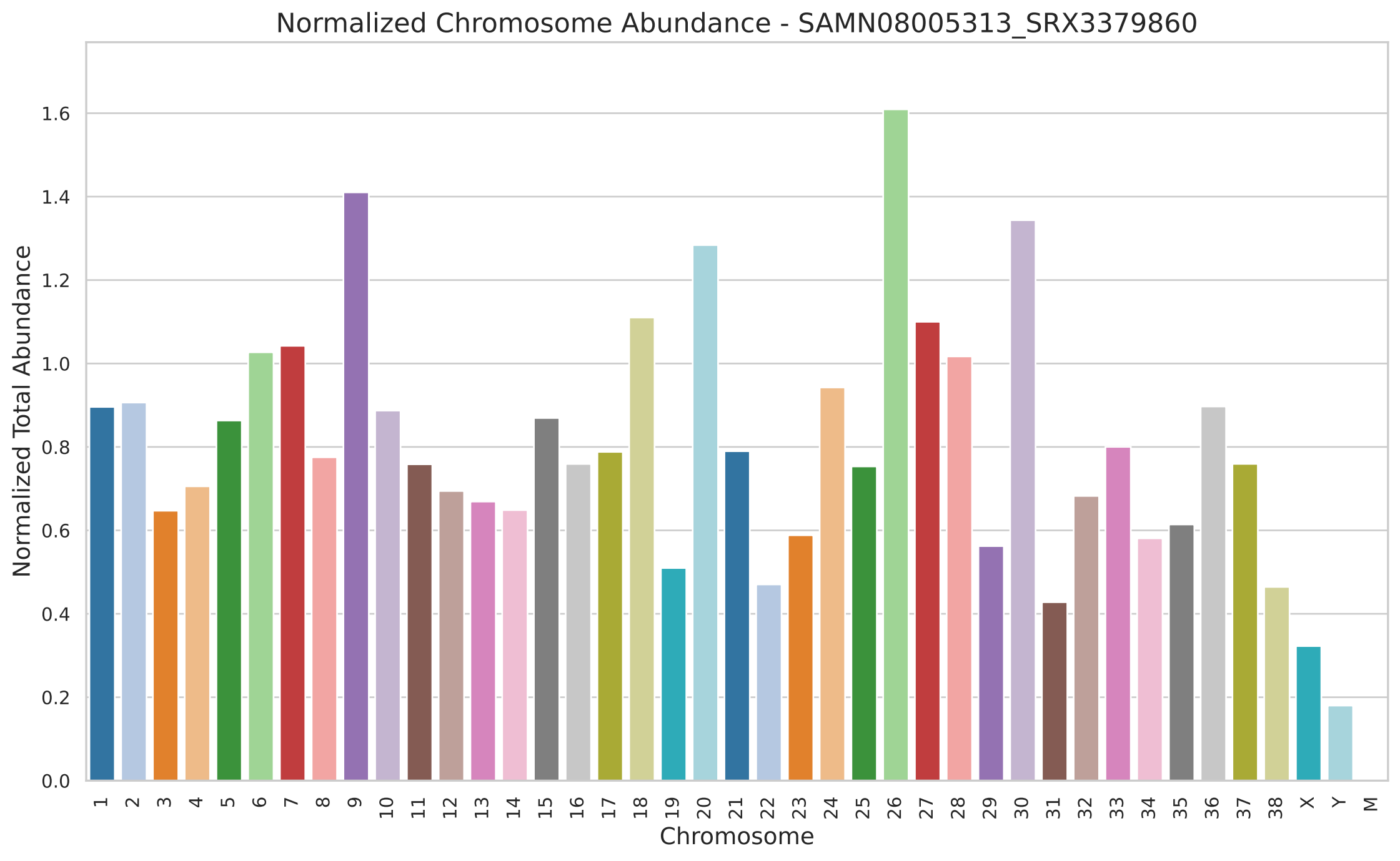

Normalized Chromosome Abundance - SAMN09948396_SRX4636160
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

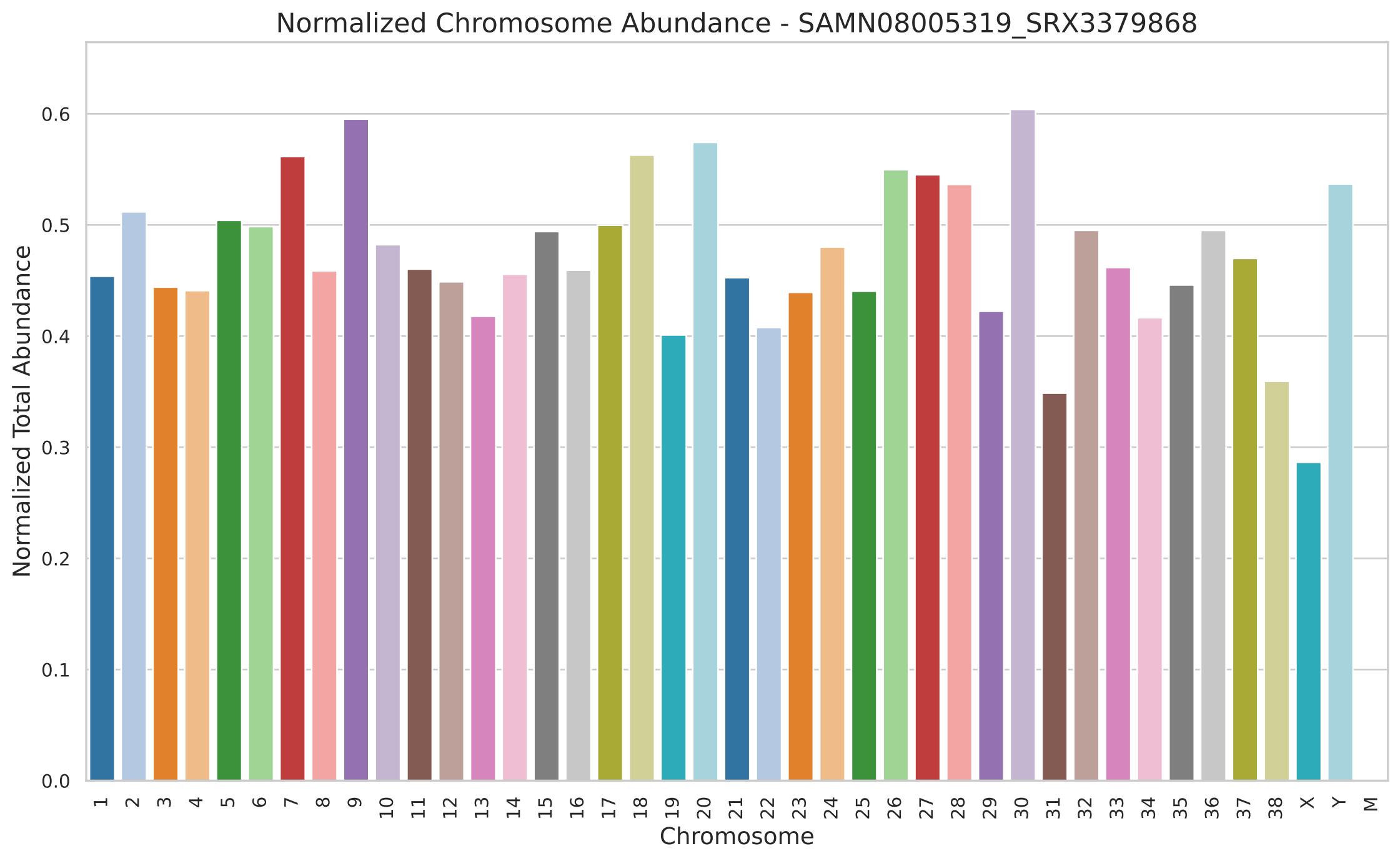

Normalized Chromosome Abundance - SAMN08005292_SRX3379845
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

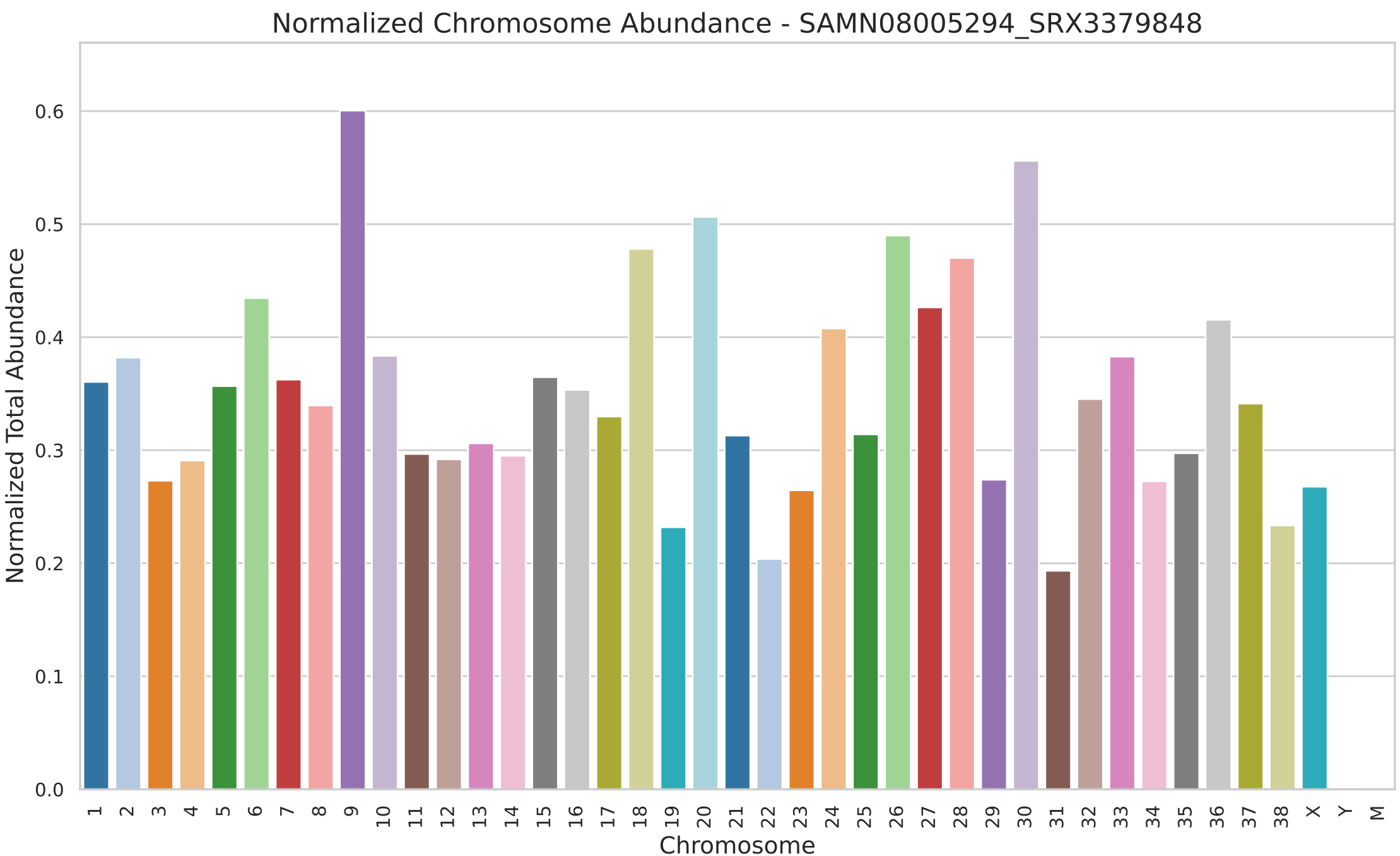

Normalized Chromosome Abundance - SAMN09948394_SRX4636165
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

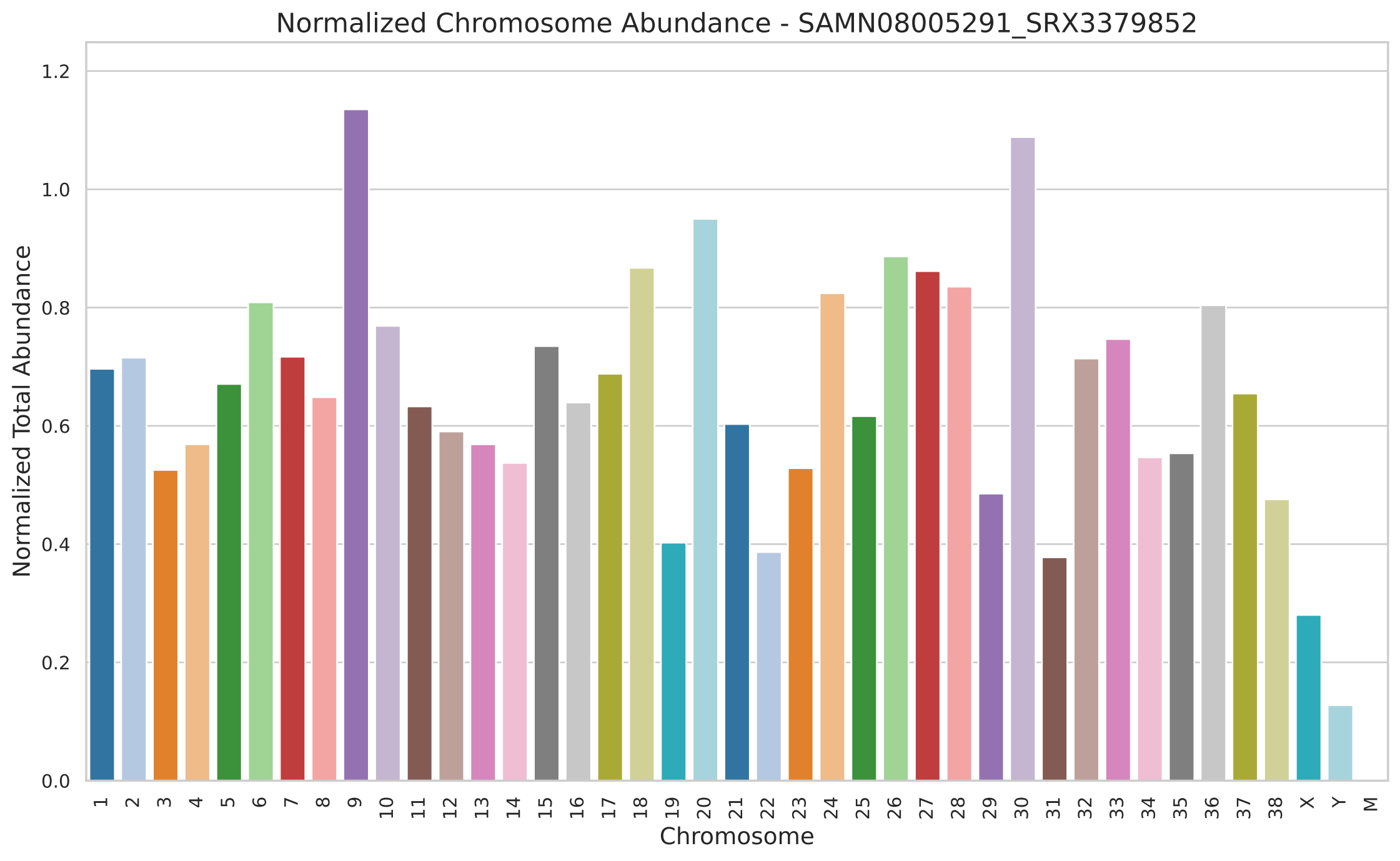

Normalized Chromosome Abundance - SAMN09948246_SRX4636184
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

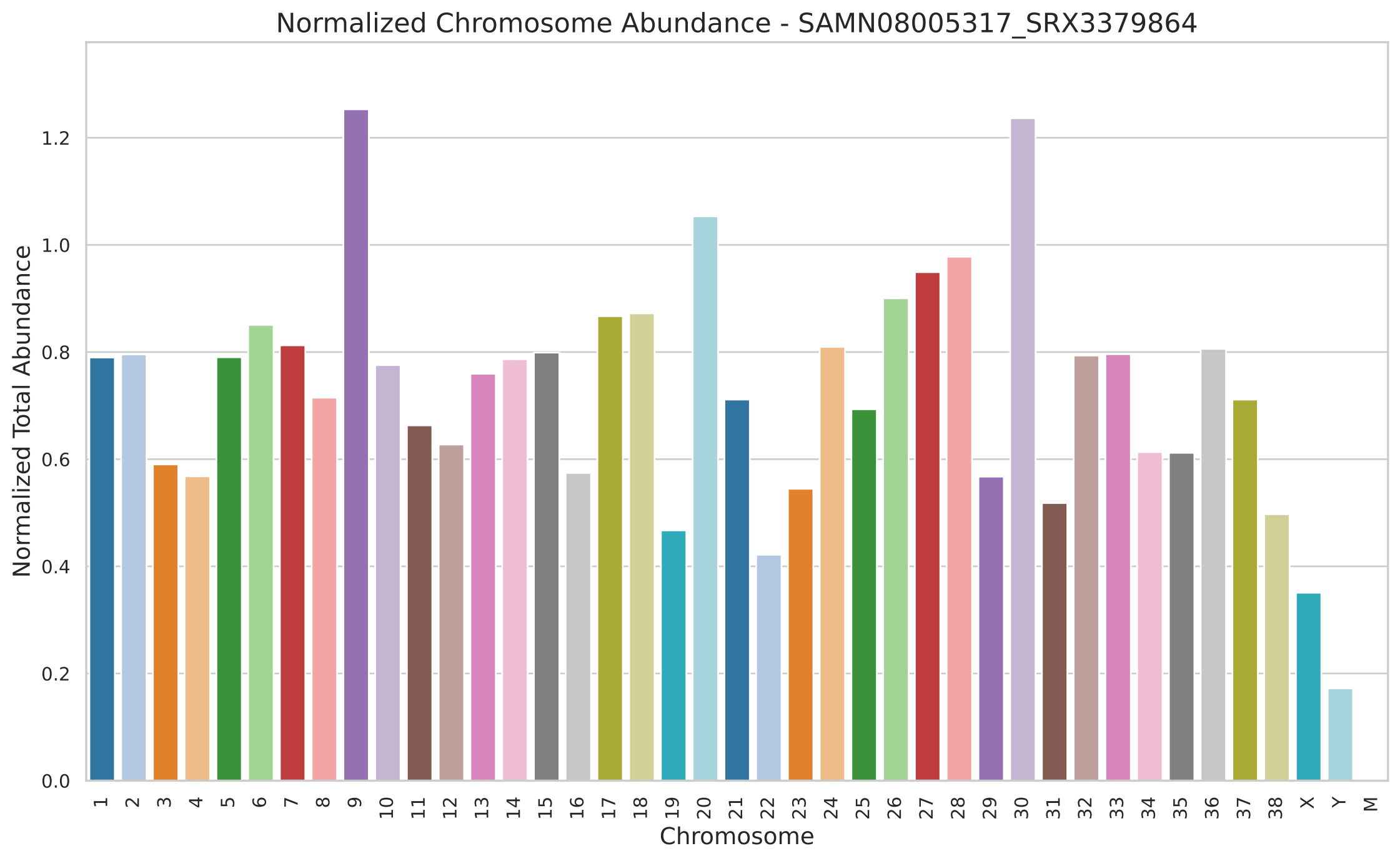

Normalized Chromosome Abundance - SAMN08005290_SRX3379851
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

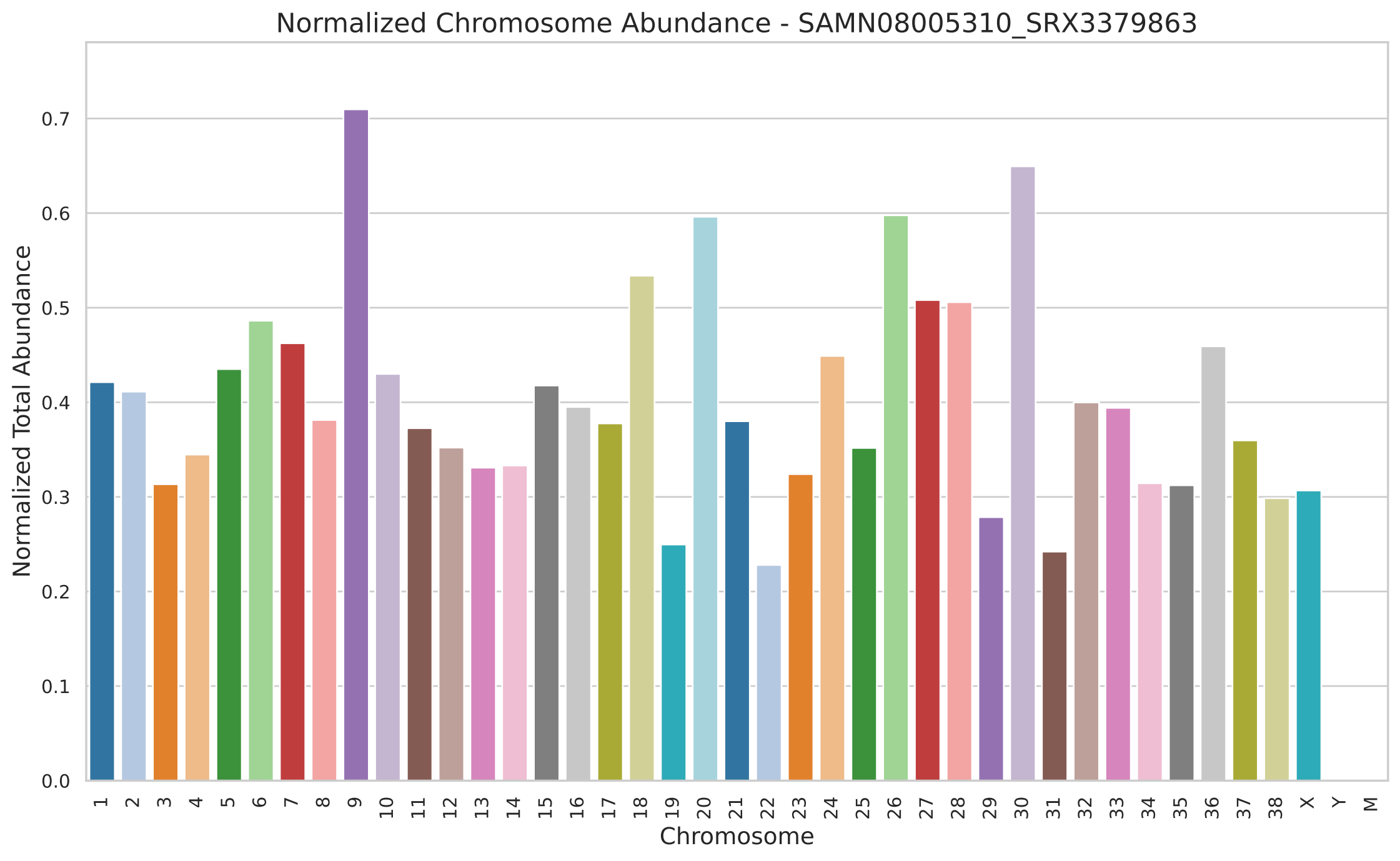

Normalized Chromosome Abundance - SAMN08005313_SRX3379860
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

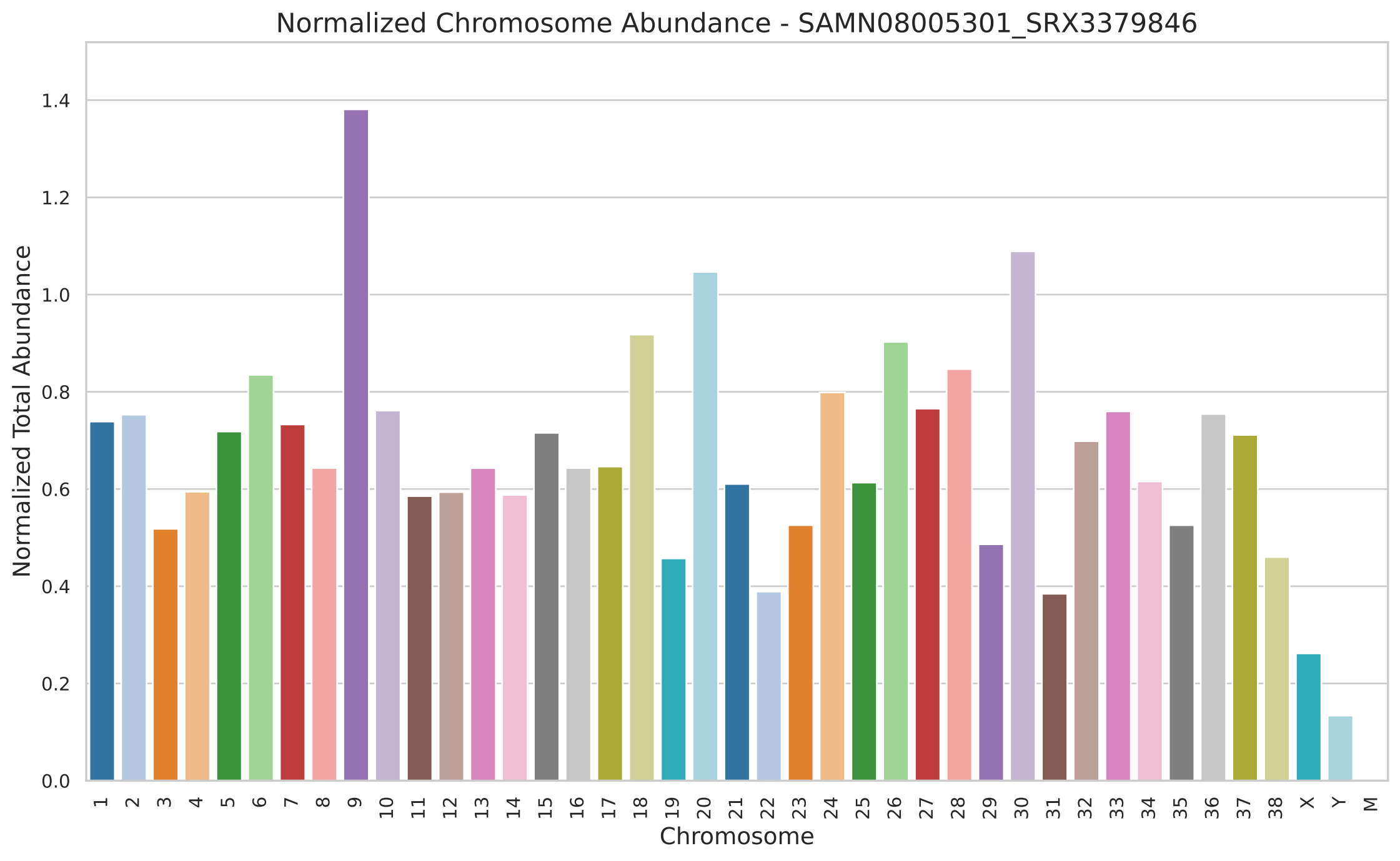

Normalized Chromosome Abundance - SAMN08005319_SRX3379868
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

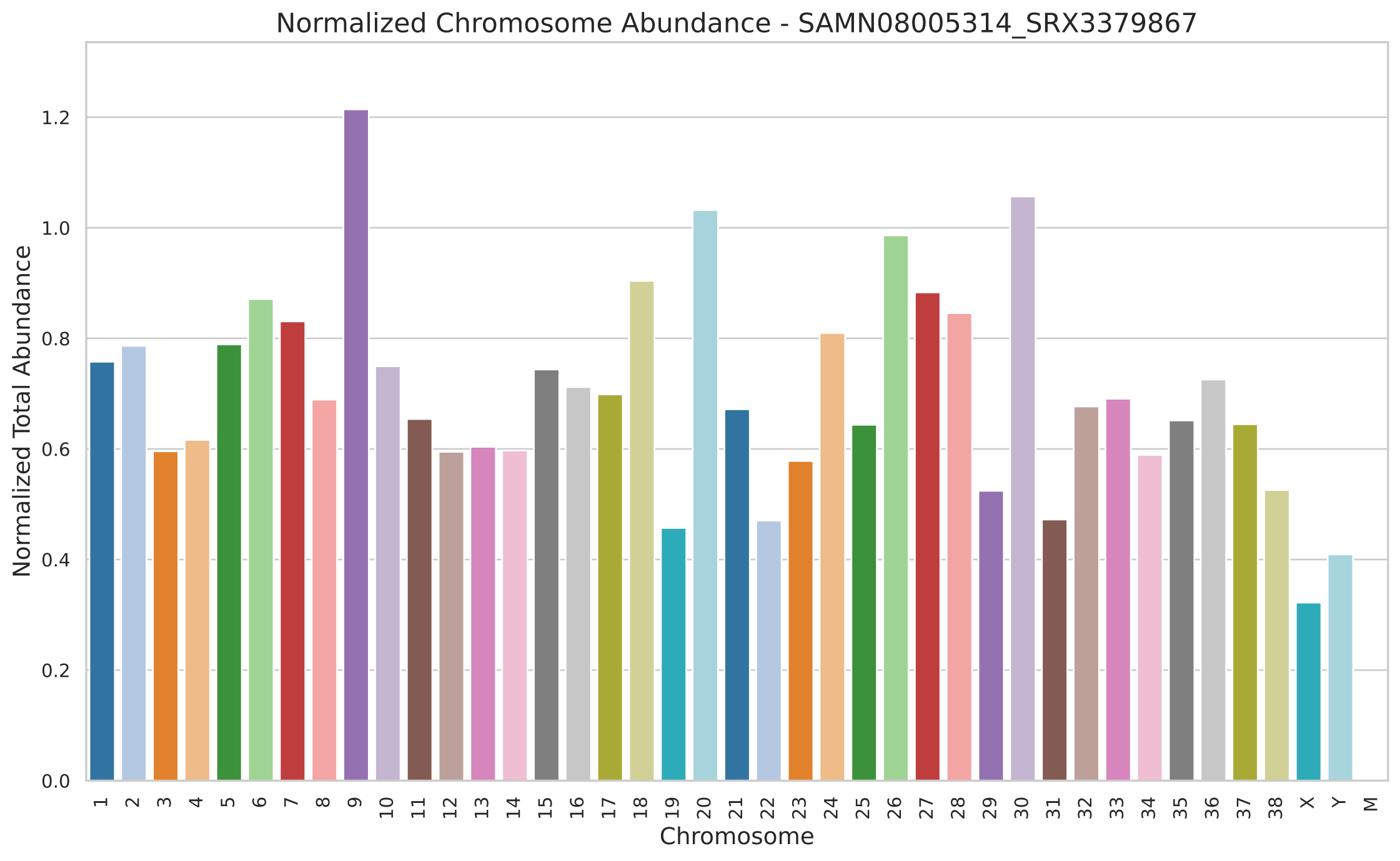

Normalized Chromosome Abundance - SAMN08005294_SRX3379848
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

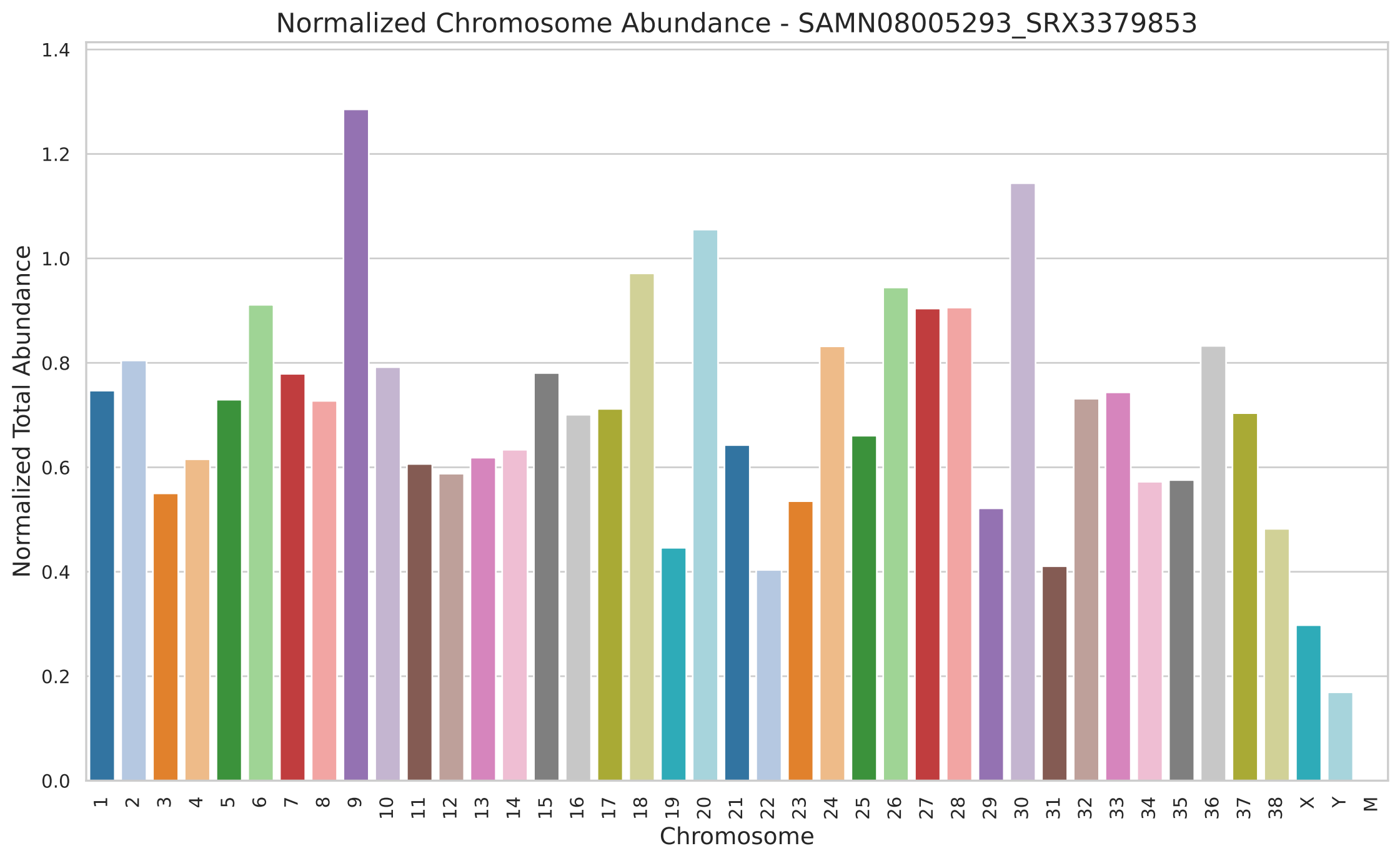

Normalized Chromosome Abundance - SAMN08005291_SRX3379852
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

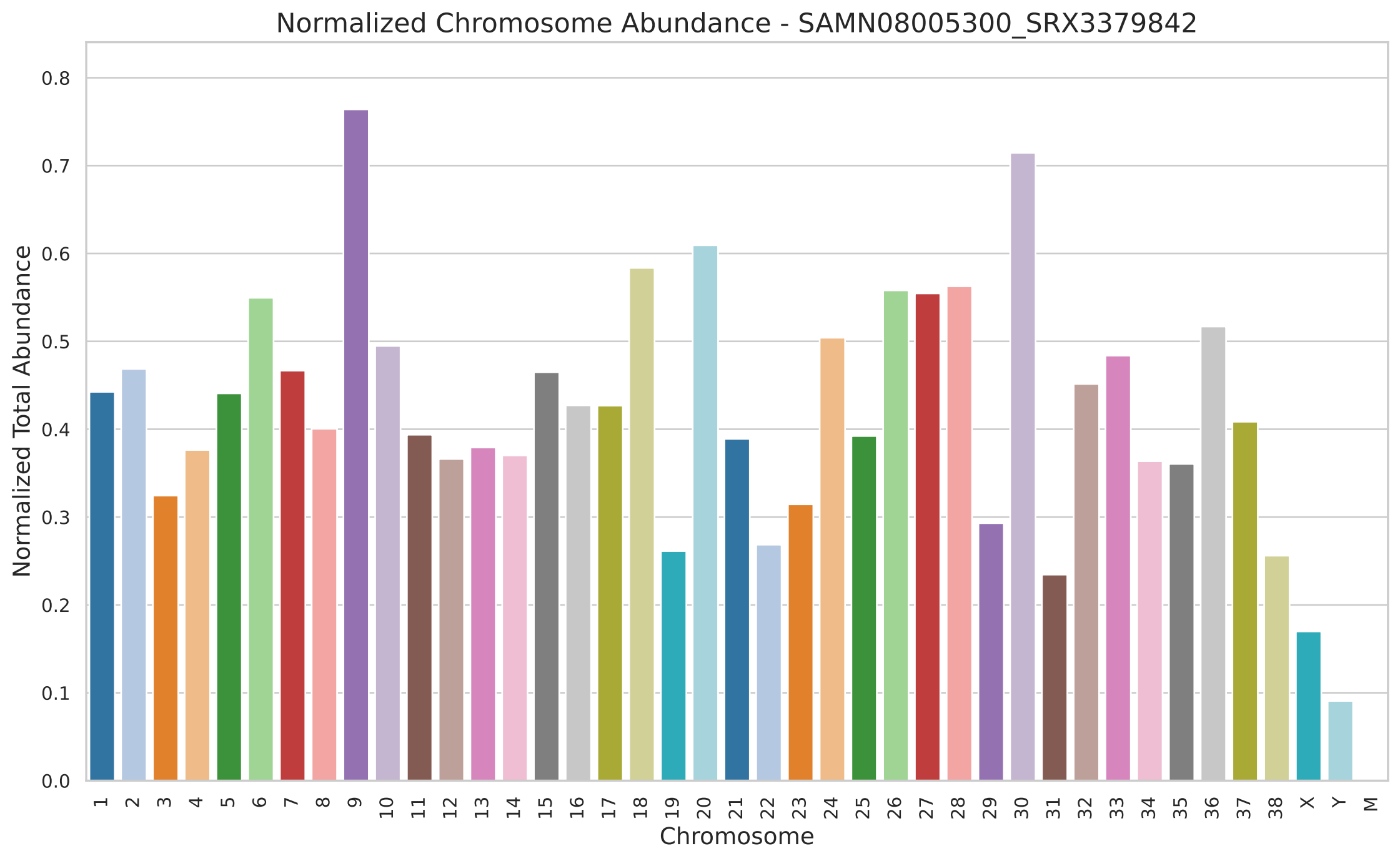

Normalized Chromosome Abundance - SAMN08005317_SRX3379864
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

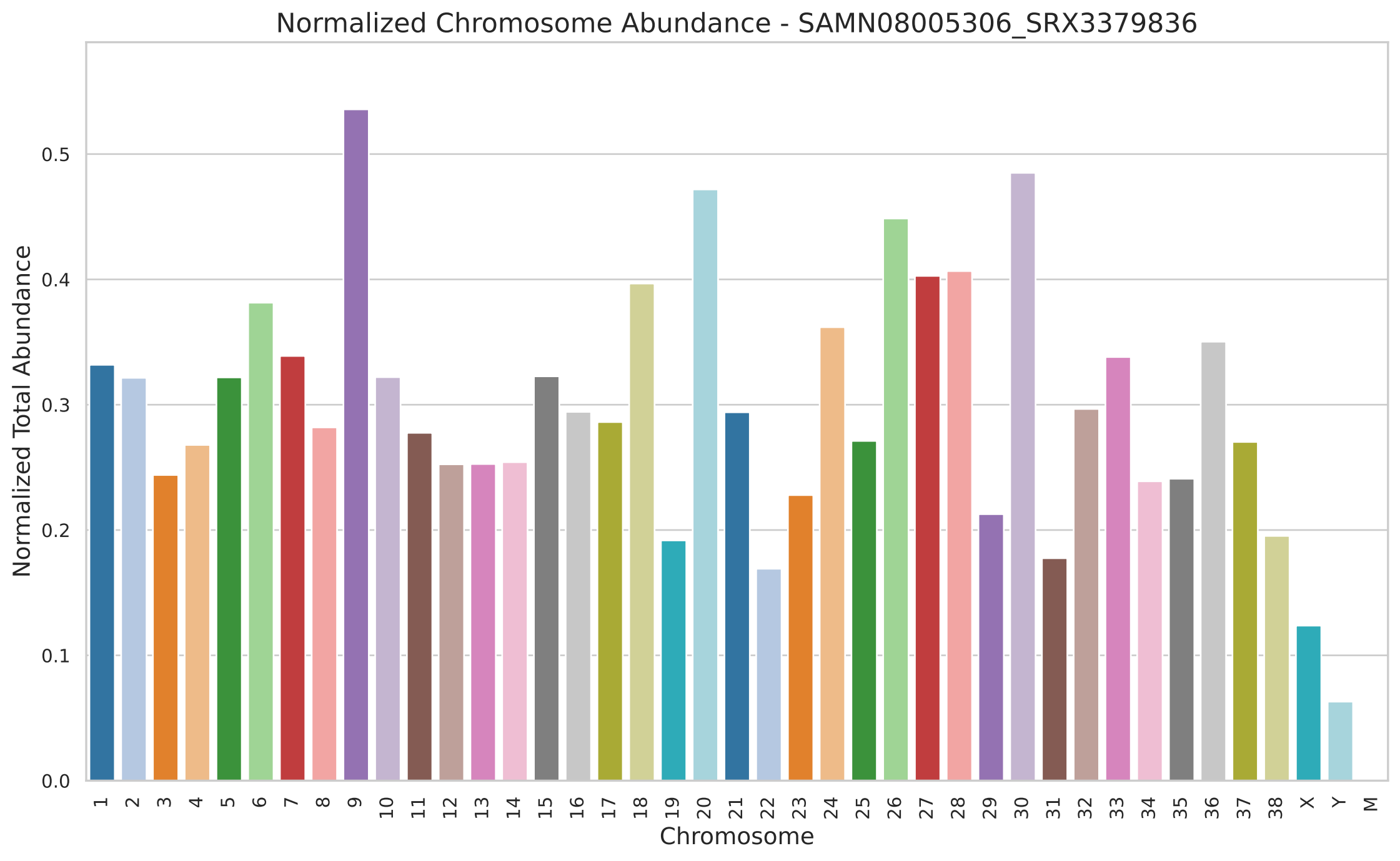

Normalized Chromosome Abundance - SAMN08005310_SRX3379863
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

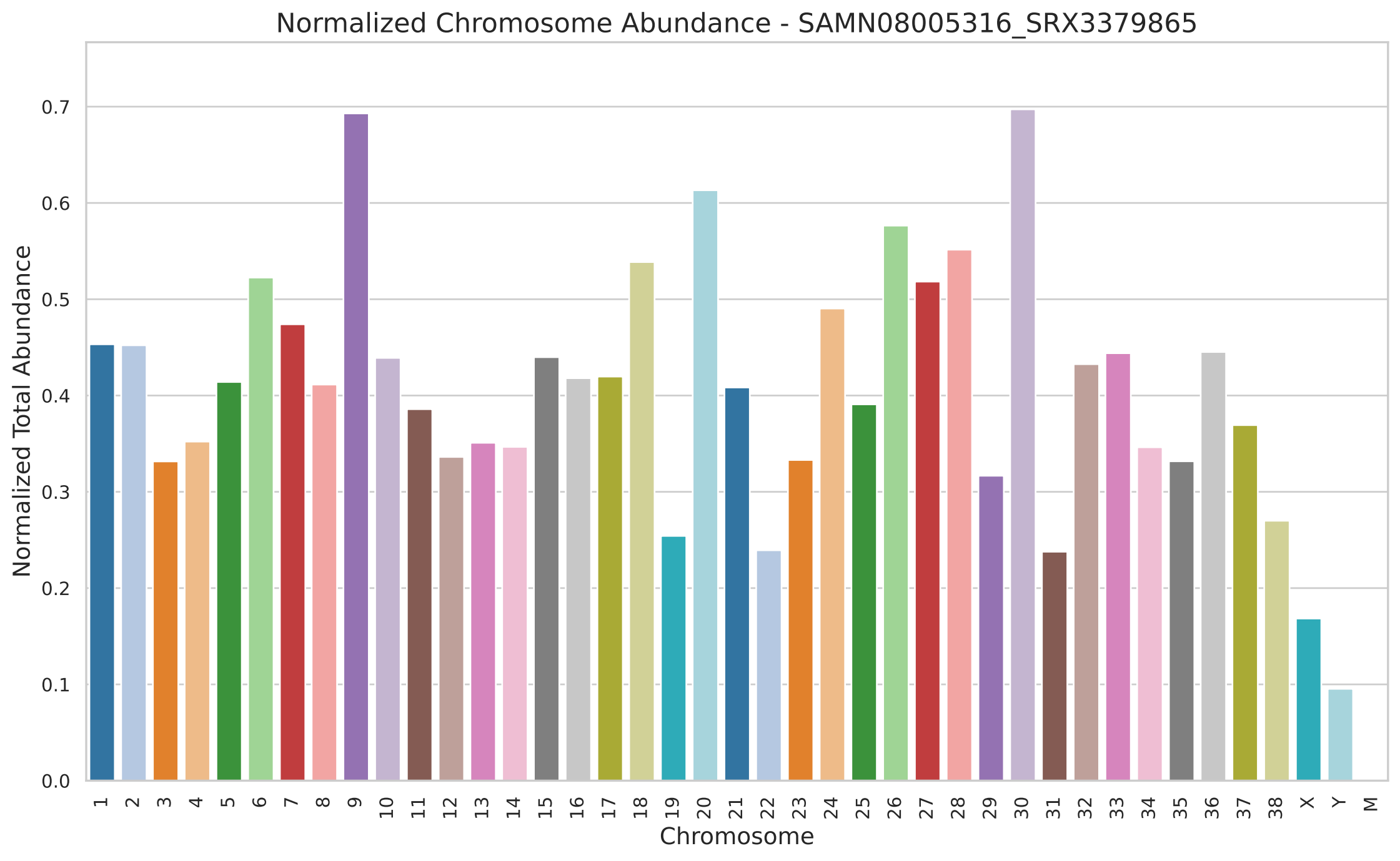

Normalized Chromosome Abundance - SAMN08005301_SRX3379846
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

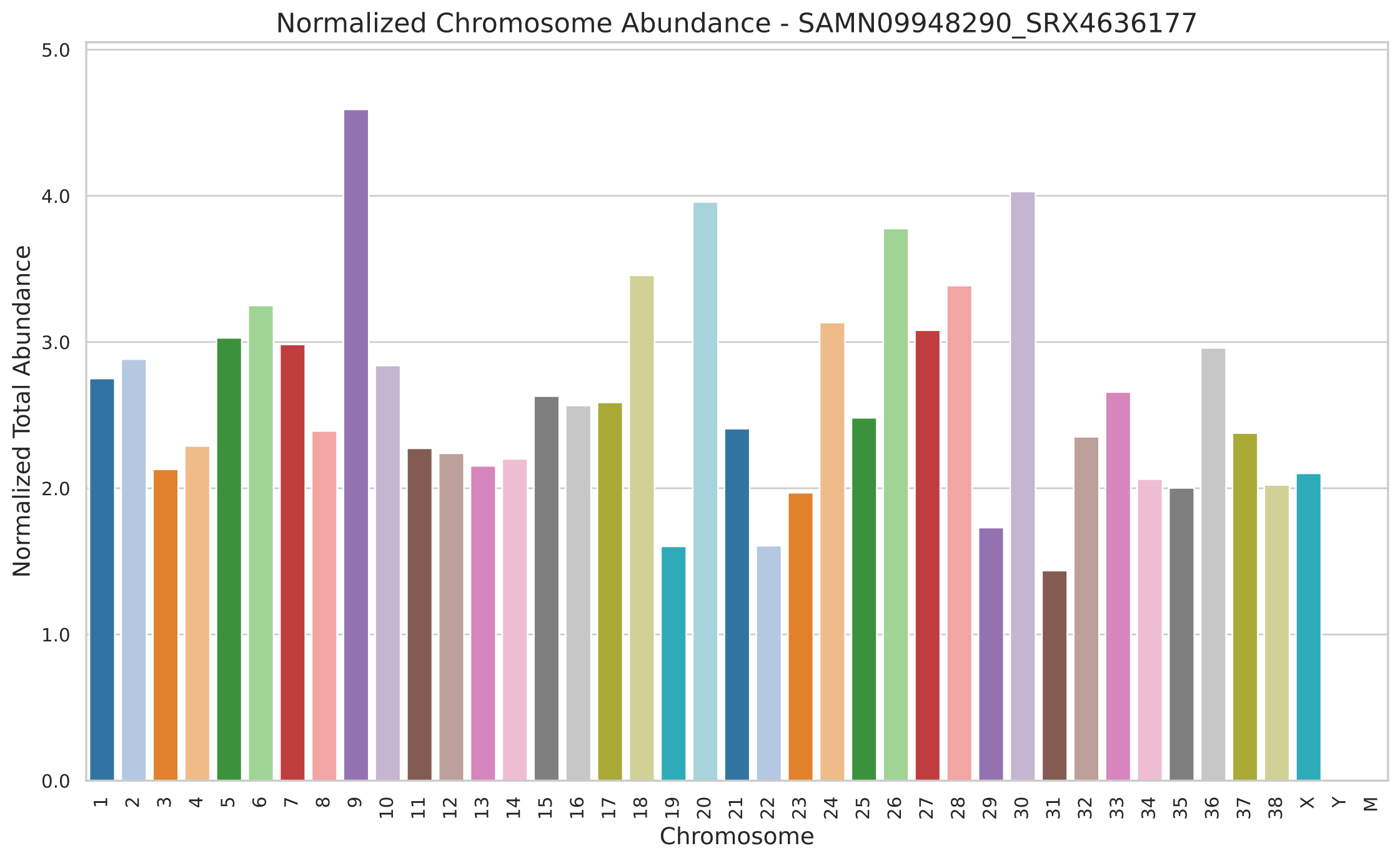

Normalized Chromosome Abundance - SAMN08005314_SRX3379867
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

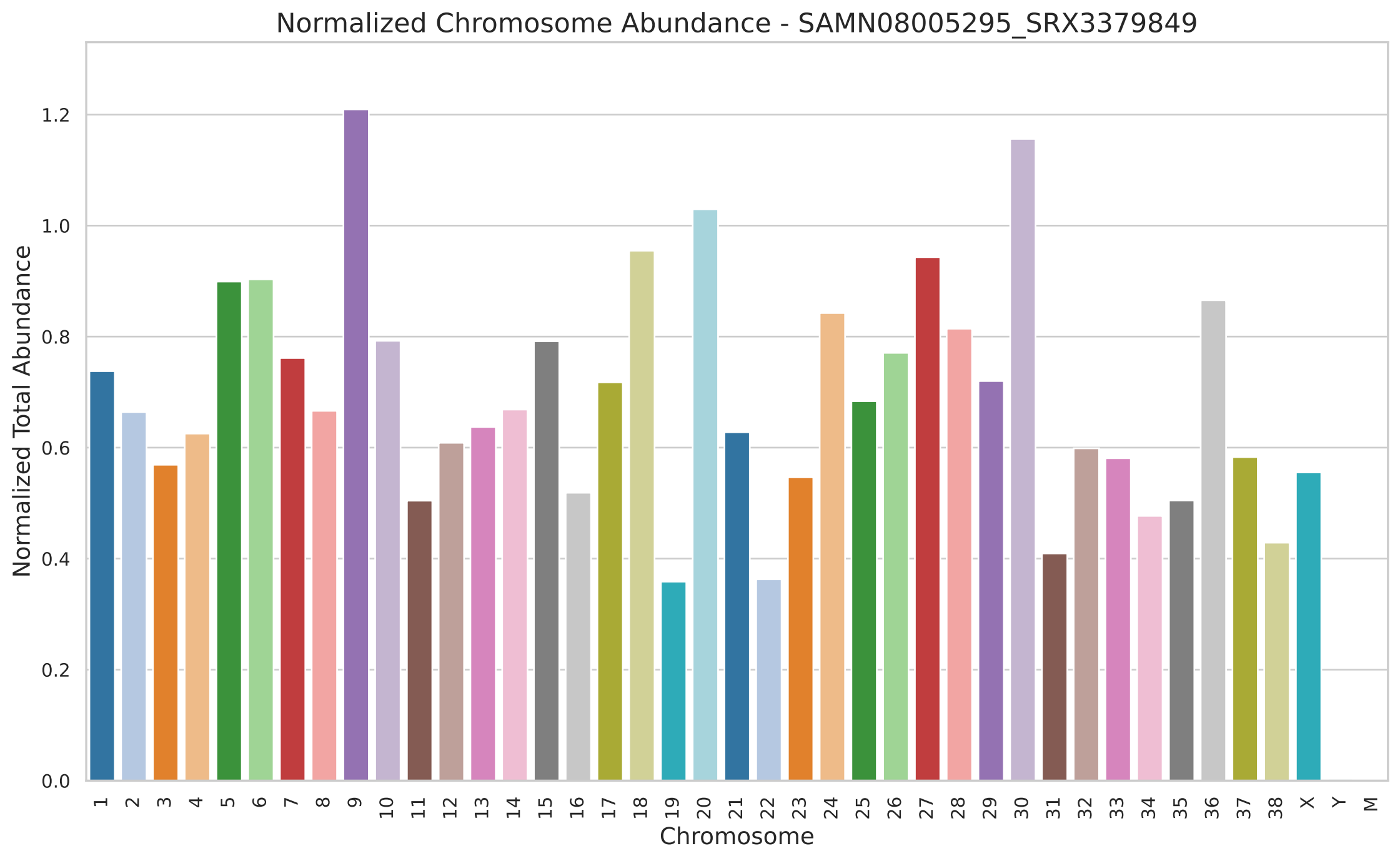

Normalized Chromosome Abundance - SAMN08005293_SRX3379853
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

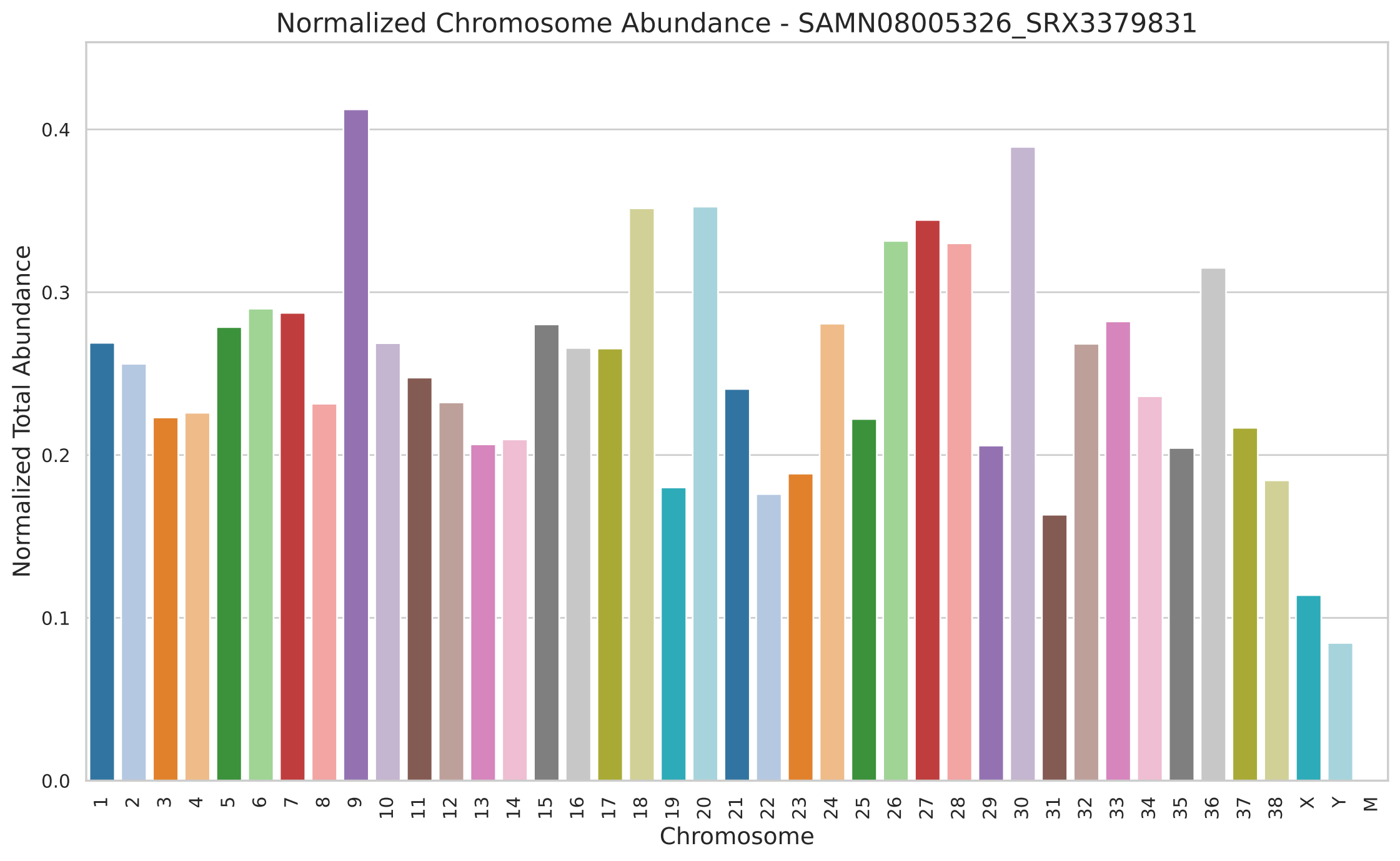

Normalized Chromosome Abundance - SAMN08005300_SRX3379842
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

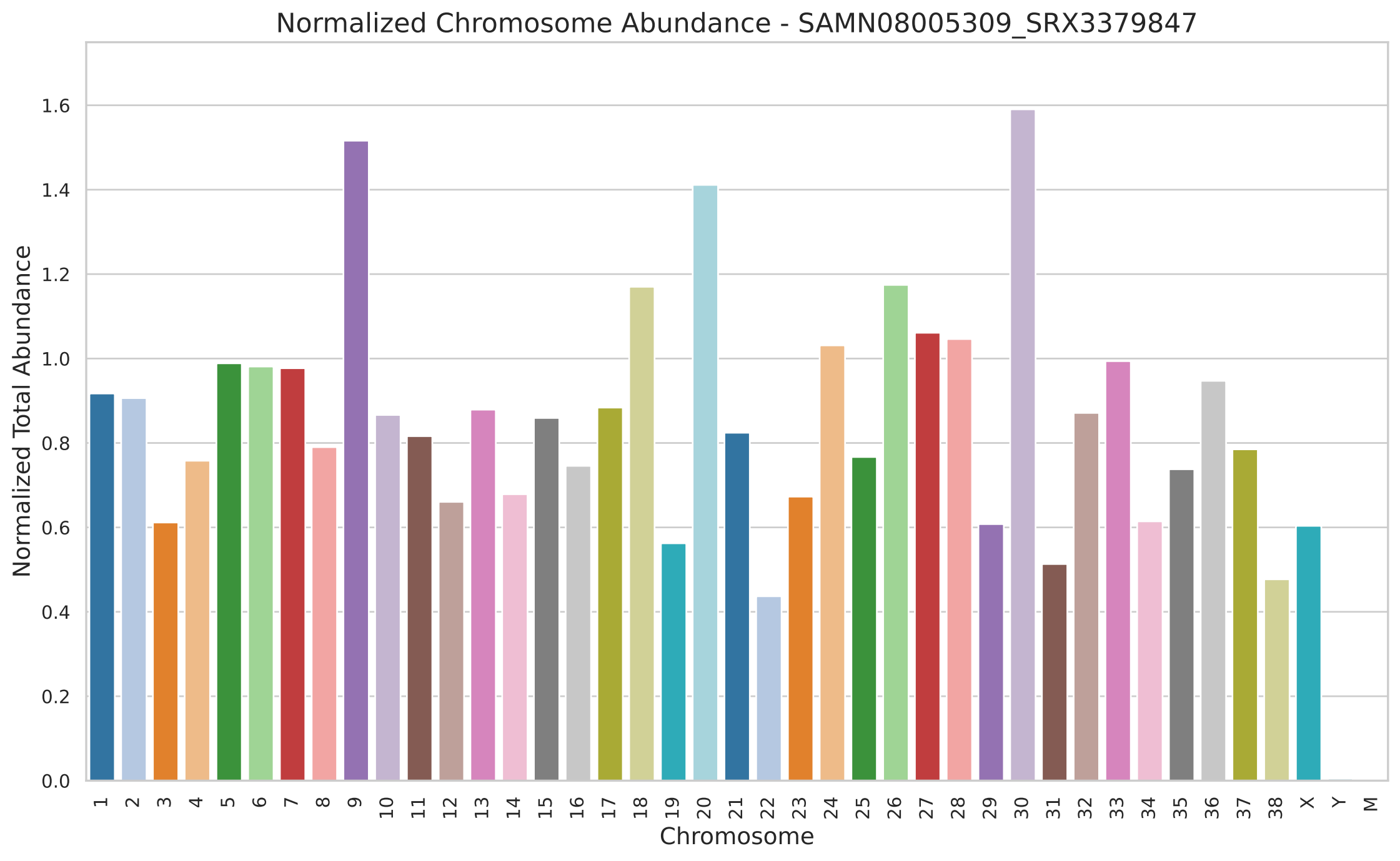

Normalized Chromosome Abundance - SAMN08005306_SRX3379836
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

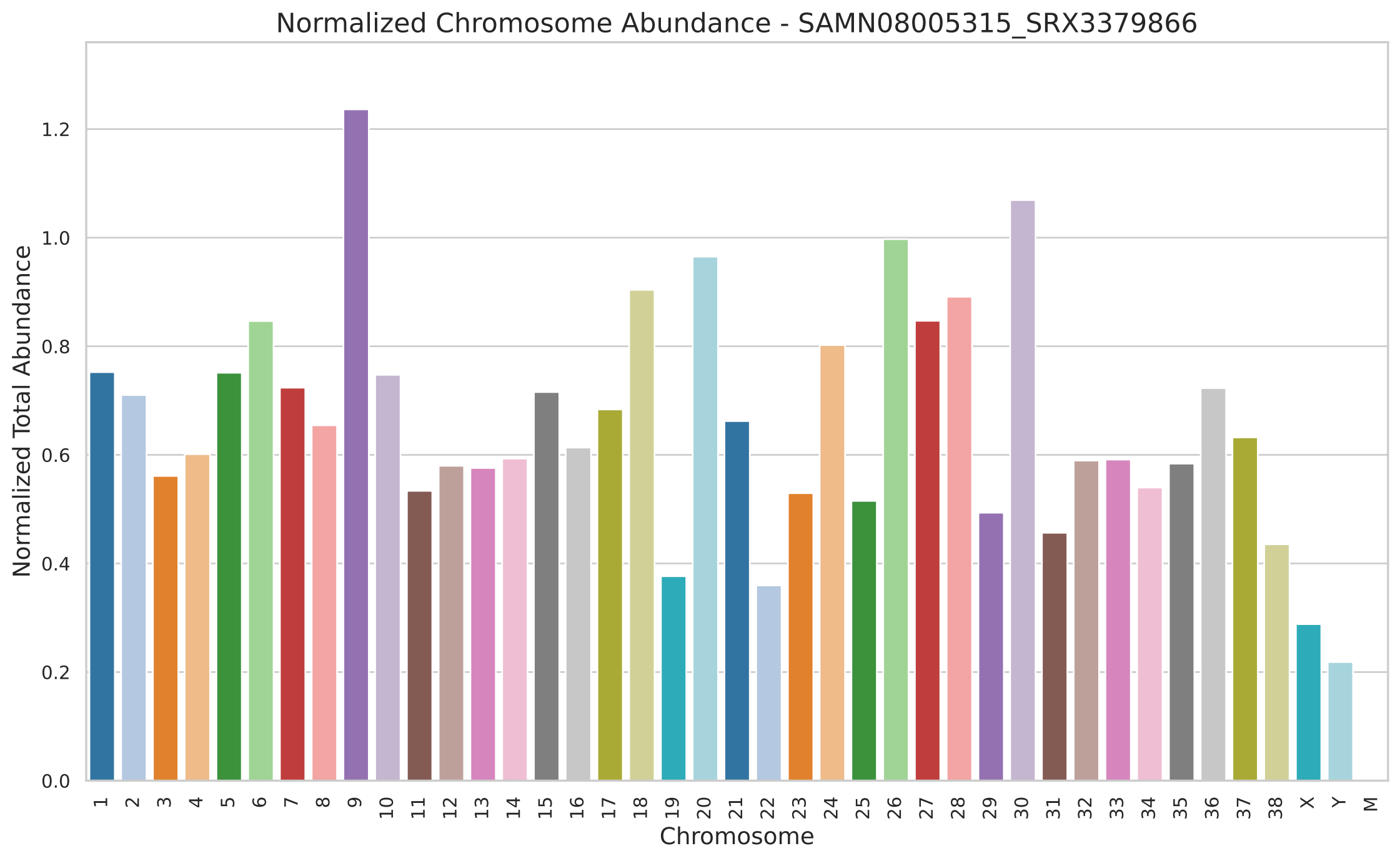

Normalized Chromosome Abundance - SAMN08005316_SRX3379865
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

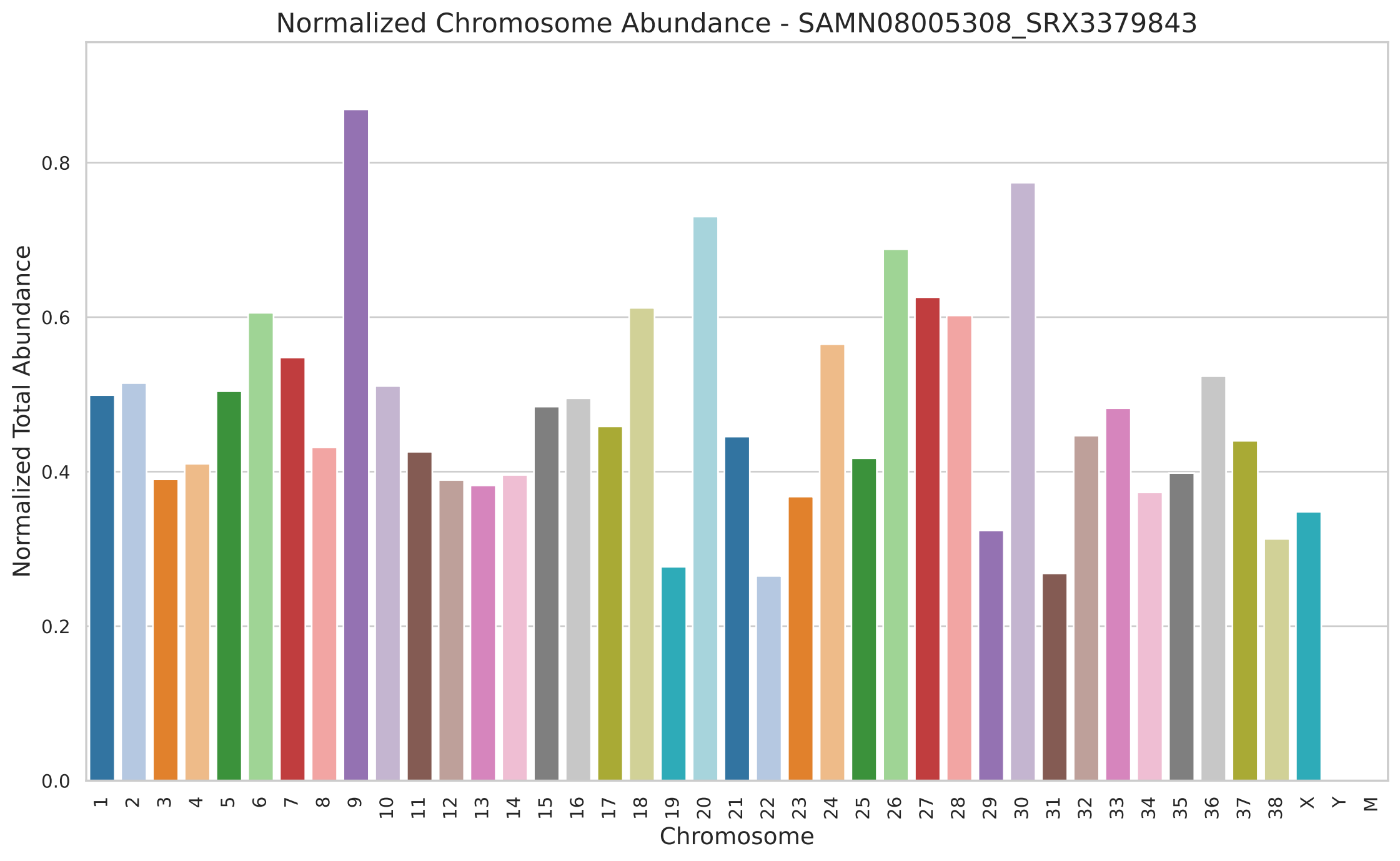

Normalized Chromosome Abundance - SAMN09948290_SRX4636177
Normalized Total Abundance
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

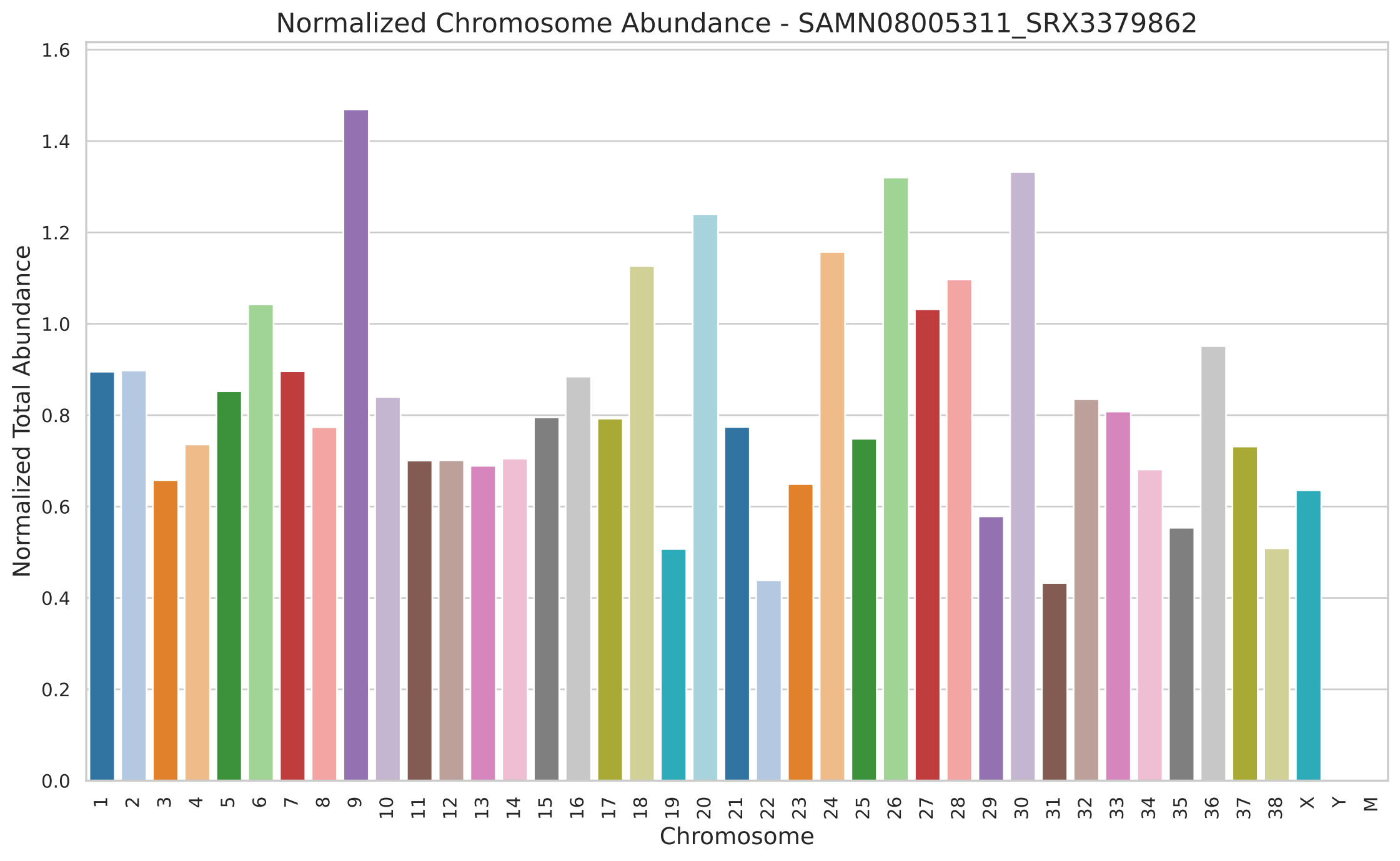

Normalized Chromosome Abundance - SAMN08005295_SRX3379849
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

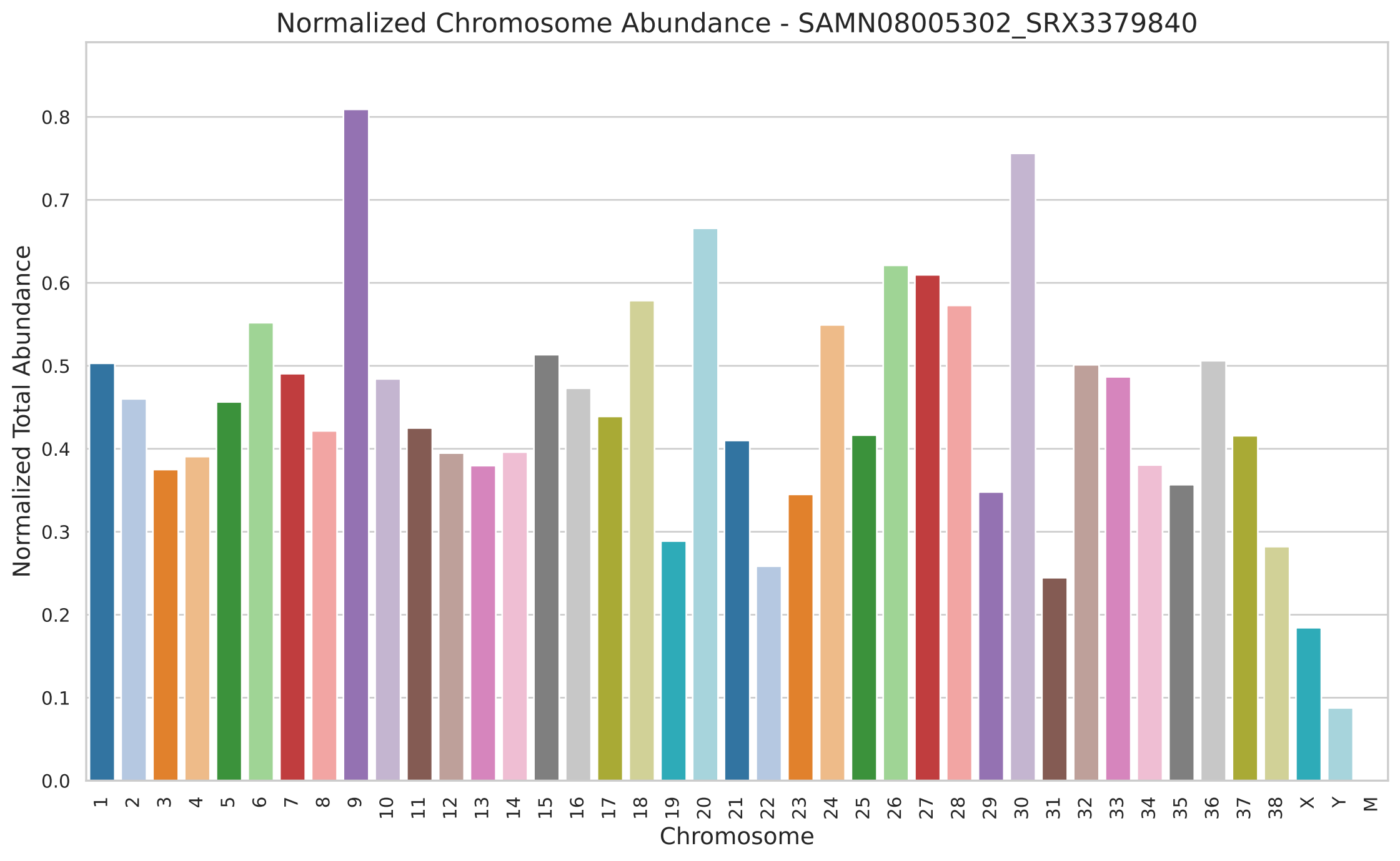

Normalized Chromosome Abundance - SAMN08005326_SRX3379831
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

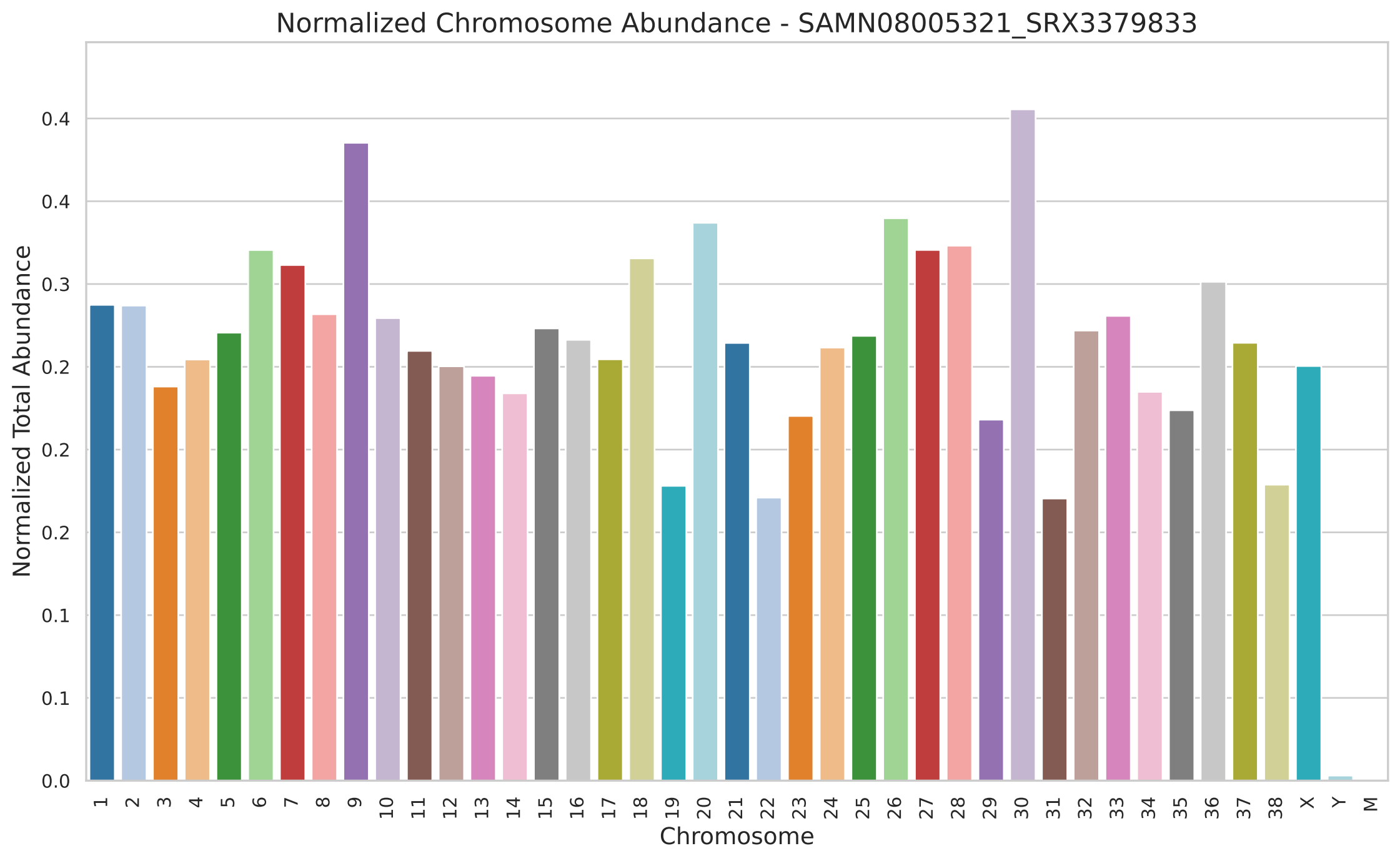

Normalized Chromosome Abundance - SAMN08005309_SRX3379847
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

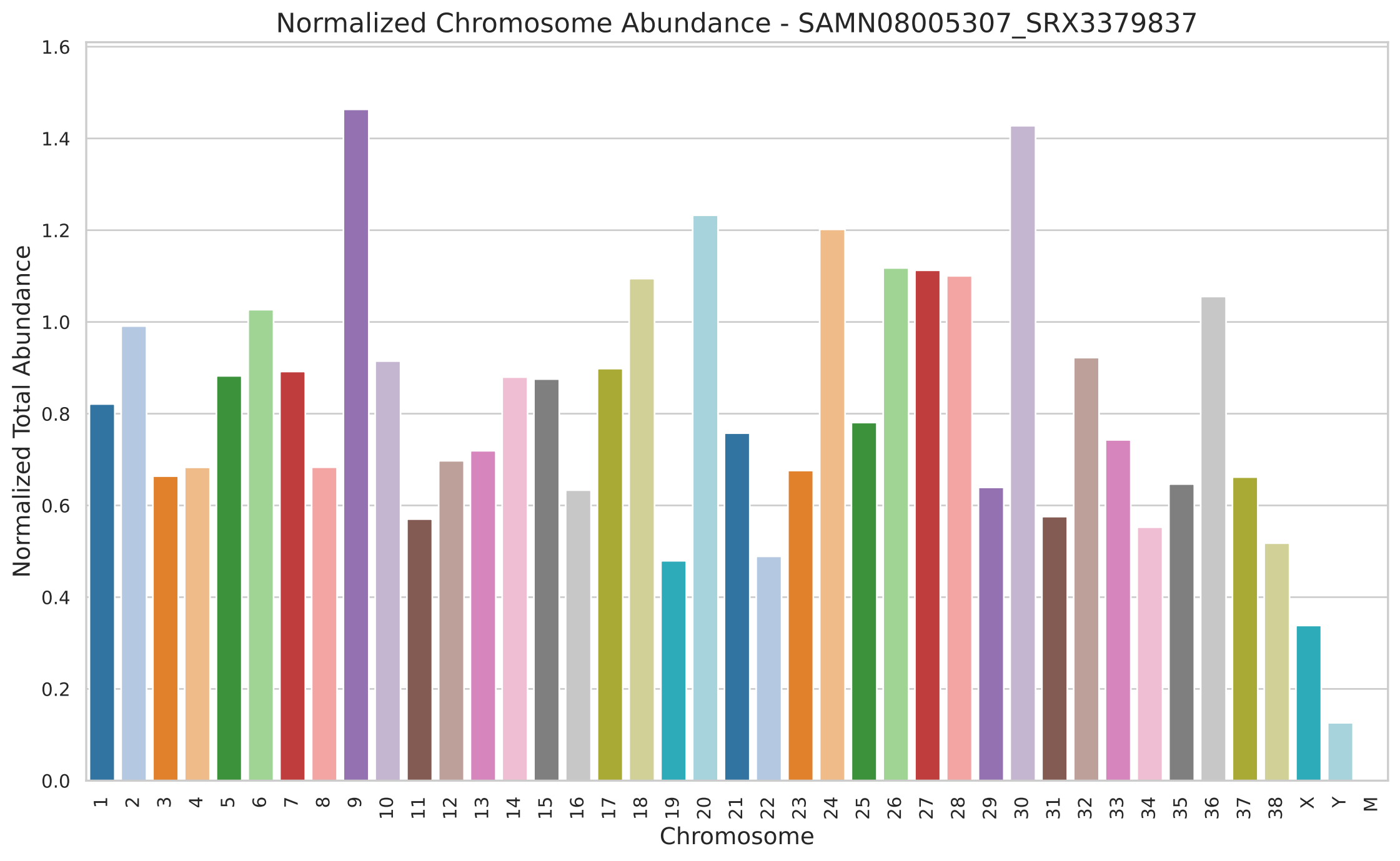

Normalized Chromosome Abundance - SAMN08005315_SRX3379866
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

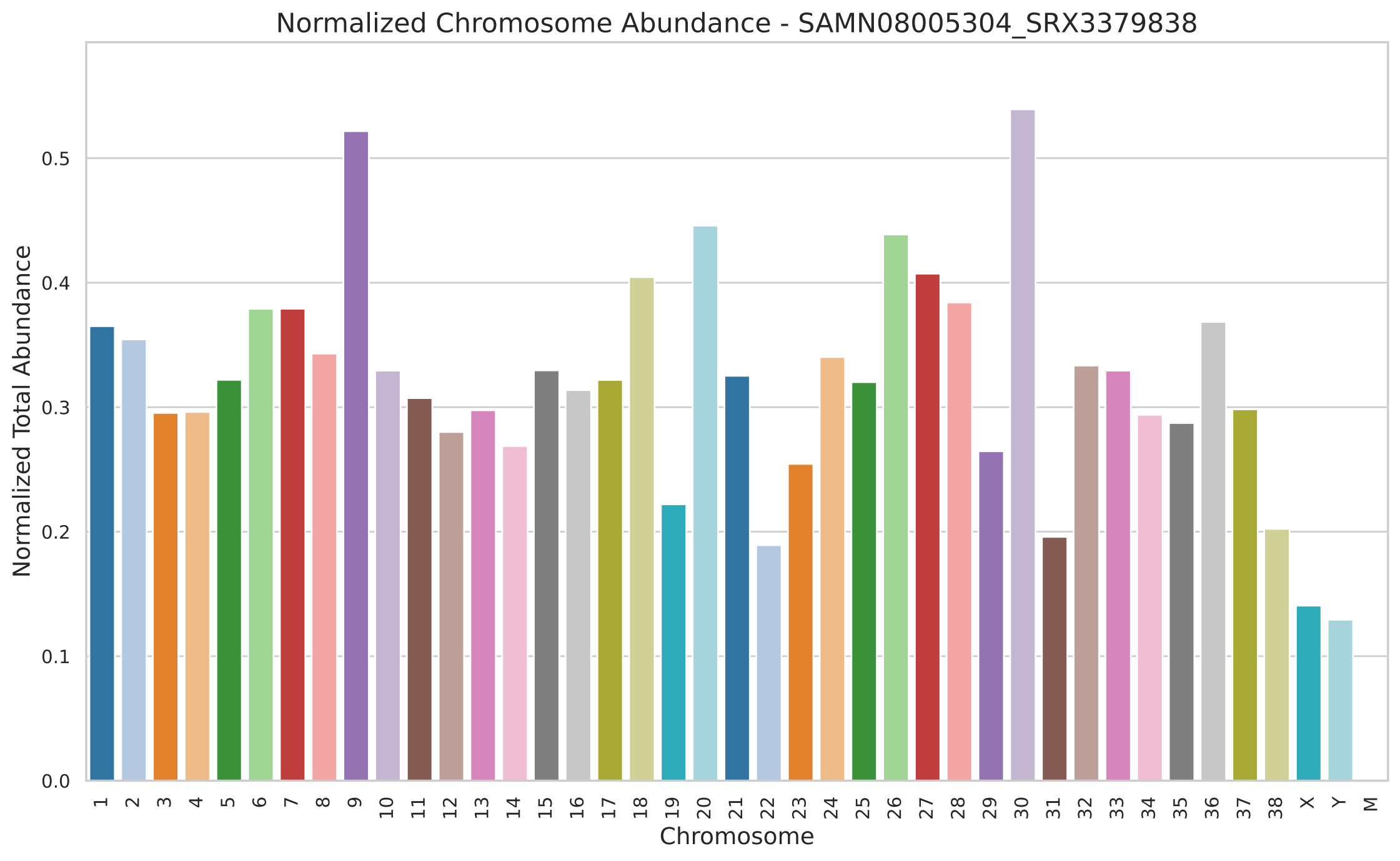

Normalized Chromosome Abundance - SAMN08005308_SRX3379843
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

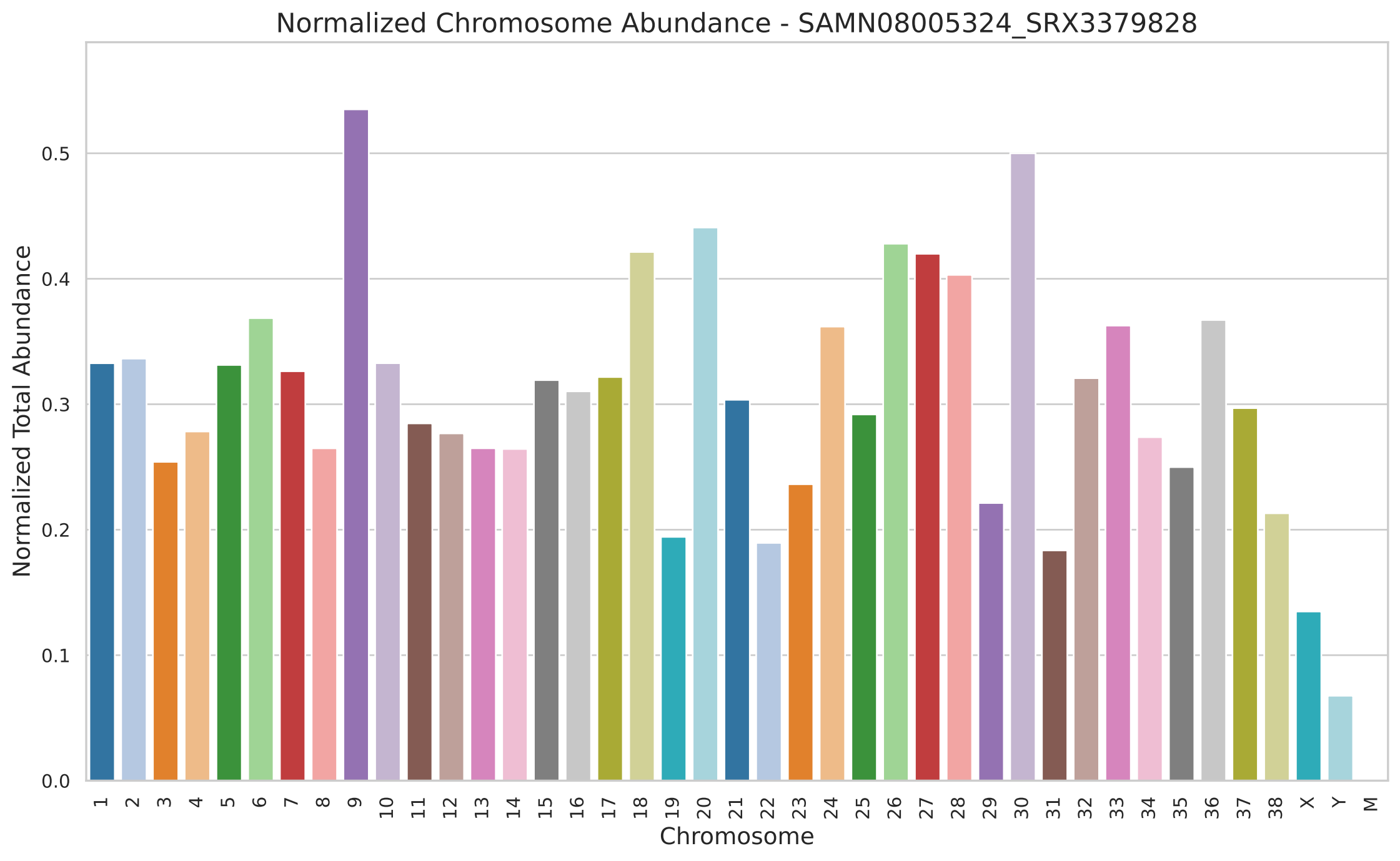

Normalized Chromosome Abundance - SAMN08005311_SRX3379862
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

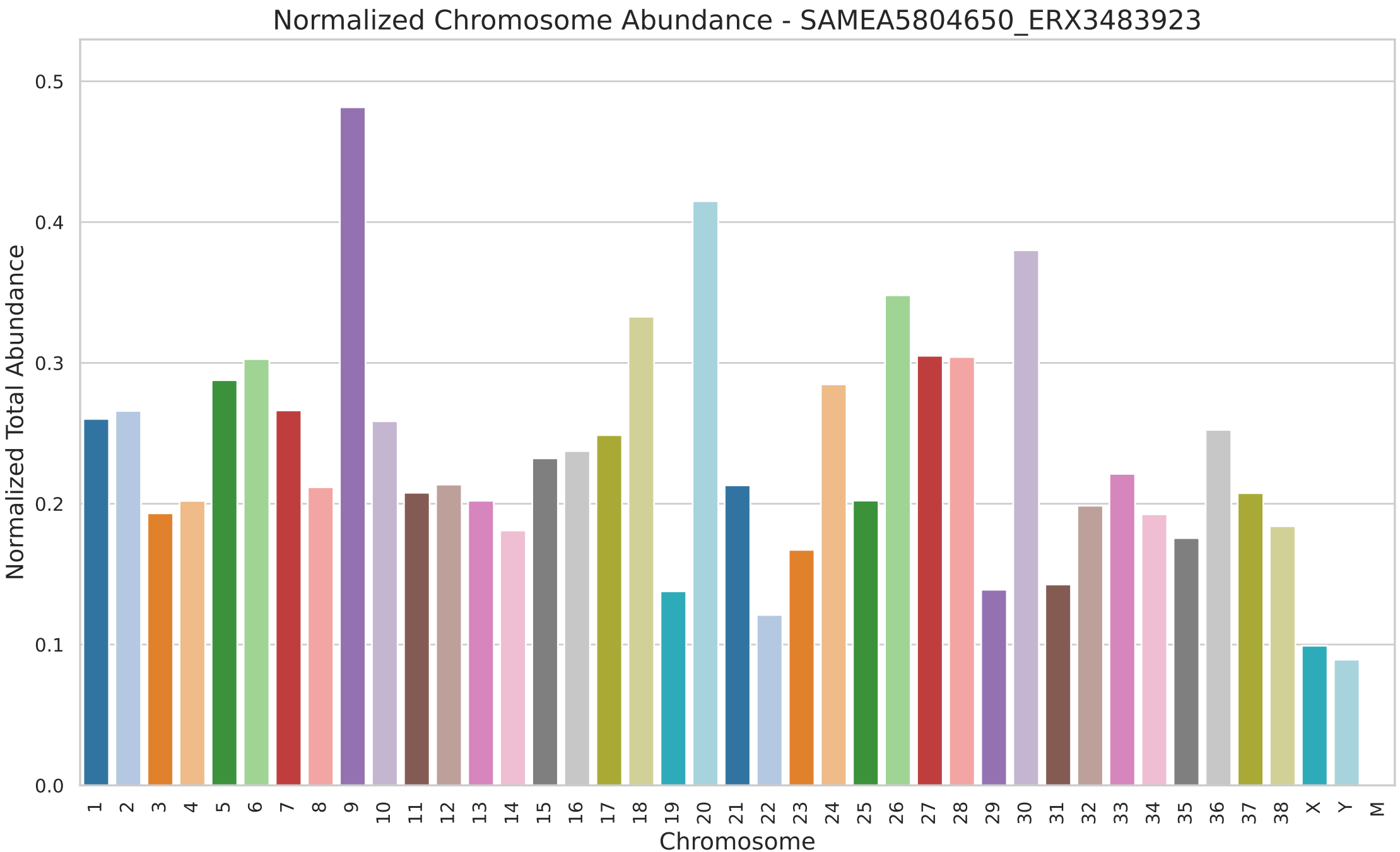

Normalized Chromosome Abundance - SAMN08005302_SRX3379840
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

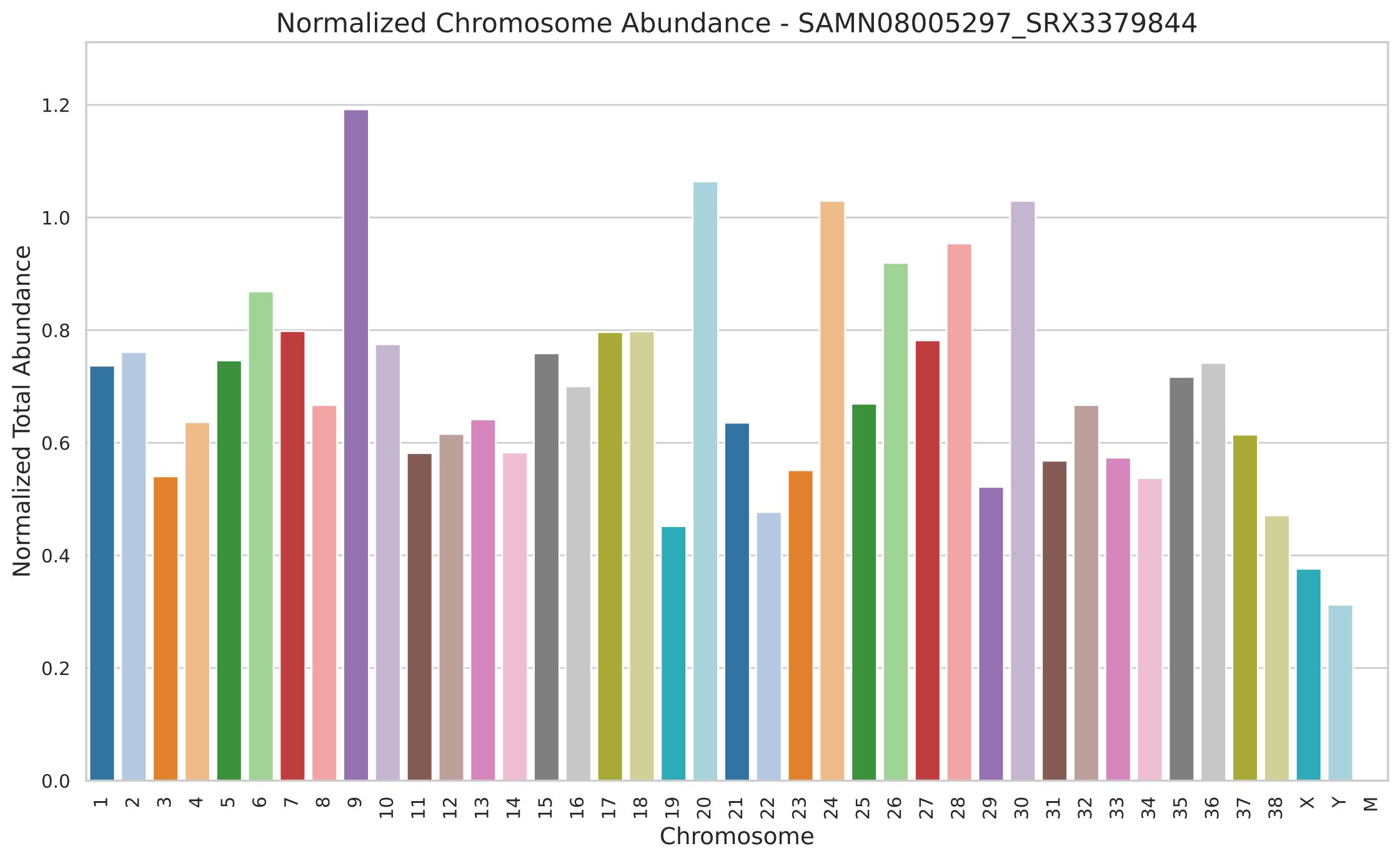

Normalized Chromosome Abundance - SAMN08005321_SRX3379833
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

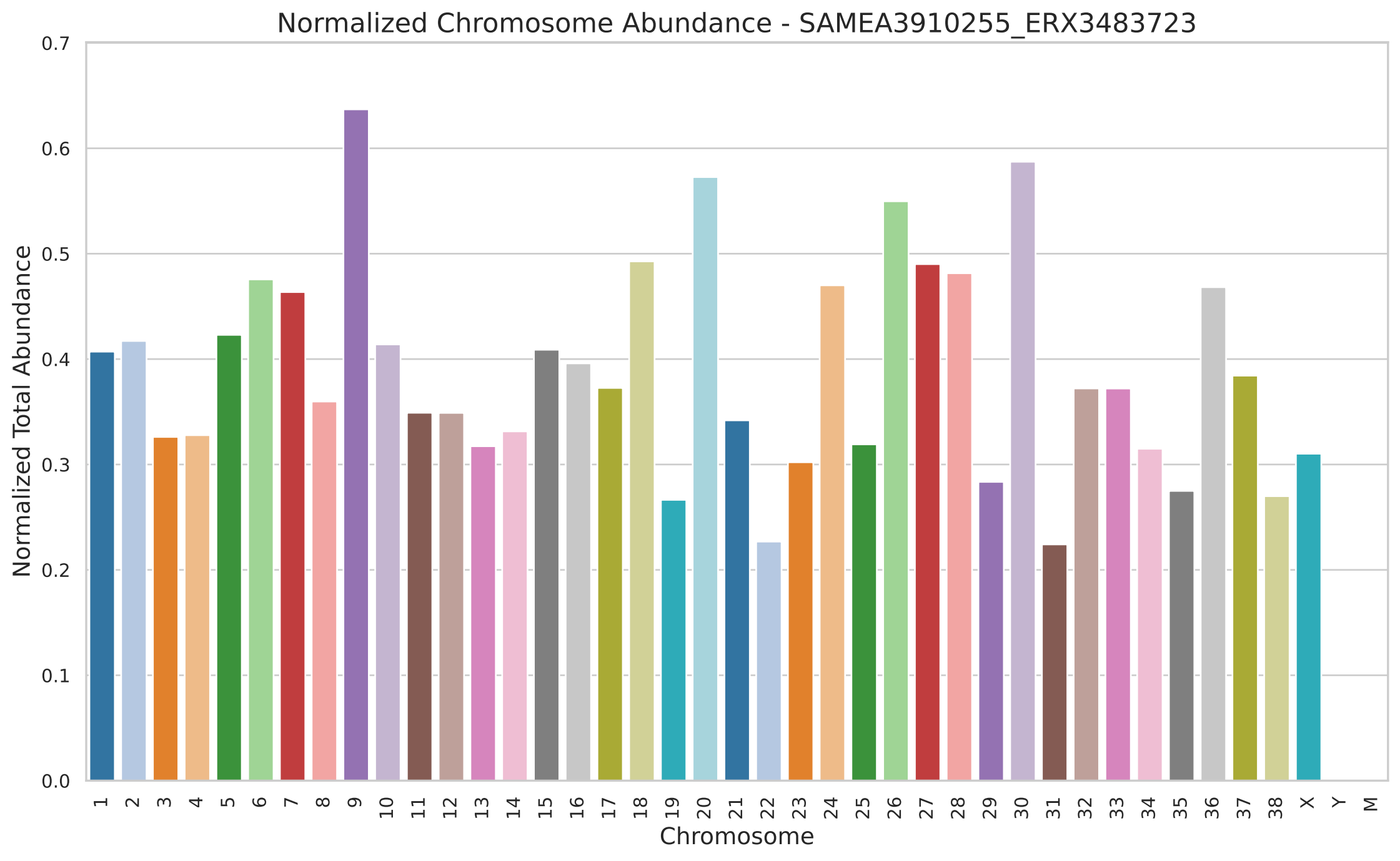

Normalized Chromosome Abundance - SAMN08005307_SRX3379837
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

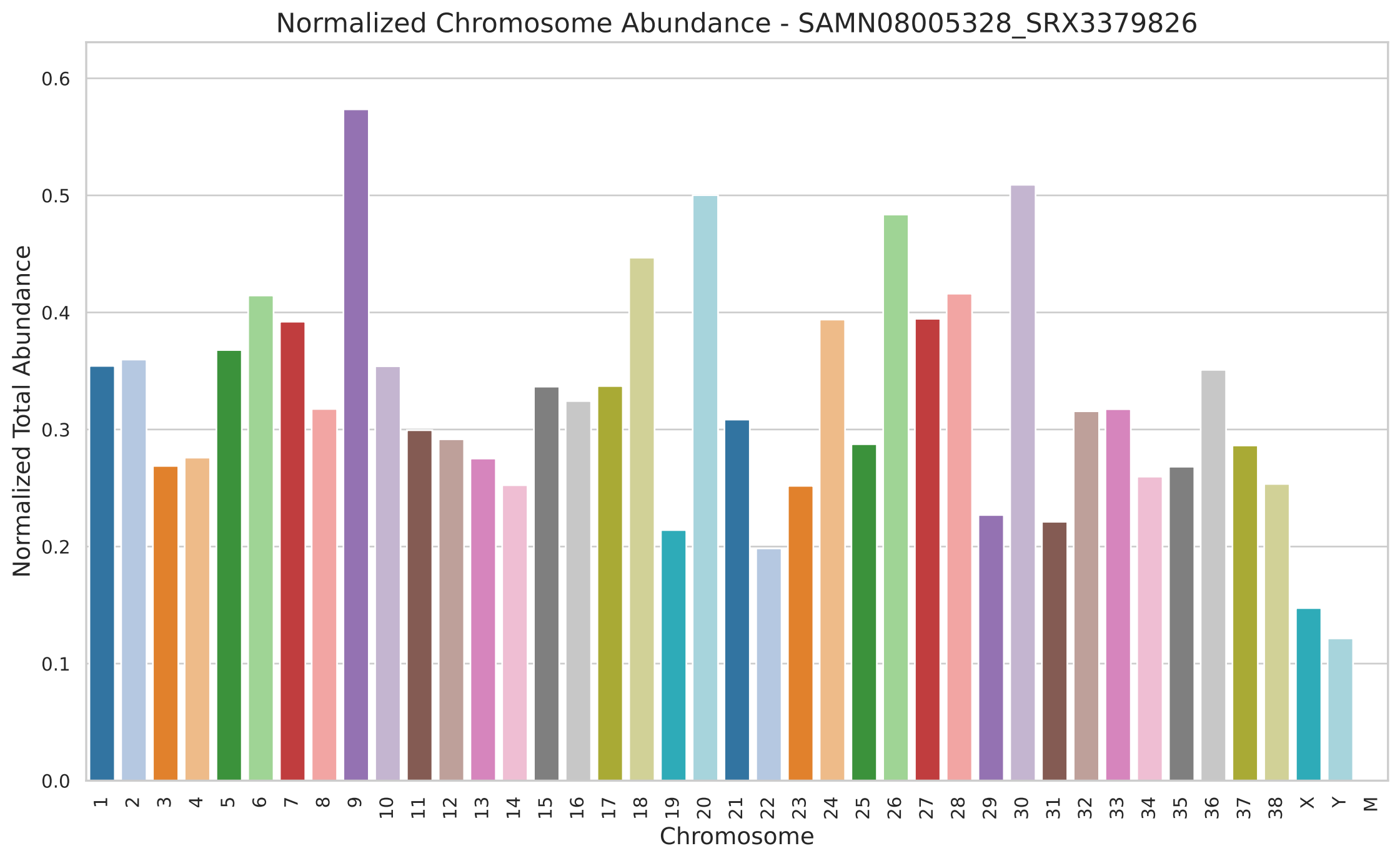

Normalized Chromosome Abundance - SAMN08005304_SRX3379838
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

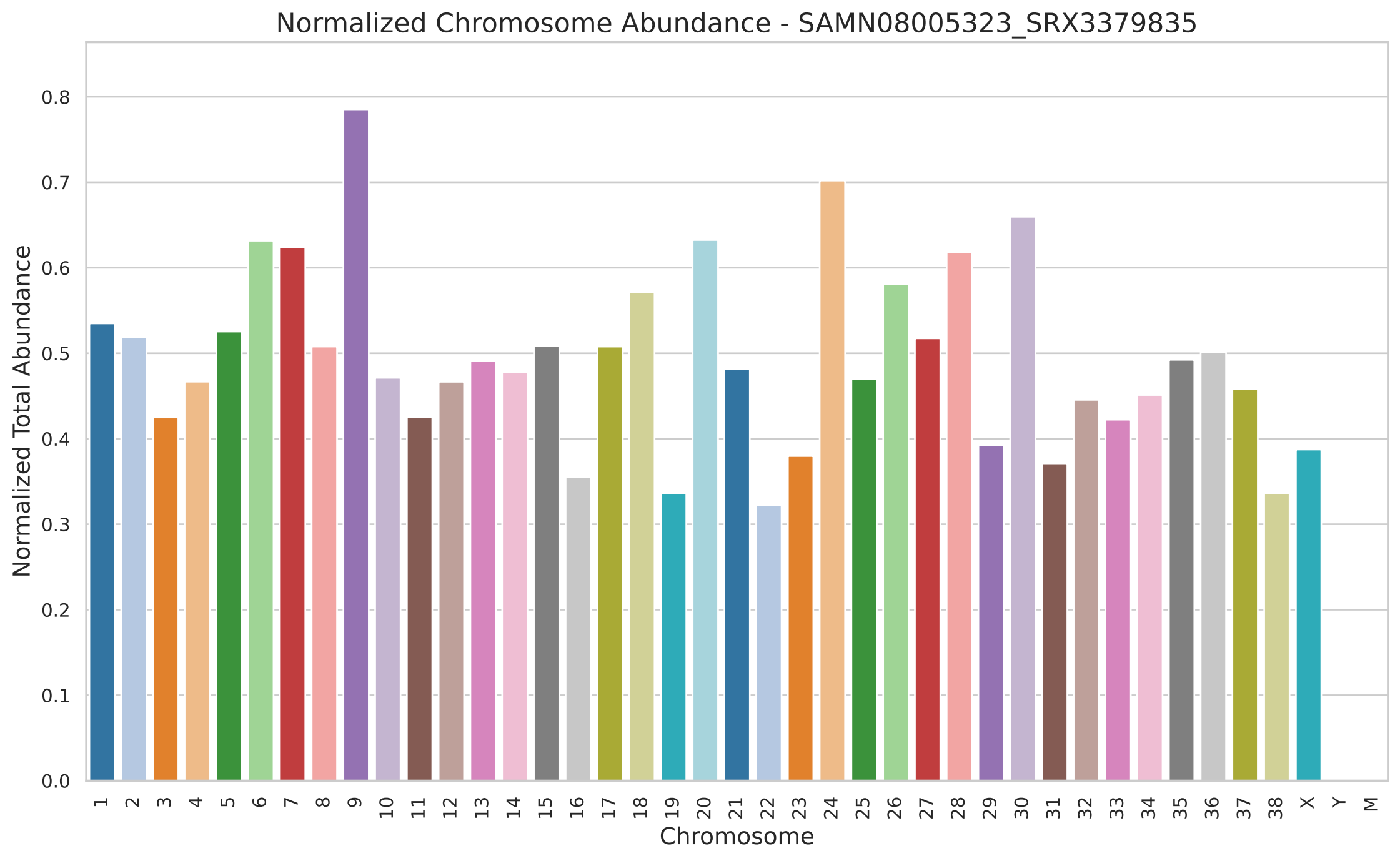

Normalized Chromosome Abundance - SAMN08005324_SRX3379828
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

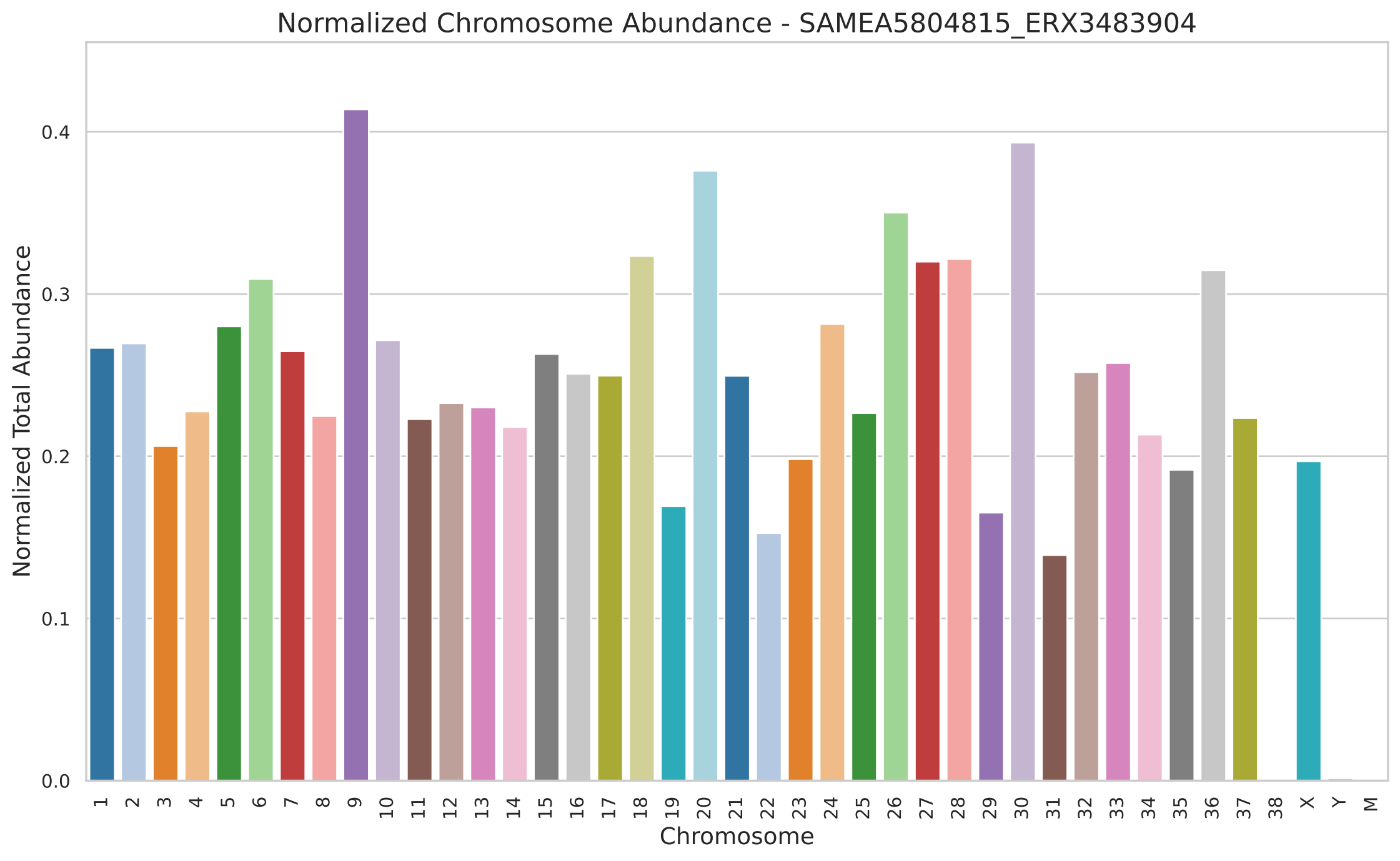

Normalized Chromosome Abundance - SAMEA5804650_ERX3483923
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

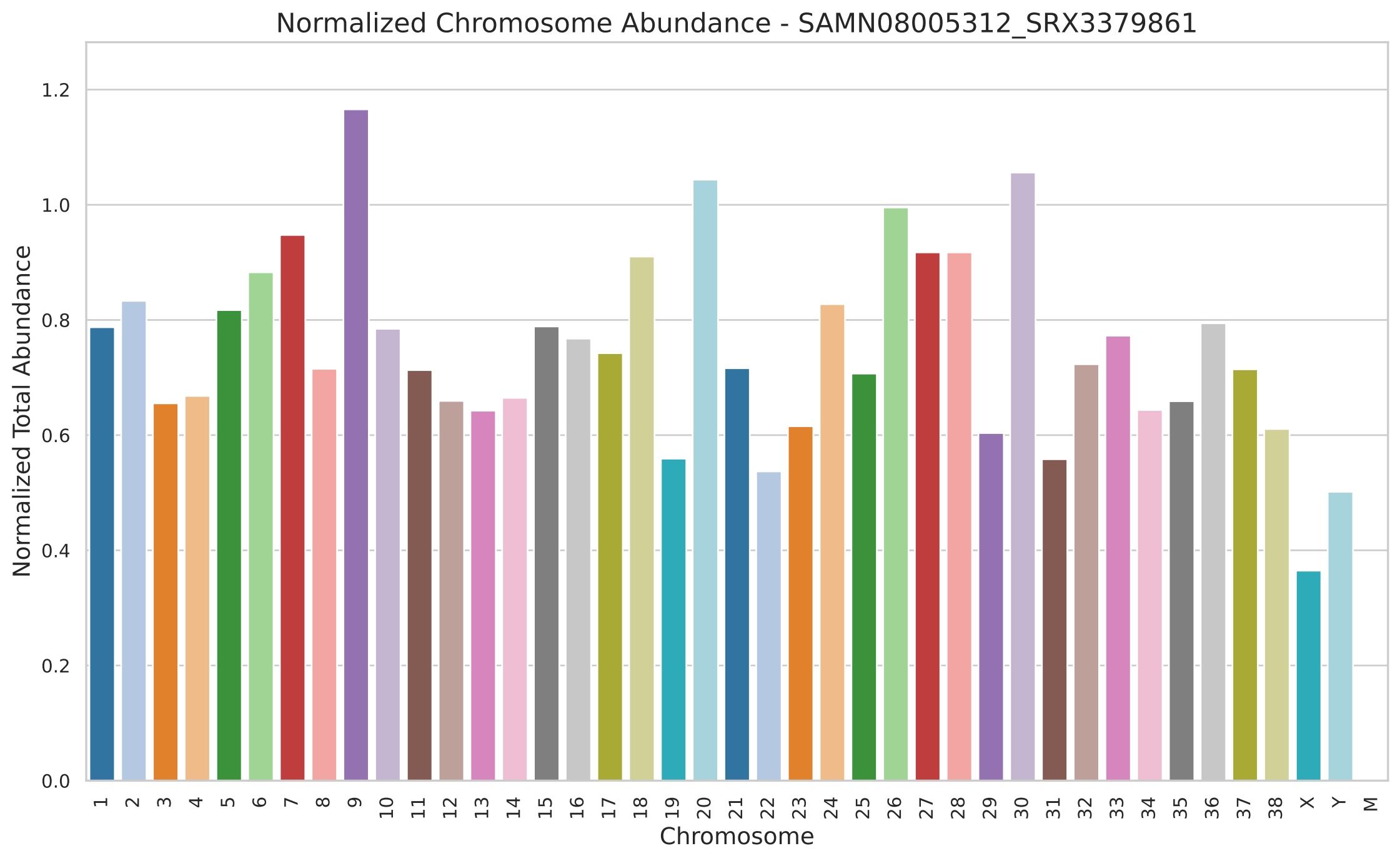

Normalized Chromosome Abundance - SAMN08005297_SRX3379844
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

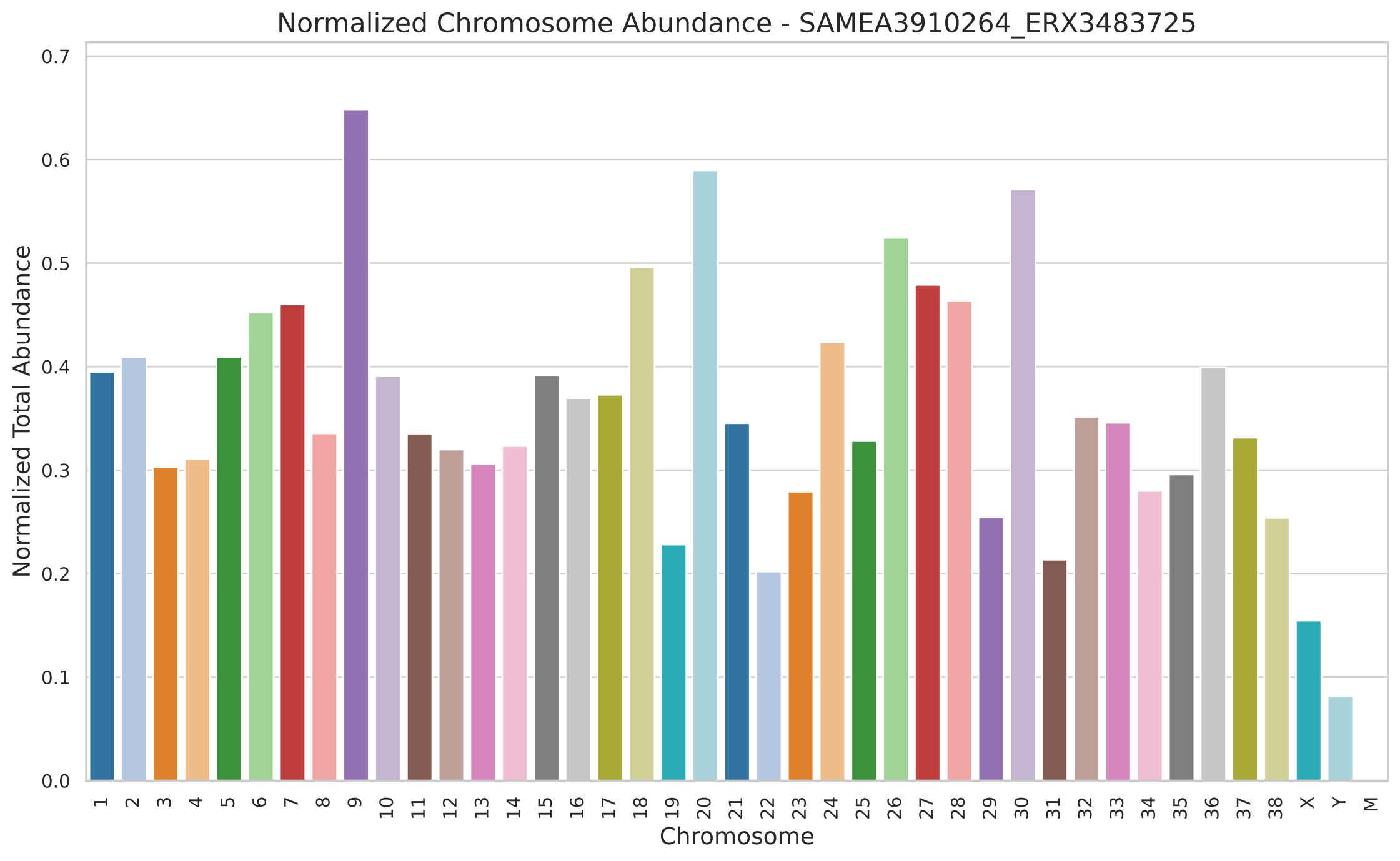

Normalized Chromosome Abundance - SAMEA3910255_ERX3483723
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

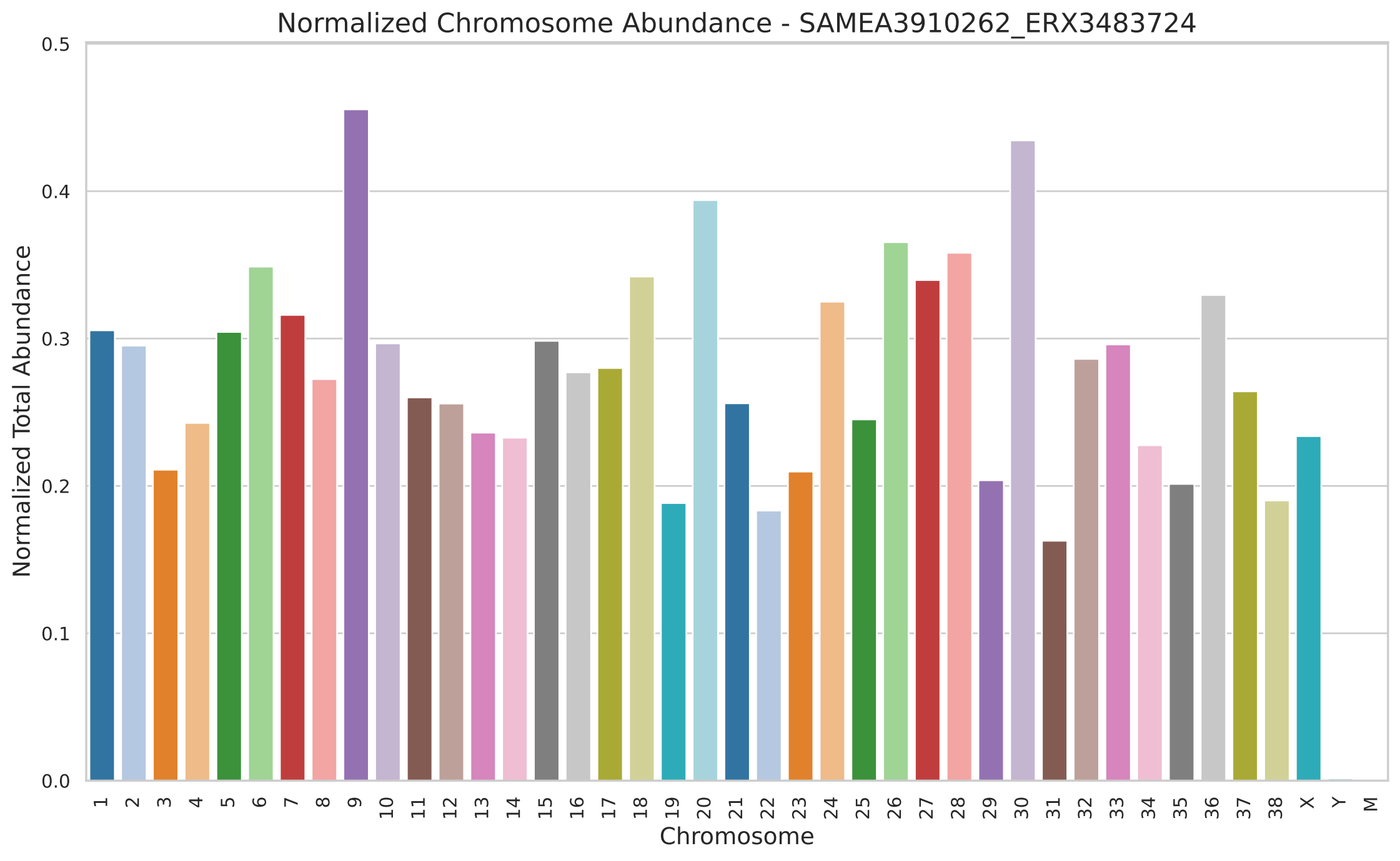

Normalized Chromosome Abundance - SAMN08005328_SRX3379826
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

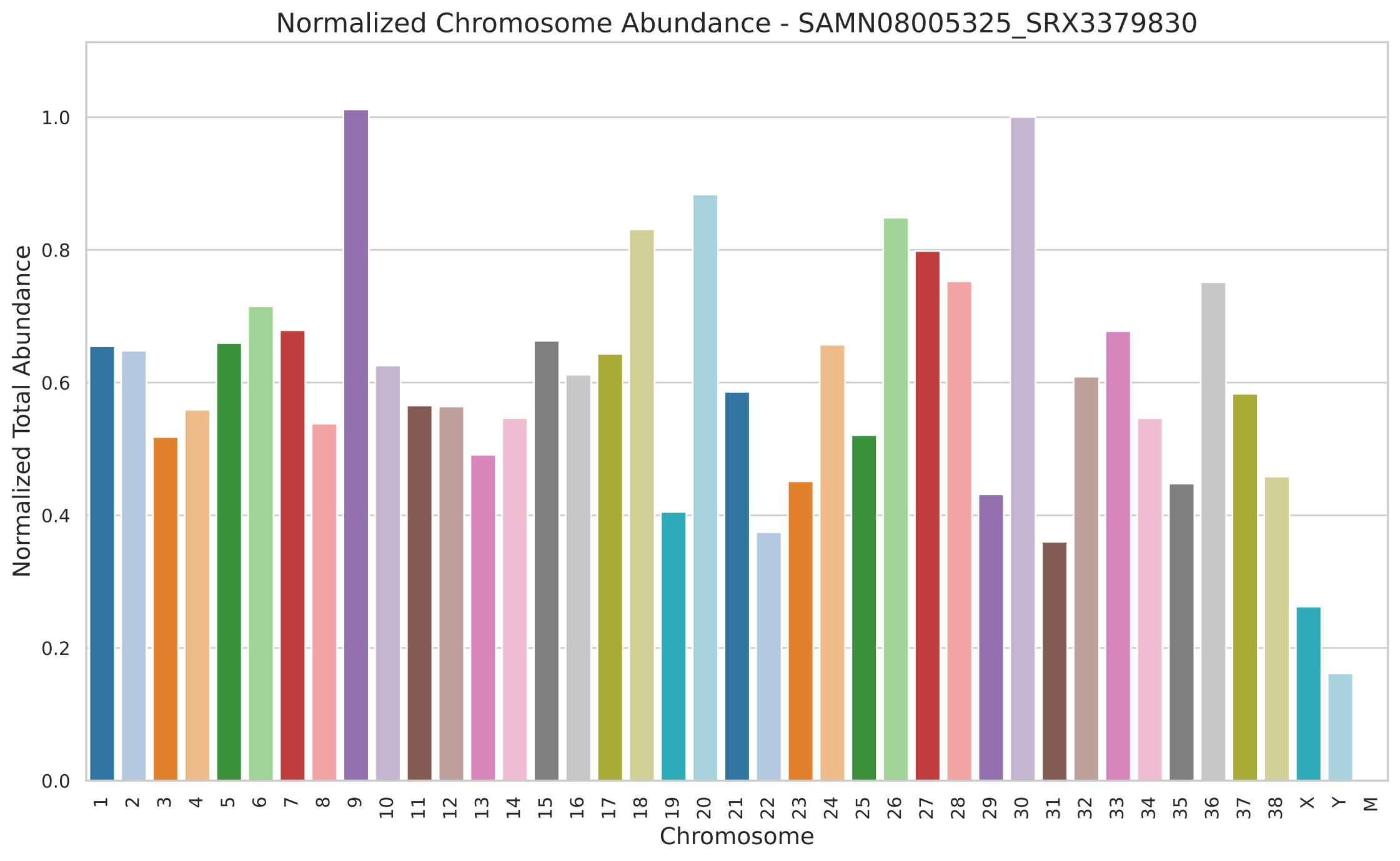

Normalized Chromosome Abundance - SAMN08005323_SRX3379835
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

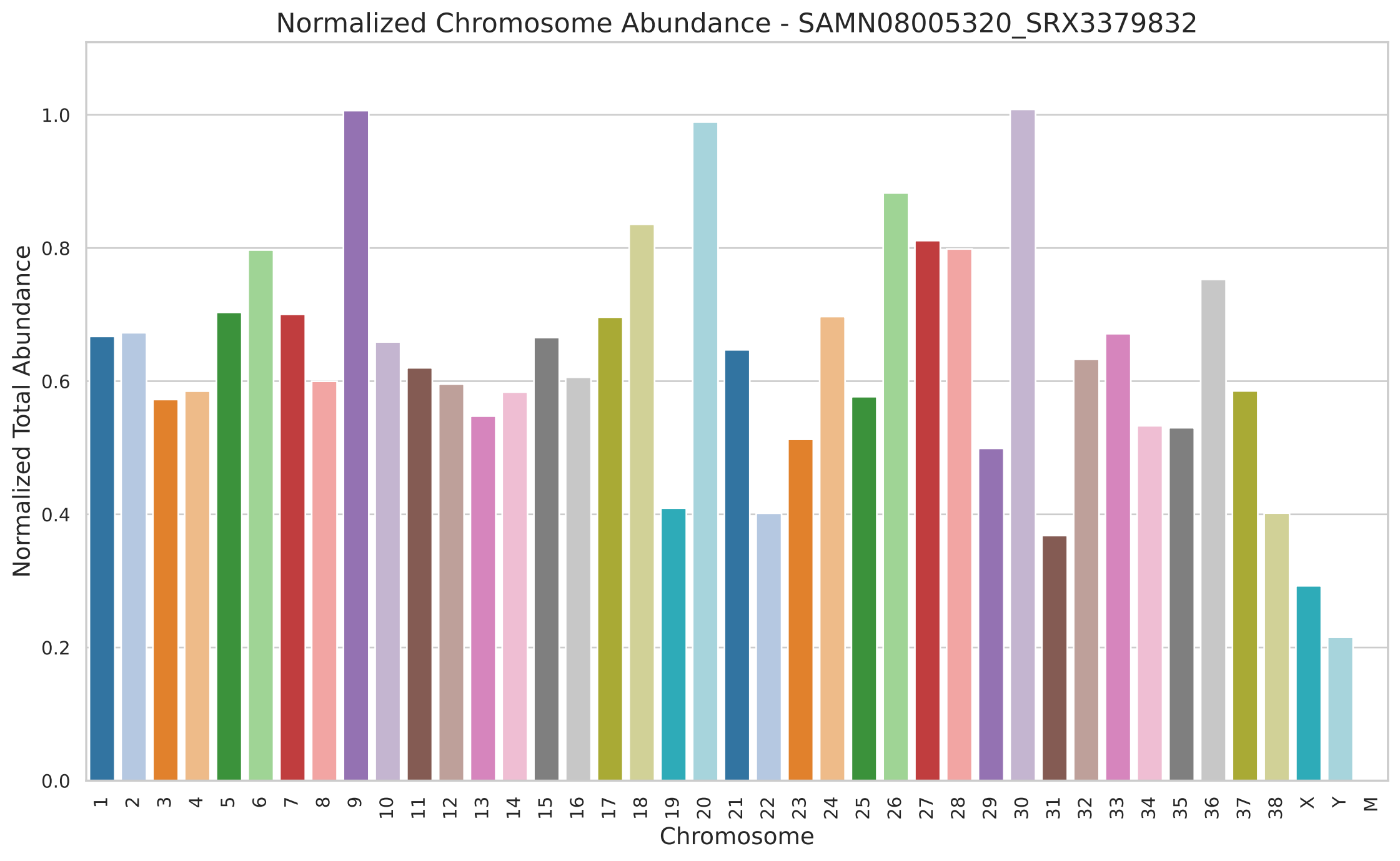

Normalized Chromosome Abundance - SAMEA5804815_ERX3483904
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

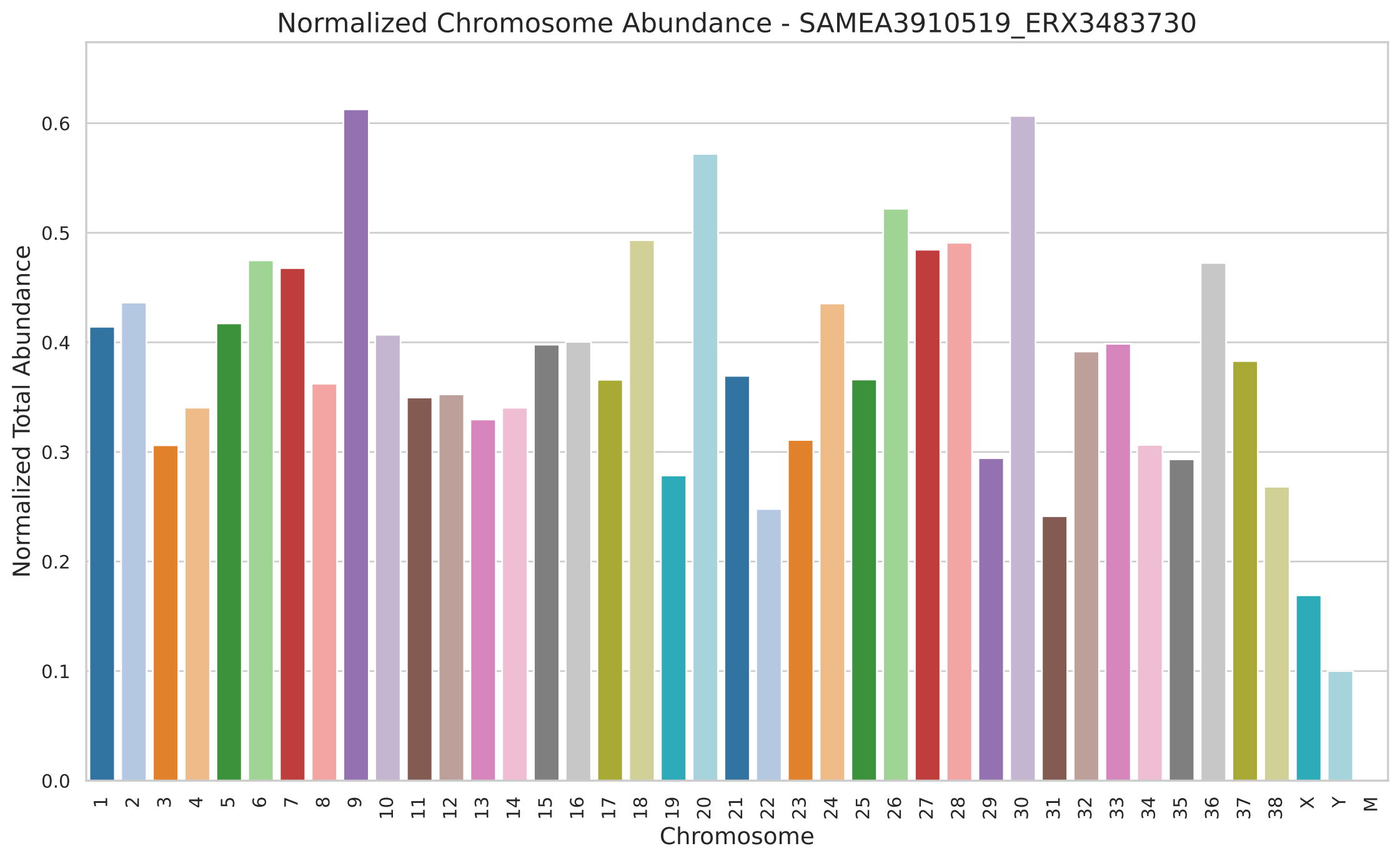

Normalized Chromosome Abundance - SAMN08005312_SRX3379861
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

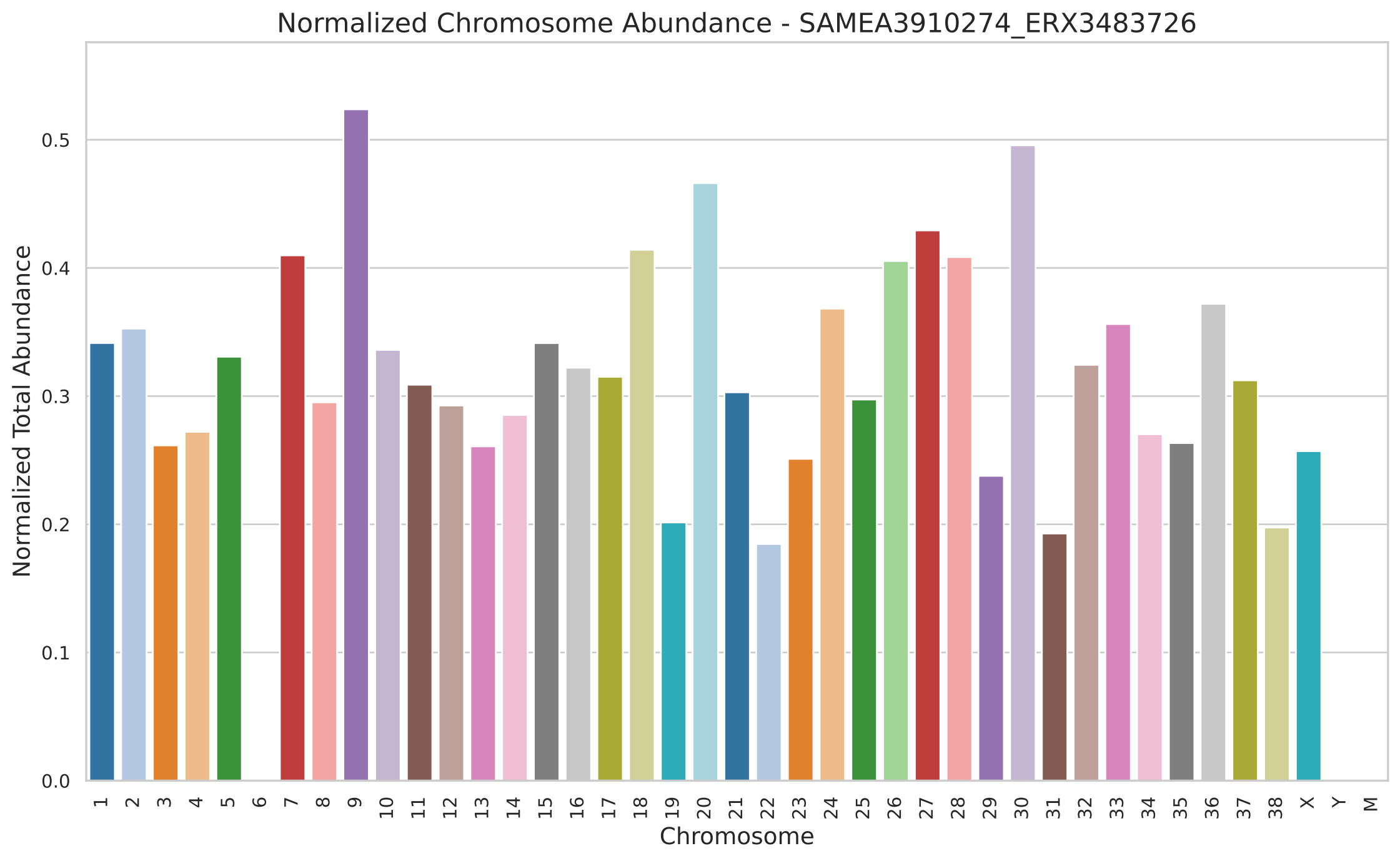

Normalized Chromosome Abundance - SAMEA3910264_ERX3483725
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

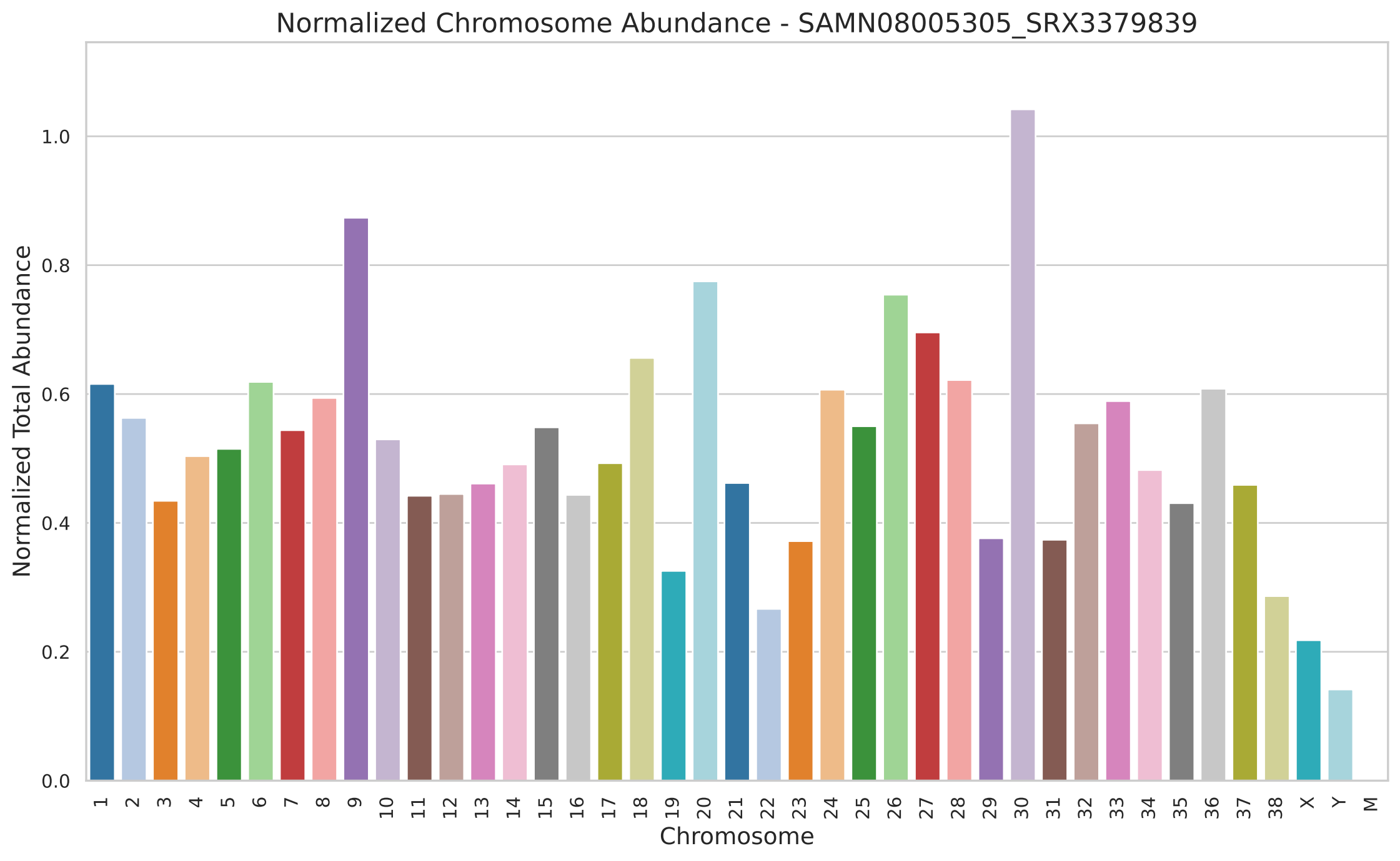

Normalized Chromosome Abundance - SAMEA3910262_ERX3483724
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

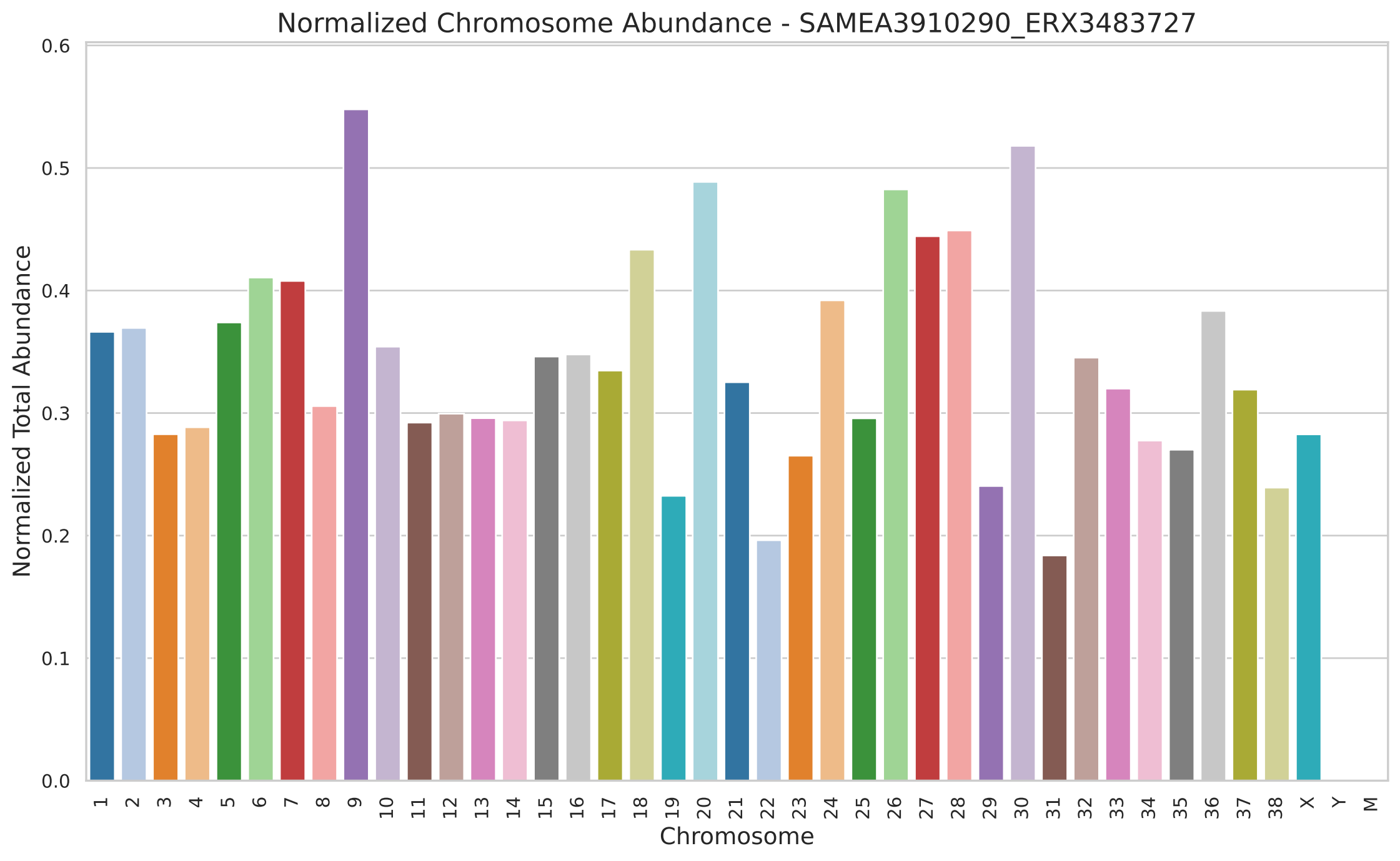

Normalized Chromosome Abundance - SAMN08005325_SRX3379830
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

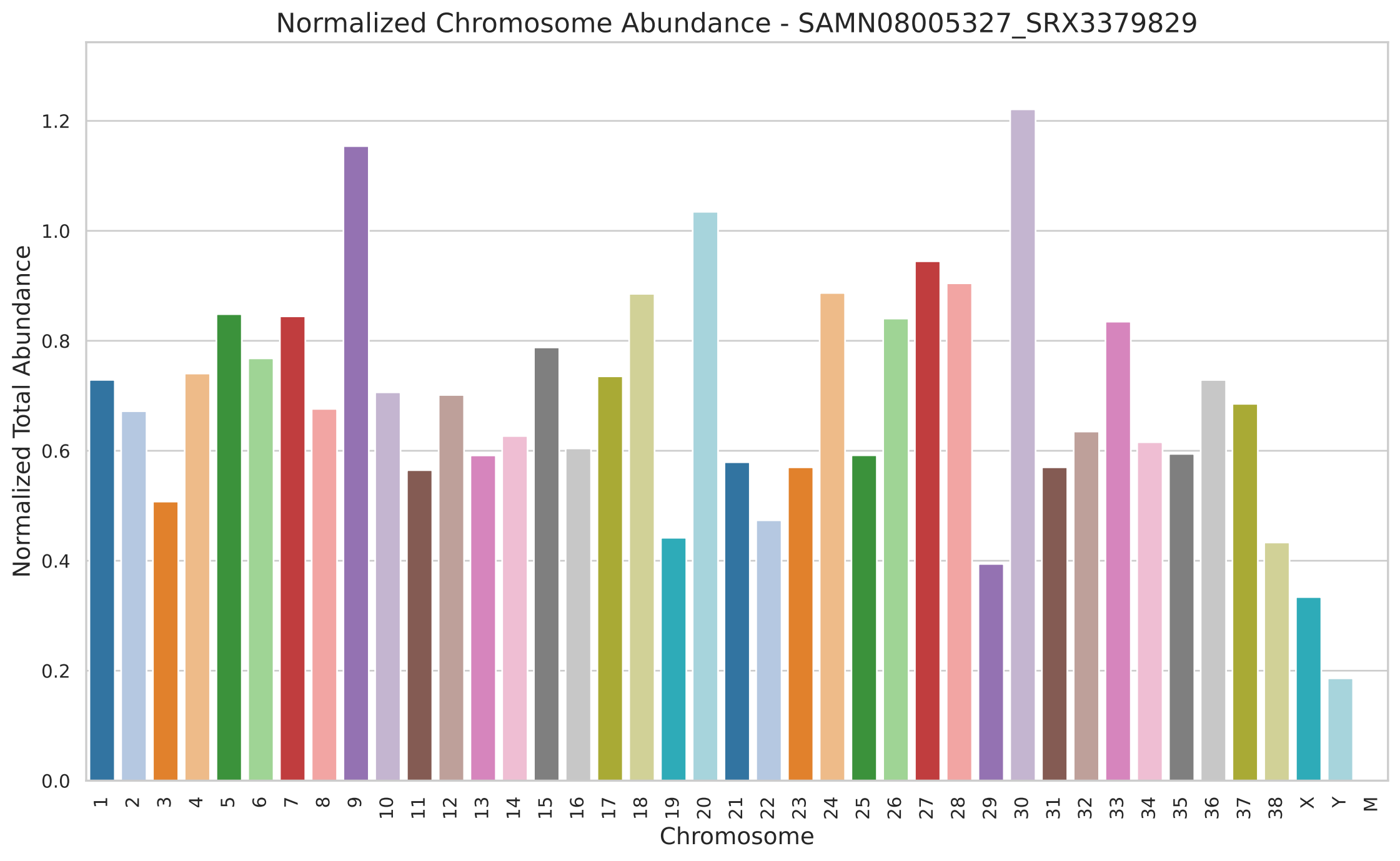

Normalized Chromosome Abundance - SAMN08005320_SRX3379832
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

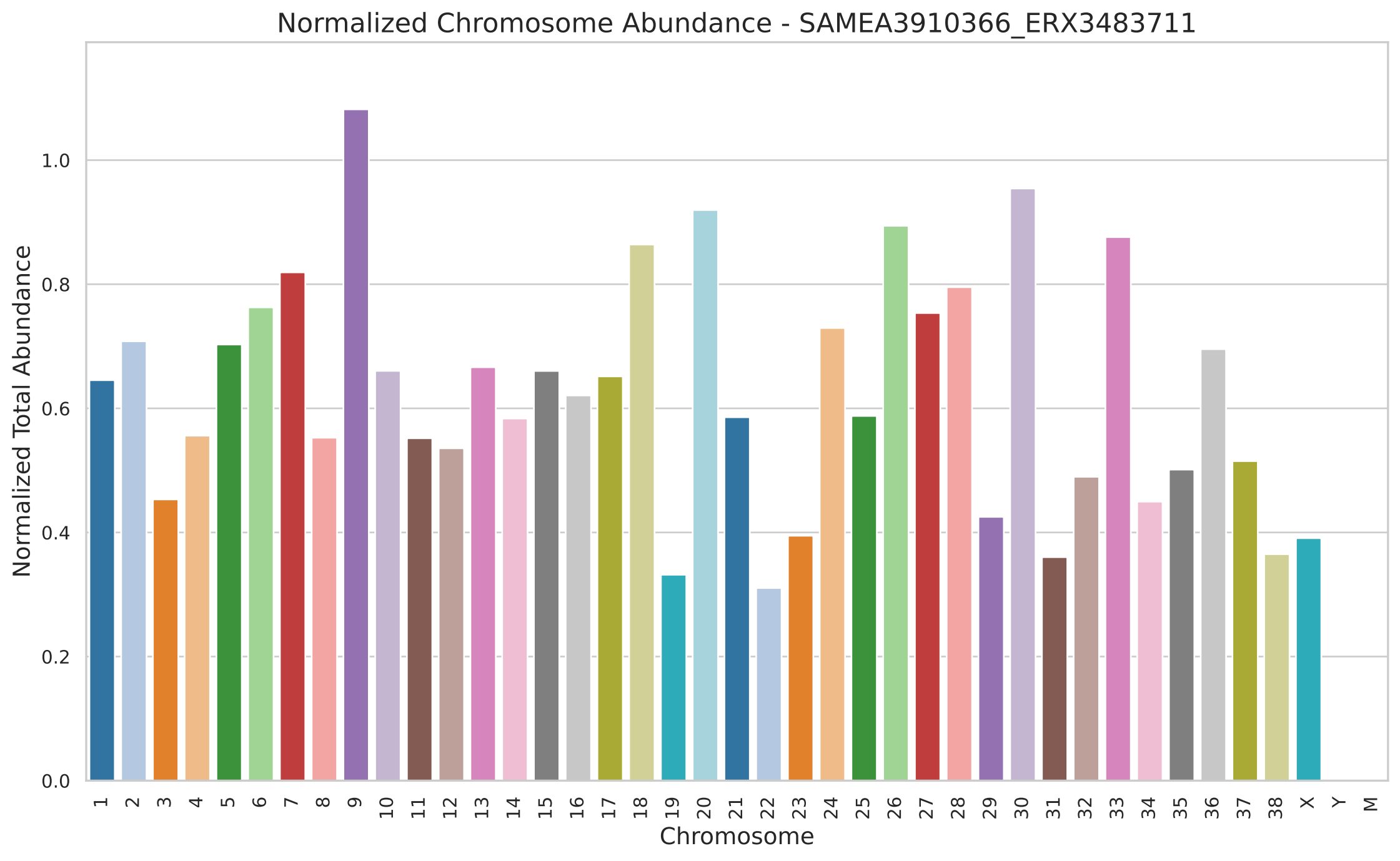

Normalized Chromosome Abundance - SAMEA3910519_ERX3483730
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

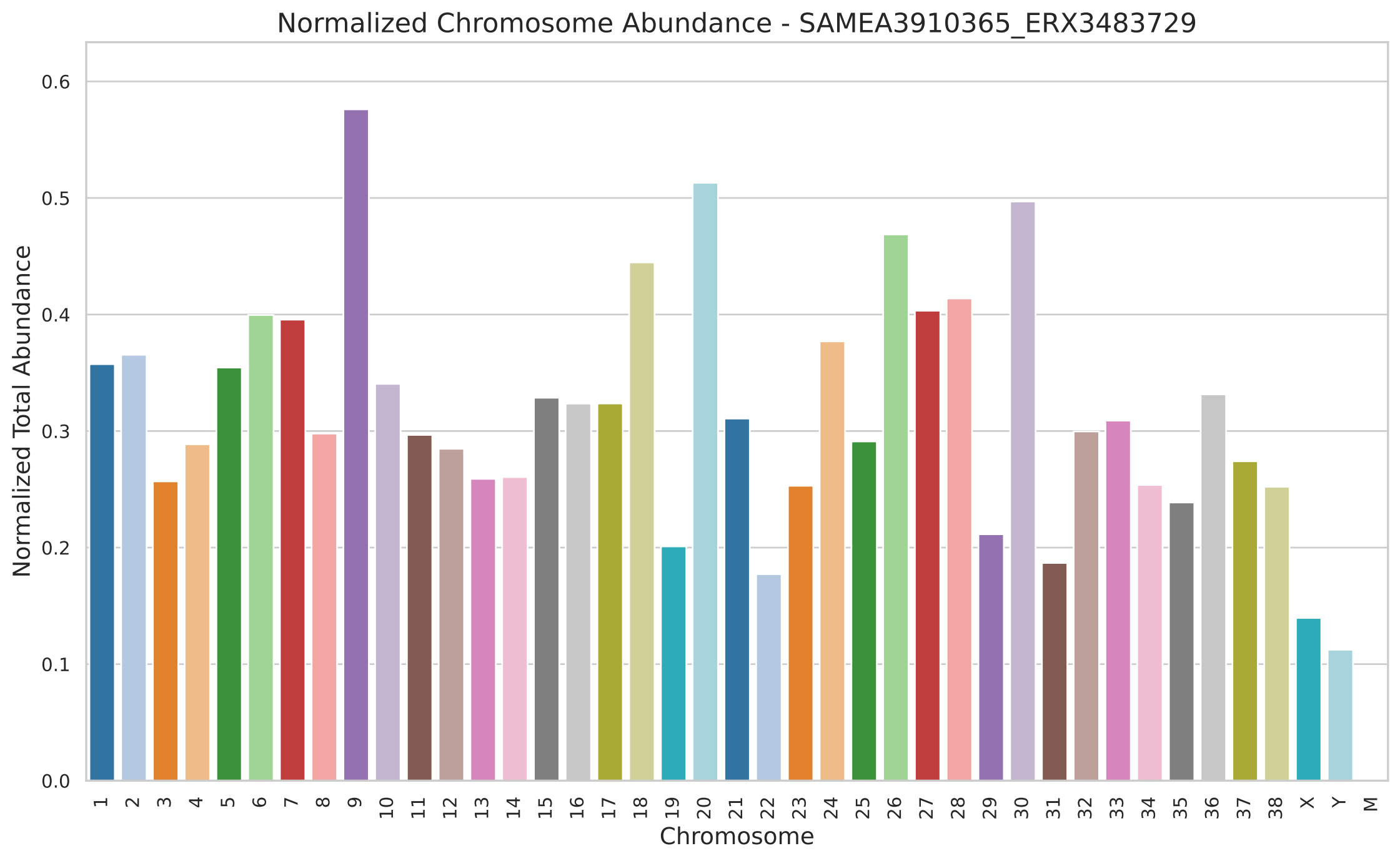

Normalized Chromosome Abundance - SAMEA3910274_ERX3483726
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

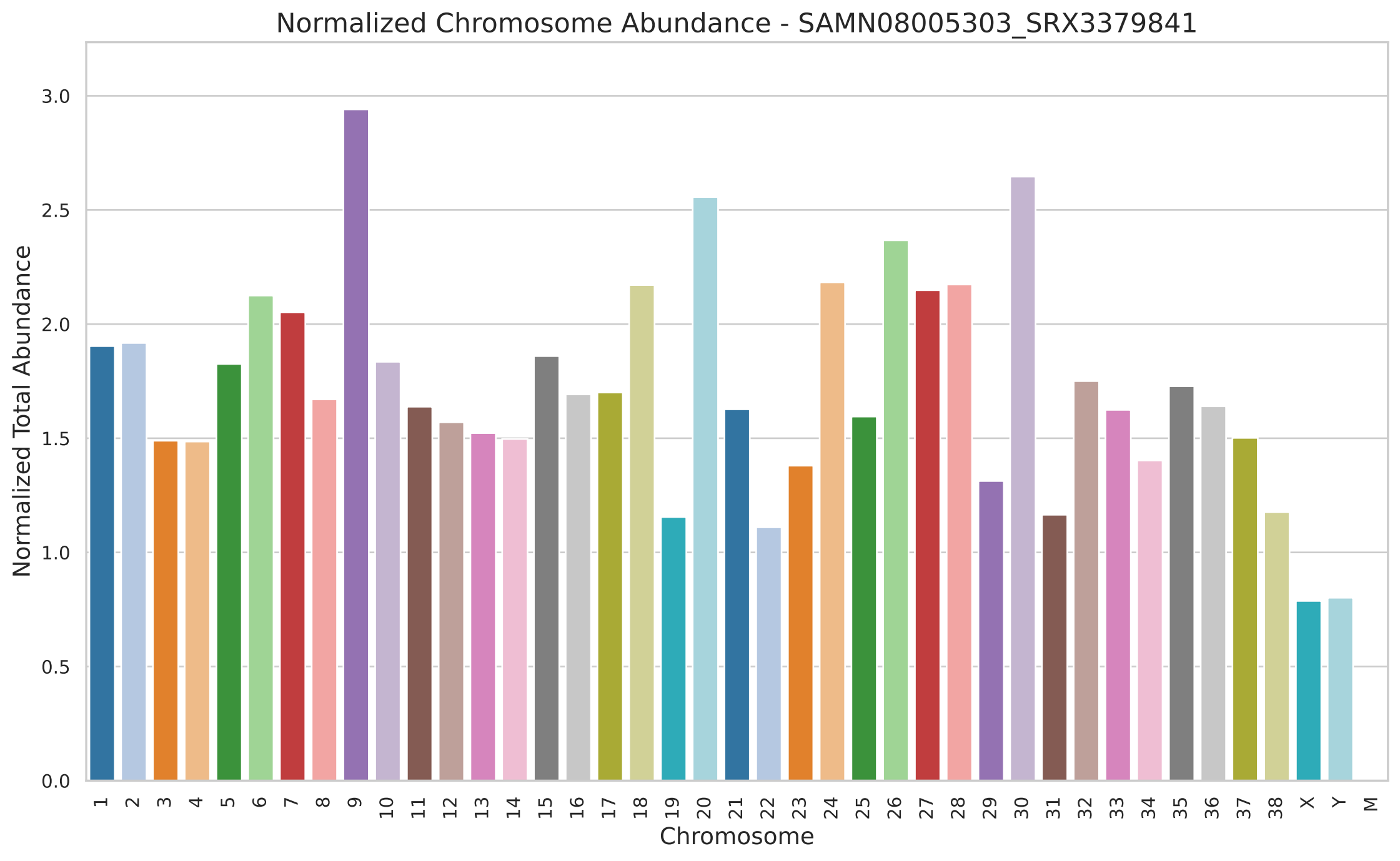

Normalized Chromosome Abundance - SAMN08005305_SRX3379839
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

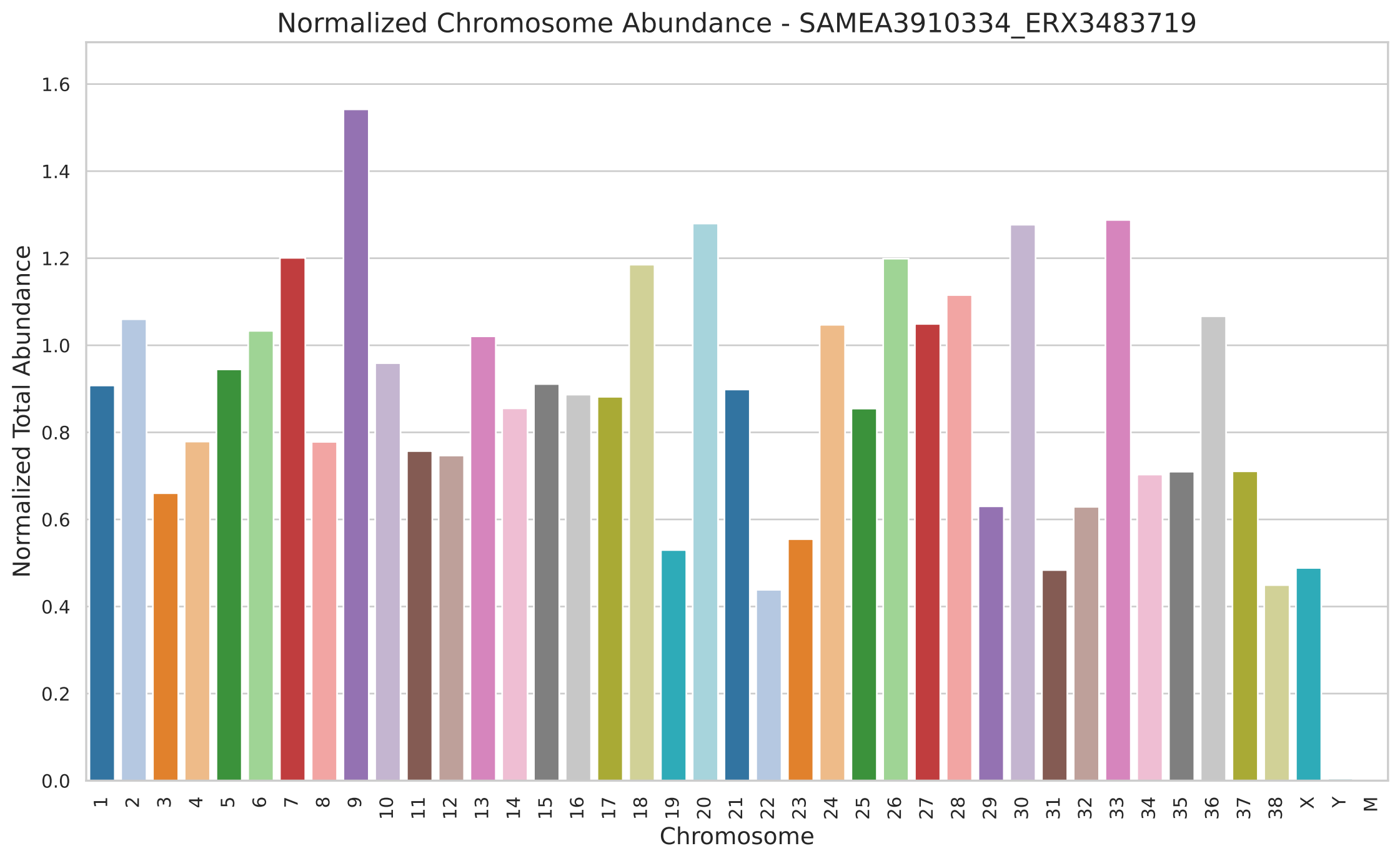

Normalized Chromosome Abundance - SAMEA3910290_ERX3483727
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

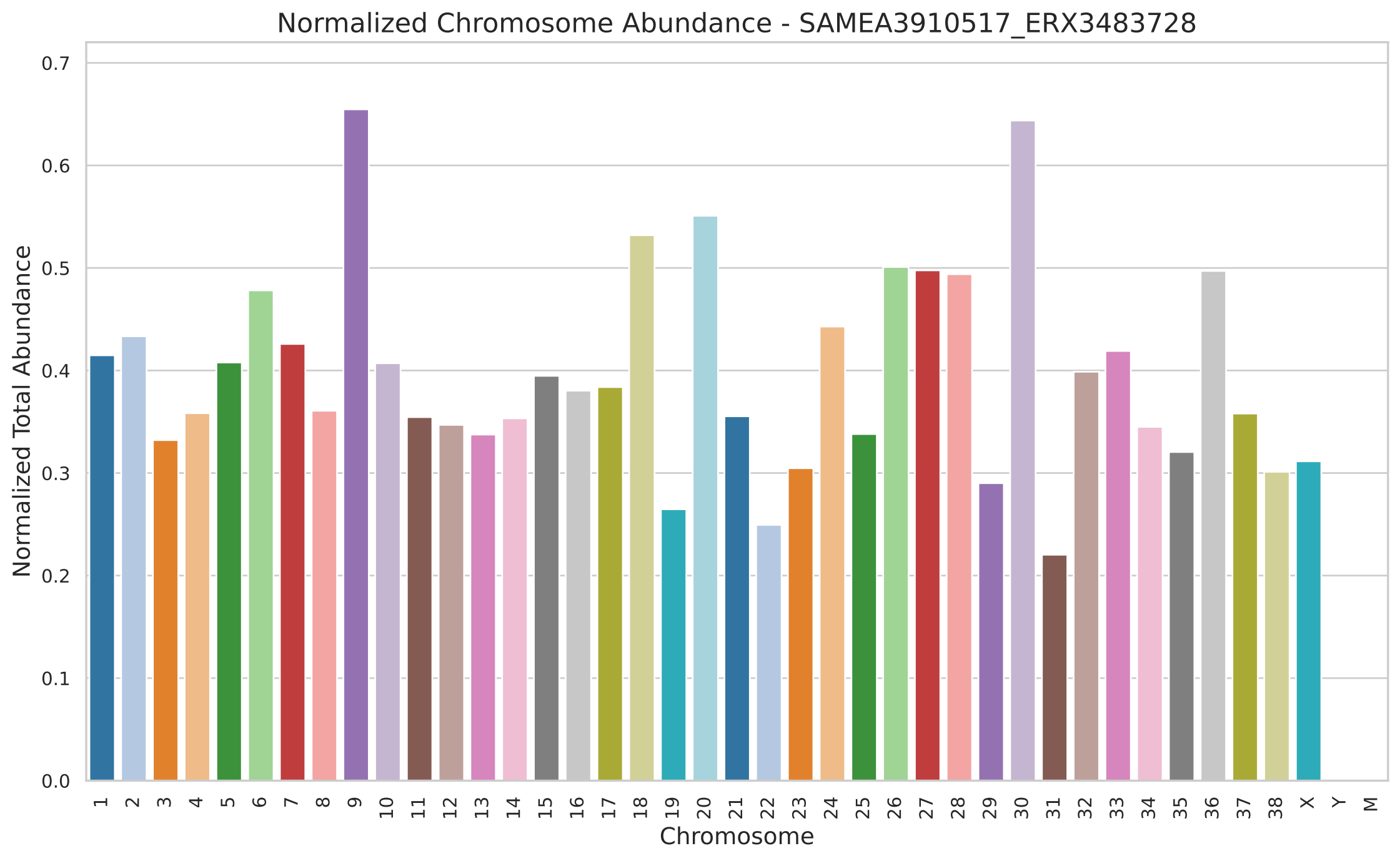

Normalized Chromosome Abundance - SAMN08005327_SRX3379829
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

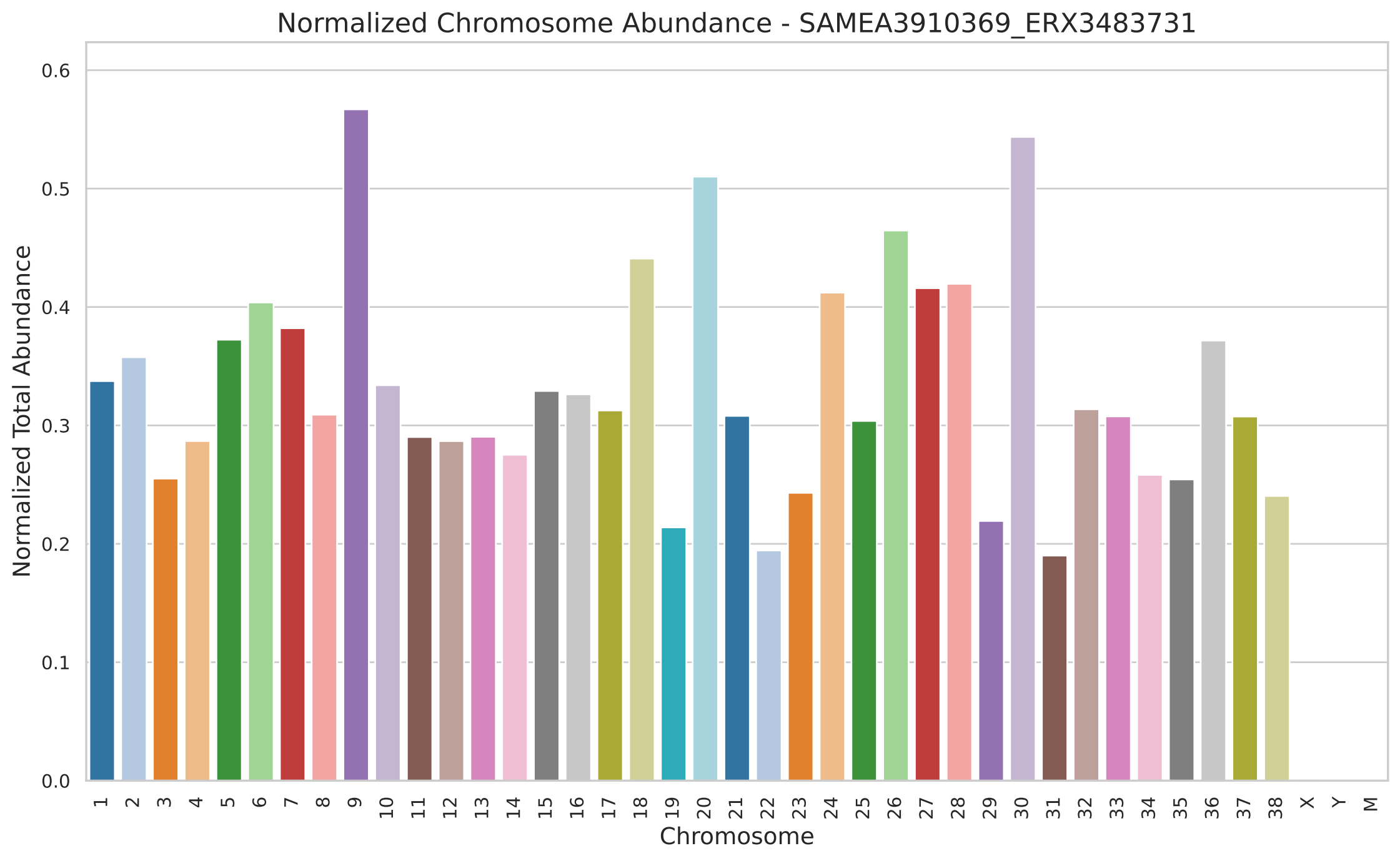

Normalized Chromosome Abundance - SAMEA3910366_ERX3483711
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

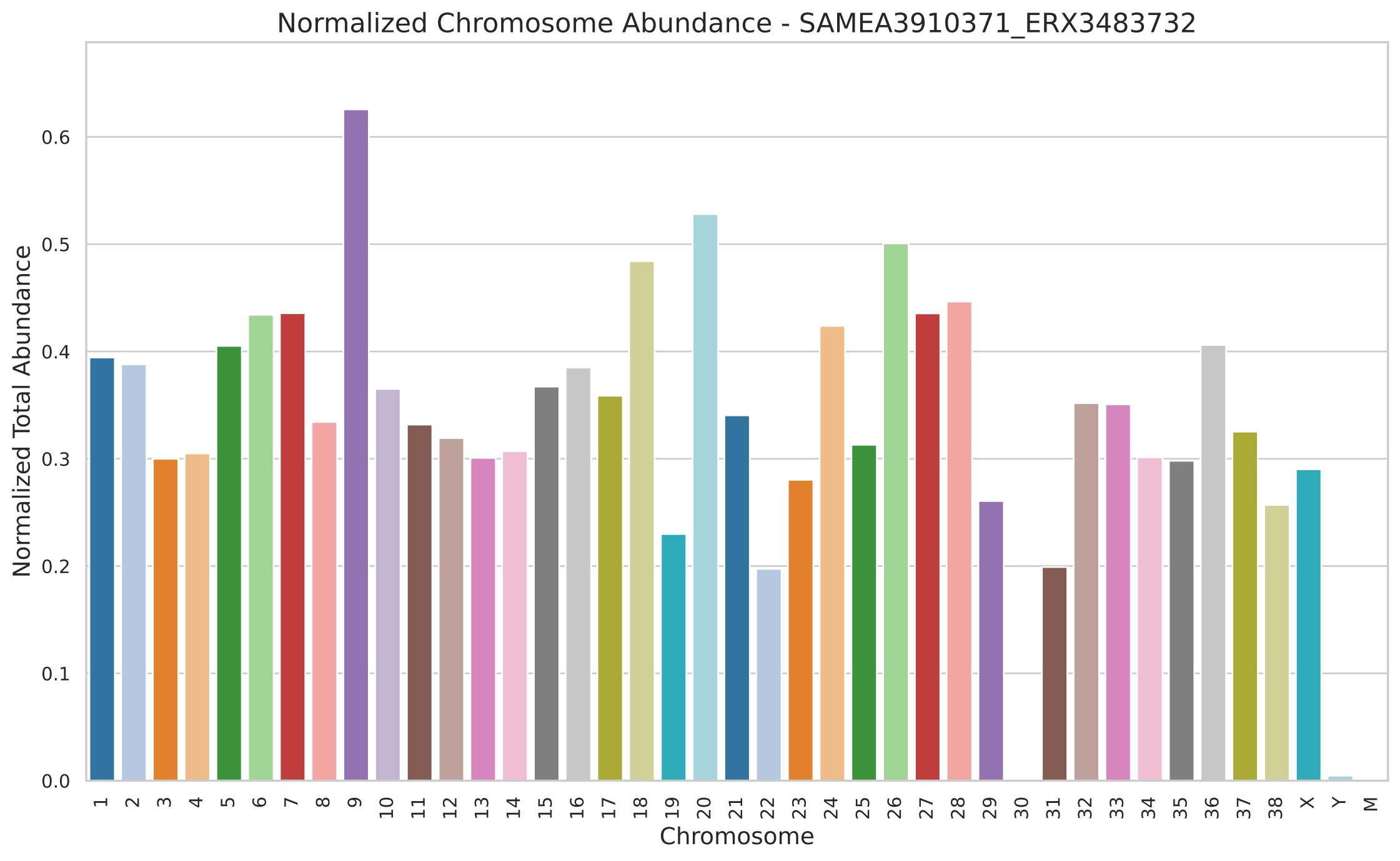

Normalized Chromosome Abundance - SAMEA3910365_ERX3483729
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

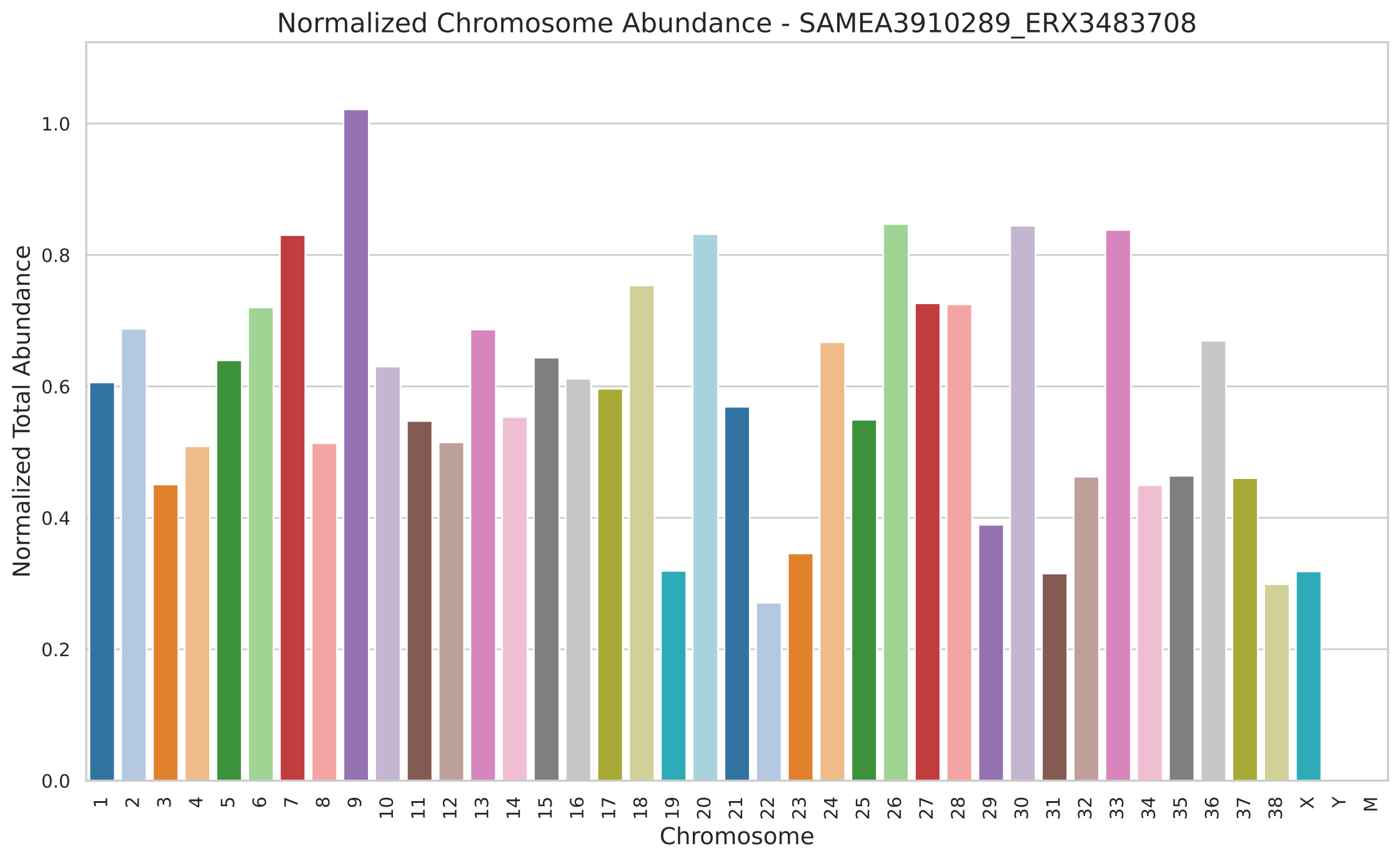

Normalized Chromosome Abundance - SAMN08005303_SRX3379841
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

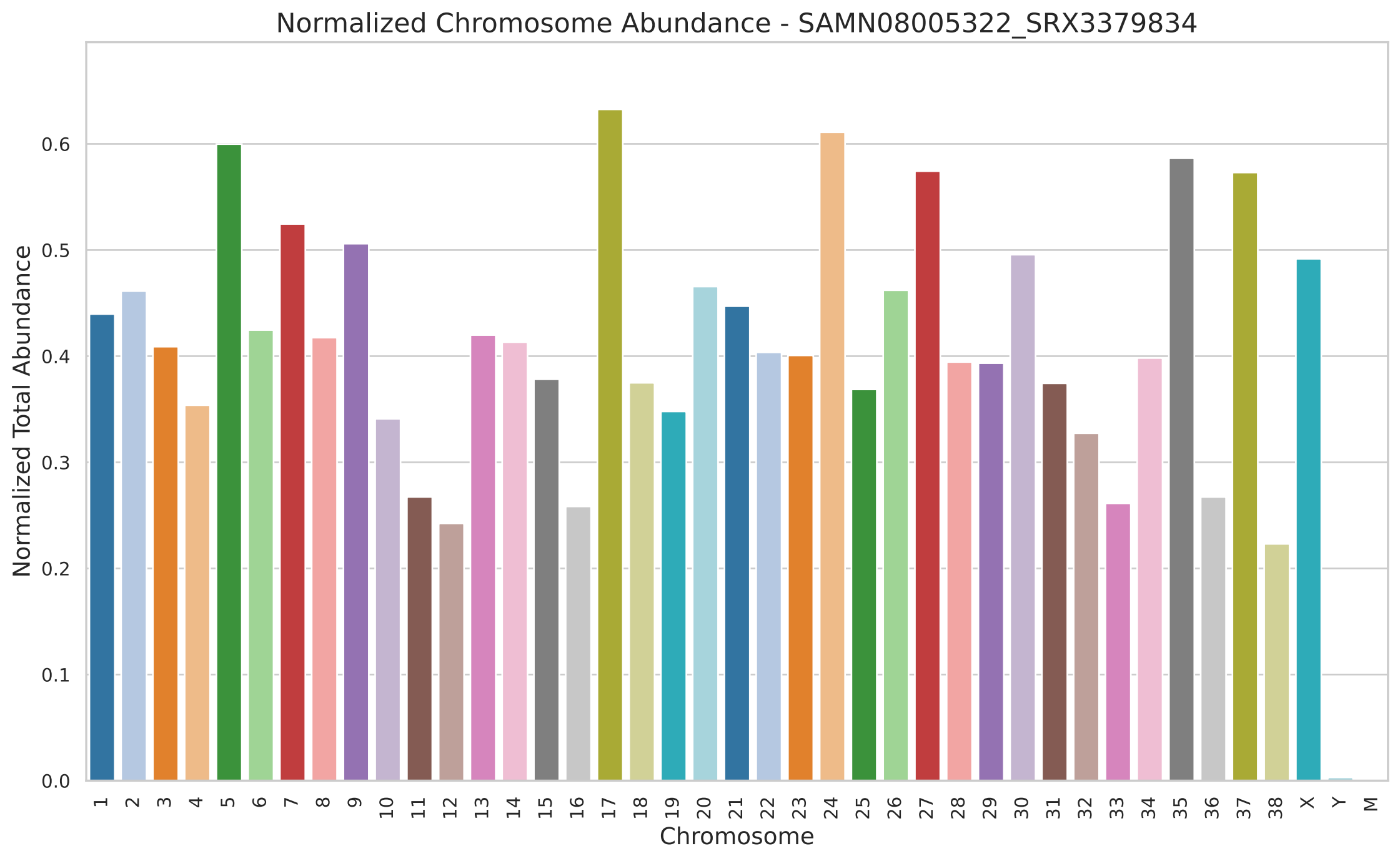

Normalized Chromosome Abundance - SAMEA3910334_ERX3483719
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

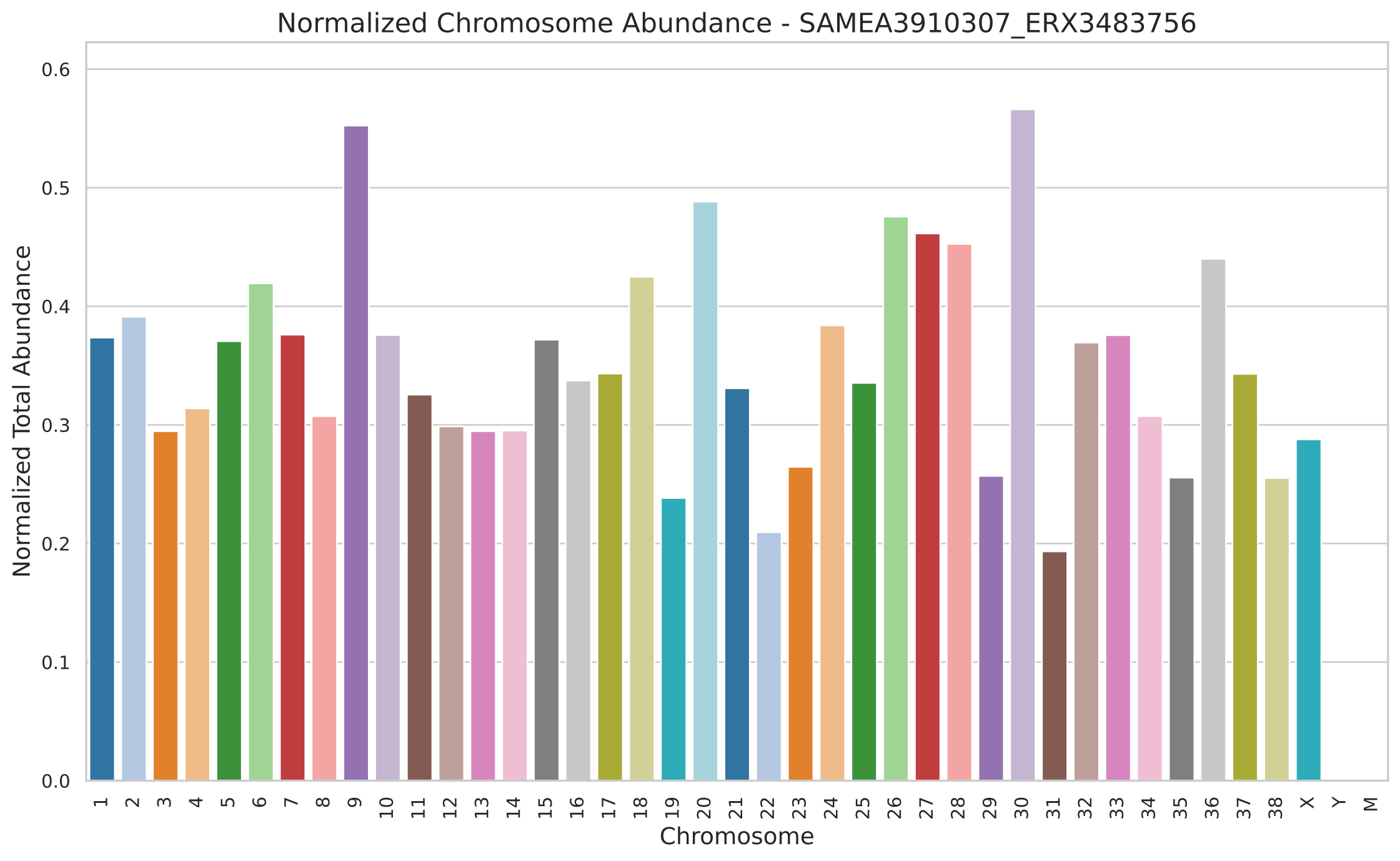

Normalized Chromosome Abundance - SAMEA3910517_ERX3483728
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

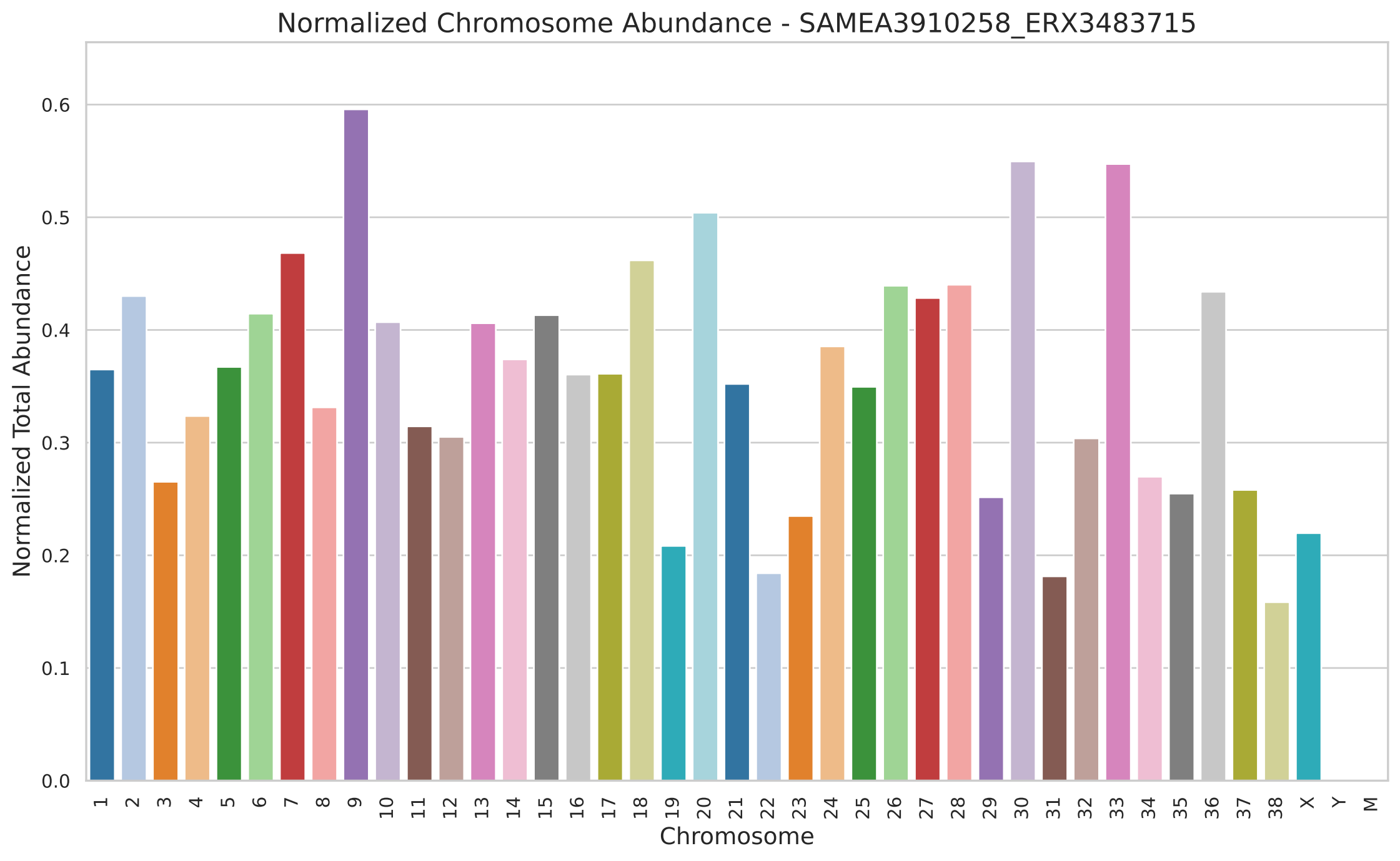

Normalized Chromosome Abundance - SAMEA3910369_ERX3483731
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

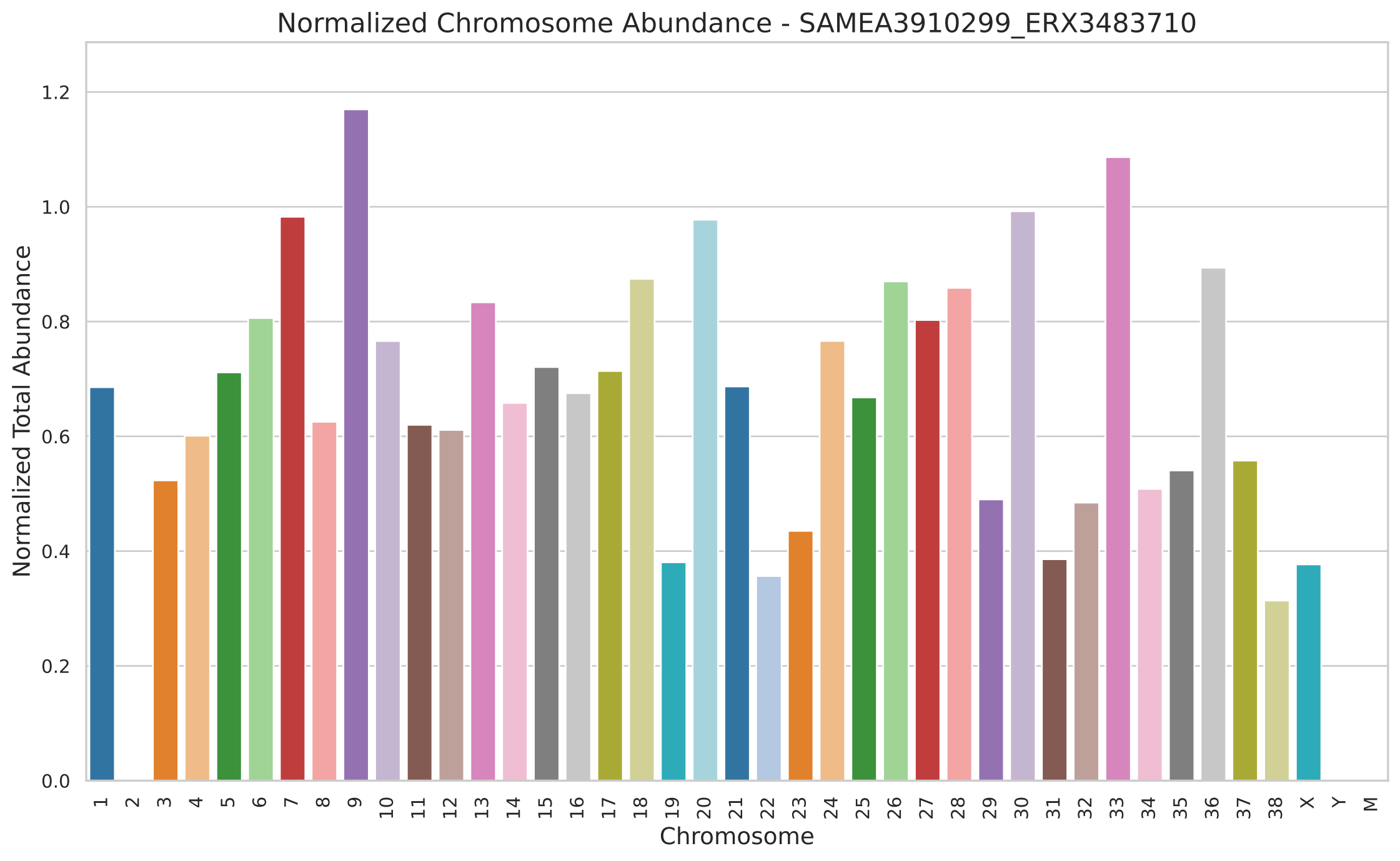

Normalized Chromosome Abundance - SAMEA3910371_ERX3483732
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

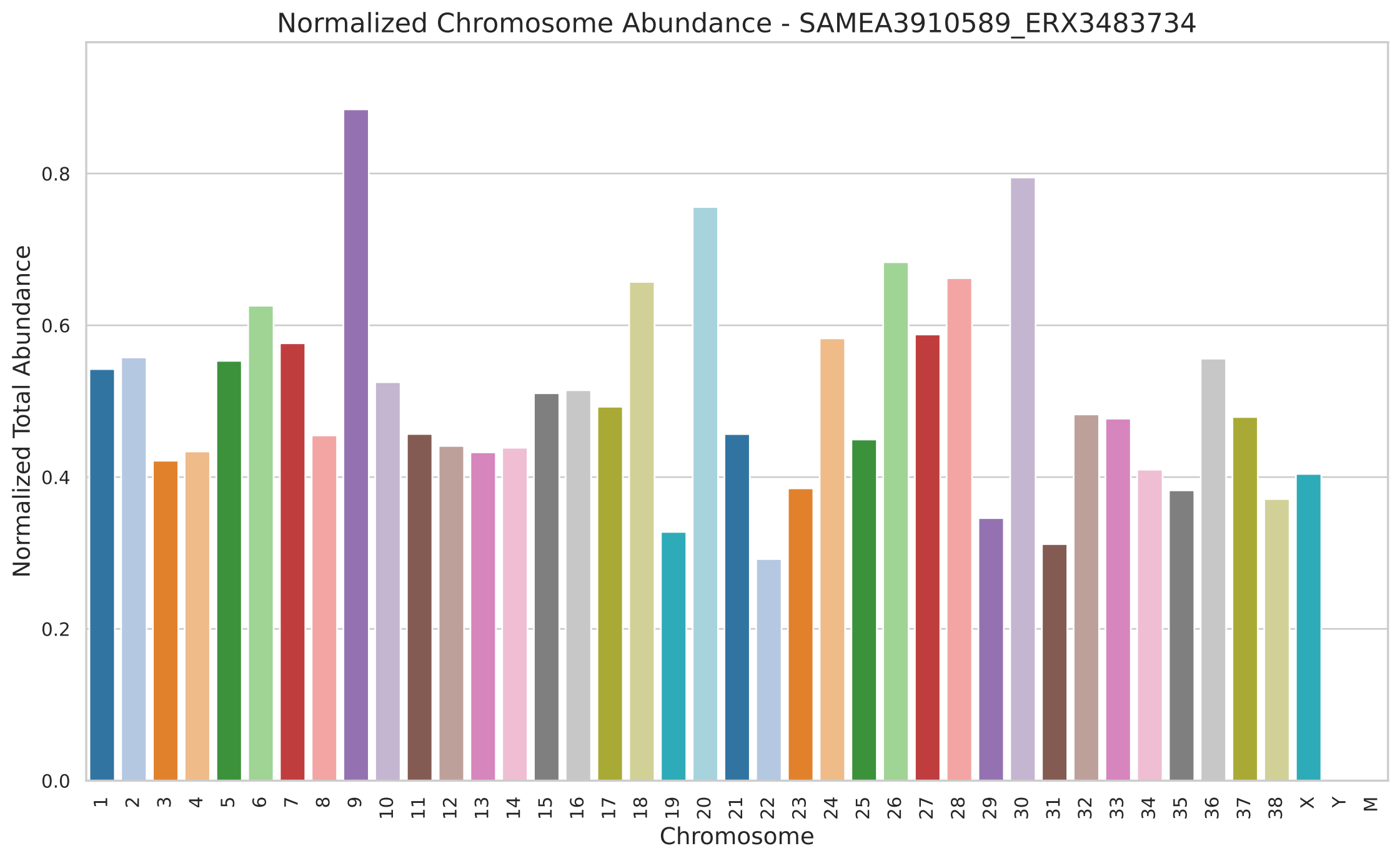

Normalized Chromosome Abundance - SAMEA3910289_ERX3483708
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

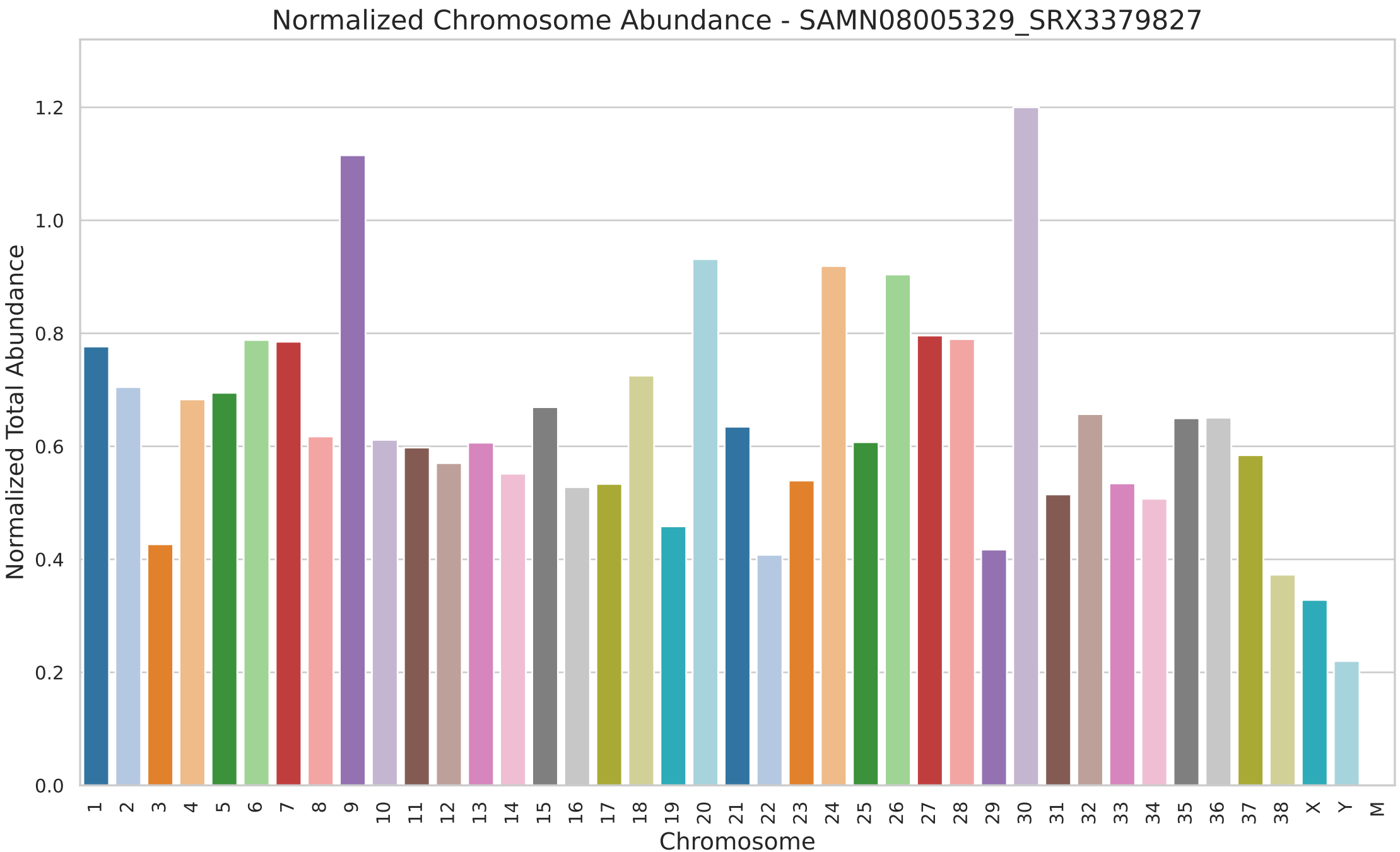

Normalized Chromosome Abundance - SAMN08005322_SRX3379834
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

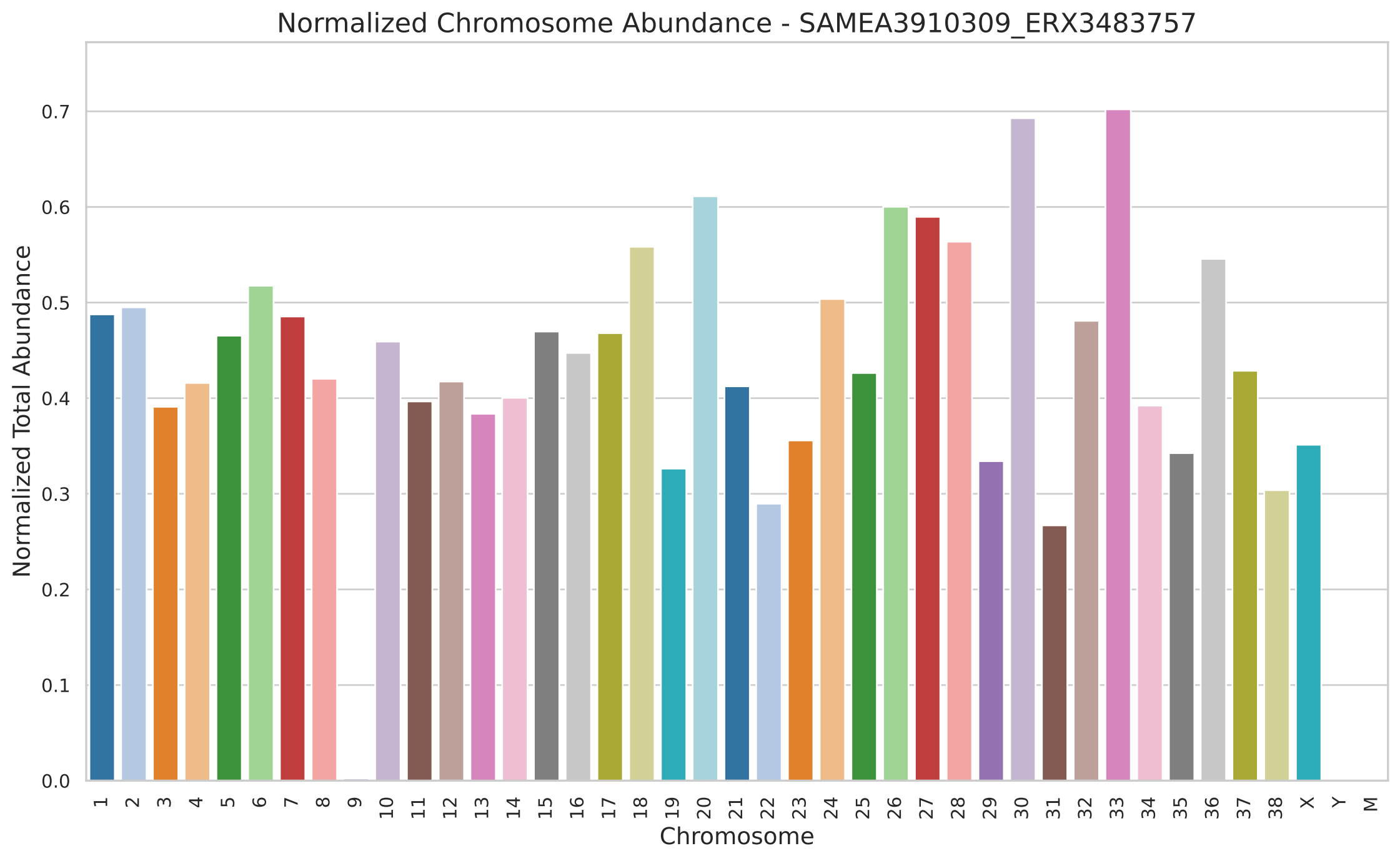

Normalized Chromosome Abundance - SAMEA3910307_ERX3483756
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

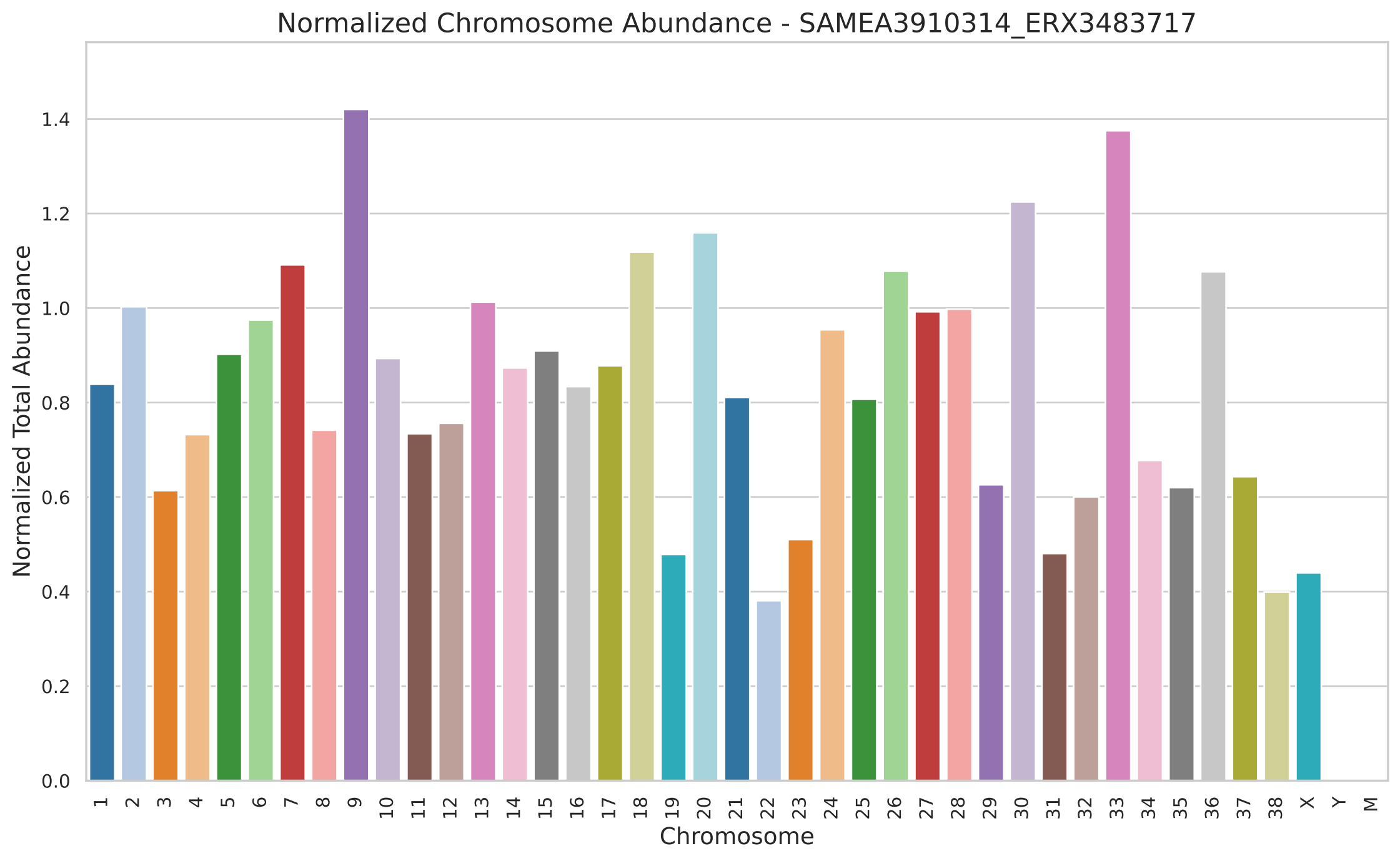

Normalized Chromosome Abundance - SAMEA3910258_ERX3483715
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

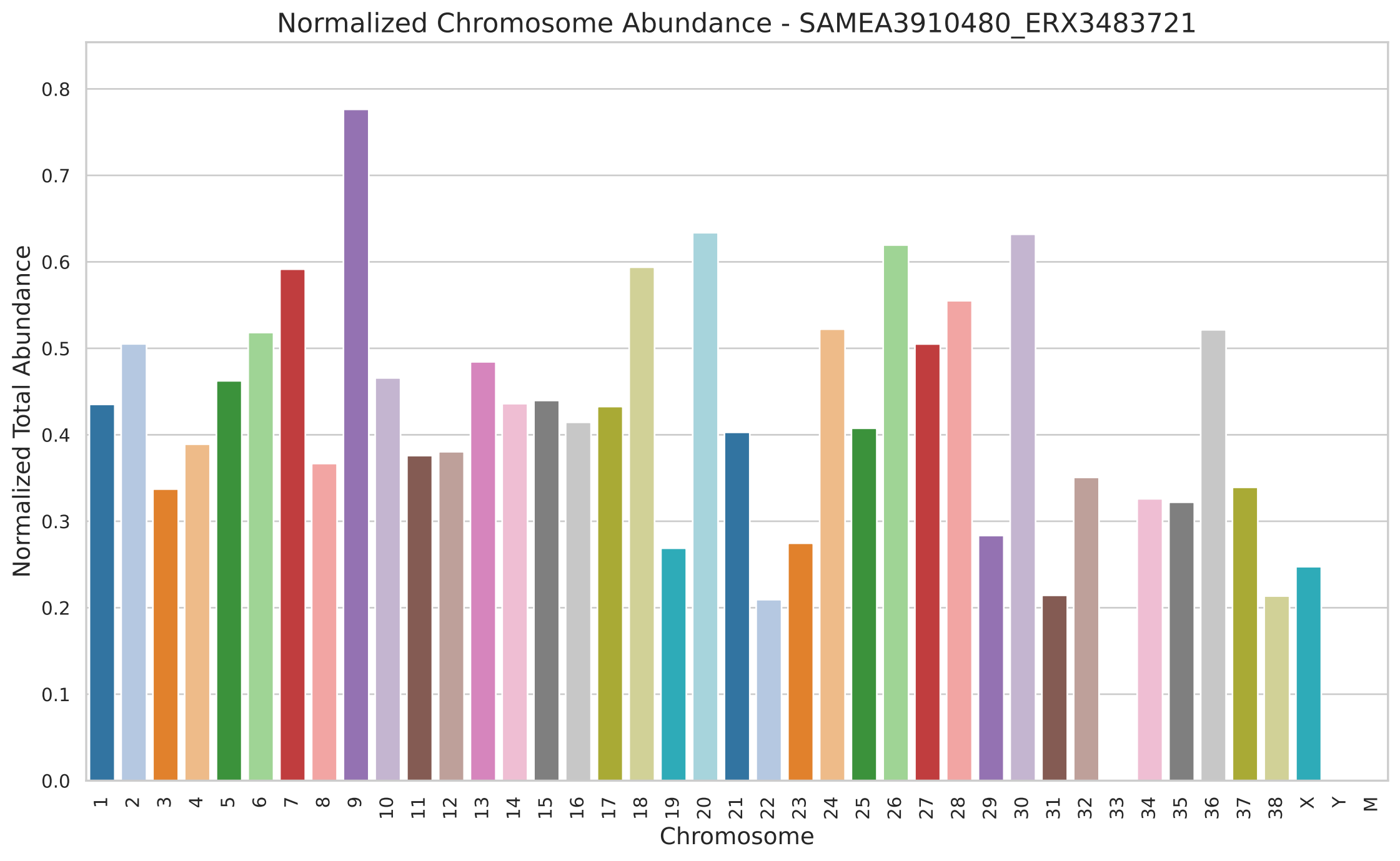

Normalized Chromosome Abundance - SAMEA3910299_ERX3483710
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

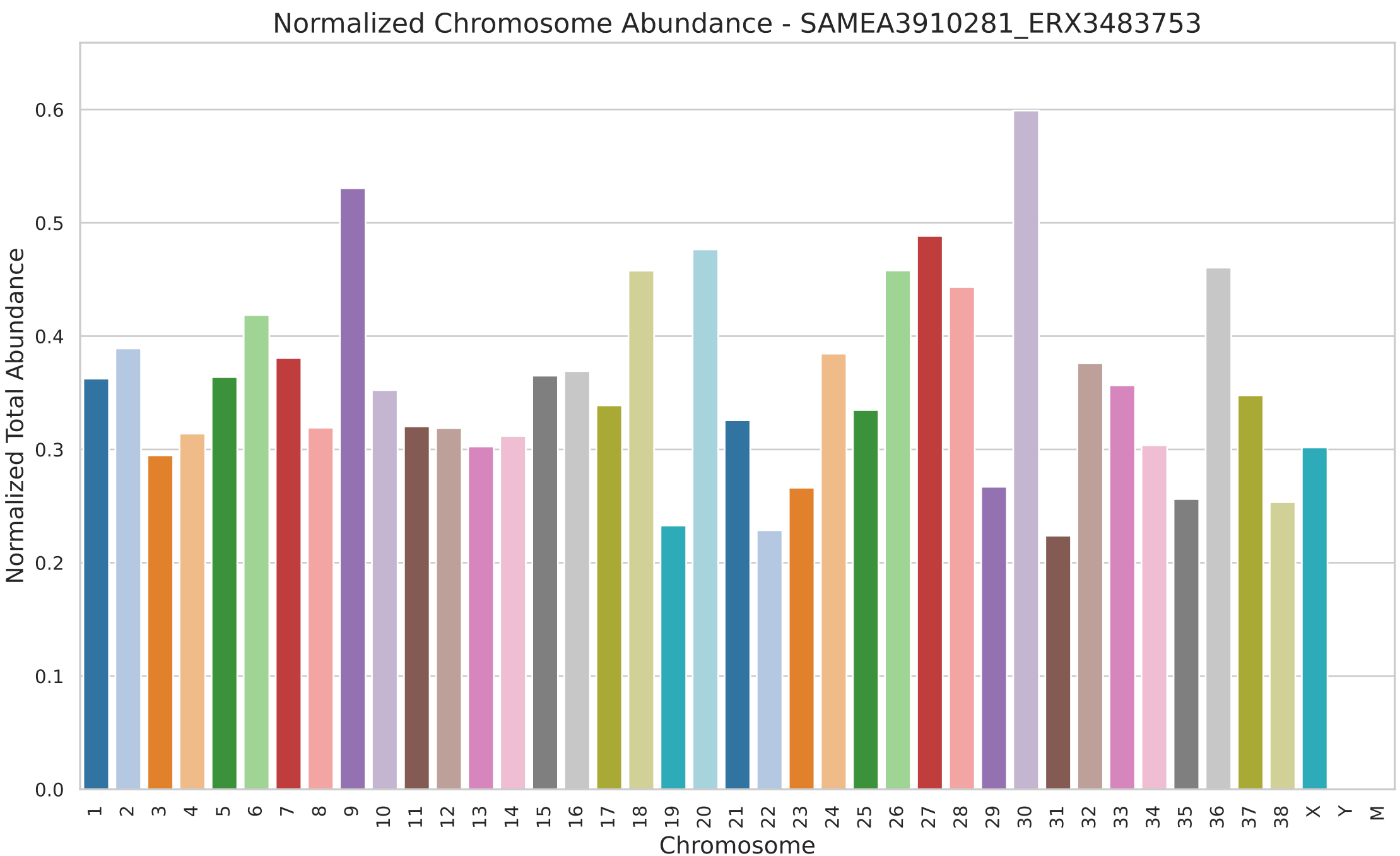

Normalized Chromosome Abundance - SAMEA3910589_ERX3483734
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

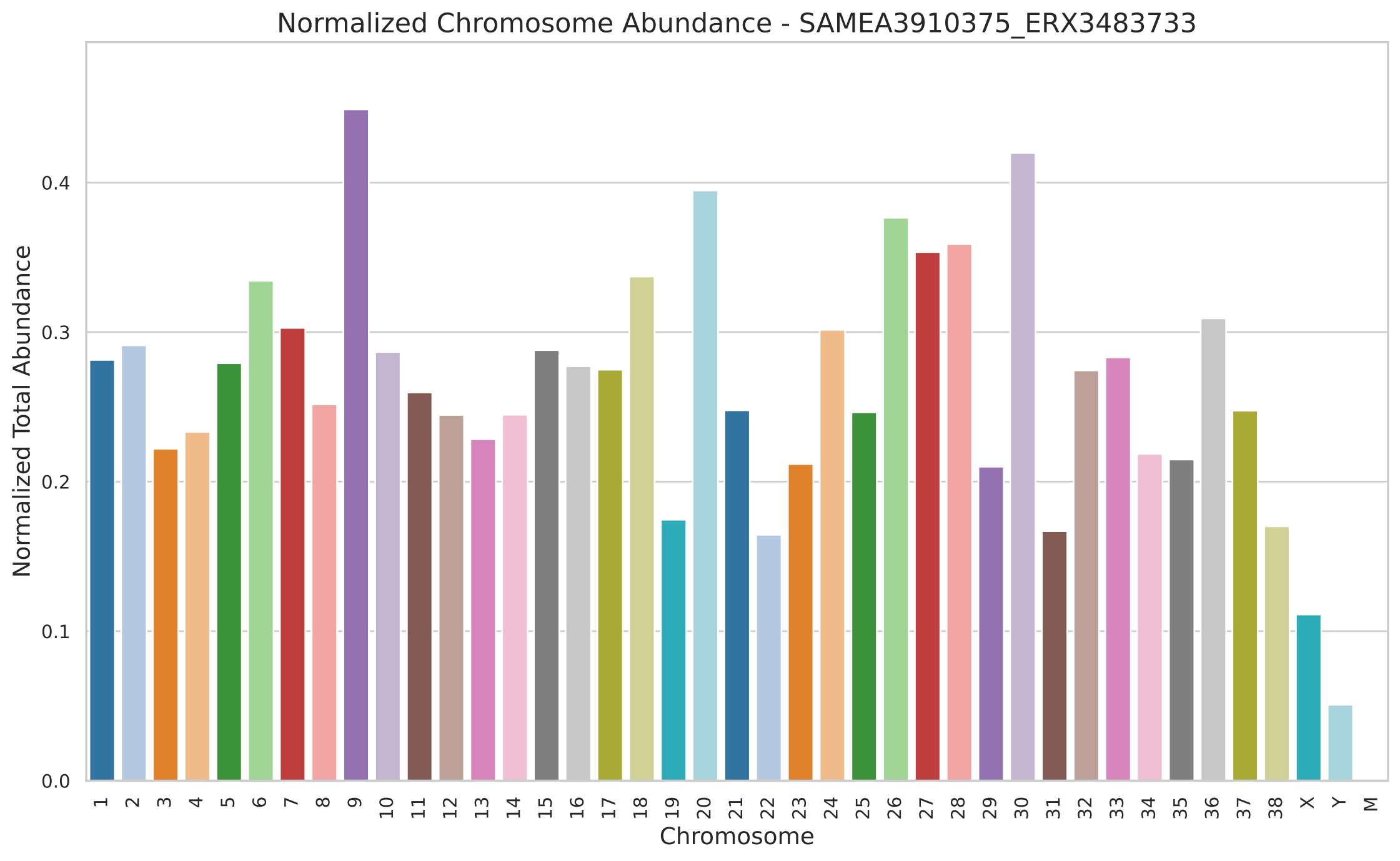

Normalized Chromosome Abundance - SAMN08005329_SRX3379827
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

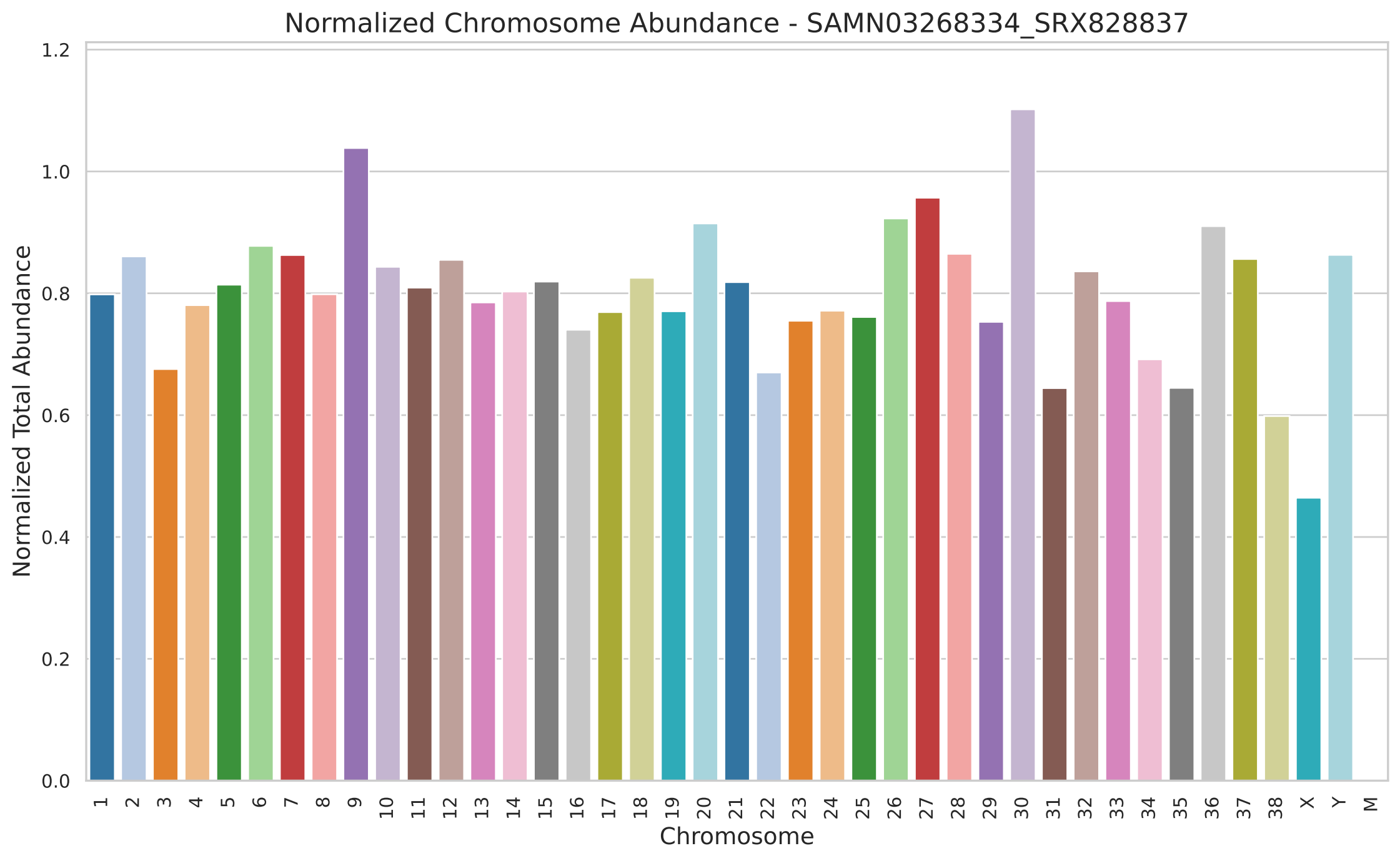

Normalized Chromosome Abundance - SAMEA3910309_ERX3483757
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

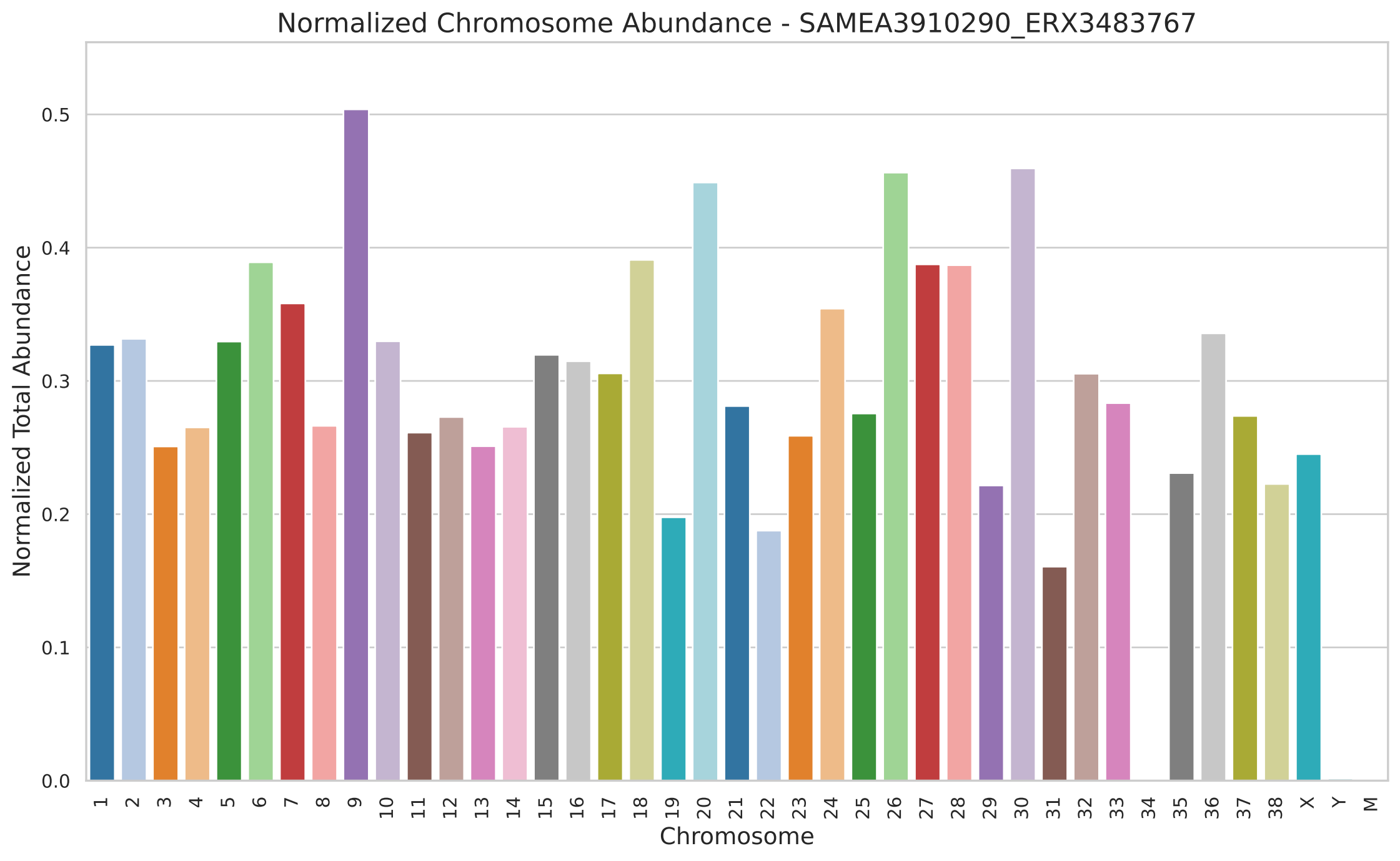

Normalized Chromosome Abundance - SAMEA3910314_ERX3483717
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

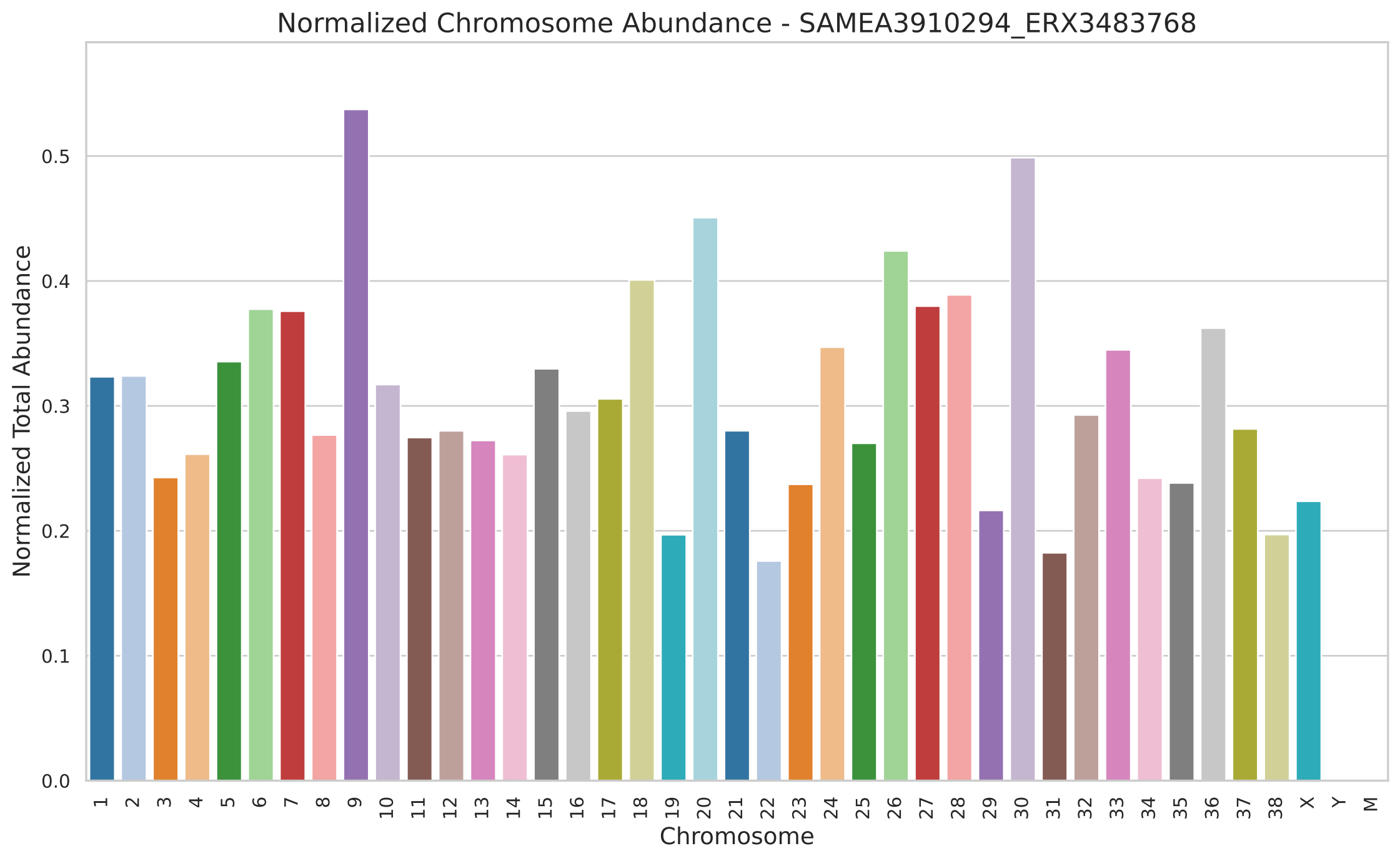

Normalized Chromosome Abundance - SAMEA3910480_ERX3483721
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

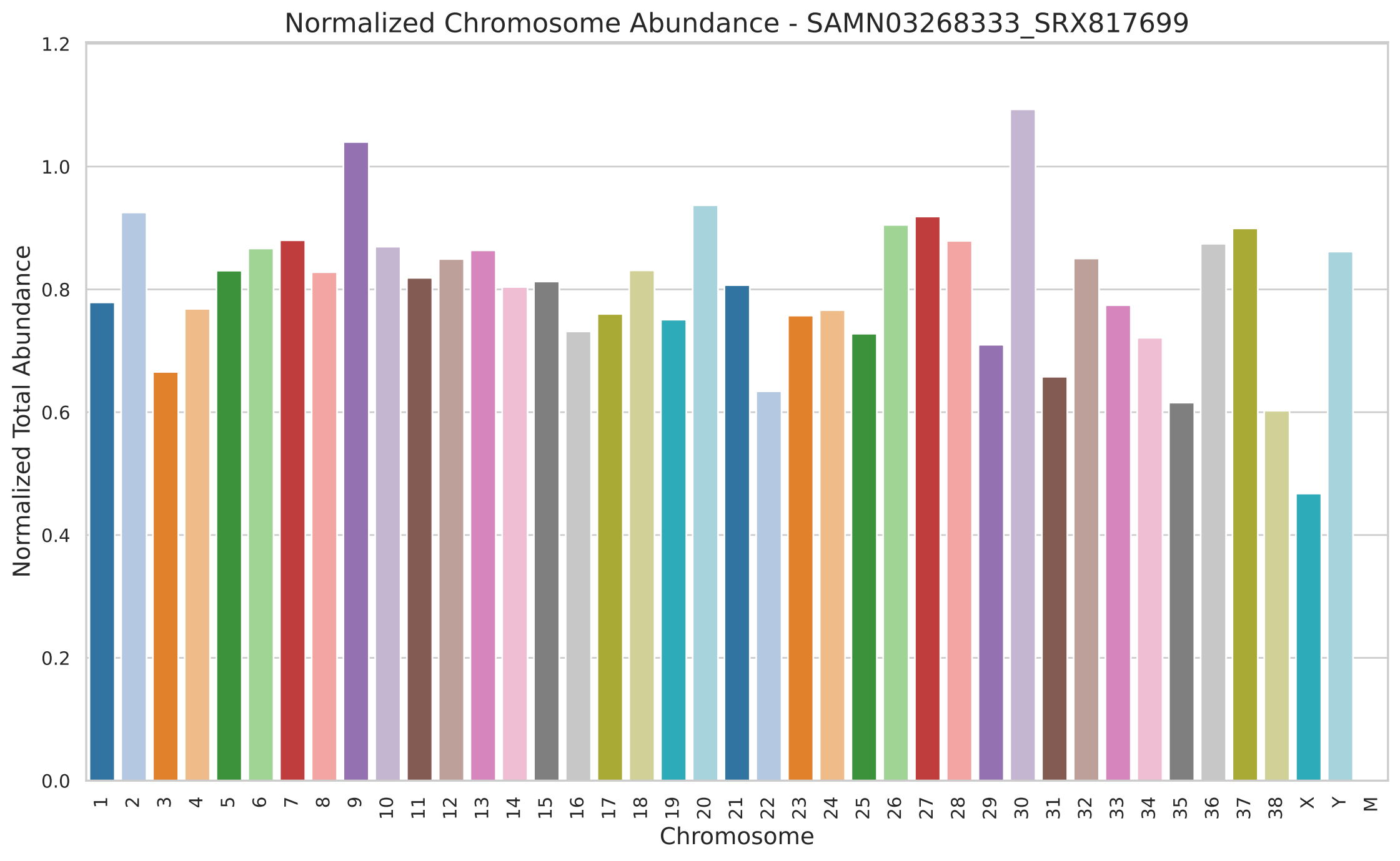

Normalized Chromosome Abundance - SAMEA3910281_ERX3483753
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

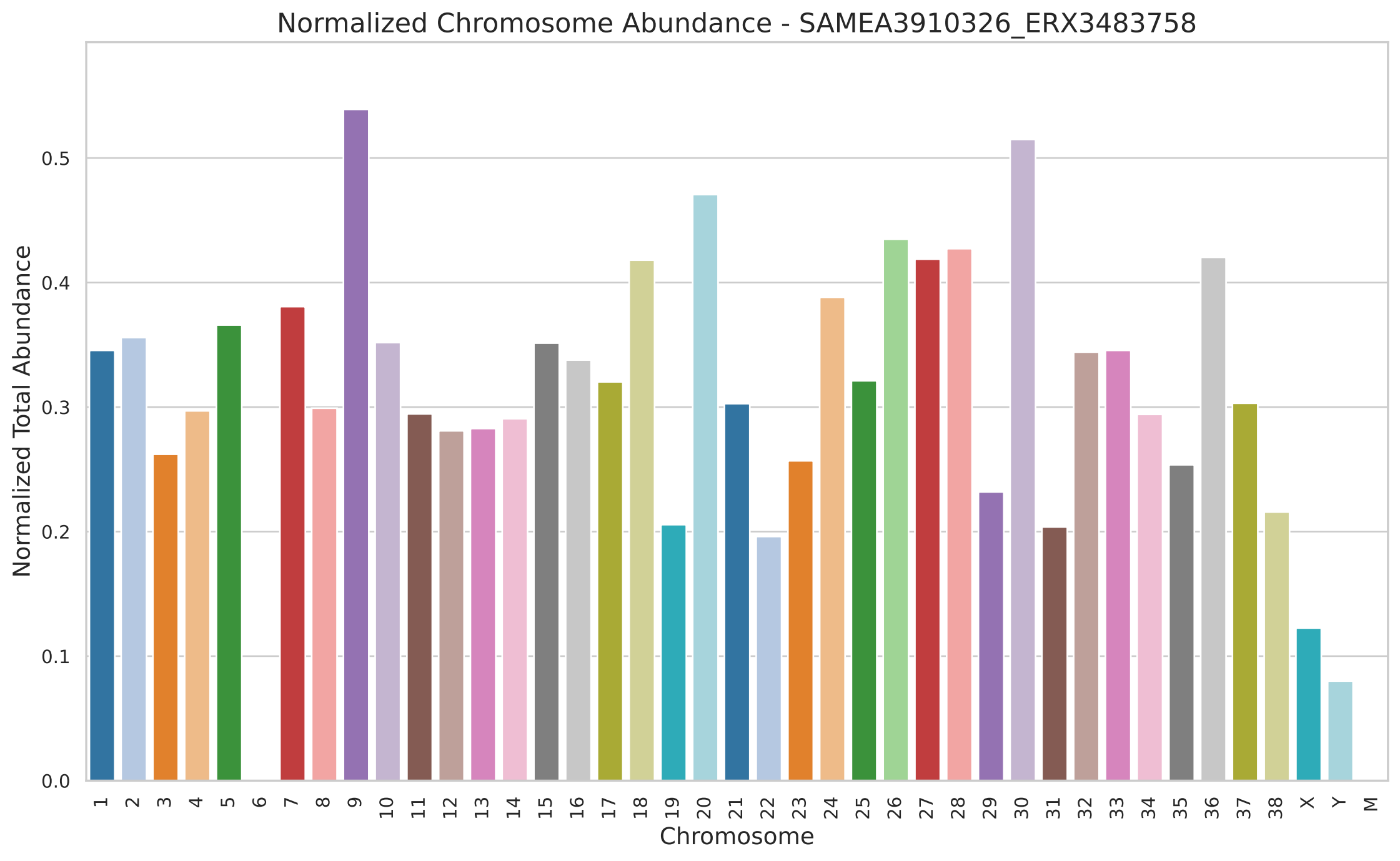

Normalized Chromosome Abundance - SAMEA3910375_ERX3483733
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

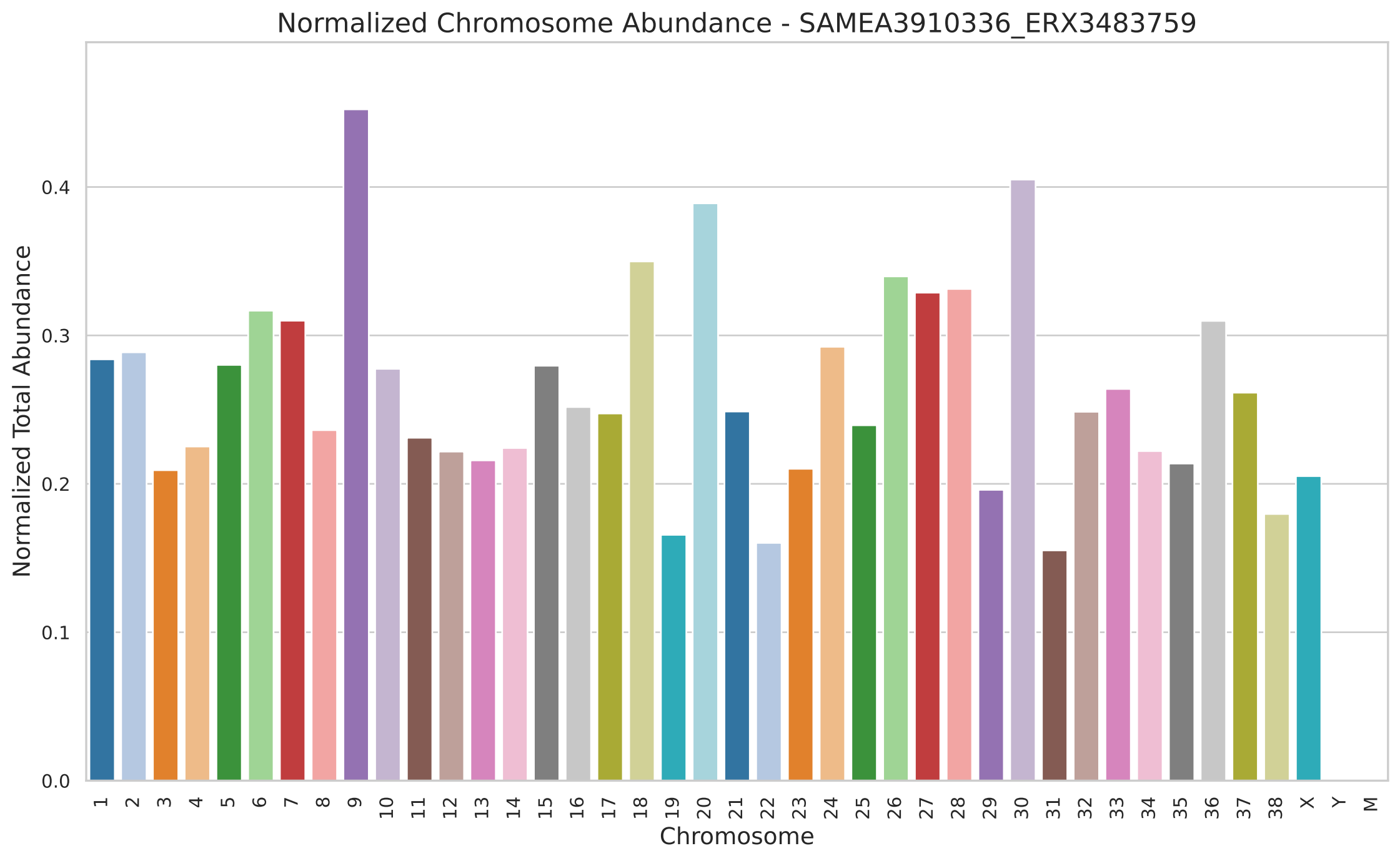

Normalized Chromosome Abundance - SAMN03268334_SRX828837
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

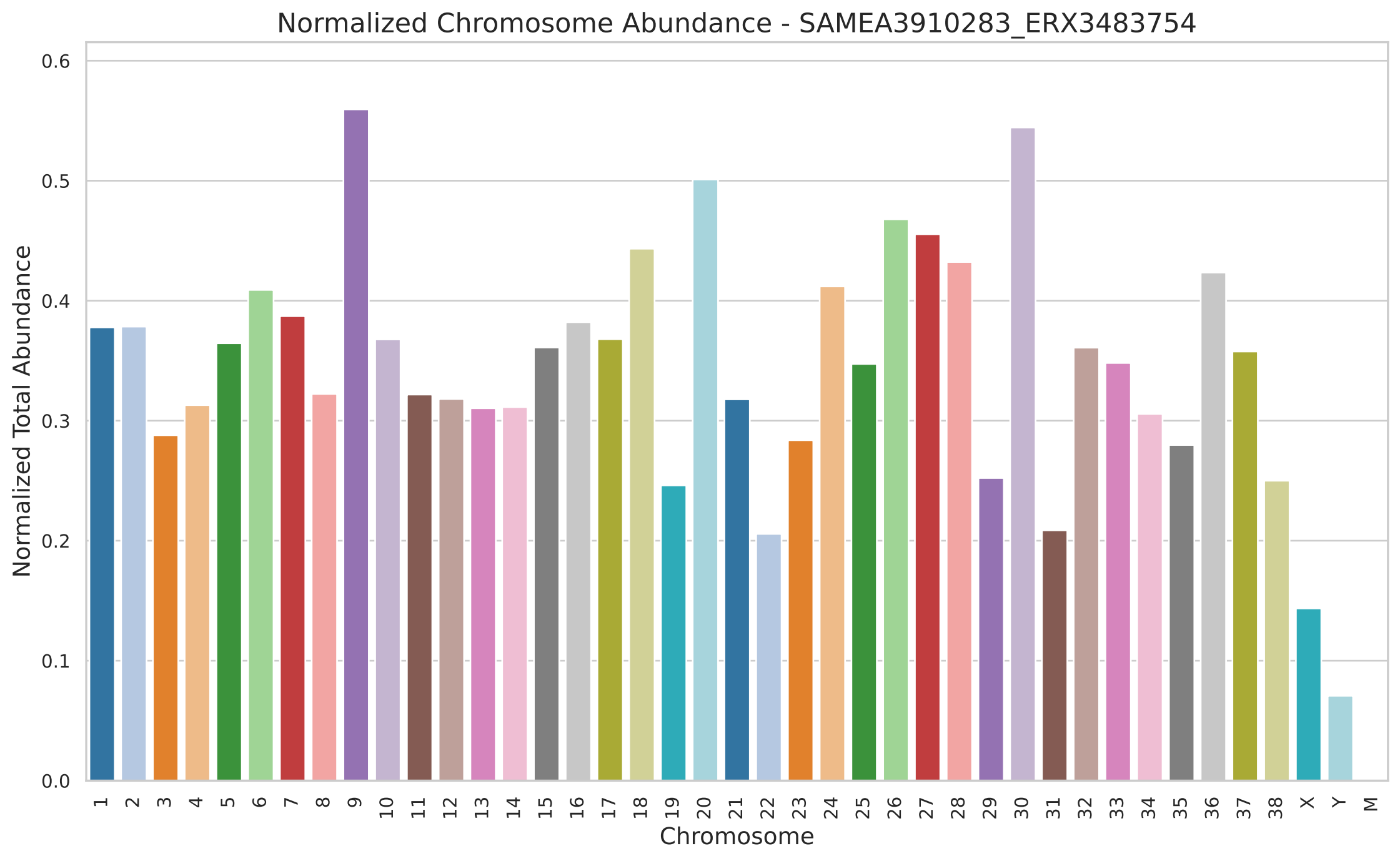

Normalized Chromosome Abundance - SAMEA3910290_ERX3483767
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

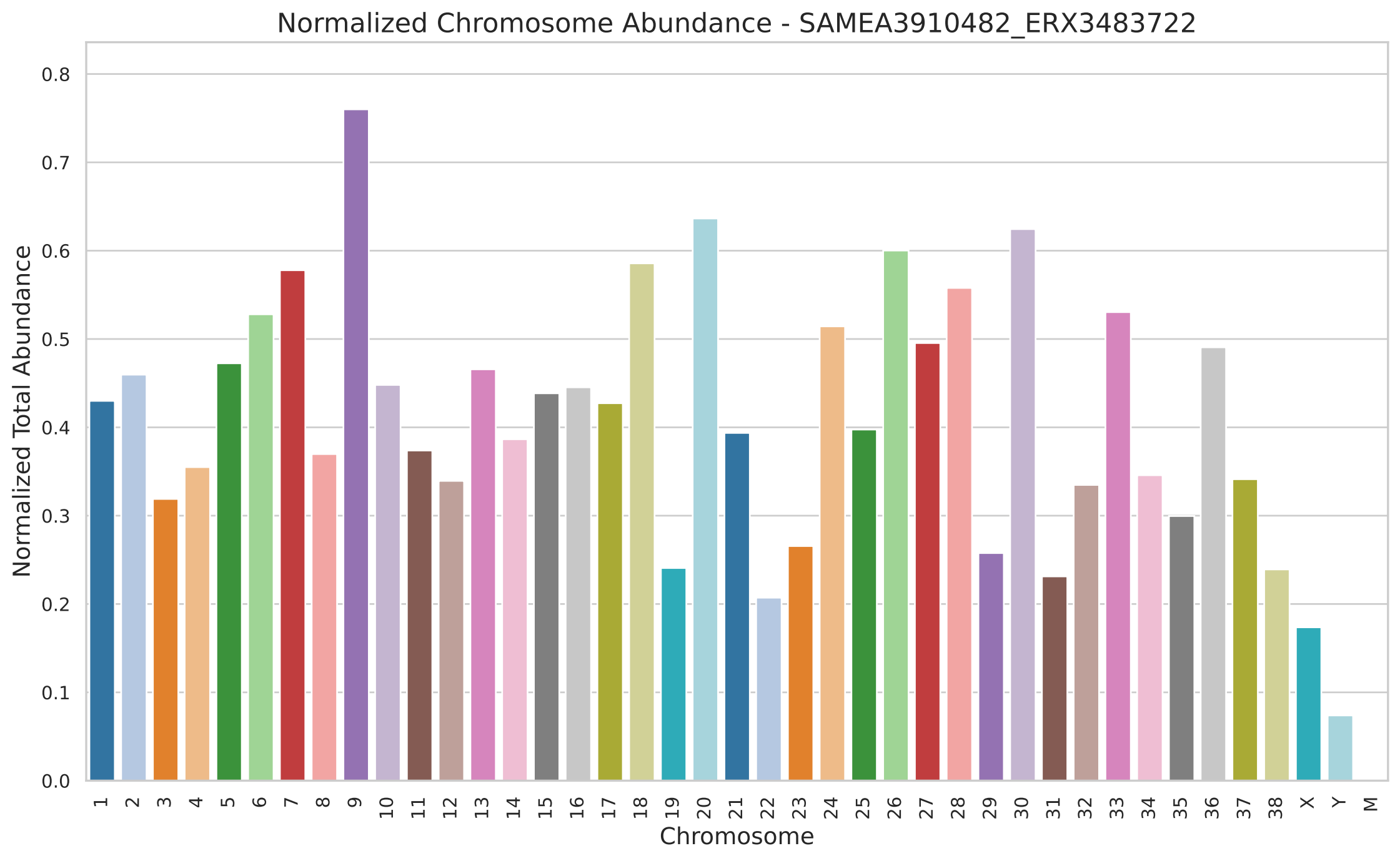

Normalized Chromosome Abundance - SAMEA3910294_ERX3483768
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

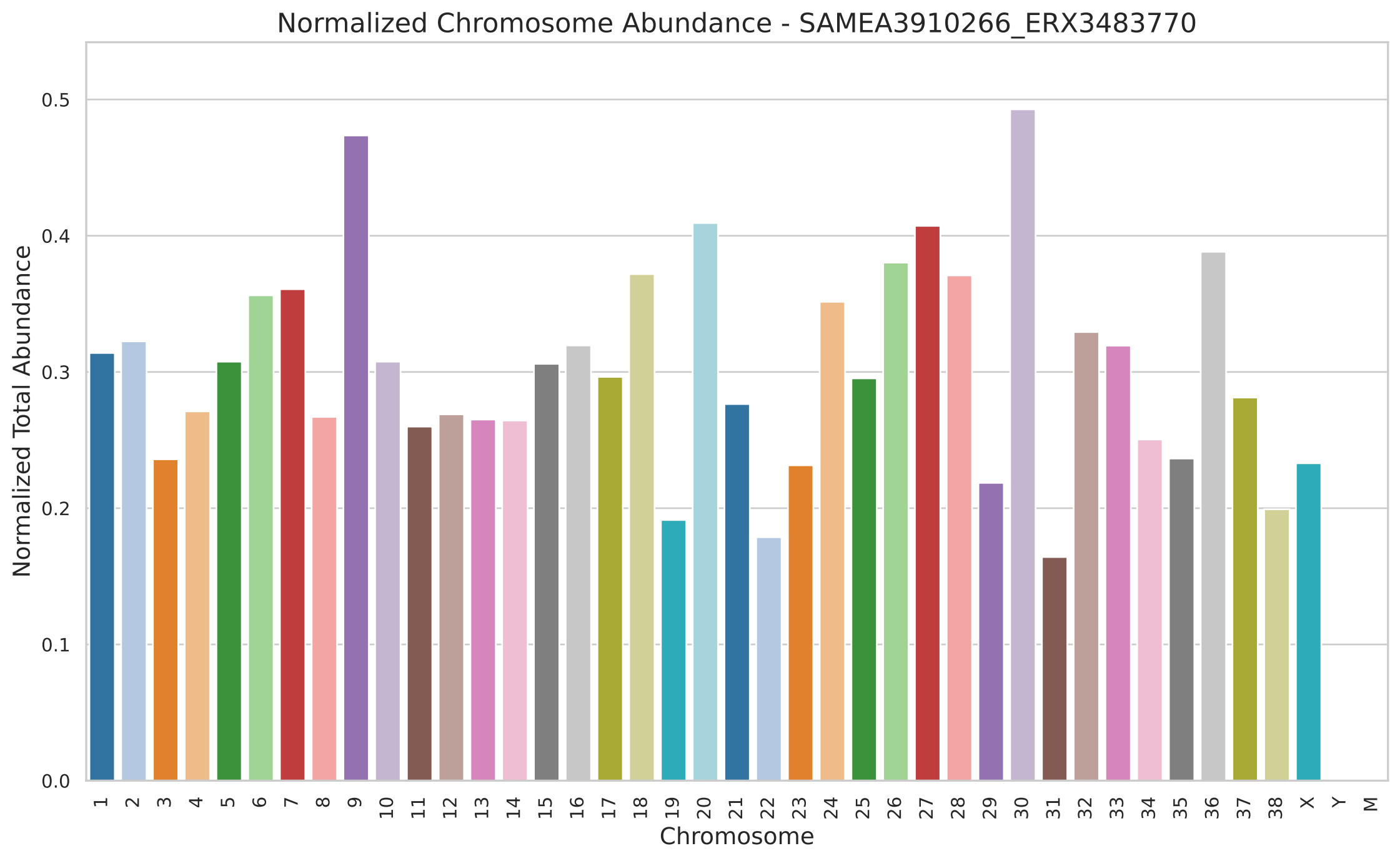

Normalized Chromosome Abundance - SAMN03268333_SRX817699
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

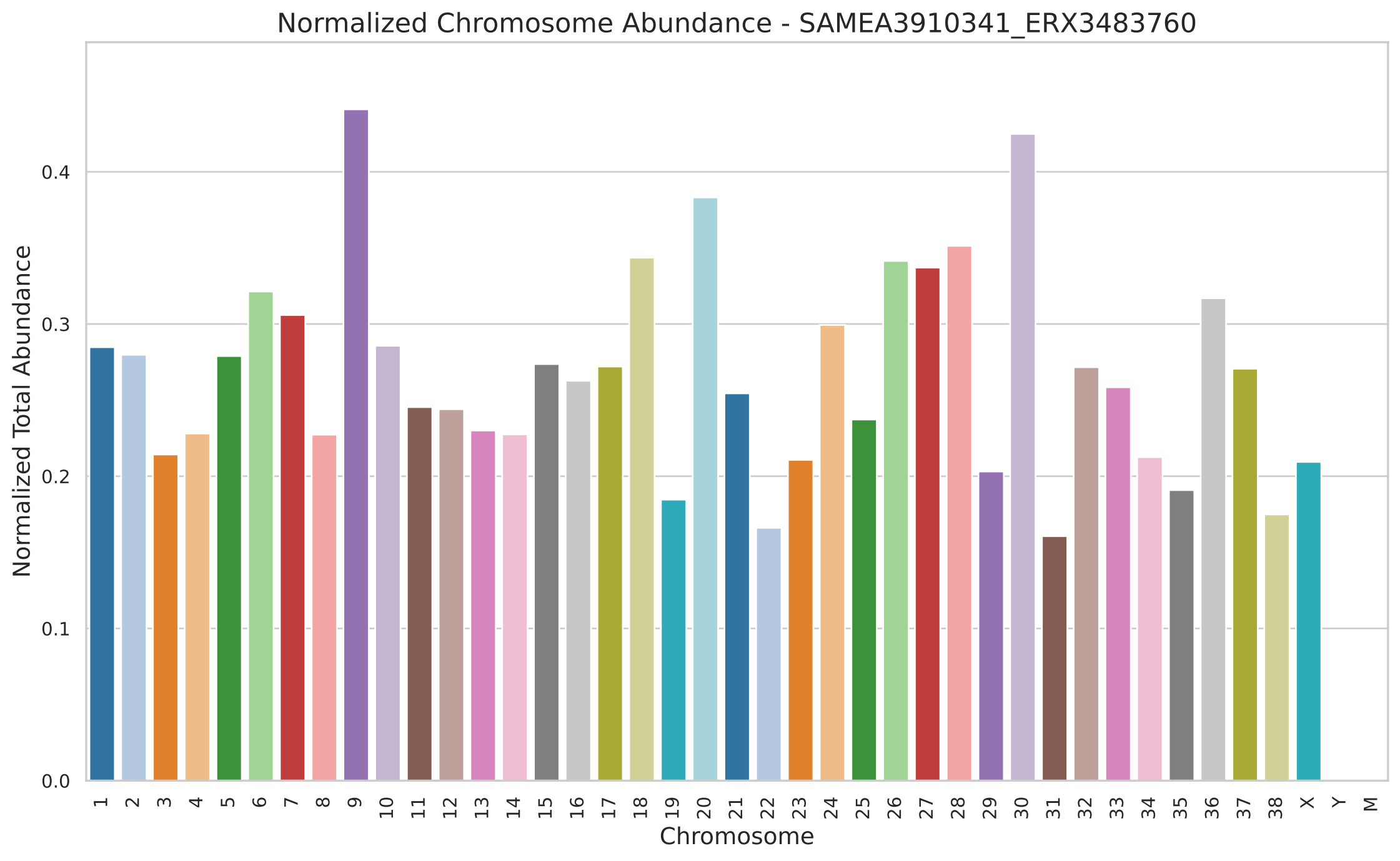

Normalized Chromosome Abundance - SAMEA3910326_ERX3483758
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

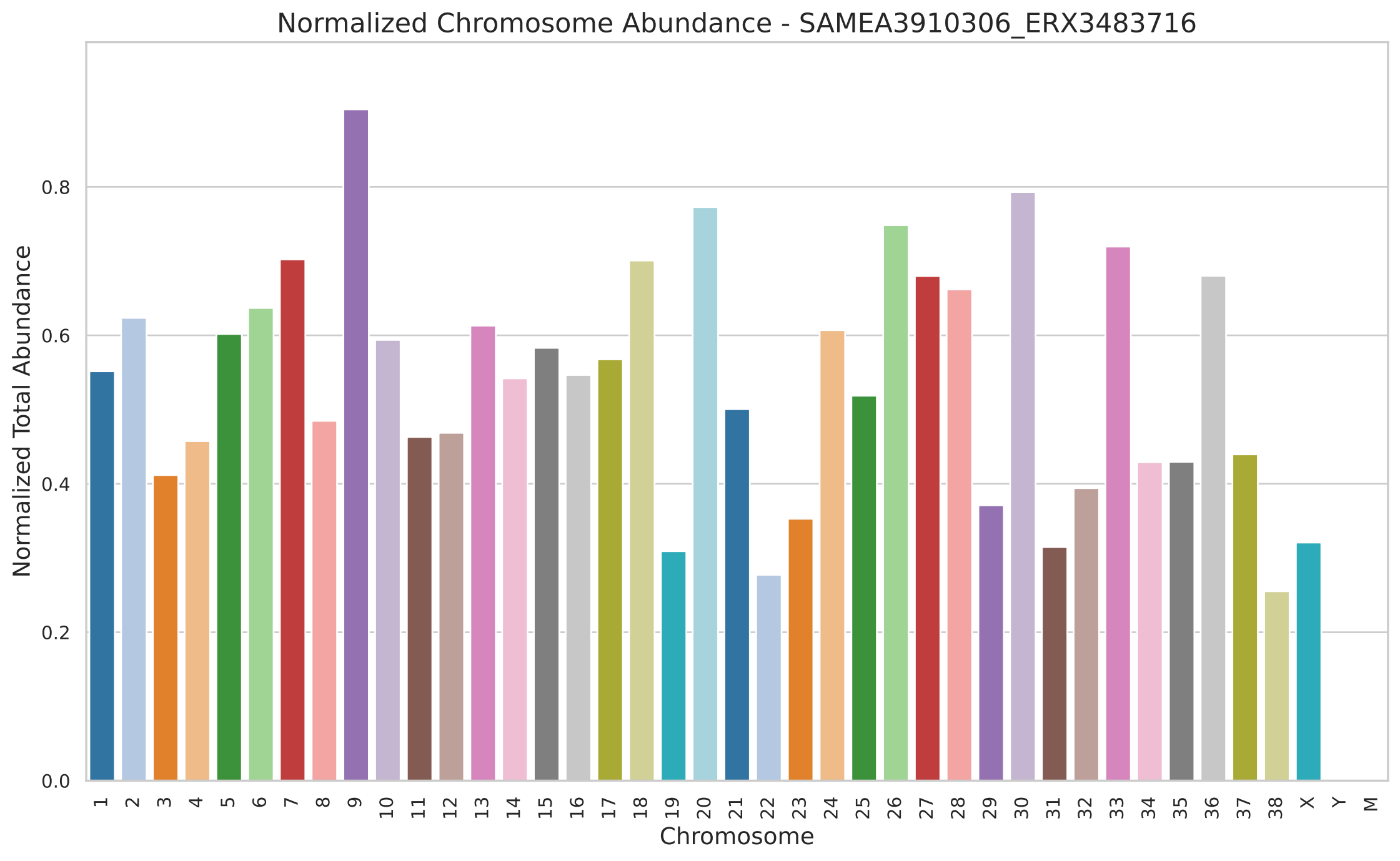

Normalized Chromosome Abundance - SAMEA3910336_ERX3483759
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

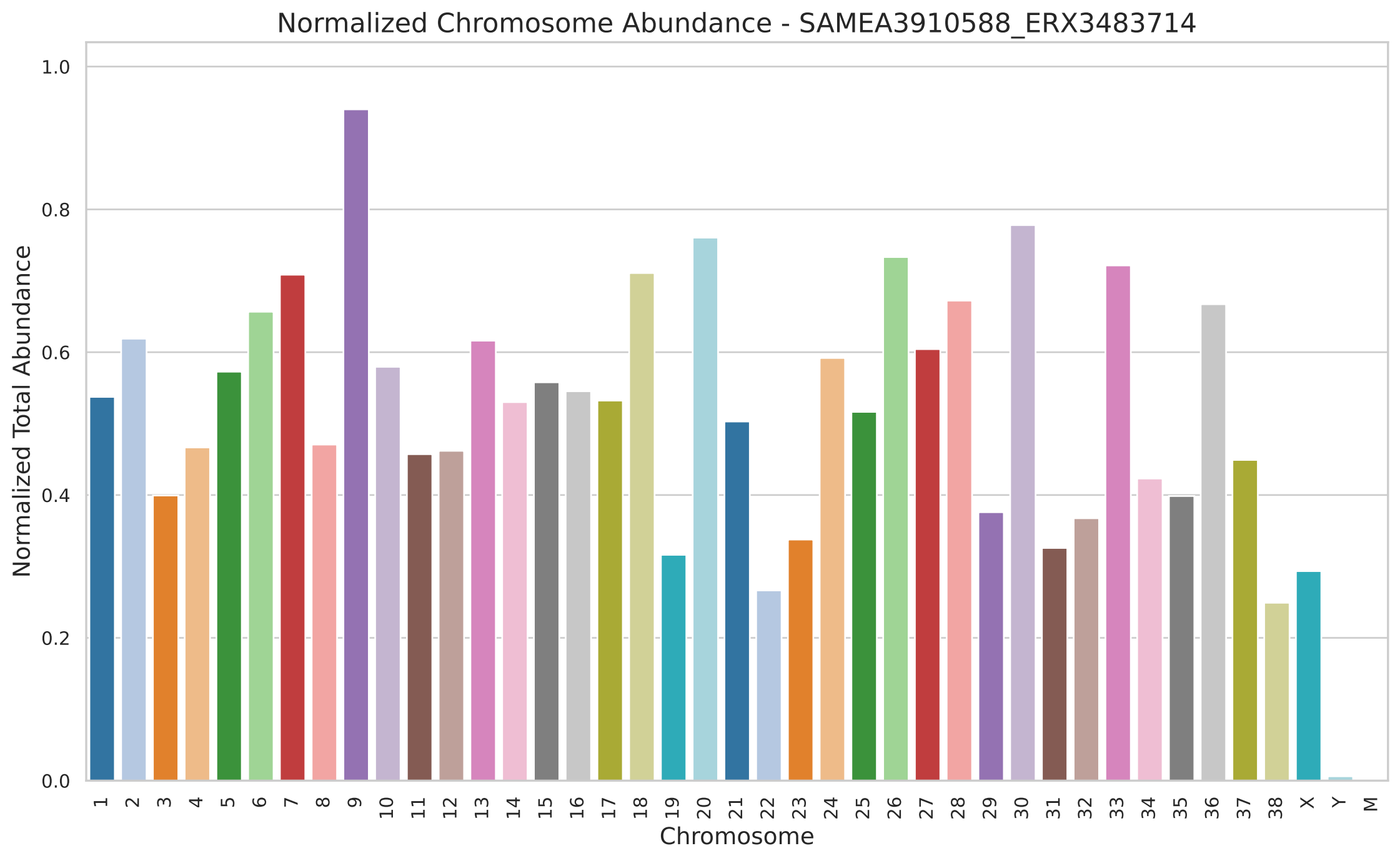

Normalized Chromosome Abundance - SAMEA3910283_ERX3483754
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

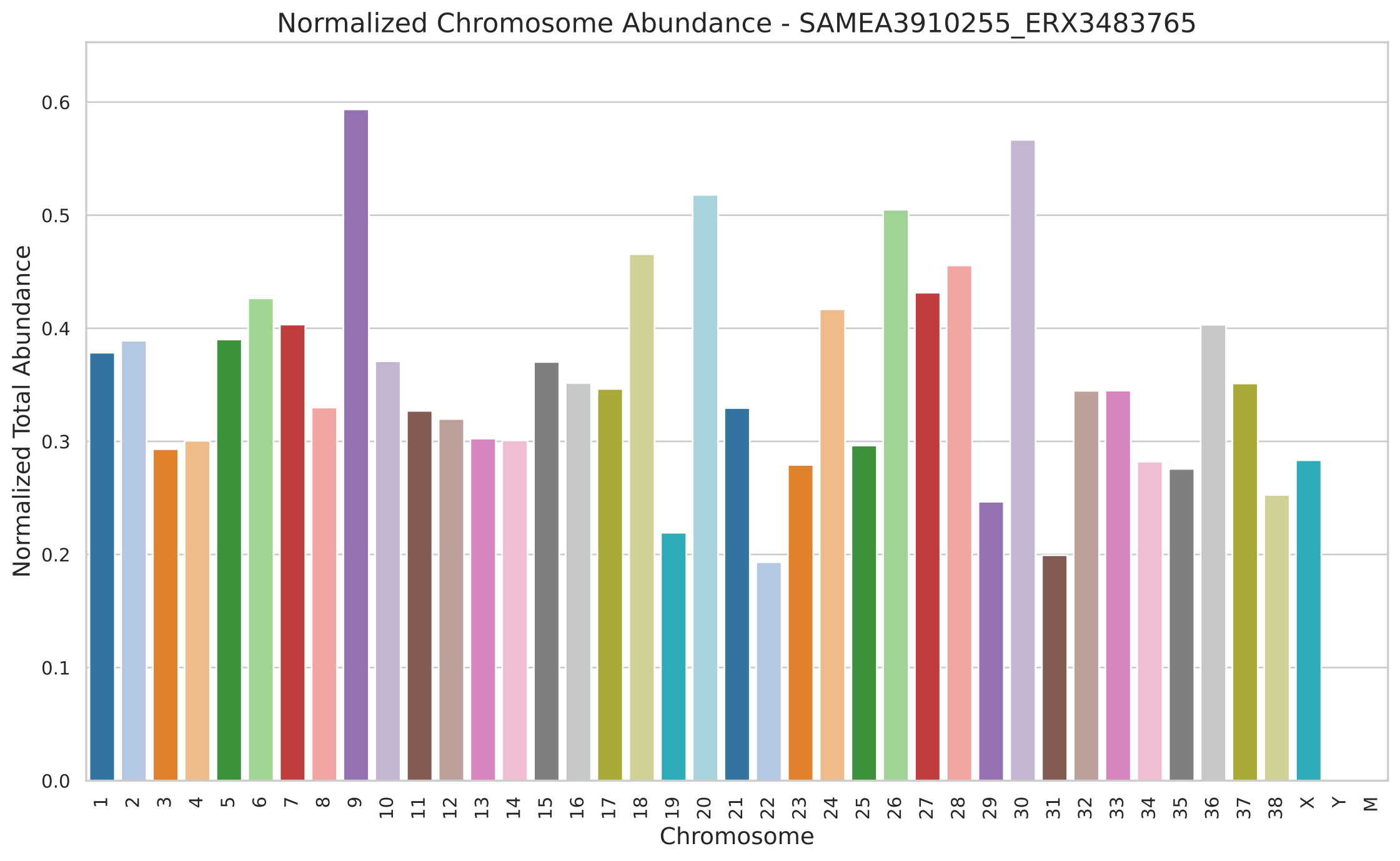

Normalized Chromosome Abundance - SAMEA3910482_ERX3483722
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

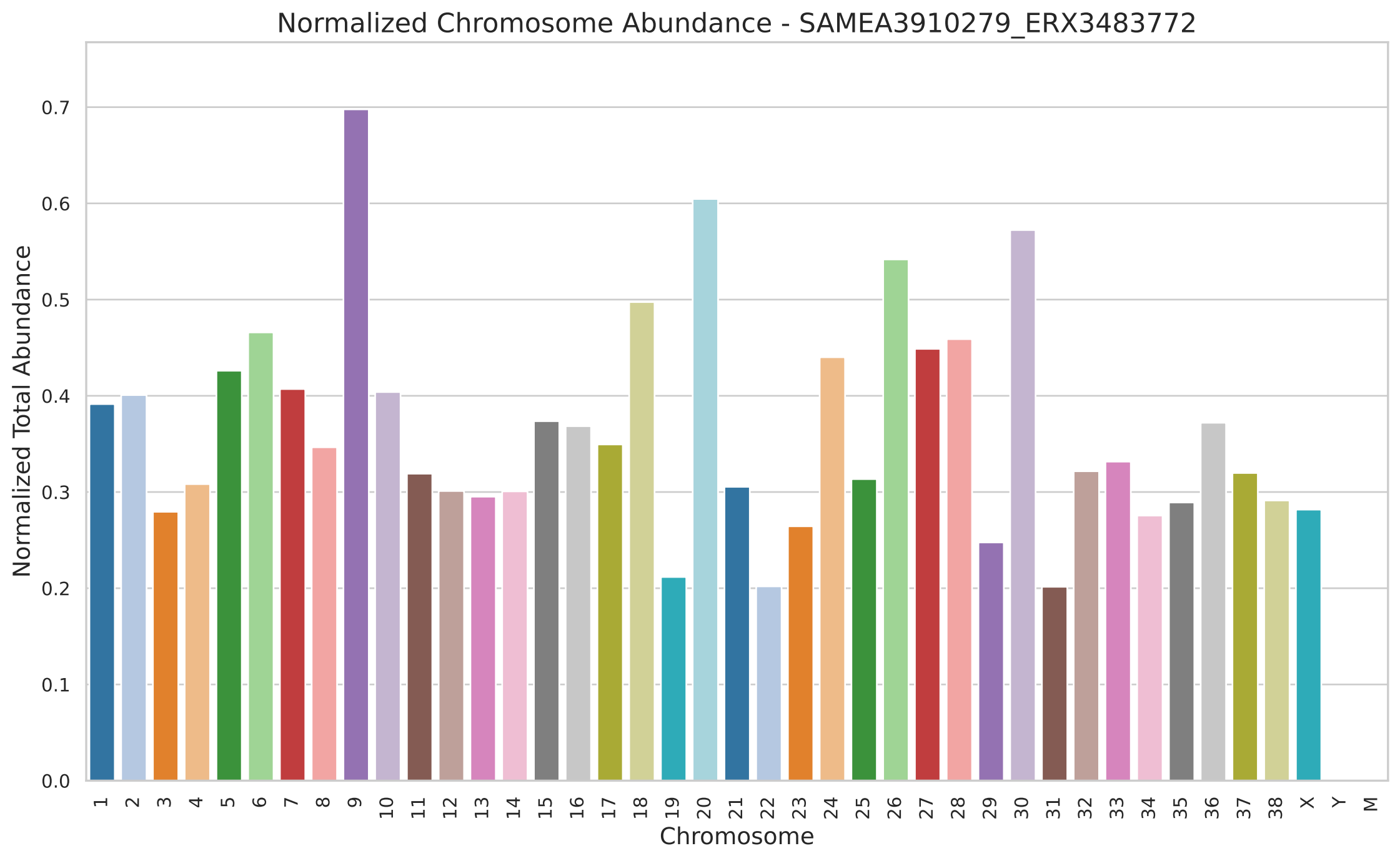

Normalized Chromosome Abundance - SAMEA3910266_ERX3483770
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

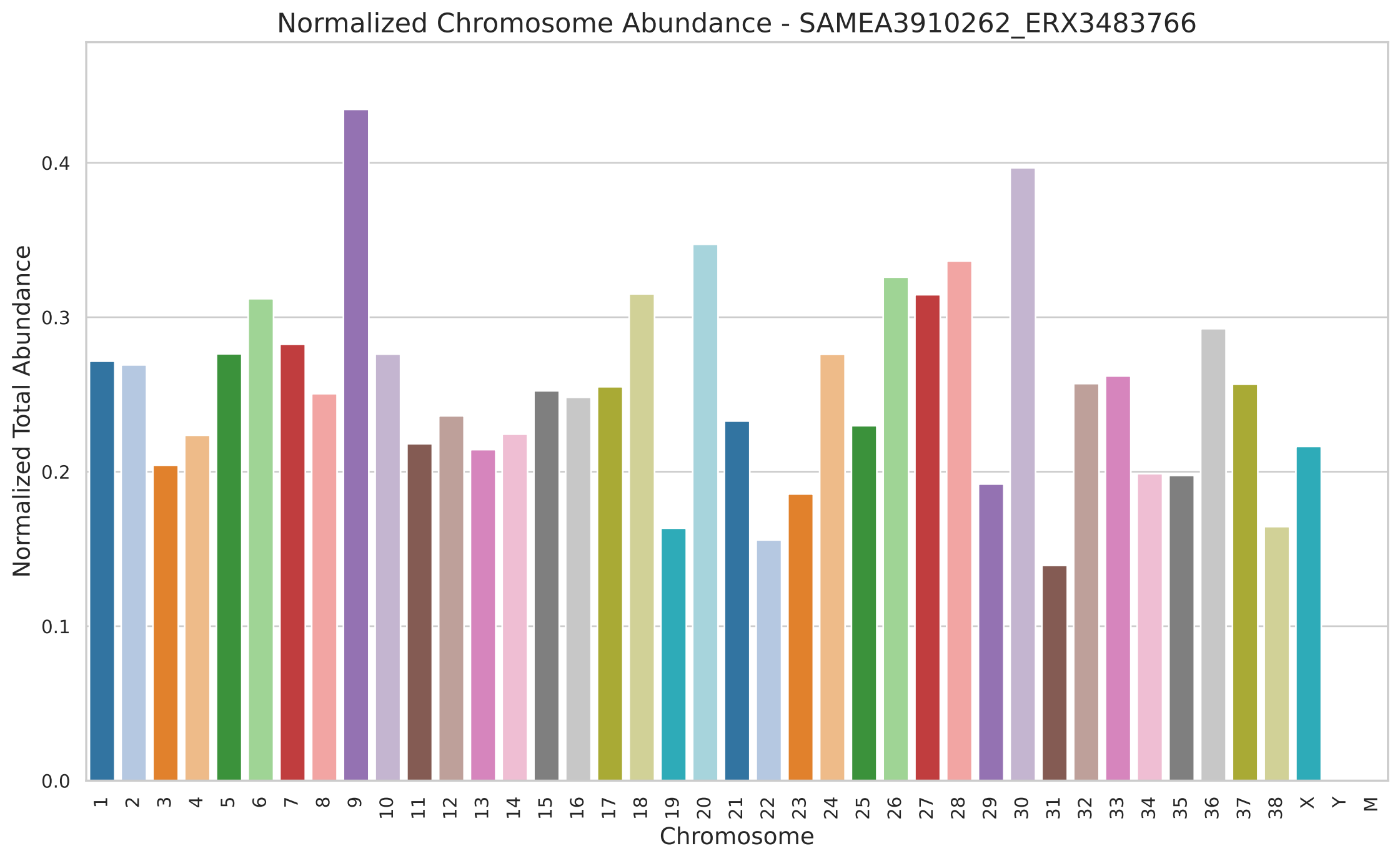

Normalized Chromosome Abundance - SAMEA3910341_ERX3483760
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

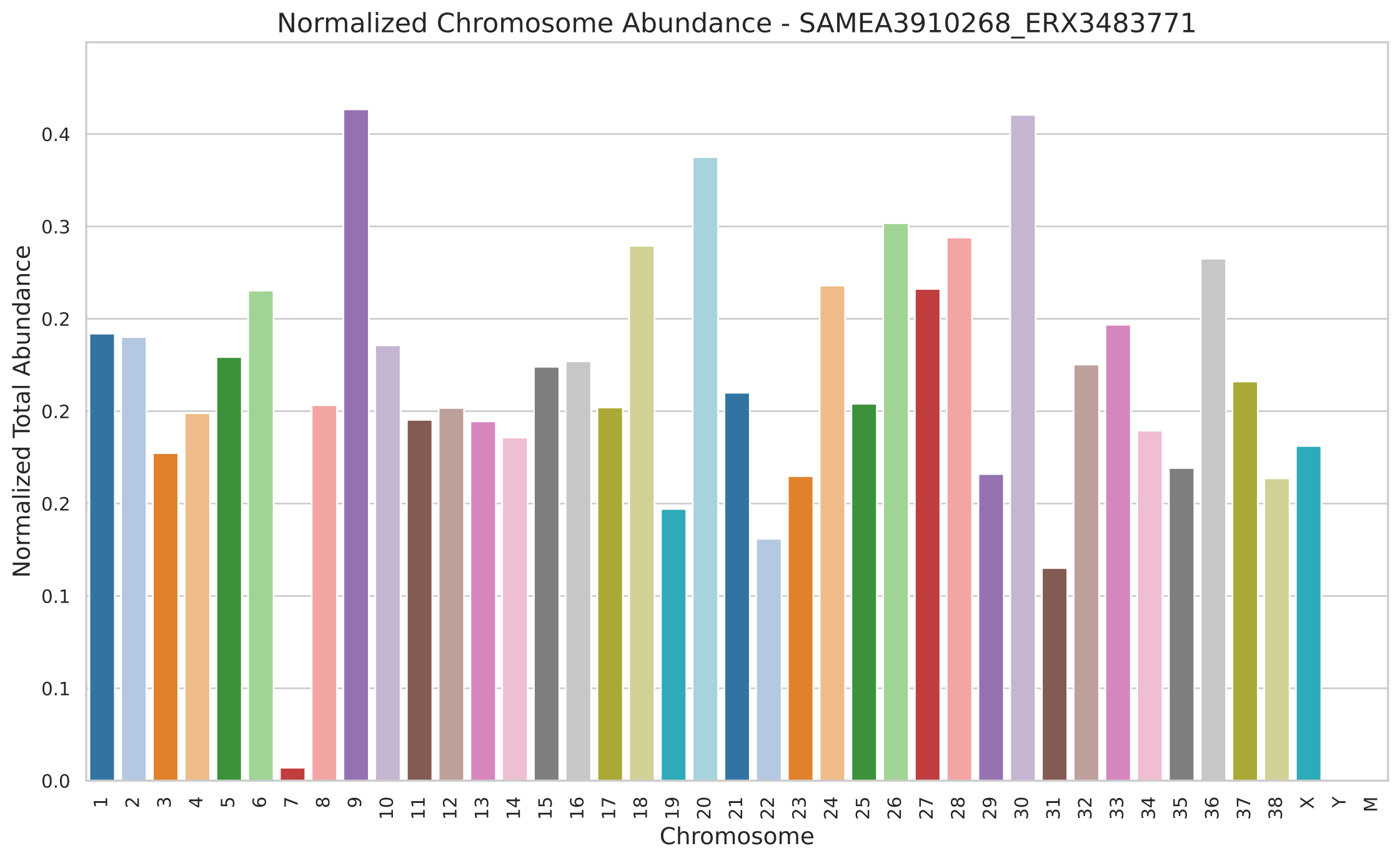

Normalized Chromosome Abundance - SAMEA3910306_ERX3483716
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

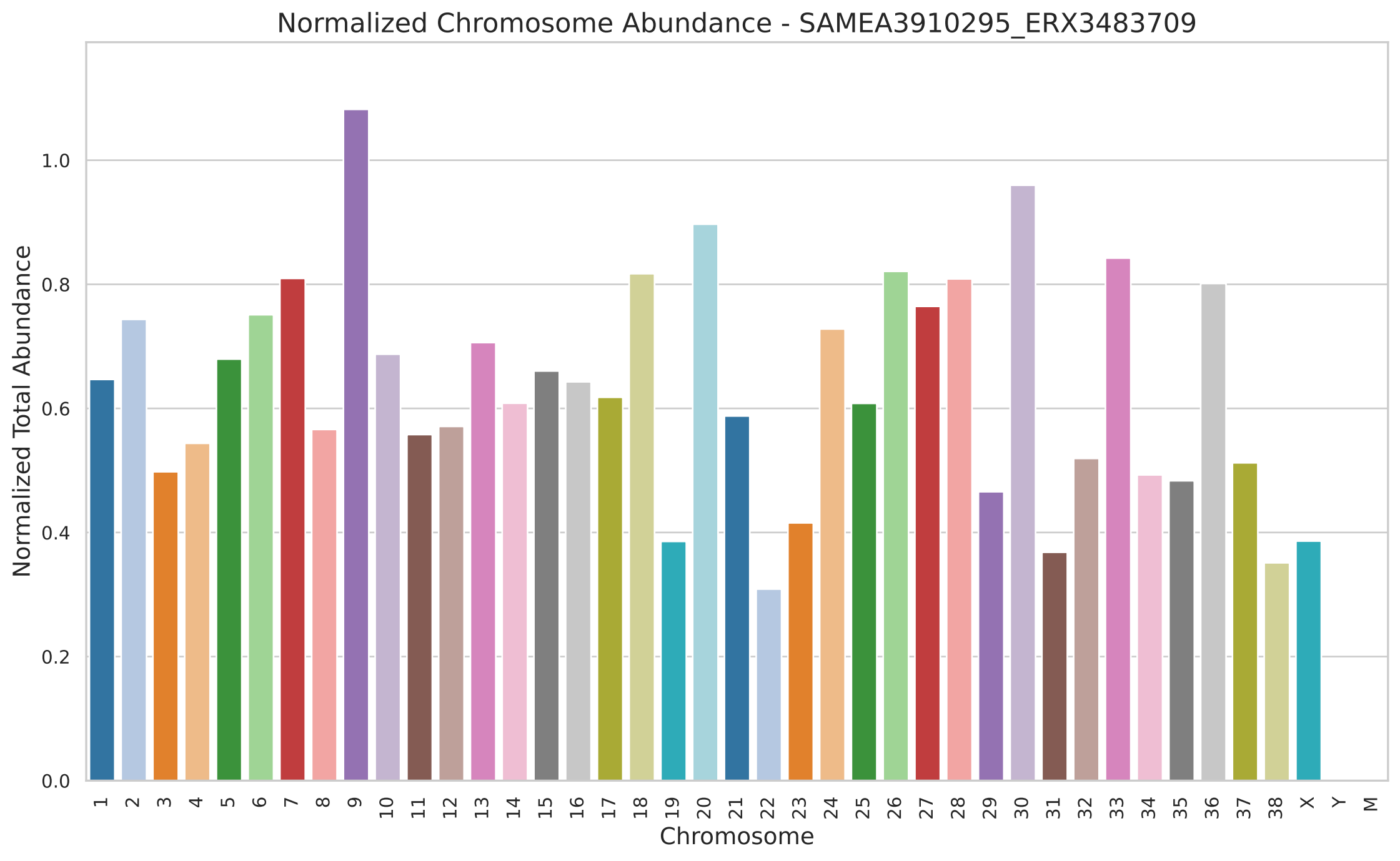

Normalized Chromosome Abundance - SAMEA3910588_ERX3483714
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

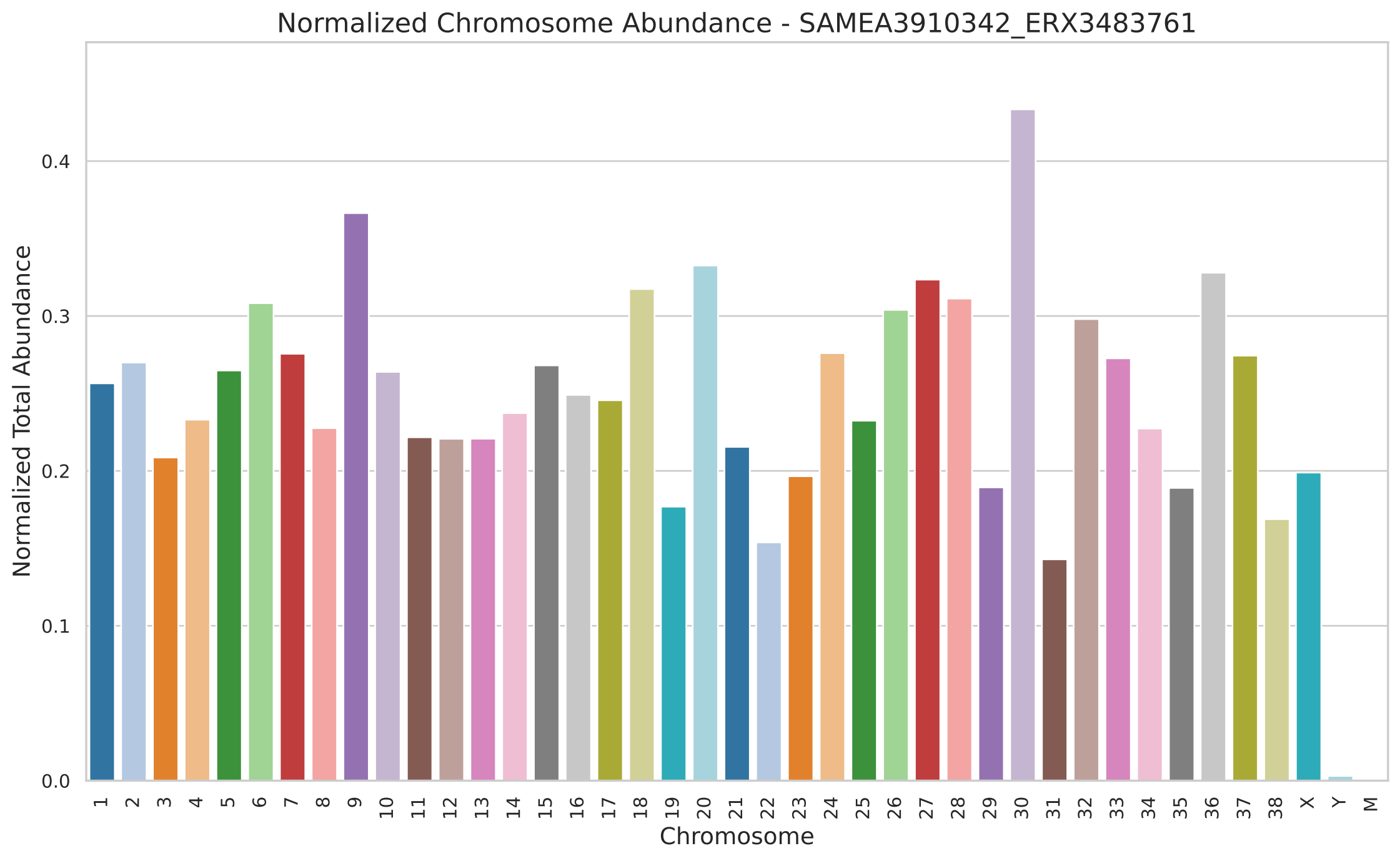

Normalized Chromosome Abundance - SAMEA3910255_ERX3483765
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

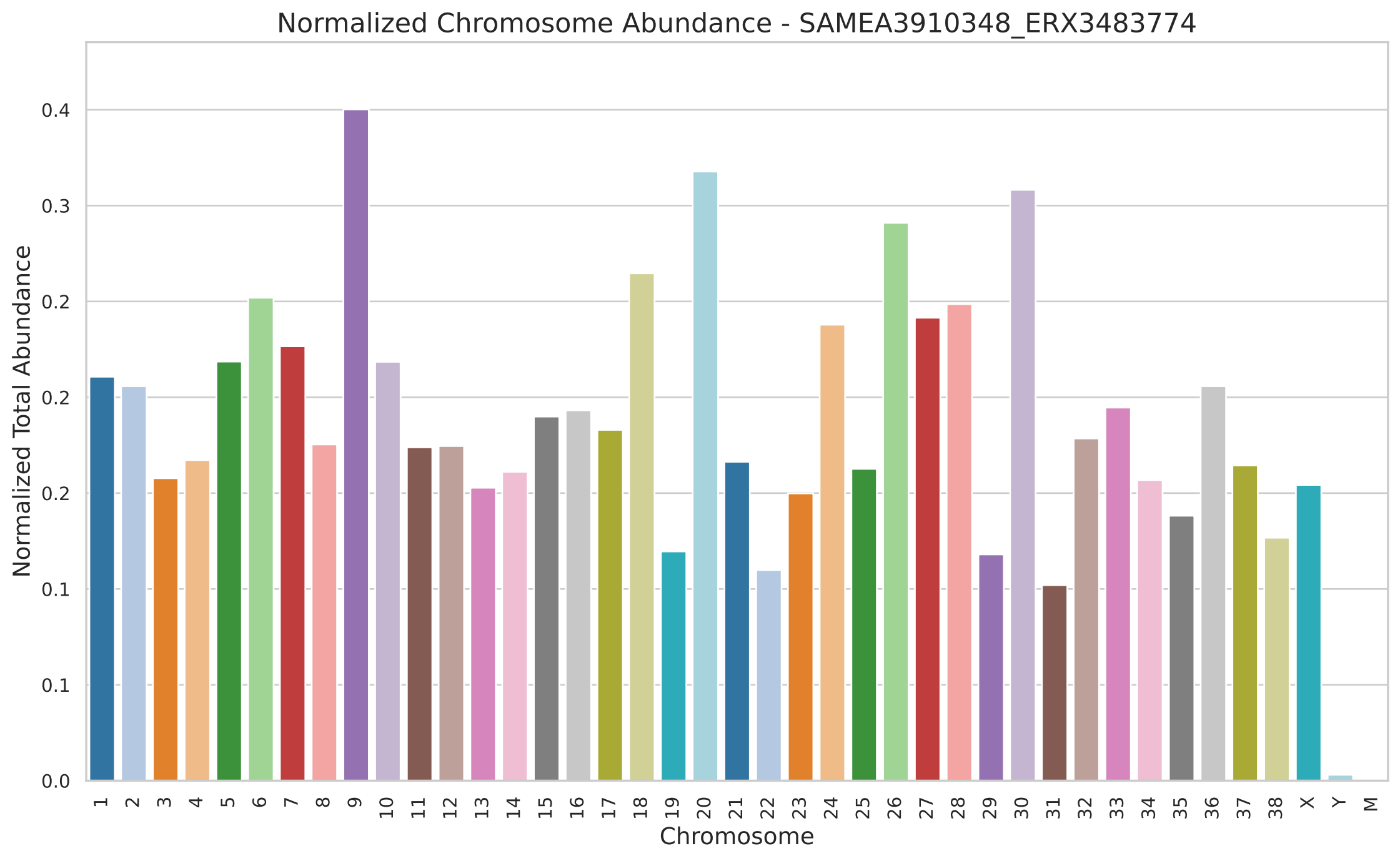

Normalized Chromosome Abundance - SAMEA3910279_ERX3483772
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

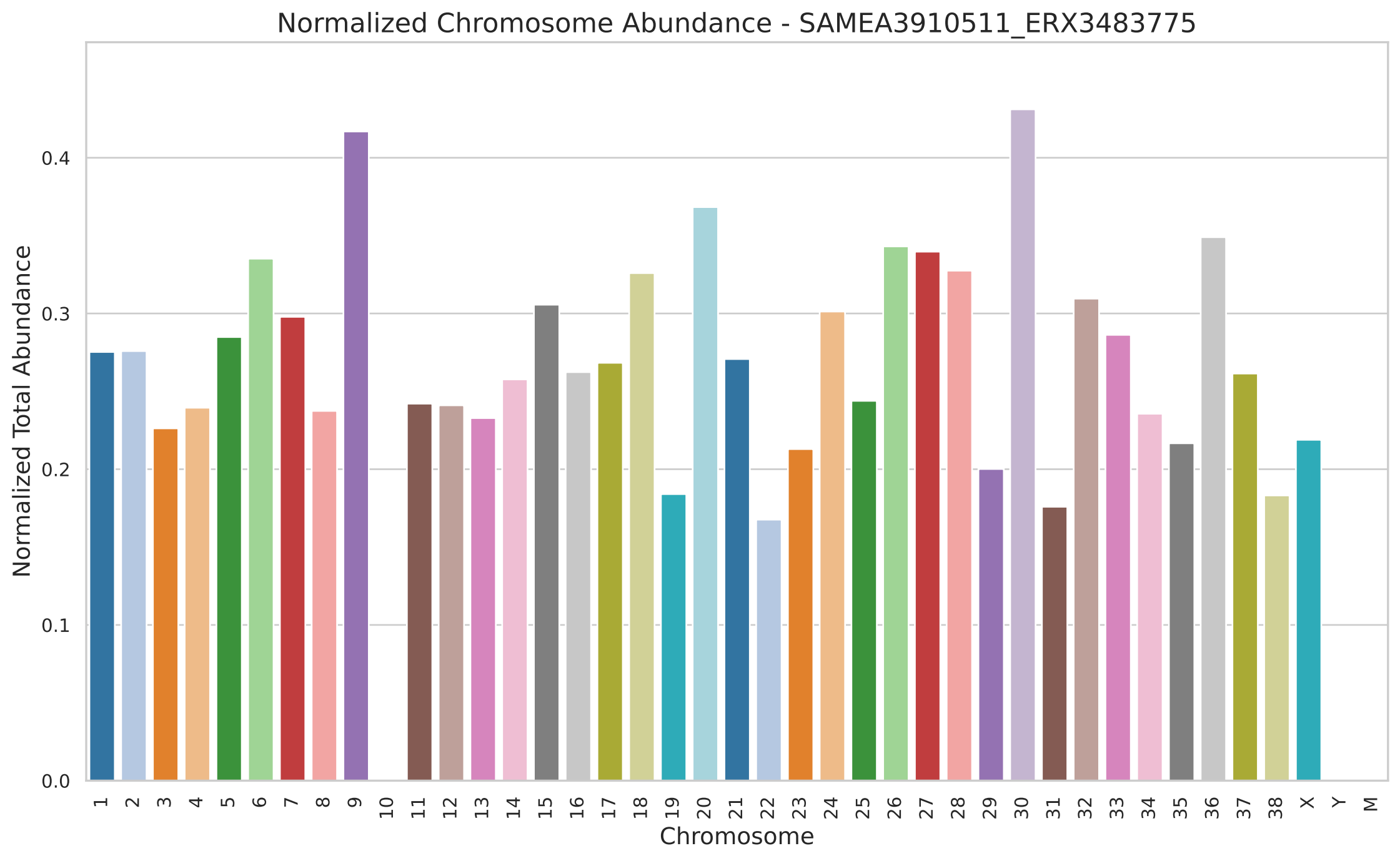

Normalized Chromosome Abundance - SAMEA3910262_ERX3483766
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

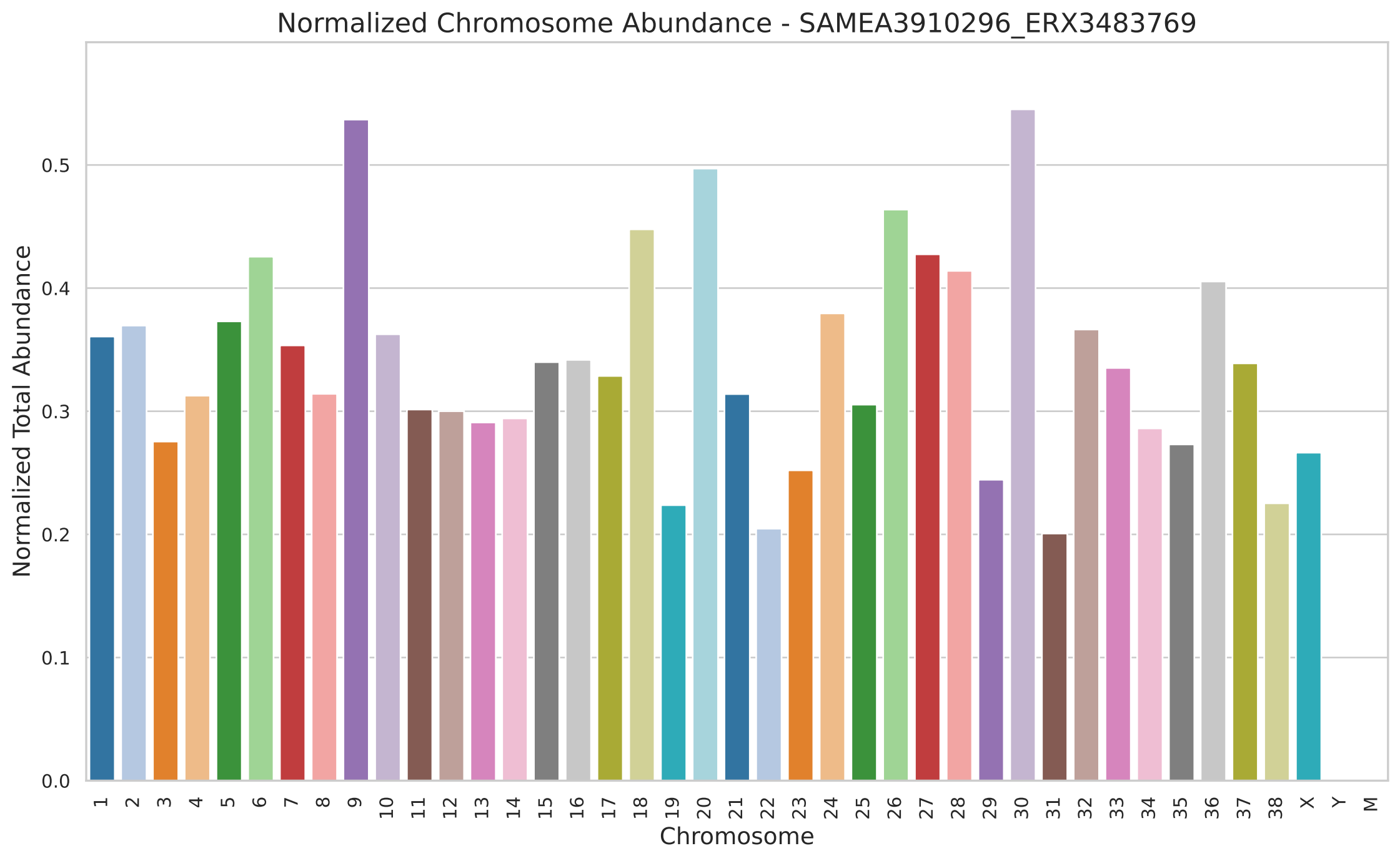

Normalized Chromosome Abundance - SAMEA3910268_ERX3483771
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

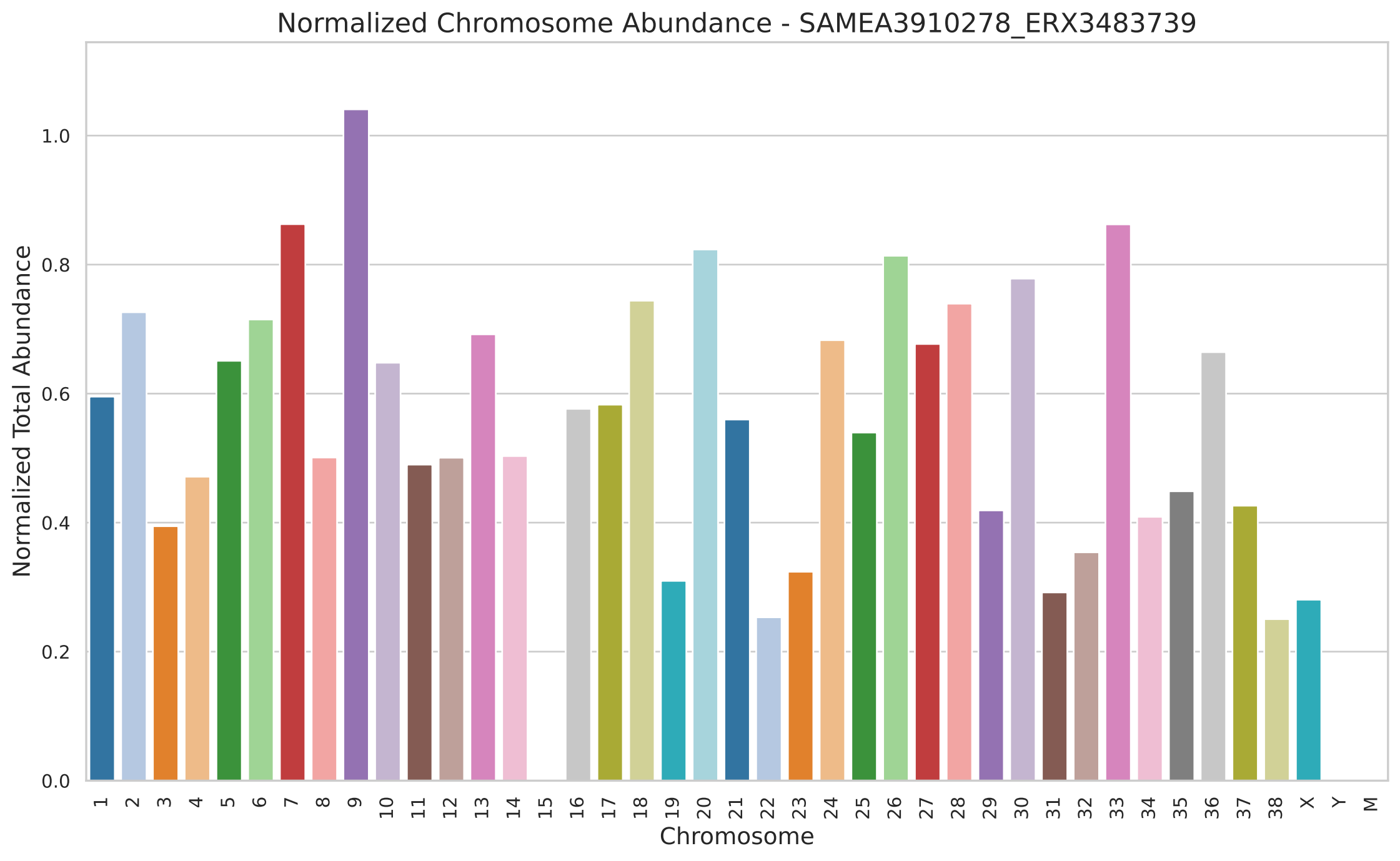

Normalized Chromosome Abundance - SAMEA3910295_ERX3483709
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

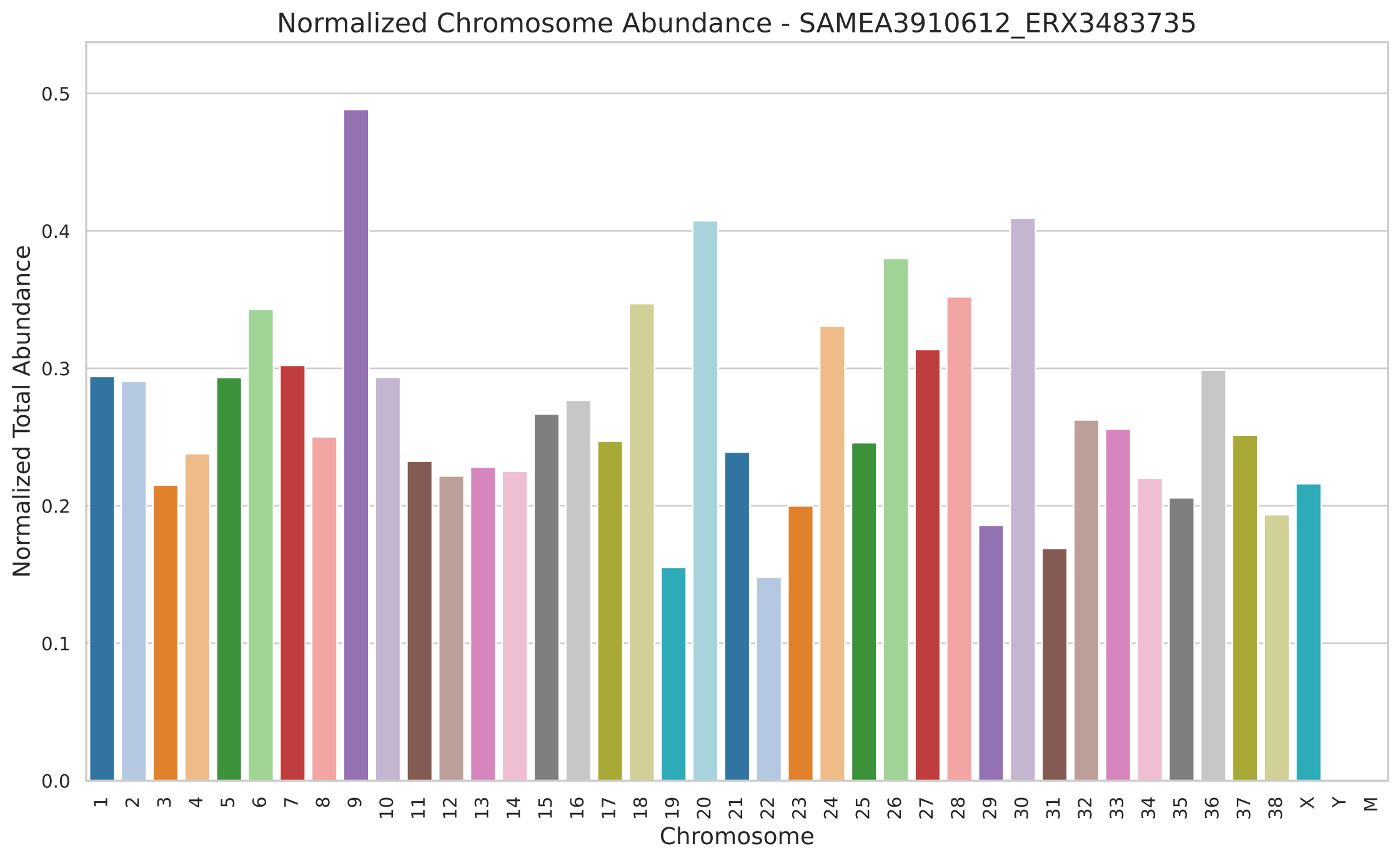

Normalized Chromosome Abundance - SAMEA3910342_ERX3483761
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

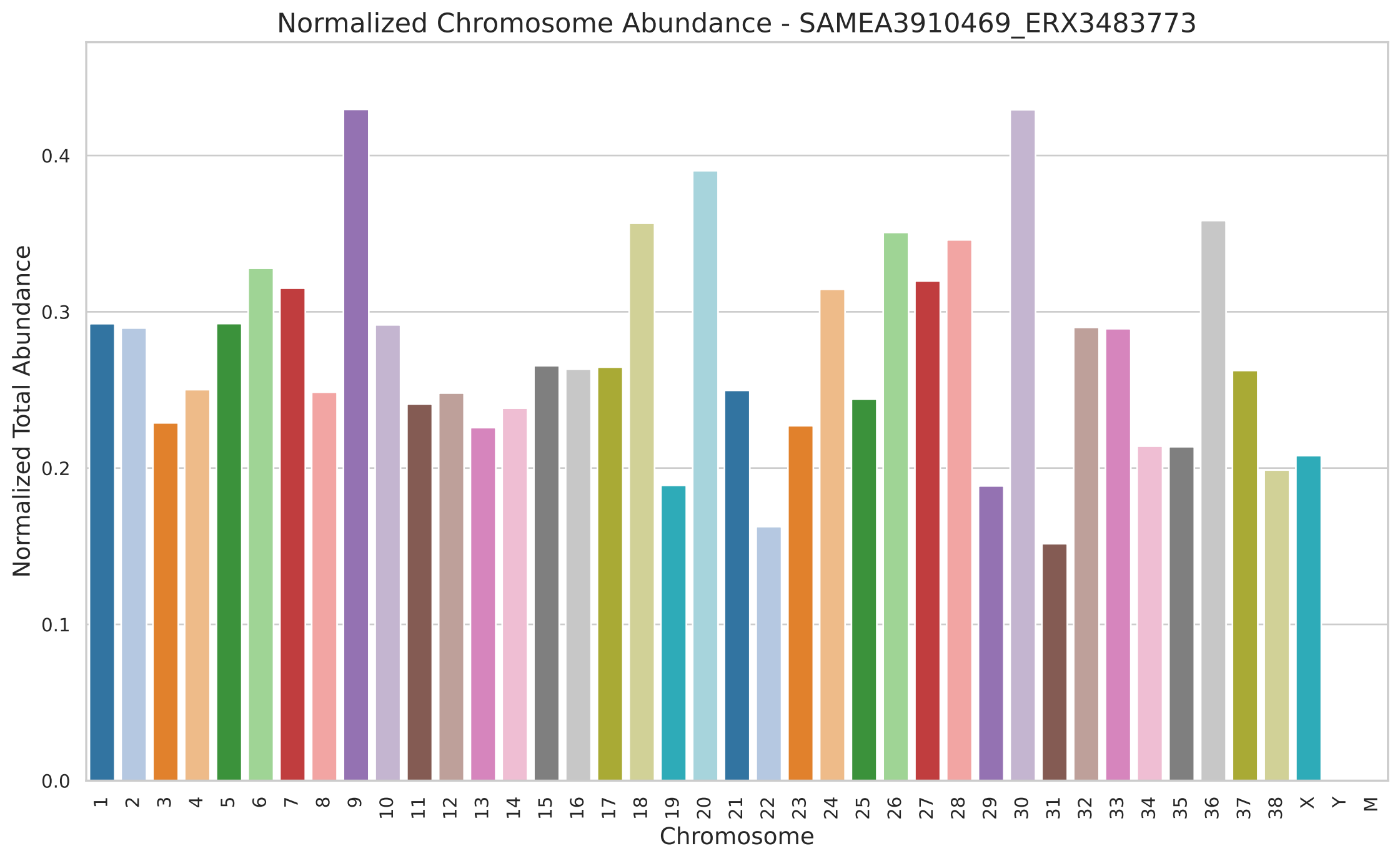

Normalized Chromosome Abundance - SAMEA3910348_ERX3483774
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

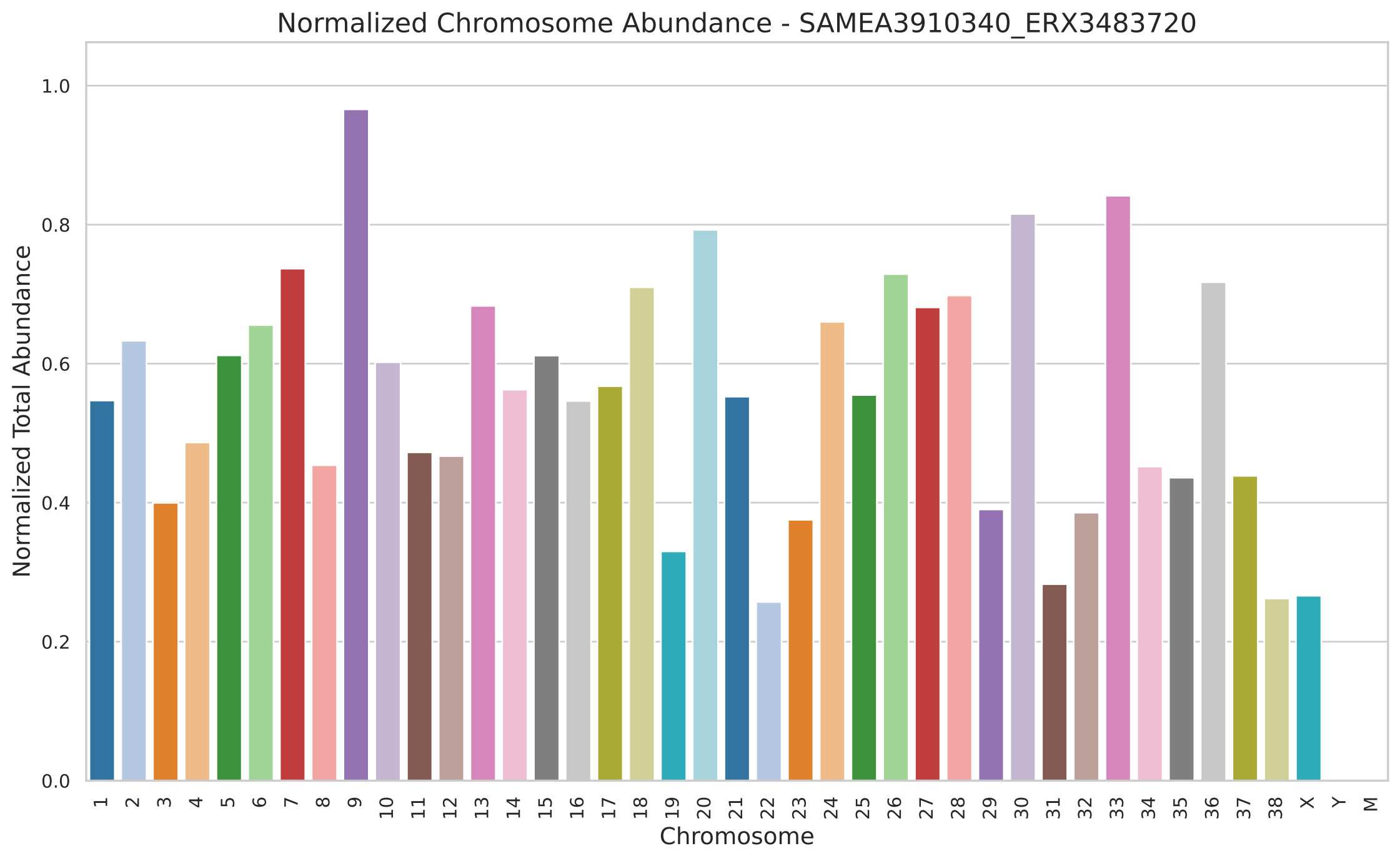

Normalized Chromosome Abundance - SAMEA3910511_ERX3483775
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

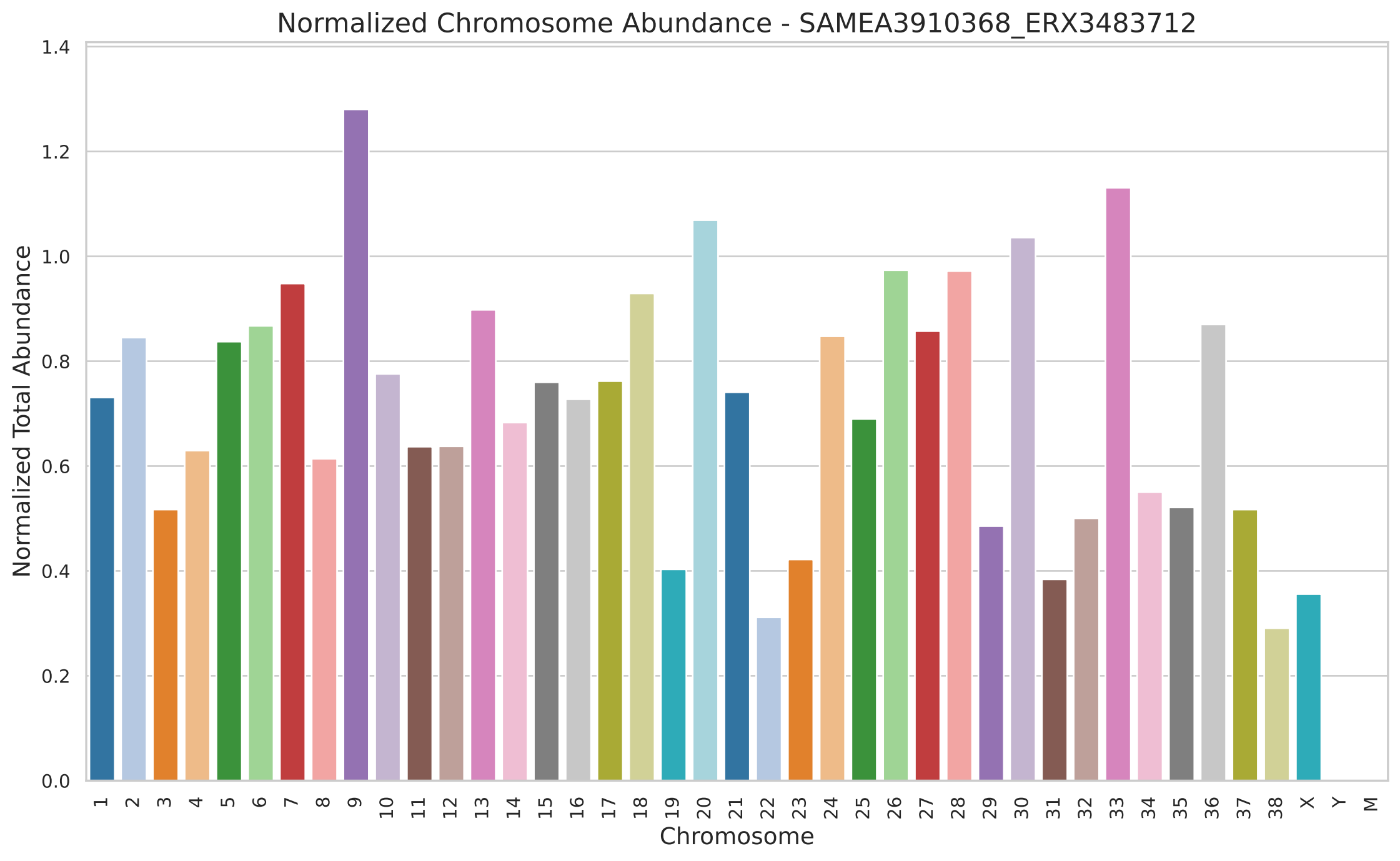

Normalized Chromosome Abundance - SAMEA3910296_ERX3483769
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

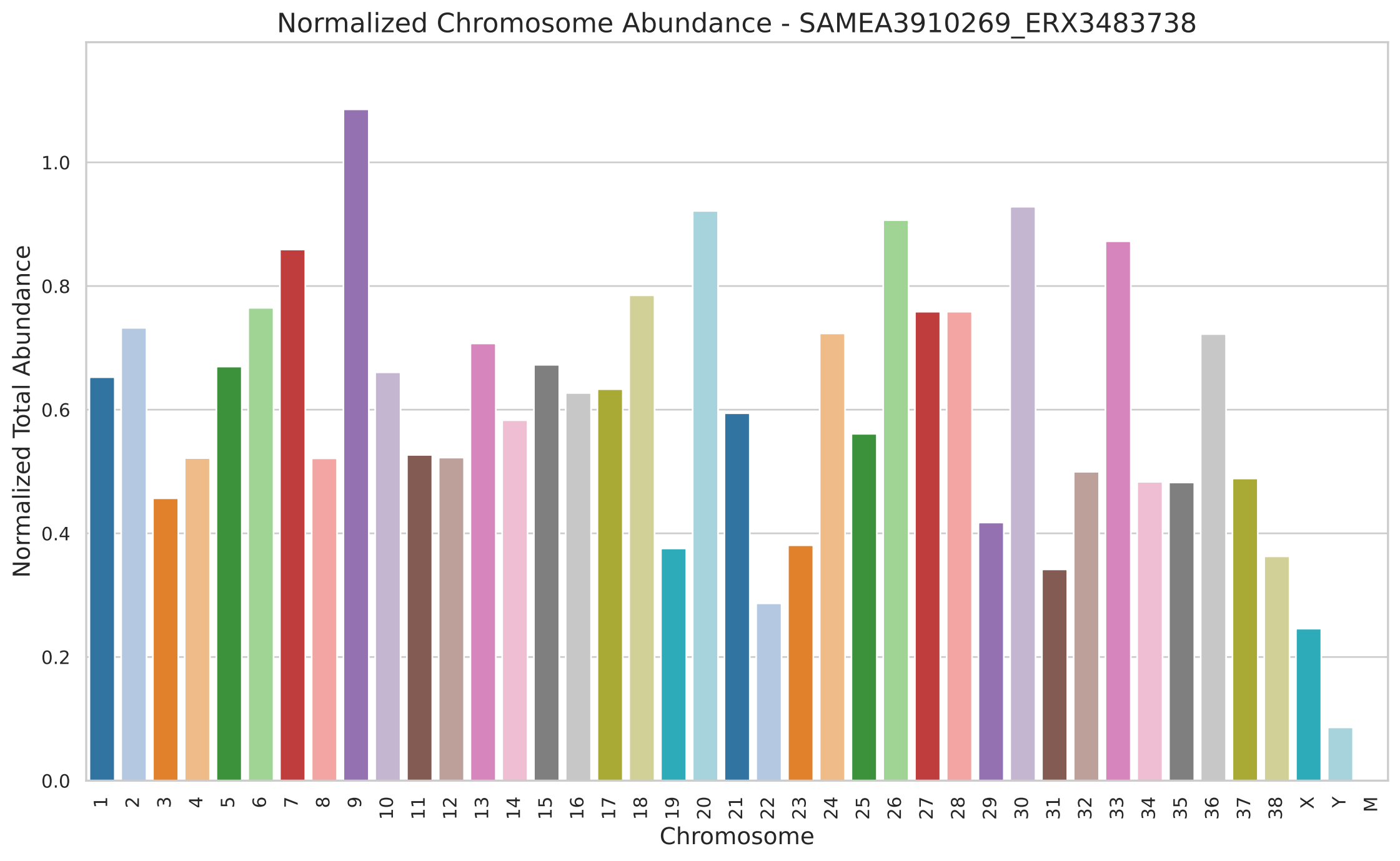

Normalized Chromosome Abundance - SAMEA3910278_ERX3483739
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

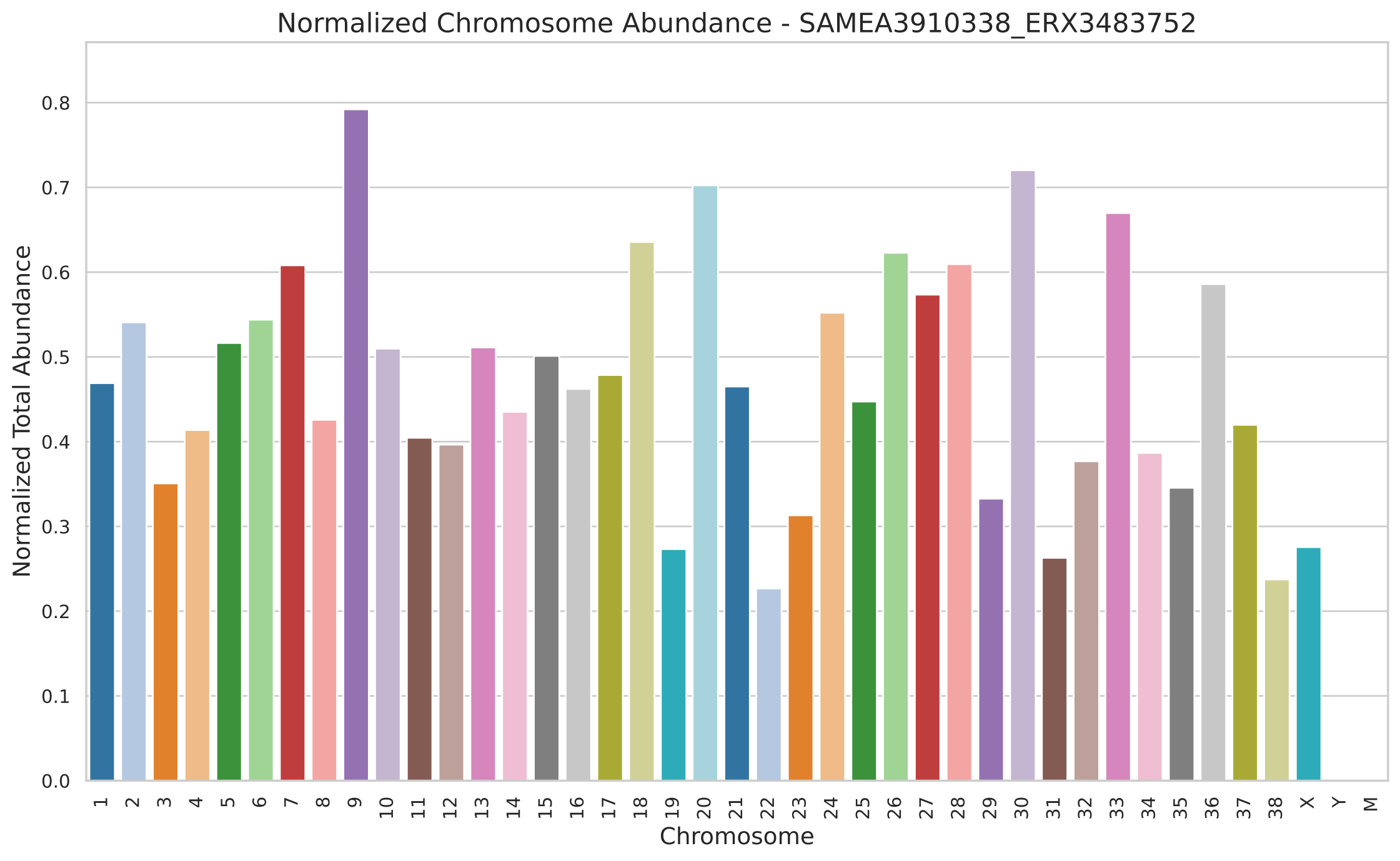

Normalized Chromosome Abundance - SAMEA3910612_ERX3483735
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

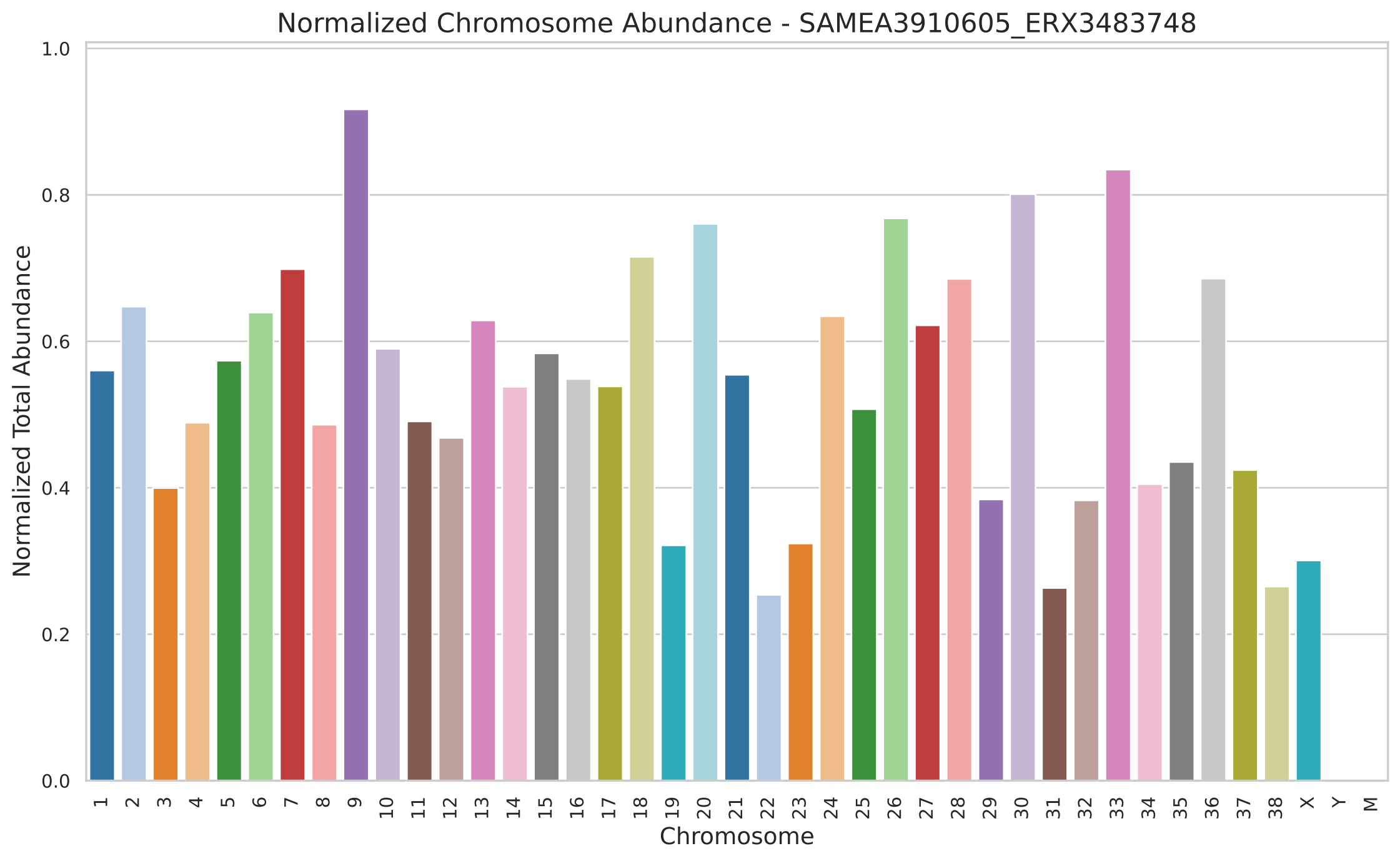

Normalized Chromosome Abundance - SAMEA3910469_ERX3483773
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

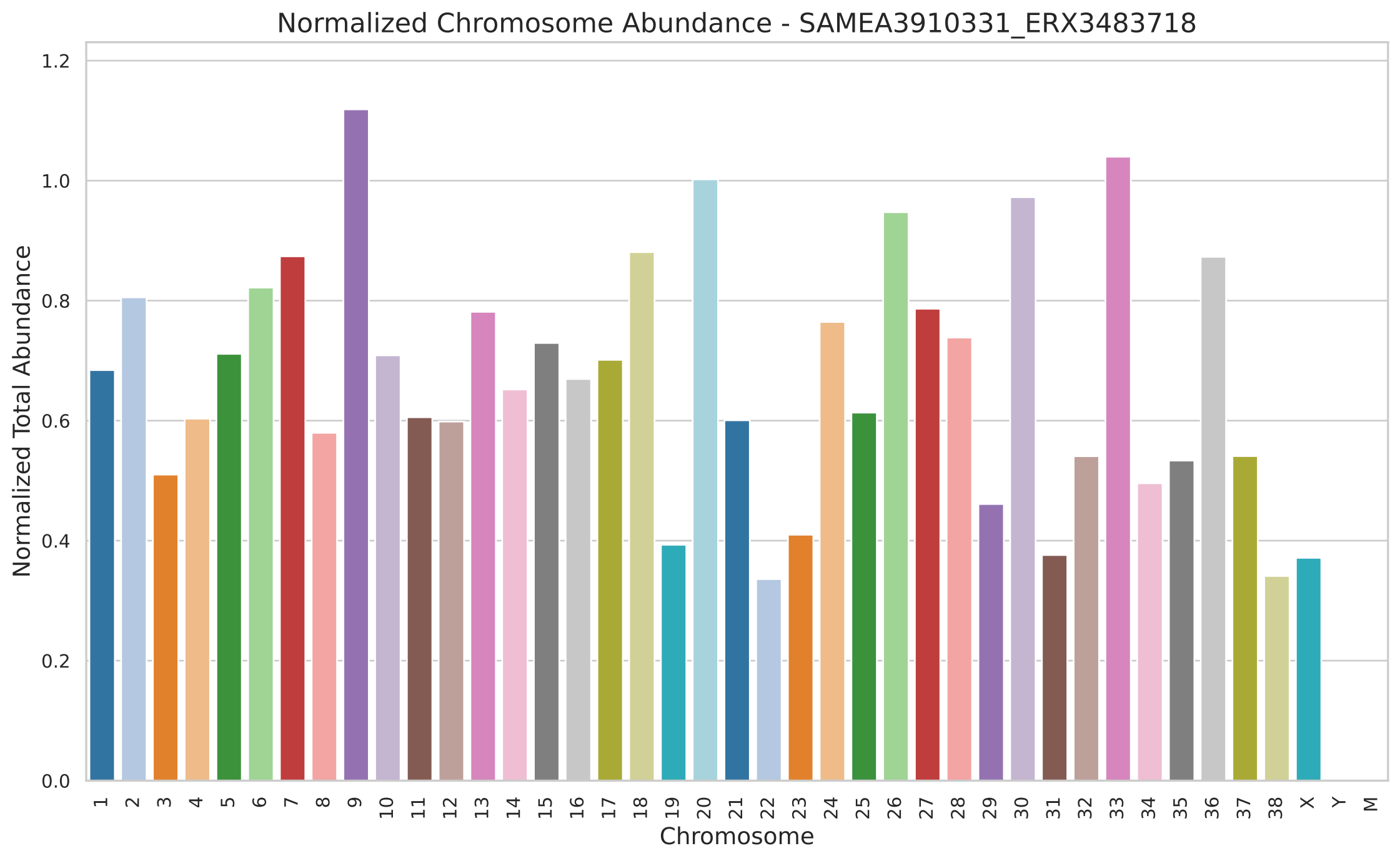

Normalized Chromosome Abundance - SAMEA3910340_ERX3483720
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

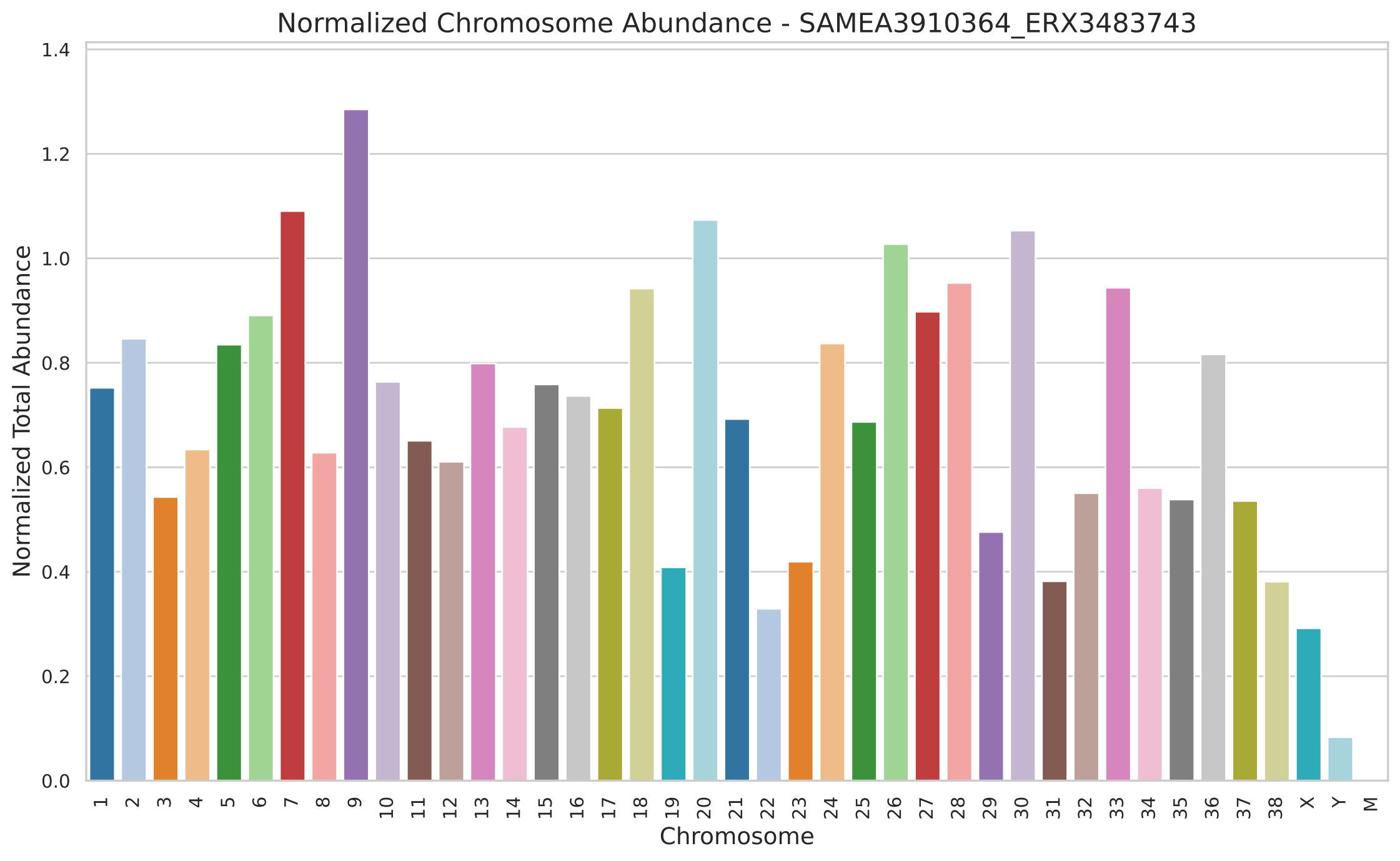

Normalized Chromosome Abundance - SAMEA3910368_ERX3483712
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

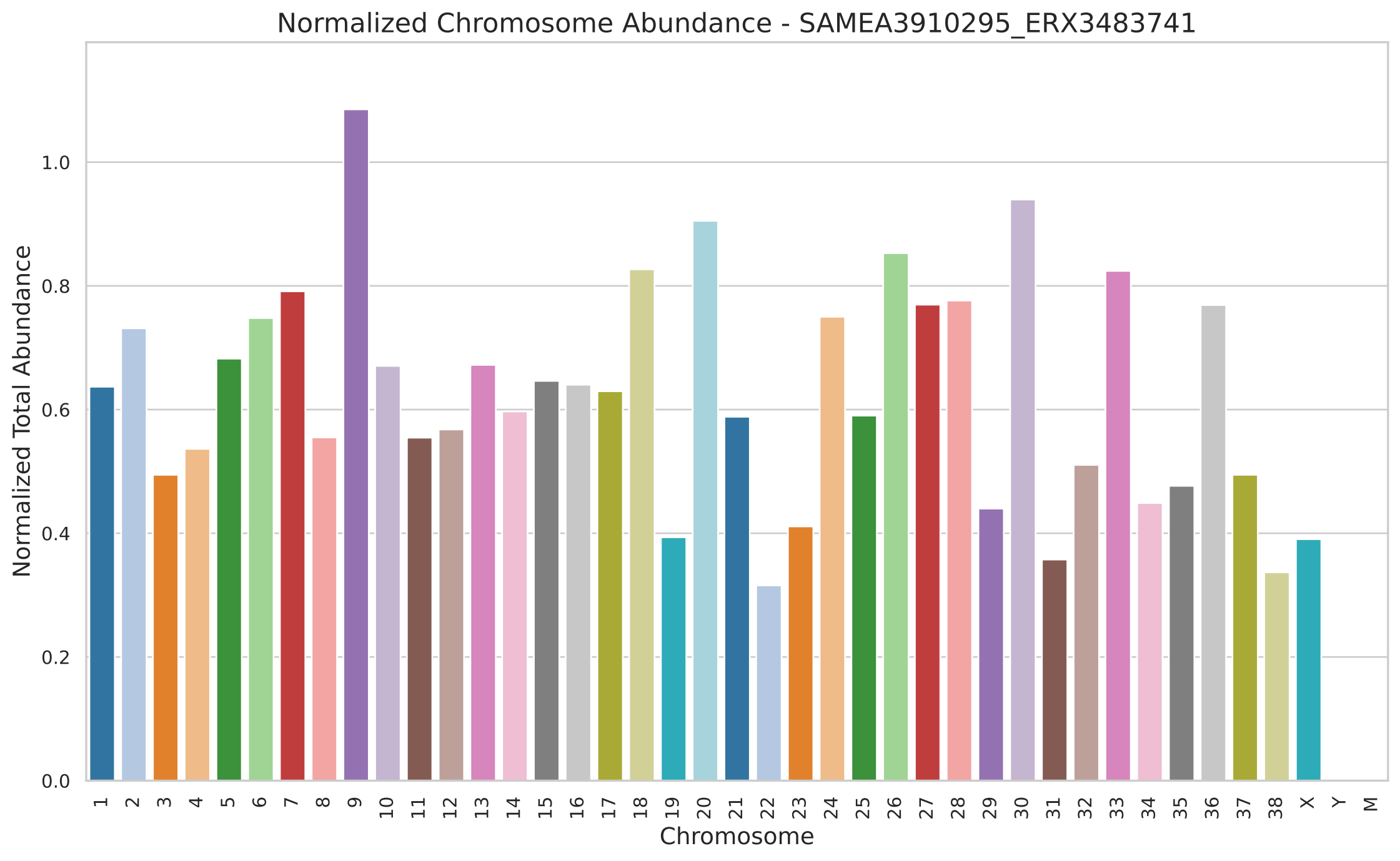

Normalized Chromosome Abundance - SAMEA3910269_ERX3483738
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

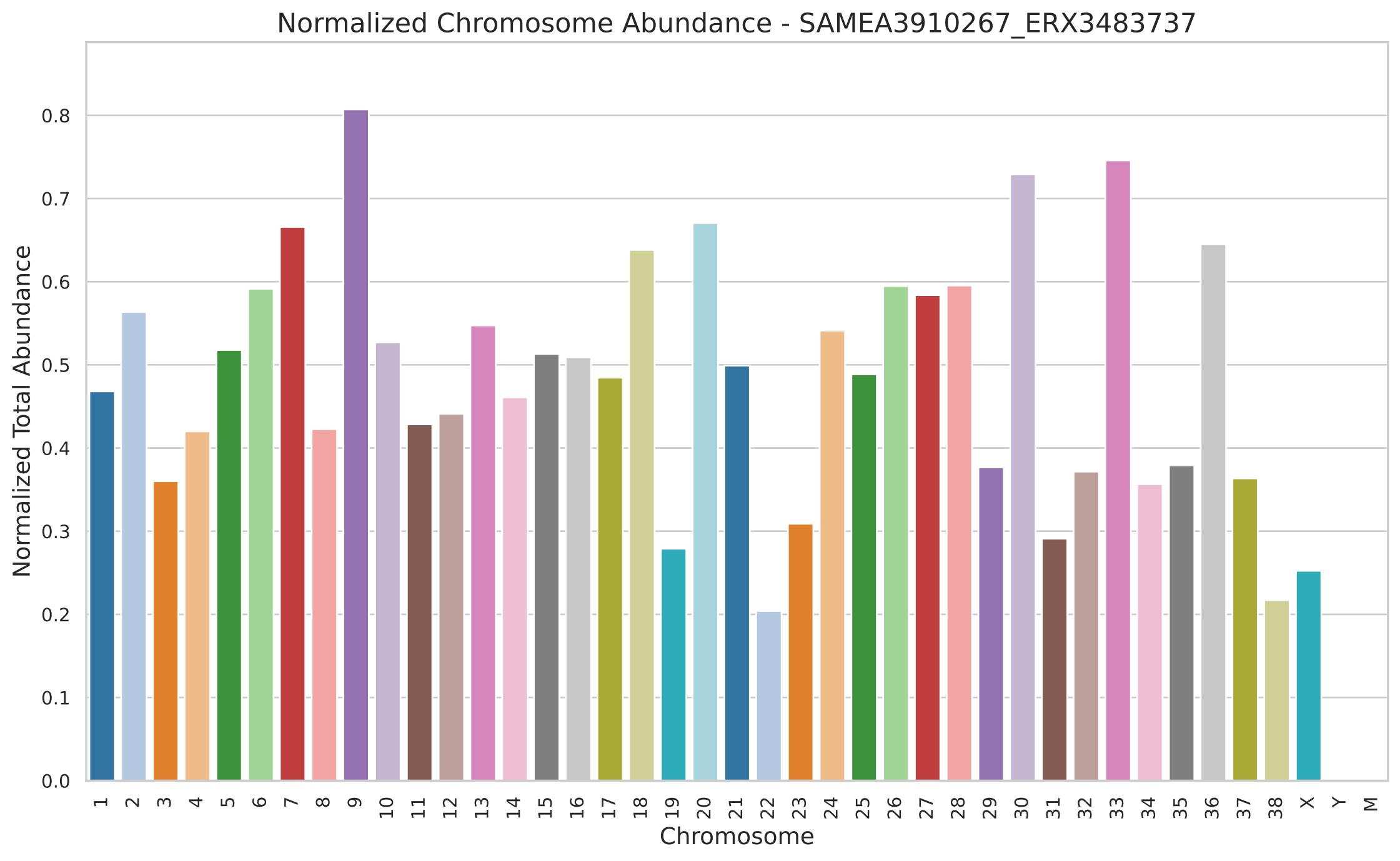

Normalized Chromosome Abundance - SAMEA3910338_ERX3483752
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

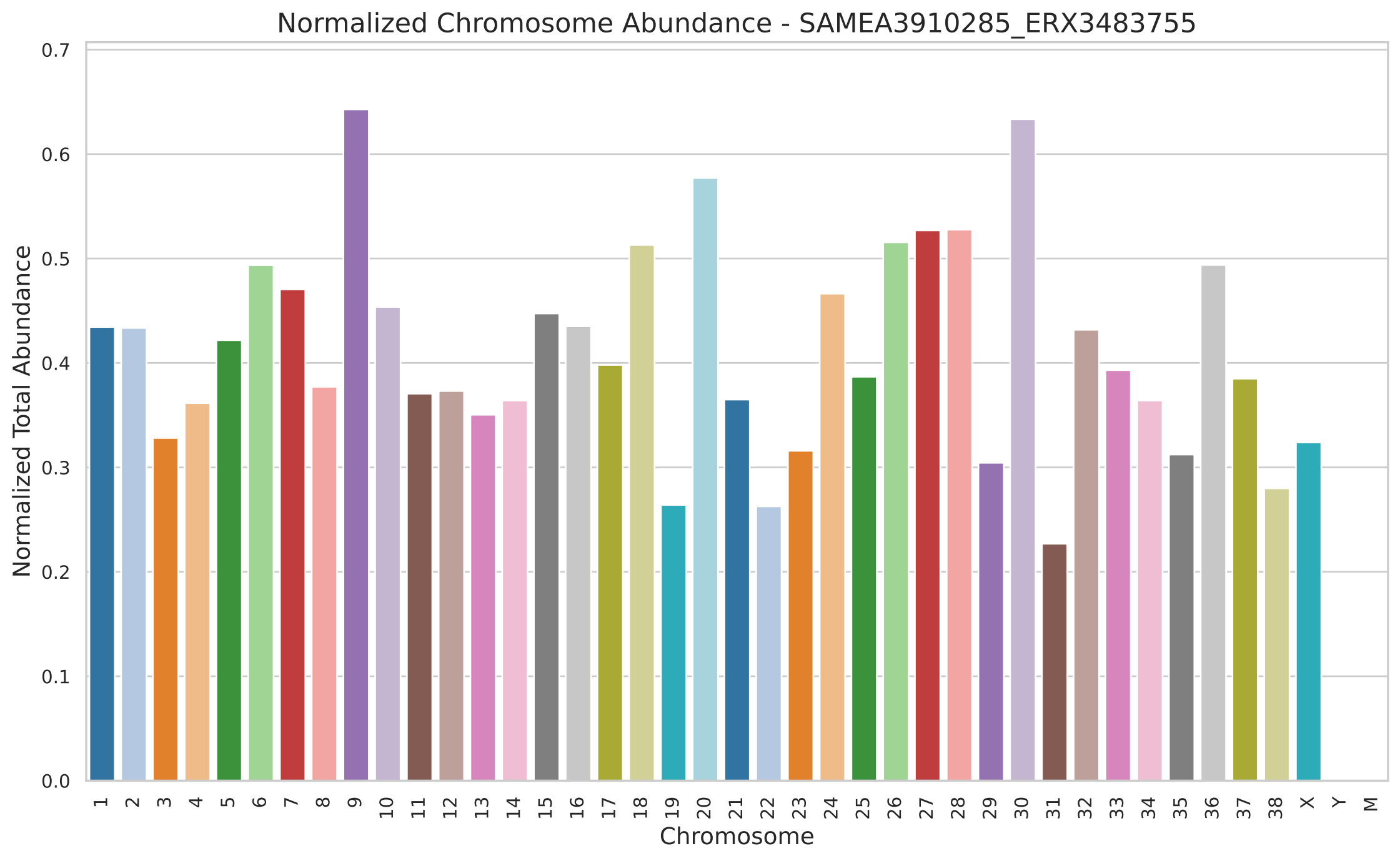

Normalized Chromosome Abundance - SAMEA3910605_ERX3483748
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

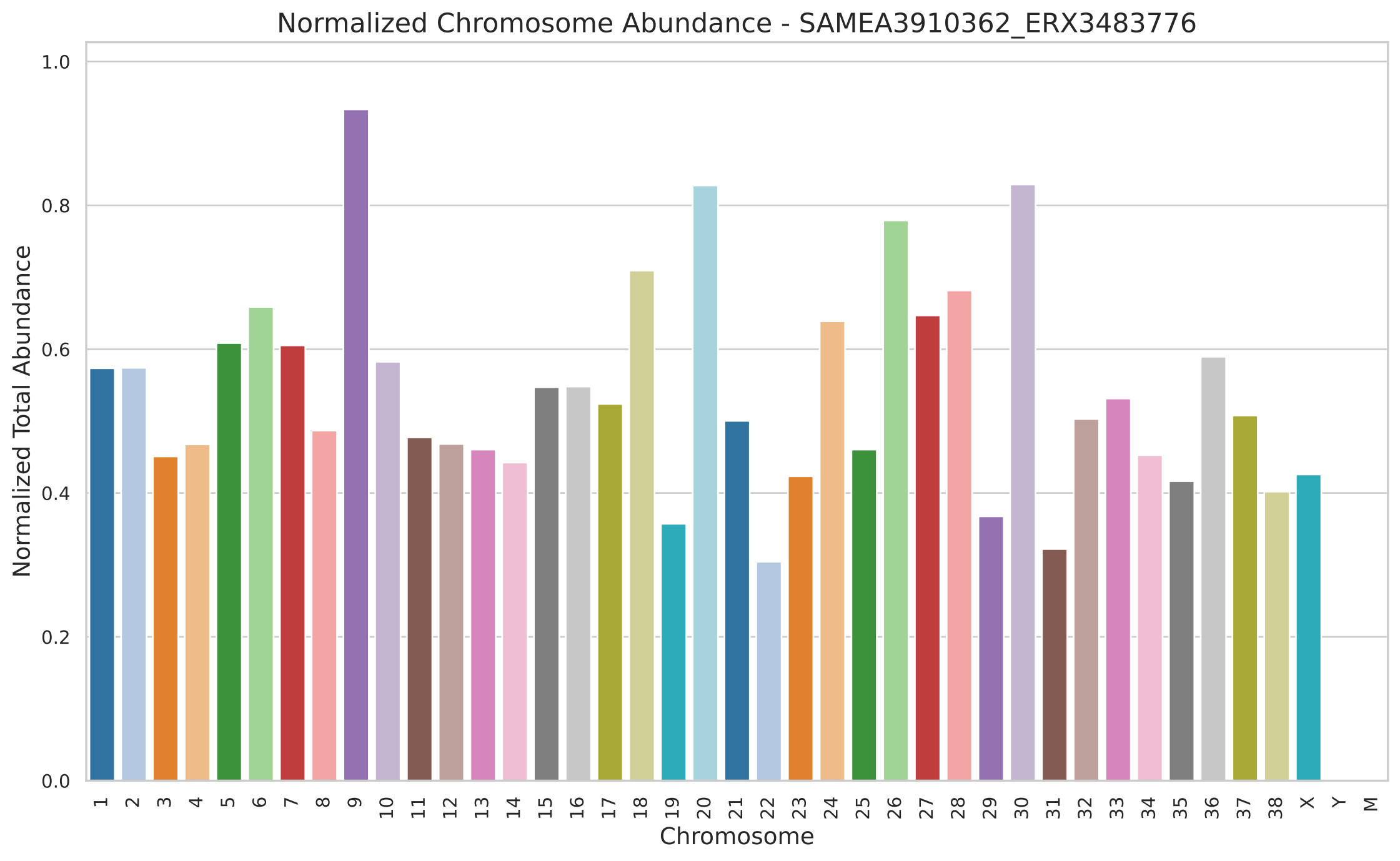

Normalized Chromosome Abundance - SAMEA3910331_ERX3483718
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

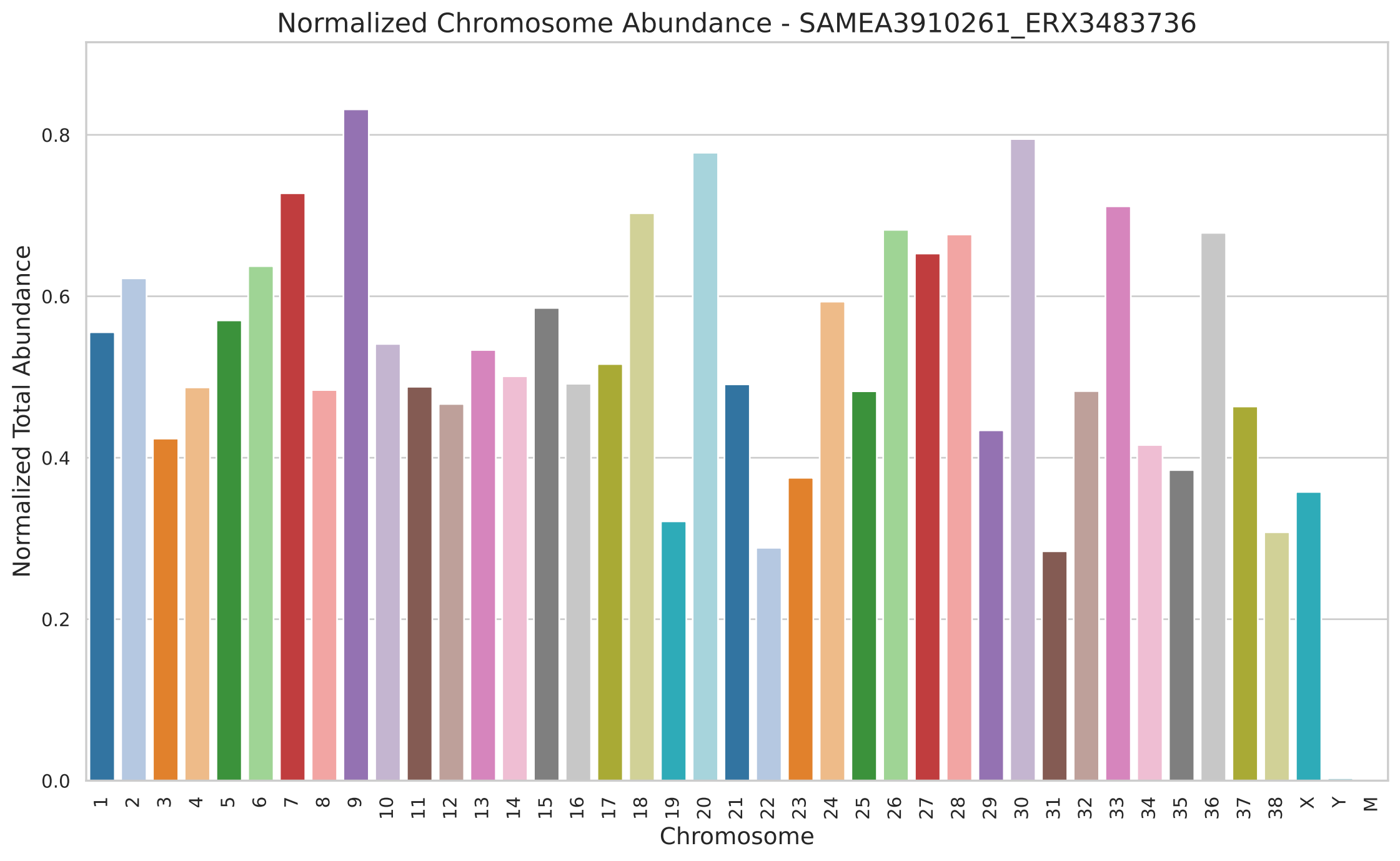

Normalized Chromosome Abundance - SAMEA3910364_ERX3483743
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

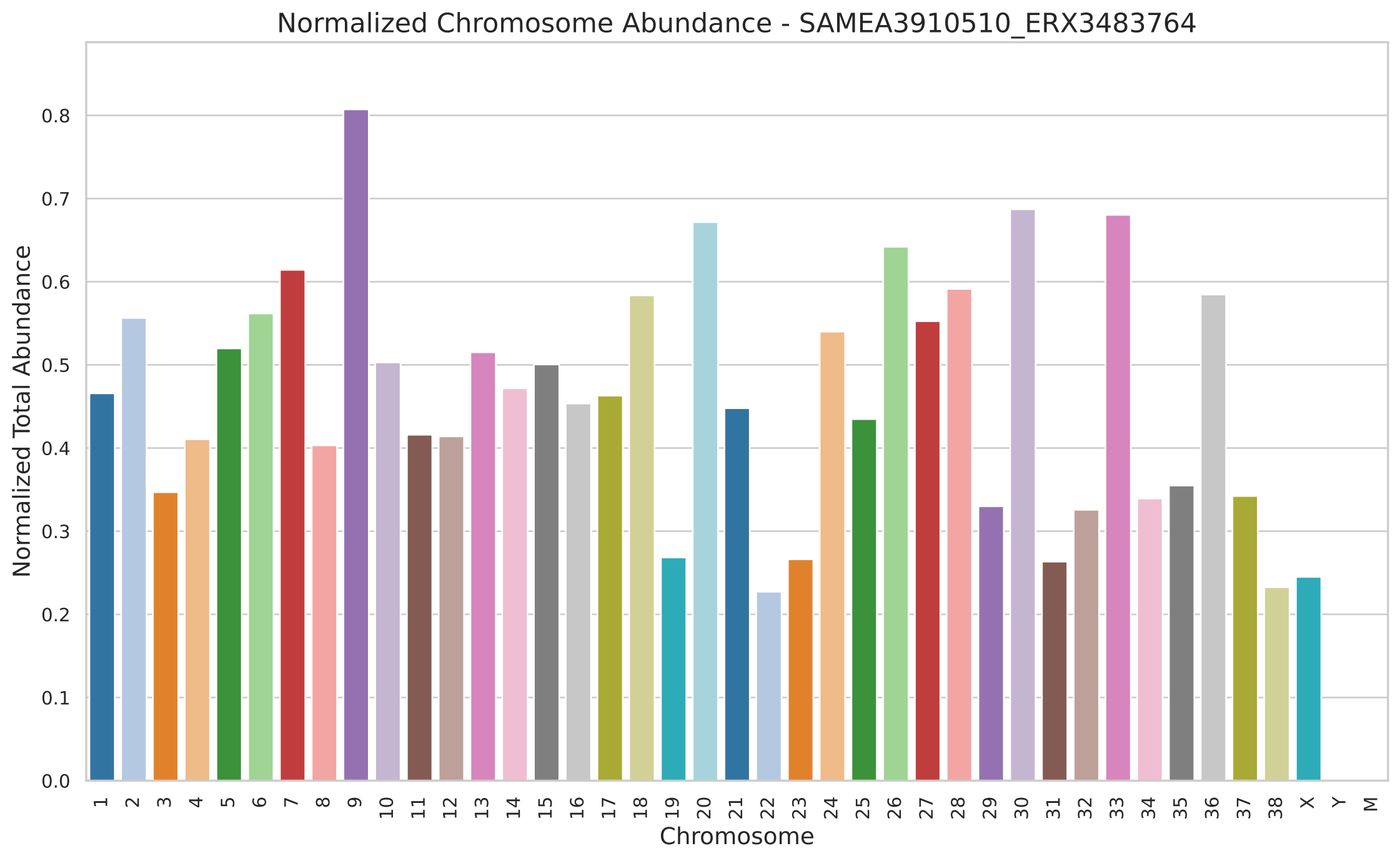

Normalized Chromosome Abundance - SAMEA3910295_ERX3483741
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

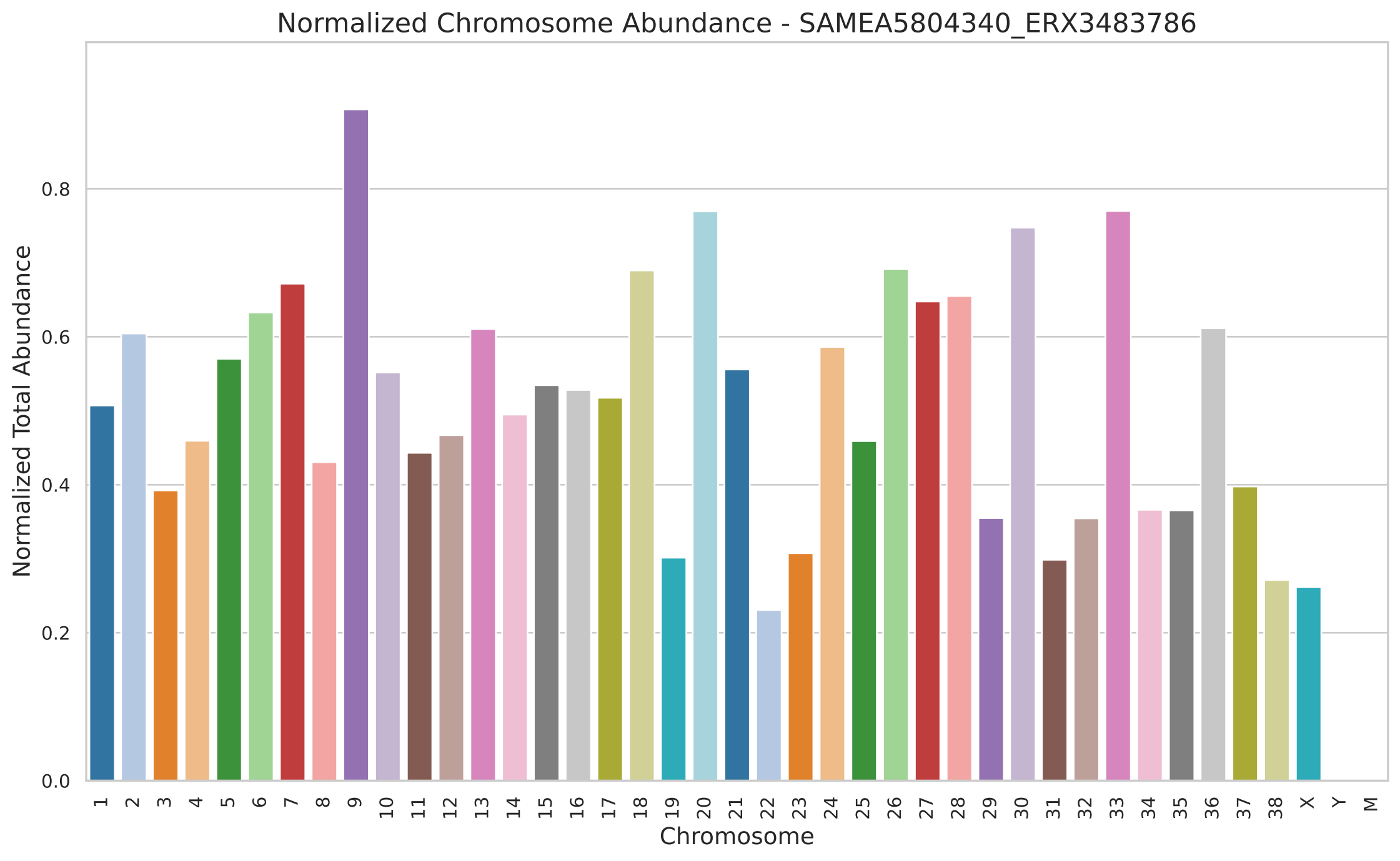

Normalized Chromosome Abundance - SAMEA3910267_ERX3483737
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

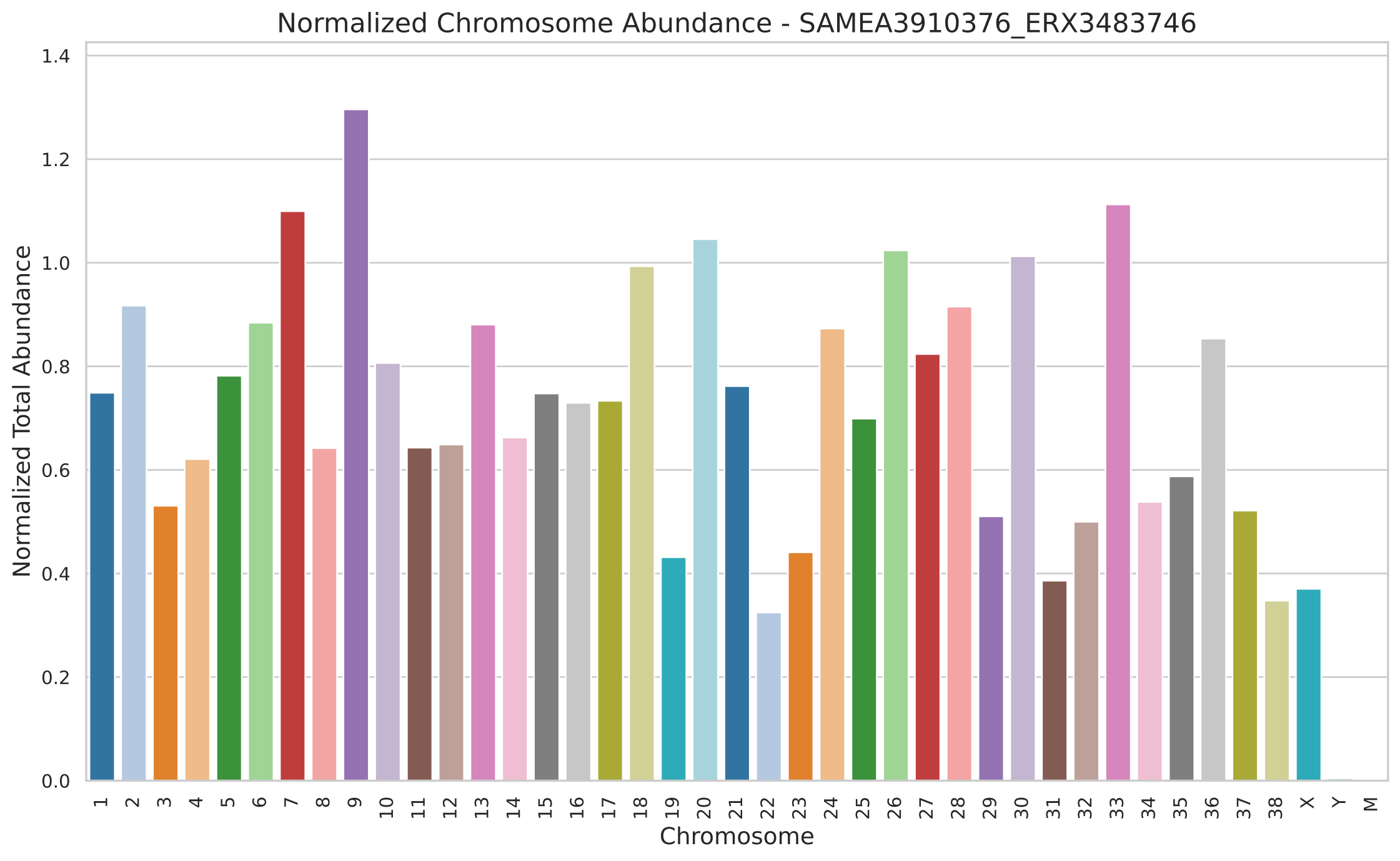

Normalized Chromosome Abundance - SAMEA3910285_ERX3483755
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

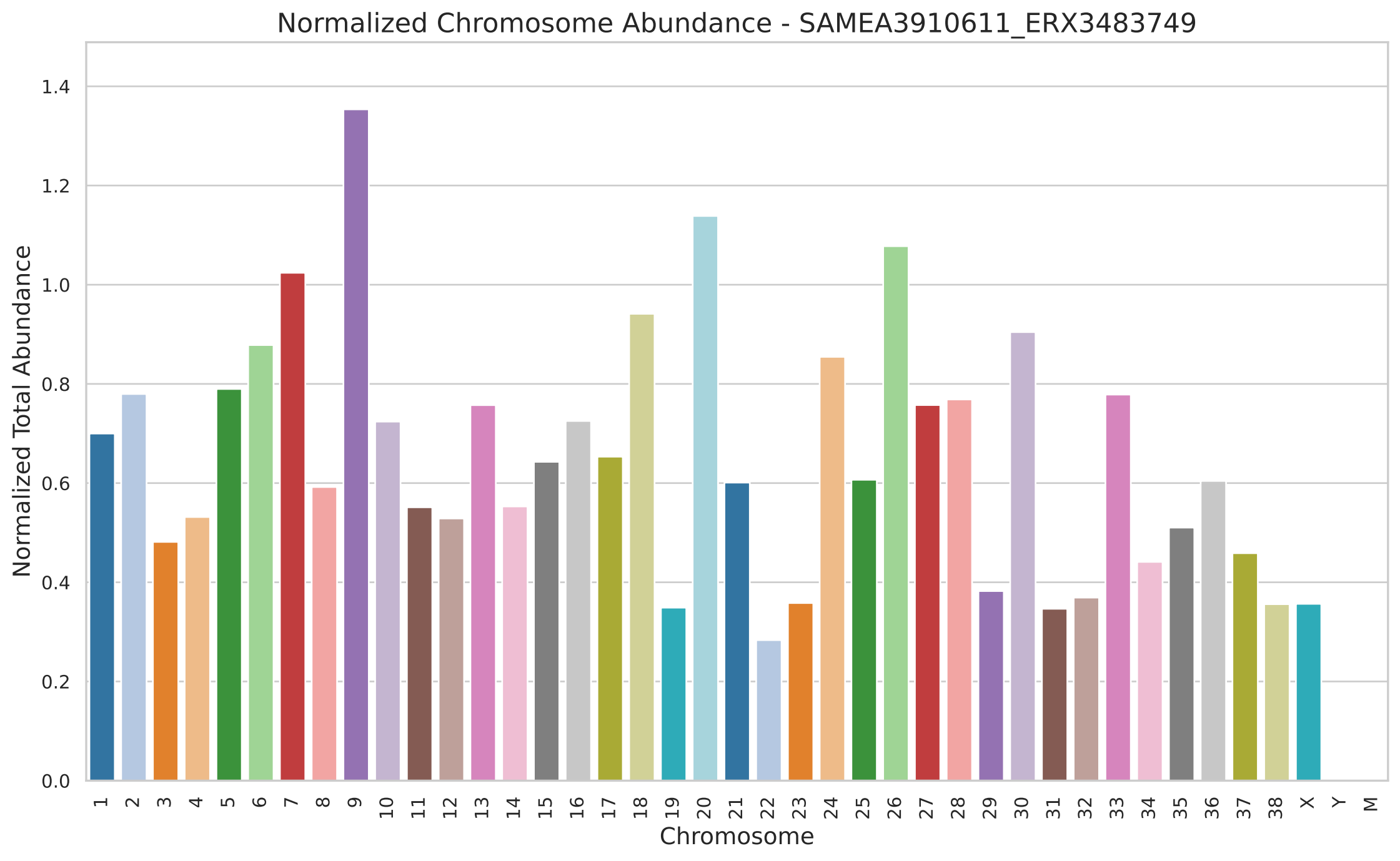

Normalized Chromosome Abundance - SAMEA3910362_ERX3483776
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

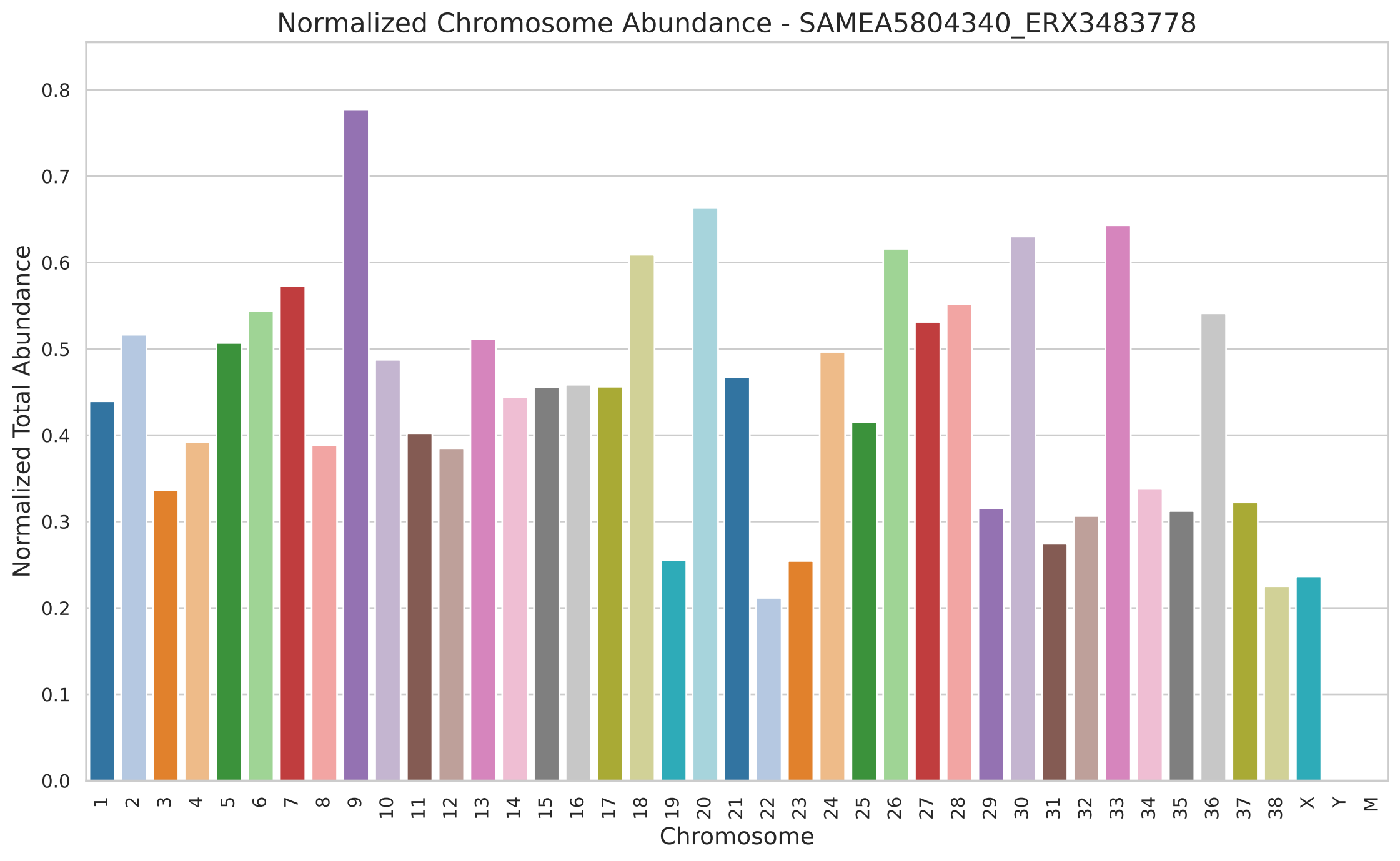

Normalized Chromosome Abundance - SAMEA3910261_ERX3483736
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

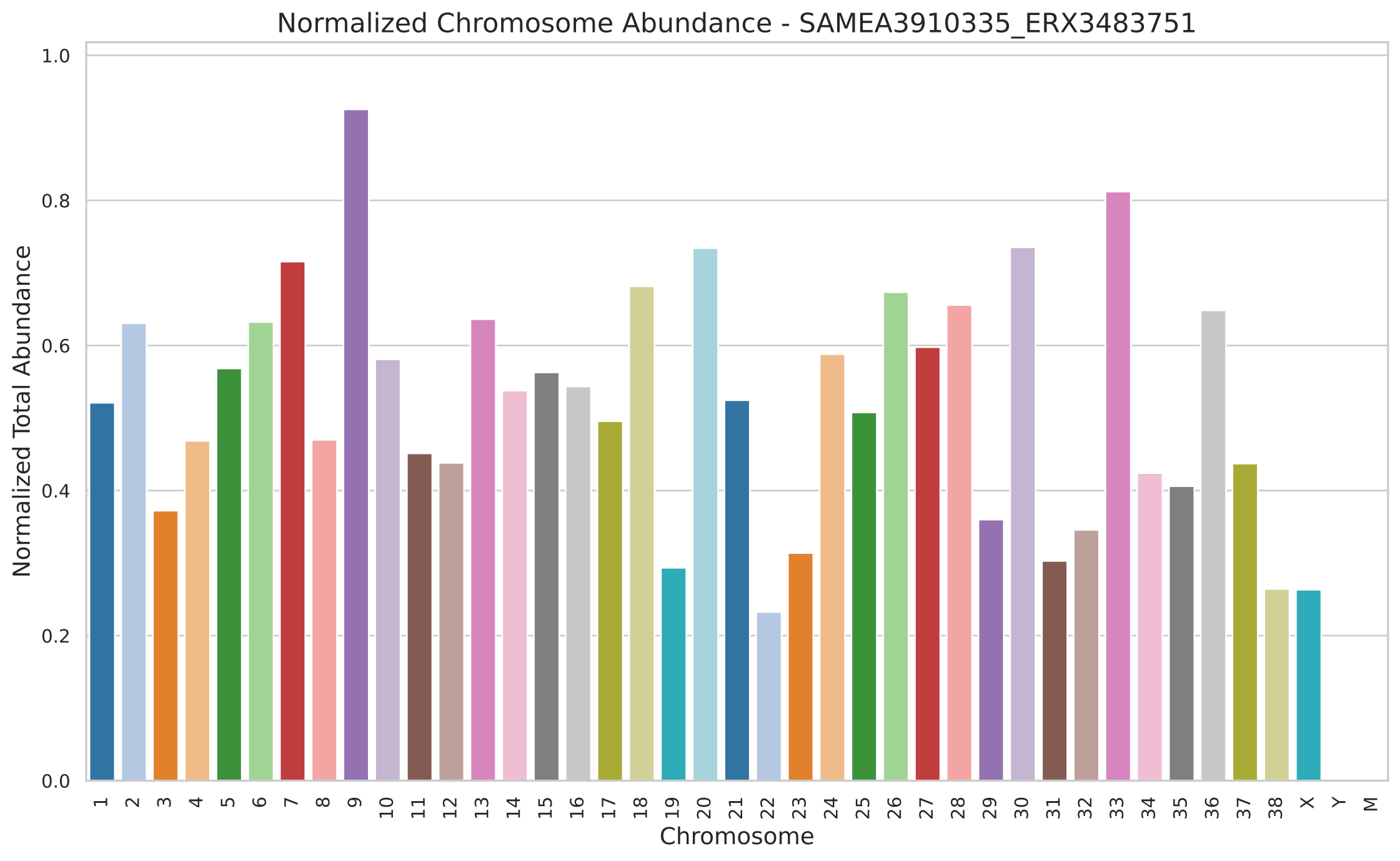

Normalized Chromosome Abundance - SAMEA3910510_ERX3483764
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

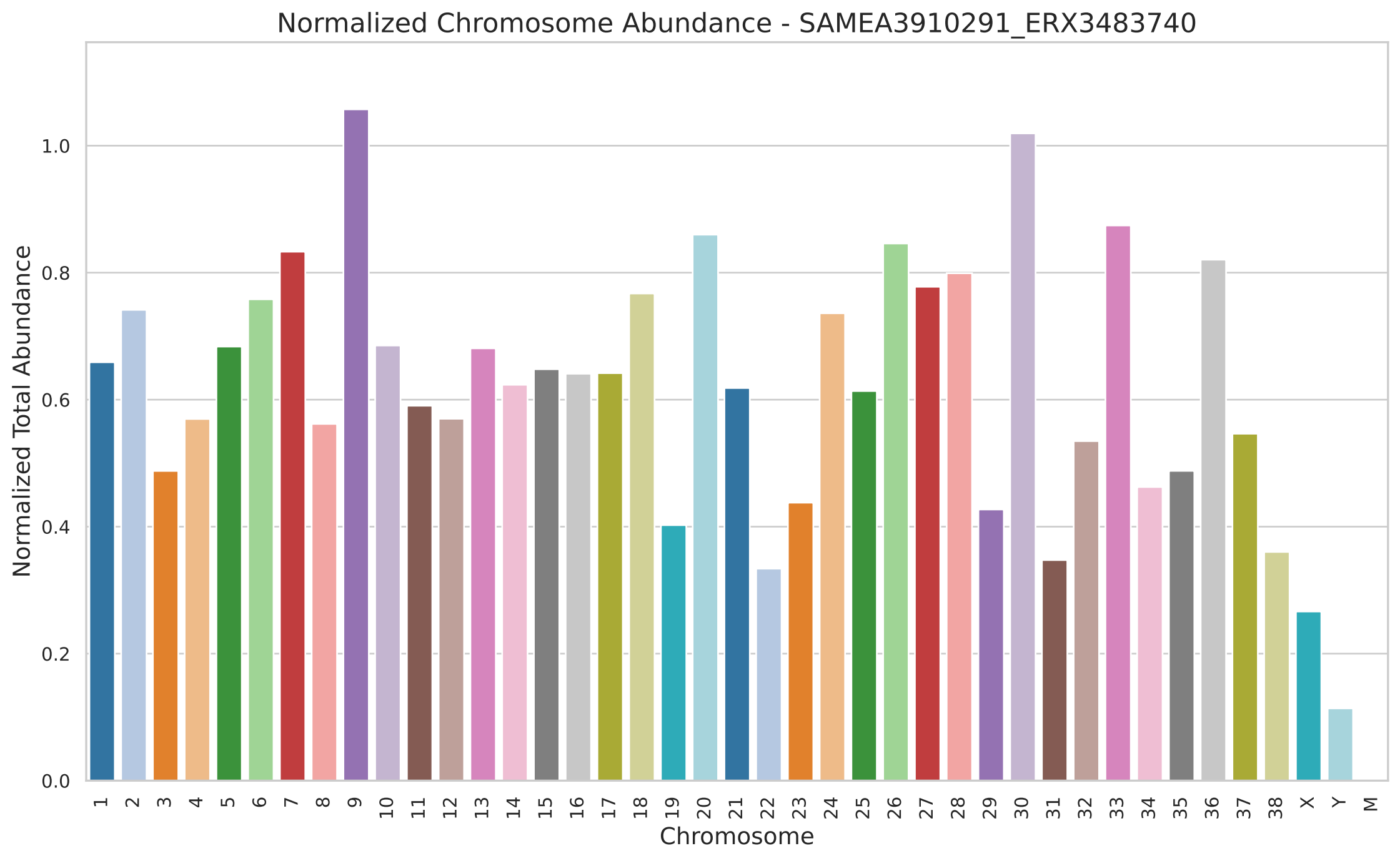

Normalized Chromosome Abundance - SAMEA5804340_ERX3483786
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

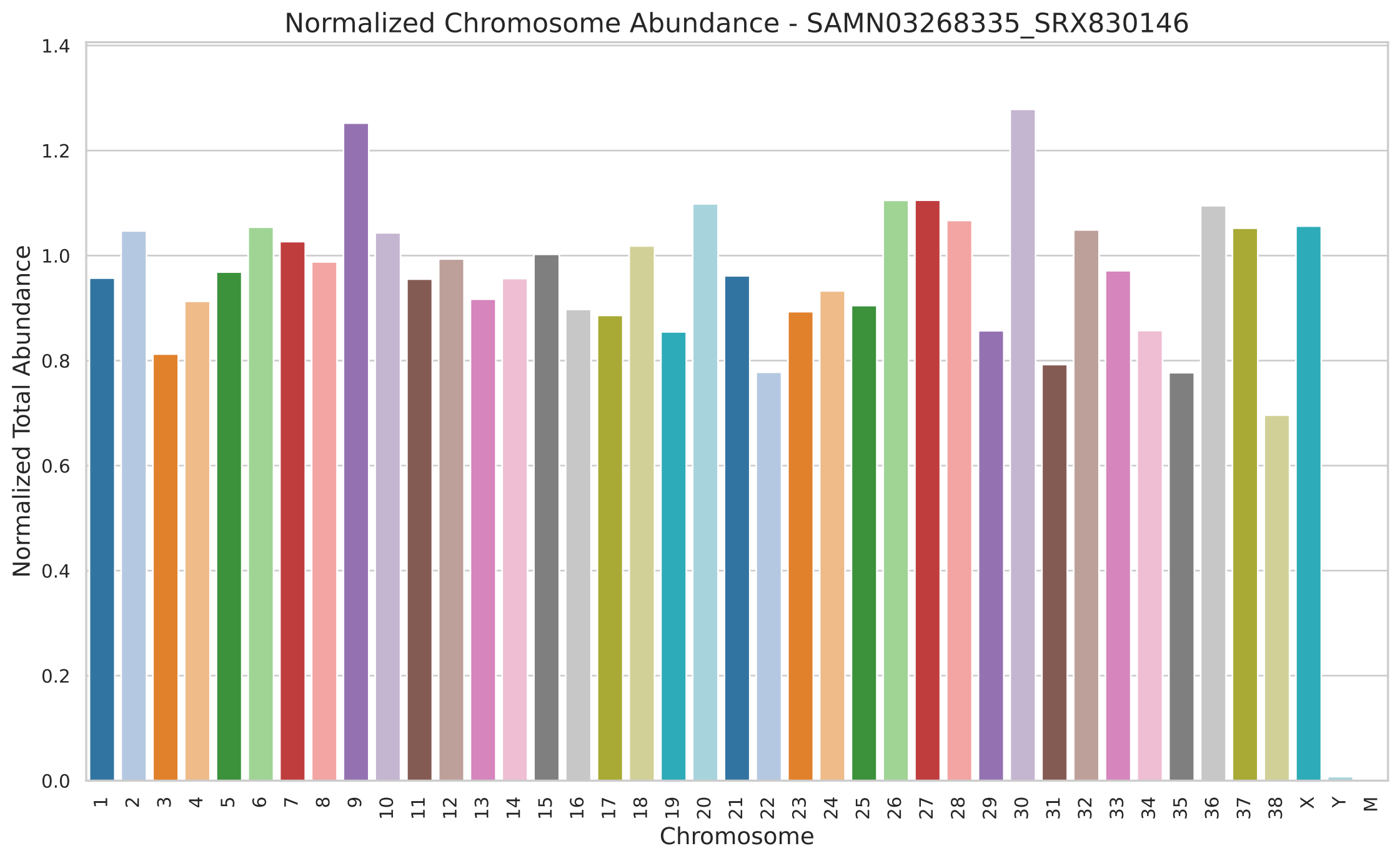

Normalized Chromosome Abundance - SAMEA3910376_ERX3483746
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

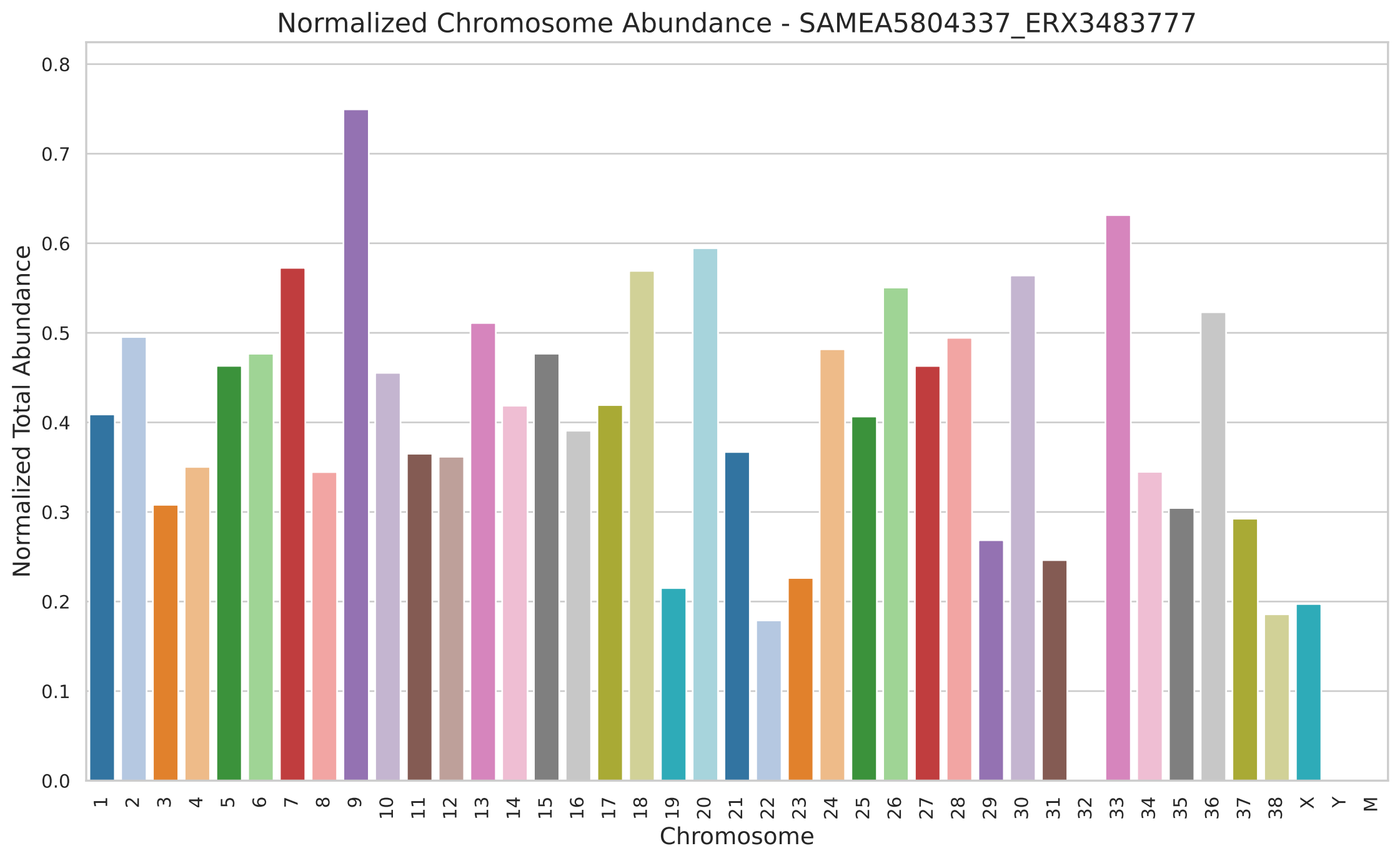

Normalized Chromosome Abundance - SAMEA3910611_ERX3483749
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

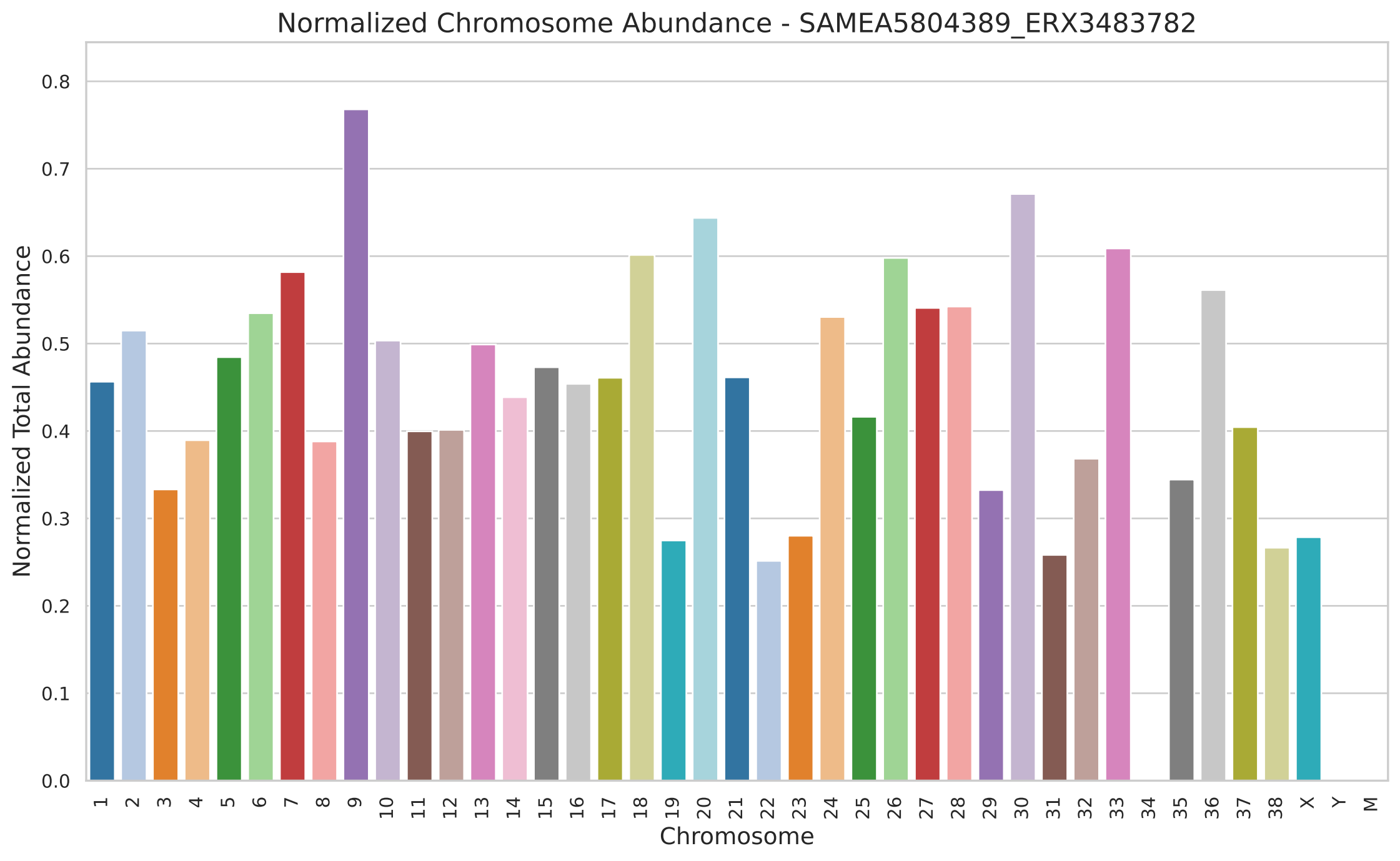

Normalized Chromosome Abundance - SAMEA5804340_ERX3483778
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

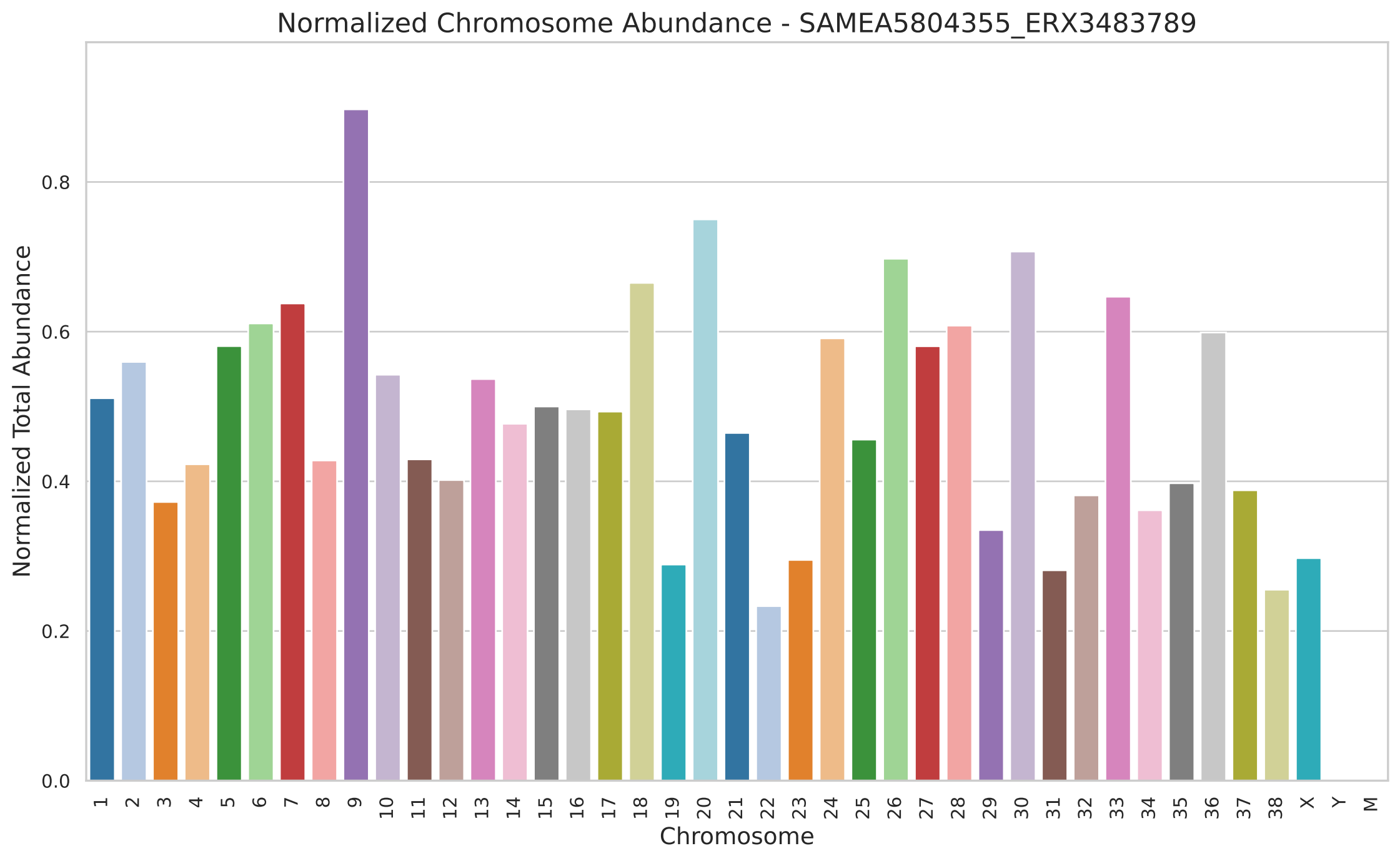

Normalized Chromosome Abundance - SAMEA3910335_ERX3483751
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

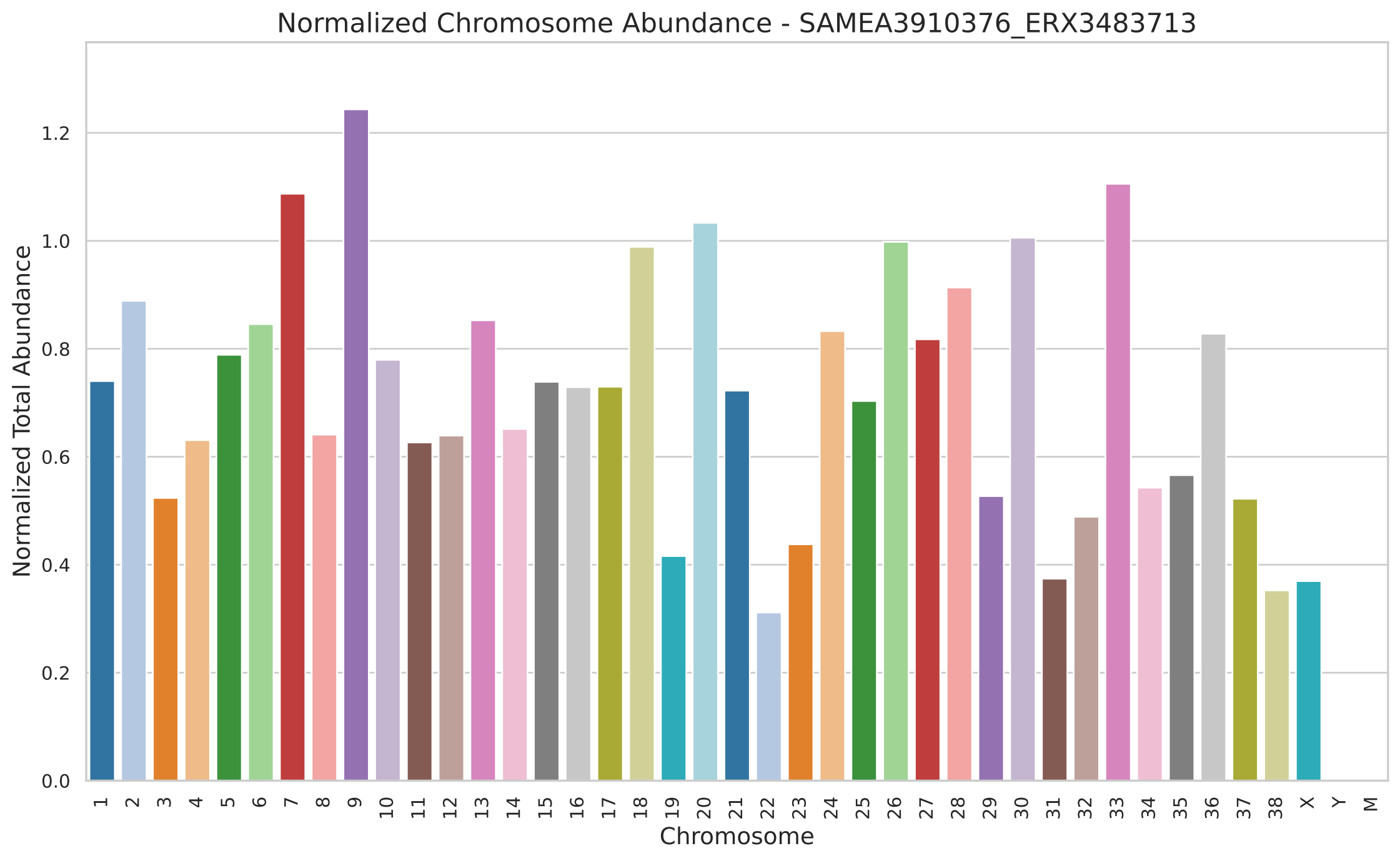

Normalized Chromosome Abundance - SAMEA3910291_ERX3483740
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

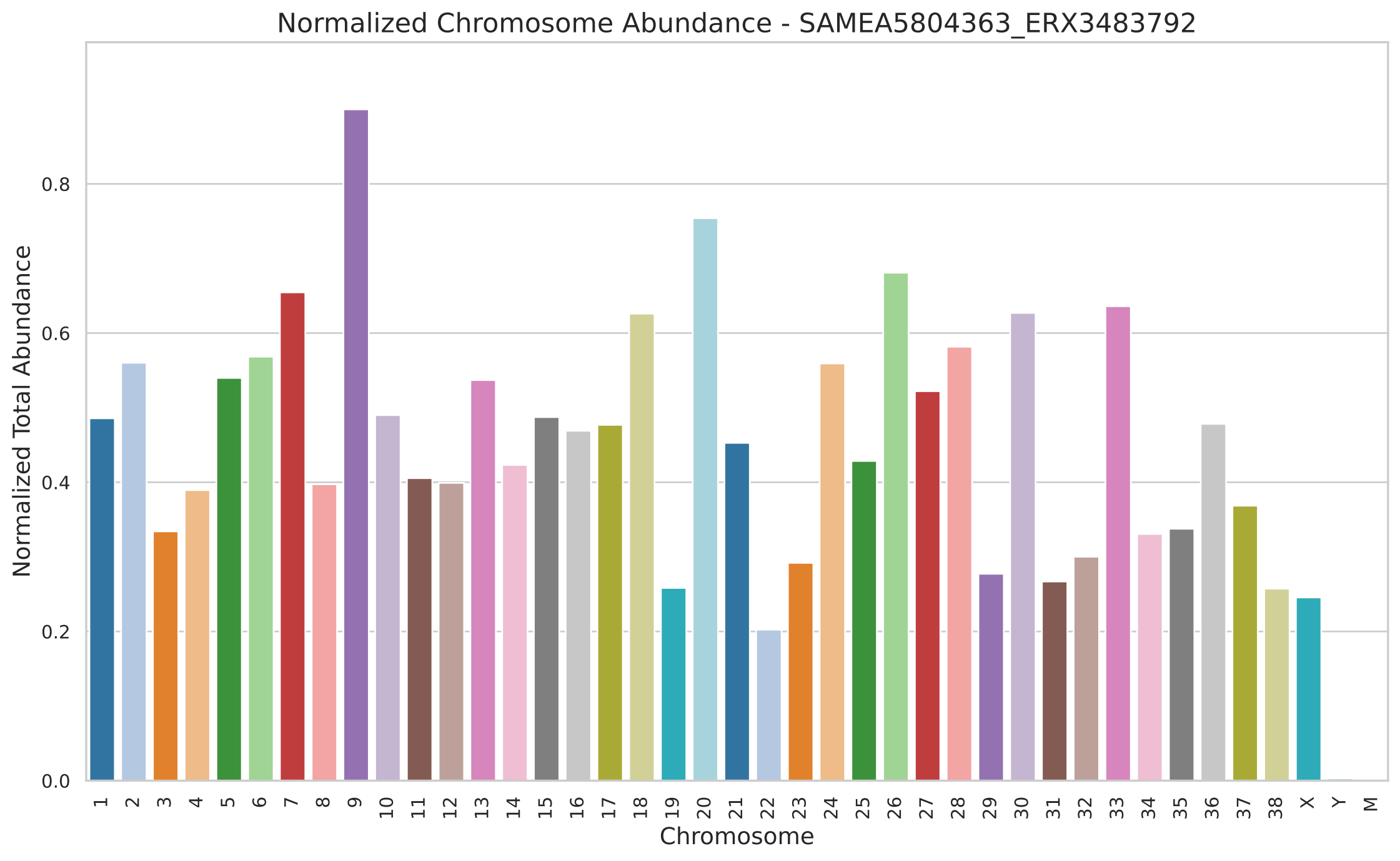

Normalized Chromosome Abundance - SAMN03268335_SRX830146
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

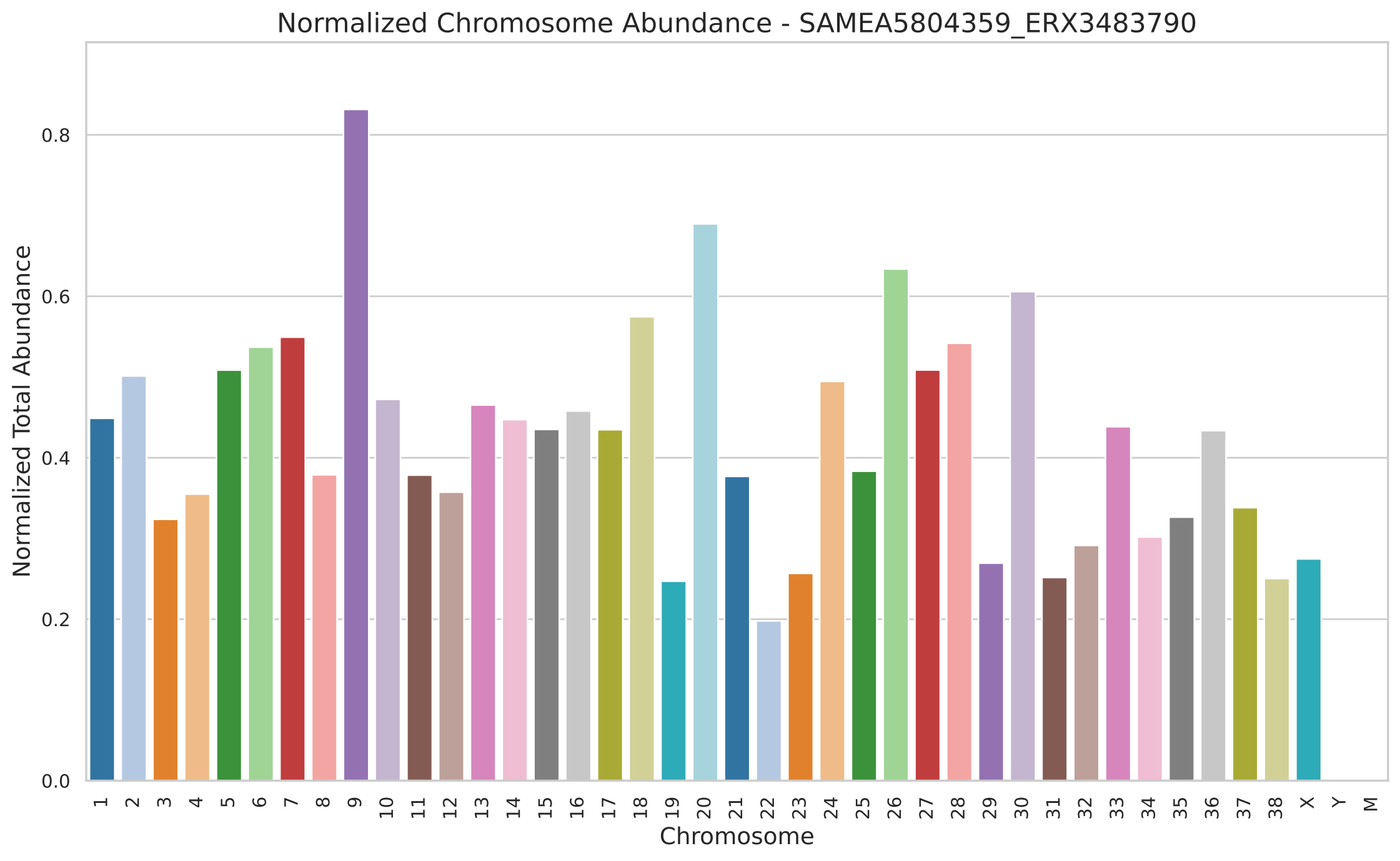

Normalized Chromosome Abundance - SAMEA5804337_ERX3483777
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

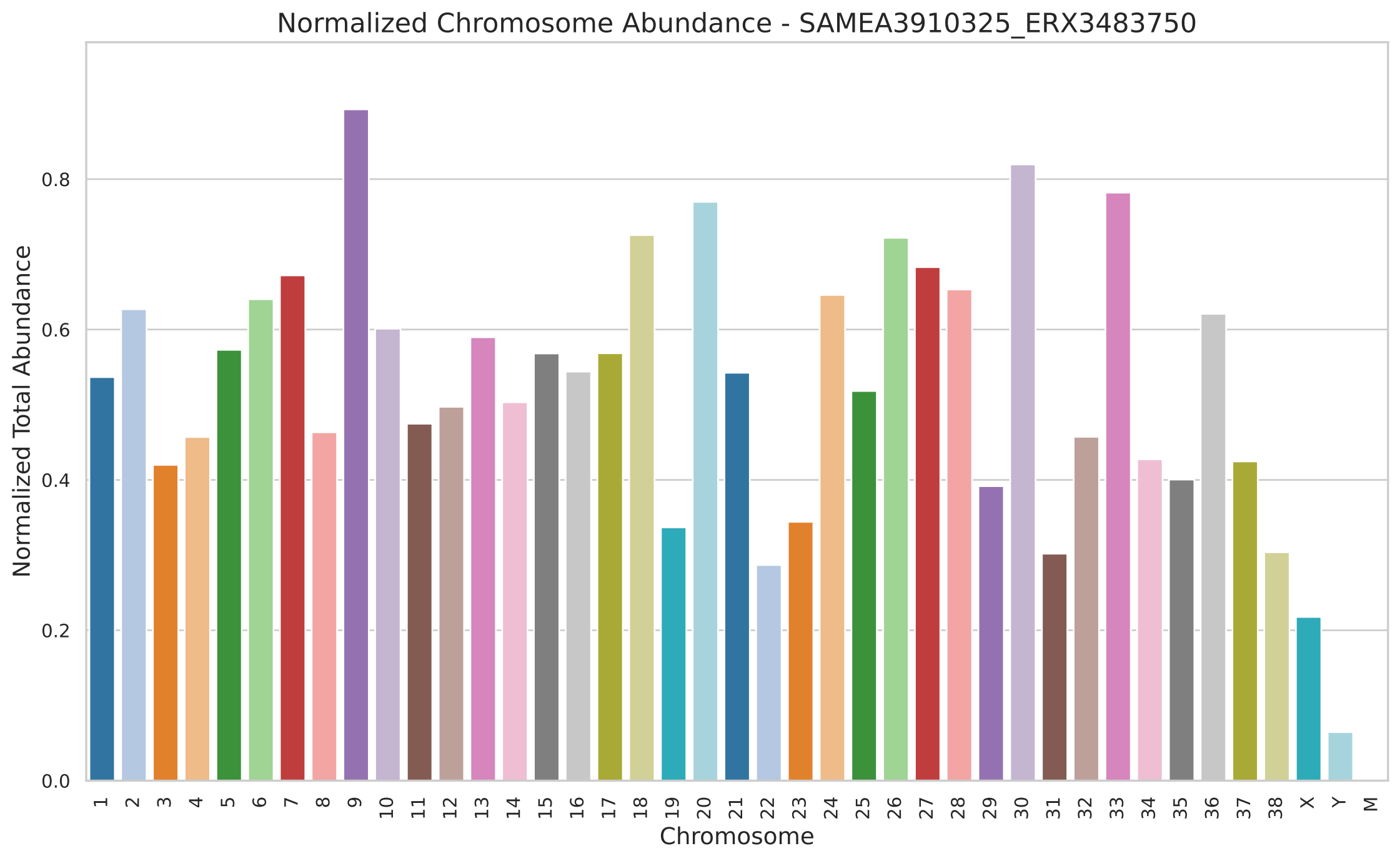

Normalized Chromosome Abundance - SAMEA5804389_ERX3483782
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

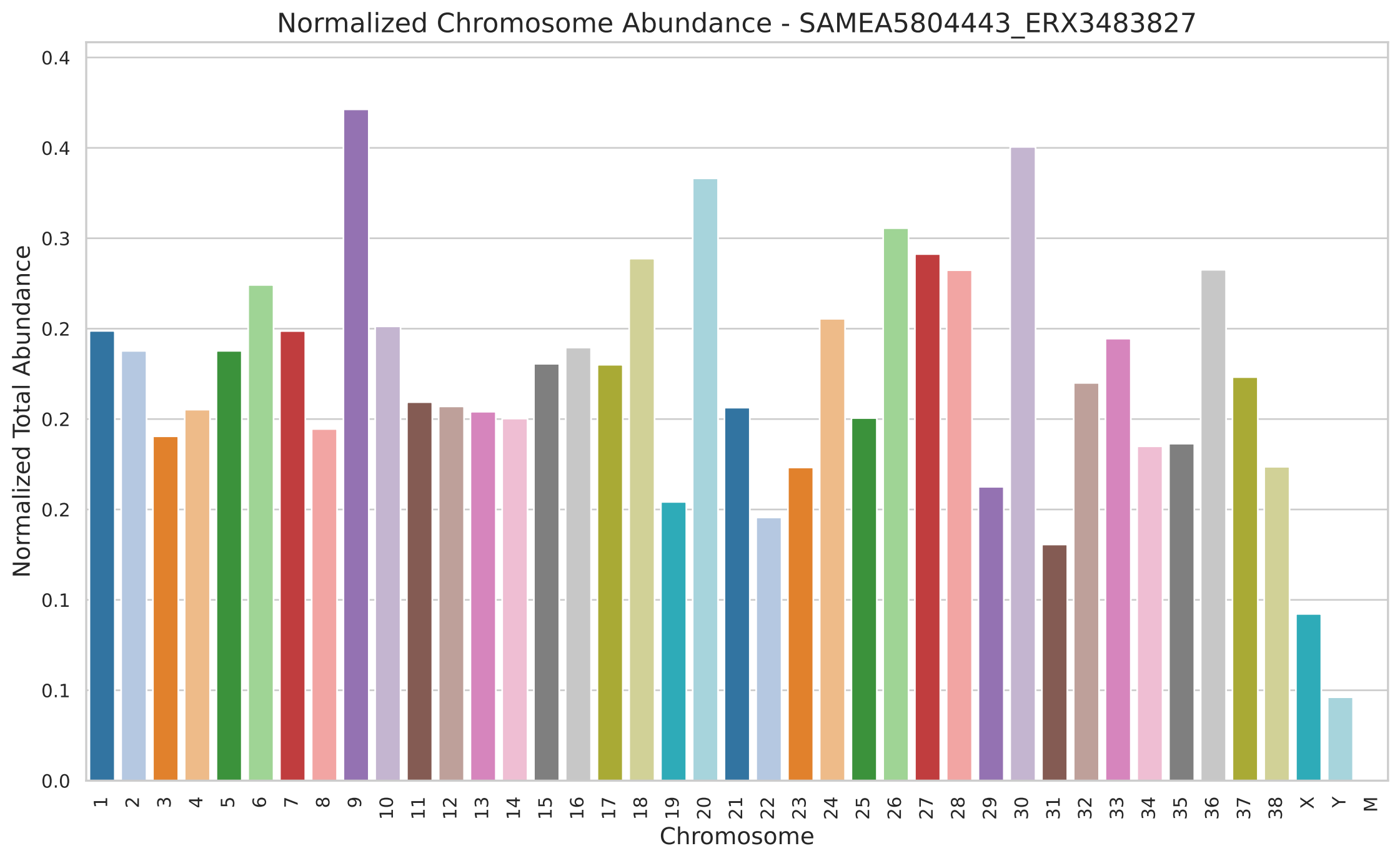

Normalized Chromosome Abundance - SAMEA5804355_ERX3483789
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

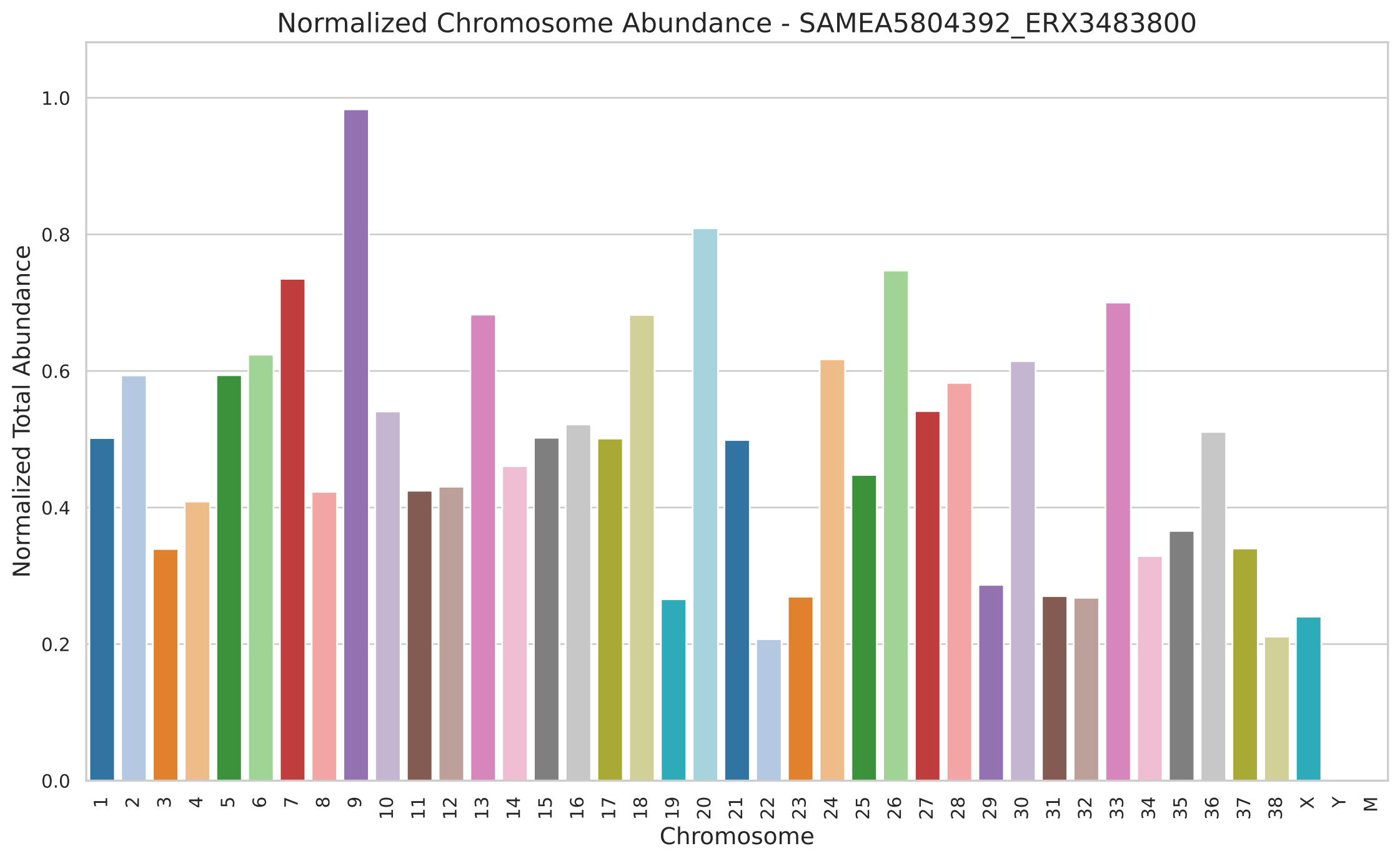

Normalized Chromosome Abundance - SAMEA3910376_ERX3483713
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

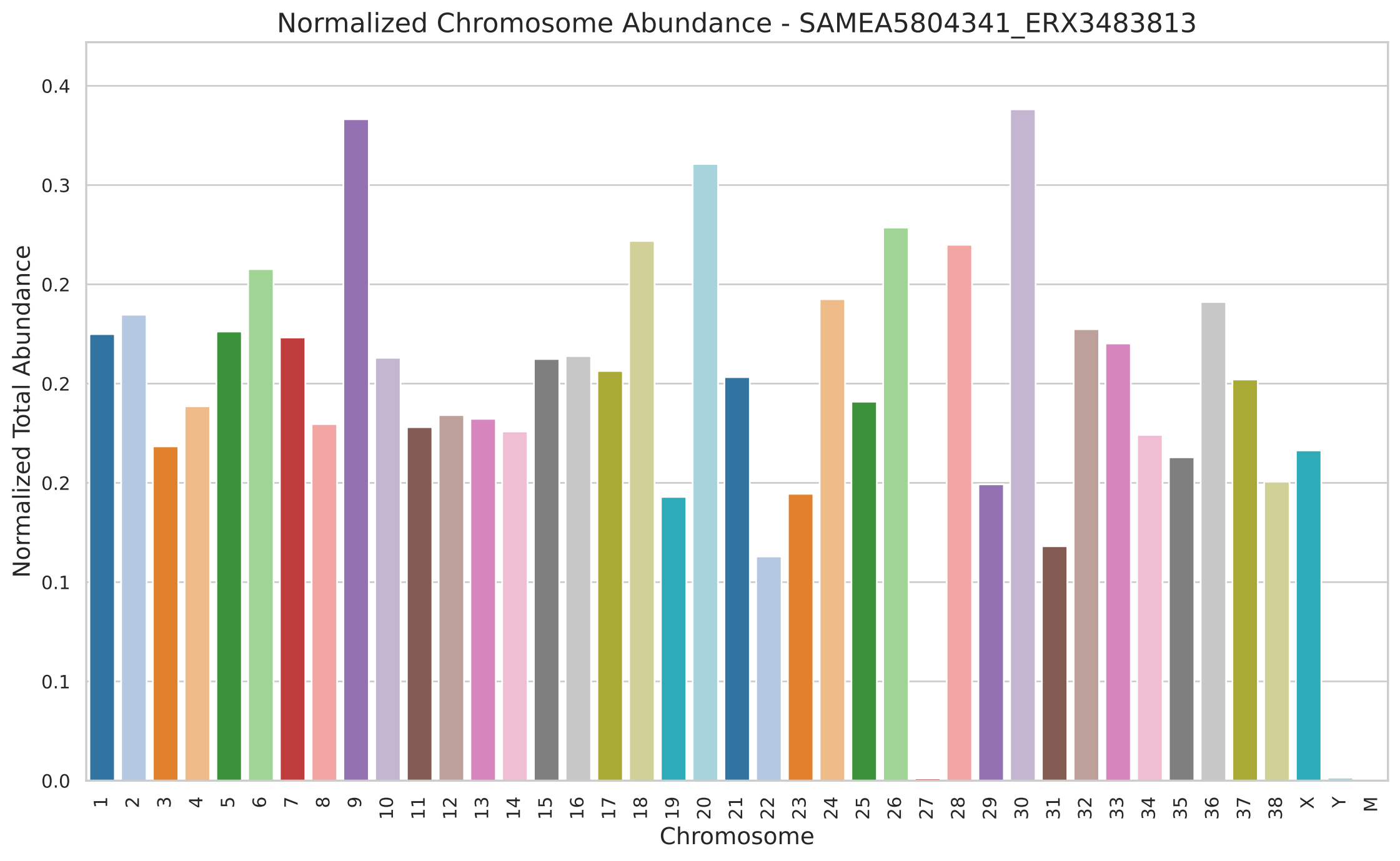

Normalized Chromosome Abundance - SAMEA5804363_ERX3483792
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

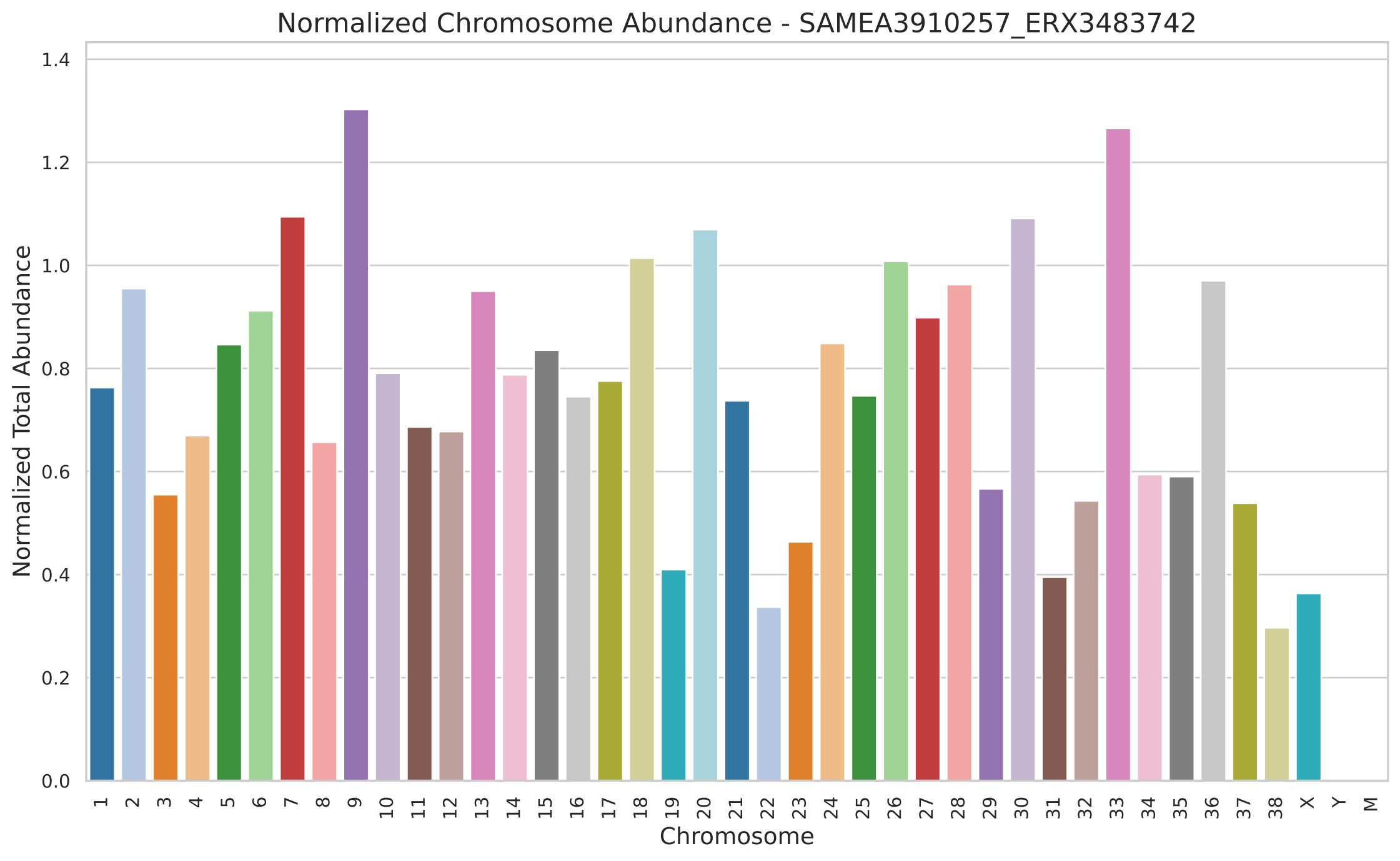

Normalized Chromosome Abundance - SAMEA5804359_ERX3483790
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

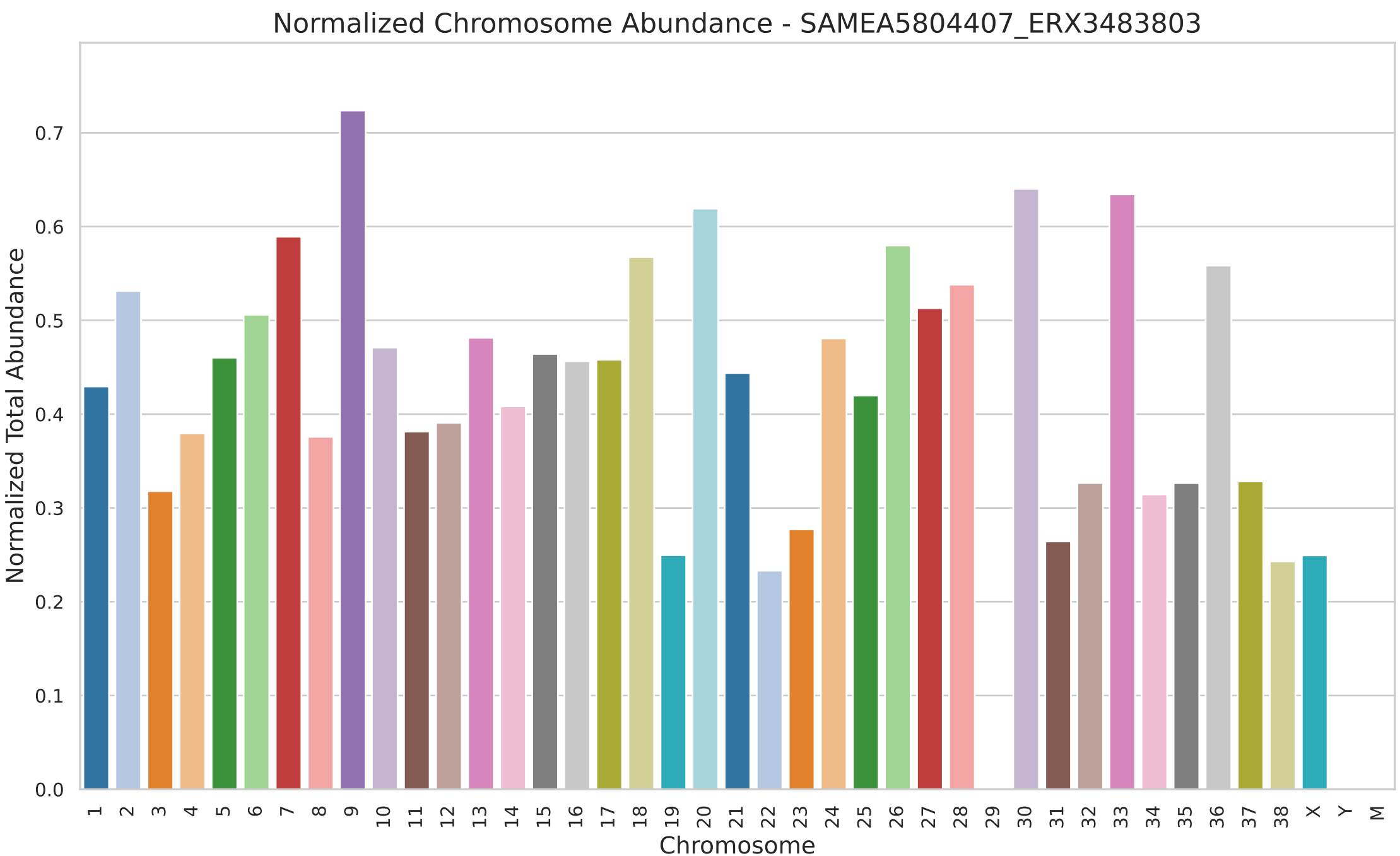

Normalized Chromosome Abundance - SAMEA3910325_ERX3483750
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

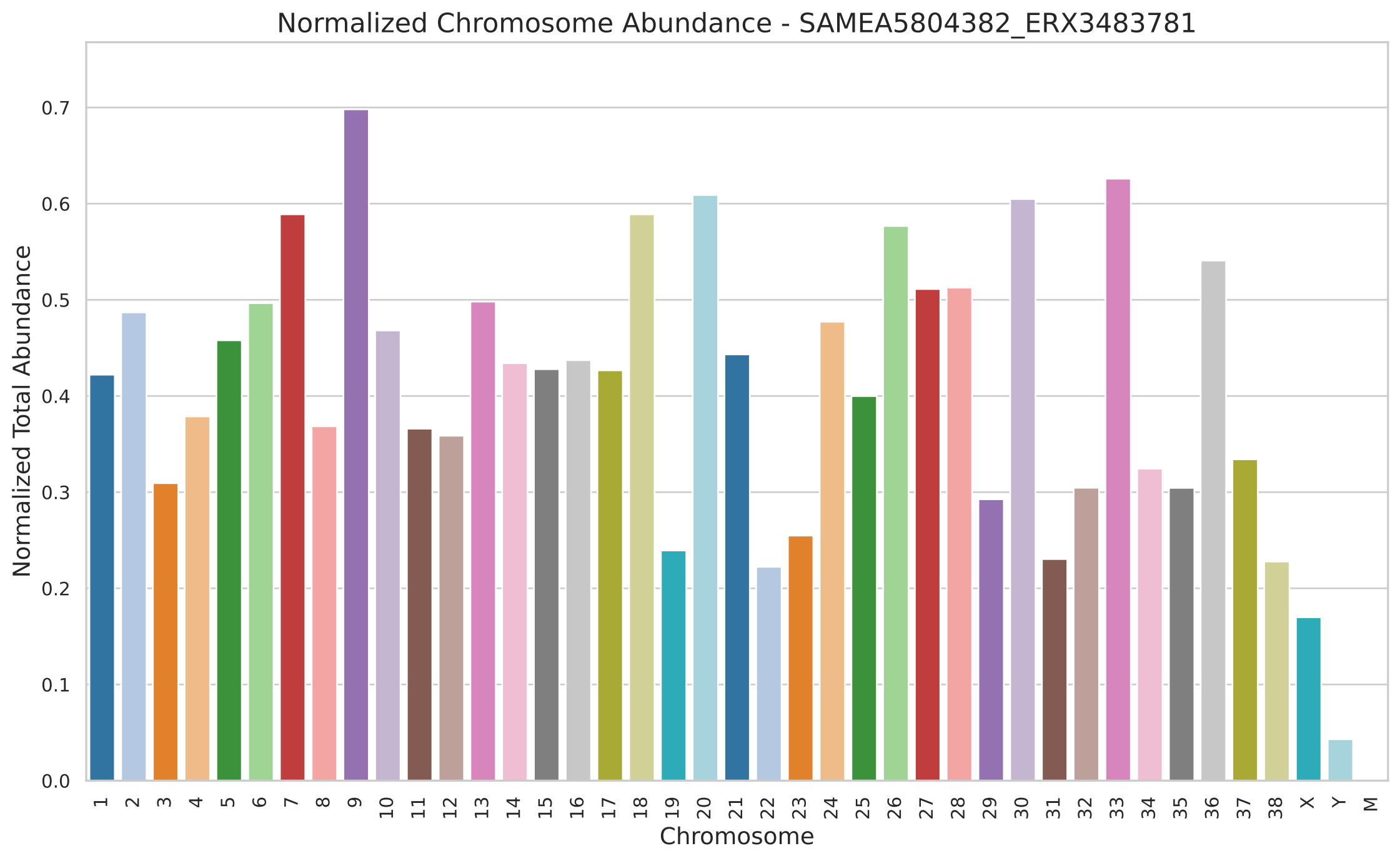

Normalized Chromosome Abundance - SAMEA5804443_ERX3483827
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

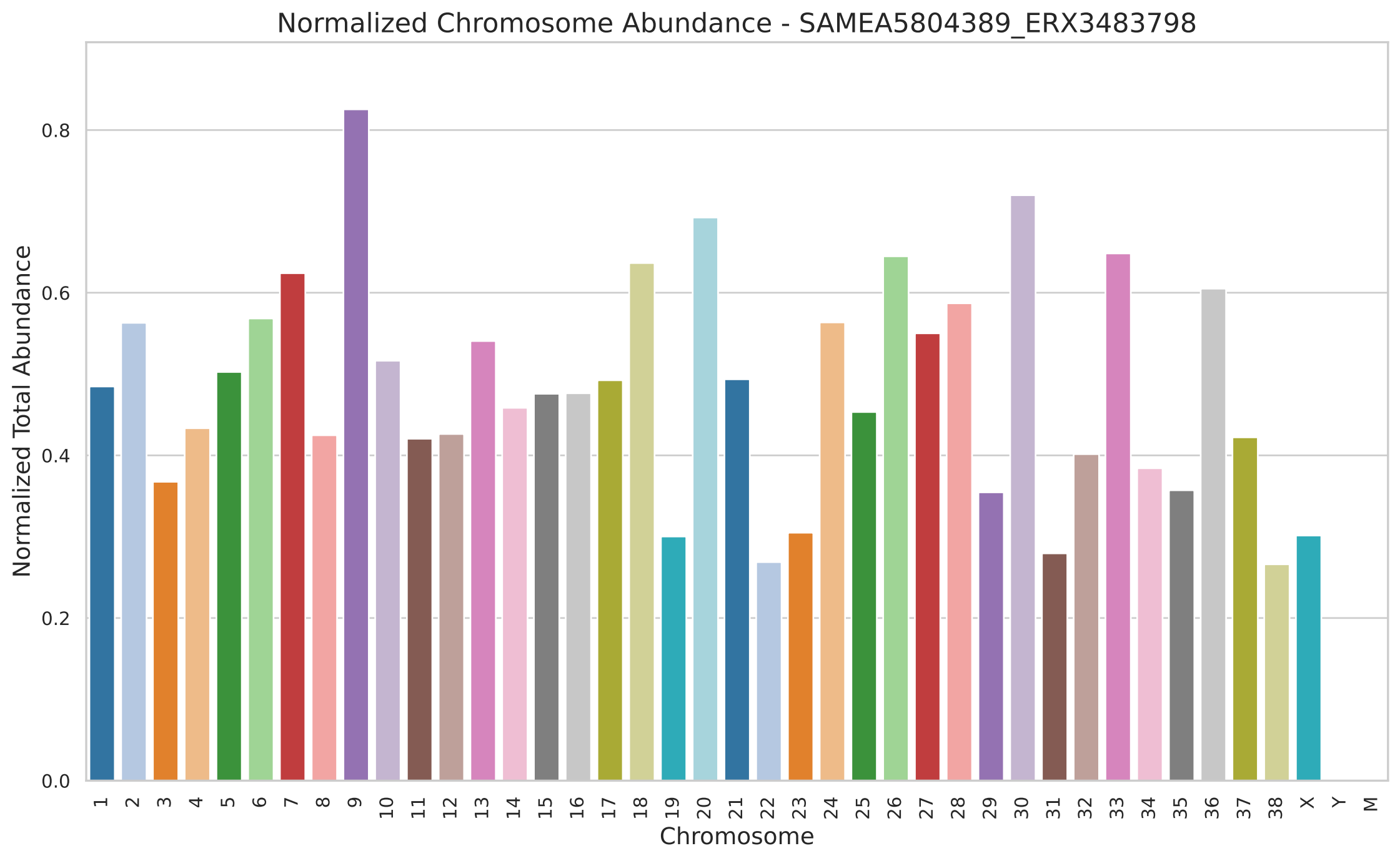

Normalized Chromosome Abundance - SAMEA5804392_ERX3483800
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

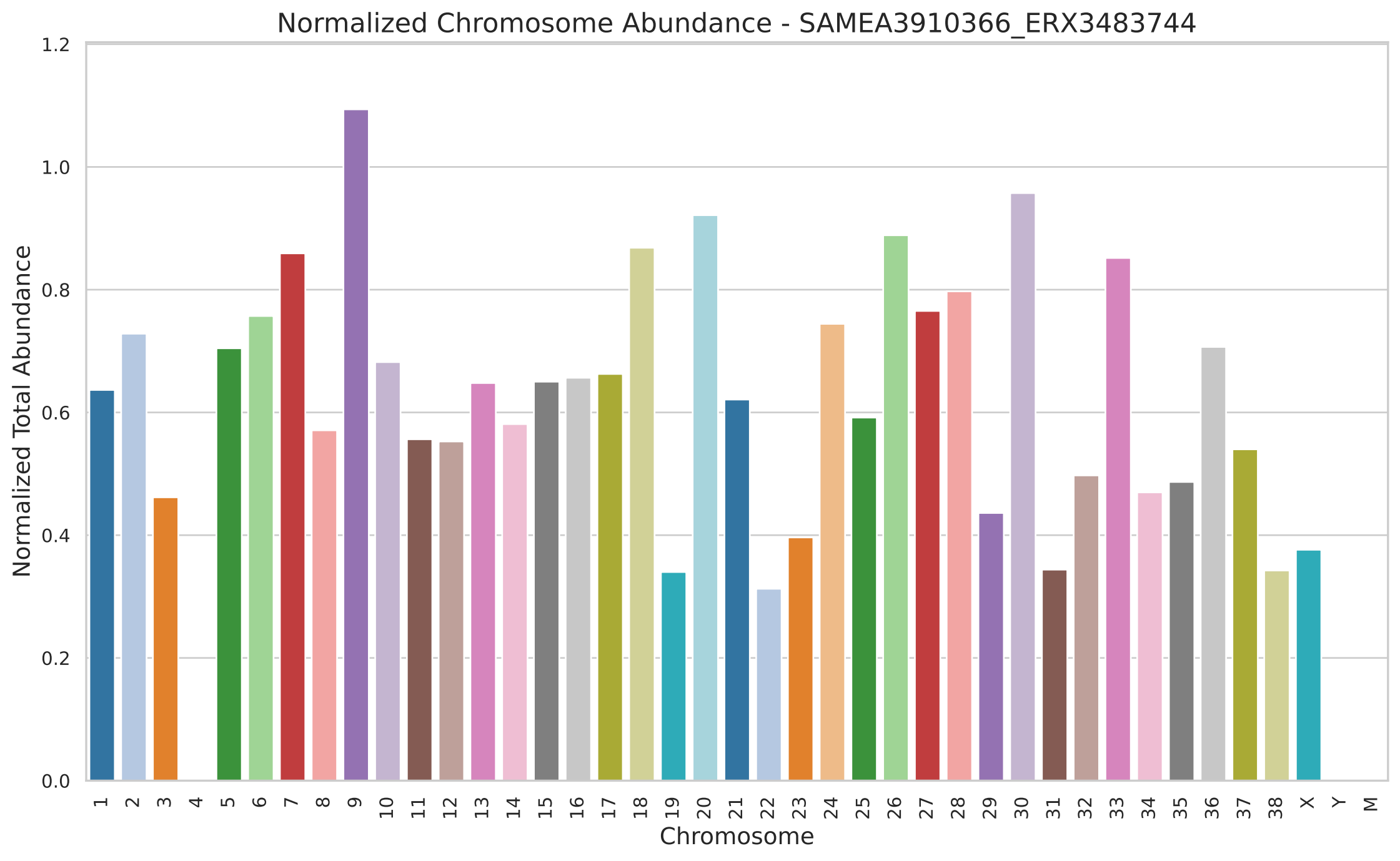

Normalized Chromosome Abundance - SAMEA5804341_ERX3483813
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

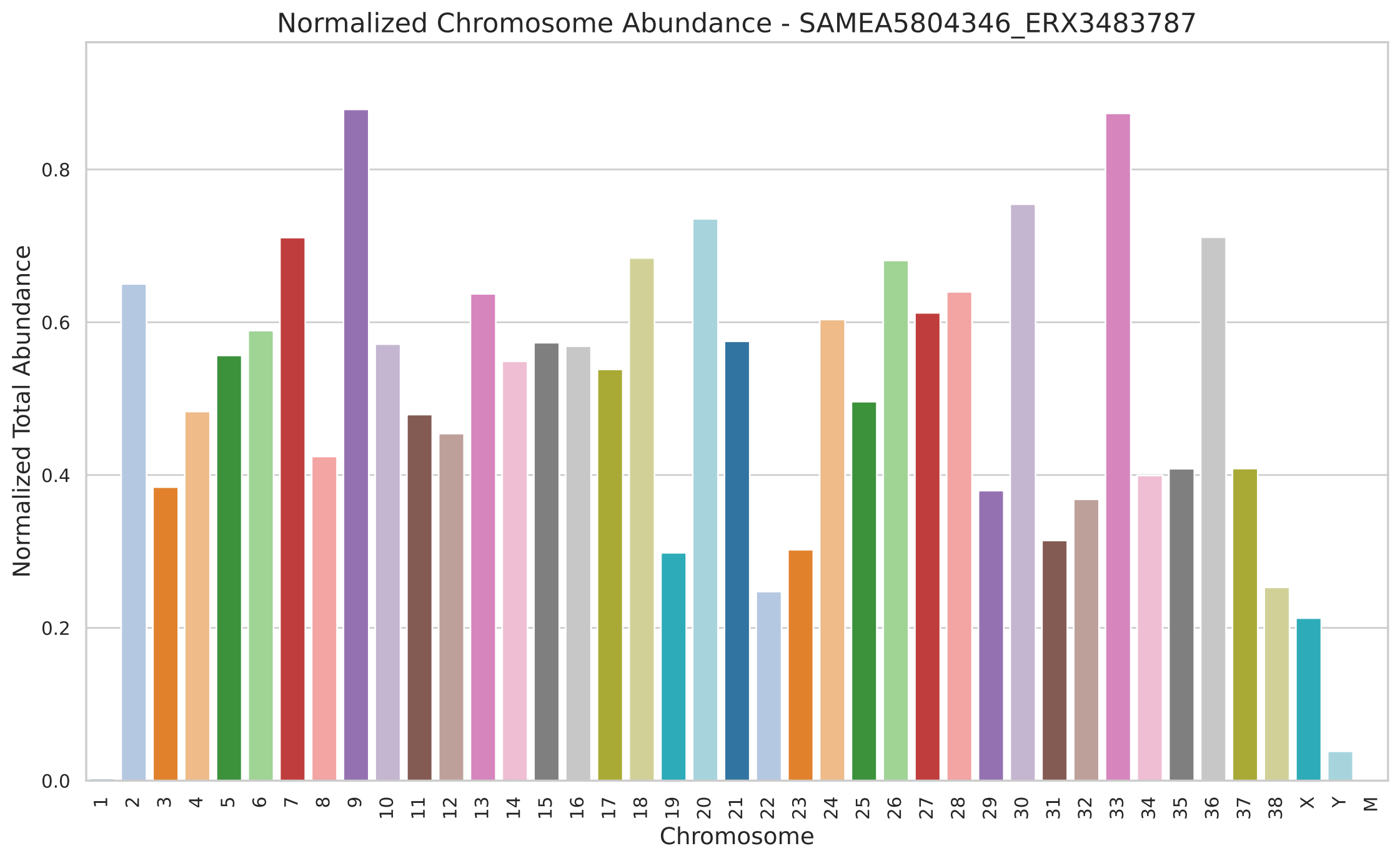

Normalized Chromosome Abundance - SAMEA3910257_ERX3483742
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

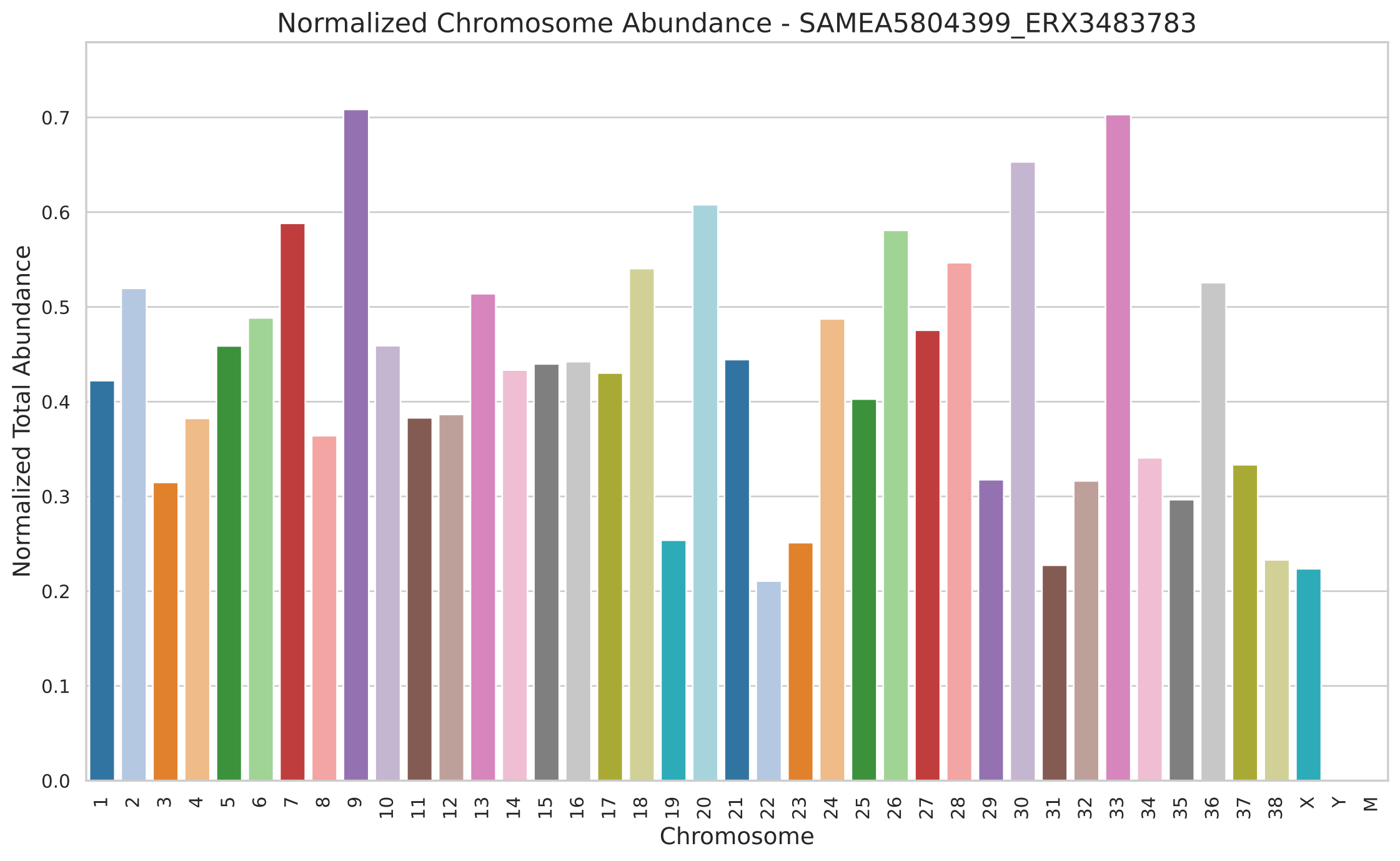

Normalized Chromosome Abundance - SAMEA5804407_ERX3483803
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

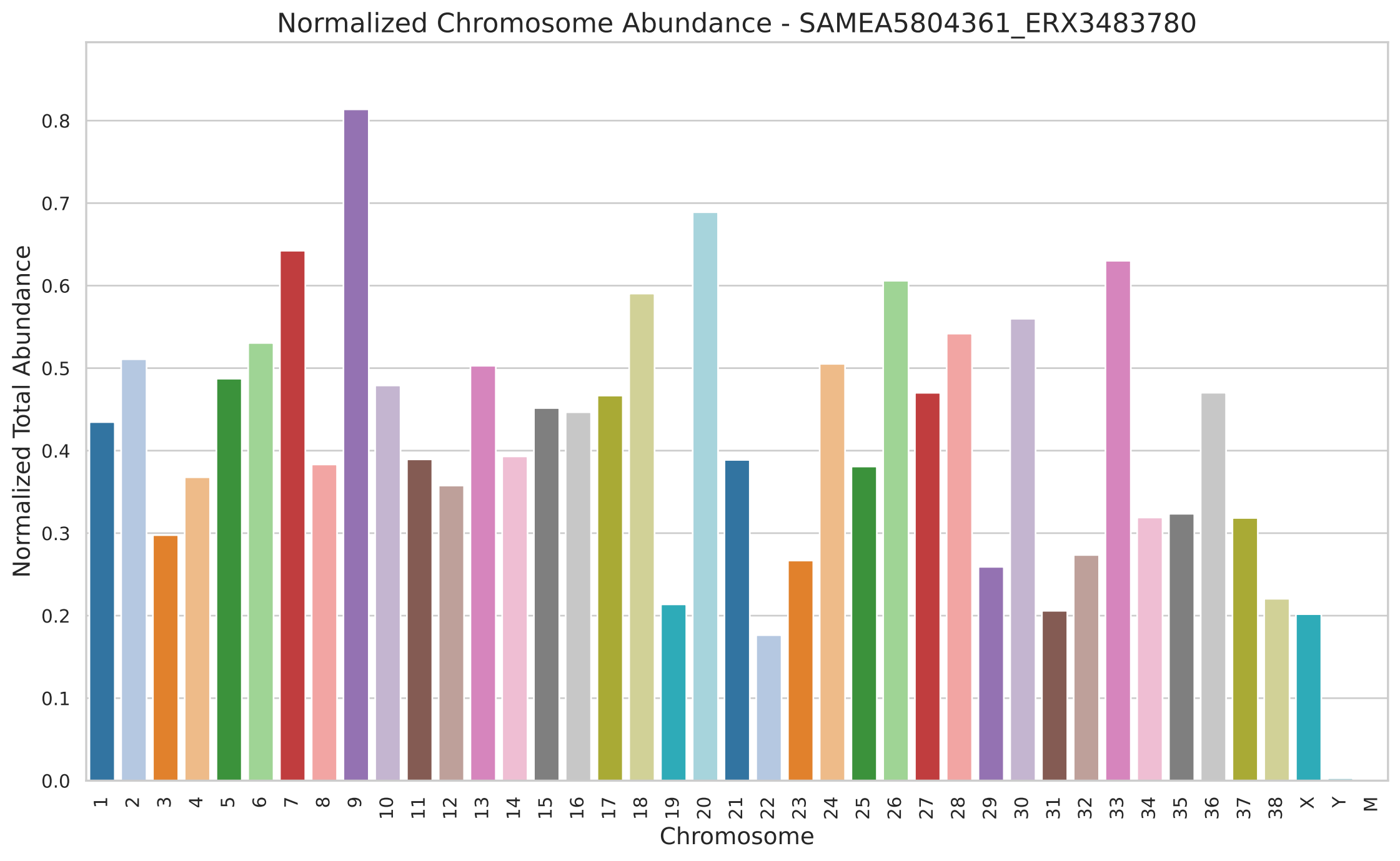

Normalized Chromosome Abundance - SAMEA5804382_ERX3483781
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

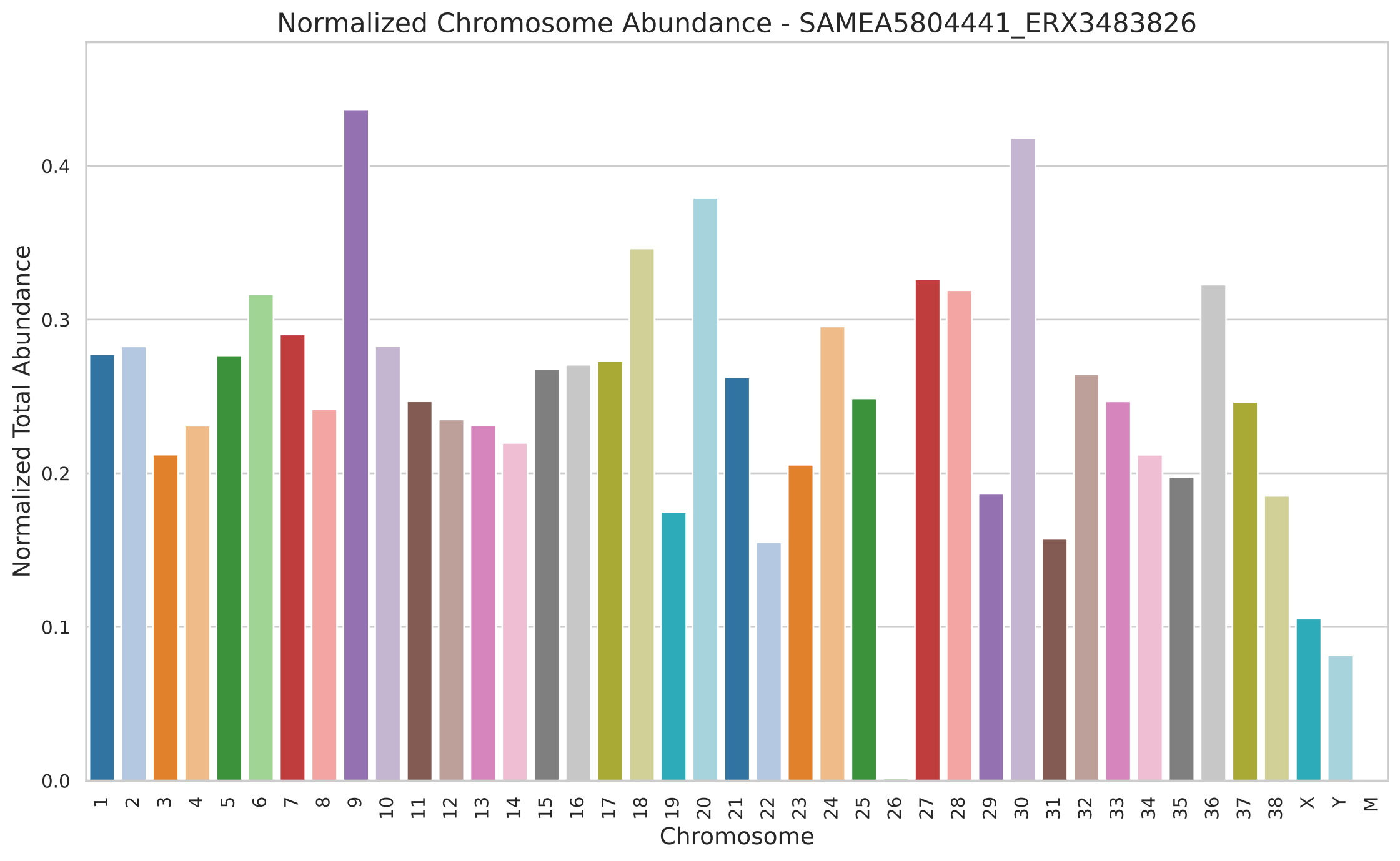

Normalized Chromosome Abundance - SAMEA5804389_ERX3483798
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

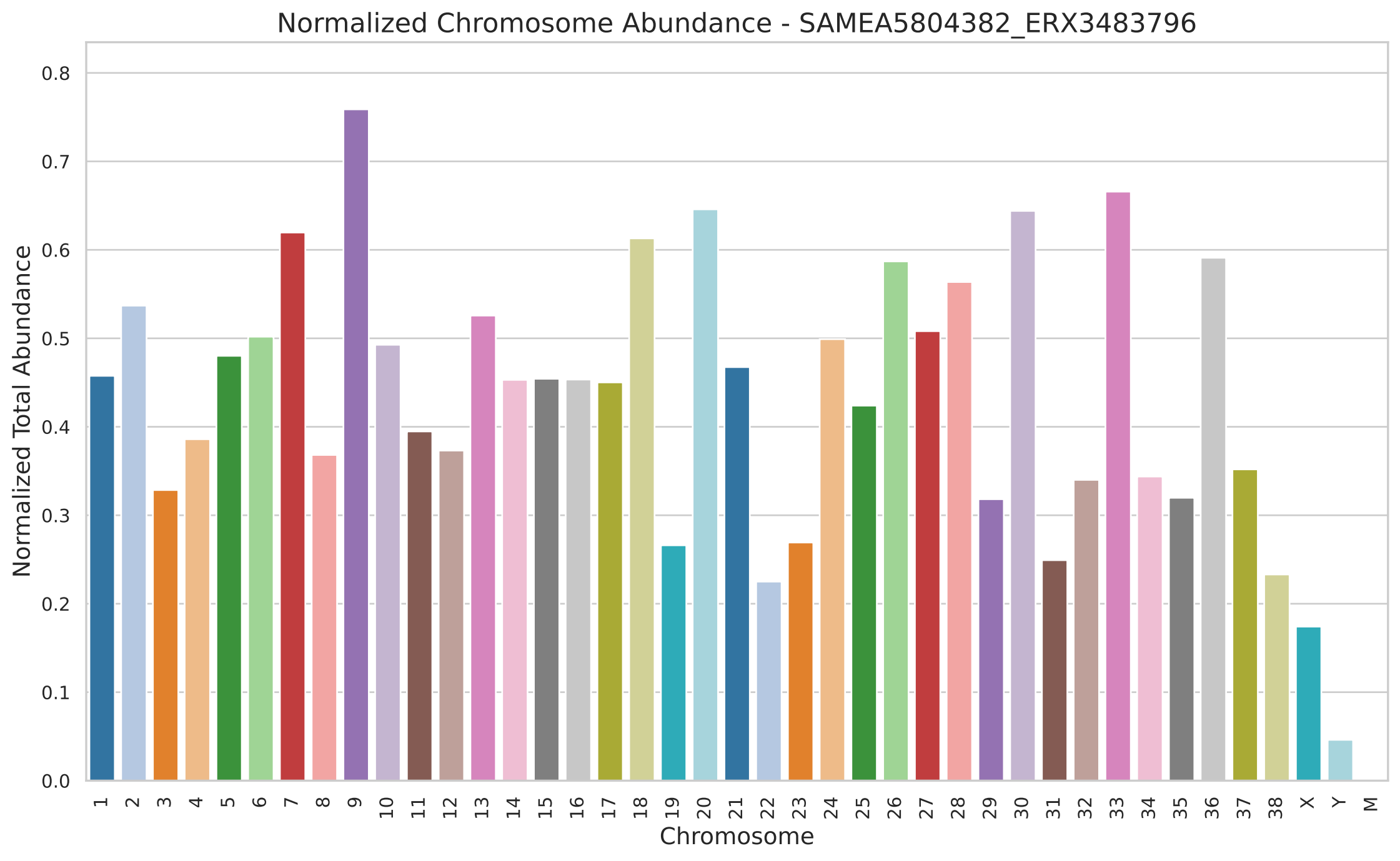

Normalized Chromosome Abundance - SAMEA3910366_ERX3483744
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

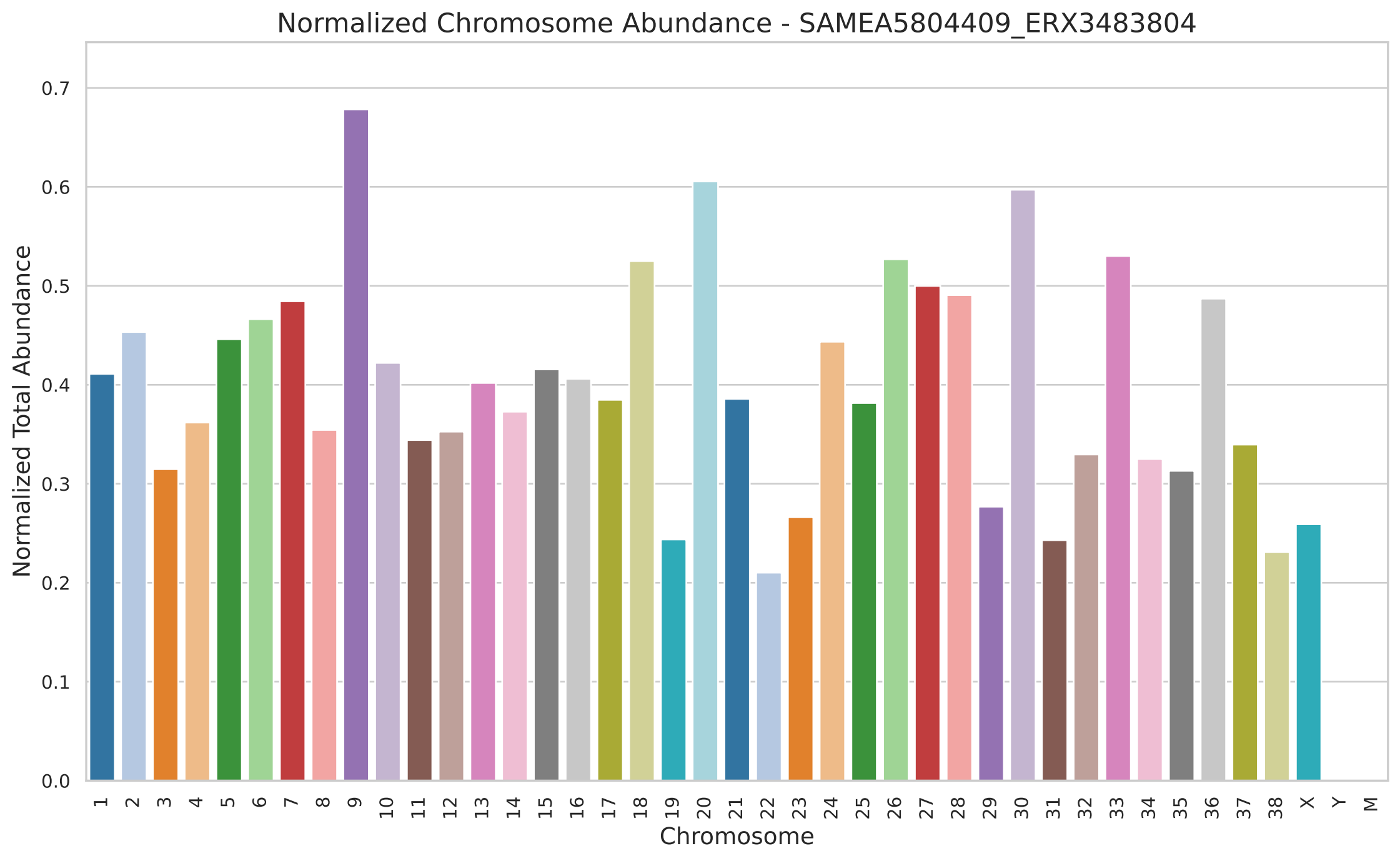

Normalized Chromosome Abundance - SAMEA5804346_ERX3483787
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

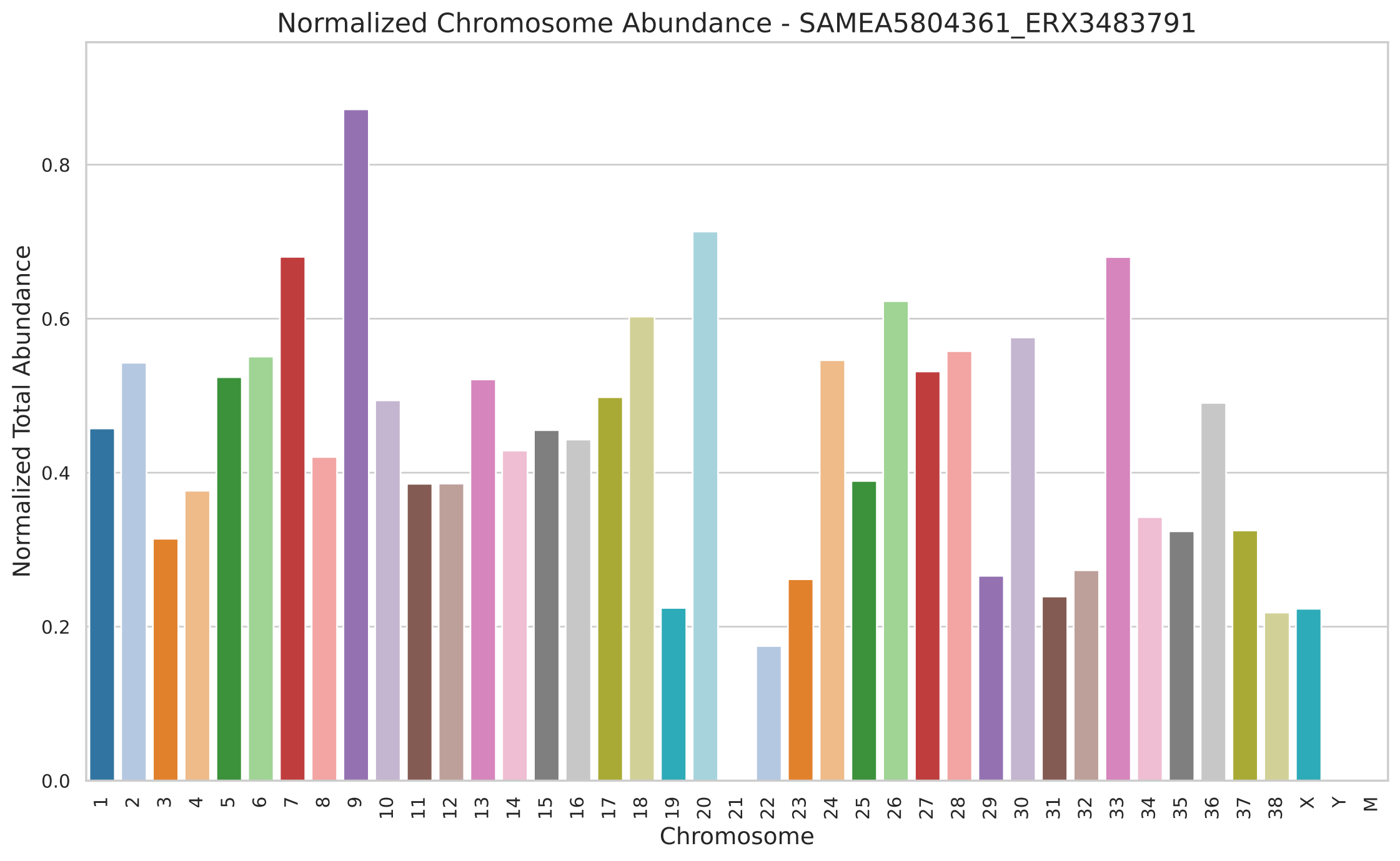

Normalized Chromosome Abundance - SAMEA5804399_ERX3483783
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

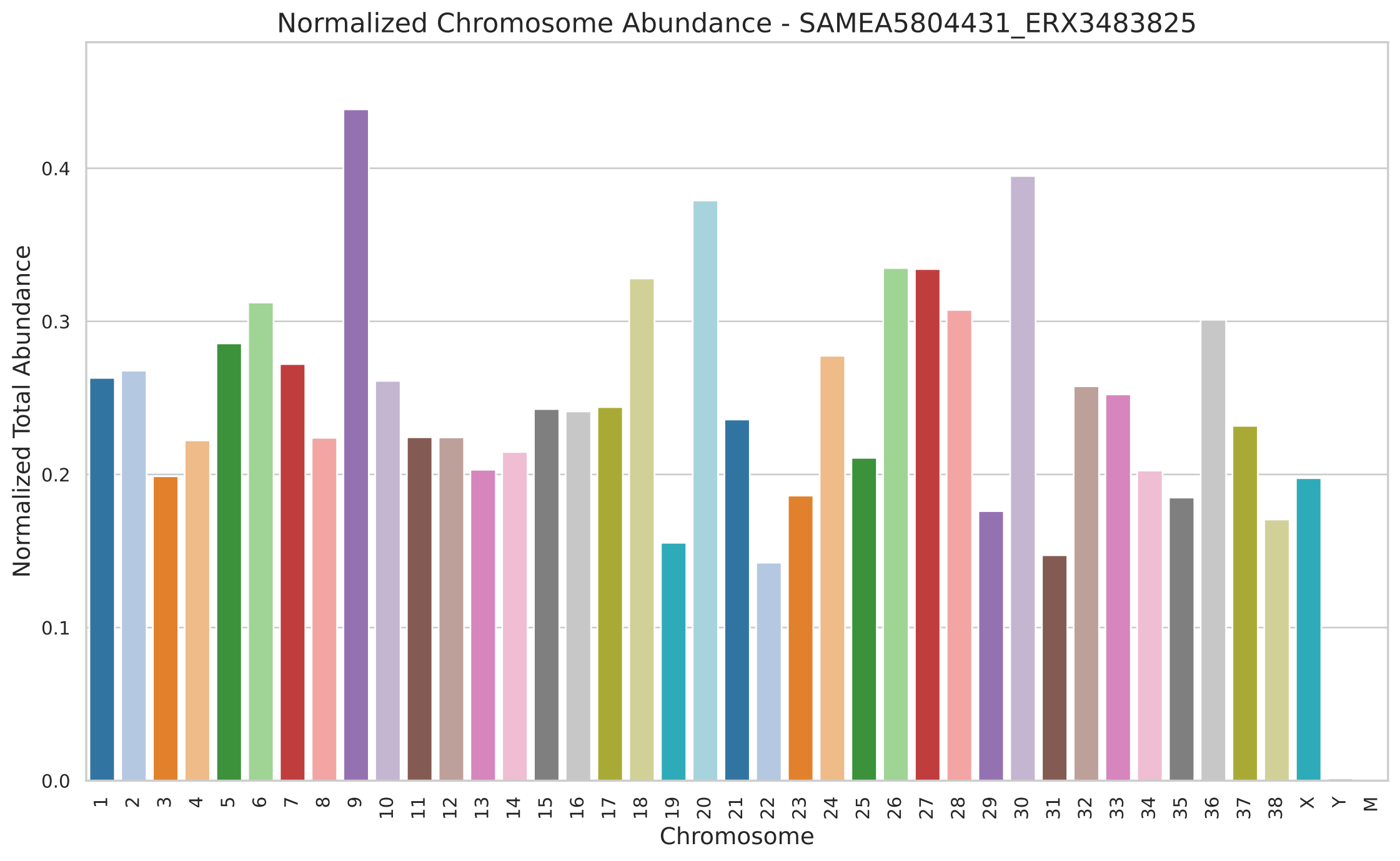

Normalized Chromosome Abundance - SAMEA5804361_ERX3483780
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

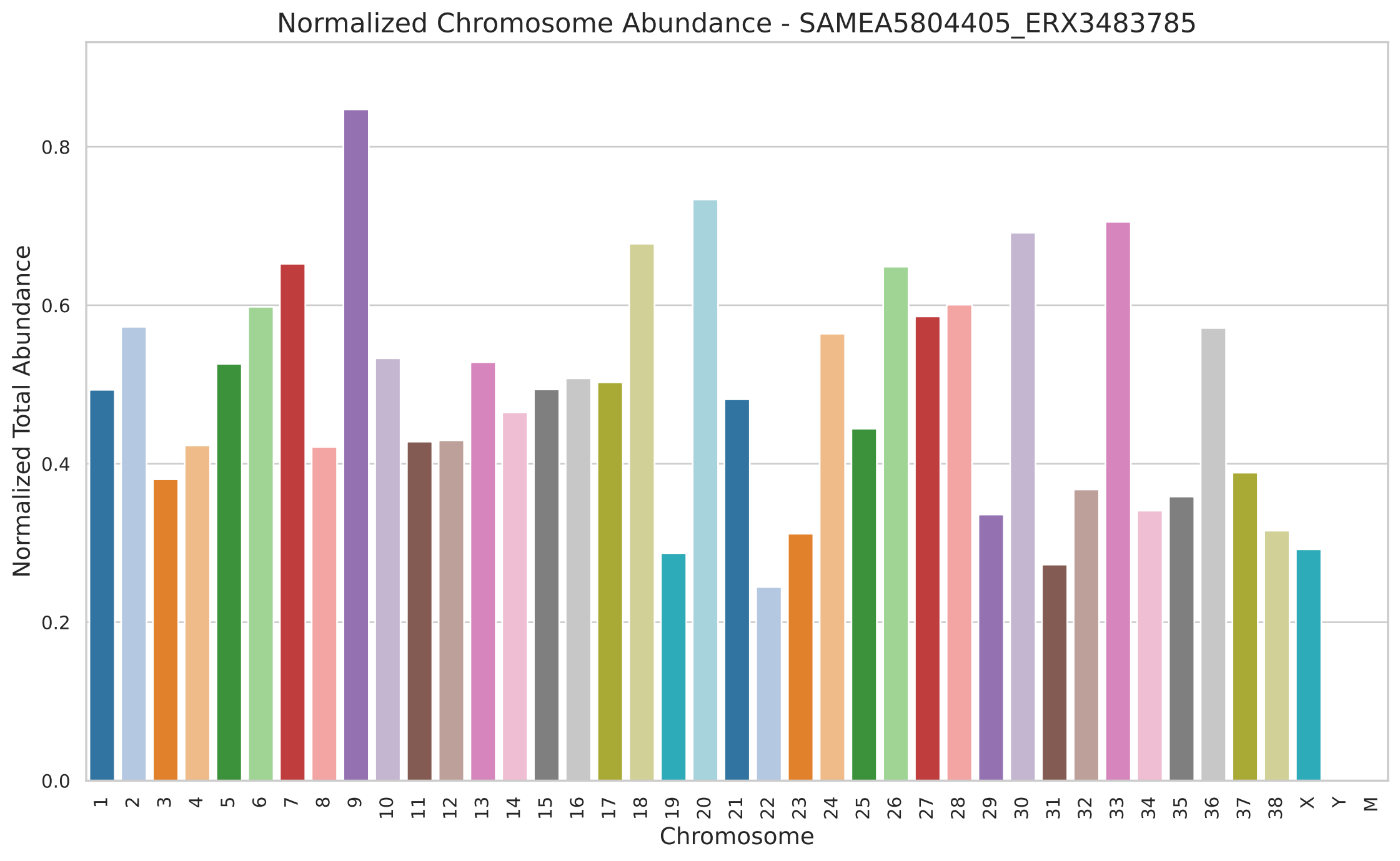

Normalized Chromosome Abundance - SAMEA5804441_ERX3483826
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

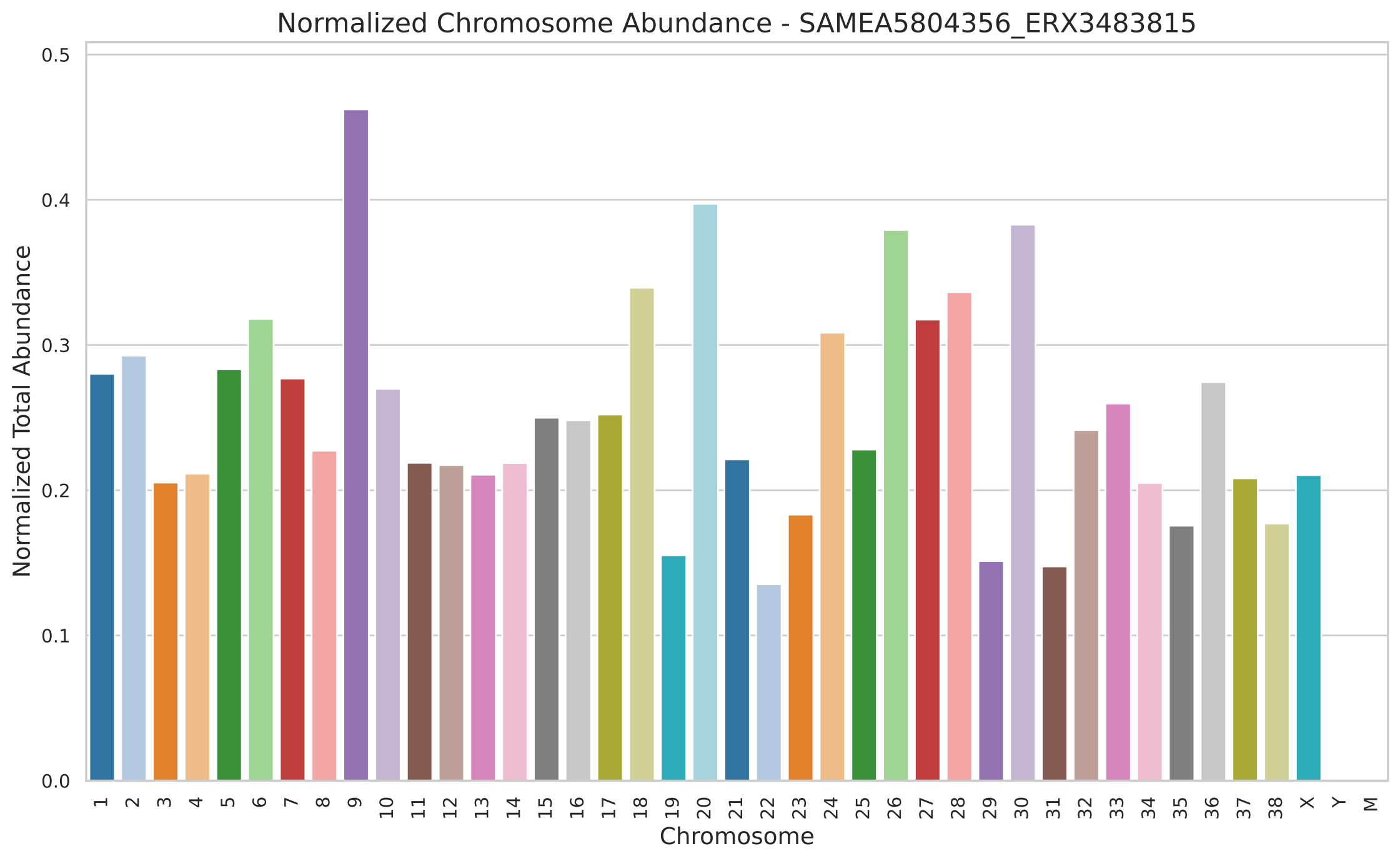

Normalized Chromosome Abundance - SAMEA5804382_ERX3483796
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

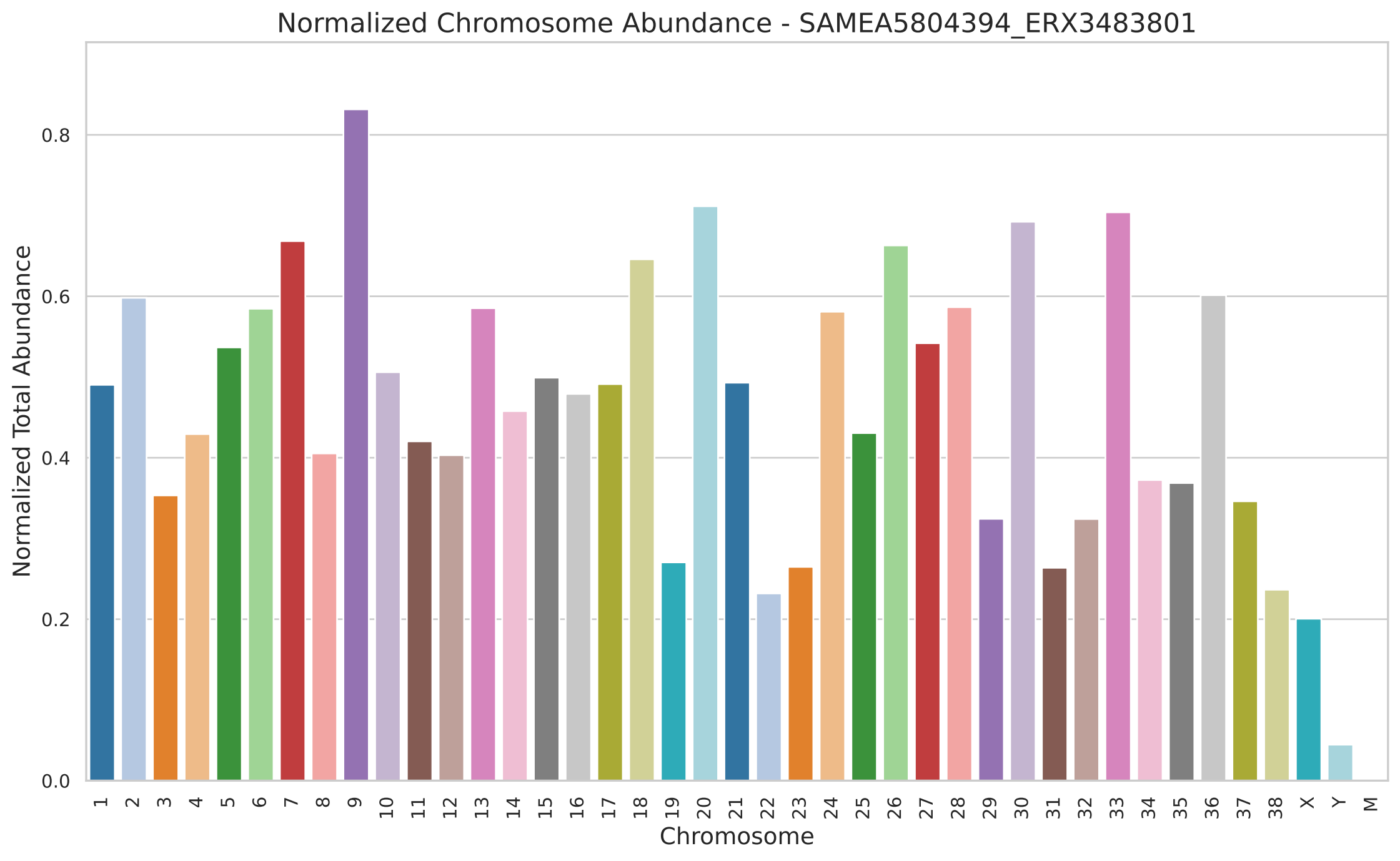

Normalized Chromosome Abundance - SAMEA5804409_ERX3483804
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

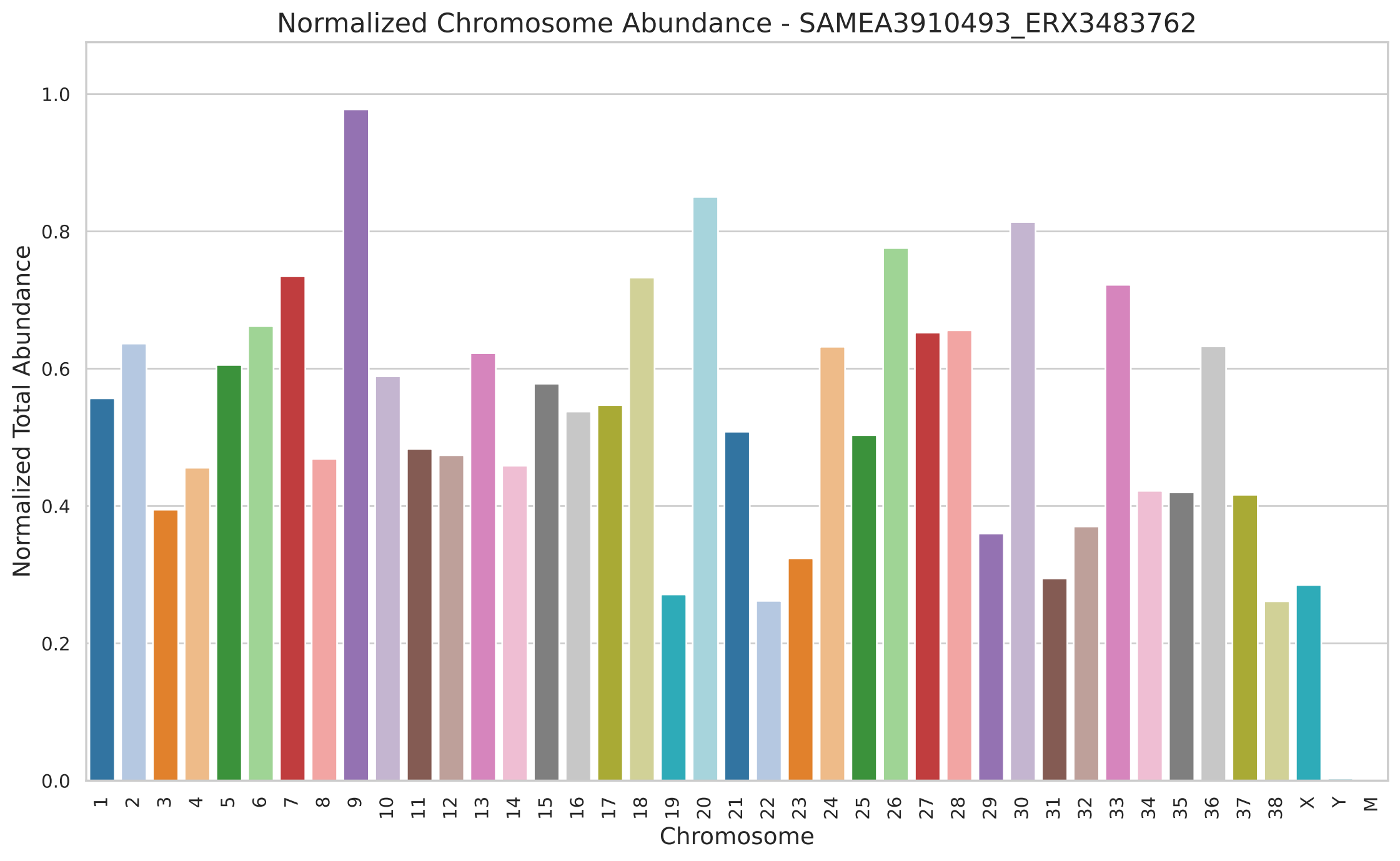

Normalized Chromosome Abundance - SAMEA5804361_ERX3483791
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

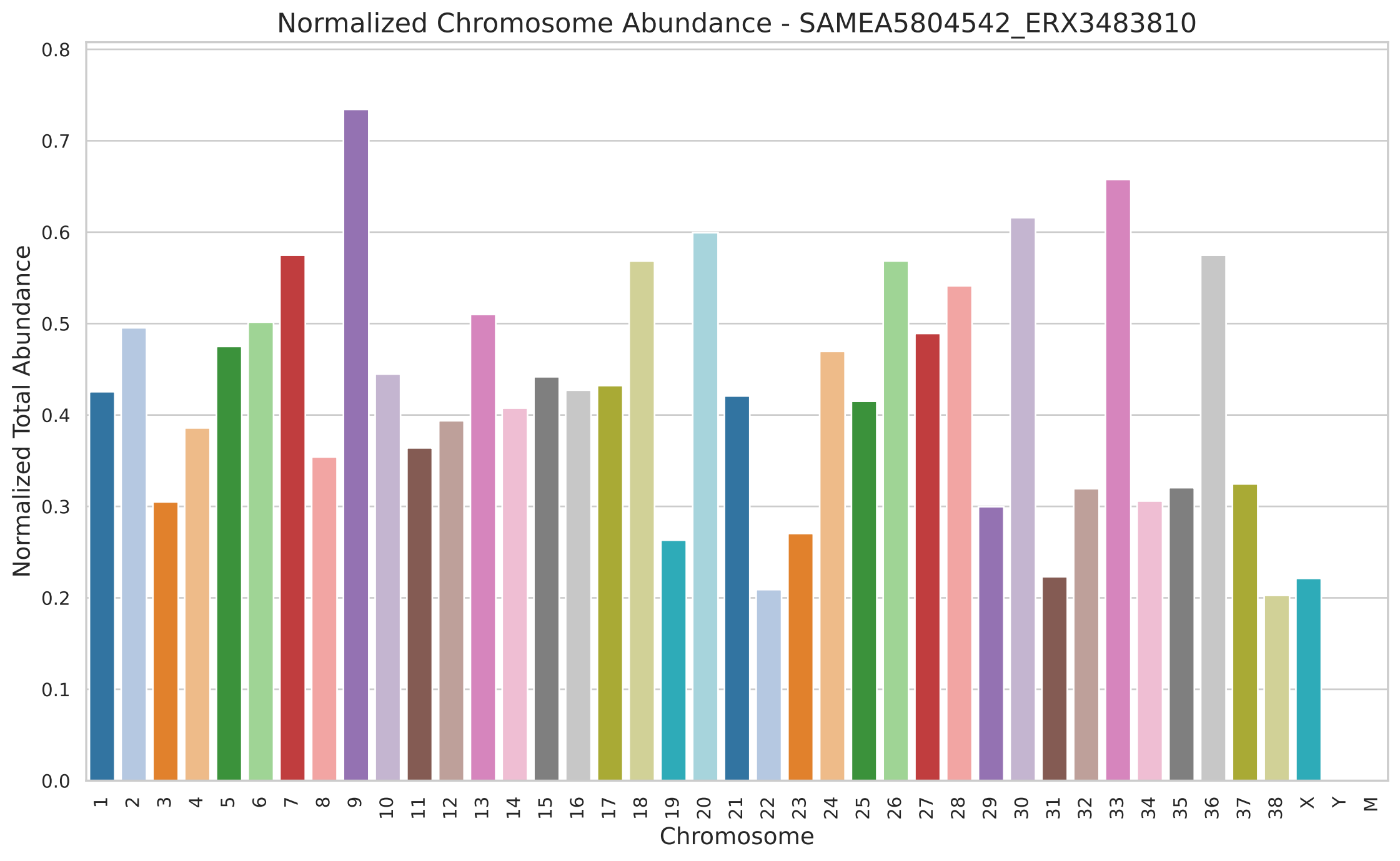

Normalized Chromosome Abundance - SAMEA5804431_ERX3483825
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

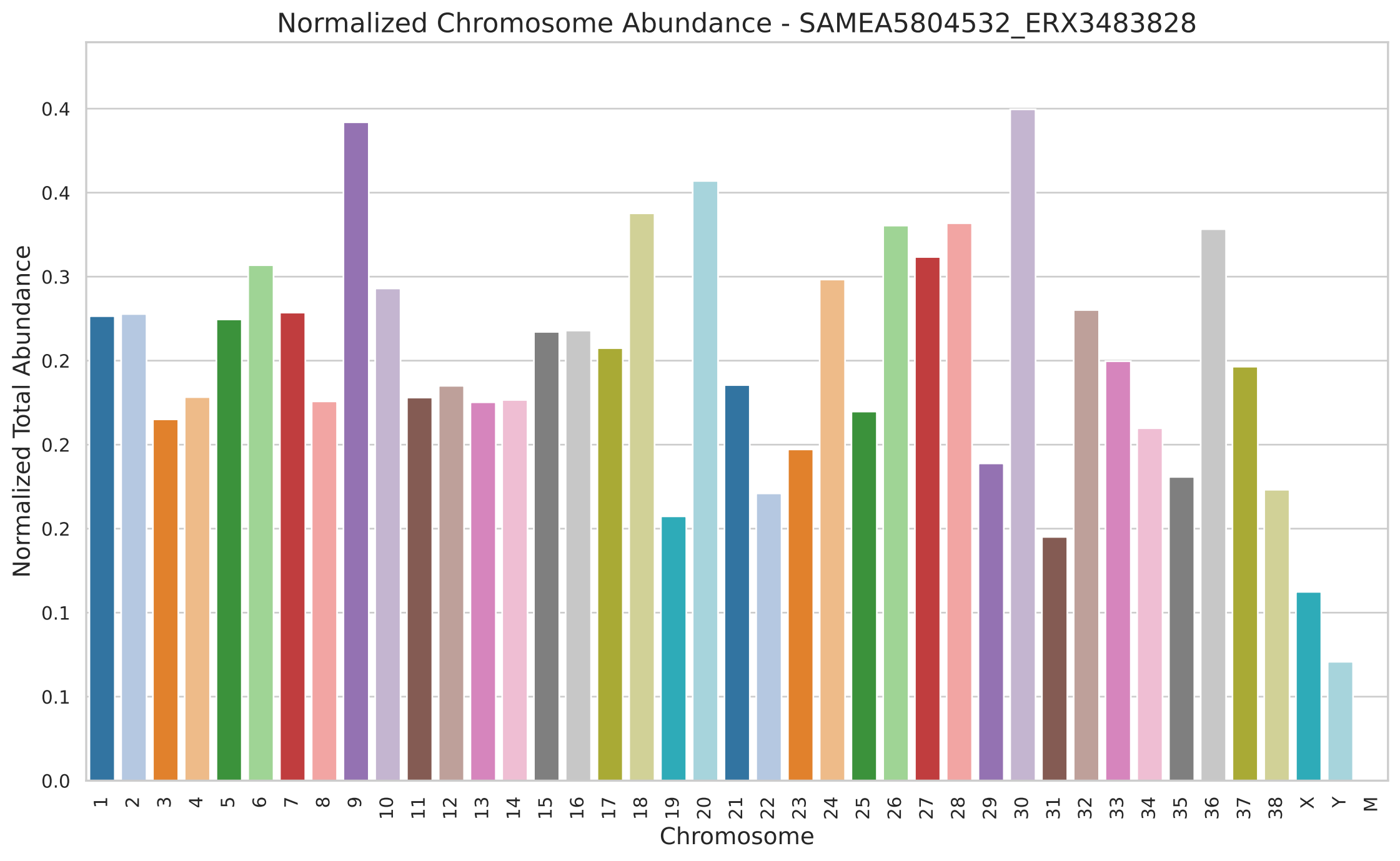

Normalized Chromosome Abundance - SAMEA5804405_ERX3483785
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

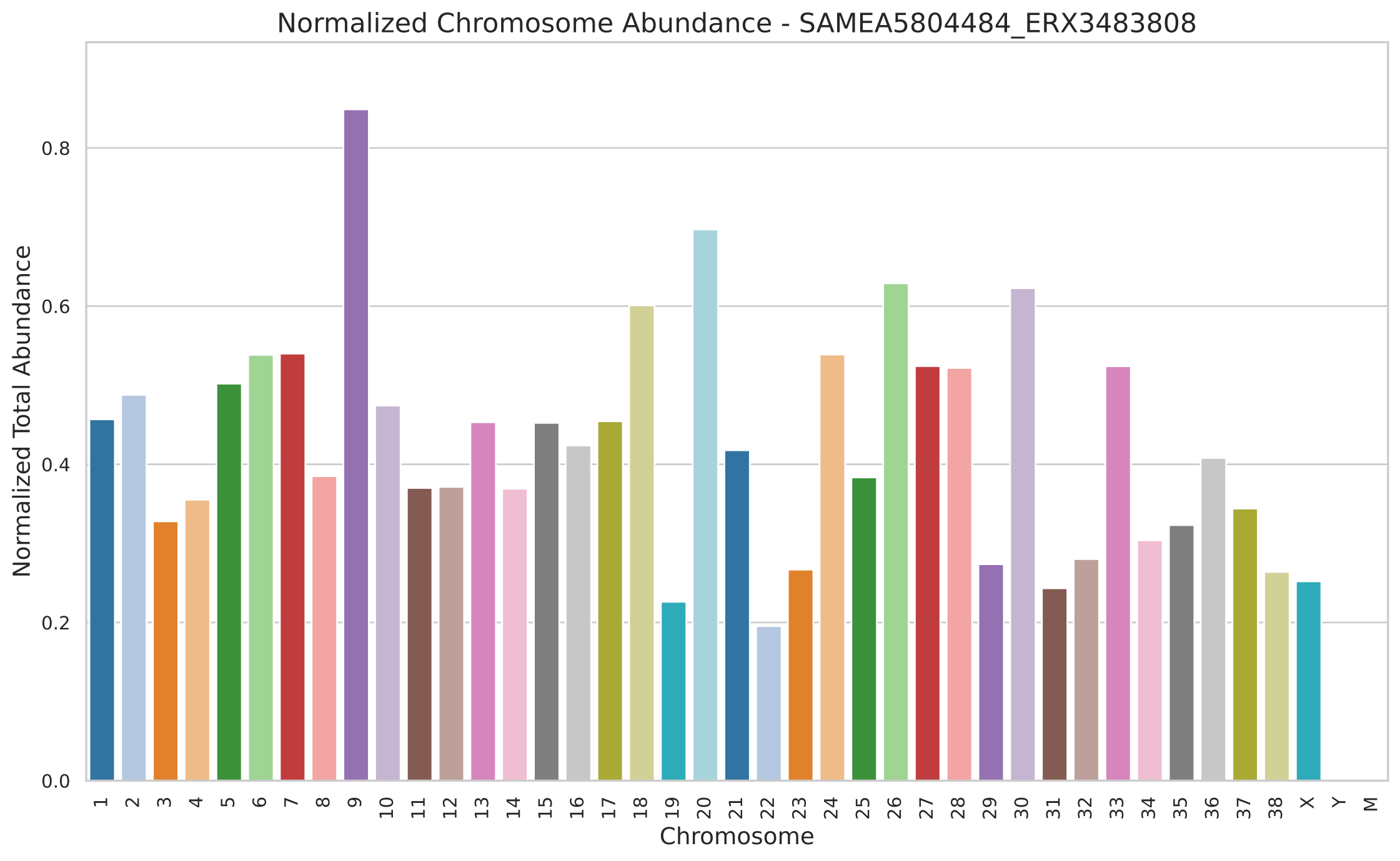

Normalized Chromosome Abundance - SAMEA5804356_ERX3483815
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

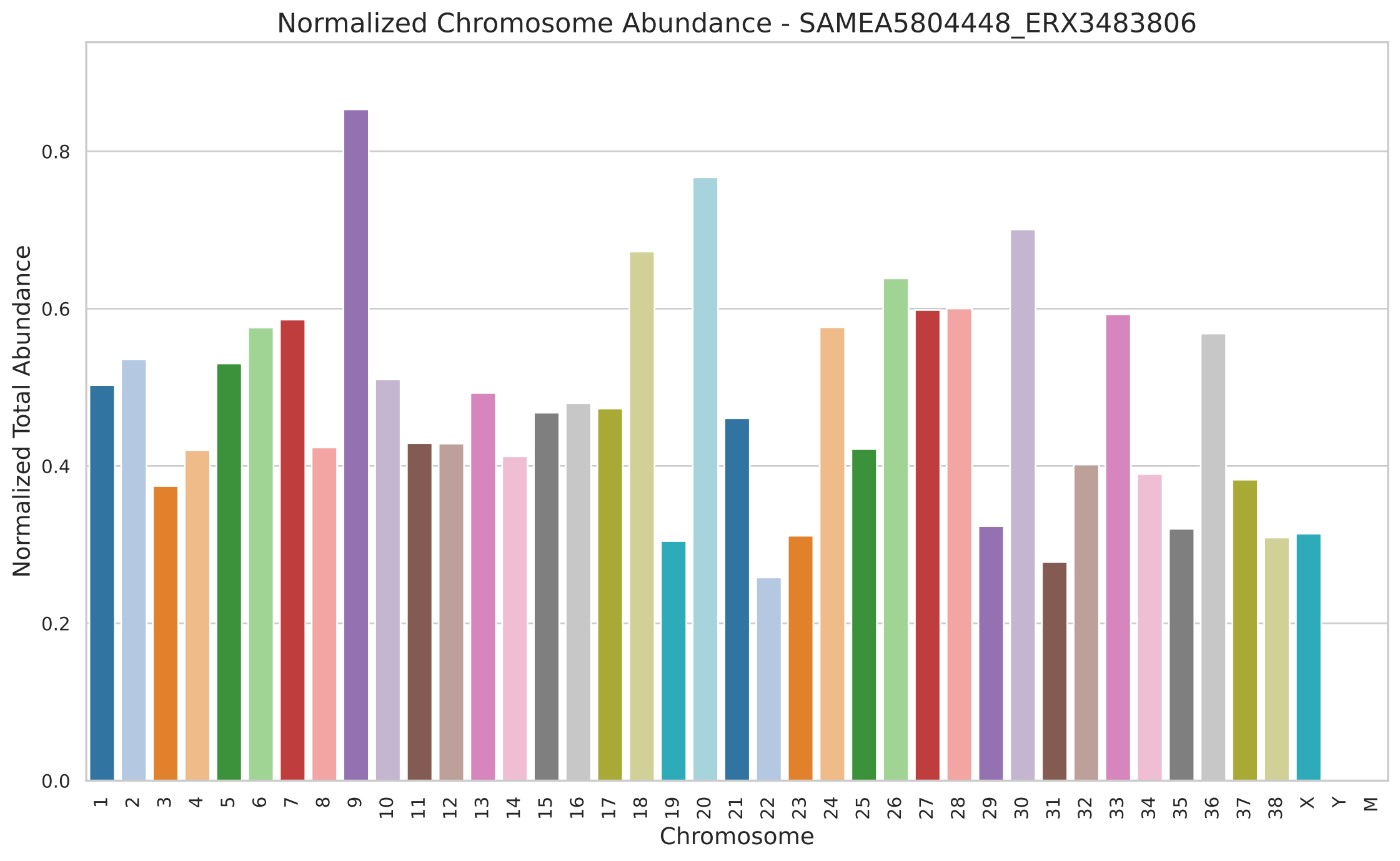

Normalized Chromosome Abundance - SAMEA5804394_ERX3483801
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

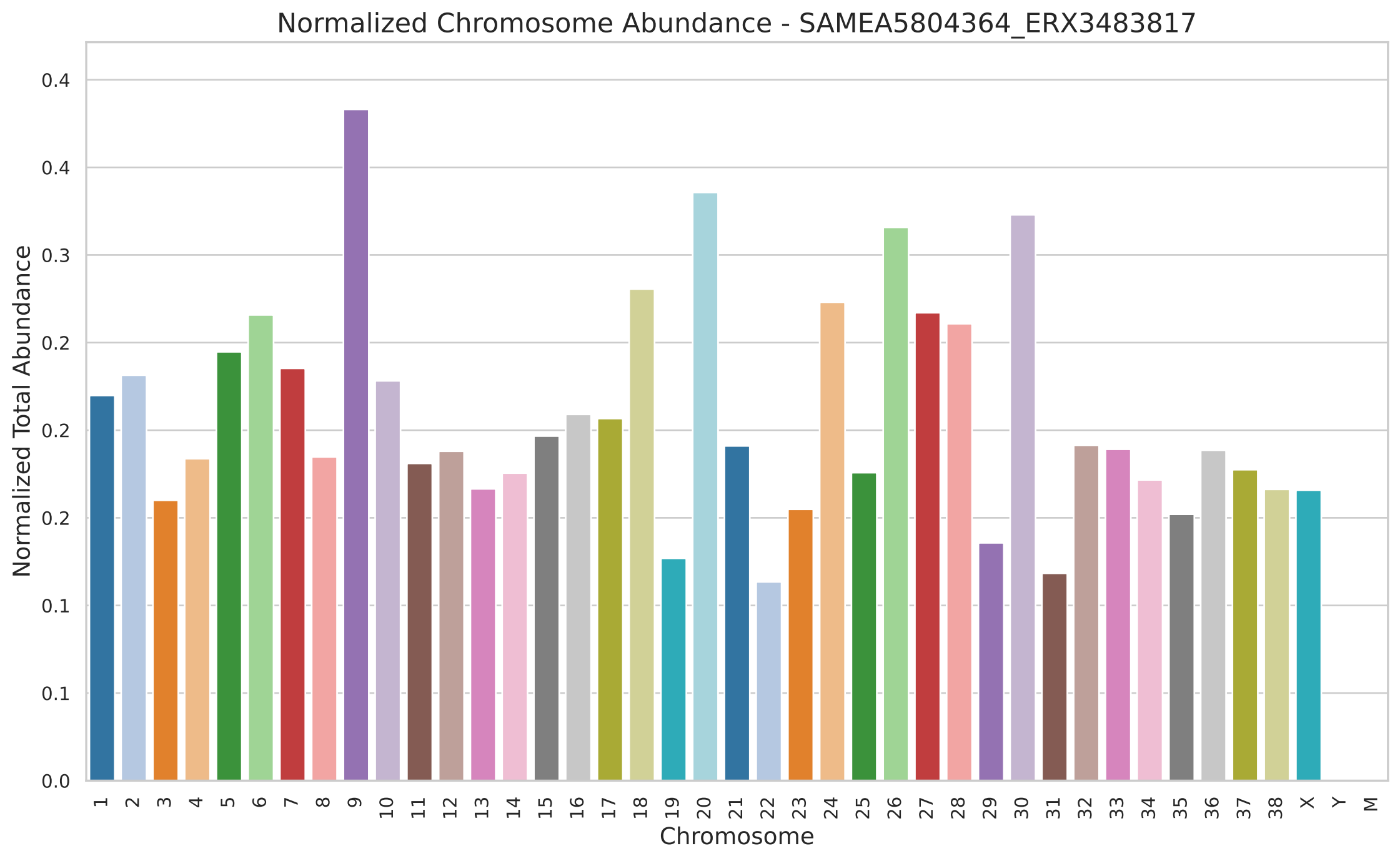

Normalized Chromosome Abundance - SAMEA3910493_ERX3483762
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

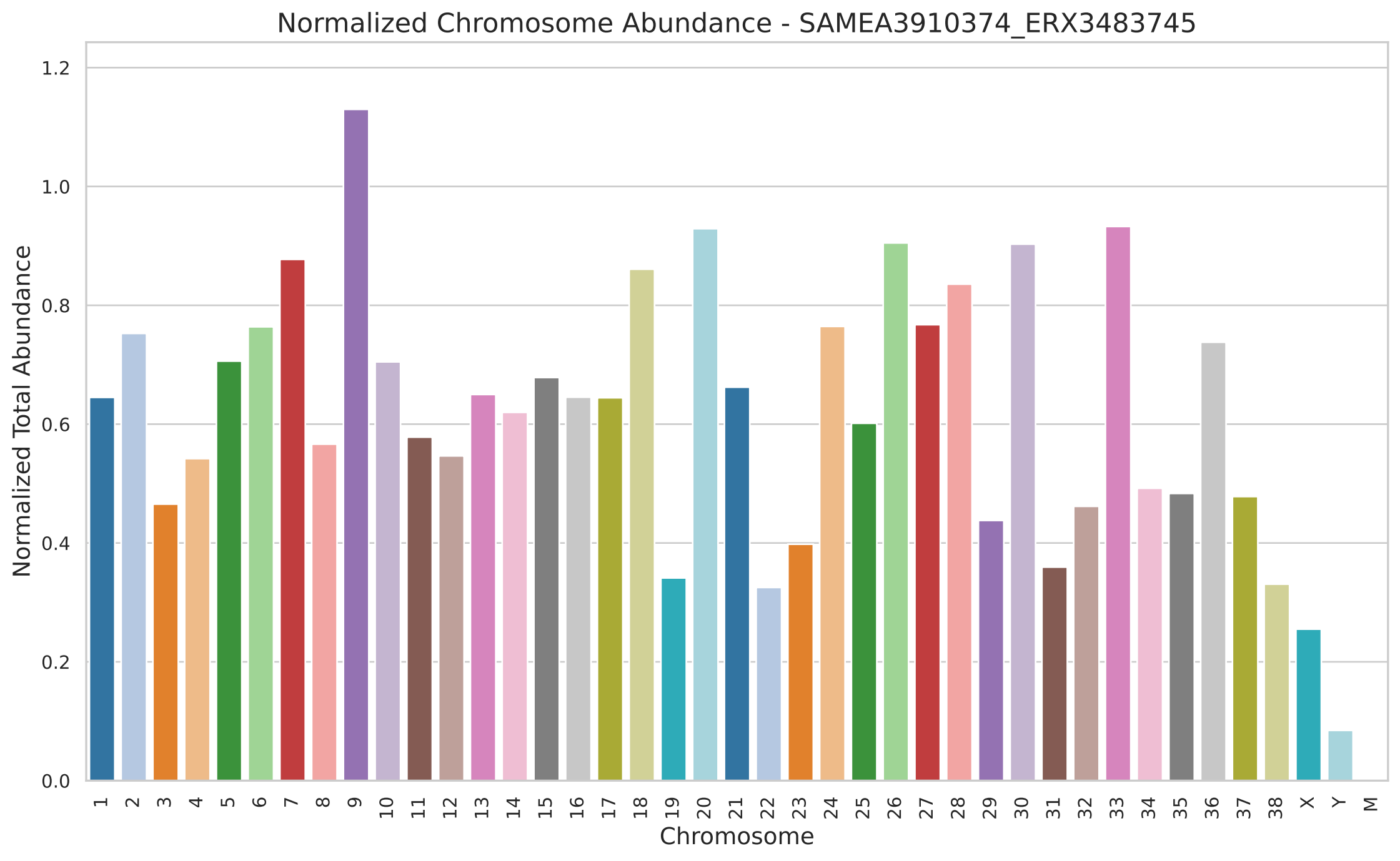

Normalized Chromosome Abundance - SAMEA5804542_ERX3483810
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

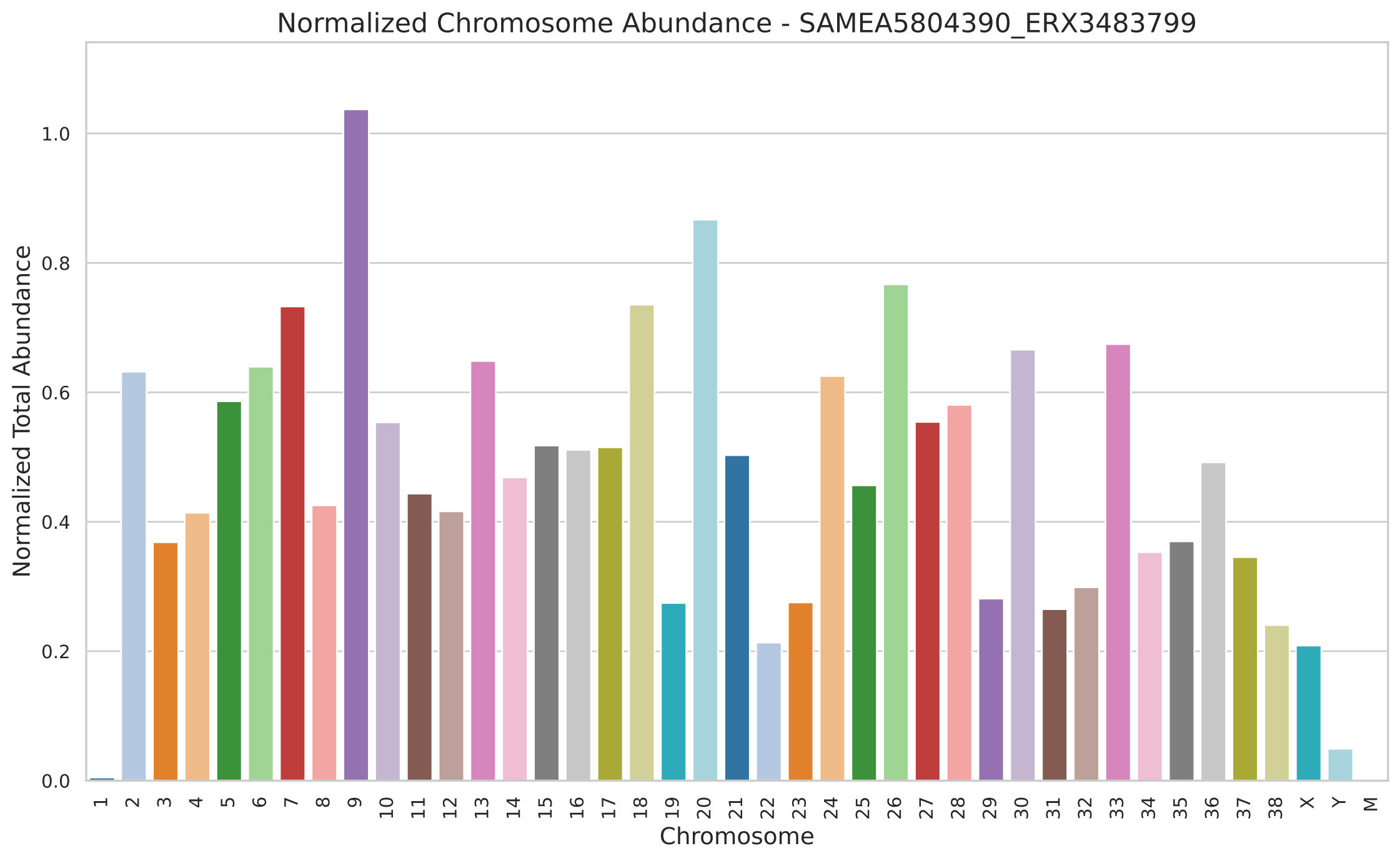

Normalized Chromosome Abundance - SAMEA5804532_ERX3483828
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

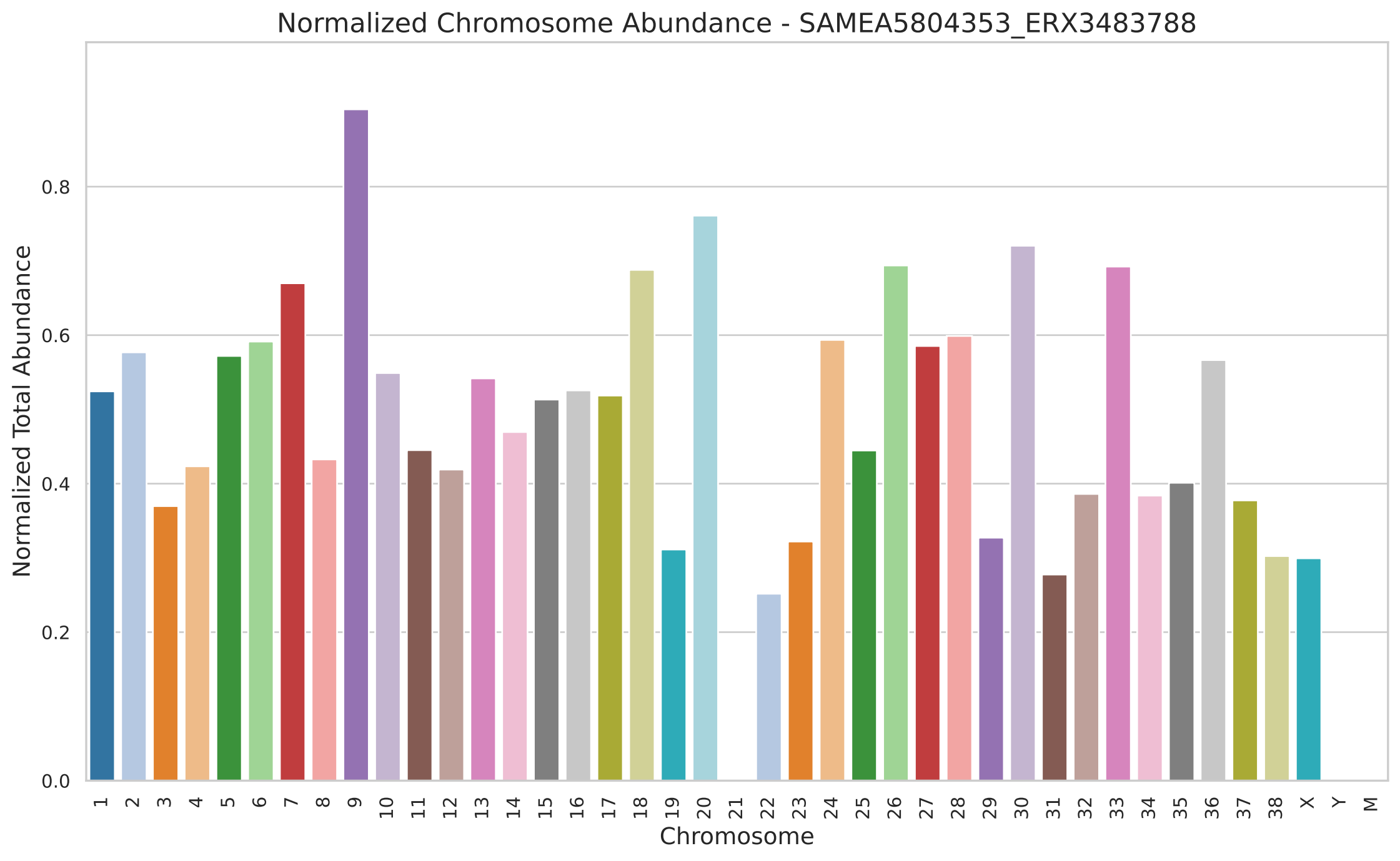

Normalized Chromosome Abundance - SAMEA5804484_ERX3483808
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

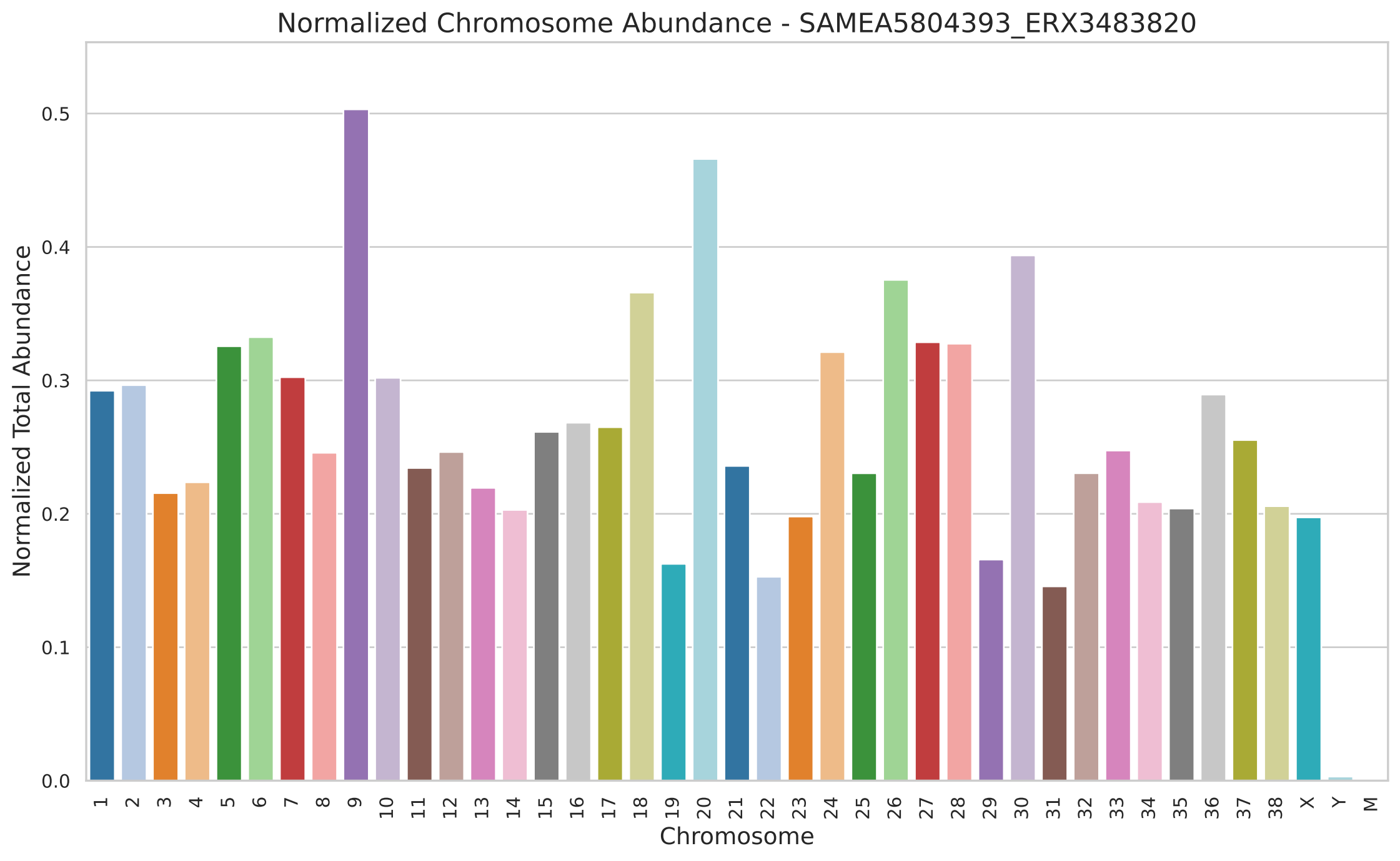

Normalized Chromosome Abundance - SAMEA5804448_ERX3483806
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

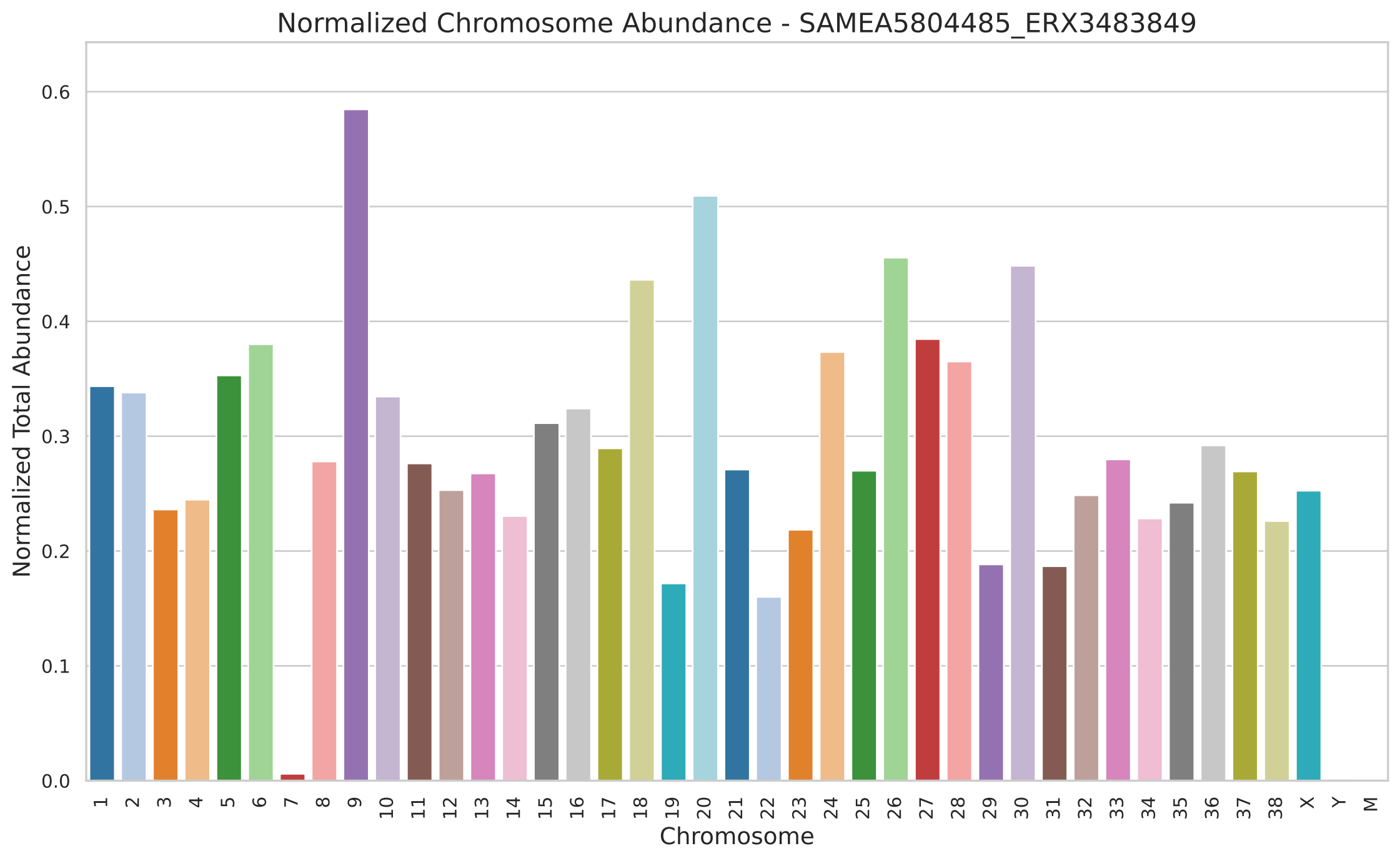

Normalized Chromosome Abundance - SAMEA5804364_ERX3483817
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

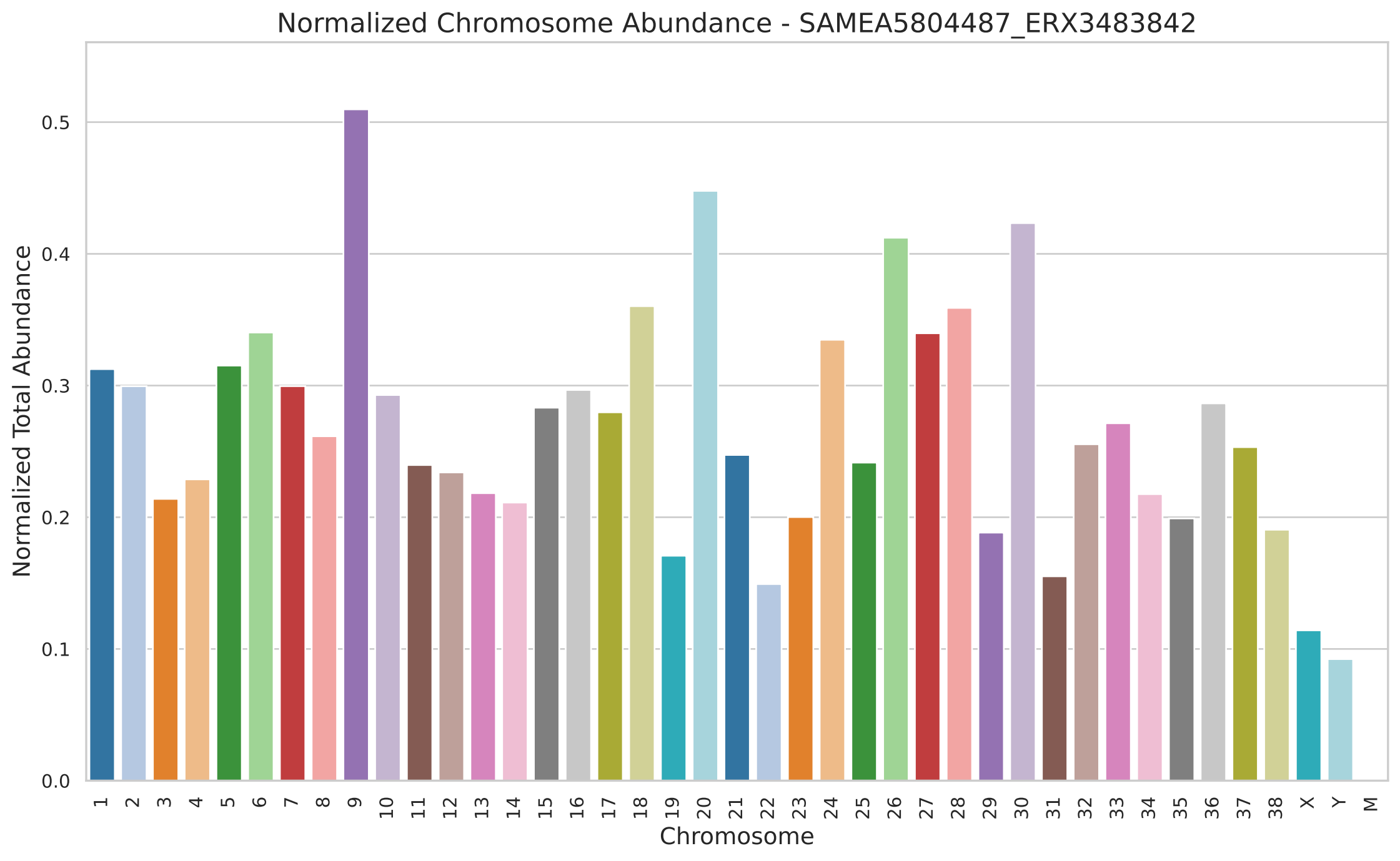

Normalized Chromosome Abundance - SAMEA3910374_ERX3483745
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

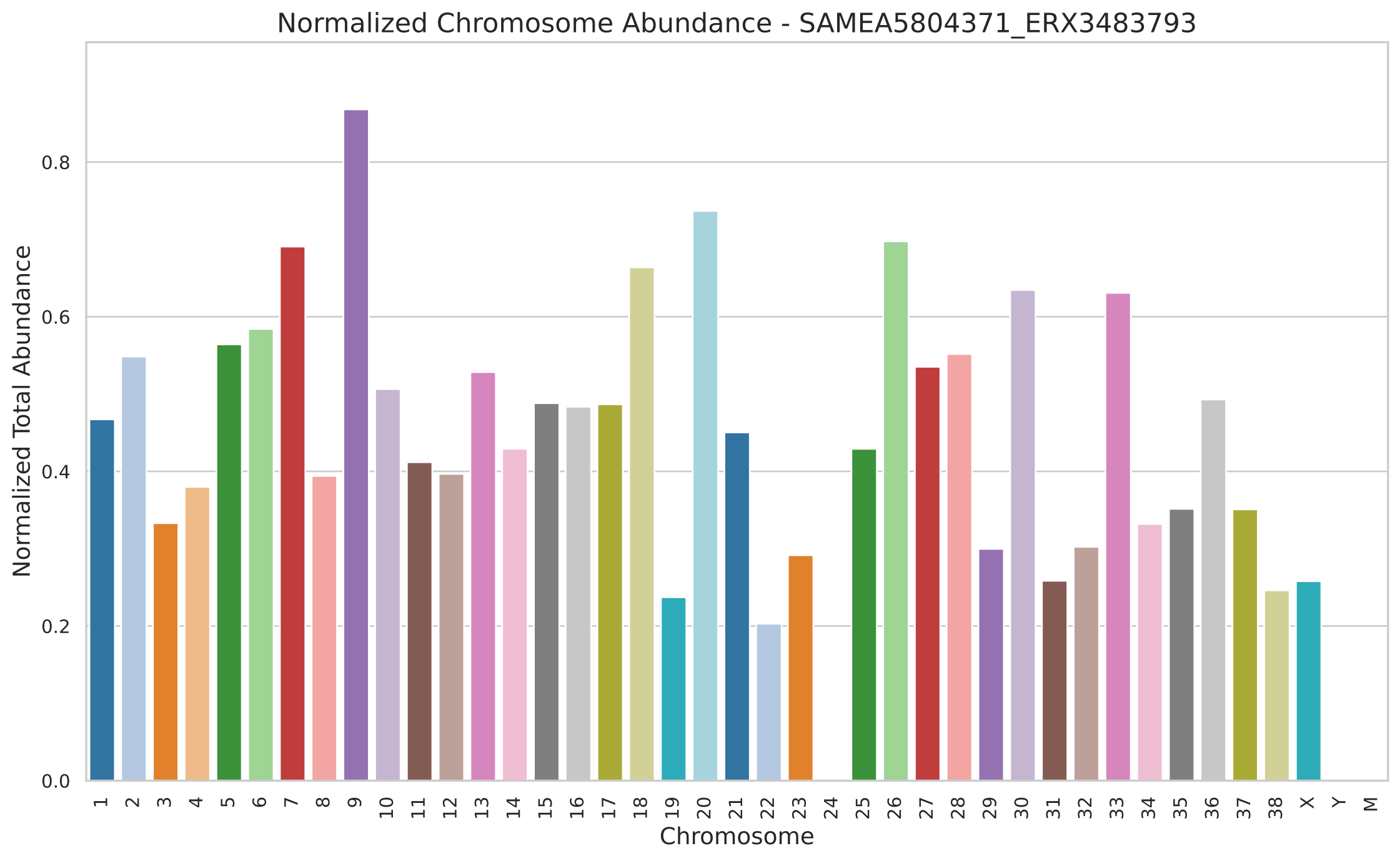

Normalized Chromosome Abundance - SAMEA5804390_ERX3483799
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

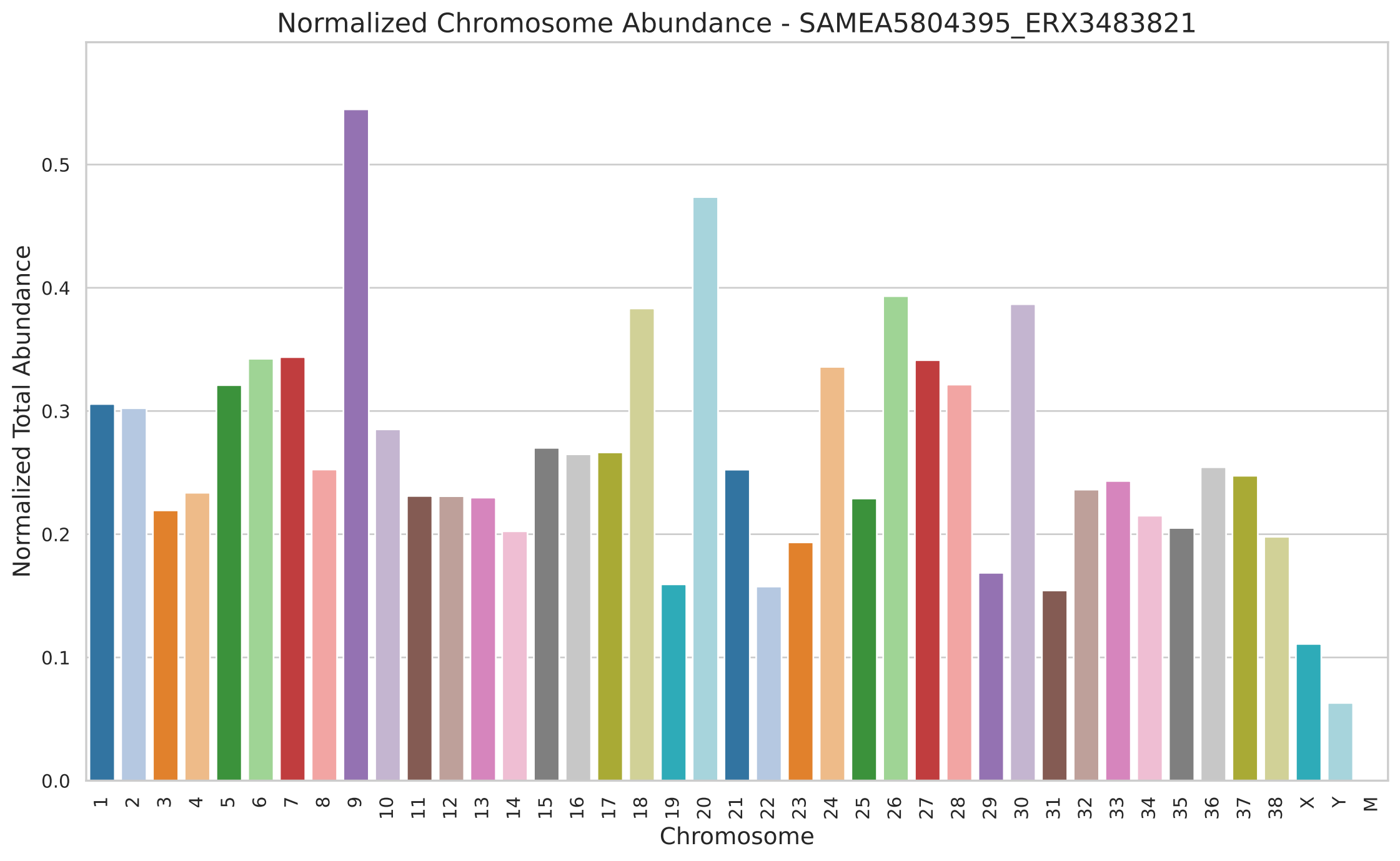

Normalized Chromosome Abundance - SAMEA5804353_ERX3483788
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

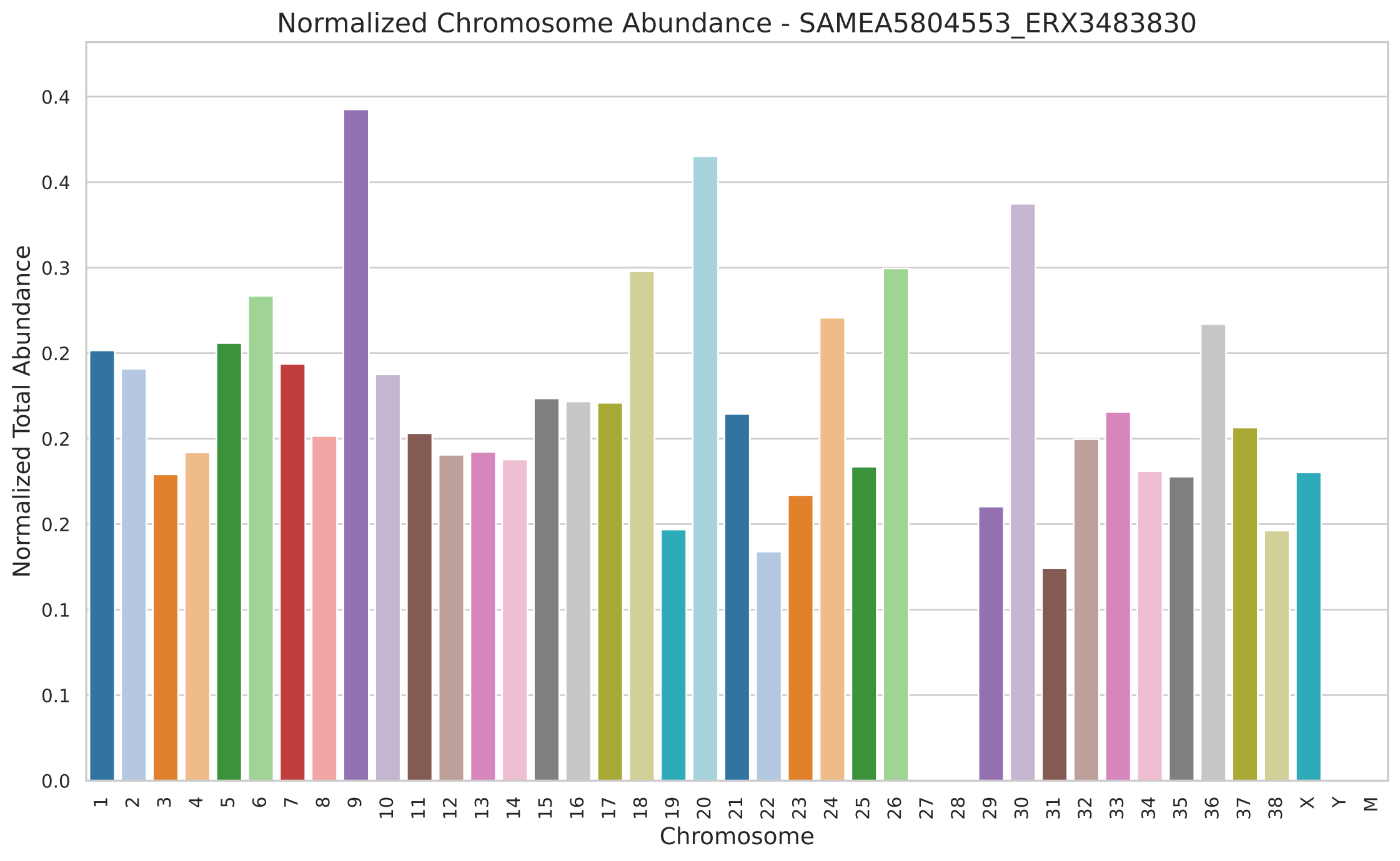

Normalized Chromosome Abundance - SAMEA5804393_ERX3483820
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

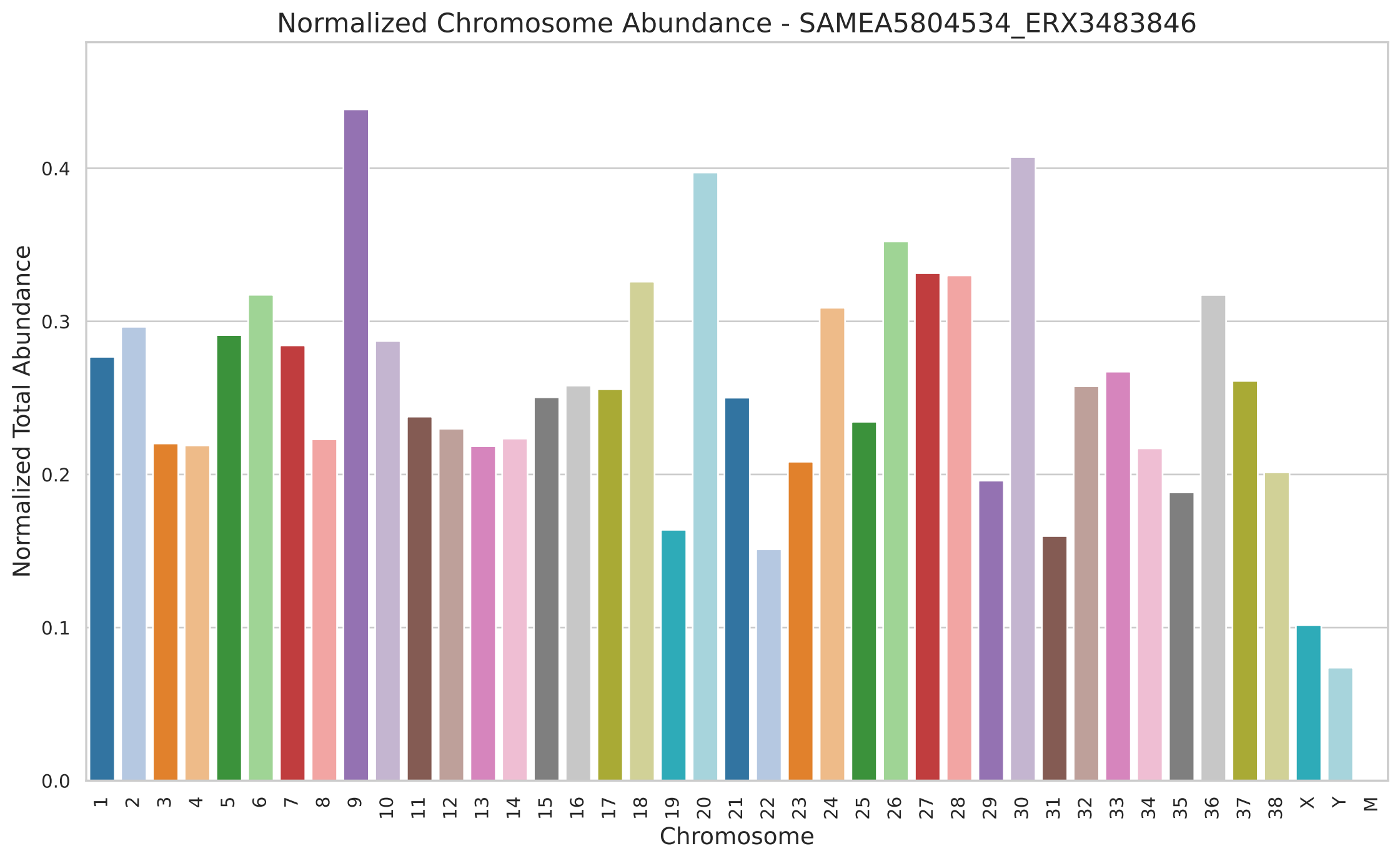

Normalized Chromosome Abundance - SAMEA5804485_ERX3483849
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

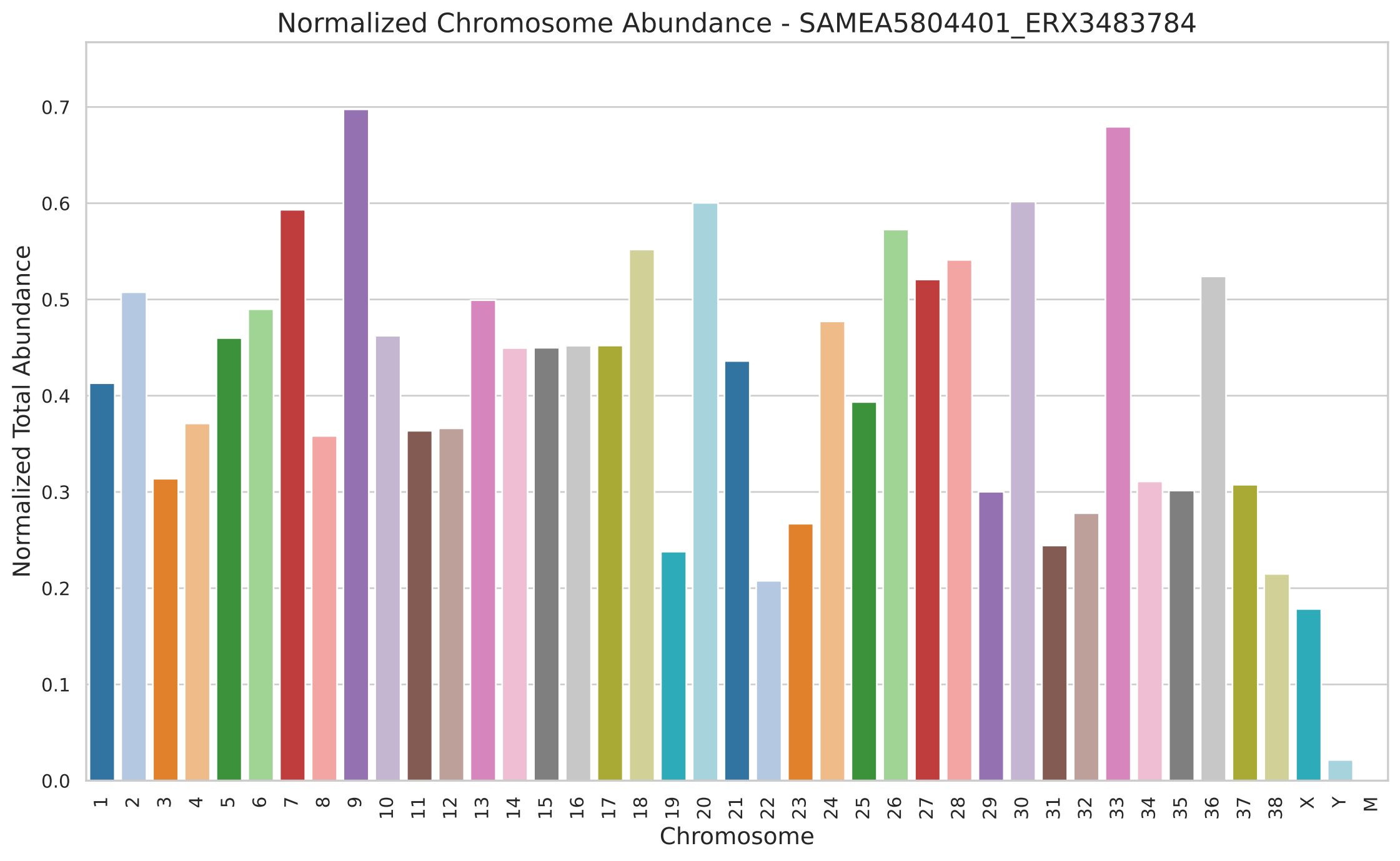

Normalized Chromosome Abundance - SAMEA5804487_ERX3483842
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

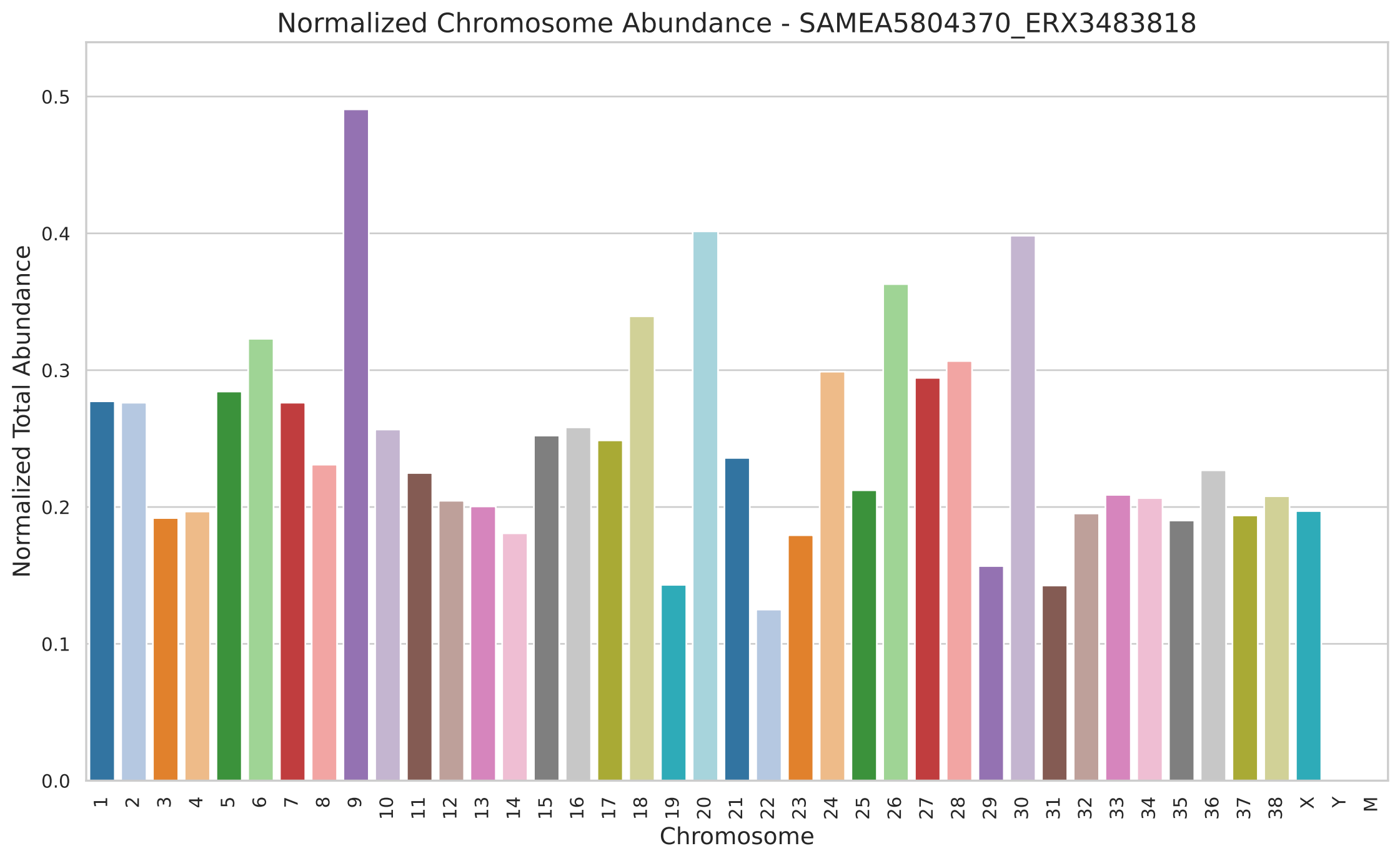

Normalized Chromosome Abundance - SAMEA5804371_ERX3483793
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

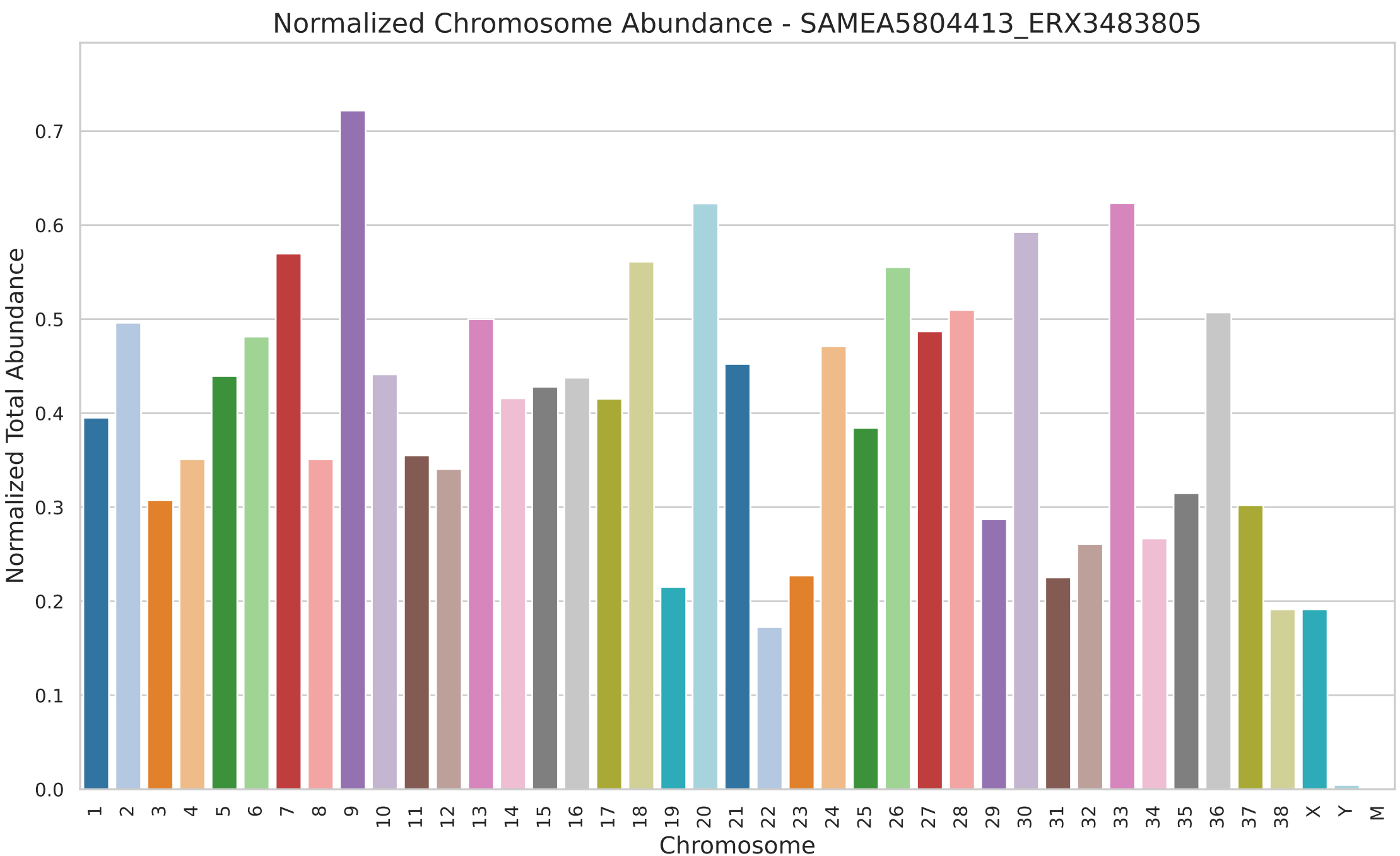

Normalized Chromosome Abundance - SAMEA5804395_ERX3483821
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

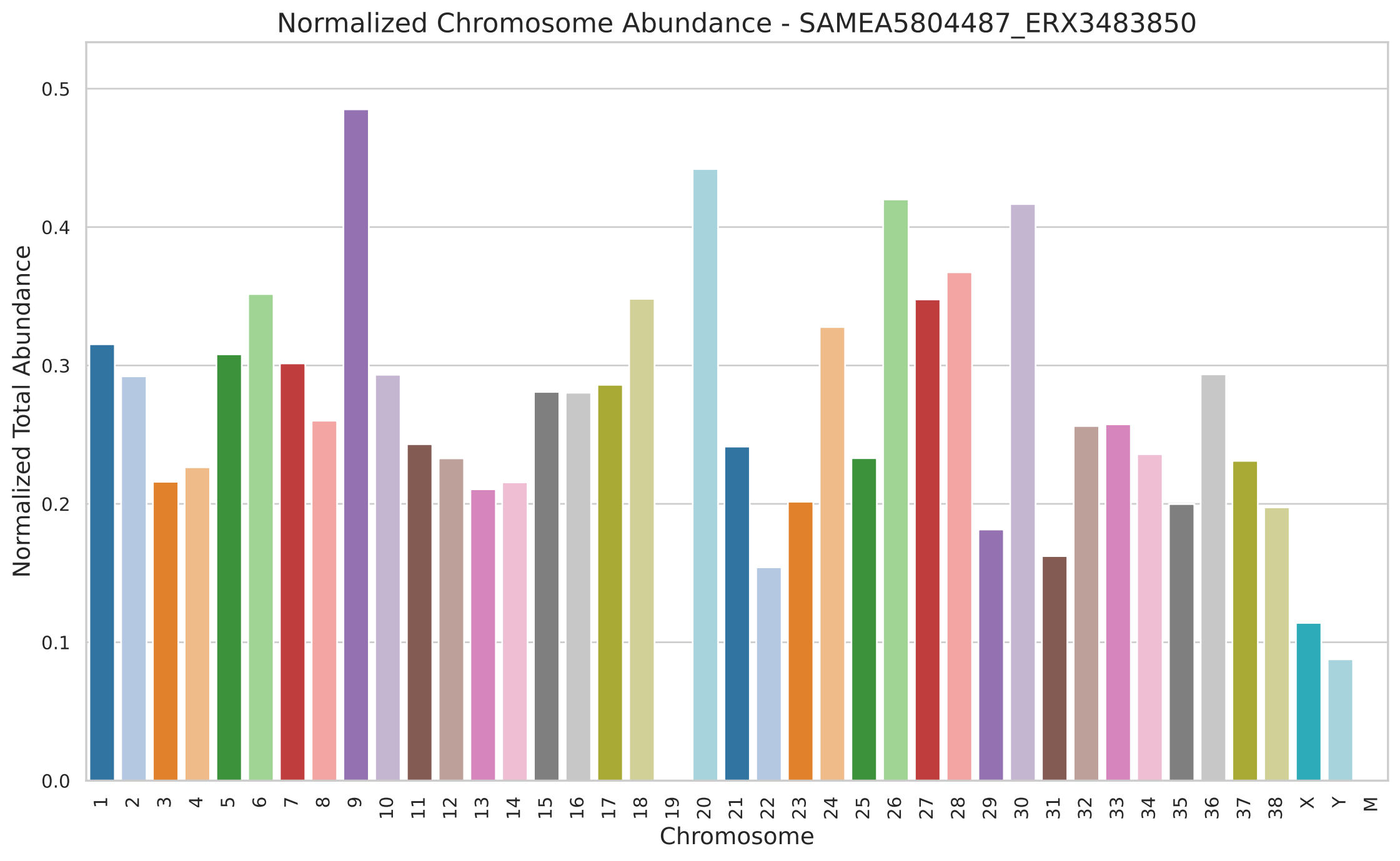

Normalized Chromosome Abundance - SAMEA5804553_ERX3483830
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

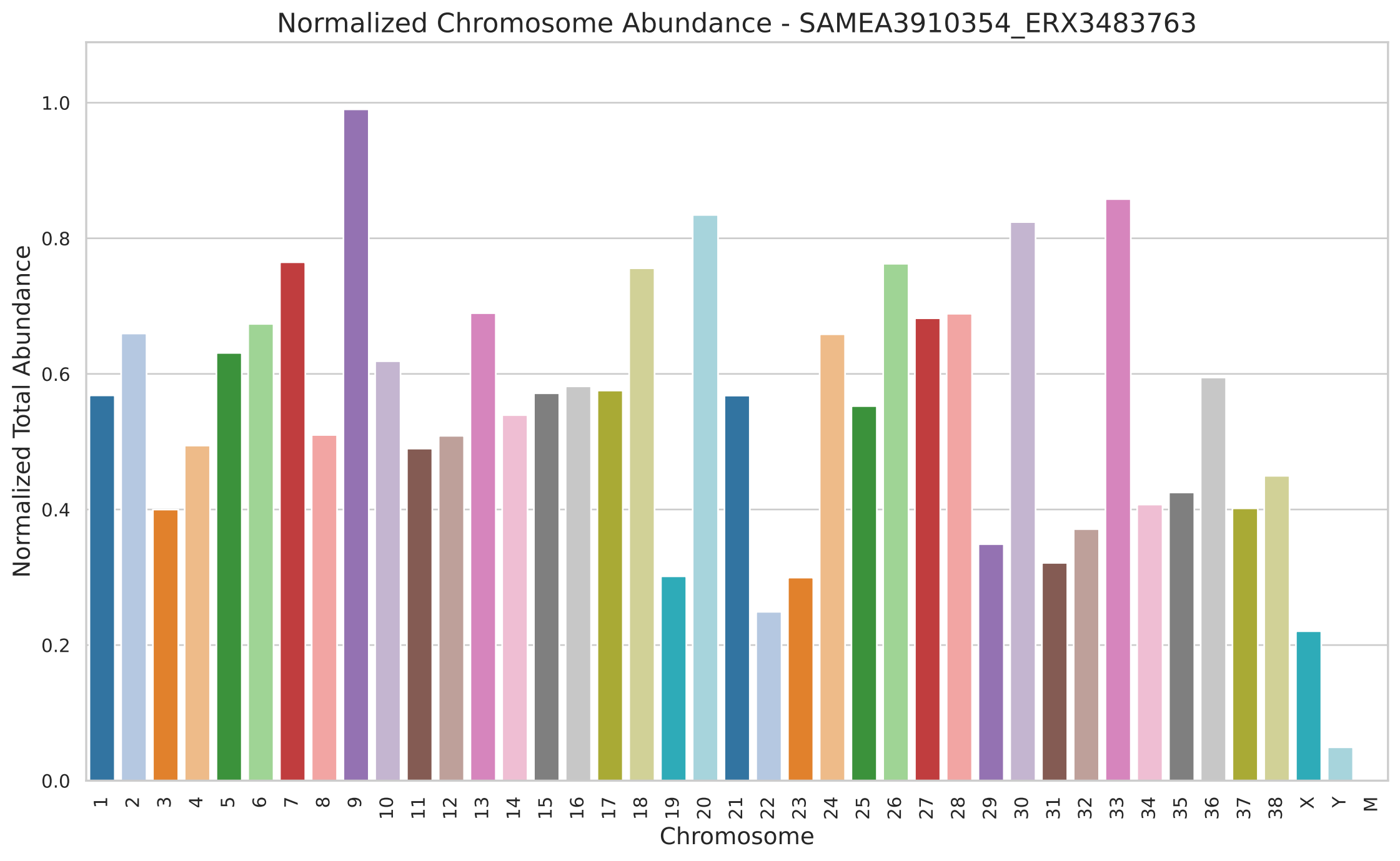

Normalized Chromosome Abundance - SAMEA5804534_ERX3483846
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

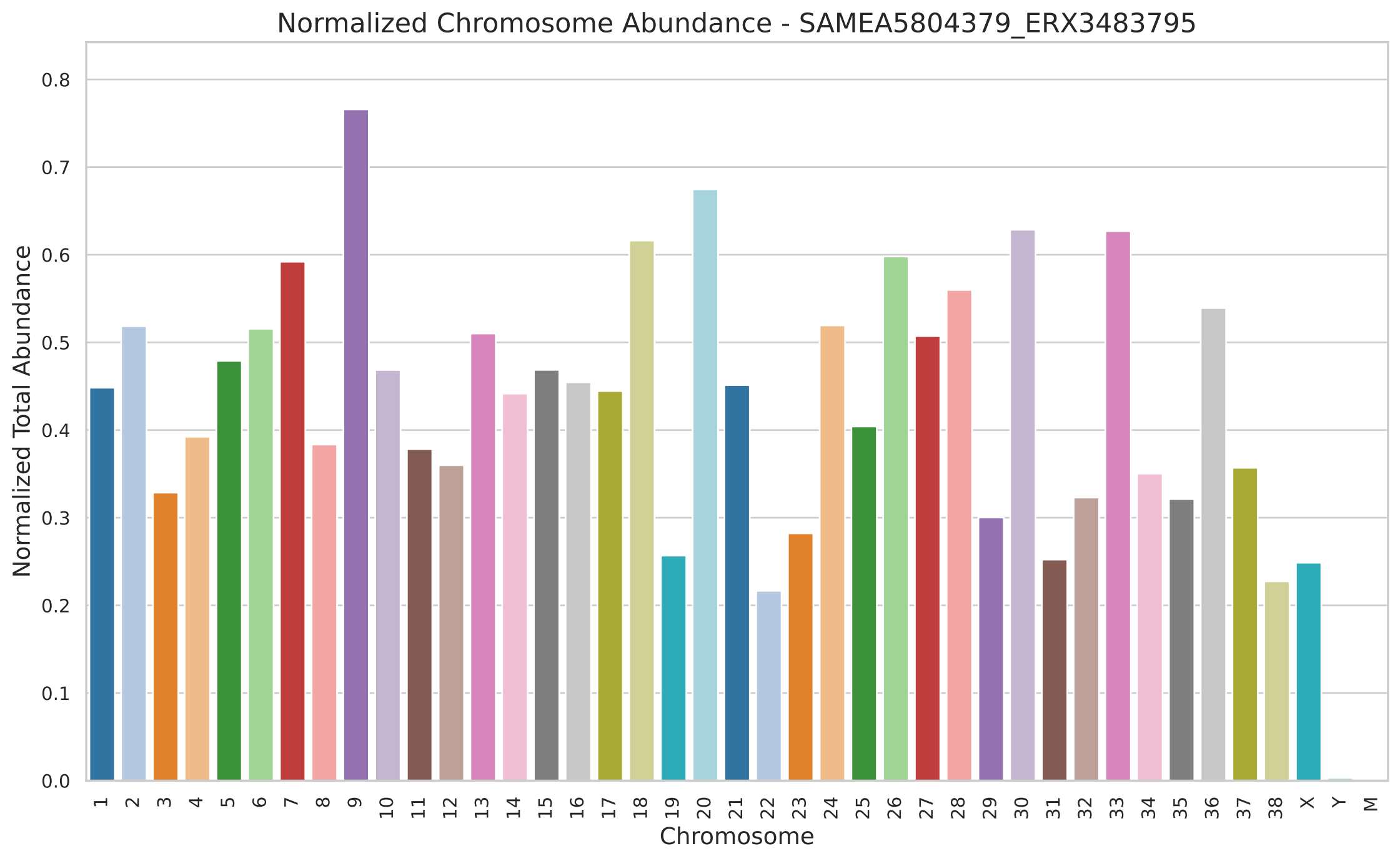

Normalized Chromosome Abundance - SAMEA5804401_ERX3483784
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

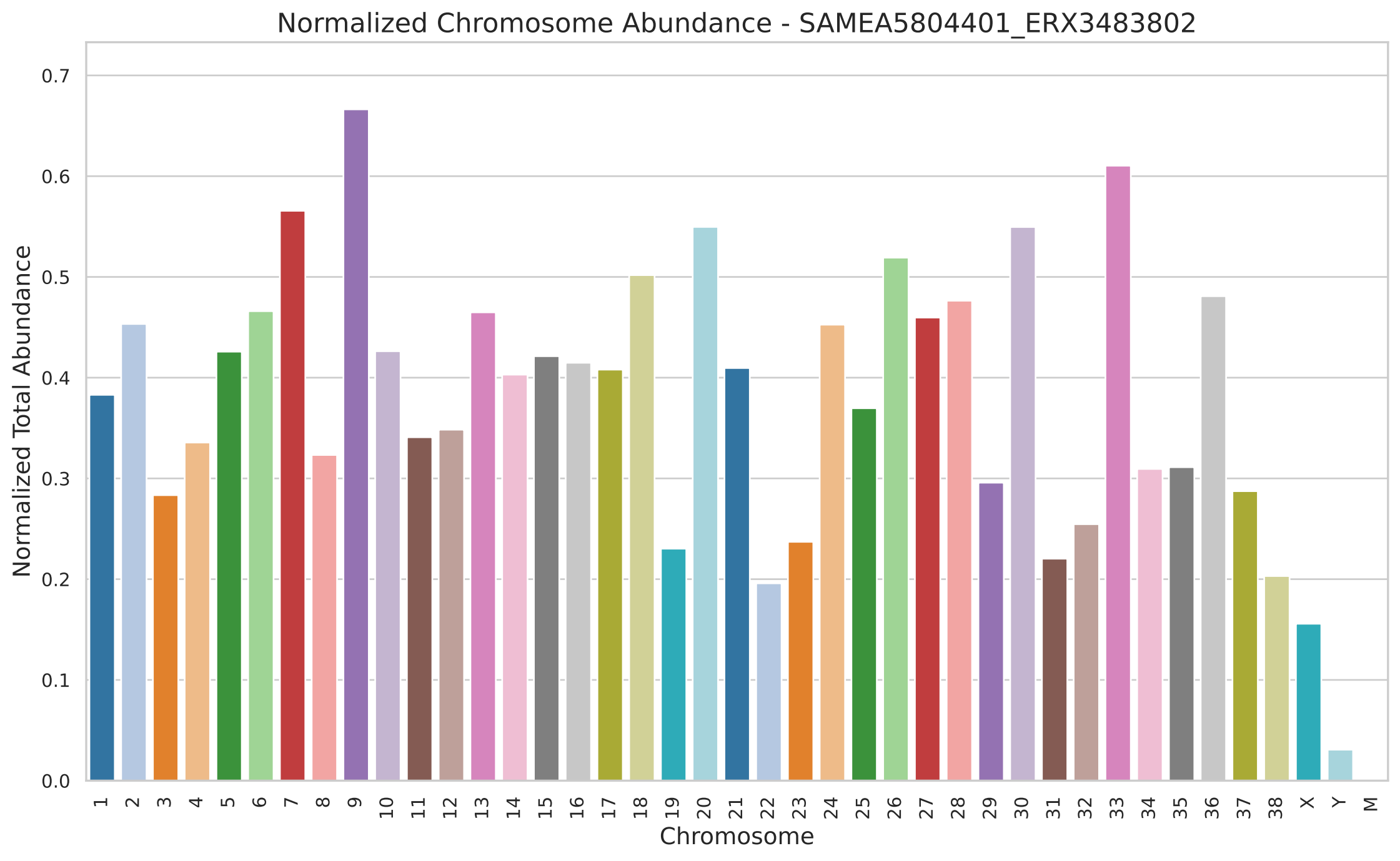

Normalized Chromosome Abundance - SAMEA5804370_ERX3483818
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

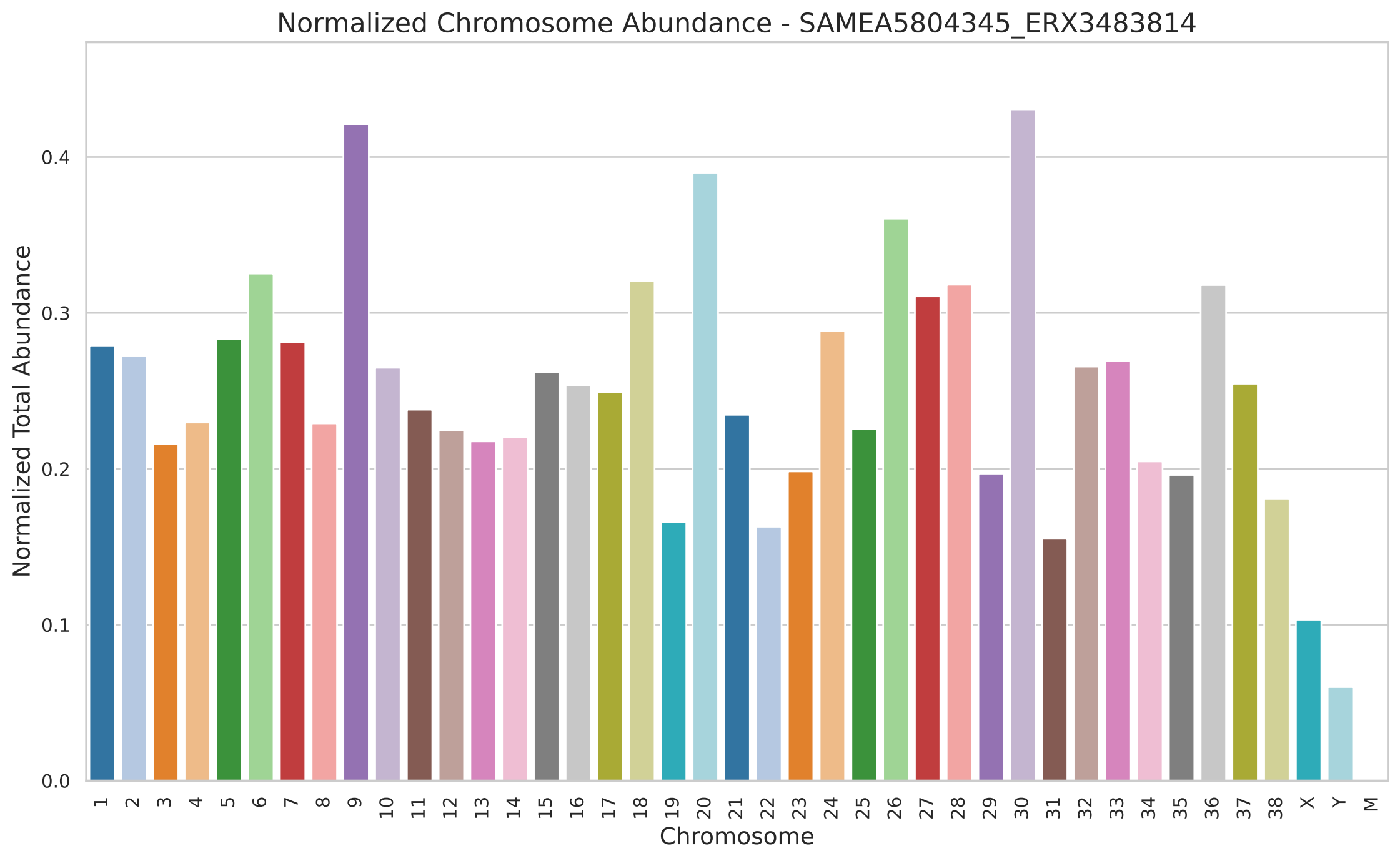

Normalized Chromosome Abundance - SAMEA5804413_ERX3483805
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

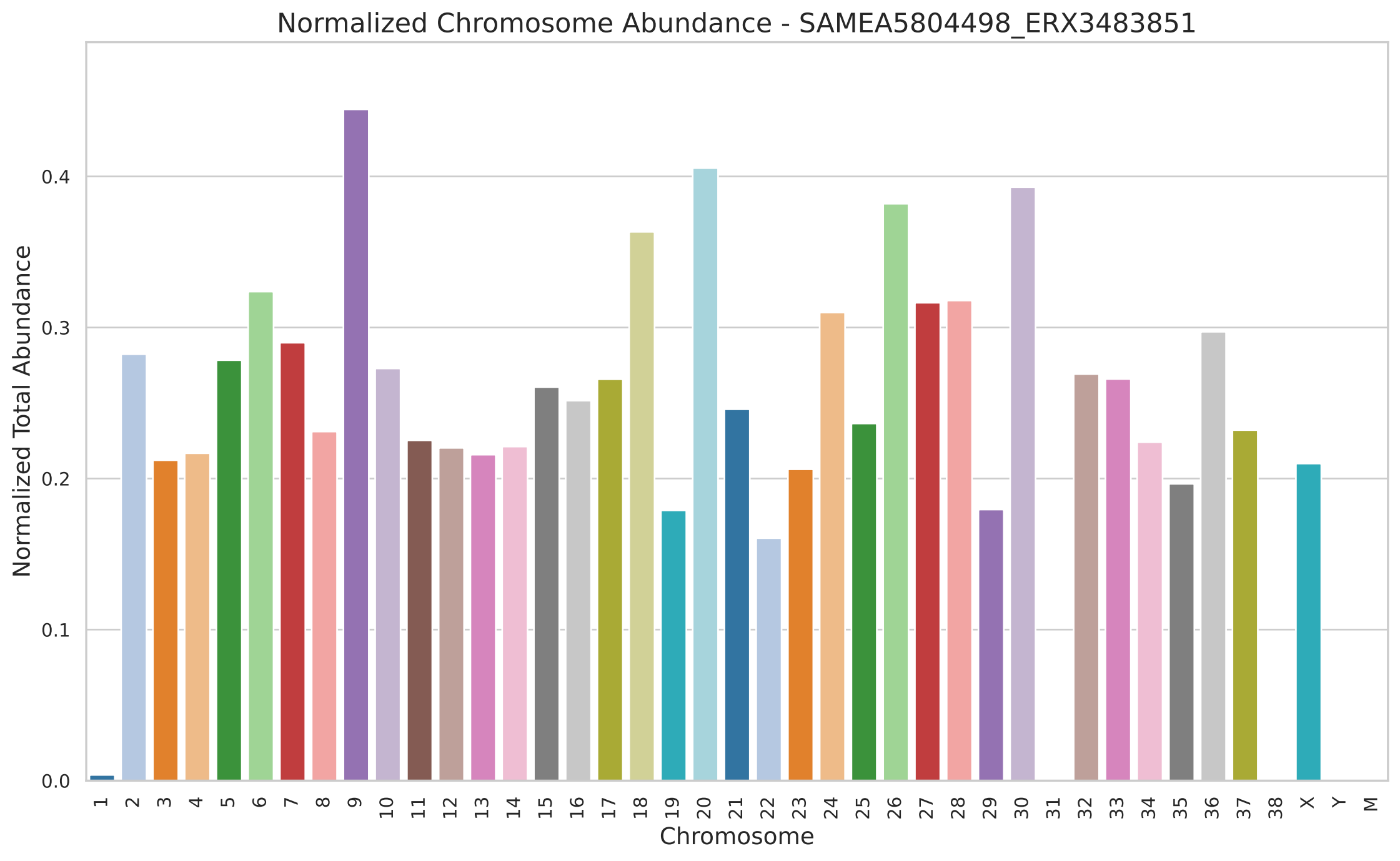

Normalized Chromosome Abundance - SAMEA5804487_ERX3483850
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

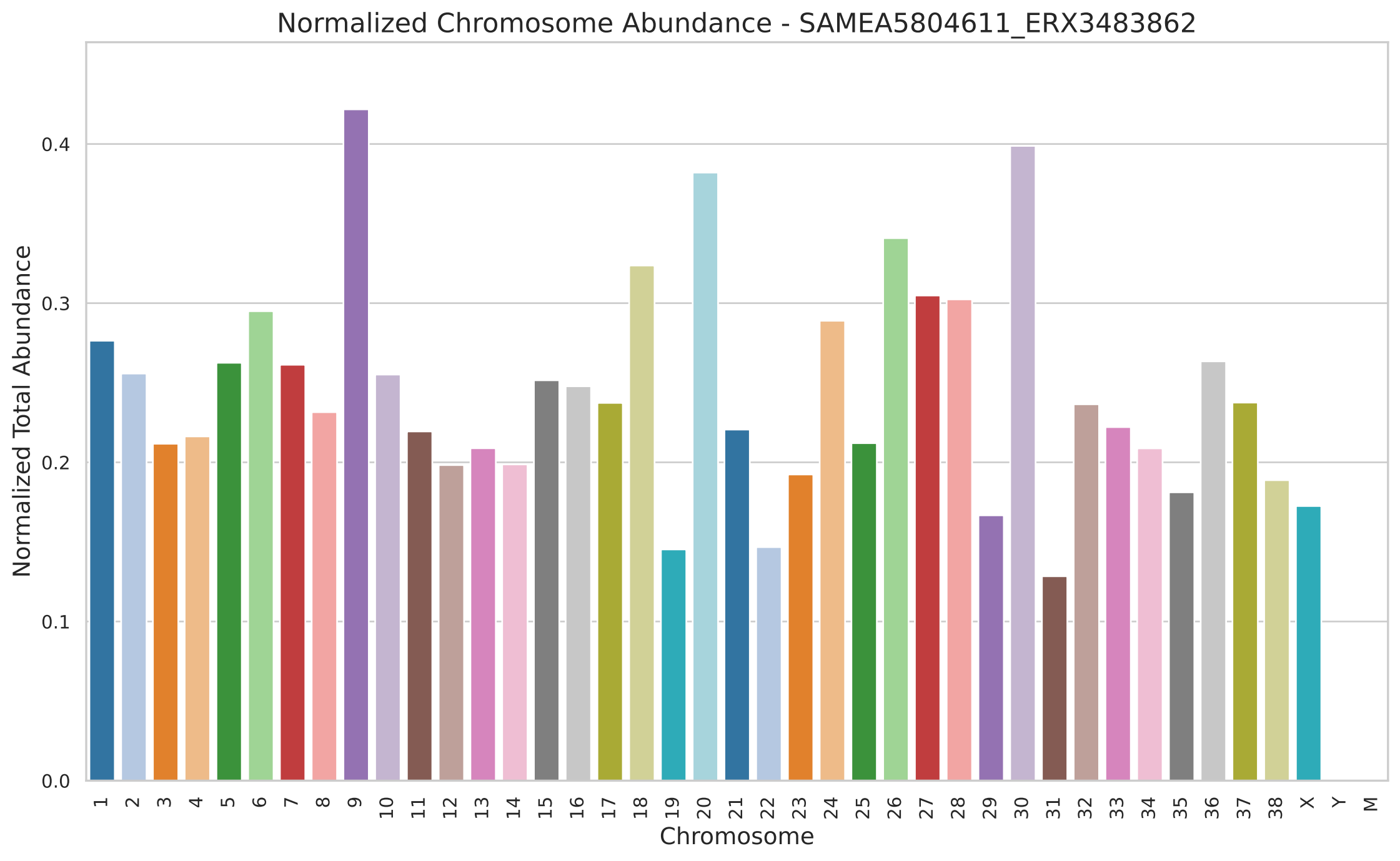

Normalized Chromosome Abundance - SAMEA3910354_ERX3483763
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

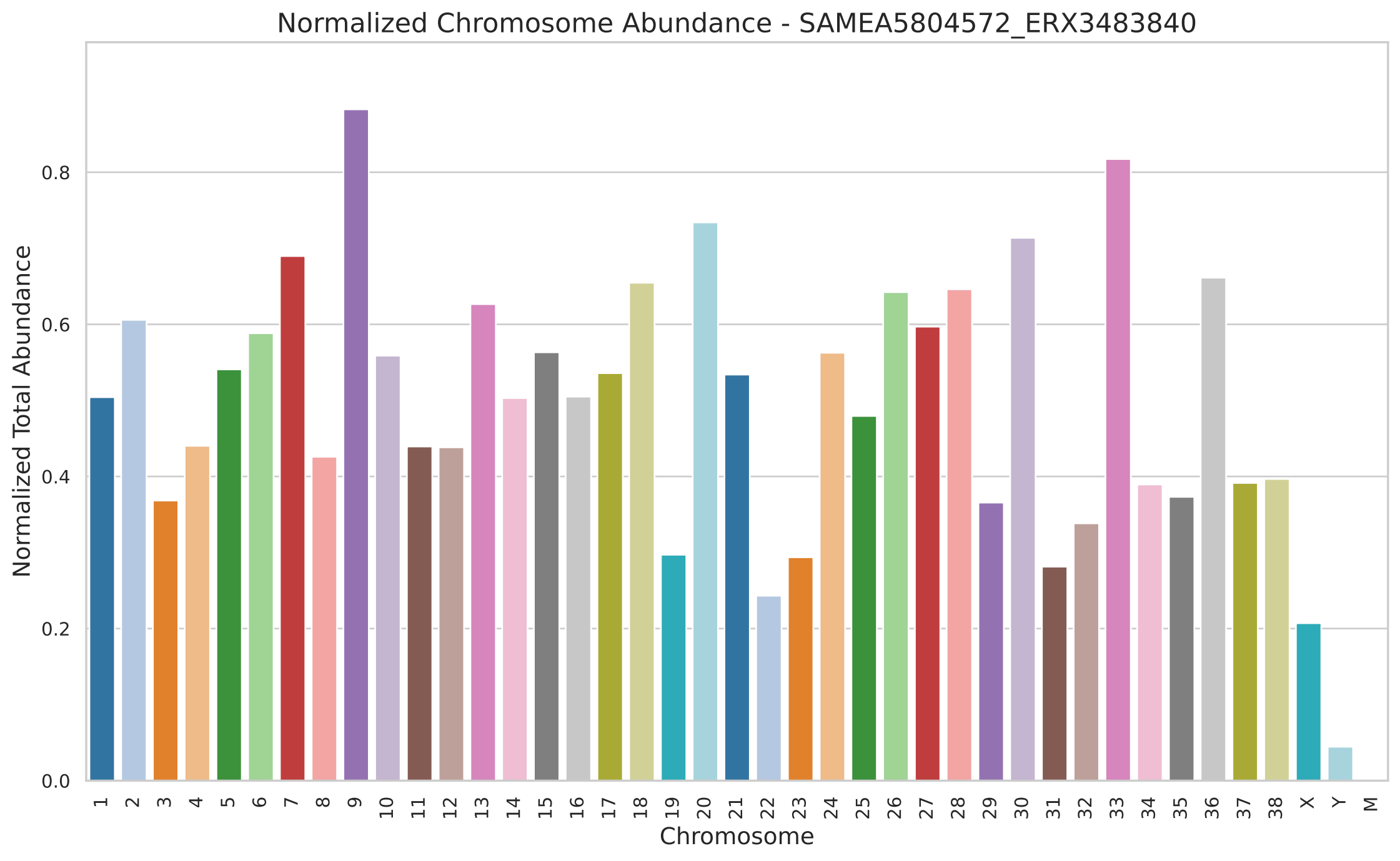

Normalized Chromosome Abundance - SAMEA5804379_ERX3483795
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

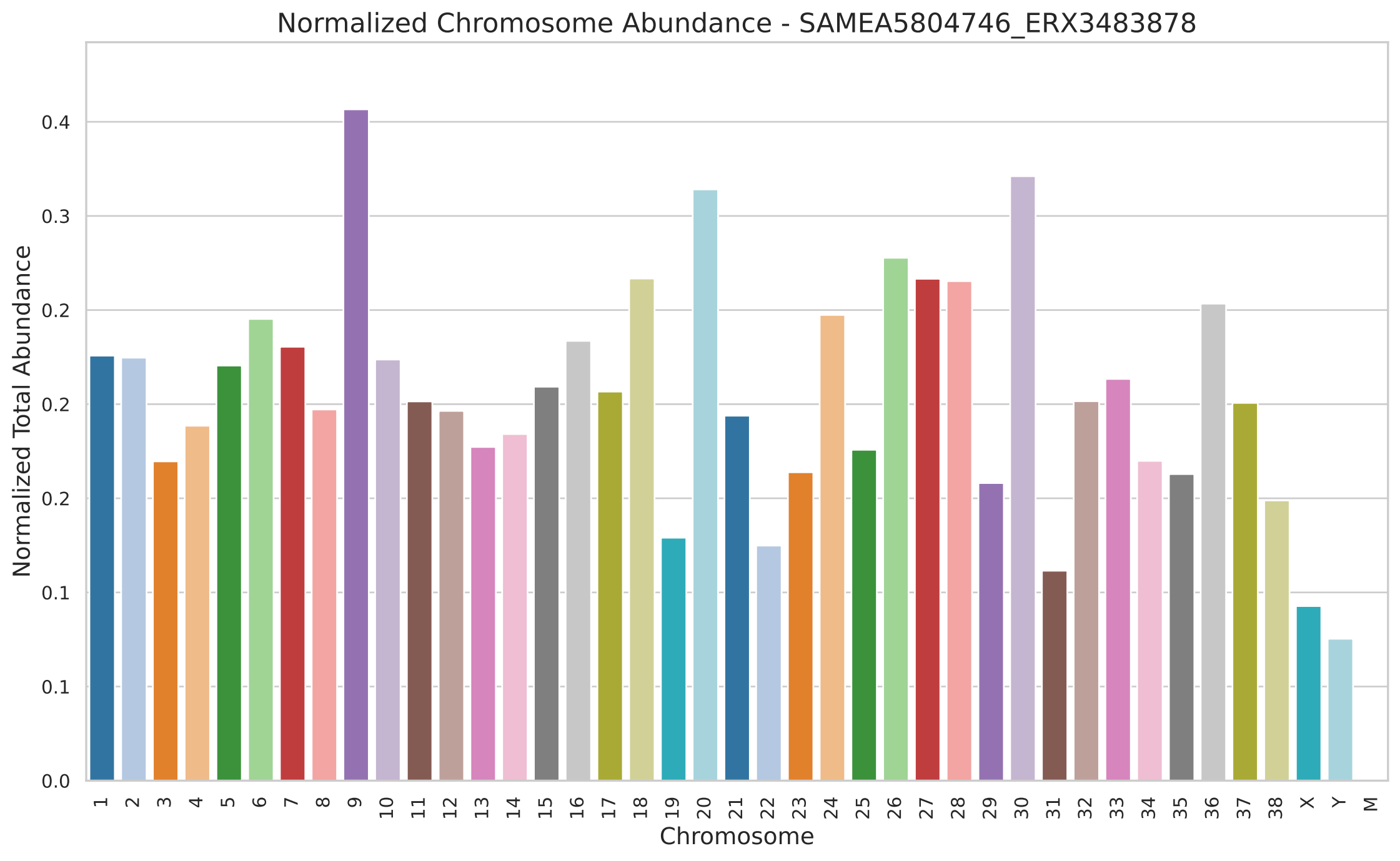

Normalized Chromosome Abundance - SAMEA5804401_ERX3483802
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

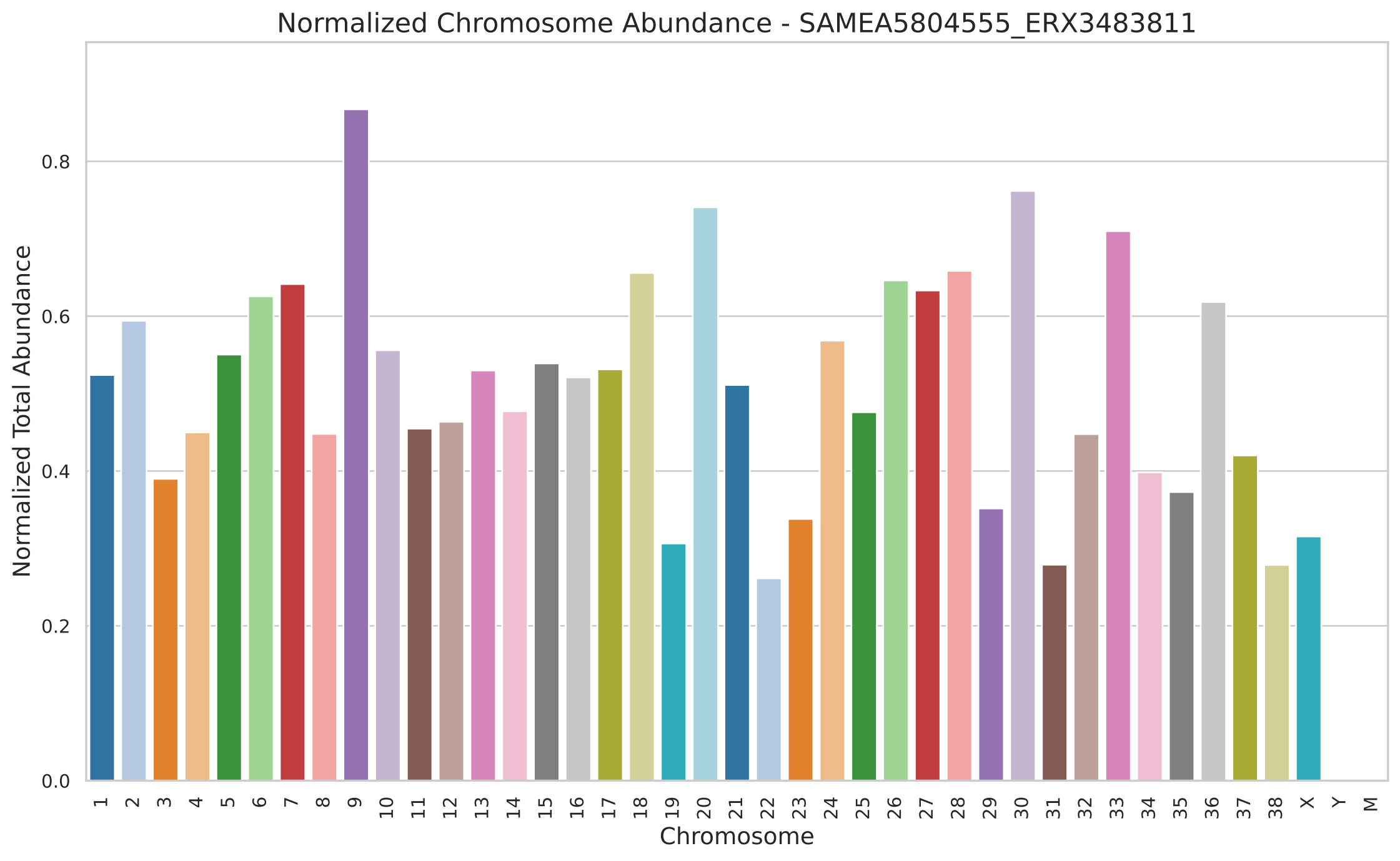

Normalized Chromosome Abundance - SAMEA5804345_ERX3483814
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

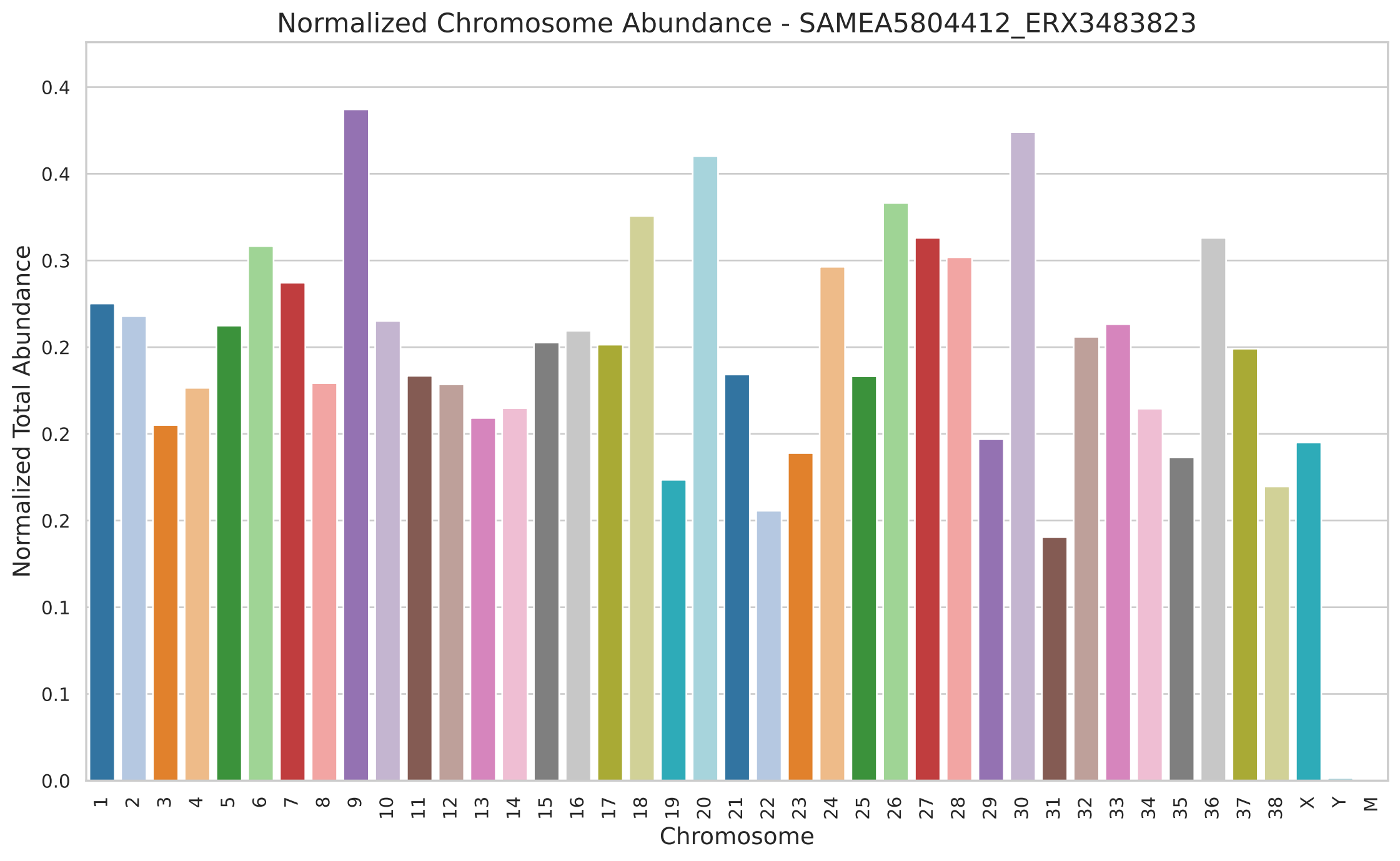

Normalized Chromosome Abundance - SAMEA5804498_ERX3483851
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

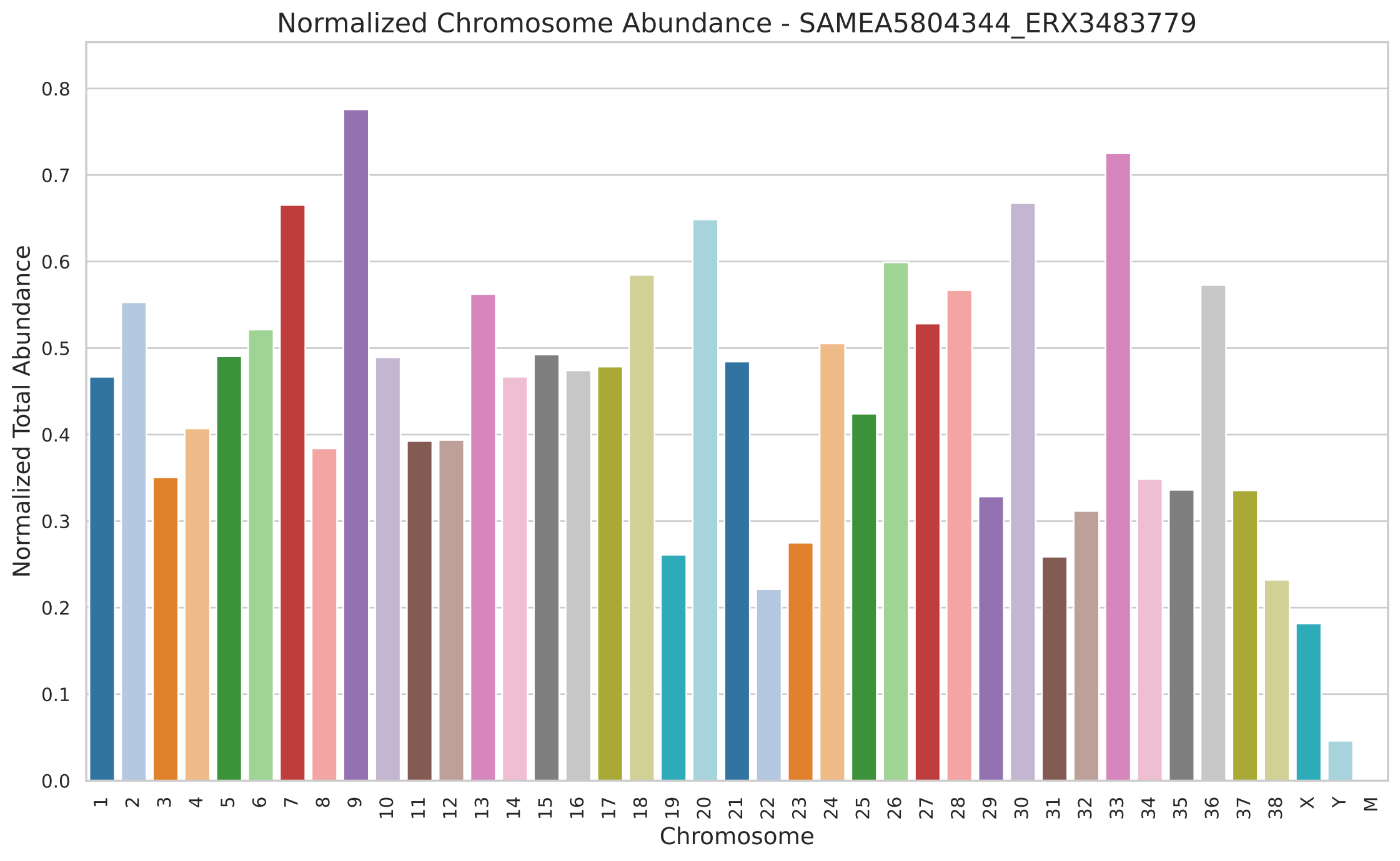

Normalized Chromosome Abundance - SAMEA5804611_ERX3483862
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

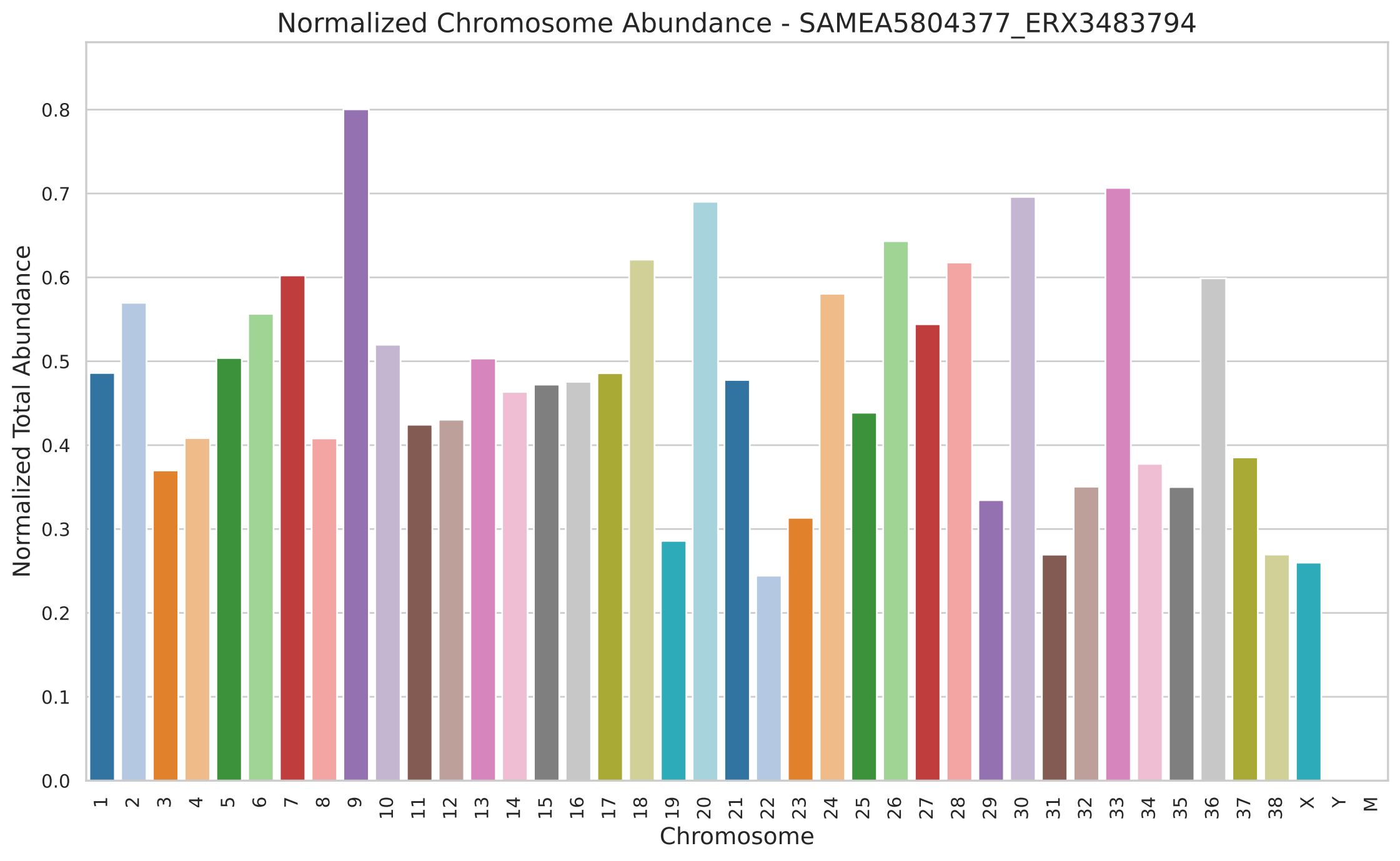

Normalized Chromosome Abundance - SAMEA5804572_ERX3483840
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

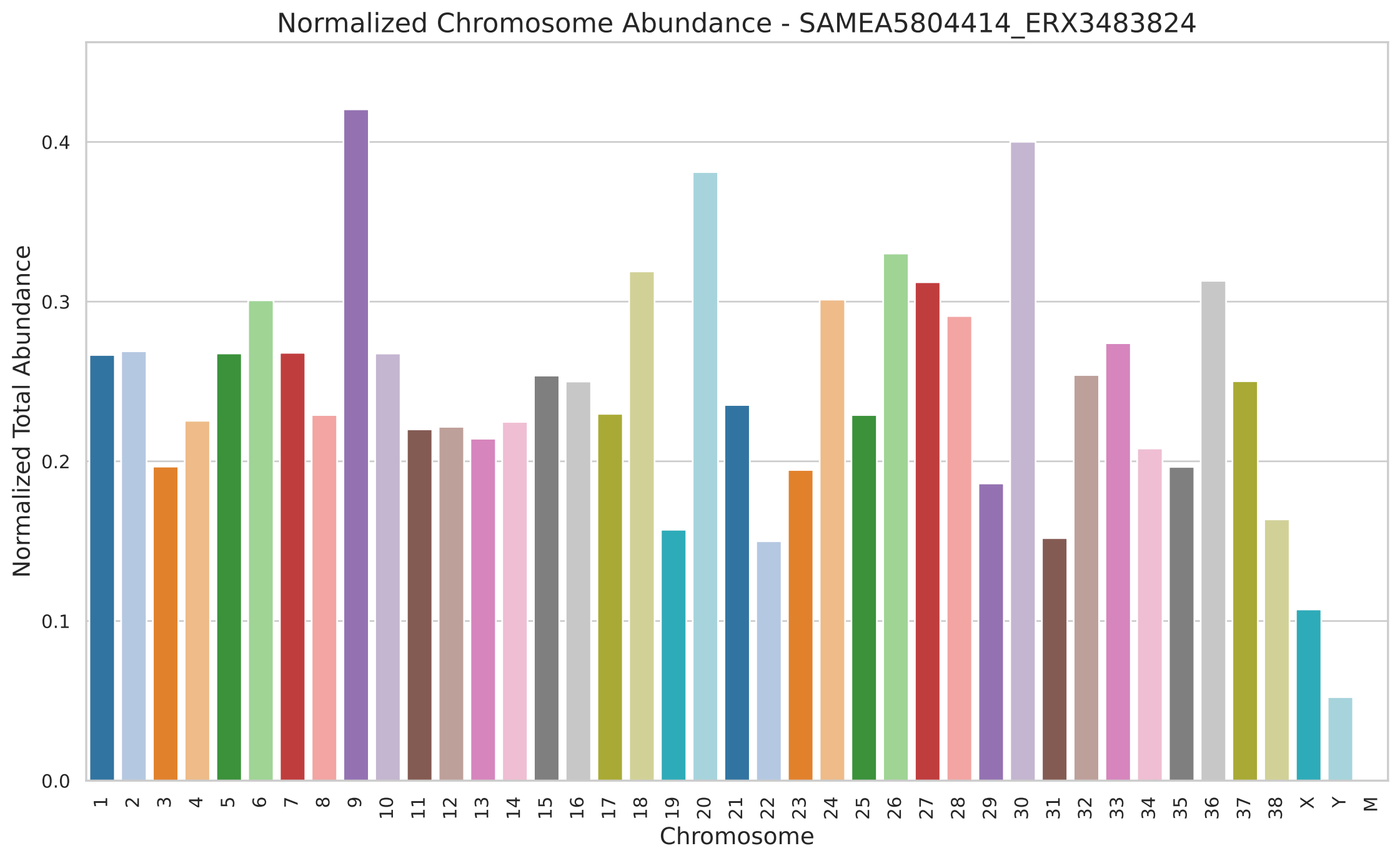

Normalized Chromosome Abundance - SAMEA5804746_ERX3483878
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

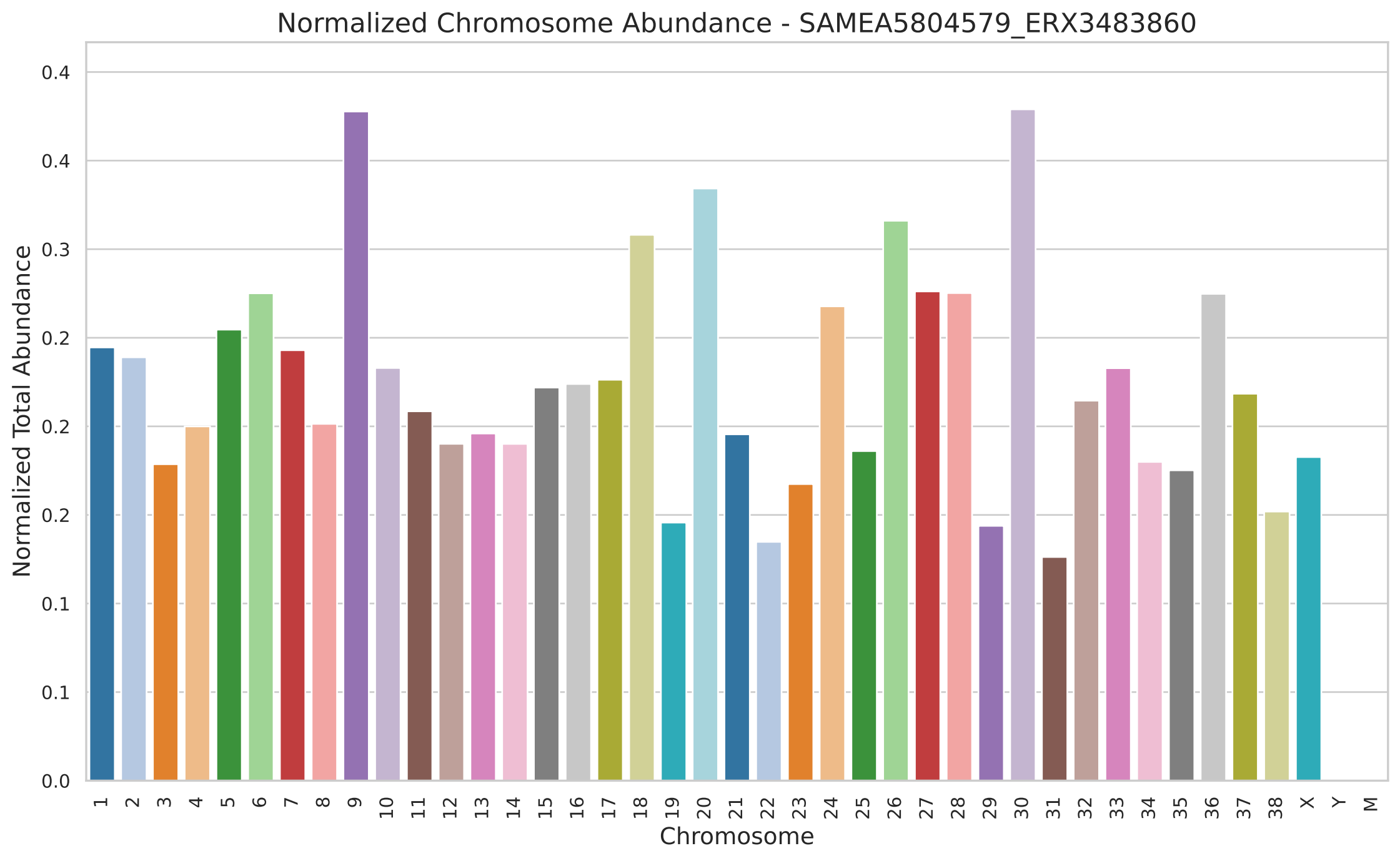

Normalized Chromosome Abundance - SAMEA5804555_ERX3483811
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

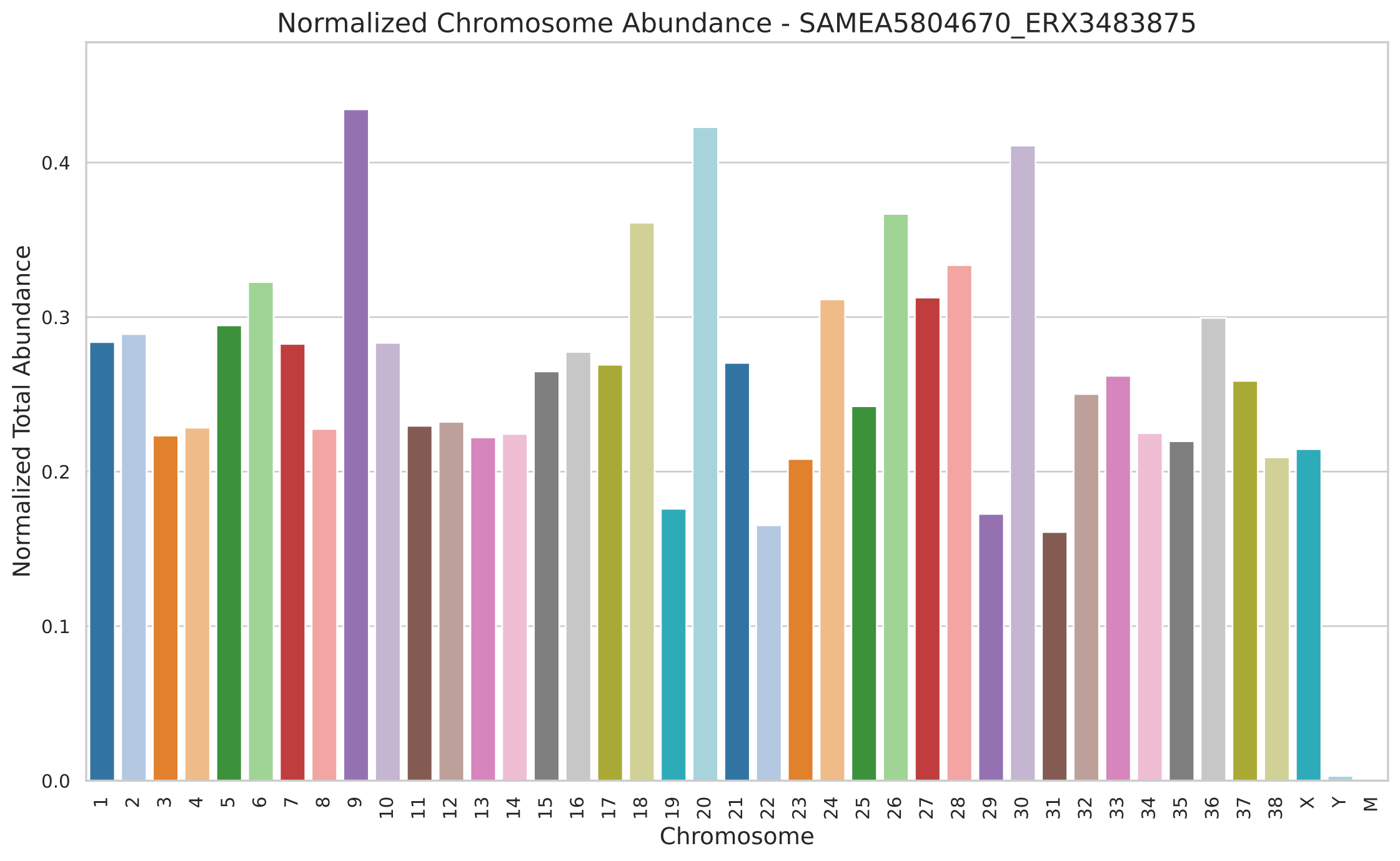

Normalized Chromosome Abundance - SAMEA5804412_ERX3483823
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

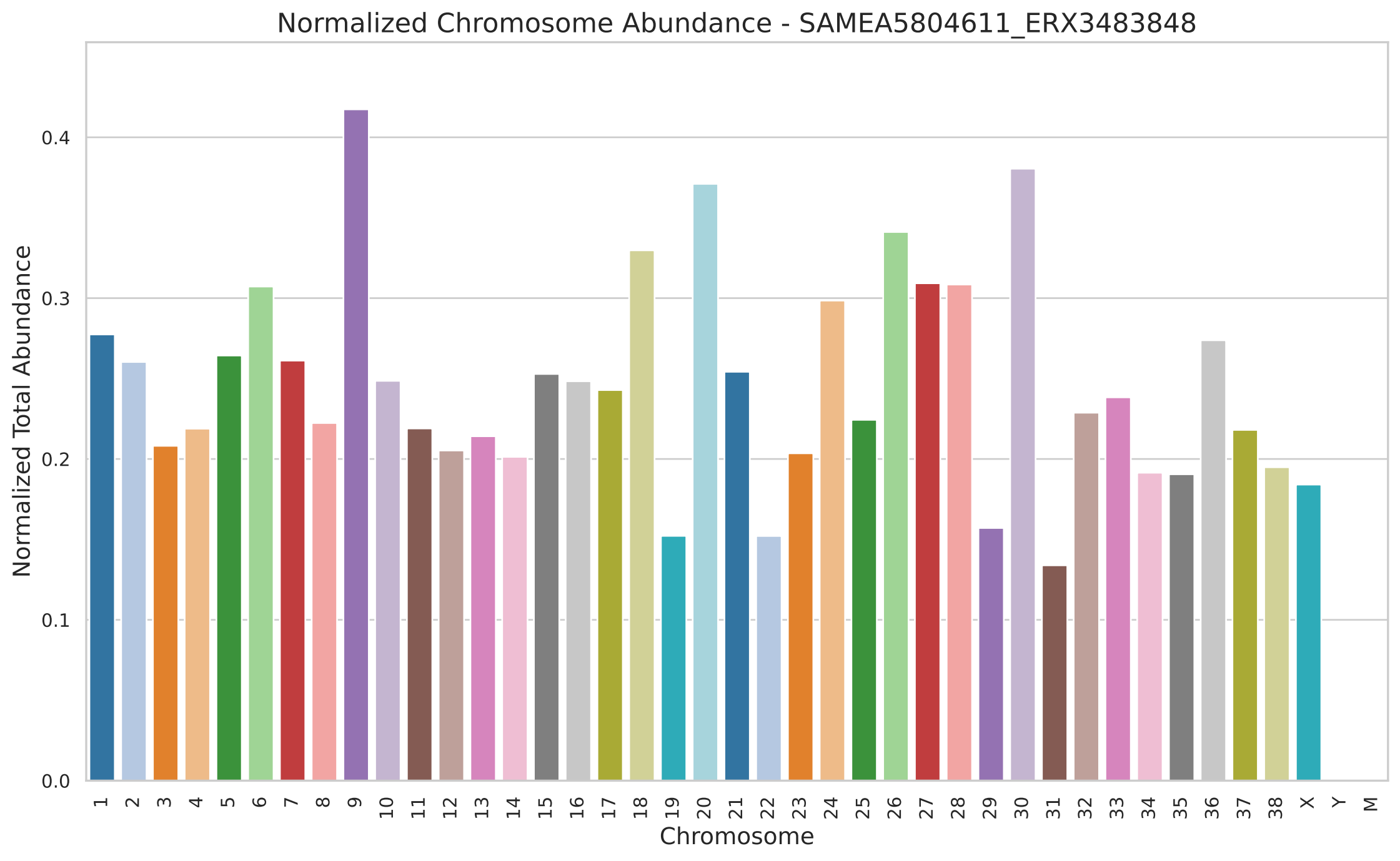

Normalized Chromosome Abundance - SAMEA5804344_ERX3483779
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

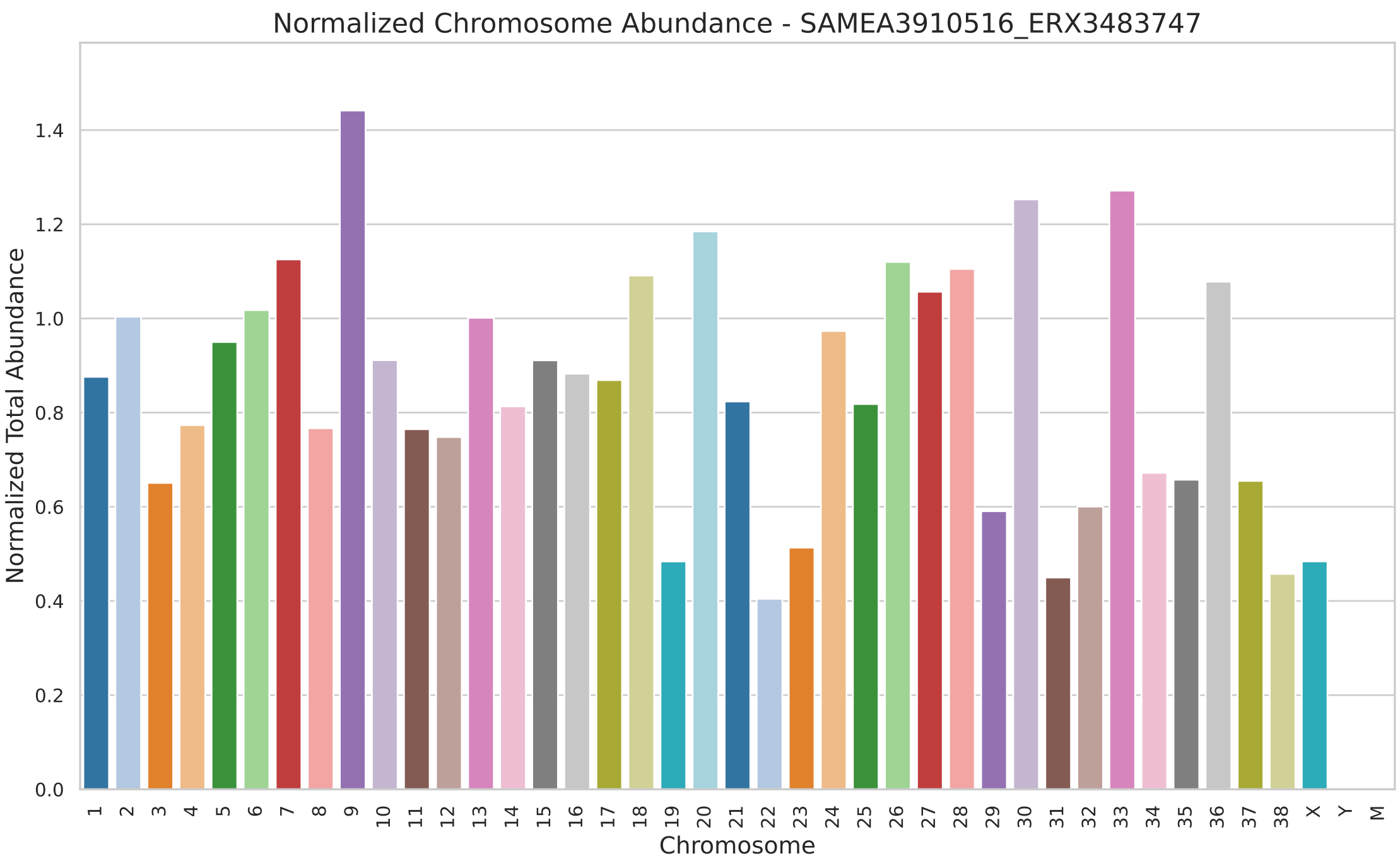

Normalized Chromosome Abundance - SAMEA5804377_ERX3483794
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

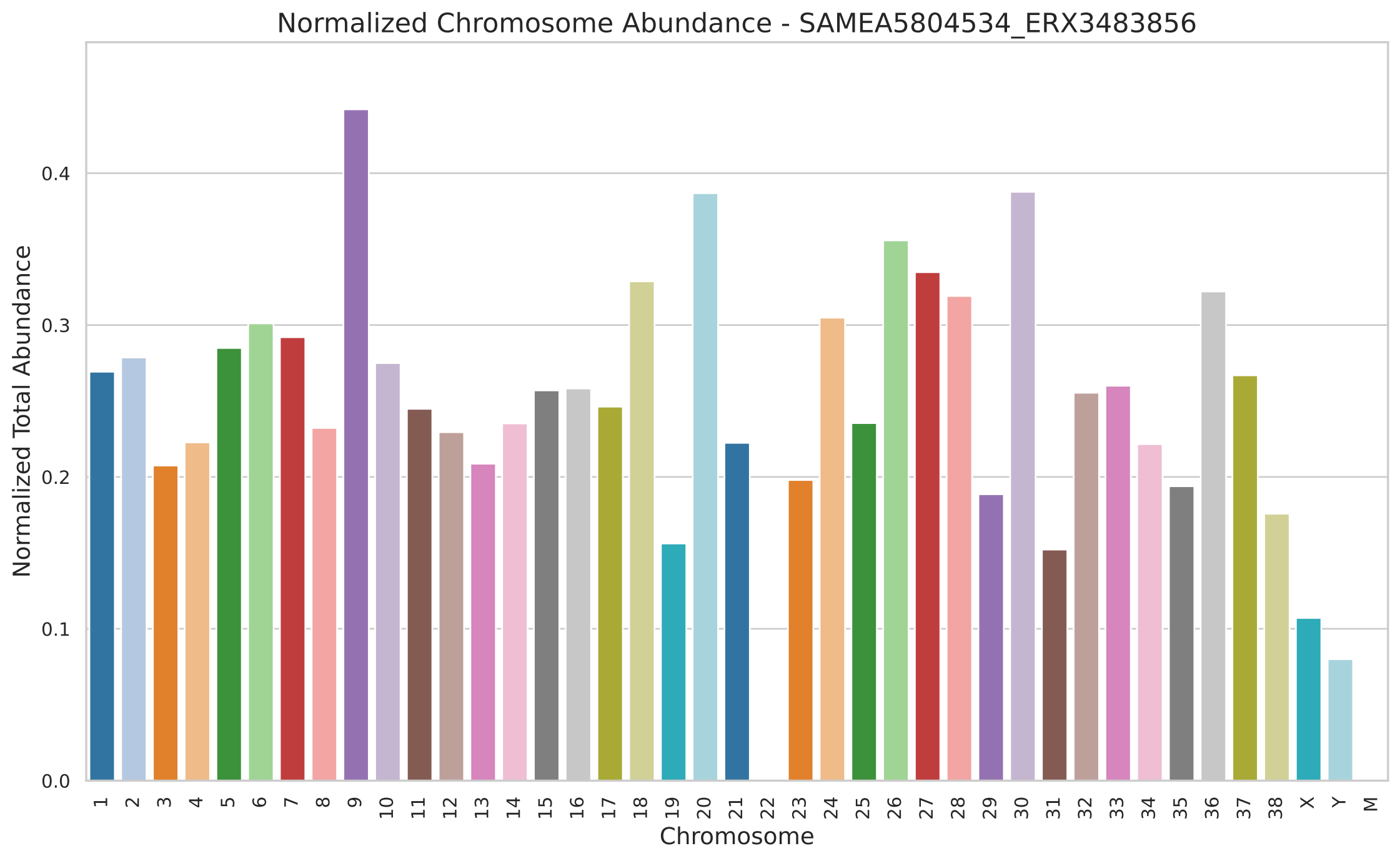

Normalized Chromosome Abundance - SAMEA5804414_ERX3483824
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

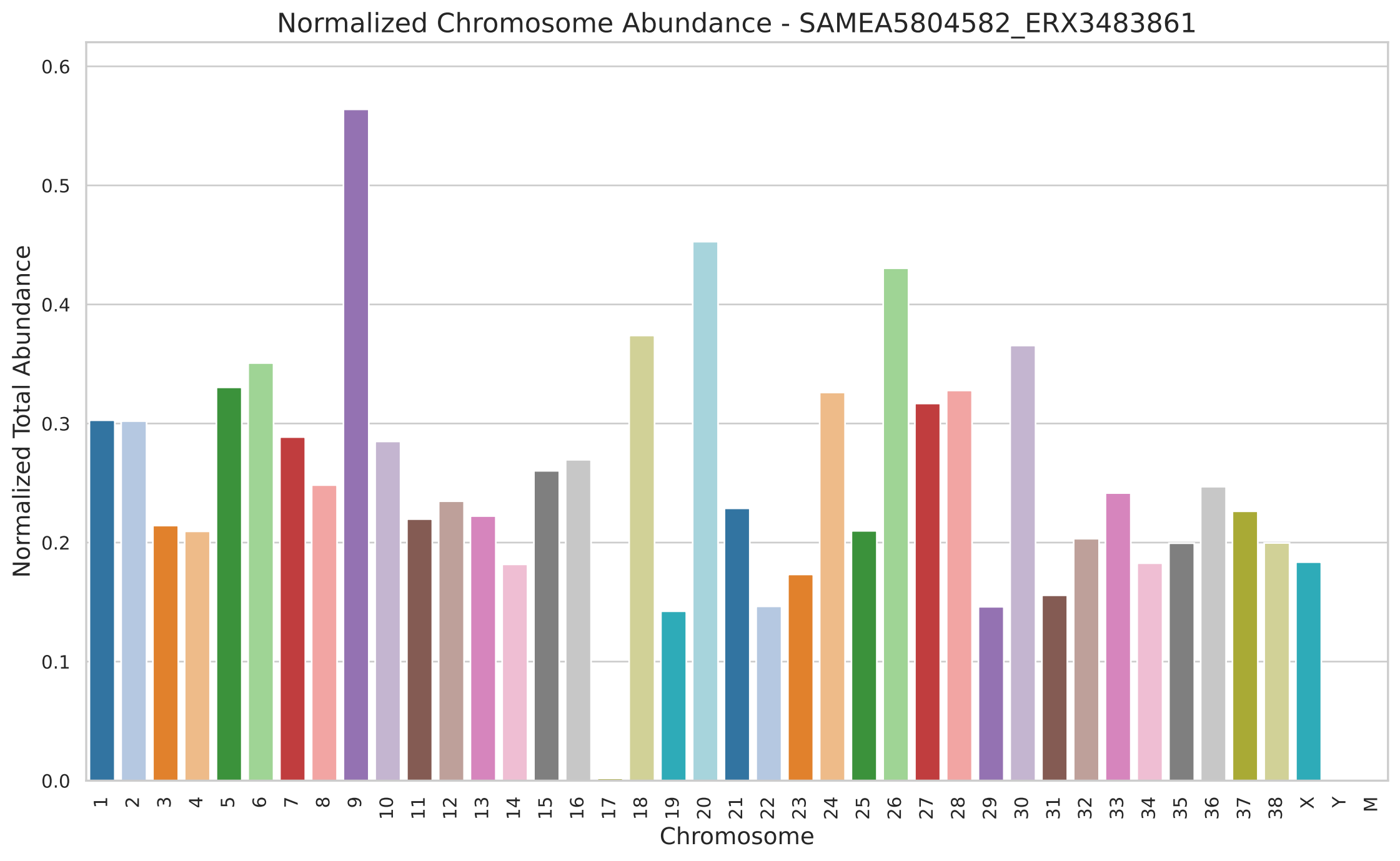

Normalized Chromosome Abundance - SAMEA5804579_ERX3483860
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

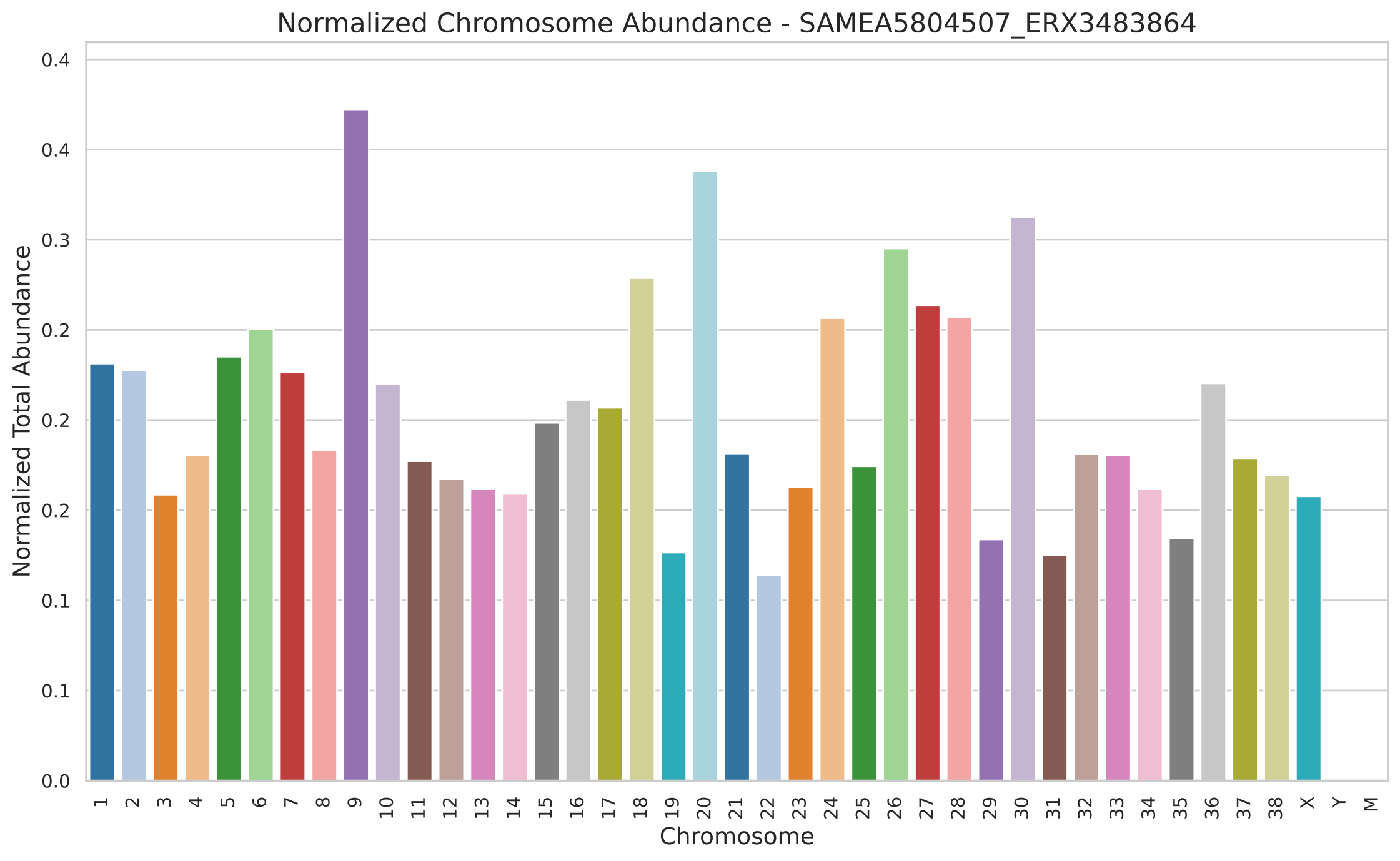

Normalized Chromosome Abundance - SAMEA5804670_ERX3483875
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

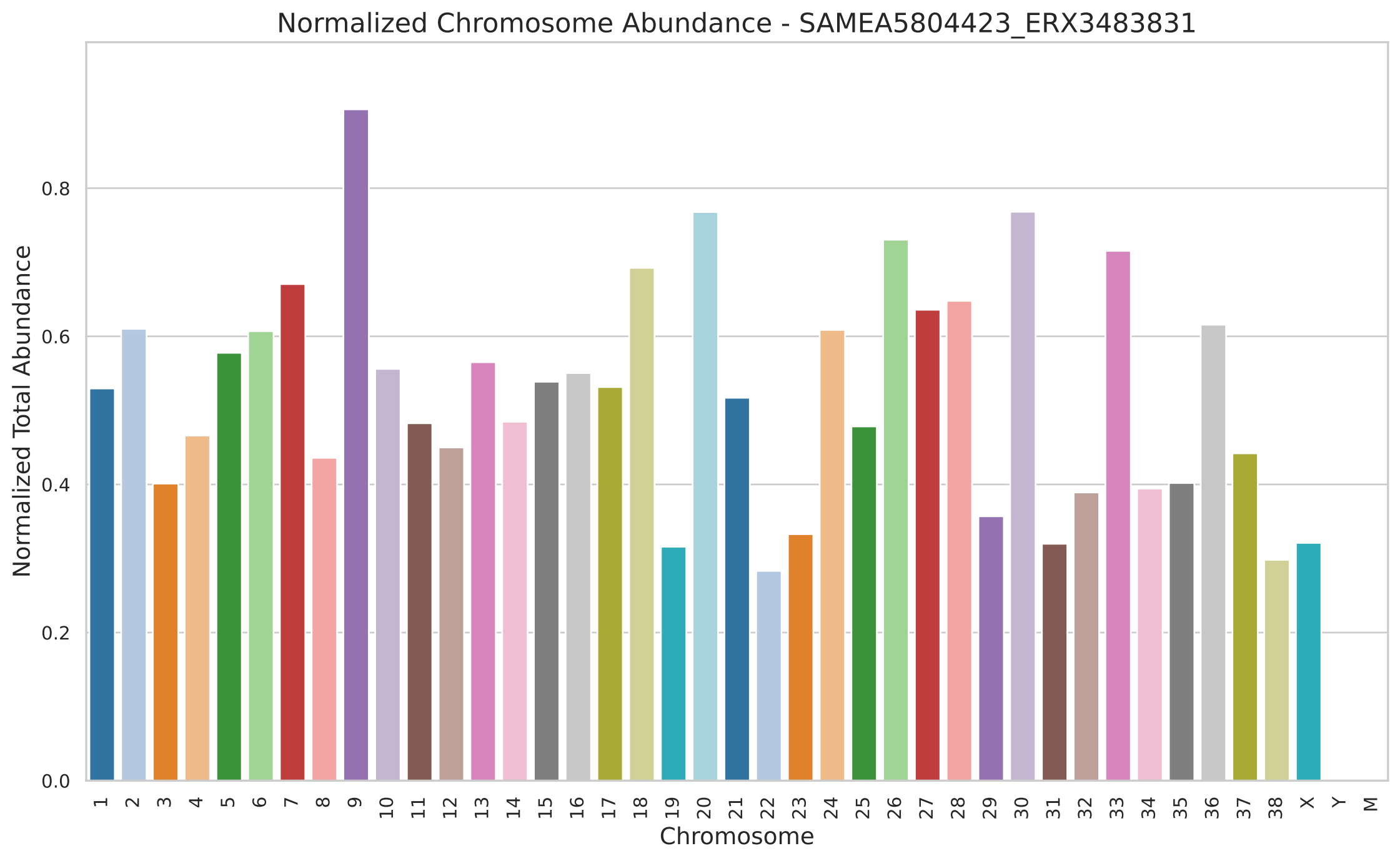

Normalized Chromosome Abundance - SAMEA5804611_ERX3483848
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

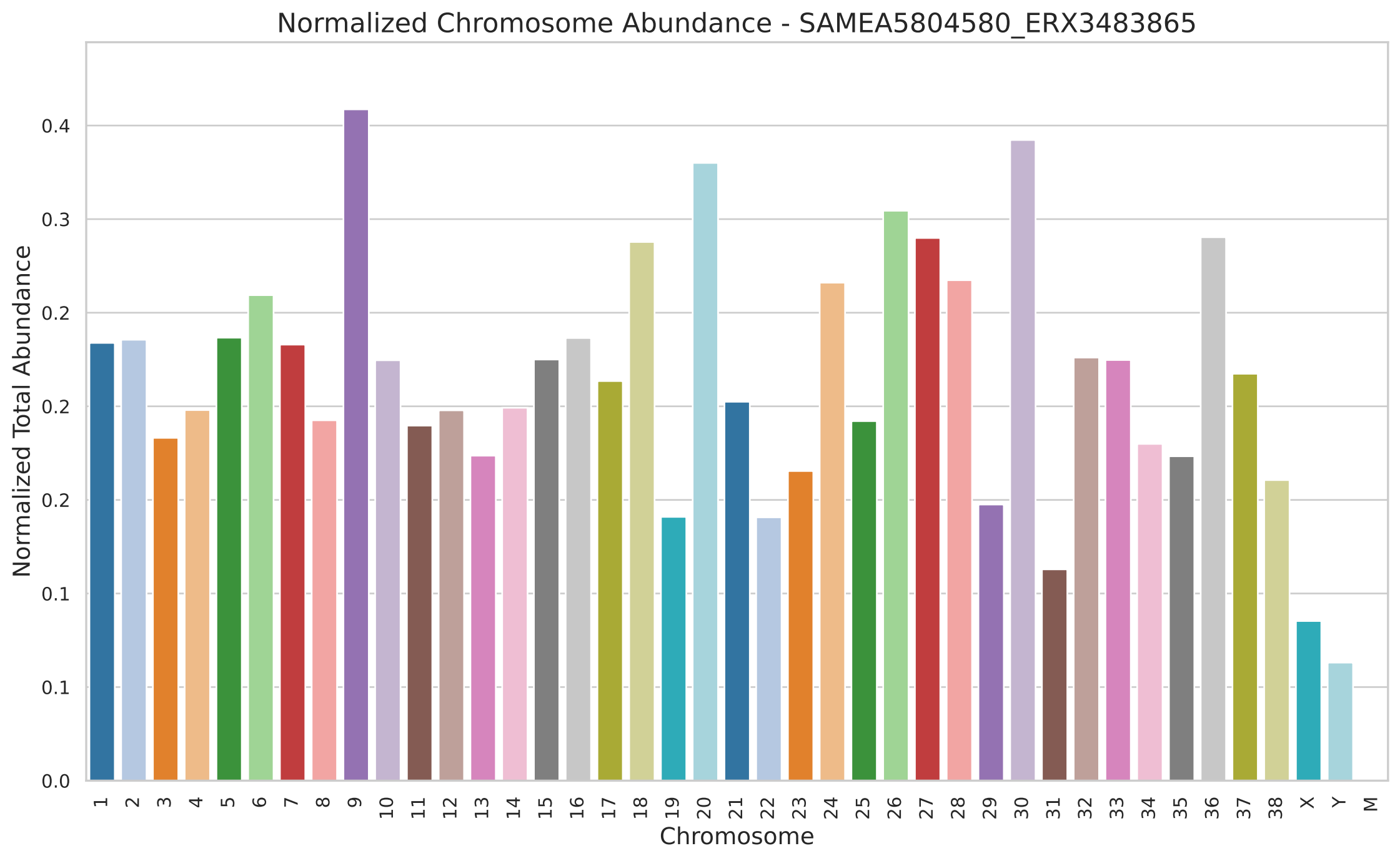

Normalized Chromosome Abundance - SAMEA3910516_ERX3483747
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

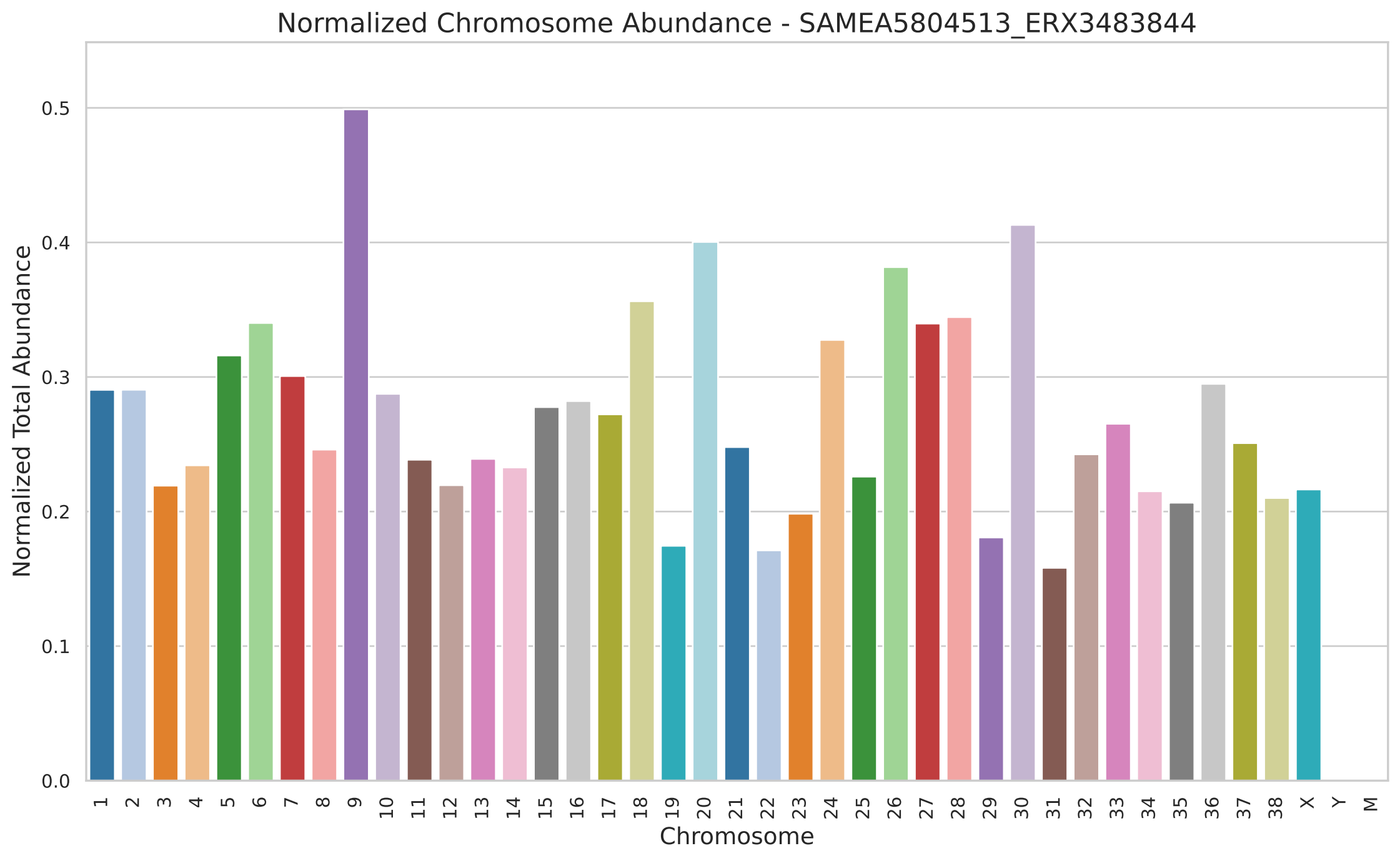

Normalized Chromosome Abundance - SAMEA5804534_ERX3483856
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

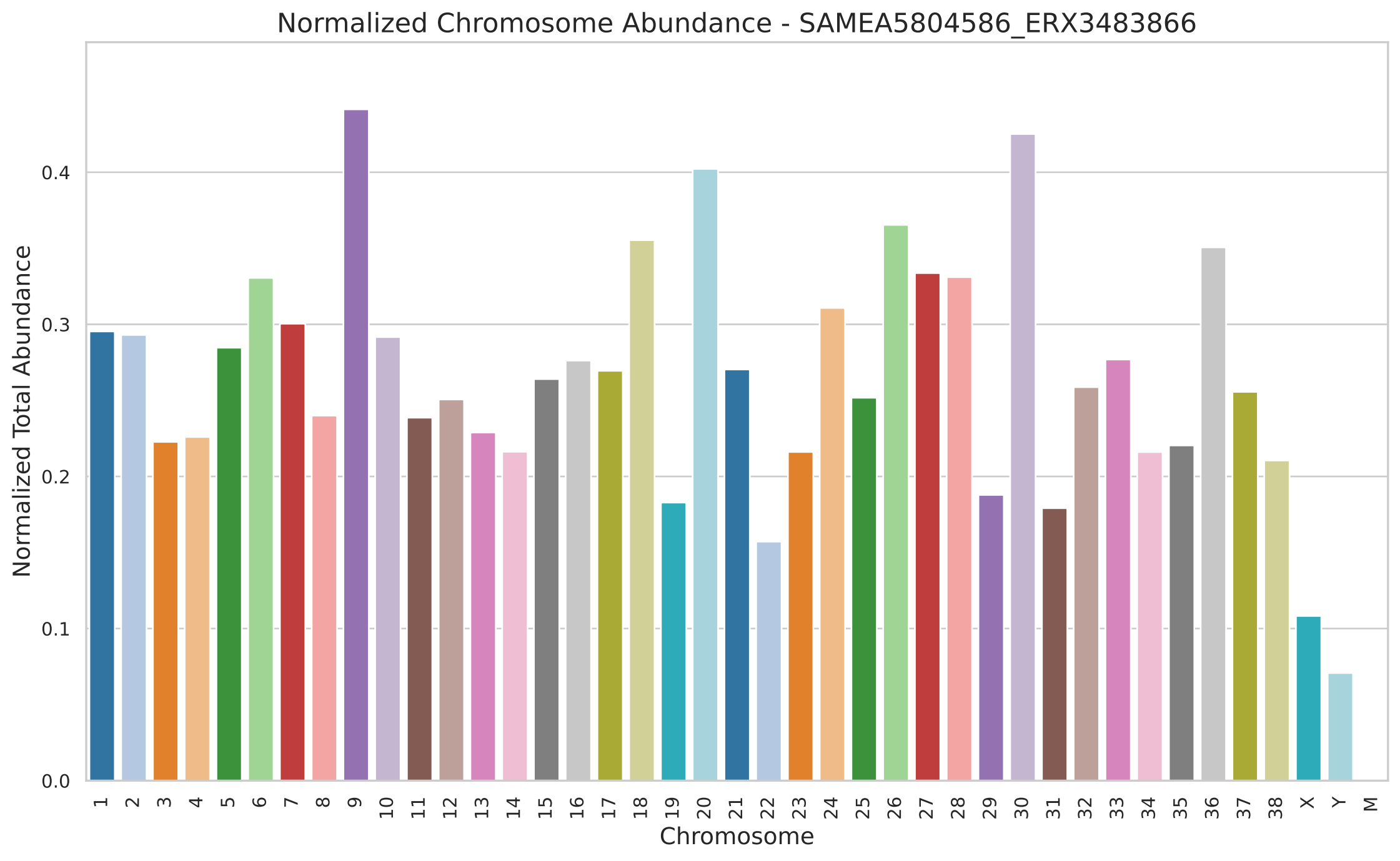

Normalized Chromosome Abundance - SAMEA5804582_ERX3483861
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

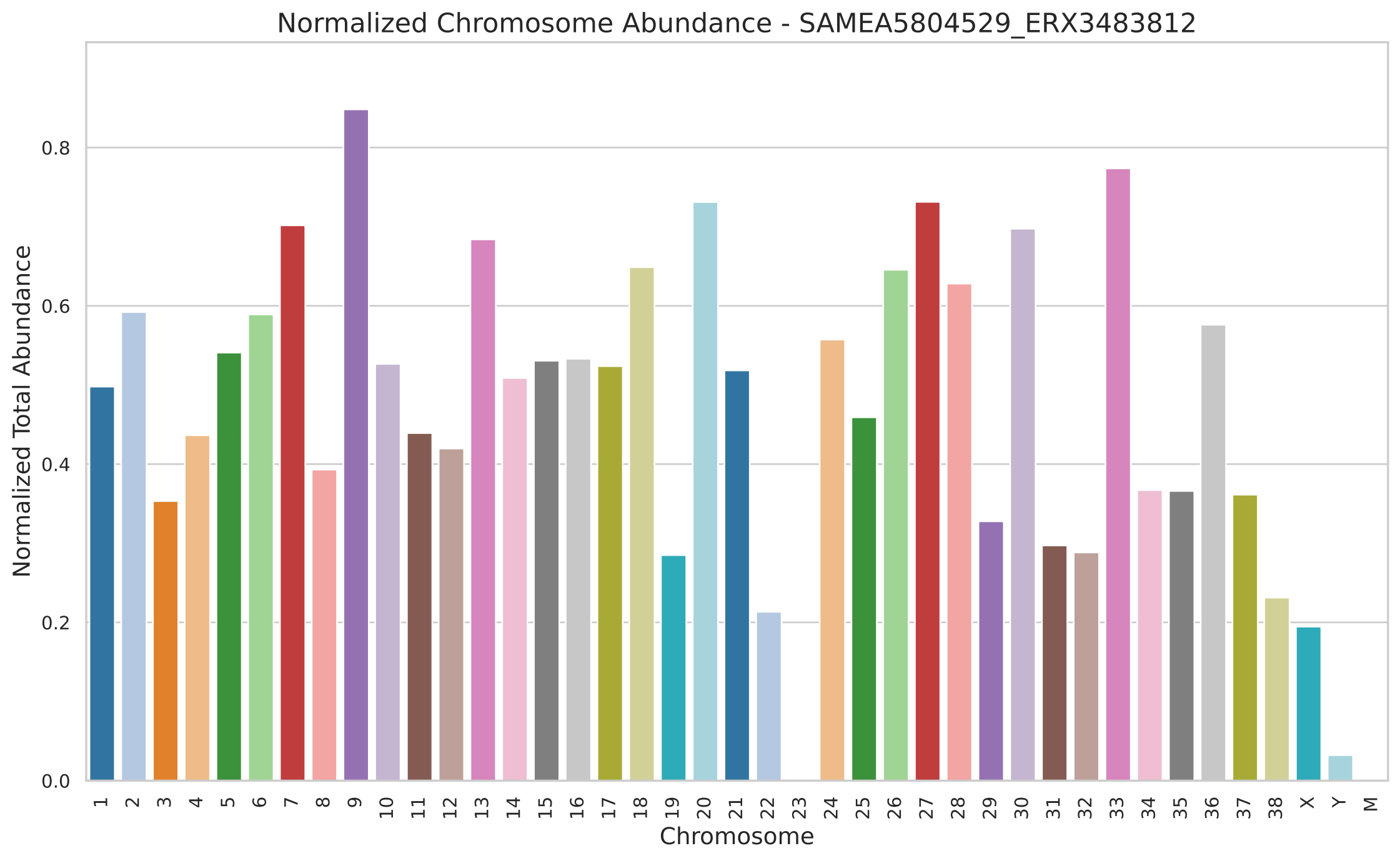

Normalized Chromosome Abundance - SAMEA5804507_ERX3483864
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
0.4
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

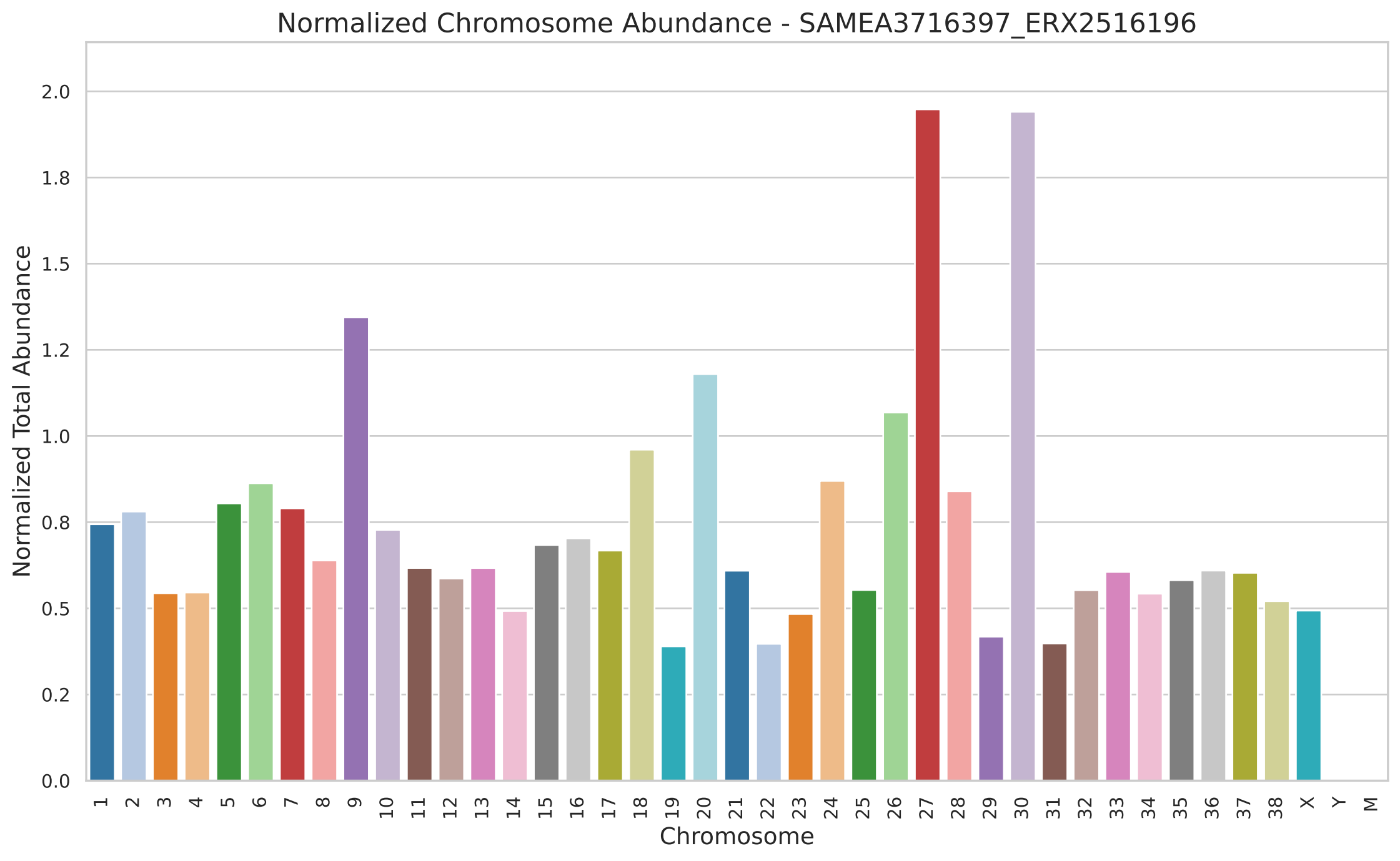

Normalized Chromosome Abundance - SAMEA5804423_ERX3483831
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

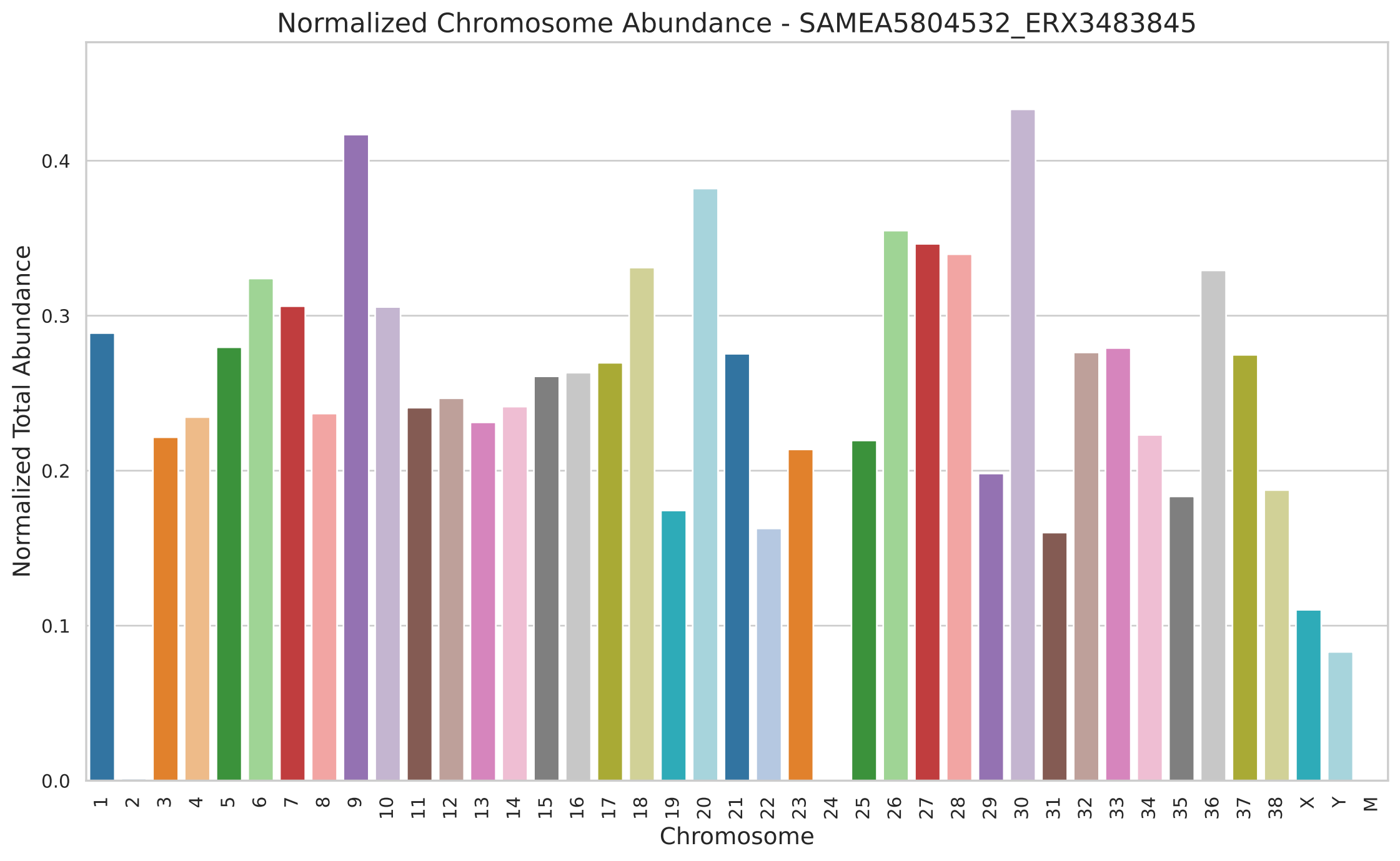

Normalized Chromosome Abundance - SAMEA5804580_ERX3483865
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

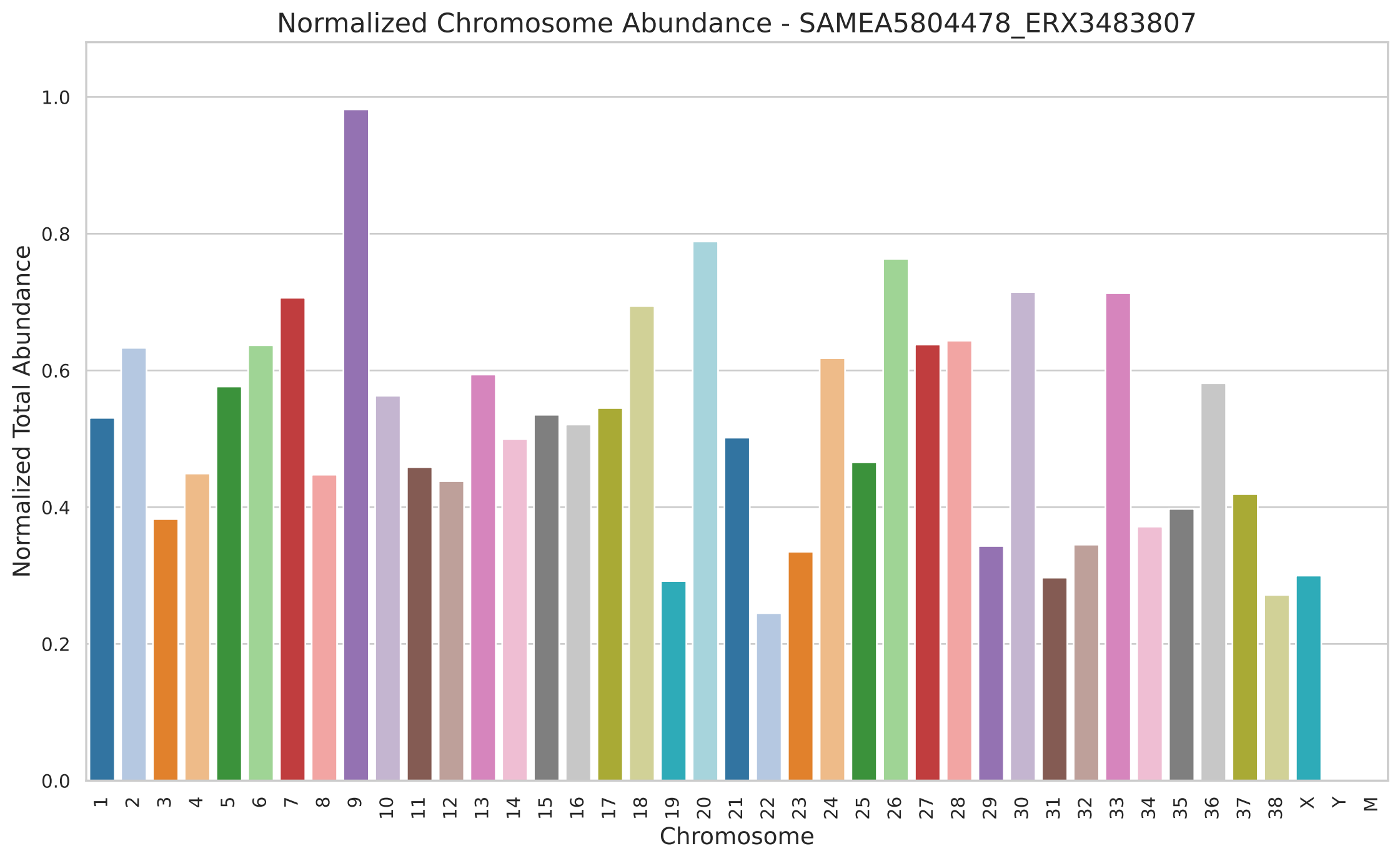

Normalized Chromosome Abundance - SAMEA5804513_ERX3483844
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

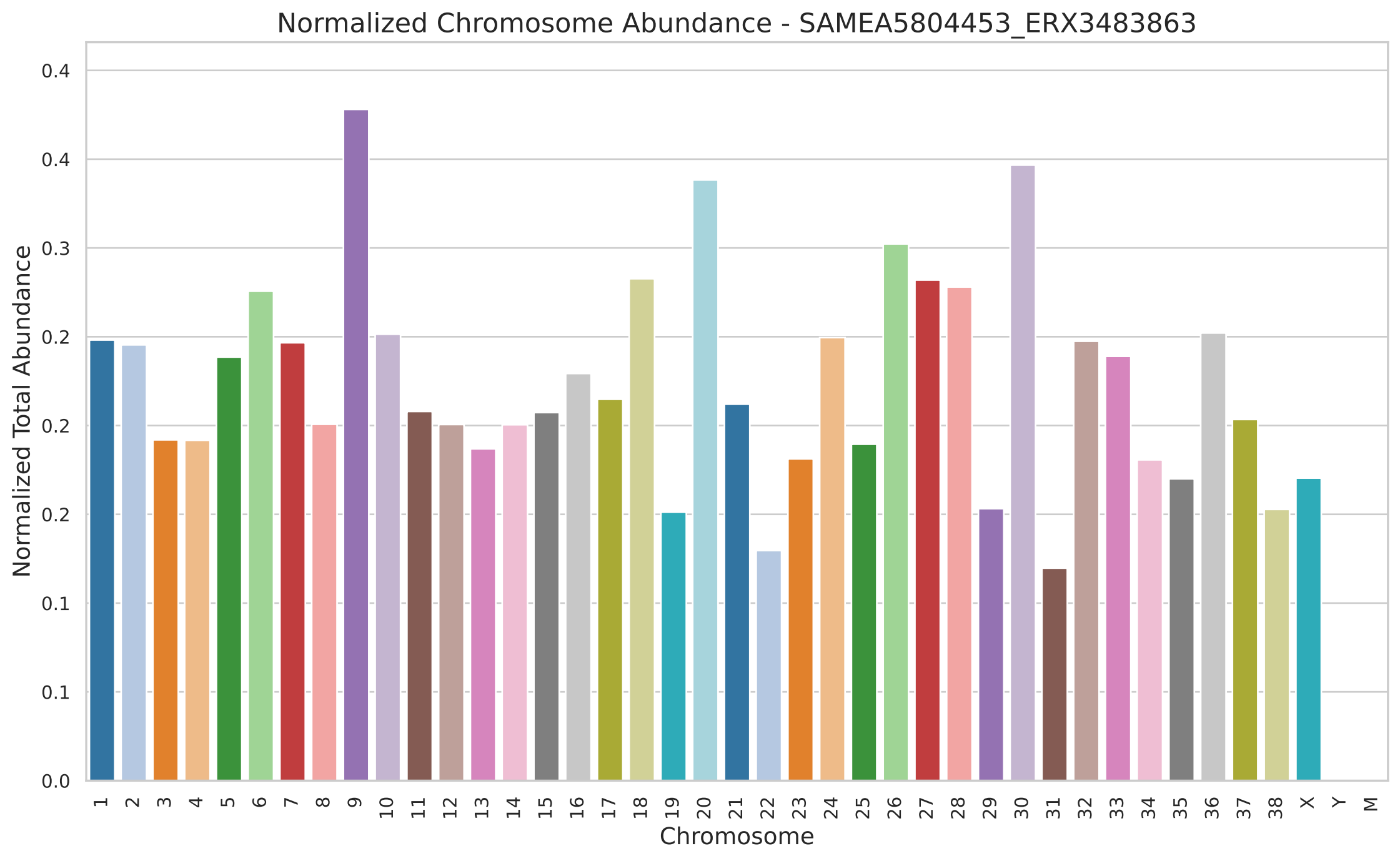

Normalized Chromosome Abundance - SAMEA5804586_ERX3483866
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

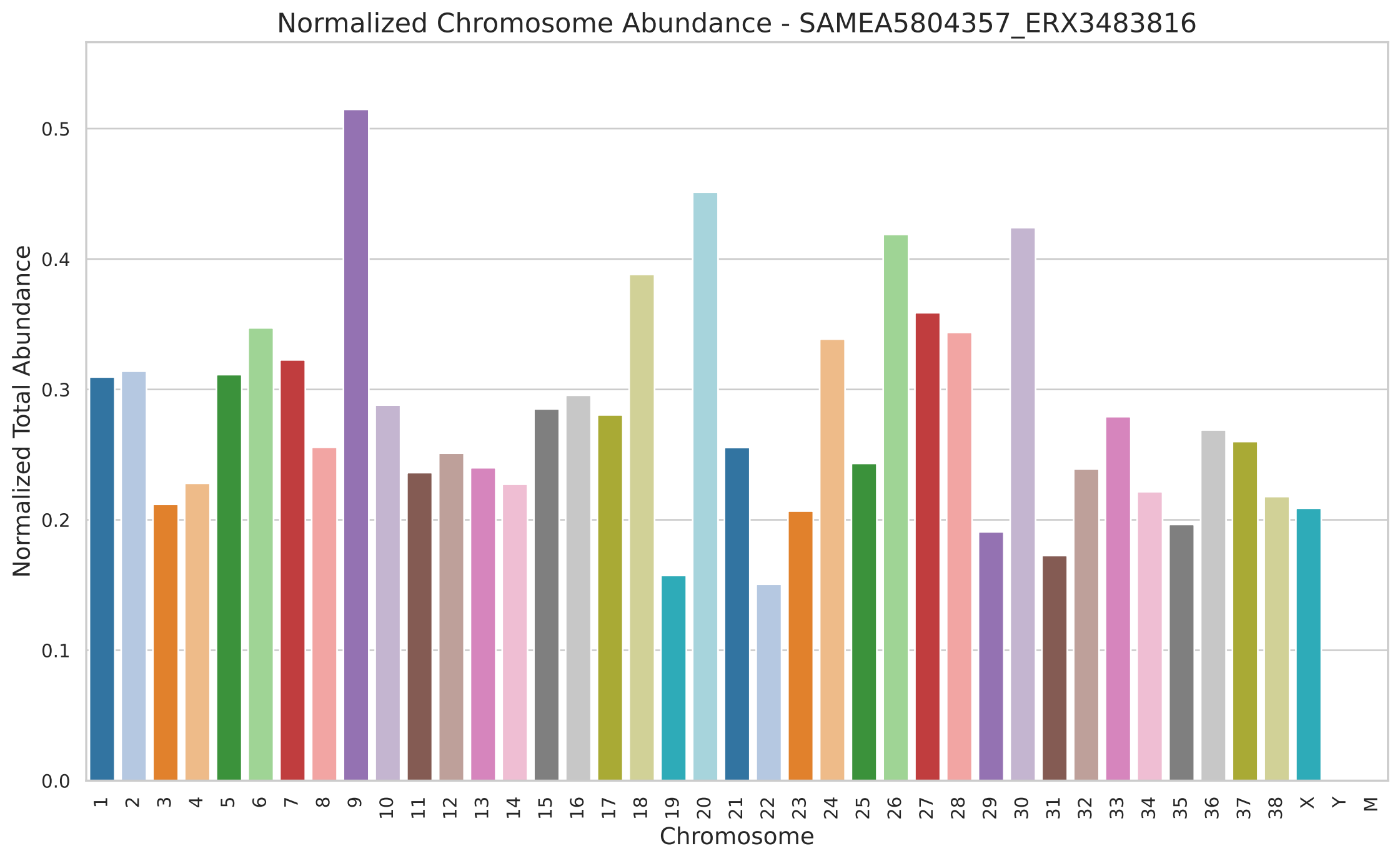

Normalized Chromosome Abundance - SAMEA5804529_ERX3483812
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

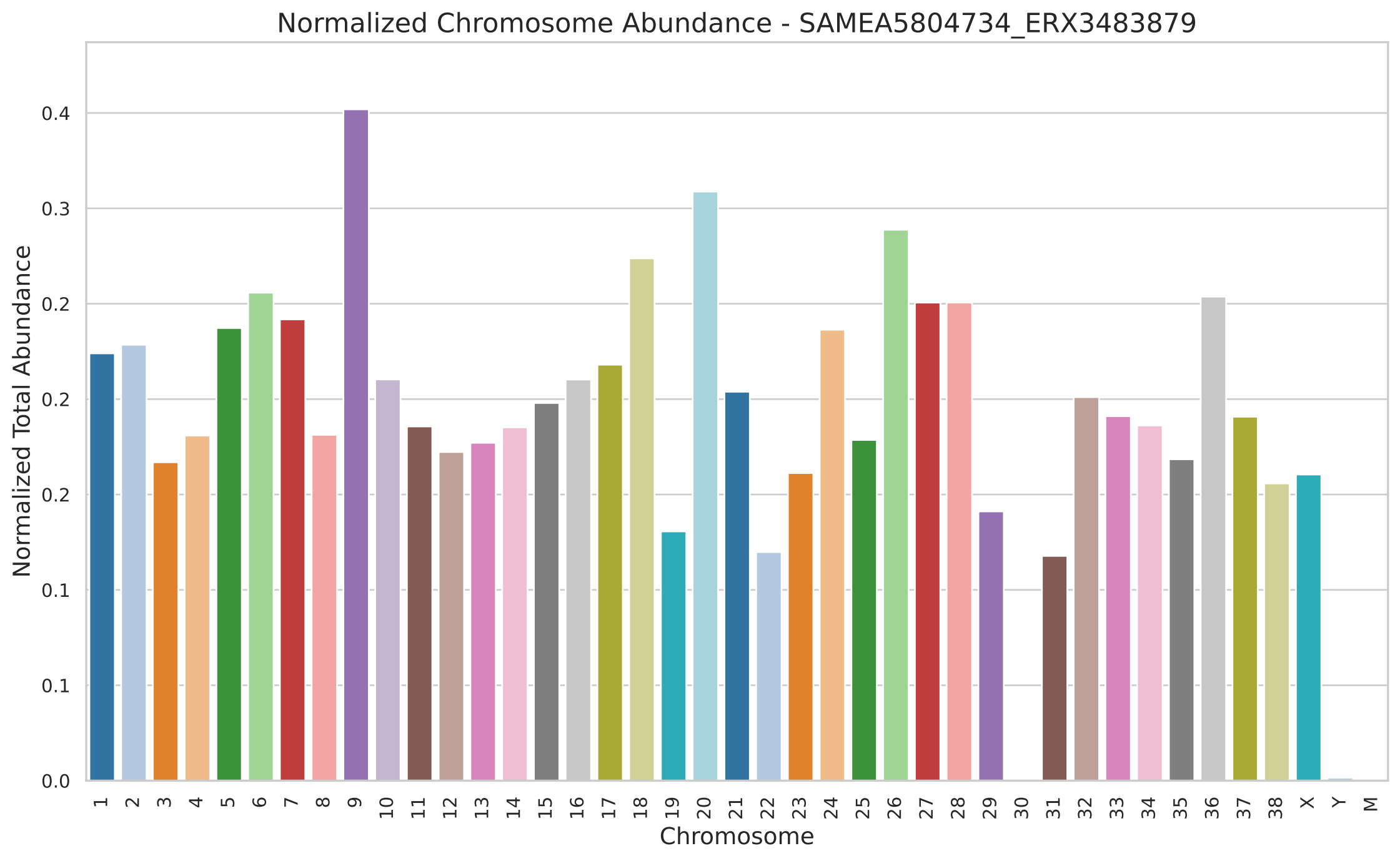

Normalized Chromosome Abundance - SAMEA3716397_ERX2516196
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

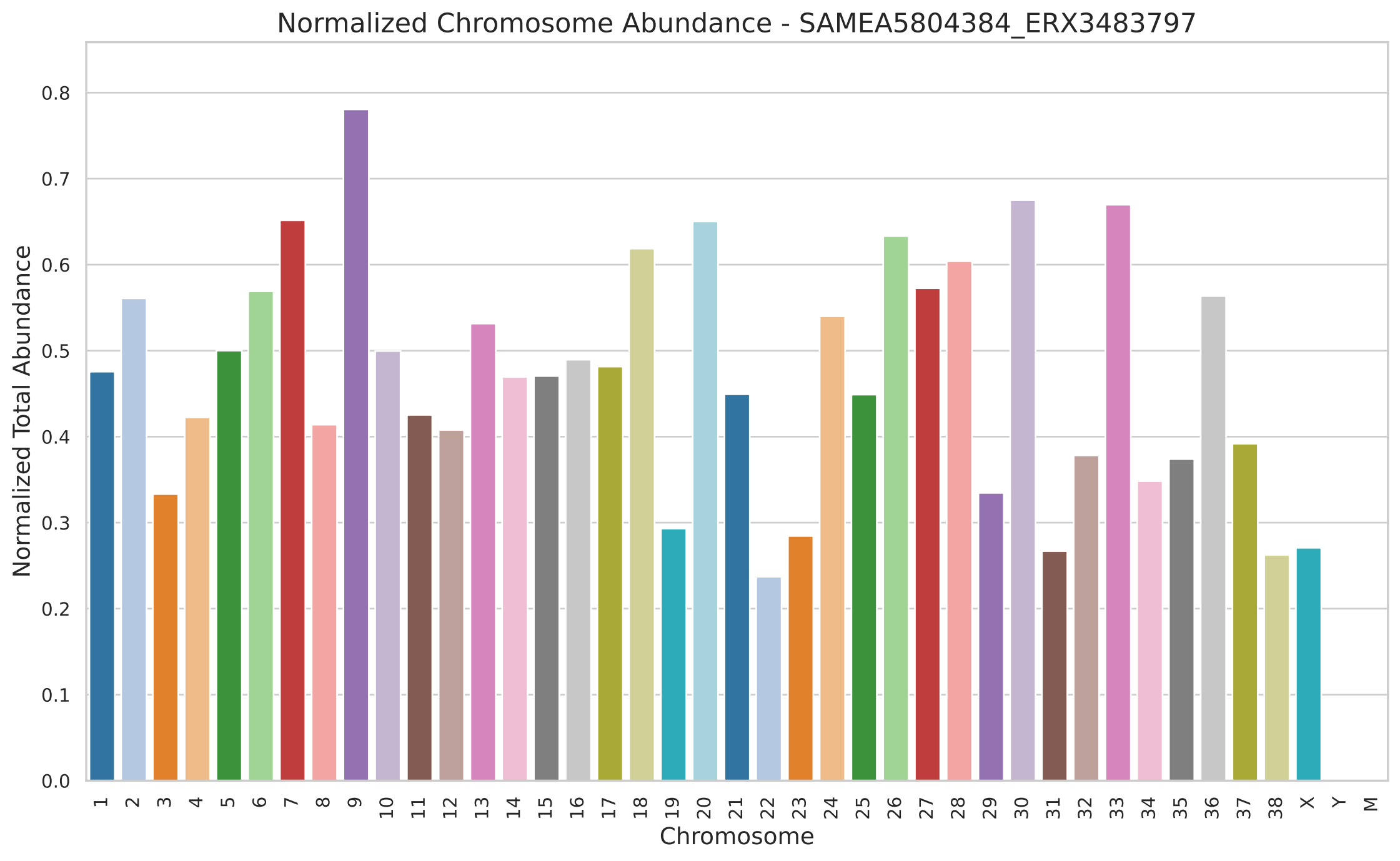

Normalized Chromosome Abundance - SAMEA5804532_ERX3483845
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

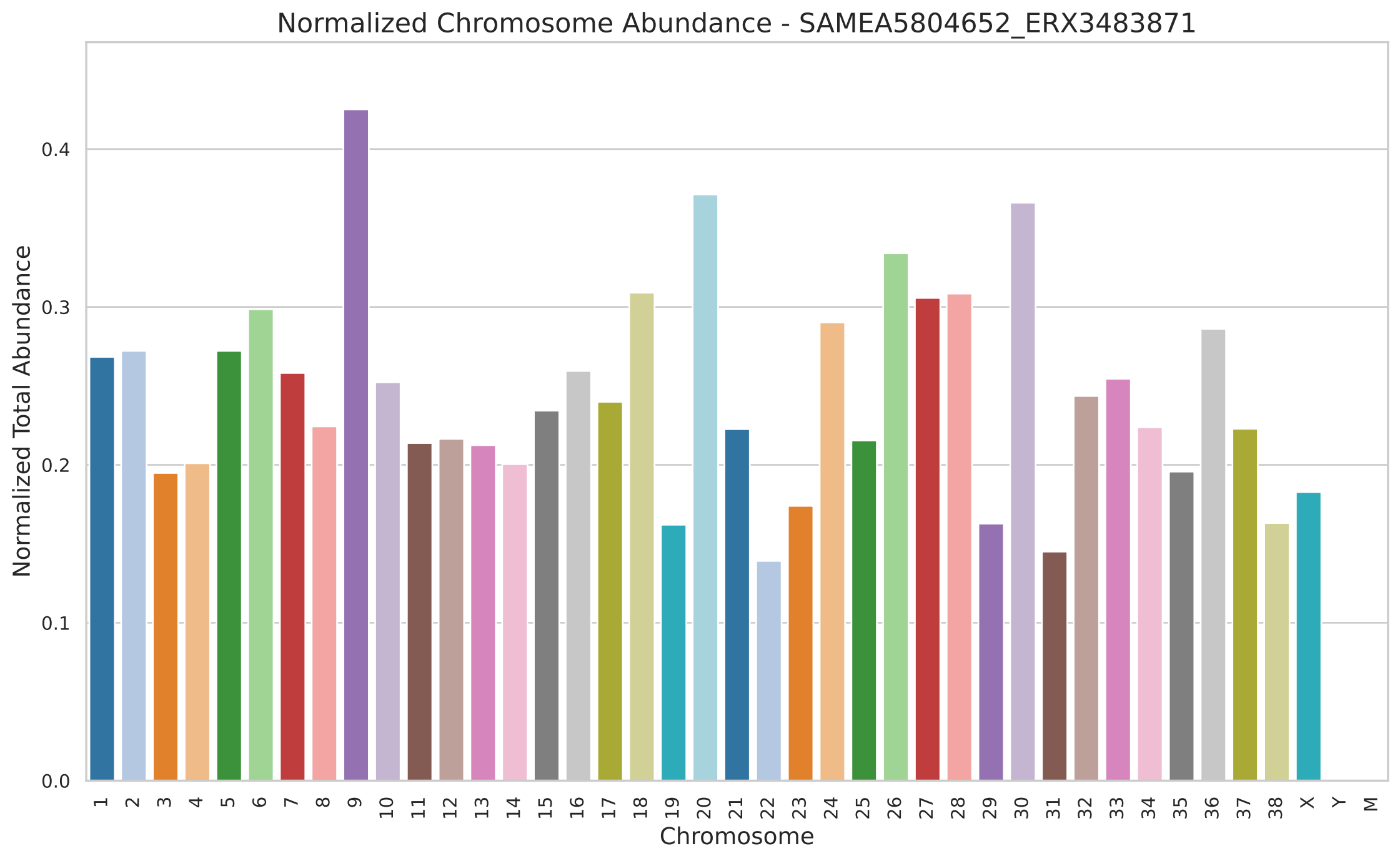

Normalized Chromosome Abundance - SAMEA5804478_ERX3483807
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

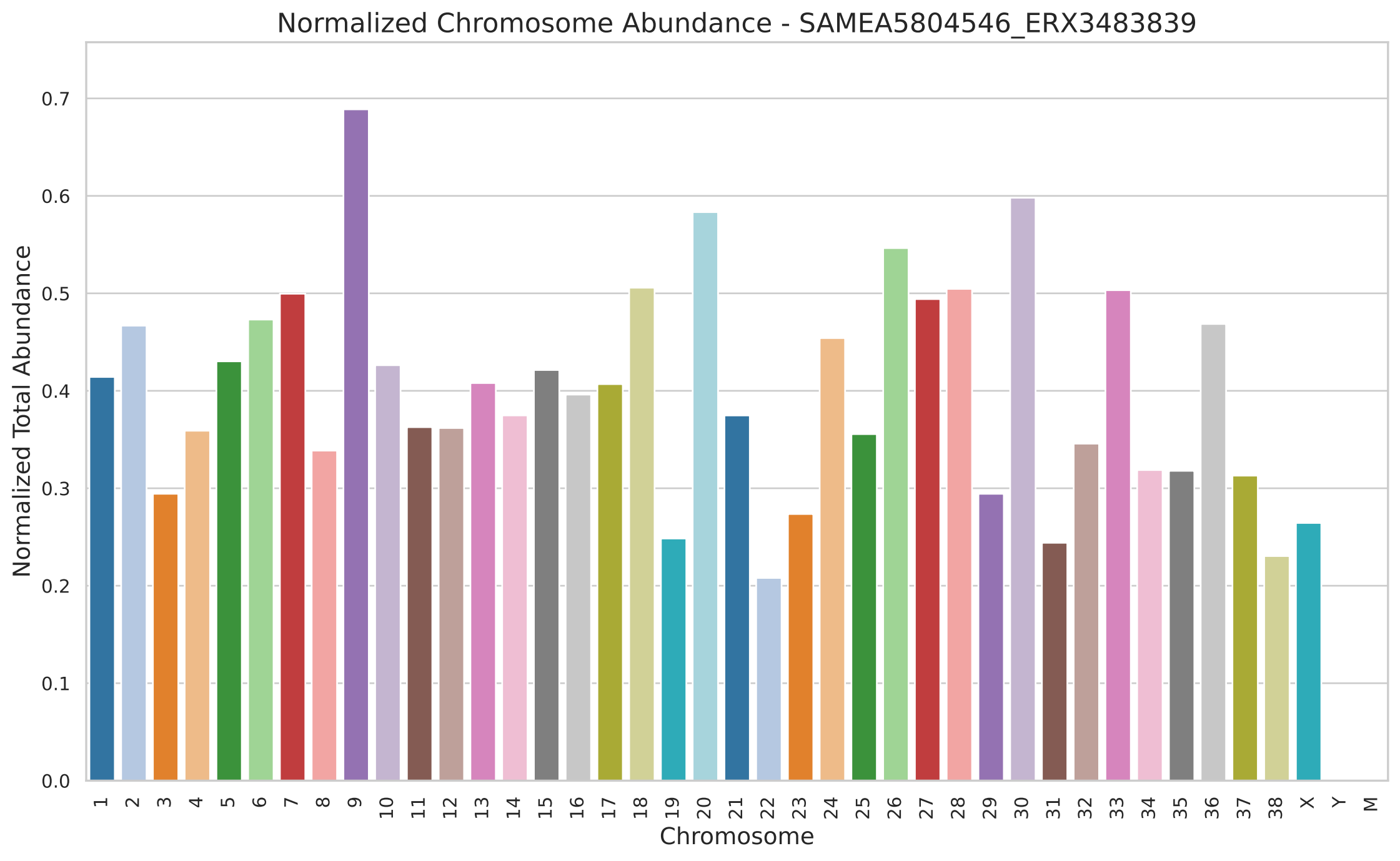

Normalized Chromosome Abundance - SAMEA5804453_ERX3483863
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

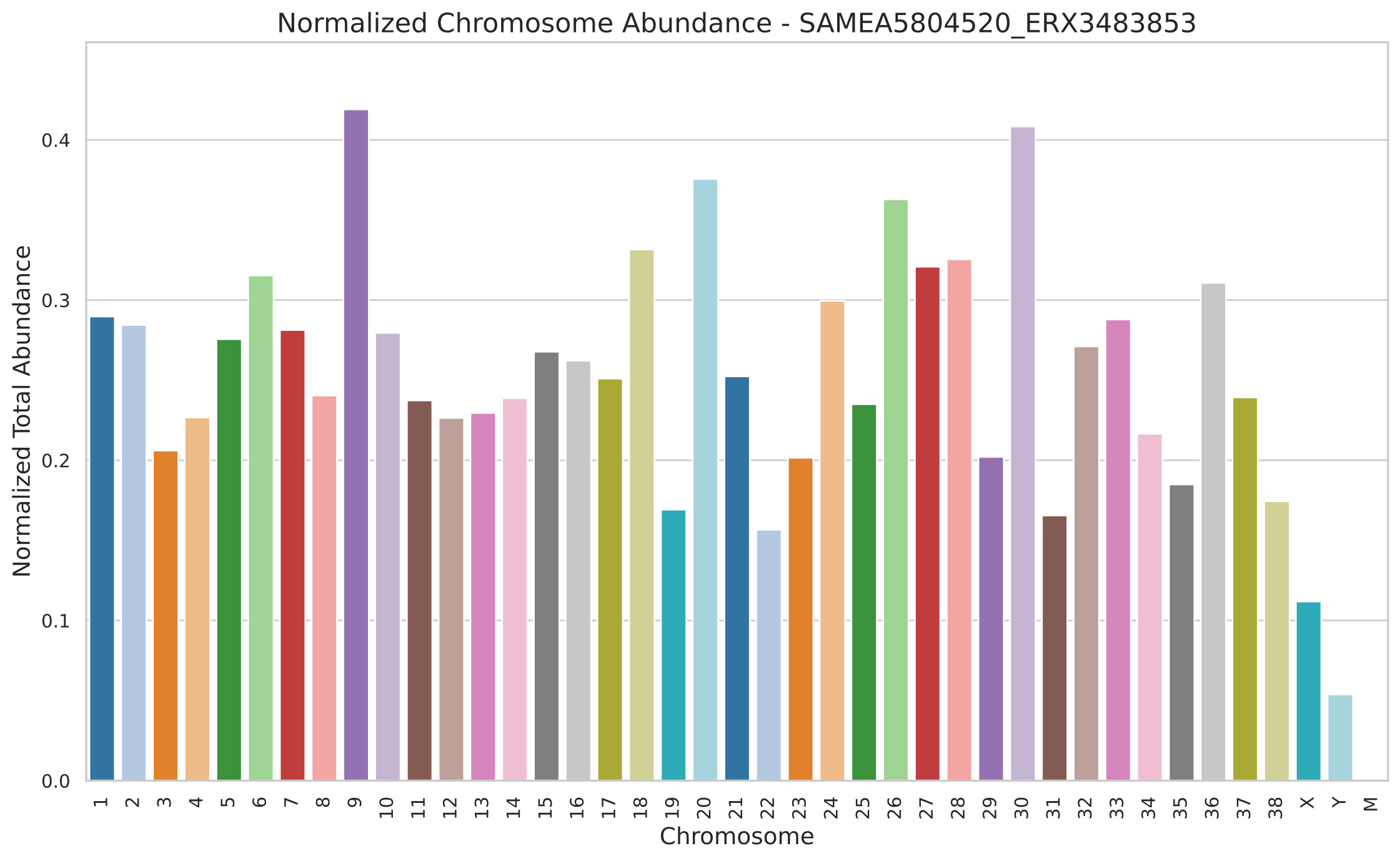

Normalized Chromosome Abundance - SAMEA5804357_ERX3483816
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

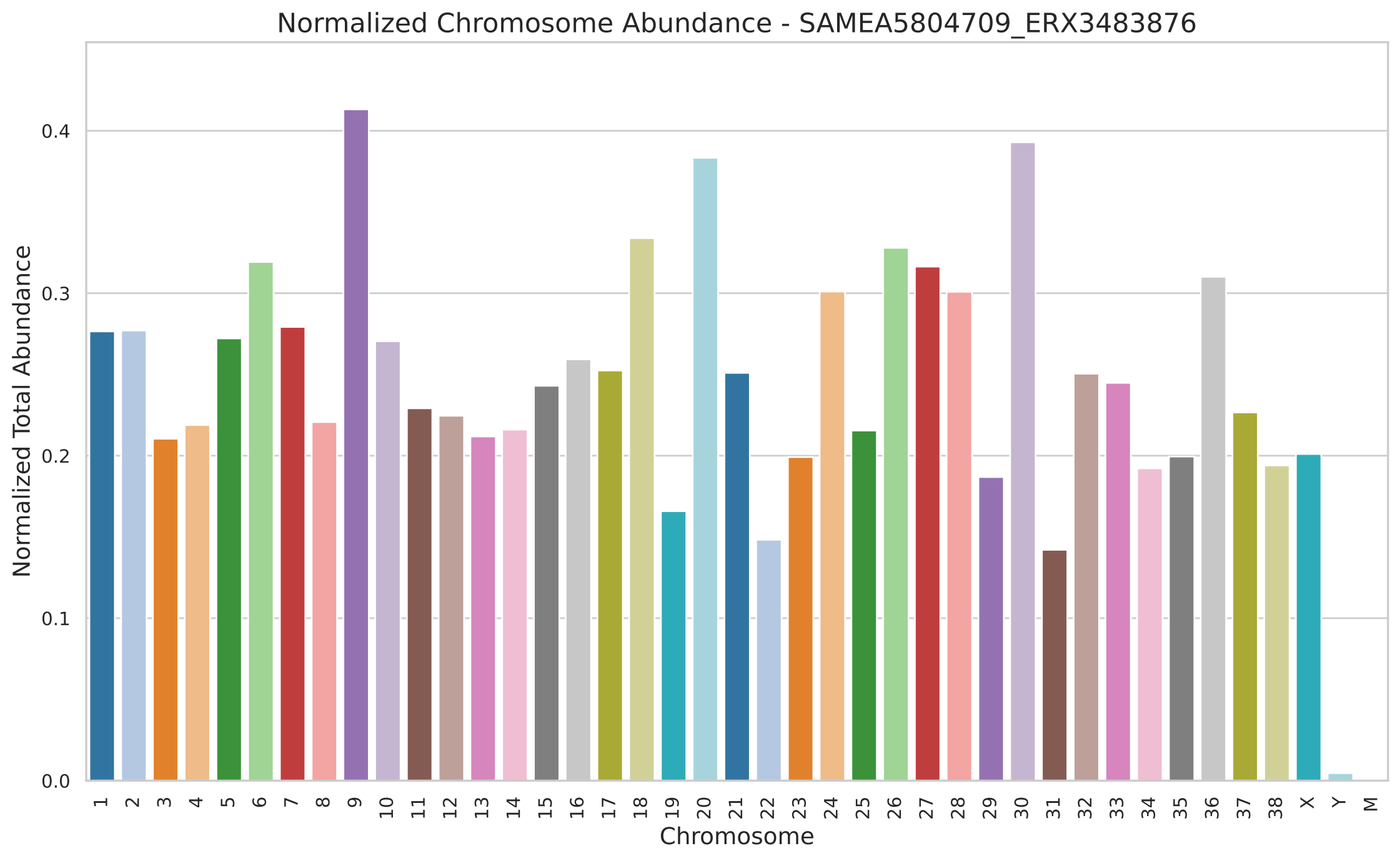

Normalized Chromosome Abundance - SAMEA5804734_ERX3483879
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

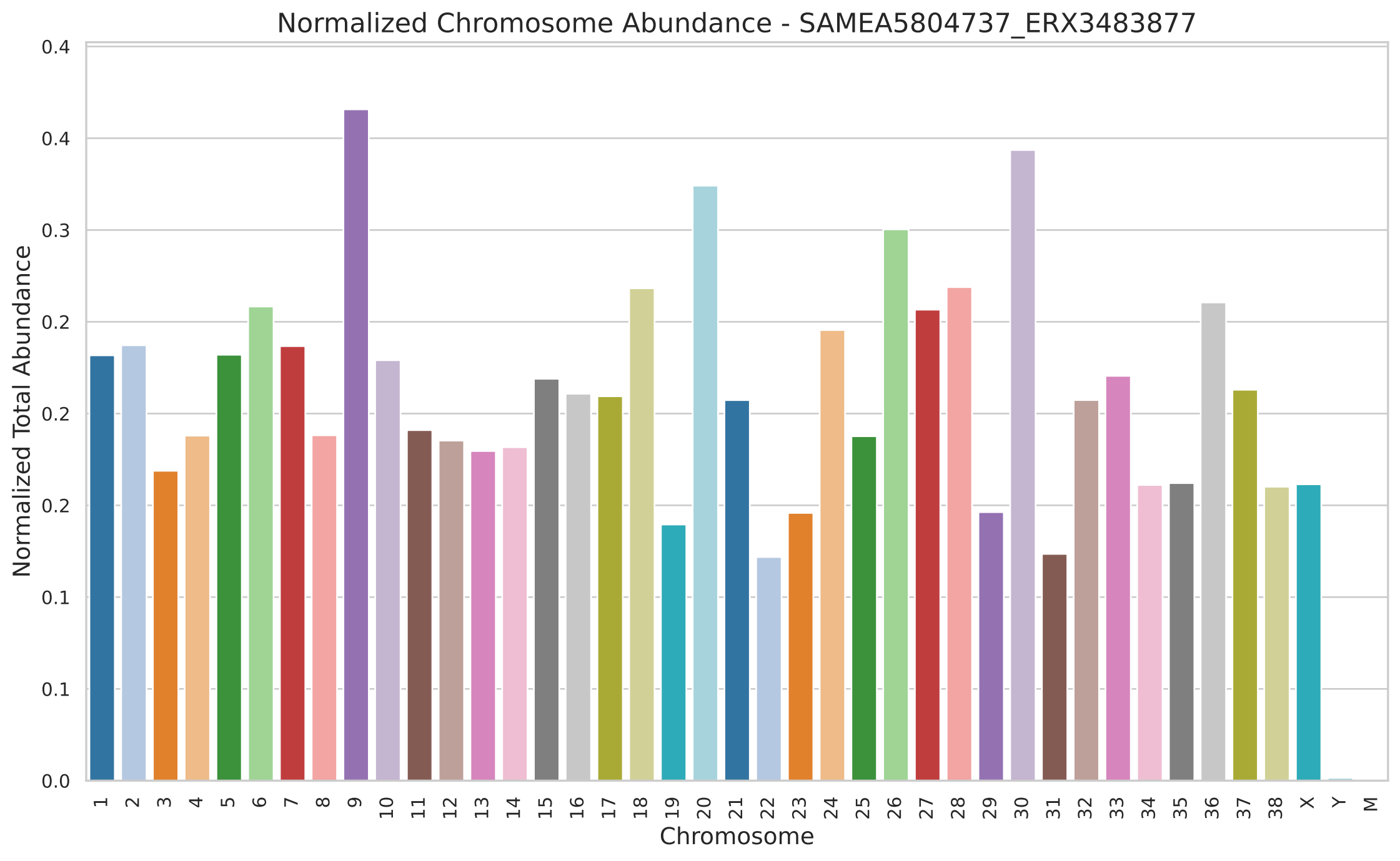

Normalized Chromosome Abundance - SAMEA5804384_ERX3483797
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

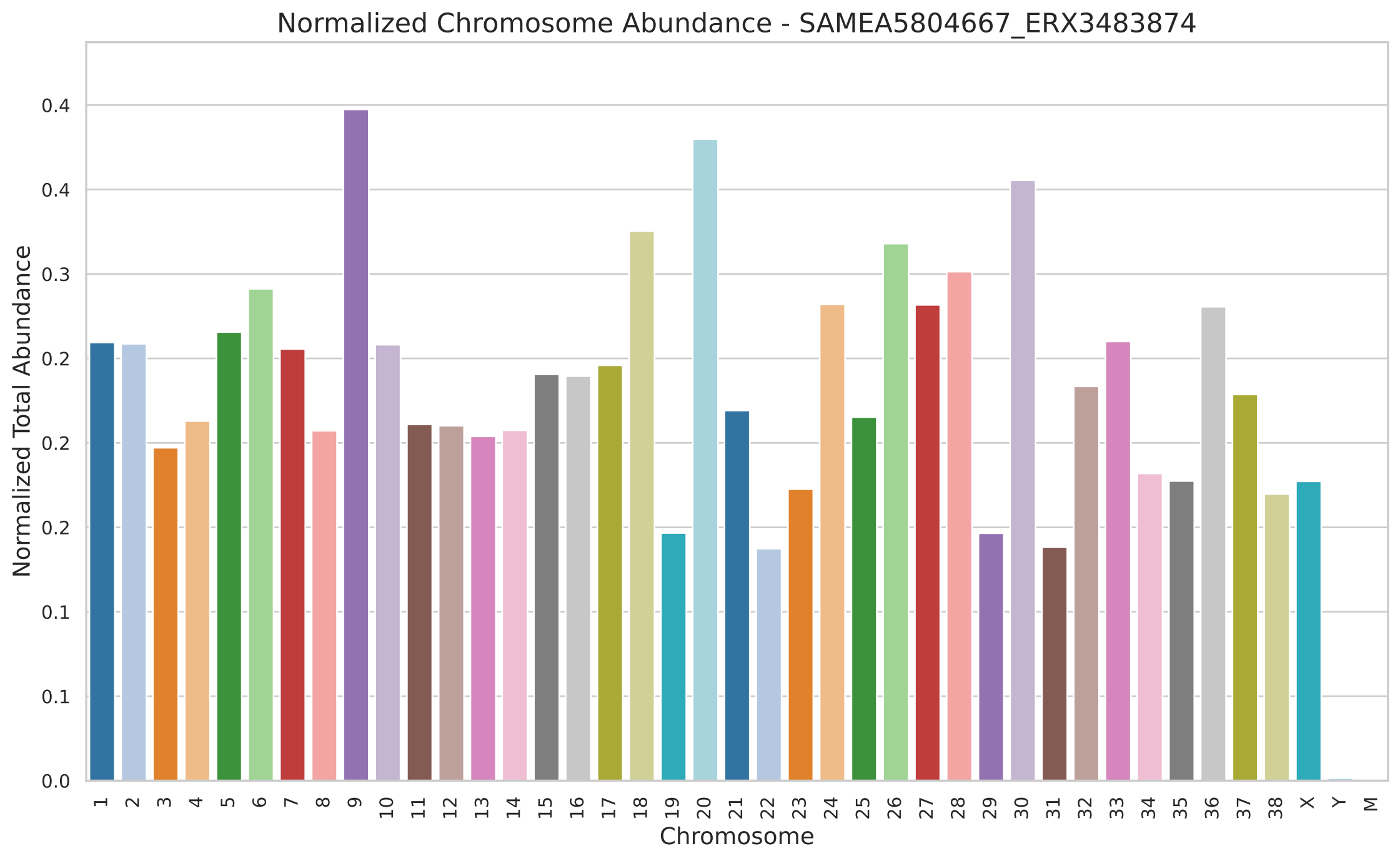

Normalized Chromosome Abundance - SAMEA5804652_ERX3483871
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

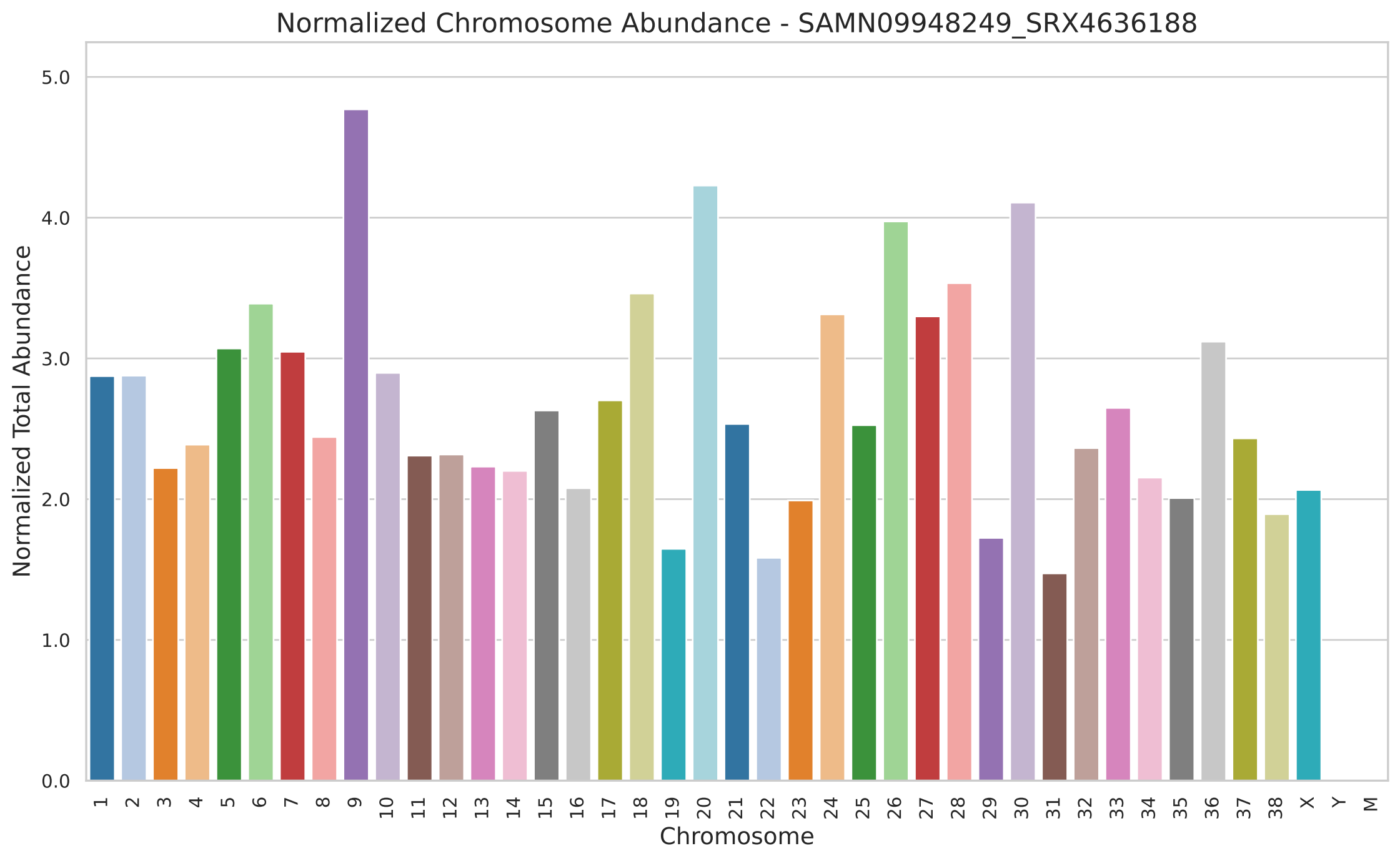

Normalized Chromosome Abundance - SAMEA5804546_ERX3483839
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

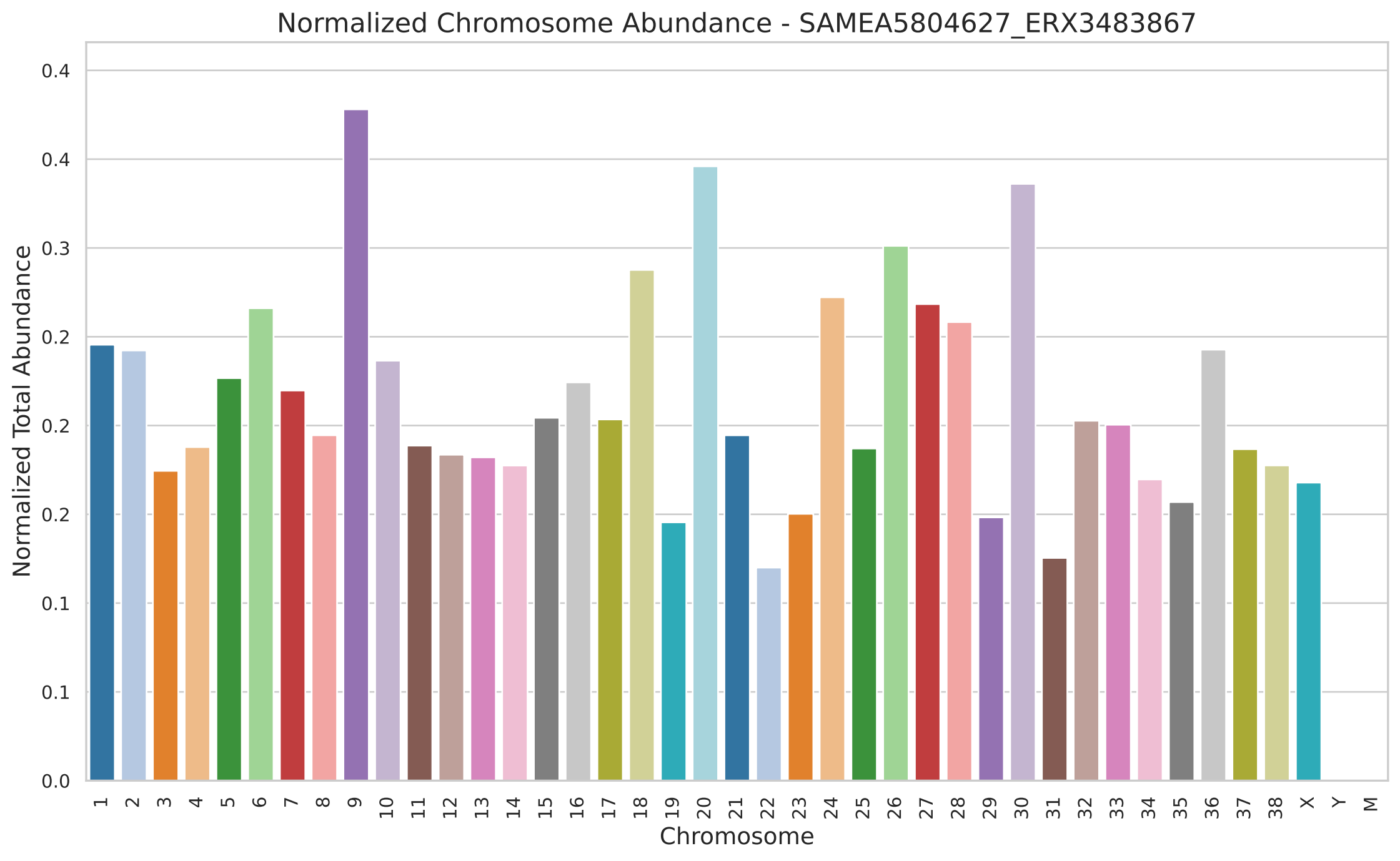

Normalized Chromosome Abundance - SAMEA5804520_ERX3483853
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

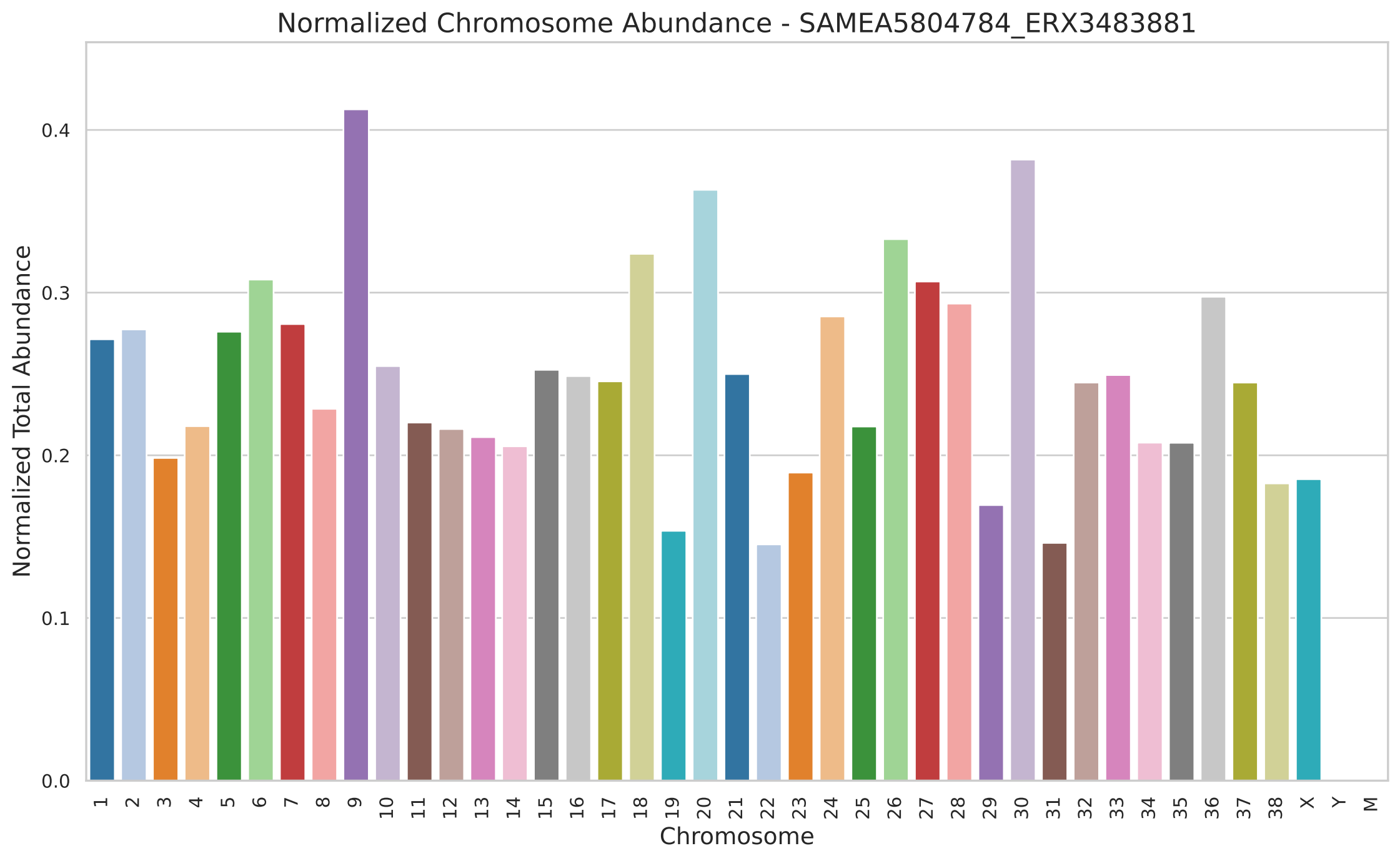

Normalized Chromosome Abundance - SAMEA5804709_ERX3483876
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

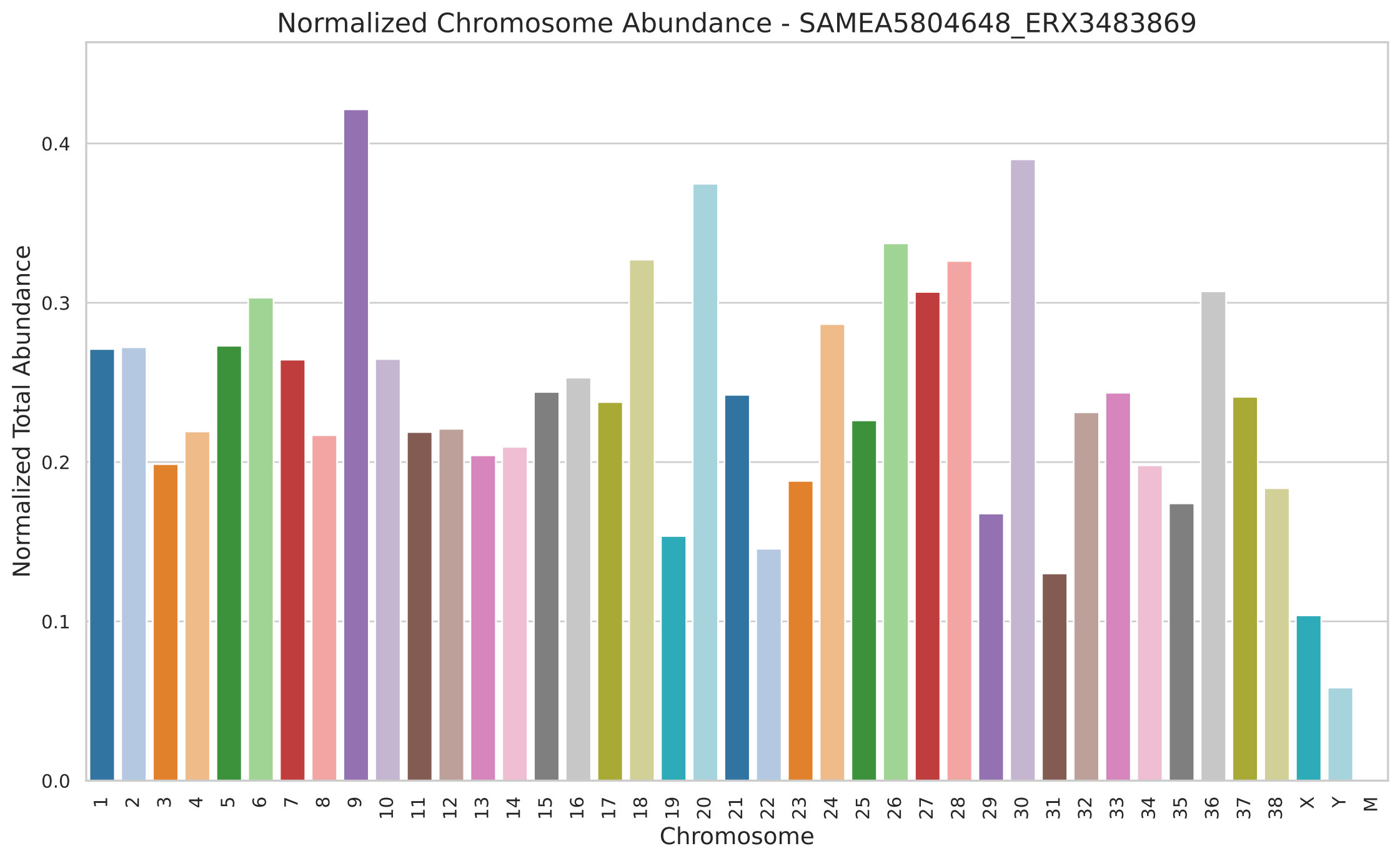

Normalized Chromosome Abundance - SAMEA5804737_ERX3483877
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

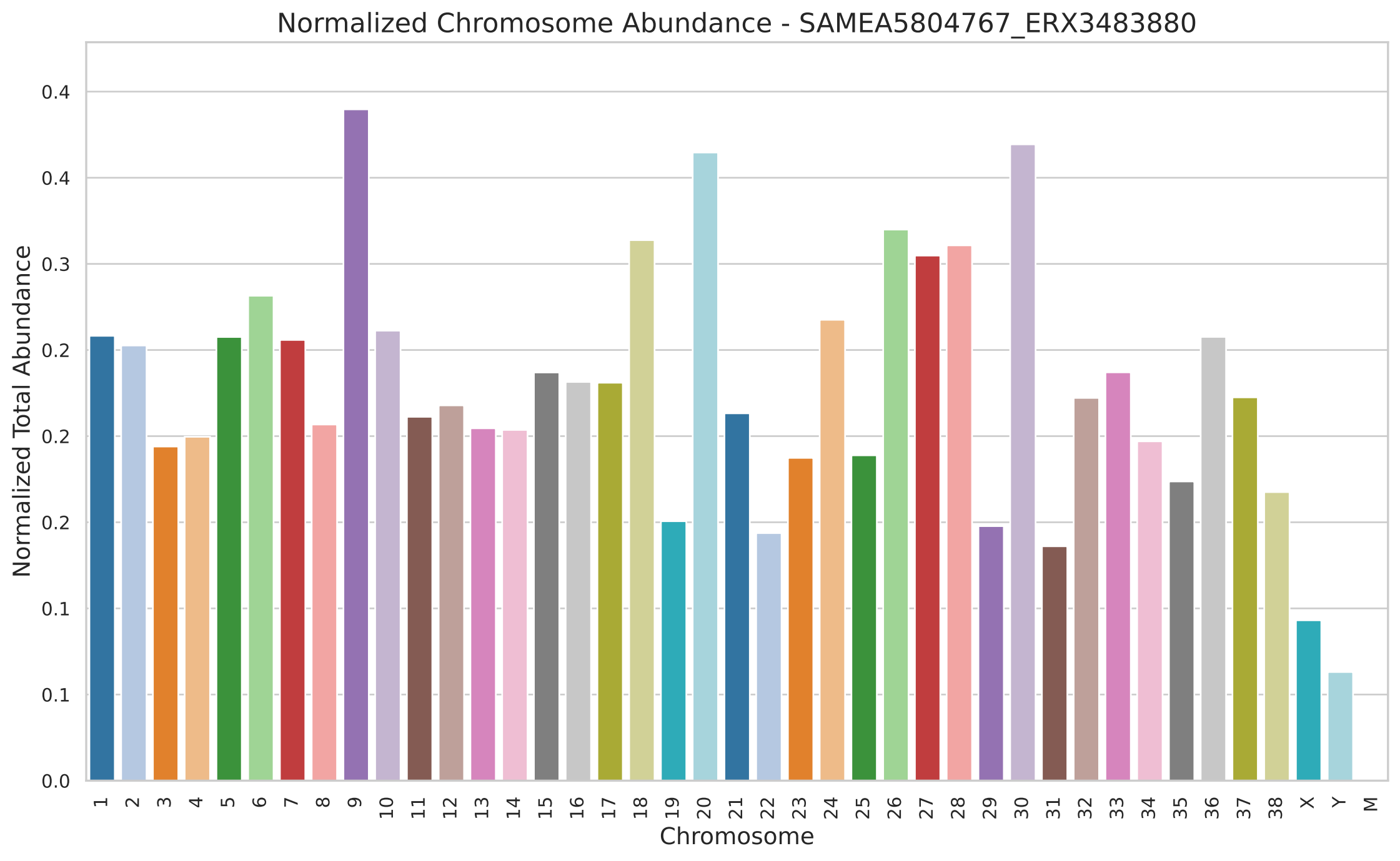

Normalized Chromosome Abundance - SAMEA5804667_ERX3483874
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

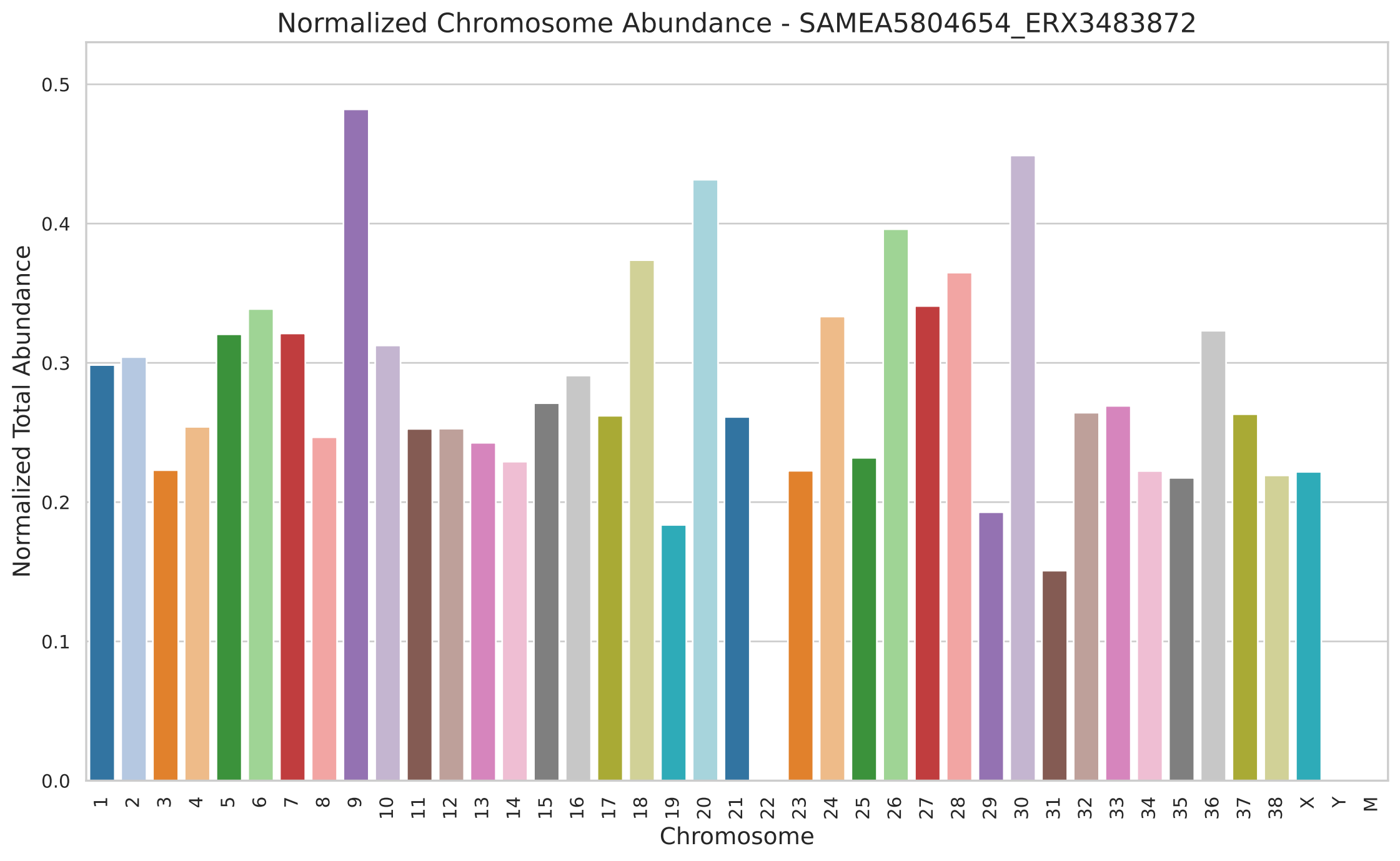

Normalized Chromosome Abundance - SAMN09948249_SRX4636188
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

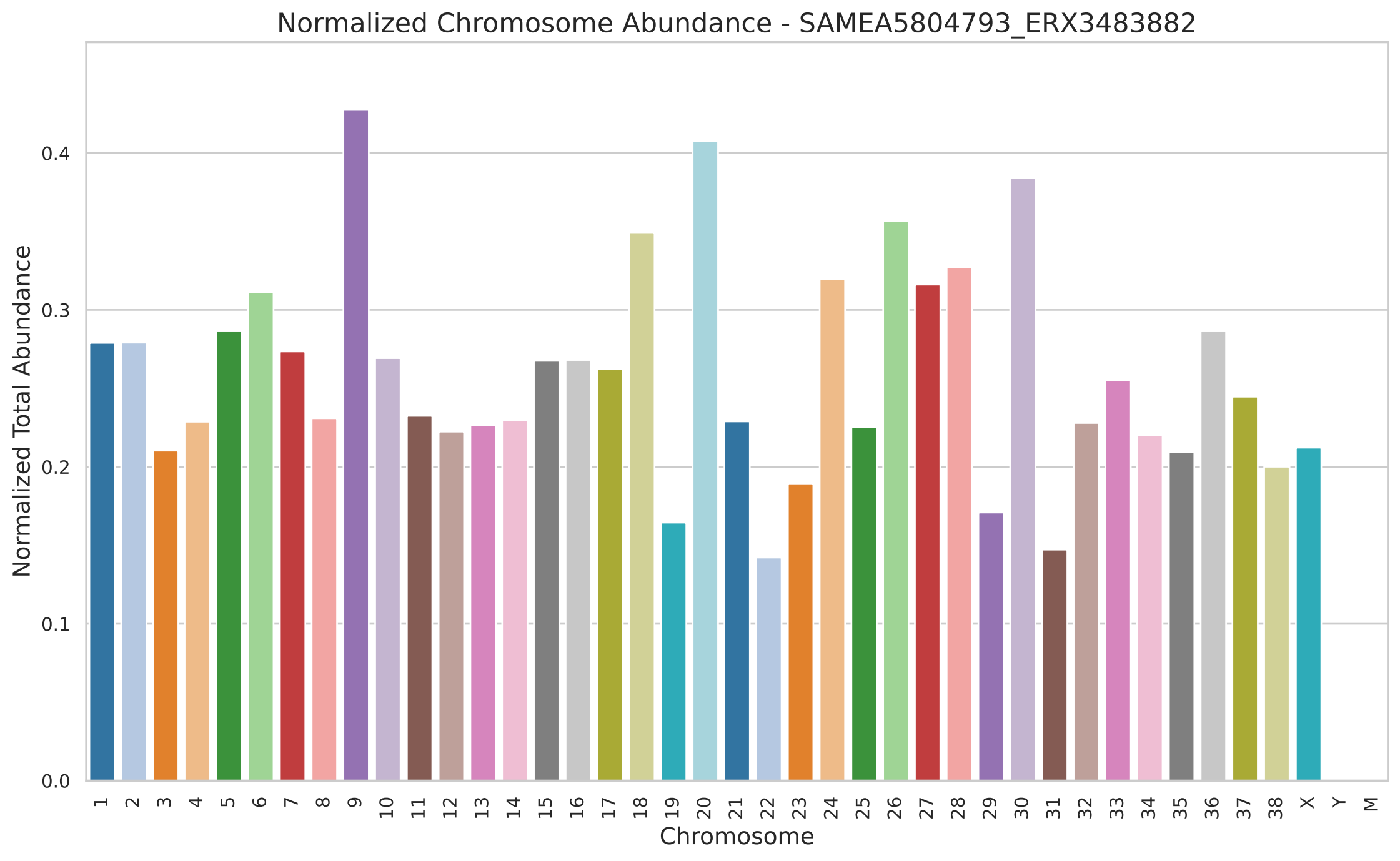

Normalized Chromosome Abundance - SAMEA5804627_ERX3483867
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
0.4
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

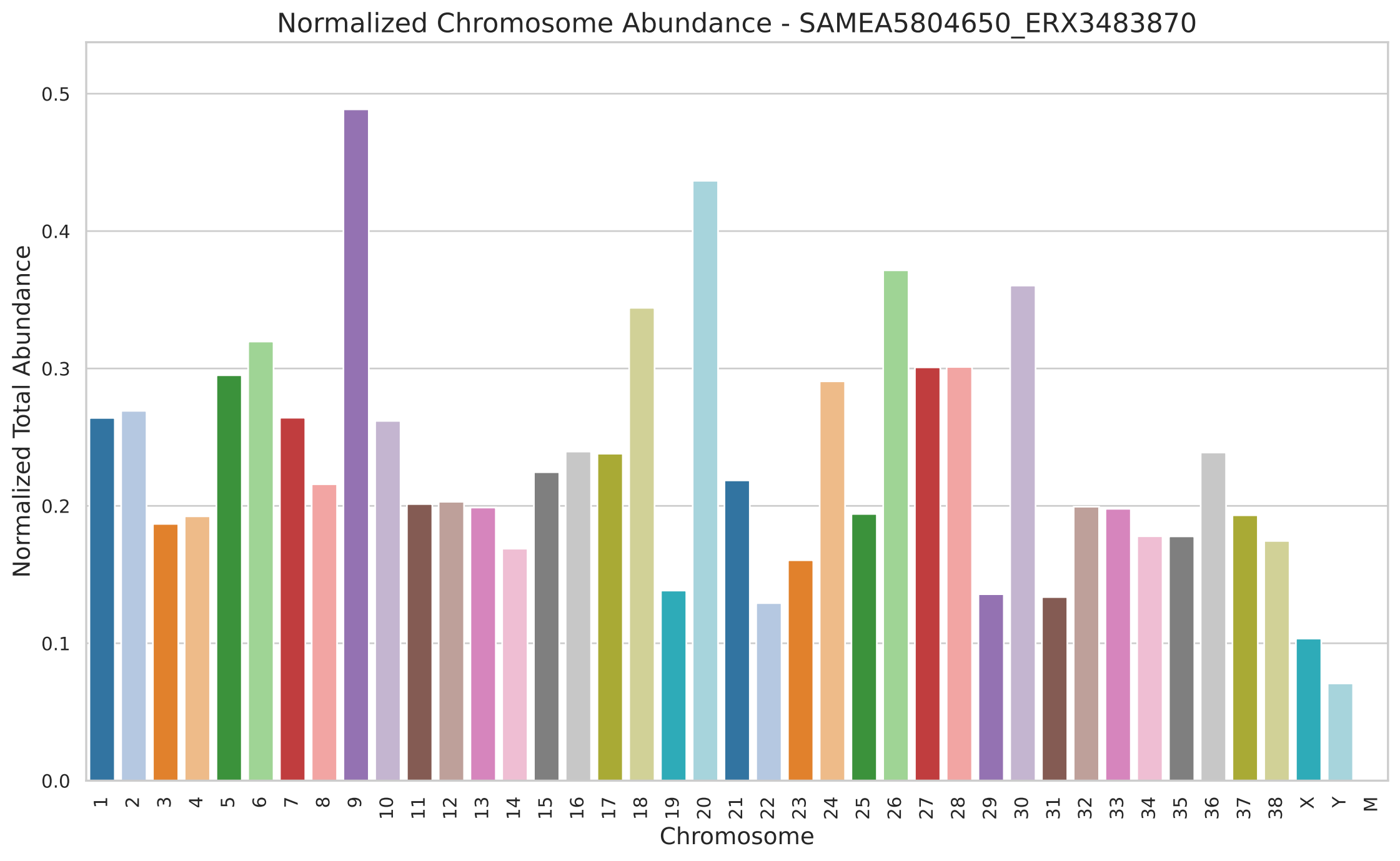

Normalized Chromosome Abundance - SAMEA5804784_ERX3483881
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

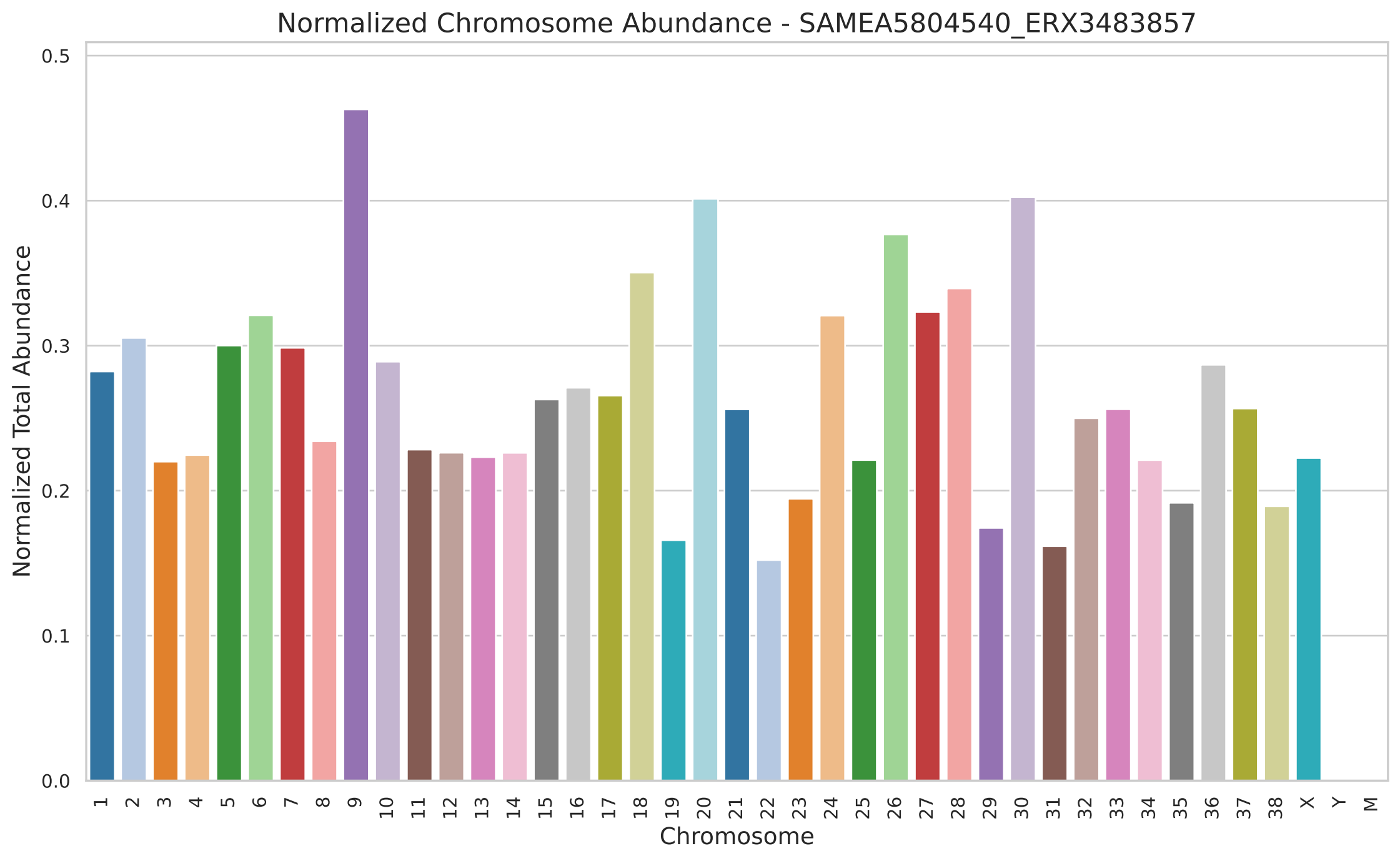

Normalized Chromosome Abundance - SAMEA5804648_ERX3483869
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

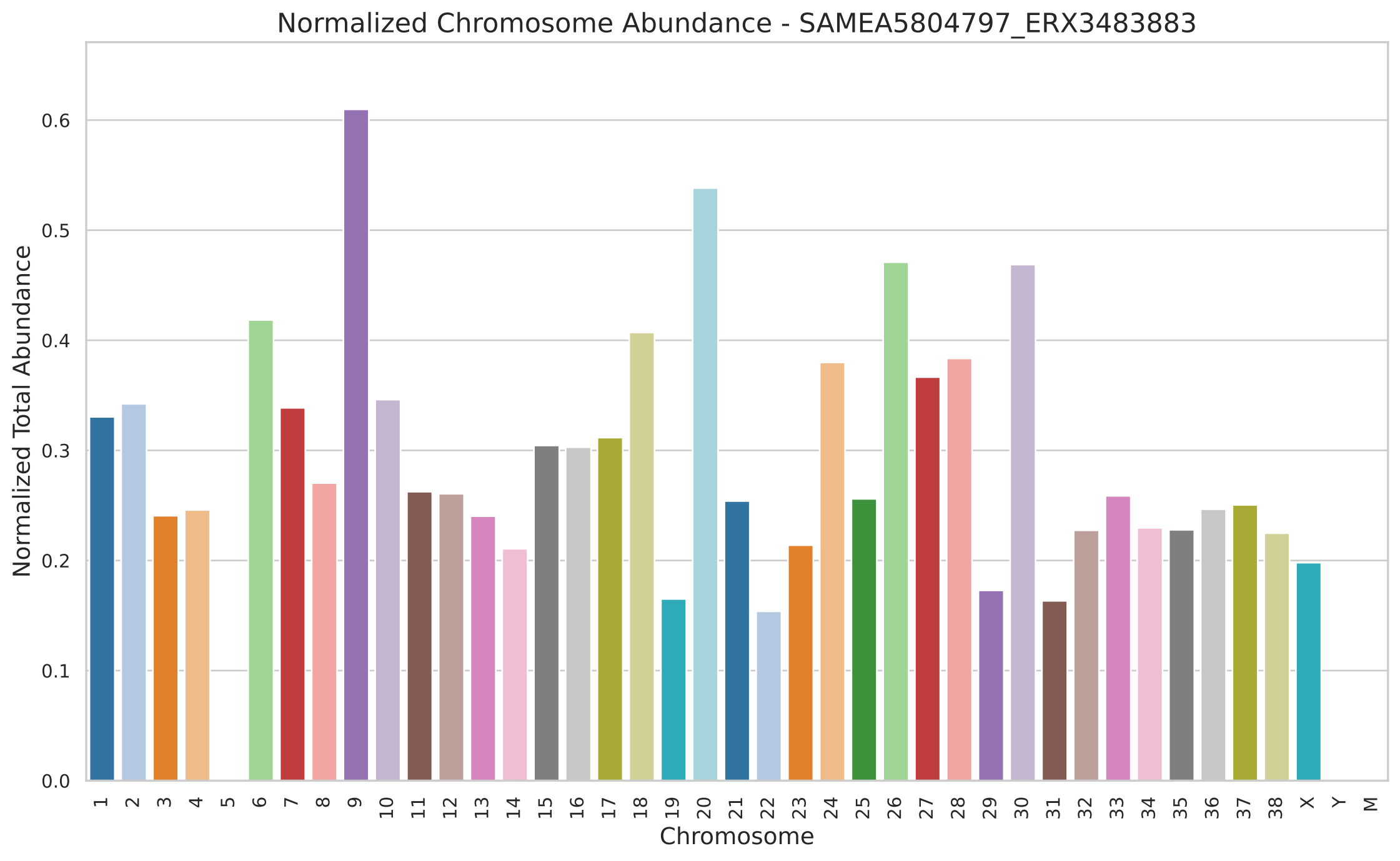

Normalized Chromosome Abundance - SAMEA5804767_ERX3483880
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

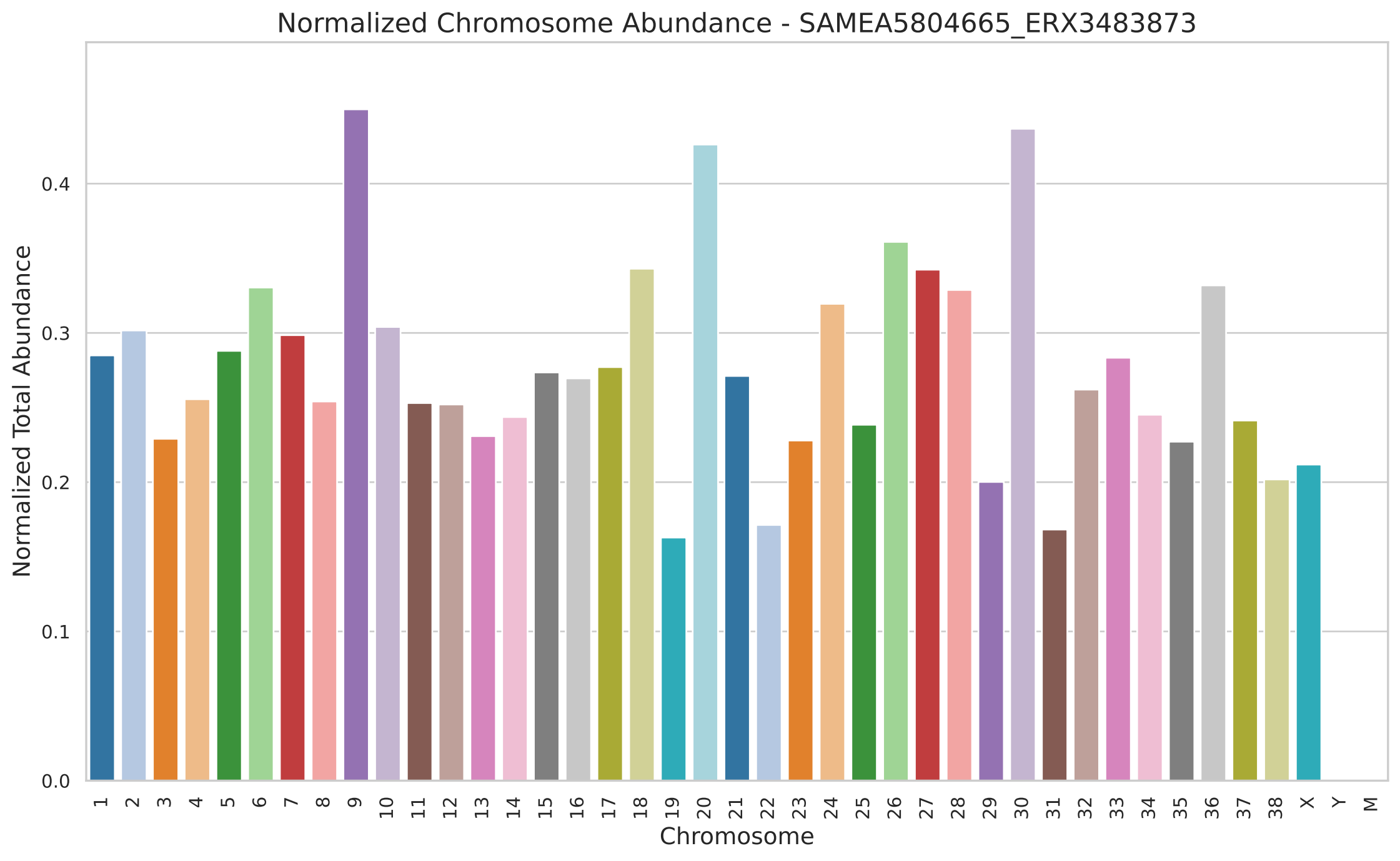

Normalized Chromosome Abundance - SAMEA5804654_ERX3483872
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

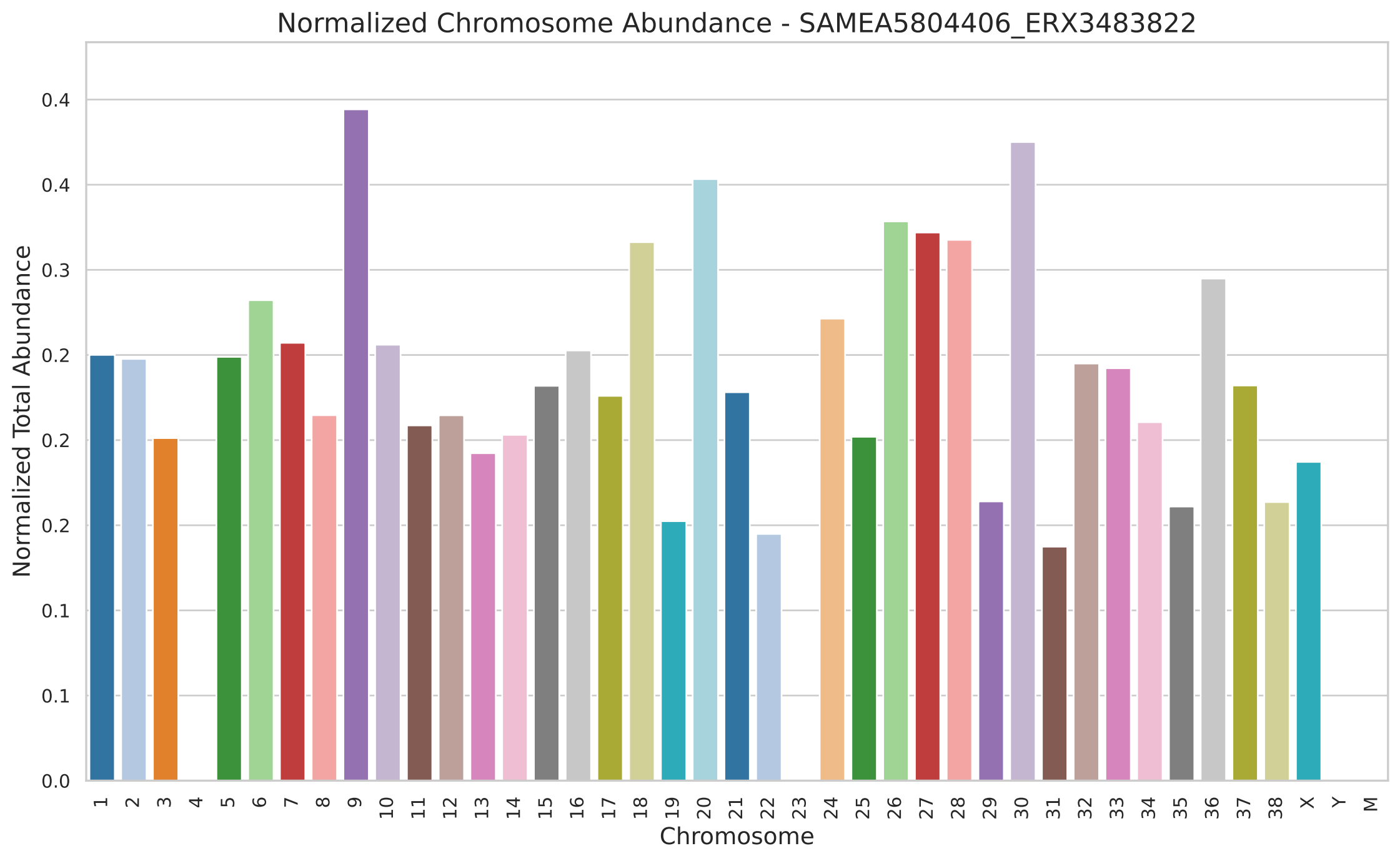

Normalized Chromosome Abundance - SAMEA5804793_ERX3483882
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

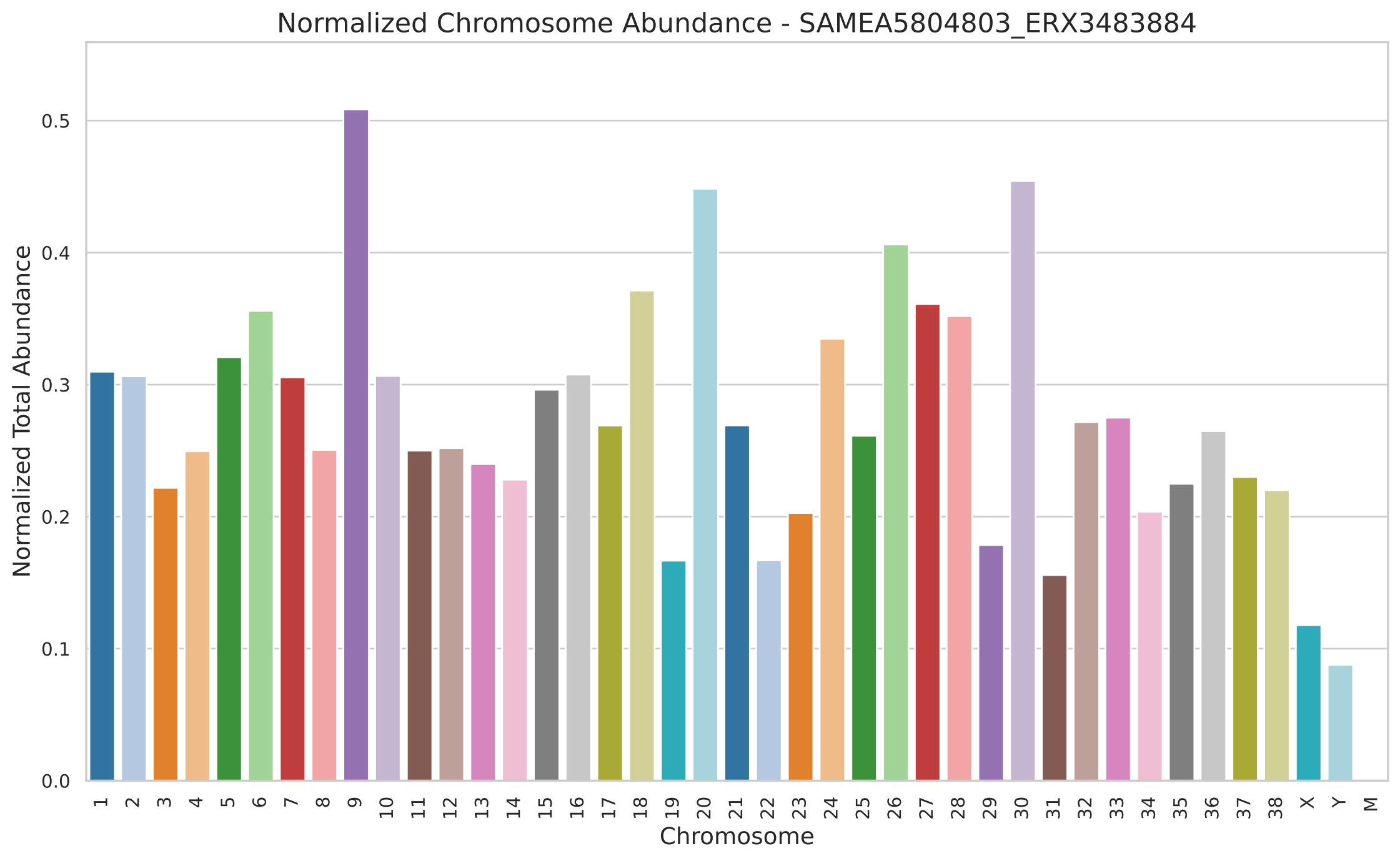

Normalized Chromosome Abundance - SAMEA5804650_ERX3483870
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

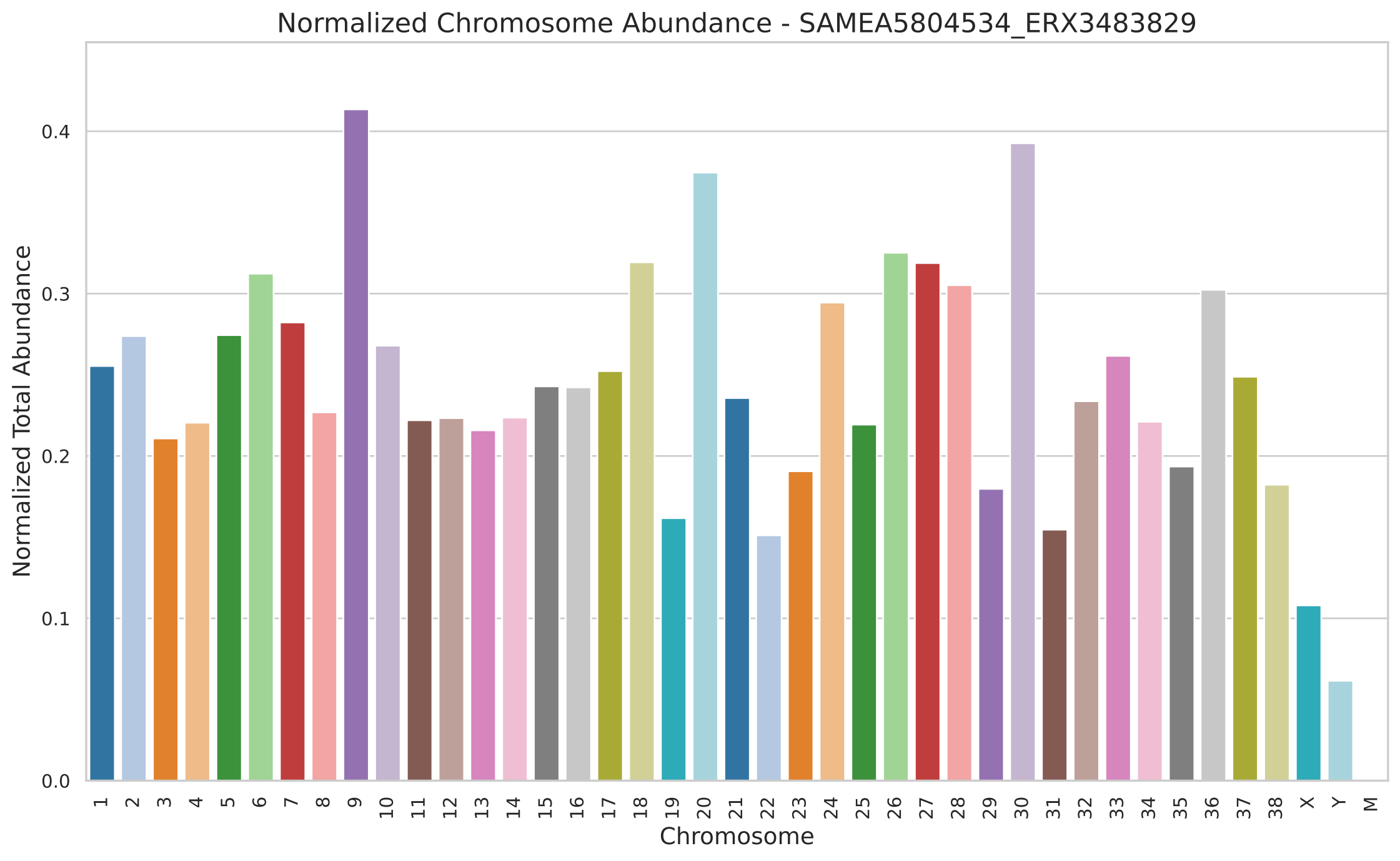

Normalized Chromosome Abundance - SAMEA5804540_ERX3483857
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

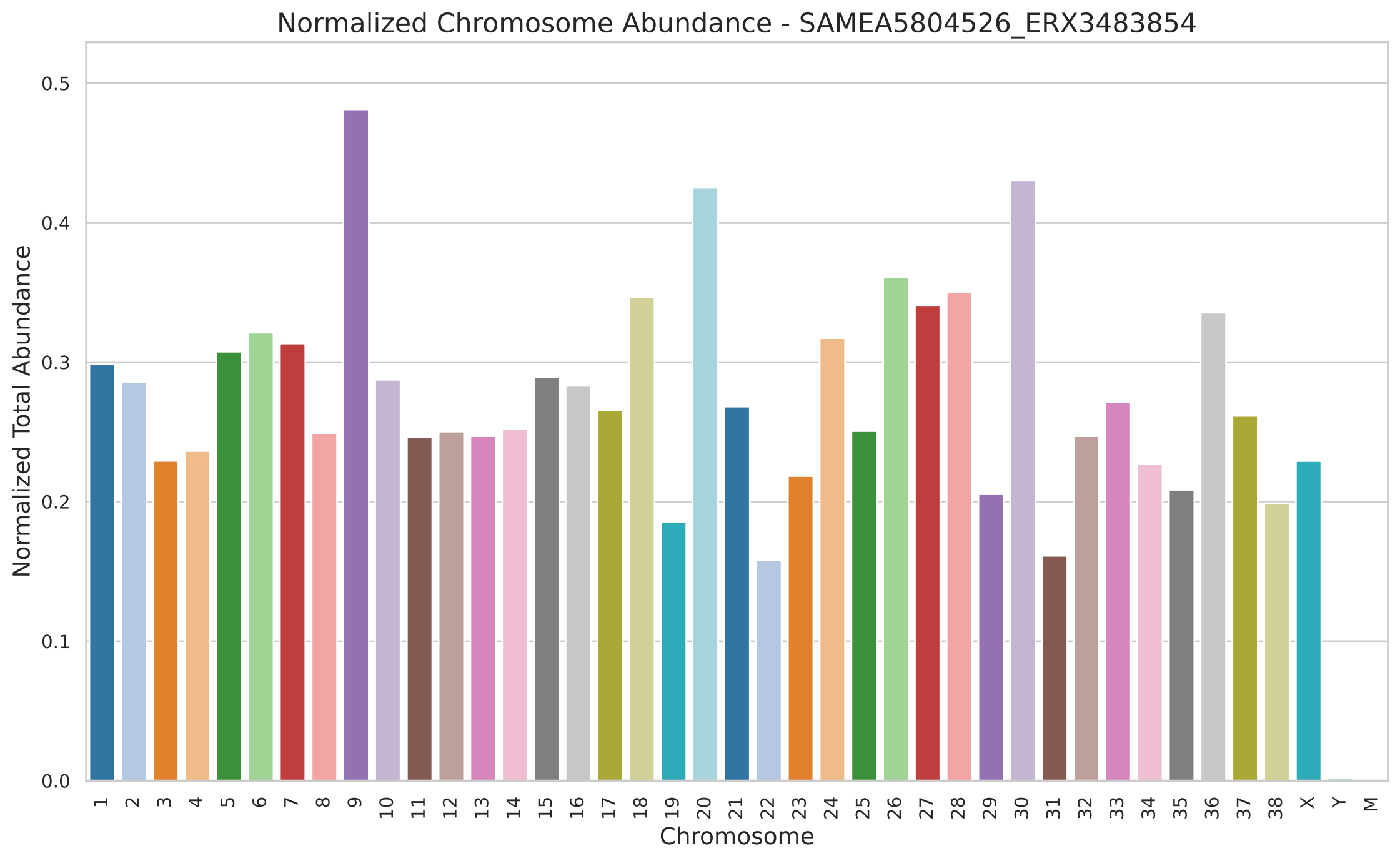

Normalized Chromosome Abundance - SAMEA5804797_ERX3483883
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

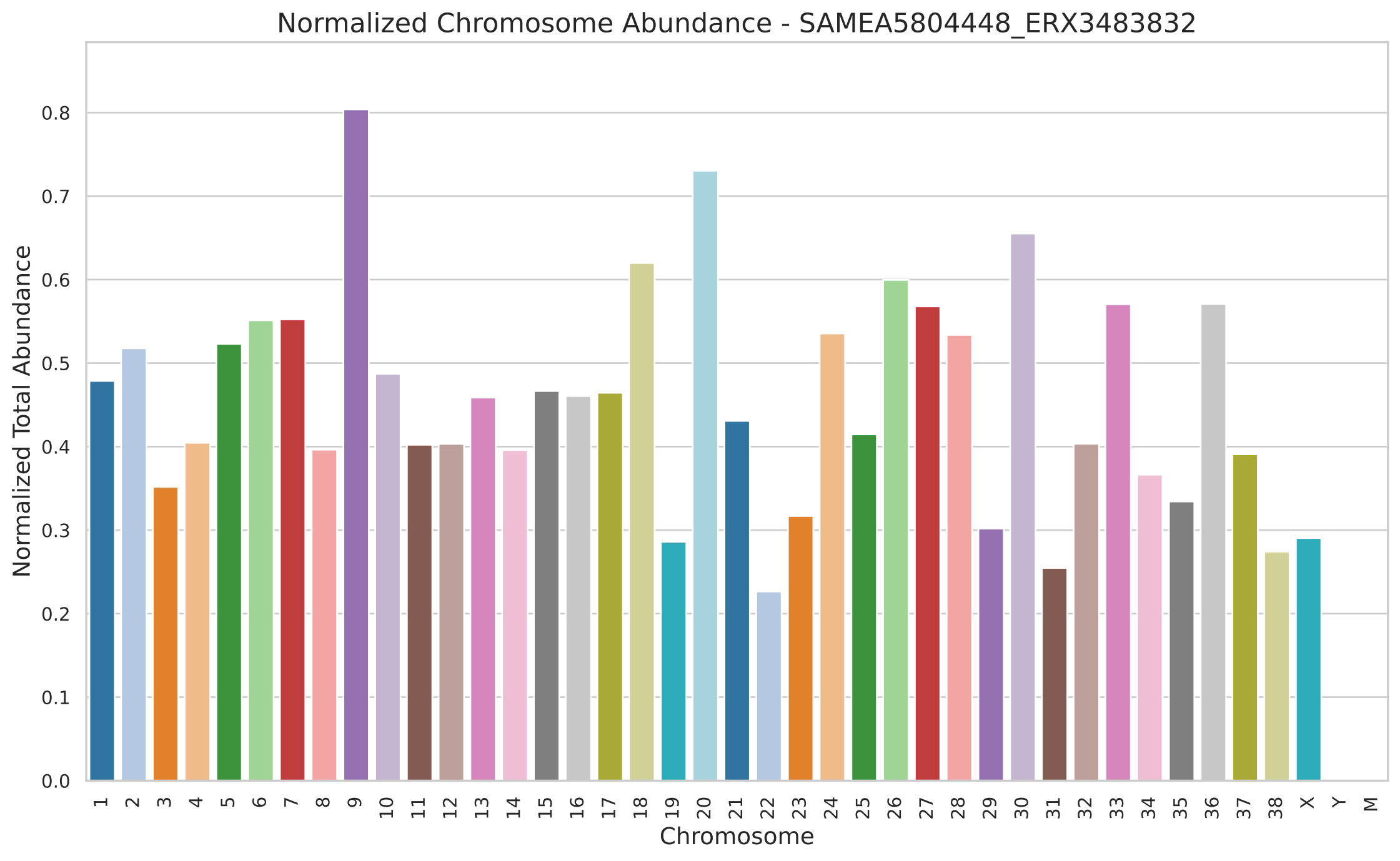

Normalized Chromosome Abundance - SAMEA5804665_ERX3483873
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

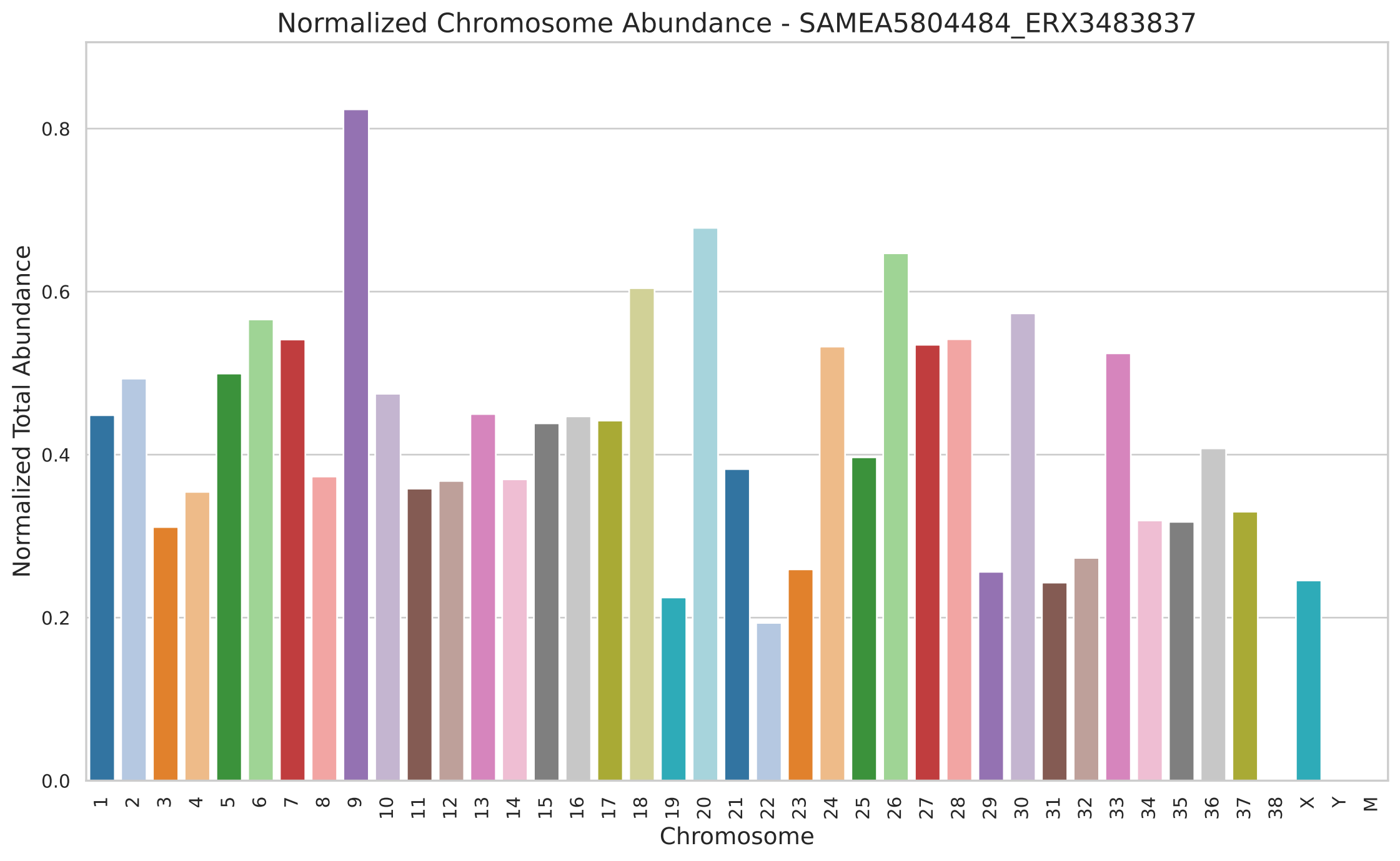

Normalized Chromosome Abundance - SAMEA5804406_ERX3483822
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

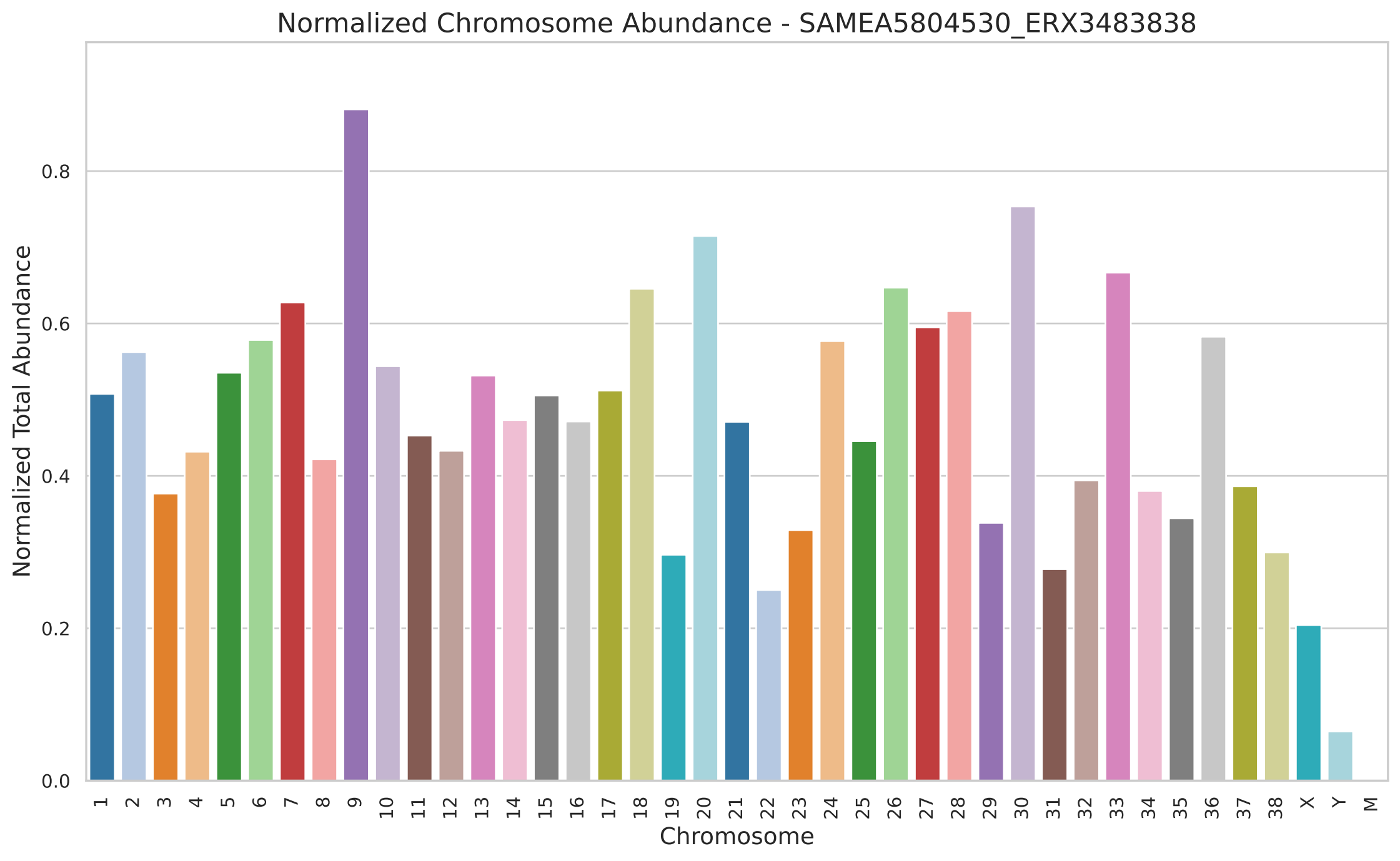

Normalized Chromosome Abundance - SAMEA5804803_ERX3483884
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

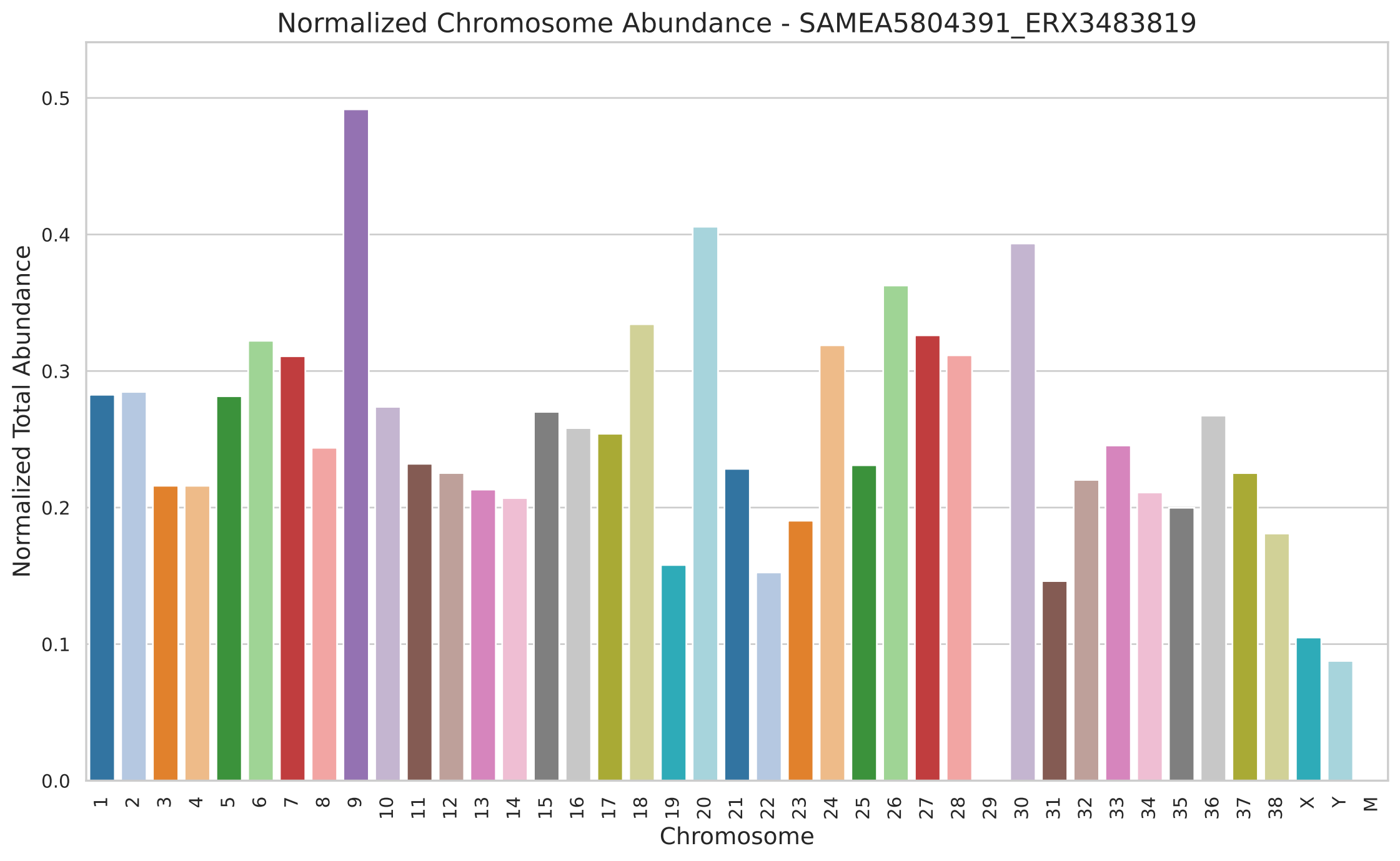

Normalized Chromosome Abundance - SAMEA5804534_ERX3483829
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

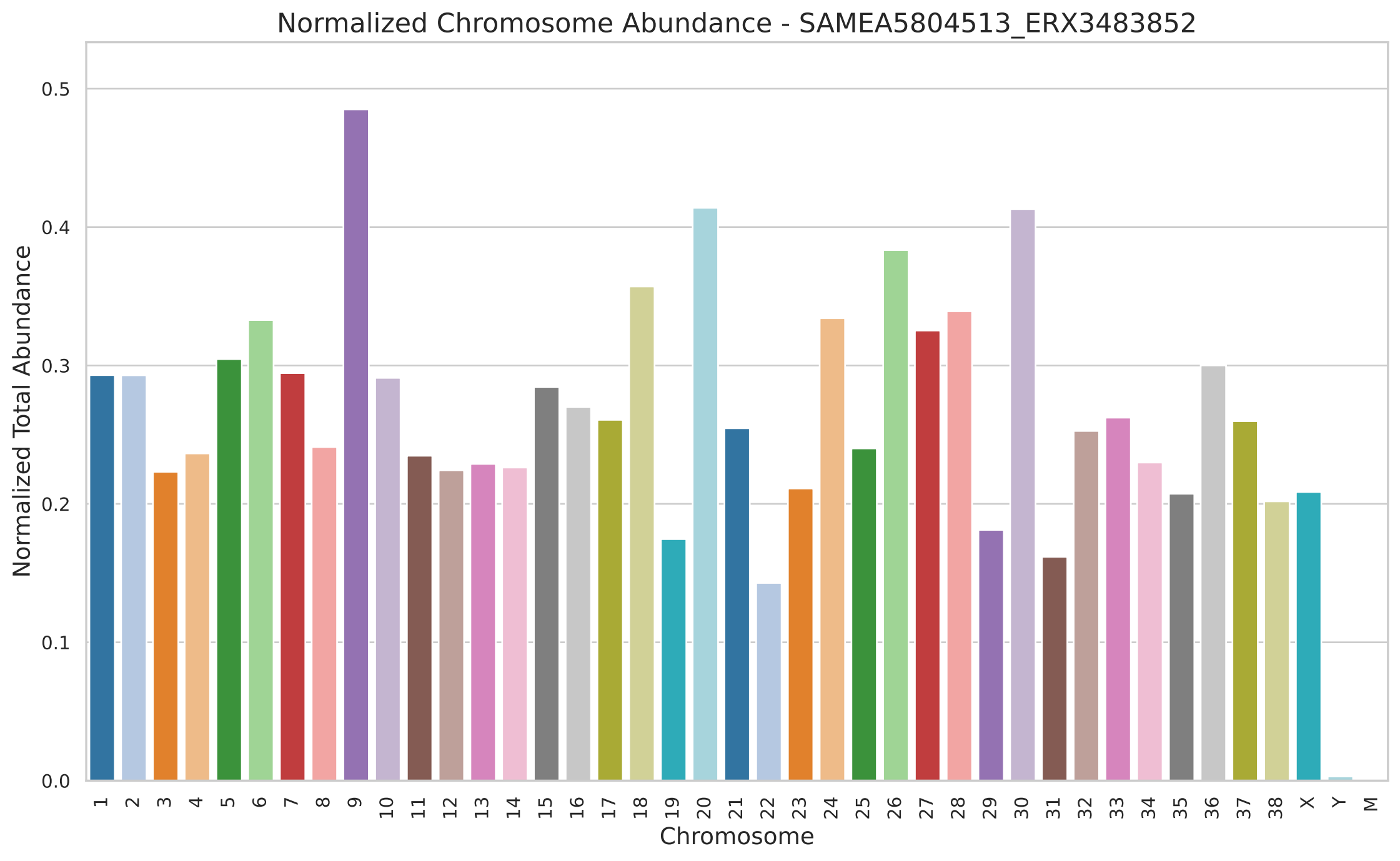

Normalized Chromosome Abundance - SAMEA5804526_ERX3483854
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

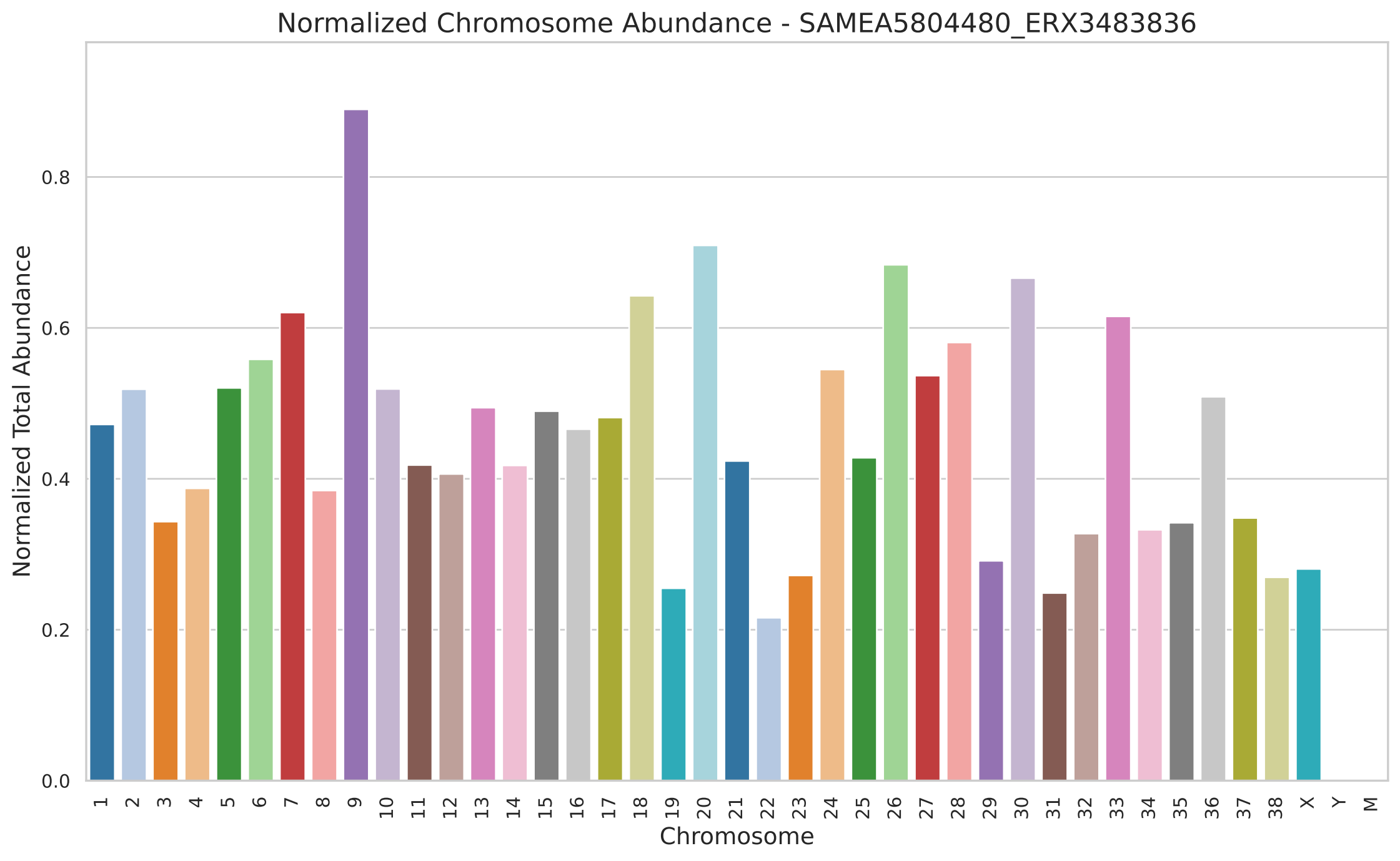

Normalized Chromosome Abundance - SAMEA5804448_ERX3483832
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

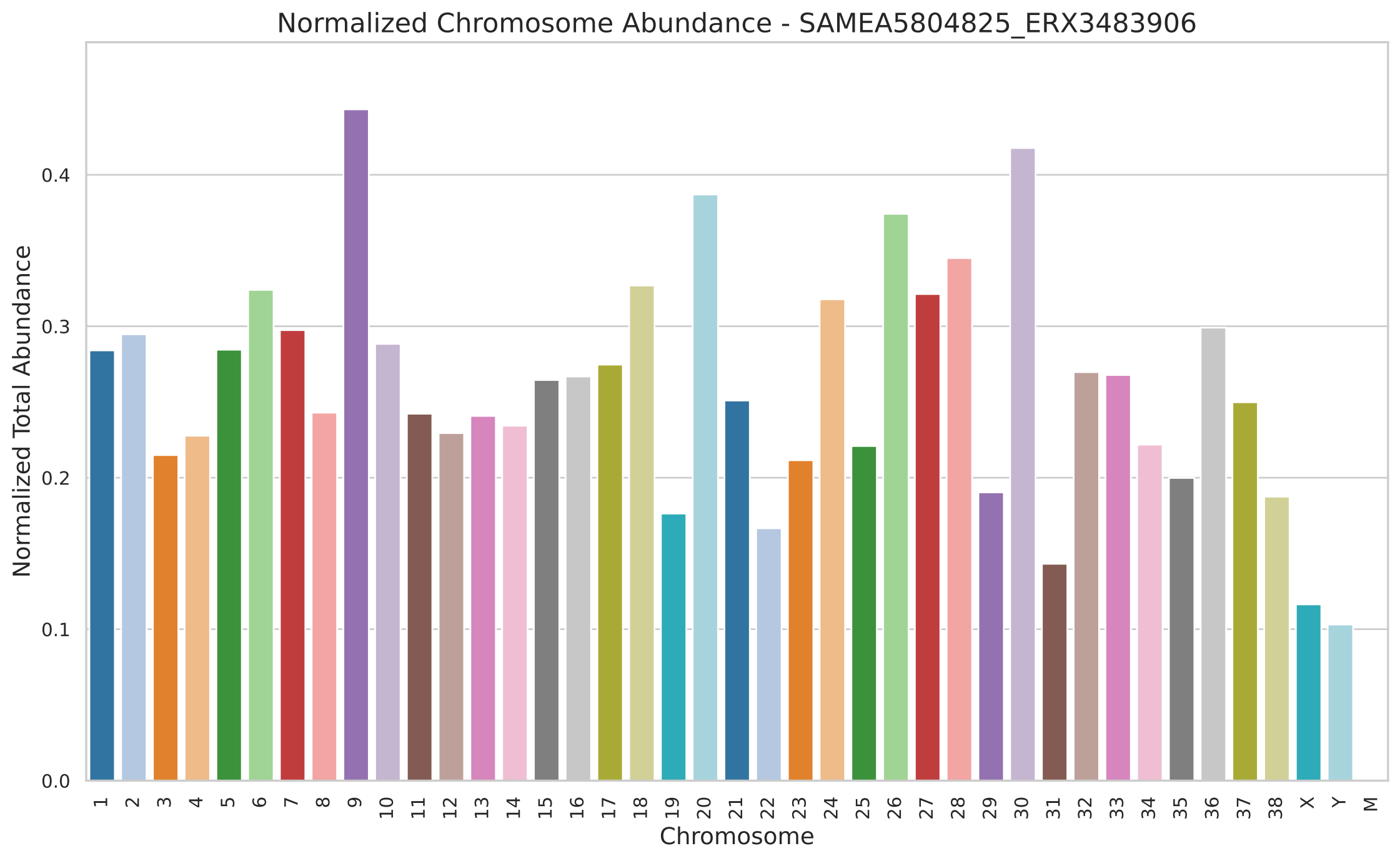

Normalized Chromosome Abundance - SAMEA5804484_ERX3483837
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

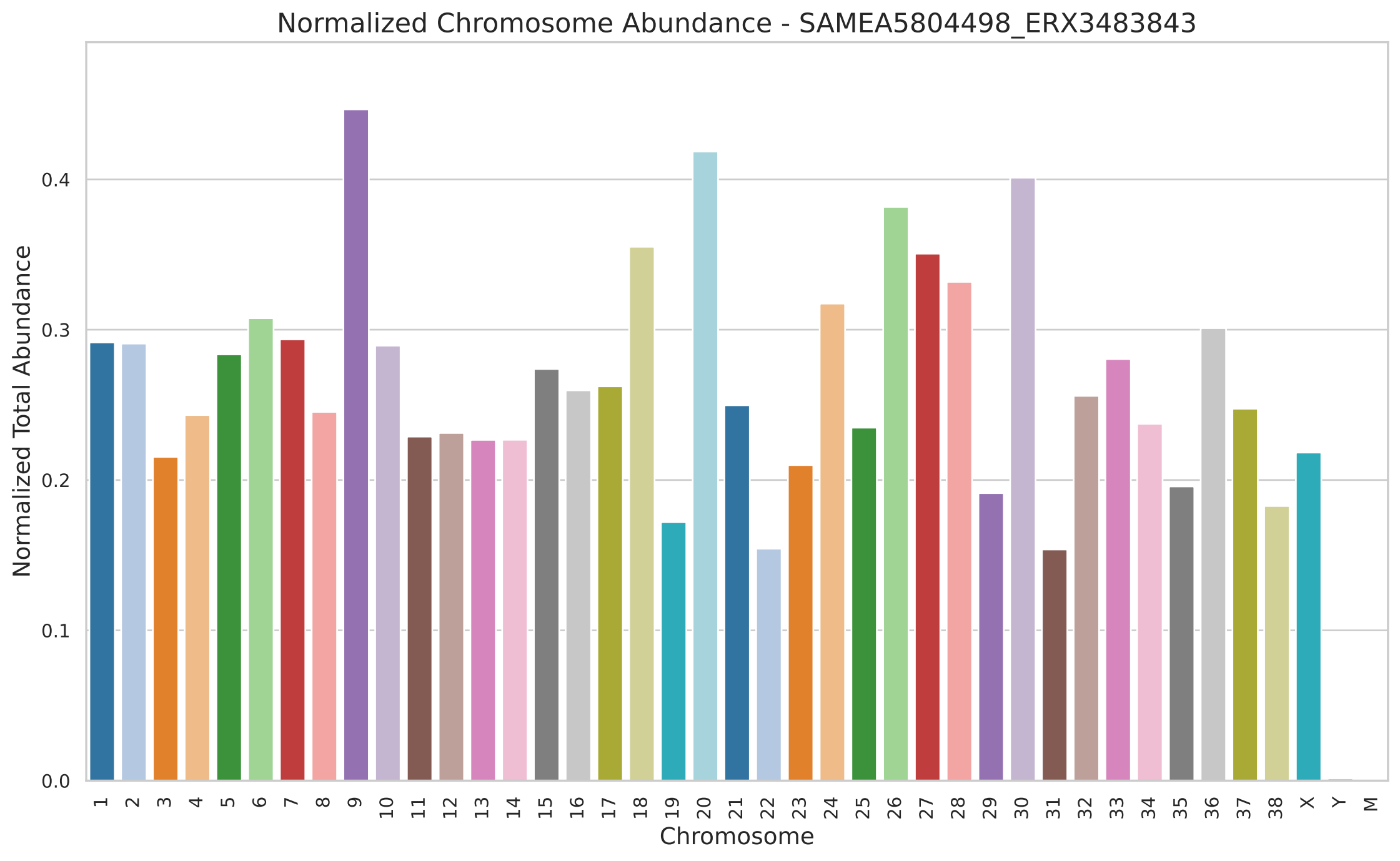

Normalized Chromosome Abundance - SAMEA5804530_ERX3483838
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

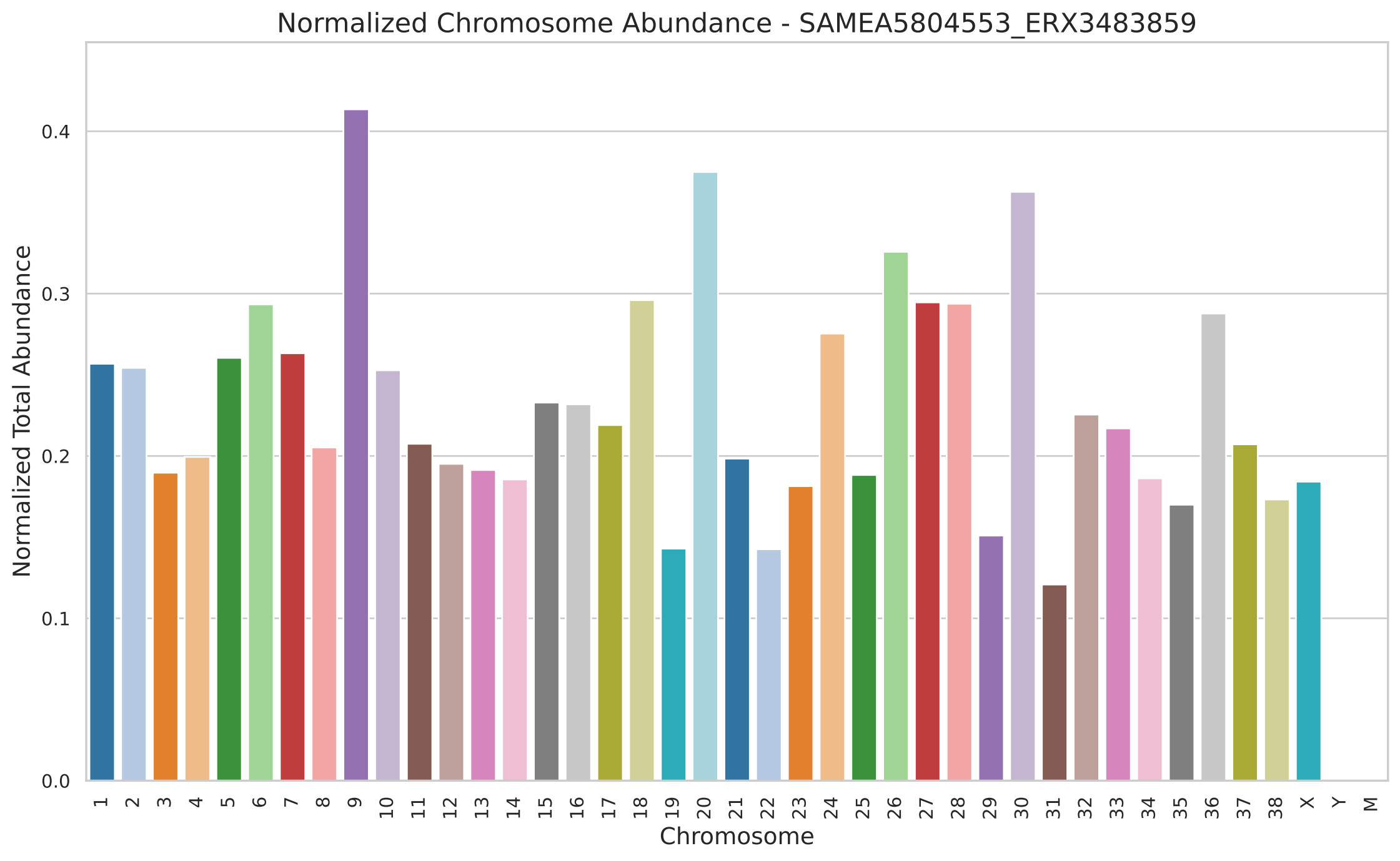

Normalized Chromosome Abundance - SAMEA5804391_ERX3483819
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

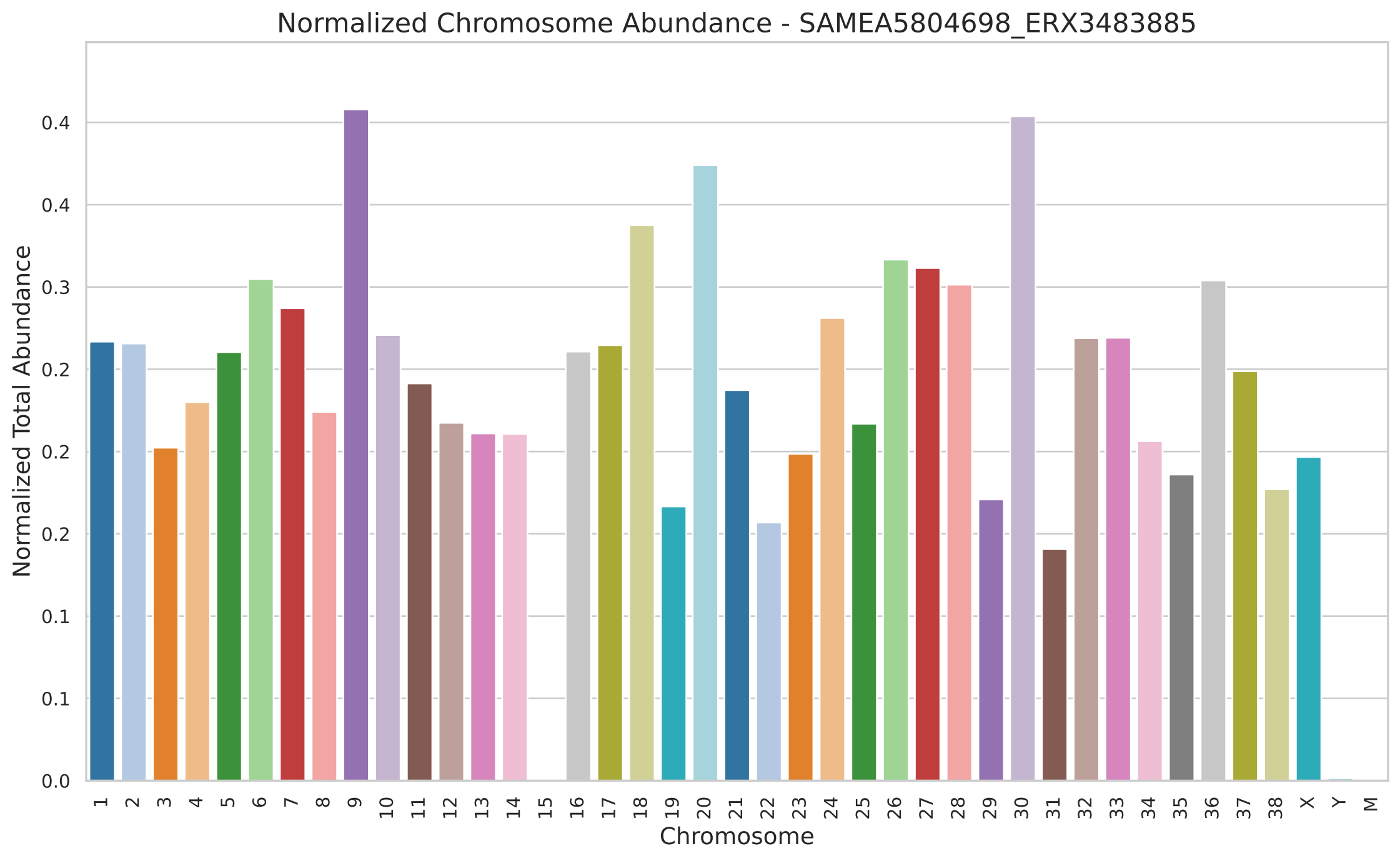

Normalized Chromosome Abundance - SAMEA5804513_ERX3483852
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

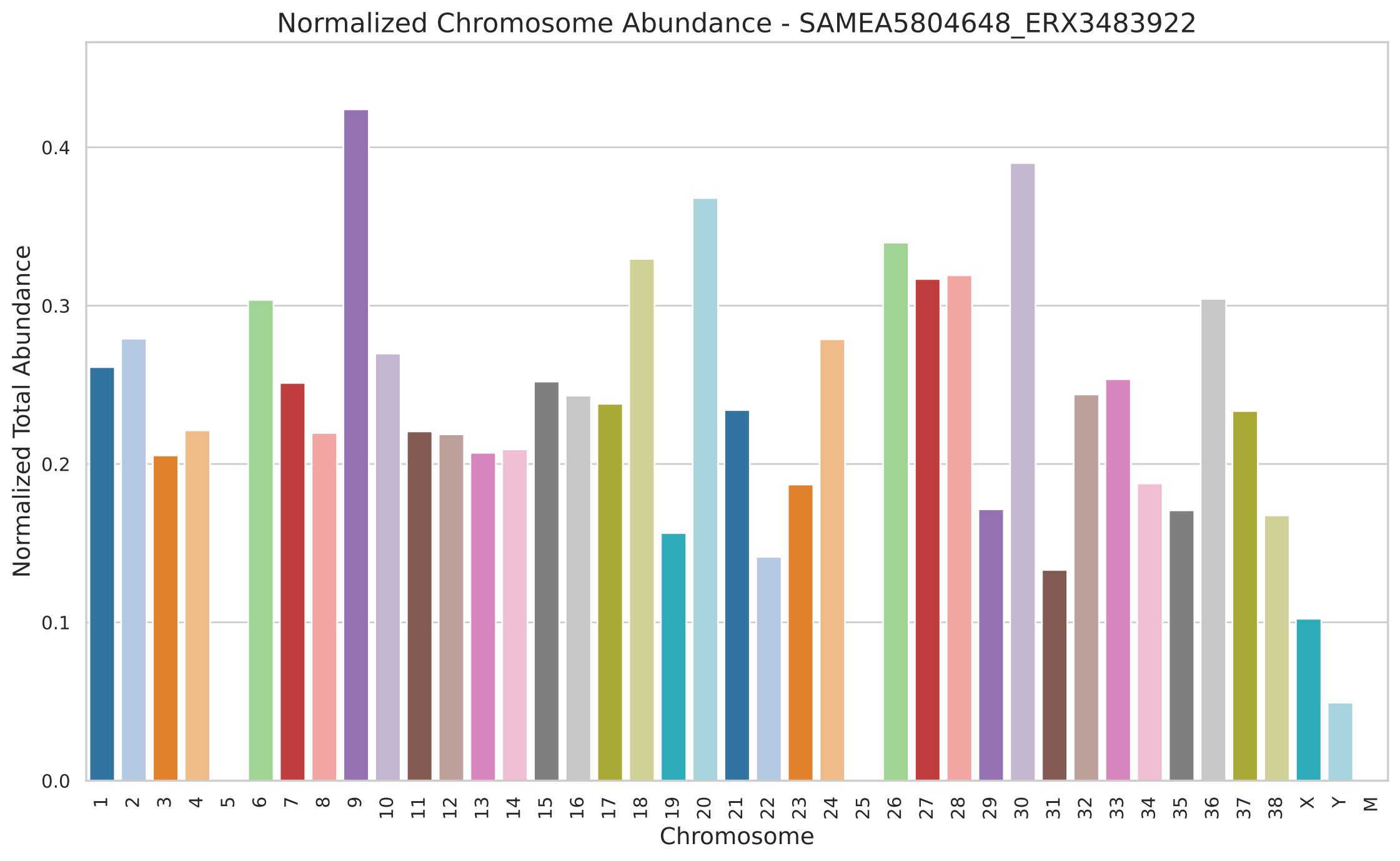

Normalized Chromosome Abundance - SAMEA5804480_ERX3483836
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

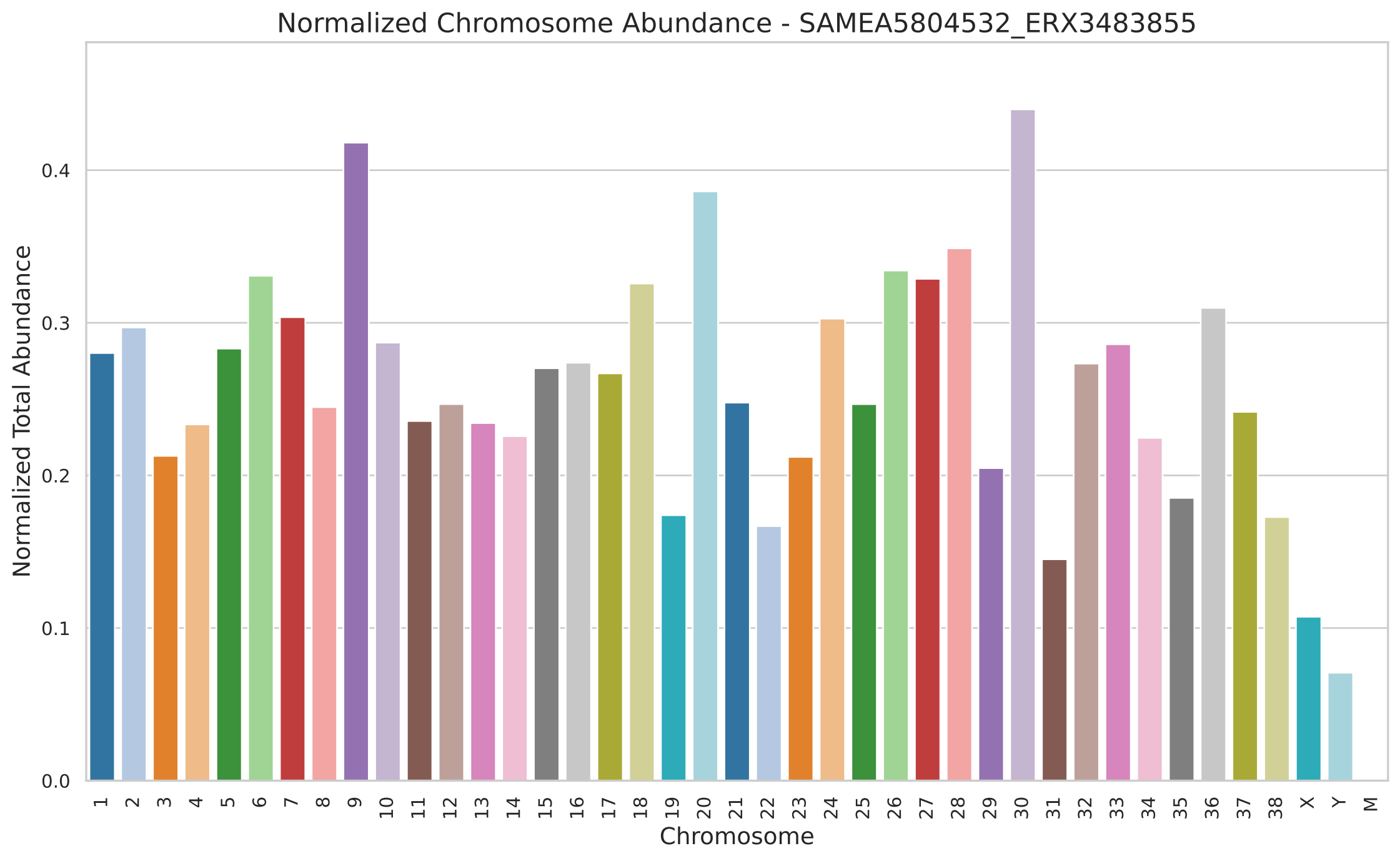

Normalized Chromosome Abundance - SAMEA5804825_ERX3483906
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

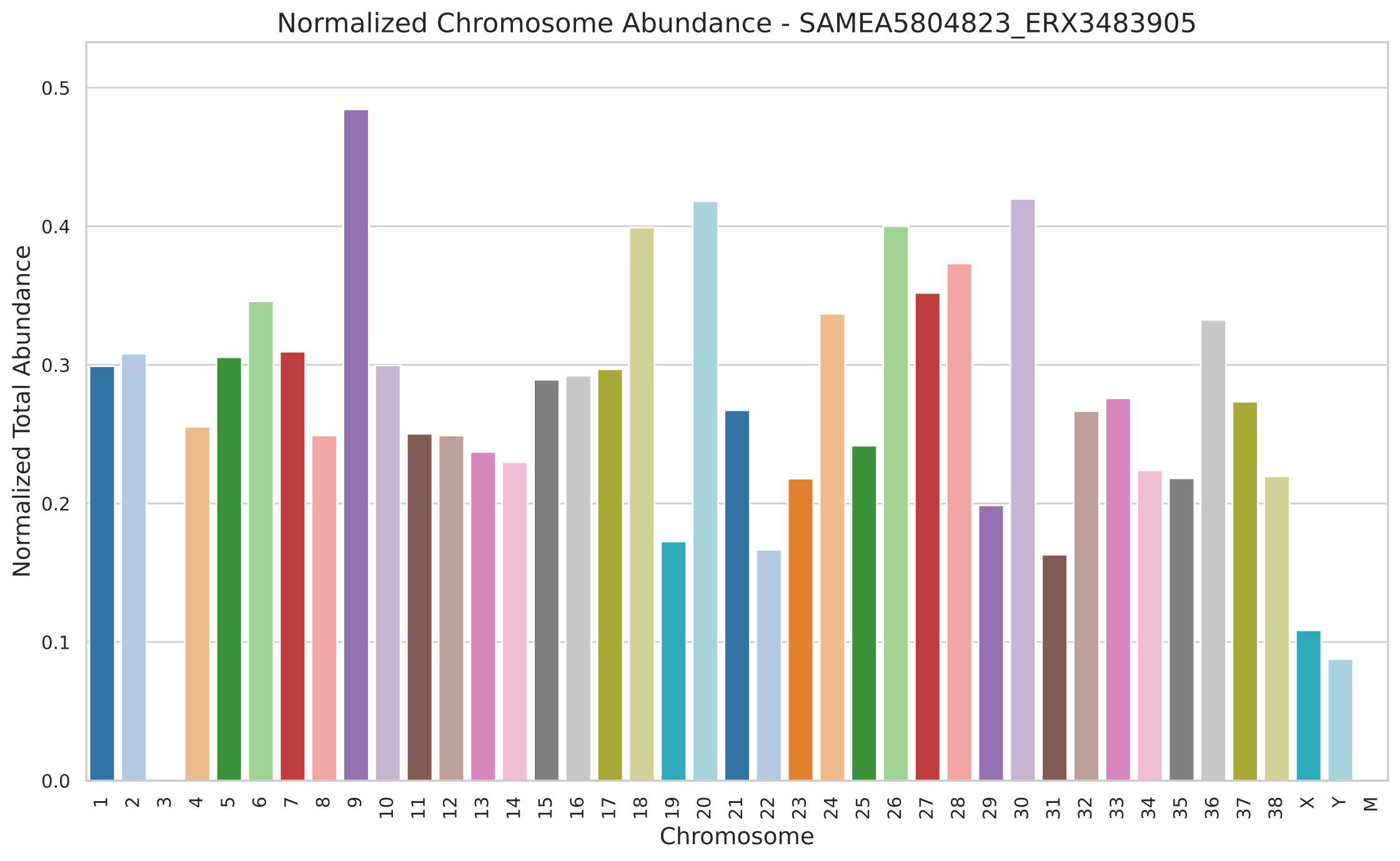

Normalized Chromosome Abundance - SAMEA5804498_ERX3483843
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

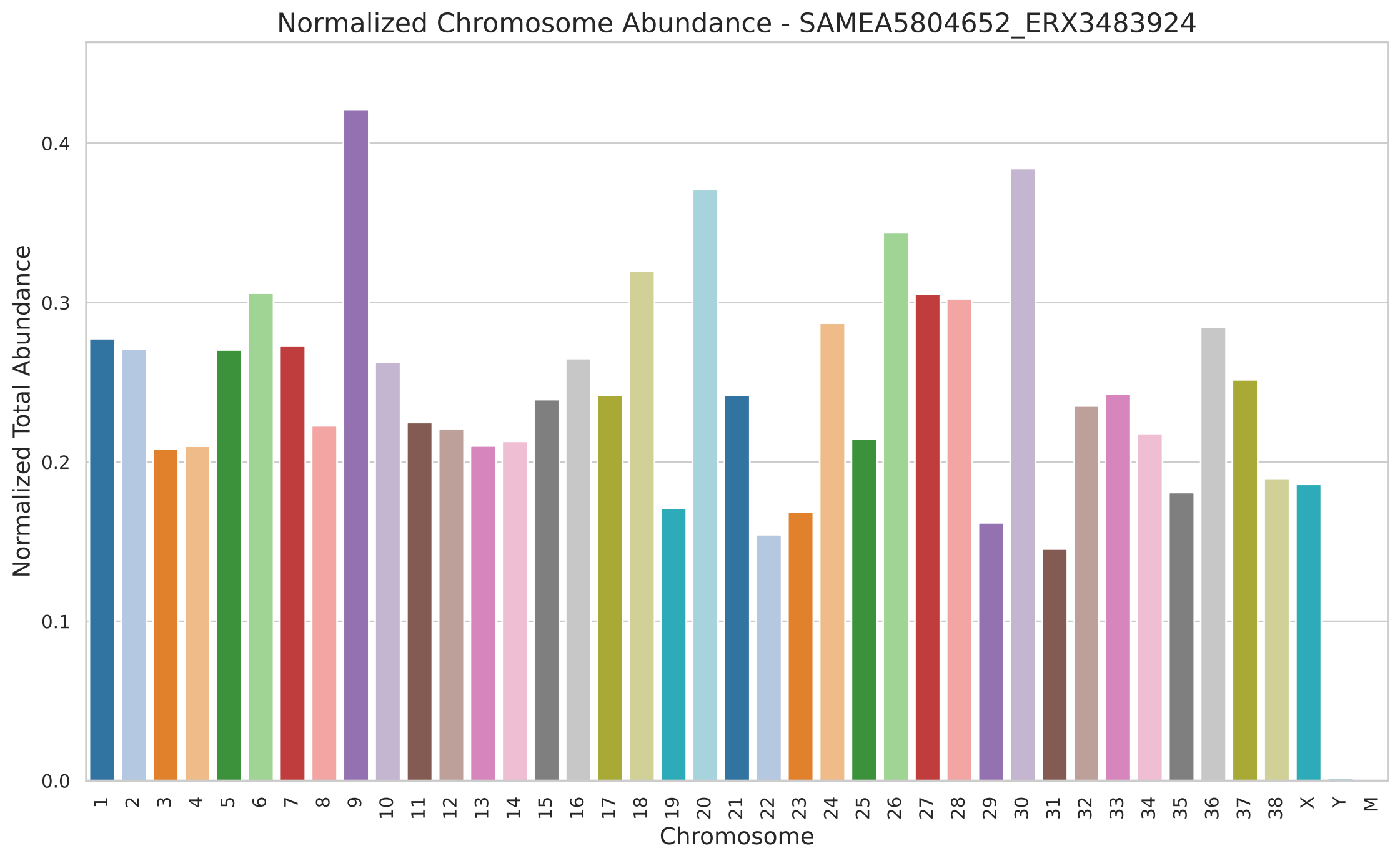

Normalized Chromosome Abundance - SAMEA5804553_ERX3483859
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

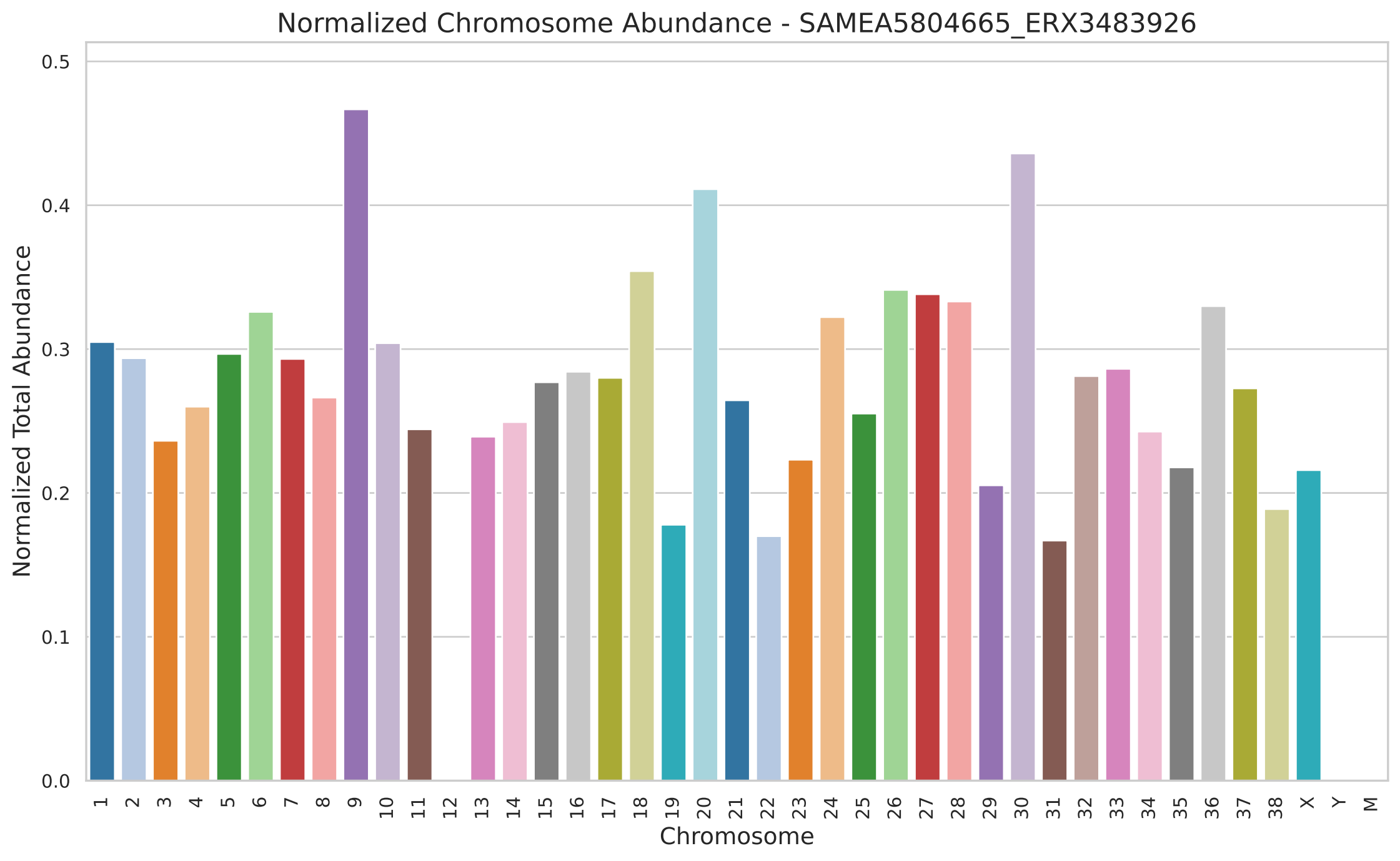

Normalized Chromosome Abundance - SAMEA5804698_ERX3483885
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

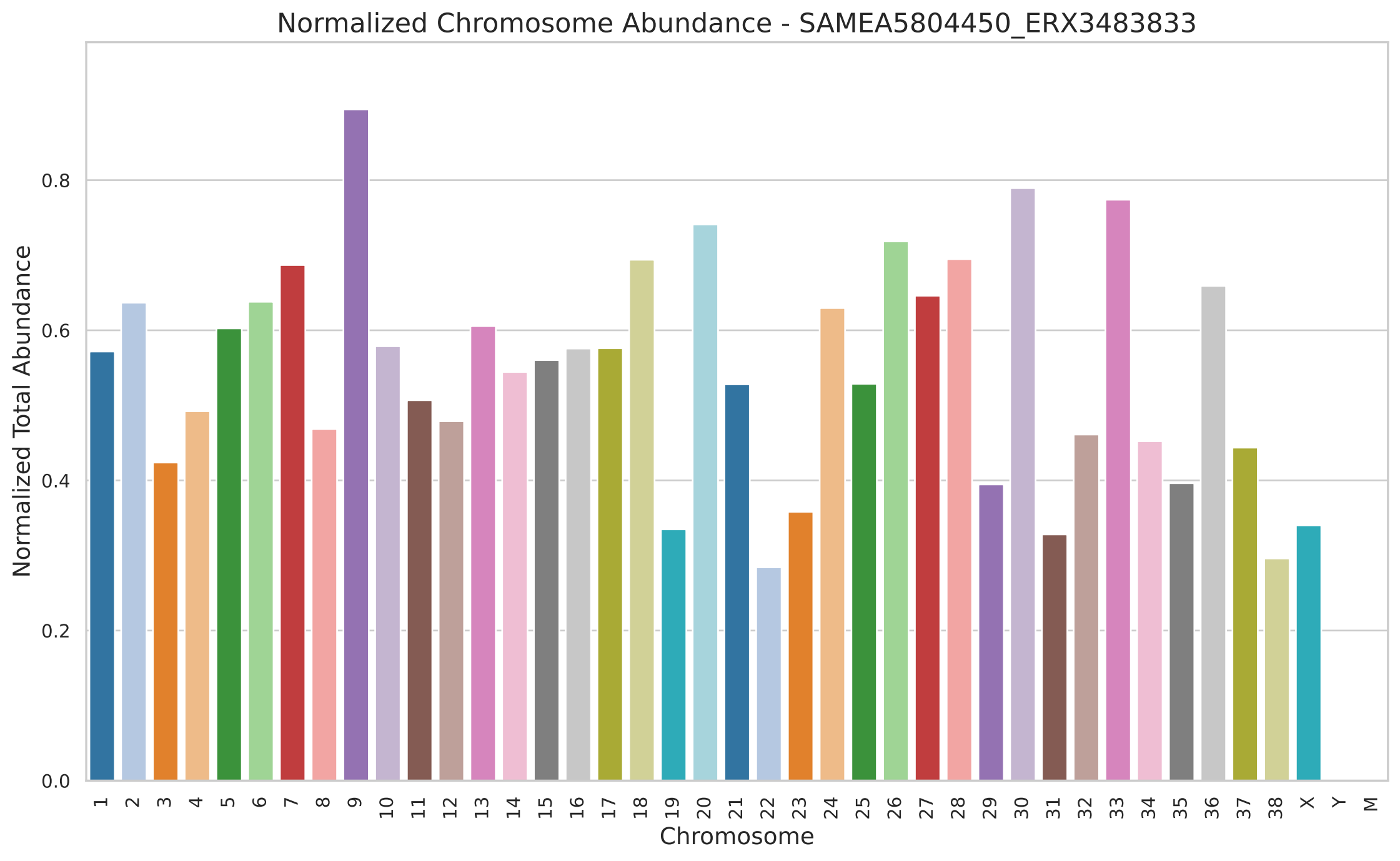

Normalized Chromosome Abundance - SAMEA5804648_ERX3483922
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

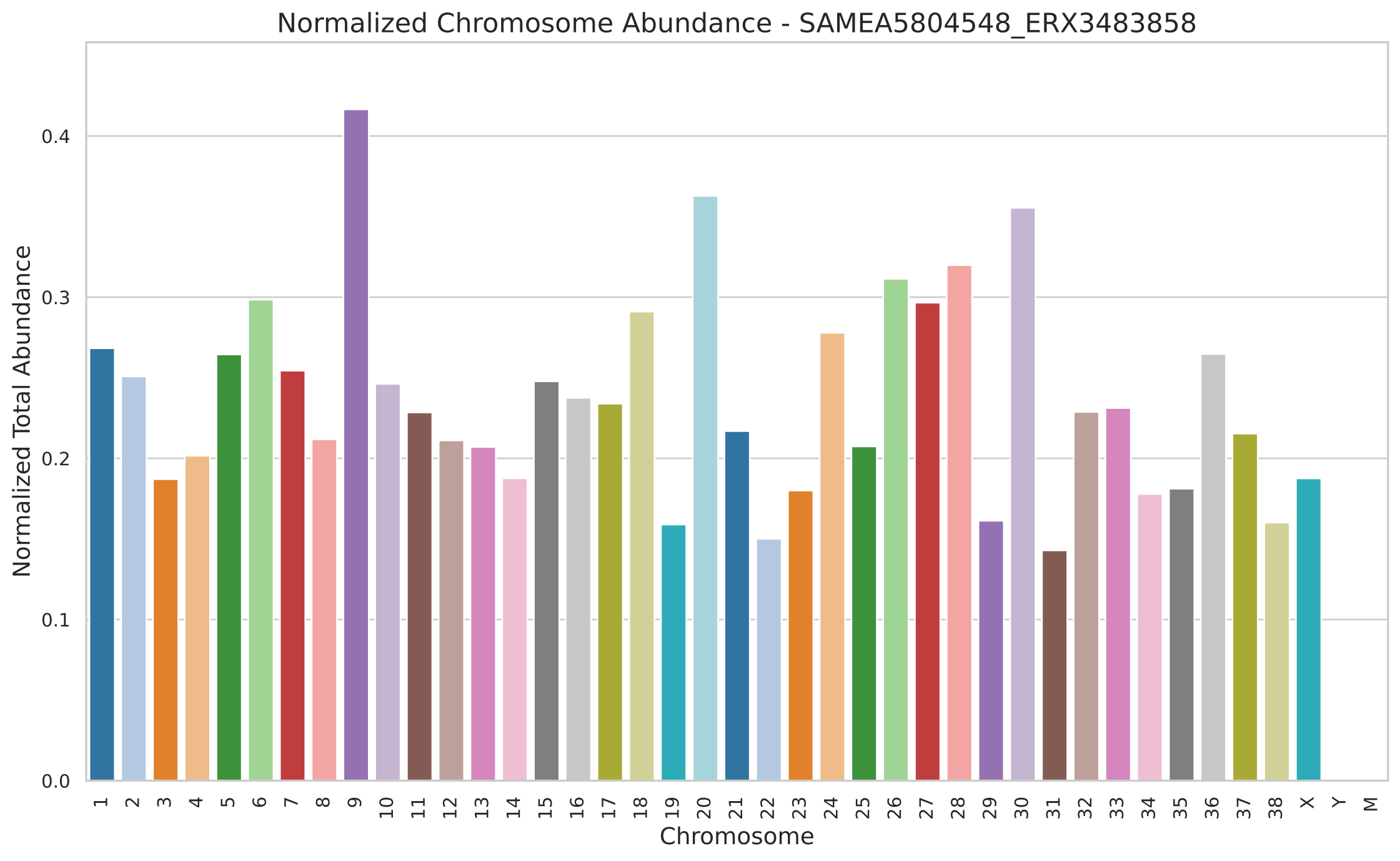

Normalized Chromosome Abundance - SAMEA5804532_ERX3483855
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

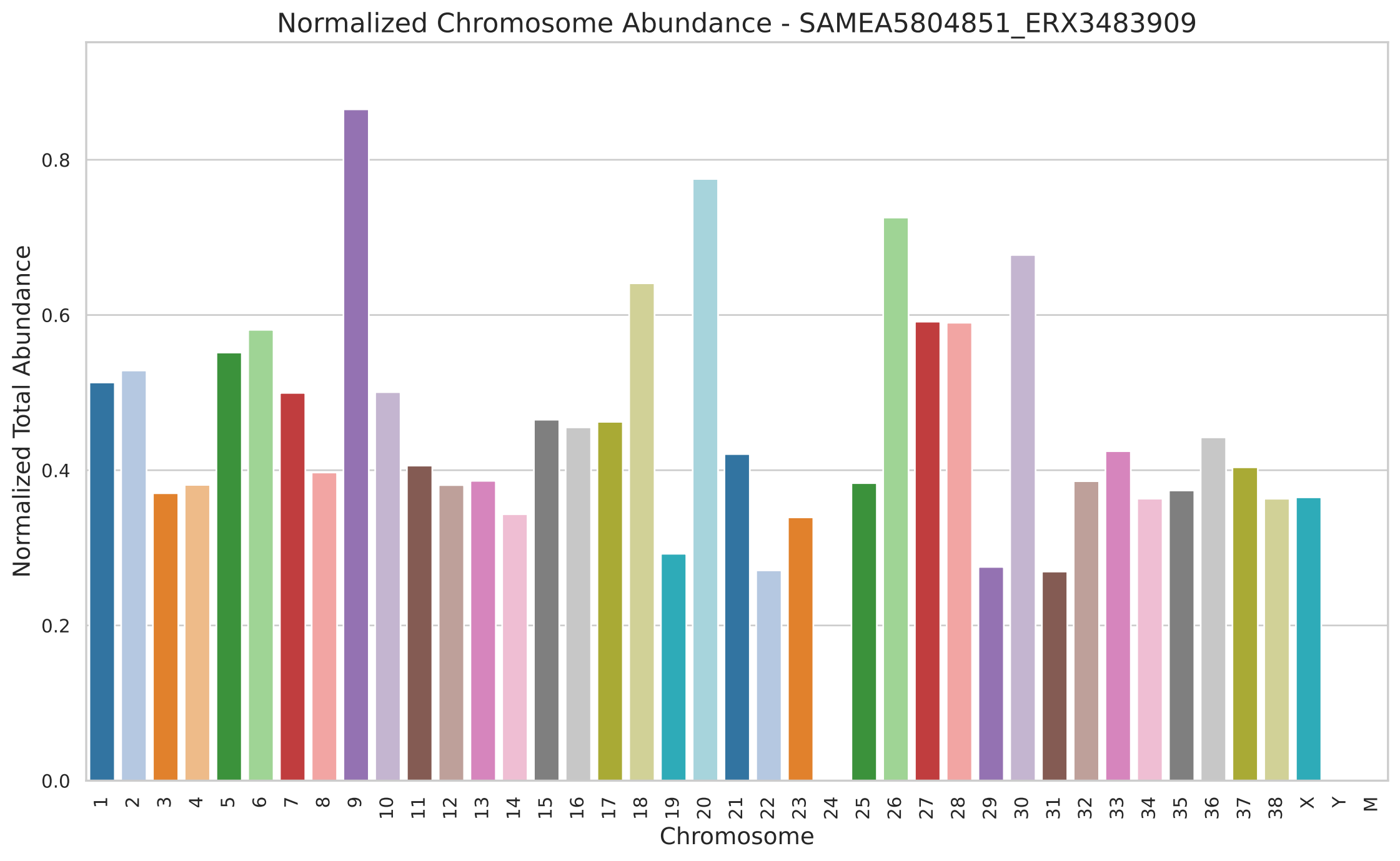

Normalized Chromosome Abundance - SAMEA5804823_ERX3483905
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

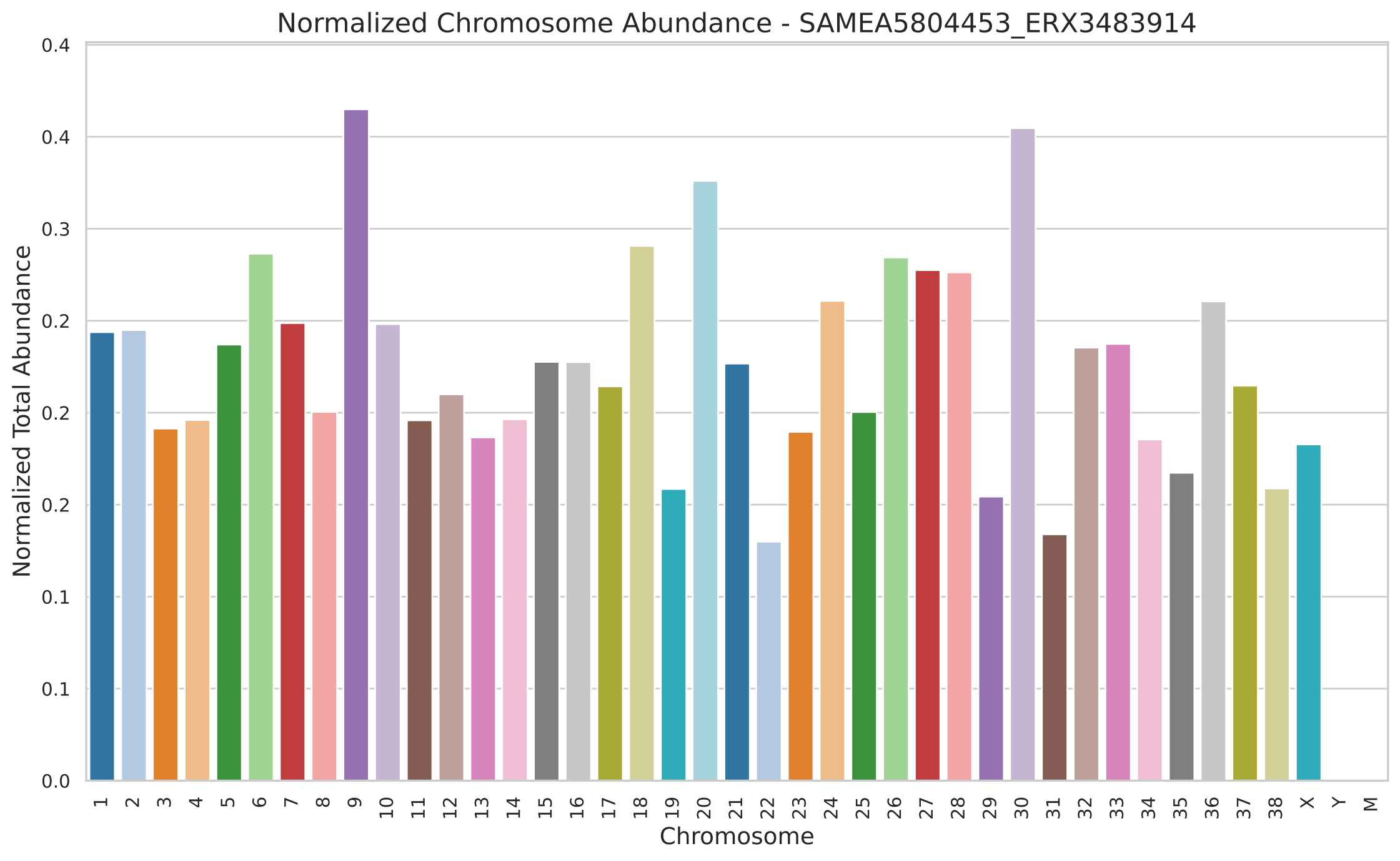

Normalized Chromosome Abundance - SAMEA5804652_ERX3483924
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

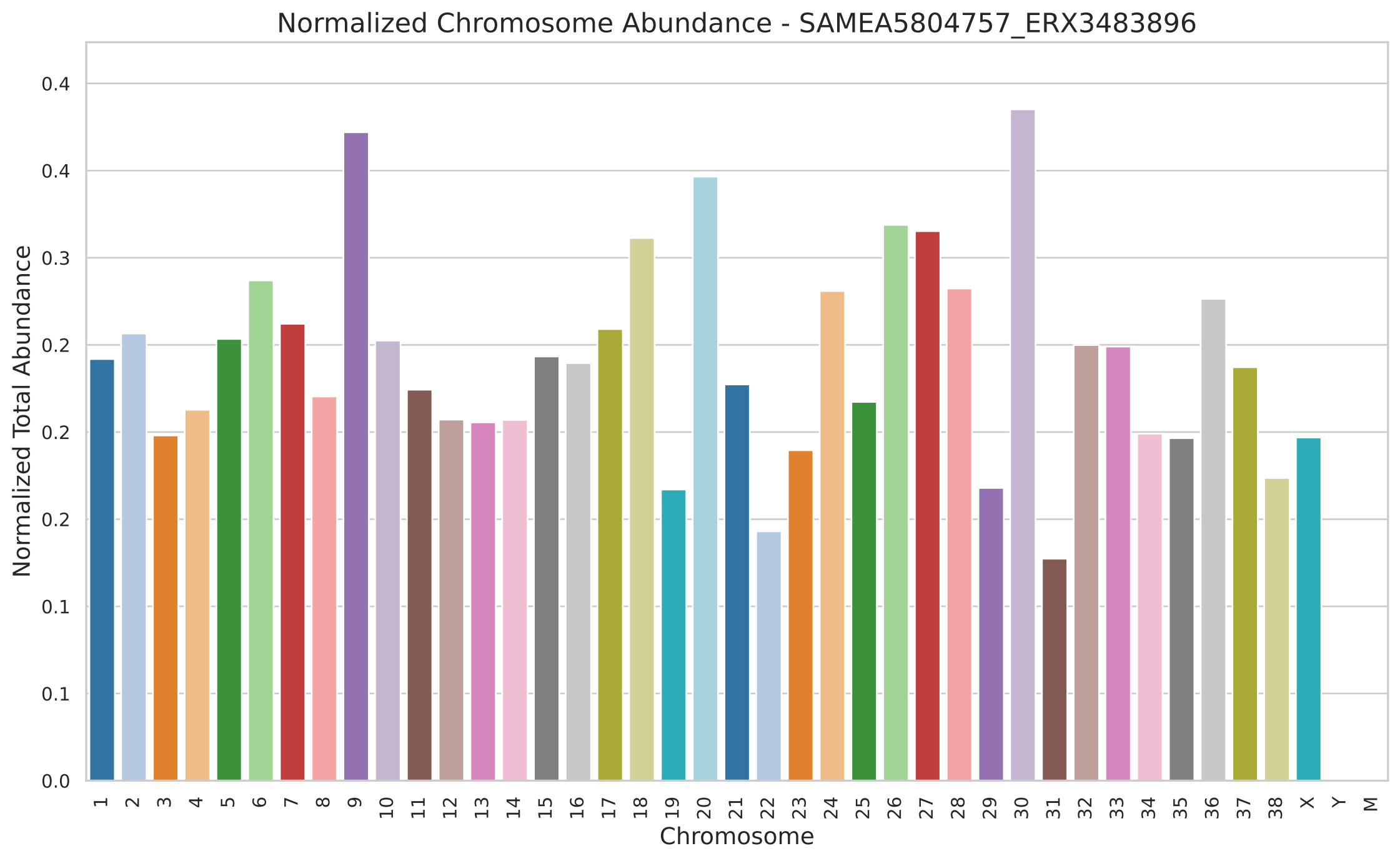

Normalized Chromosome Abundance - SAMEA5804665_ERX3483926
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

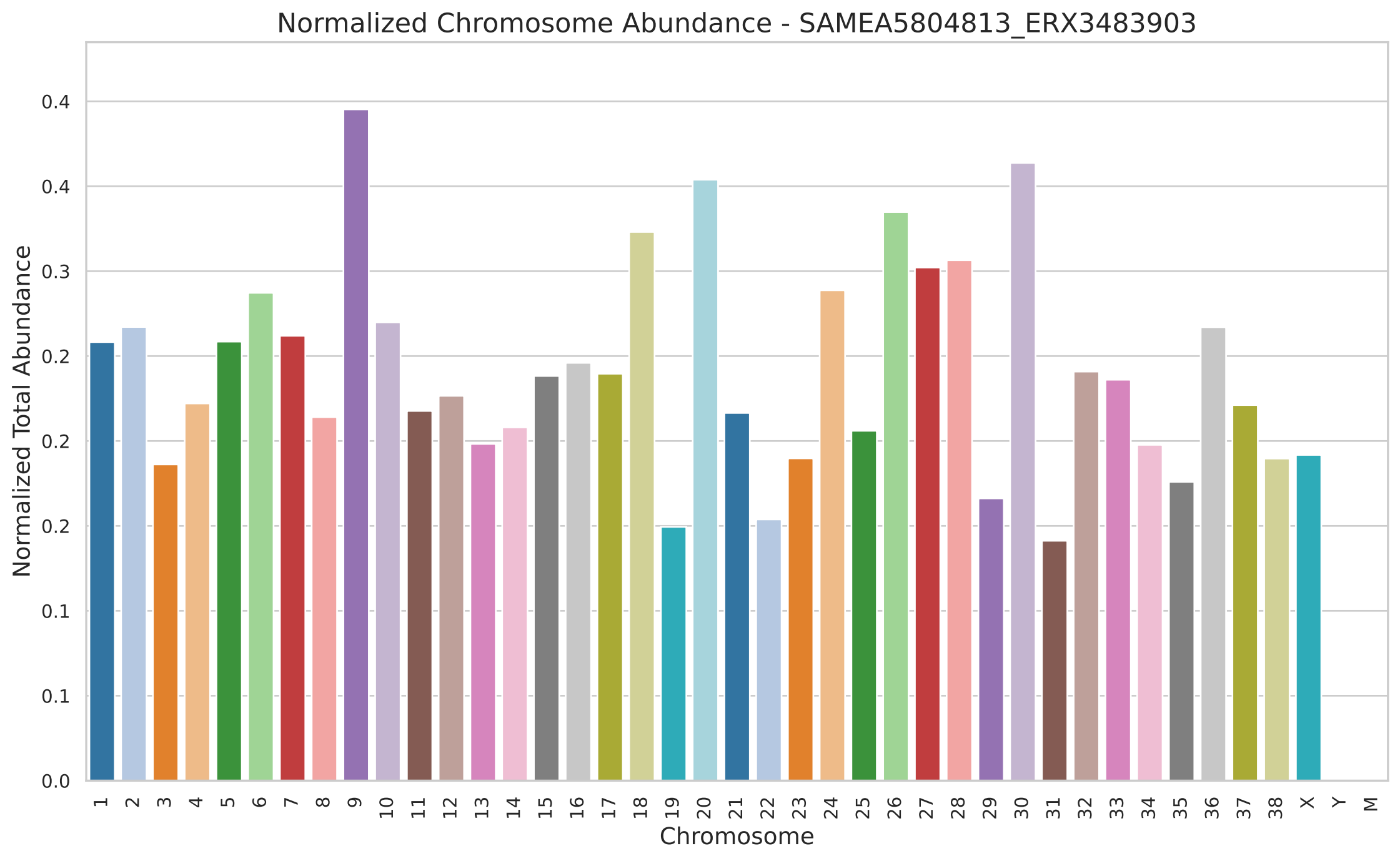

Normalized Chromosome Abundance - SAMEA5804450_ERX3483833
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

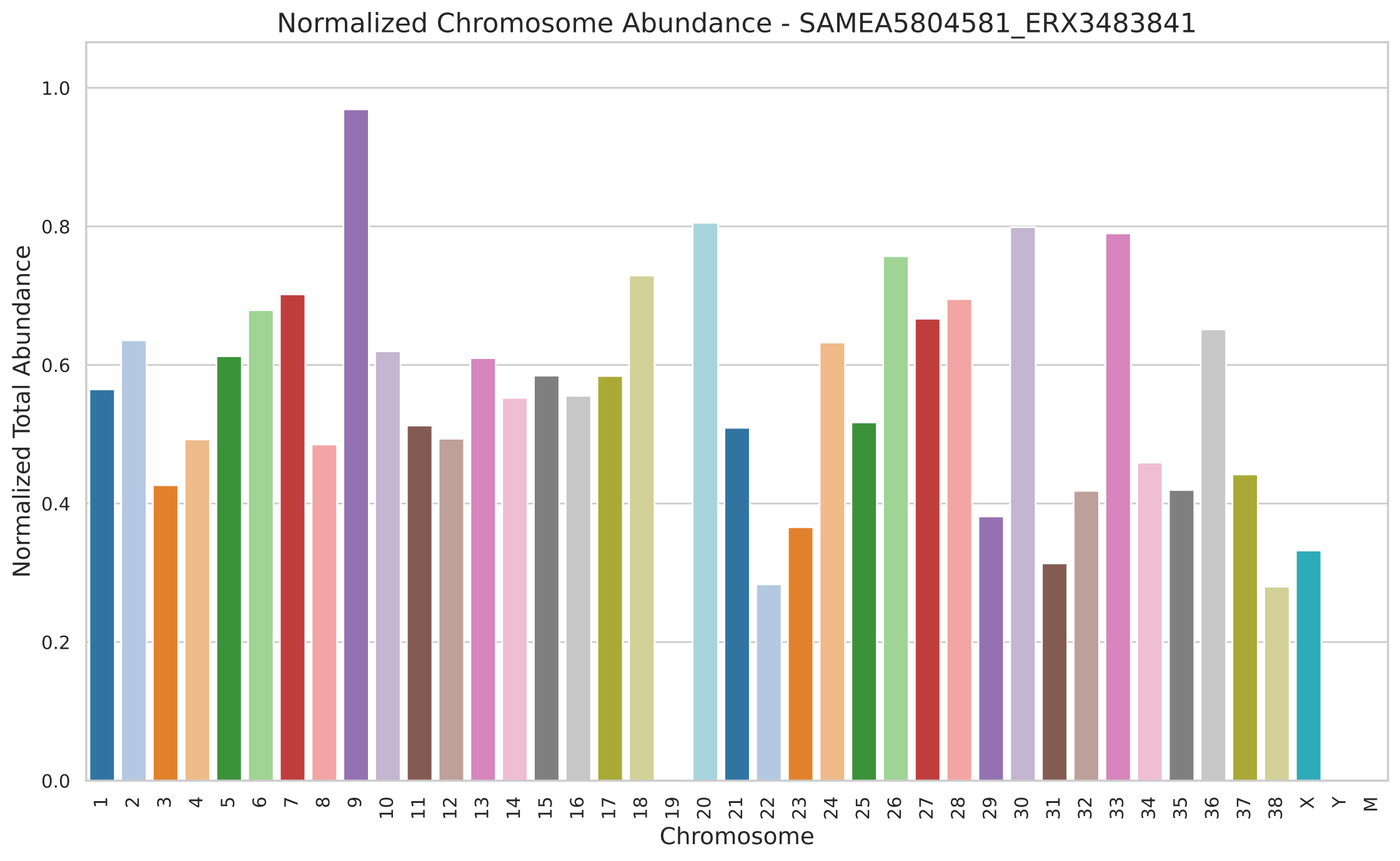

Normalized Chromosome Abundance - SAMEA5804548_ERX3483858
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

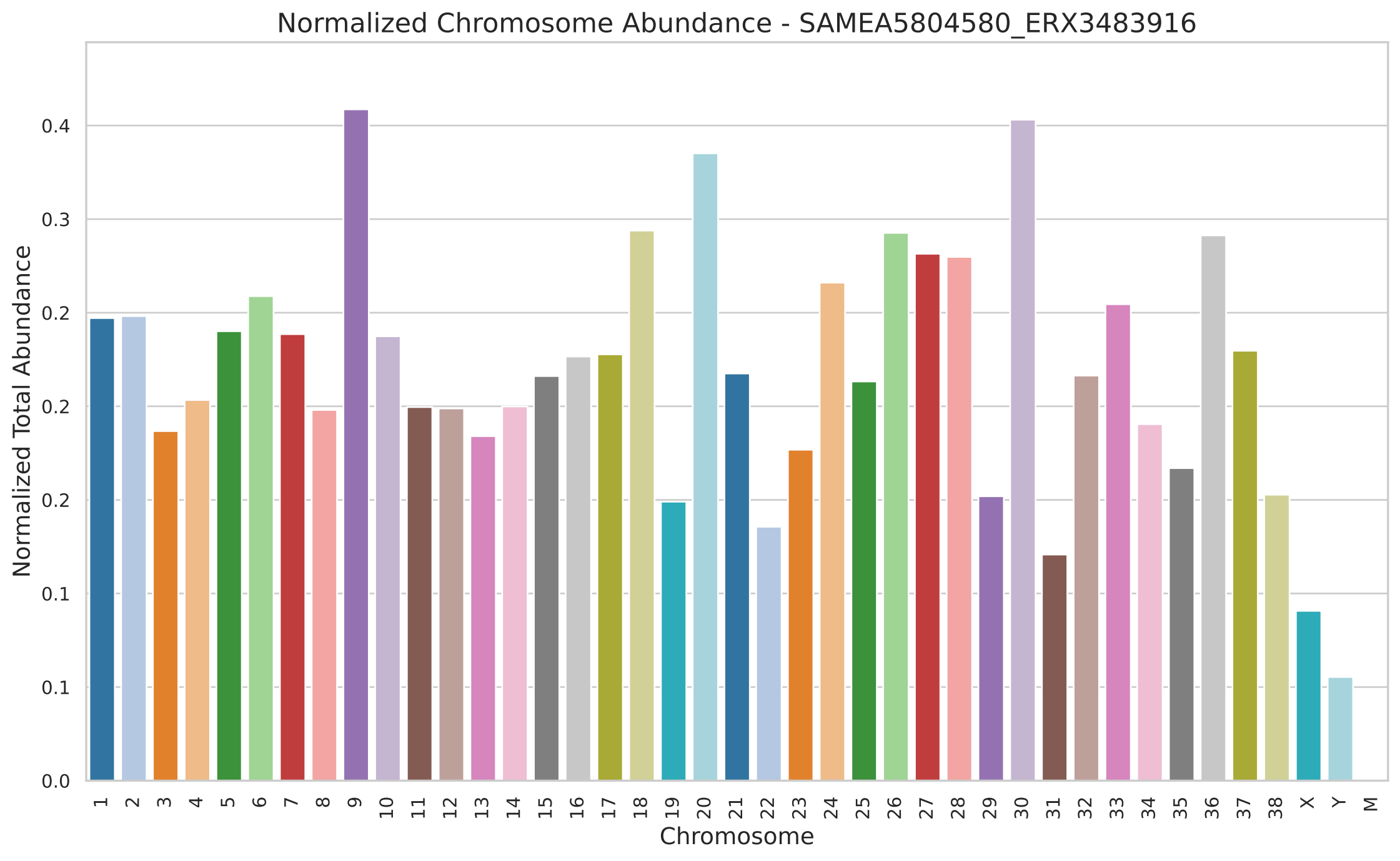

Normalized Chromosome Abundance - SAMEA5804851_ERX3483909
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

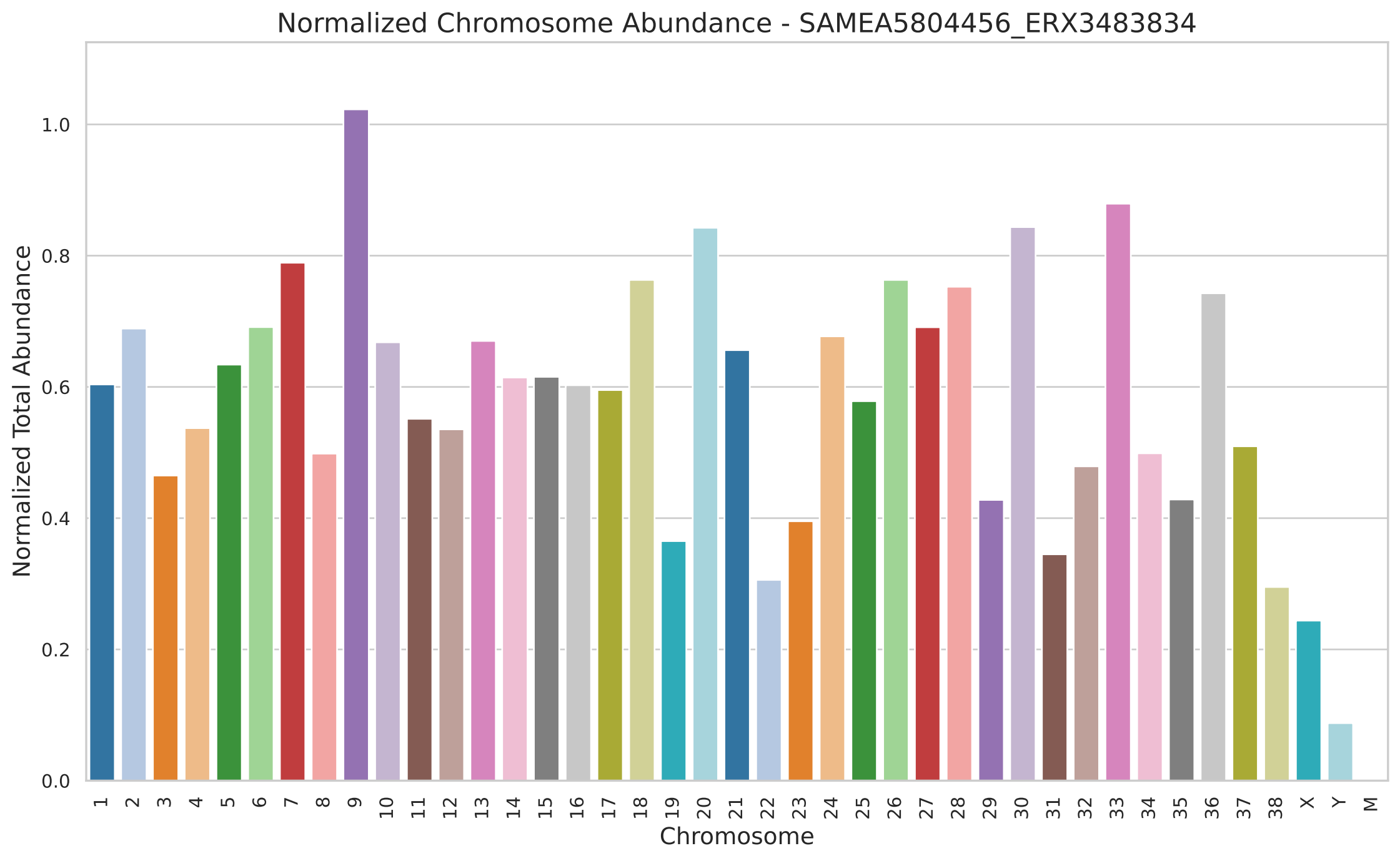

Normalized Chromosome Abundance - SAMEA5804453_ERX3483914
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

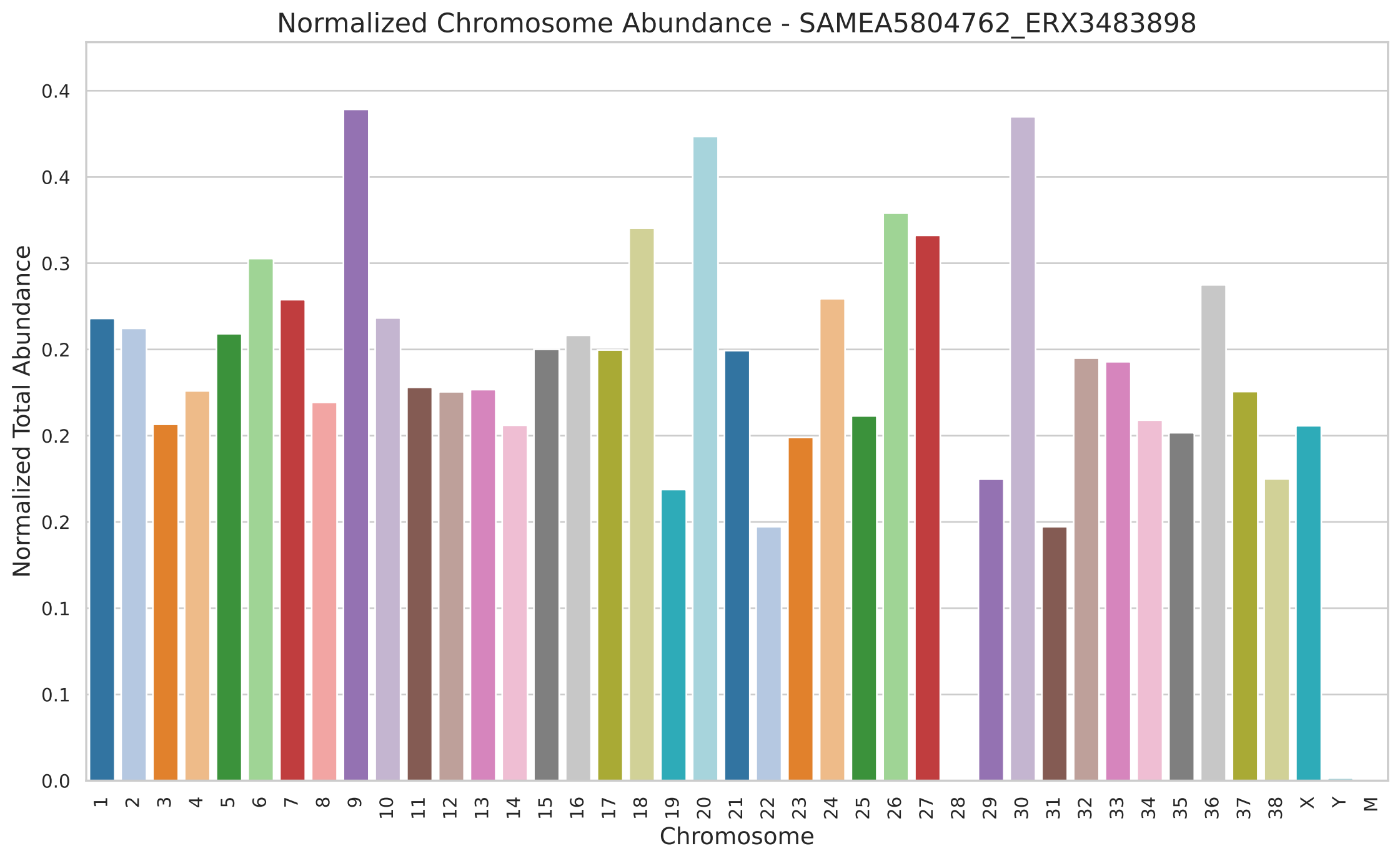

Normalized Chromosome Abundance - SAMEA5804757_ERX3483896
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

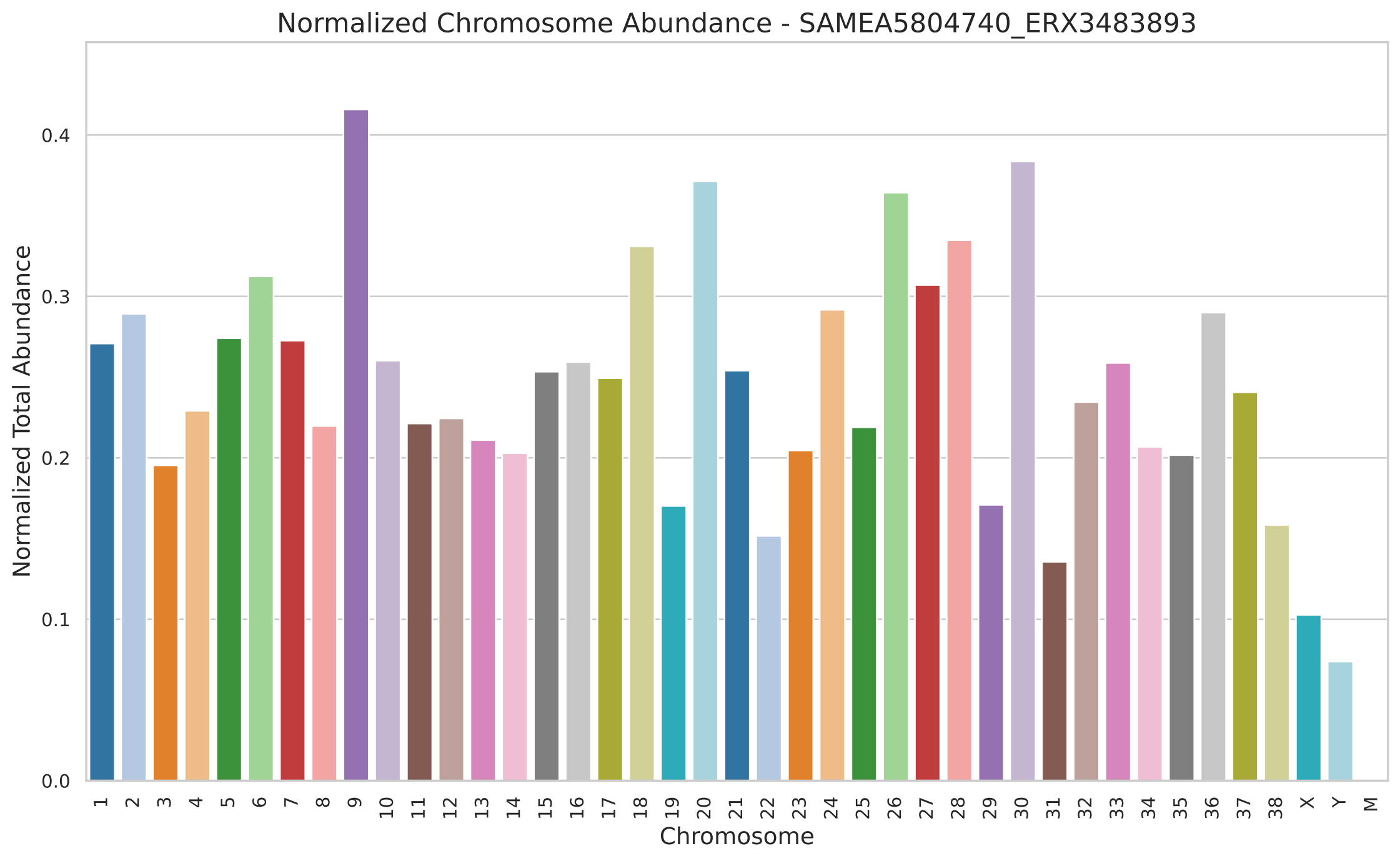

Normalized Chromosome Abundance - SAMEA5804813_ERX3483903
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

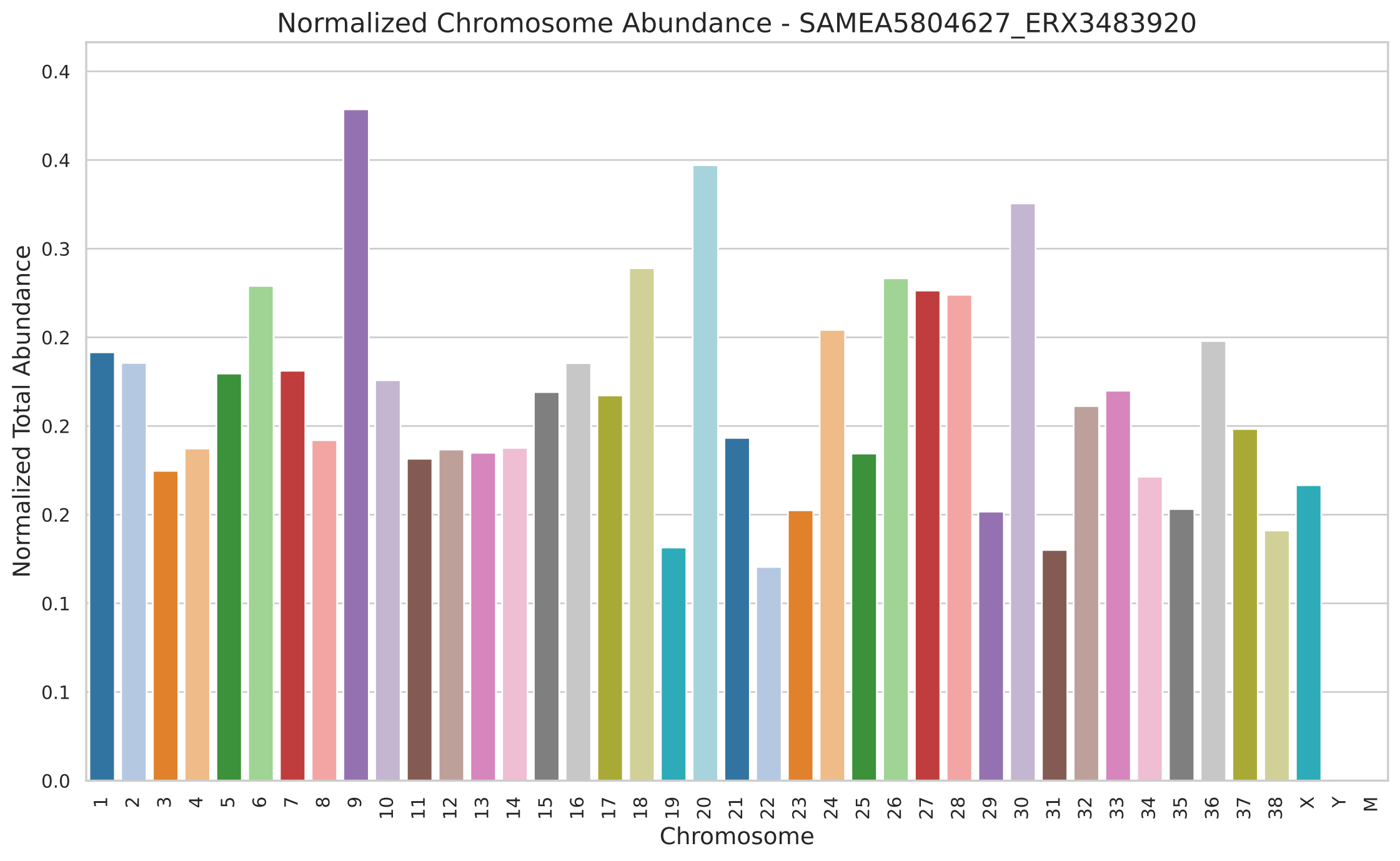

Normalized Chromosome Abundance - SAMEA5804581_ERX3483841
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

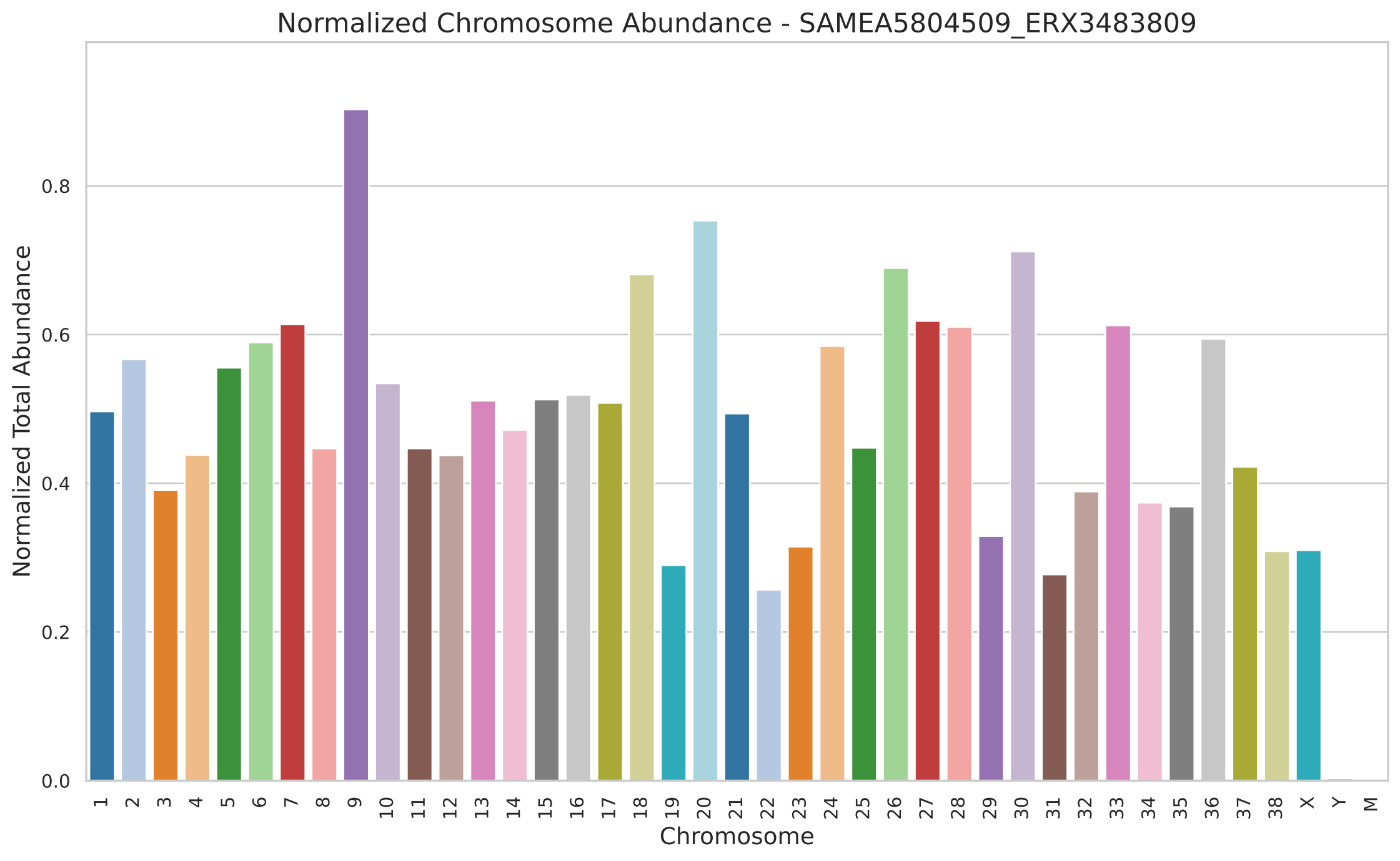

Normalized Chromosome Abundance - SAMEA5804580_ERX3483916
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

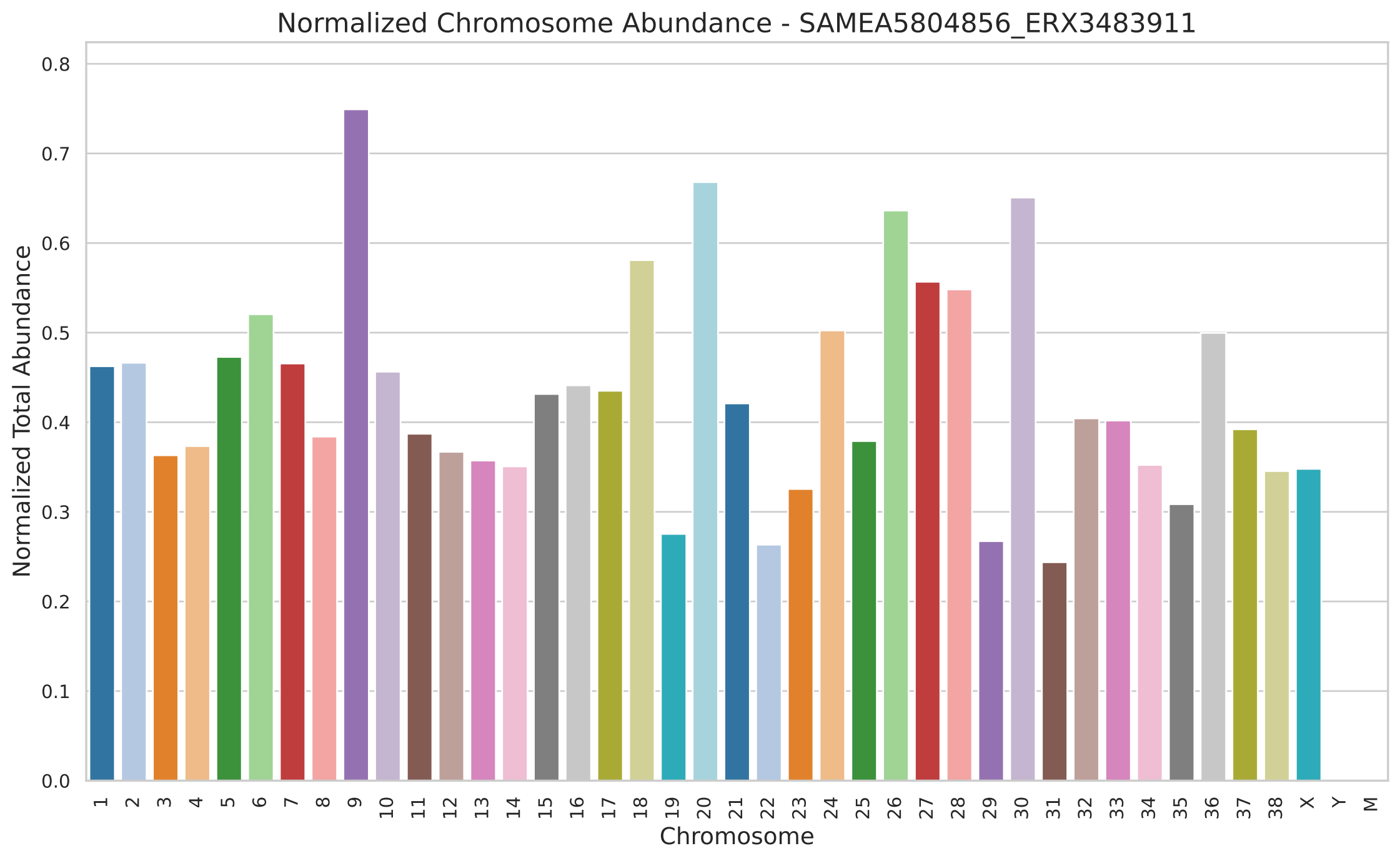

Normalized Chromosome Abundance - SAMEA5804456_ERX3483834
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

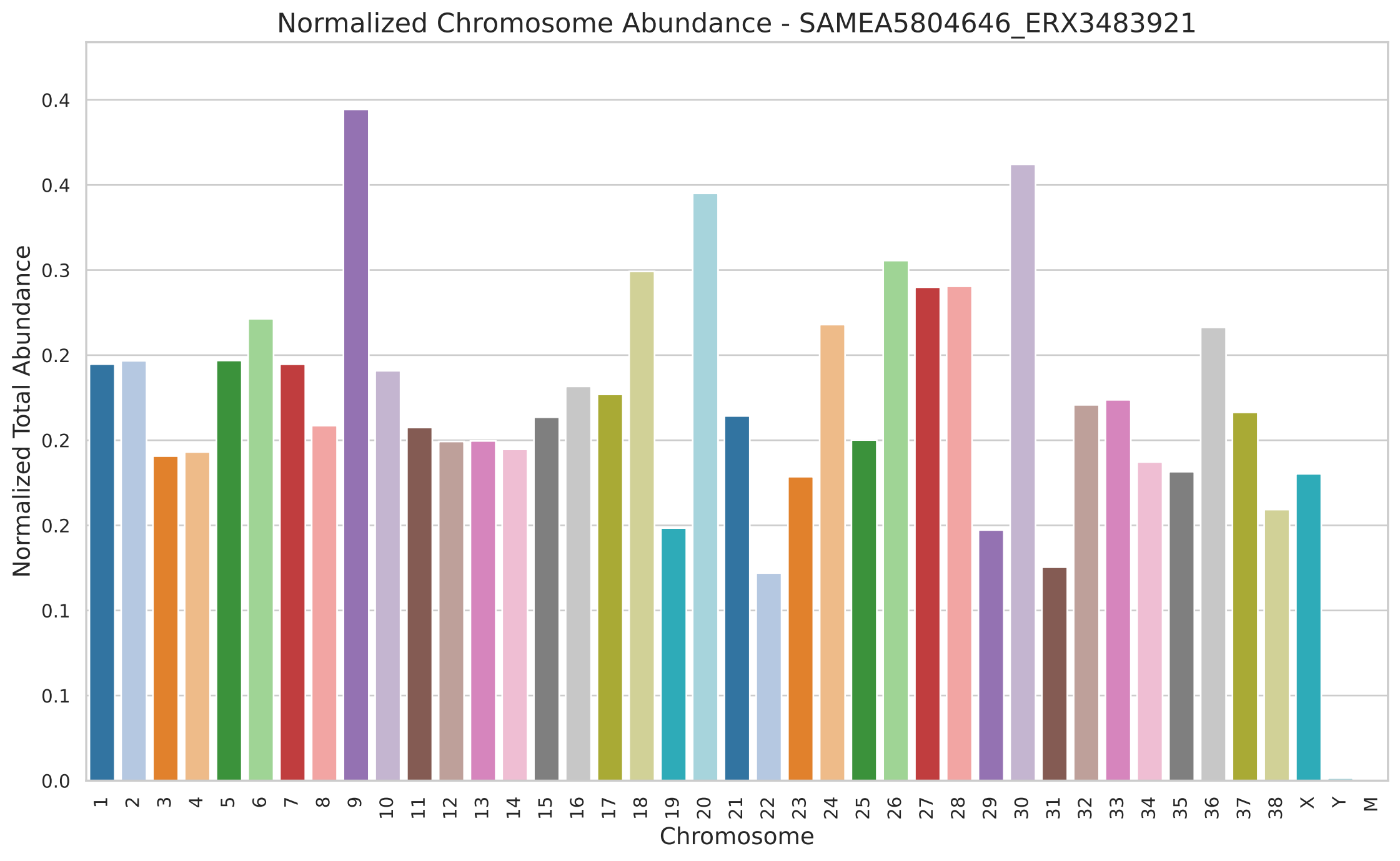

Normalized Chromosome Abundance - SAMEA5804762_ERX3483898
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

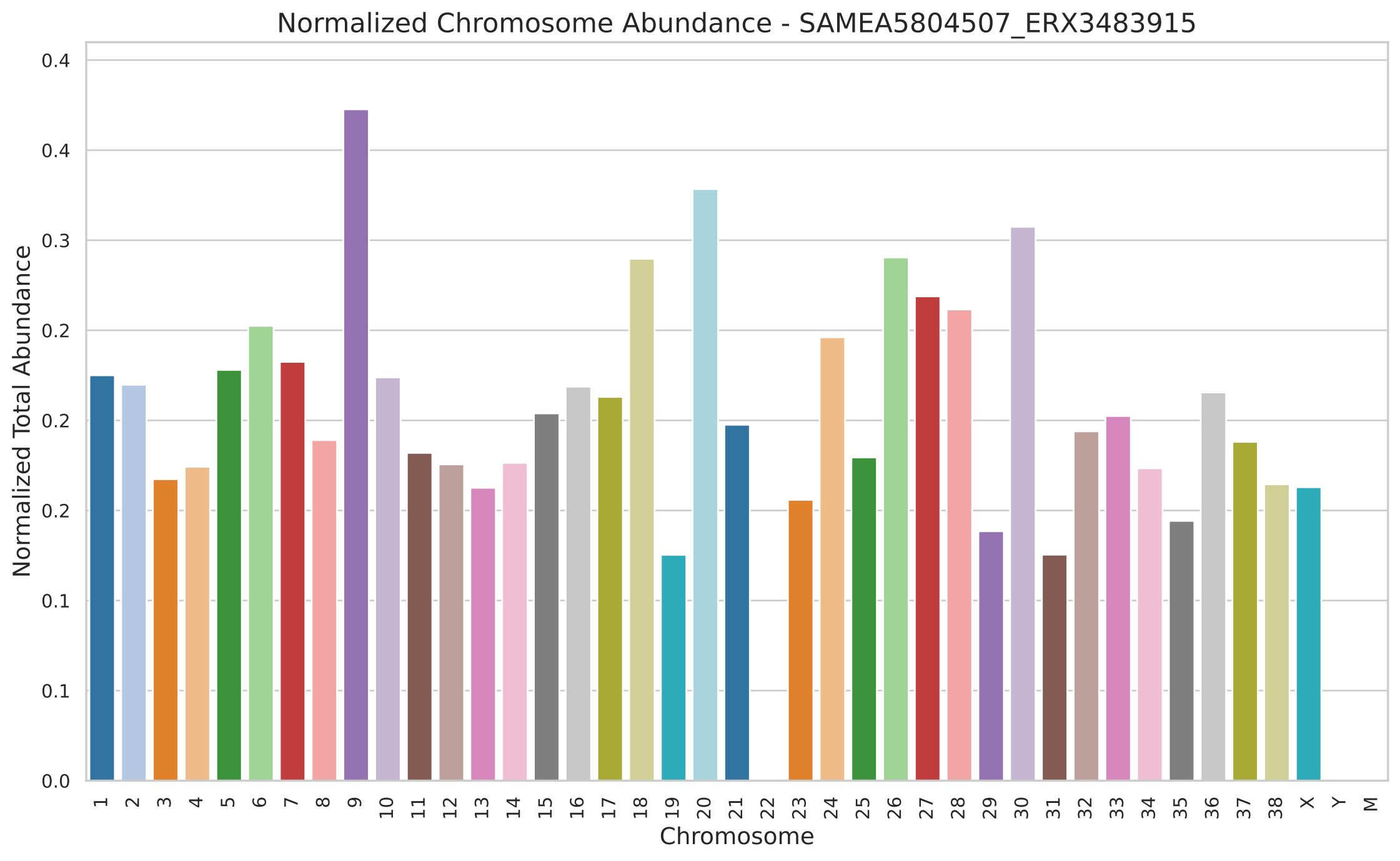

Normalized Chromosome Abundance - SAMEA5804740_ERX3483893
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

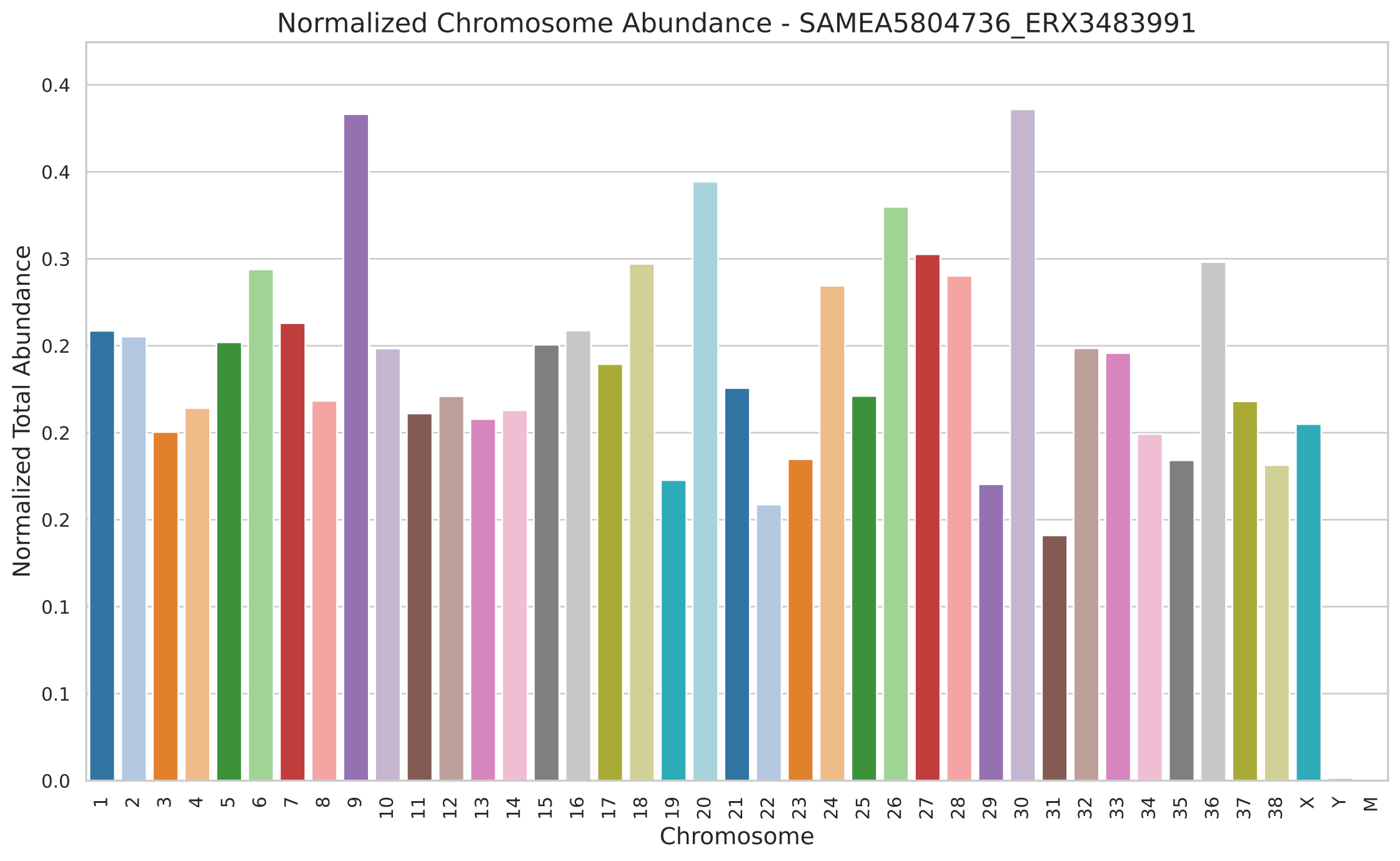

Normalized Chromosome Abundance - SAMEA5804627_ERX3483920
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

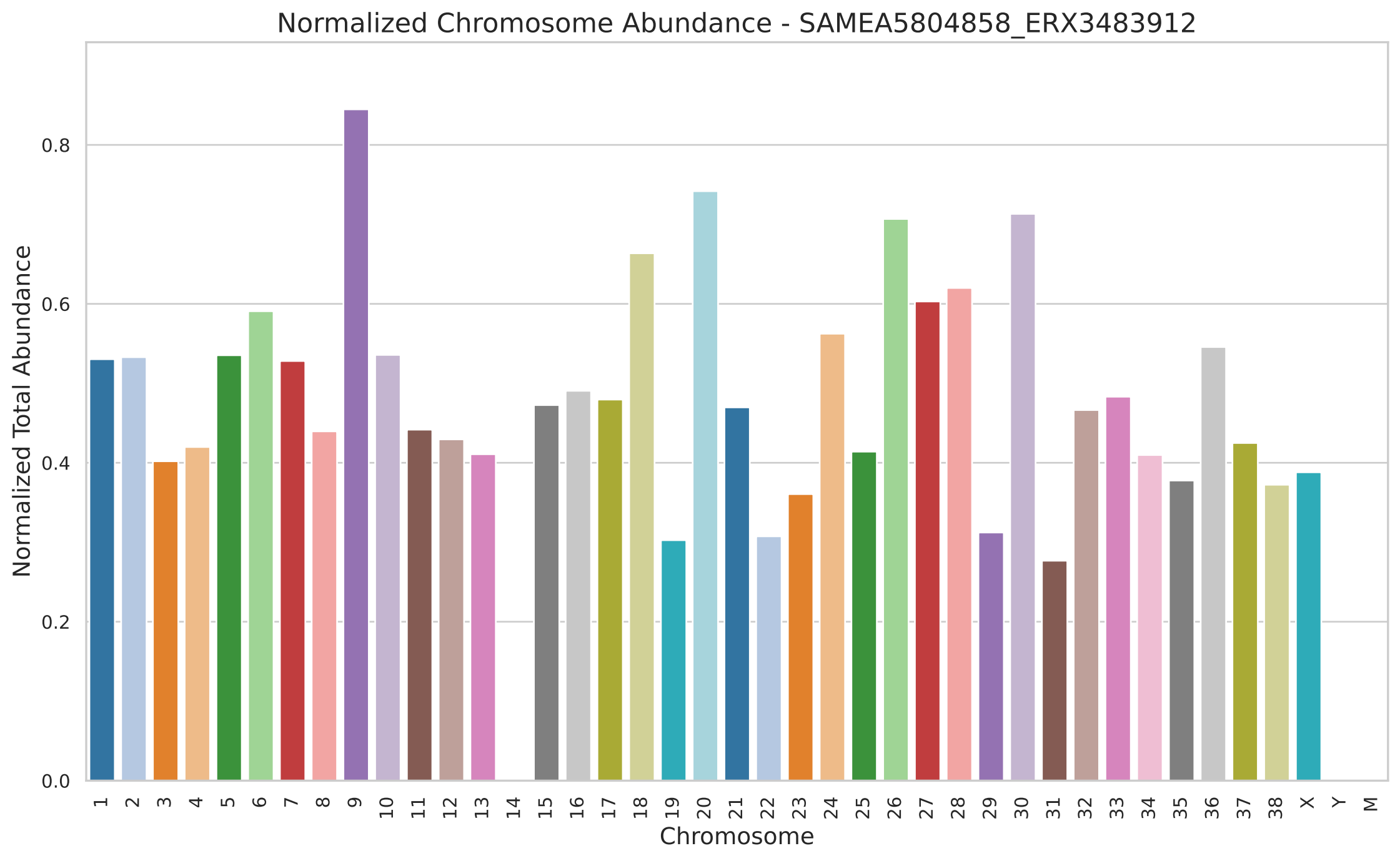

Normalized Chromosome Abundance - SAMEA5804509_ERX3483809
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

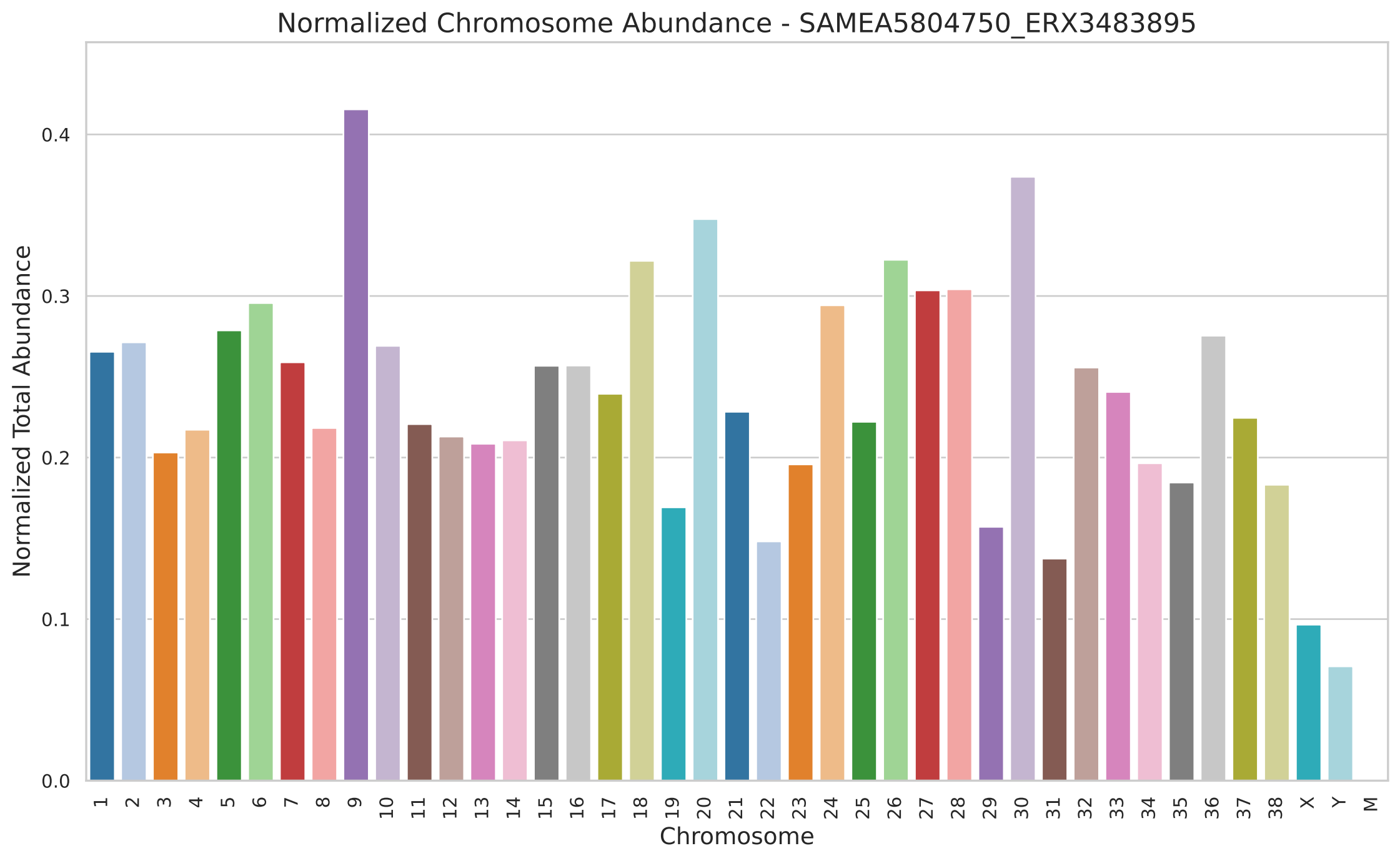

Normalized Chromosome Abundance - SAMEA5804856_ERX3483911
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

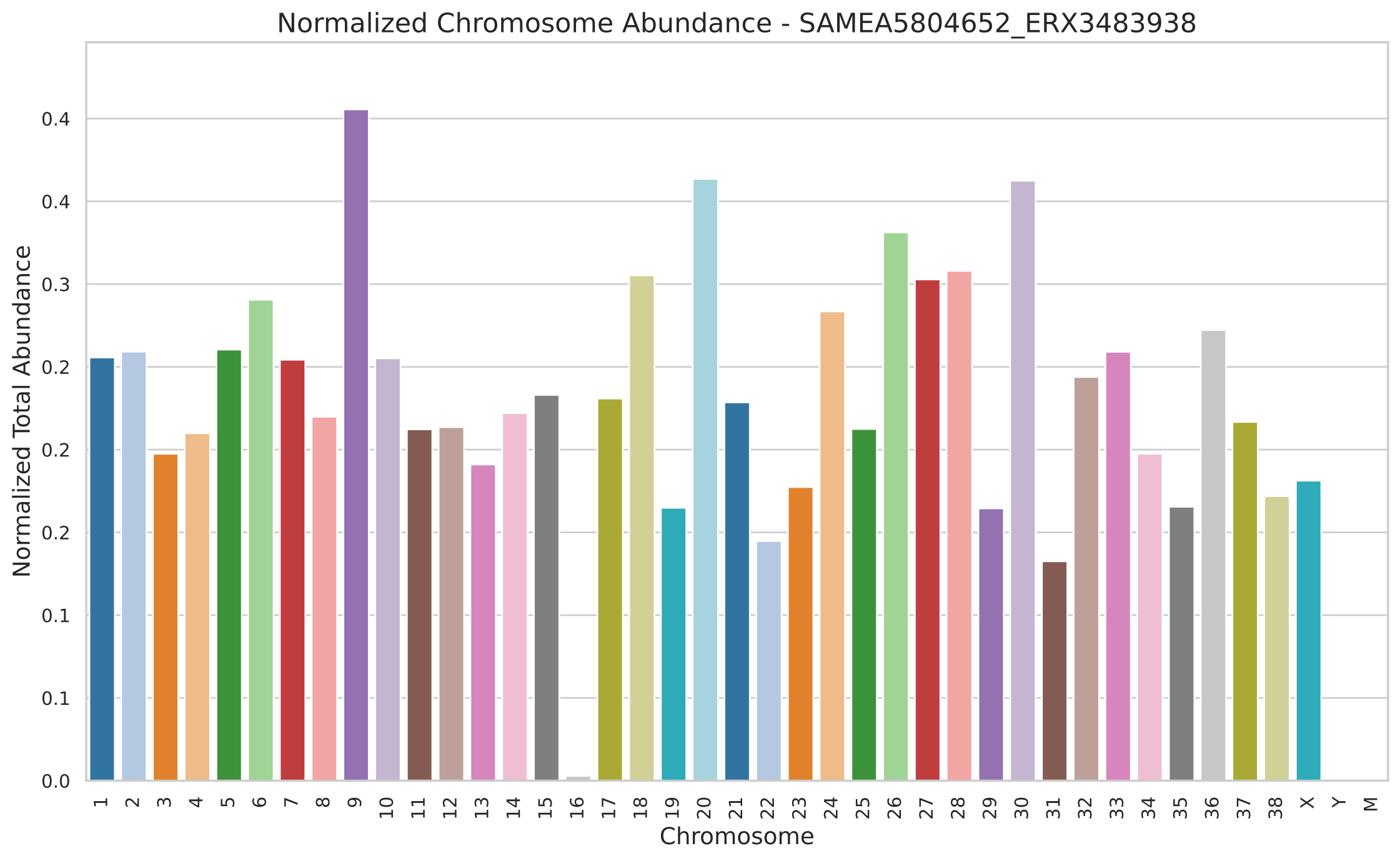

Normalized Chromosome Abundance - SAMEA5804646_ERX3483921
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

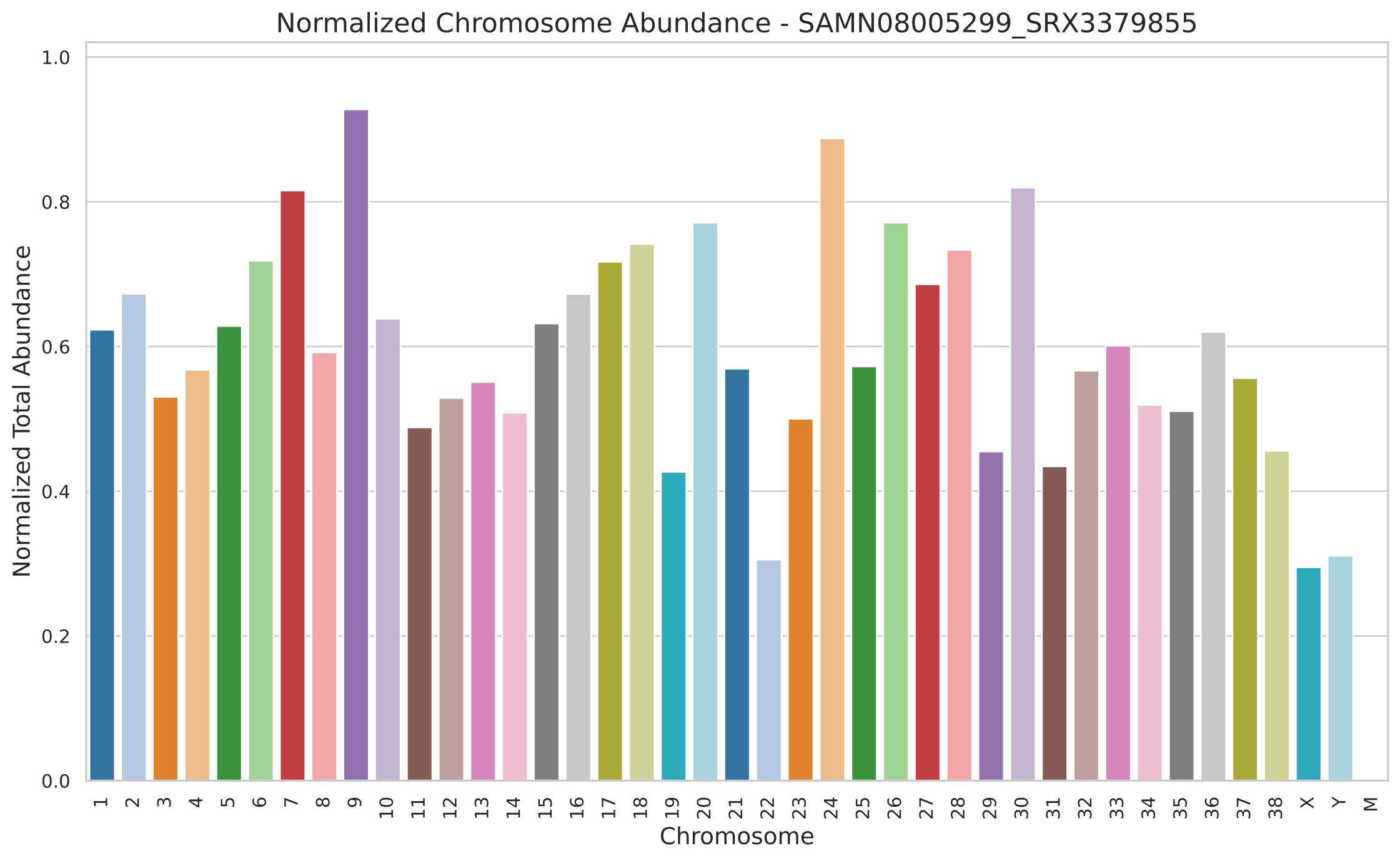

Normalized Chromosome Abundance - SAMEA5804507_ERX3483915
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

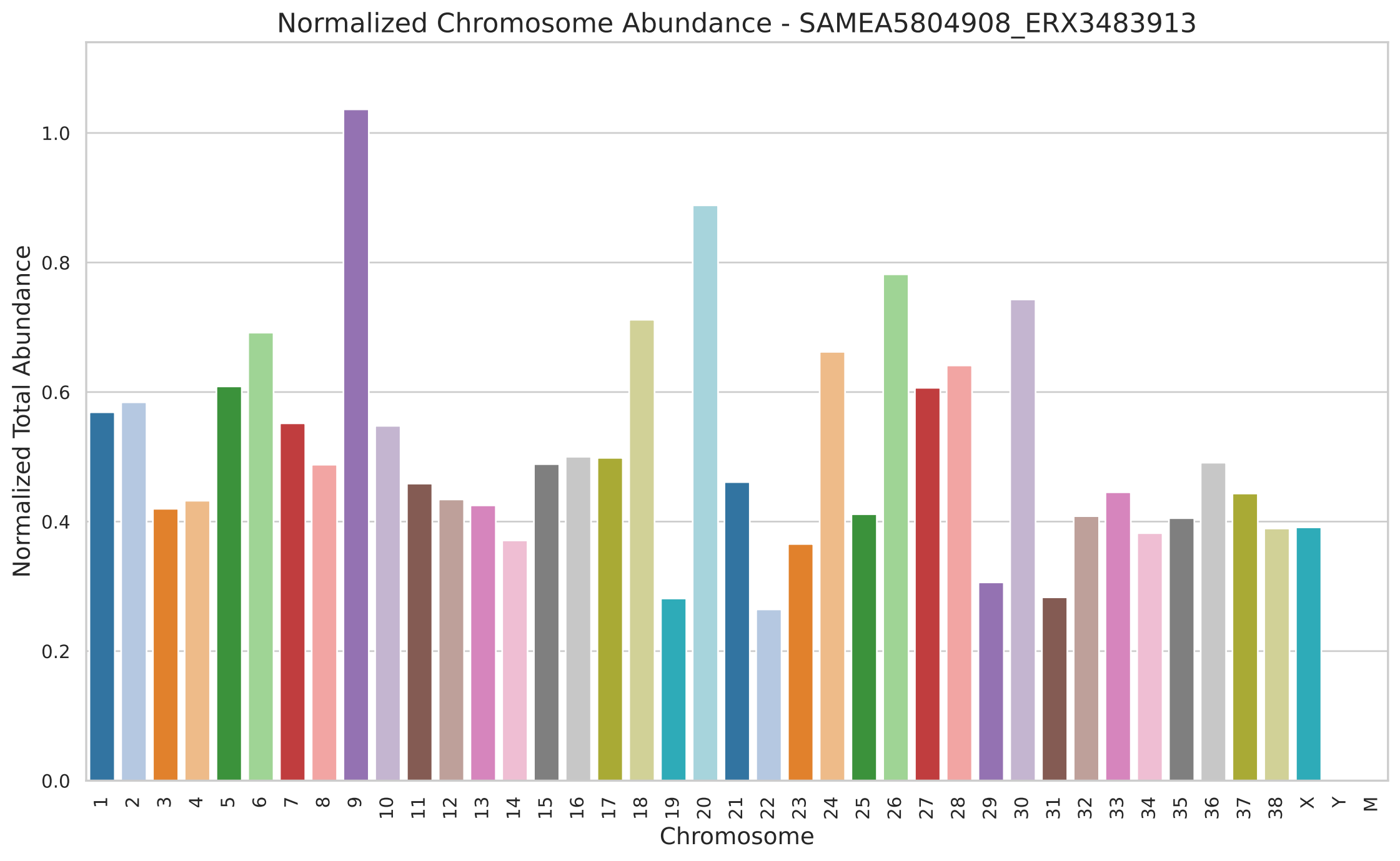

Normalized Chromosome Abundance - SAMEA5804736_ERX3483991
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

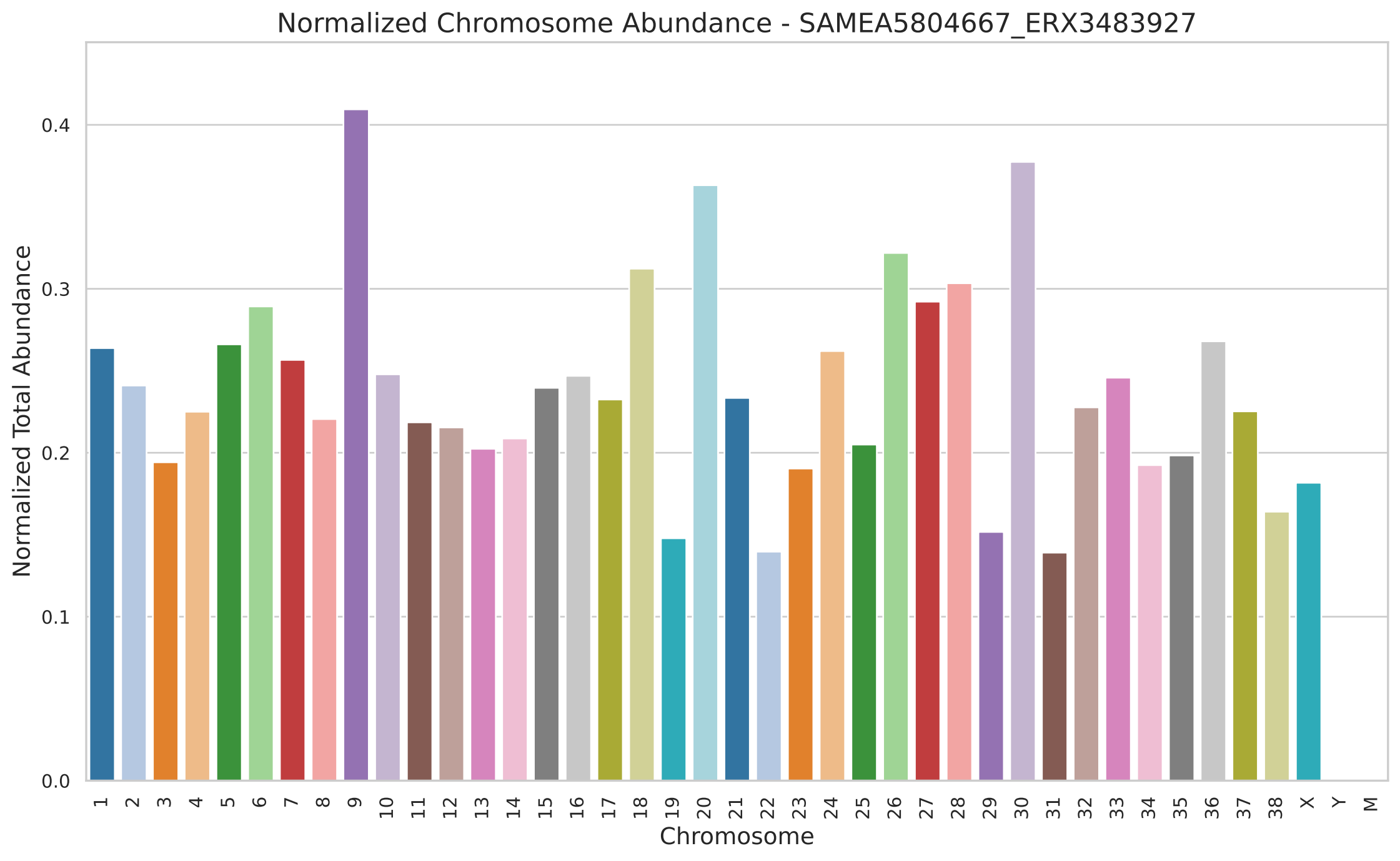

Normalized Chromosome Abundance - SAMEA5804858_ERX3483912
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

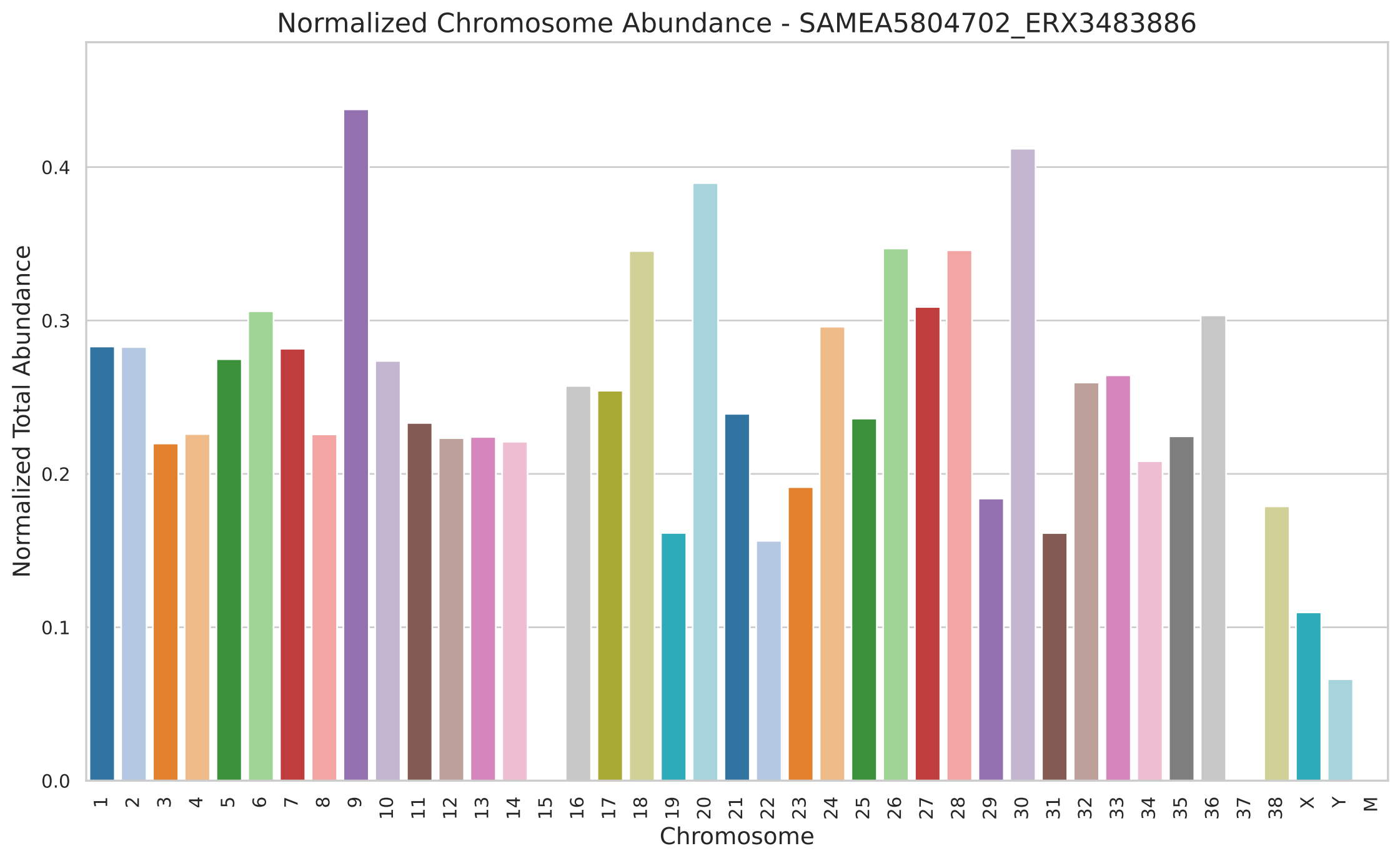

Normalized Chromosome Abundance - SAMEA5804750_ERX3483895
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

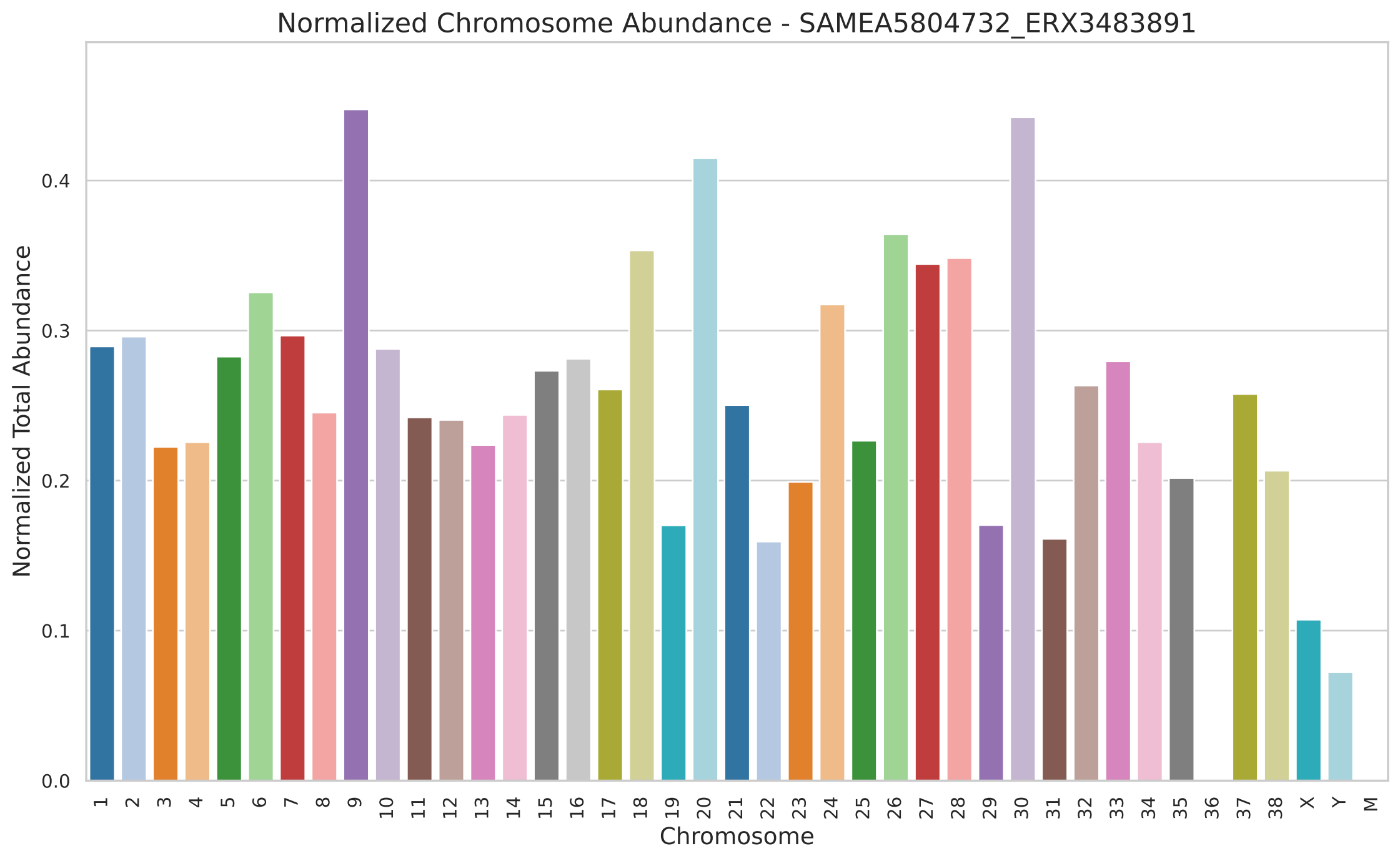

Normalized Chromosome Abundance - SAMEA5804652_ERX3483938
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

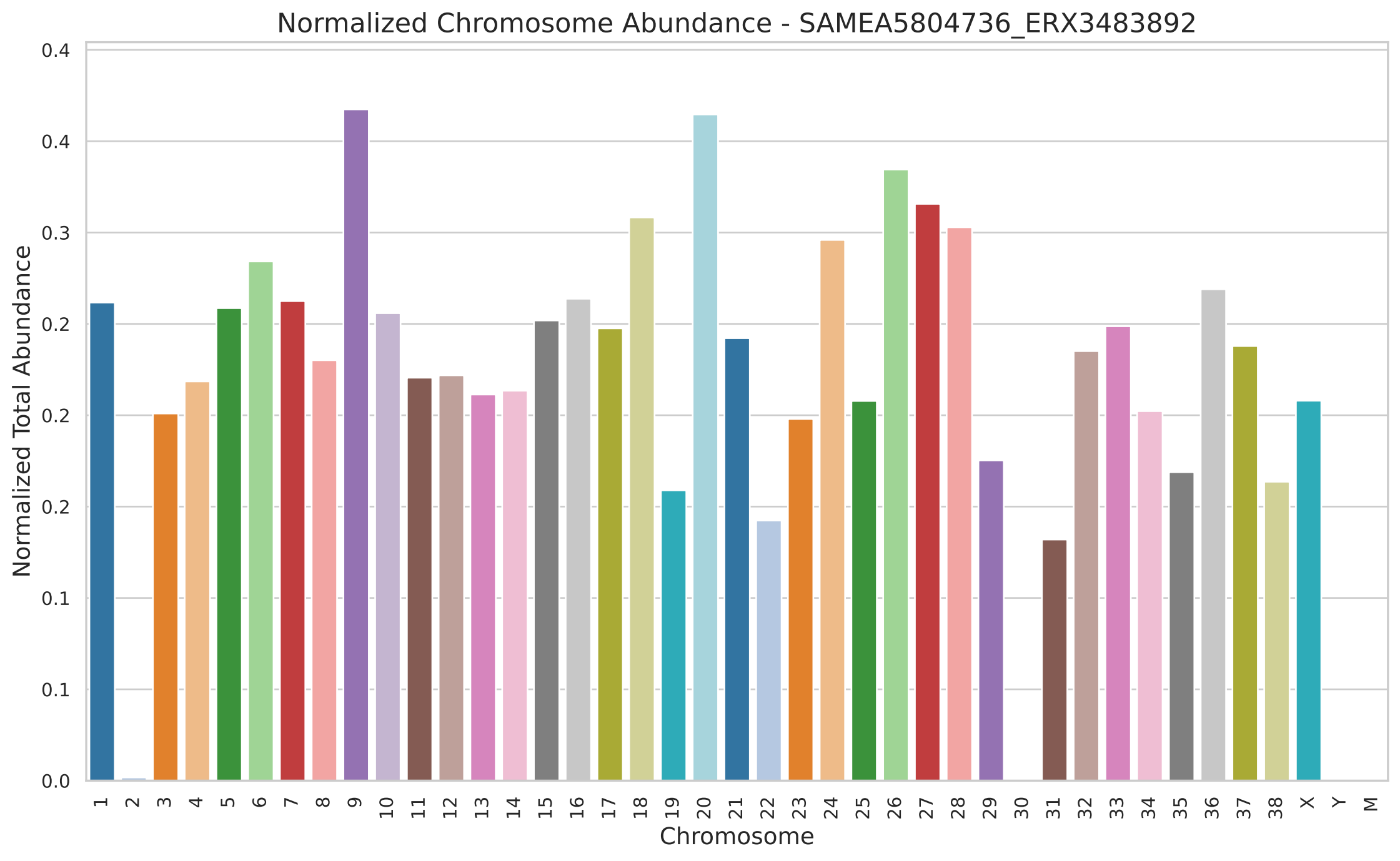

Normalized Chromosome Abundance - SAMN08005299_SRX3379855
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

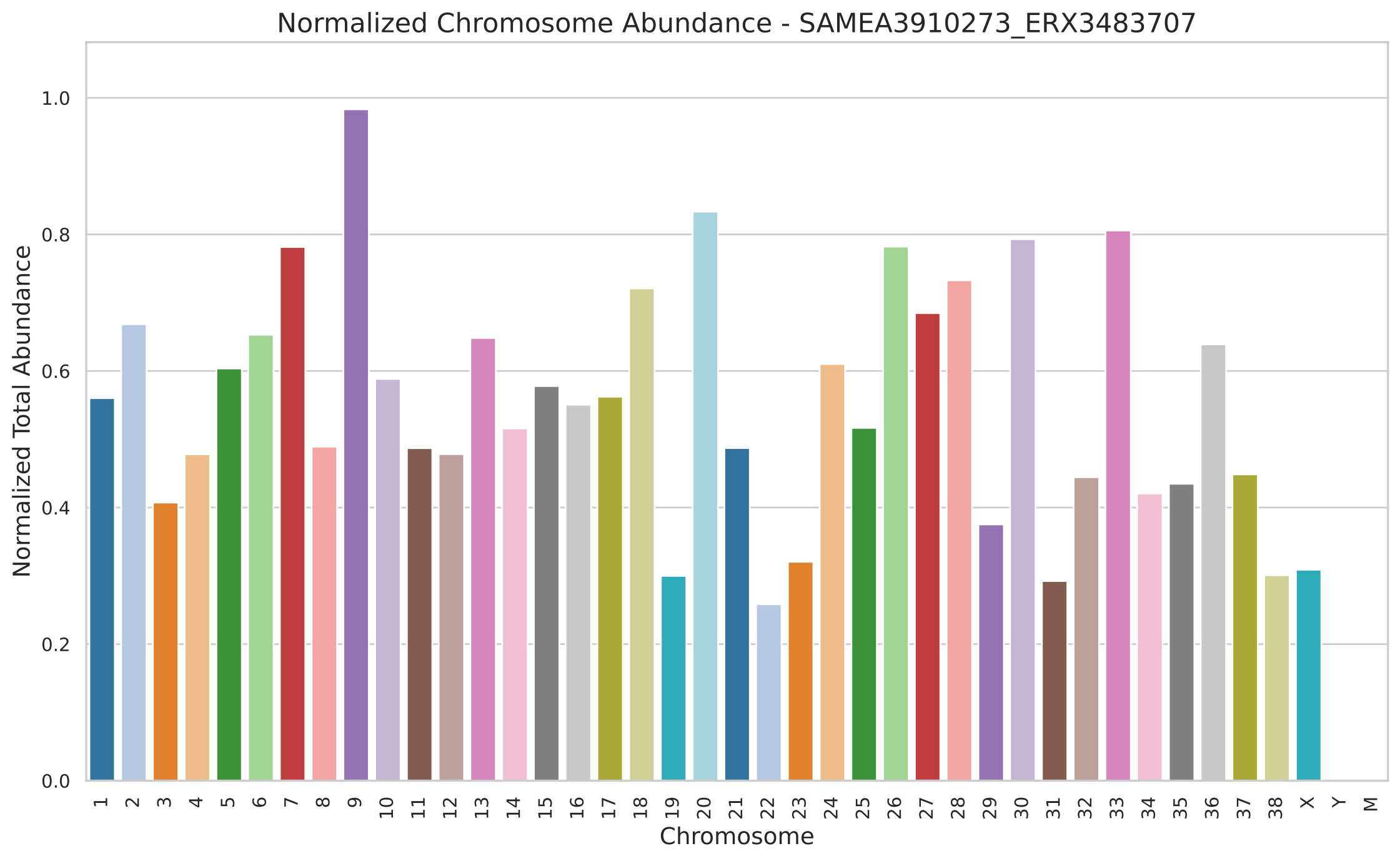

Normalized Chromosome Abundance - SAMEA5804908_ERX3483913
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

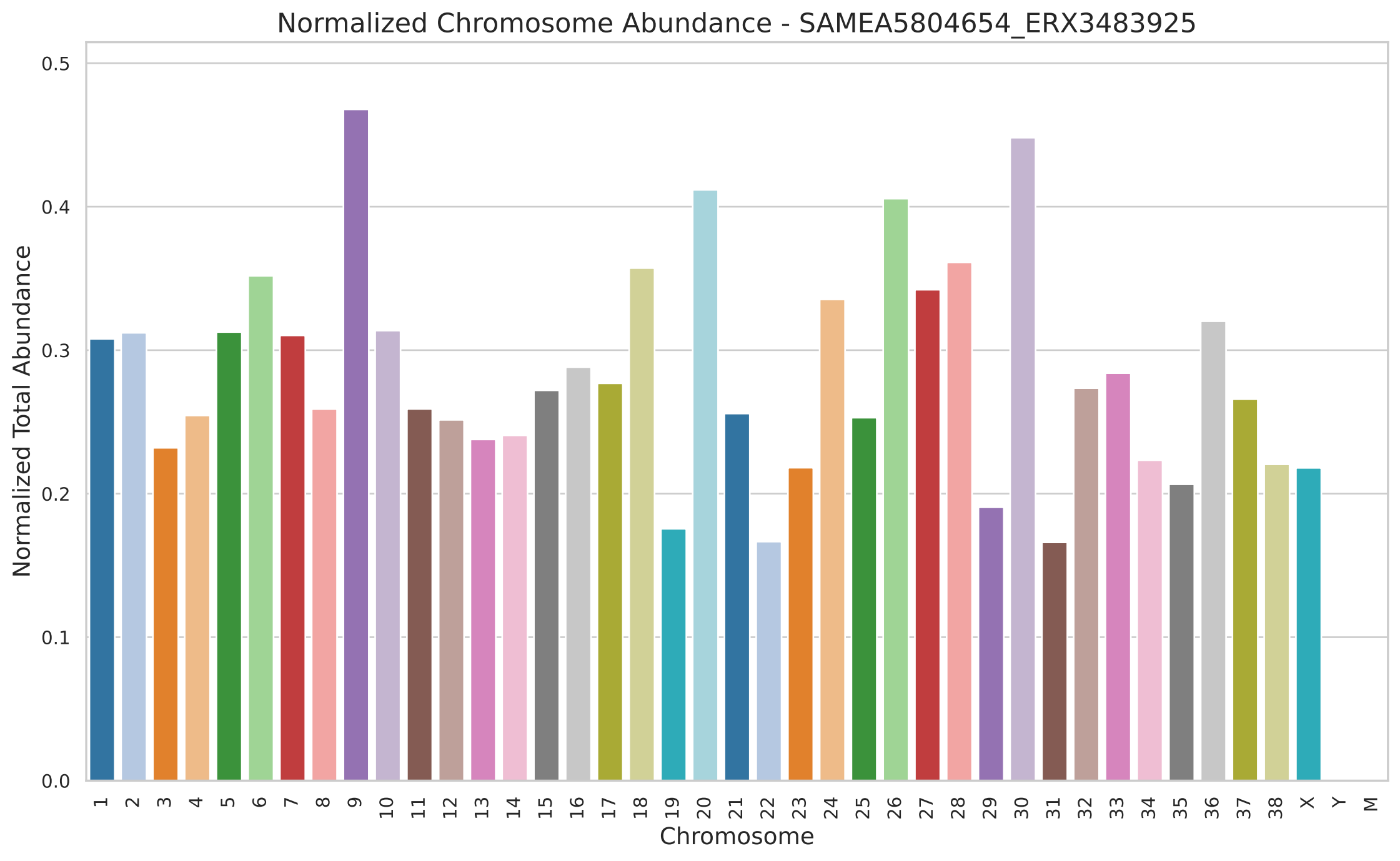

Normalized Chromosome Abundance - SAMEA5804667_ERX3483927
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

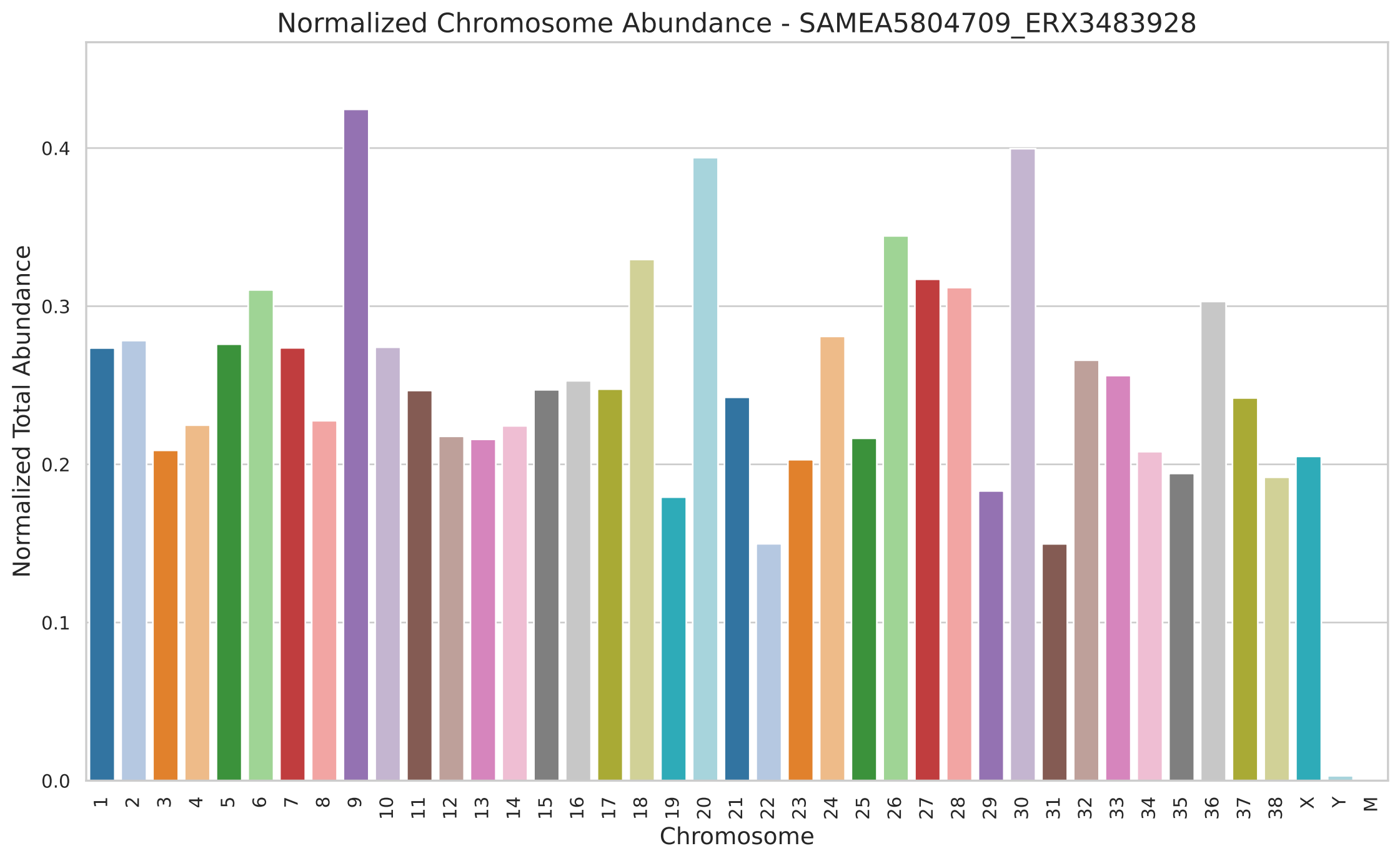

Normalized Chromosome Abundance - SAMEA5804702_ERX3483886
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

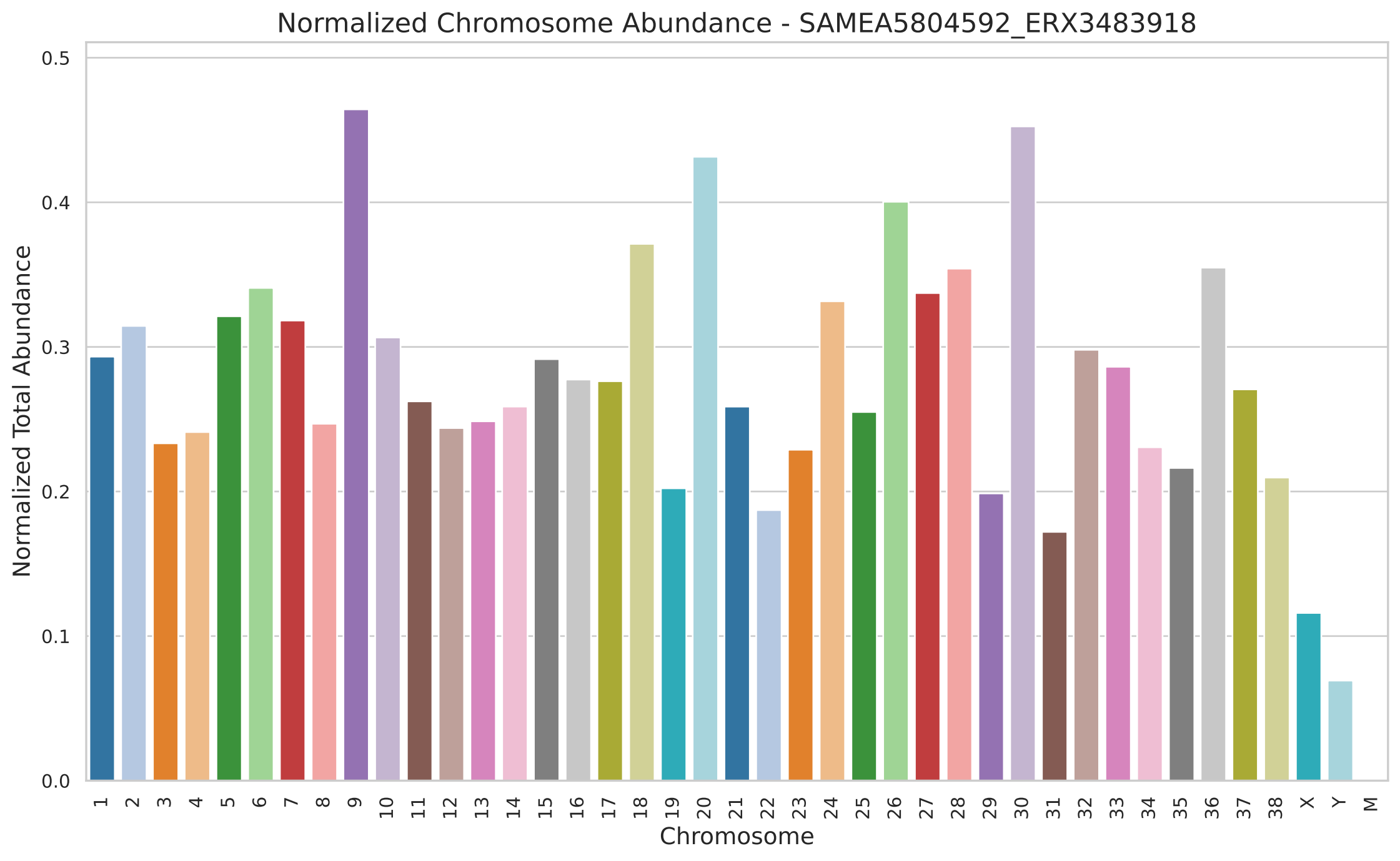

Normalized Chromosome Abundance - SAMEA5804732_ERX3483891
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

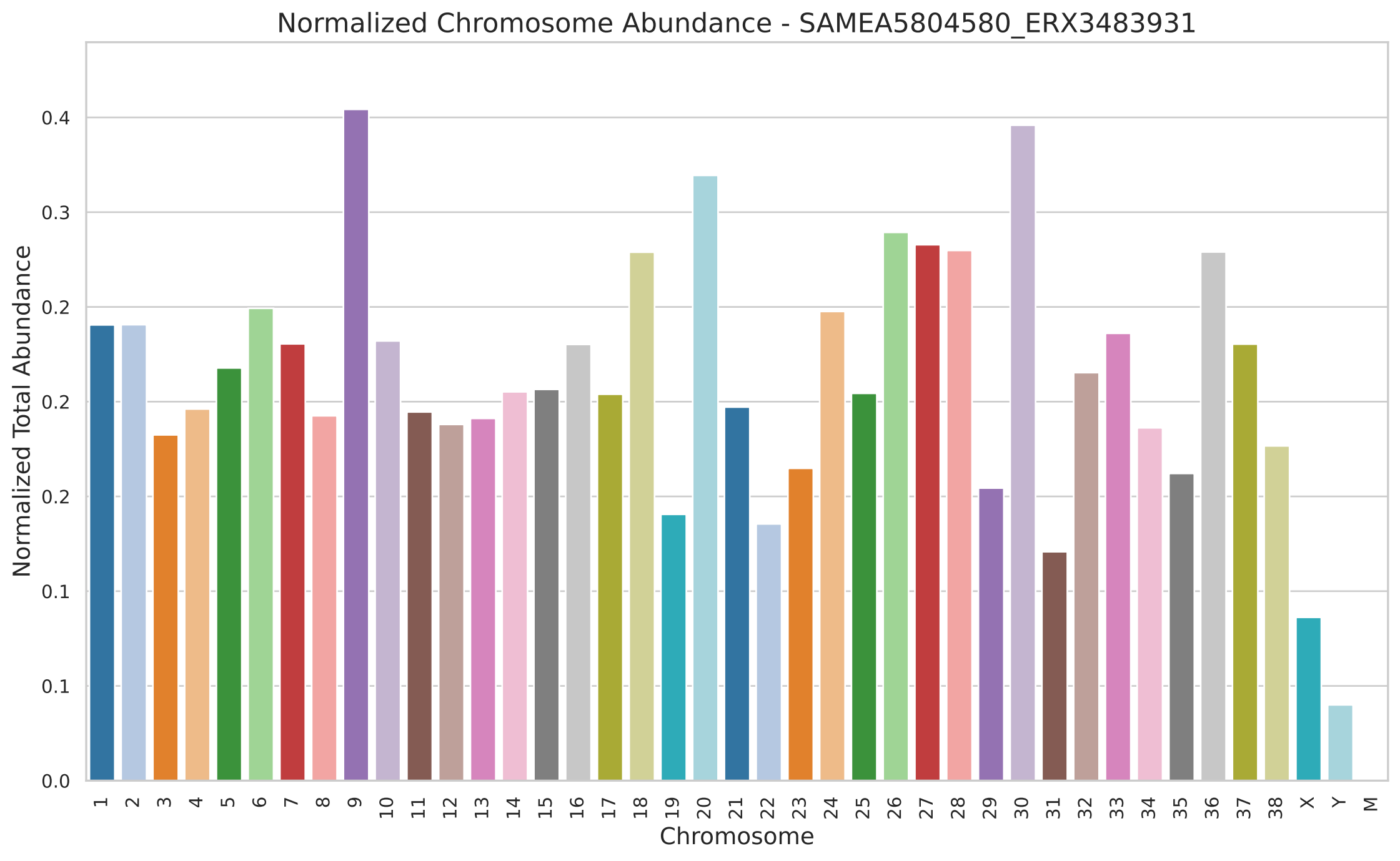

Normalized Chromosome Abundance - SAMEA5804736_ERX3483892
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

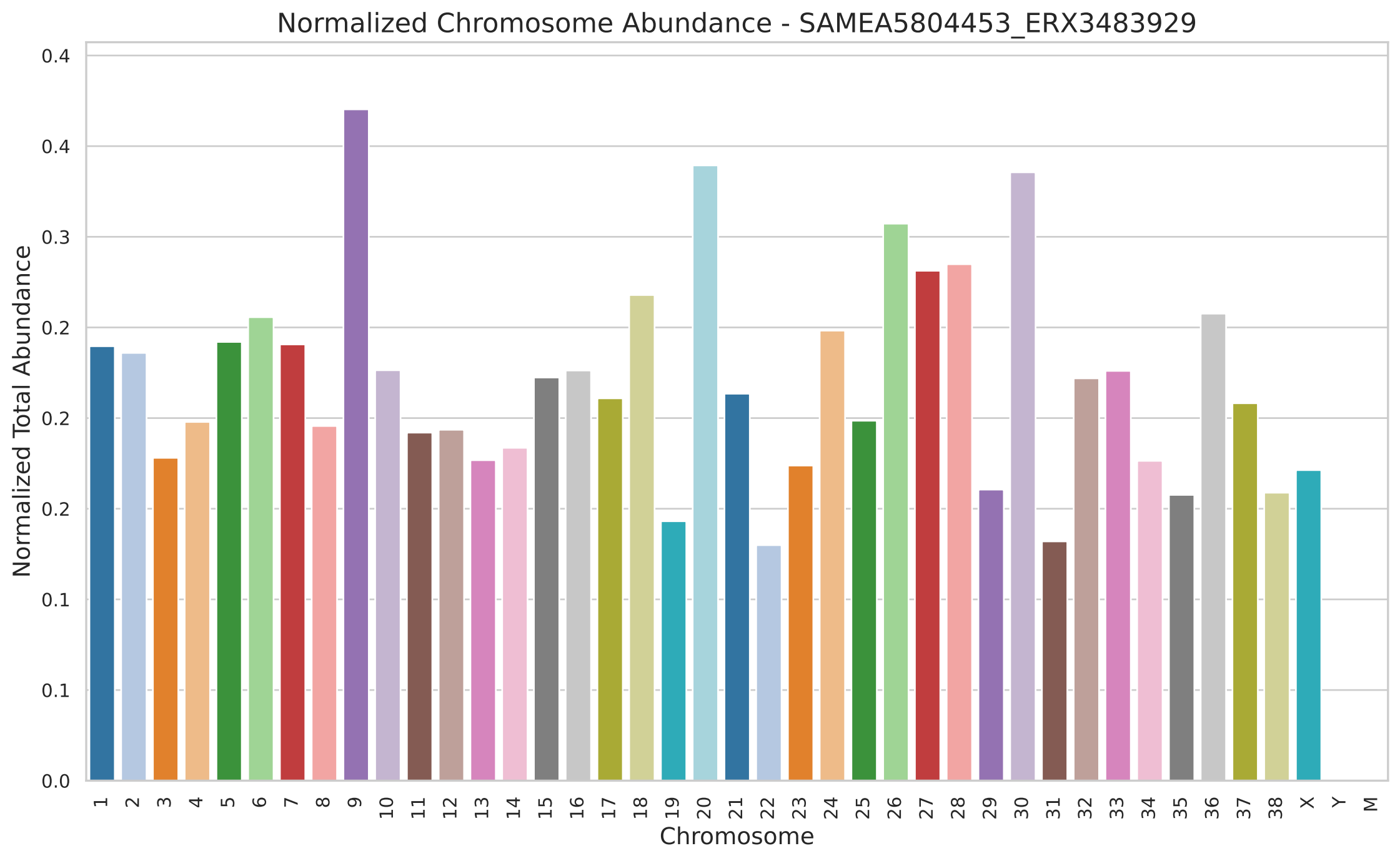

Normalized Chromosome Abundance - SAMEA3910273_ERX3483707
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

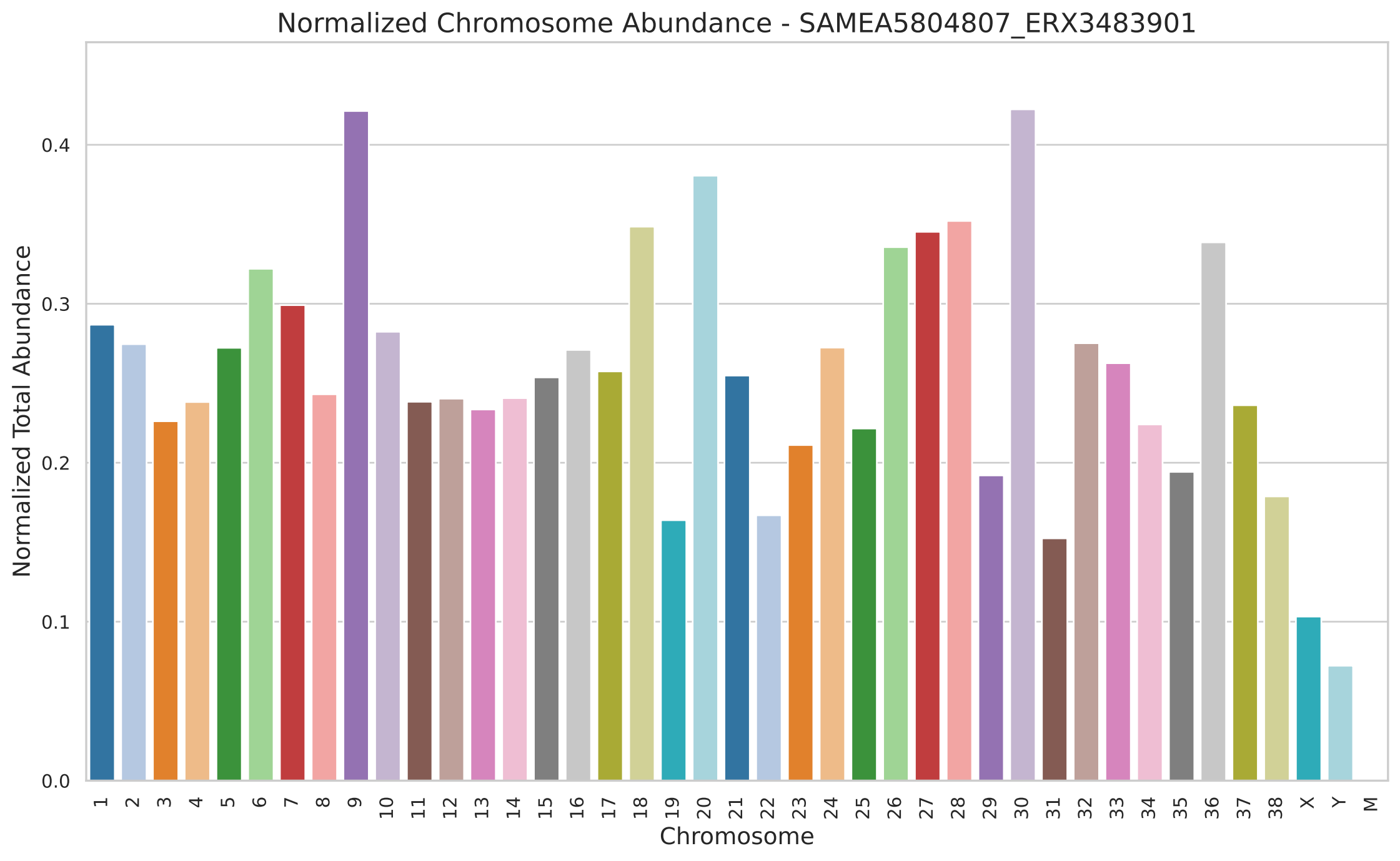

Normalized Chromosome Abundance - SAMEA5804654_ERX3483925
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

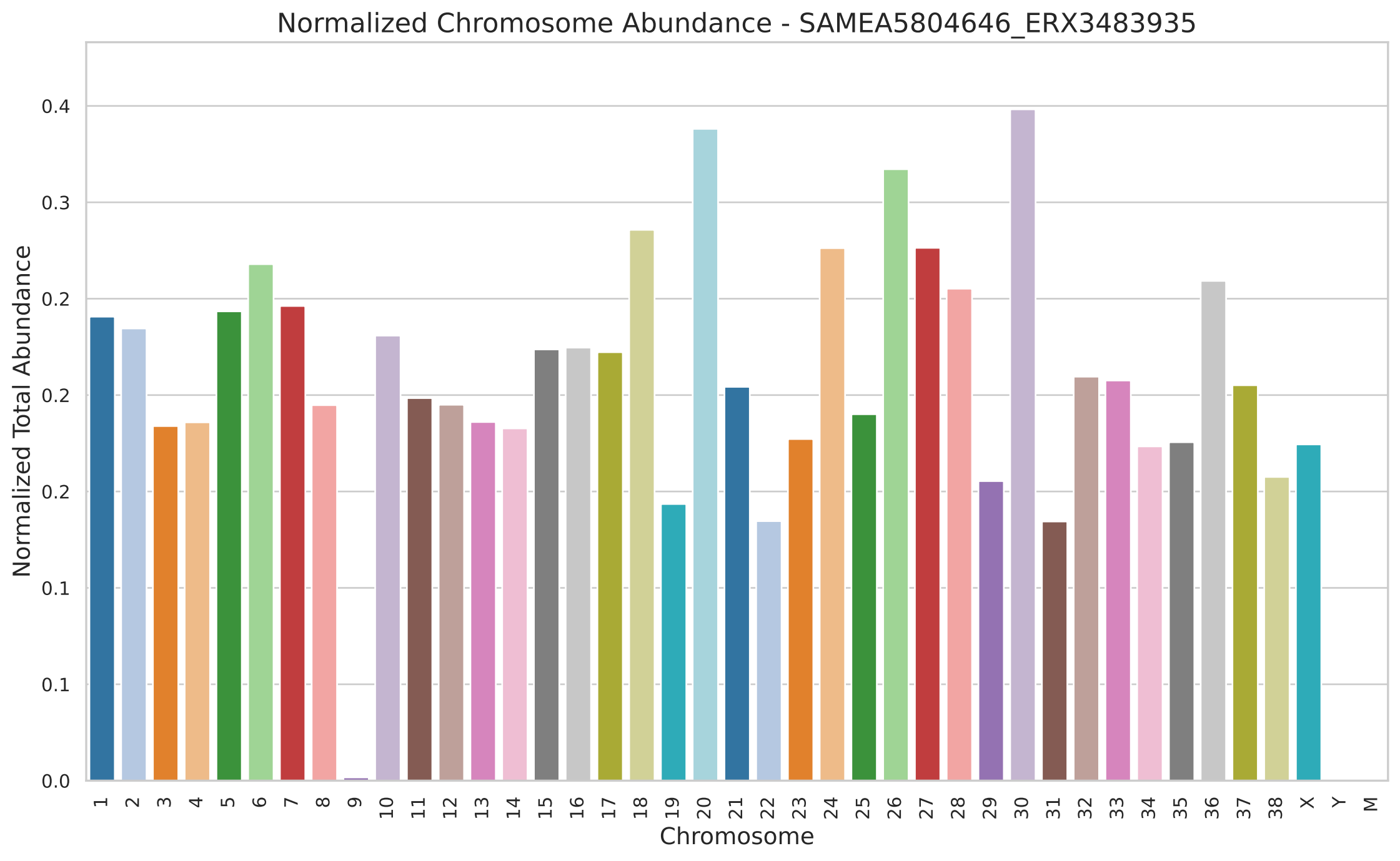

Normalized Chromosome Abundance - SAMEA5804709_ERX3483928
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

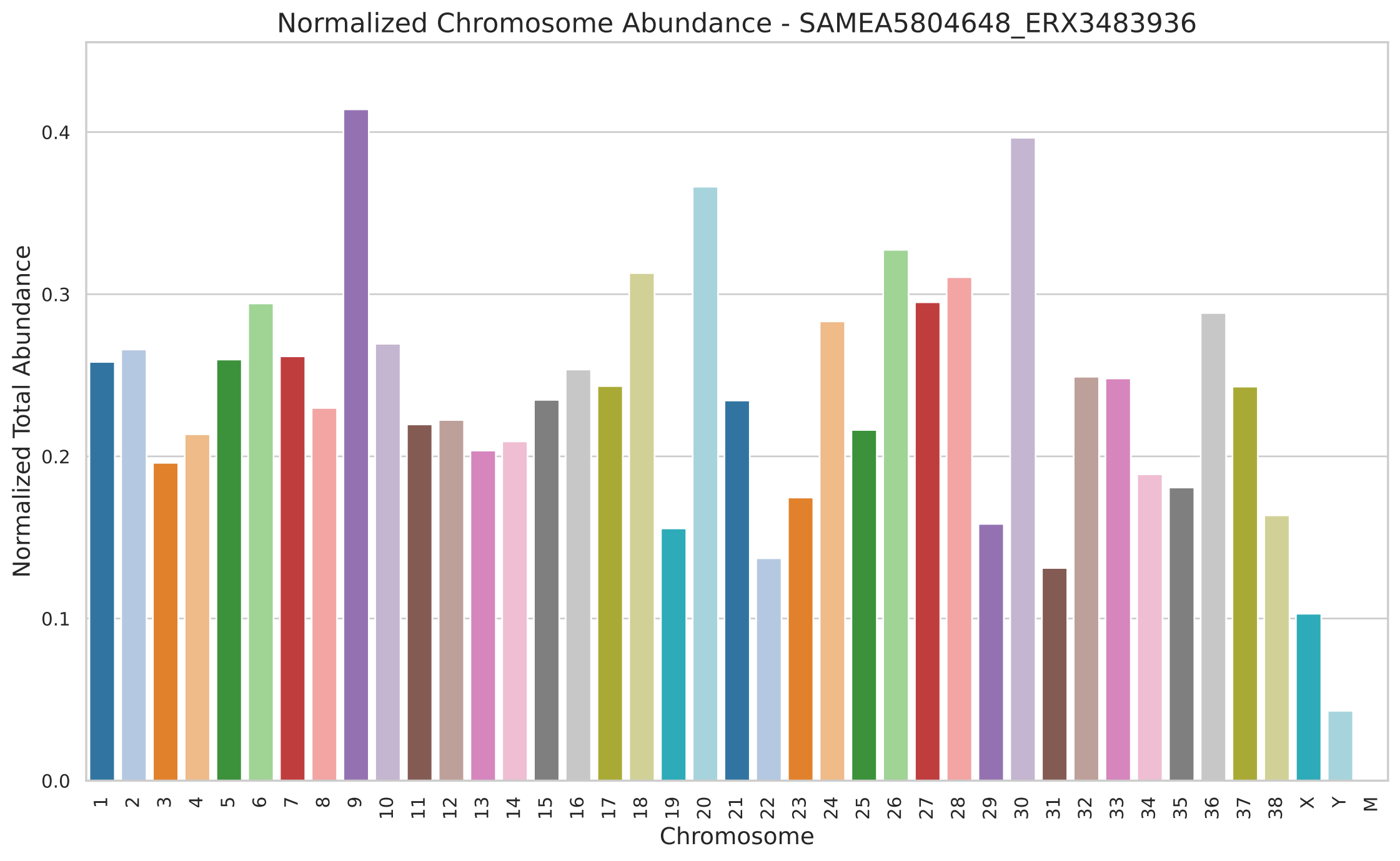

Normalized Chromosome Abundance - SAMEA5804592_ERX3483918
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

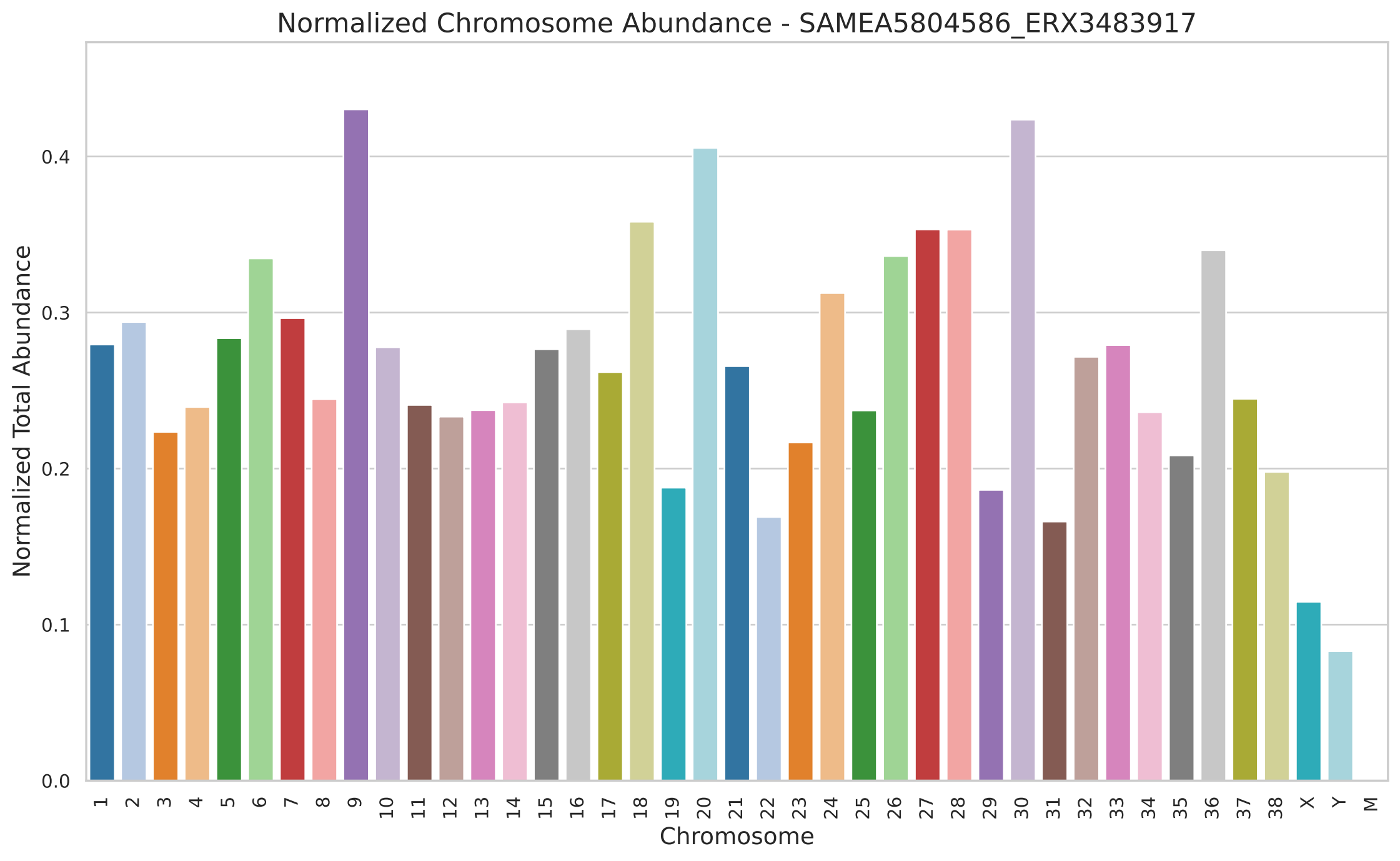

Normalized Chromosome Abundance - SAMEA5804580_ERX3483931
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

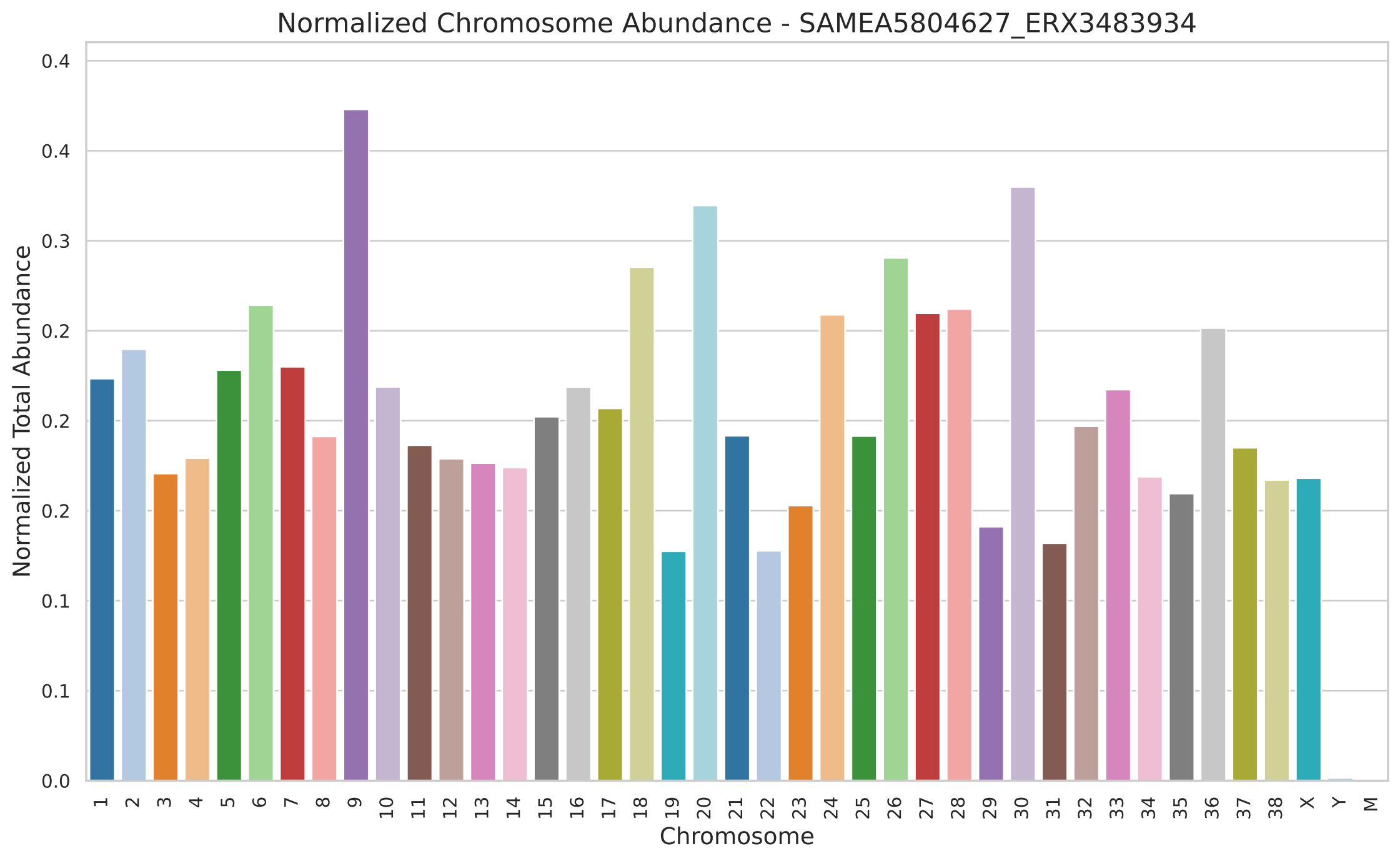

Normalized Chromosome Abundance - SAMEA5804453_ERX3483929
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

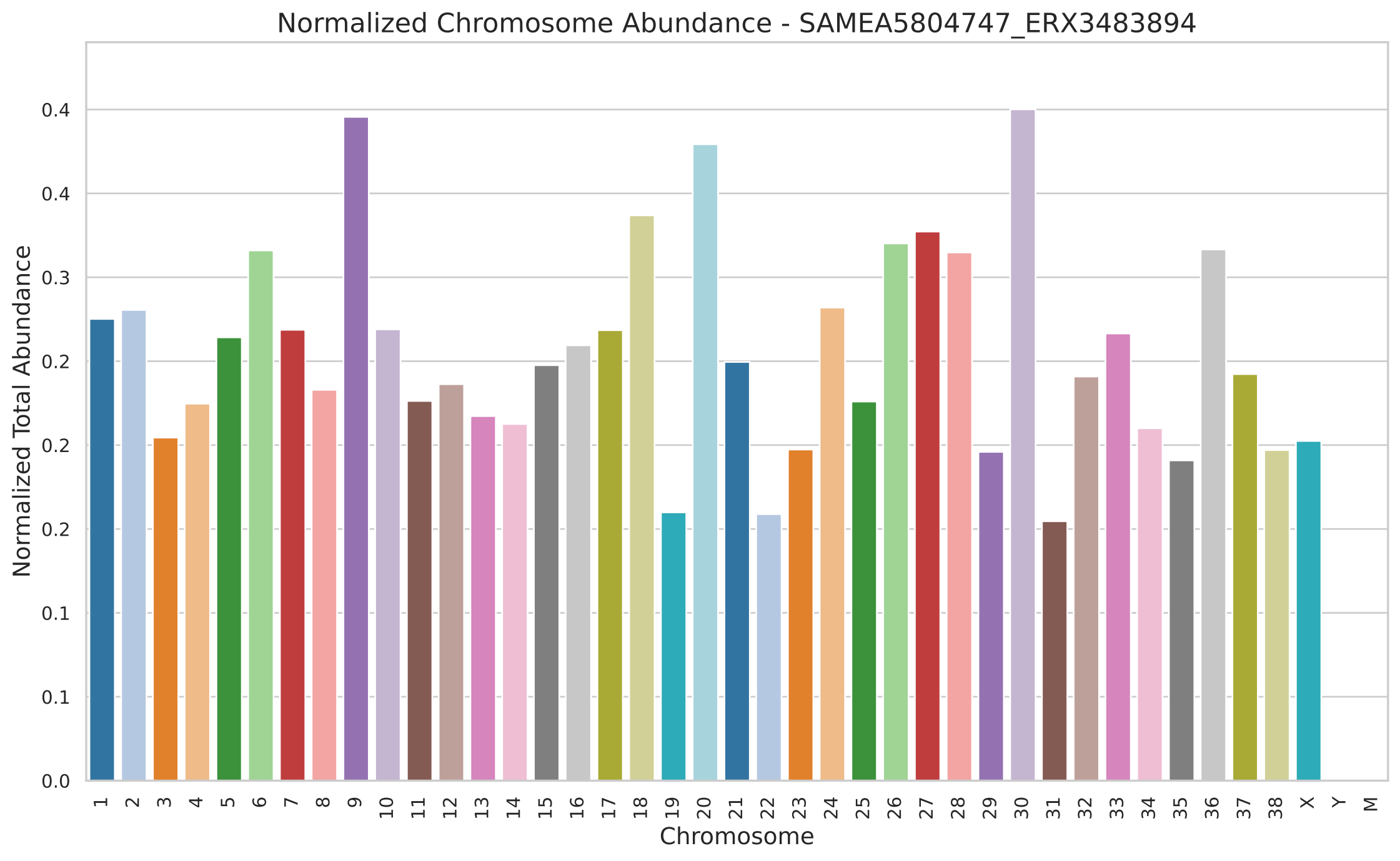

Normalized Chromosome Abundance - SAMEA5804807_ERX3483901
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

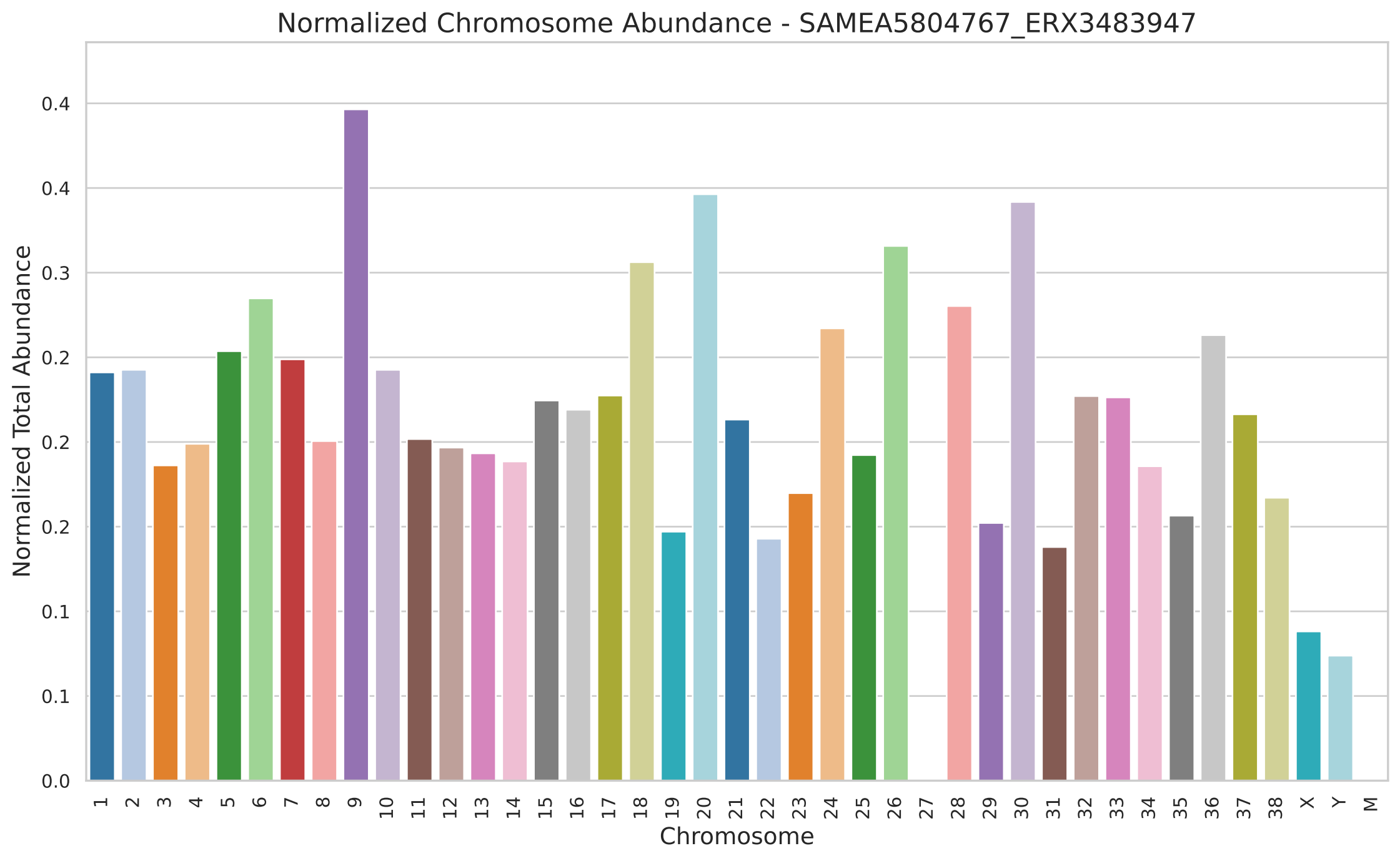

Normalized Chromosome Abundance - SAMEA5804646_ERX3483935
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

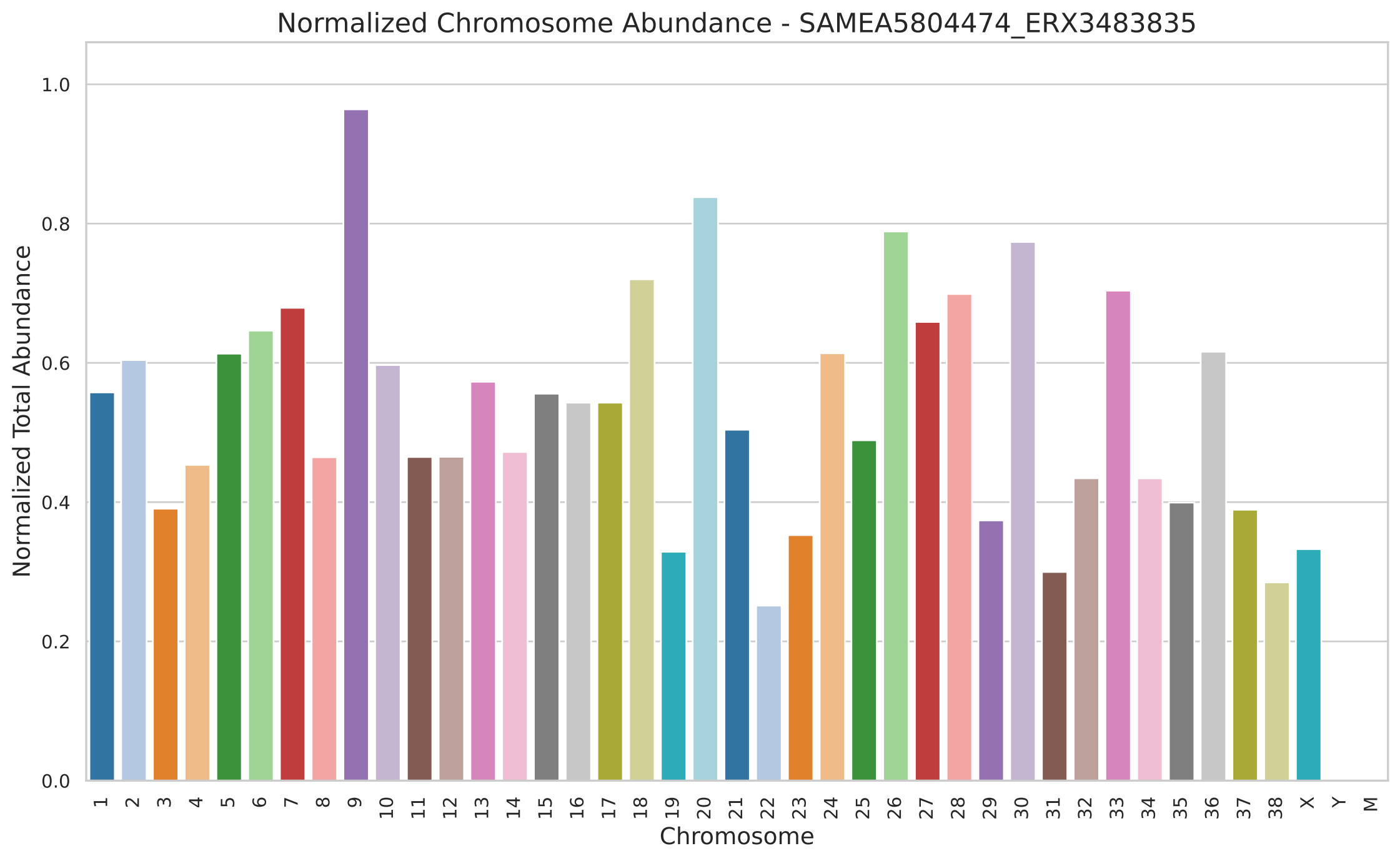

Normalized Chromosome Abundance - SAMEA5804648_ERX3483936
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

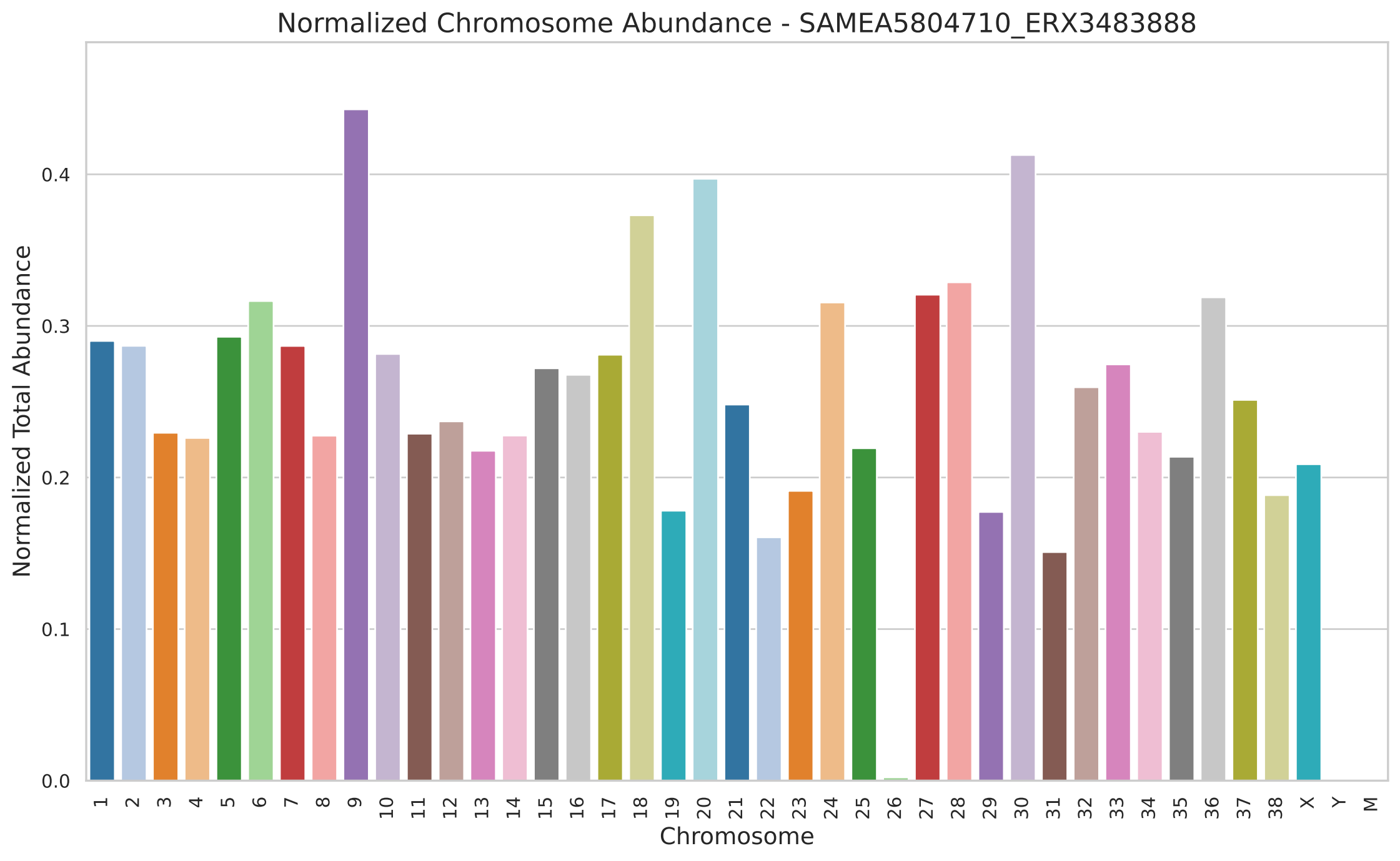

Normalized Chromosome Abundance - SAMEA5804586_ERX3483917
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

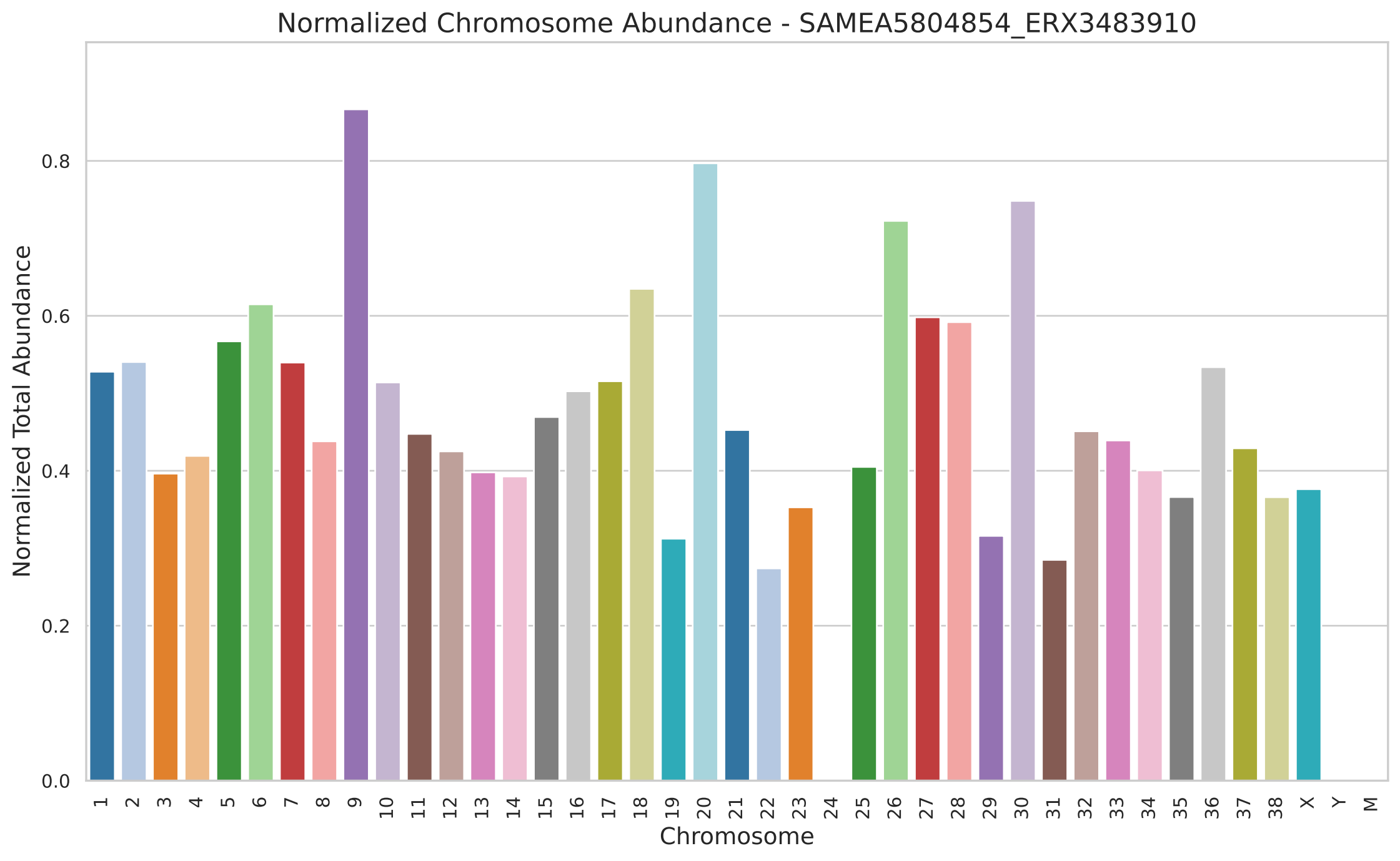

Normalized Chromosome Abundance - SAMEA5804627_ERX3483934
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
0.4
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

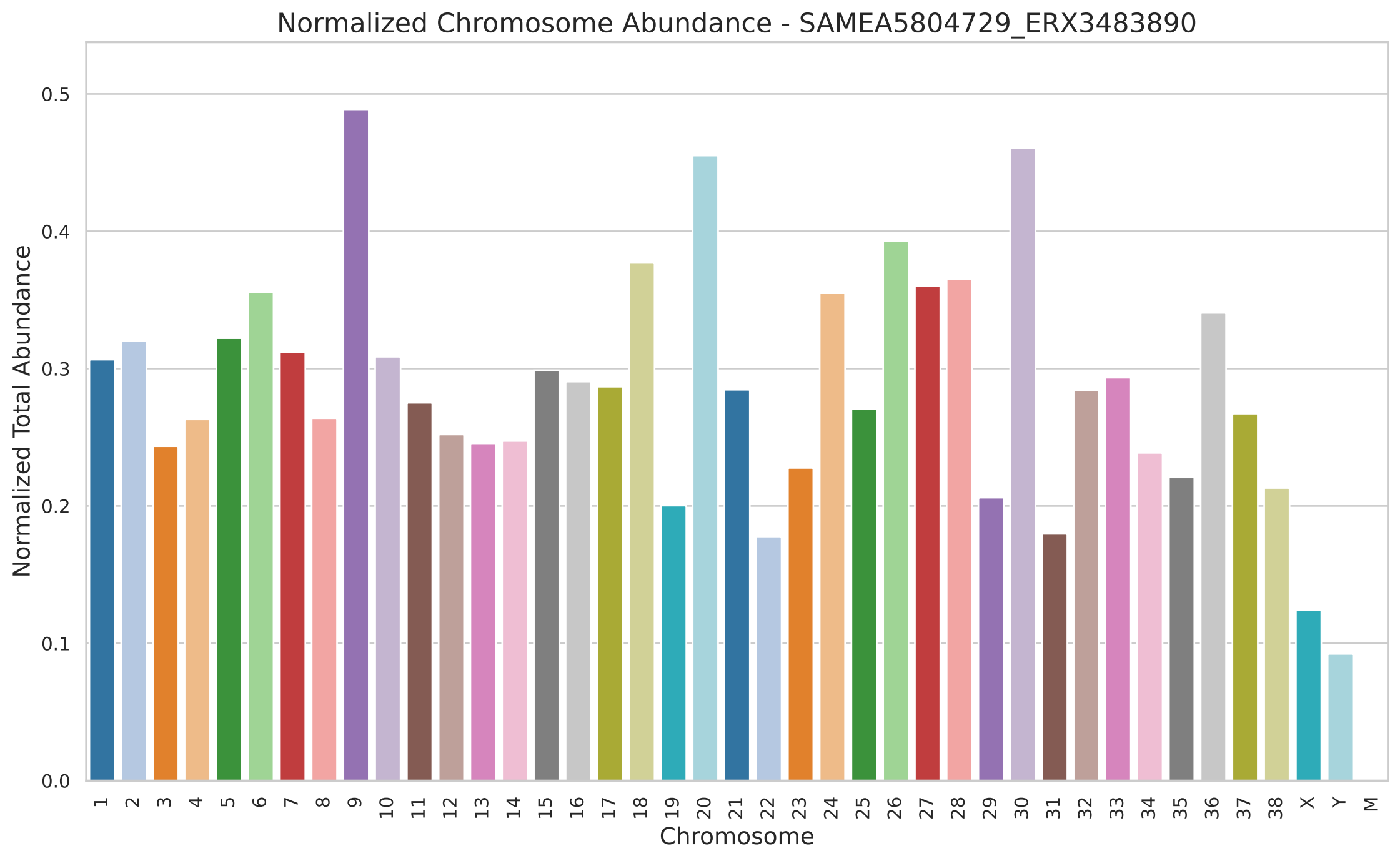

Normalized Chromosome Abundance - SAMEA5804747_ERX3483894
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.4
0.2
0.1
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

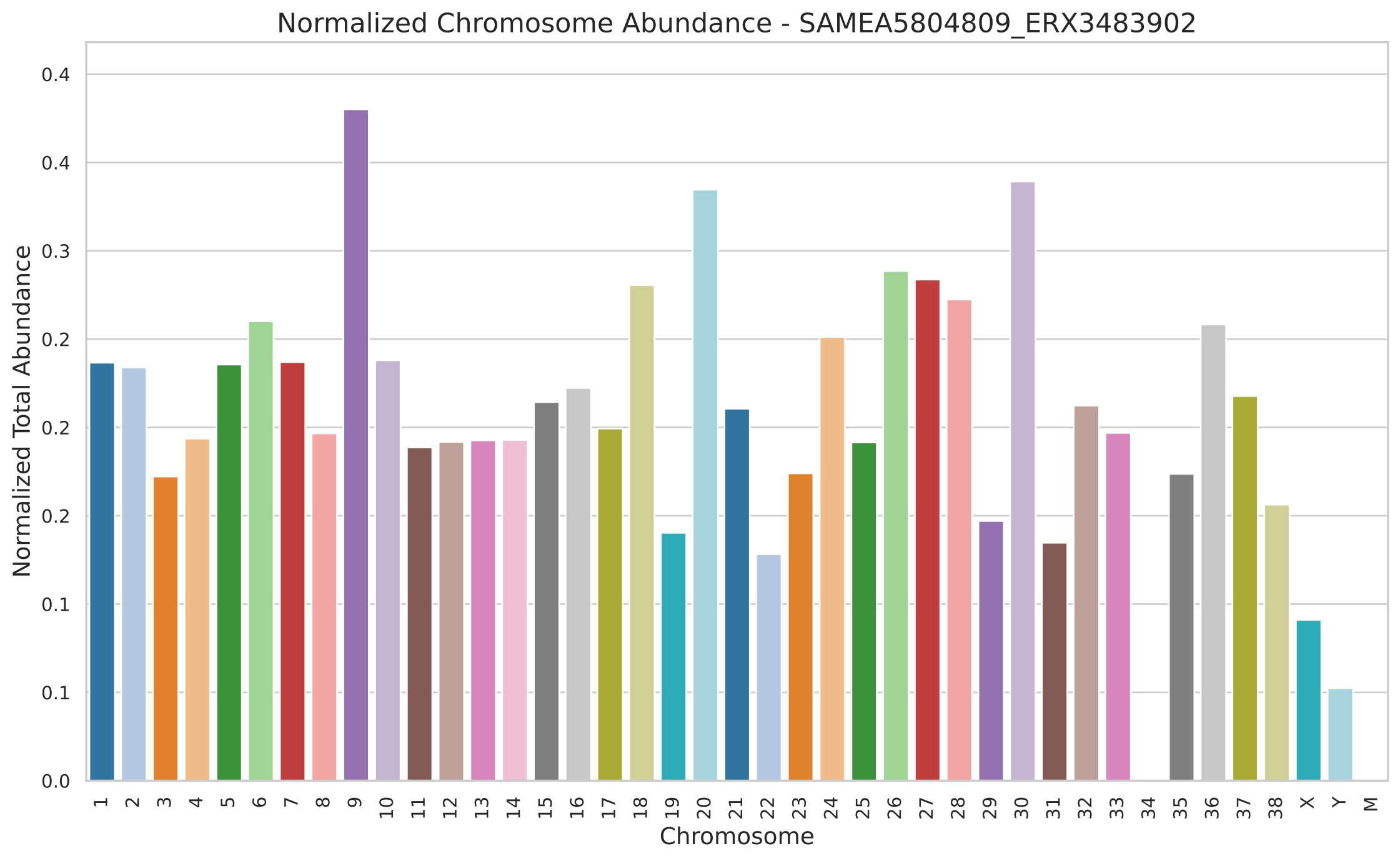

Normalized Chromosome Abundance - SAMEA5804767_ERX3483947
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

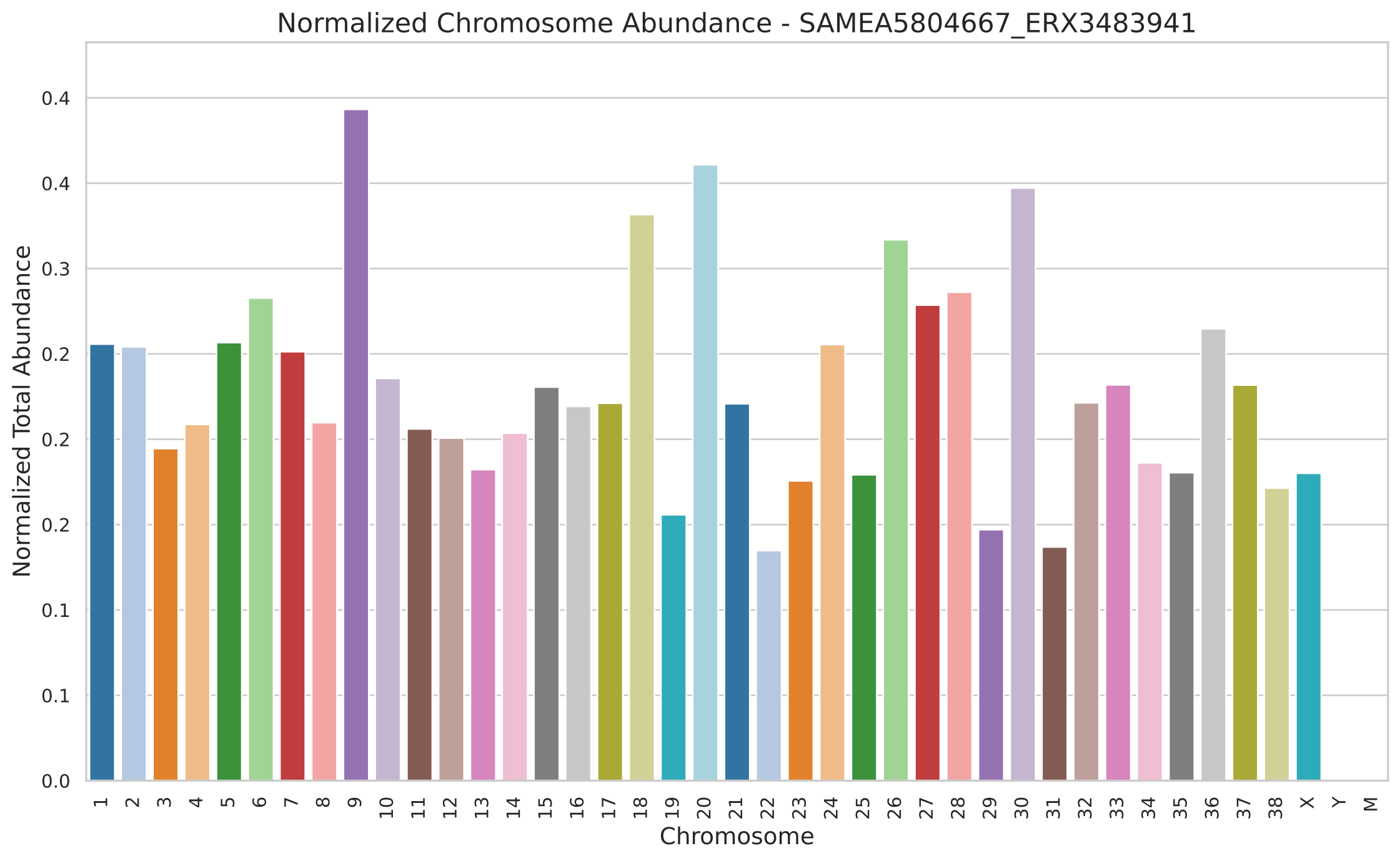

Normalized Chromosome Abundance - SAMEA5804474_ERX3483835
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

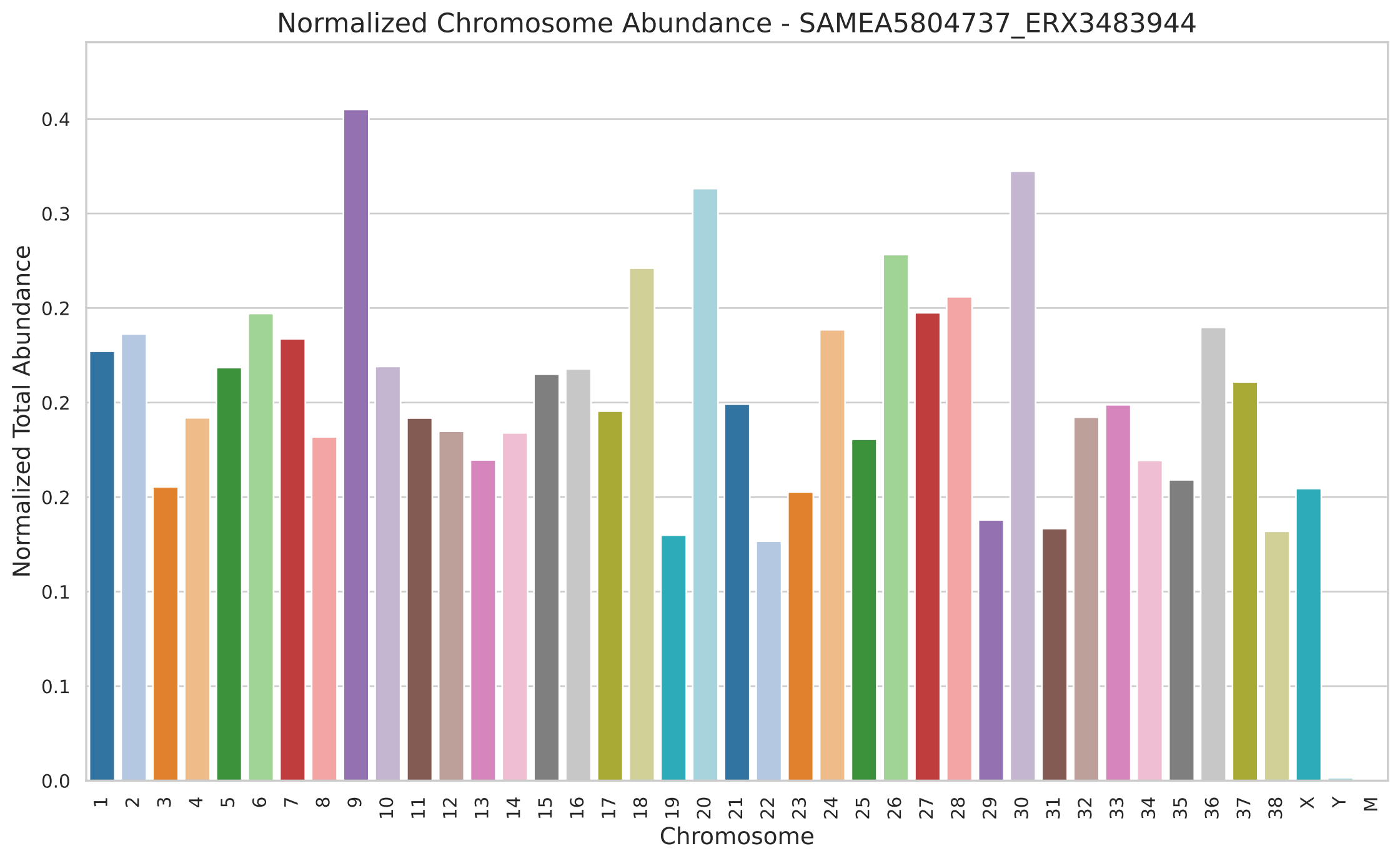

Normalized Chromosome Abundance - SAMEA5804710_ERX3483888
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

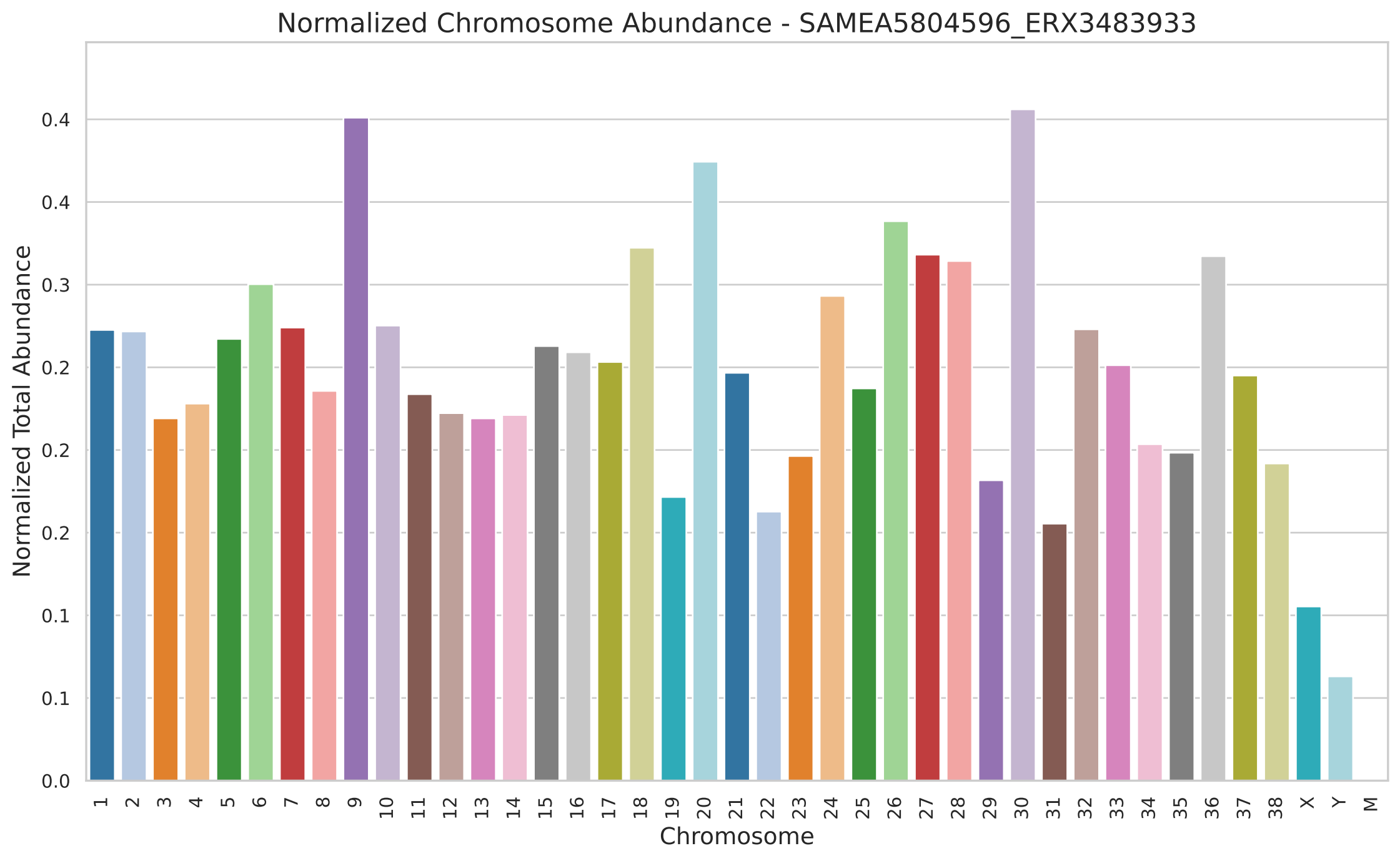

Normalized Chromosome Abundance - SAMEA5804854_ERX3483910
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

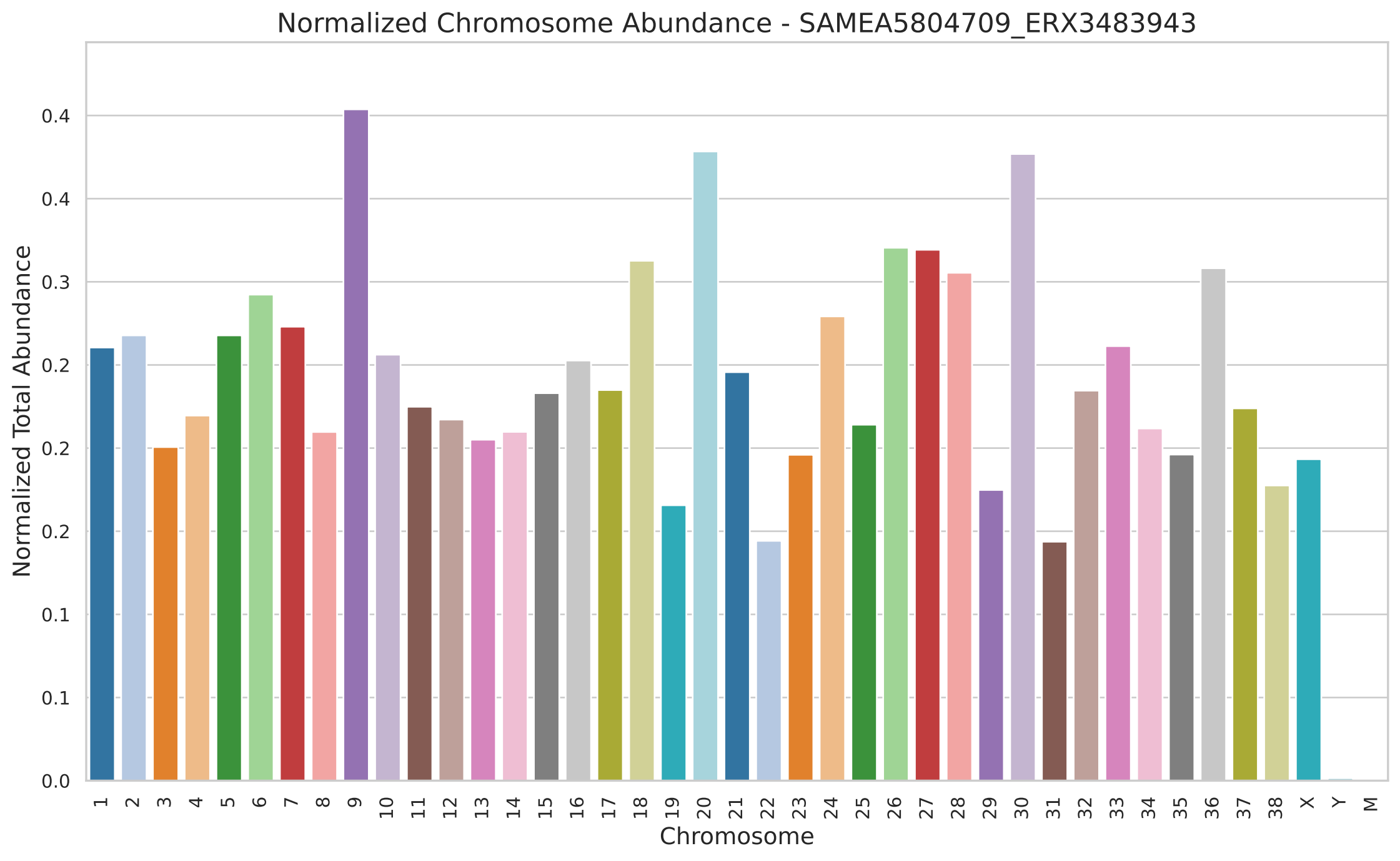

Normalized Chromosome Abundance - SAMEA5804729_ERX3483890
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

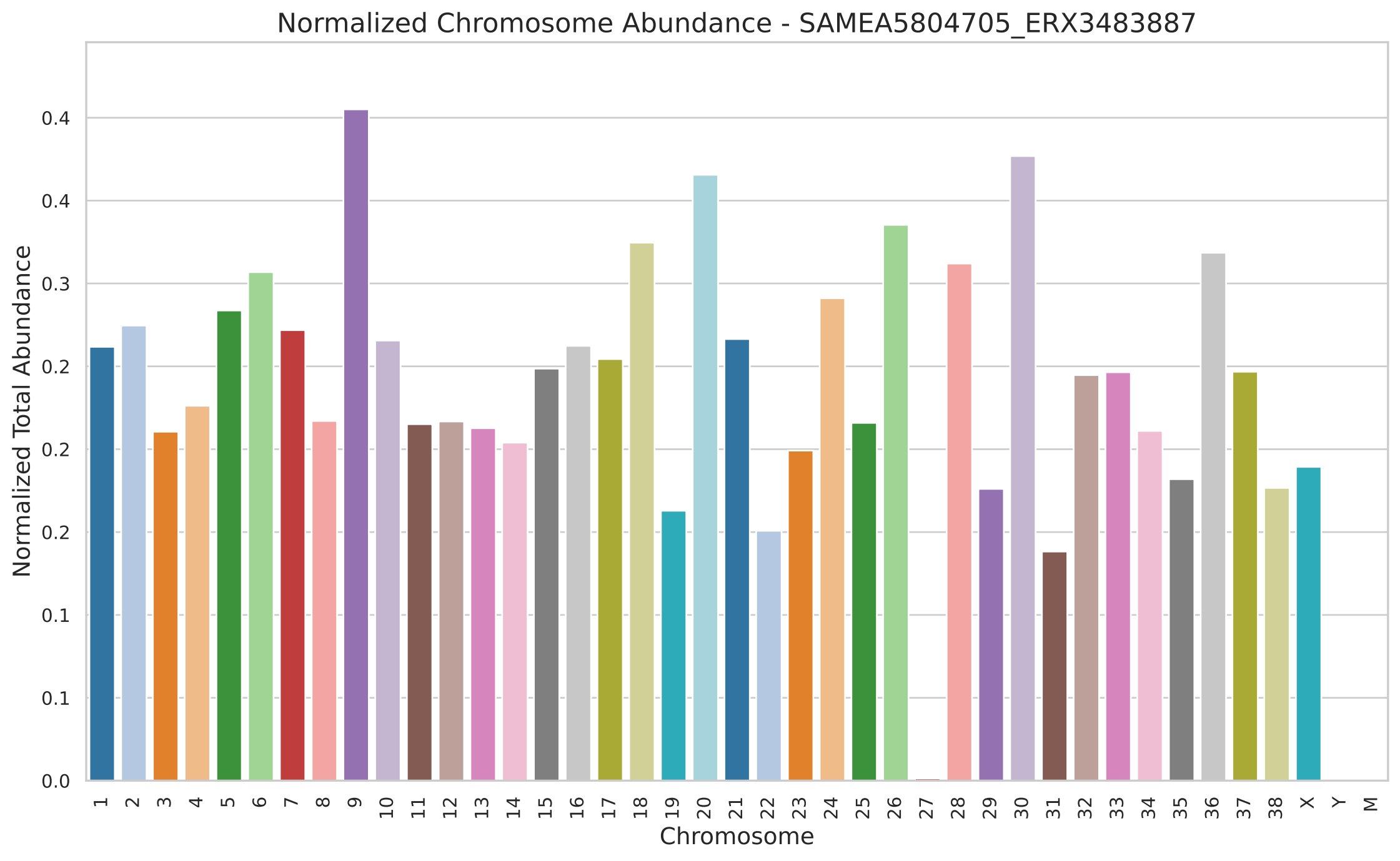

Normalized Chromosome Abundance - SAMEA5804809_ERX3483902
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
0.4
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

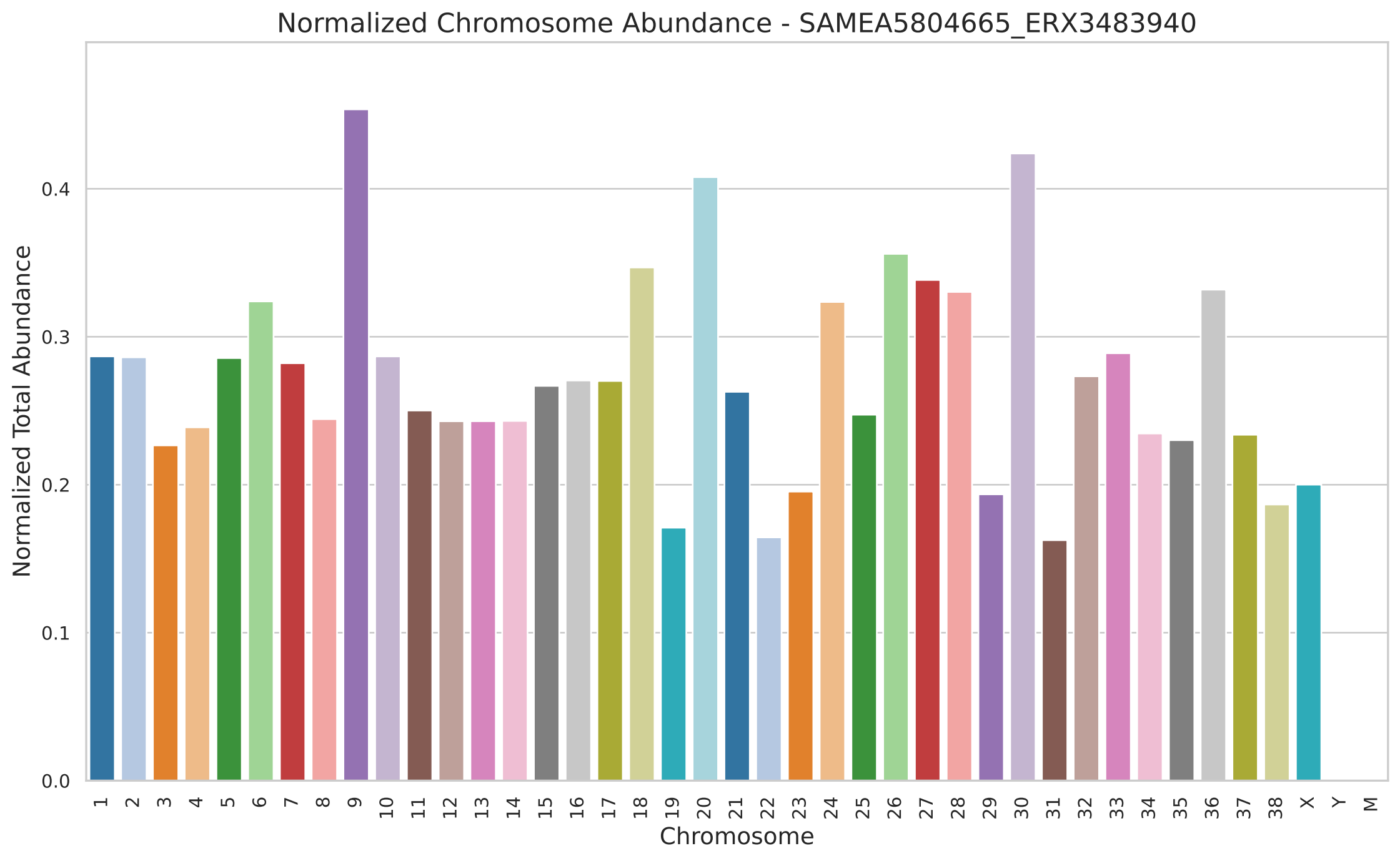

Normalized Chromosome Abundance - SAMEA5804667_ERX3483941
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

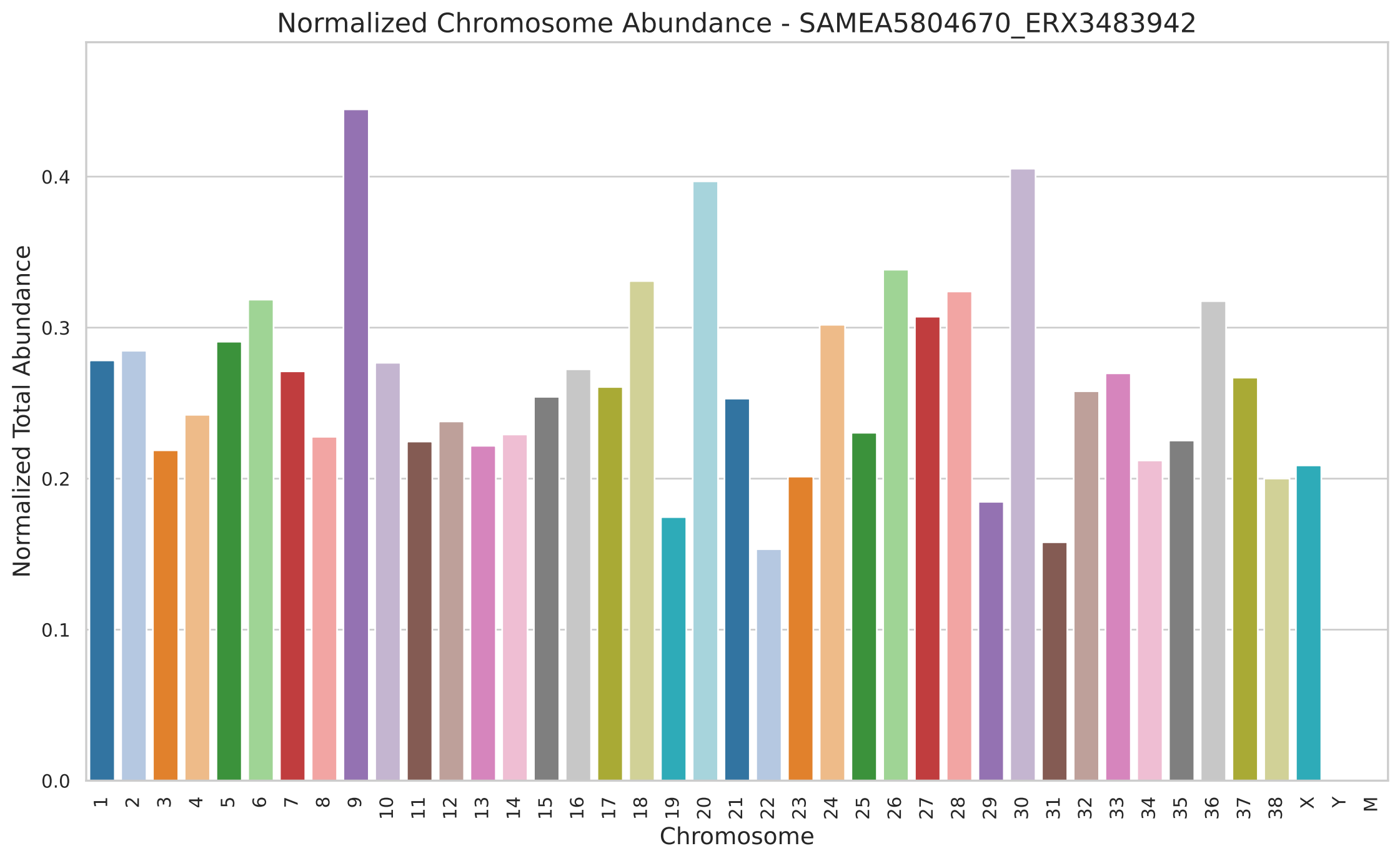

Normalized Chromosome Abundance - SAMEA5804737_ERX3483944
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

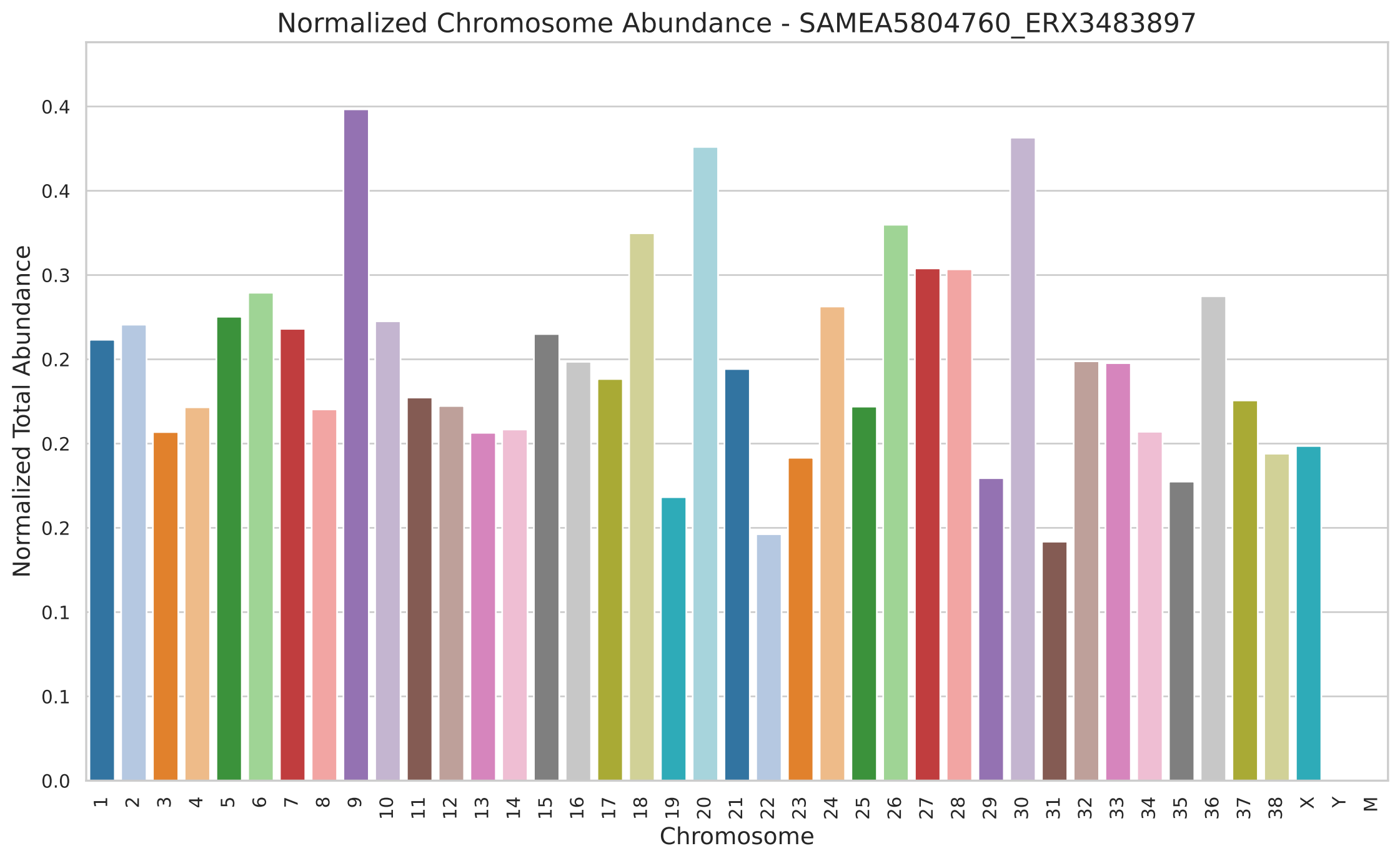

Normalized Chromosome Abundance - SAMEA5804596_ERX3483933
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

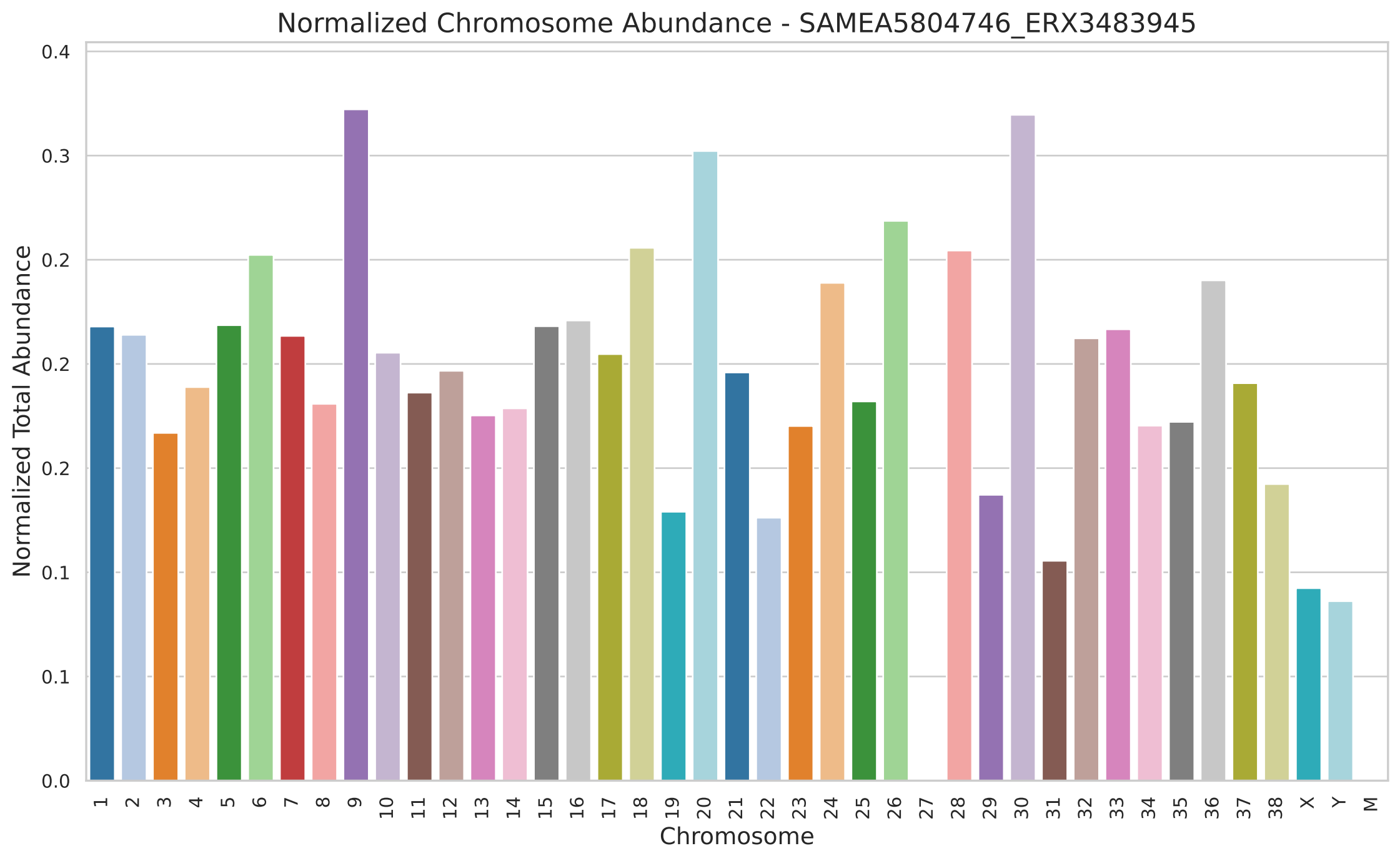

Normalized Chromosome Abundance - SAMEA5804709_ERX3483943
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

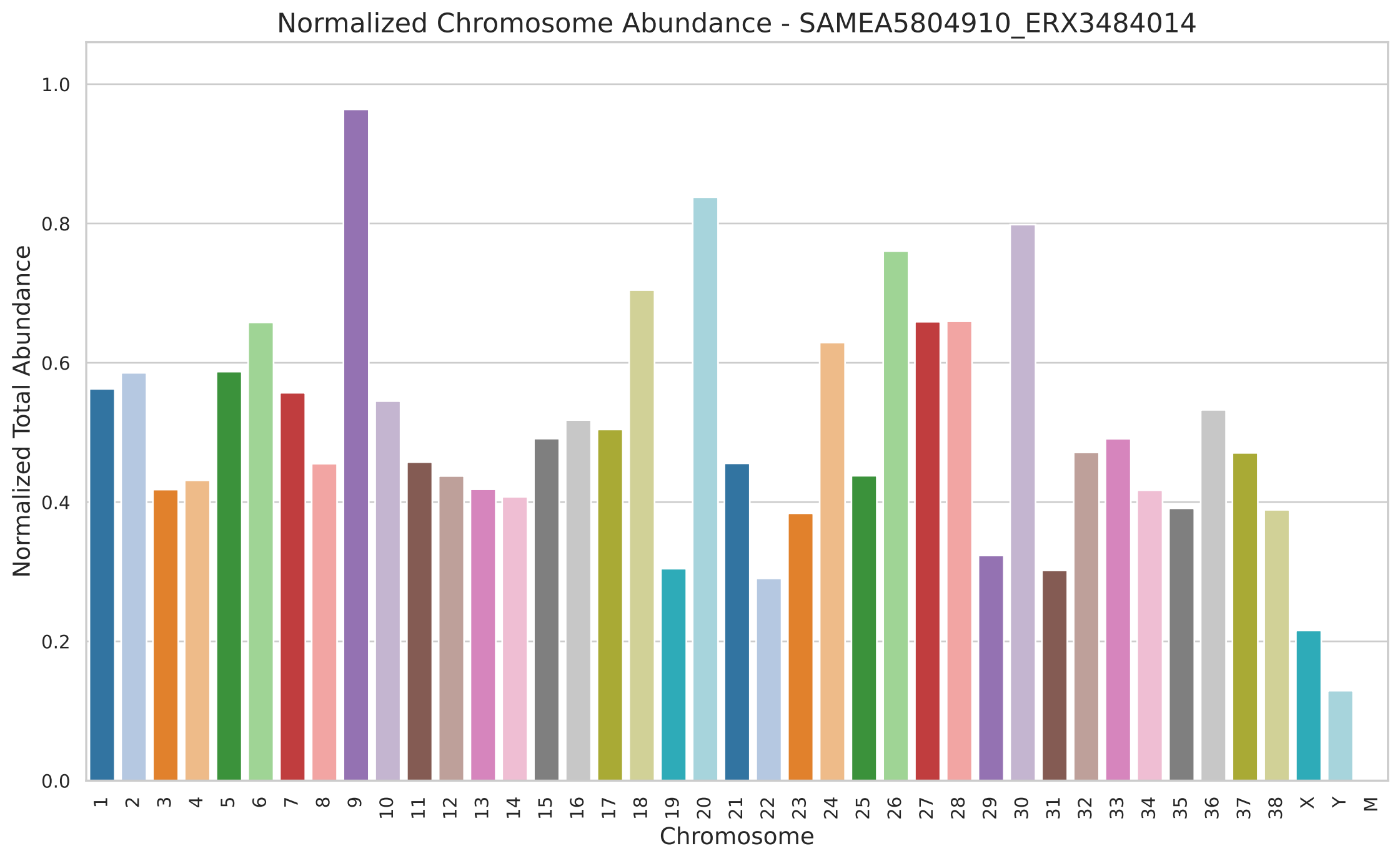

Normalized Chromosome Abundance - SAMEA5804705_ERX3483887
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

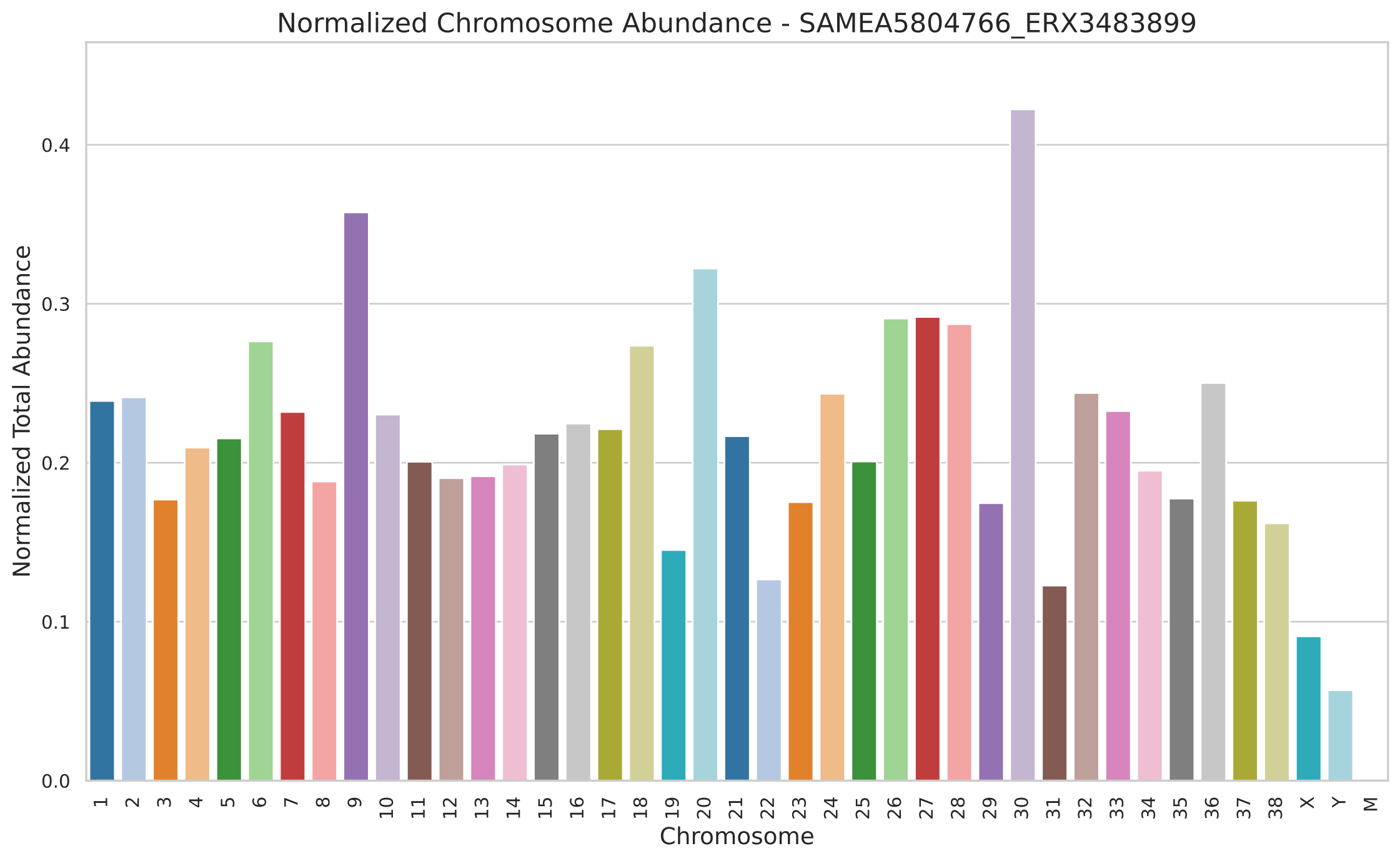

Normalized Chromosome Abundance - SAMEA5804665_ERX3483940
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

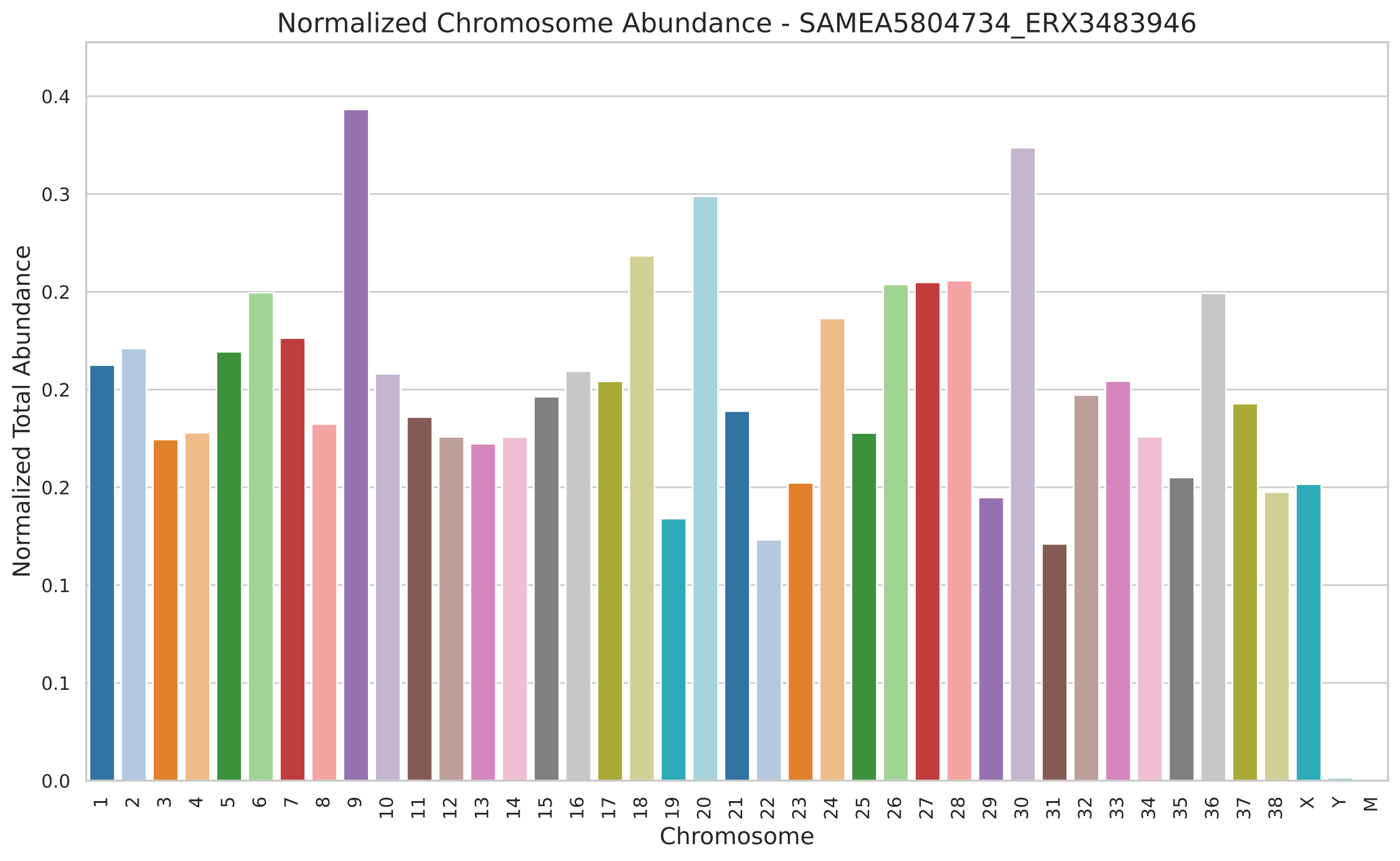

Normalized Chromosome Abundance - SAMEA5804670_ERX3483942
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

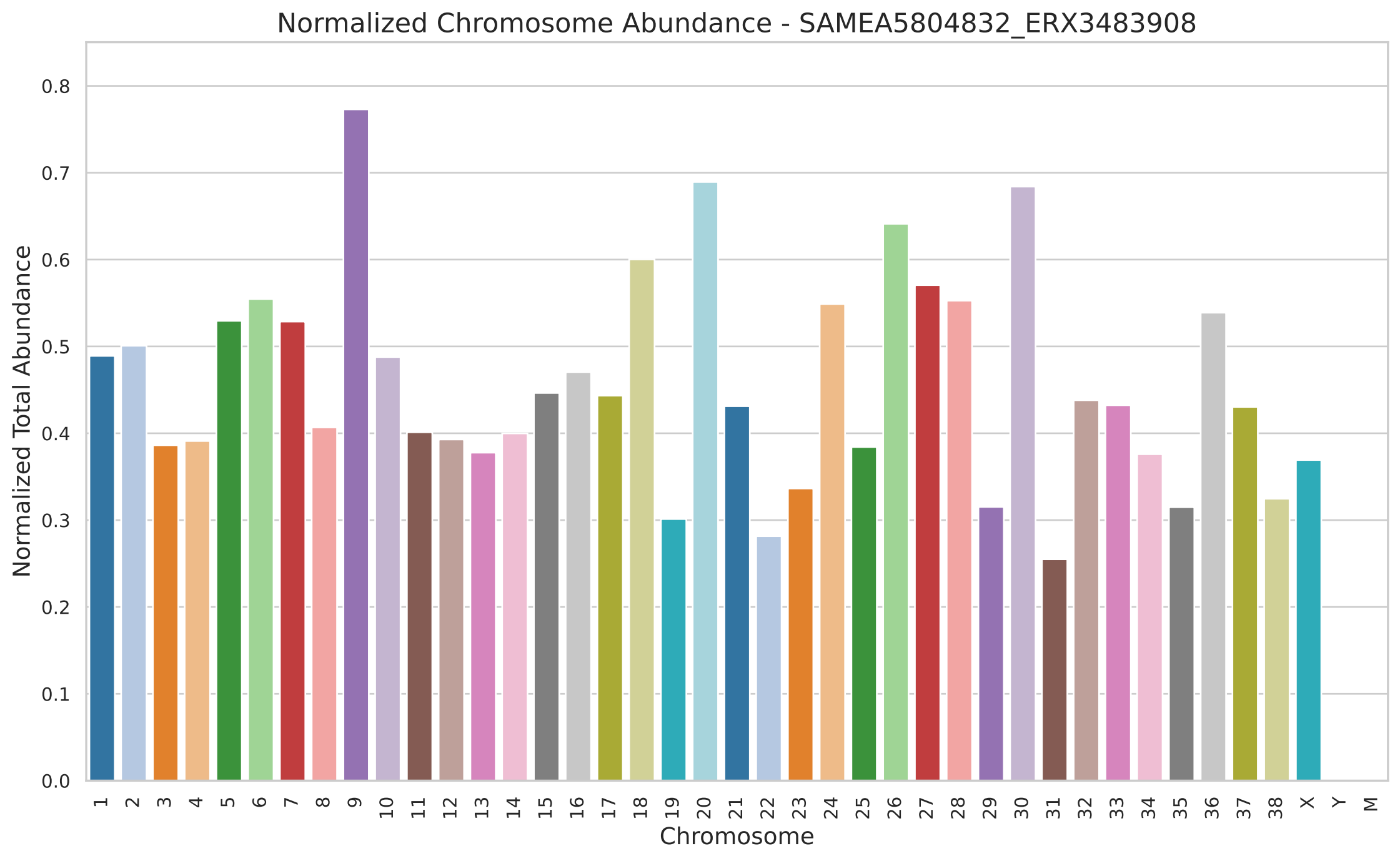

Normalized Chromosome Abundance - SAMEA5804760_ERX3483897
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

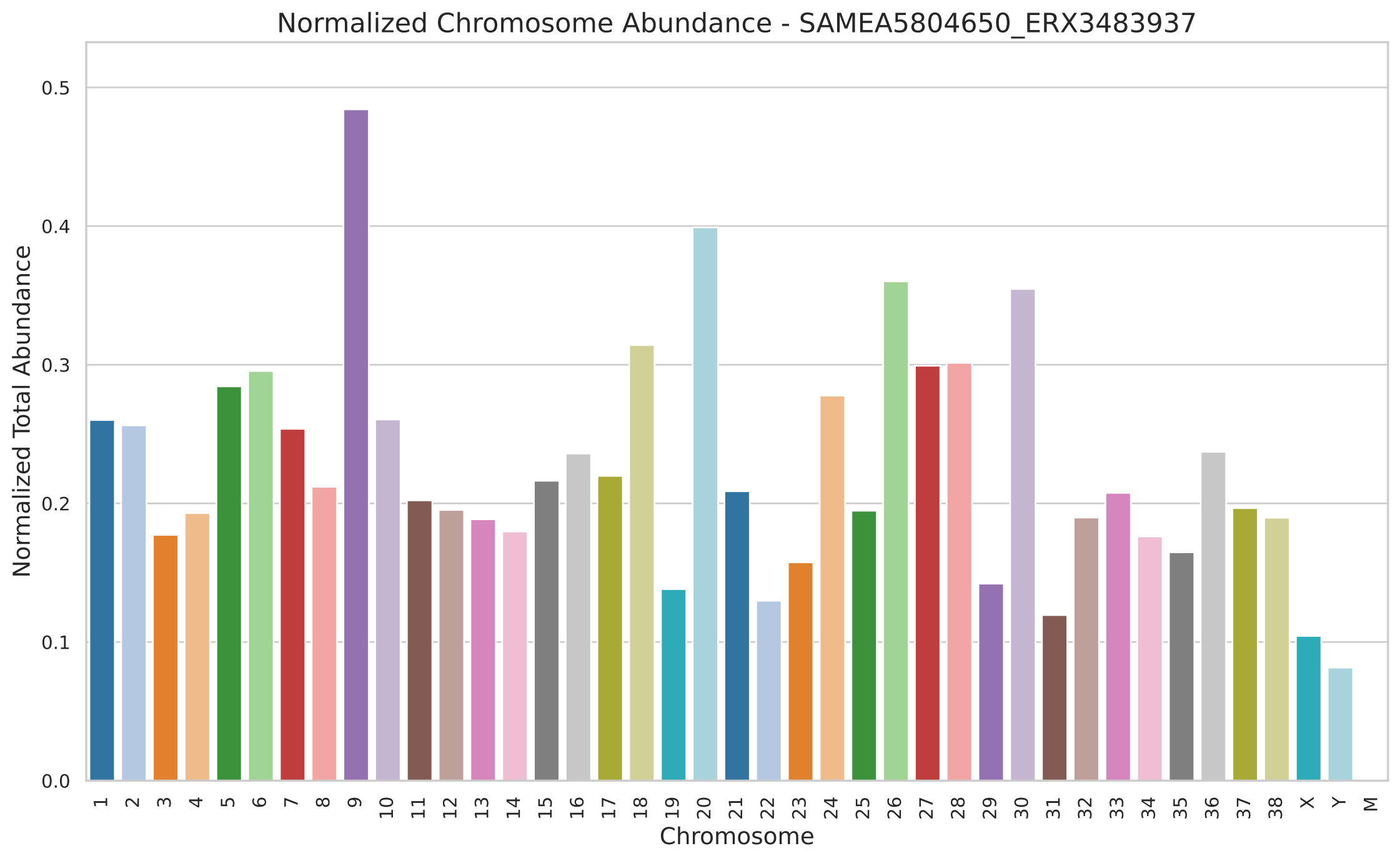

Normalized Chromosome Abundance - SAMEA5804746_ERX3483945
Normalized Total Abundance
0.4
0.3
0.2
0.2
0.1
0.1
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

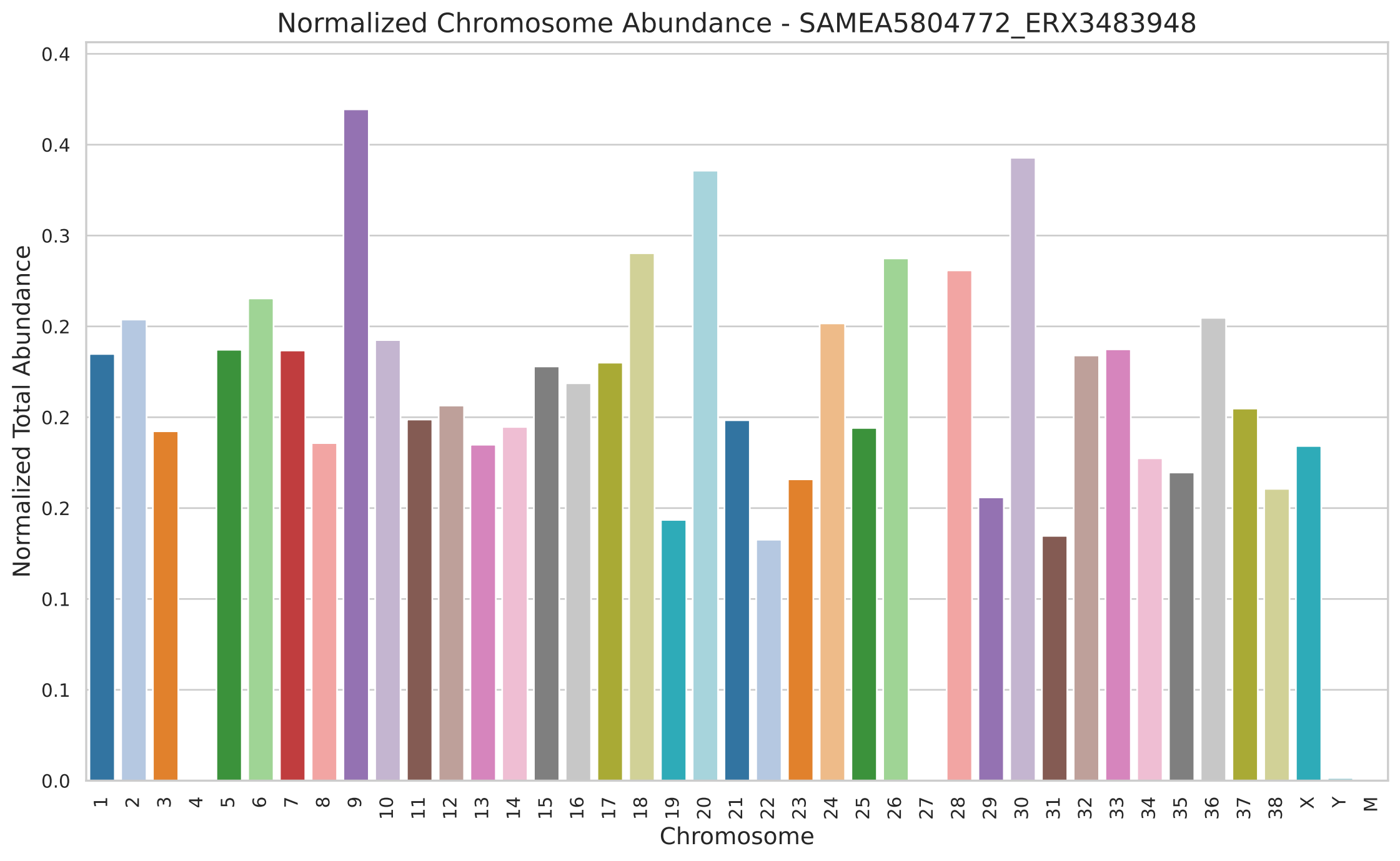

Normalized Chromosome Abundance - SAMEA5804910_ERX3484014
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

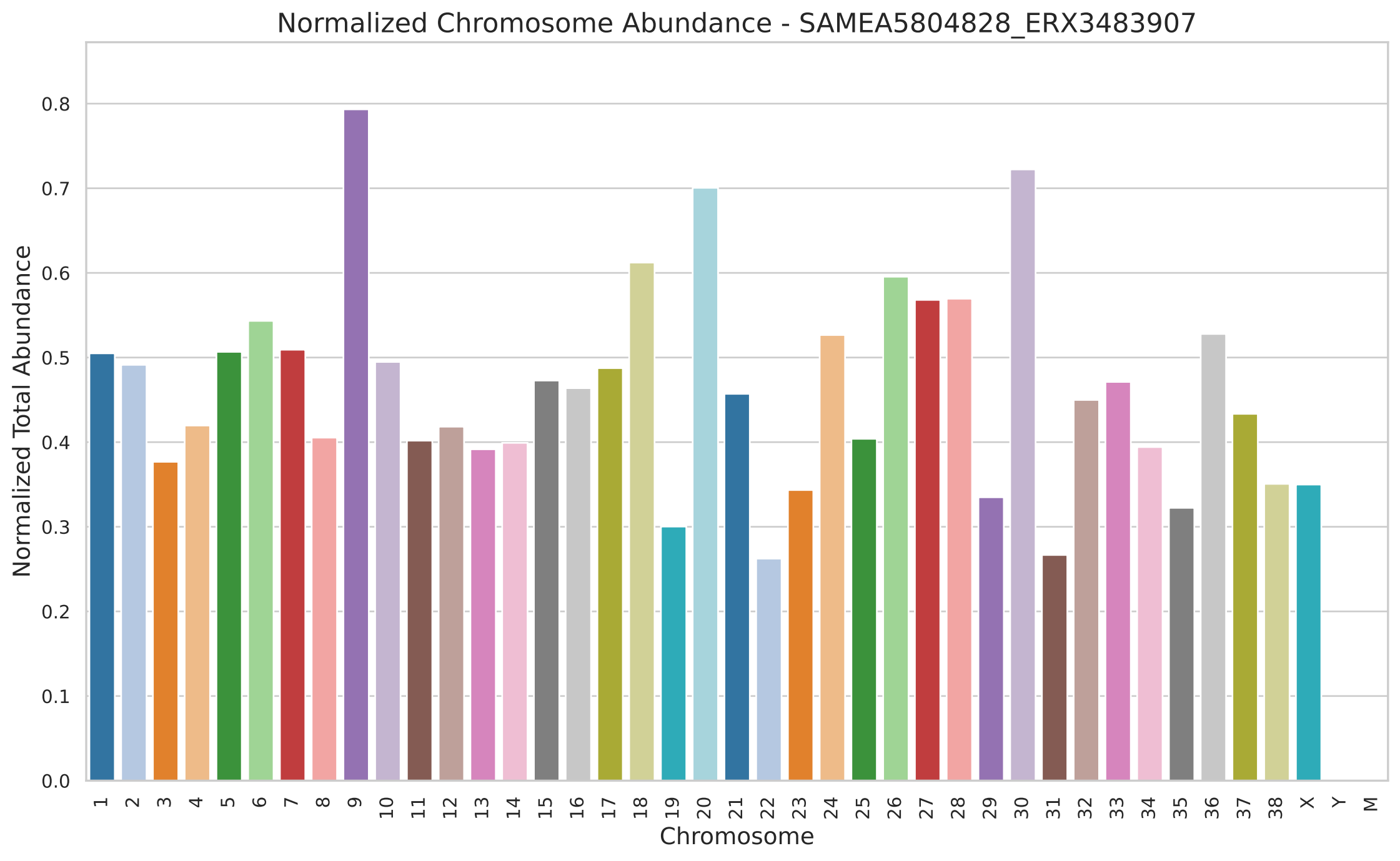

Normalized Chromosome Abundance - SAMEA5804766_ERX3483899
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

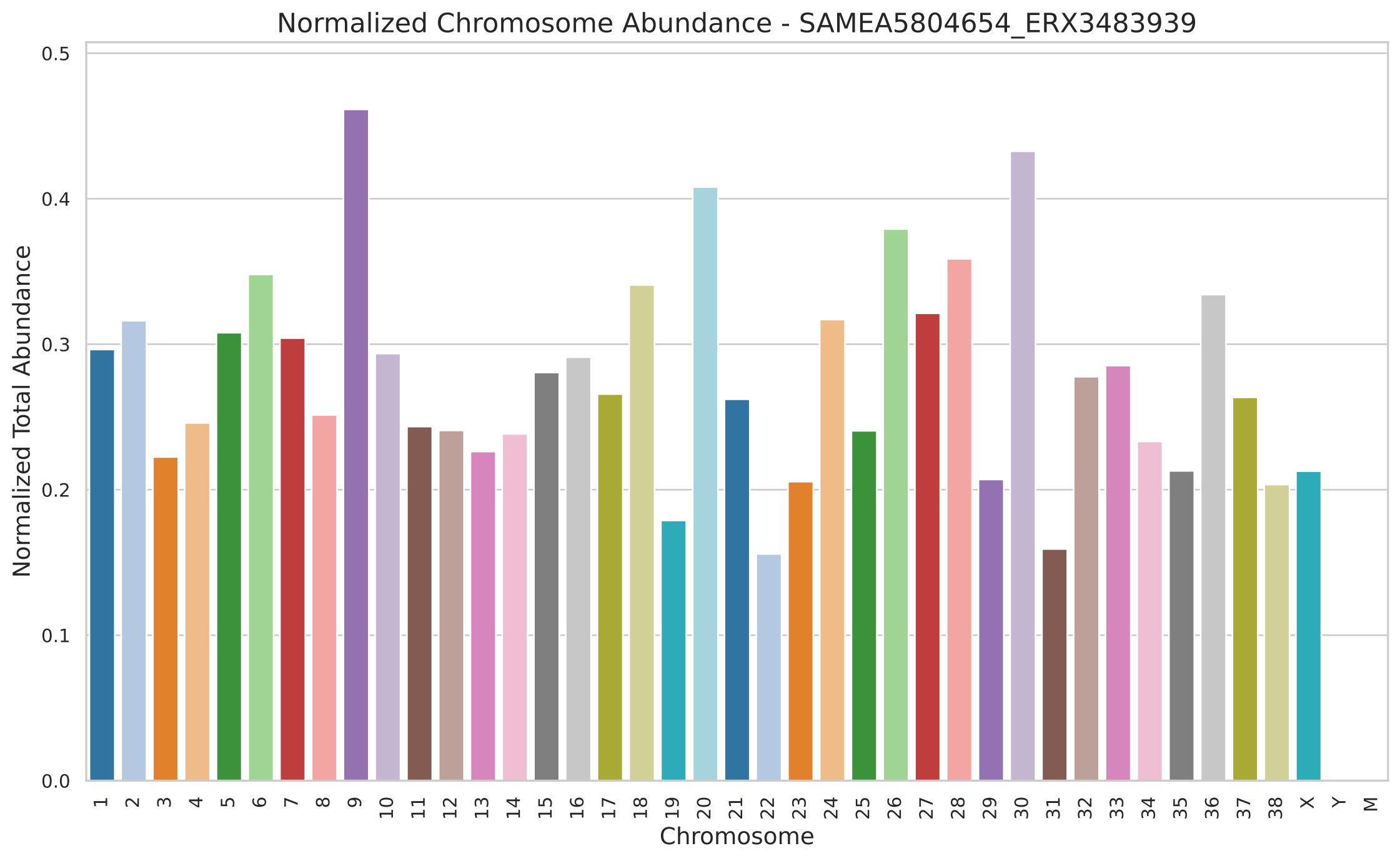

Normalized Chromosome Abundance - SAMEA5804734_ERX3483946
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

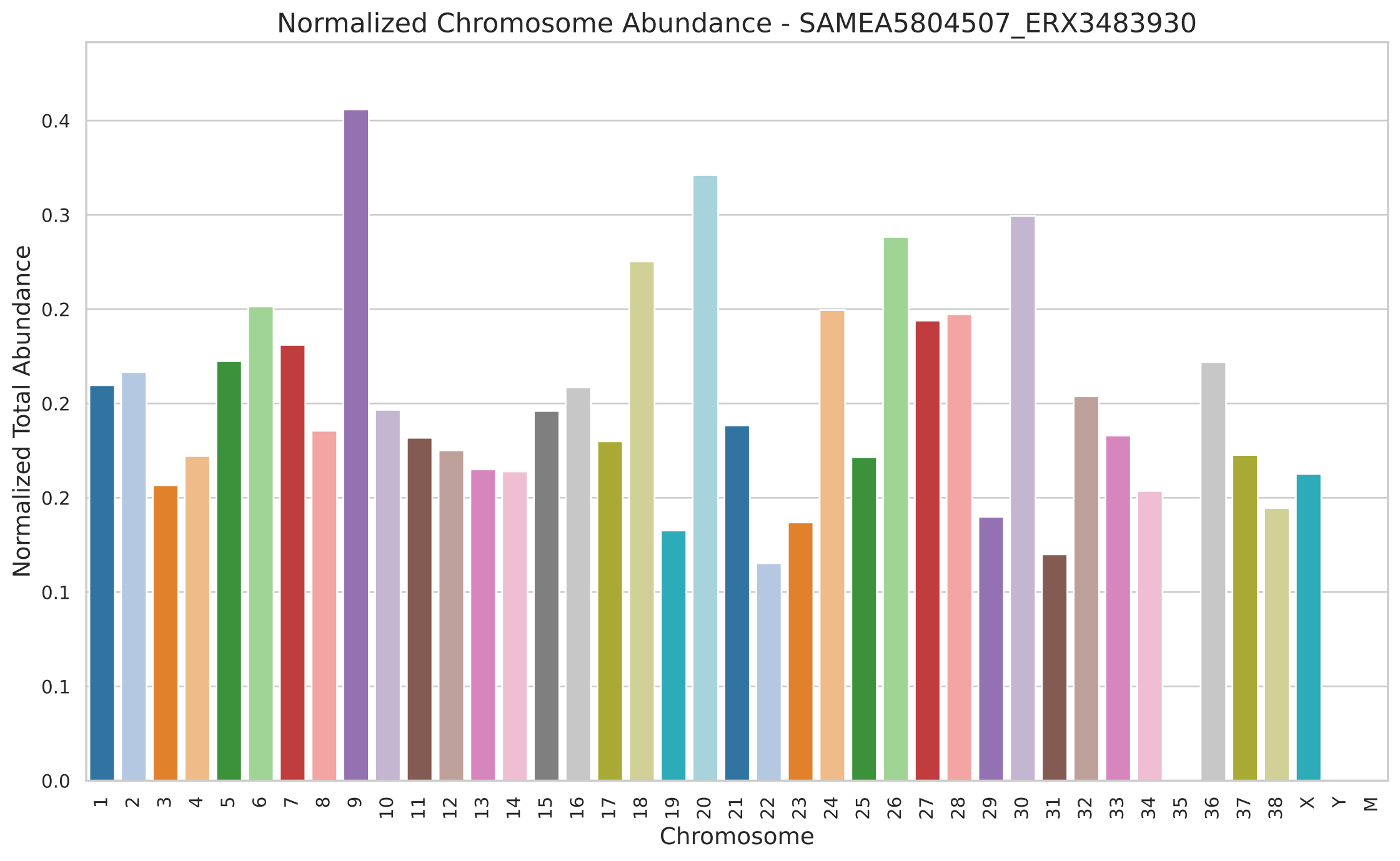

Normalized Chromosome Abundance - SAMEA5804832_ERX3483908
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

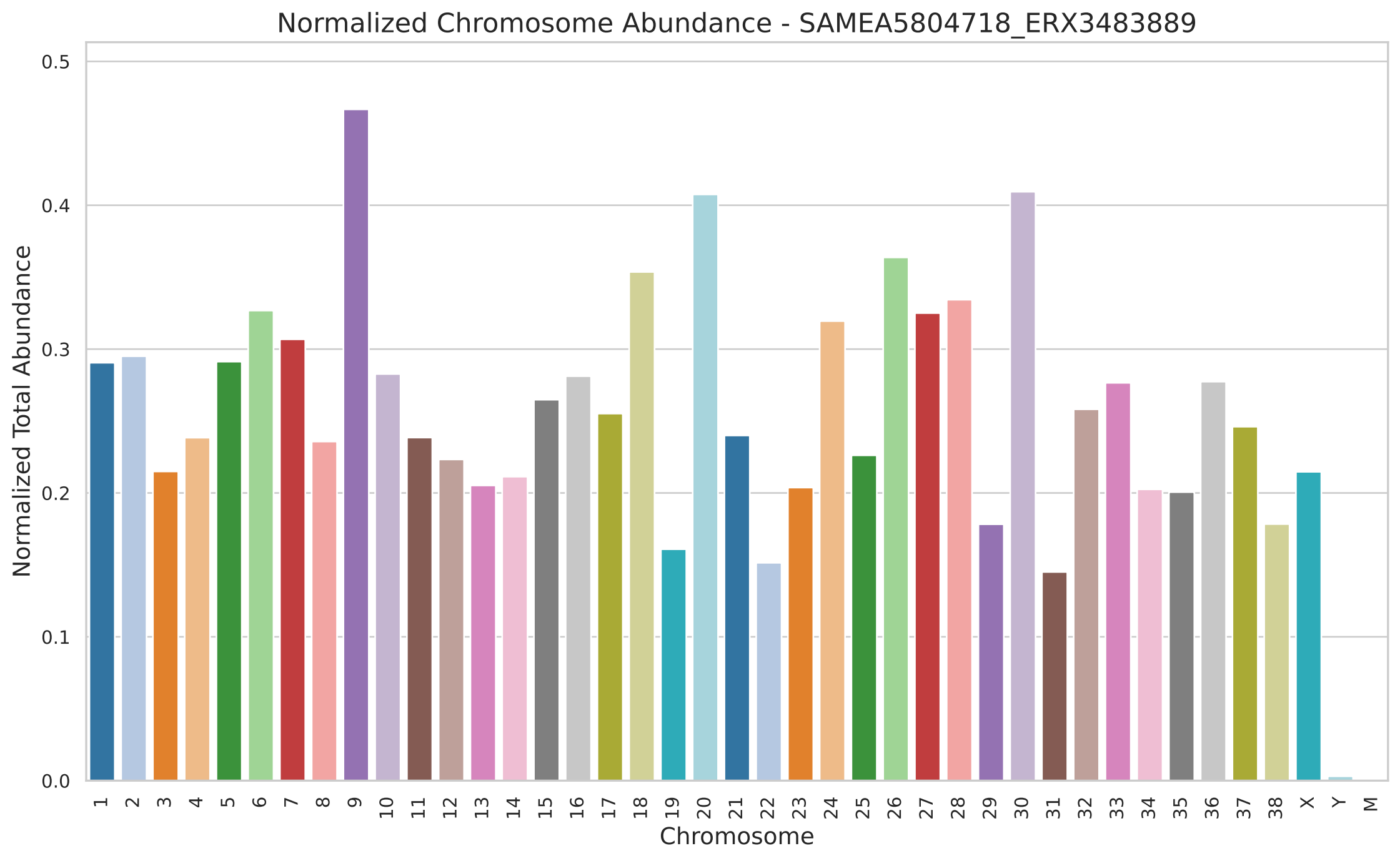

Normalized Chromosome Abundance - SAMEA5804650_ERX3483937
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

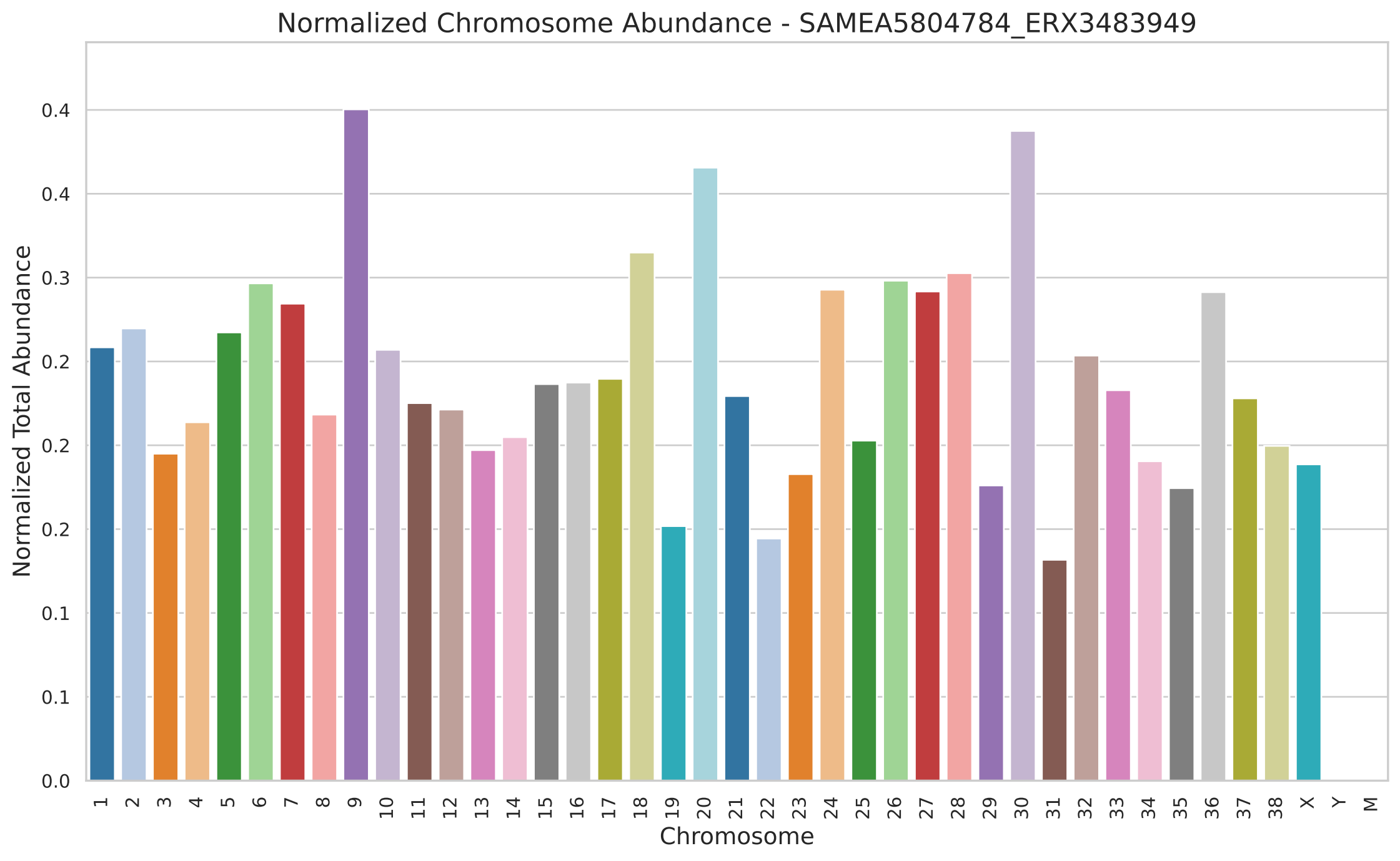

Normalized Chromosome Abundance - SAMEA5804772_ERX3483948
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

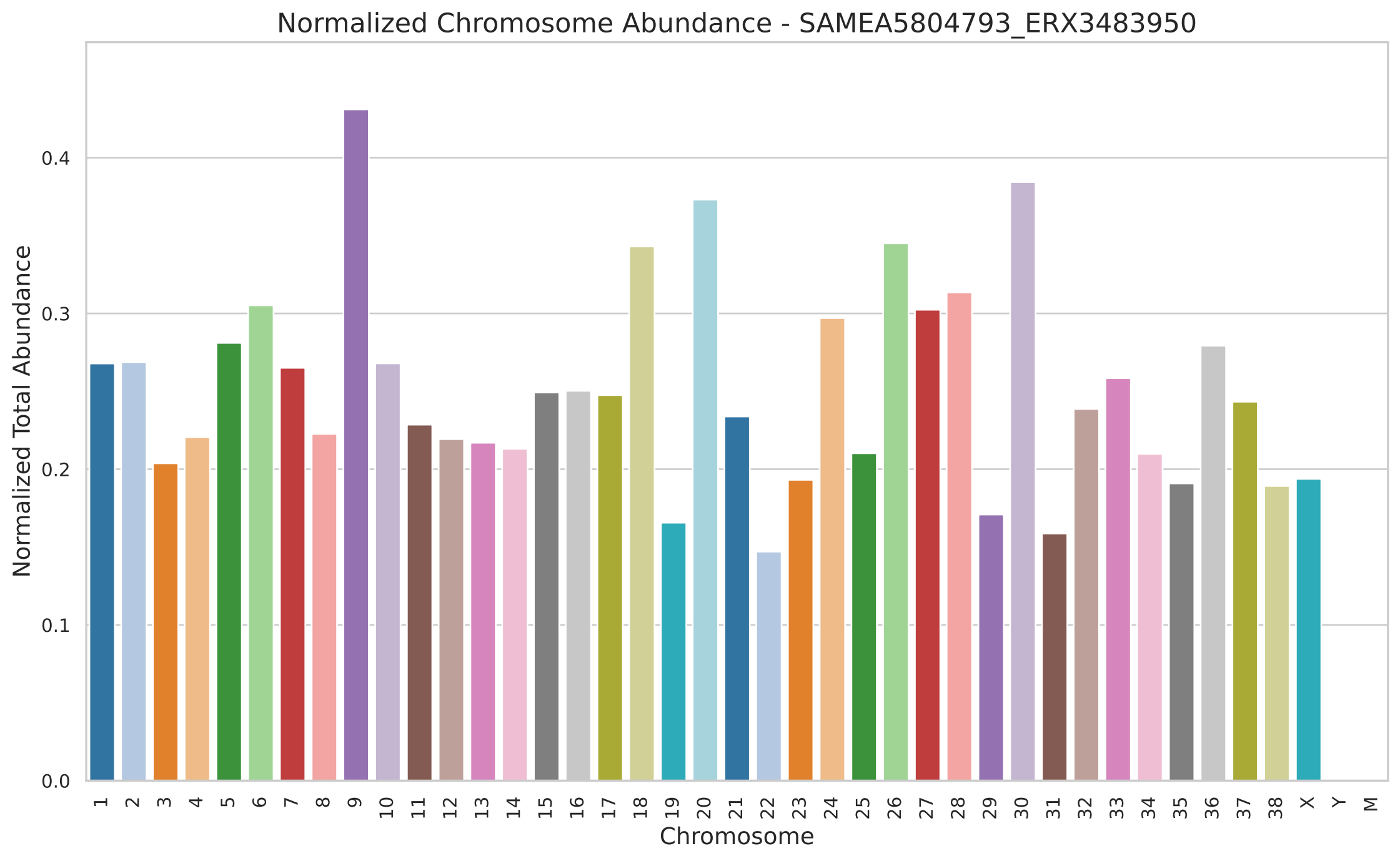

Normalized Chromosome Abundance - SAMEA5804828_ERX3483907
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

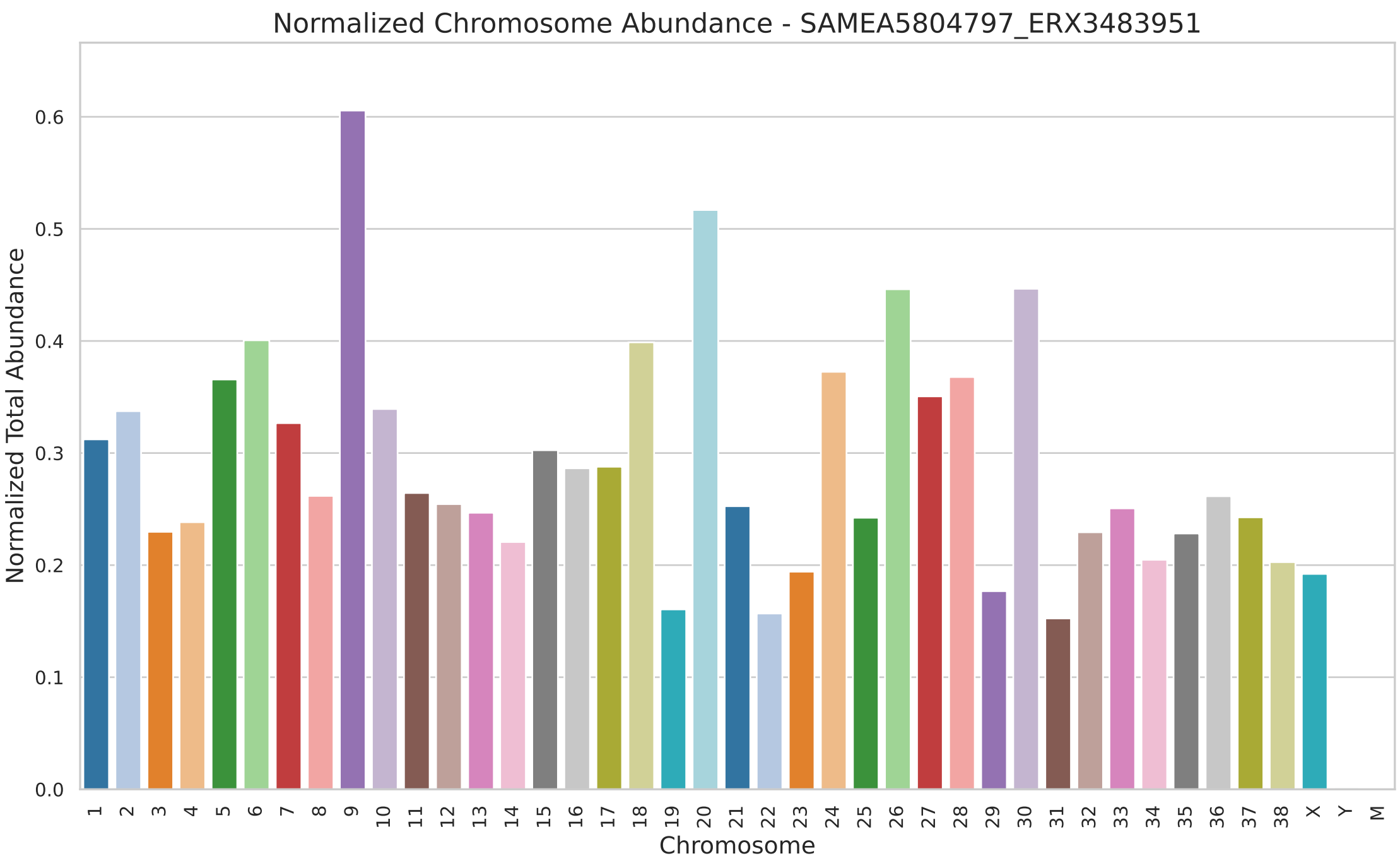

Normalized Chromosome Abundance - SAMEA5804654_ERX3483939
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

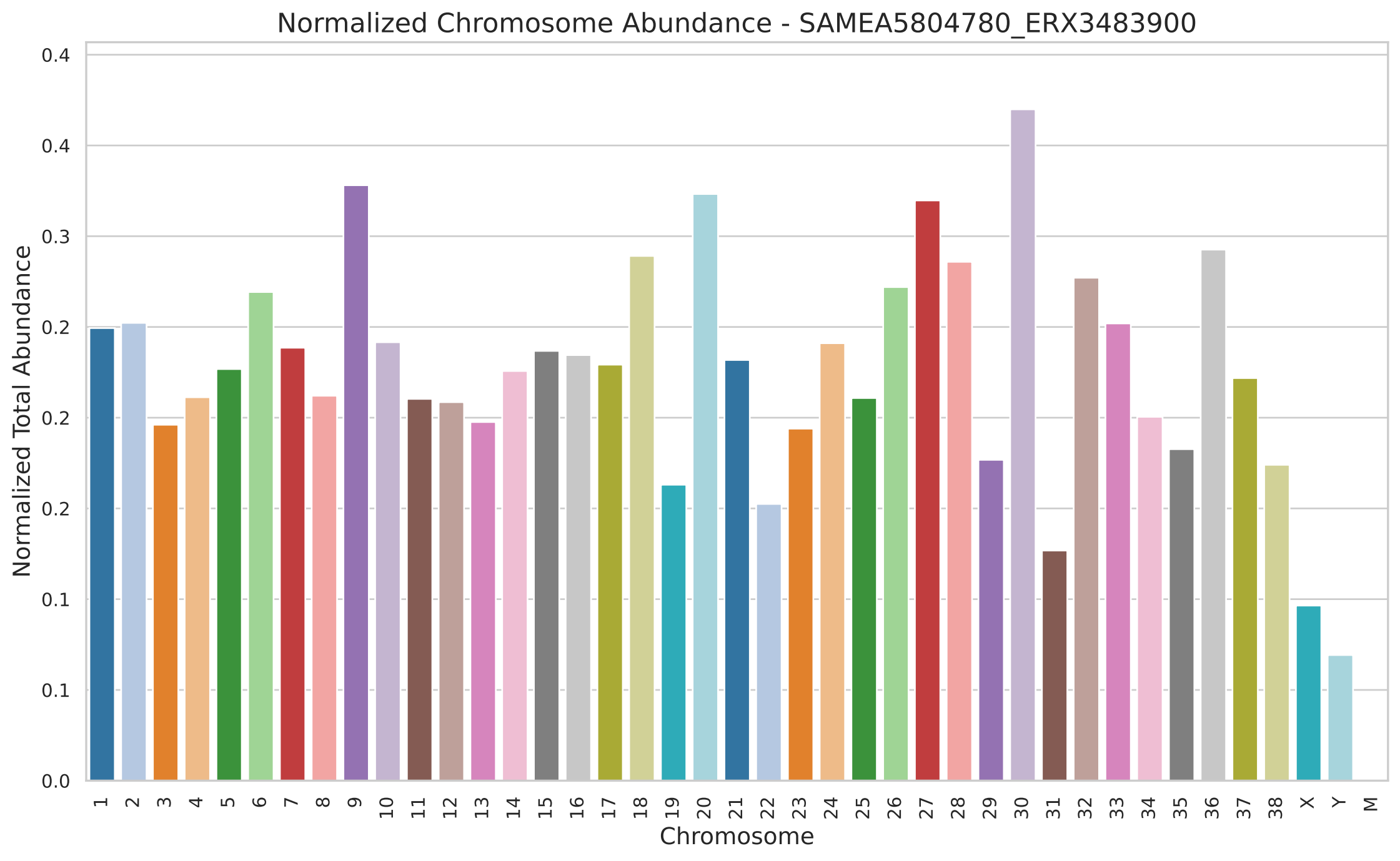

Normalized Chromosome Abundance - SAMEA5804507_ERX3483930
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

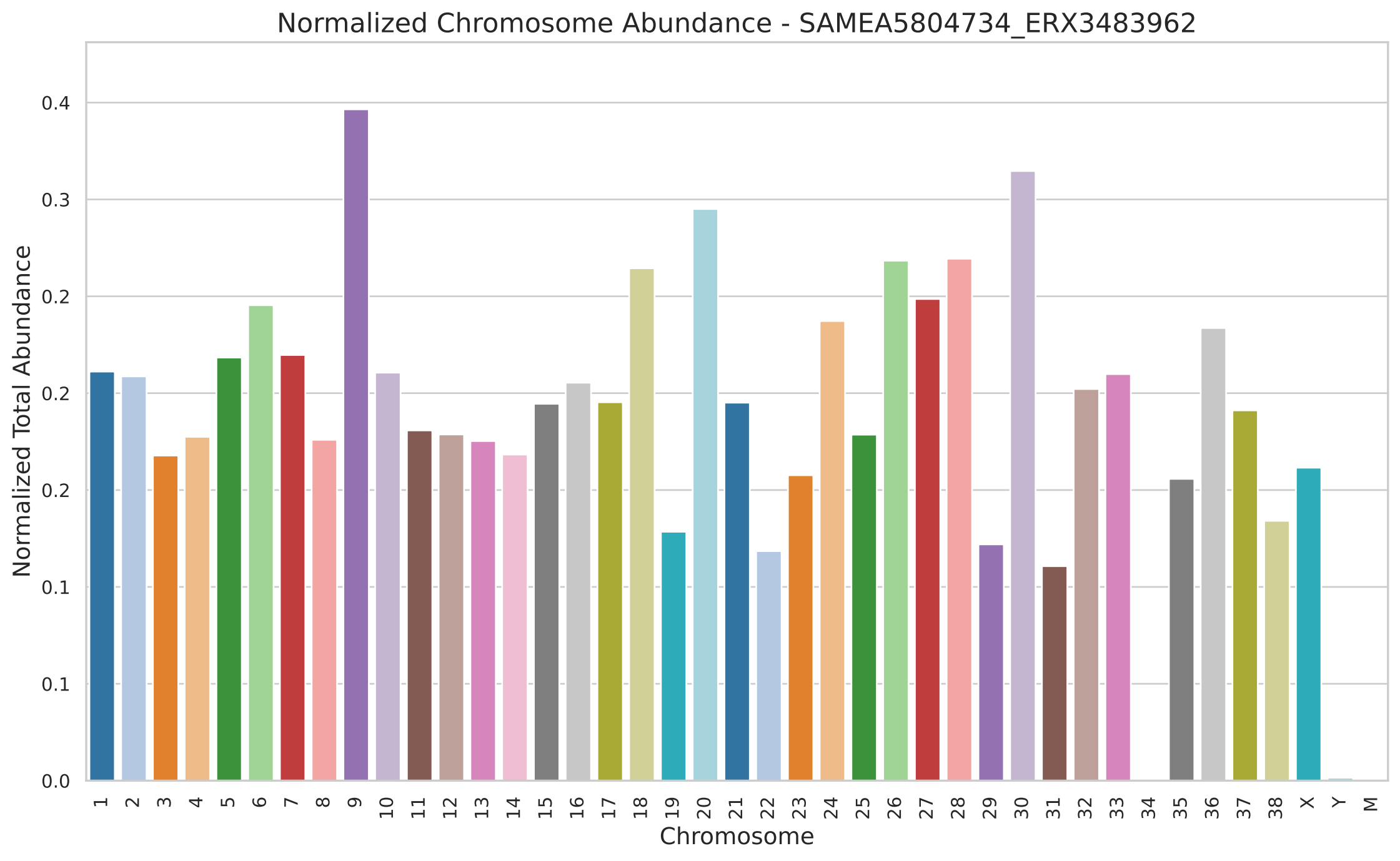

Normalized Chromosome Abundance - SAMEA5804718_ERX3483889
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

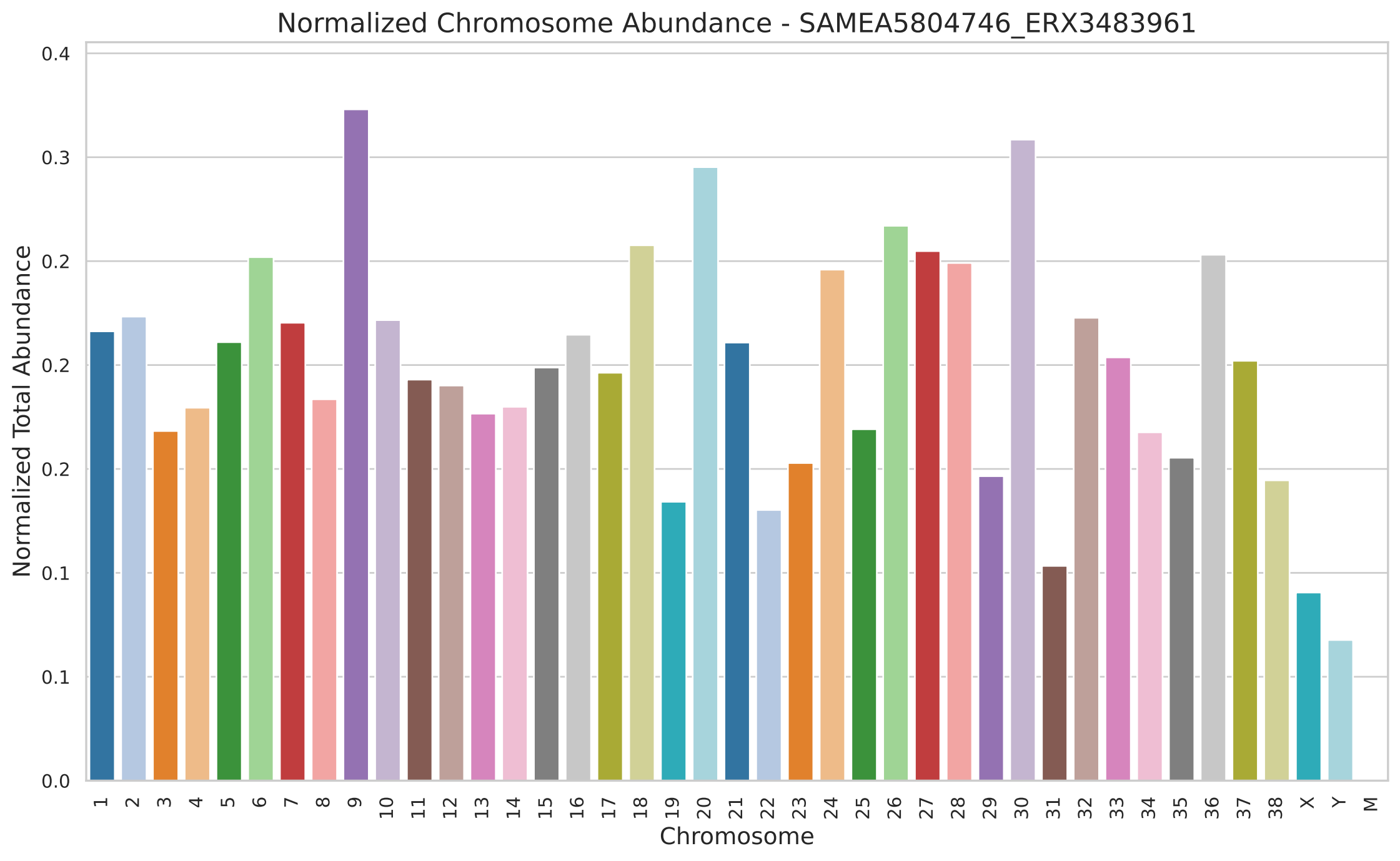

Normalized Chromosome Abundance - SAMEA5804784_ERX3483949
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

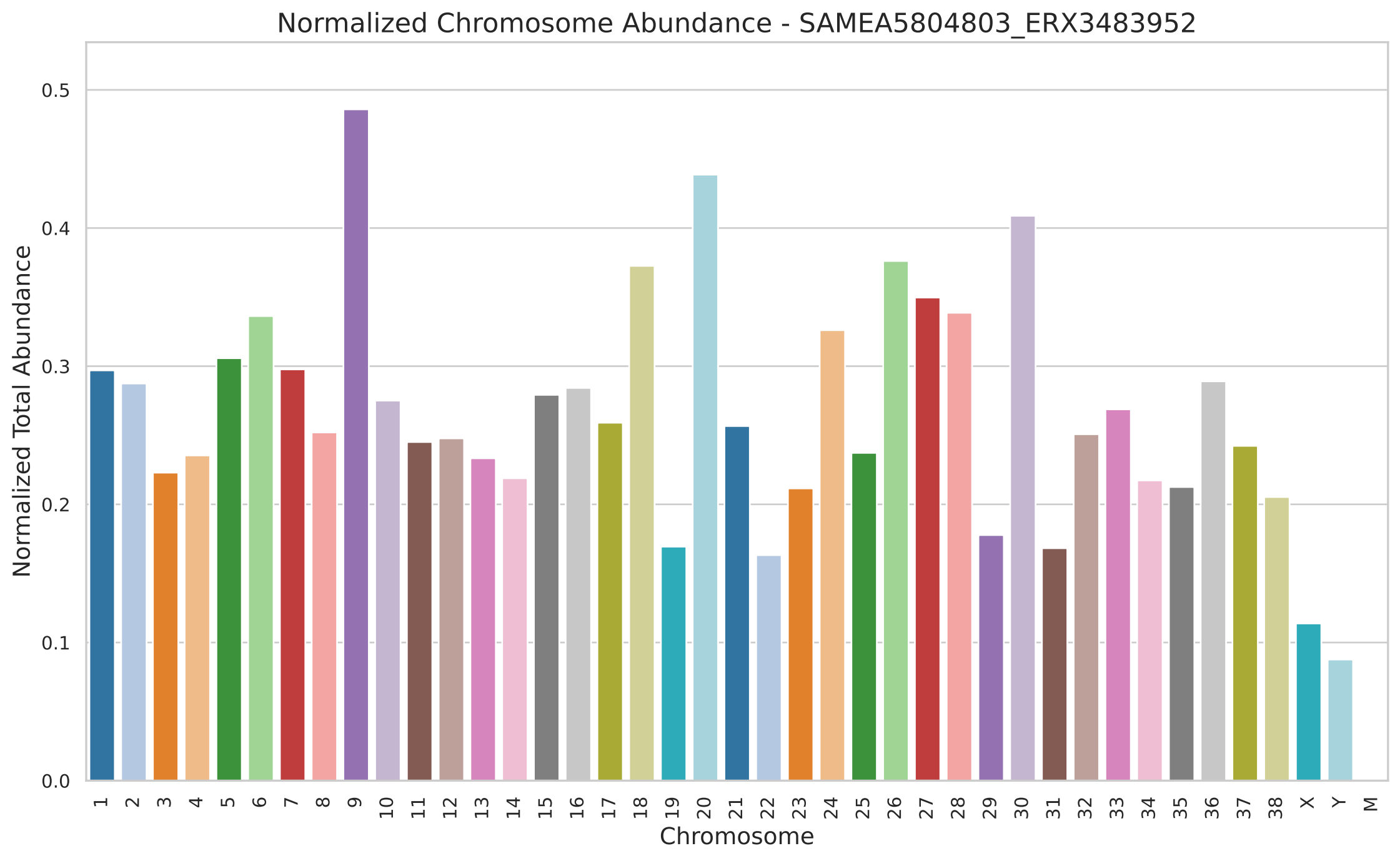

Normalized Chromosome Abundance - SAMEA5804793_ERX3483950
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

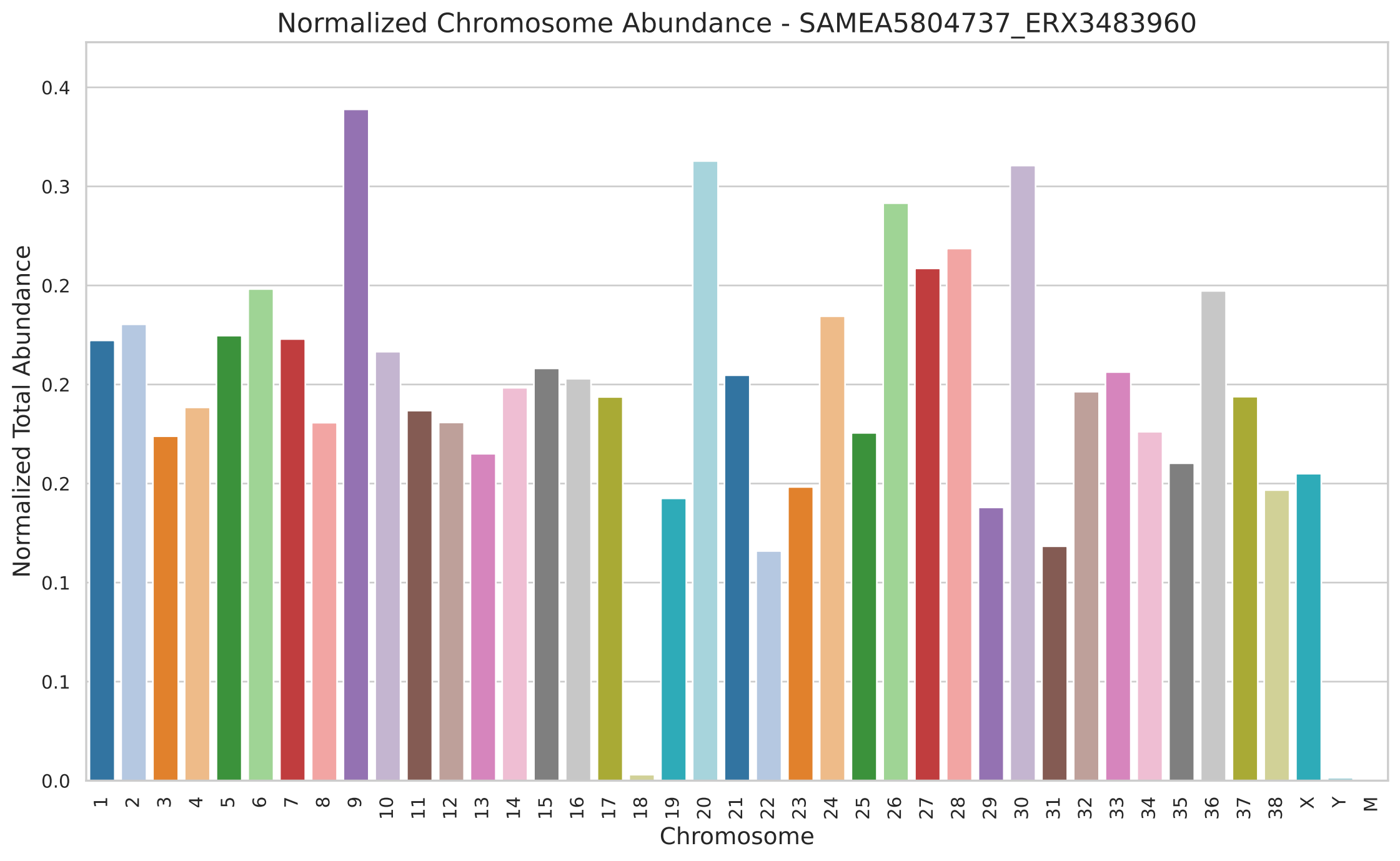

Normalized Chromosome Abundance - SAMEA5804797_ERX3483951
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

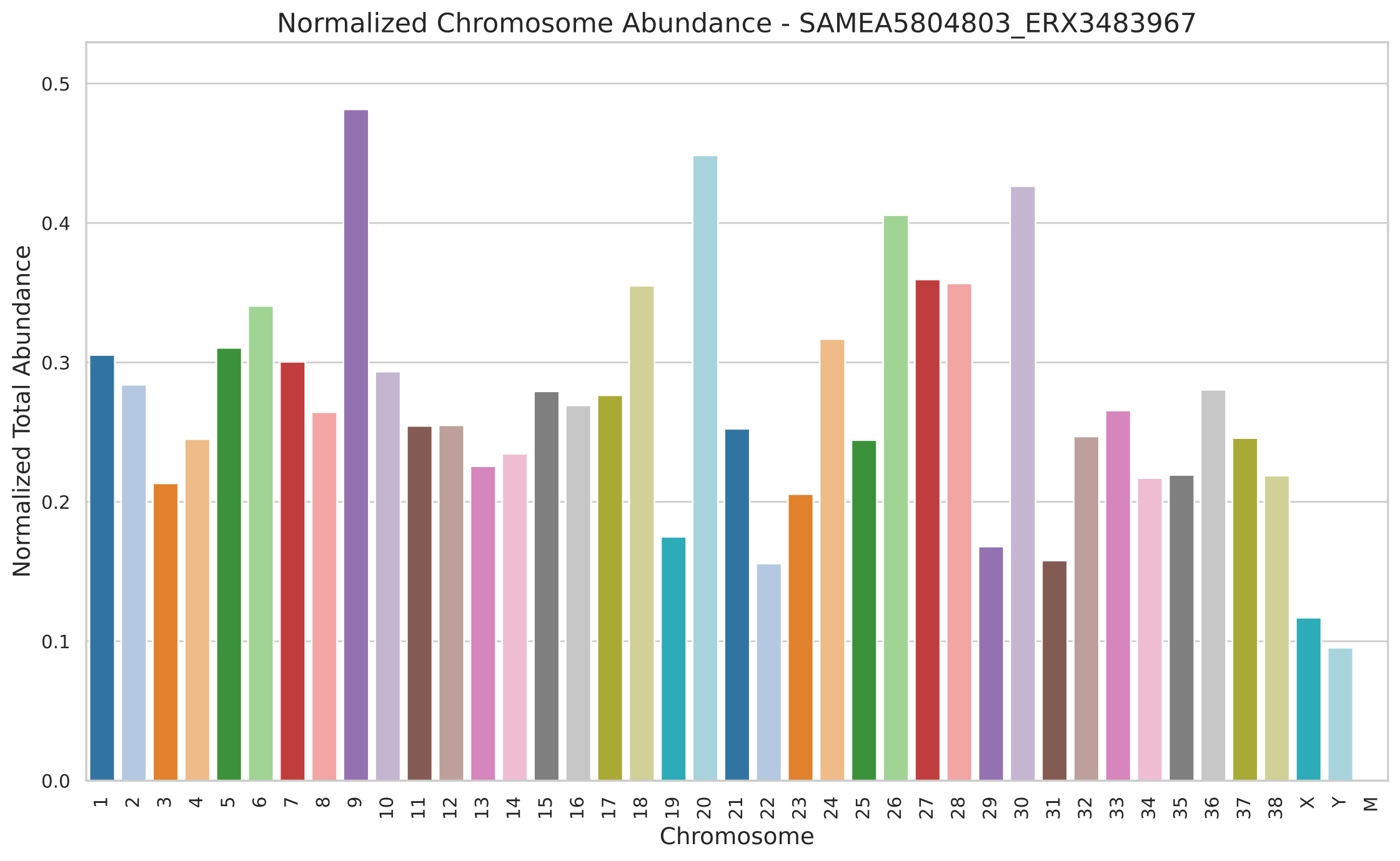

Normalized Chromosome Abundance - SAMEA5804780_ERX3483900
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

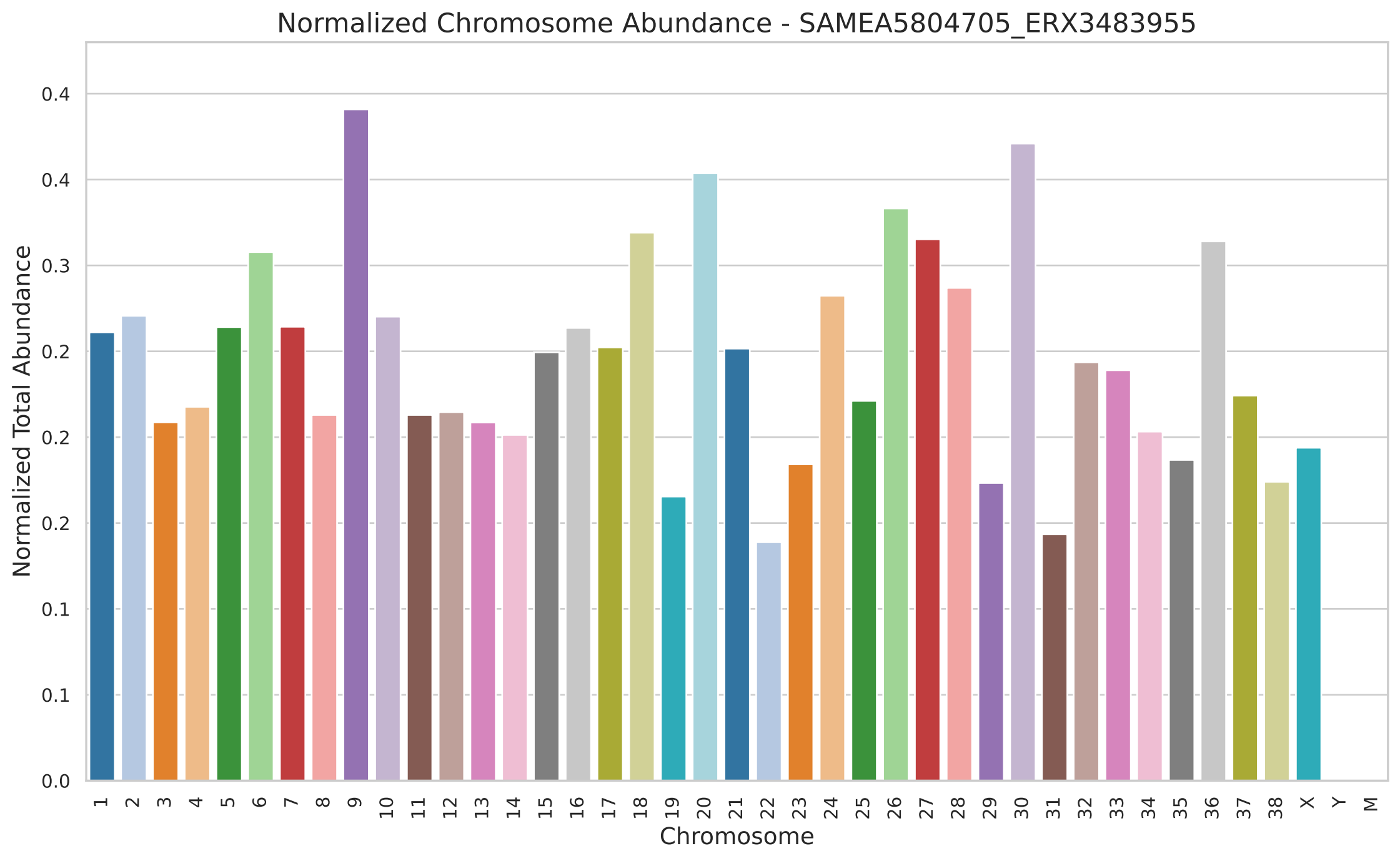

Normalized Chromosome Abundance - SAMEA5804734_ERX3483962
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

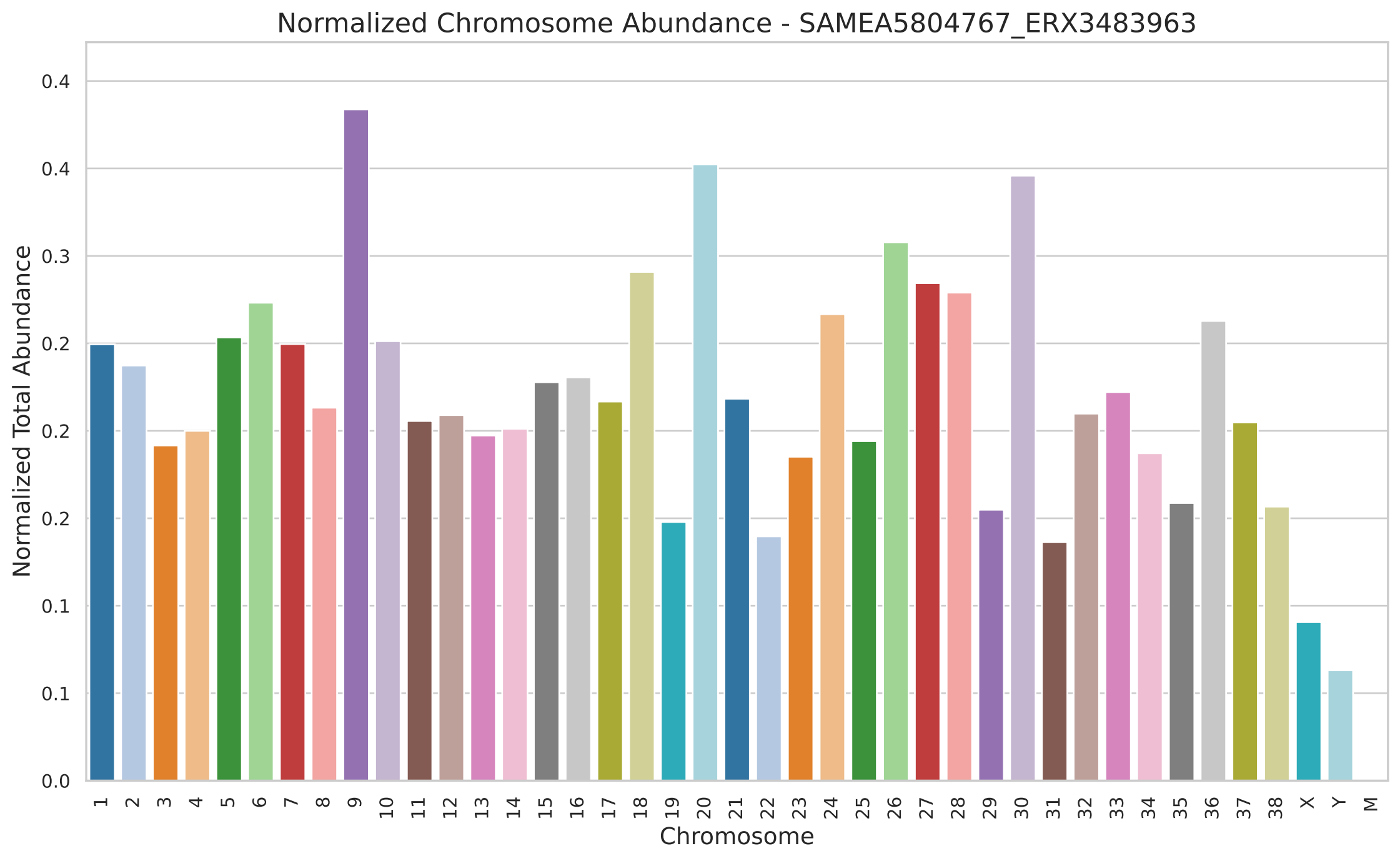

Normalized Chromosome Abundance - SAMEA5804746_ERX3483961
Normalized Total Abundance
0.4
0.3
0.2
0.2
0.1
0.1
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

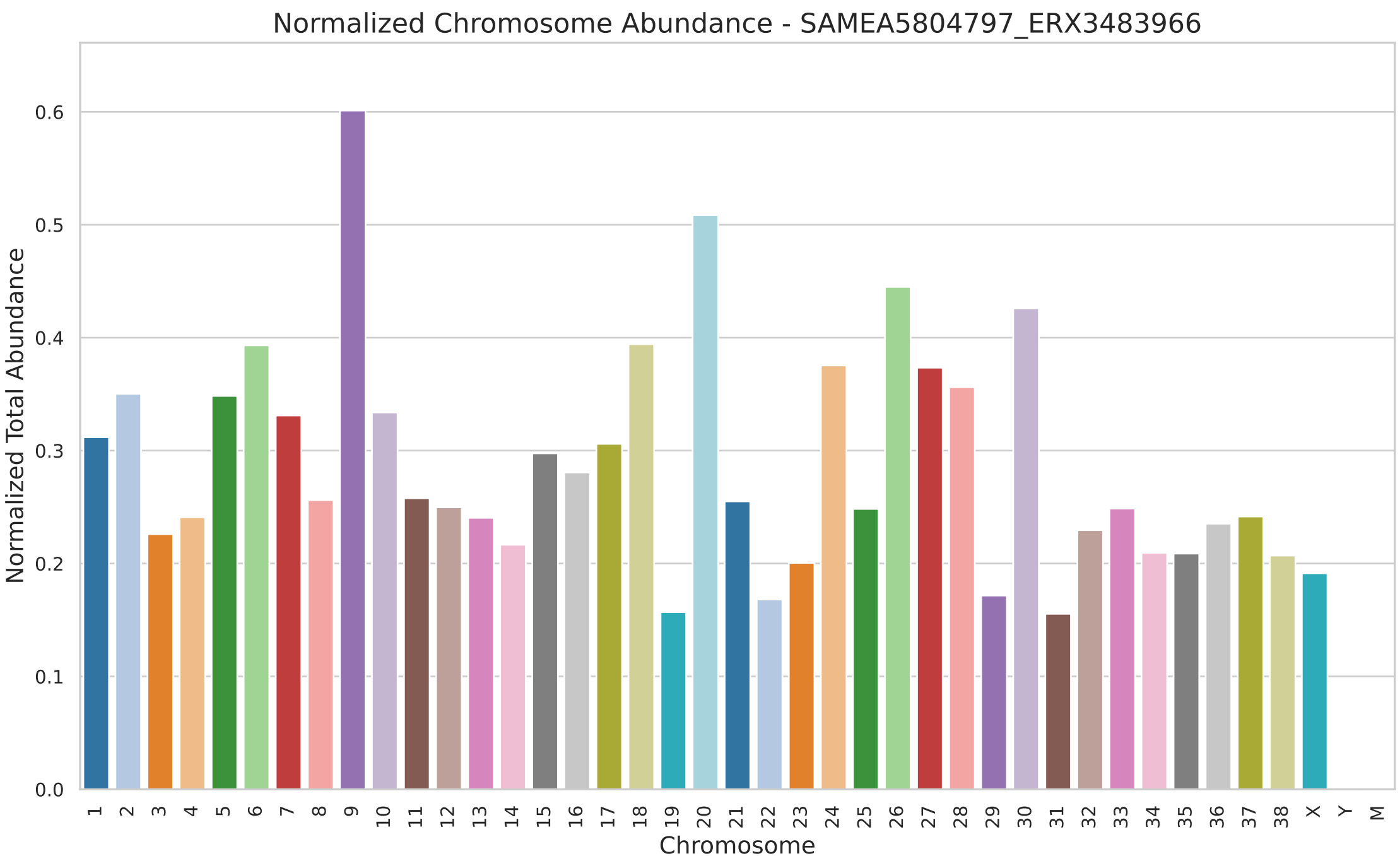

Normalized Chromosome Abundance - SAMEA5804803_ERX3483952
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

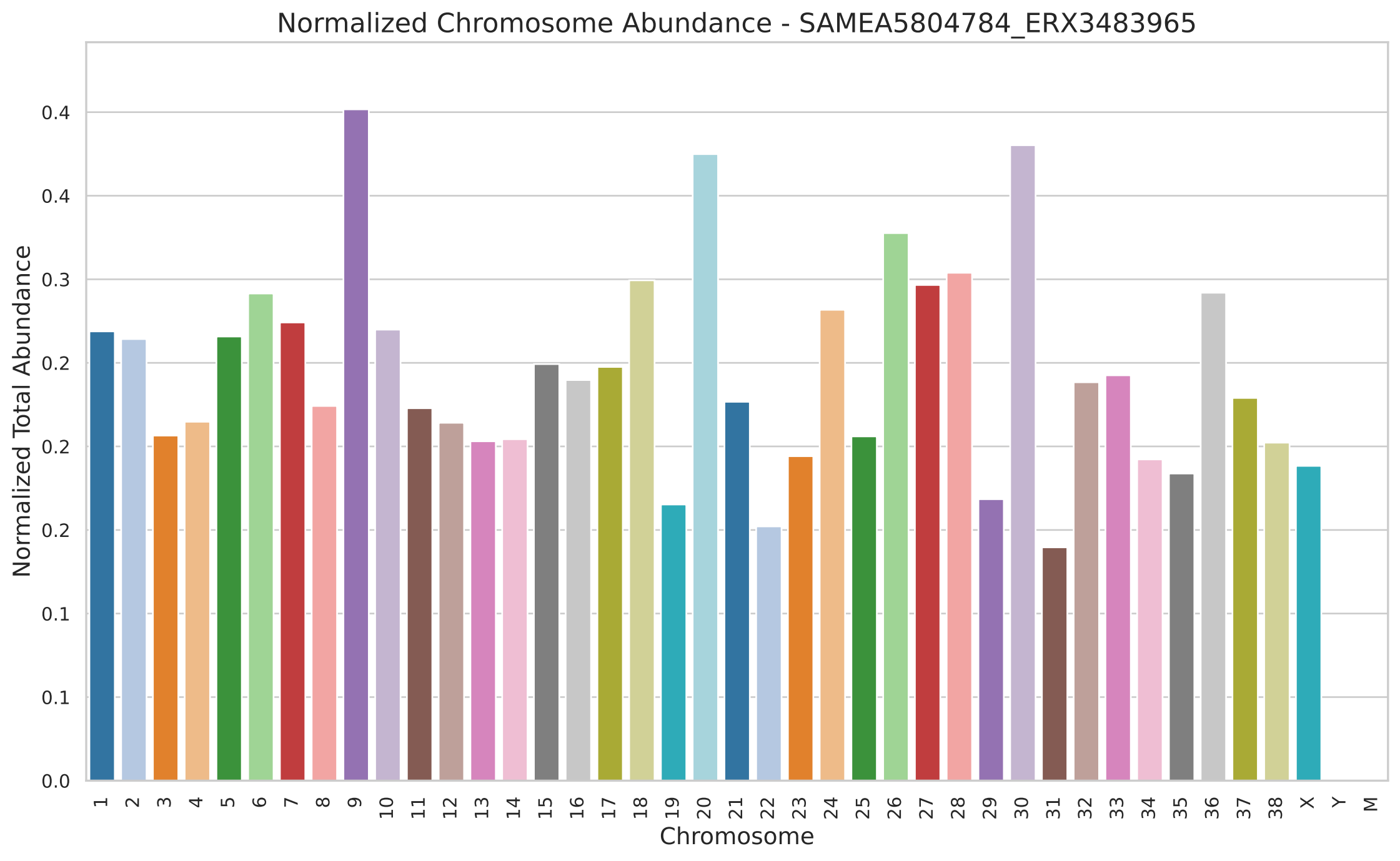

Normalized Chromosome Abundance - SAMEA5804737_ERX3483960
Normalized Total Abundance
0.4
0.3
0.2
0.2
0.1
0.1
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

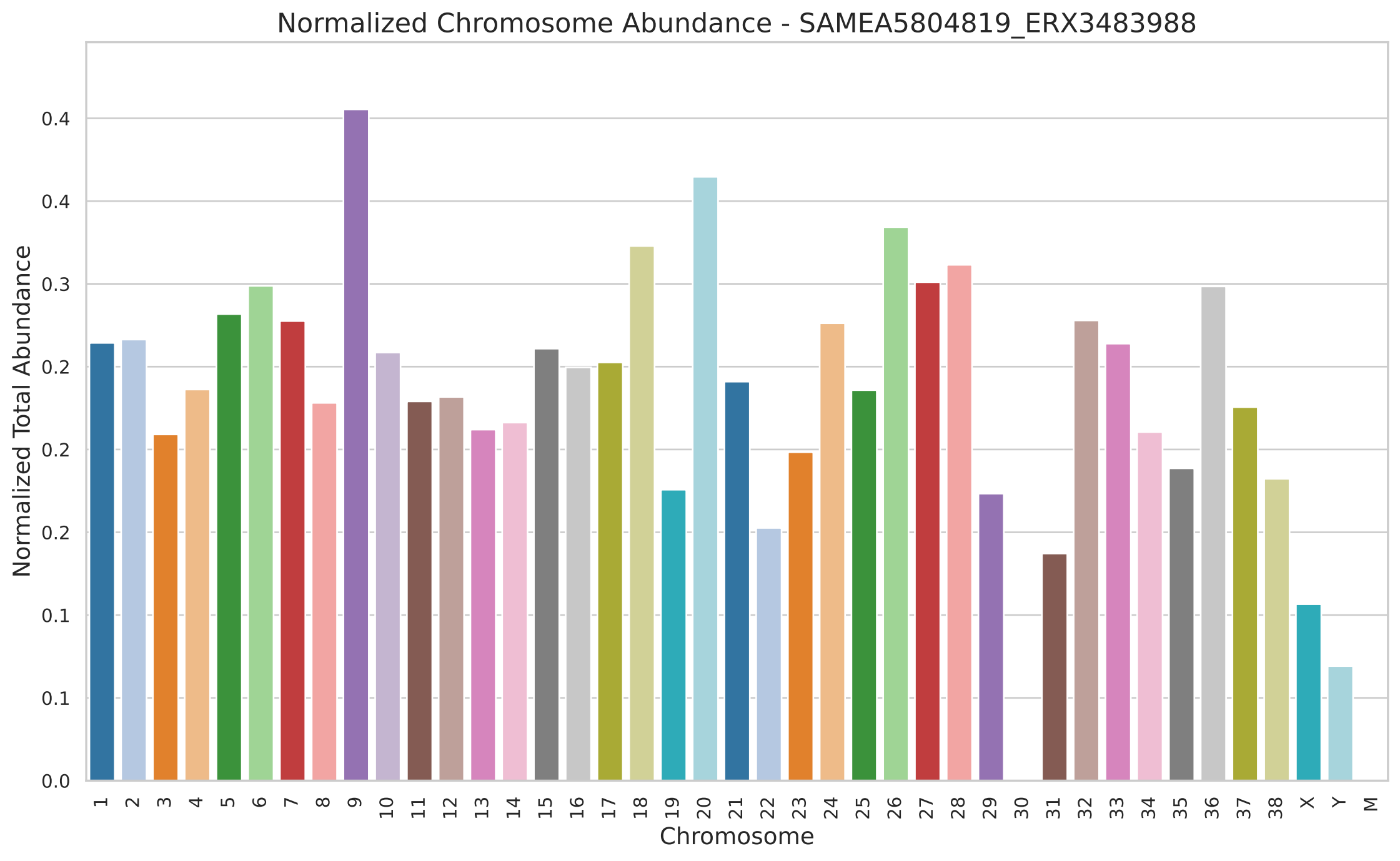

Normalized Chromosome Abundance - SAMEA5804803_ERX3483967
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

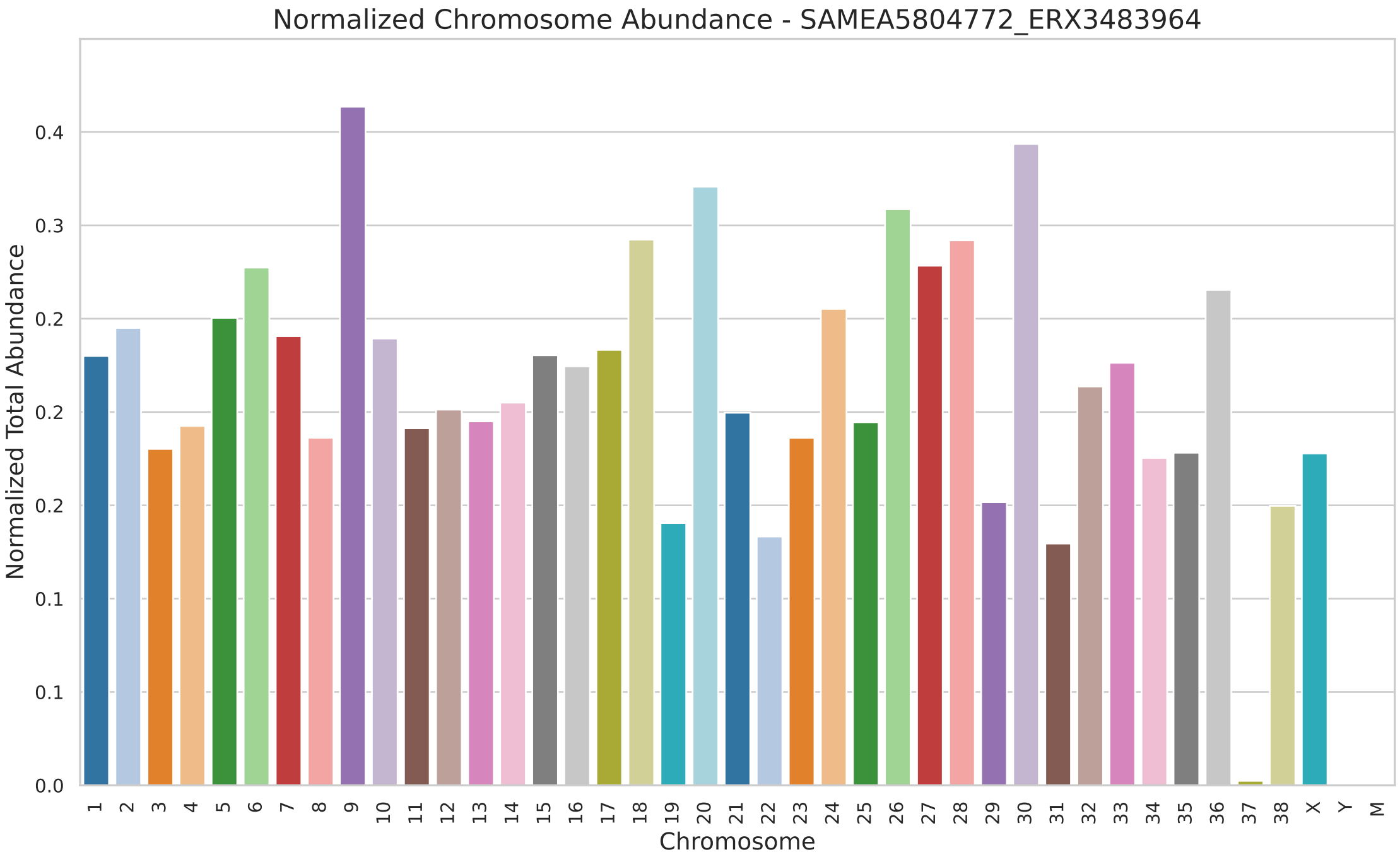

Normalized Chromosome Abundance - SAMEA5804705_ERX3483955
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

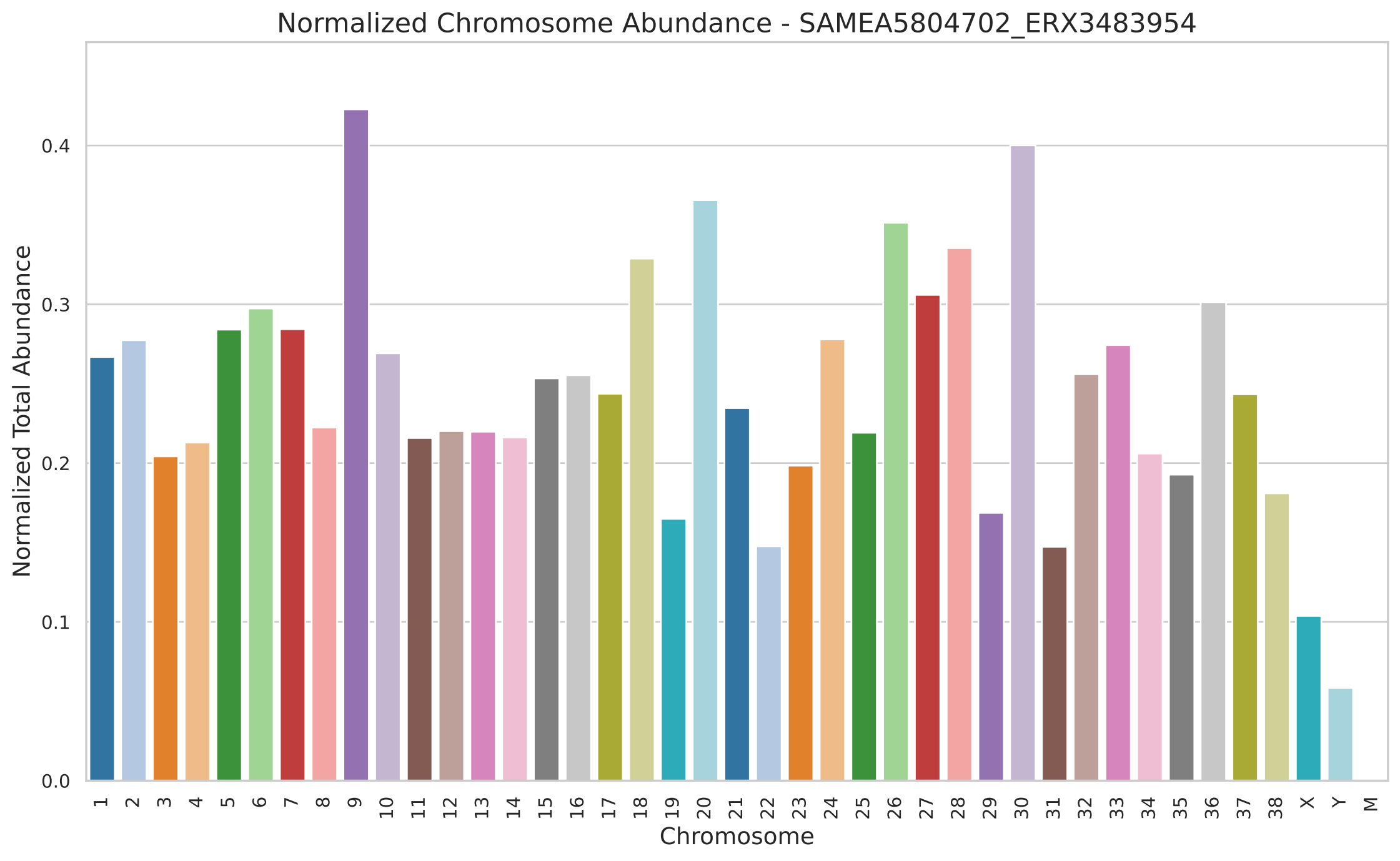

Normalized Chromosome Abundance - SAMEA5804767_ERX3483963
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

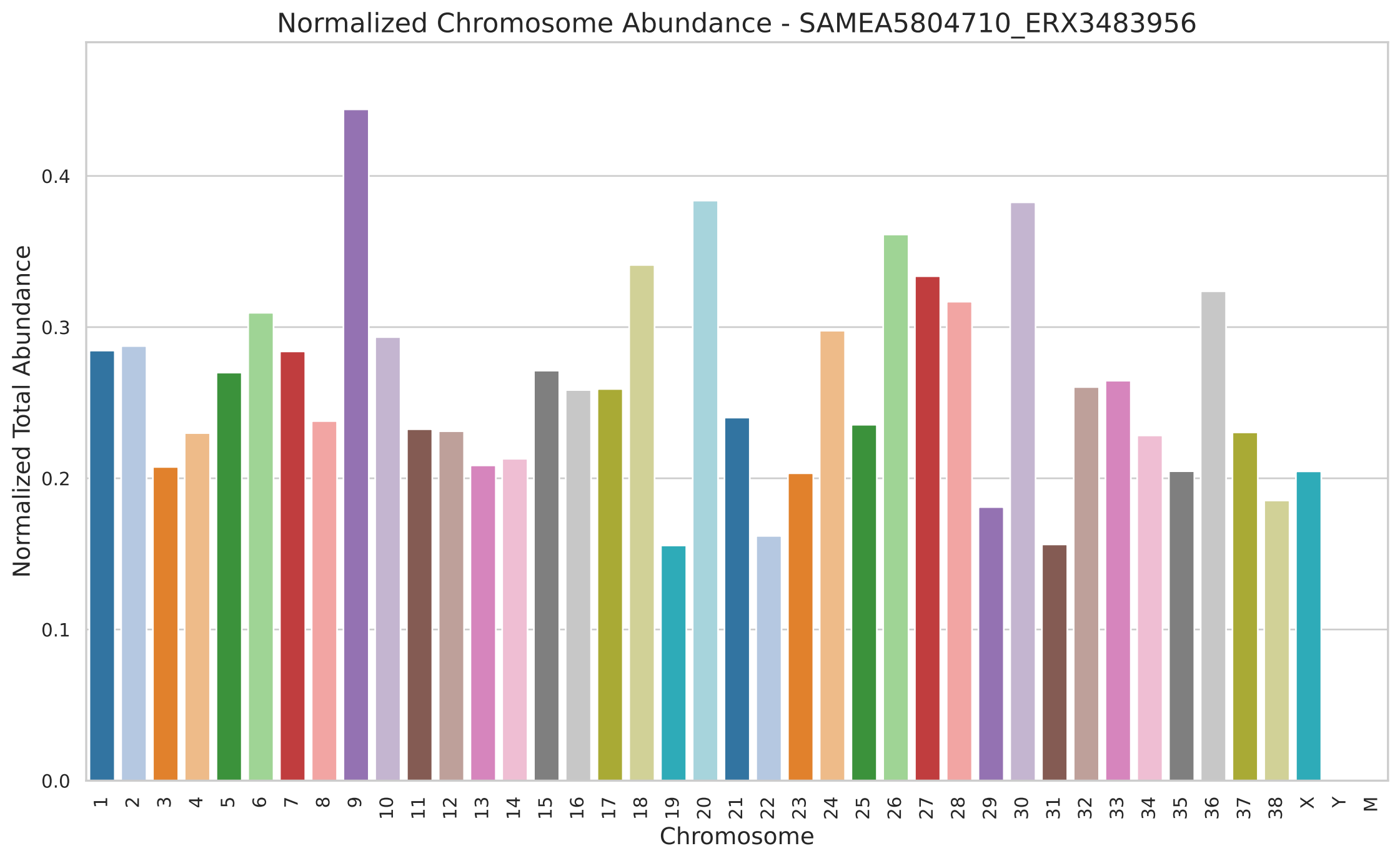

Normalized Chromosome Abundance - SAMEA5804797_ERX3483966
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

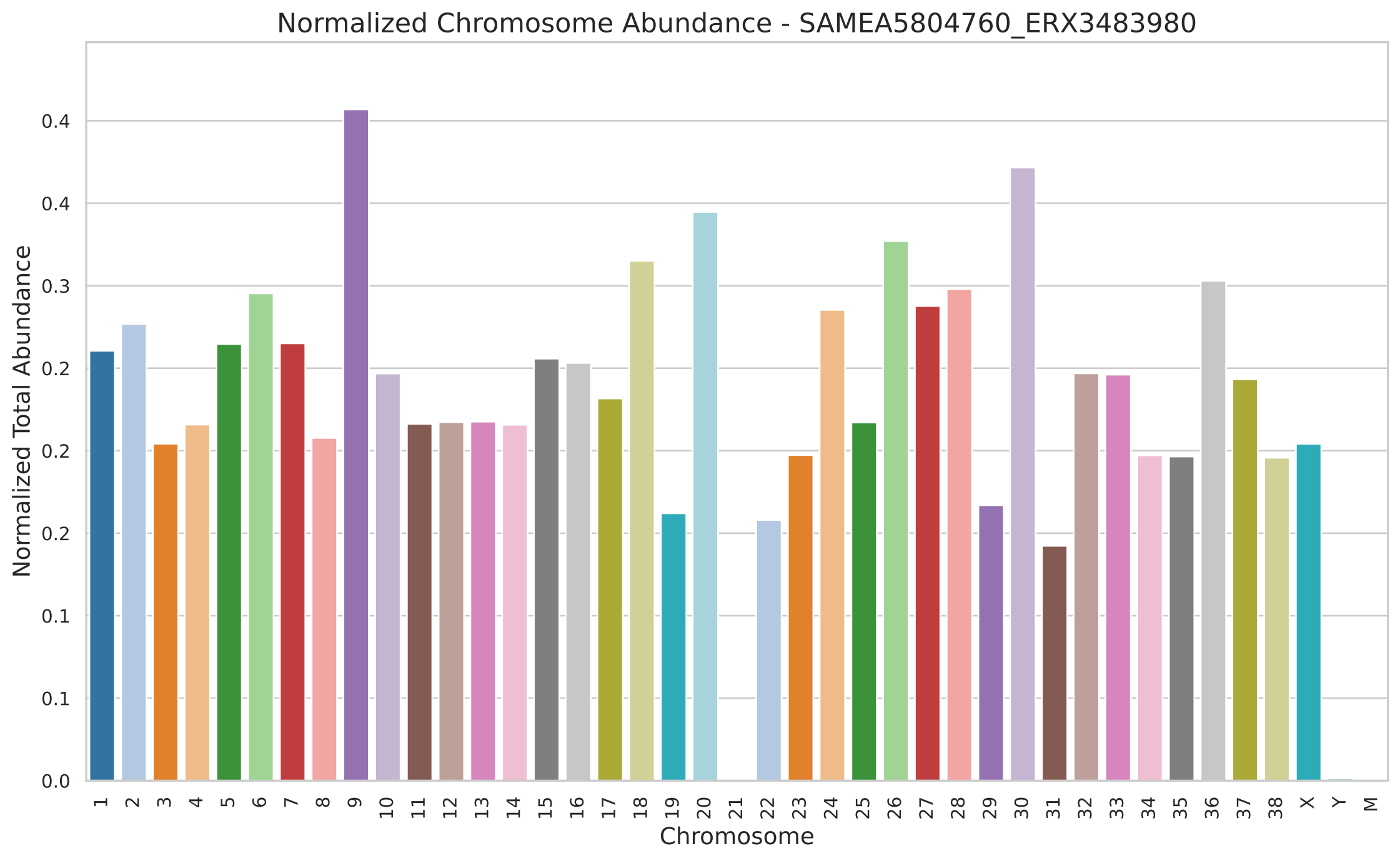

Normalized Chromosome Abundance - SAMEA5804784_ERX3483965
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

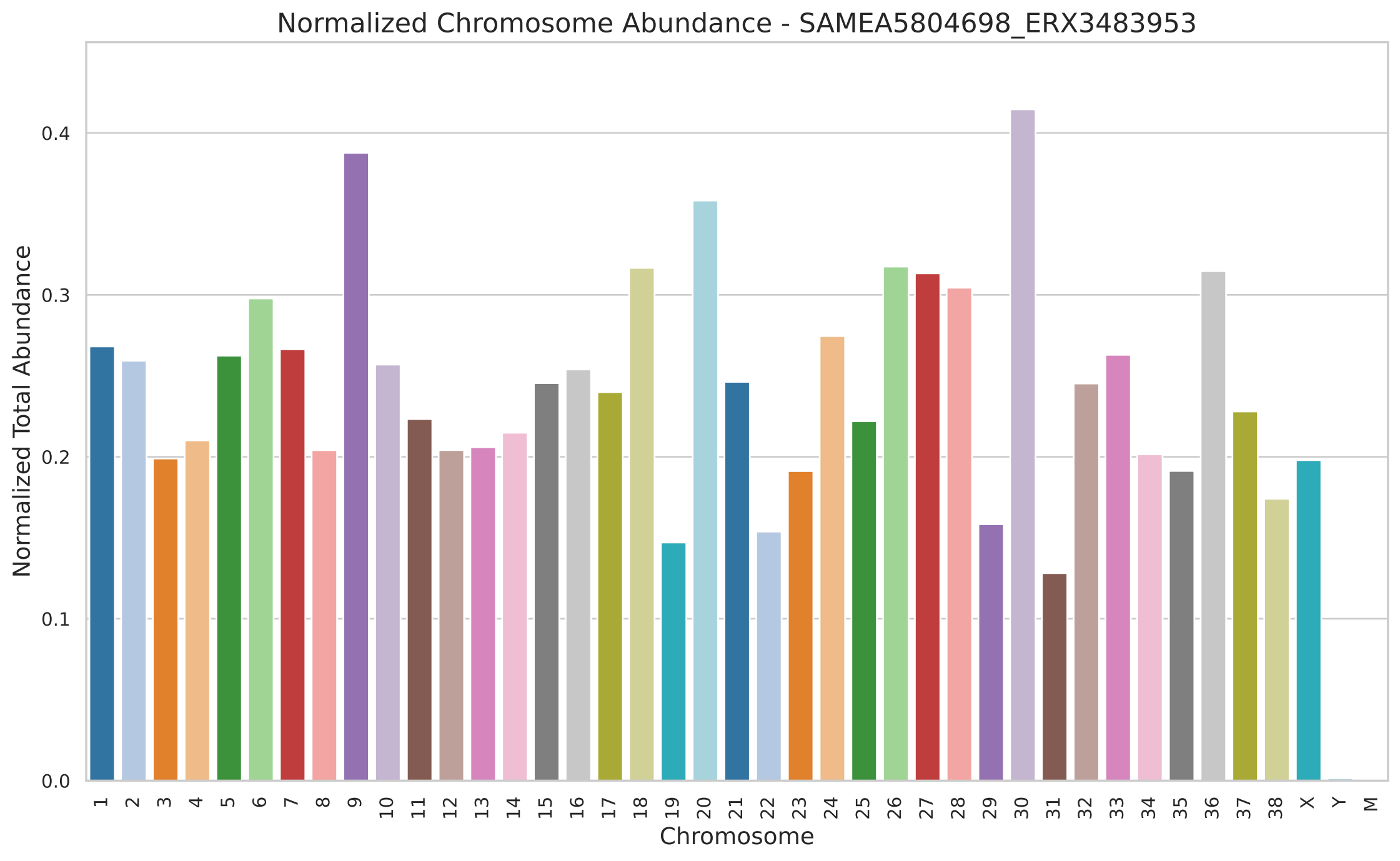

Normalized Chromosome Abundance - SAMEA5804819_ERX3483988
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

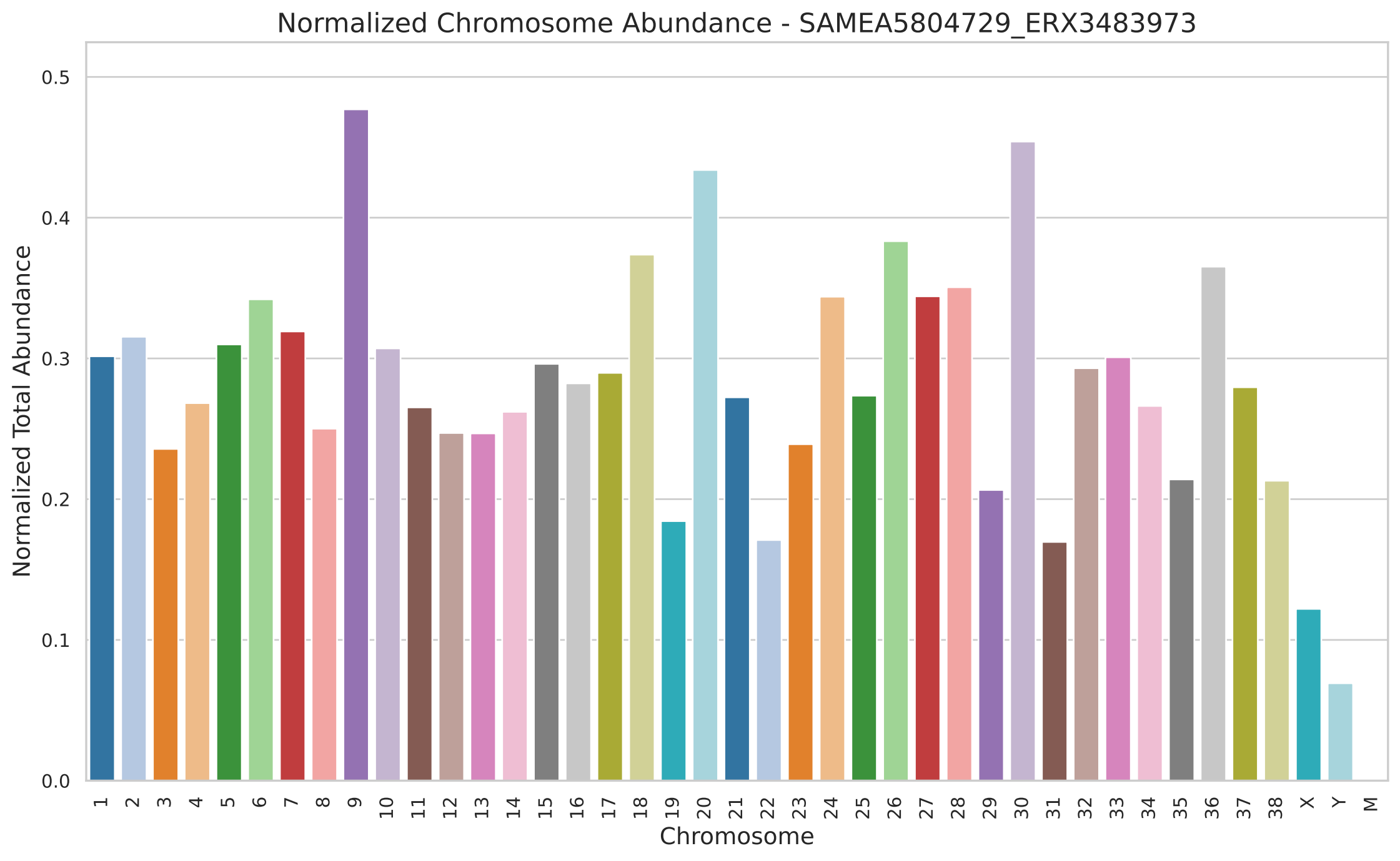

Normalized Chromosome Abundance - SAMEA5804772_ERX3483964
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

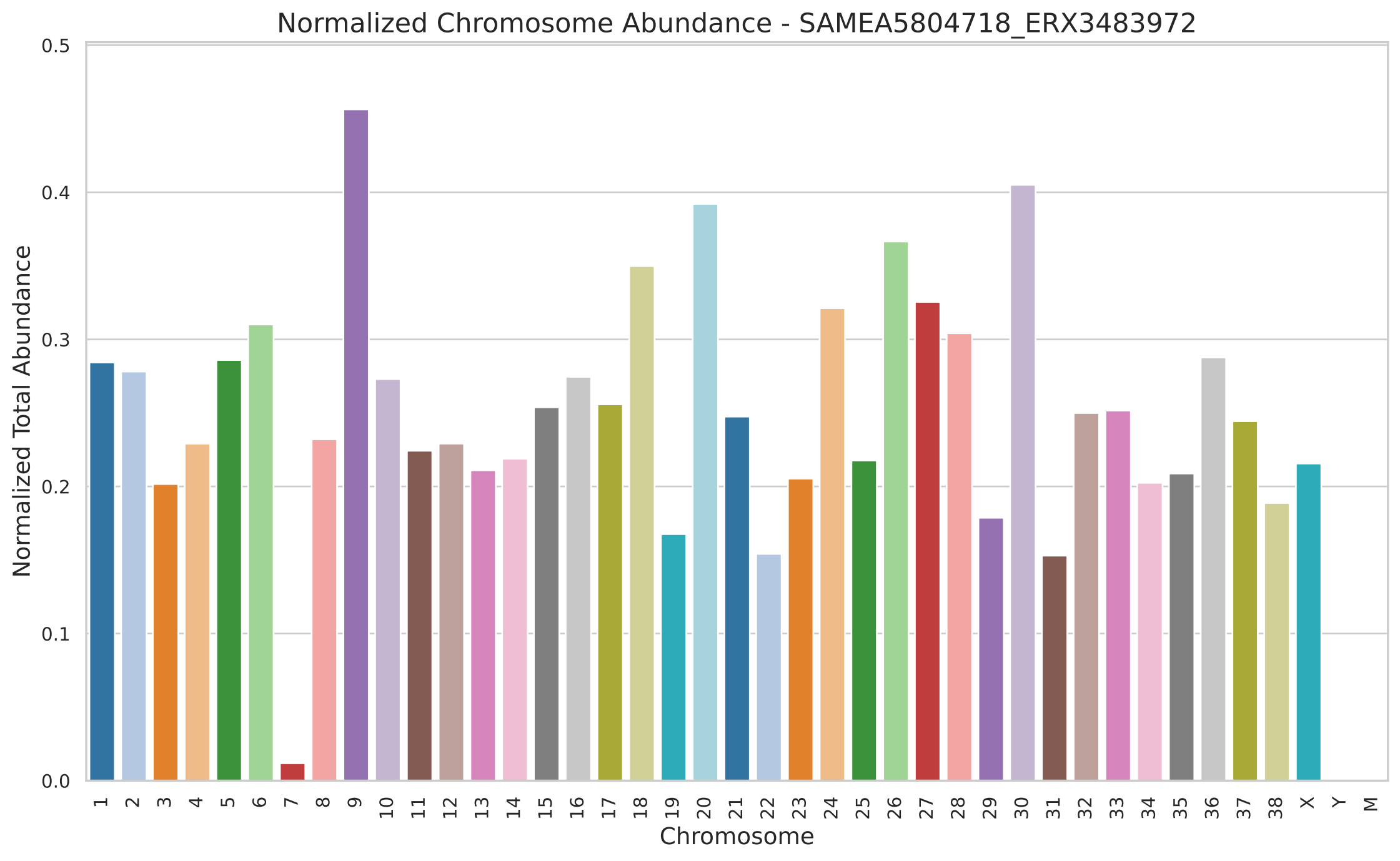

Normalized Chromosome Abundance - SAMEA5804702_ERX3483954
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

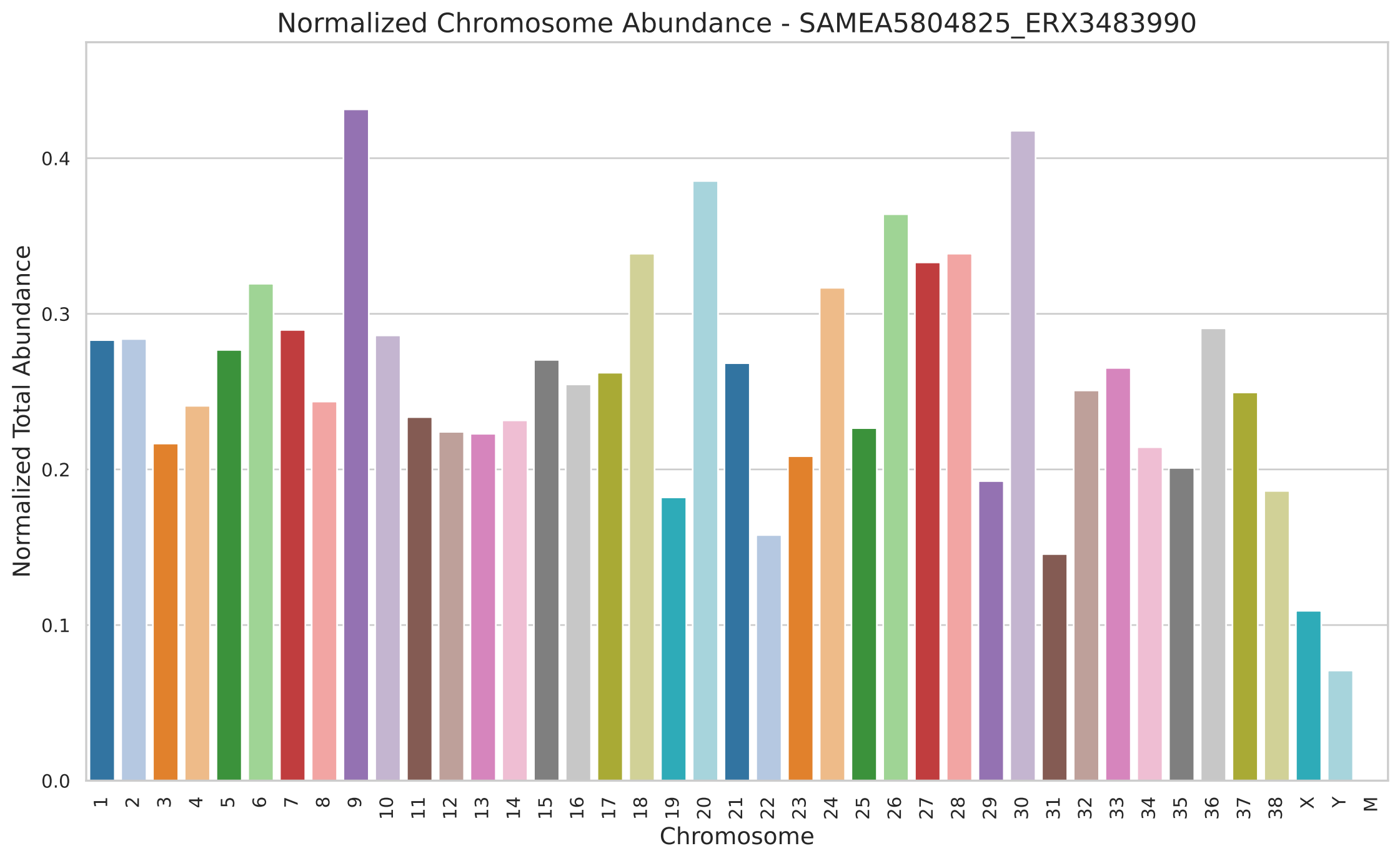

Normalized Chromosome Abundance - SAMEA5804710_ERX3483956
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

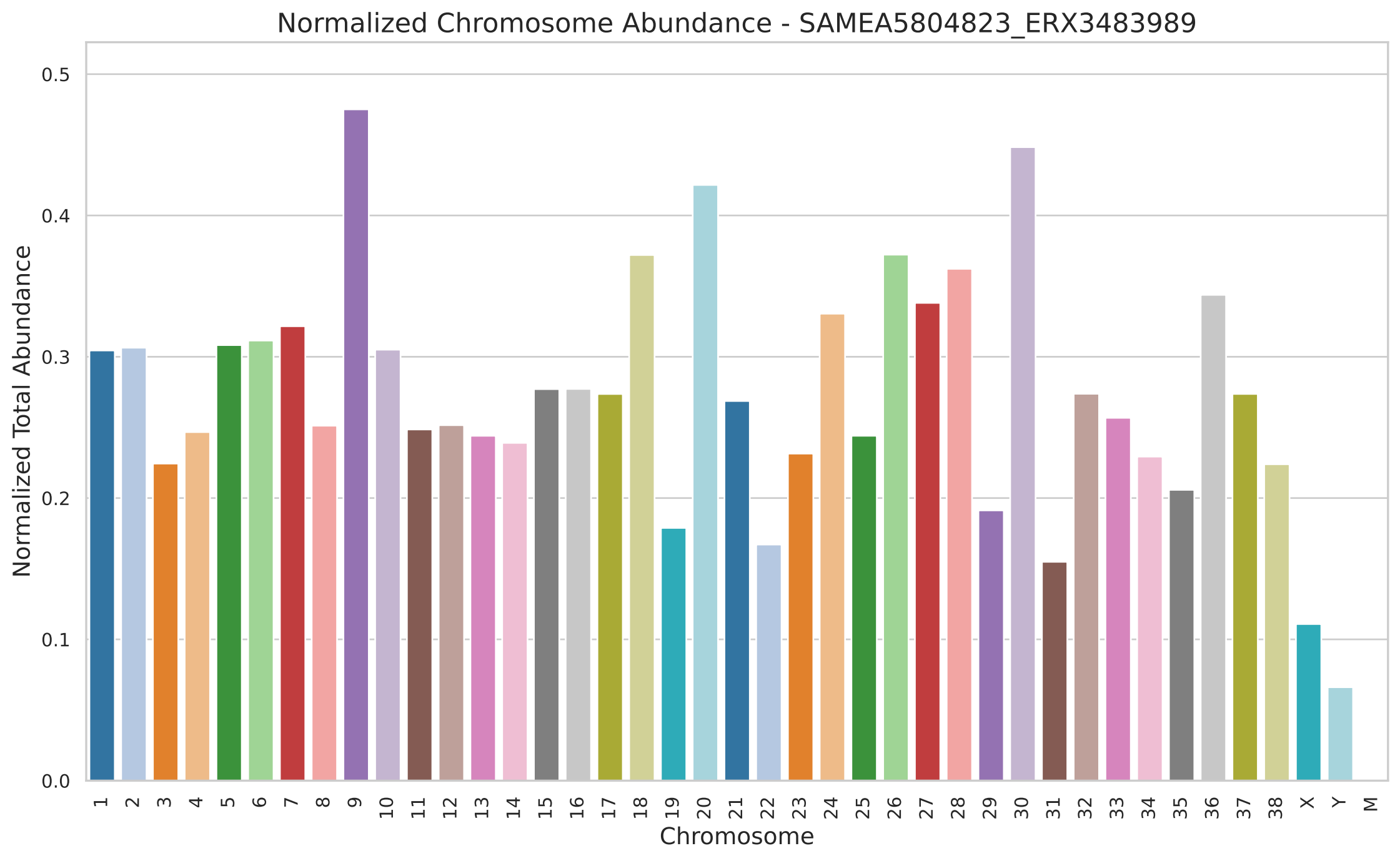

Normalized Chromosome Abundance - SAMEA5804760_ERX3483980
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

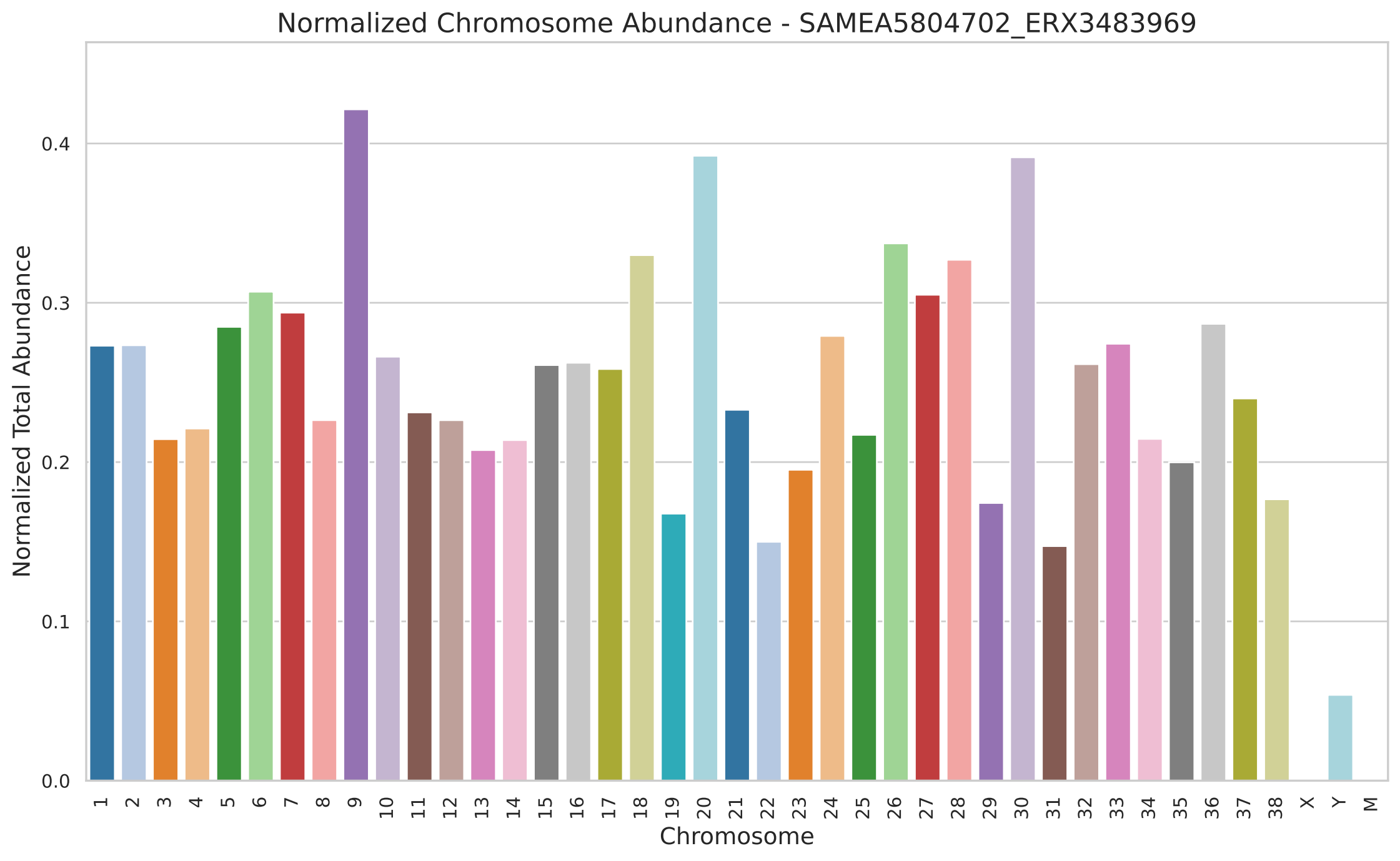

Normalized Chromosome Abundance - SAMEA5804698_ERX3483953
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

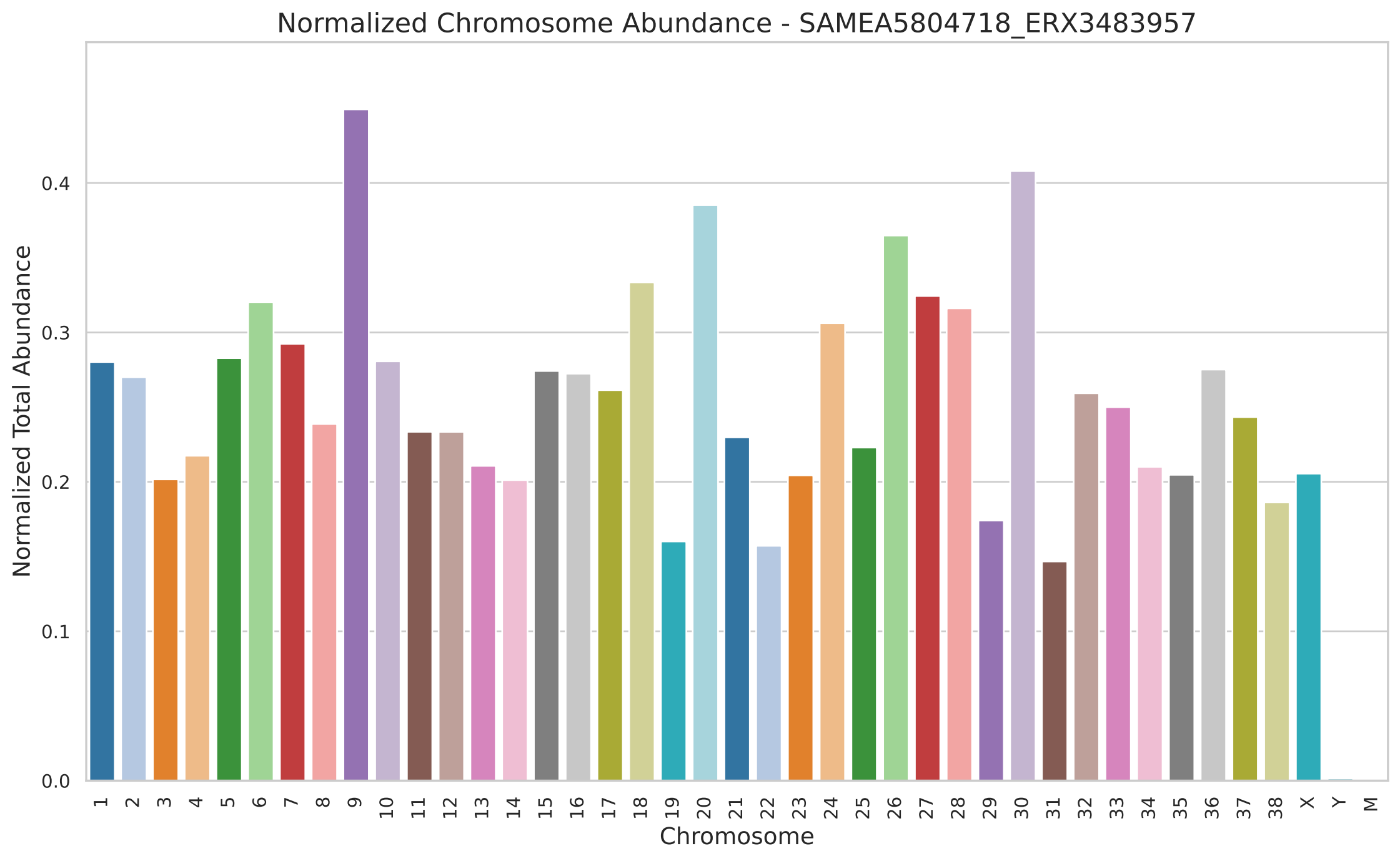

Normalized Chromosome Abundance - SAMEA5804729_ERX3483973
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

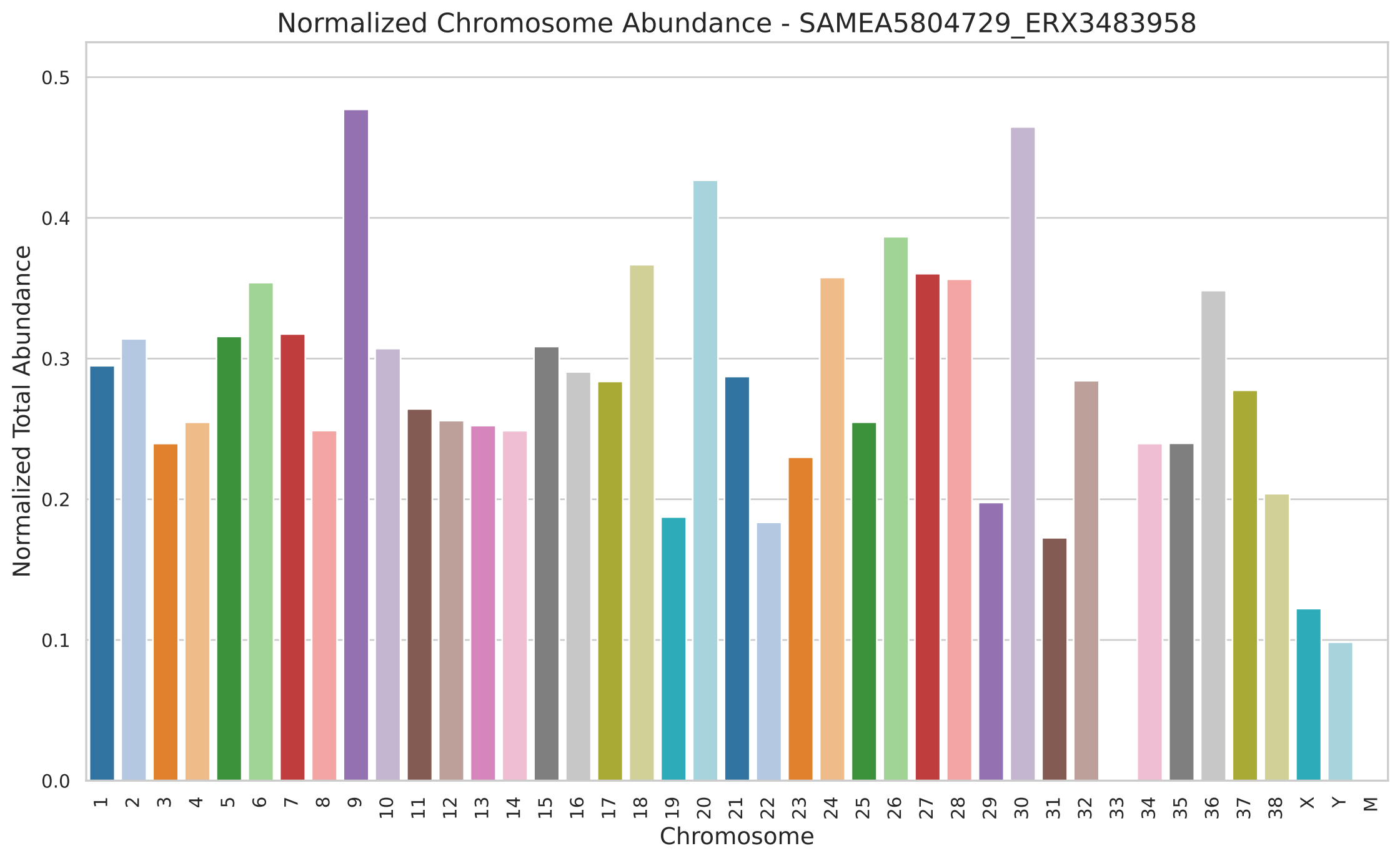

Normalized Chromosome Abundance - SAMEA5804718_ERX3483972
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

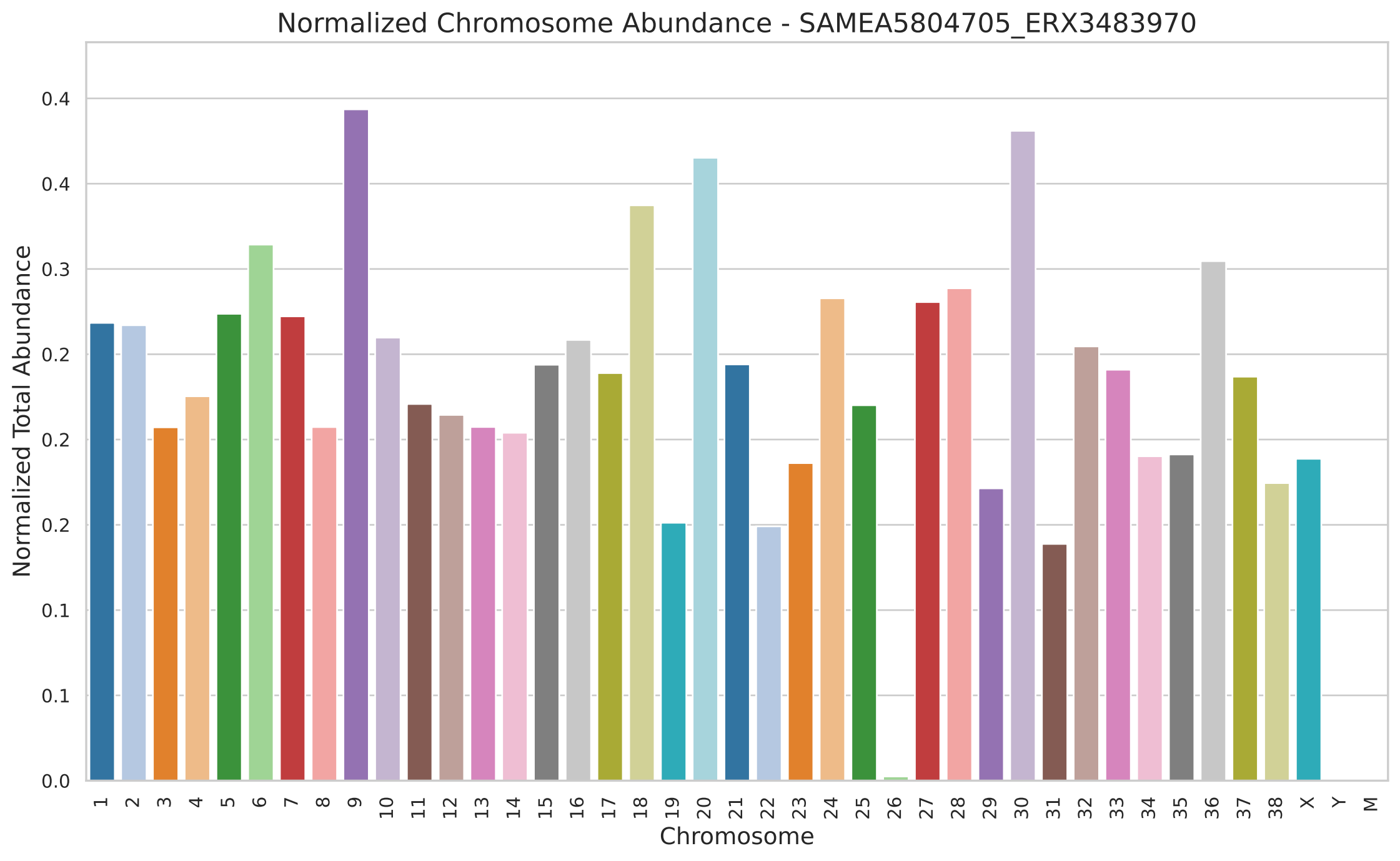

Normalized Chromosome Abundance - SAMEA5804825_ERX3483990
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

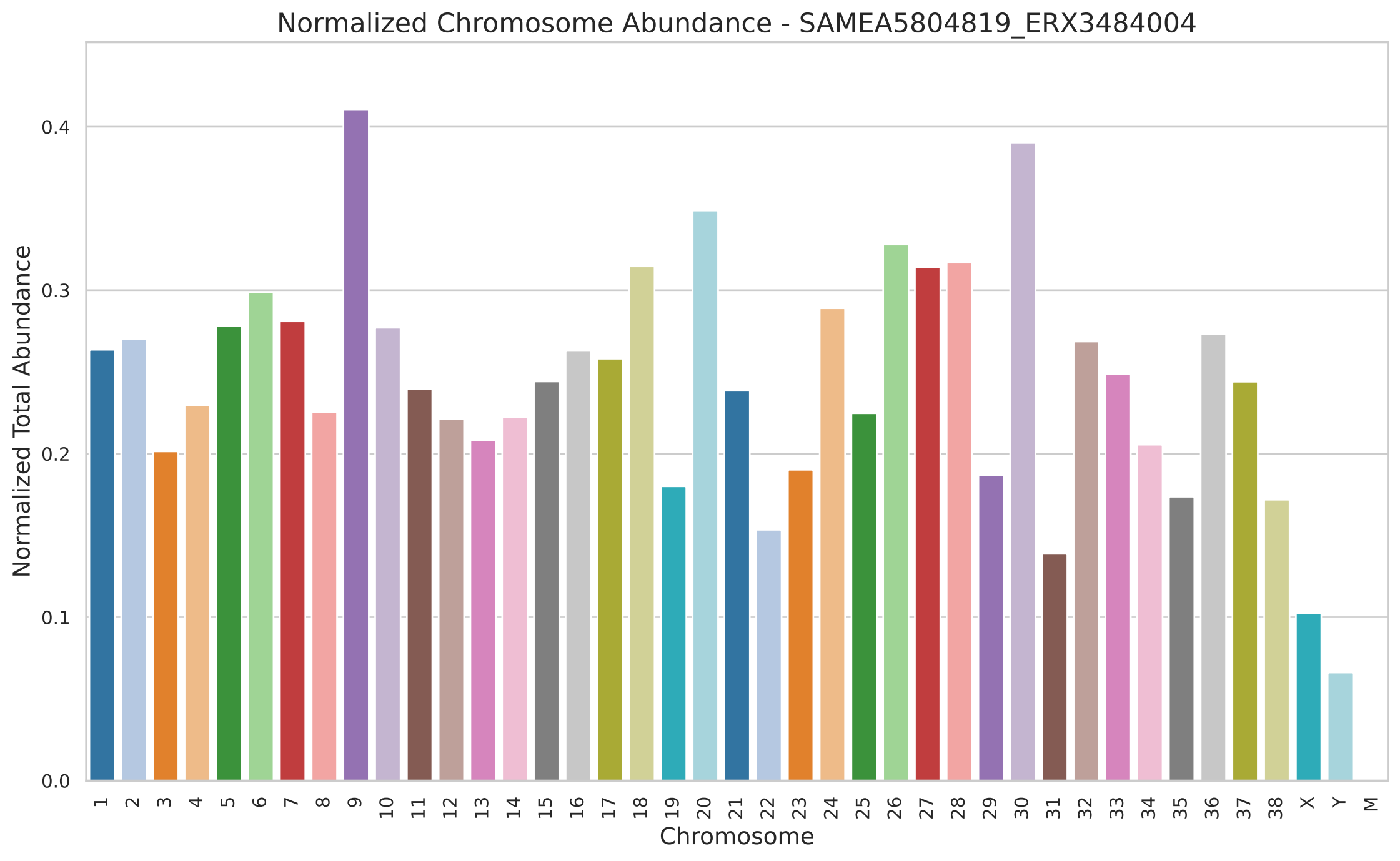

Normalized Chromosome Abundance - SAMEA5804823_ERX3483989
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

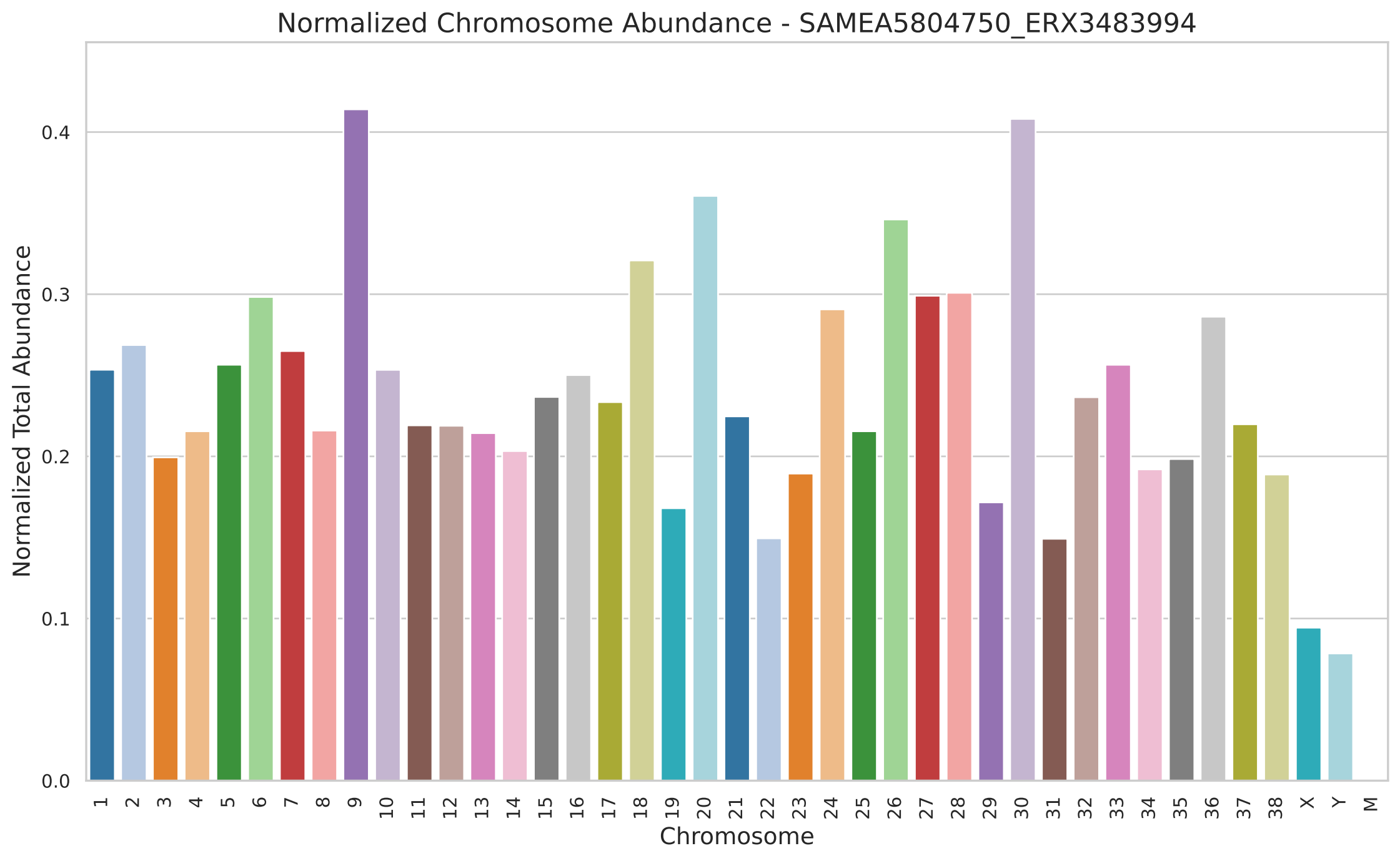

Normalized Chromosome Abundance - SAMEA5804702_ERX3483969
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

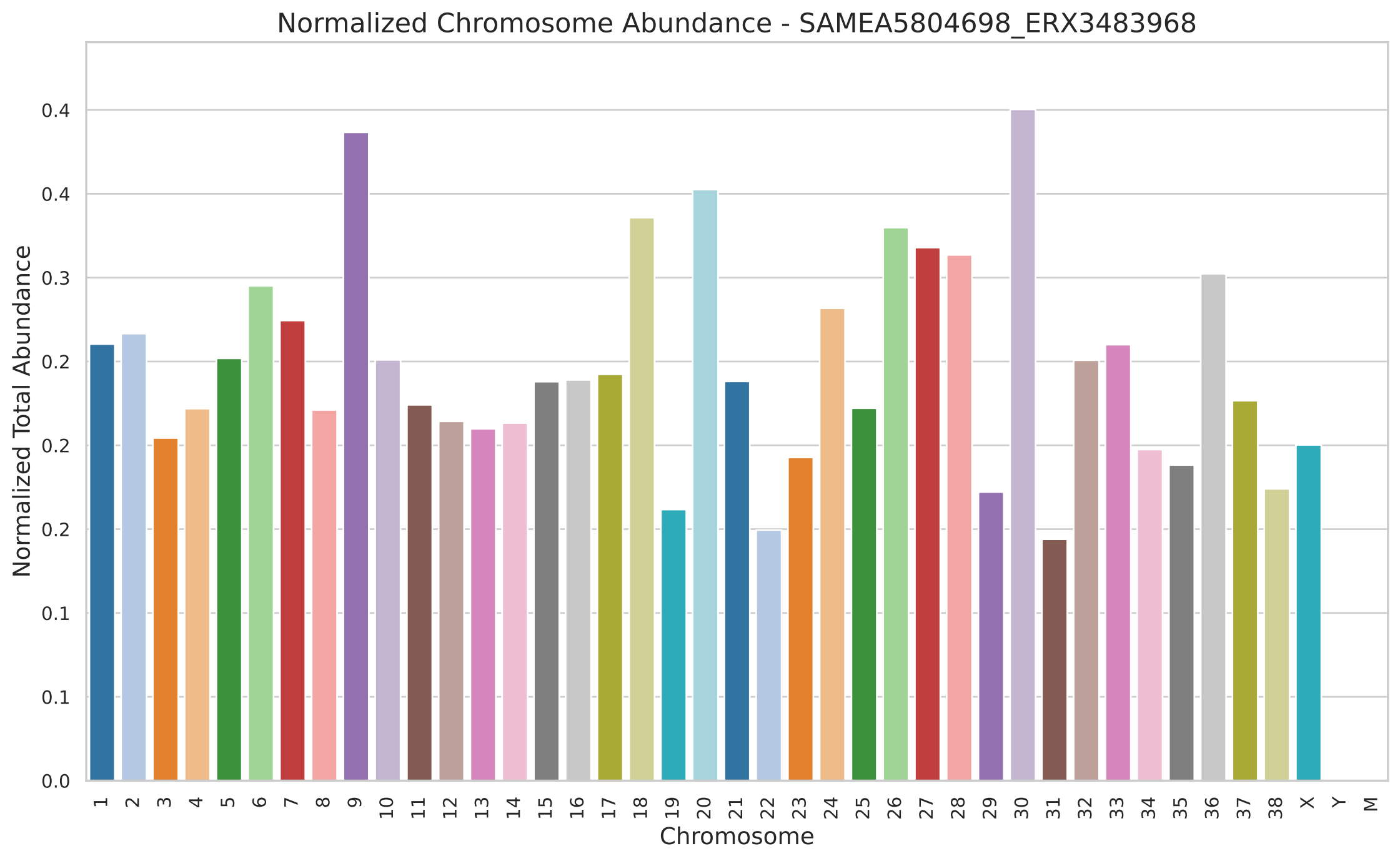

Normalized Chromosome Abundance - SAMEA5804718_ERX3483957
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

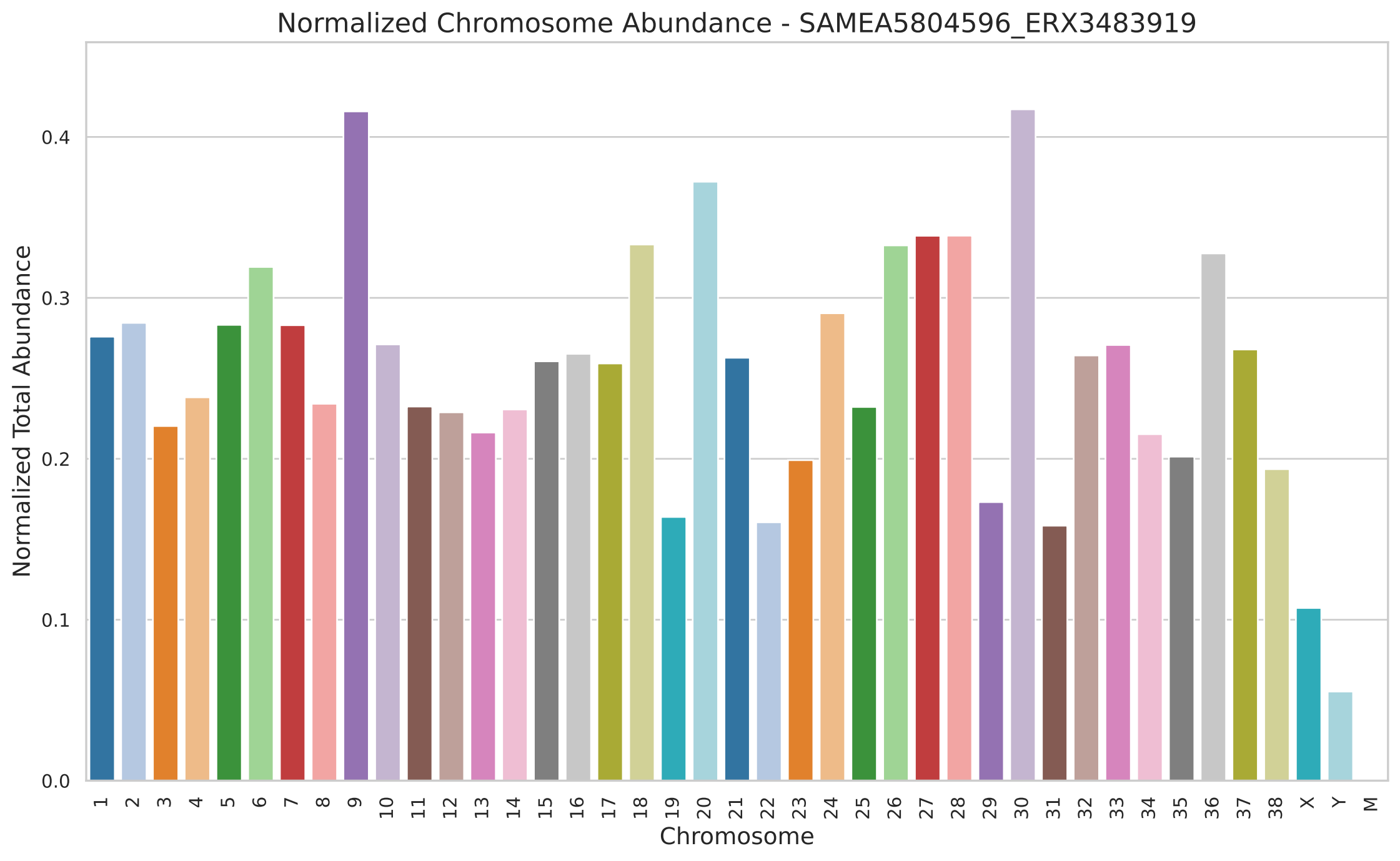

Normalized Chromosome Abundance - SAMEA5804729_ERX3483958
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

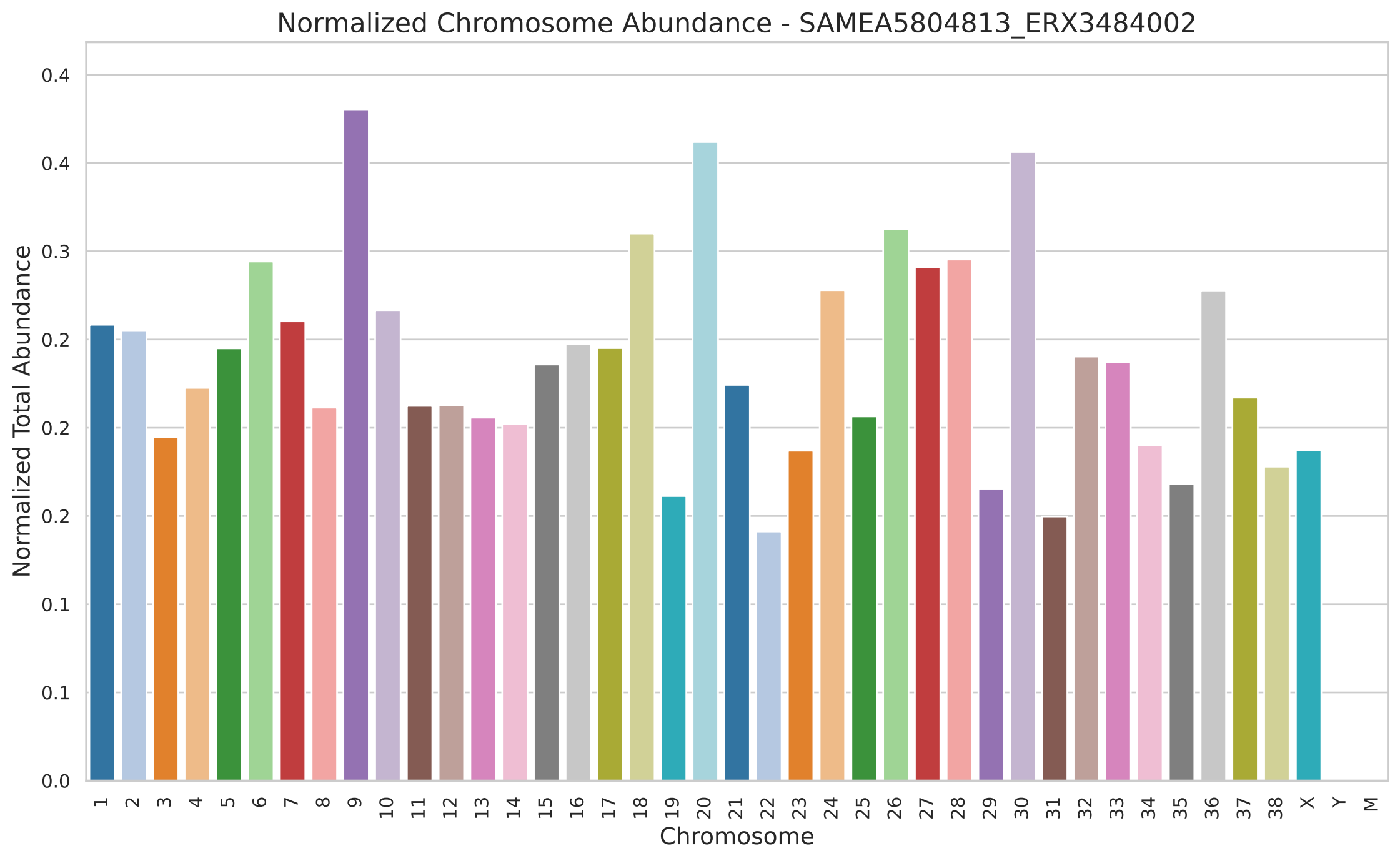

Normalized Chromosome Abundance - SAMEA5804705_ERX3483970
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

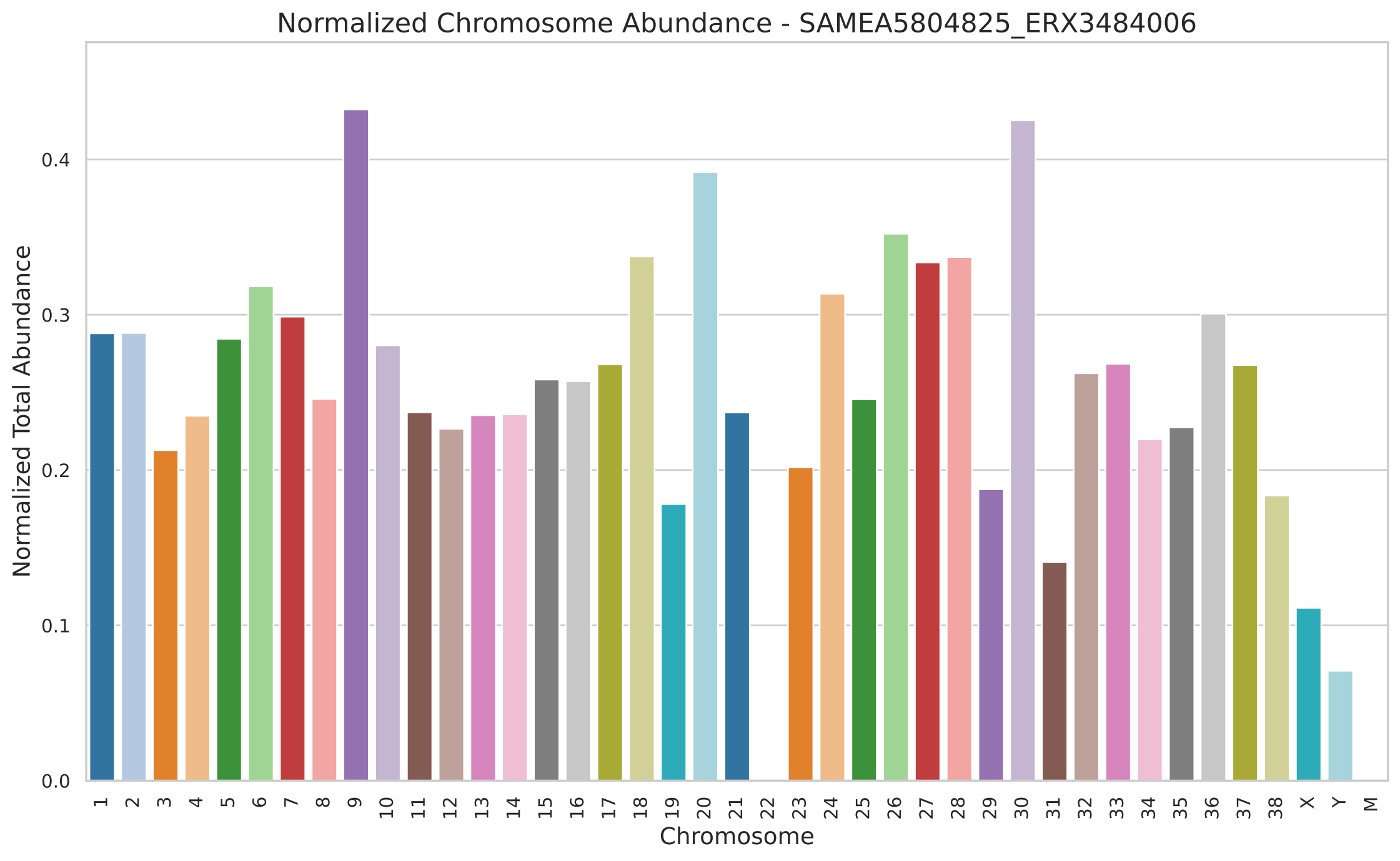

Normalized Chromosome Abundance - SAMEA5804819_ERX3484004
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

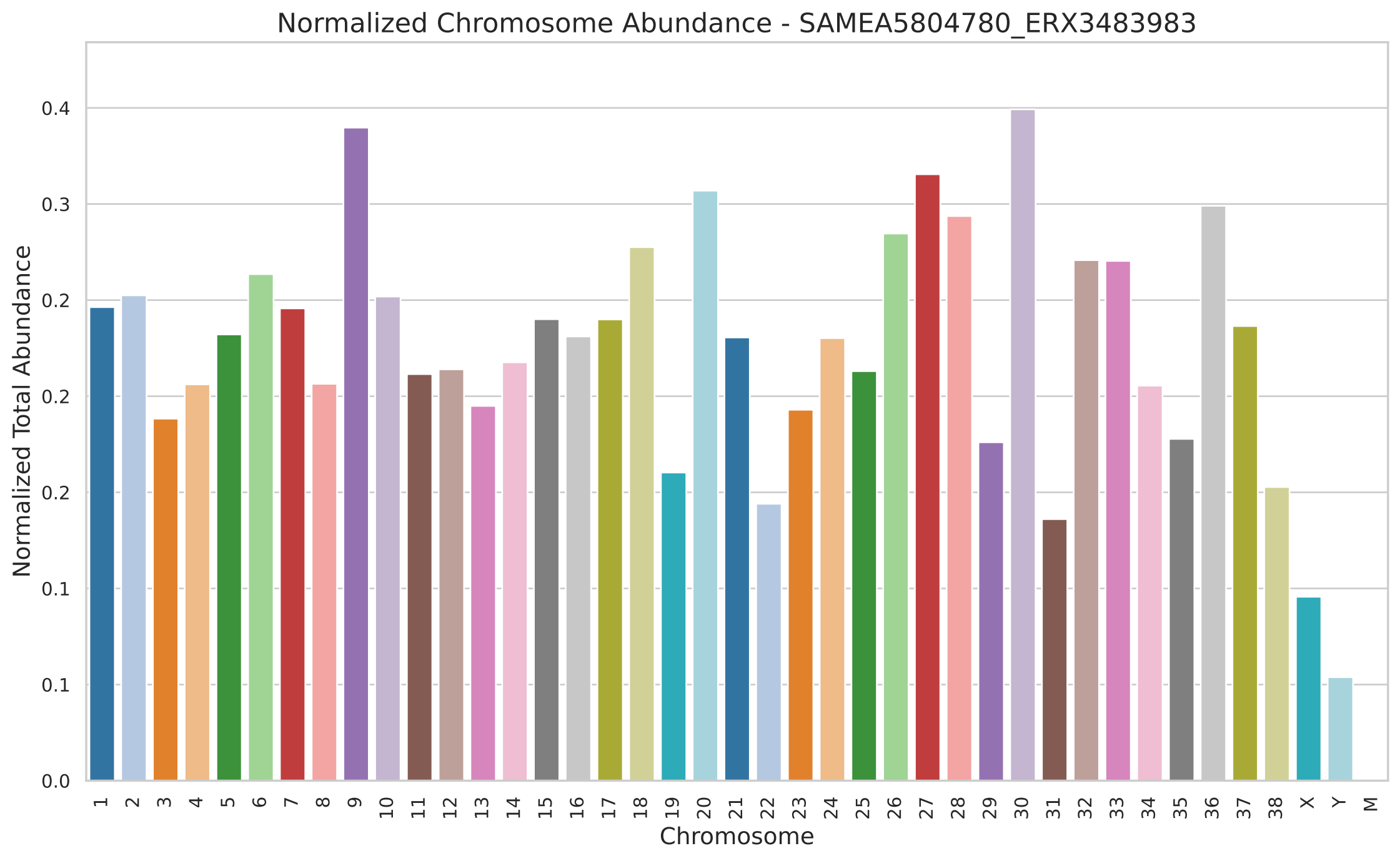

Normalized Chromosome Abundance - SAMEA5804750_ERX3483994
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

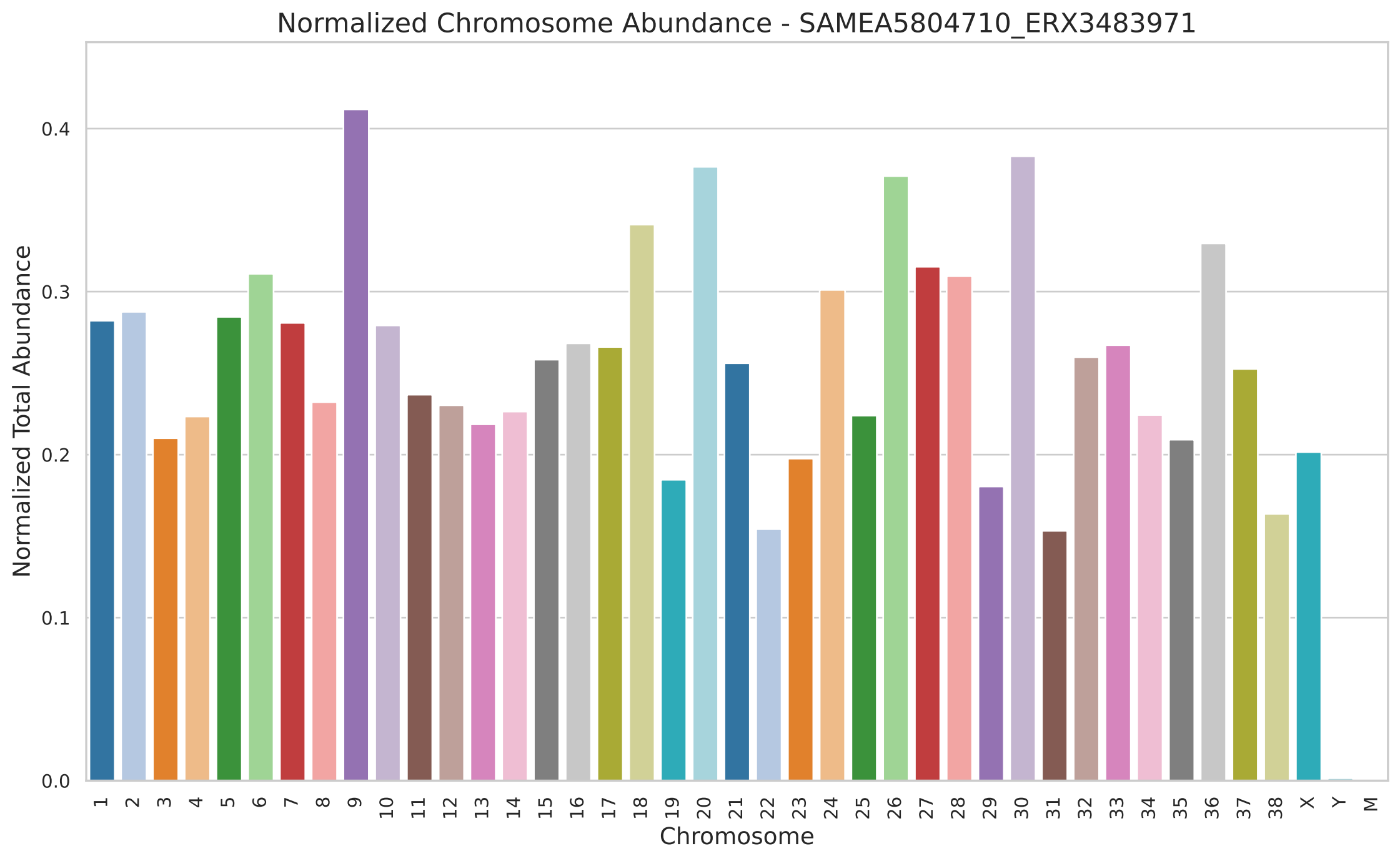

Normalized Chromosome Abundance - SAMEA5804698_ERX3483968
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

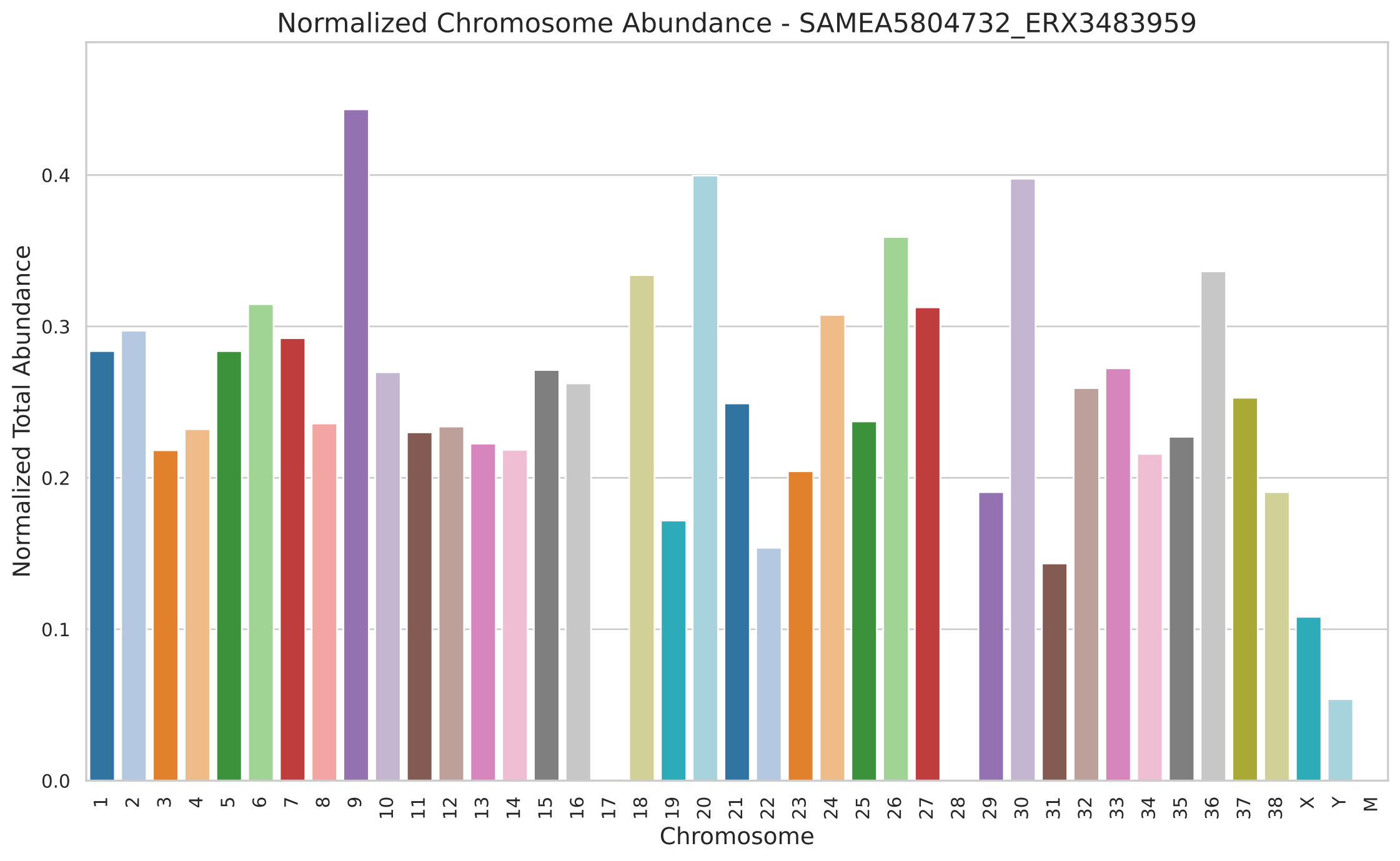

Normalized Chromosome Abundance - SAMEA5804596_ERX3483919
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

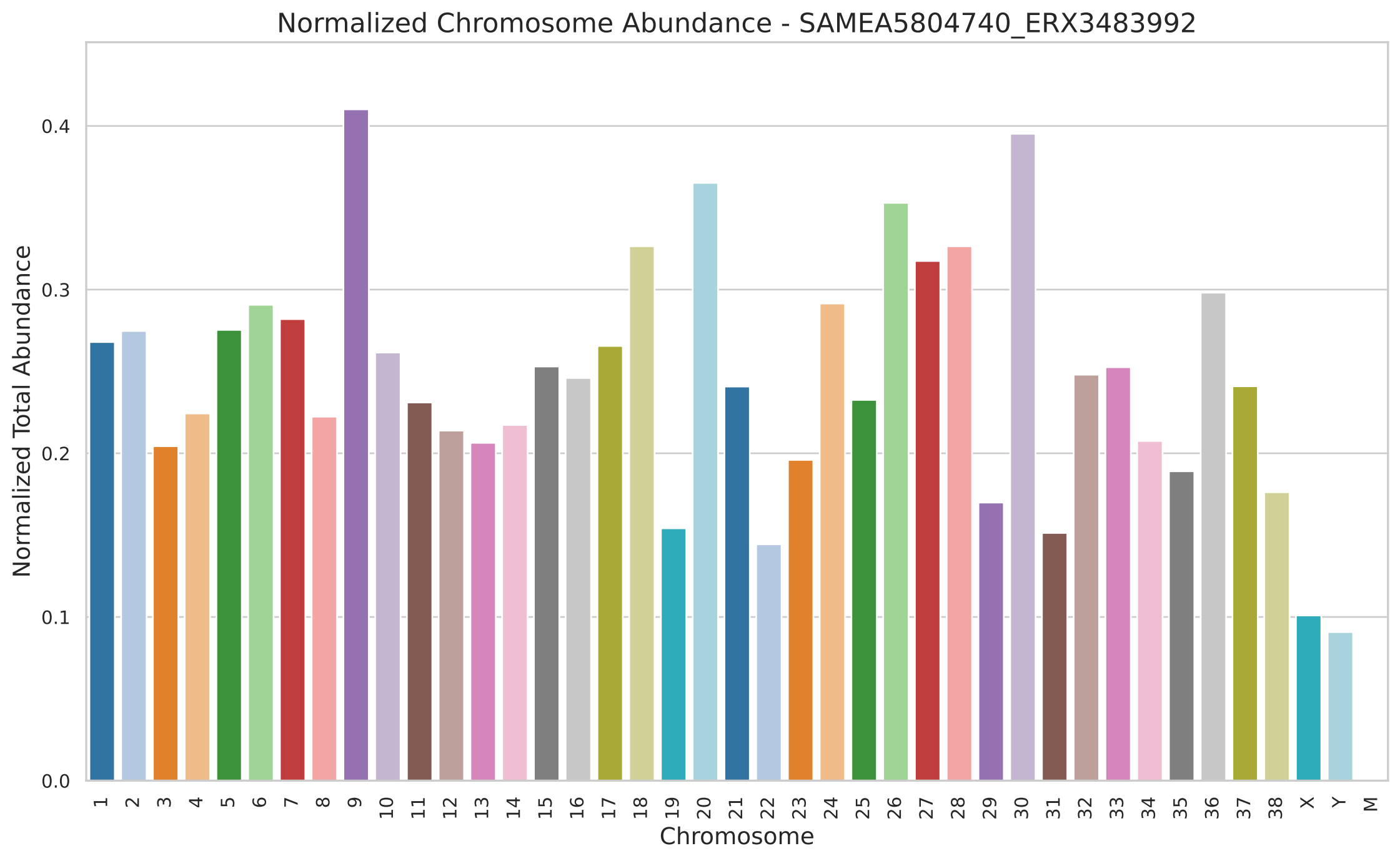

Normalized Chromosome Abundance - SAMEA5804813_ERX3484002
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

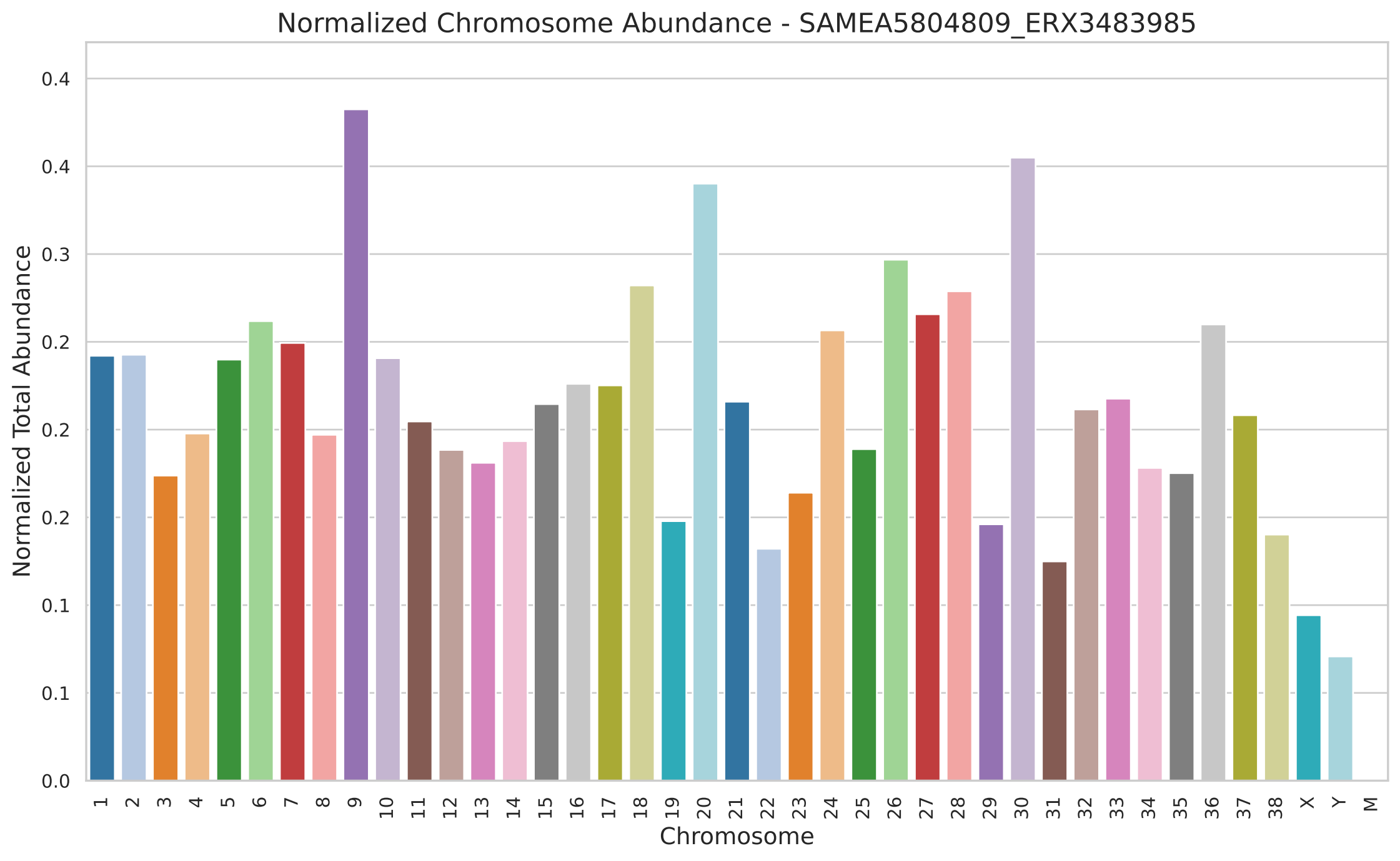

Normalized Chromosome Abundance - SAMEA5804825_ERX3484006
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

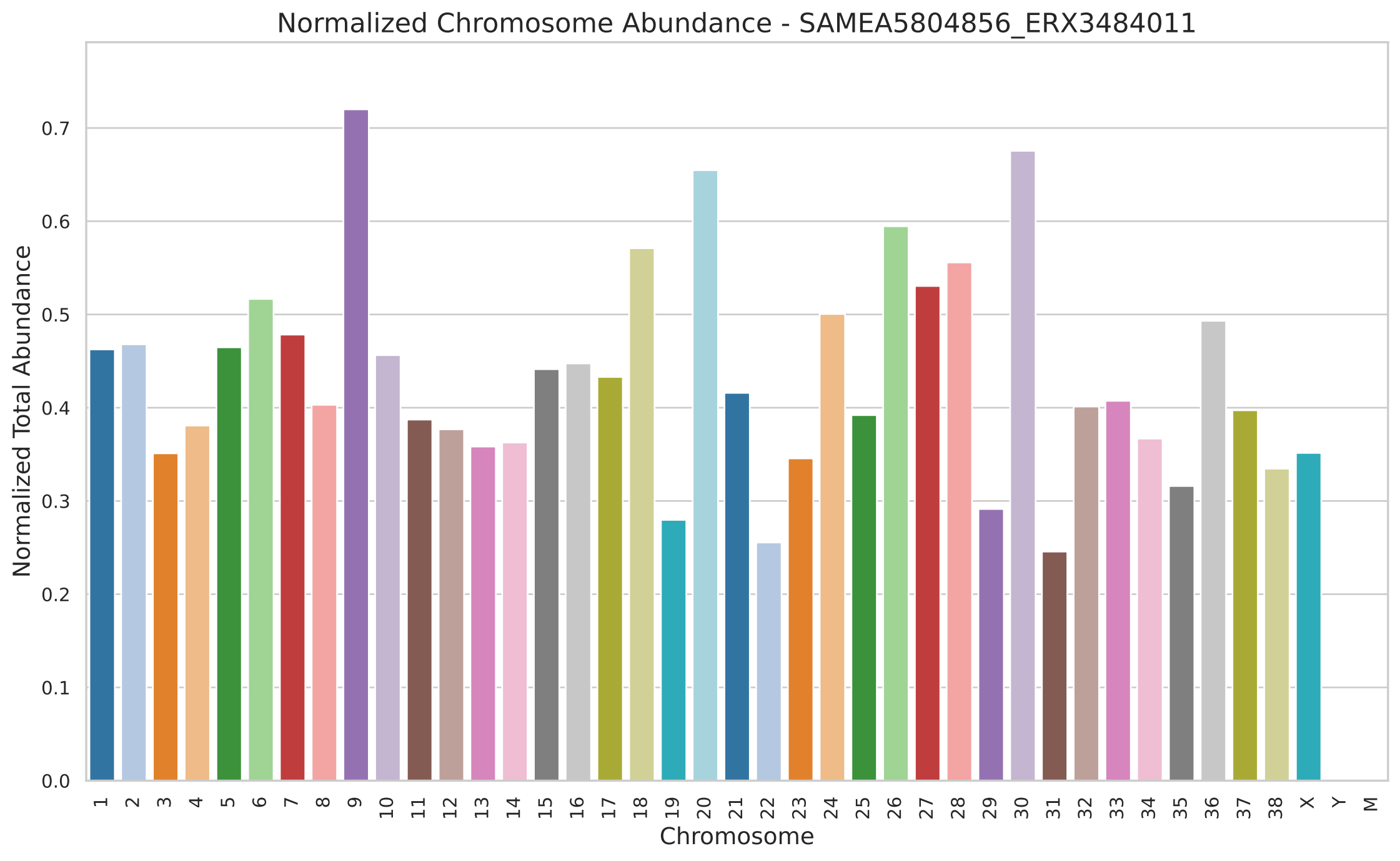

Normalized Chromosome Abundance - SAMEA5804780_ERX3483983
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

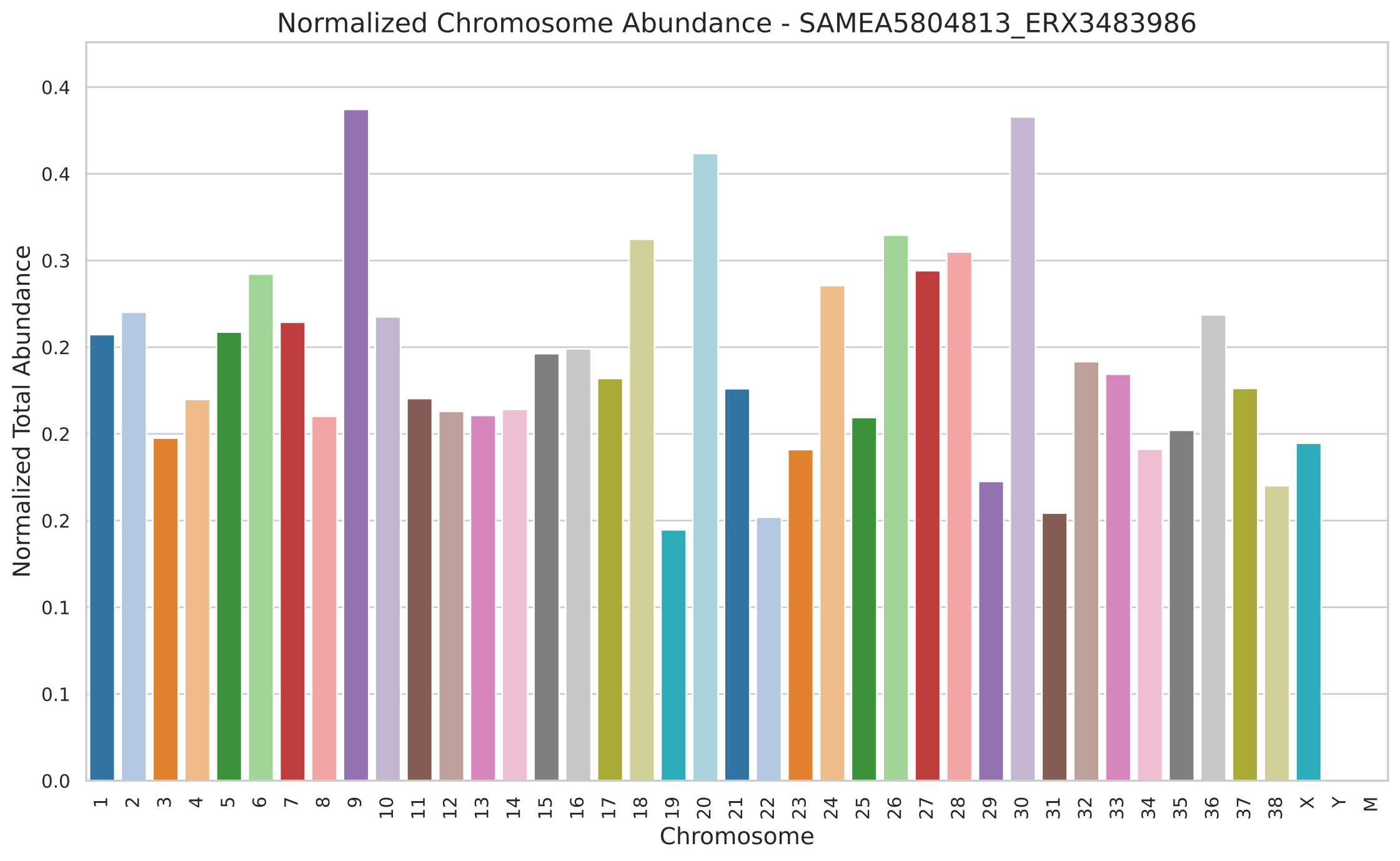

Normalized Chromosome Abundance - SAMEA5804710_ERX3483971
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

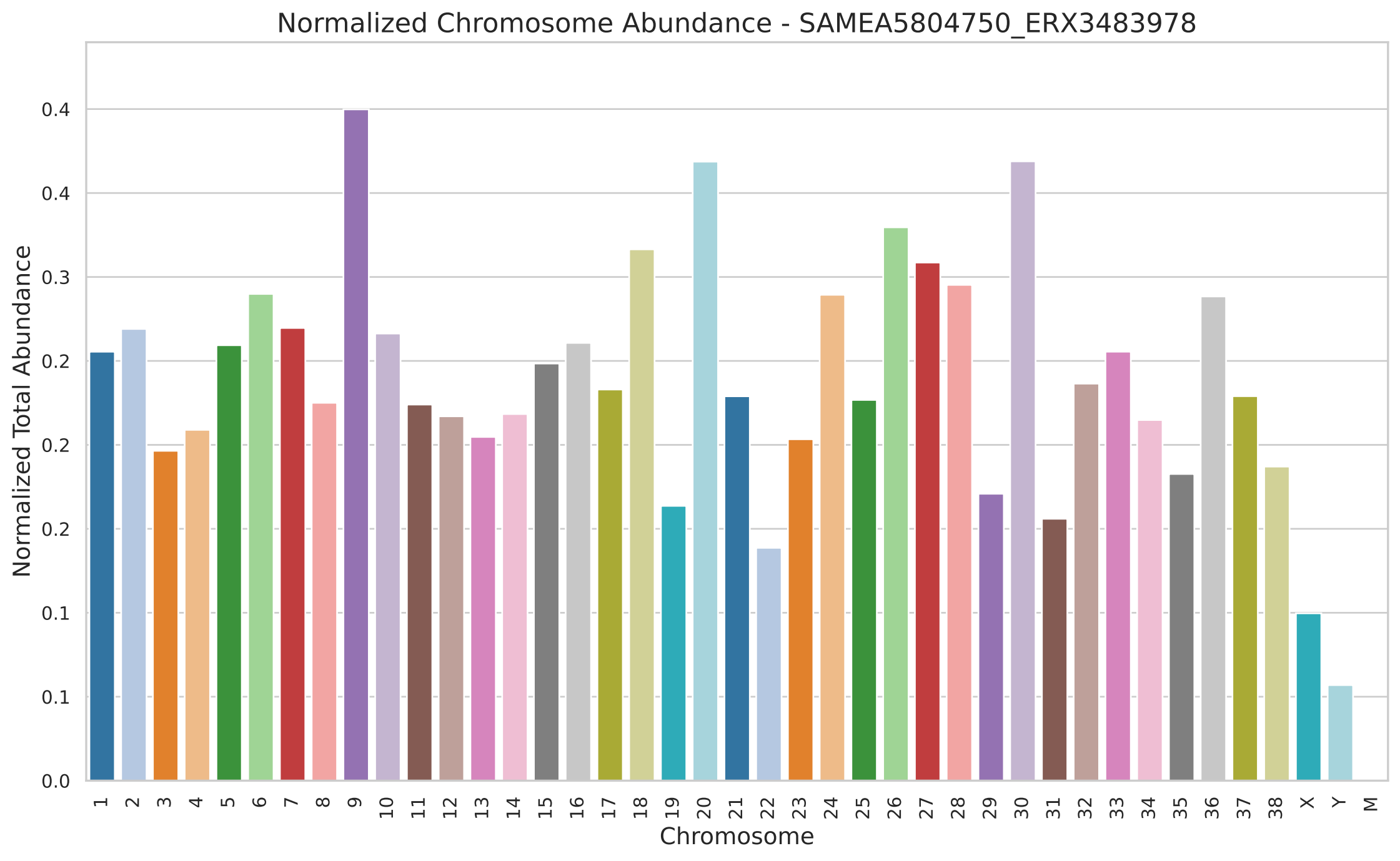

Normalized Chromosome Abundance - SAMEA5804732_ERX3483959
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

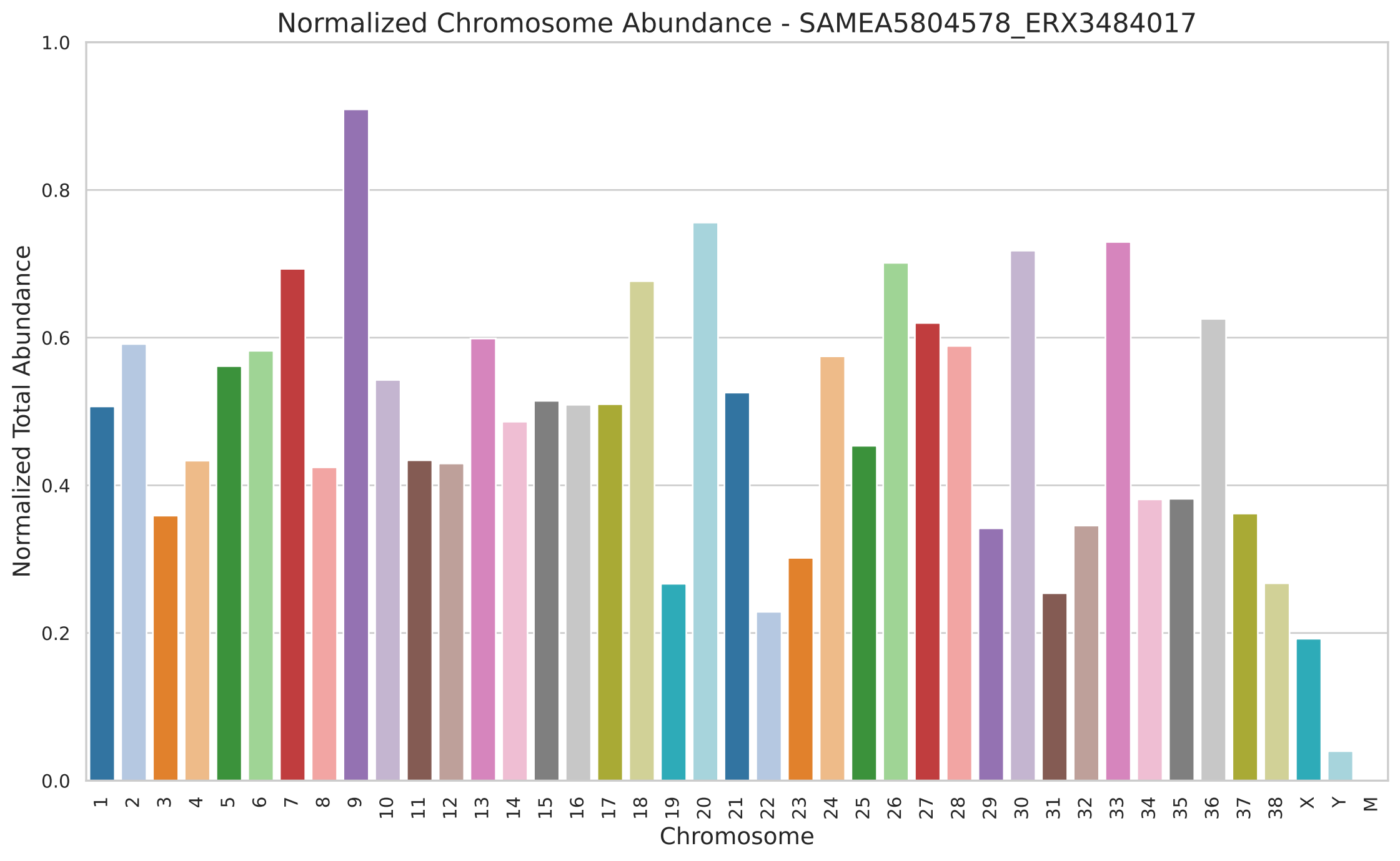

Normalized Chromosome Abundance - SAMEA5804740_ERX3483992
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

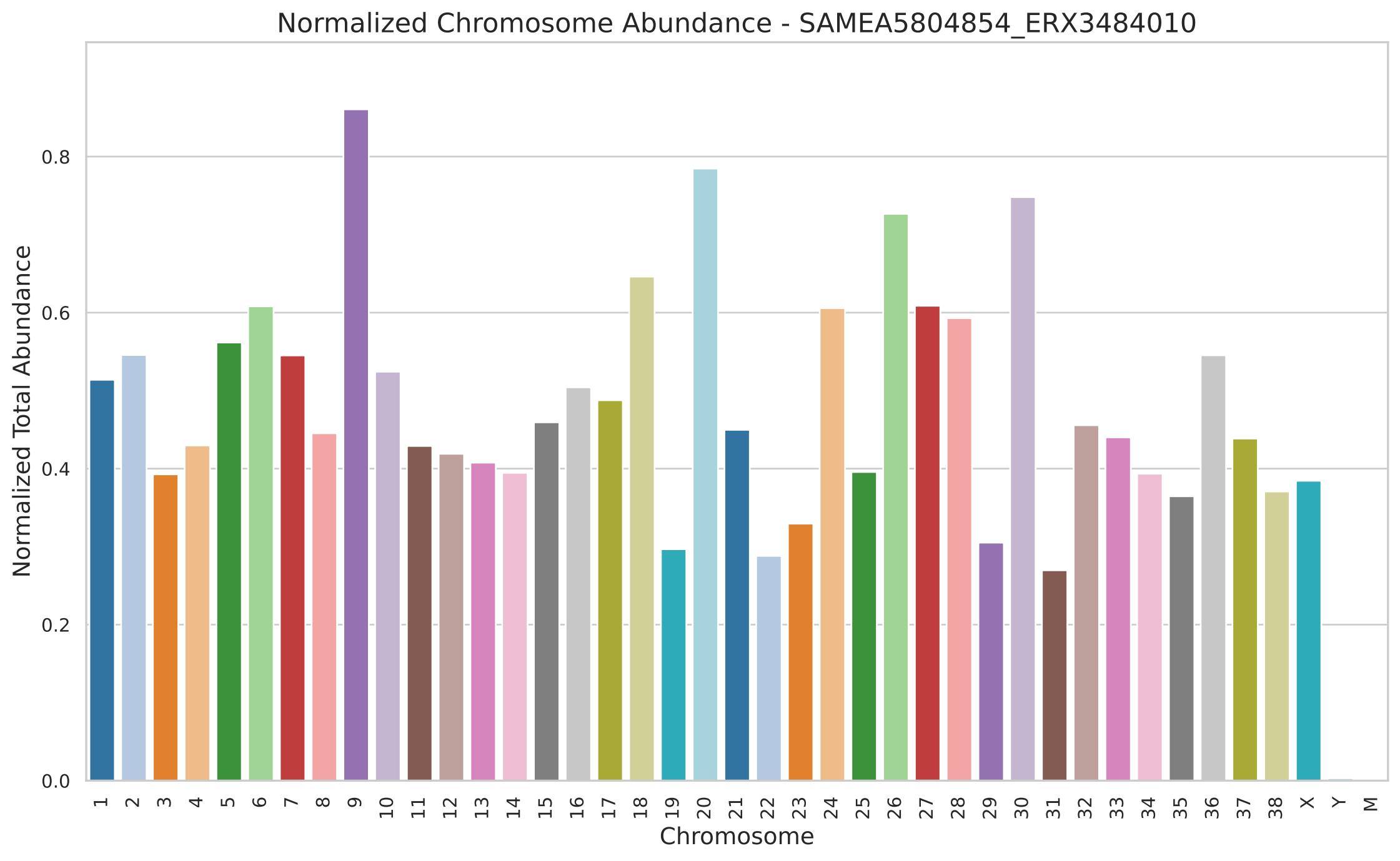

Normalized Chromosome Abundance - SAMEA5804809_ERX3483985
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

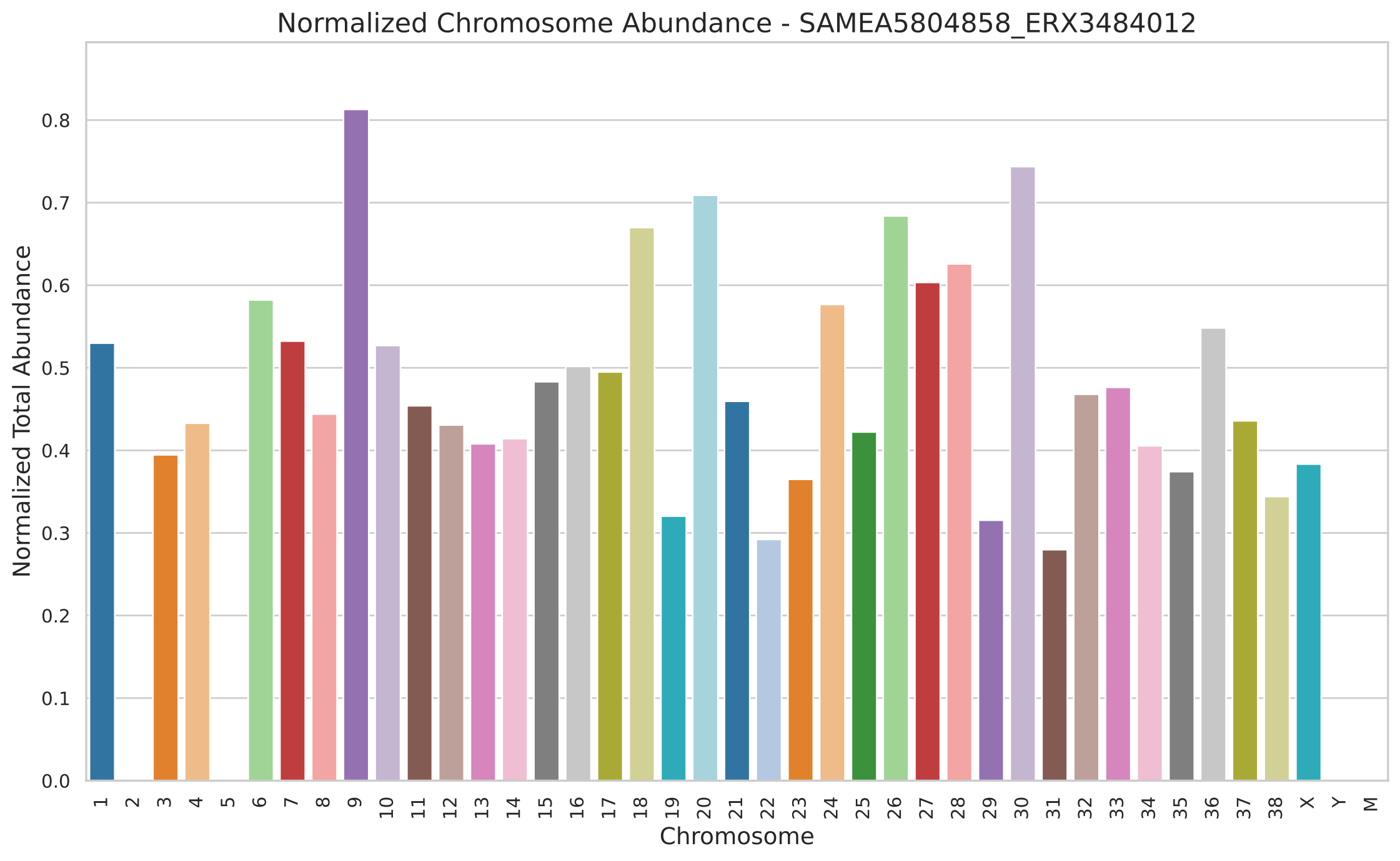

Normalized Chromosome Abundance - SAMEA5804856_ERX3484011
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

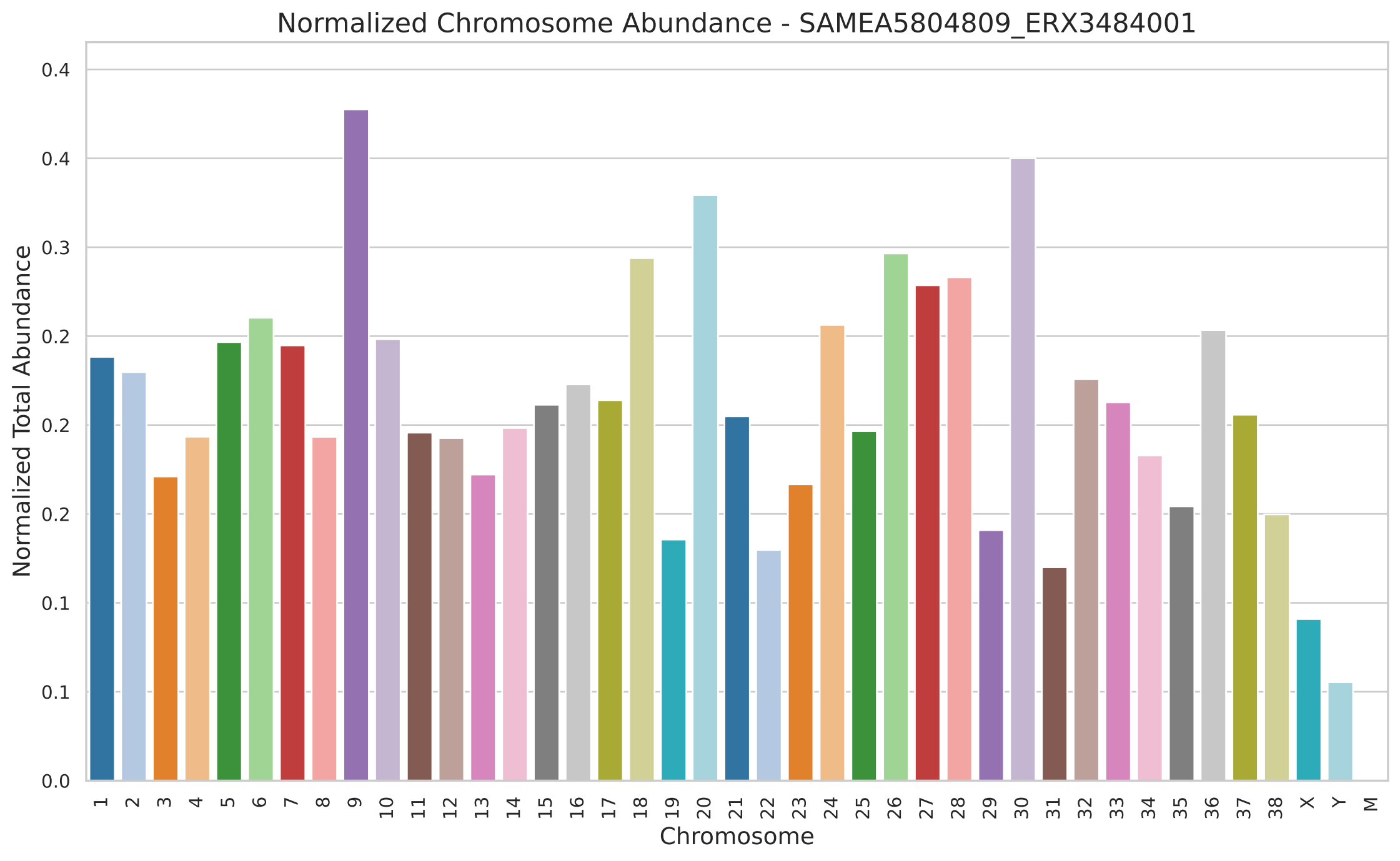

Normalized Chromosome Abundance - SAMEA5804813_ERX3483986
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

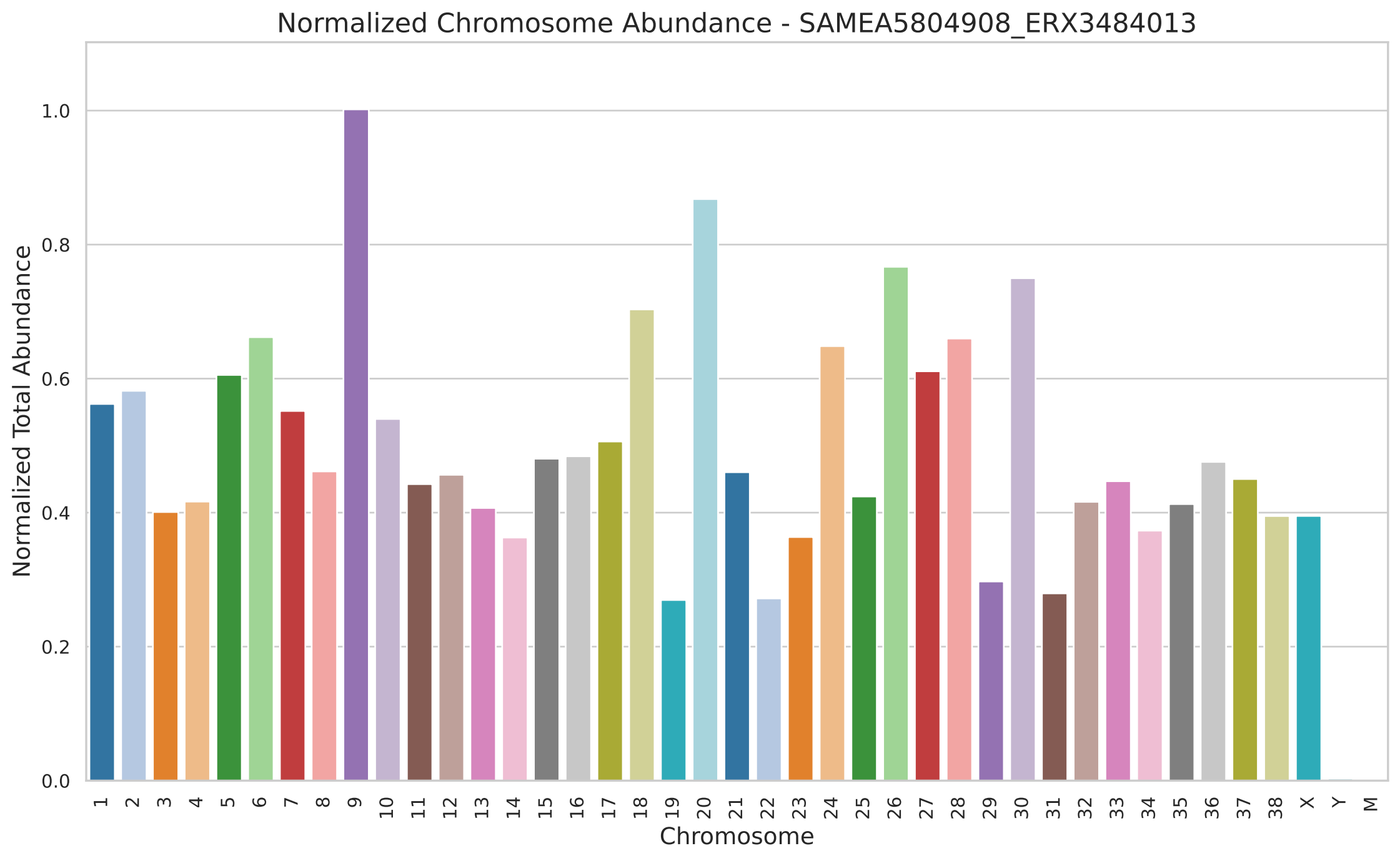

Normalized Chromosome Abundance - SAMEA5804750_ERX3483978
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

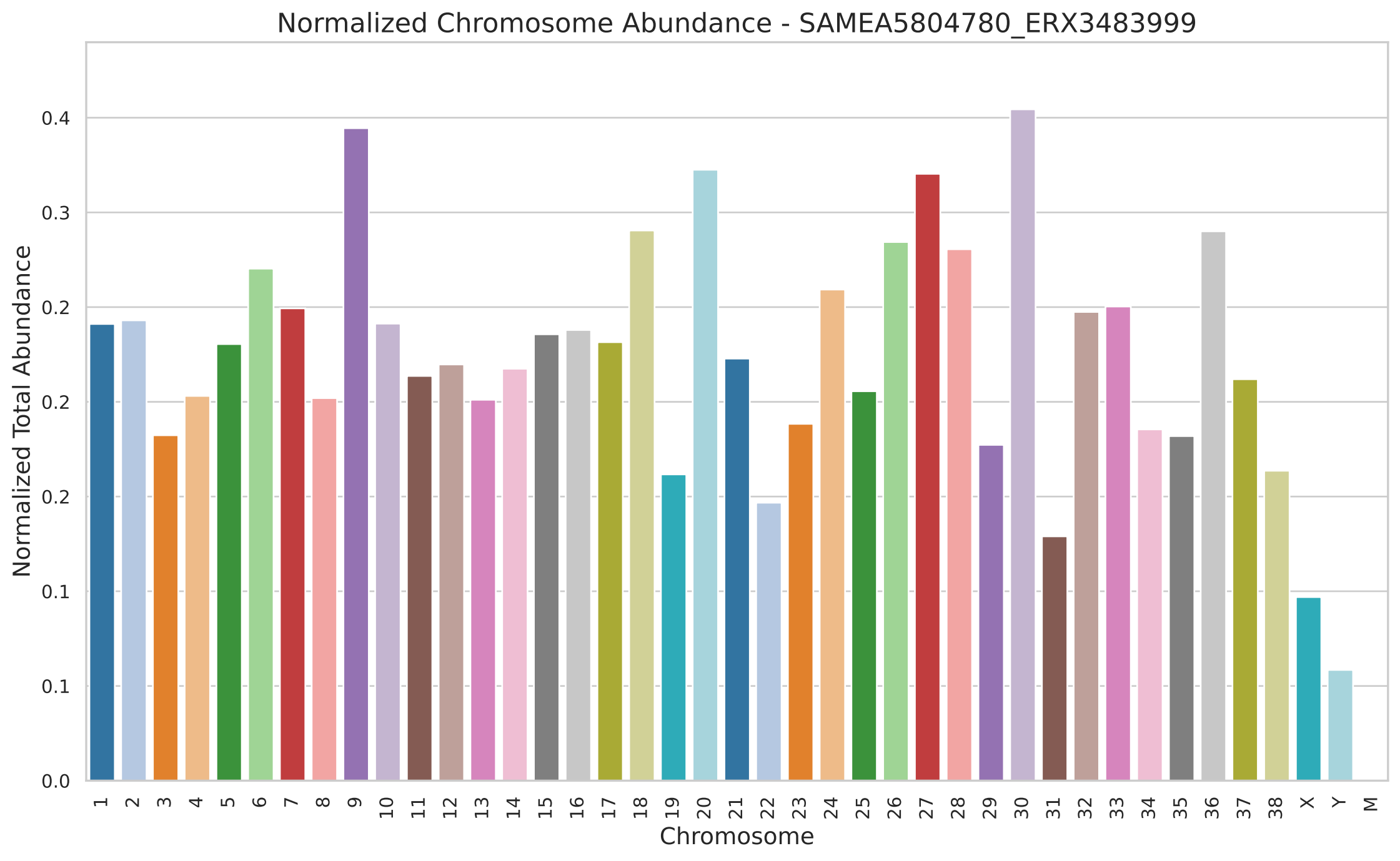

Normalized Chromosome Abundance - SAMEA5804578_ERX3484017
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

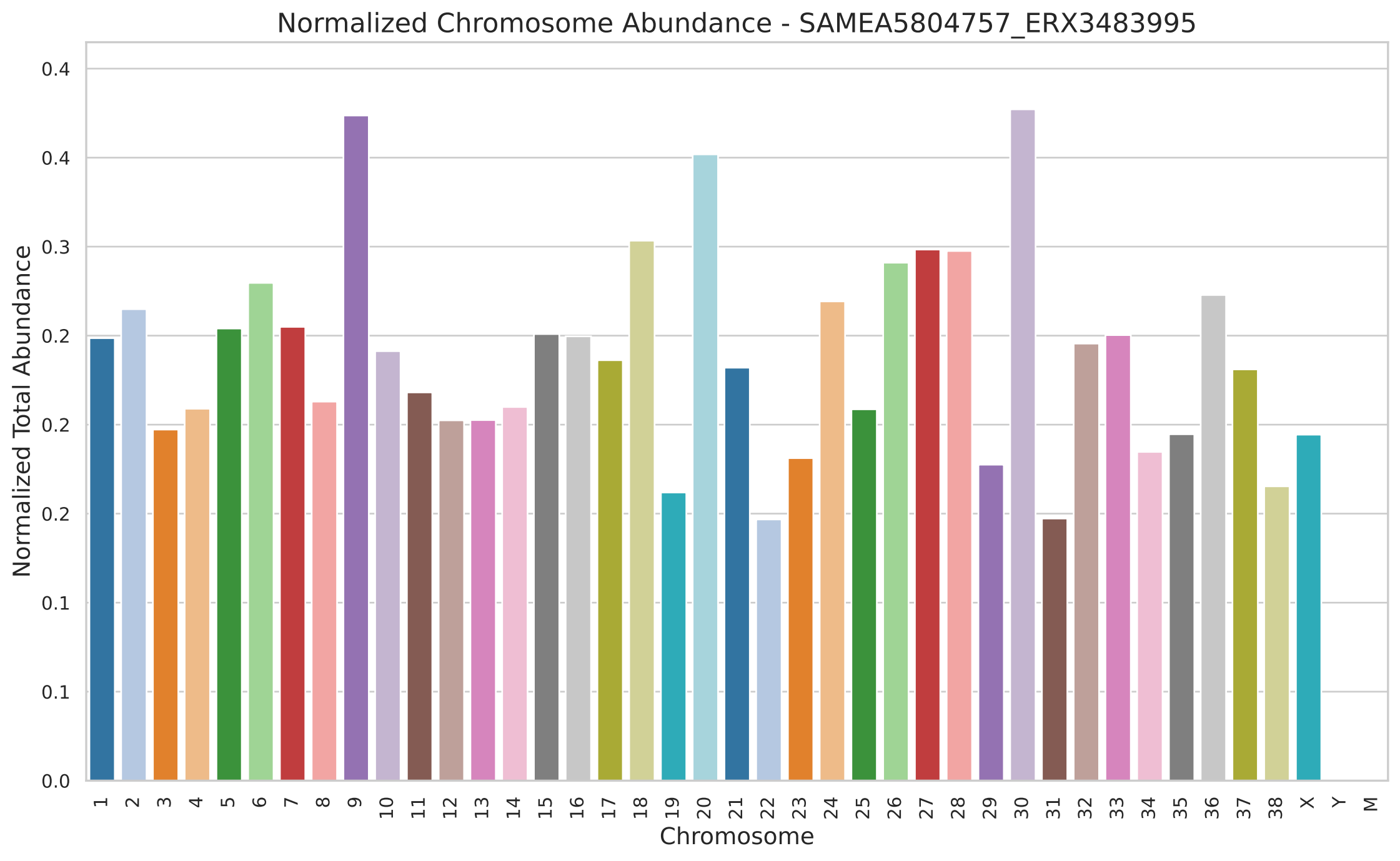

Normalized Chromosome Abundance - SAMEA5804854_ERX3484010
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

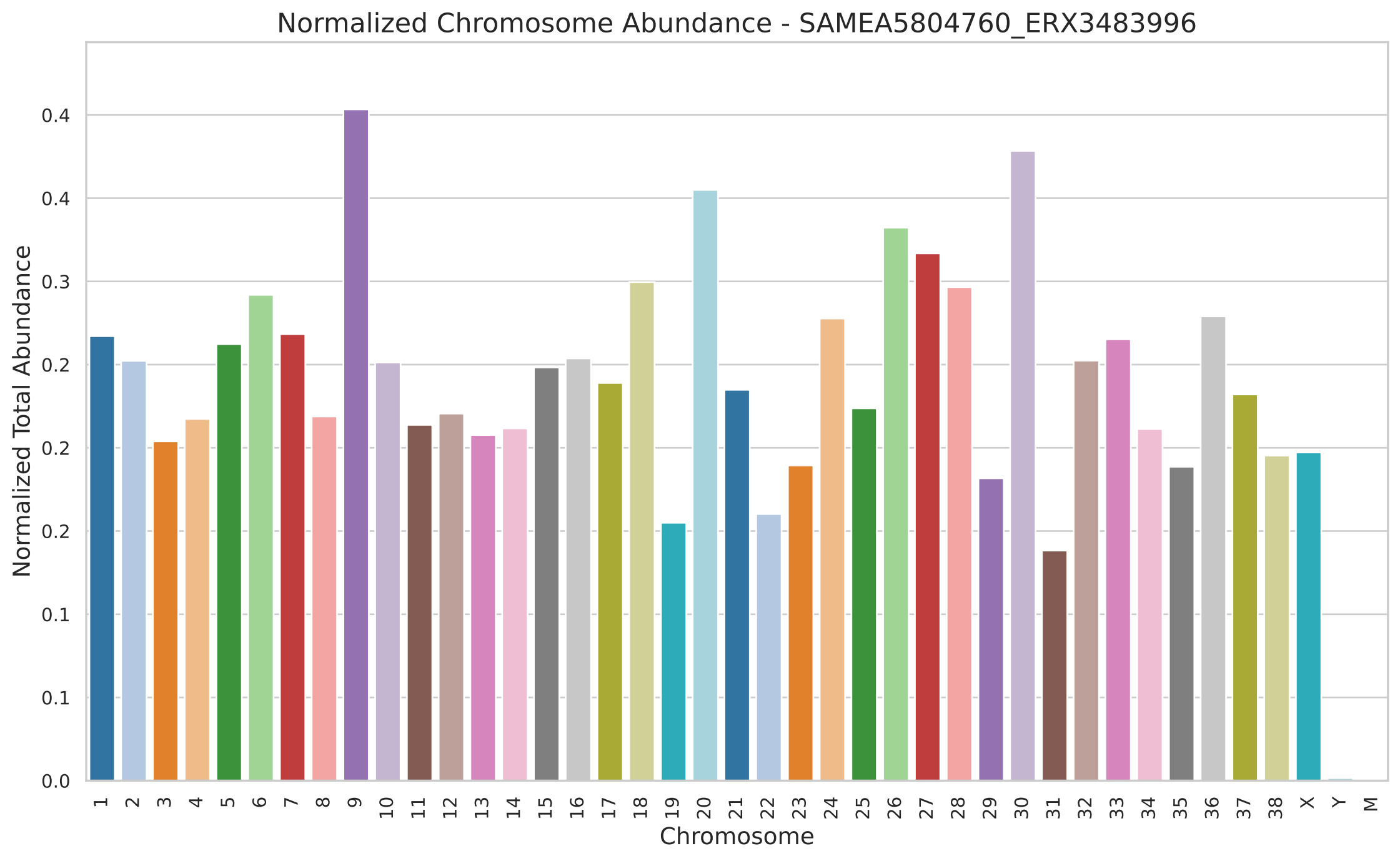

Normalized Chromosome Abundance - SAMEA5804858_ERX3484012
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

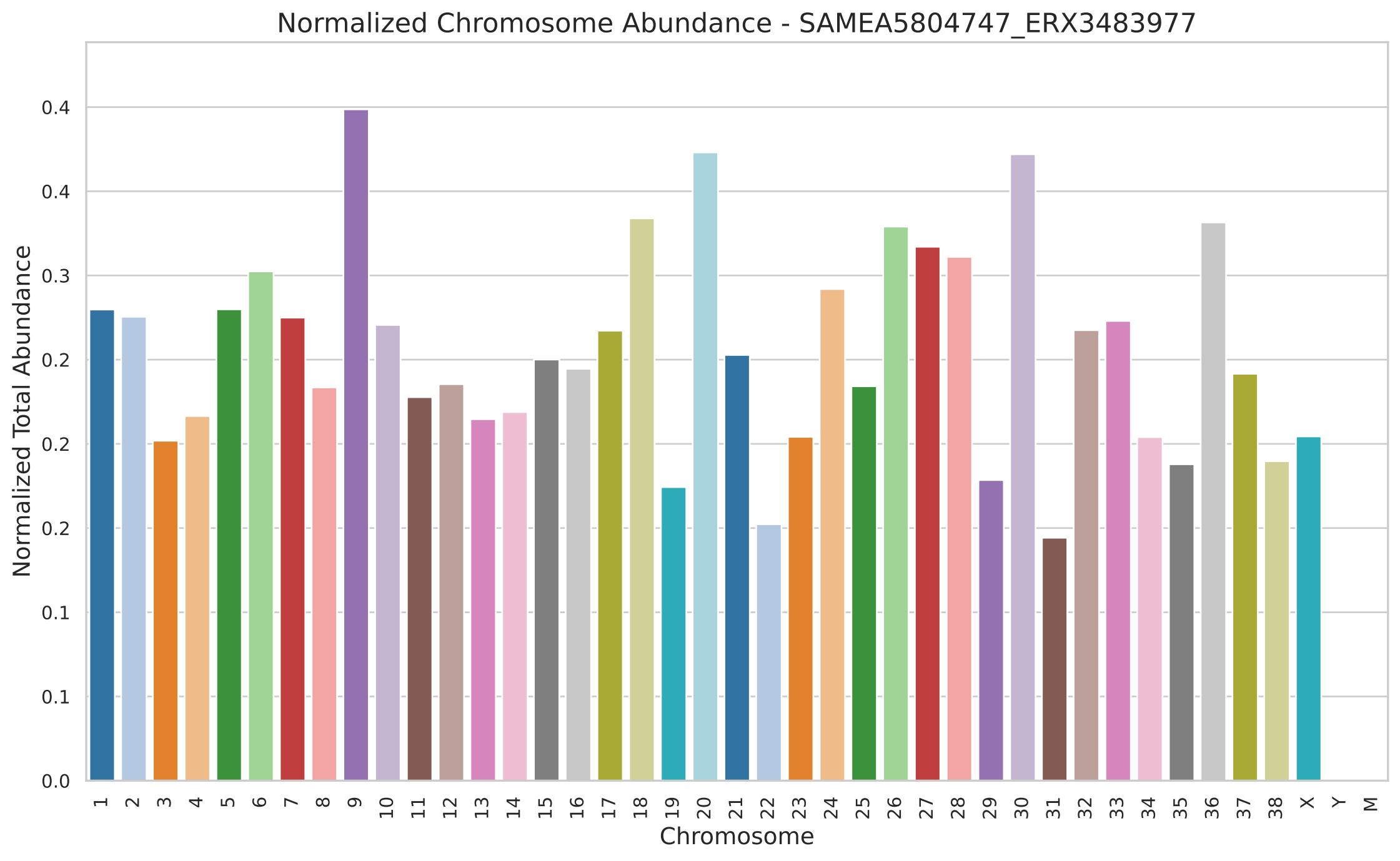

Normalized Chromosome Abundance - SAMEA5804809_ERX3484001
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
0.4
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

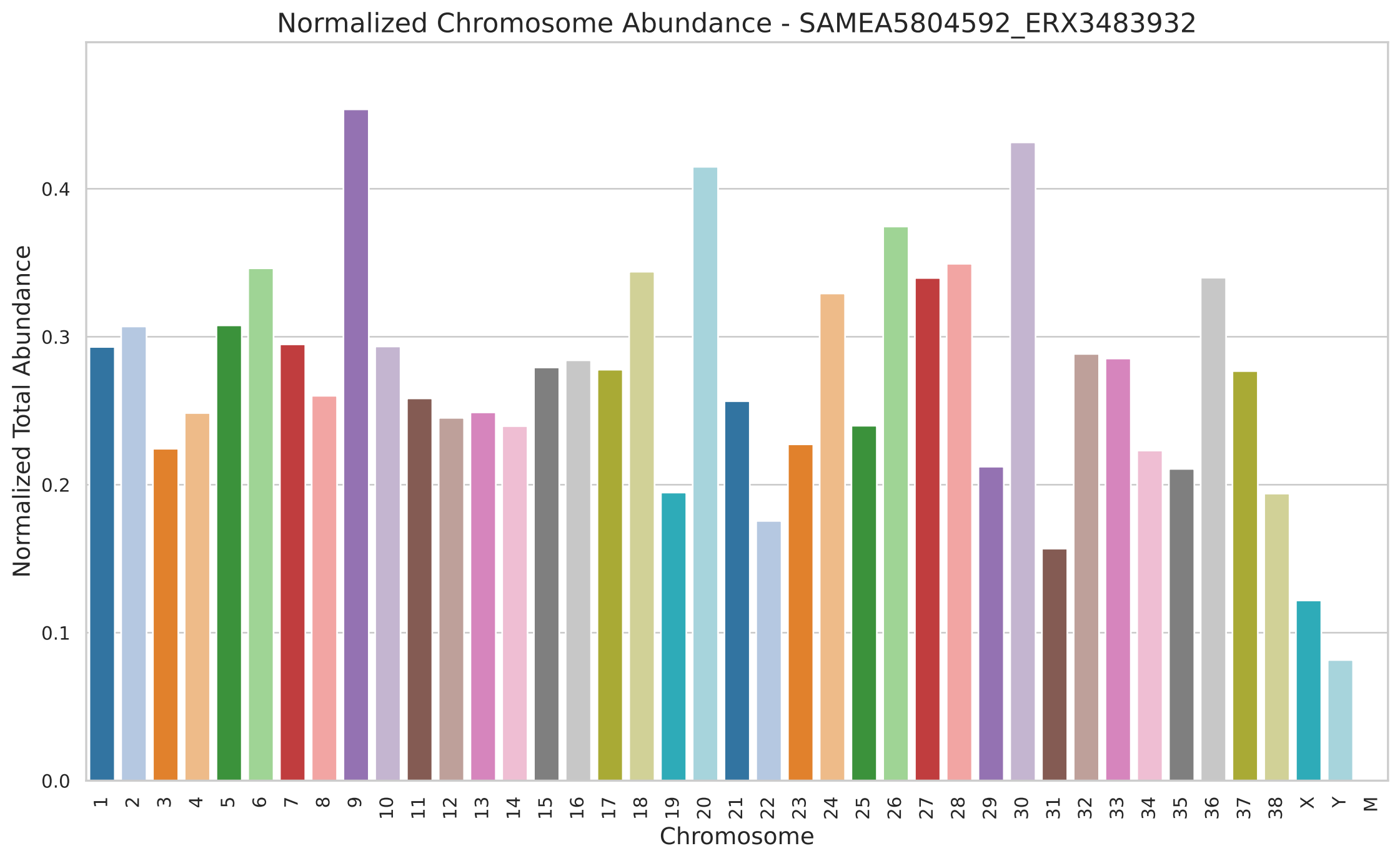

Normalized Chromosome Abundance - SAMEA5804908_ERX3484013
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

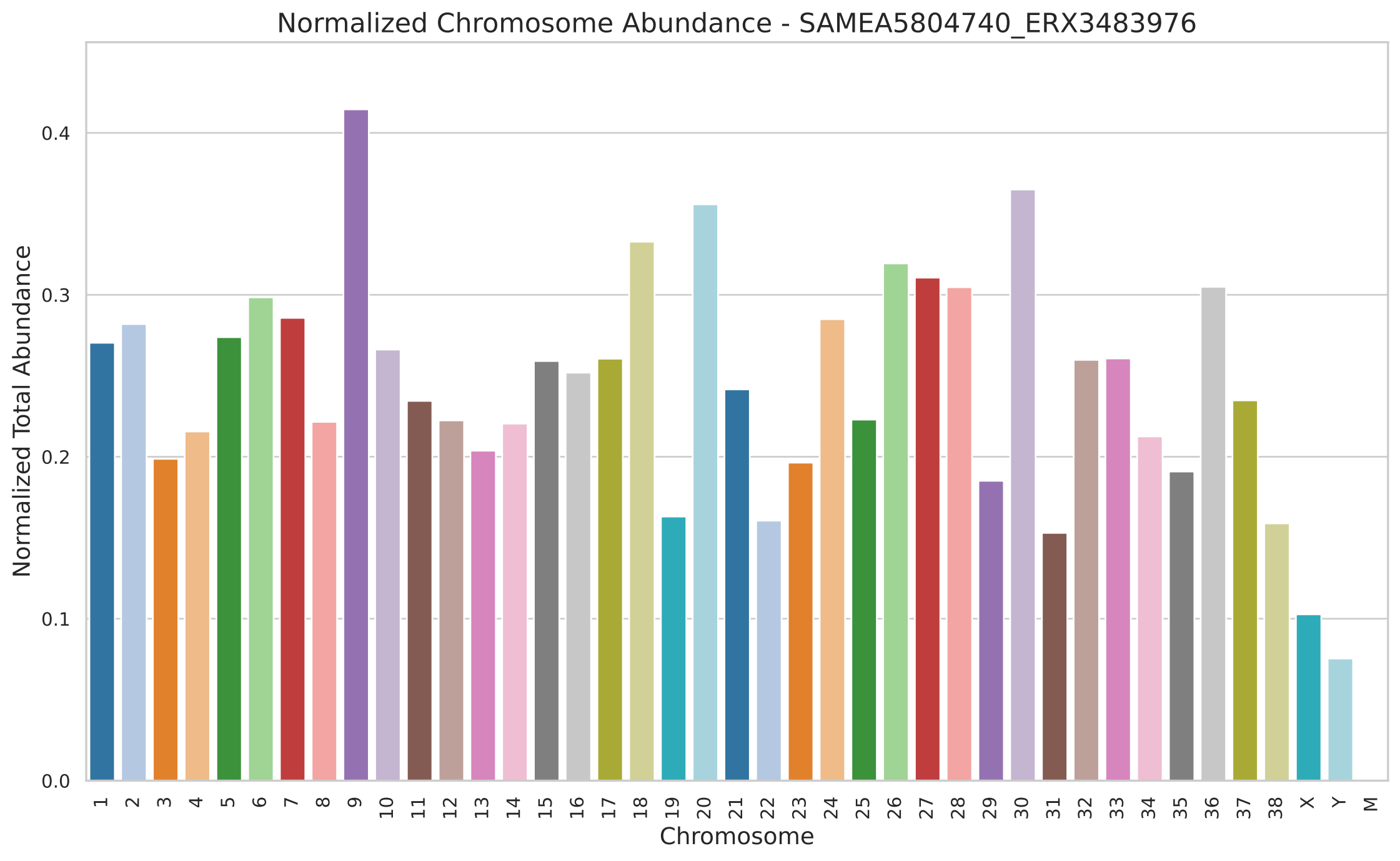

Normalized Chromosome Abundance - SAMEA5804780_ERX3483999
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

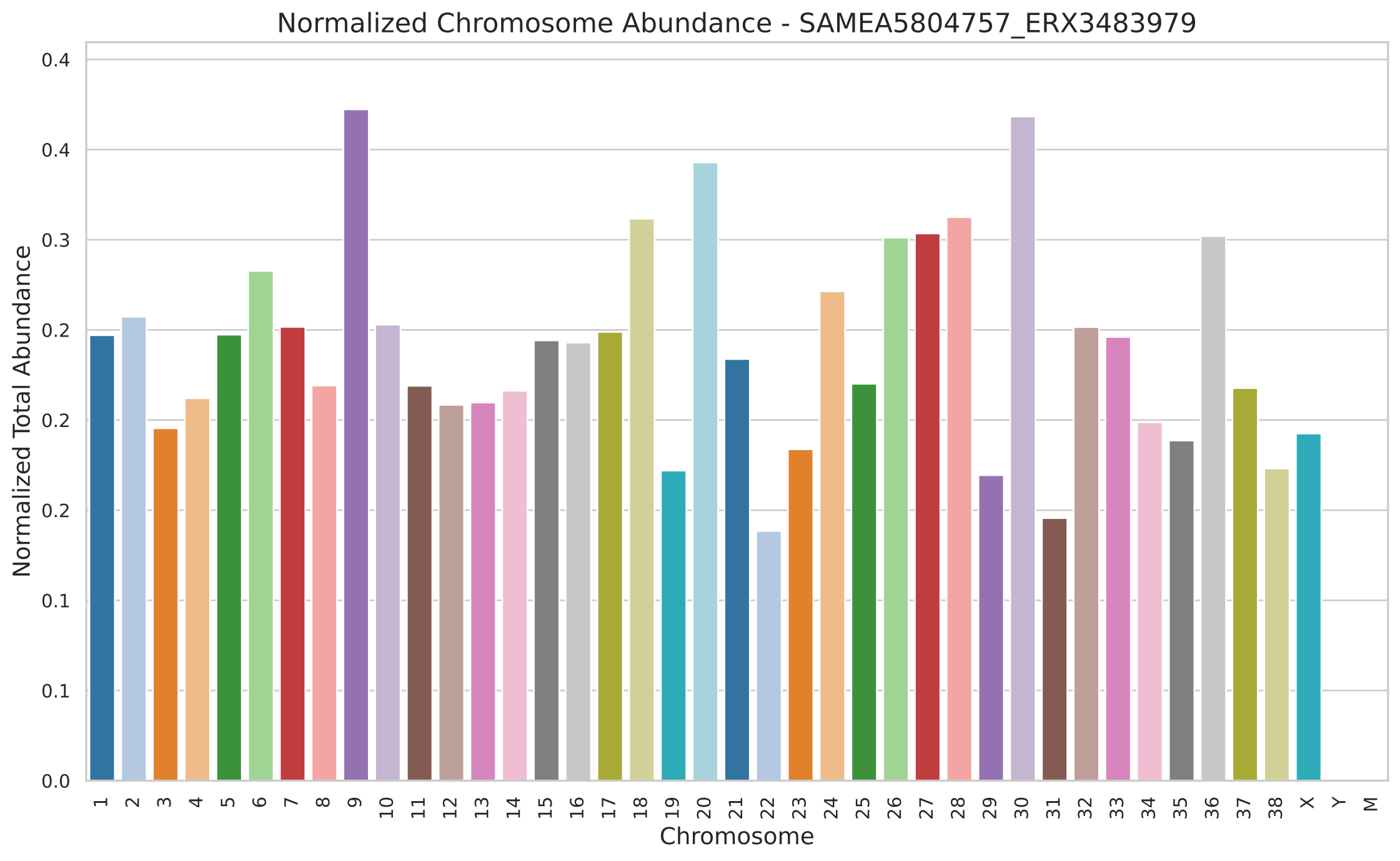

Normalized Chromosome Abundance - SAMEA5804757_ERX3483995
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

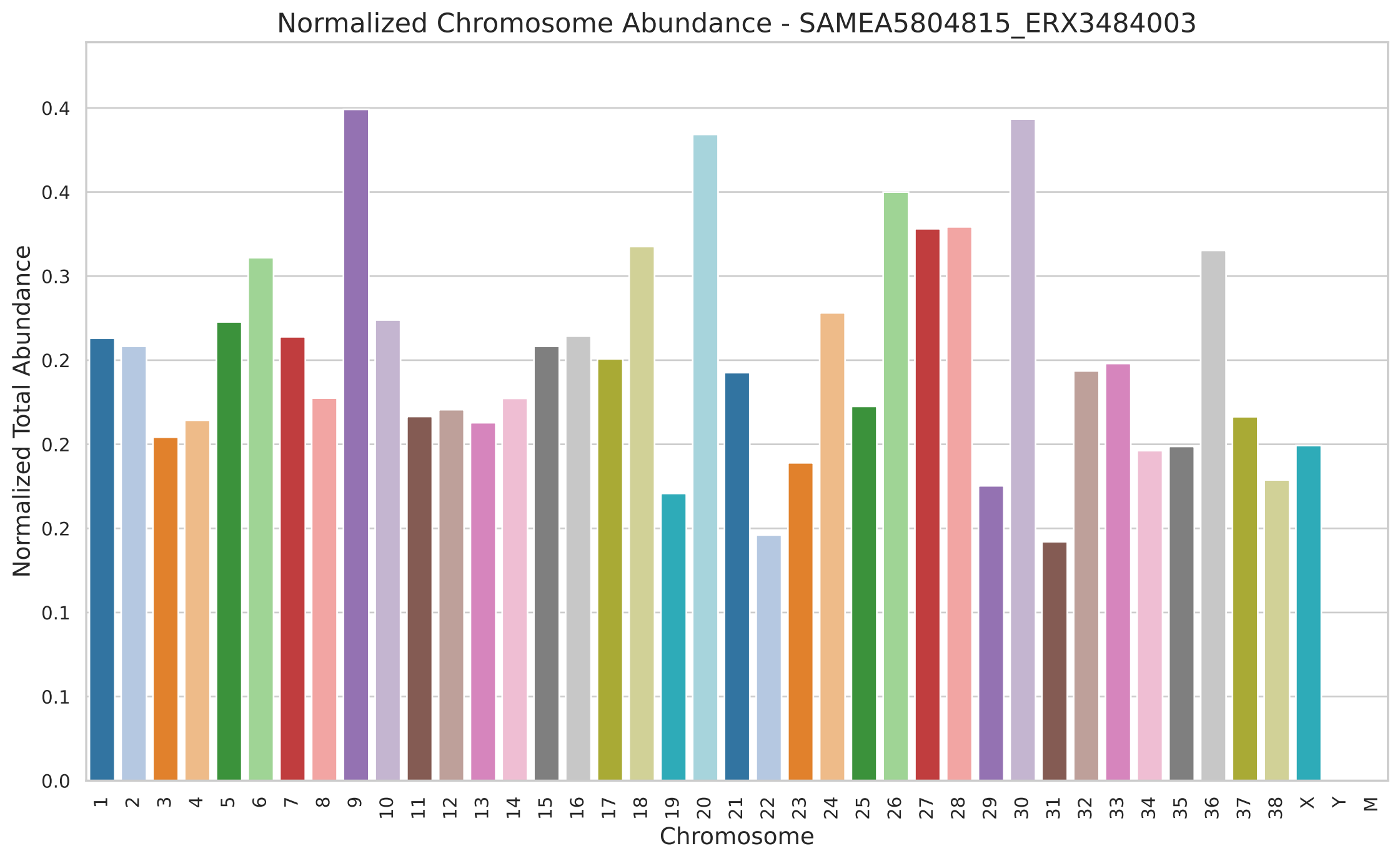

Normalized Chromosome Abundance - SAMEA5804760_ERX3483996
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

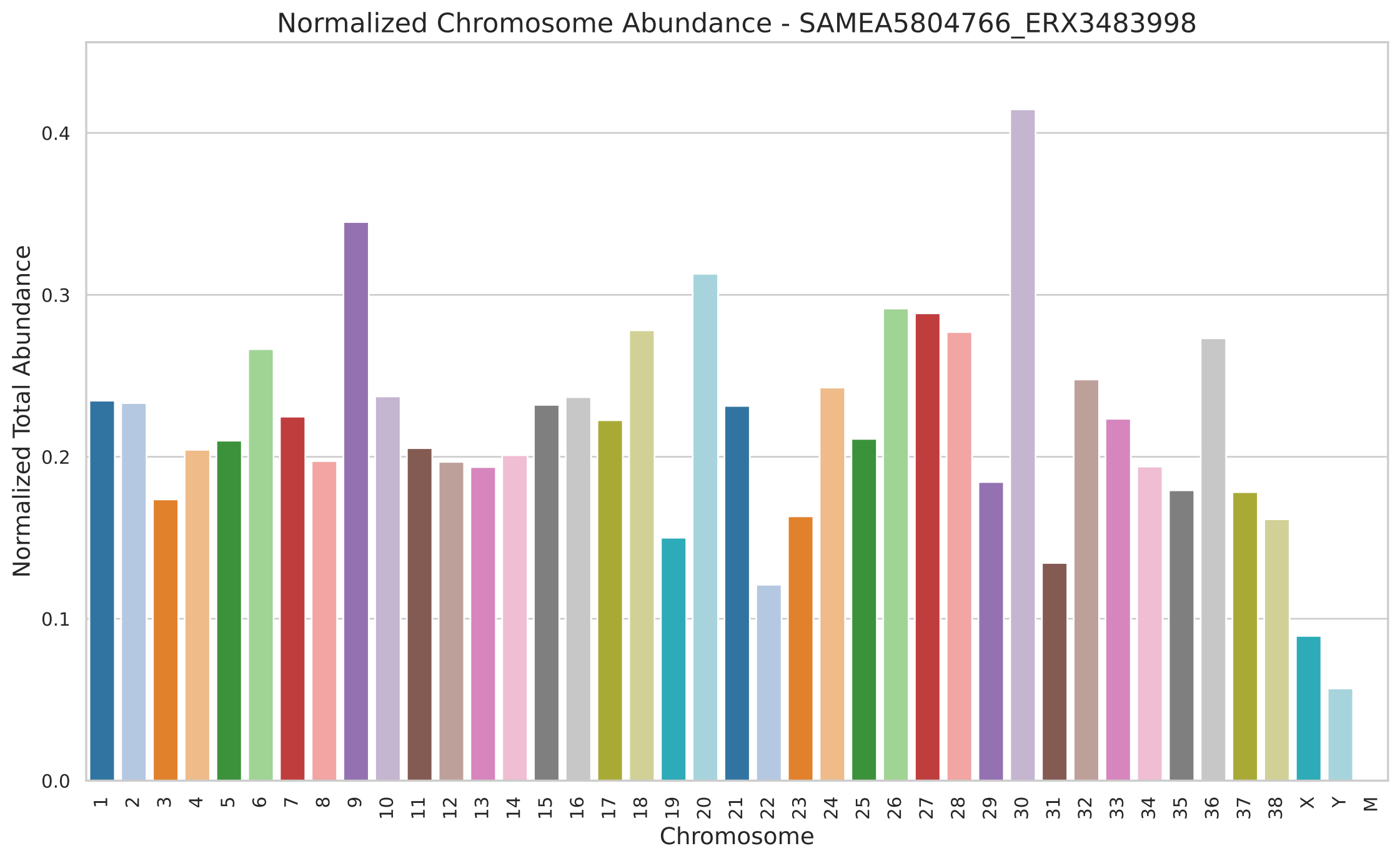

Normalized Chromosome Abundance - SAMEA5804747_ERX3483977
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

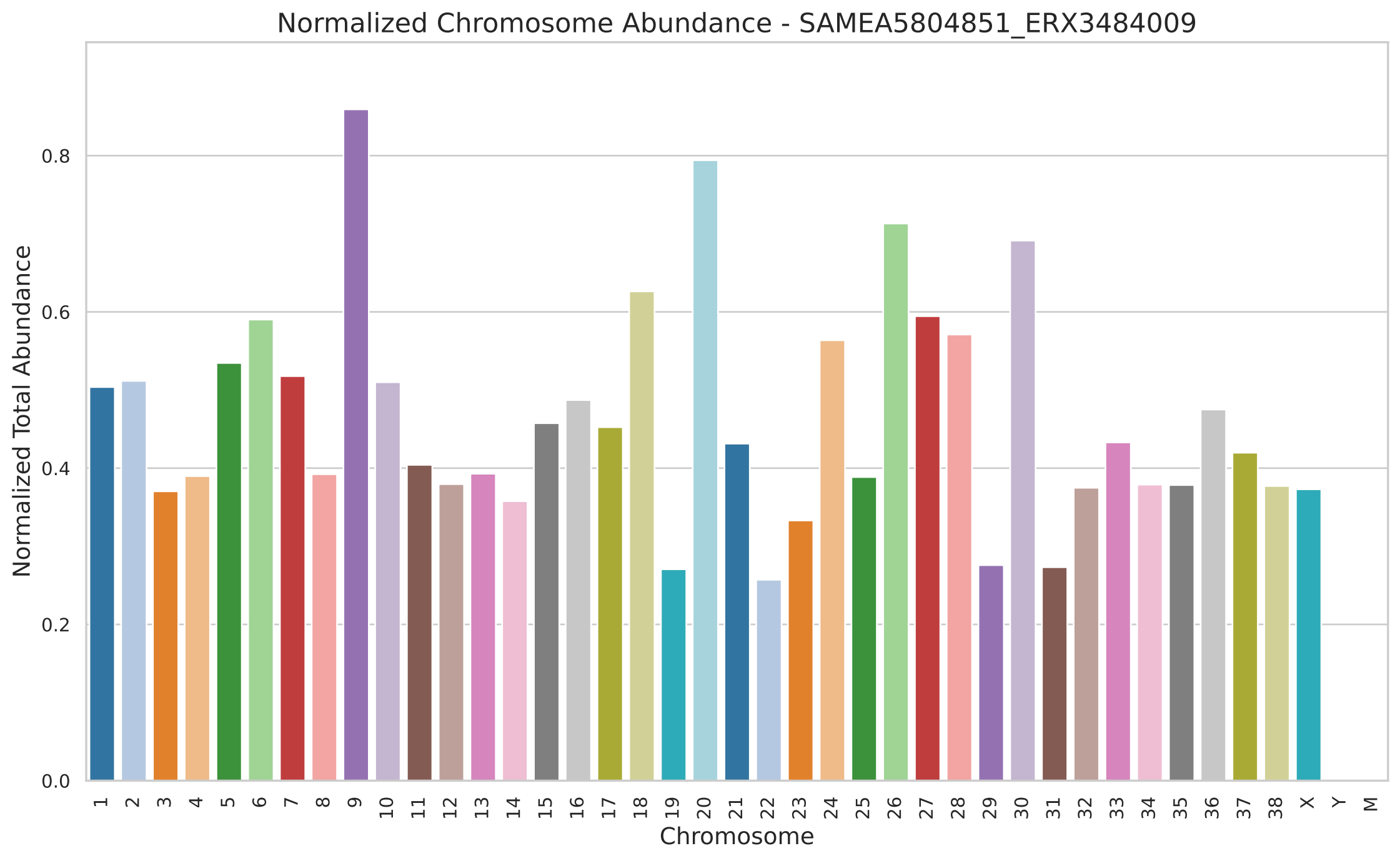

Normalized Chromosome Abundance - SAMEA5804592_ERX3483932
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

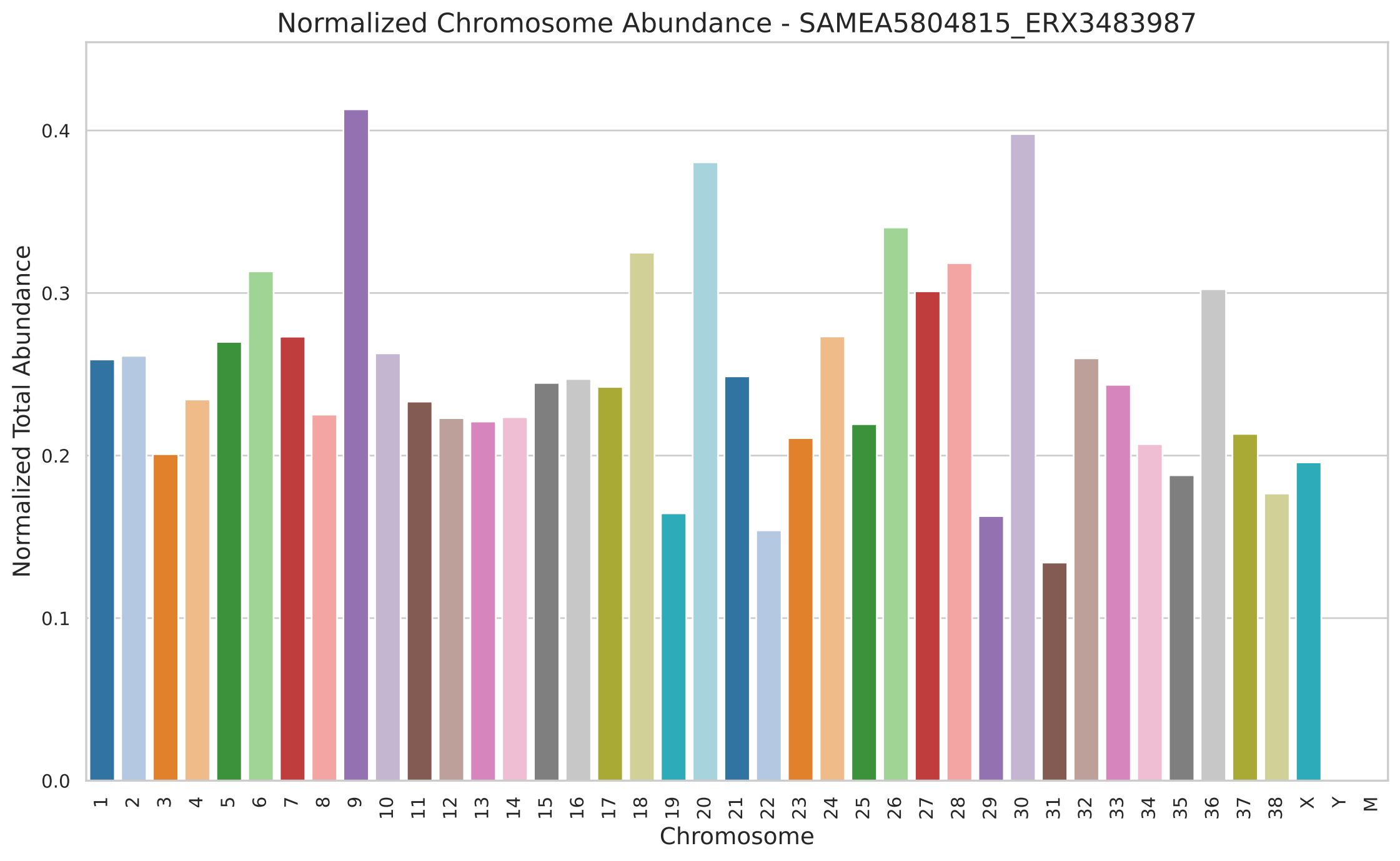

Normalized Chromosome Abundance - SAMEA5804740_ERX3483976
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

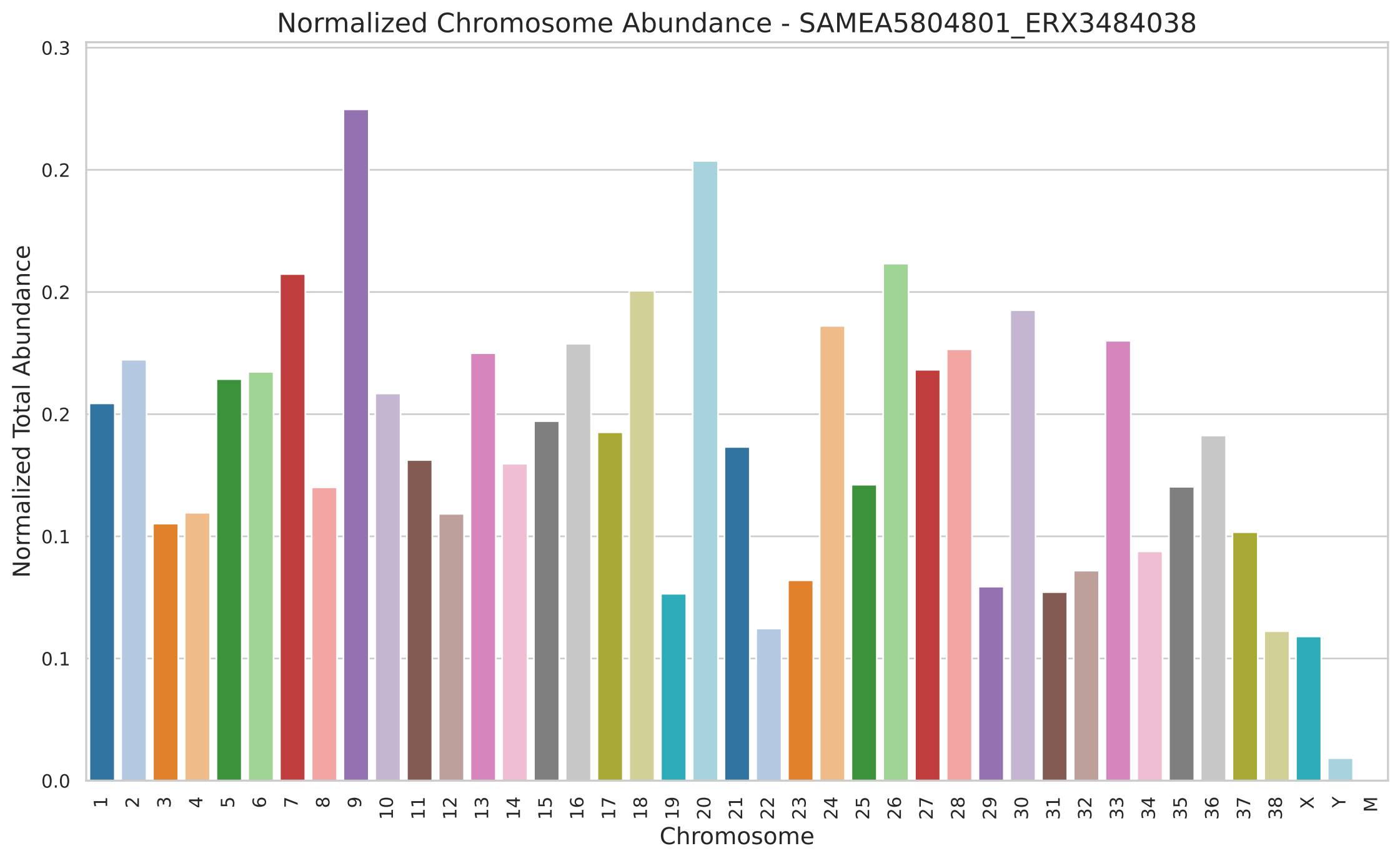

Normalized Chromosome Abundance - SAMEA5804757_ERX3483979
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

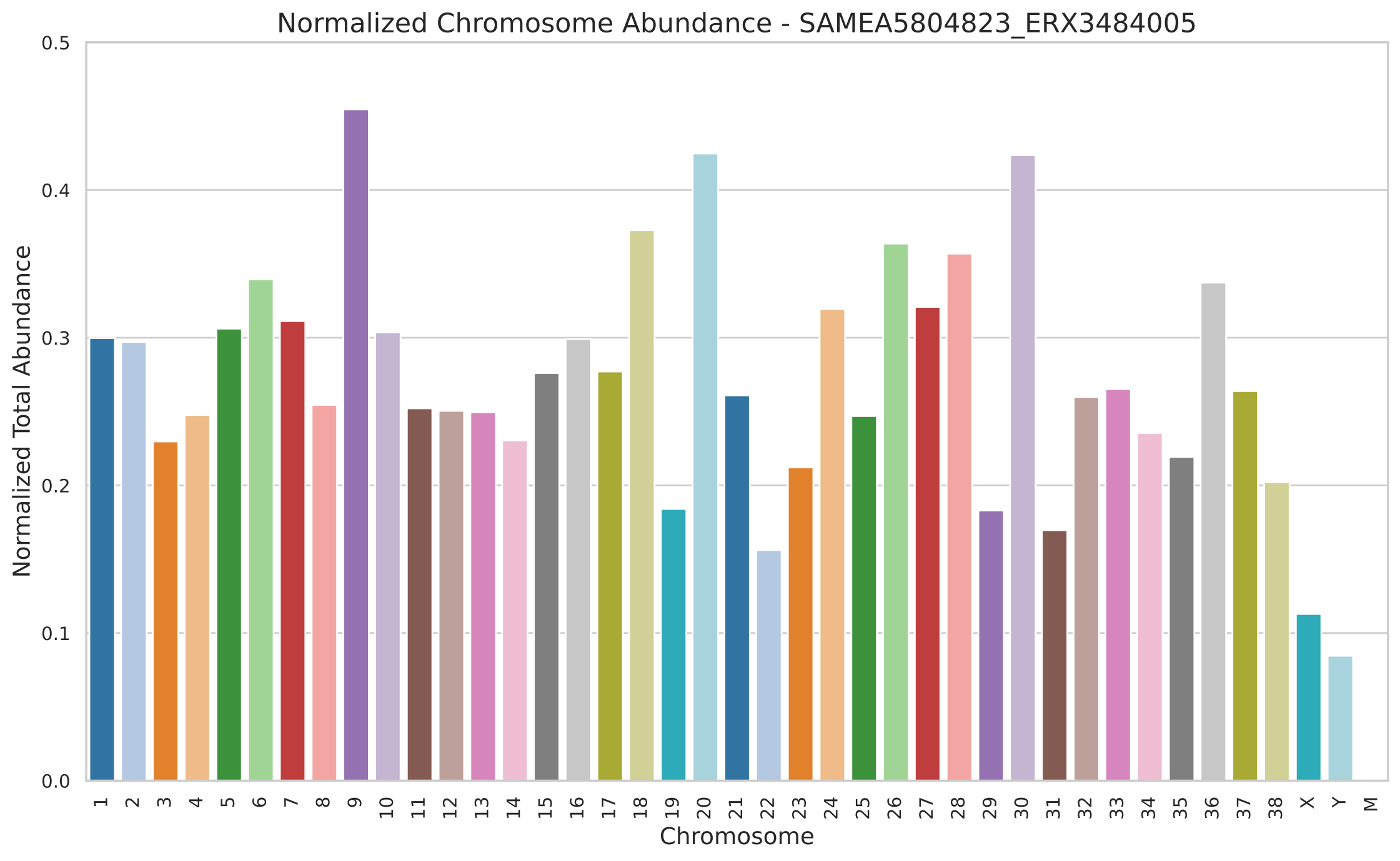

Normalized Chromosome Abundance - SAMEA5804815_ERX3484003
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

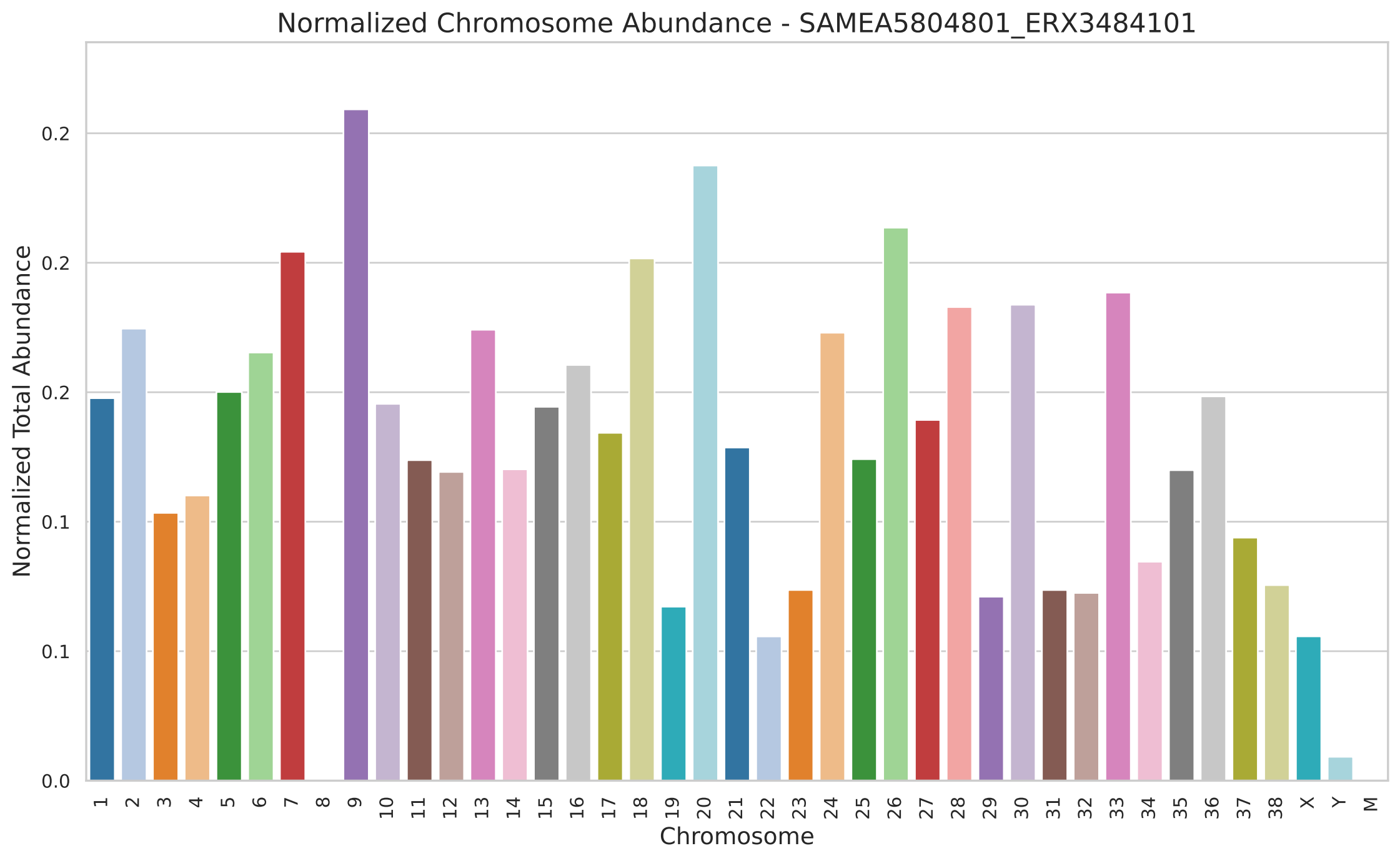

Normalized Chromosome Abundance - SAMEA5804766_ERX3483998
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

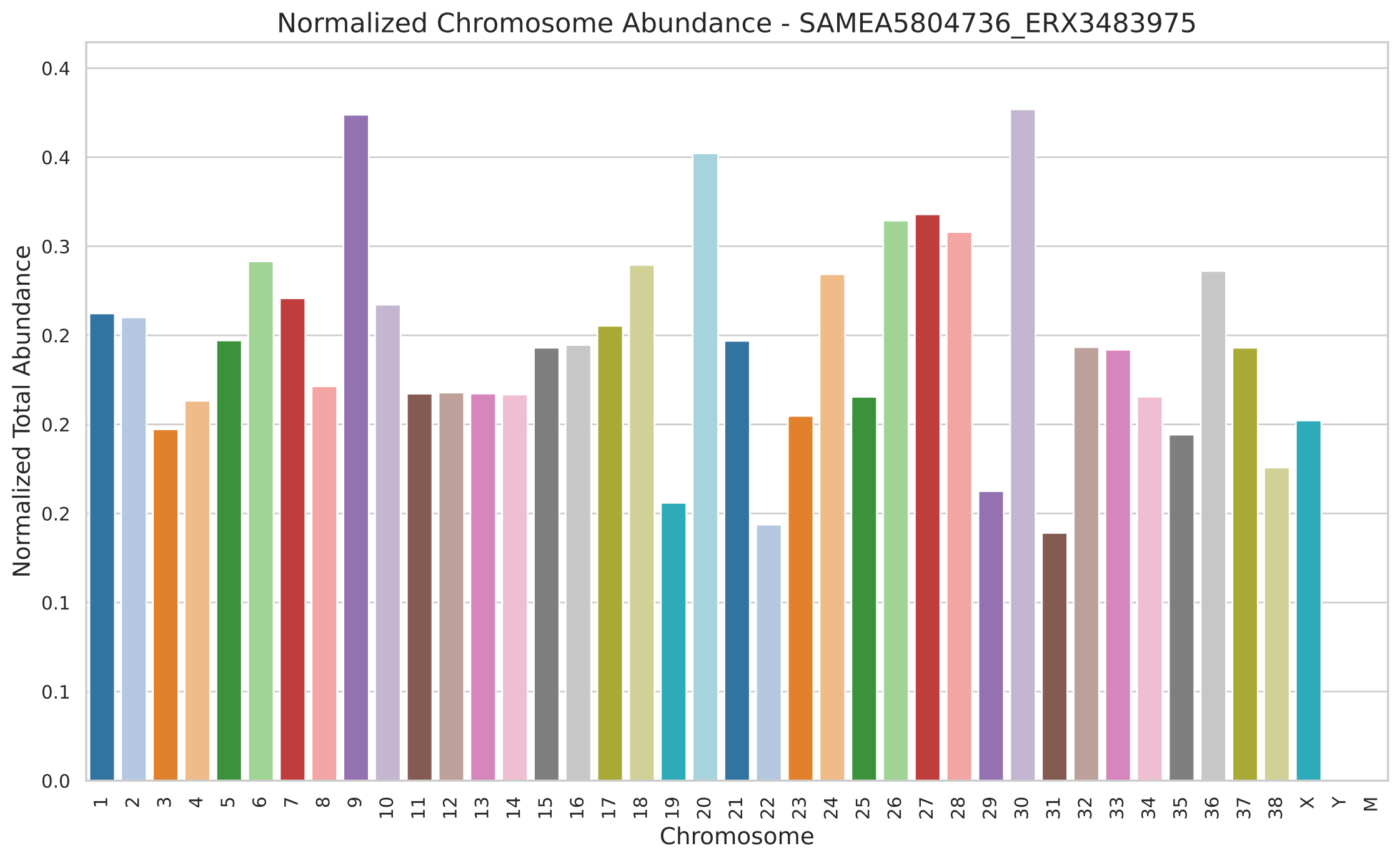

Normalized Chromosome Abundance - SAMEA5804851_ERX3484009
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

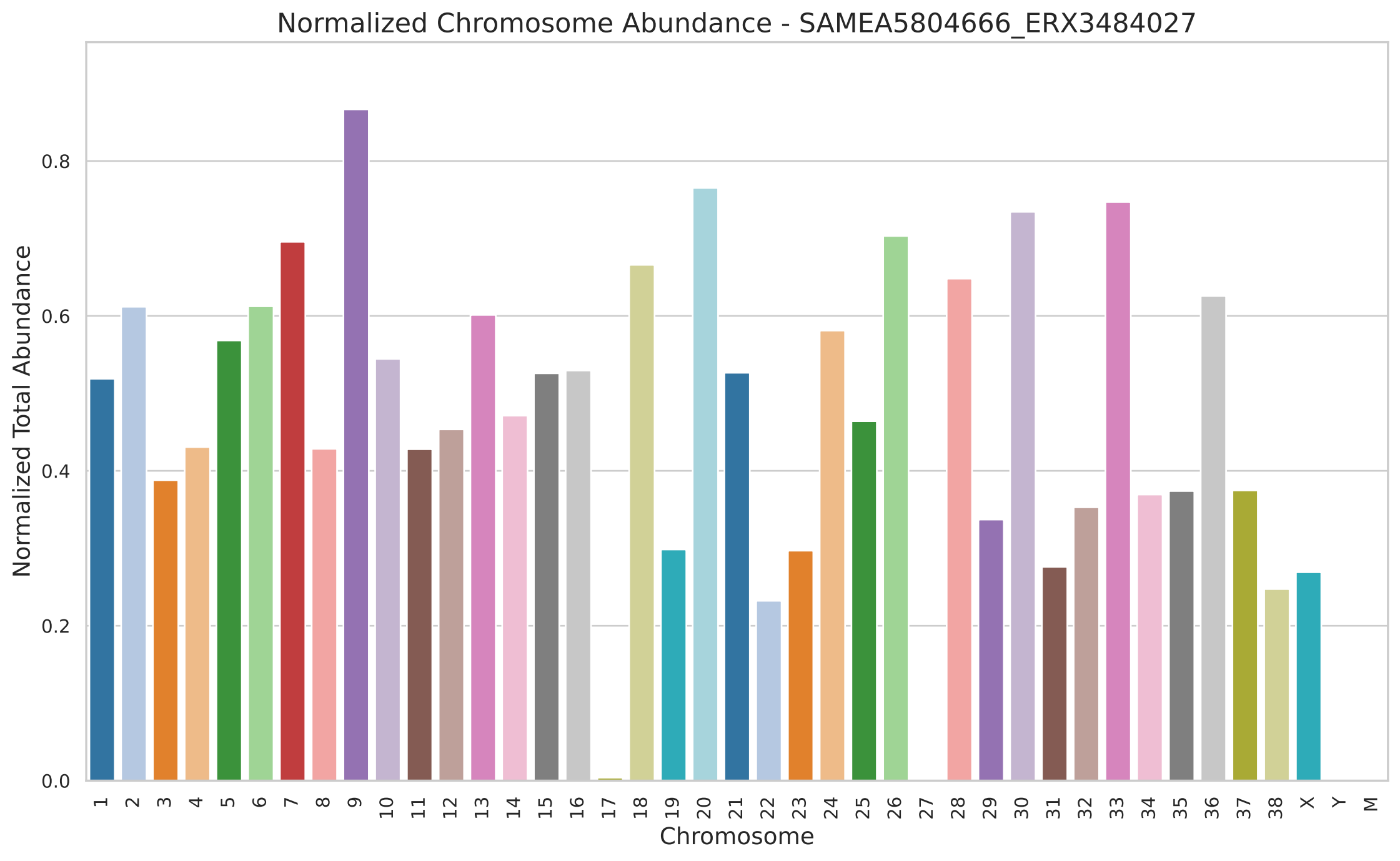

Normalized Chromosome Abundance - SAMEA5804815_ERX3483987
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

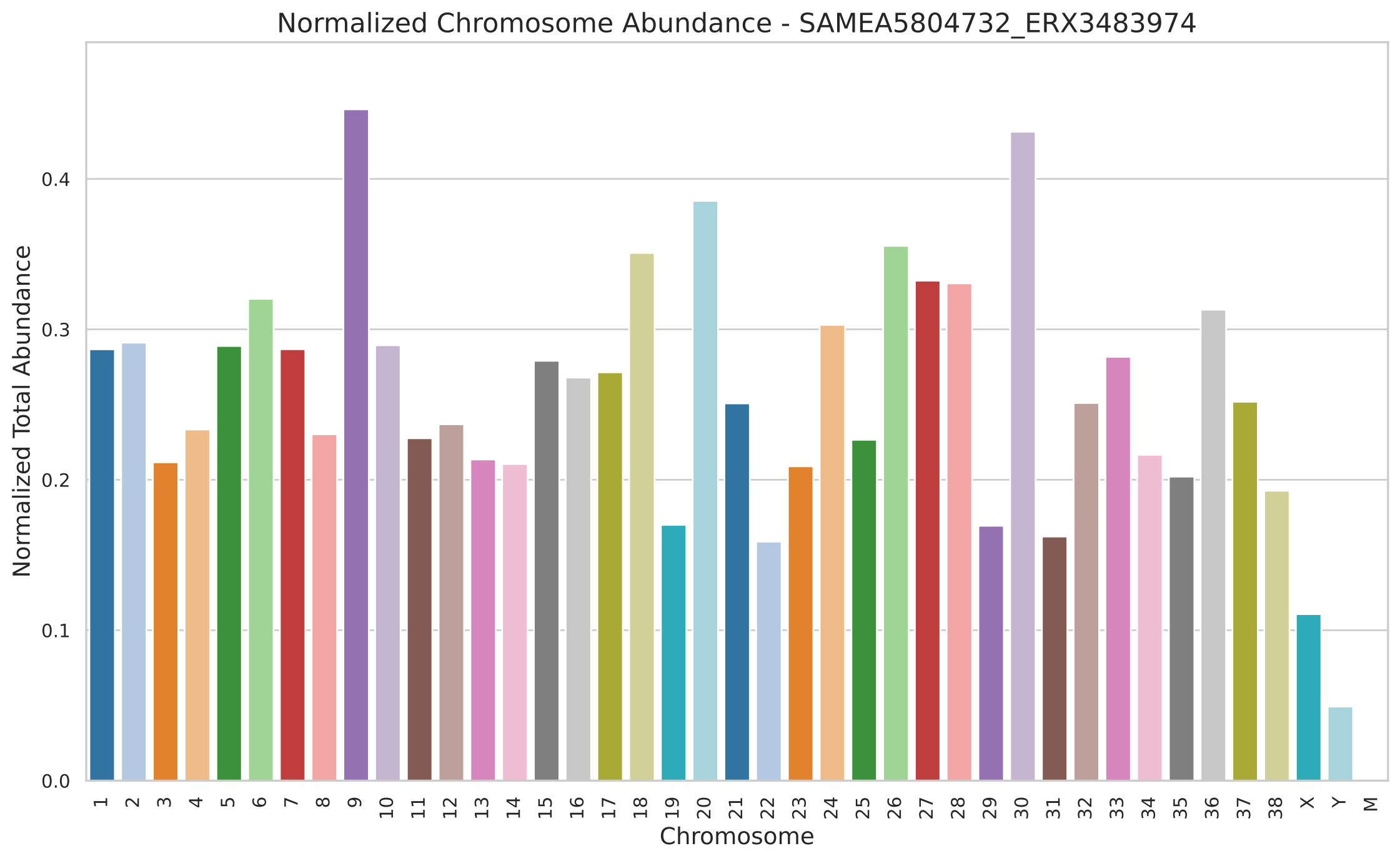

Normalized Chromosome Abundance - SAMEA5804801_ERX3484038
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

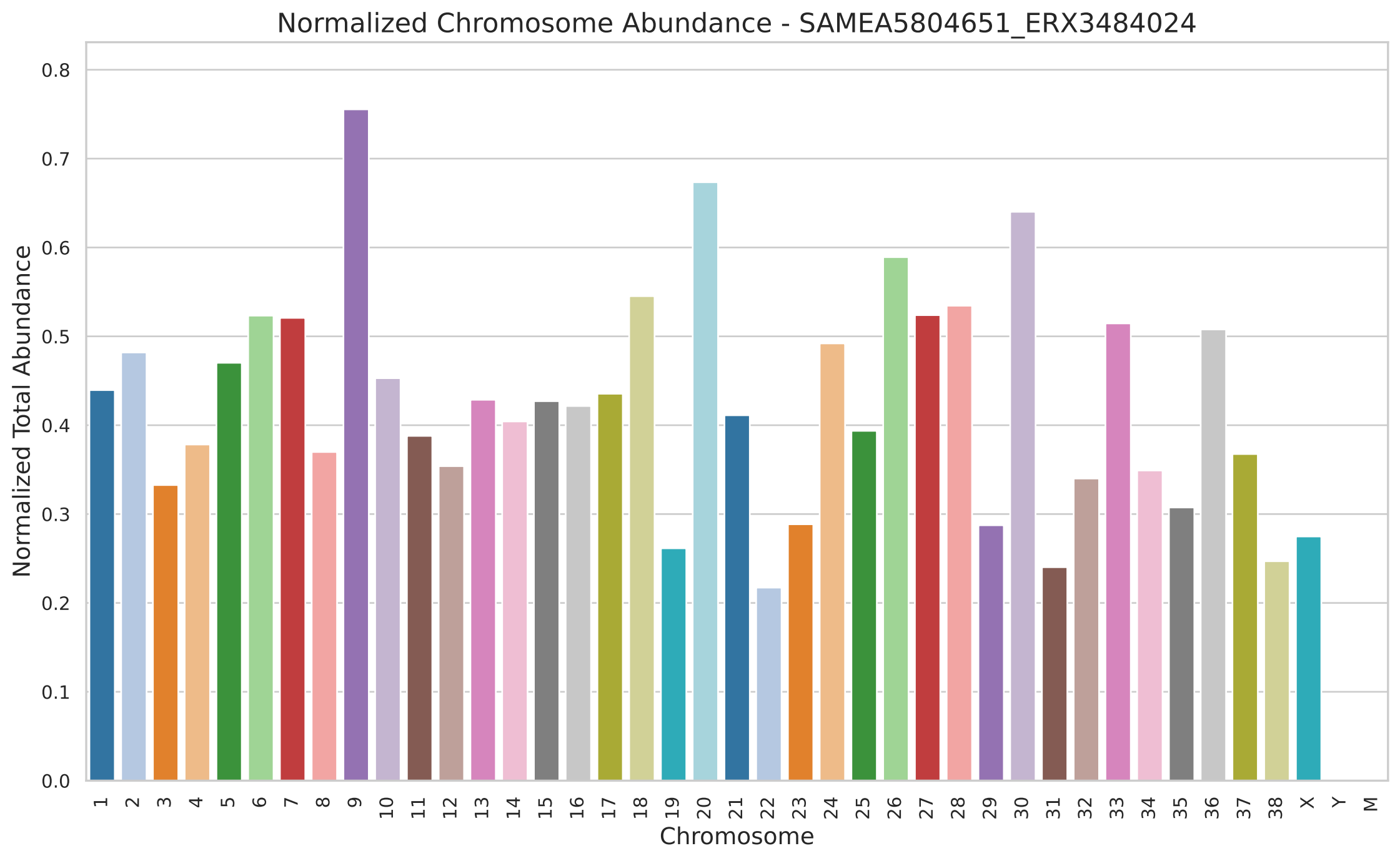

Normalized Chromosome Abundance - SAMEA5804823_ERX3484005
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

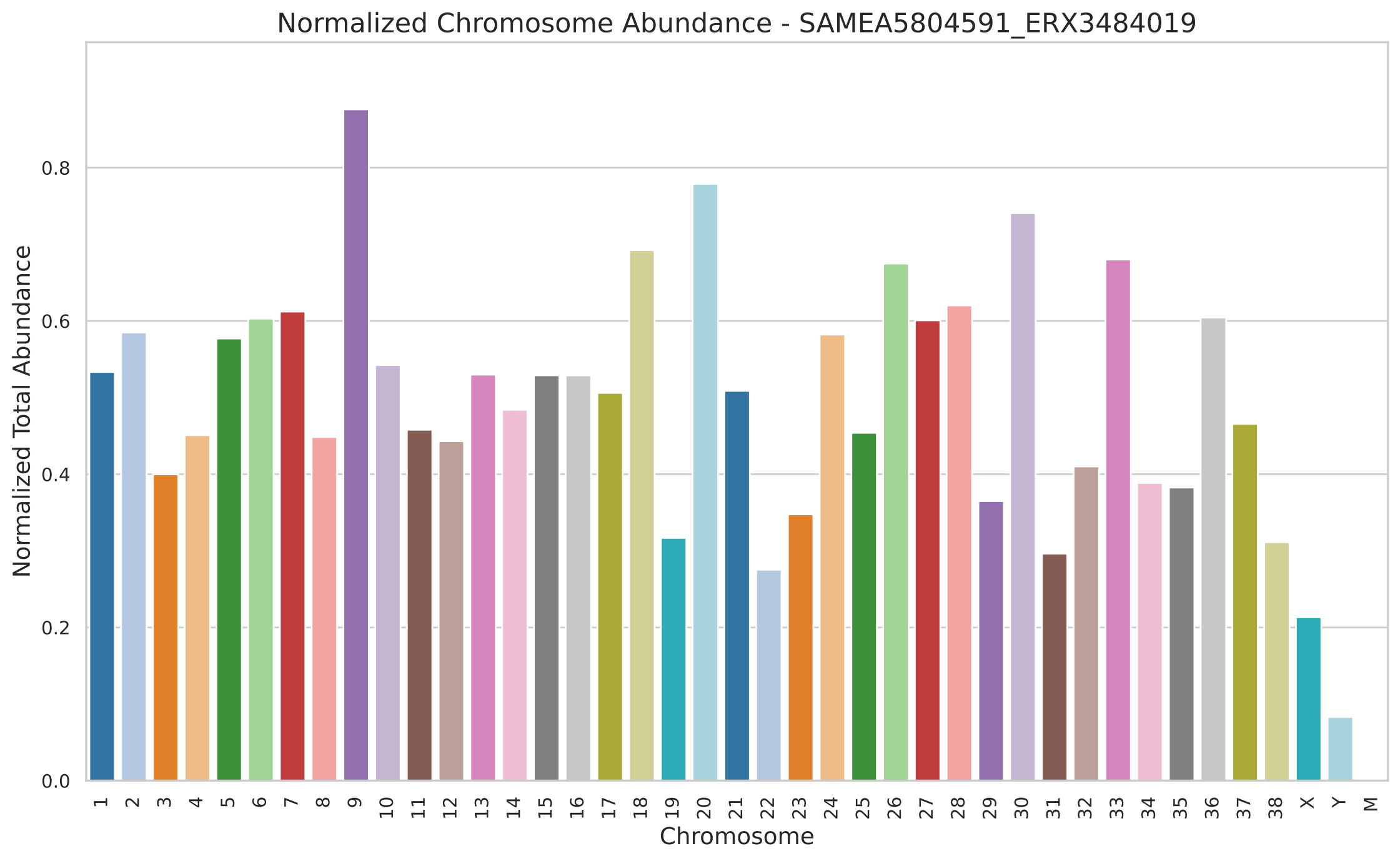

Normalized Chromosome Abundance - SAMEA5804801_ERX3484101
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

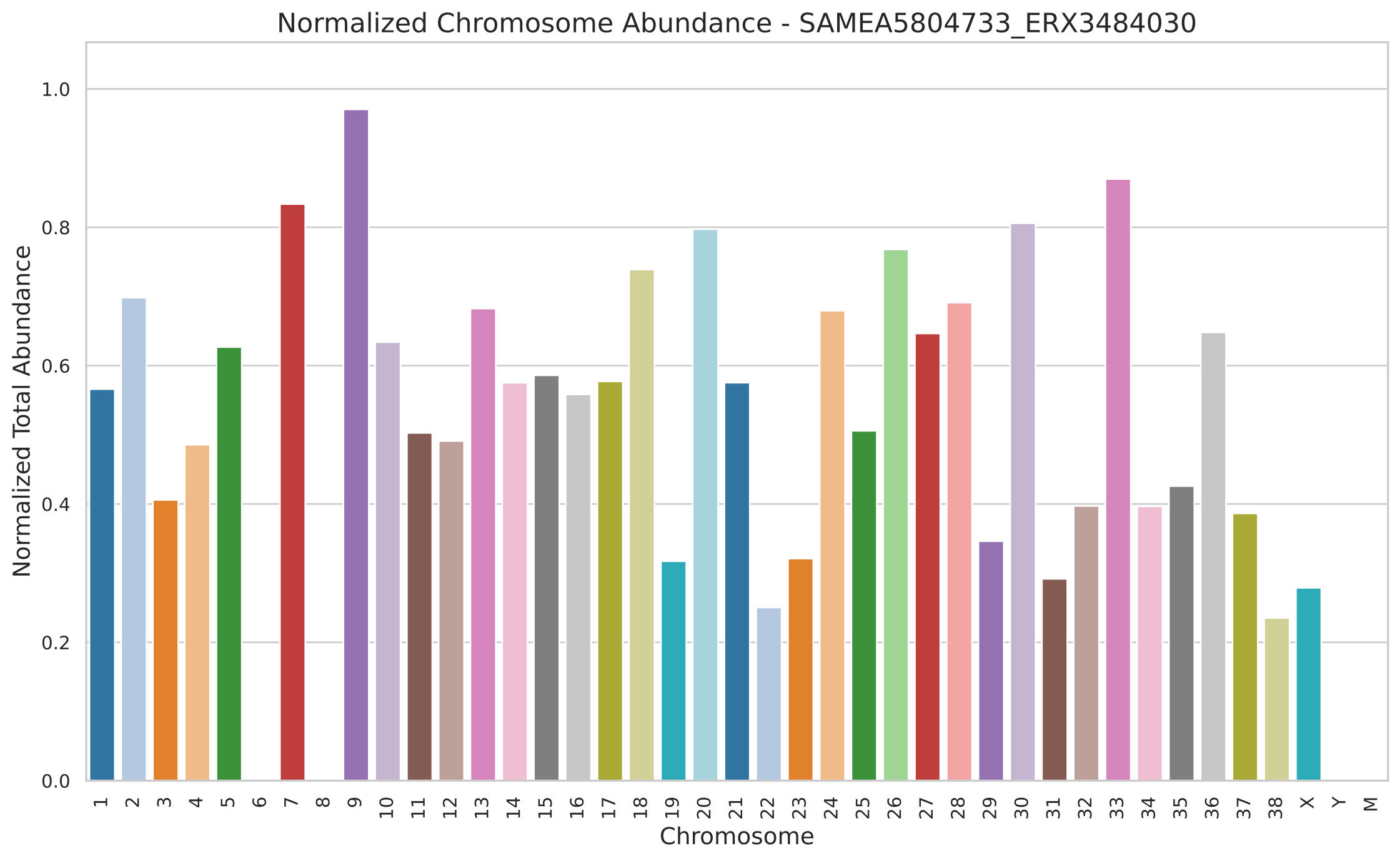

Normalized Chromosome Abundance - SAMEA5804736_ERX3483975
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

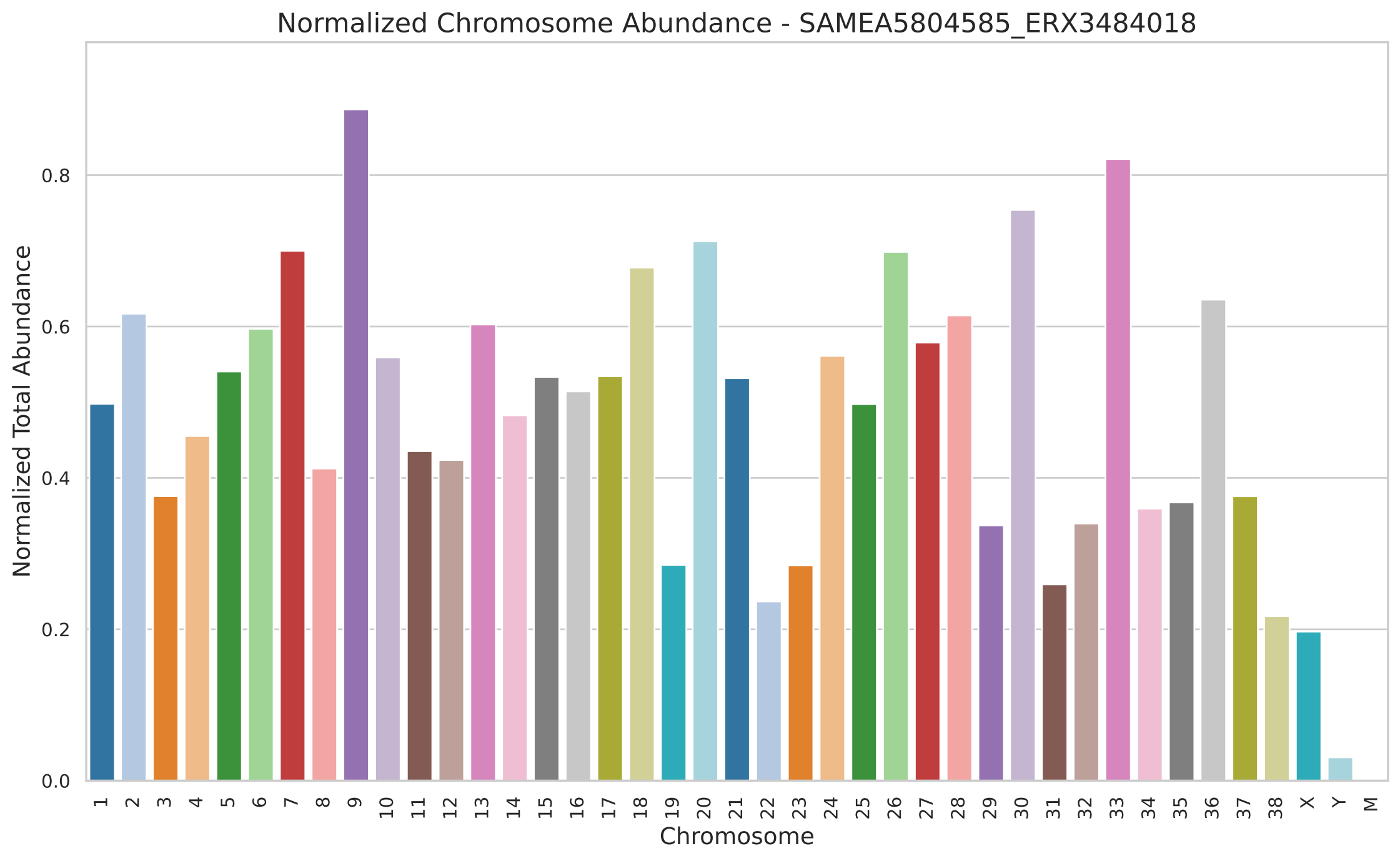

Normalized Chromosome Abundance - SAMEA5804666_ERX3484027
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

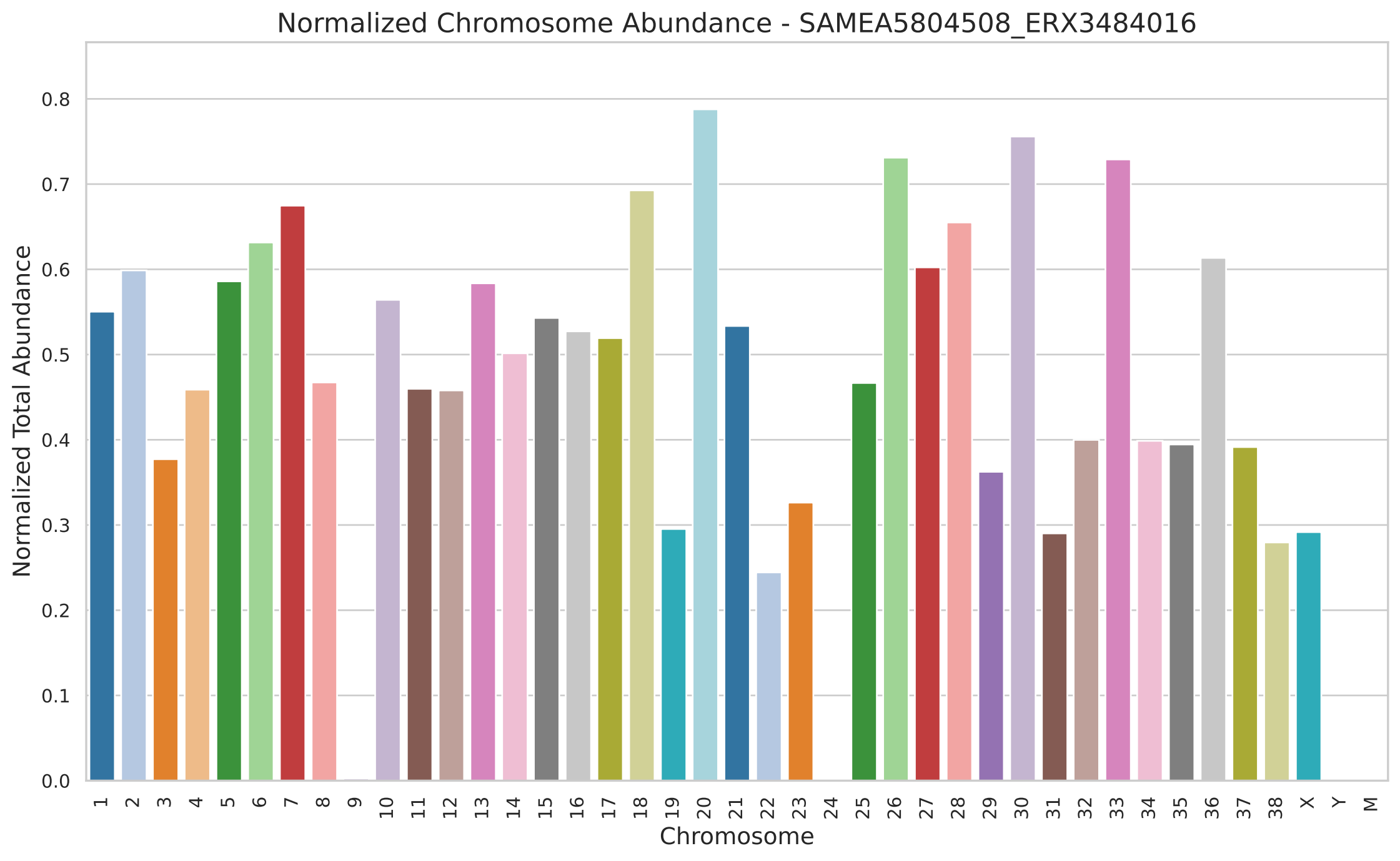

Normalized Chromosome Abundance - SAMEA5804732_ERX3483974
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

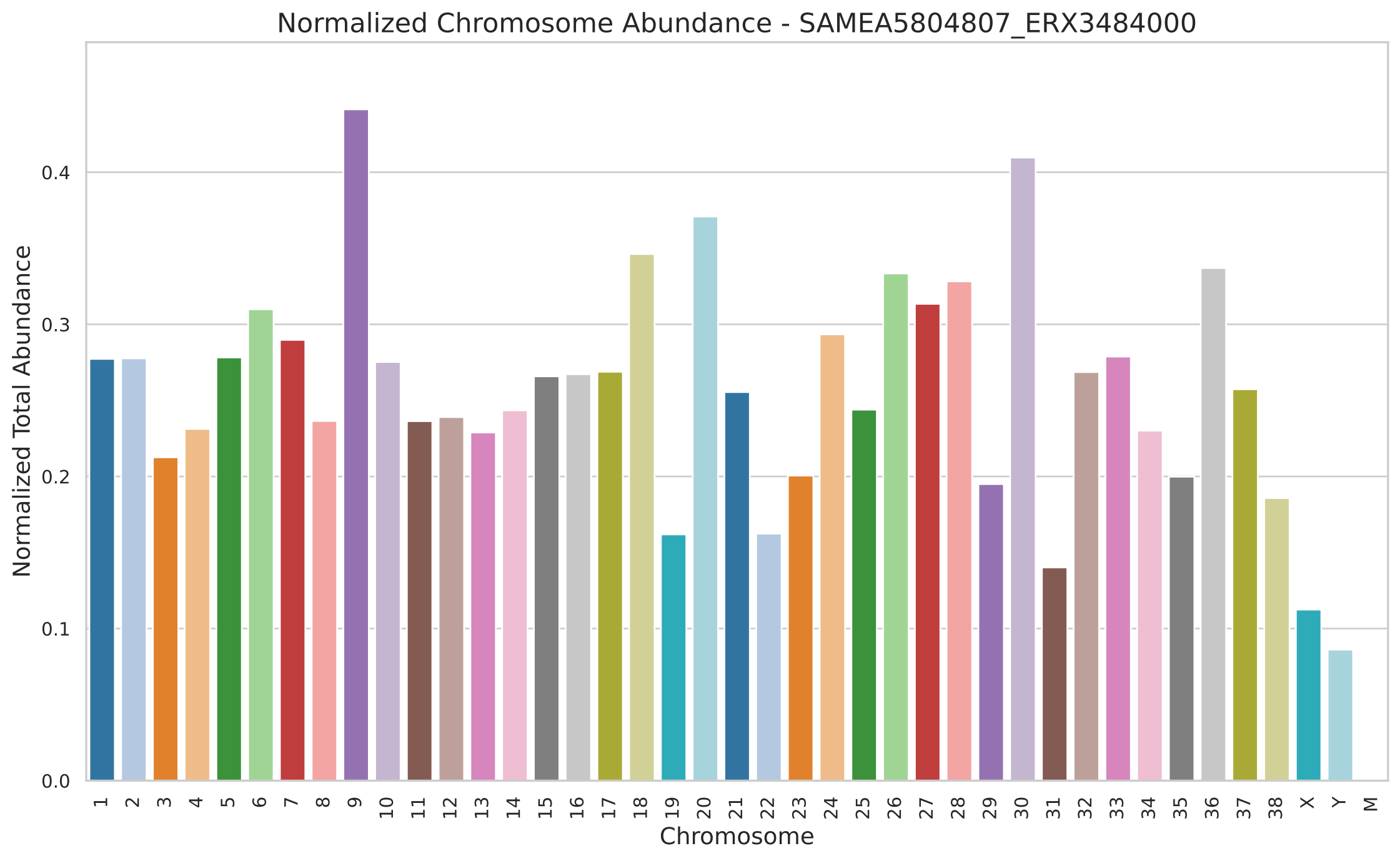

Normalized Chromosome Abundance - SAMEA5804651_ERX3484024
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

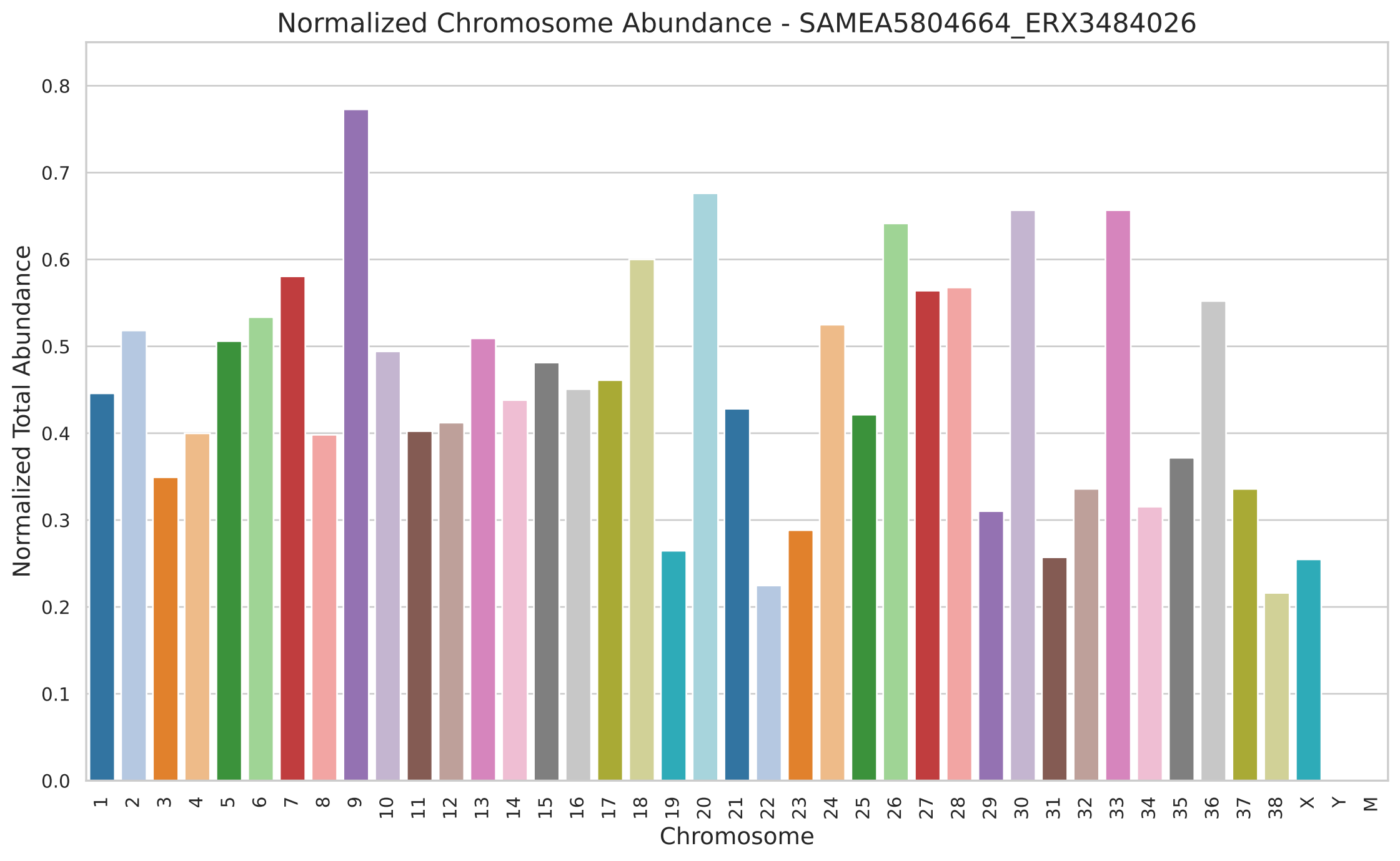

Normalized Chromosome Abundance - SAMEA5804591_ERX3484019
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

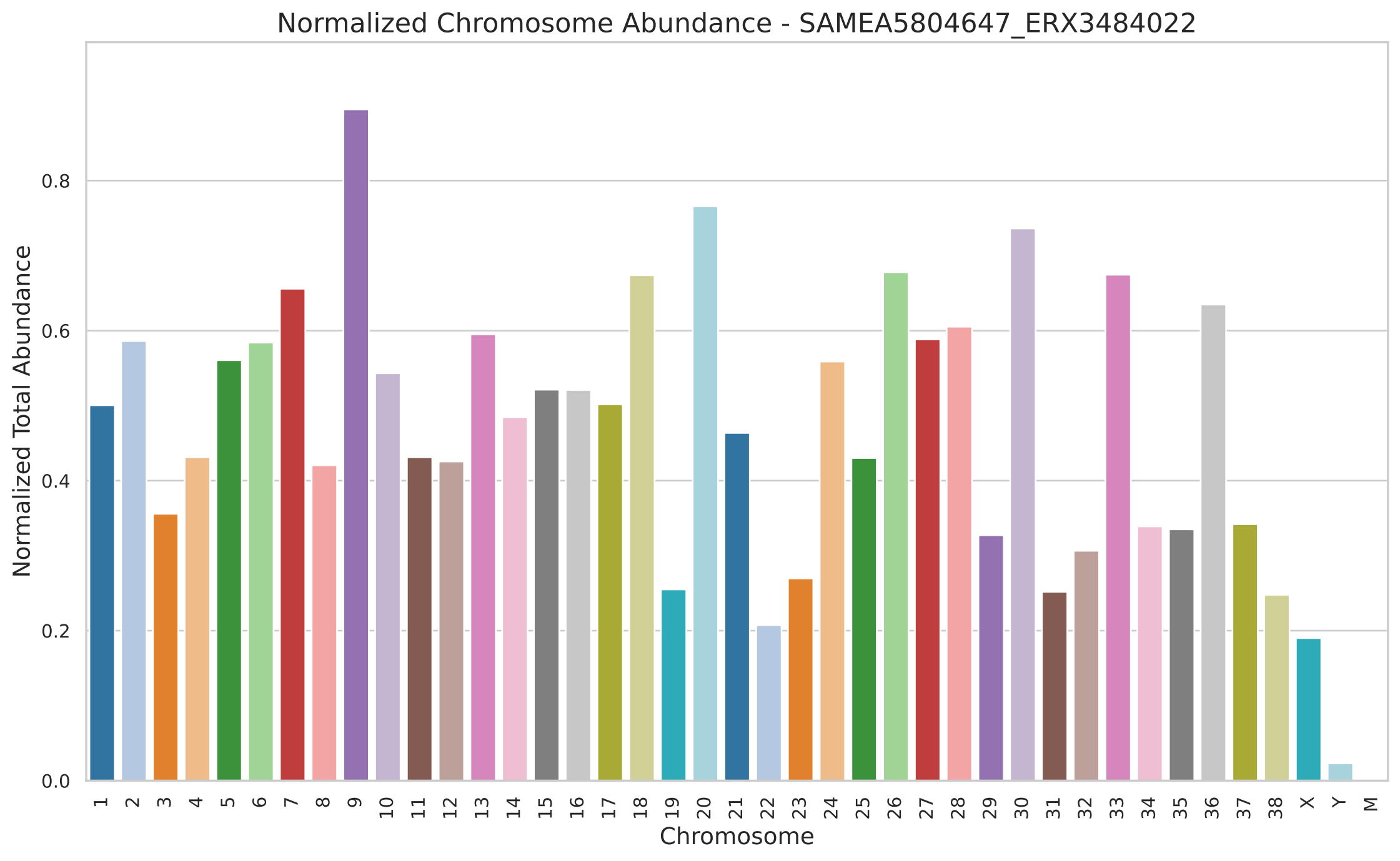

Normalized Chromosome Abundance - SAMEA5804733_ERX3484030
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

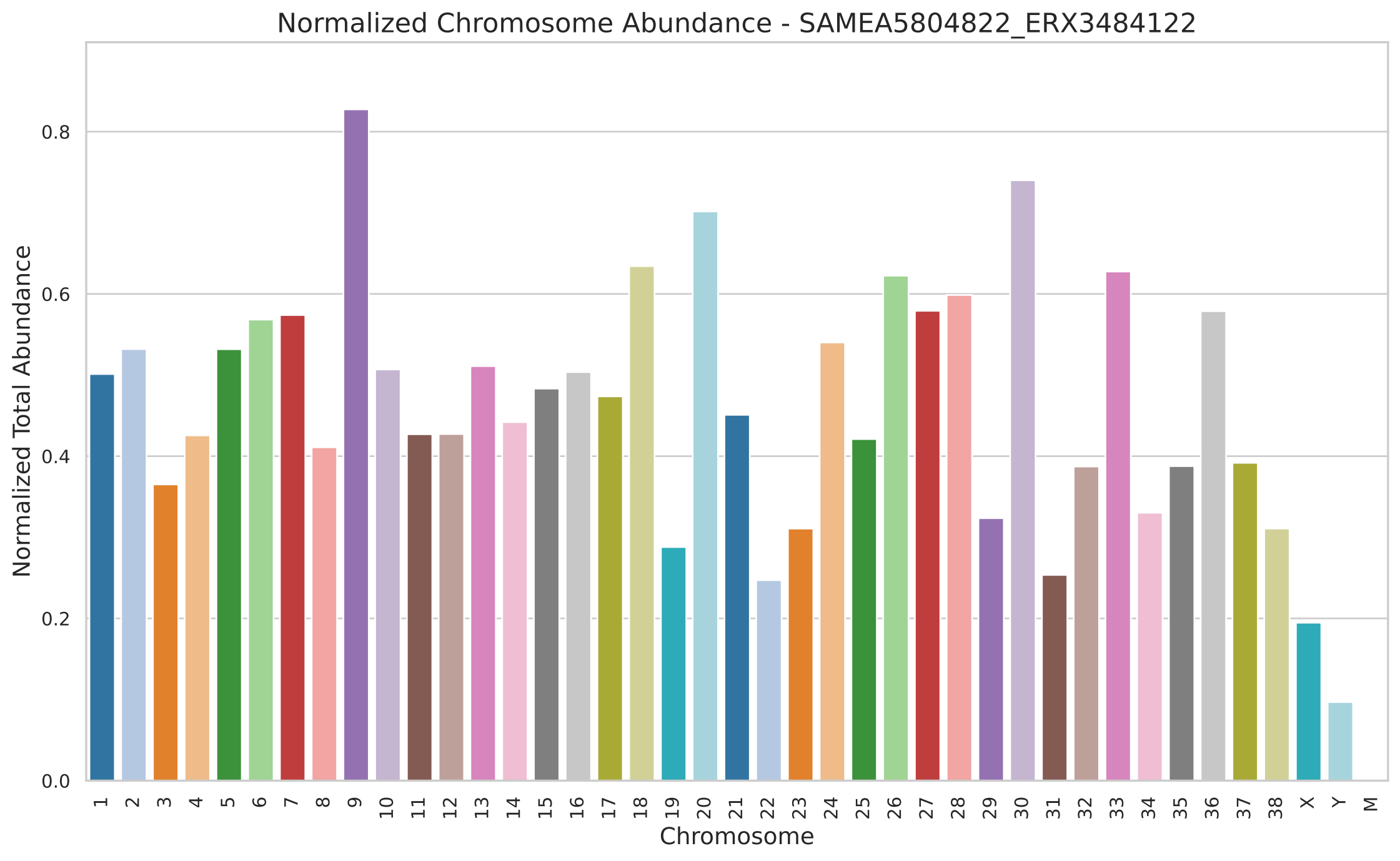

Normalized Chromosome Abundance - SAMEA5804585_ERX3484018
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

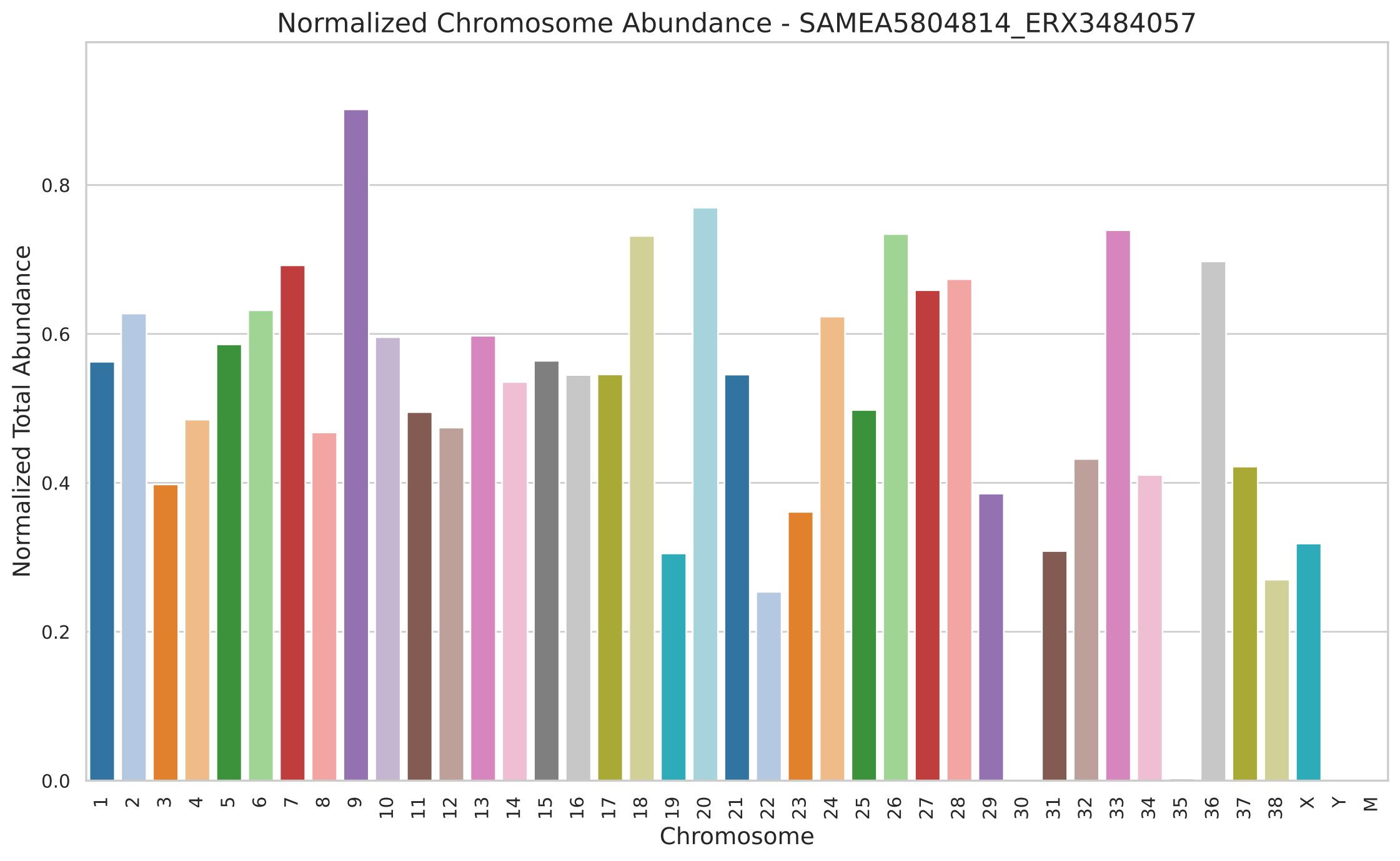

Normalized Chromosome Abundance - SAMEA5804508_ERX3484016
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

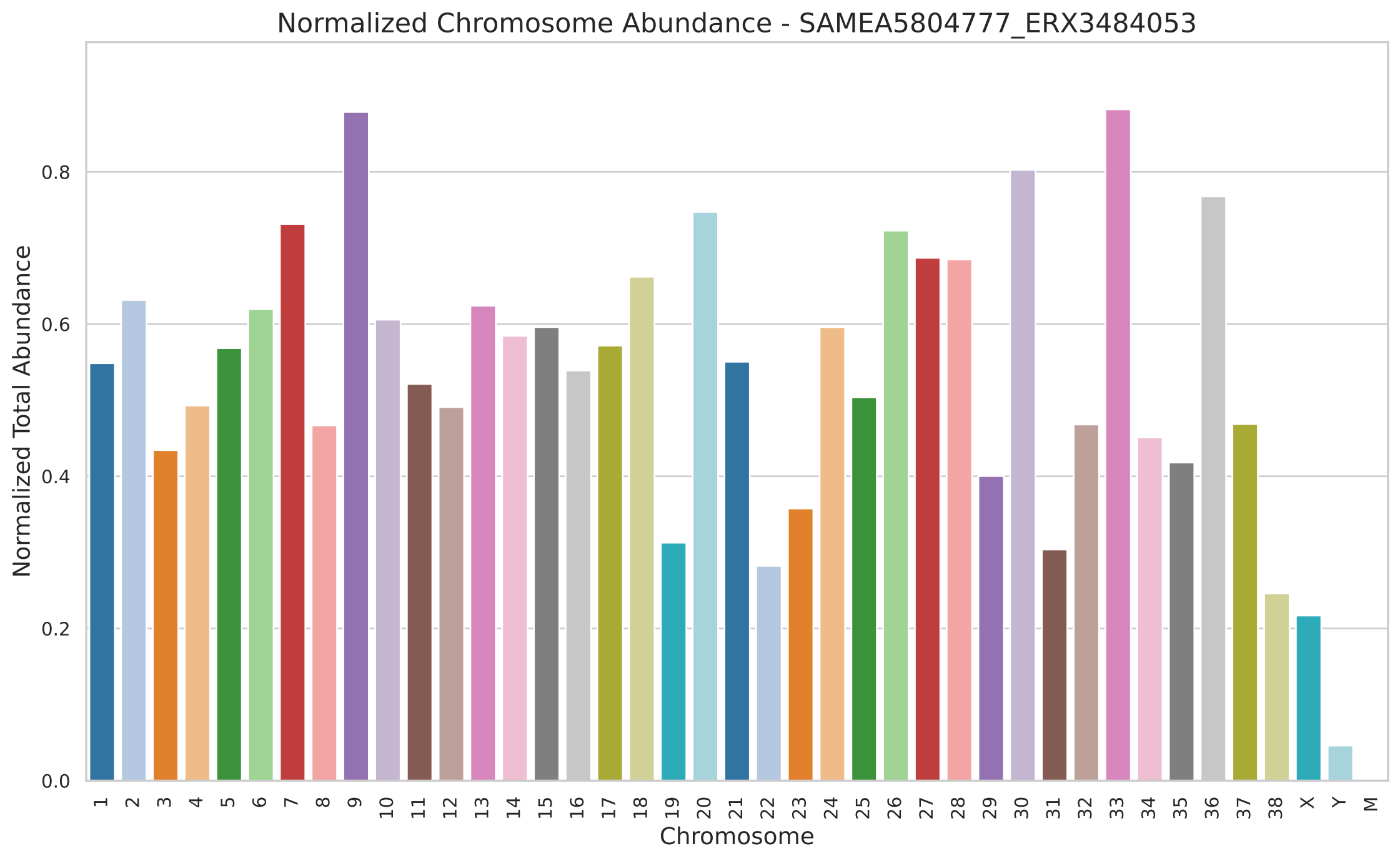

Normalized Chromosome Abundance - SAMEA5804807_ERX3484000
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

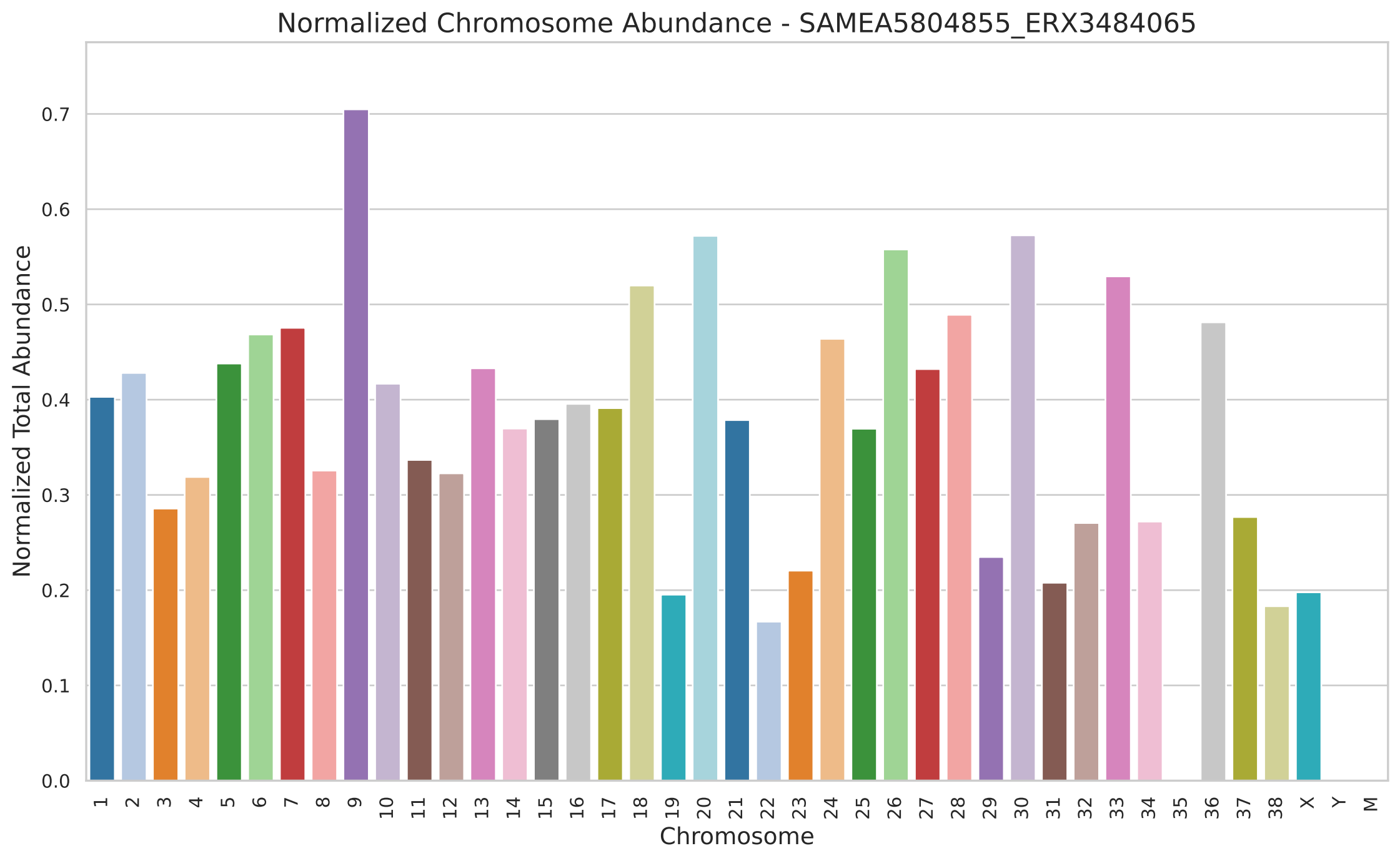

Normalized Chromosome Abundance - SAMEA5804664_ERX3484026
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

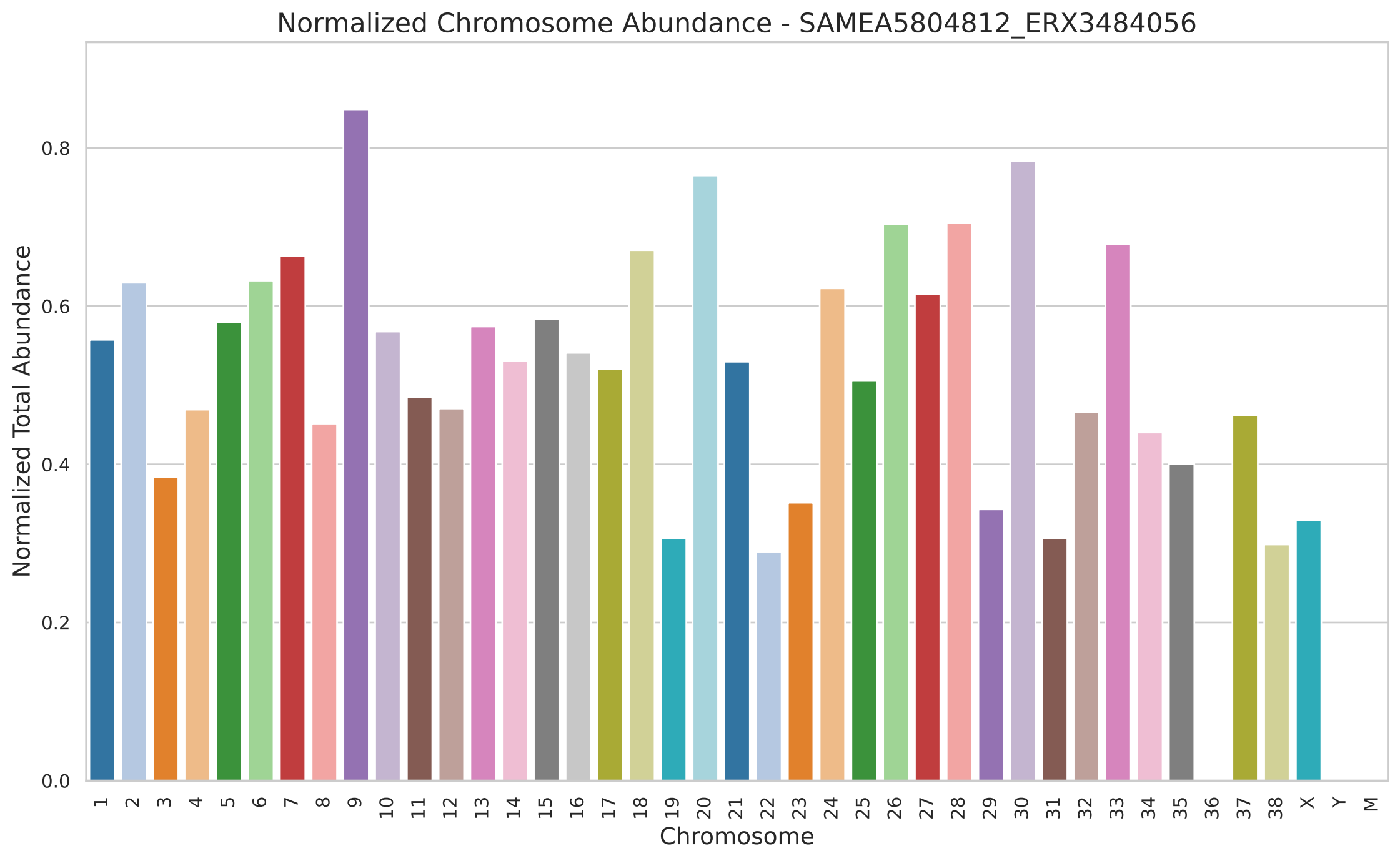

Normalized Chromosome Abundance - SAMEA5804647_ERX3484022
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

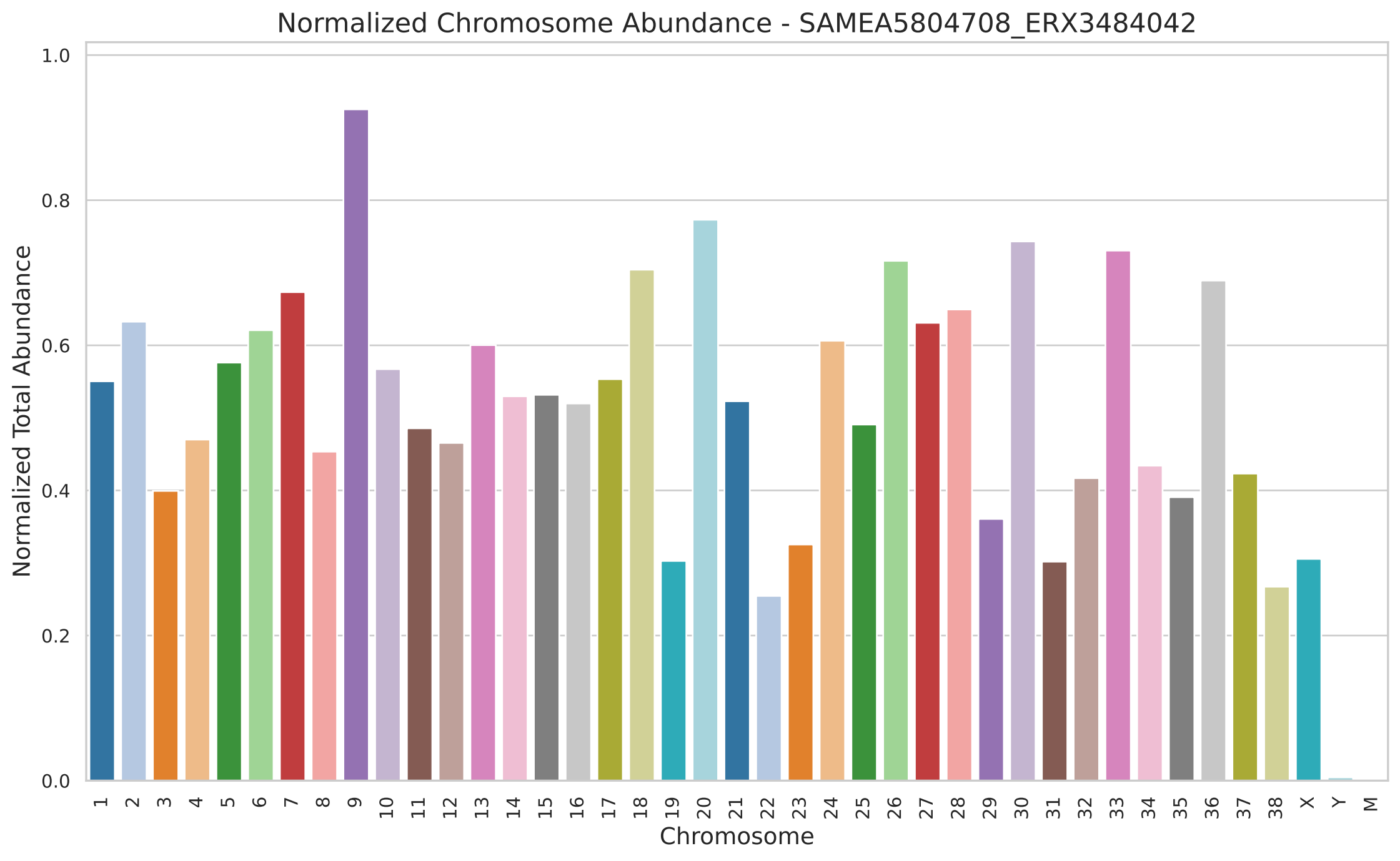

Normalized Chromosome Abundance - SAMEA5804822_ERX3484122
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

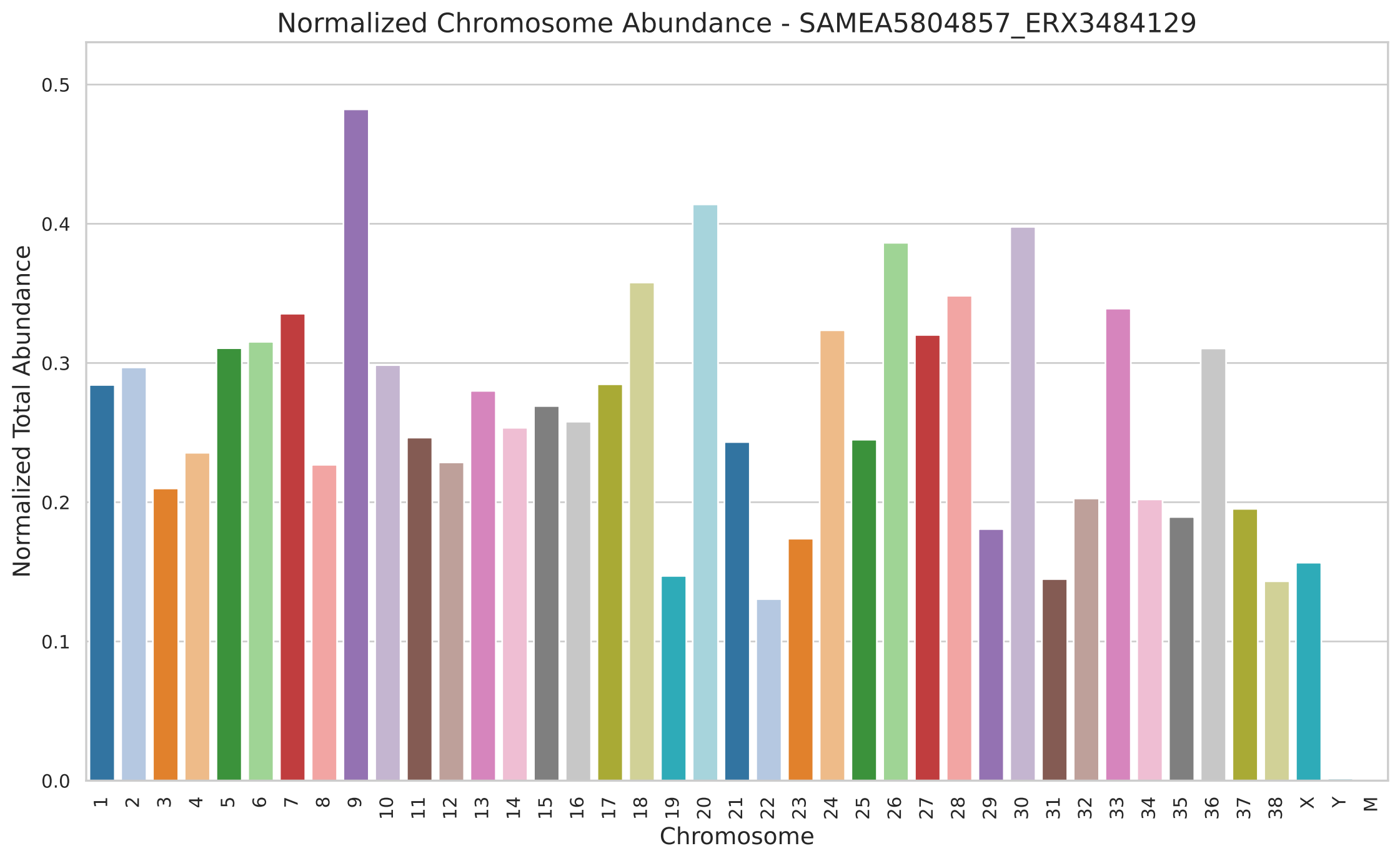

Normalized Chromosome Abundance - SAMEA5804814_ERX3484057
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

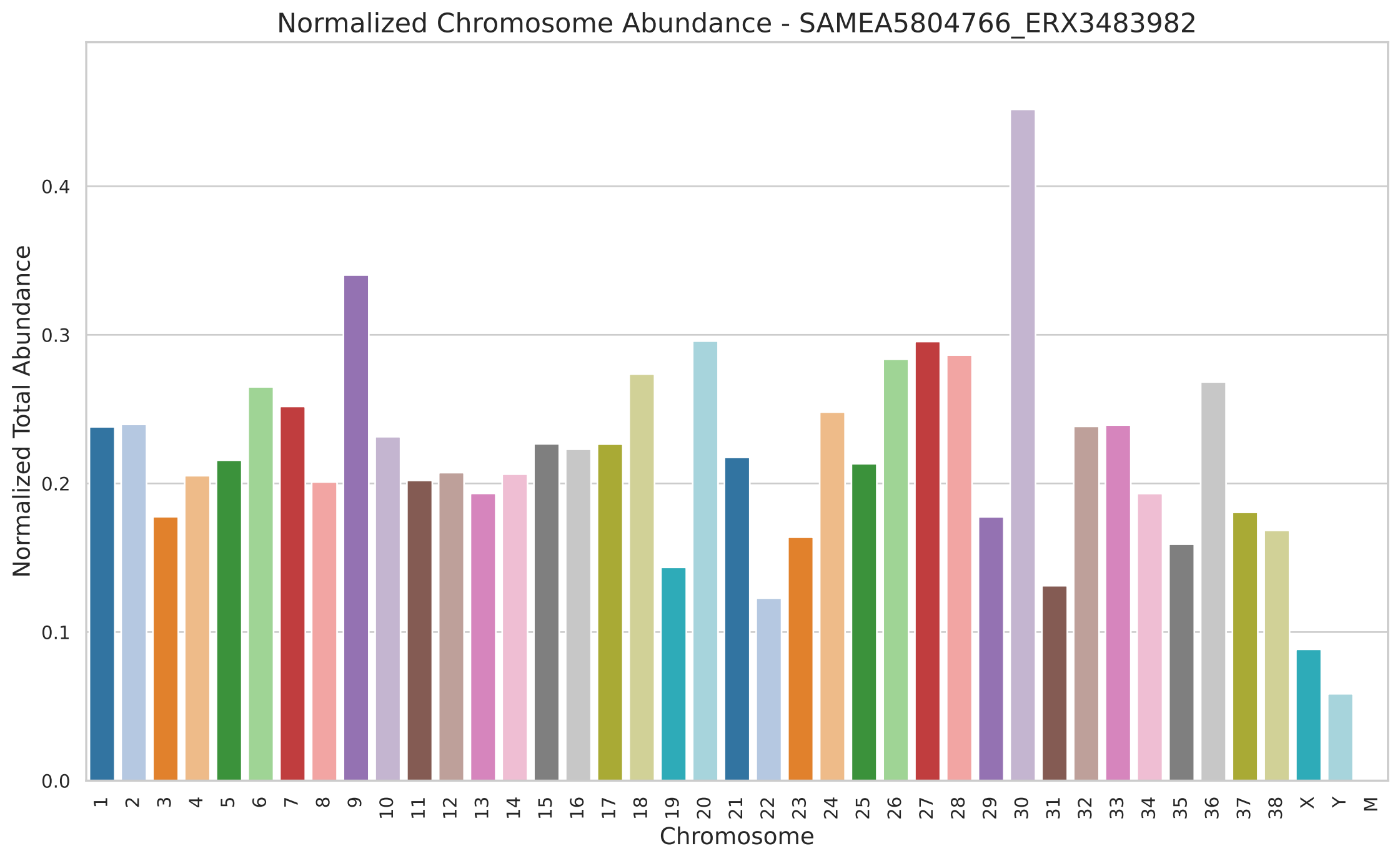

Normalized Chromosome Abundance - SAMEA5804777_ERX3484053
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

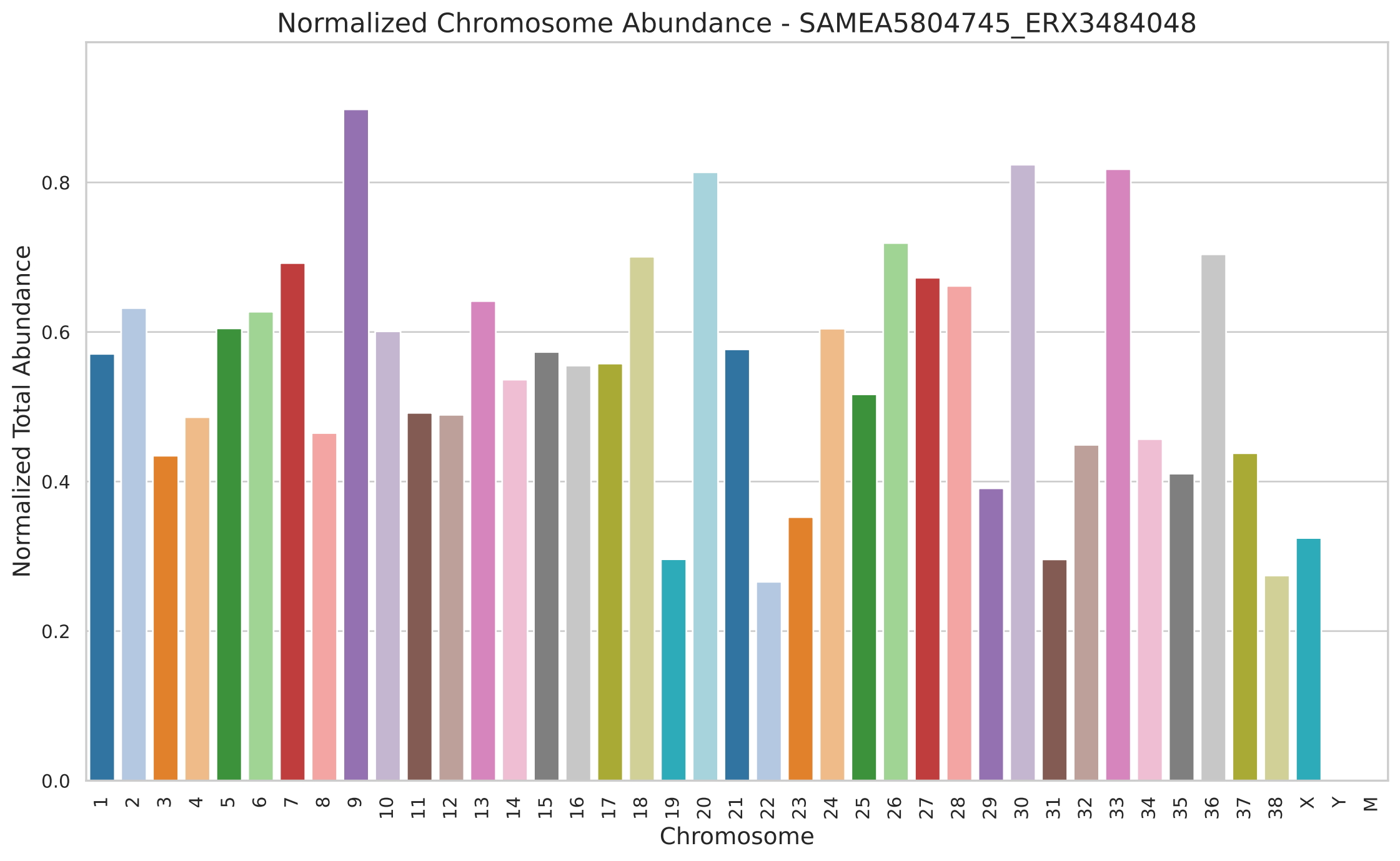

Normalized Chromosome Abundance - SAMEA5804855_ERX3484065
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

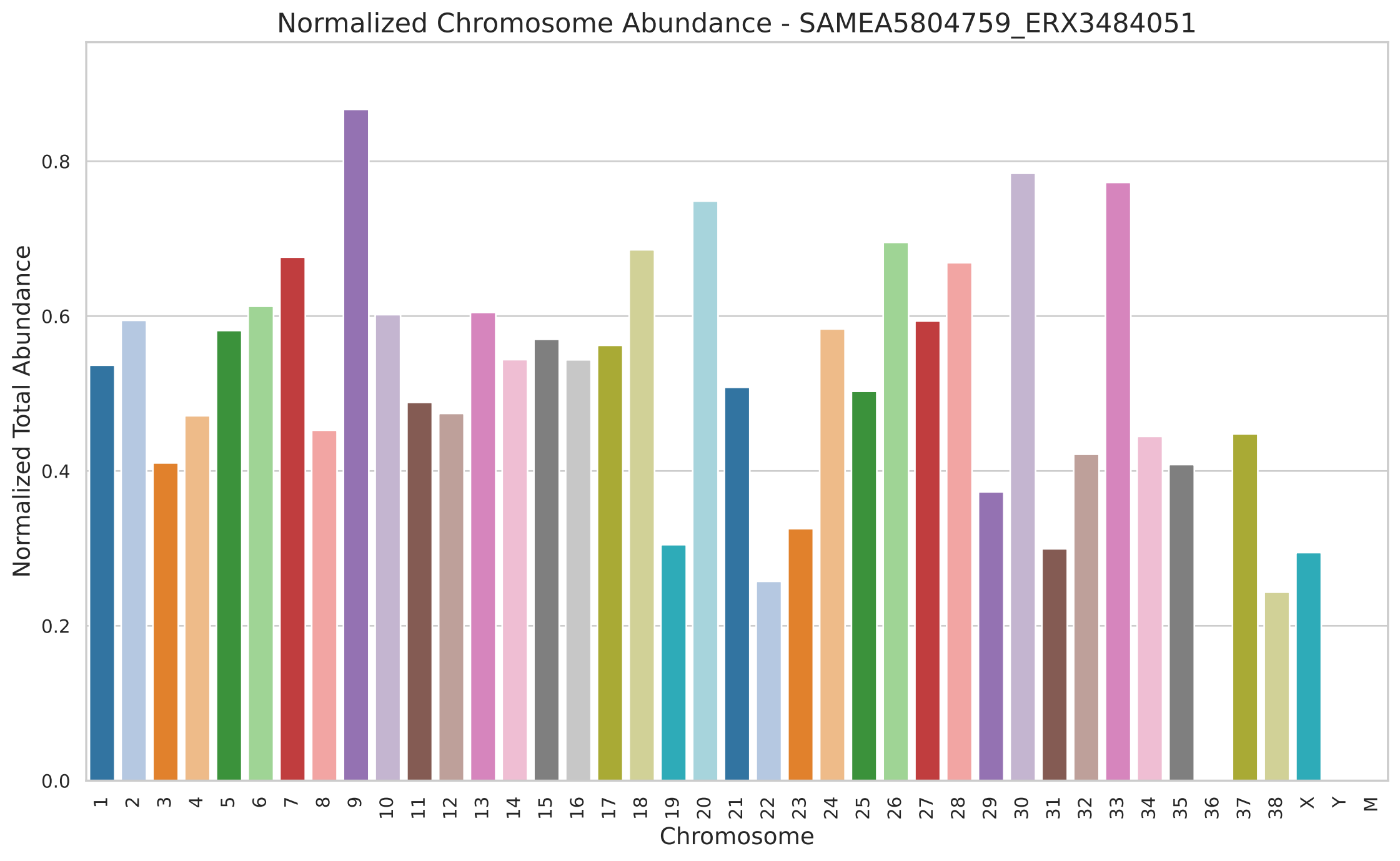

Normalized Chromosome Abundance - SAMEA5804812_ERX3484056
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

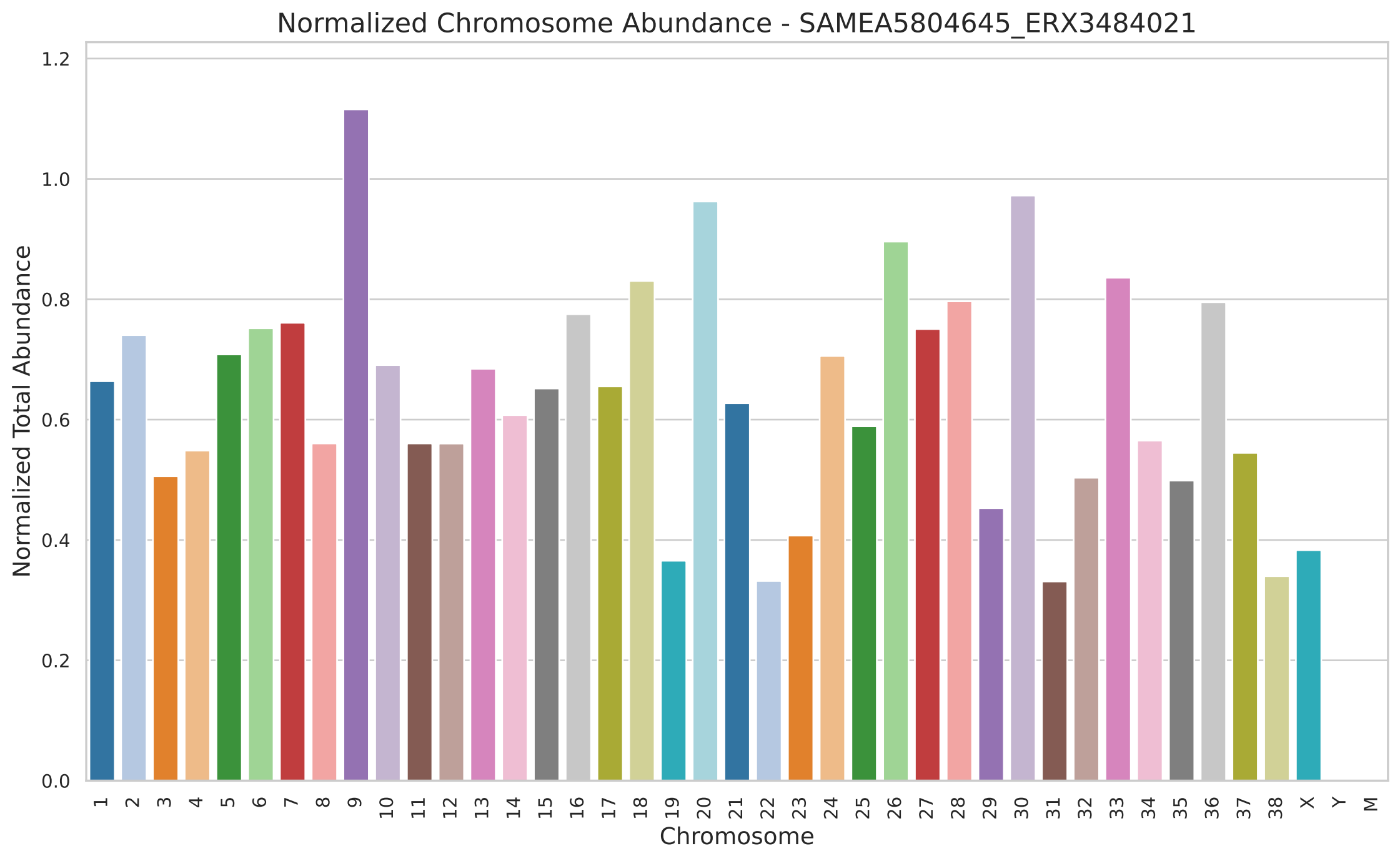

Normalized Chromosome Abundance - SAMEA5804708_ERX3484042
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

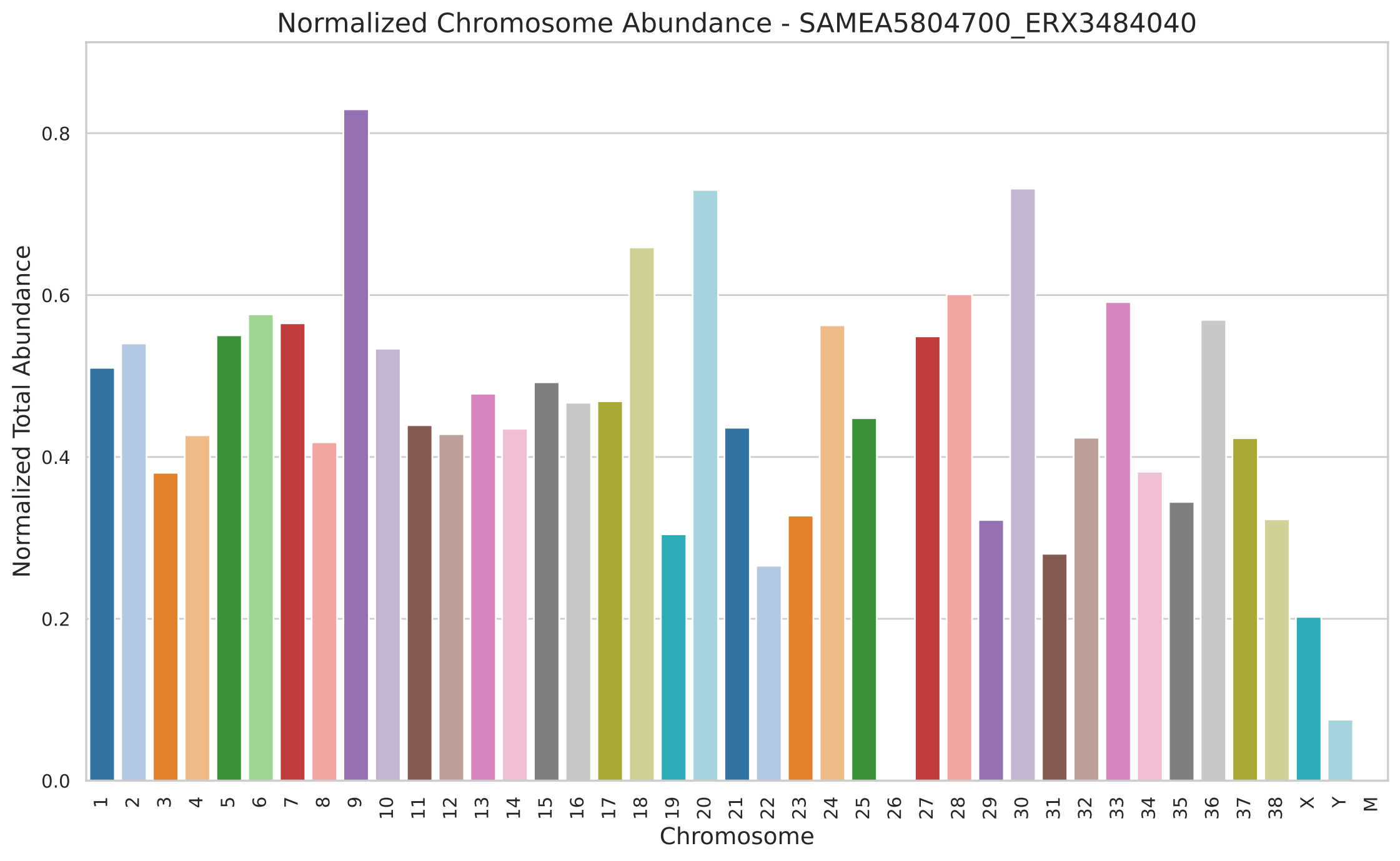

Normalized Chromosome Abundance - SAMEA5804857_ERX3484129
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

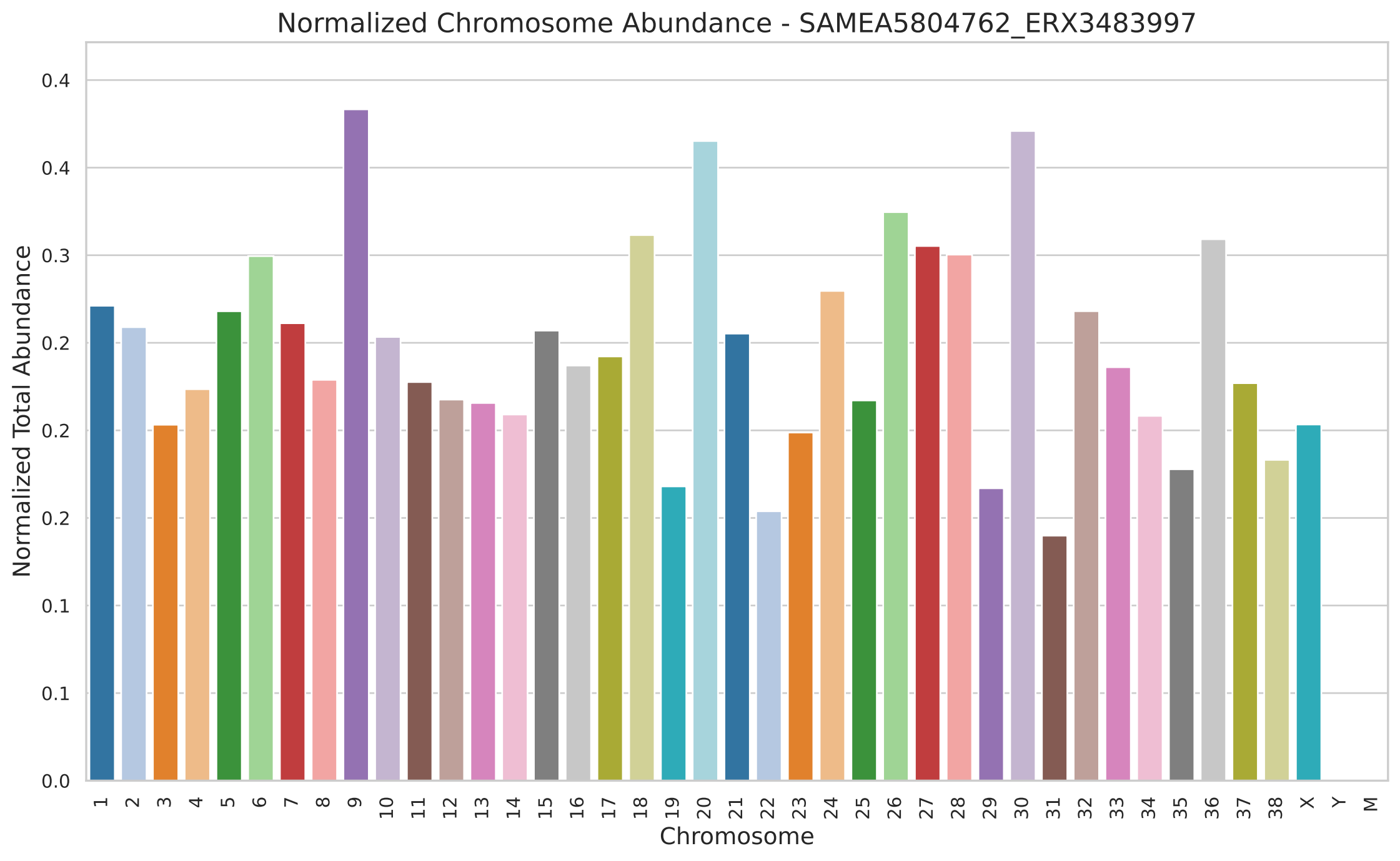

Normalized Chromosome Abundance - SAMEA5804766_ERX3483982
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

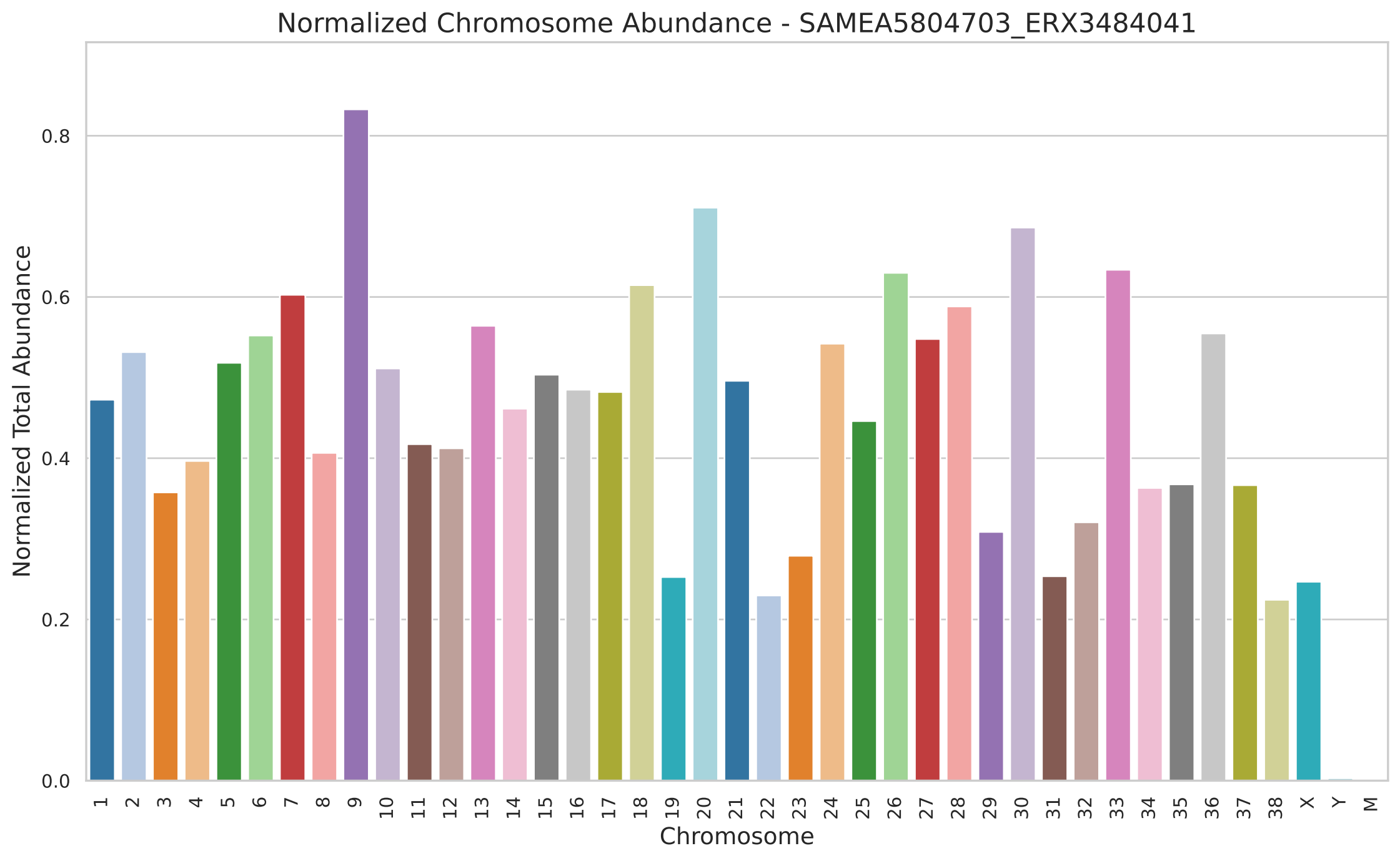

Normalized Chromosome Abundance - SAMEA5804745_ERX3484048
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

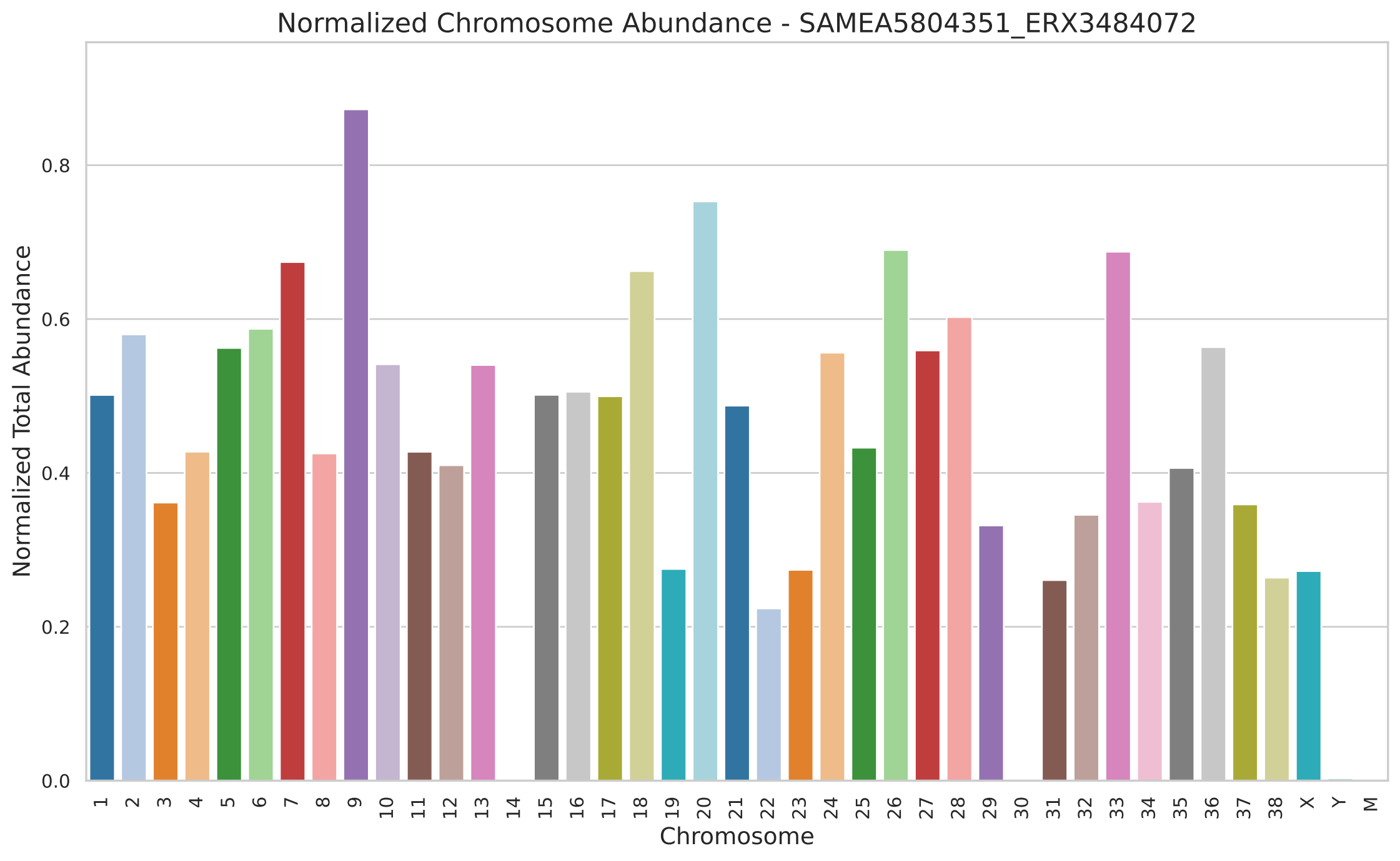

Normalized Chromosome Abundance - SAMEA5804759_ERX3484051
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

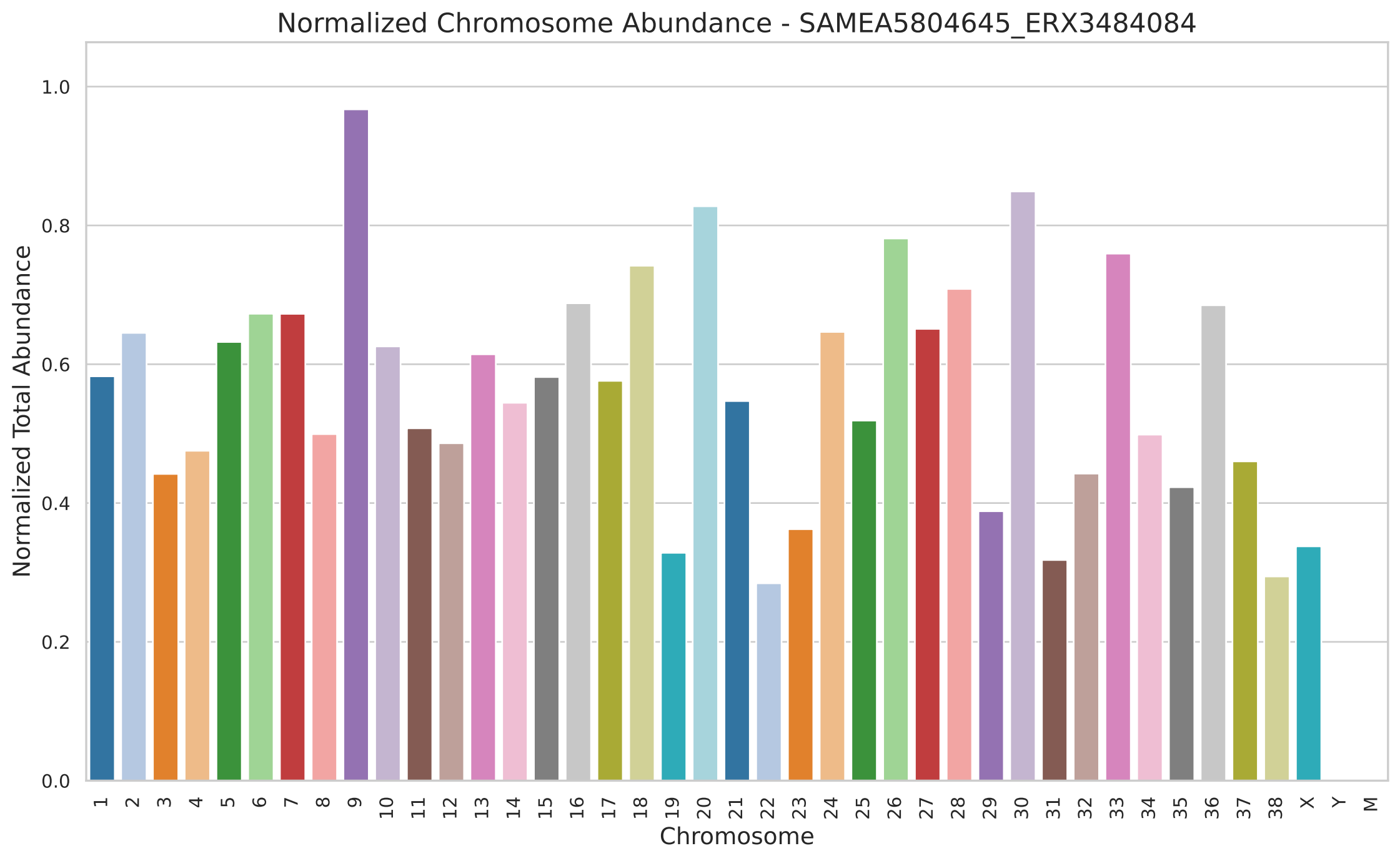

Normalized Chromosome Abundance - SAMEA5804645_ERX3484021
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

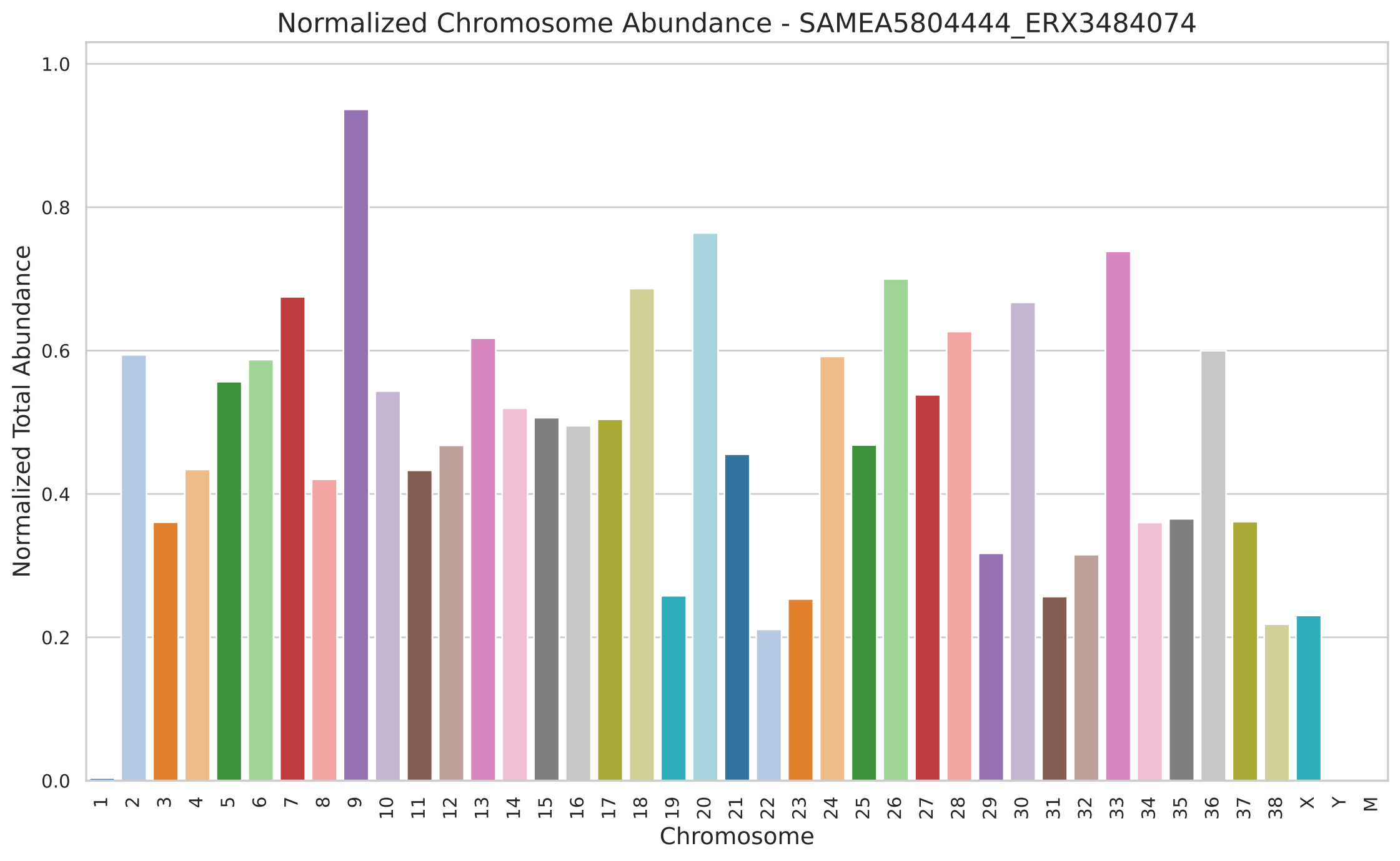

Normalized Chromosome Abundance - SAMEA5804700_ERX3484040
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

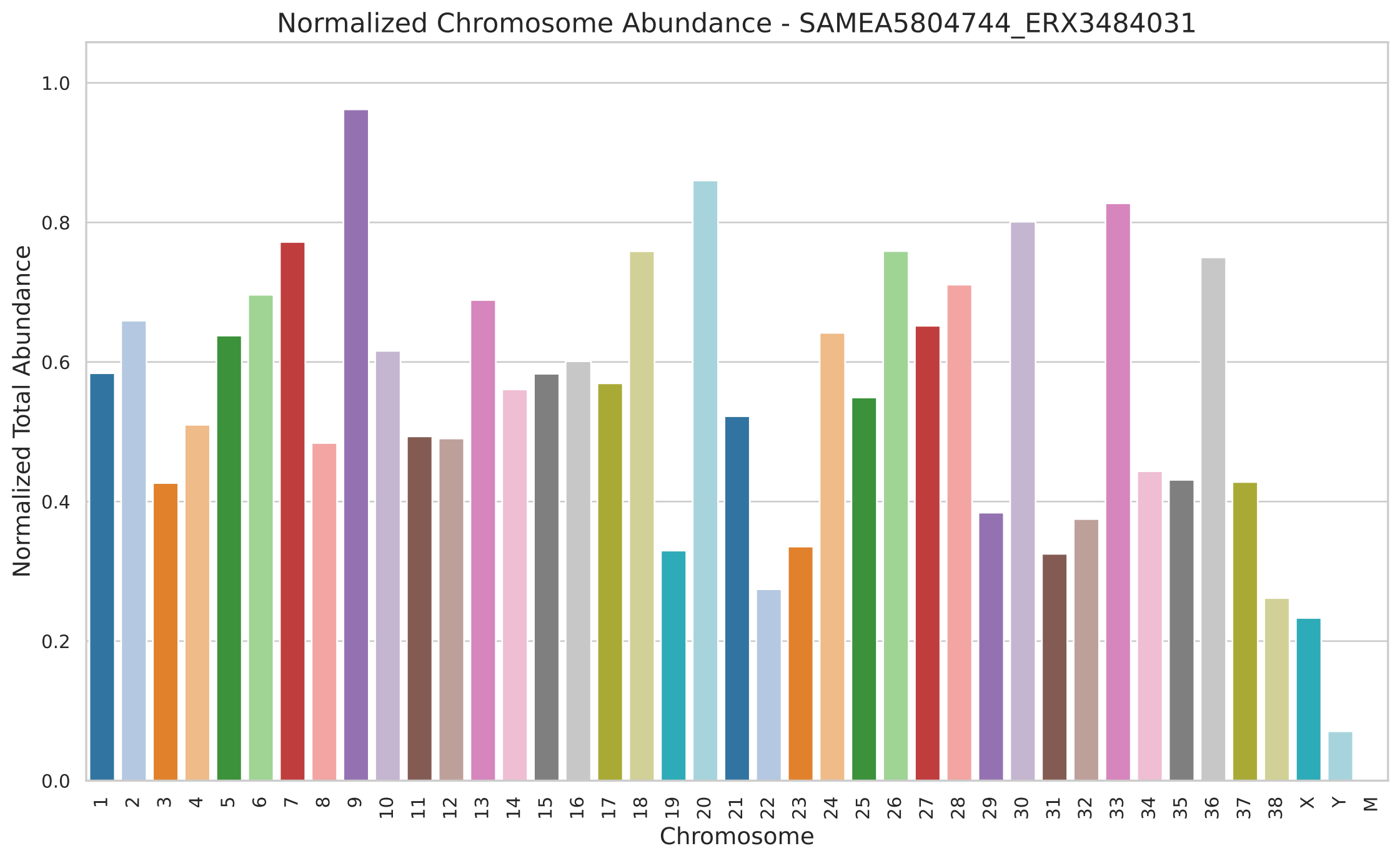

Normalized Chromosome Abundance - SAMEA5804762_ERX3483997
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

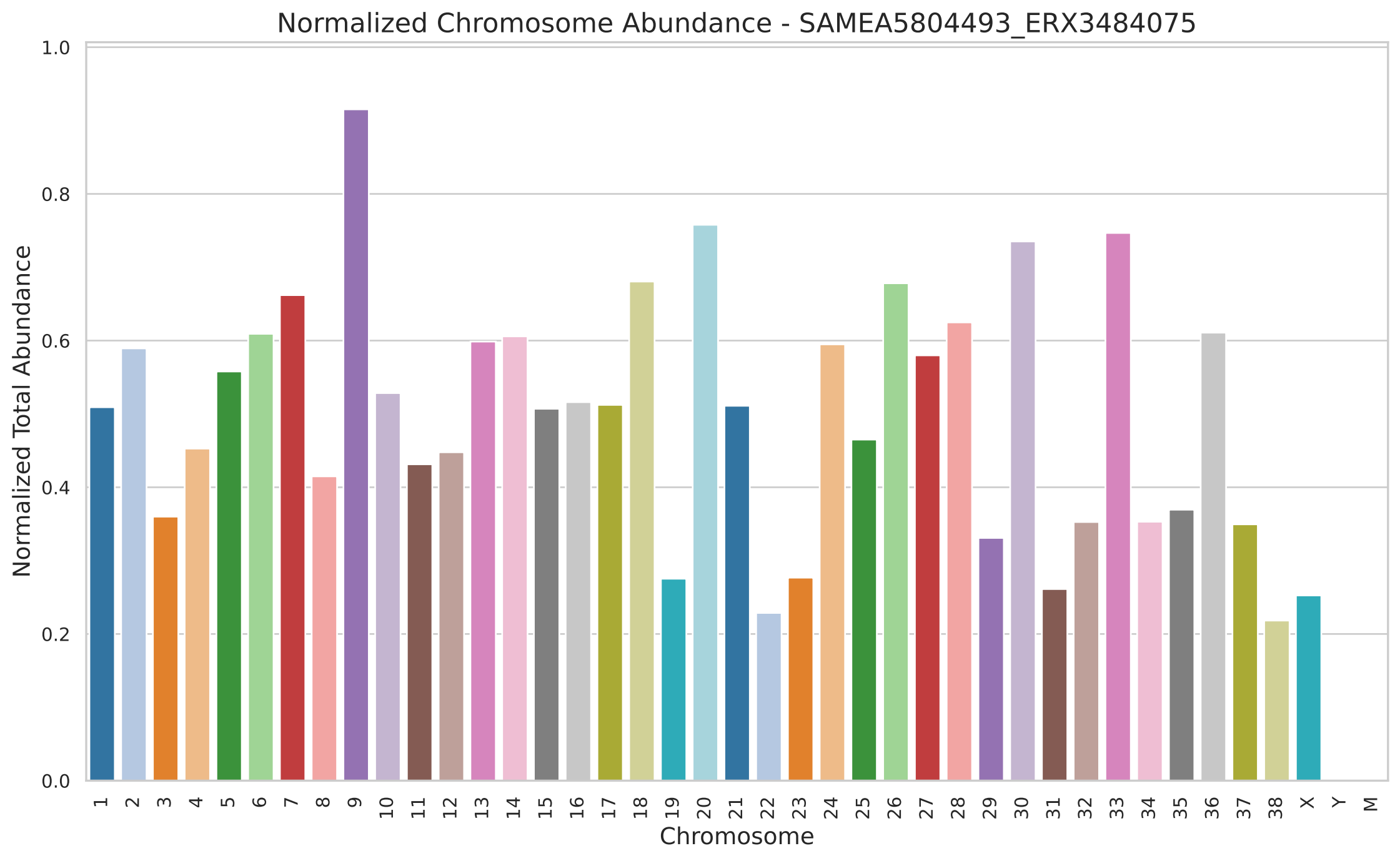

Normalized Chromosome Abundance - SAMEA5804703_ERX3484041
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

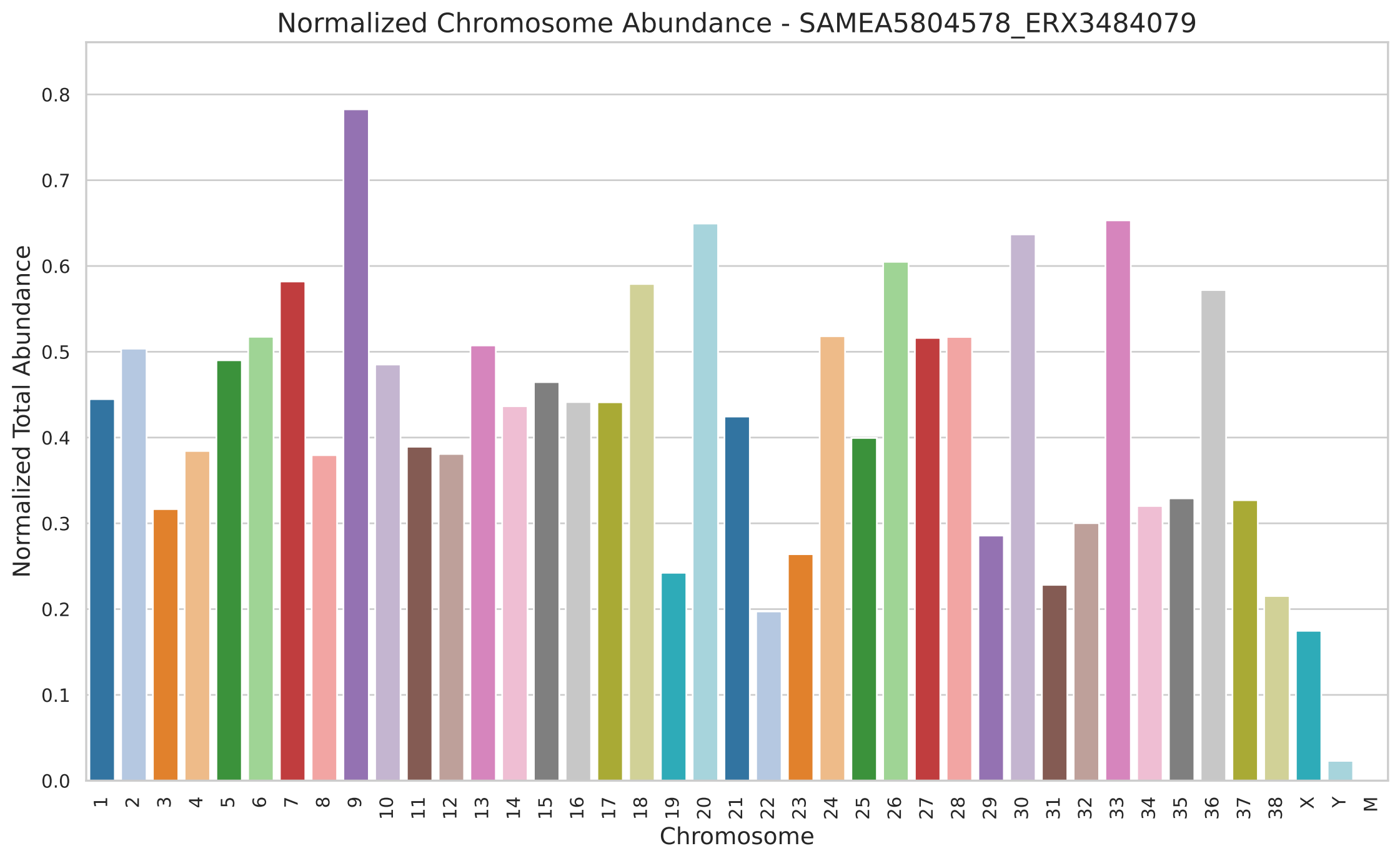

Normalized Chromosome Abundance - SAMEA5804351_ERX3484072
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

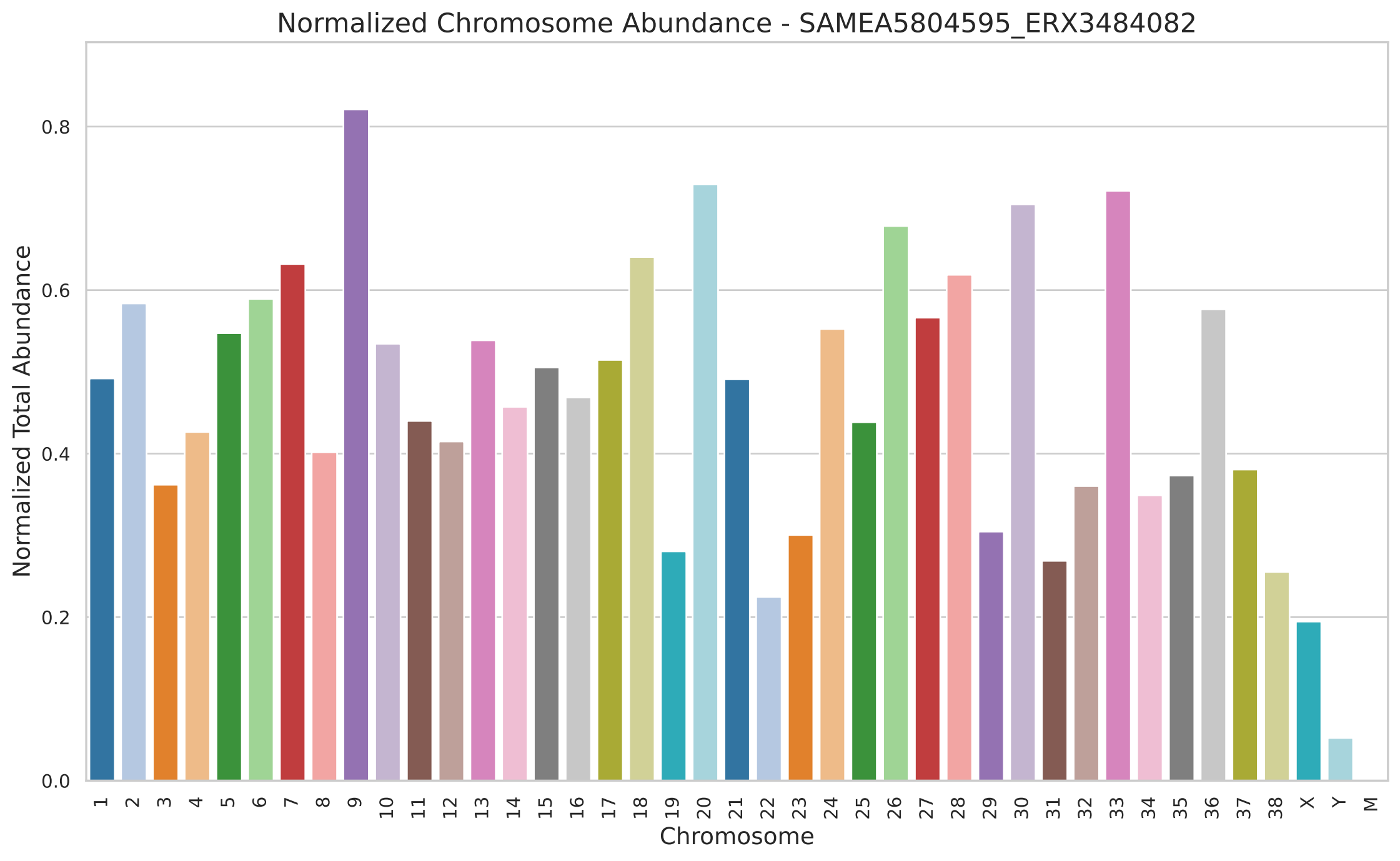

Normalized Chromosome Abundance - SAMEA5804645_ERX3484084
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

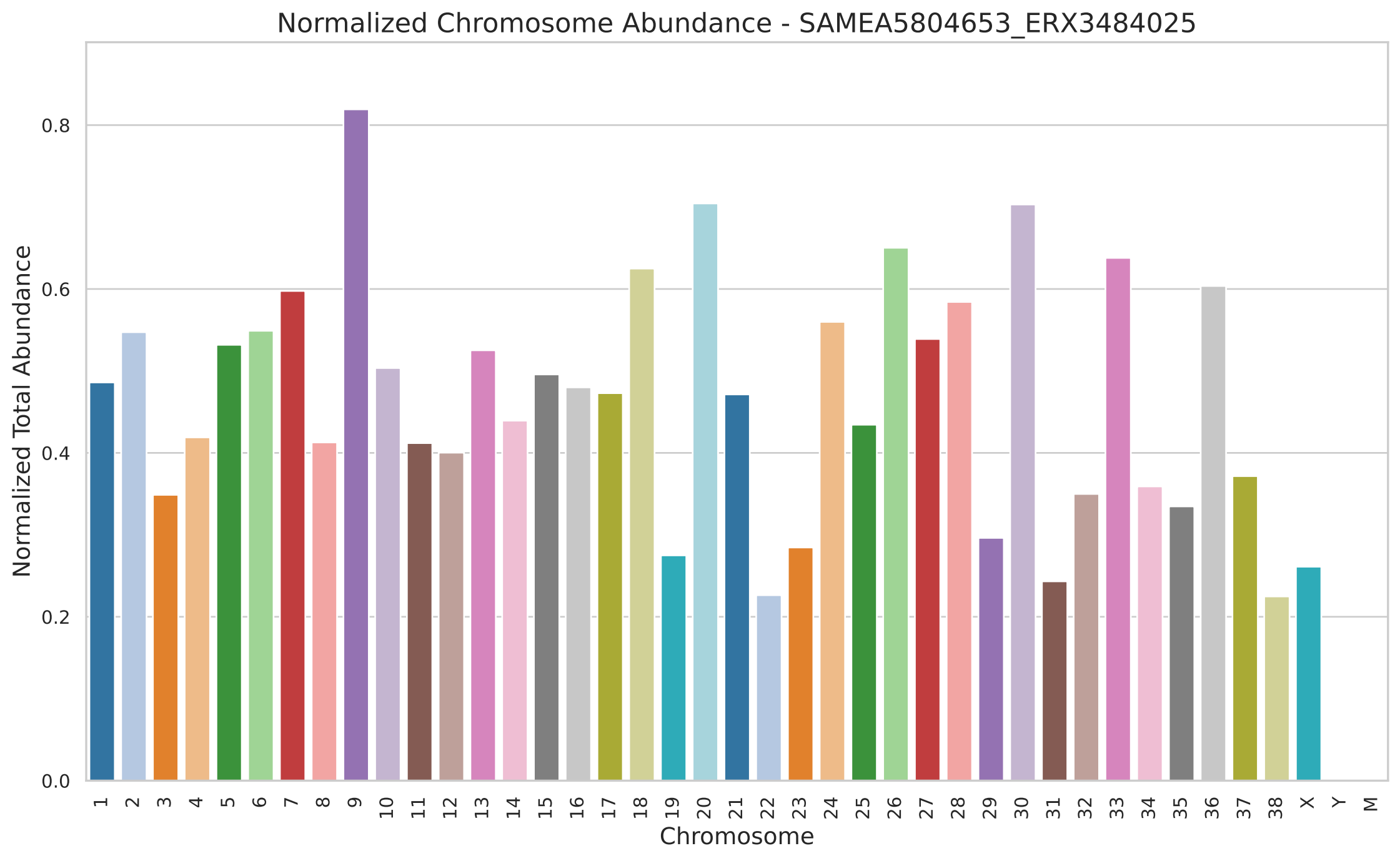

Normalized Chromosome Abundance - SAMEA5804444_ERX3484074
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

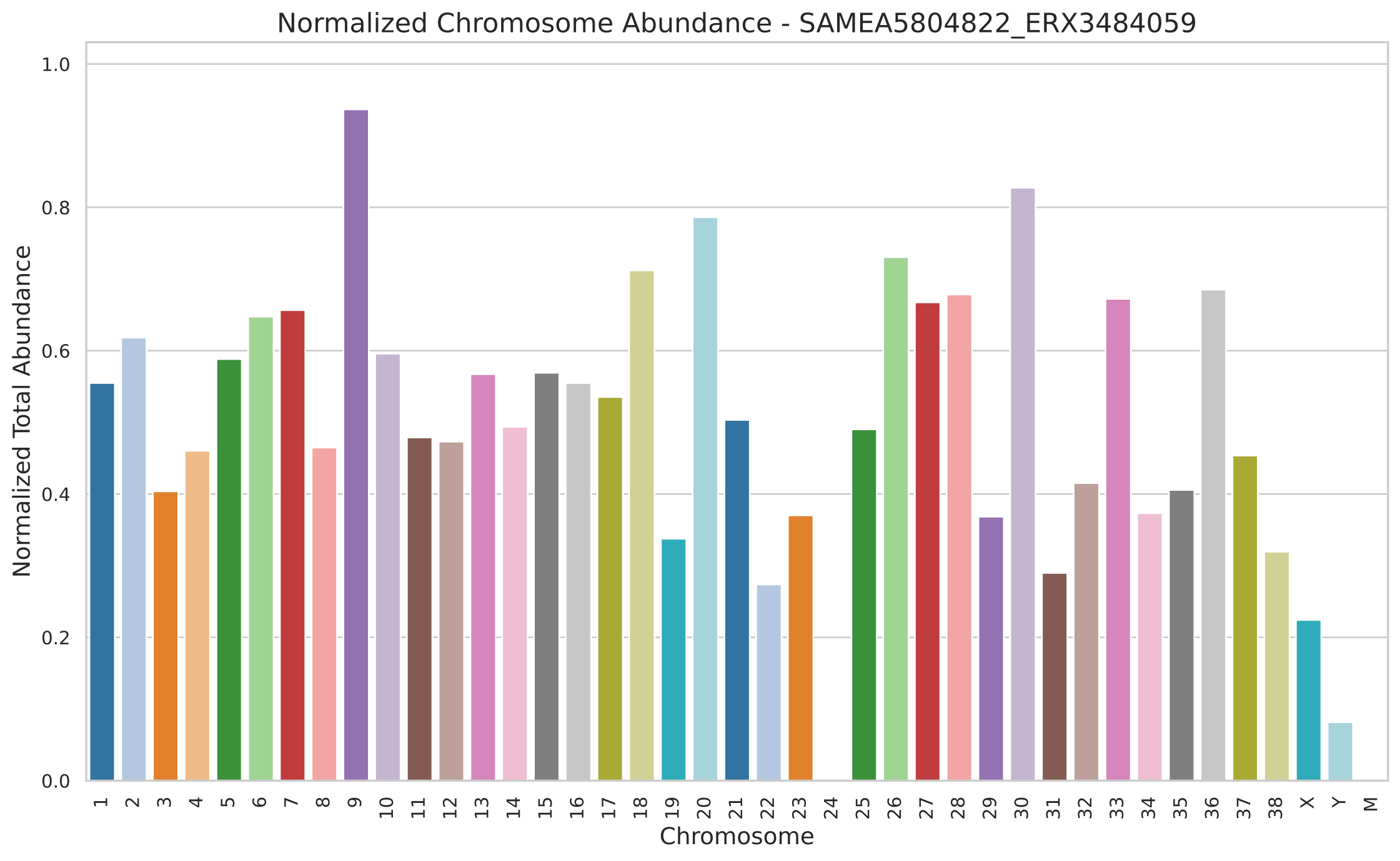

Normalized Chromosome Abundance - SAMEA5804744_ERX3484031
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

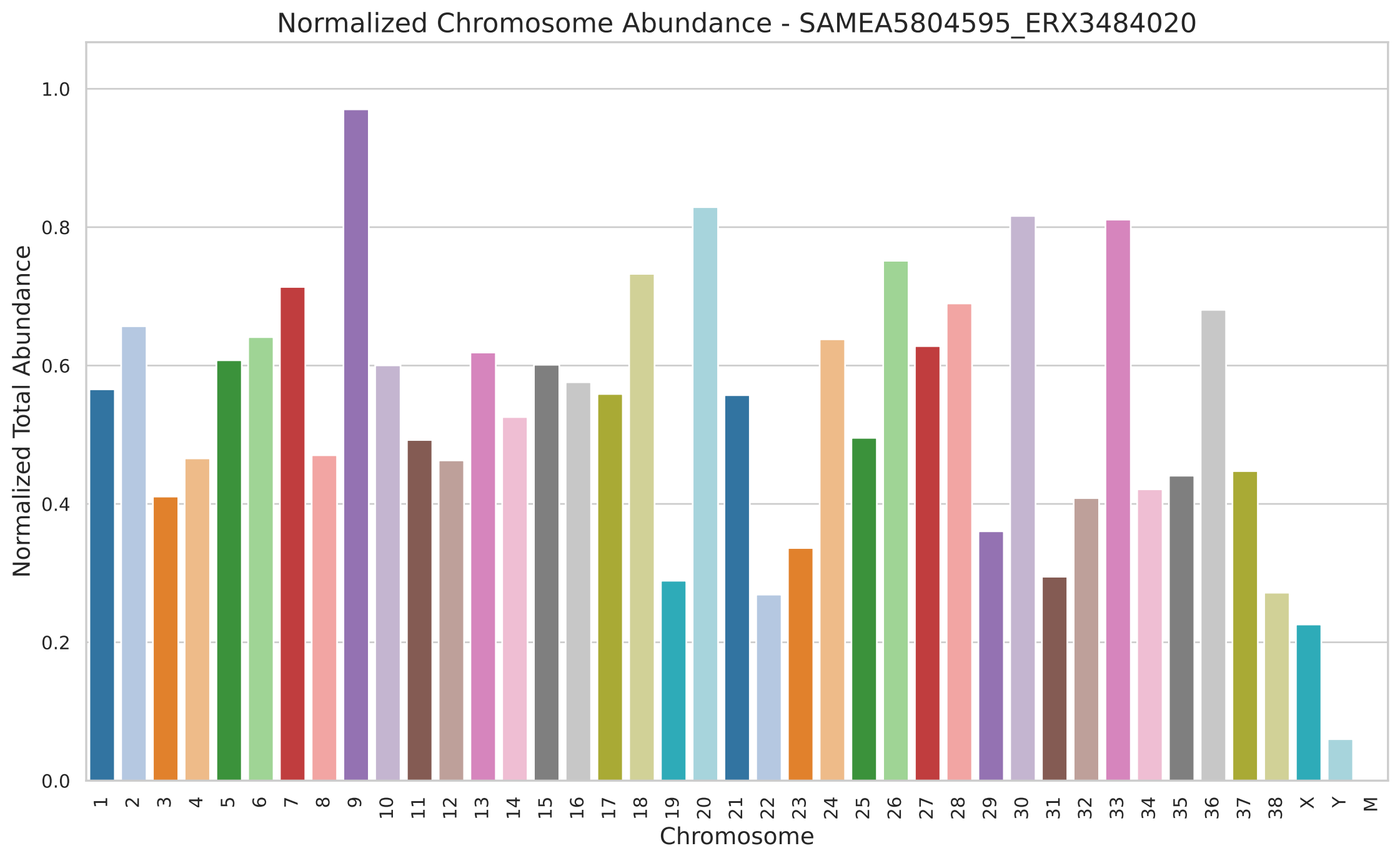

Normalized Chromosome Abundance - SAMEA5804493_ERX3484075
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

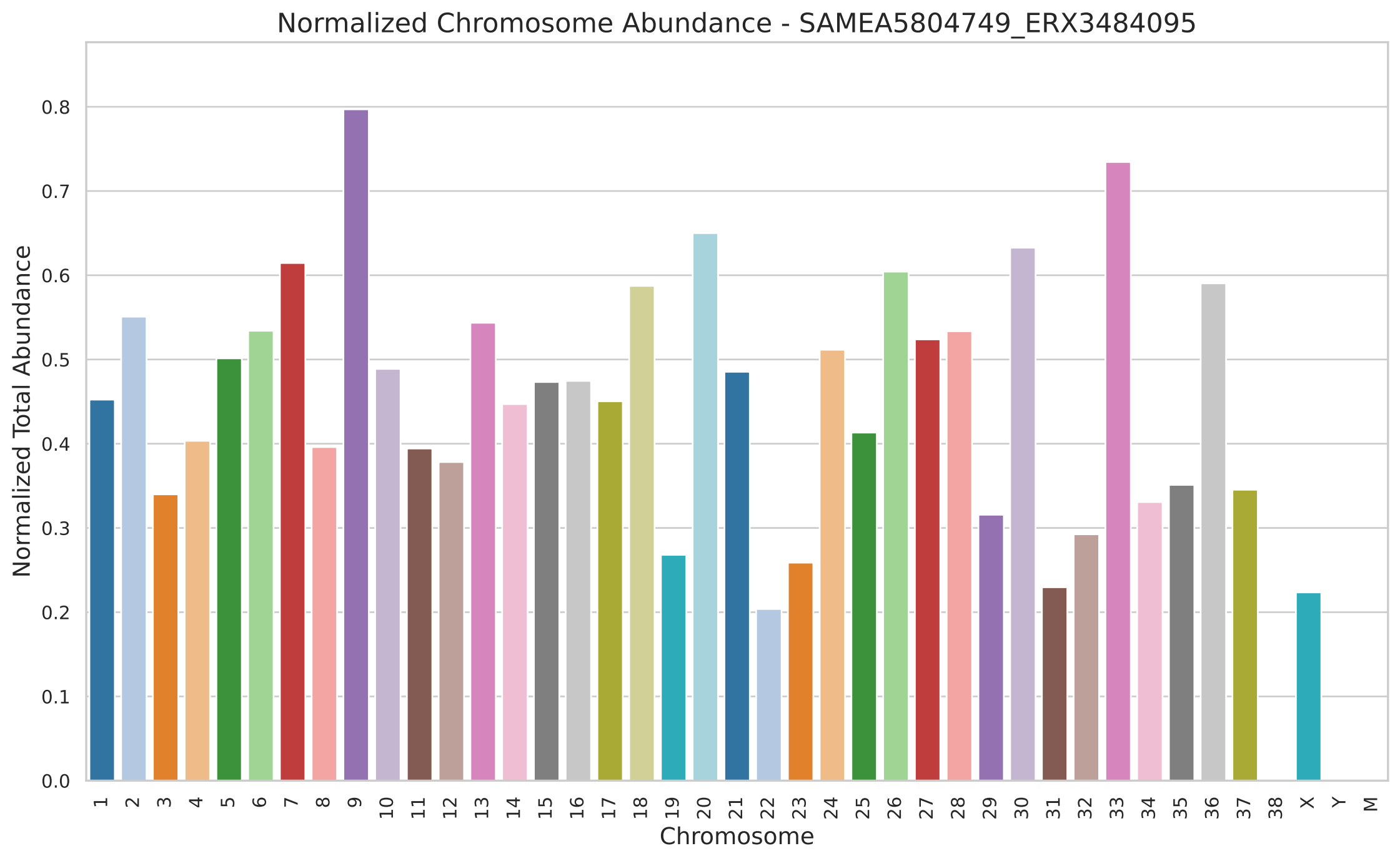

Normalized Chromosome Abundance - SAMEA5804578_ERX3484079
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

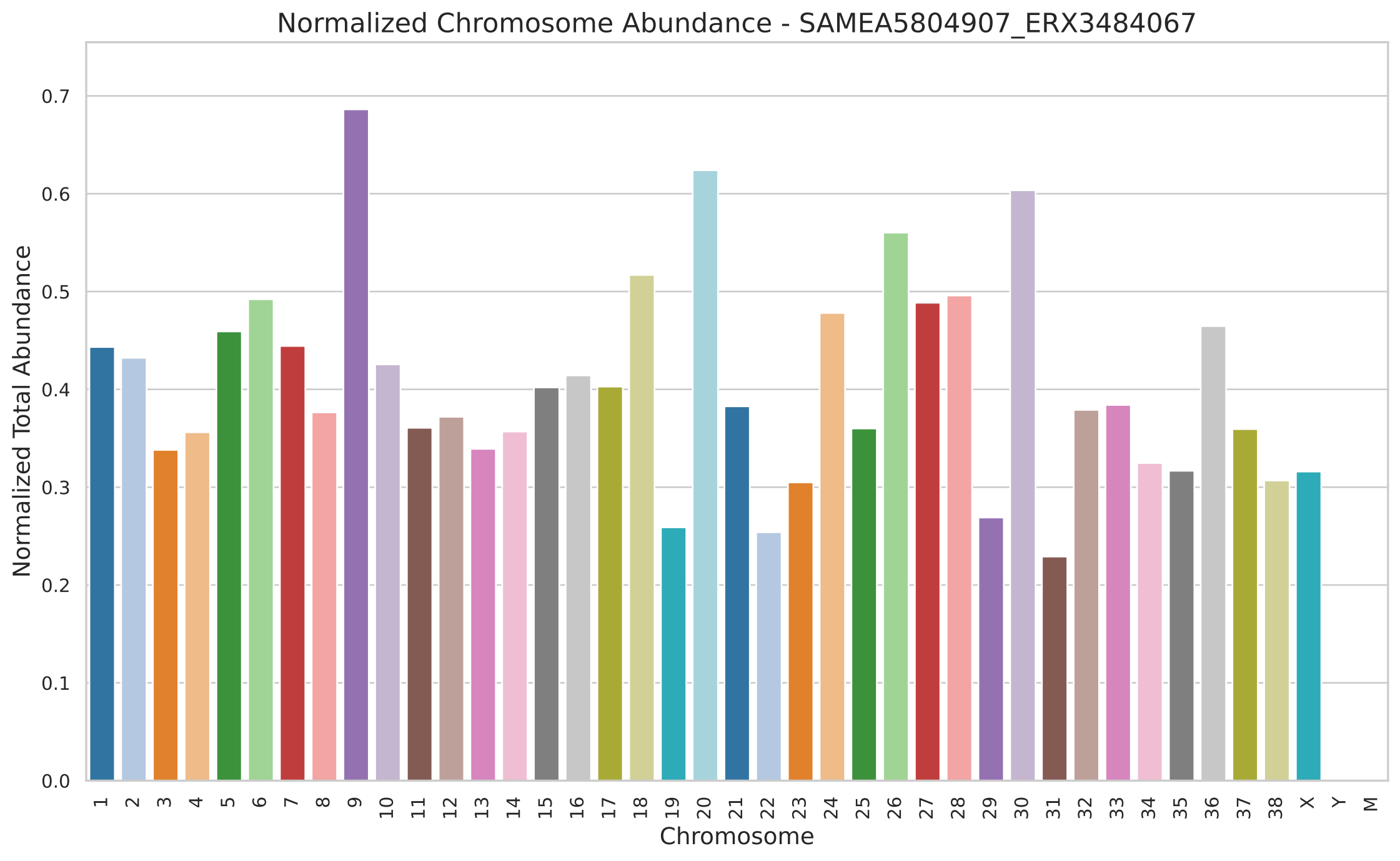

Normalized Chromosome Abundance - SAMEA5804595_ERX3484082
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

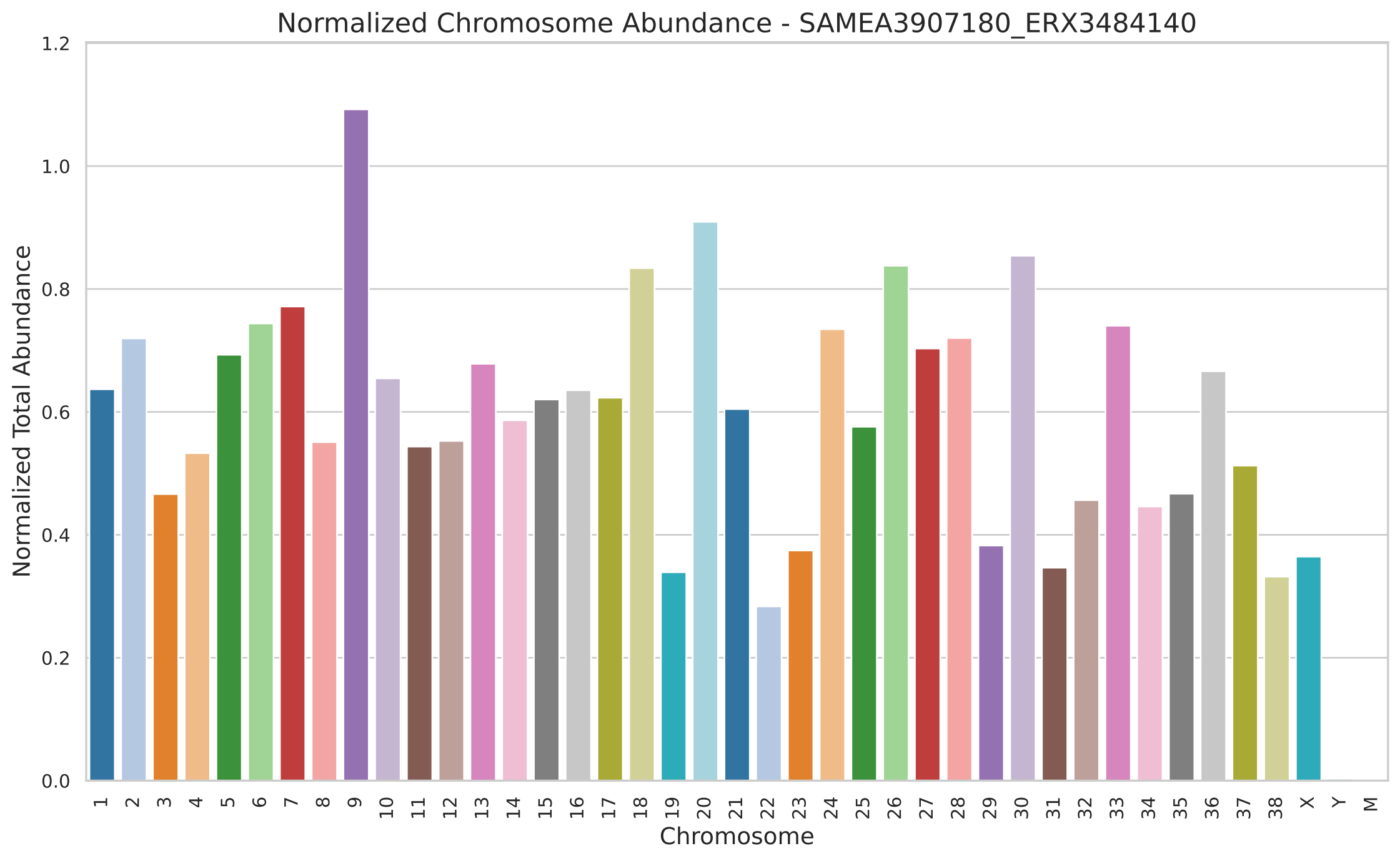

Normalized Chromosome Abundance - SAMEA5804653_ERX3484025
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

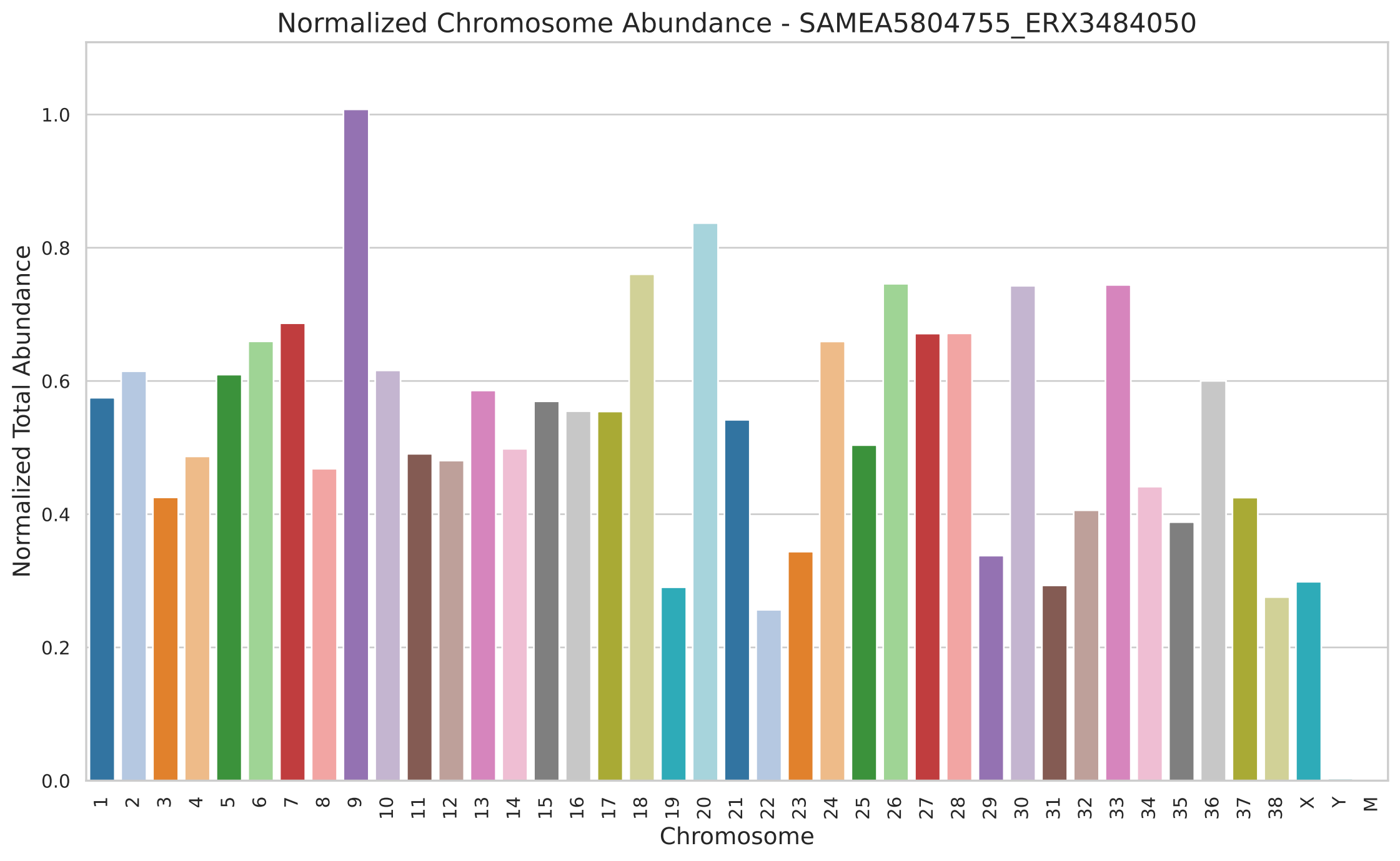

Normalized Chromosome Abundance - SAMEA5804822_ERX3484059
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

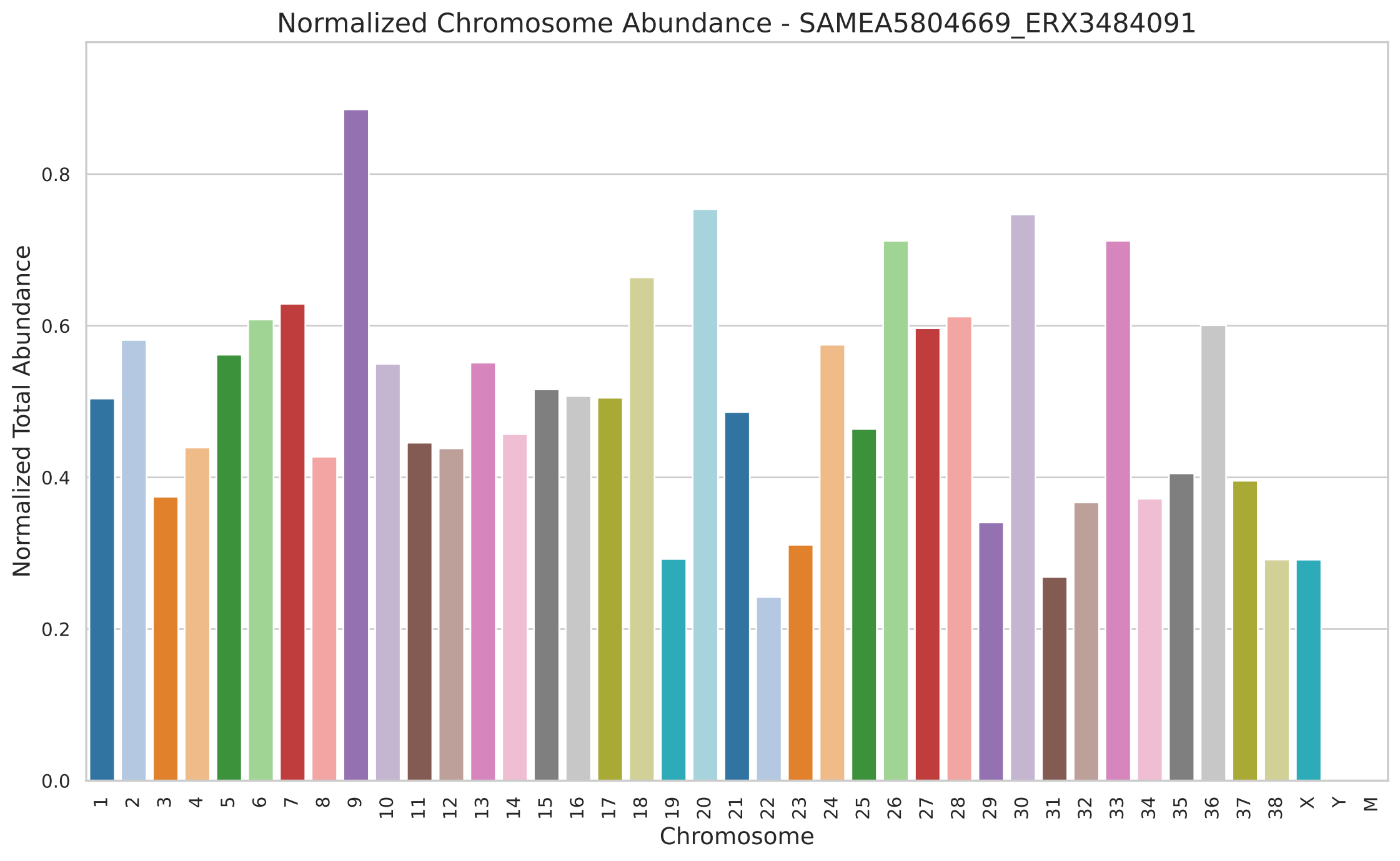

Normalized Chromosome Abundance - SAMEA5804595_ERX3484020
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

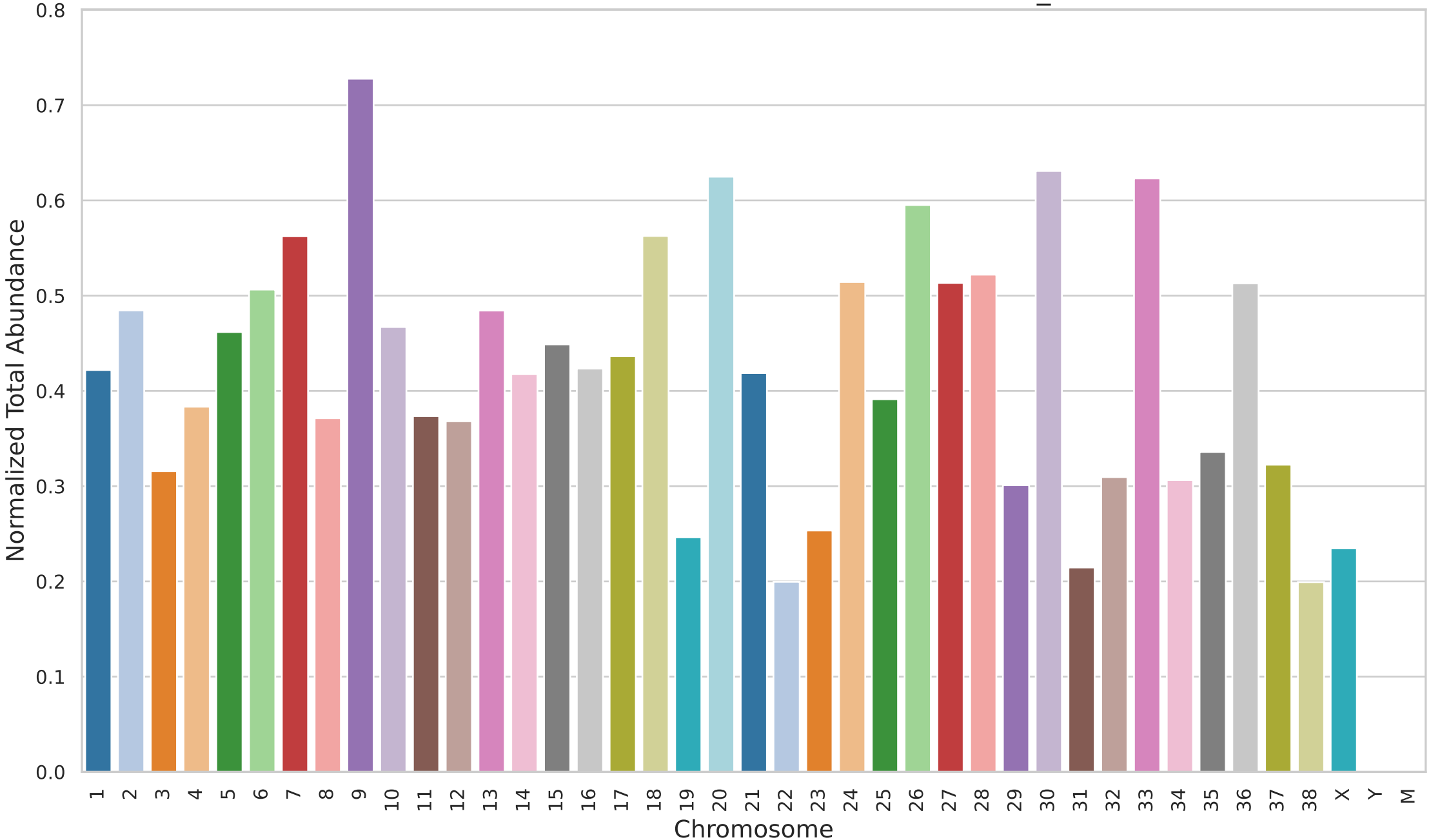

Normalized Chromosome Abundance - SAMEA5804749_ERX3484095
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

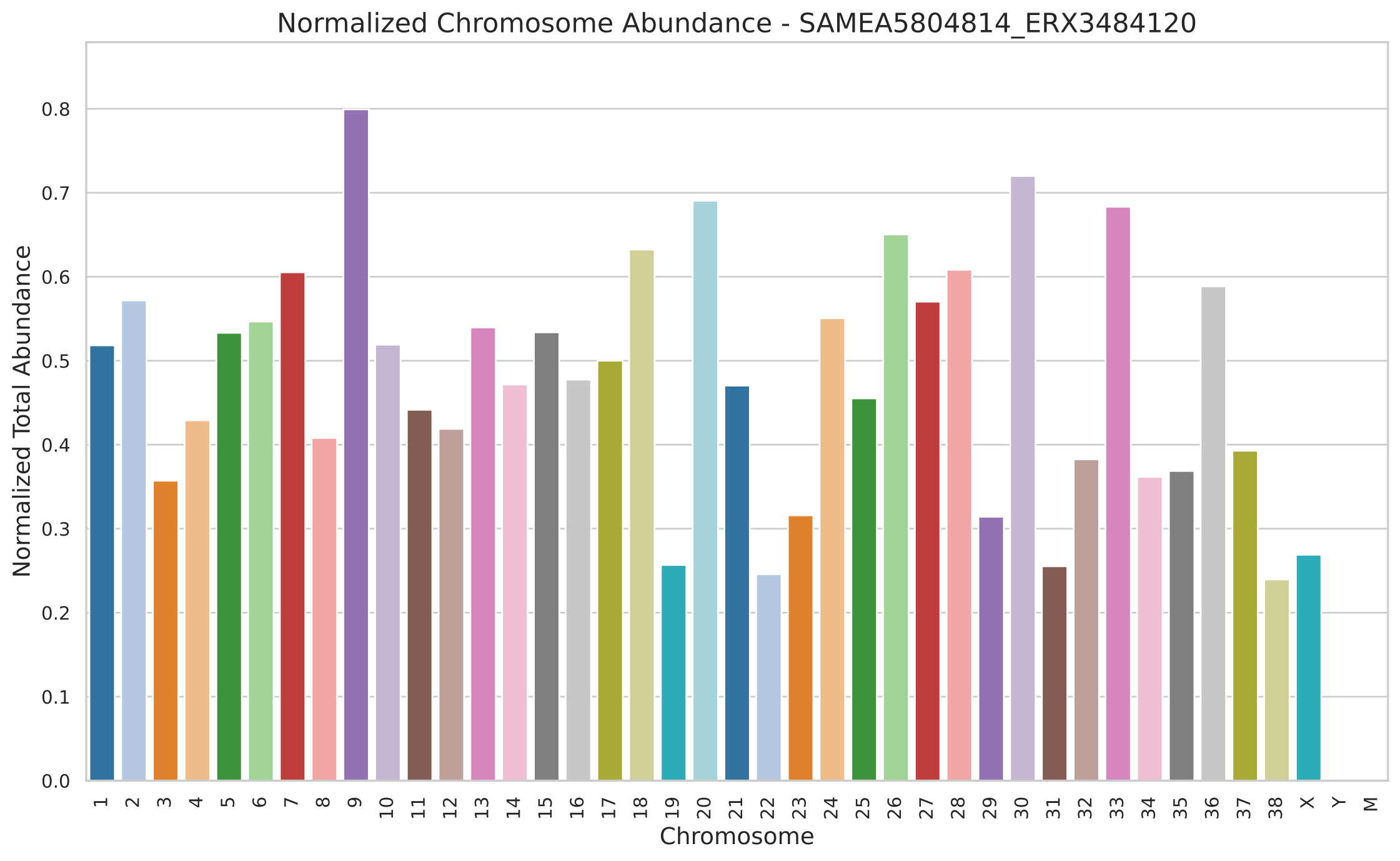

Normalized Chromosome Abundance - SAMEA5804907_ERX3484067
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

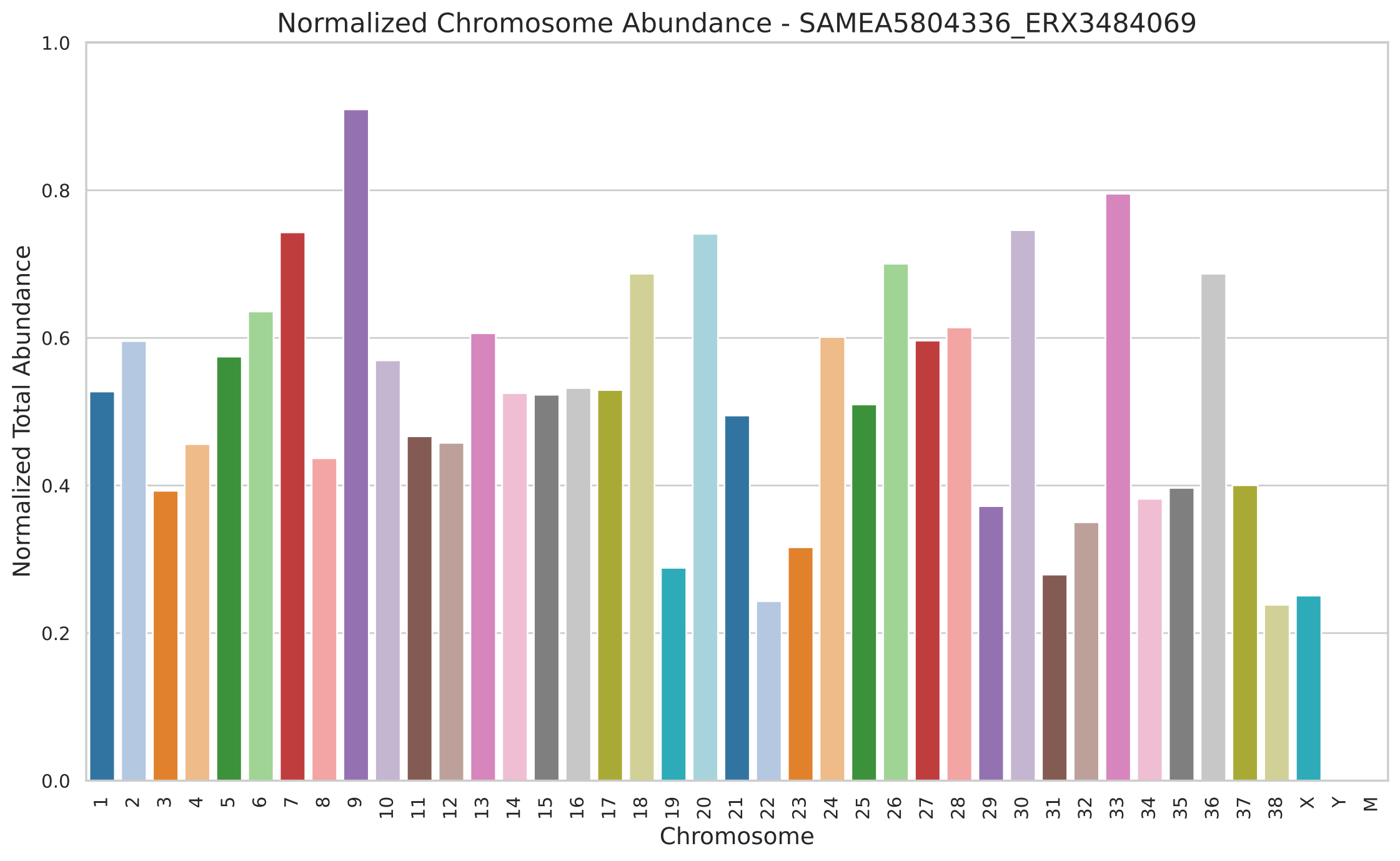

Normalized Chromosome Abundance - SAMEA3907180_ERX3484140
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

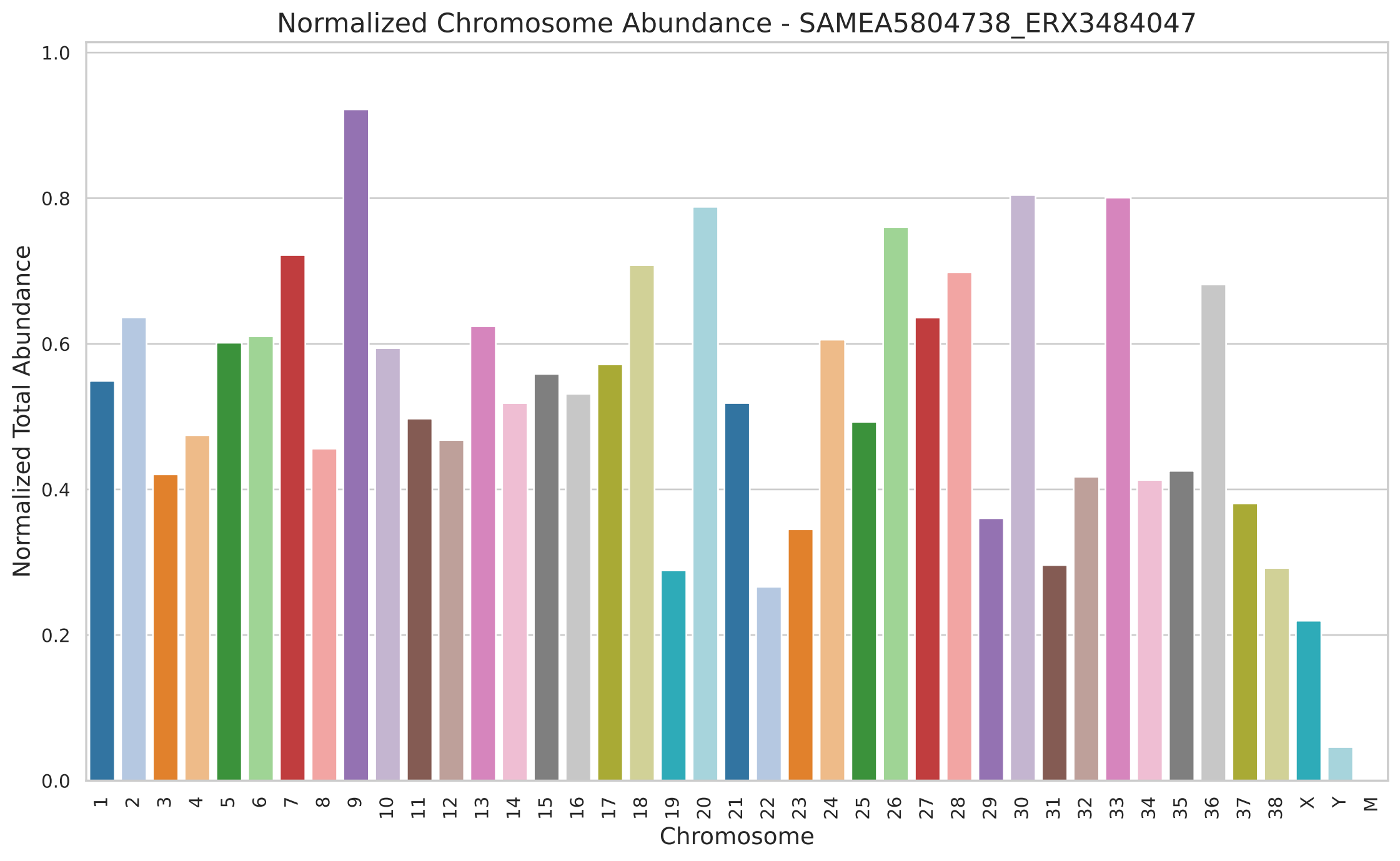

Normalized Chromosome Abundance - SAMEA5804755_ERX3484050
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

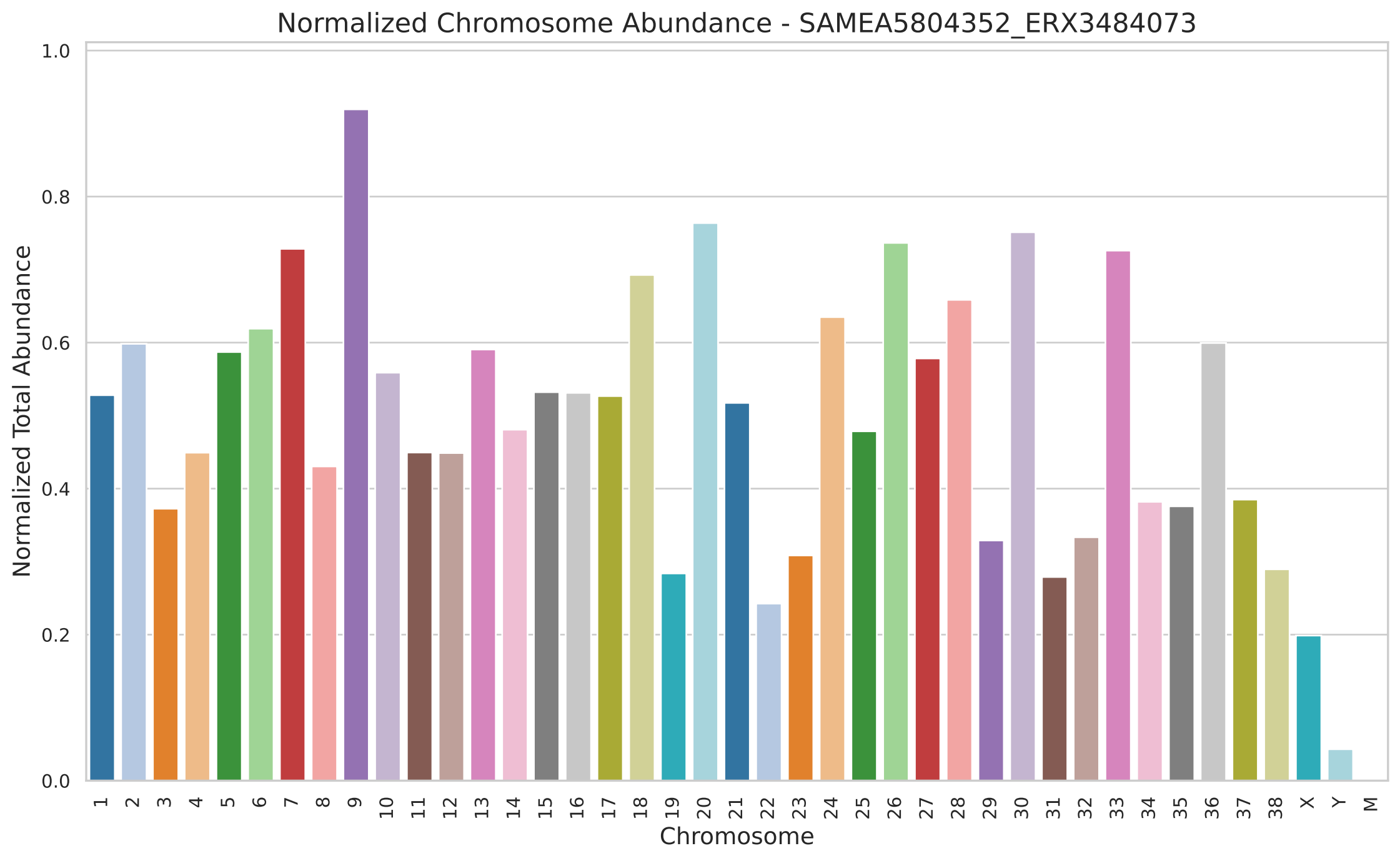

Normalized Chromosome Abundance - SAMEA5804669_ERX3484091
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

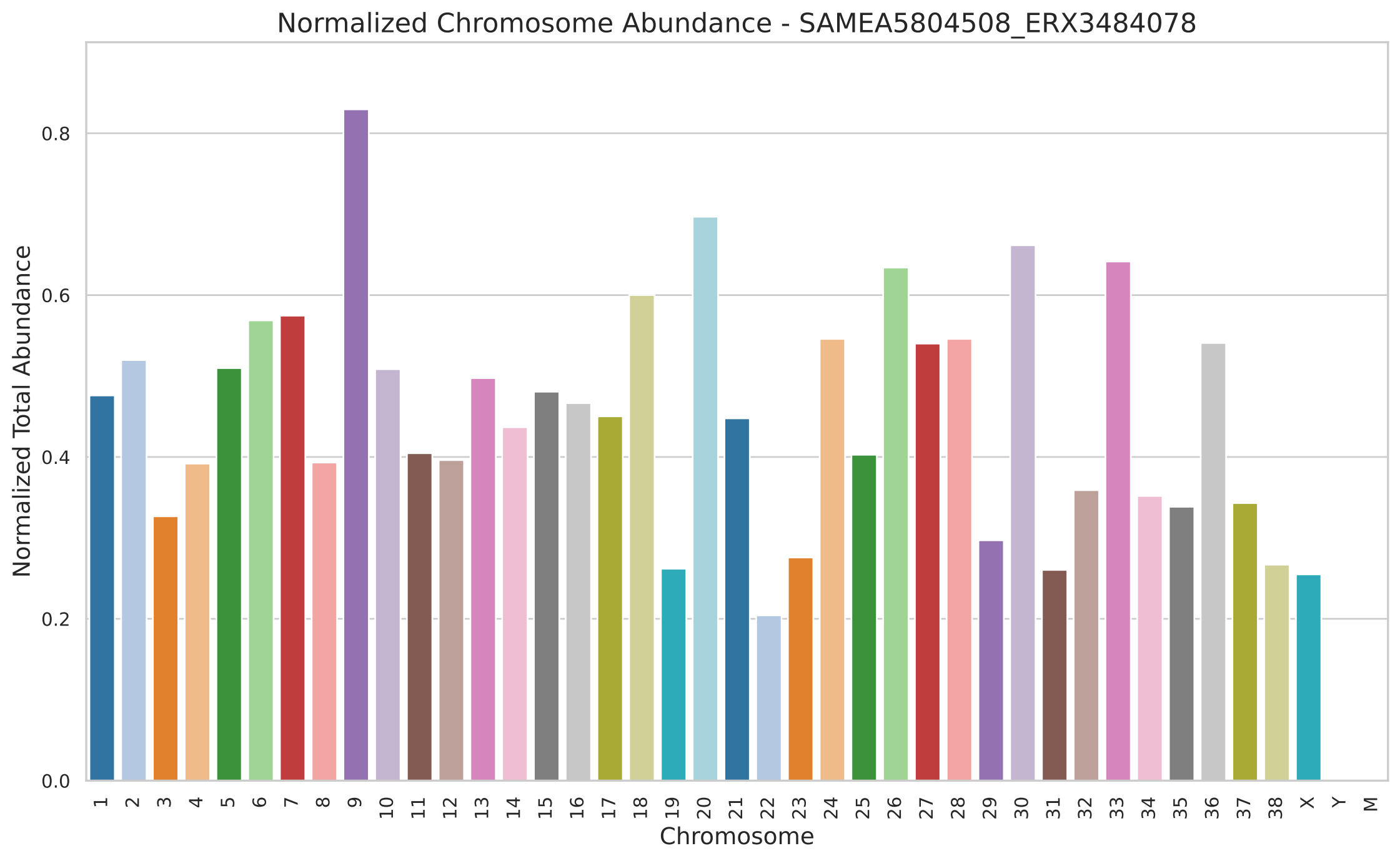

Normalized Chromosome Abundance - SAMEA5804664_ERX3484089
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

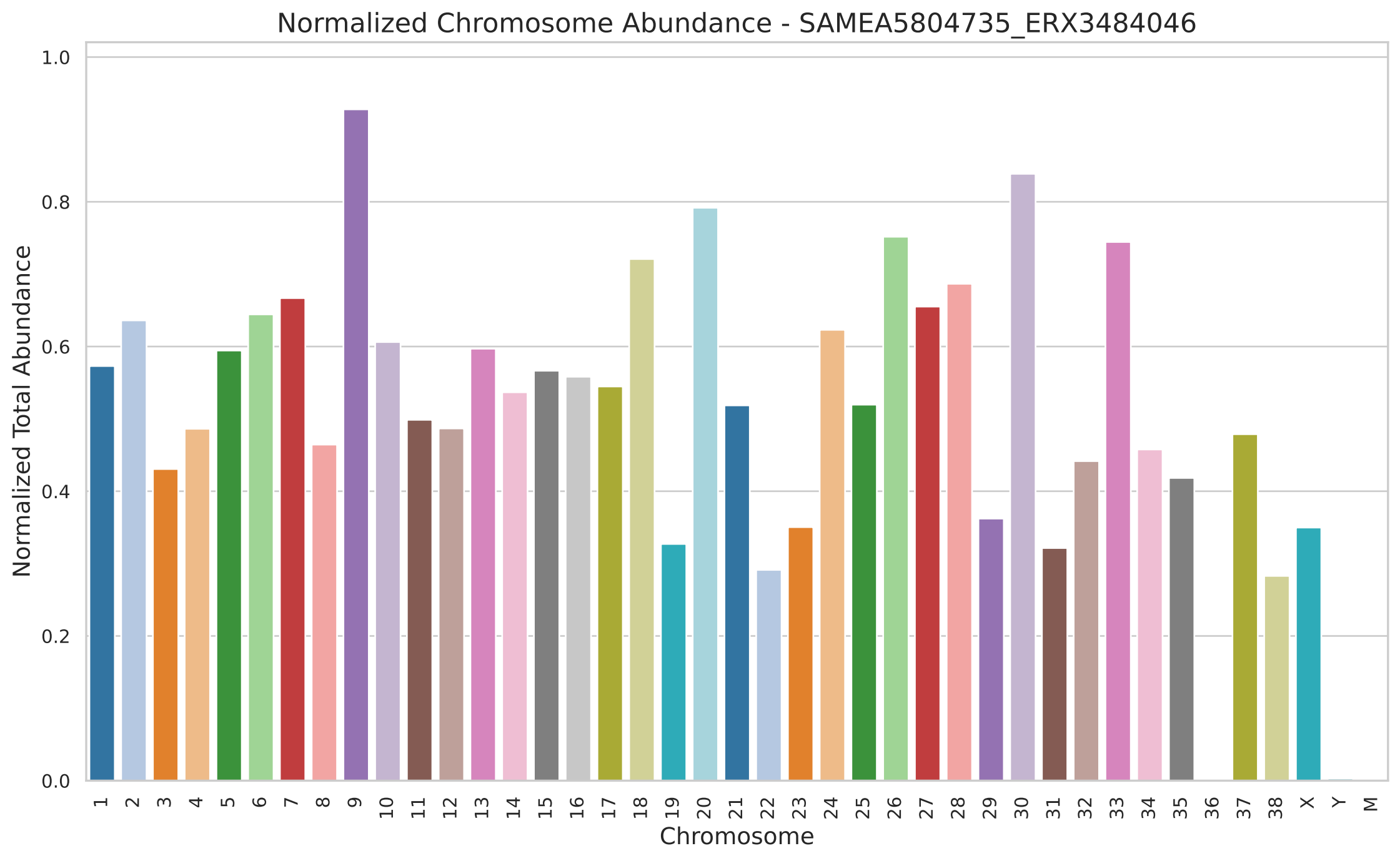

Normalized Chromosome Abundance - SAMEA5804814_ERX3484120
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

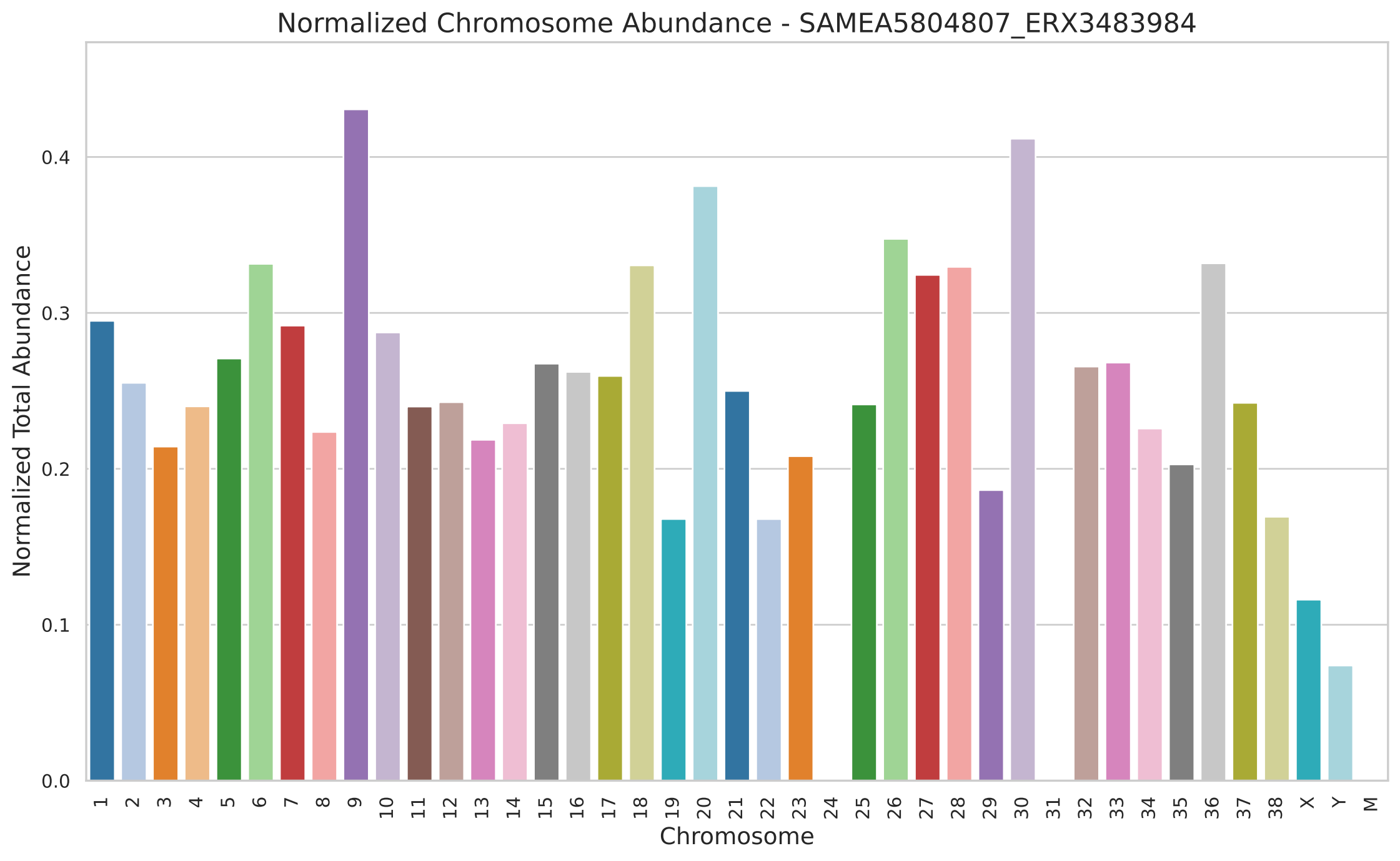

Normalized Chromosome Abundance - SAMEA5804336_ERX3484069
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

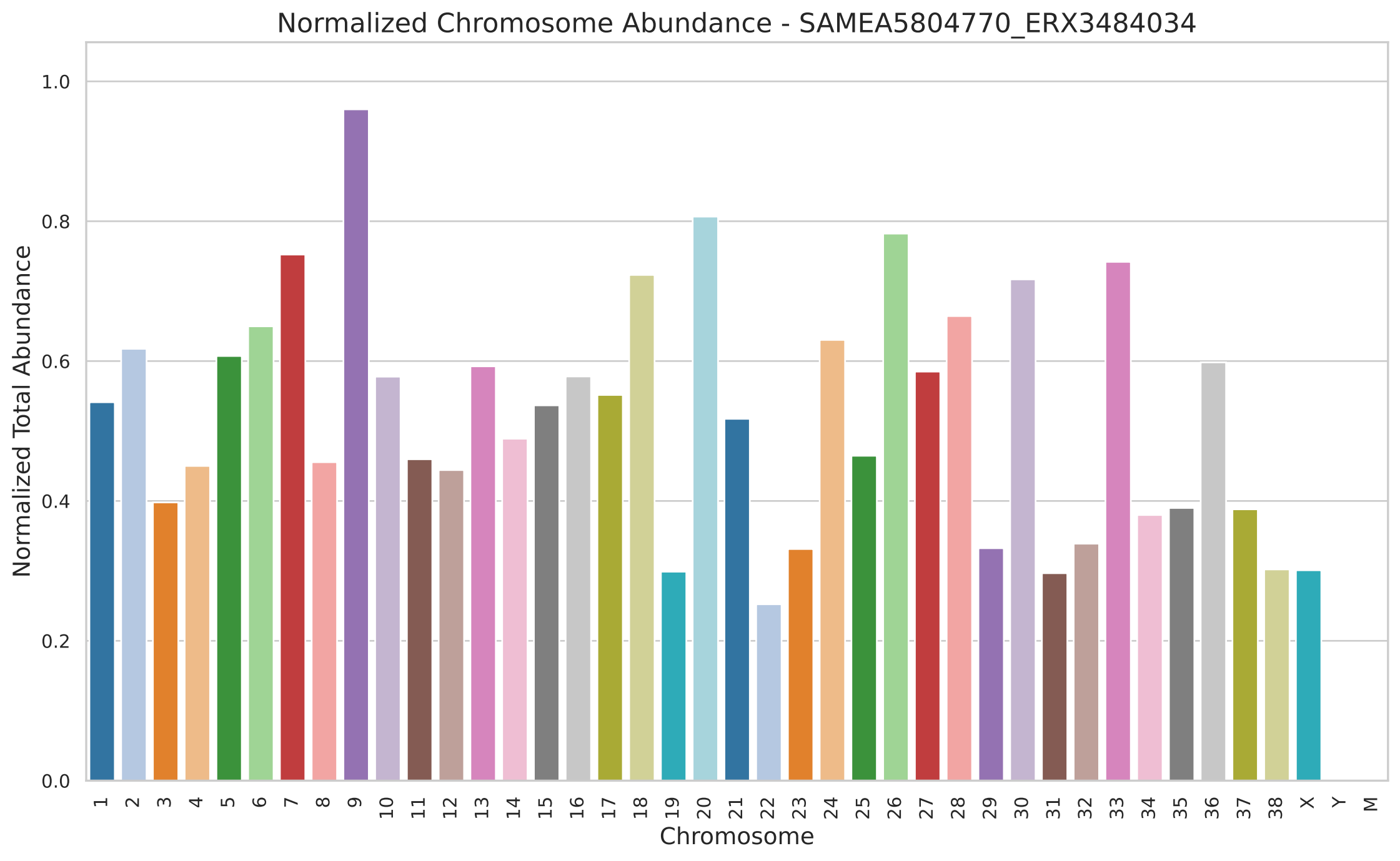

Normalized Chromosome Abundance - SAMEA5804738_ERX3484047
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

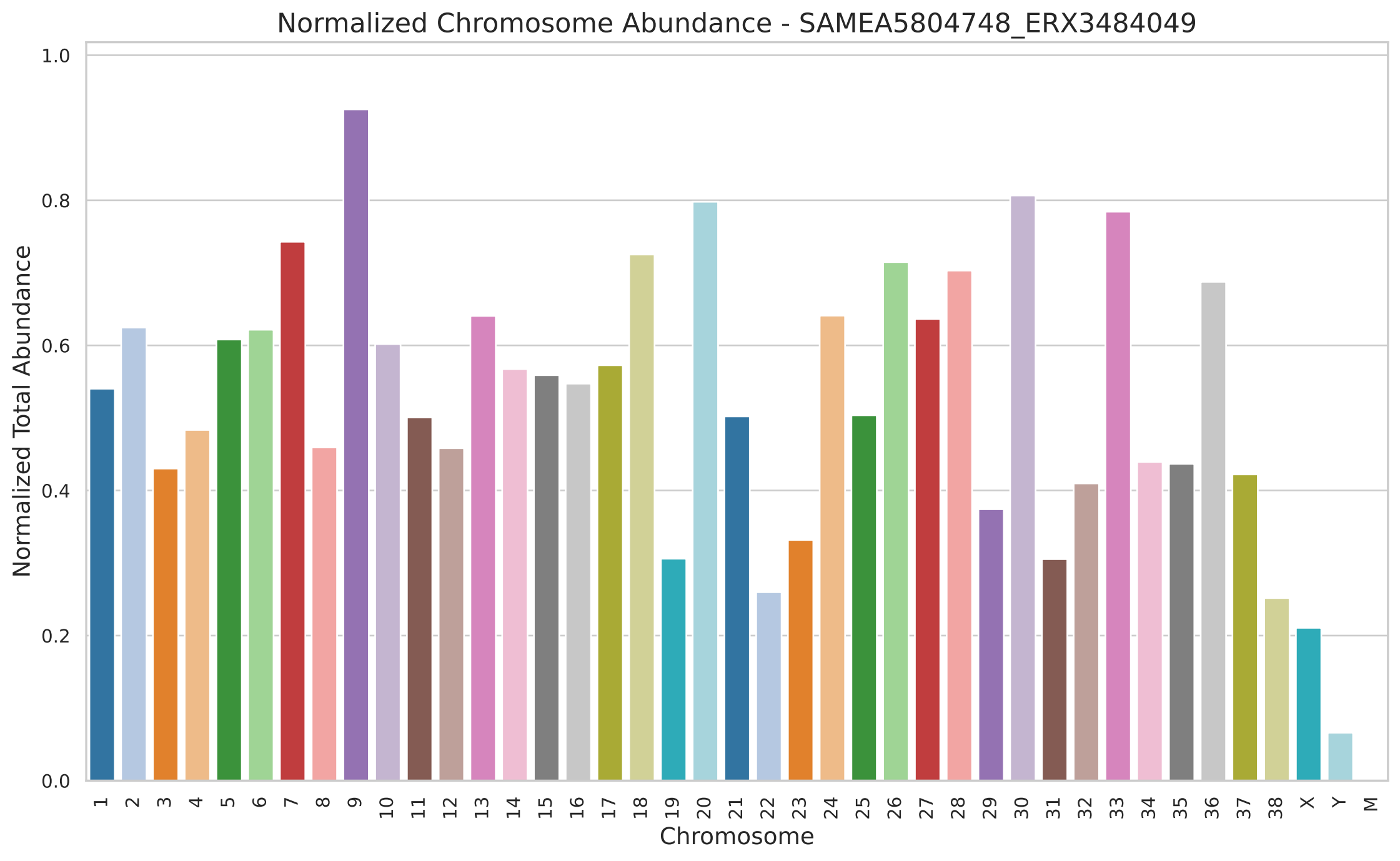

Normalized Chromosome Abundance - SAMEA5804352_ERX3484073
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

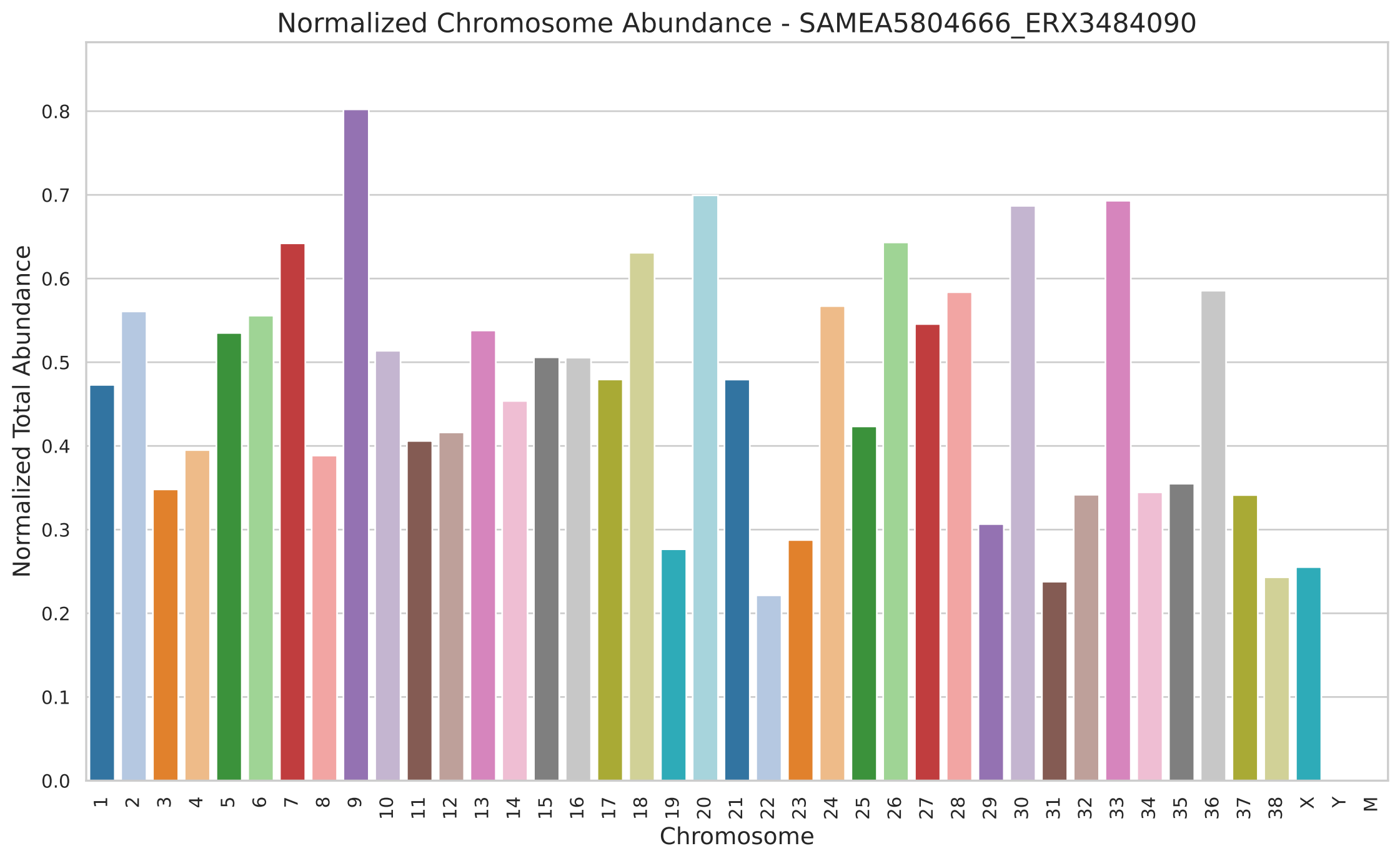

Normalized Chromosome Abundance - SAMEA5804508_ERX3484078
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

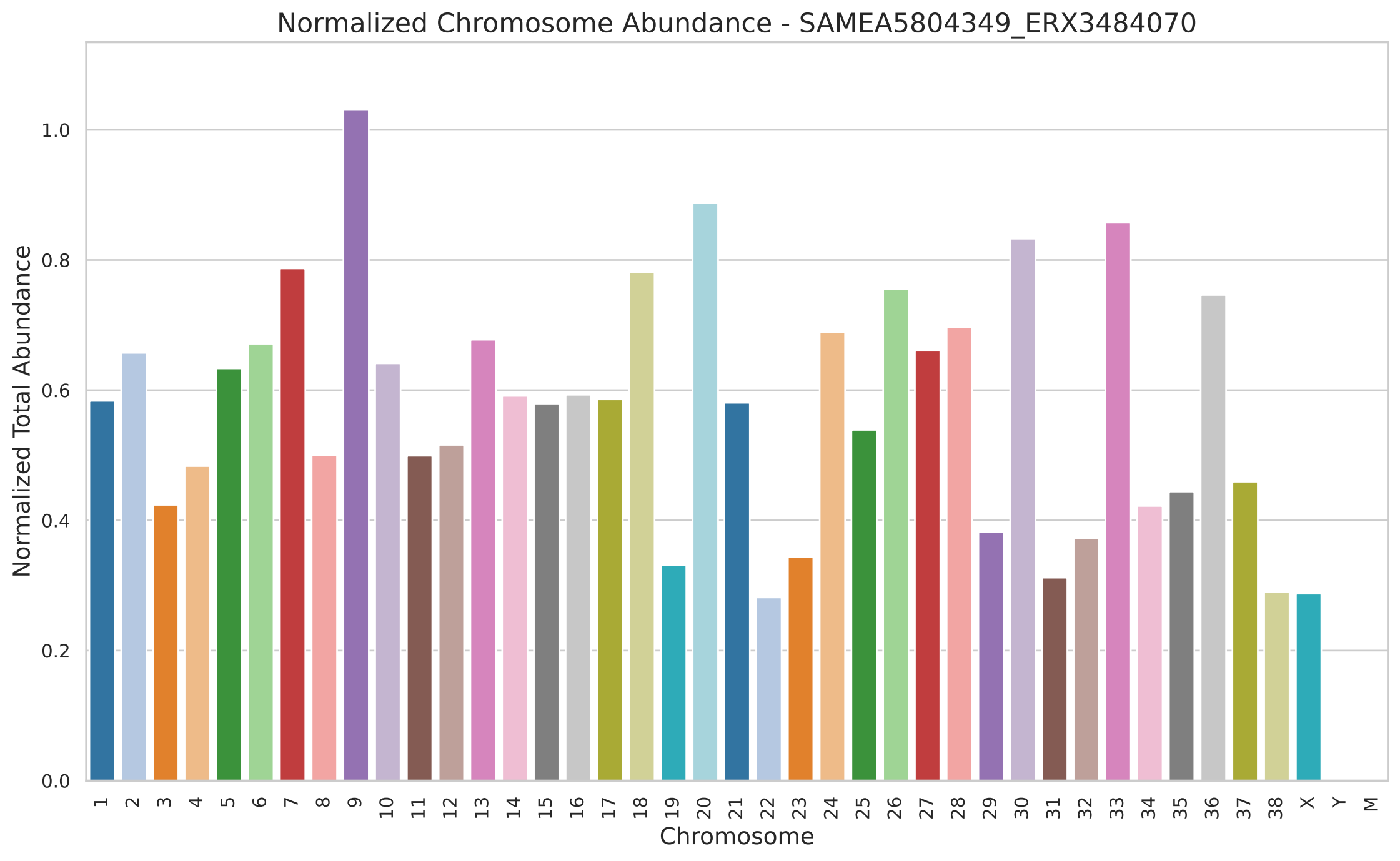

Normalized Chromosome Abundance - SAMEA5804735_ERX3484046
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

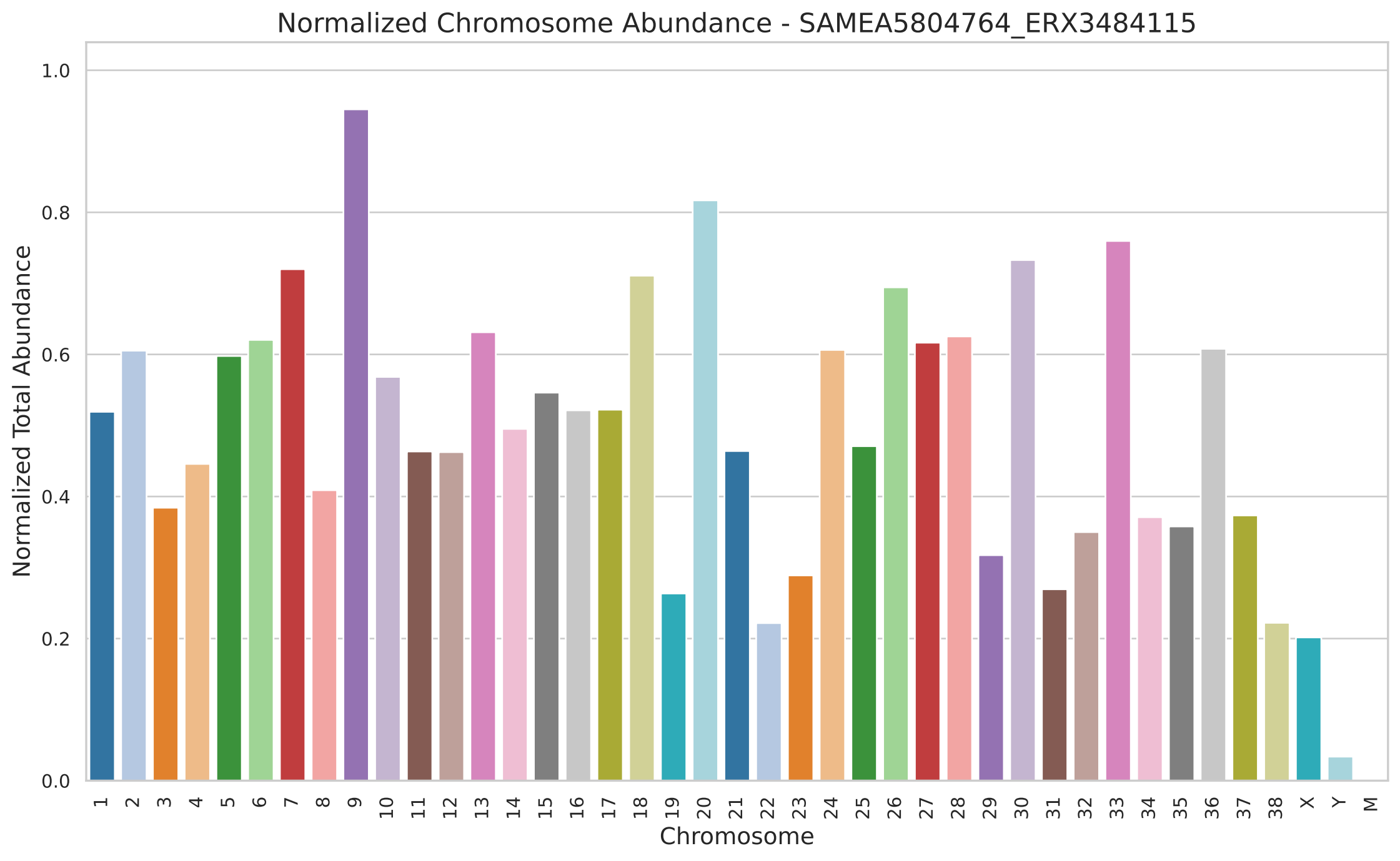

Normalized Chromosome Abundance - SAMEA5804807_ERX3483984
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

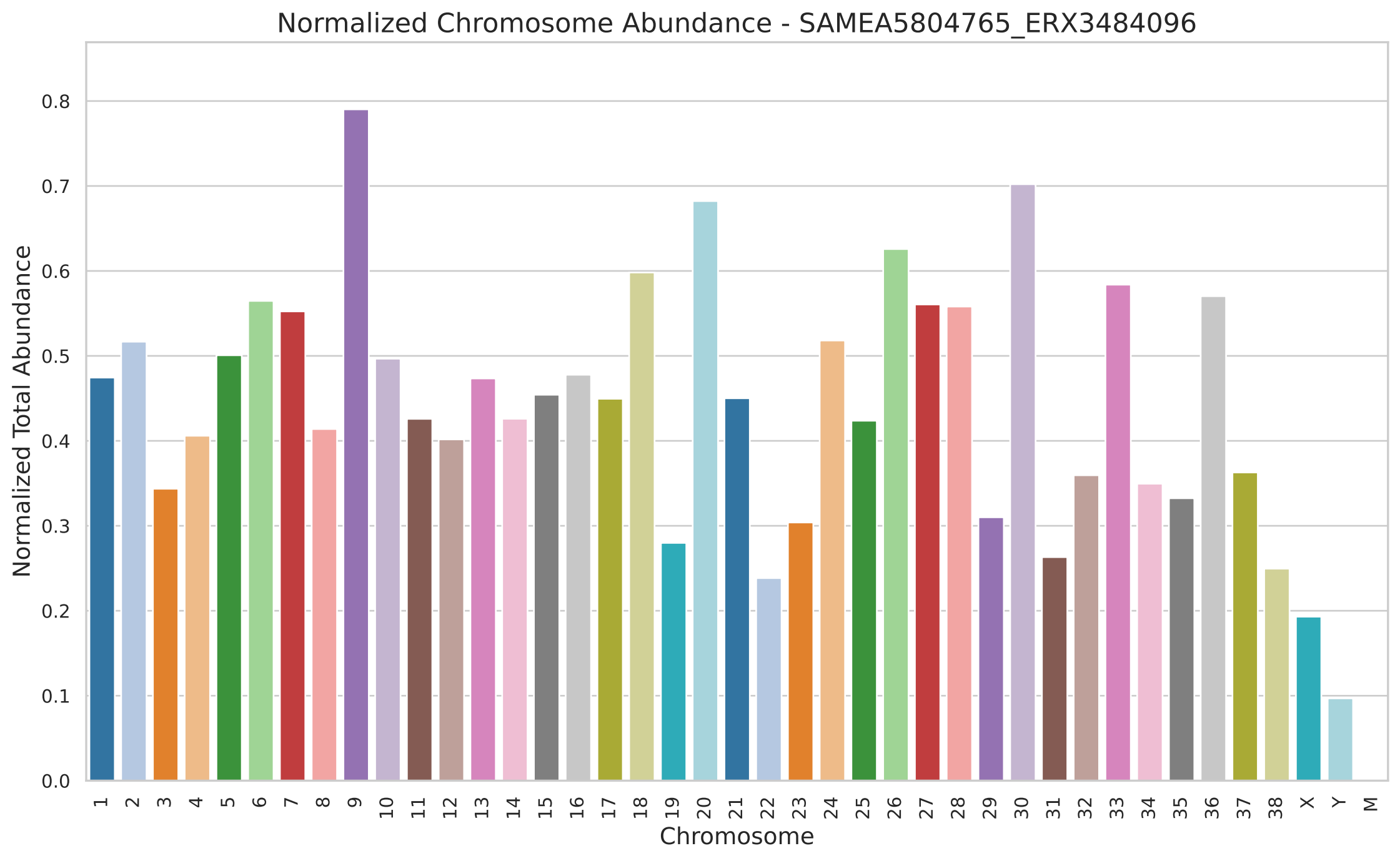

Normalized Chromosome Abundance - SAMEA5804770_ERX3484034
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

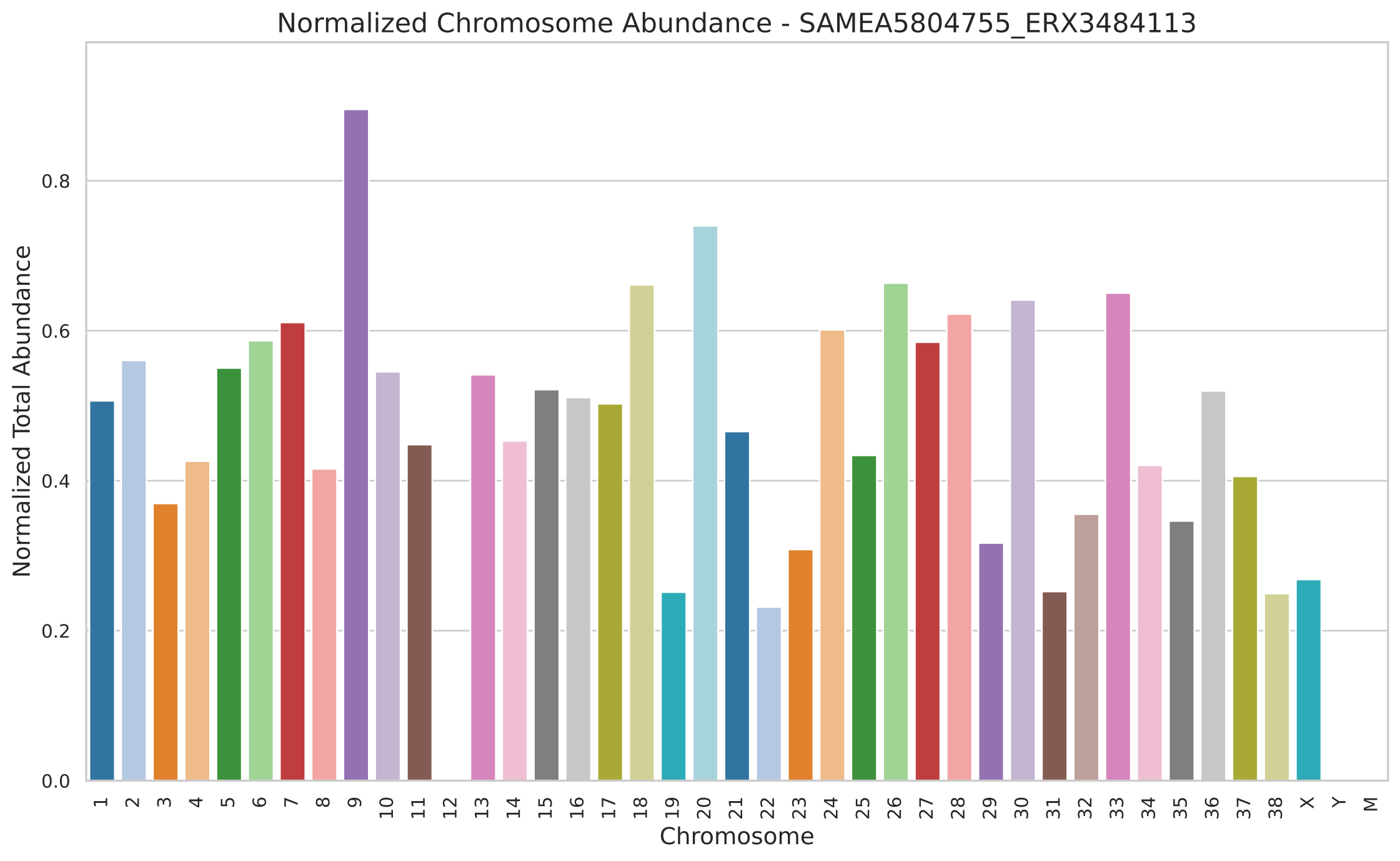

Normalized Chromosome Abundance - SAMEA5804748_ERX3484049
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

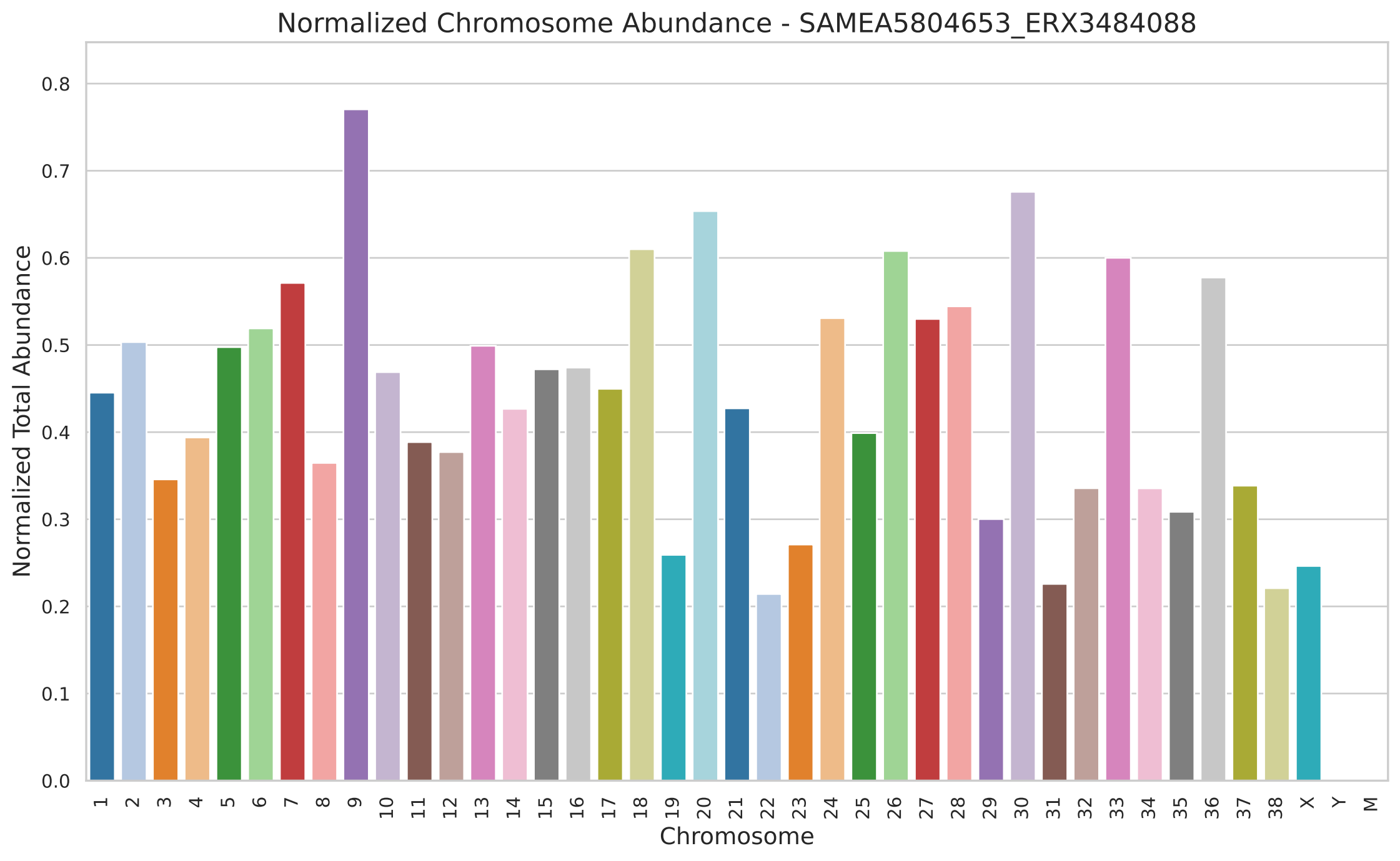

Normalized Chromosome Abundance - SAMEA5804666_ERX3484090
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

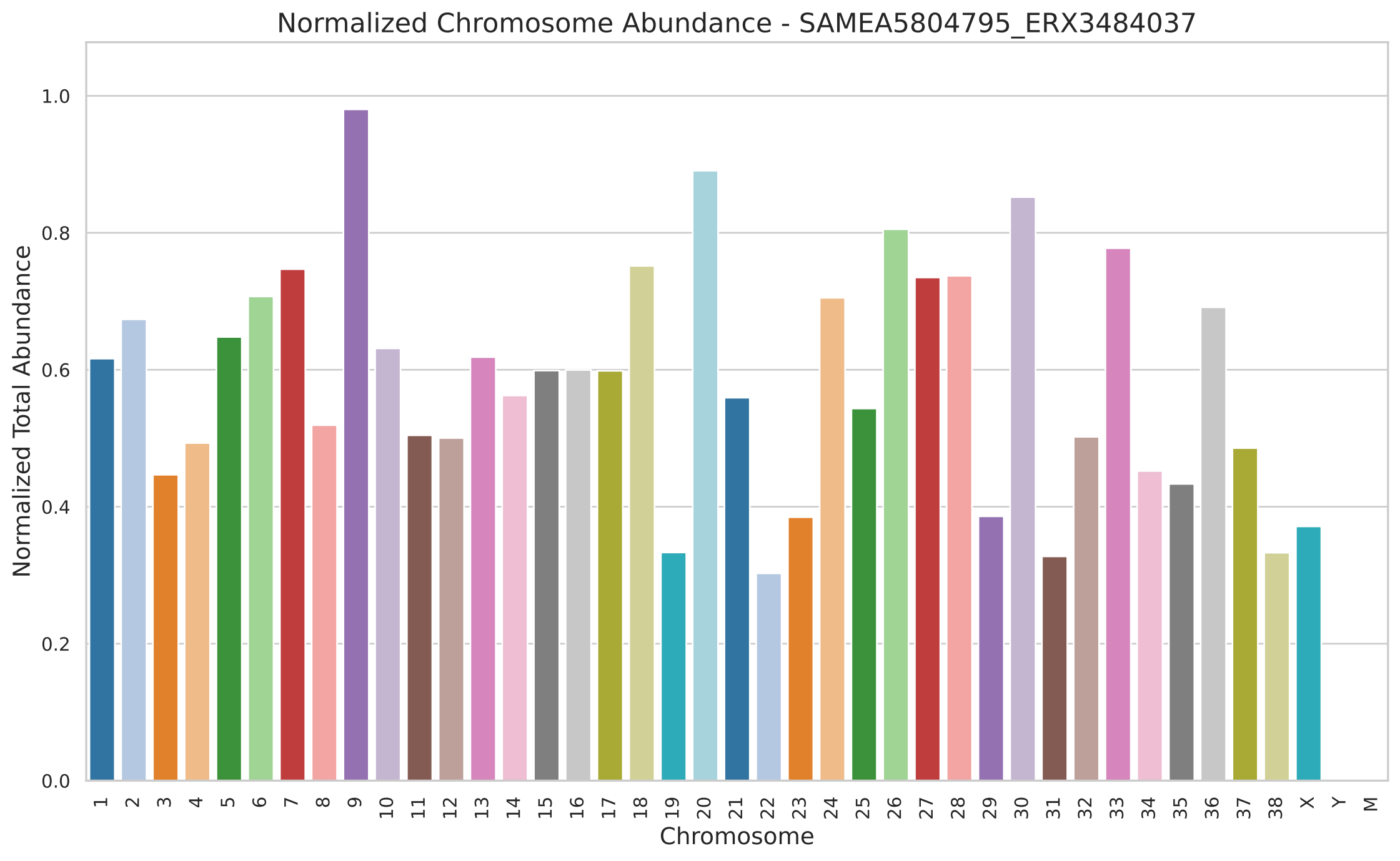

Normalized Chromosome Abundance - SAMEA5804349_ERX3484070
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

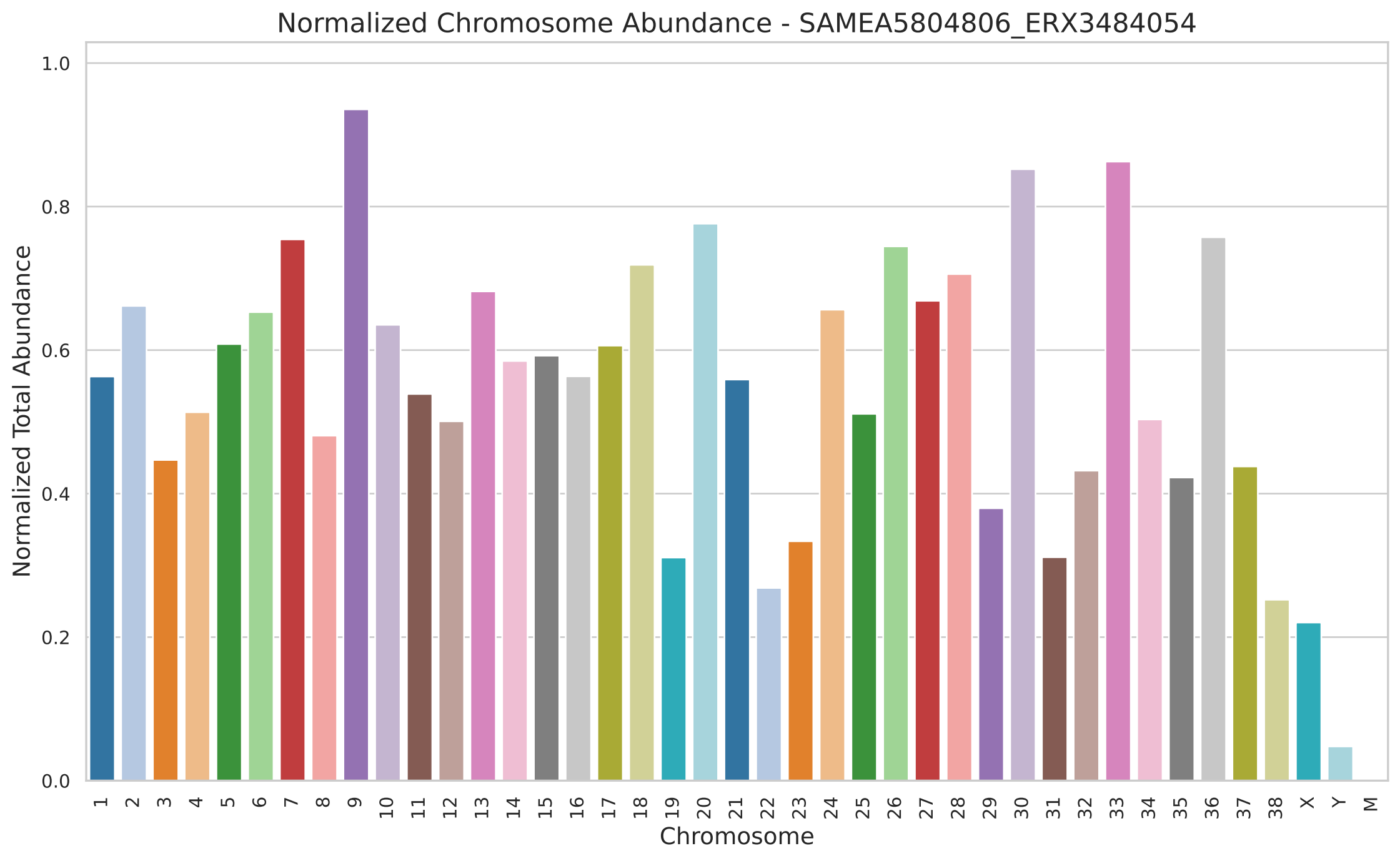

Normalized Chromosome Abundance - SAMEA5804764_ERX3484115
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

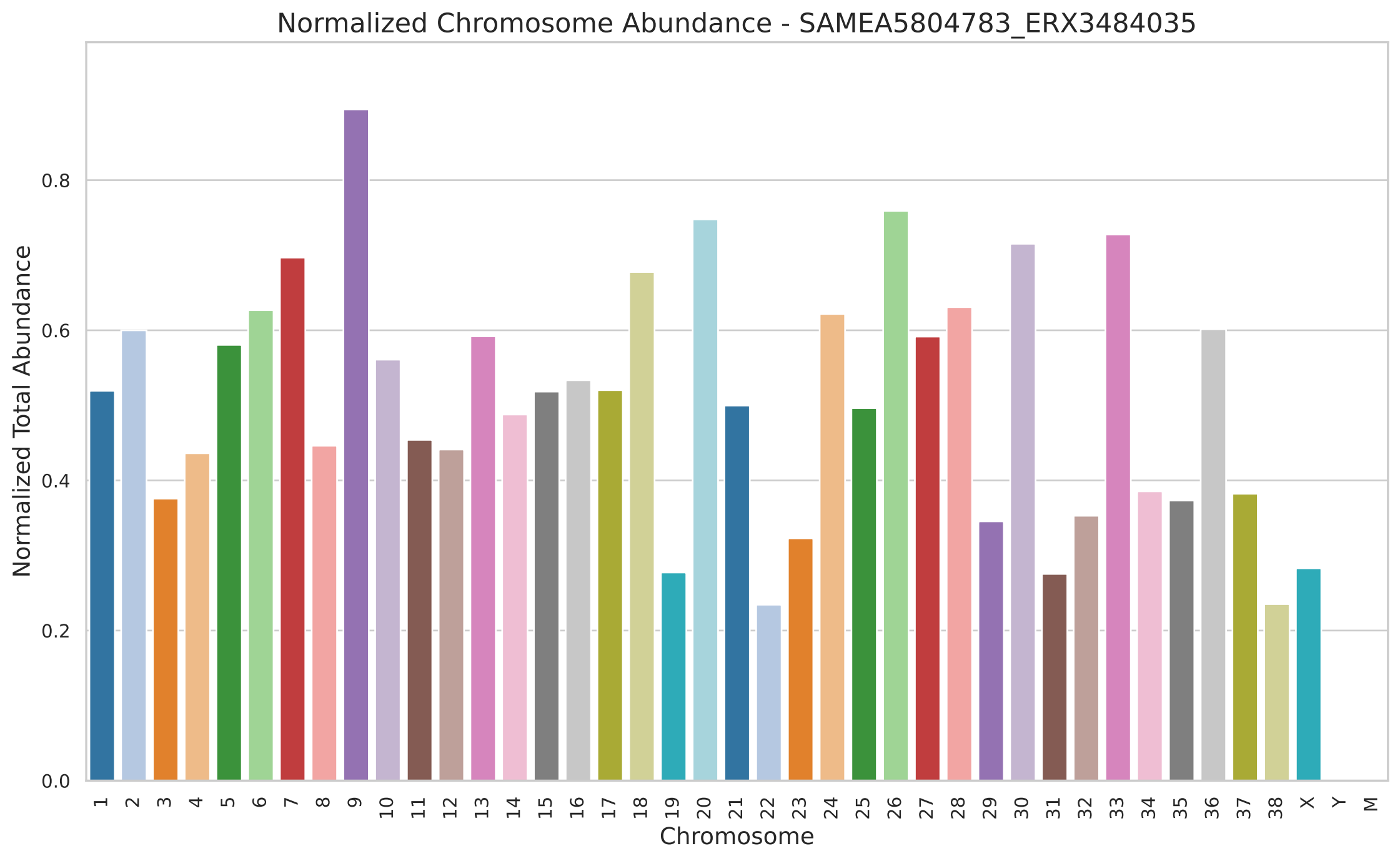

Normalized Chromosome Abundance - SAMEA5804765_ERX3484096
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

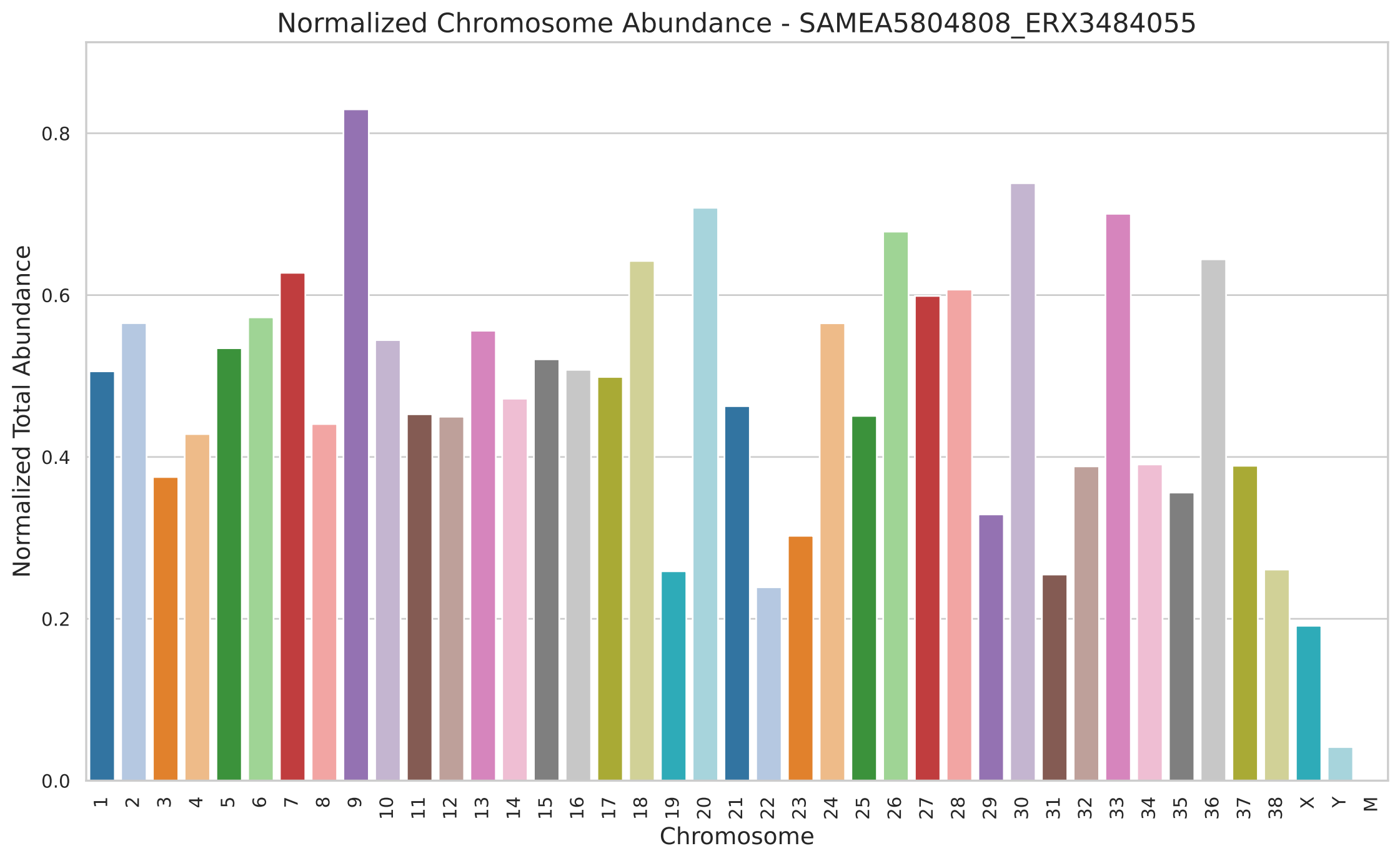

Normalized Chromosome Abundance - SAMEA5804755_ERX3484113
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

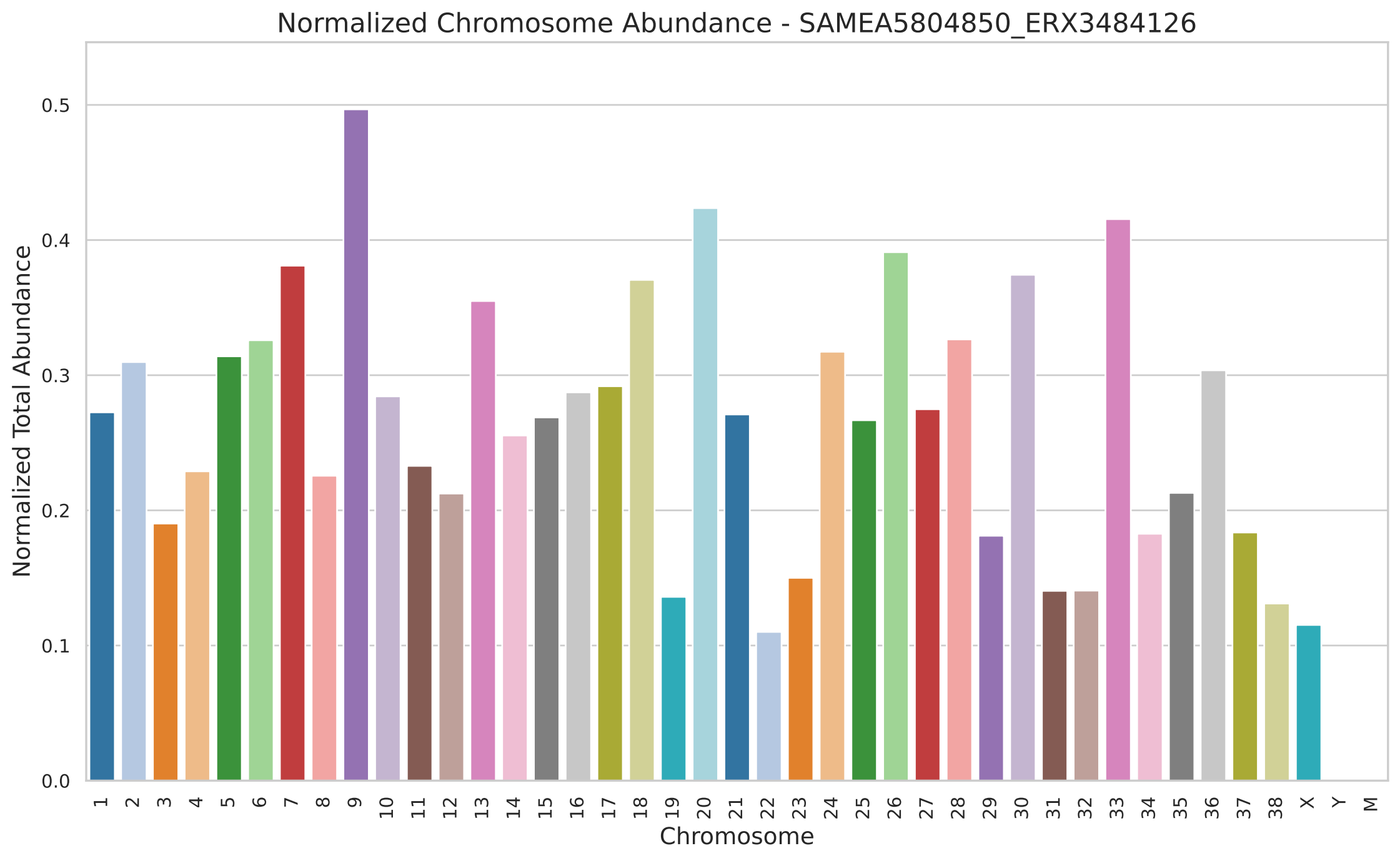

Normalized Chromosome Abundance - SAMEA5804653_ERX3484088
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

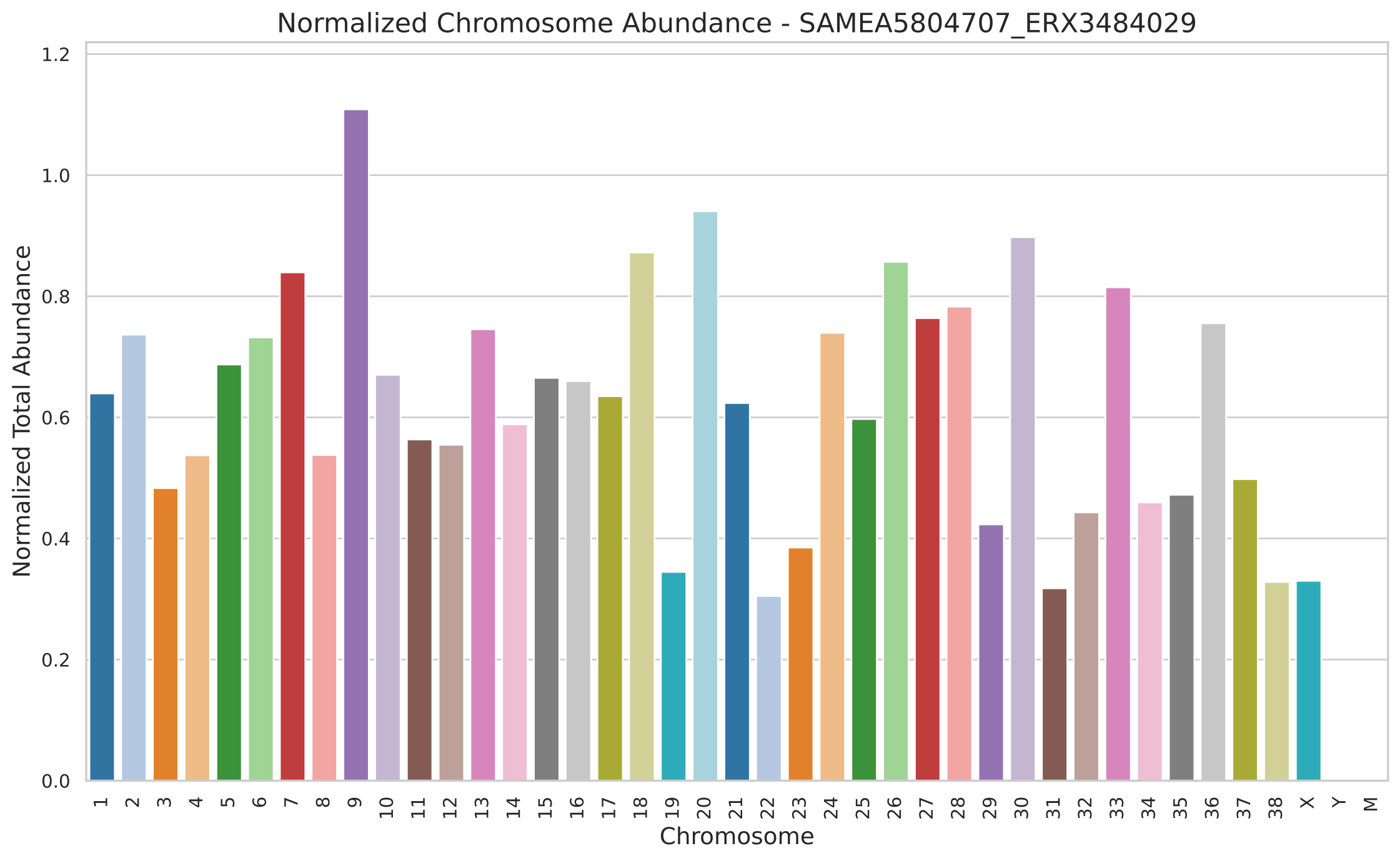

Normalized Chromosome Abundance - SAMEA5804795_ERX3484037
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

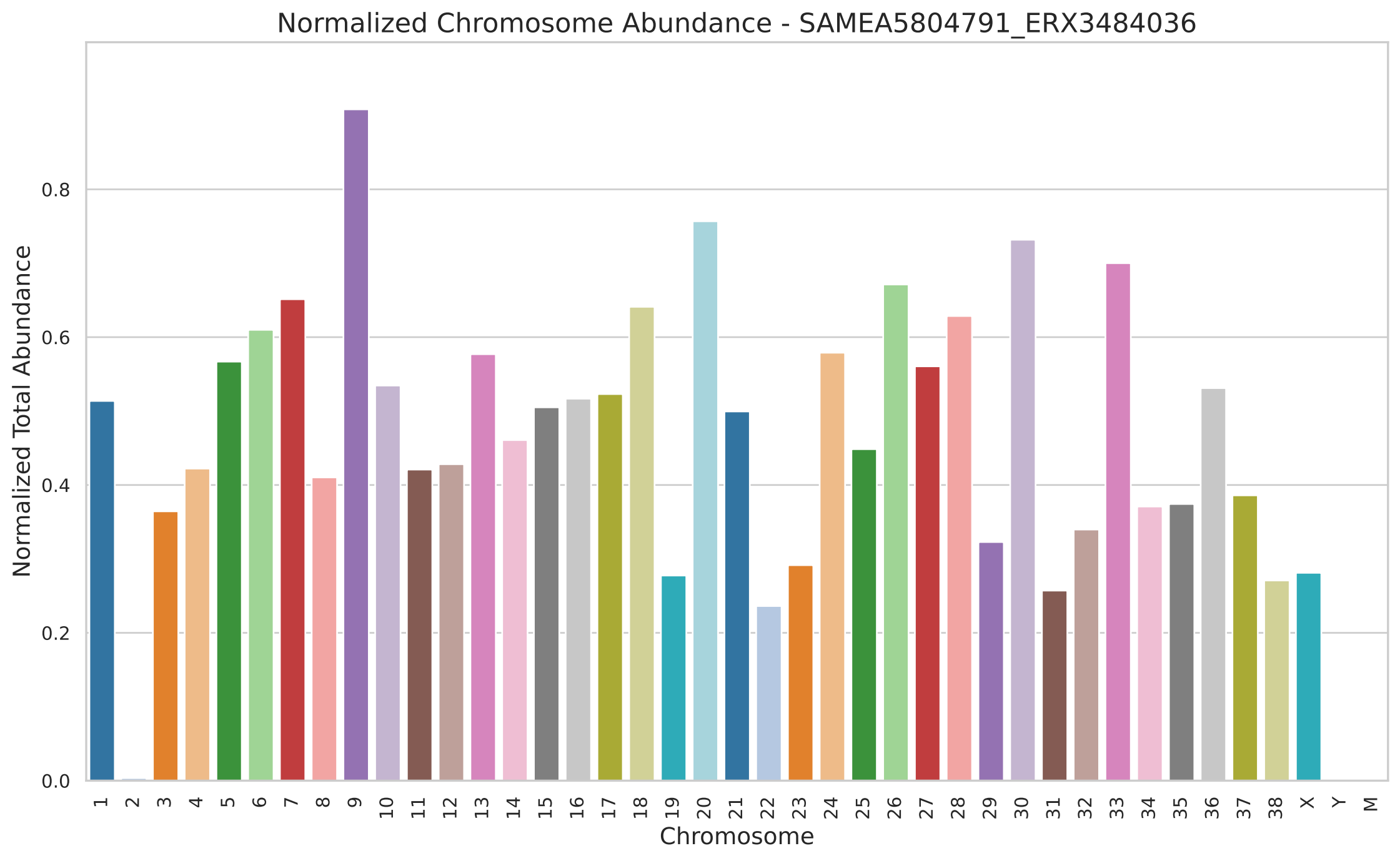

Normalized Chromosome Abundance - SAMEA5804806_ERX3484054
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

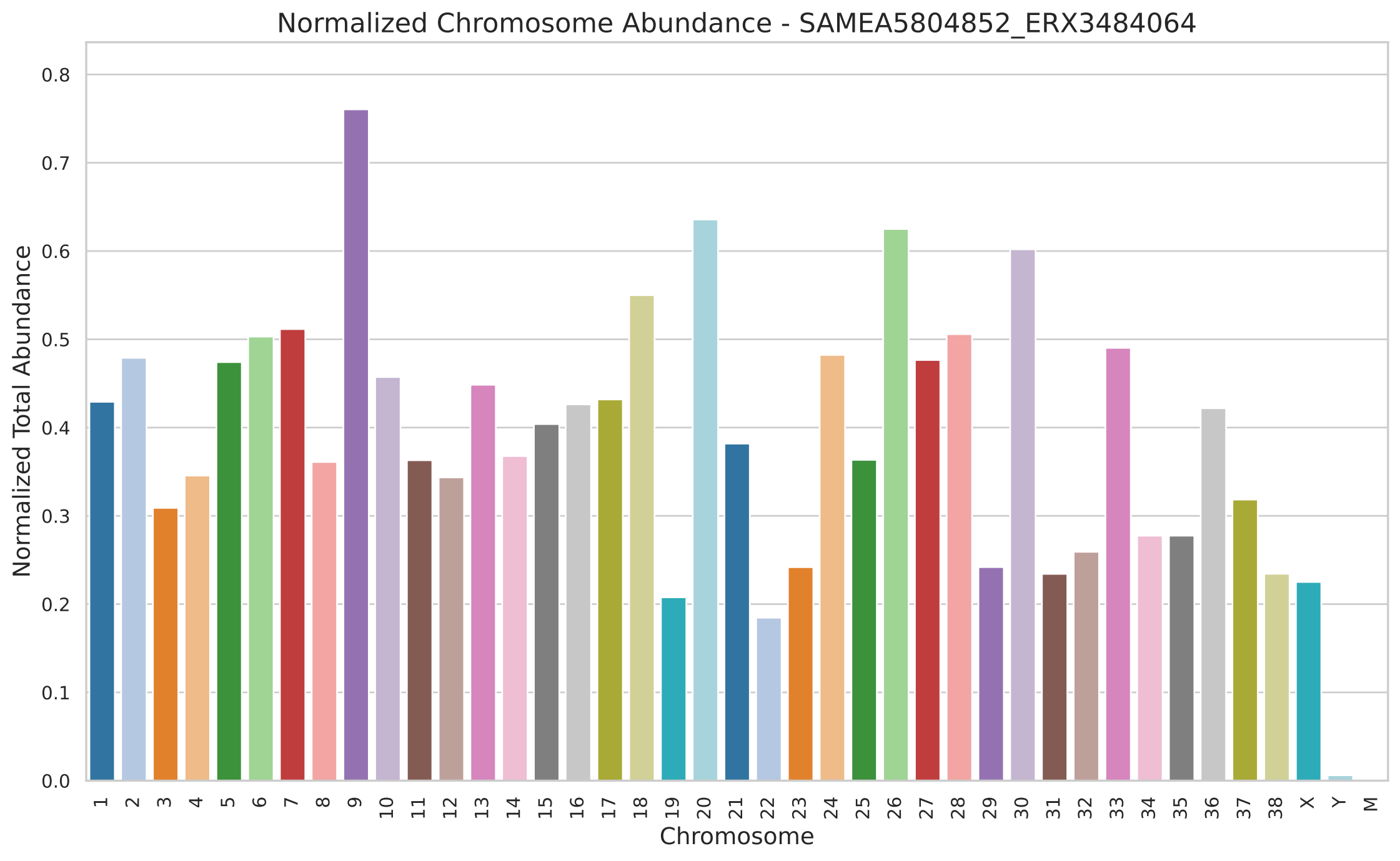

Normalized Chromosome Abundance - SAMEA5804783_ERX3484035
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

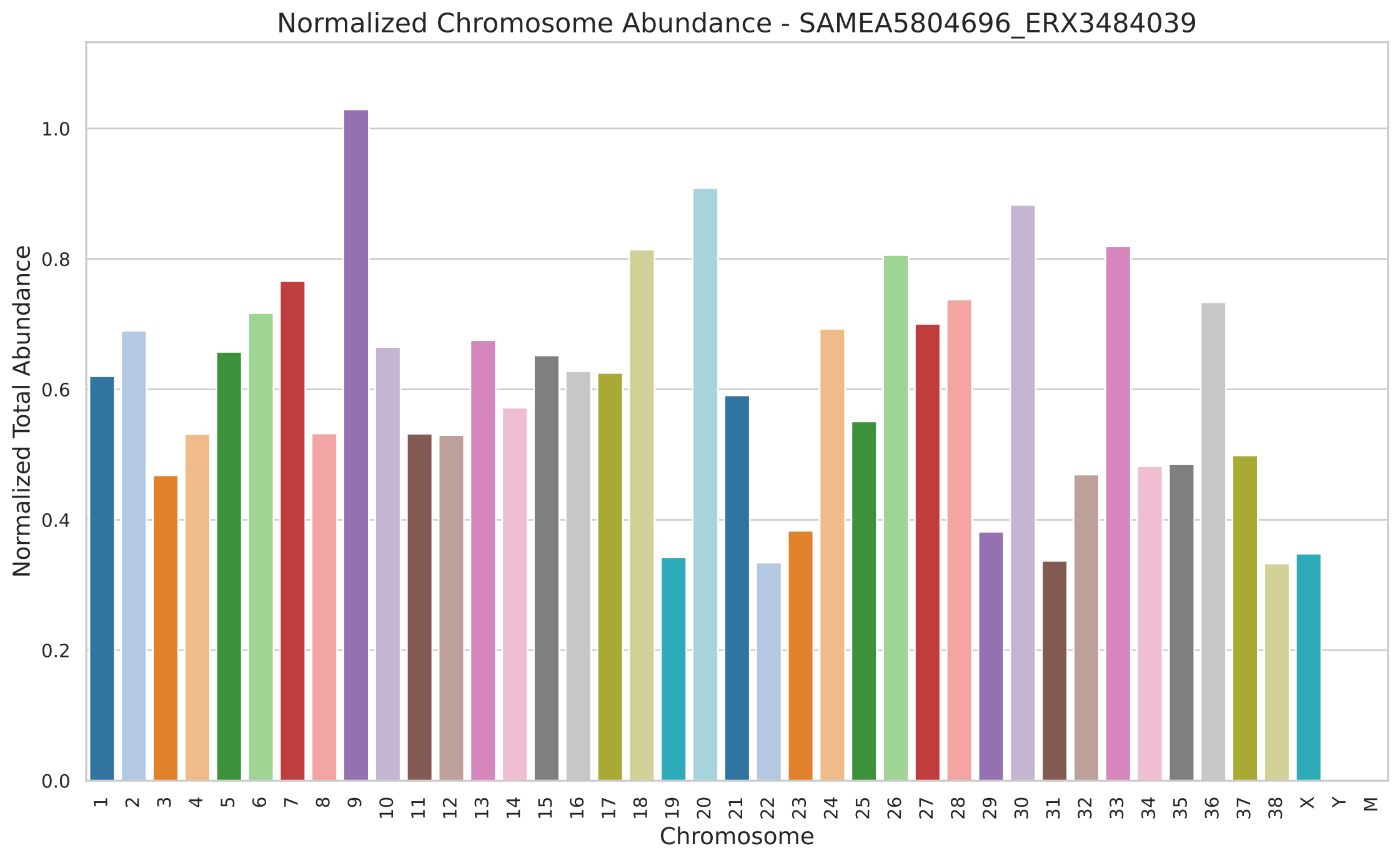

Normalized Chromosome Abundance - SAMEA5804808_ERX3484055
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

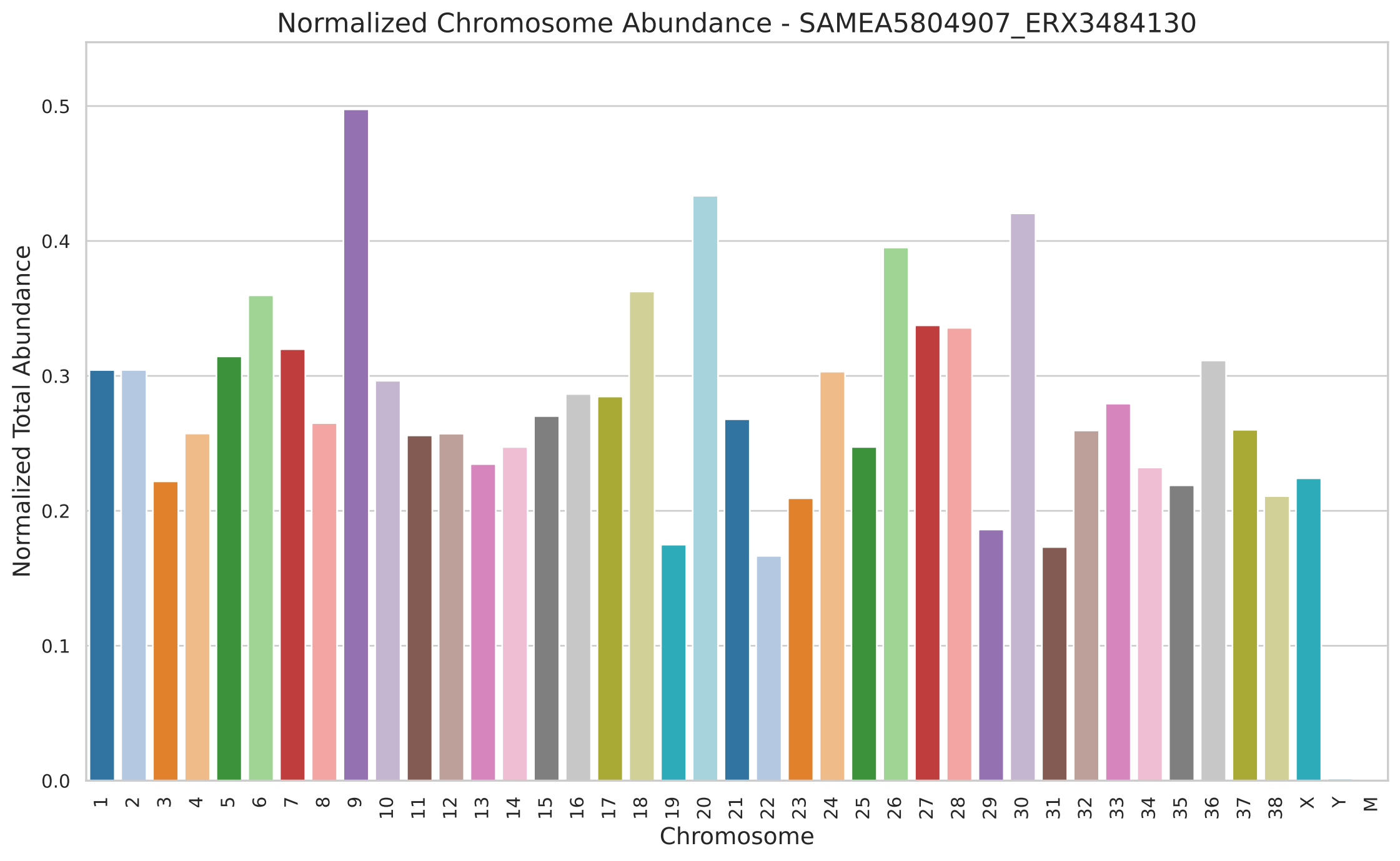

Normalized Chromosome Abundance - SAMEA5804850_ERX3484126
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

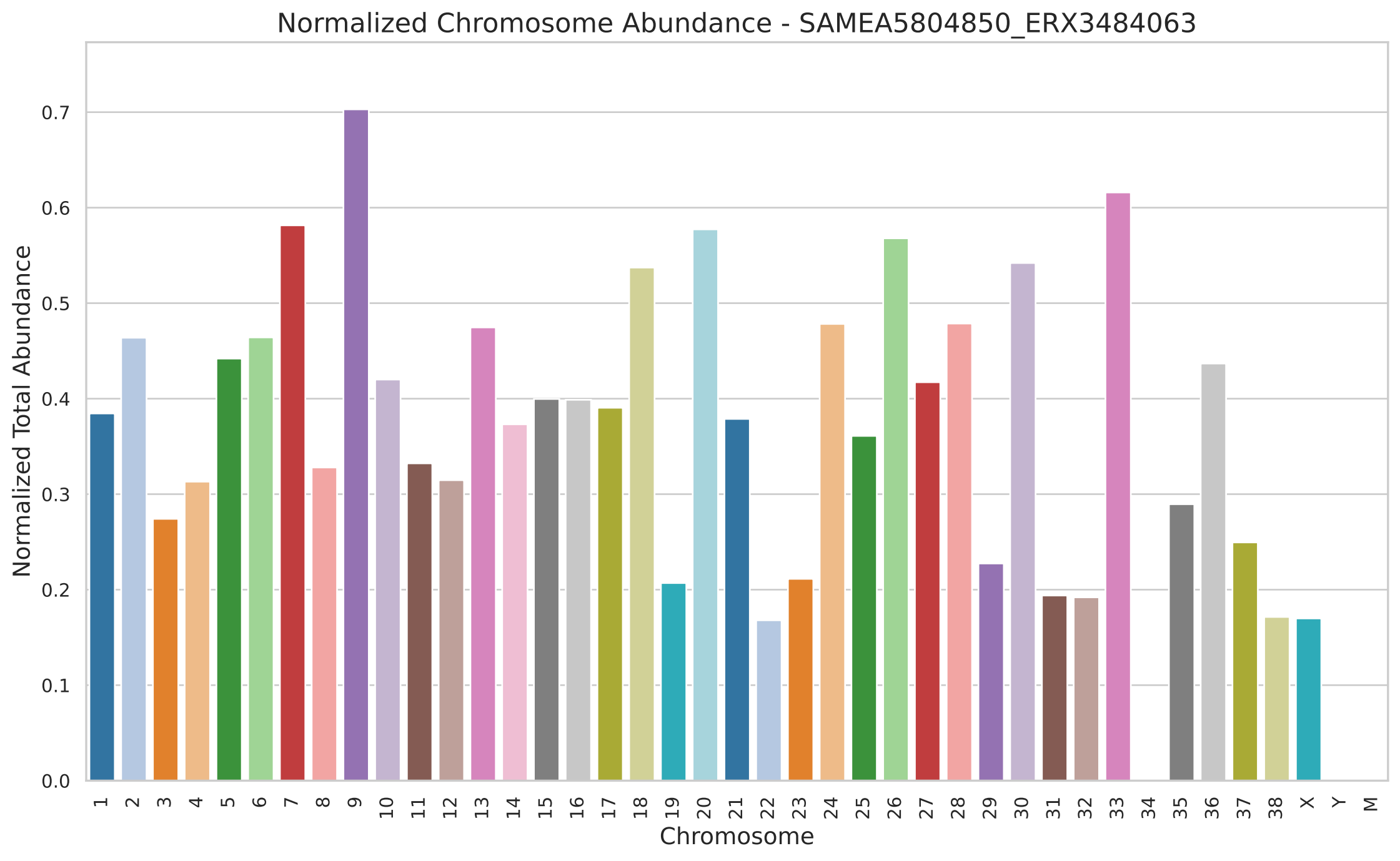

Normalized Chromosome Abundance - SAMEA5804707_ERX3484029
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

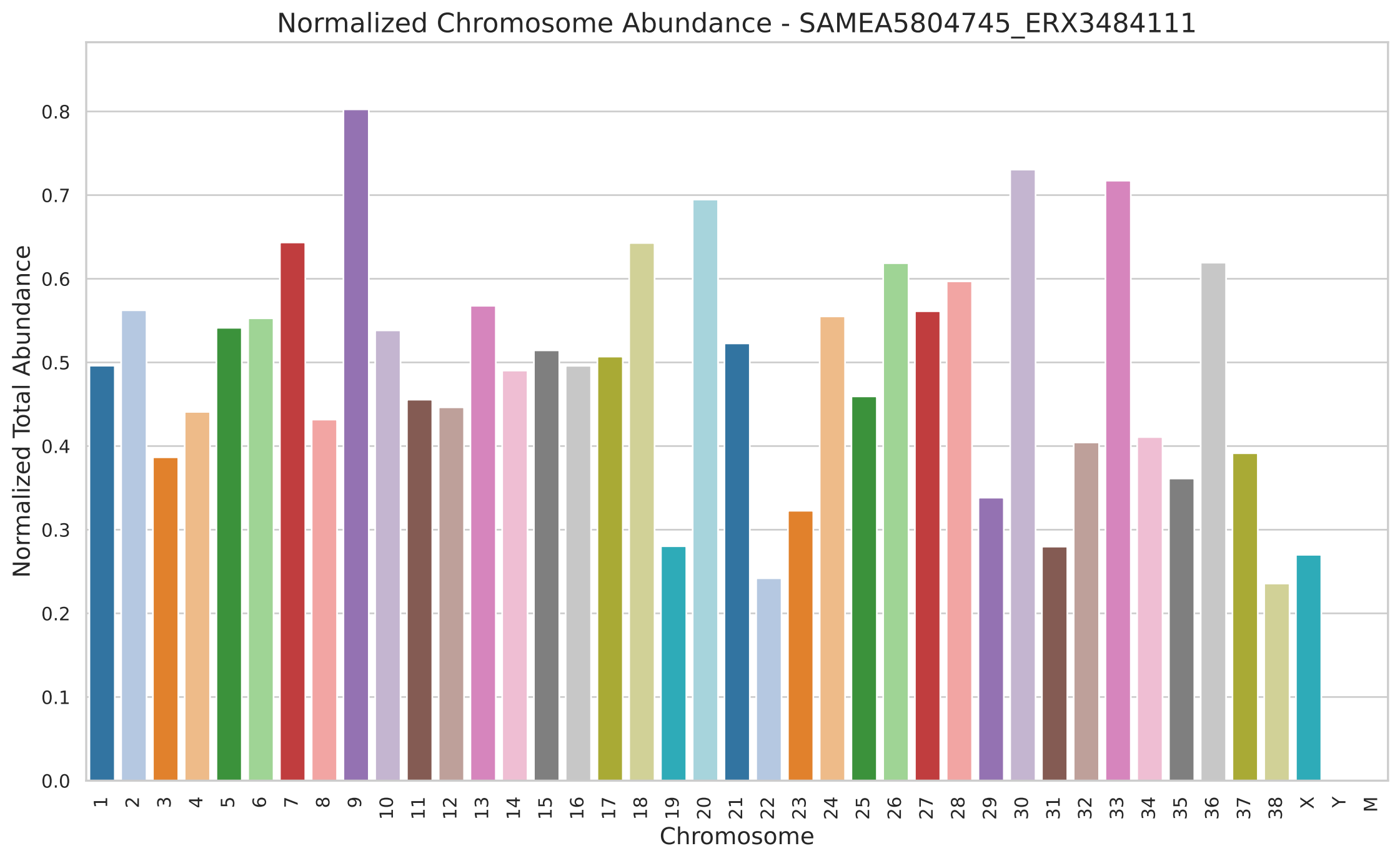

Normalized Chromosome Abundance - SAMEA5804791_ERX3484036
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

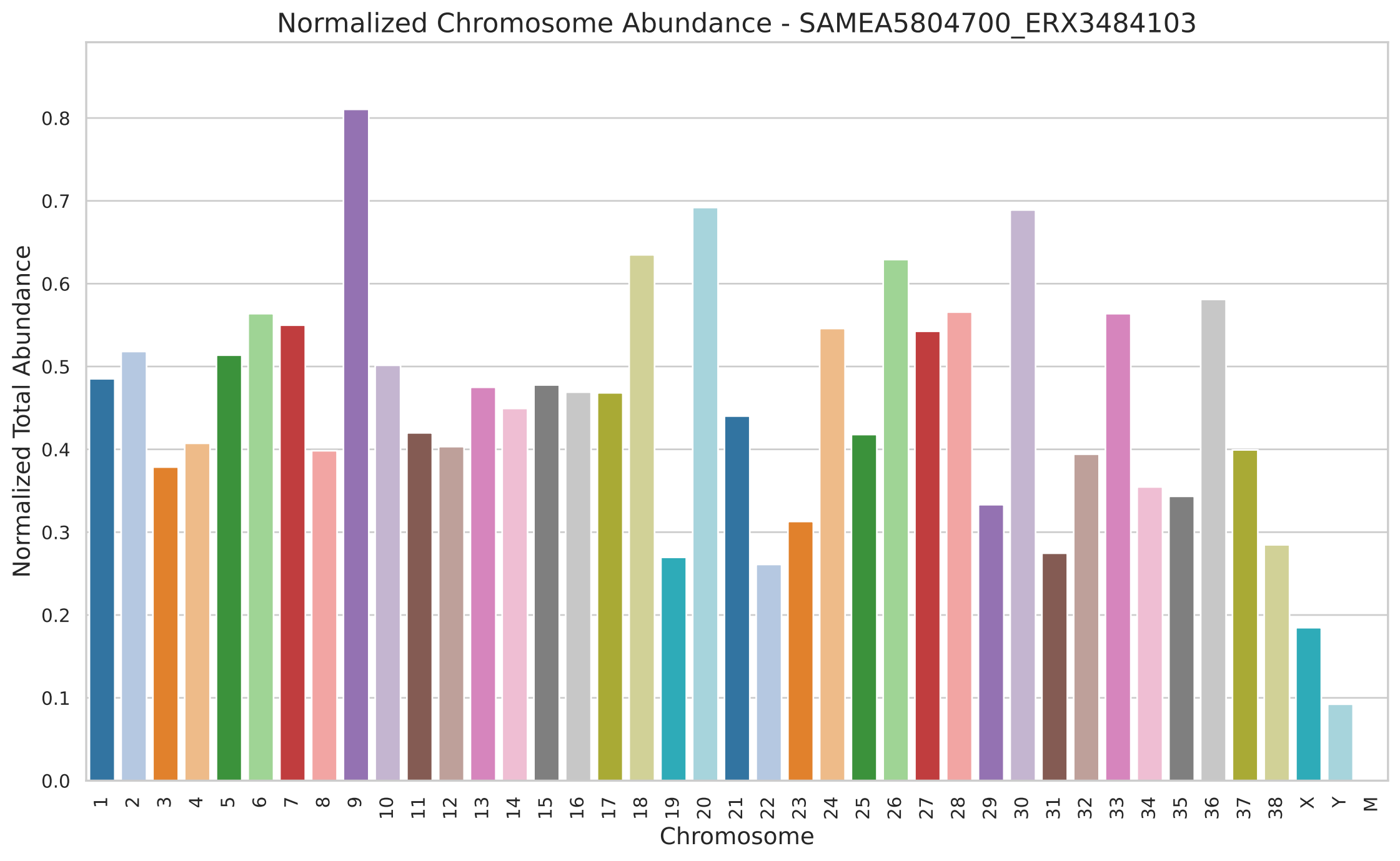

Normalized Chromosome Abundance - SAMEA5804852_ERX3484064
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

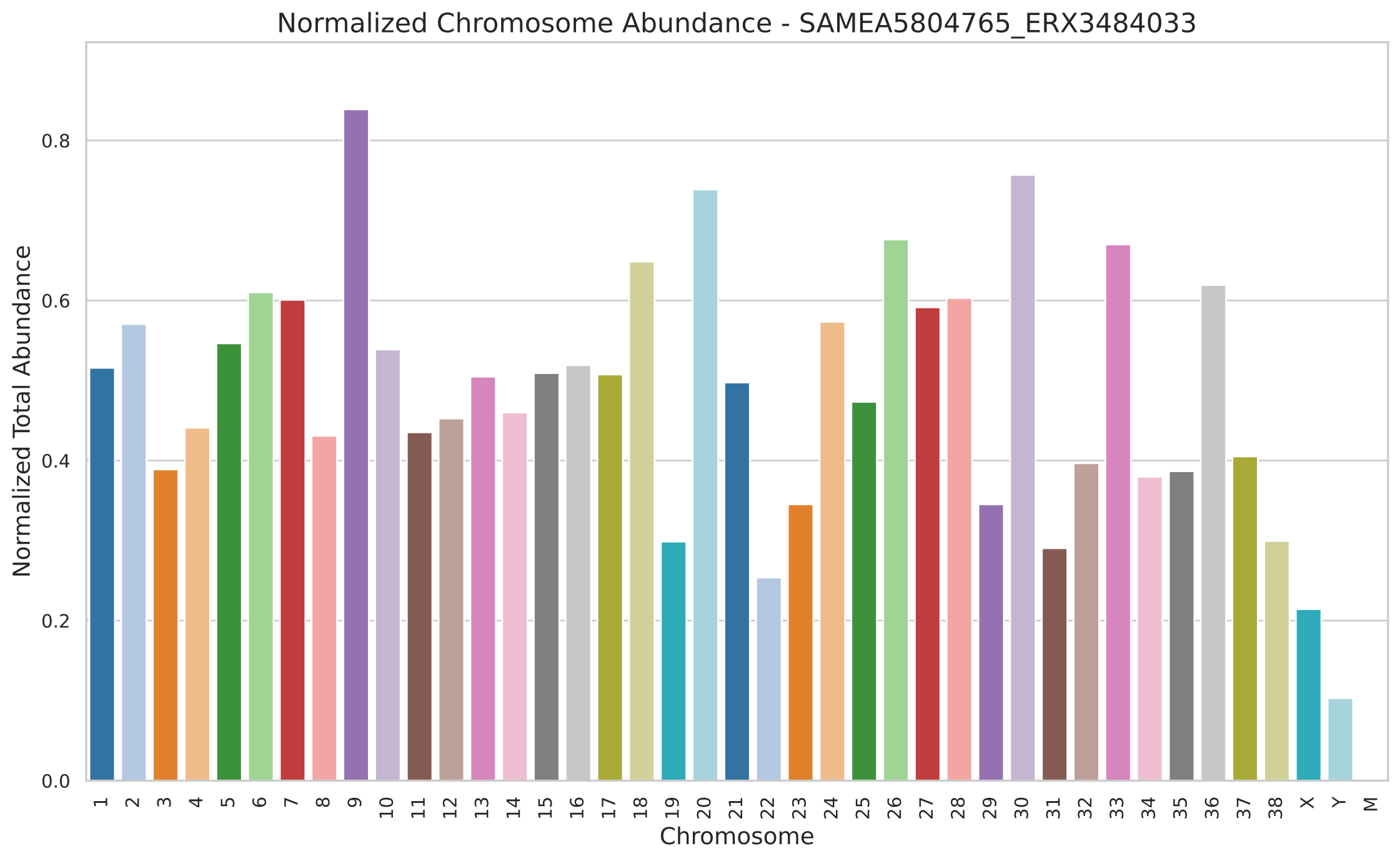

Normalized Chromosome Abundance - SAMEA5804696_ERX3484039
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

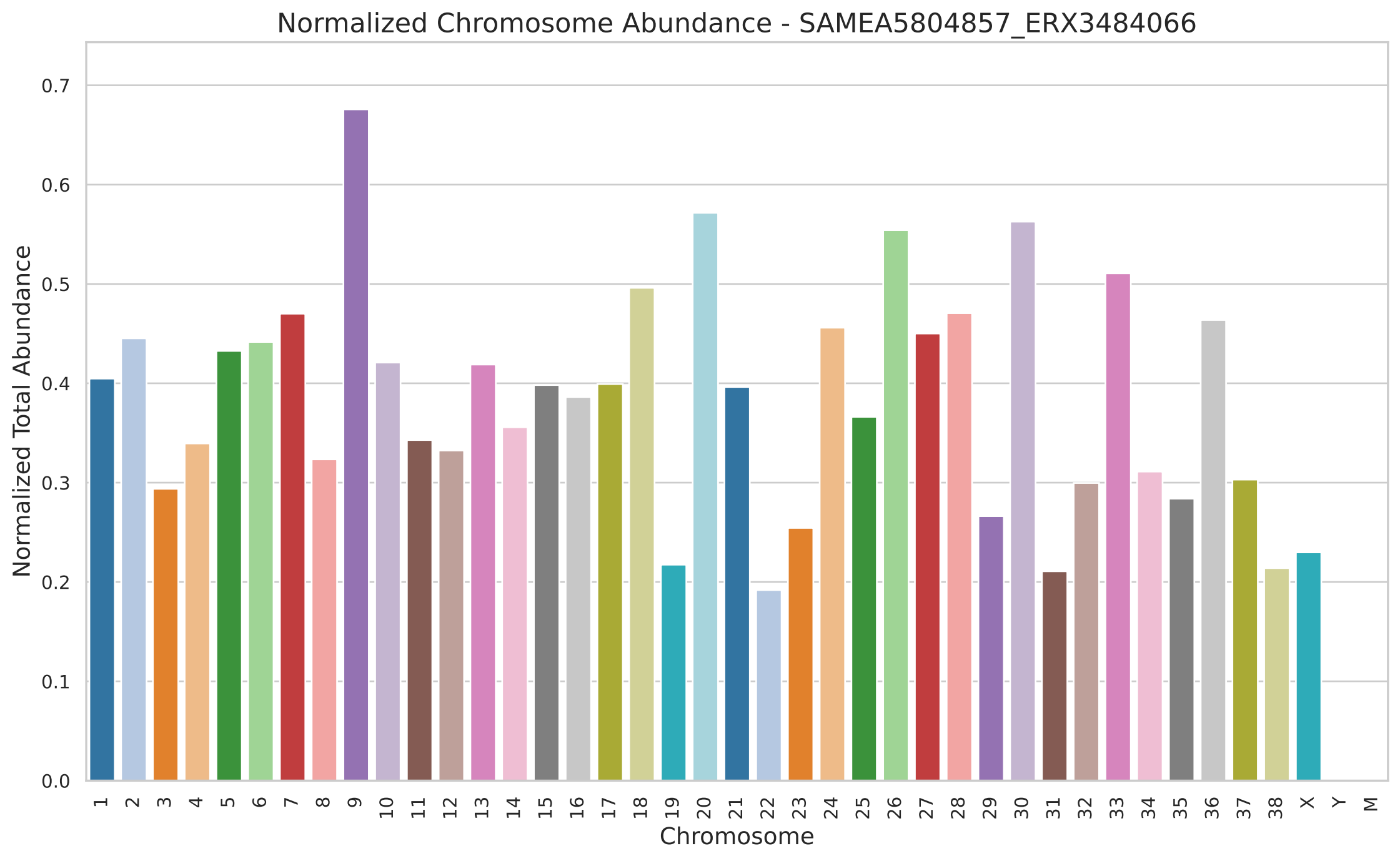

Normalized Chromosome Abundance - SAMEA5804907_ERX3484130
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

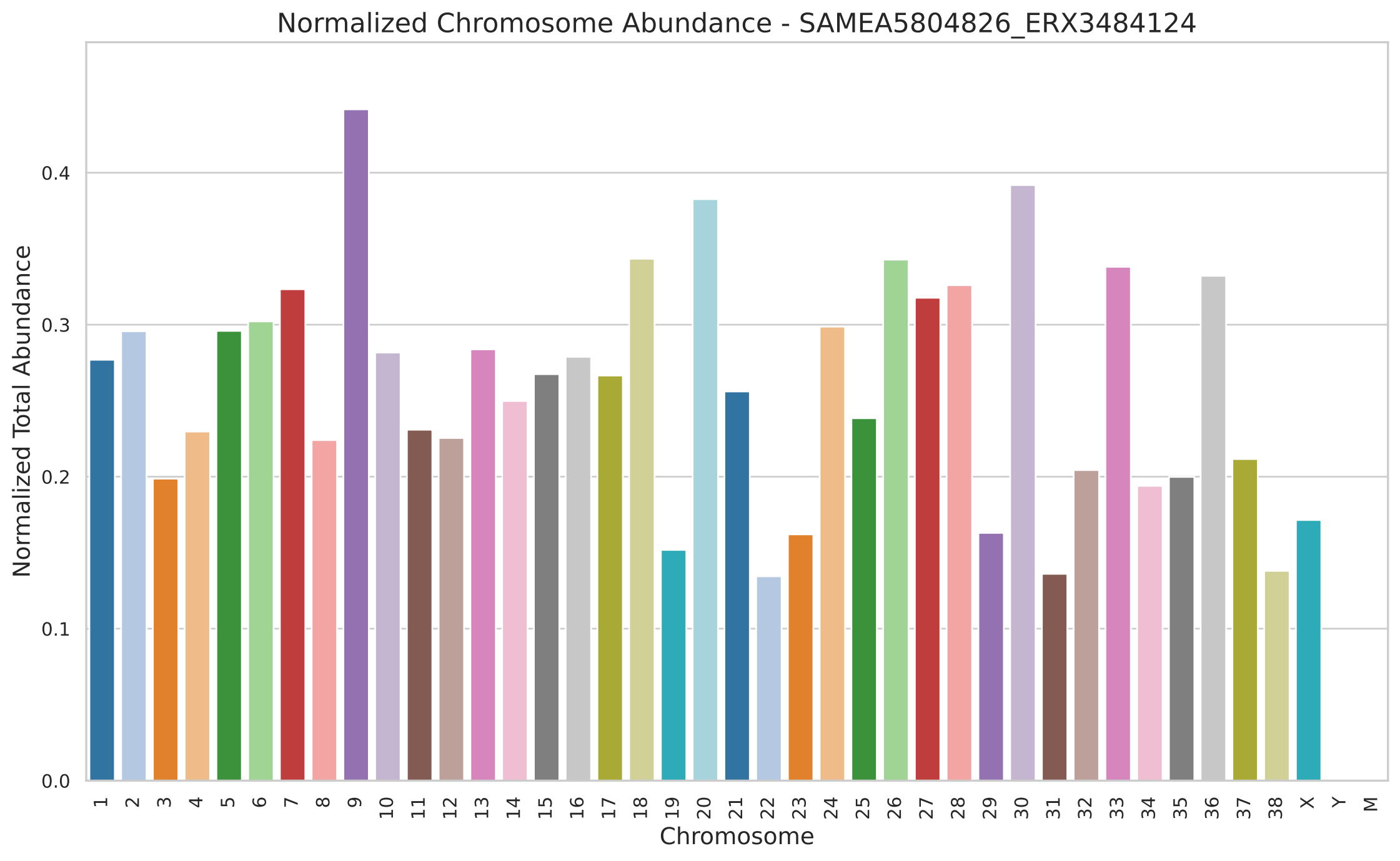

Normalized Chromosome Abundance - SAMEA5804850_ERX3484063
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

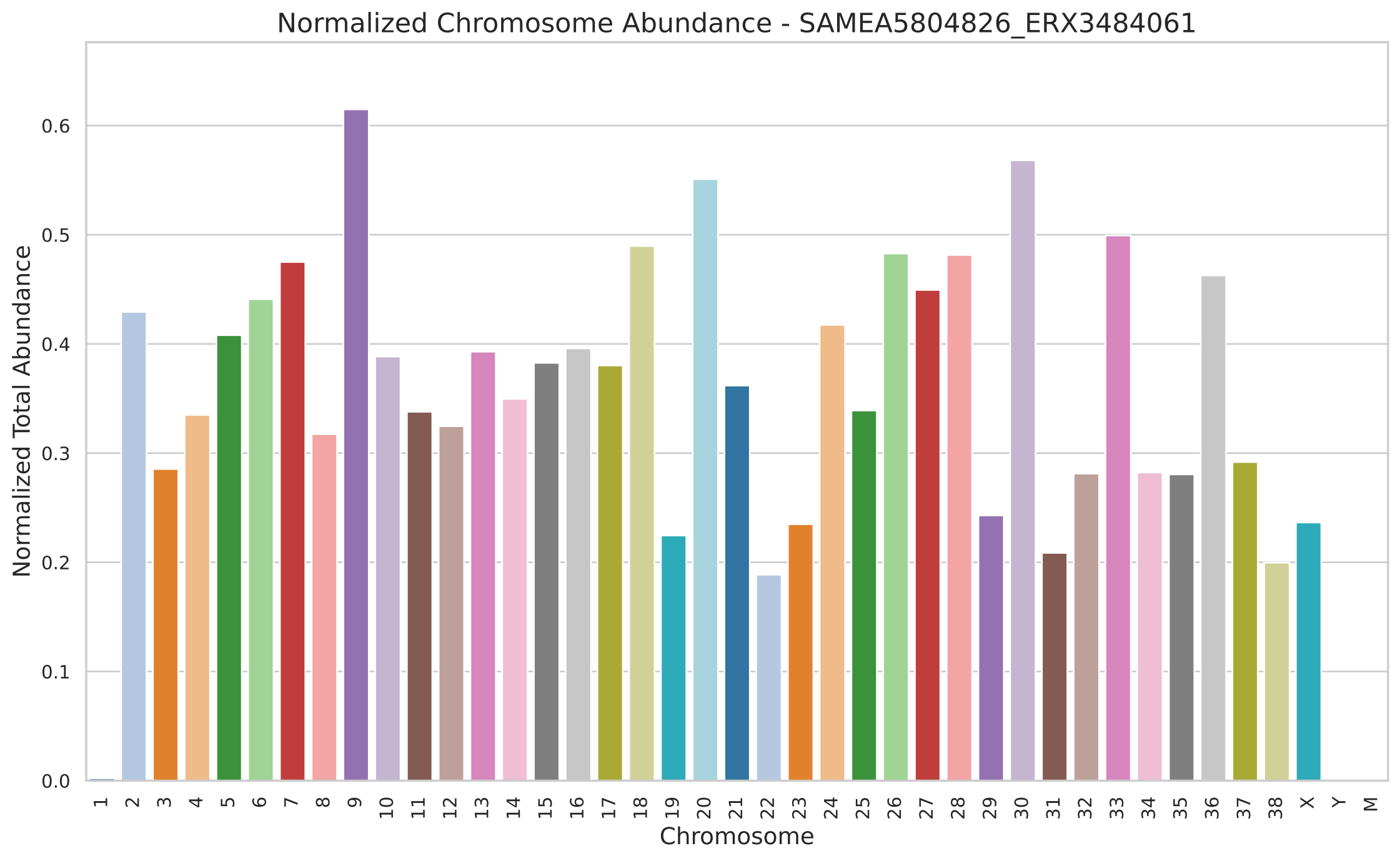

Normalized Chromosome Abundance - SAMEA5804745_ERX3484111
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

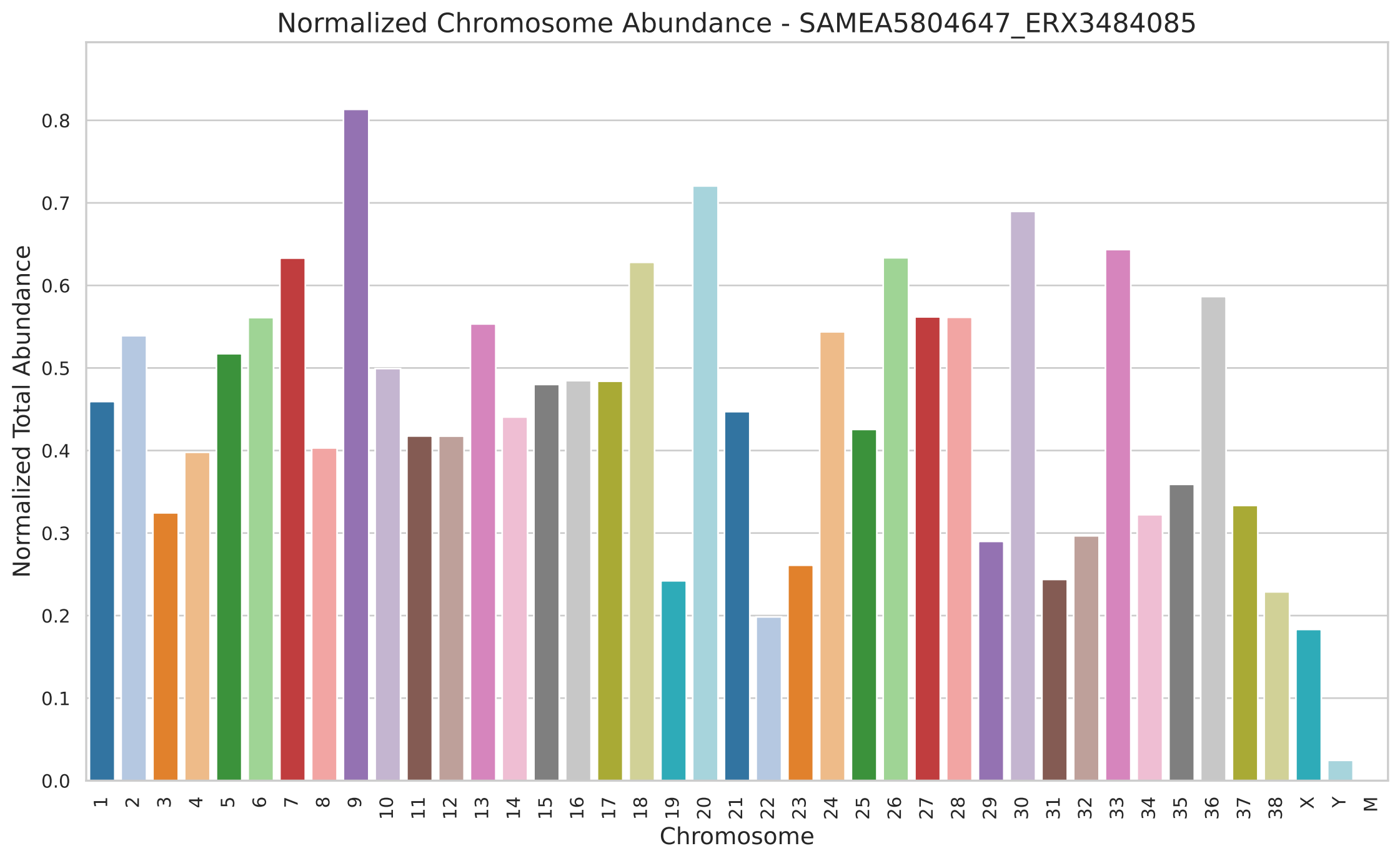

Normalized Chromosome Abundance - SAMEA5804700_ERX3484103
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

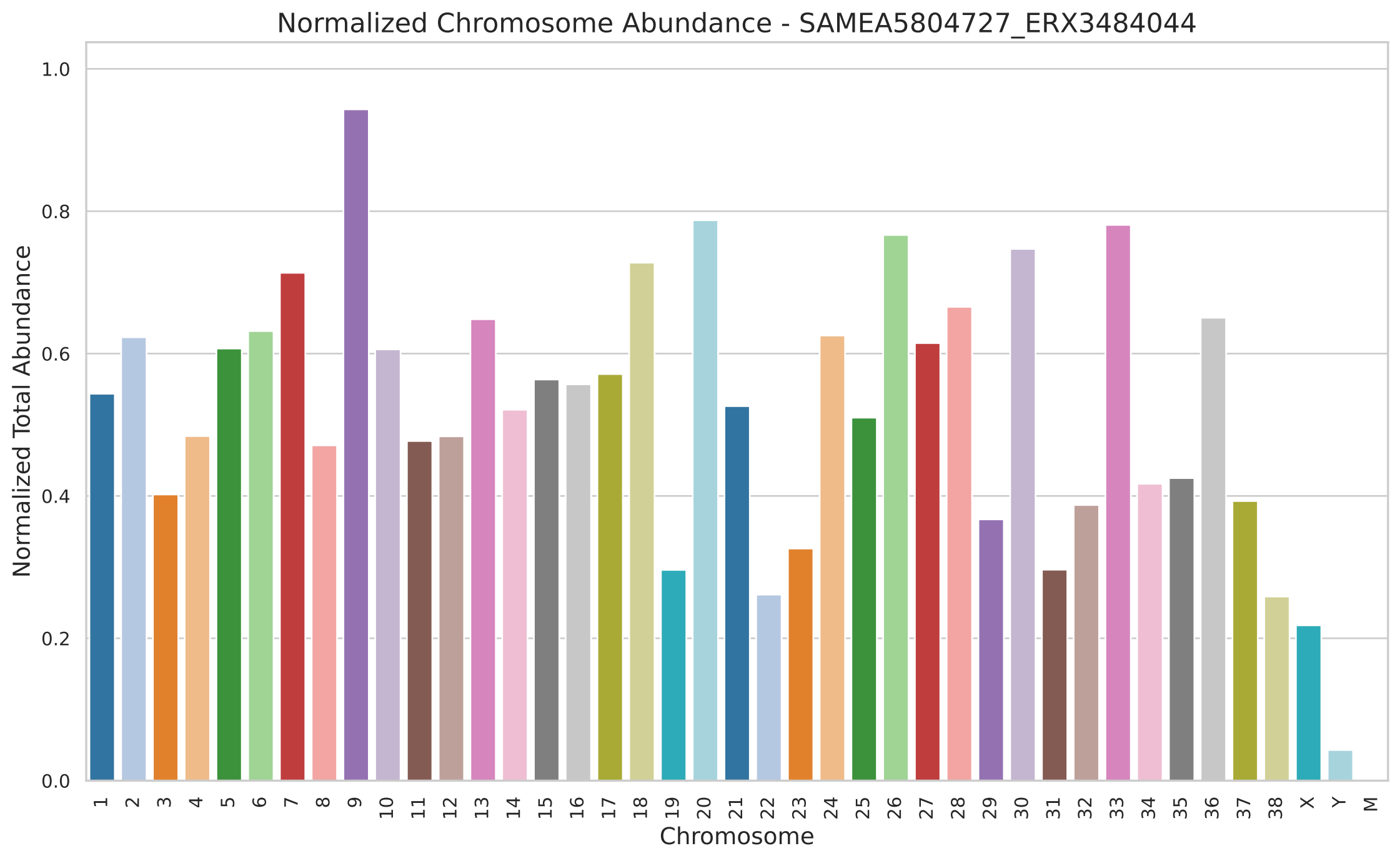

Normalized Chromosome Abundance - SAMEA5804765_ERX3484033
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

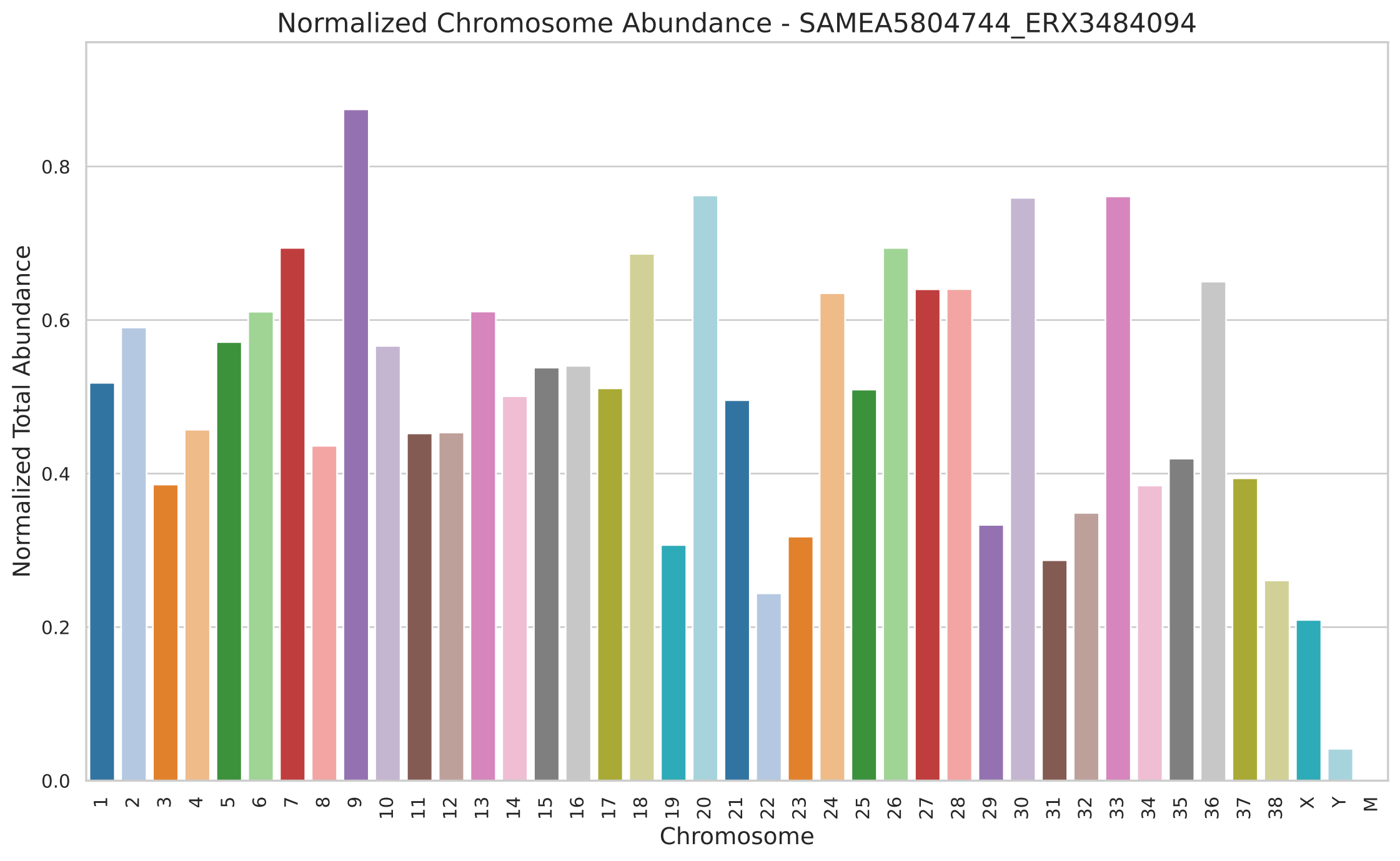

Normalized Chromosome Abundance - SAMEA5804857_ERX3484066
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

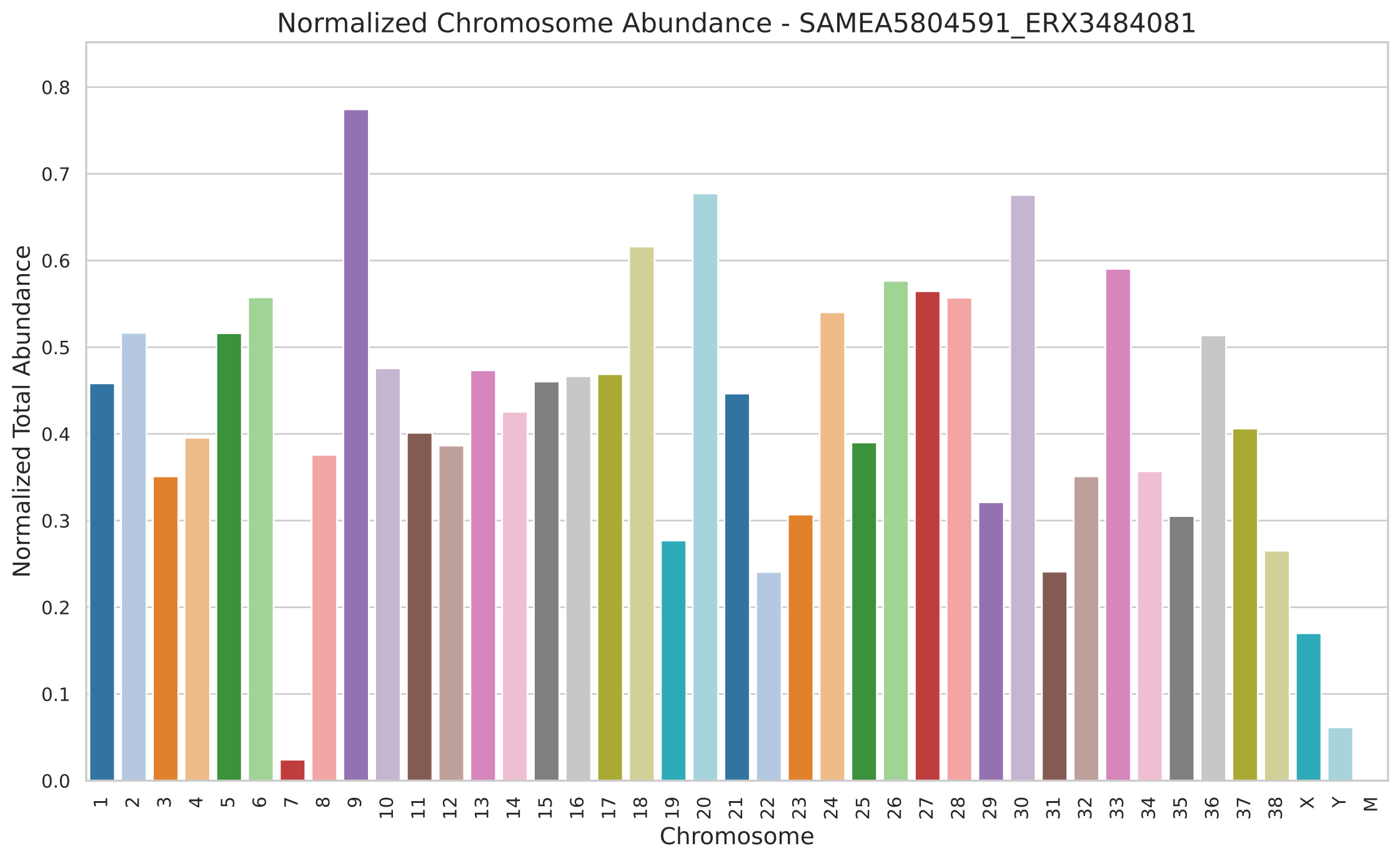

Normalized Chromosome Abundance - SAMEA5804826_ERX3484124
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

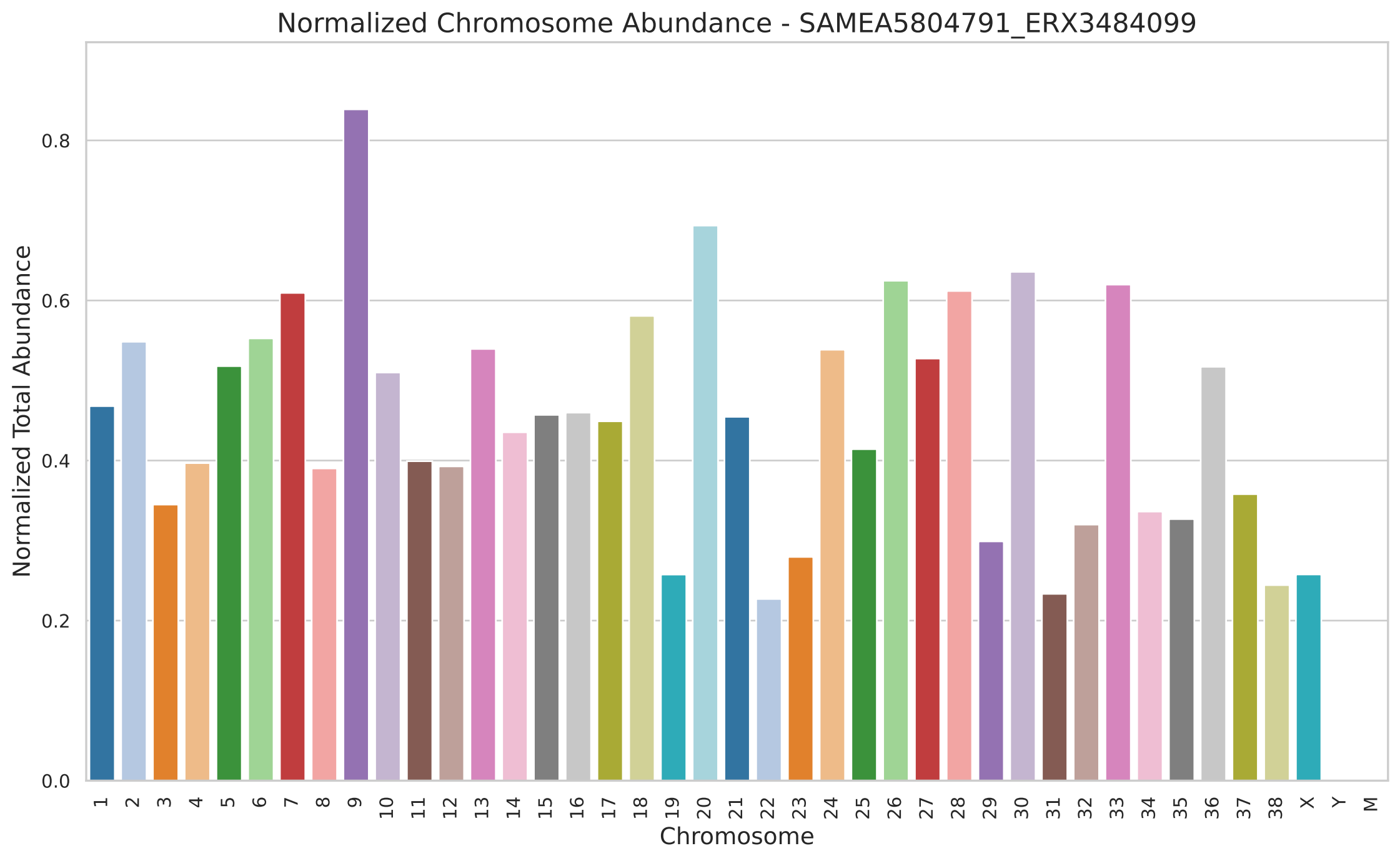

Normalized Chromosome Abundance - SAMEA5804826_ERX3484061
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

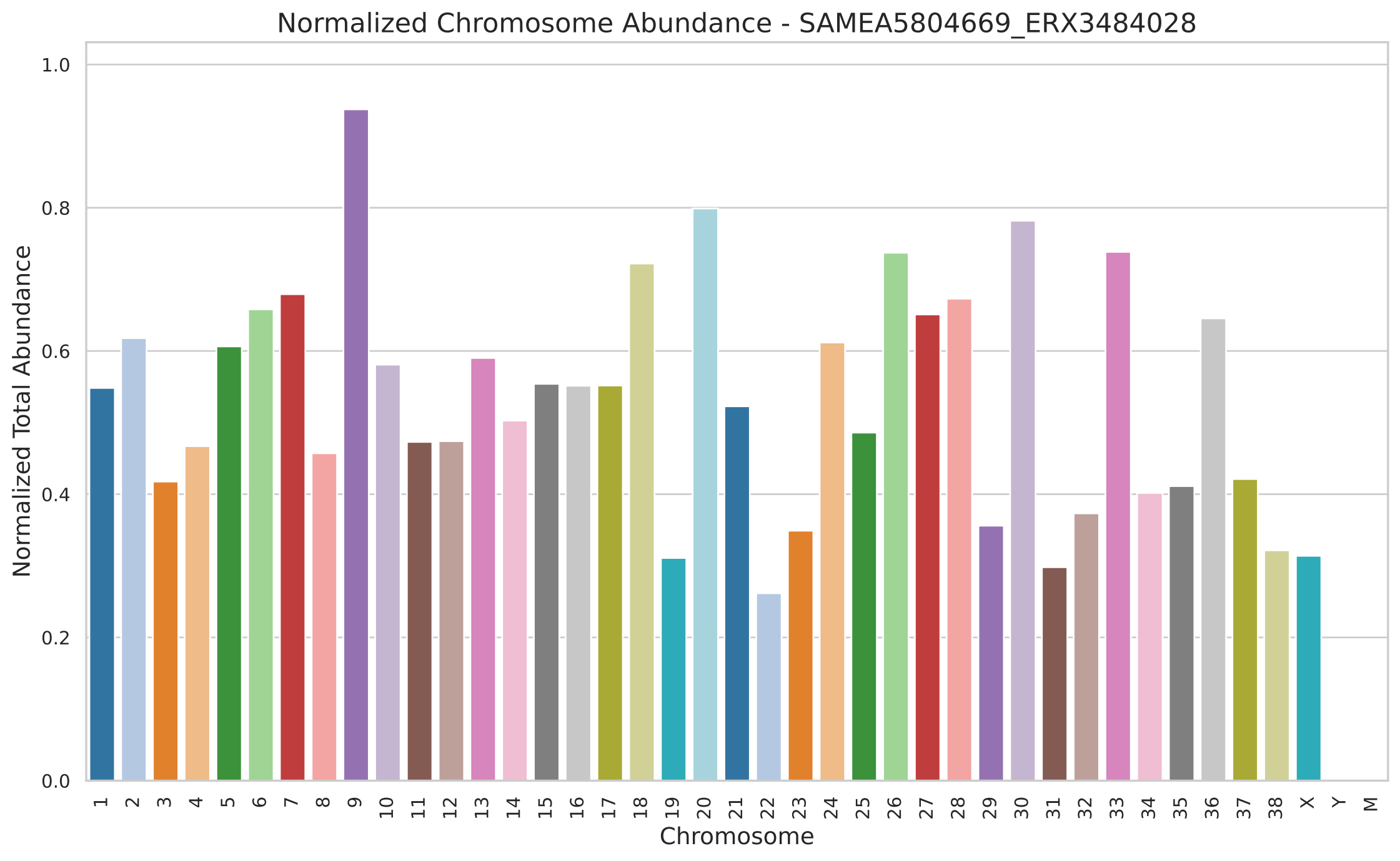

Normalized Chromosome Abundance - SAMEA5804647_ERX3484085
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

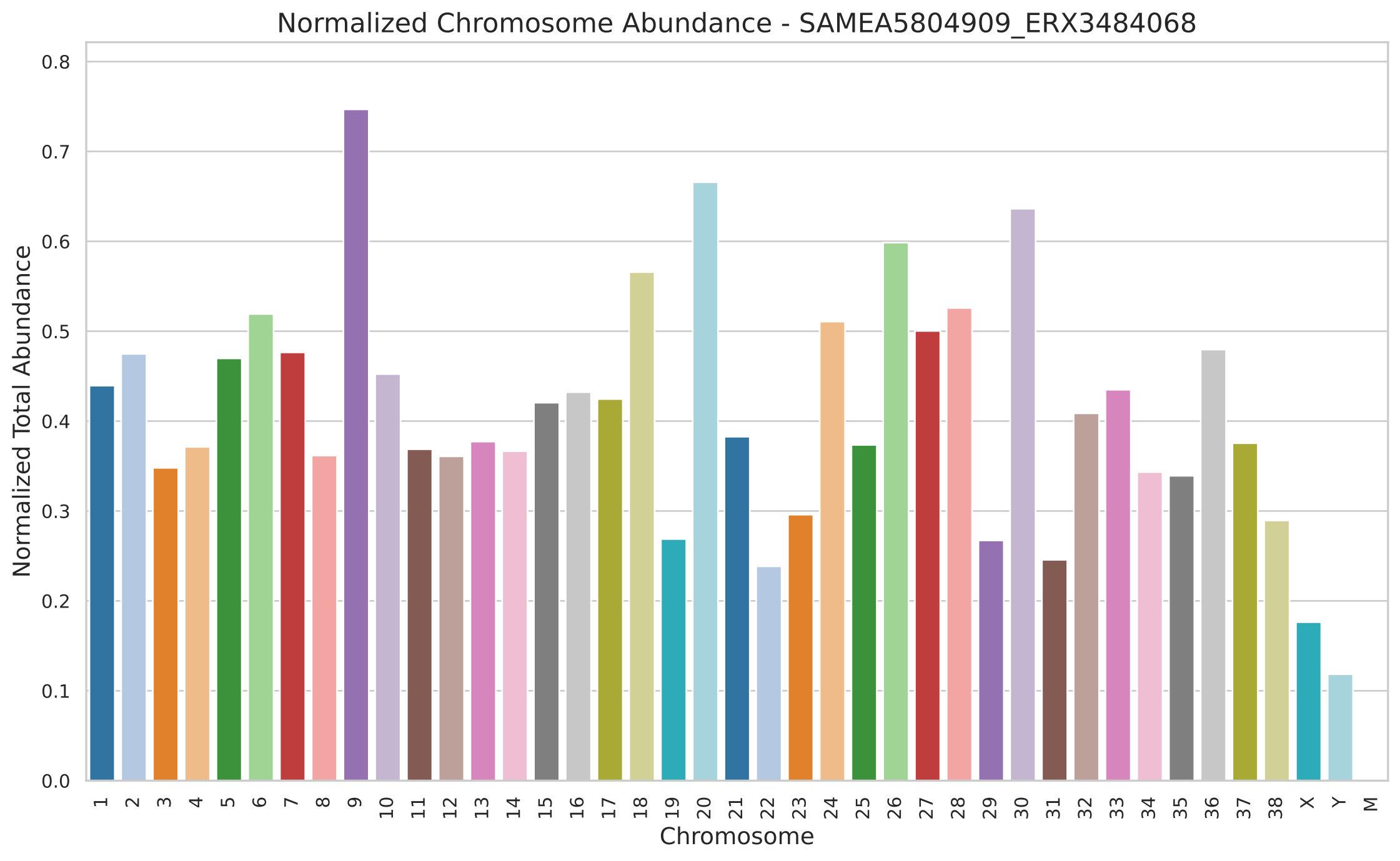

Normalized Chromosome Abundance - SAMEA5804727_ERX3484044
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

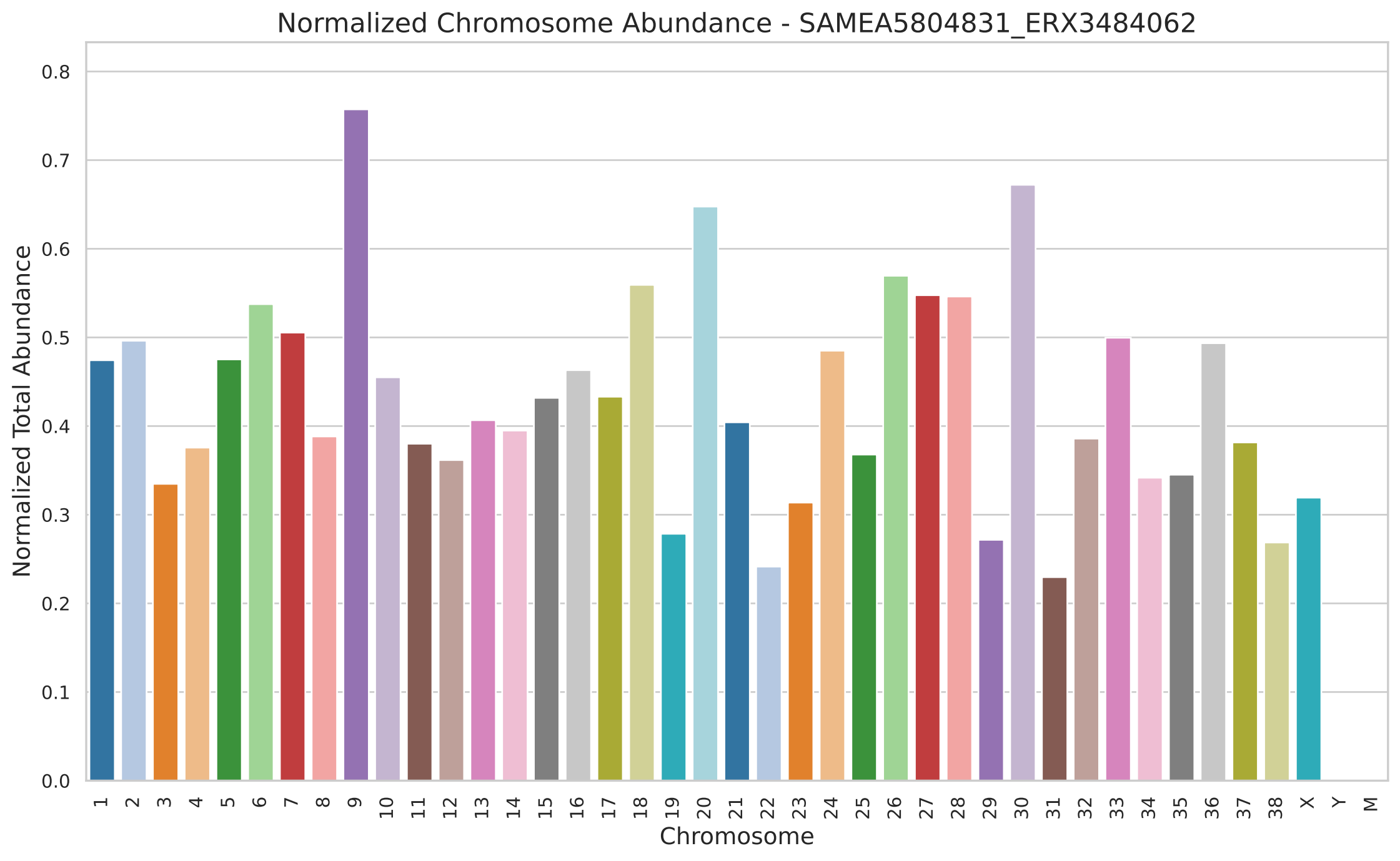

Normalized Chromosome Abundance - SAMEA5804744_ERX3484094
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

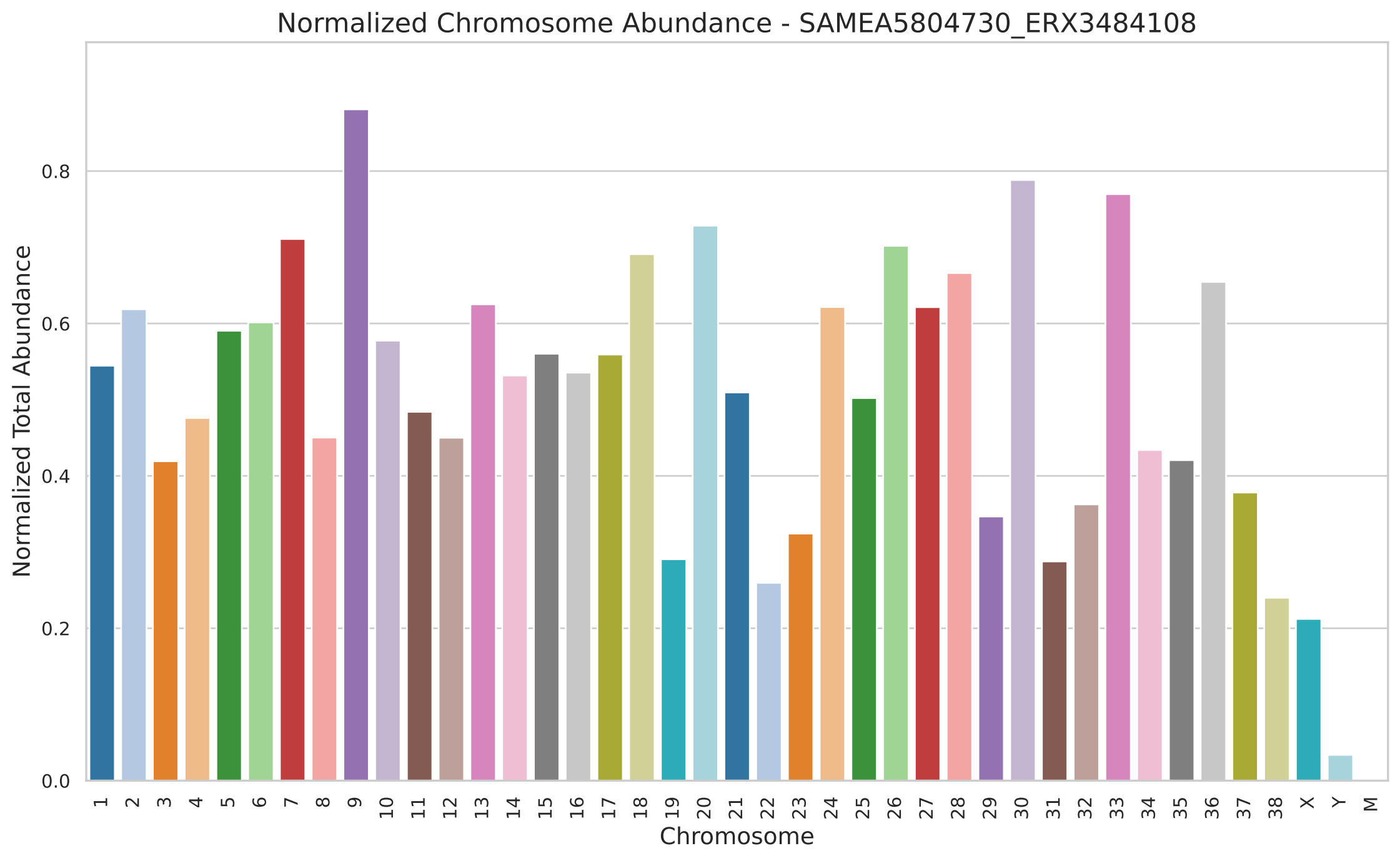

Normalized Chromosome Abundance - SAMEA5804591_ERX3484081
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

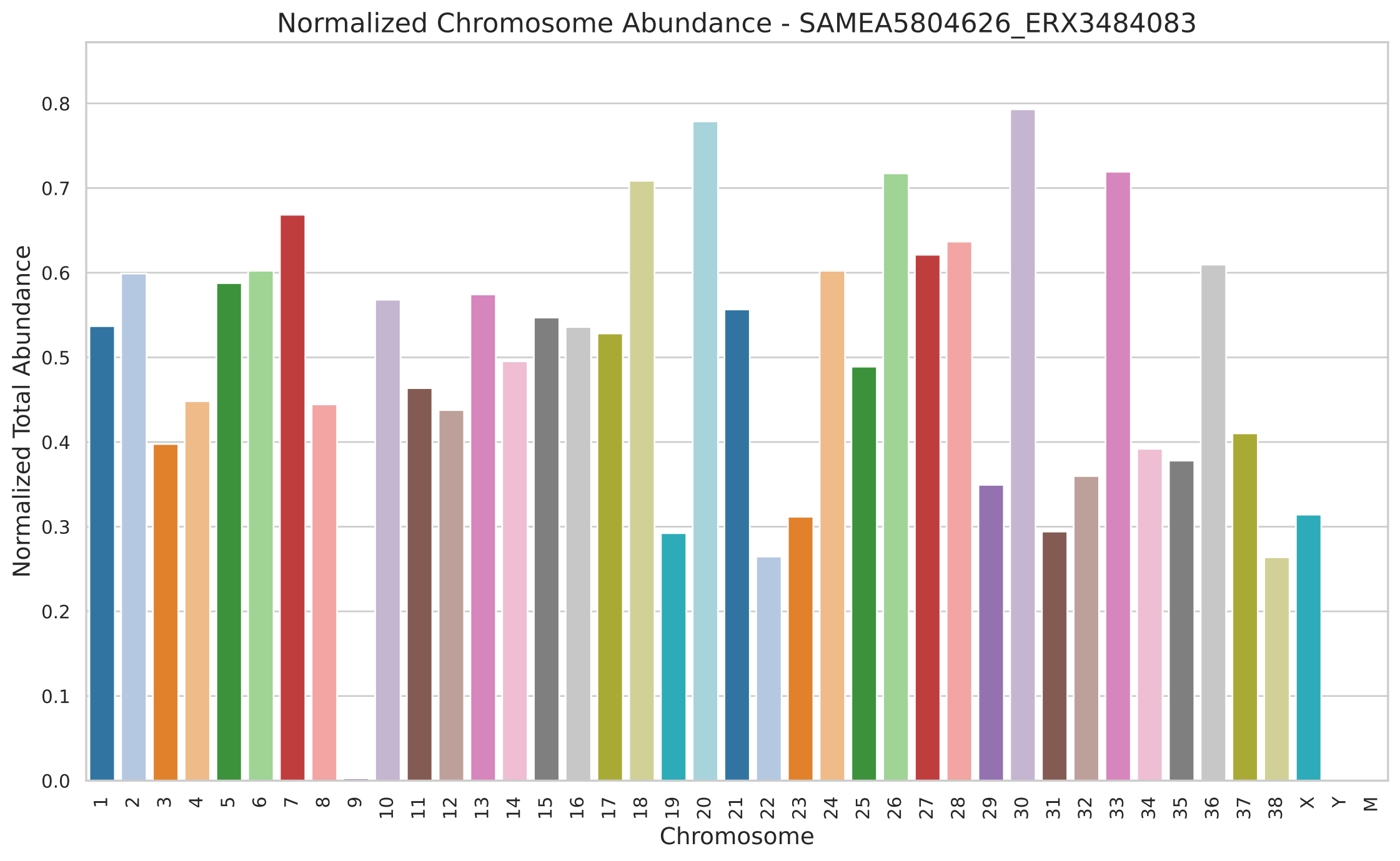

Normalized Chromosome Abundance - SAMEA5804791_ERX3484099
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

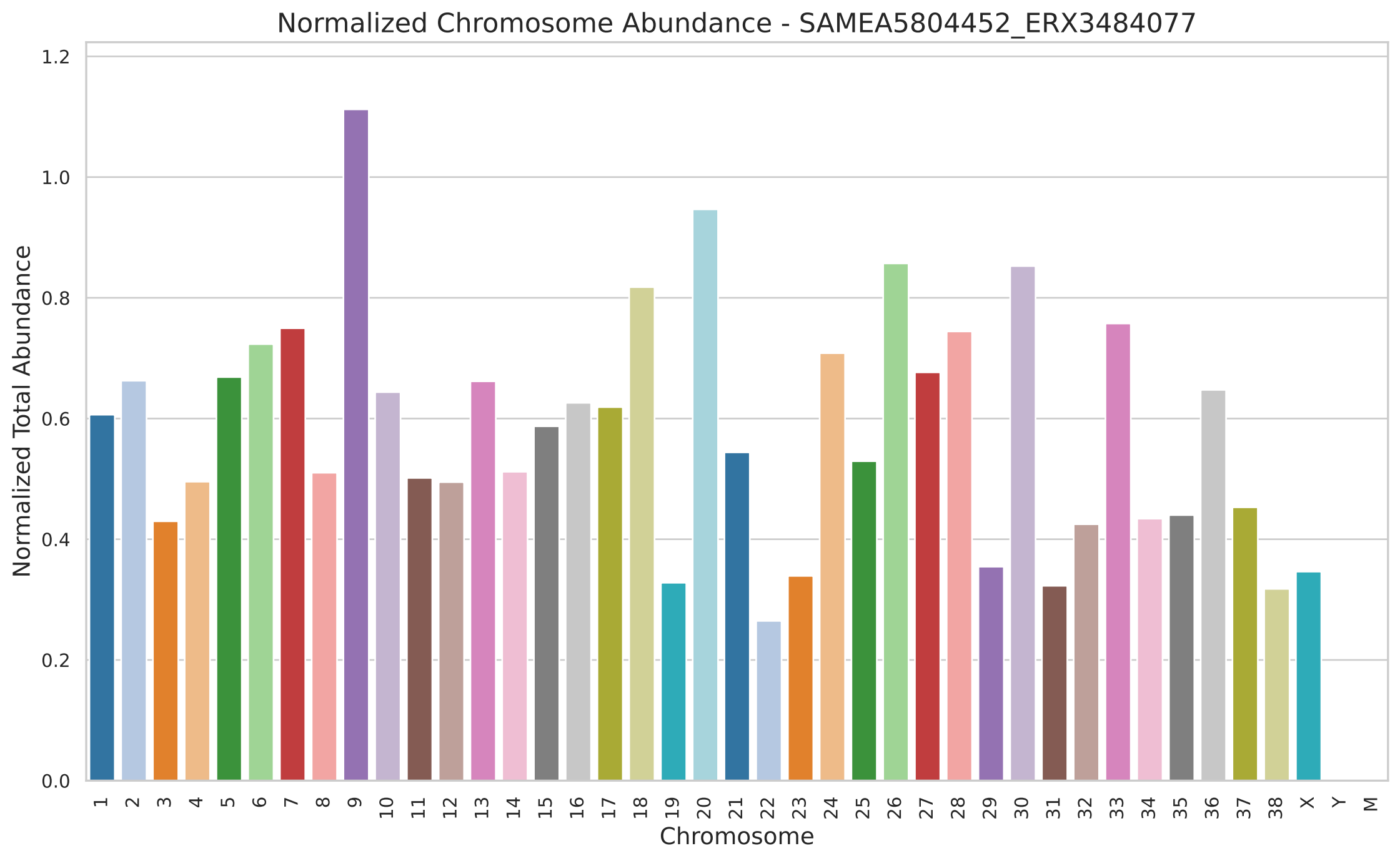

Normalized Chromosome Abundance - SAMEA5804669_ERX3484028
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

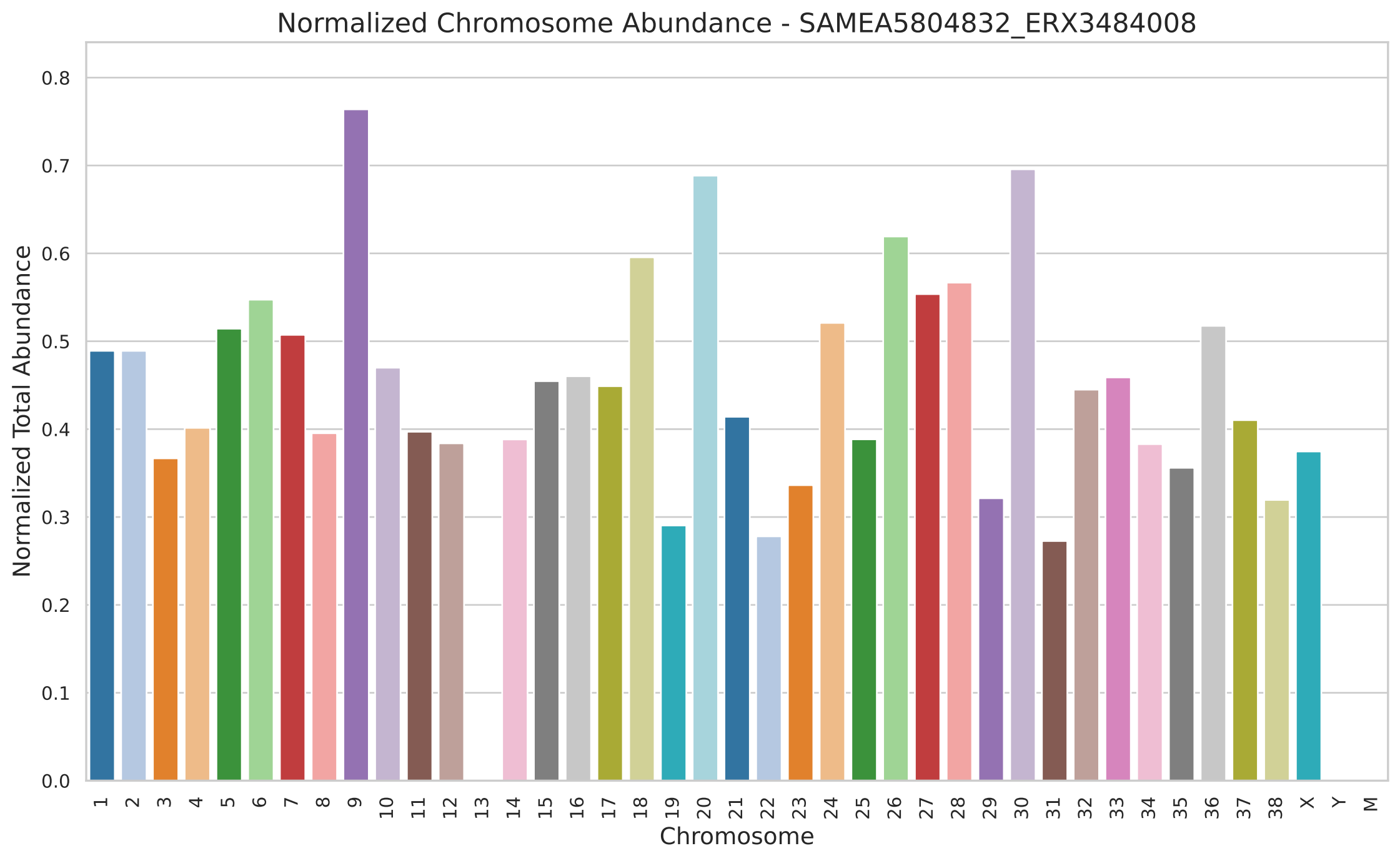

Normalized Chromosome Abundance - SAMEA5804909_ERX3484068
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

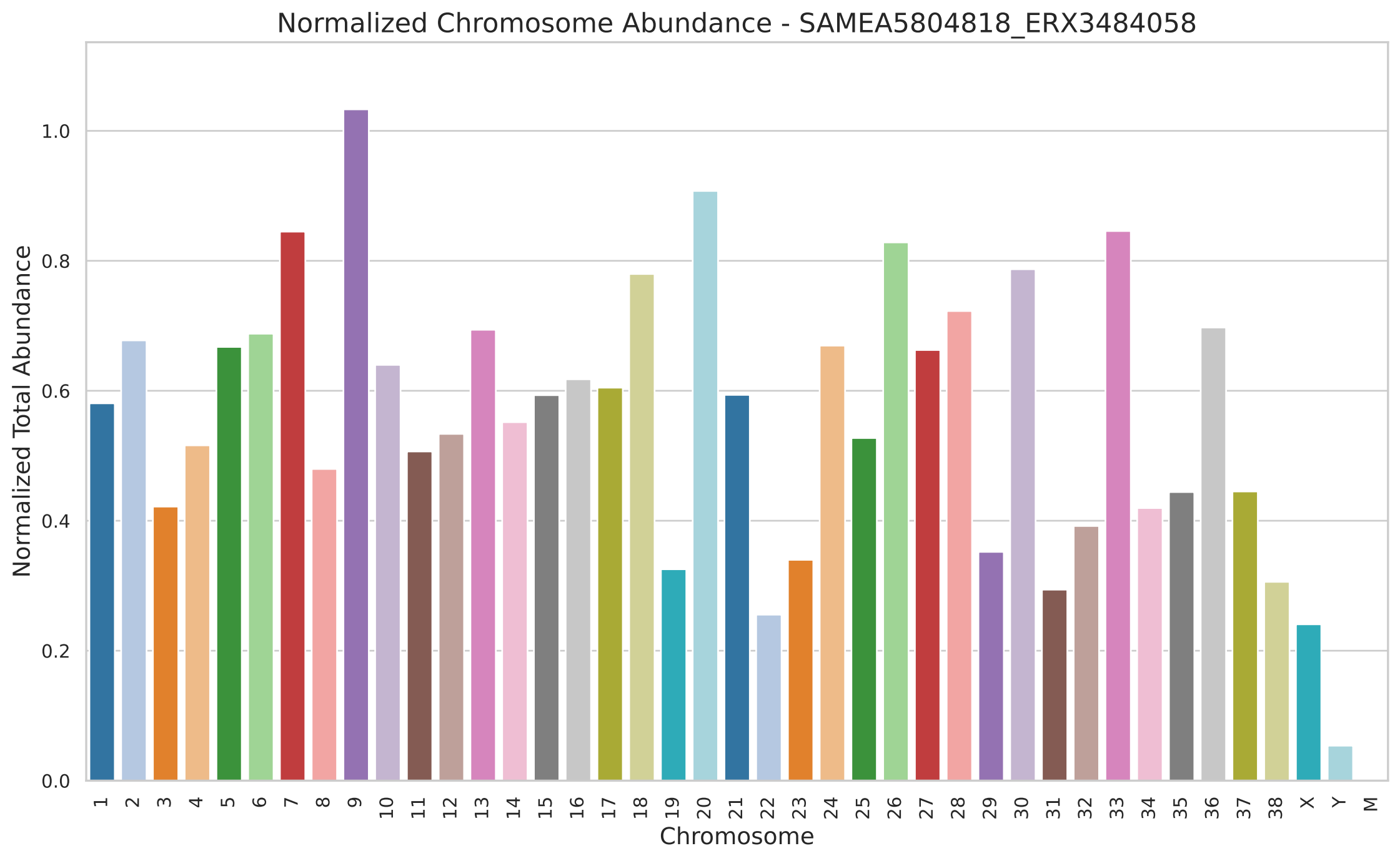

Normalized Chromosome Abundance - SAMEA5804831_ERX3484062
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

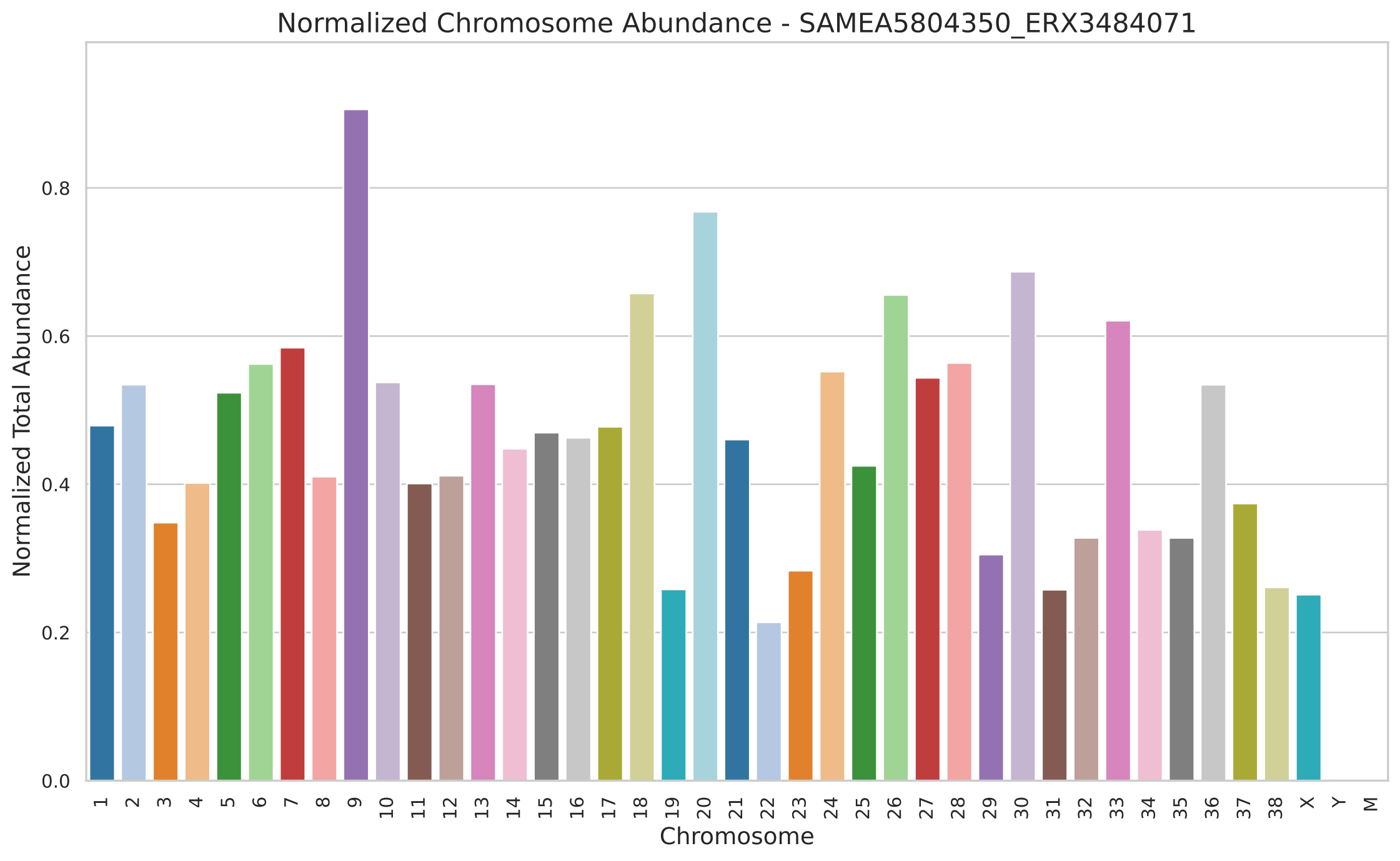

Normalized Chromosome Abundance - SAMEA5804730_ERX3484108
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

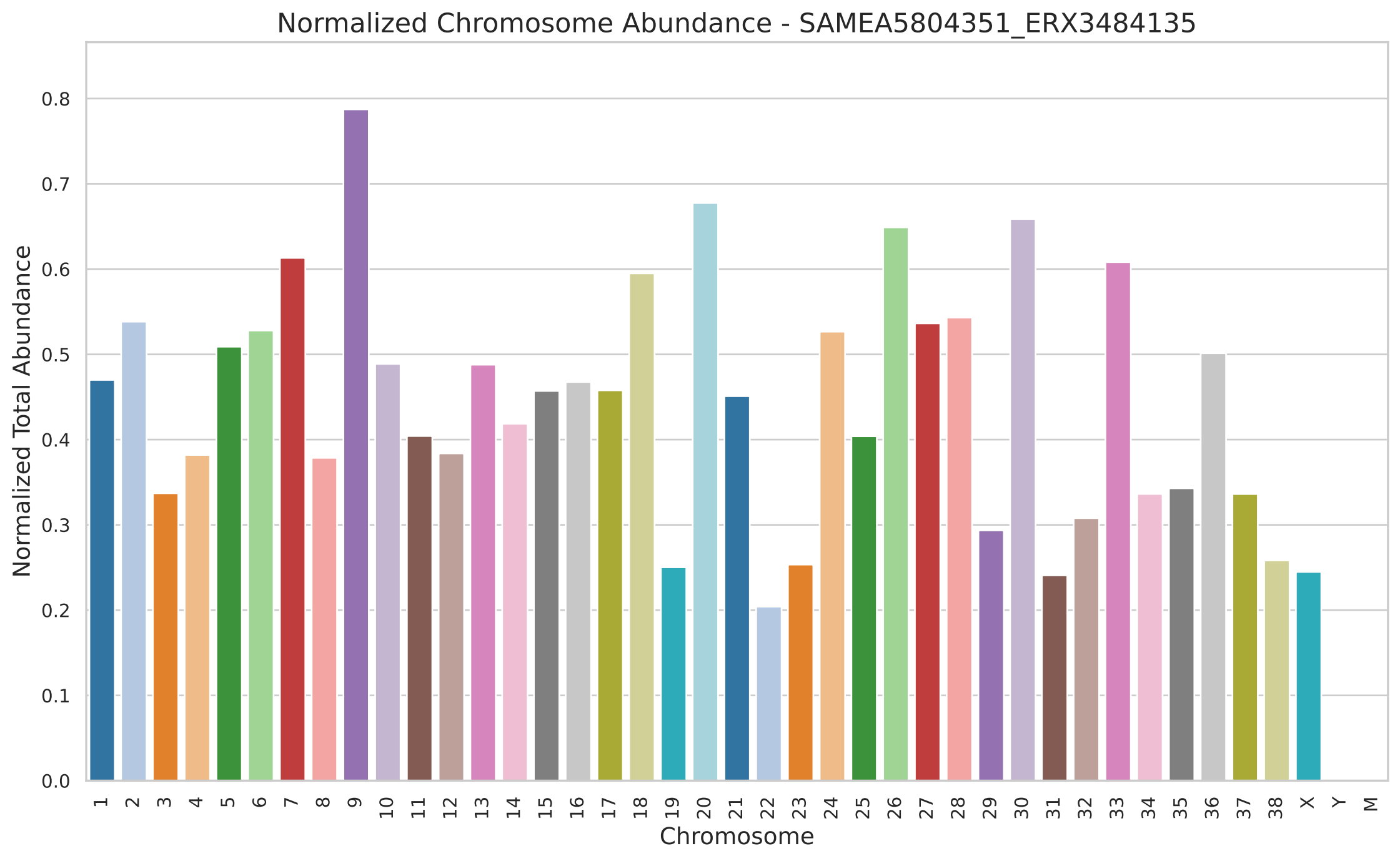

Normalized Chromosome Abundance - SAMEA5804626_ERX3484083
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

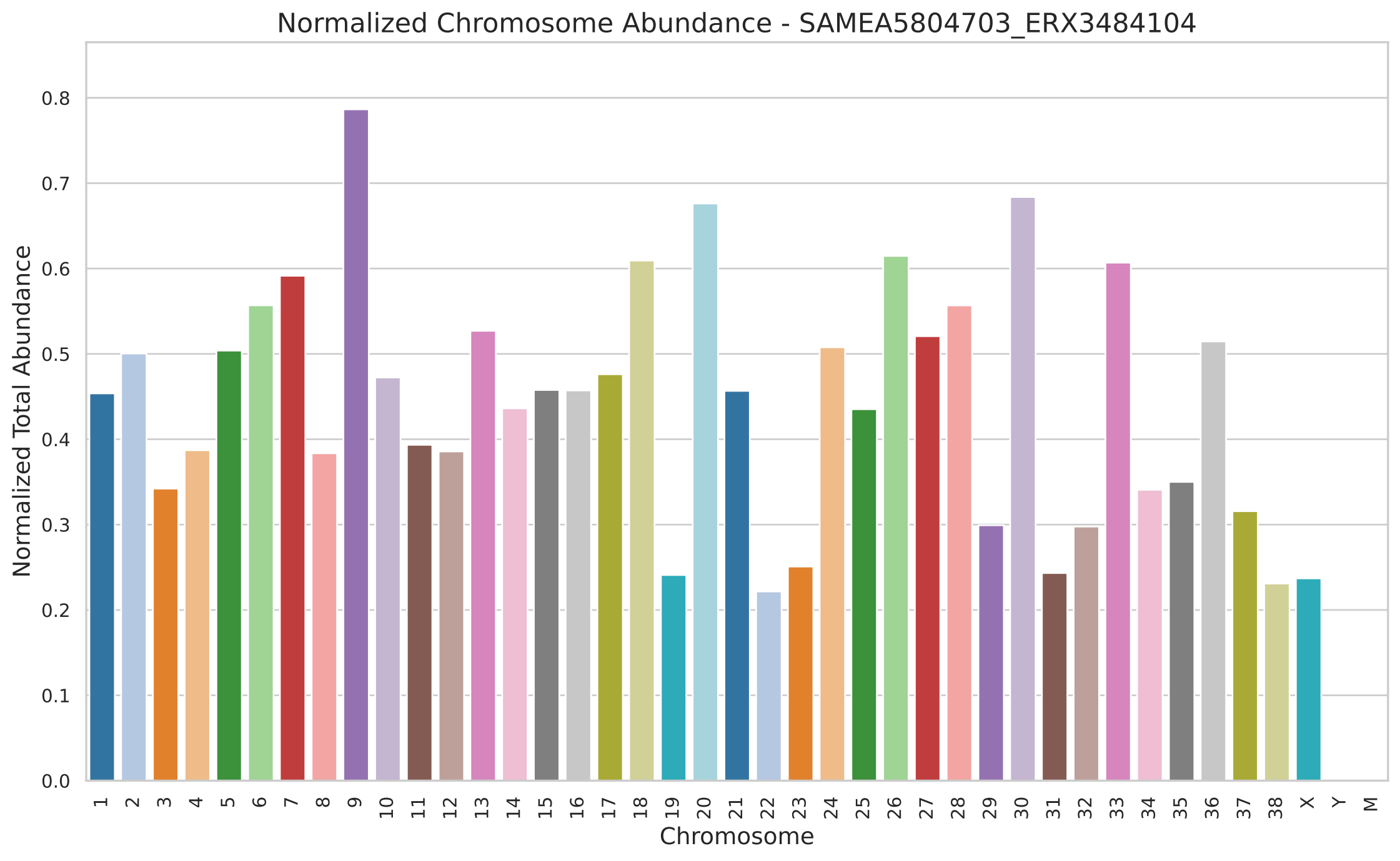

Normalized Chromosome Abundance - SAMEA5804452_ERX3484077
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

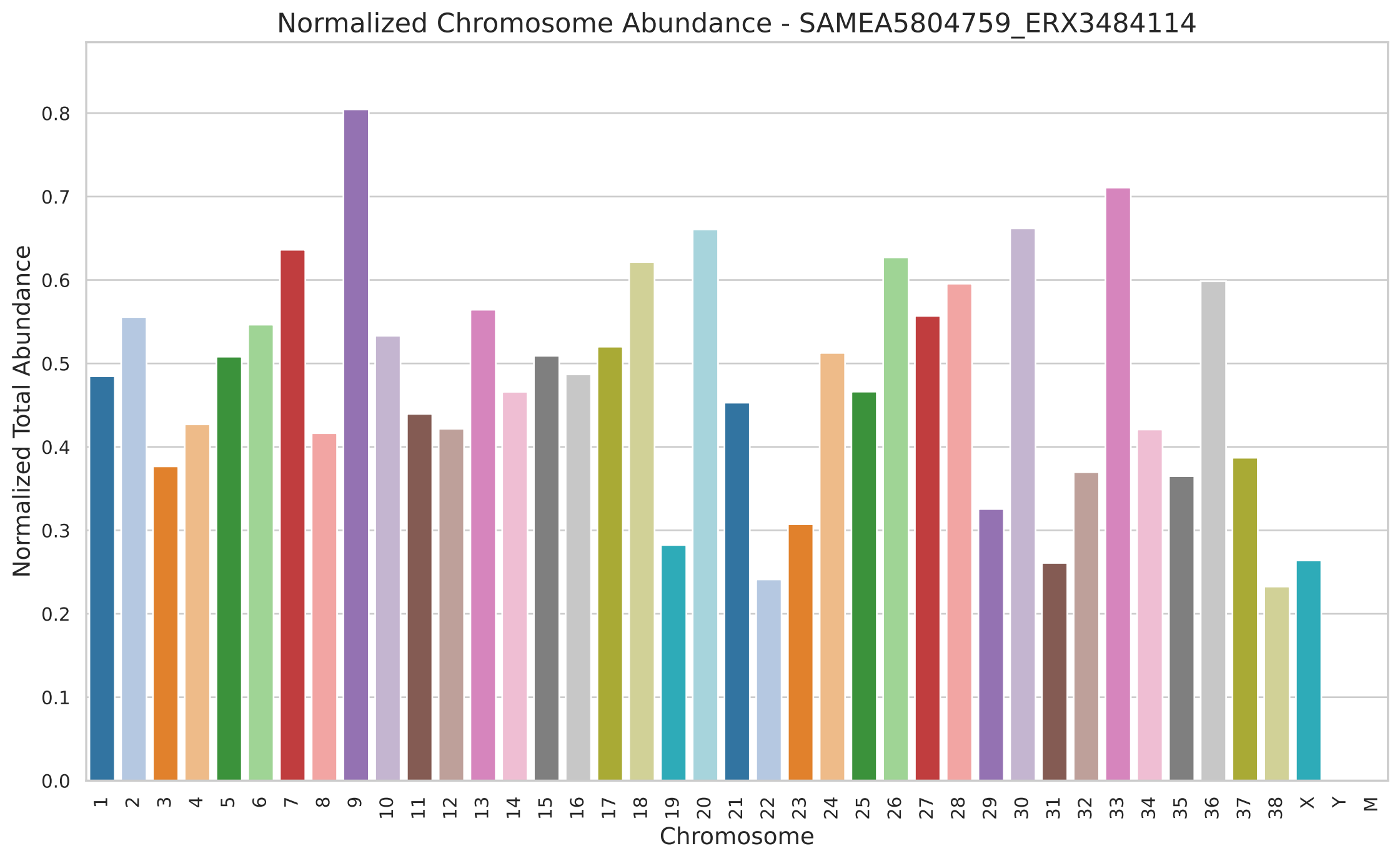

Normalized Chromosome Abundance - SAMEA5804832_ERX3484008
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

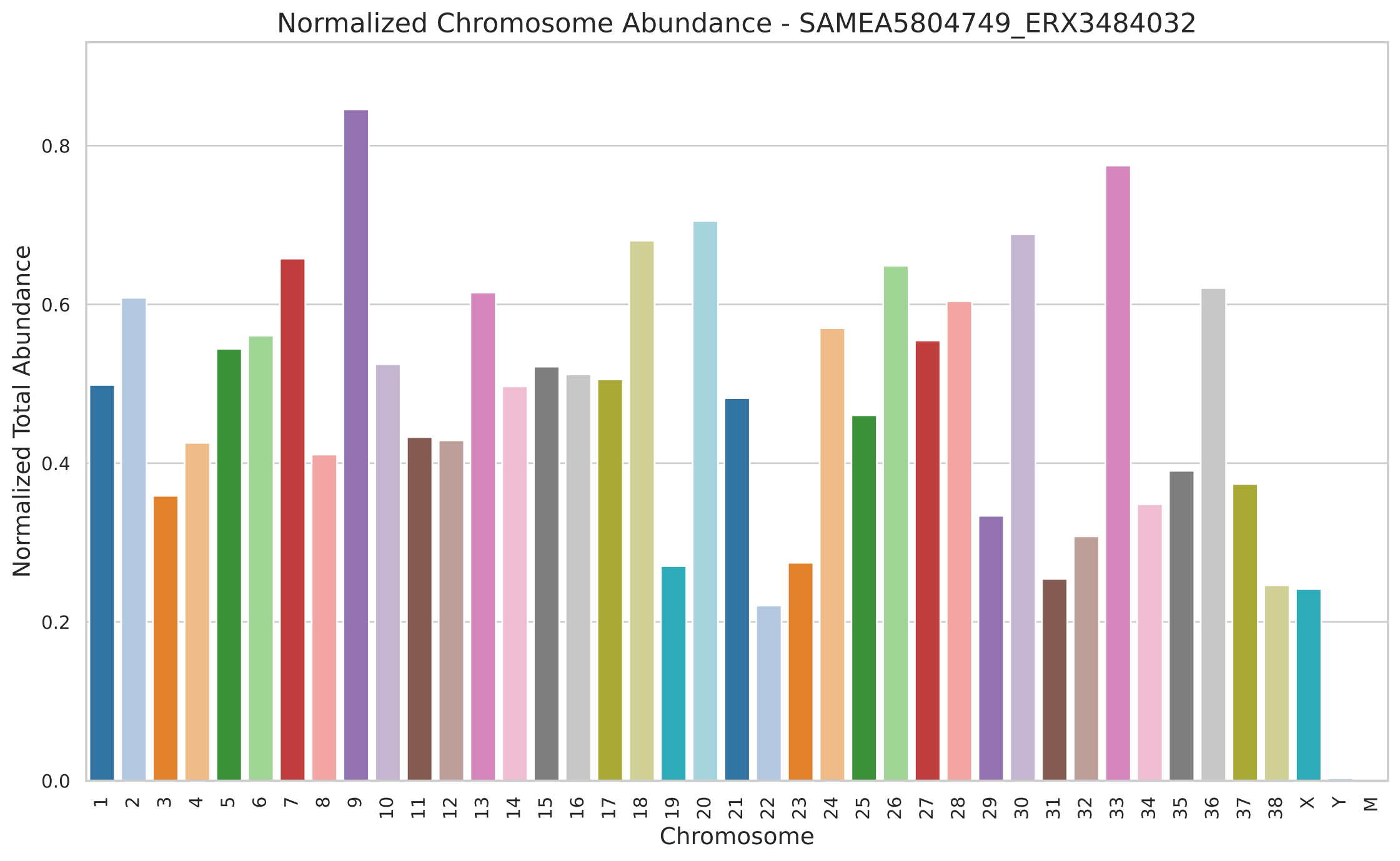

Normalized Chromosome Abundance - SAMEA5804818_ERX3484058
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

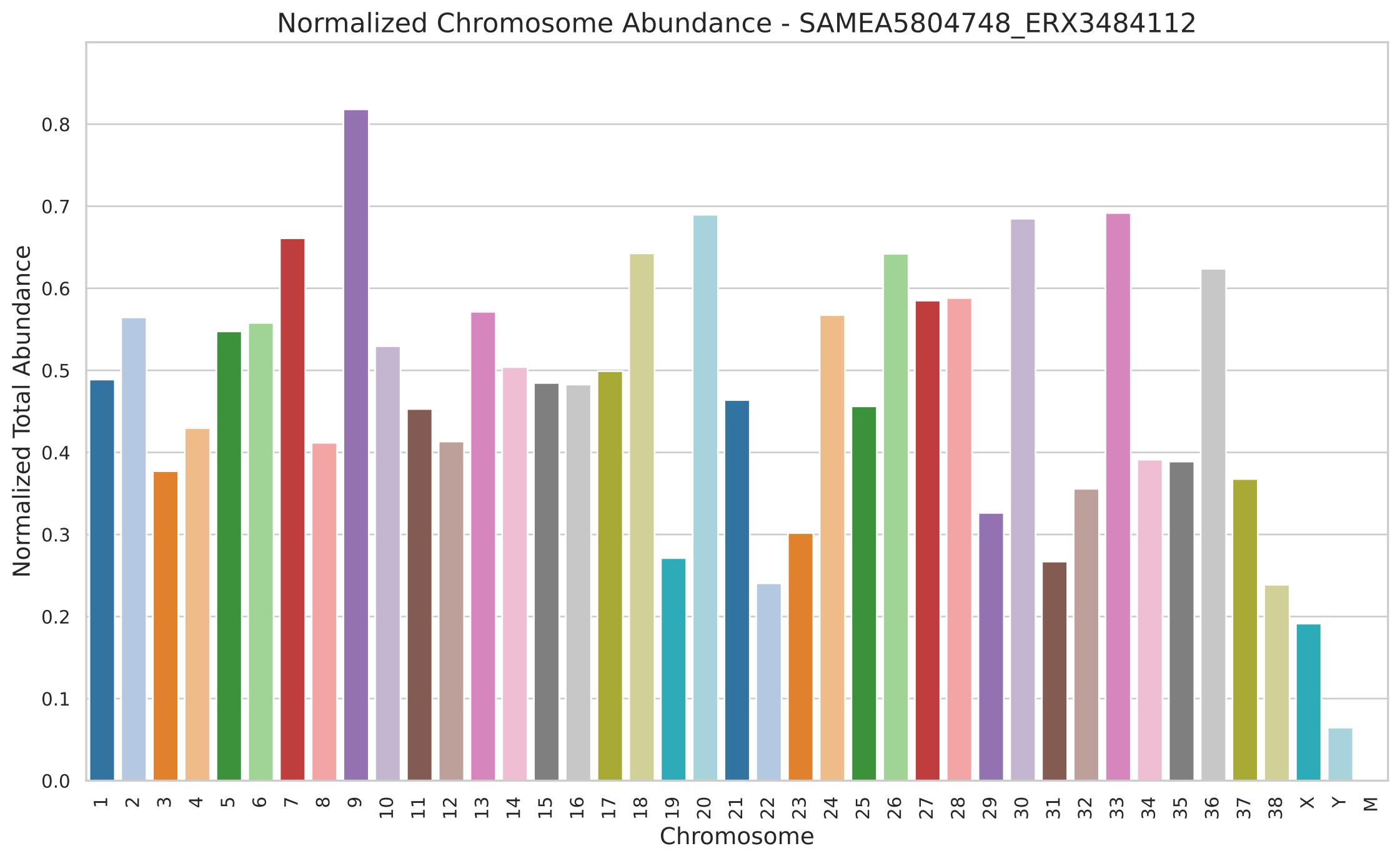

Normalized Chromosome Abundance - SAMEA5804350_ERX3484071
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

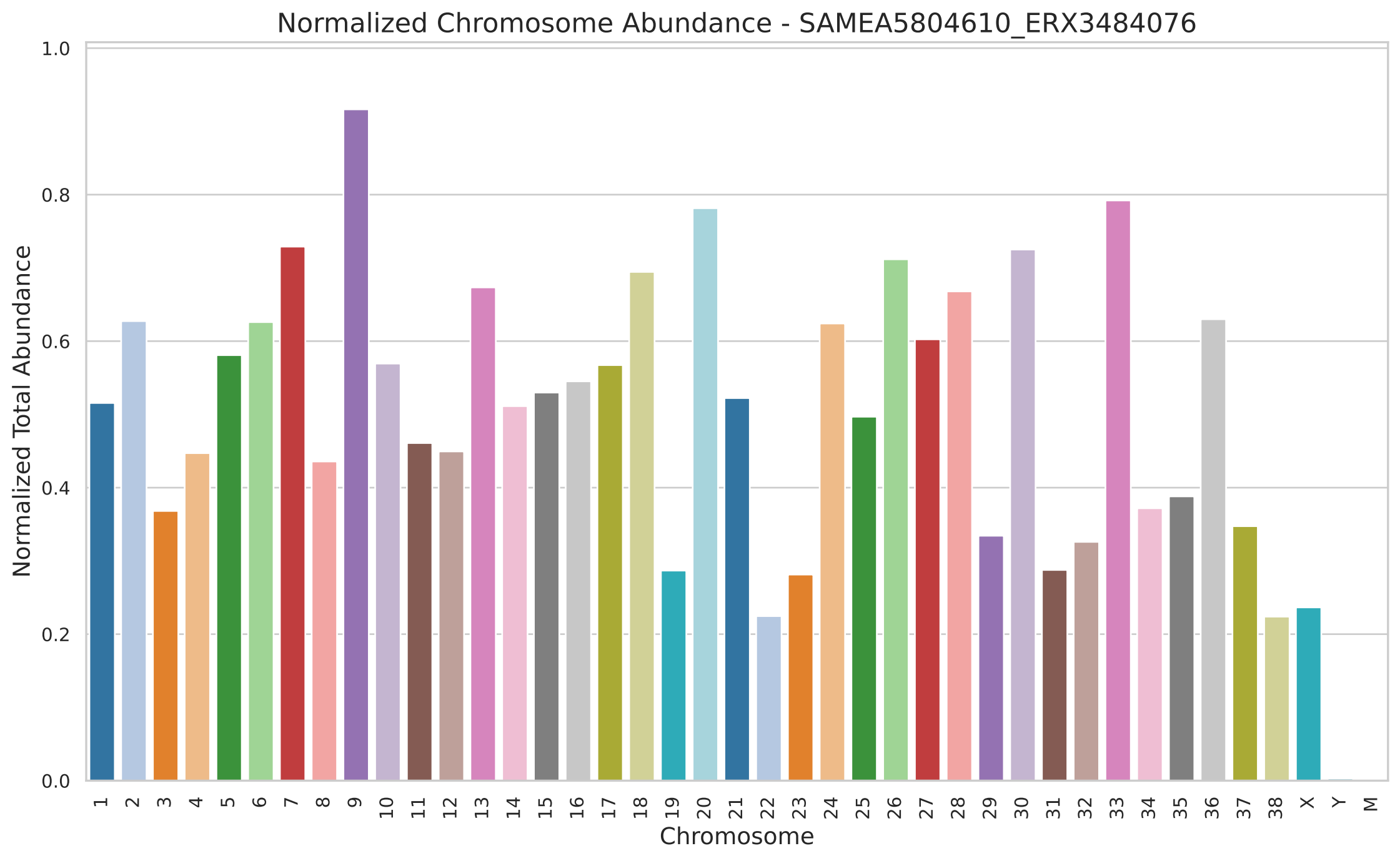

Normalized Chromosome Abundance - SAMEA5804351_ERX3484135
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

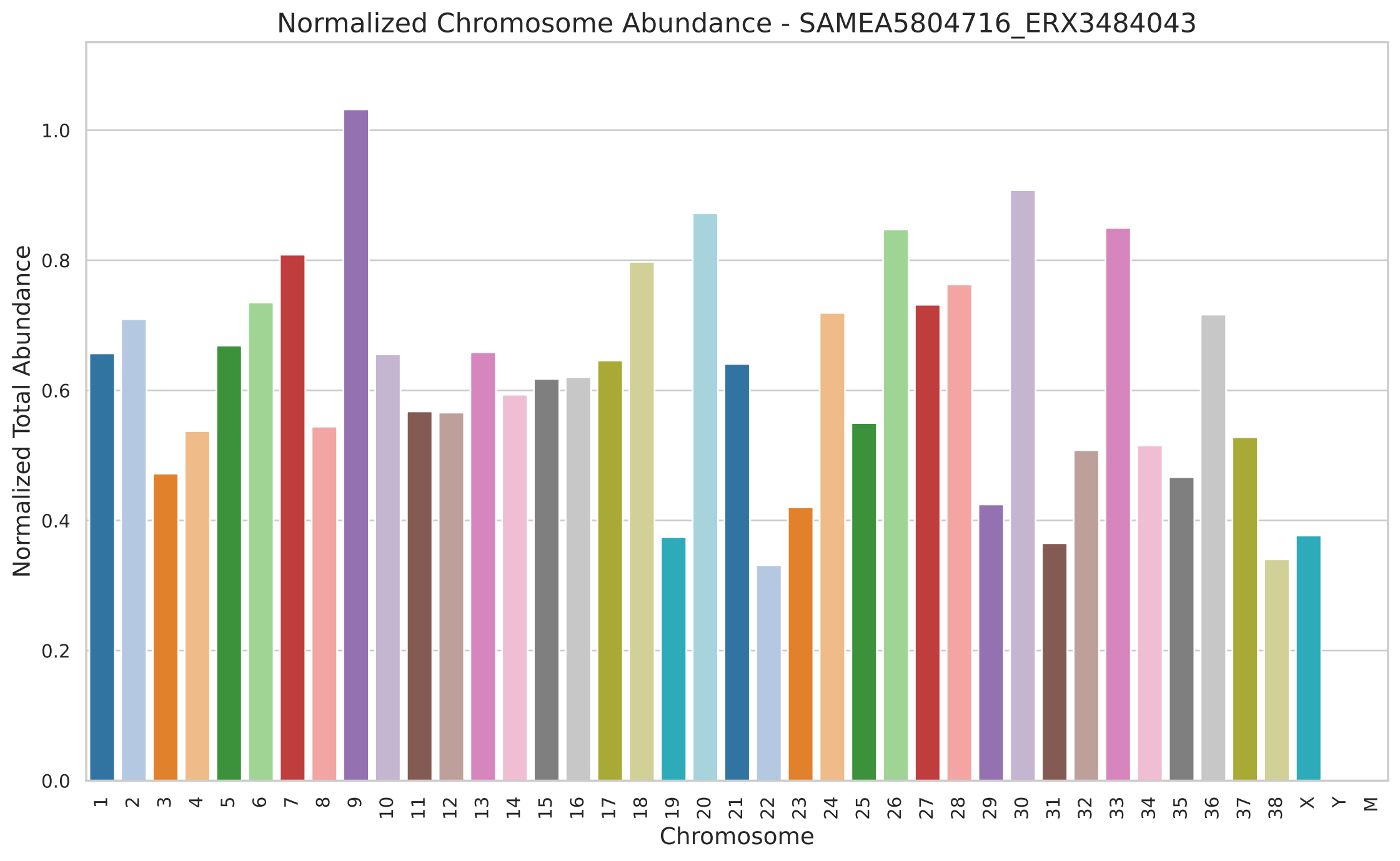

Normalized Chromosome Abundance - SAMEA5804703_ERX3484104
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

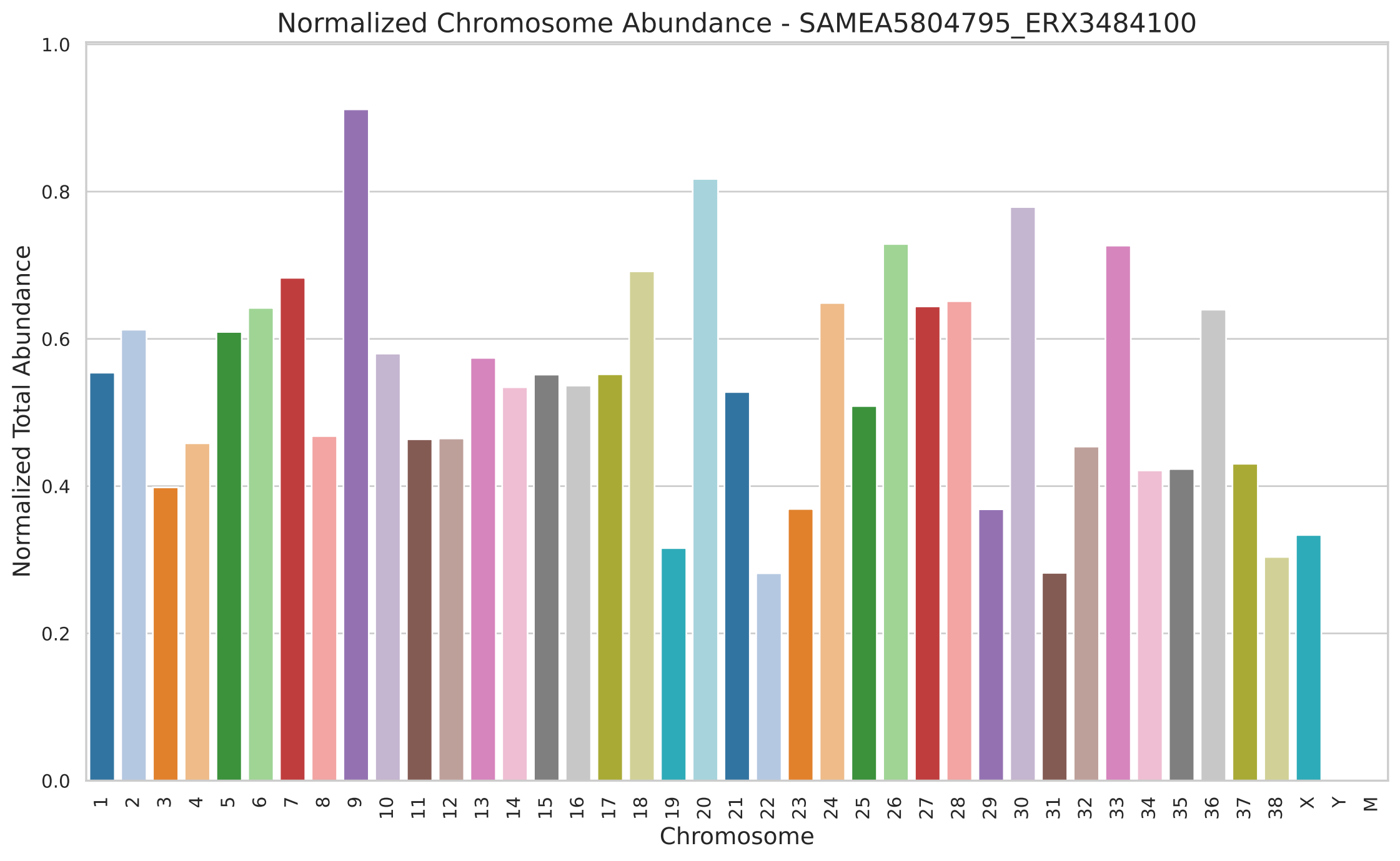

Normalized Chromosome Abundance - SAMEA5804759_ERX3484114
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

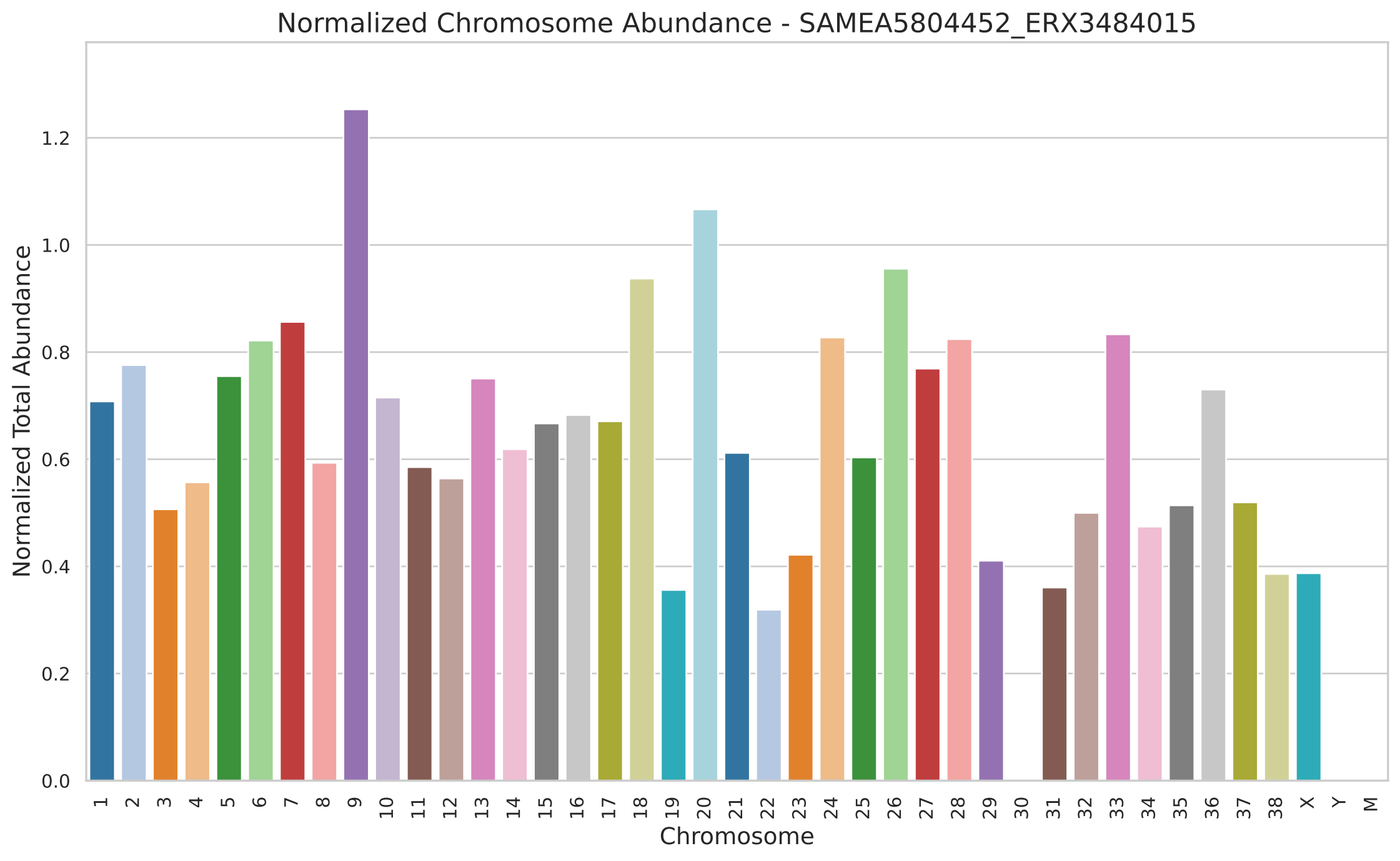

Normalized Chromosome Abundance - SAMEA5804749_ERX3484032
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

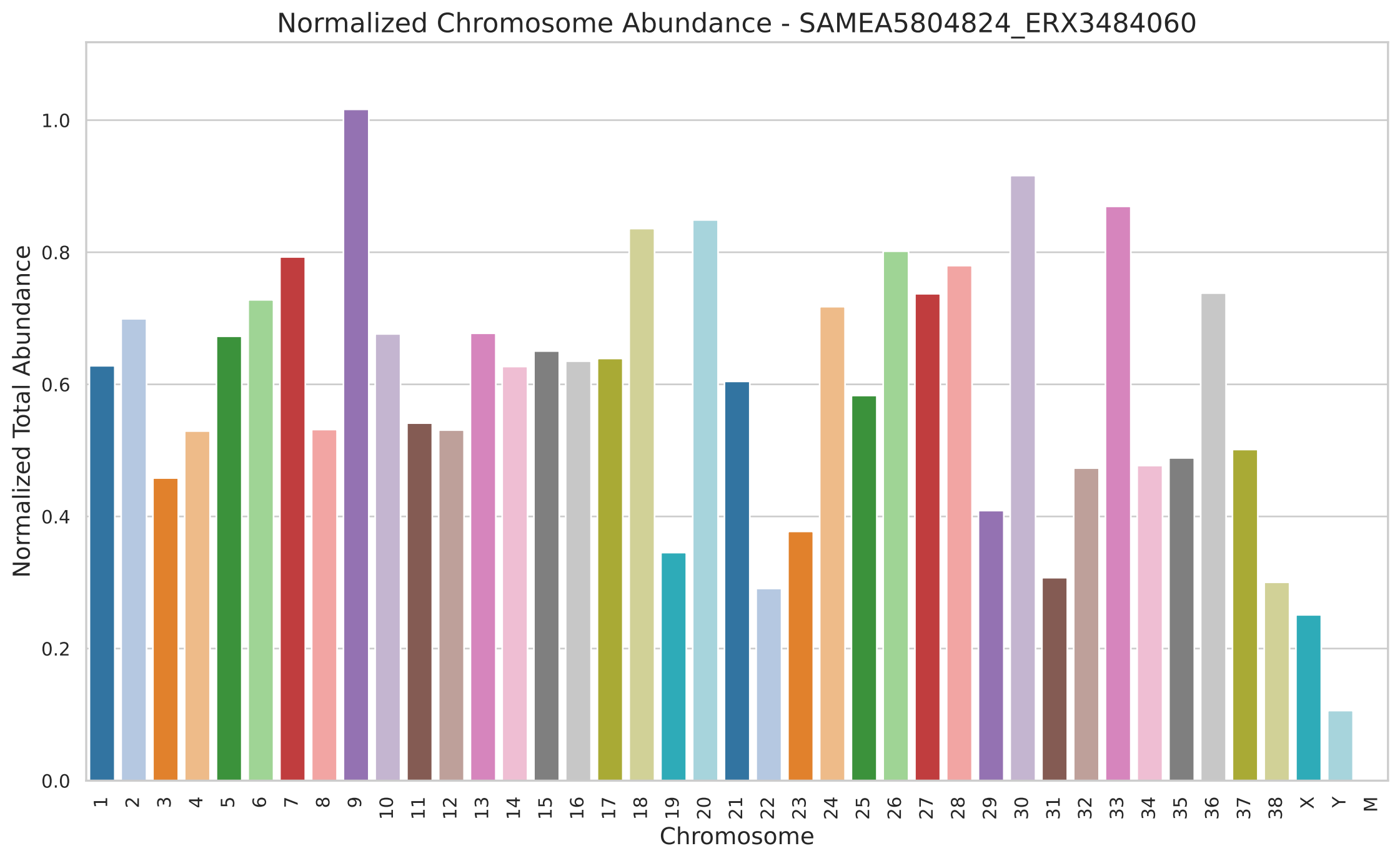

Normalized Chromosome Abundance - SAMEA5804748_ERX3484112
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

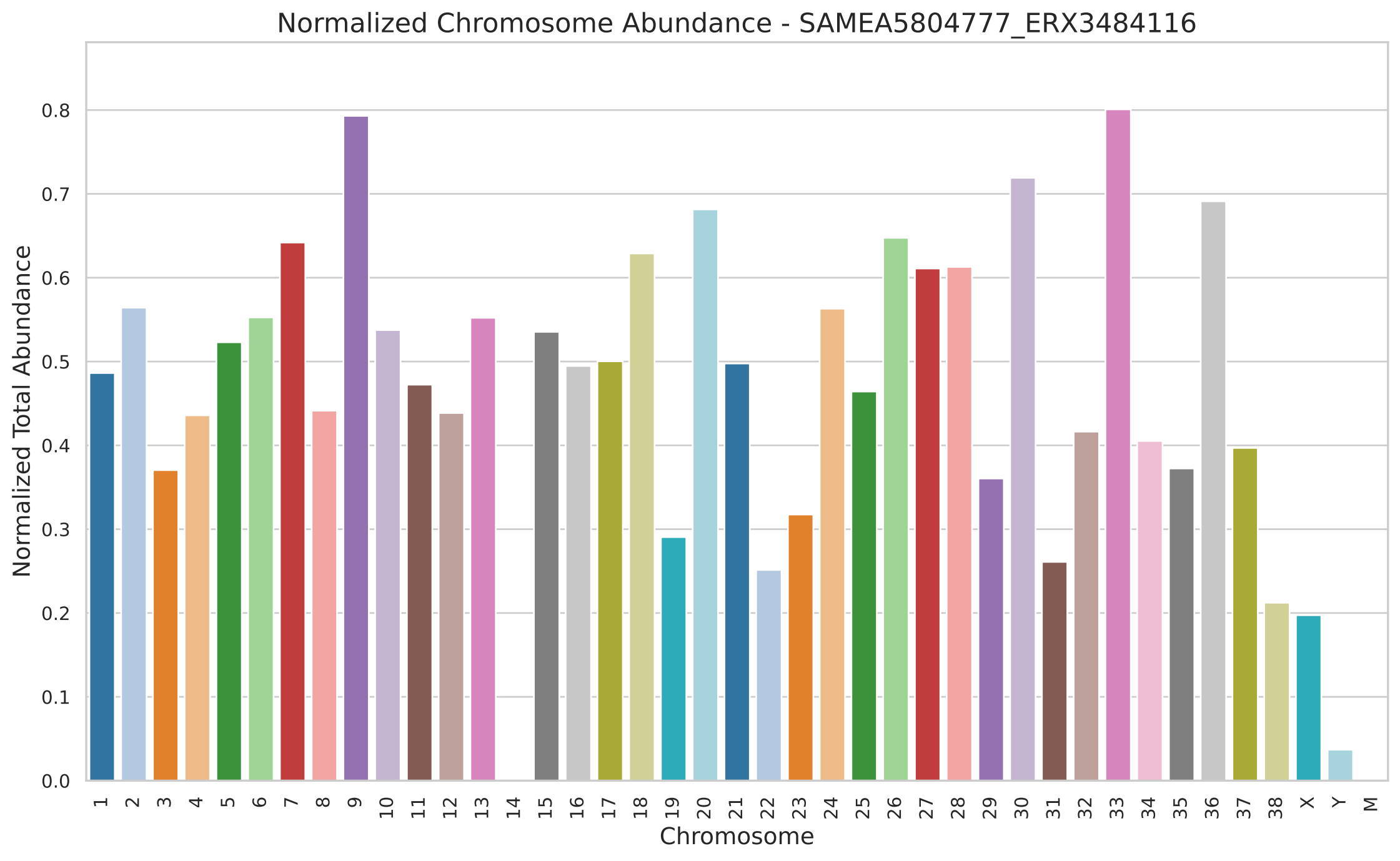

Normalized Chromosome Abundance - SAMEA5804610_ERX3484076
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

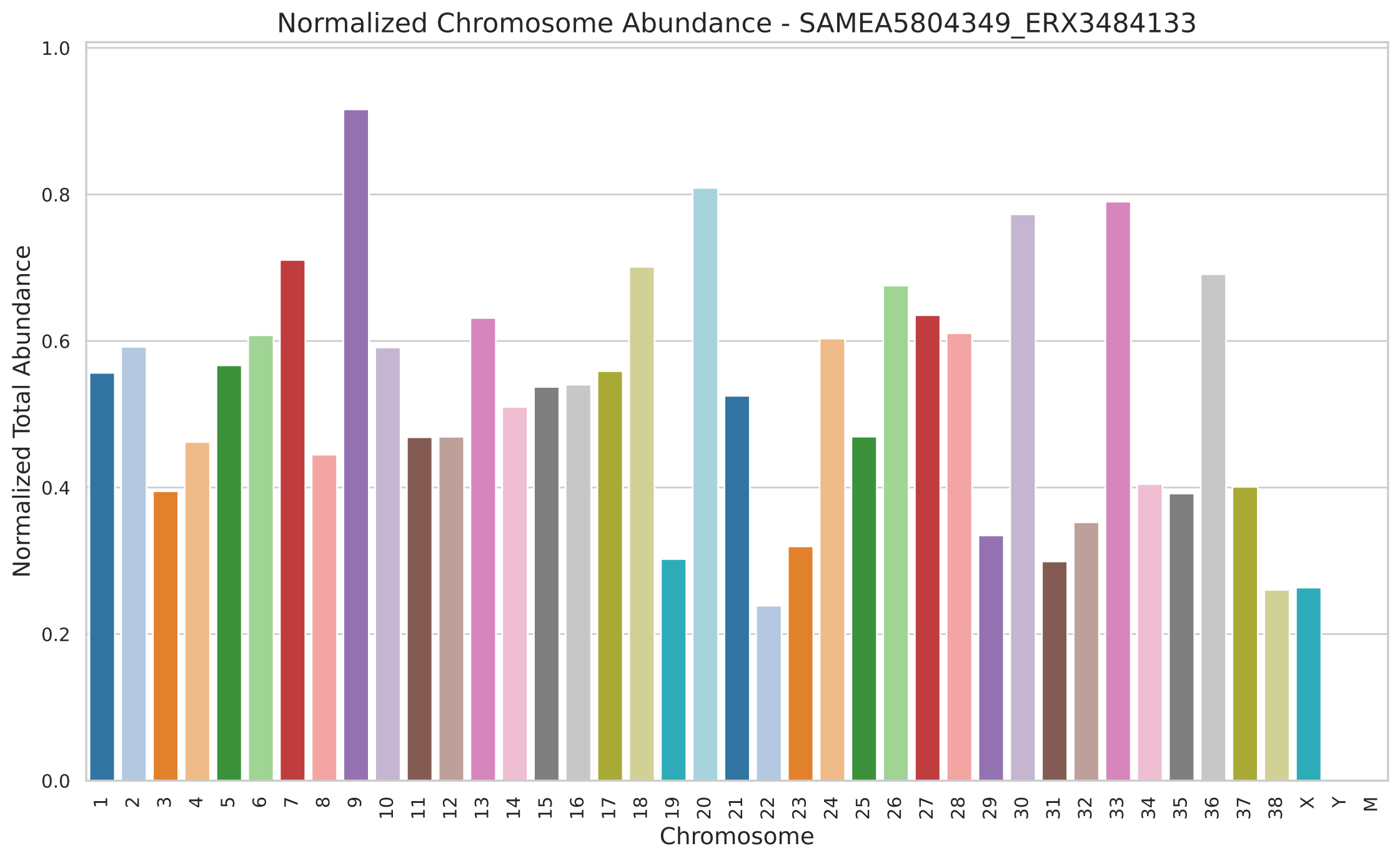

Normalized Chromosome Abundance - SAMEA5804716_ERX3484043
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

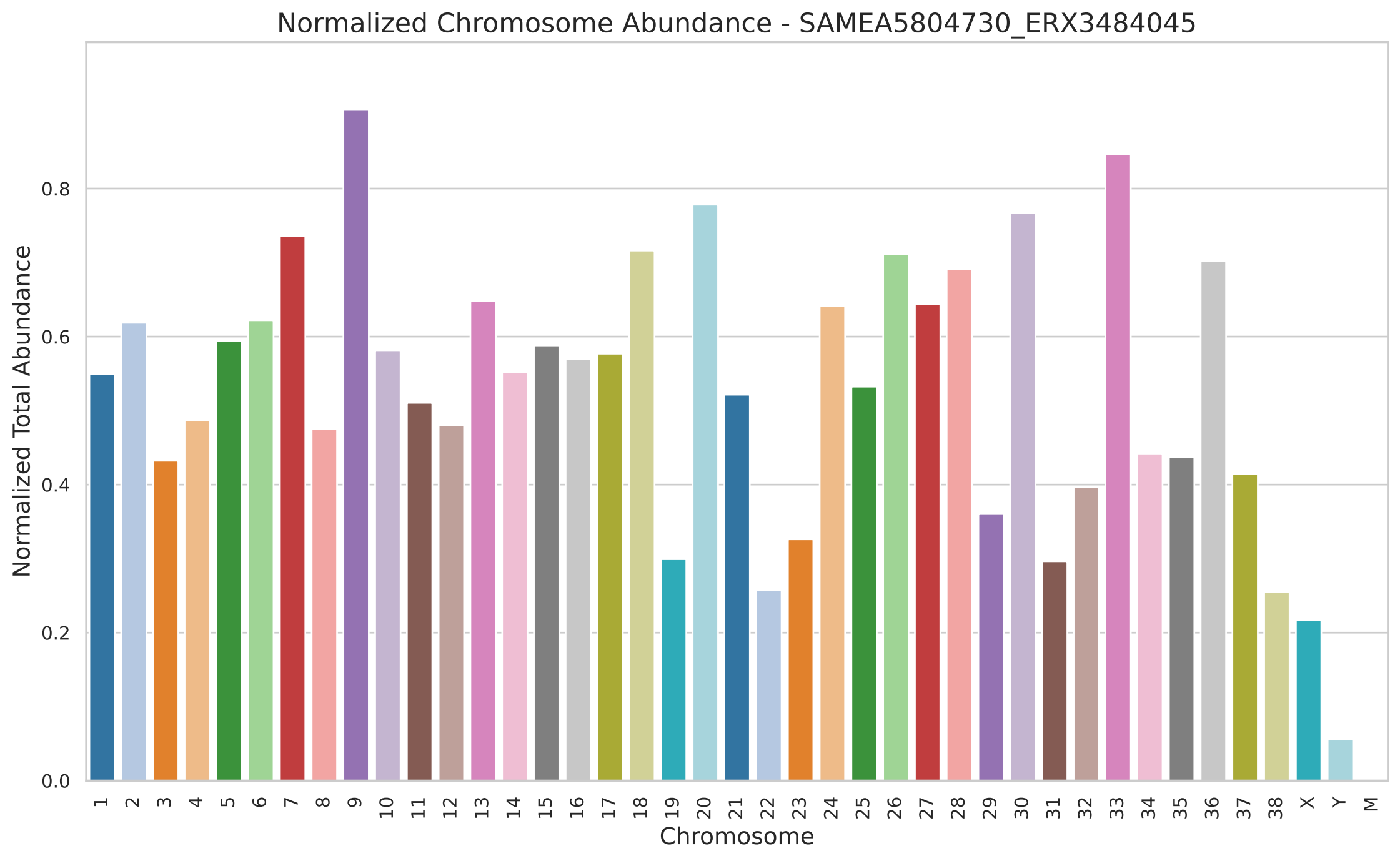

Normalized Chromosome Abundance - SAMEA5804795_ERX3484100
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

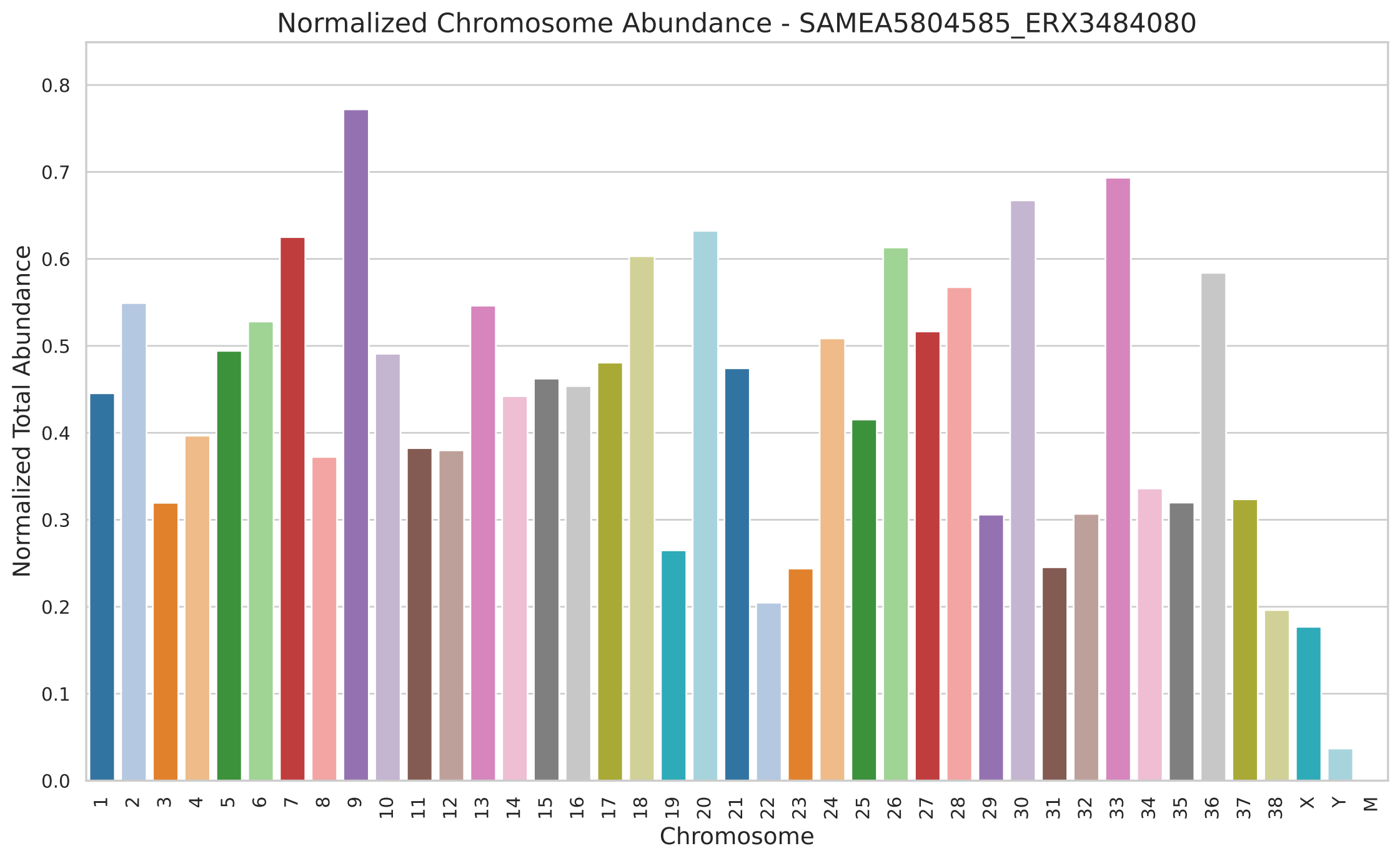

Normalized Chromosome Abundance - SAMEA5804452_ERX3484015
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

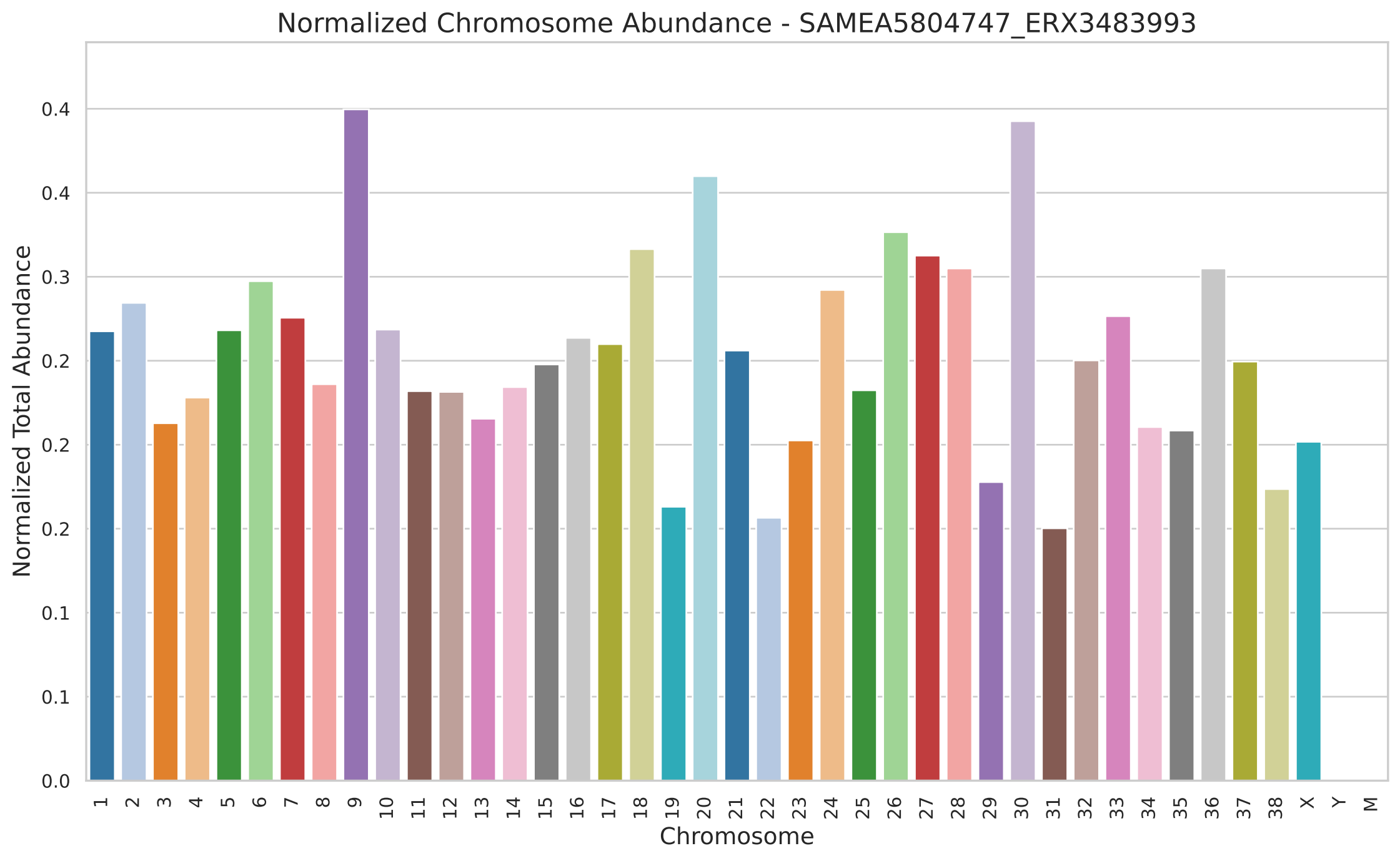

Normalized Chromosome Abundance - SAMEA5804824_ERX3484060
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

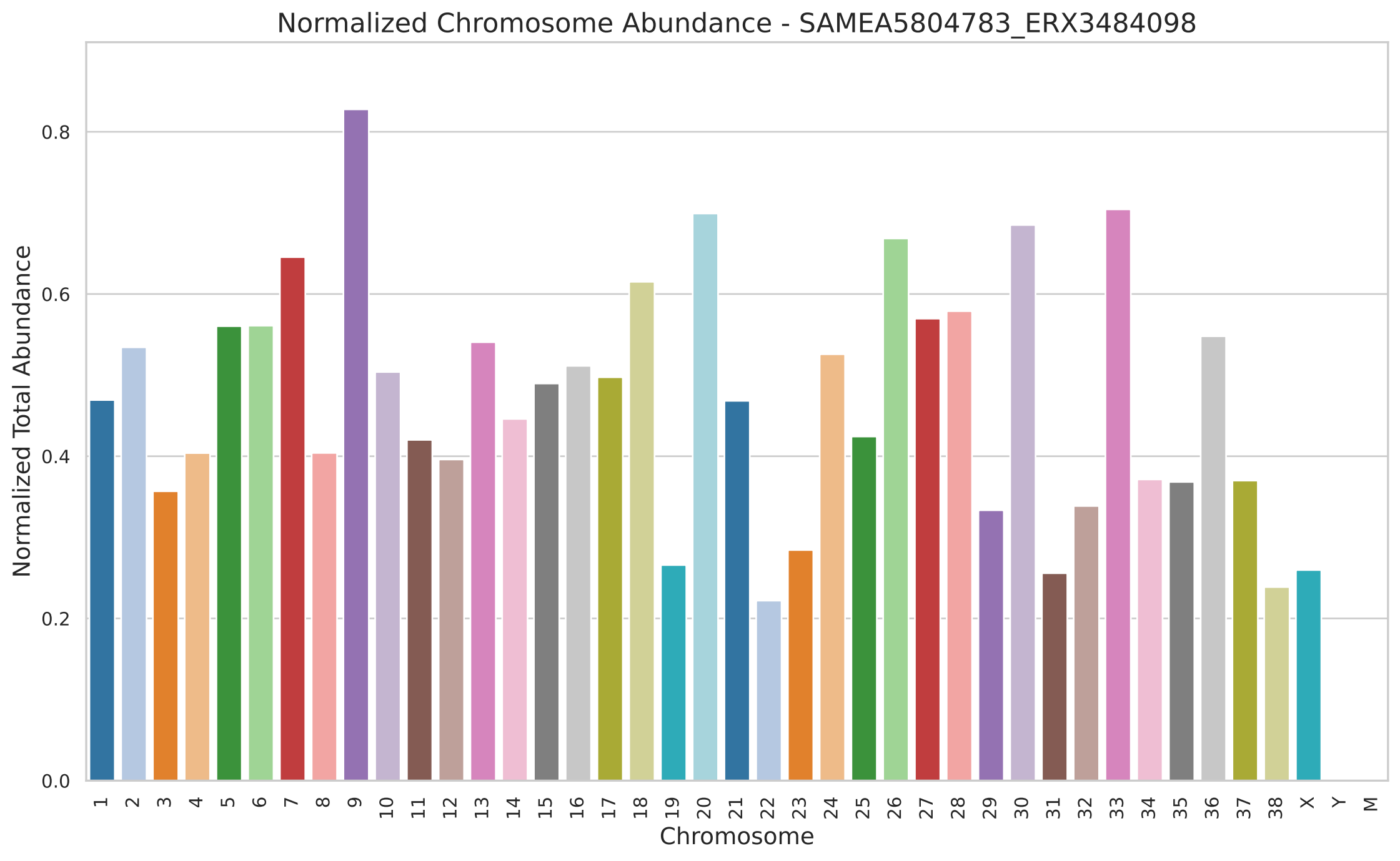

Normalized Chromosome Abundance - SAMEA5804777_ERX3484116
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

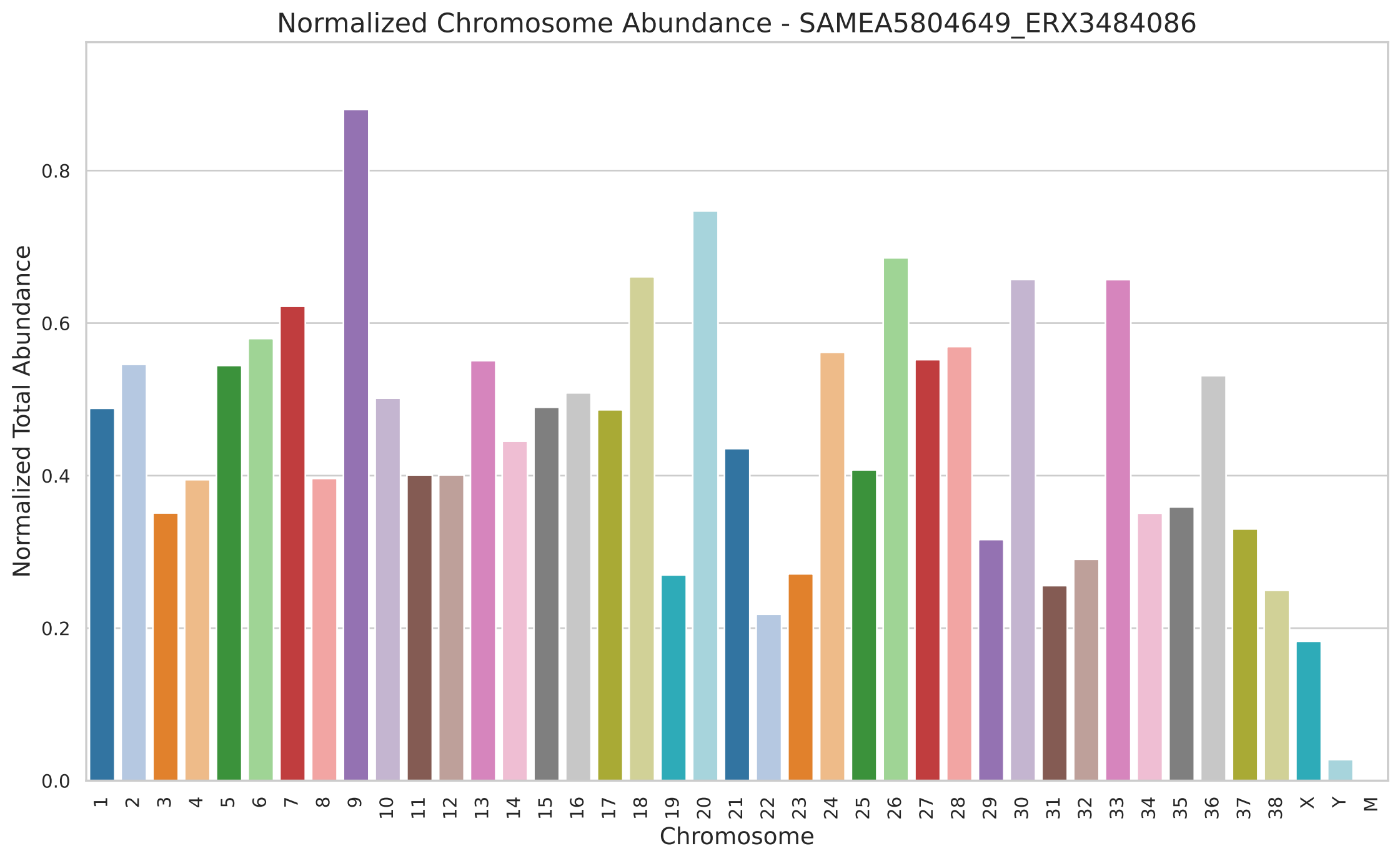

Normalized Chromosome Abundance - SAMEA5804349_ERX3484133
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

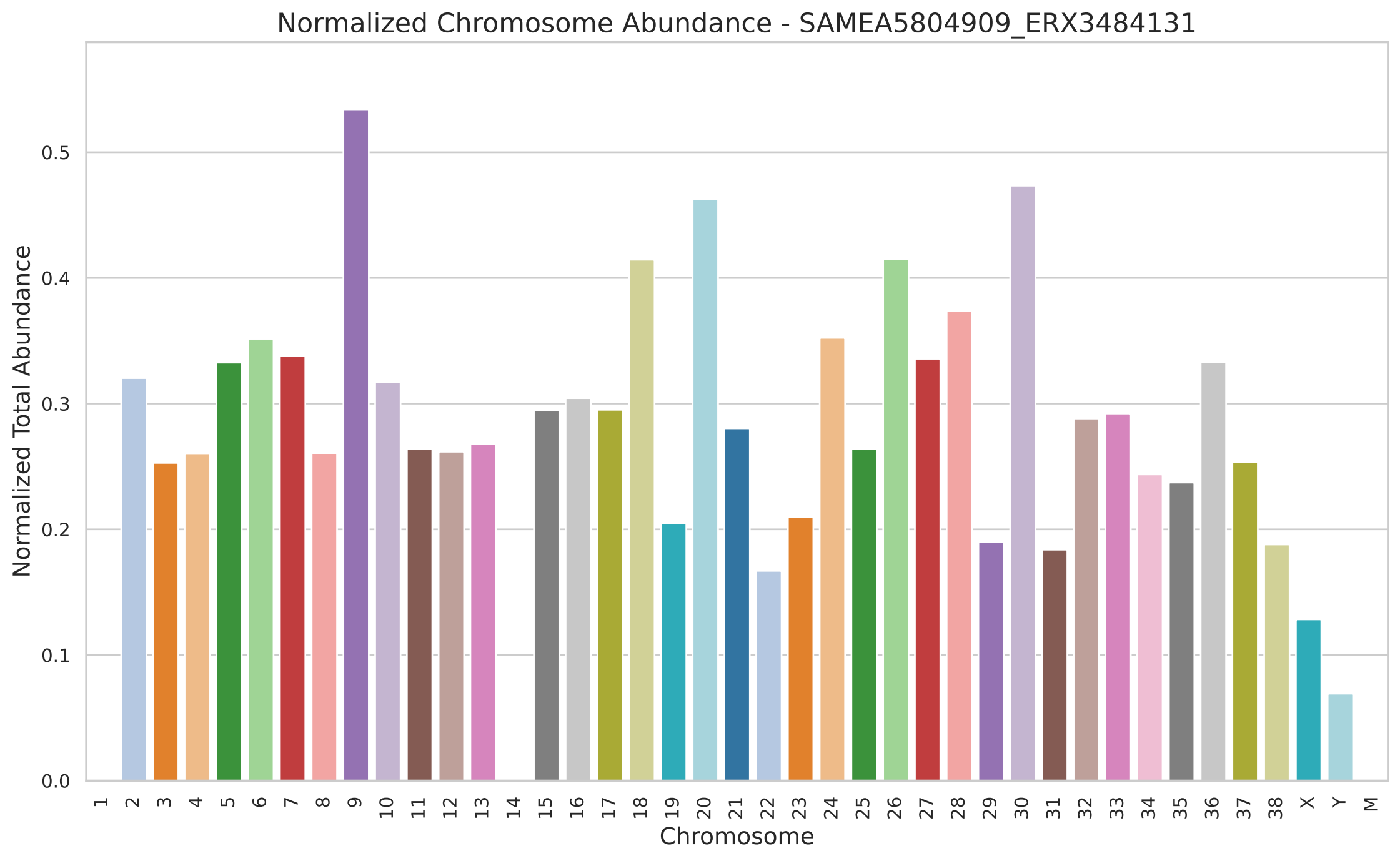

Normalized Chromosome Abundance - SAMEA5804730_ERX3484045
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

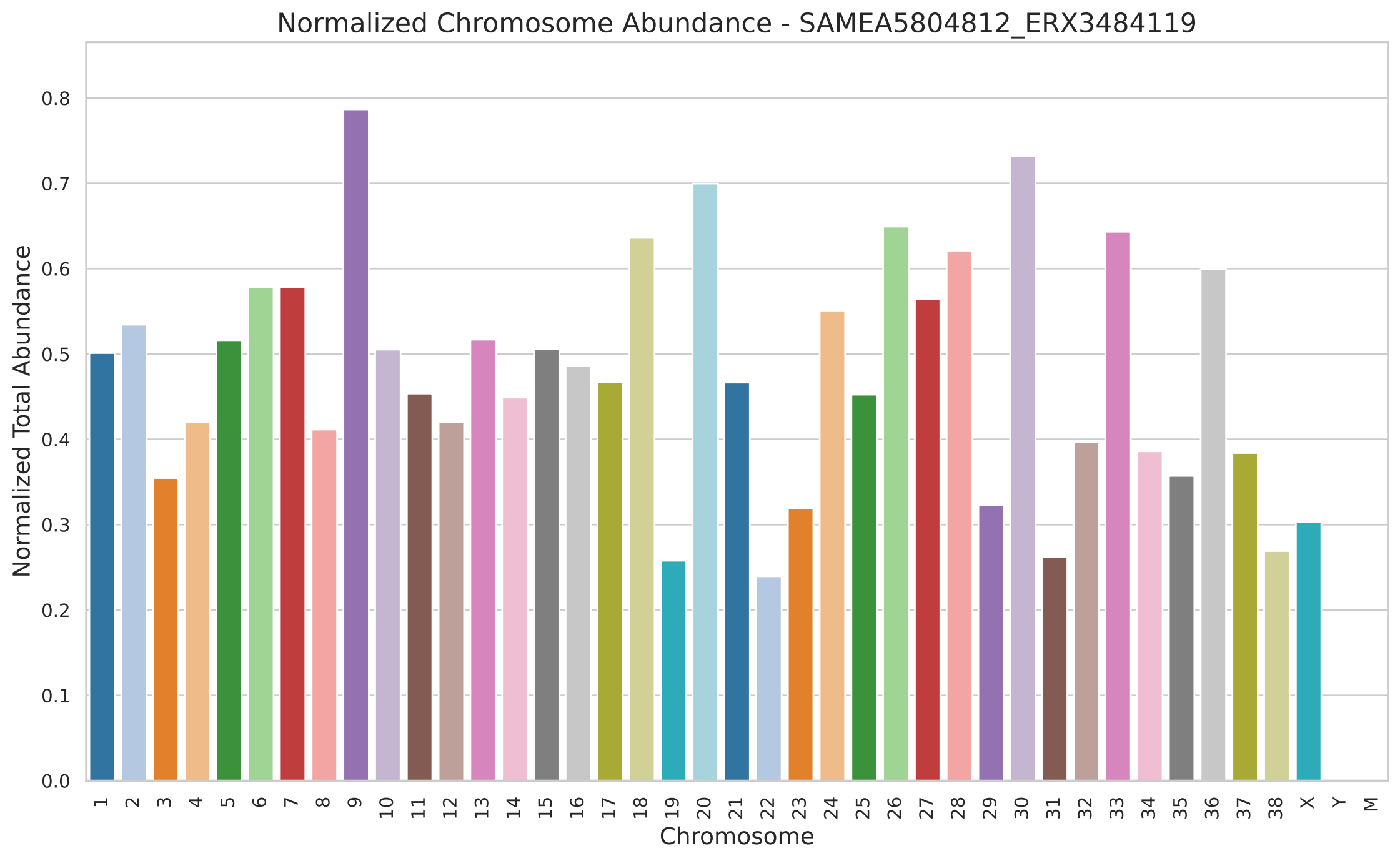

Normalized Chromosome Abundance - SAMEA5804585_ERX3484080
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

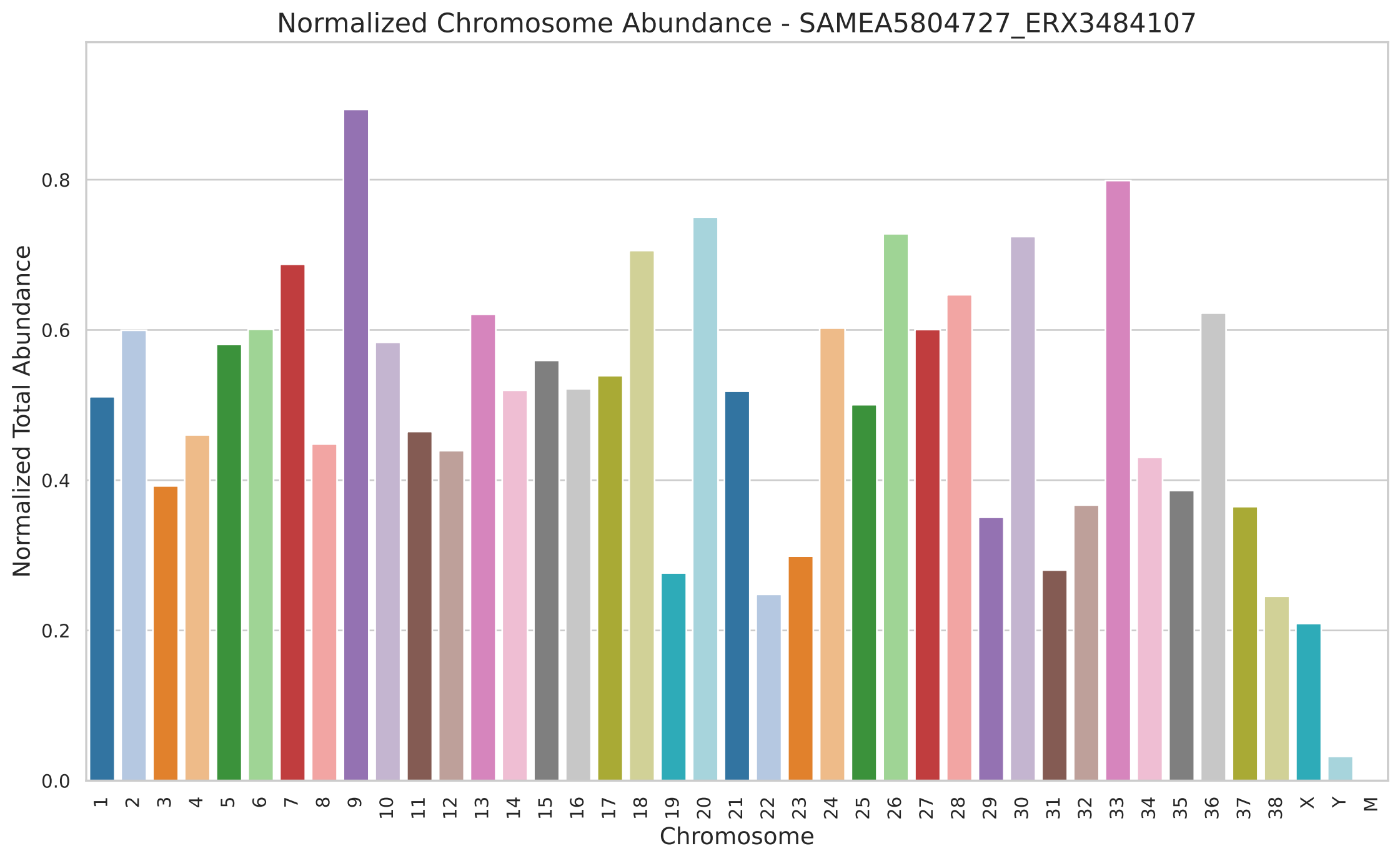

Normalized Chromosome Abundance - SAMEA5804747_ERX3483993
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

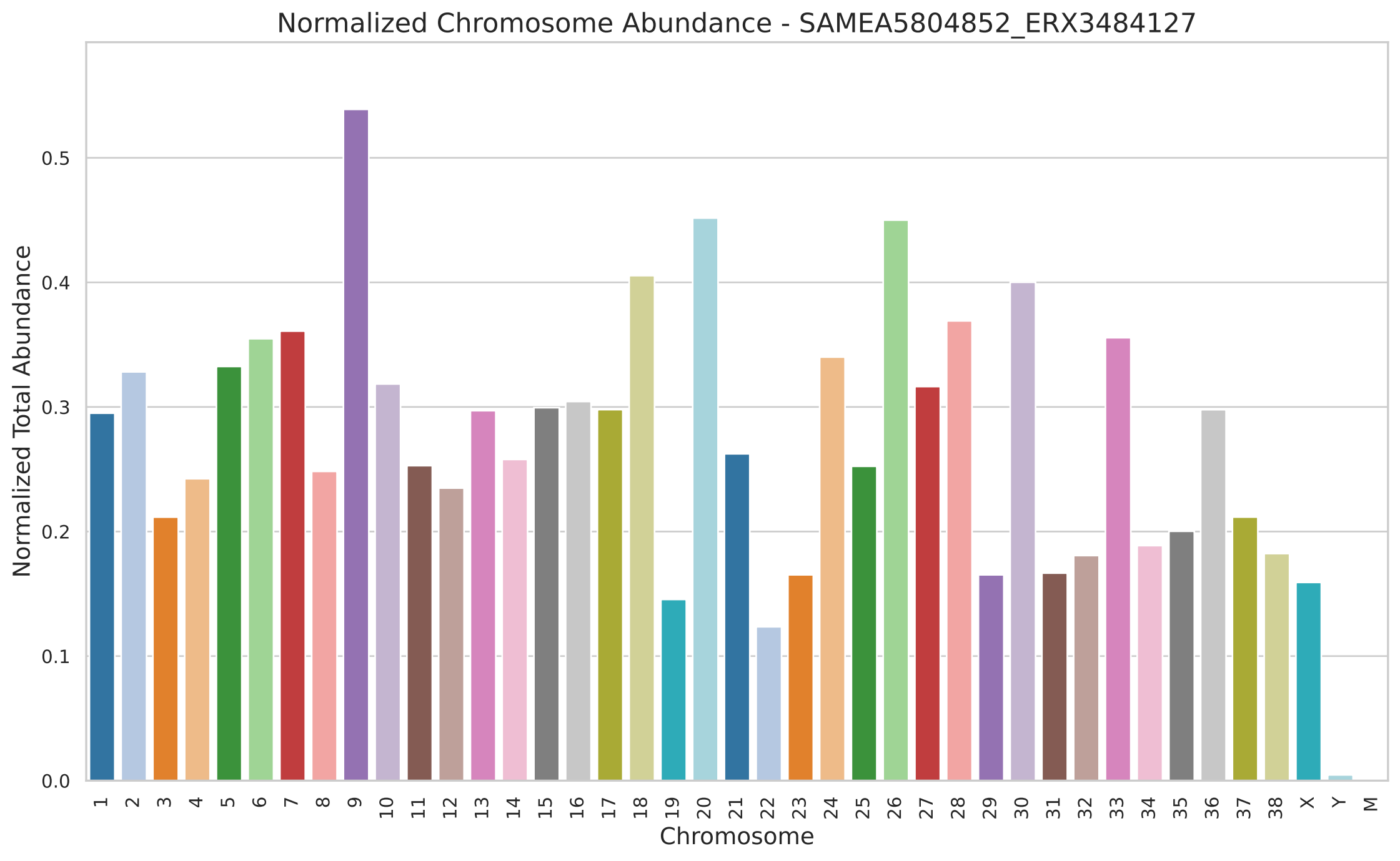

Normalized Chromosome Abundance - SAMEA5804783_ERX3484098
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

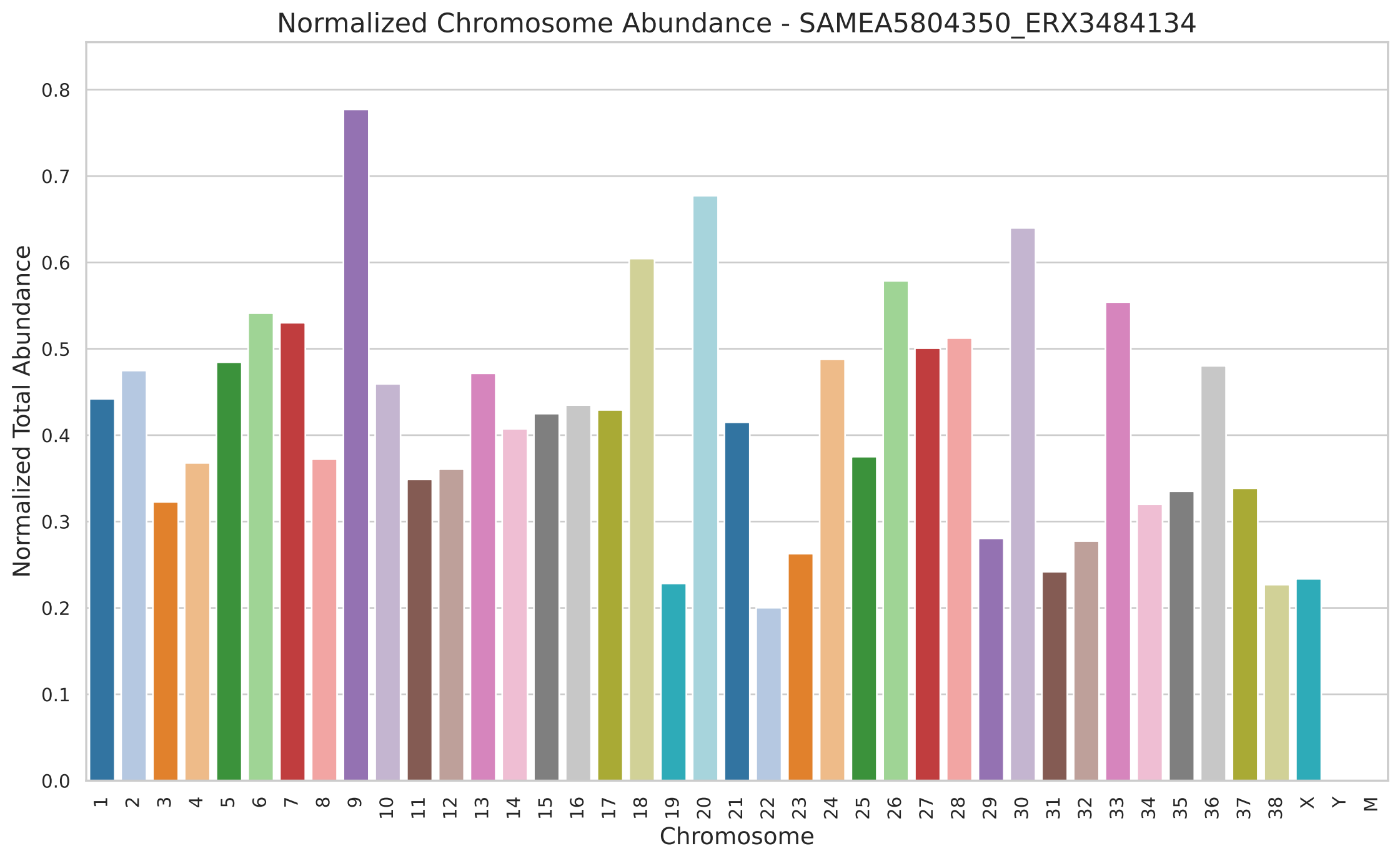

Normalized Chromosome Abundance - SAMEA5804649_ERX3484086
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

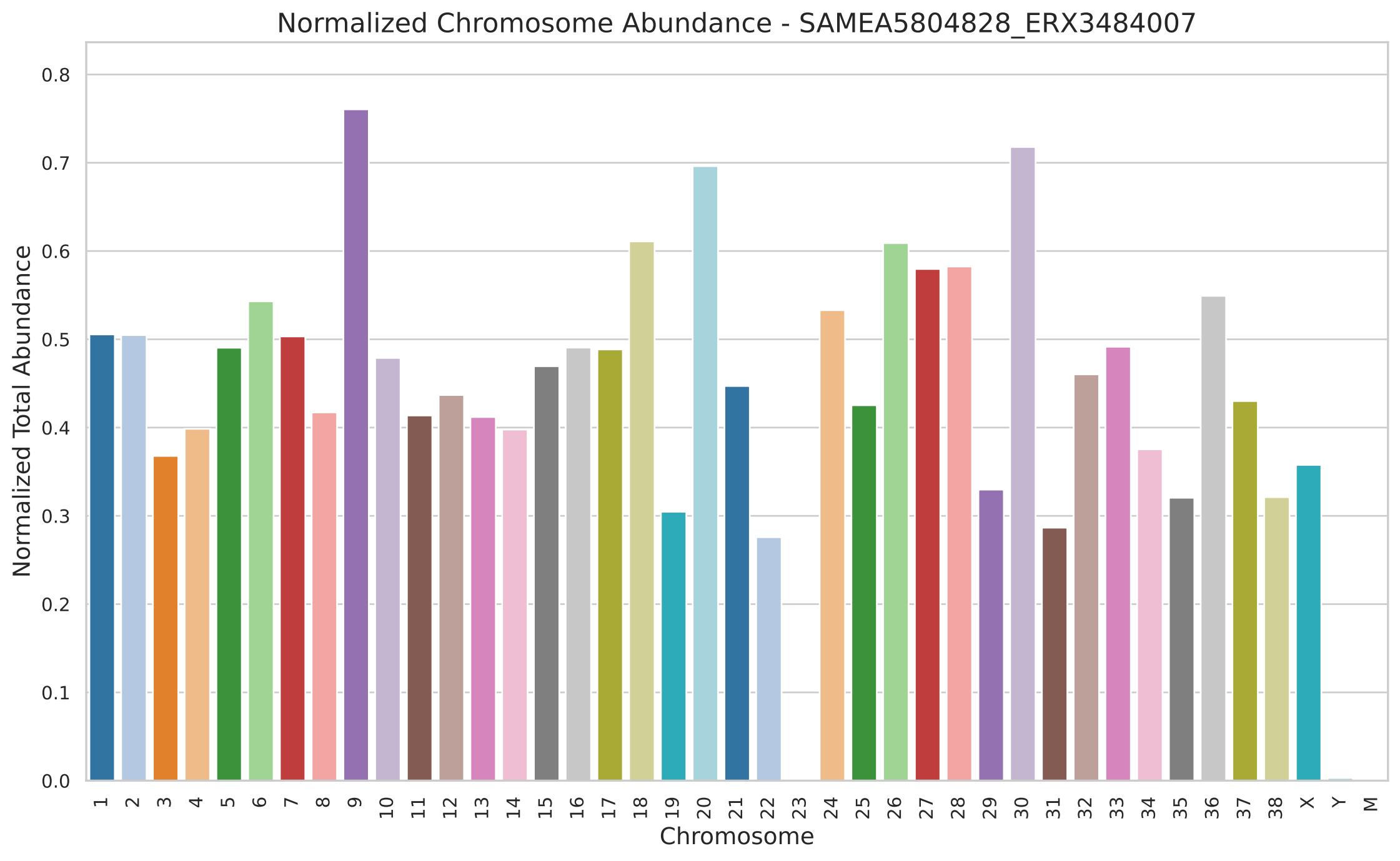

Normalized Chromosome Abundance - SAMEA5804909_ERX3484131
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

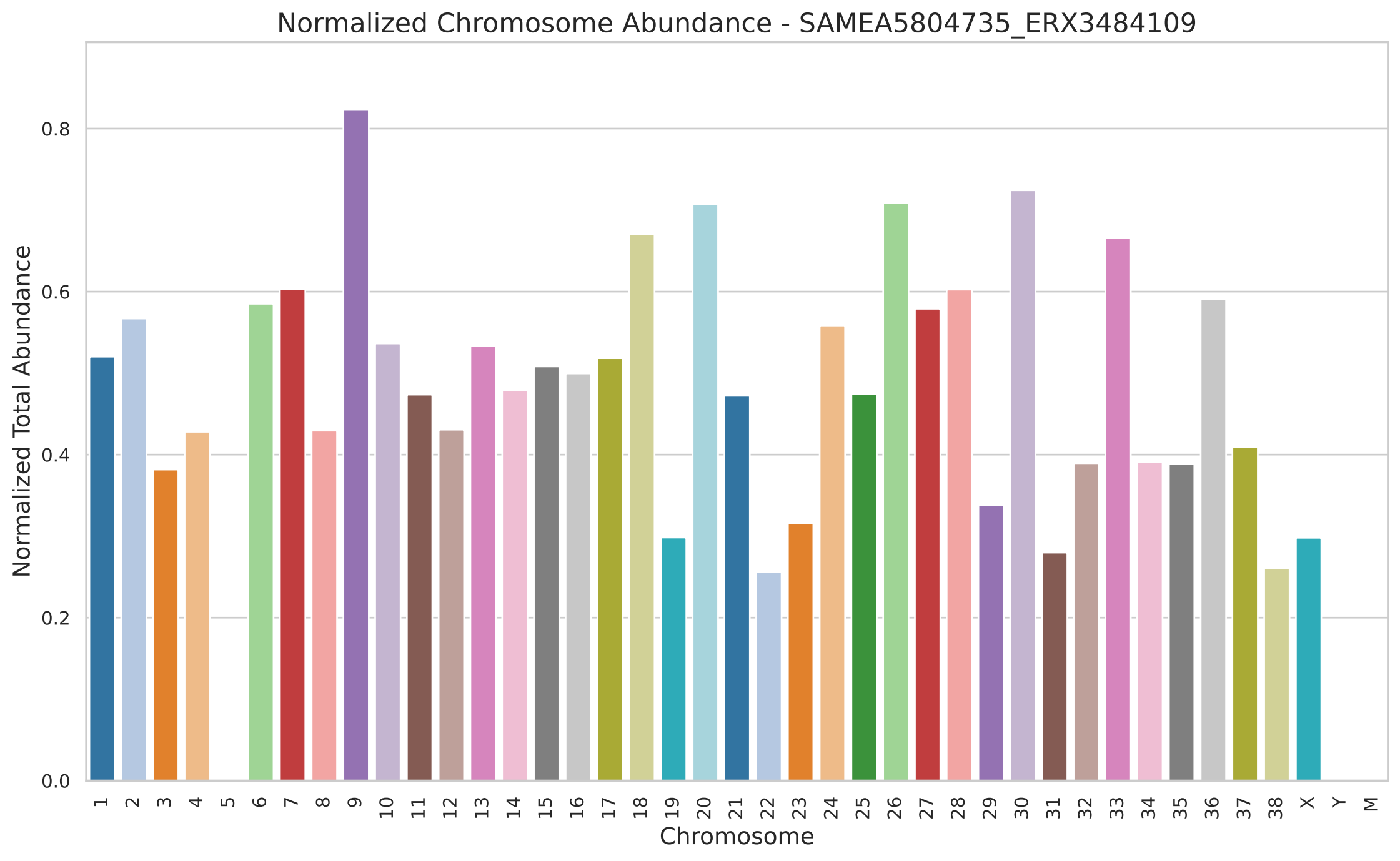

Normalized Chromosome Abundance - SAMEA5804812_ERX3484119
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

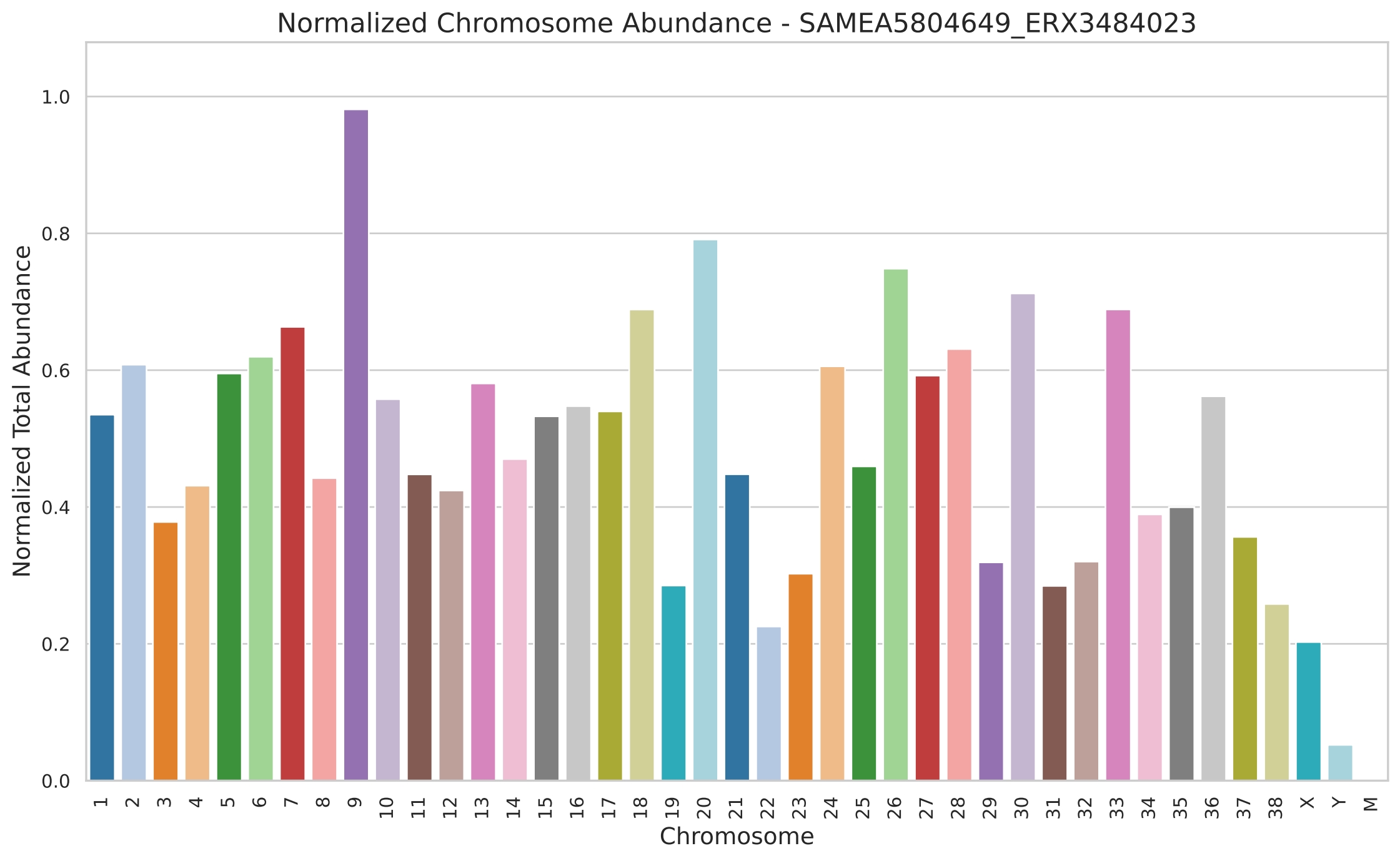

Normalized Chromosome Abundance - SAMEA5804727_ERX3484107
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

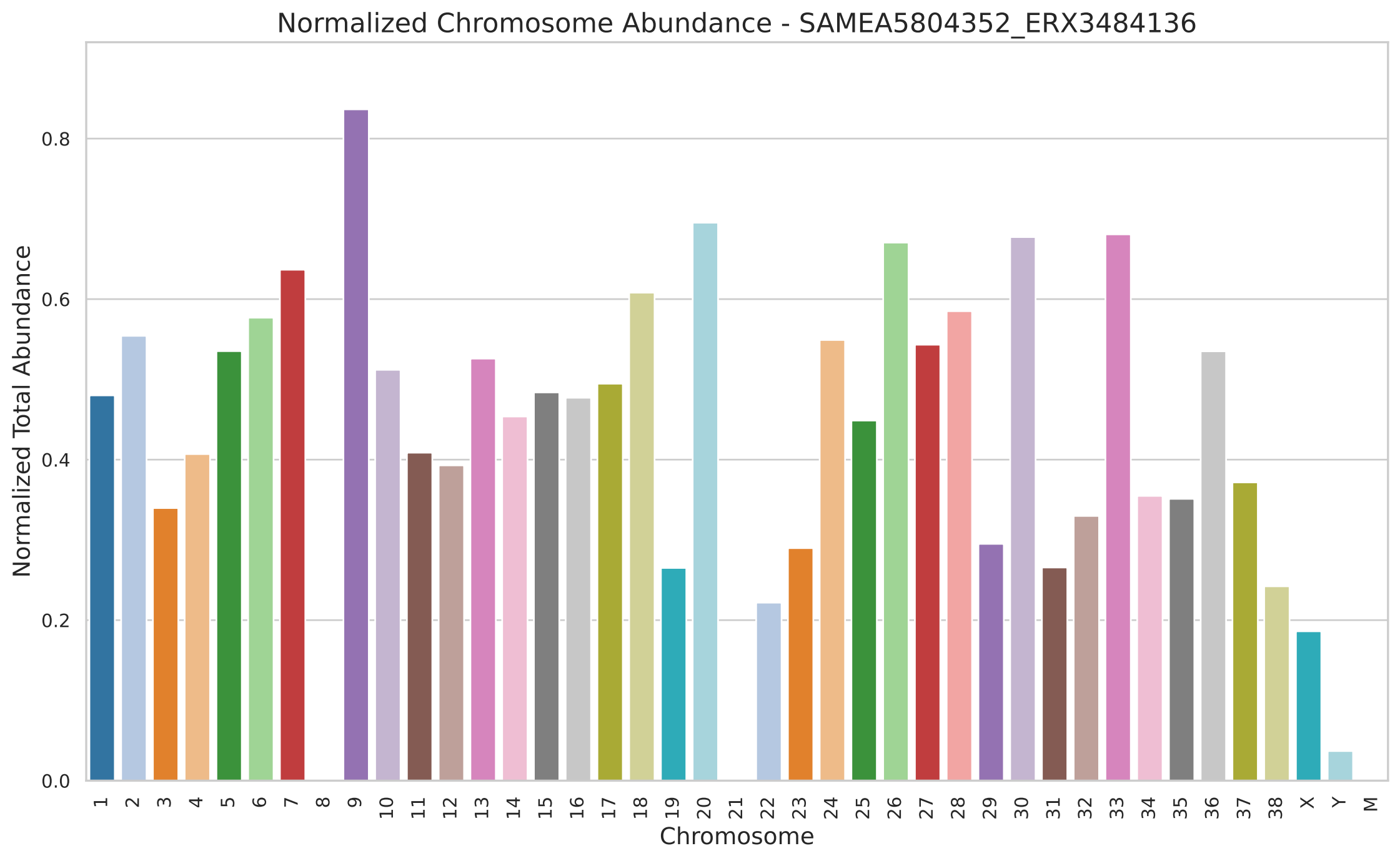

Normalized Chromosome Abundance - SAMEA5804852_ERX3484127
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

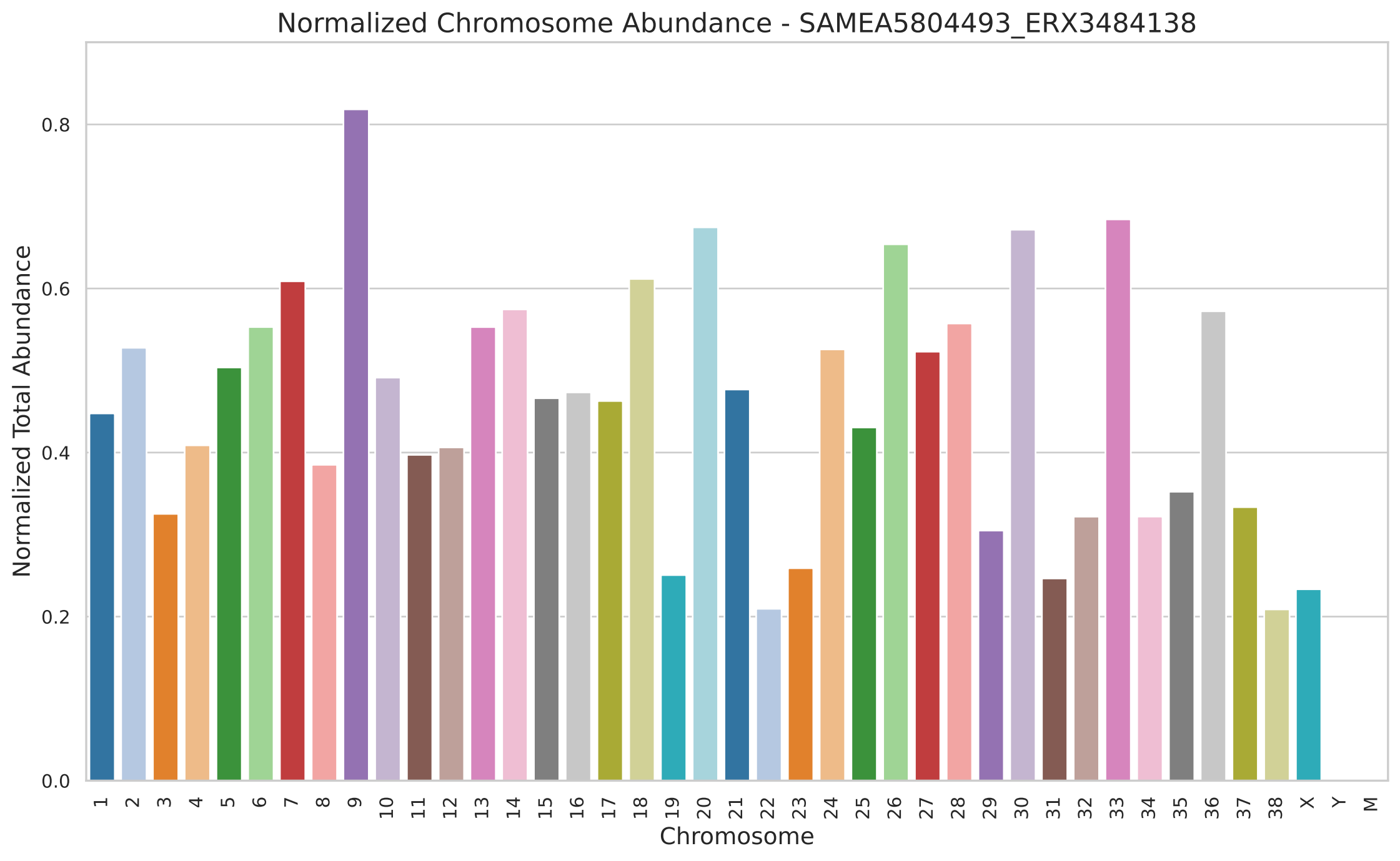

Normalized Chromosome Abundance - SAMEA5804350_ERX3484134
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

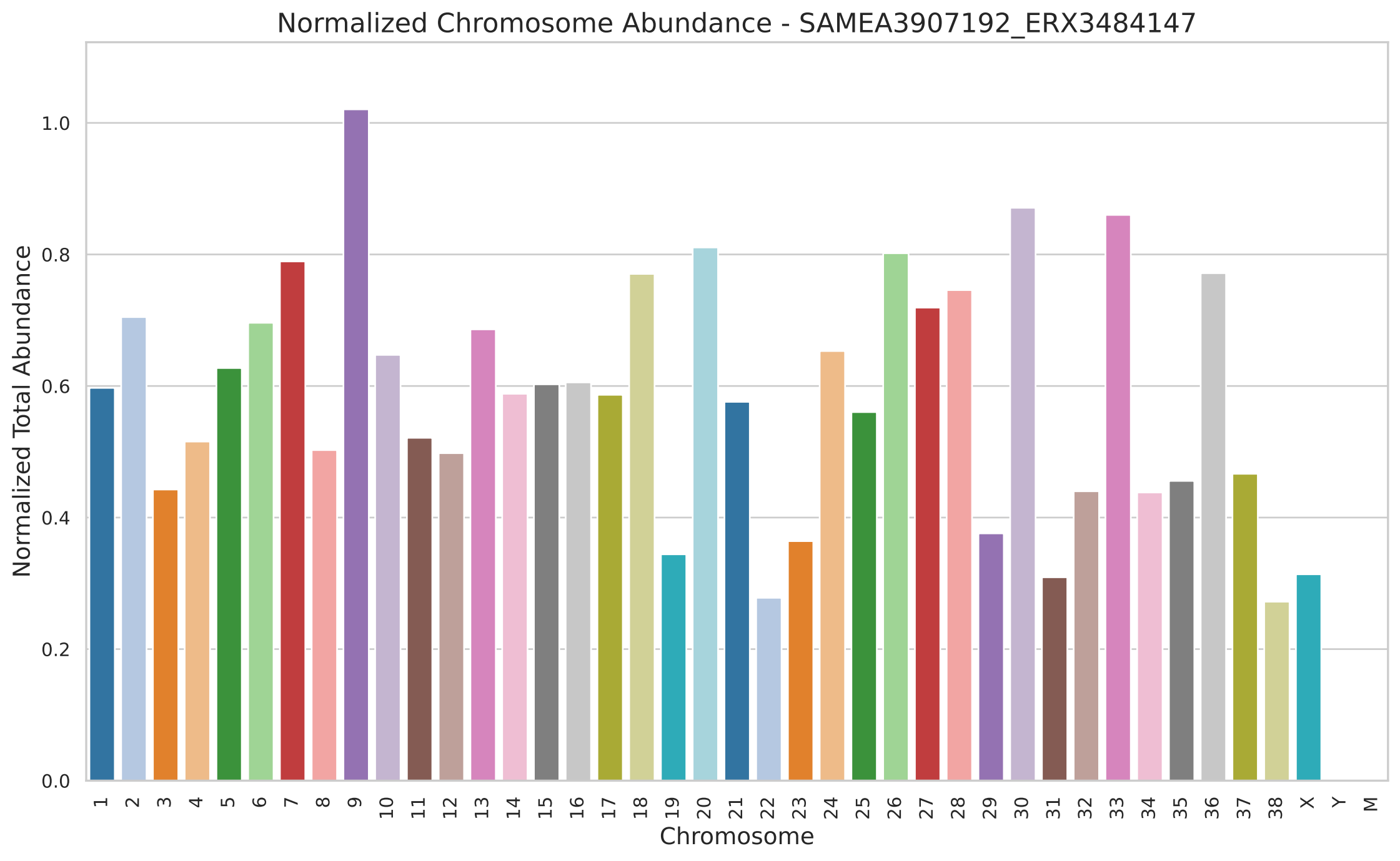

Normalized Chromosome Abundance - SAMEA5804828_ERX3484007
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

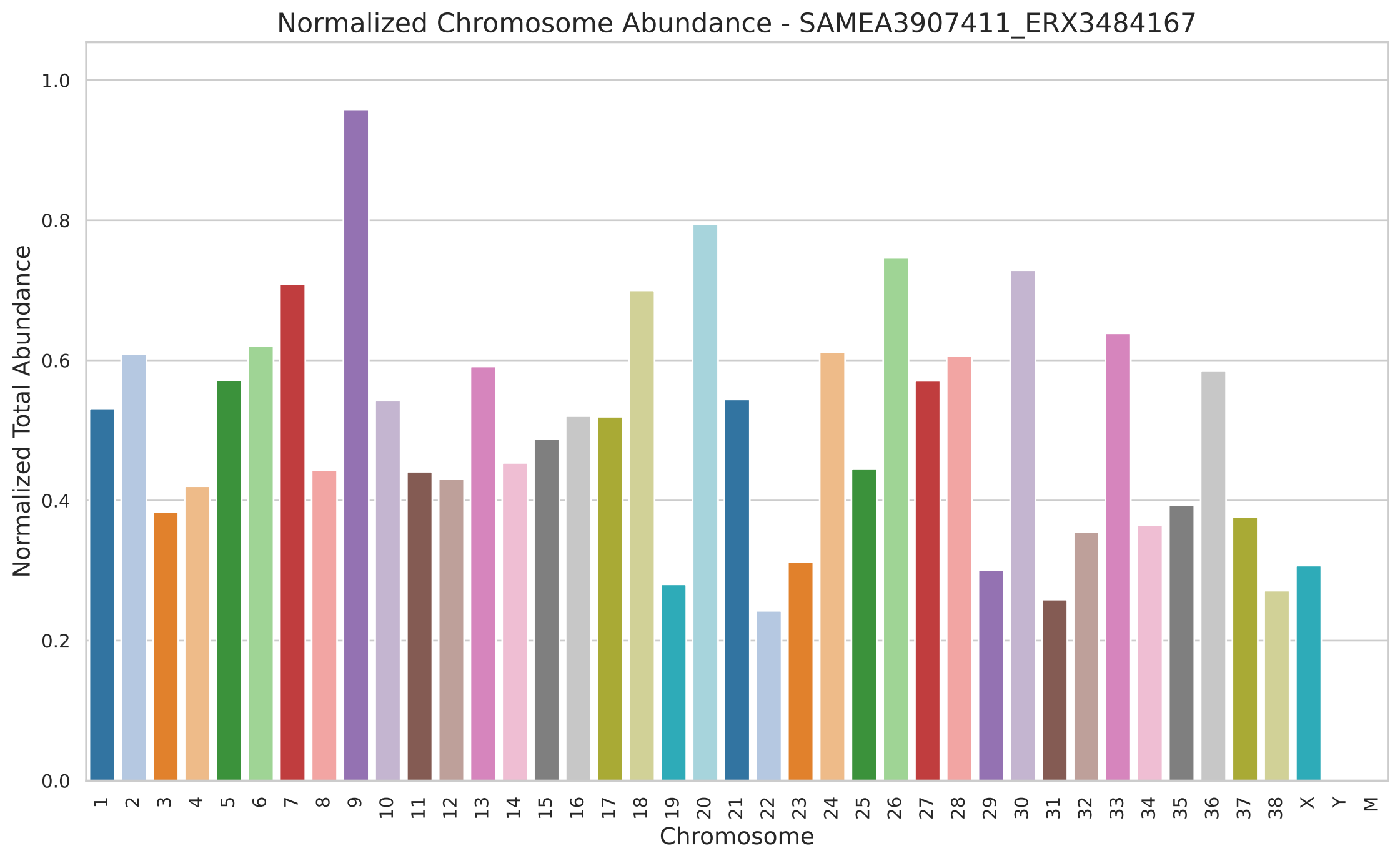

Normalized Chromosome Abundance - SAMEA5804735_ERX3484109
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

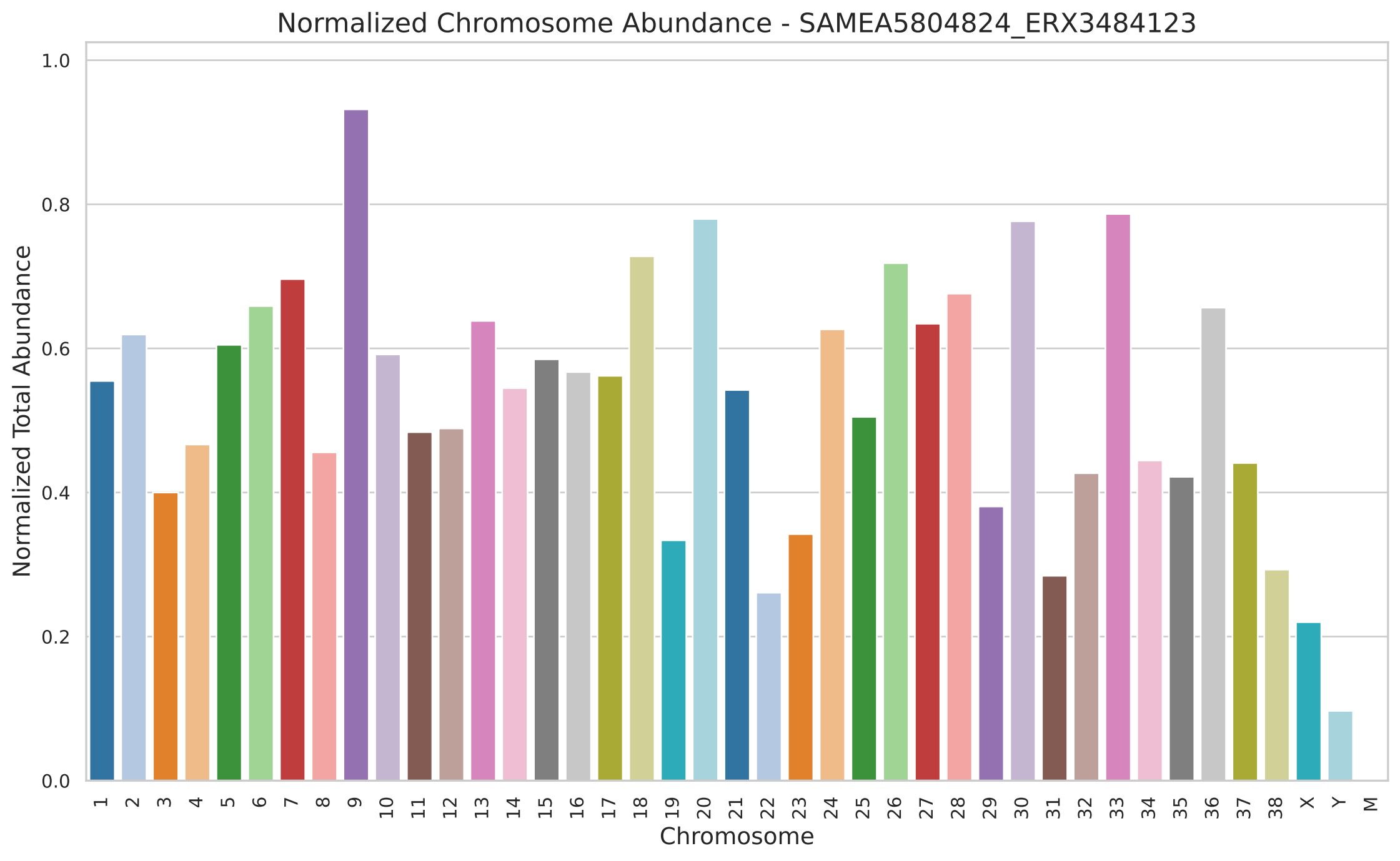

Normalized Chromosome Abundance - SAMEA5804649_ERX3484023
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

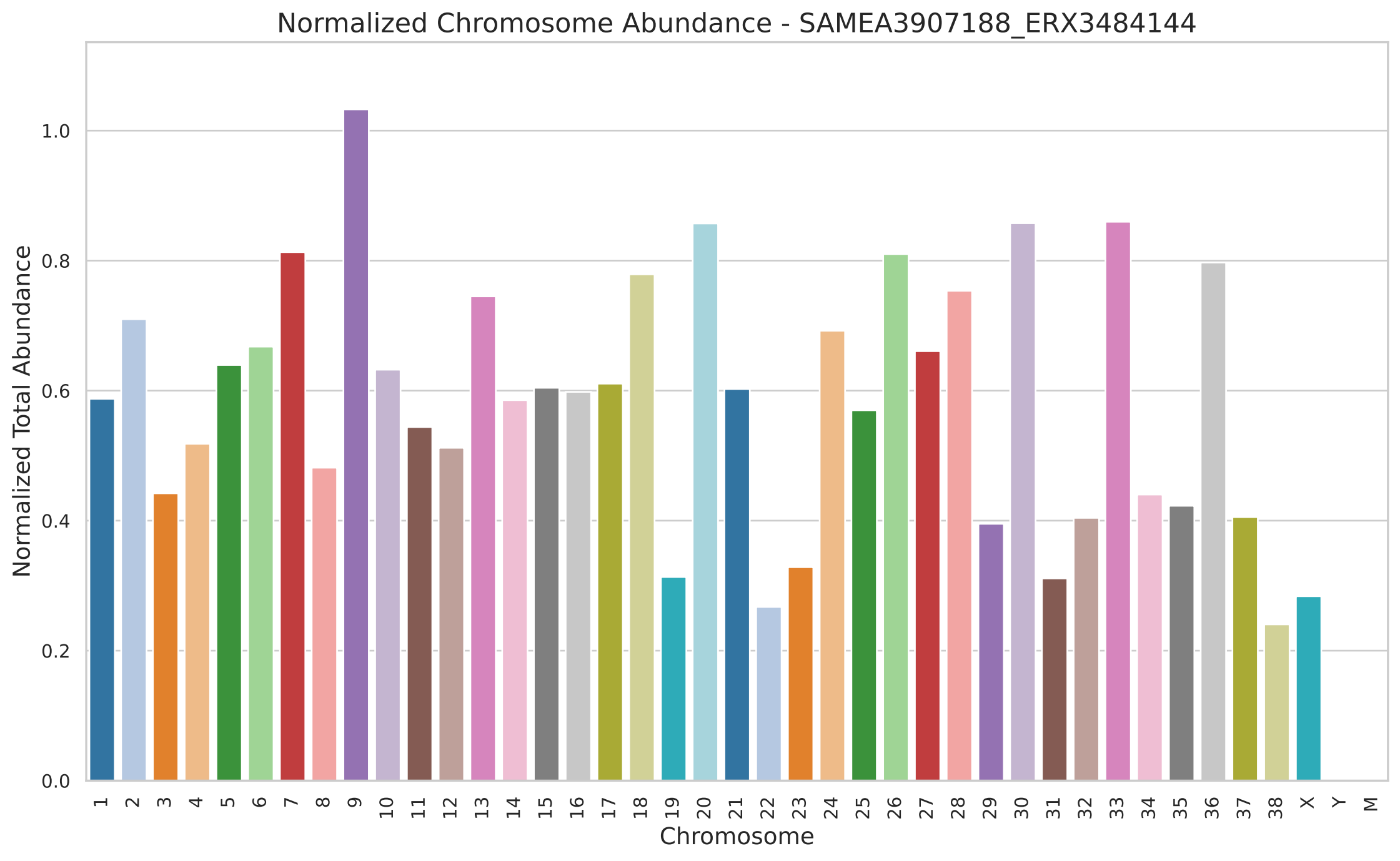

Normalized Chromosome Abundance - SAMEA5804352_ERX3484136
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

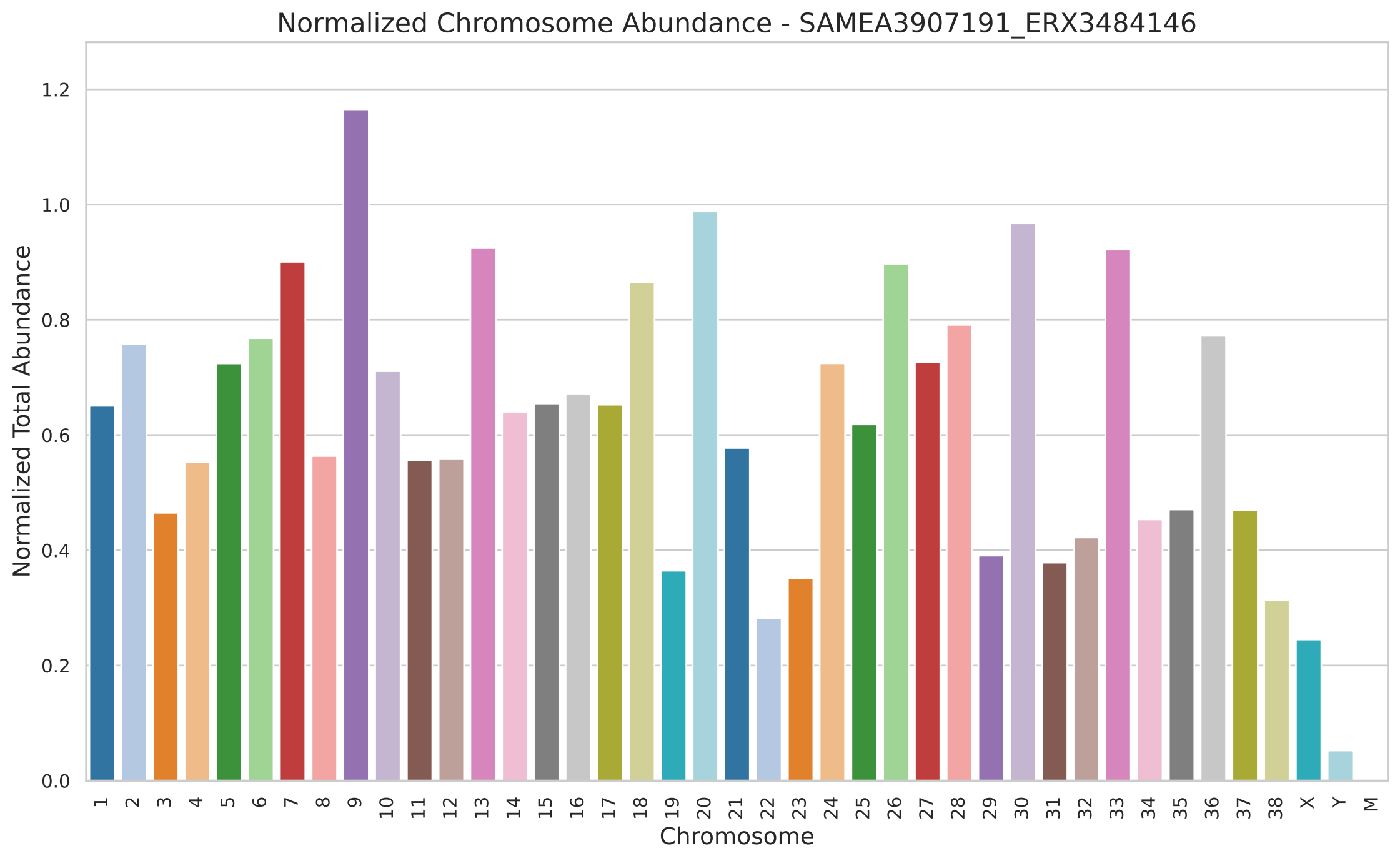

Normalized Chromosome Abundance - SAMEA5804493_ERX3484138
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

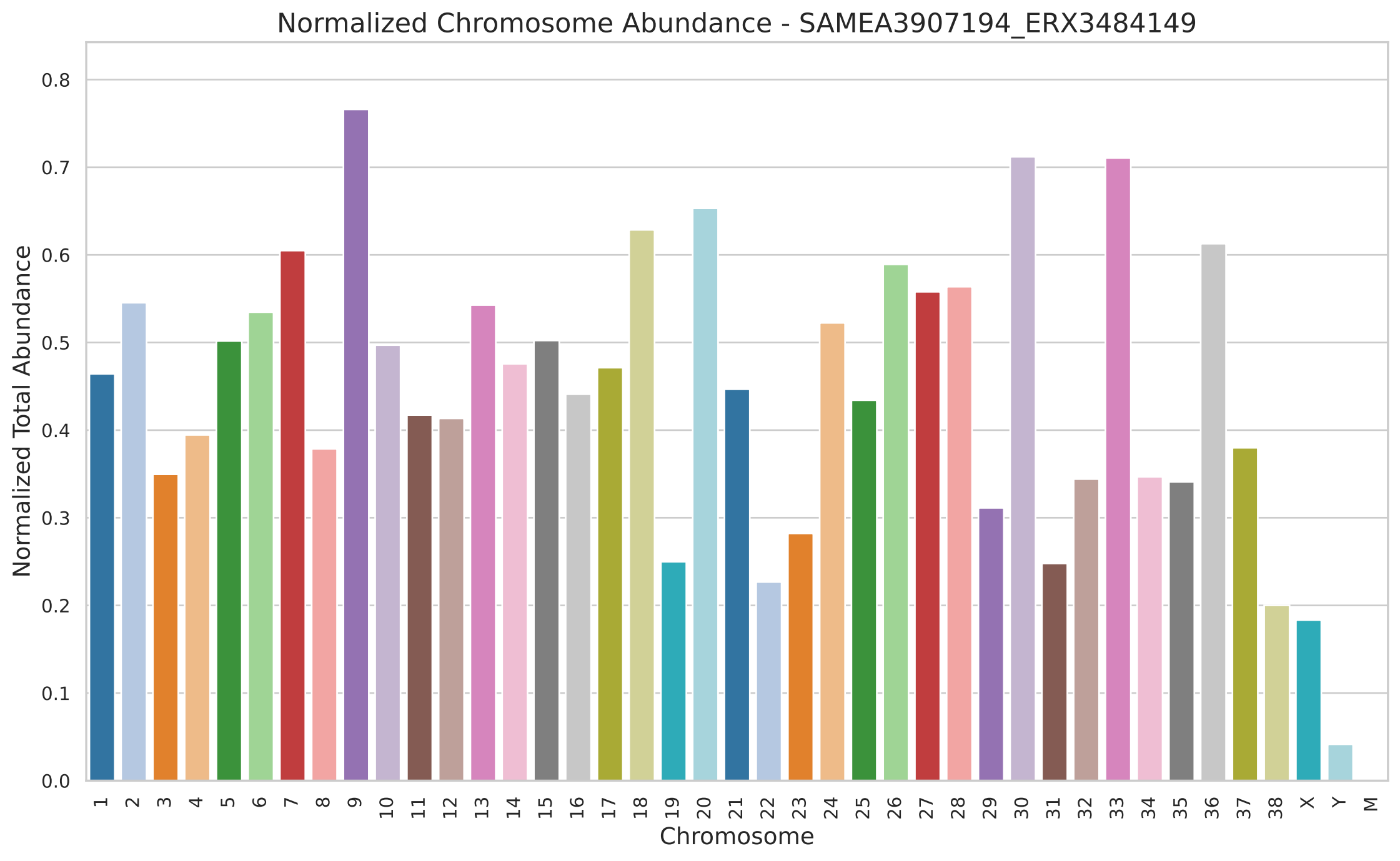

Normalized Chromosome Abundance - SAMEA3907192_ERX3484147
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

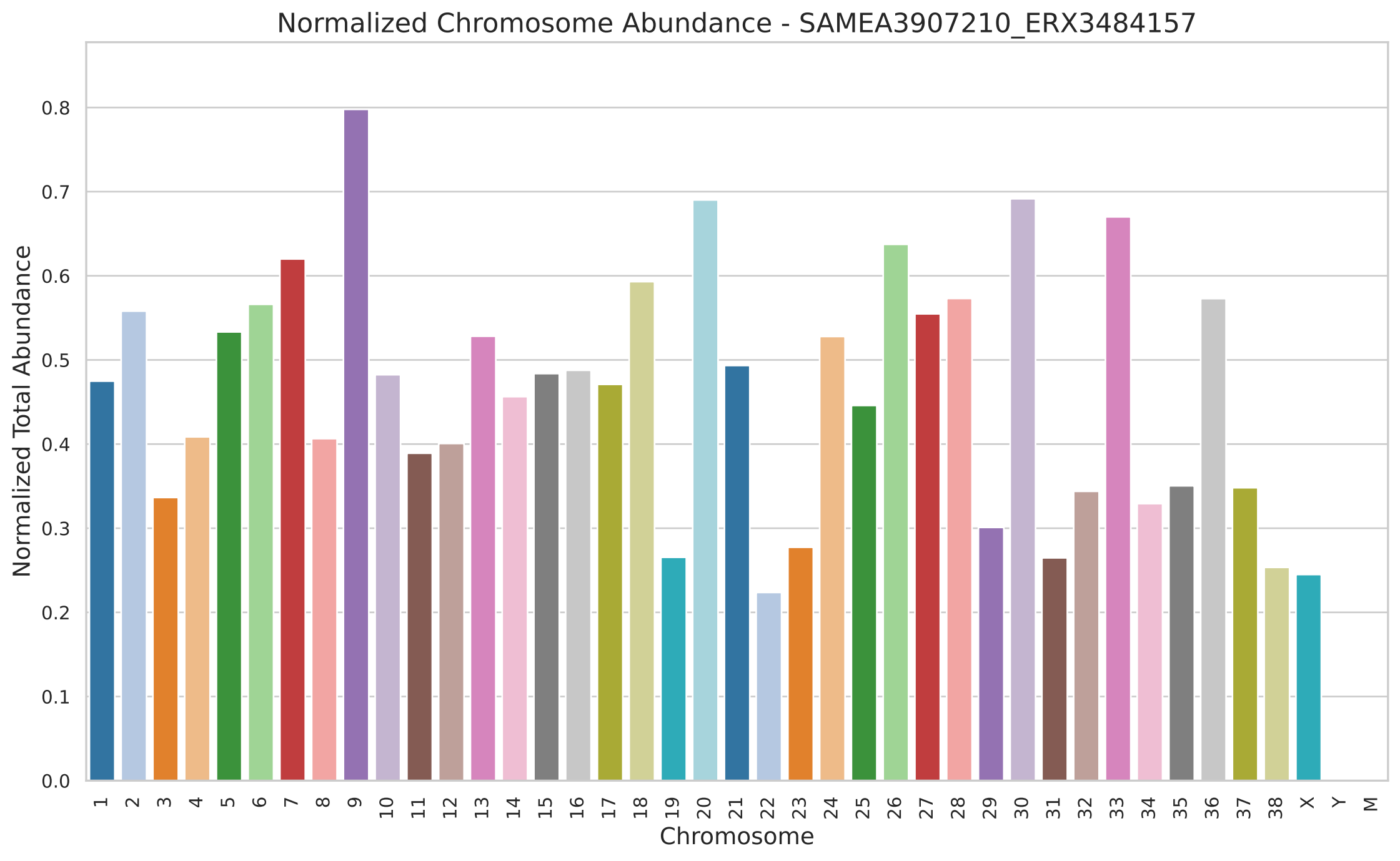

Normalized Chromosome Abundance - SAMEA3907411_ERX3484167
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

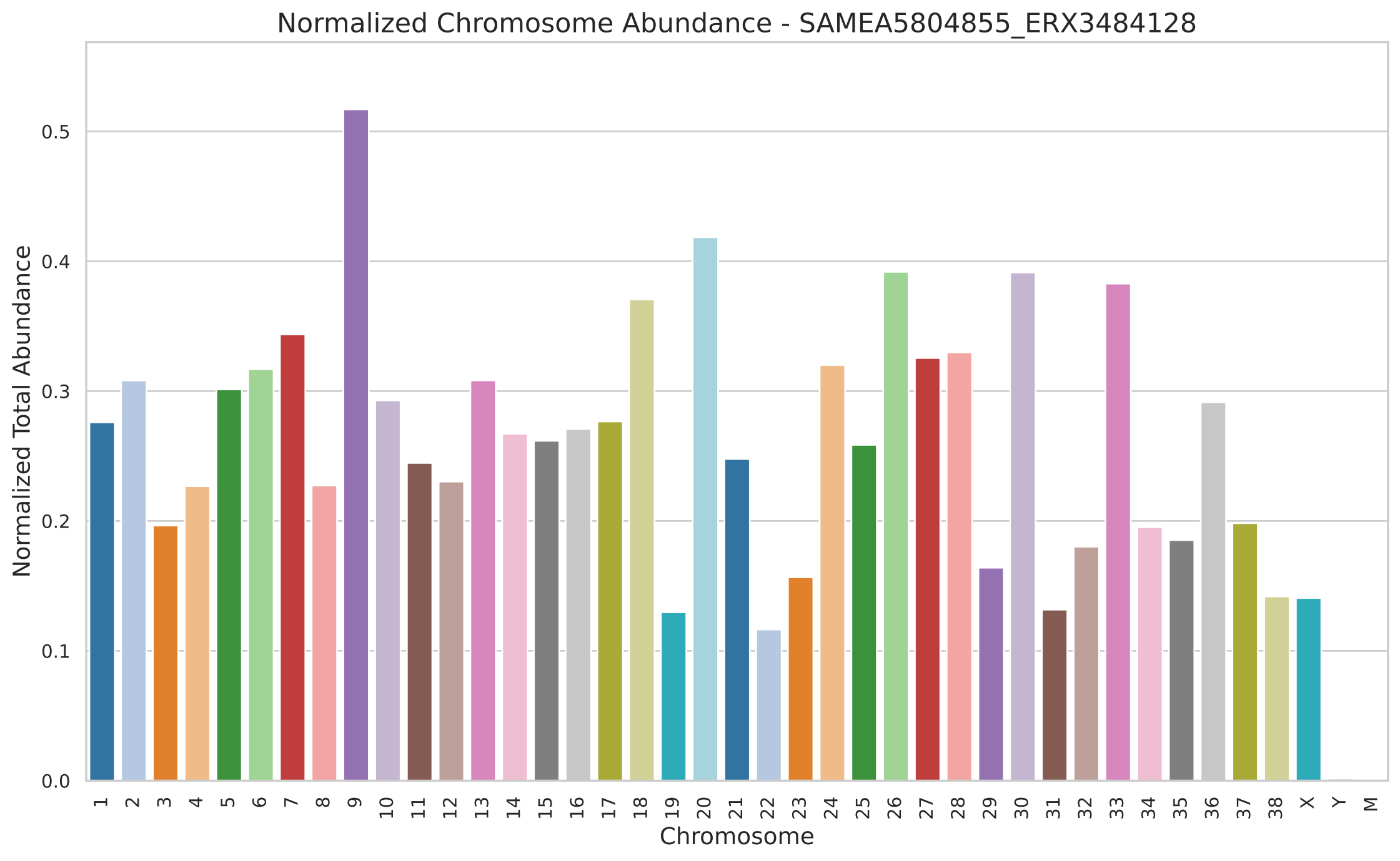

Normalized Chromosome Abundance - SAMEA5804824_ERX3484123
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

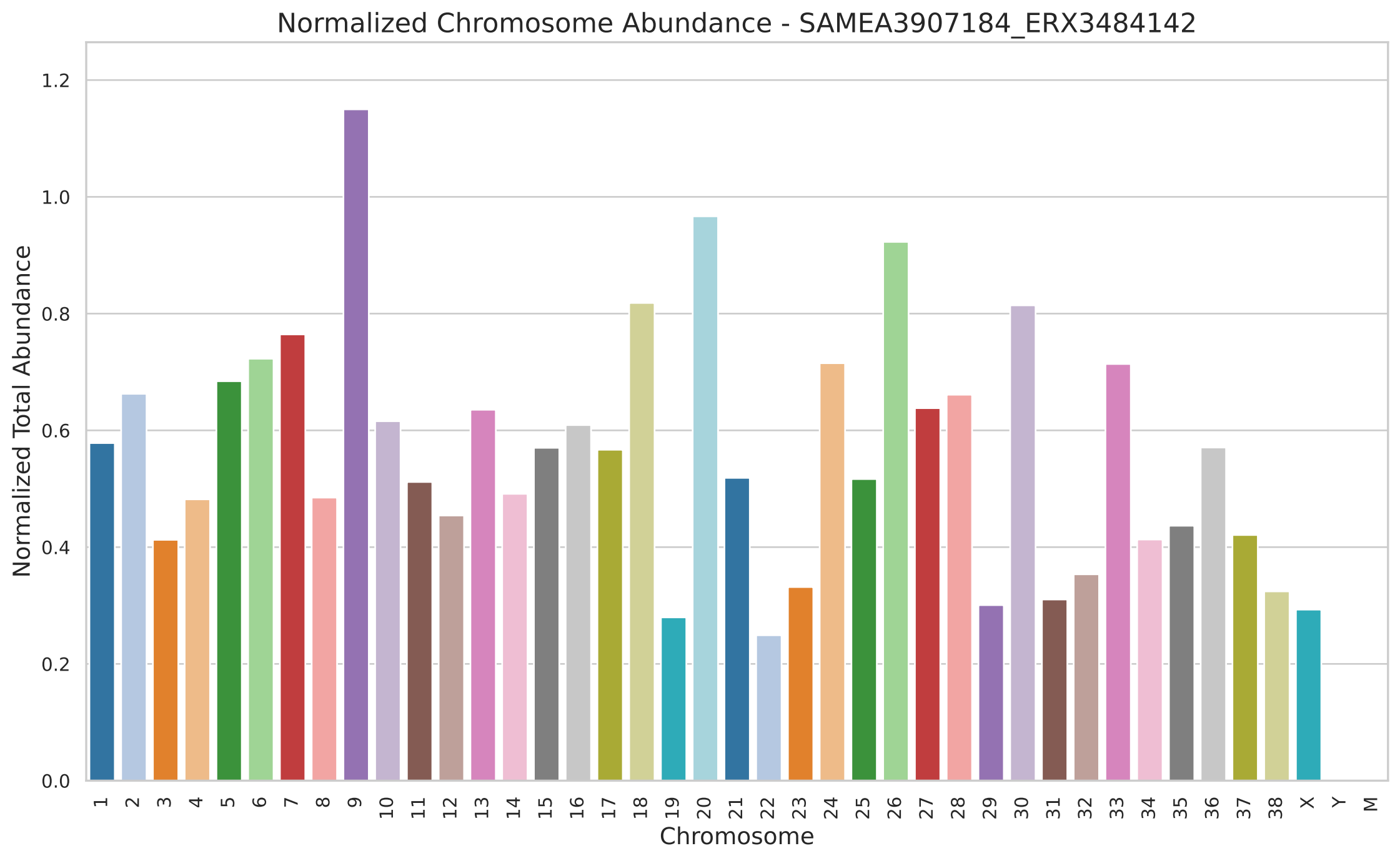

Normalized Chromosome Abundance - SAMEA3907188_ERX3484144
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

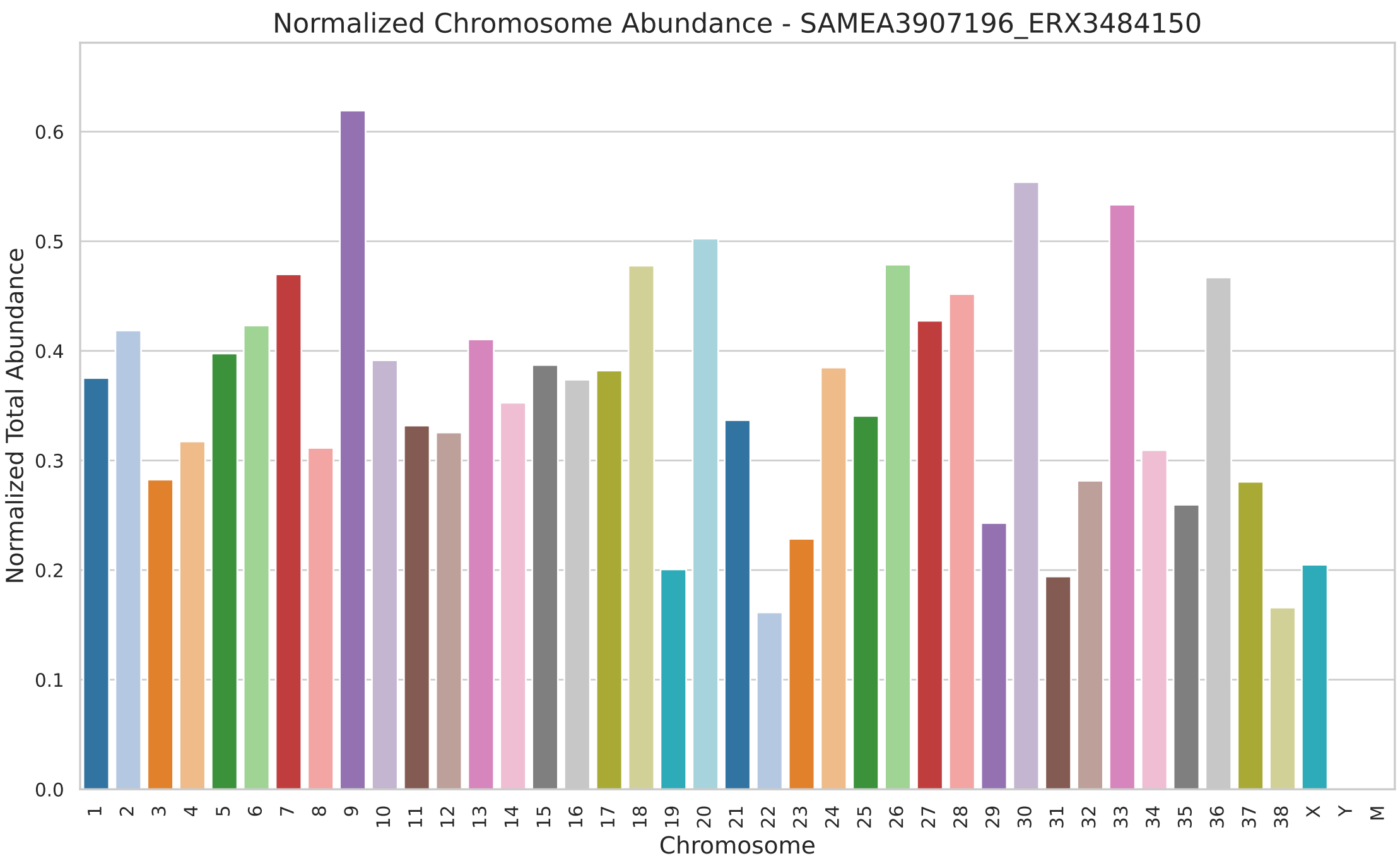

Normalized Chromosome Abundance - SAMEA3907191_ERX3484146
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

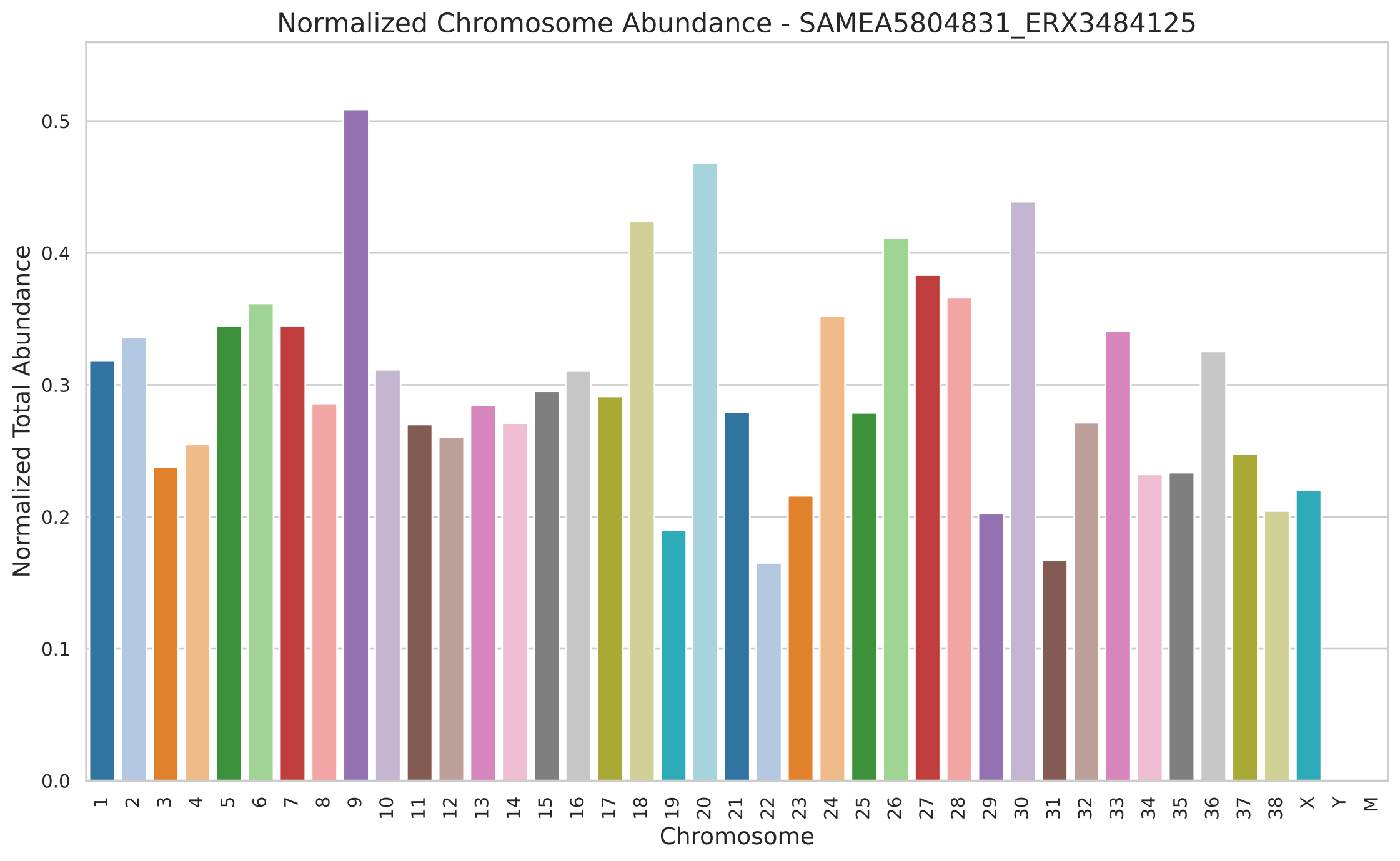

Normalized Chromosome Abundance - SAMEA3907194_ERX3484149
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

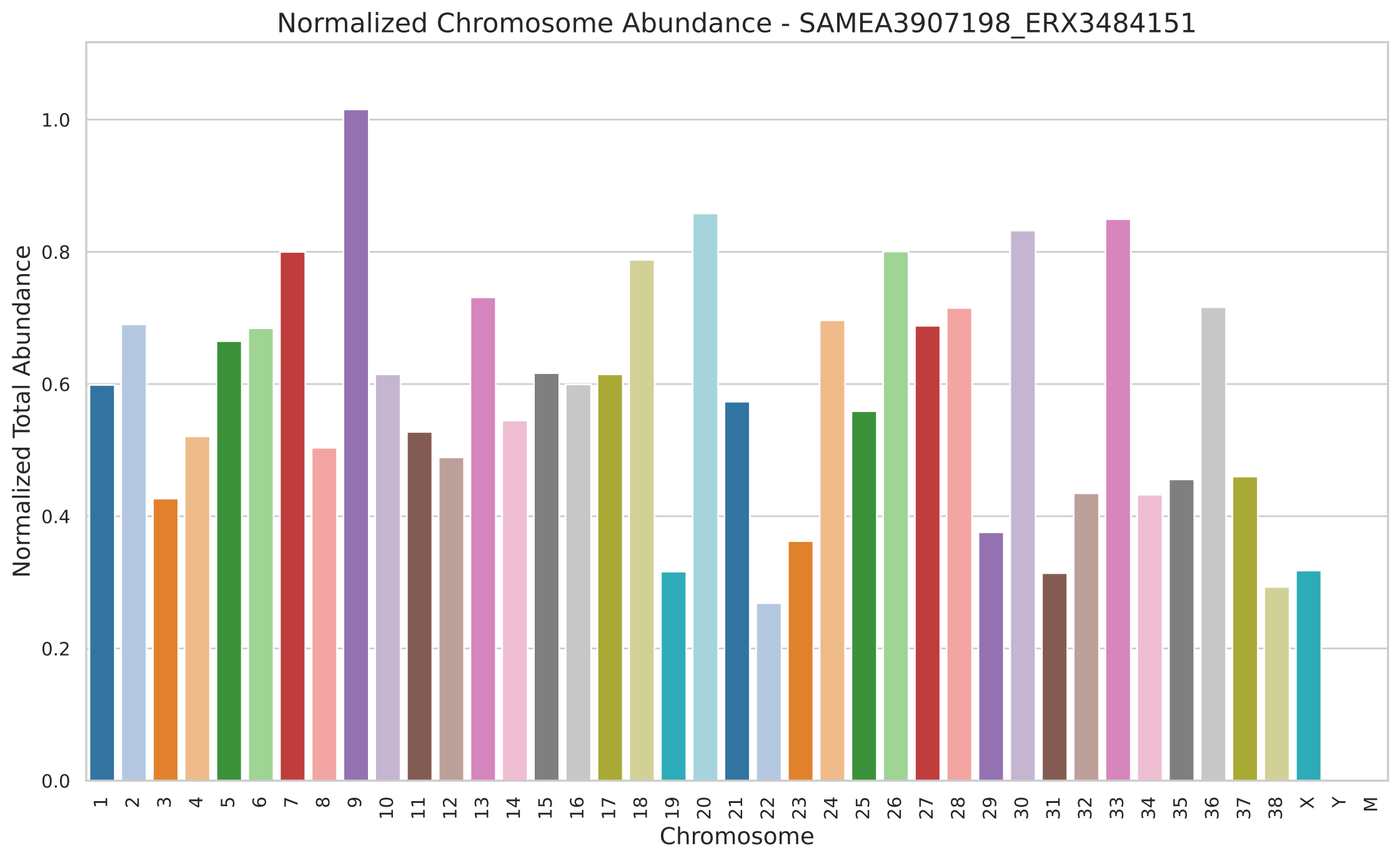

Normalized Chromosome Abundance - SAMEA3907210_ERX3484157
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

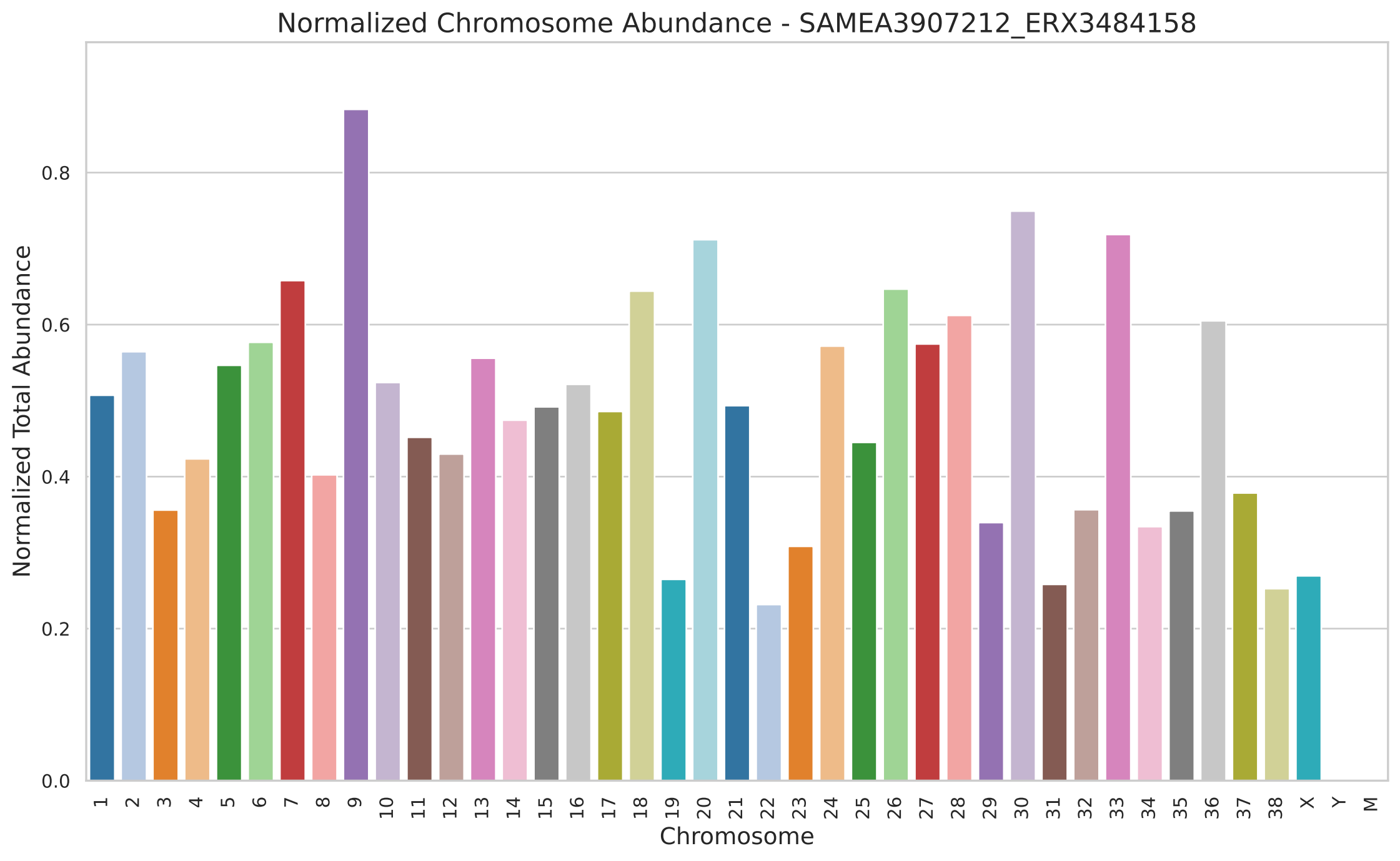

Normalized Chromosome Abundance - SAMEA5804855_ERX3484128
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

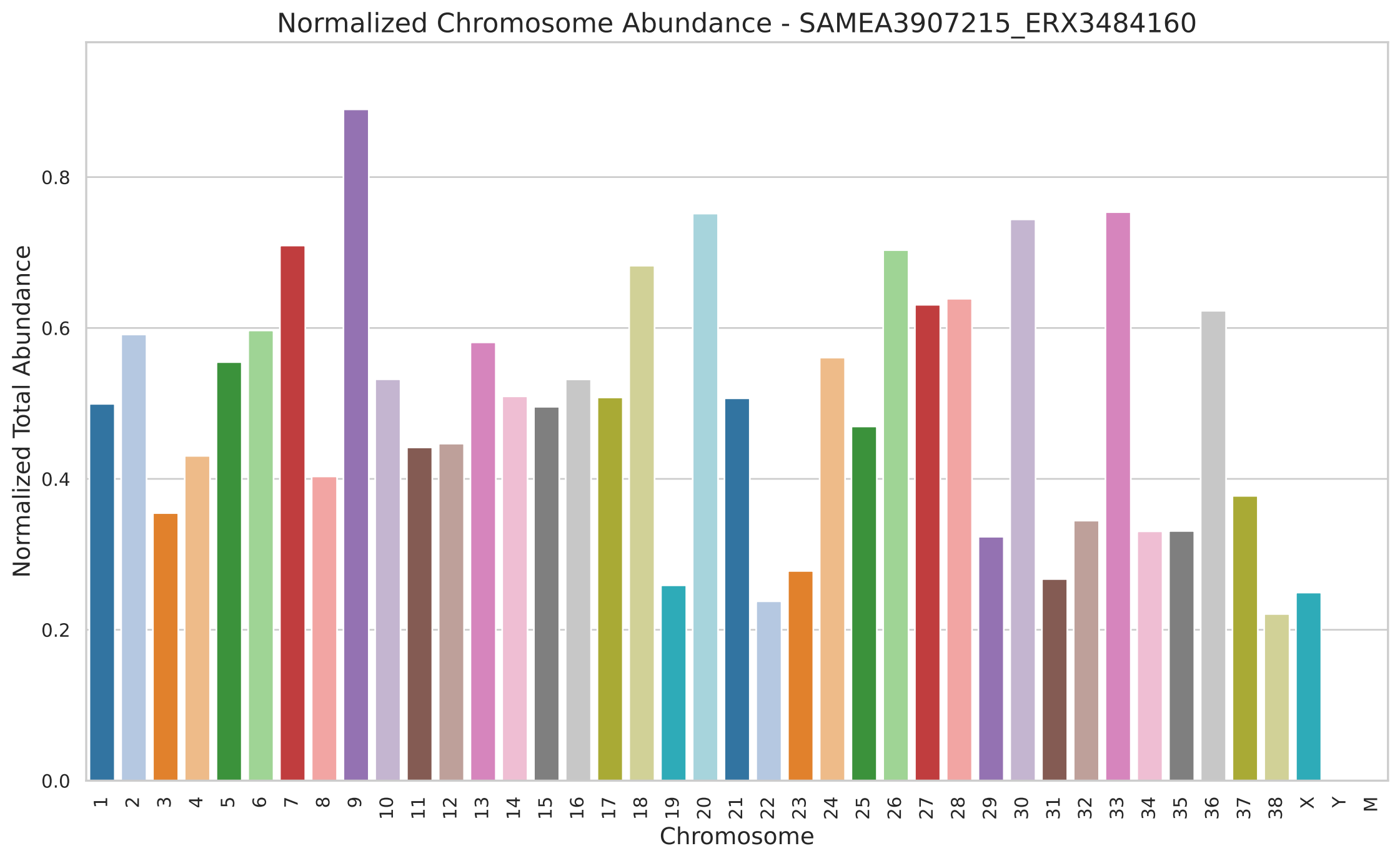

Normalized Chromosome Abundance - SAMEA3907184_ERX3484142
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

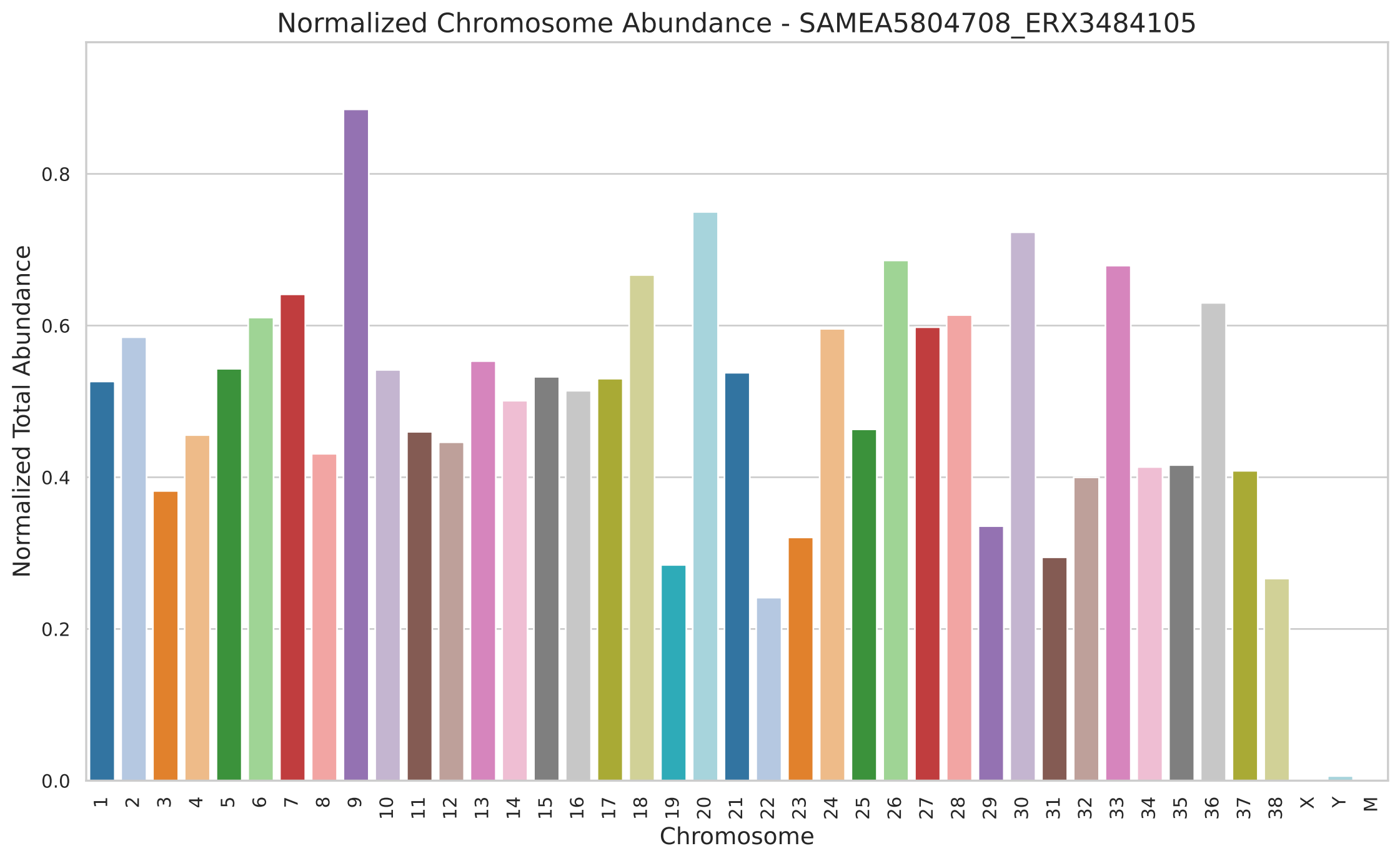

Normalized Chromosome Abundance - SAMEA3907196_ERX3484150
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

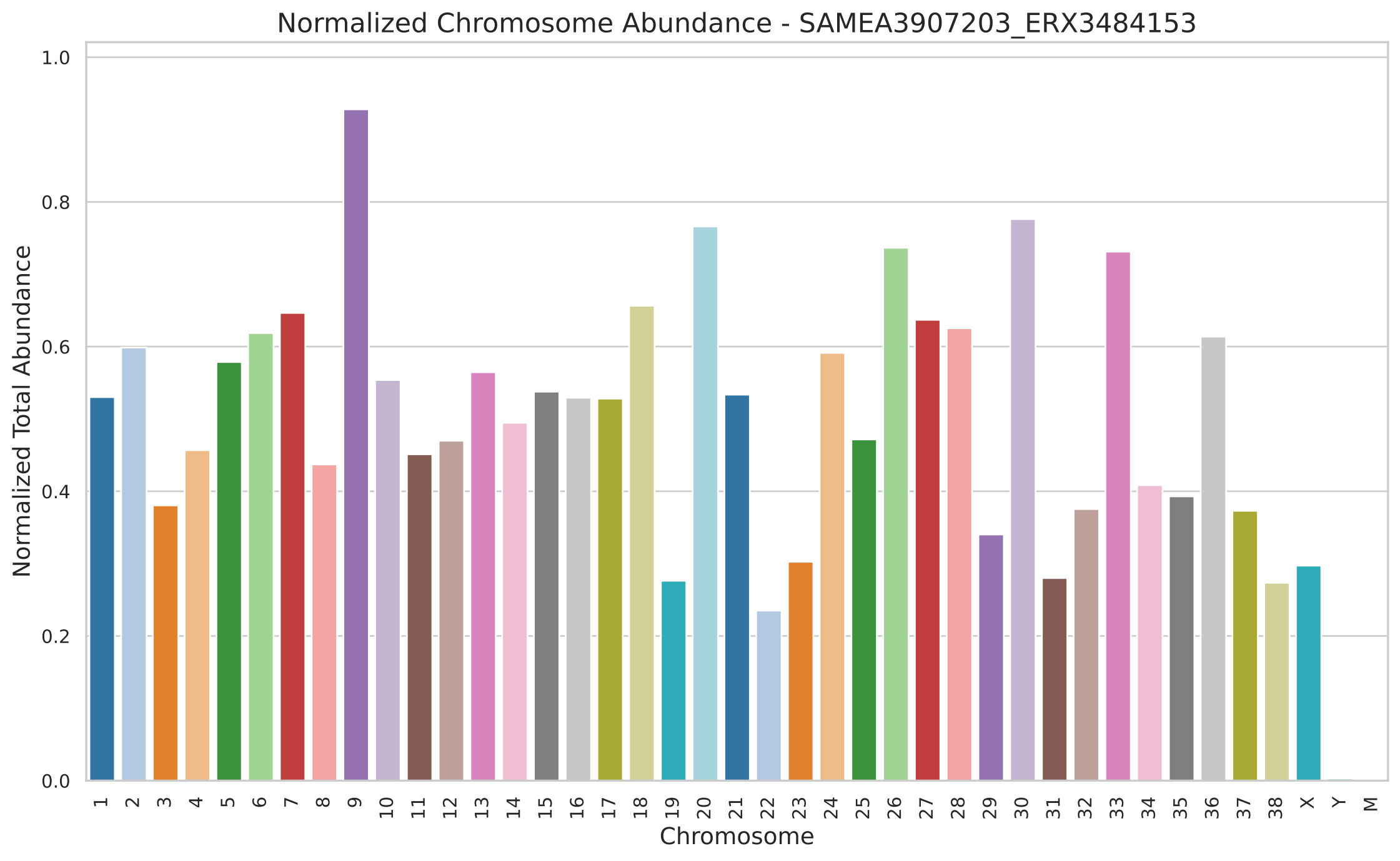

Normalized Chromosome Abundance - SAMEA5804831_ERX3484125
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

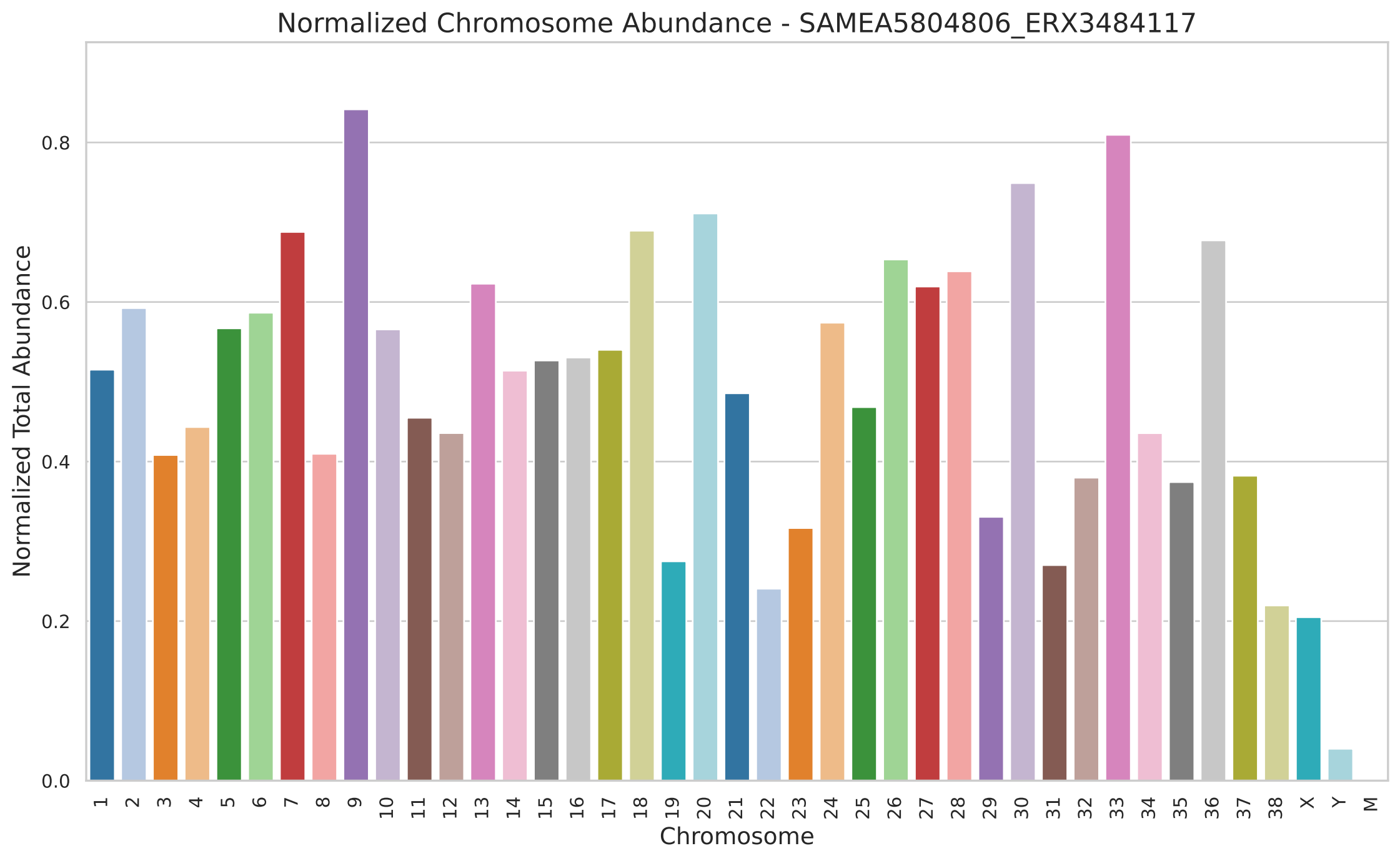

Normalized Chromosome Abundance - SAMEA3907198_ERX3484151
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

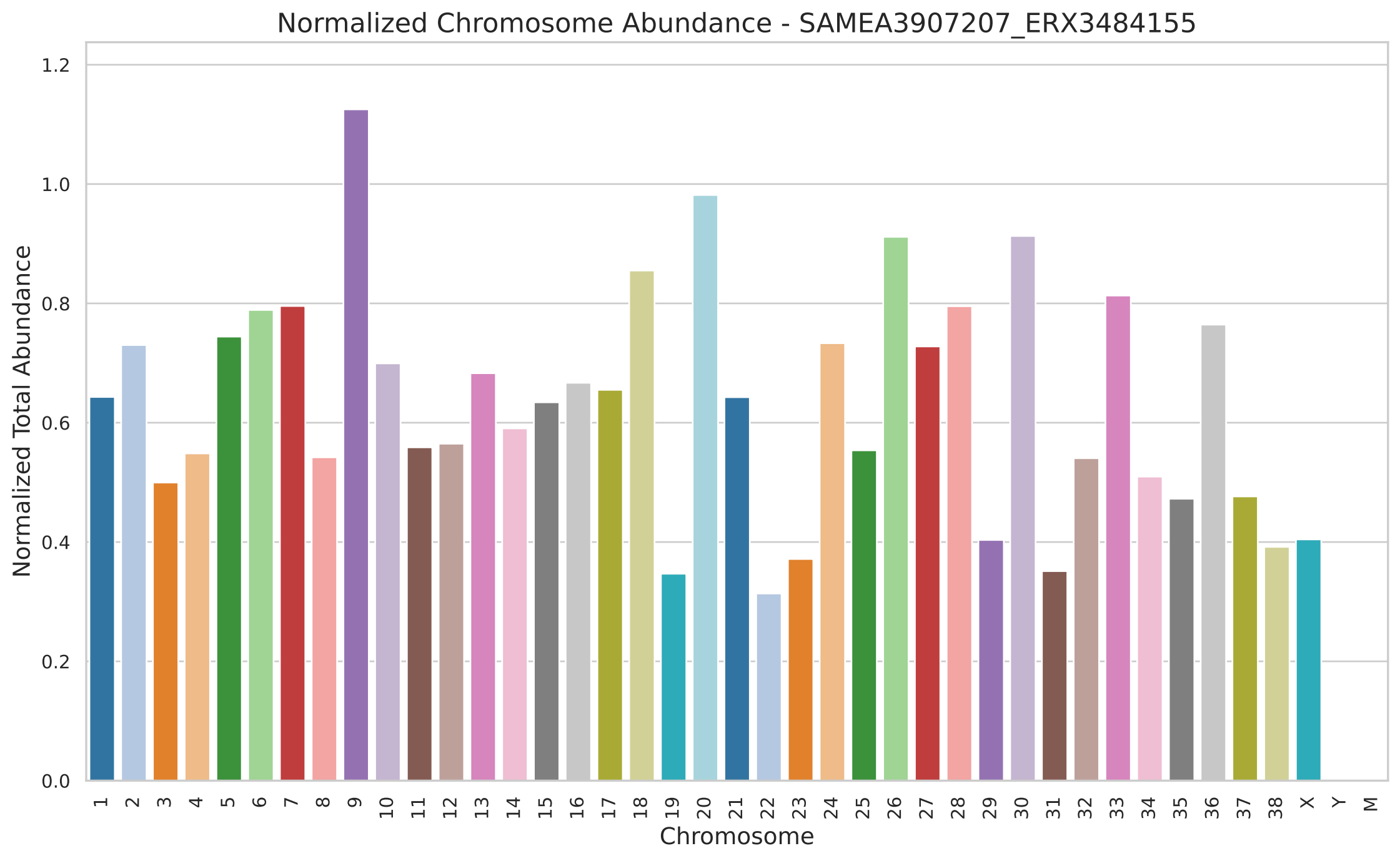

Normalized Chromosome Abundance - SAMEA3907212_ERX3484158
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

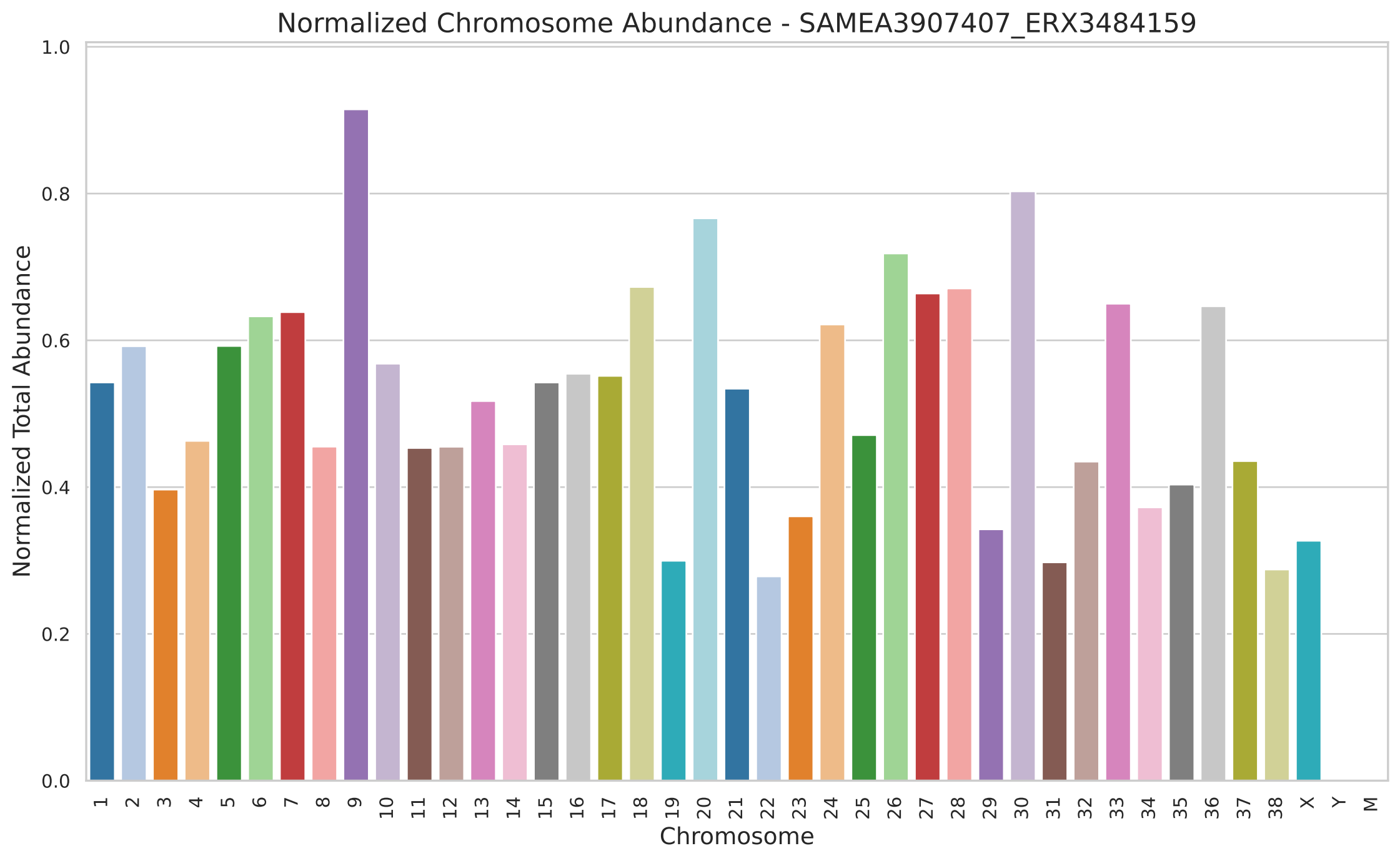

Normalized Chromosome Abundance - SAMEA3907215_ERX3484160
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

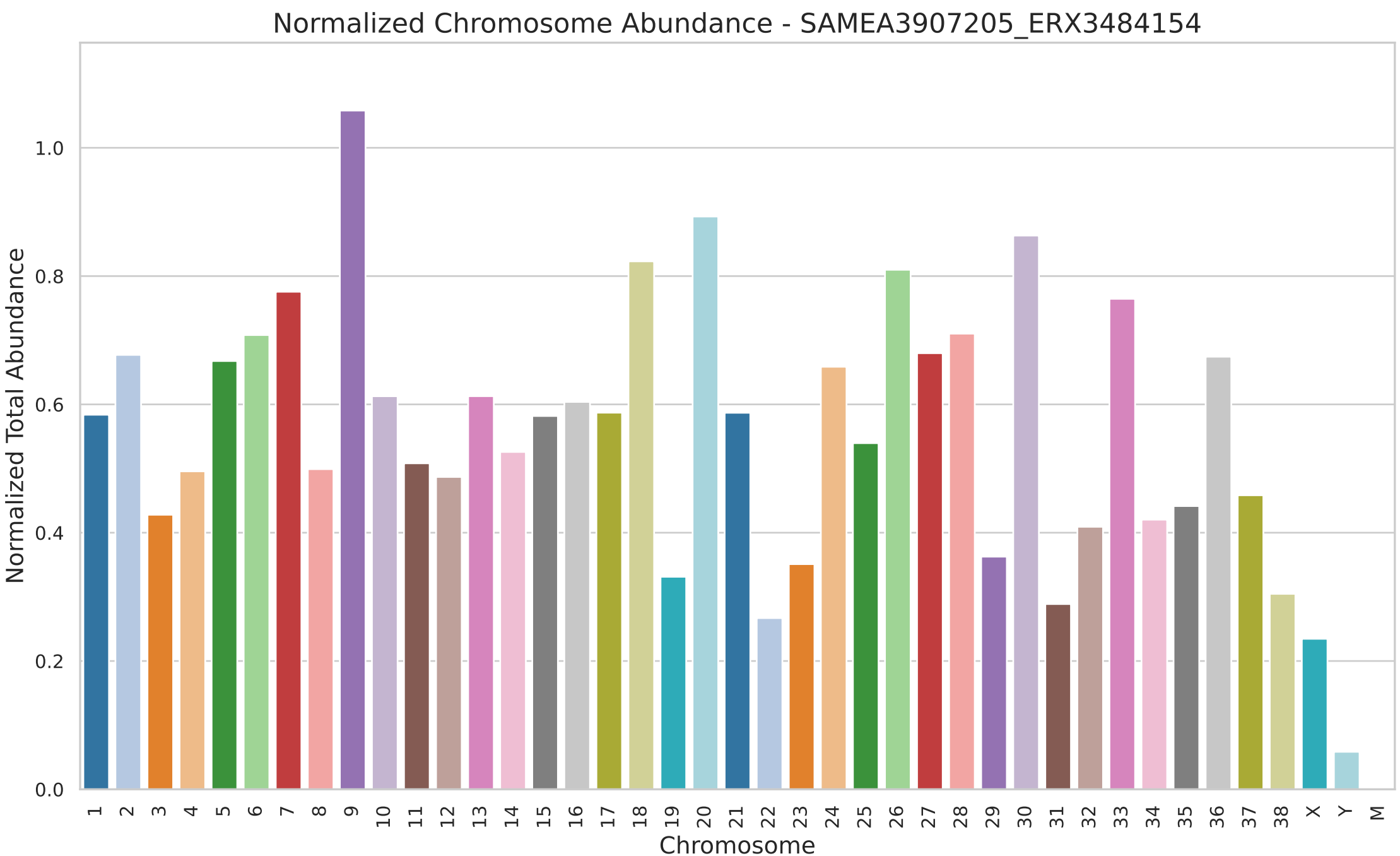

Normalized Chromosome Abundance - SAMEA5804708_ERX3484105
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

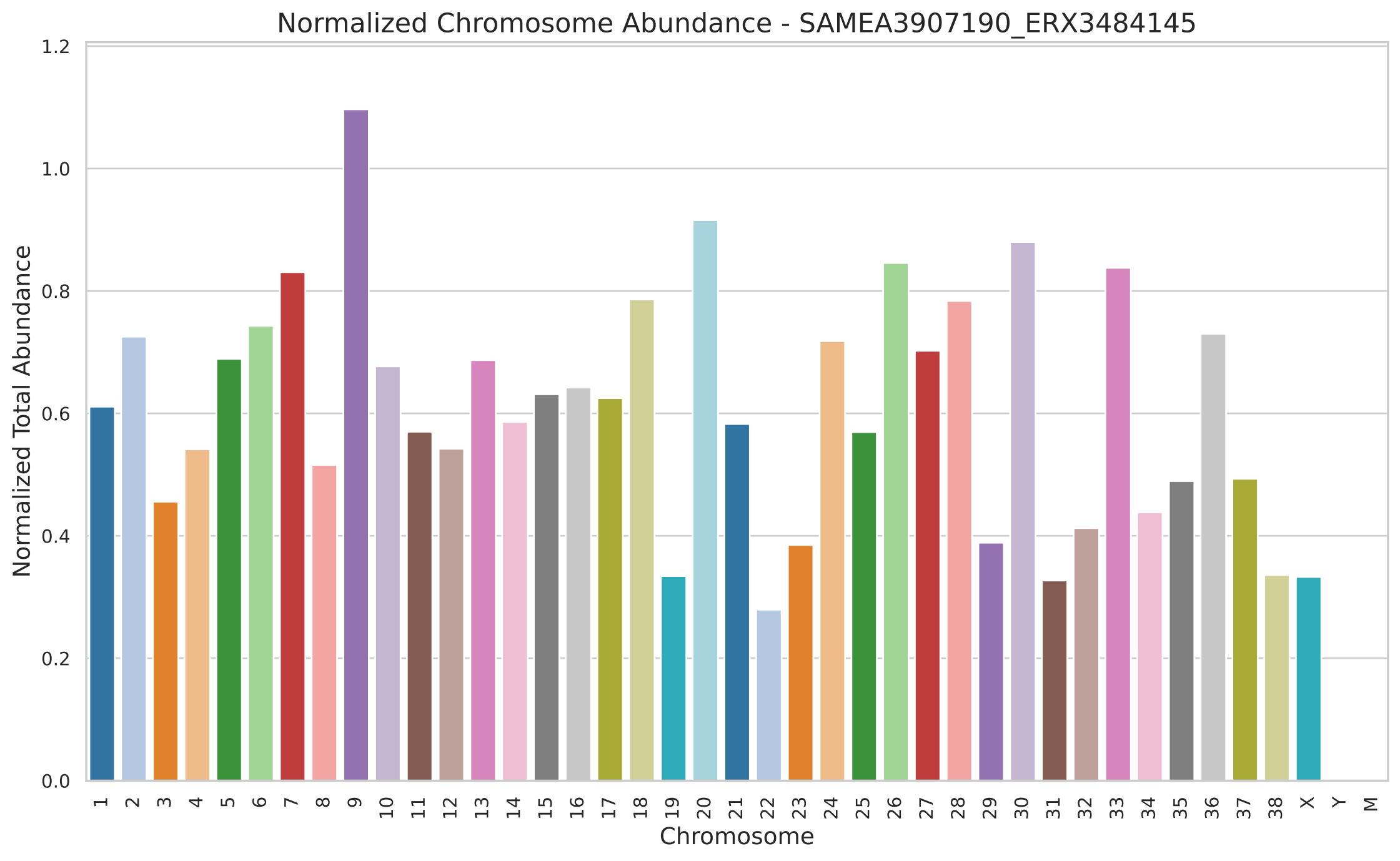

Normalized Chromosome Abundance - SAMEA3907203_ERX3484153
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

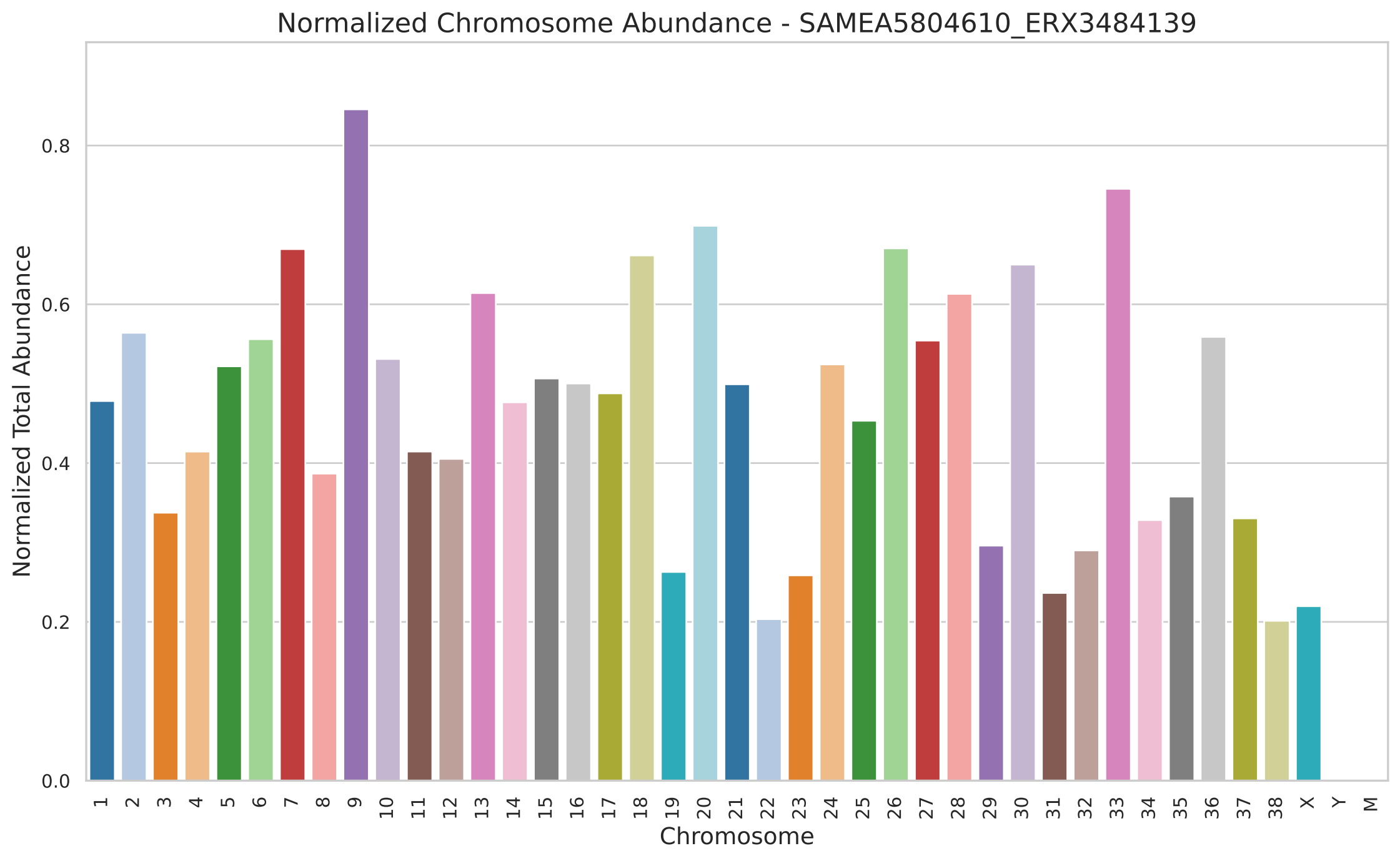

Normalized Chromosome Abundance - SAMEA5804806_ERX3484117
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

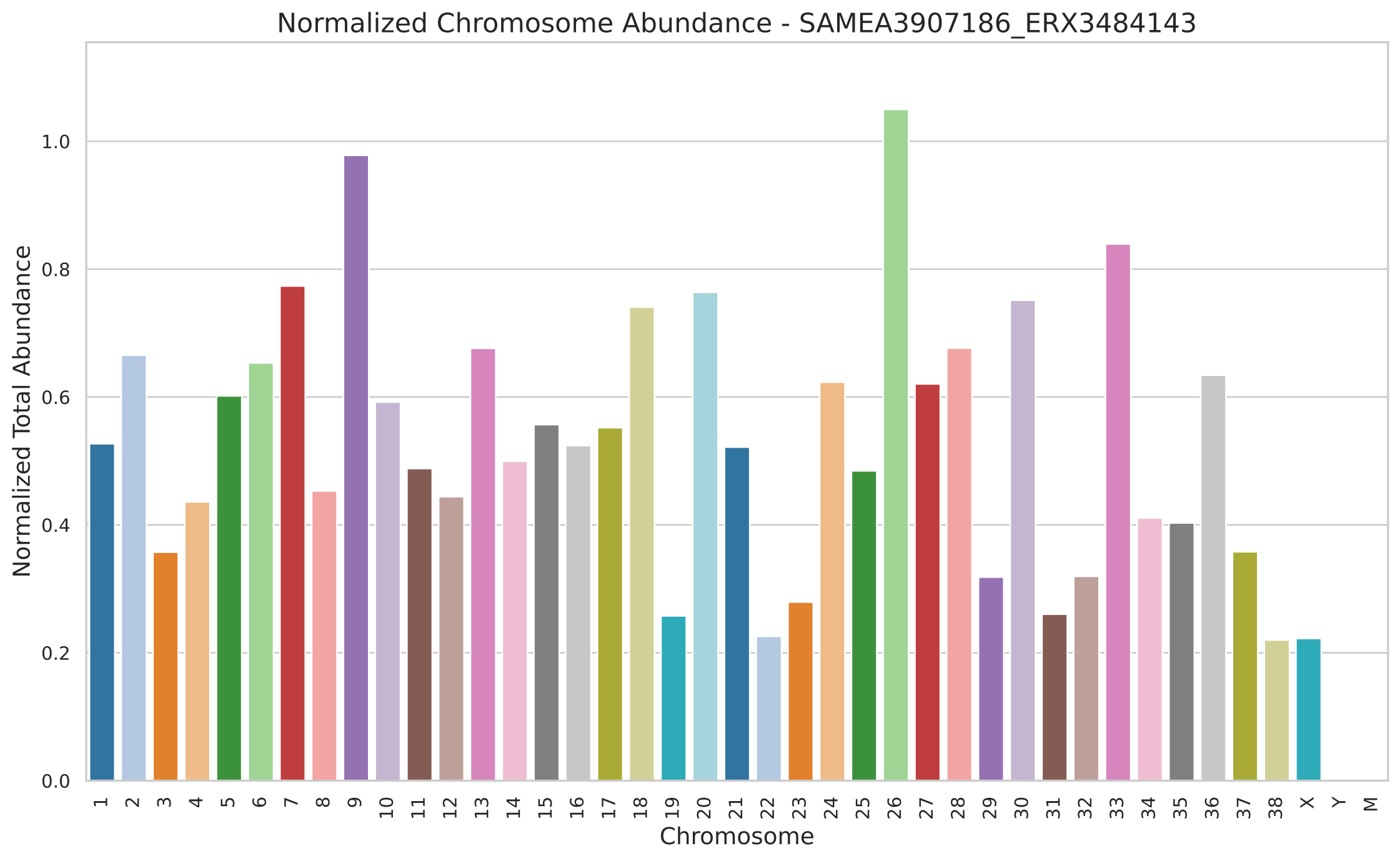

Normalized Chromosome Abundance - SAMEA3907207_ERX3484155
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

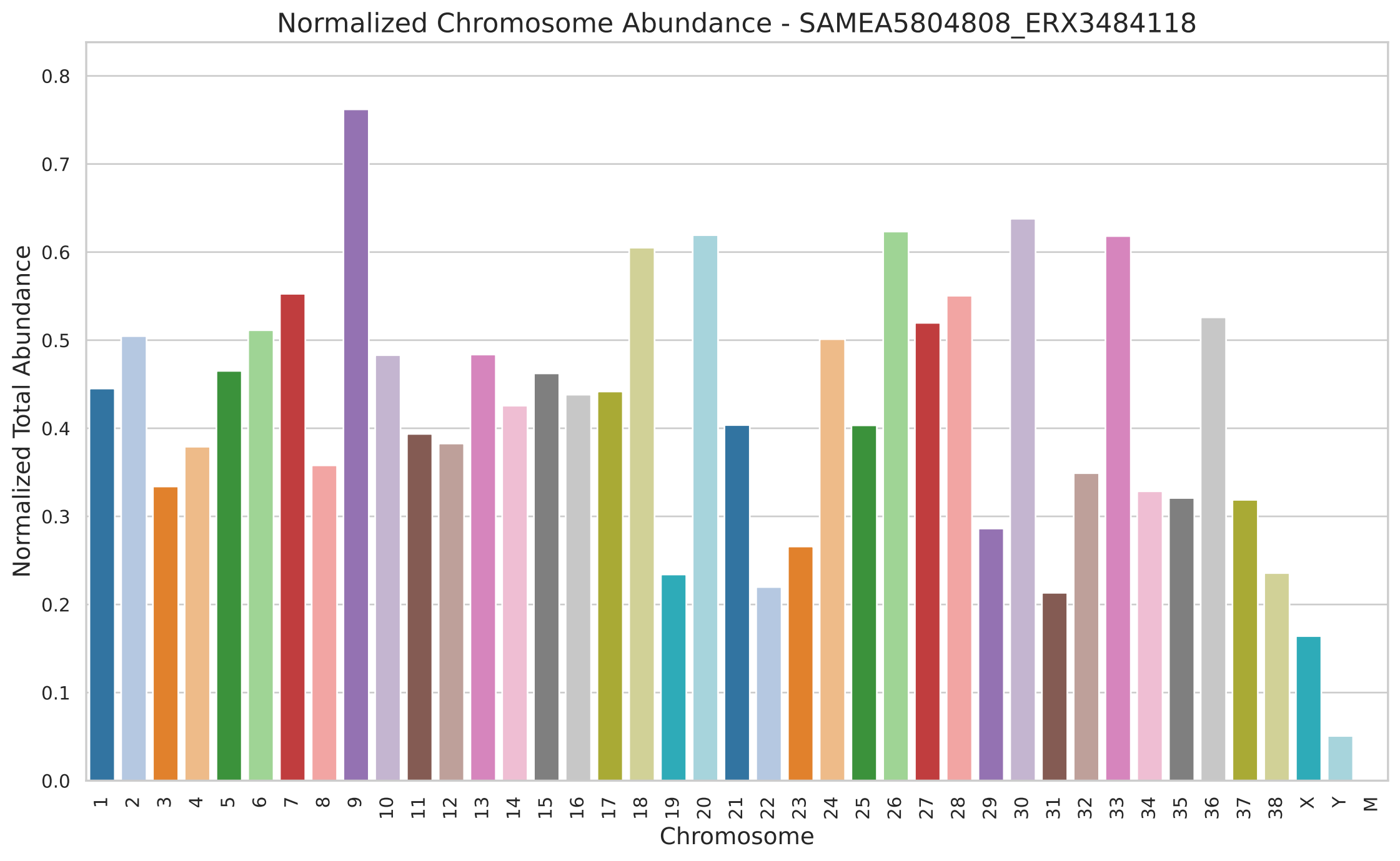

Normalized Chromosome Abundance - SAMEA3907407_ERX3484159
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

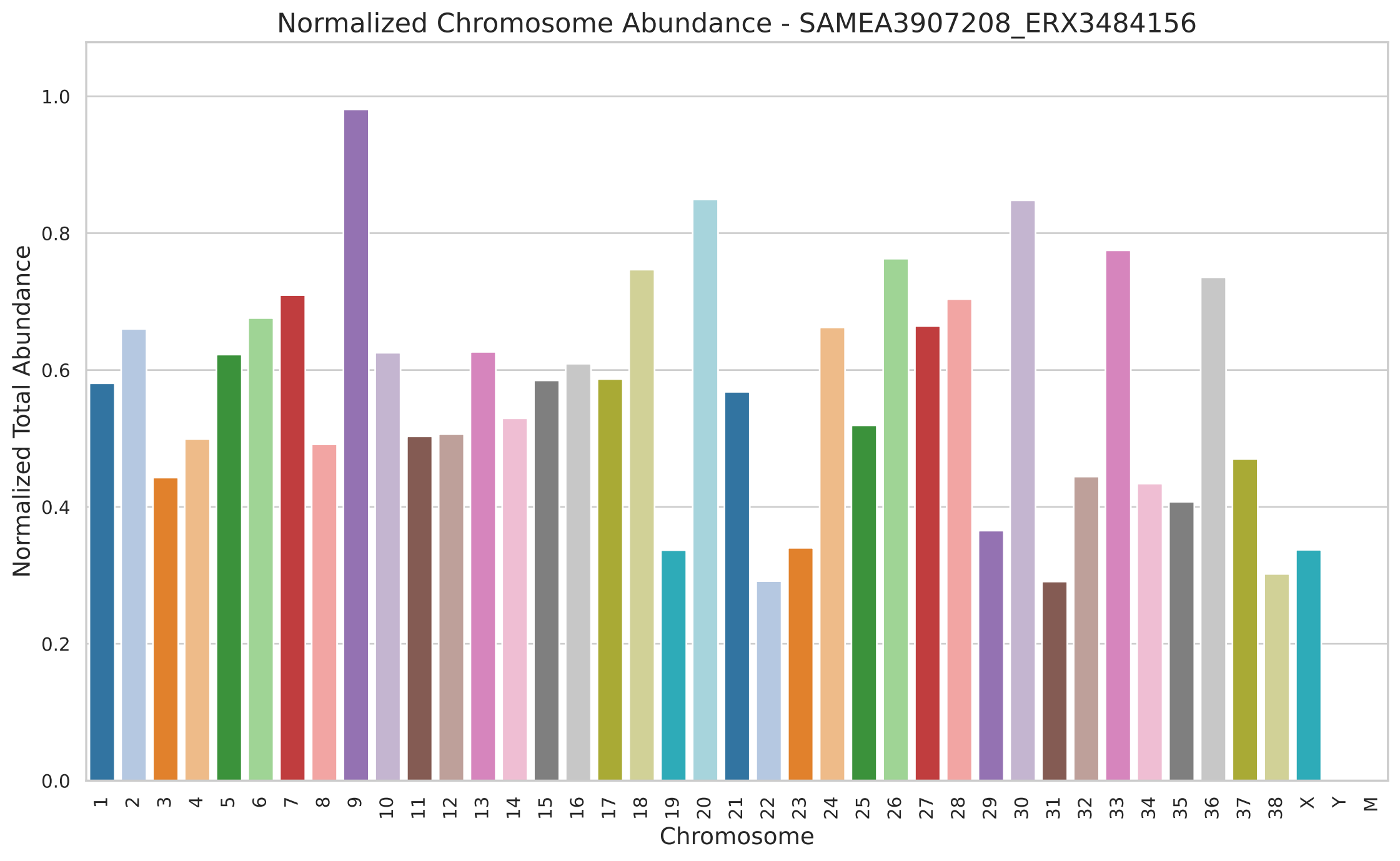

Normalized Chromosome Abundance - SAMEA3907205_ERX3484154
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

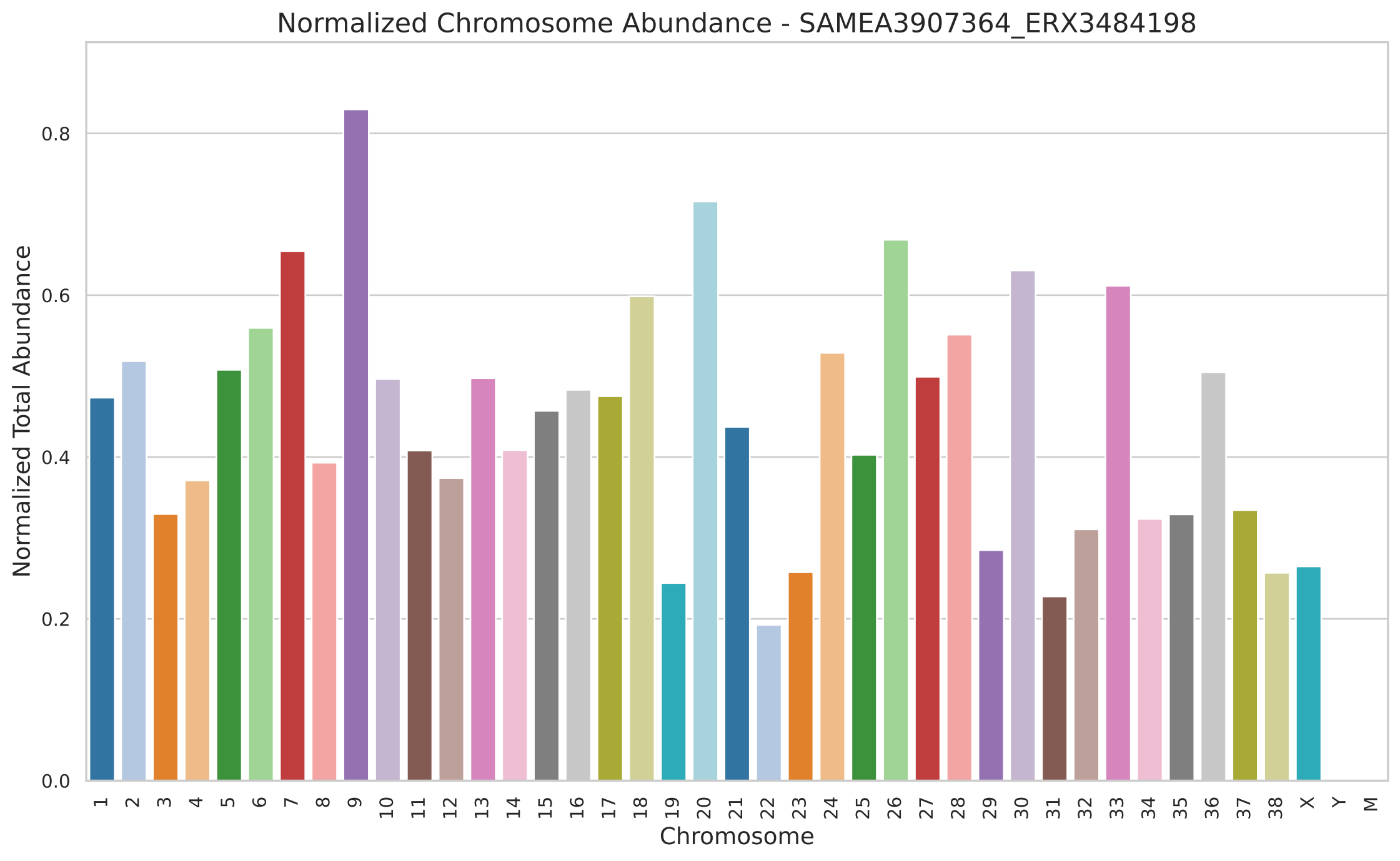

Normalized Chromosome Abundance - SAMEA3907190_ERX3484145
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

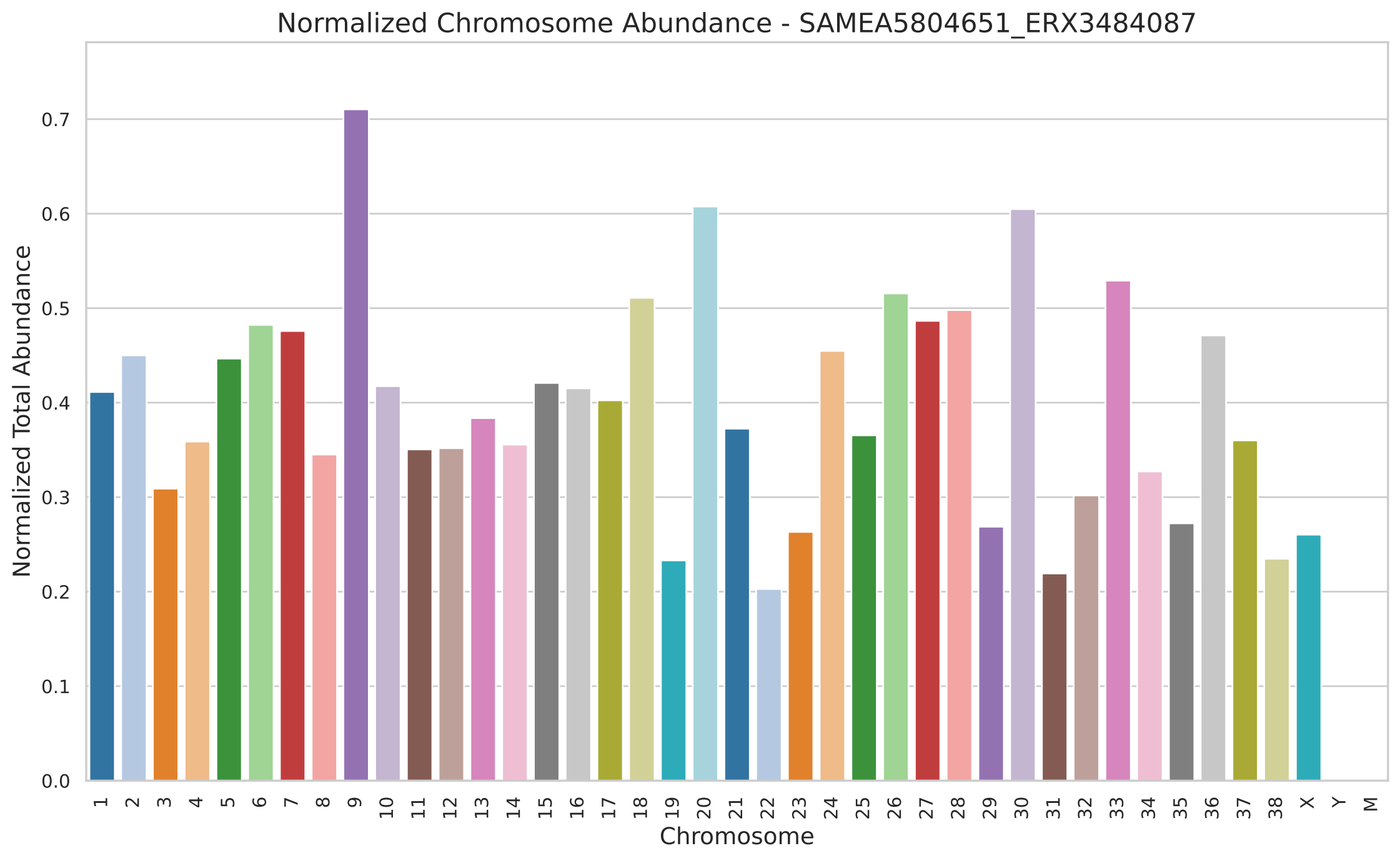

Normalized Chromosome Abundance - SAMEA5804610_ERX3484139
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

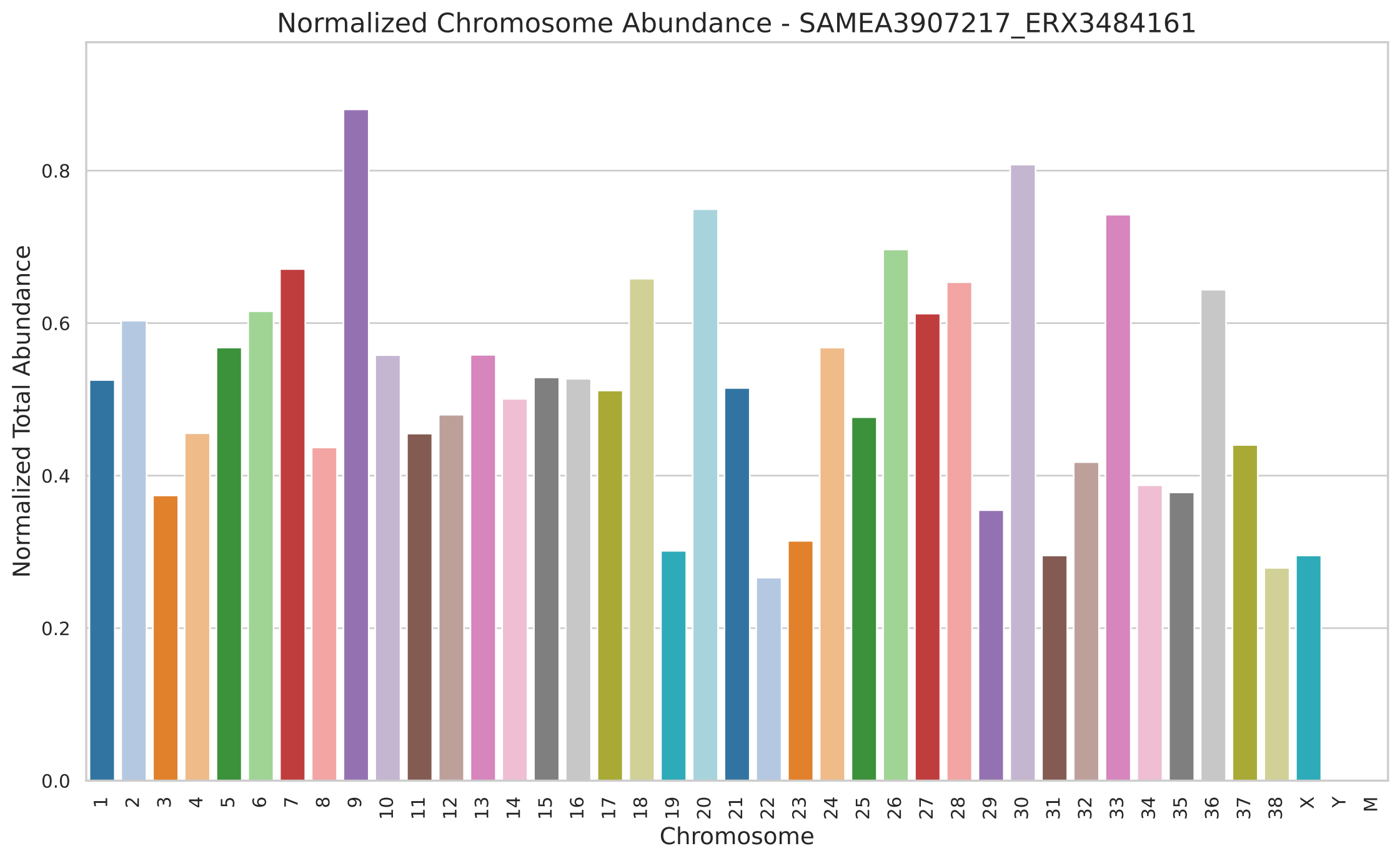

Normalized Chromosome Abundance - SAMEA3907186_ERX3484143
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

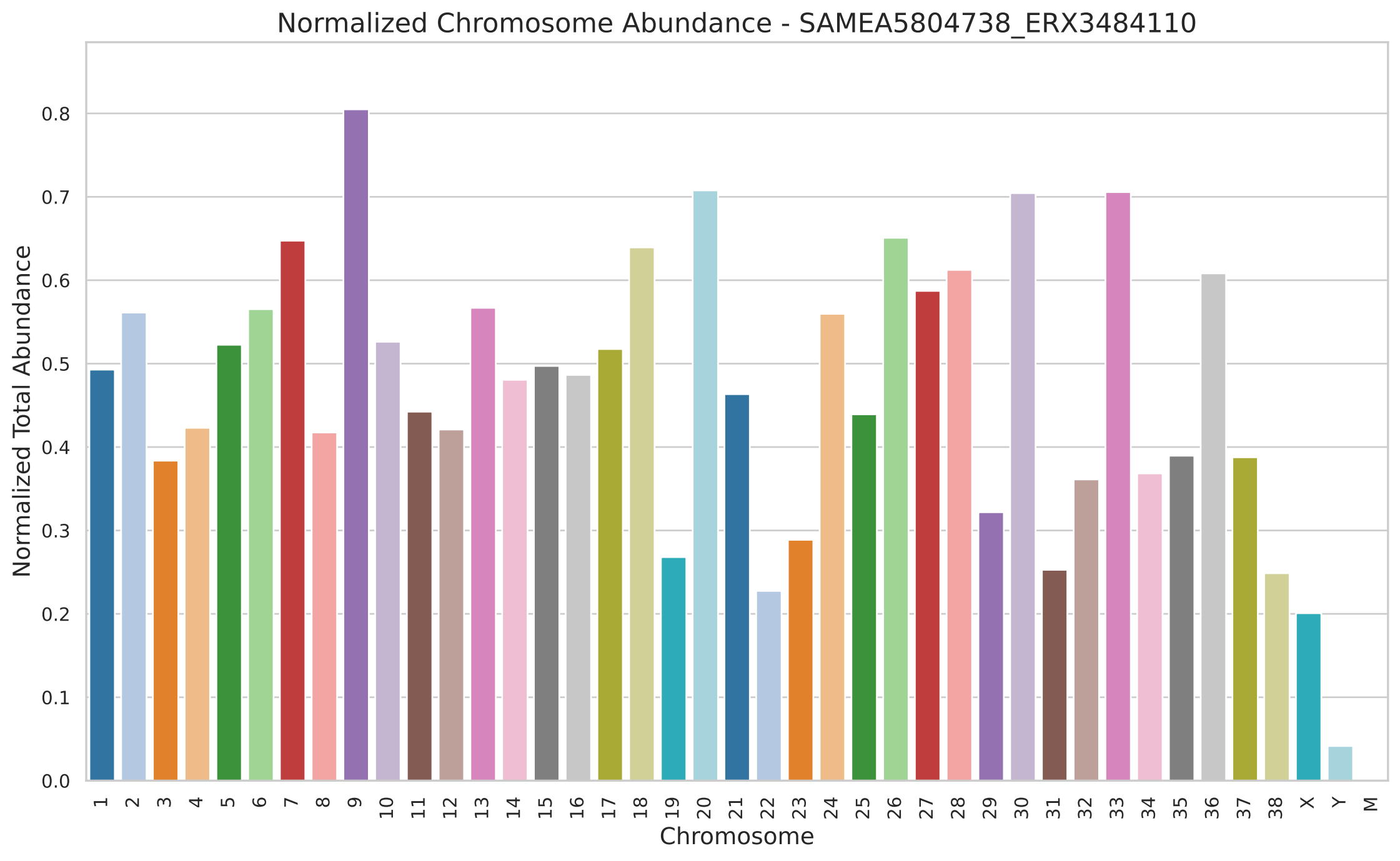

Normalized Chromosome Abundance - SAMEA5804808_ERX3484118
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

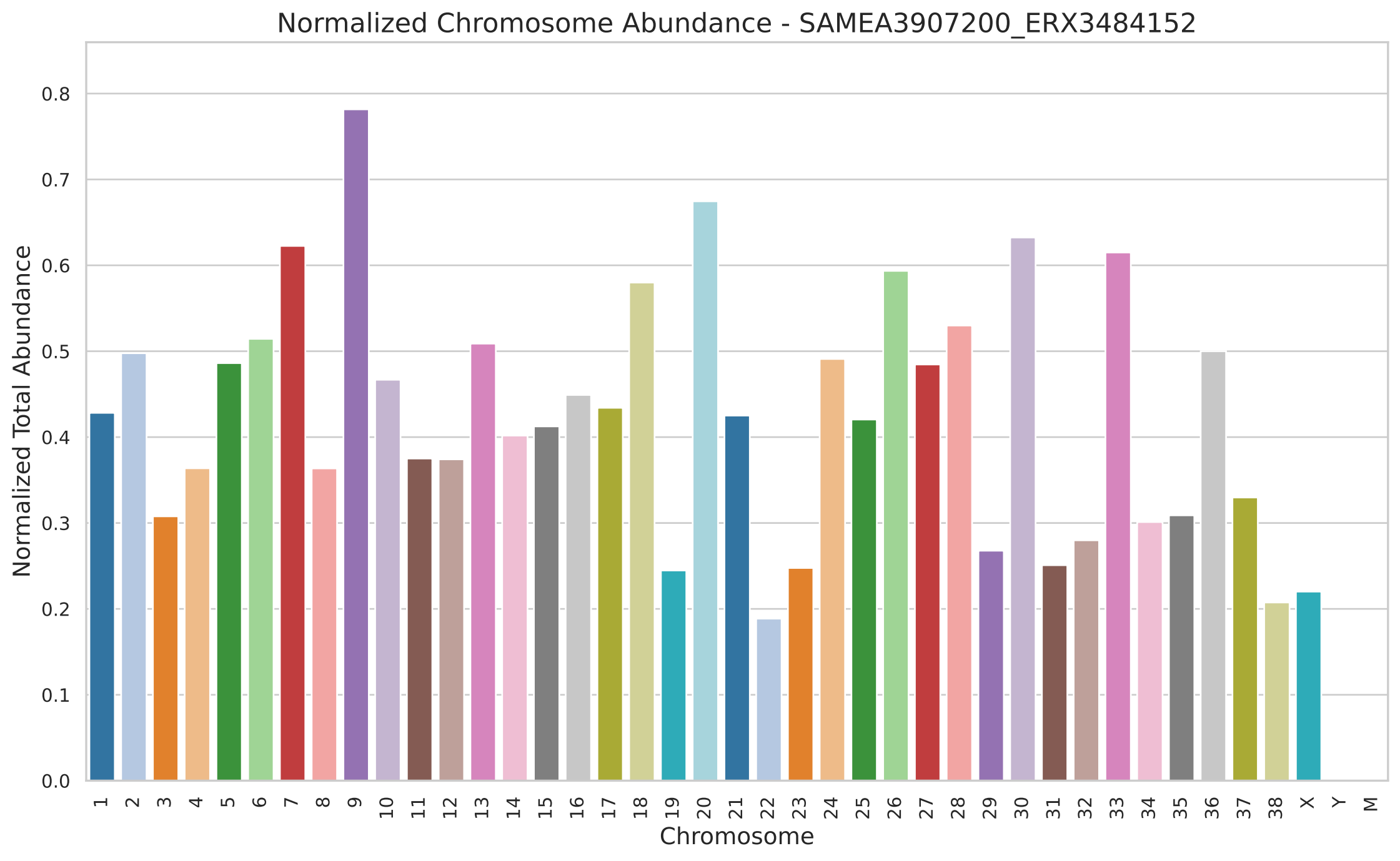

Normalized Chromosome Abundance - SAMEA3907208_ERX3484156
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

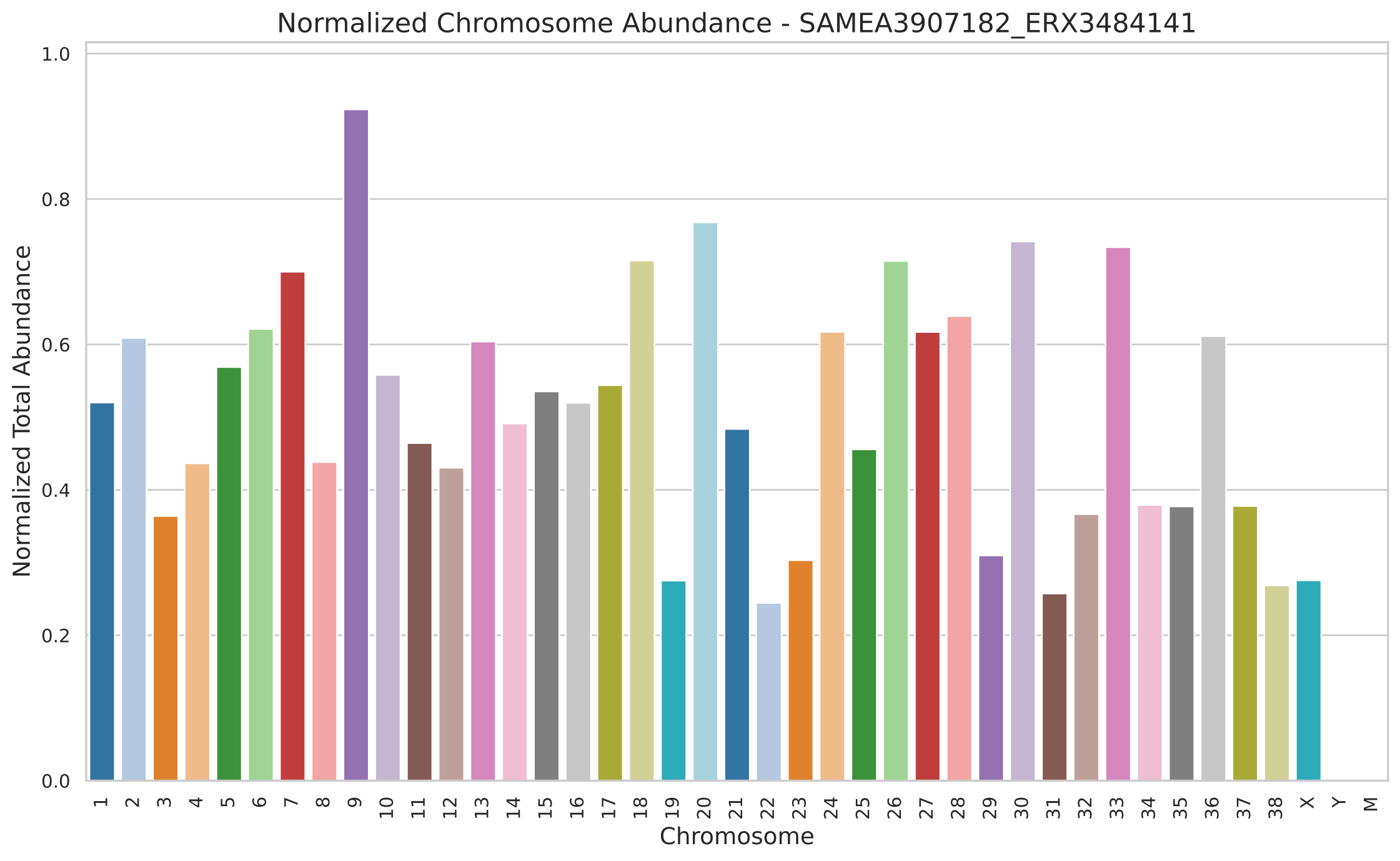

Normalized Chromosome Abundance - SAMEA3907364_ERX3484198
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

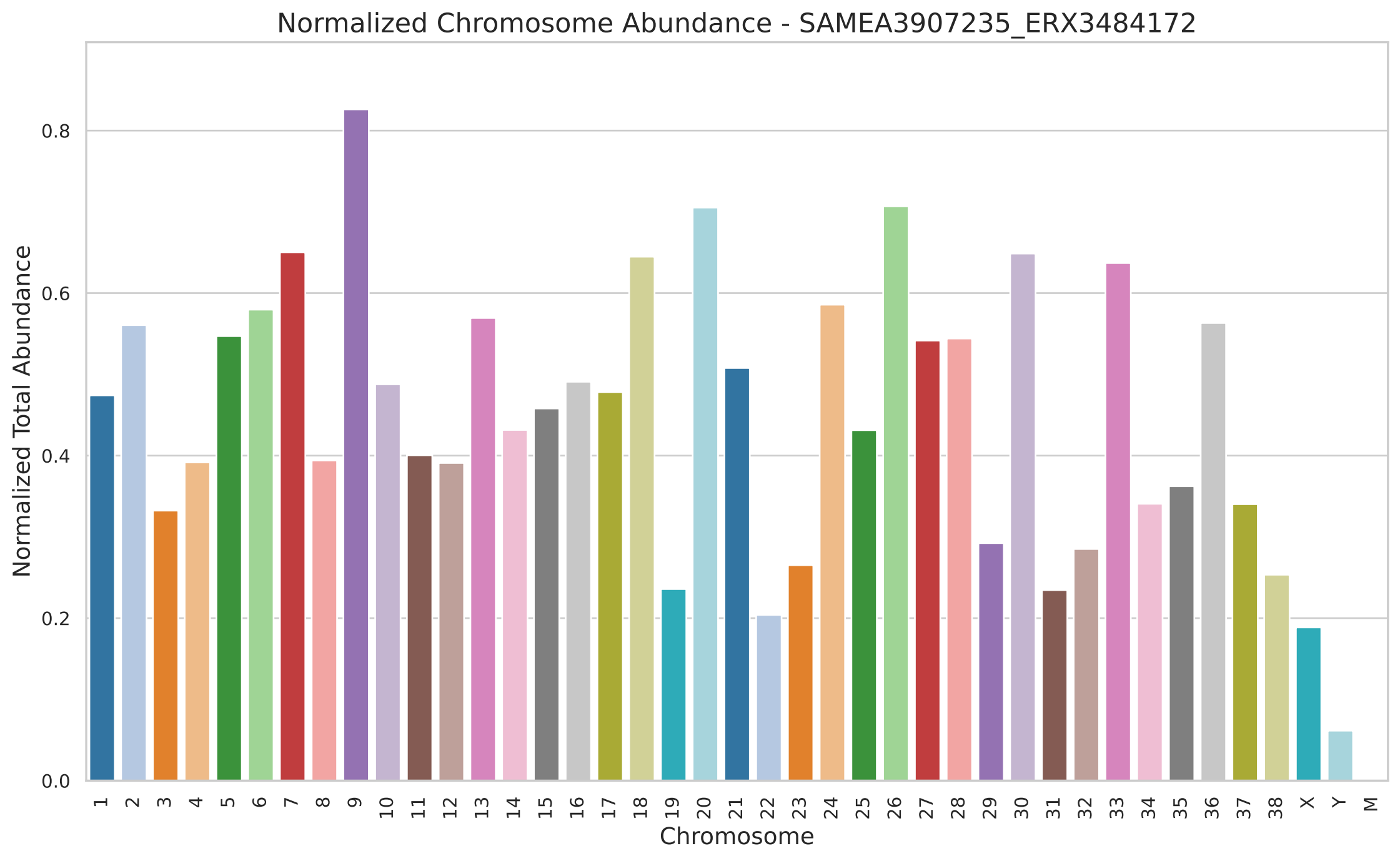

Normalized Chromosome Abundance - SAMEA5804651_ERX3484087
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

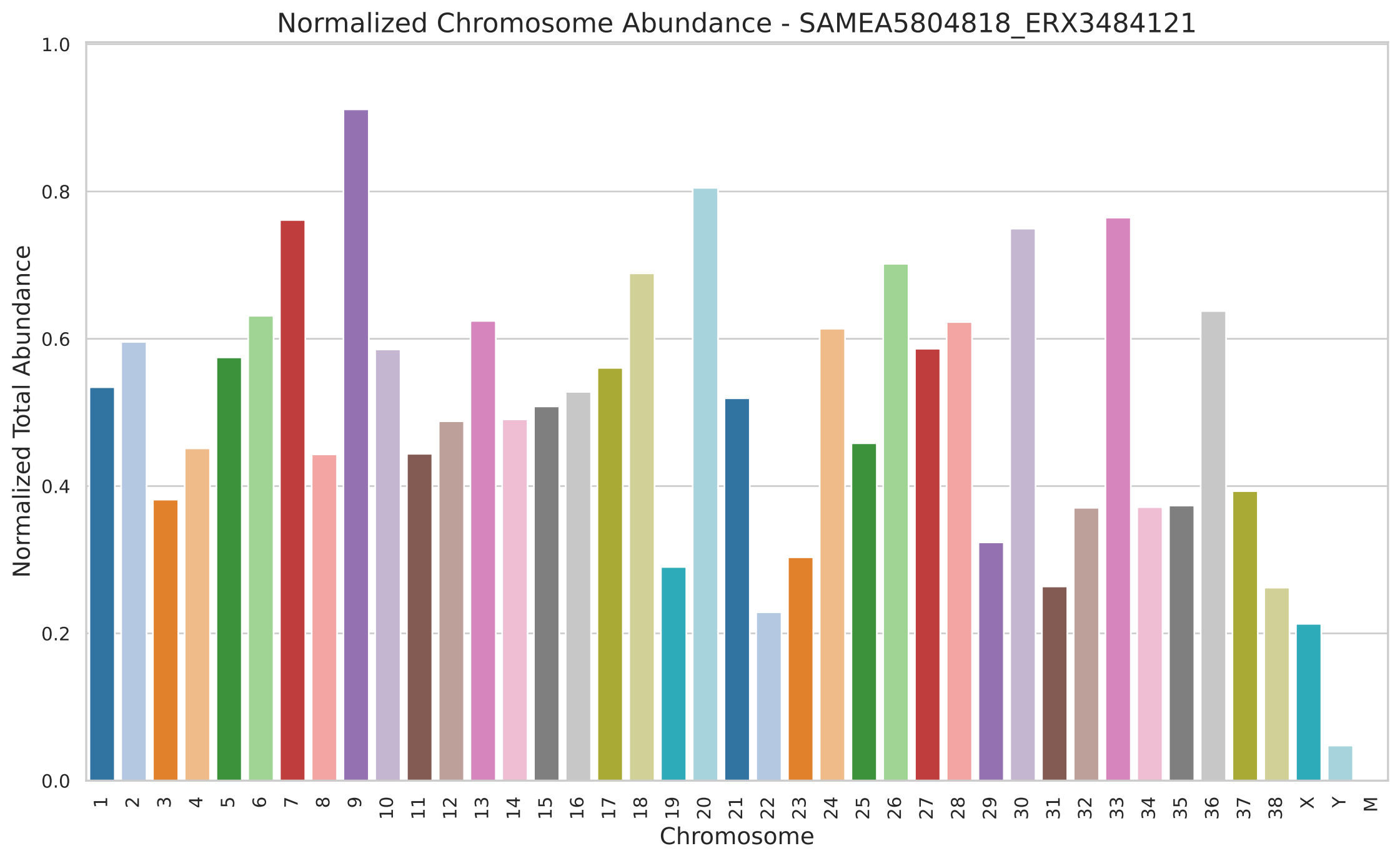

Normalized Chromosome Abundance - SAMEA3907217_ERX3484161
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

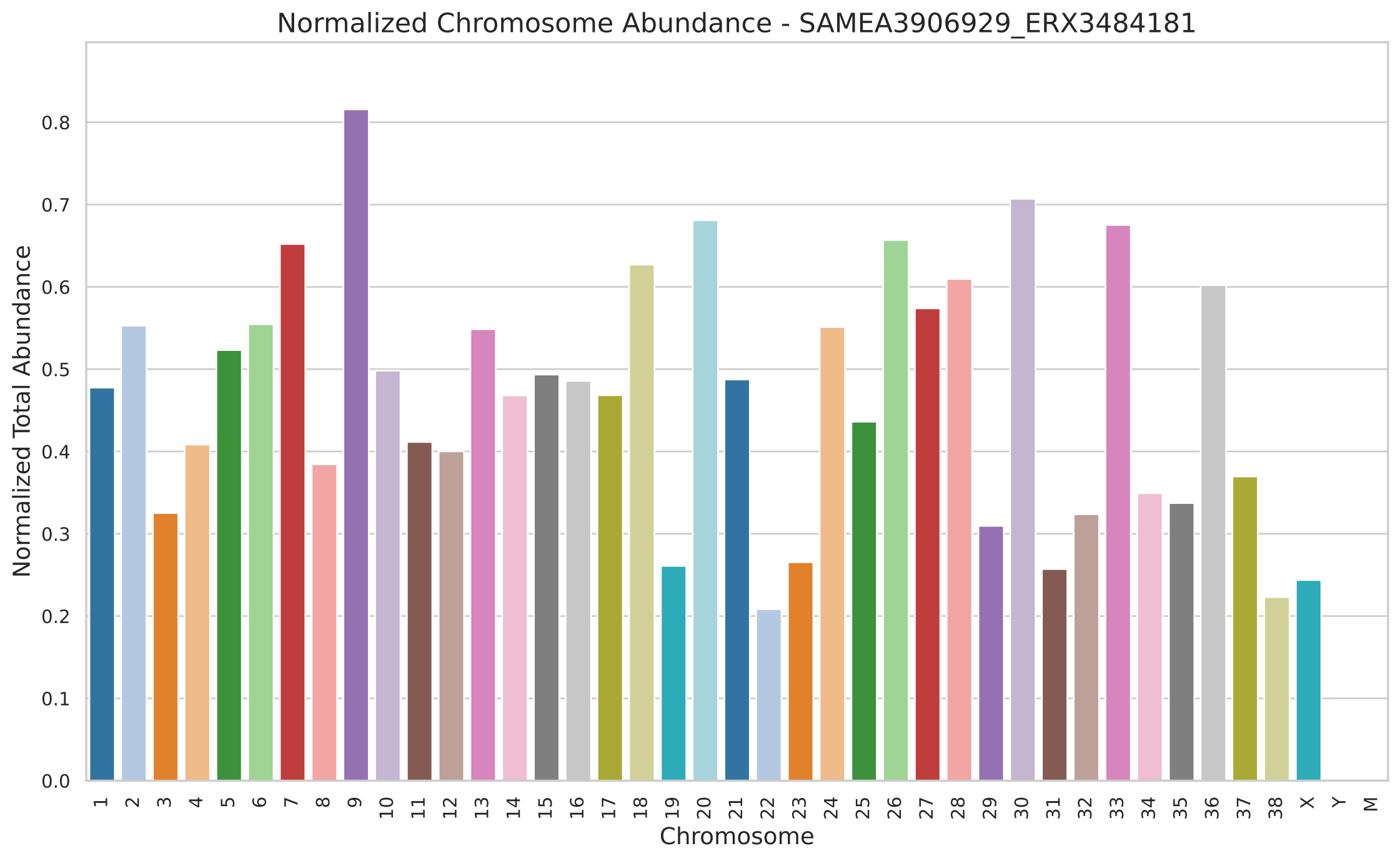

Normalized Chromosome Abundance - SAMEA5804738_ERX3484110
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

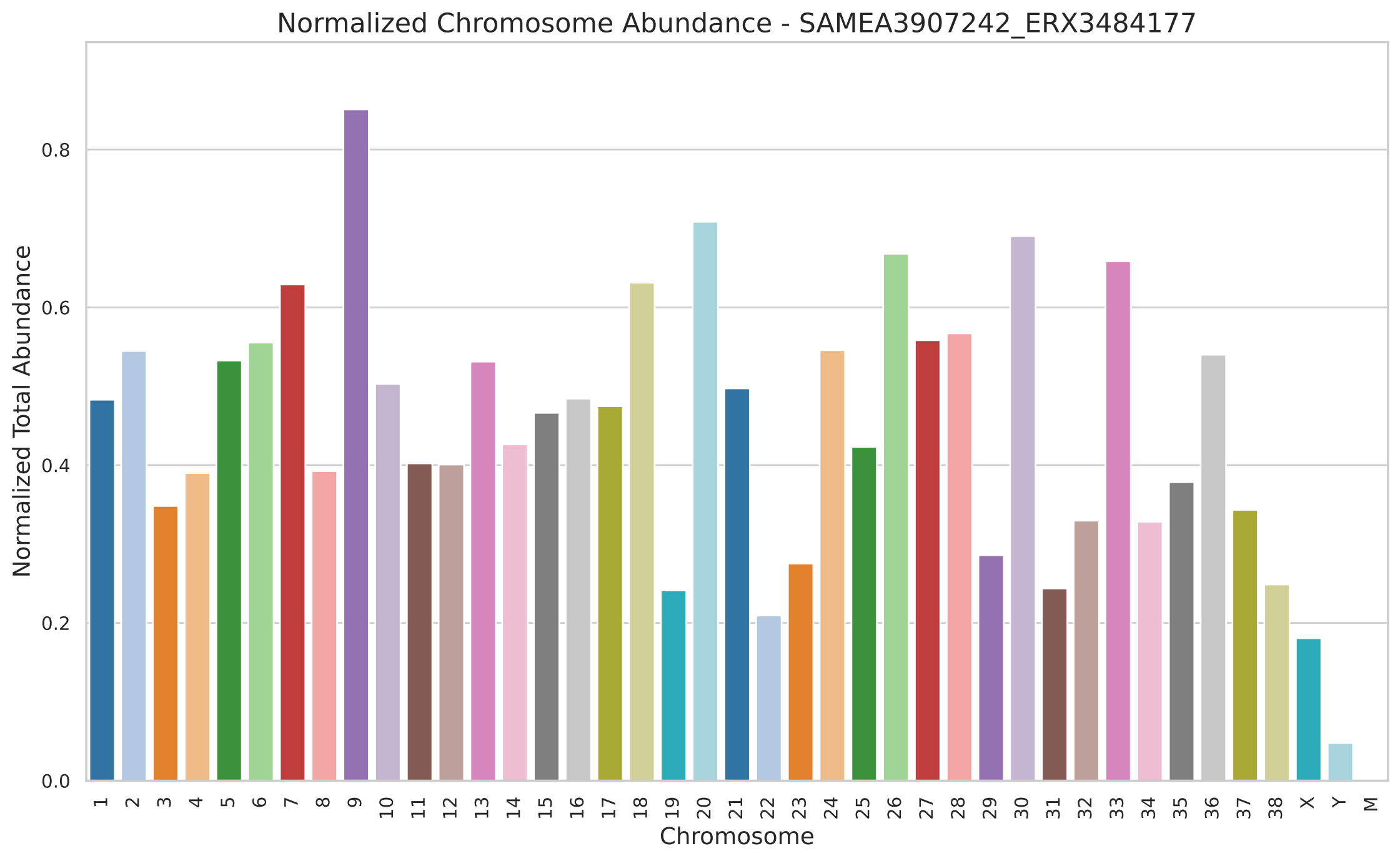

Normalized Chromosome Abundance - SAMEA3907200_ERX3484152
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

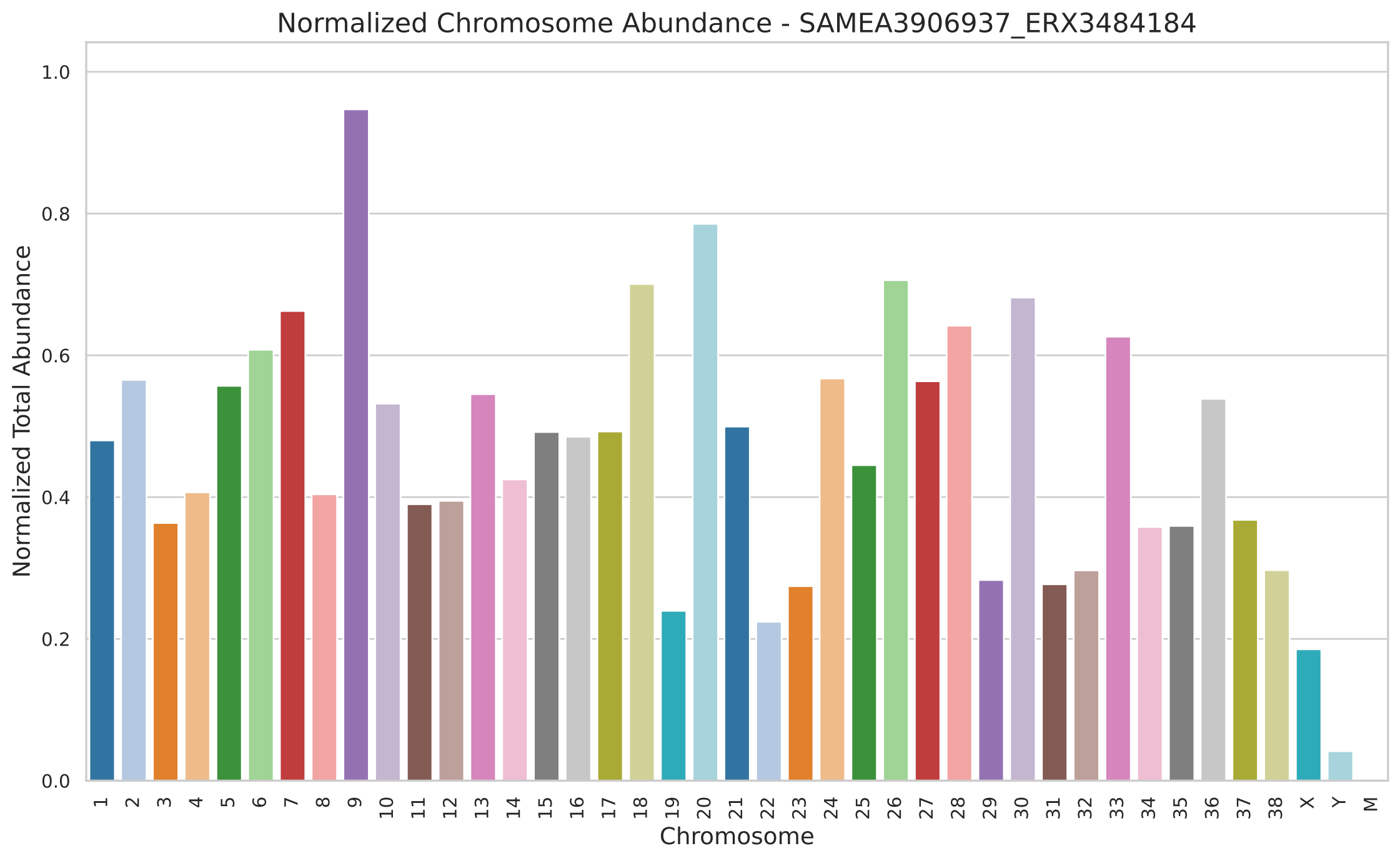

Normalized Chromosome Abundance - SAMEA3907182_ERX3484141
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

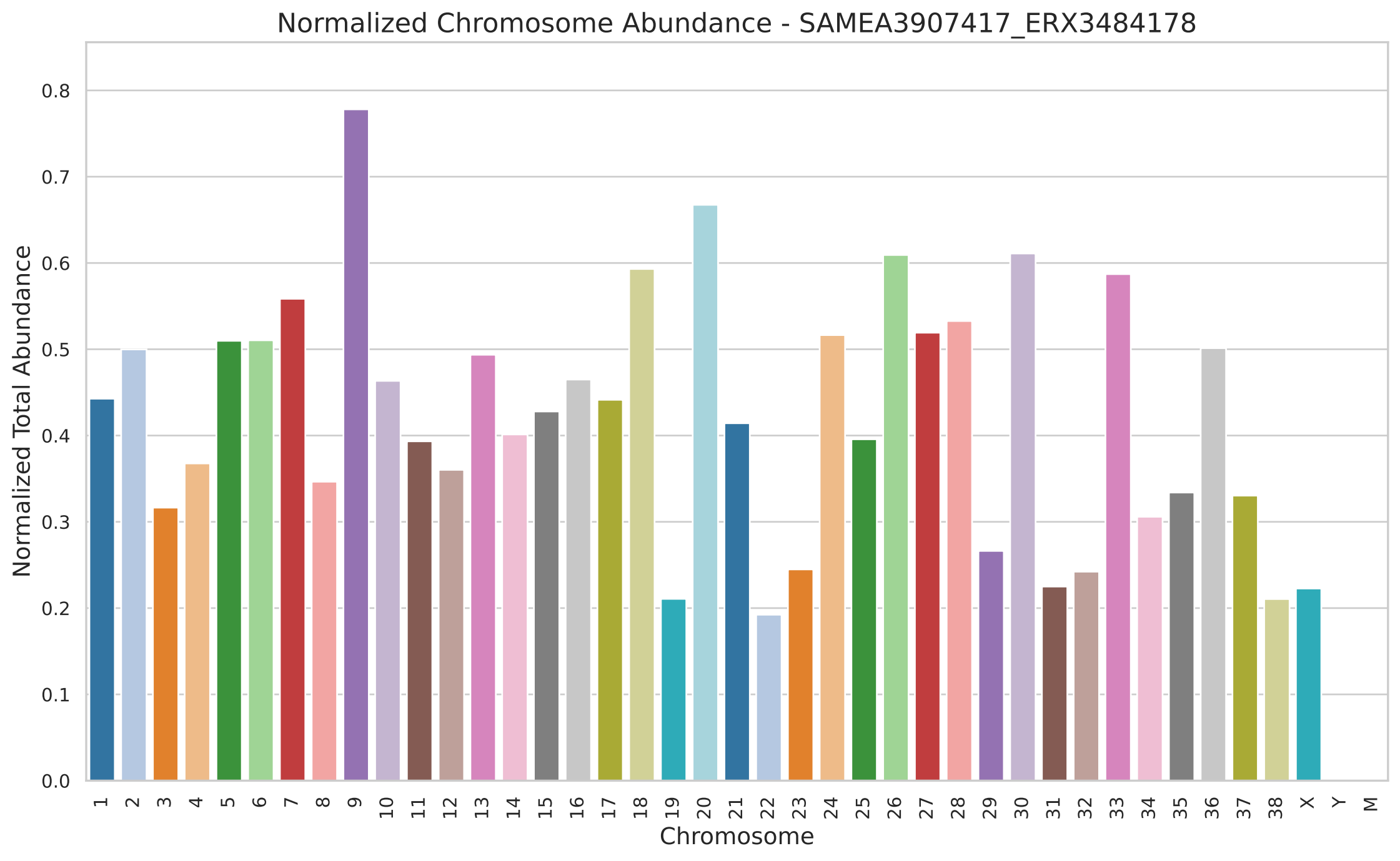

Normalized Chromosome Abundance - SAMEA3907235_ERX3484172
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

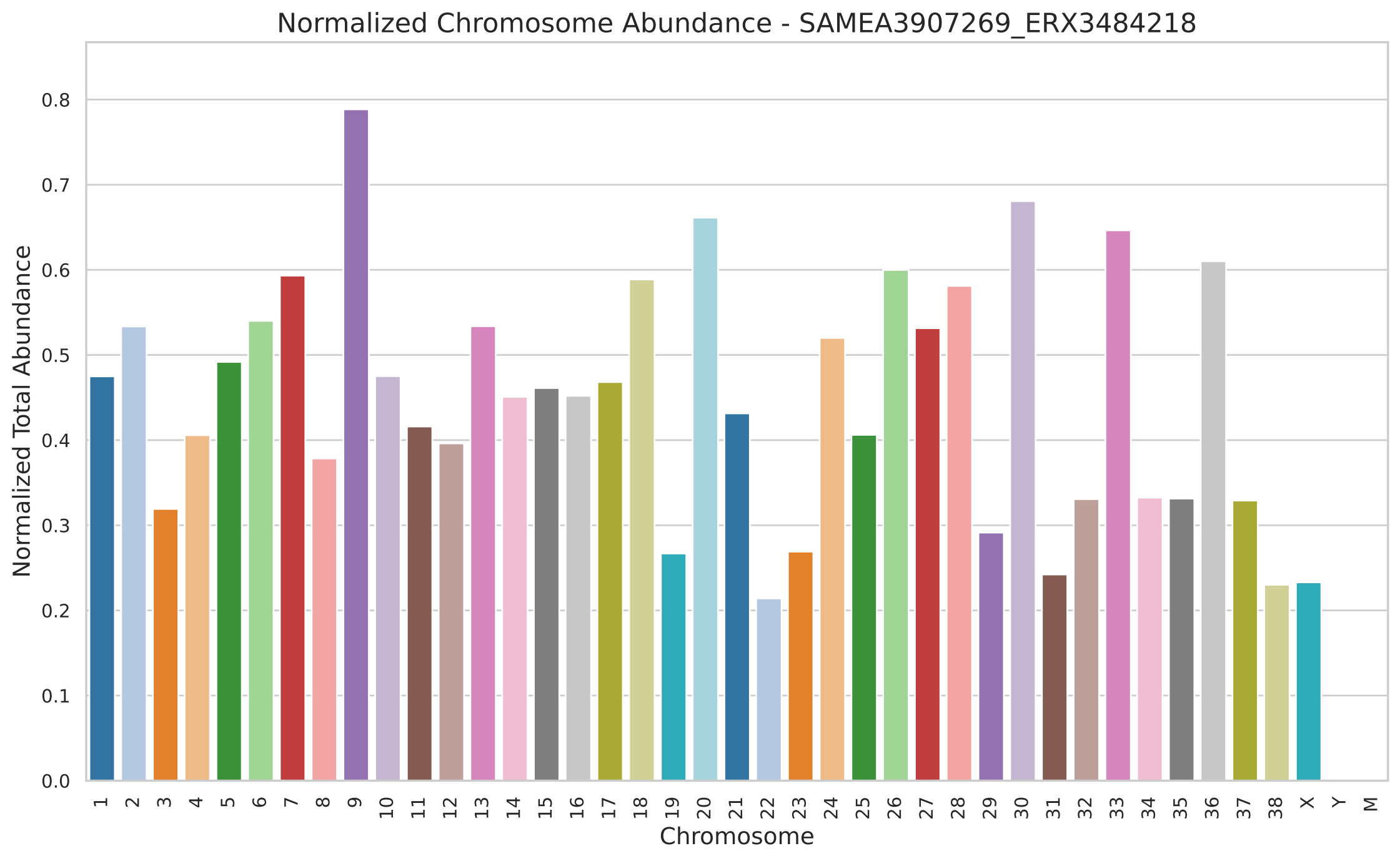

Normalized Chromosome Abundance - SAMEA5804818_ERX3484121
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

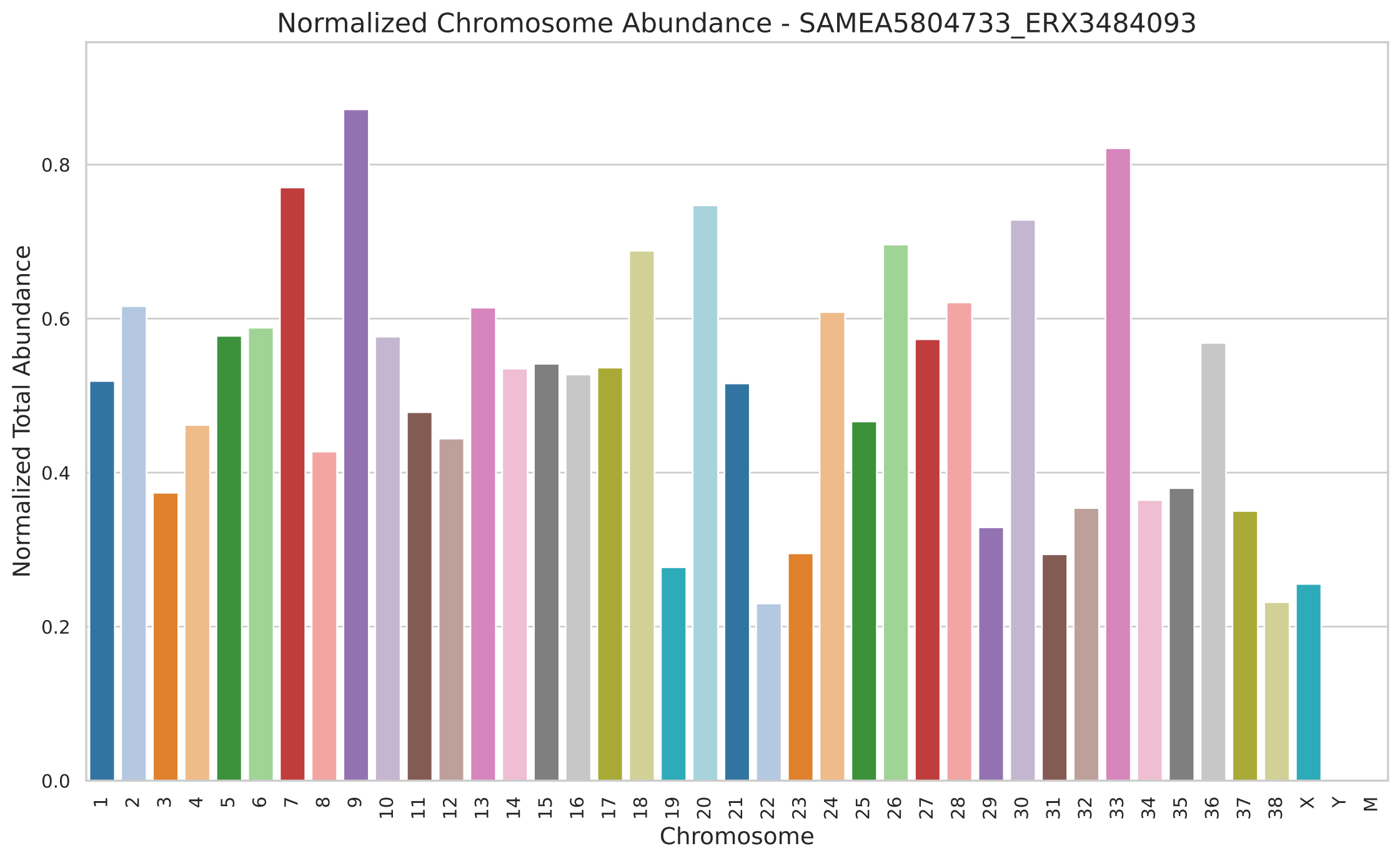

Normalized Chromosome Abundance - SAMEA3906929_ERX3484181
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

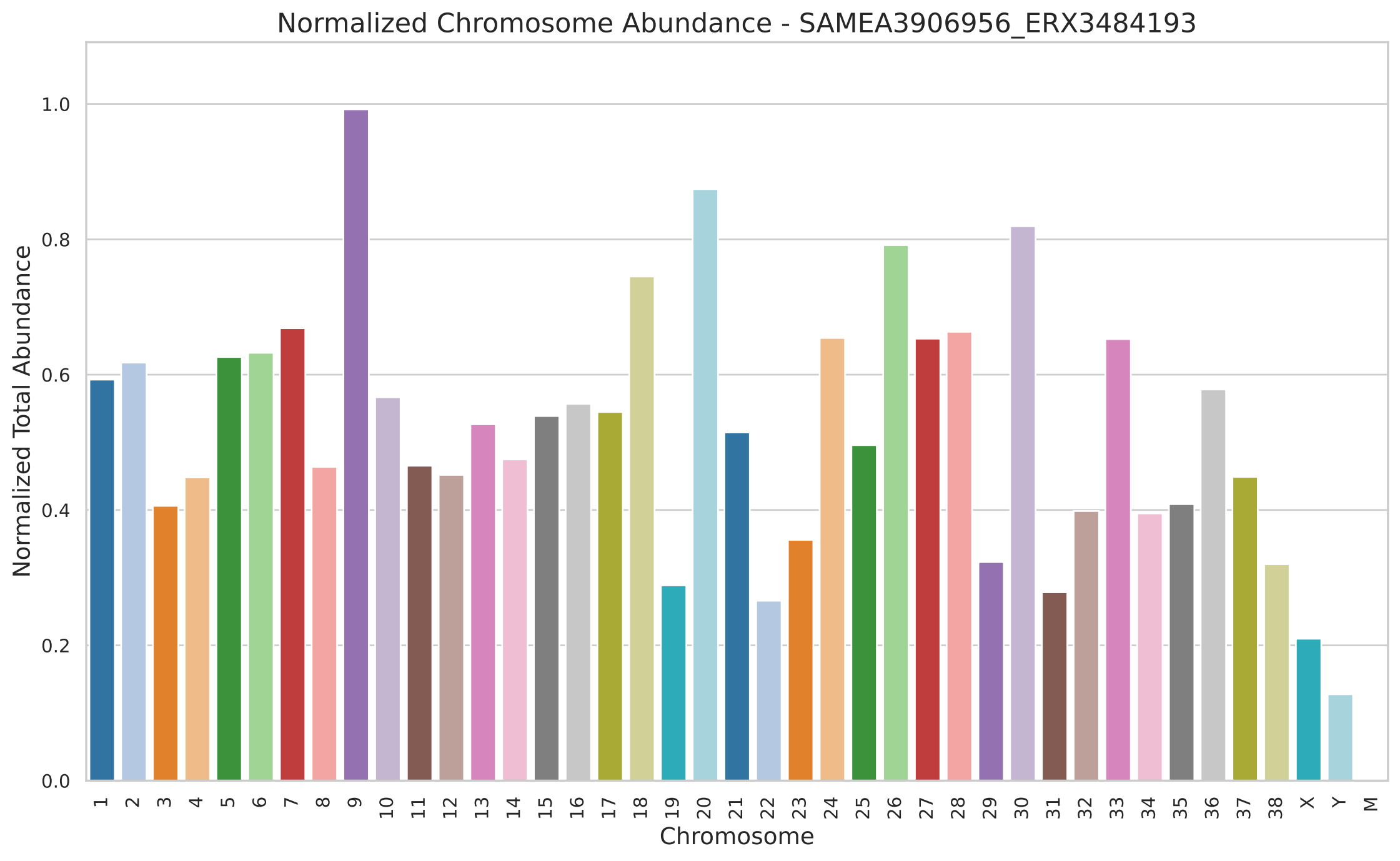

Normalized Chromosome Abundance - SAMEA3907242_ERX3484177
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

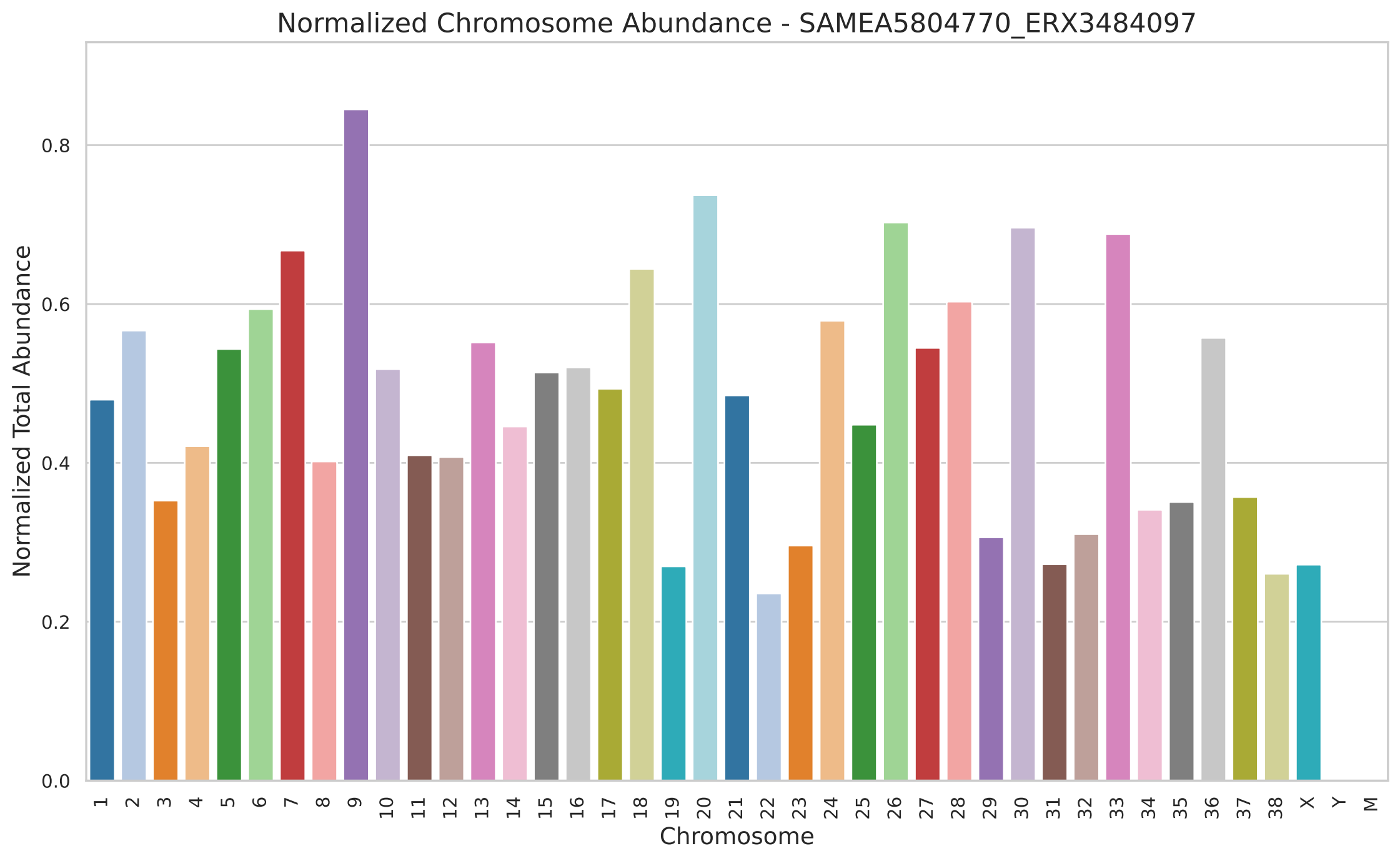

Normalized Chromosome Abundance - SAMEA3906937_ERX3484184
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

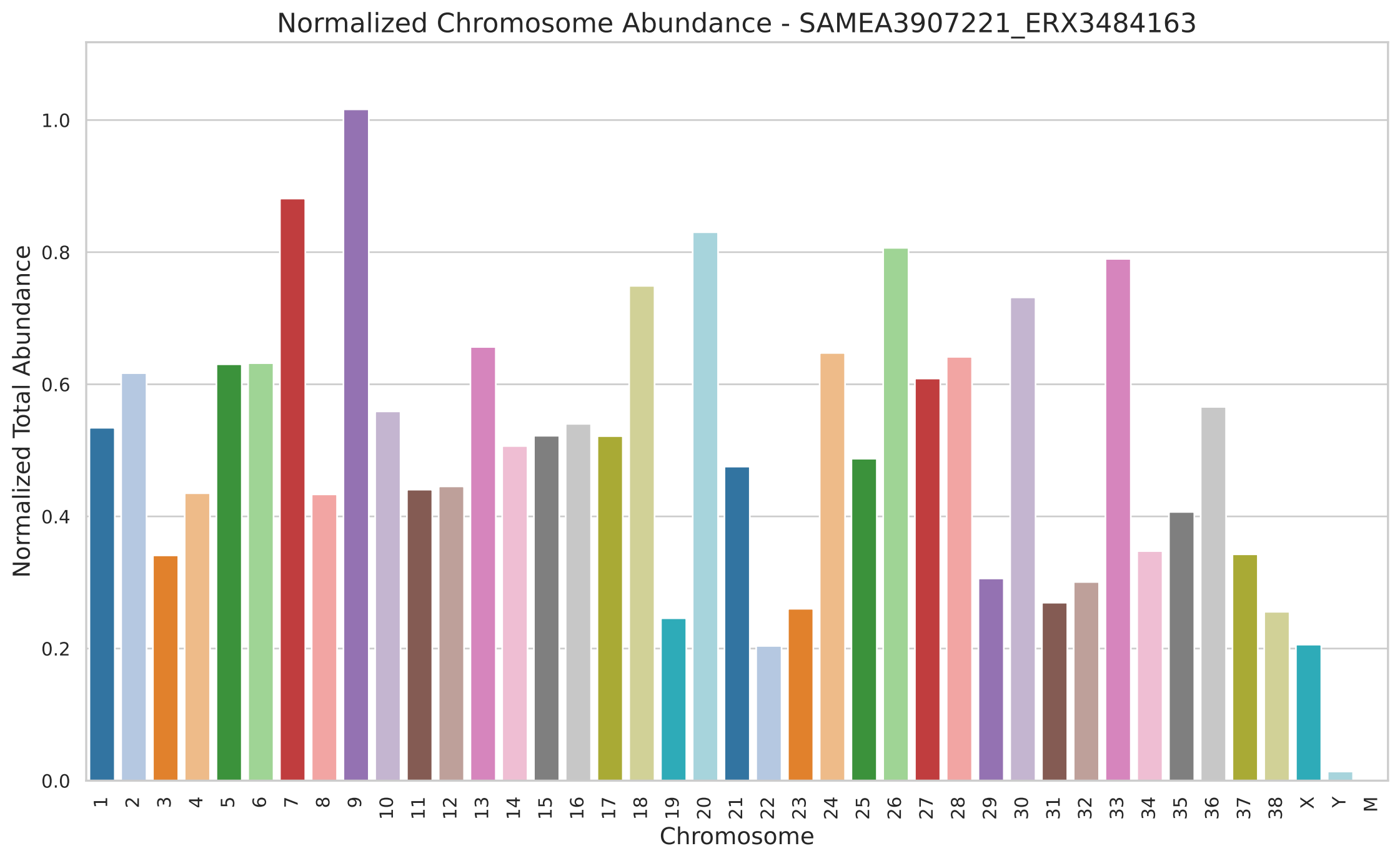

Normalized Chromosome Abundance - SAMEA3907417_ERX3484178
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

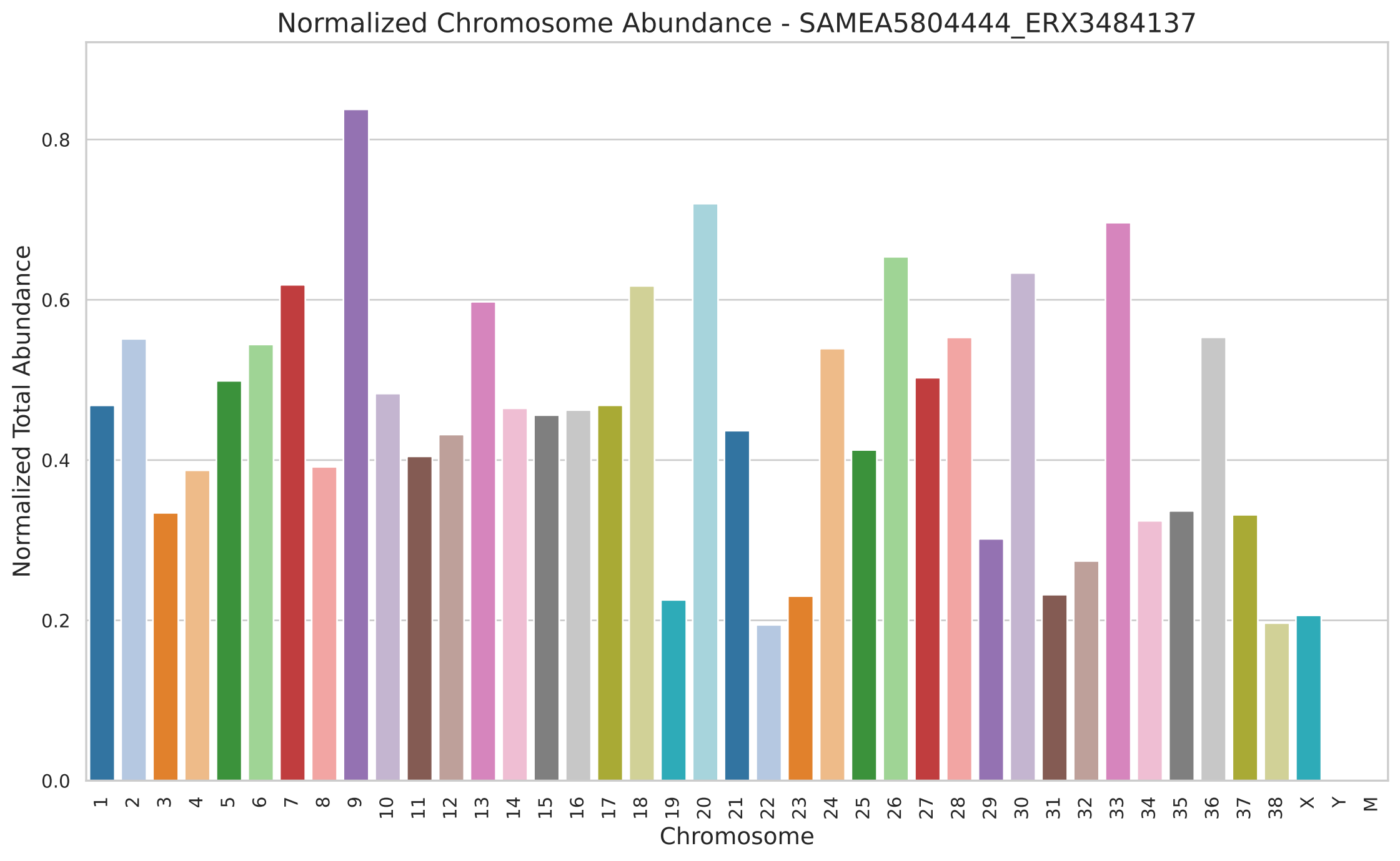

Normalized Chromosome Abundance - SAMEA3907269_ERX3484218
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

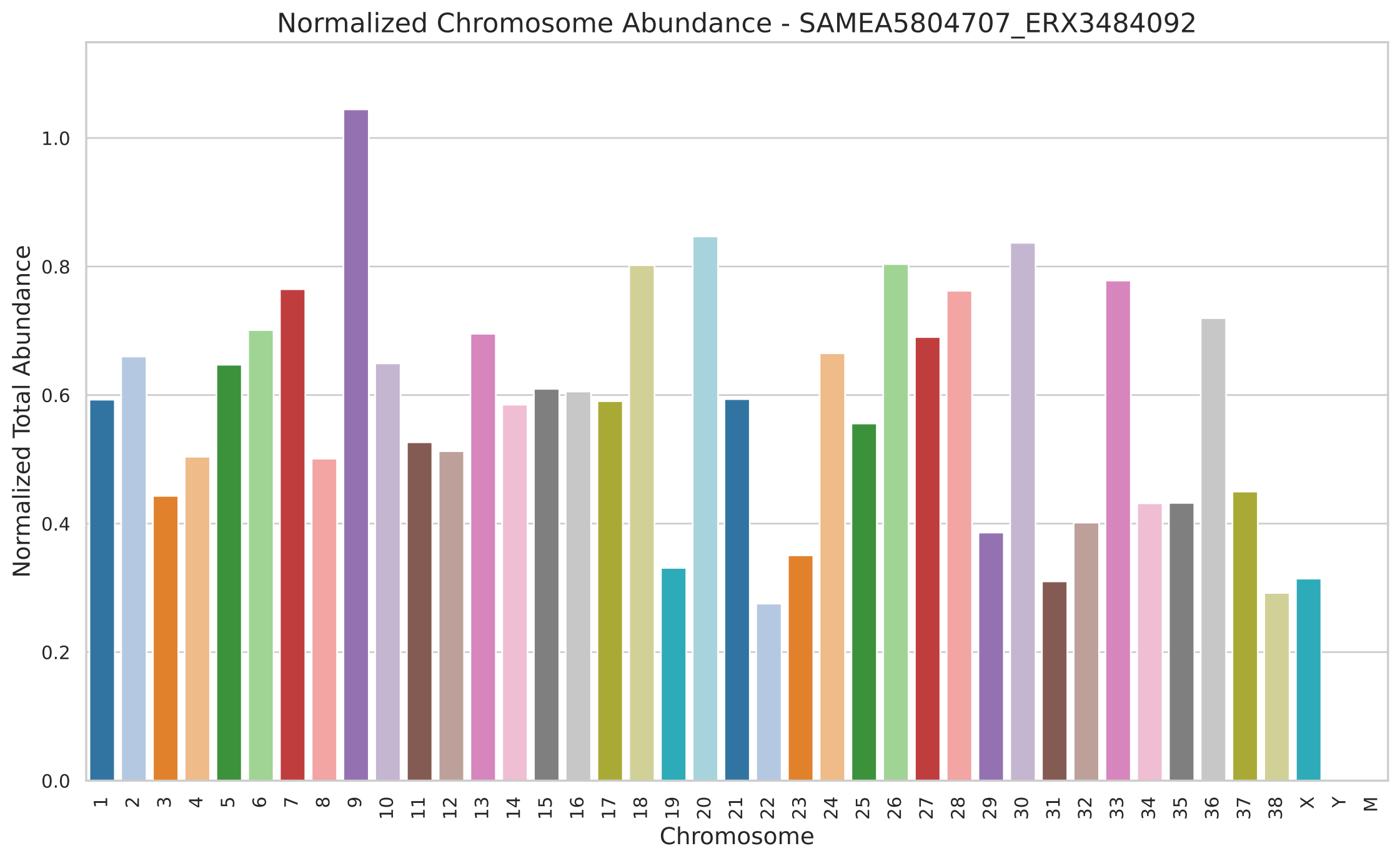

Normalized Chromosome Abundance - SAMEA5804733_ERX3484093
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

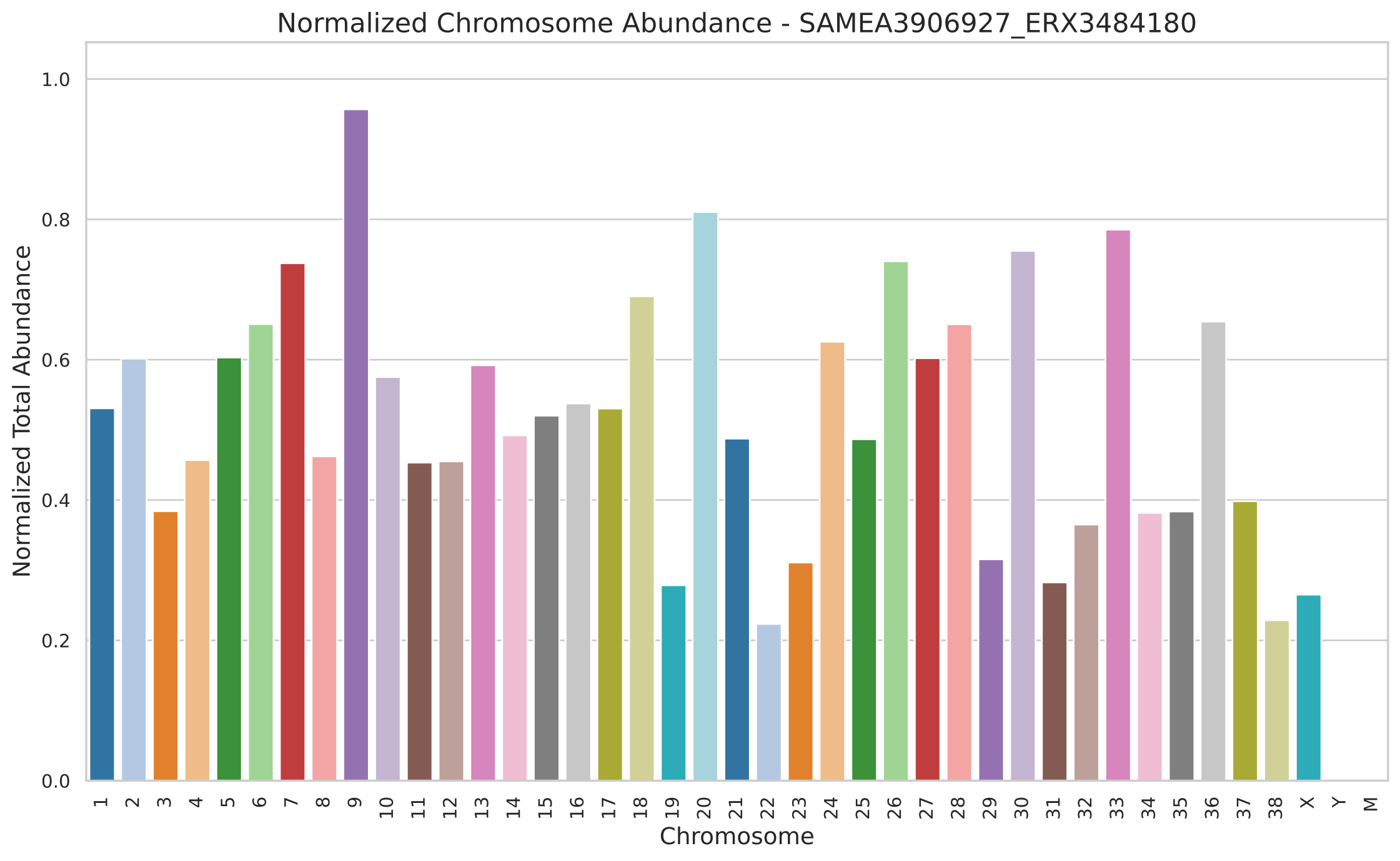

Normalized Chromosome Abundance - SAMEA3906956_ERX3484193
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

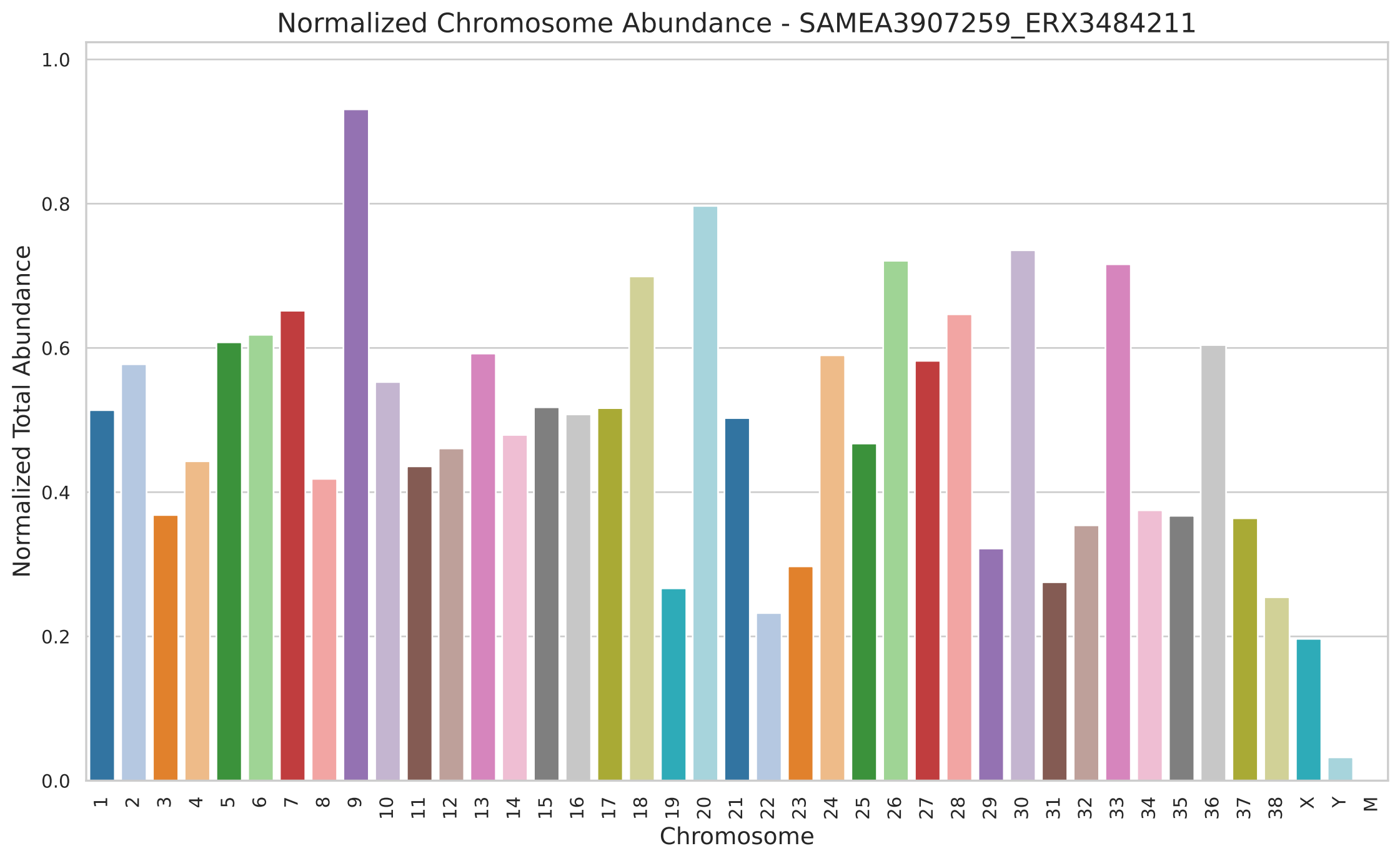

Normalized Chromosome Abundance - SAMEA5804770_ERX3484097
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

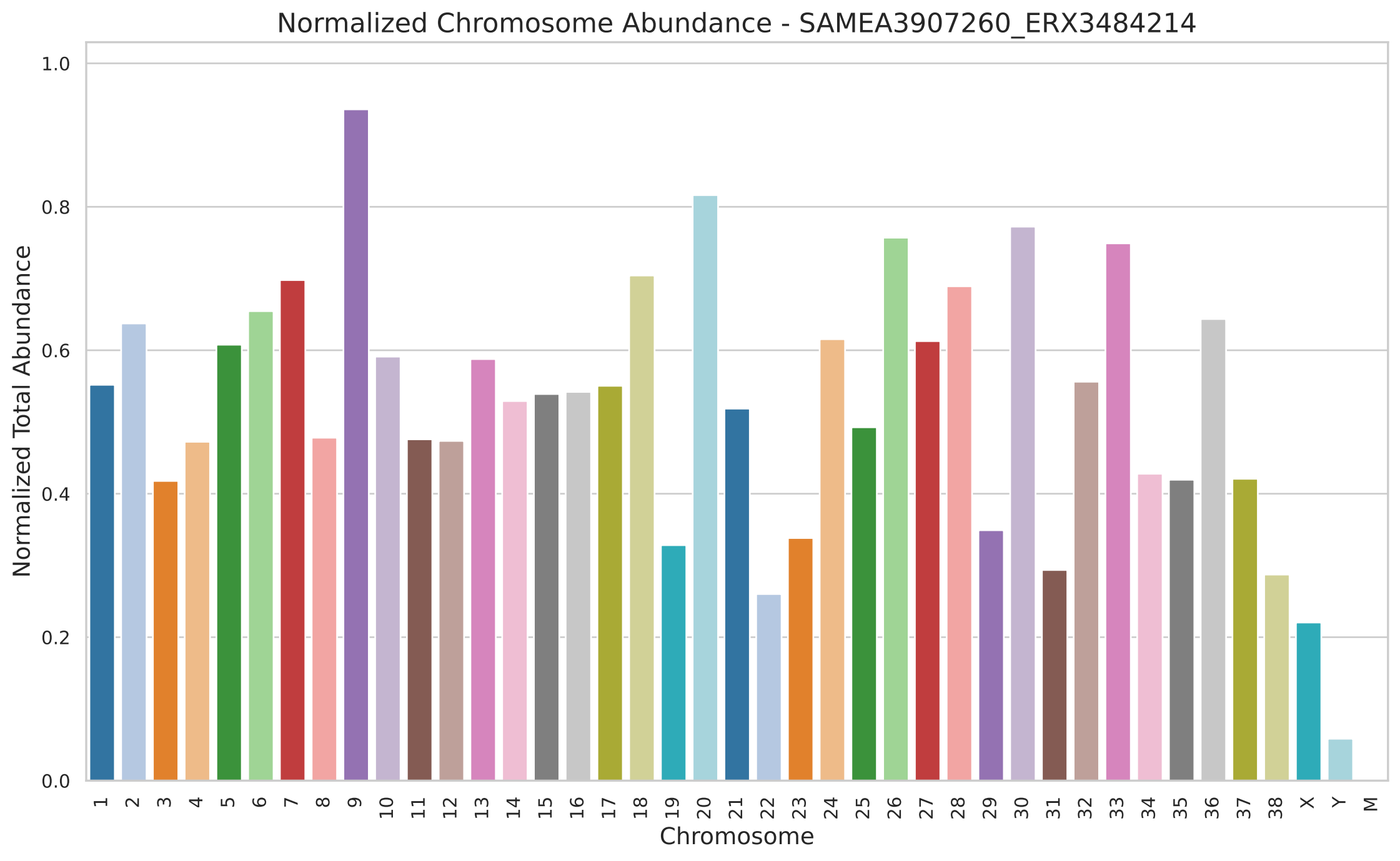

Normalized Chromosome Abundance - SAMEA3907221_ERX3484163
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

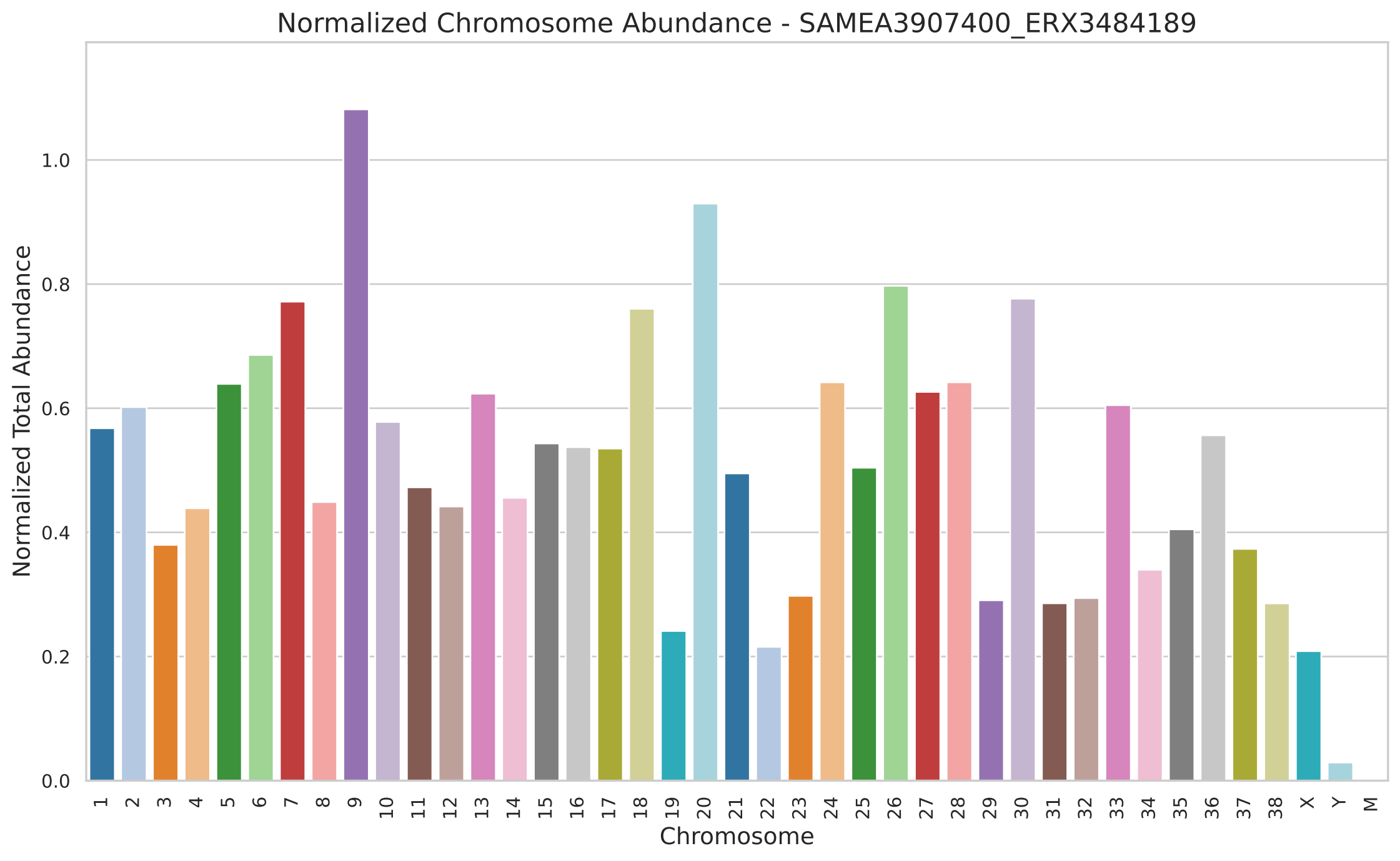

Normalized Chromosome Abundance - SAMEA5804444_ERX3484137
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

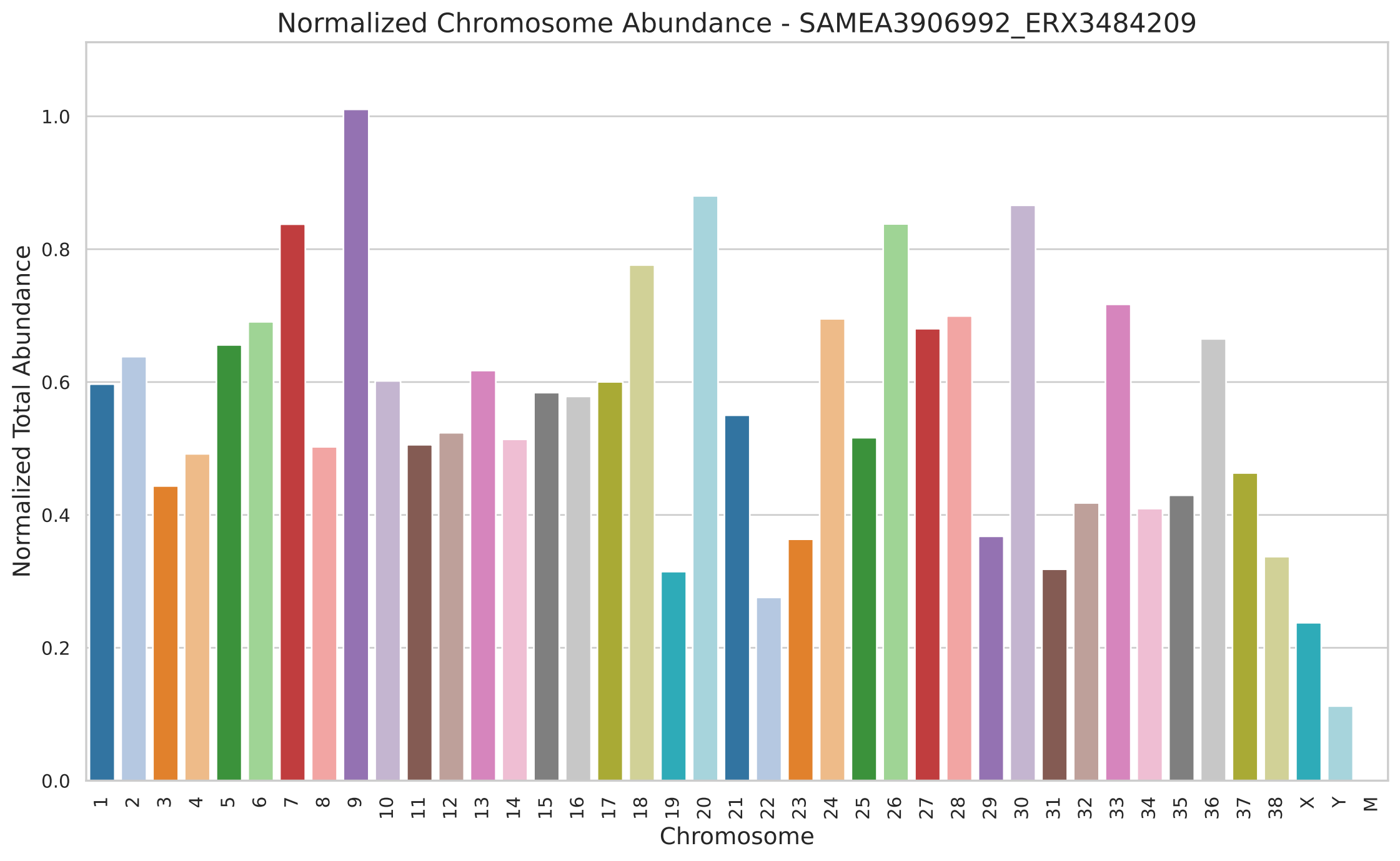

Normalized Chromosome Abundance - SAMEA5804707_ERX3484092
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

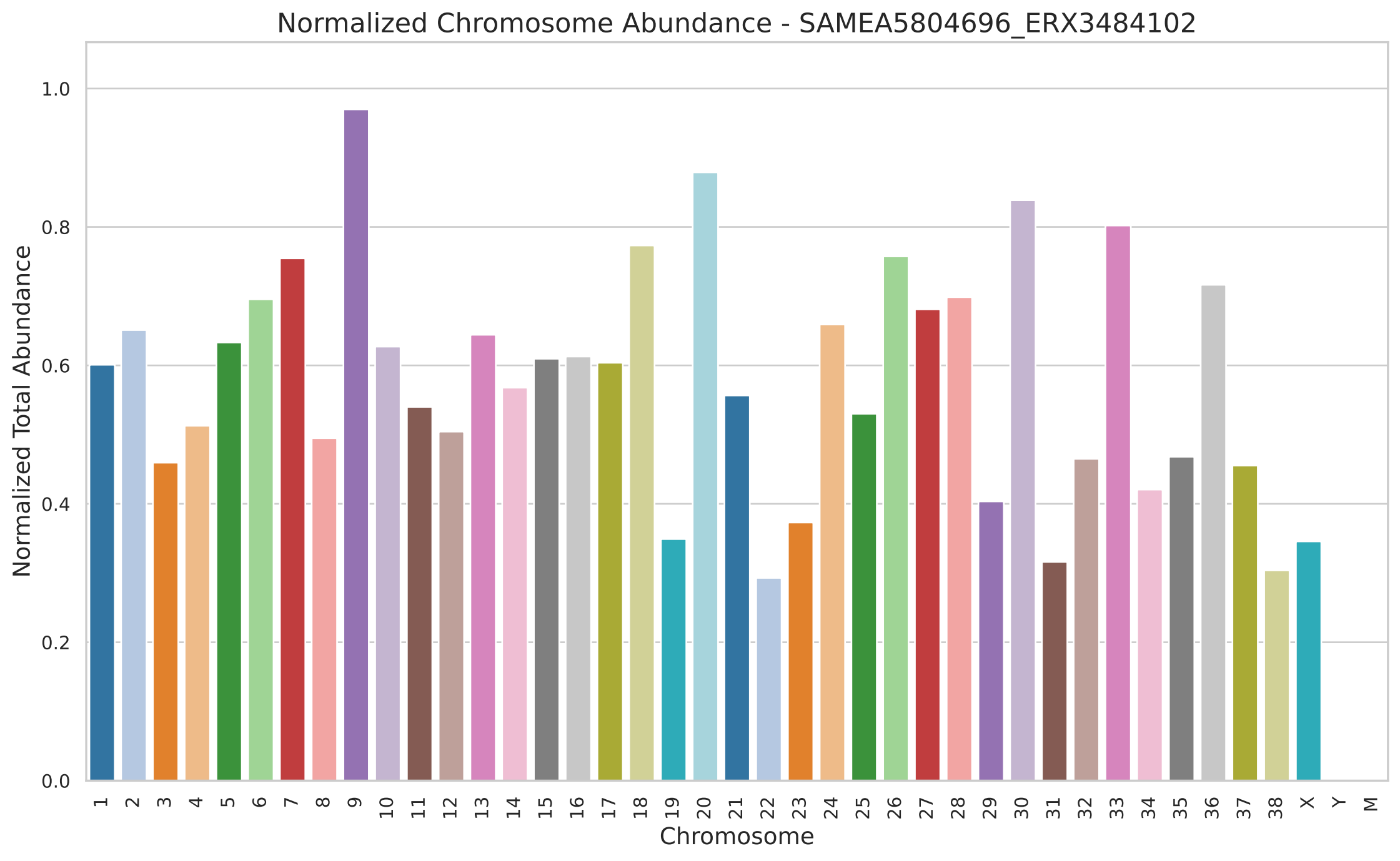

Normalized Chromosome Abundance - SAMEA3906927_ERX3484180
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

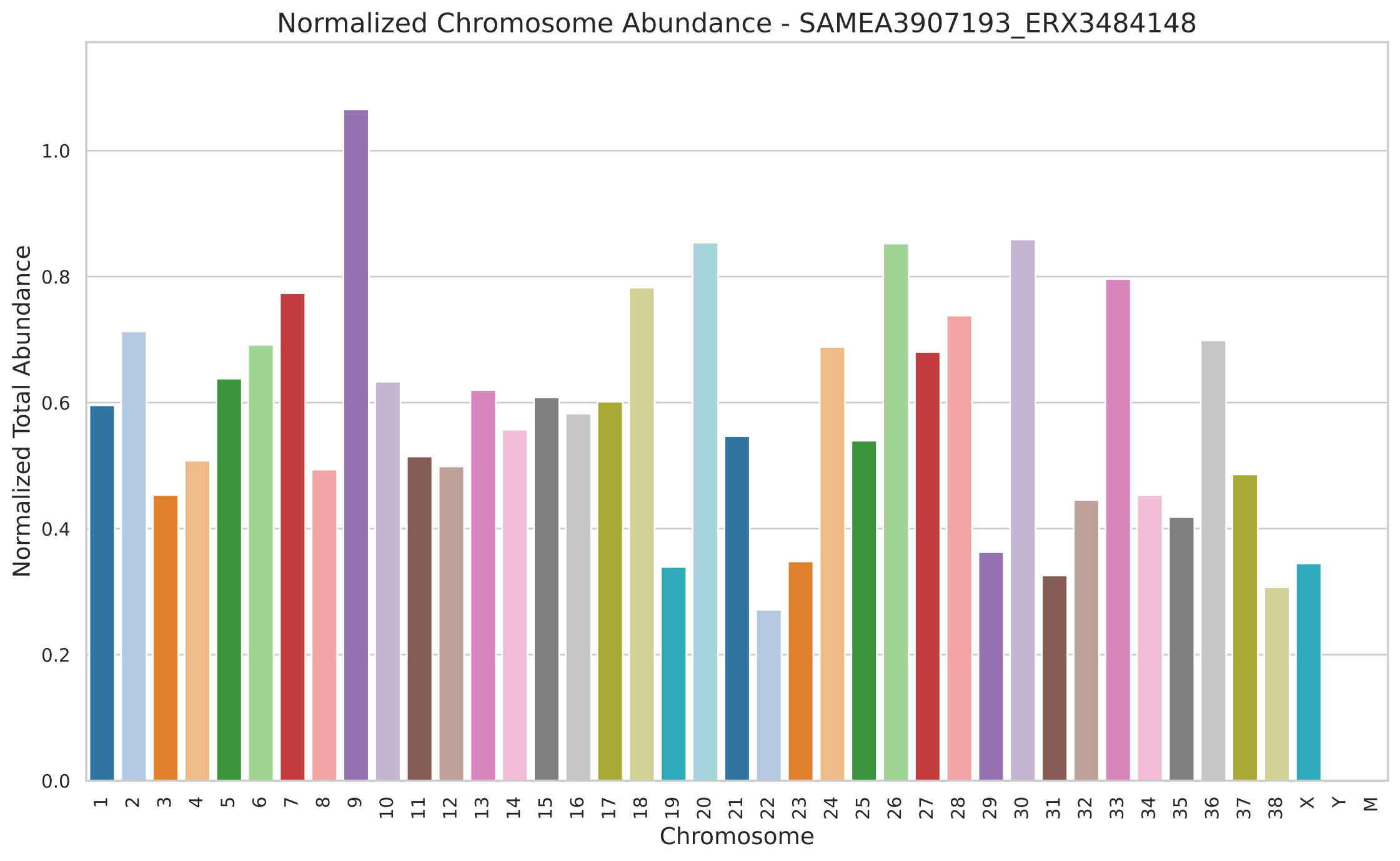

Normalized Chromosome Abundance - SAMEA3907259_ERX3484211
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

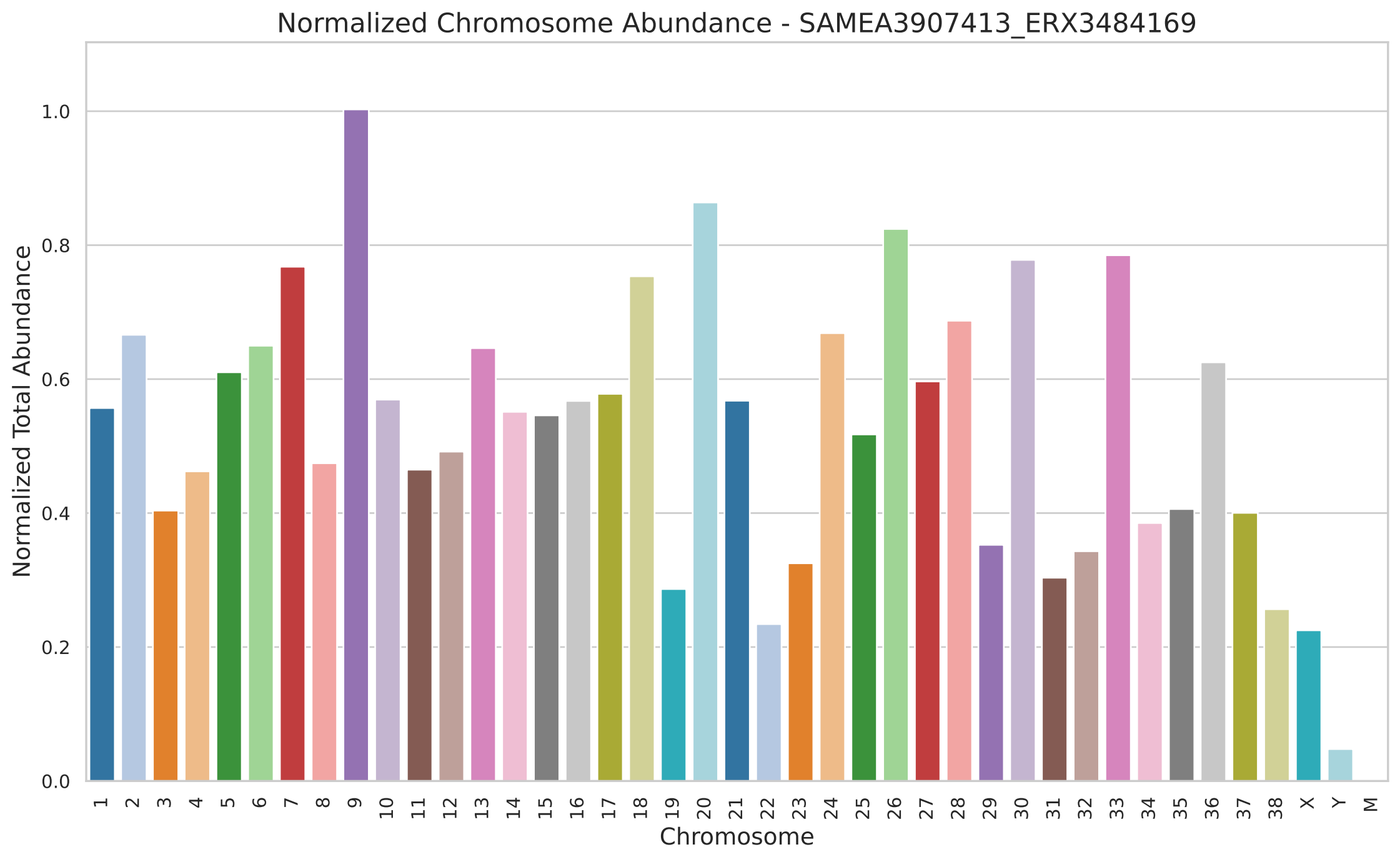

Normalized Chromosome Abundance - SAMEA3907260_ERX3484214
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

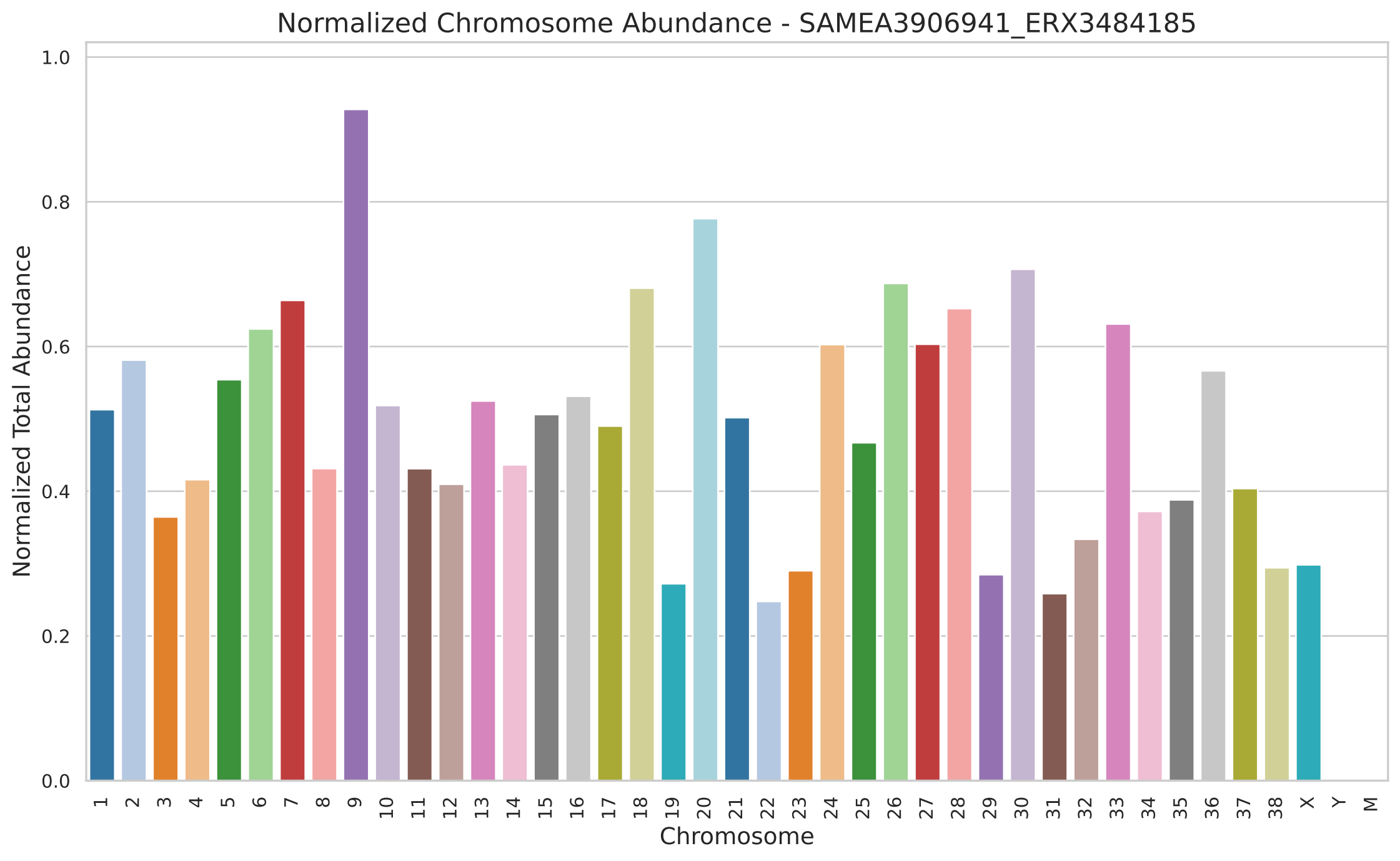

Normalized Chromosome Abundance - SAMEA3907400_ERX3484189
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

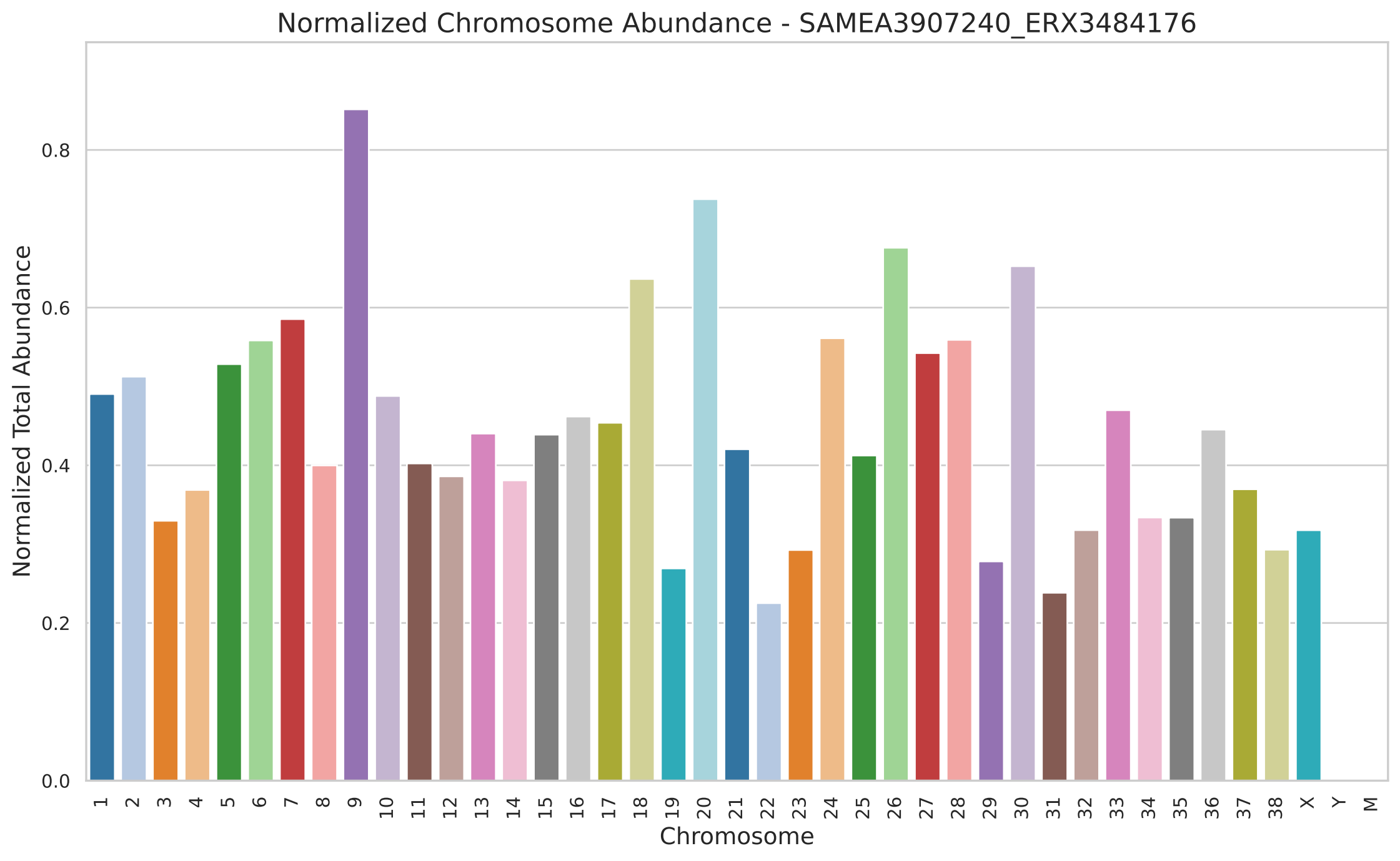

Normalized Chromosome Abundance - SAMEA3906992_ERX3484209
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

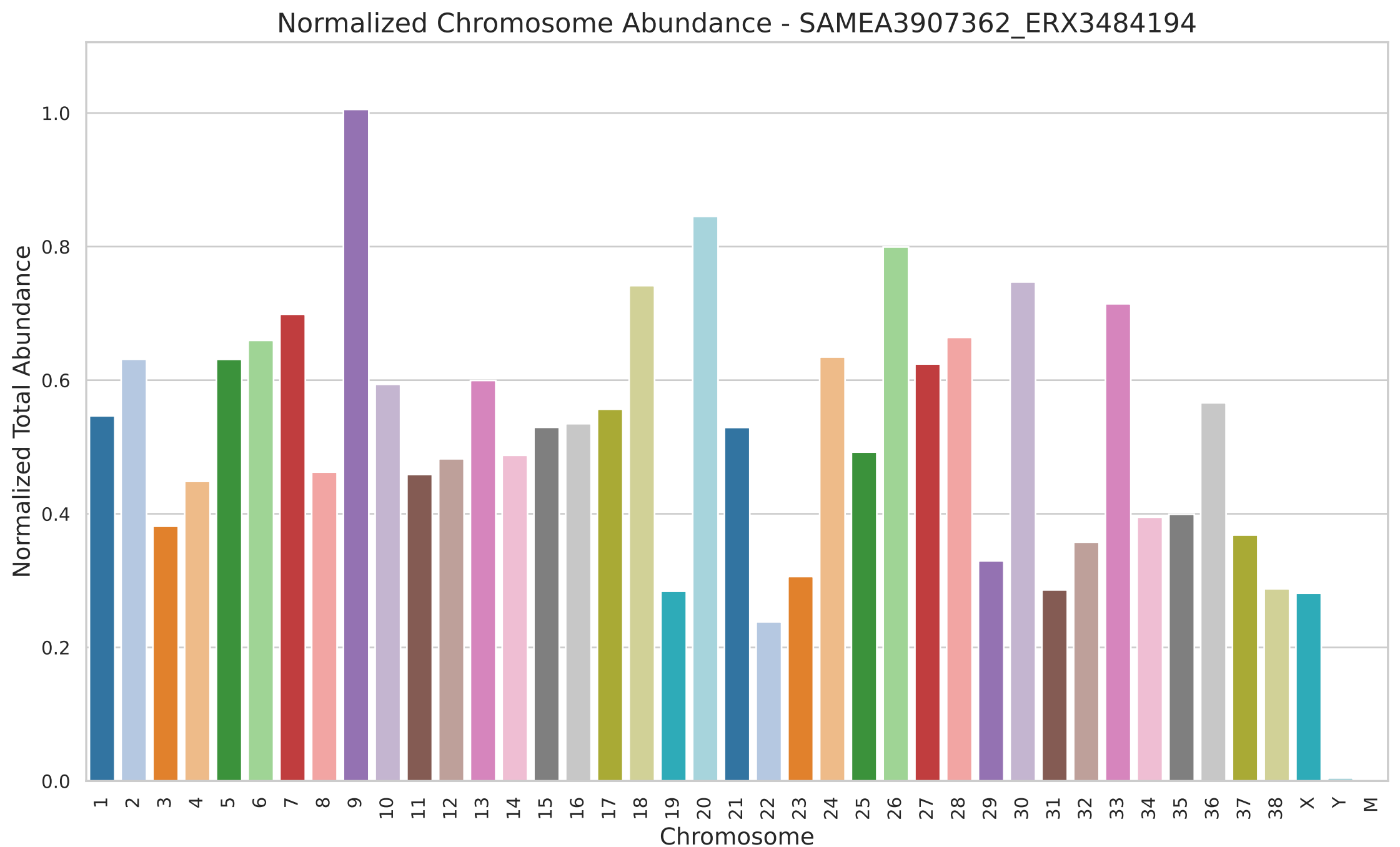

Normalized Chromosome Abundance - SAMEA5804696_ERX3484102
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

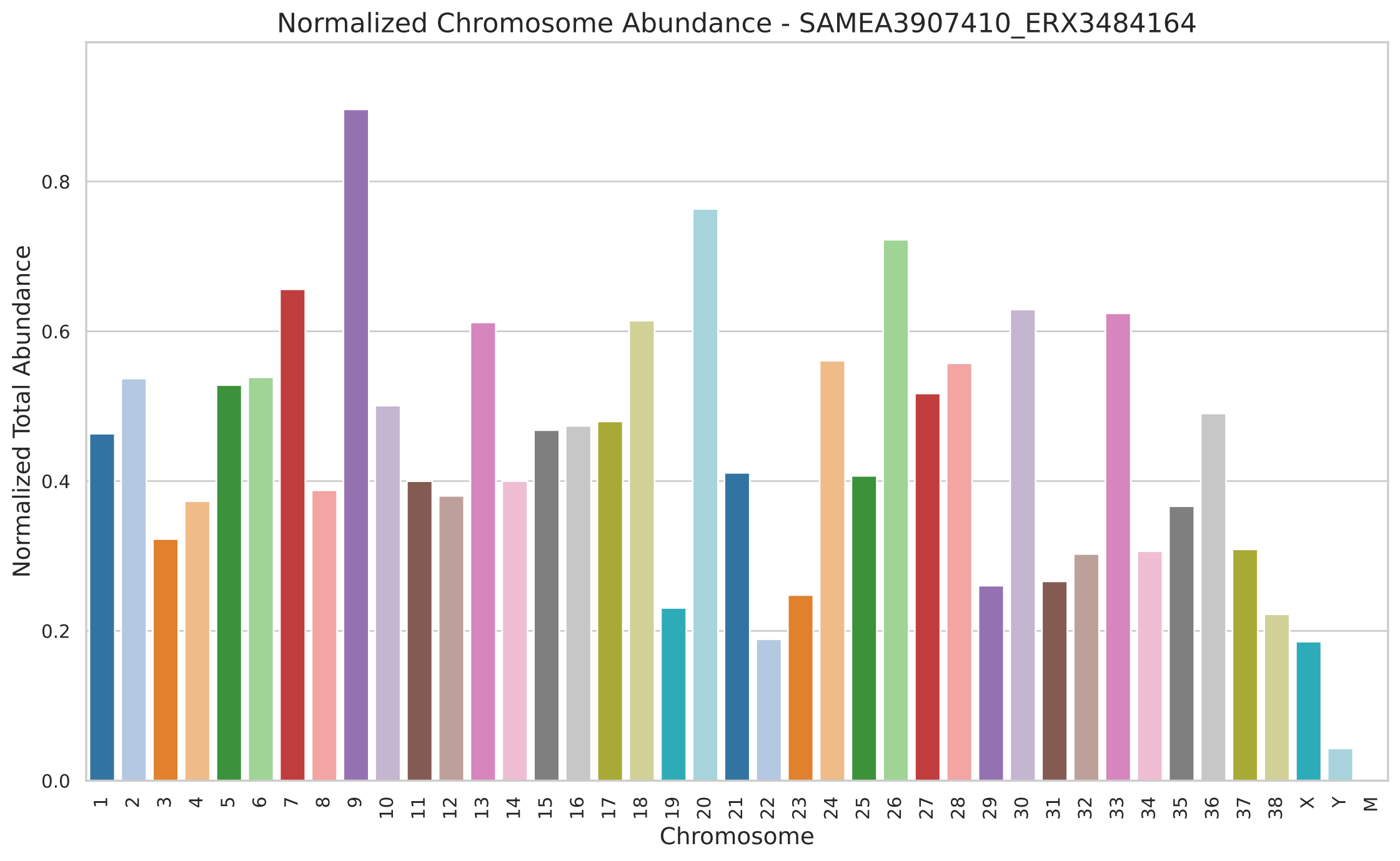

Normalized Chromosome Abundance - SAMEA3907193_ERX3484148
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

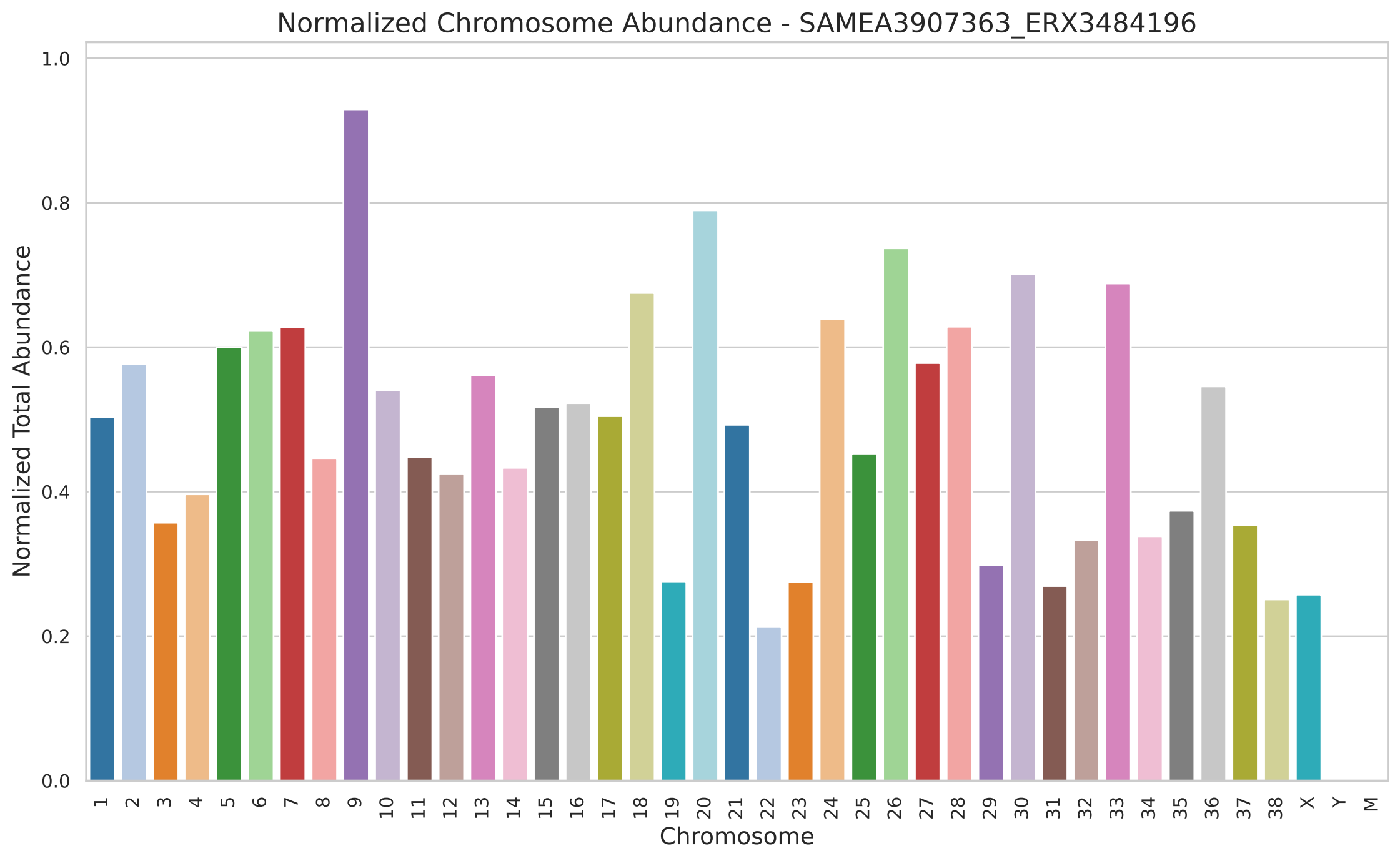

Normalized Chromosome Abundance - SAMEA3907413_ERX3484169
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

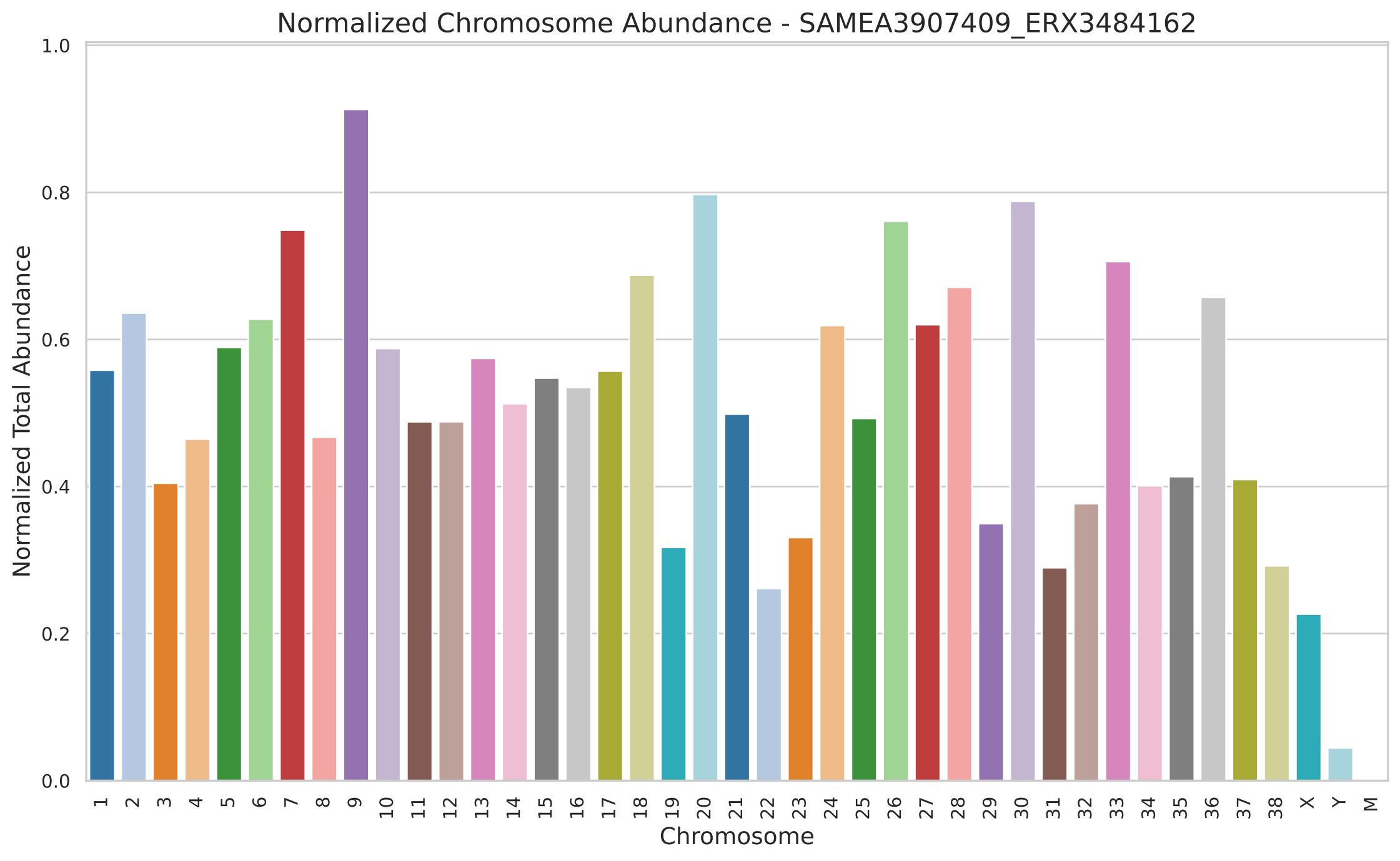

Normalized Chromosome Abundance - SAMEA3906941_ERX3484185
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

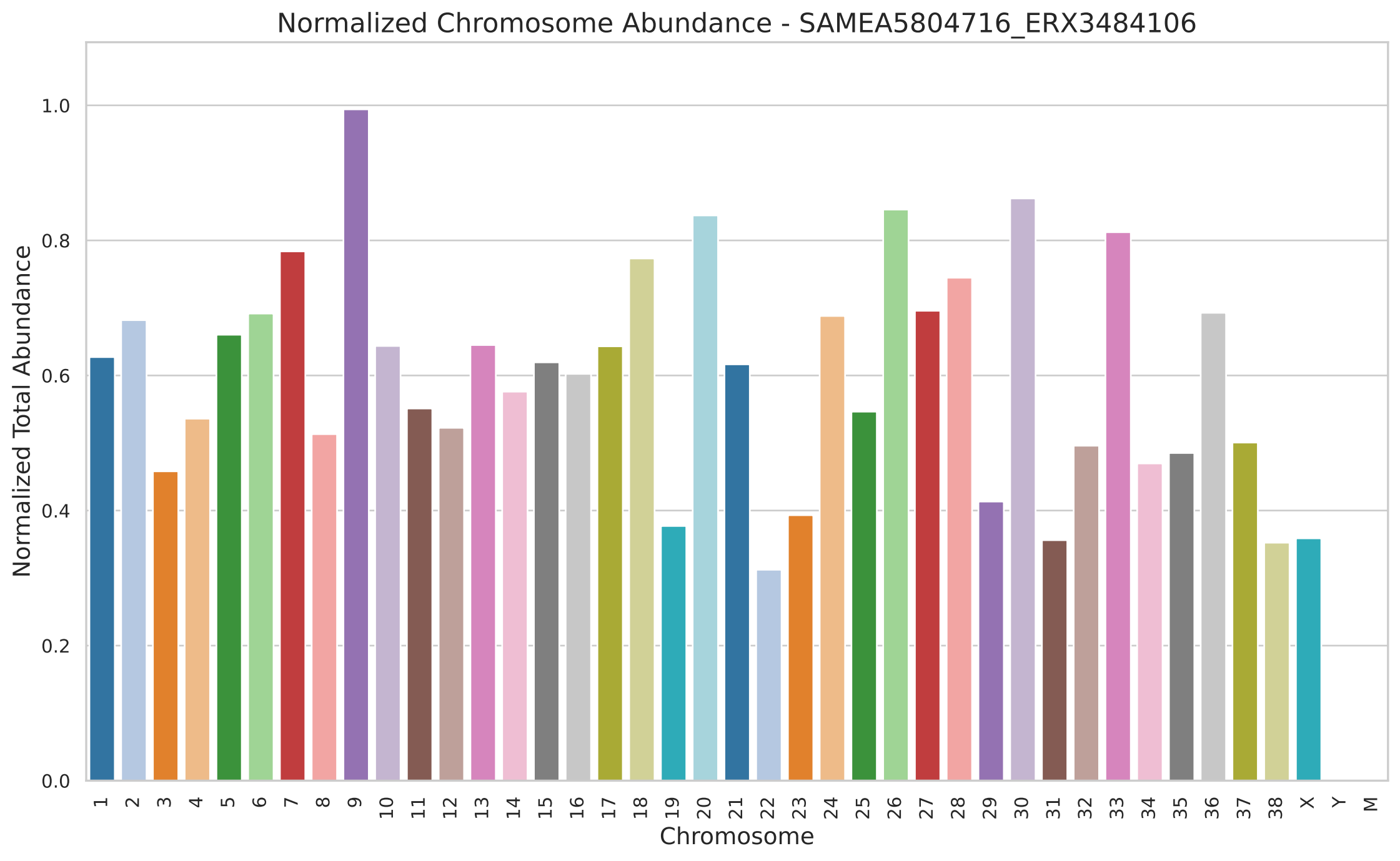

Normalized Chromosome Abundance - SAMEA3907240_ERX3484176
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

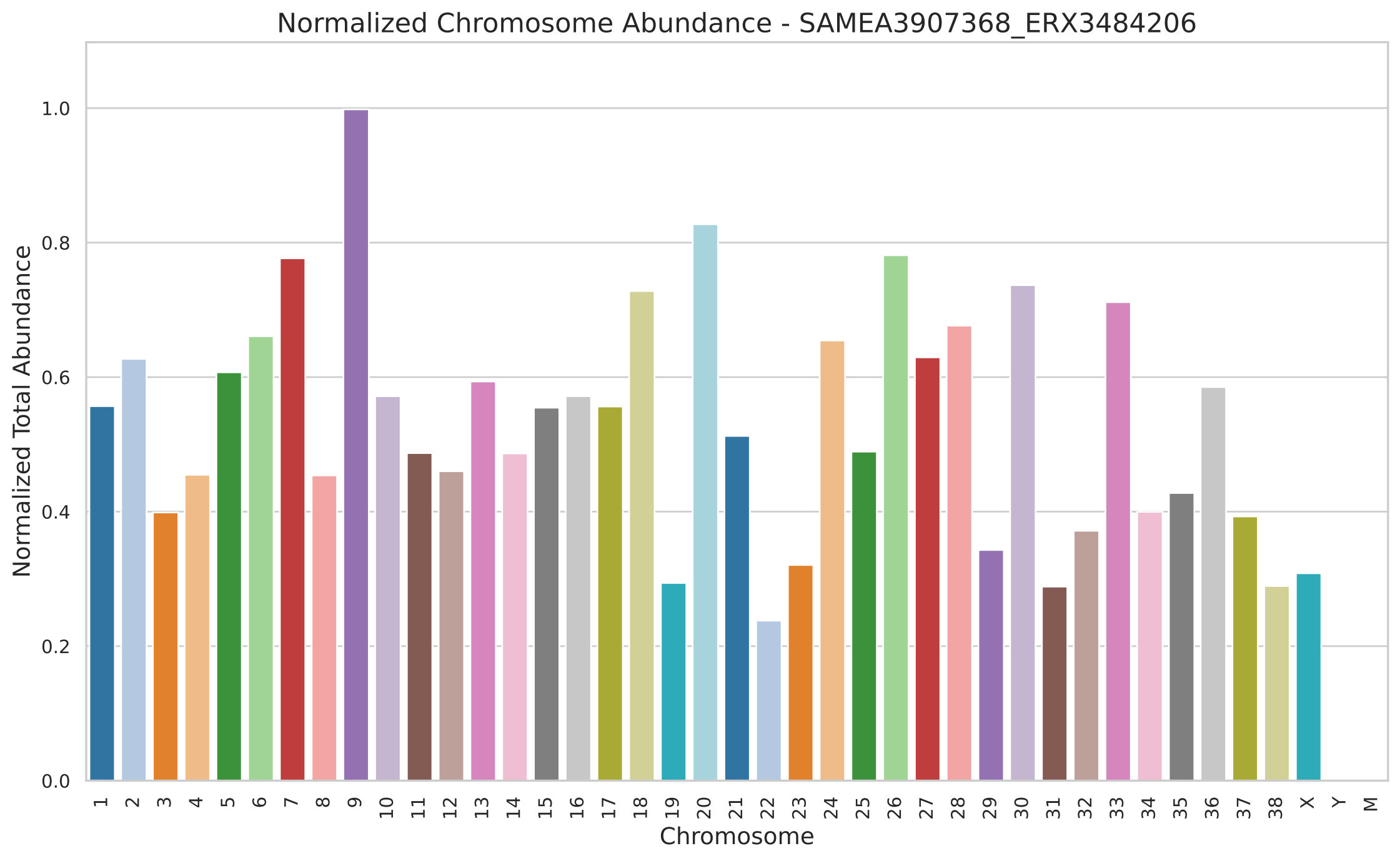

Normalized Chromosome Abundance - SAMEA3907362_ERX3484194
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

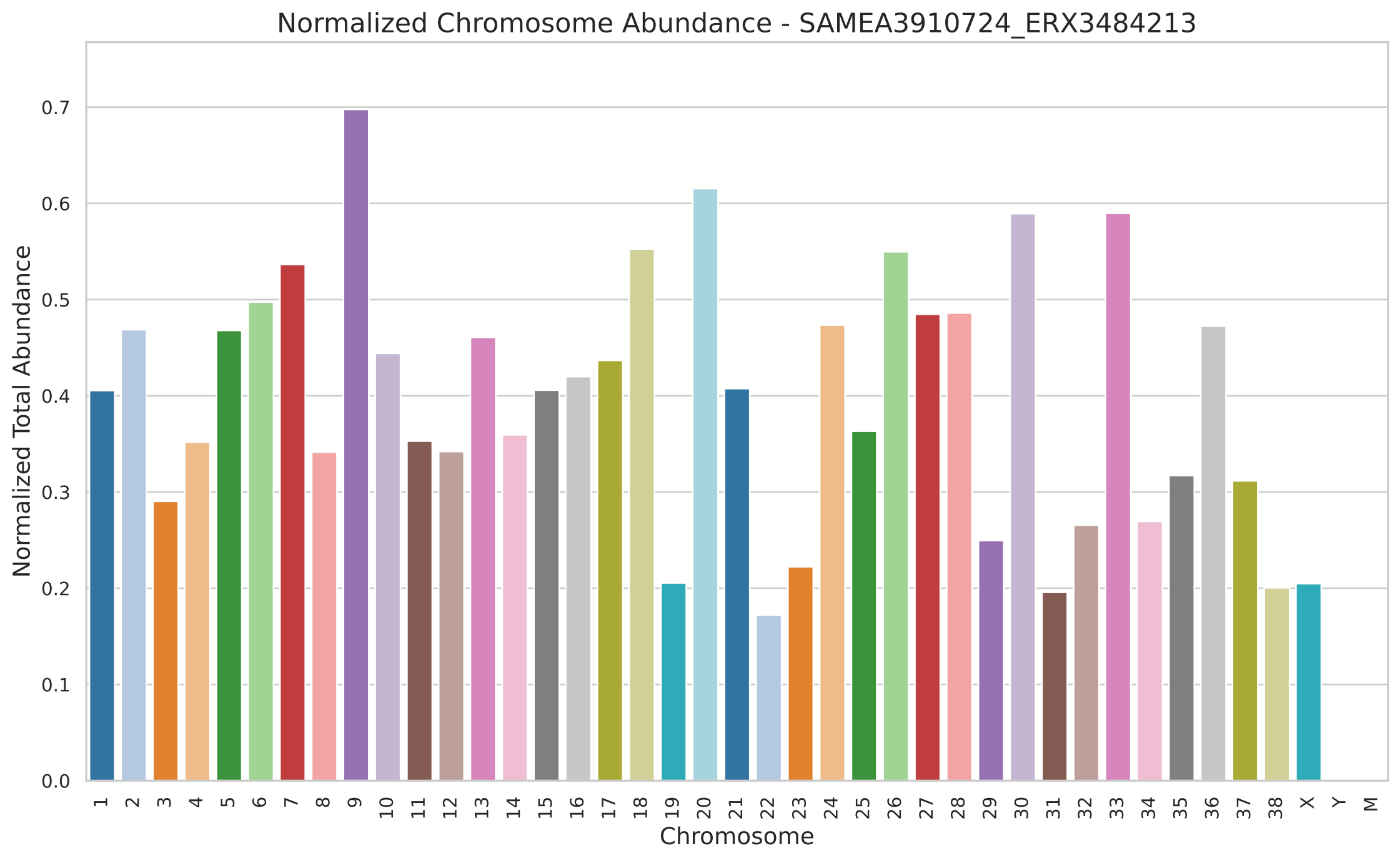

Normalized Chromosome Abundance - SAMEA3907410_ERX3484164
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

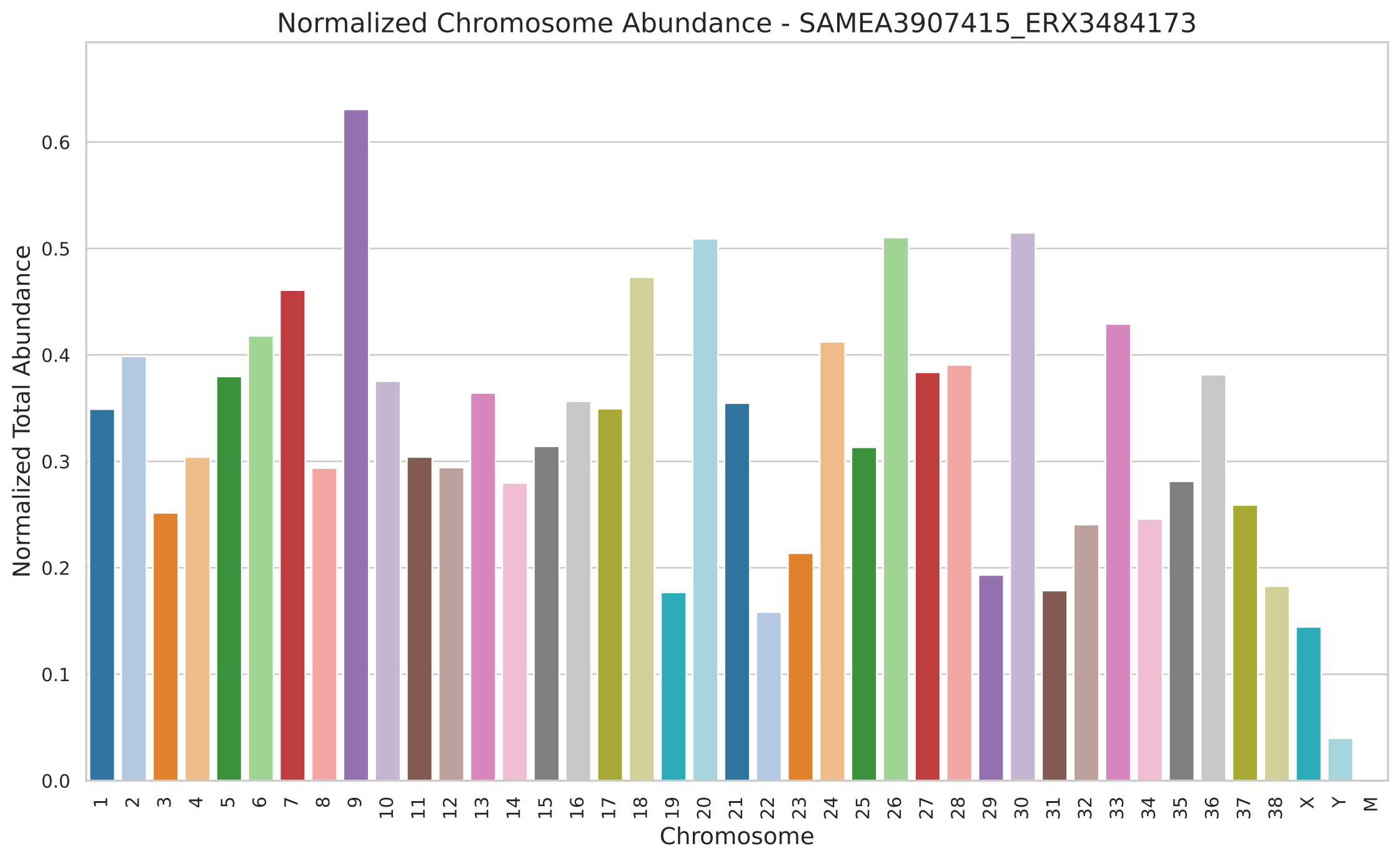

Normalized Chromosome Abundance - SAMEA3907363_ERX3484196
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

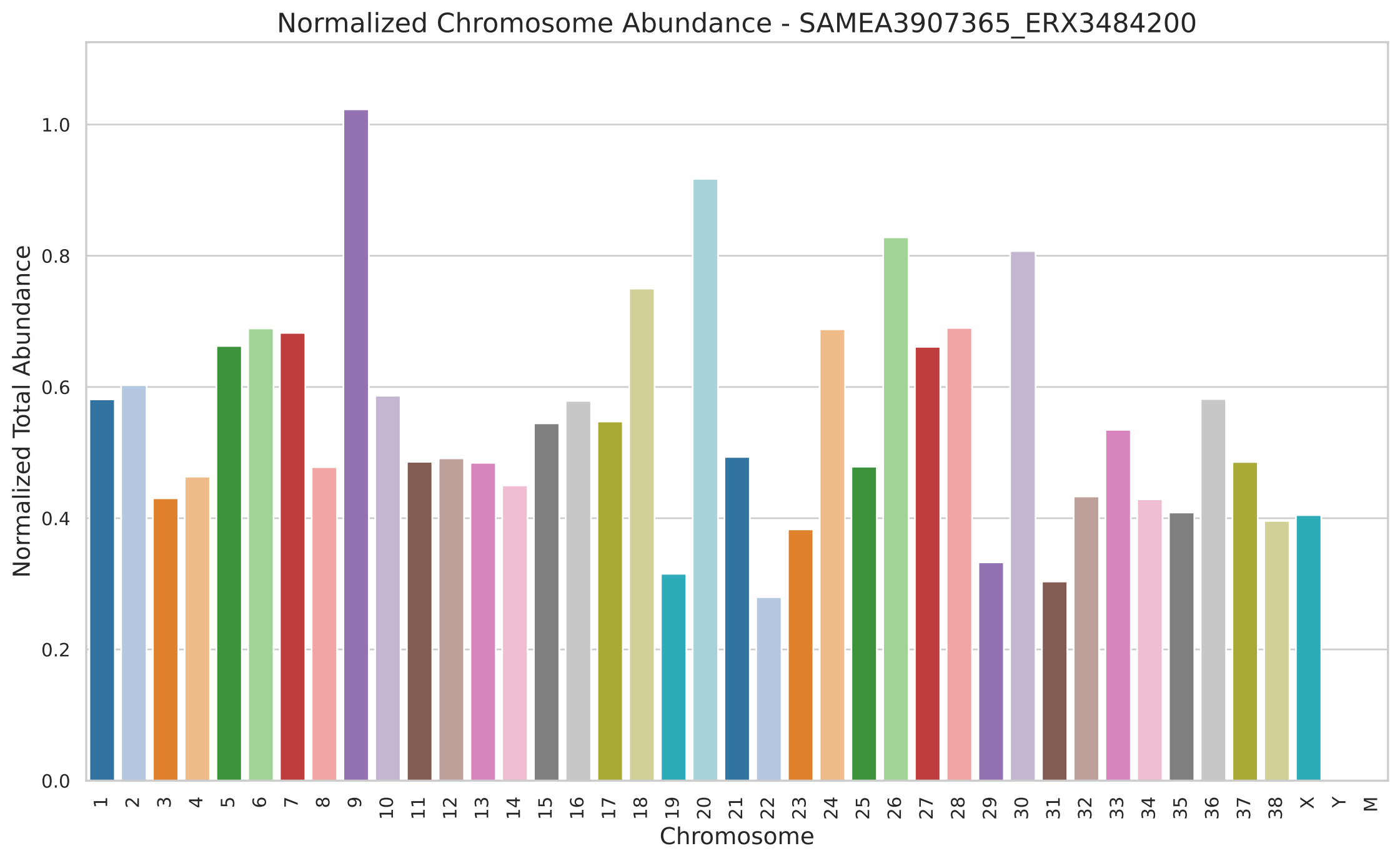

Normalized Chromosome Abundance - SAMEA3907409_ERX3484162
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

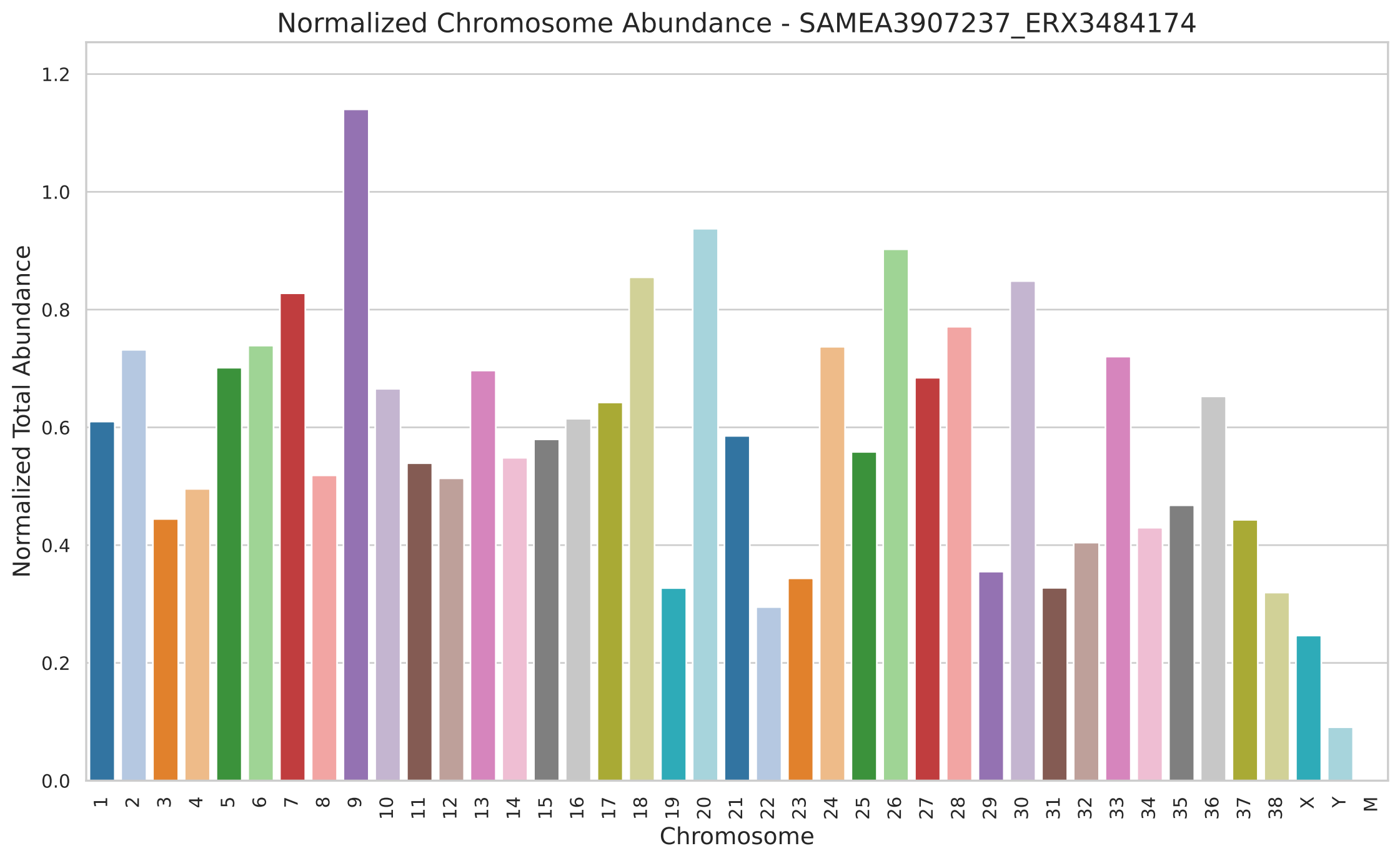

Normalized Chromosome Abundance - SAMEA5804716_ERX3484106
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

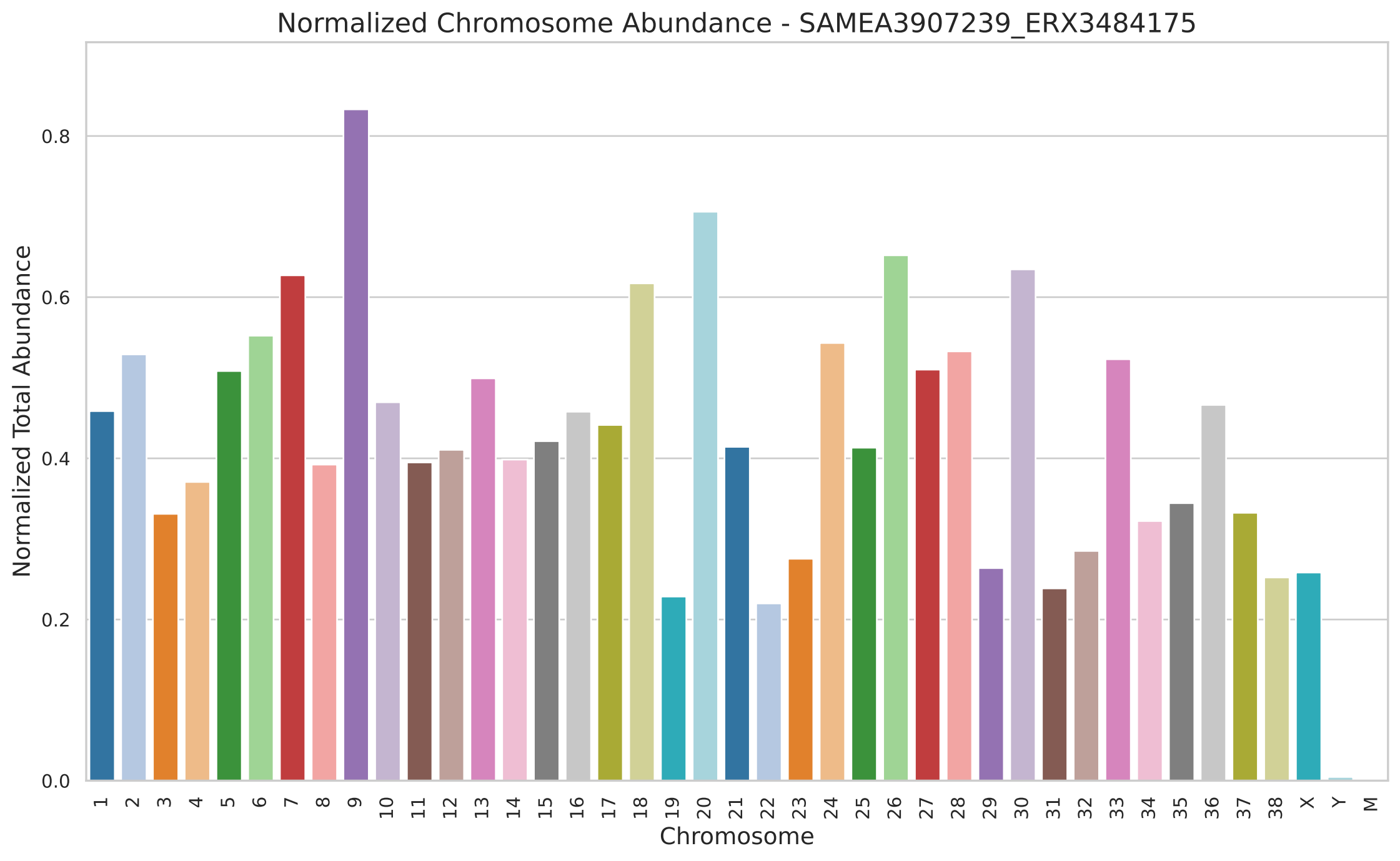

Normalized Chromosome Abundance - SAMEA3907368_ERX3484206
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

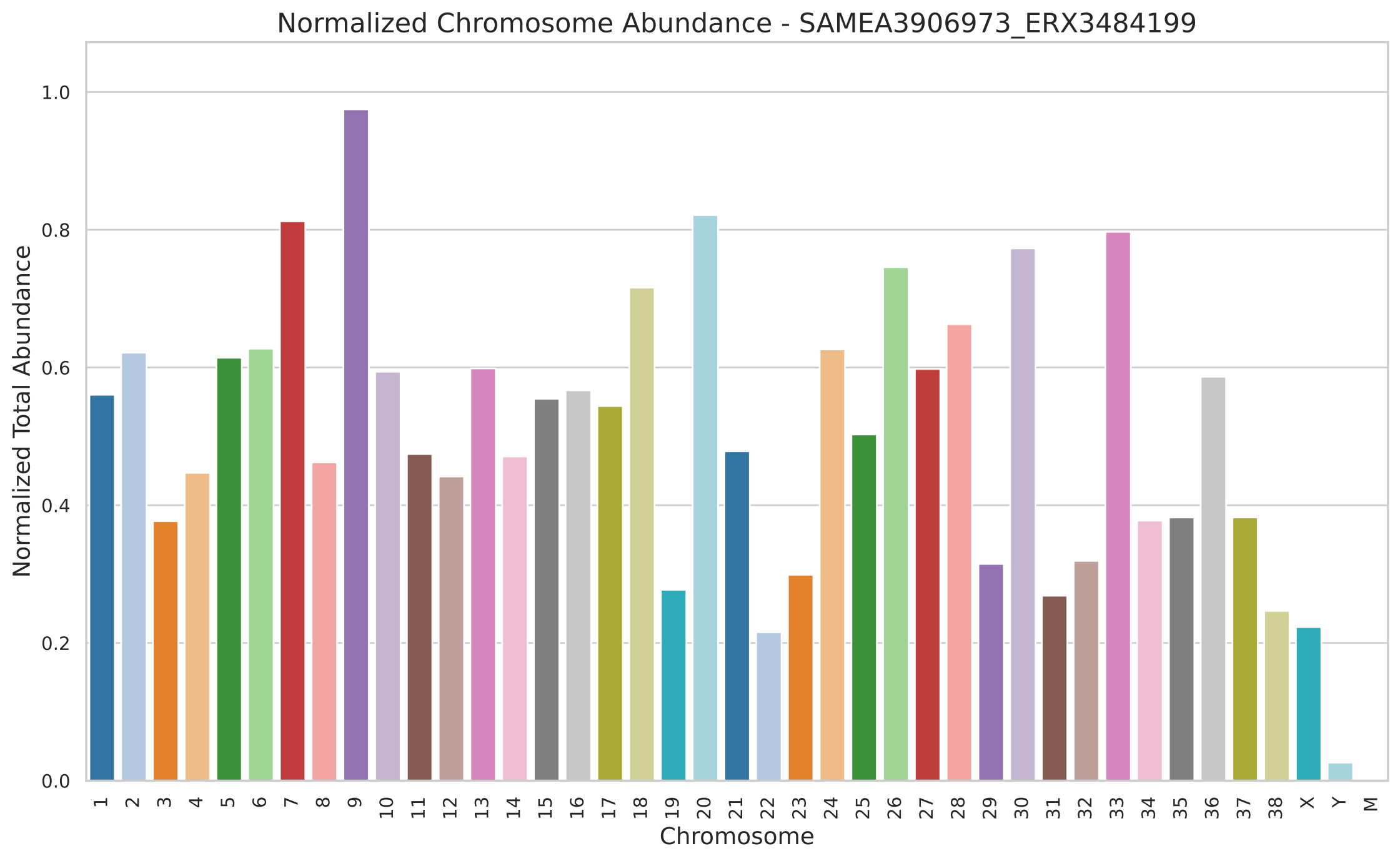

Normalized Chromosome Abundance - SAMEA3910724_ERX3484213
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

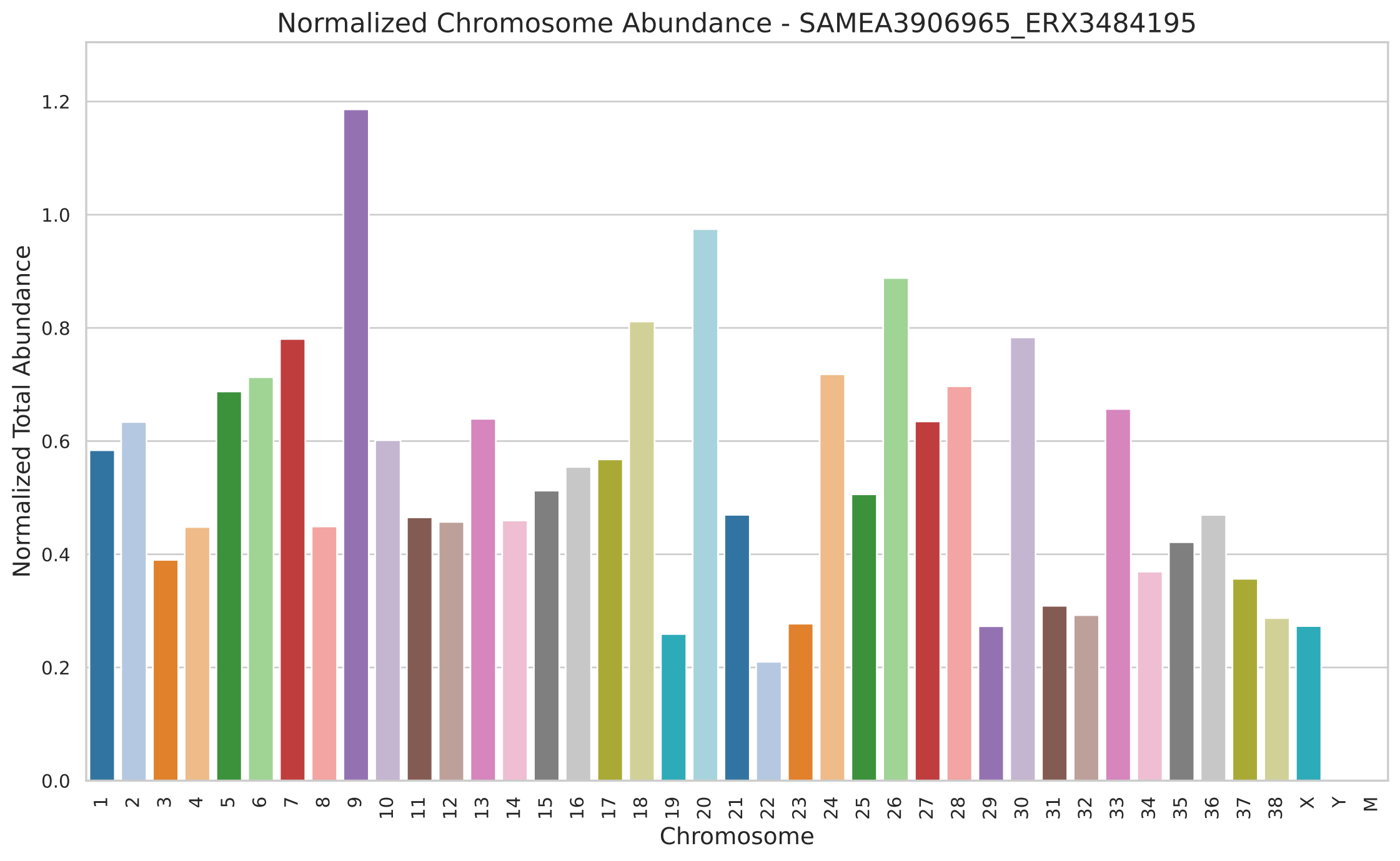

Normalized Chromosome Abundance - SAMEA3907415_ERX3484173
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

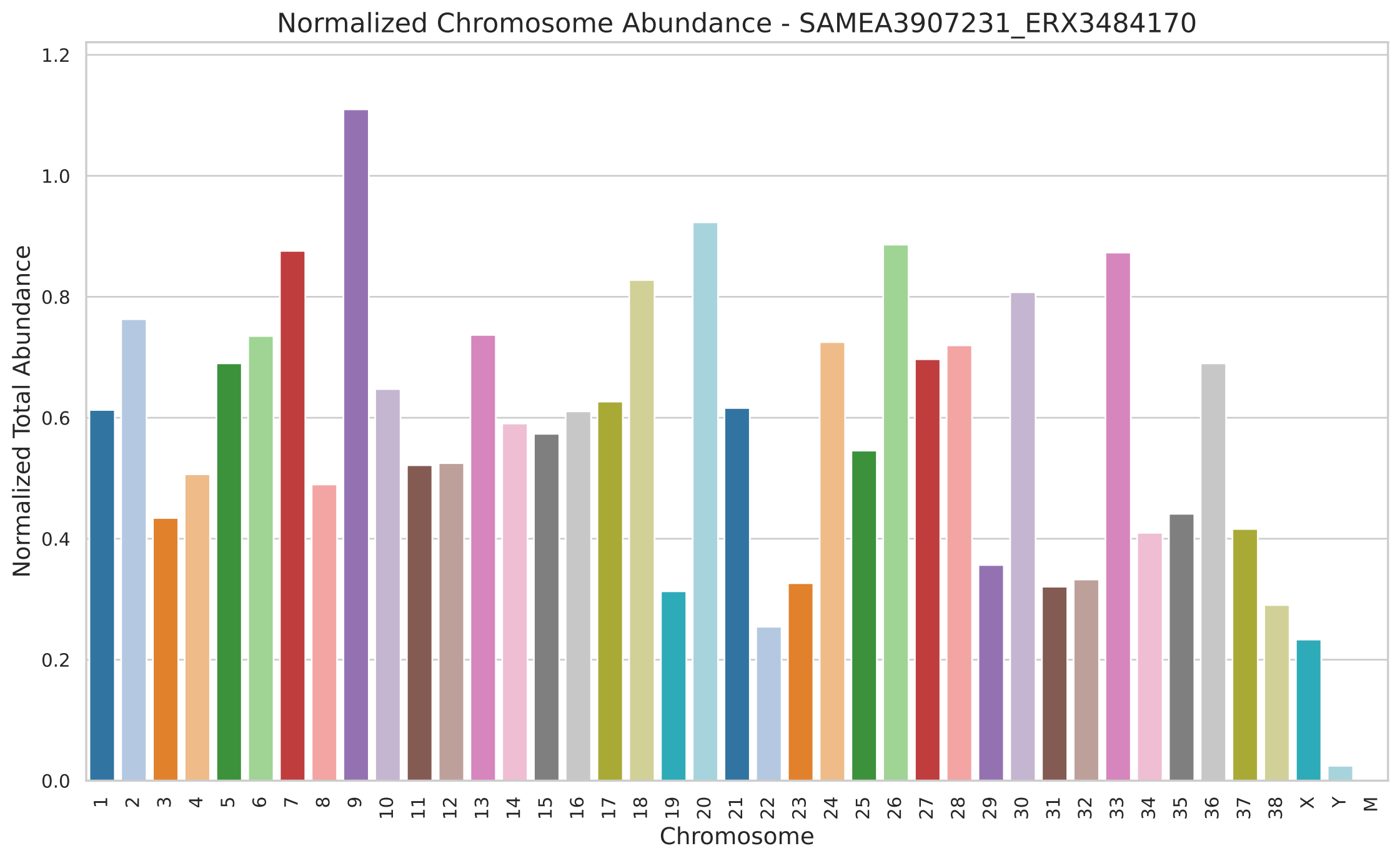

Normalized Chromosome Abundance - SAMEA3907365_ERX3484200
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

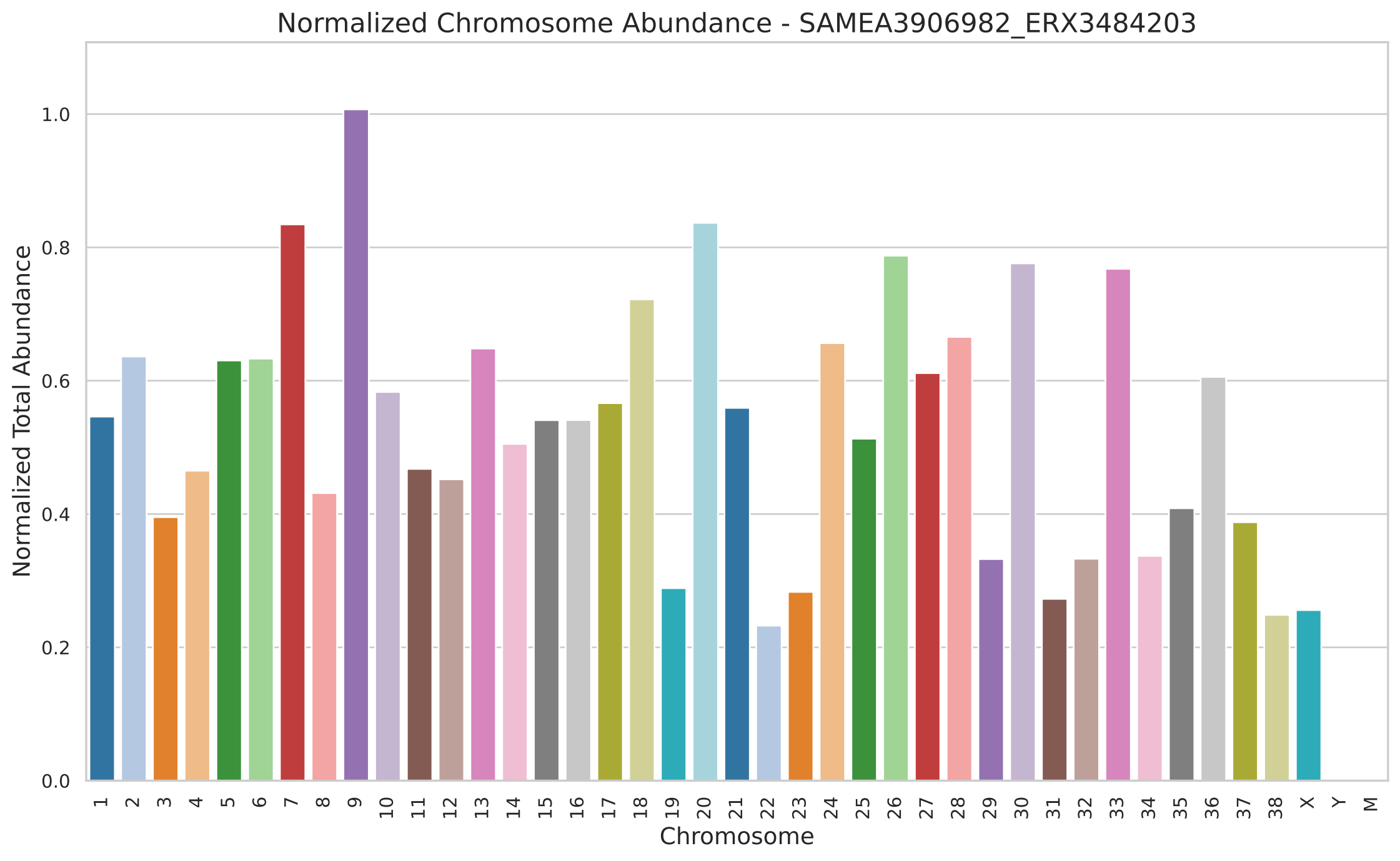

Normalized Chromosome Abundance - SAMEA3907237_ERX3484174
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

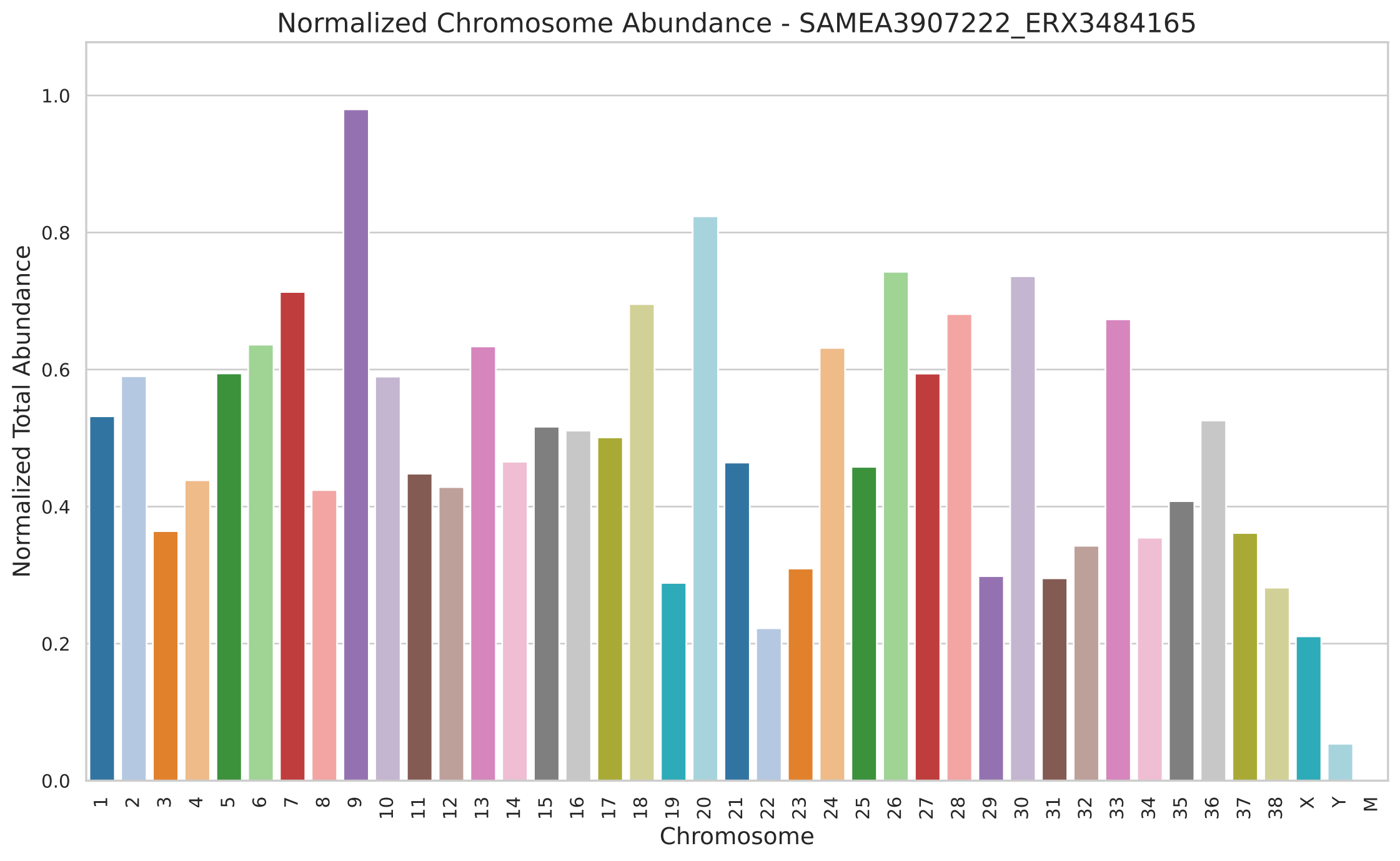

Normalized Chromosome Abundance - SAMEA3907239_ERX3484175
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

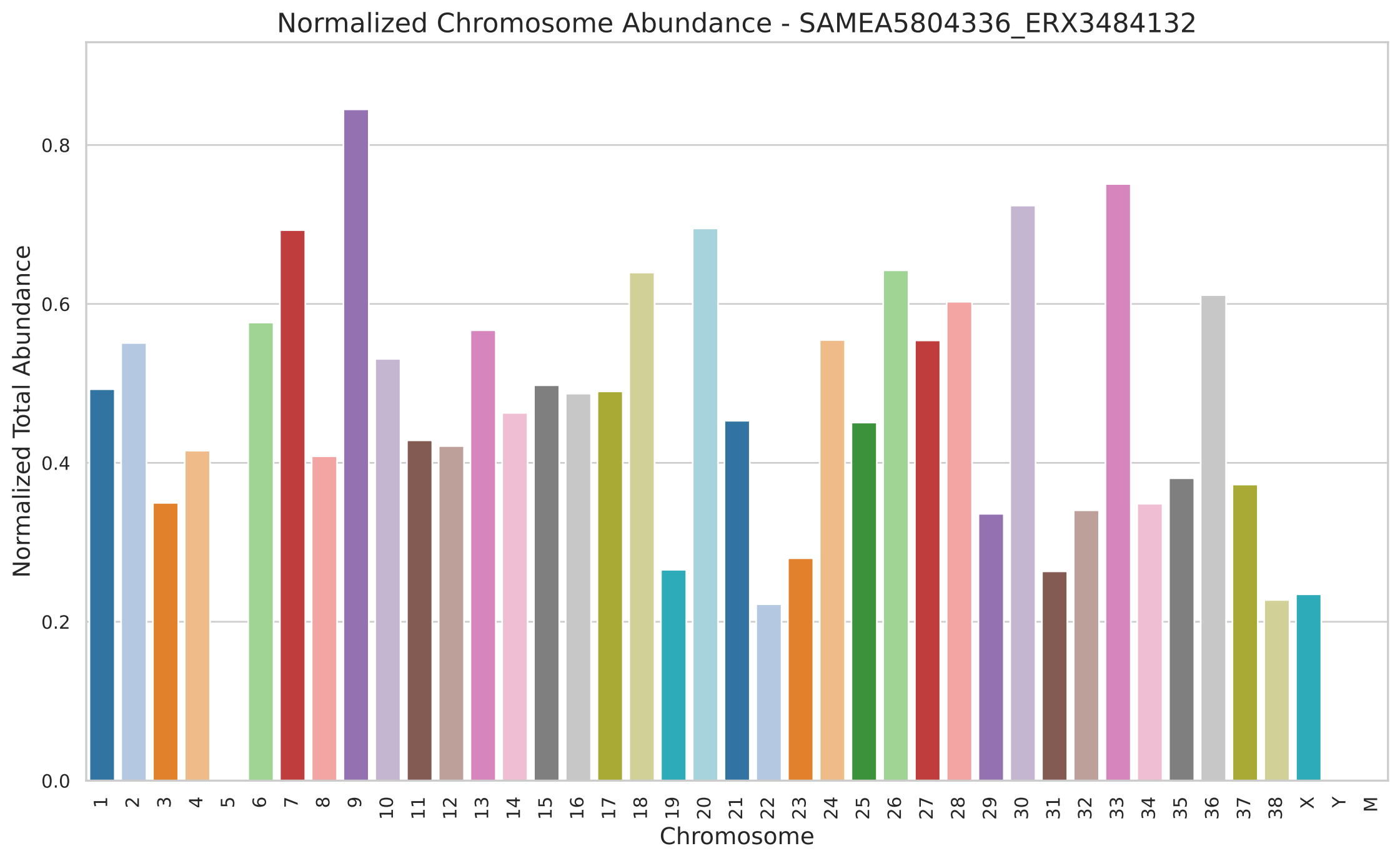

Normalized Chromosome Abundance - SAMEA3906973_ERX3484199
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

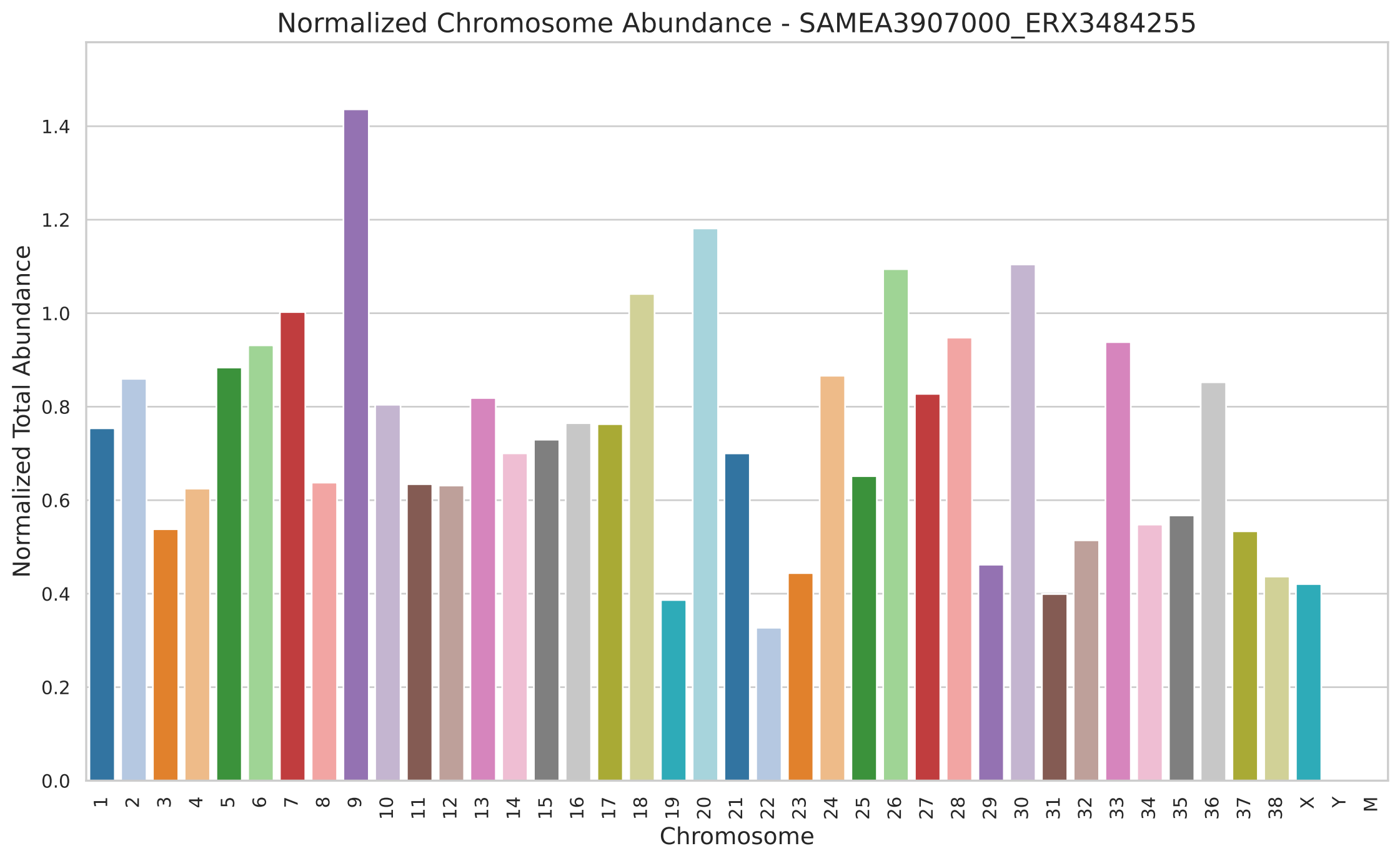

Normalized Chromosome Abundance - SAMEA3906965_ERX3484195
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

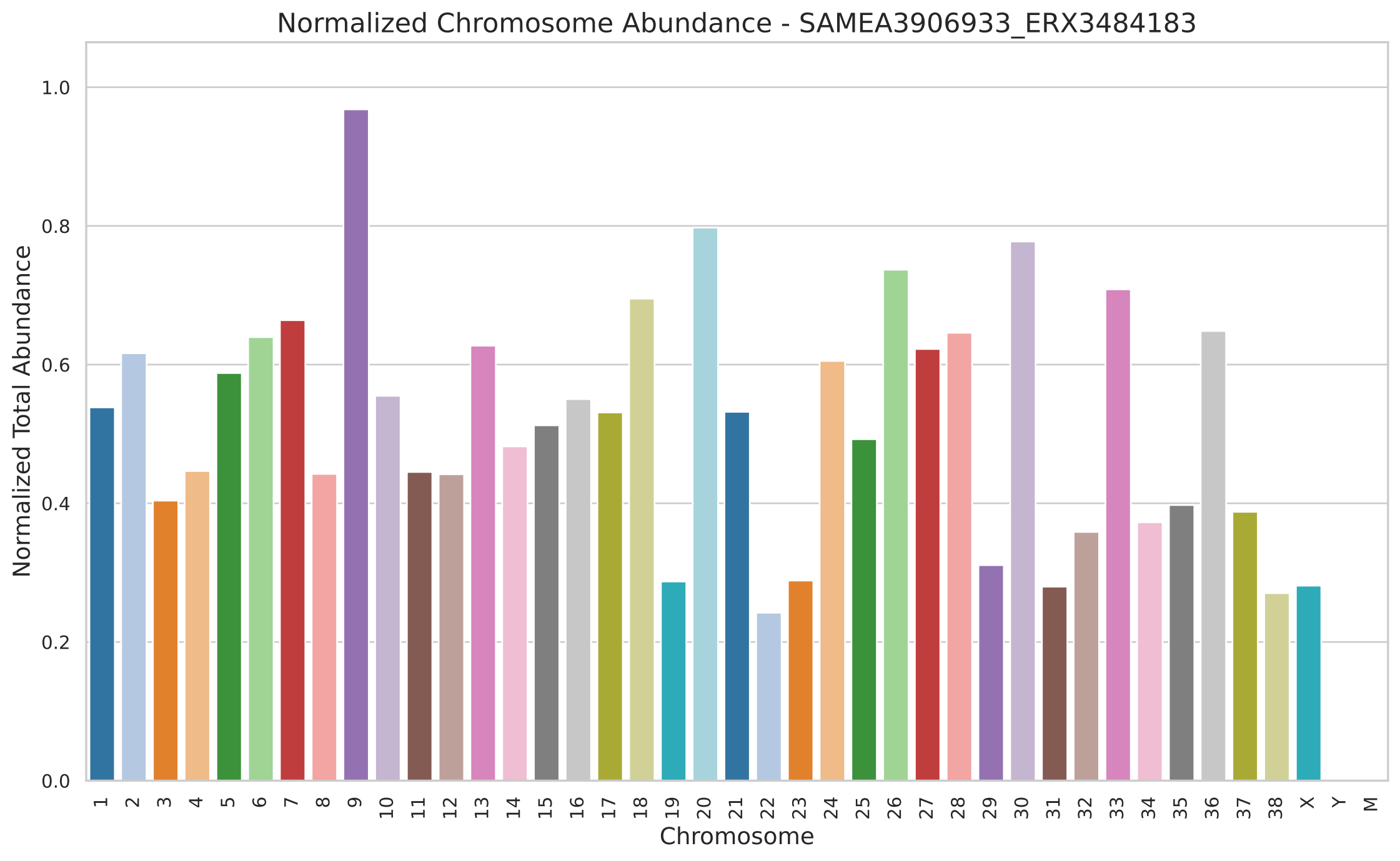

Normalized Chromosome Abundance - SAMEA3907231_ERX3484170
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

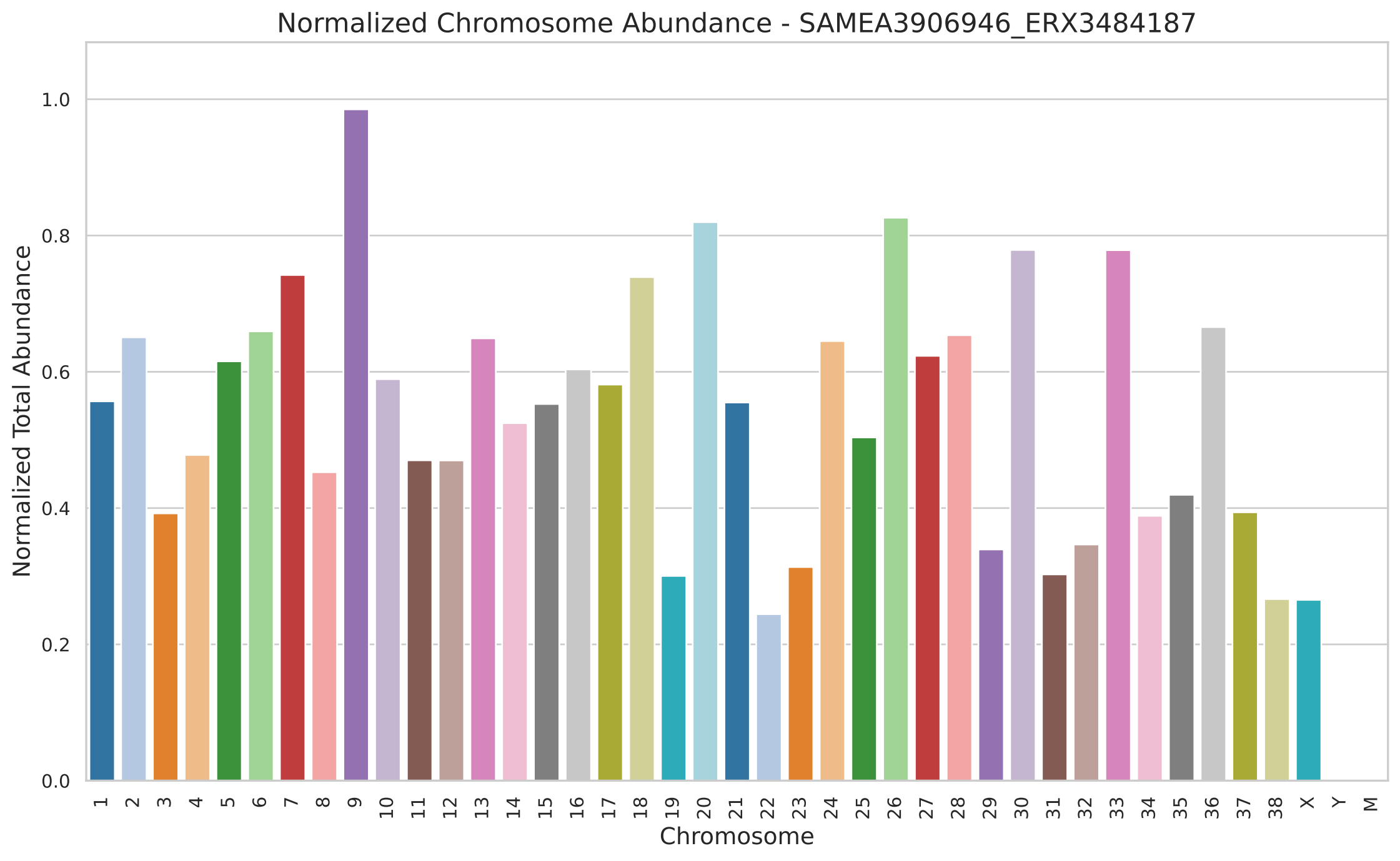

Normalized Chromosome Abundance - SAMEA3906982_ERX3484203
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

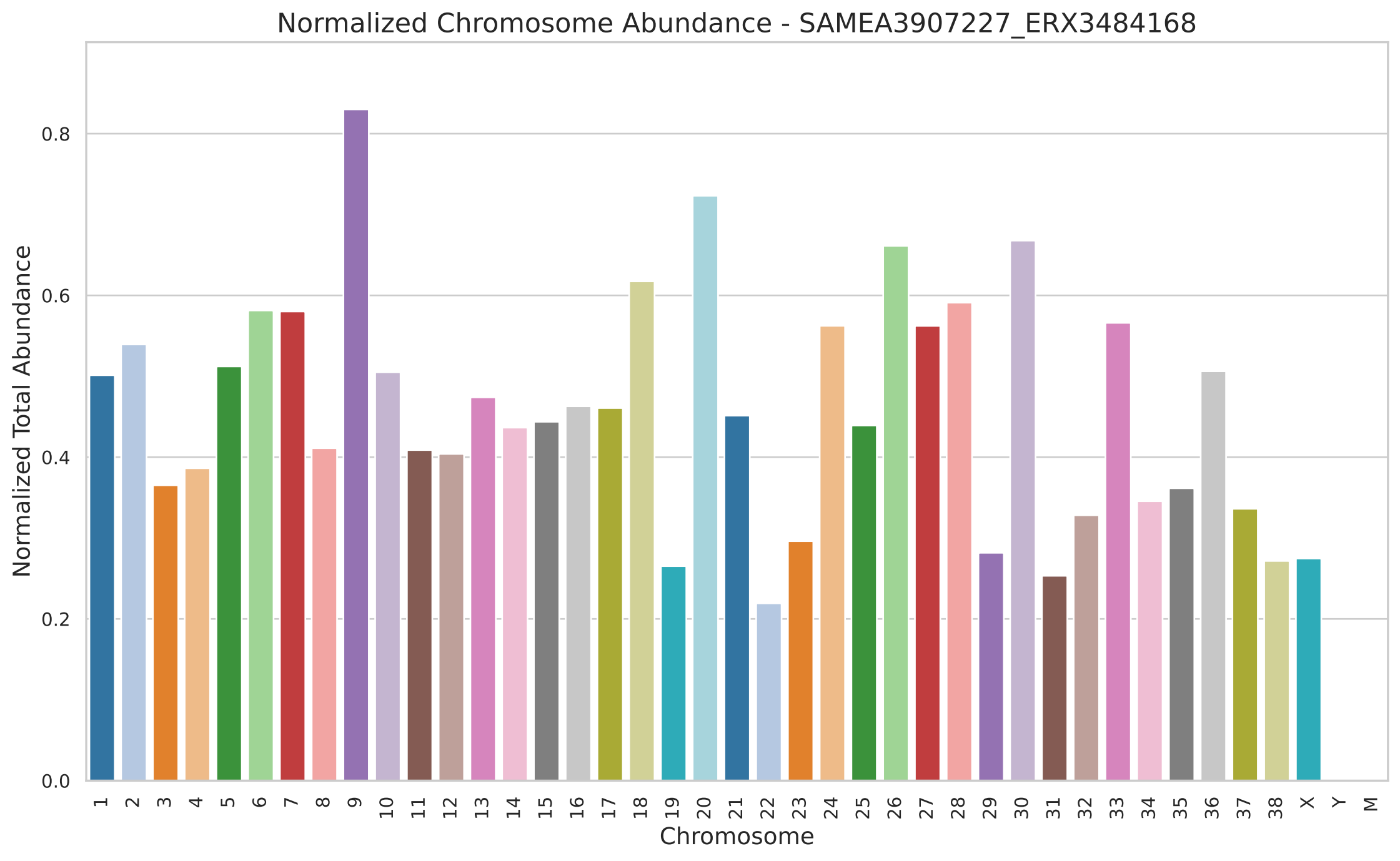

Normalized Chromosome Abundance - SAMEA3907222_ERX3484165
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

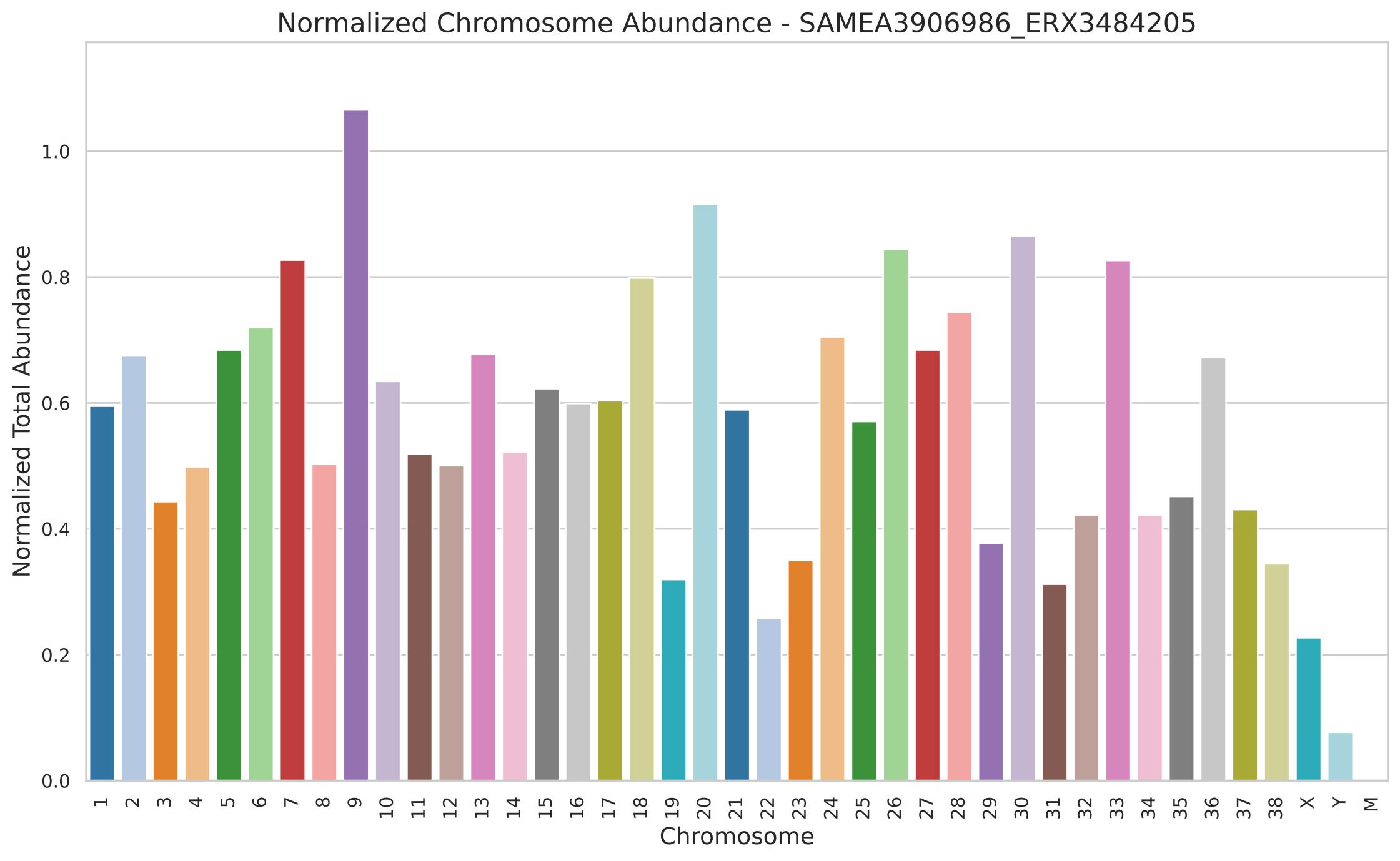

Normalized Chromosome Abundance - SAMEA5804336_ERX3484132
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

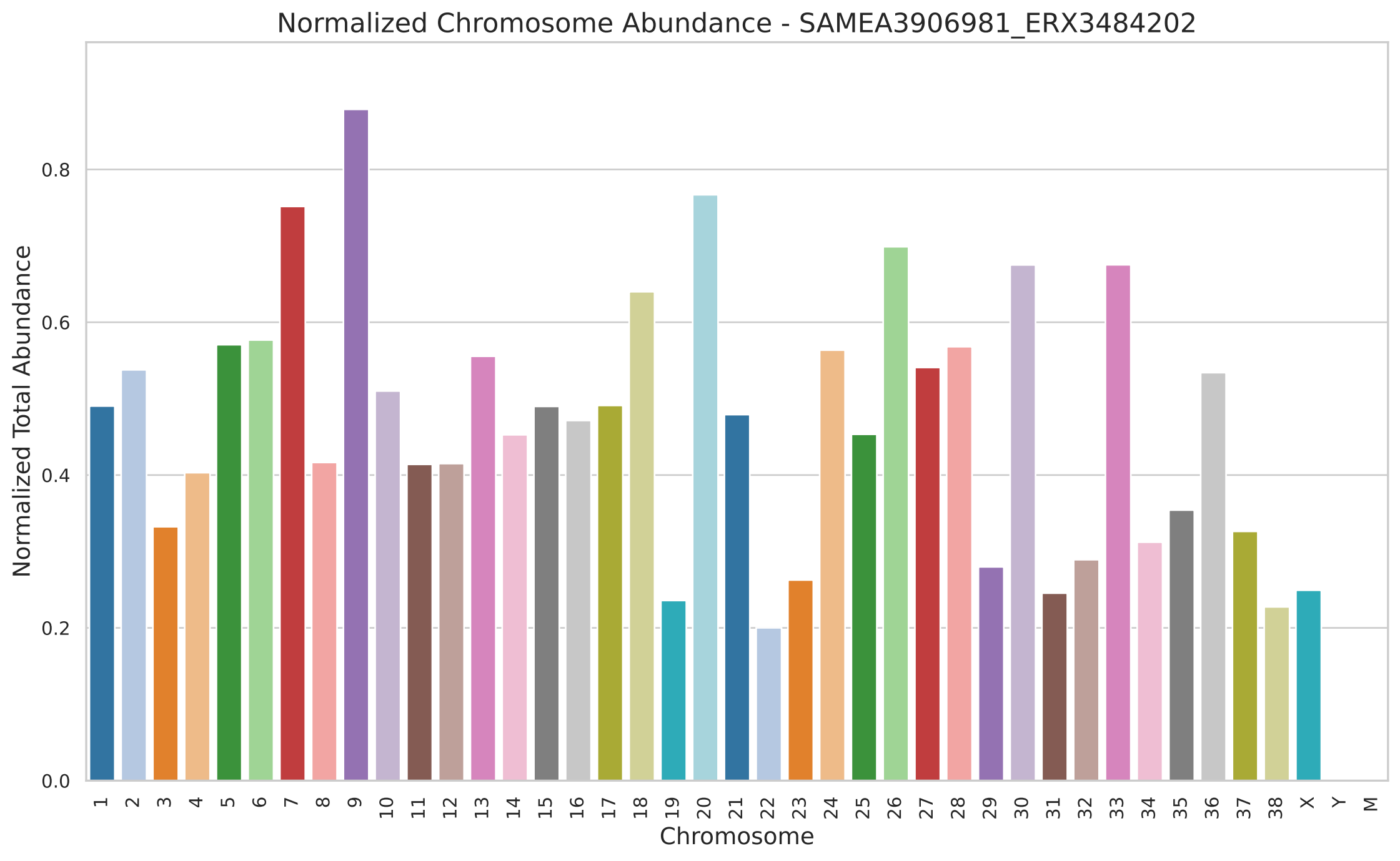

Normalized Chromosome Abundance - SAMEA3907000_ERX3484255
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

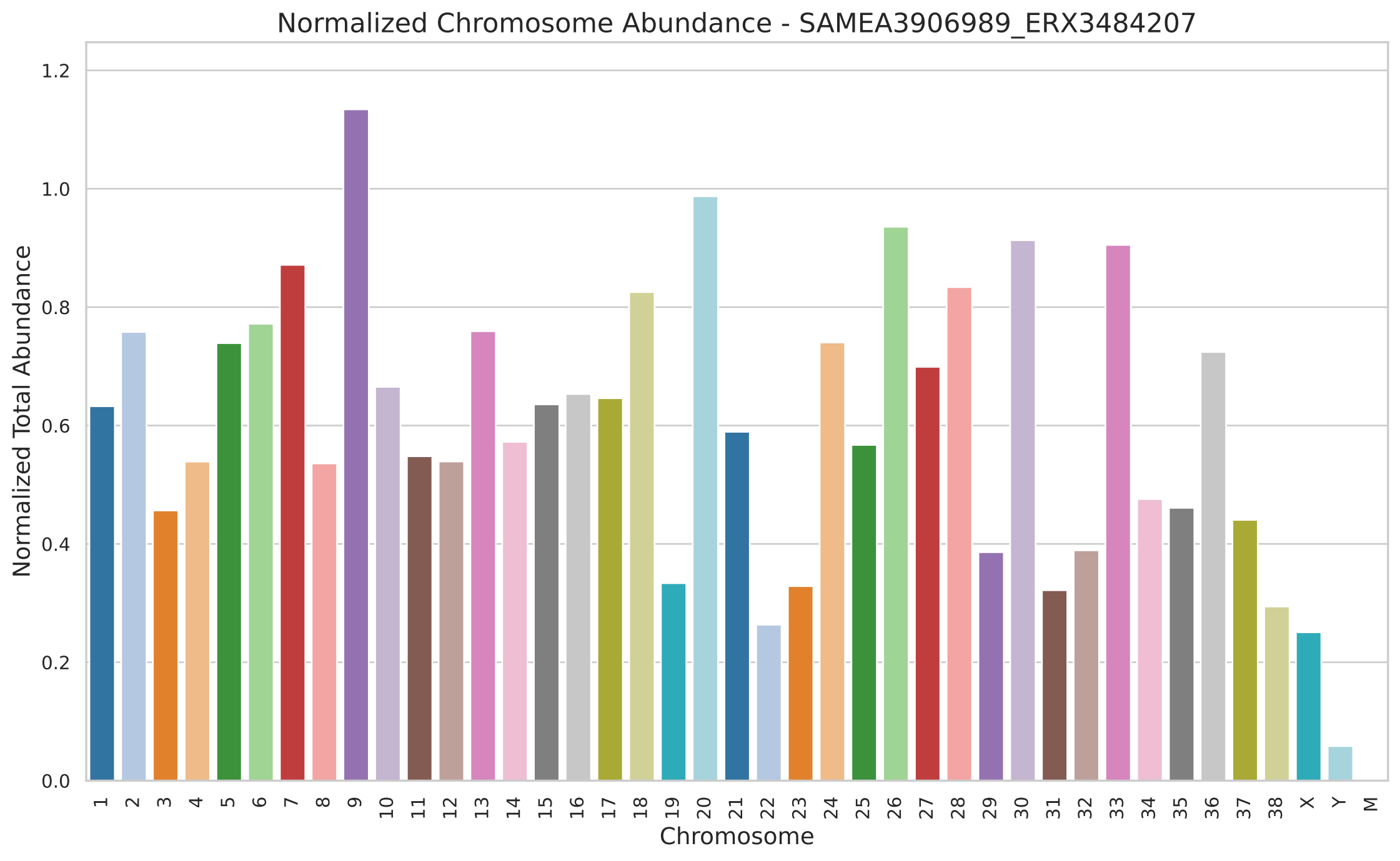

Normalized Chromosome Abundance - SAMEA3906933_ERX3484183
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

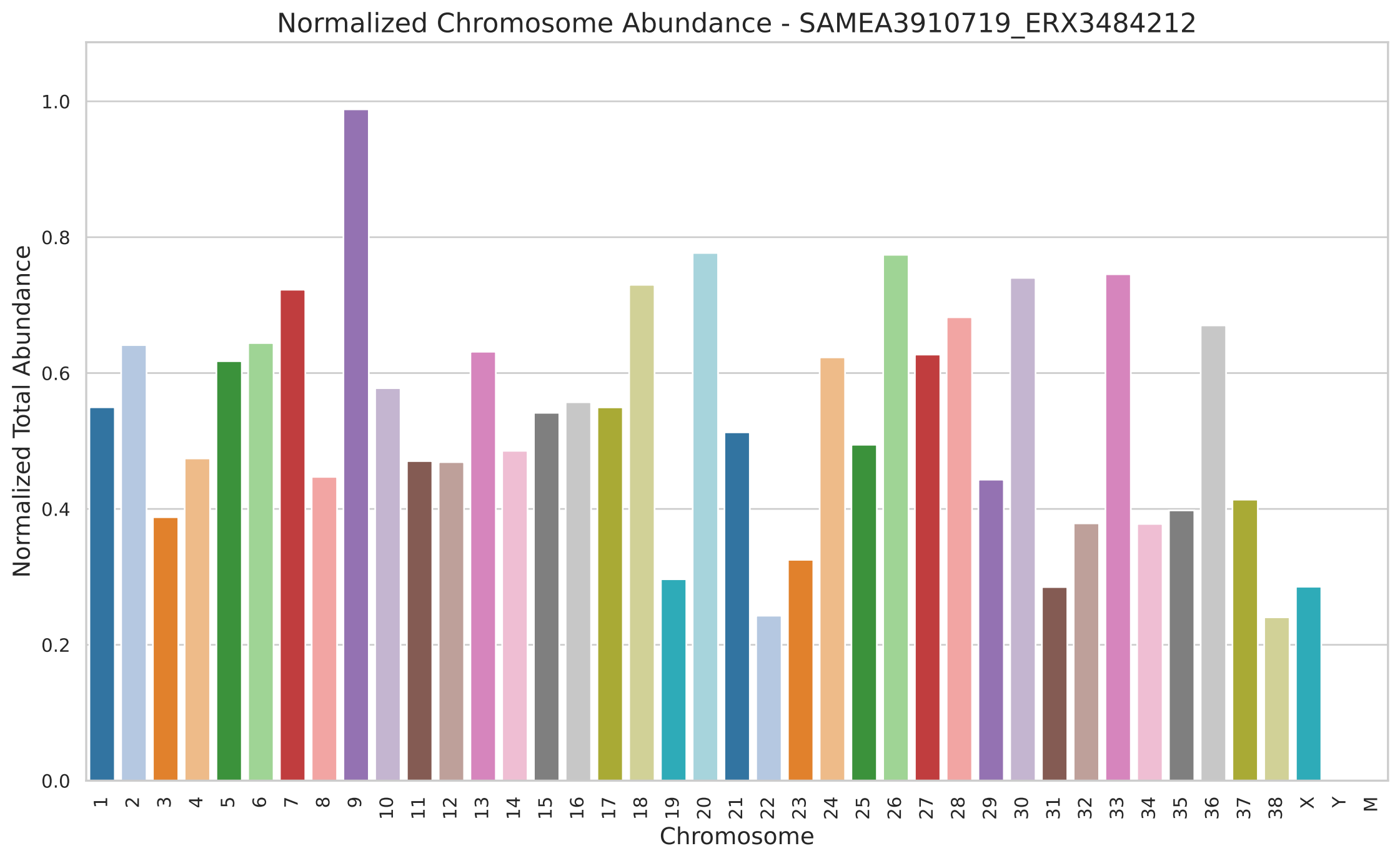

Normalized Chromosome Abundance - SAMEA3906946_ERX3484187
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

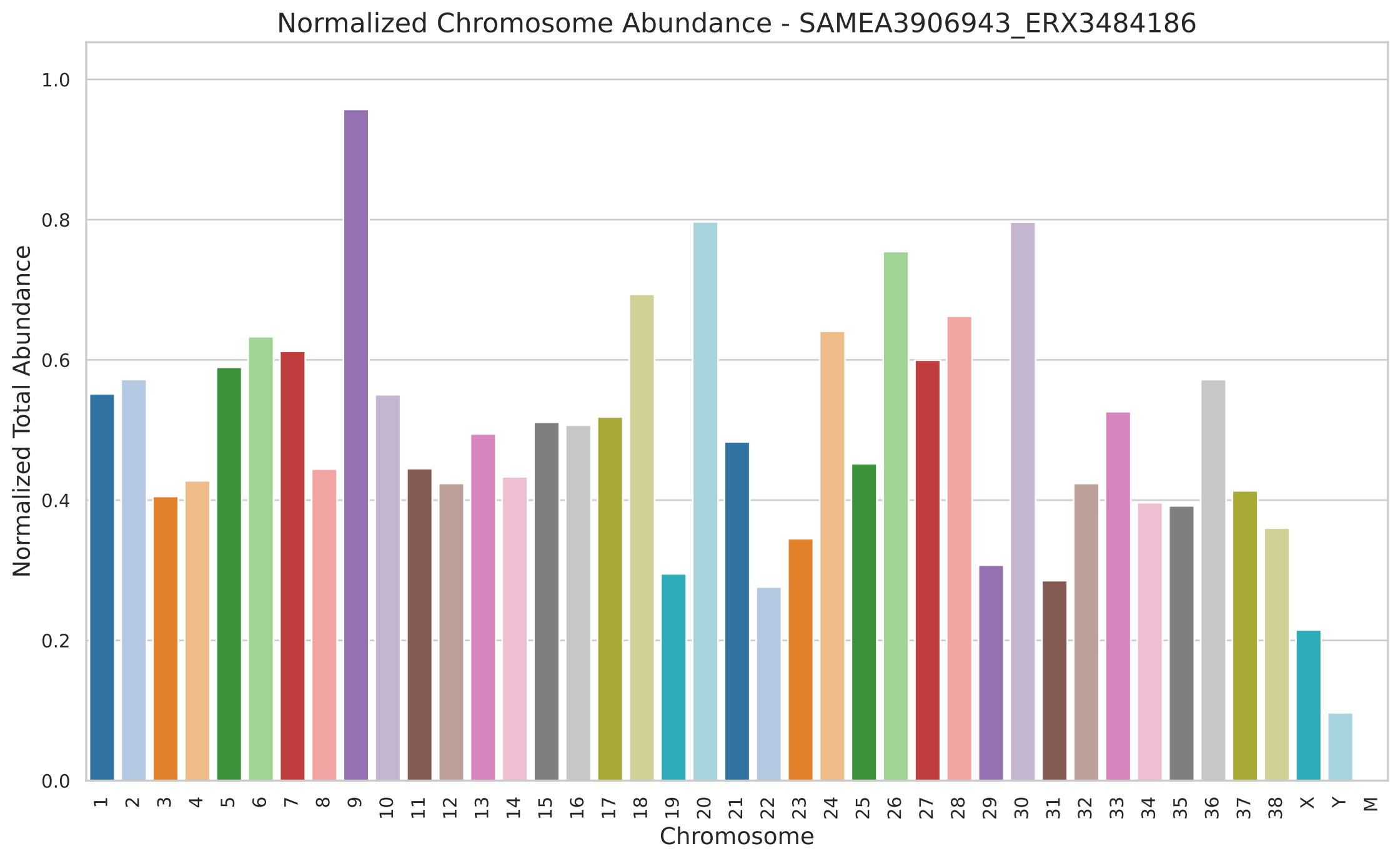

Normalized Chromosome Abundance - SAMEA3907227_ERX3484168
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

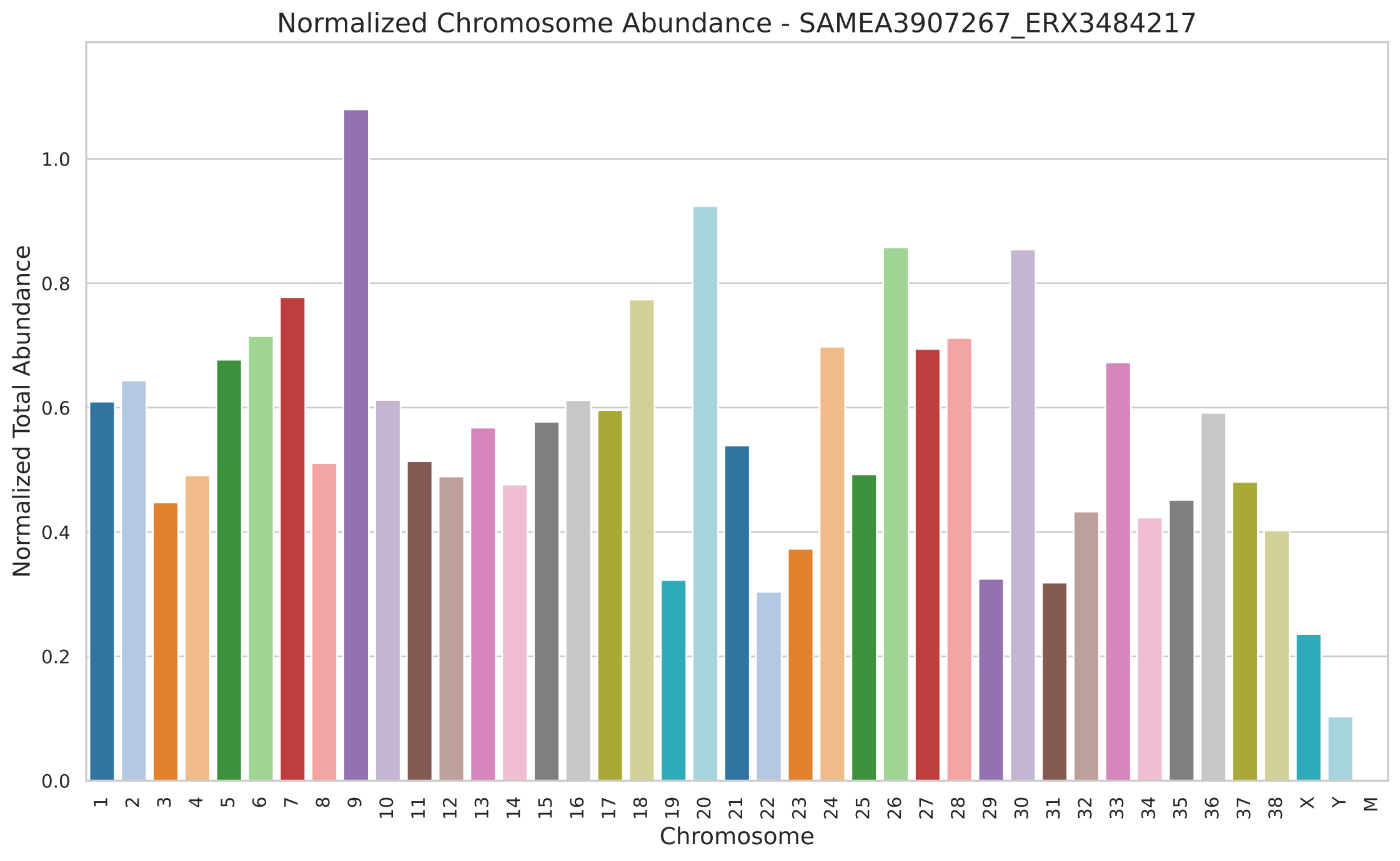

Normalized Chromosome Abundance - SAMEA3906986_ERX3484205
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

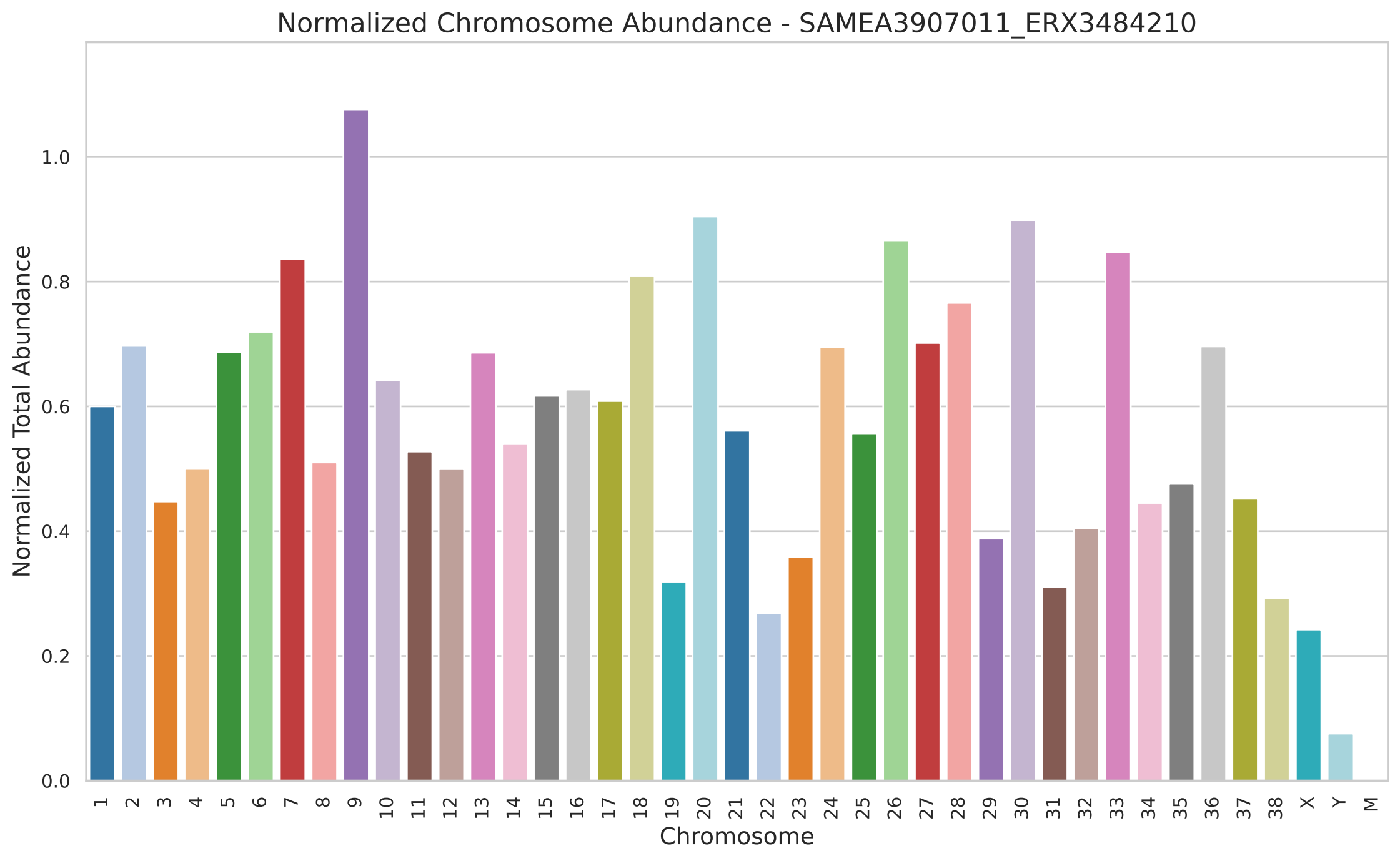

Normalized Chromosome Abundance - SAMEA3906981_ERX3484202
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

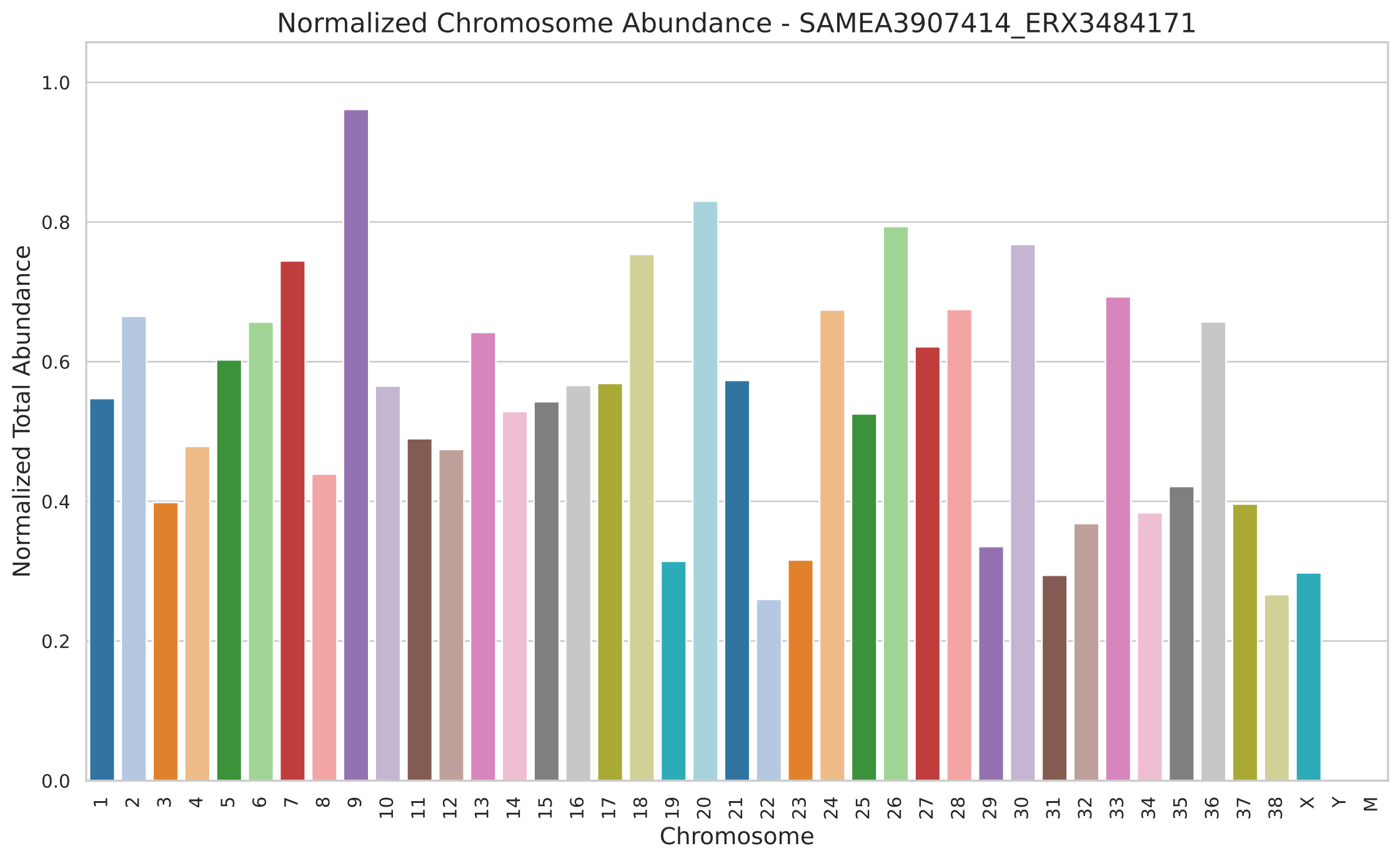

Normalized Chromosome Abundance - SAMEA3906989_ERX3484207
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

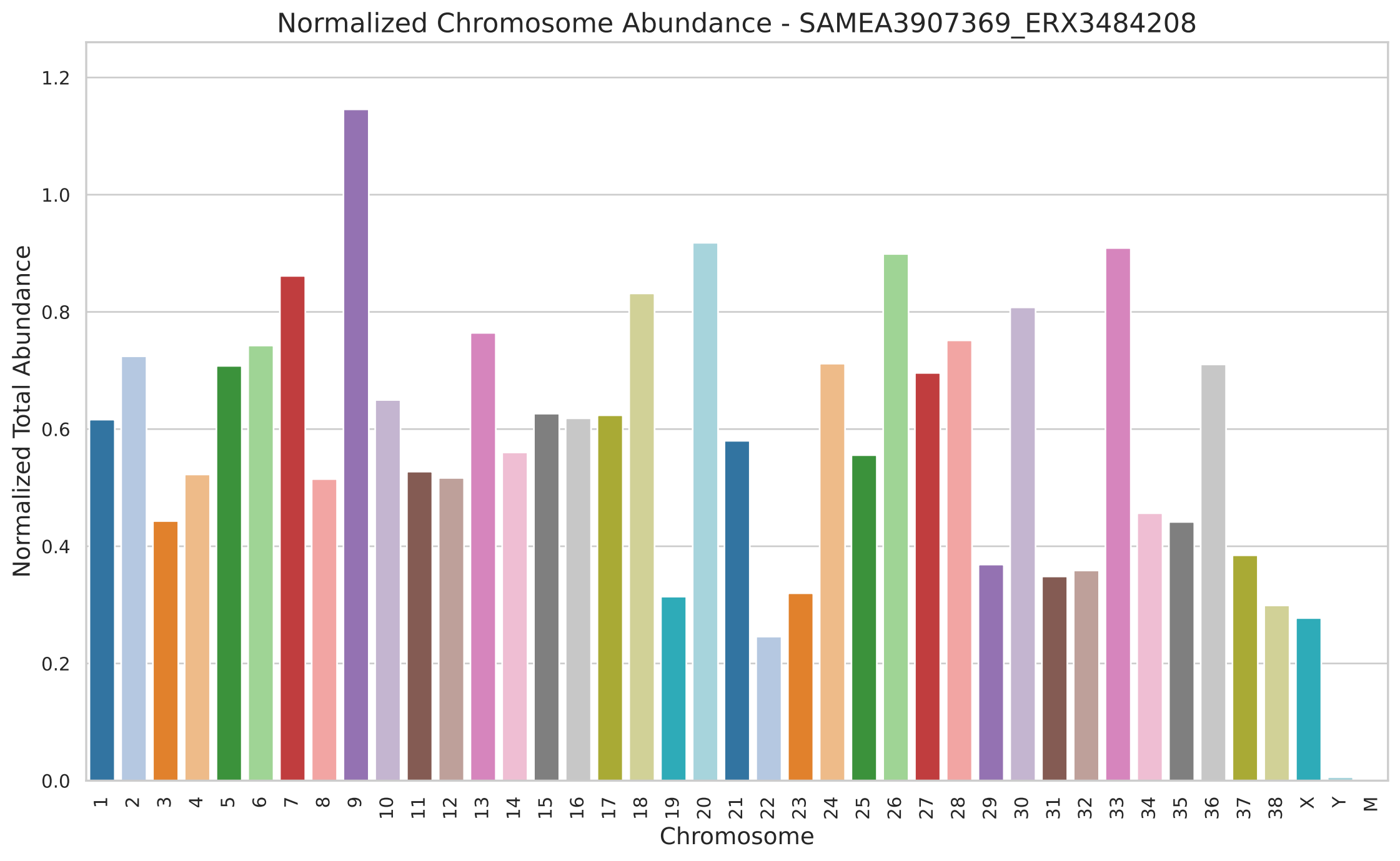

Normalized Chromosome Abundance - SAMEA3910719_ERX3484212
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

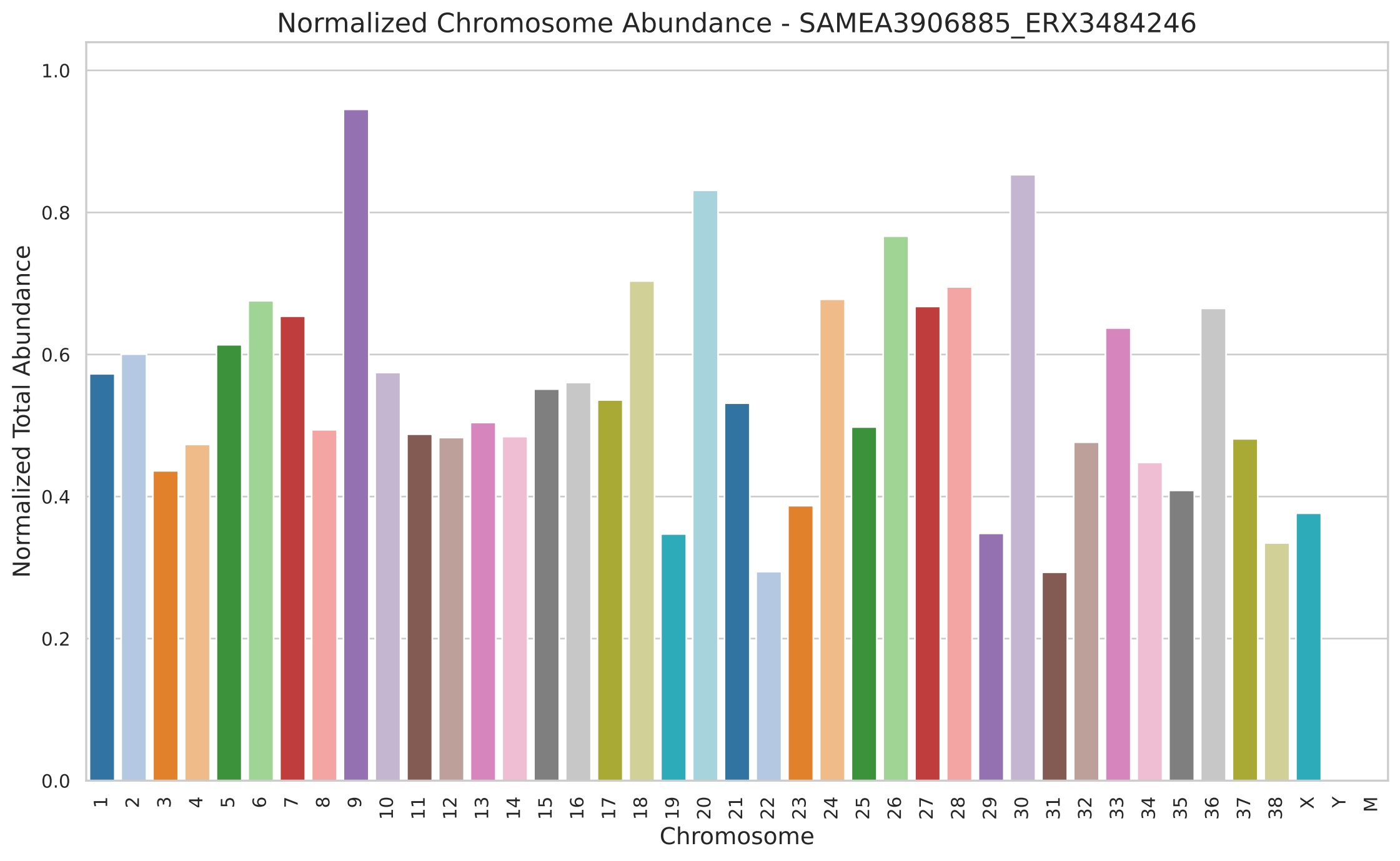

Normalized Chromosome Abundance - SAMEA3906943_ERX3484186
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

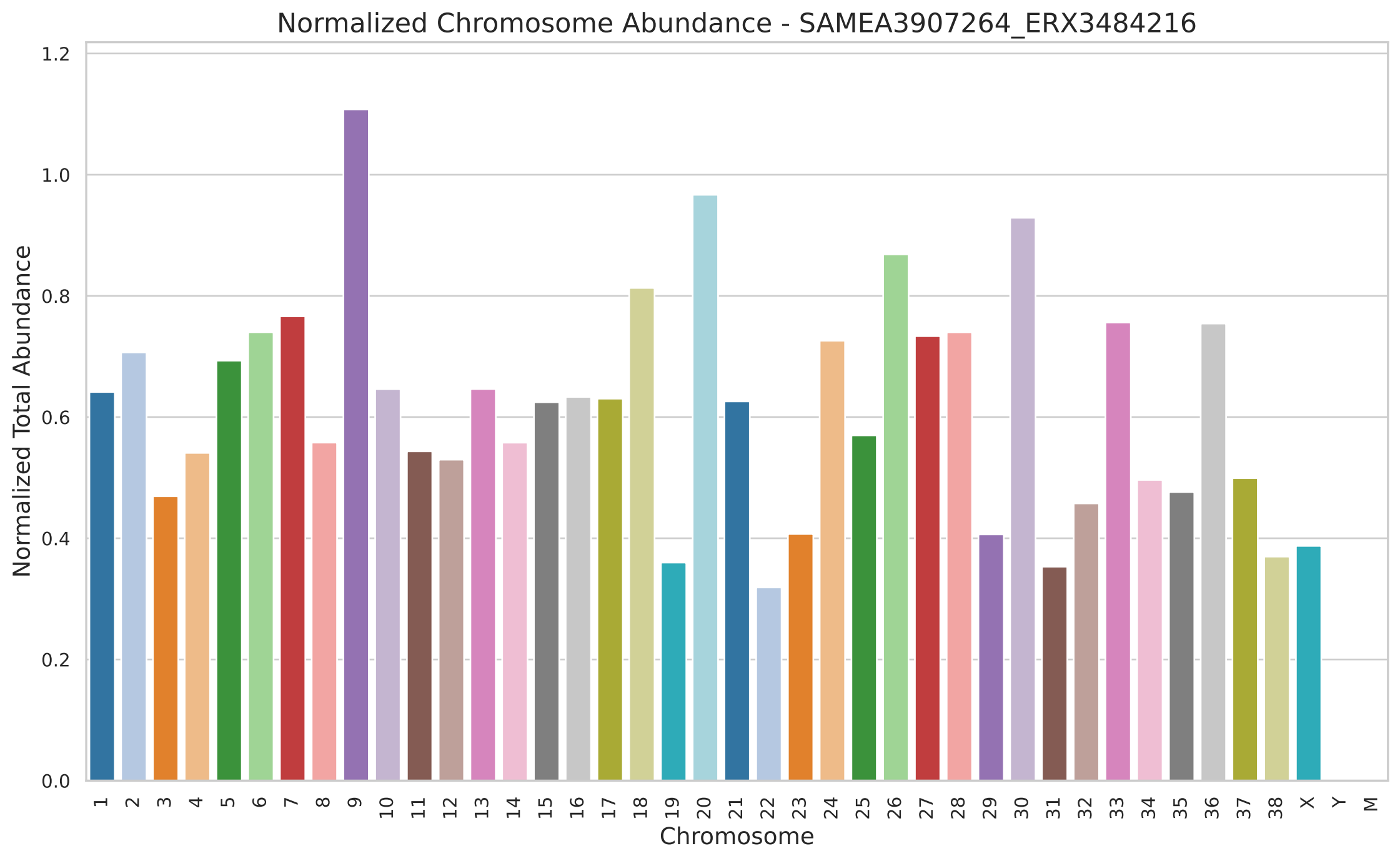

Normalized Chromosome Abundance - SAMEA3907267_ERX3484217
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

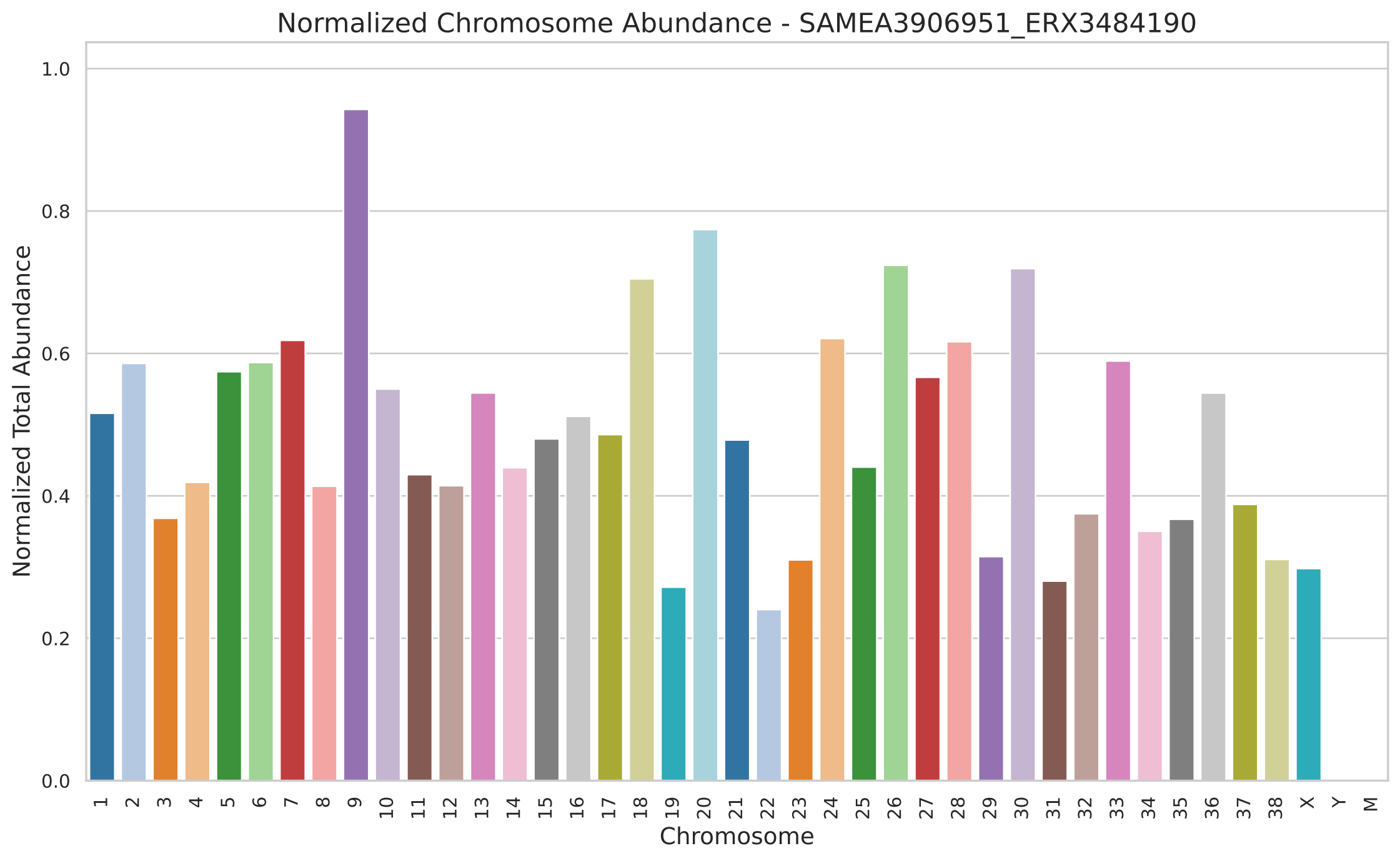

Normalized Chromosome Abundance - SAMEA3907011_ERX3484210
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

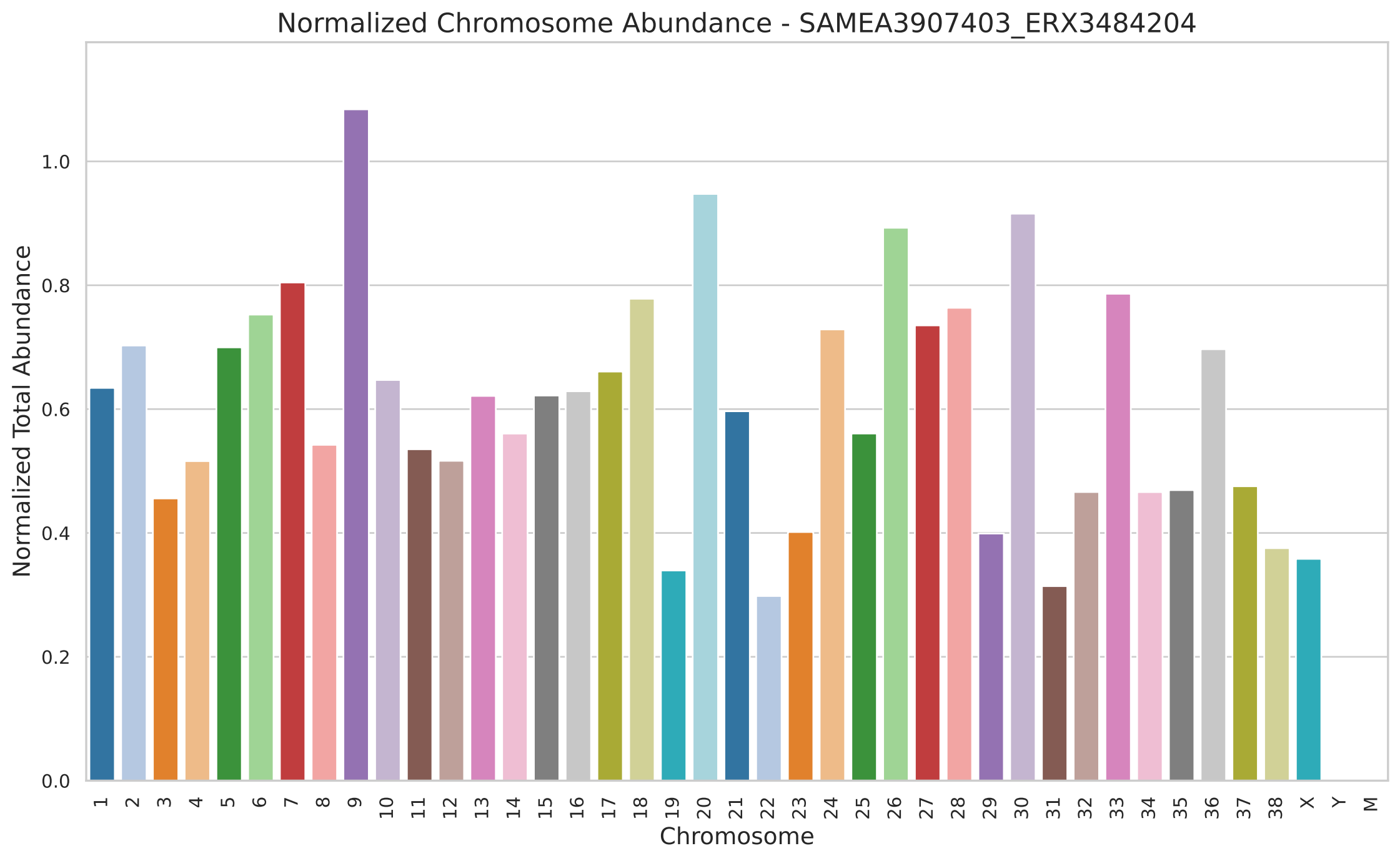

Normalized Chromosome Abundance - SAMEA3907414_ERX3484171
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

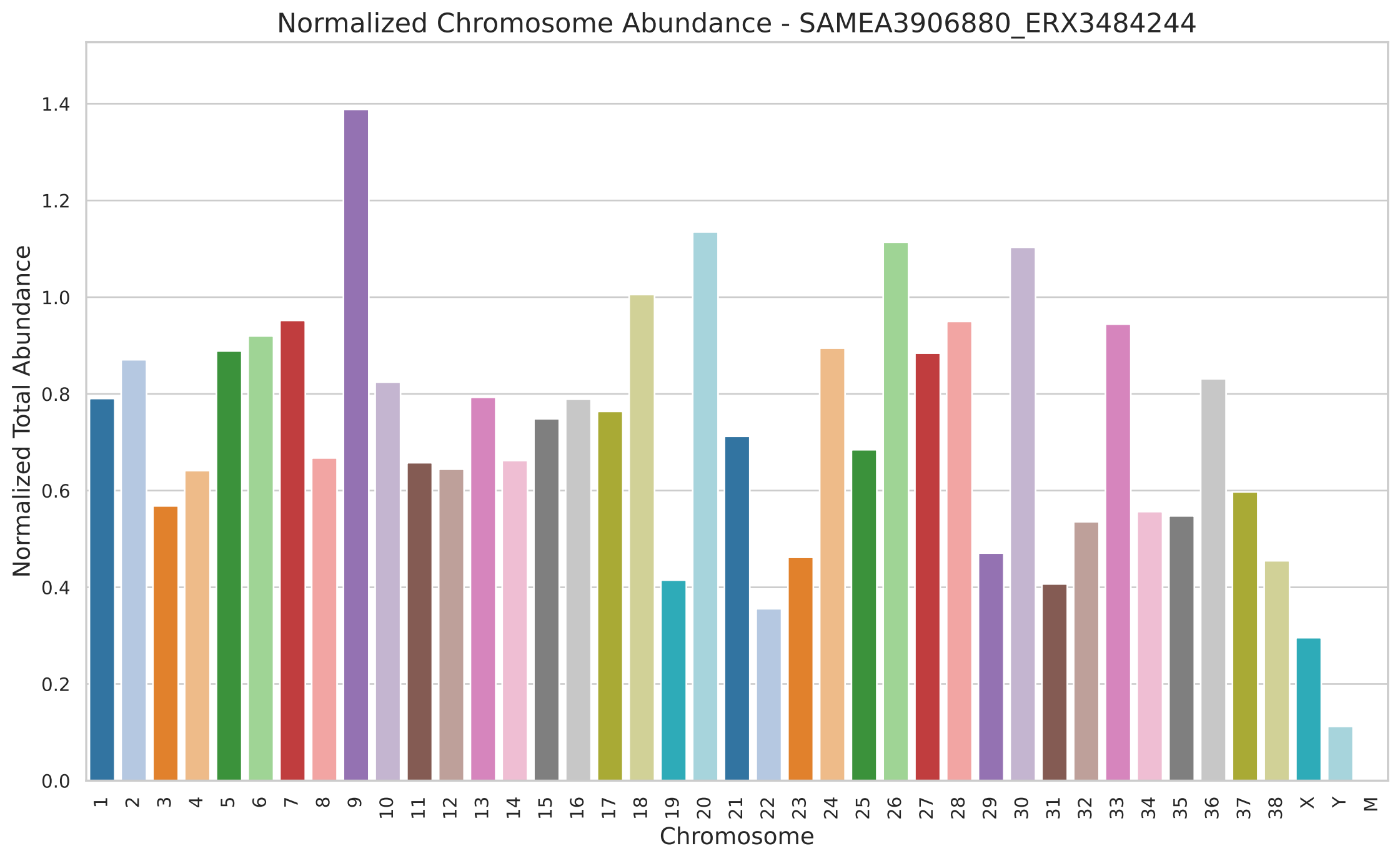

Normalized Chromosome Abundance - SAMEA3907369_ERX3484208
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

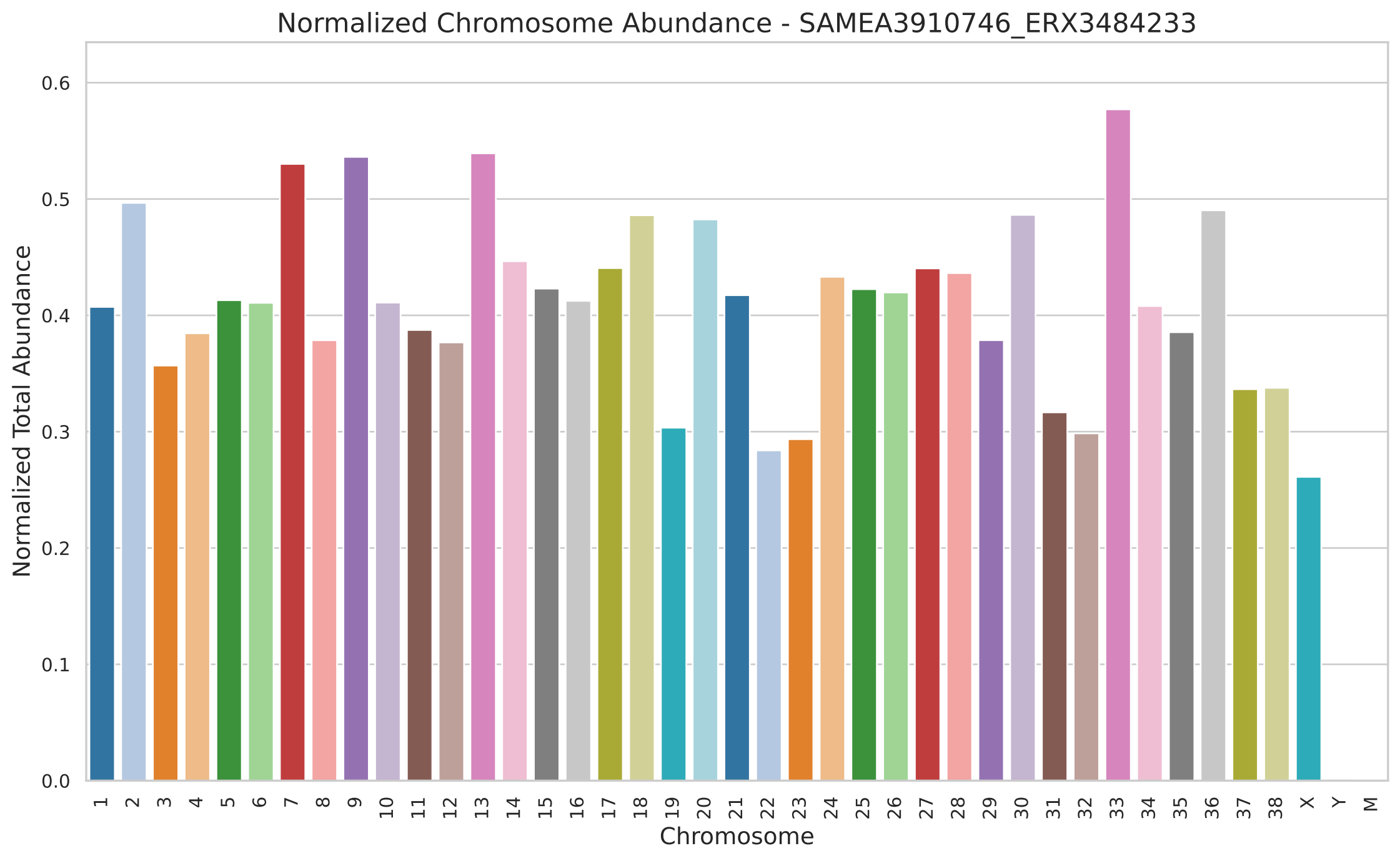

Normalized Chromosome Abundance - SAMEA3906885_ERX3484246
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

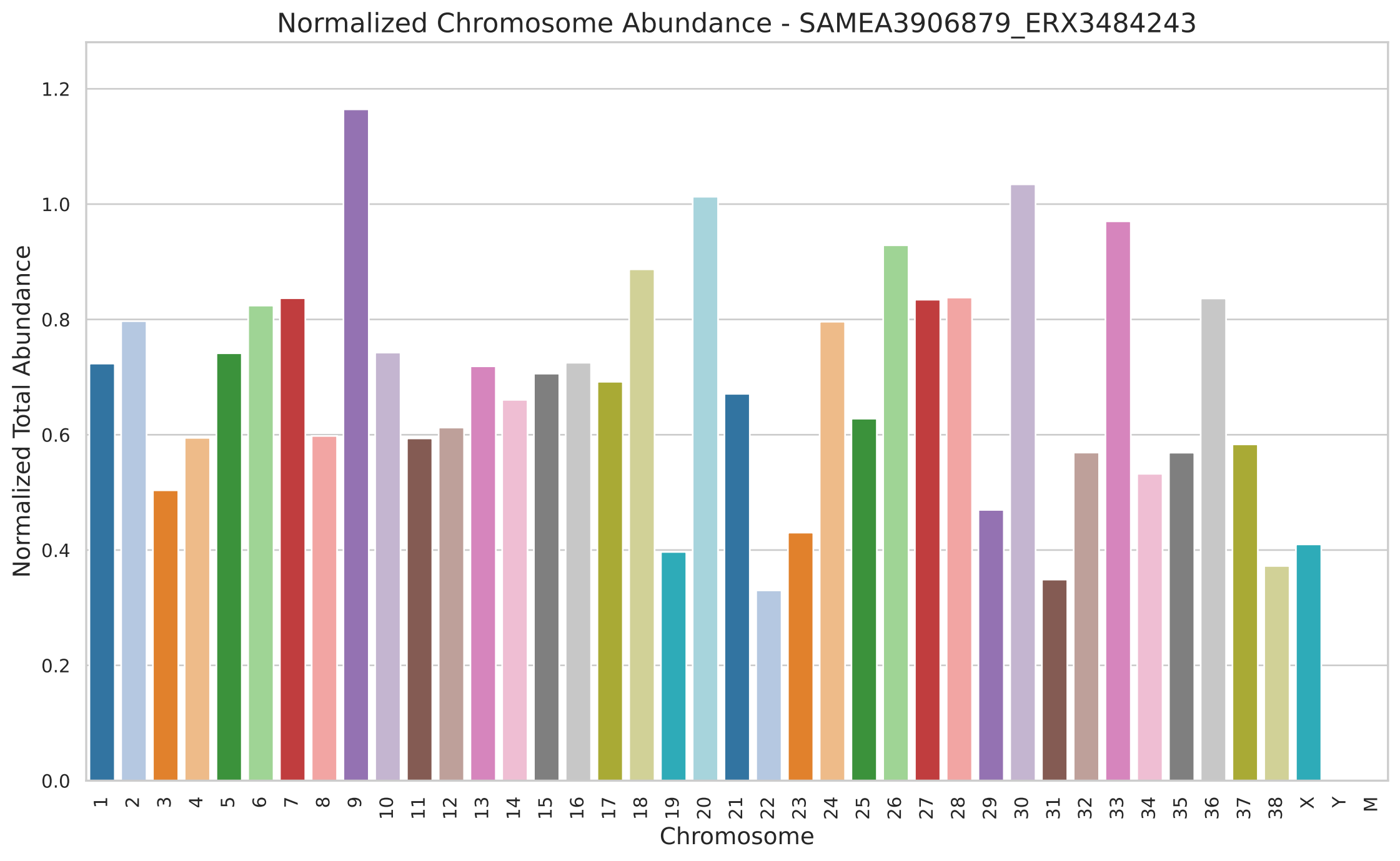

Normalized Chromosome Abundance - SAMEA3907264_ERX3484216
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

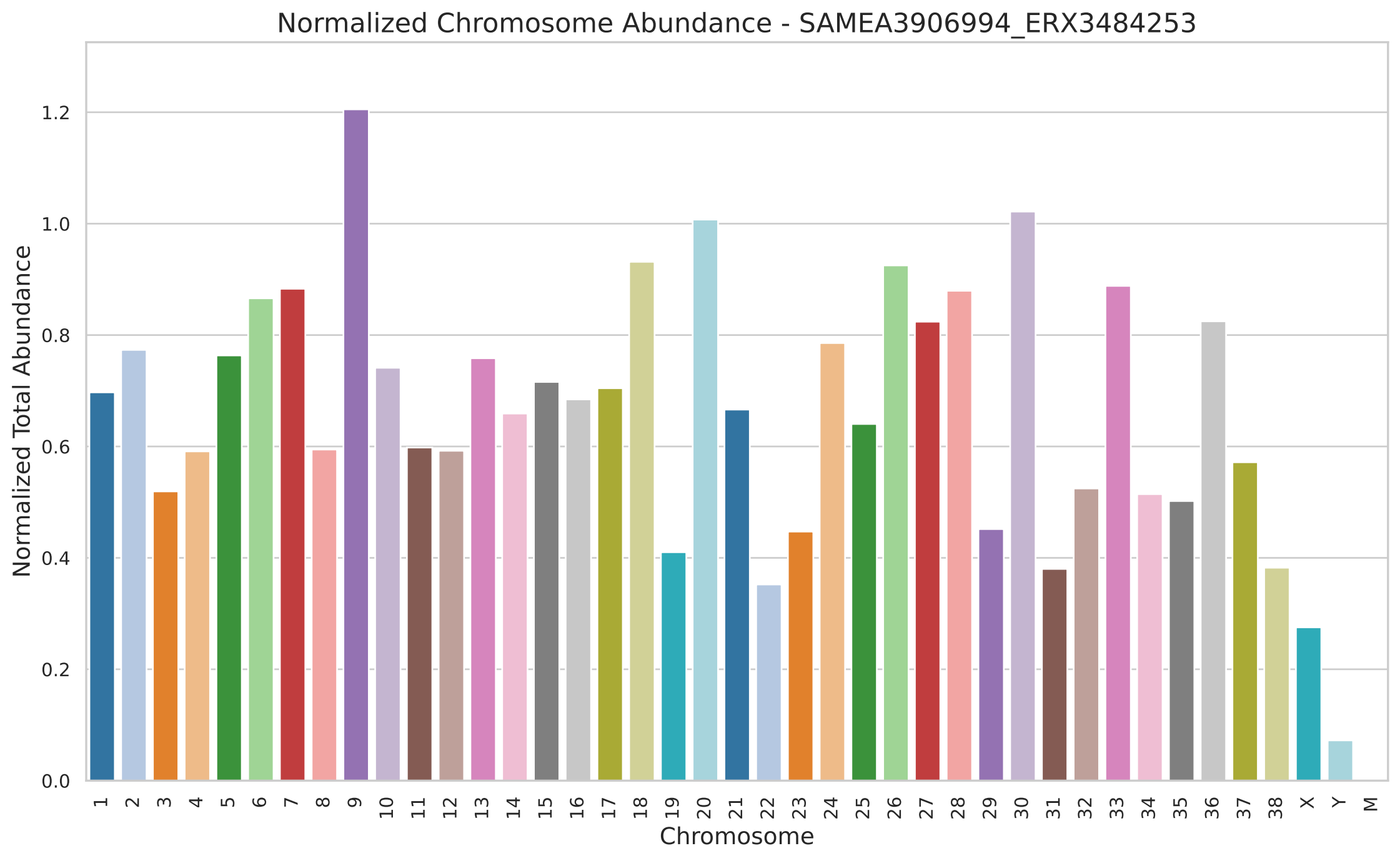

Normalized Chromosome Abundance - SAMEA3906951_ERX3484190
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

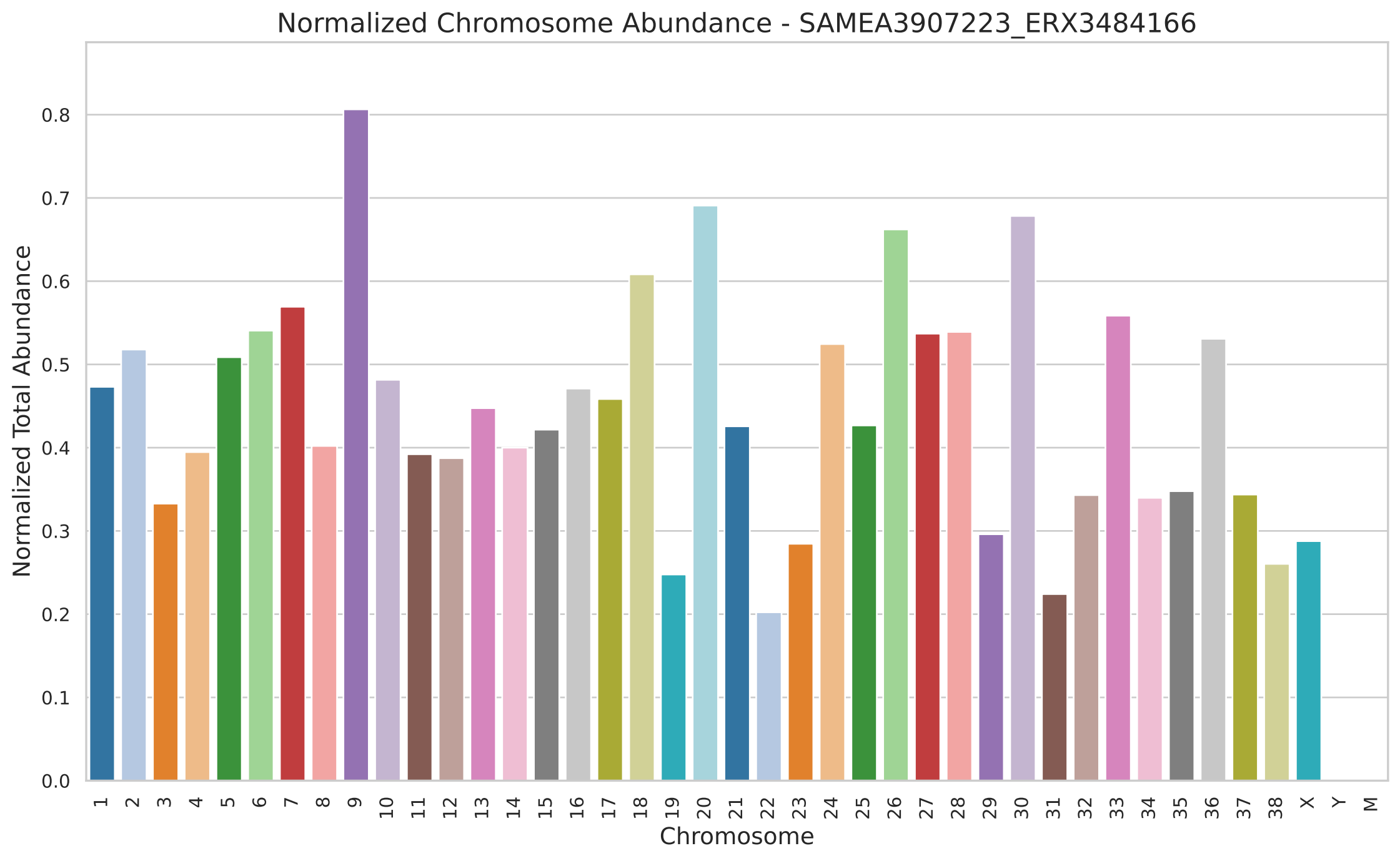

Normalized Chromosome Abundance - SAMEA3907403_ERX3484204
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

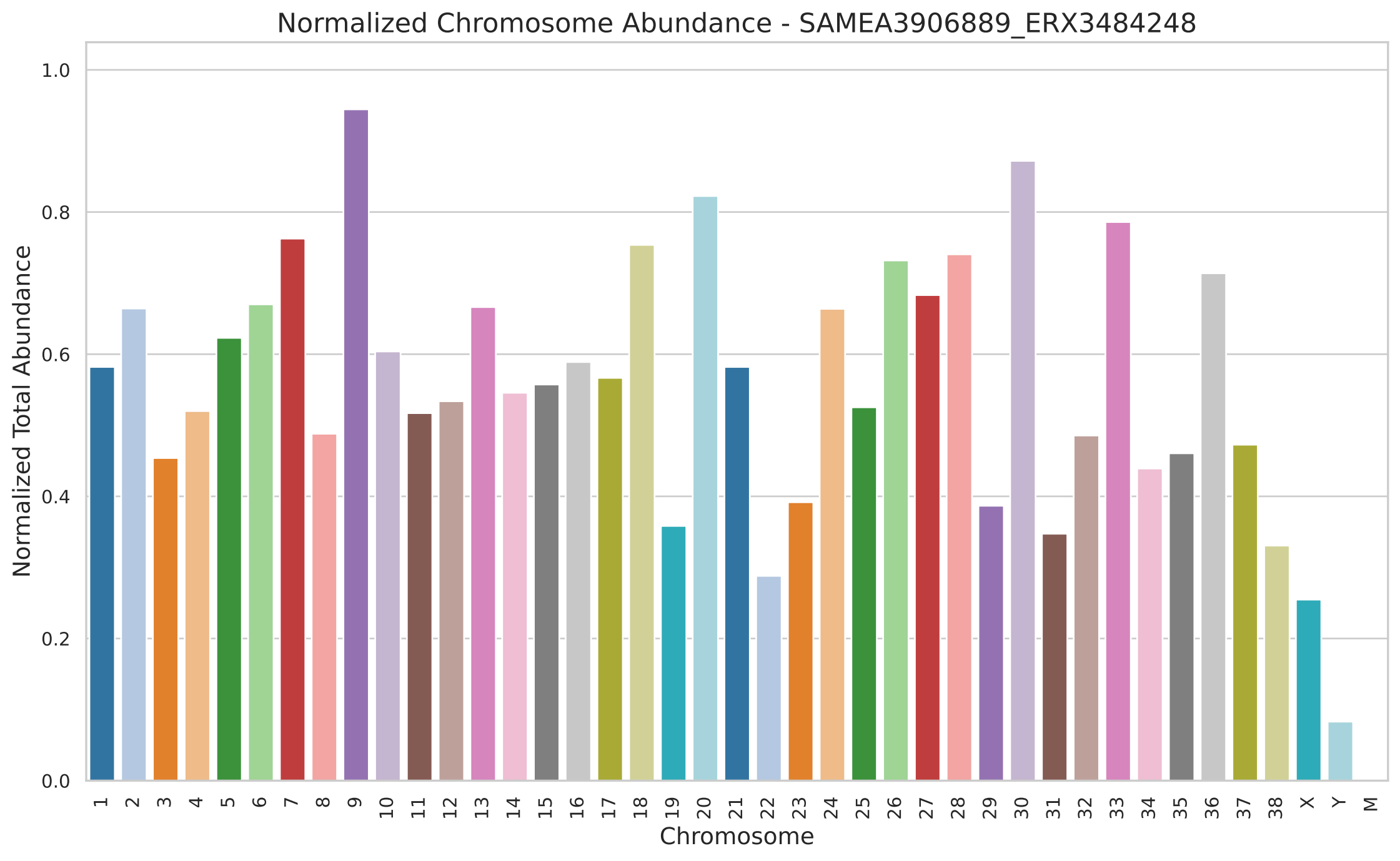

Normalized Chromosome Abundance - SAMEA3906880_ERX3484244
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

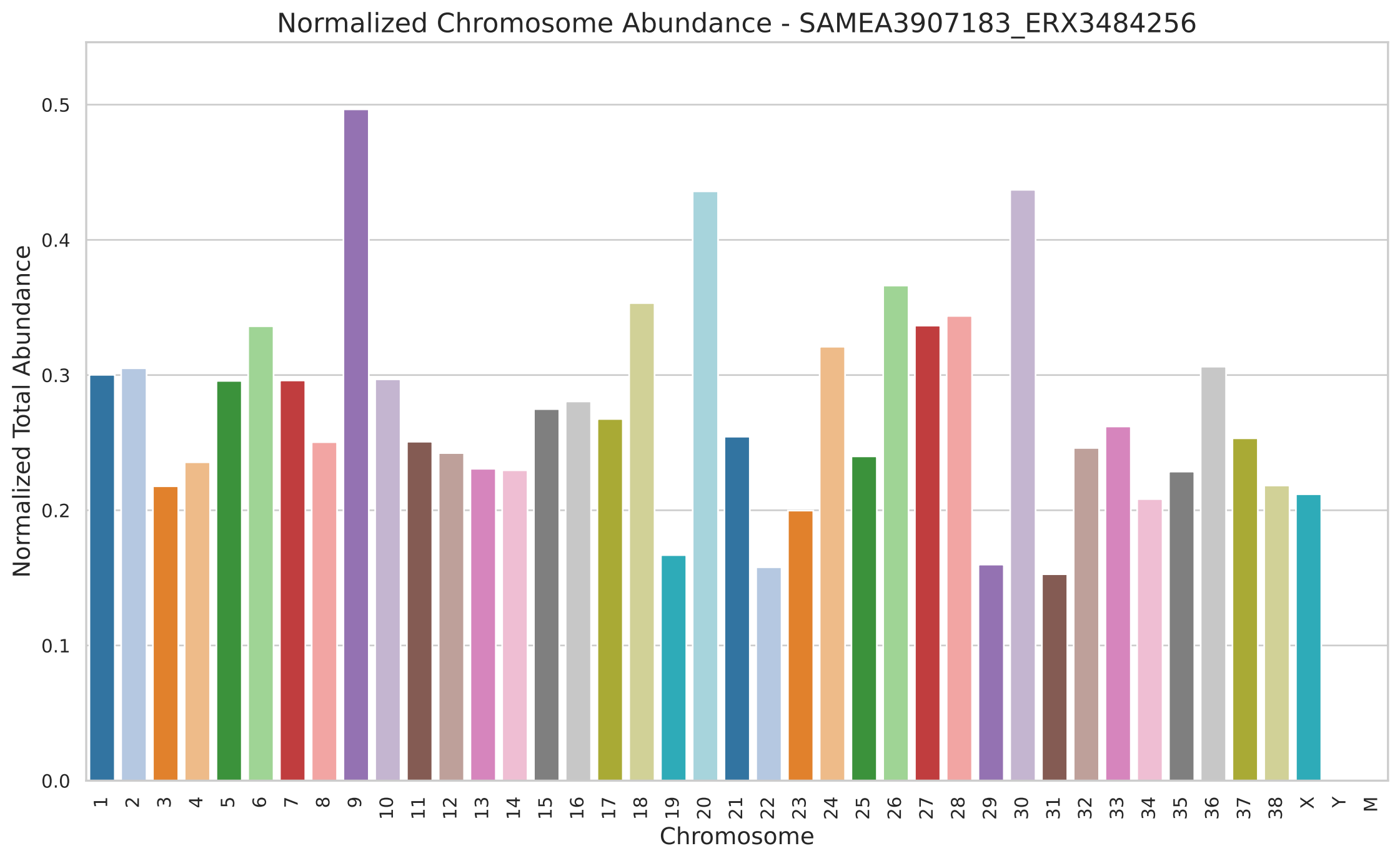

Normalized Chromosome Abundance - SAMEA3910746_ERX3484233
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

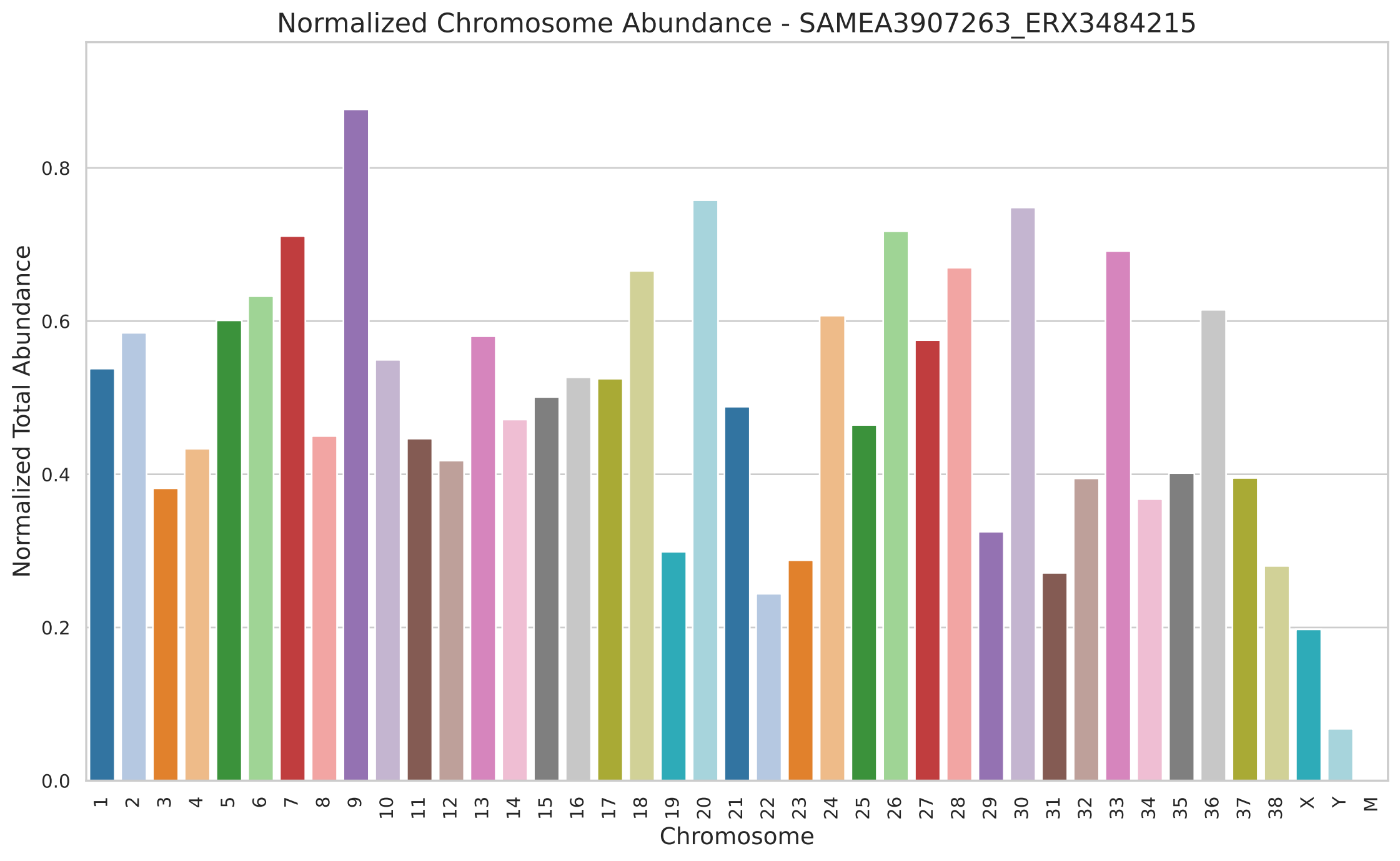

Normalized Chromosome Abundance - SAMEA3906879_ERX3484243
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

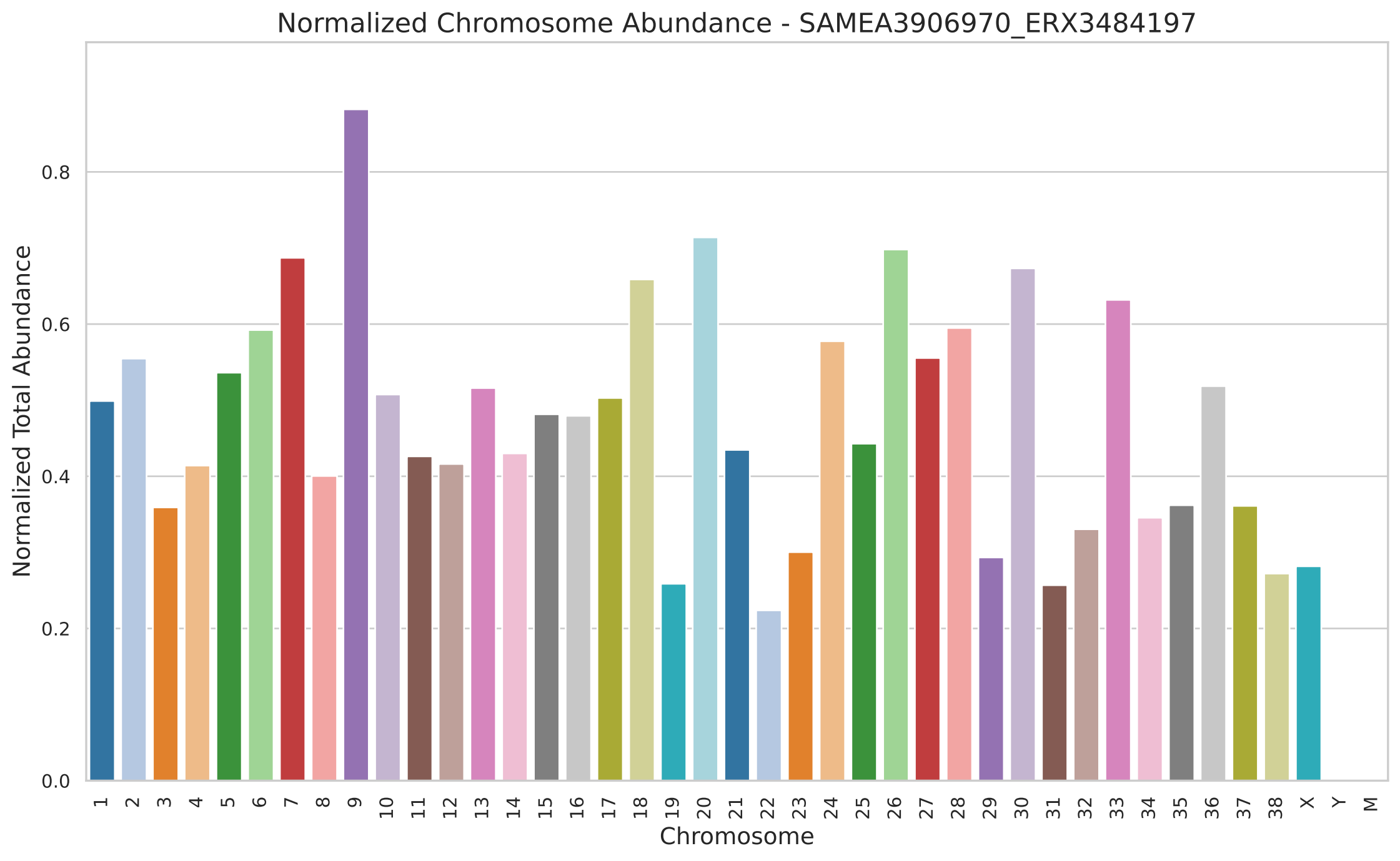

Normalized Chromosome Abundance - SAMEA3906994_ERX3484253
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

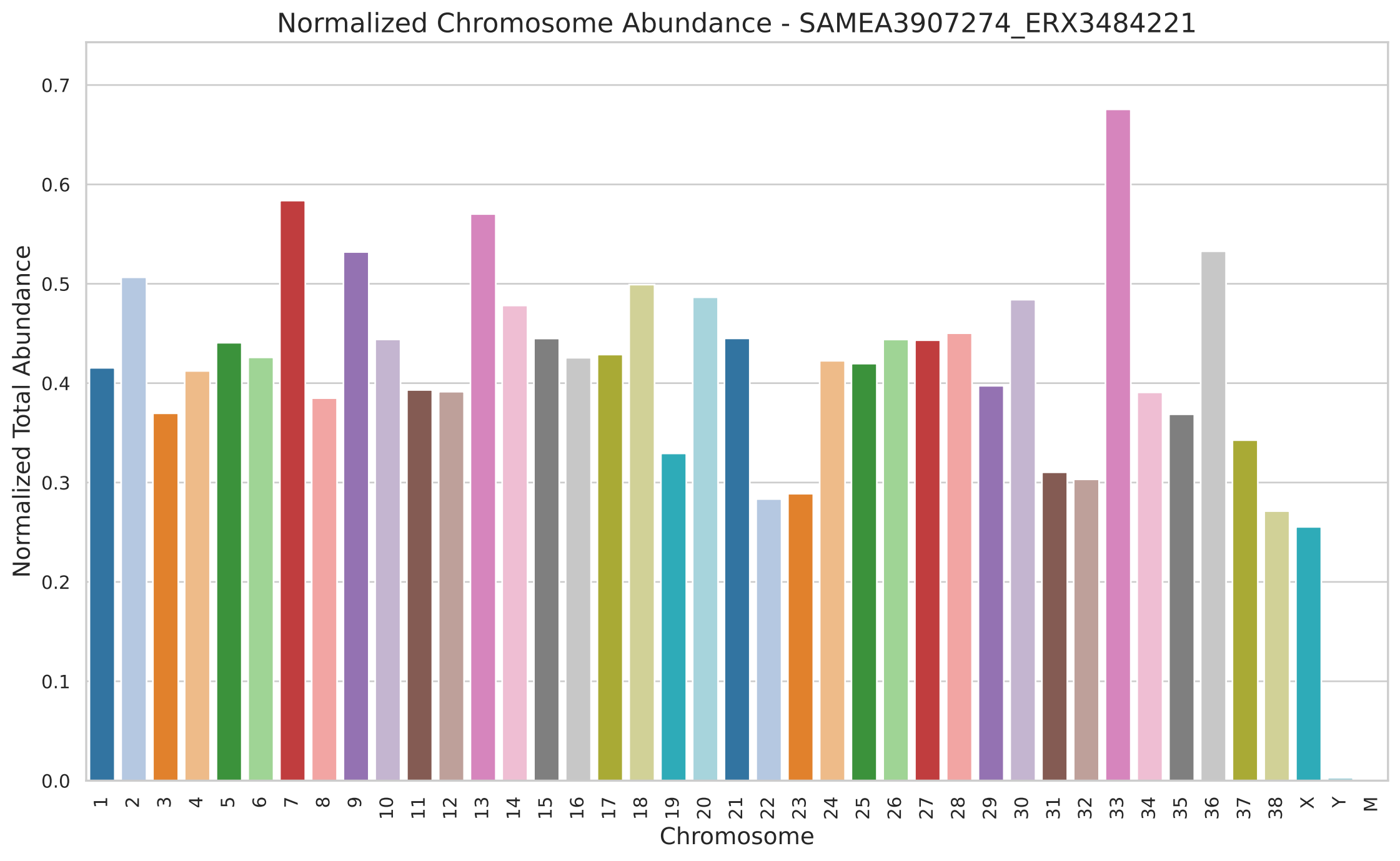

Normalized Chromosome Abundance - SAMEA3907223_ERX3484166
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

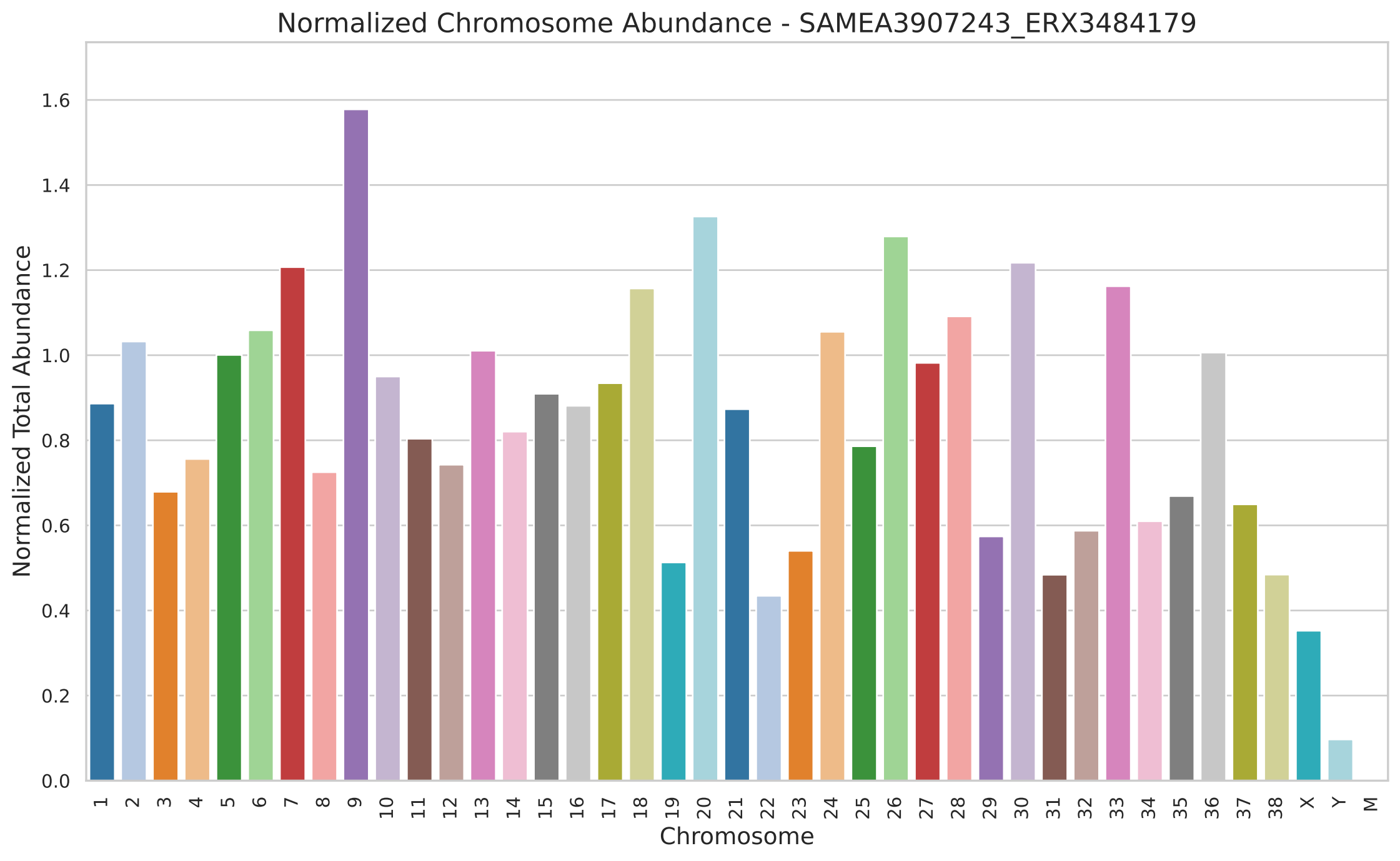

Normalized Chromosome Abundance - SAMEA3906889_ERX3484248
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

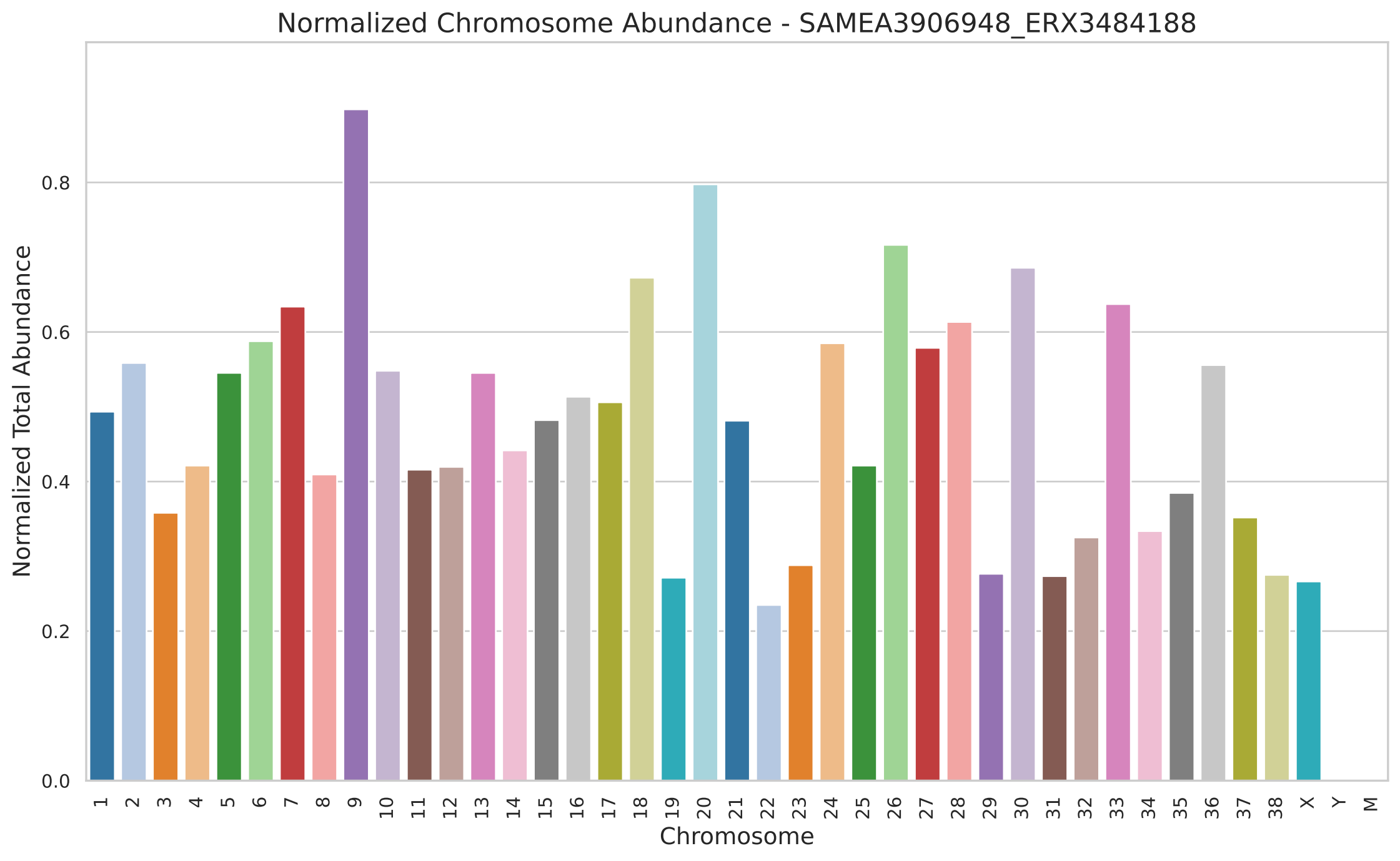

Normalized Chromosome Abundance - SAMEA3907183_ERX3484256
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

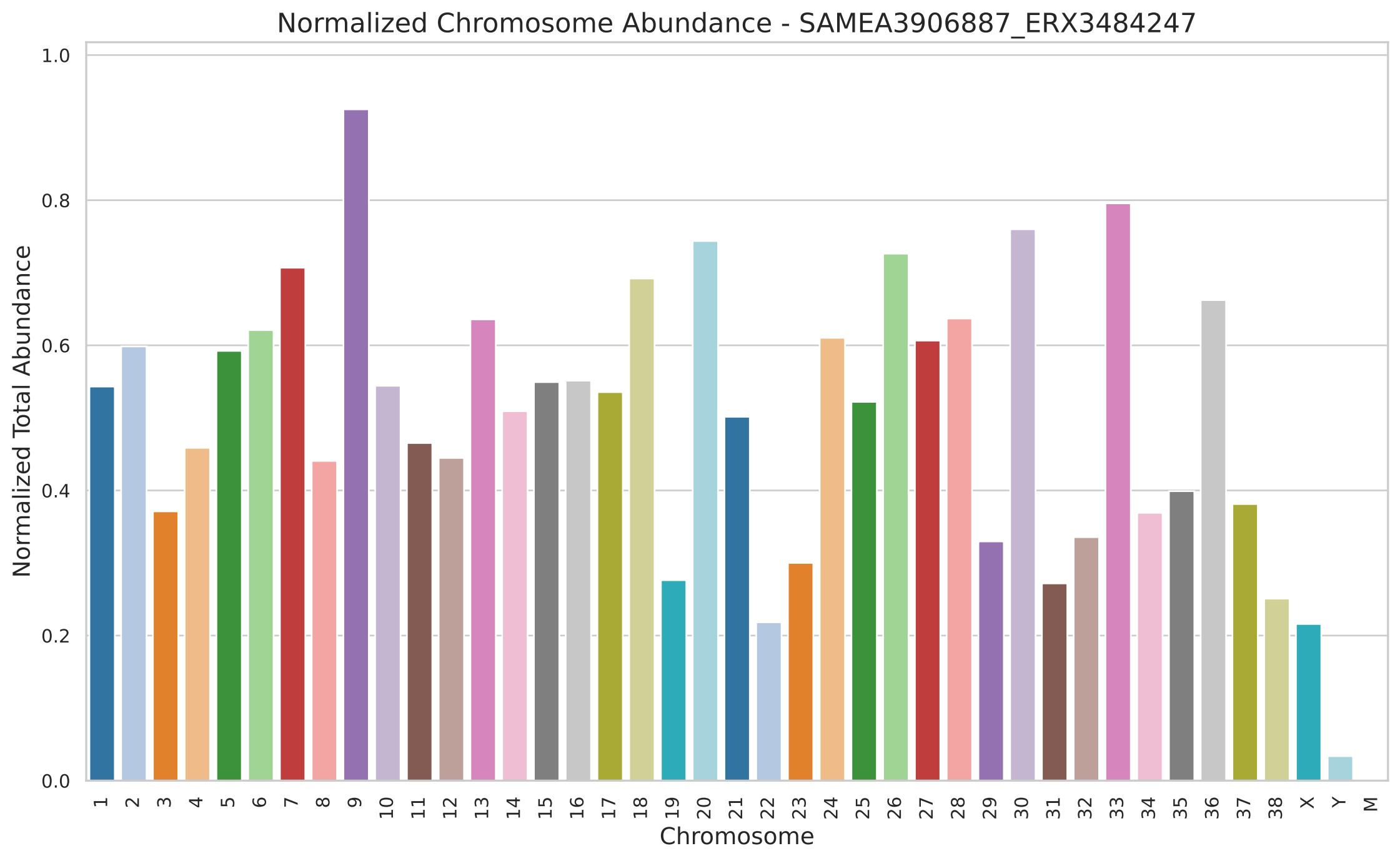

Normalized Chromosome Abundance - SAMEA3907263_ERX3484215
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

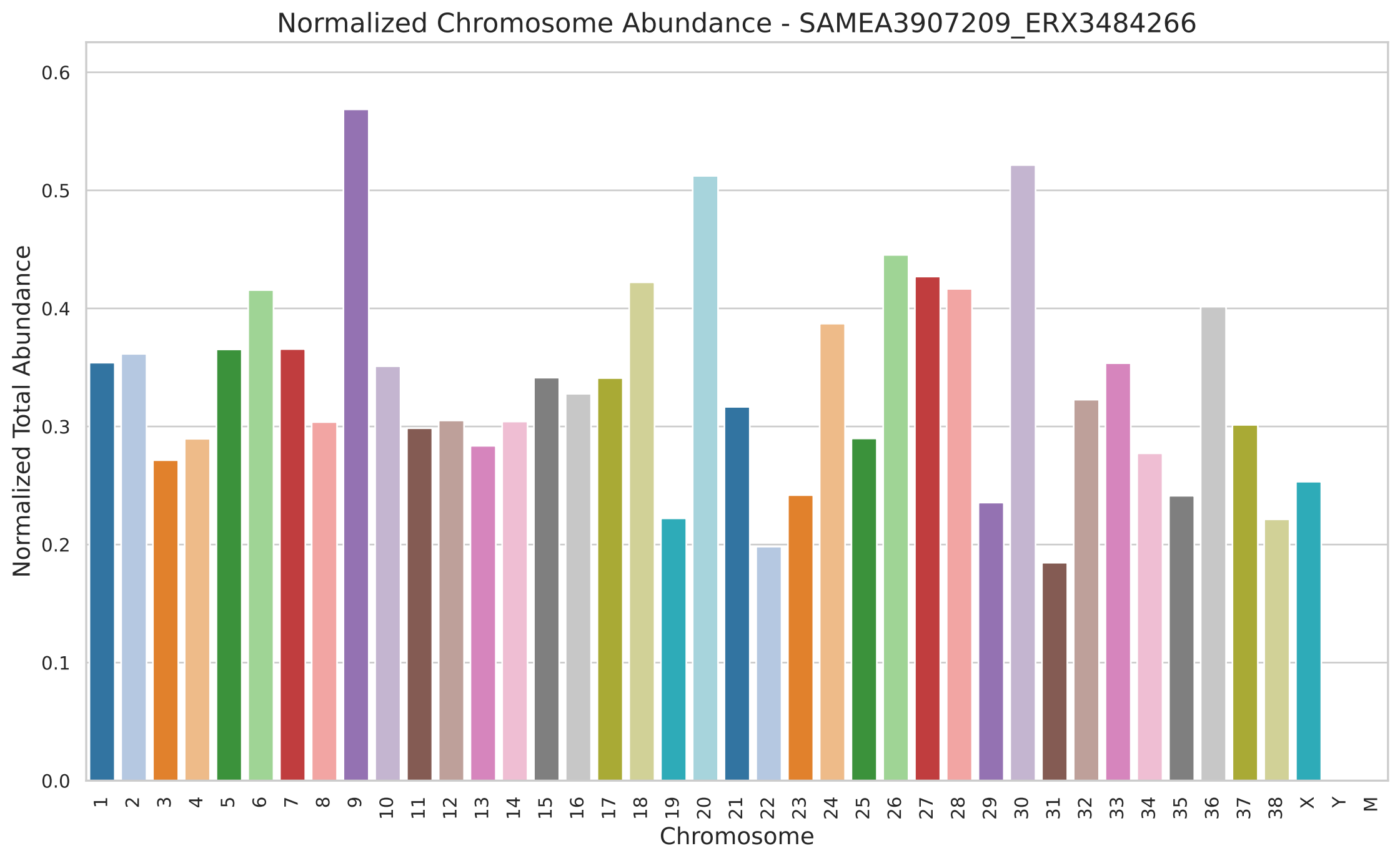

Normalized Chromosome Abundance - SAMEA3906970_ERX3484197
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

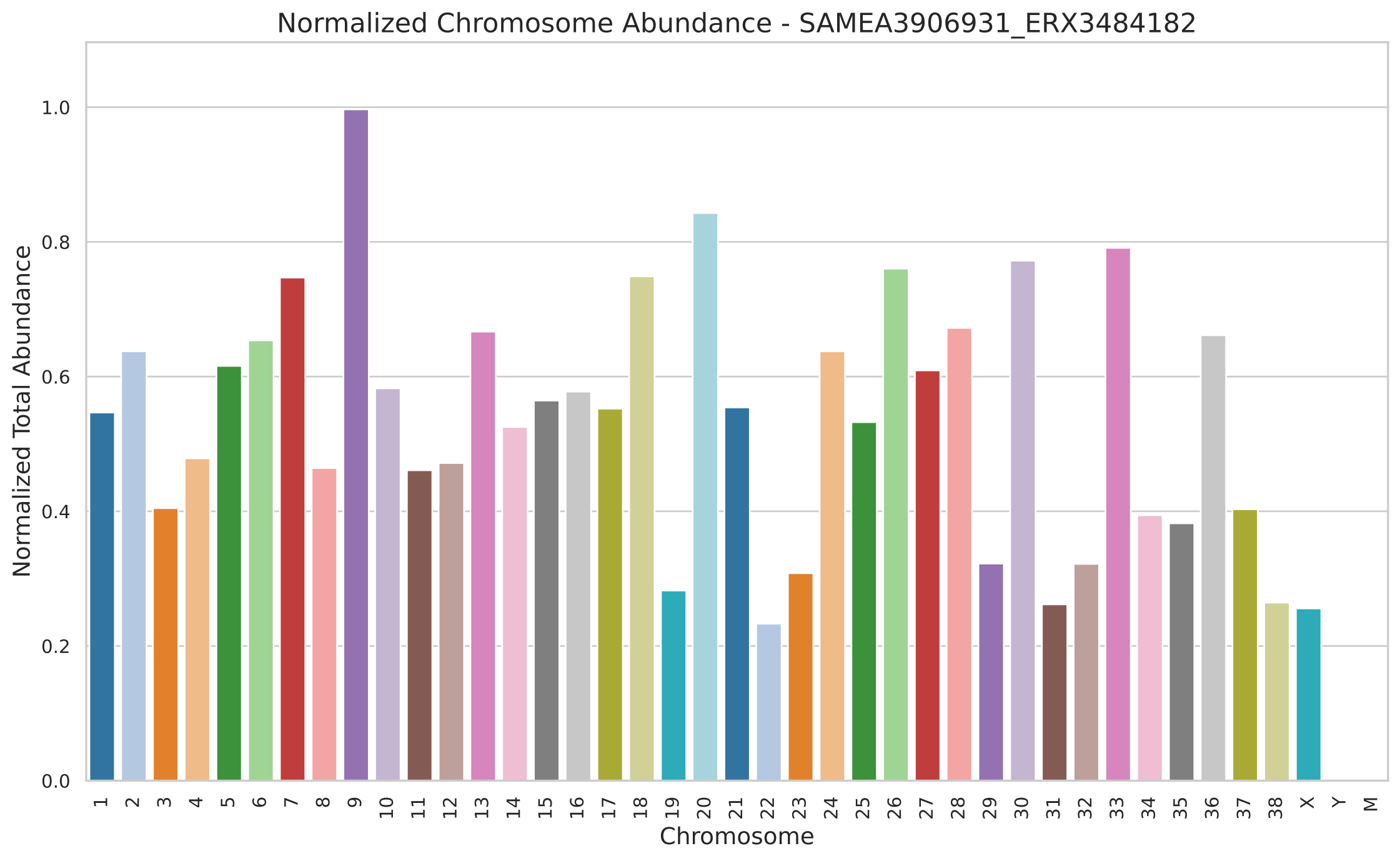

Normalized Chromosome Abundance - SAMEA3907274_ERX3484221
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

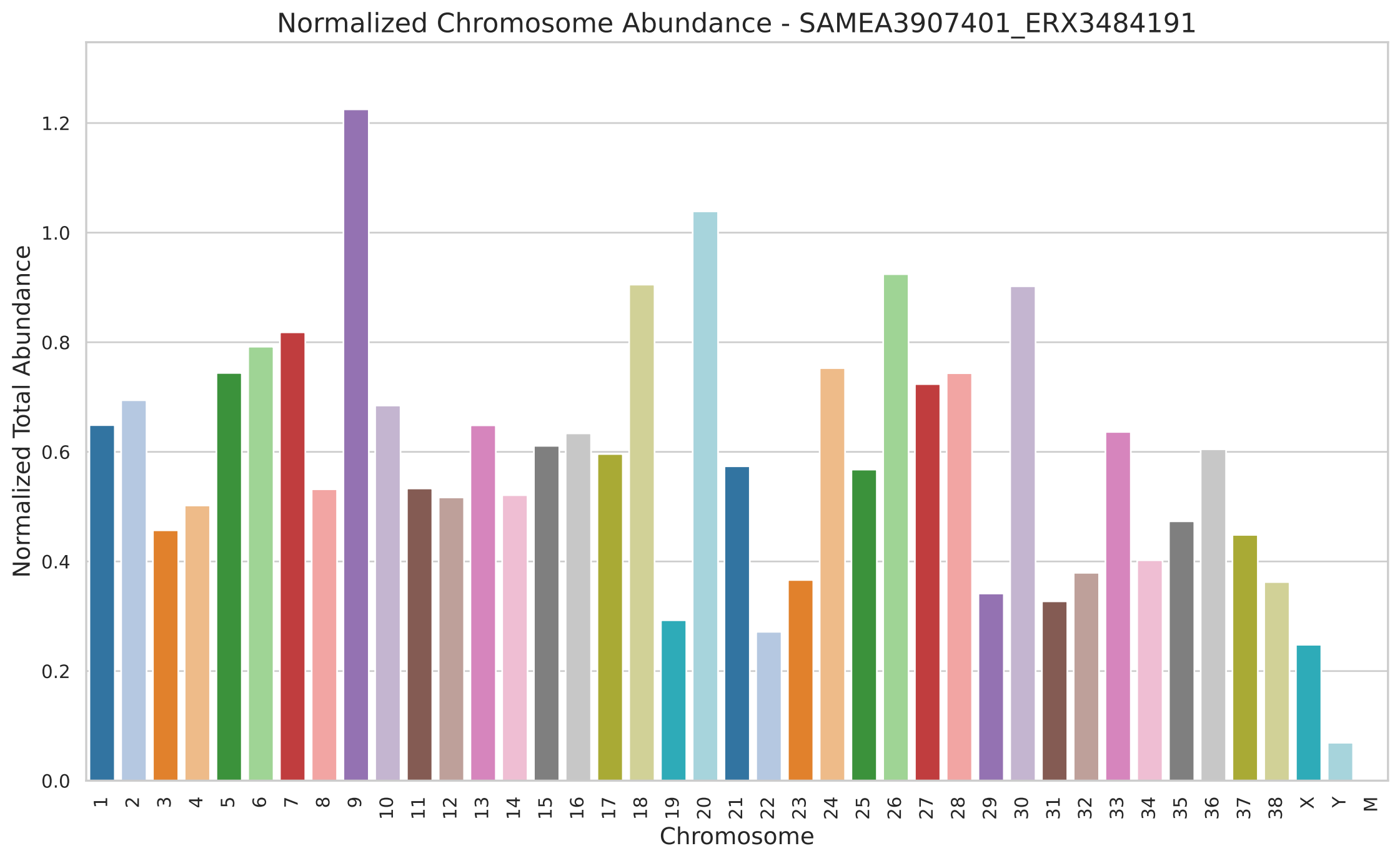

Normalized Chromosome Abundance - SAMEA3907243_ERX3484179
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

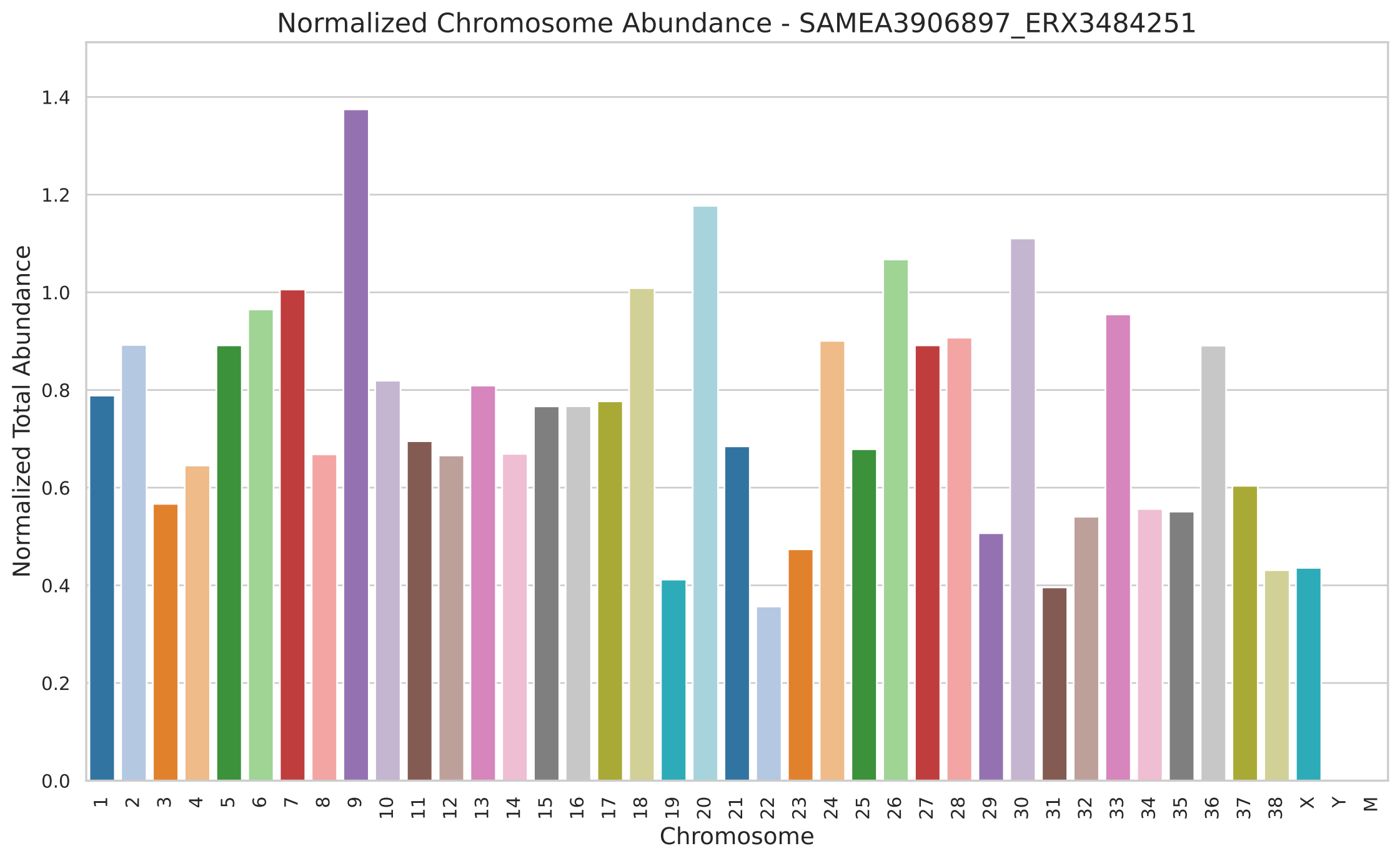

Normalized Chromosome Abundance - SAMEA3906948_ERX3484188
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

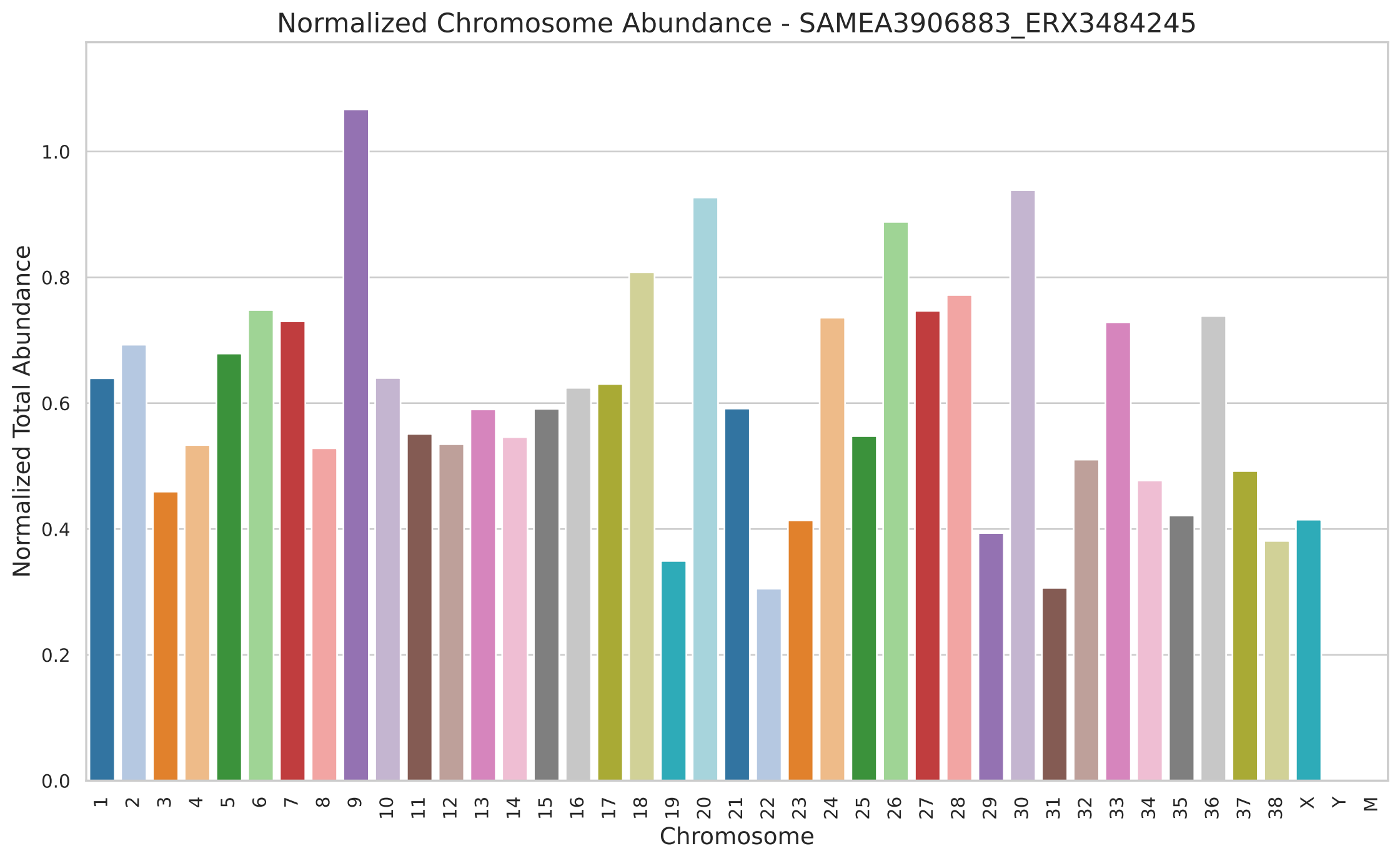

Normalized Chromosome Abundance - SAMEA3906887_ERX3484247
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

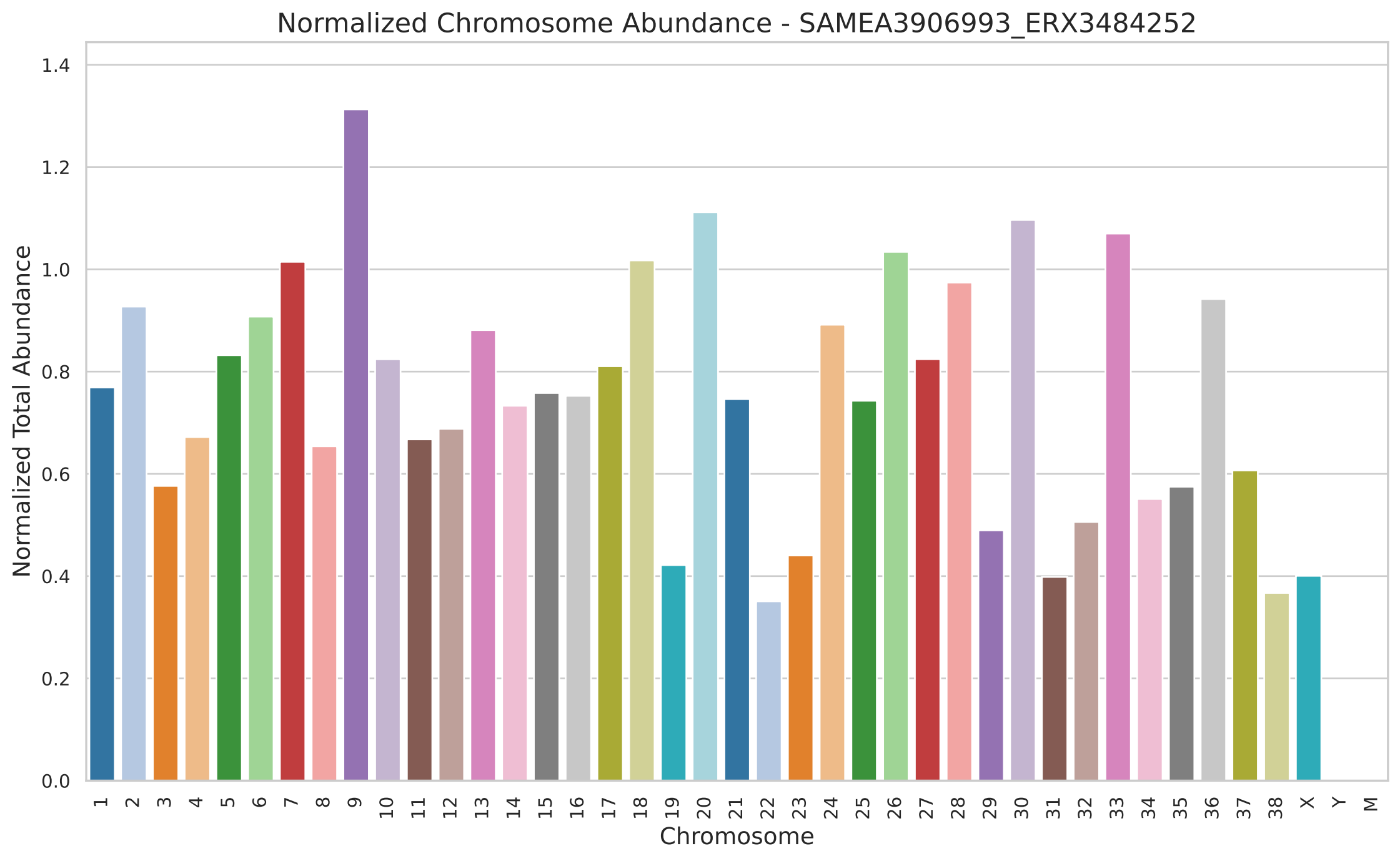

Normalized Chromosome Abundance - SAMEA3907209_ERX3484266
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

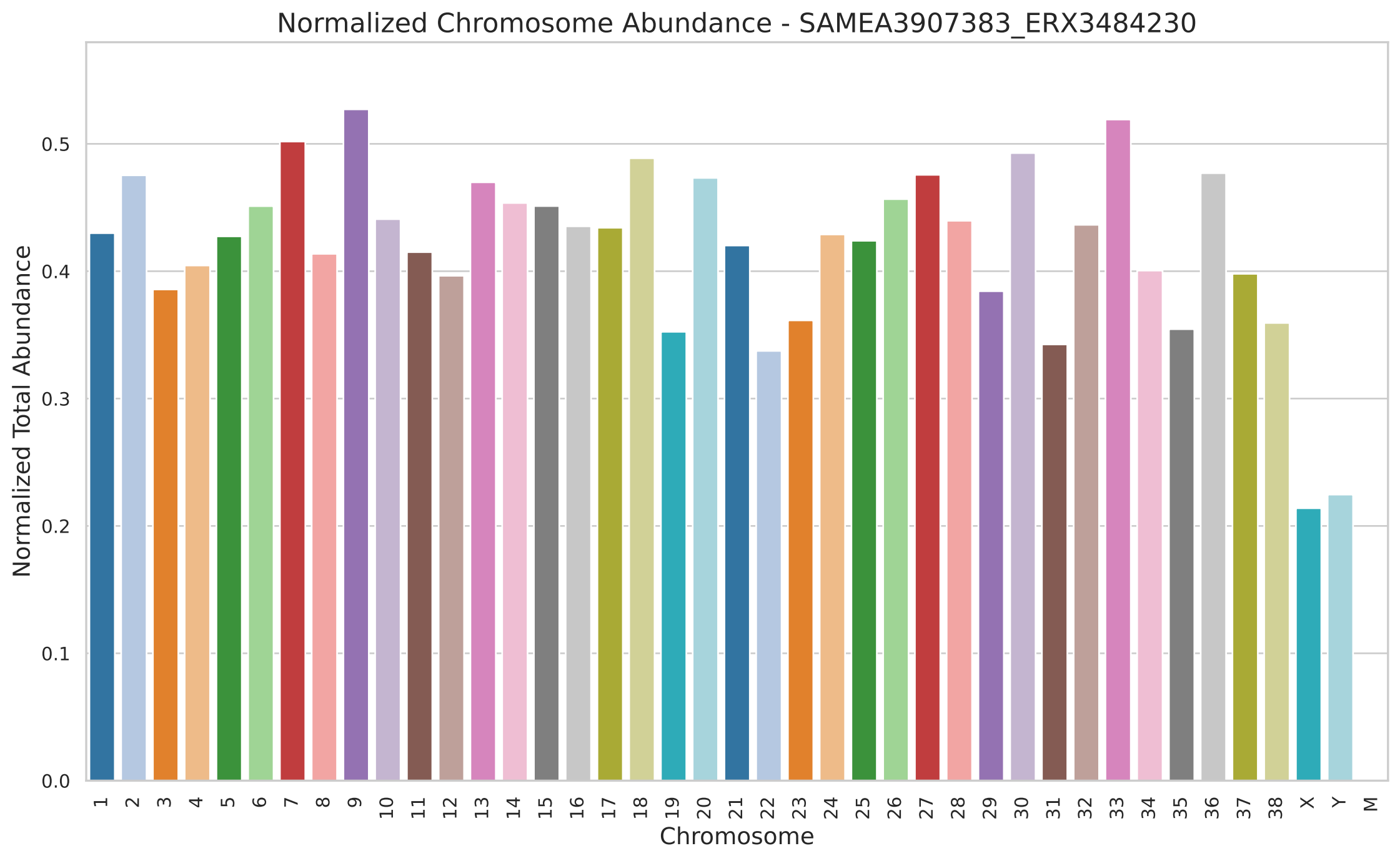

Normalized Chromosome Abundance - SAMEA3906931_ERX3484182
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

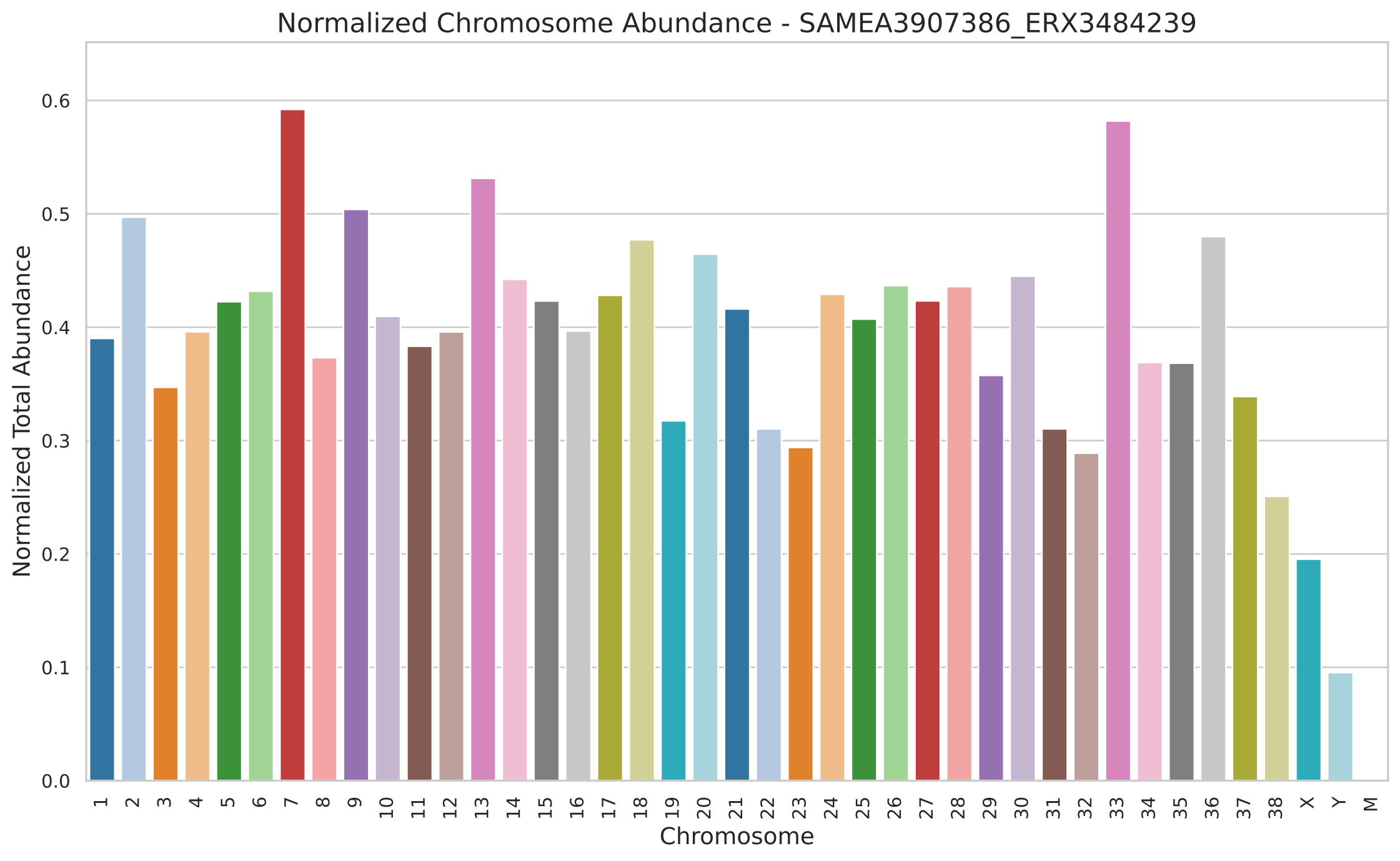

Normalized Chromosome Abundance - SAMEA3907401_ERX3484191
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

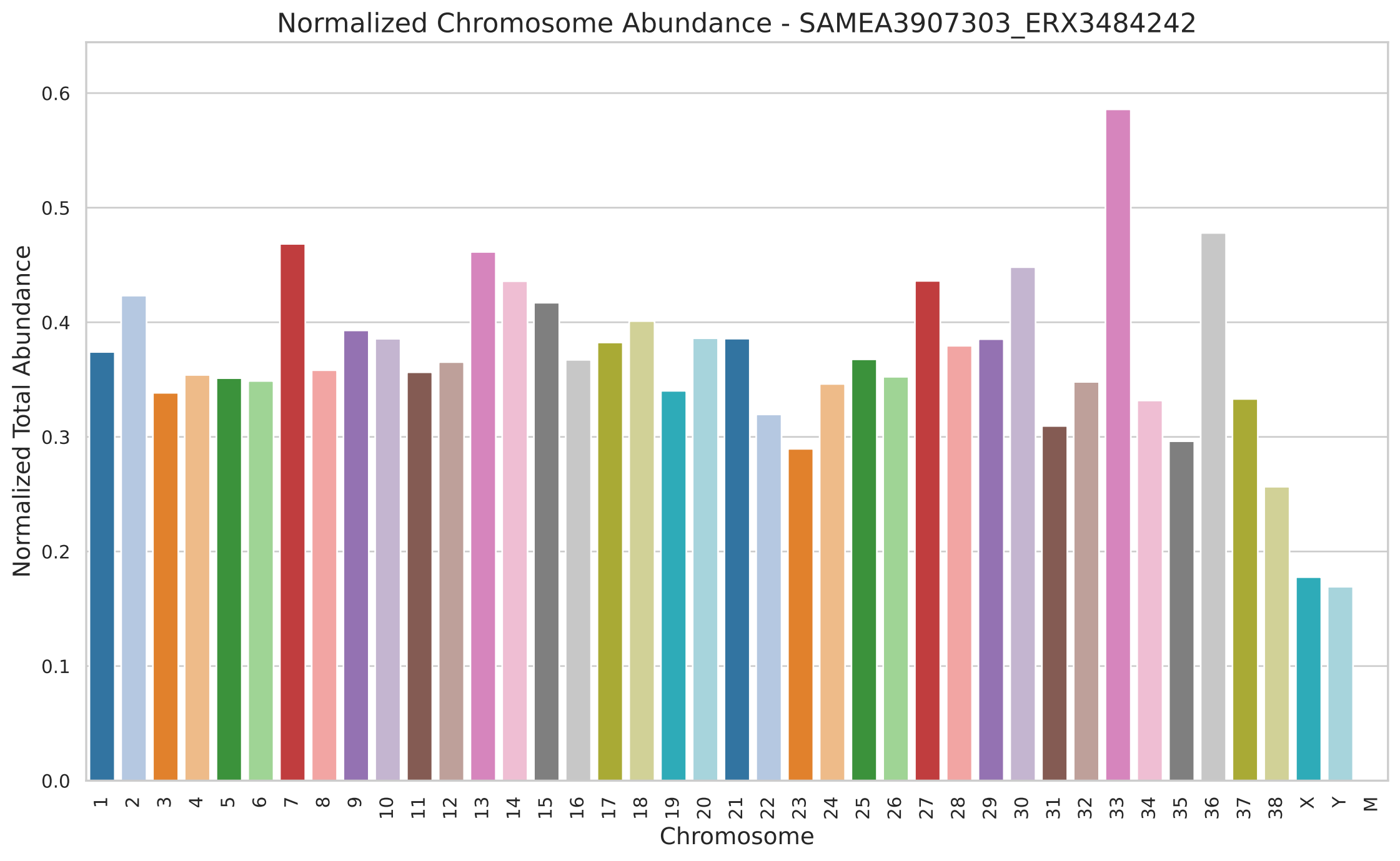

Normalized Chromosome Abundance - SAMEA3906897_ERX3484251
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

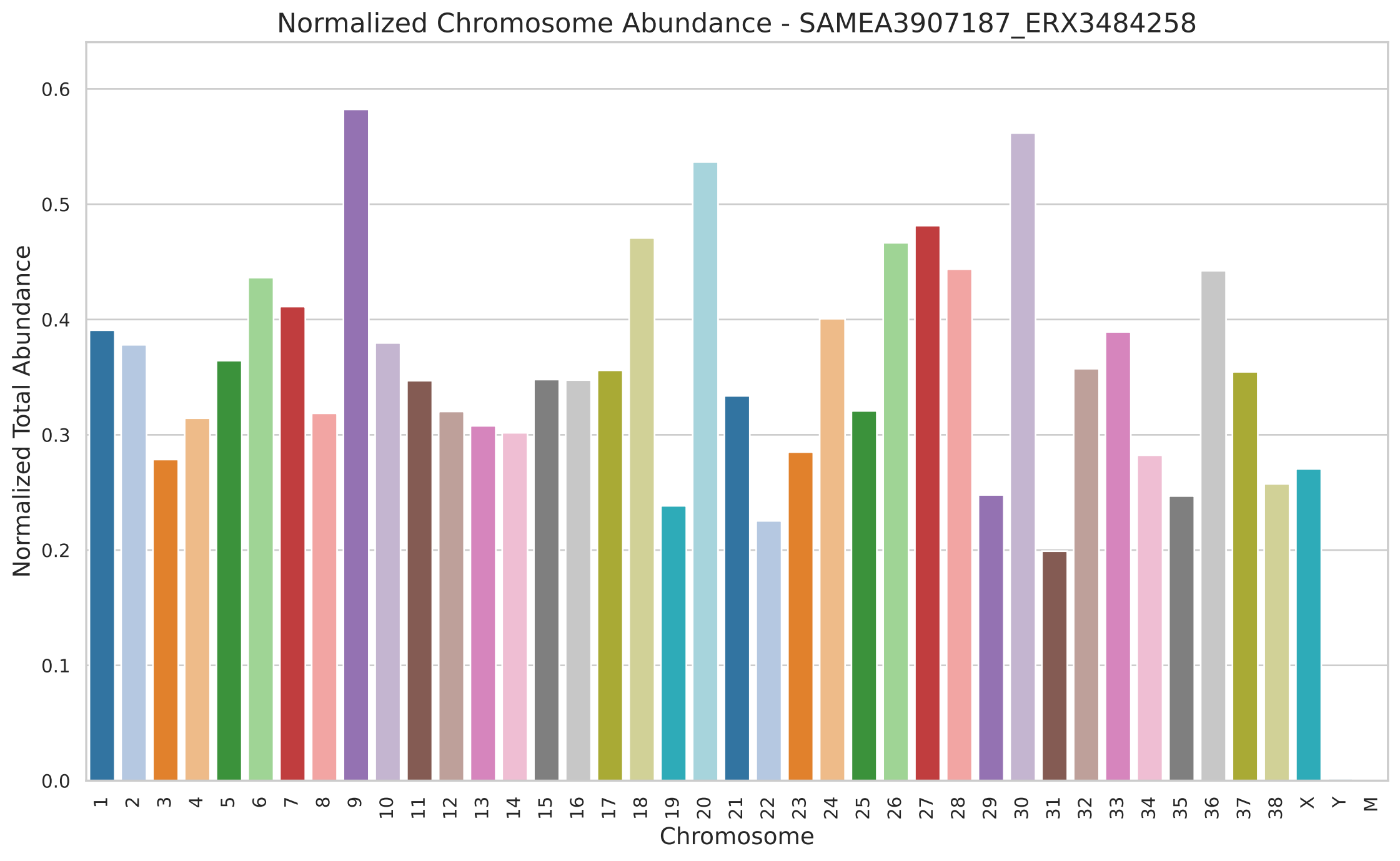

Normalized Chromosome Abundance - SAMEA3906883_ERX3484245
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

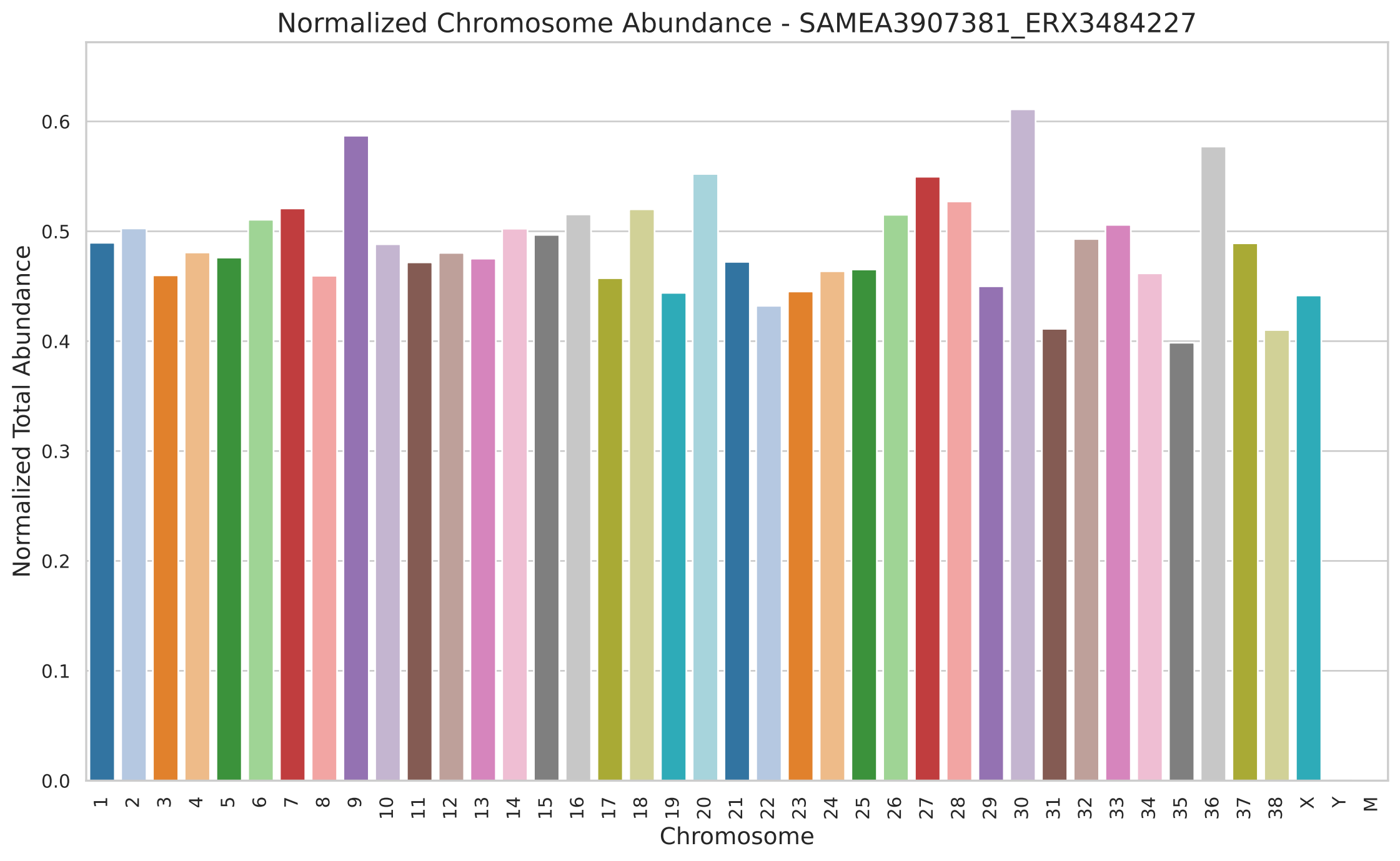

Normalized Chromosome Abundance - SAMEA3906993_ERX3484252
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

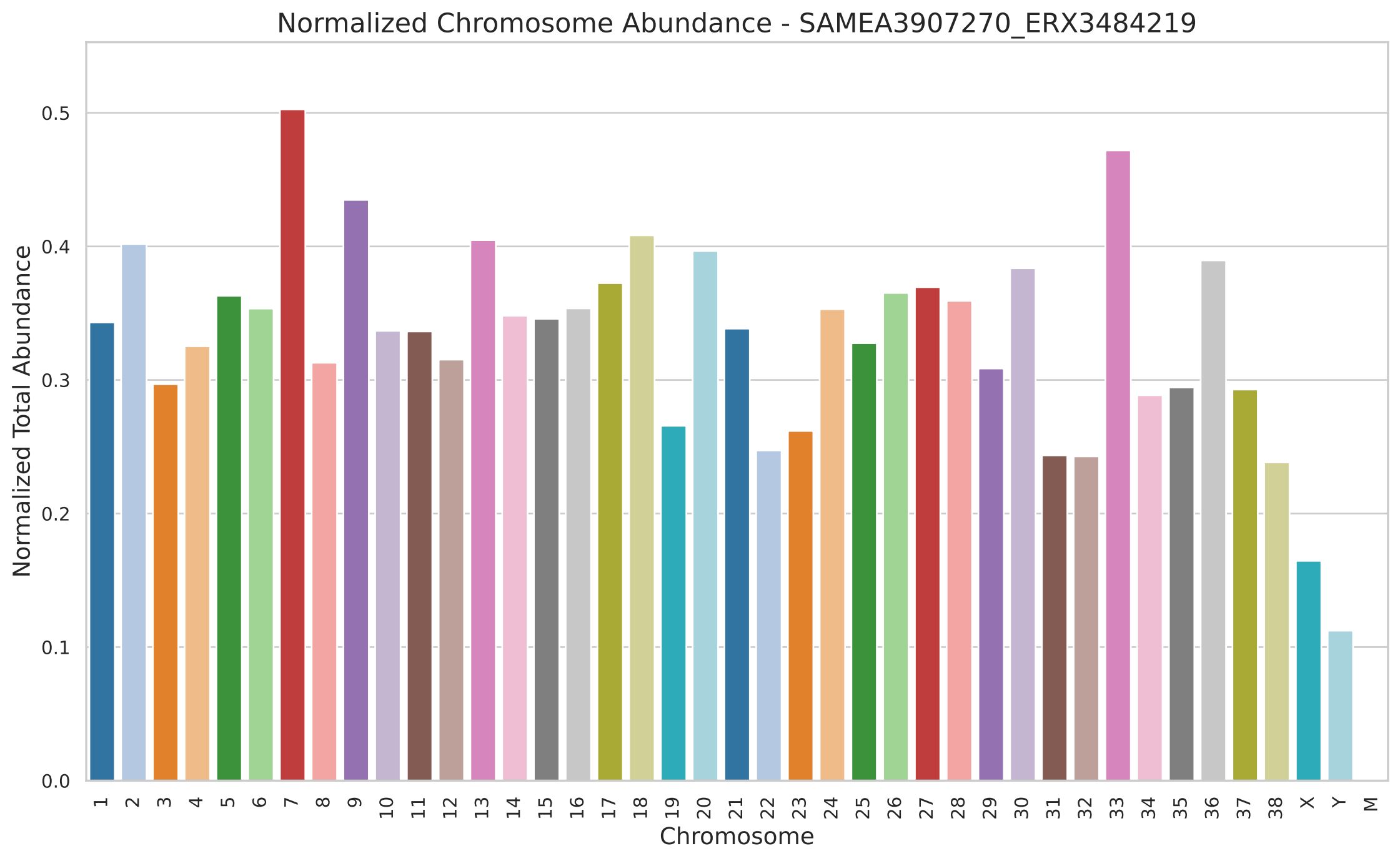

Normalized Chromosome Abundance - SAMEA3907383_ERX3484230
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

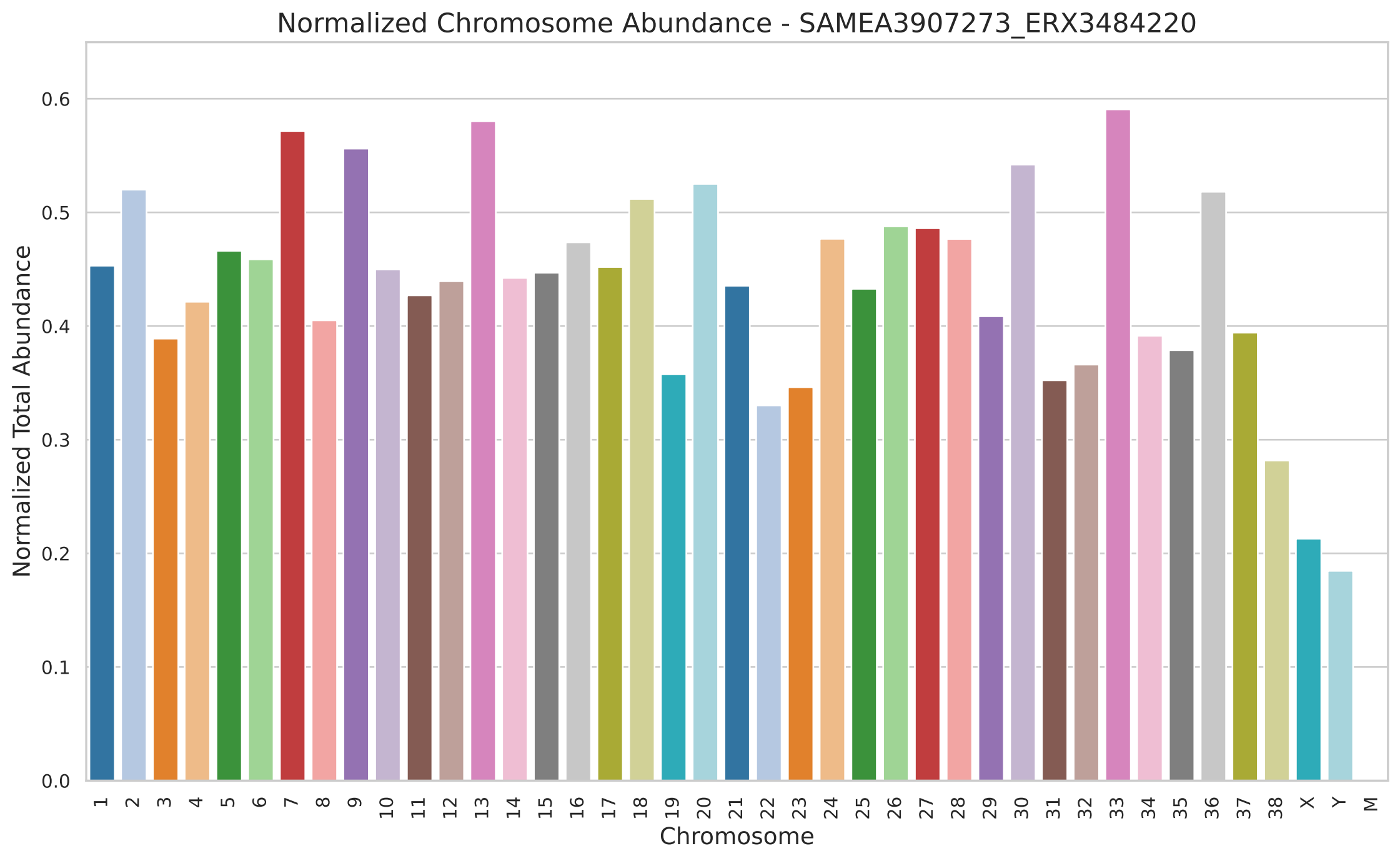

Normalized Chromosome Abundance - SAMEA3907386_ERX3484239
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

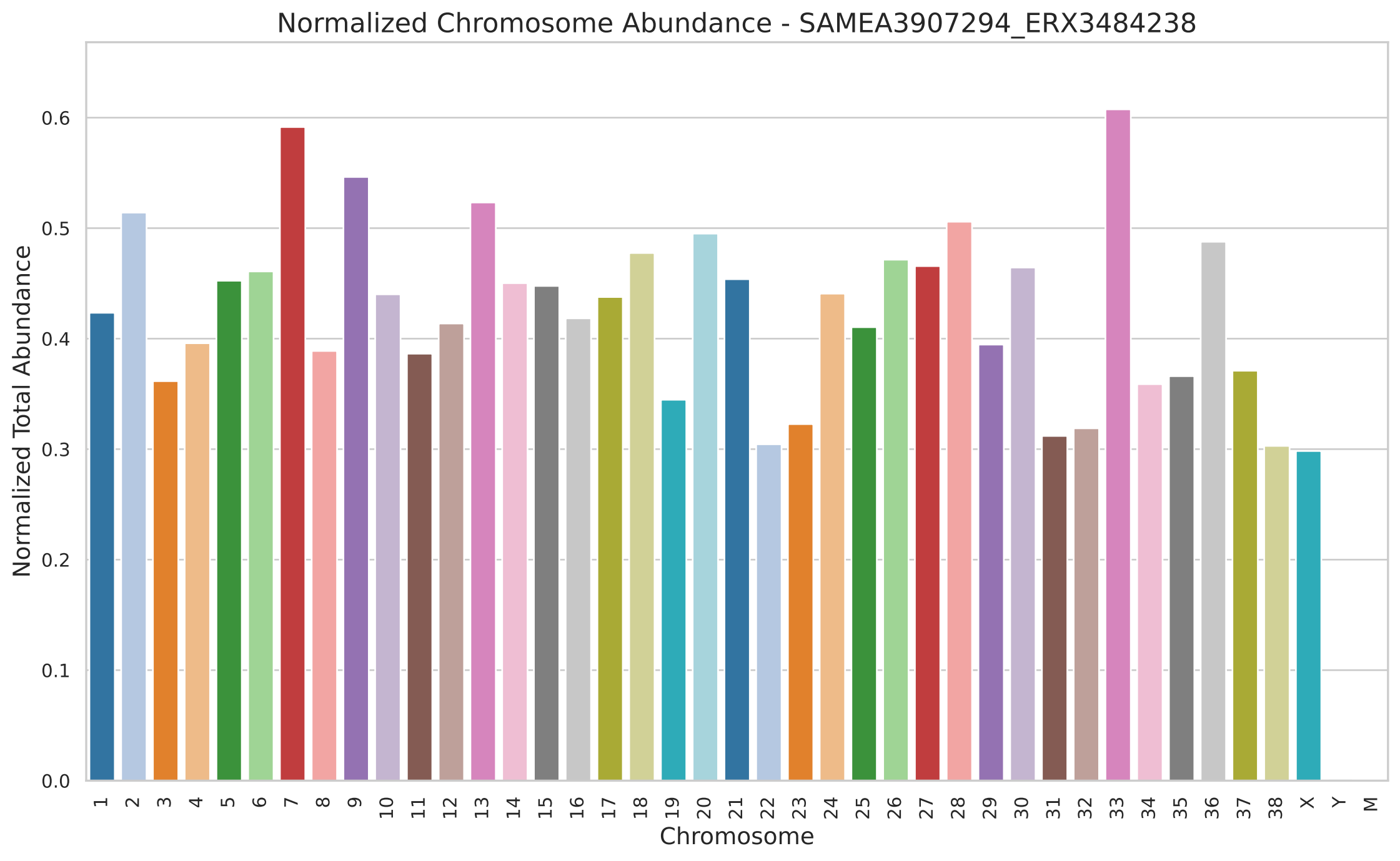

Normalized Chromosome Abundance - SAMEA3907303_ERX3484242
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

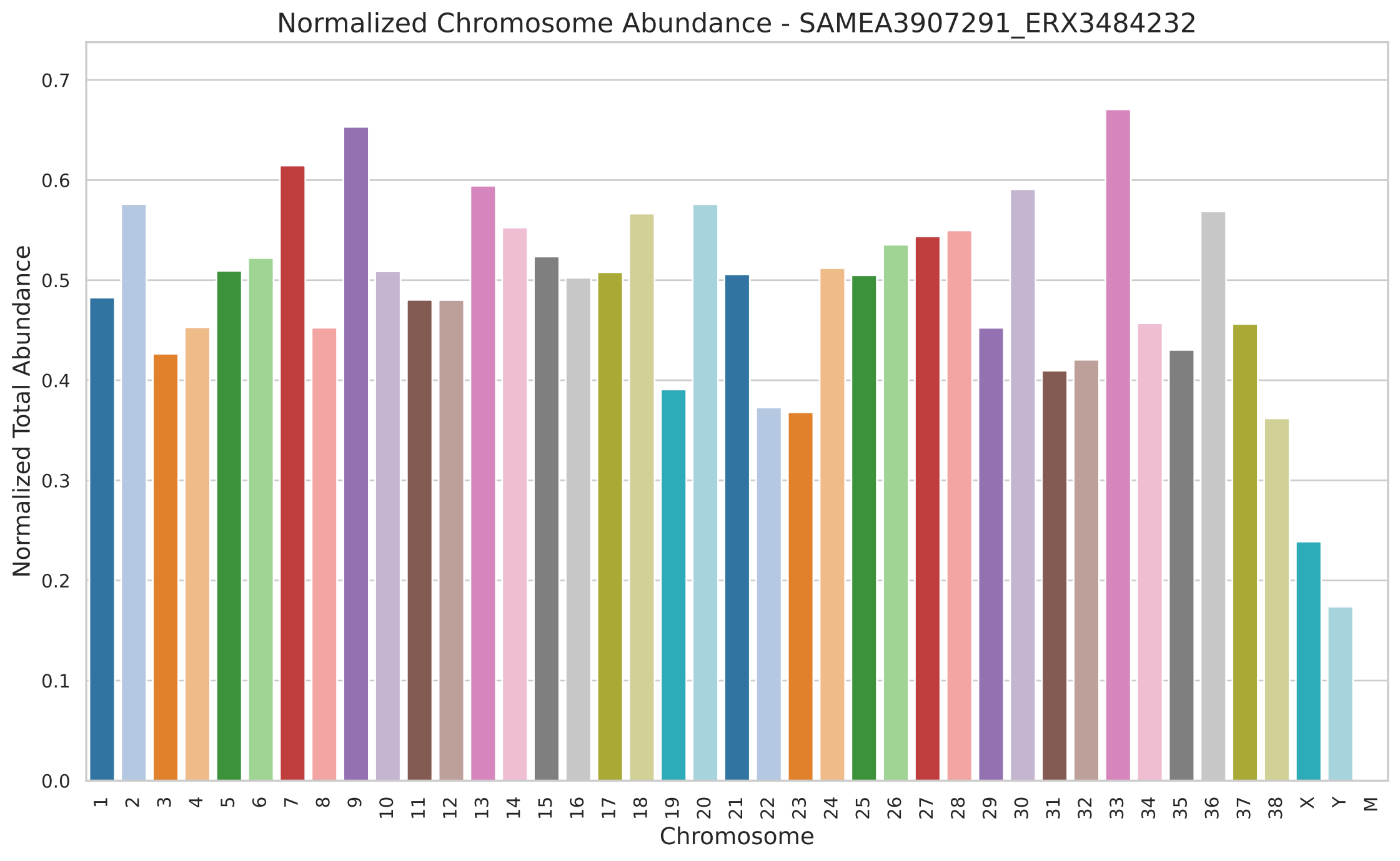

Normalized Chromosome Abundance - SAMEA3907187_ERX3484258
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

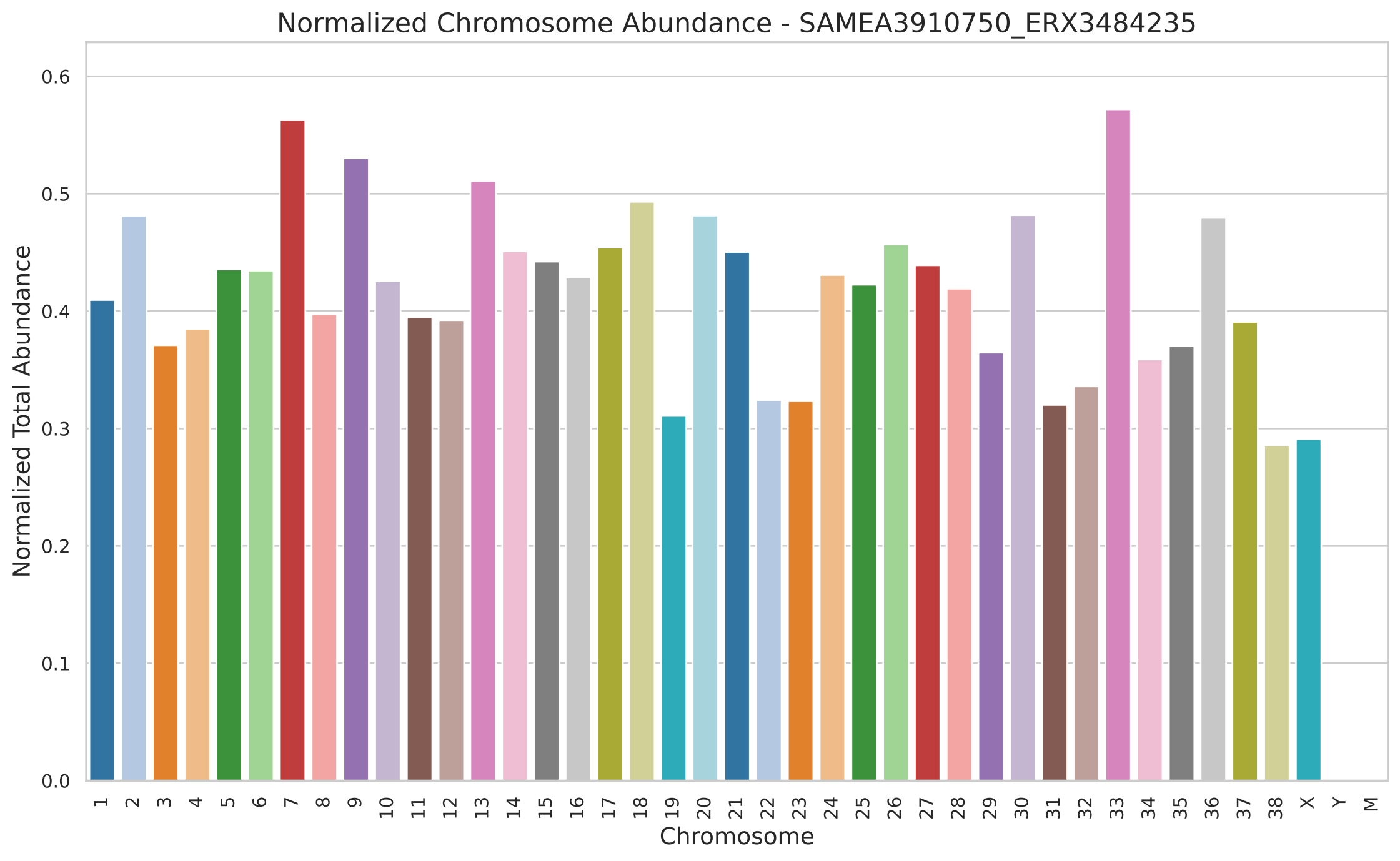

Normalized Chromosome Abundance - SAMEA3907381_ERX3484227
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

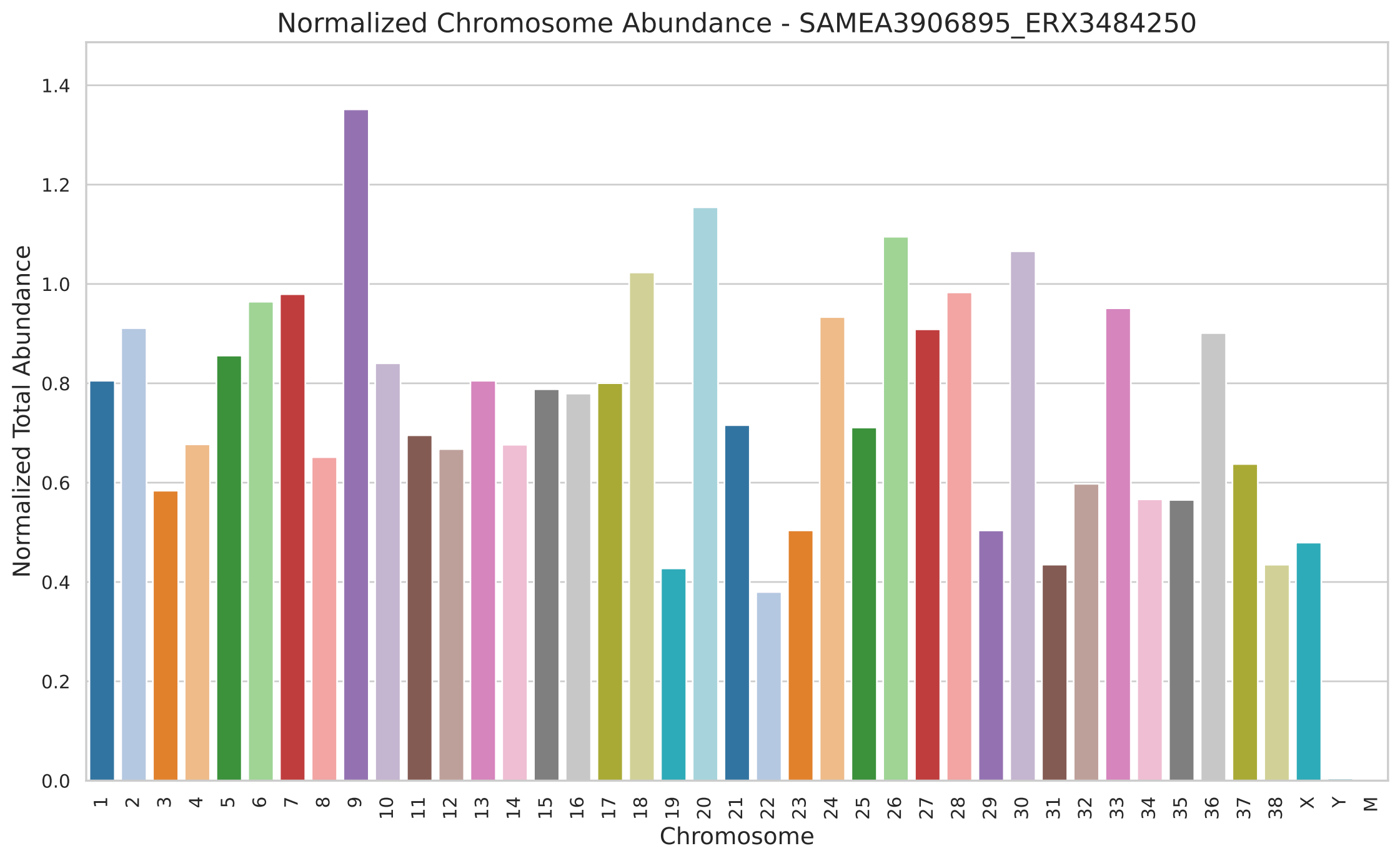

Normalized Chromosome Abundance - SAMEA3907270_ERX3484219
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

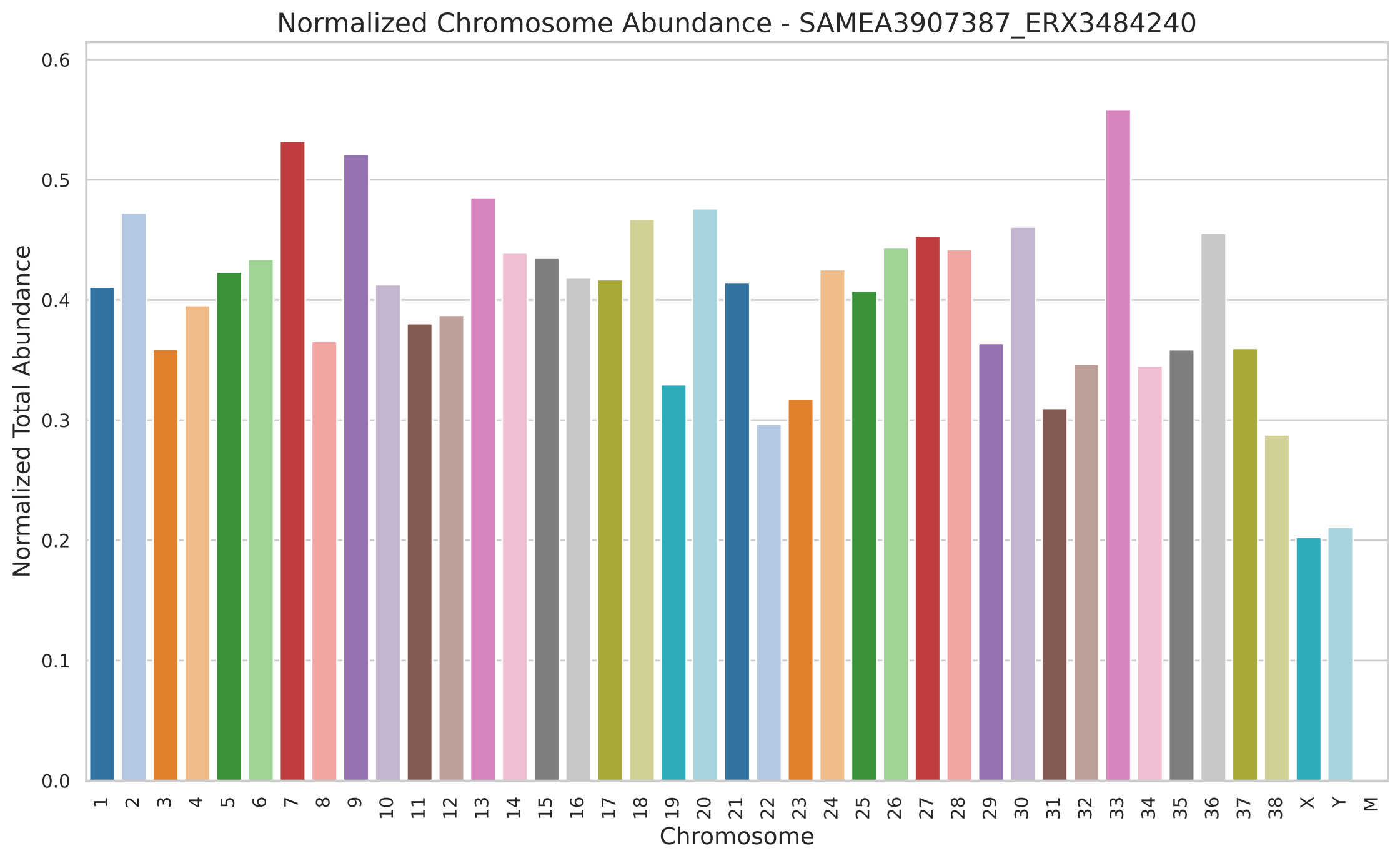

Normalized Chromosome Abundance - SAMEA3907273_ERX3484220
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

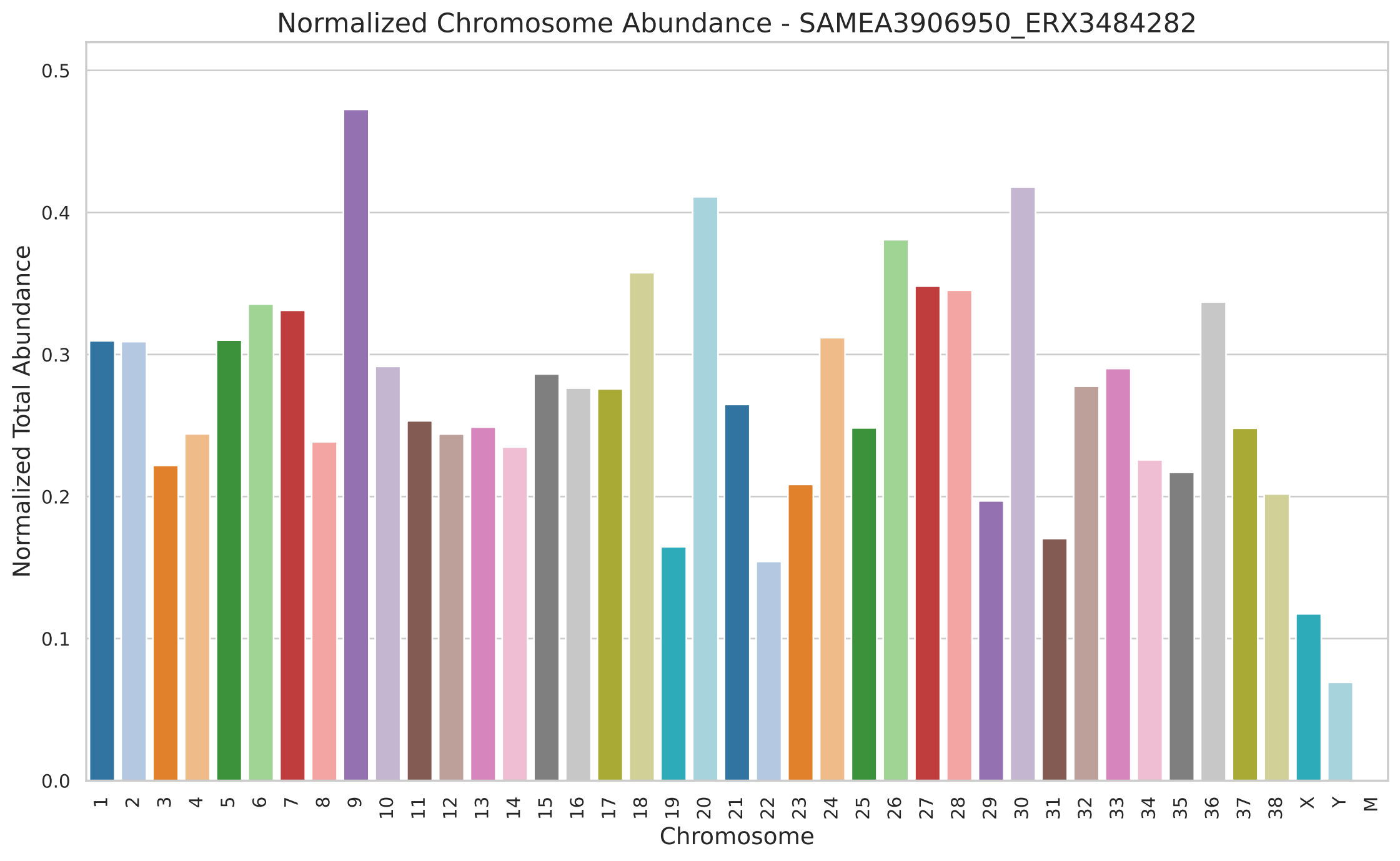

Normalized Chromosome Abundance - SAMEA3907294_ERX3484238
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

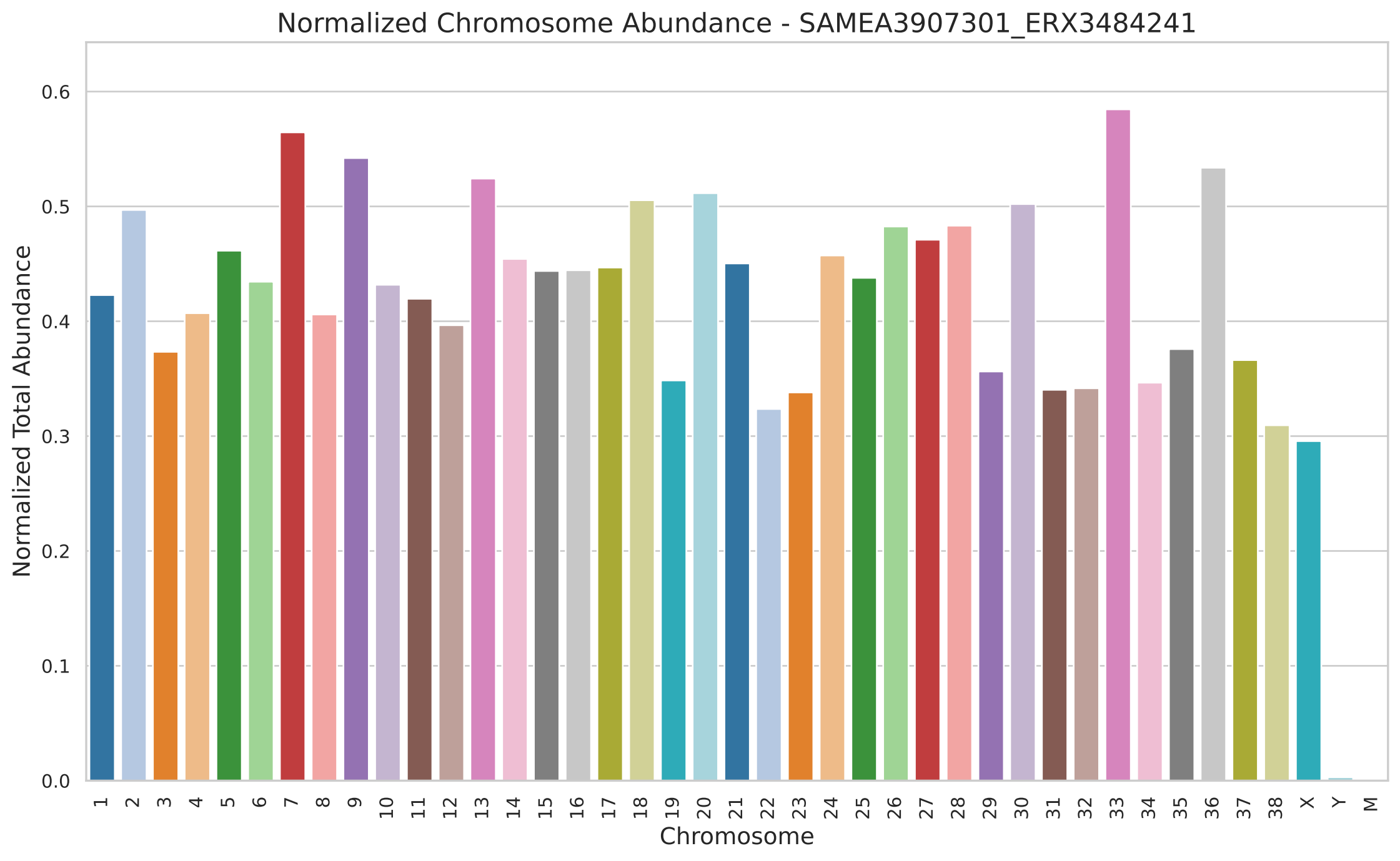

Normalized Chromosome Abundance - SAMEA3907291_ERX3484232
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

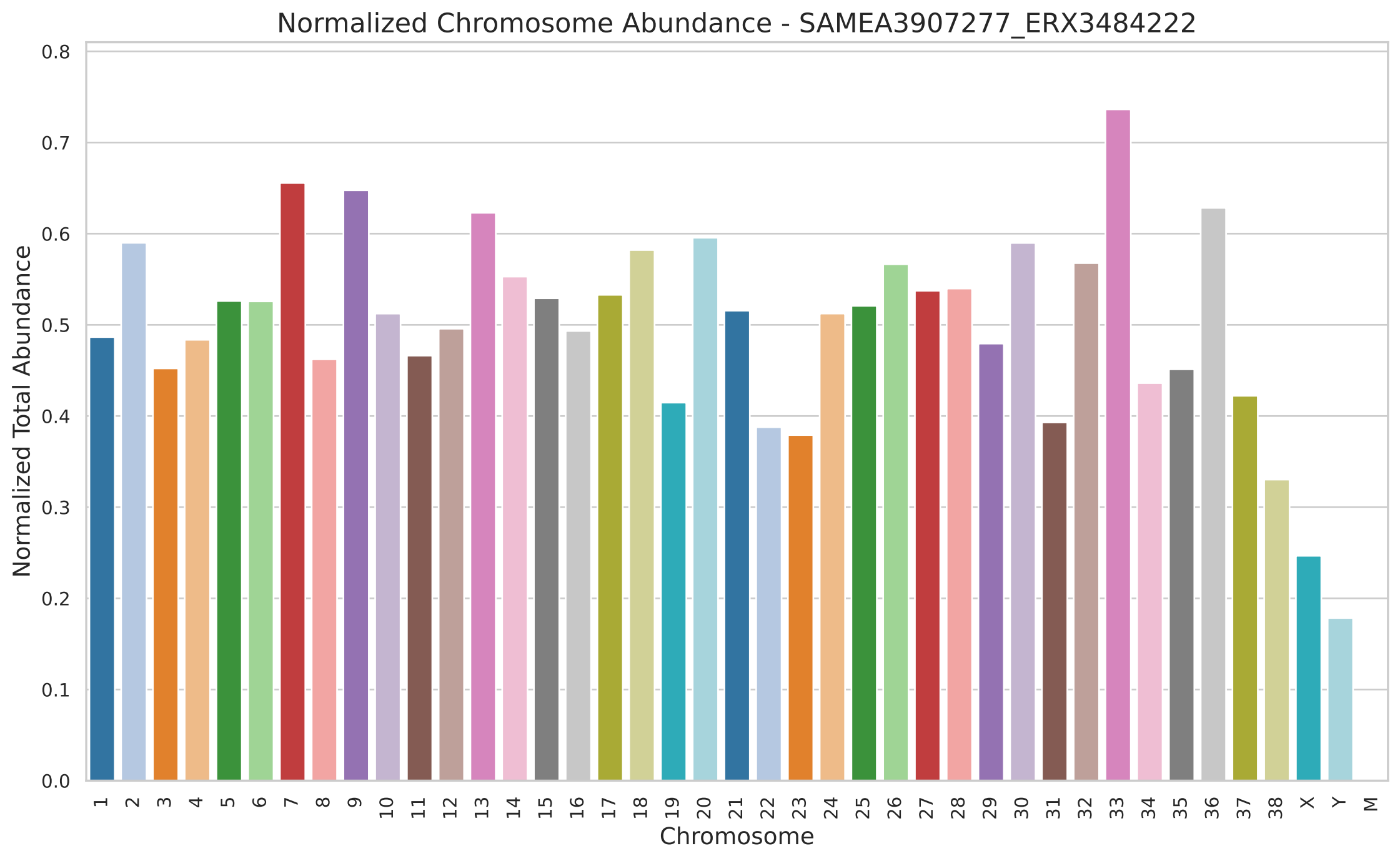

Normalized Chromosome Abundance - SAMEA3910750_ERX3484235
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

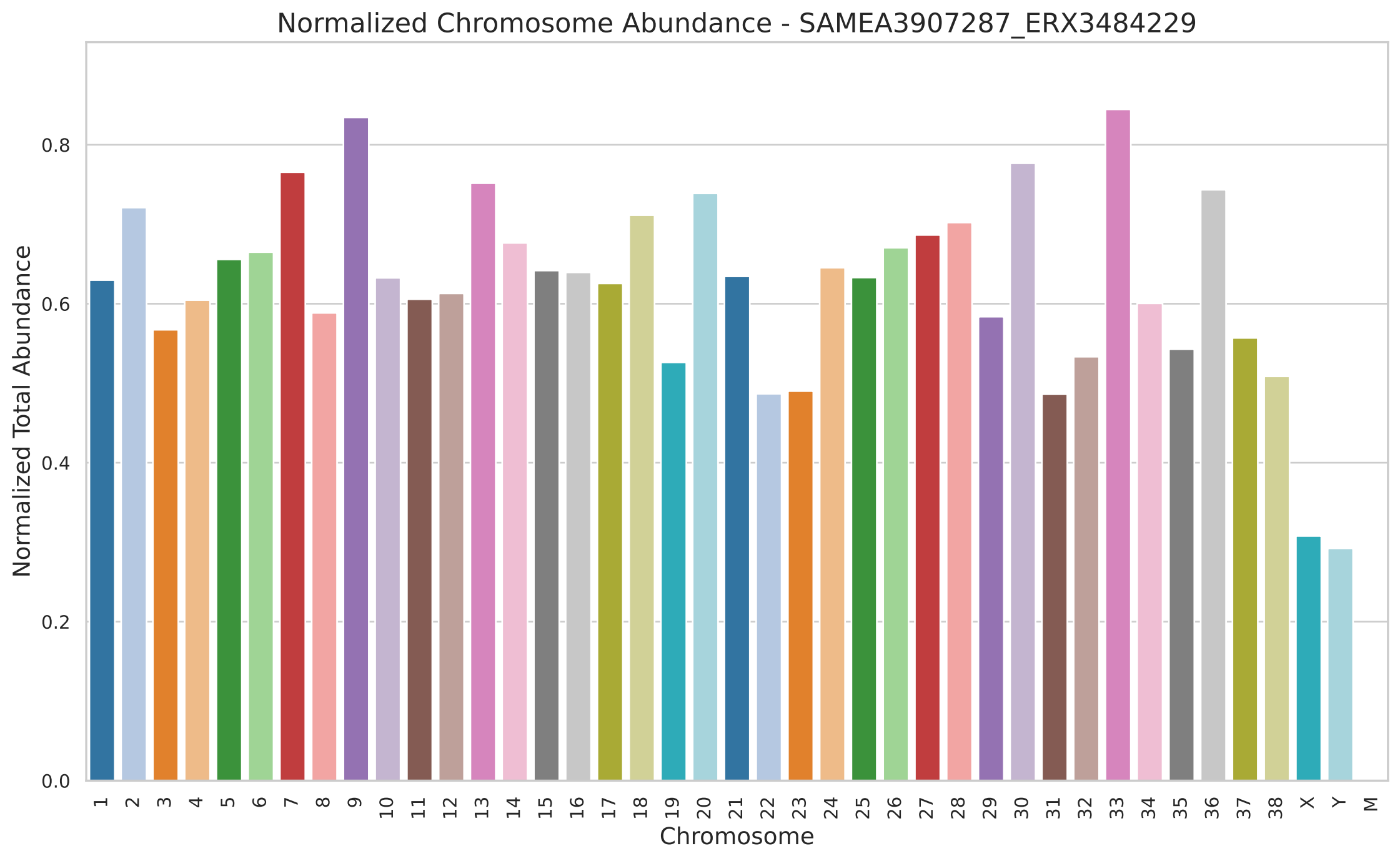

Normalized Chromosome Abundance - SAMEA3906895_ERX3484250
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

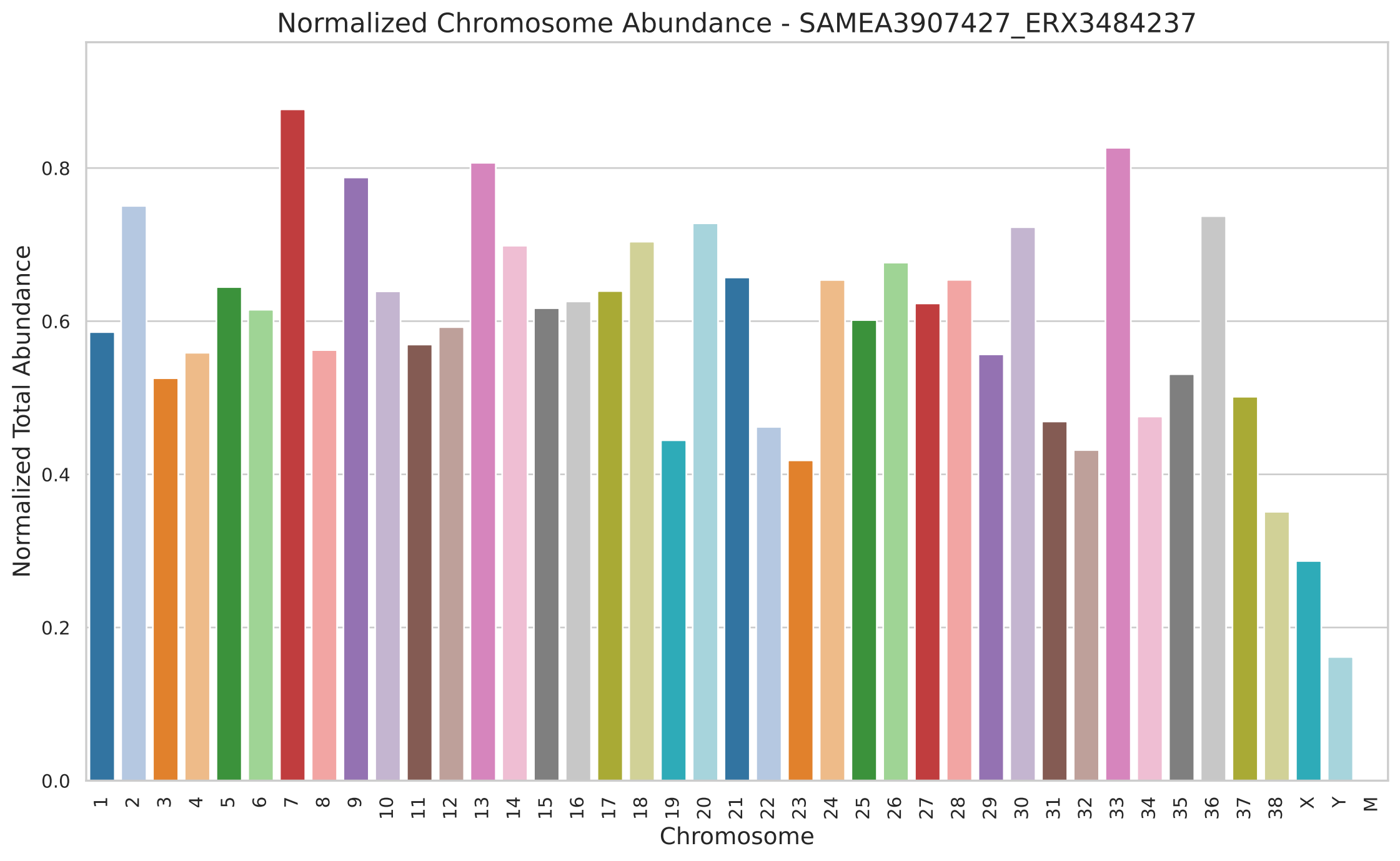

Normalized Chromosome Abundance - SAMEA3907387_ERX3484240
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

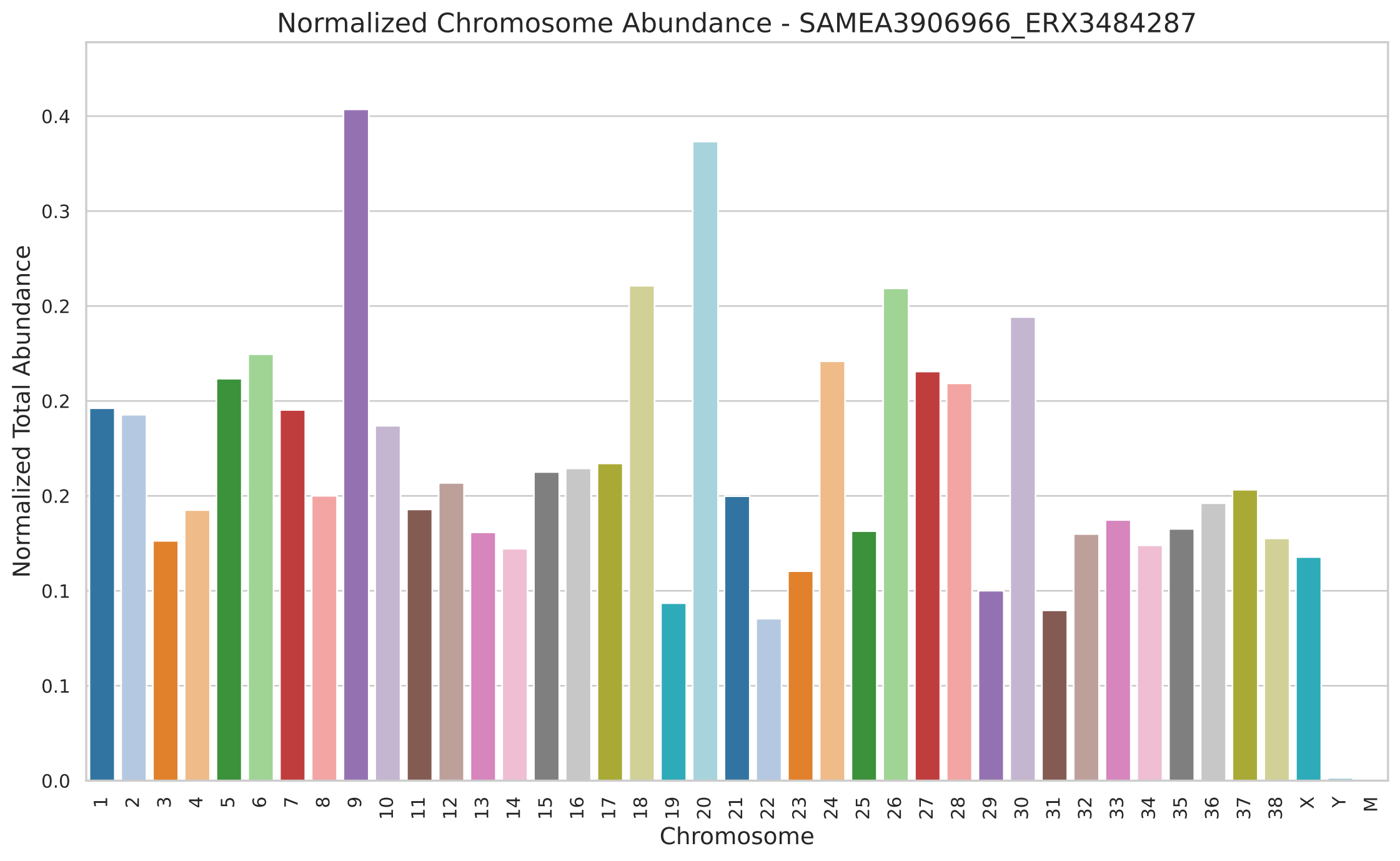

Normalized Chromosome Abundance - SAMEA3906950_ERX3484282
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

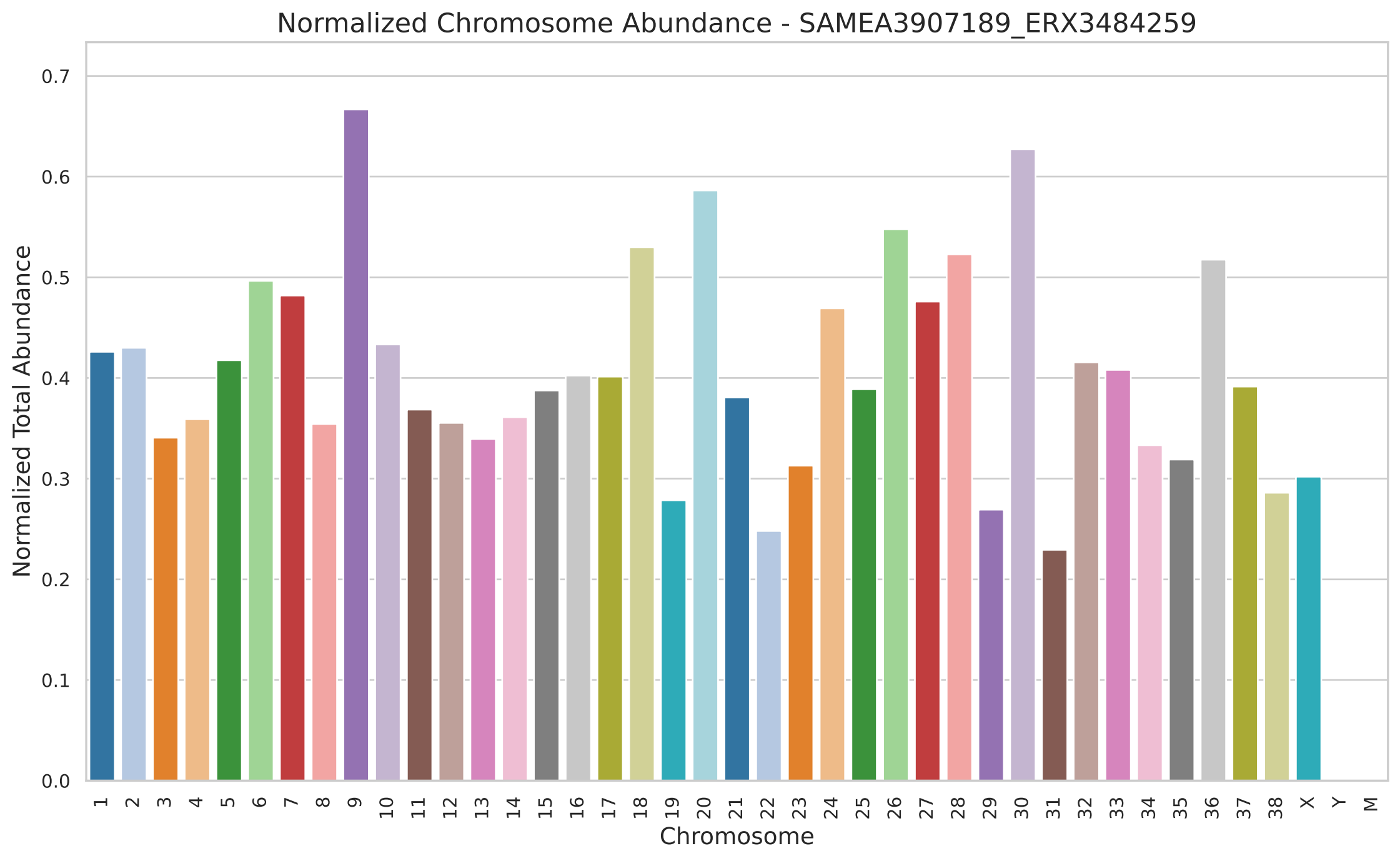

Normalized Chromosome Abundance - SAMEA3907301_ERX3484241
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

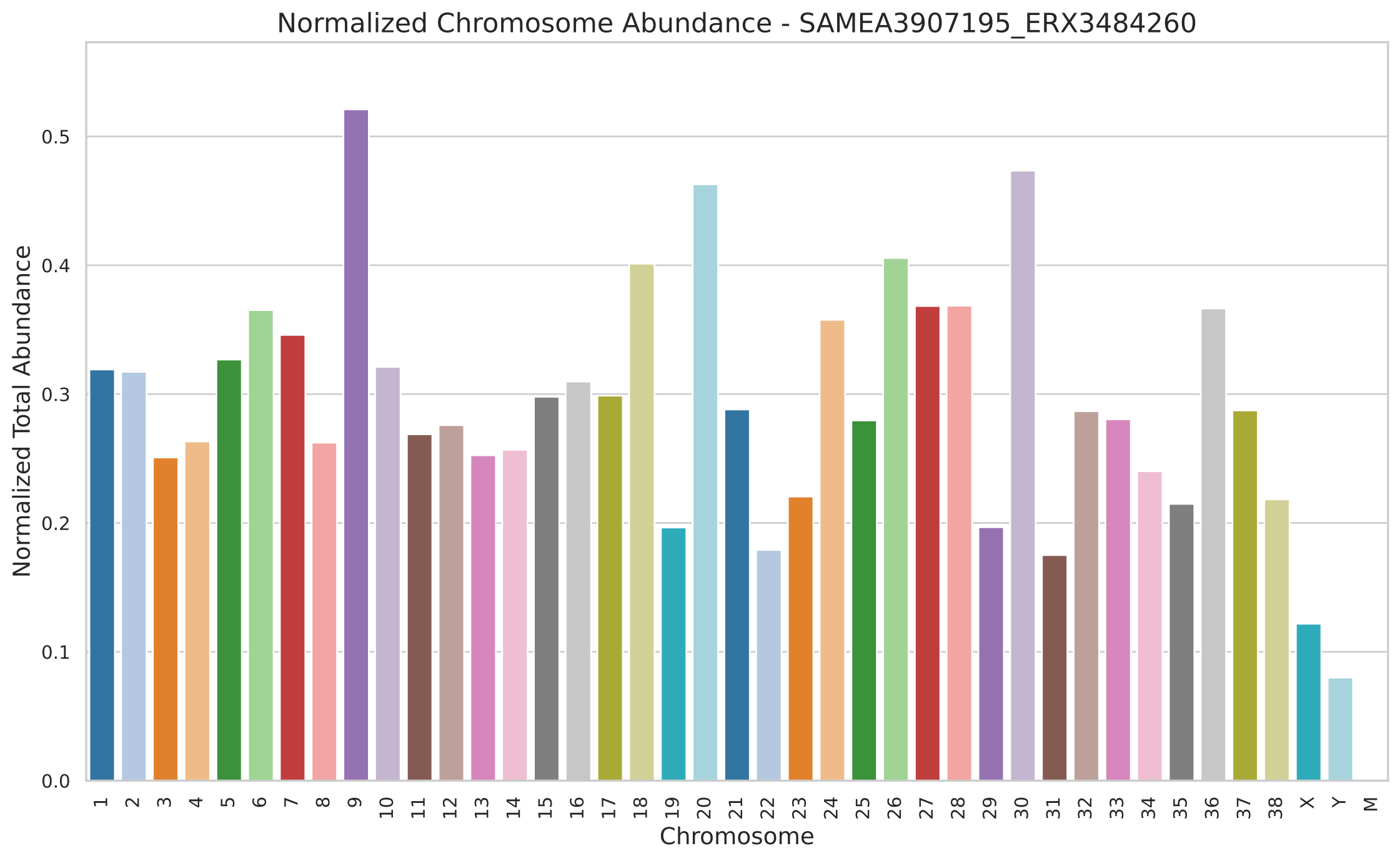

Normalized Chromosome Abundance - SAMEA3907277_ERX3484222
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

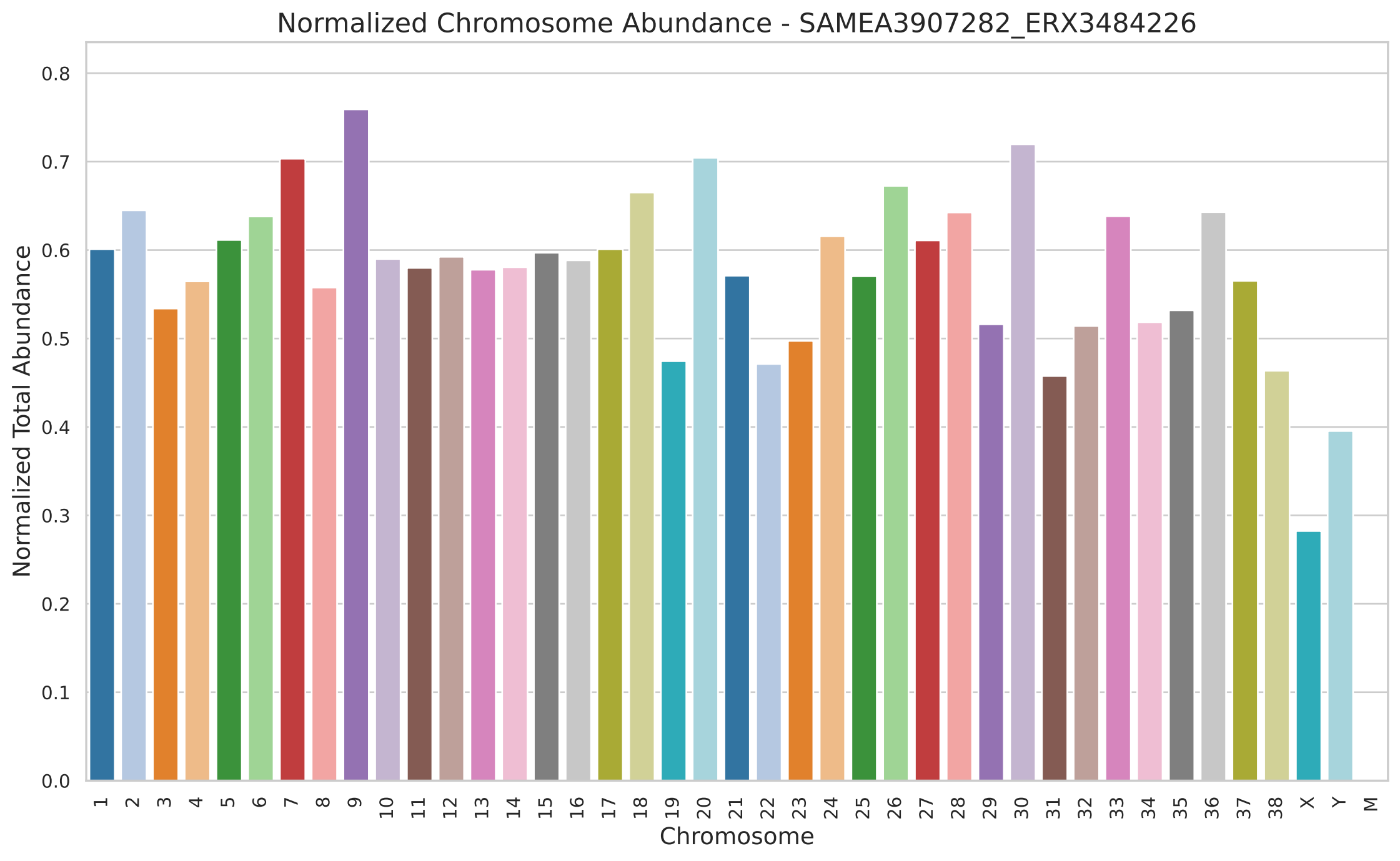

Normalized Chromosome Abundance - SAMEA3907287_ERX3484229
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

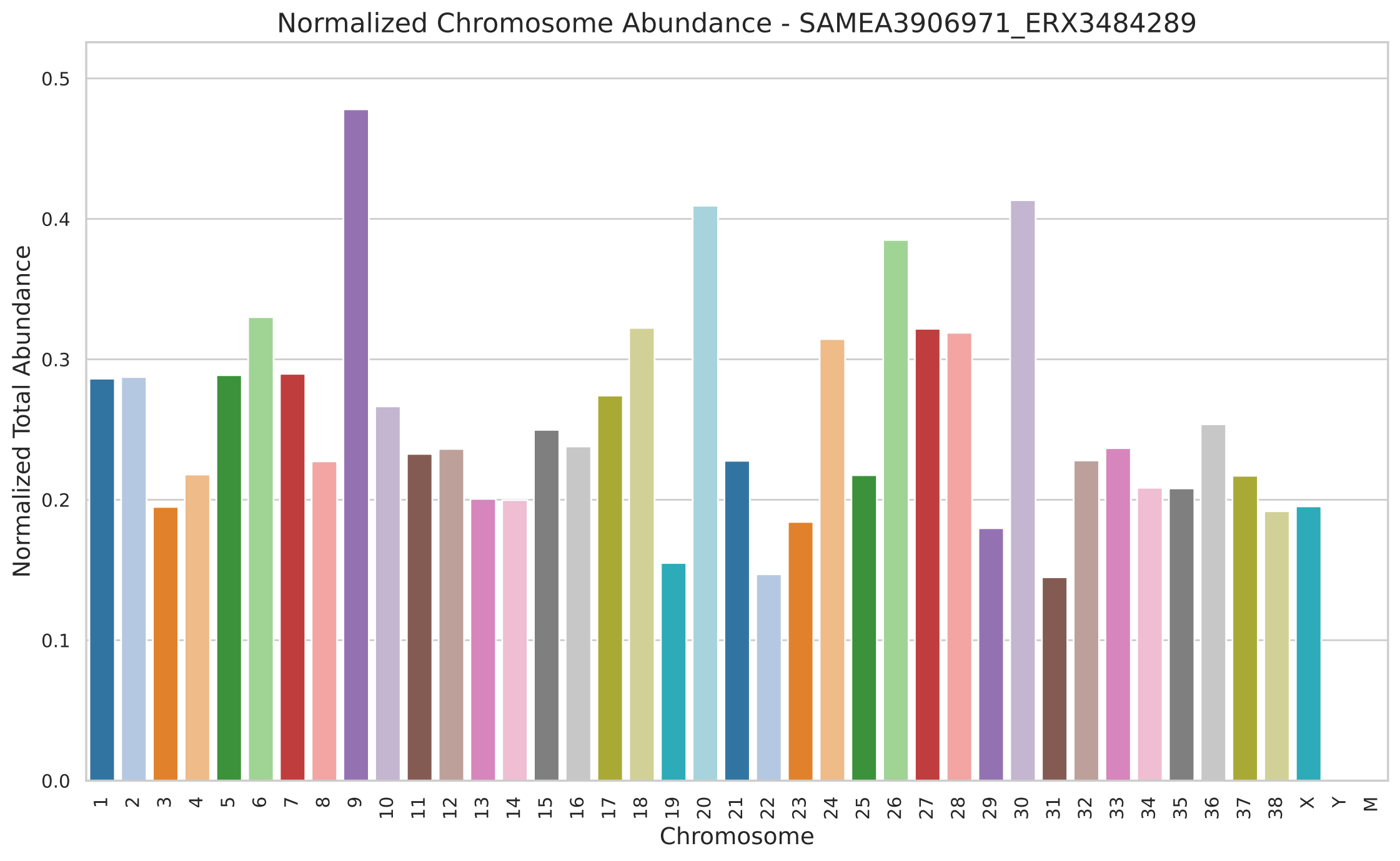

Normalized Chromosome Abundance - SAMEA3907427_ERX3484237
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

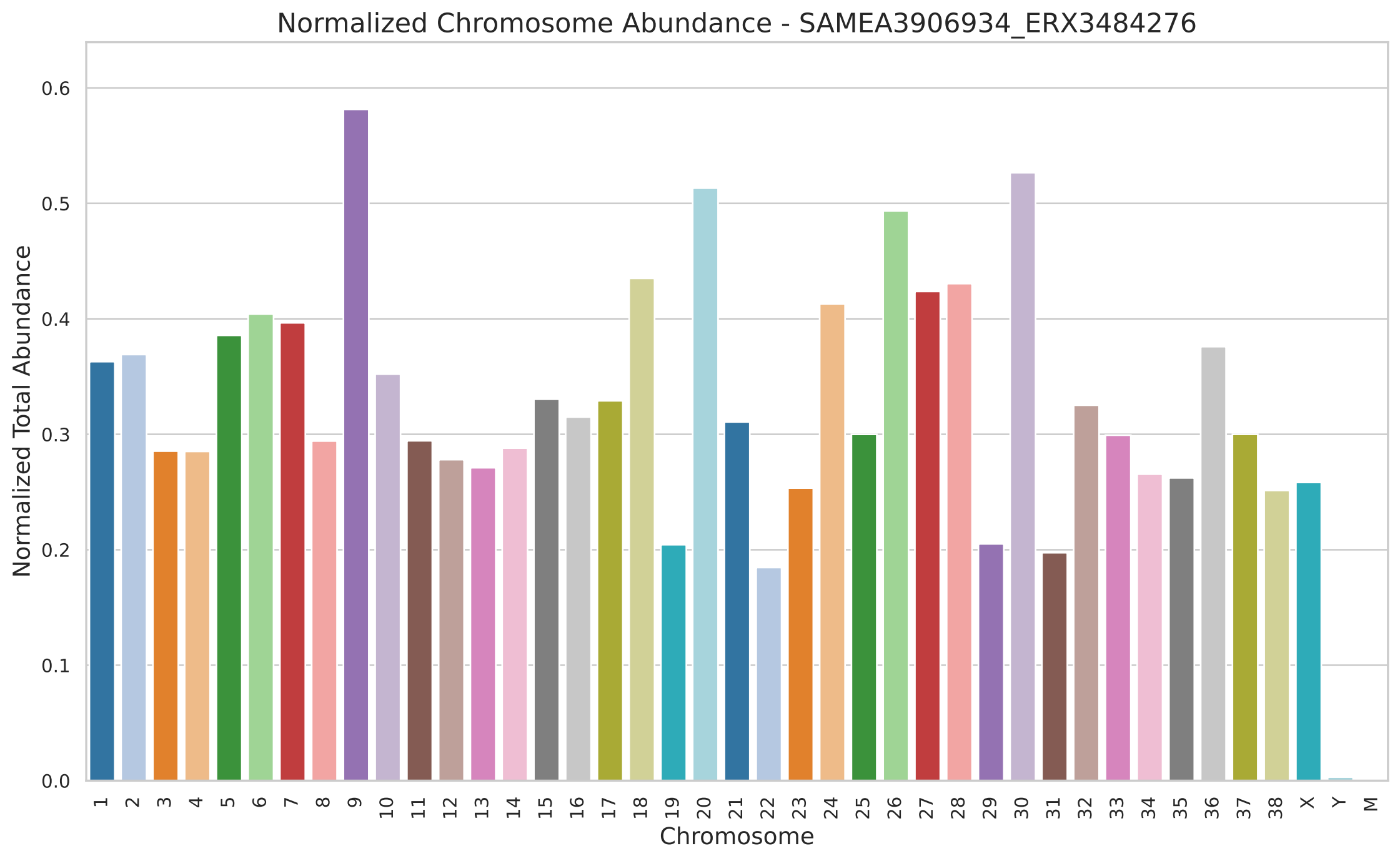

Normalized Chromosome Abundance - SAMEA3906966_ERX3484287
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

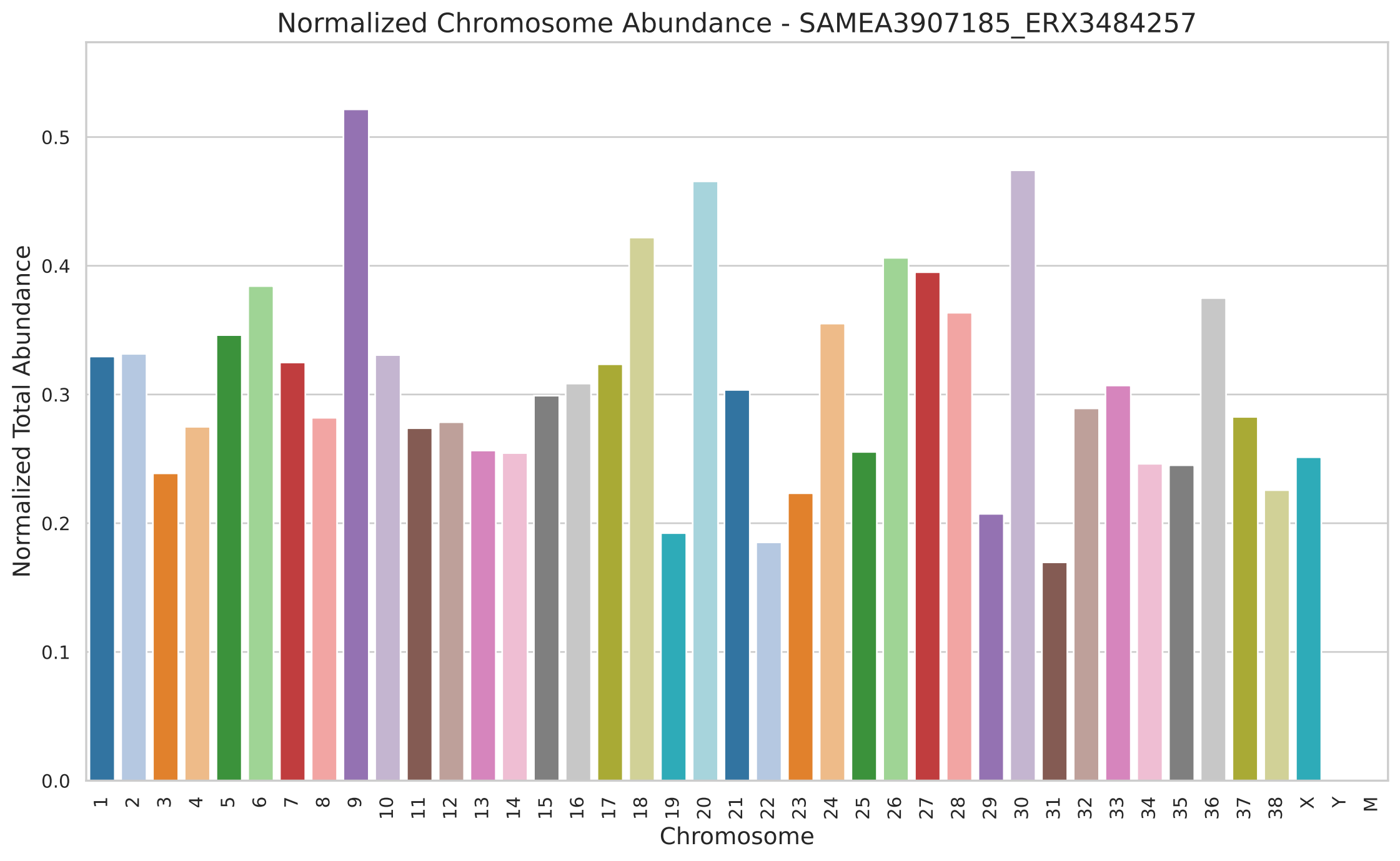

Normalized Chromosome Abundance - SAMEA3907189_ERX3484259
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

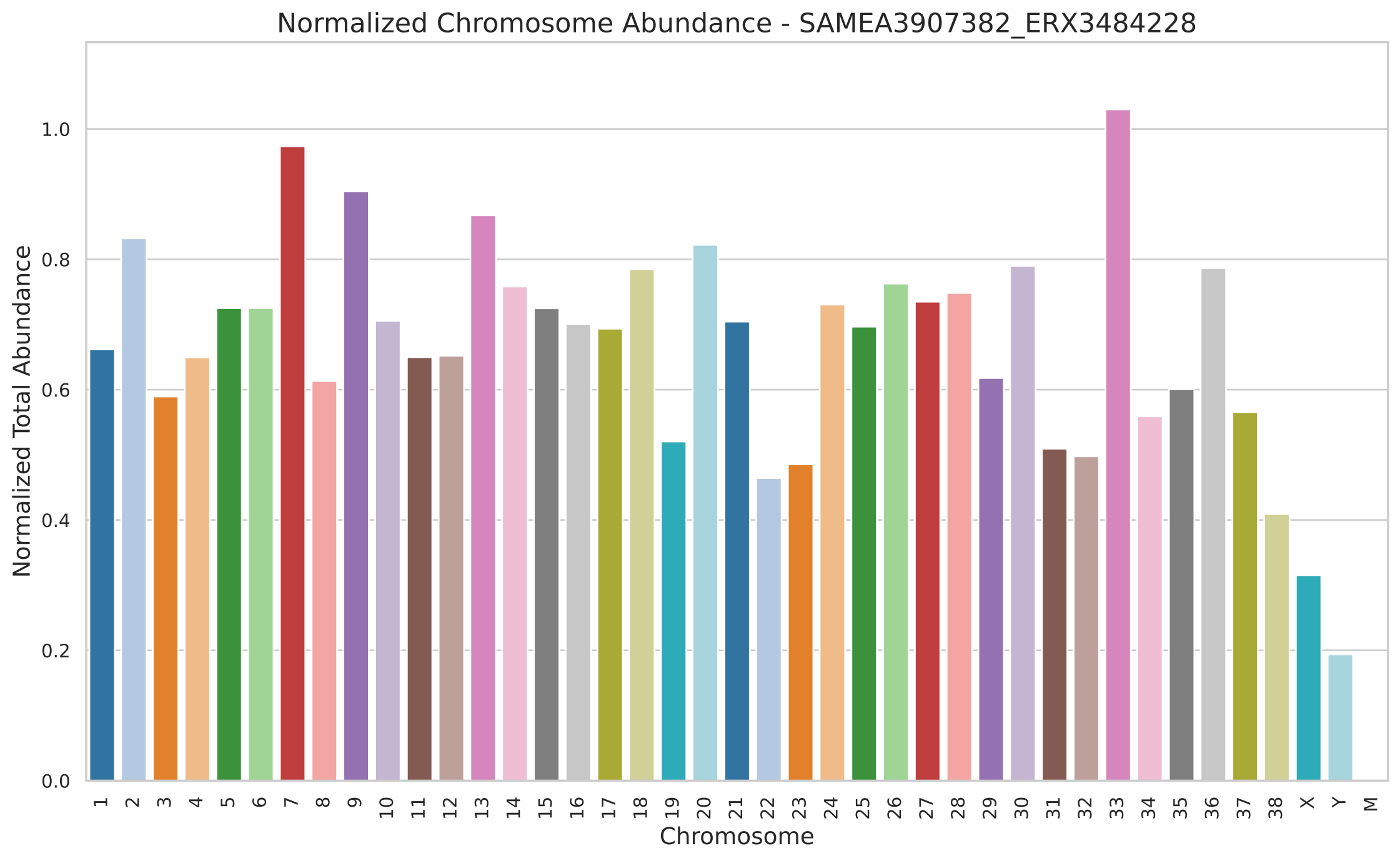

Normalized Chromosome Abundance - SAMEA3907195_ERX3484260
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

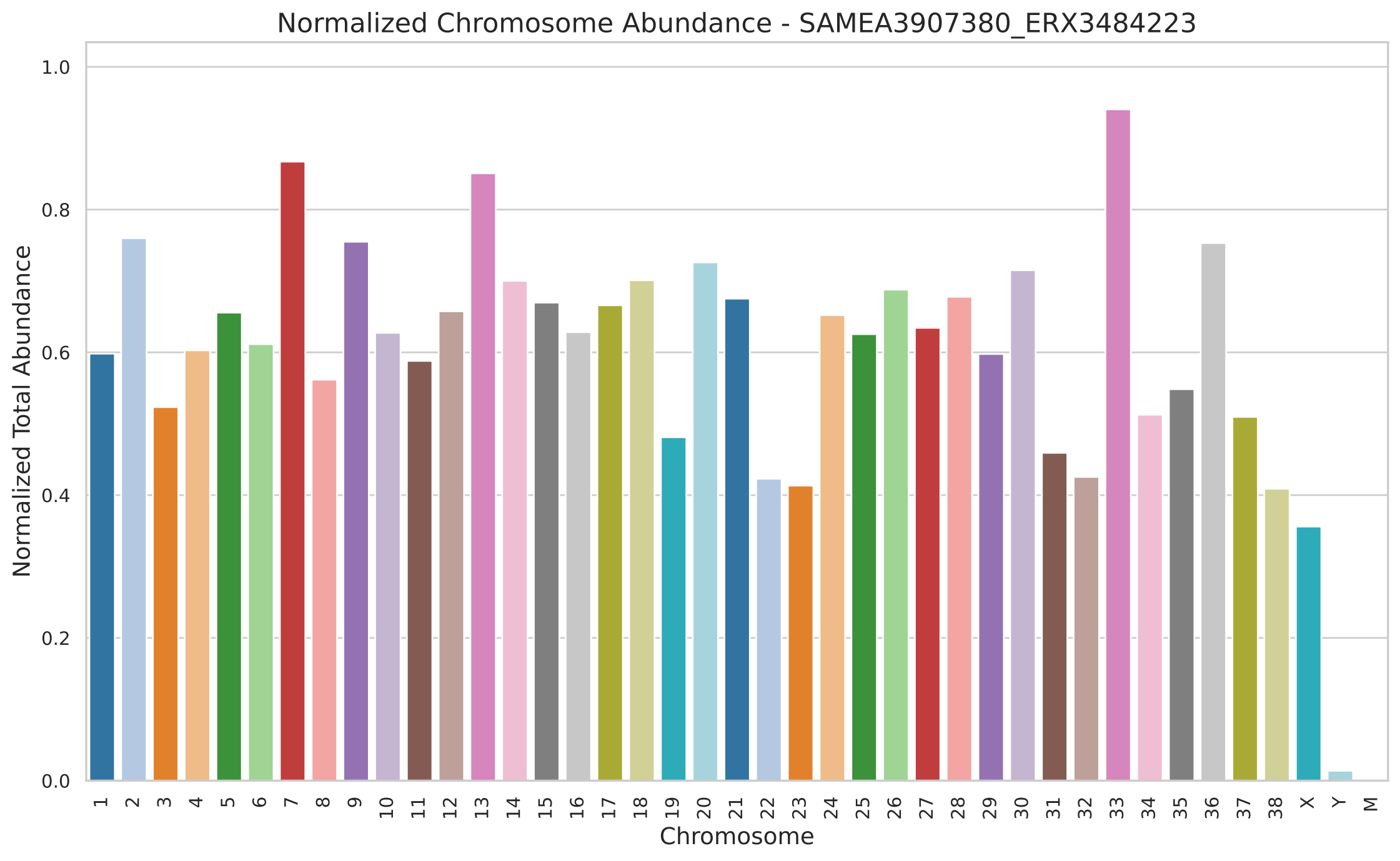

Normalized Chromosome Abundance - SAMEA3907282_ERX3484226
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

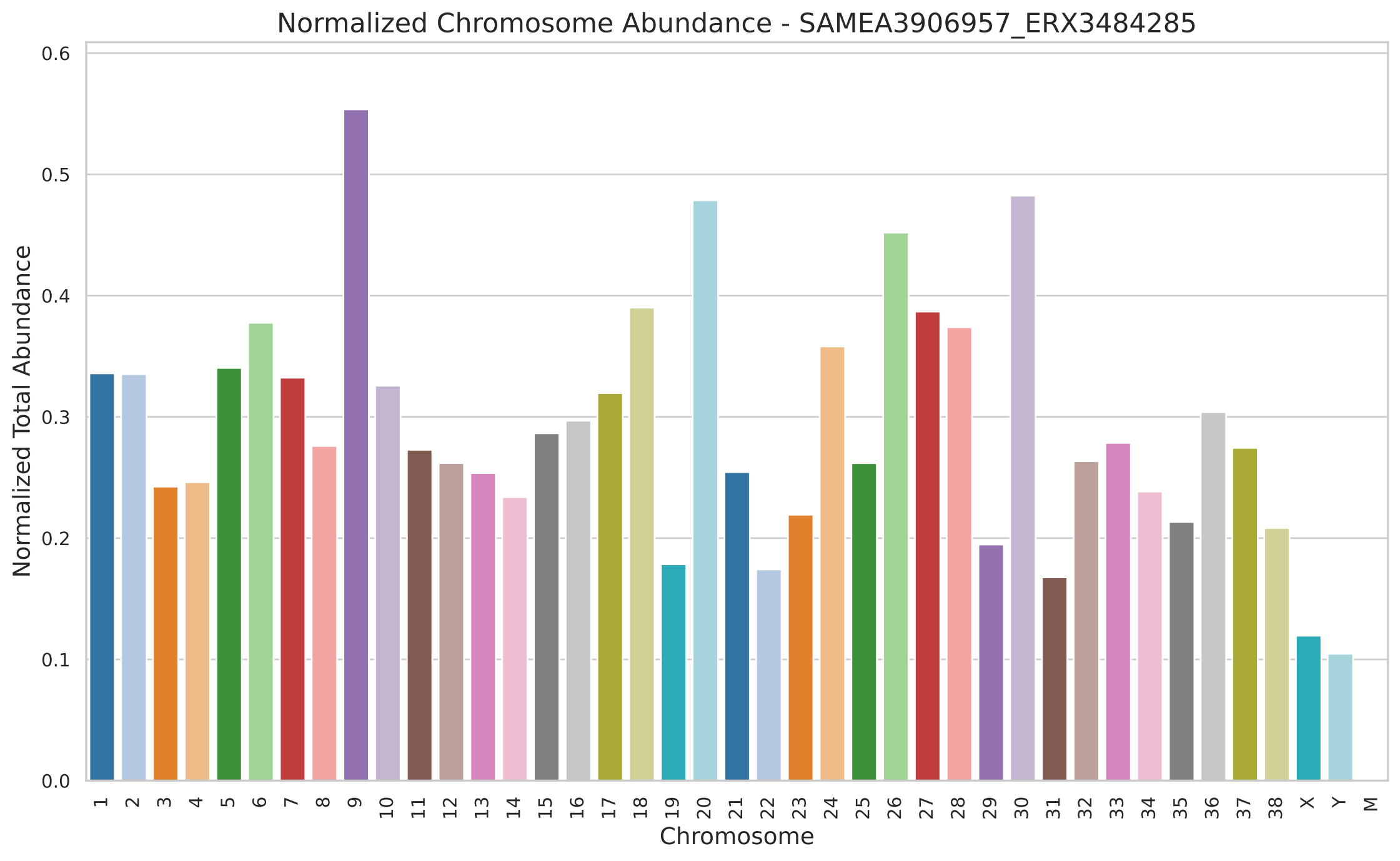

Normalized Chromosome Abundance - SAMEA3906971_ERX3484289
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

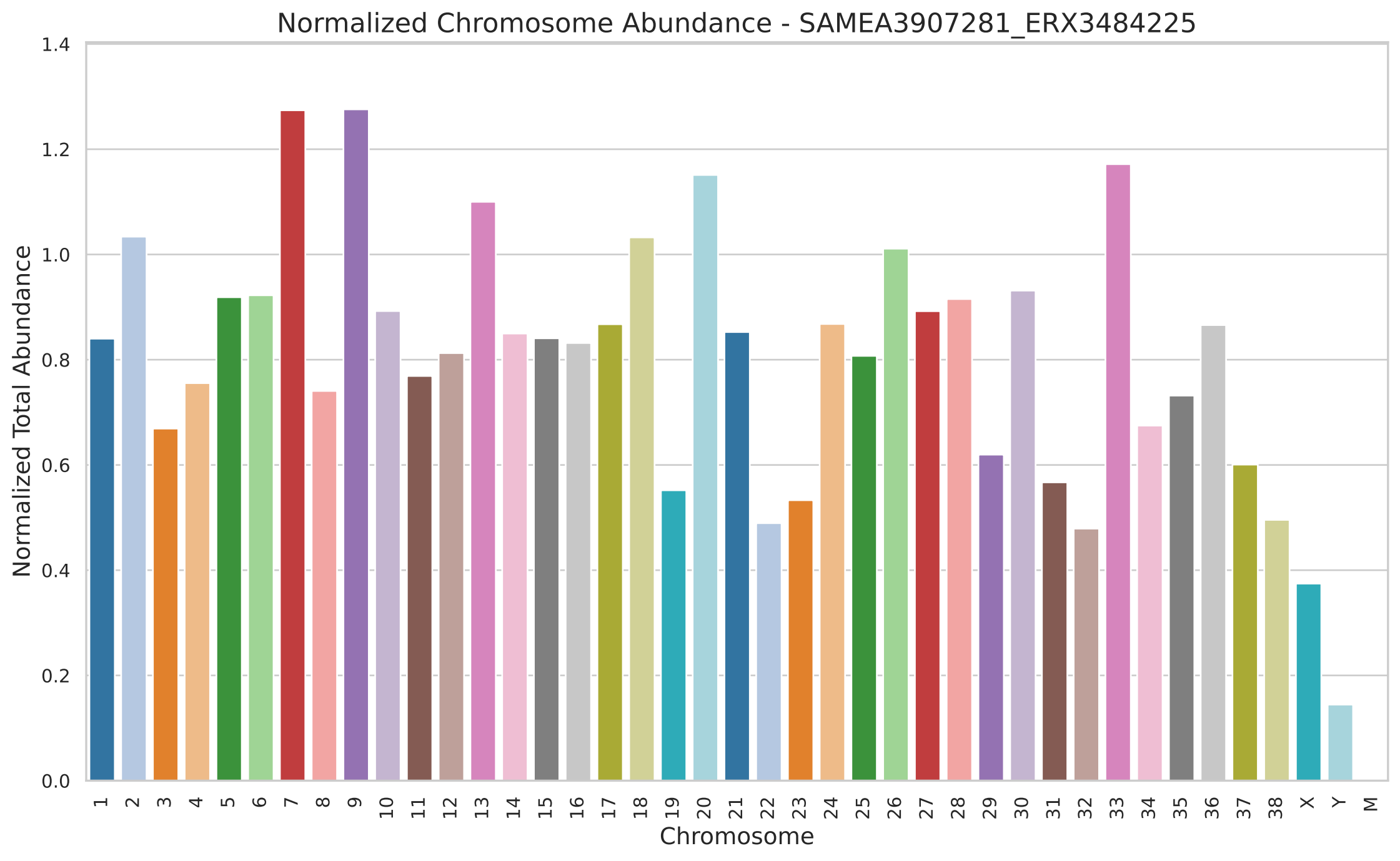

Normalized Chromosome Abundance - SAMEA3906934_ERX3484276
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

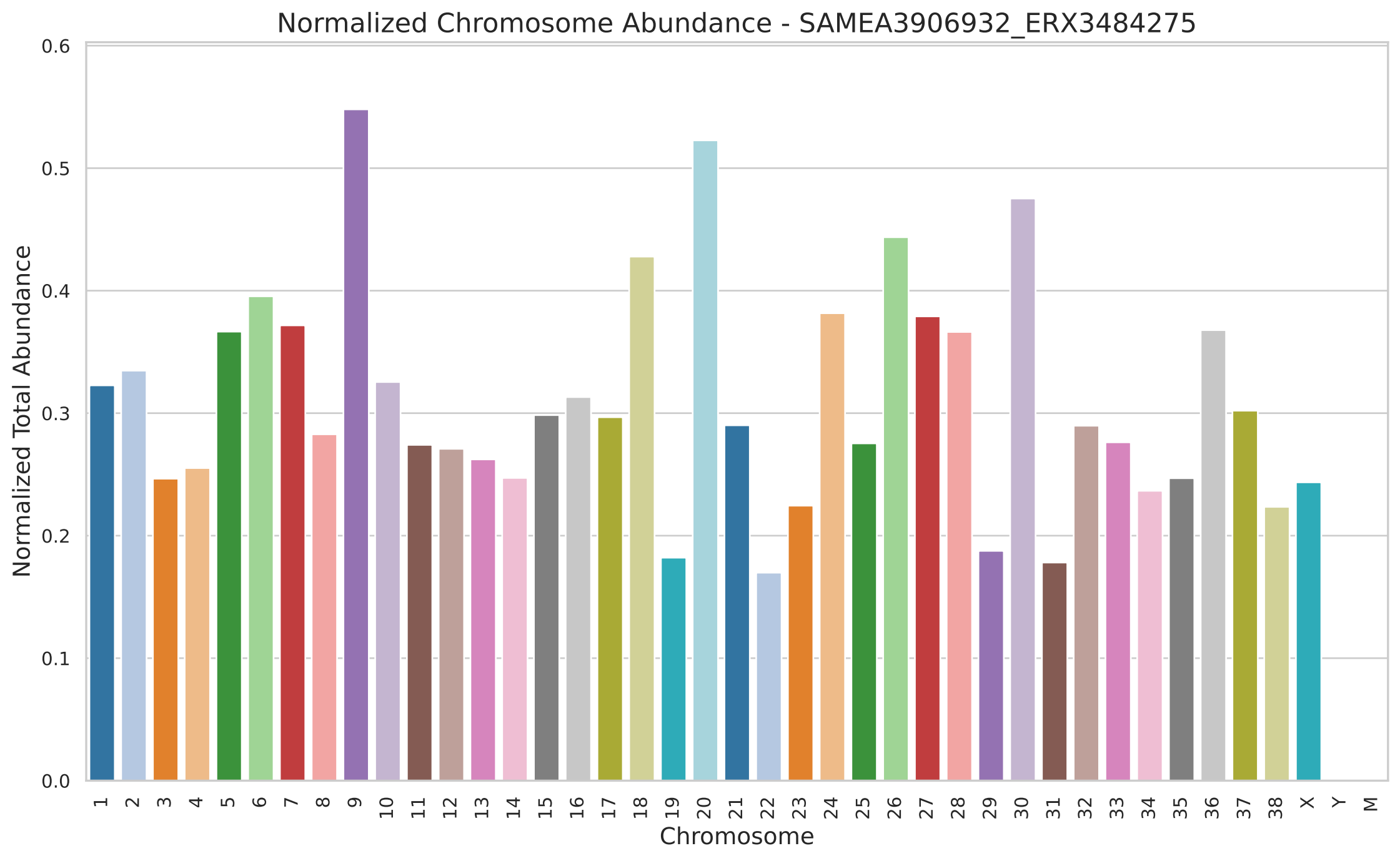

Normalized Chromosome Abundance - SAMEA3907185_ERX3484257
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

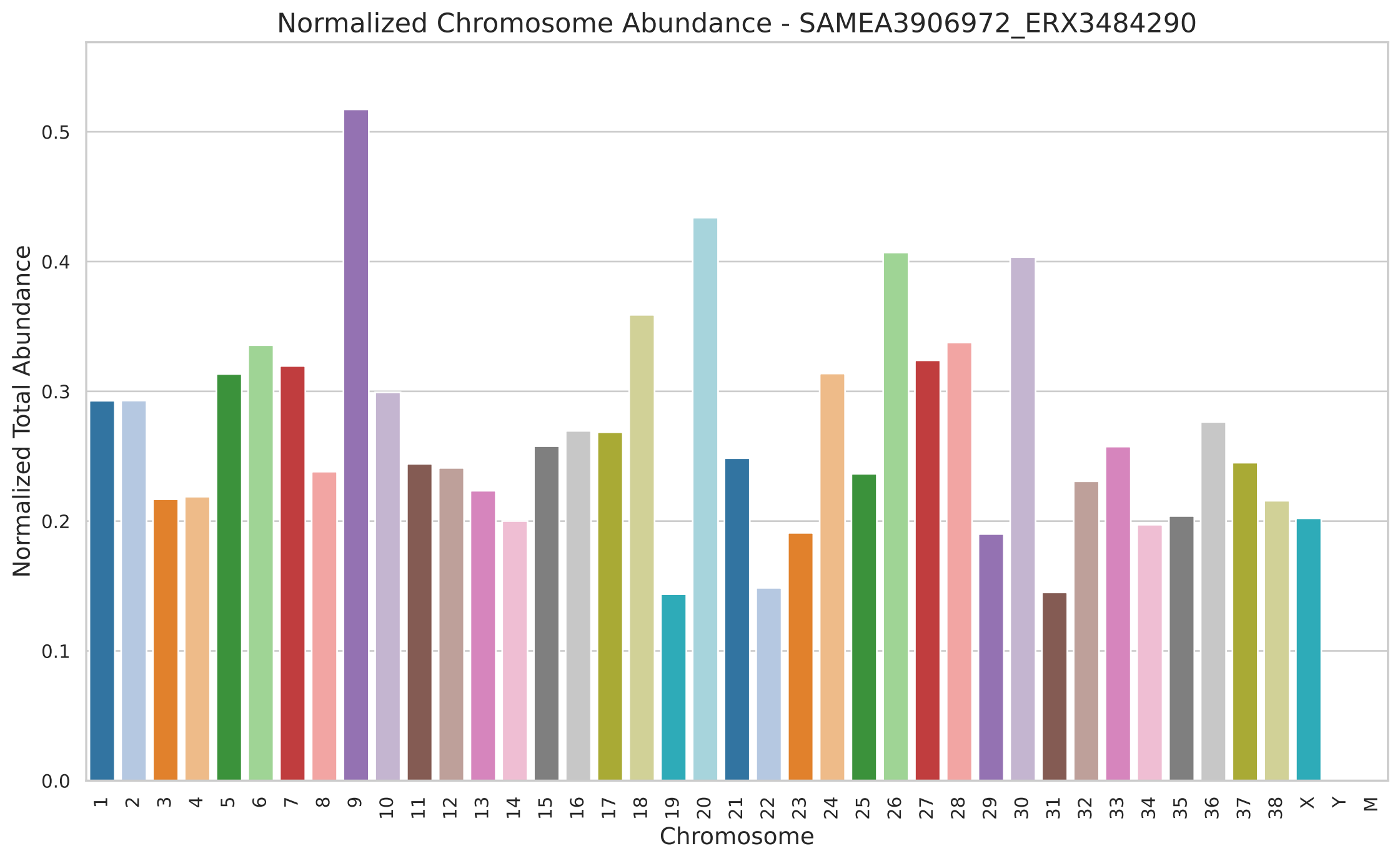

Normalized Chromosome Abundance - SAMEA3907382_ERX3484228
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

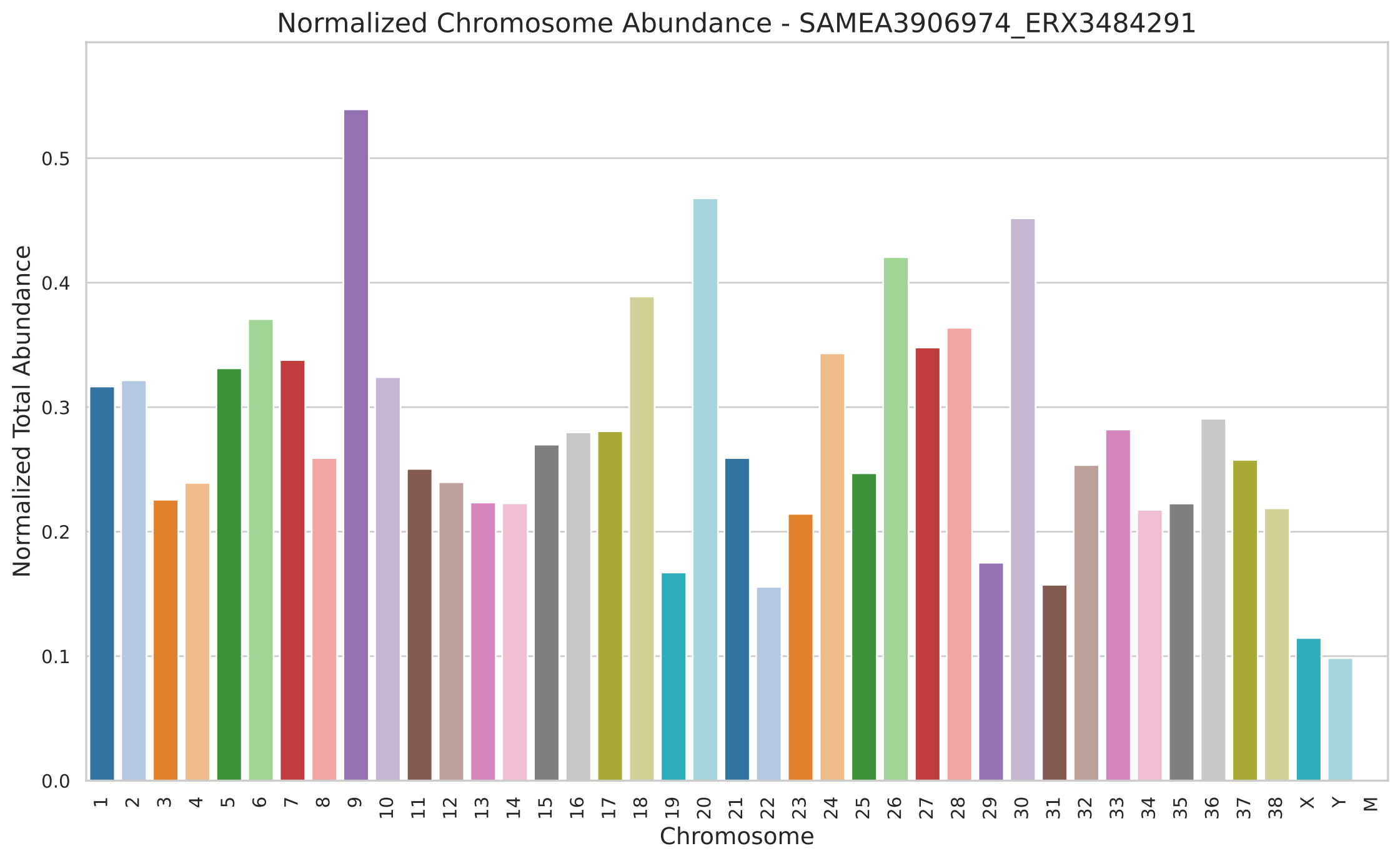

Normalized Chromosome Abundance - SAMEA3907380_ERX3484223
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

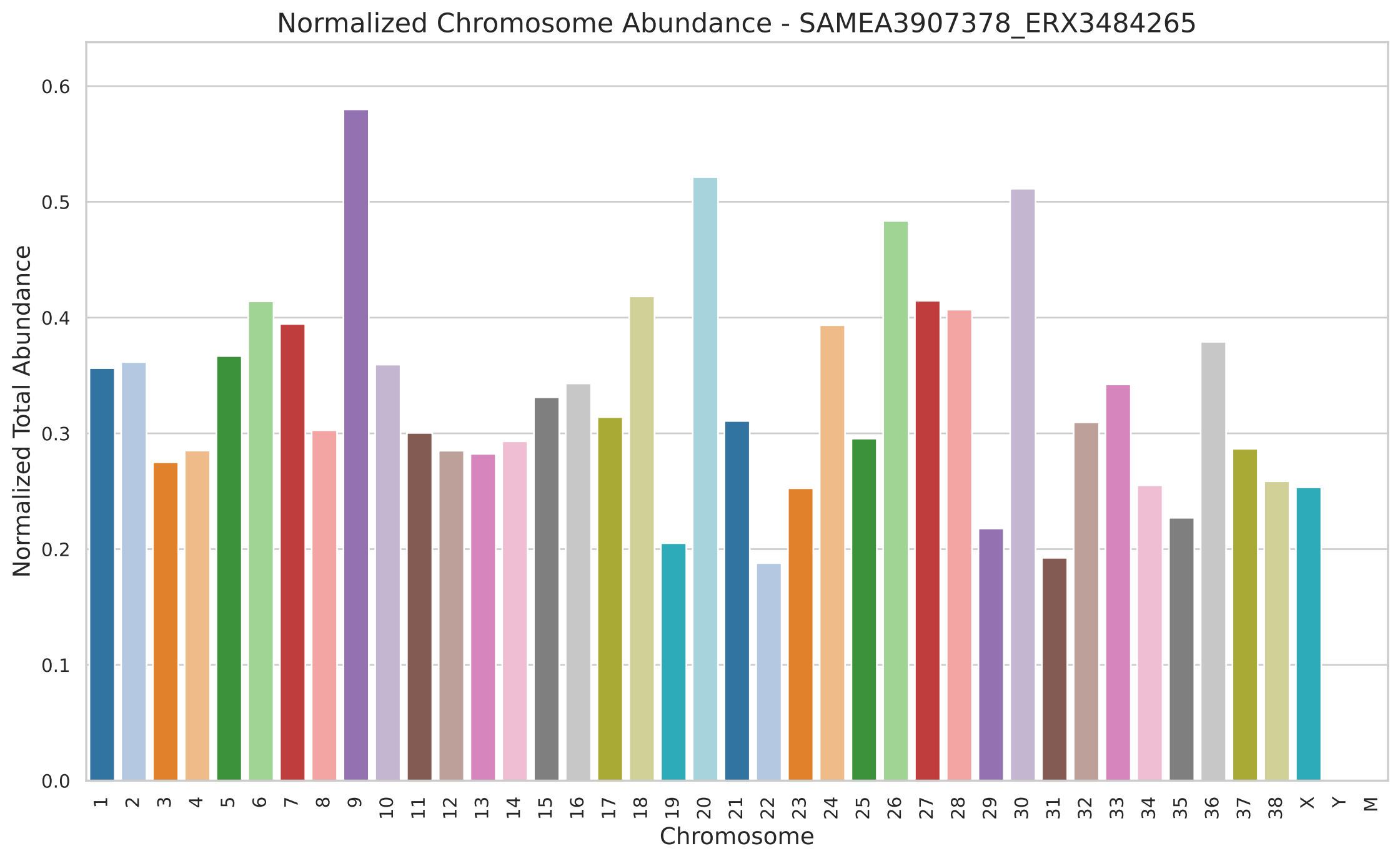

Normalized Chromosome Abundance - SAMEA3906957_ERX3484285
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

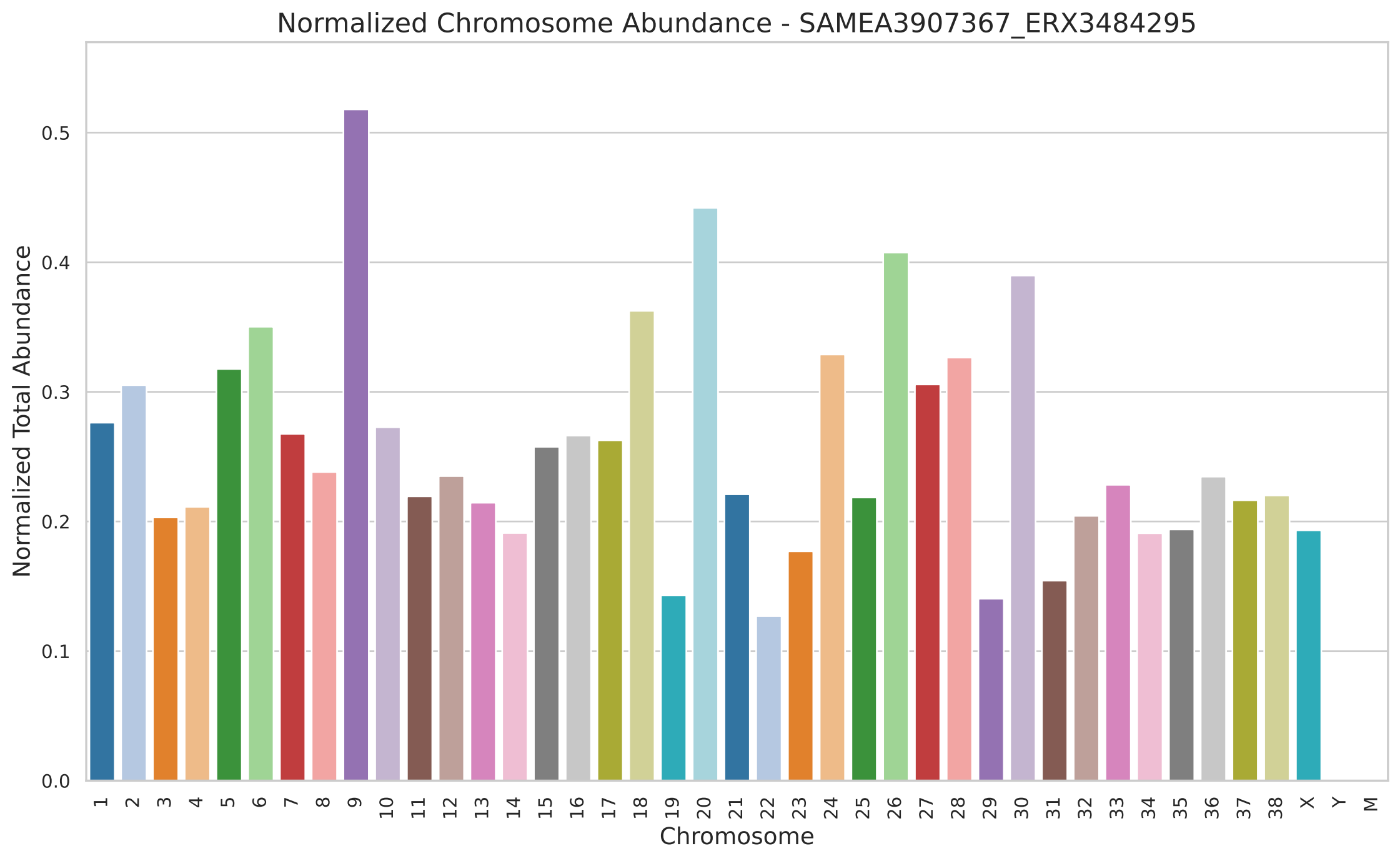

Normalized Chromosome Abundance - SAMEA3907281_ERX3484225
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

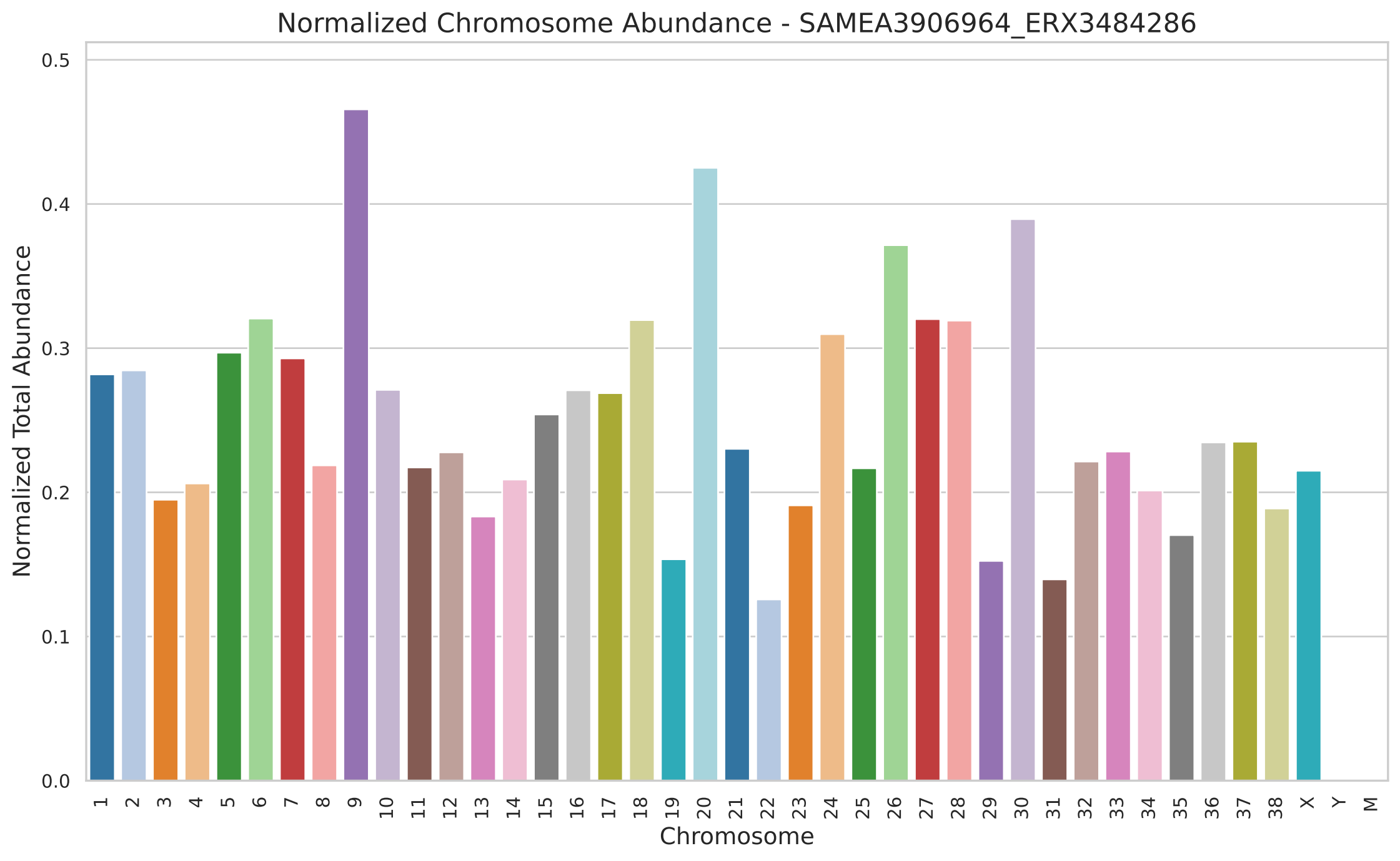

Normalized Chromosome Abundance - SAMEA3906932_ERX3484275
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

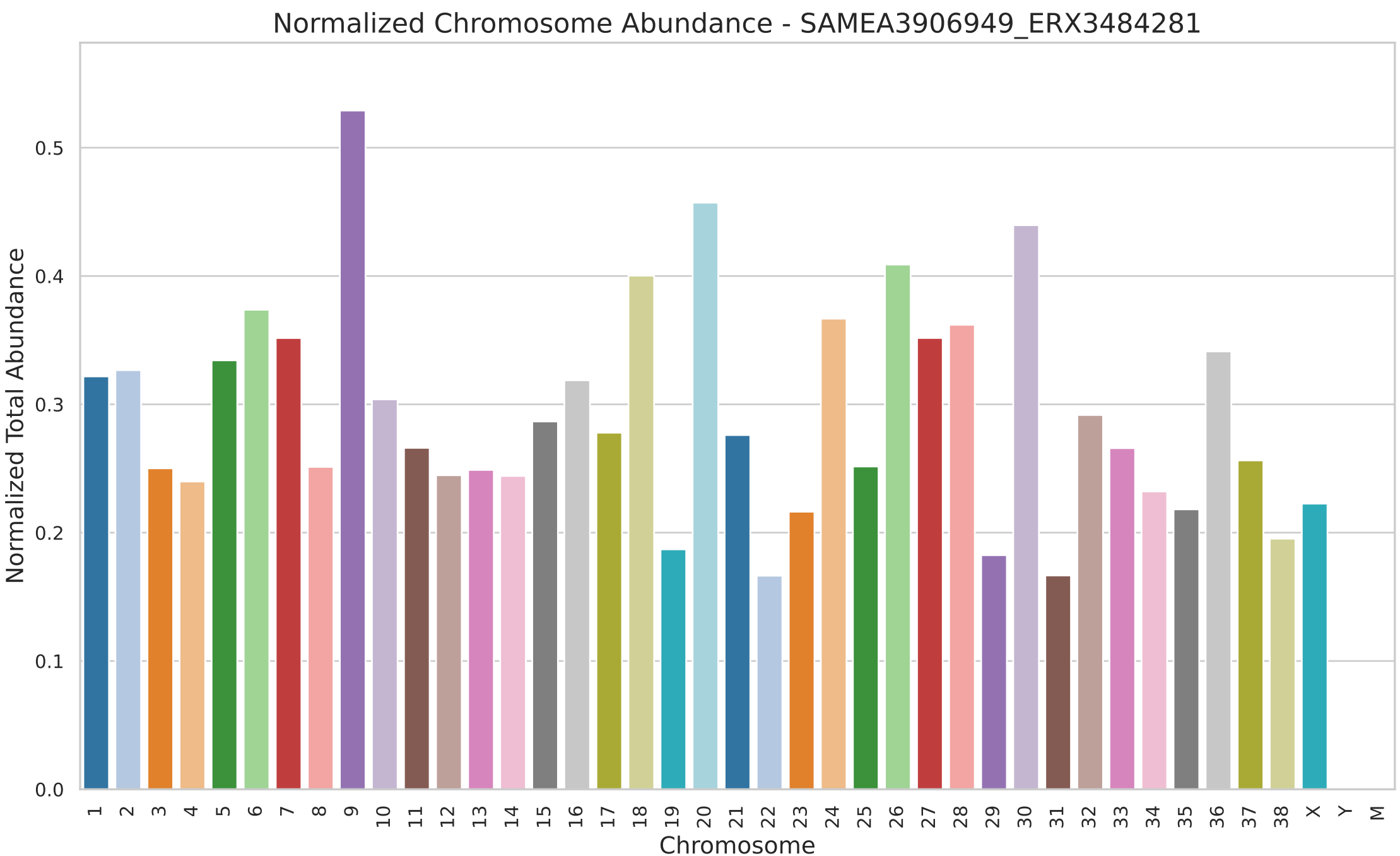

Normalized Chromosome Abundance - SAMEA3906972_ERX3484290
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

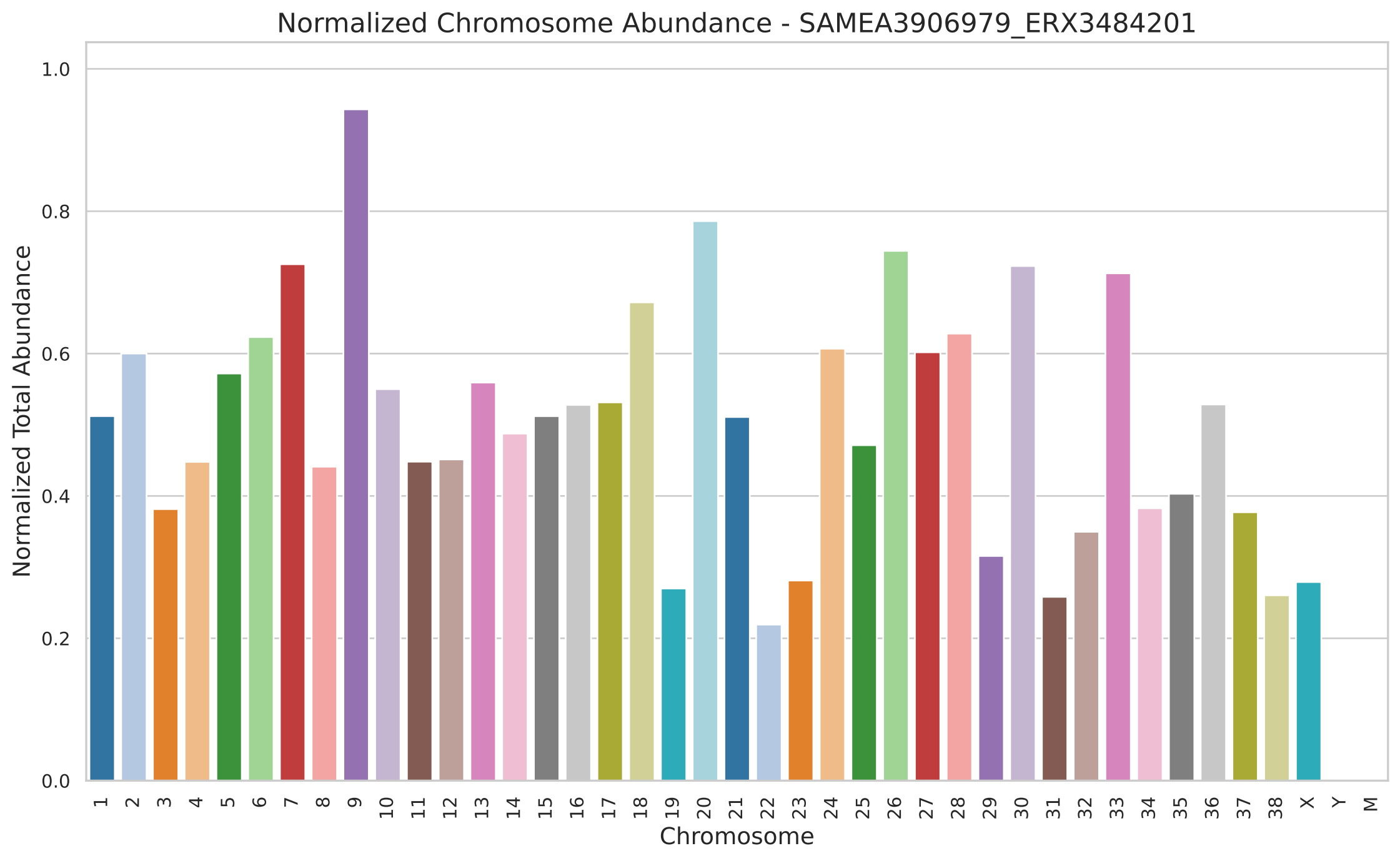

Normalized Chromosome Abundance - SAMEA3906974_ERX3484291
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

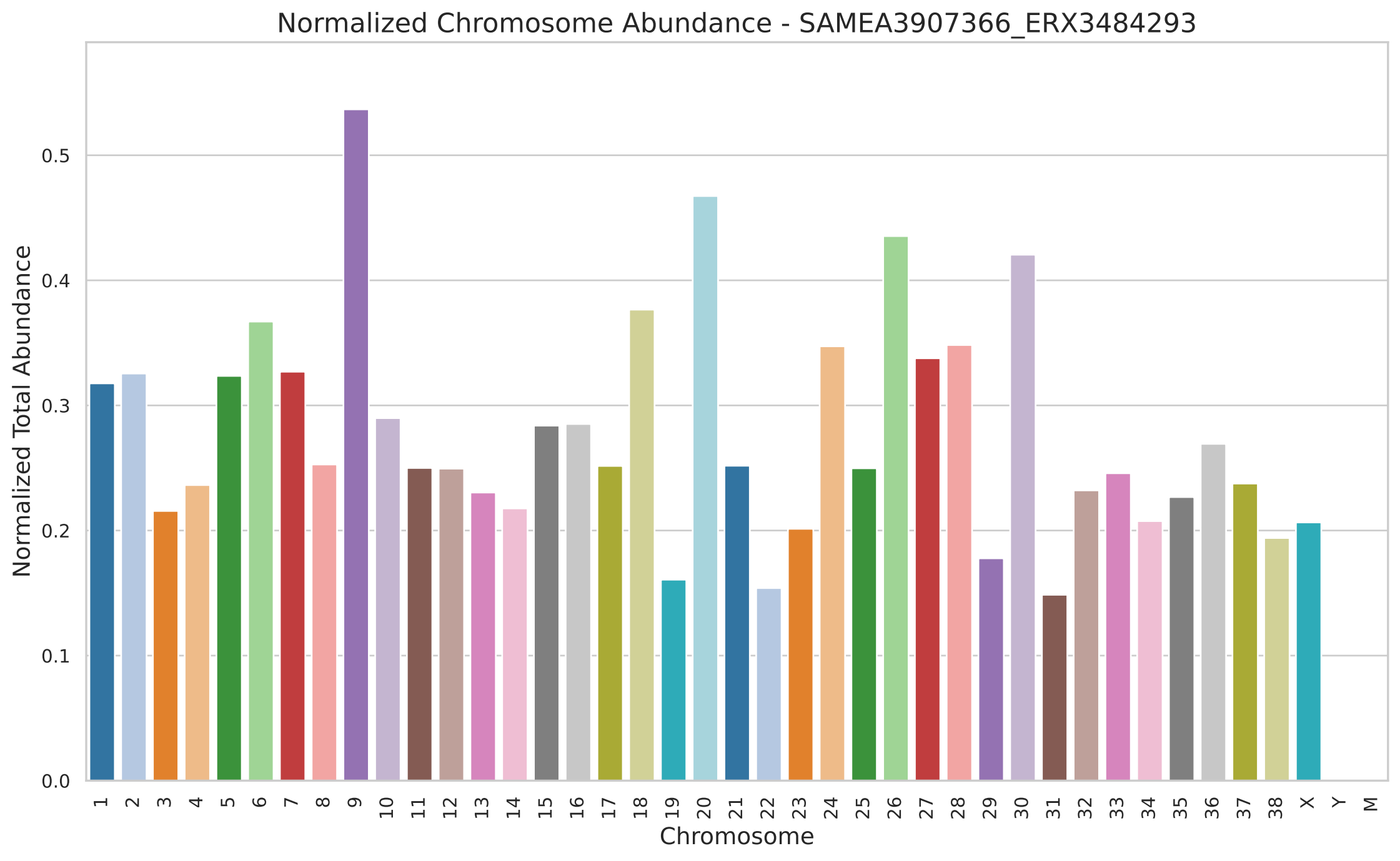

Normalized Chromosome Abundance - SAMEA3907378_ERX3484265
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

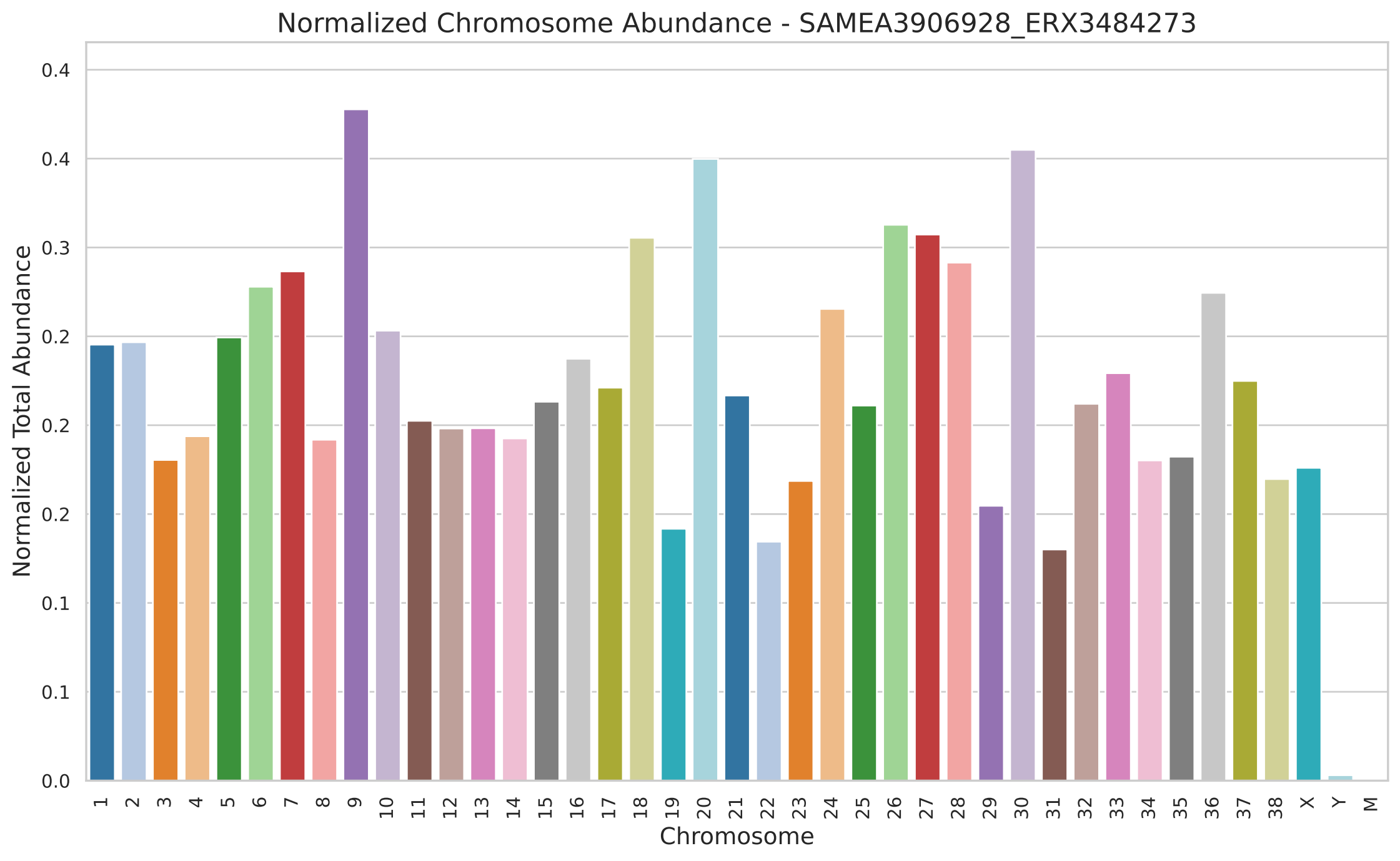

Normalized Chromosome Abundance - SAMEA3907367_ERX3484295
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

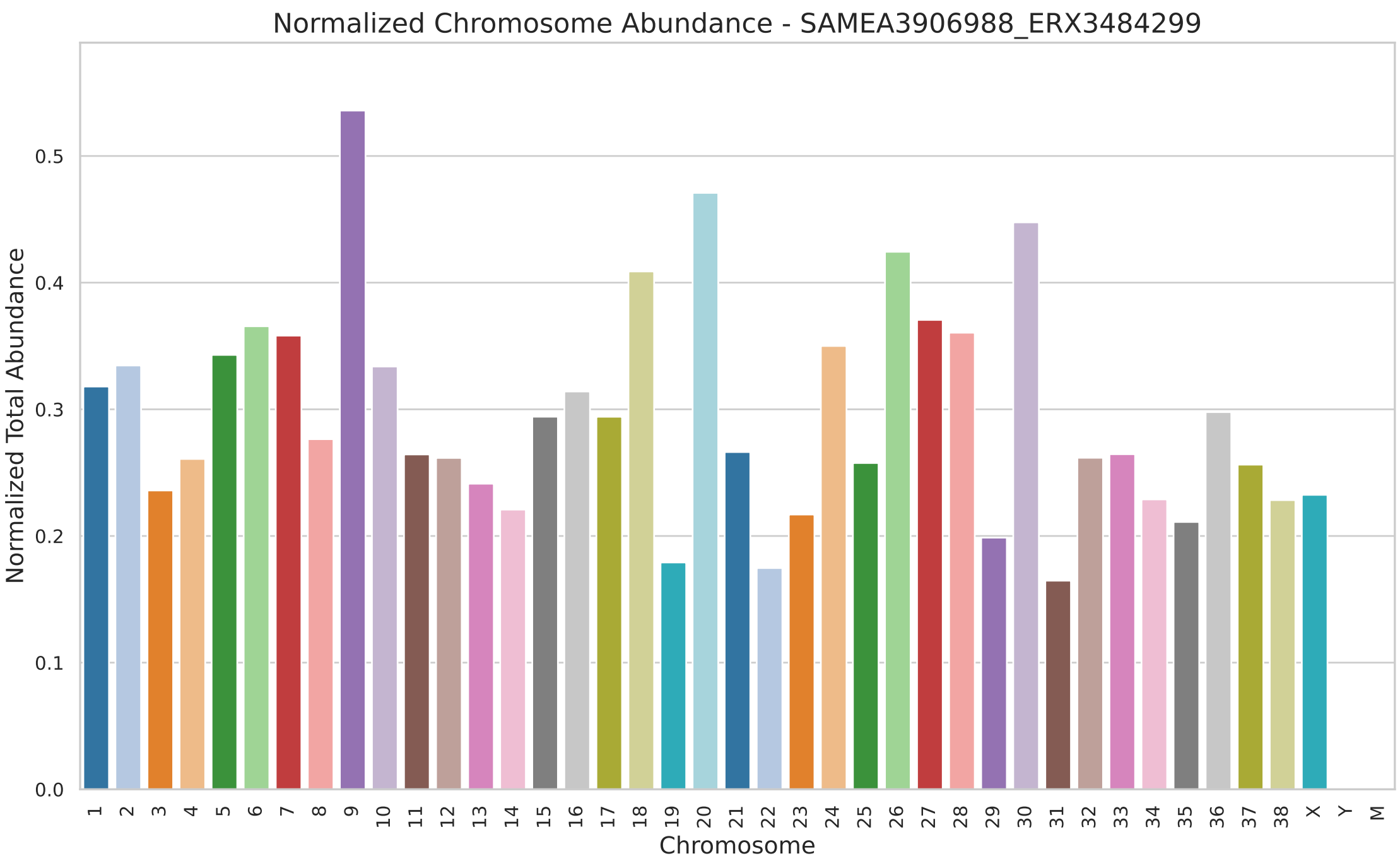

Normalized Chromosome Abundance - SAMEA3906964_ERX3484286
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

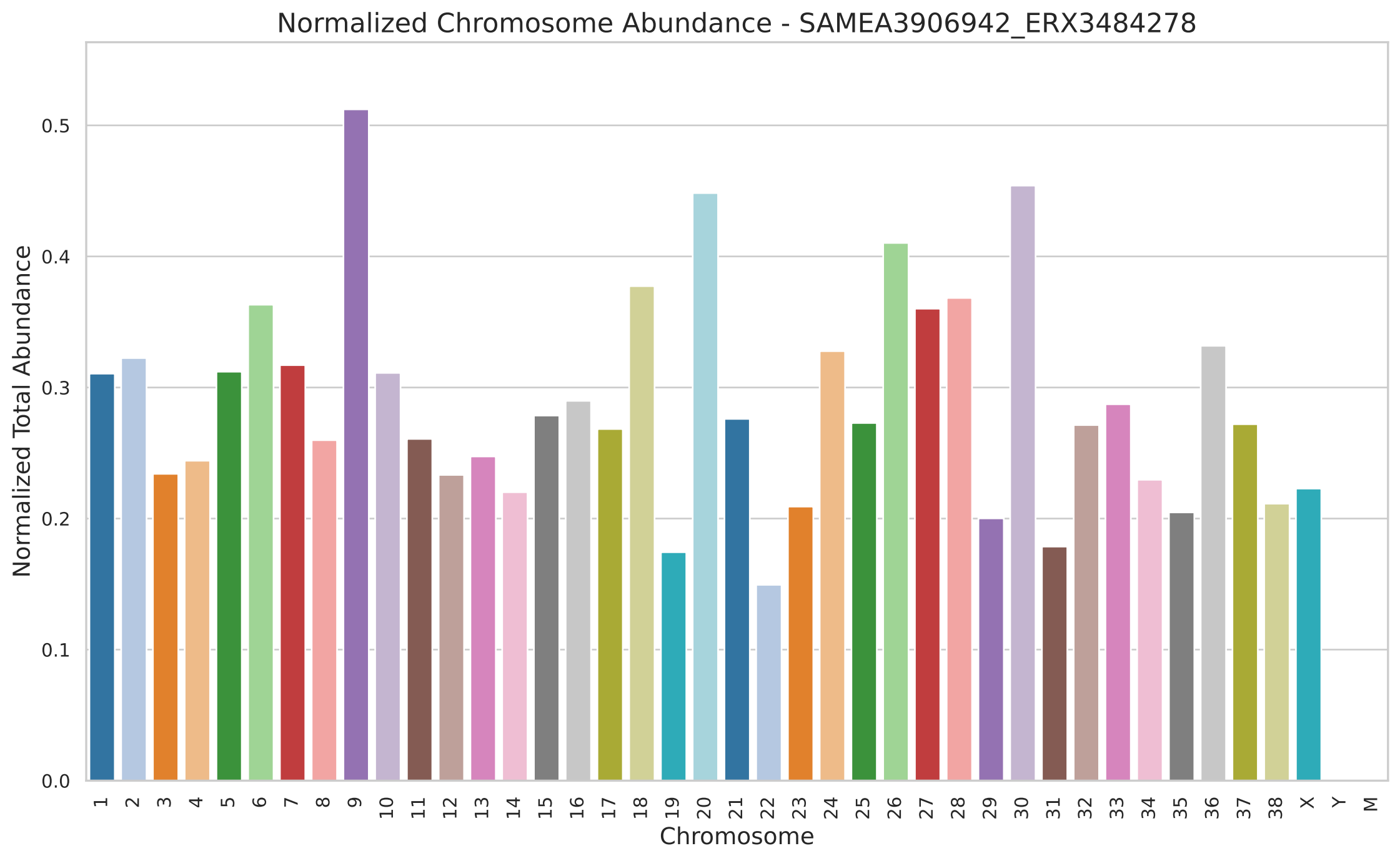

Normalized Chromosome Abundance - SAMEA3906949_ERX3484281
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

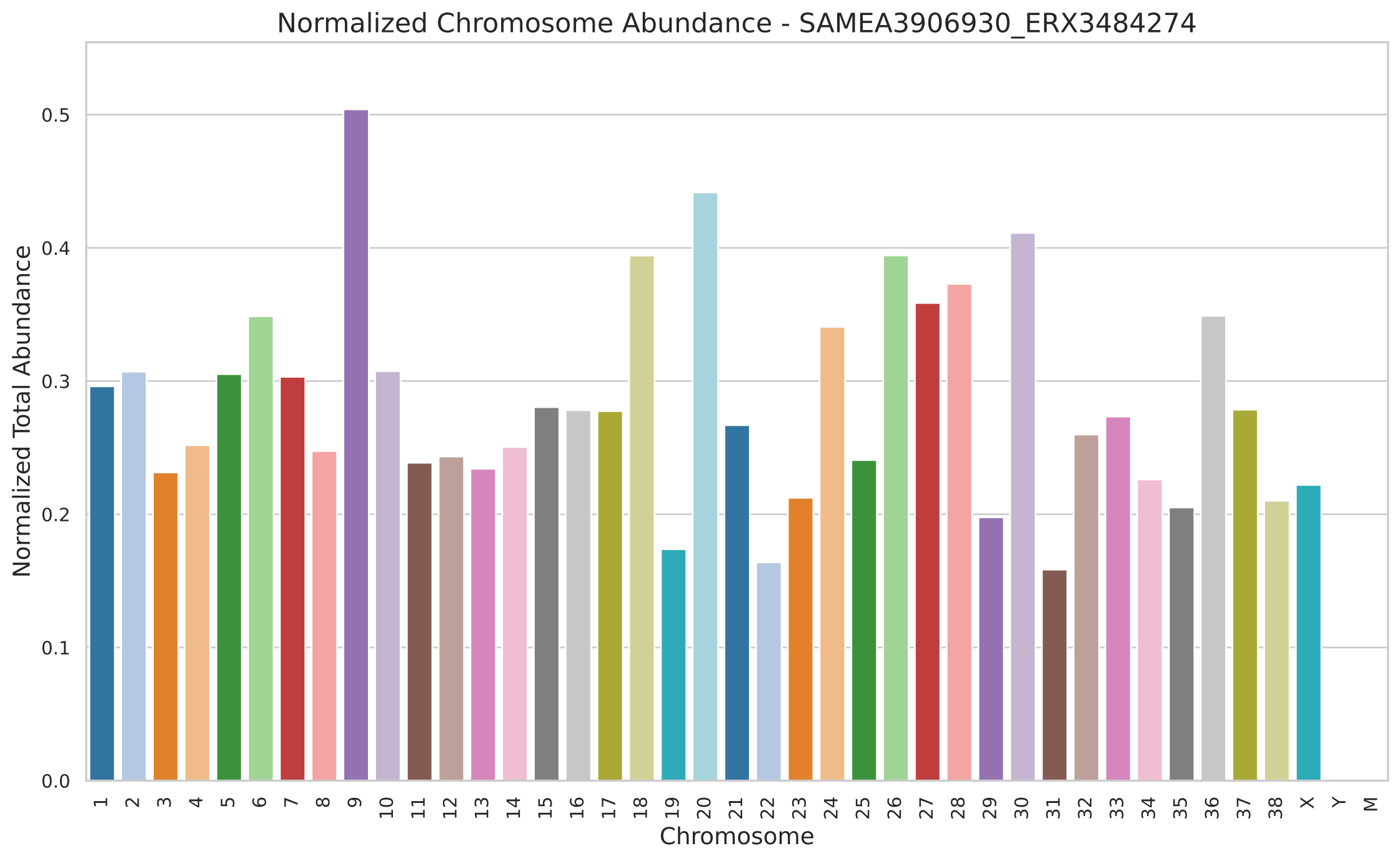

Normalized Chromosome Abundance - SAMEA3906979_ERX3484201
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

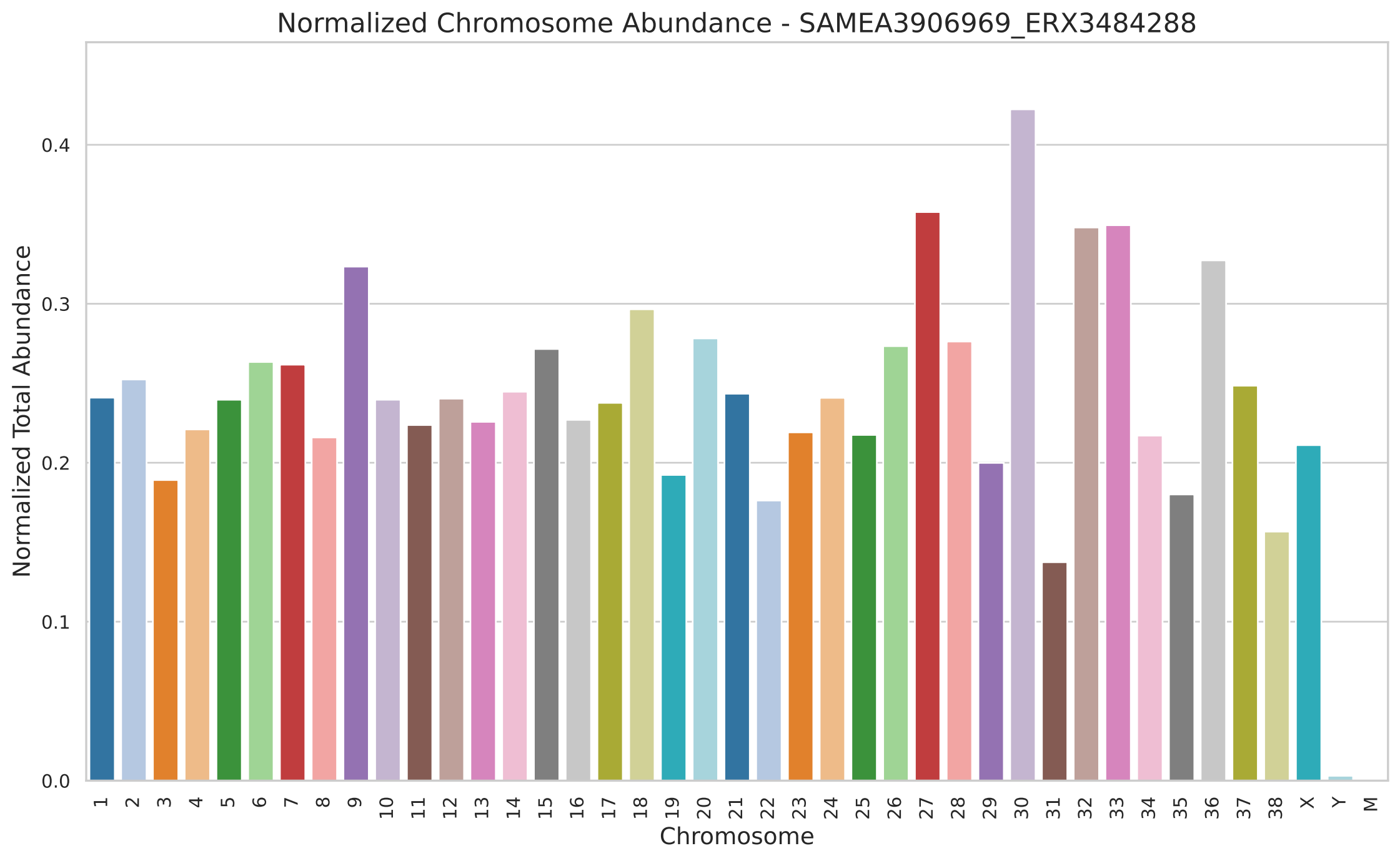

Normalized Chromosome Abundance - SAMEA3907366_ERX3484293
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

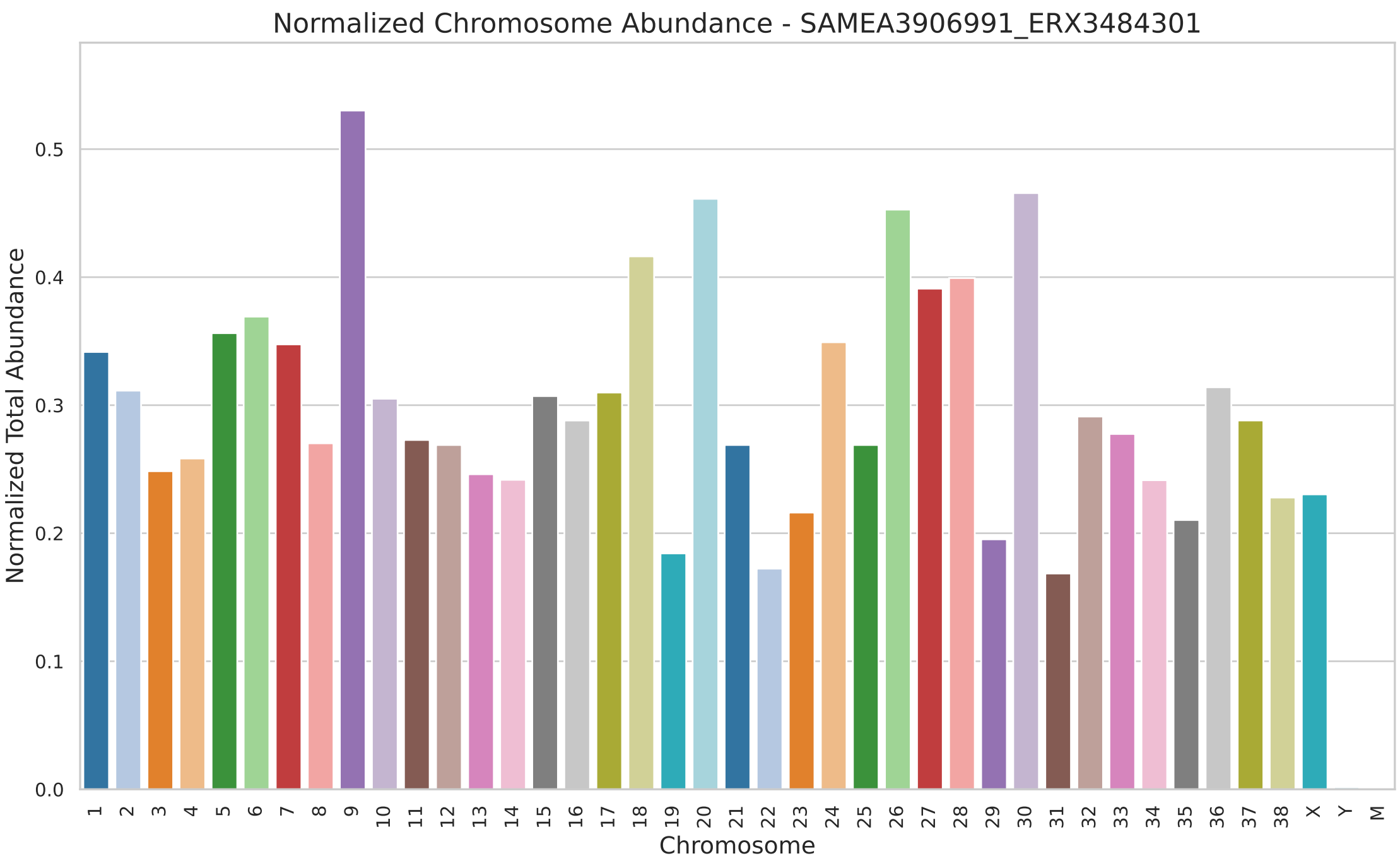

Normalized Chromosome Abundance - SAMEA3906928_ERX3484273
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

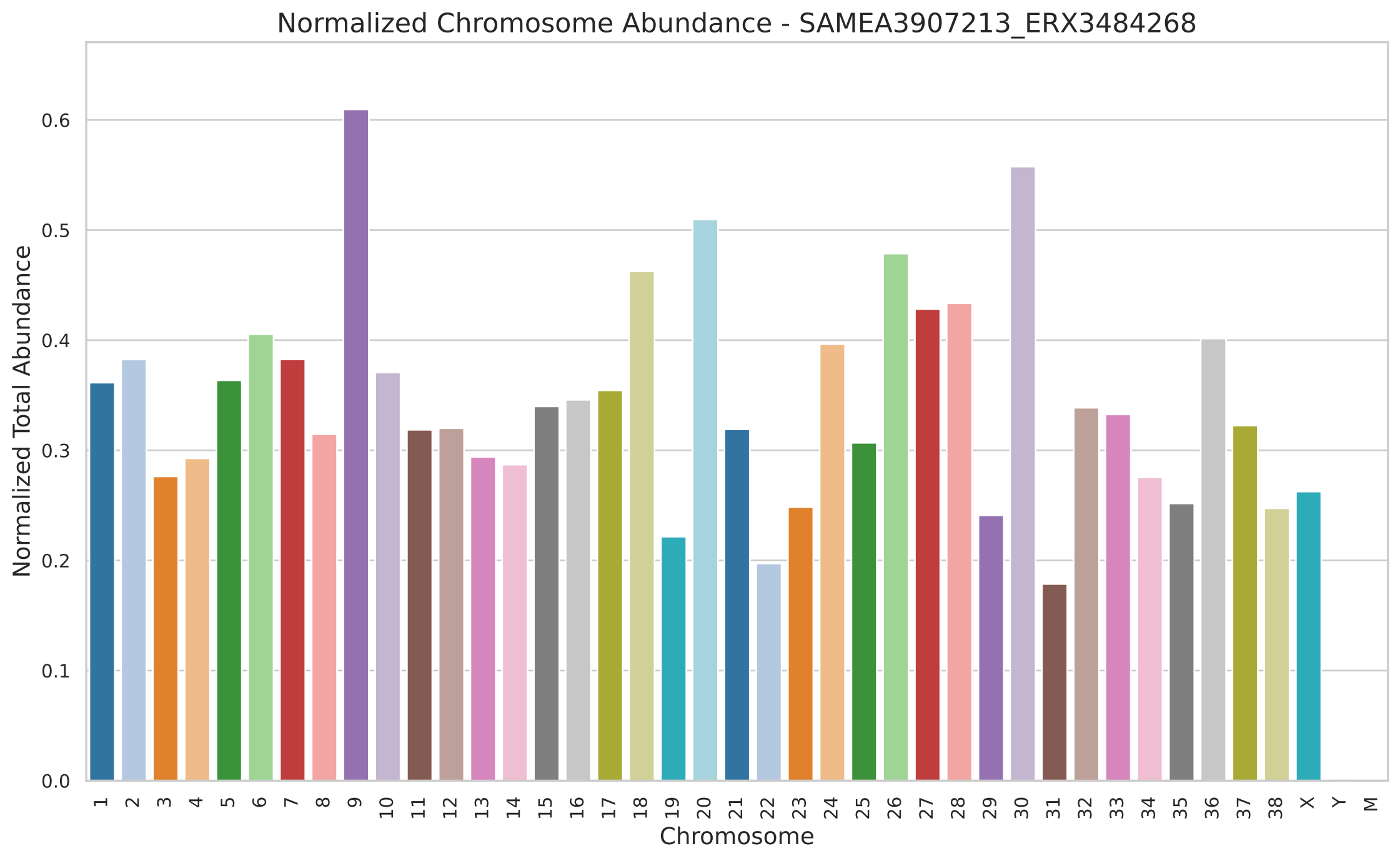

Normalized Chromosome Abundance - SAMEA3906988_ERX3484299
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

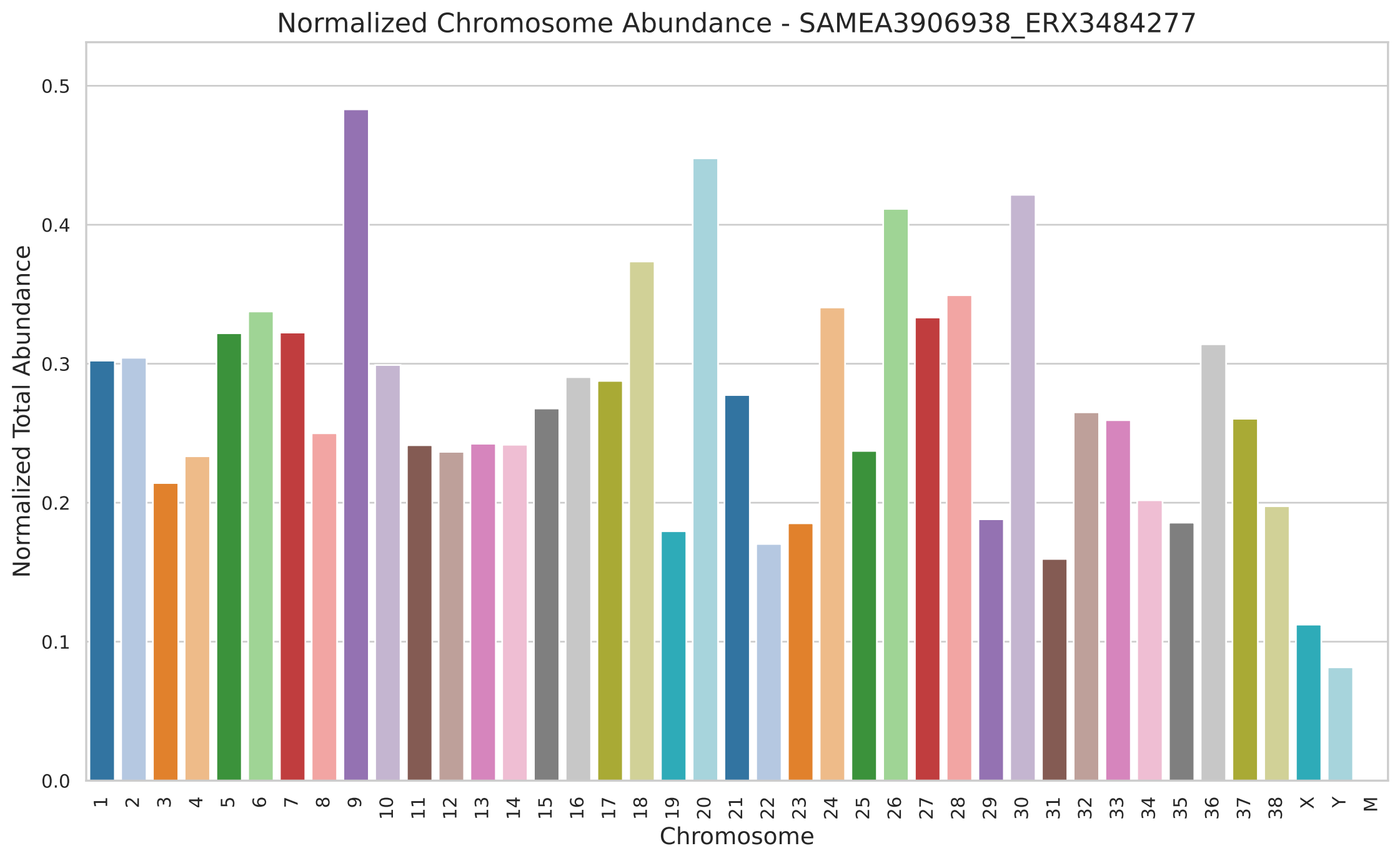

Normalized Chromosome Abundance - SAMEA3906942_ERX3484278
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

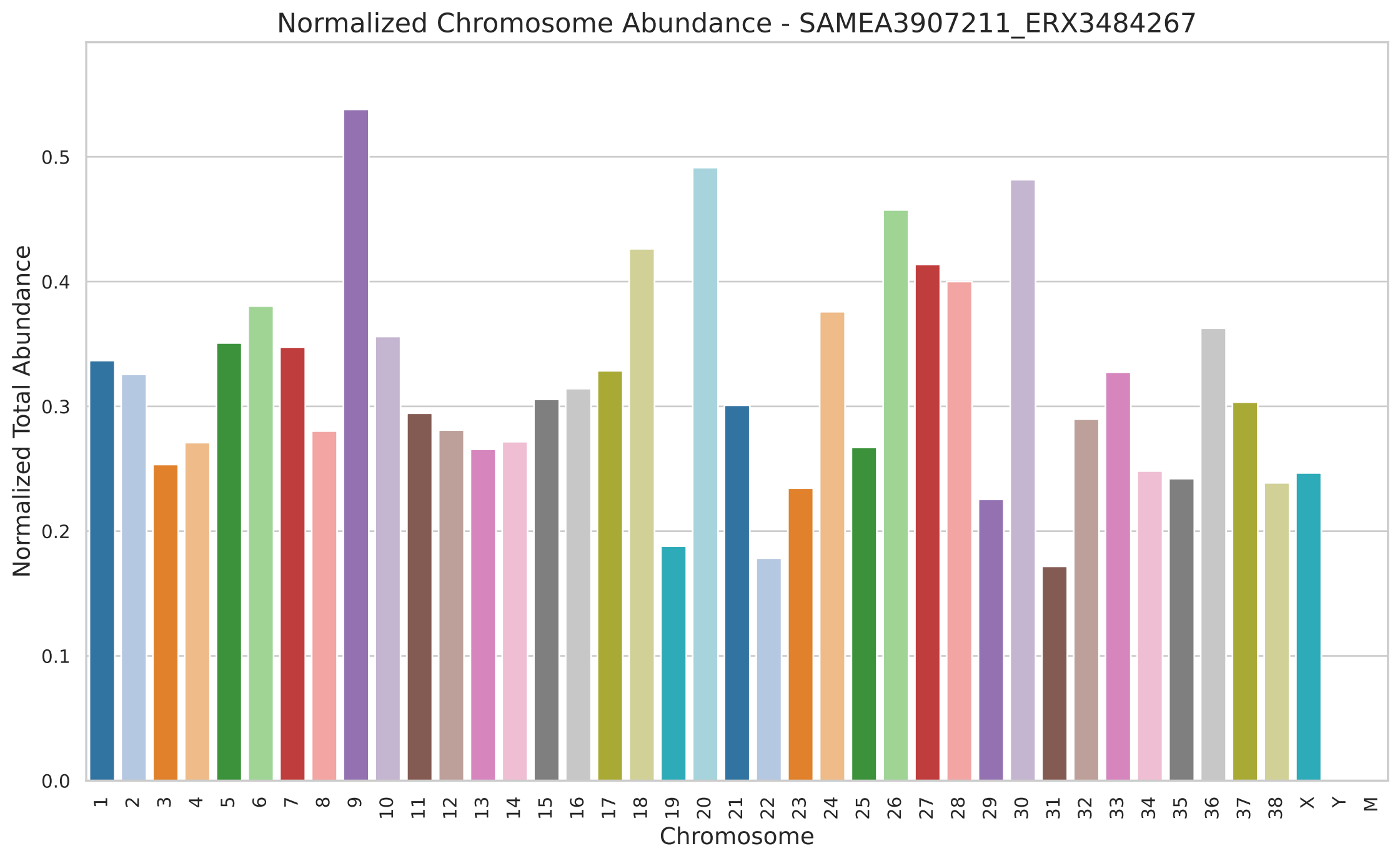

Normalized Chromosome Abundance - SAMEA3906930_ERX3484274
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

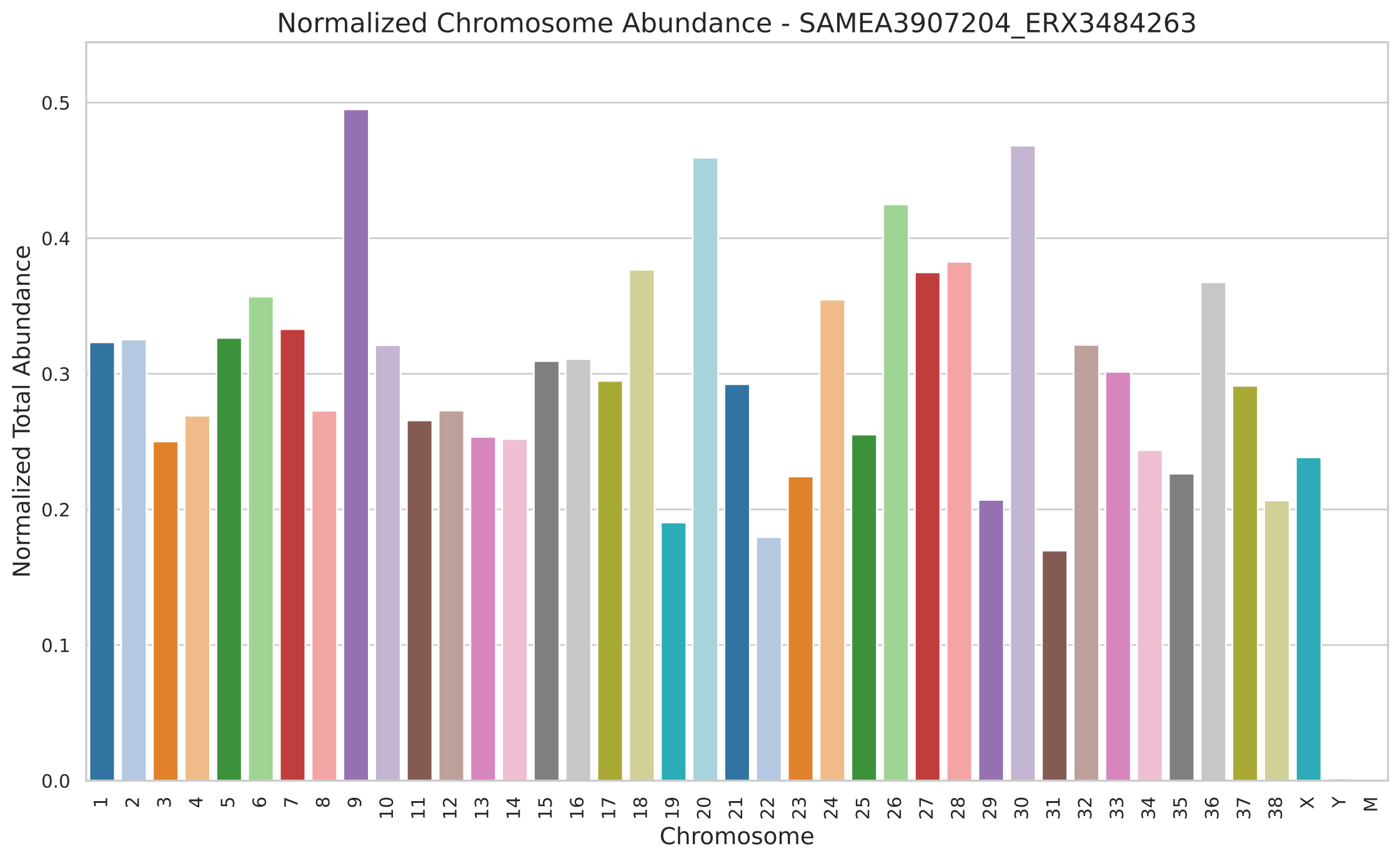

Normalized Chromosome Abundance - SAMEA3906969_ERX3484288
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

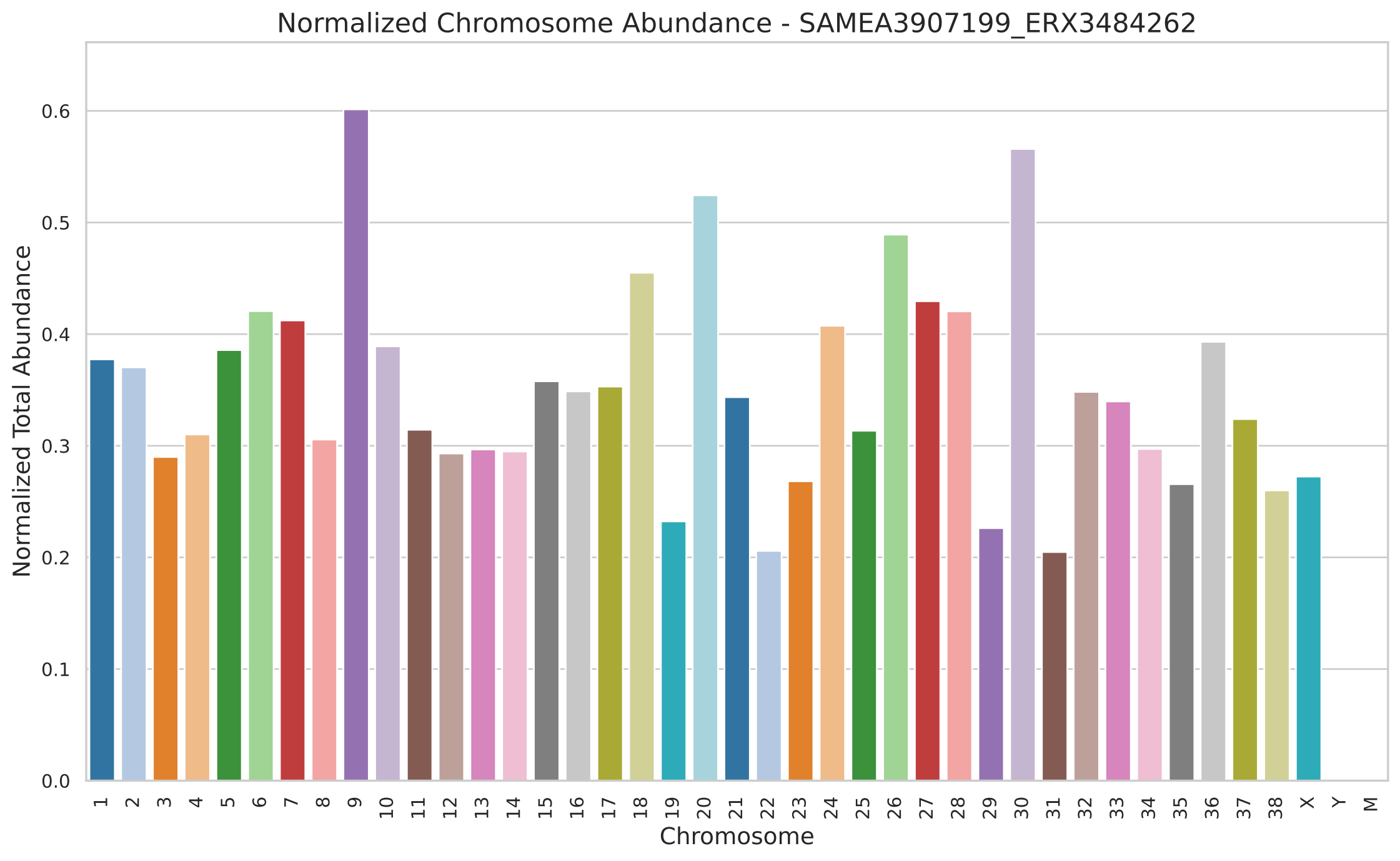

Normalized Chromosome Abundance - SAMEA3906991_ERX3484301
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

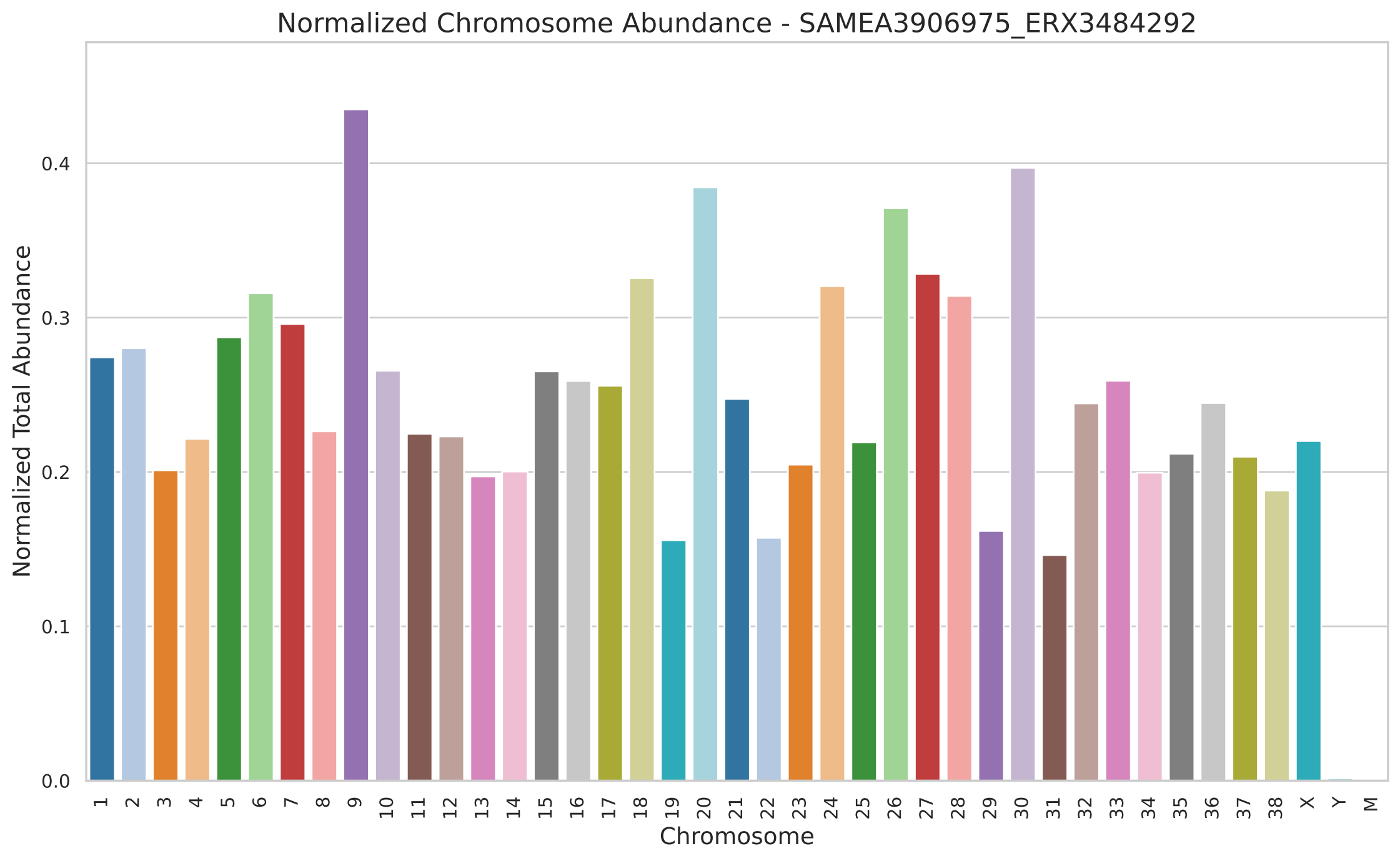

Normalized Chromosome Abundance - SAMEA3907213_ERX3484268
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

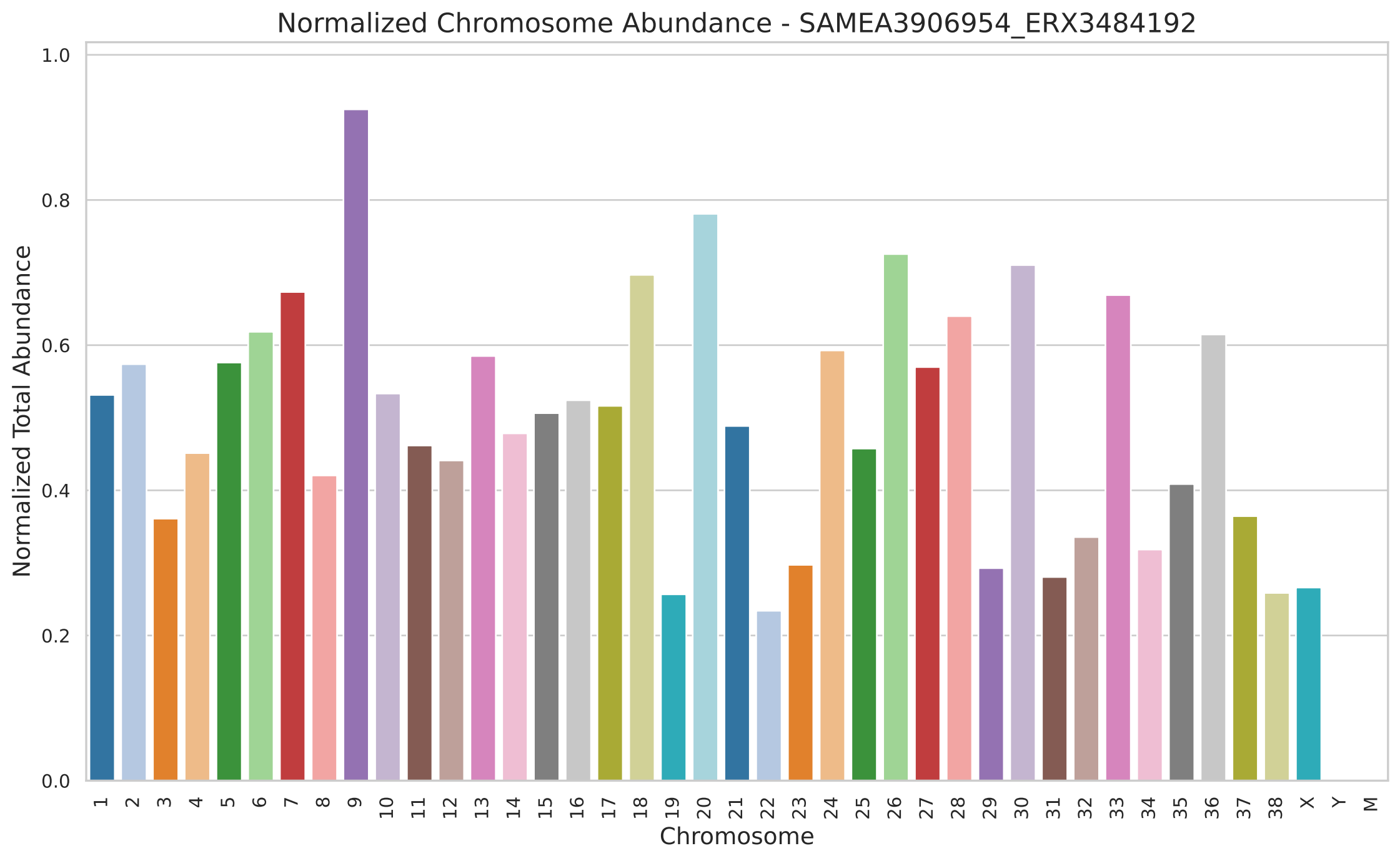

Normalized Chromosome Abundance - SAMEA3906938_ERX3484277
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

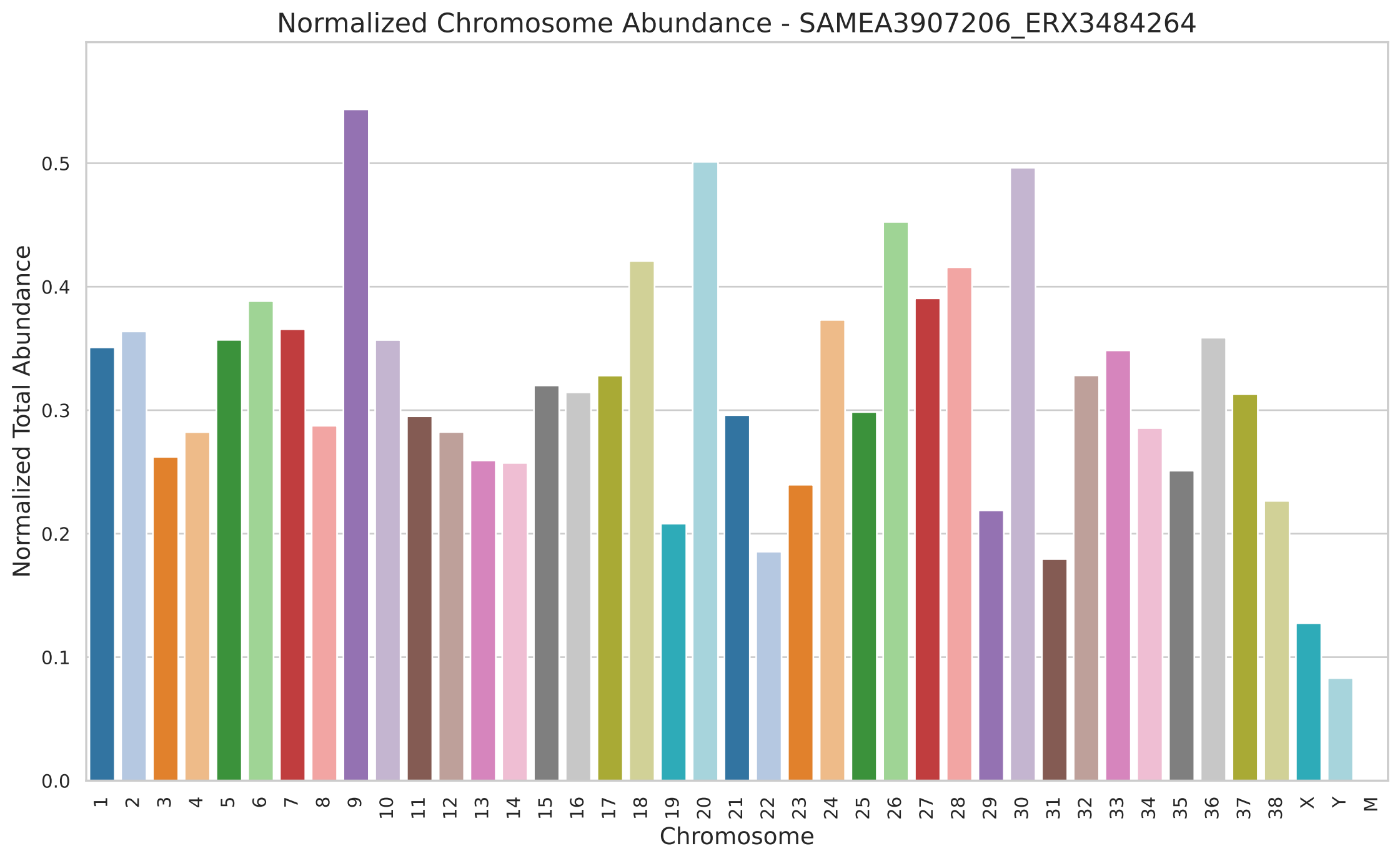

Normalized Chromosome Abundance - SAMEA3907211_ERX3484267
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

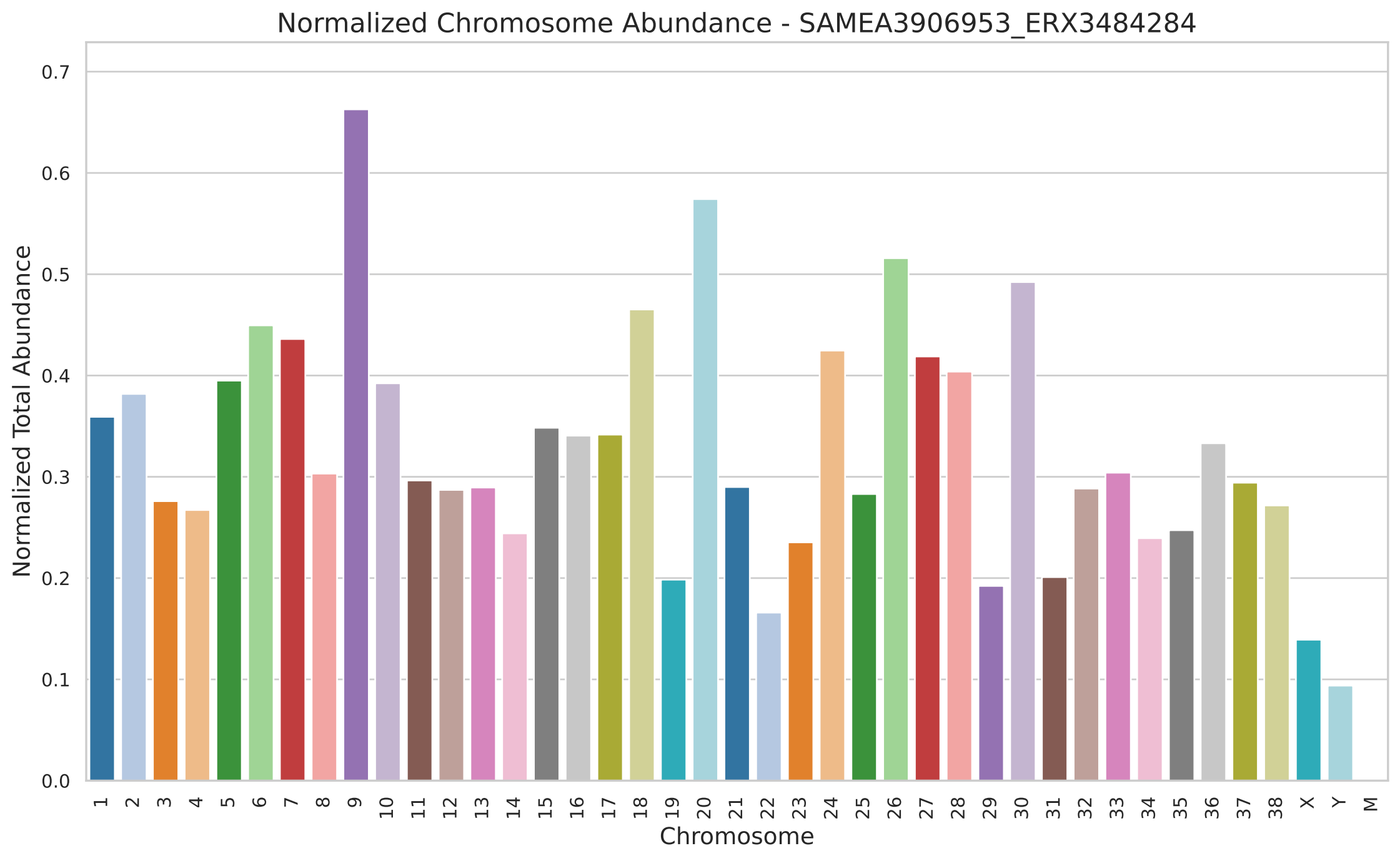

Normalized Chromosome Abundance - SAMEA3907204_ERX3484263
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

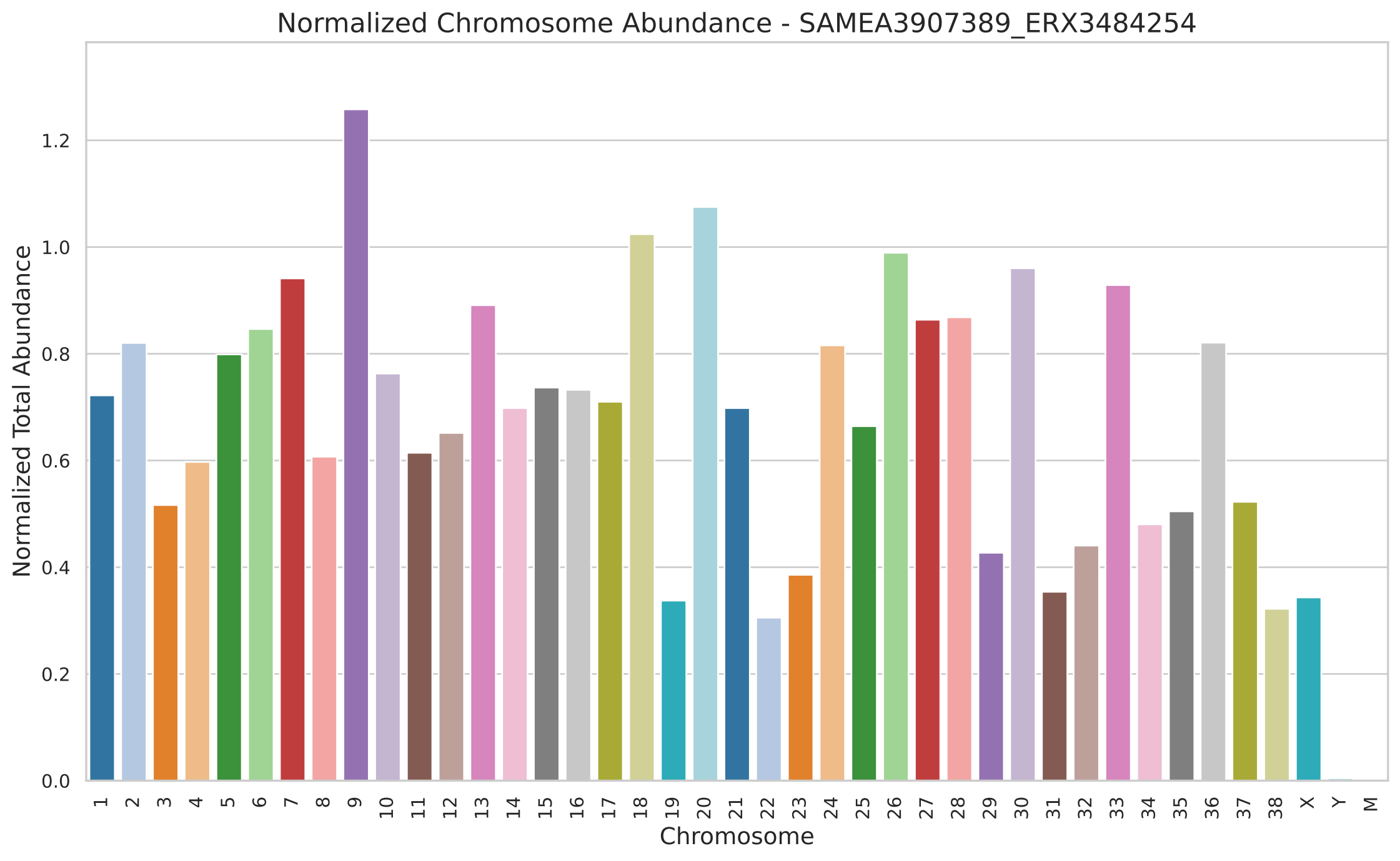

Normalized Chromosome Abundance - SAMEA3907199_ERX3484262
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

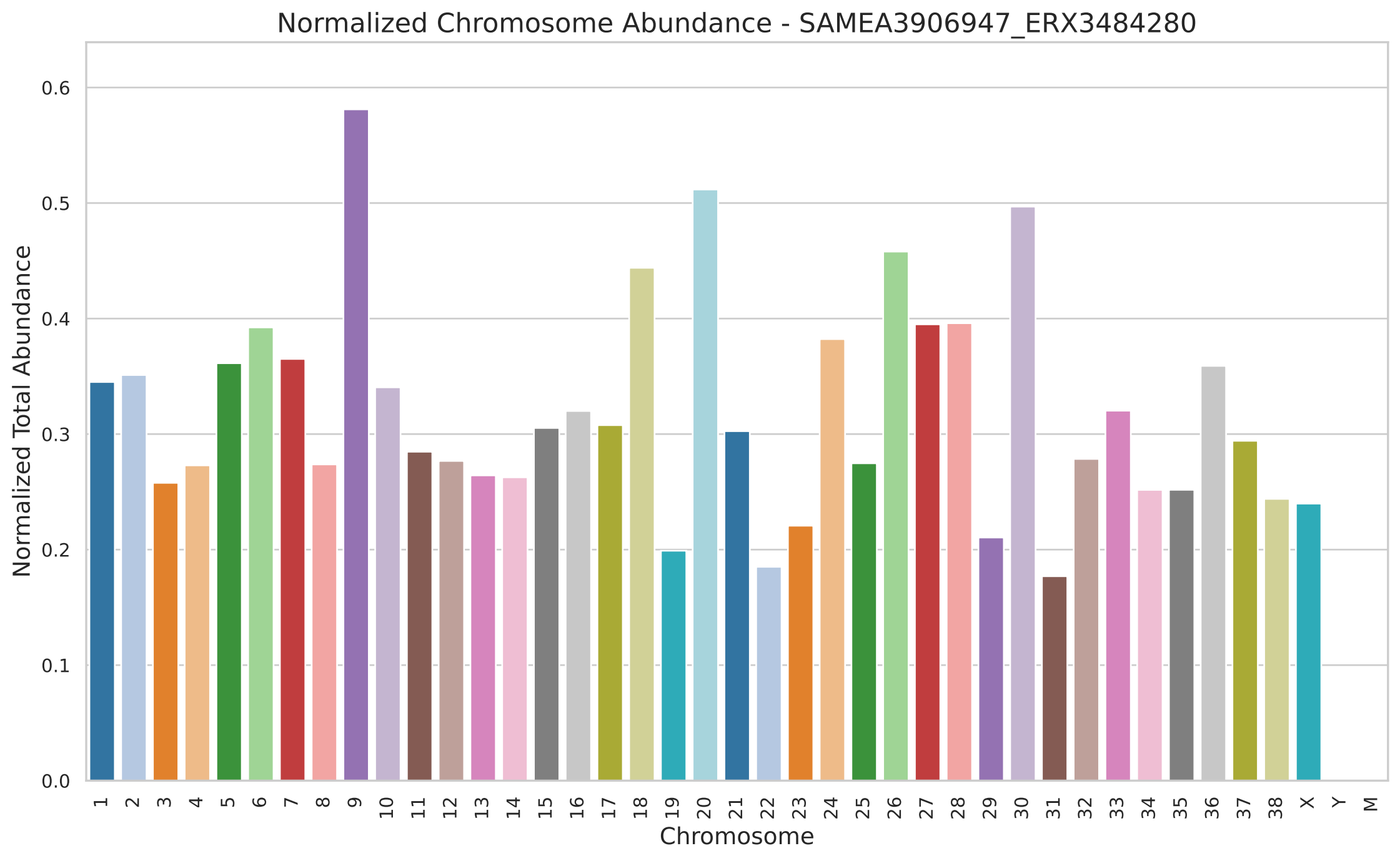

Normalized Chromosome Abundance - SAMEA3906975_ERX3484292
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

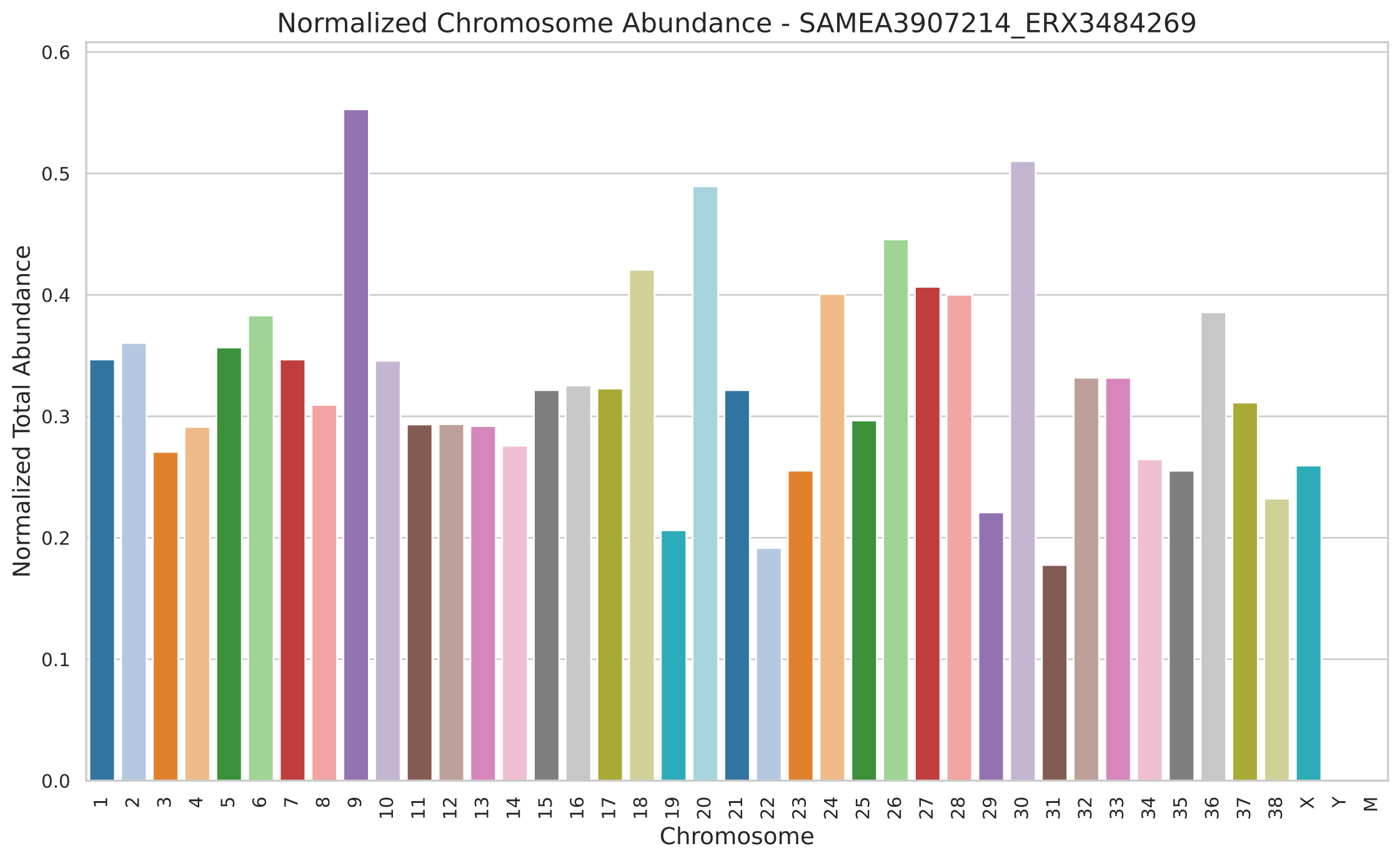

Normalized Chromosome Abundance - SAMEA3906954_ERX3484192
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

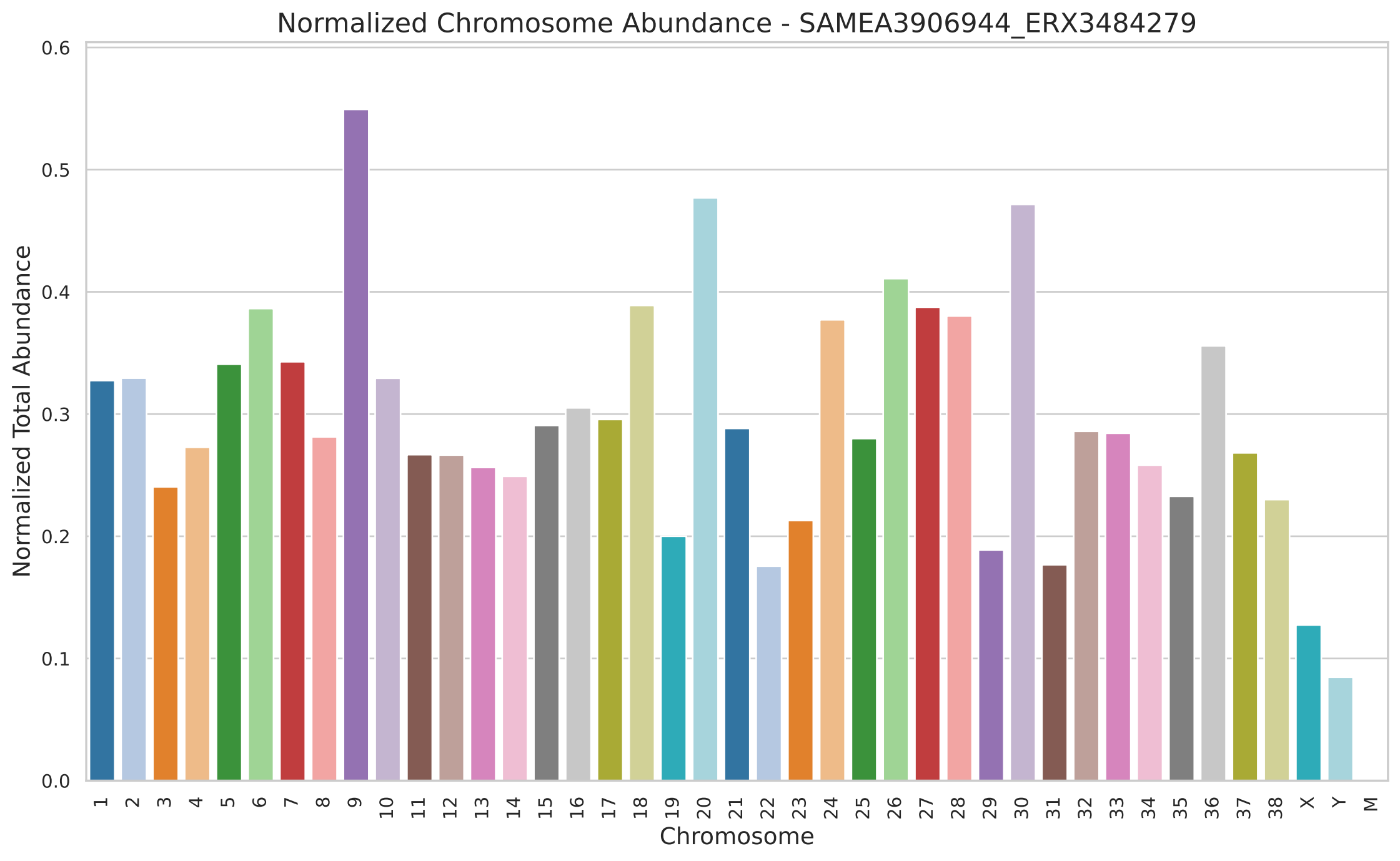

Normalized Chromosome Abundance - SAMEA3907206_ERX3484264
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

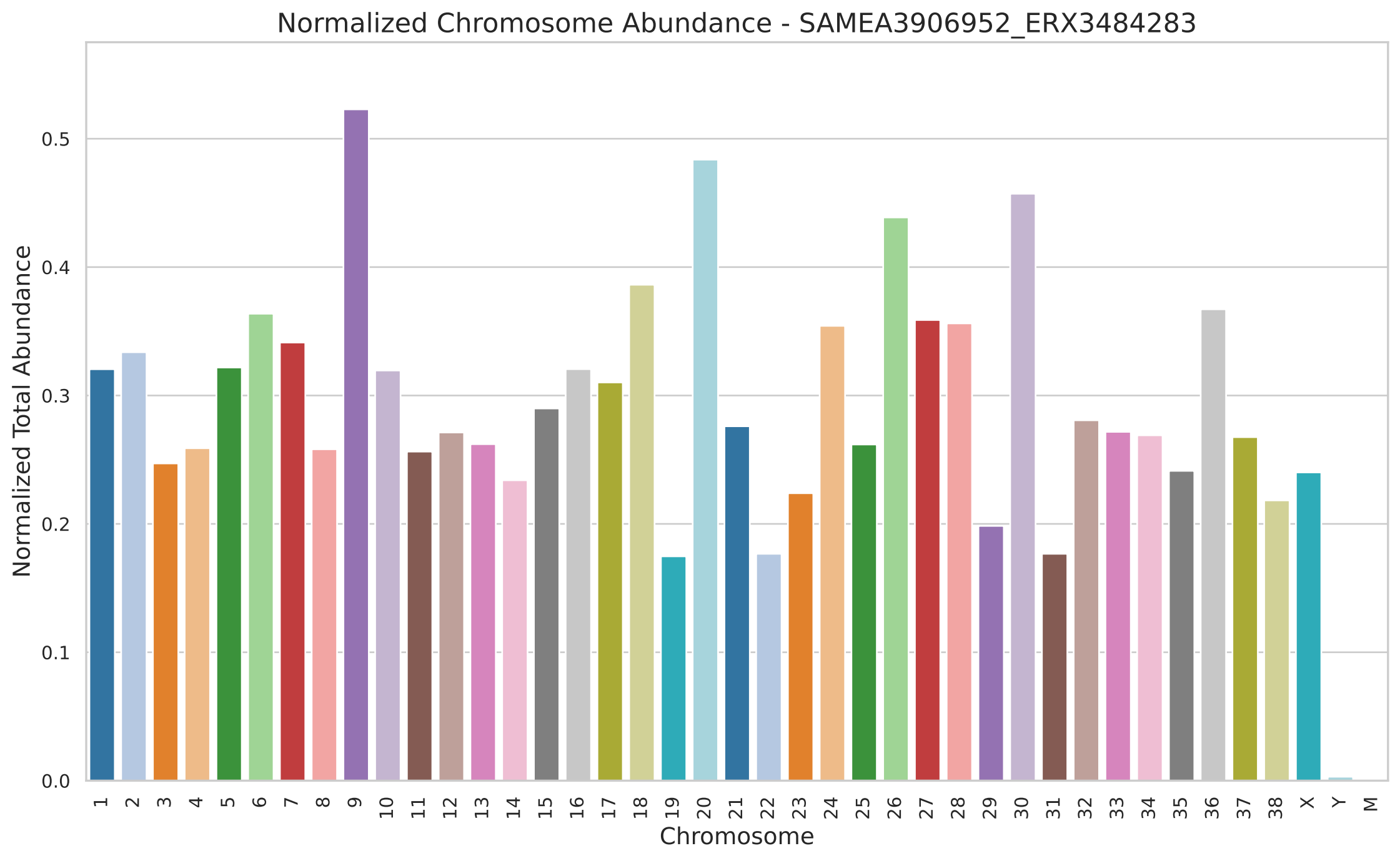

Normalized Chromosome Abundance - SAMEA3906953_ERX3484284
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

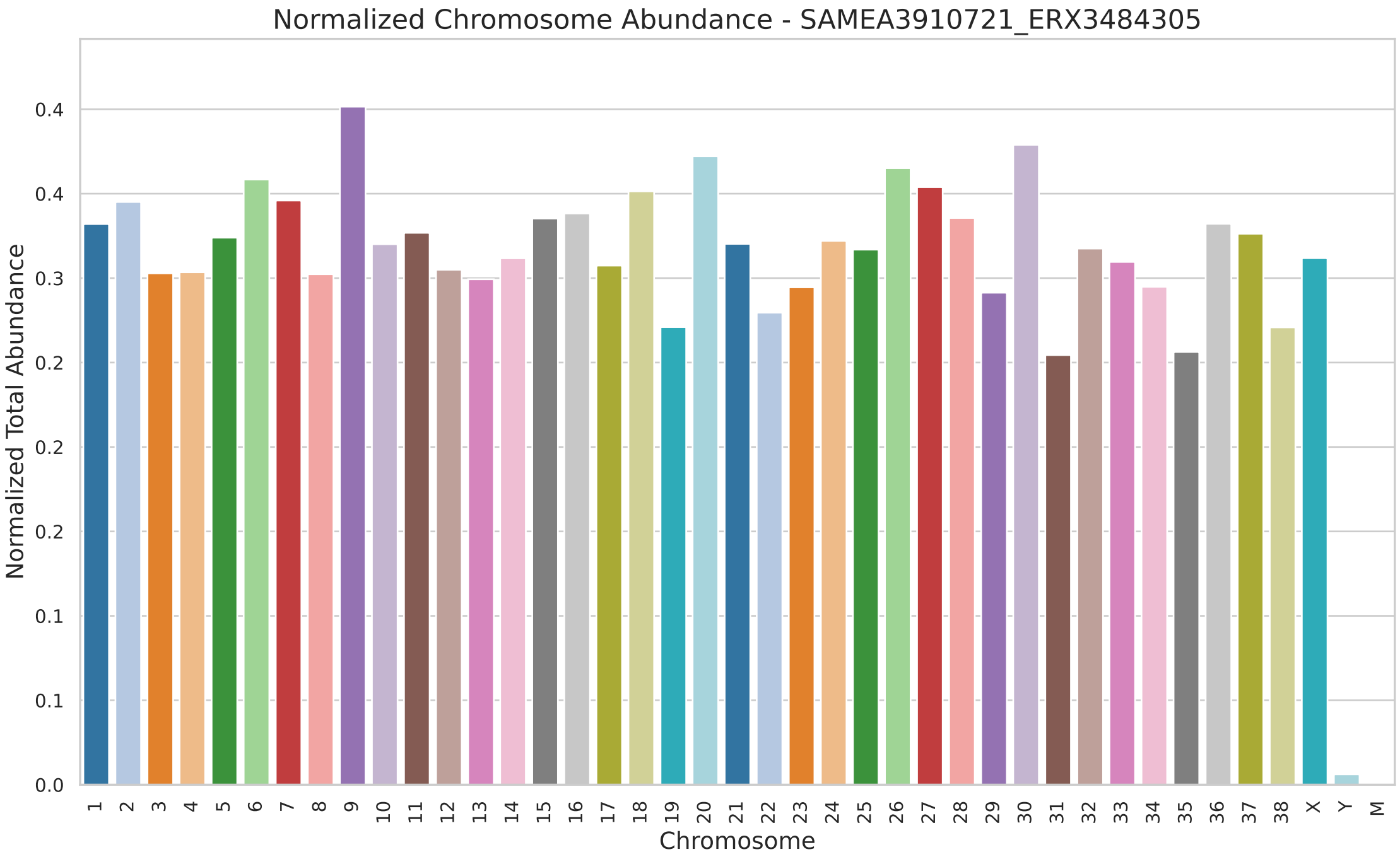

Normalized Chromosome Abundance - SAMEA3907389_ERX3484254
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

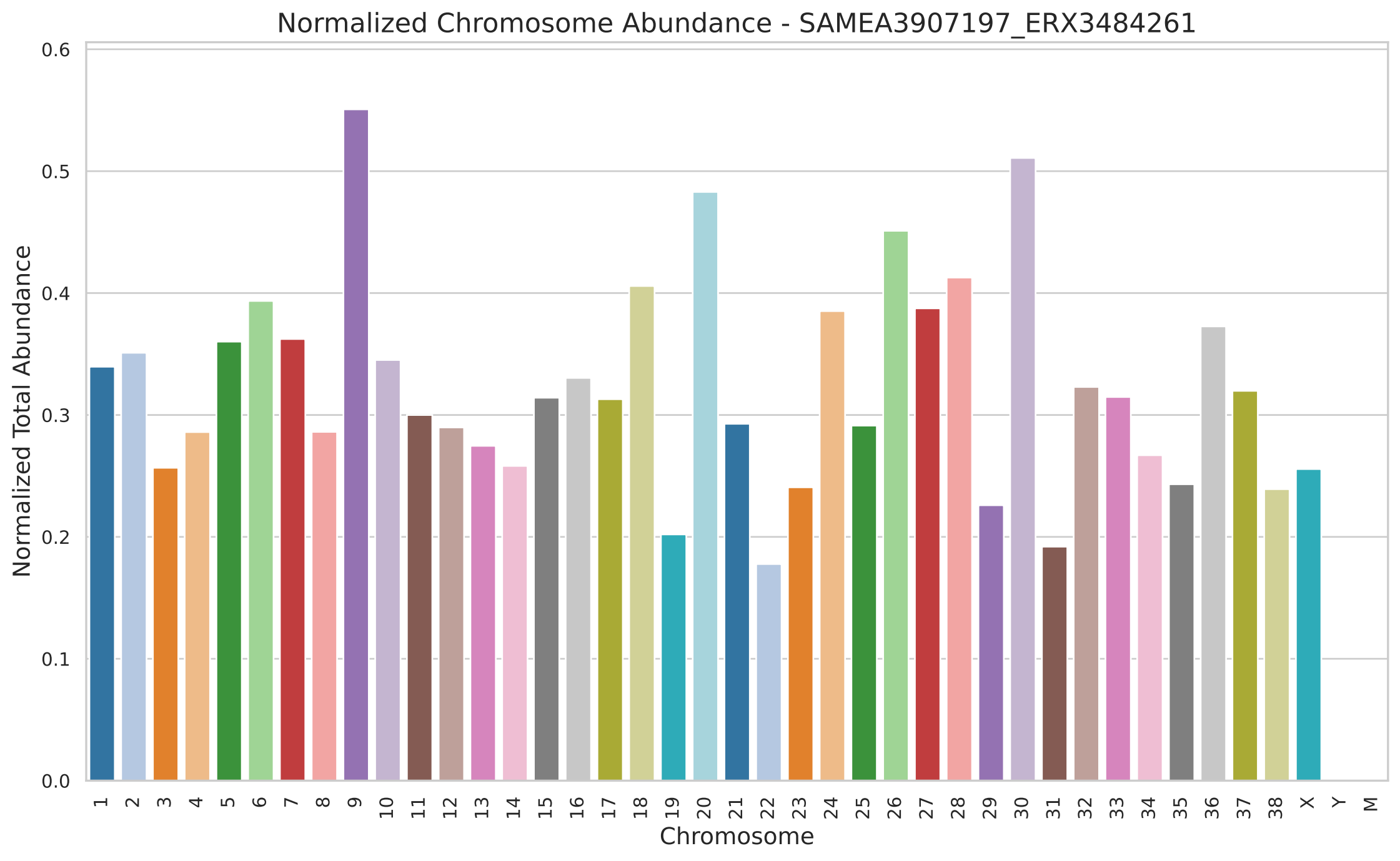

Normalized Chromosome Abundance - SAMEA3906947_ERX3484280
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

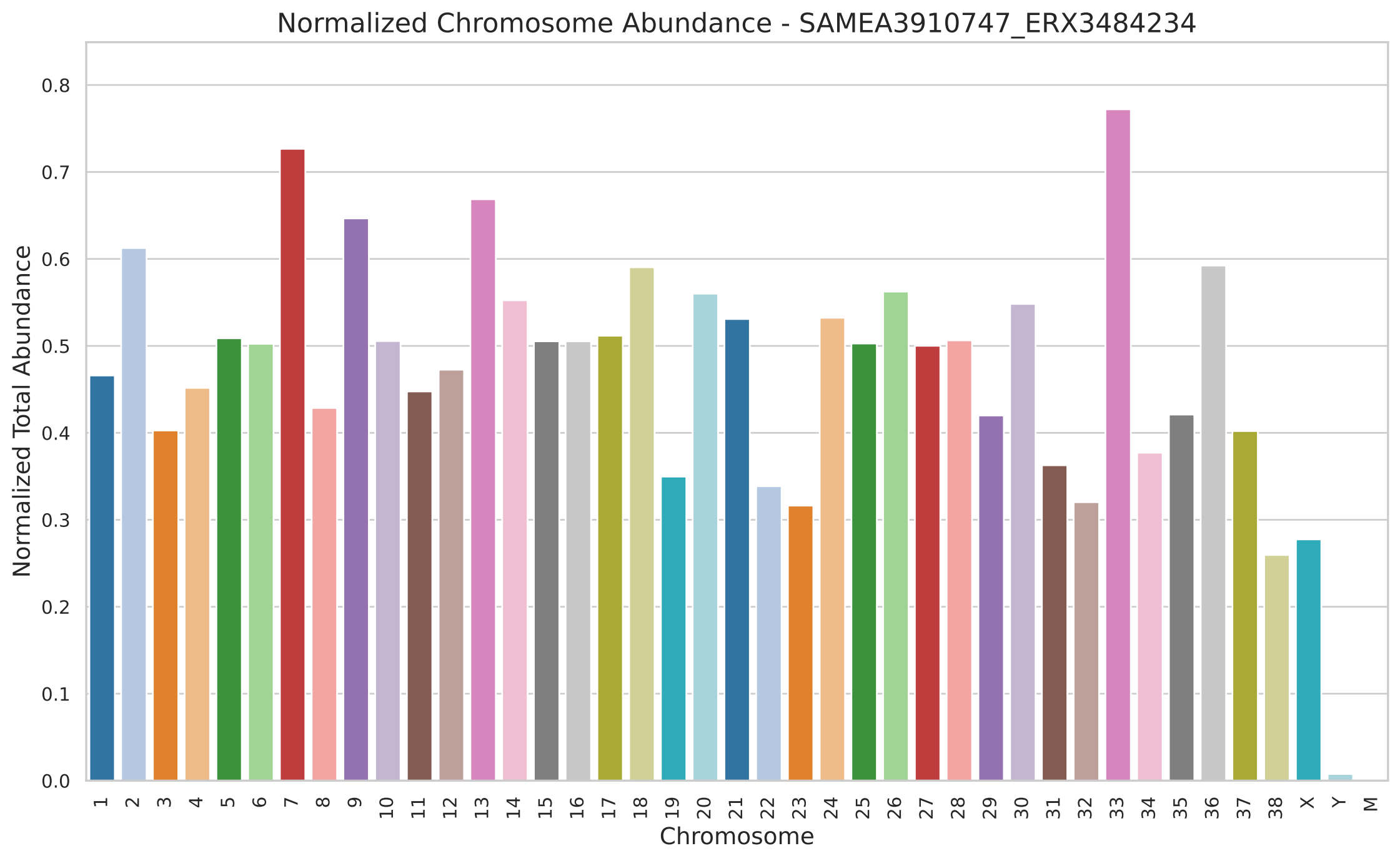

Normalized Chromosome Abundance - SAMEA3907214_ERX3484269
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

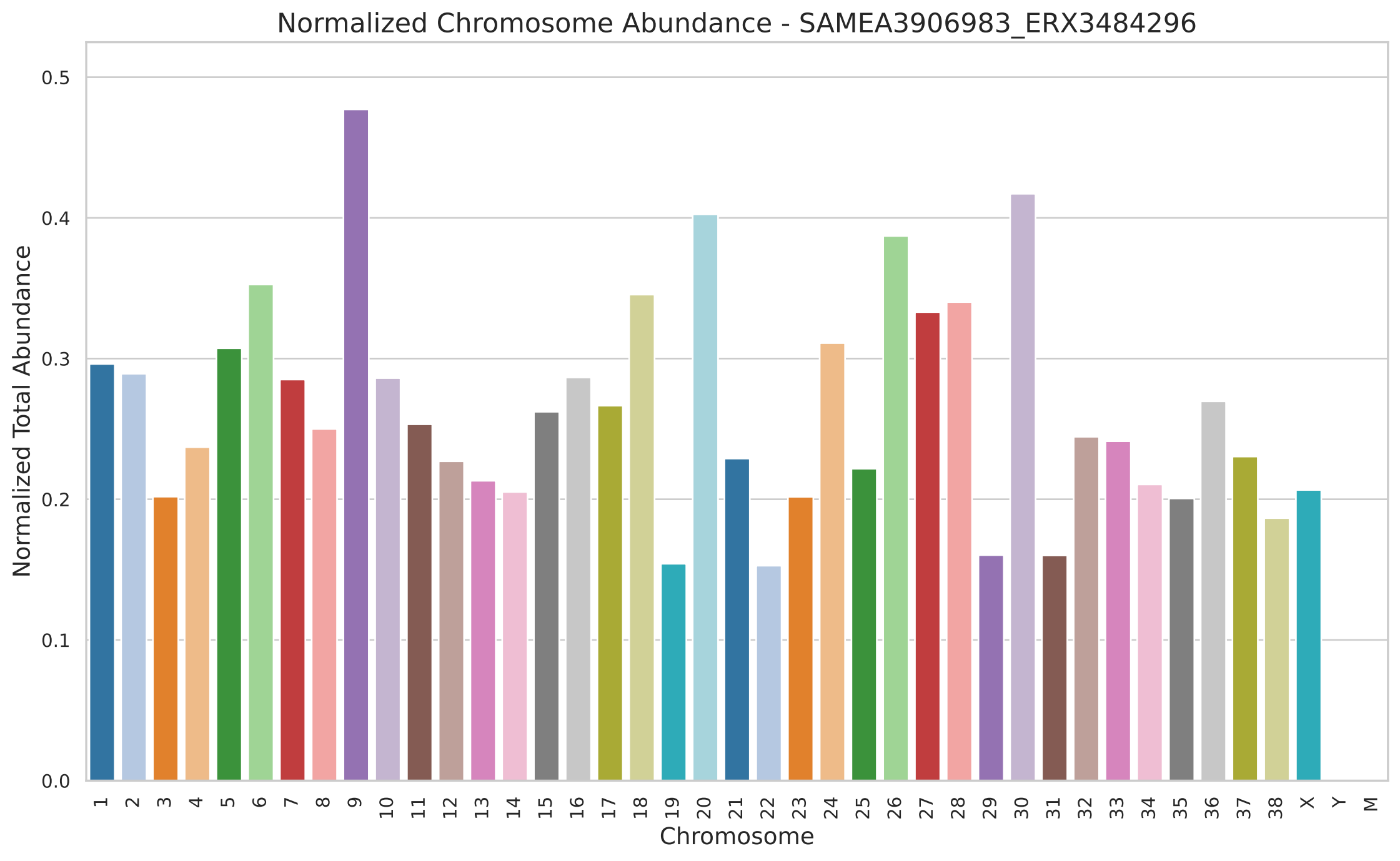

Normalized Chromosome Abundance - SAMEA3906944_ERX3484279
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

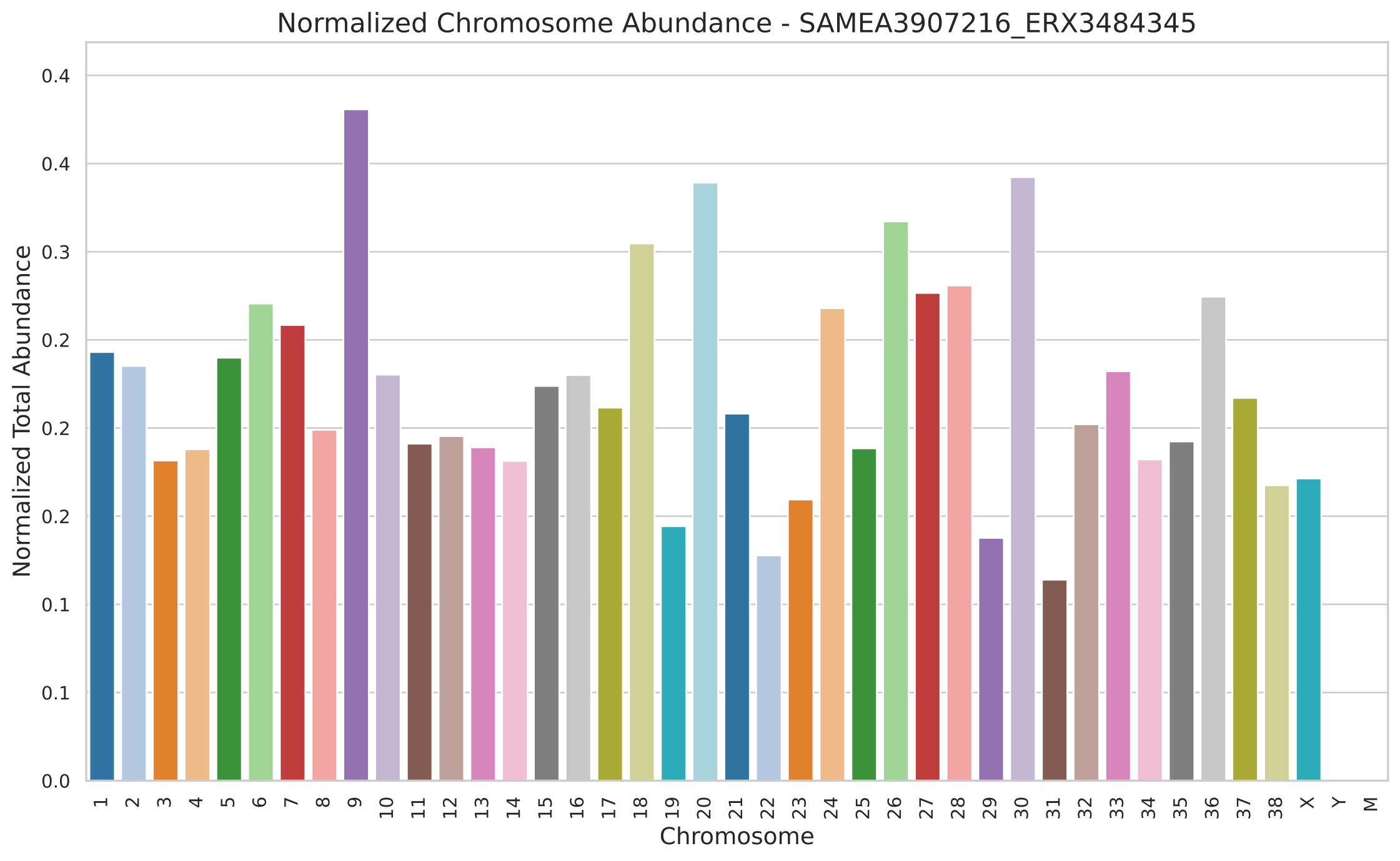

Normalized Chromosome Abundance - SAMEA3906952_ERX3484283
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

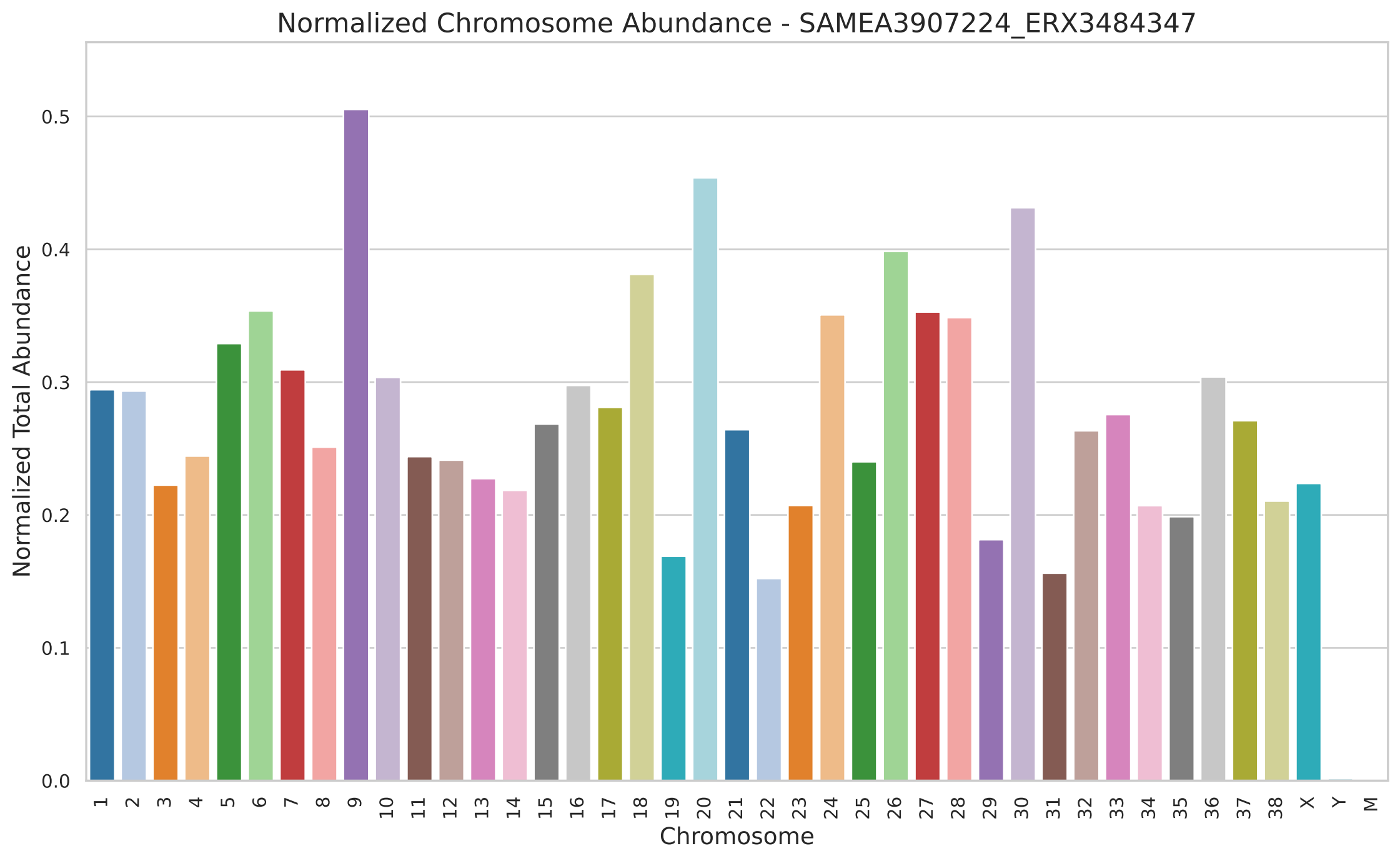

Normalized Chromosome Abundance - SAMEA3910721_ERX3484305
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

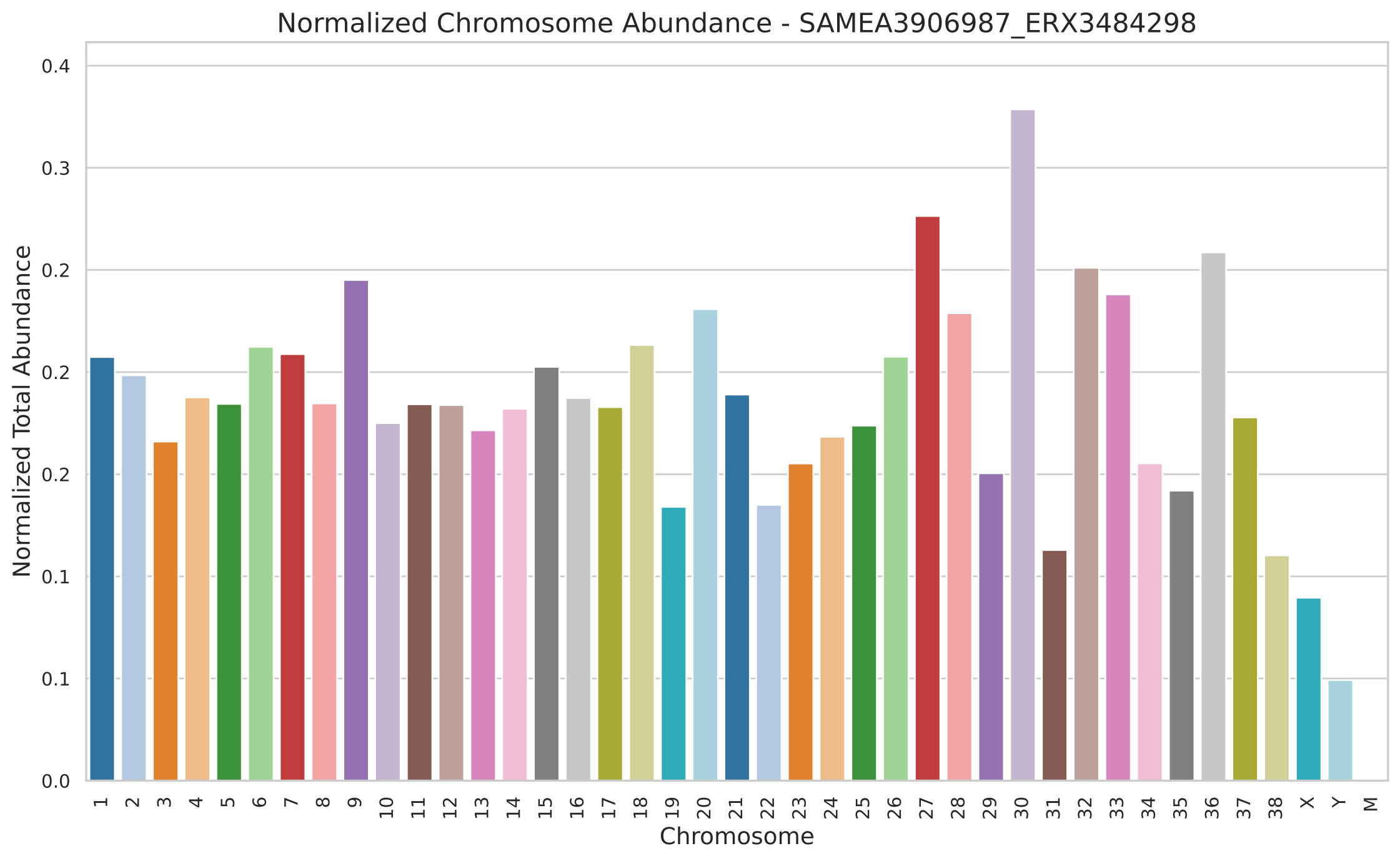

Normalized Chromosome Abundance - SAMEA3907197_ERX3484261
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

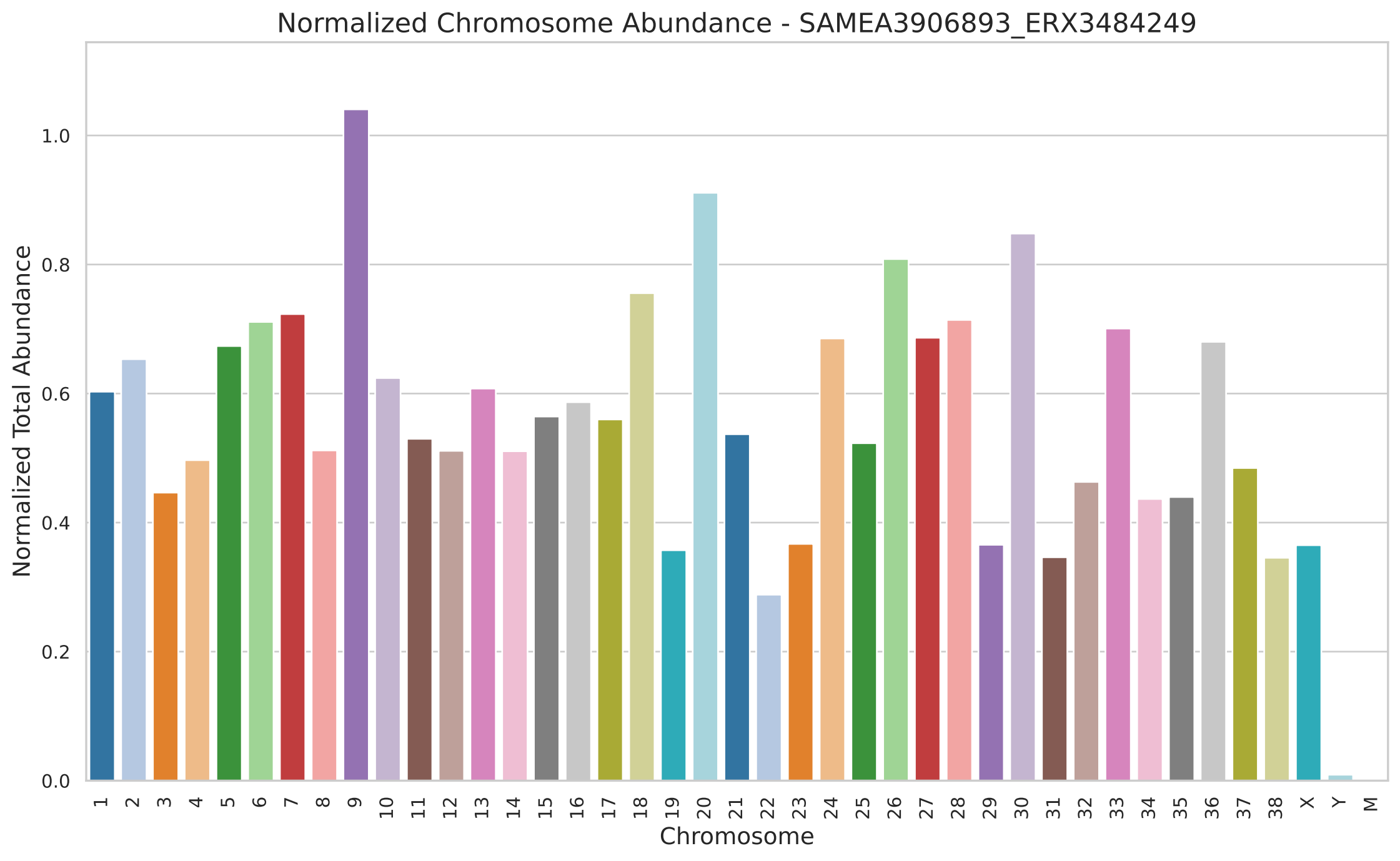

Normalized Chromosome Abundance - SAMEA3910747_ERX3484234
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

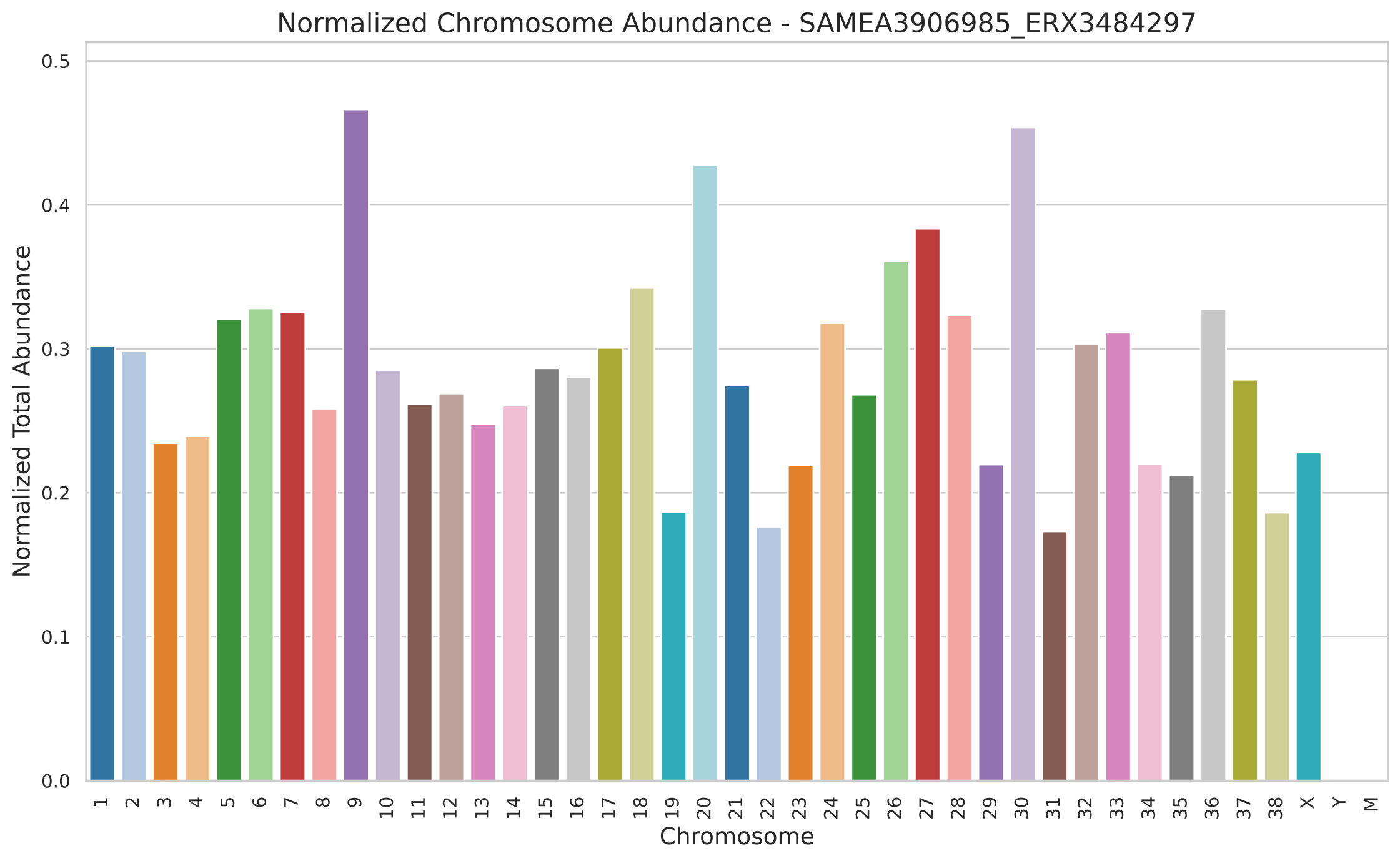

Normalized Chromosome Abundance - SAMEA3906983_ERX3484296
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

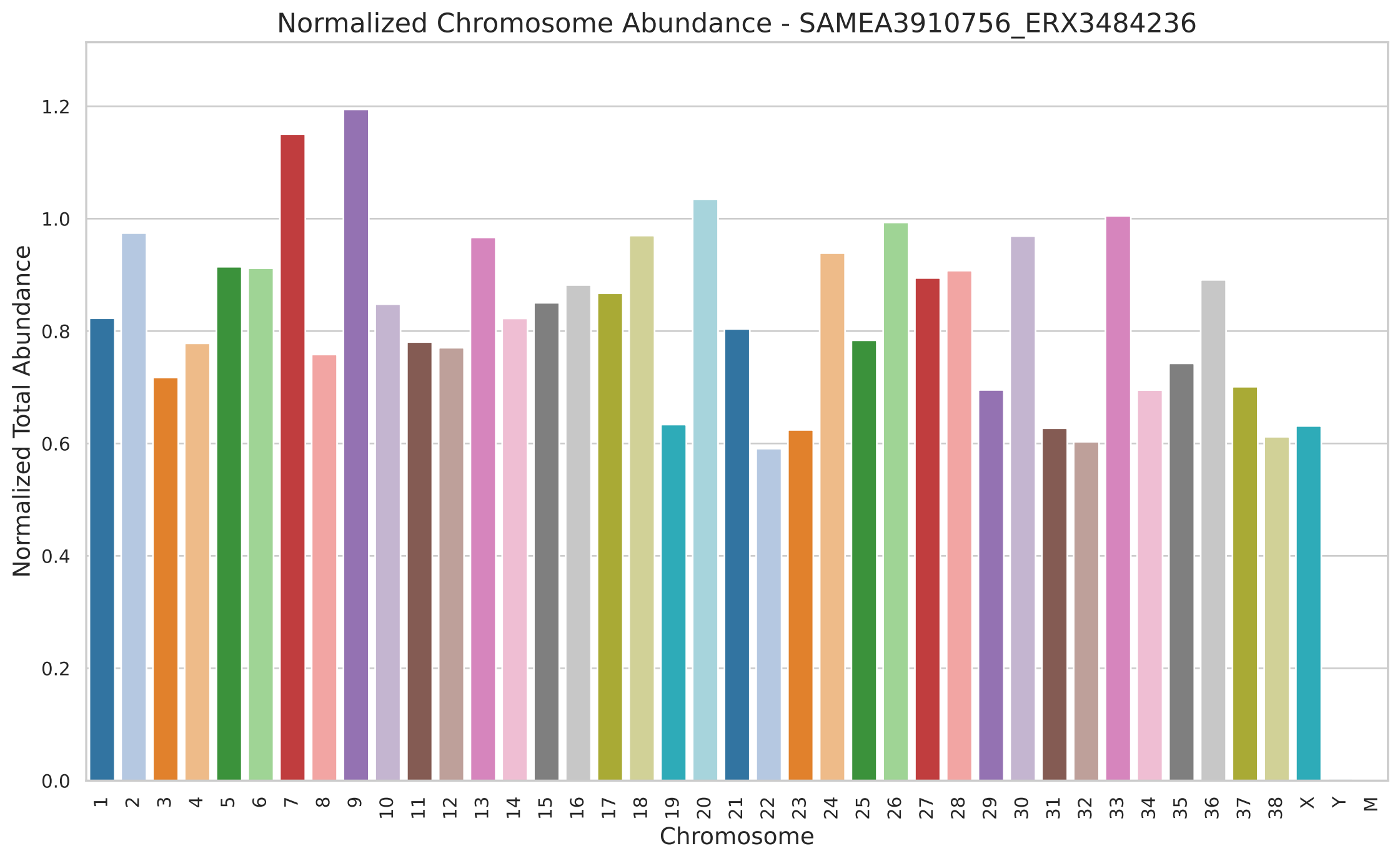

Normalized Chromosome Abundance - SAMEA3907216_ERX3484345
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

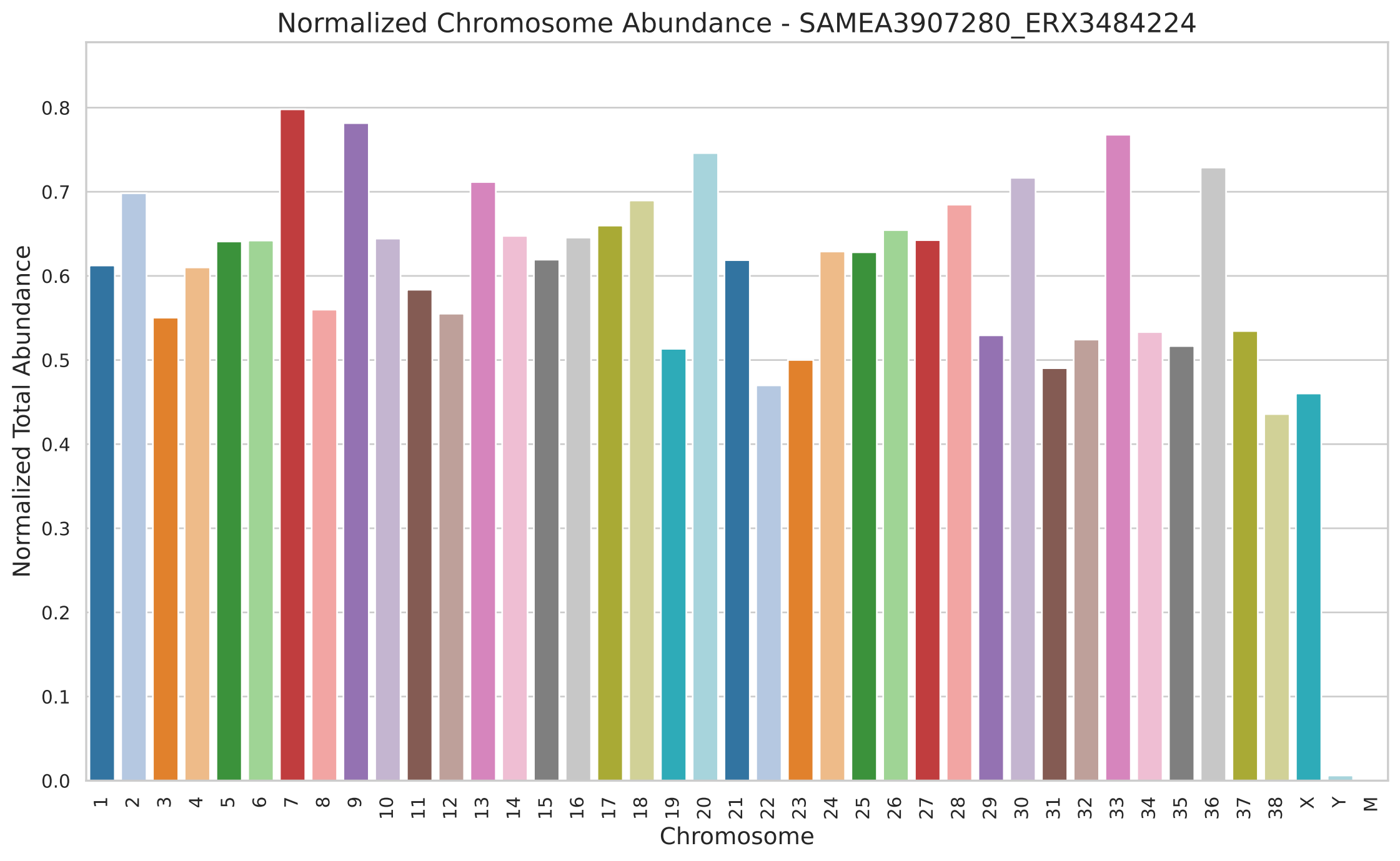

Normalized Chromosome Abundance - SAMEA3907224_ERX3484347
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

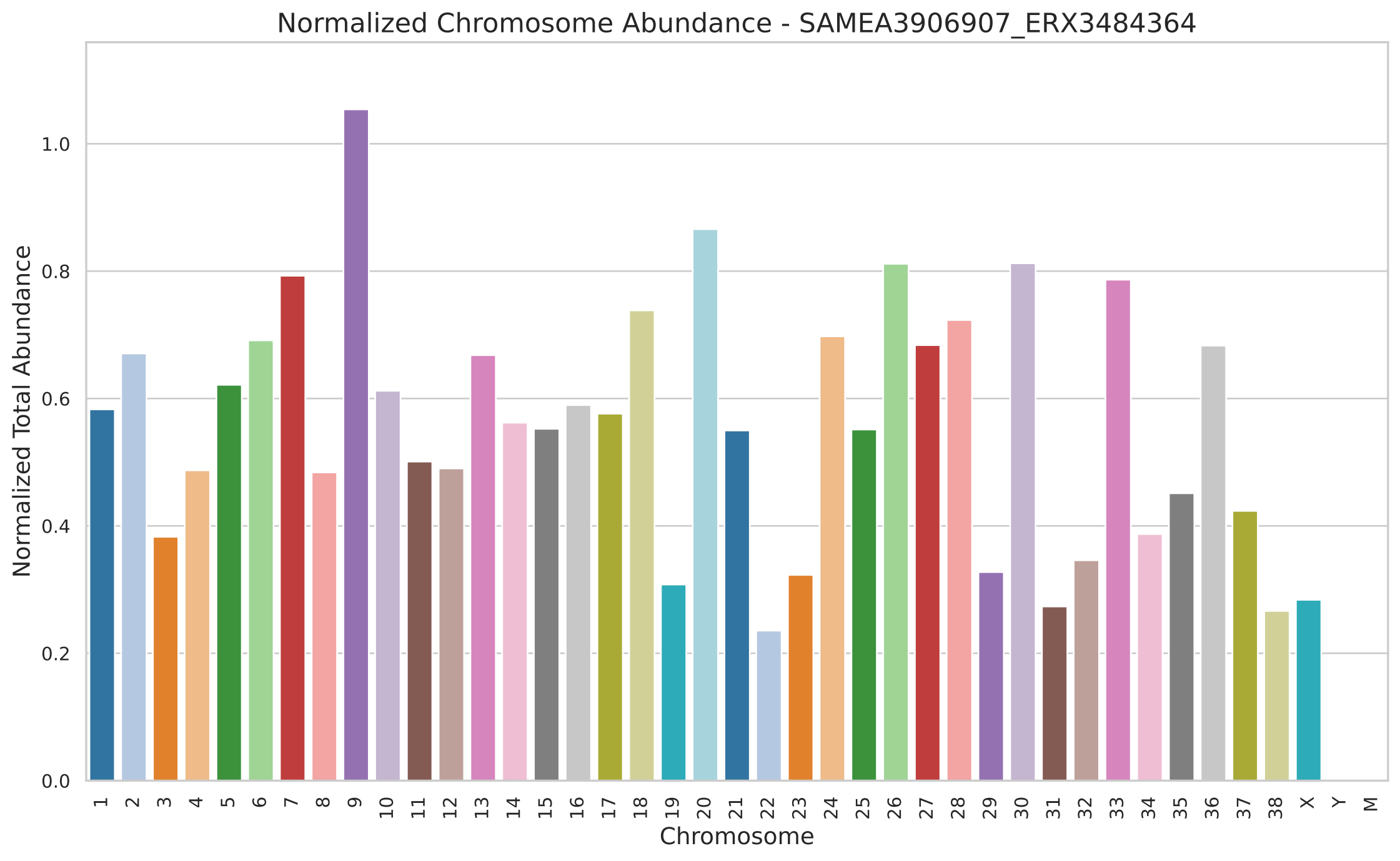

Normalized Chromosome Abundance - SAMEA3906987_ERX3484298
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

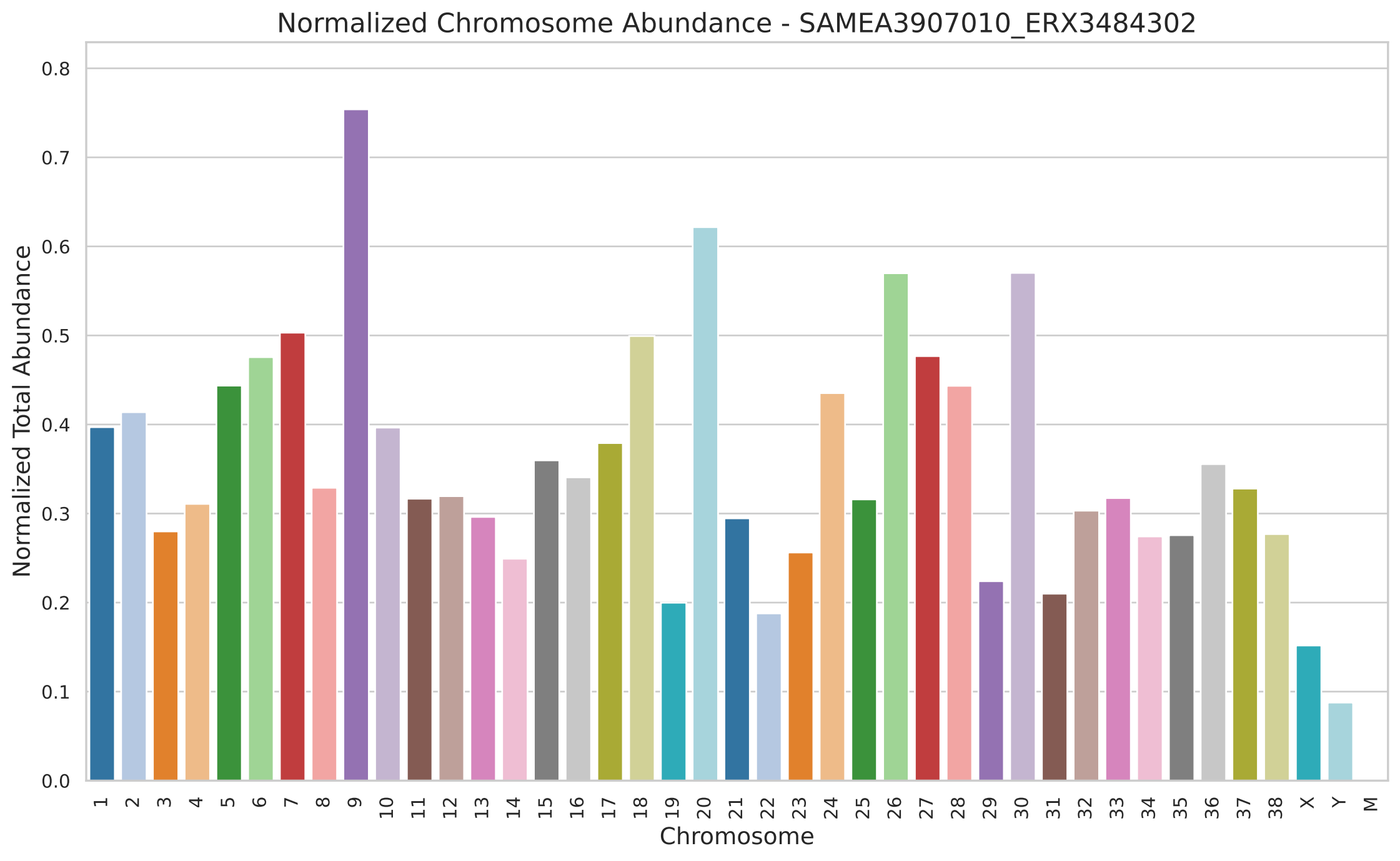

Normalized Chromosome Abundance - SAMEA3906893_ERX3484249
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

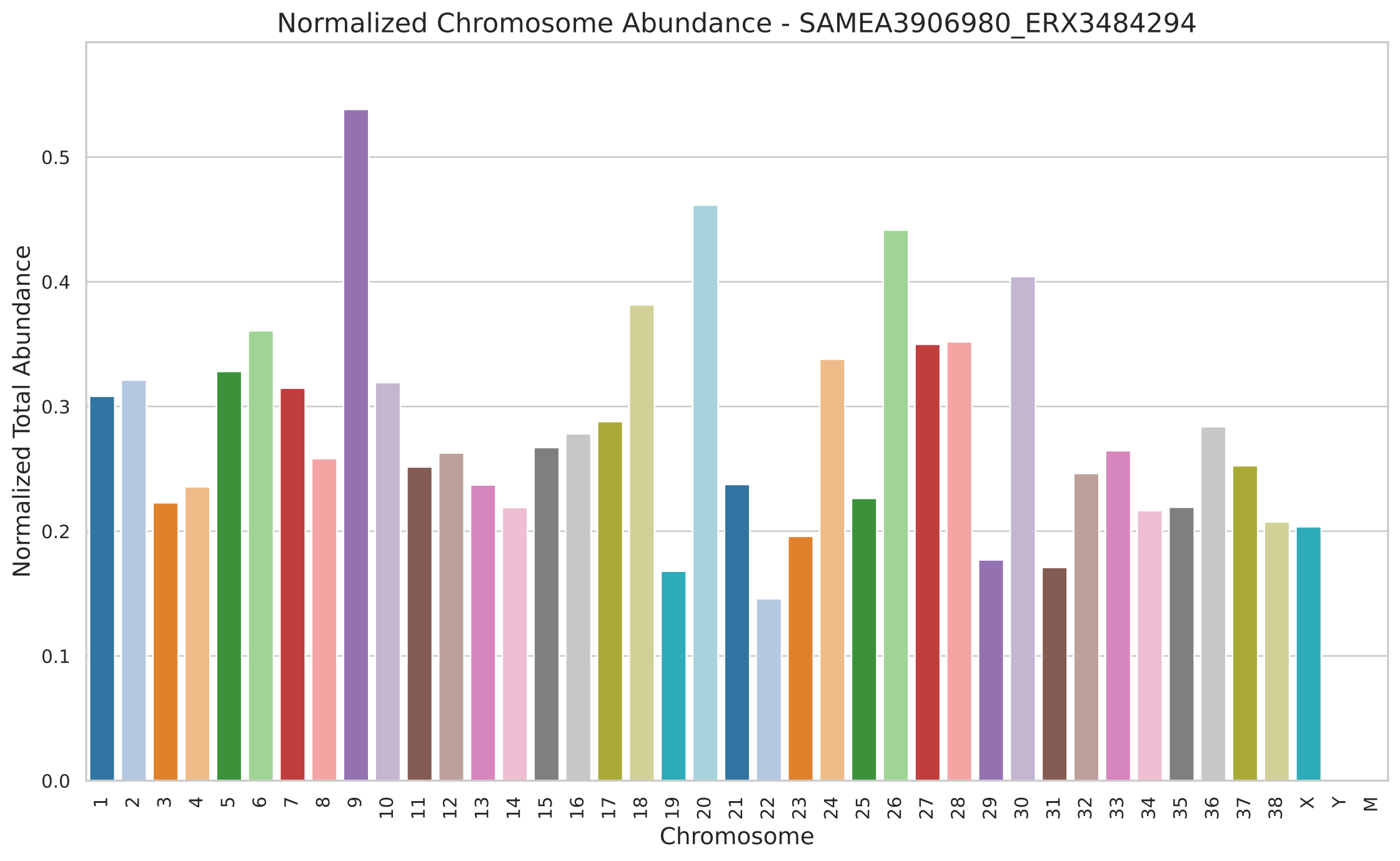

Normalized Chromosome Abundance - SAMEA3906985_ERX3484297
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

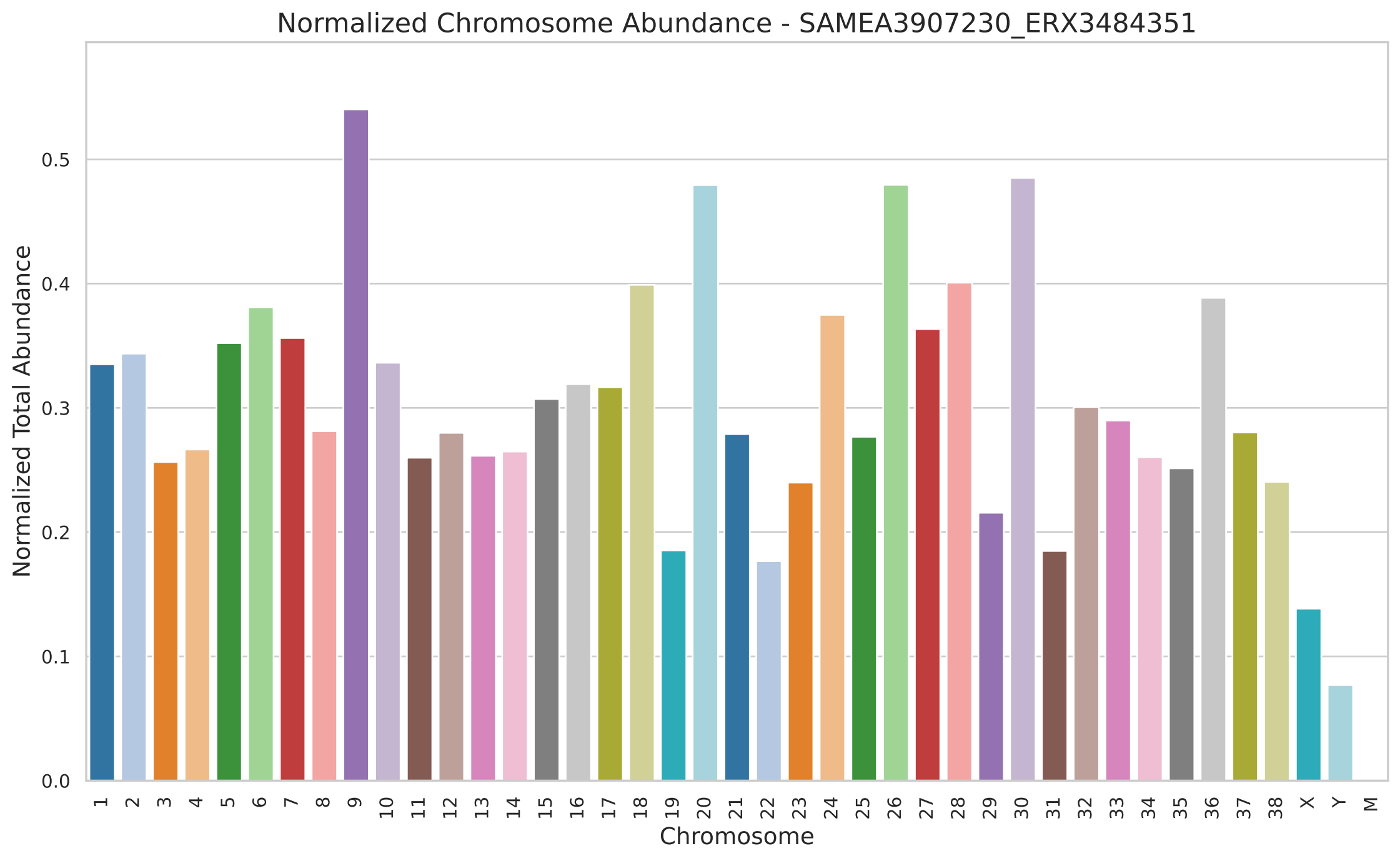

Normalized Chromosome Abundance - SAMEA3910756_ERX3484236
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

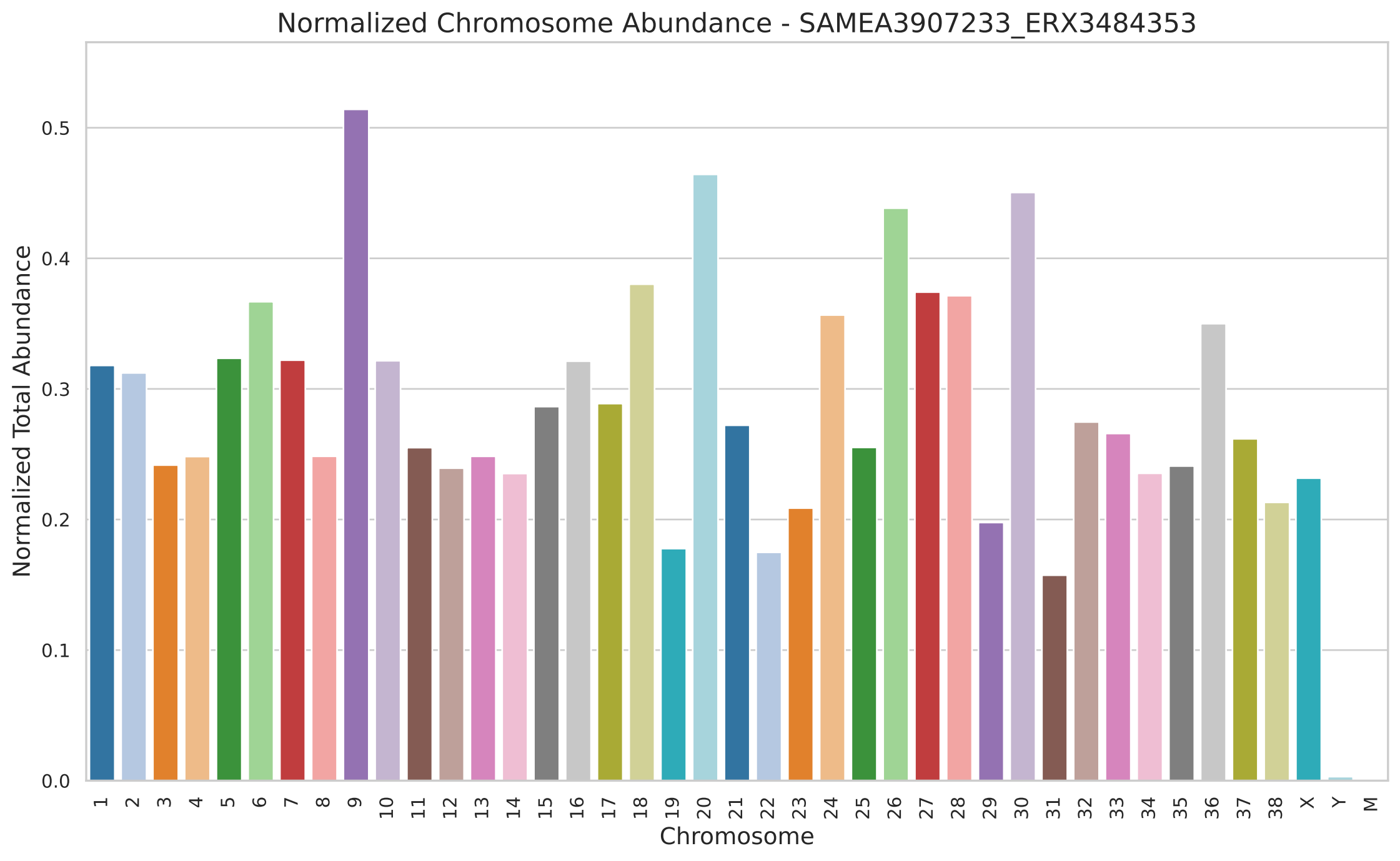

Normalized Chromosome Abundance - SAMEA3907280_ERX3484224
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

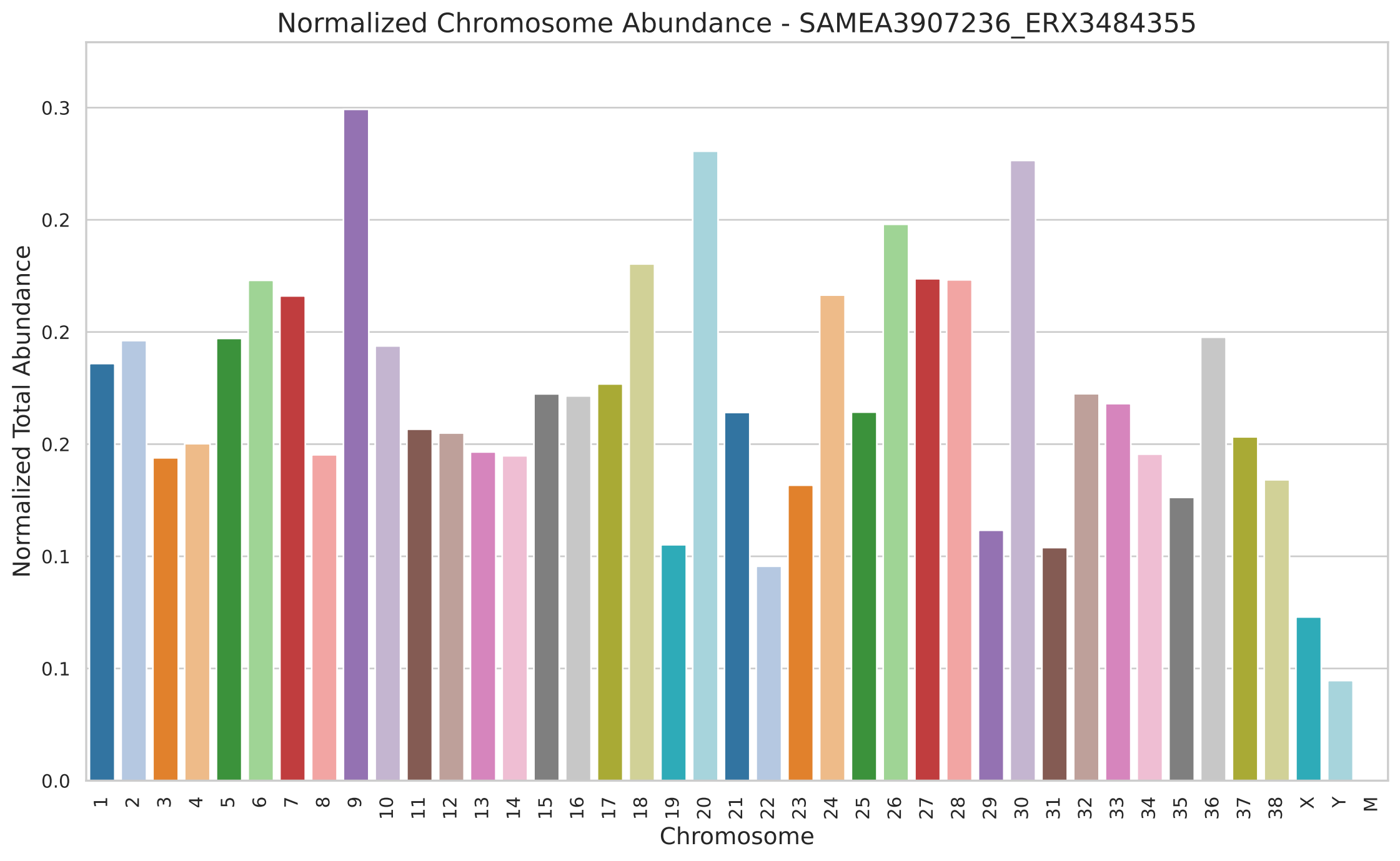

Normalized Chromosome Abundance - SAMEA3906907_ERX3484364
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

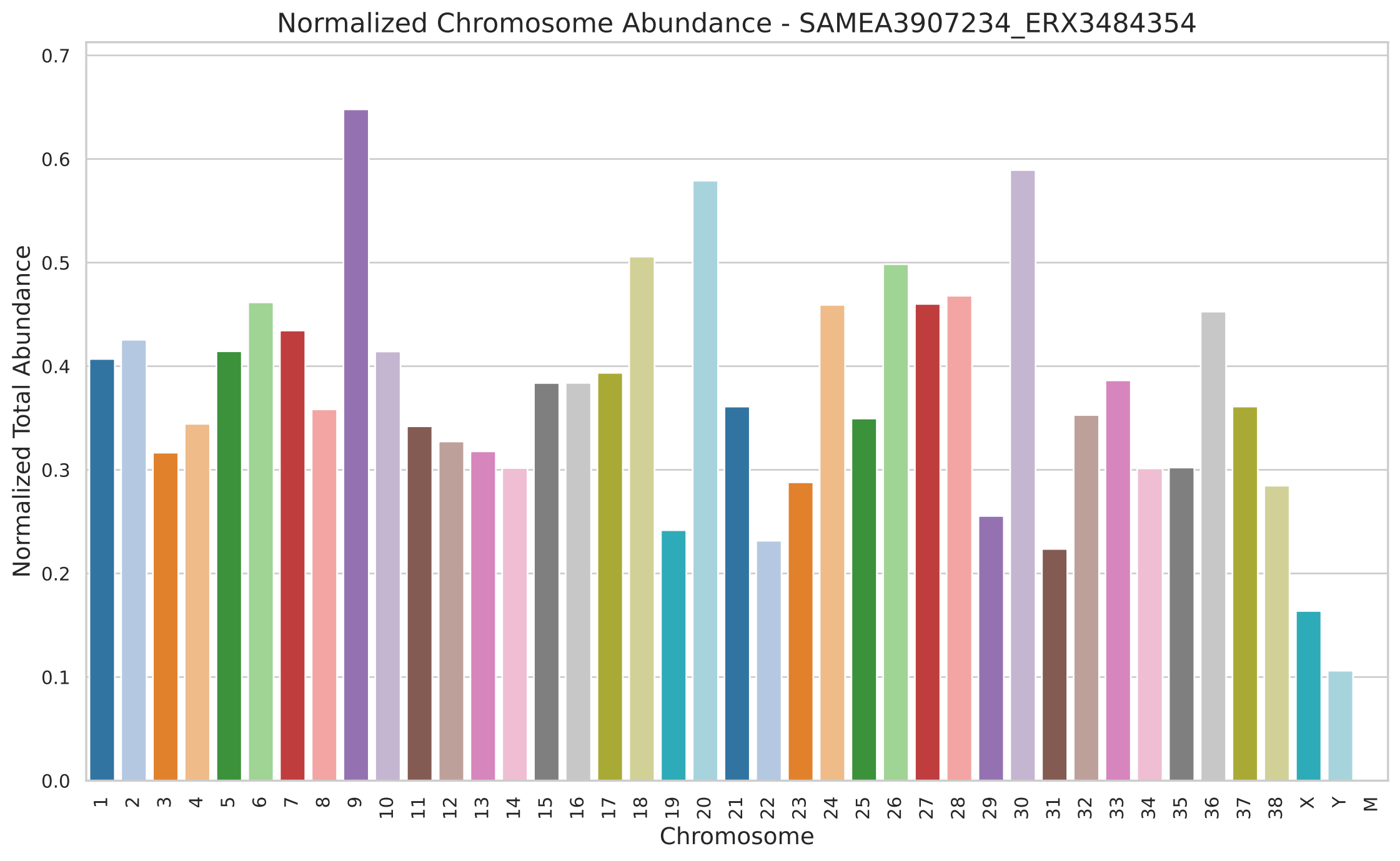

Normalized Chromosome Abundance - SAMEA3907010_ERX3484302
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

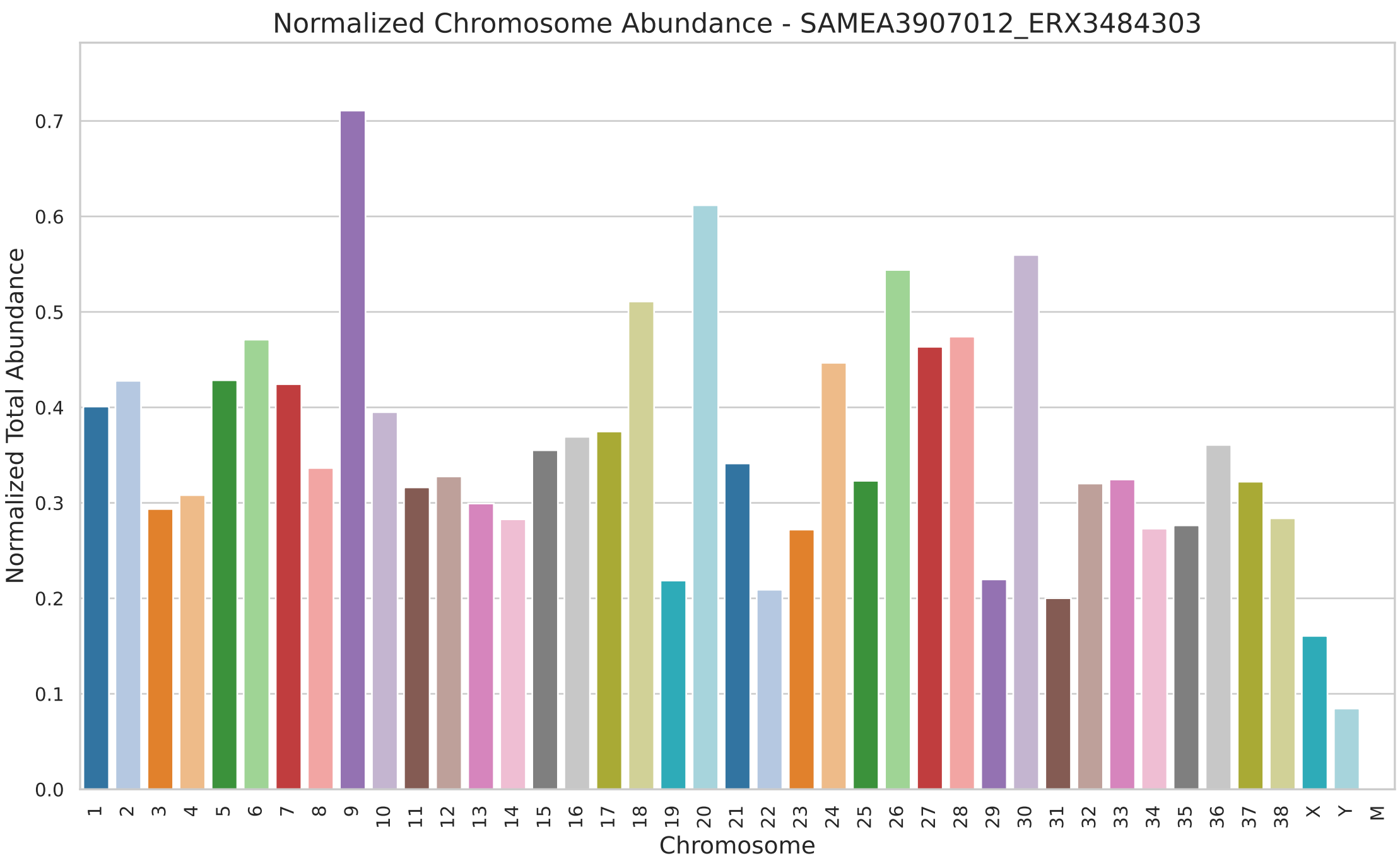

Normalized Chromosome Abundance - SAMEA3906980_ERX3484294
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

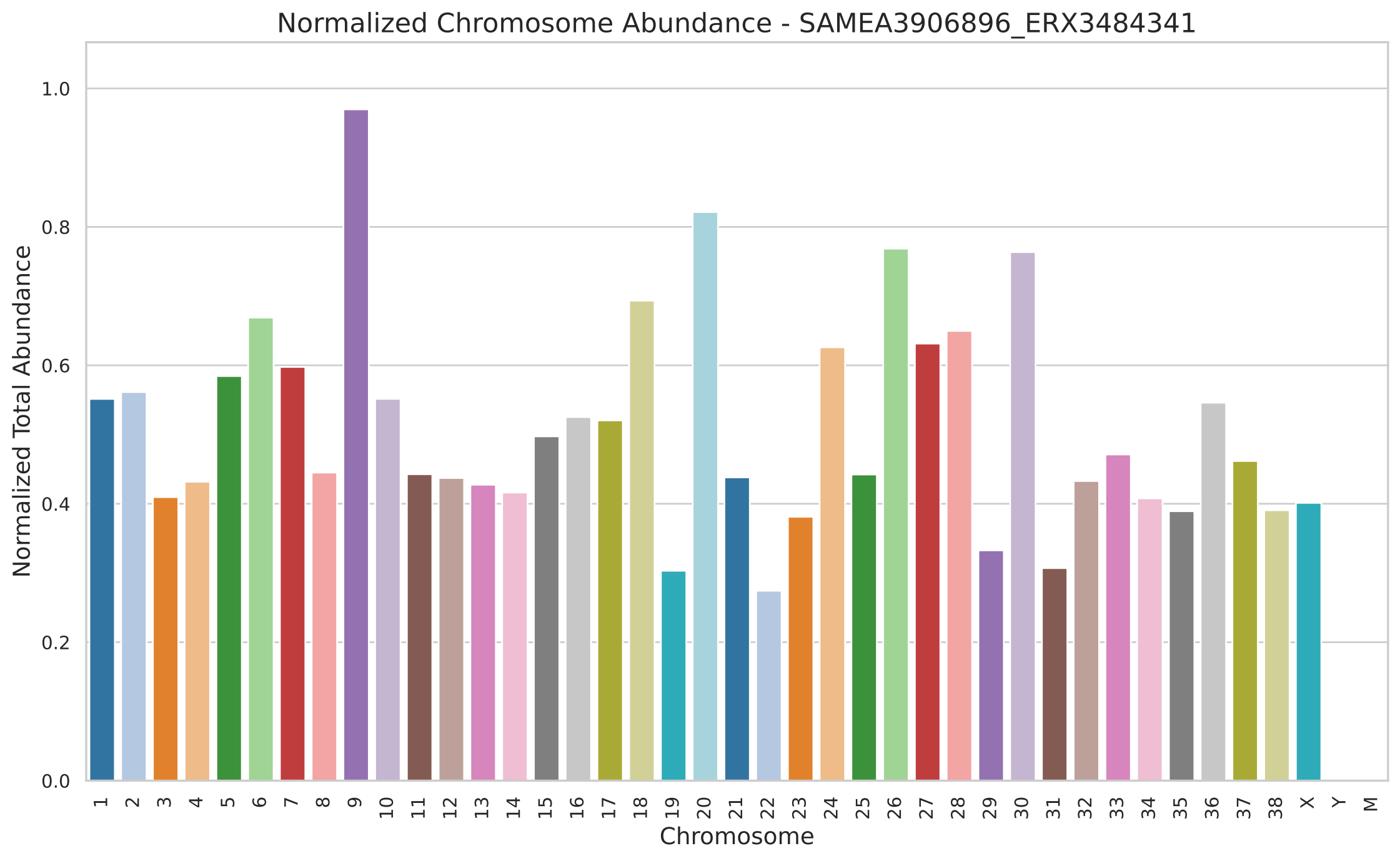

Normalized Chromosome Abundance - SAMEA3907230_ERX3484351
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

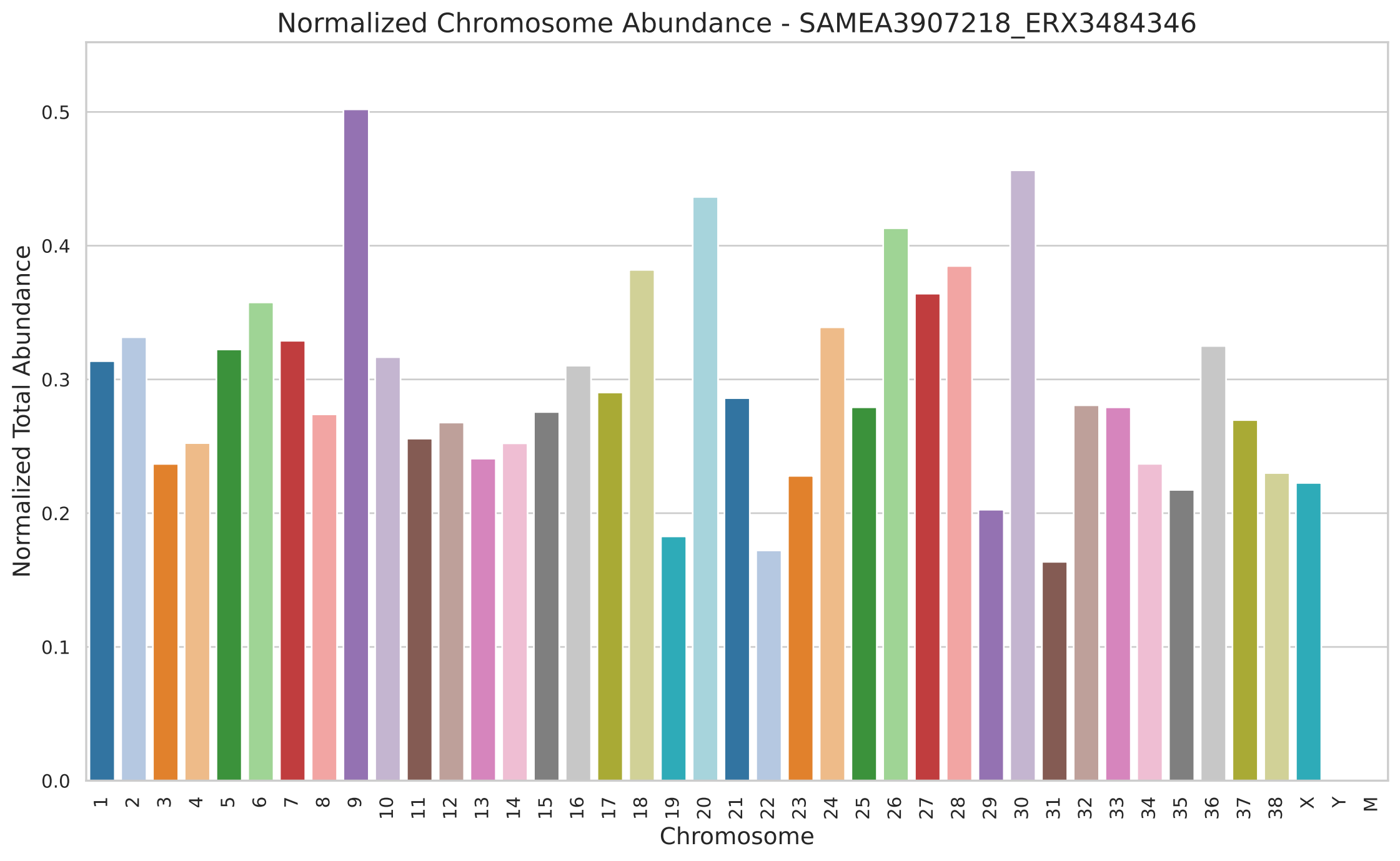

Normalized Chromosome Abundance - SAMEA3907233_ERX3484353
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

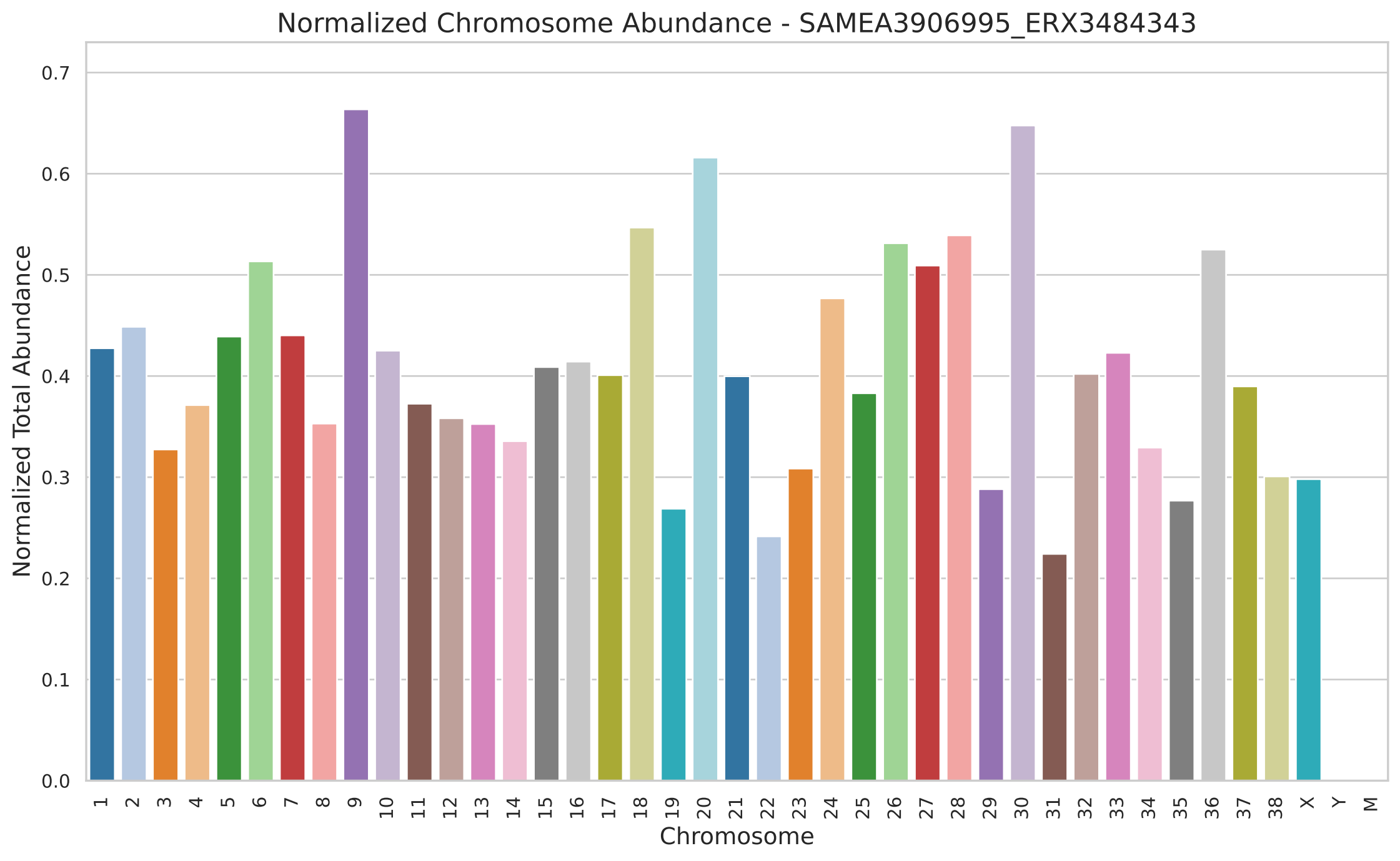

Normalized Chromosome Abundance - SAMEA3907236_ERX3484355
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

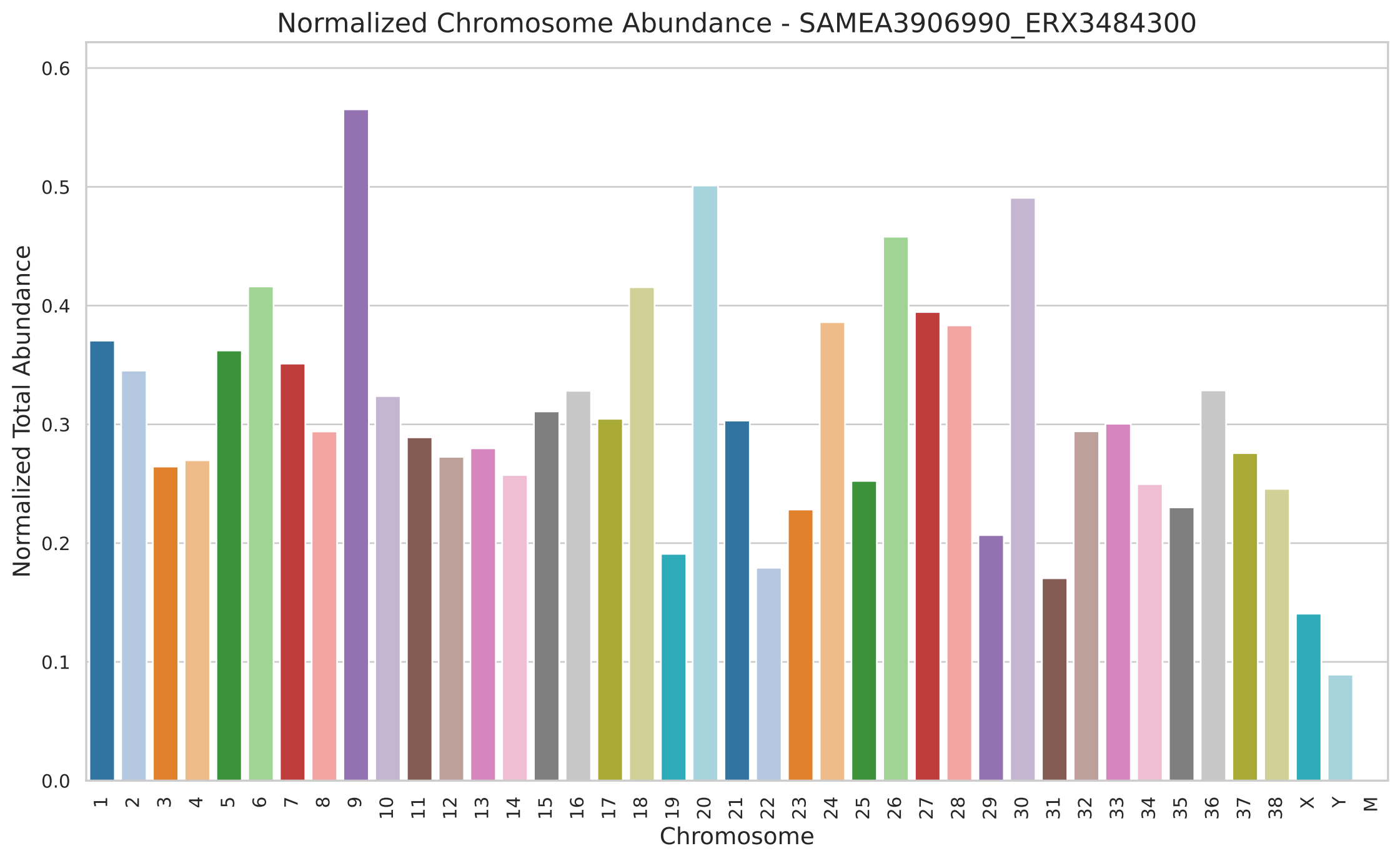

Normalized Chromosome Abundance - SAMEA3907234_ERX3484354
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

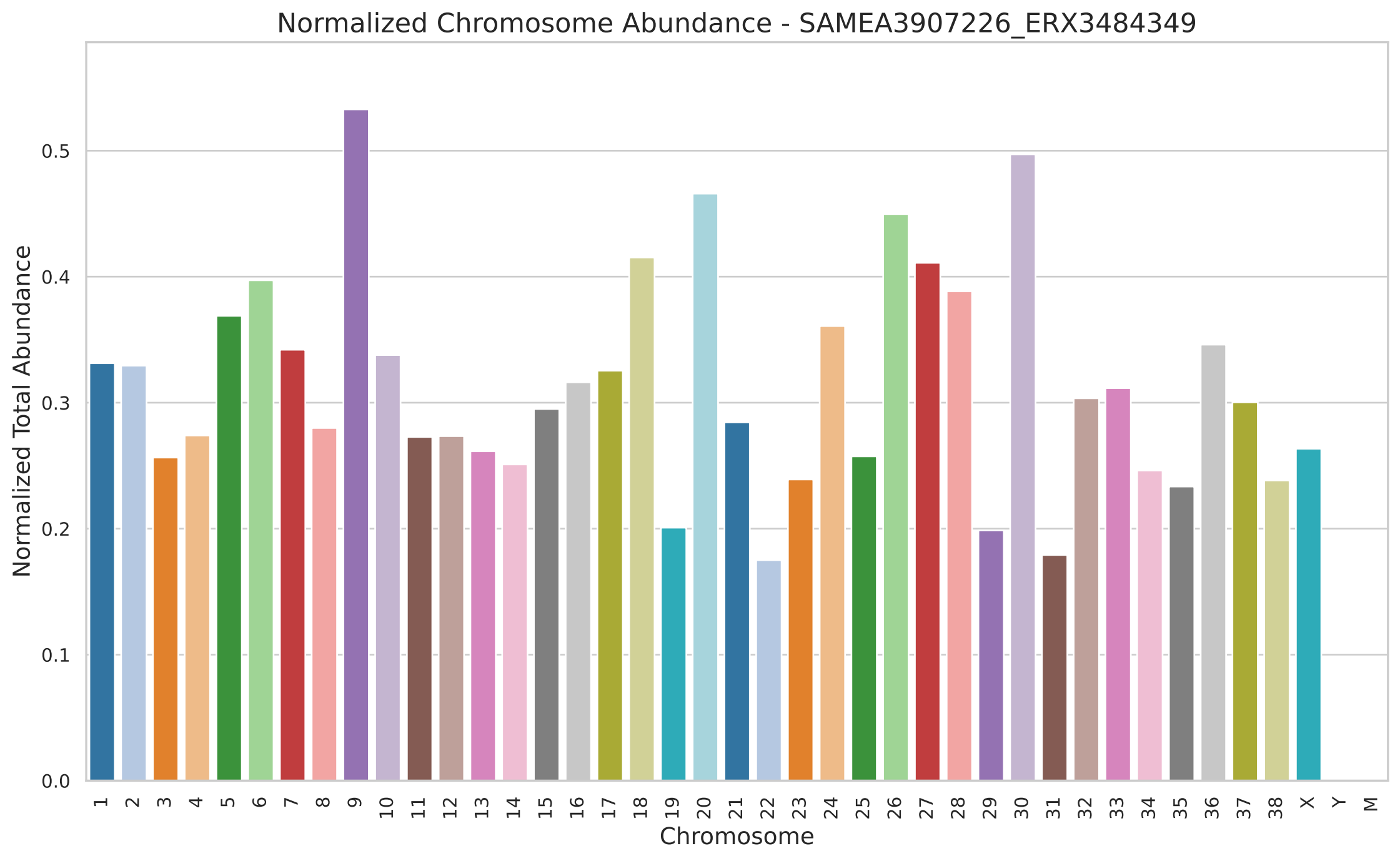

Normalized Chromosome Abundance - SAMEA3907012_ERX3484303
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

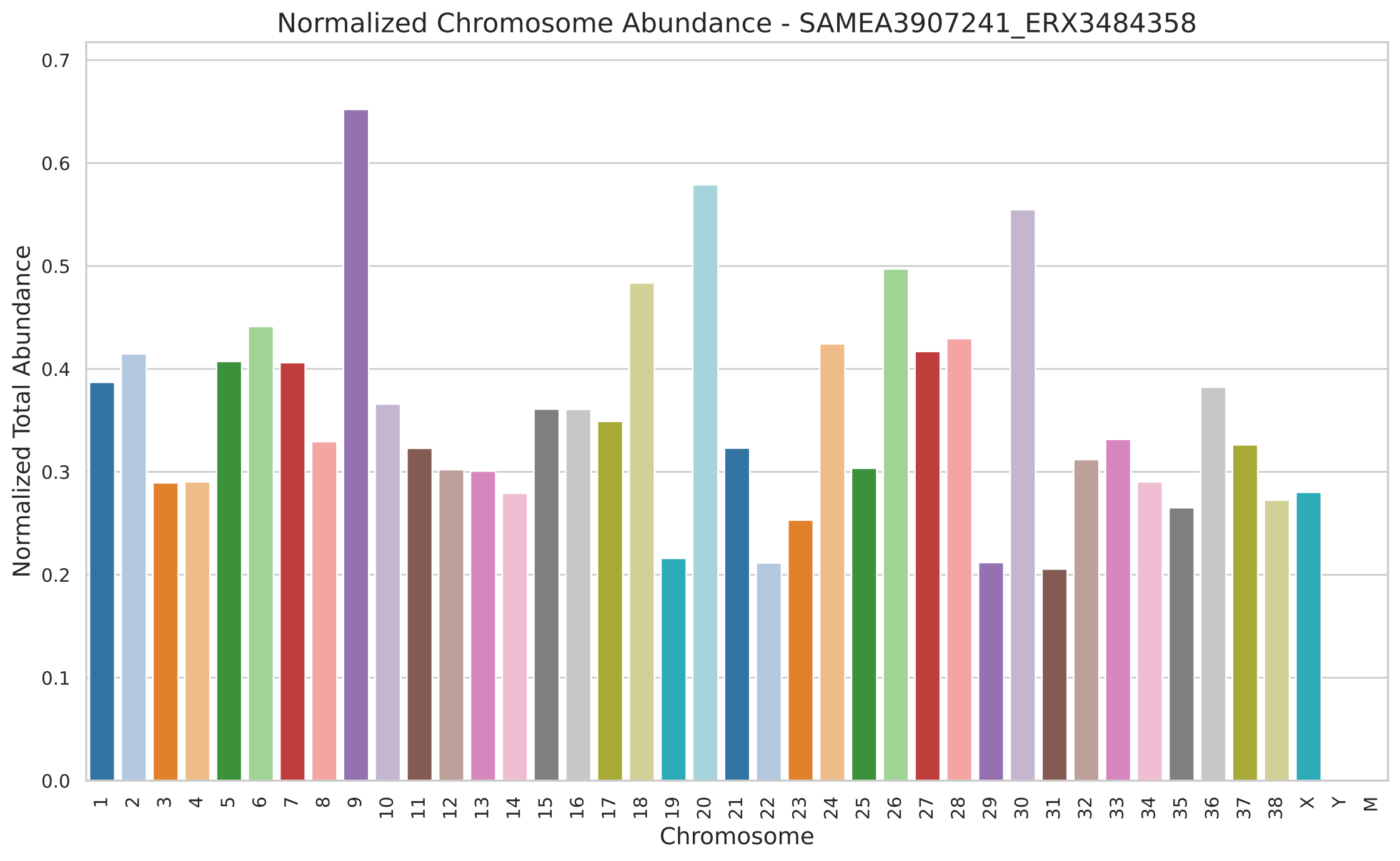

Normalized Chromosome Abundance - SAMEA3906896_ERX3484341
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

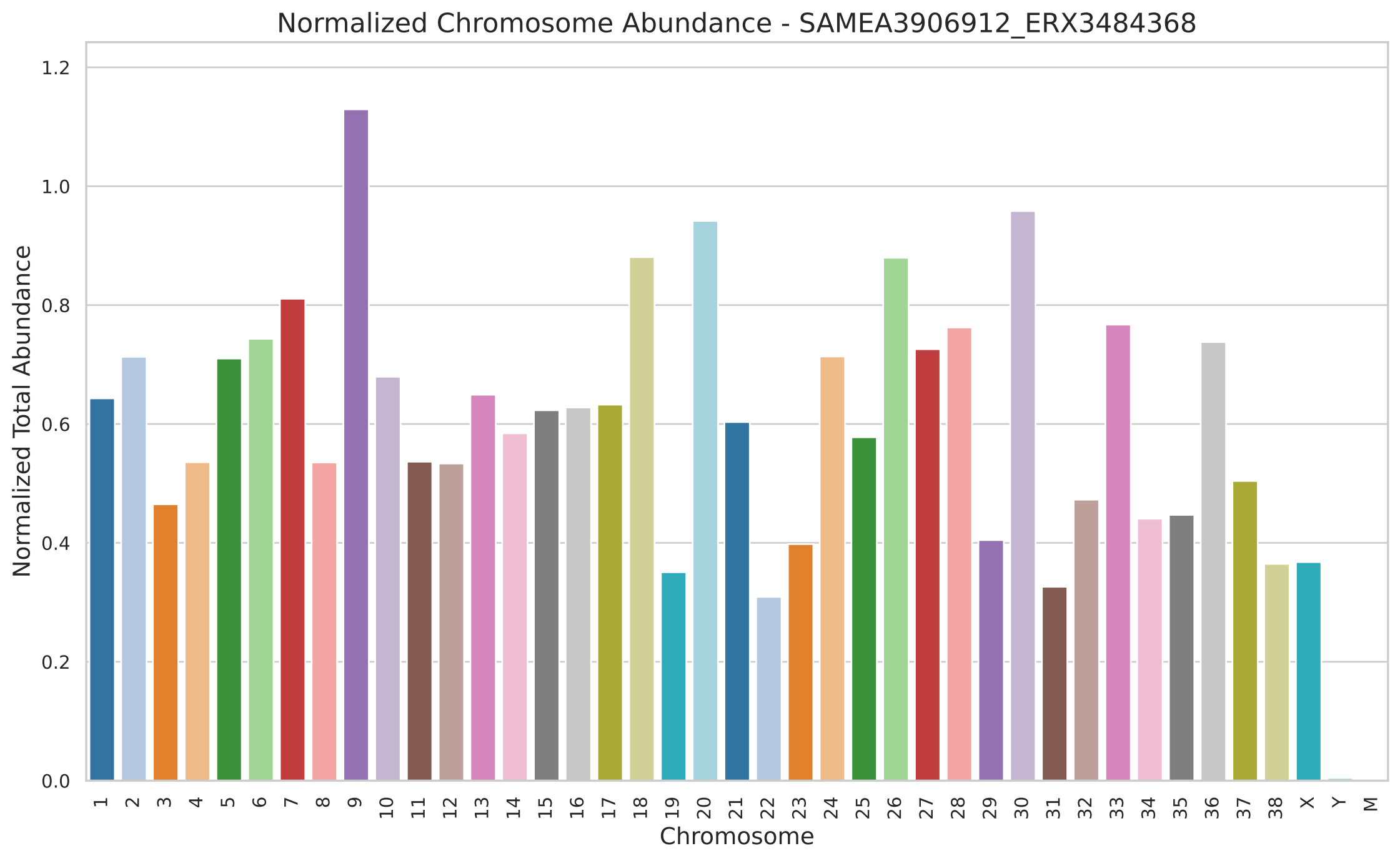

Normalized Chromosome Abundance - SAMEA3907218_ERX3484346
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

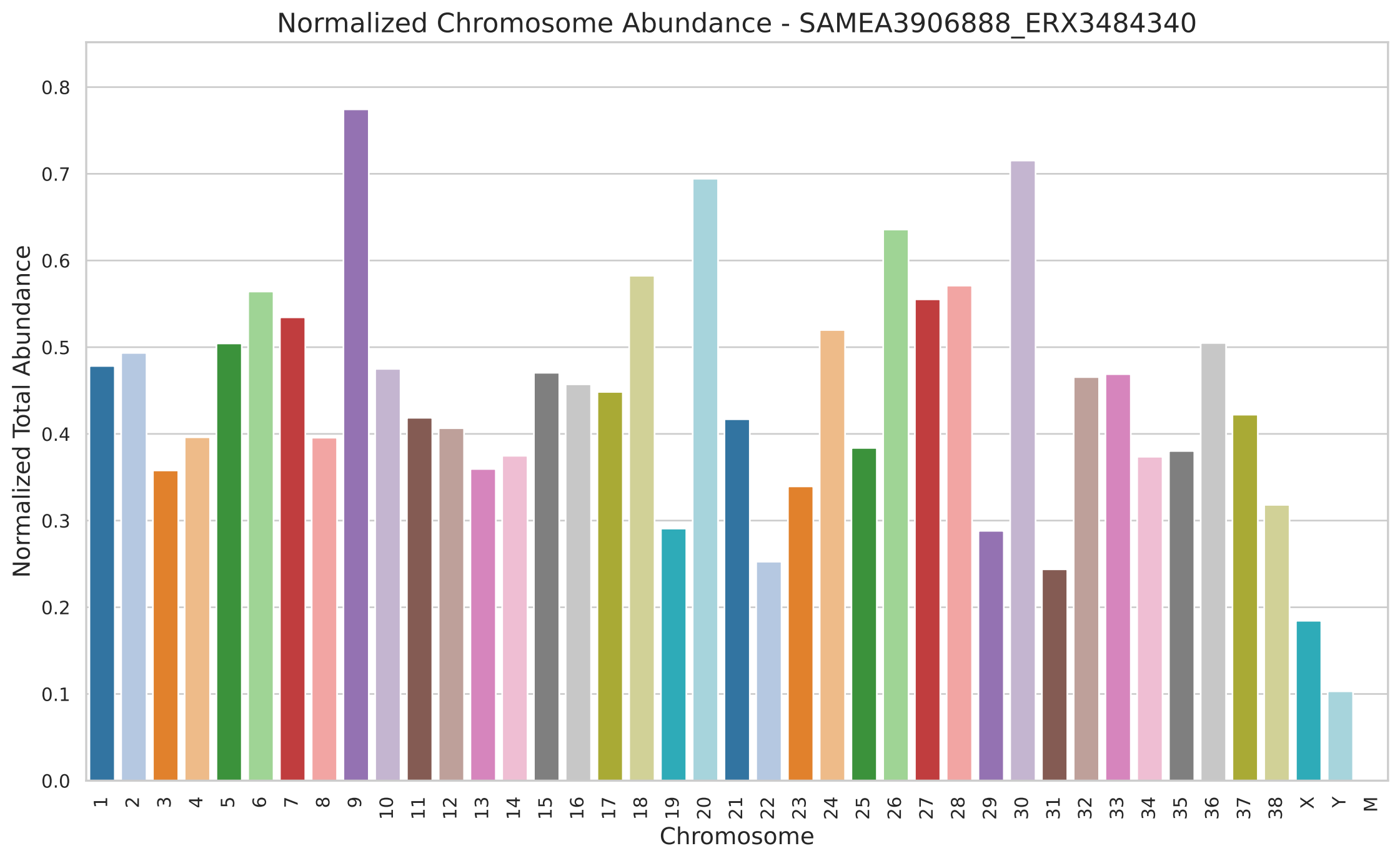

Normalized Chromosome Abundance - SAMEA3906995_ERX3484343
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

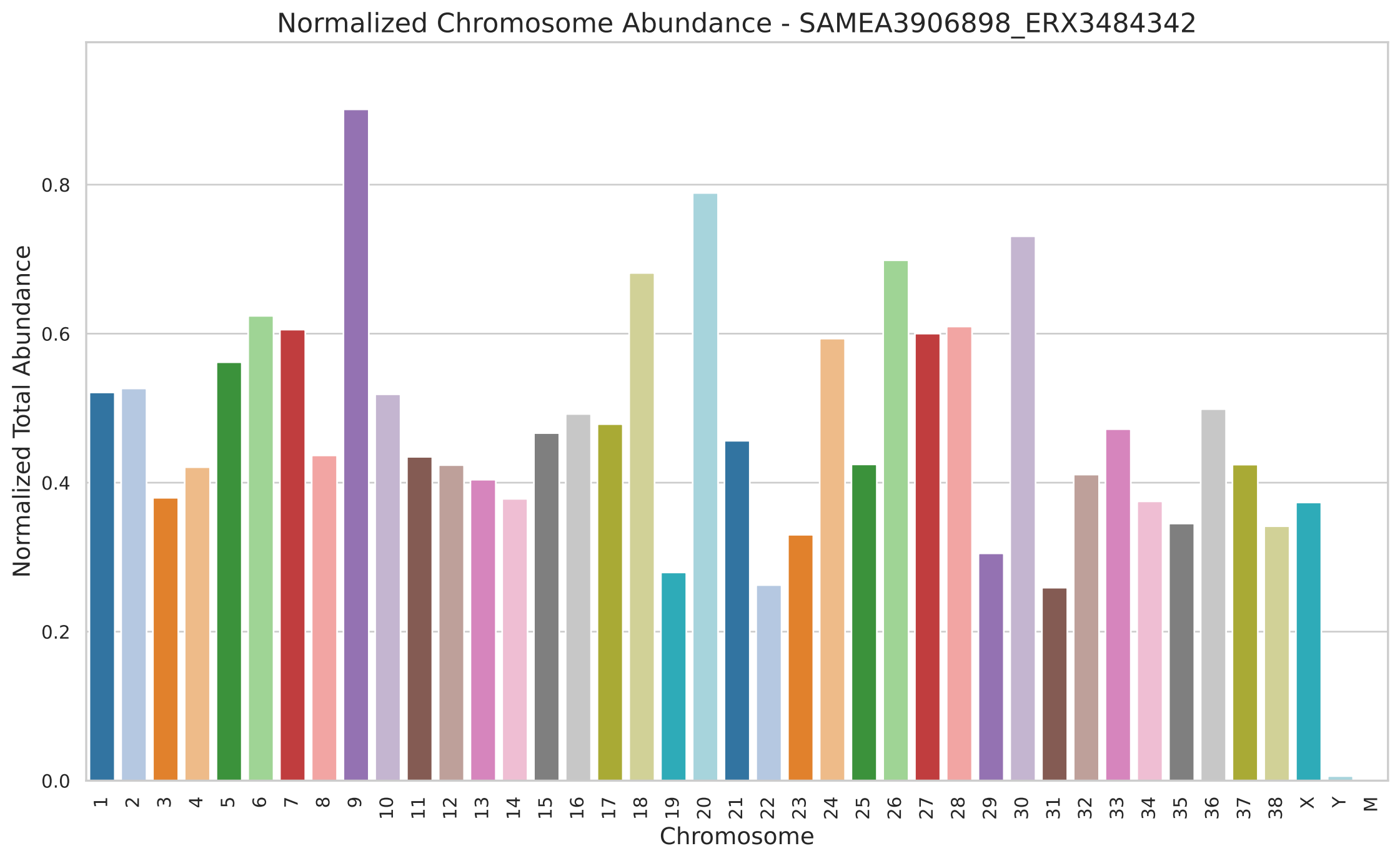

Normalized Chromosome Abundance - SAMEA3906990_ERX3484300
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

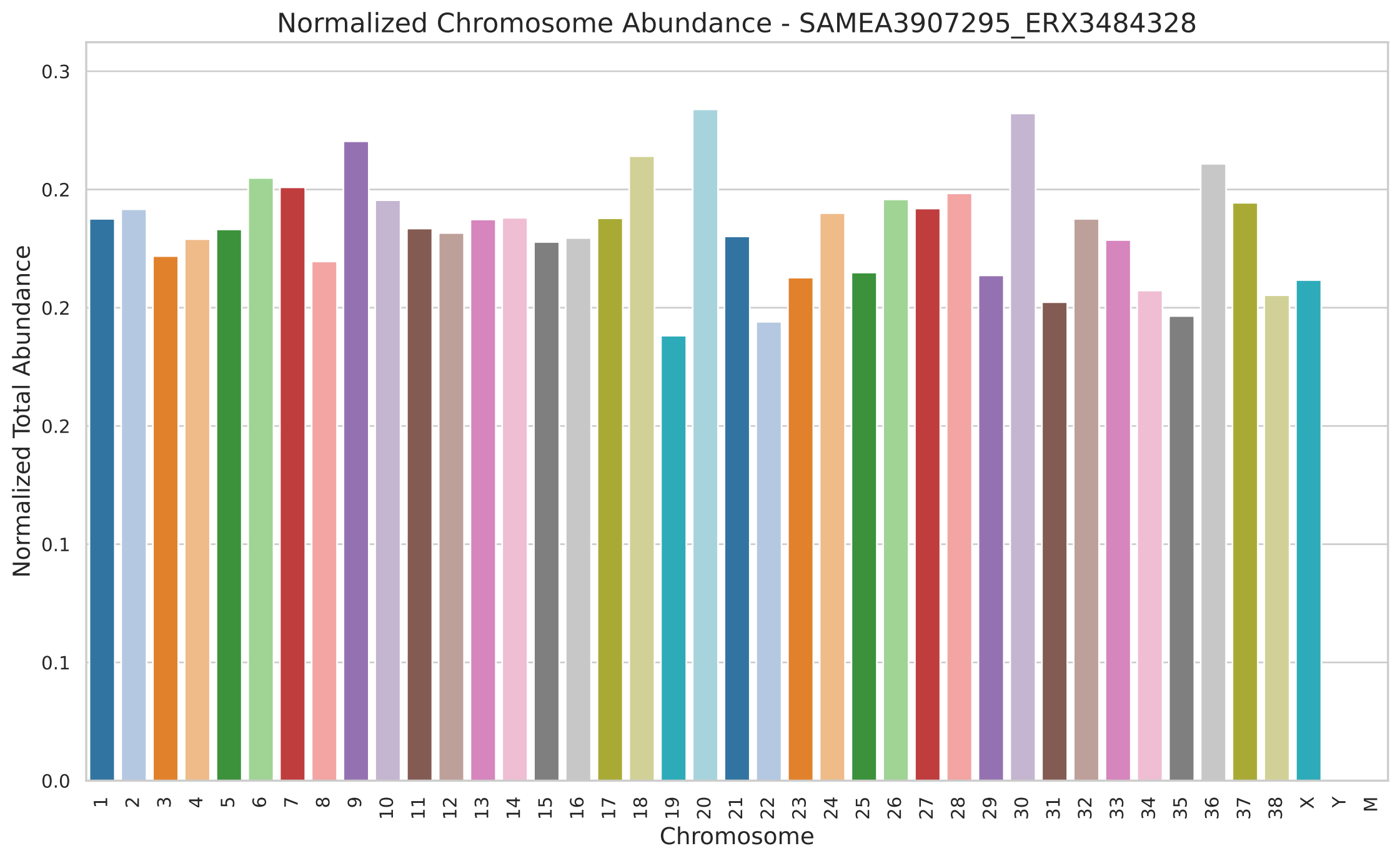

Normalized Chromosome Abundance - SAMEA3907226_ERX3484349
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

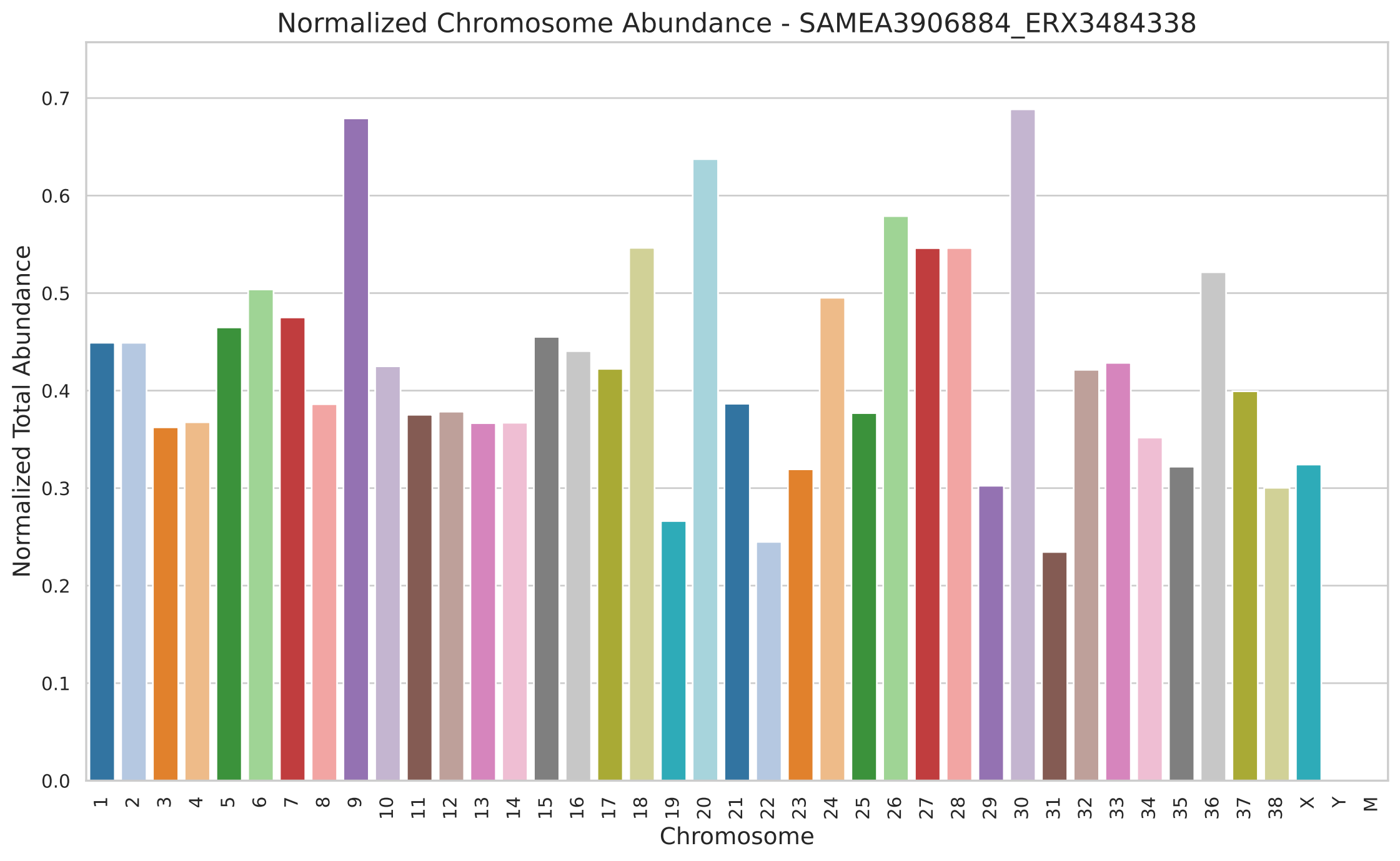

Normalized Chromosome Abundance - SAMEA3907241_ERX3484358
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

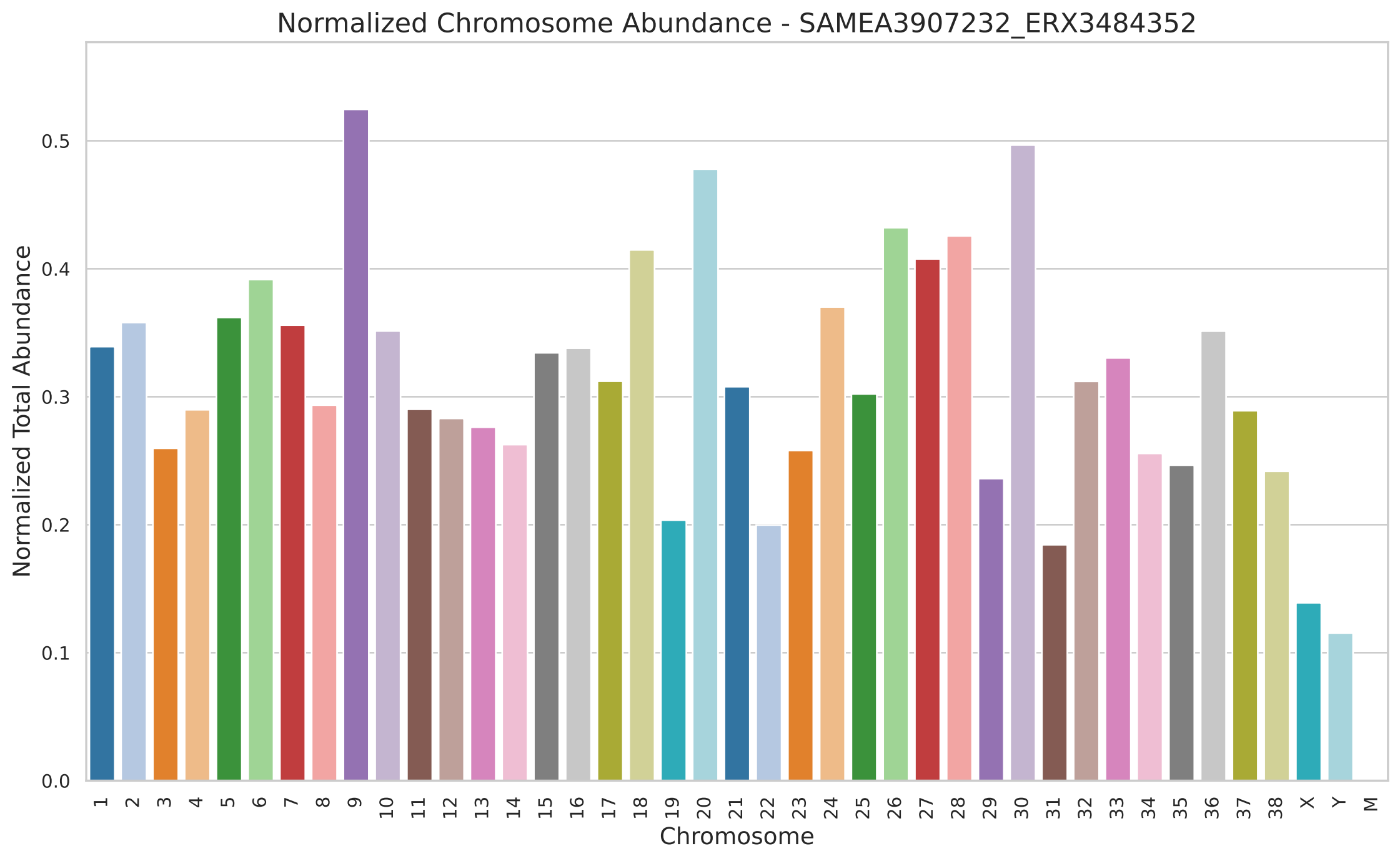

Normalized Chromosome Abundance - SAMEA3906912_ERX3484368
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

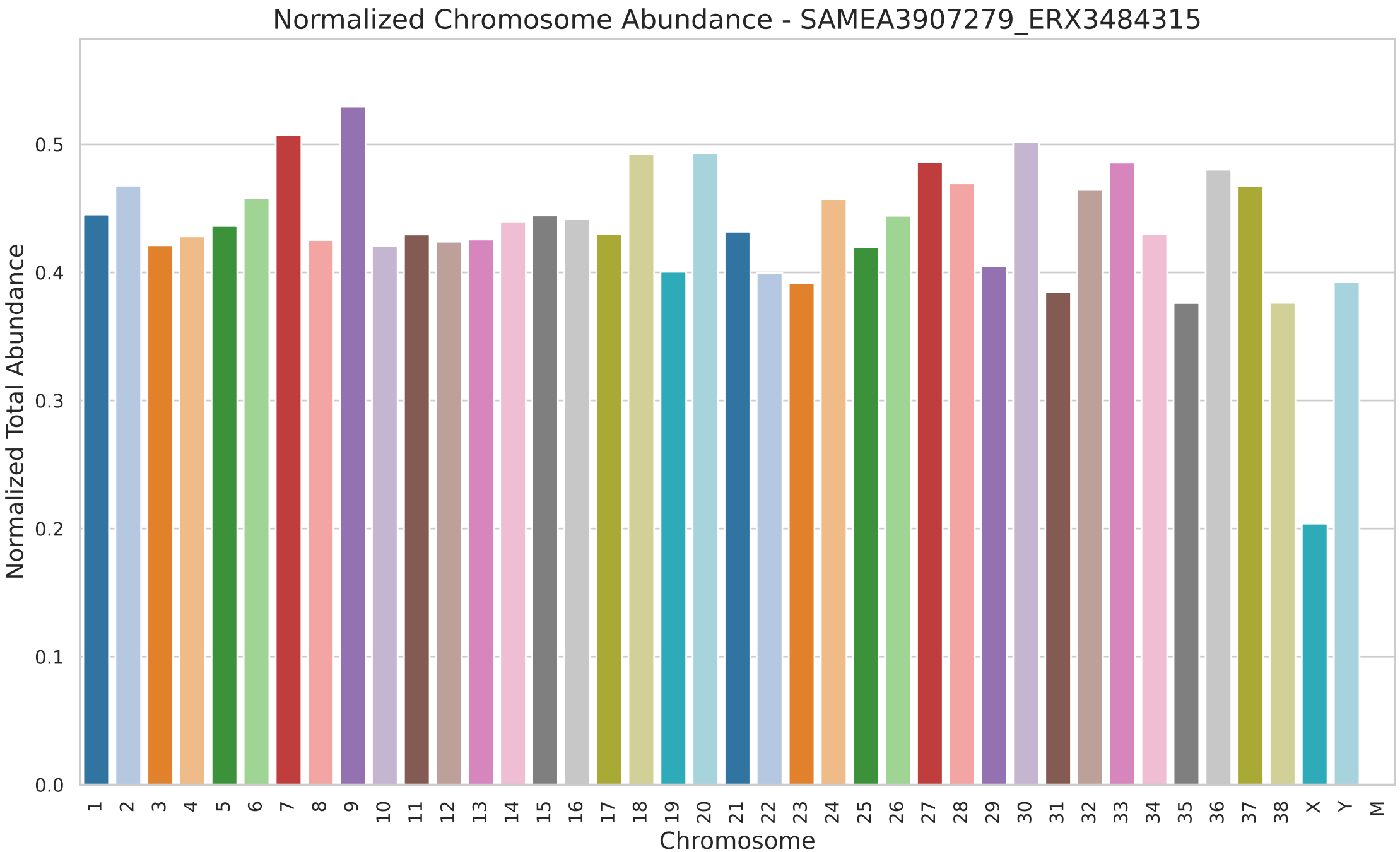

Normalized Chromosome Abundance - SAMEA3906888_ERX3484340
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

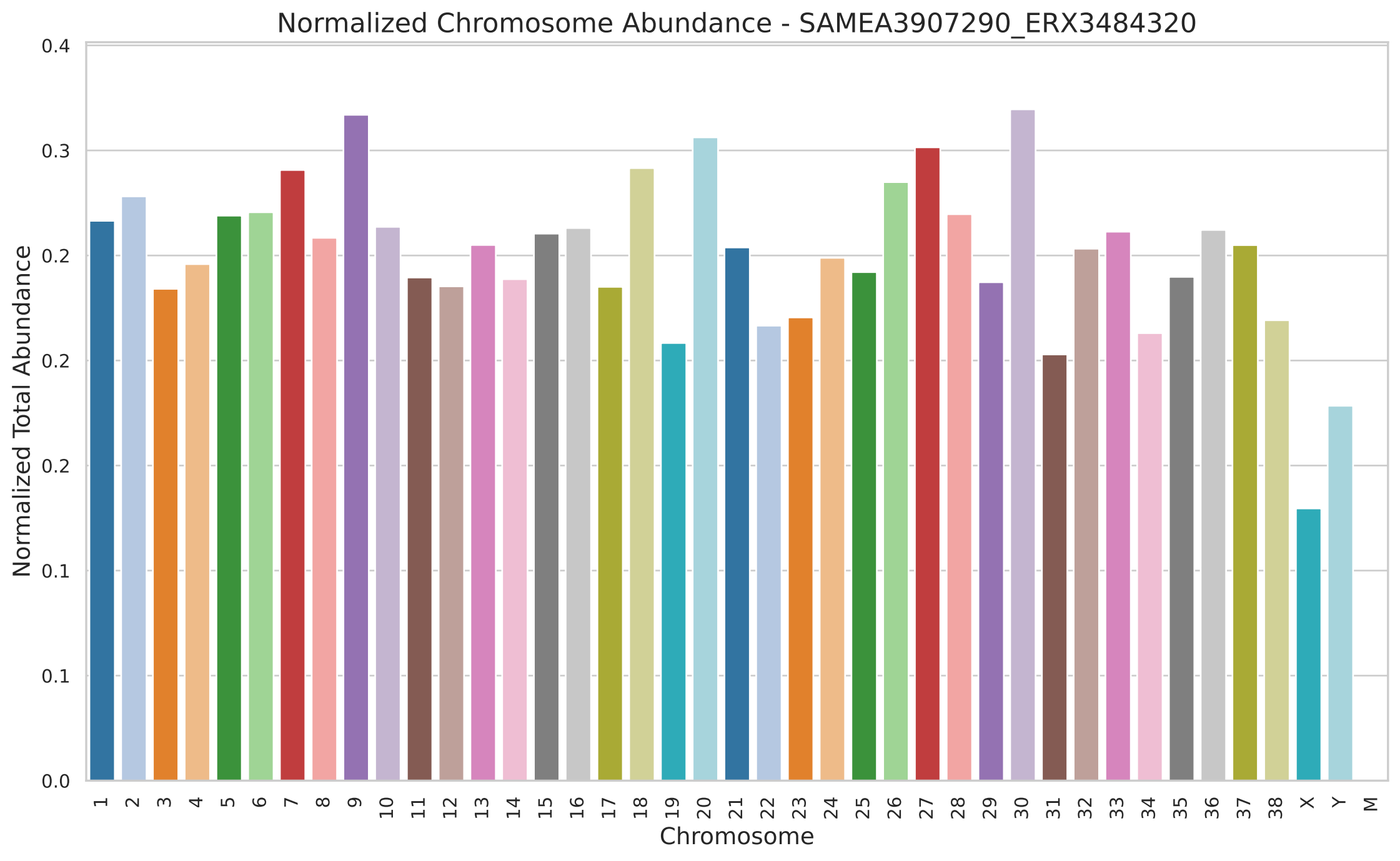

Normalized Chromosome Abundance - SAMEA3906898_ERX3484342
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

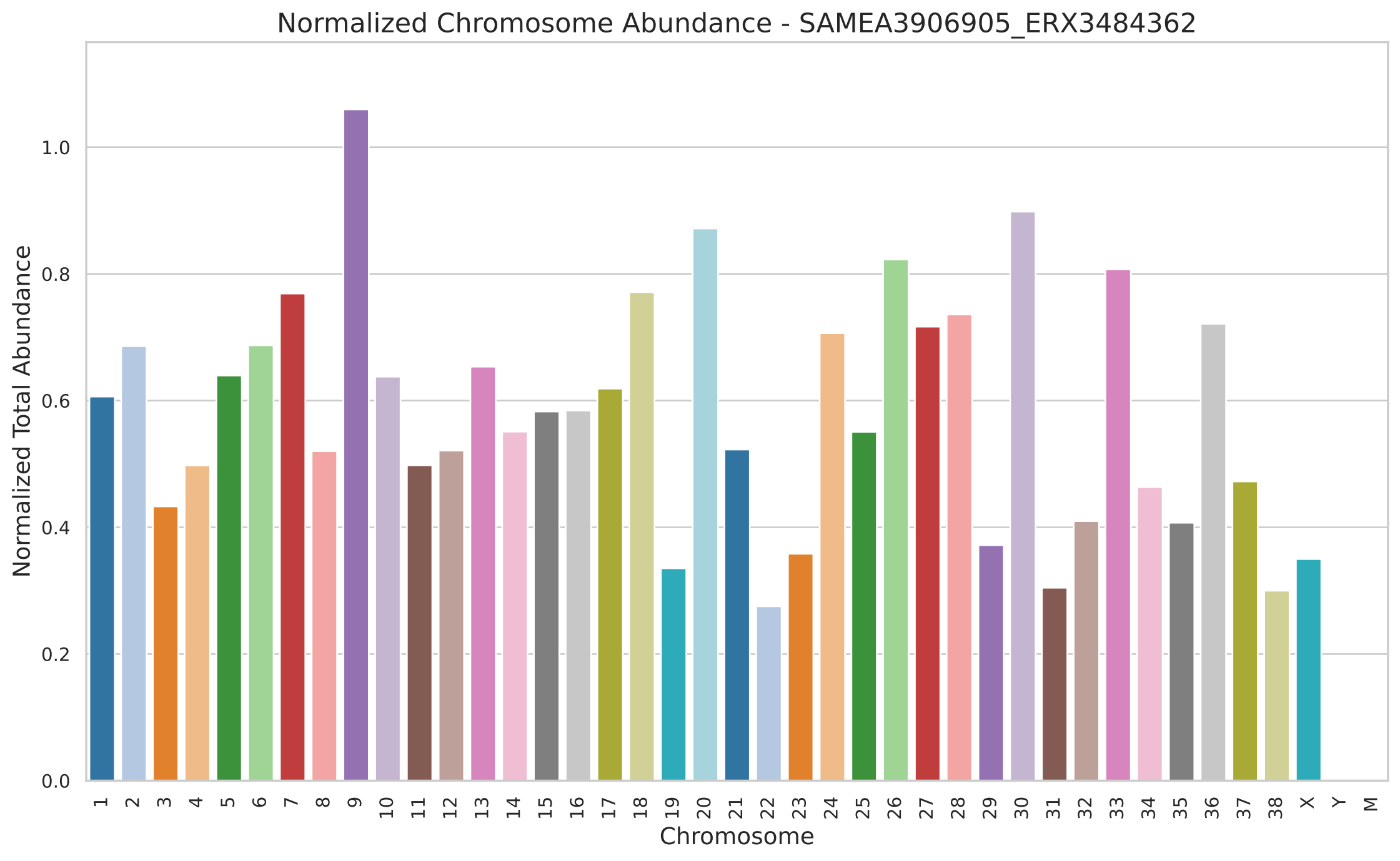

Normalized Chromosome Abundance - SAMEA3907295_ERX3484328
Normalized Total Abundance
0.3
0.2
0.2
0.1
0.1
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

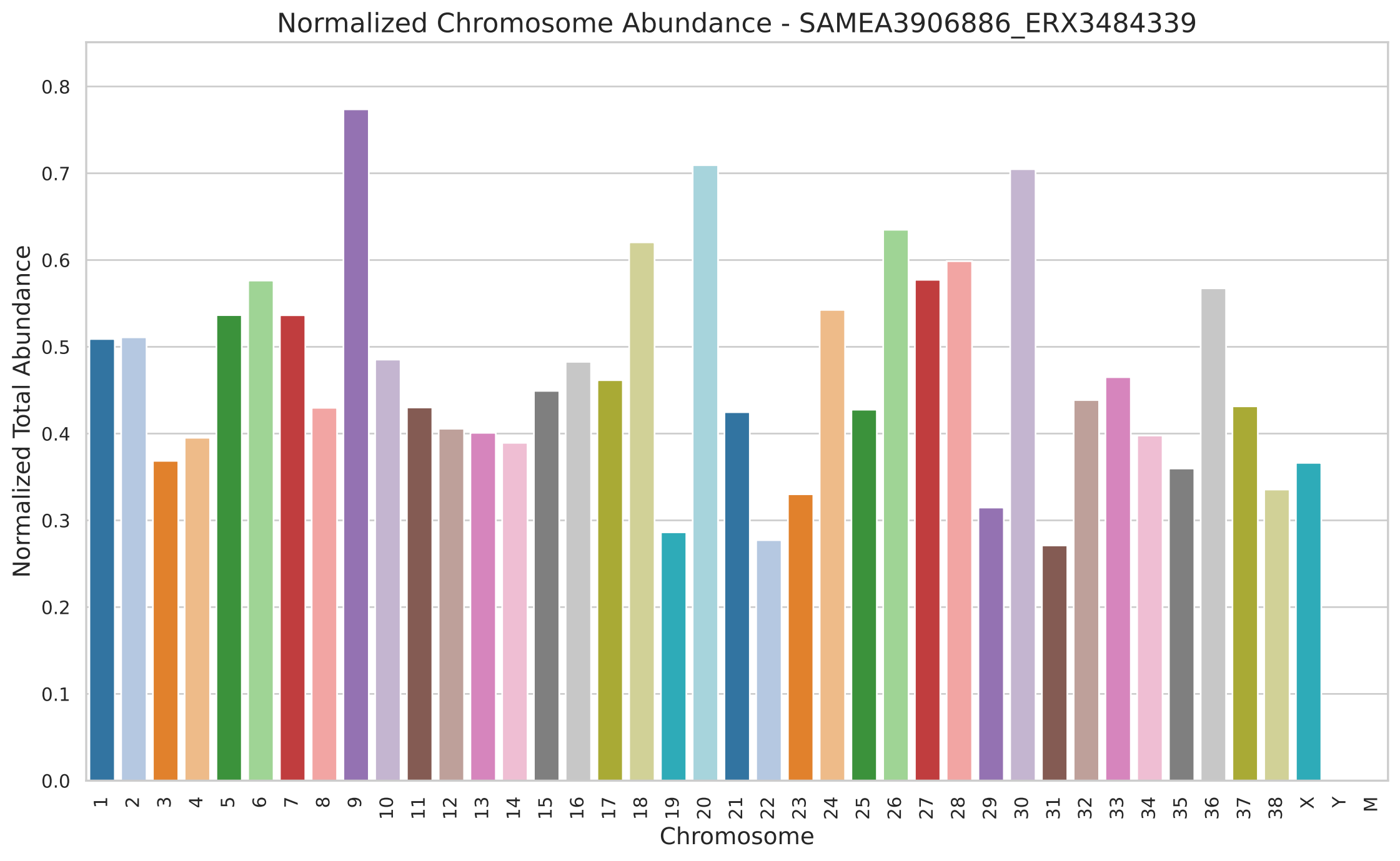

Normalized Chromosome Abundance - SAMEA3906884_ERX3484338
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

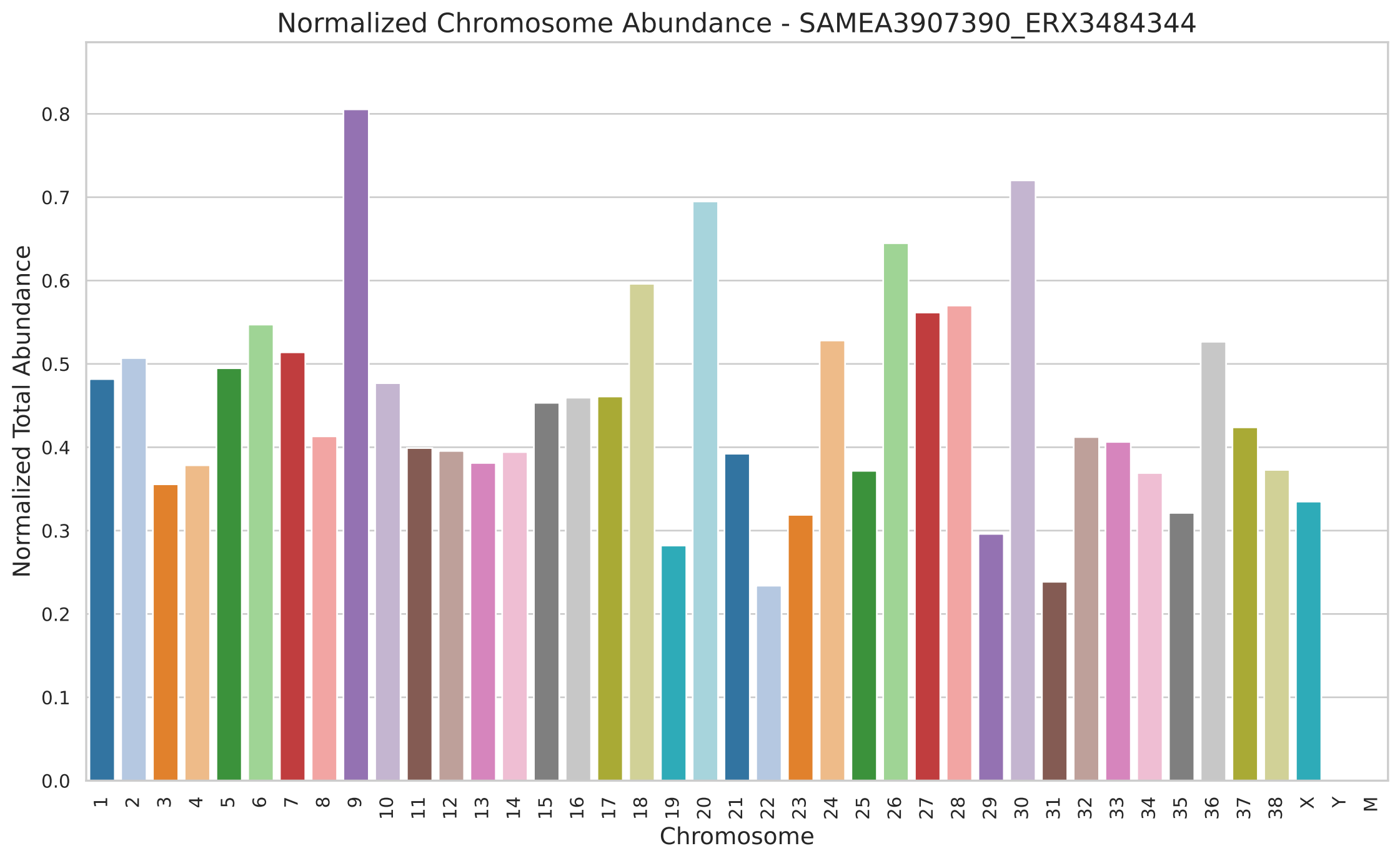

Normalized Chromosome Abundance - SAMEA3907232_ERX3484352
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

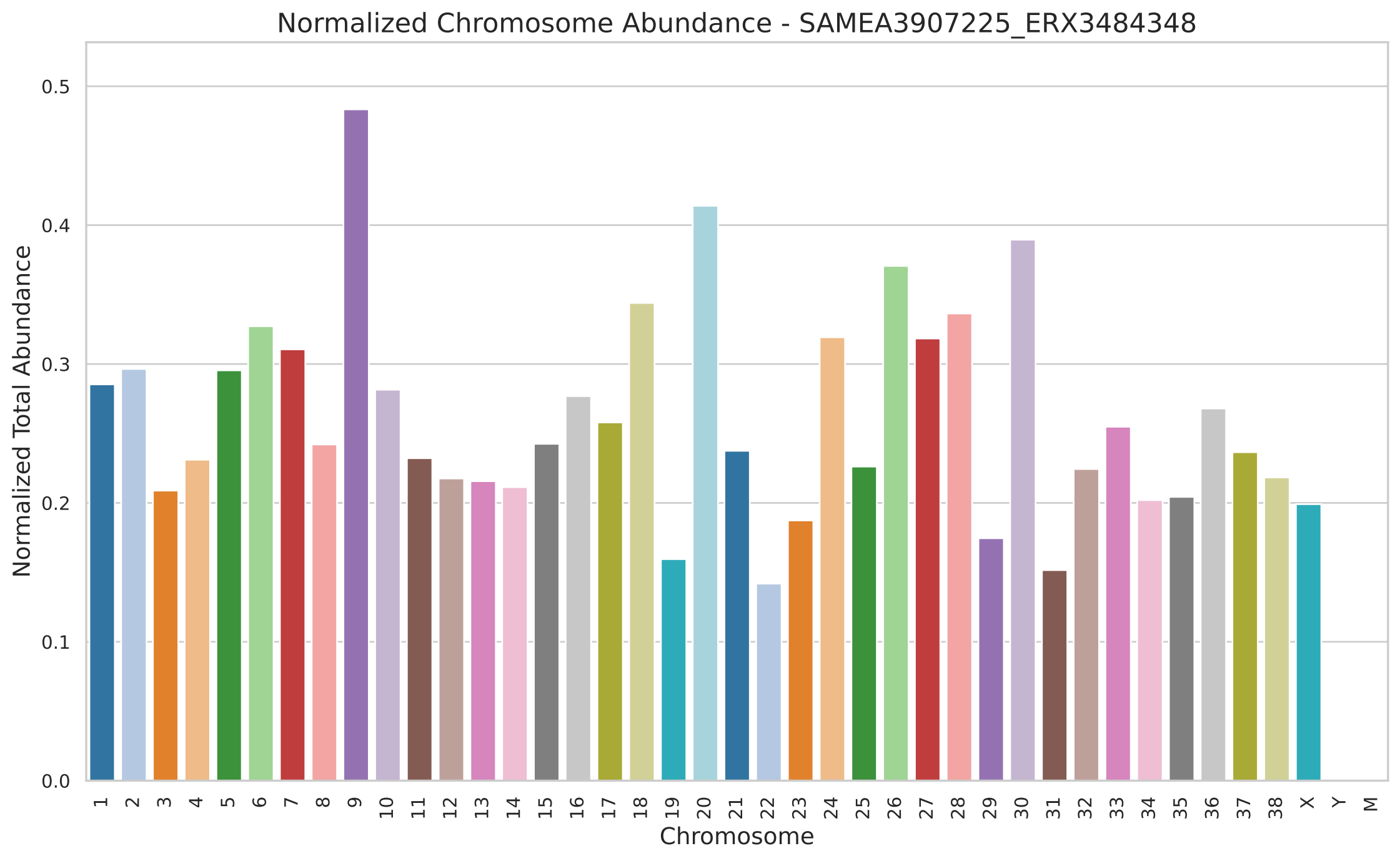

Normalized Chromosome Abundance - SAMEA3907279_ERX3484315
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

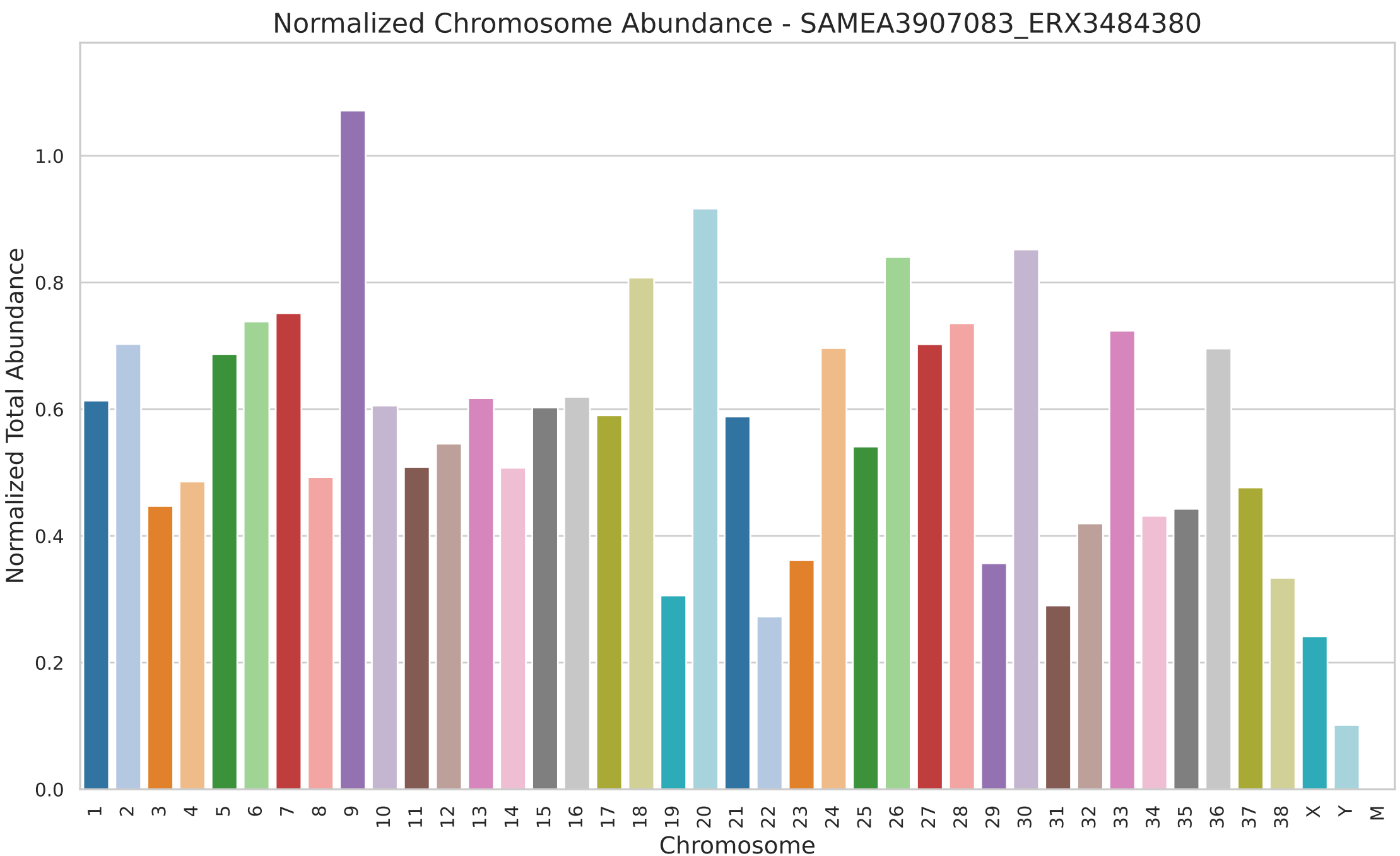

Normalized Chromosome Abundance - SAMEA3907290_ERX3484320
Normalized Total Abundance
0.4
0.3
0.2
0.2
0.1
0.1
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

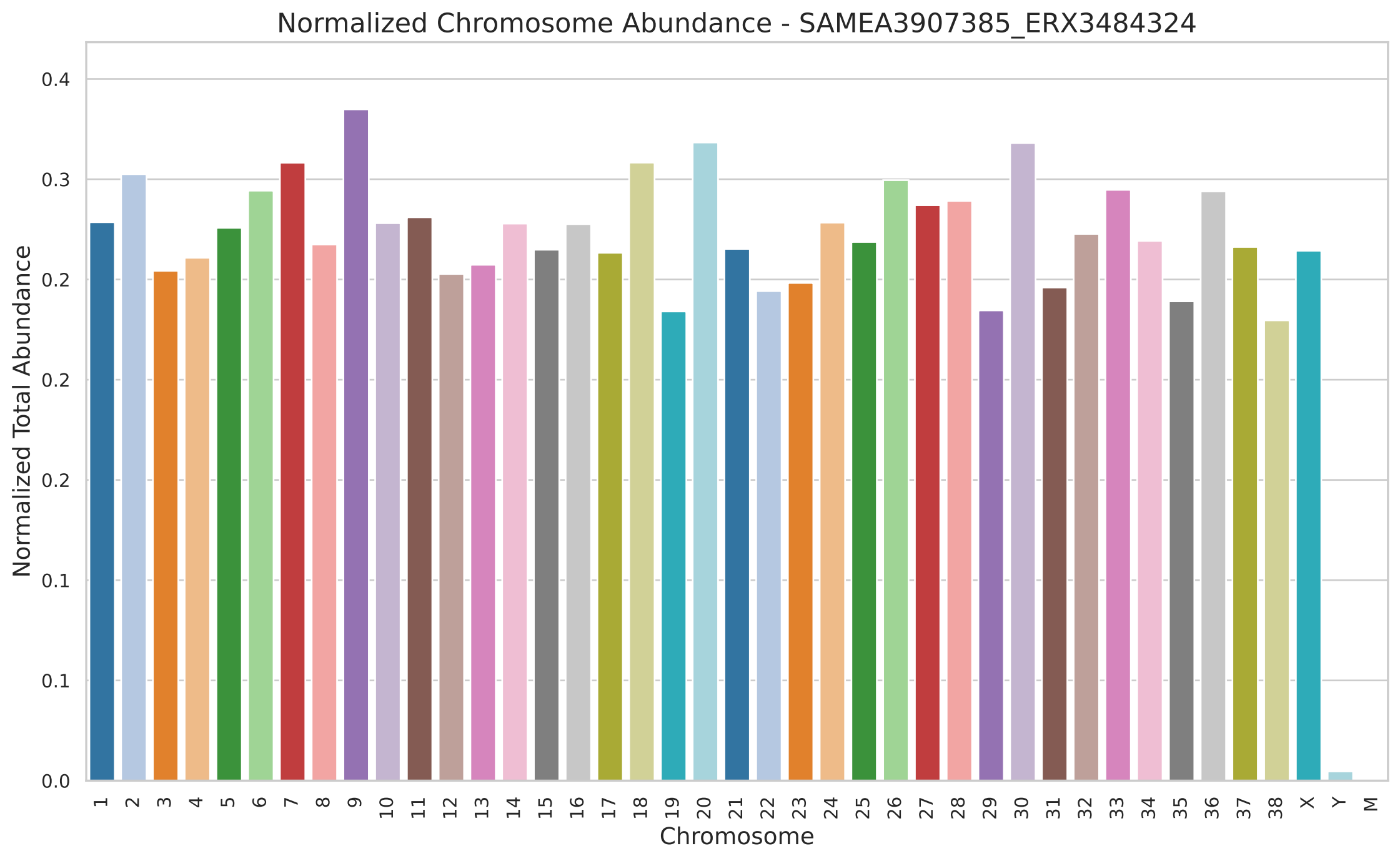

Normalized Chromosome Abundance - SAMEA3906905_ERX3484362
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

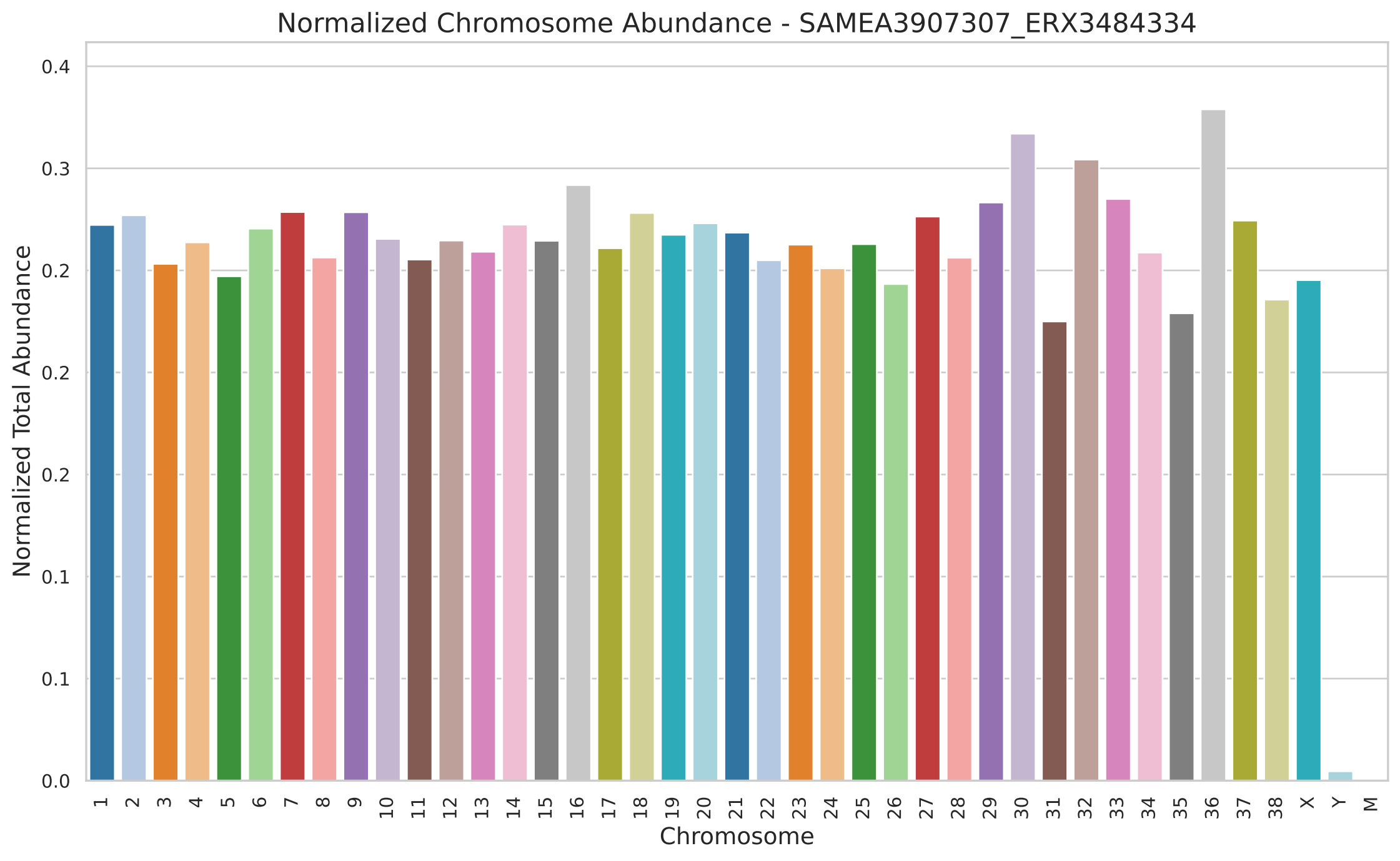

Normalized Chromosome Abundance - SAMEA3906886_ERX3484339
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

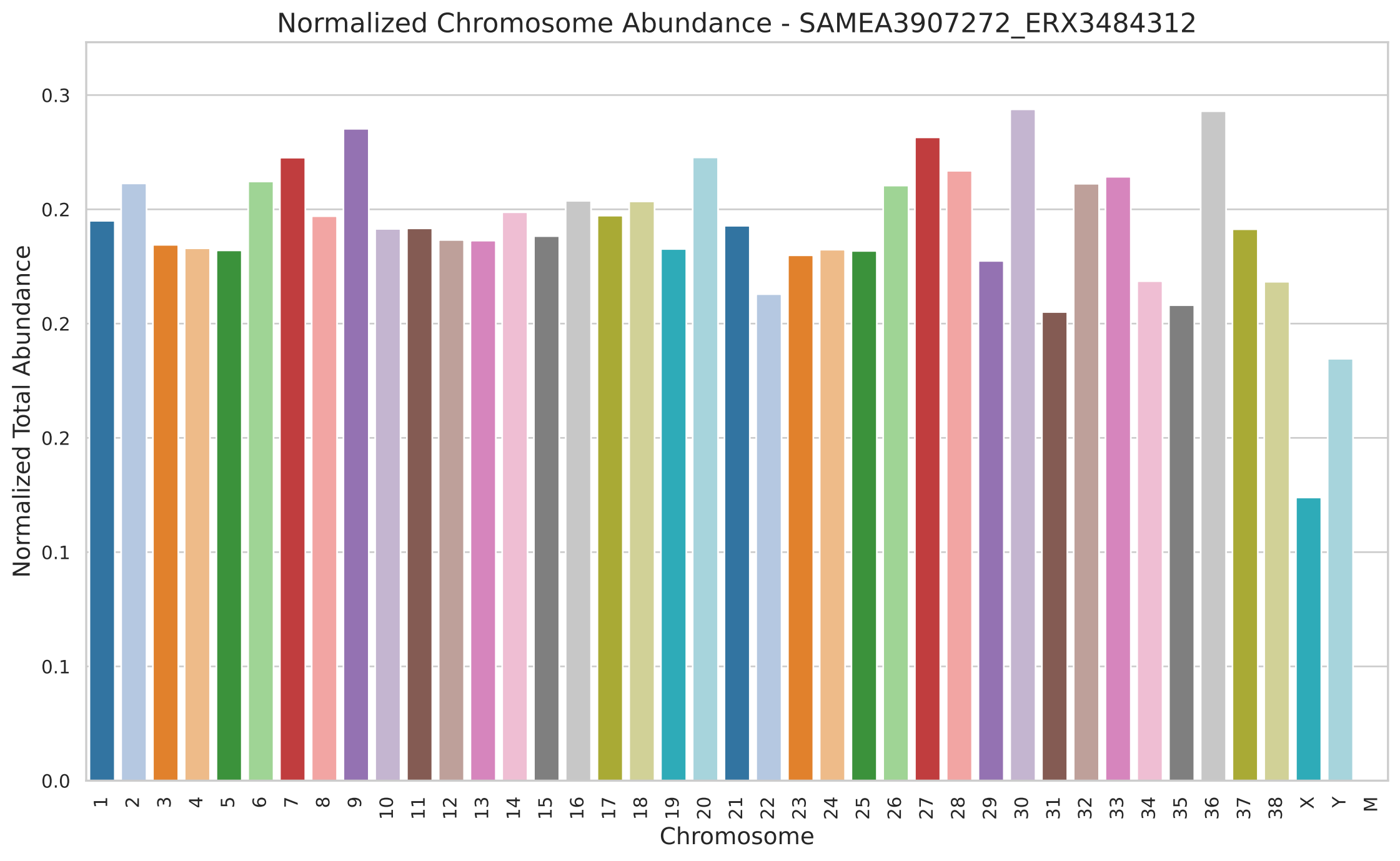

Normalized Chromosome Abundance - SAMEA3907390_ERX3484344
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

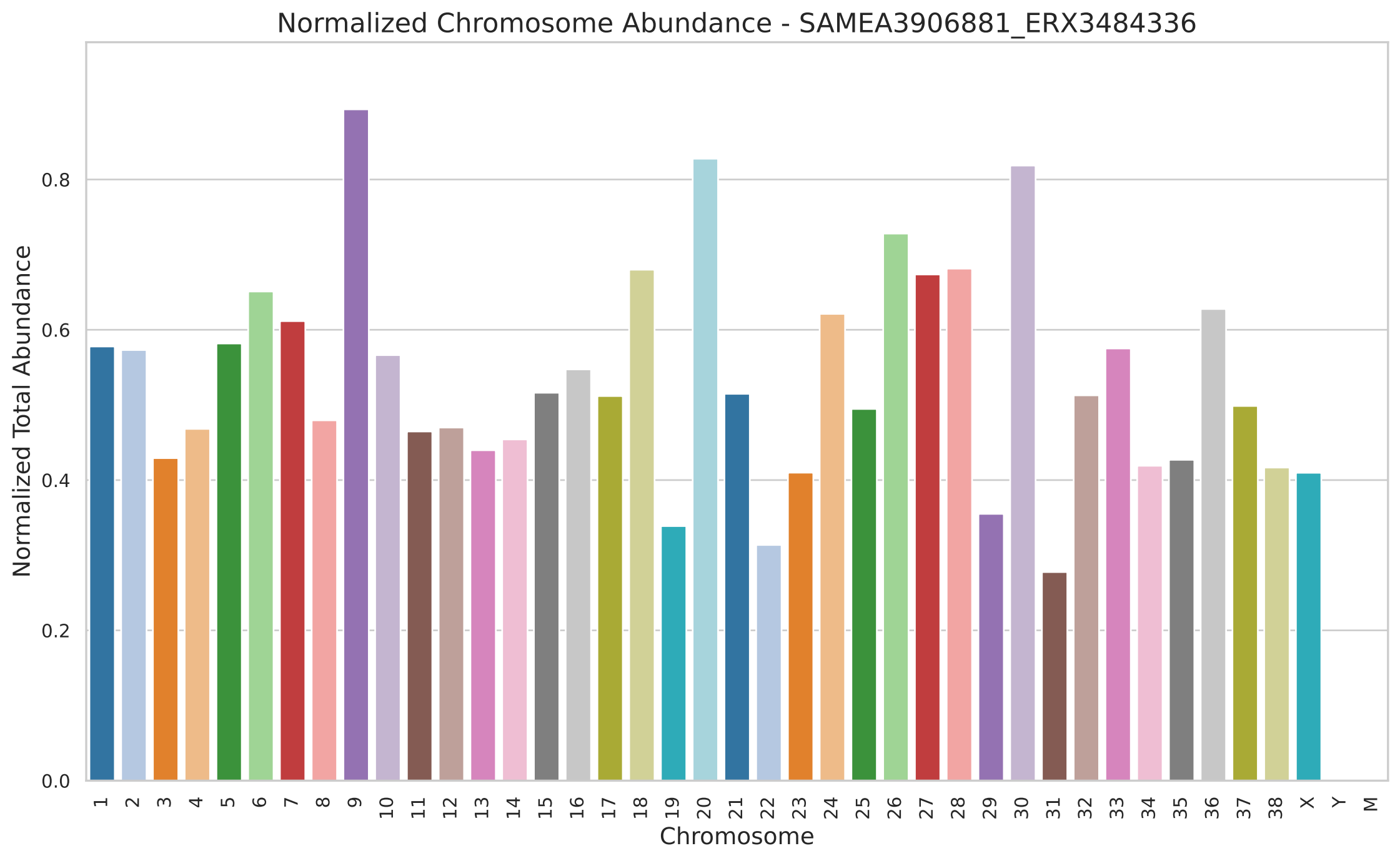

Normalized Chromosome Abundance - SAMEA3907225_ERX3484348
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

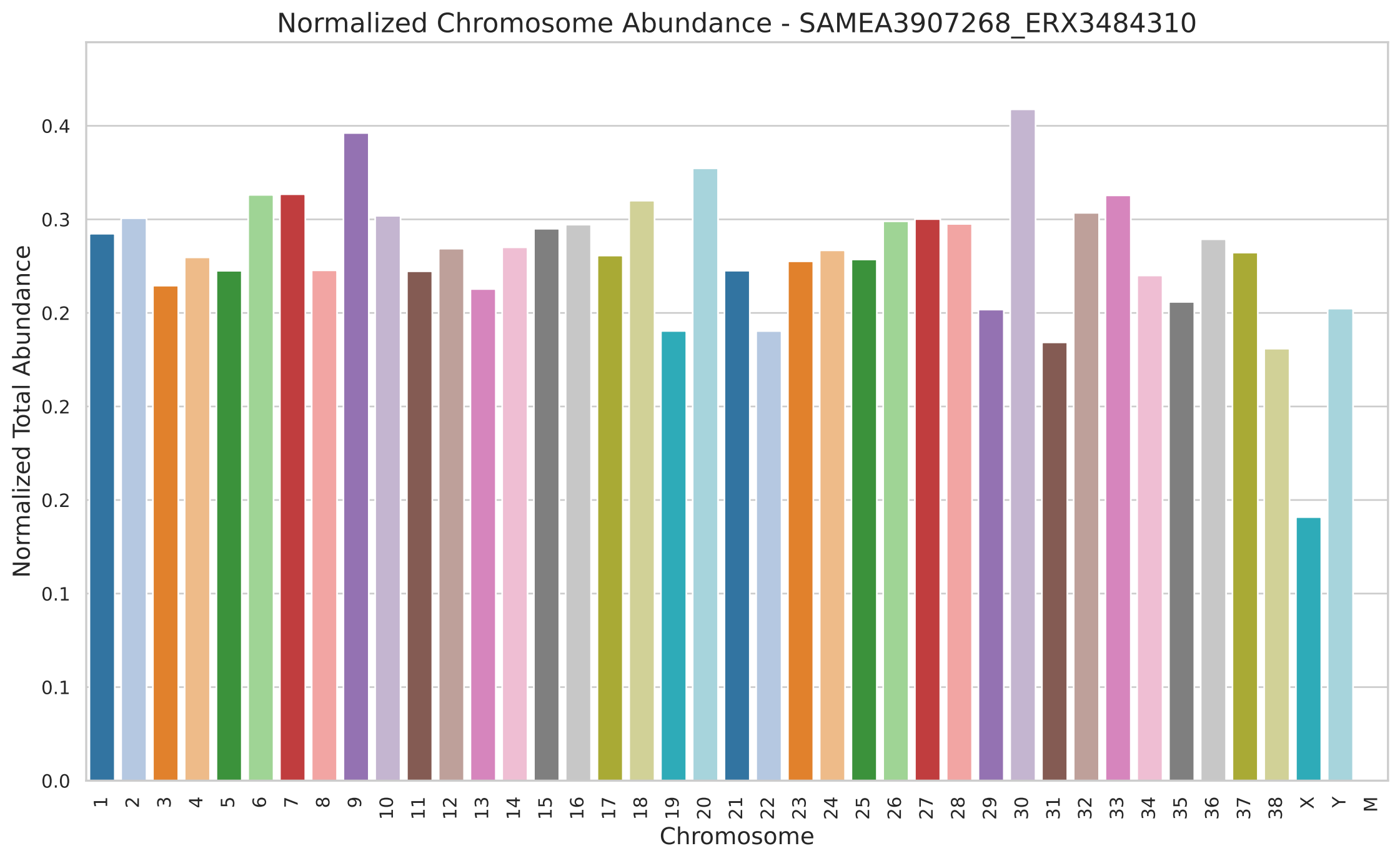

Normalized Chromosome Abundance - SAMEA3907083_ERX3484380
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

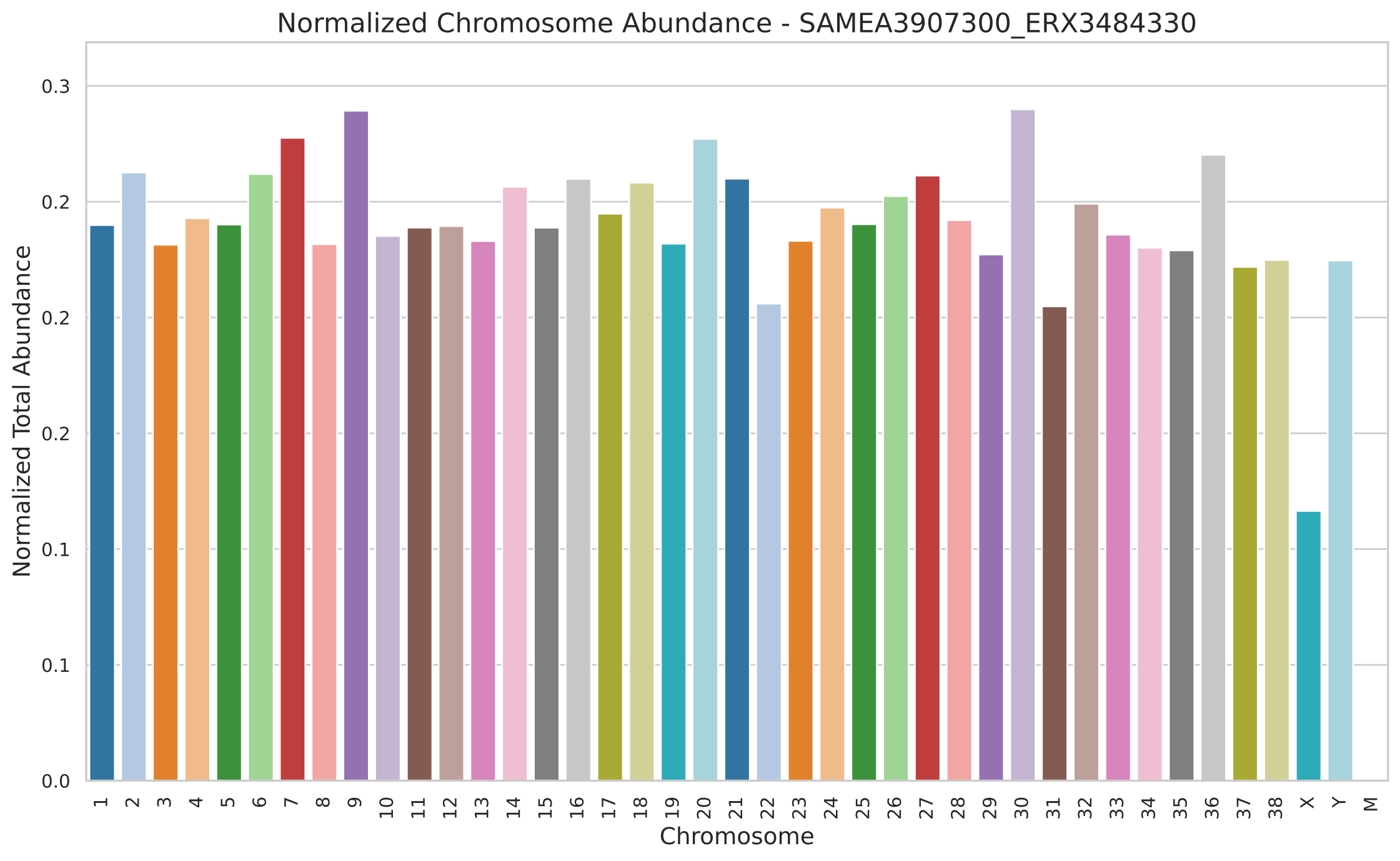

Normalized Chromosome Abundance - SAMEA3907385_ERX3484324
Normalized Total Abundance
0.4
0.3
0.2
0.2
0.1
0.1
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

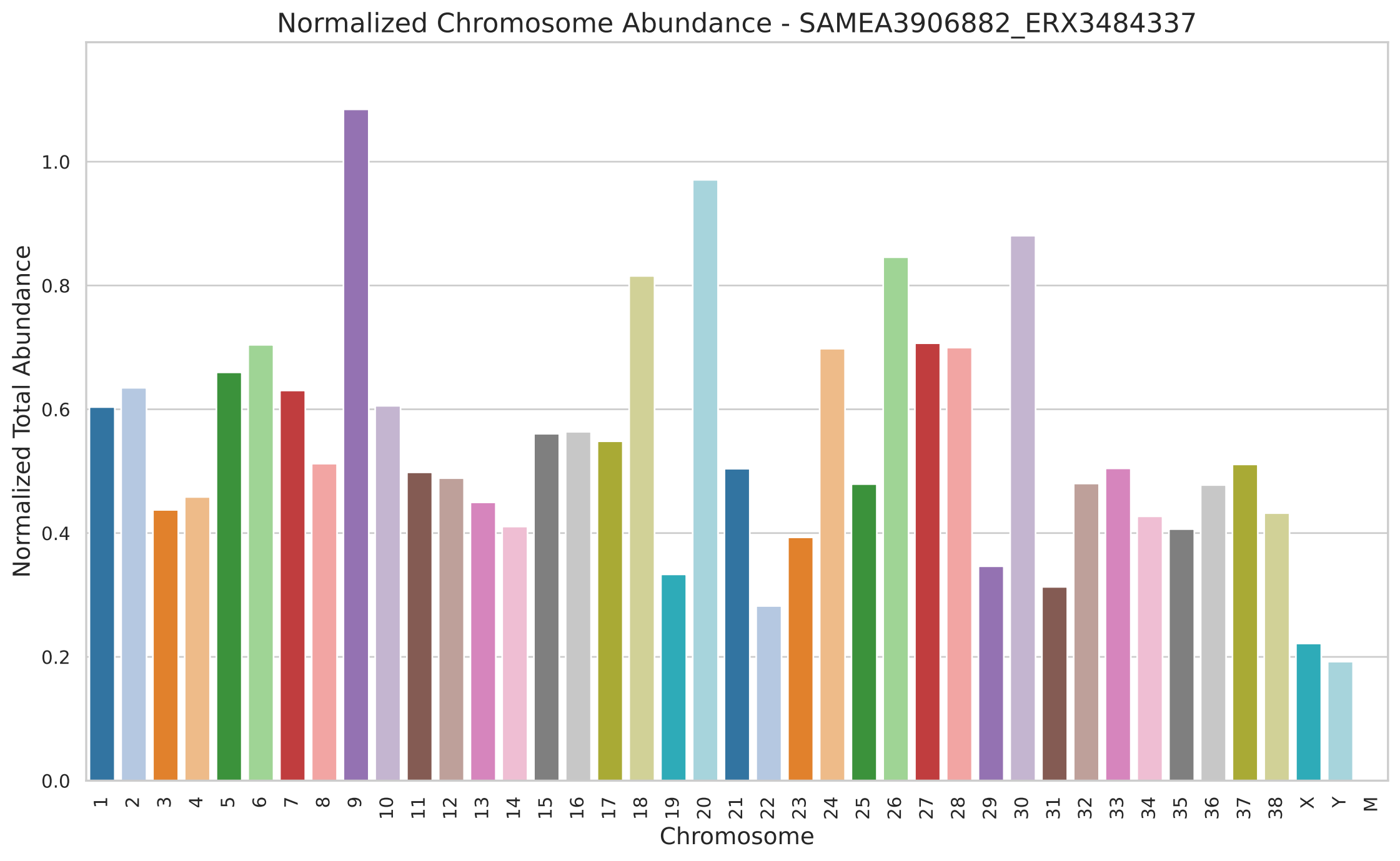

Normalized Chromosome Abundance - SAMEA3907307_ERX3484334
Normalized Total Abundance
0.4
0.3
0.2
0.2
0.1
0.1
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

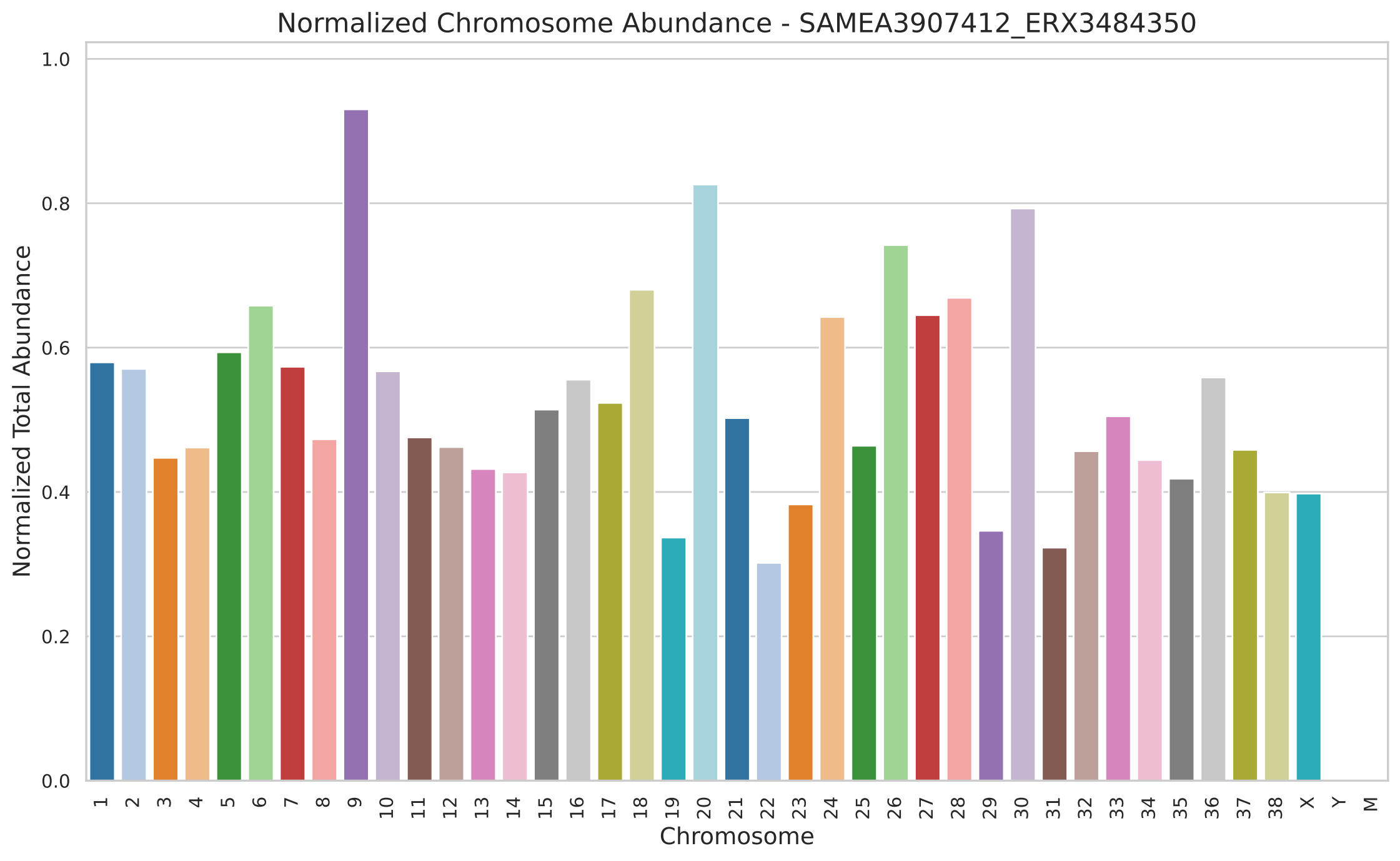

Normalized Chromosome Abundance - SAMEA3907272_ERX3484312
Normalized Total Abundance
0.0
0.1
0.2
0.3
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

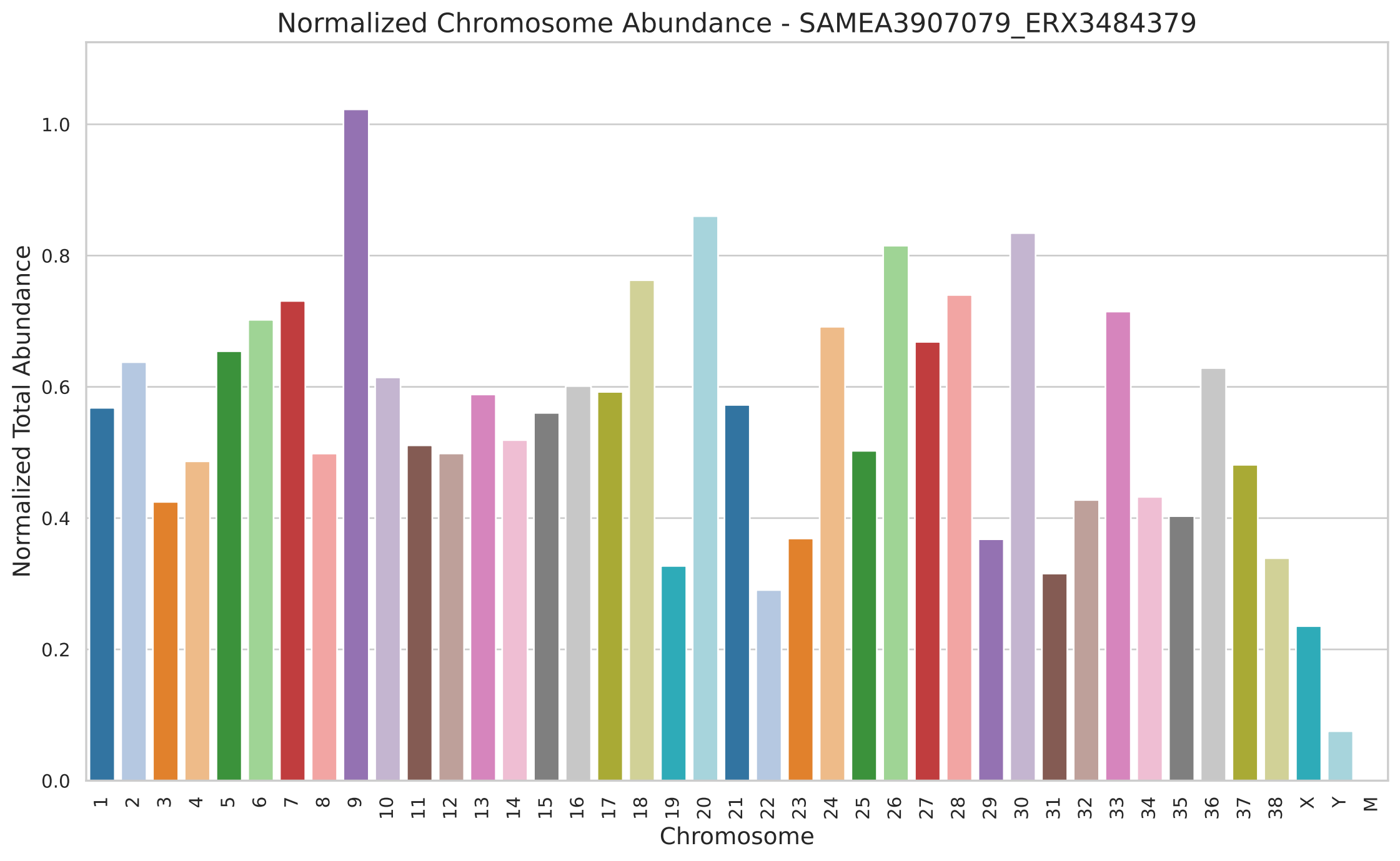

Normalized Chromosome Abundance - SAMEA3906881_ERX3484336
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

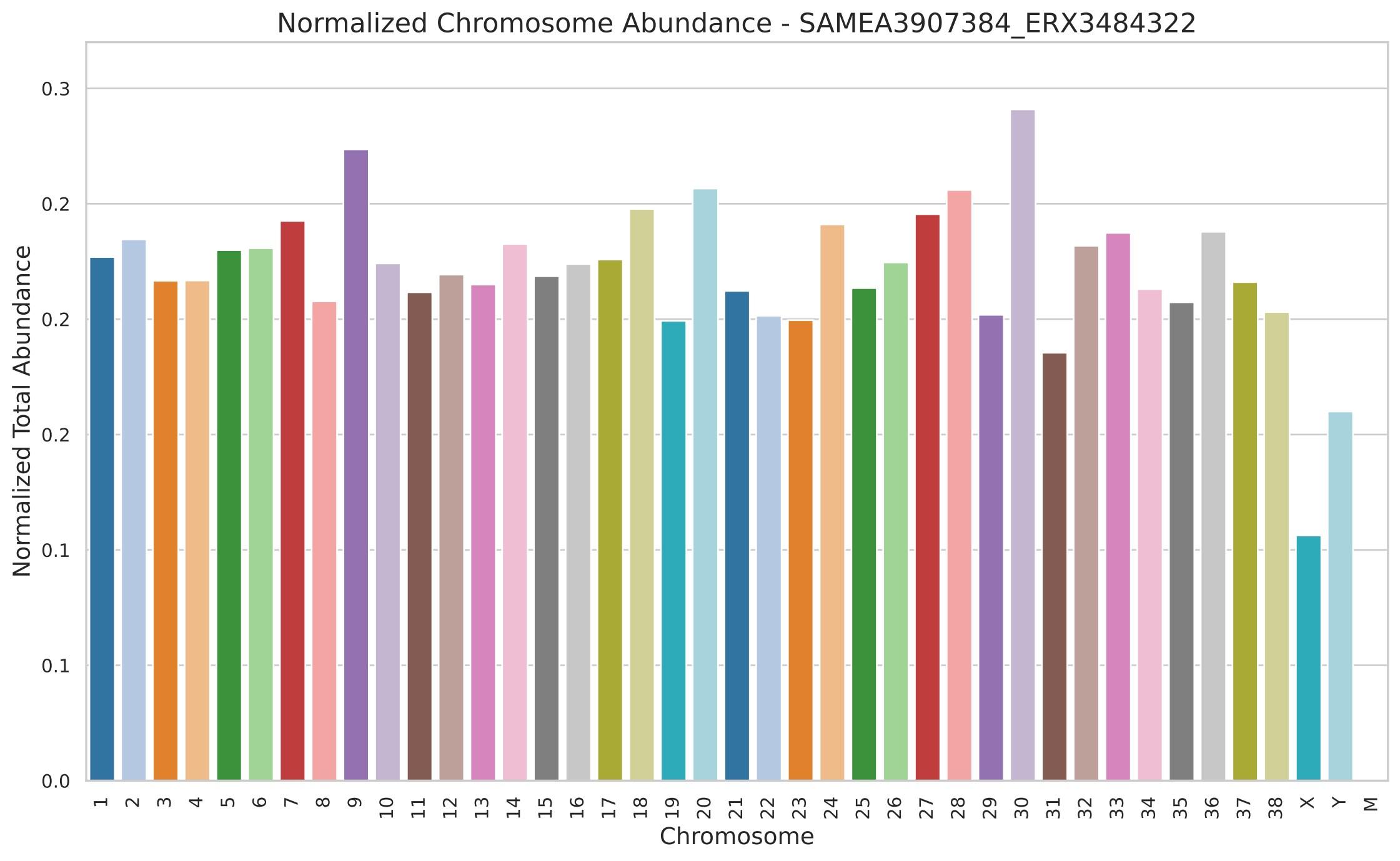

Normalized Chromosome Abundance - SAMEA3907268_ERX3484310
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

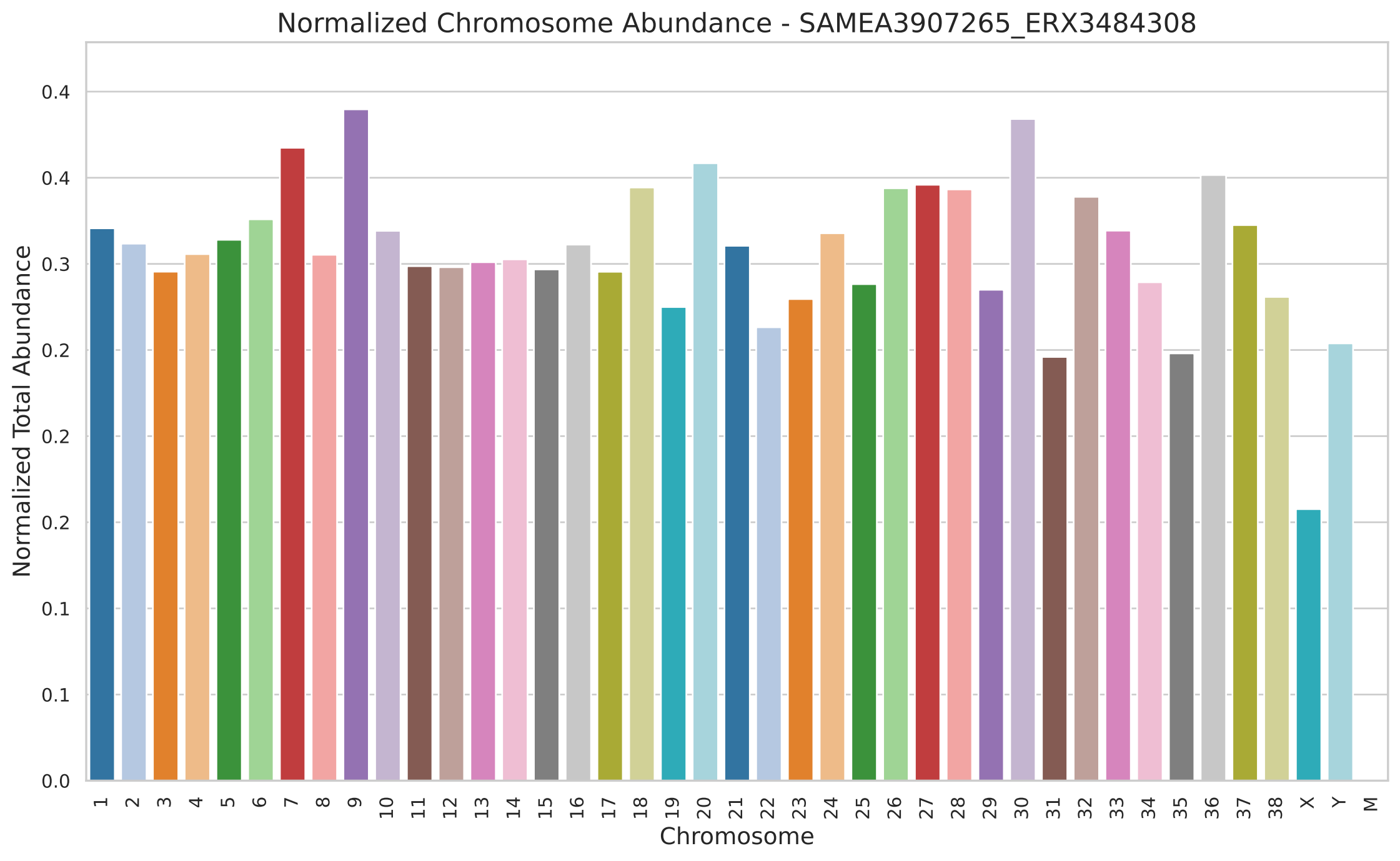

Normalized Chromosome Abundance - SAMEA3907300_ERX3484330
Normalized Total Abundance
0.0
0.1
0.2
0.3
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

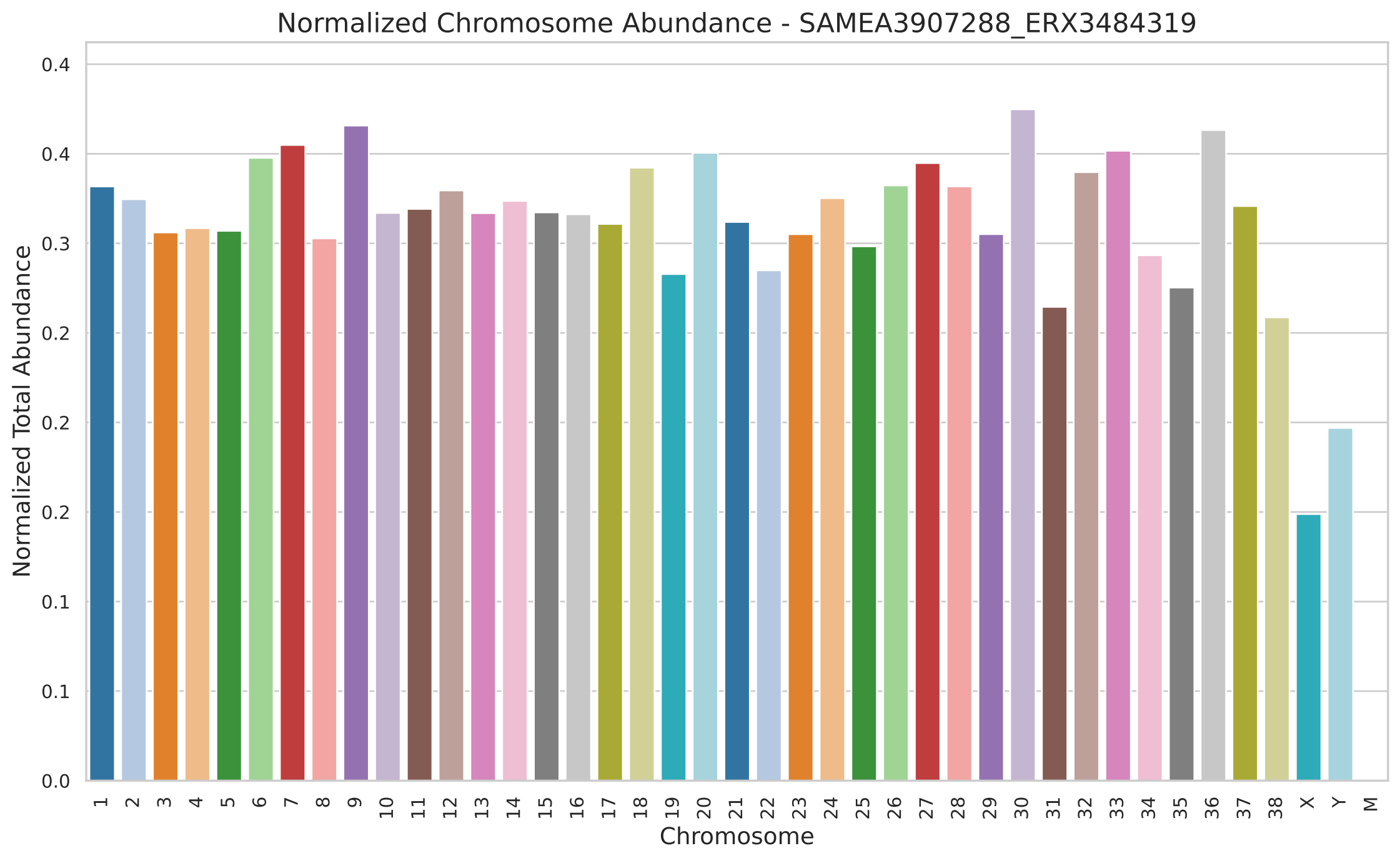

Normalized Chromosome Abundance - SAMEA3906882_ERX3484337
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

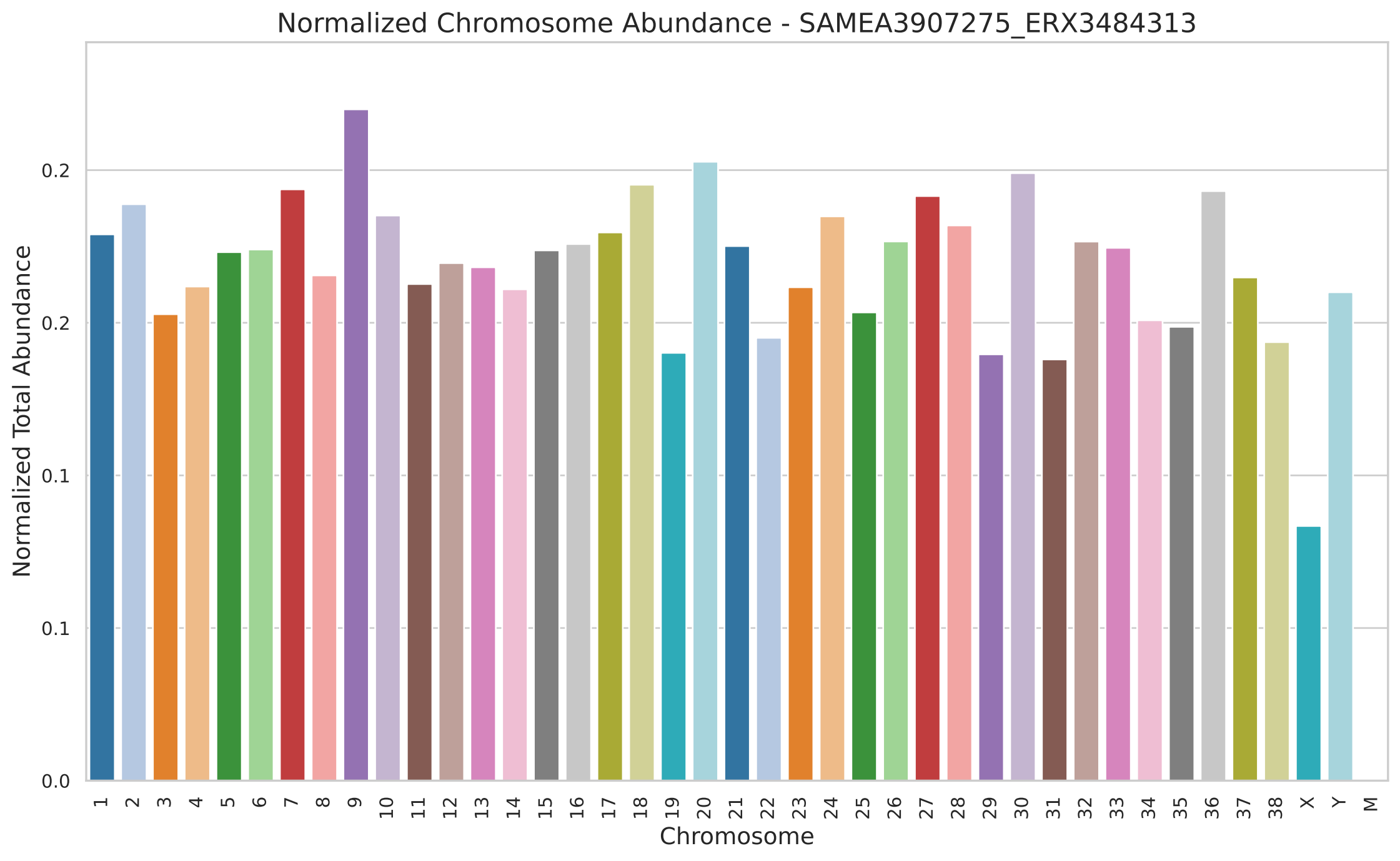

Normalized Chromosome Abundance - SAMEA3907412_ERX3484350
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

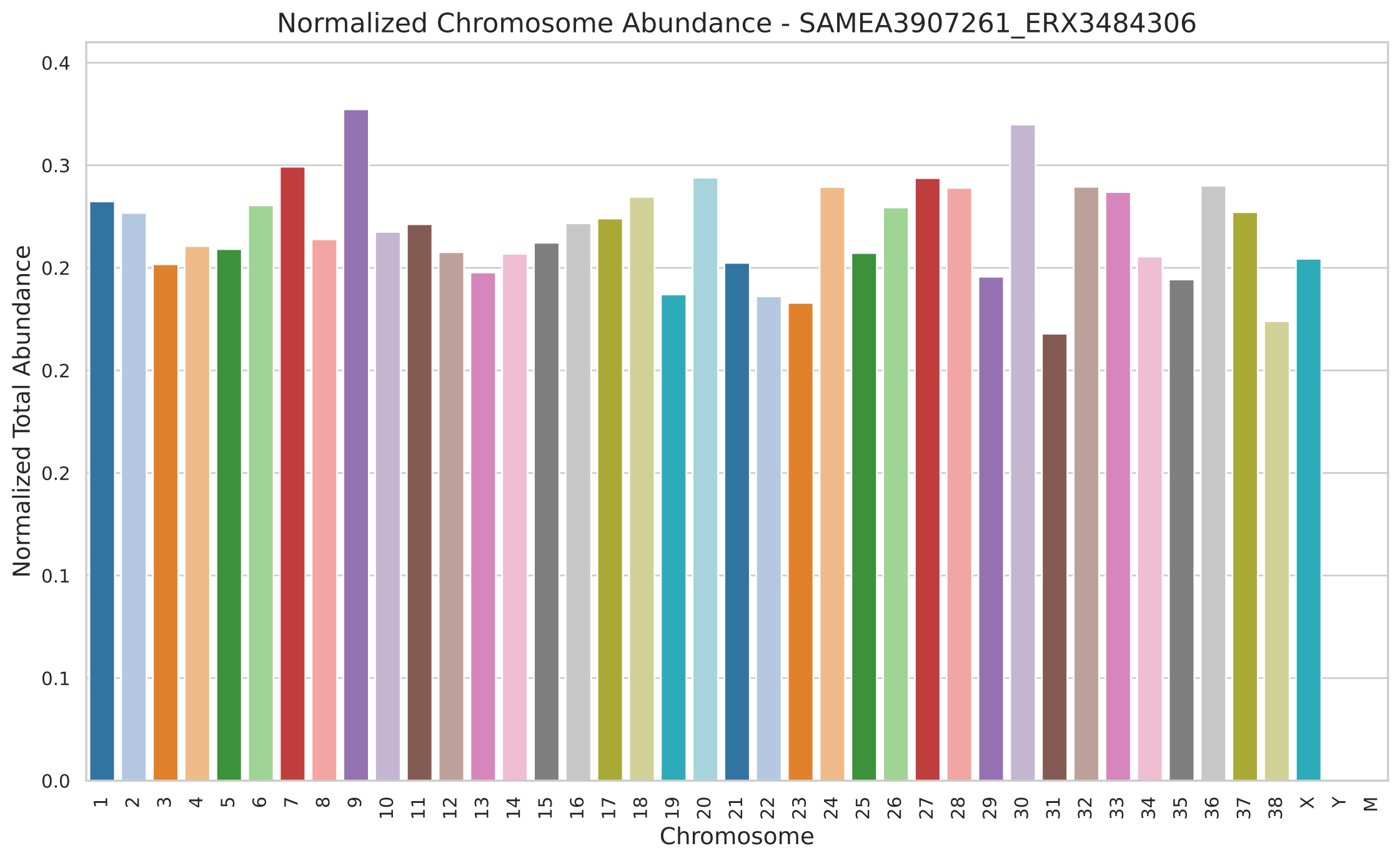

Normalized Chromosome Abundance - SAMEA3907079_ERX3484379
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

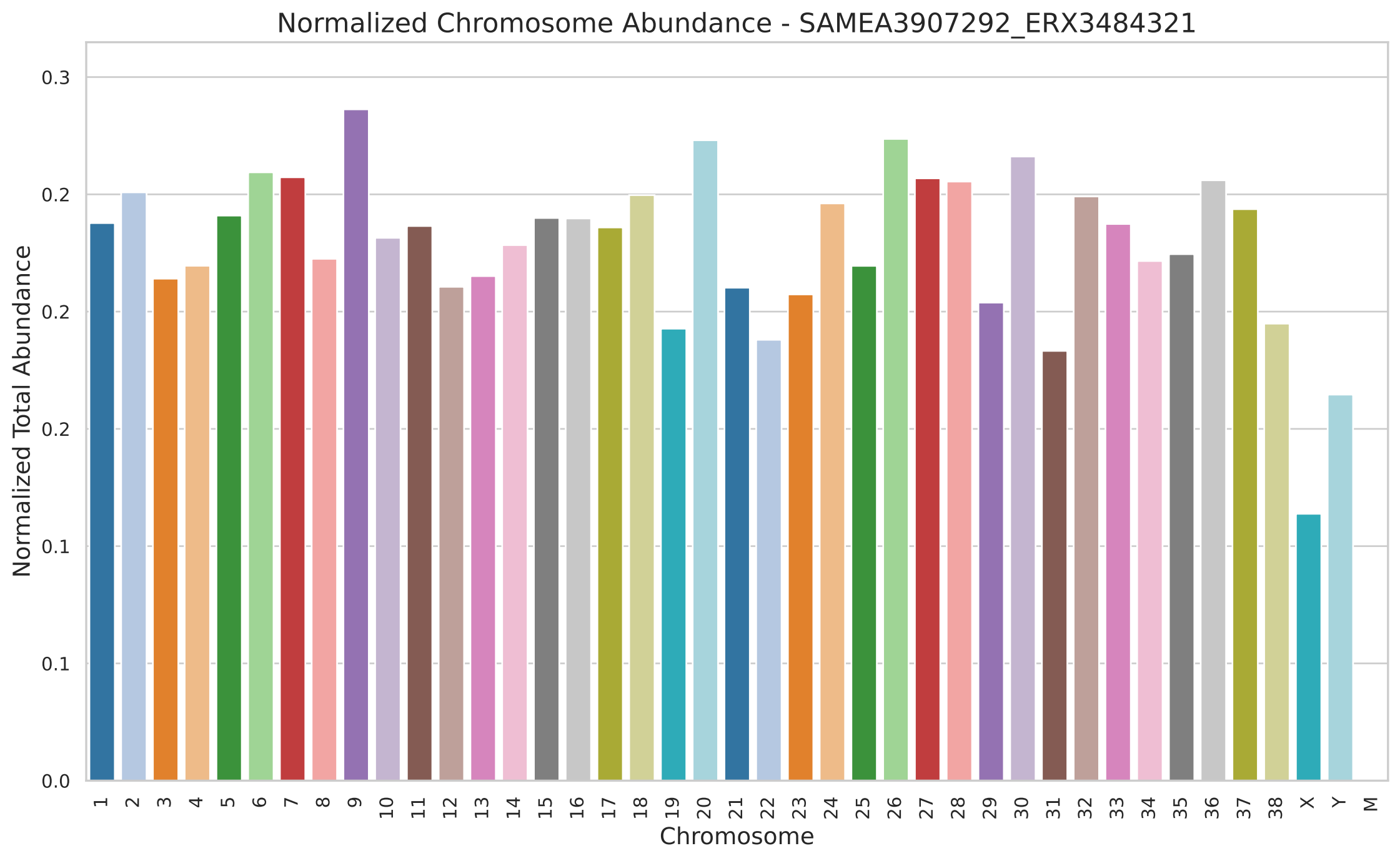

Normalized Chromosome Abundance - SAMEA3907384_ERX3484322
Normalized Total Abundance
0.0
0.1
0.2
0.3
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

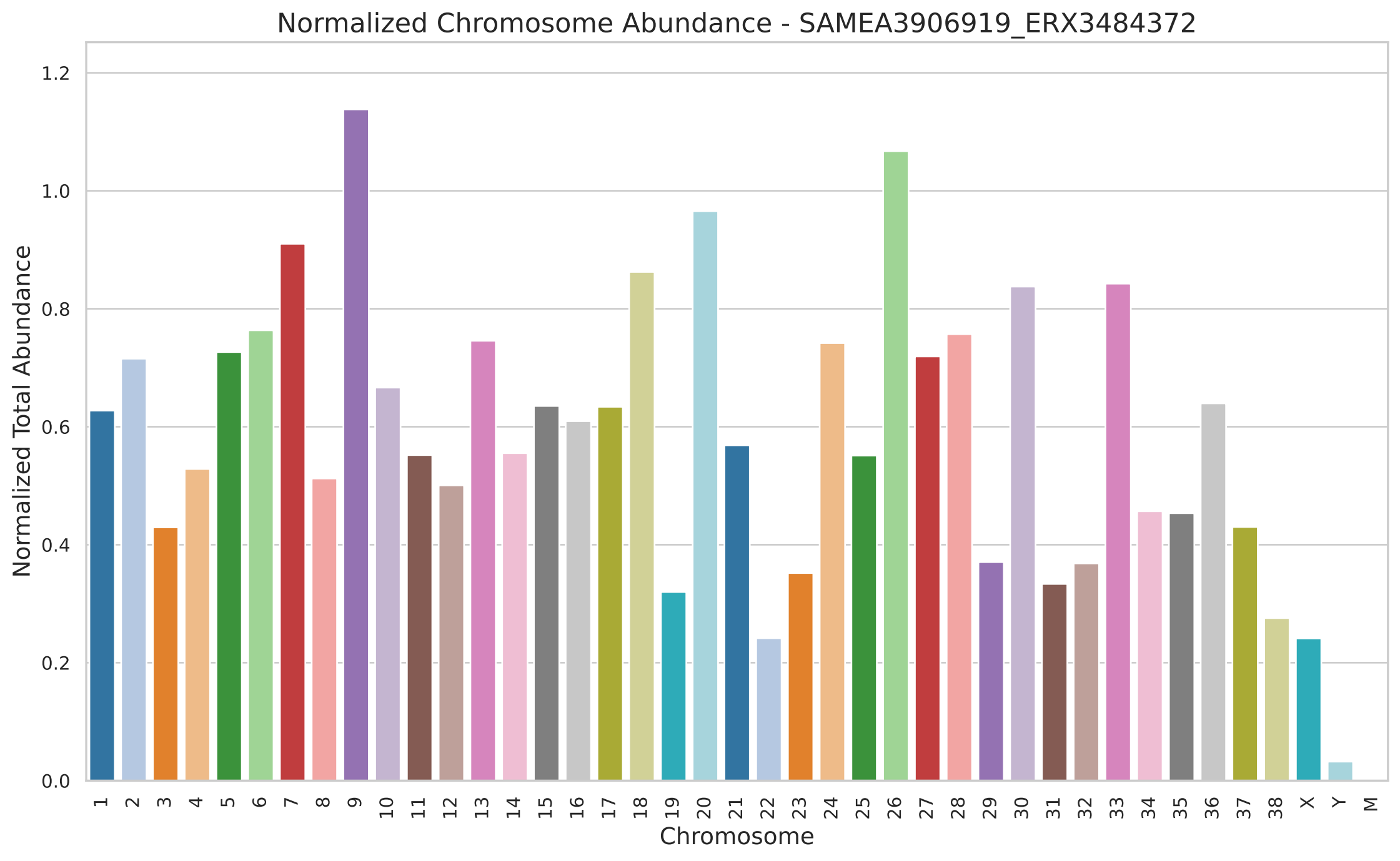

Normalized Chromosome Abundance - SAMEA3907265_ERX3484308
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

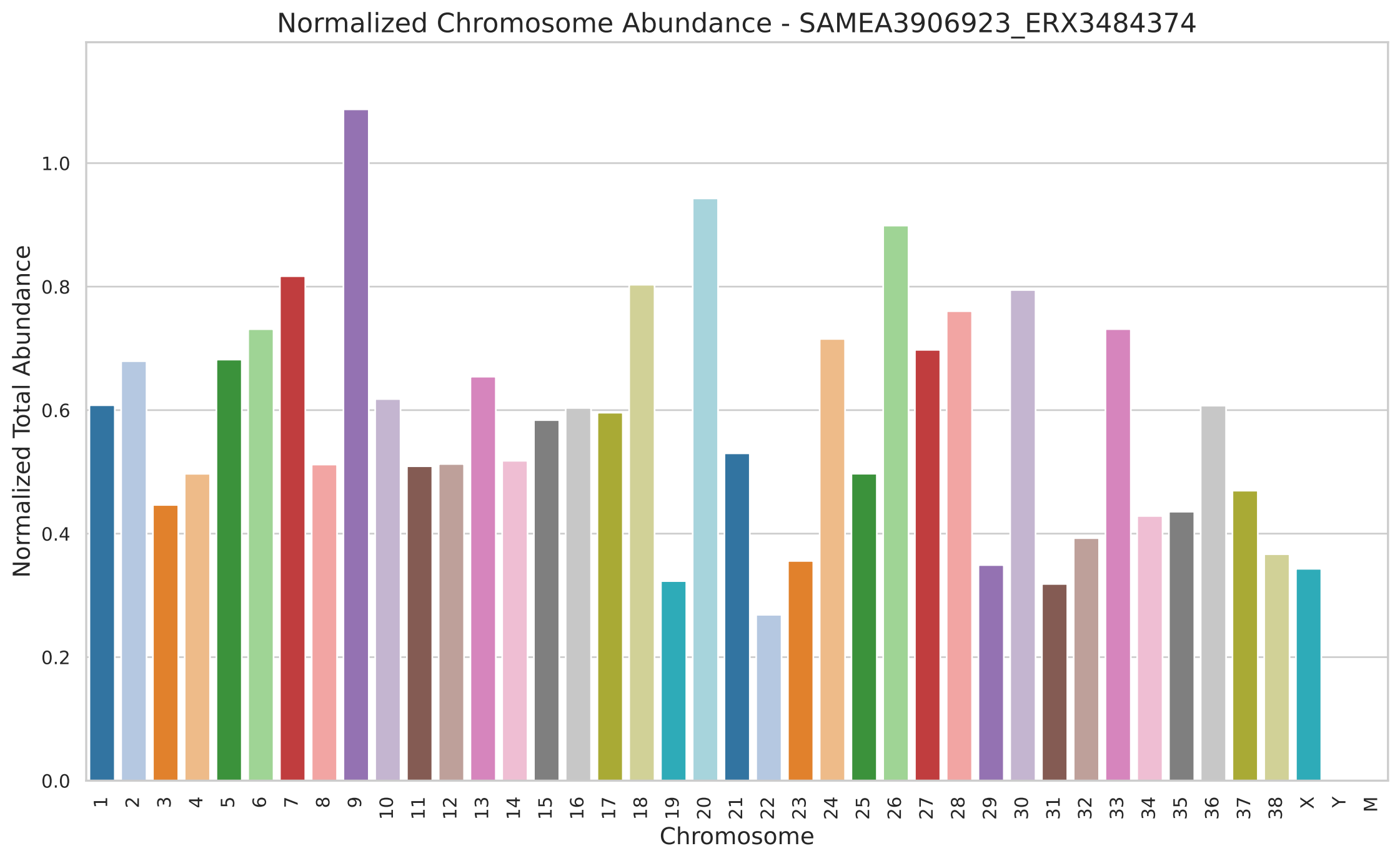

Normalized Chromosome Abundance - SAMEA3907288_ERX3484319
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

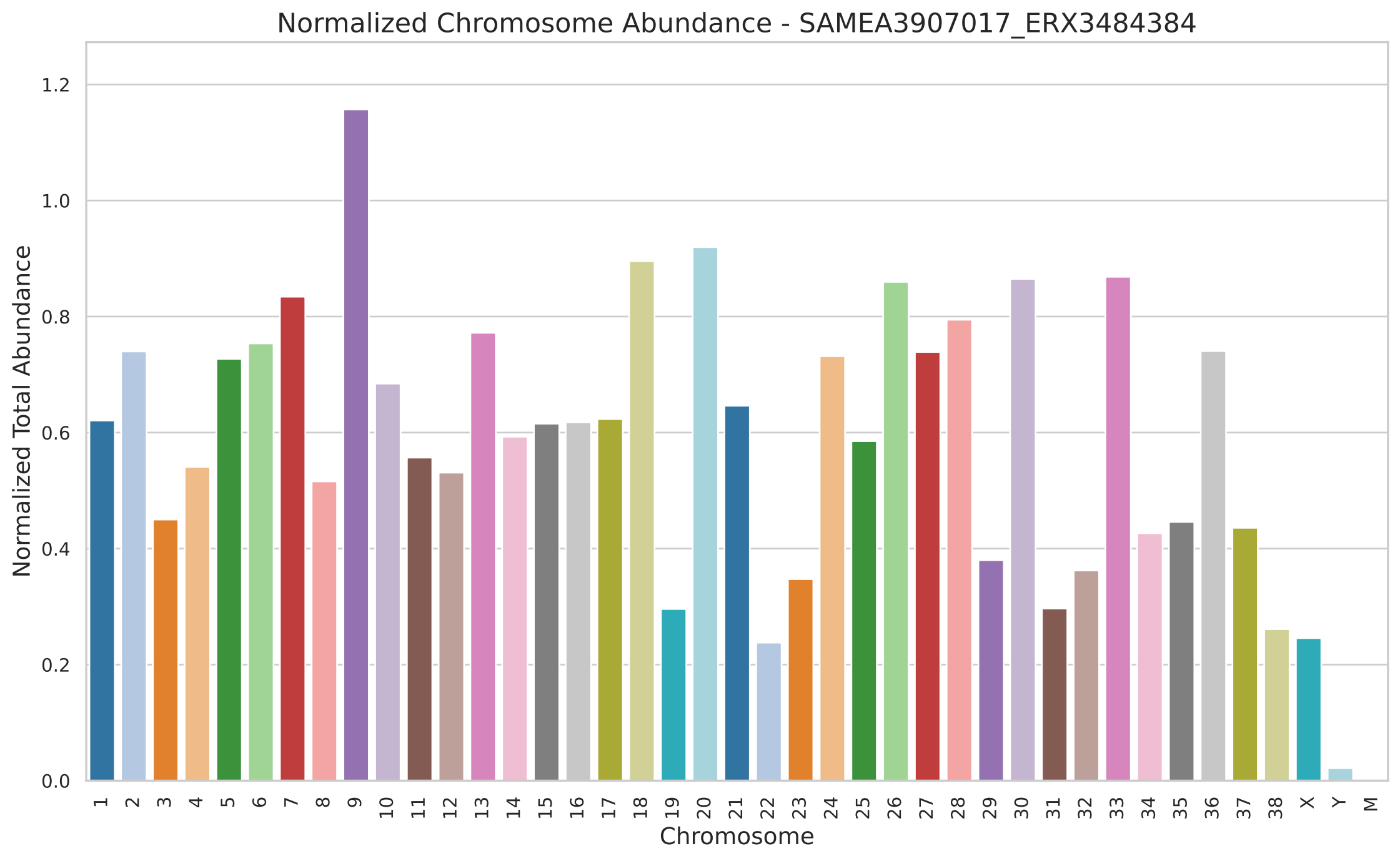

Normalized Chromosome Abundance - SAMEA3907275_ERX3484313
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

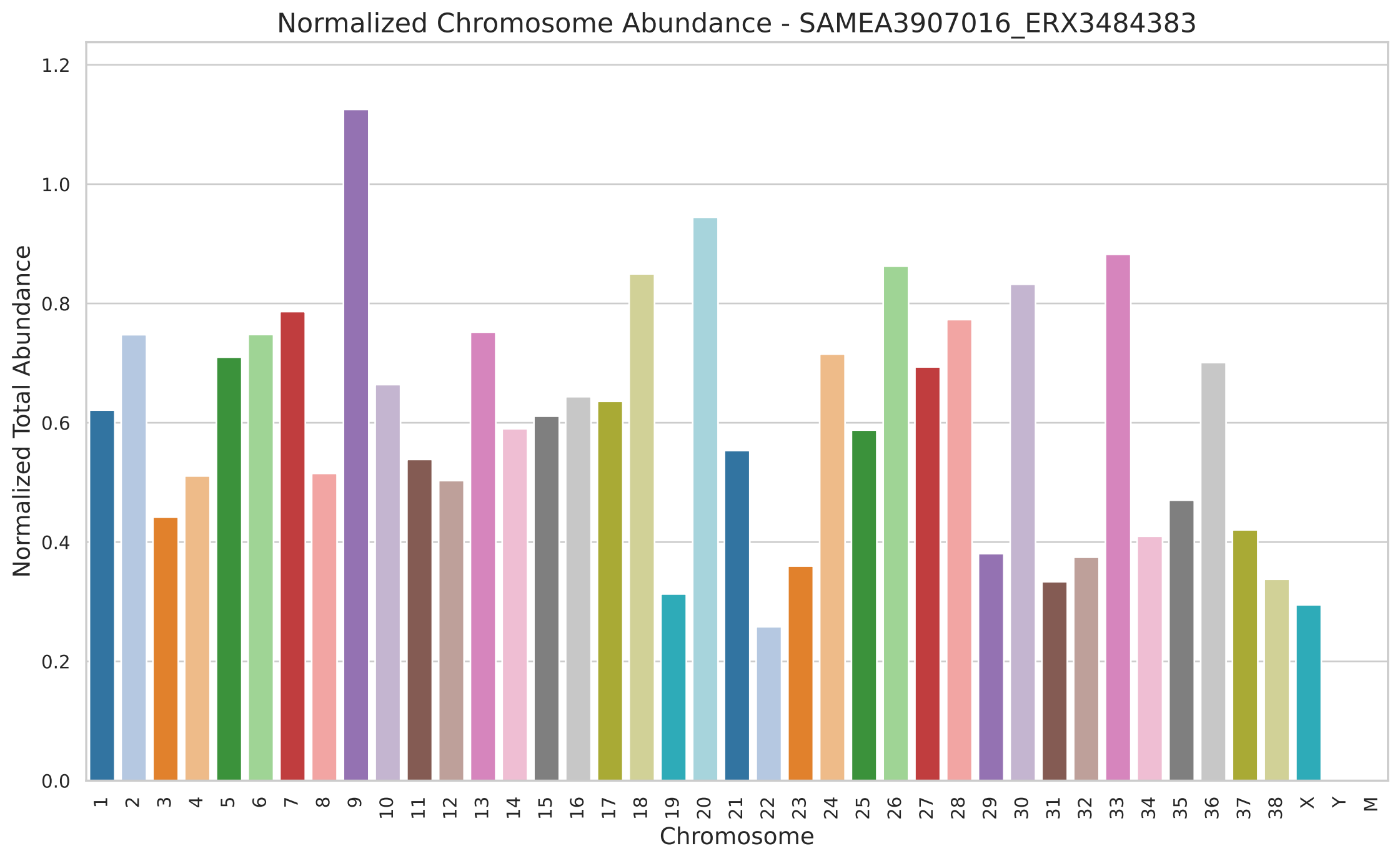

Normalized Chromosome Abundance - SAMEA3907261_ERX3484306
Normalized Total Abundance
0.4
0.3
0.2
0.2
0.1
0.1
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

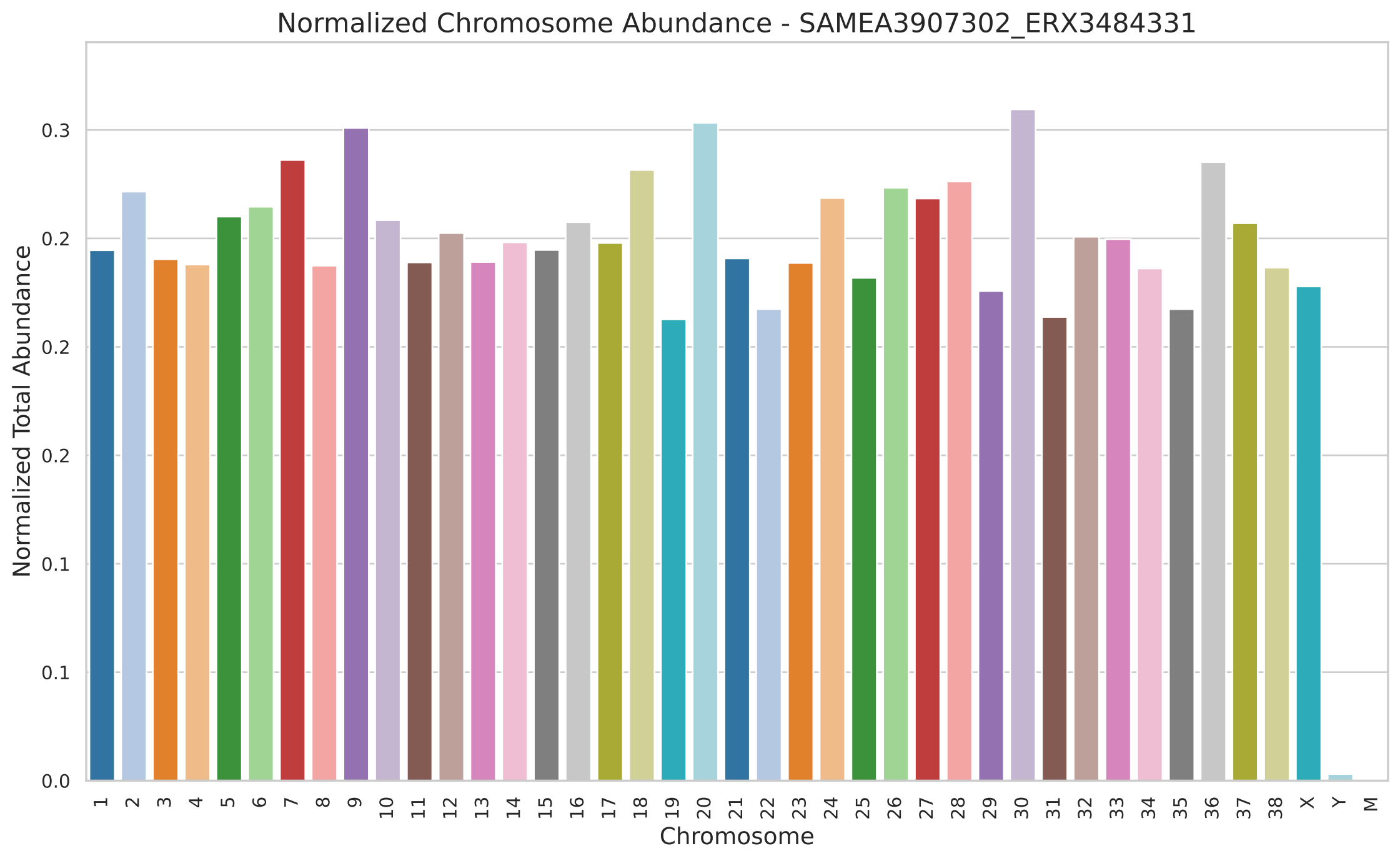

Normalized Chromosome Abundance - SAMEA3907292_ERX3484321
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

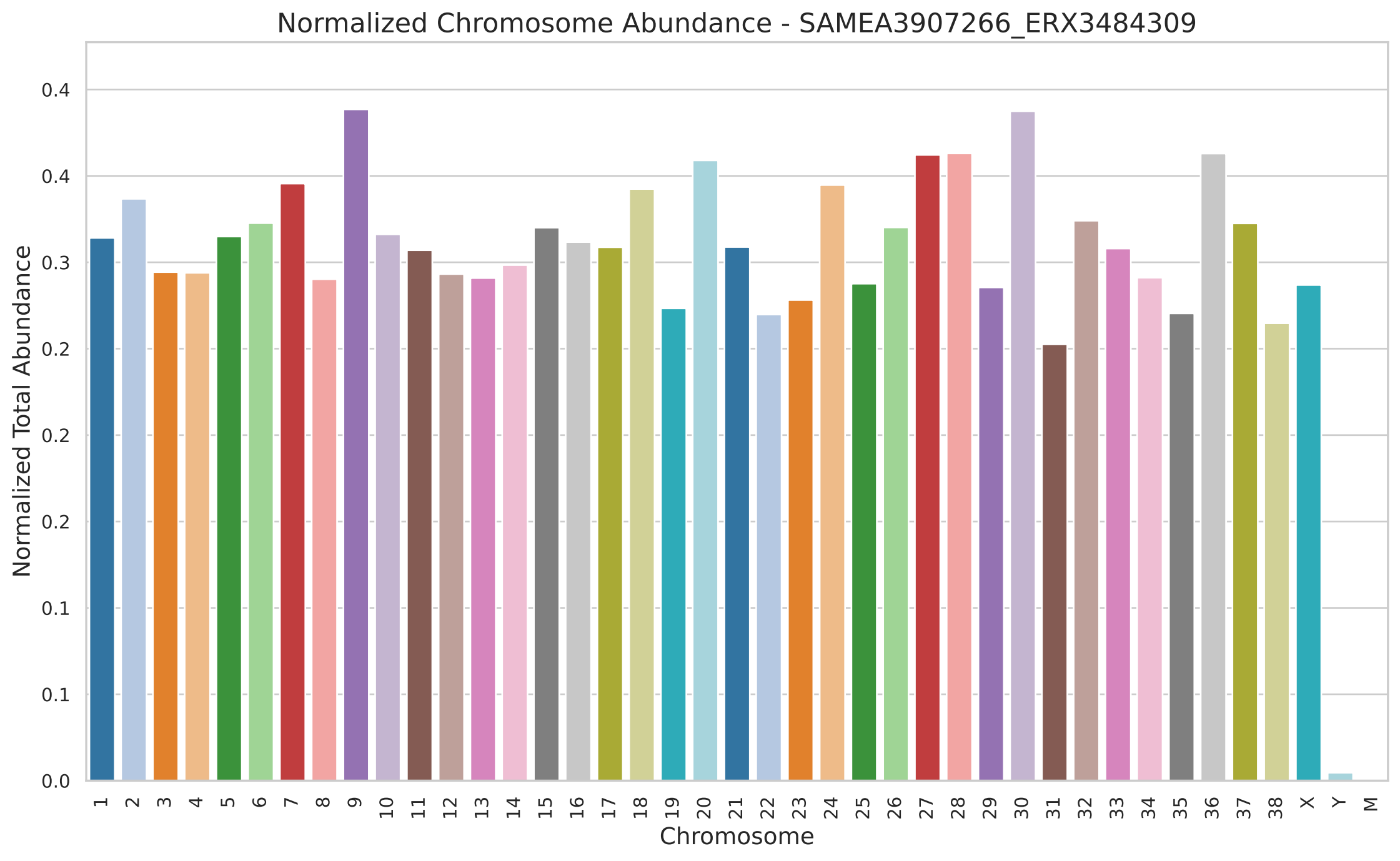

Normalized Chromosome Abundance - SAMEA3906919_ERX3484372
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

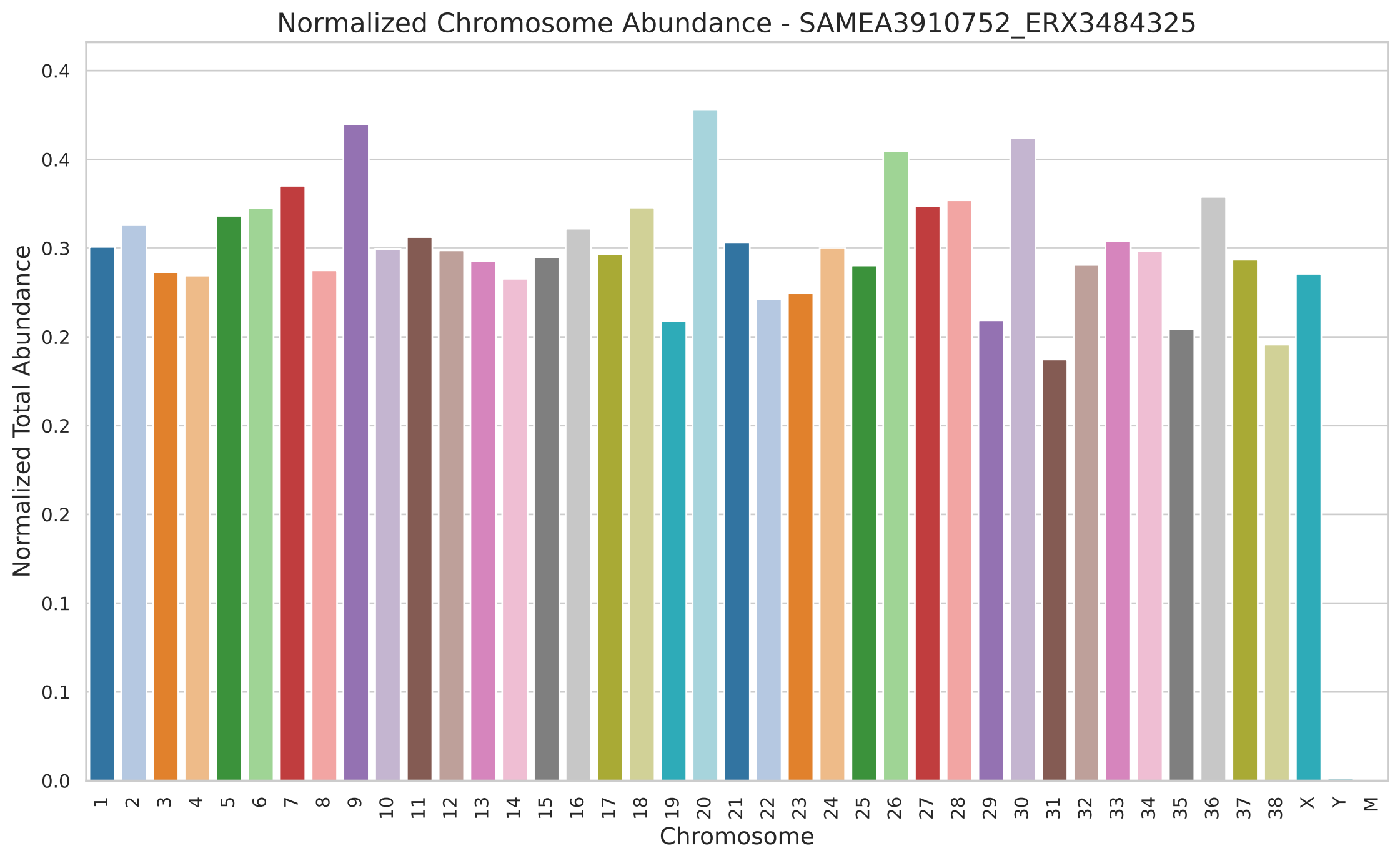

Normalized Chromosome Abundance - SAMEA3906923_ERX3484374
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

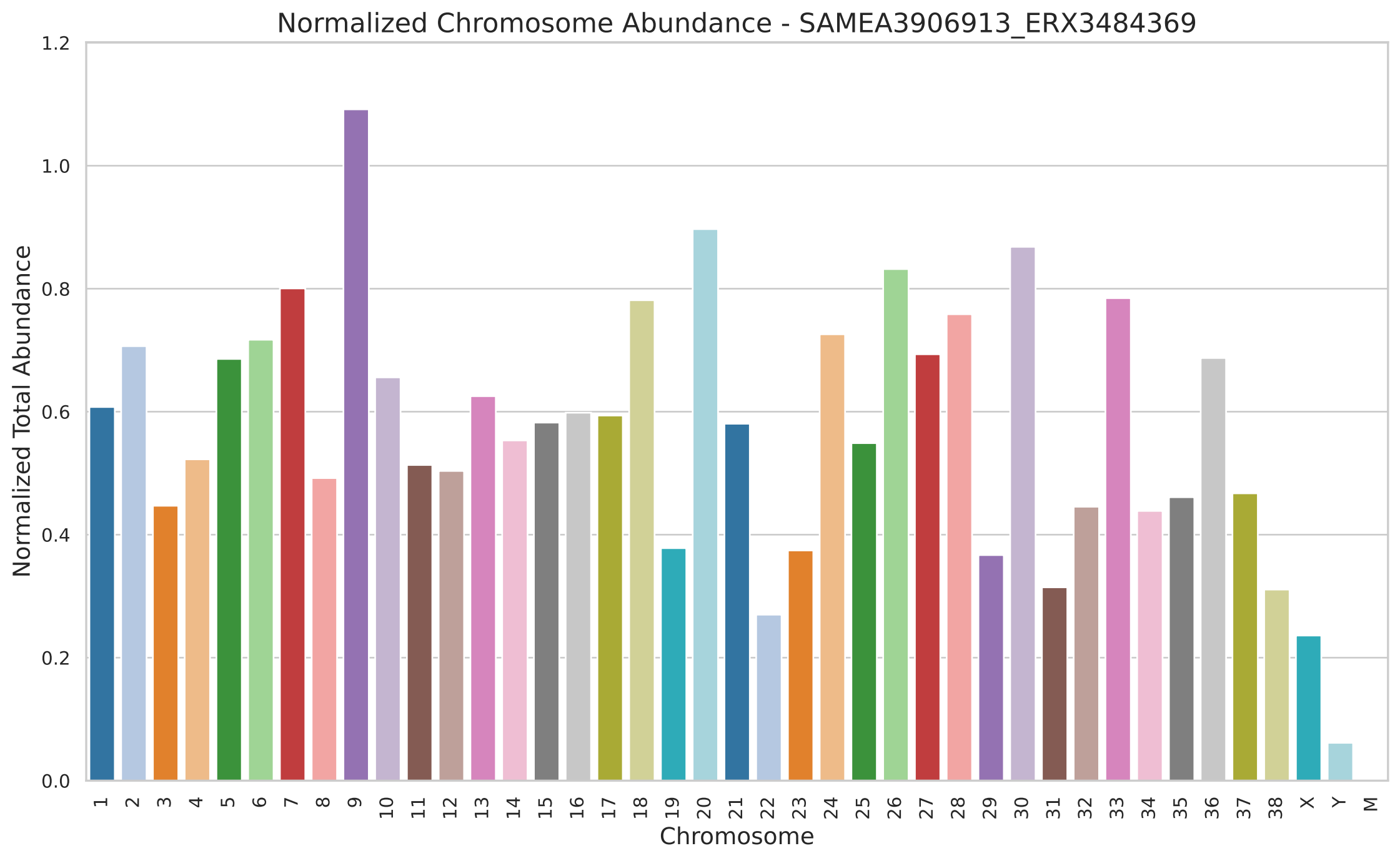

Normalized Chromosome Abundance - SAMEA3907017_ERX3484384
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

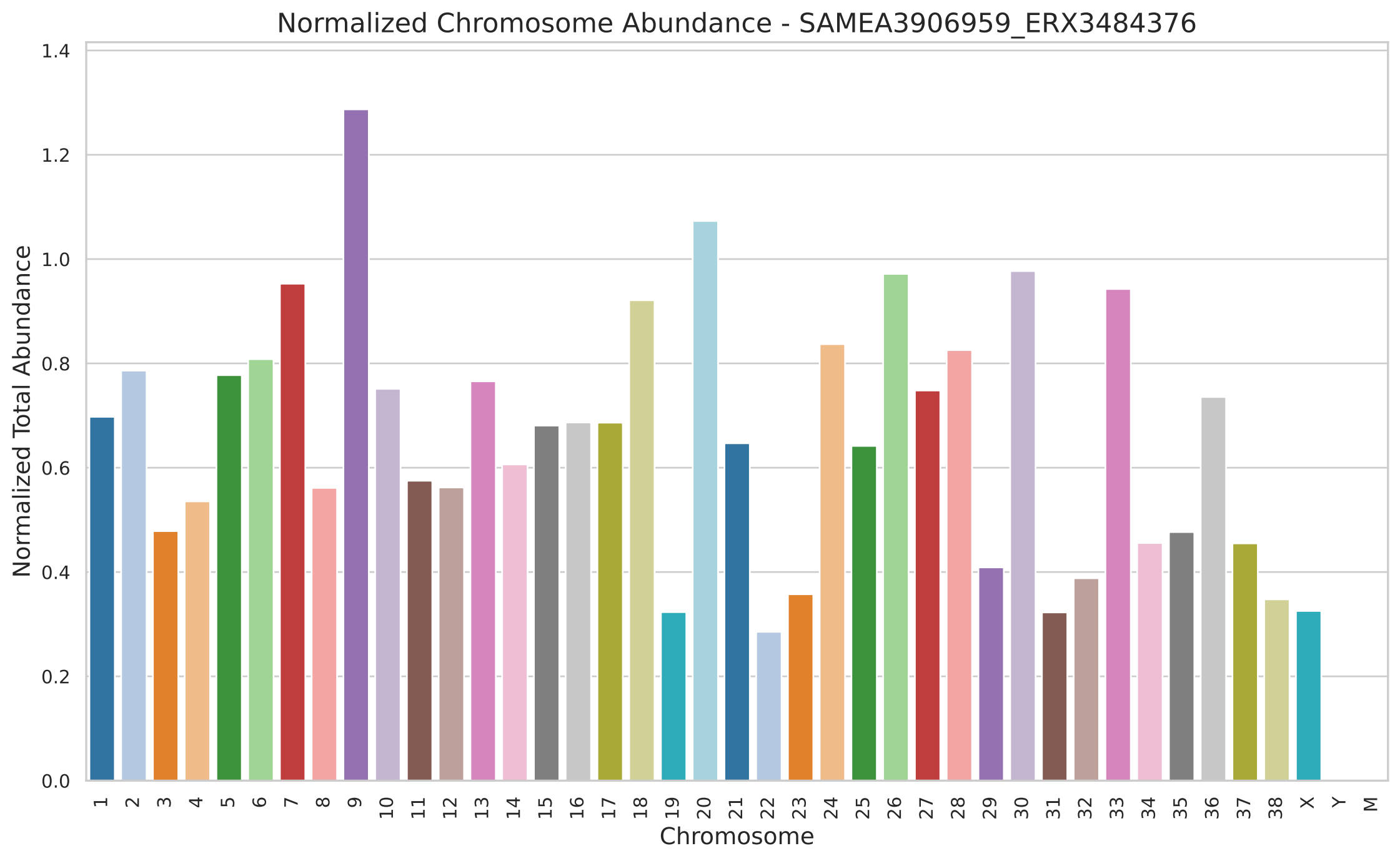

Normalized Chromosome Abundance - SAMEA3907016_ERX3484383
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

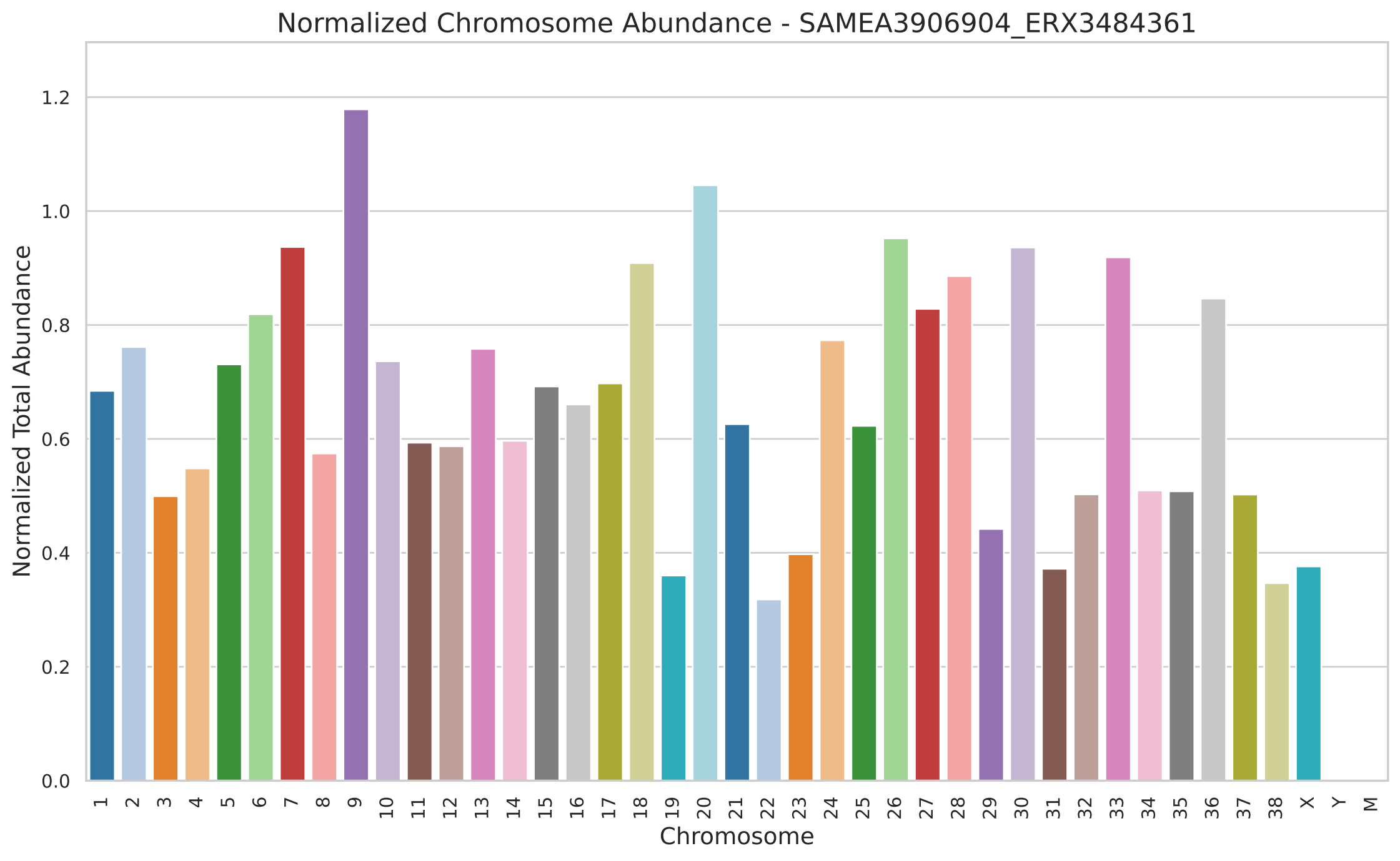

Normalized Chromosome Abundance - SAMEA3907302_ERX3484331
Normalized Total Abundance
0.0
0.1
0.2
0.2
0.1
0.3
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

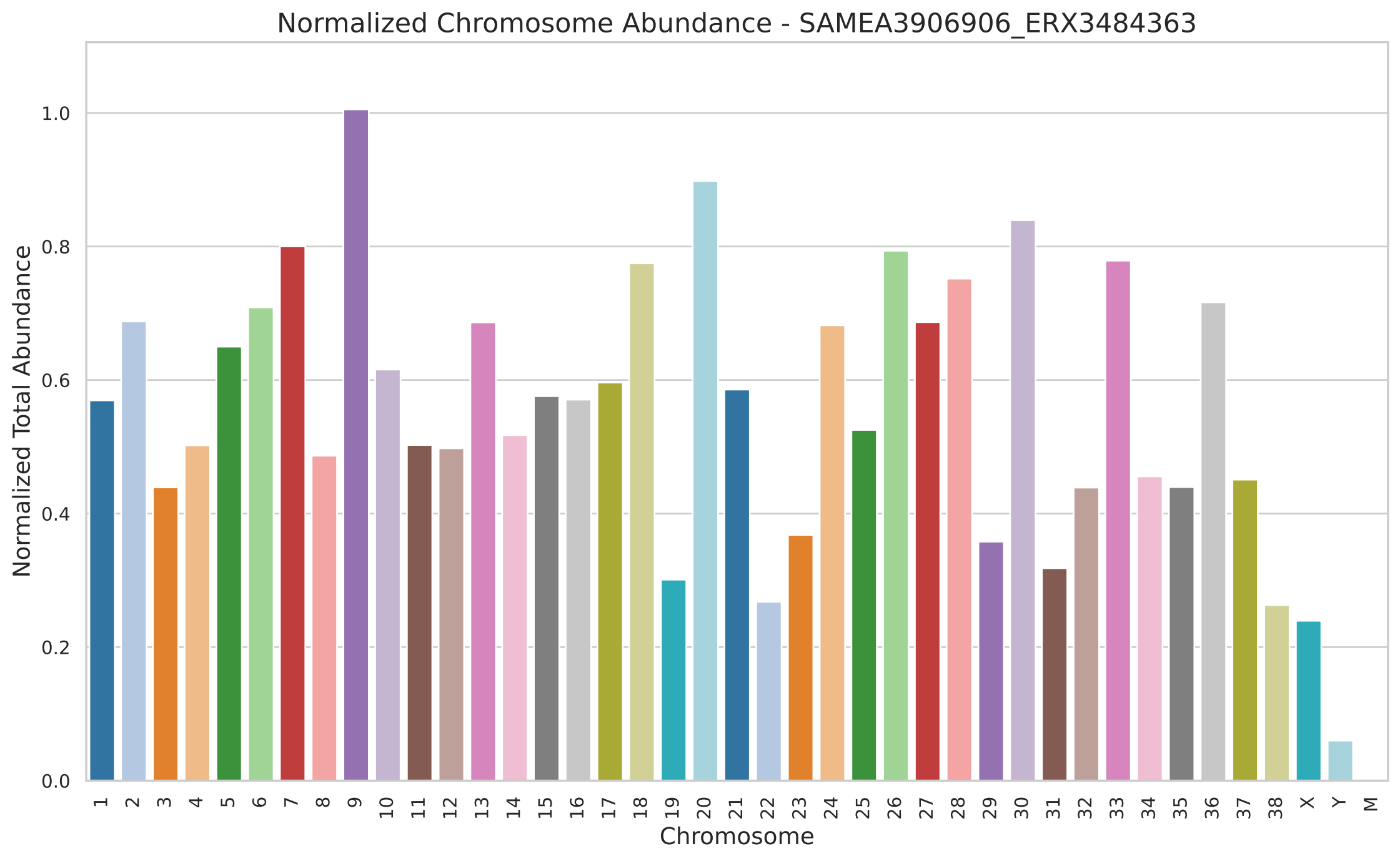

Normalized Chromosome Abundance - SAMEA3907266_ERX3484309
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

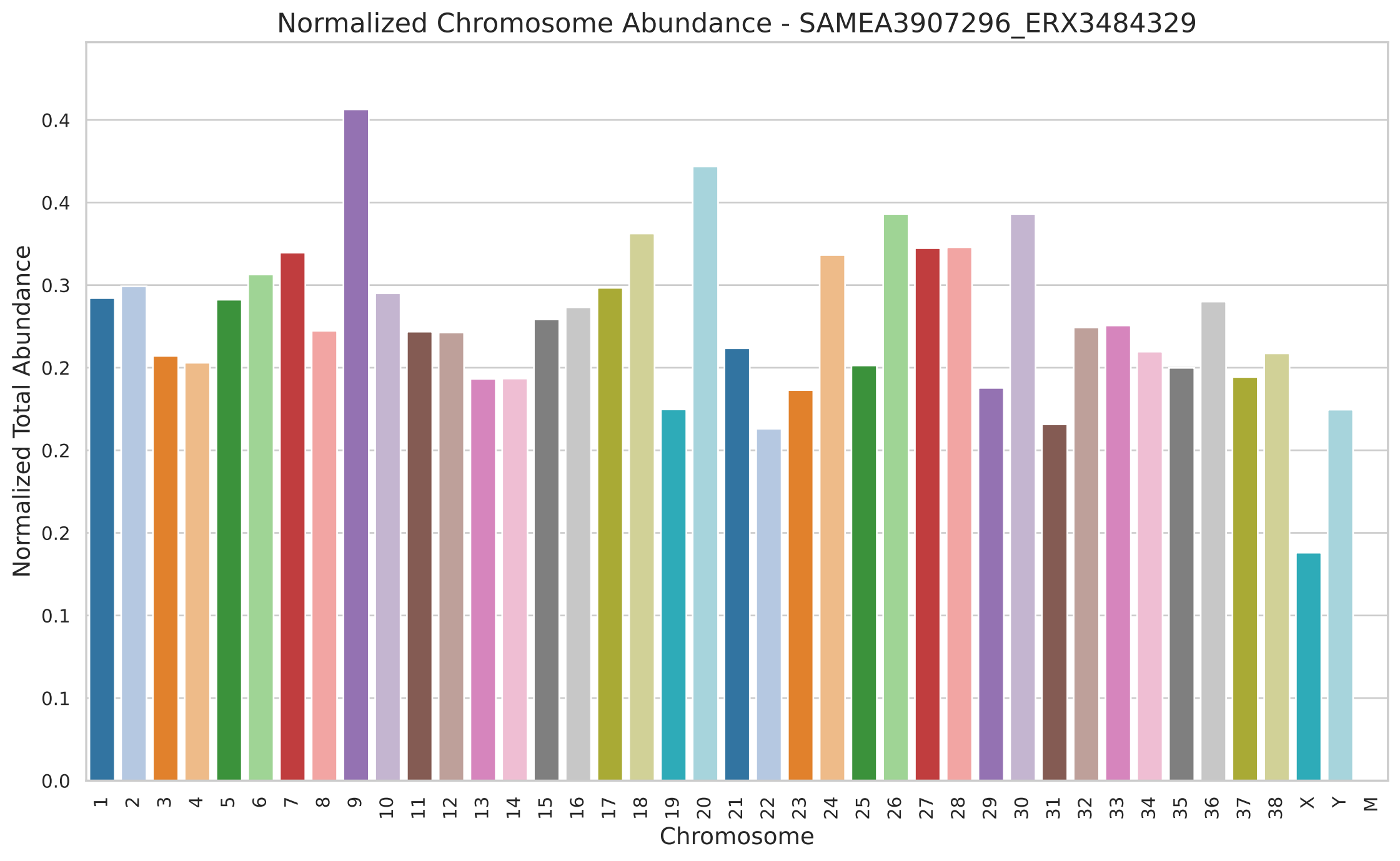

Normalized Chromosome Abundance - SAMEA3910752_ERX3484325
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

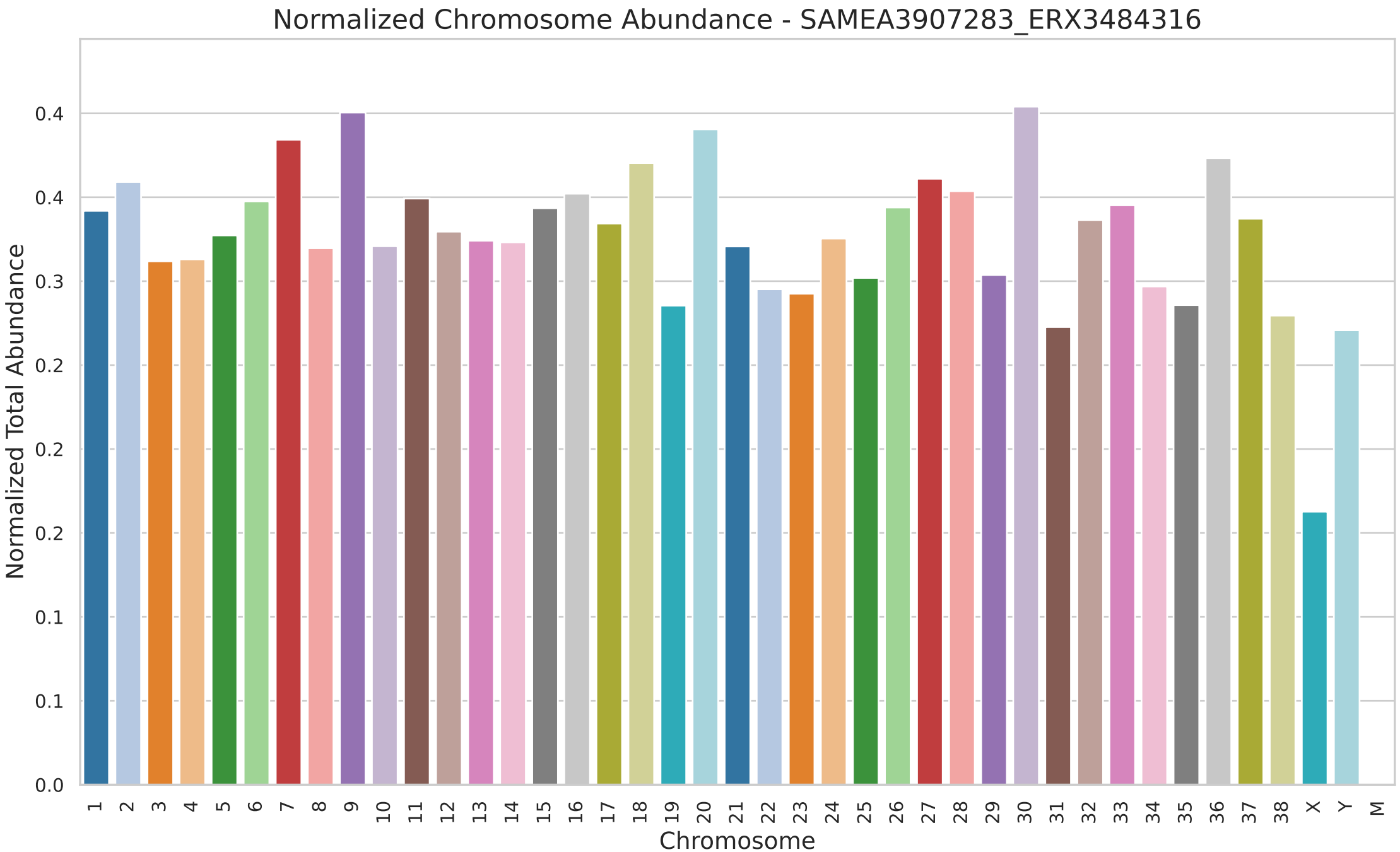

Normalized Chromosome Abundance - SAMEA3906913_ERX3484369
Normalized Total Abundance
1.2
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

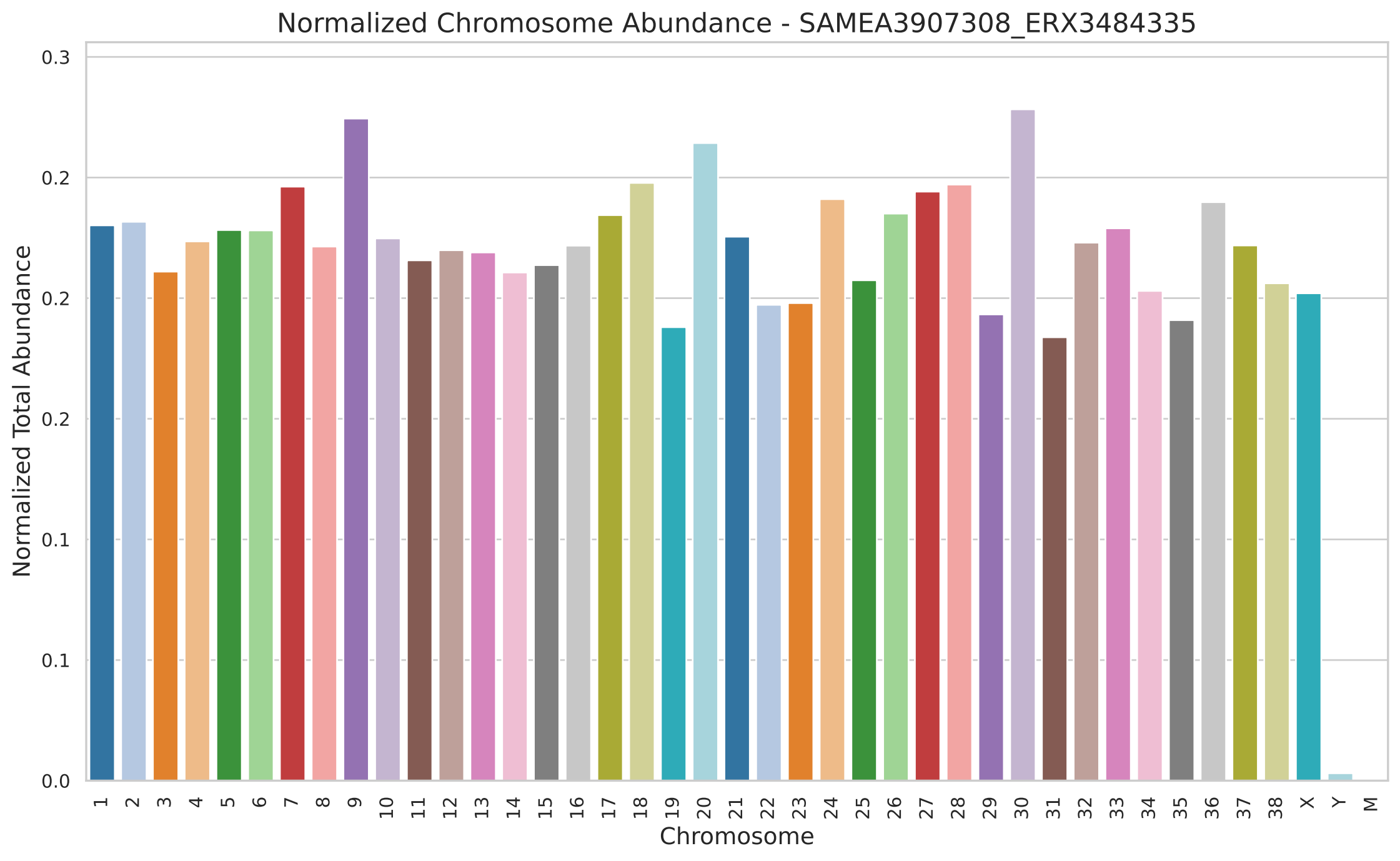

Normalized Chromosome Abundance - SAMEA3906959_ERX3484376
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

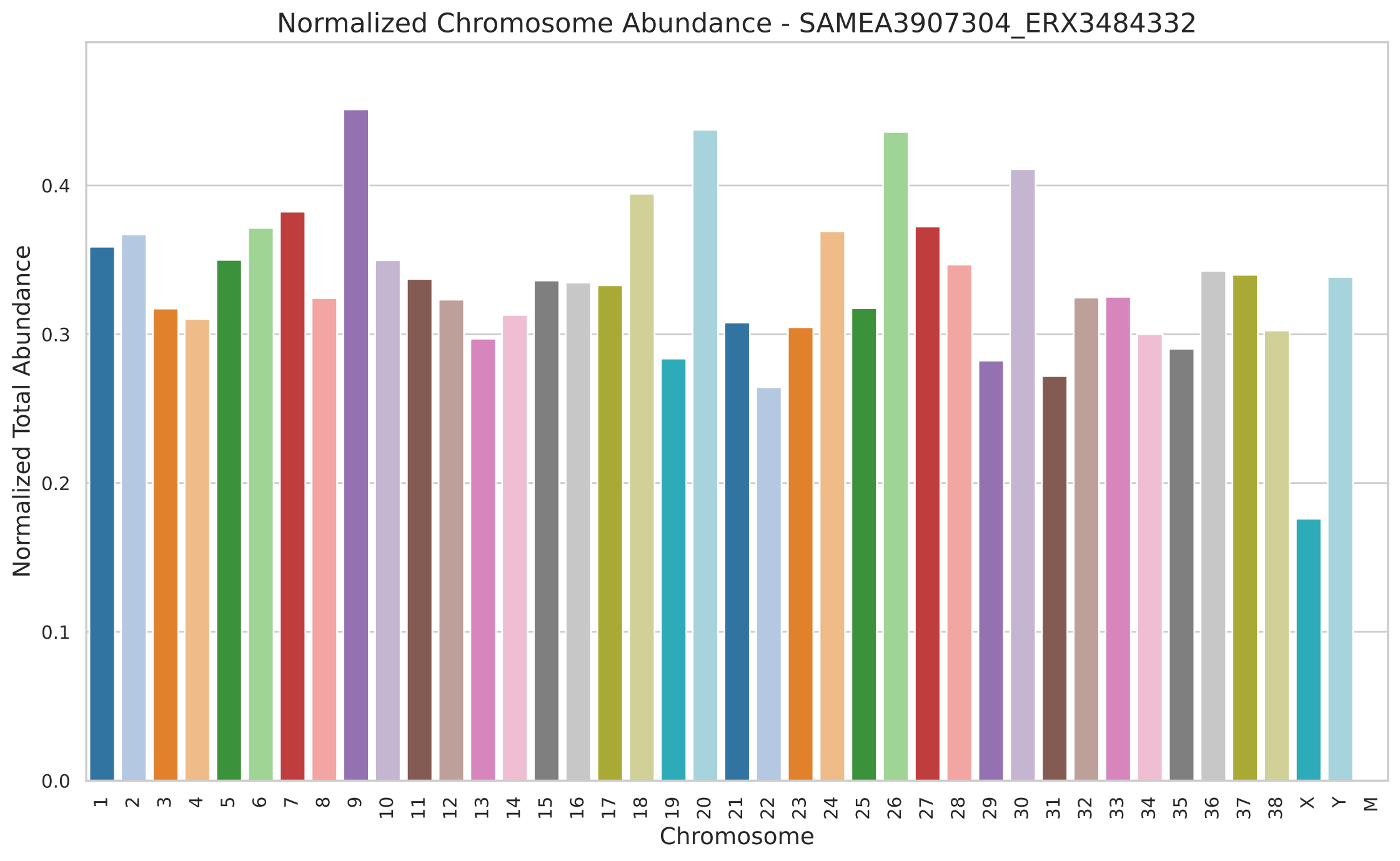

Normalized Chromosome Abundance - SAMEA3906904_ERX3484361
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

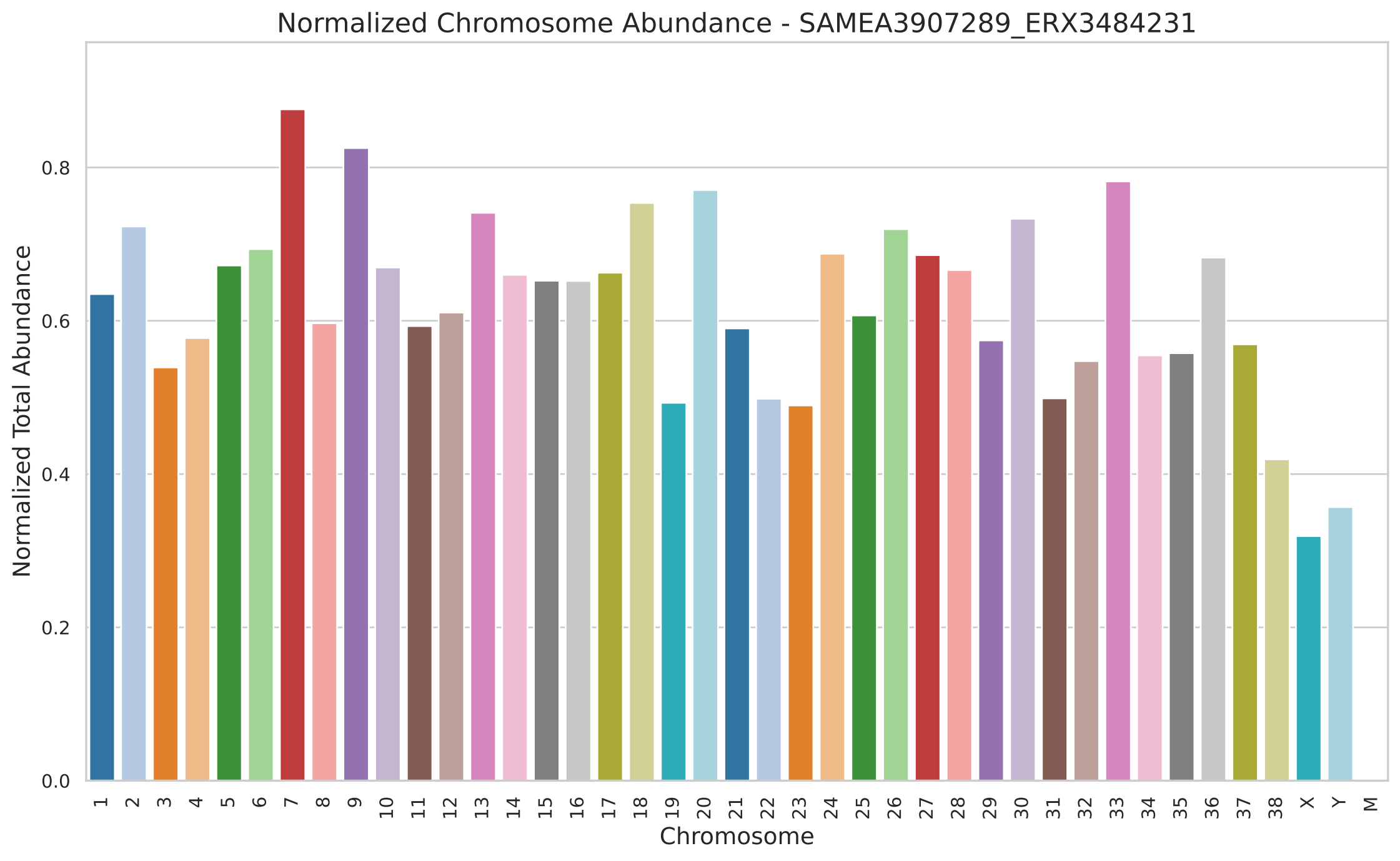

Normalized Chromosome Abundance - SAMEA3906906_ERX3484363
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

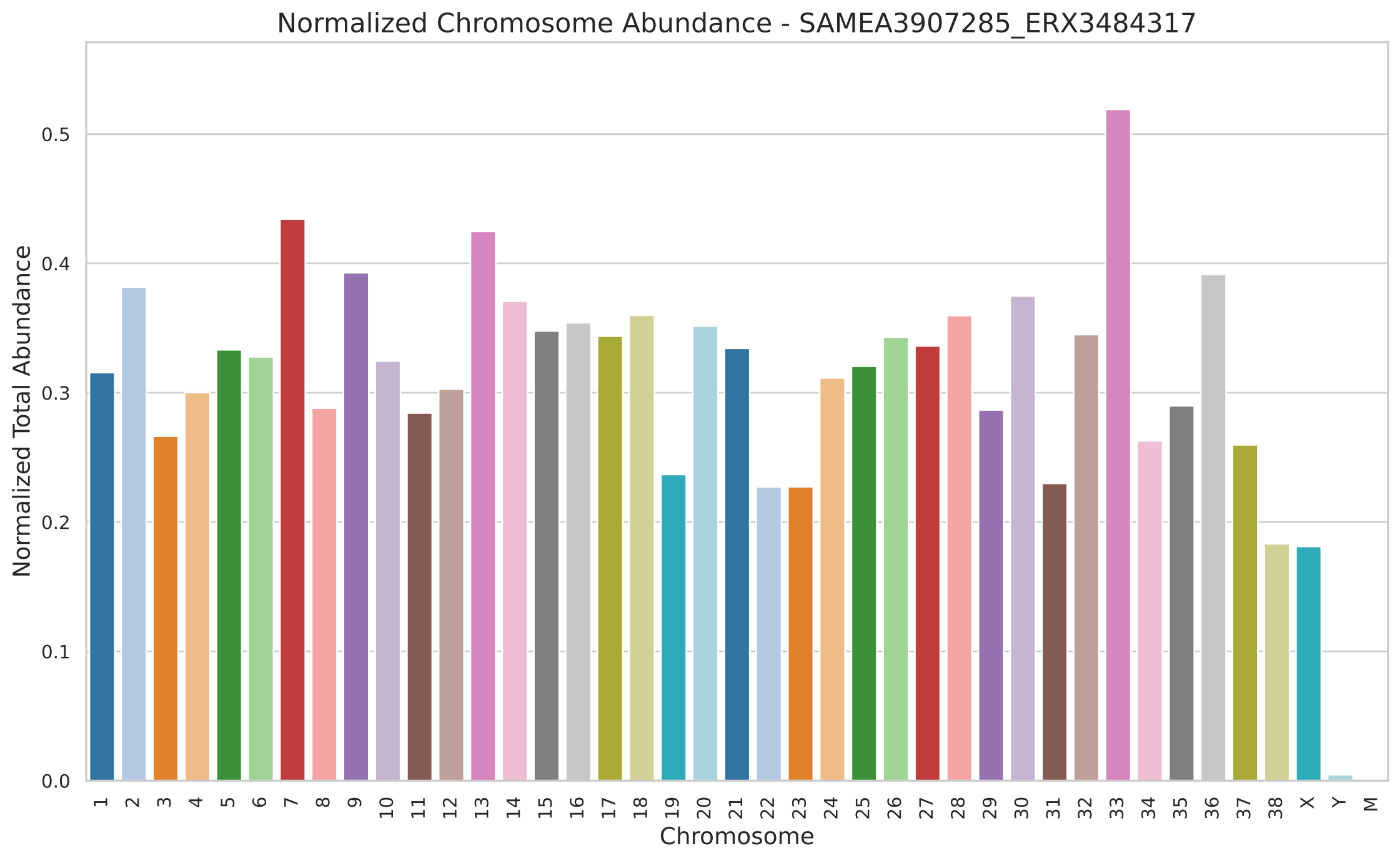

Normalized Chromosome Abundance - SAMEA3907296_ERX3484329
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

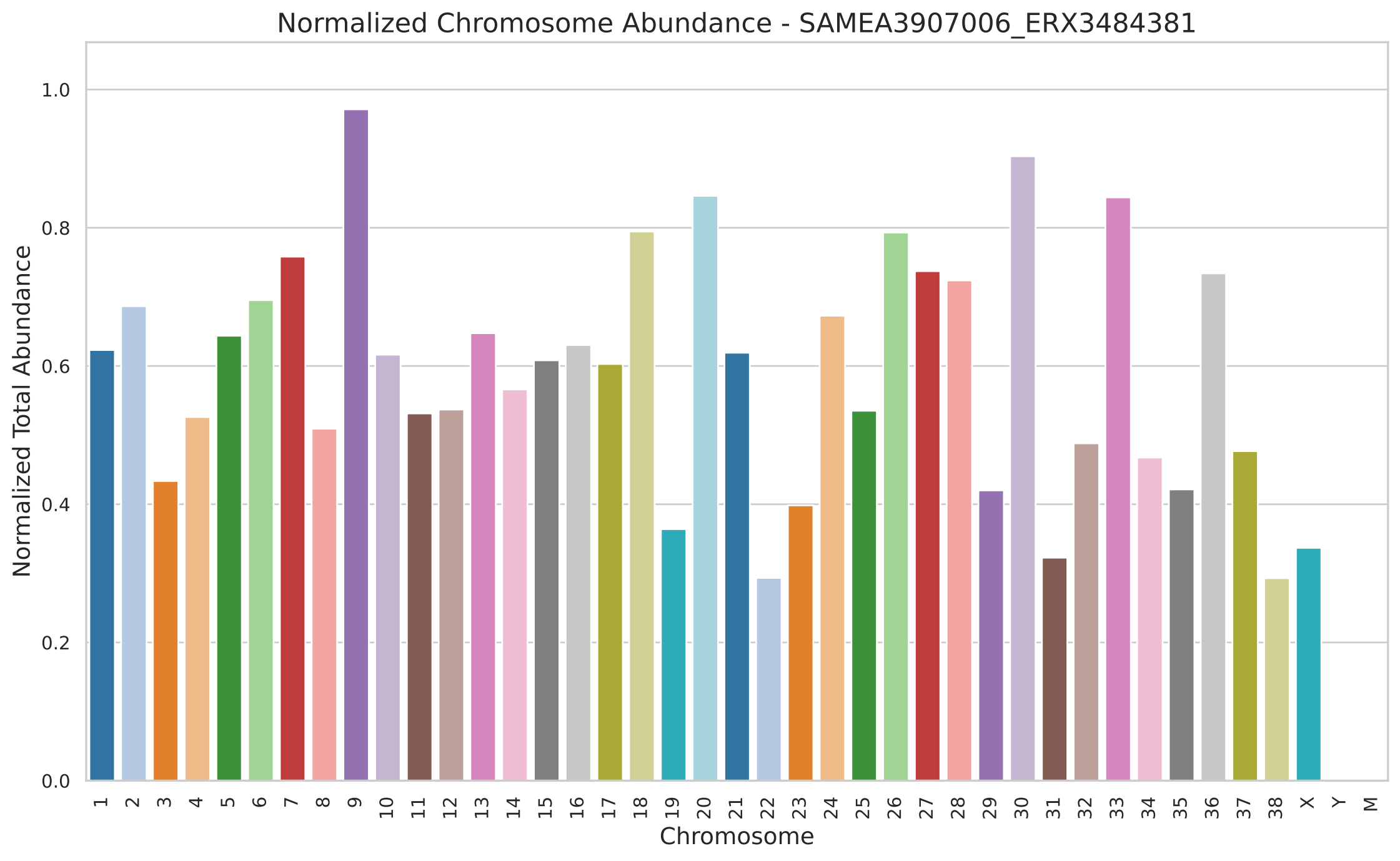

Normalized Chromosome Abundance - SAMEA3907283_ERX3484316
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
0.4
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

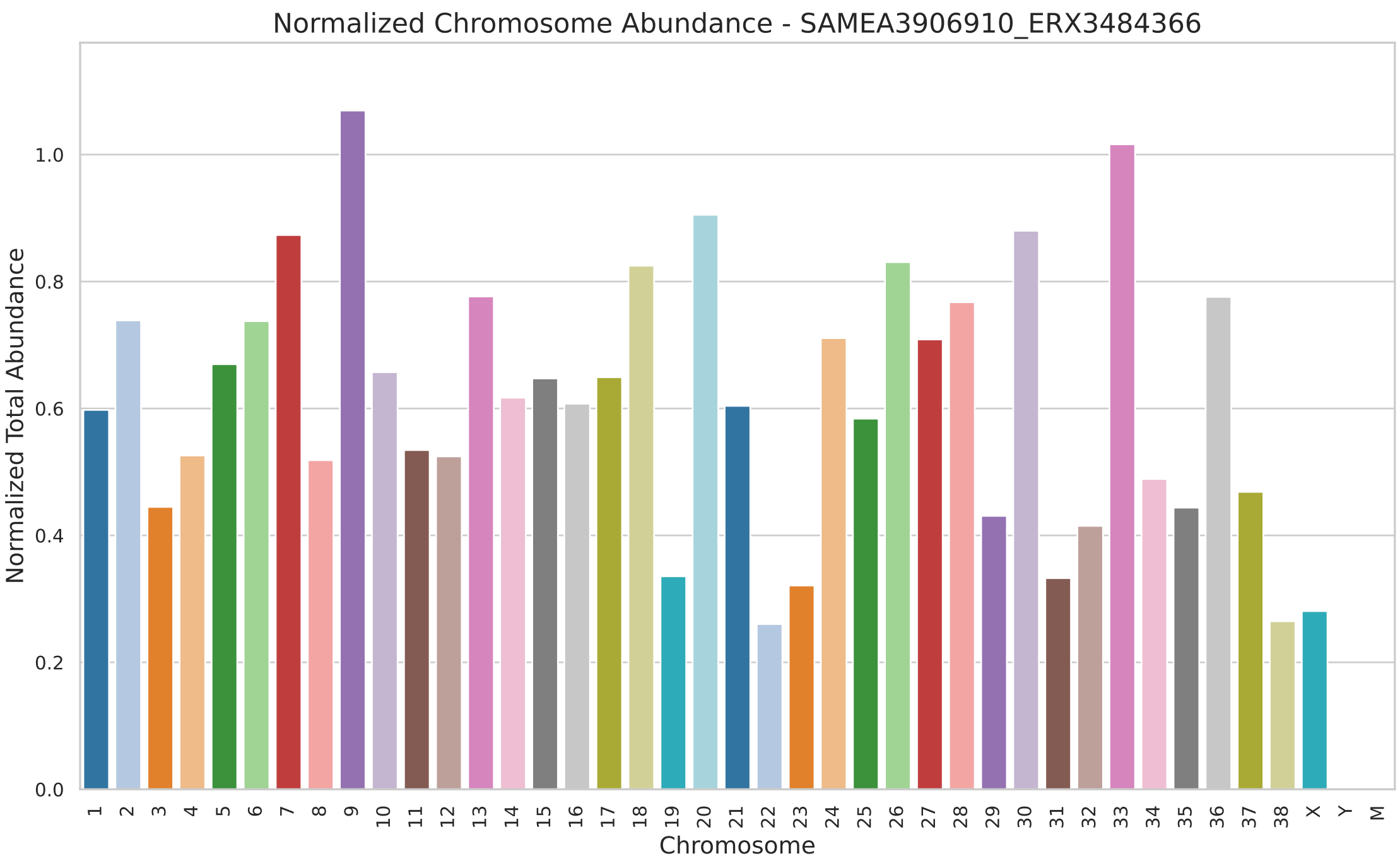

Normalized Chromosome Abundance - SAMEA3907308_ERX3484335
Normalized Total Abundance
0.3
0.2
0.2
0.1
0.1
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

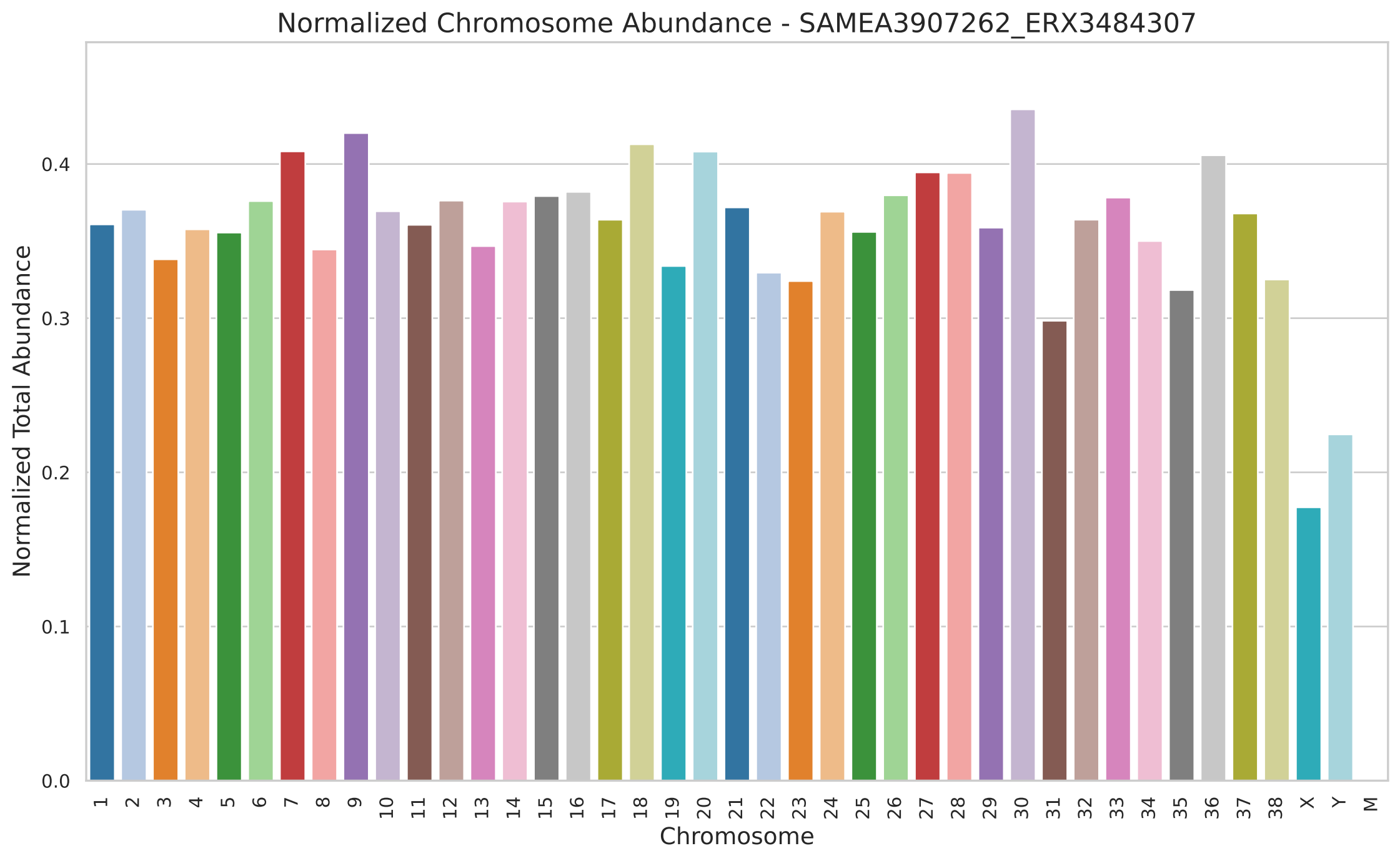

Normalized Chromosome Abundance - SAMEA3907304_ERX3484332
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

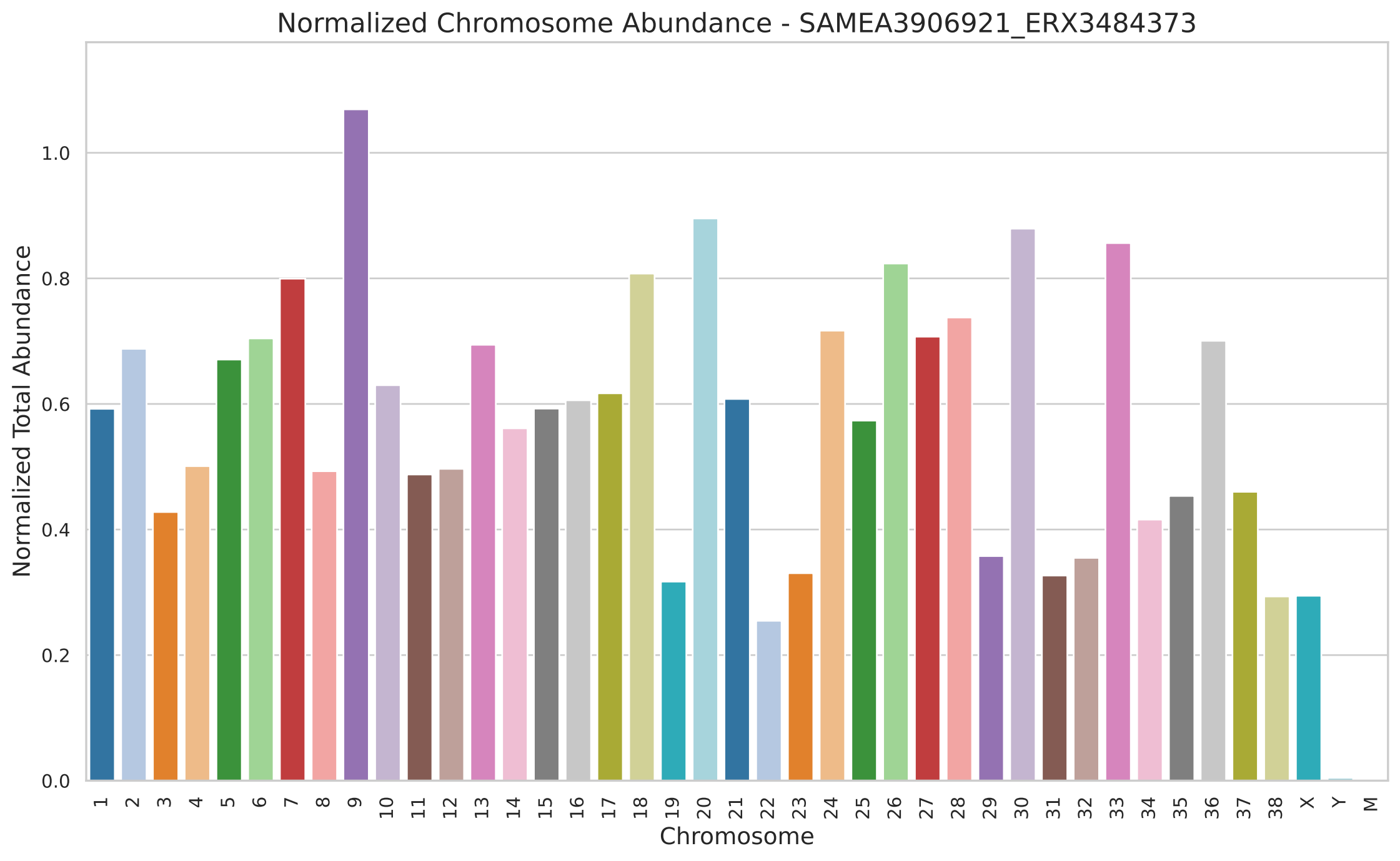

Normalized Chromosome Abundance - SAMEA3907289_ERX3484231
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

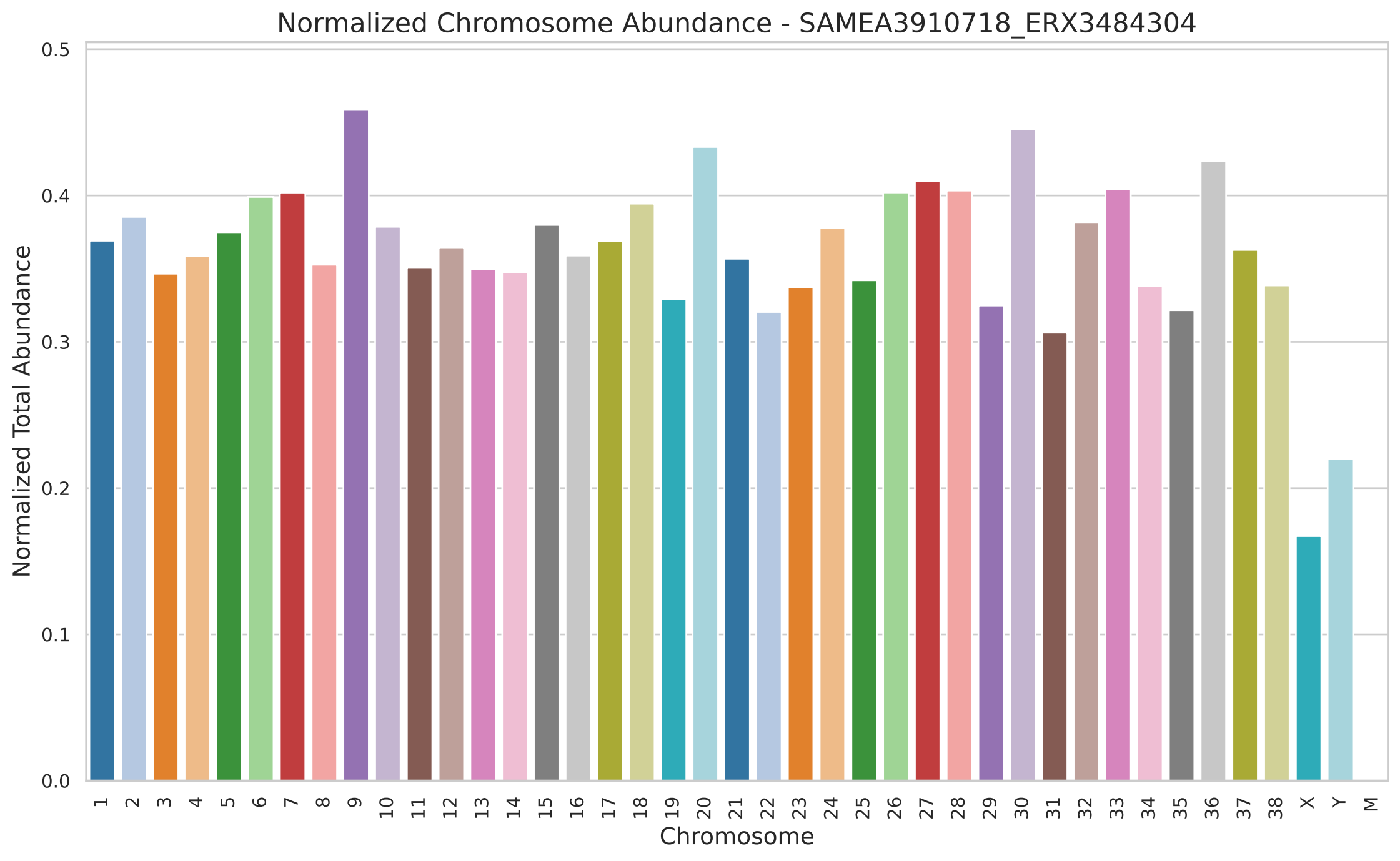

Normalized Chromosome Abundance - SAMEA3907285_ERX3484317
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

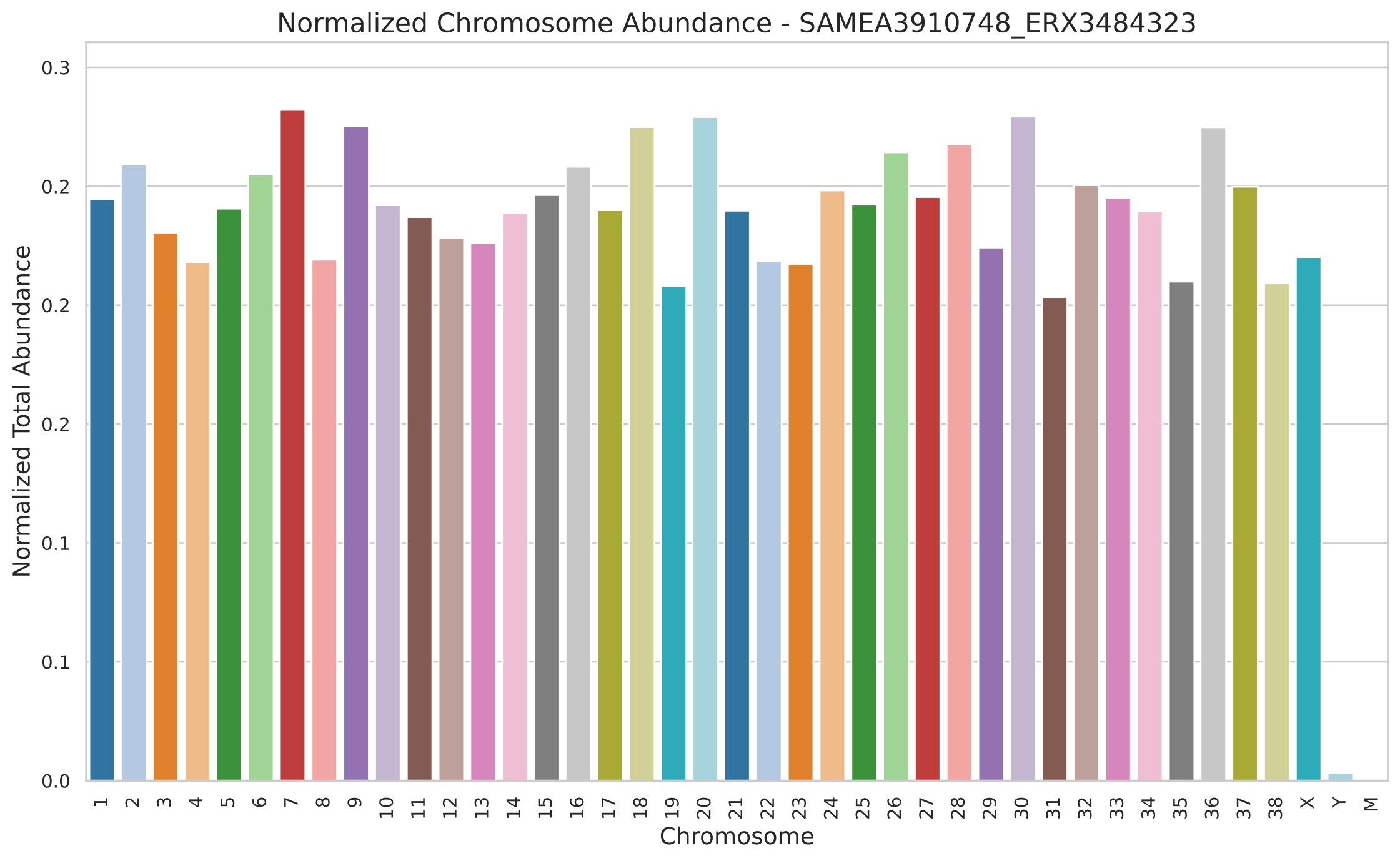

Normalized Chromosome Abundance - SAMEA3907006_ERX3484381
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

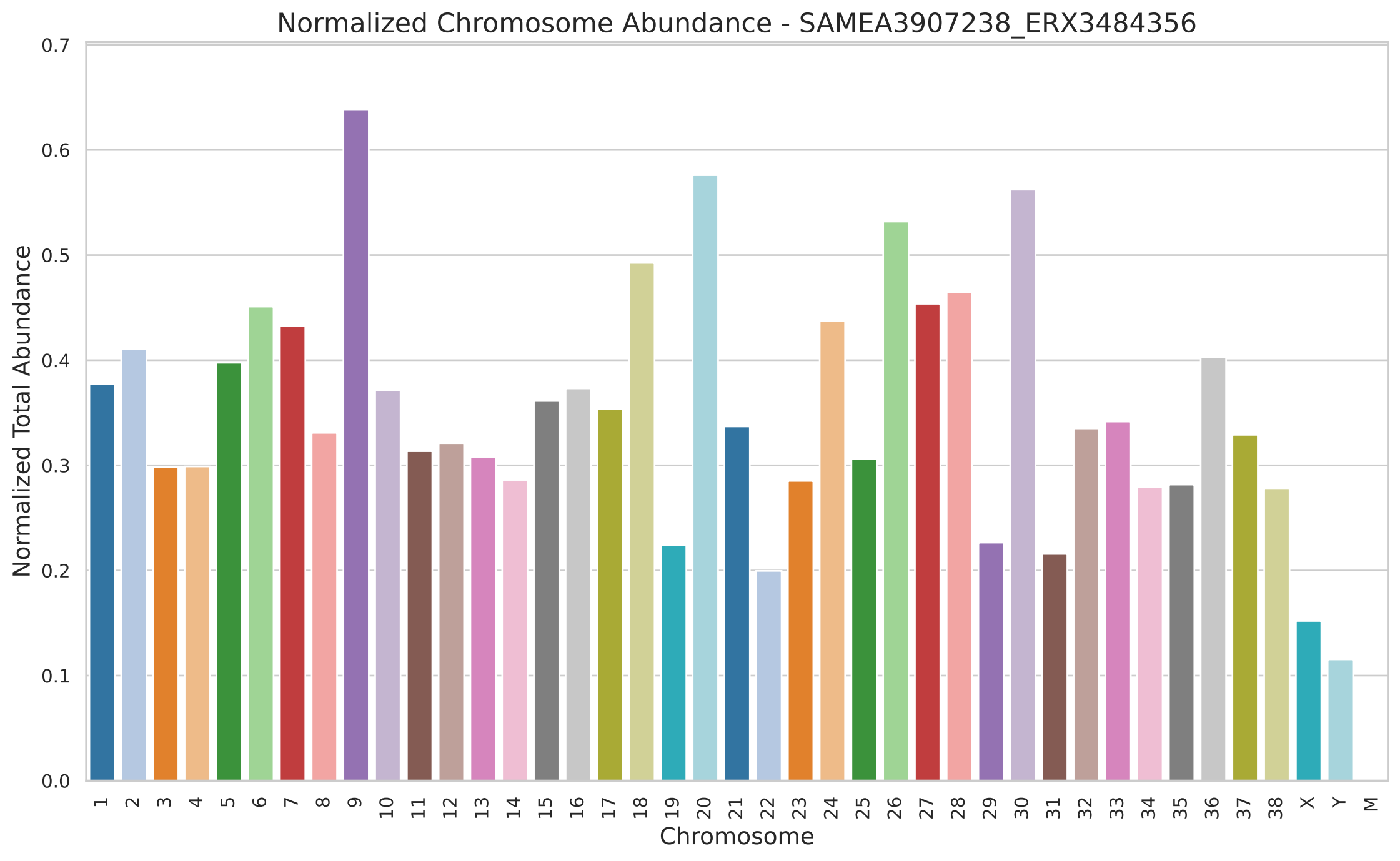

Normalized Chromosome Abundance - SAMEA3906910_ERX3484366
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

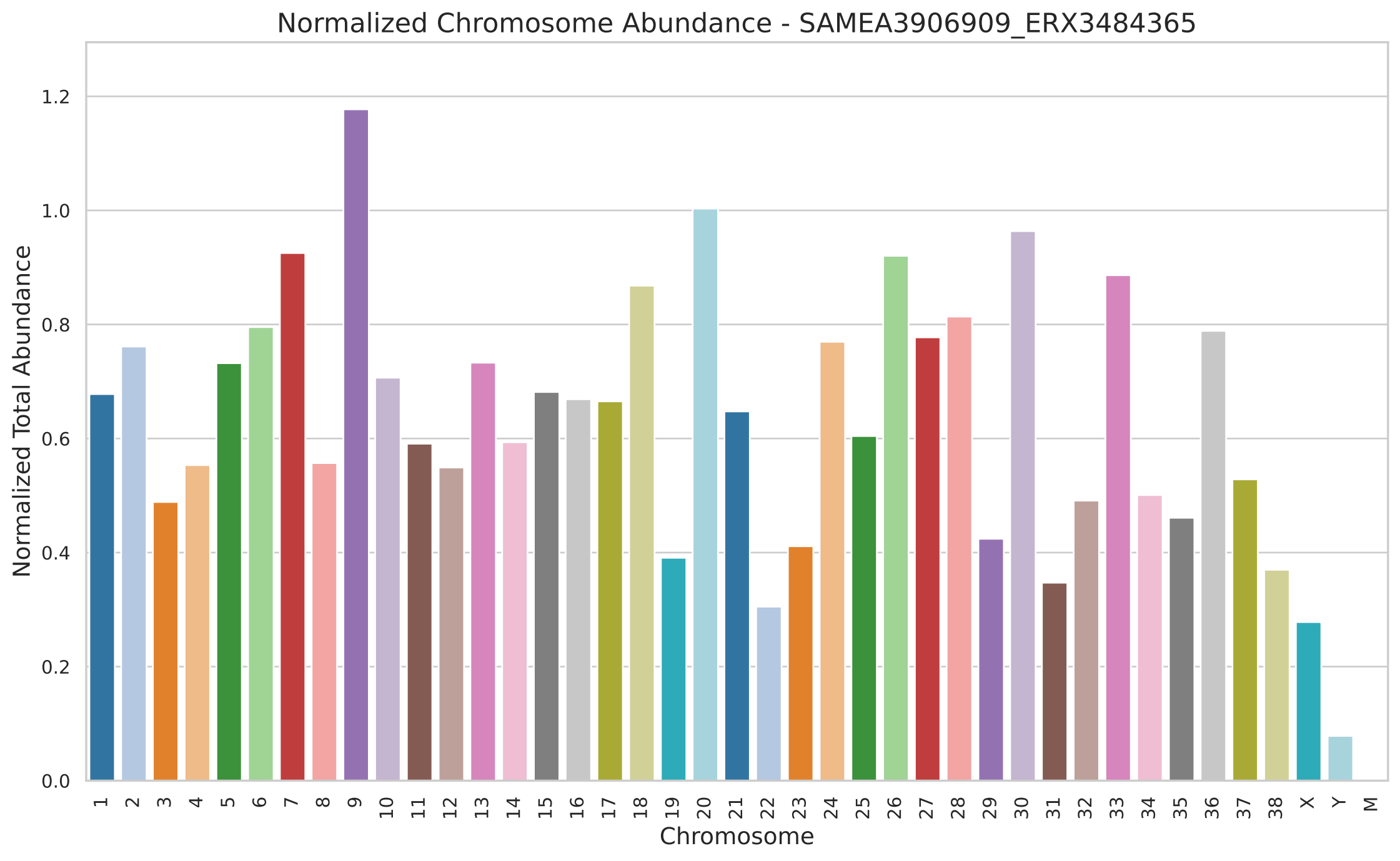

Normalized Chromosome Abundance - SAMEA3907262_ERX3484307
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

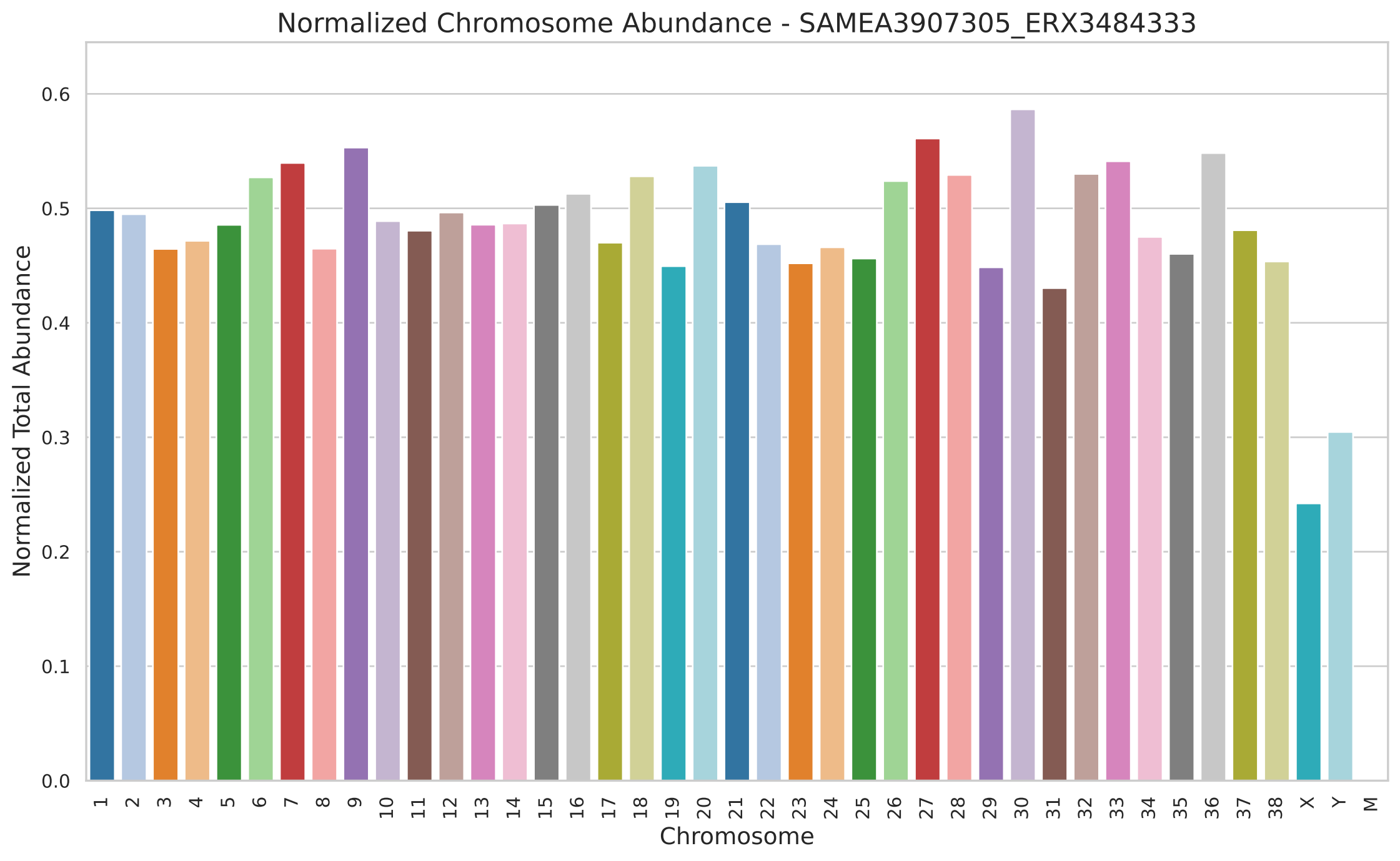

Normalized Chromosome Abundance - SAMEA3906921_ERX3484373
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

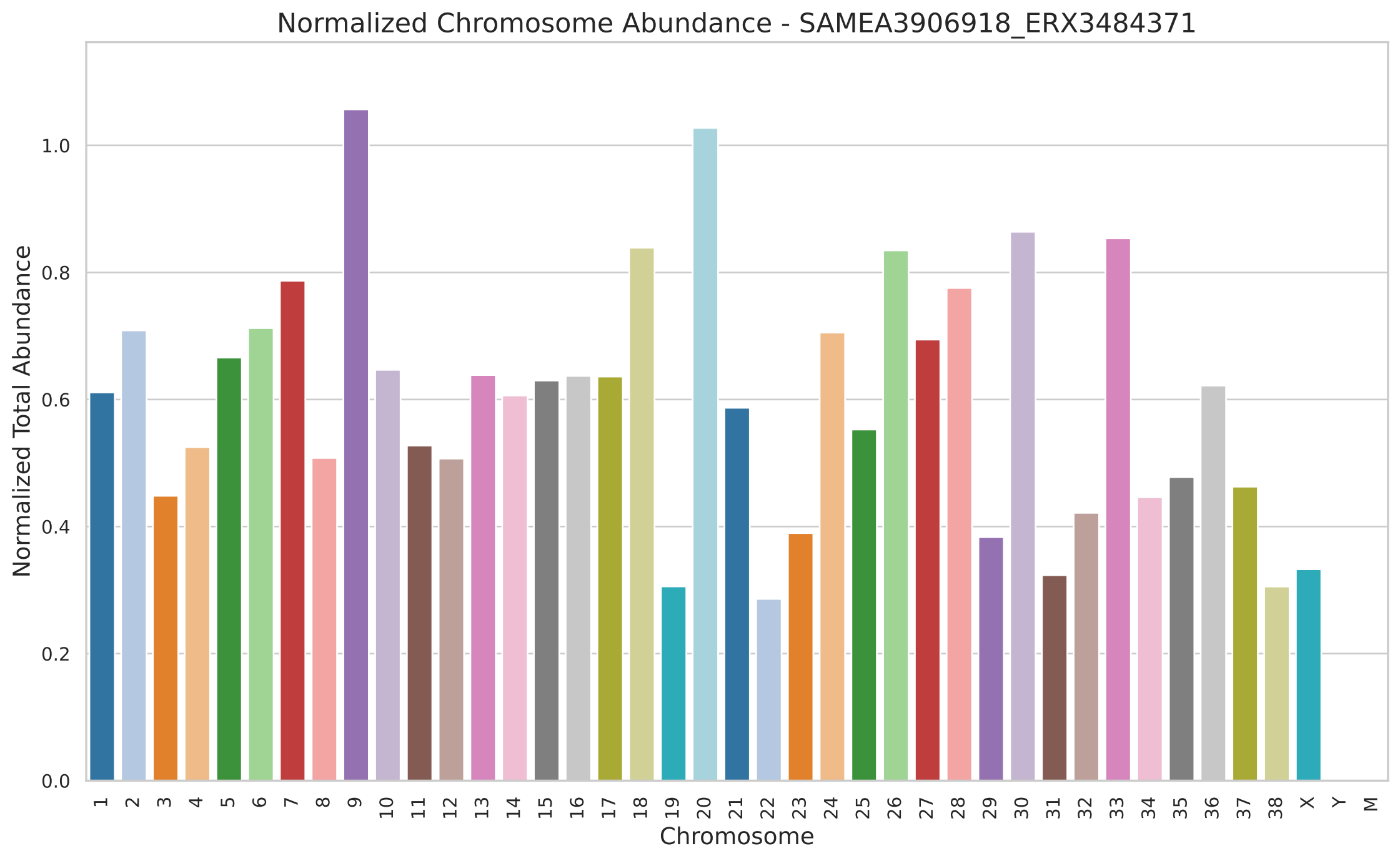

Normalized Chromosome Abundance - SAMEA3910718_ERX3484304
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

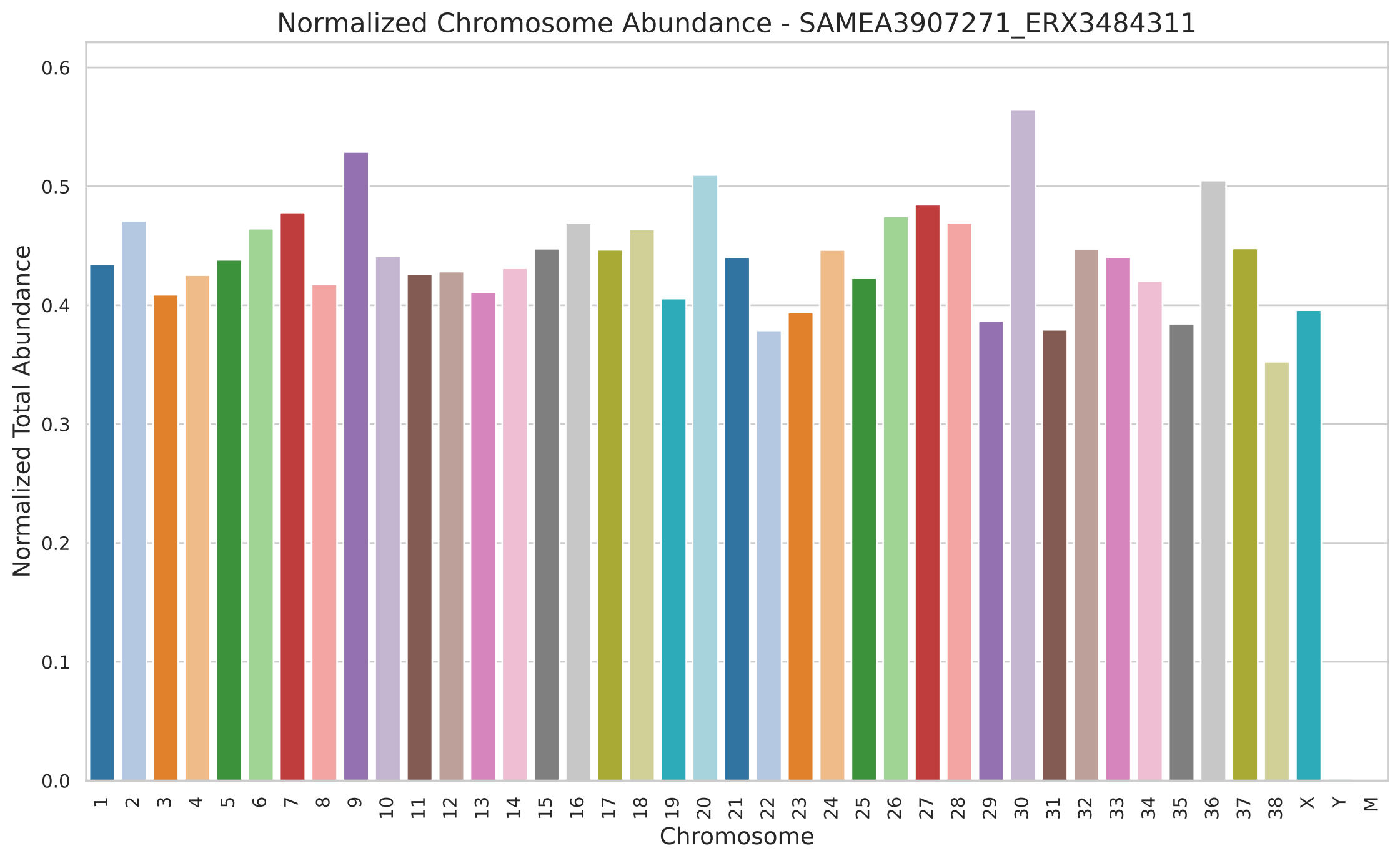

Normalized Chromosome Abundance - SAMEA3910748_ERX3484323
Normalized Total Abundance
0.0
0.1
0.2
0.2
0.1
0.3
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

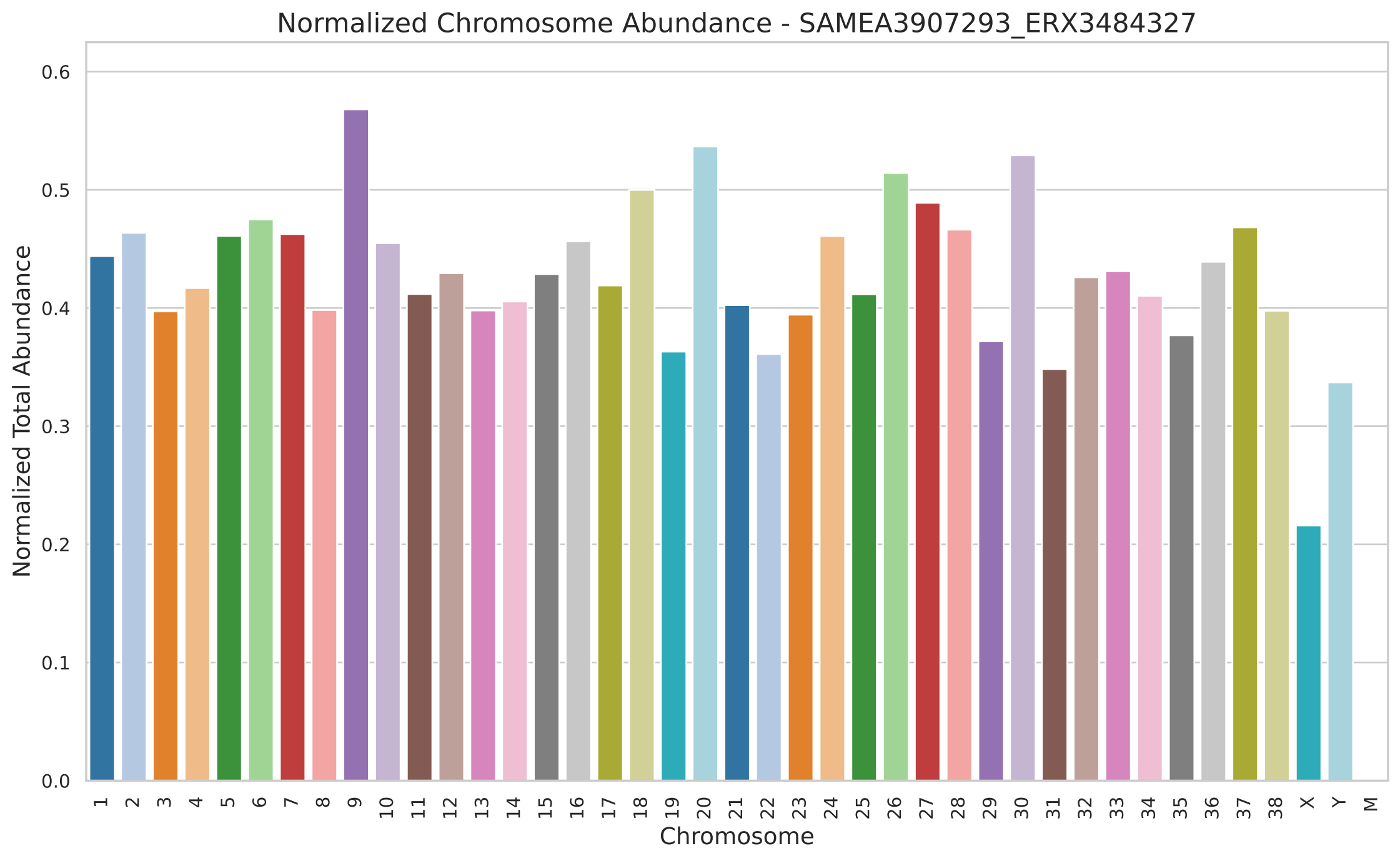

Normalized Chromosome Abundance - SAMEA3907238_ERX3484356
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

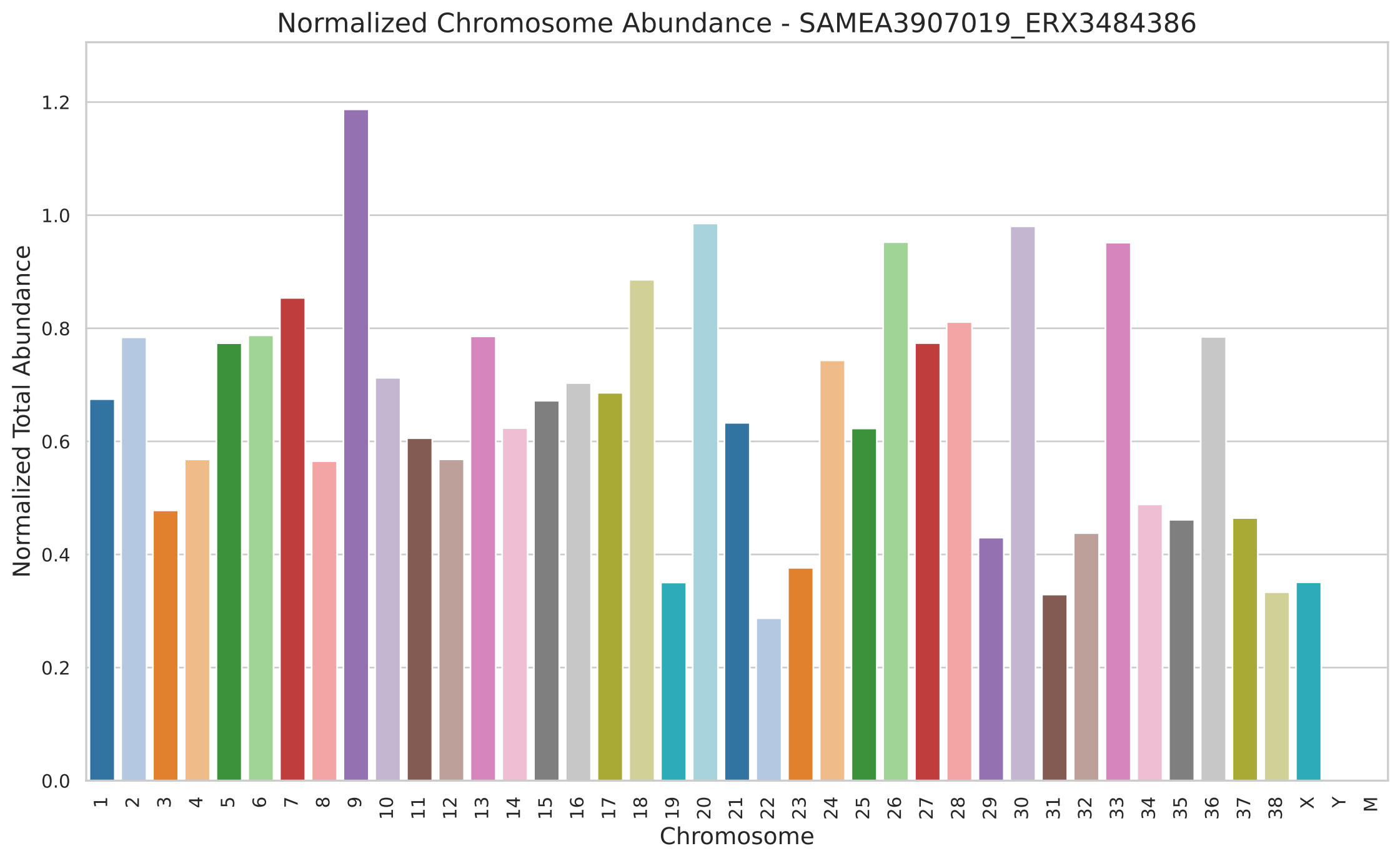

Normalized Chromosome Abundance - SAMEA3906909_ERX3484365
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

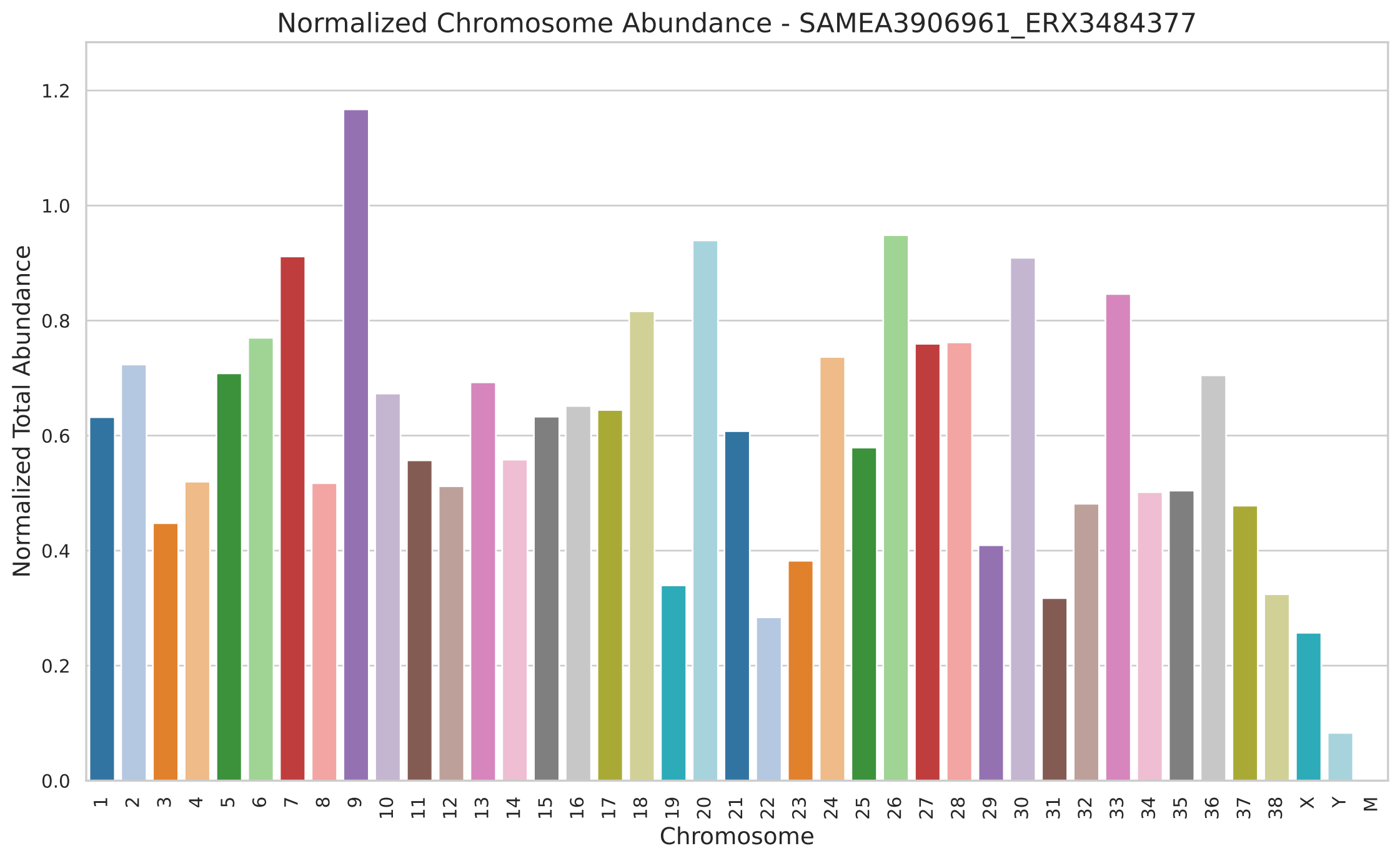

Normalized Chromosome Abundance - SAMEA3907305_ERX3484333
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

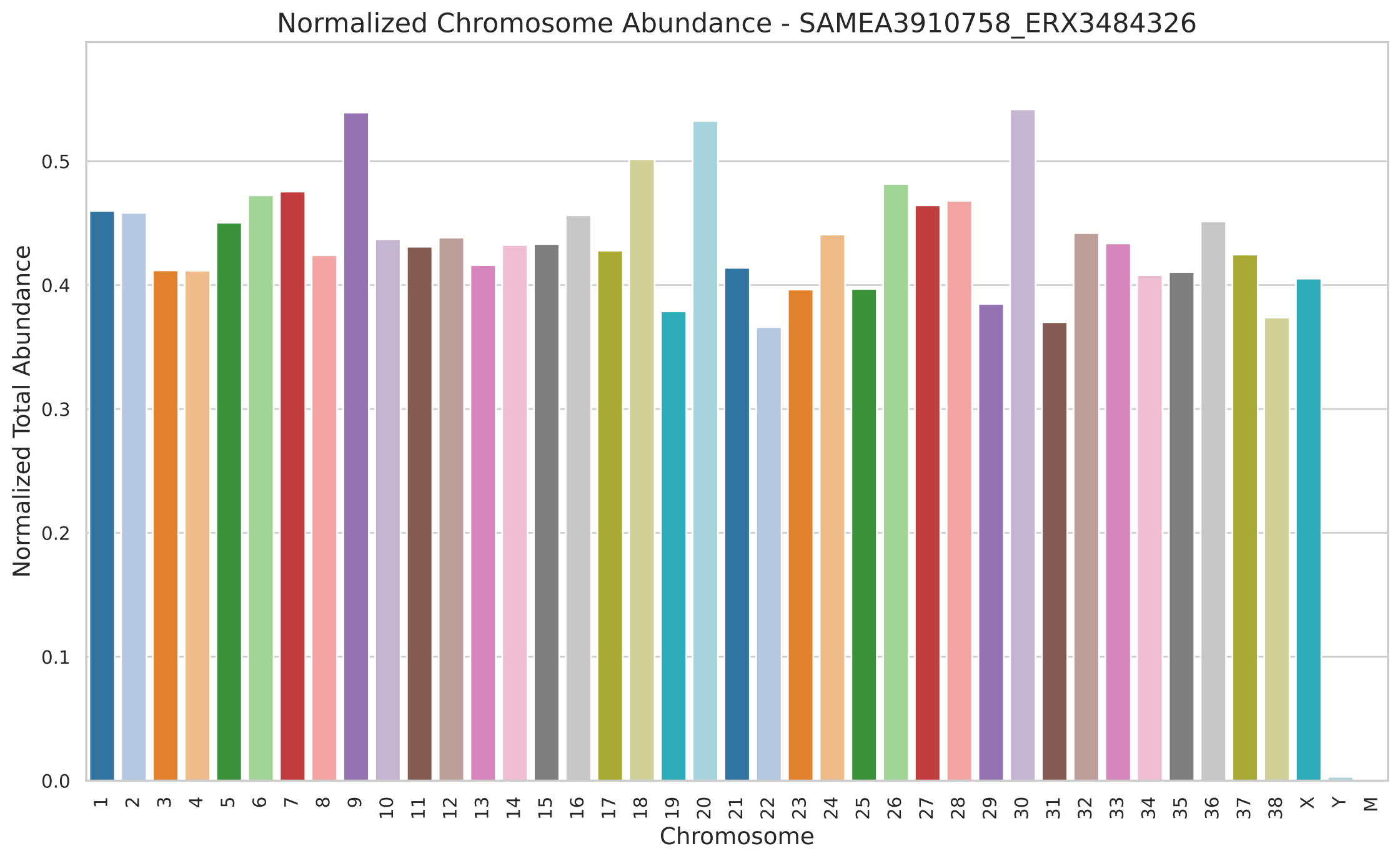

Normalized Chromosome Abundance - SAMEA3906918_ERX3484371
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

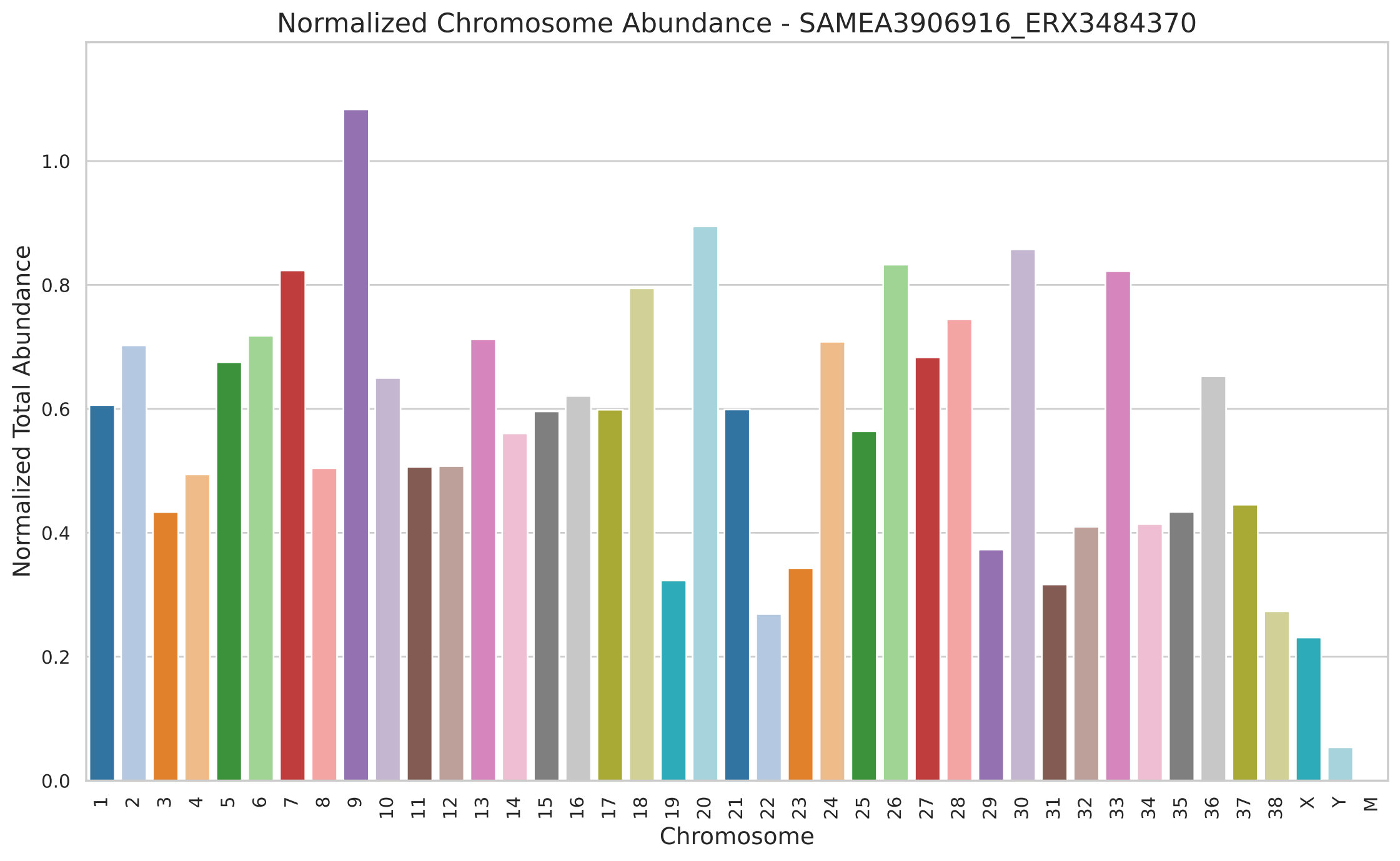

Normalized Chromosome Abundance - SAMEA3907271_ERX3484311
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

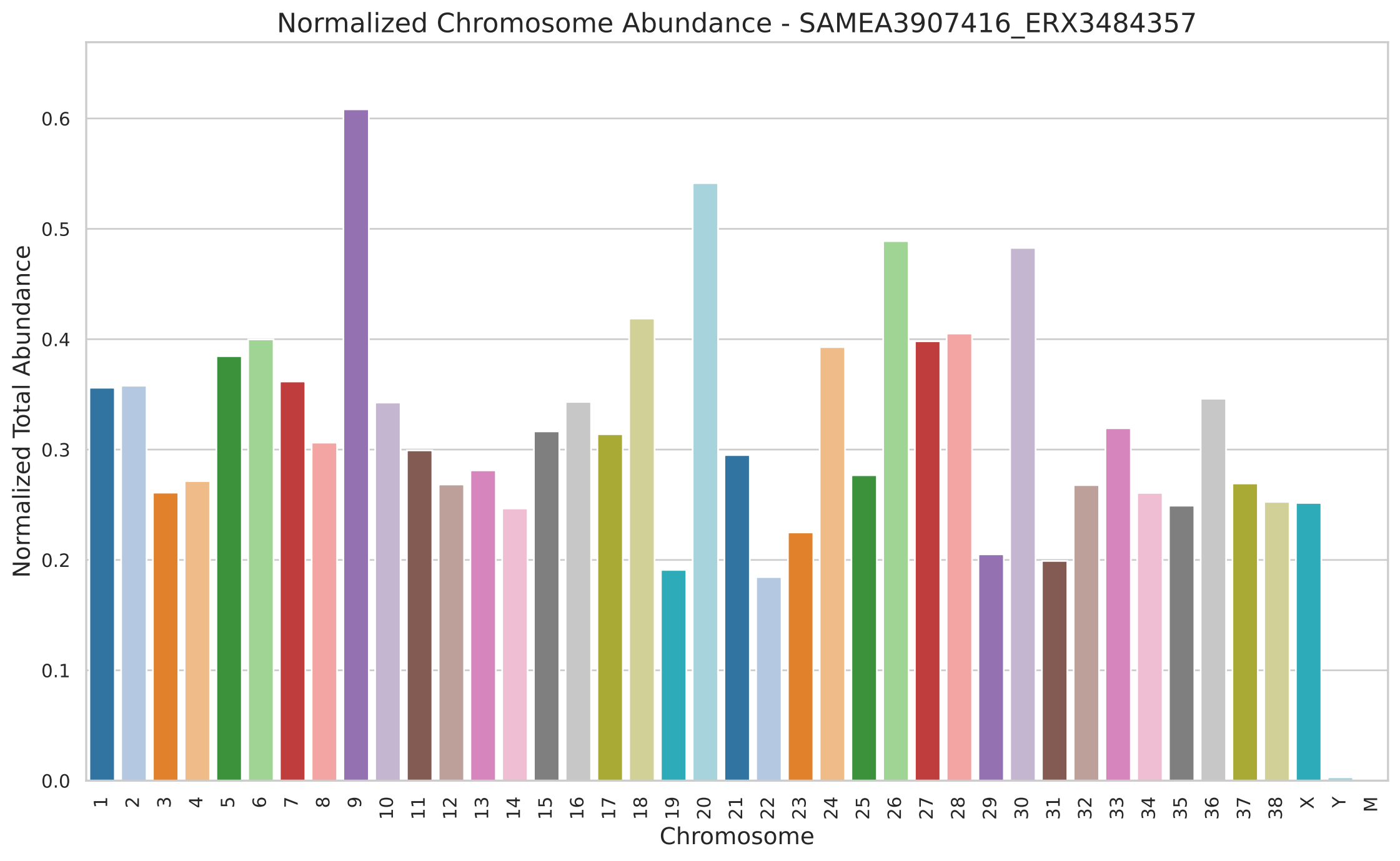

Normalized Chromosome Abundance - SAMEA3907293_ERX3484327
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

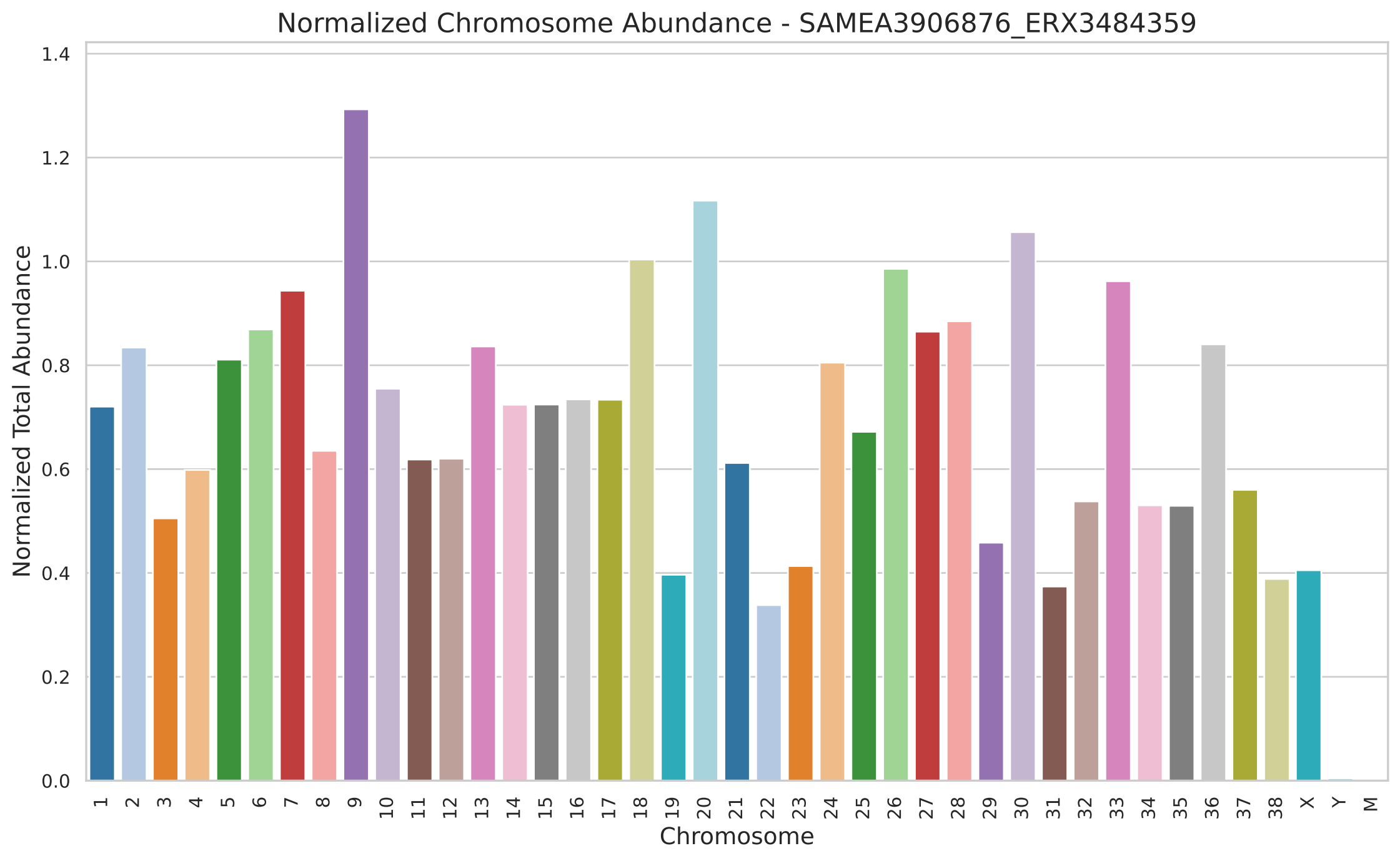

Normalized Chromosome Abundance - SAMEA3907019_ERX3484386
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

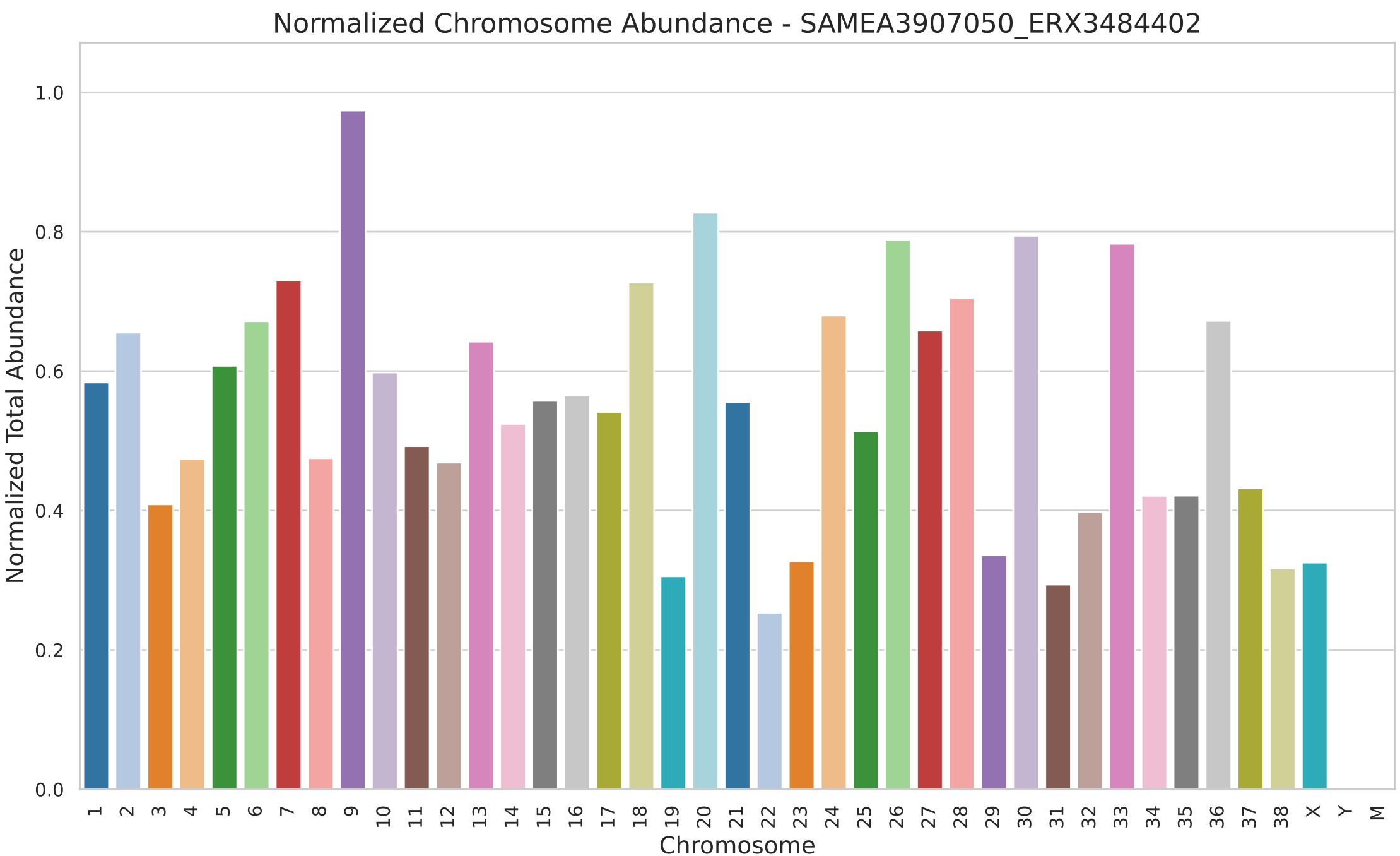

Normalized Chromosome Abundance - SAMEA3906961_ERX3484377
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

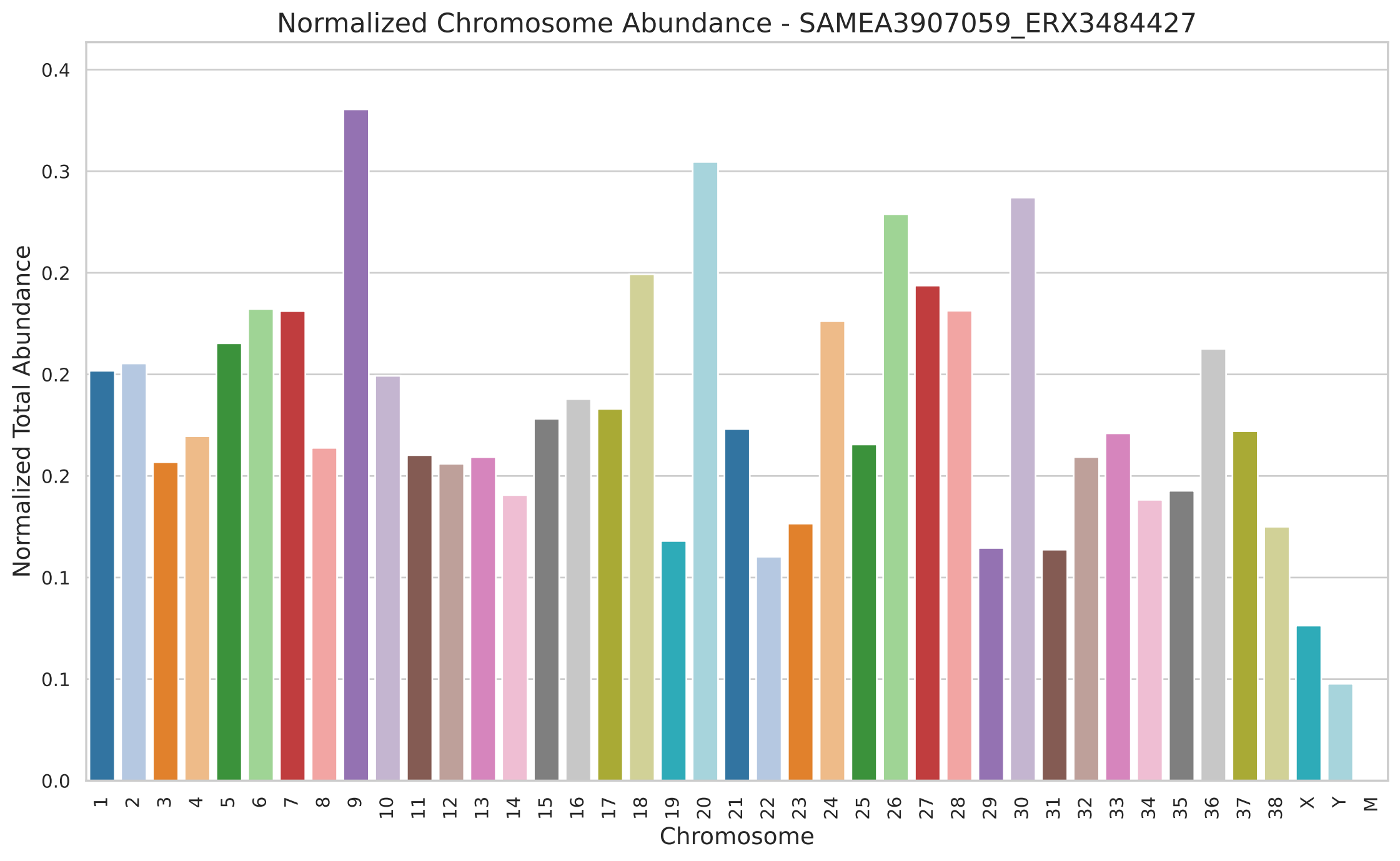

Normalized Chromosome Abundance - SAMEA3910758_ERX3484326
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

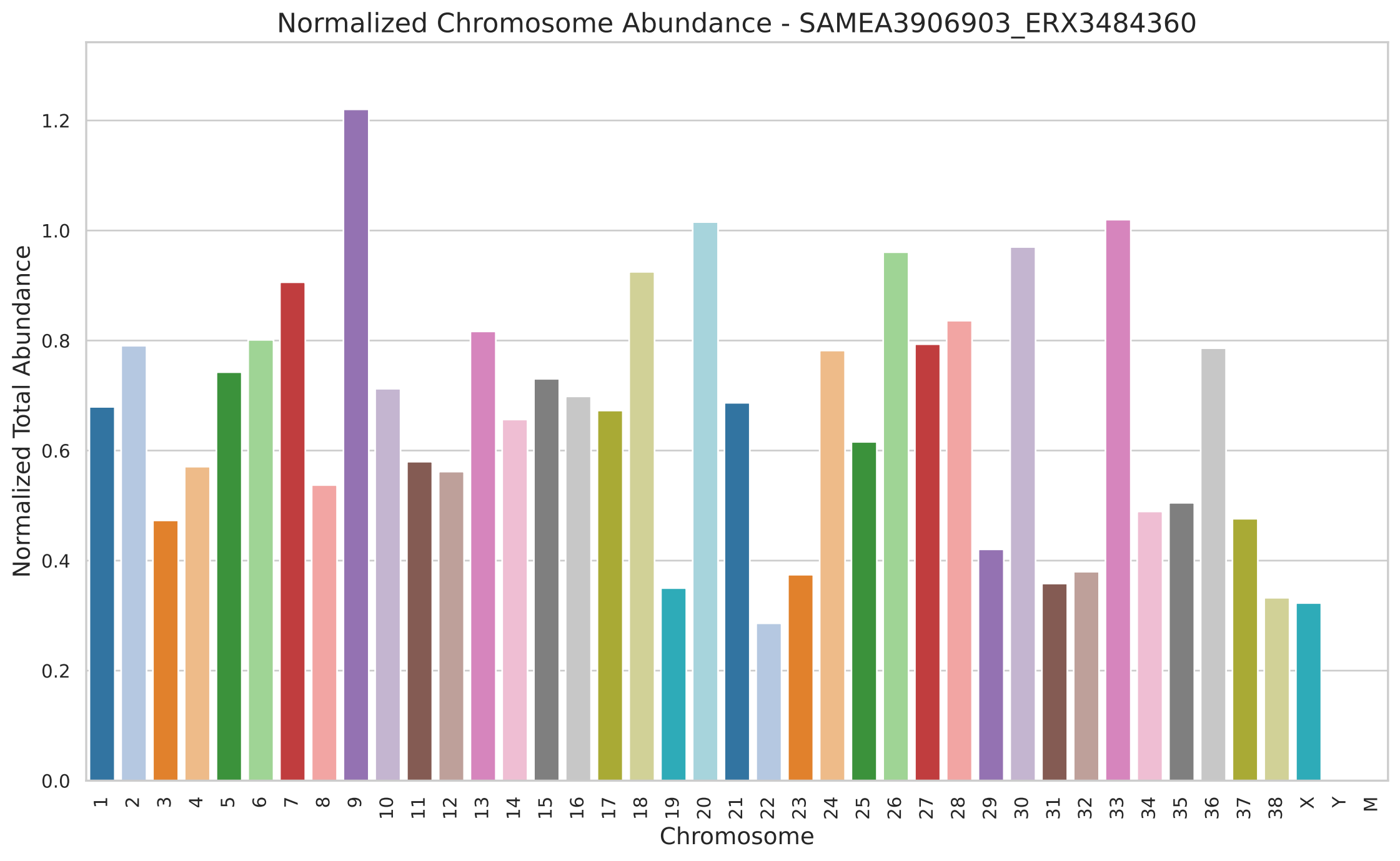

Normalized Chromosome Abundance - SAMEA3906916_ERX3484370
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

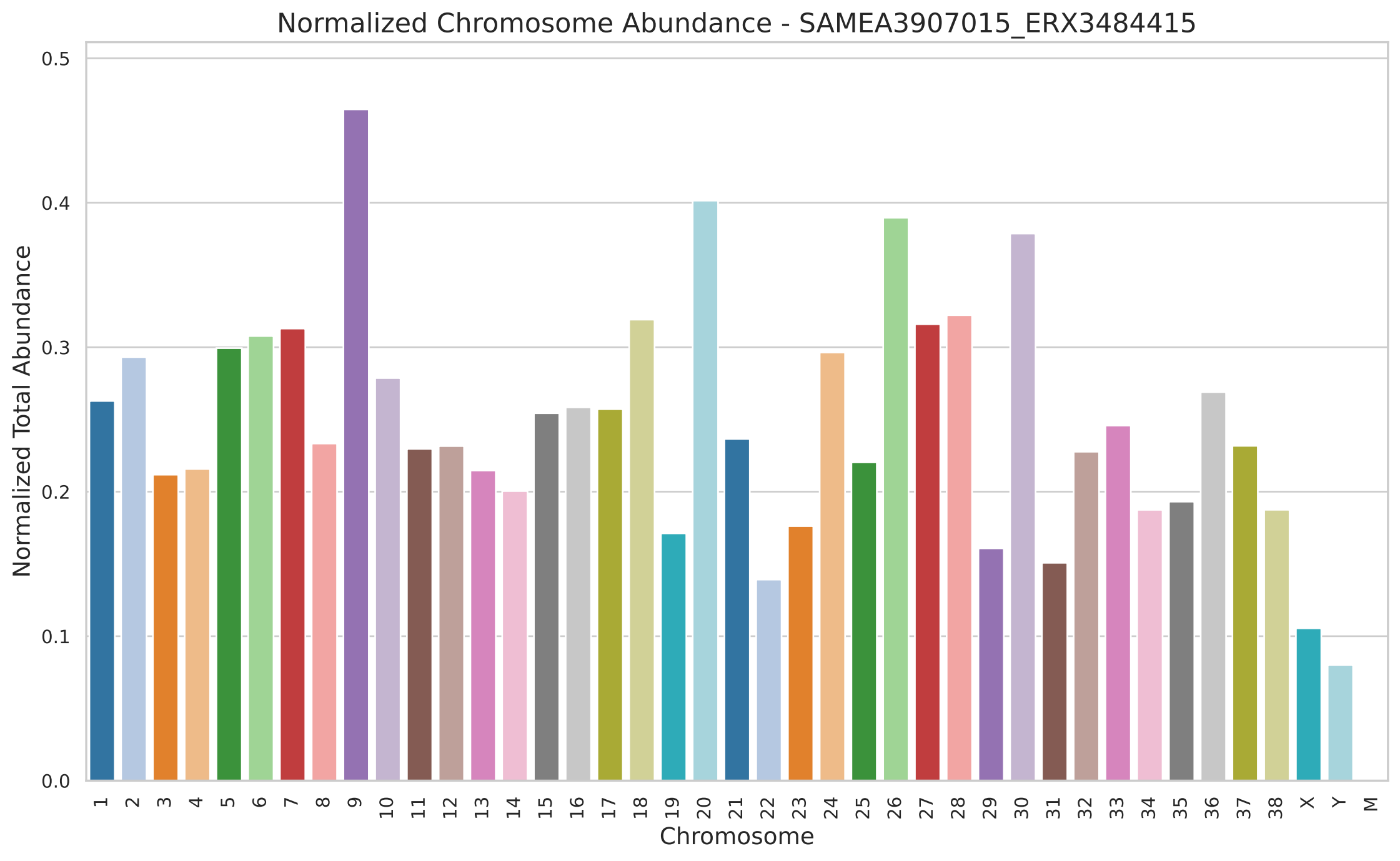

Normalized Chromosome Abundance - SAMEA3907416_ERX3484357
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

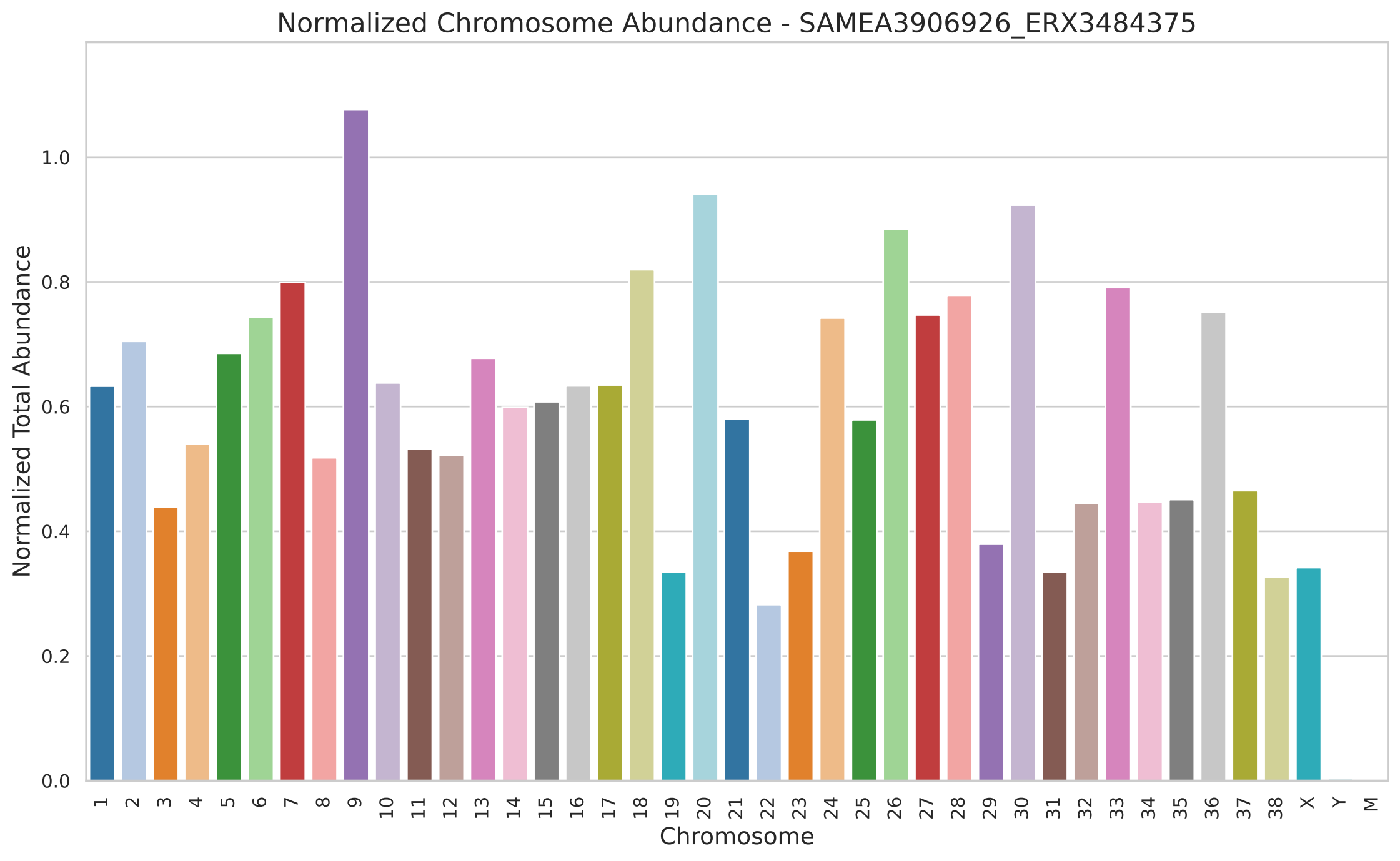

Normalized Chromosome Abundance - SAMEA3906876_ERX3484359
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

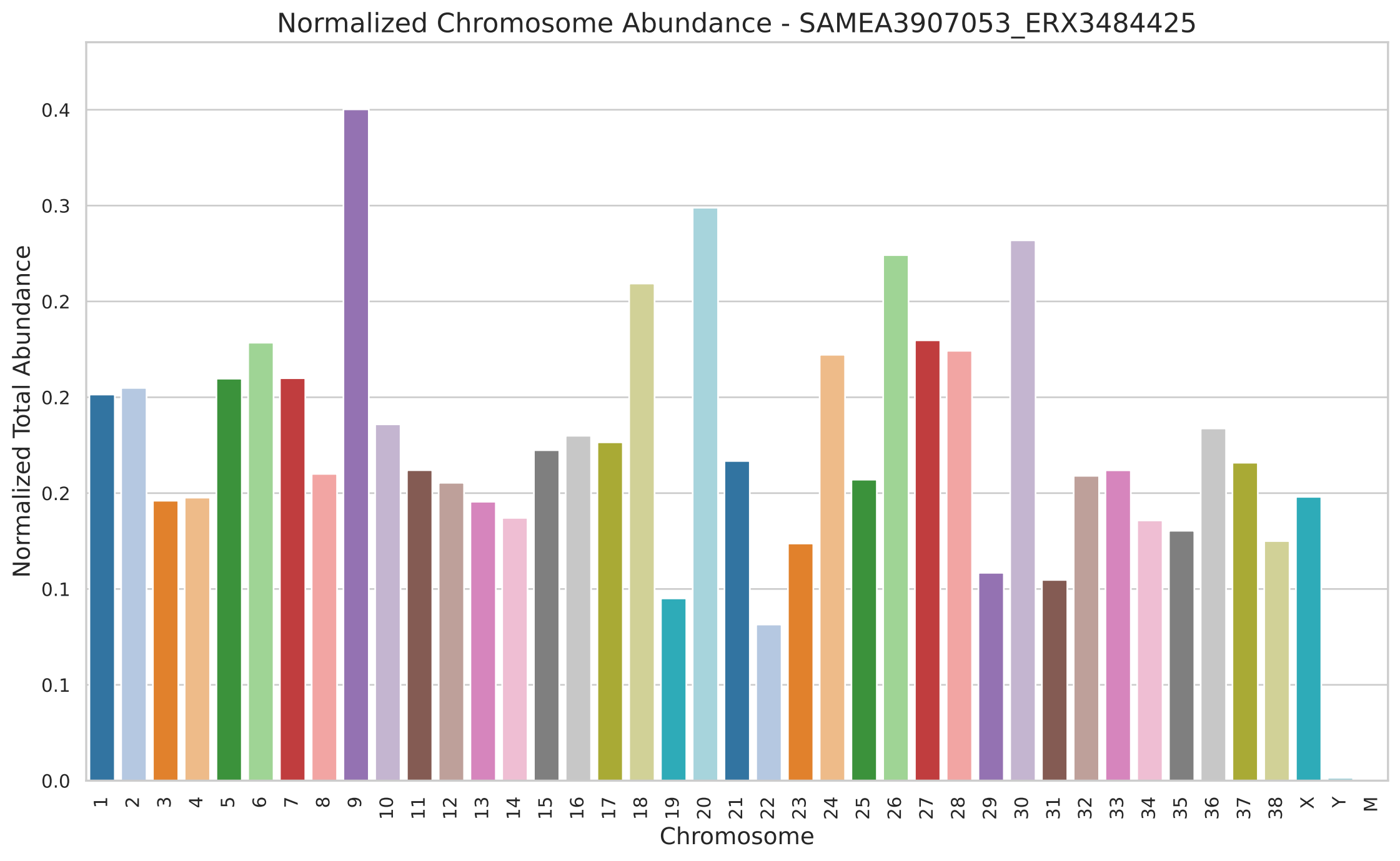

Normalized Chromosome Abundance - SAMEA3907050_ERX3484402
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

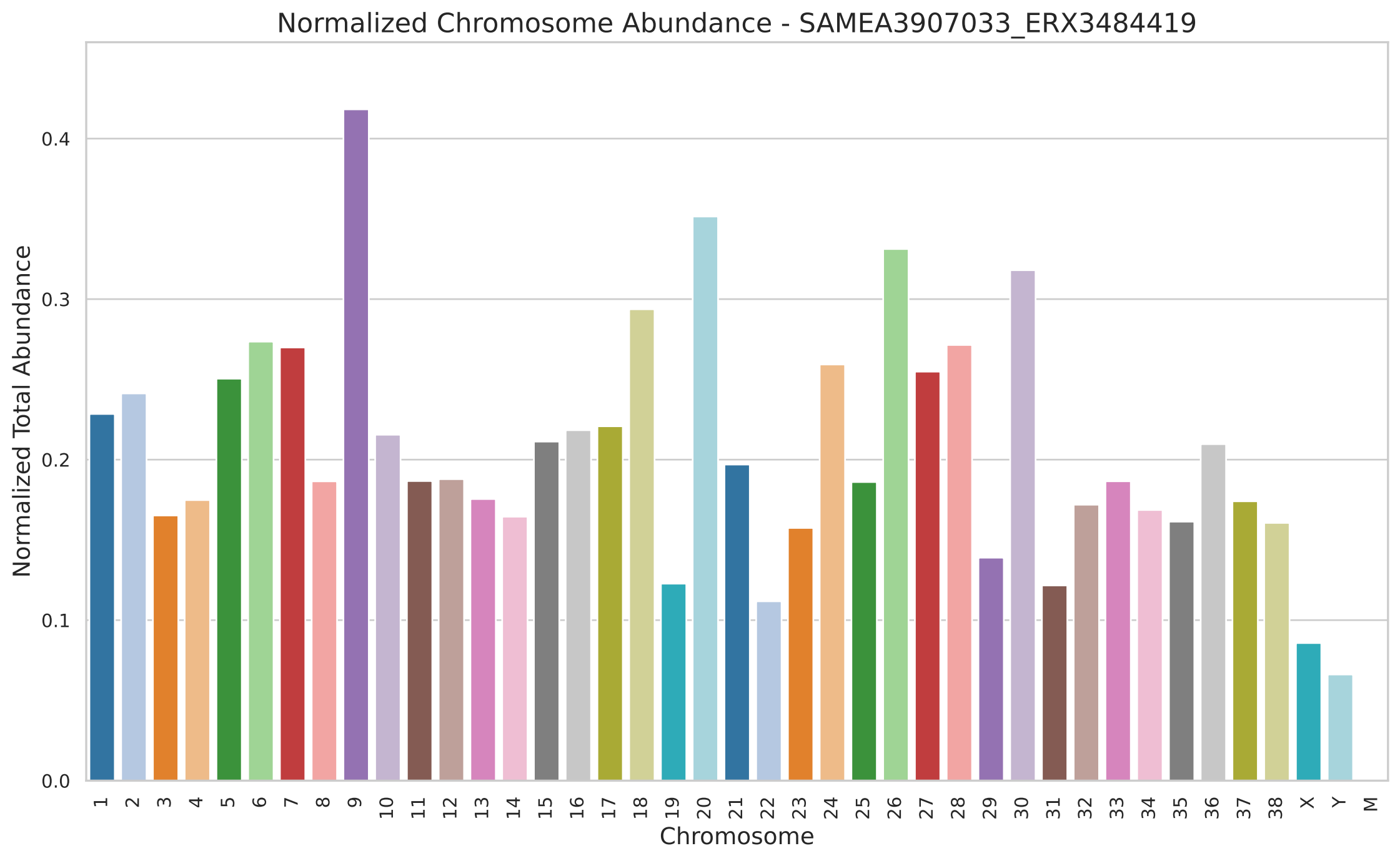

Normalized Chromosome Abundance - SAMEA3907059_ERX3484427
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

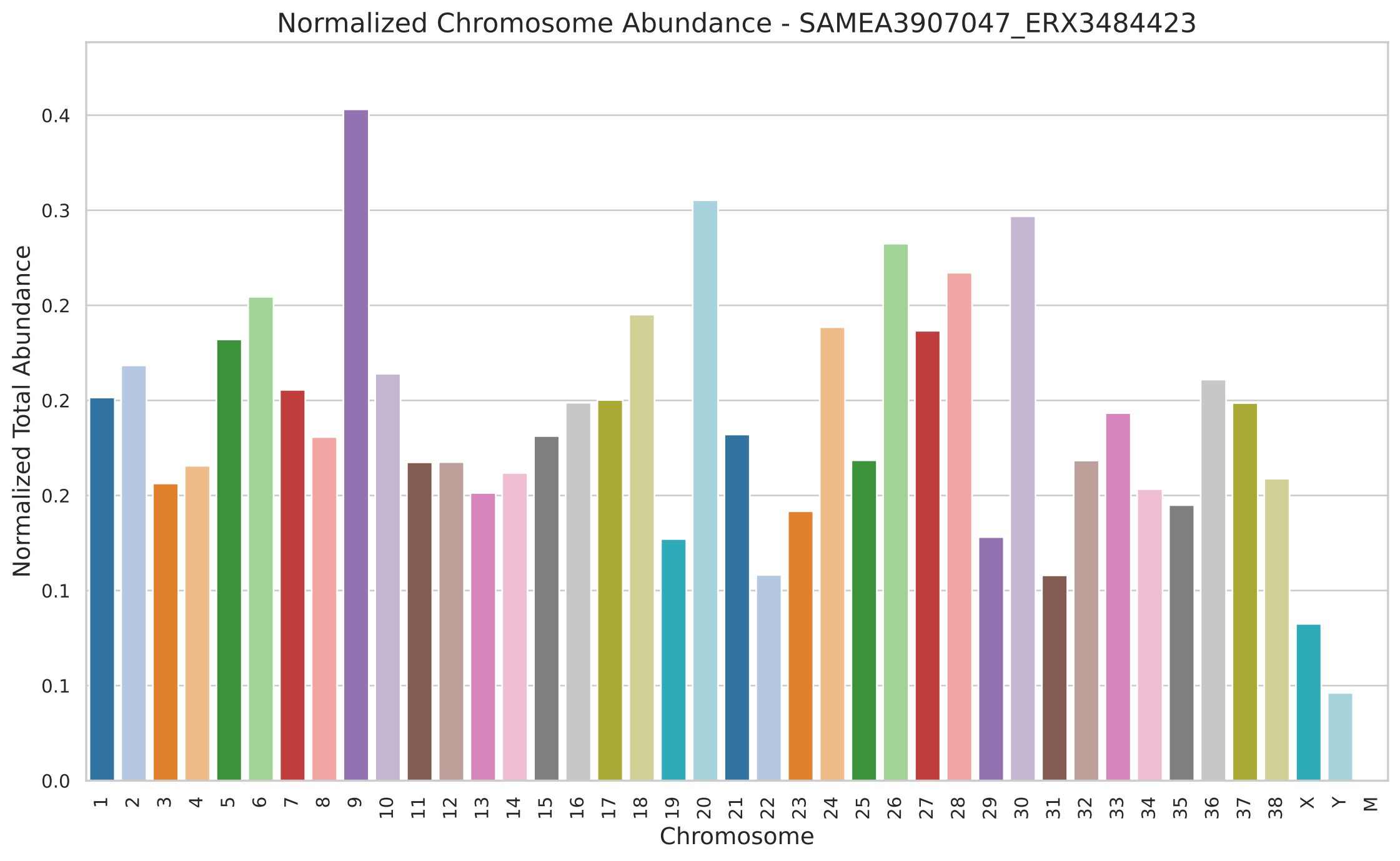

Normalized Chromosome Abundance - SAMEA3906903_ERX3484360
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

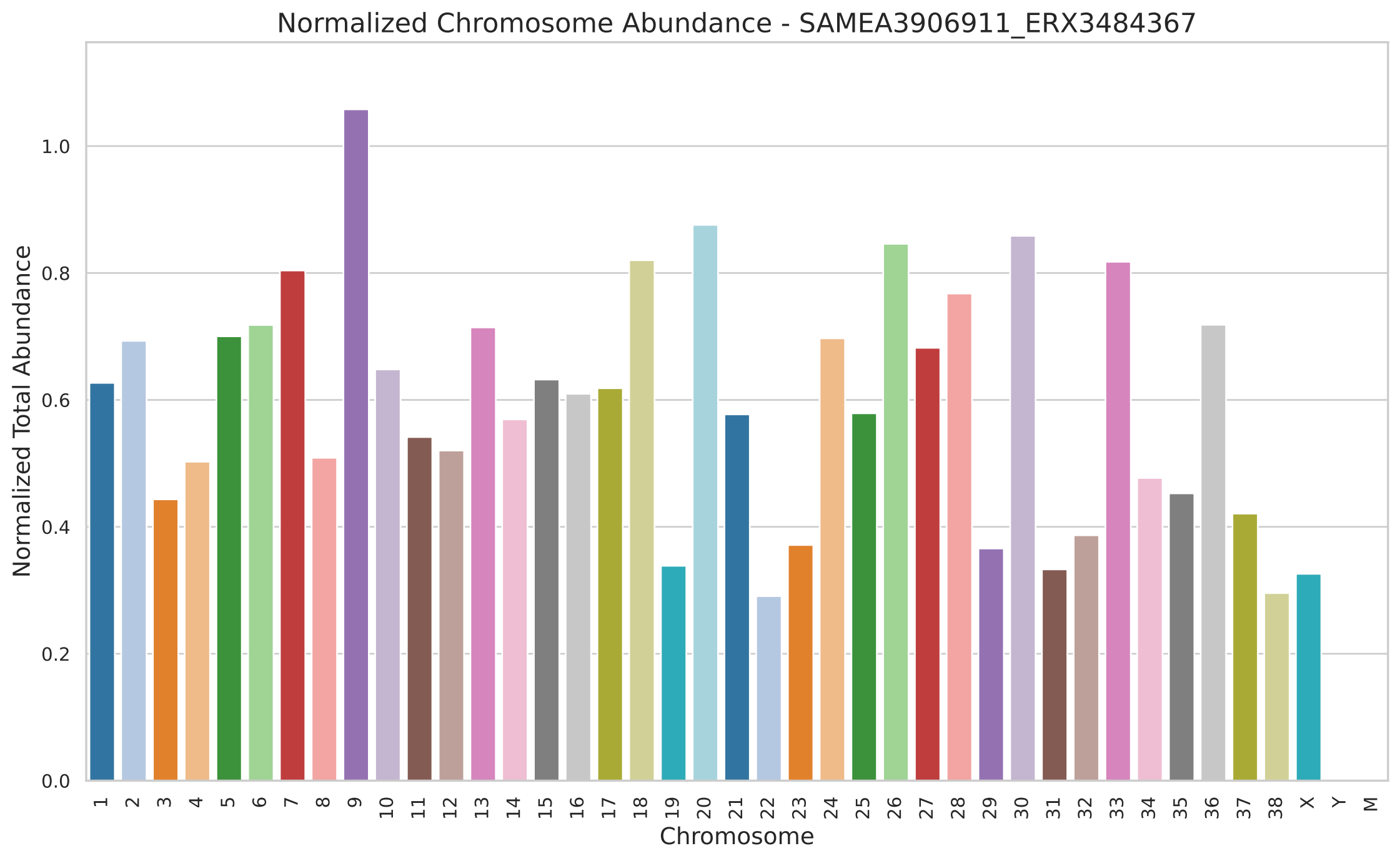

Normalized Chromosome Abundance - SAMEA3907015_ERX3484415
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

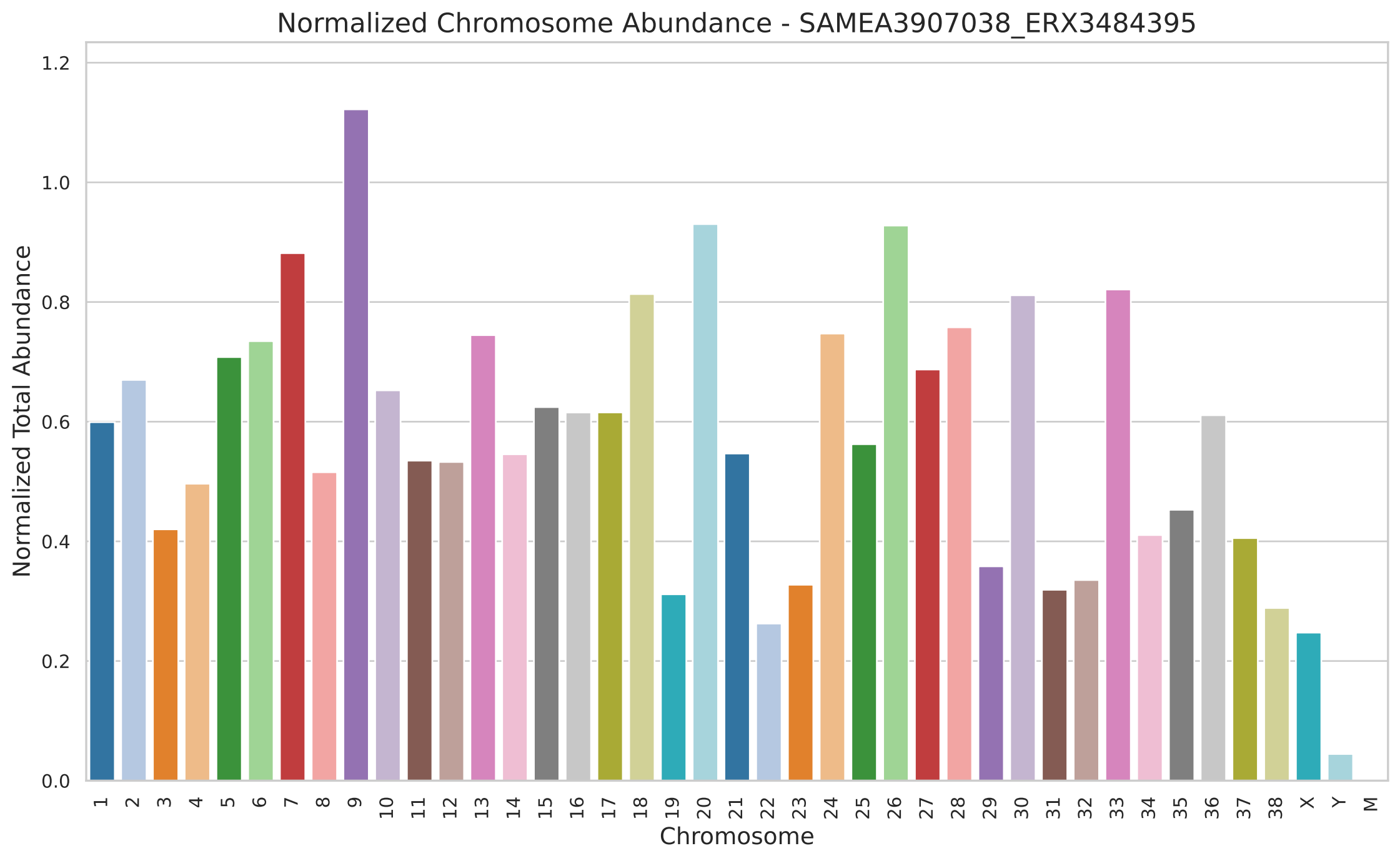

Normalized Chromosome Abundance - SAMEA3906926_ERX3484375
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

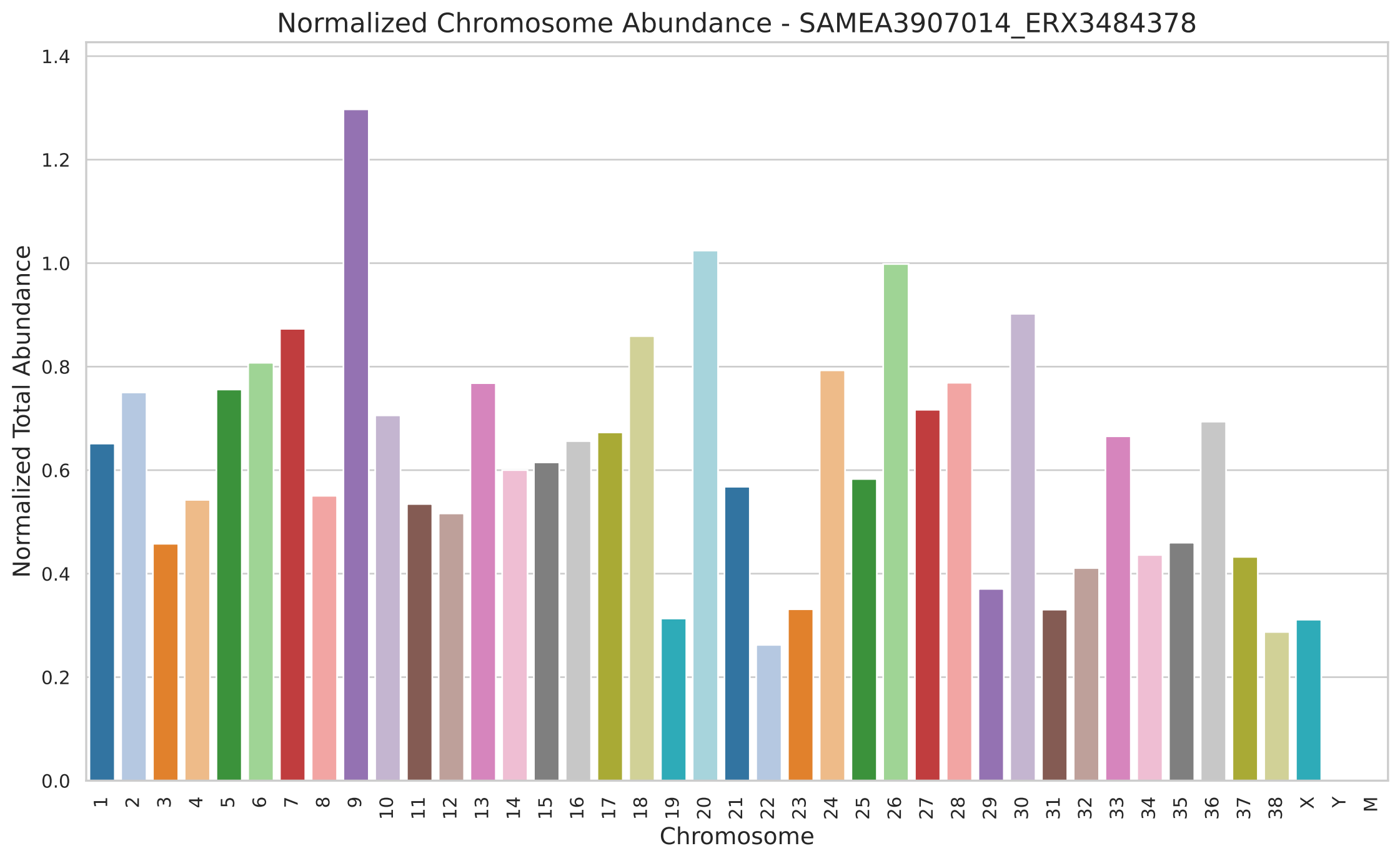

Normalized Chromosome Abundance - SAMEA3907053_ERX3484425
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

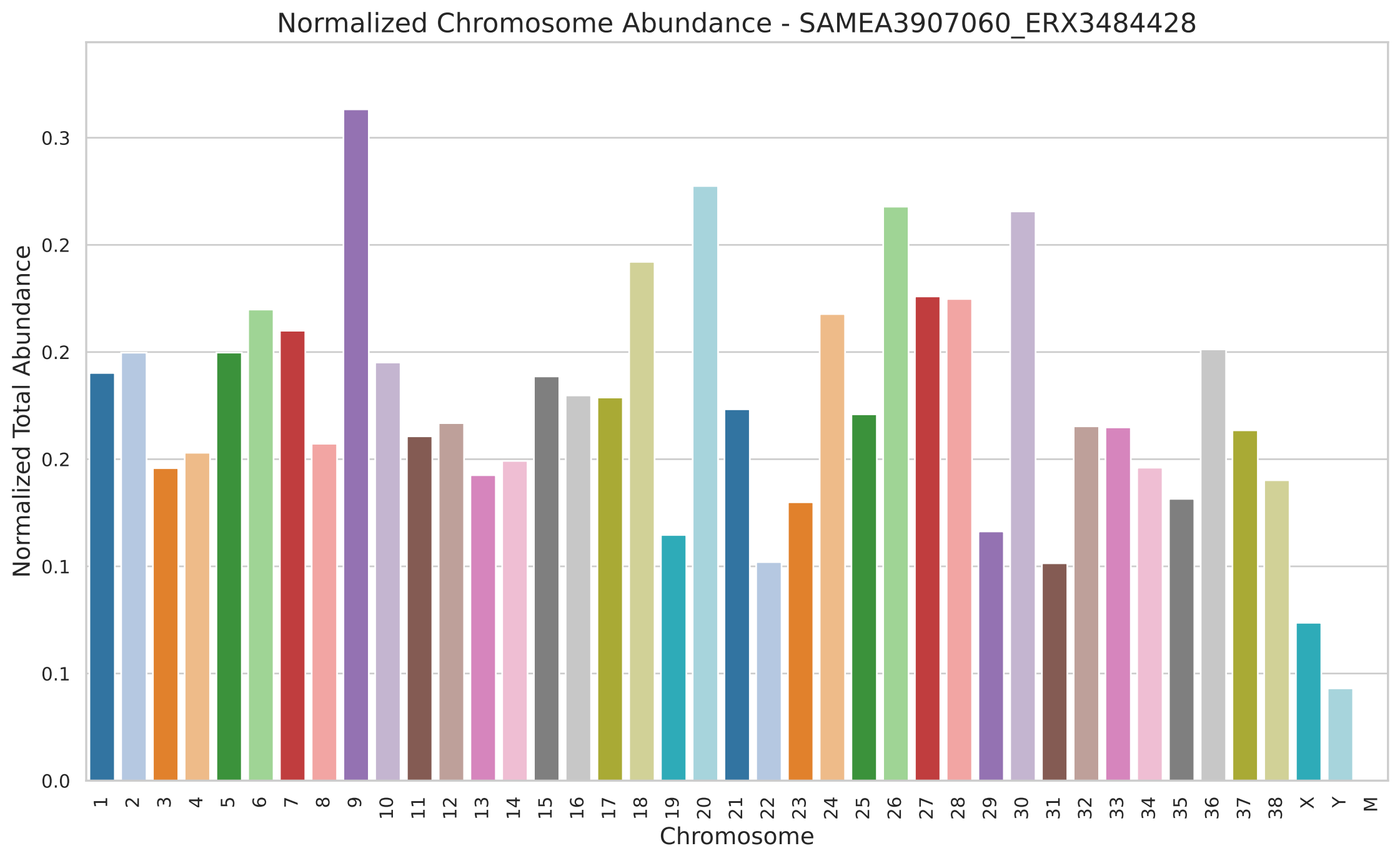

Normalized Chromosome Abundance - SAMEA3907033_ERX3484419
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

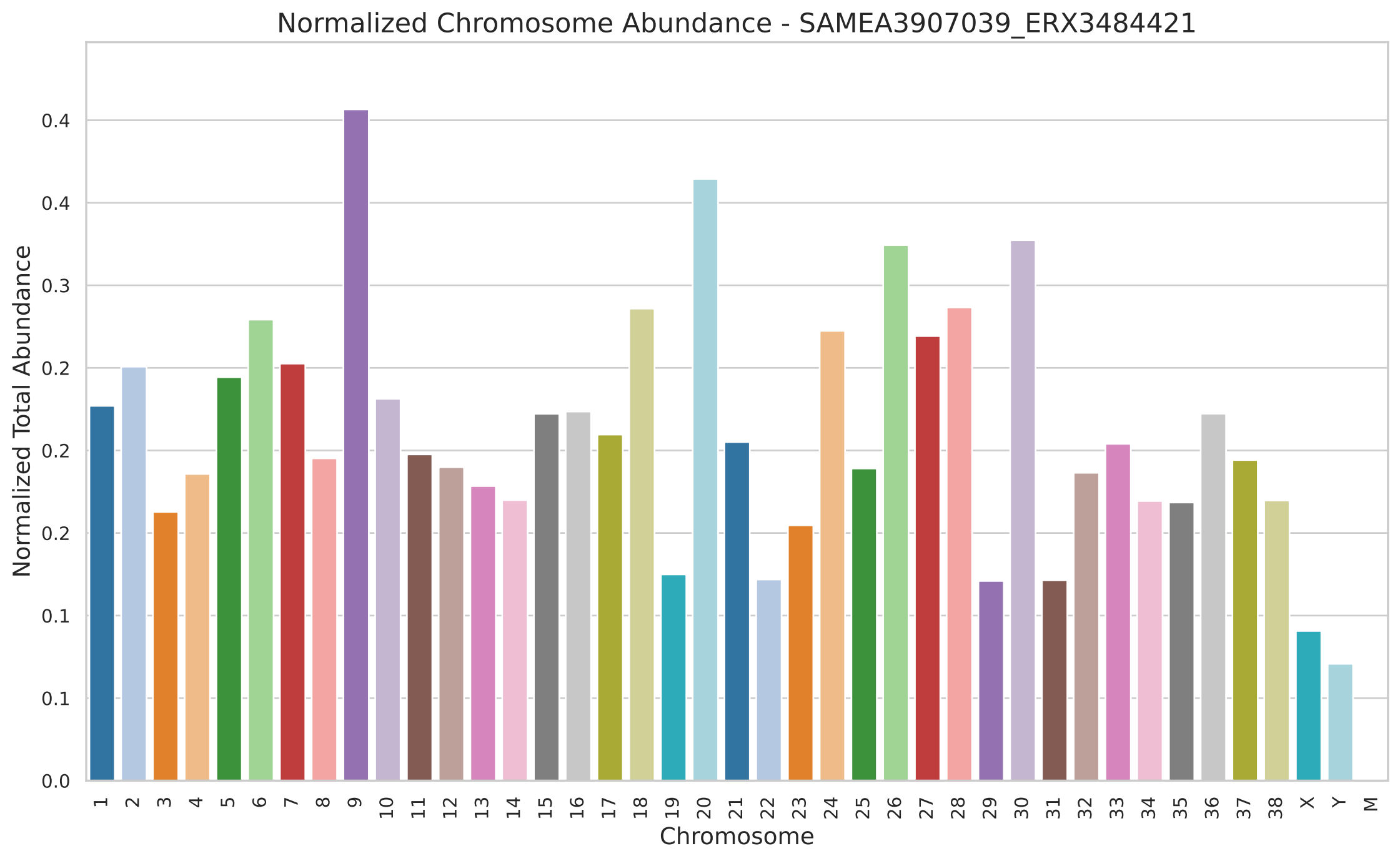

Normalized Chromosome Abundance - SAMEA3907047_ERX3484423
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

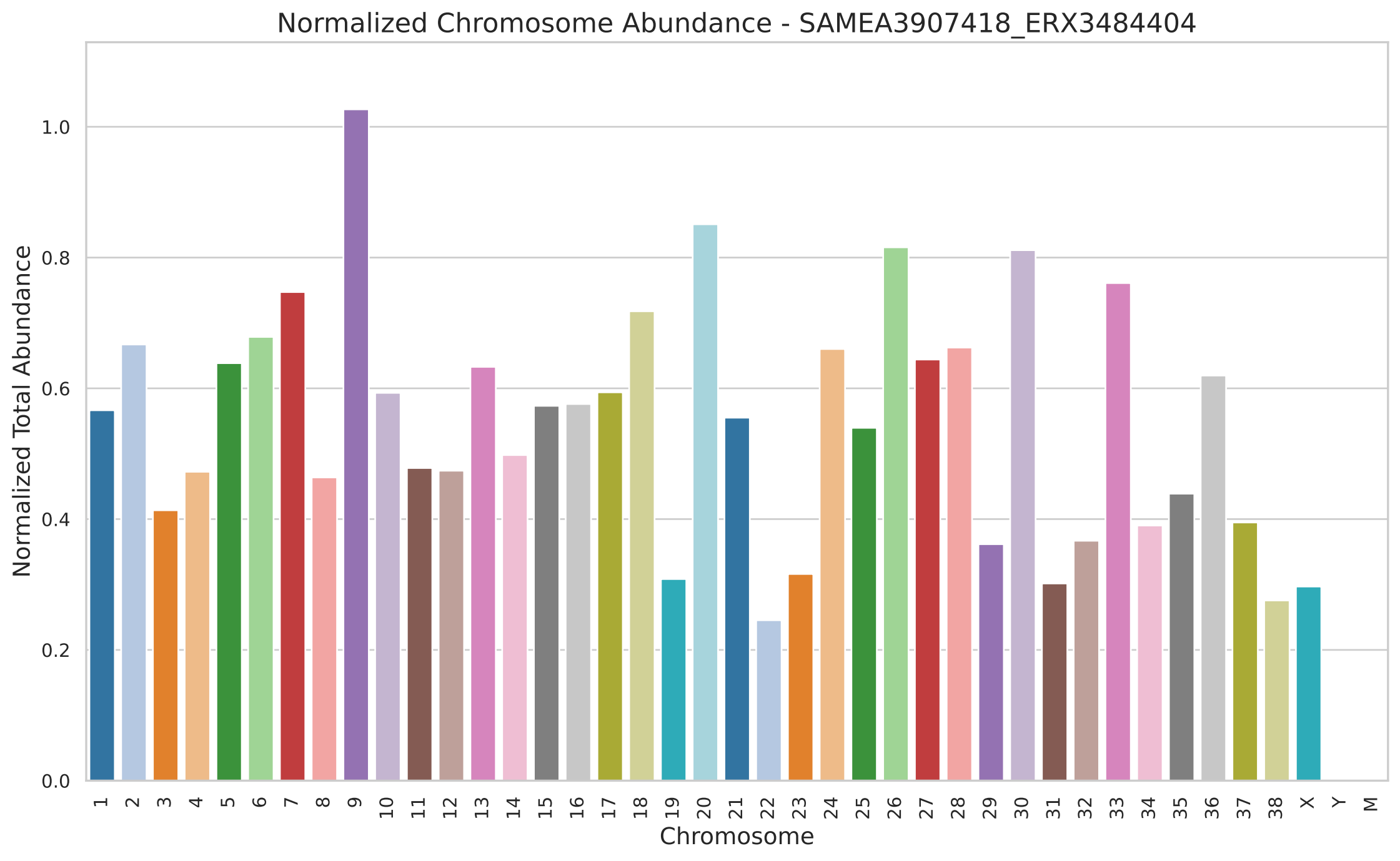

Normalized Chromosome Abundance - SAMEA3906911_ERX3484367
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

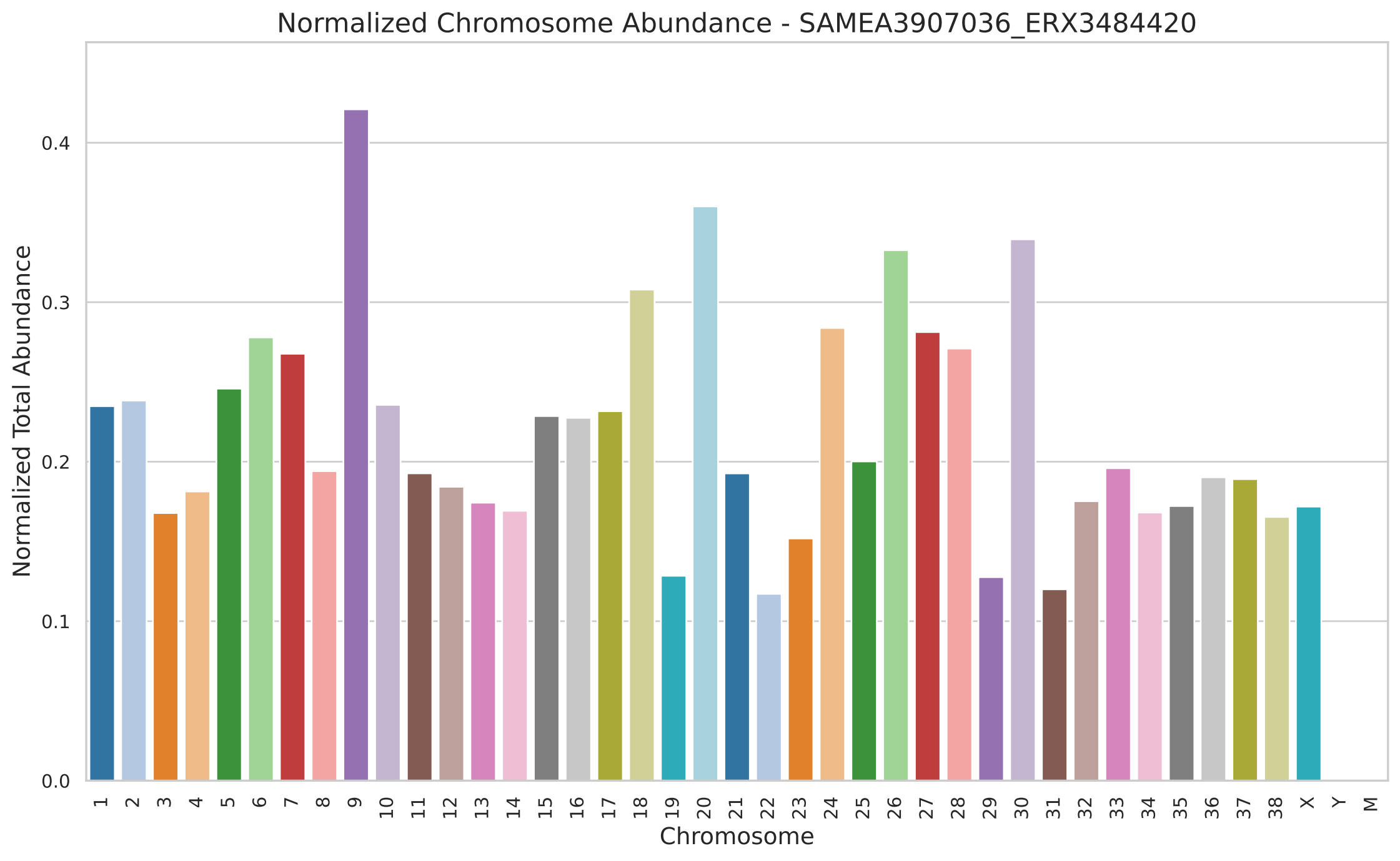

Normalized Chromosome Abundance - SAMEA3907038_ERX3484395
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

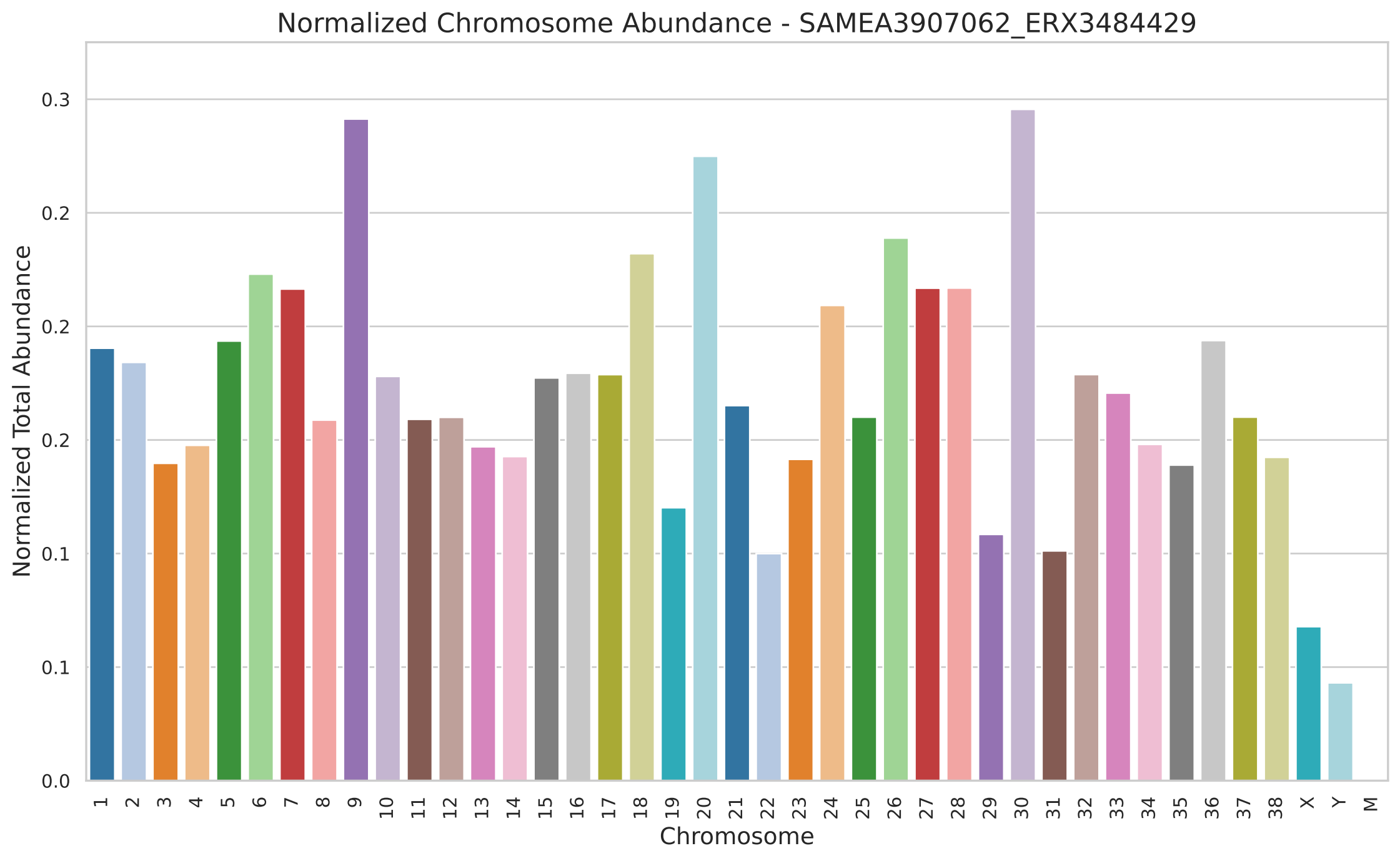

Normalized Chromosome Abundance - SAMEA3907014_ERX3484378
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

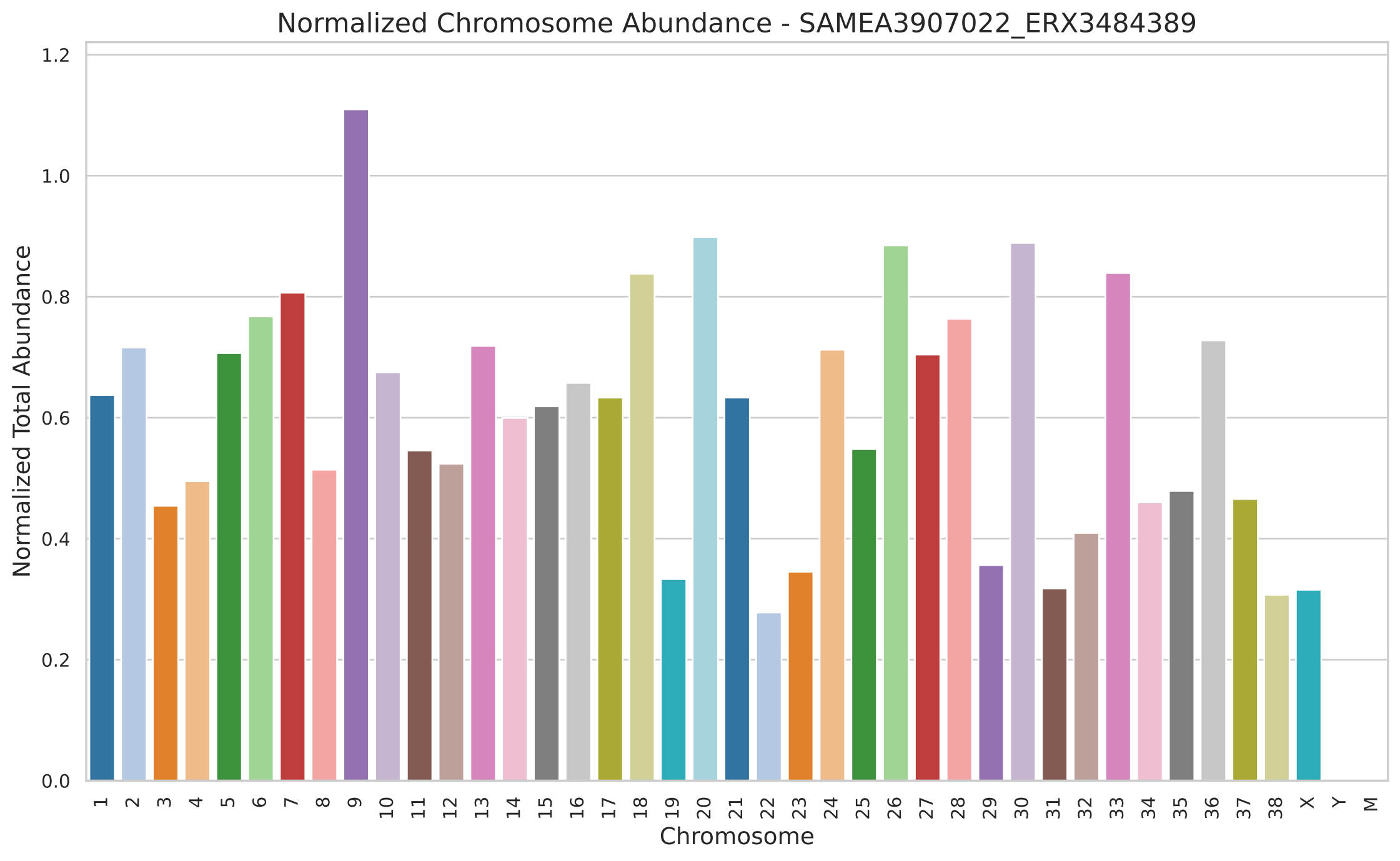

Normalized Chromosome Abundance - SAMEA3907060_ERX3484428
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

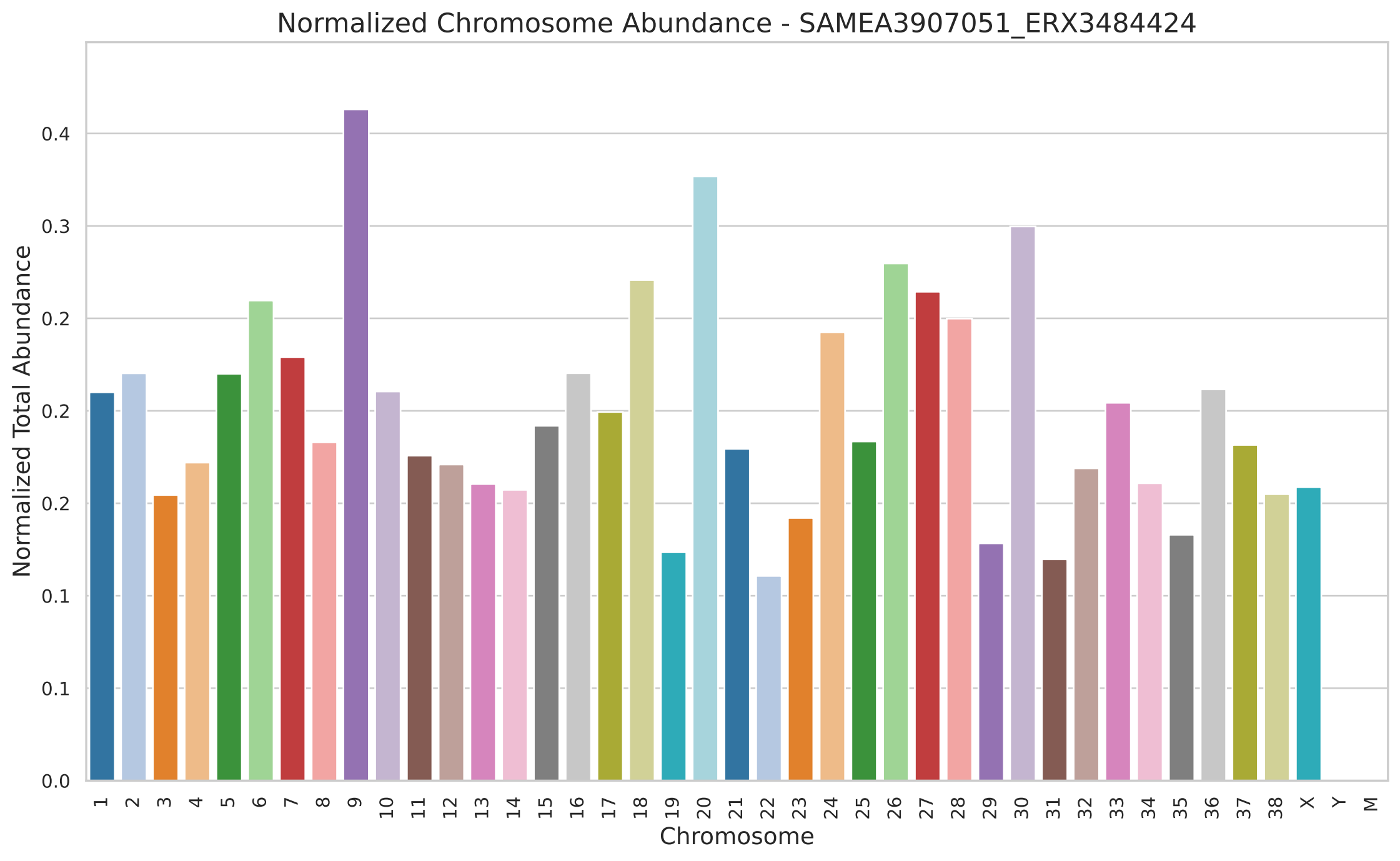

Normalized Chromosome Abundance - SAMEA3907039_ERX3484421
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
0.4
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

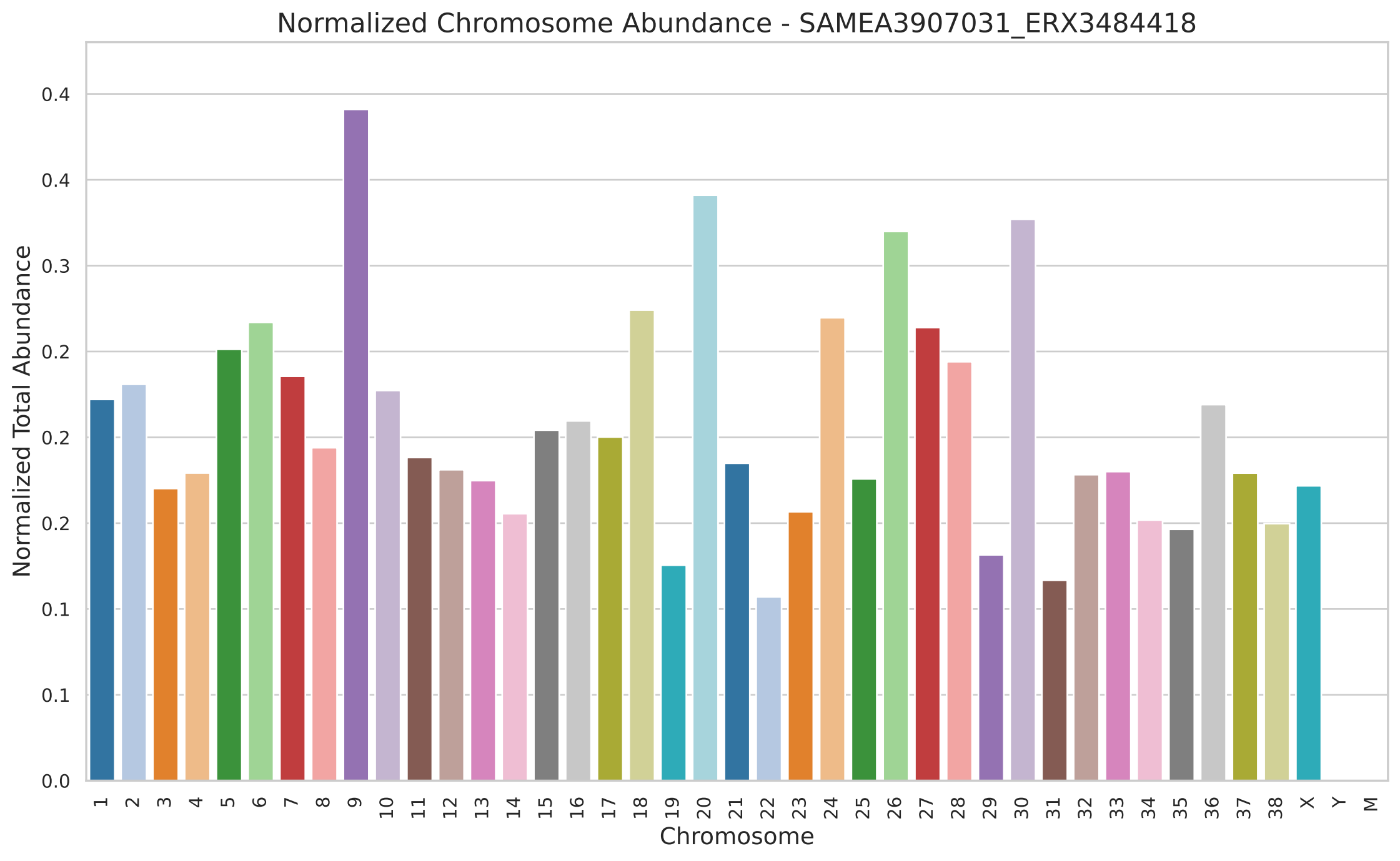

Normalized Chromosome Abundance - SAMEA3907418_ERX3484404
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

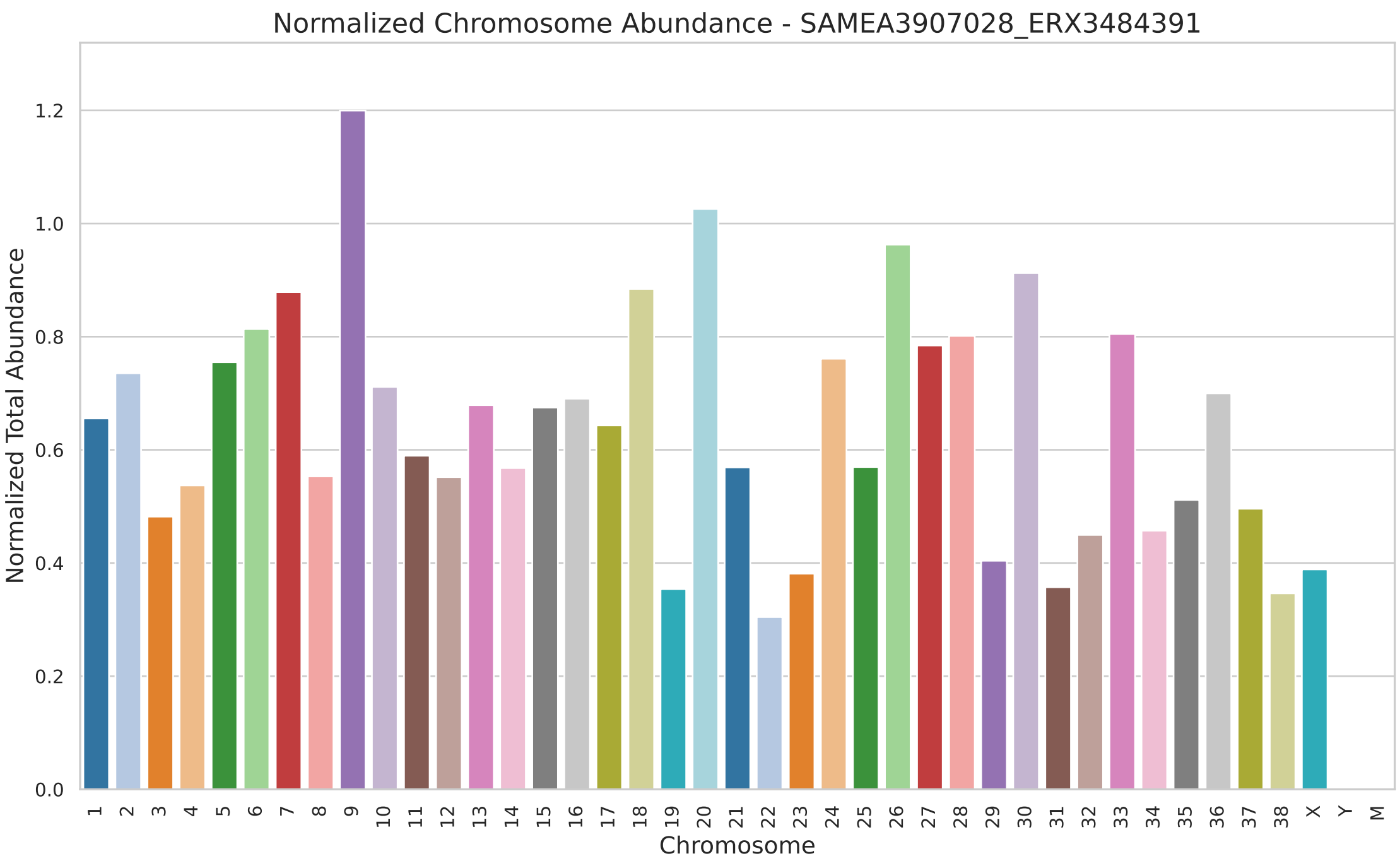

Normalized Chromosome Abundance - SAMEA3907036_ERX3484420
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

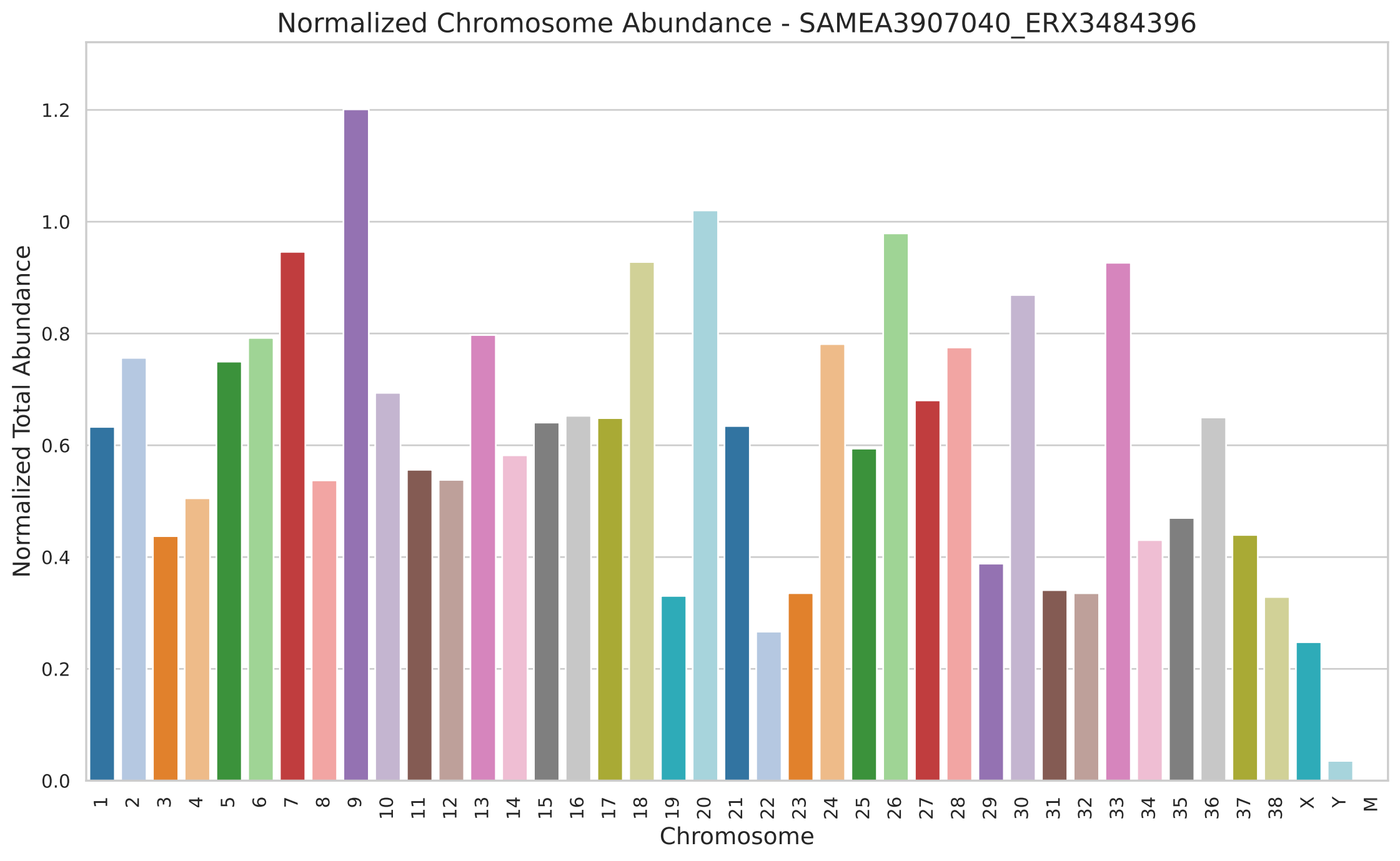

Normalized Chromosome Abundance - SAMEA3907062_ERX3484429
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

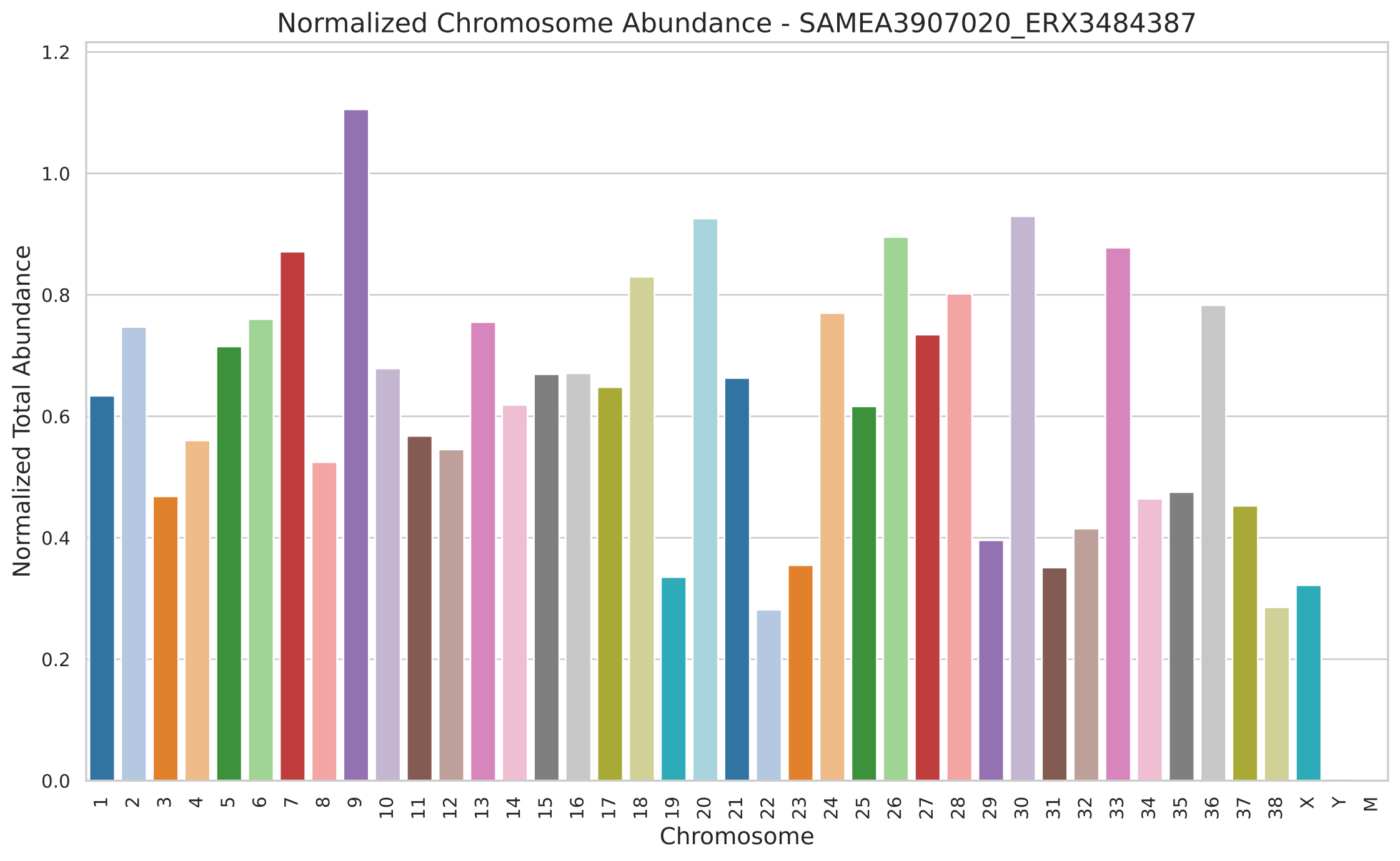

Normalized Chromosome Abundance - SAMEA3907022_ERX3484389
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

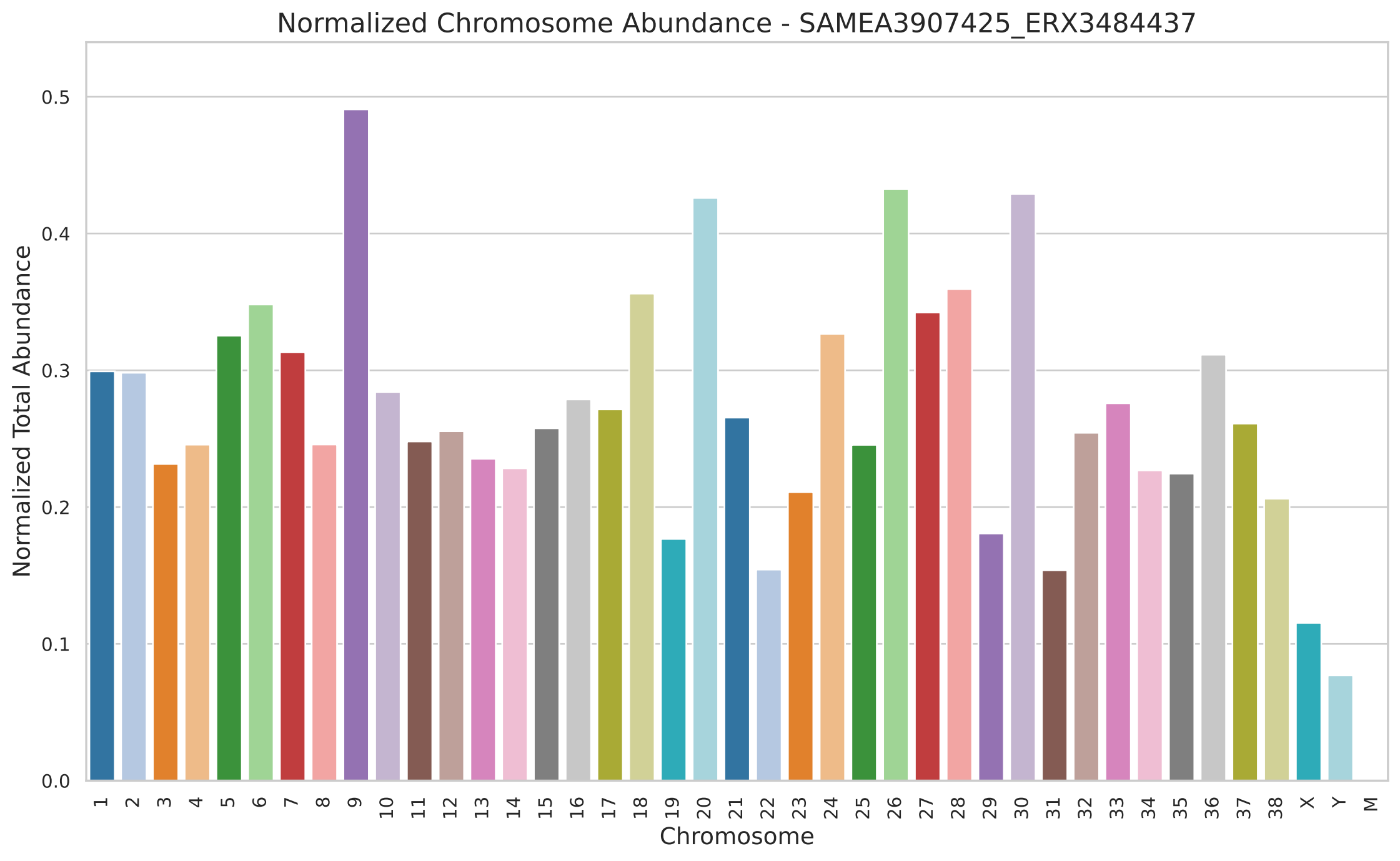

Normalized Chromosome Abundance - SAMEA3907051_ERX3484424
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

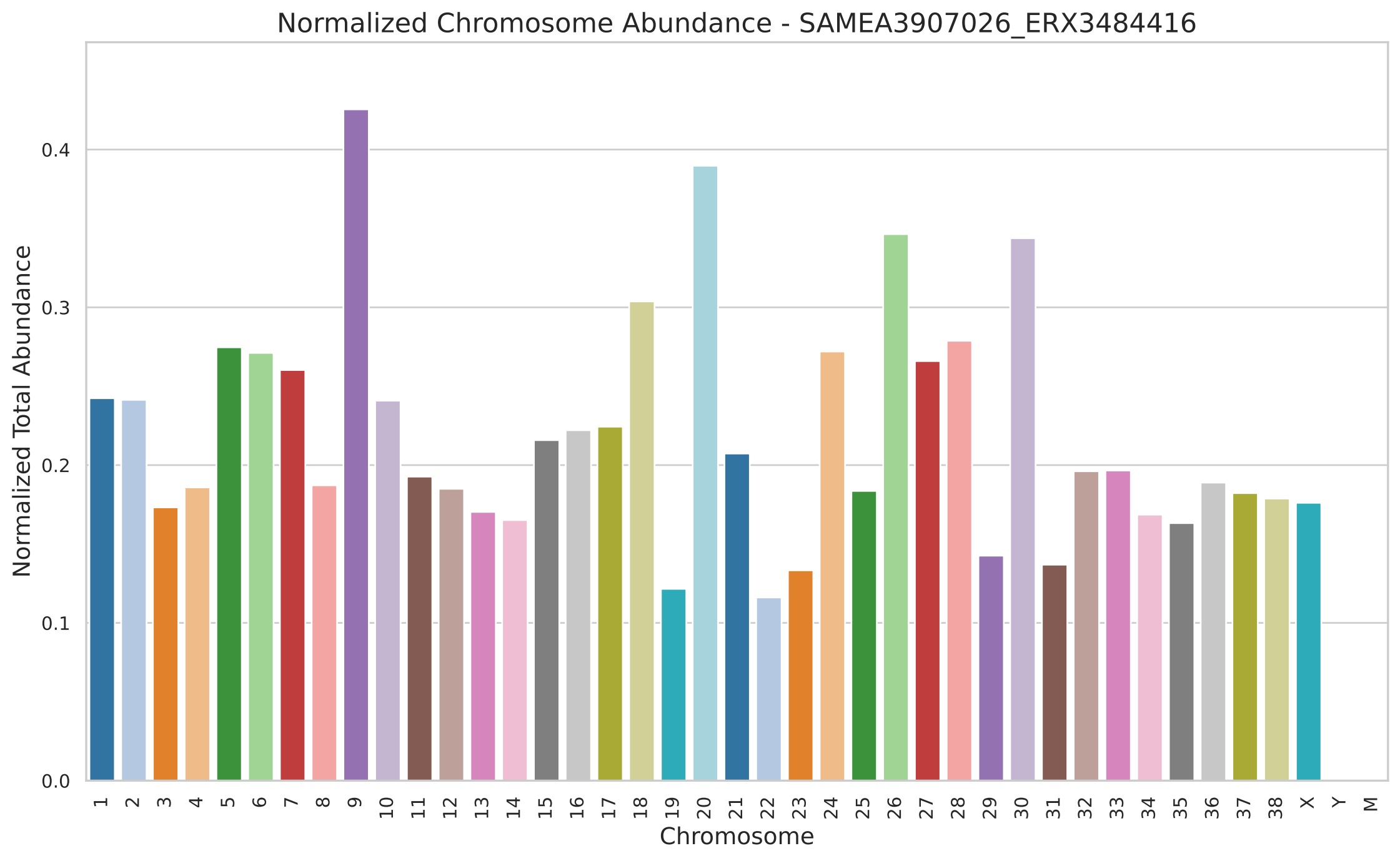

Normalized Chromosome Abundance - SAMEA3907031_ERX3484418
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

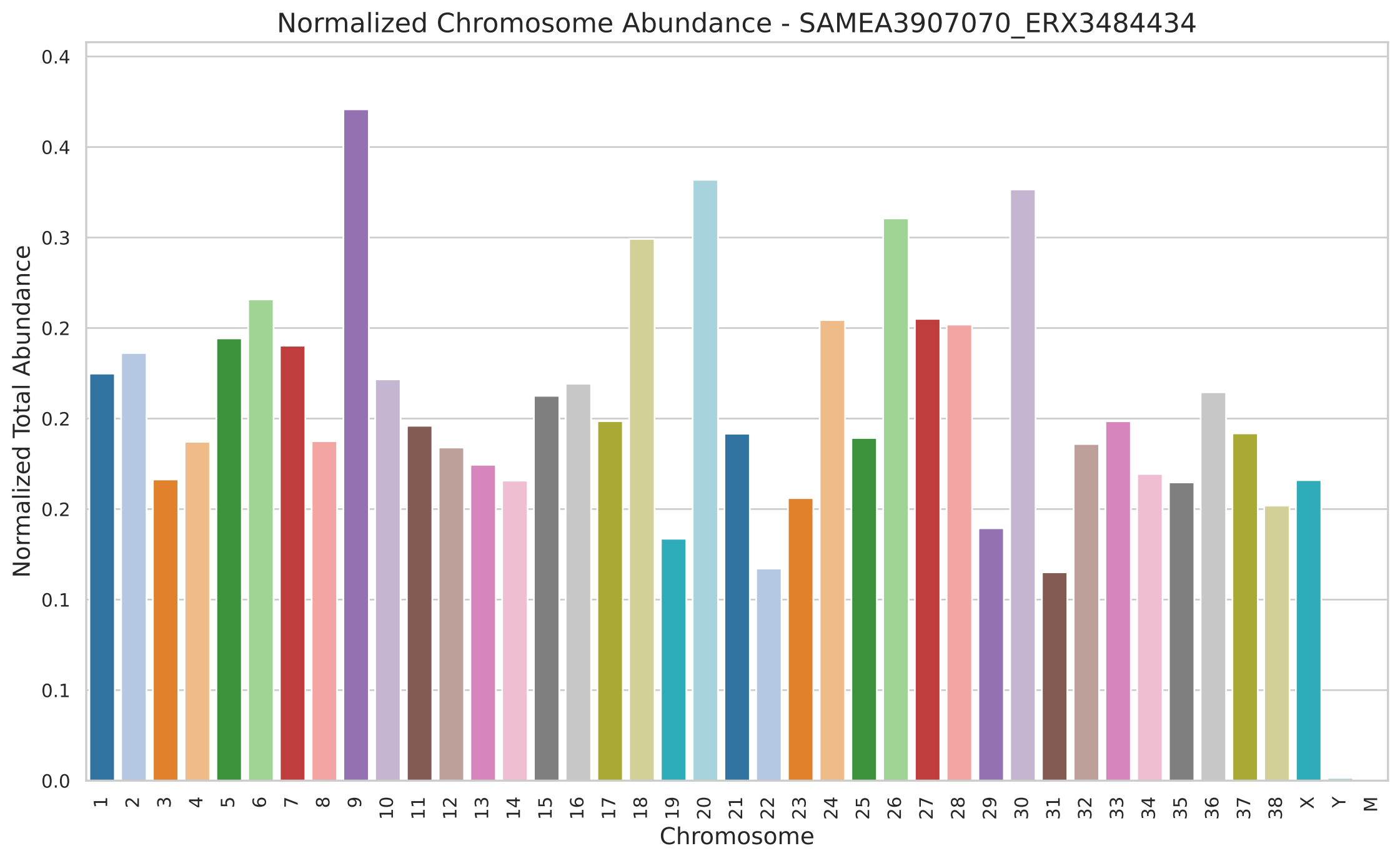

Normalized Chromosome Abundance - SAMEA3907028_ERX3484391
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

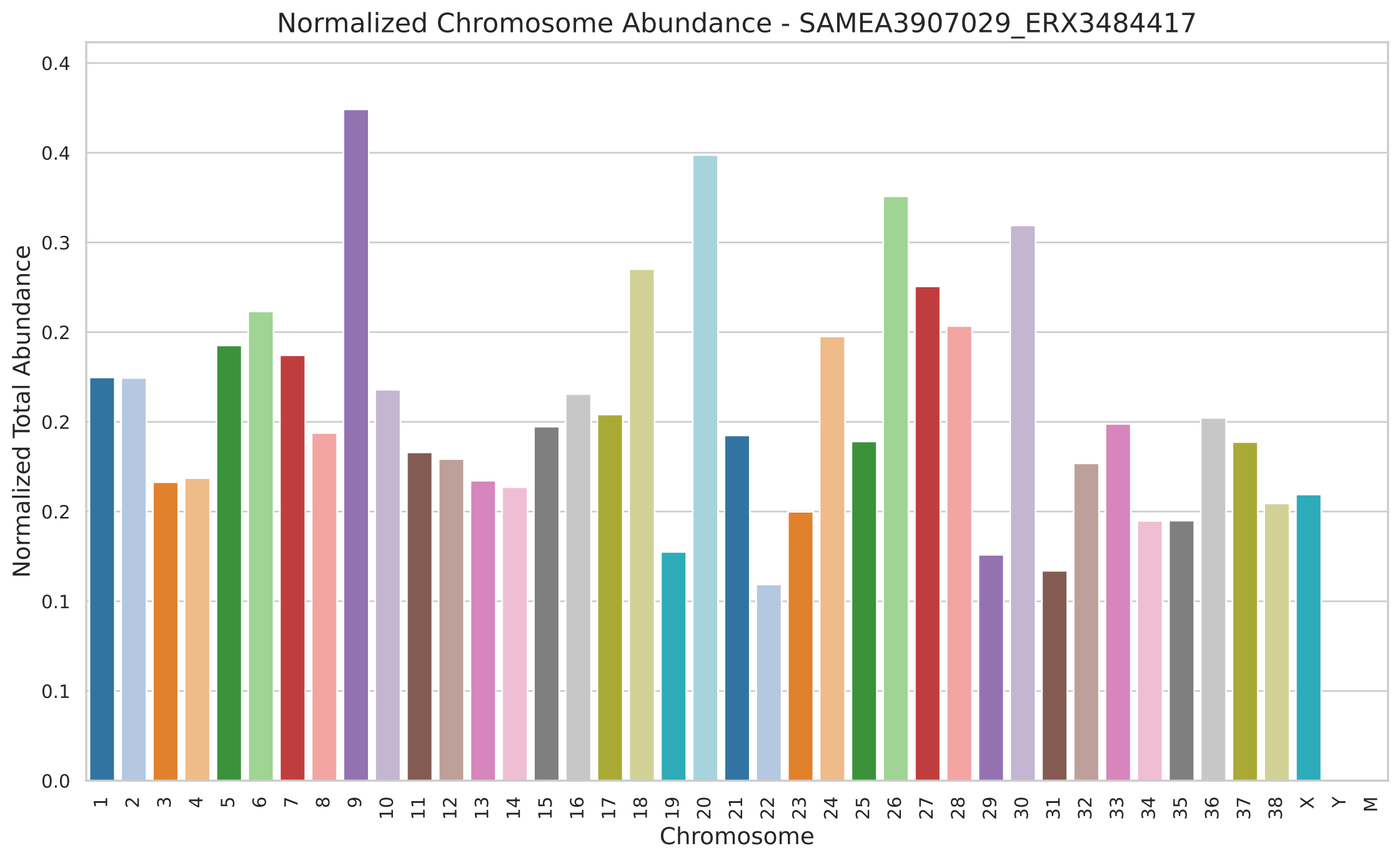

Normalized Chromosome Abundance - SAMEA3907040_ERX3484396
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

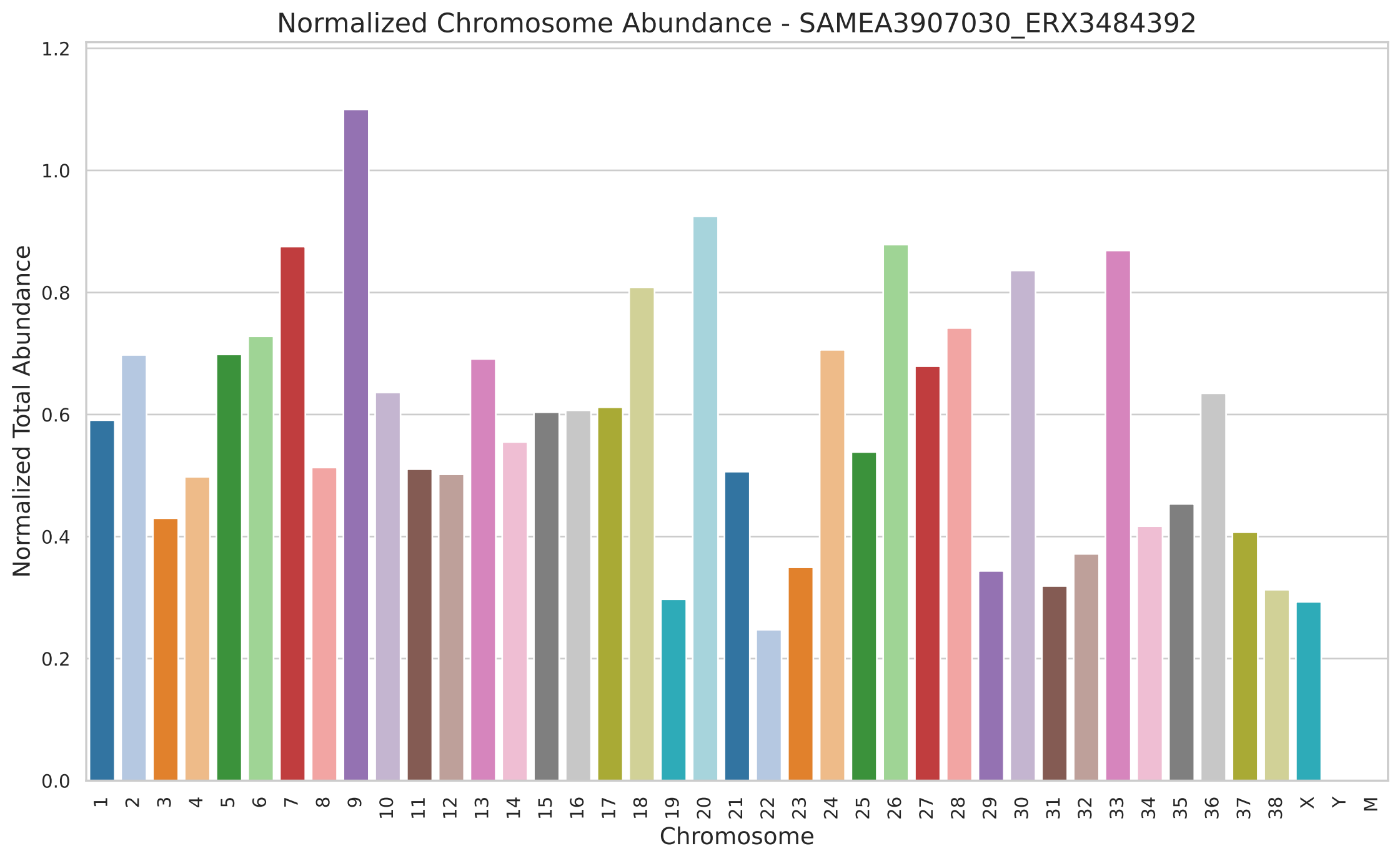

Normalized Chromosome Abundance - SAMEA3907020_ERX3484387
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

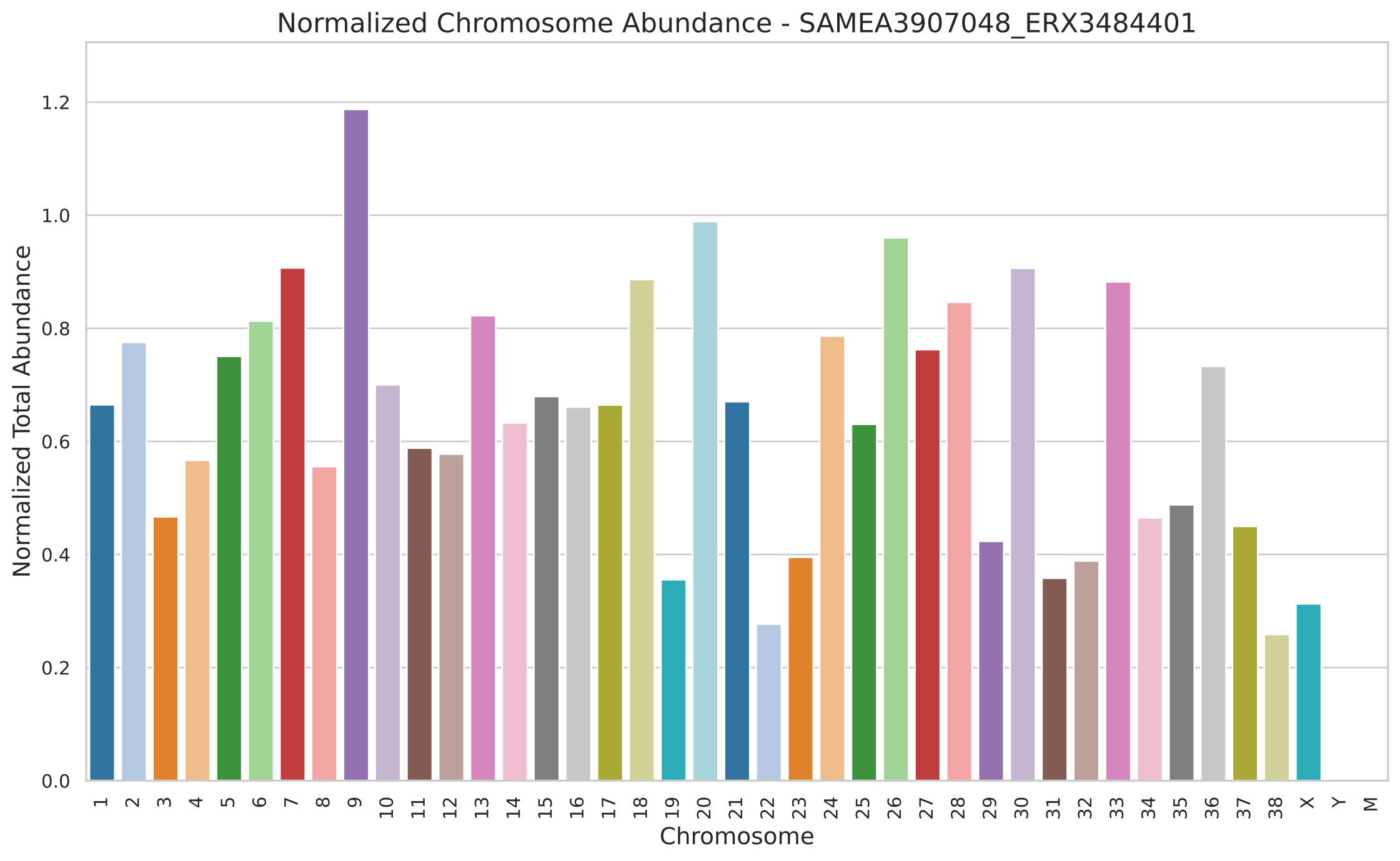

Normalized Chromosome Abundance - SAMEA3907425_ERX3484437
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

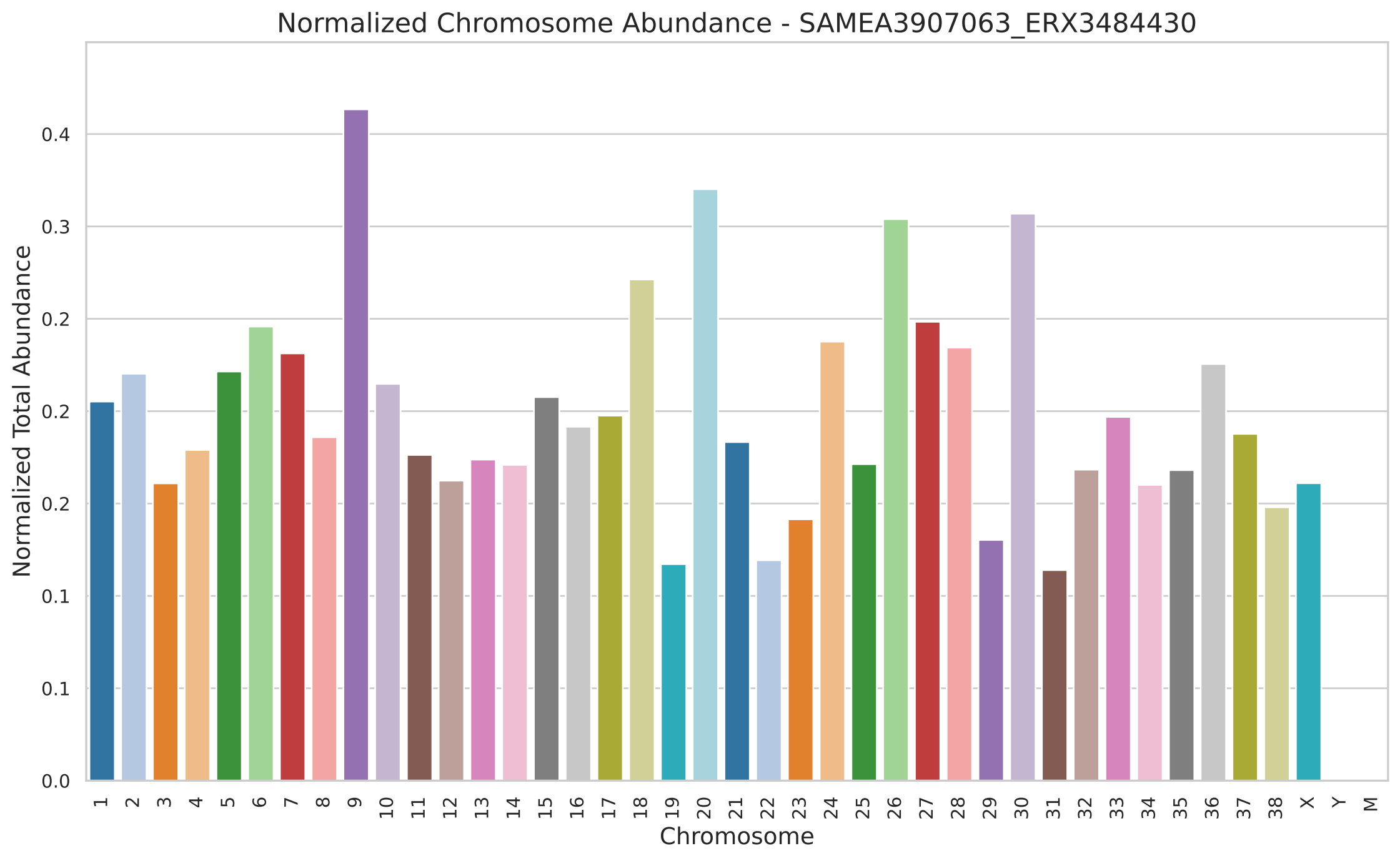

Normalized Chromosome Abundance - SAMEA3907026_ERX3484416
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

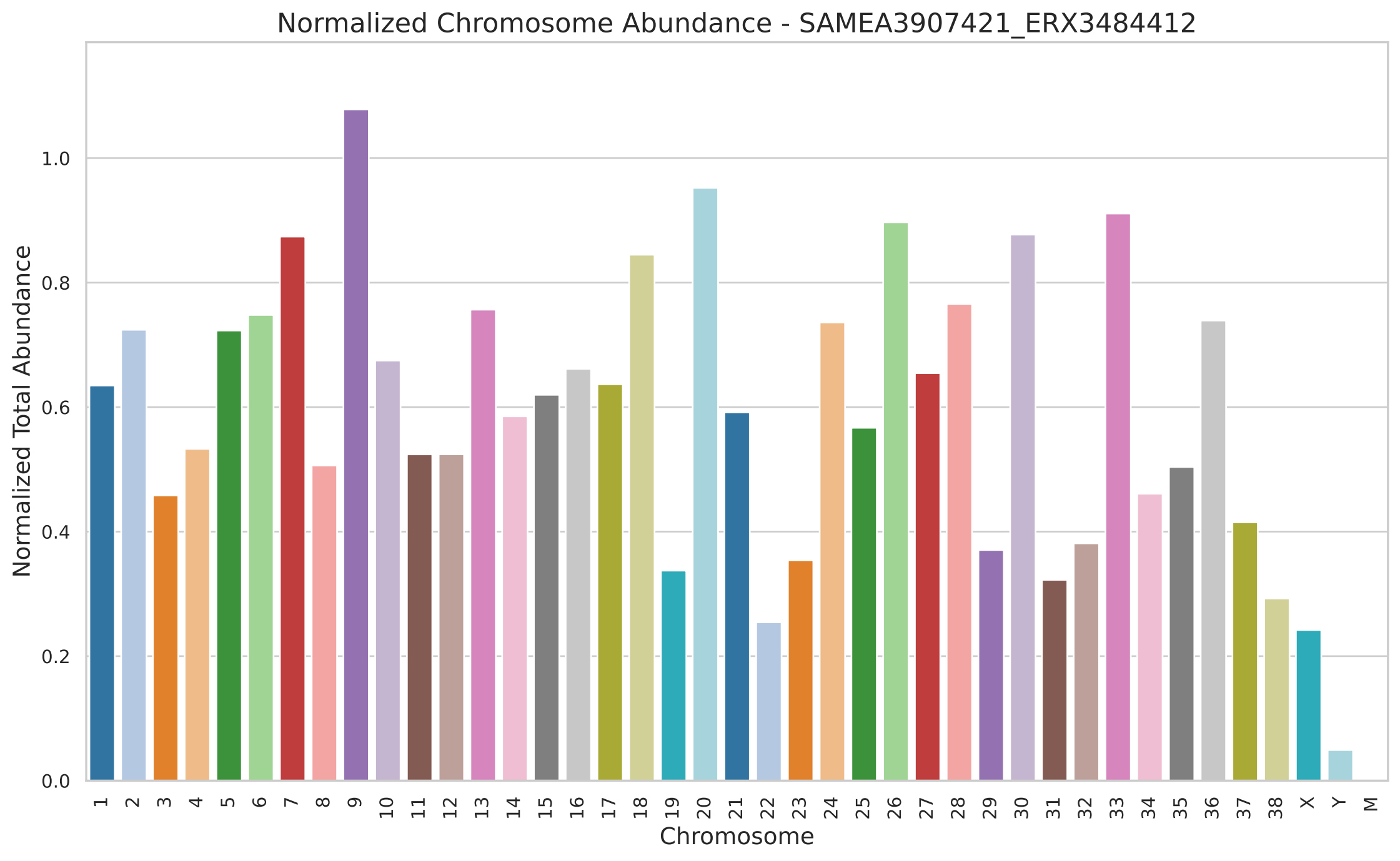

Normalized Chromosome Abundance - SAMEA3907070_ERX3484434
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
0.4
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

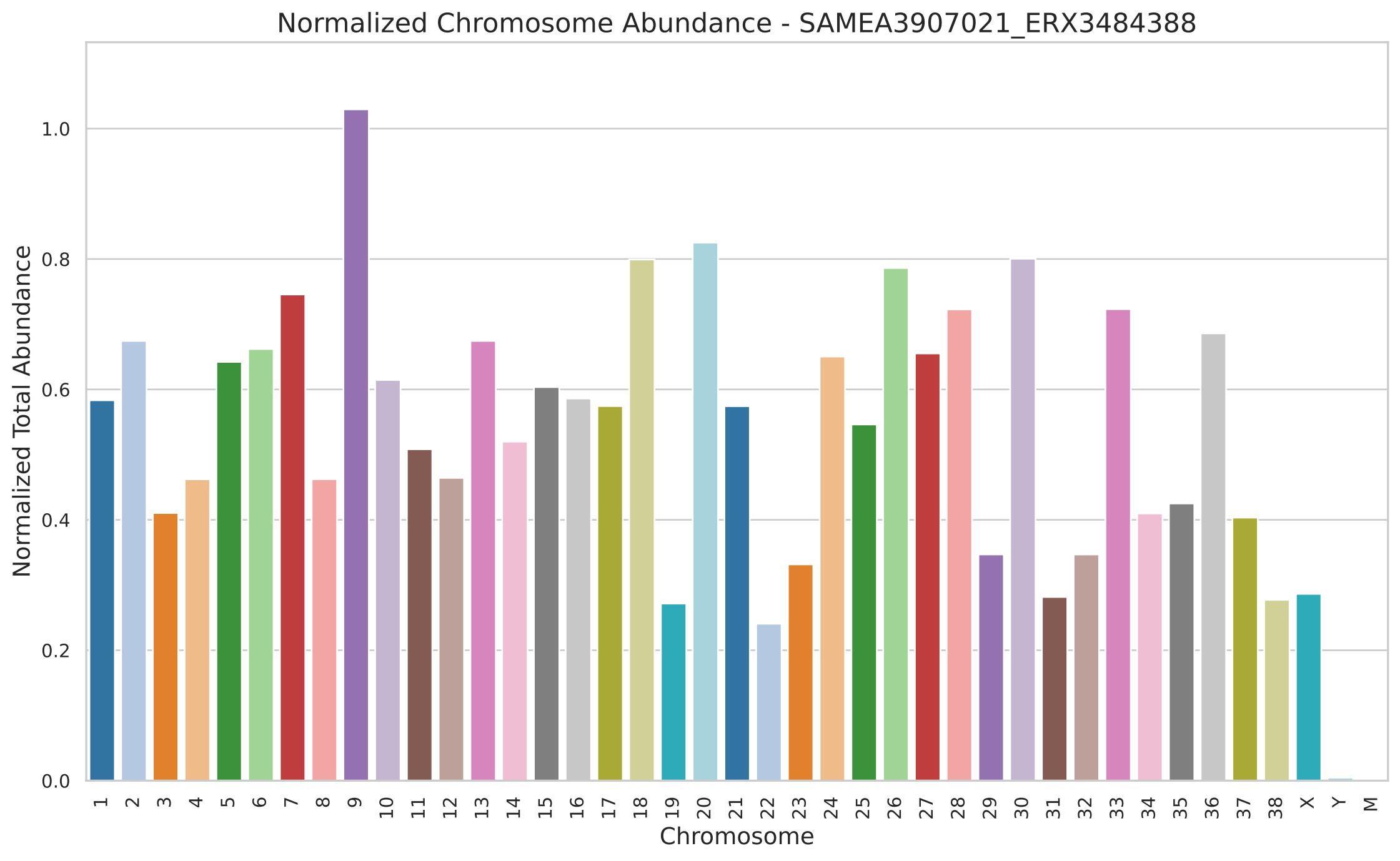

Normalized Chromosome Abundance - SAMEA3907029_ERX3484417
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
0.4
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

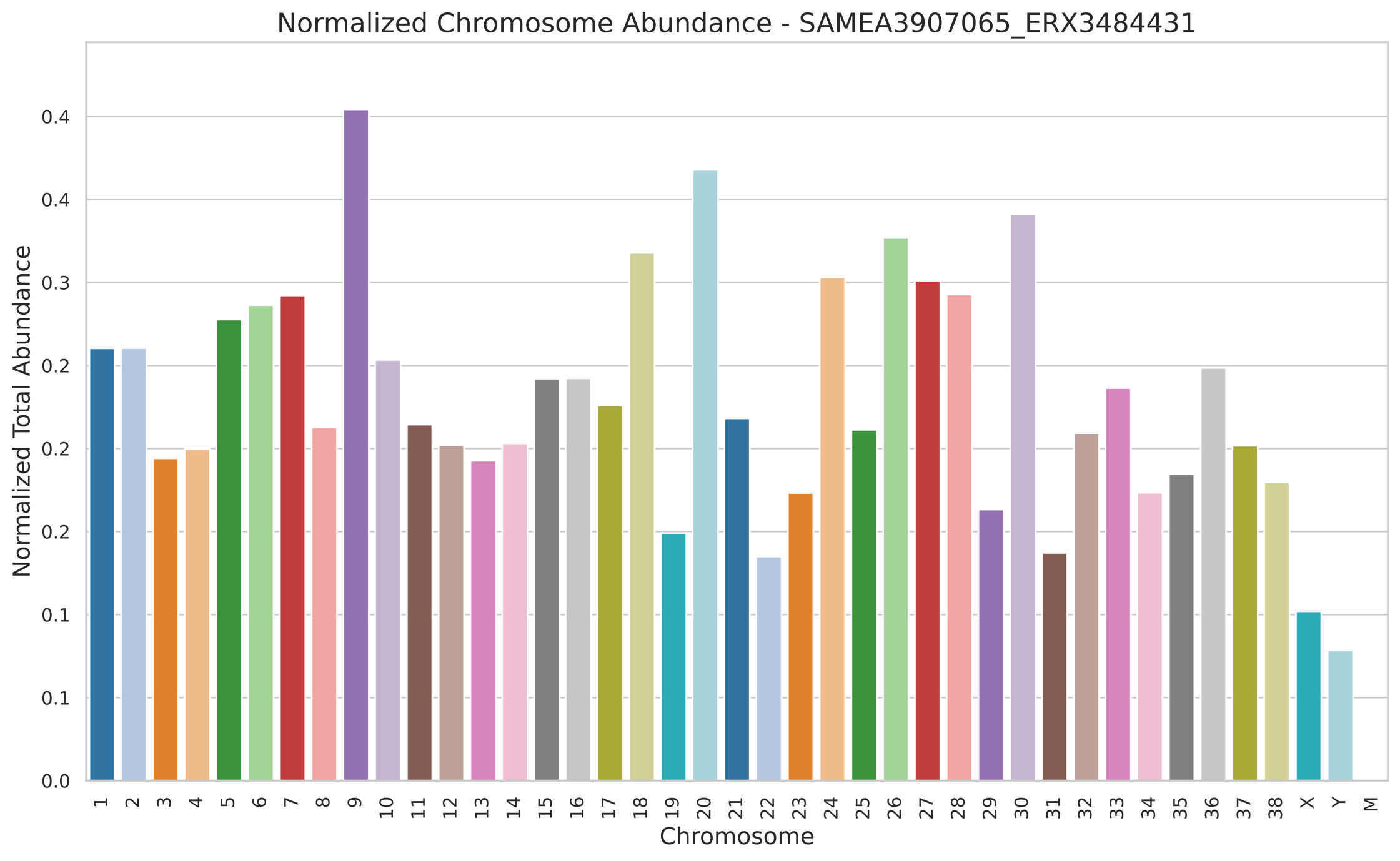

Normalized Chromosome Abundance - SAMEA3907030_ERX3484392
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

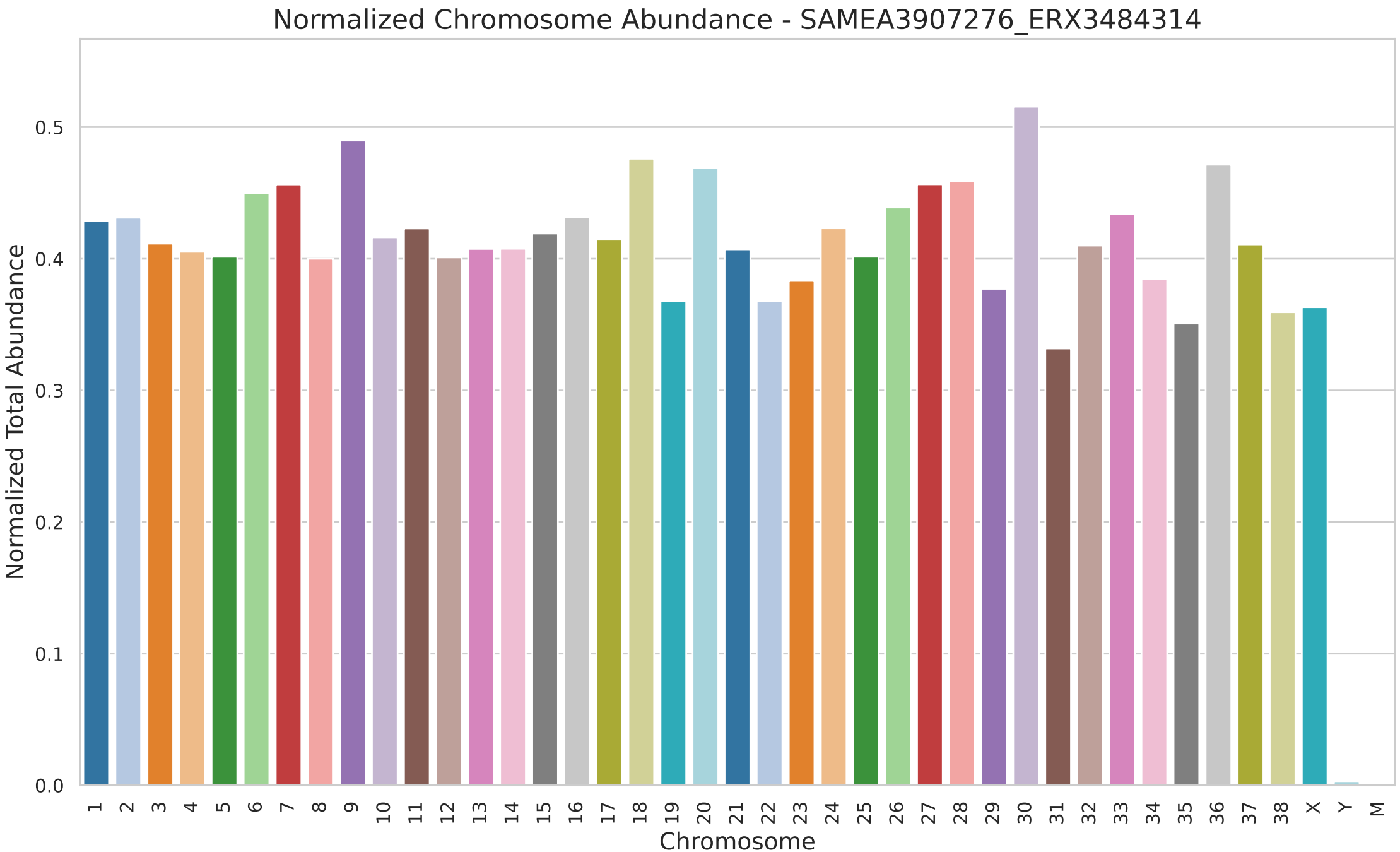

Normalized Chromosome Abundance - SAMEA3907048_ERX3484401
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

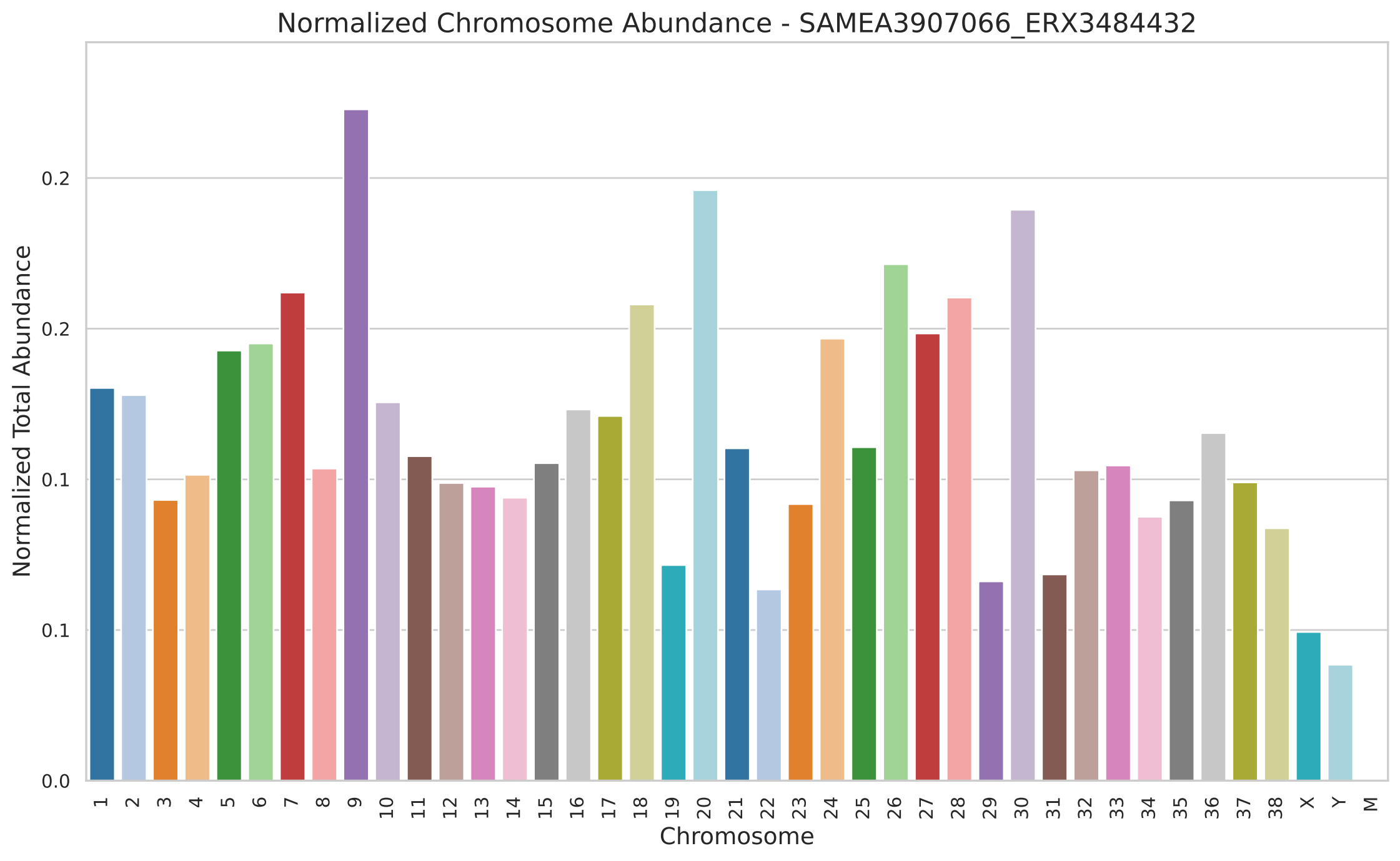

Normalized Chromosome Abundance - SAMEA3907063_ERX3484430
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

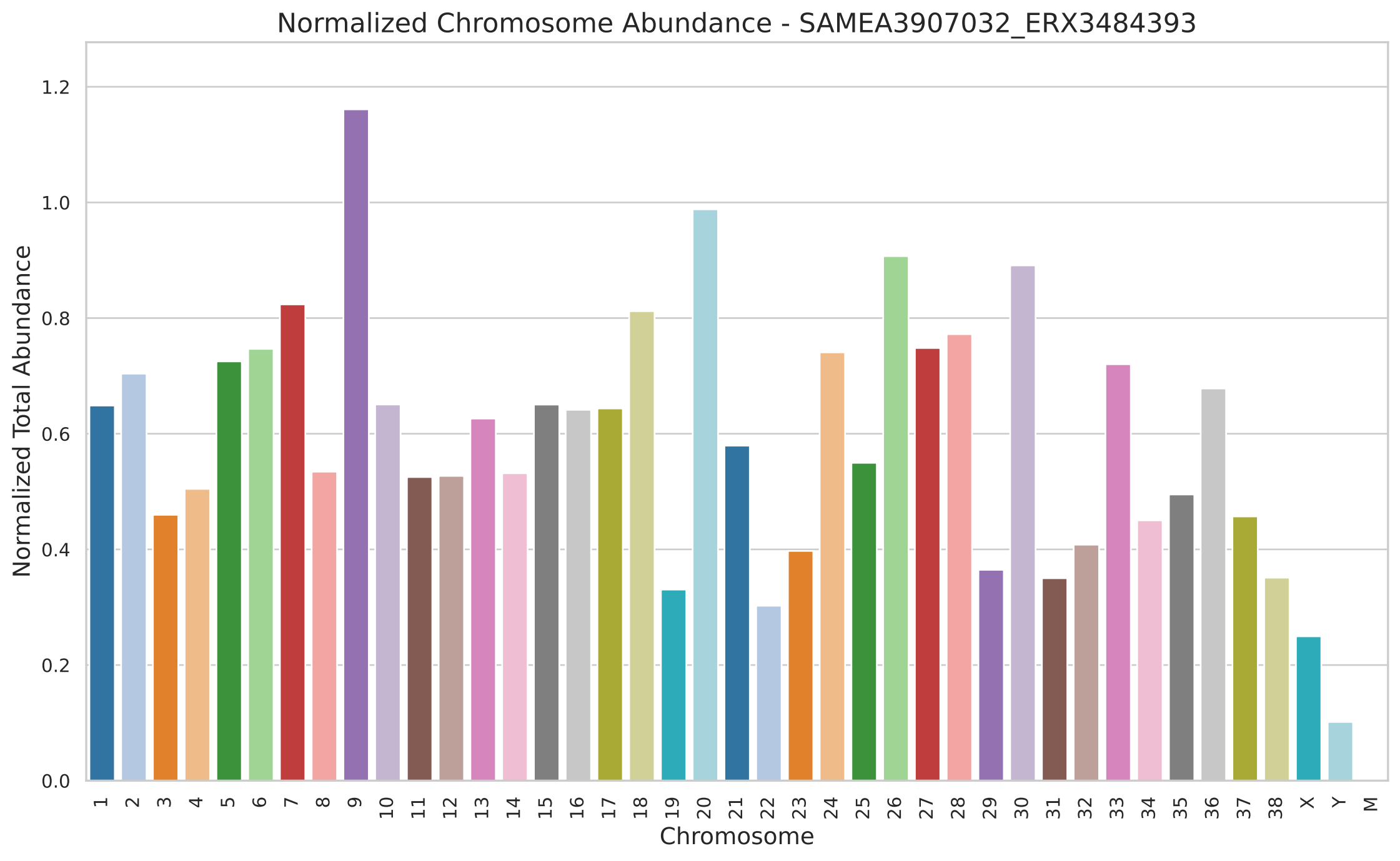

Normalized Chromosome Abundance - SAMEA3907421_ERX3484412
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

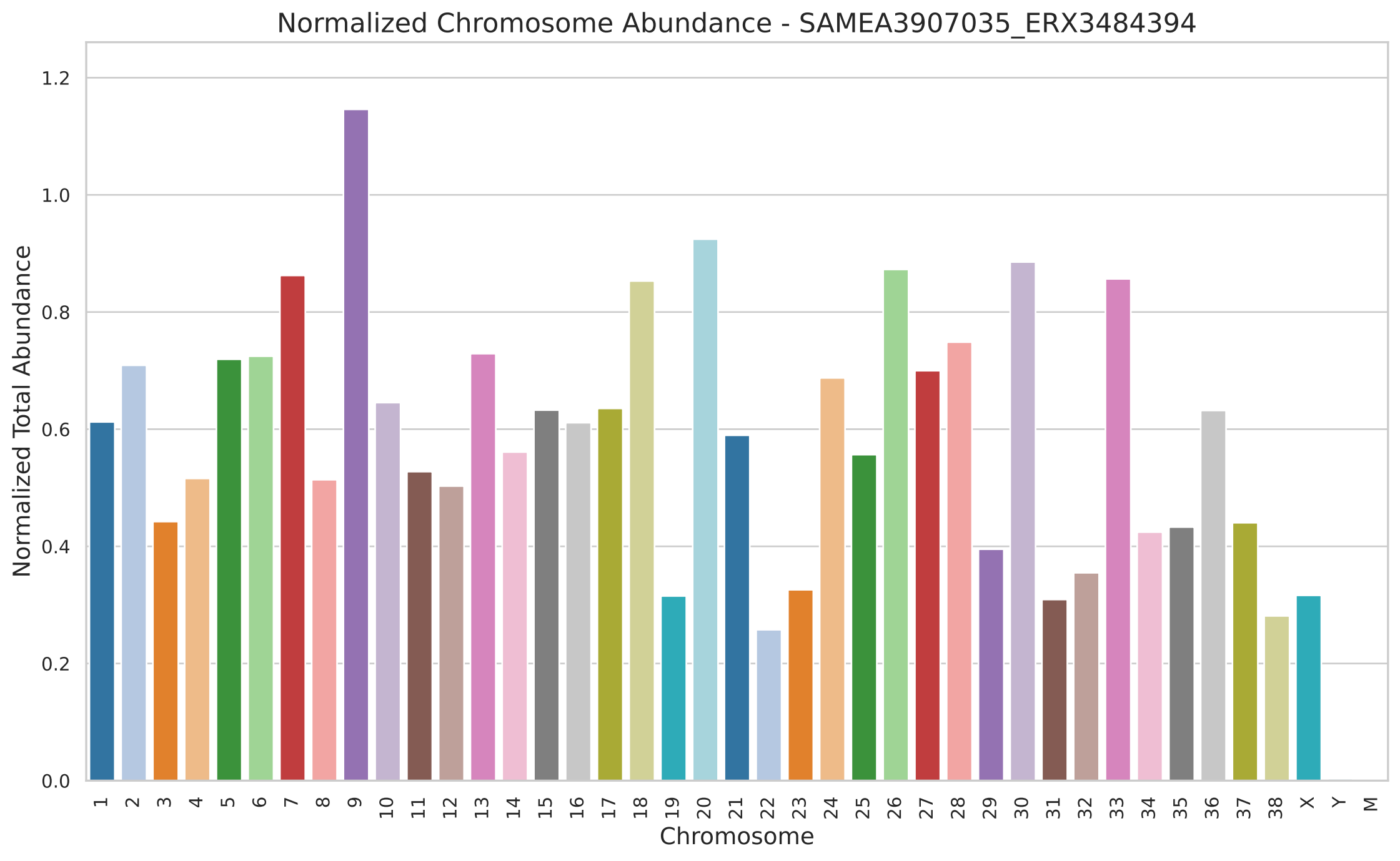

Normalized Chromosome Abundance - SAMEA3907021_ERX3484388
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

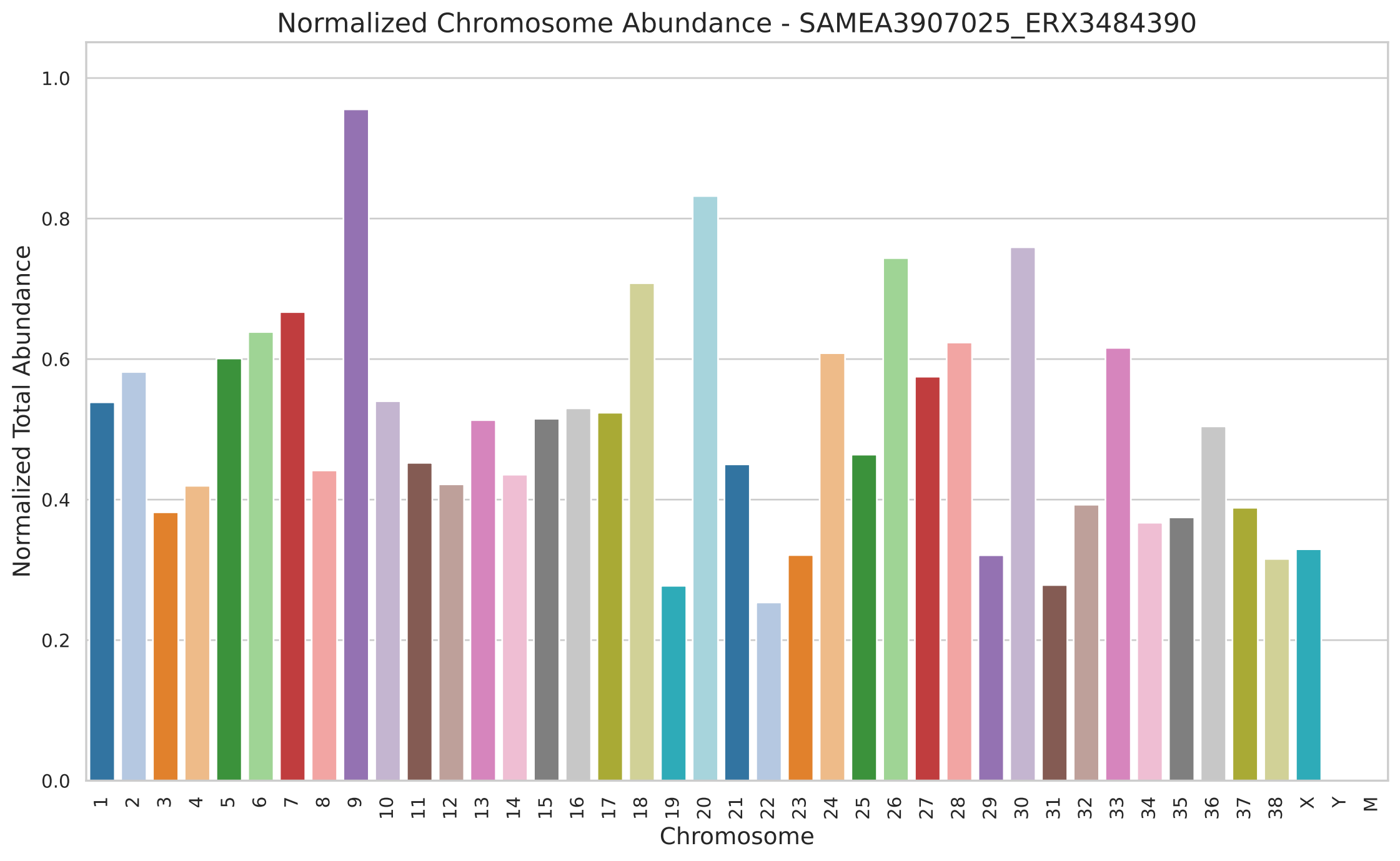

Normalized Chromosome Abundance - SAMEA3907065_ERX3484431
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

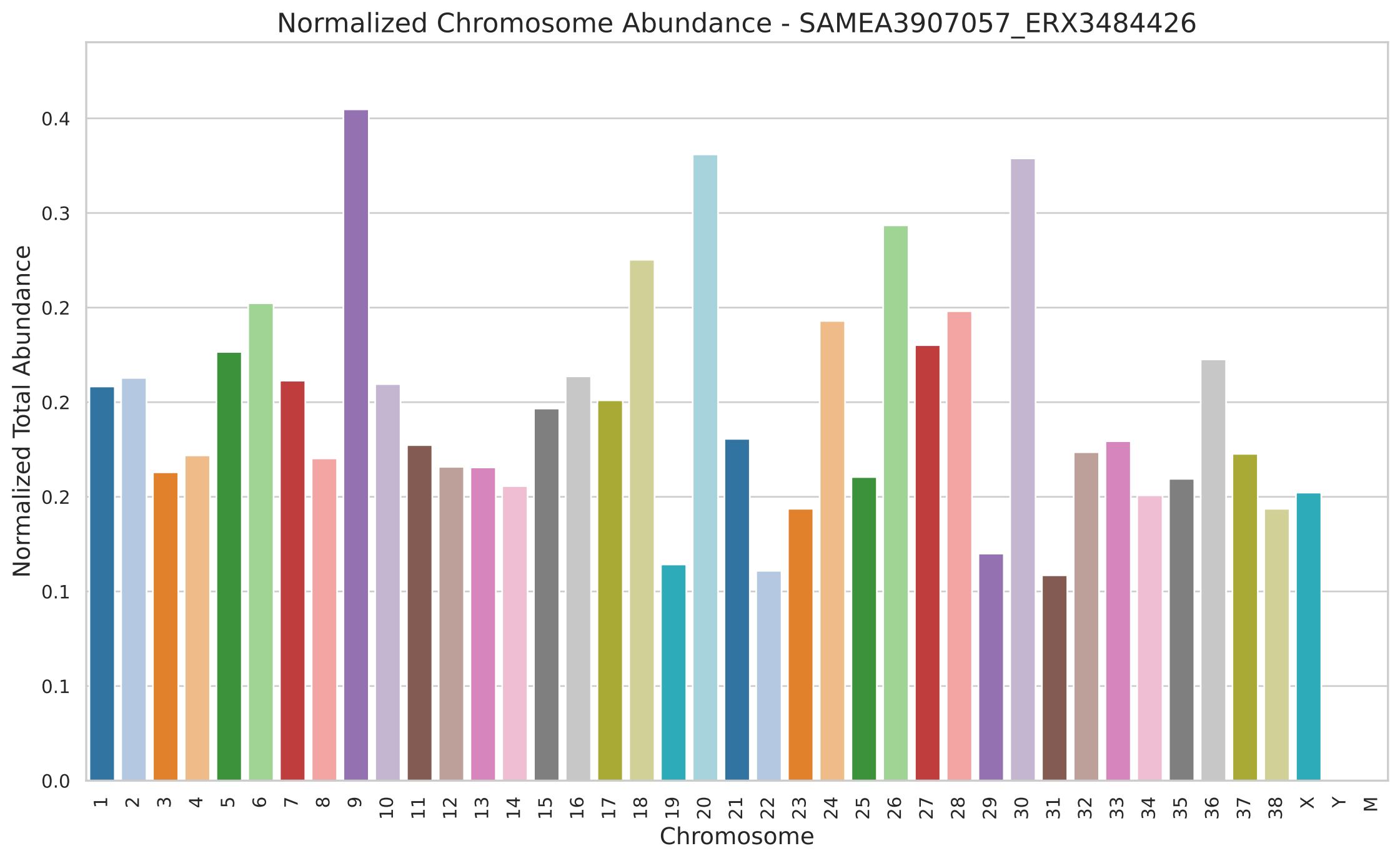

Normalized Chromosome Abundance - SAMEA3907276_ERX3484314
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

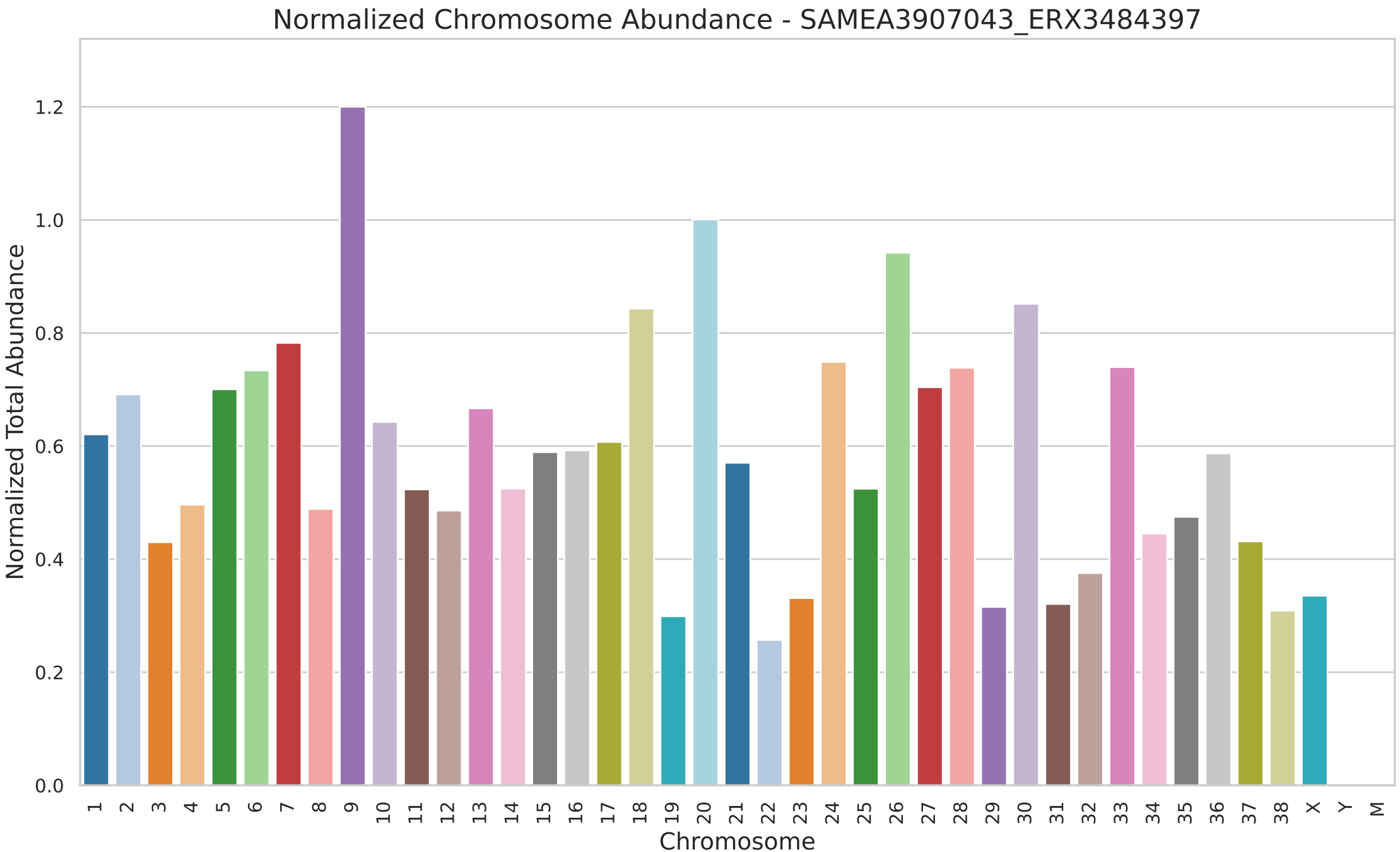

Normalized Chromosome Abundance - SAMEA3907066_ERX3484432
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

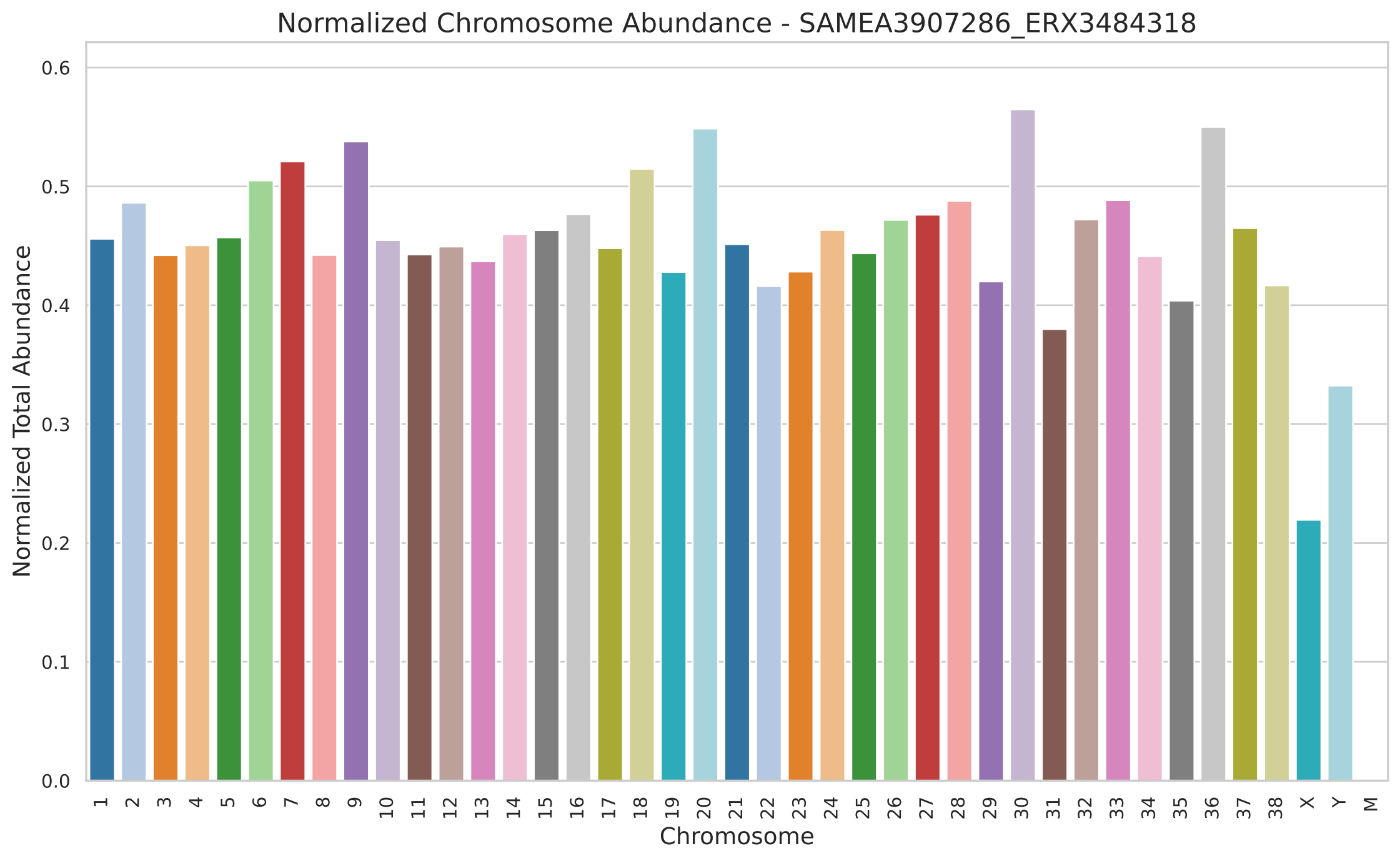

Normalized Chromosome Abundance - SAMEA3907032_ERX3484393
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

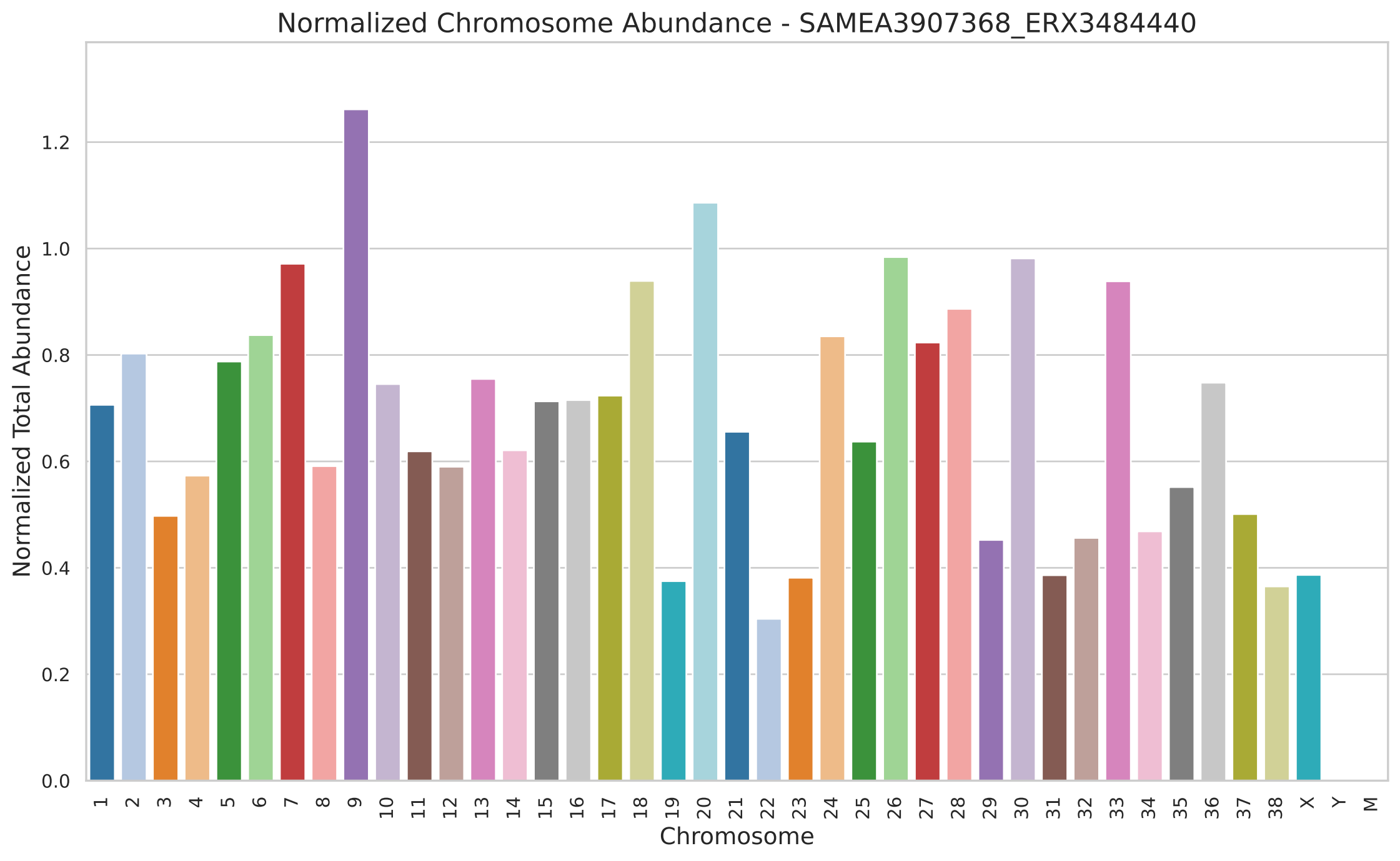

Normalized Chromosome Abundance - SAMEA3907035_ERX3484394
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

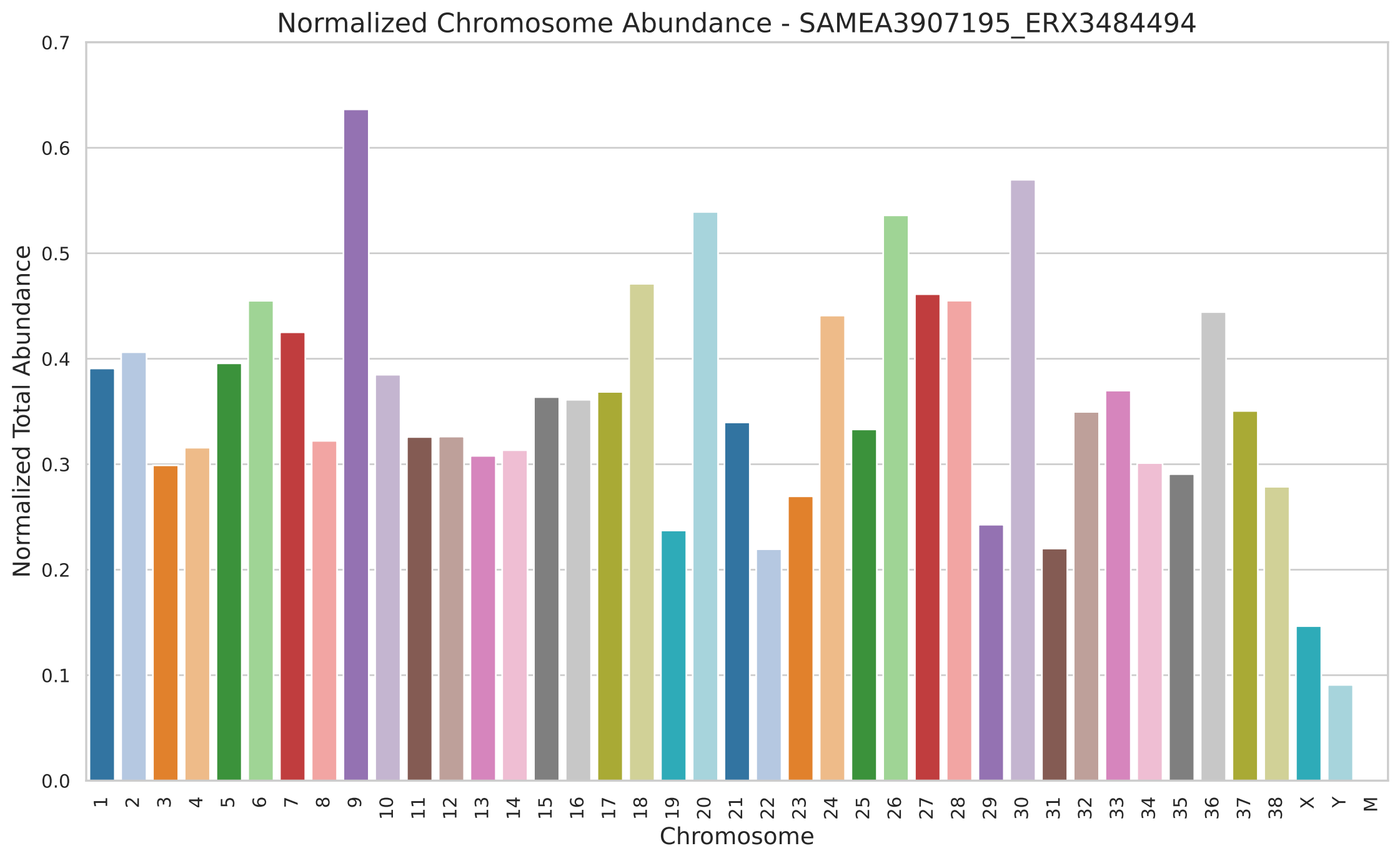

Normalized Chromosome Abundance - SAMEA3907025_ERX3484390
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

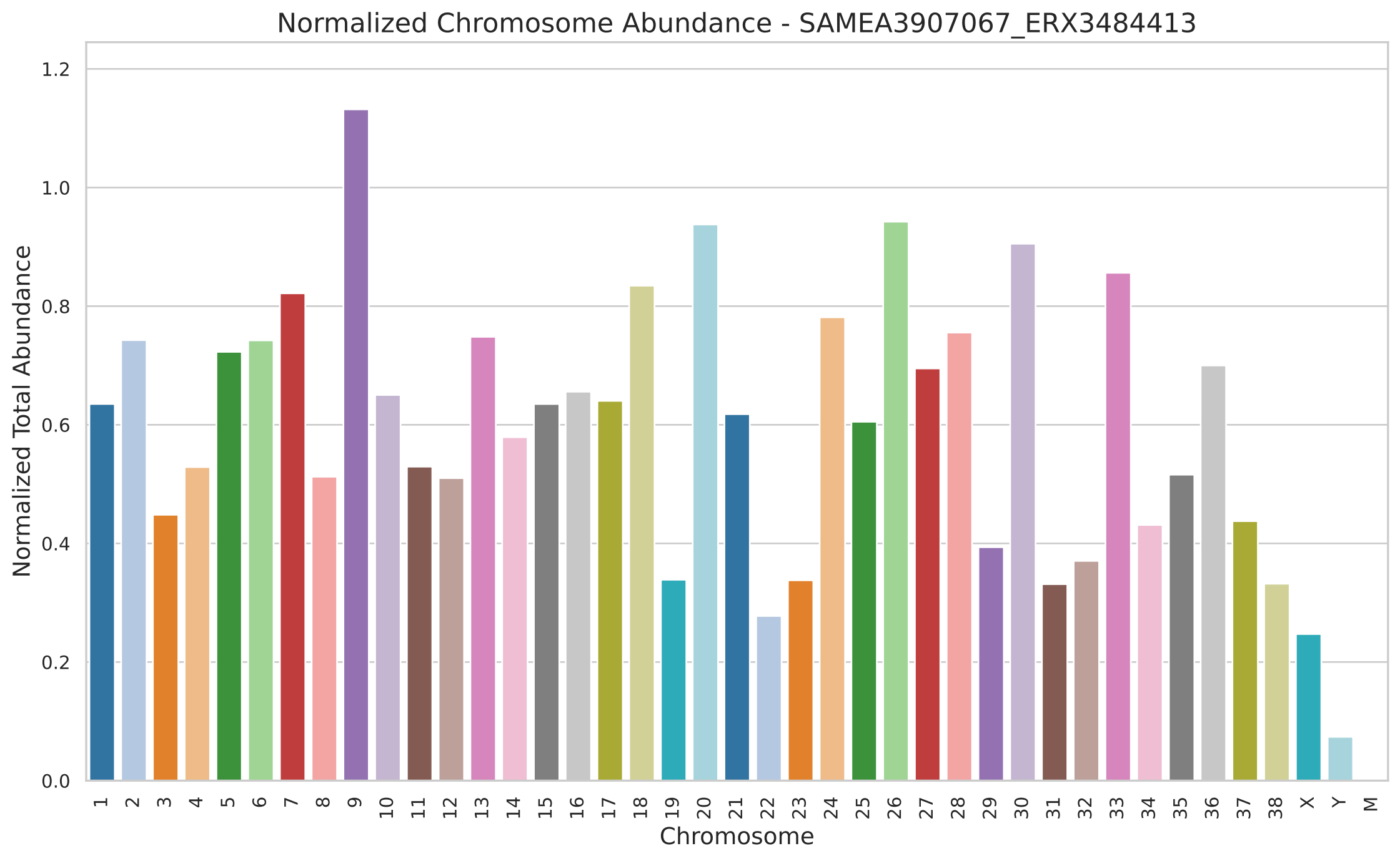

Normalized Chromosome Abundance - SAMEA3907057_ERX3484426
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

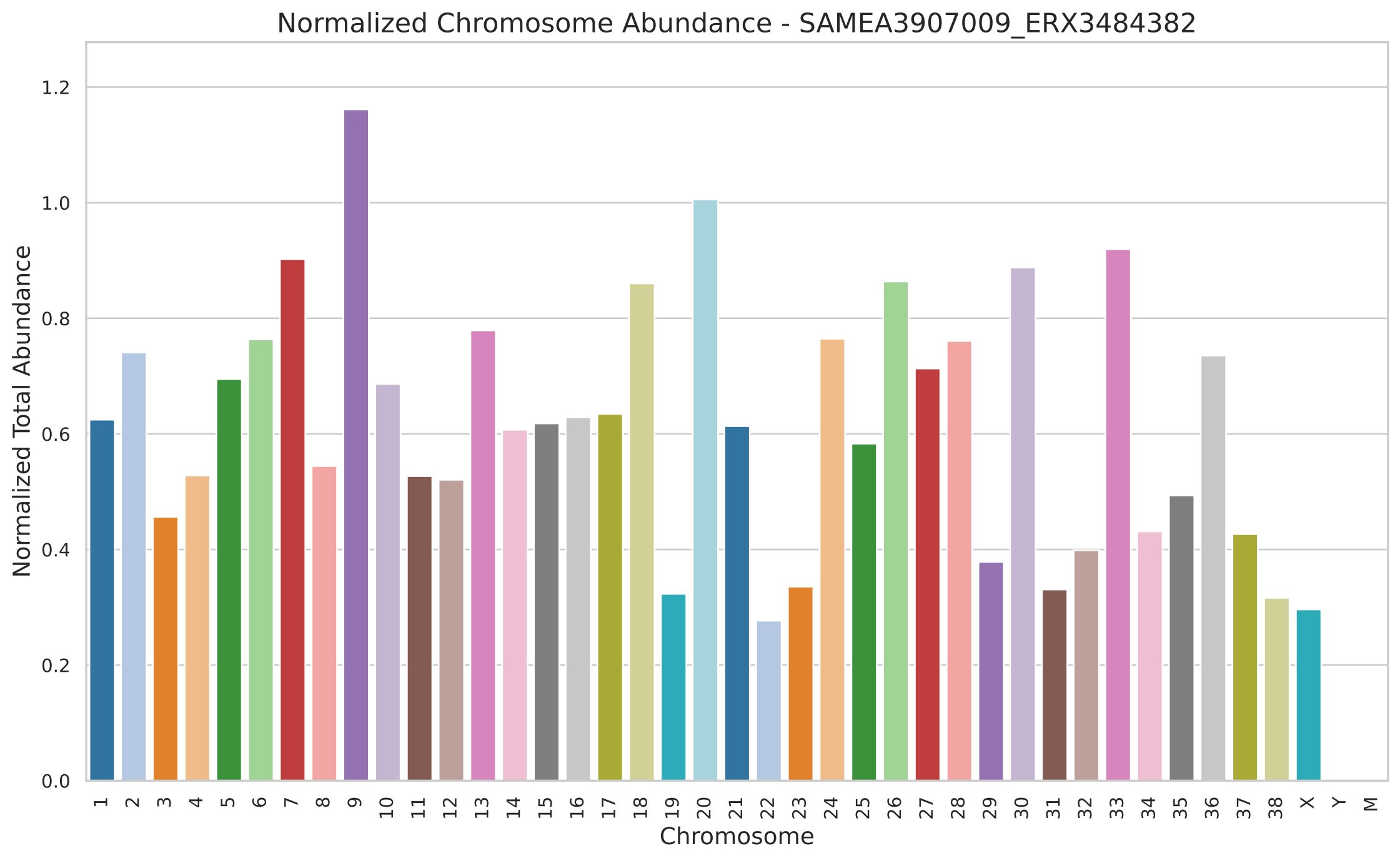

Normalized Chromosome Abundance - SAMEA3907043_ERX3484397
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

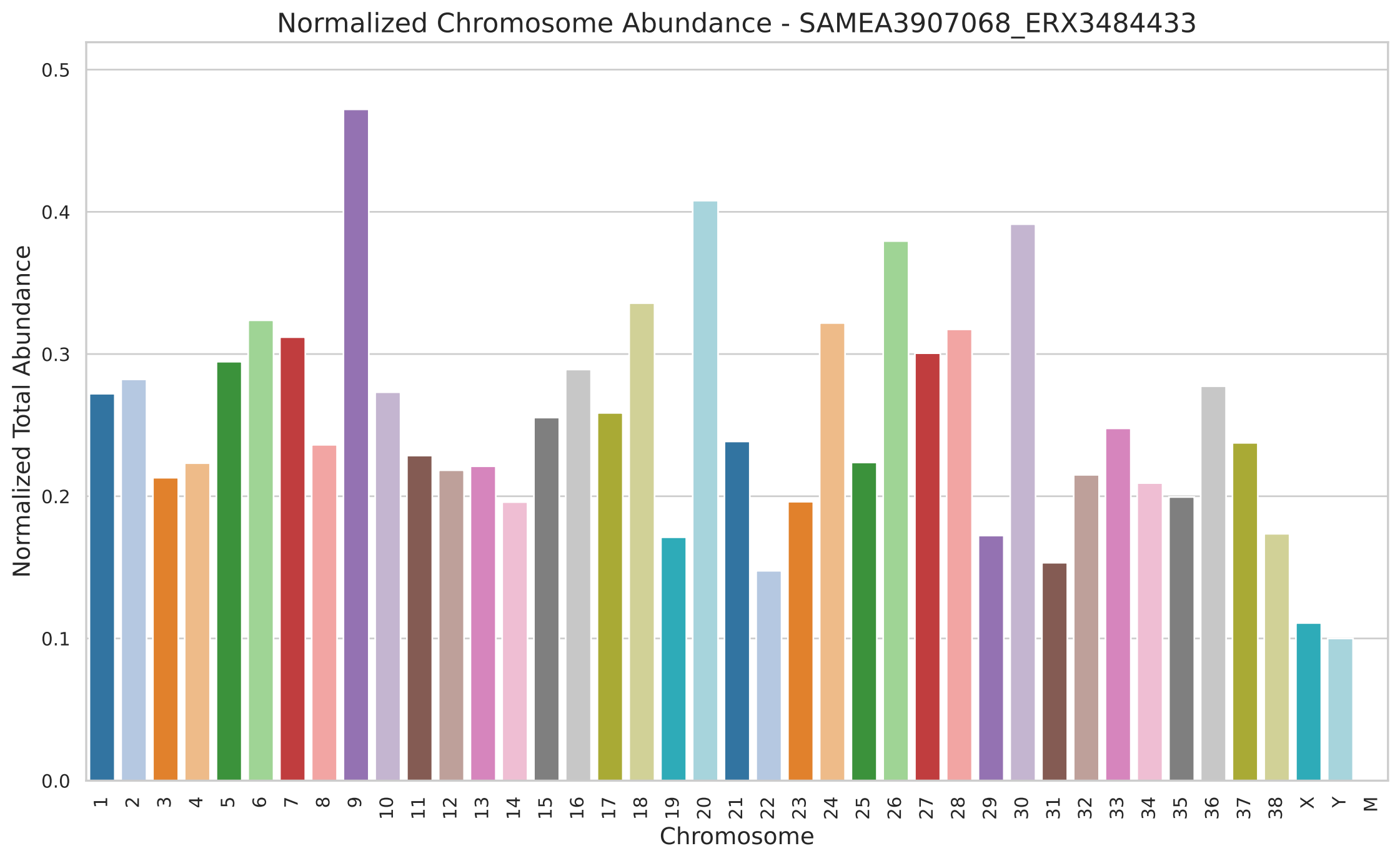

Normalized Chromosome Abundance - SAMEA3907286_ERX3484318
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

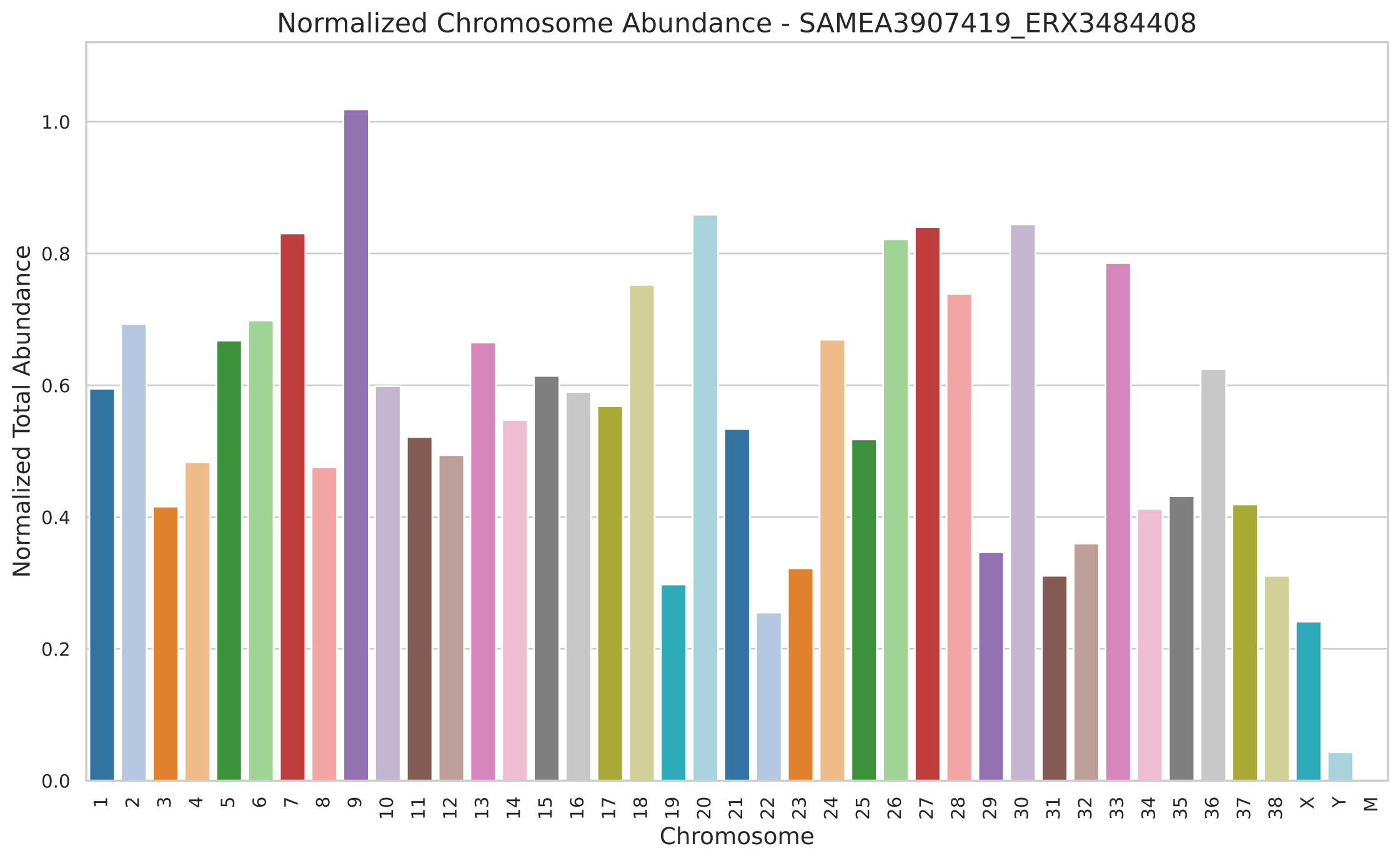

Normalized Chromosome Abundance - SAMEA3907368_ERX3484440
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

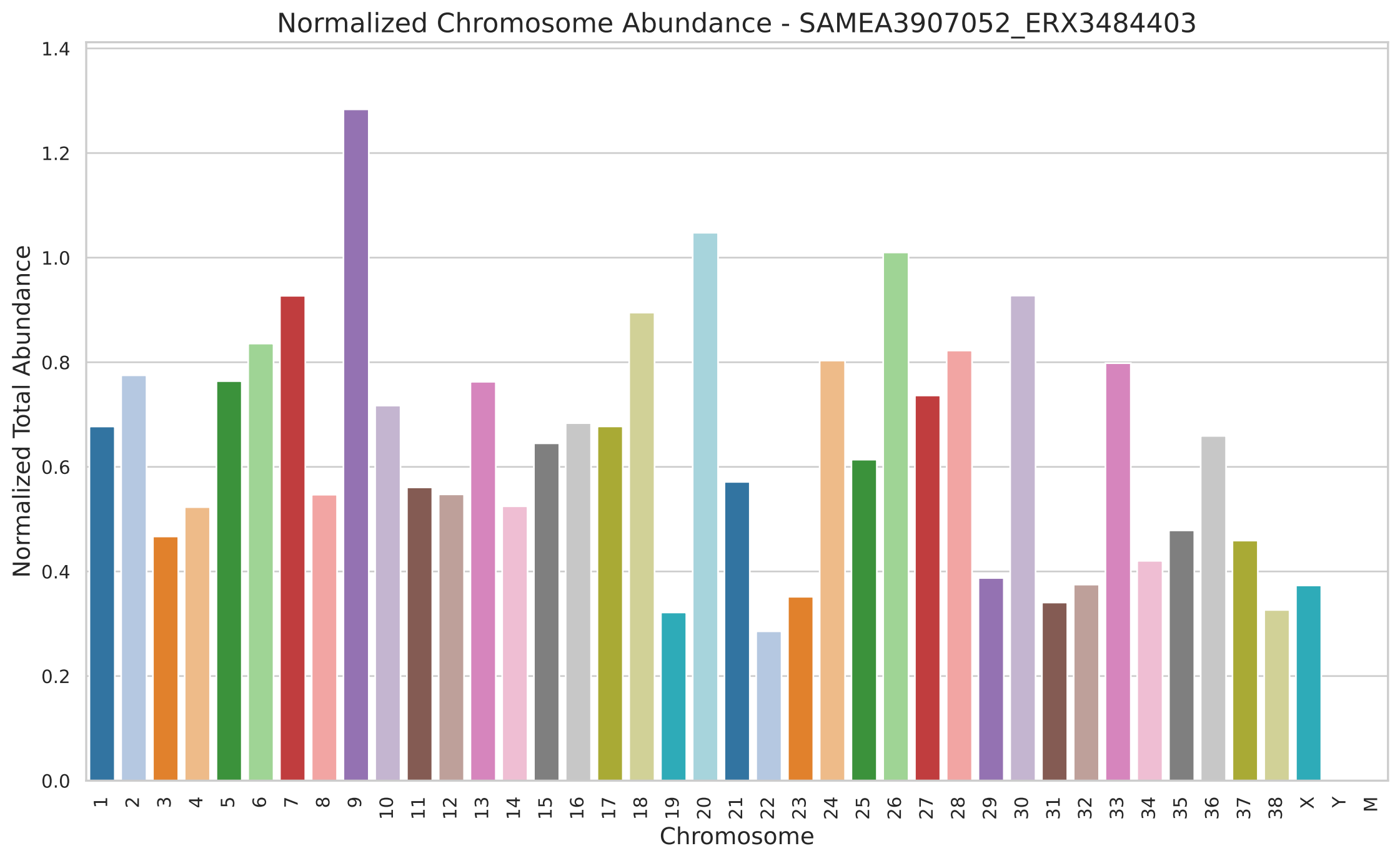

Normalized Chromosome Abundance - SAMEA3907195_ERX3484494
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

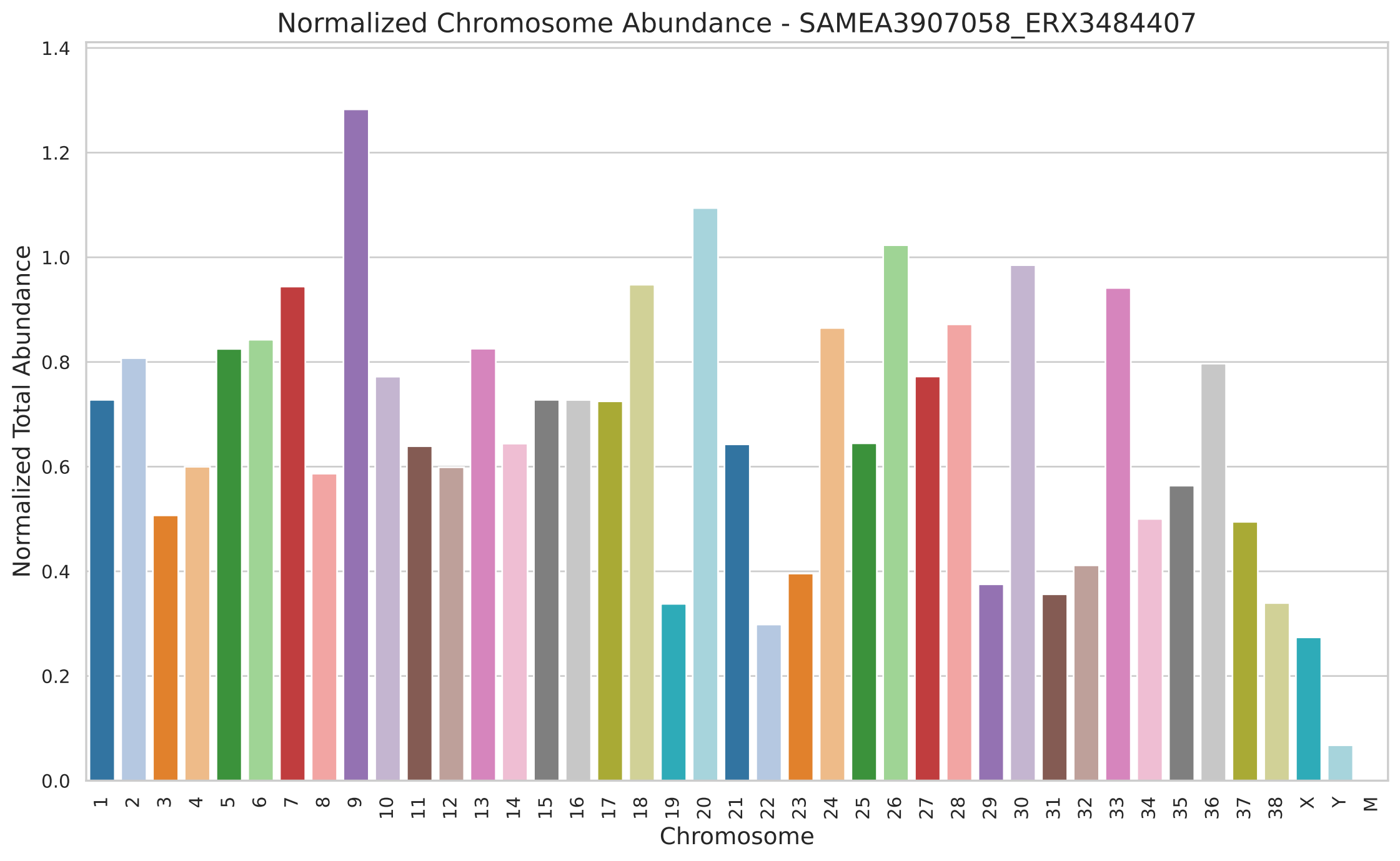

Normalized Chromosome Abundance - SAMEA3907067_ERX3484413
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

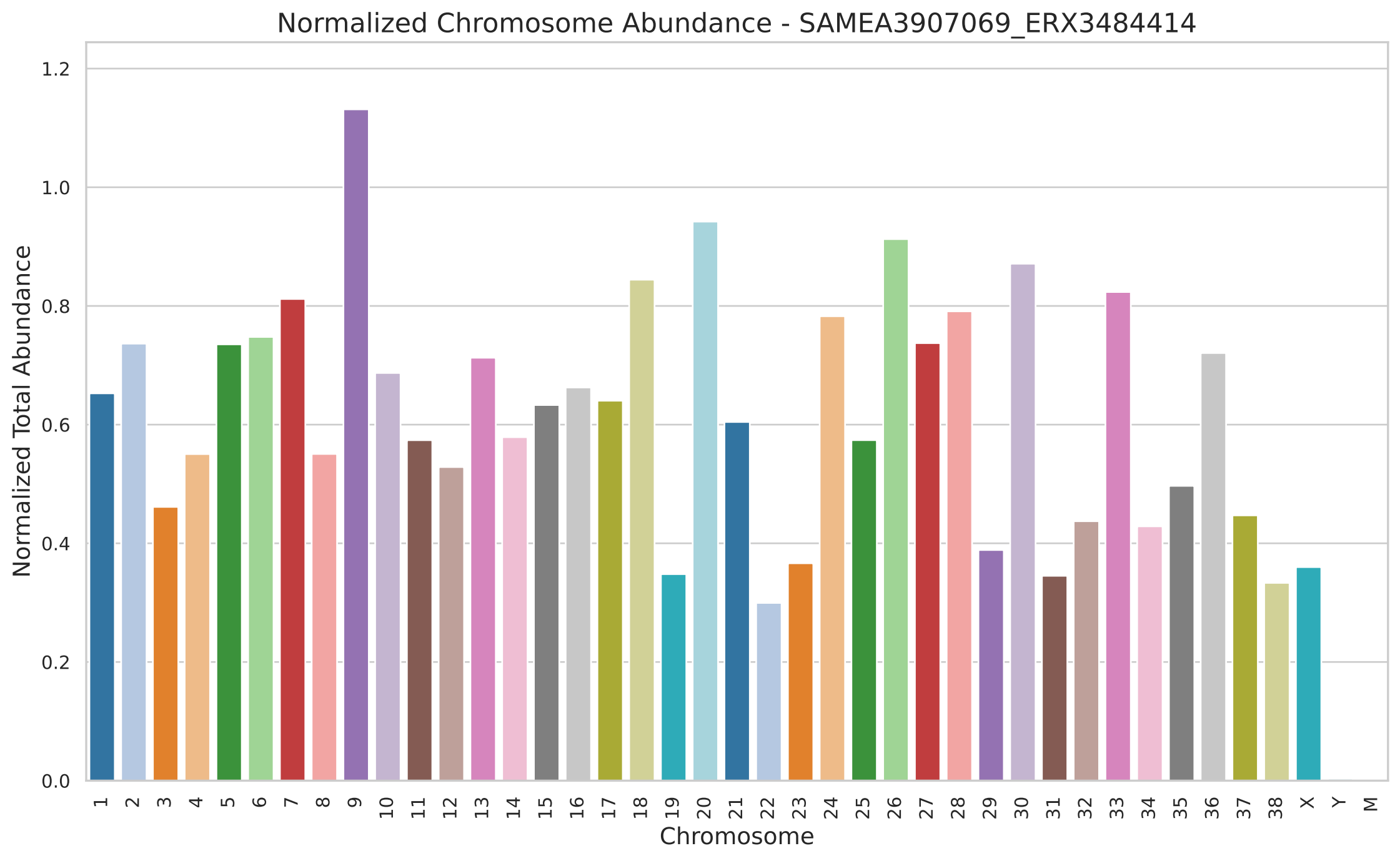

Normalized Chromosome Abundance - SAMEA3907009_ERX3484382
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

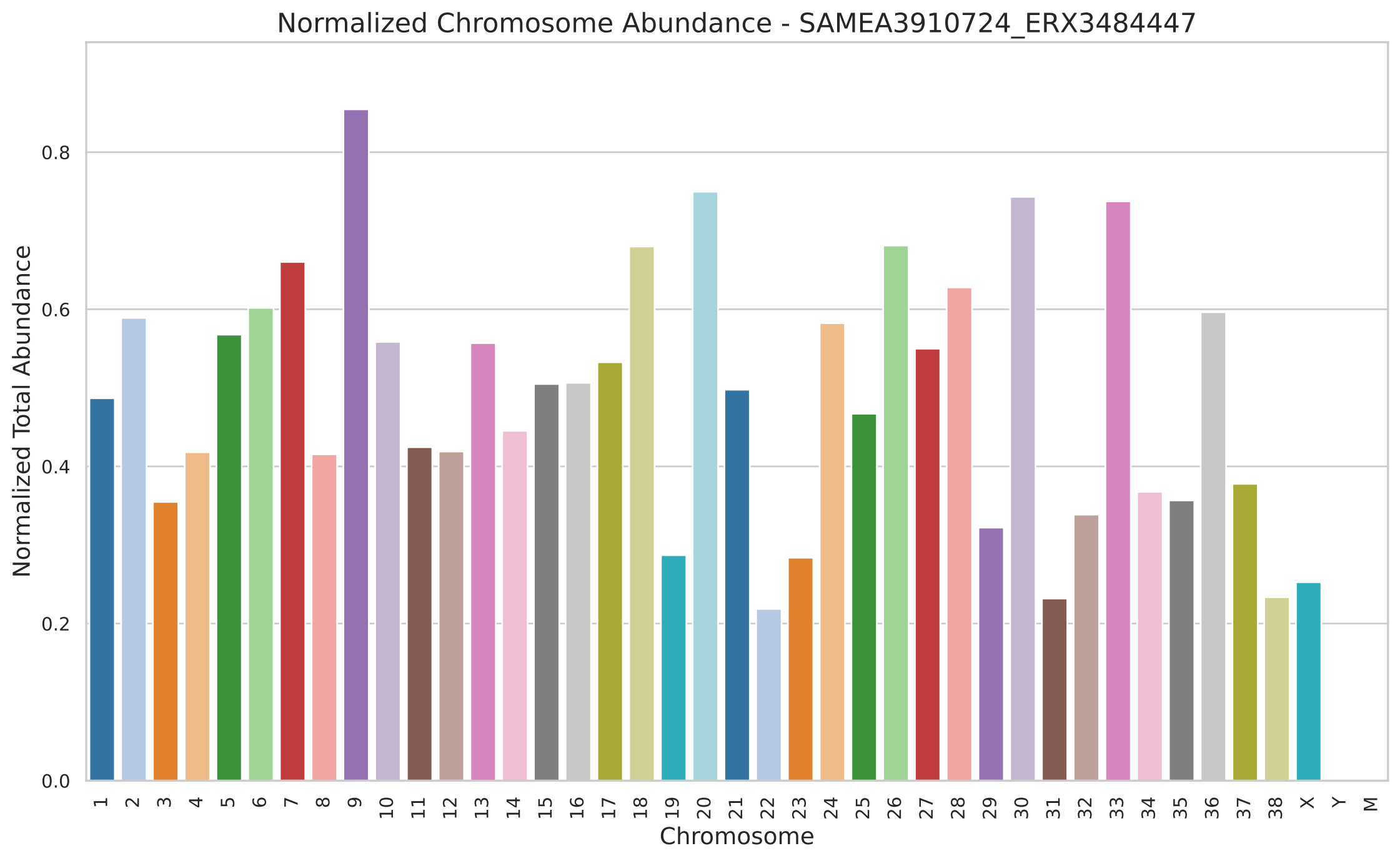

Normalized Chromosome Abundance - SAMEA3907068_ERX3484433
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

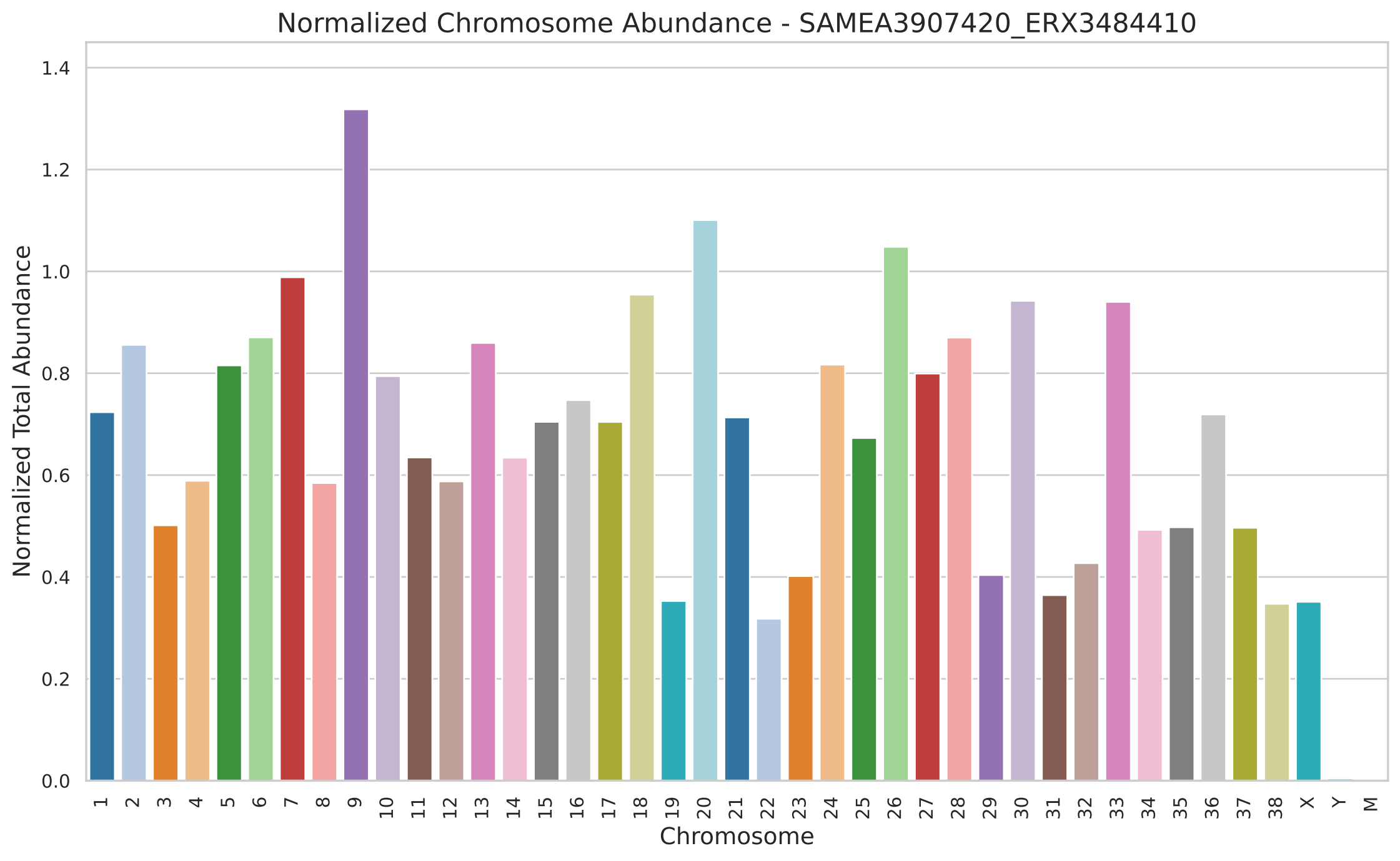

Normalized Chromosome Abundance - SAMEA3907419_ERX3484408
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

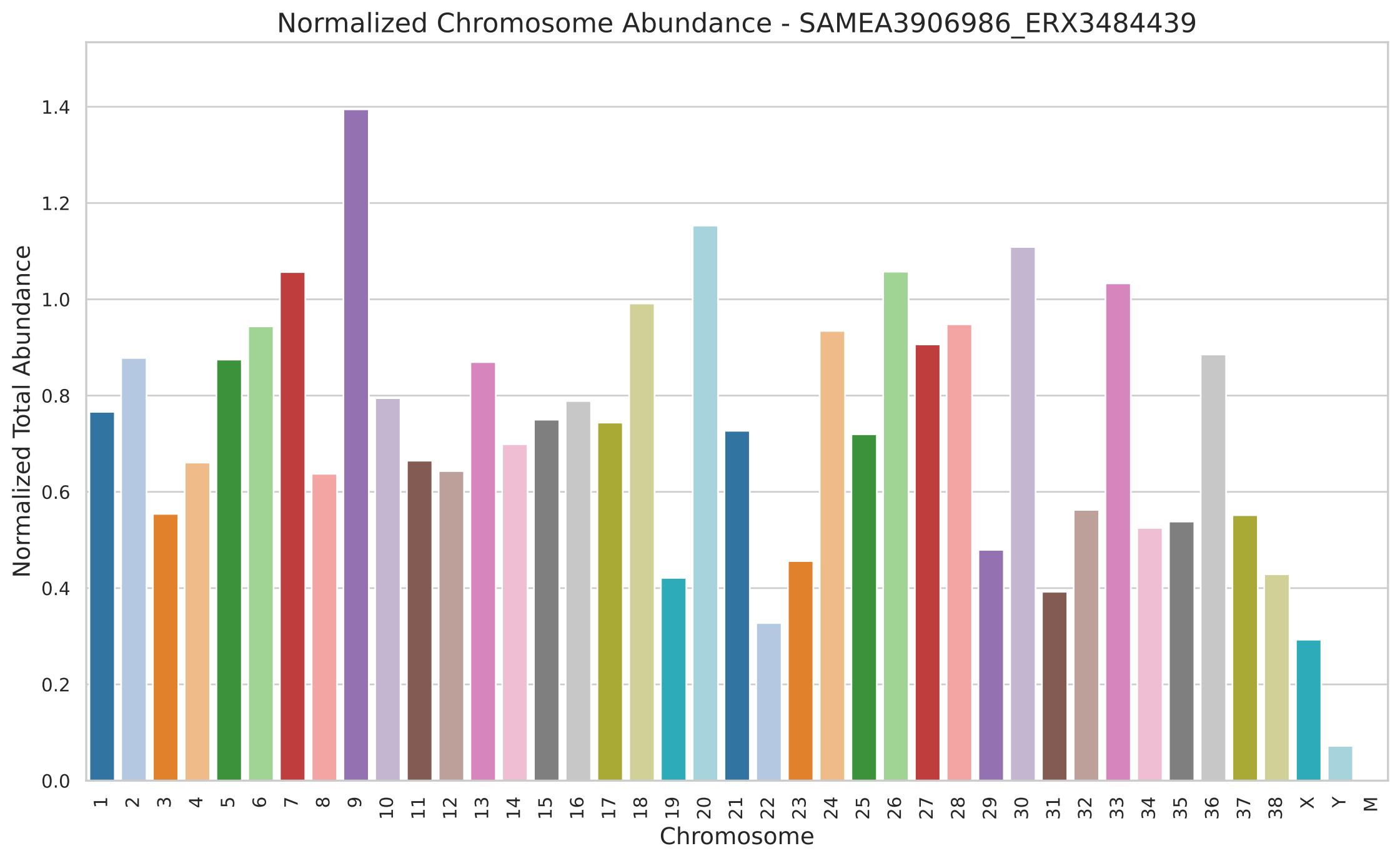

Normalized Chromosome Abundance - SAMEA3907052_ERX3484403
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

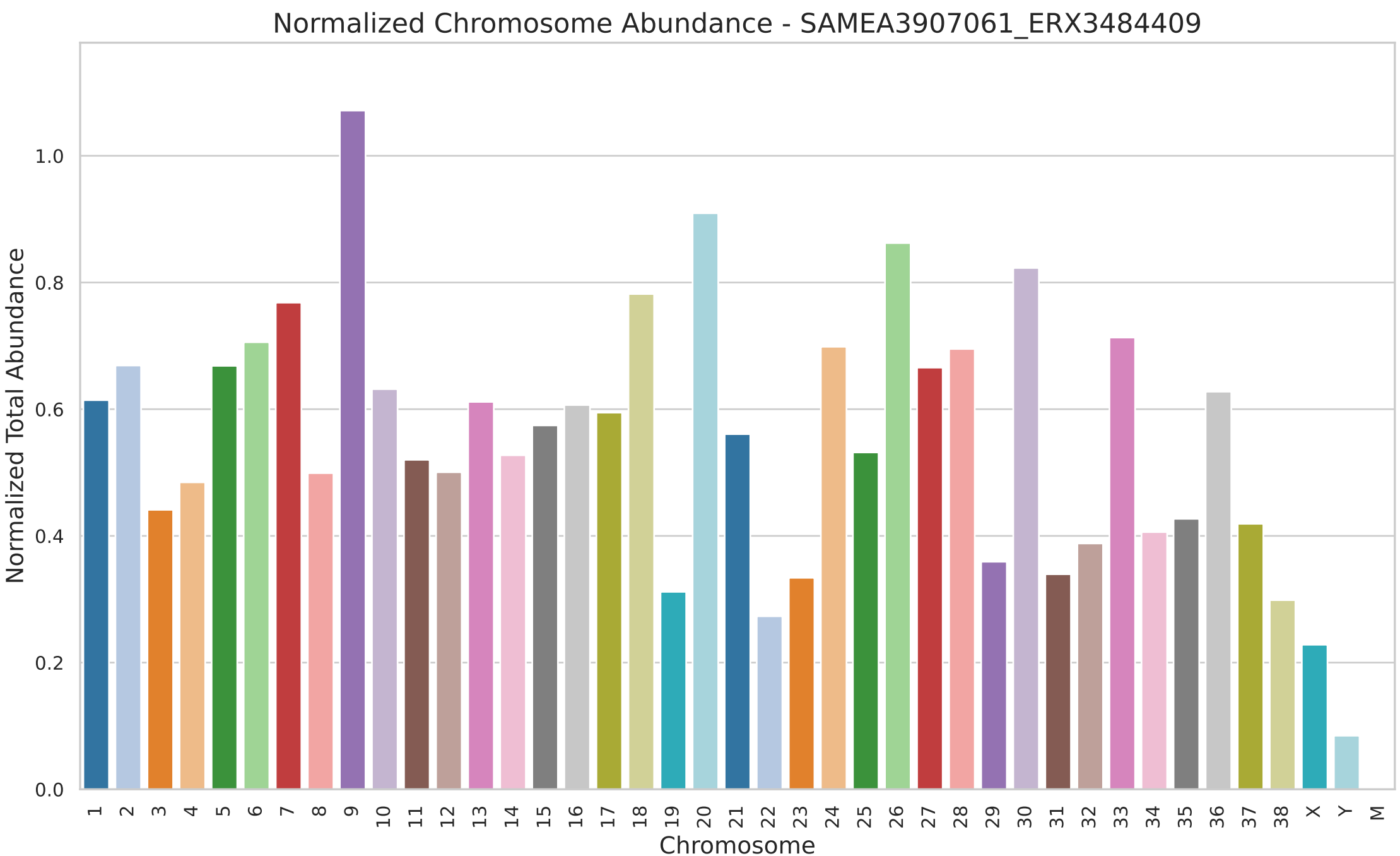

Normalized Chromosome Abundance - SAMEA3907058_ERX3484407
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

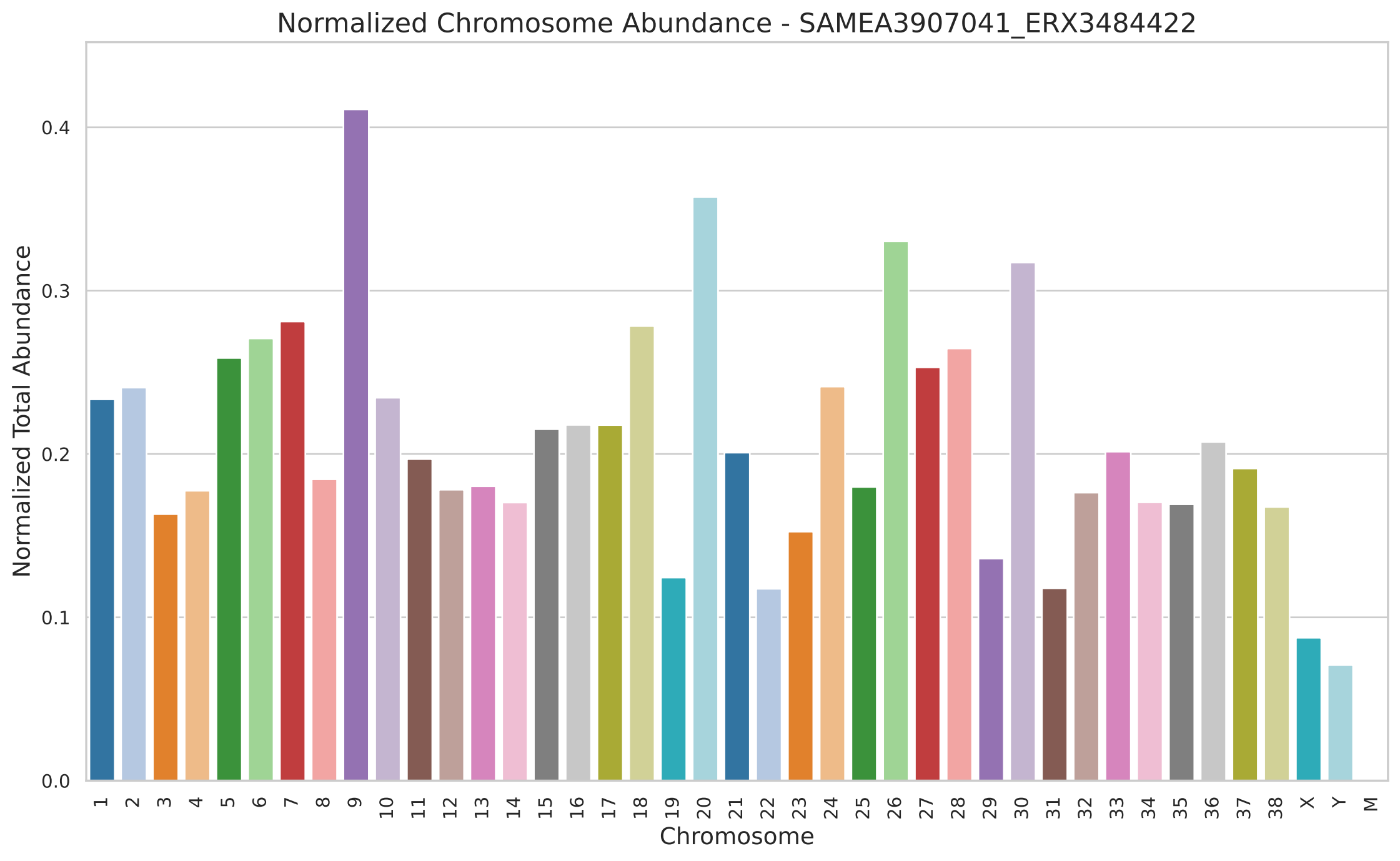

Normalized Chromosome Abundance - SAMEA3907069_ERX3484414
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

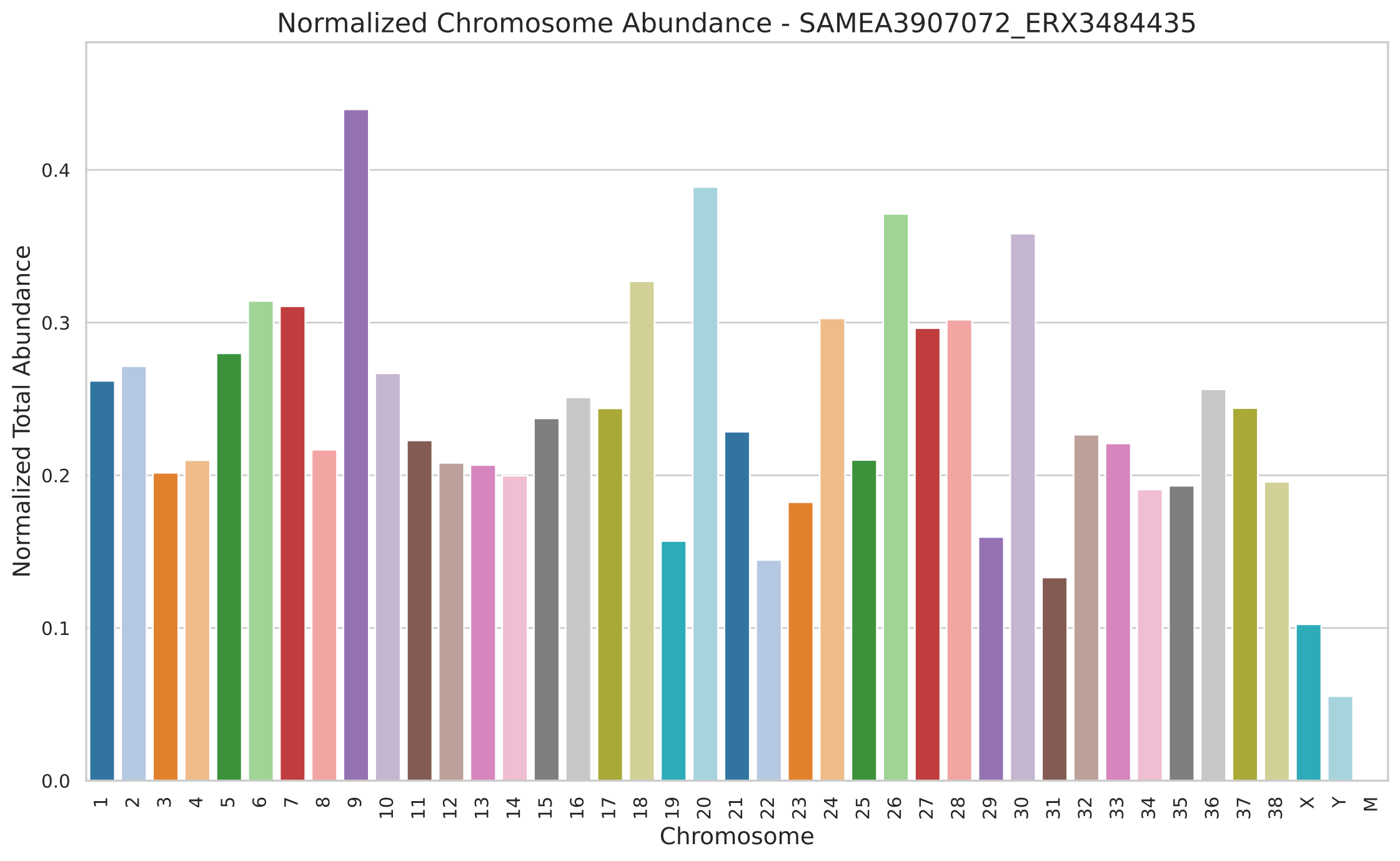

Normalized Chromosome Abundance - SAMEA3910724_ERX3484447
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

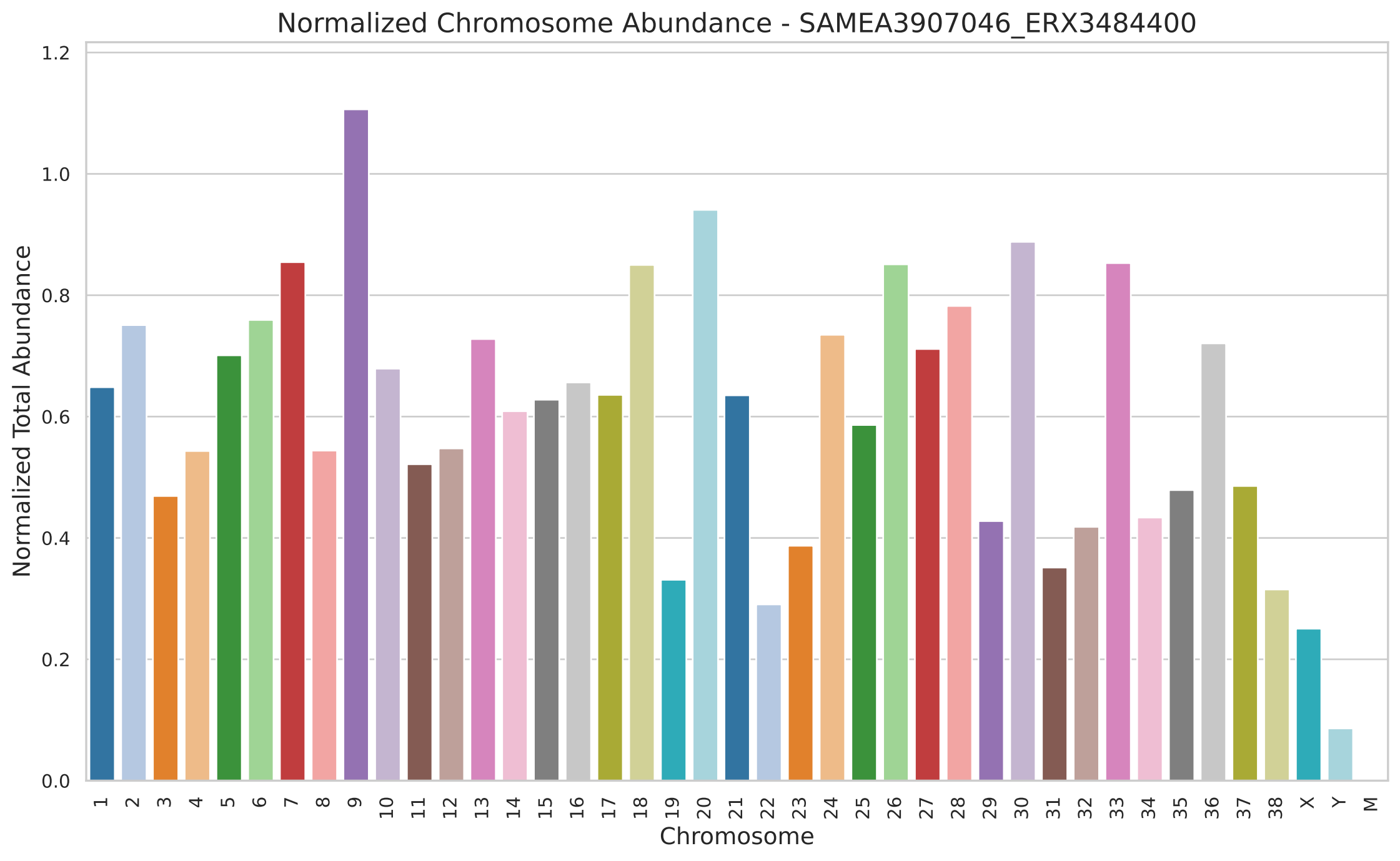

Normalized Chromosome Abundance - SAMEA3907420_ERX3484410
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

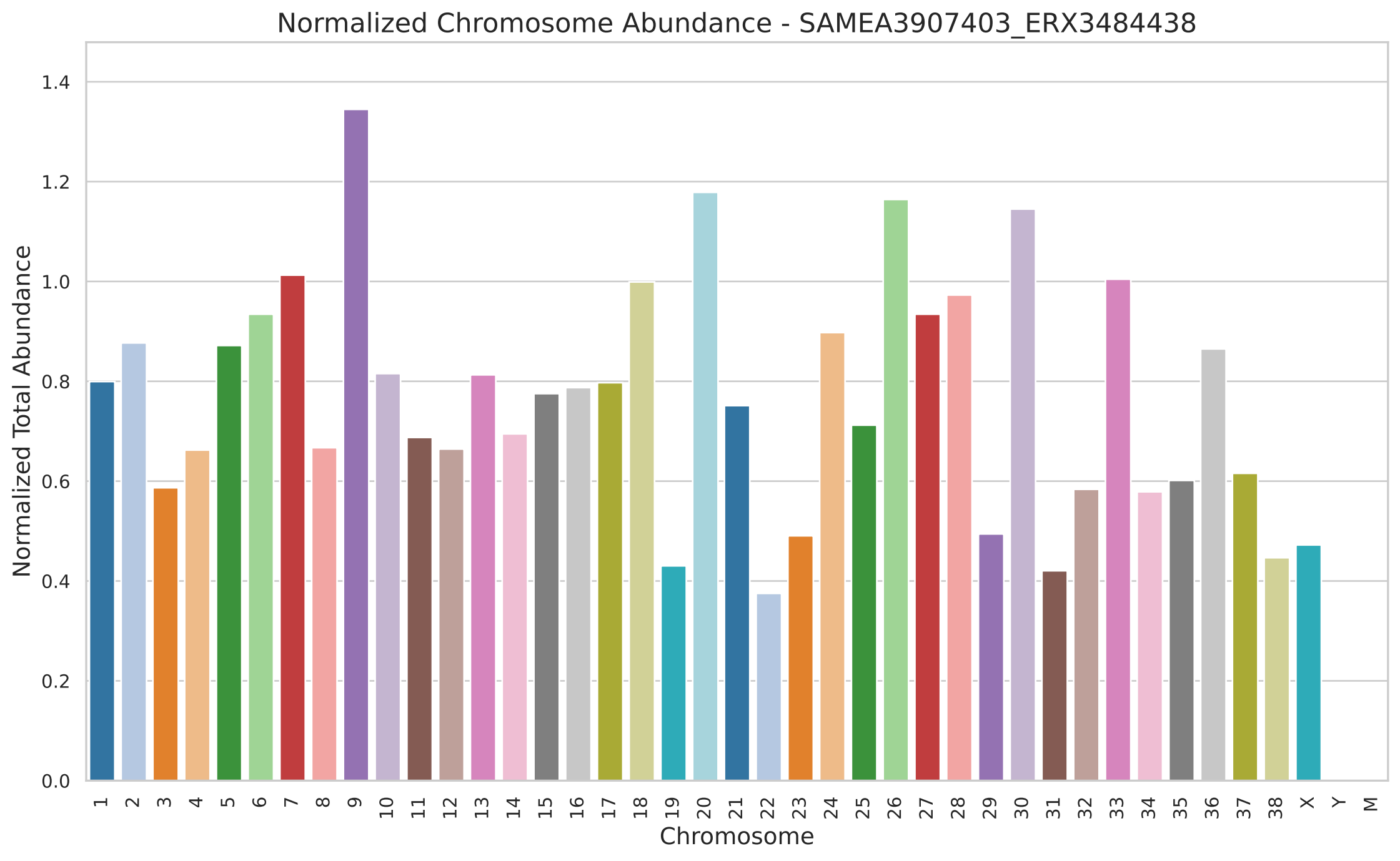

Normalized Chromosome Abundance - SAMEA3906986_ERX3484439
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

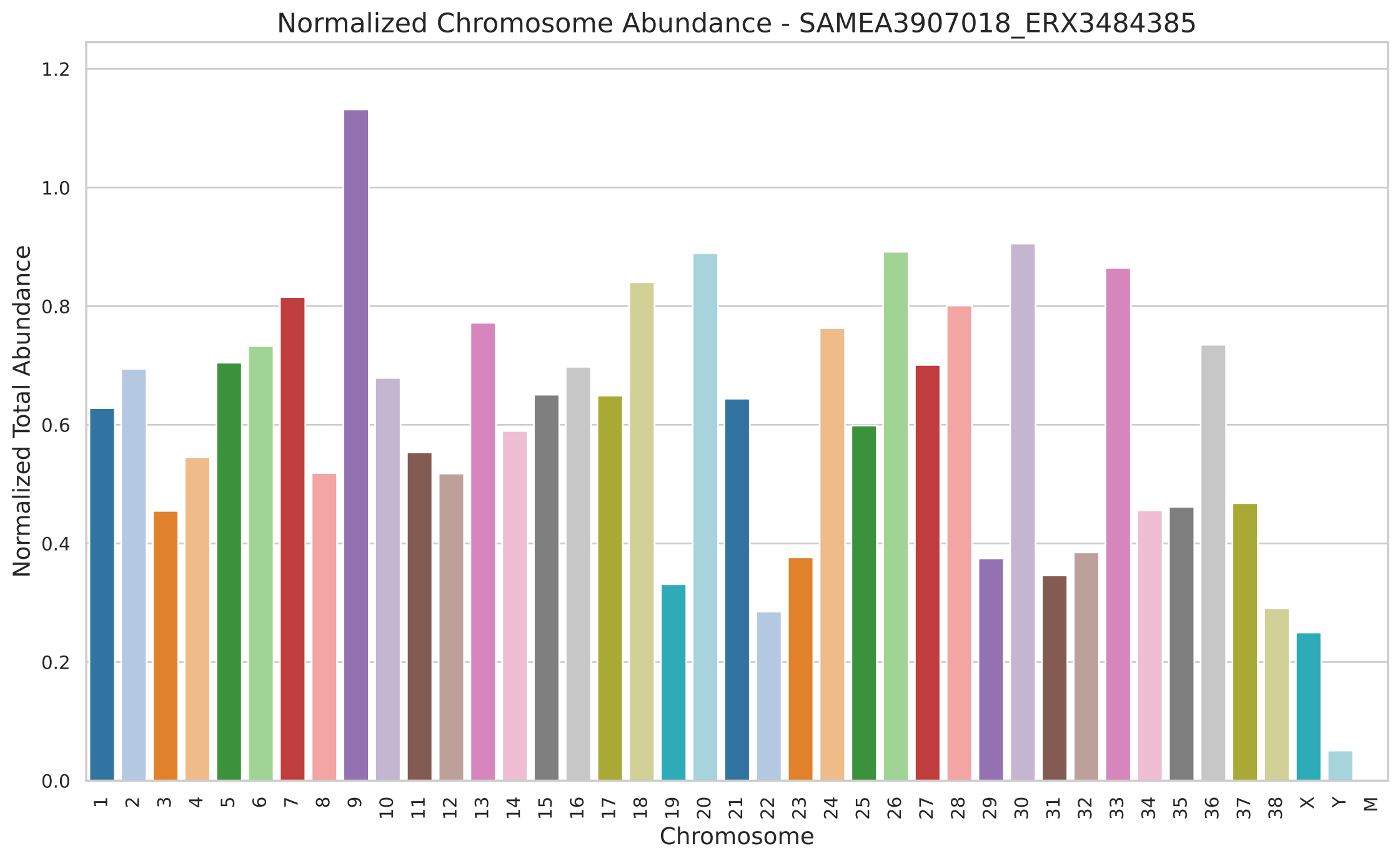

Normalized Chromosome Abundance - SAMEA3907061_ERX3484409
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

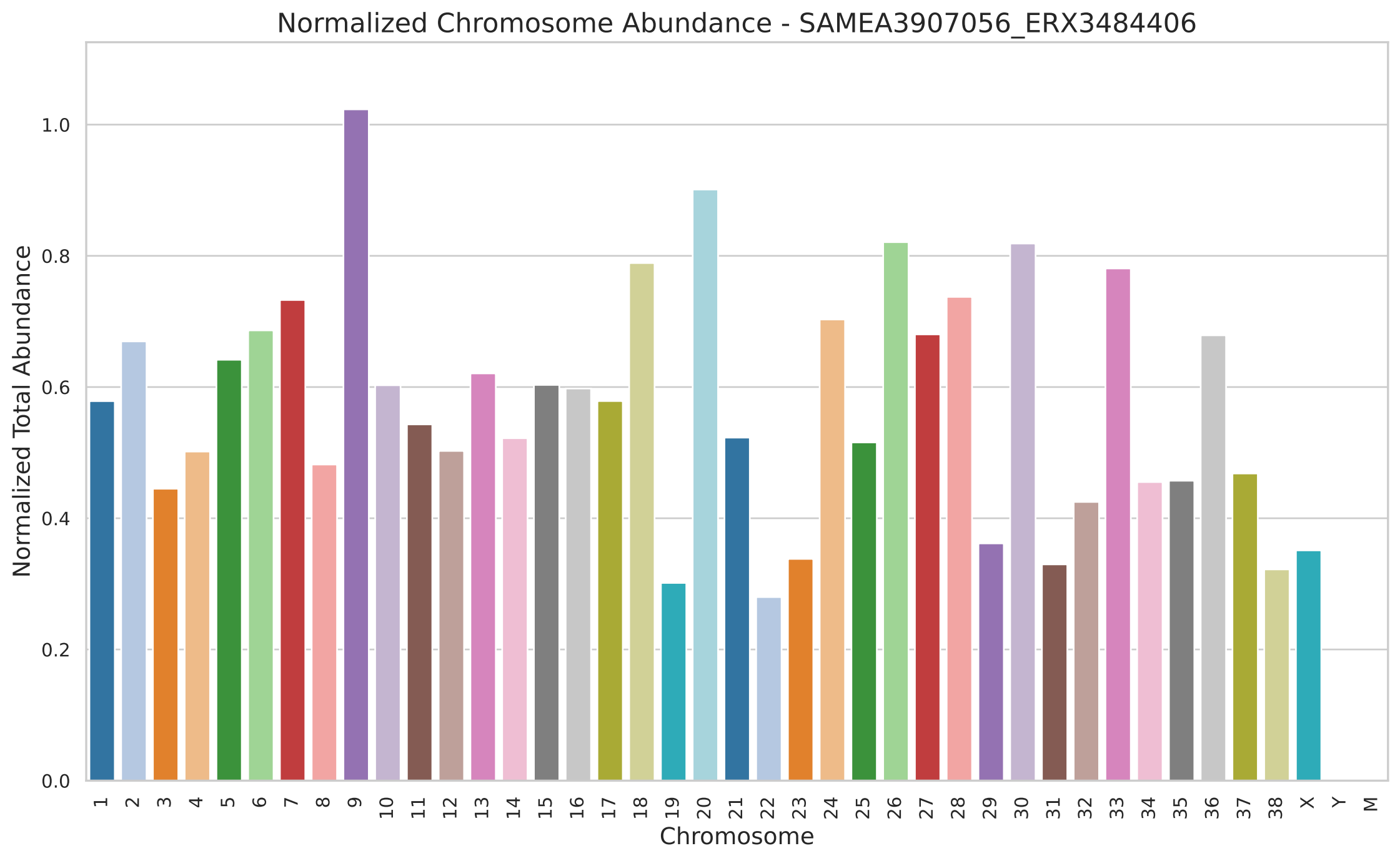

Normalized Chromosome Abundance - SAMEA3907041_ERX3484422
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

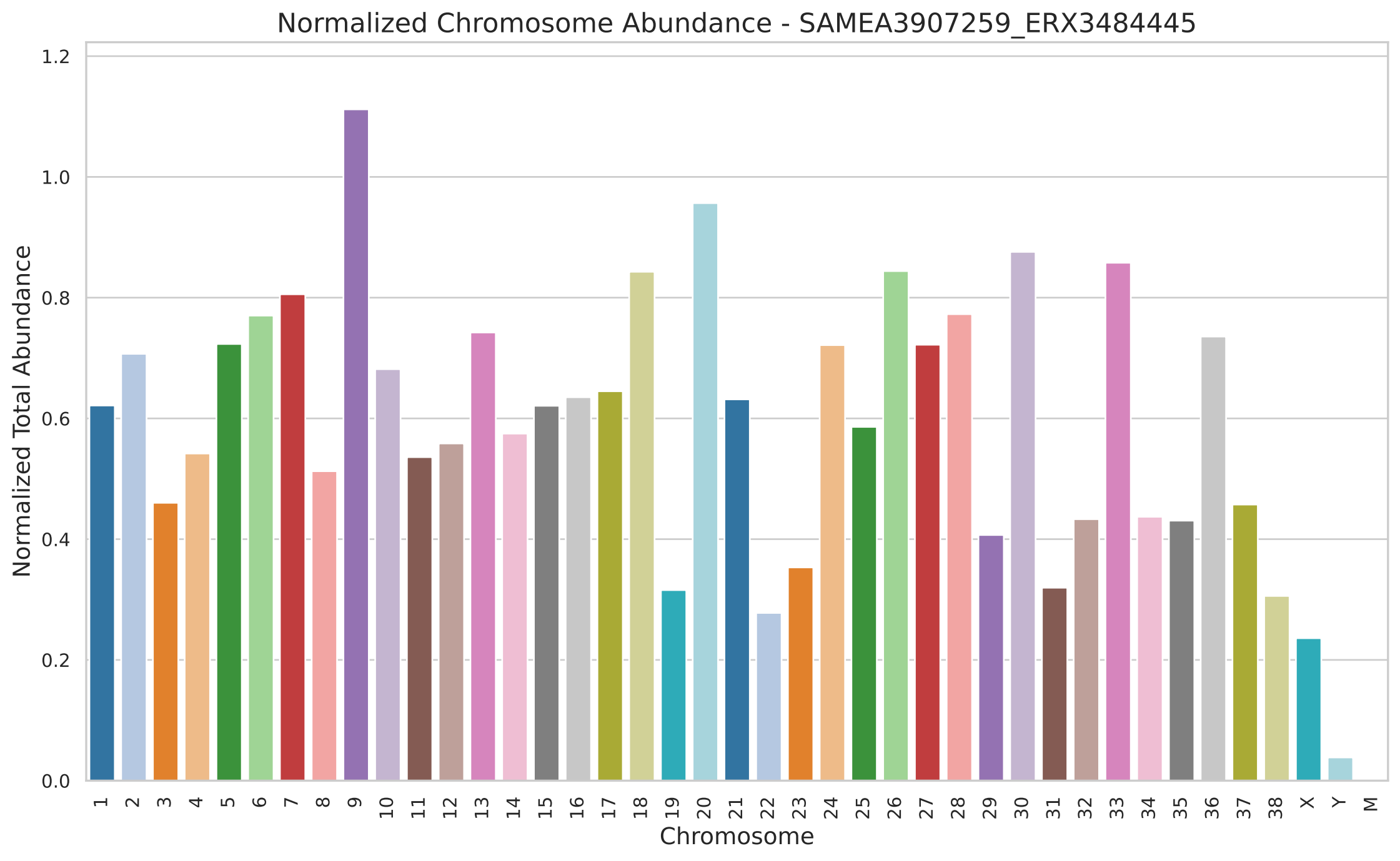

Normalized Chromosome Abundance - SAMEA3907072_ERX3484435
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

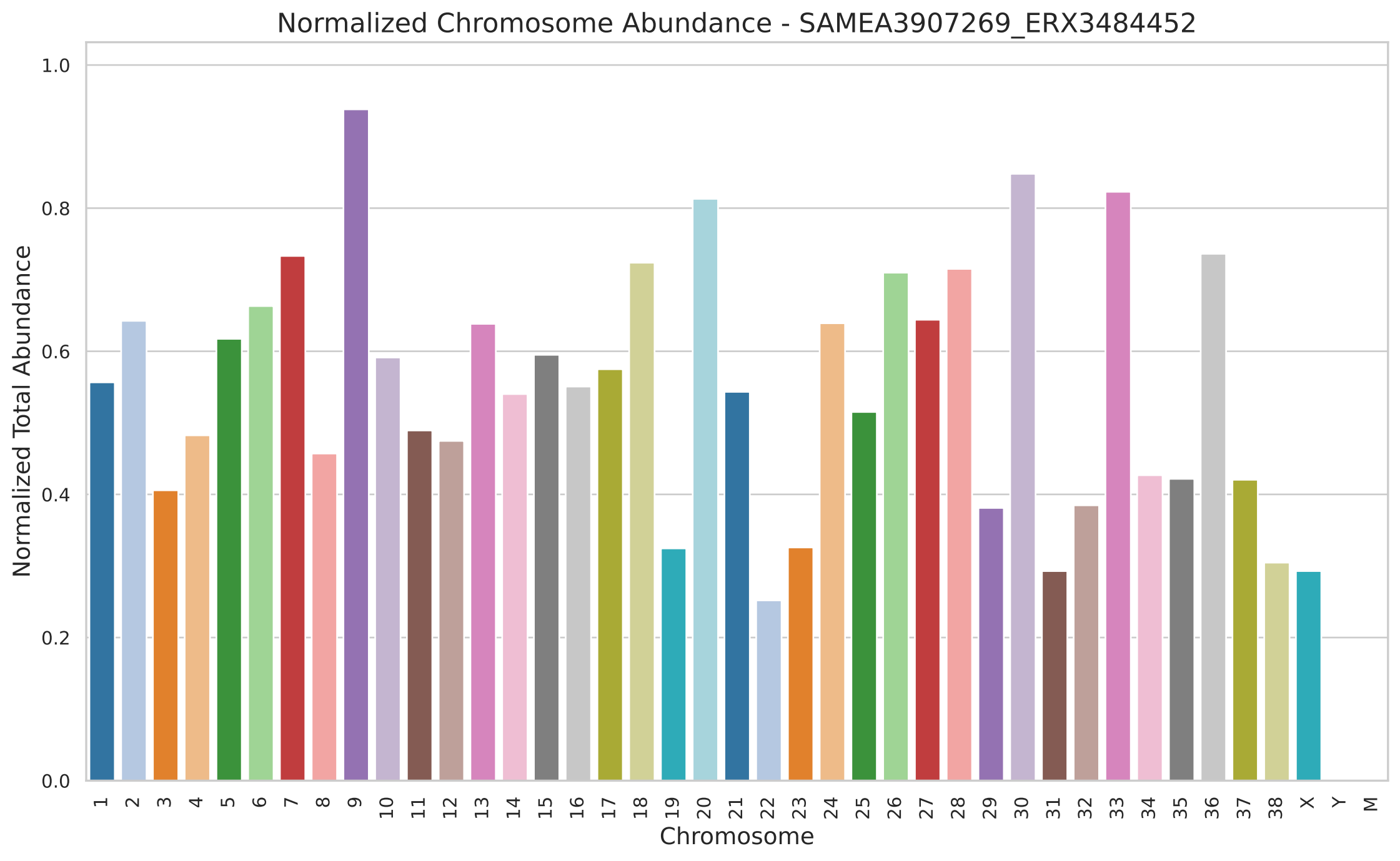

Normalized Chromosome Abundance - SAMEA3907046_ERX3484400
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

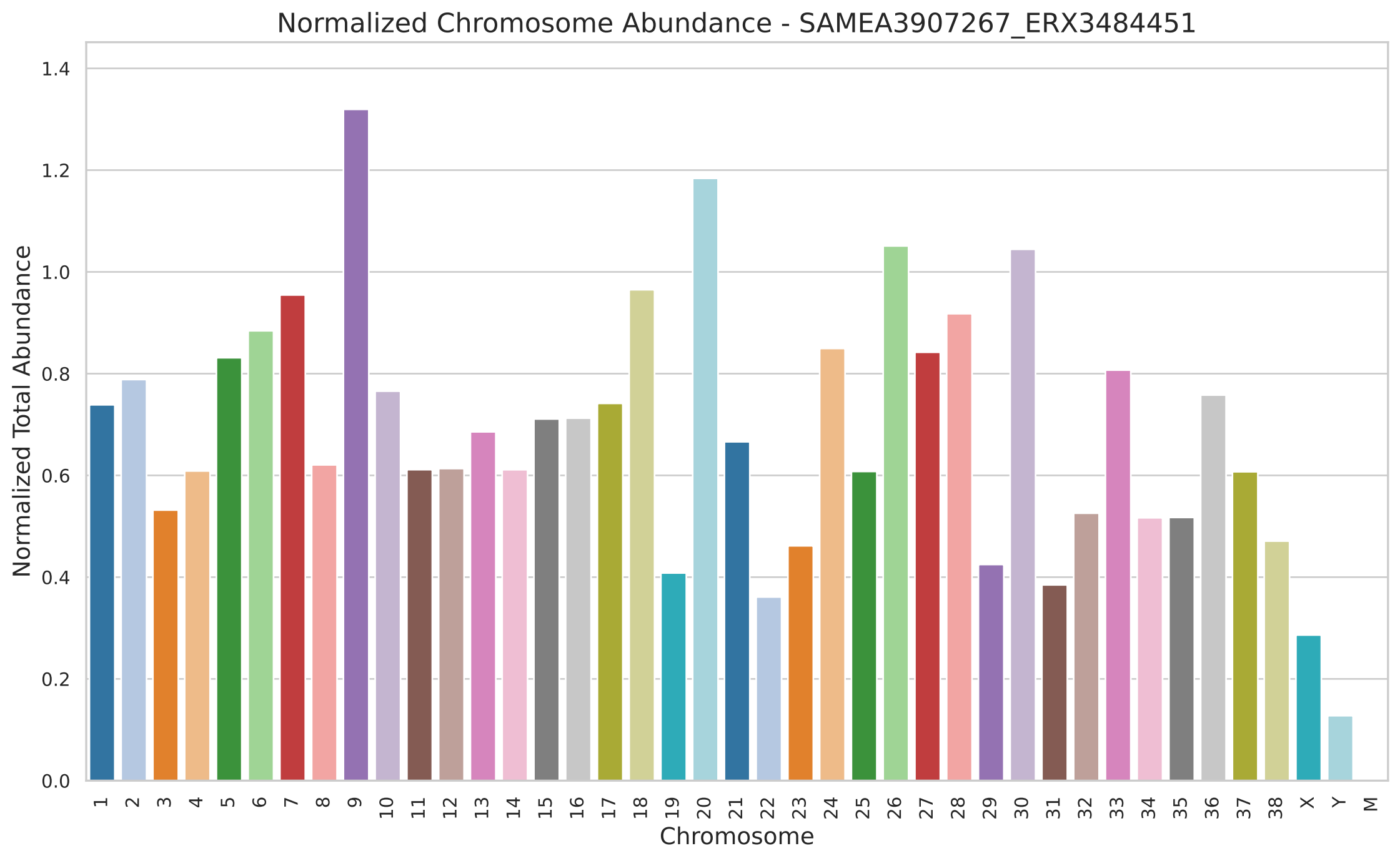

Normalized Chromosome Abundance - SAMEA3907403_ERX3484438
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

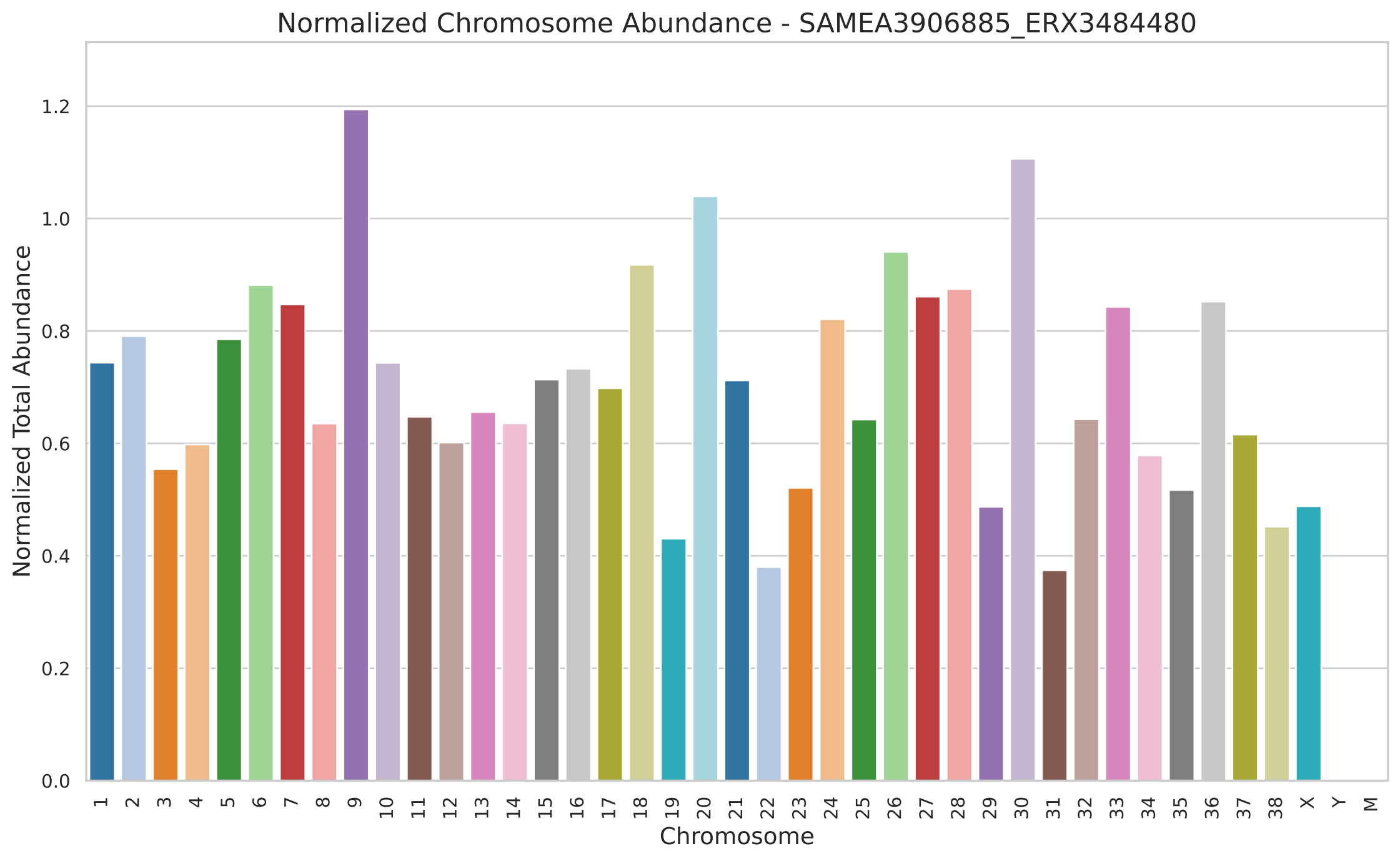

Normalized Chromosome Abundance - SAMEA3907018_ERX3484385
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

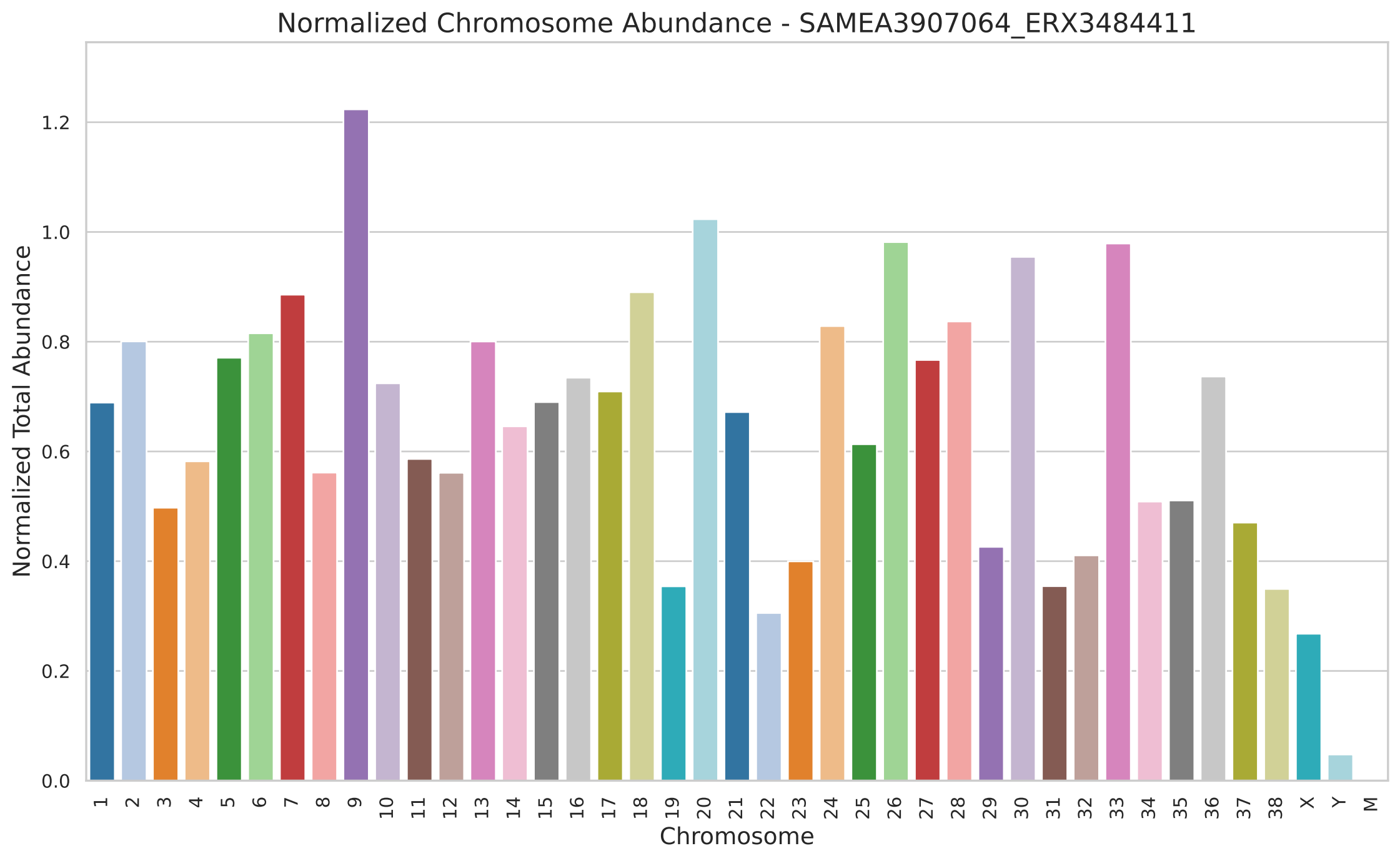

Normalized Chromosome Abundance - SAMEA3907056_ERX3484406
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

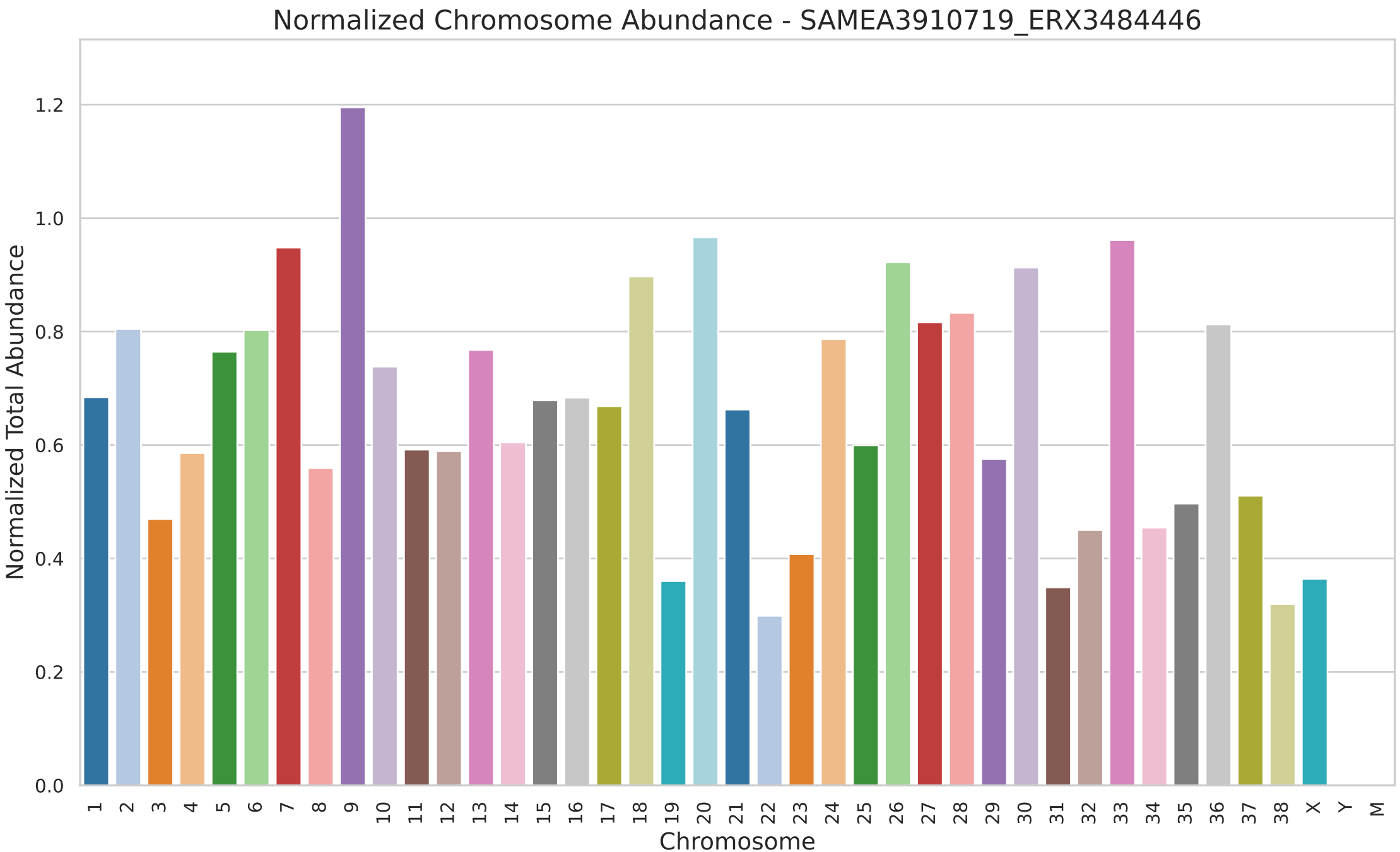

Normalized Chromosome Abundance - SAMEA3907259_ERX3484445
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

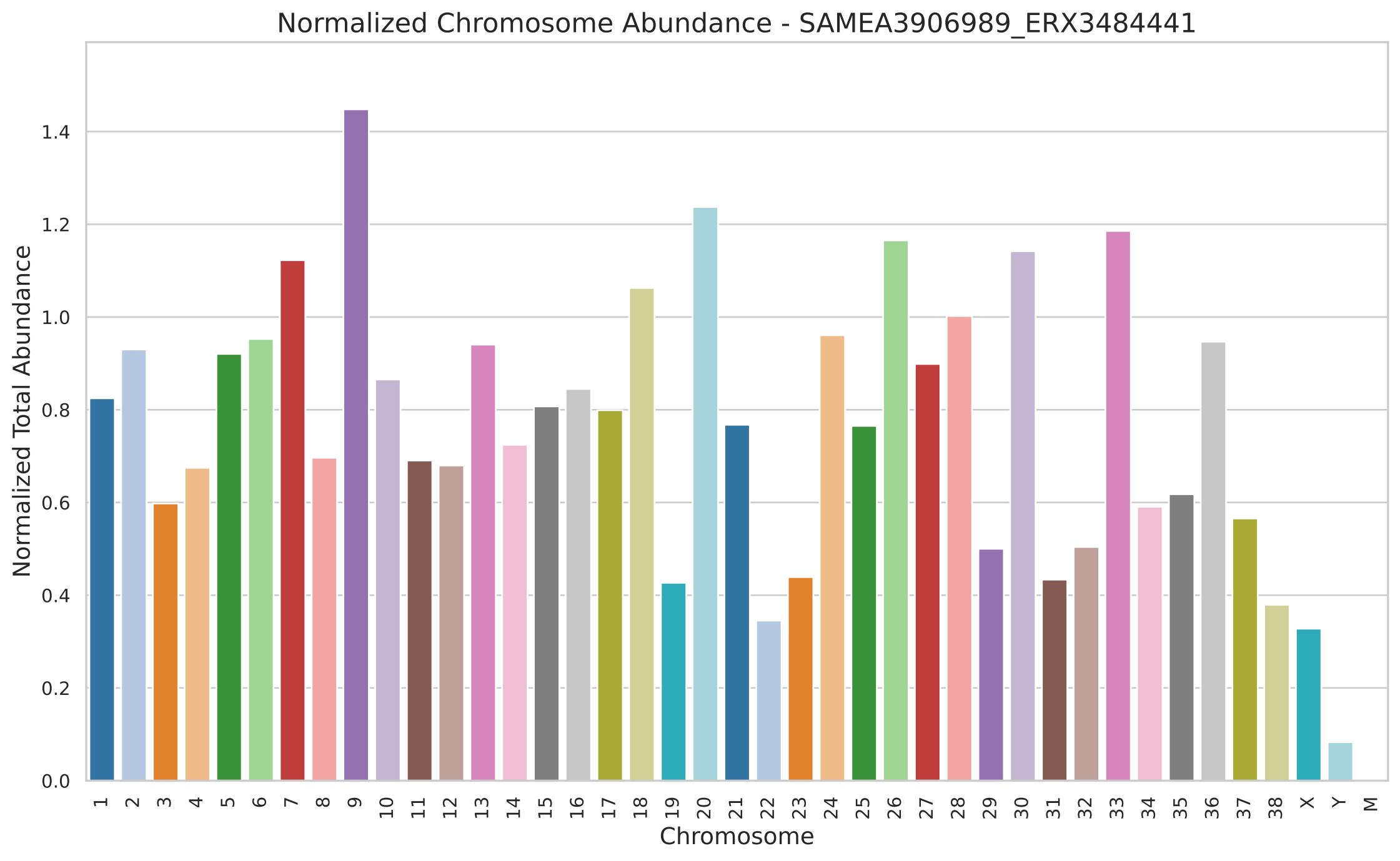

Normalized Chromosome Abundance - SAMEA3907269_ERX3484452
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

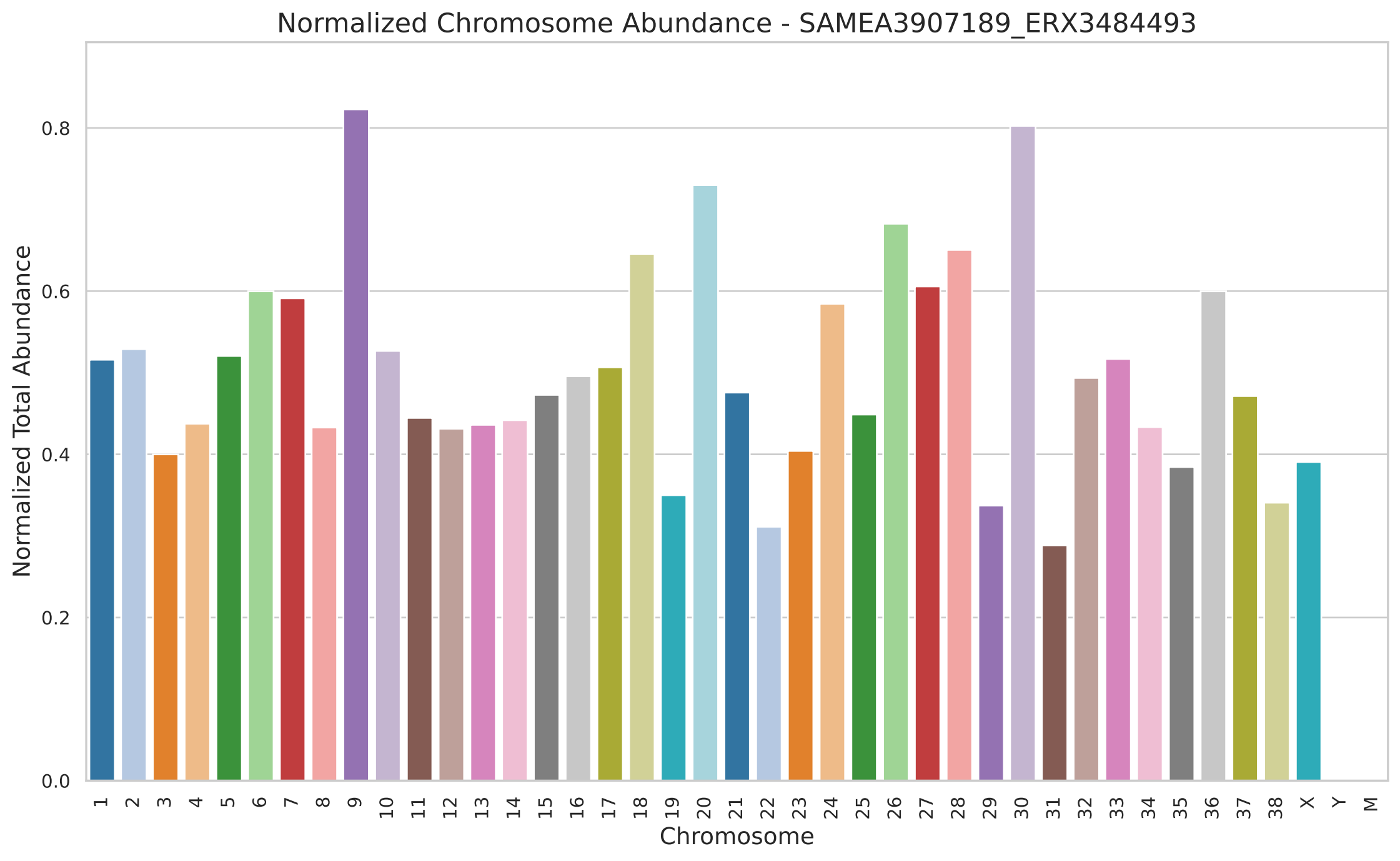

Normalized Chromosome Abundance - SAMEA3907267_ERX3484451
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

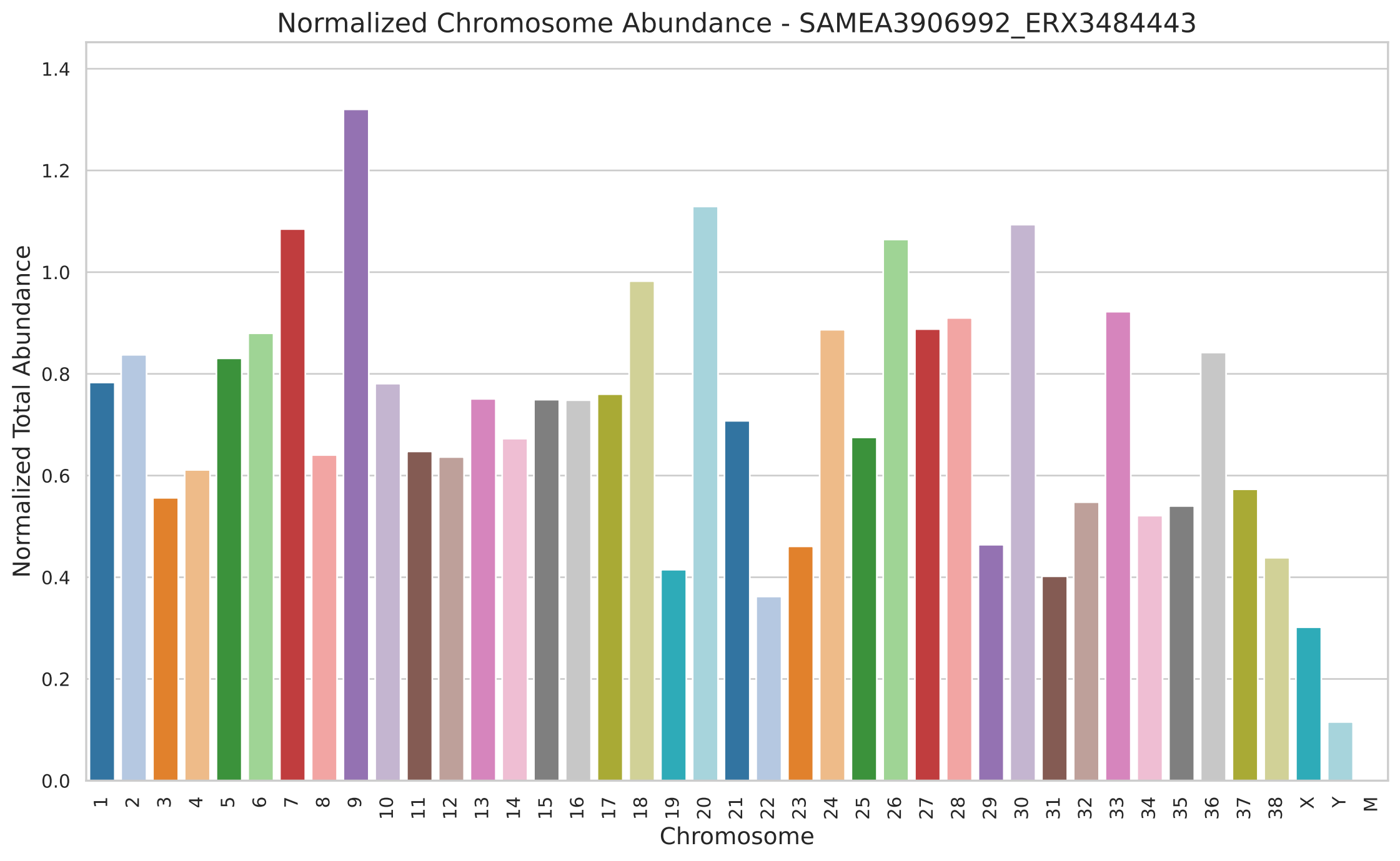

Normalized Chromosome Abundance - SAMEA3906885_ERX3484480
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

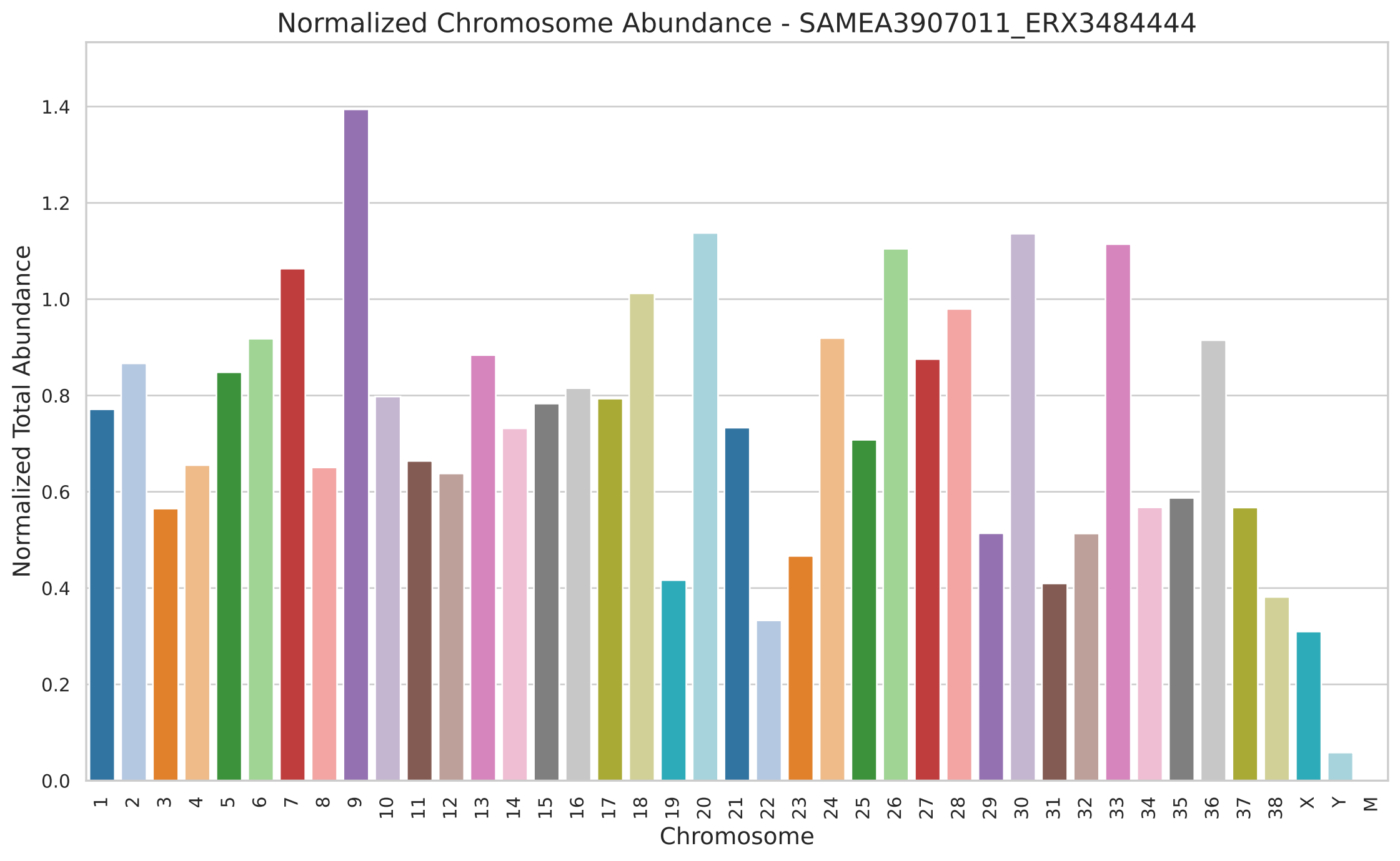

Normalized Chromosome Abundance - SAMEA3907064_ERX3484411
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

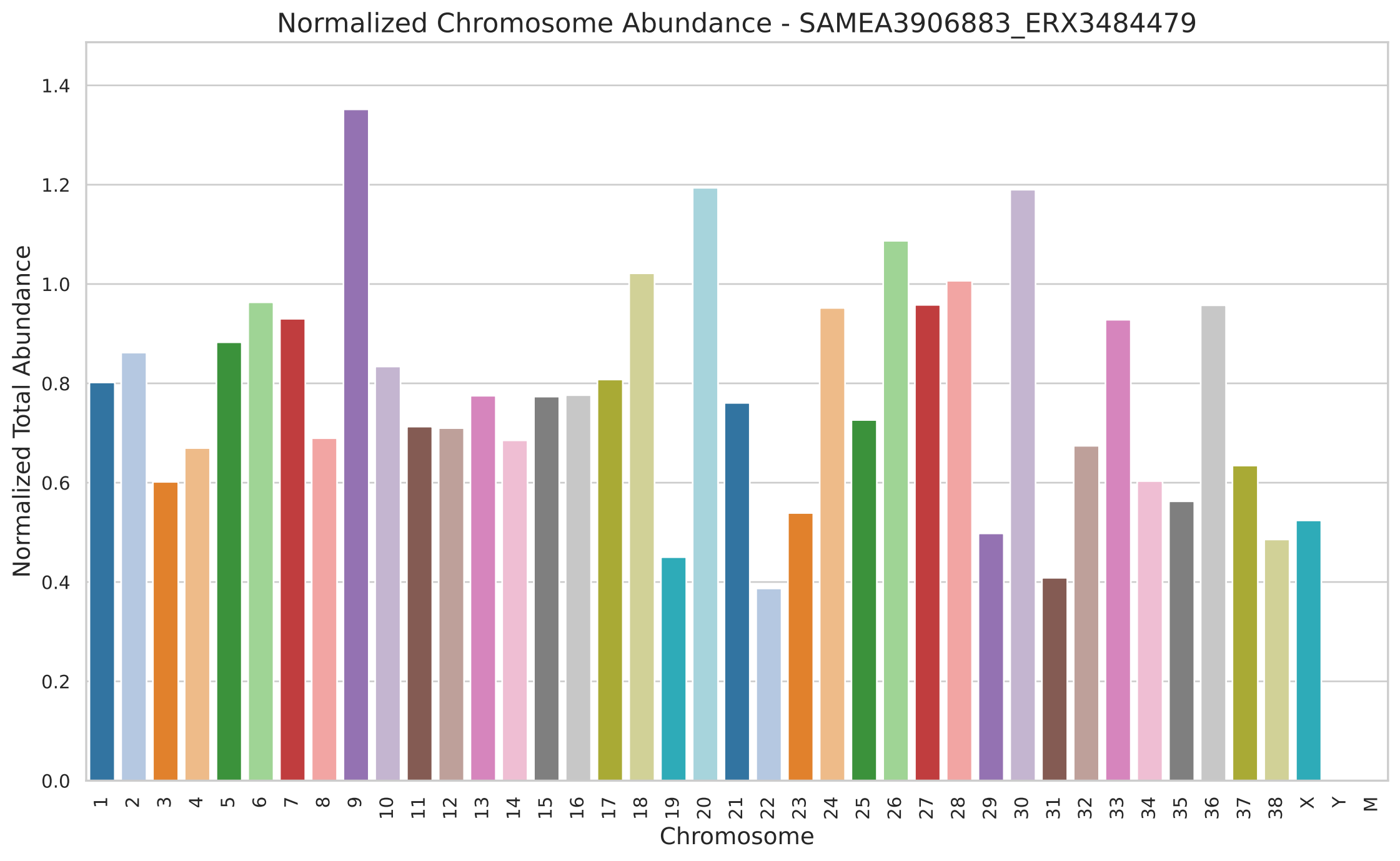

Normalized Chromosome Abundance - SAMEA3910719_ERX3484446
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

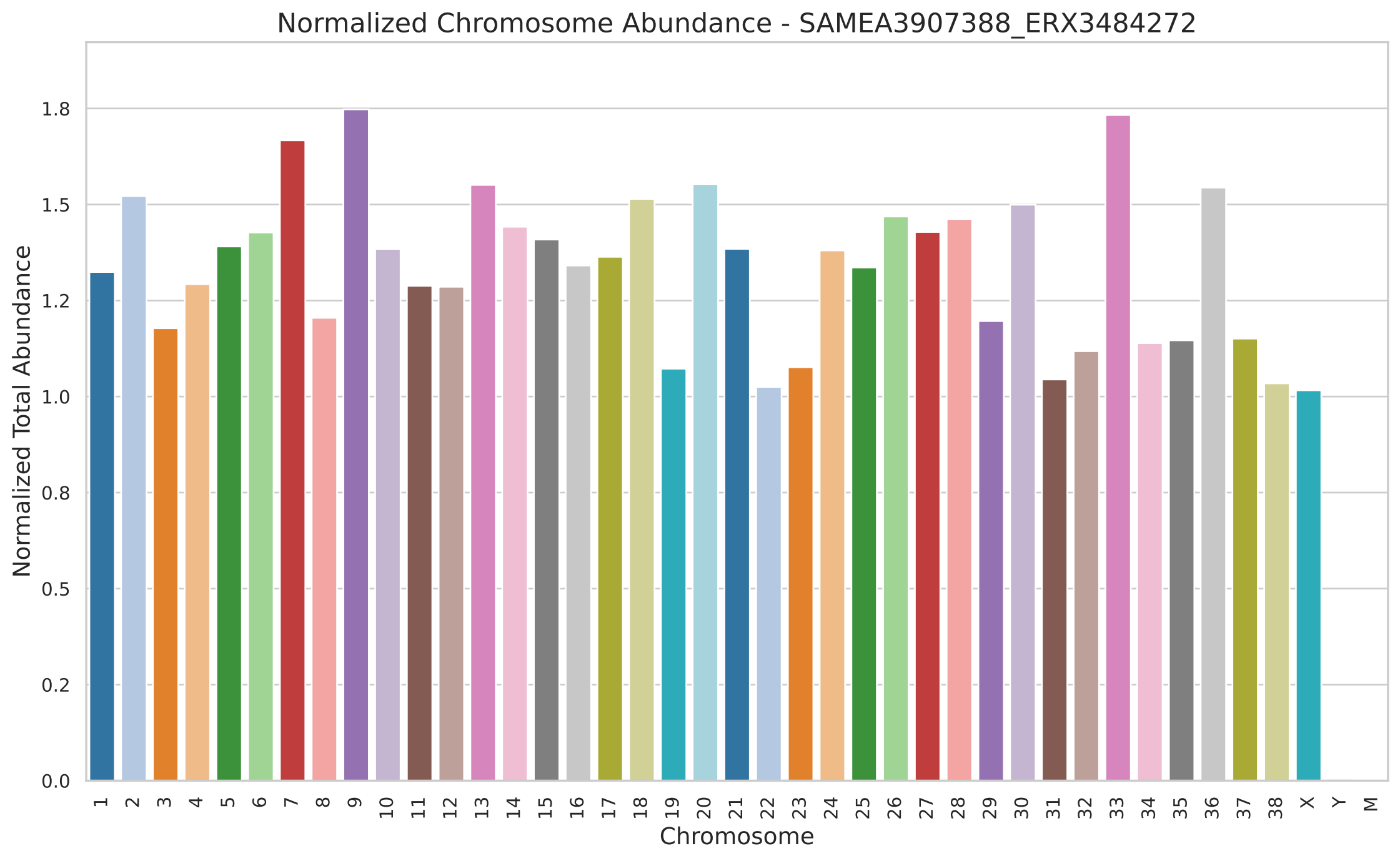

Normalized Chromosome Abundance - SAMEA3906989_ERX3484441
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

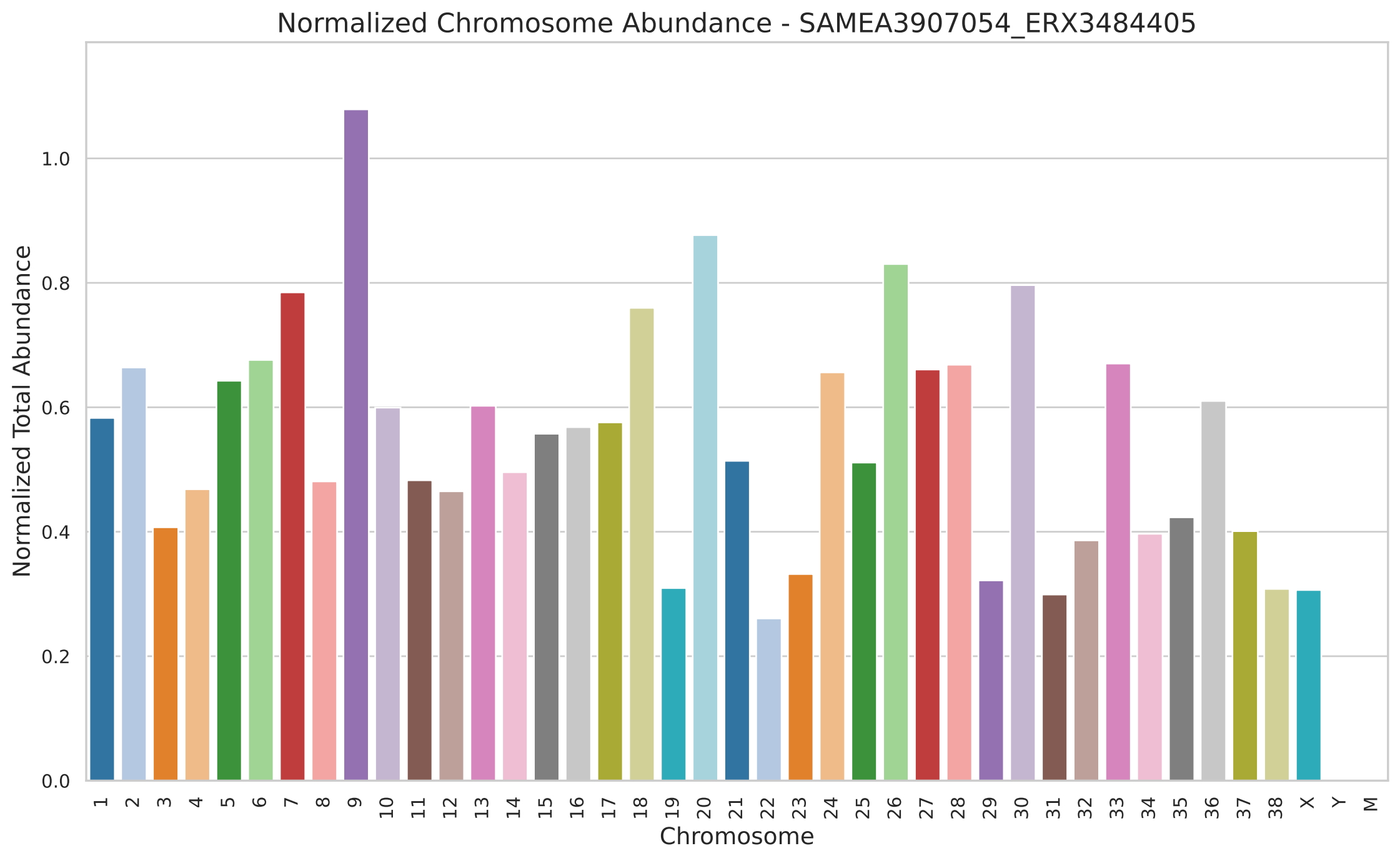

Normalized Chromosome Abundance - SAMEA3907189_ERX3484493
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

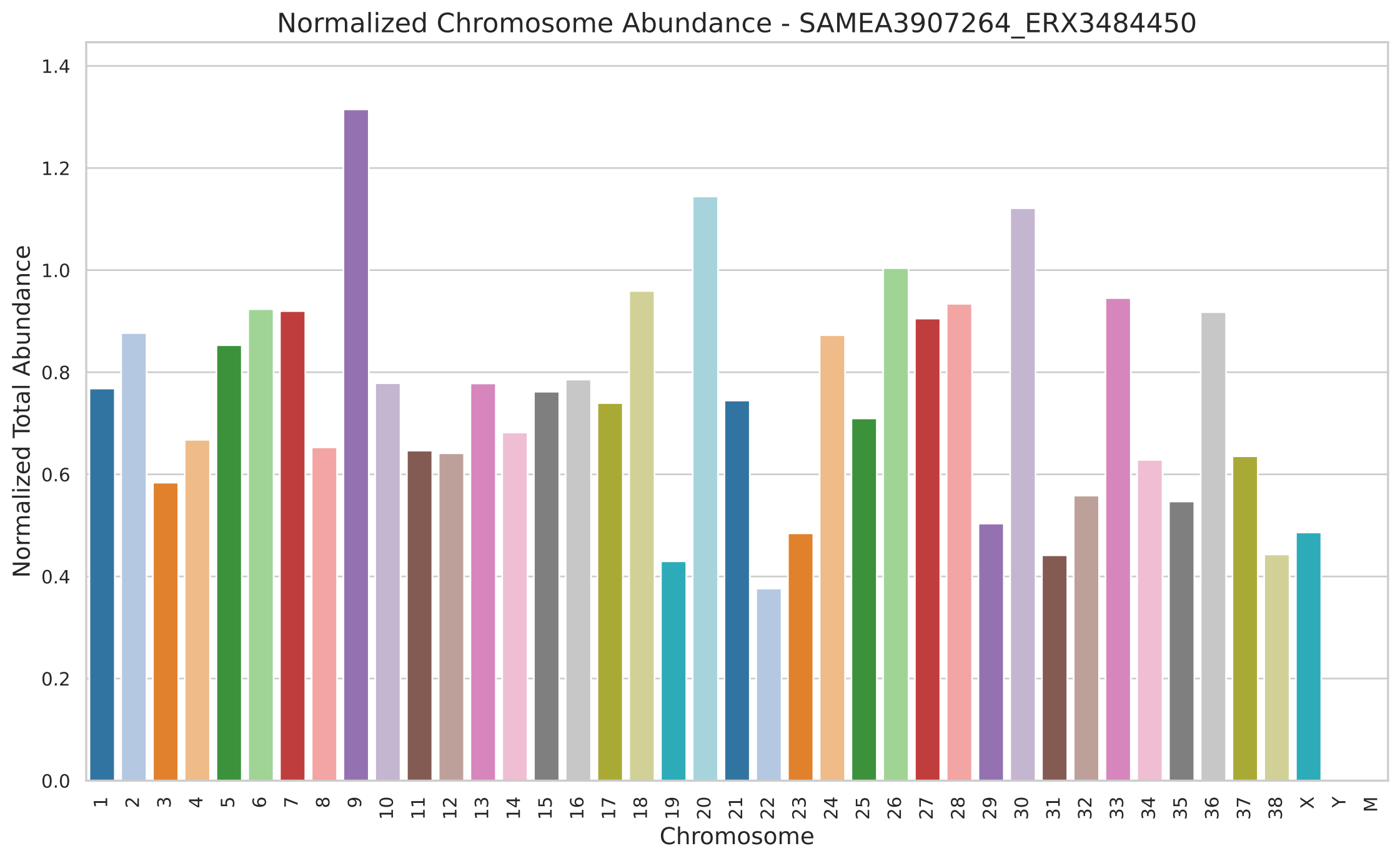

Normalized Chromosome Abundance - SAMEA3906992_ERX3484443
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

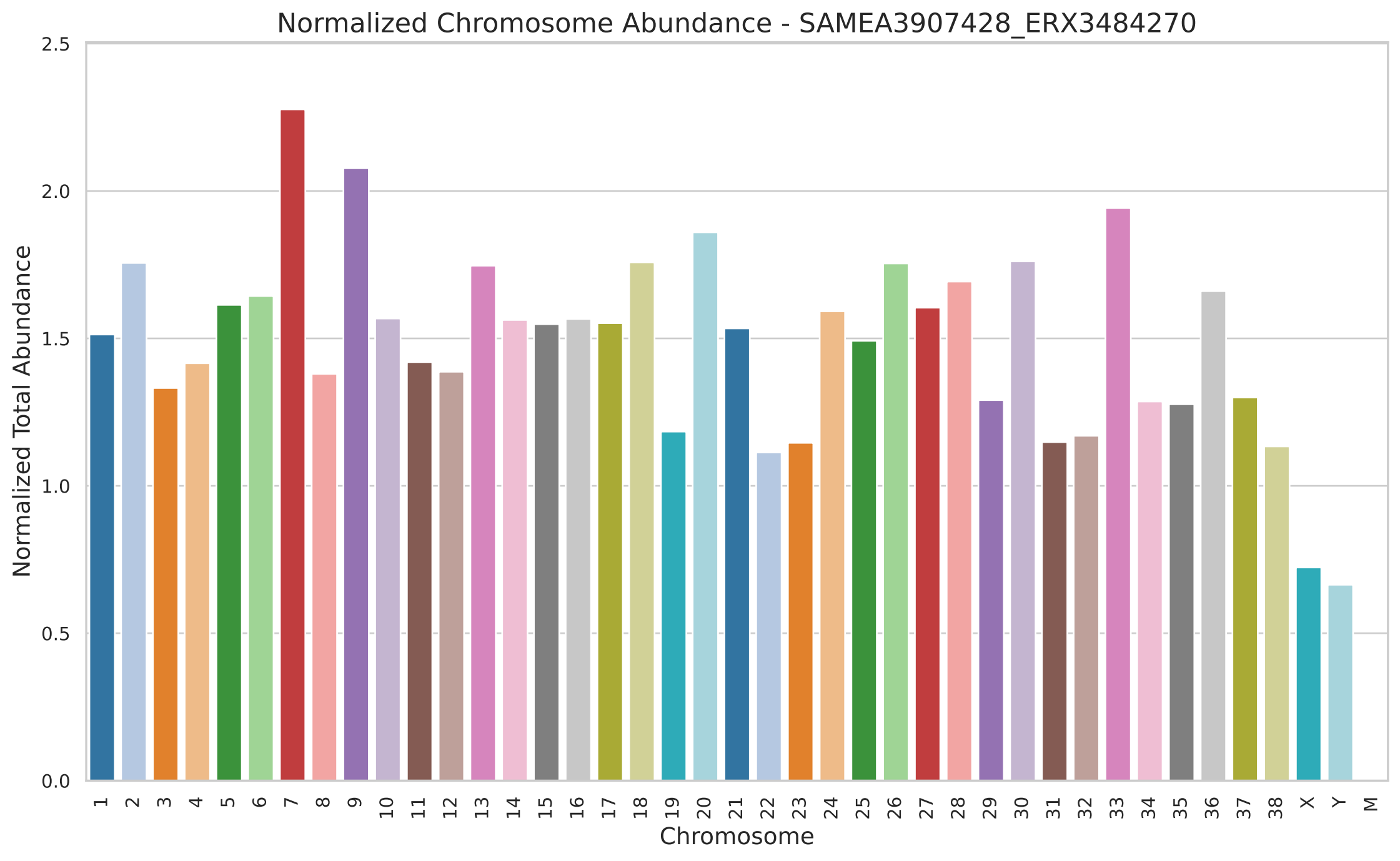

Normalized Chromosome Abundance - SAMEA3907011_ERX3484444
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

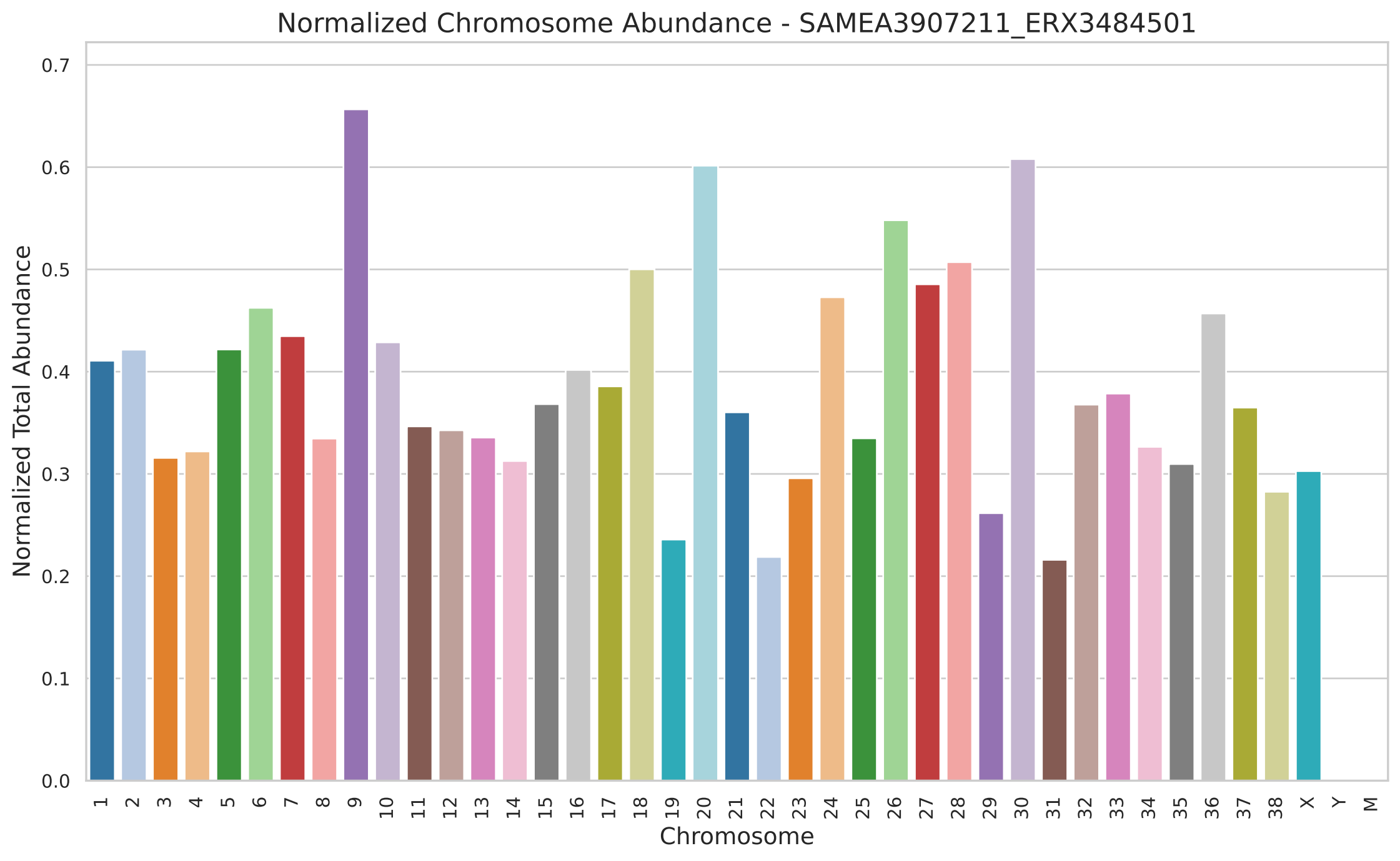

Normalized Chromosome Abundance - SAMEA3906883_ERX3484479
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

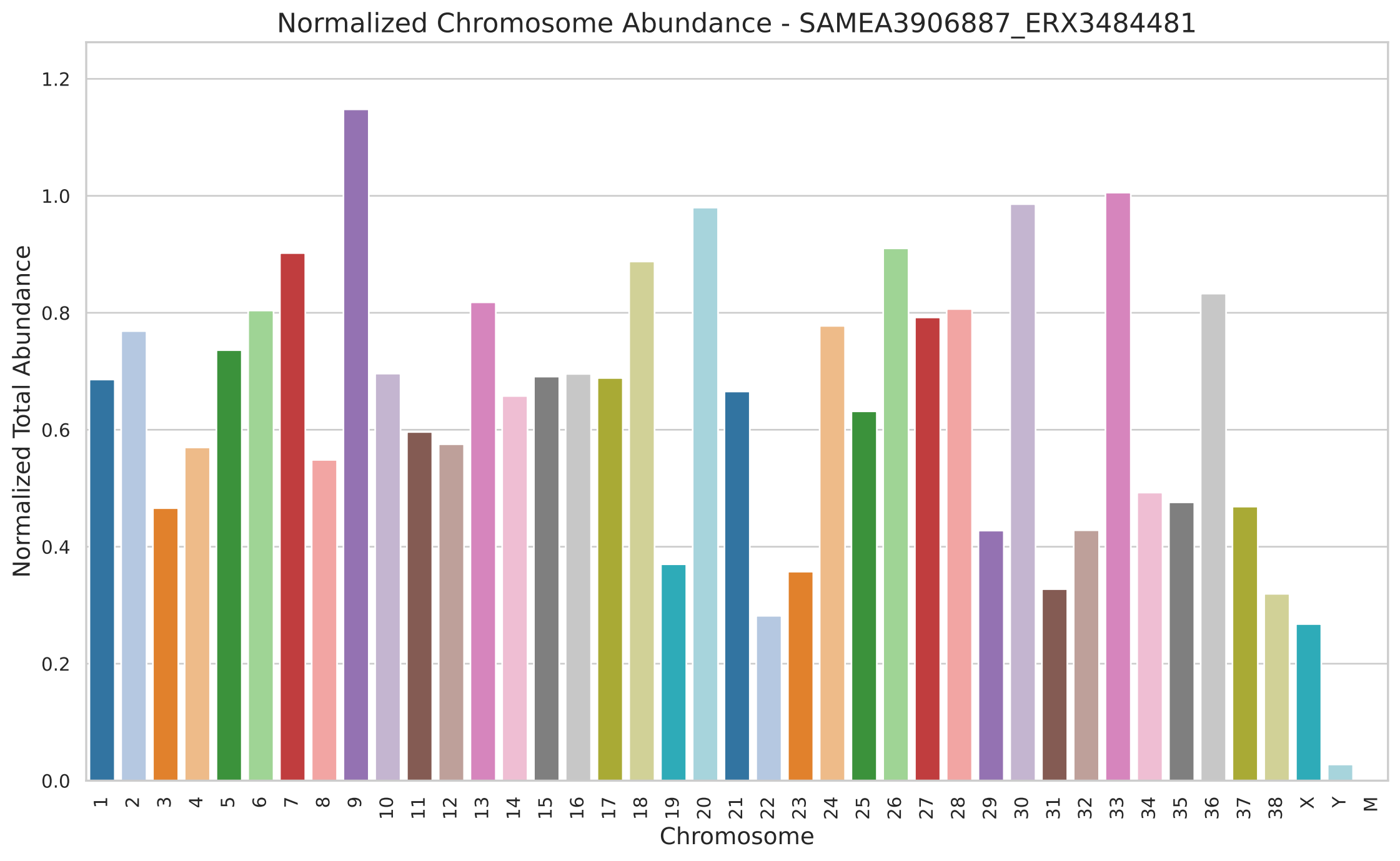

Normalized Chromosome Abundance - SAMEA3907388_ERX3484272
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

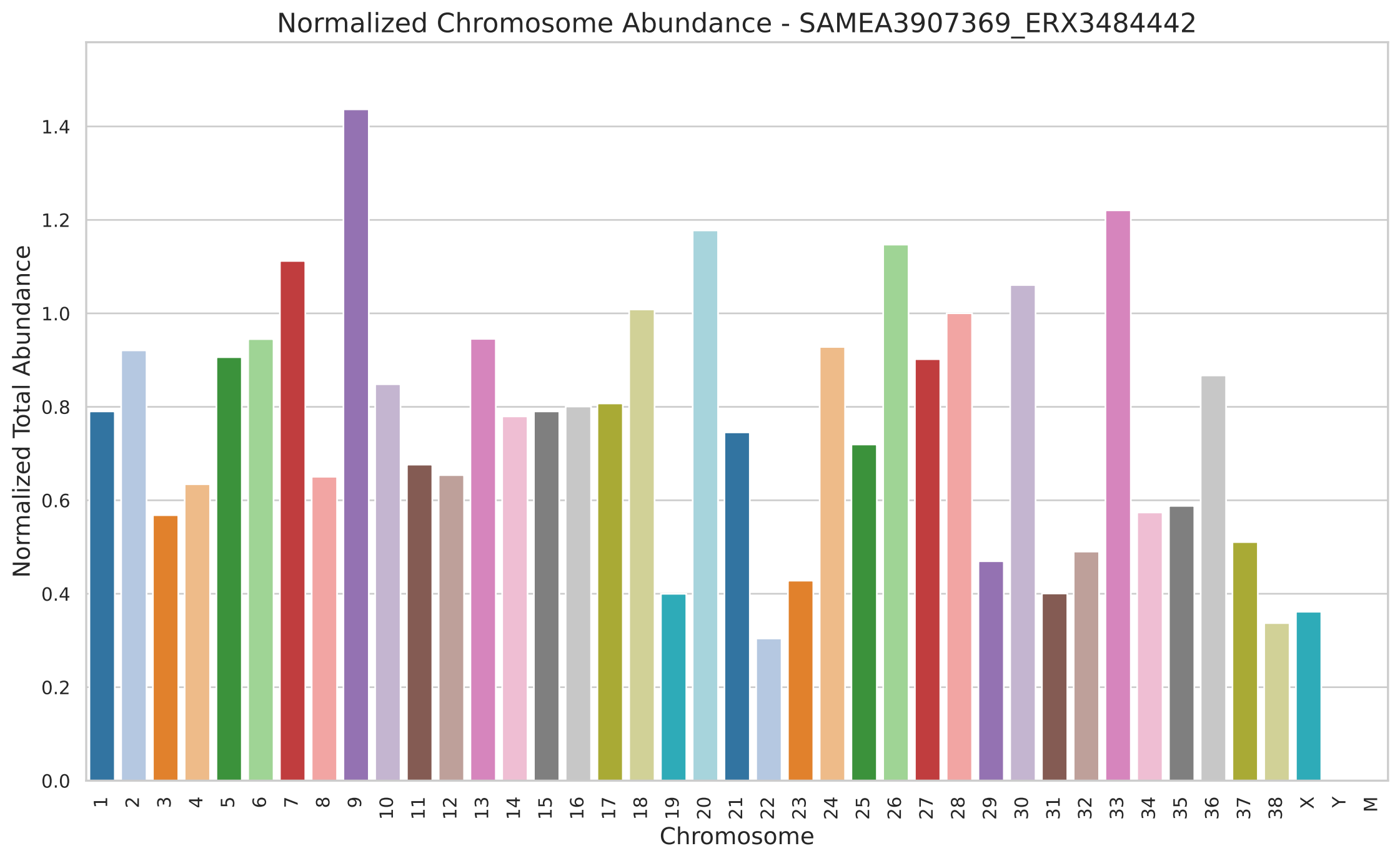

Normalized Chromosome Abundance - SAMEA3907054_ERX3484405
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

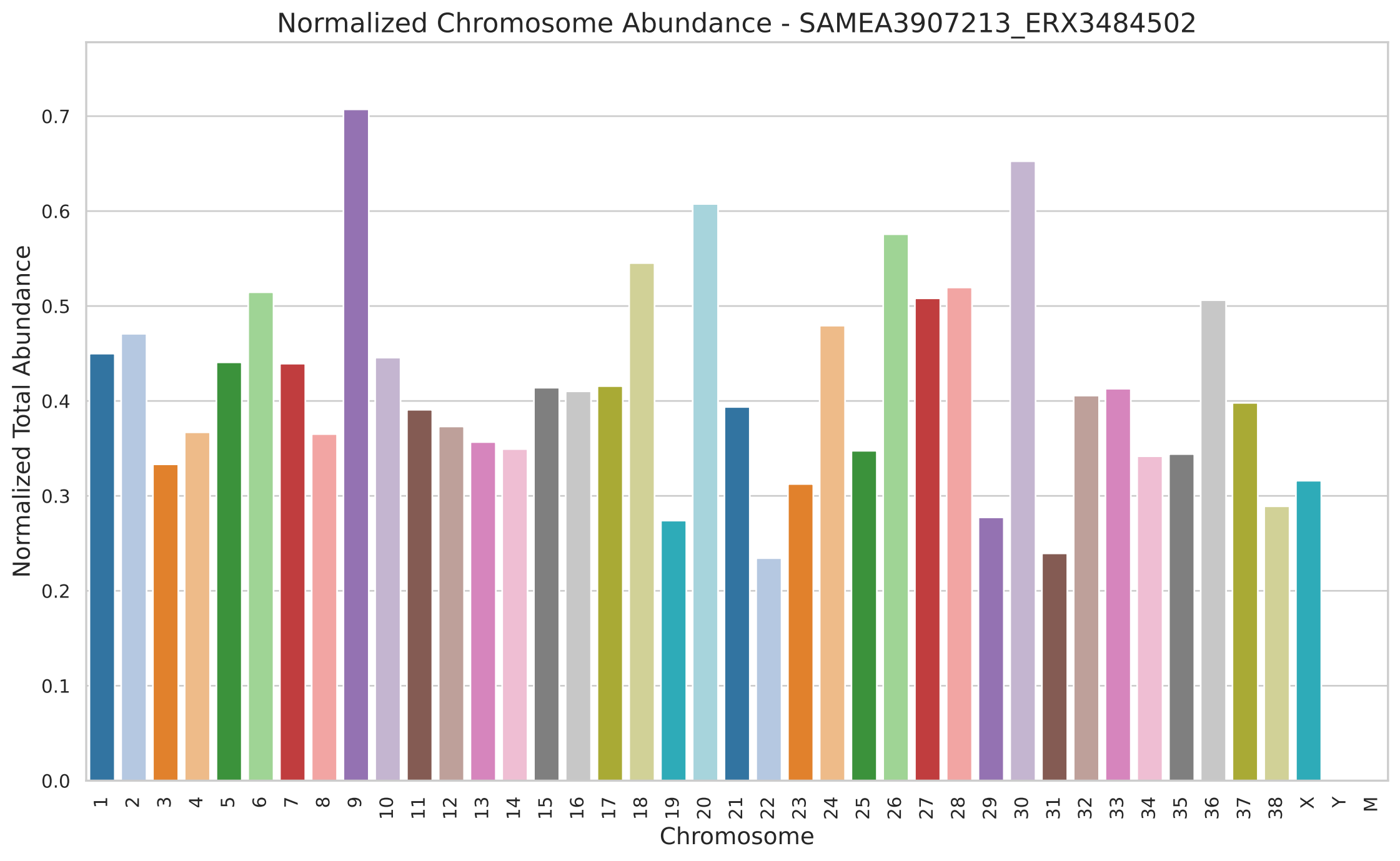

Normalized Chromosome Abundance - SAMEA3907264_ERX3484450
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

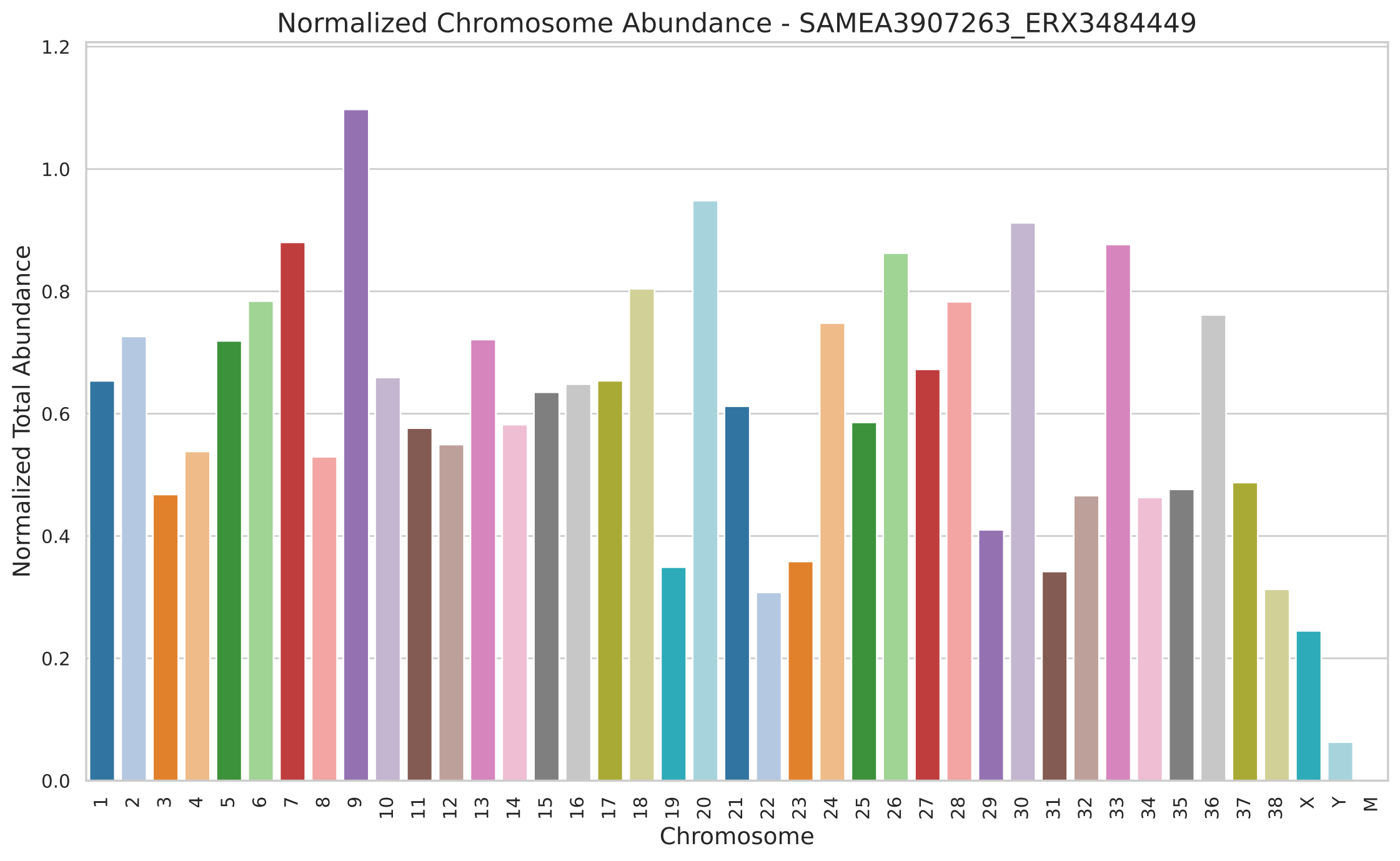

Normalized Chromosome Abundance - SAMEA3907428_ERX3484270
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

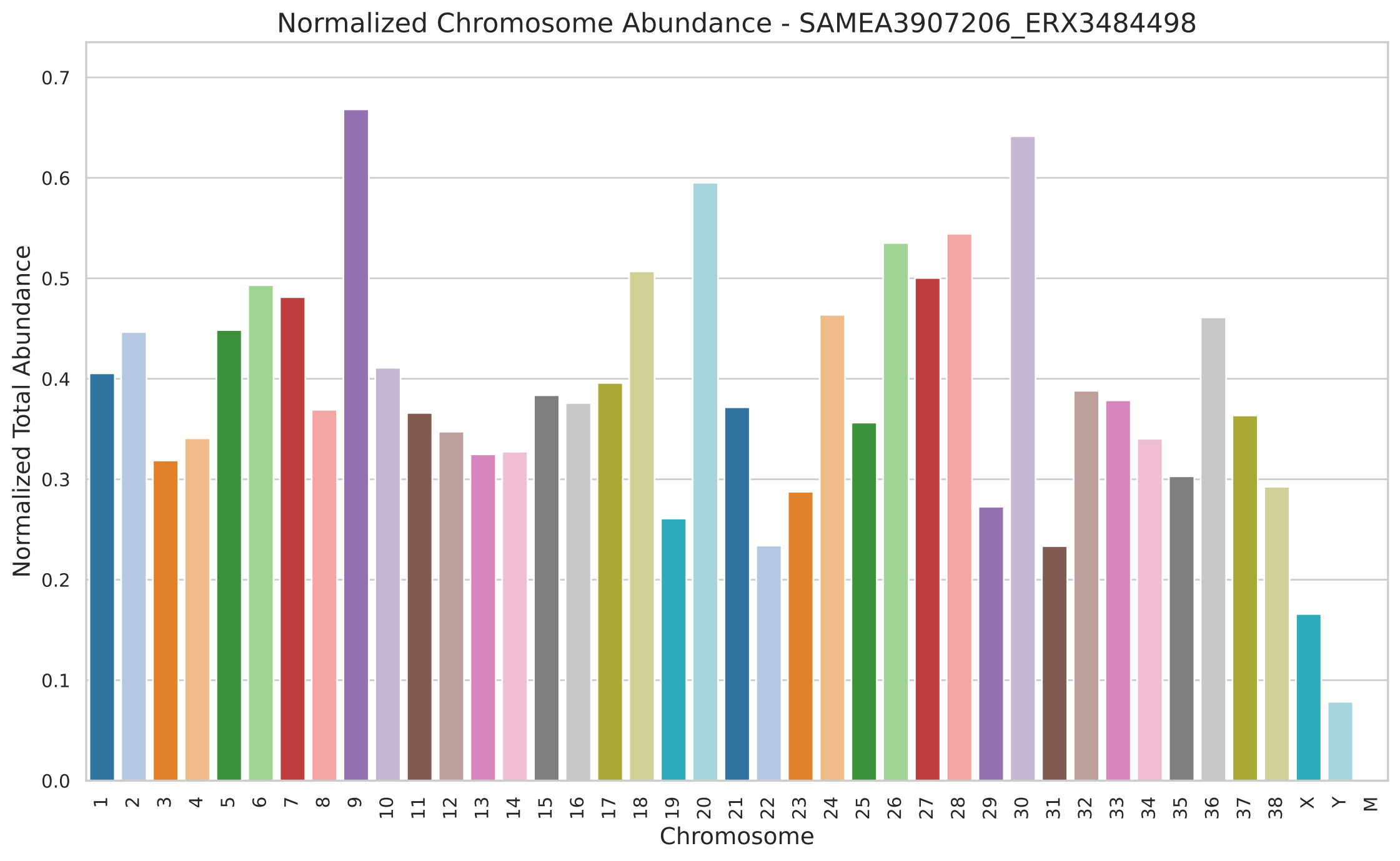

Normalized Chromosome Abundance - SAMEA3907211_ERX3484501
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

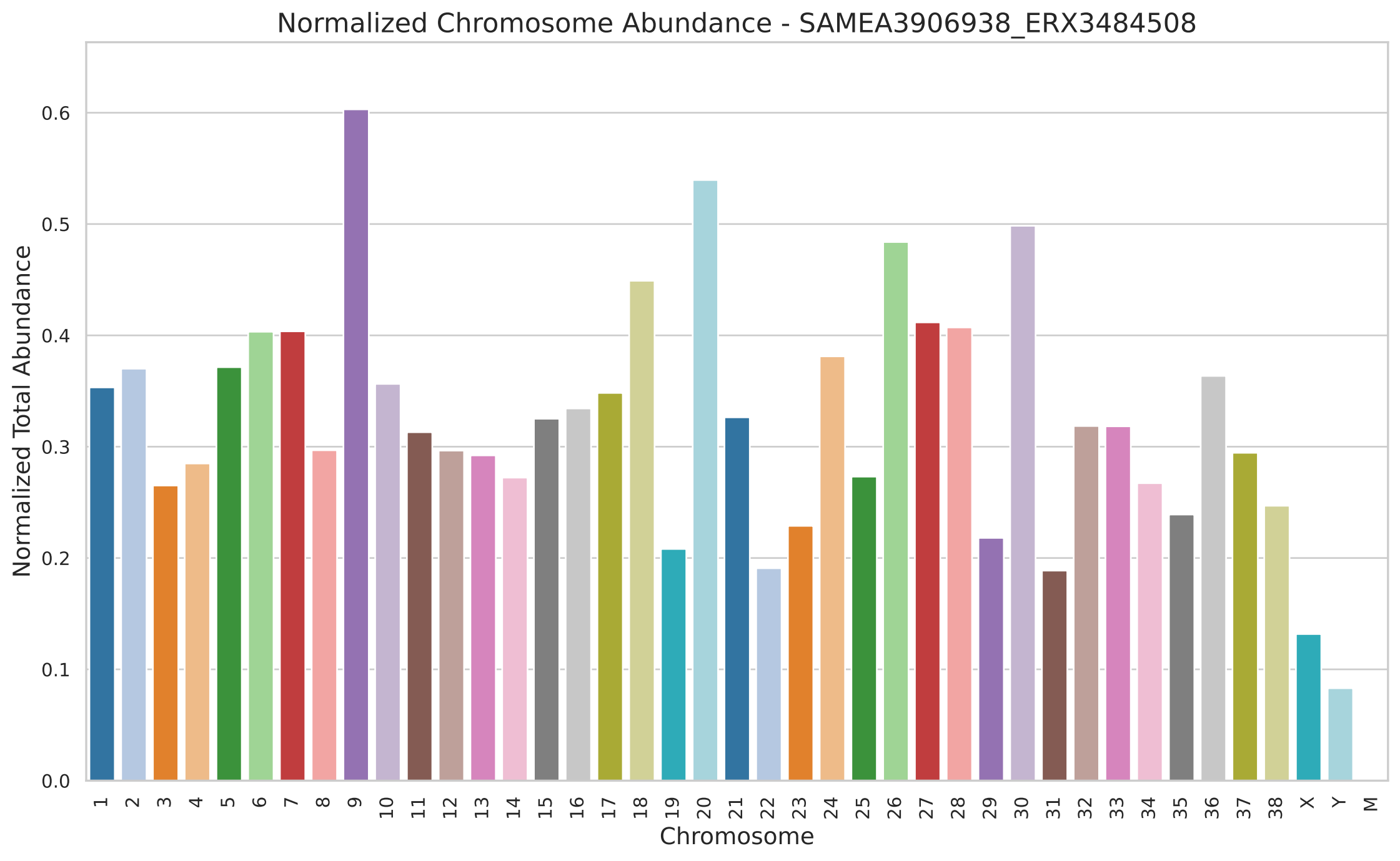

Normalized Chromosome Abundance - SAMEA3906887_ERX3484481
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

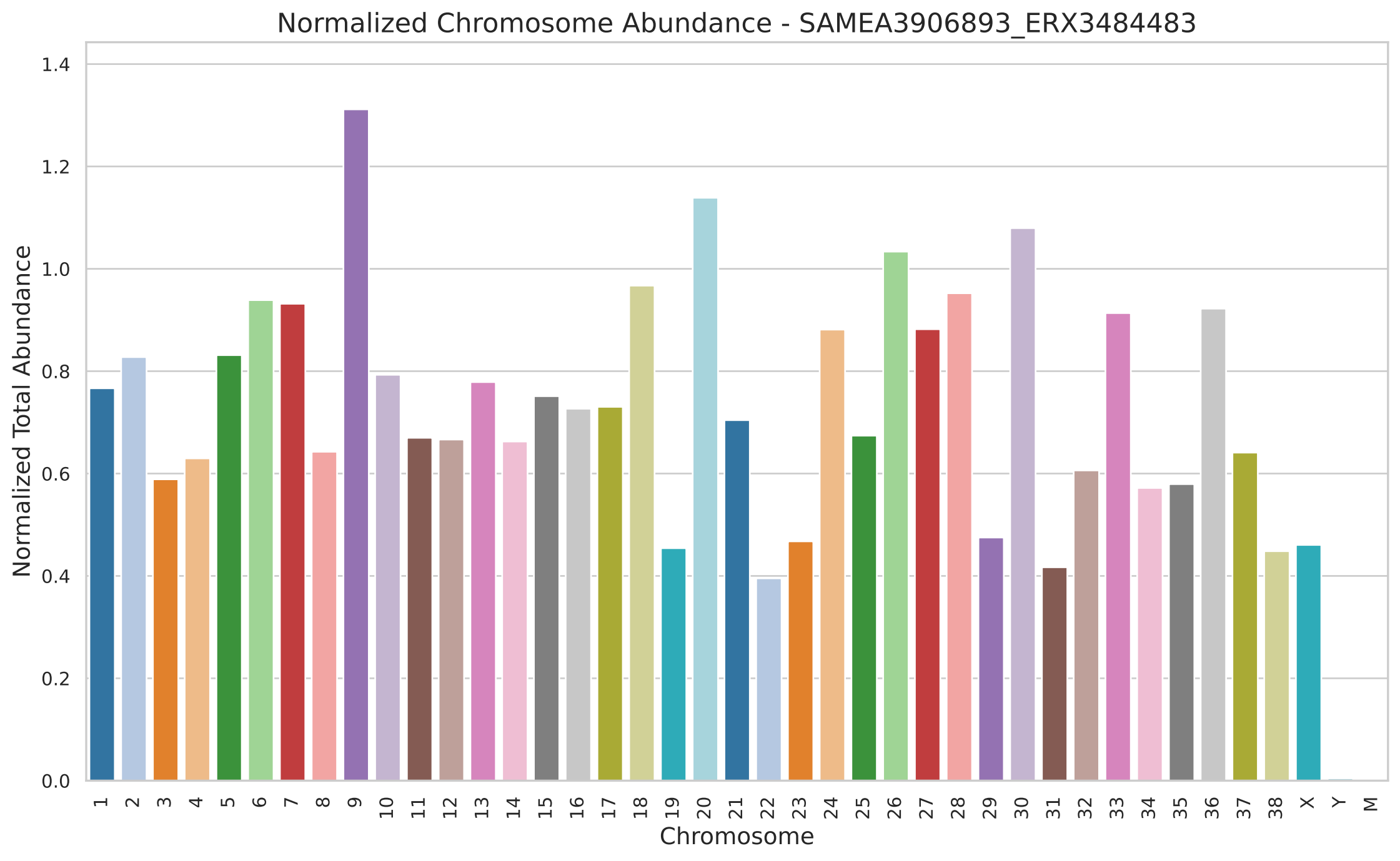

Normalized Chromosome Abundance - SAMEA3907369_ERX3484442
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

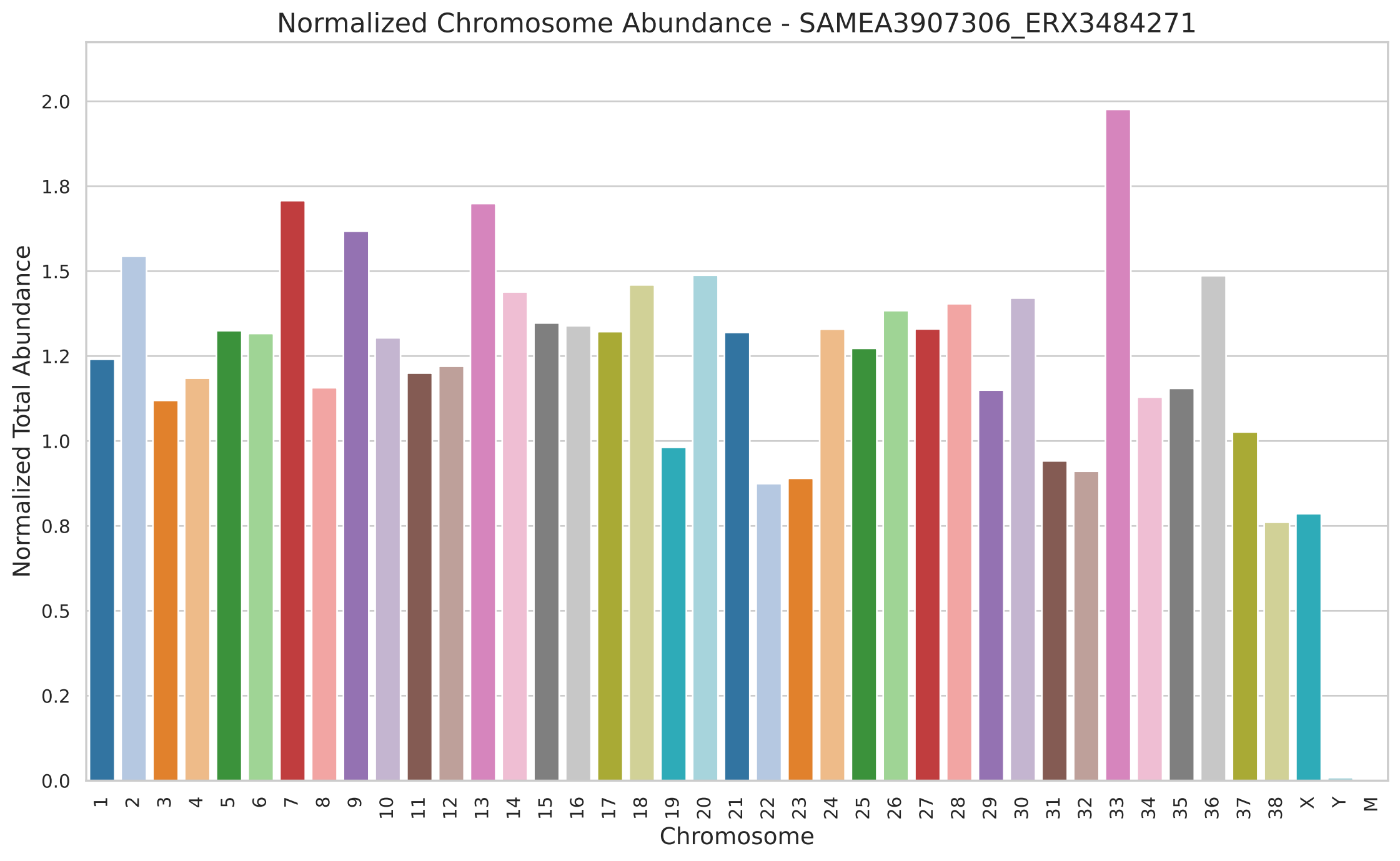

Normalized Chromosome Abundance - SAMEA3907213_ERX3484502
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

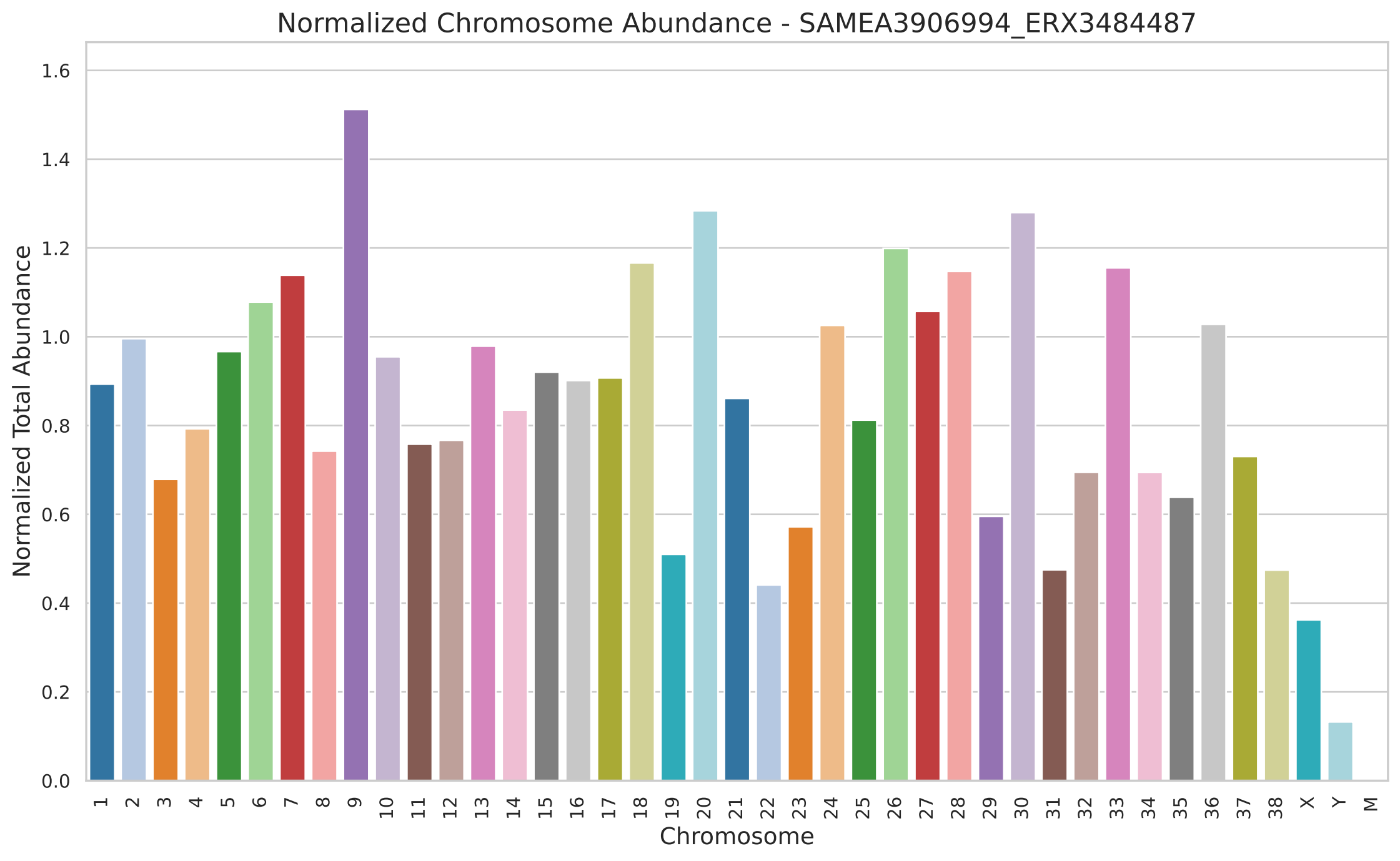

Normalized Chromosome Abundance - SAMEA3907263_ERX3484449
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

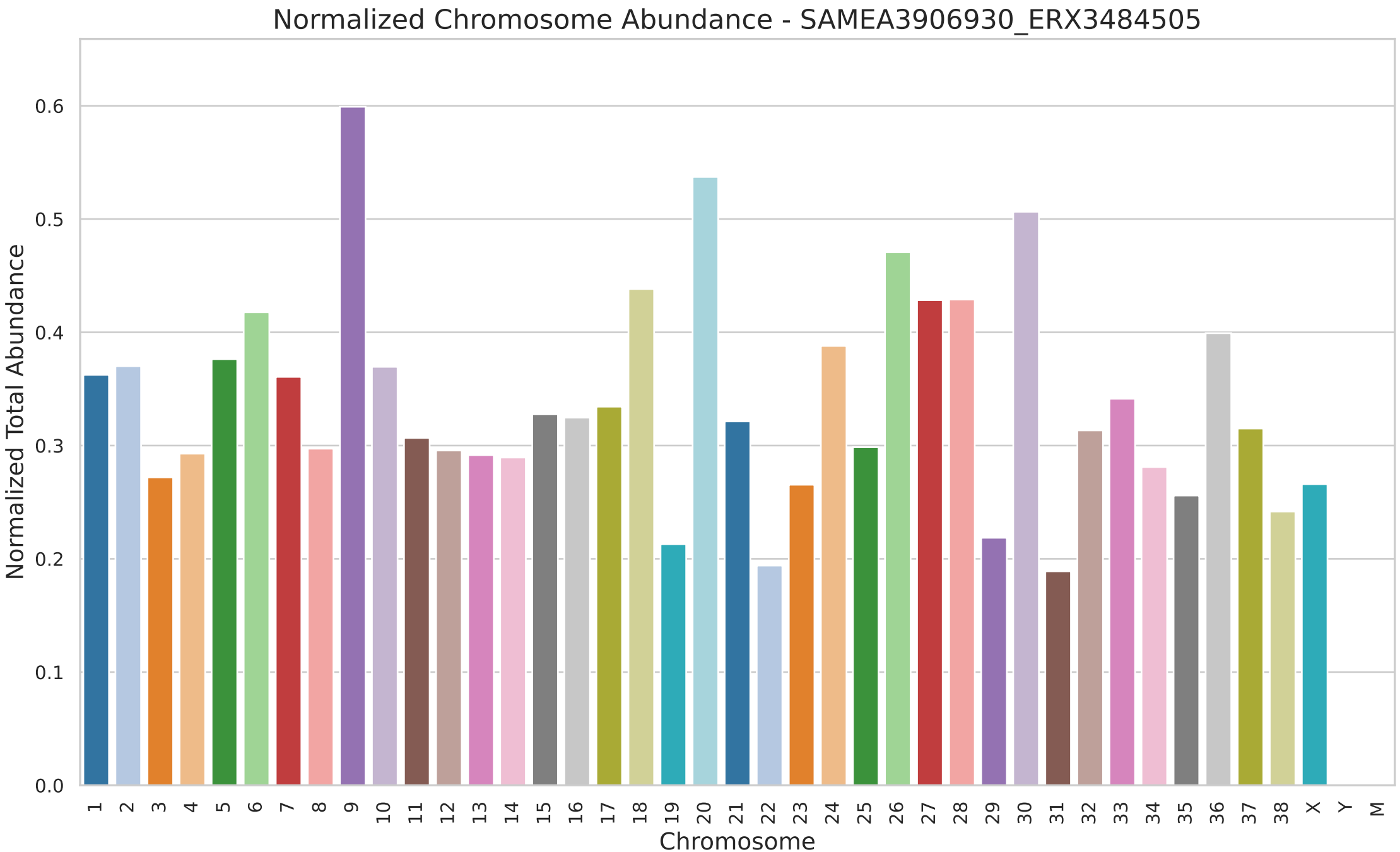

Normalized Chromosome Abundance - SAMEA3907206_ERX3484498
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

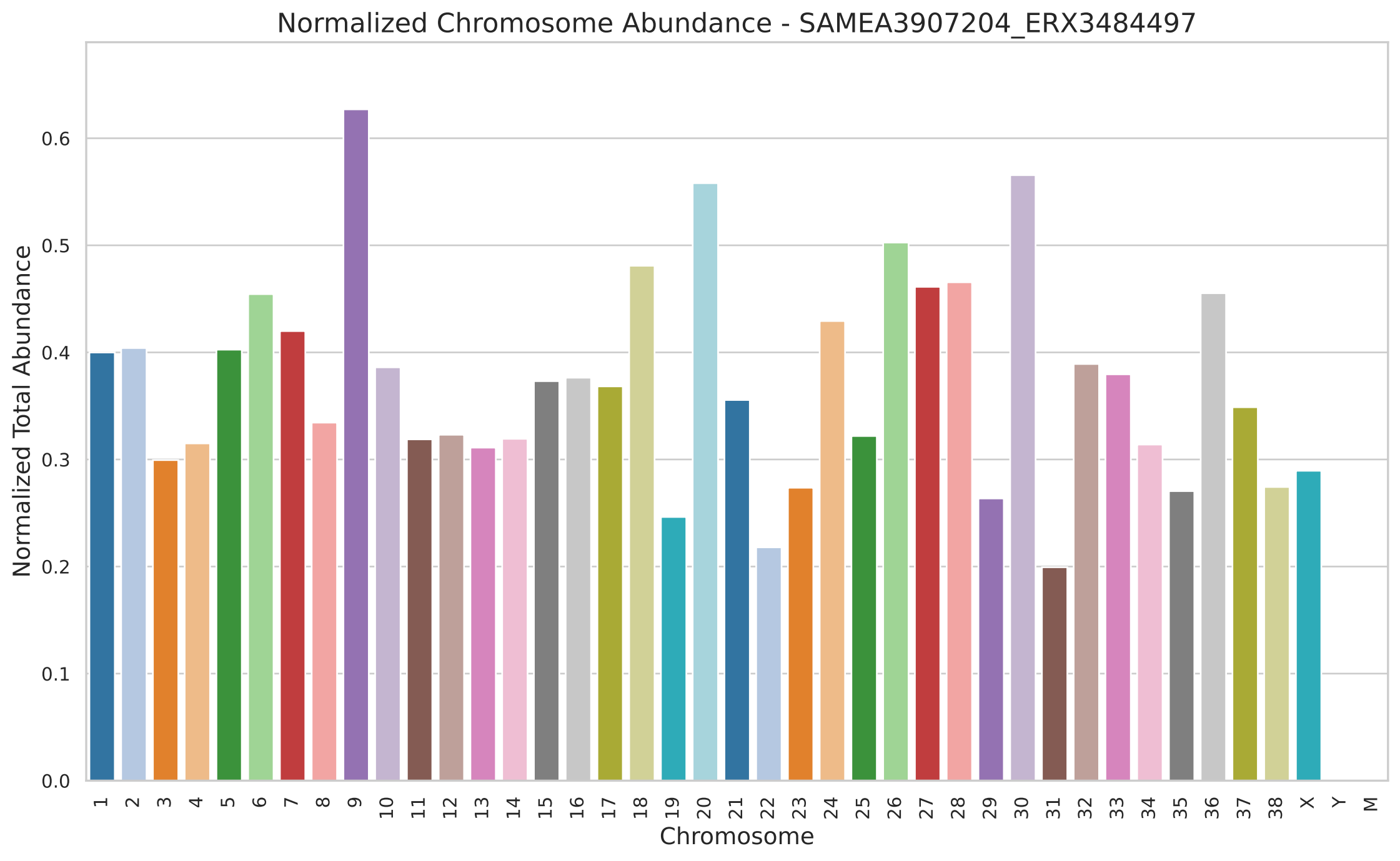

Normalized Chromosome Abundance - SAMEA3906938_ERX3484508
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

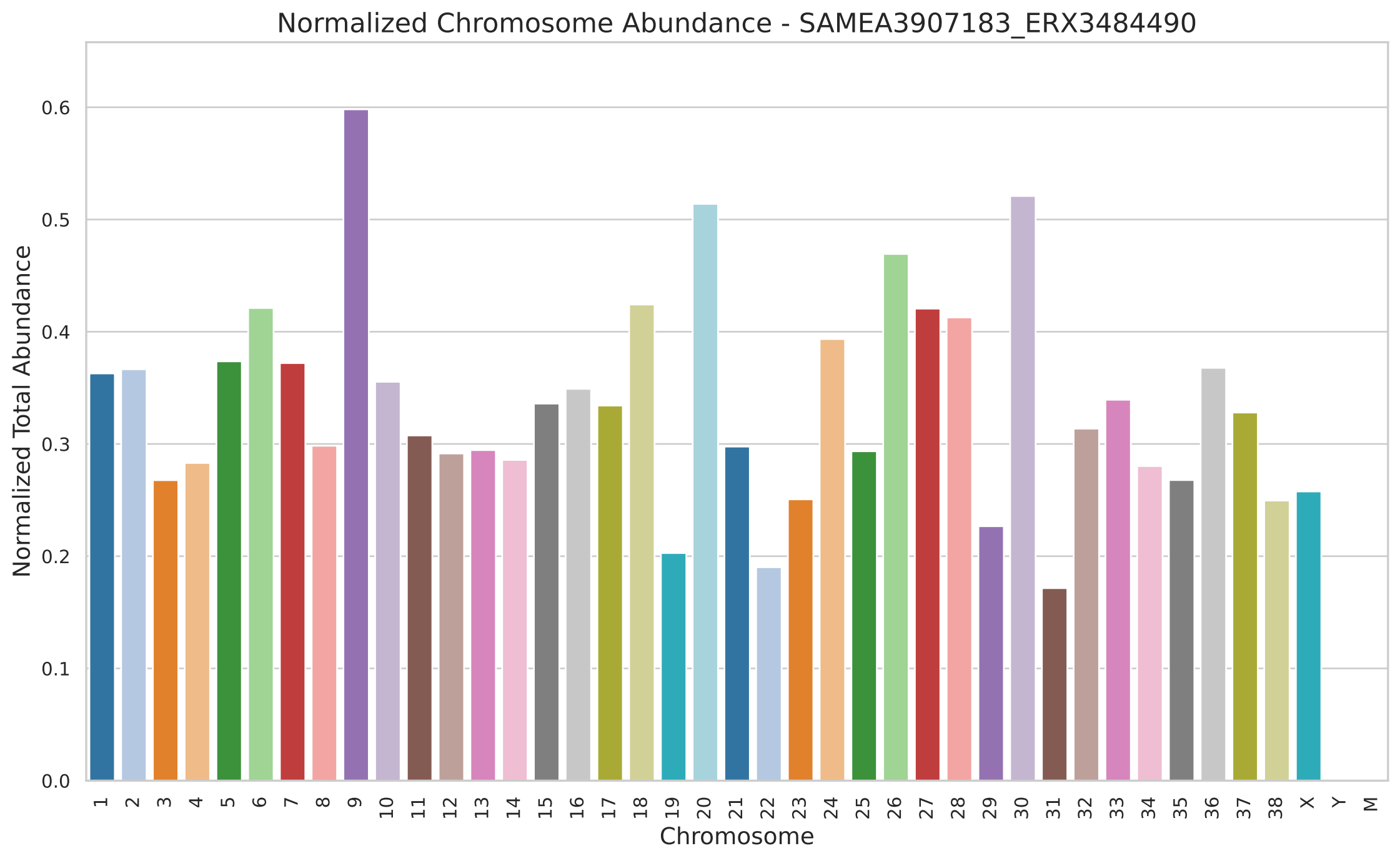

Normalized Chromosome Abundance - SAMEA3906893_ERX3484483
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

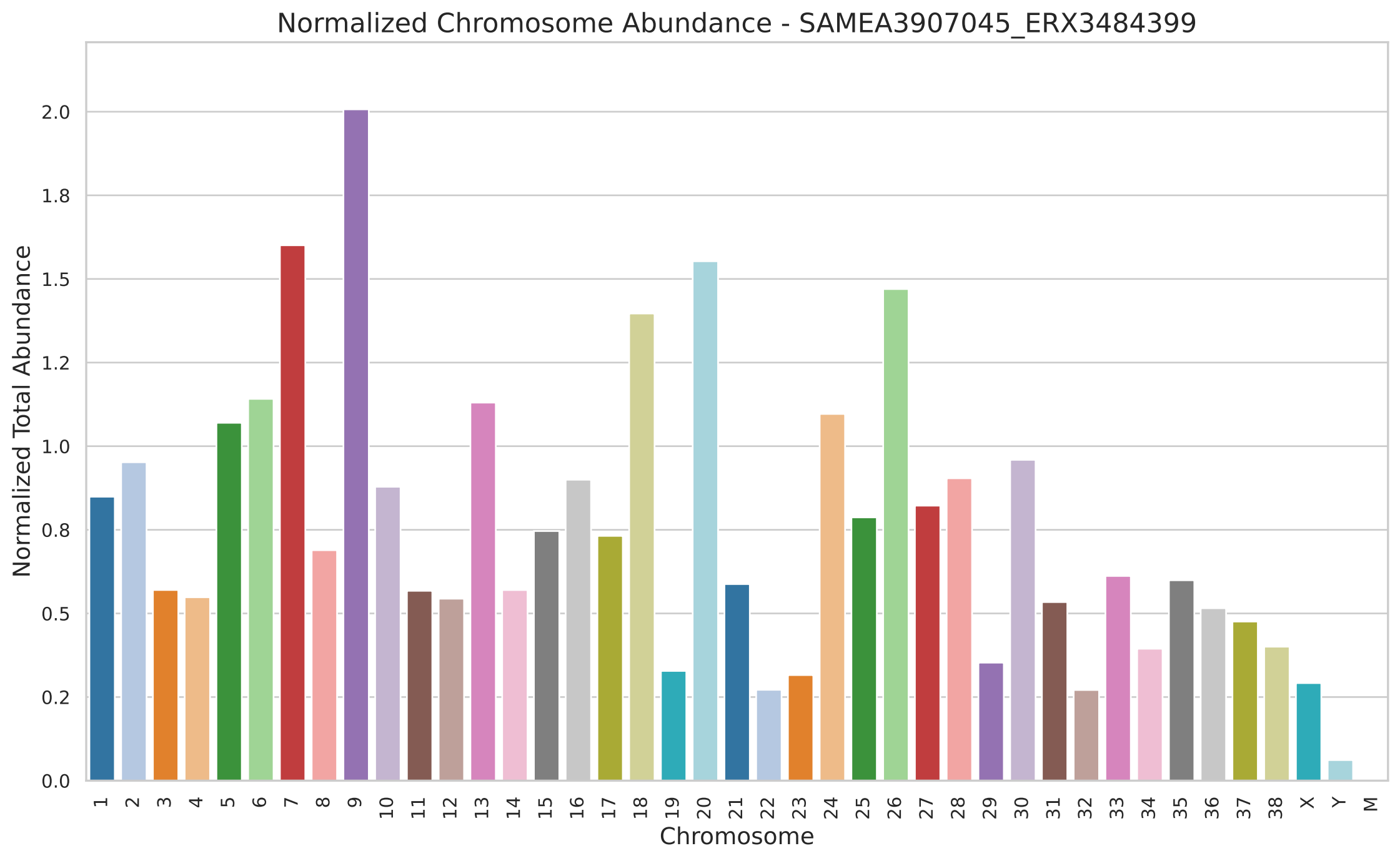

Normalized Chromosome Abundance - SAMEA3907306_ERX3484271
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

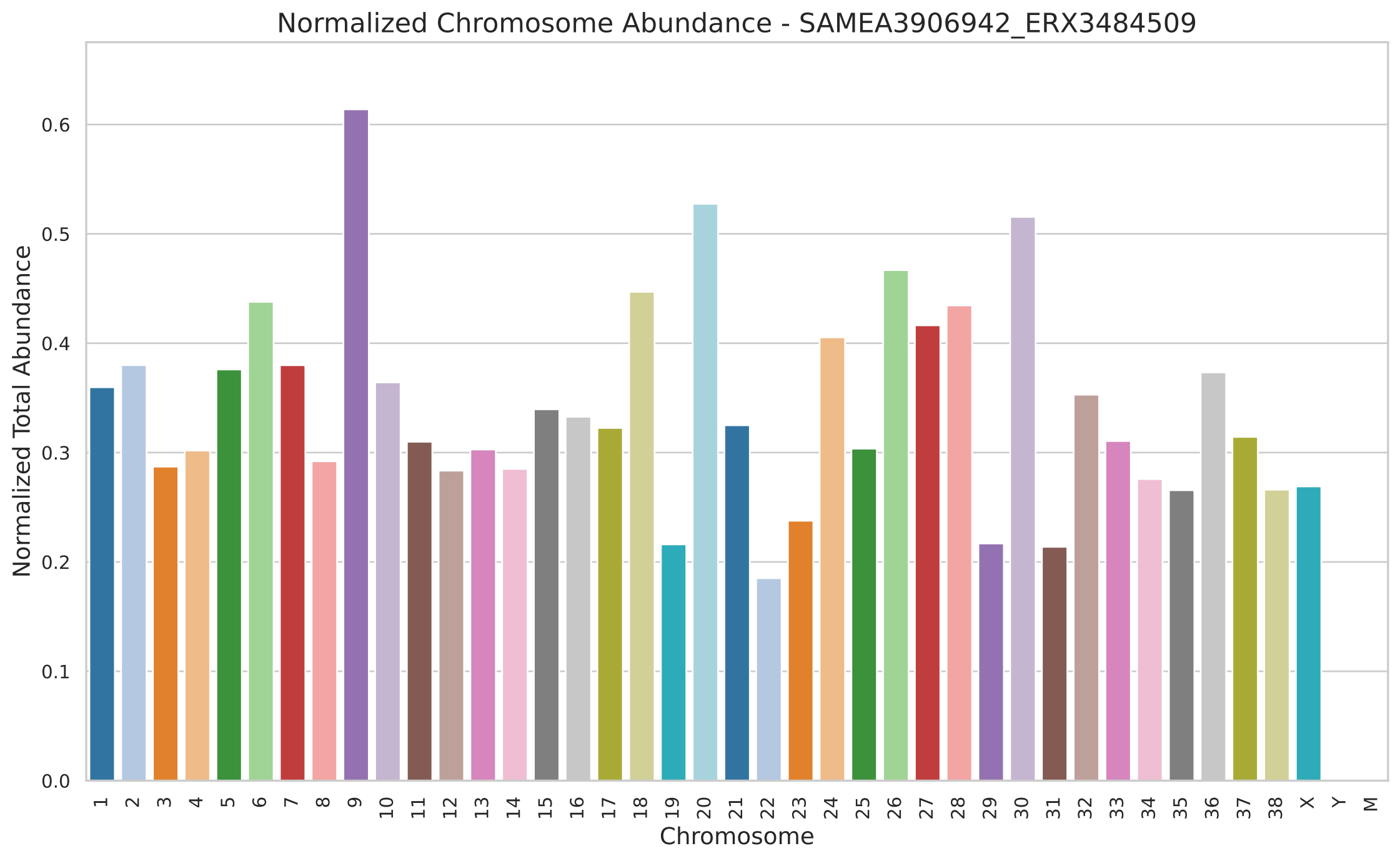

Normalized Chromosome Abundance - SAMEA3906994_ERX3484487
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

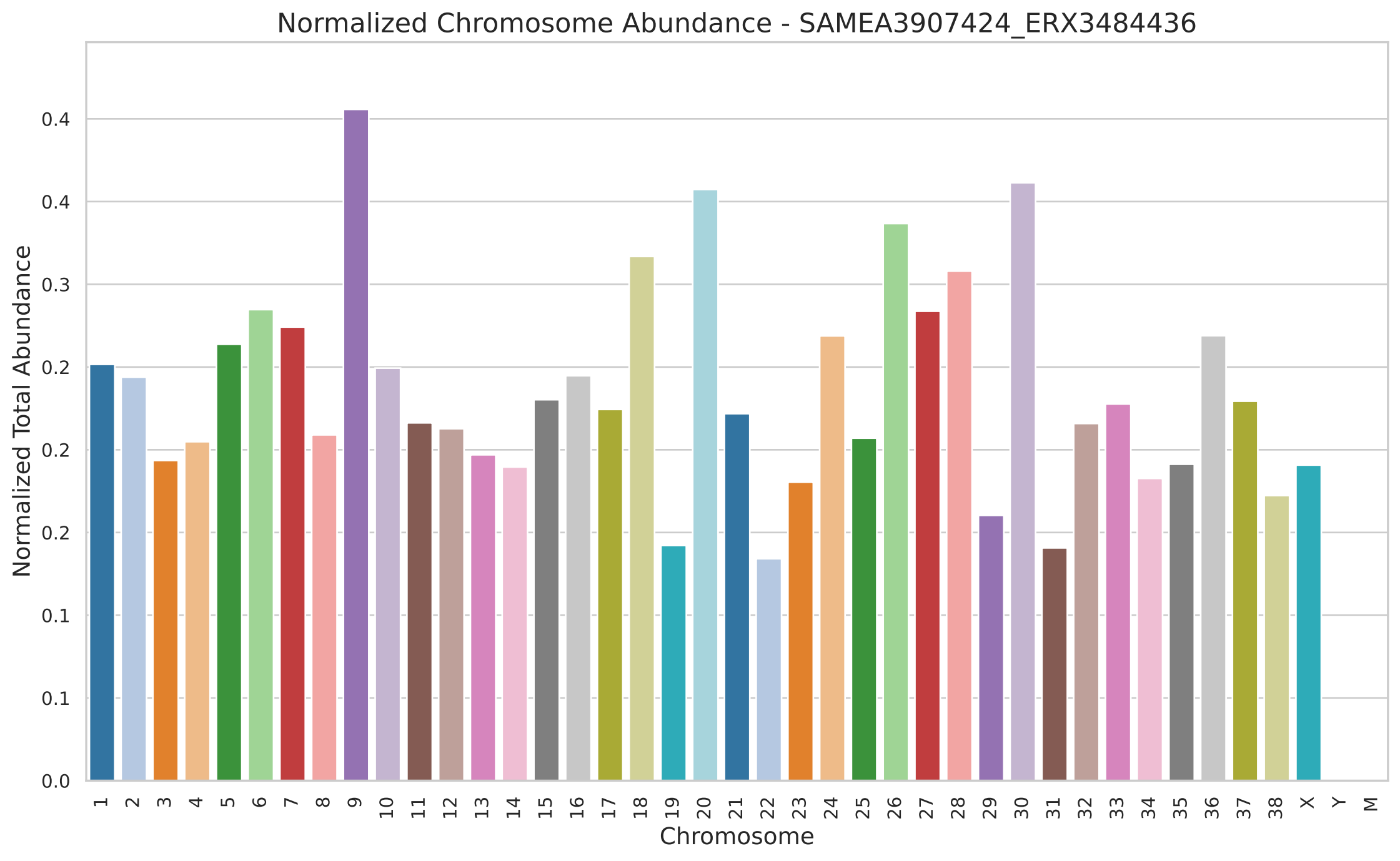

Normalized Chromosome Abundance - SAMEA3906930_ERX3484505
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

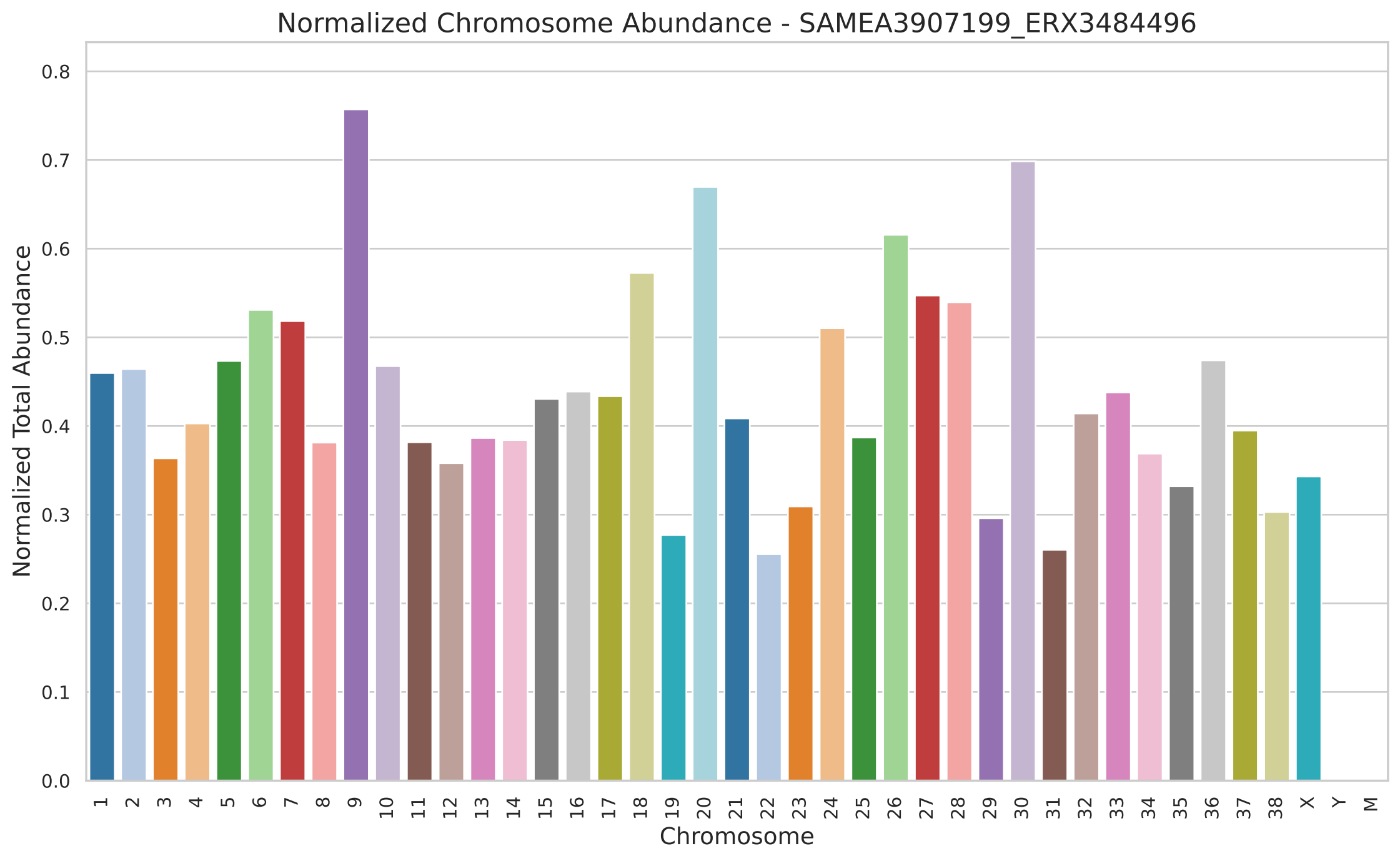

Normalized Chromosome Abundance - SAMEA3907204_ERX3484497
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

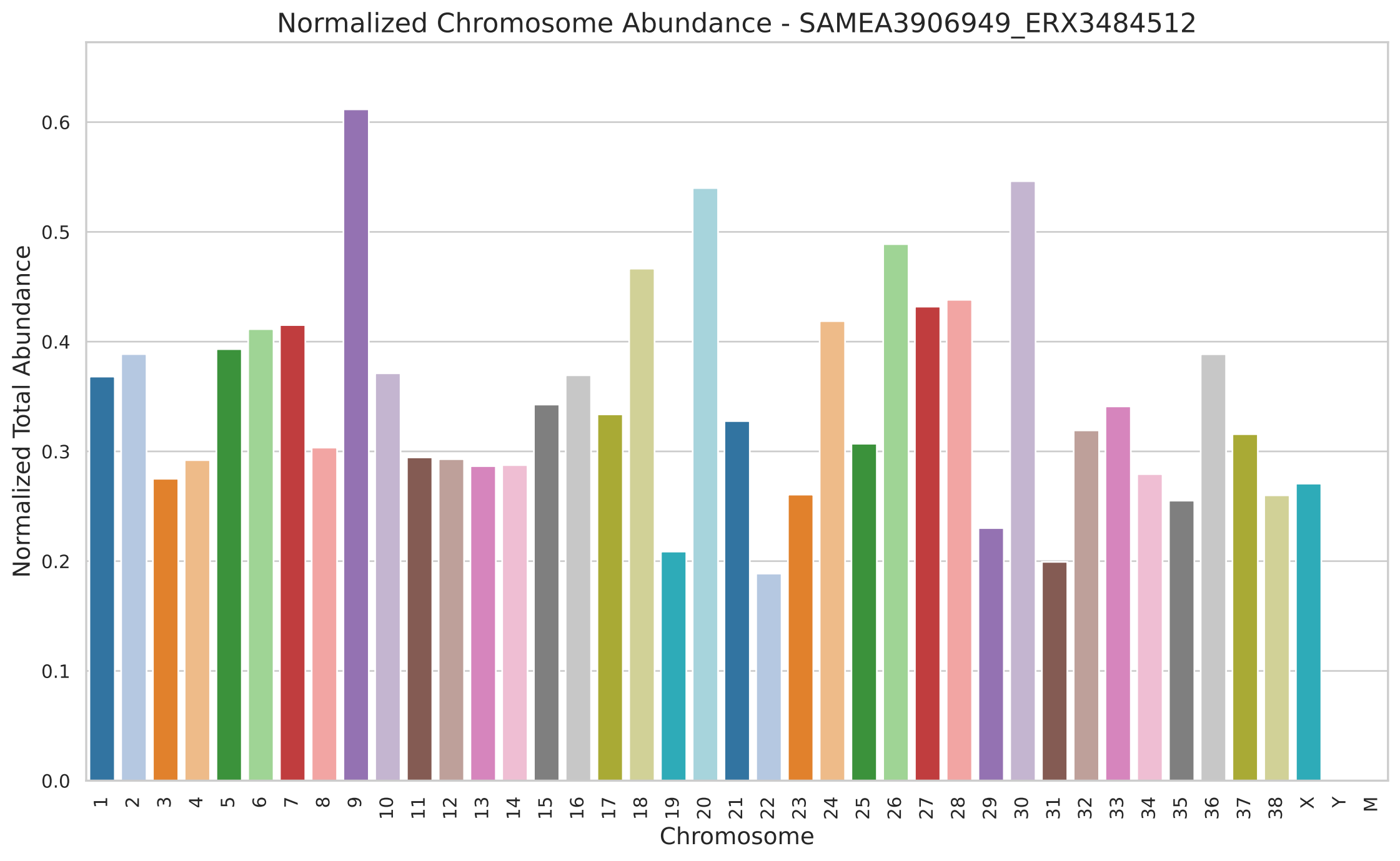

Normalized Chromosome Abundance - SAMEA3907183_ERX3484490
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

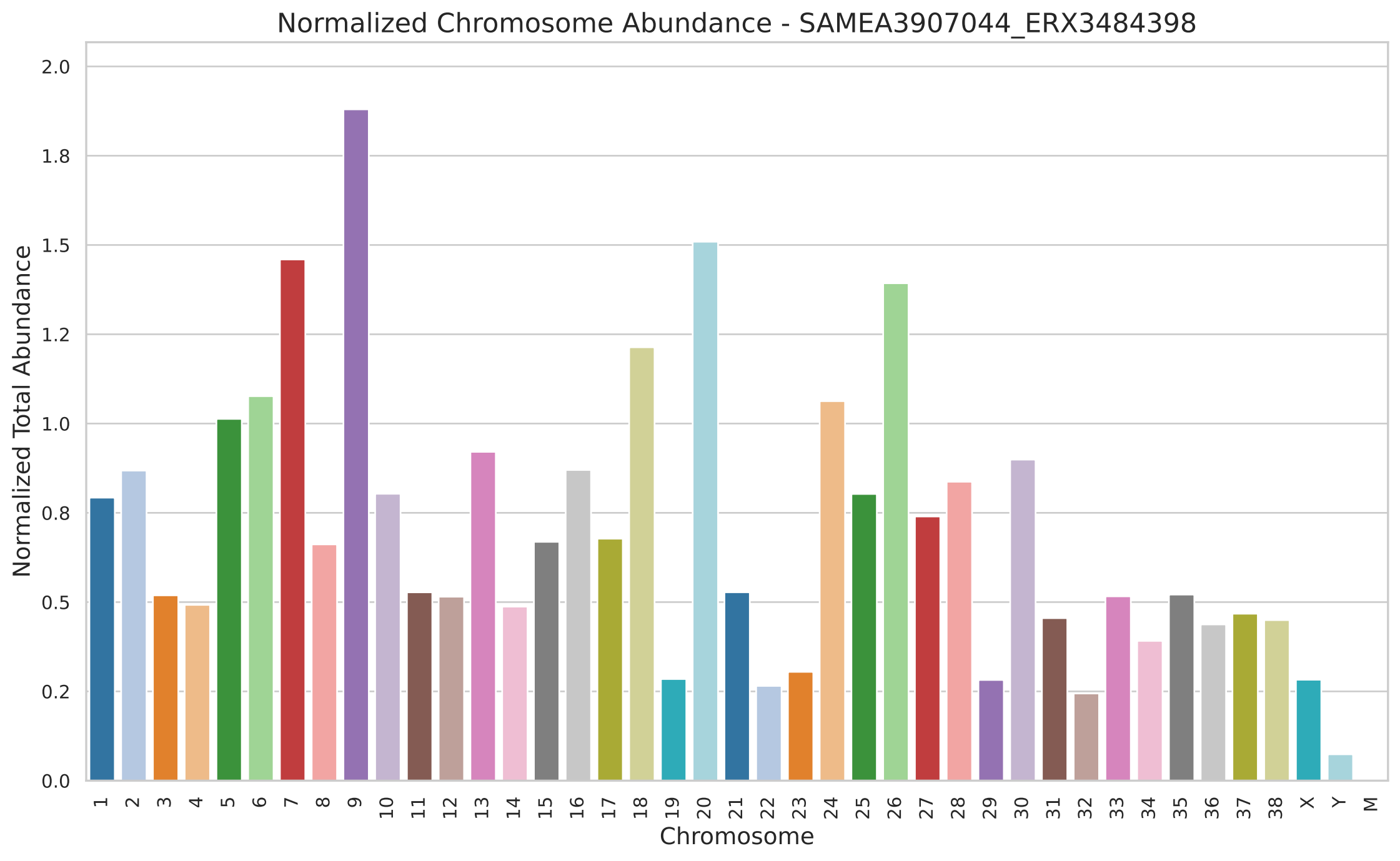

Normalized Chromosome Abundance - SAMEA3907045_ERX3484399
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

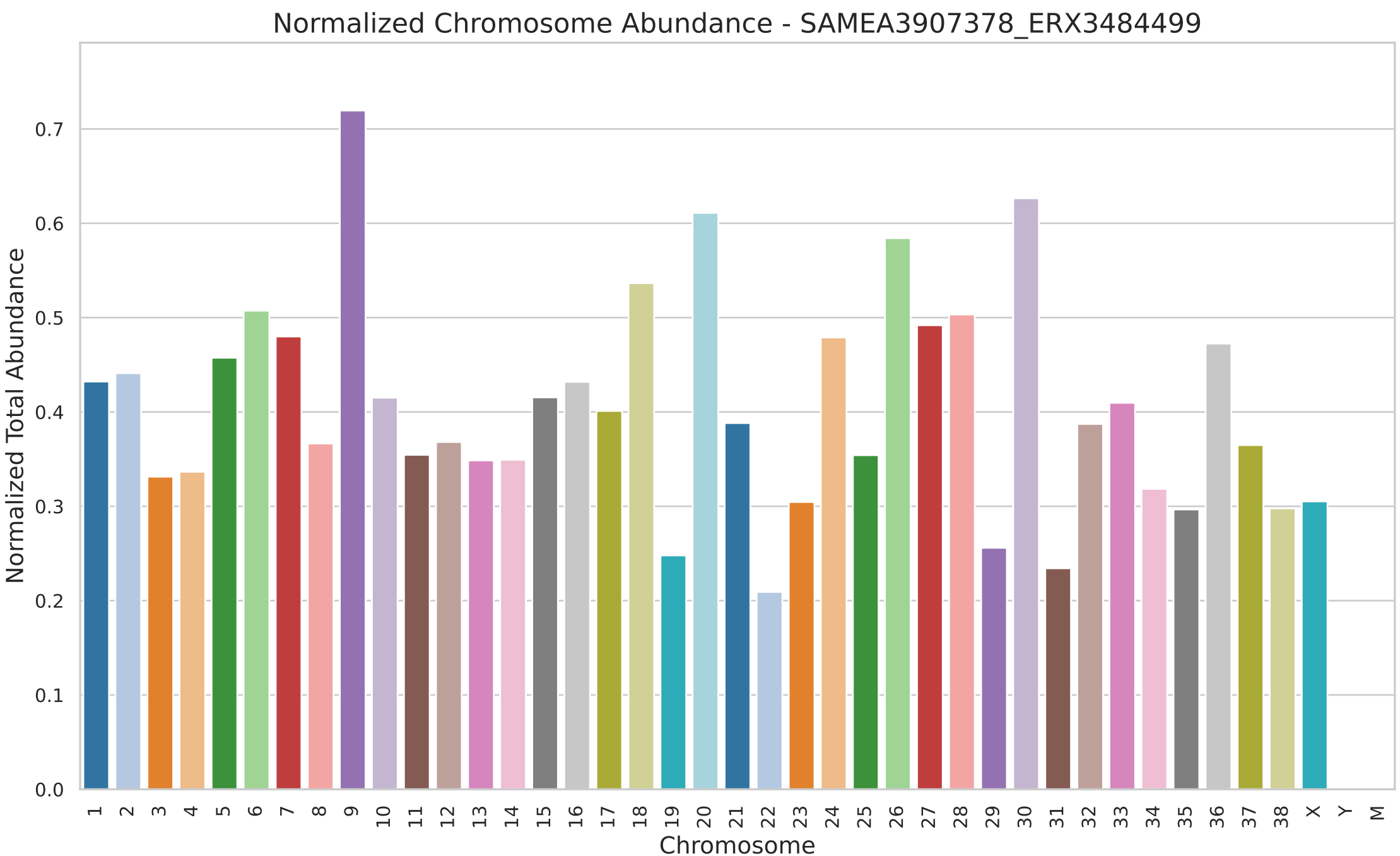

Normalized Chromosome Abundance - SAMEA3906942_ERX3484509
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

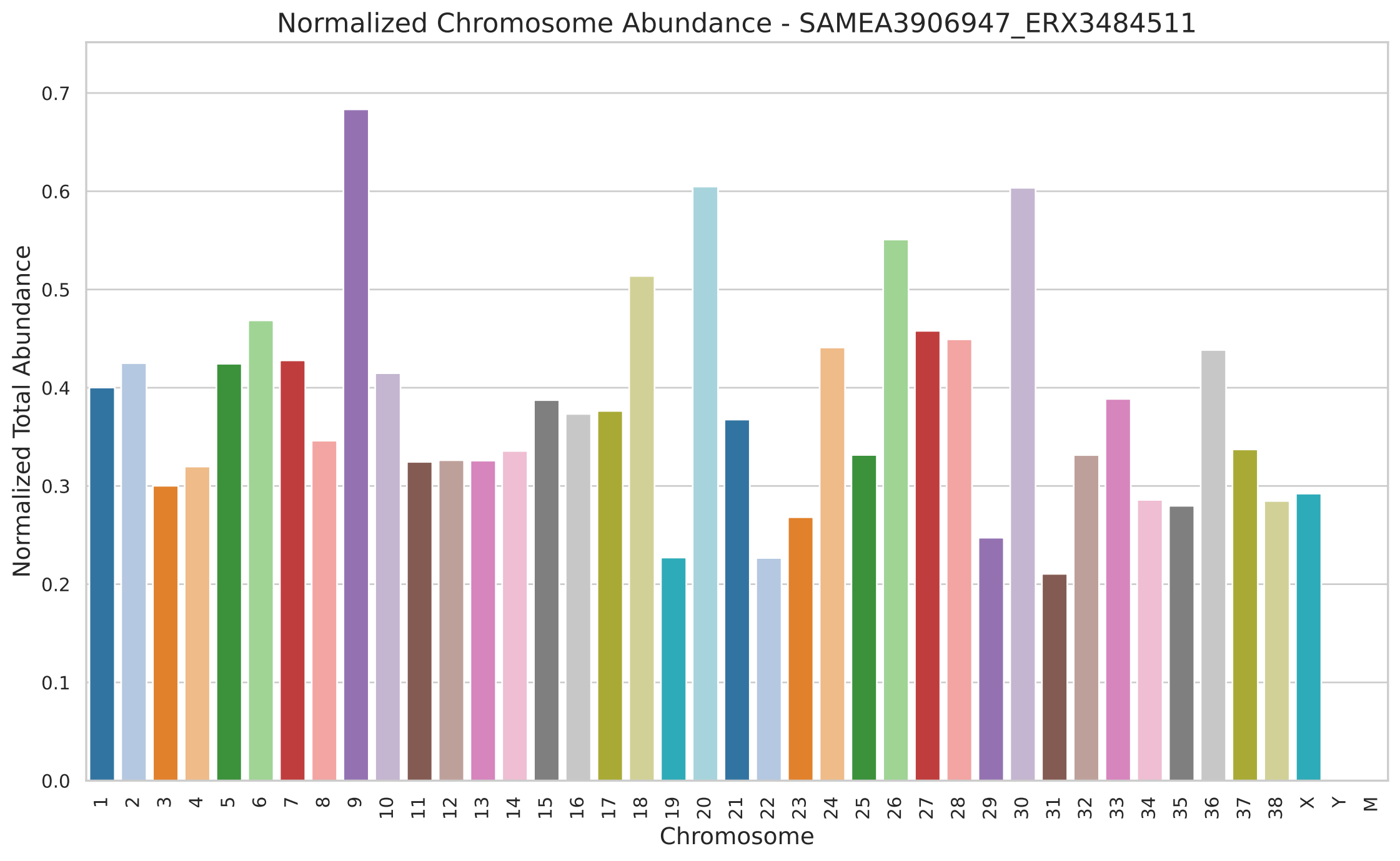

Normalized Chromosome Abundance - SAMEA3907424_ERX3484436
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

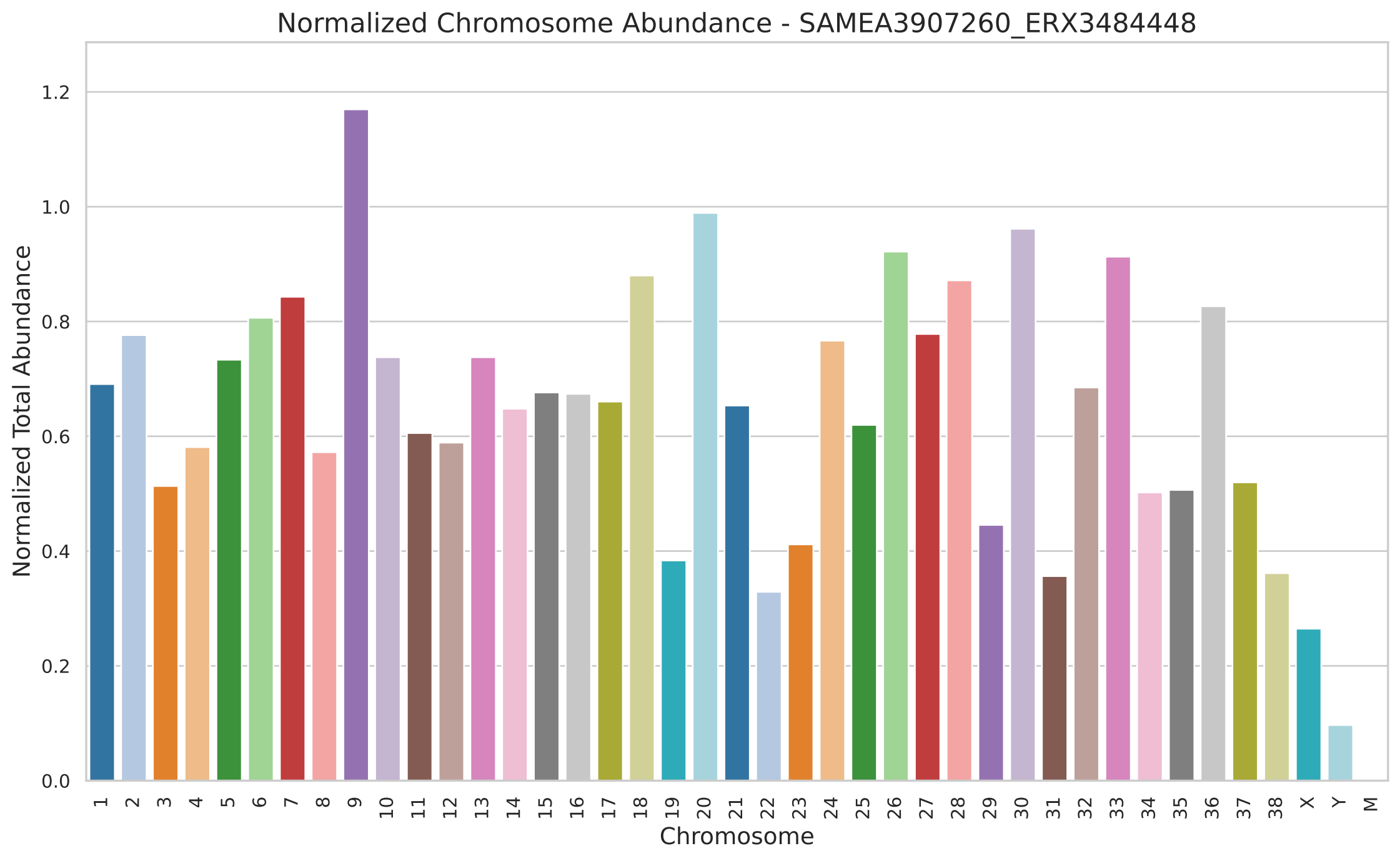

Normalized Chromosome Abundance - SAMEA3907199_ERX3484496
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

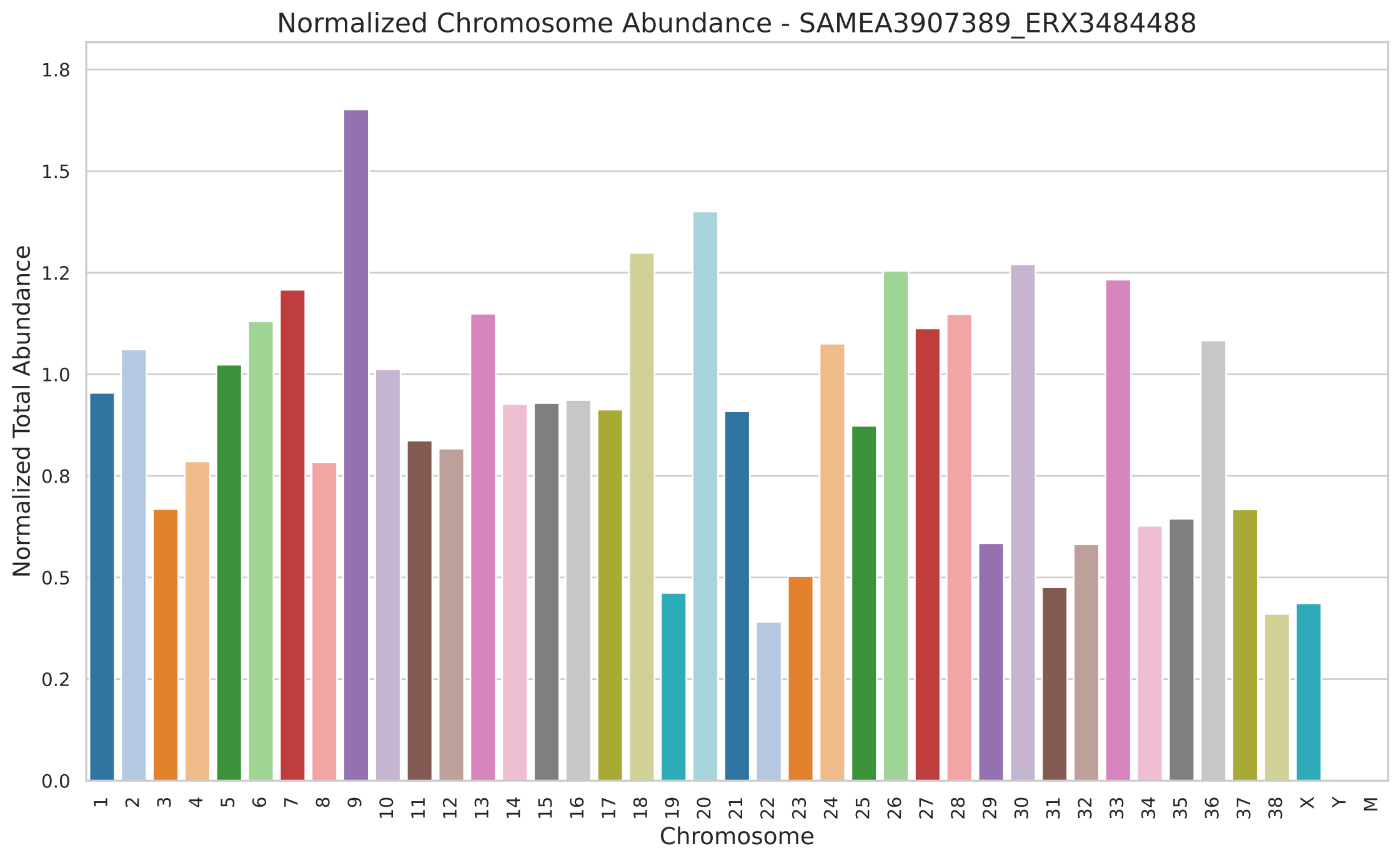

Normalized Chromosome Abundance - SAMEA3906949_ERX3484512
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

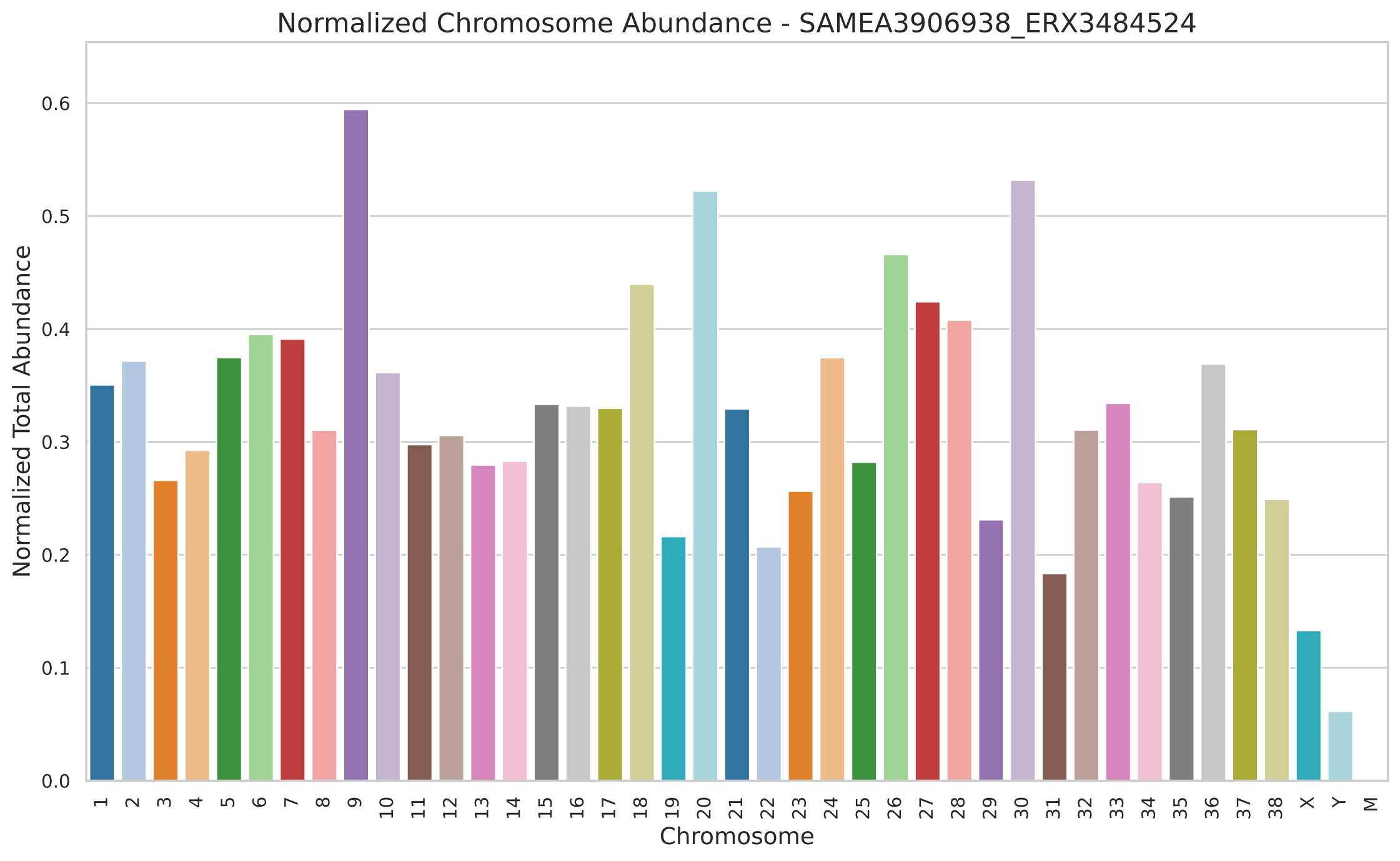

Normalized Chromosome Abundance - SAMEA3907044_ERX3484398
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

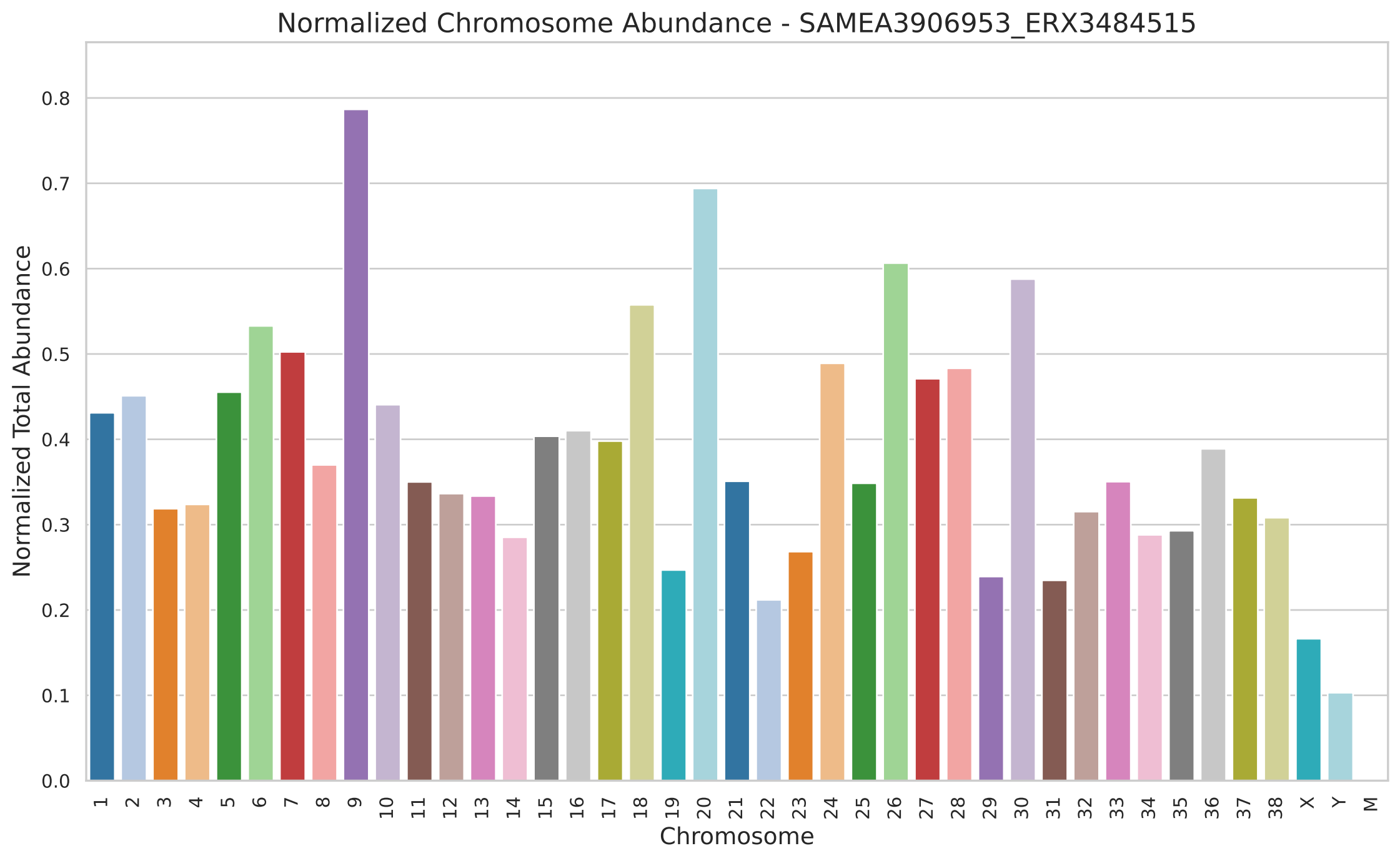

Normalized Chromosome Abundance - SAMEA3907378_ERX3484499
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

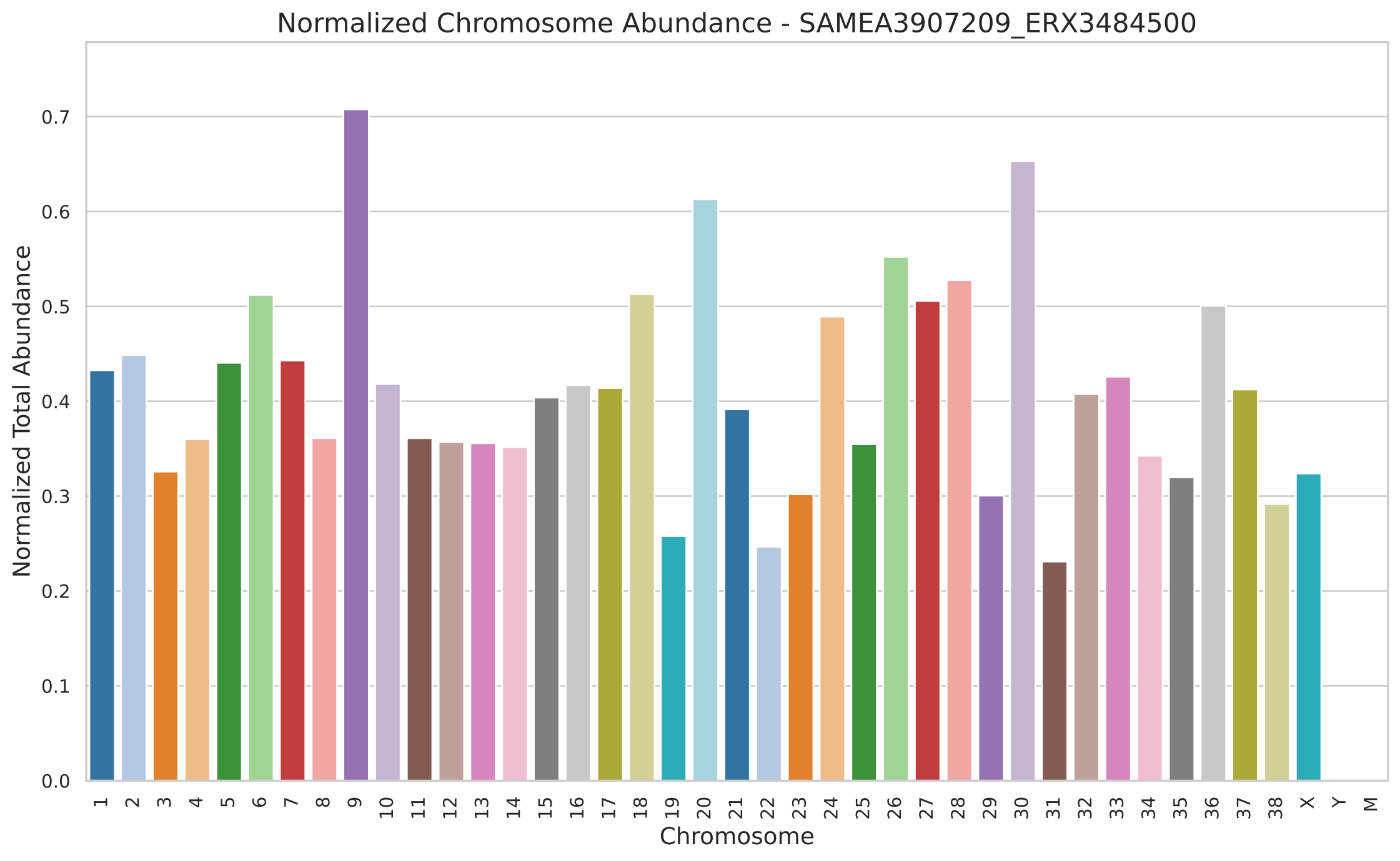

Normalized Chromosome Abundance - SAMEA3906947_ERX3484511
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

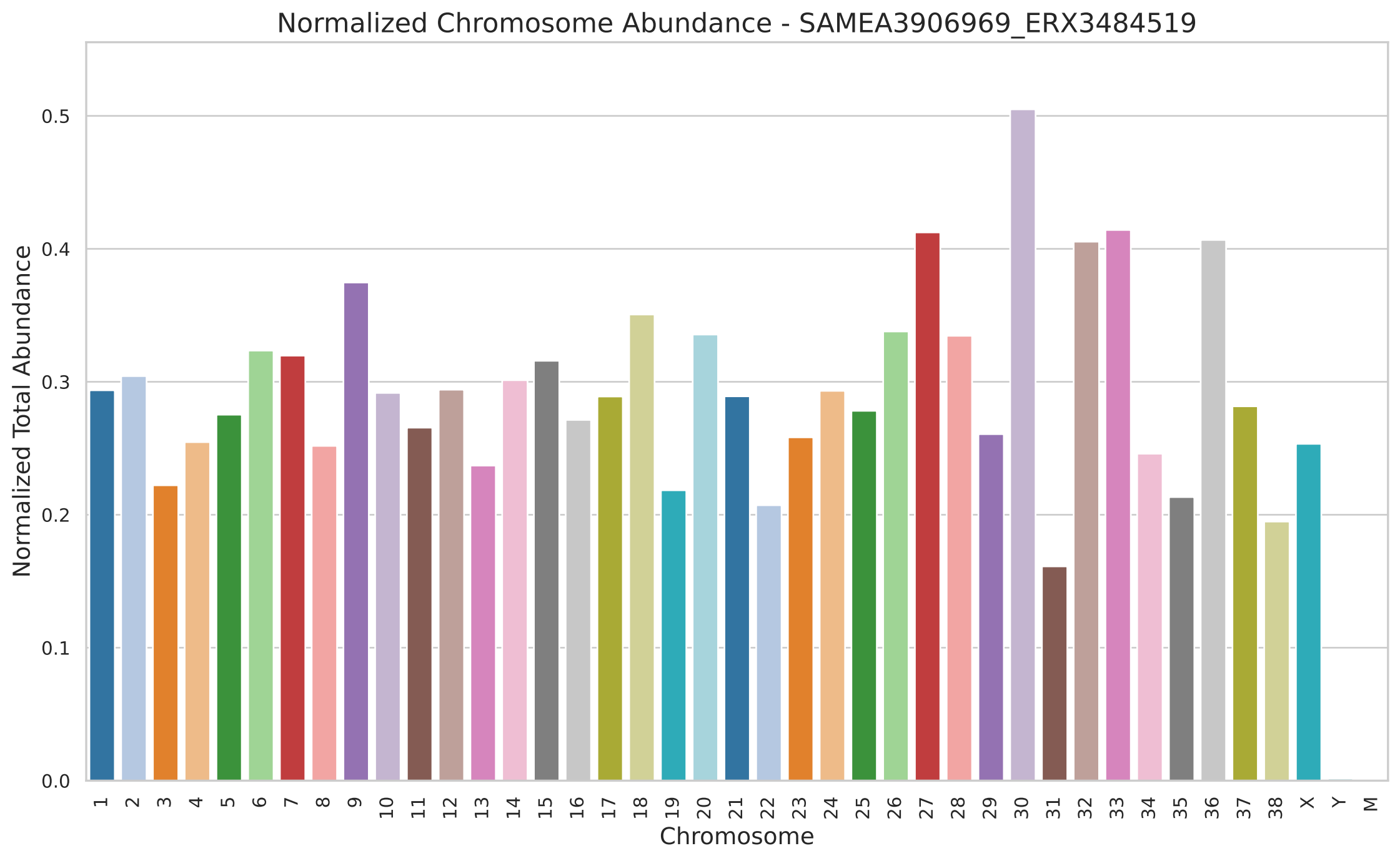

Normalized Chromosome Abundance - SAMEA3907260_ERX3484448
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

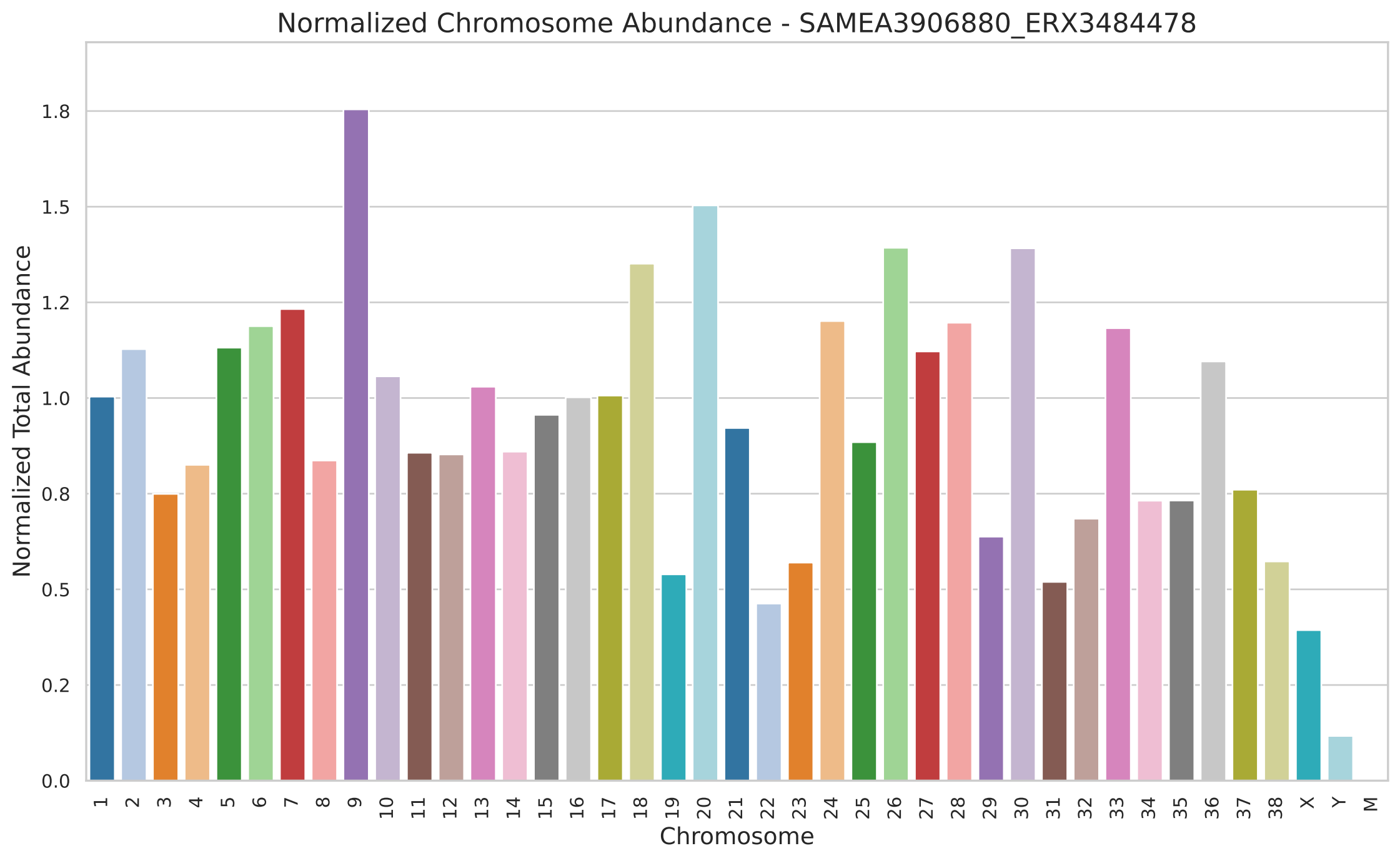

Normalized Chromosome Abundance - SAMEA3907389_ERX3484488
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

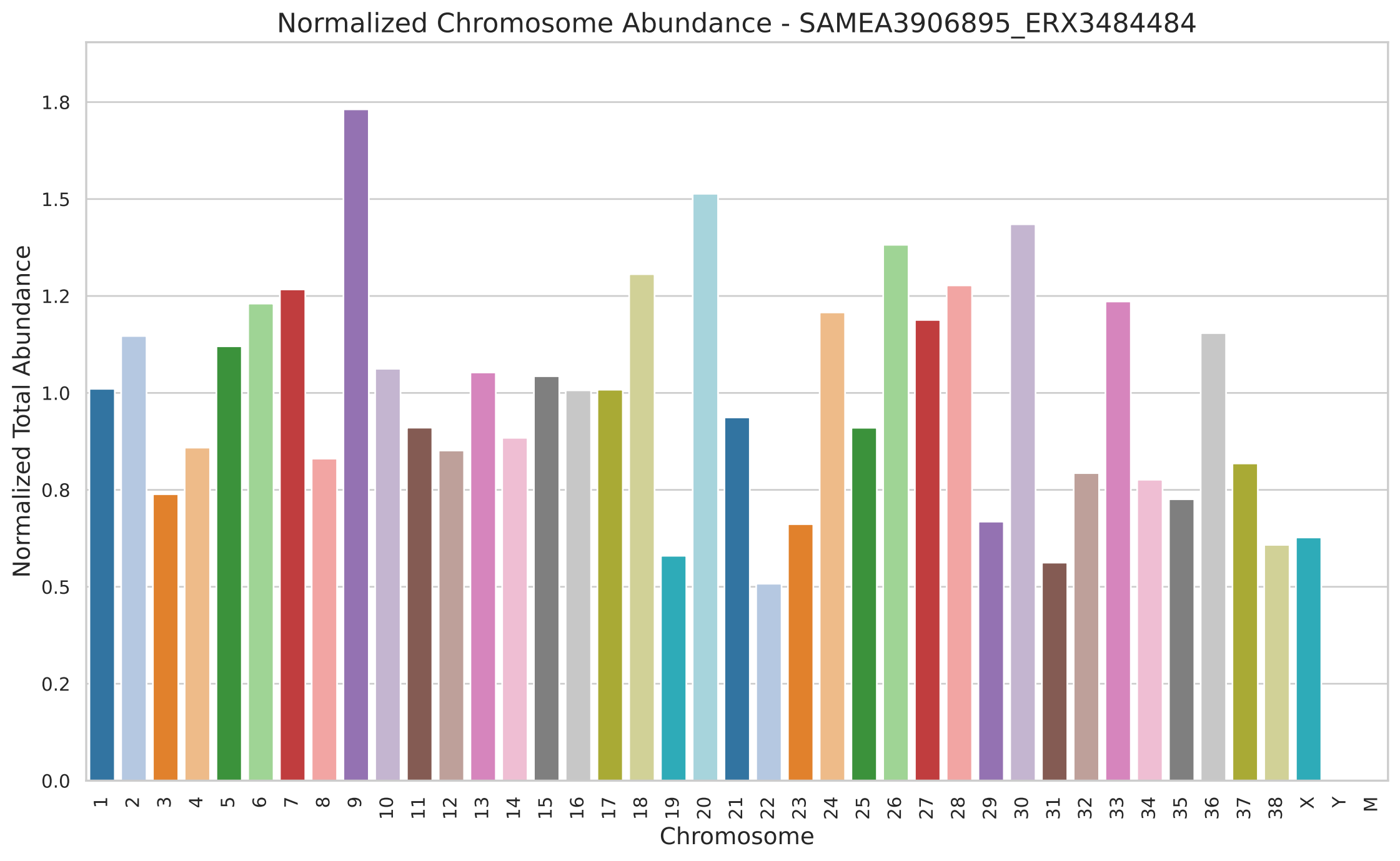

Normalized Chromosome Abundance - SAMEA3906938_ERX3484524
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

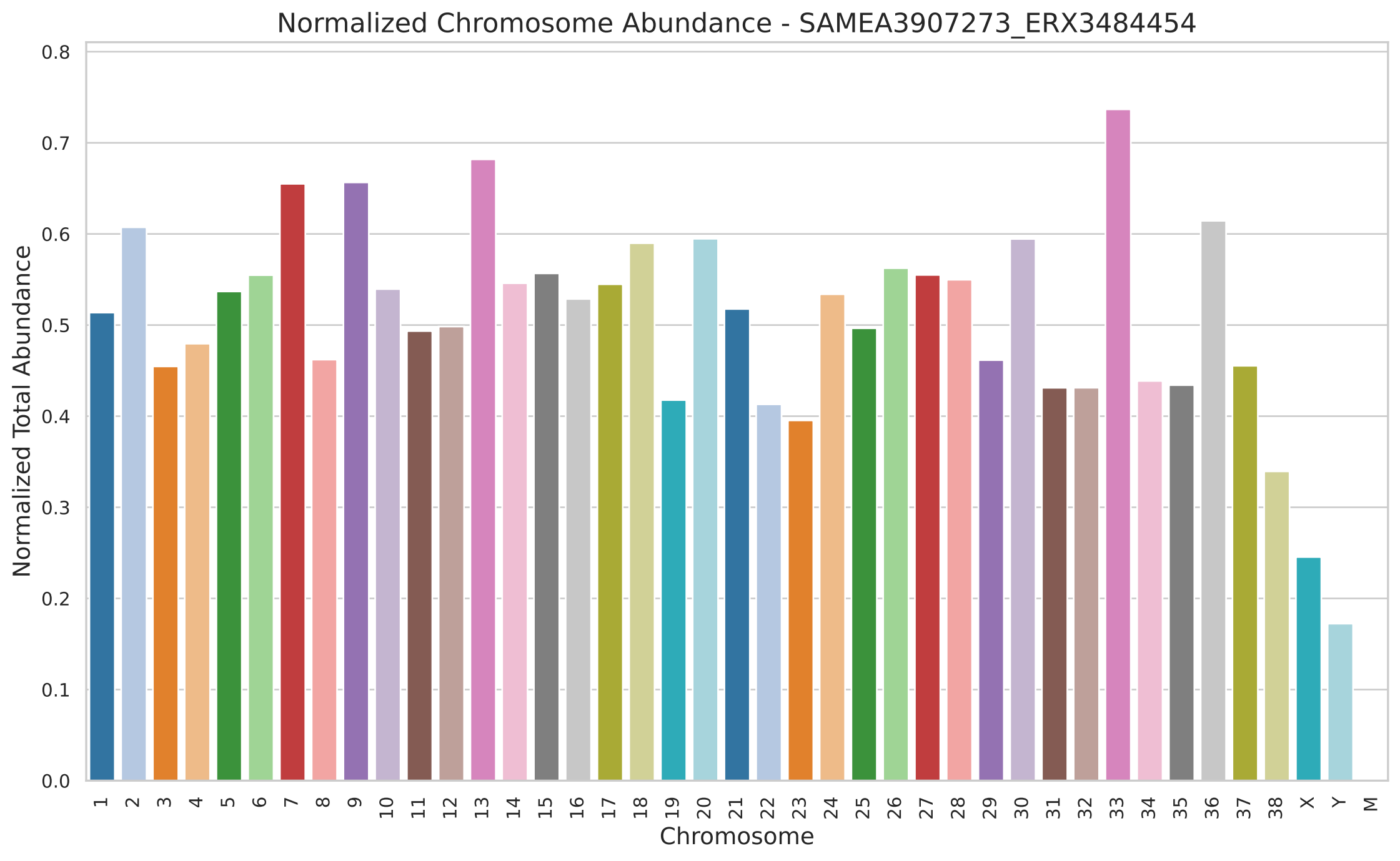

Normalized Chromosome Abundance - SAMEA3906953_ERX3484515
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

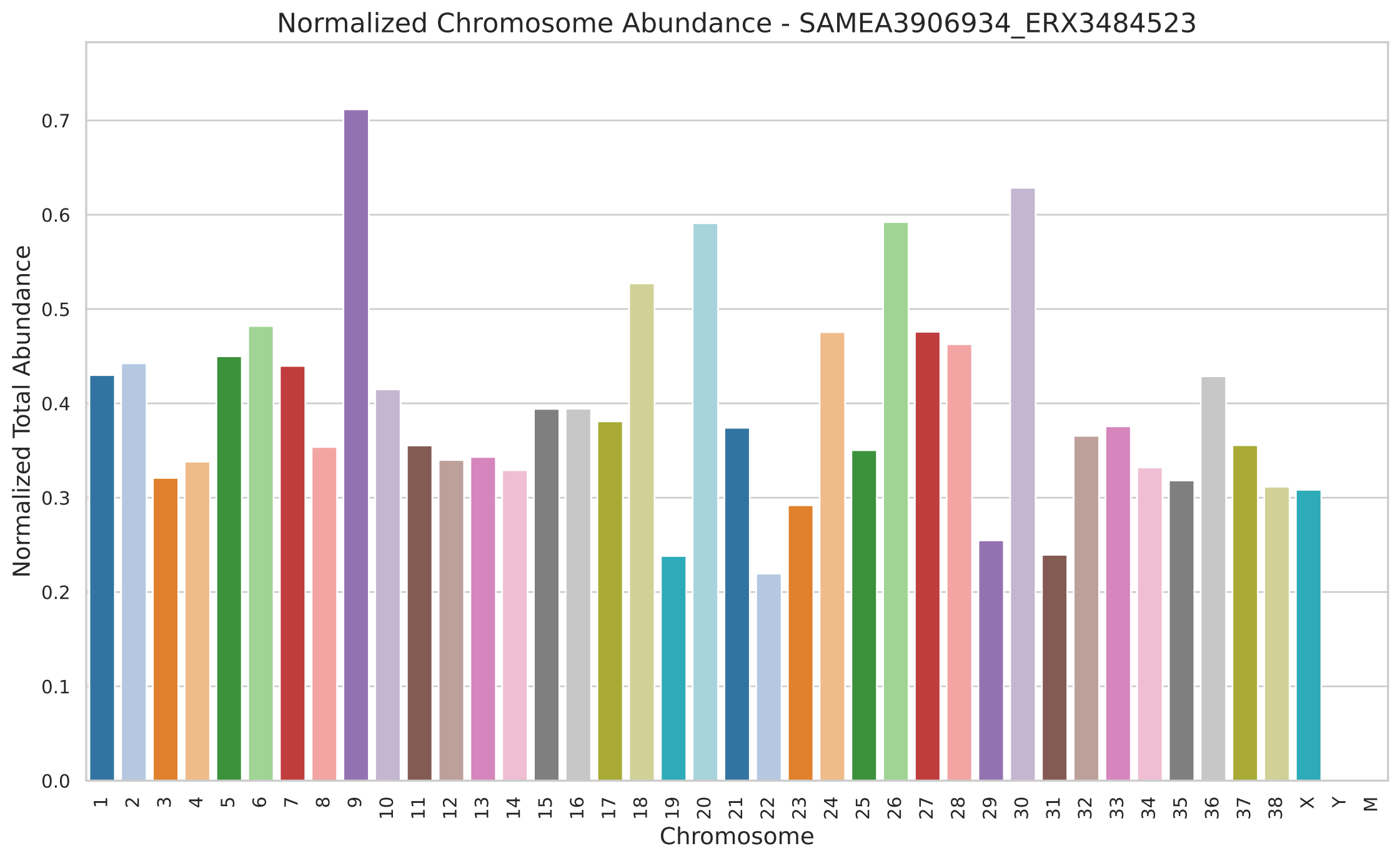

Normalized Chromosome Abundance - SAMEA3907209_ERX3484500
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

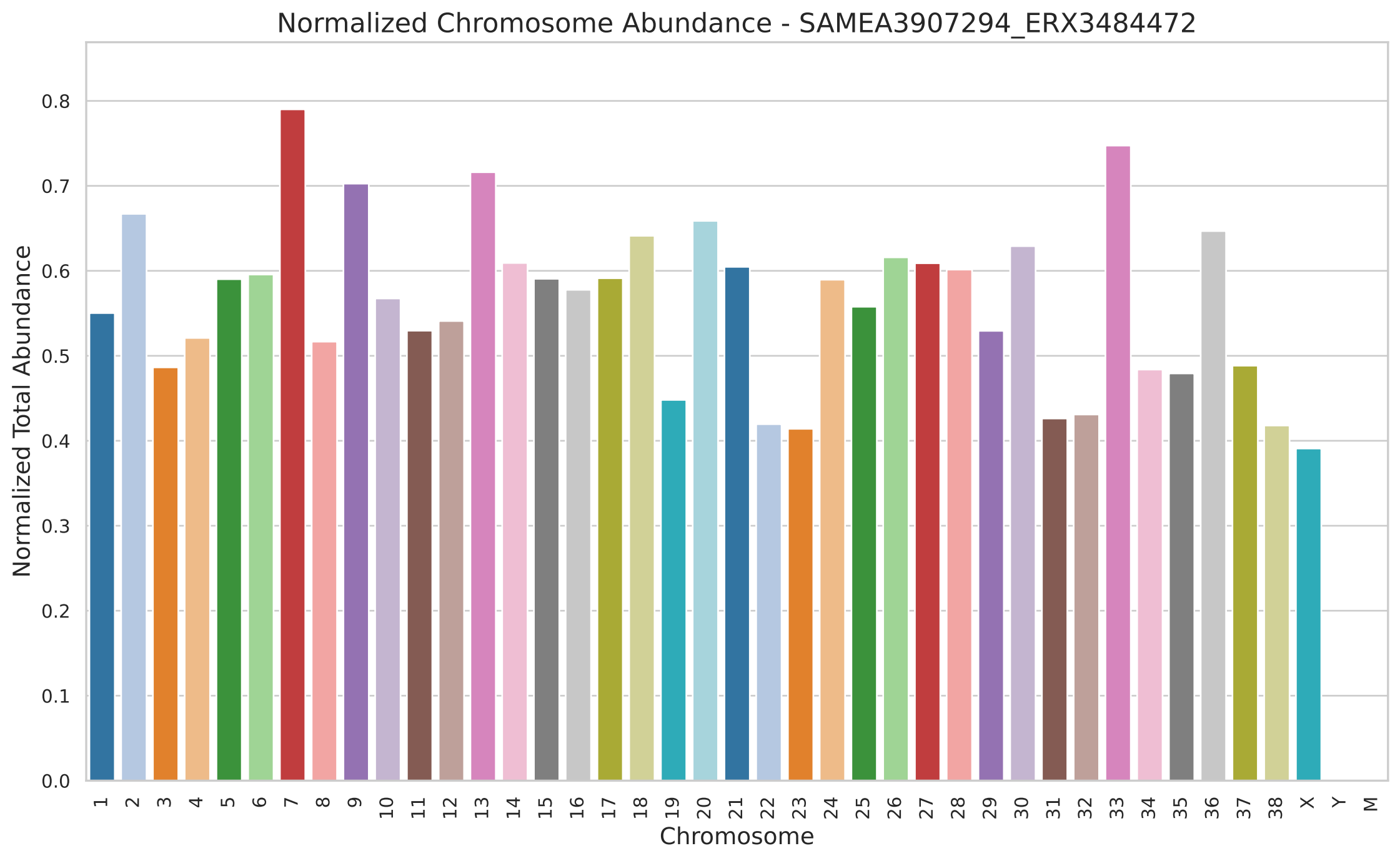

Normalized Chromosome Abundance - SAMEA3906969_ERX3484519
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

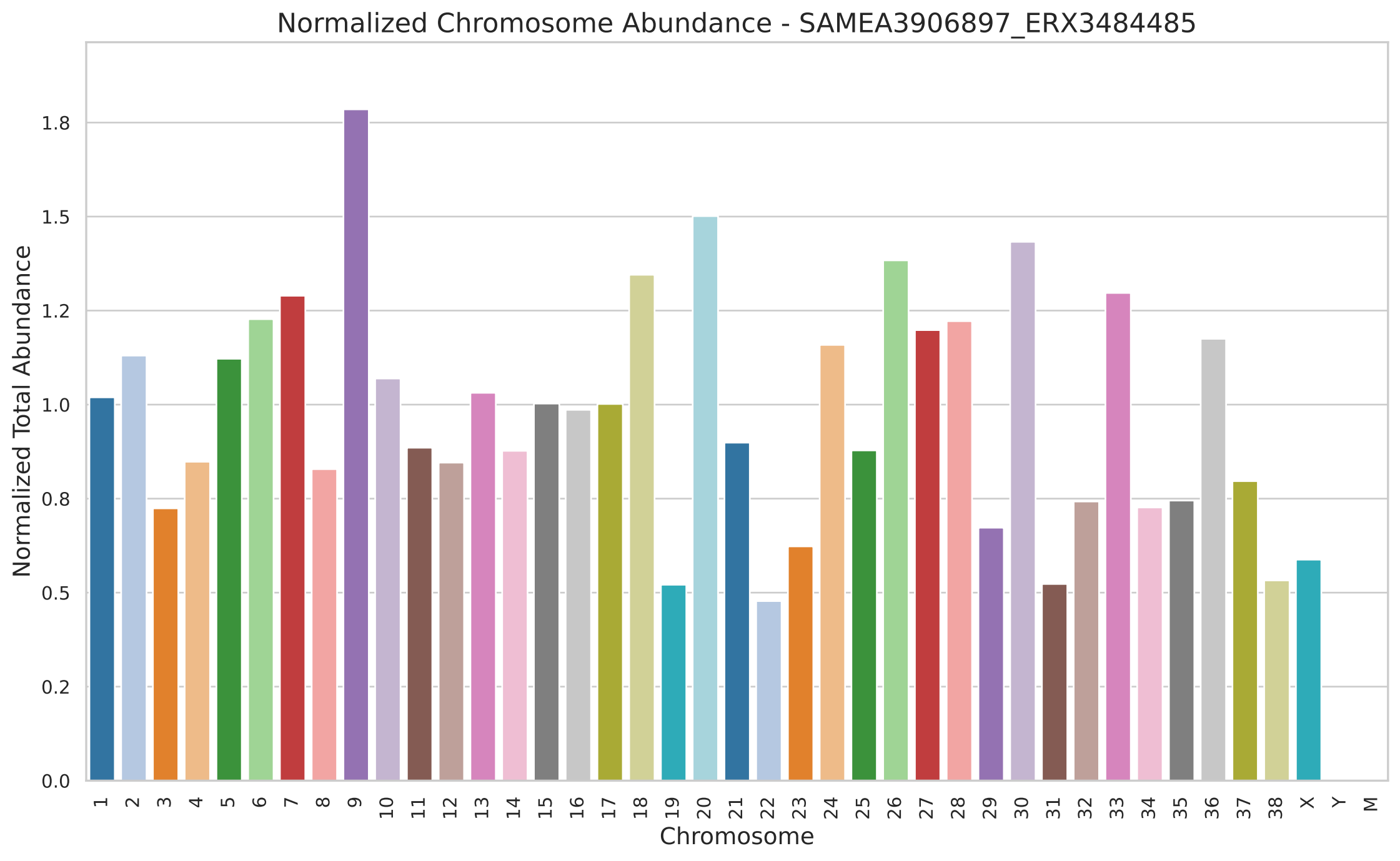

Normalized Chromosome Abundance - SAMEA3906880_ERX3484478
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

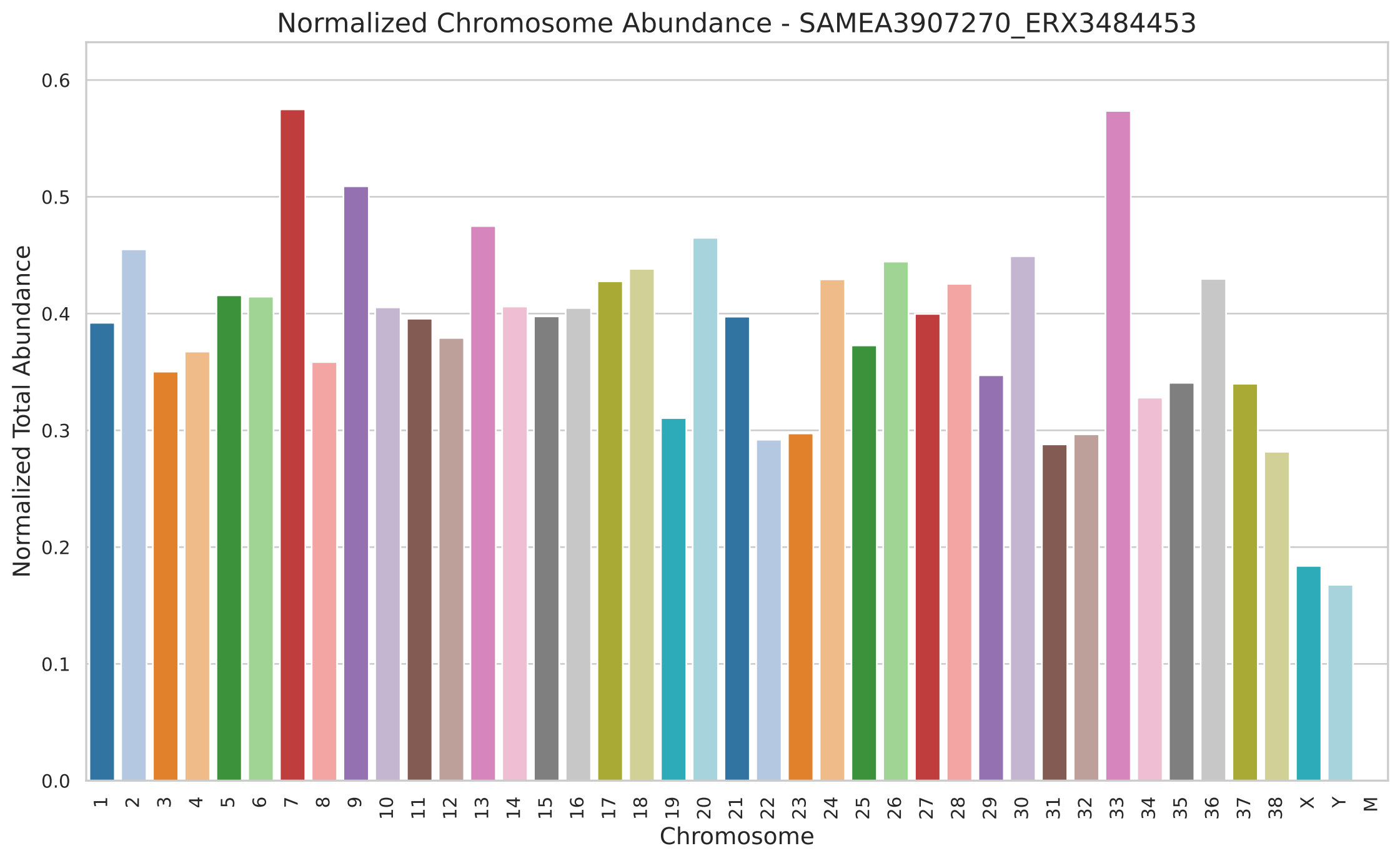

Normalized Chromosome Abundance - SAMEA3906895_ERX3484484
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

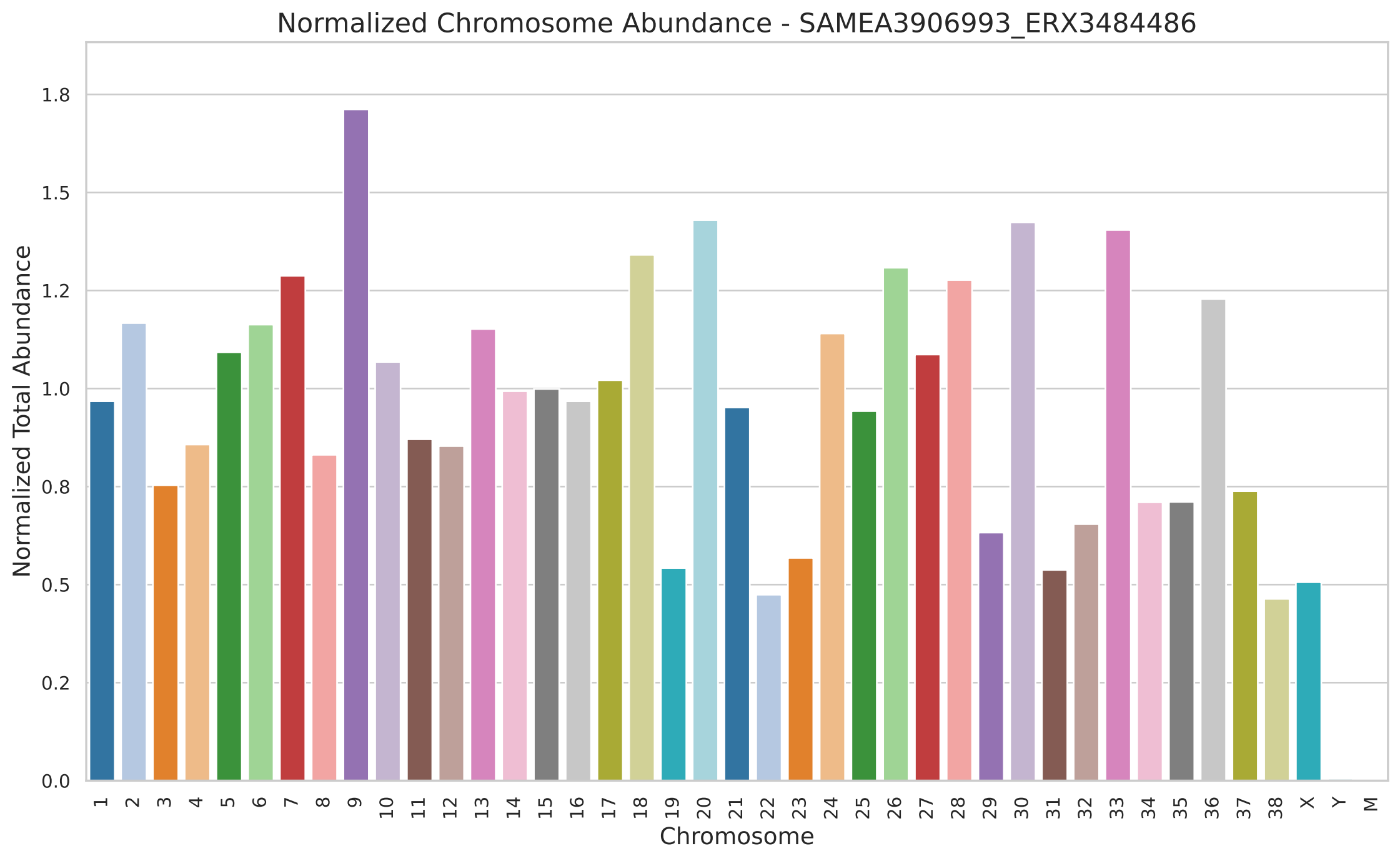

Normalized Chromosome Abundance - SAMEA3907273_ERX3484454
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

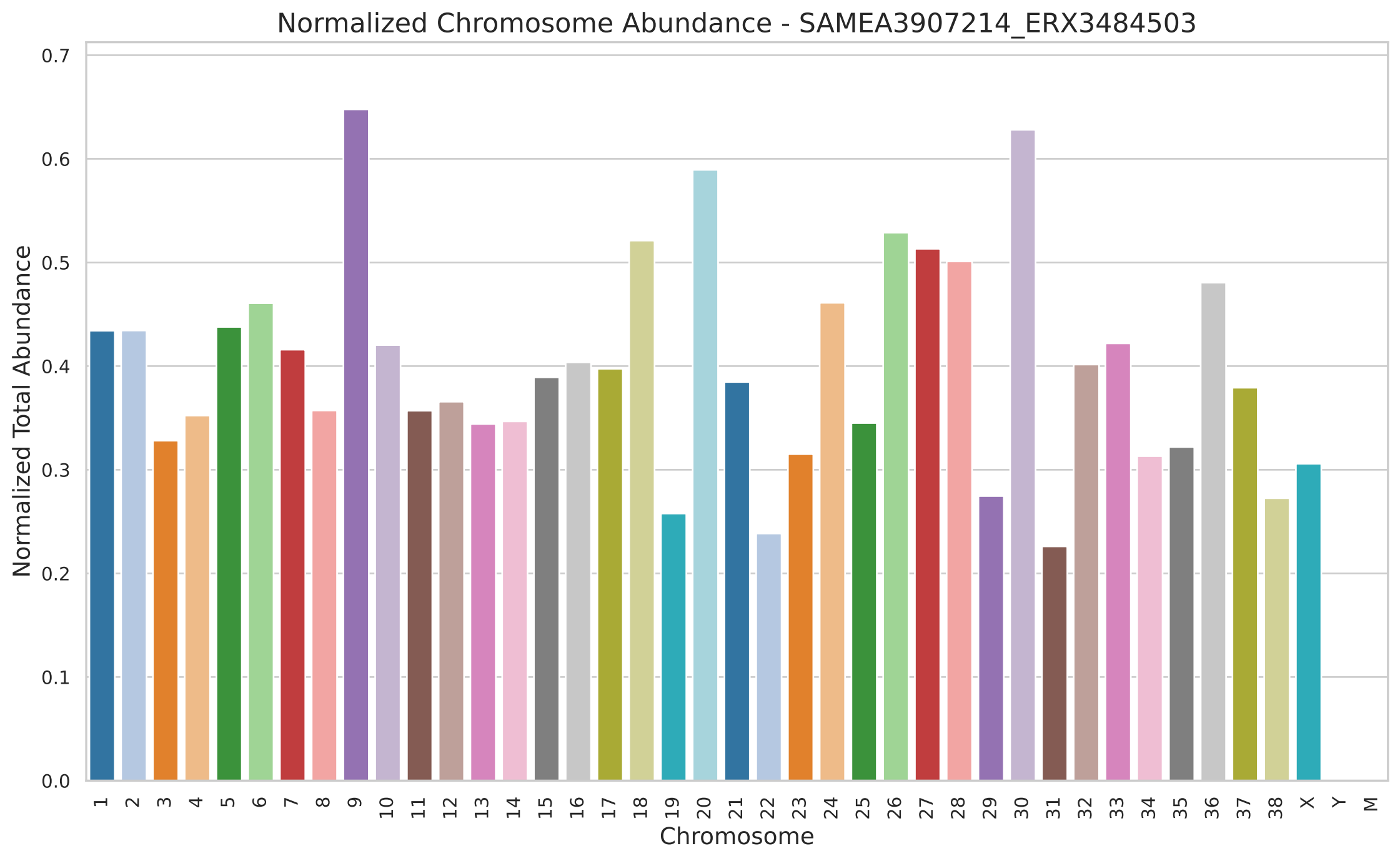

Normalized Chromosome Abundance - SAMEA3906934_ERX3484523
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

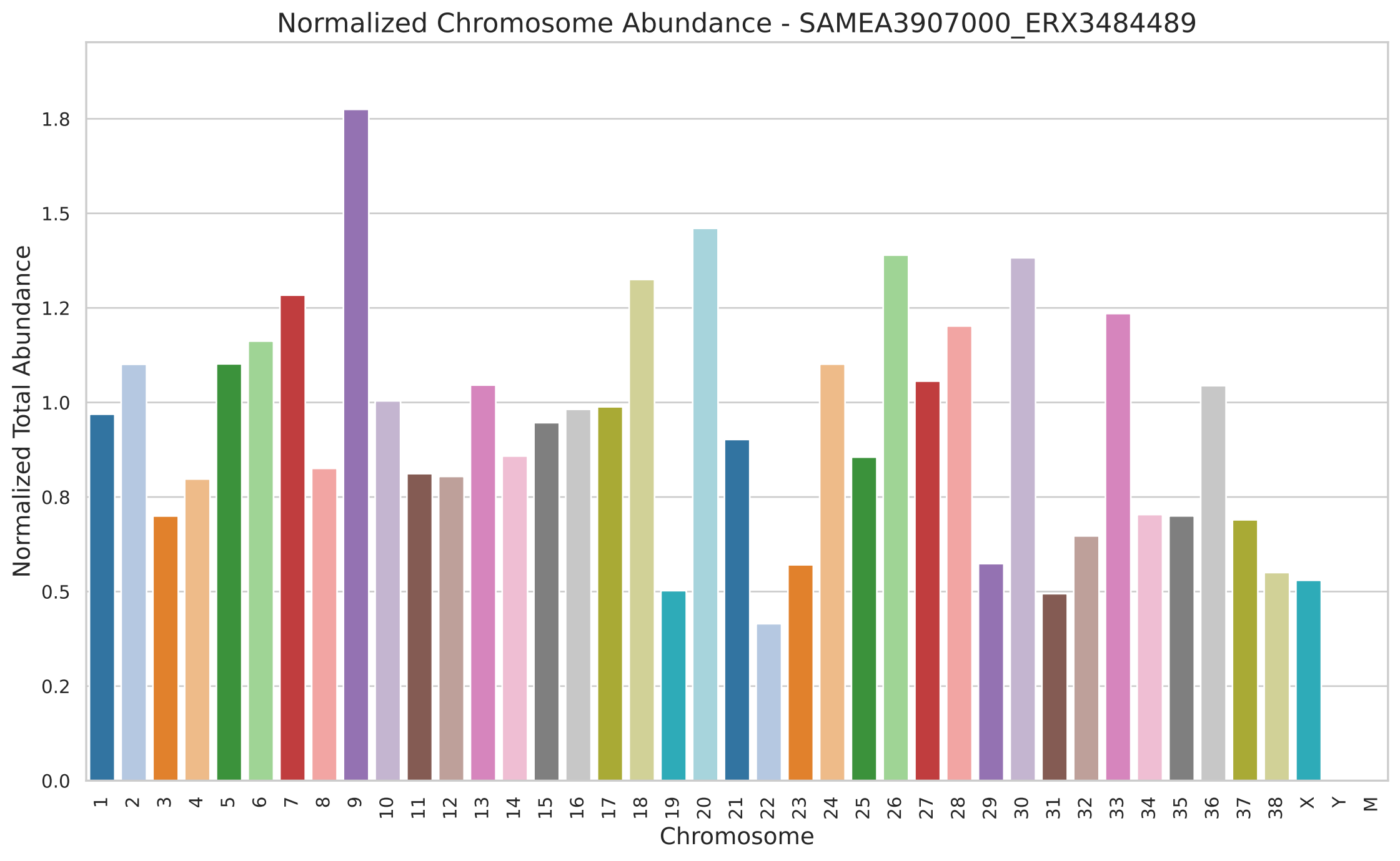

Normalized Chromosome Abundance - SAMEA3907294_ERX3484472
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

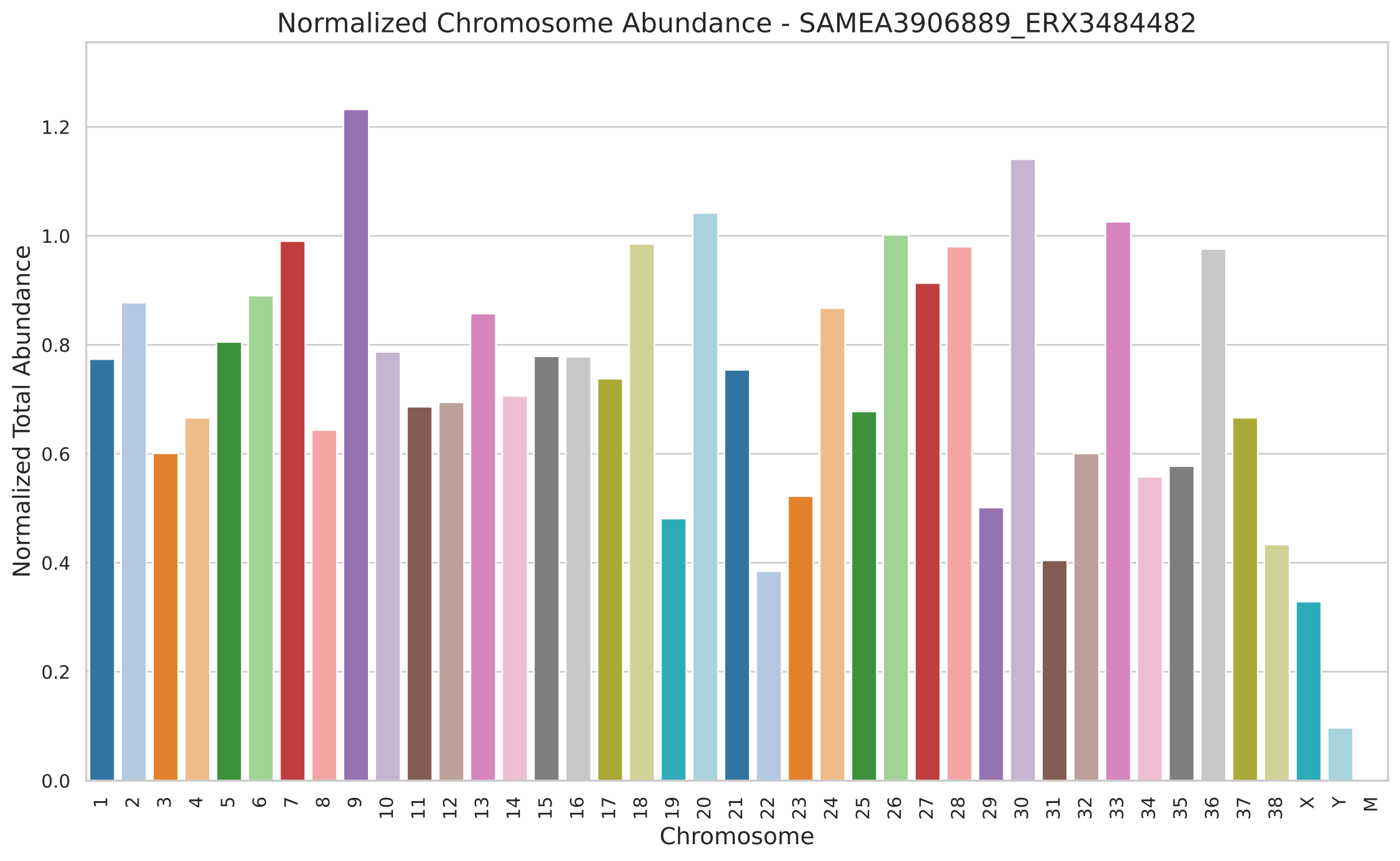

Normalized Chromosome Abundance - SAMEA3906897_ERX3484485
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

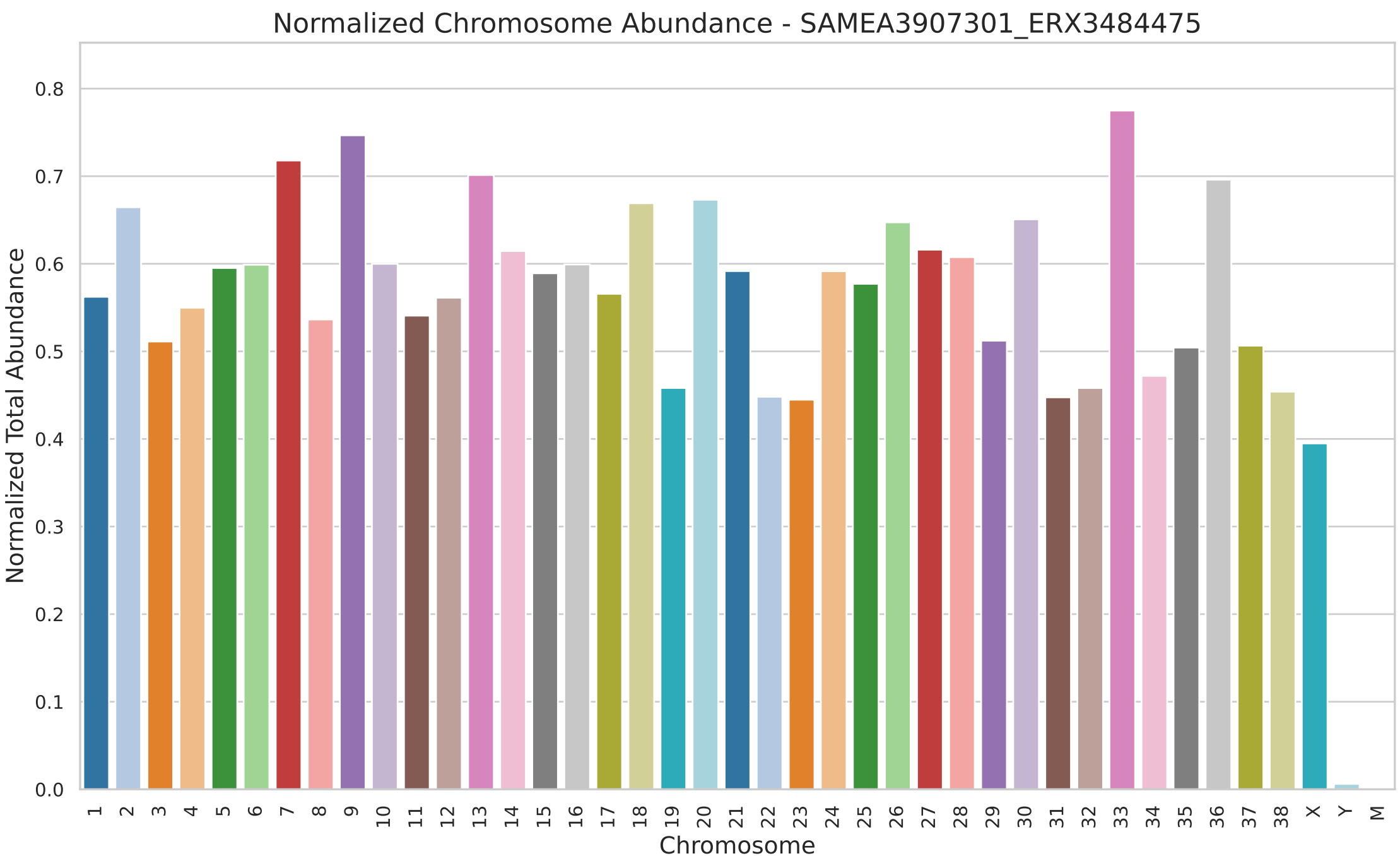

Normalized Chromosome Abundance - SAMEA3907270_ERX3484453
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

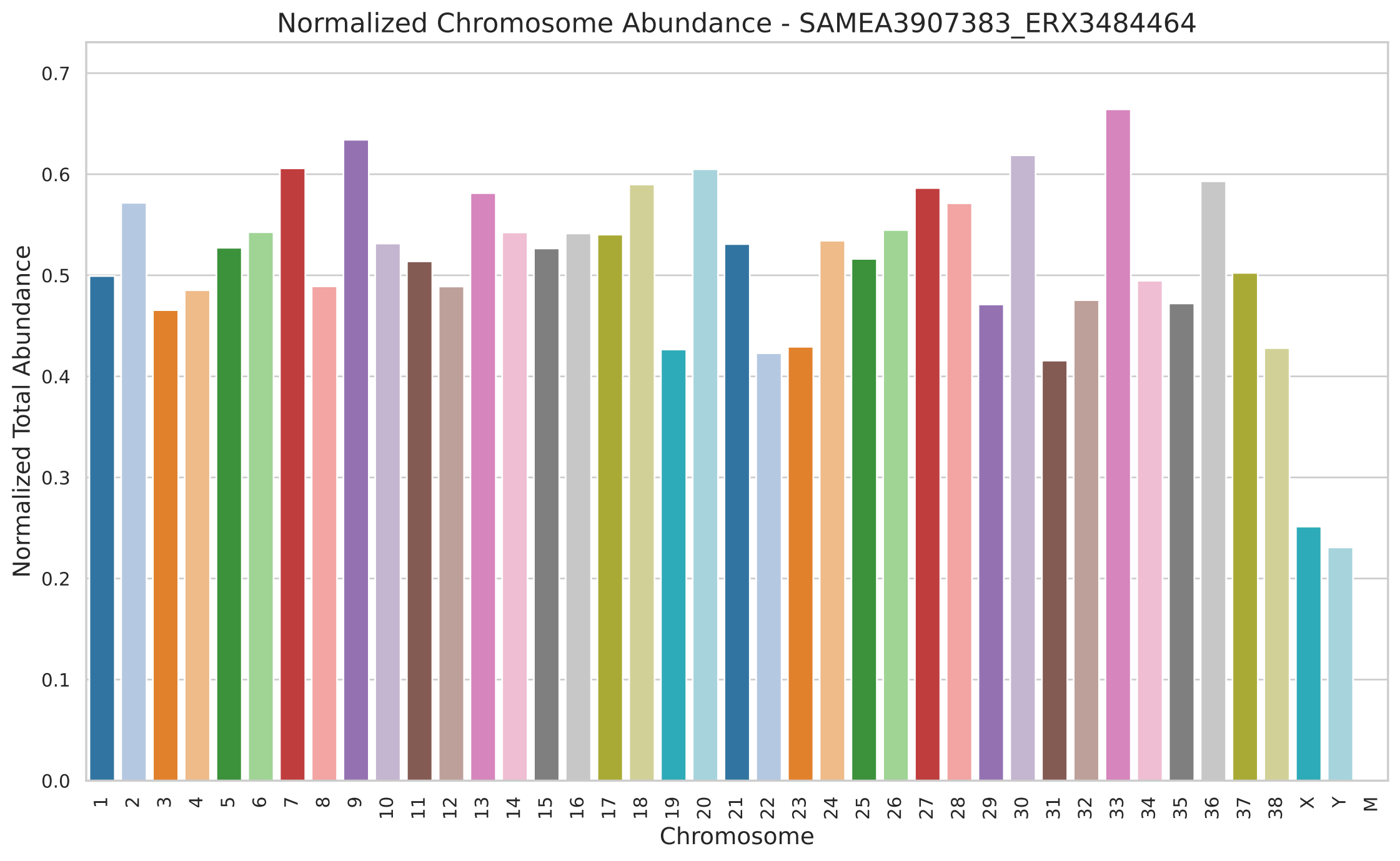

Normalized Chromosome Abundance - SAMEA3906993_ERX3484486
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

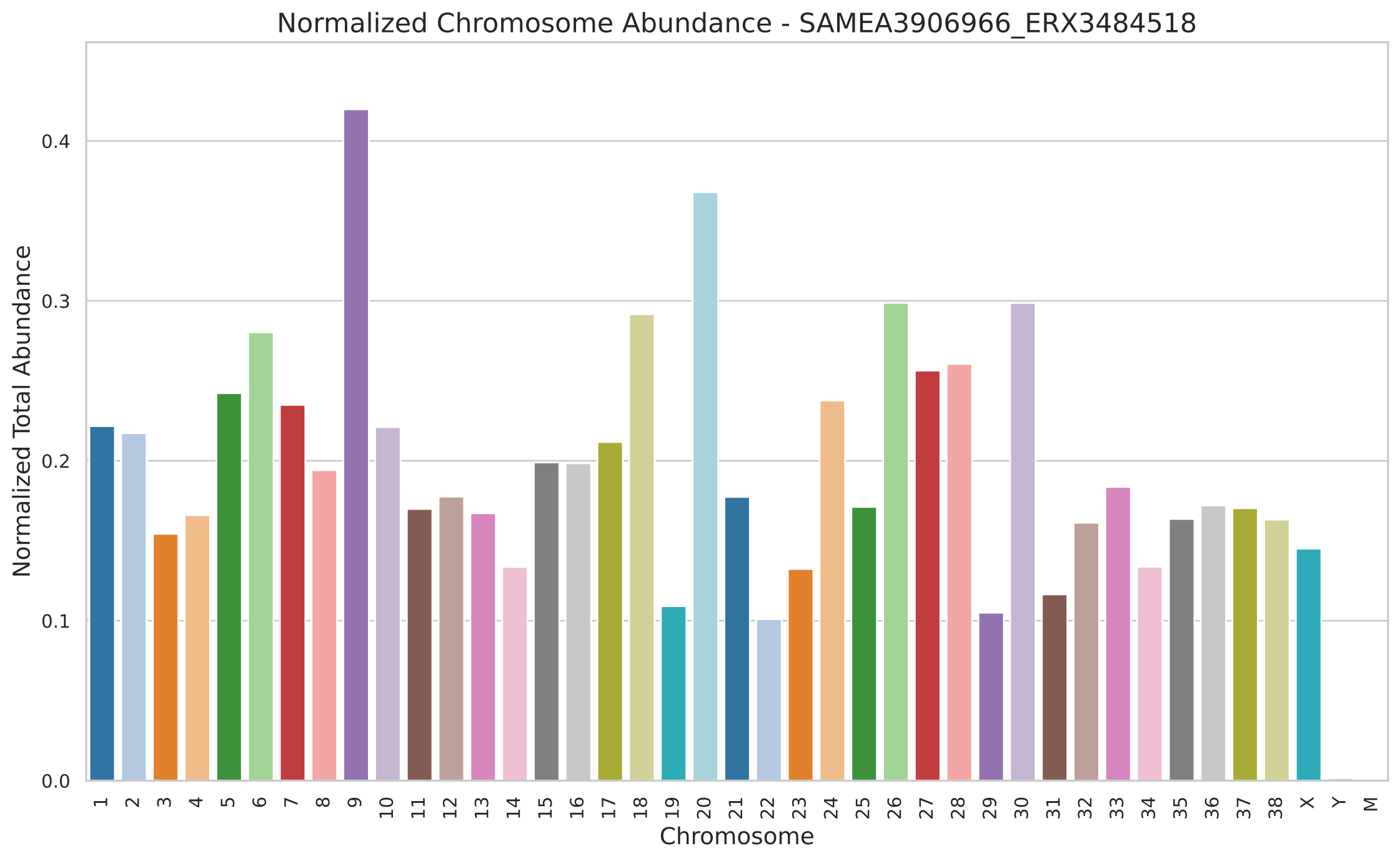

Normalized Chromosome Abundance - SAMEA3907214_ERX3484503
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

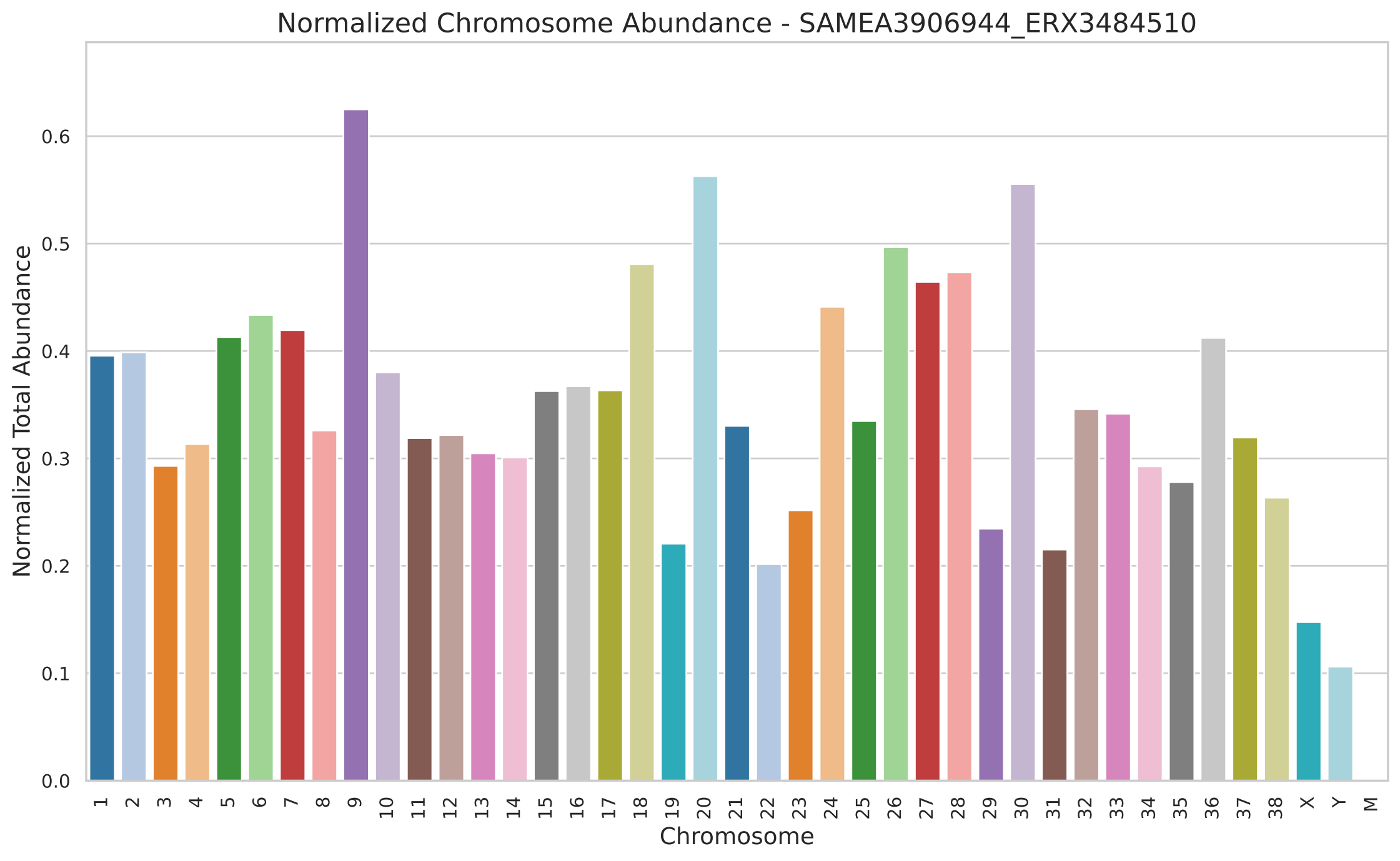

Normalized Chromosome Abundance - SAMEA3907000_ERX3484489
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

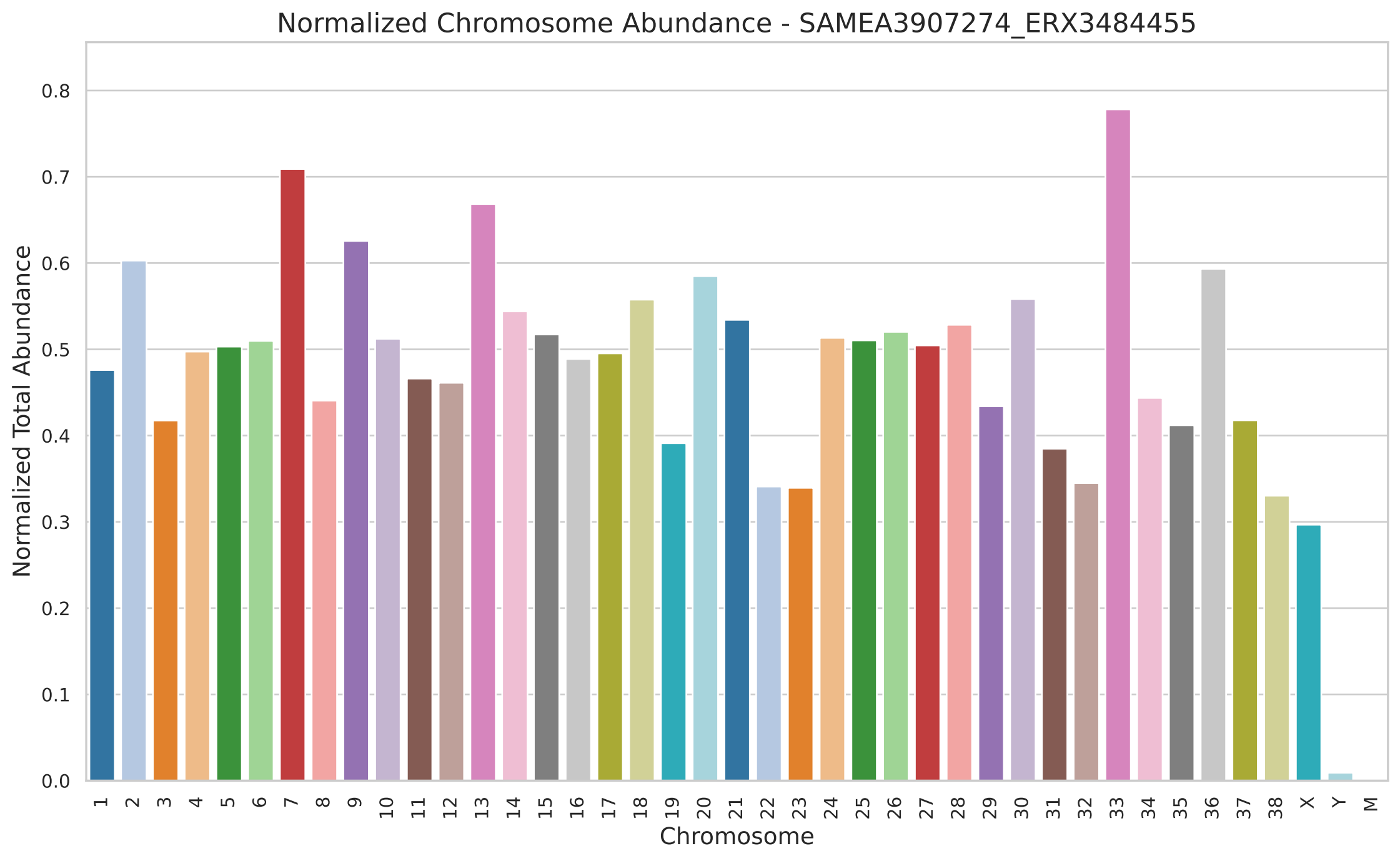

Normalized Chromosome Abundance - SAMEA3906889_ERX3484482
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

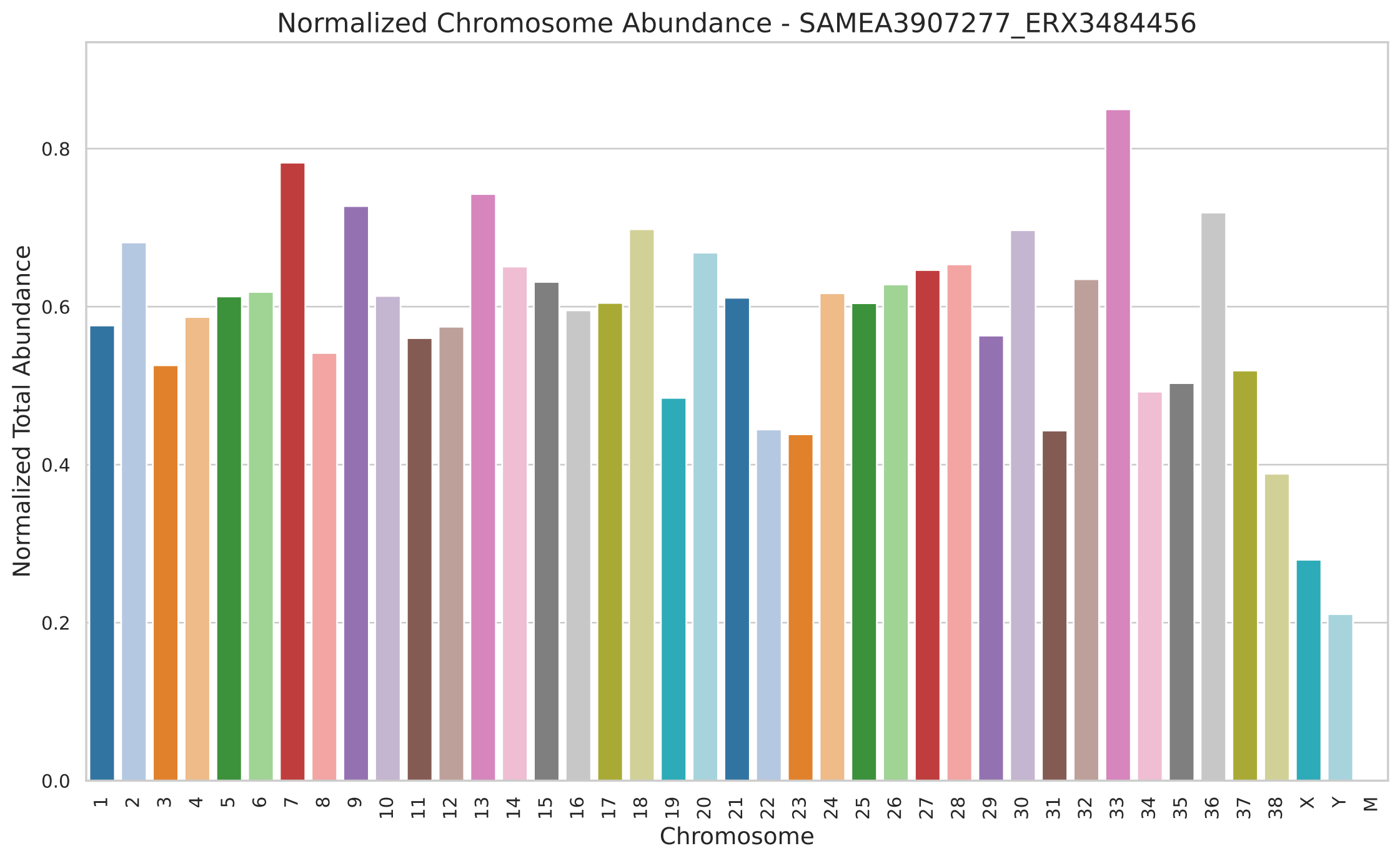

Normalized Chromosome Abundance - SAMEA3907301_ERX3484475
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

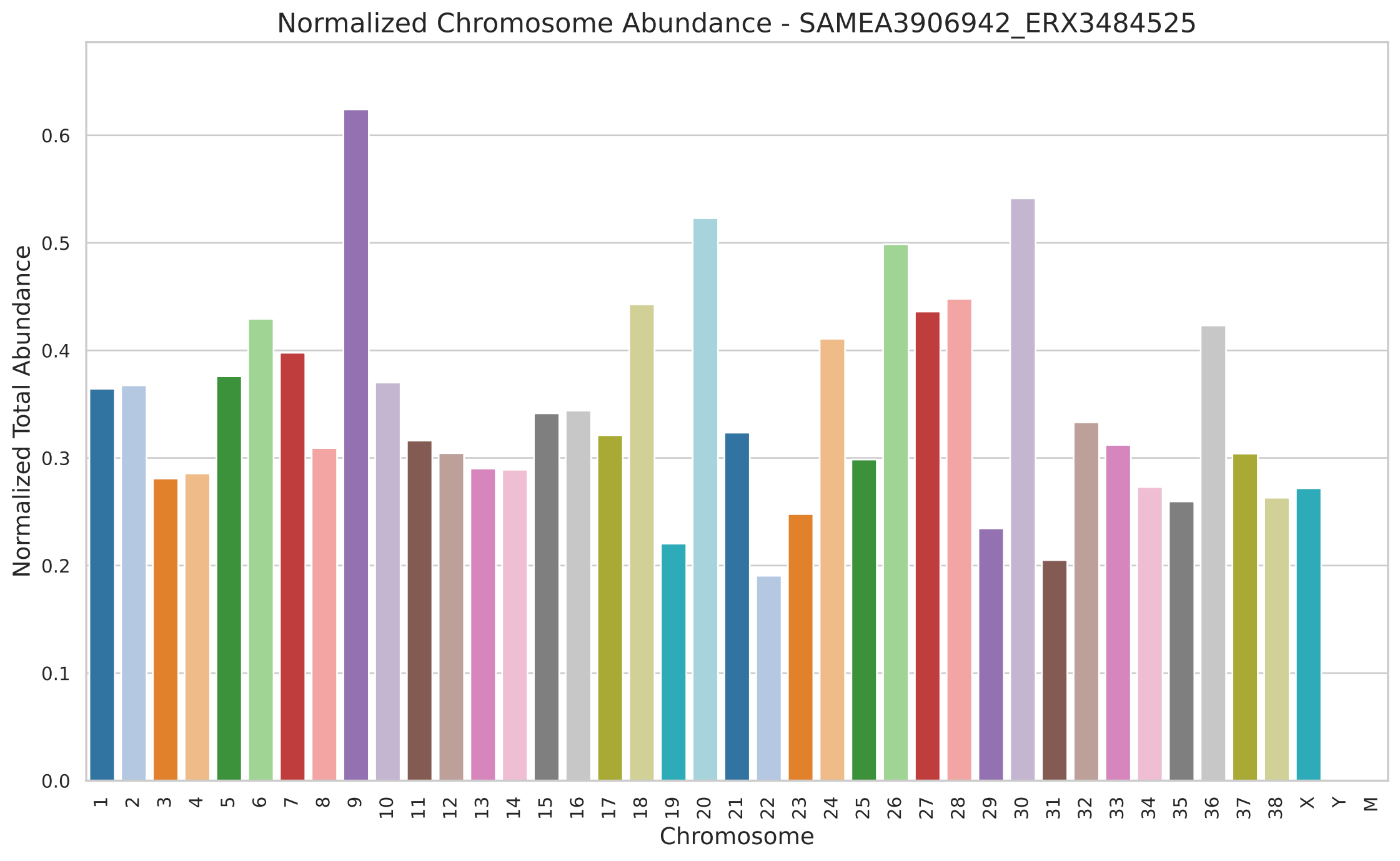

Normalized Chromosome Abundance - SAMEA3907383_ERX3484464
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

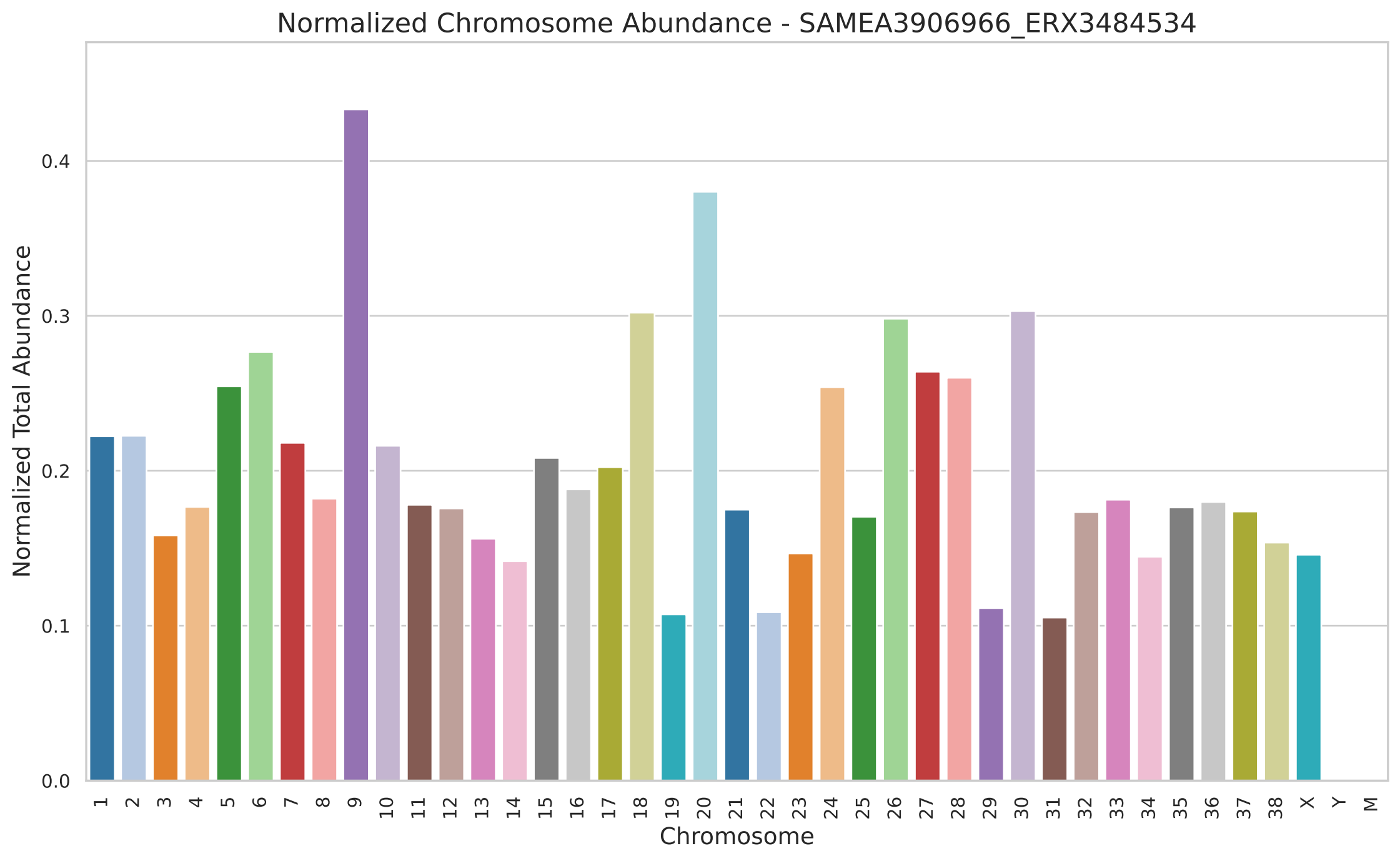

Normalized Chromosome Abundance - SAMEA3906966_ERX3484518
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

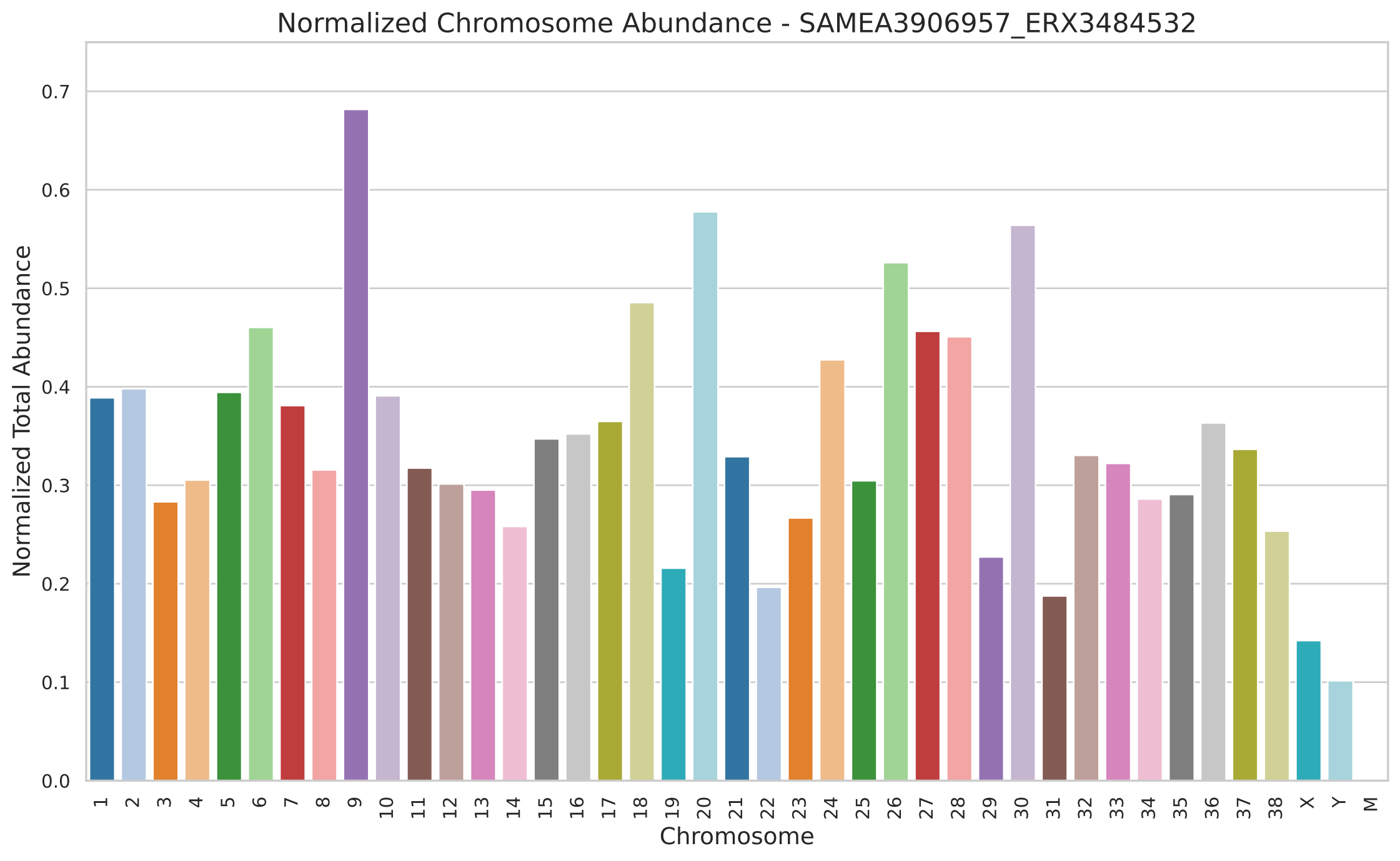

Normalized Chromosome Abundance - SAMEA3906944_ERX3484510
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

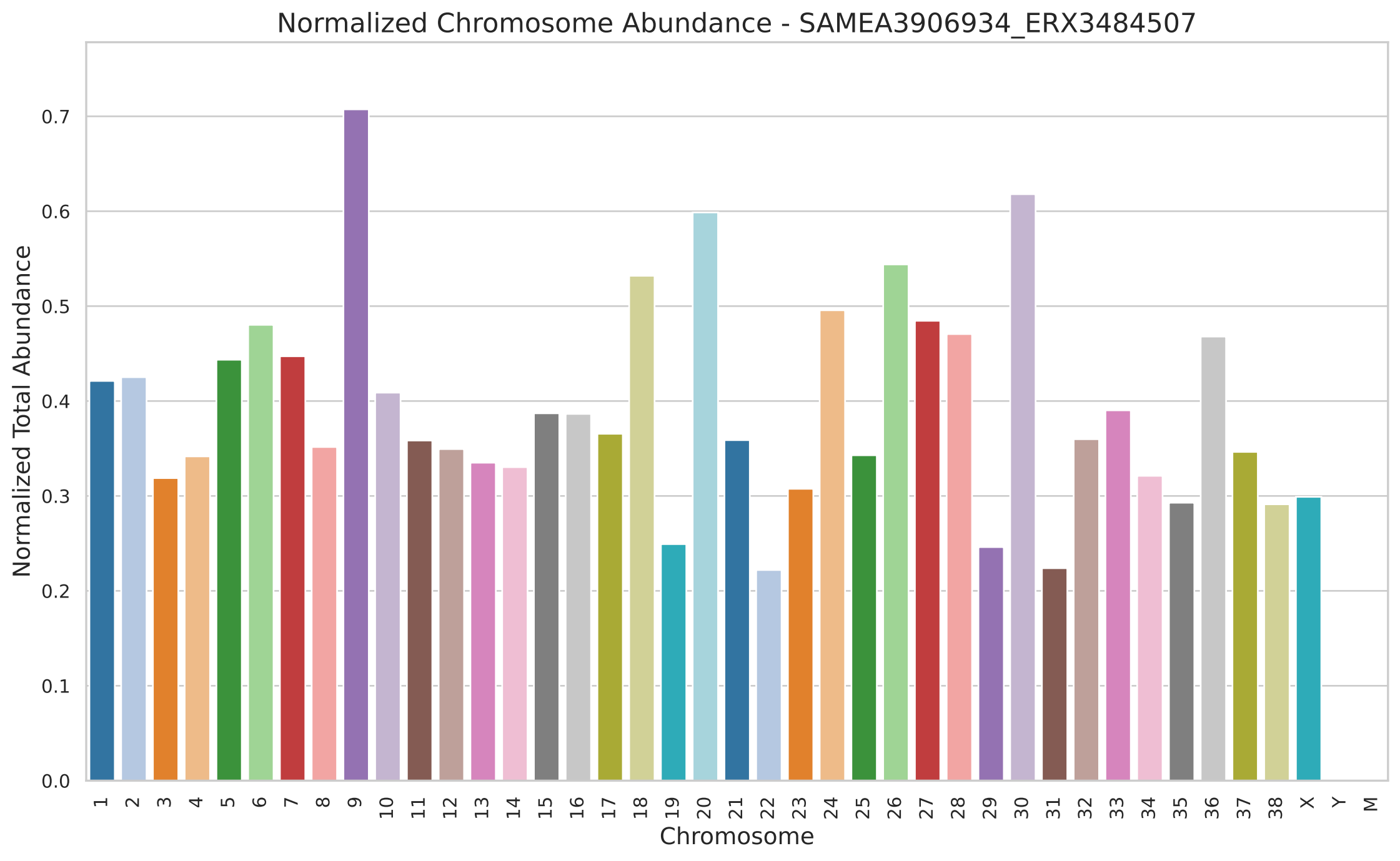

Normalized Chromosome Abundance - SAMEA3907274_ERX3484455
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

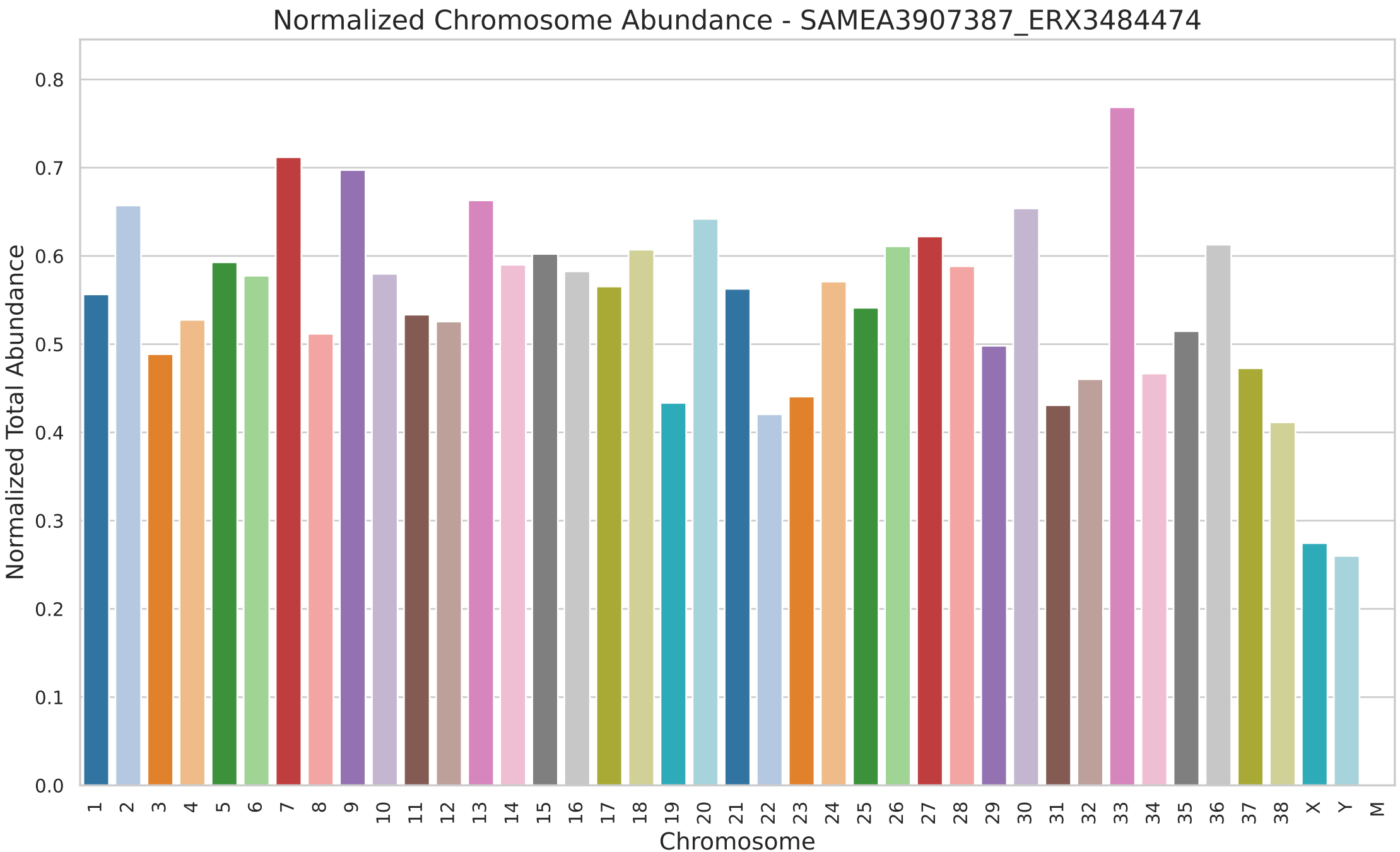

Normalized Chromosome Abundance - SAMEA3907277_ERX3484456
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

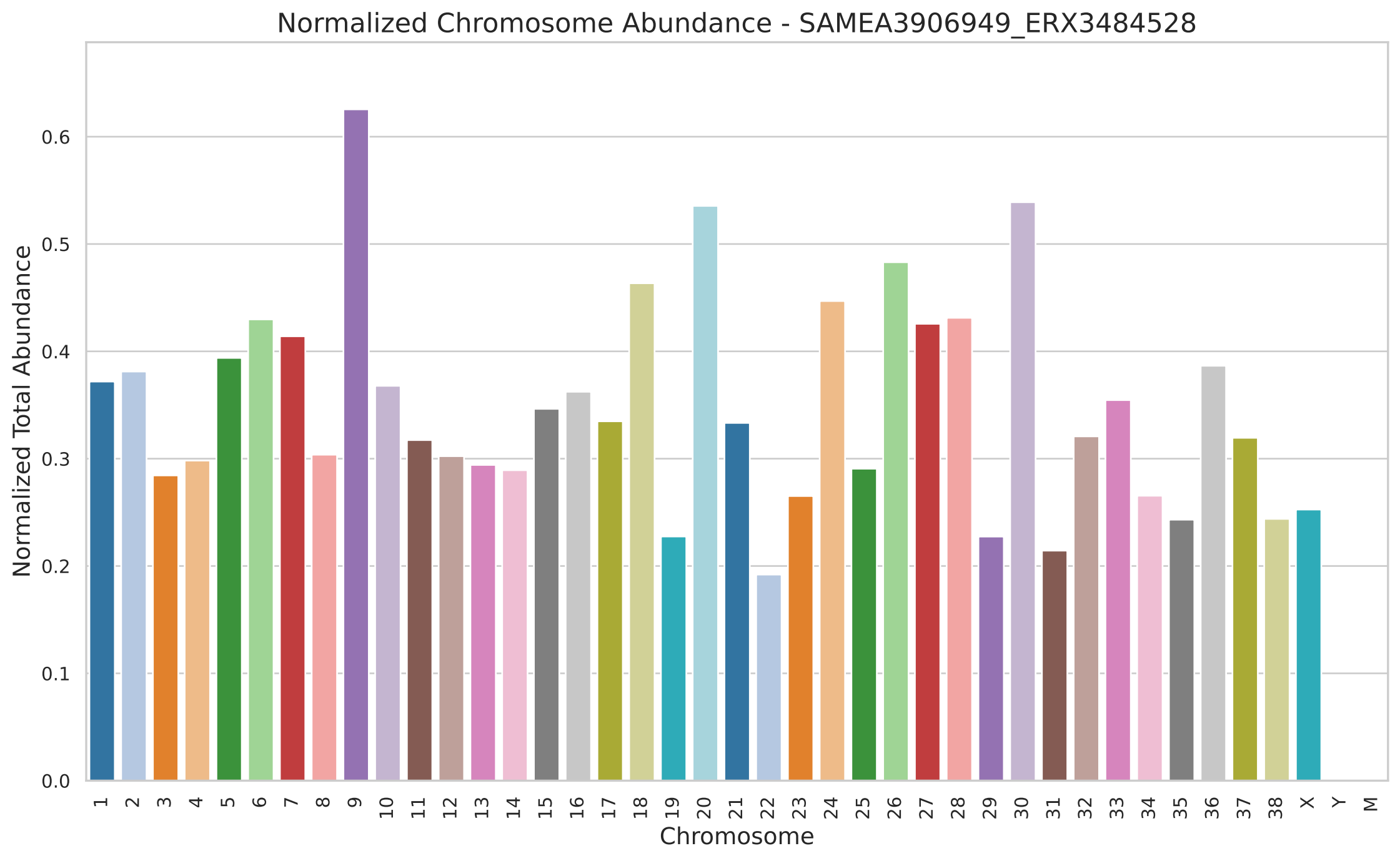

Normalized Chromosome Abundance - SAMEA3906942_ERX3484525
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

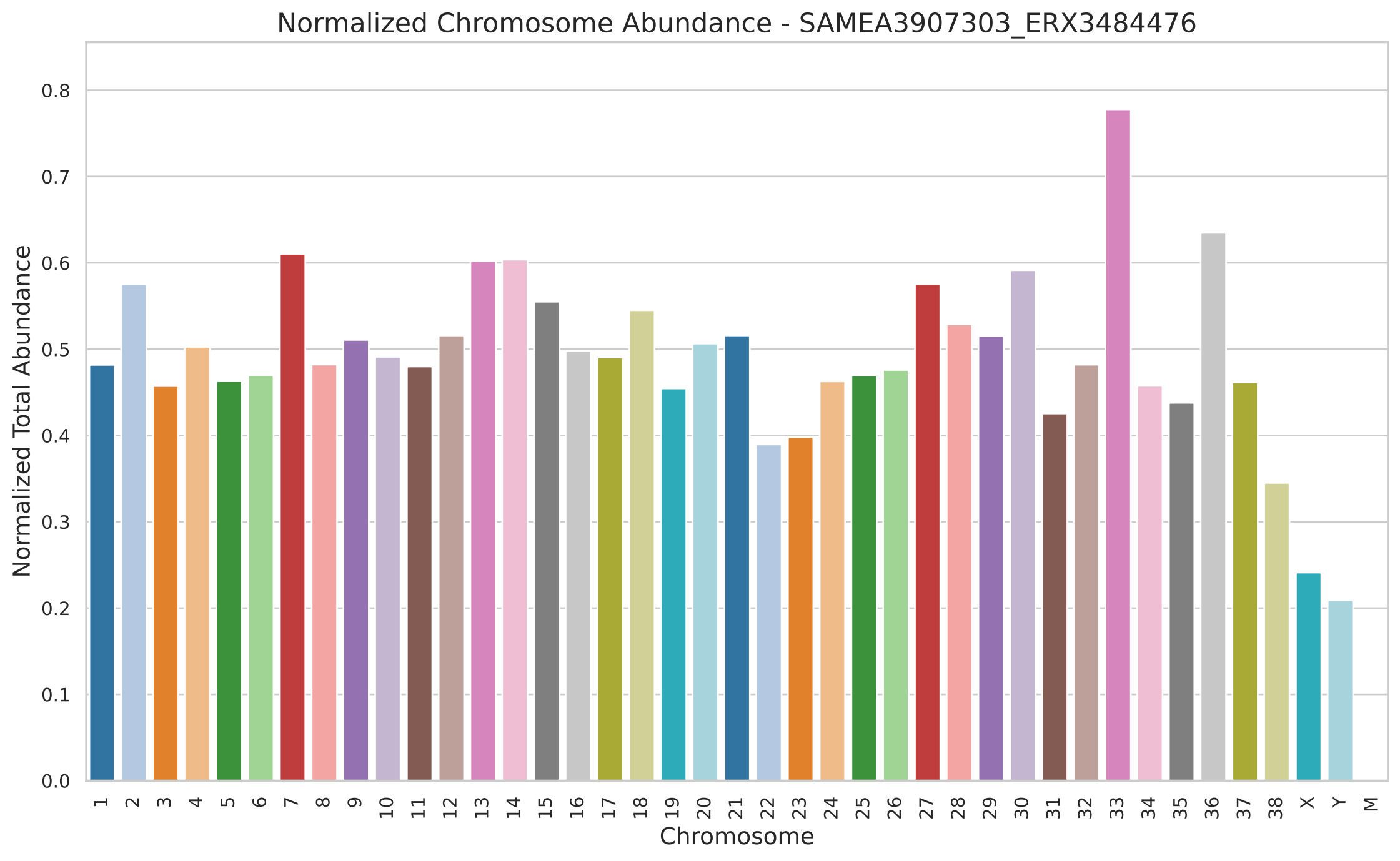

Normalized Chromosome Abundance - SAMEA3906966_ERX3484534
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

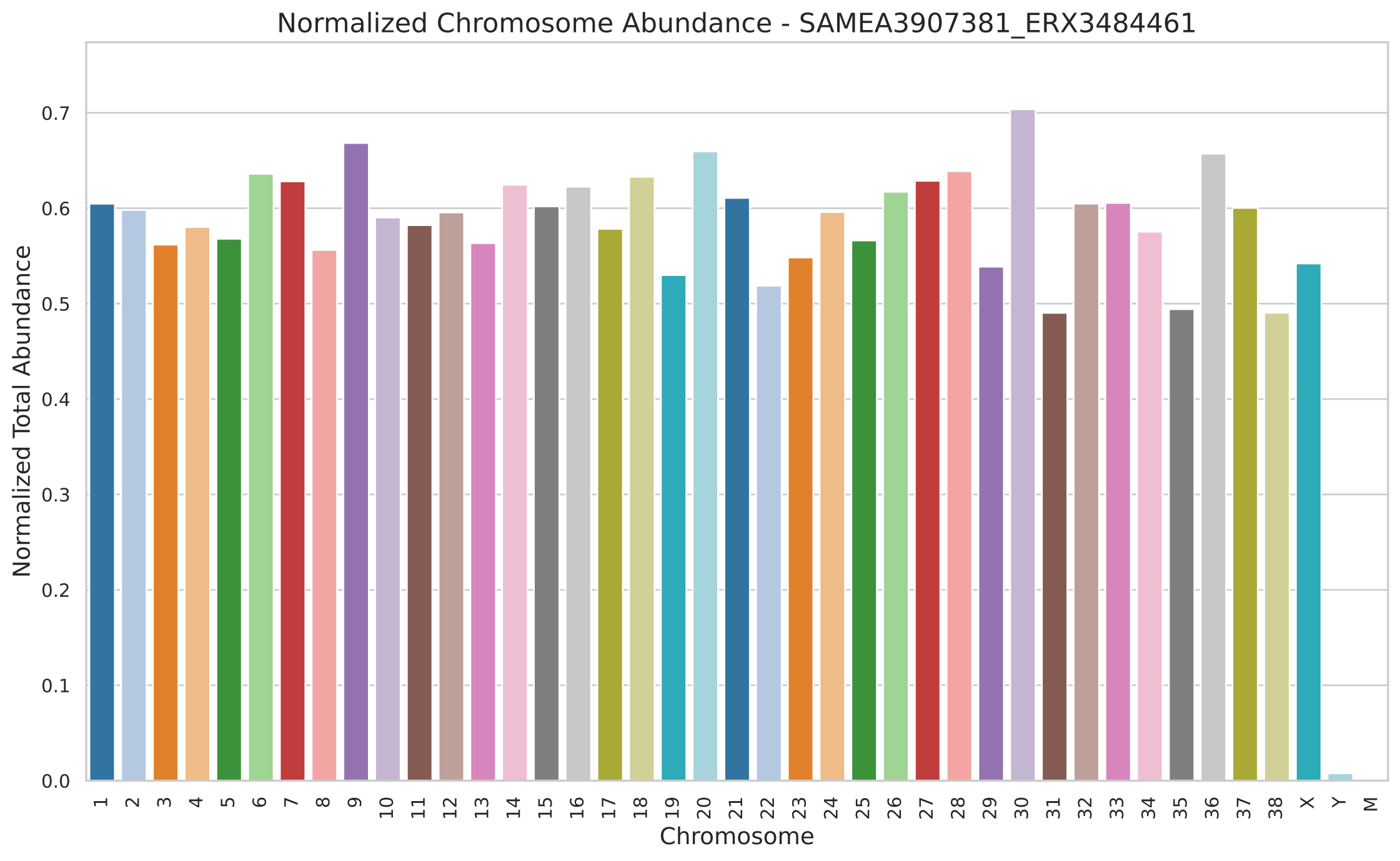

Normalized Chromosome Abundance - SAMEA3906957_ERX3484532
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

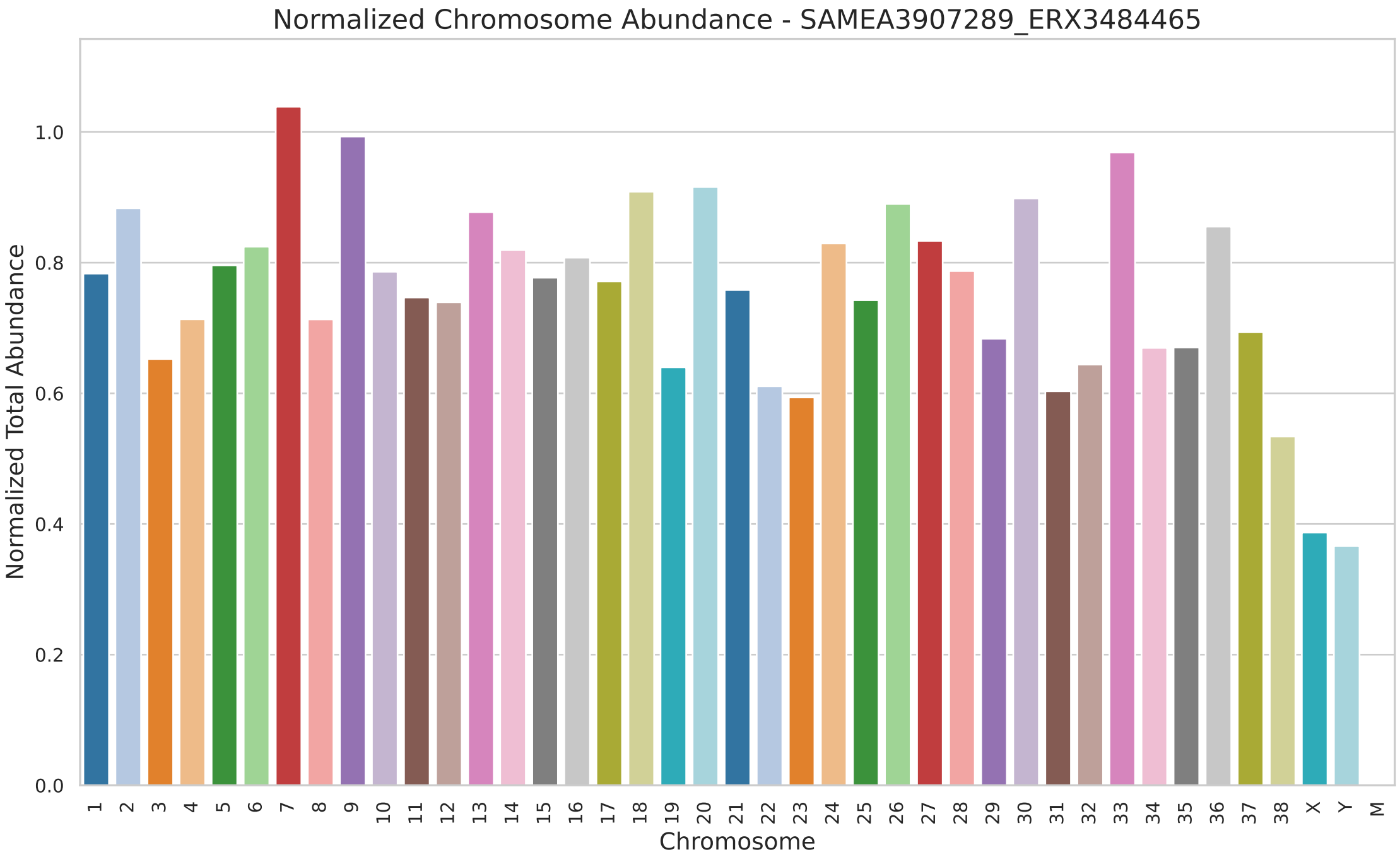

Normalized Chromosome Abundance - SAMEA3906934_ERX3484507
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

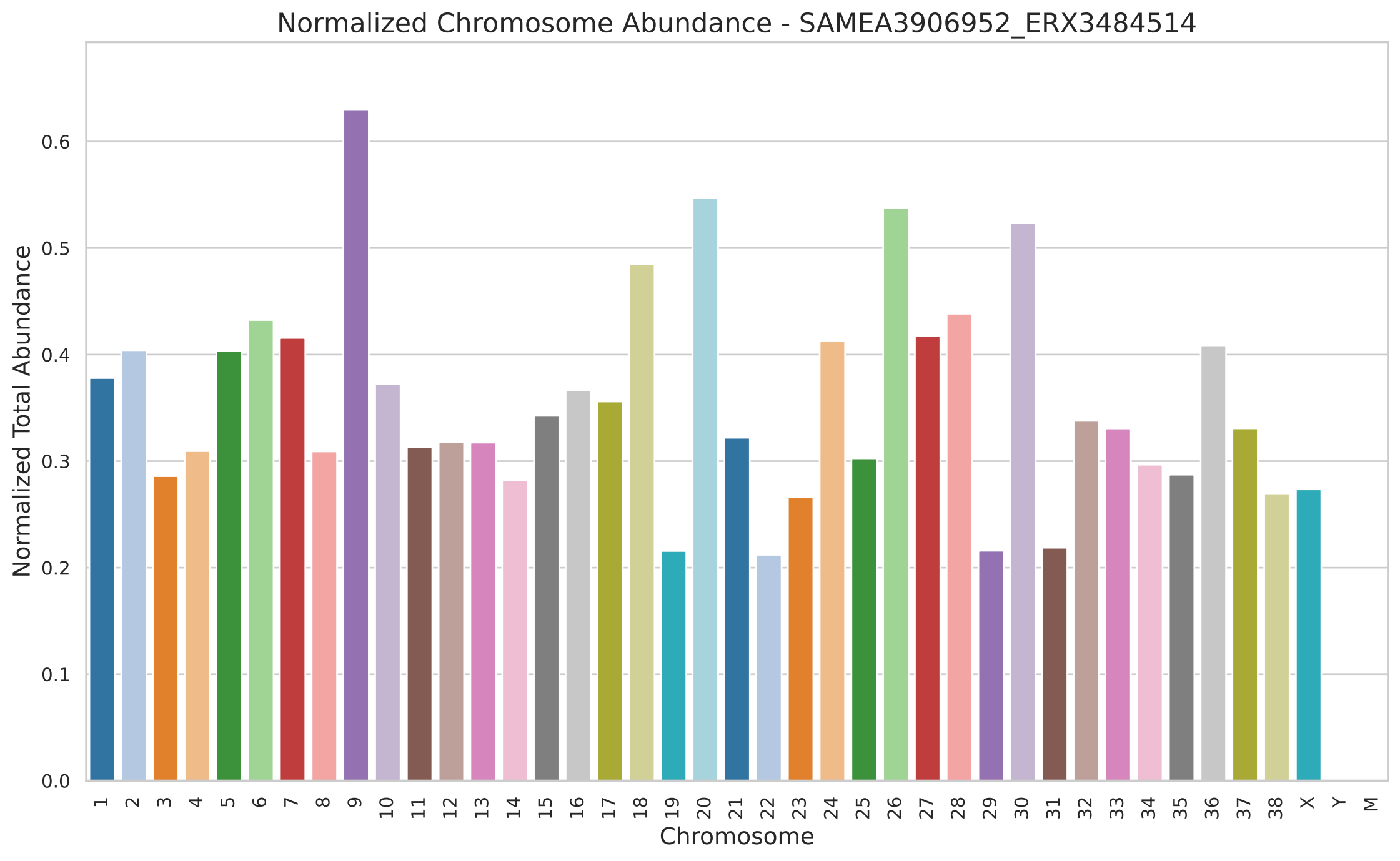

Normalized Chromosome Abundance - SAMEA3907387_ERX3484474
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

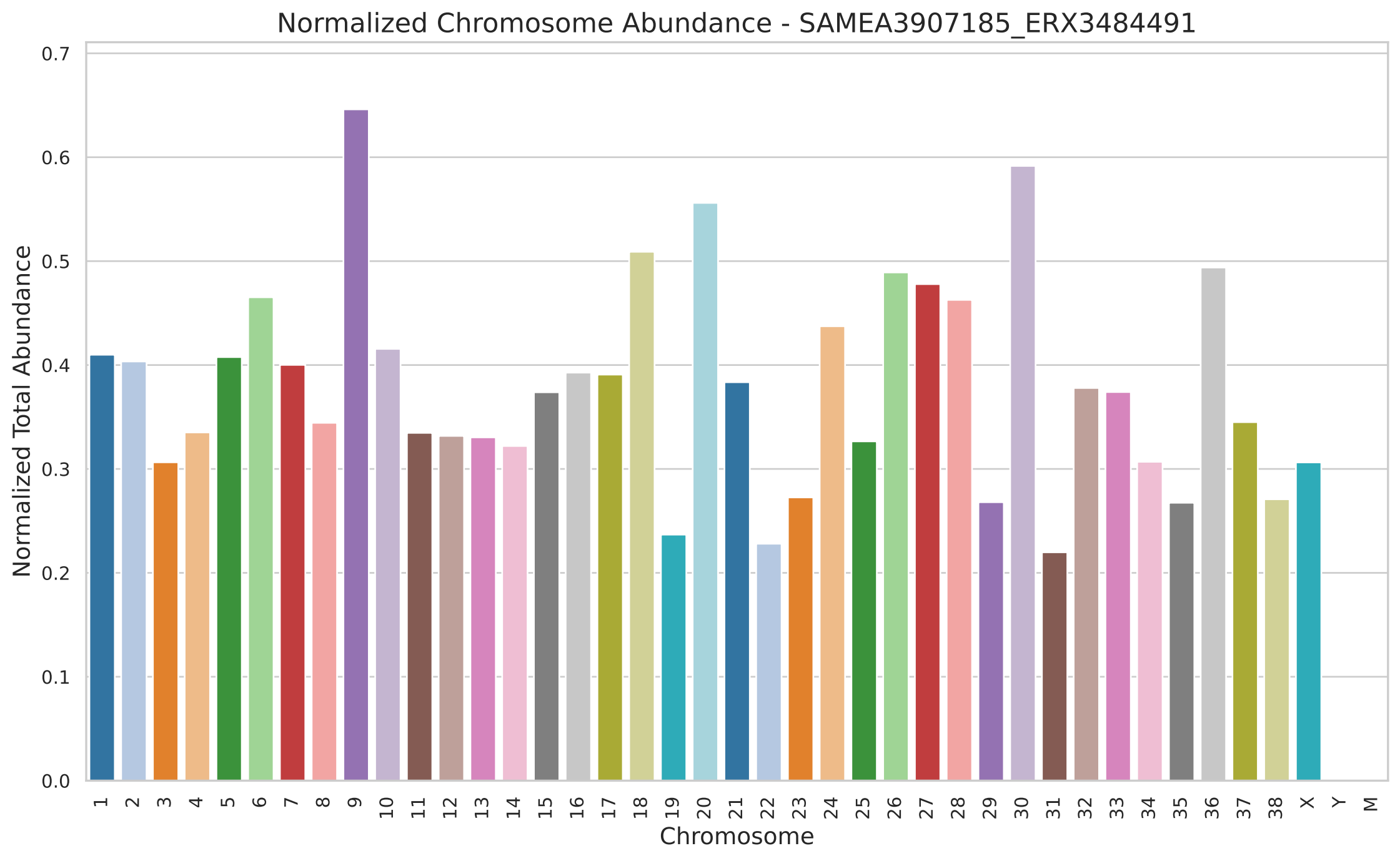

Normalized Chromosome Abundance - SAMEA3906949_ERX3484528
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

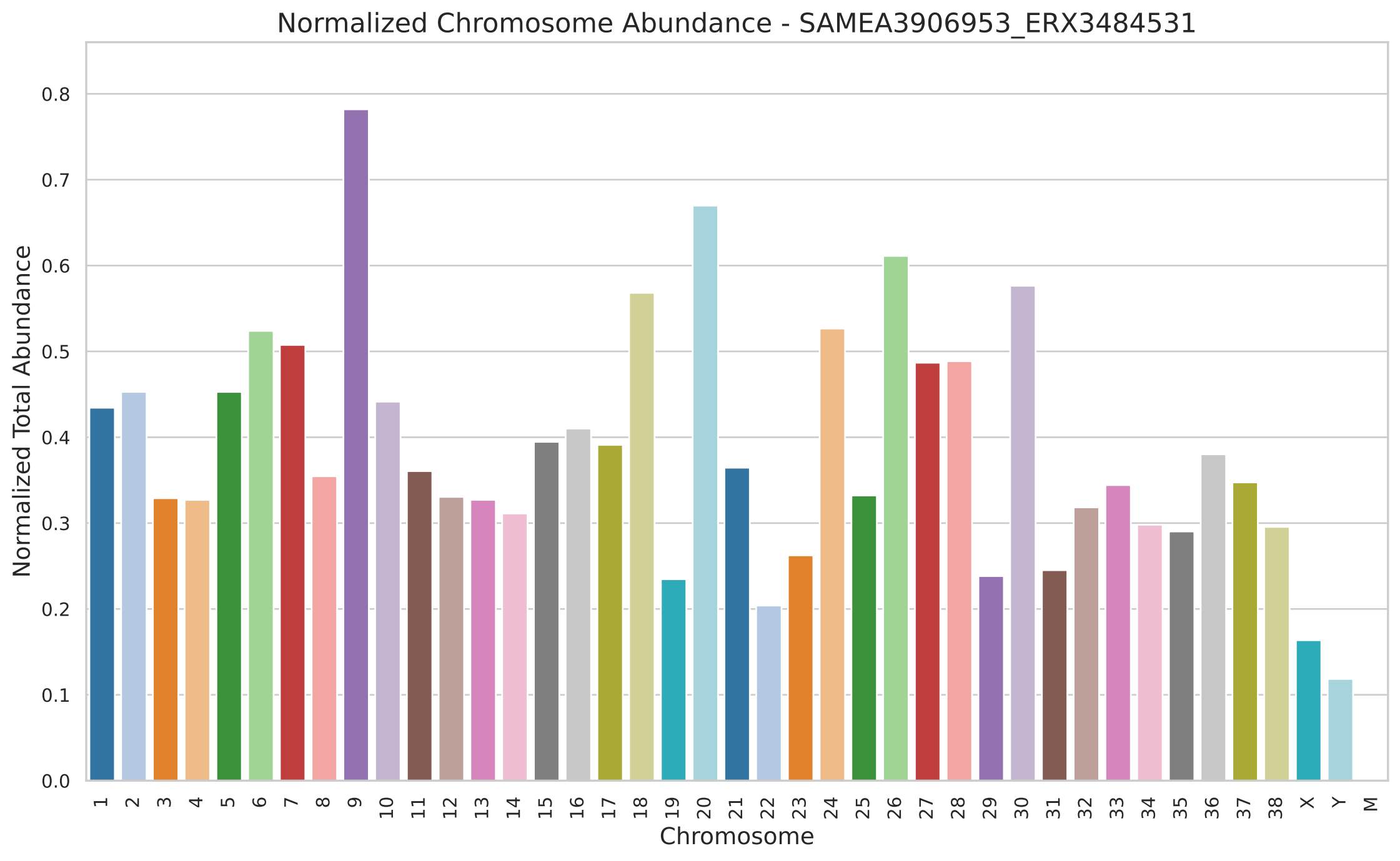

Normalized Chromosome Abundance - SAMEA3907303_ERX3484476
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

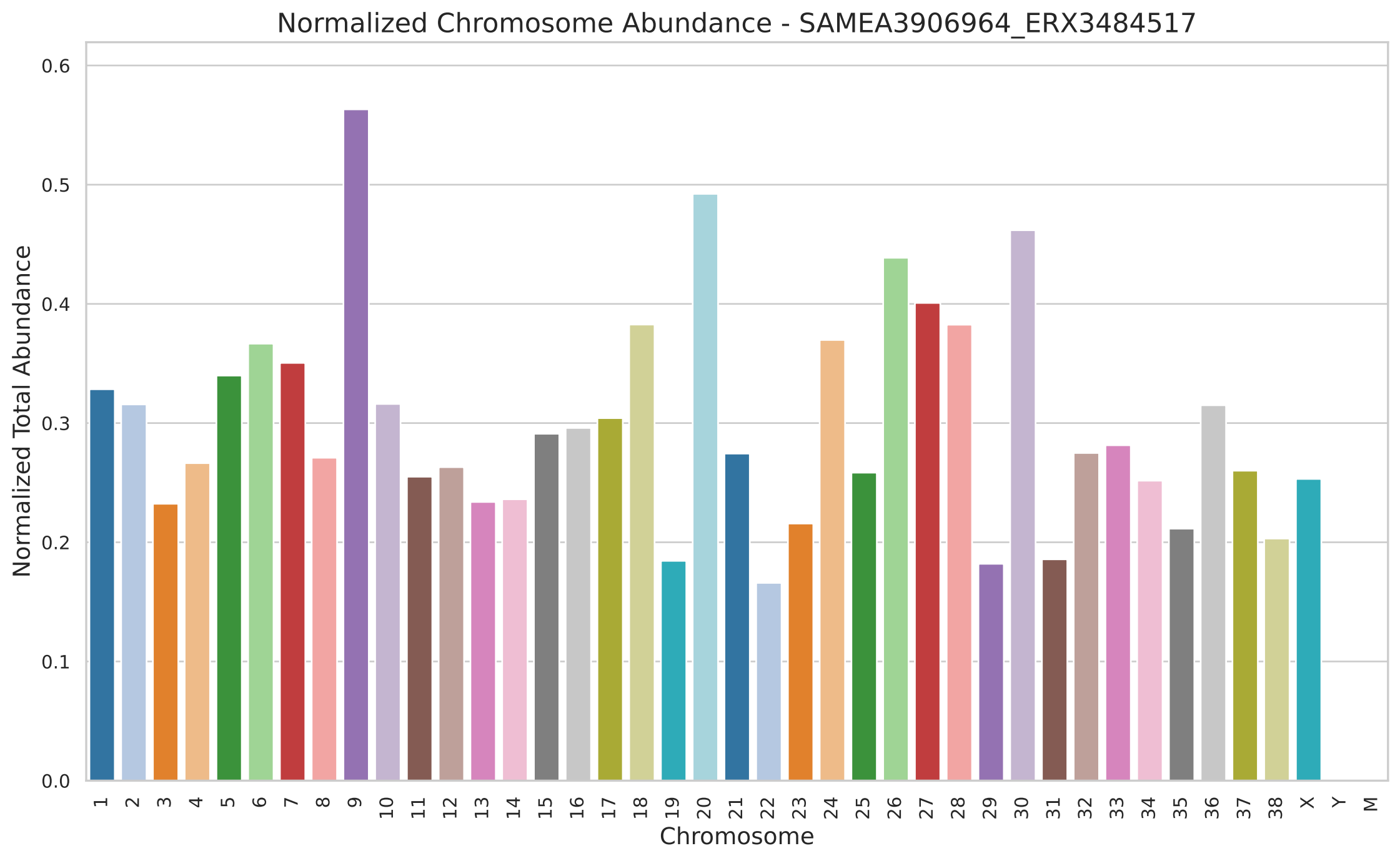

Normalized Chromosome Abundance - SAMEA3907381_ERX3484461
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

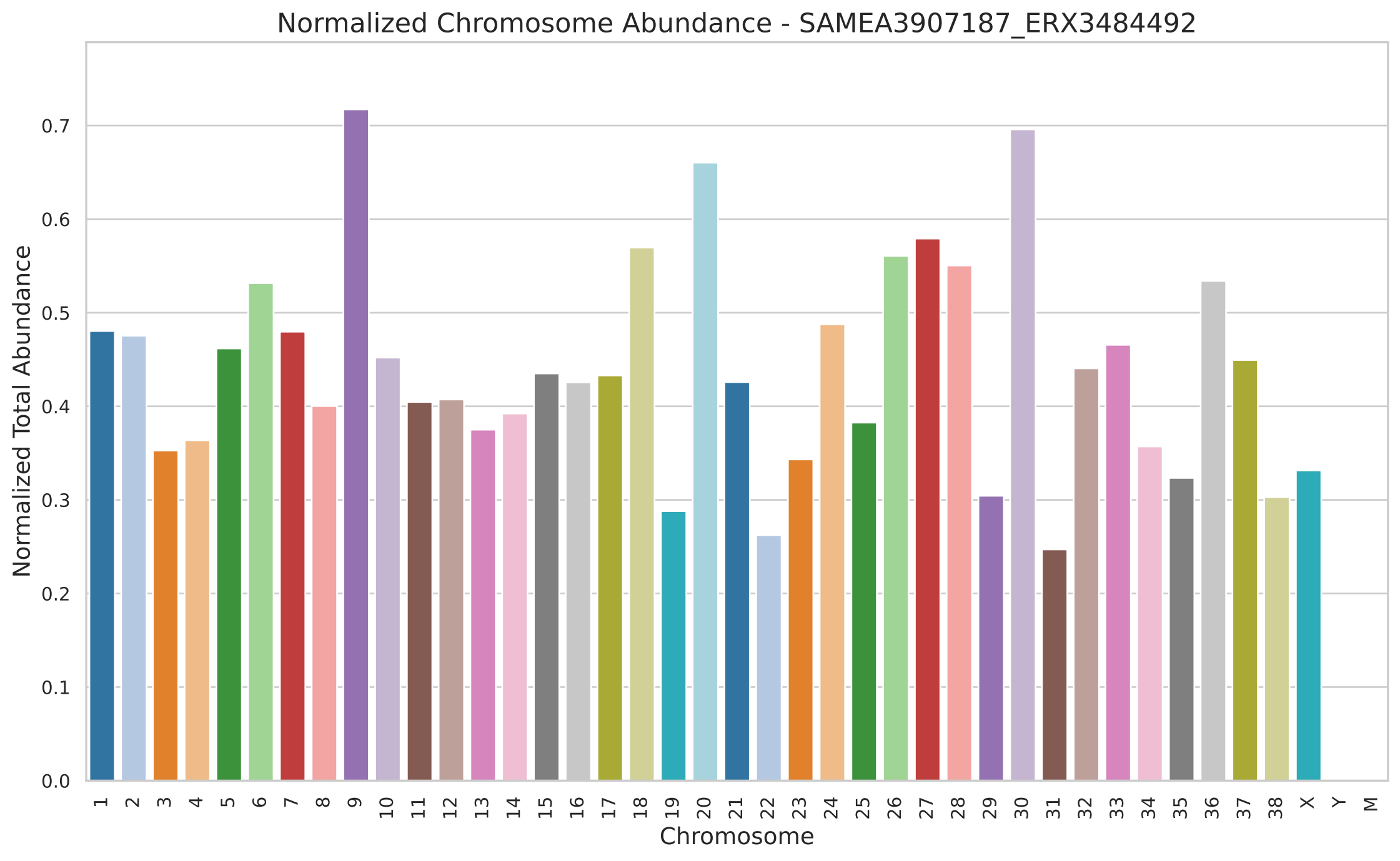

Normalized Chromosome Abundance - SAMEA3907289_ERX3484465
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

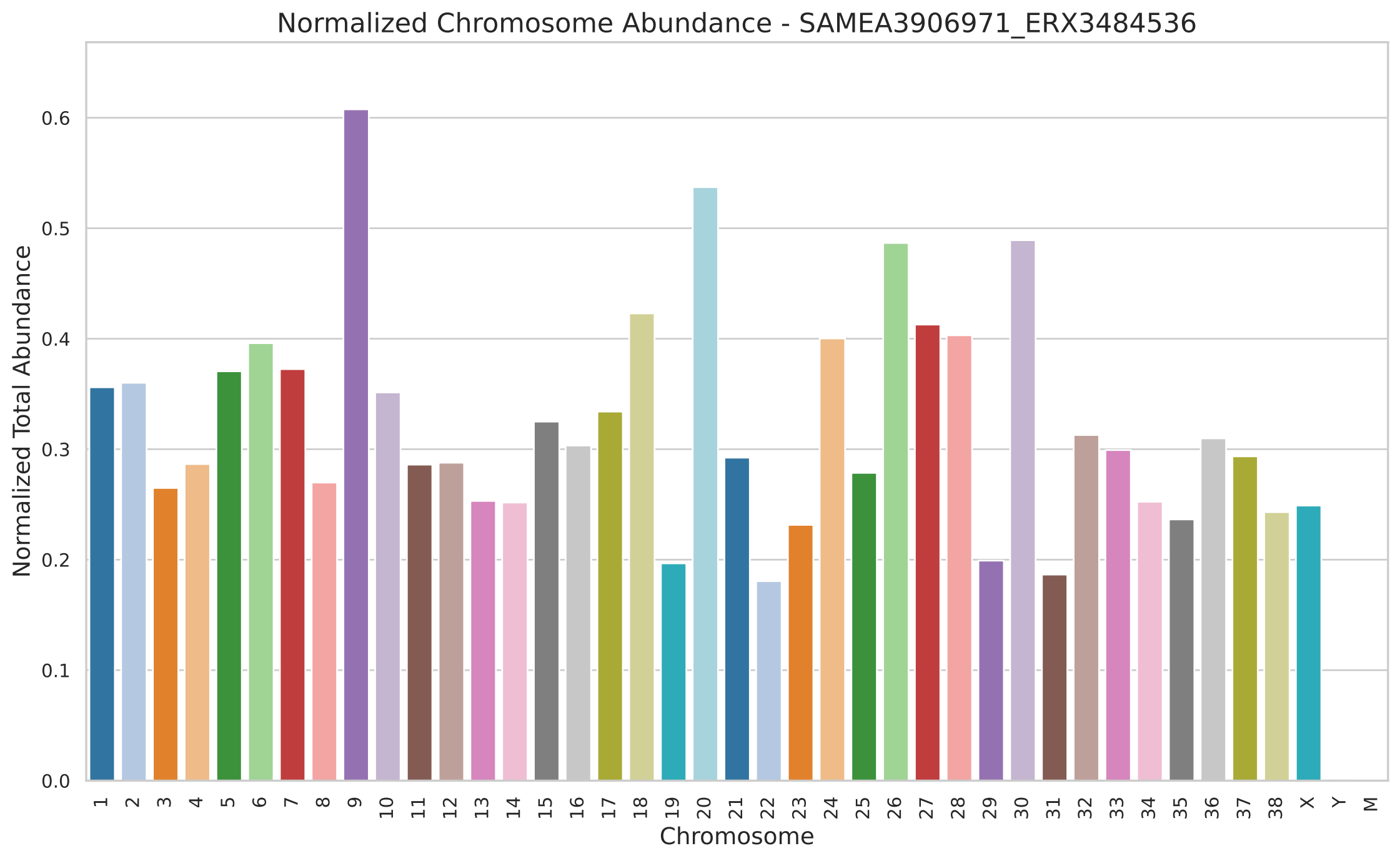

Normalized Chromosome Abundance - SAMEA3906952_ERX3484514
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

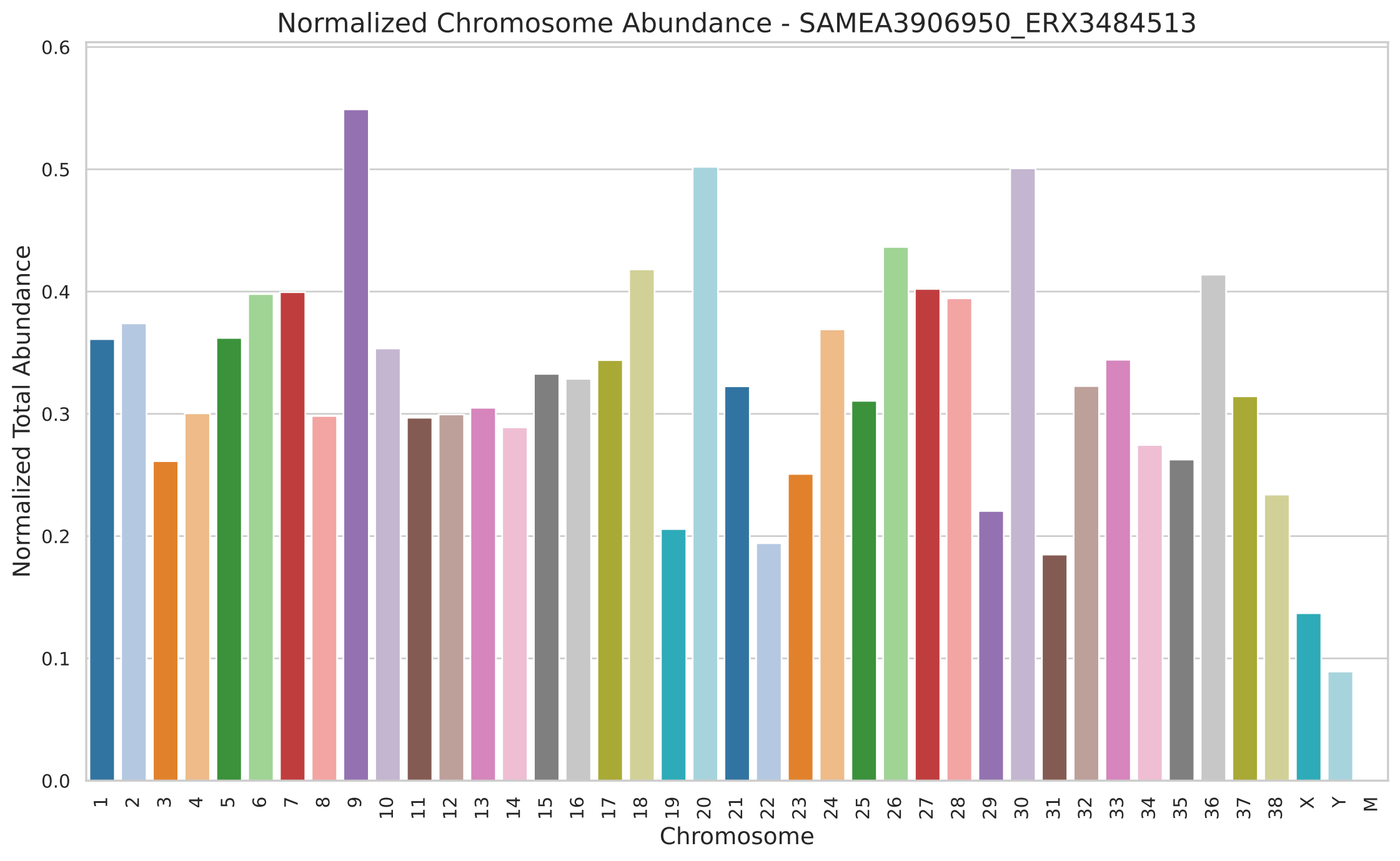

Normalized Chromosome Abundance - SAMEA3907185_ERX3484491
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

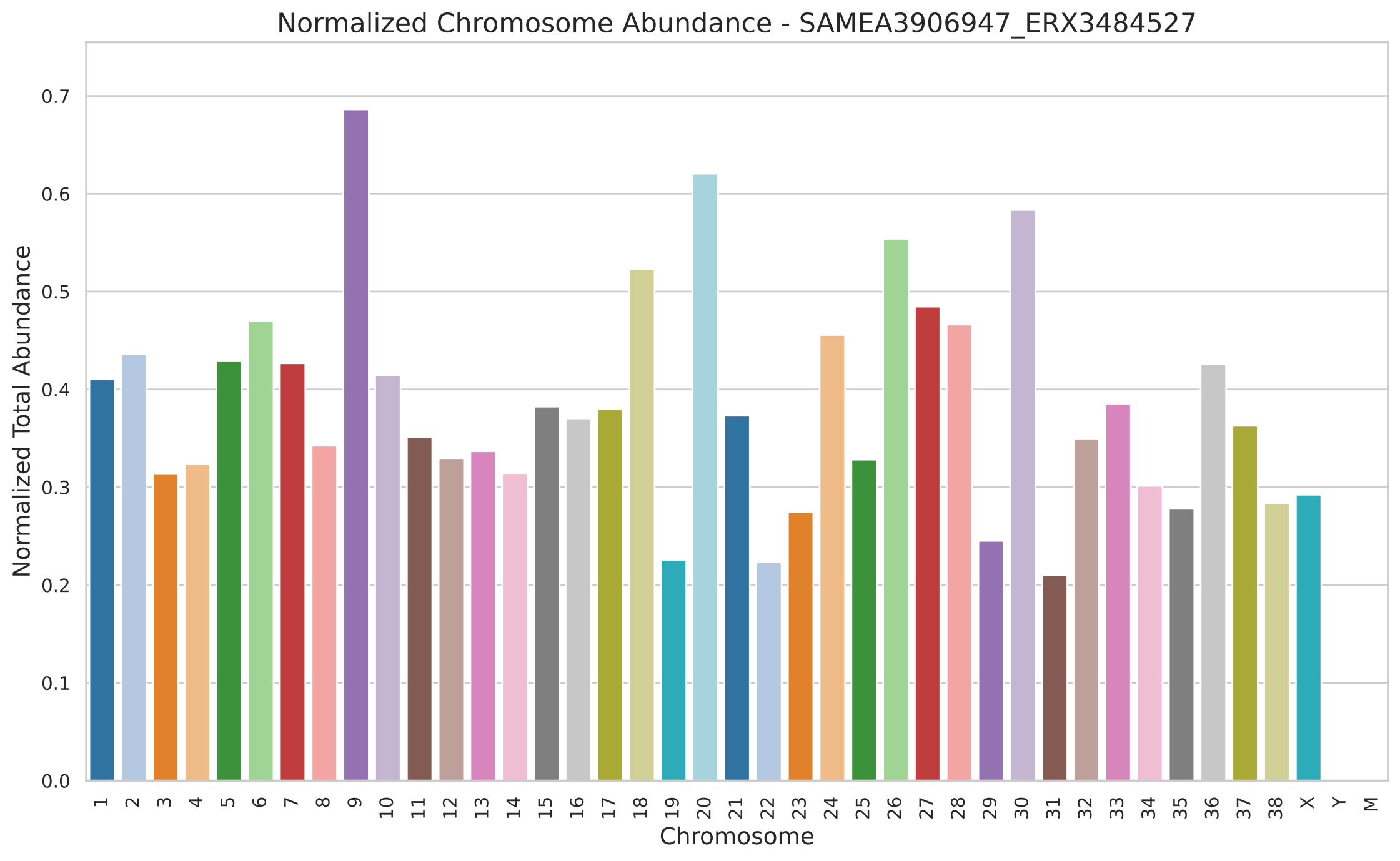

Normalized Chromosome Abundance - SAMEA3906953_ERX3484531
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

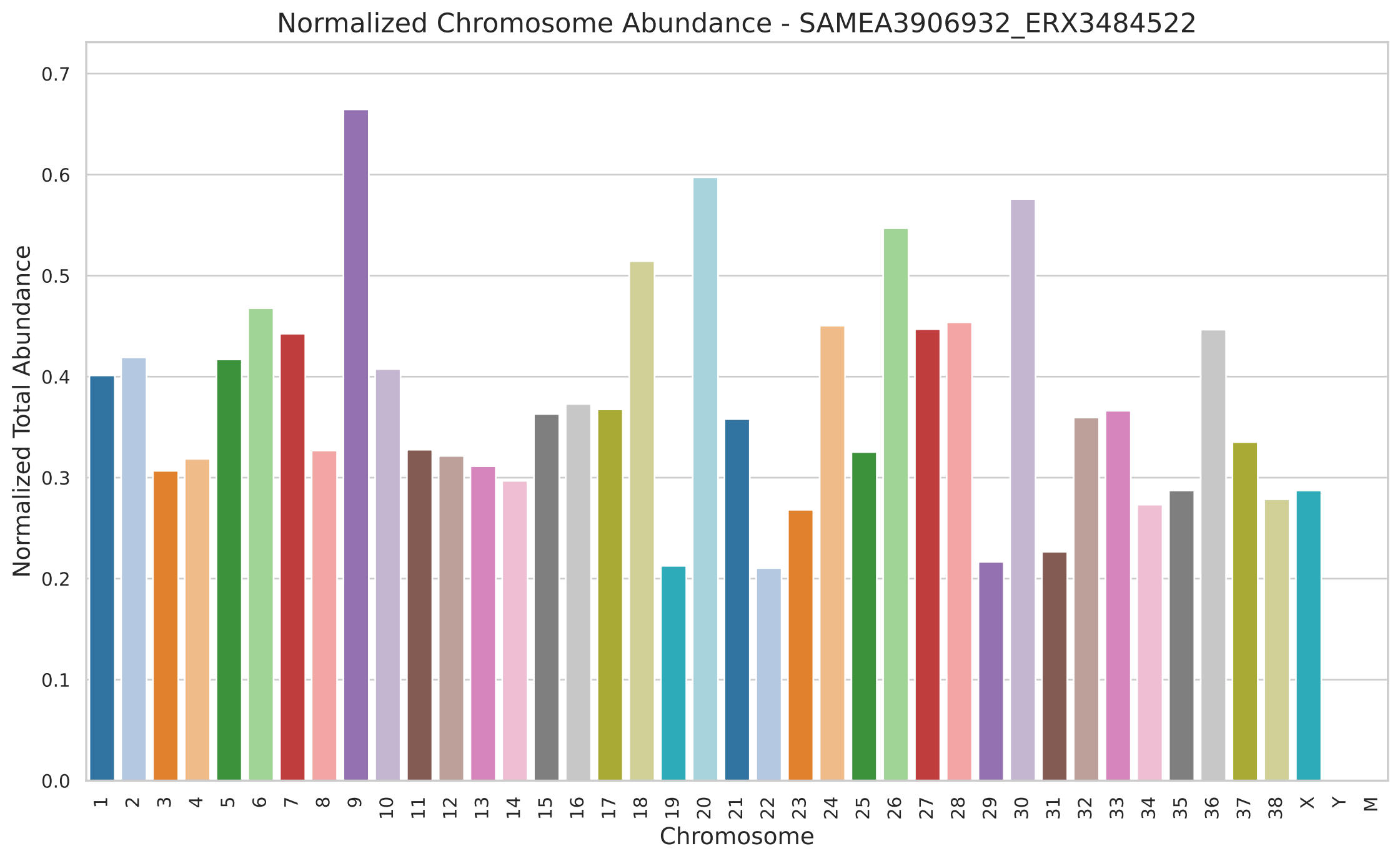

Normalized Chromosome Abundance - SAMEA3906964_ERX3484517
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

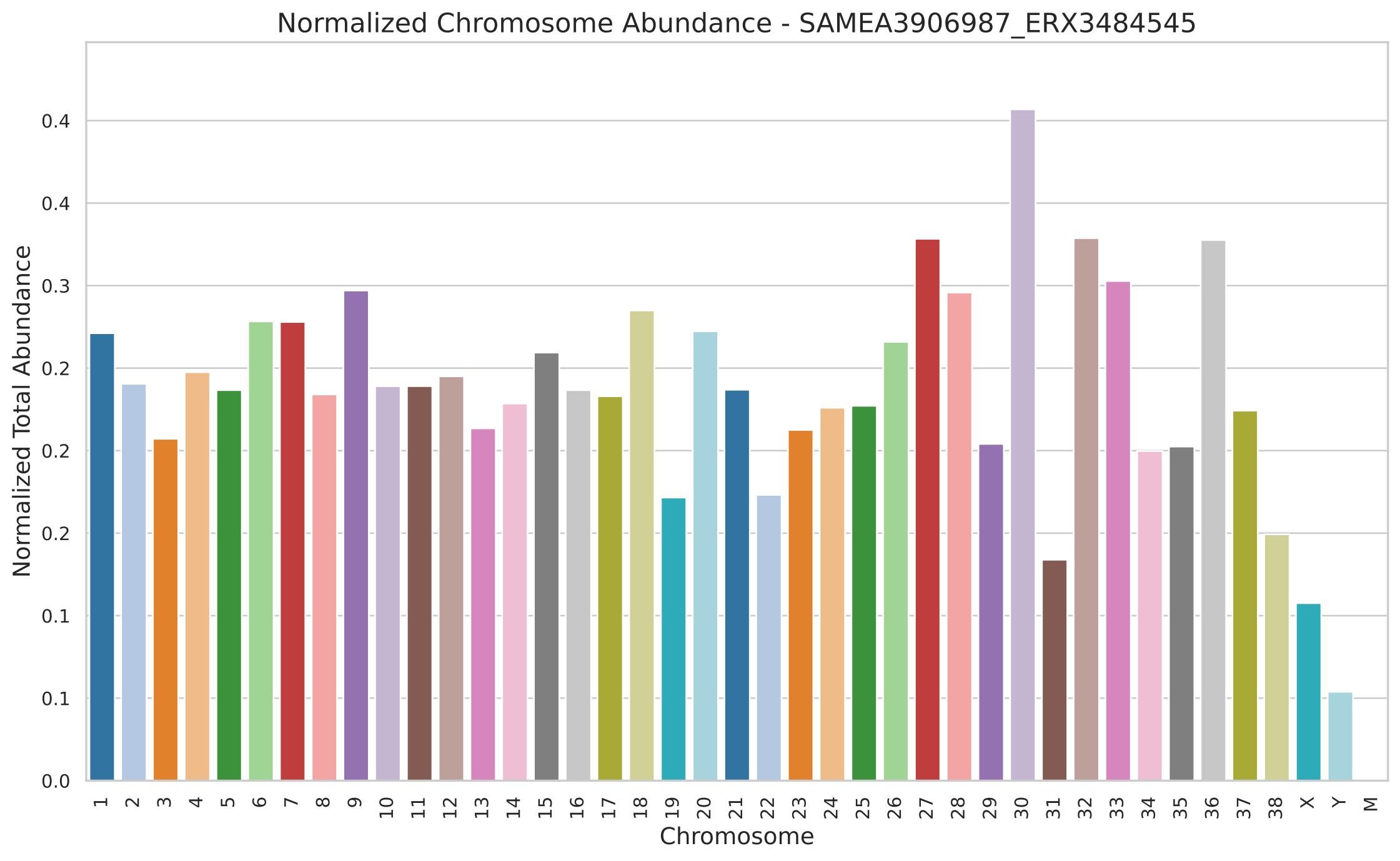

Normalized Chromosome Abundance - SAMEA3907187_ERX3484492
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

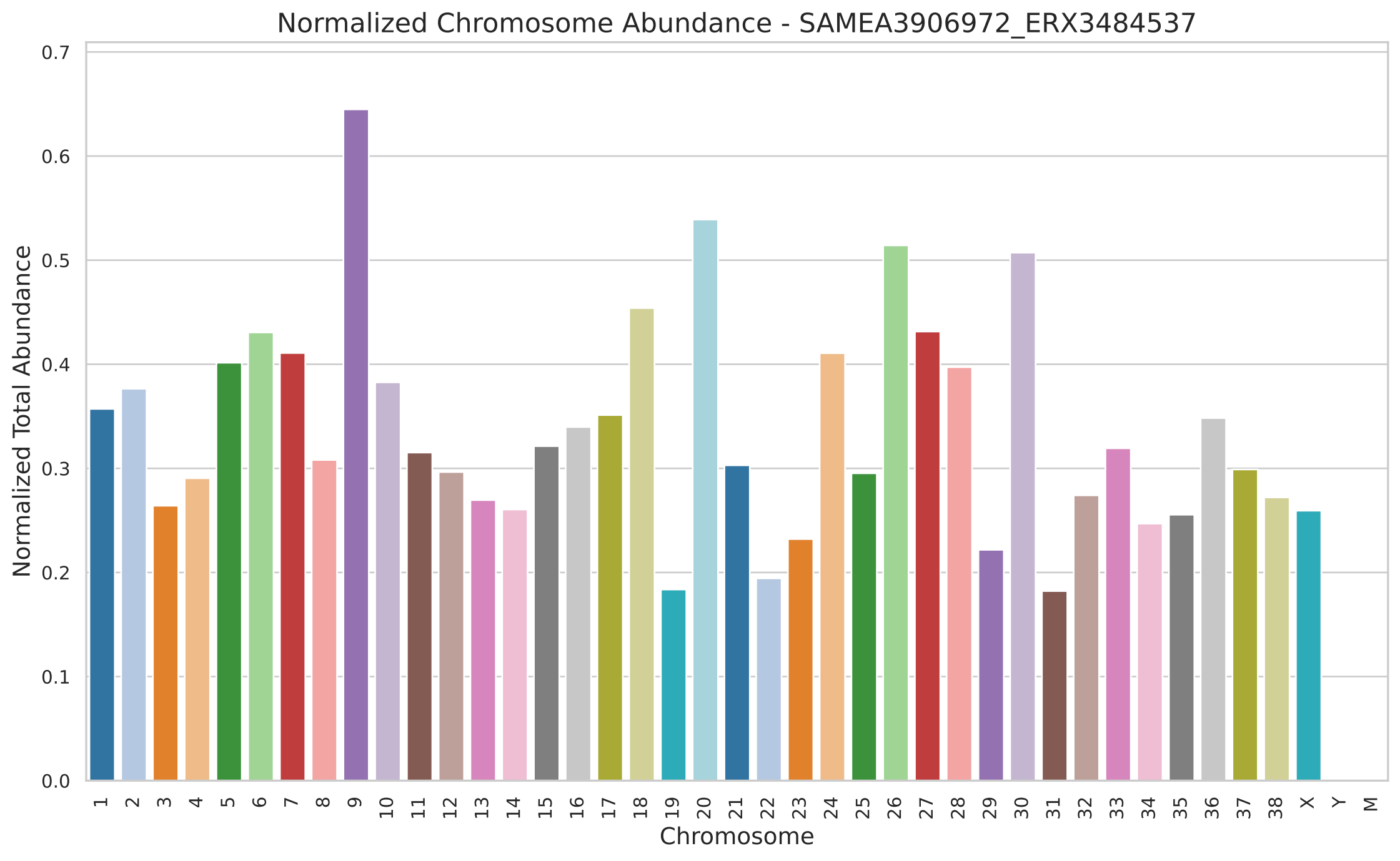

Normalized Chromosome Abundance - SAMEA3906971_ERX3484536
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

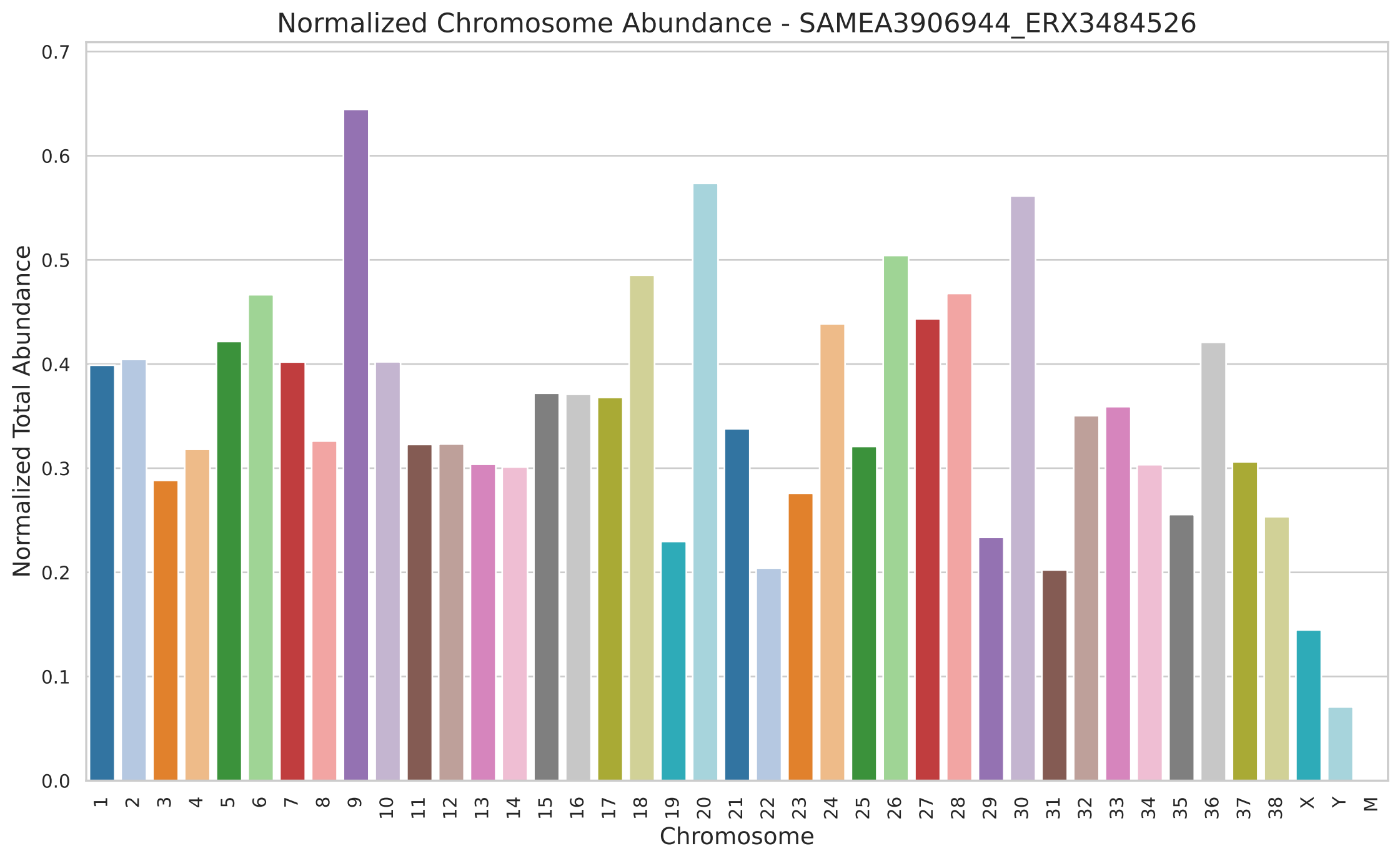

Normalized Chromosome Abundance - SAMEA3906950_ERX3484513
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

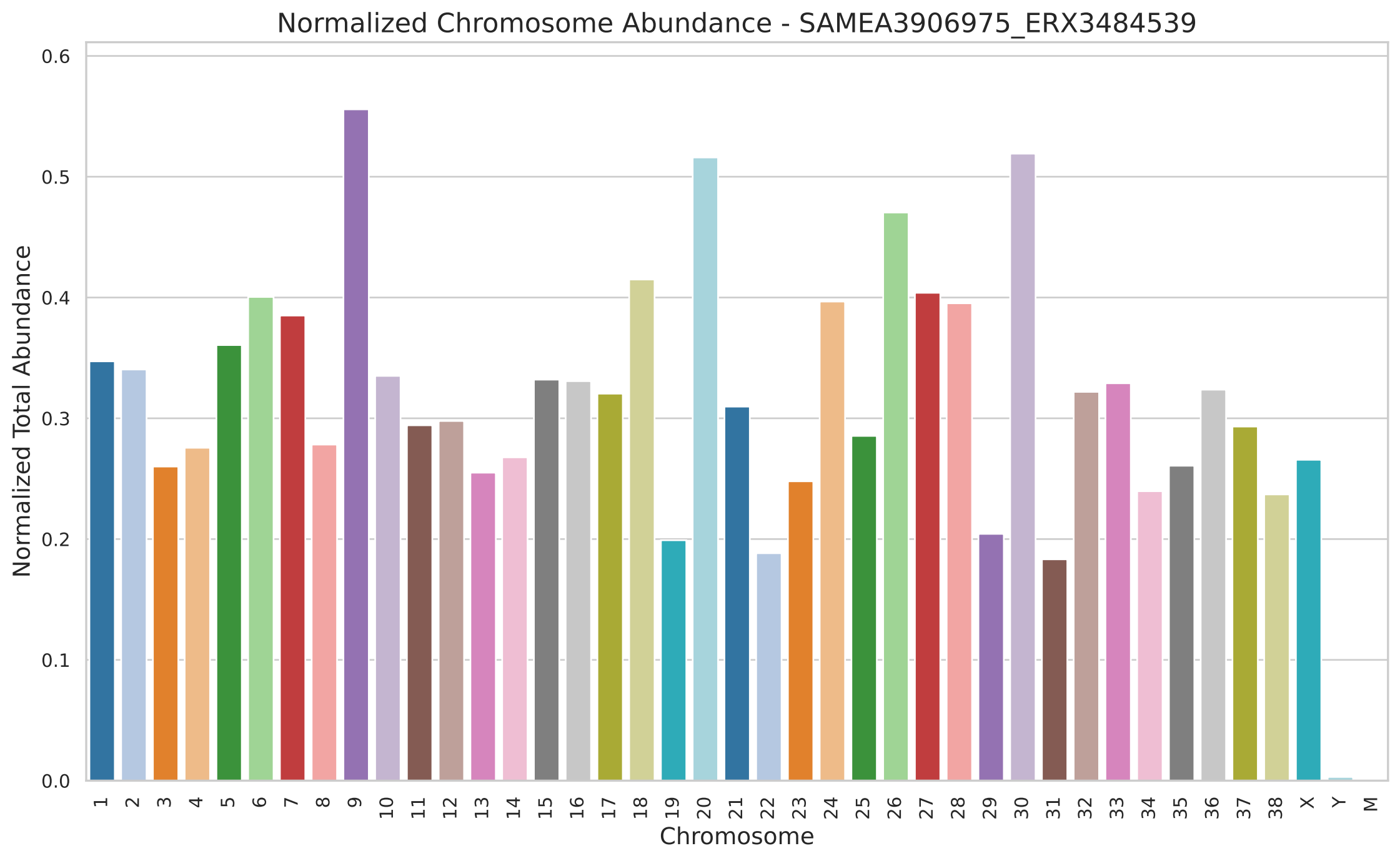

Normalized Chromosome Abundance - SAMEA3906947_ERX3484527
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

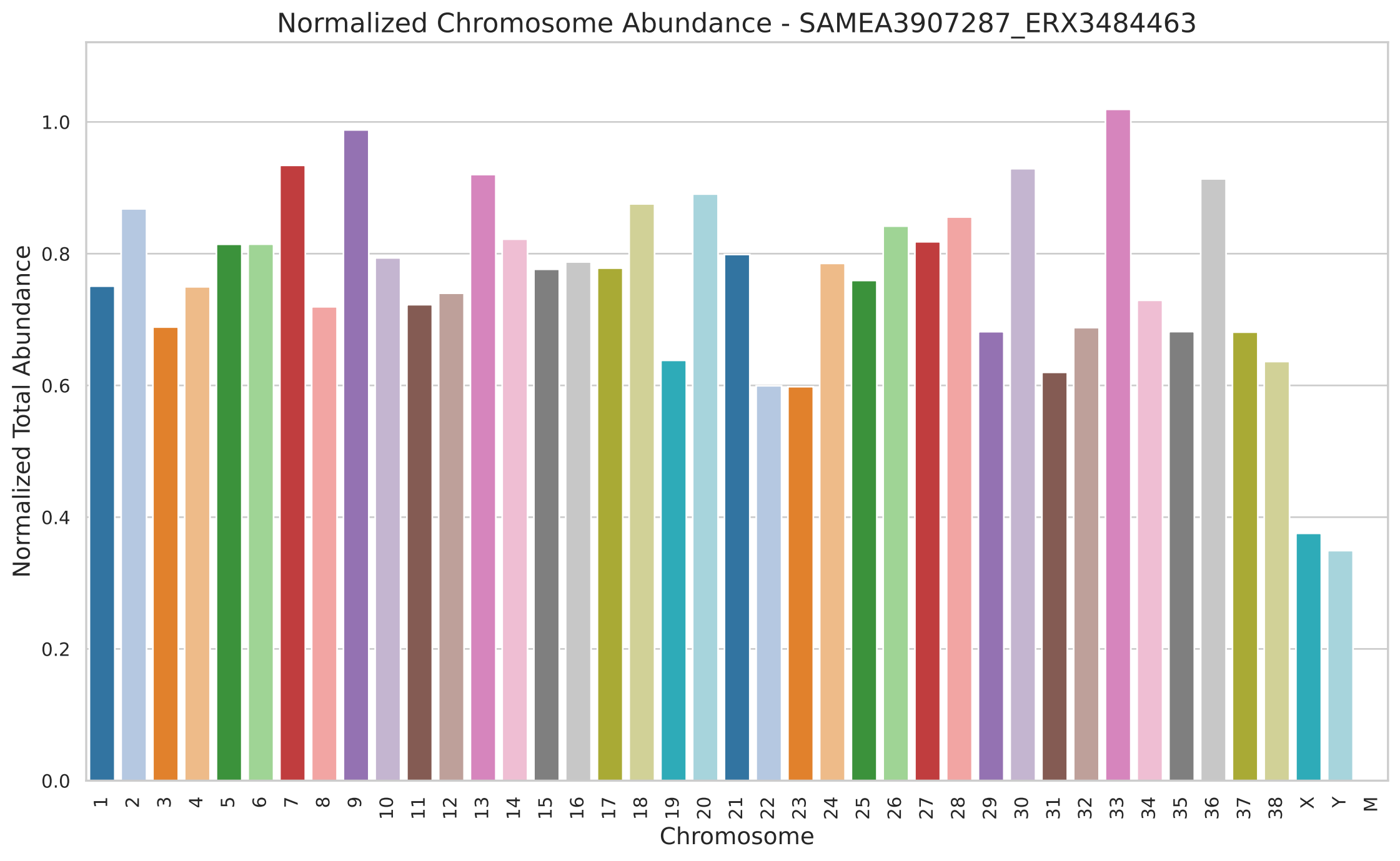

Normalized Chromosome Abundance - SAMEA3906932_ERX3484522
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

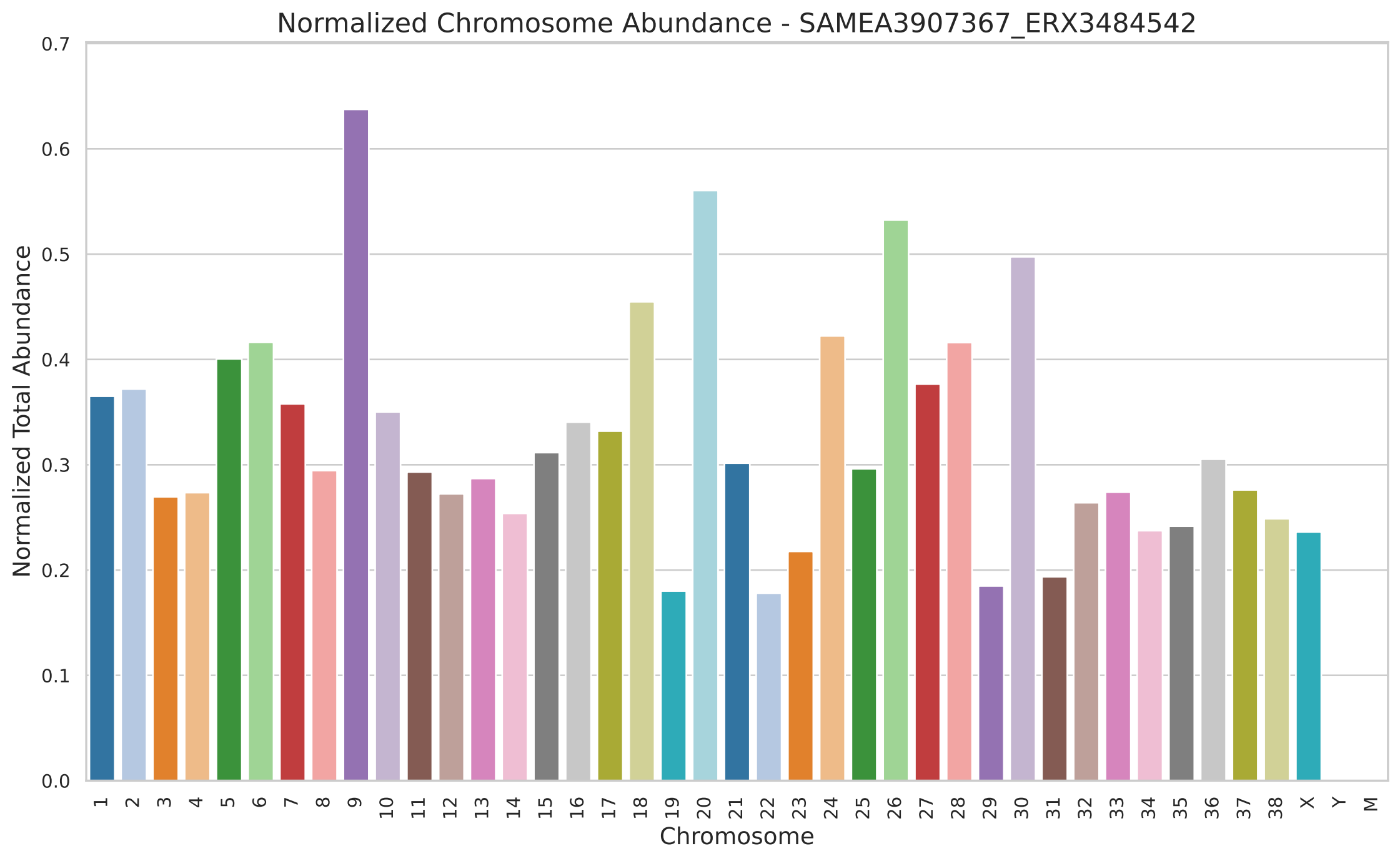

Normalized Chromosome Abundance - SAMEA3906987_ERX3484545
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

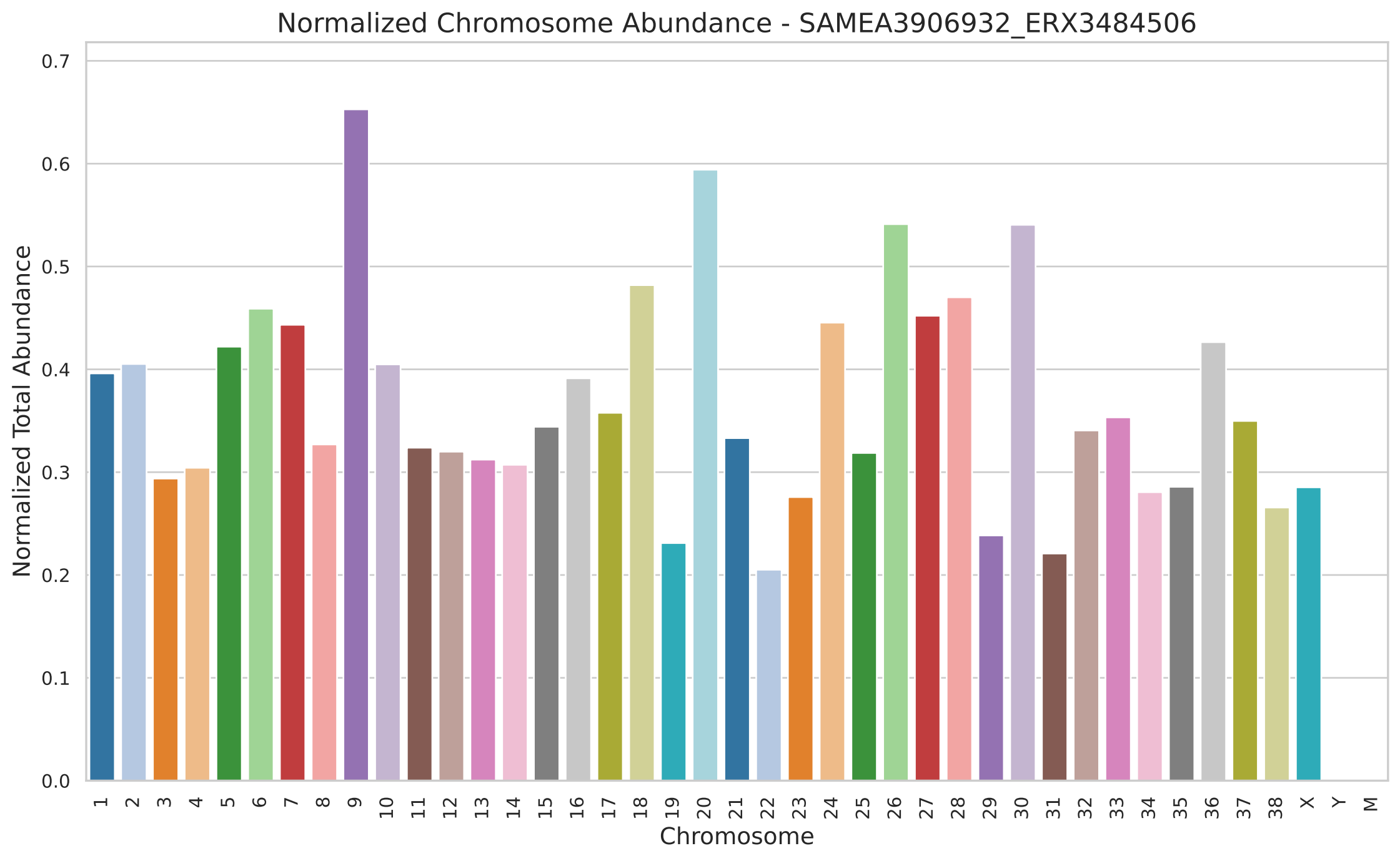

Normalized Chromosome Abundance - SAMEA3906972_ERX3484537
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

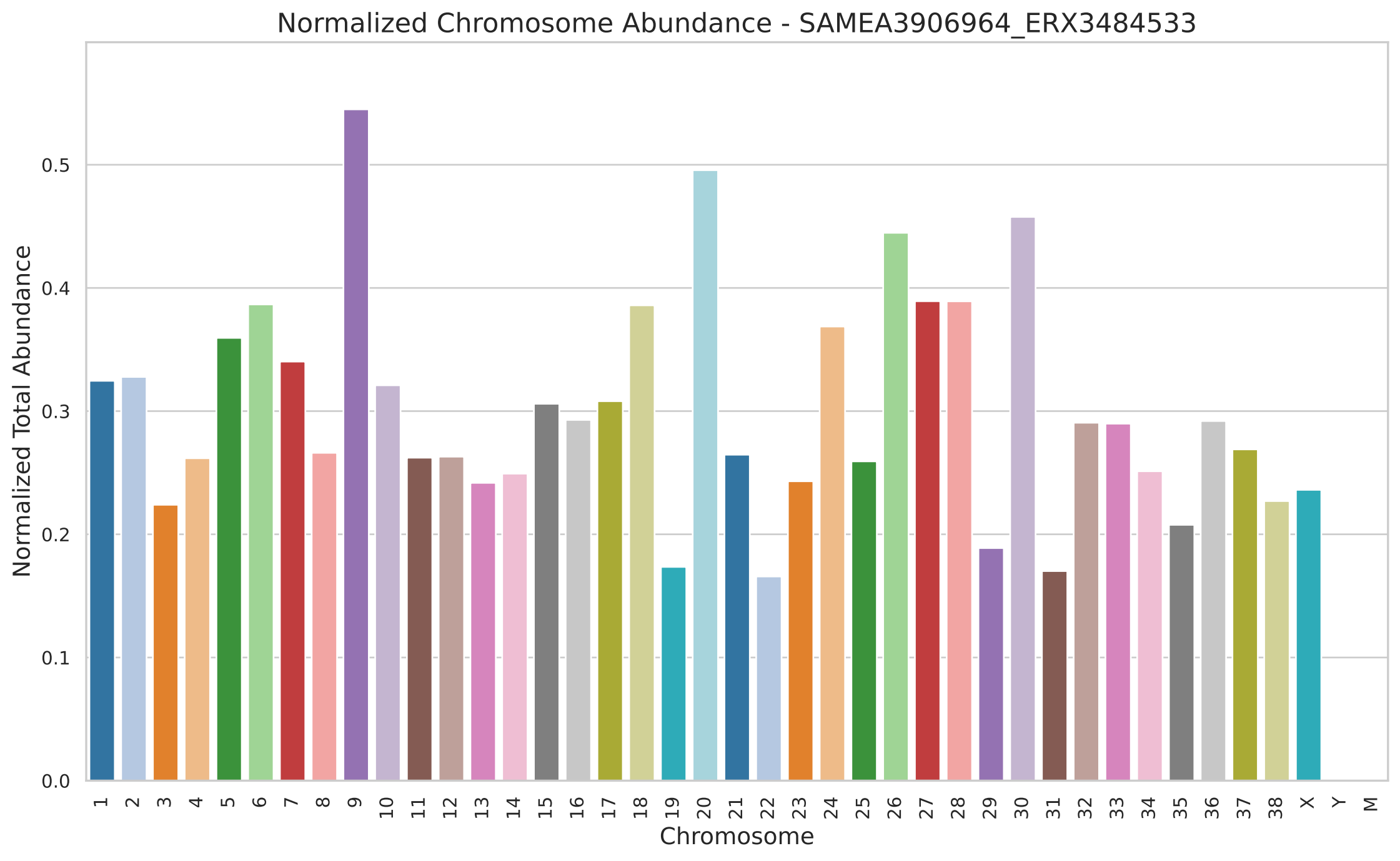

Normalized Chromosome Abundance - SAMEA3906944_ERX3484526
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

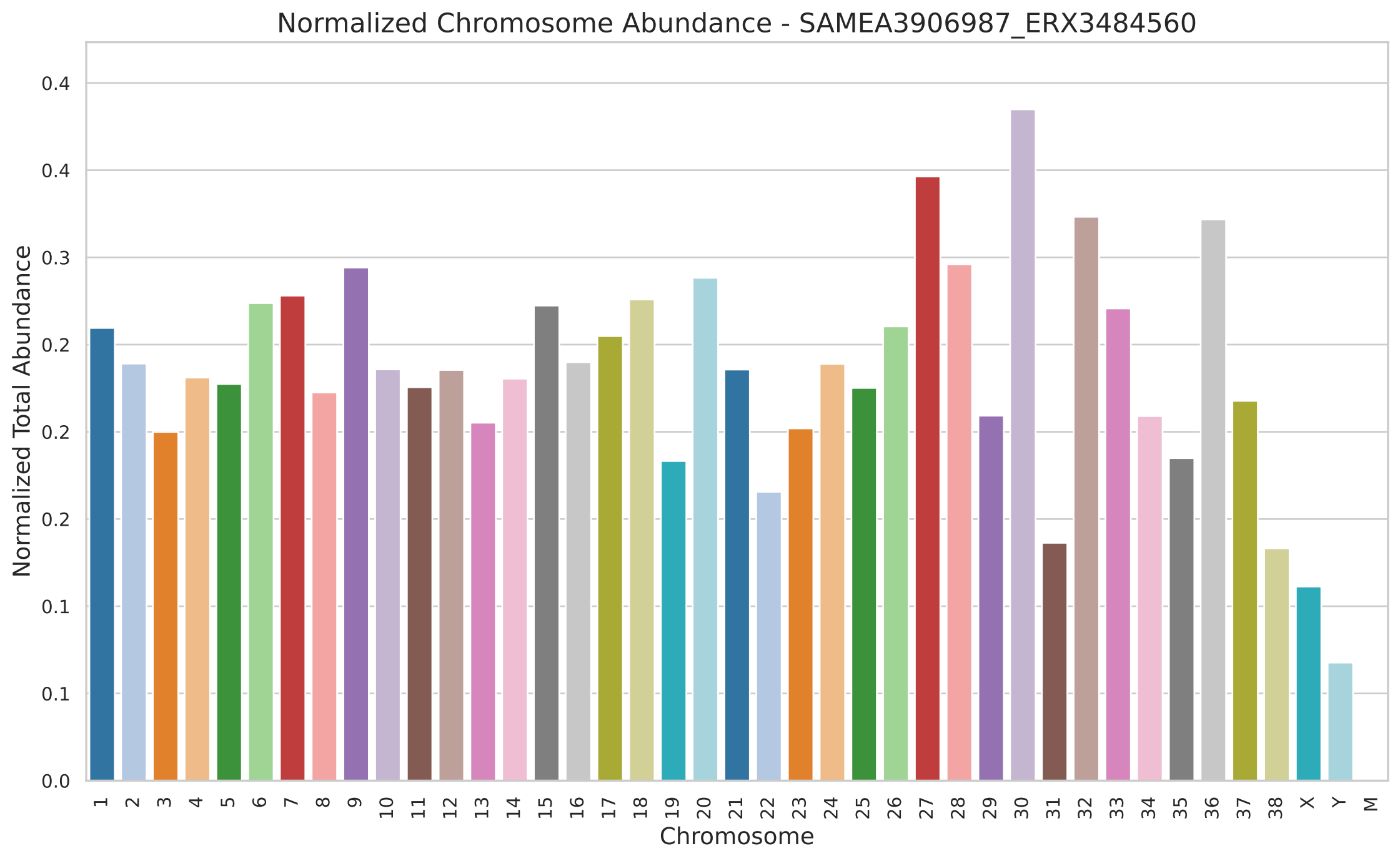

Normalized Chromosome Abundance - SAMEA3906975_ERX3484539
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

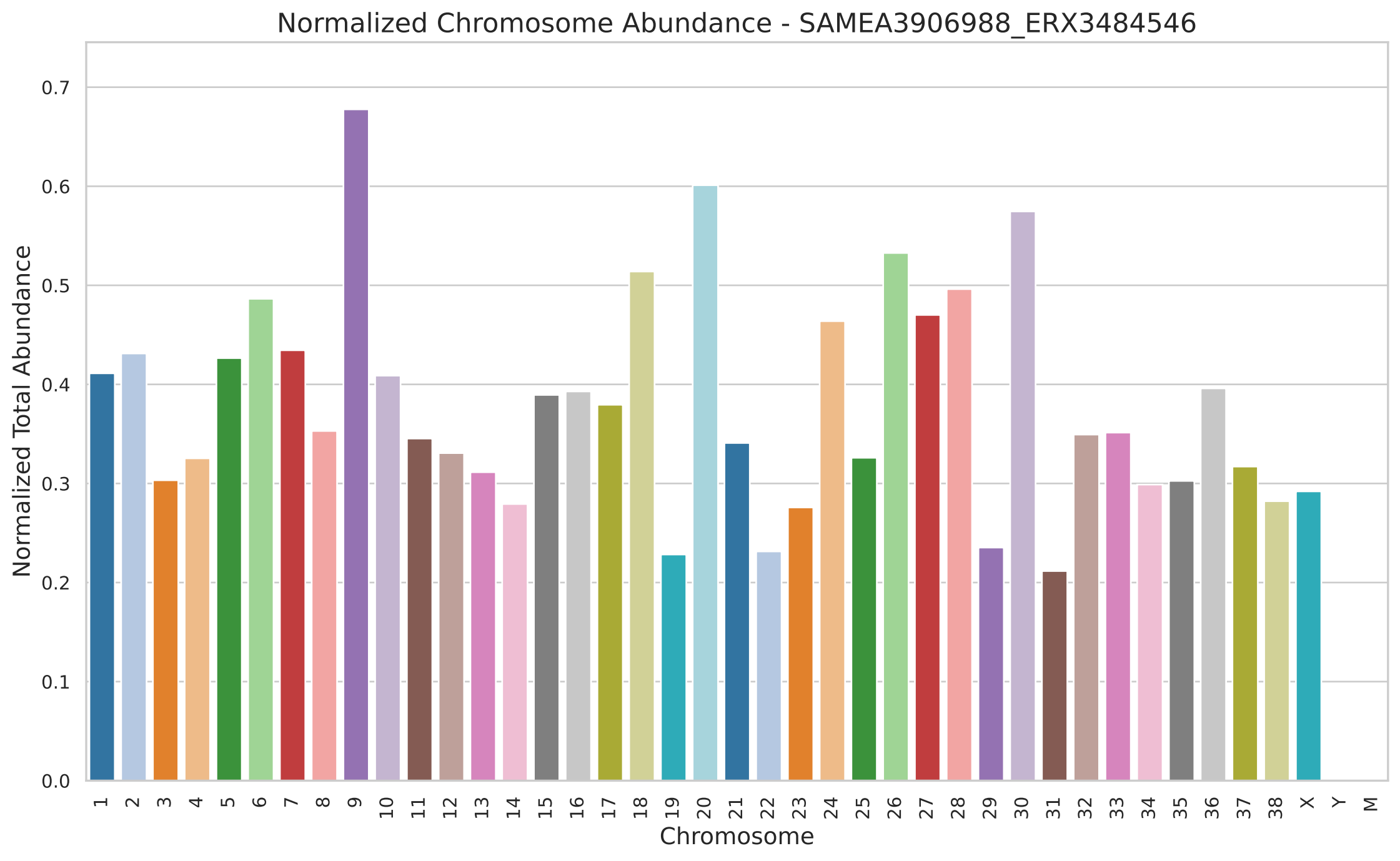

Normalized Chromosome Abundance - SAMEA3907287_ERX3484463
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

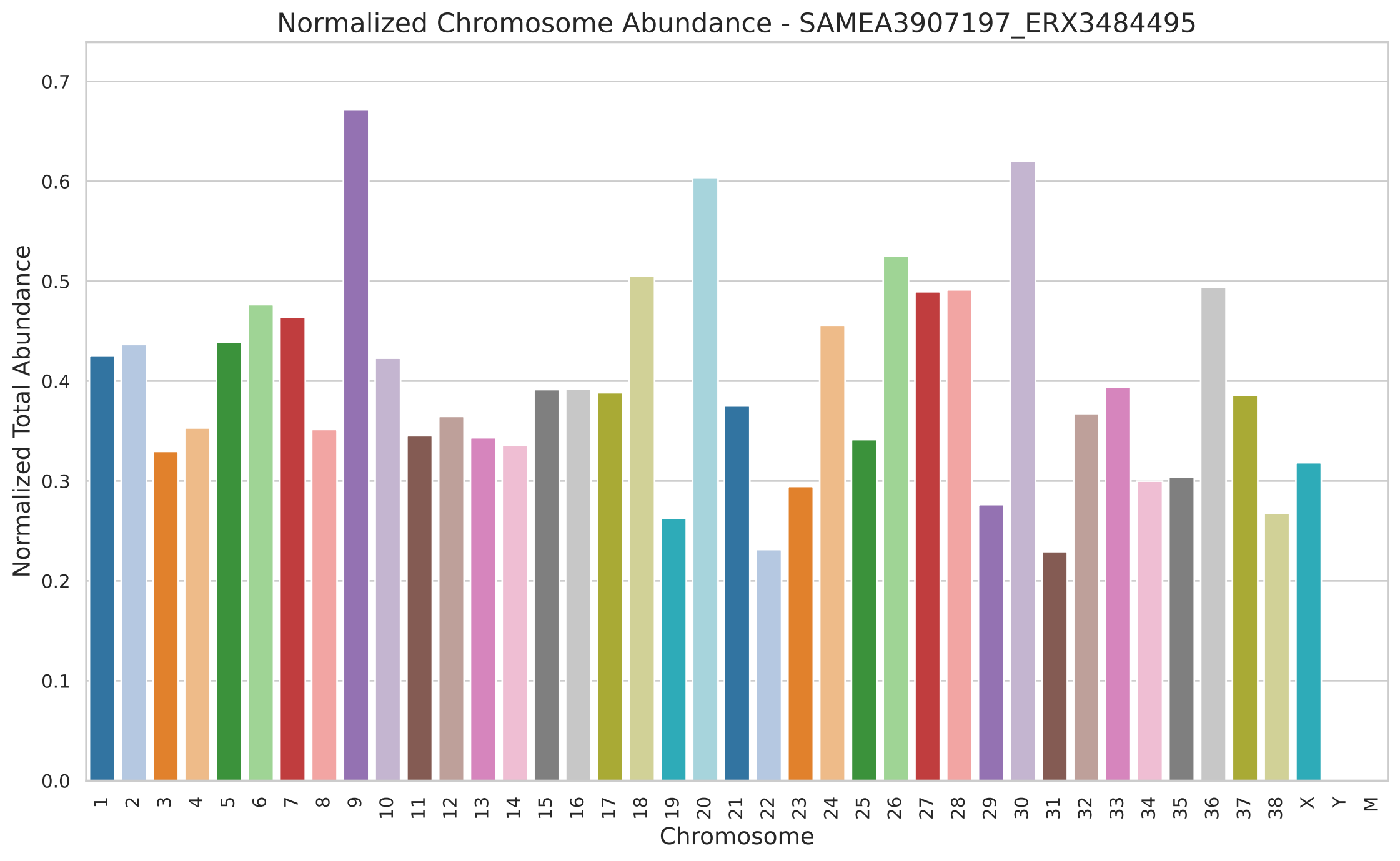

Normalized Chromosome Abundance - SAMEA3907367_ERX3484542
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

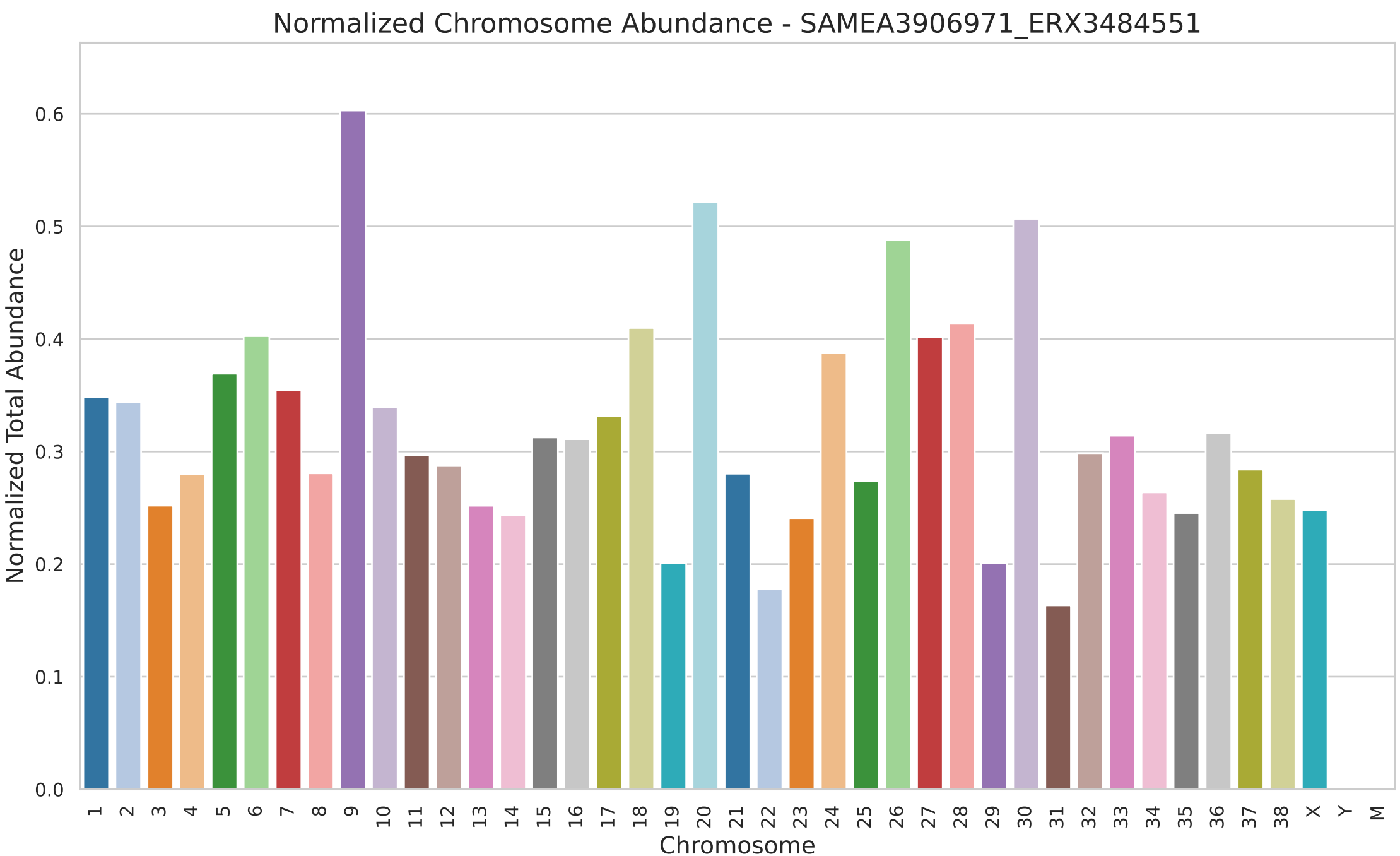

Normalized Chromosome Abundance - SAMEA3906932_ERX3484506
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

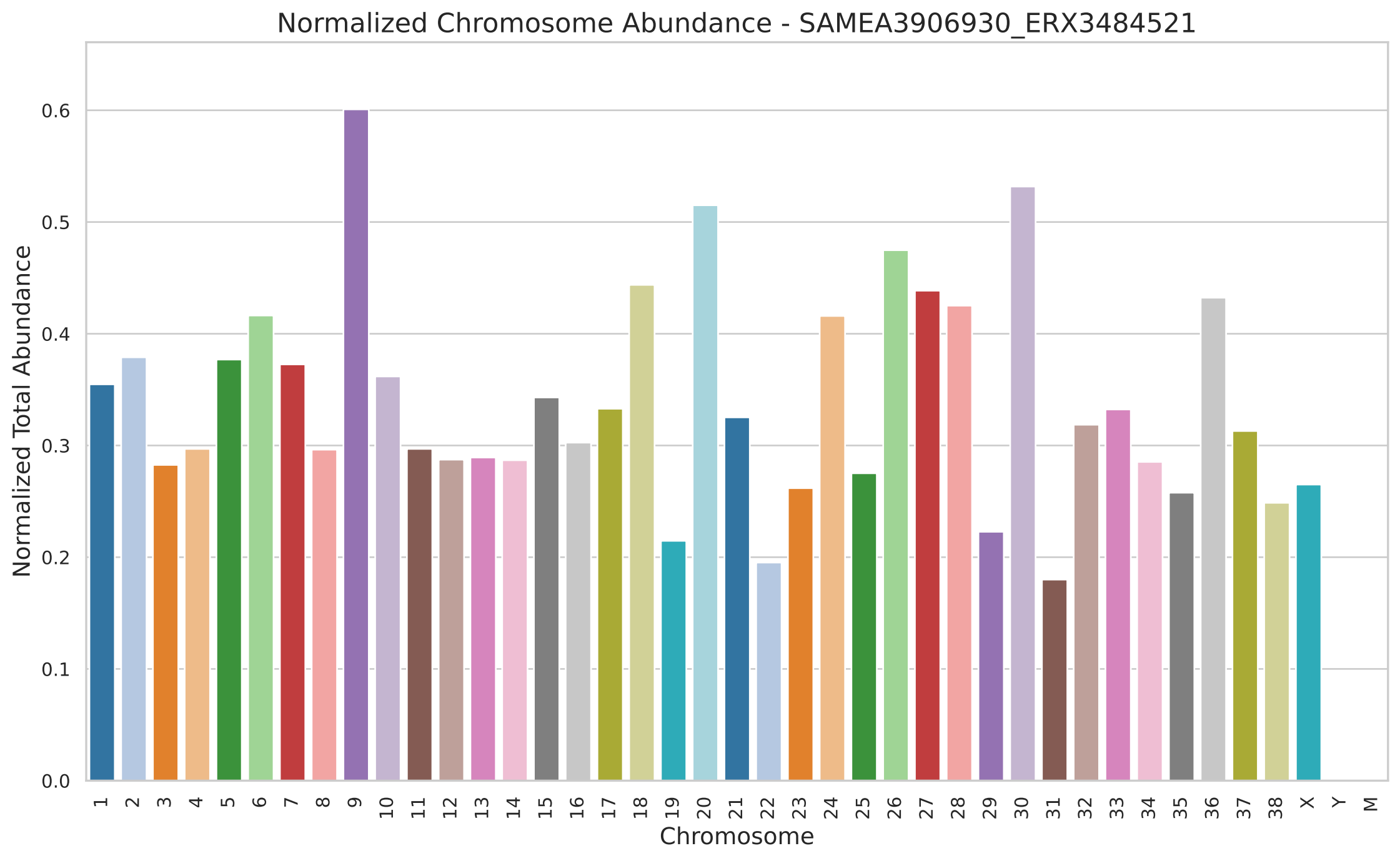

Normalized Chromosome Abundance - SAMEA3906964_ERX3484533
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

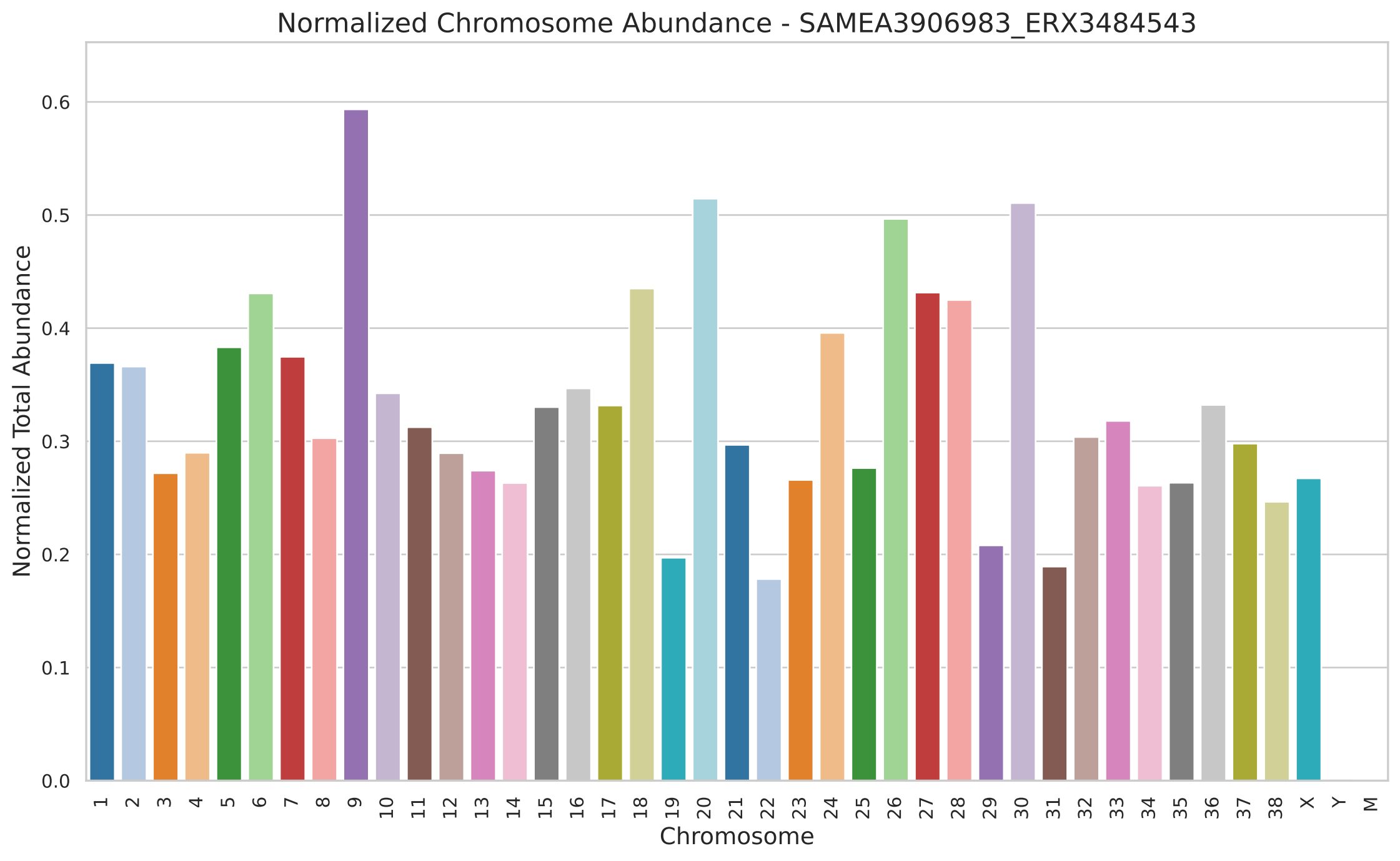

Normalized Chromosome Abundance - SAMEA3906987_ERX3484560
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

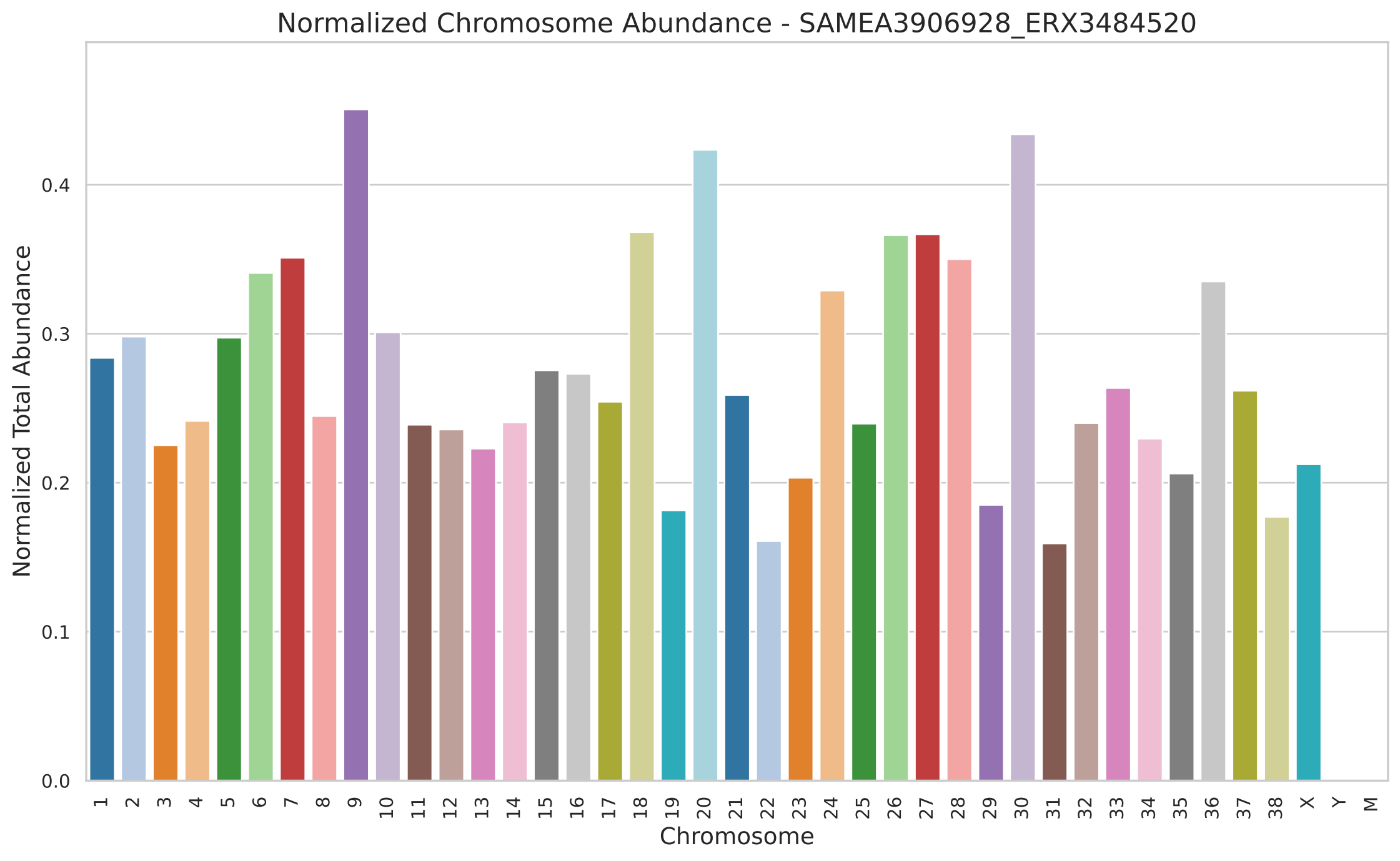

Normalized Chromosome Abundance - SAMEA3906988_ERX3484546
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

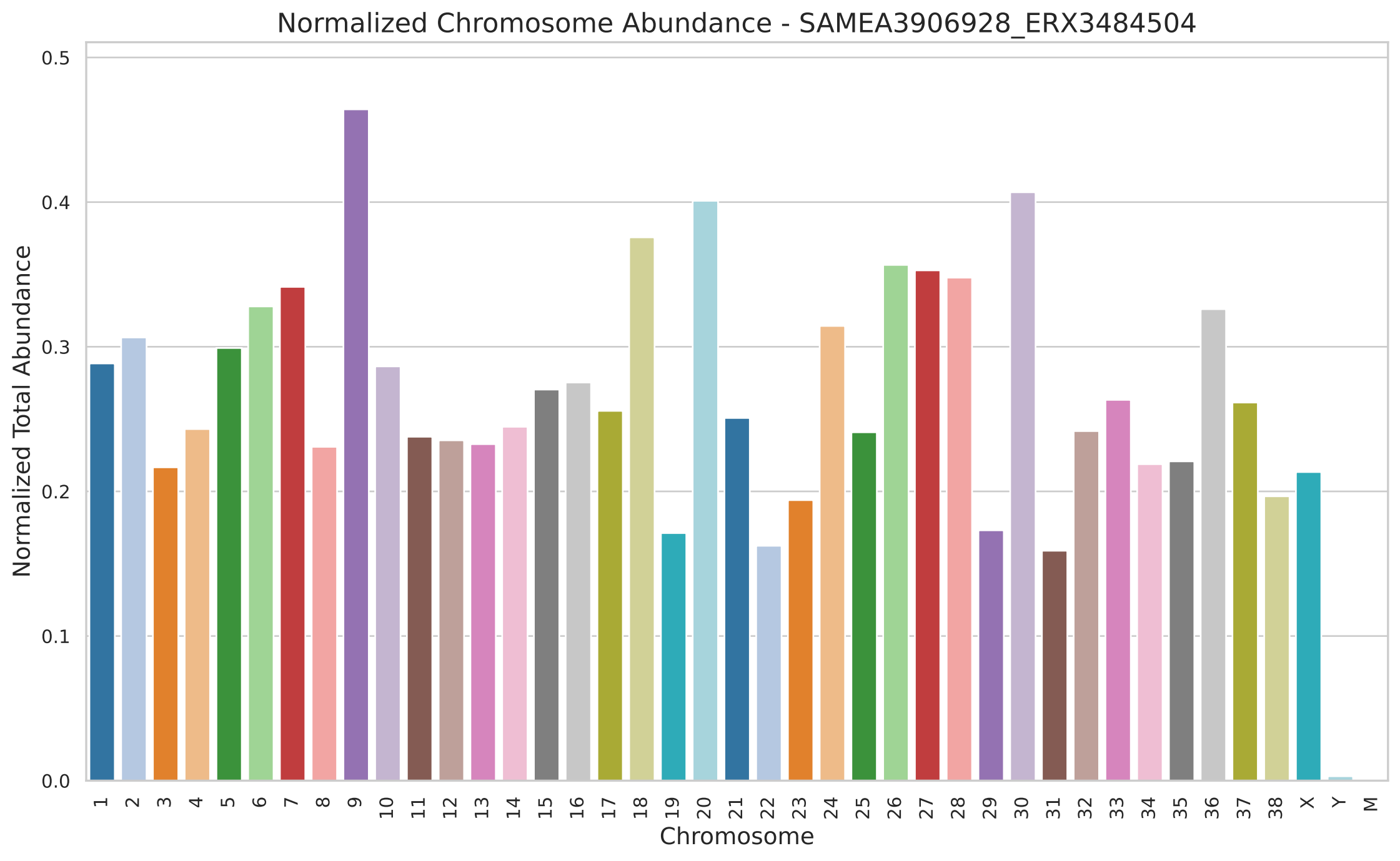

Normalized Chromosome Abundance - SAMEA3907197_ERX3484495
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

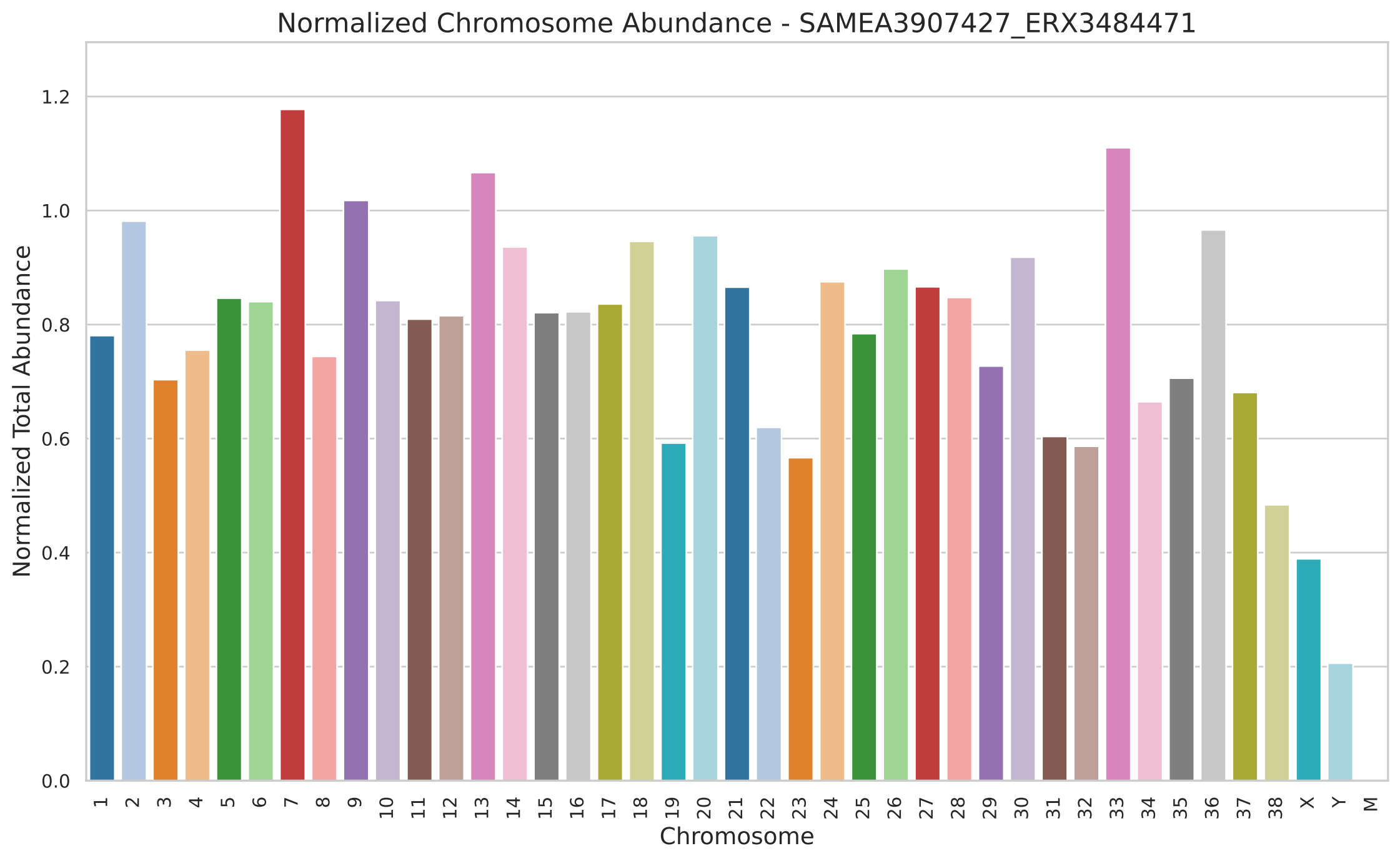

Normalized Chromosome Abundance - SAMEA3906971_ERX3484551
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

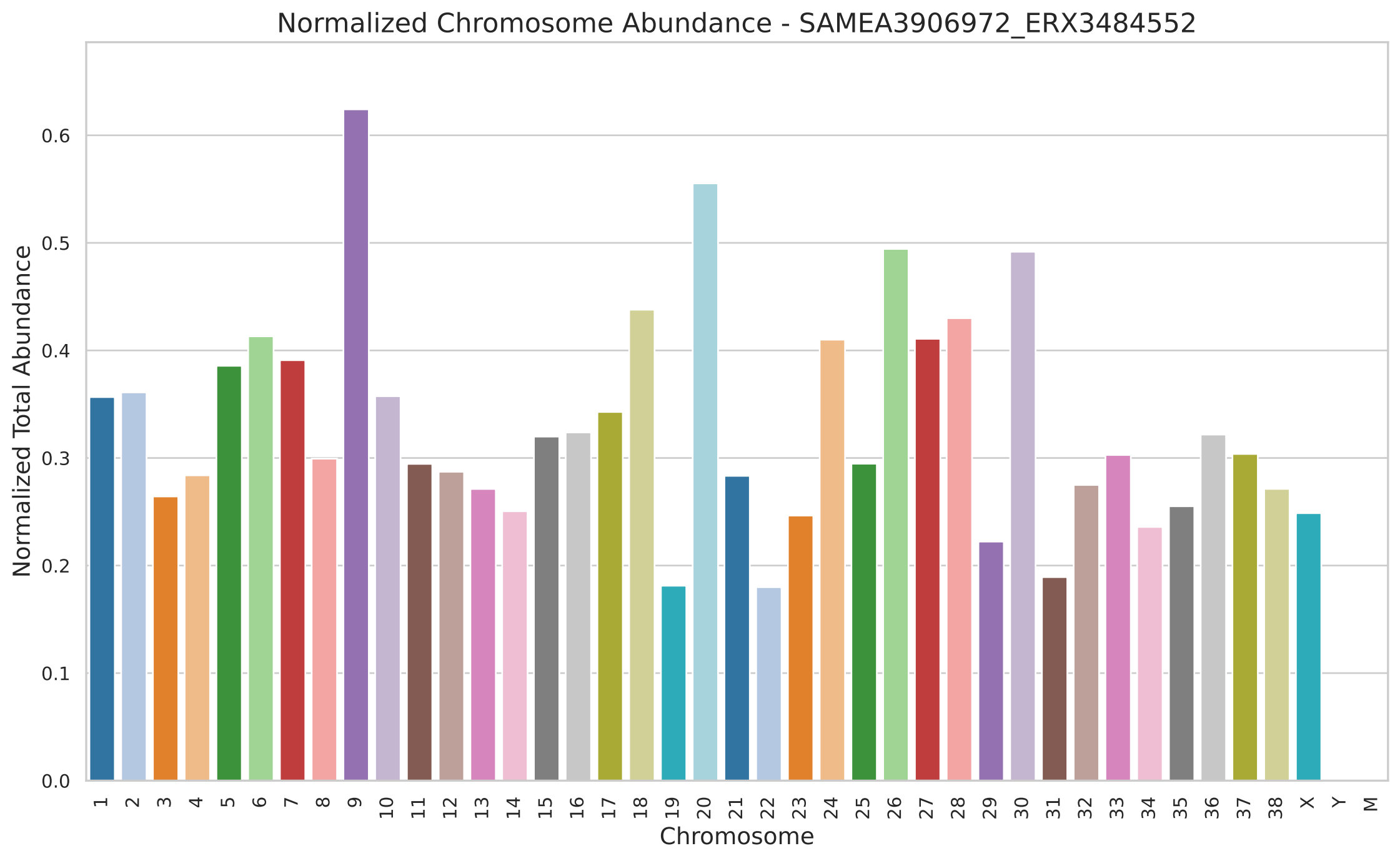

Normalized Chromosome Abundance - SAMEA3906930_ERX3484521
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

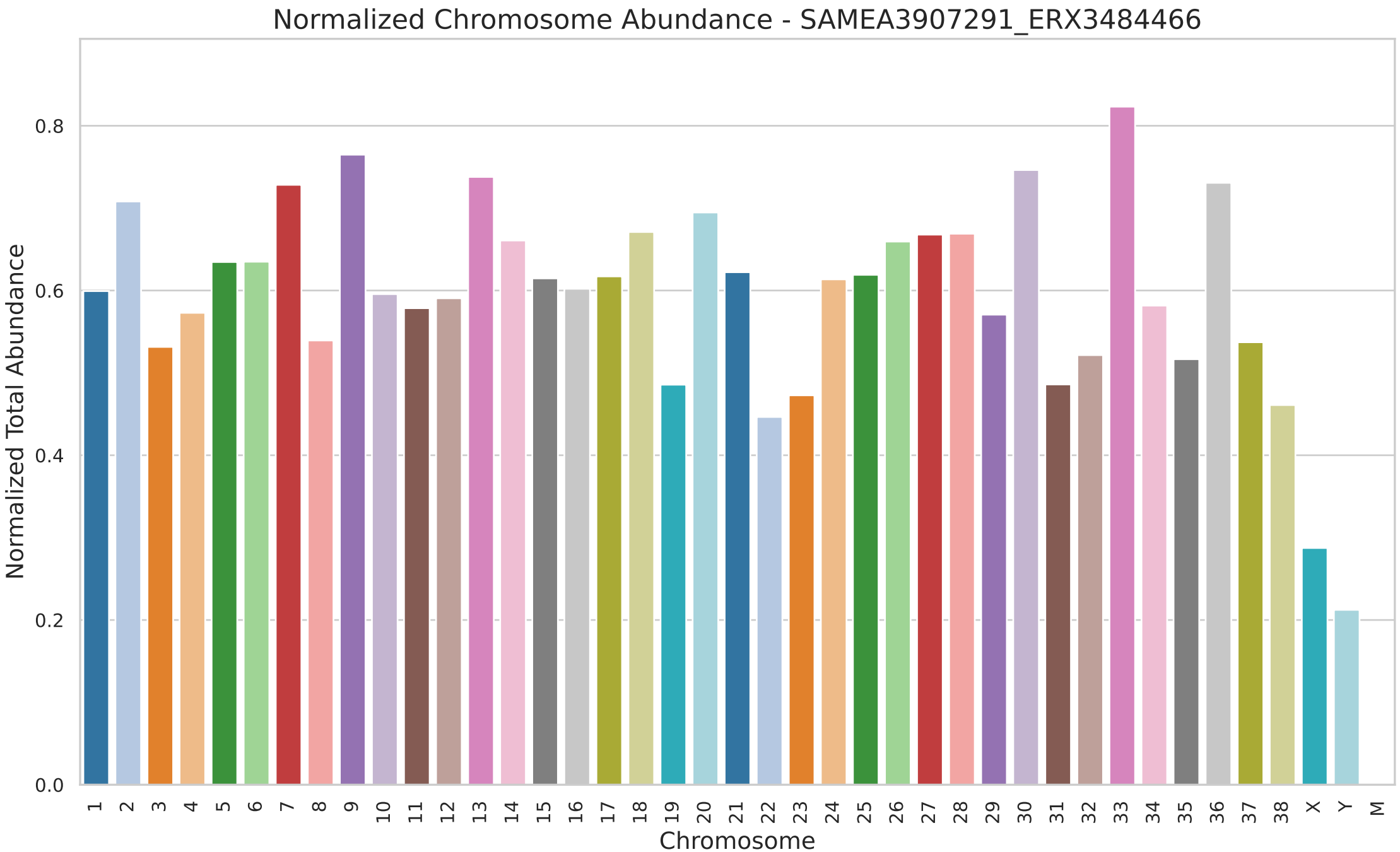

Normalized Chromosome Abundance - SAMEA3906983_ERX3484543
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

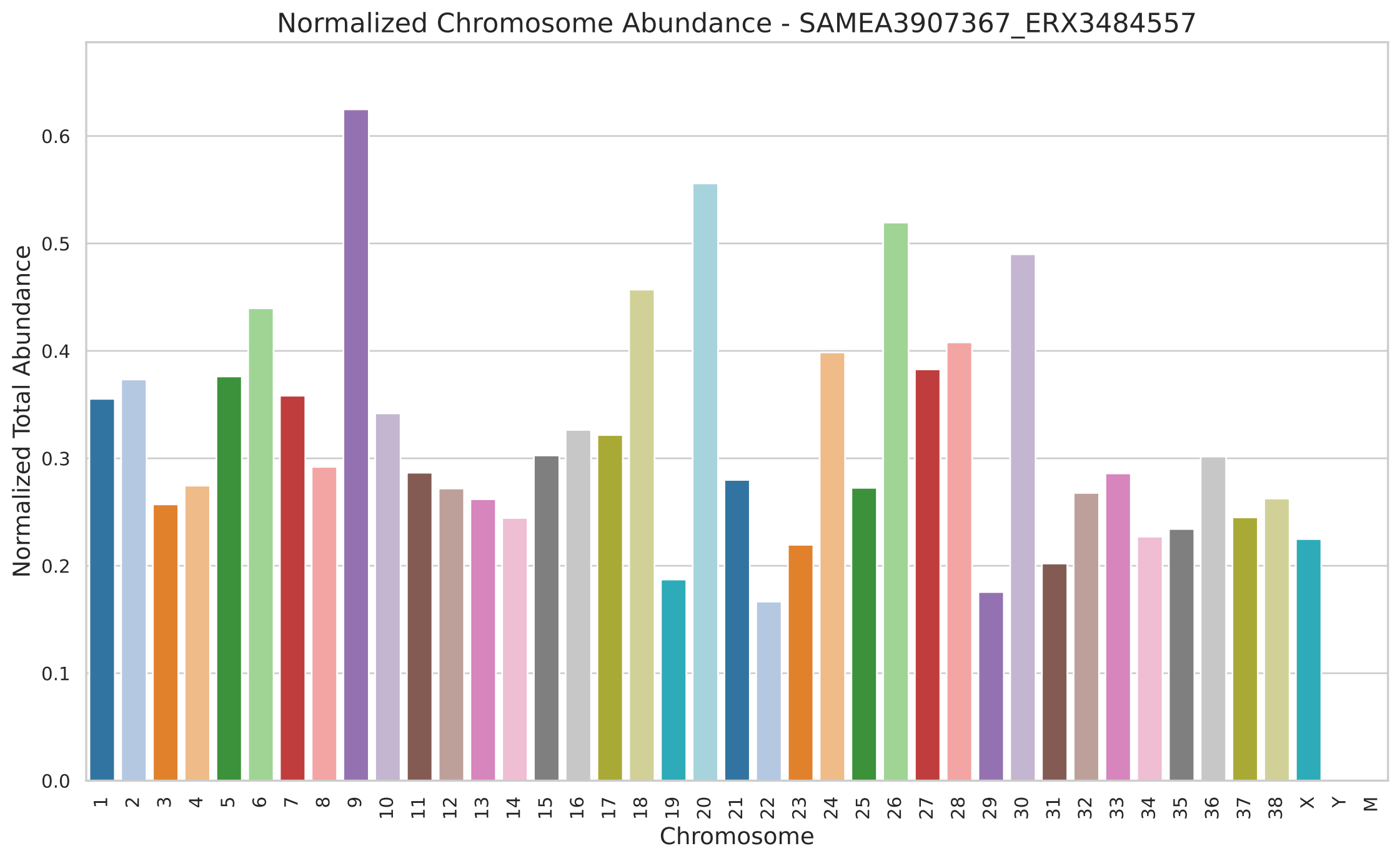

Normalized Chromosome Abundance - SAMEA3906928_ERX3484520
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

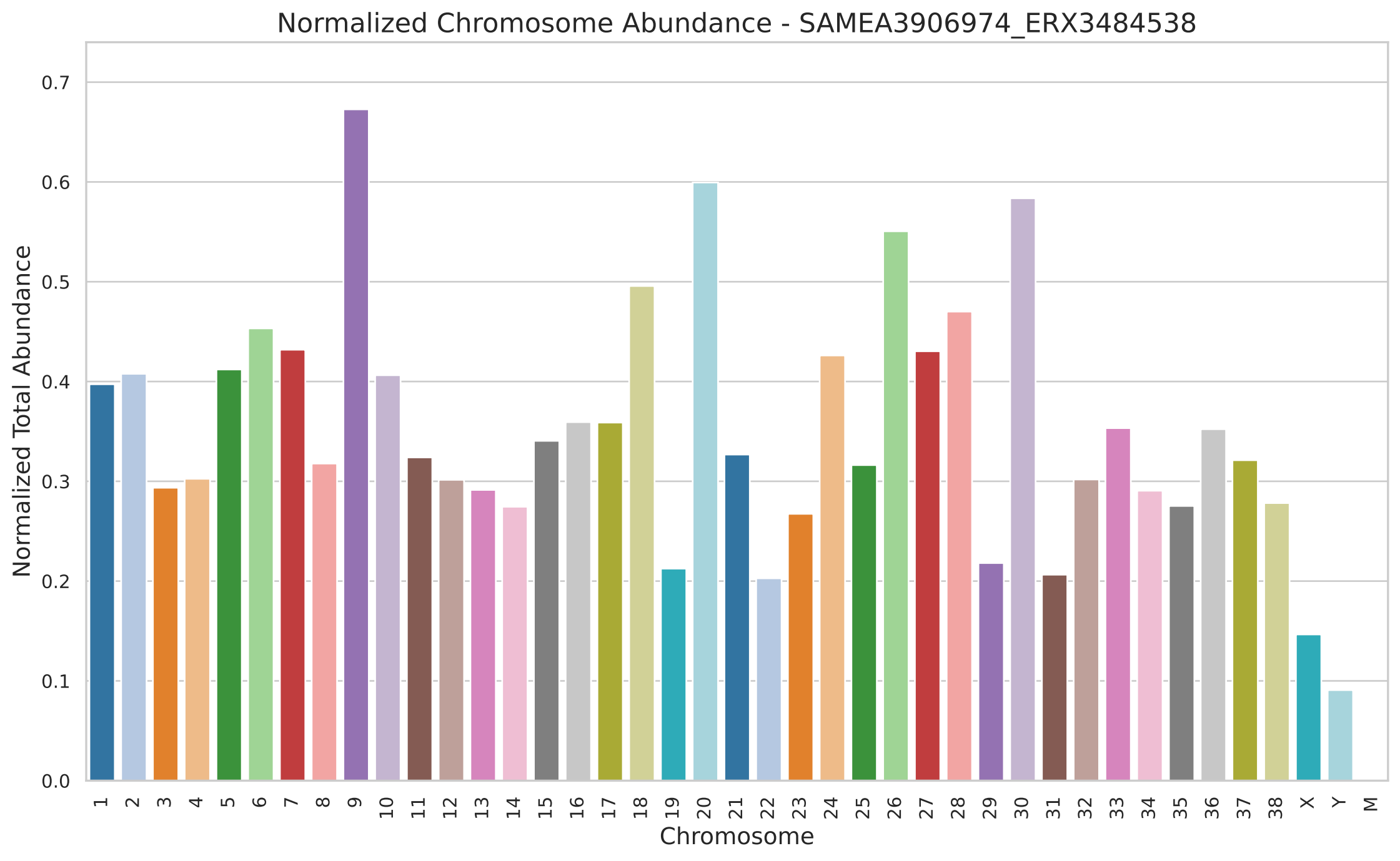

Normalized Chromosome Abundance - SAMEA3906928_ERX3484504
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

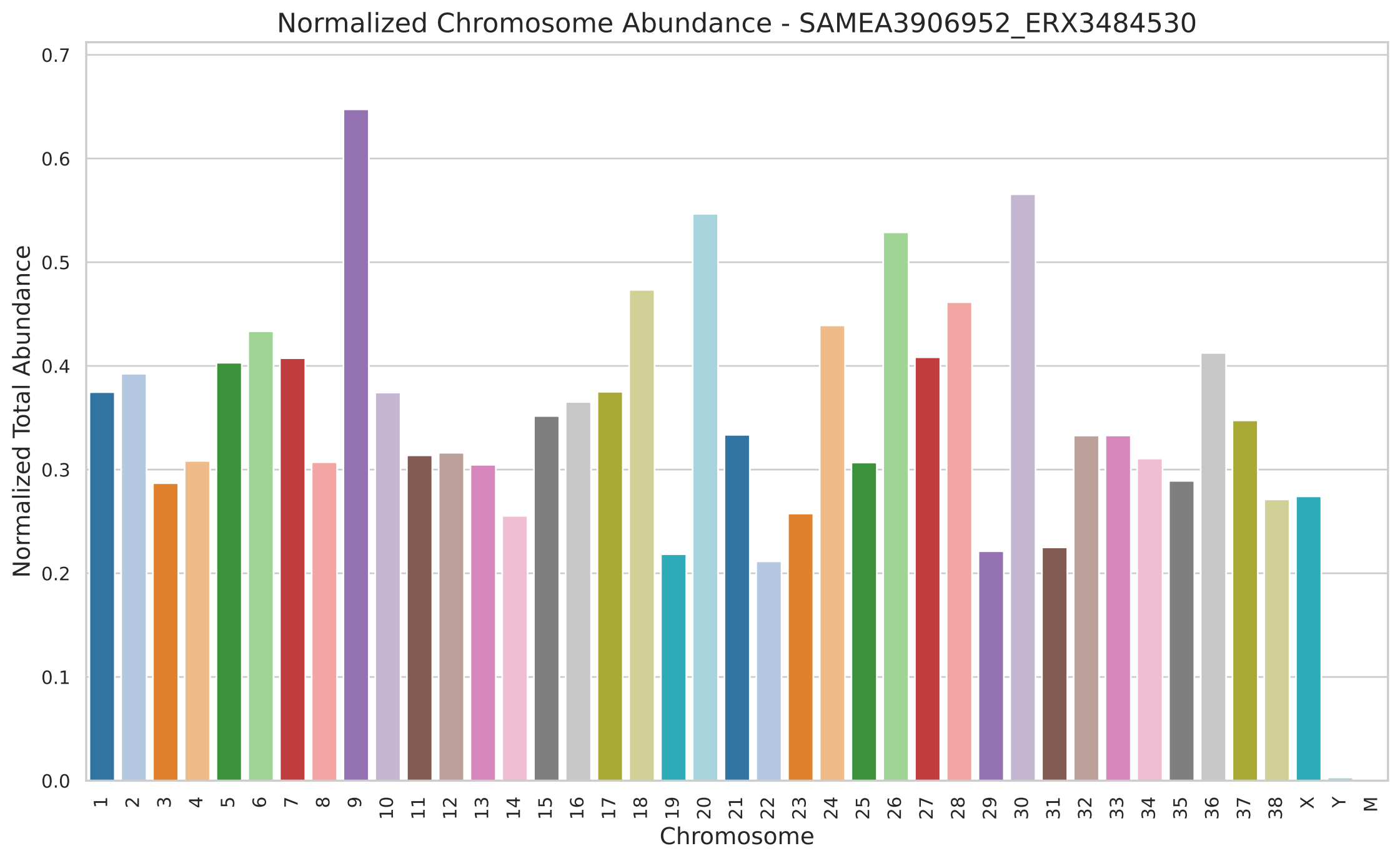

Normalized Chromosome Abundance - SAMEA3907427_ERX3484471
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

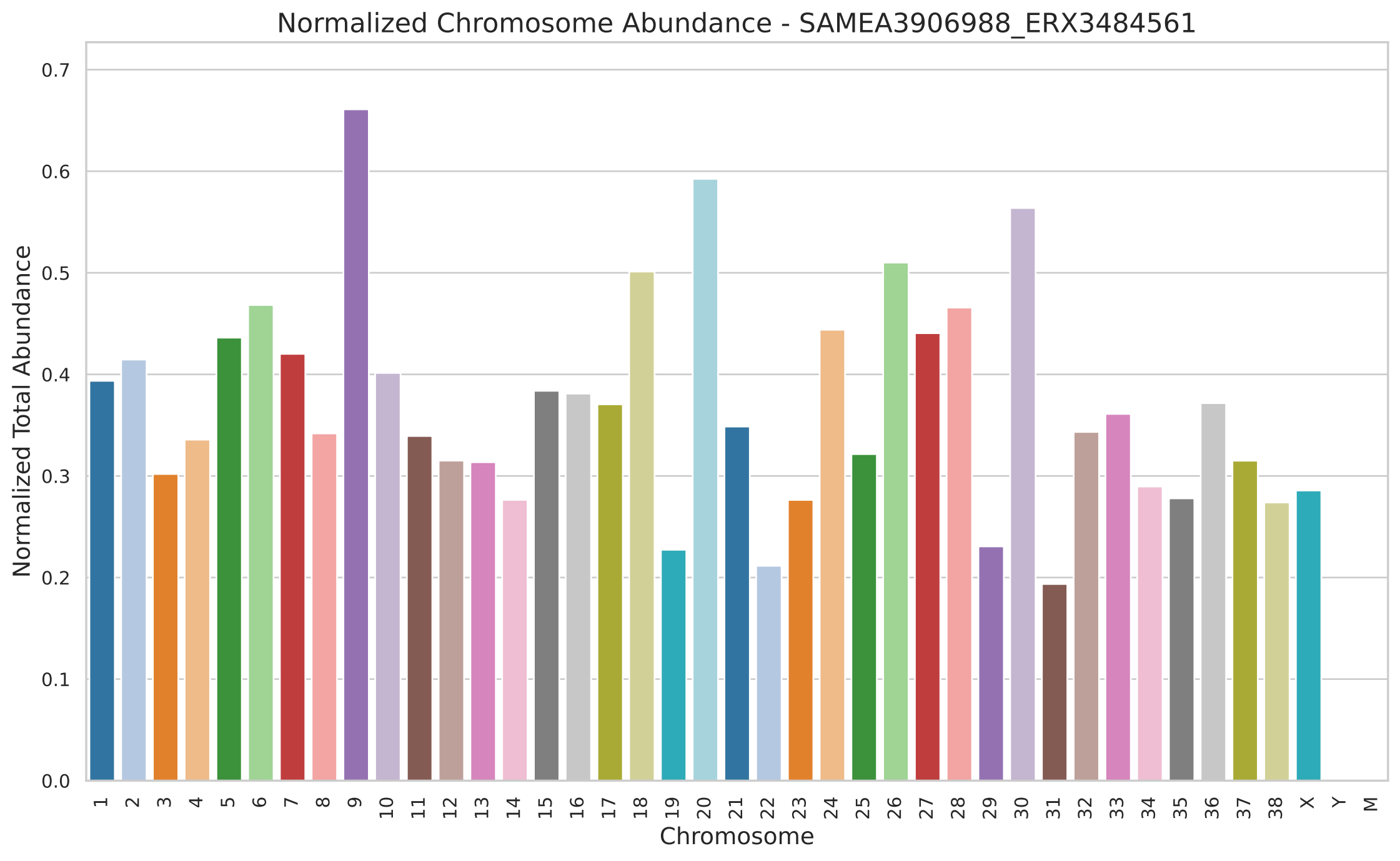

Normalized Chromosome Abundance - SAMEA3906972_ERX3484552
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

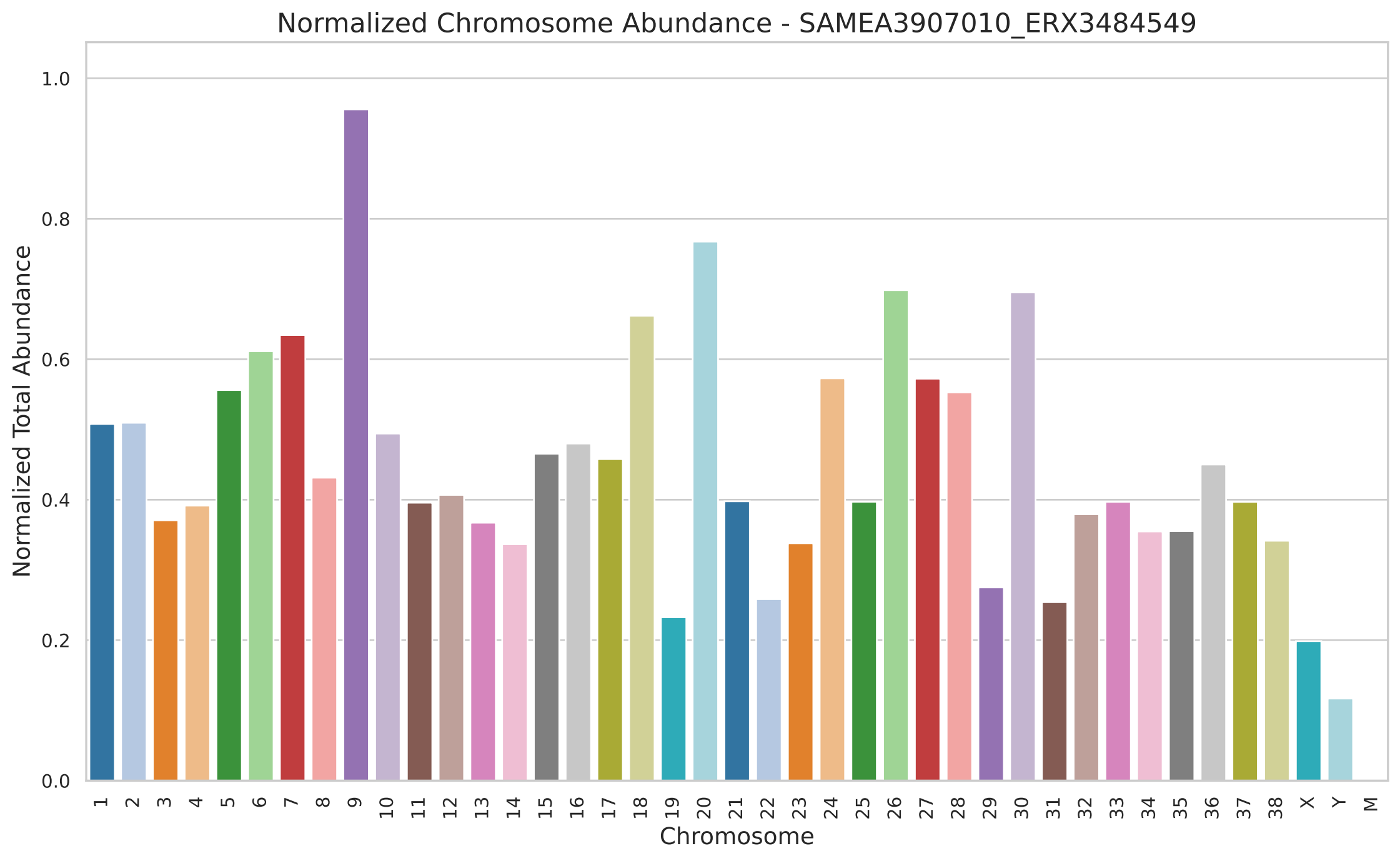

Normalized Chromosome Abundance - SAMEA3907291_ERX3484466
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

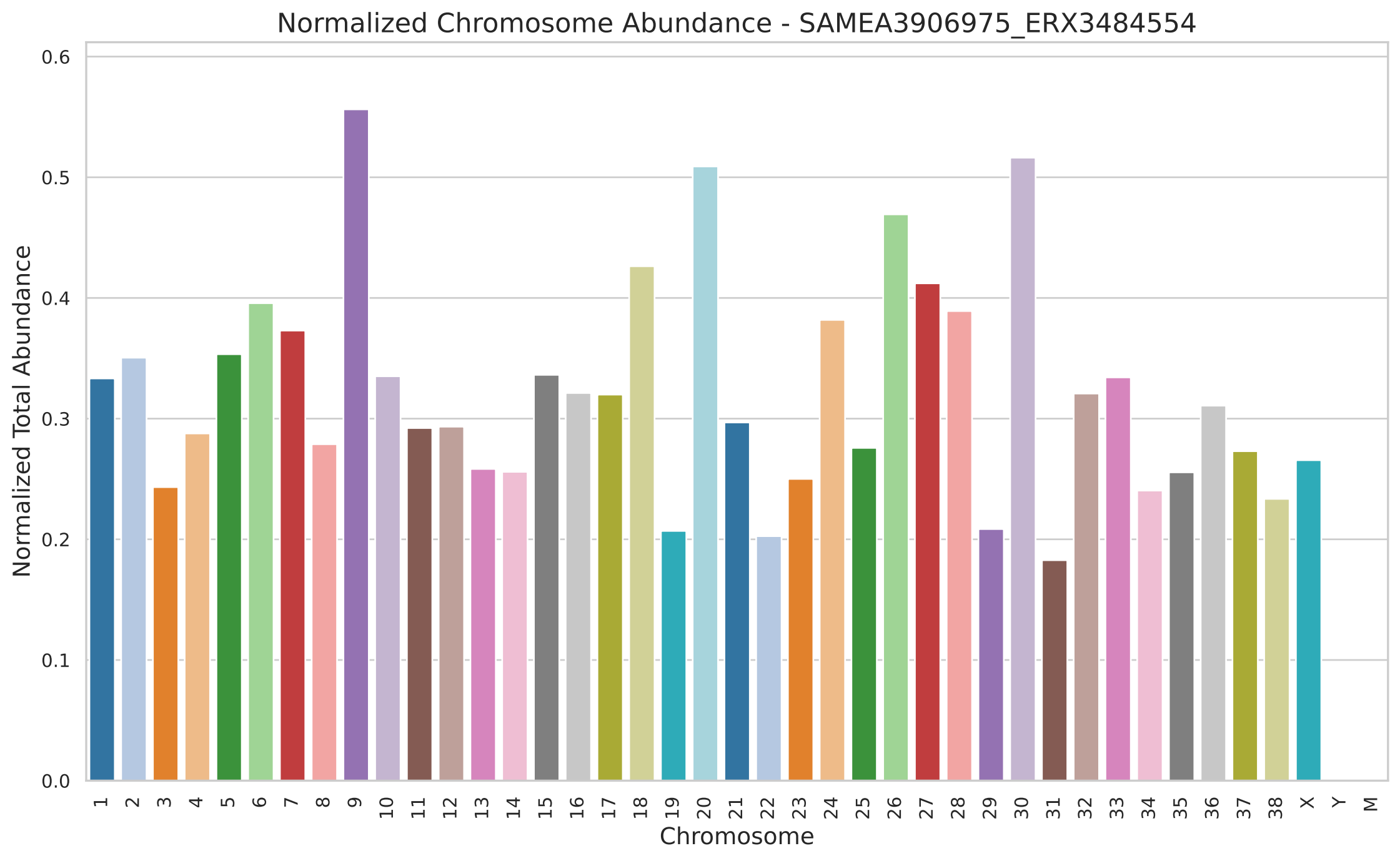

Normalized Chromosome Abundance - SAMEA3907367_ERX3484557
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

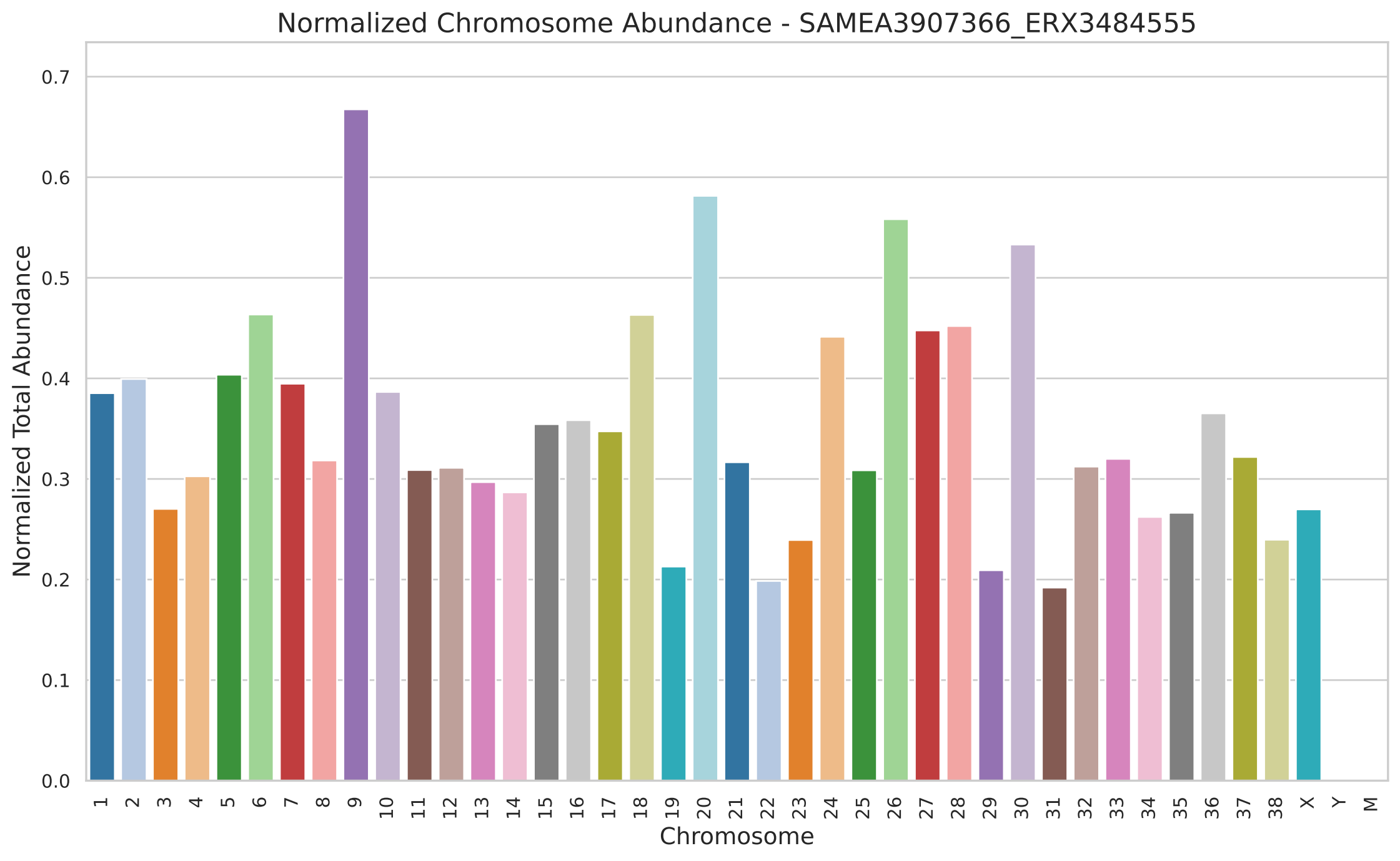

Normalized Chromosome Abundance - SAMEA3906974_ERX3484538
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

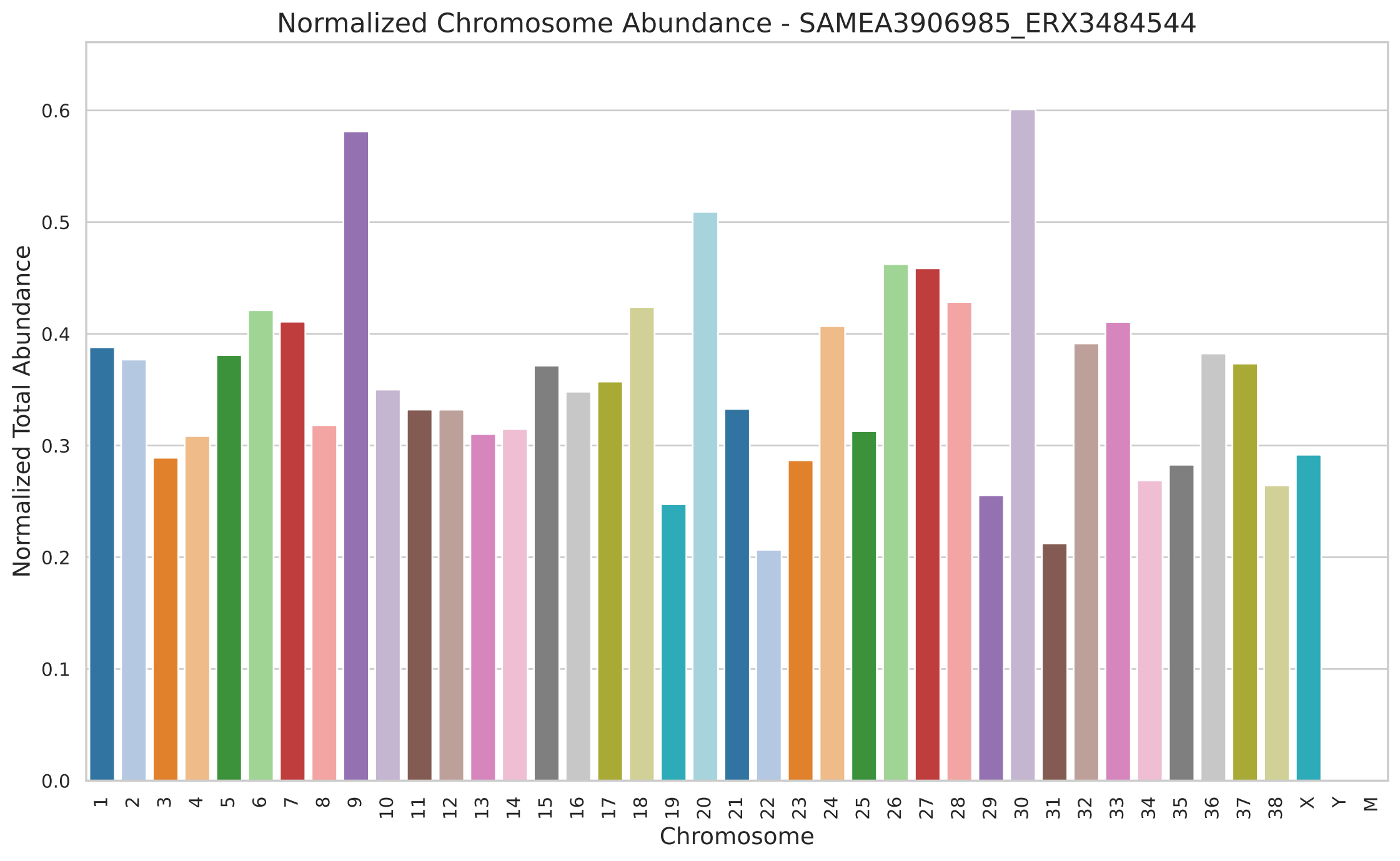

Normalized Chromosome Abundance - SAMEA3906952_ERX3484530
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

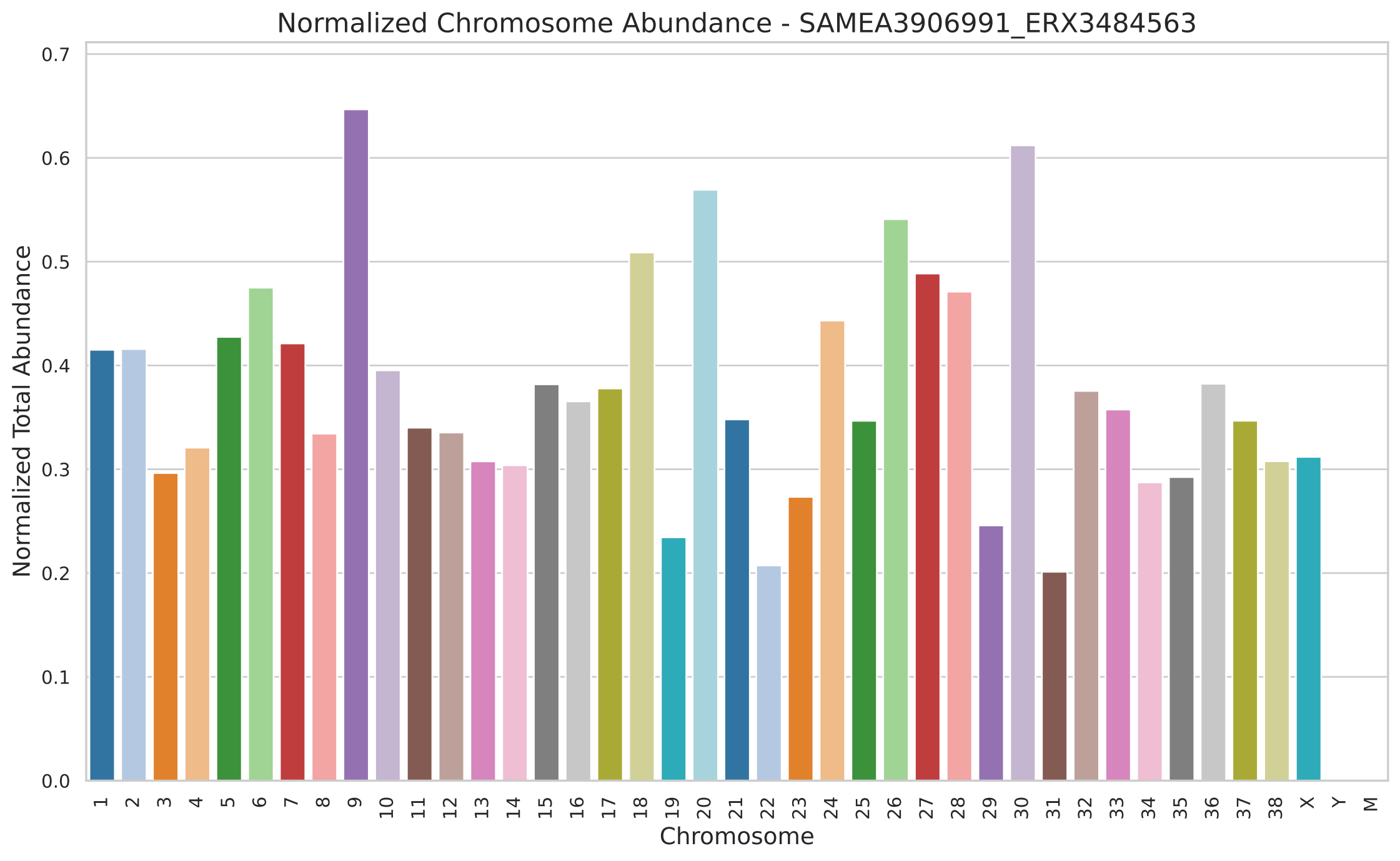

Normalized Chromosome Abundance - SAMEA3906988_ERX3484561
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

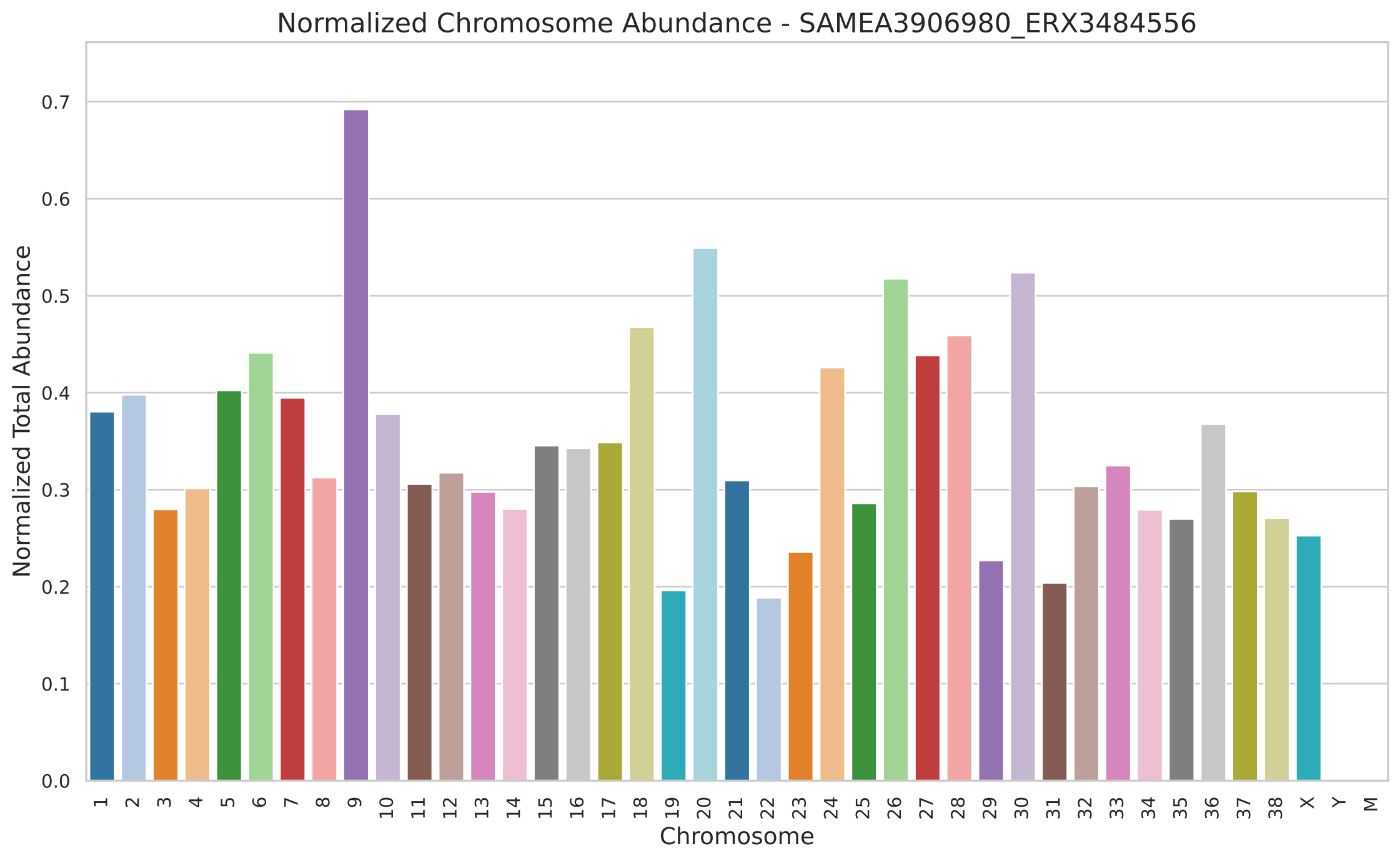

Normalized Chromosome Abundance - SAMEA3907010_ERX3484549
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

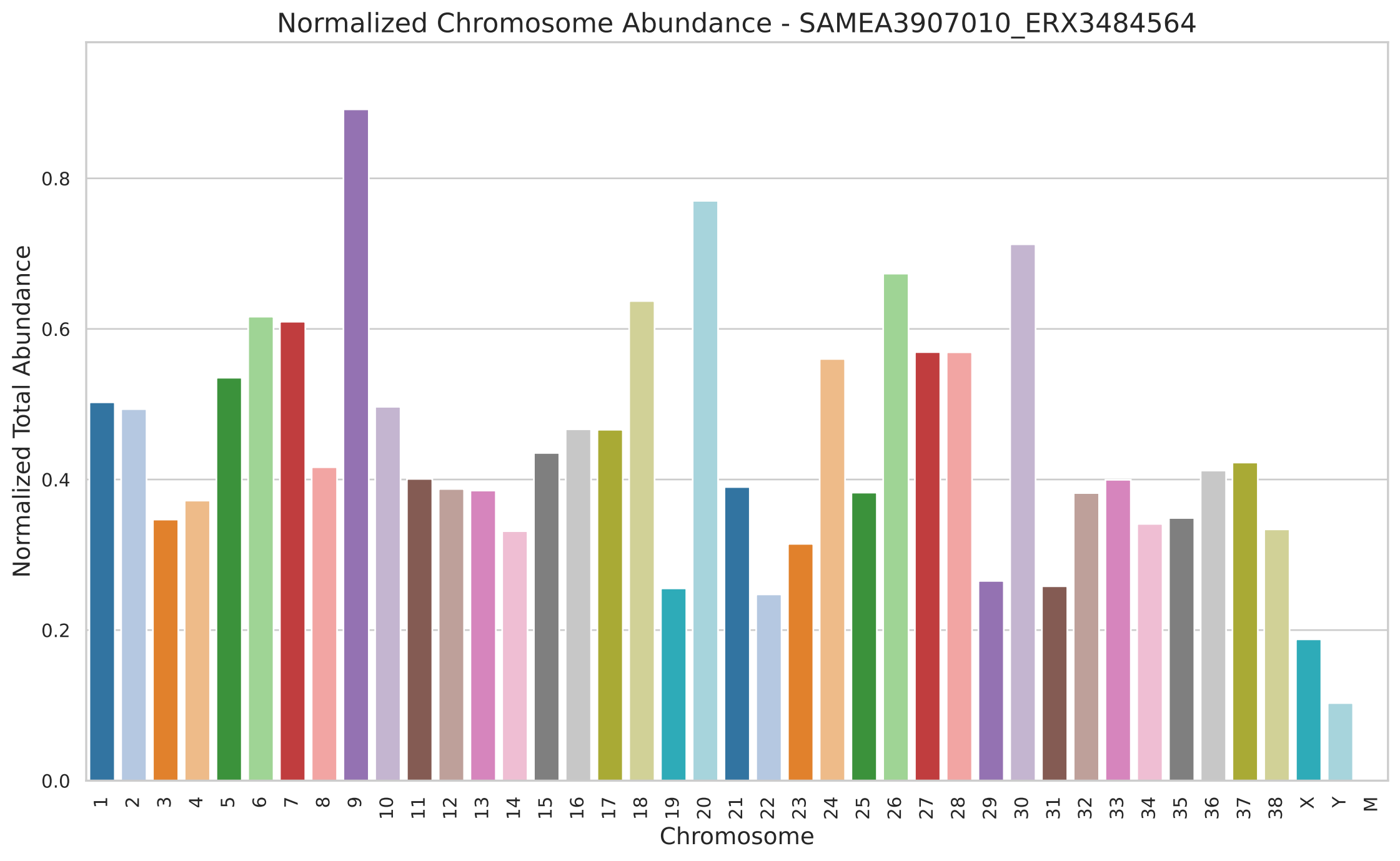

Normalized Chromosome Abundance - SAMEA3906975_ERX3484554
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

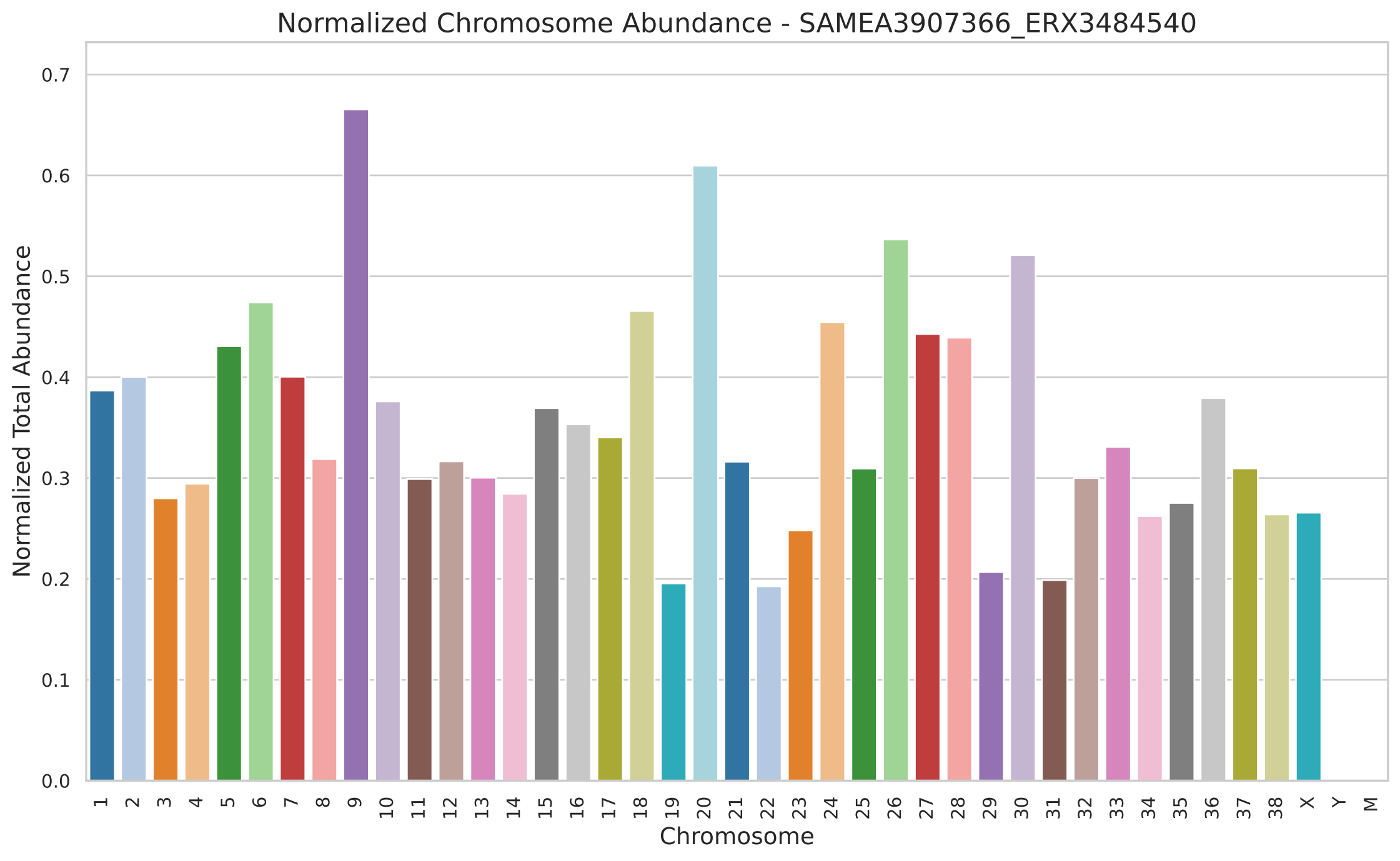

Normalized Chromosome Abundance - SAMEA3907366_ERX3484555
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

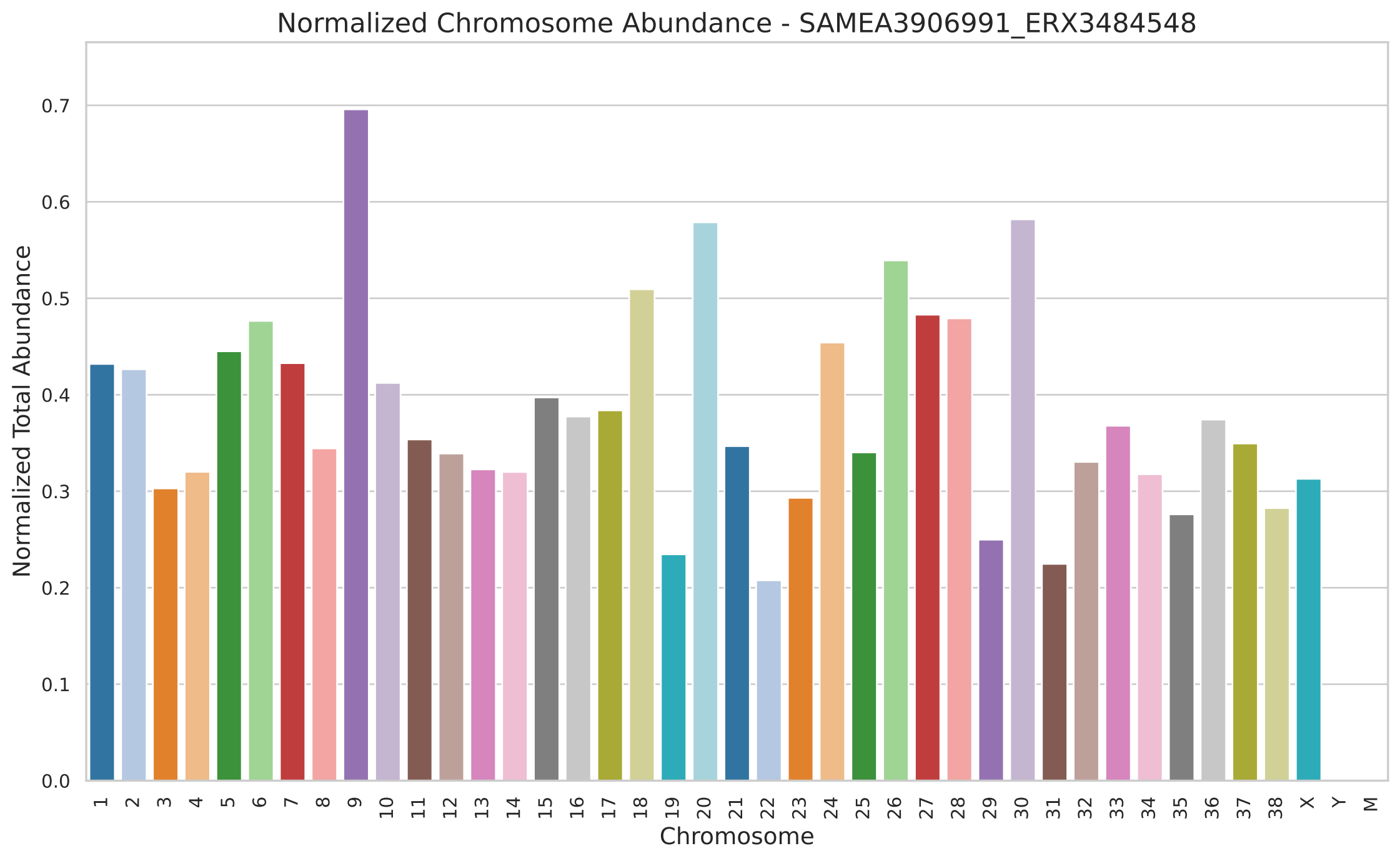

Normalized Chromosome Abundance - SAMEA3906985_ERX3484544
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

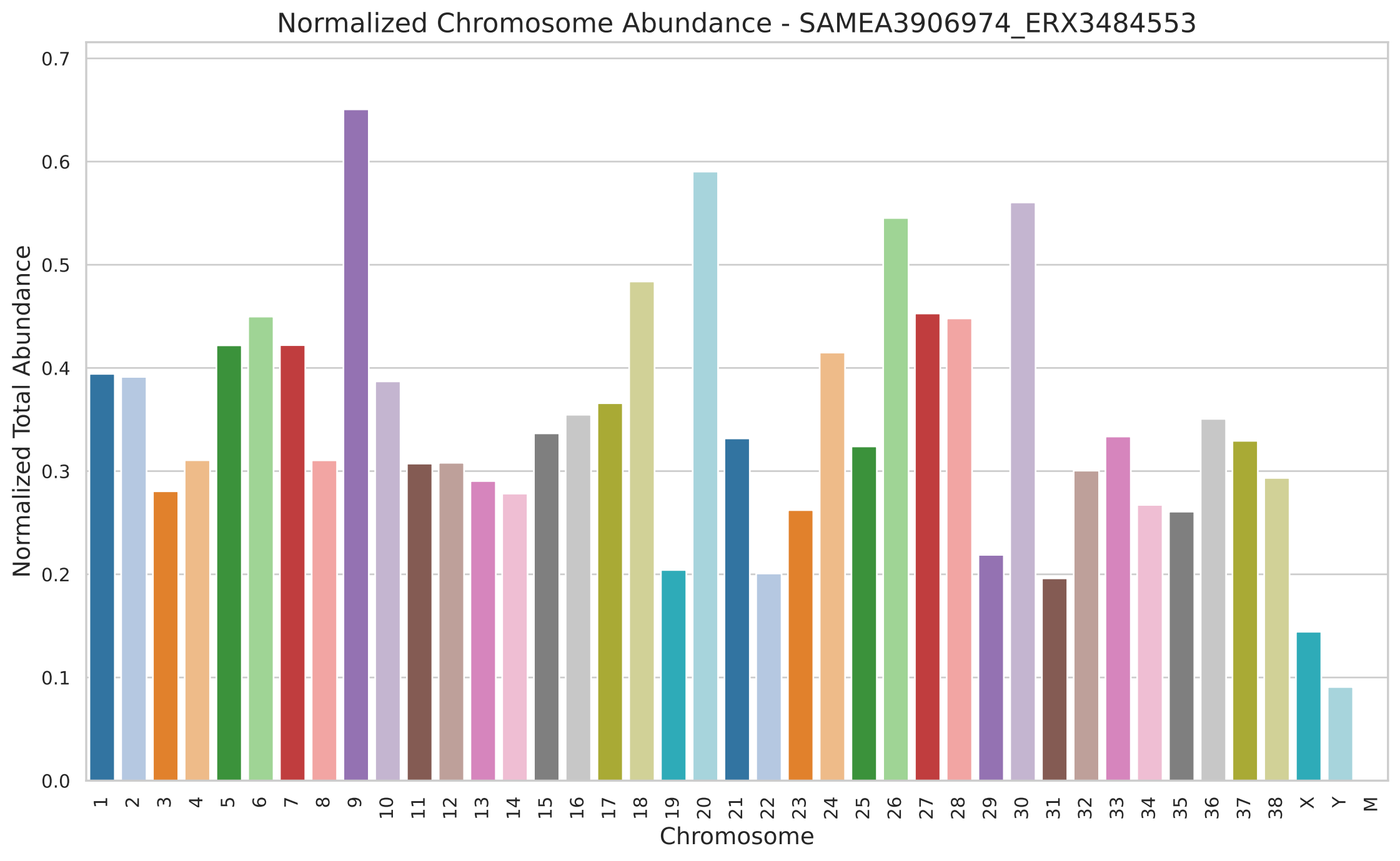

Normalized Chromosome Abundance - SAMEA3906991_ERX3484563
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

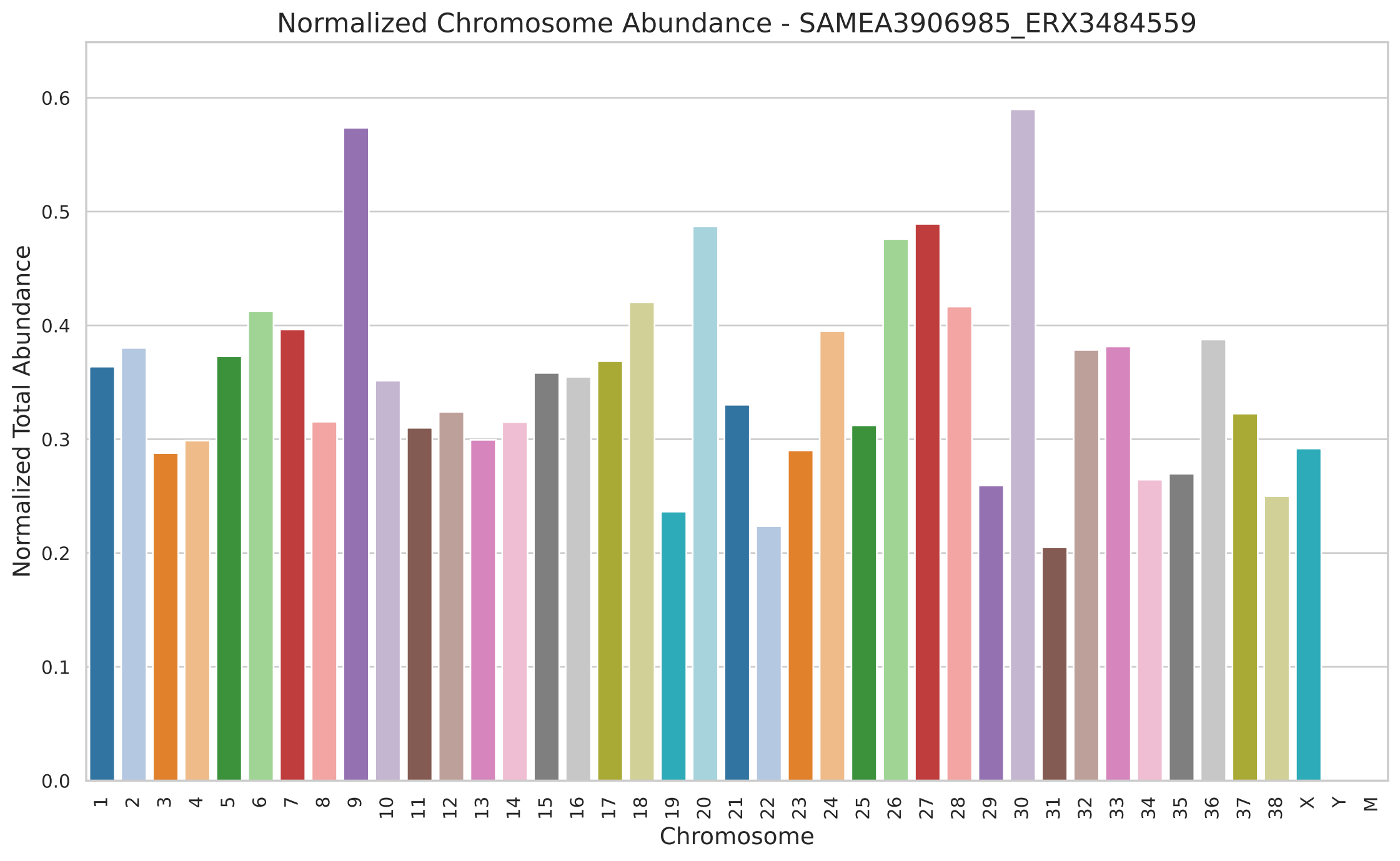

Normalized Chromosome Abundance - SAMEA3906980_ERX3484556
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

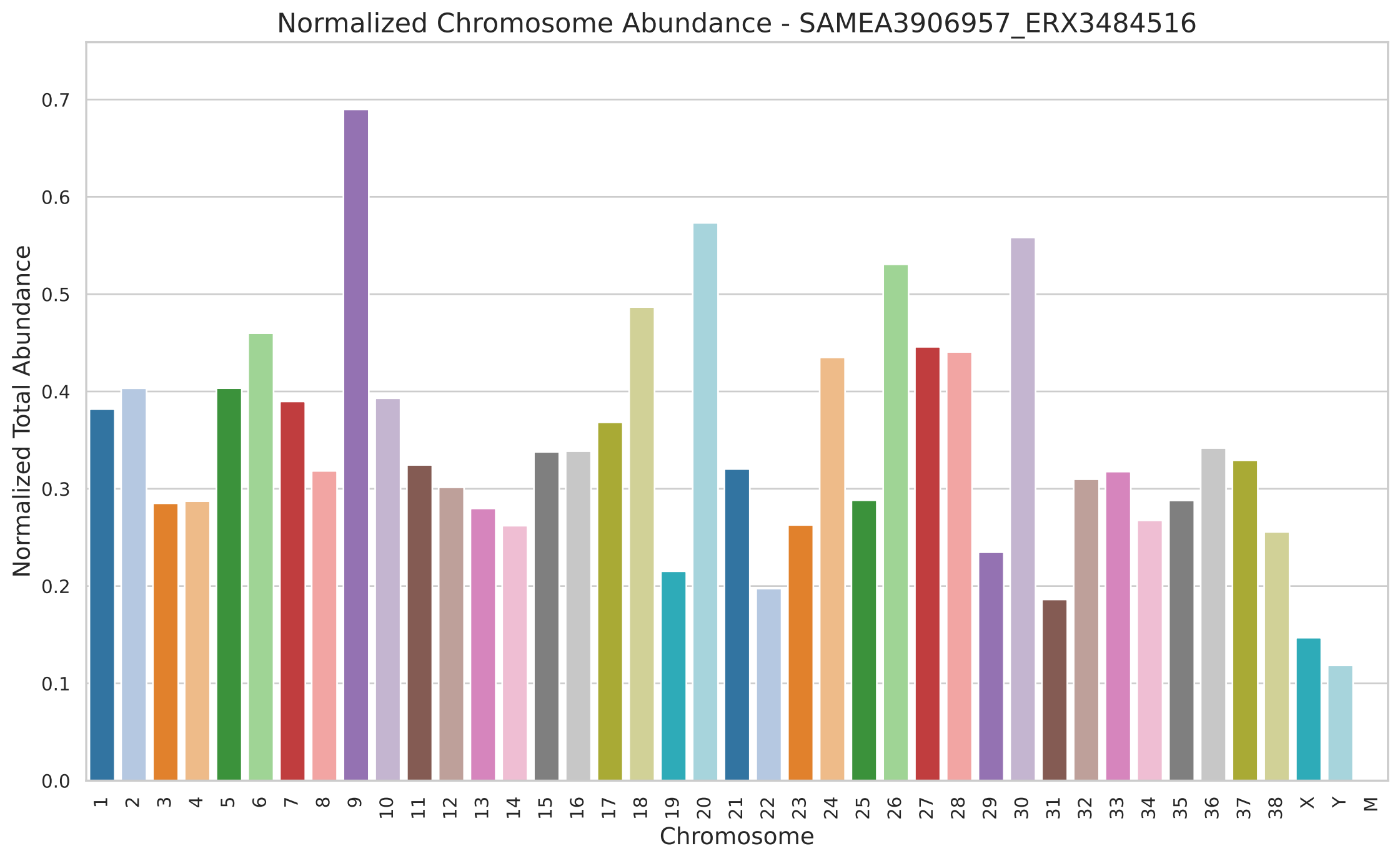

Normalized Chromosome Abundance - SAMEA3907010_ERX3484564
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

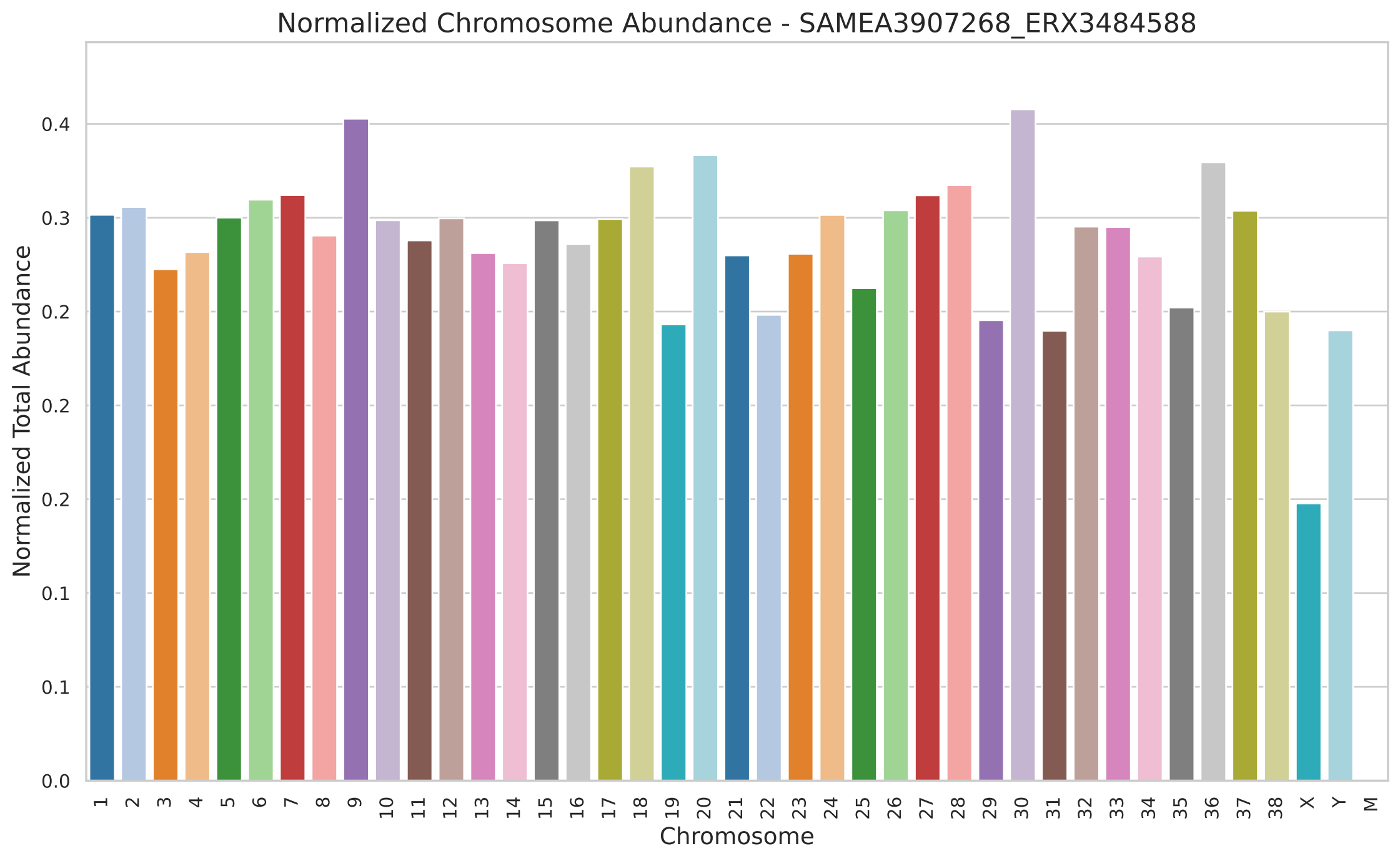

Normalized Chromosome Abundance - SAMEA3907366_ERX3484540
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

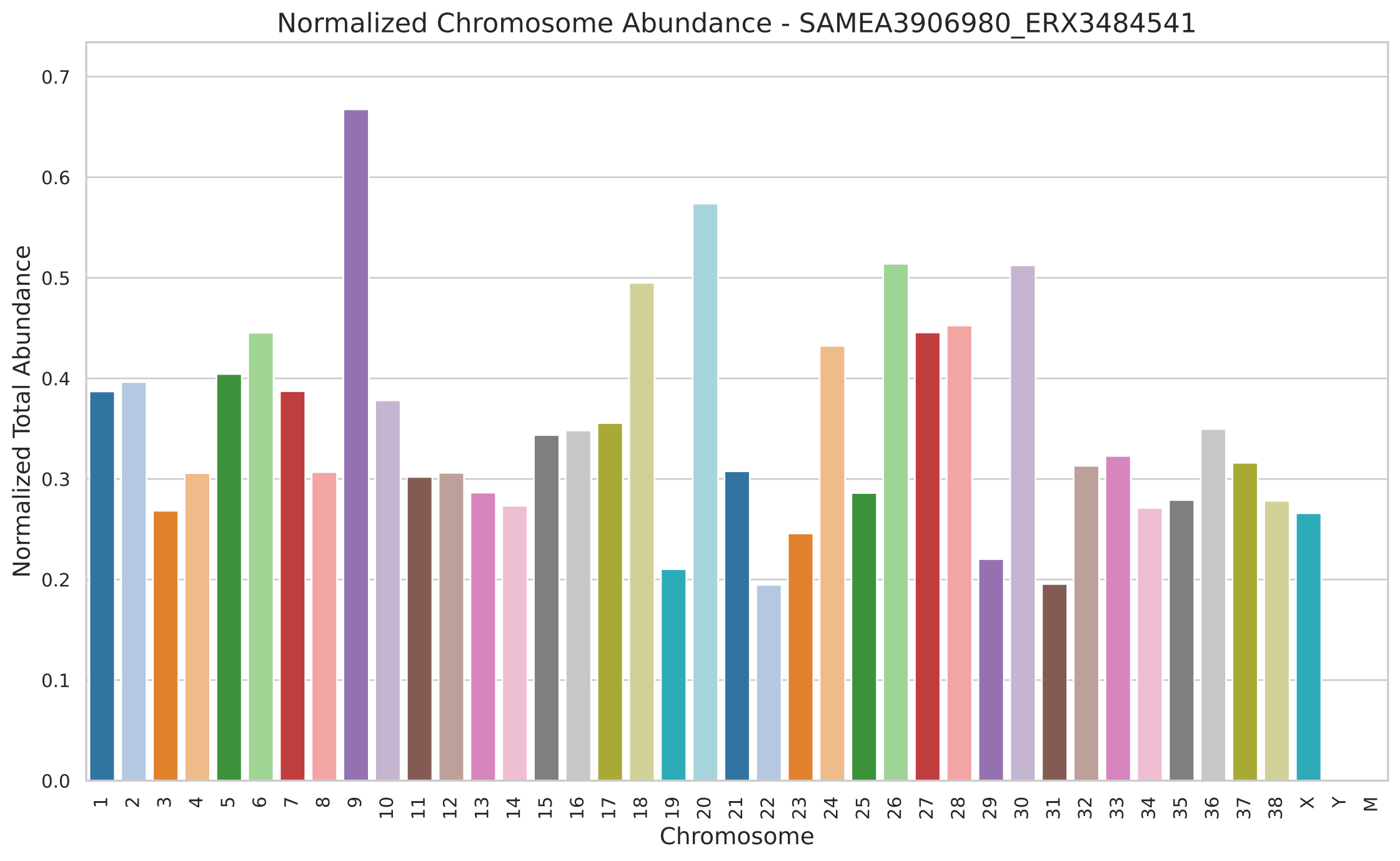

Normalized Chromosome Abundance - SAMEA3906991_ERX3484548
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

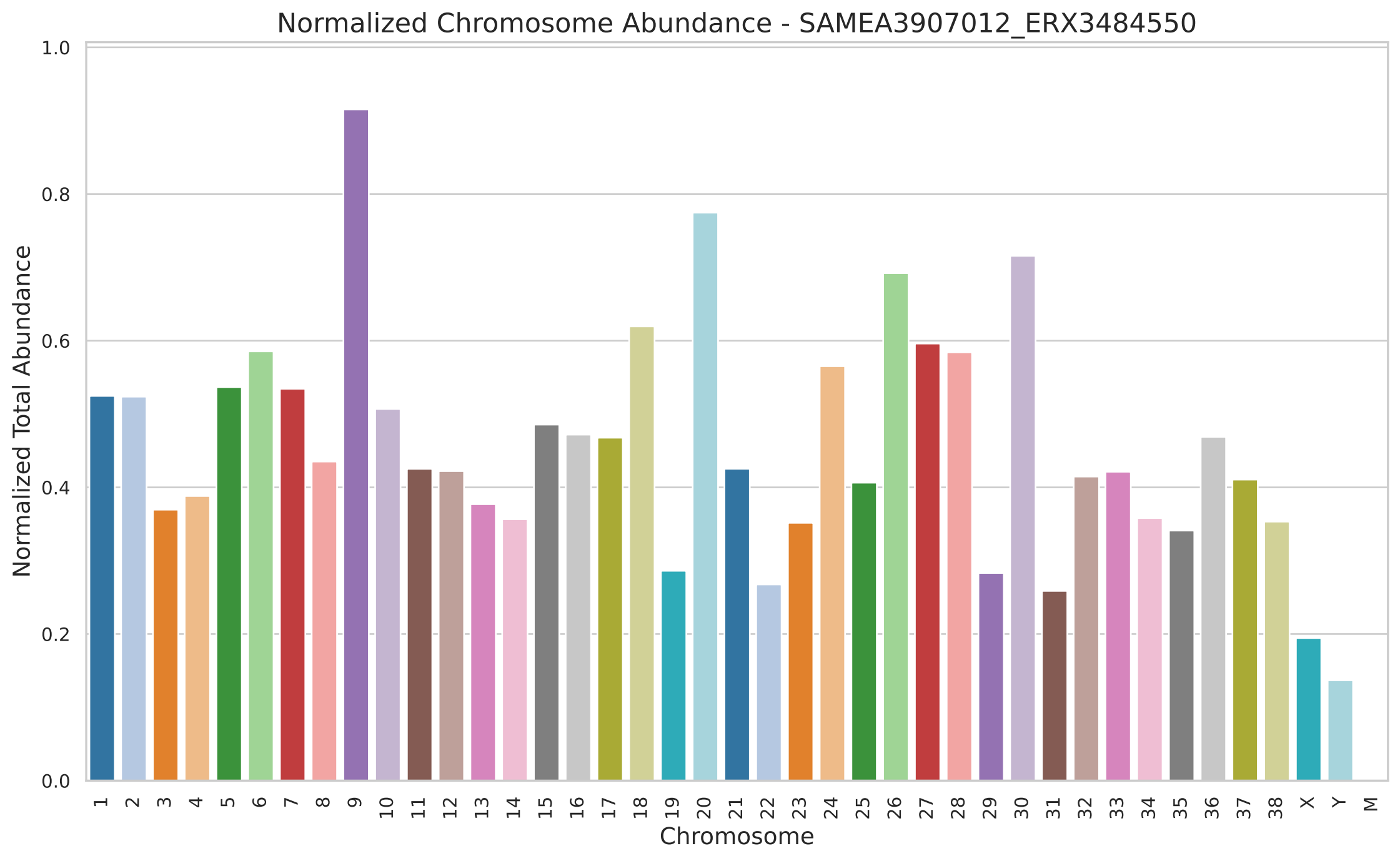

Normalized Chromosome Abundance - SAMEA3906974_ERX3484553
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

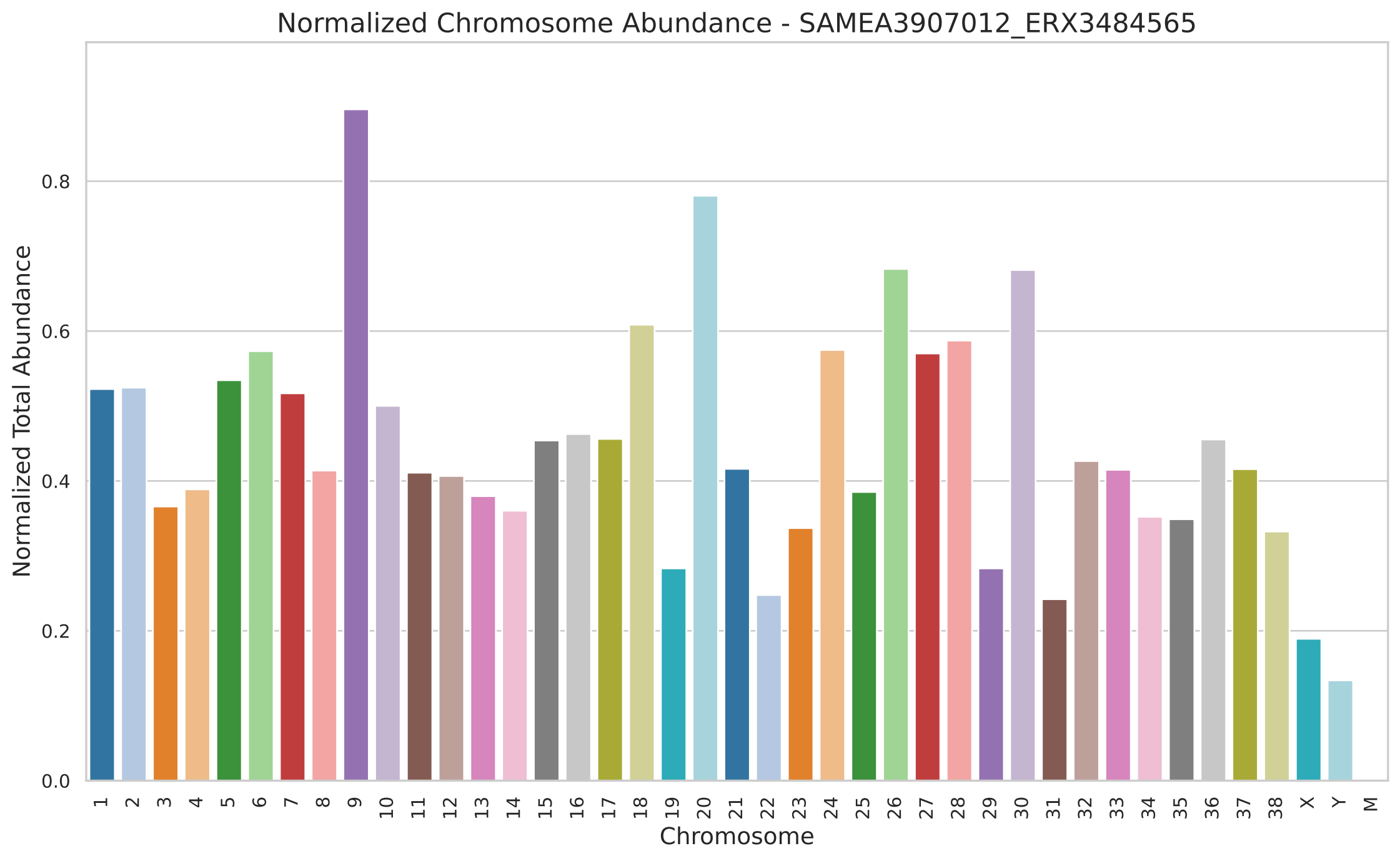

Normalized Chromosome Abundance - SAMEA3906985_ERX3484559
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

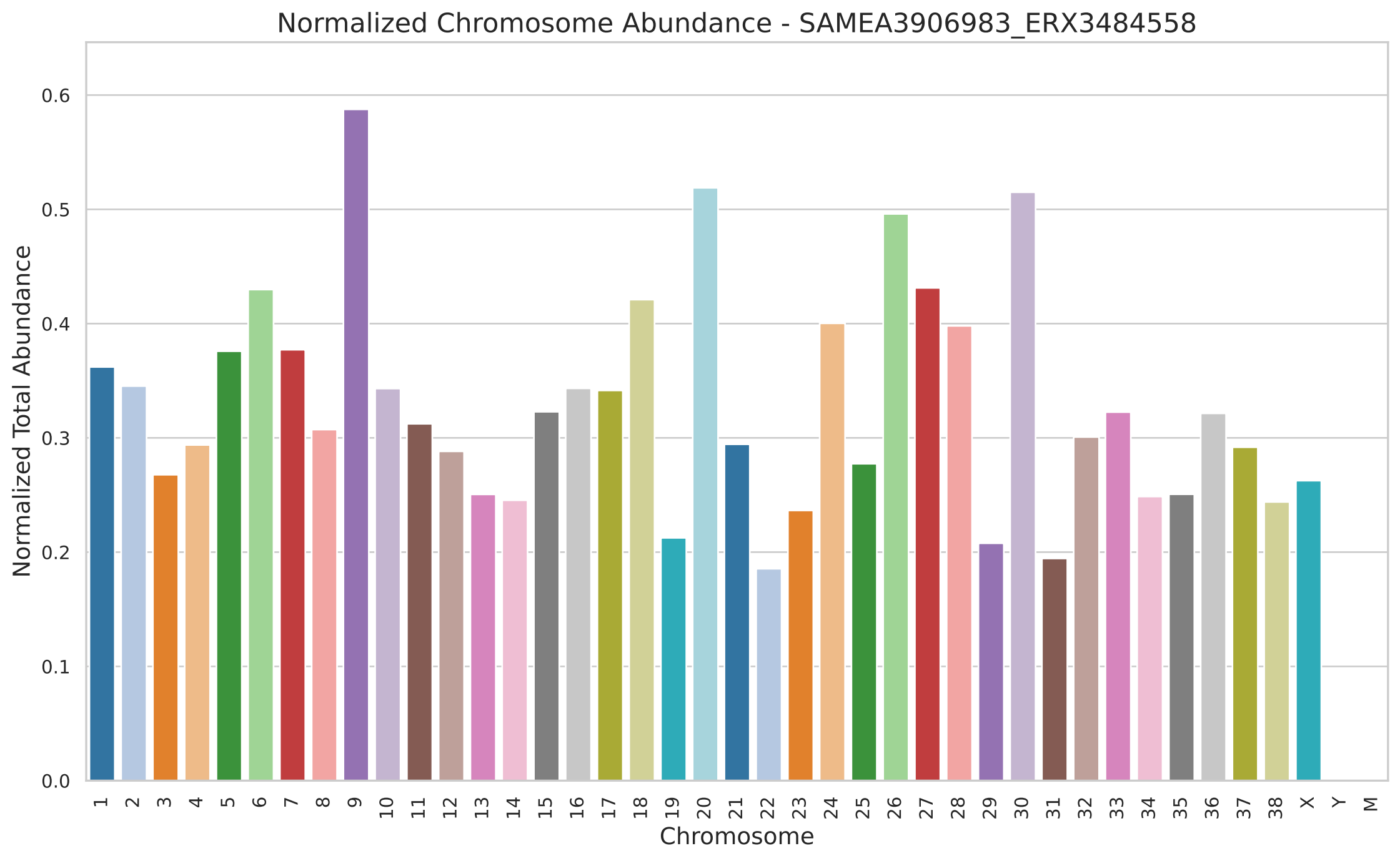

Normalized Chromosome Abundance - SAMEA3906957_ERX3484516
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

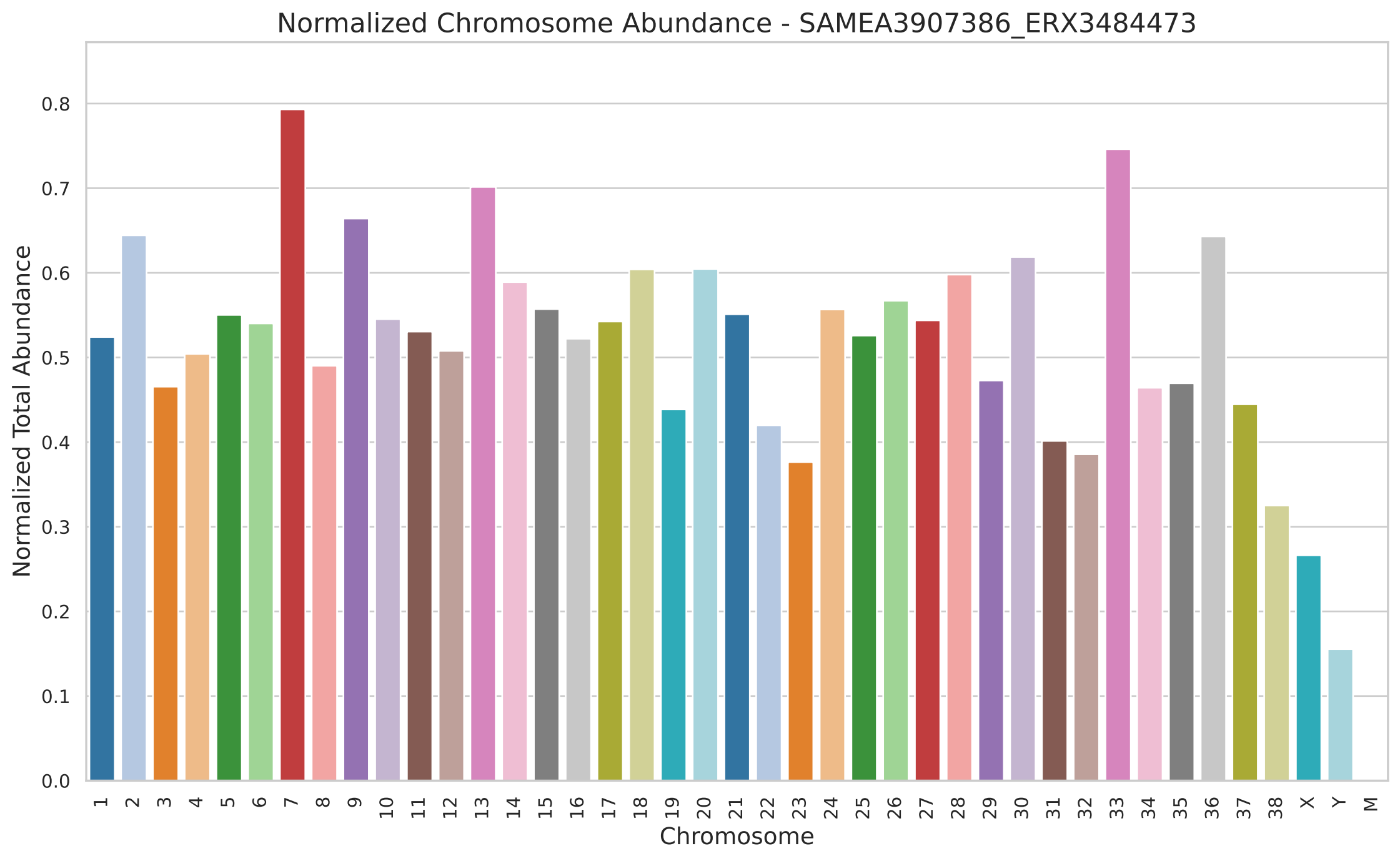

Normalized Chromosome Abundance - SAMEA3907268_ERX3484588
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

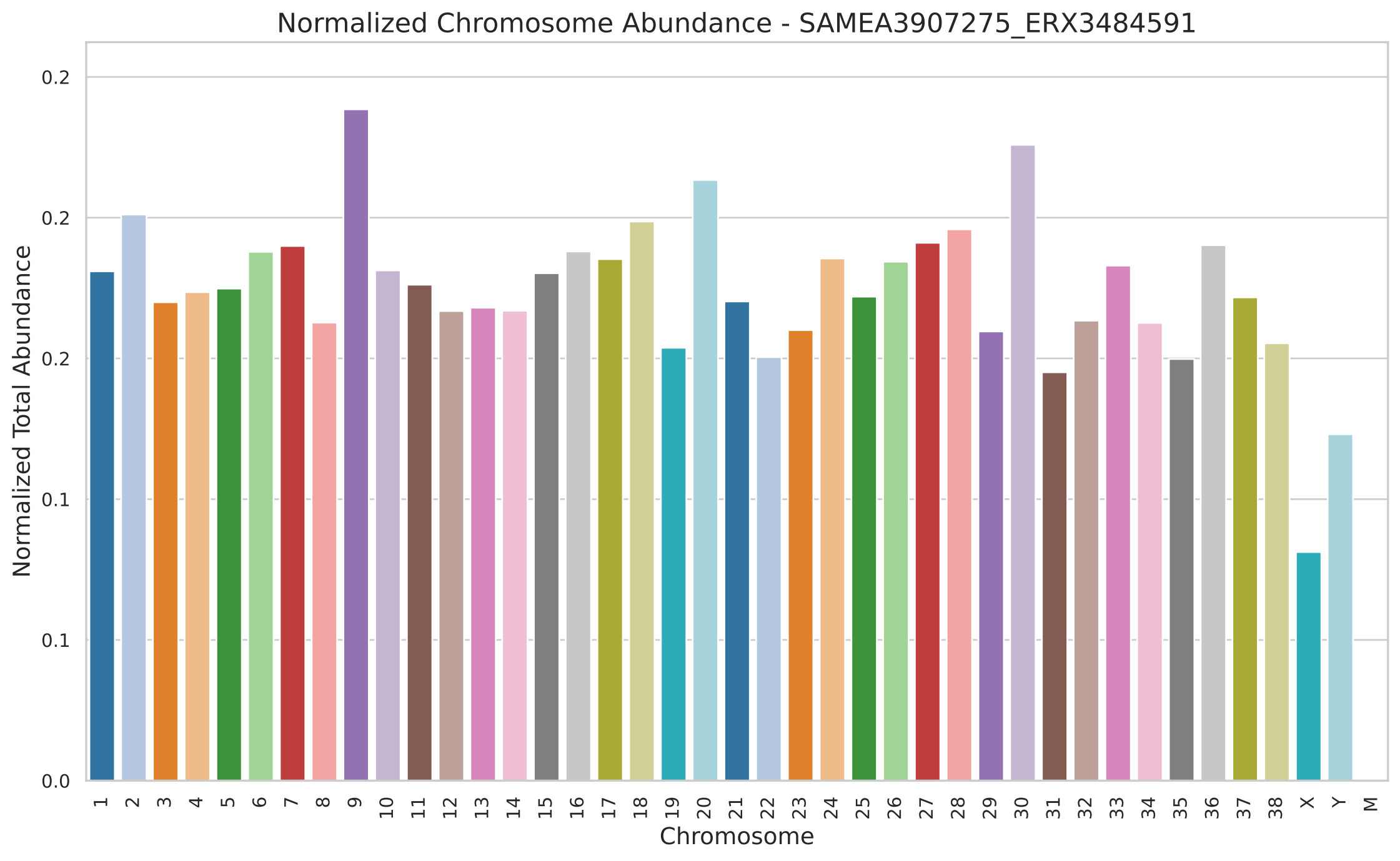

Normalized Chromosome Abundance - SAMEA3906980_ERX3484541
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

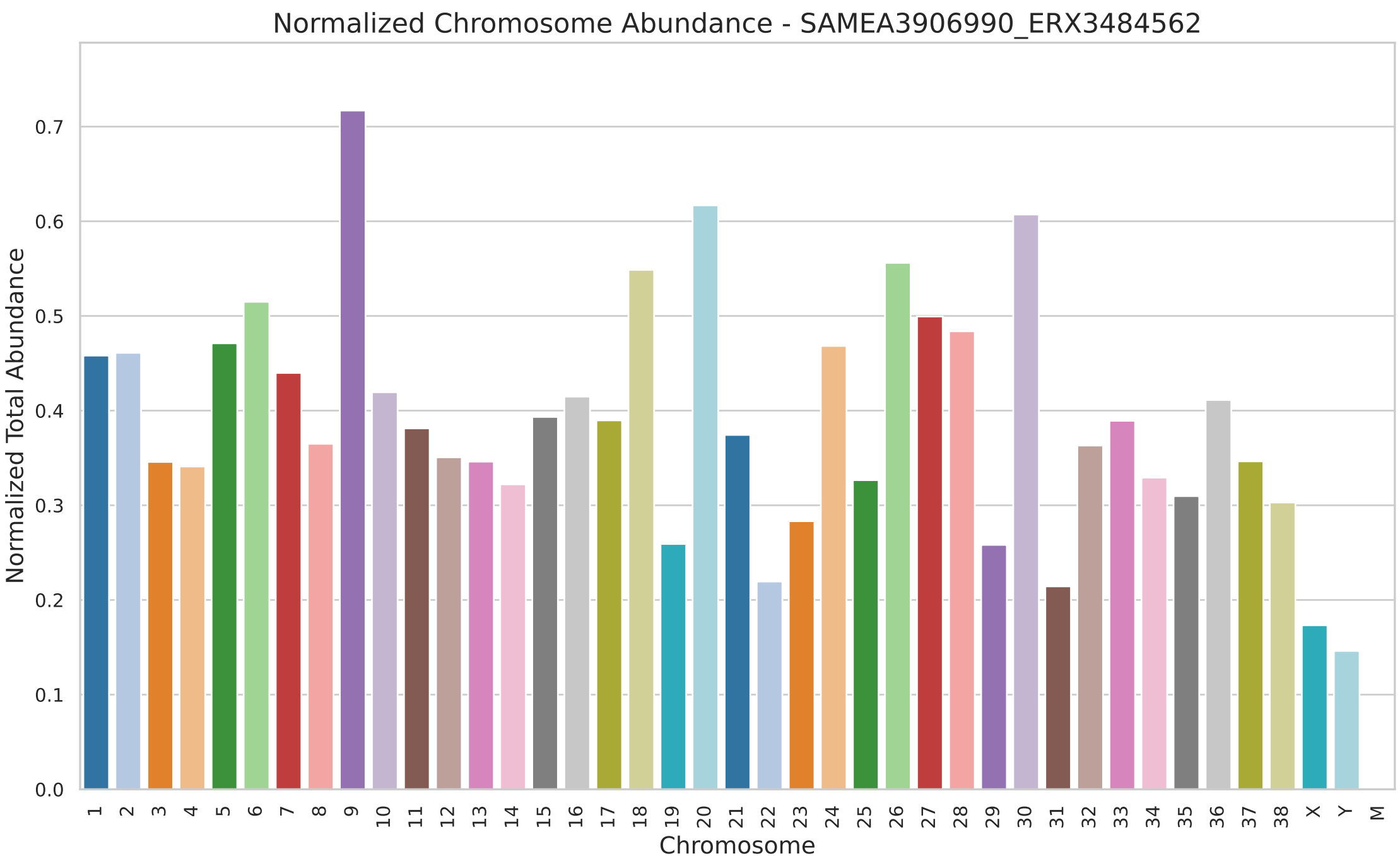

Normalized Chromosome Abundance - SAMEA3907012_ERX3484550
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

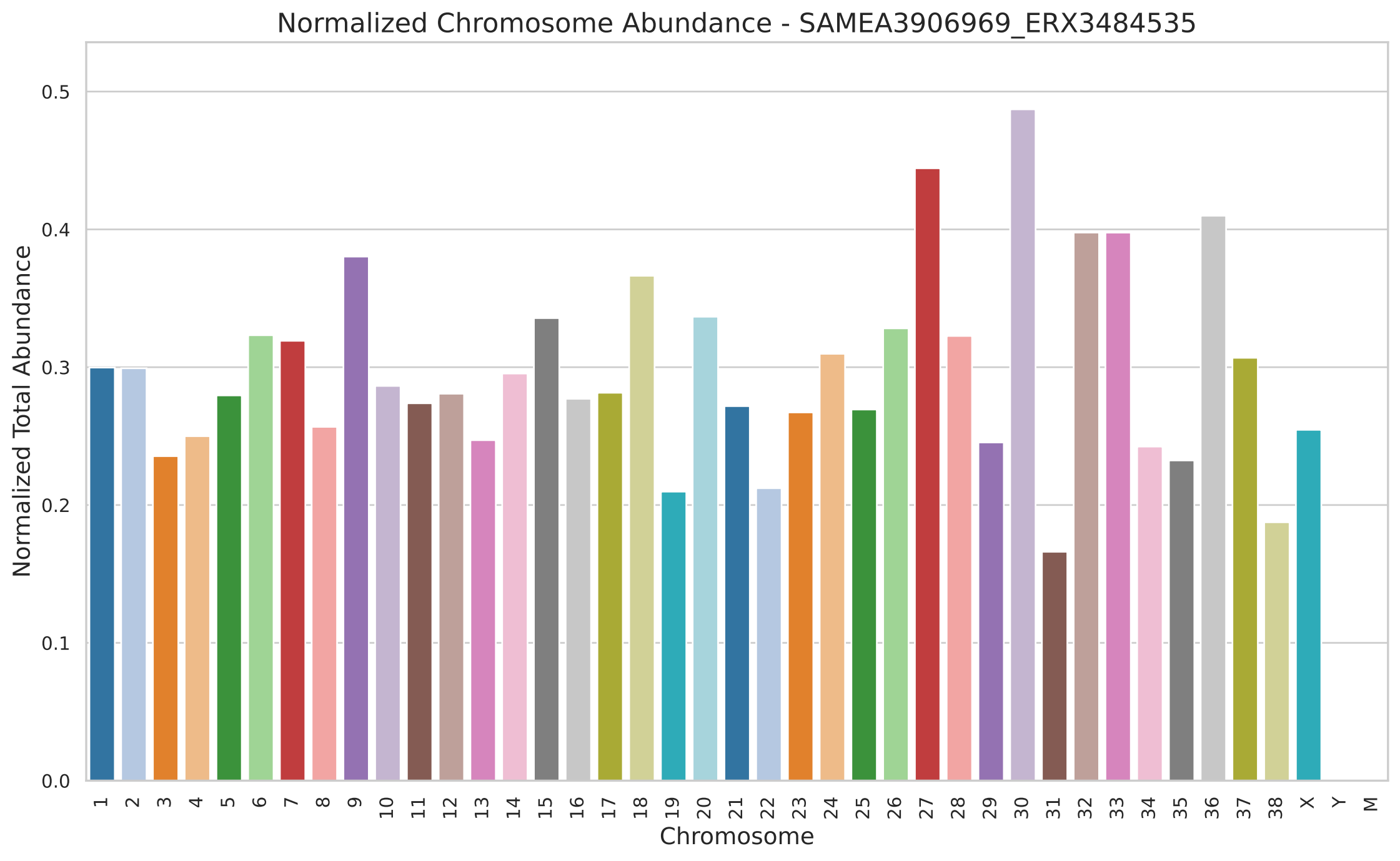

Normalized Chromosome Abundance - SAMEA3907012_ERX3484565
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

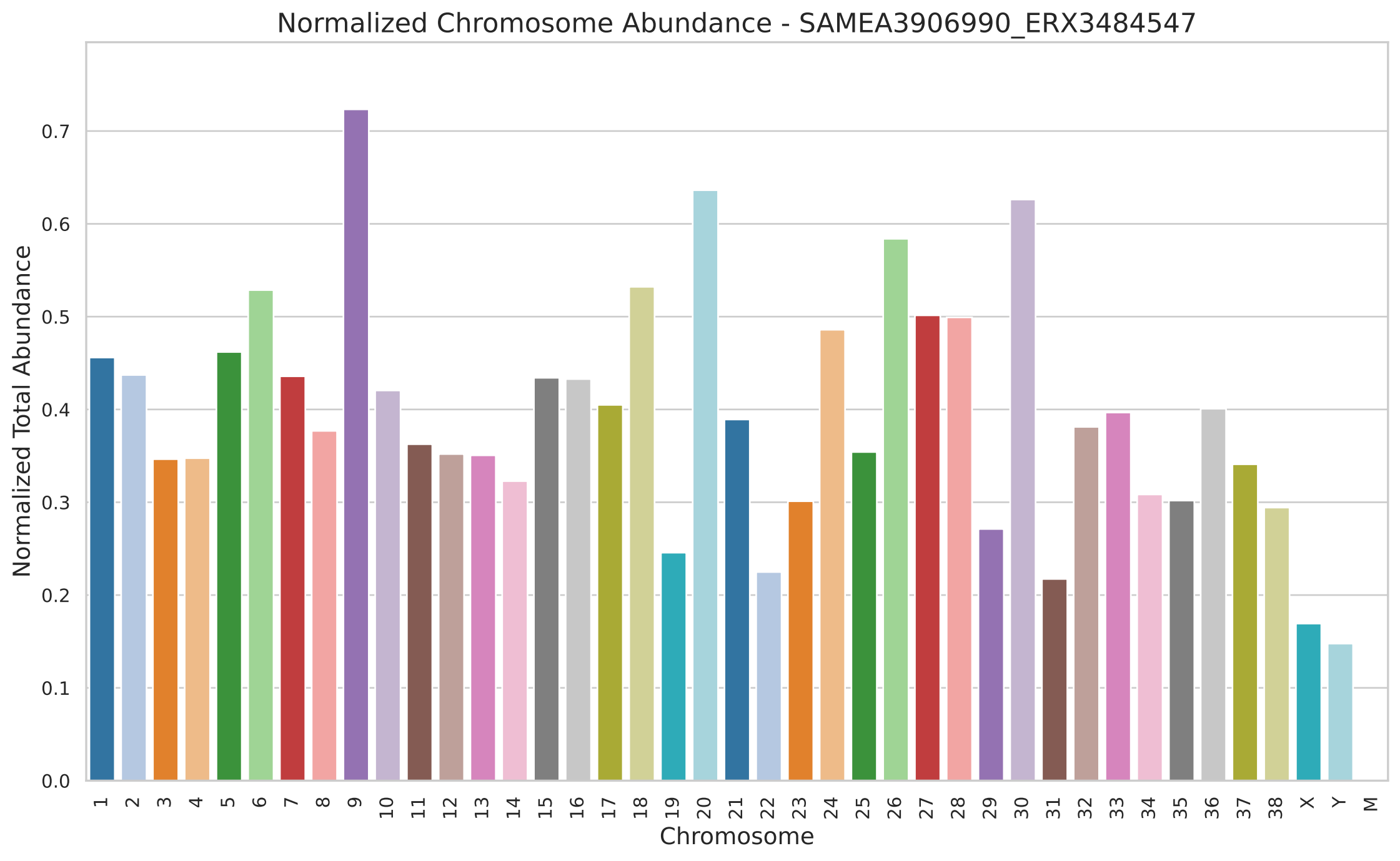

Normalized Chromosome Abundance - SAMEA3906983_ERX3484558
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

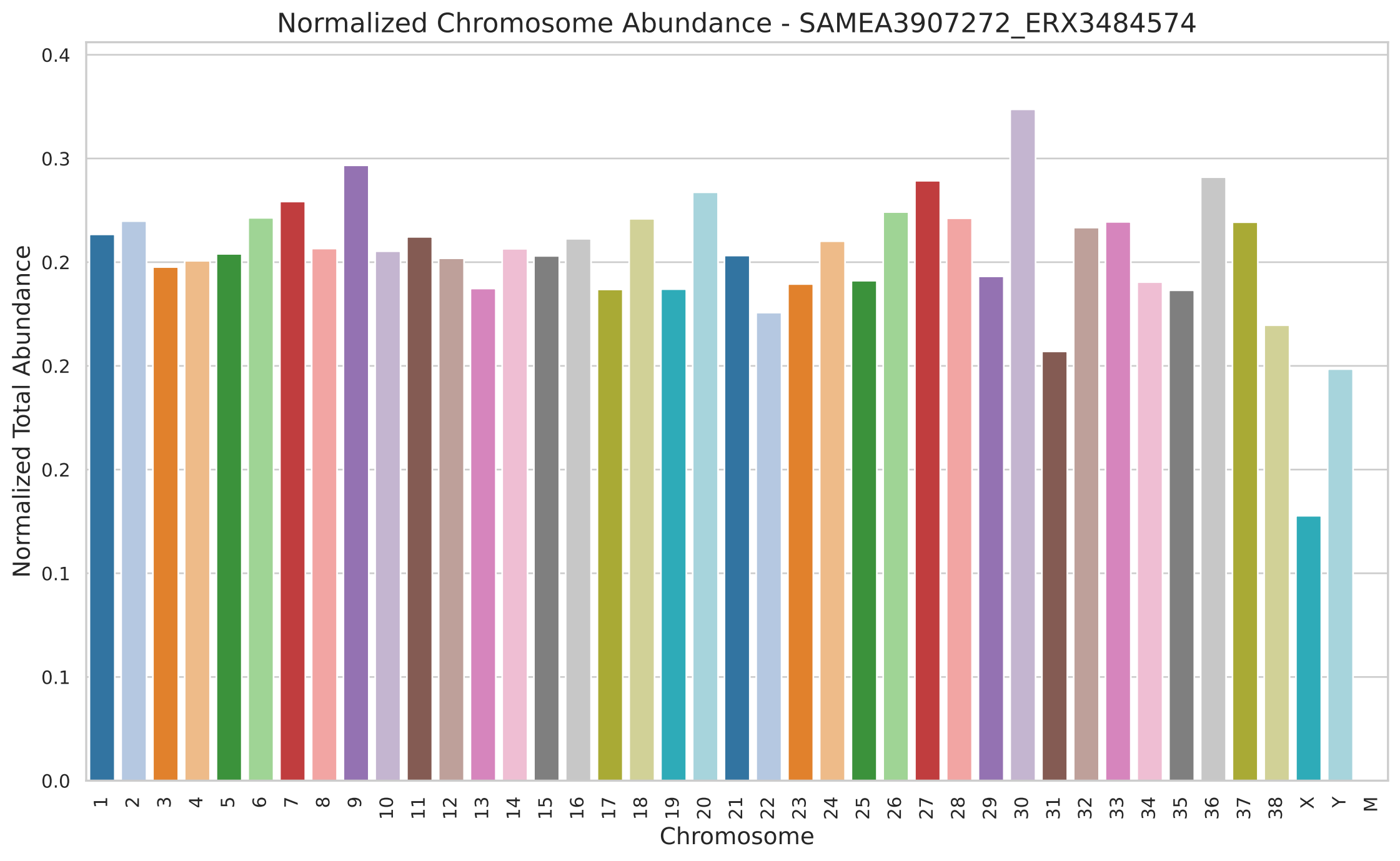

Normalized Chromosome Abundance - SAMEA3907386_ERX3484473
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

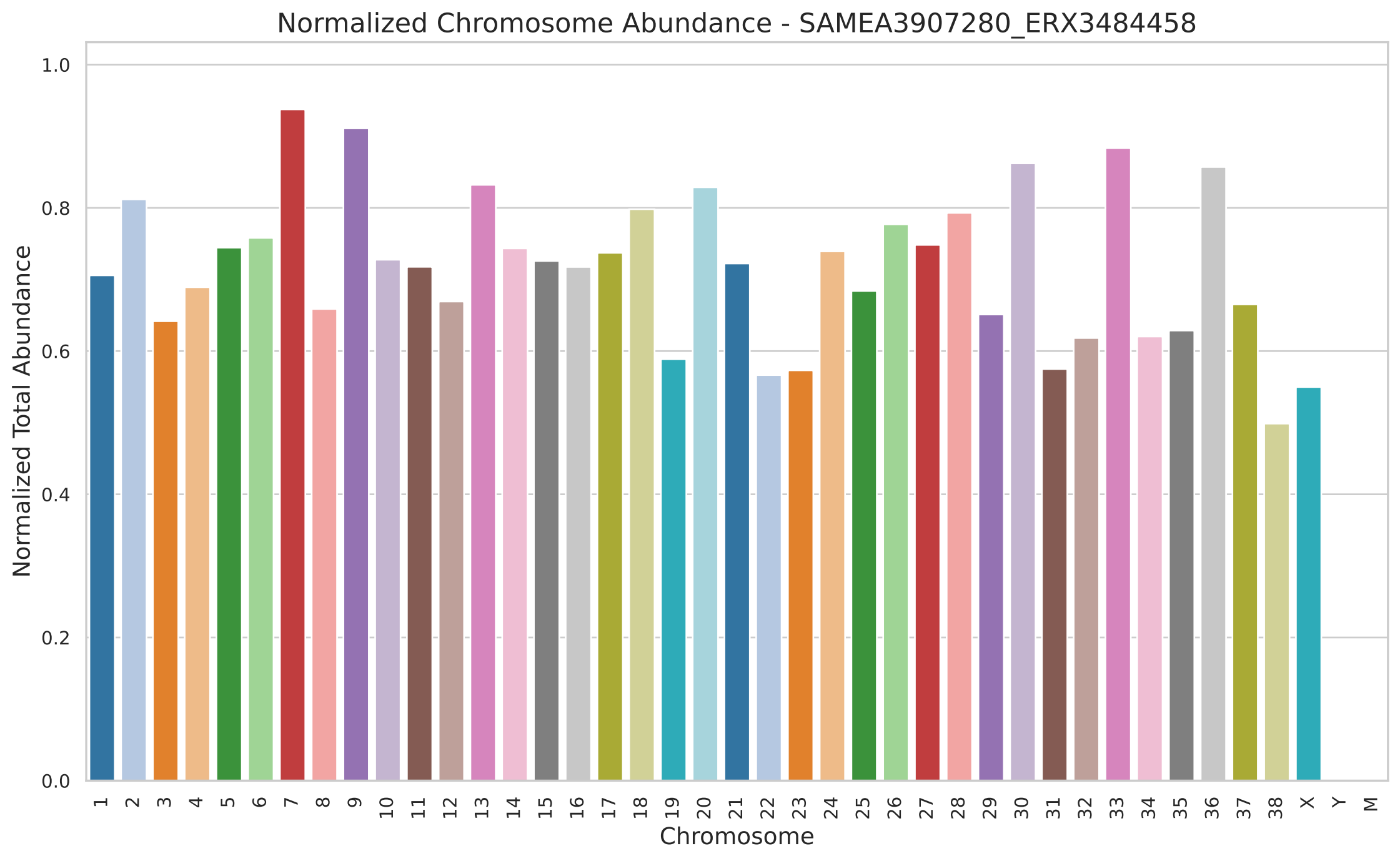

Normalized Chromosome Abundance - SAMEA3907275_ERX3484591
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

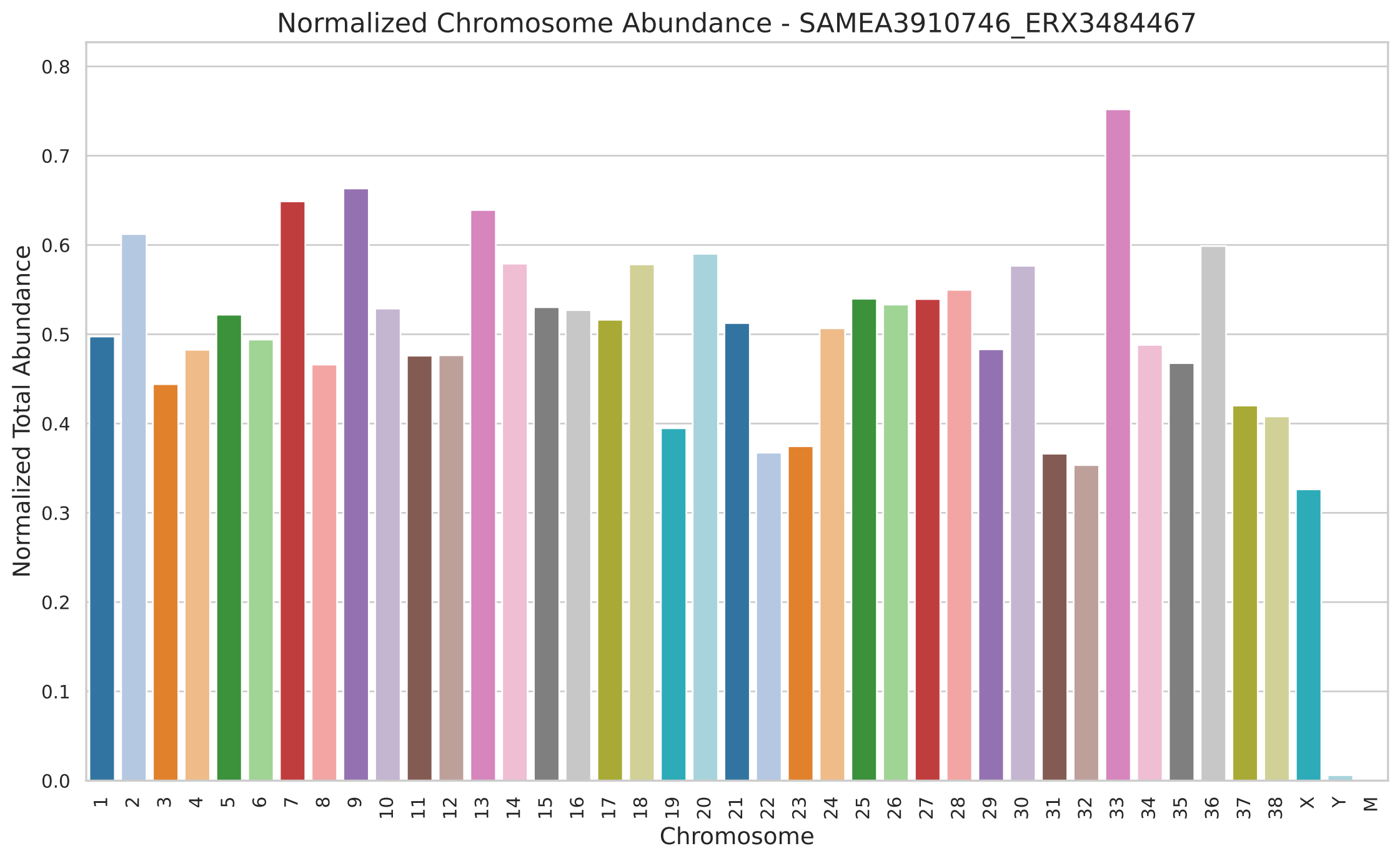

Normalized Chromosome Abundance - SAMEA3906990_ERX3484562
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

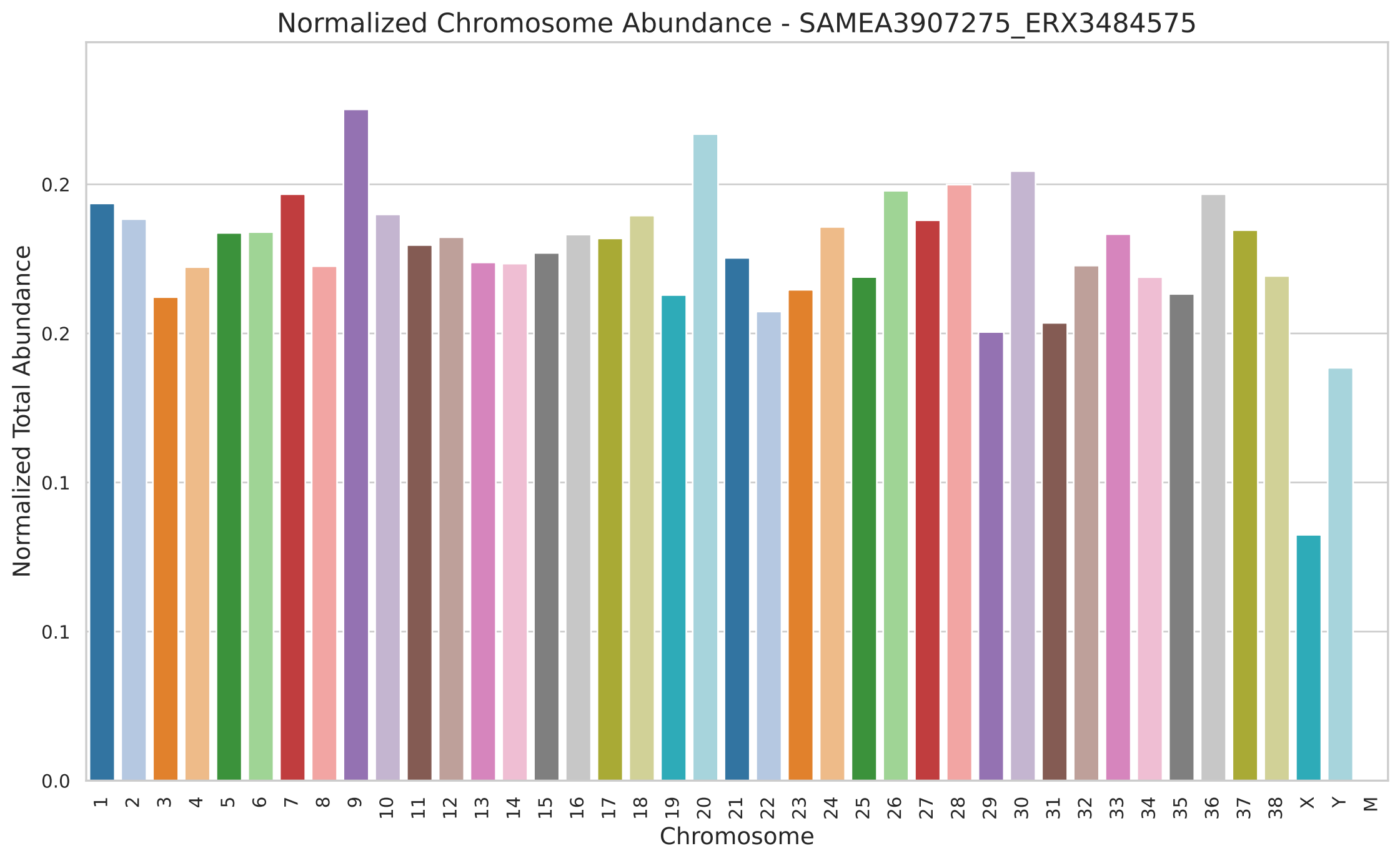

Normalized Chromosome Abundance - SAMEA3906969_ERX3484535
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

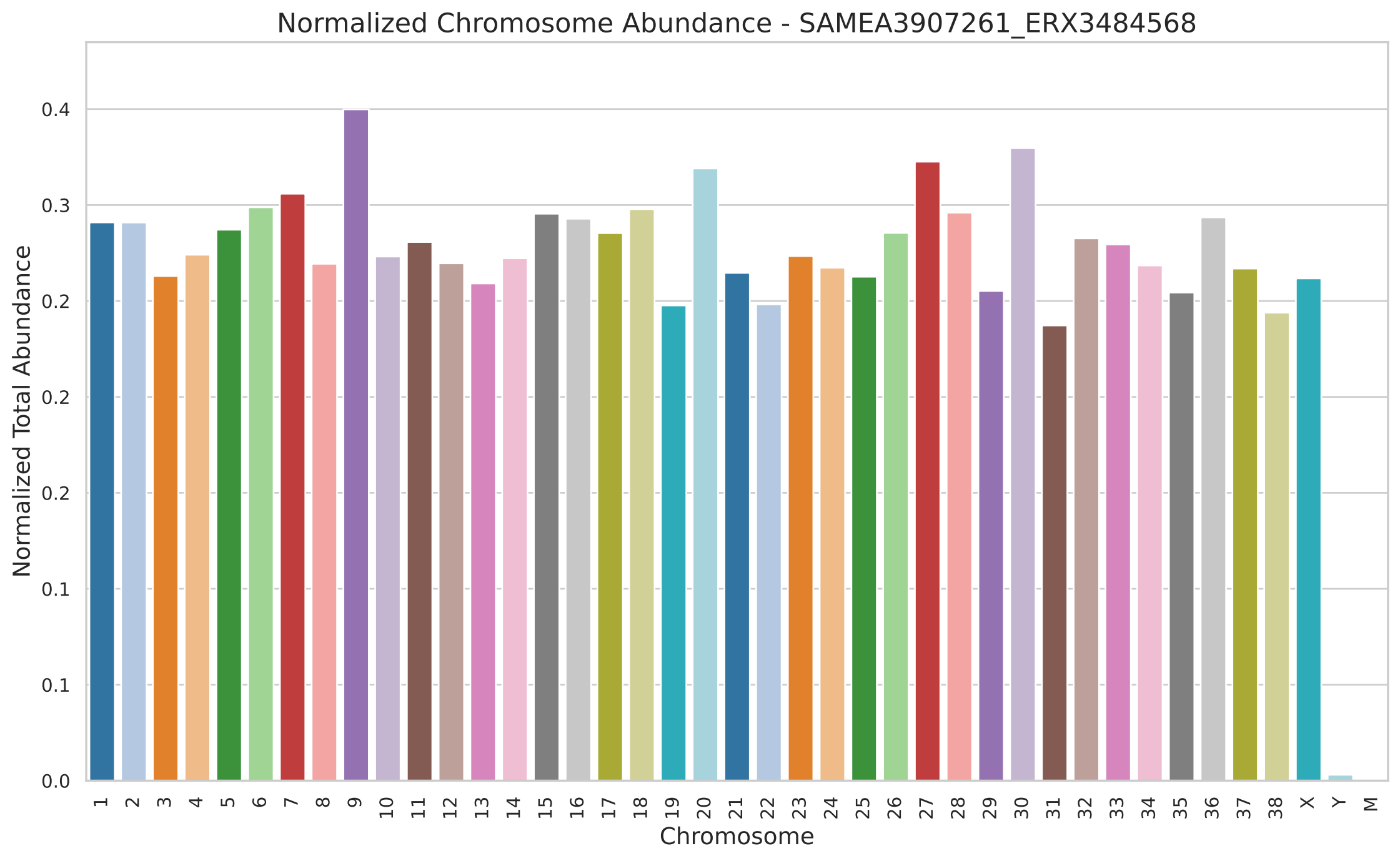

Normalized Chromosome Abundance - SAMEA3906990_ERX3484547
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

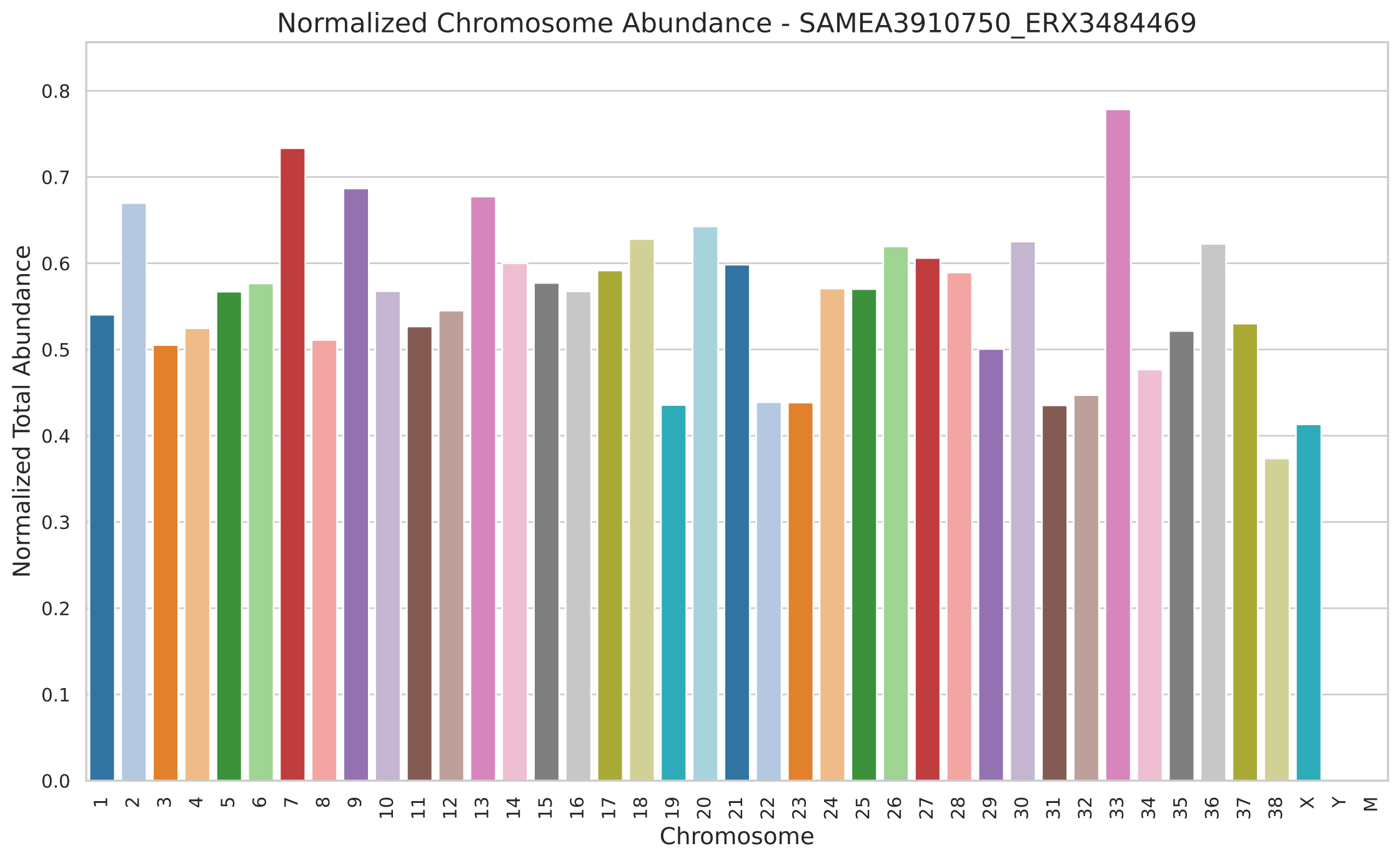

Normalized Chromosome Abundance - SAMEA3907272_ERX3484574
Normalized Total Abundance
0.4
0.3
0.2
0.2
0.1
0.1
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

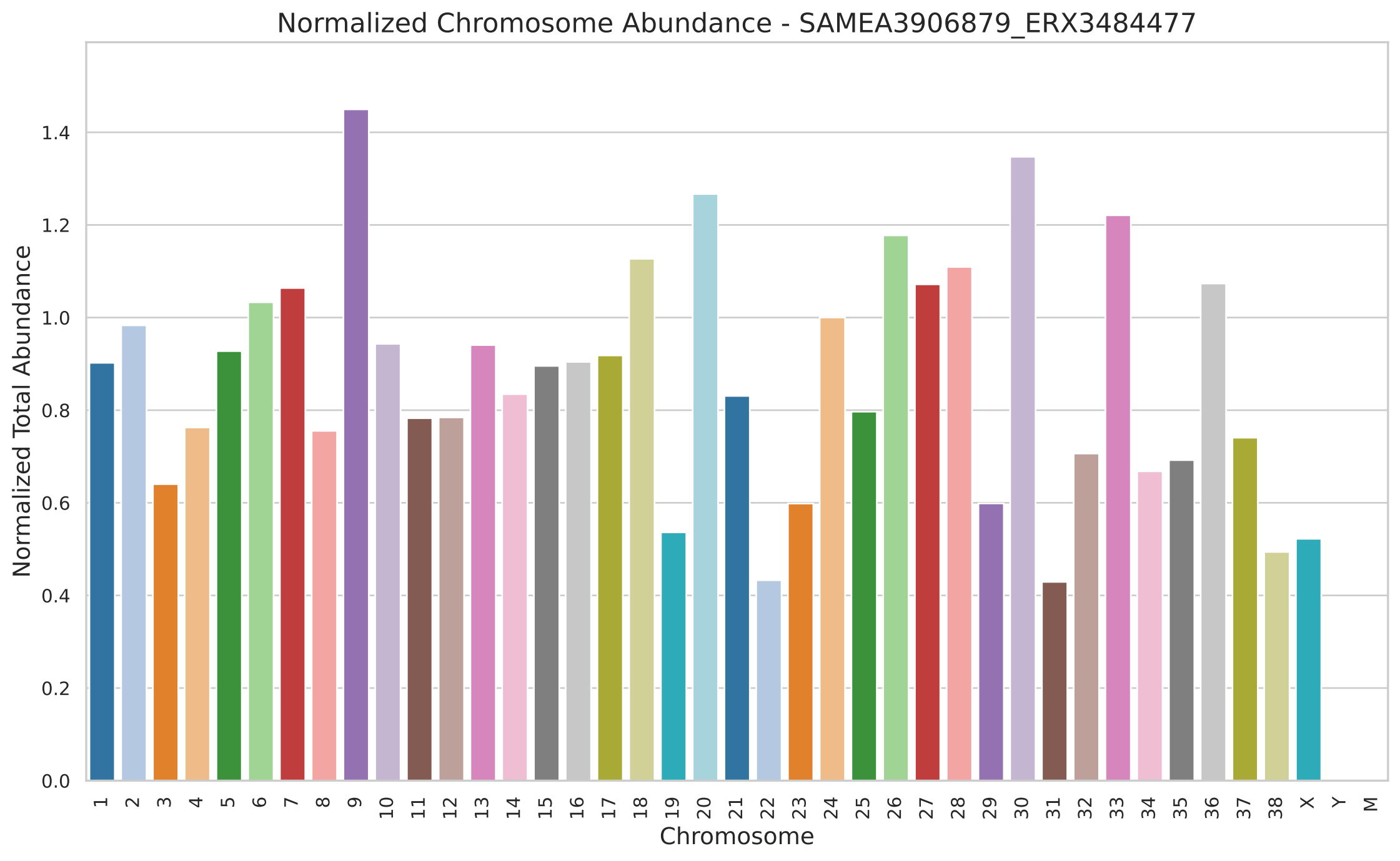

Normalized Chromosome Abundance - SAMEA3907280_ERX3484458
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

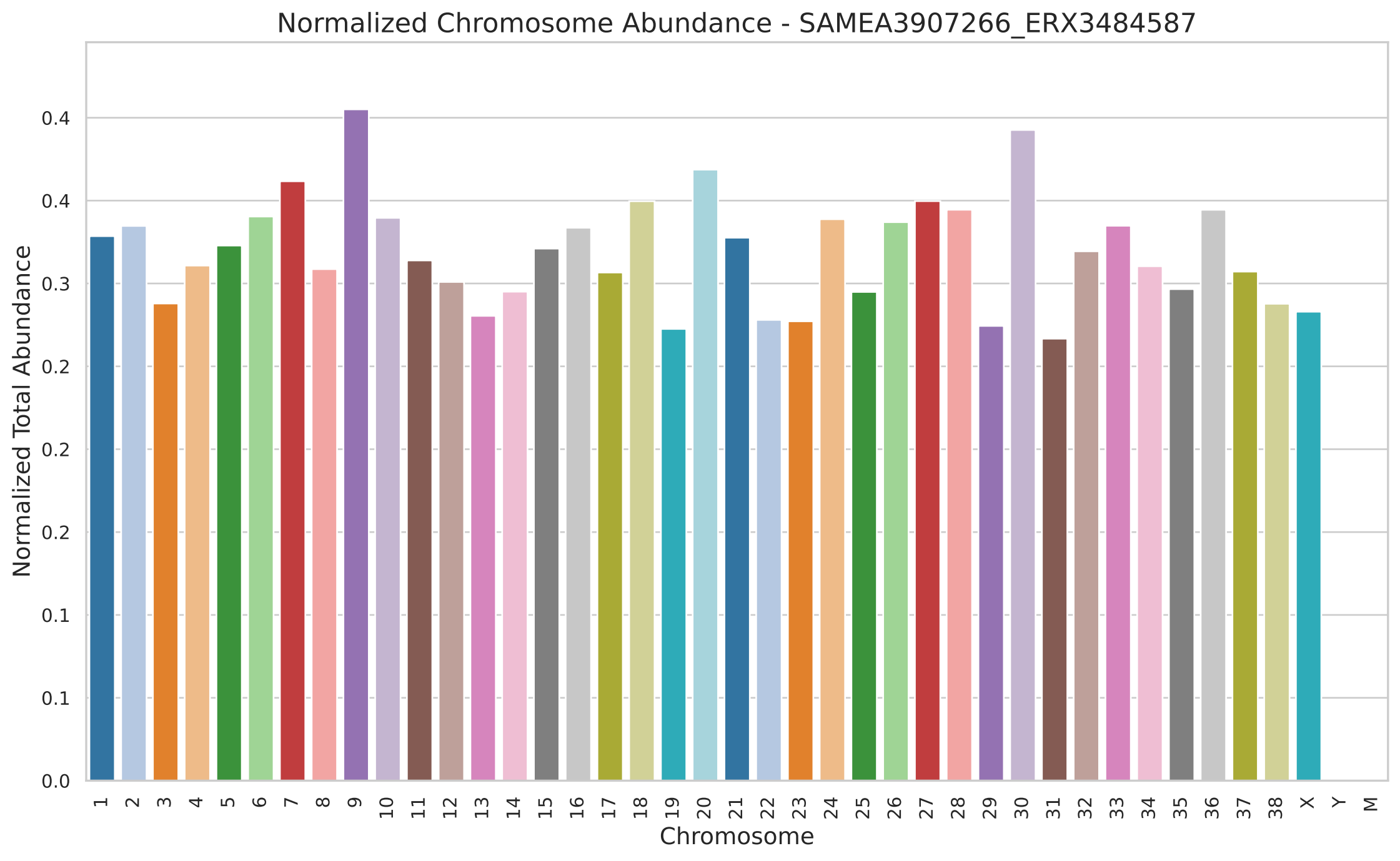

Normalized Chromosome Abundance - SAMEA3910746_ERX3484467
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

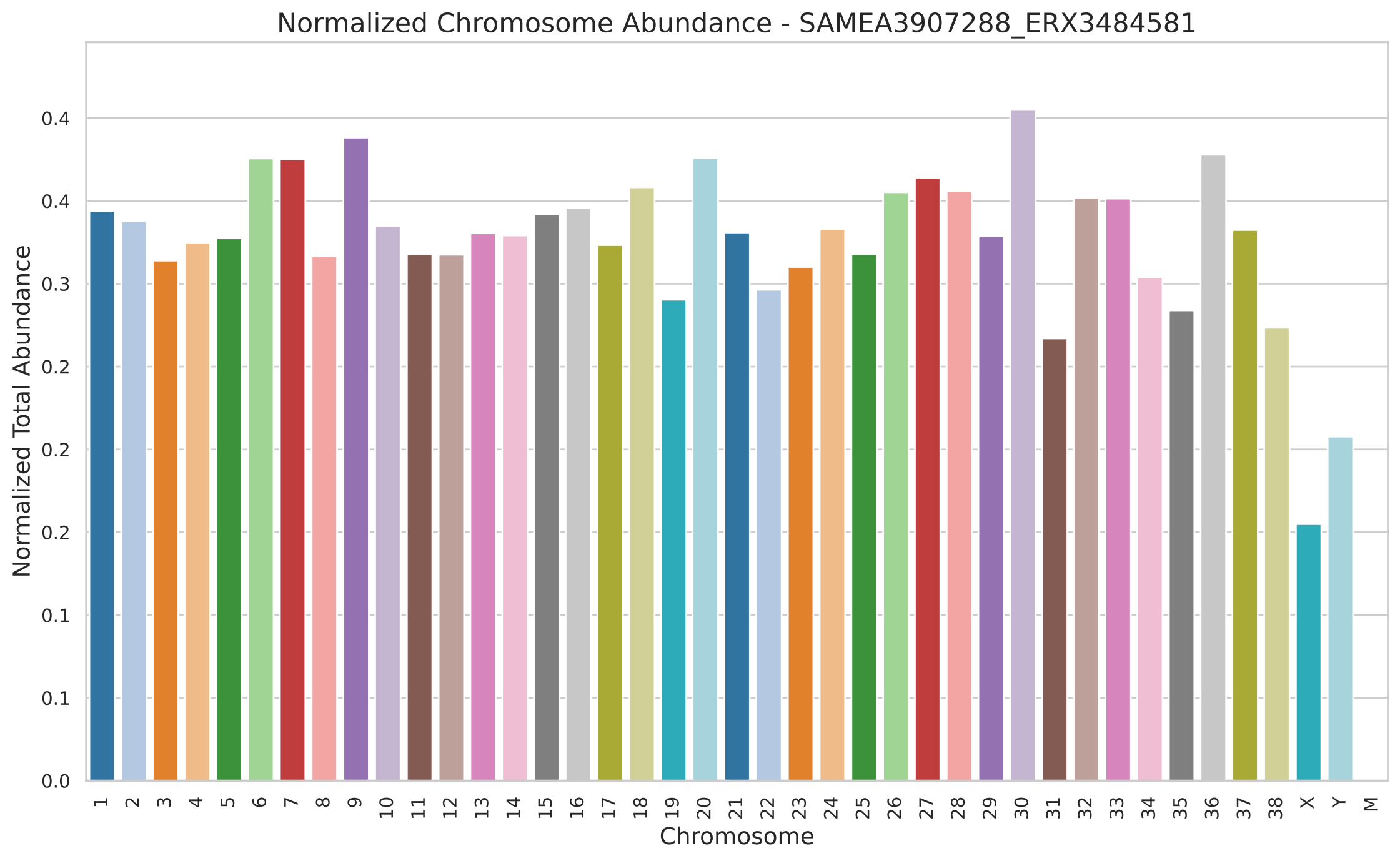

Normalized Chromosome Abundance - SAMEA3907275_ERX3484575
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

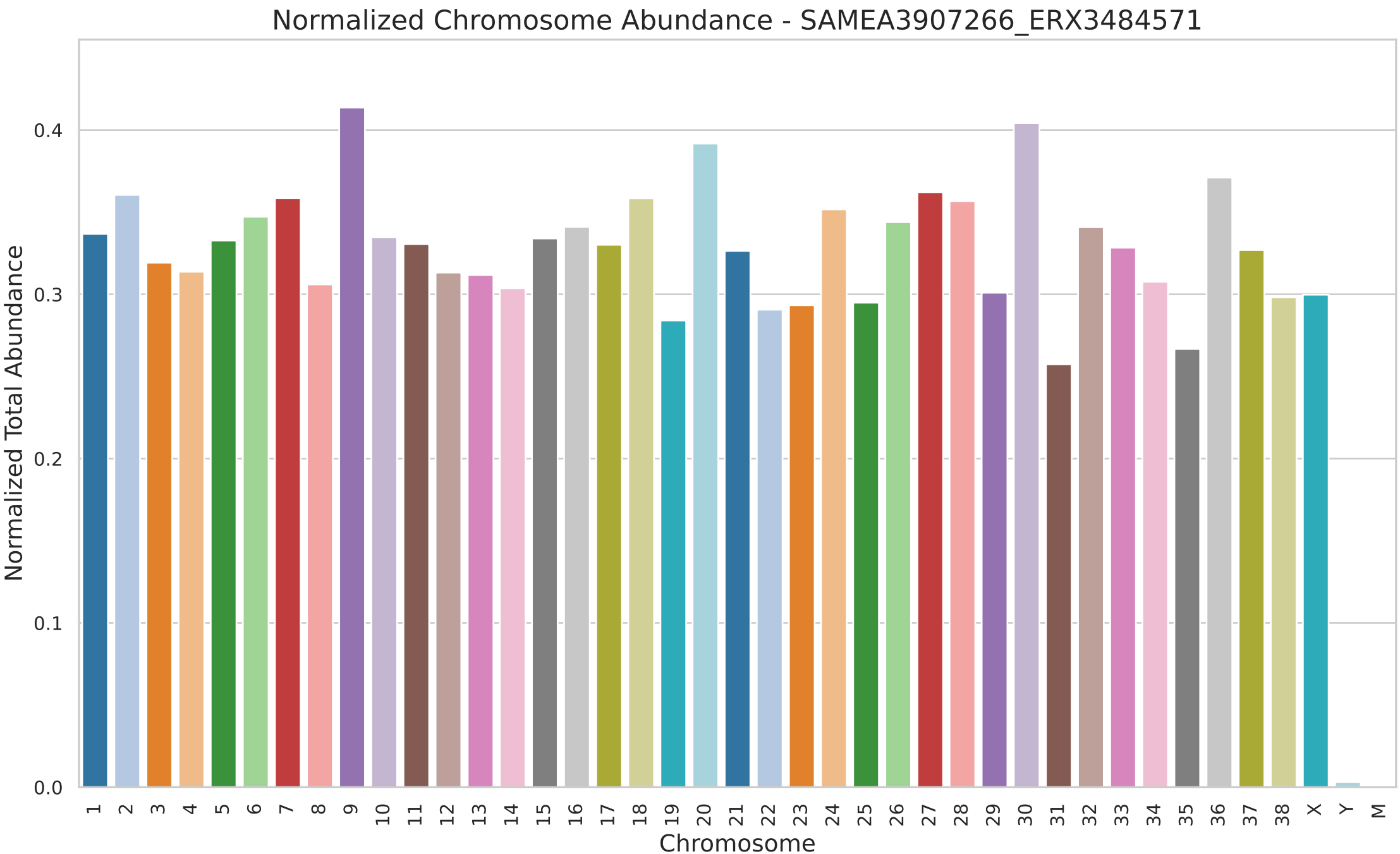

Normalized Chromosome Abundance - SAMEA3907261_ERX3484568
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

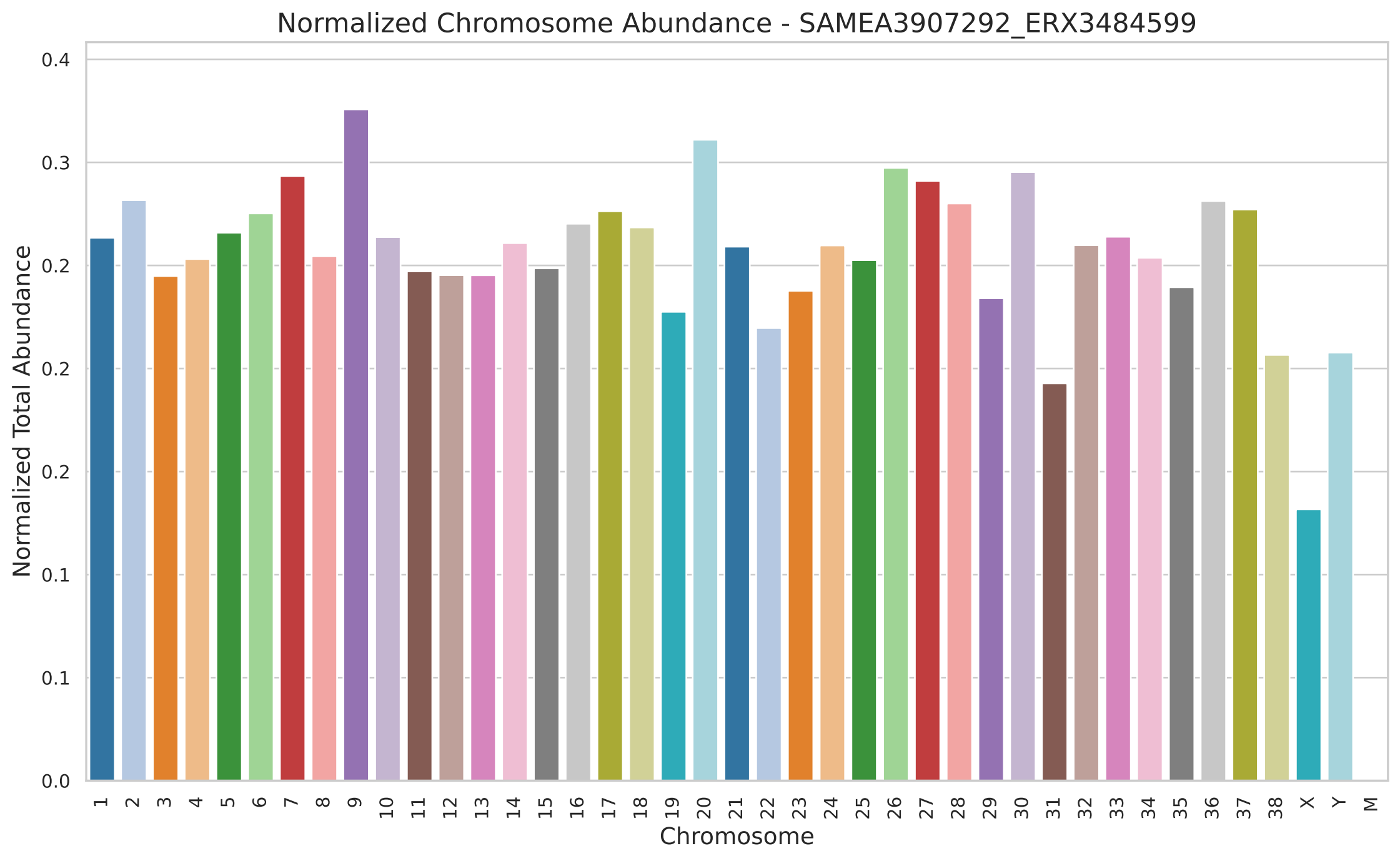

Normalized Chromosome Abundance - SAMEA3910750_ERX3484469
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

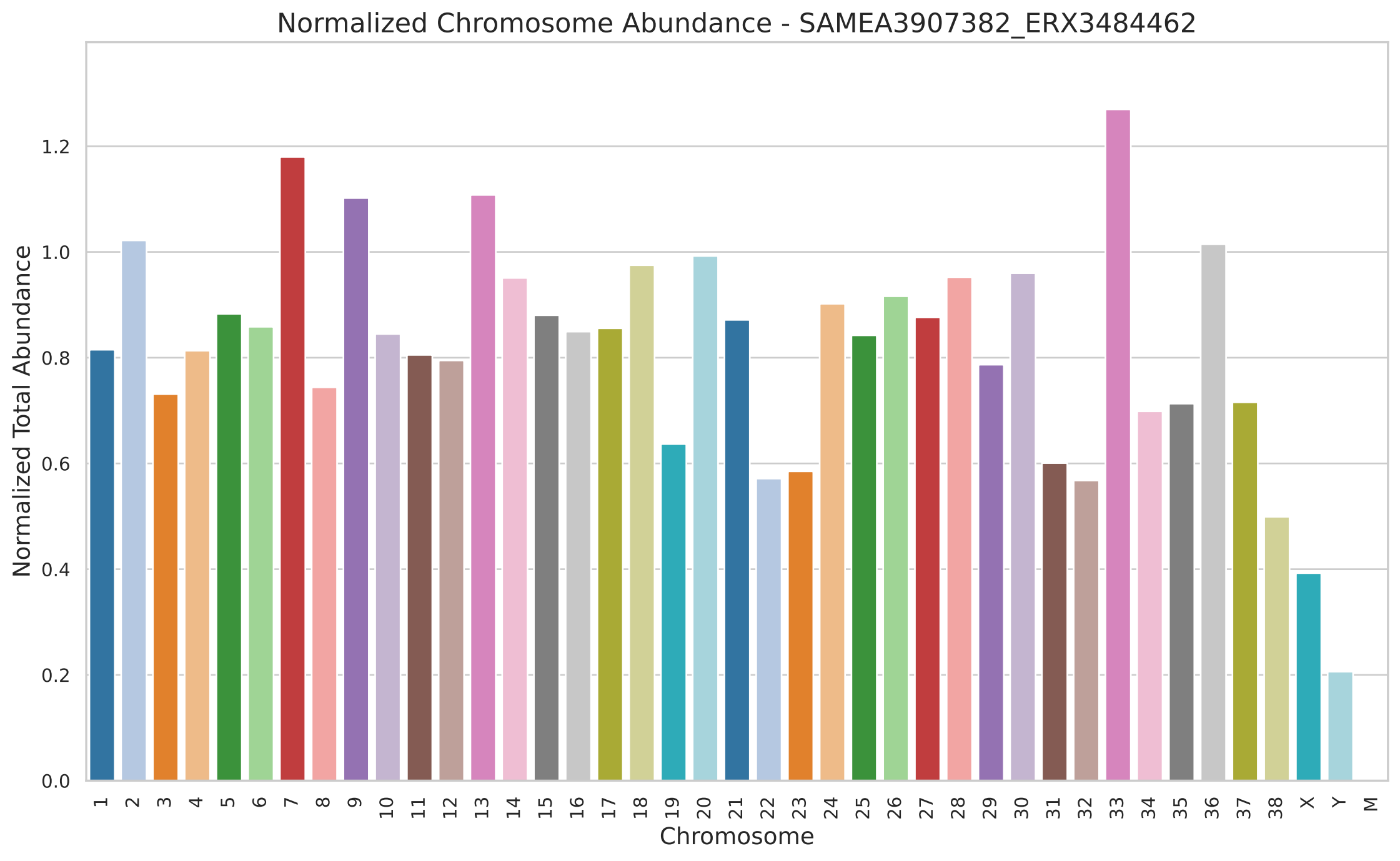

Normalized Chromosome Abundance - SAMEA3906879_ERX3484477
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

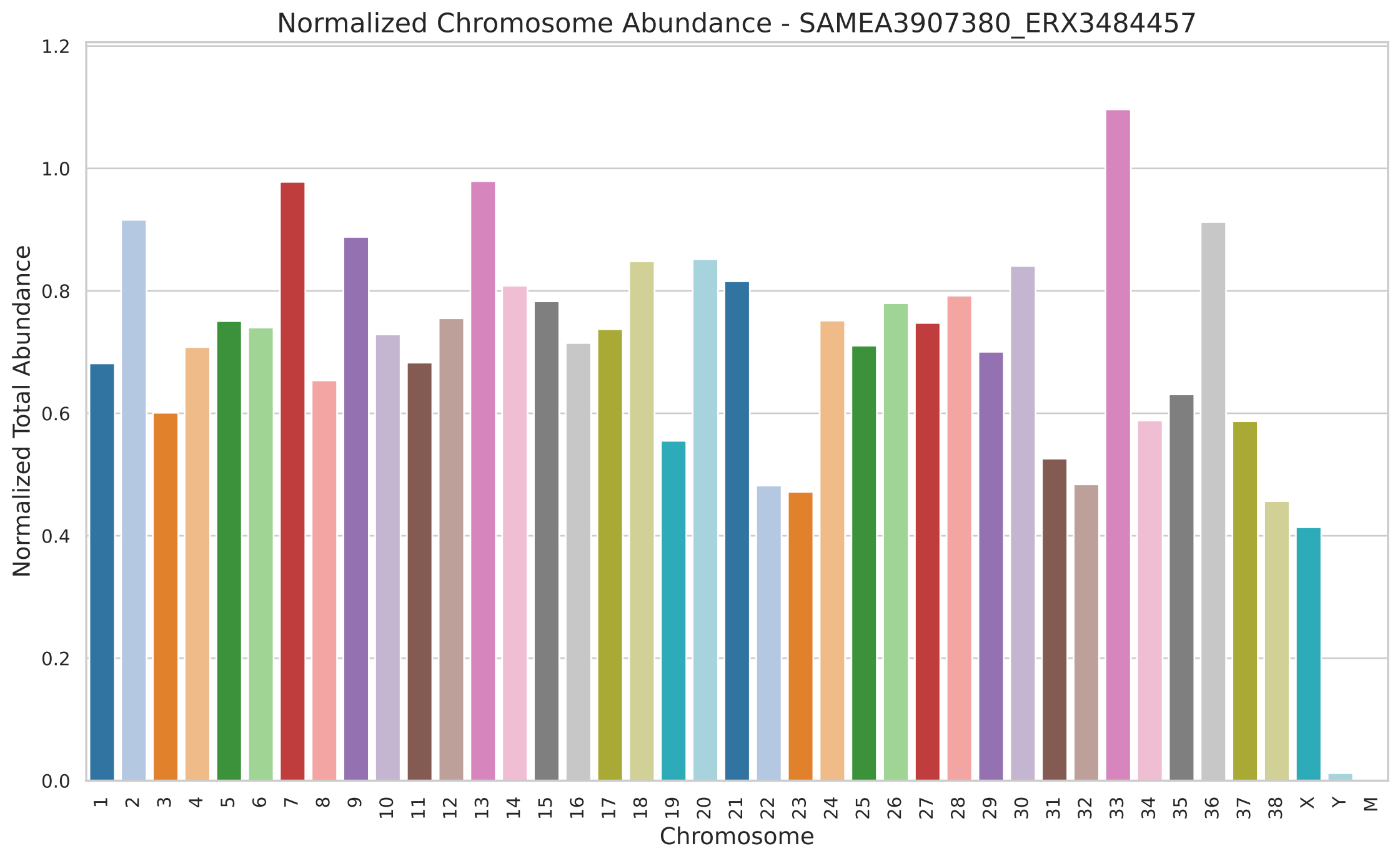

Normalized Chromosome Abundance - SAMEA3907266_ERX3484587
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
0.4
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

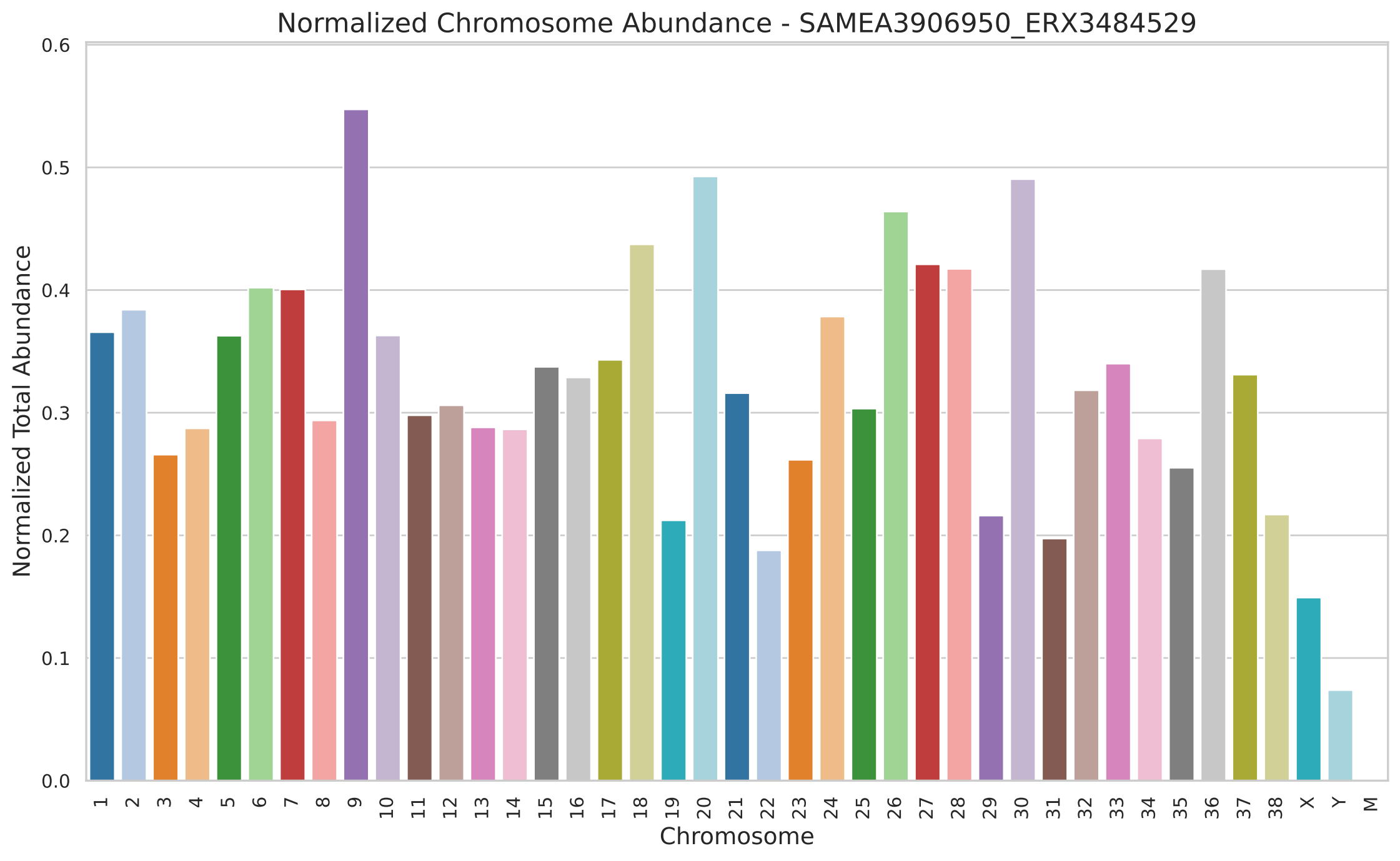

Normalized Chromosome Abundance - SAMEA3907288_ERX3484581
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

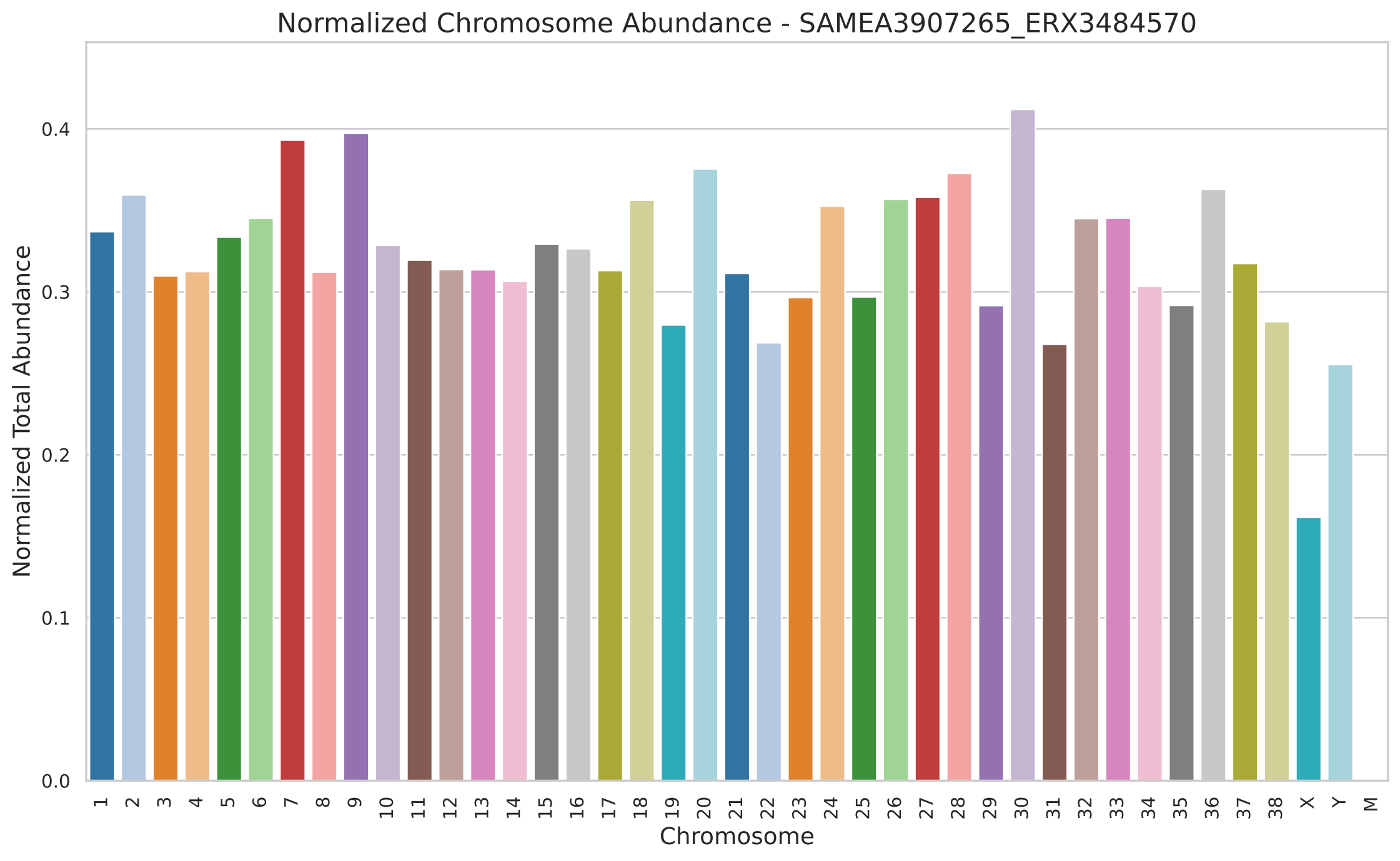

Normalized Chromosome Abundance - SAMEA3907266_ERX3484571
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

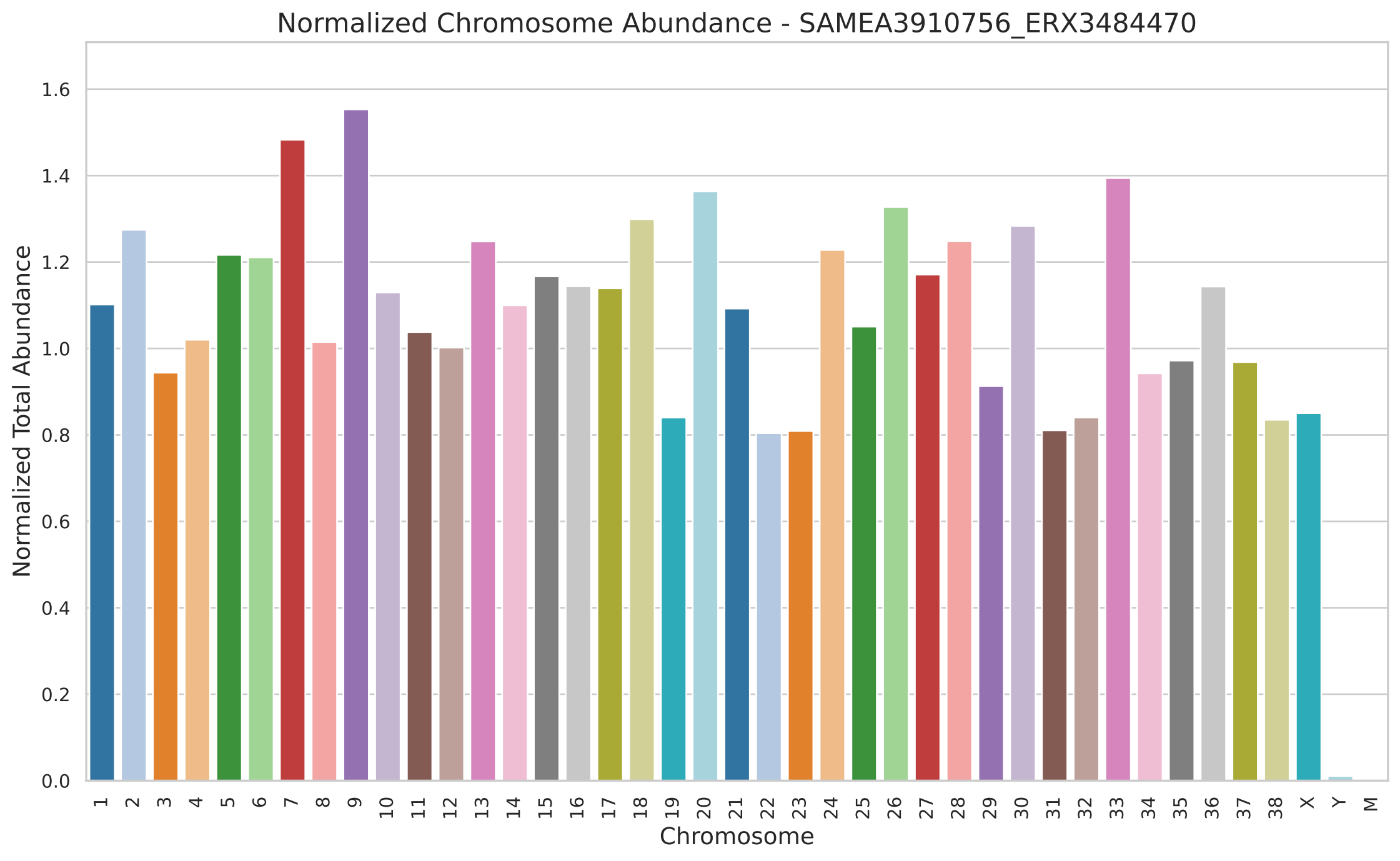

Normalized Chromosome Abundance - SAMEA3907292_ERX3484599
Normalized Total Abundance
0.4
0.3
0.2
0.2
0.1
0.1
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

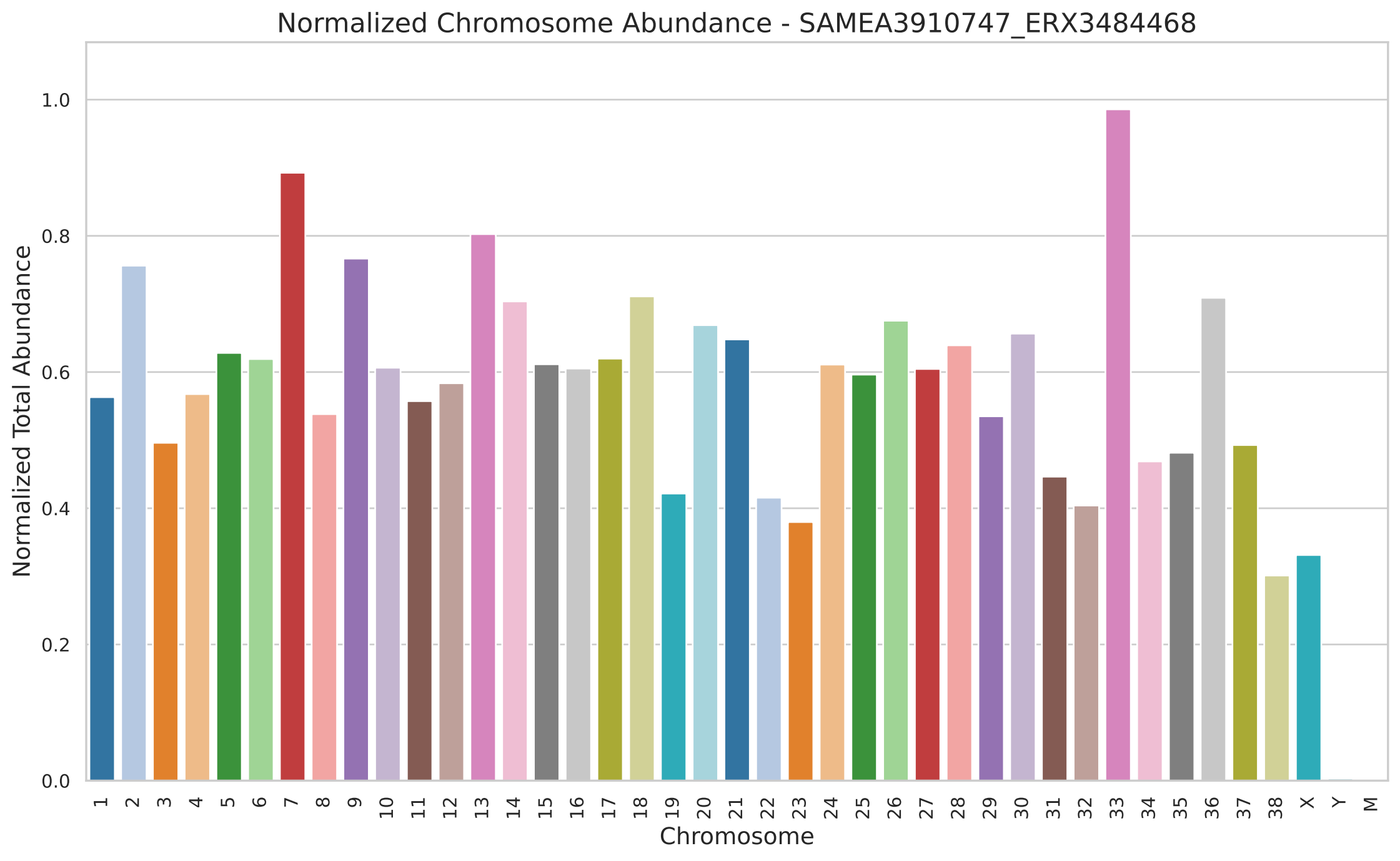

Normalized Chromosome Abundance - SAMEA3907382_ERX3484462
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

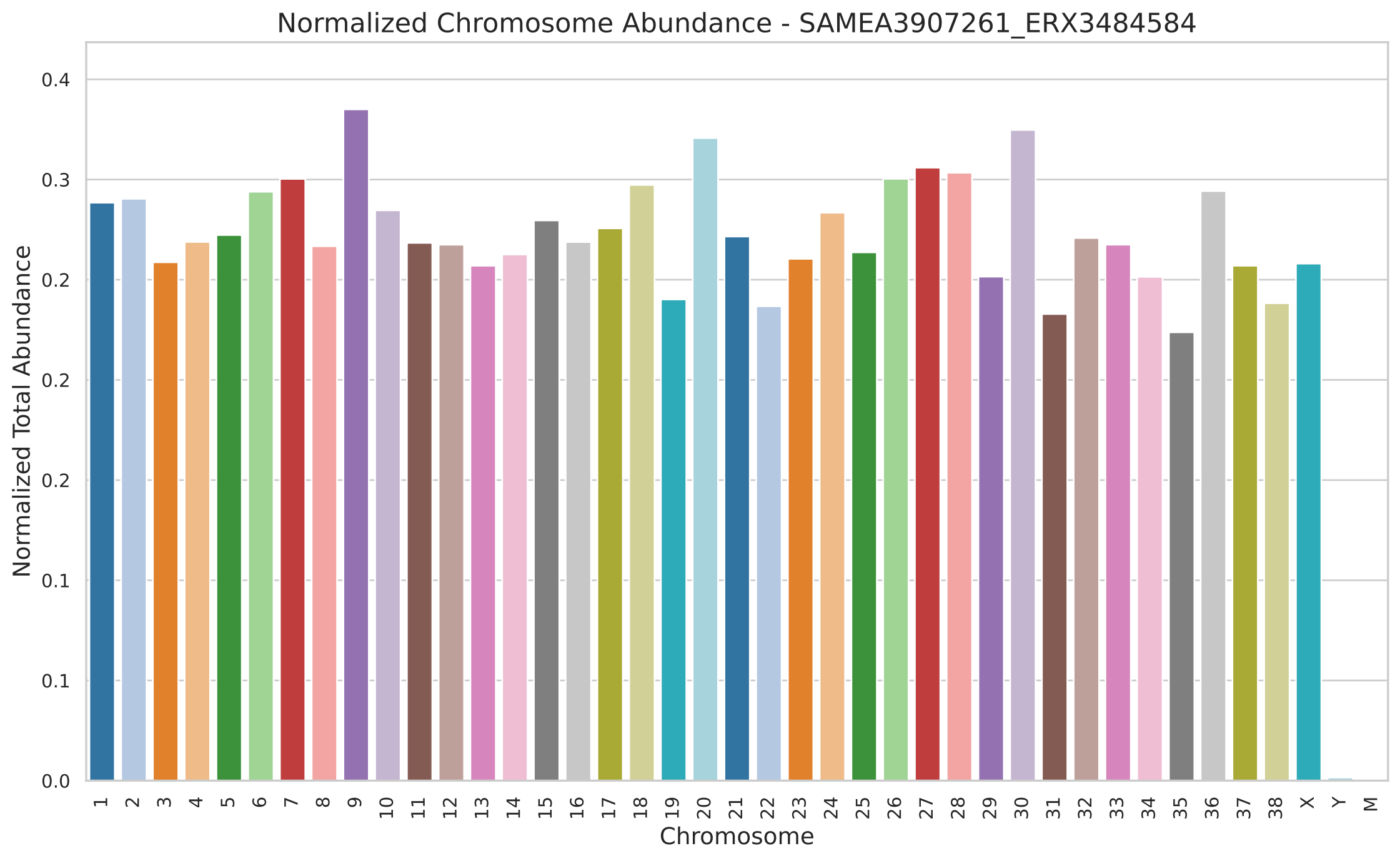

Normalized Chromosome Abundance - SAMEA3907380_ERX3484457
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

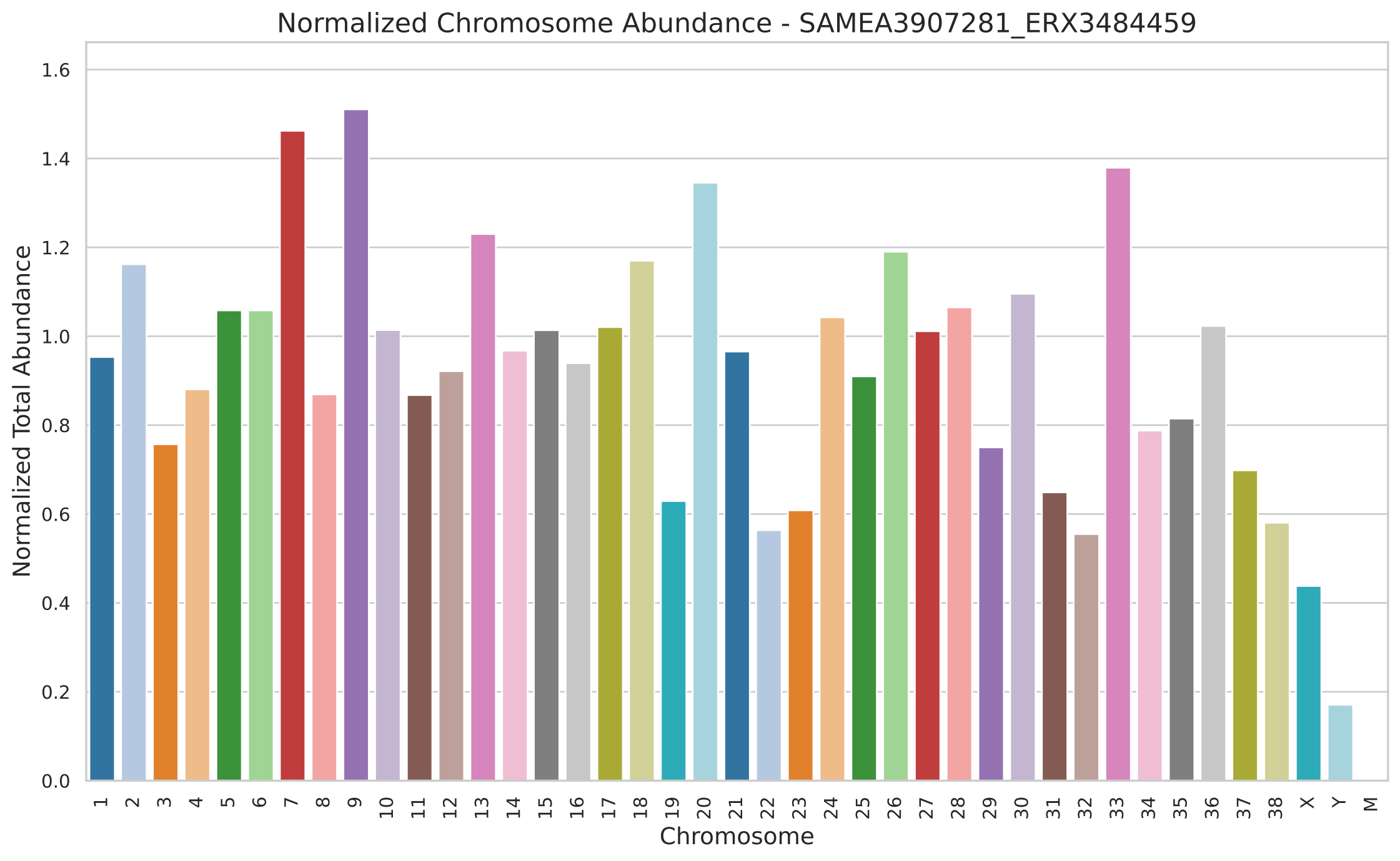

Normalized Chromosome Abundance - SAMEA3906950_ERX3484529
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

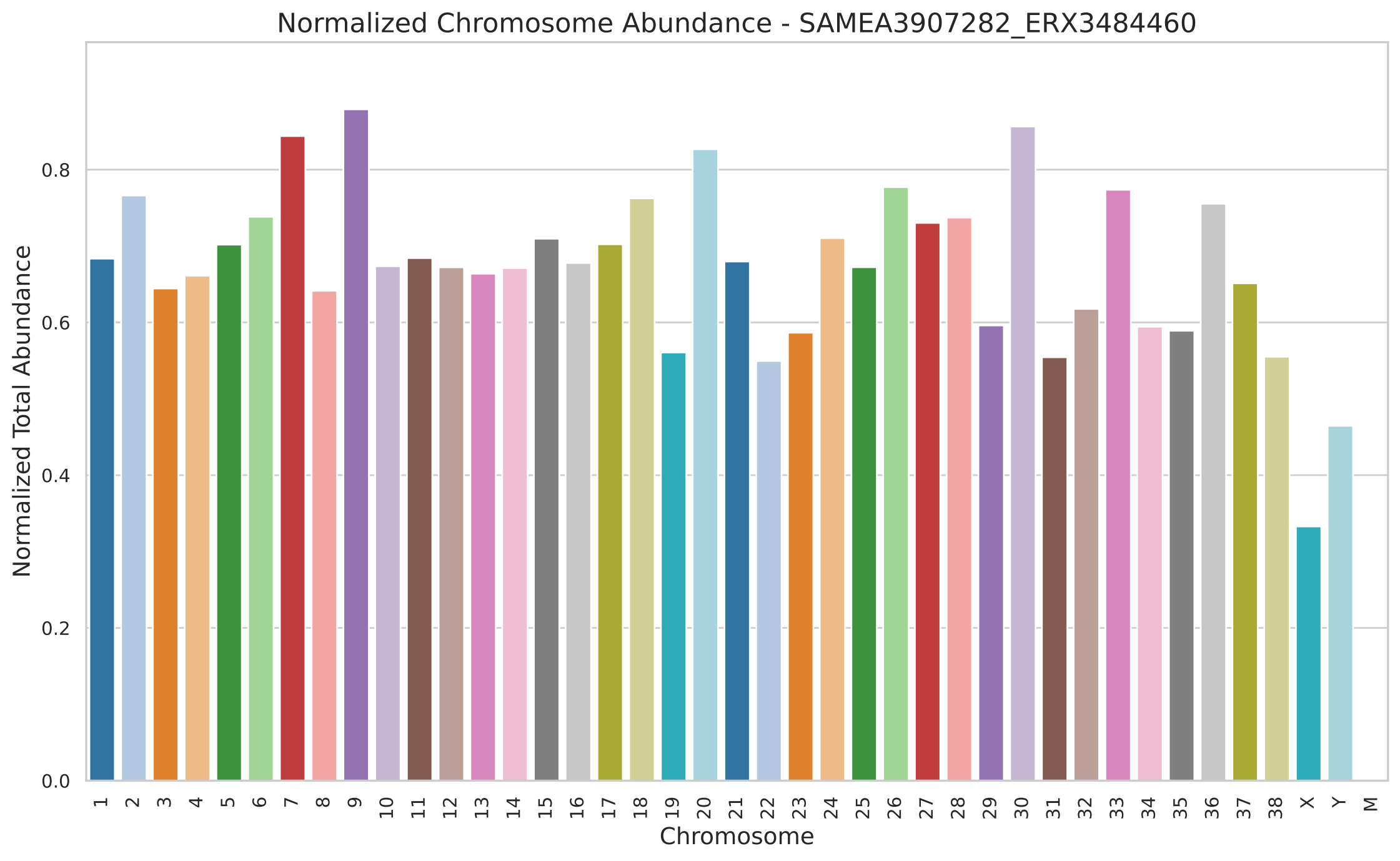

Normalized Chromosome Abundance - SAMEA3907265_ERX3484570
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

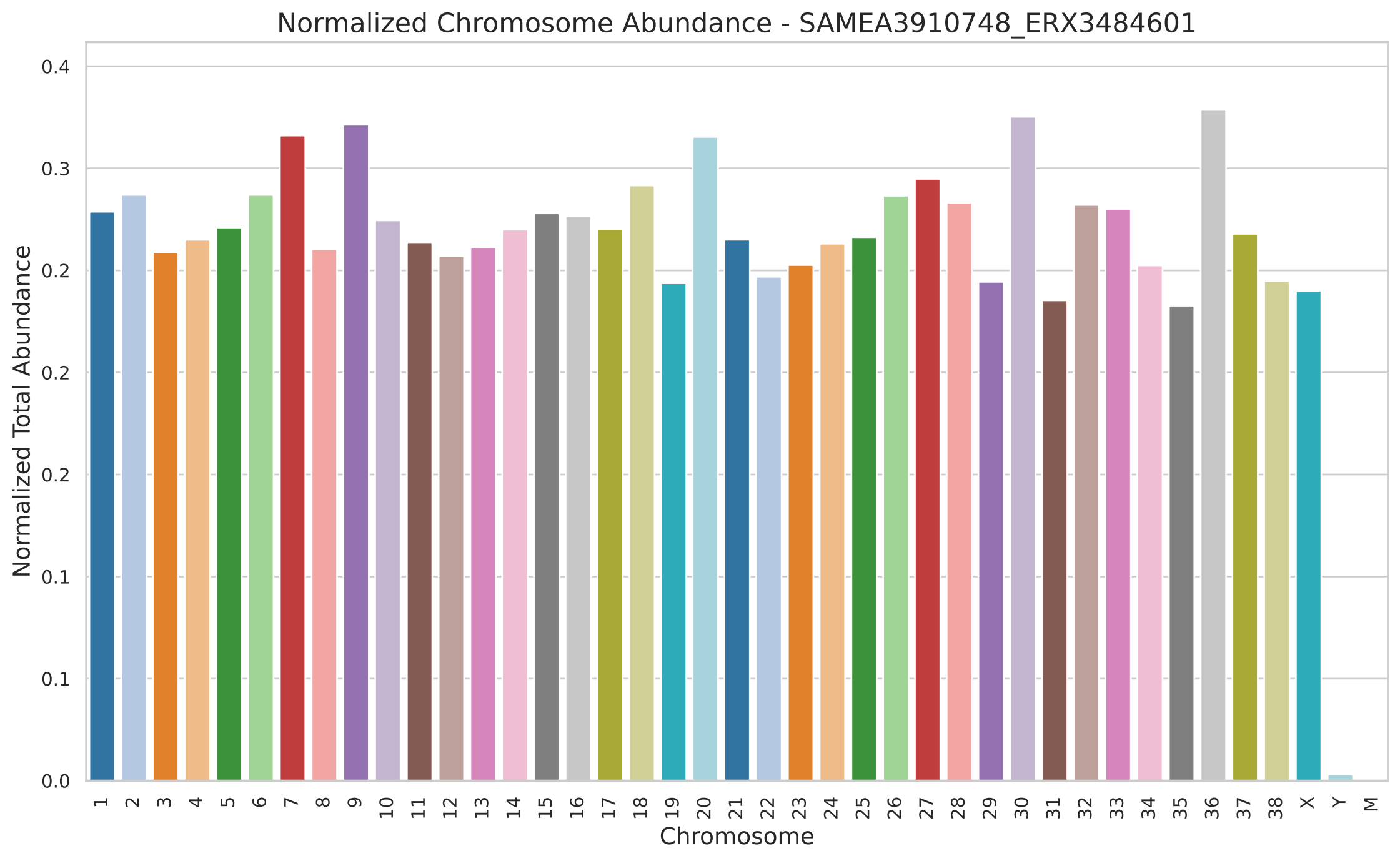

Normalized Chromosome Abundance - SAMEA3910756_ERX3484470
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

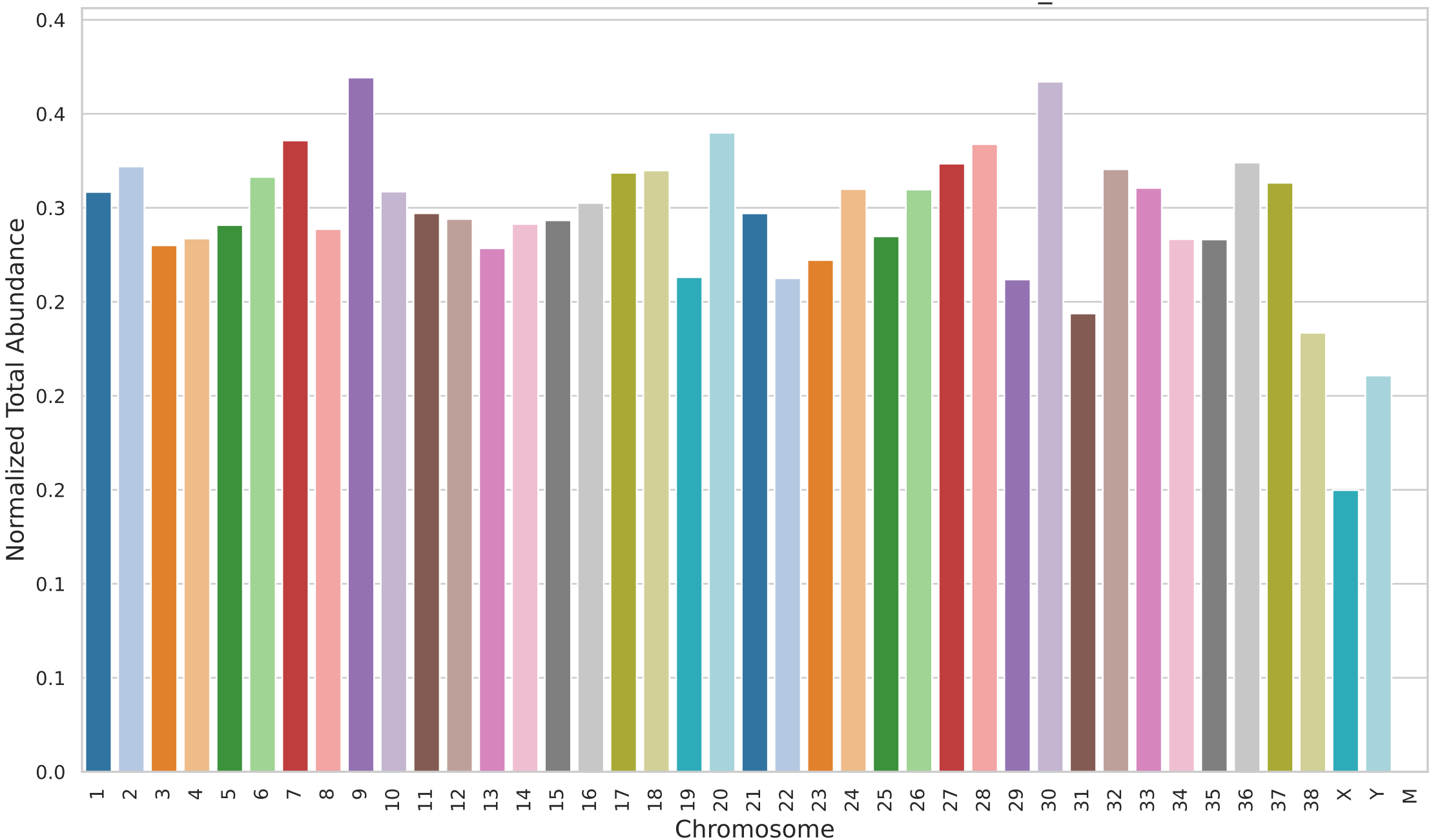

Normalized Chromosome Abundance - SAMEA3910747_ERX3484468
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

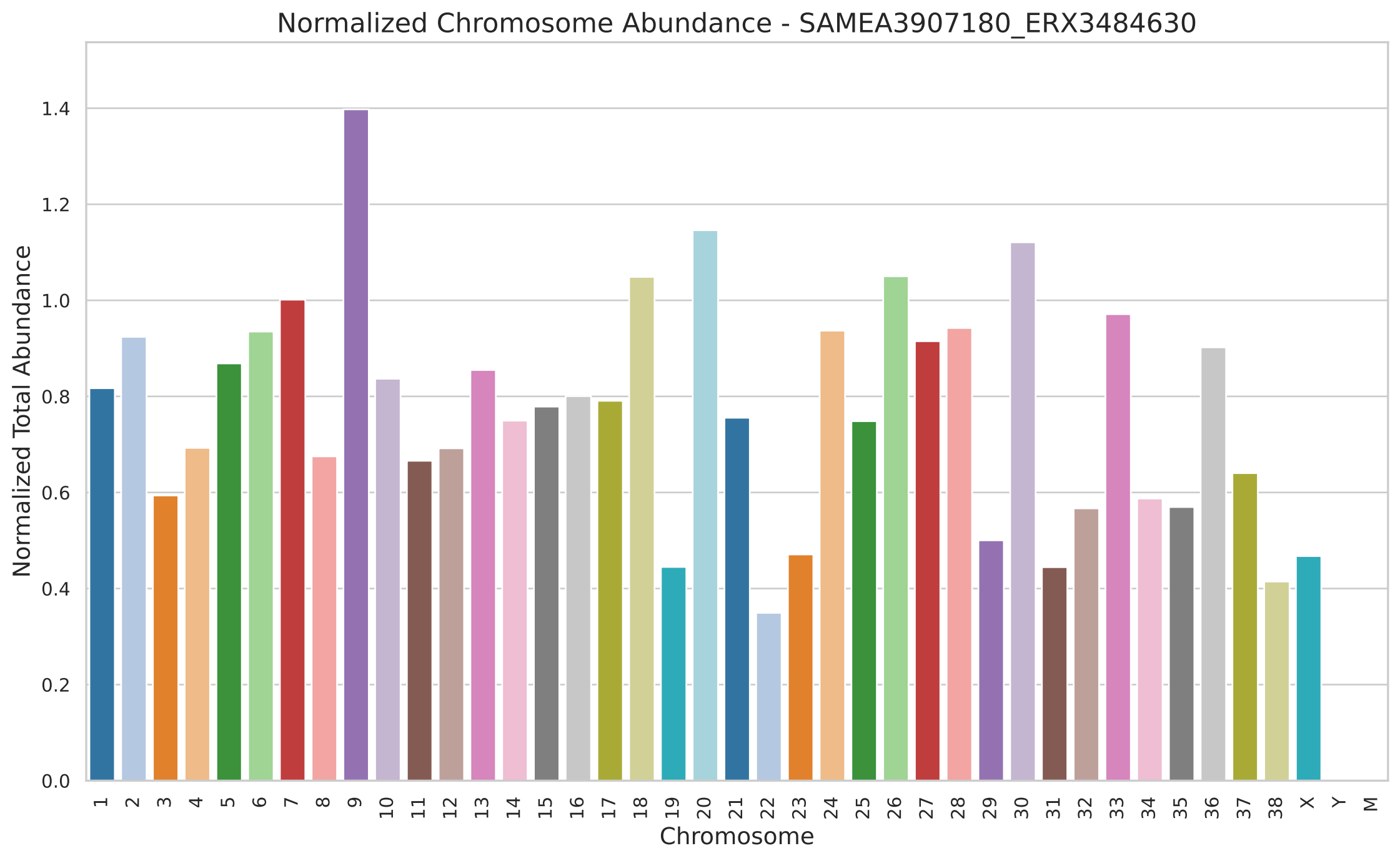

Normalized Chromosome Abundance - SAMEA3907261_ERX3484584
Normalized Total Abundance
0.4
0.3
0.2
0.2
0.1
0.1
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

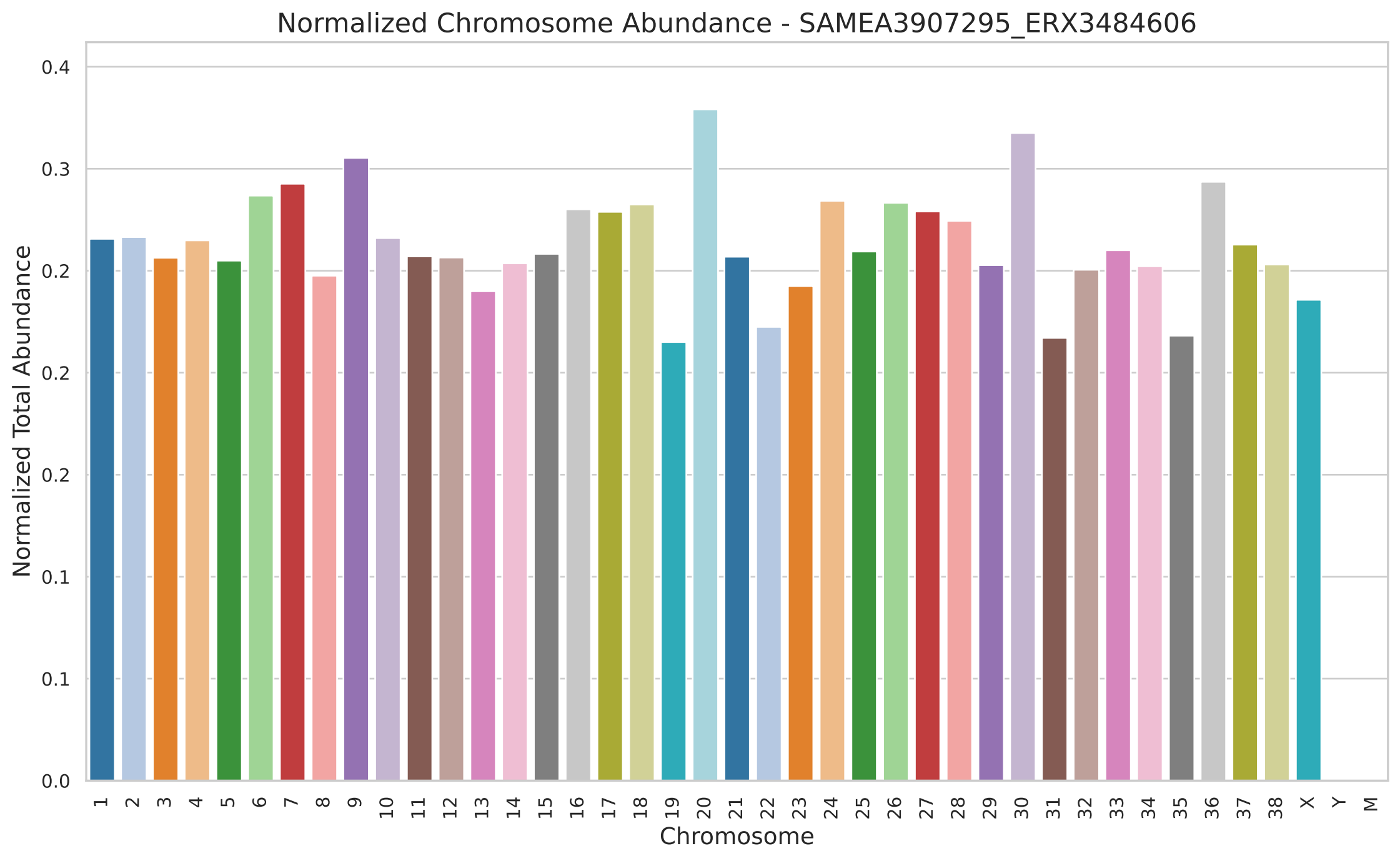

Normalized Chromosome Abundance - SAMEA3907281_ERX3484459
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

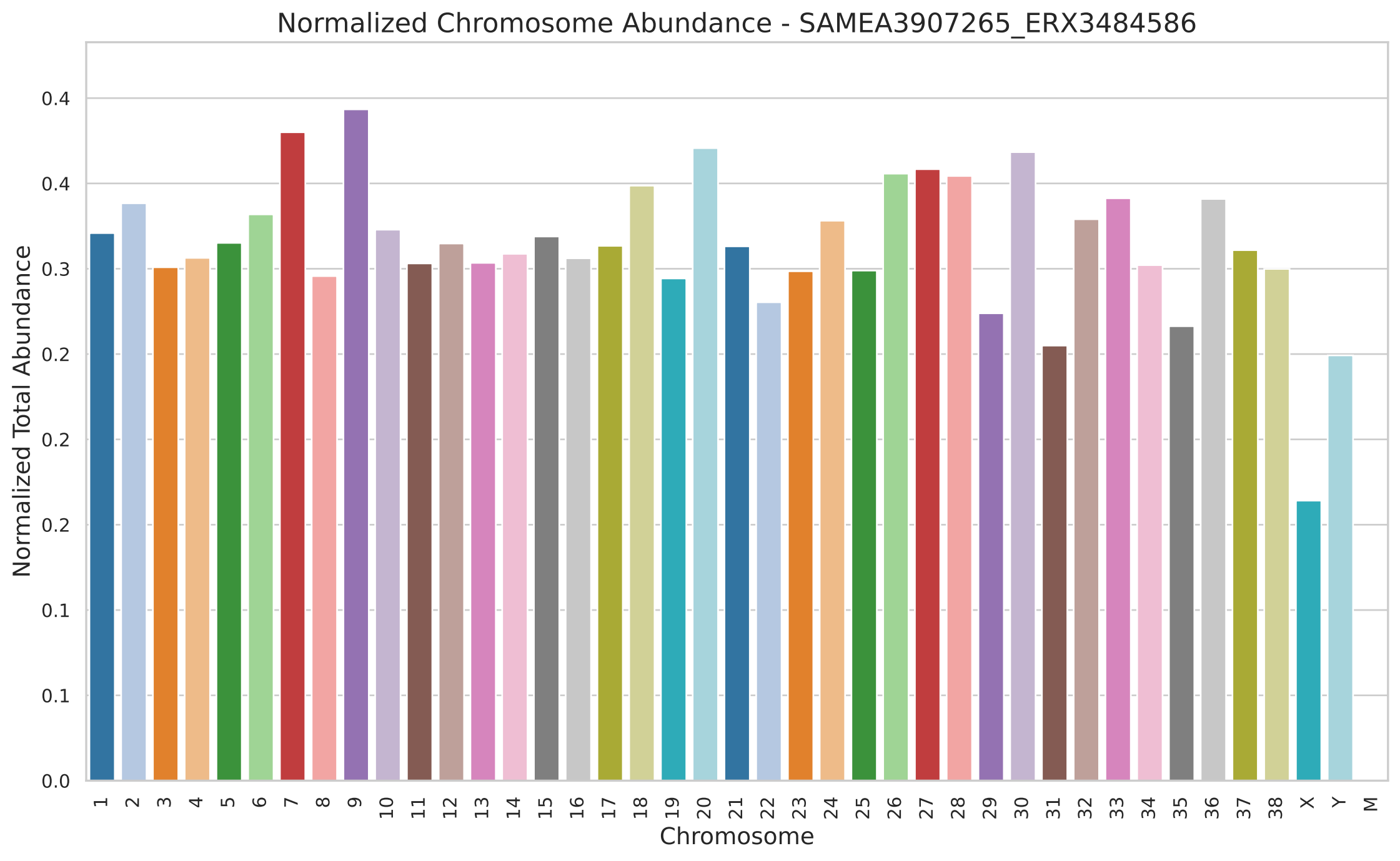

Normalized Chromosome Abundance - SAMEA3907282_ERX3484460
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

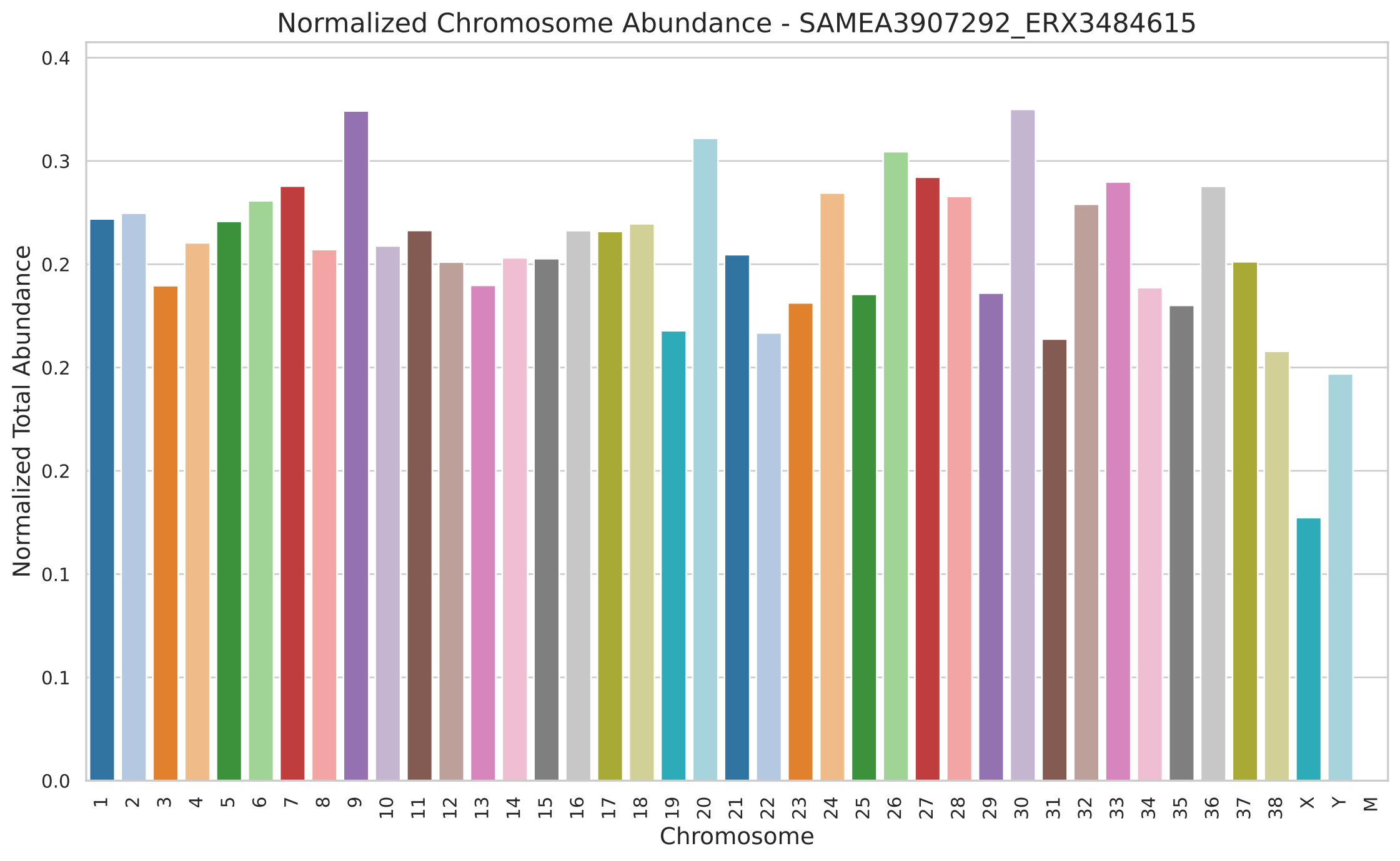

Normalized Chromosome Abundance - SAMEA3910748_ERX3484601
Normalized Total Abundance
0.4
0.3
0.2
0.2
0.1
0.1
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

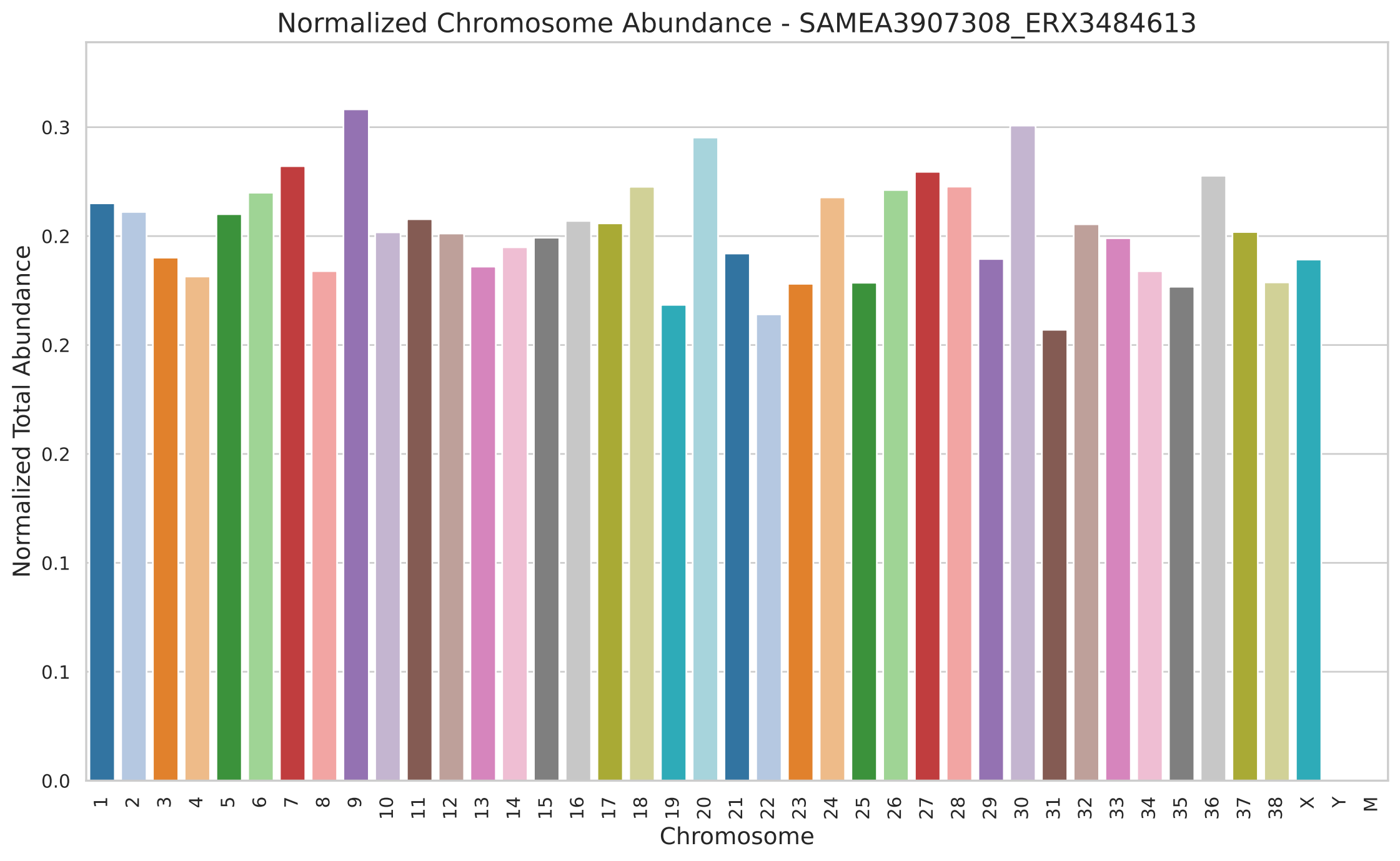

Normalized Chromosome Abundance - SAMEA3907268_ERX3484572
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

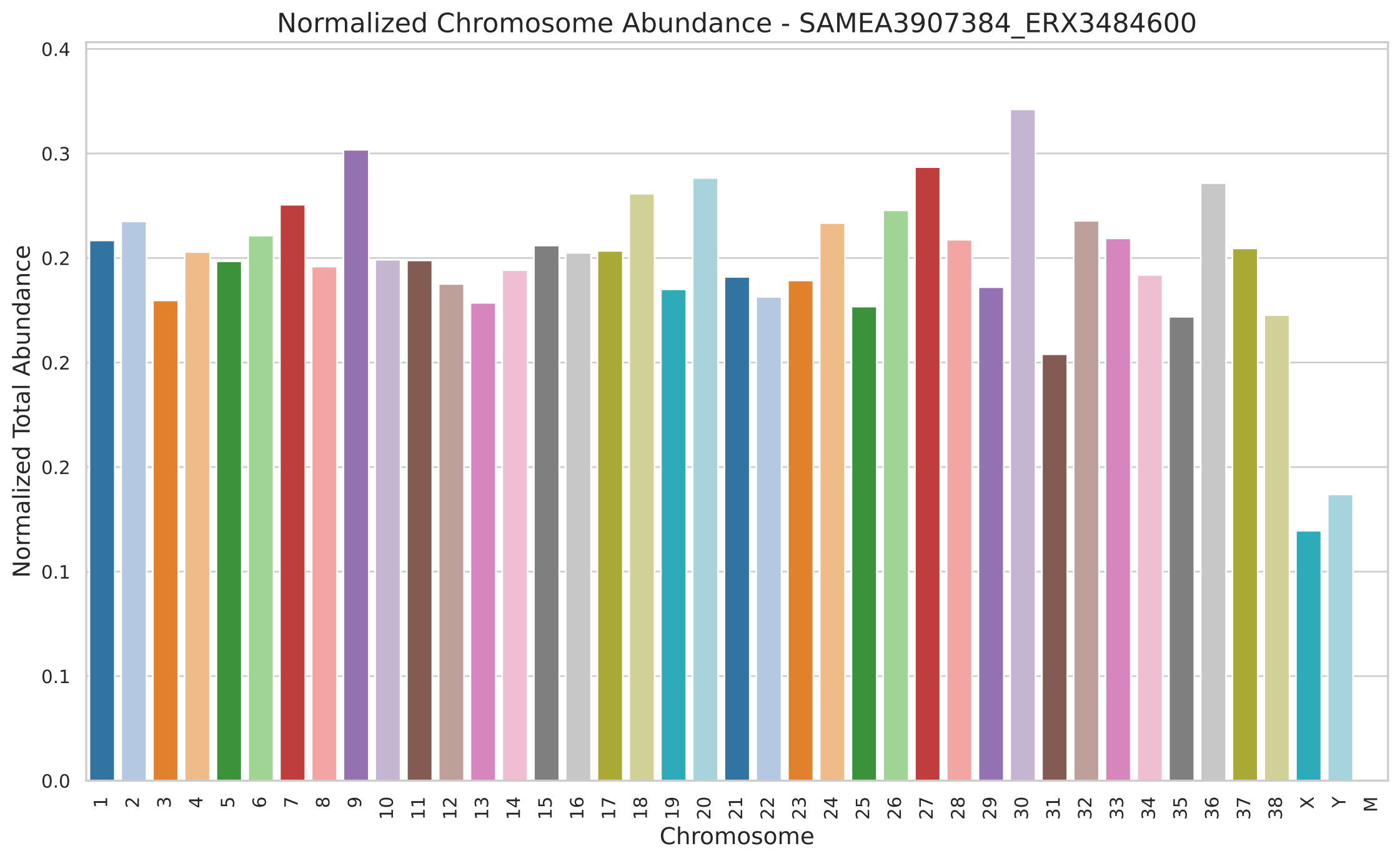

Normalized Chromosome Abundance - SAMEA3907180_ERX3484630
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

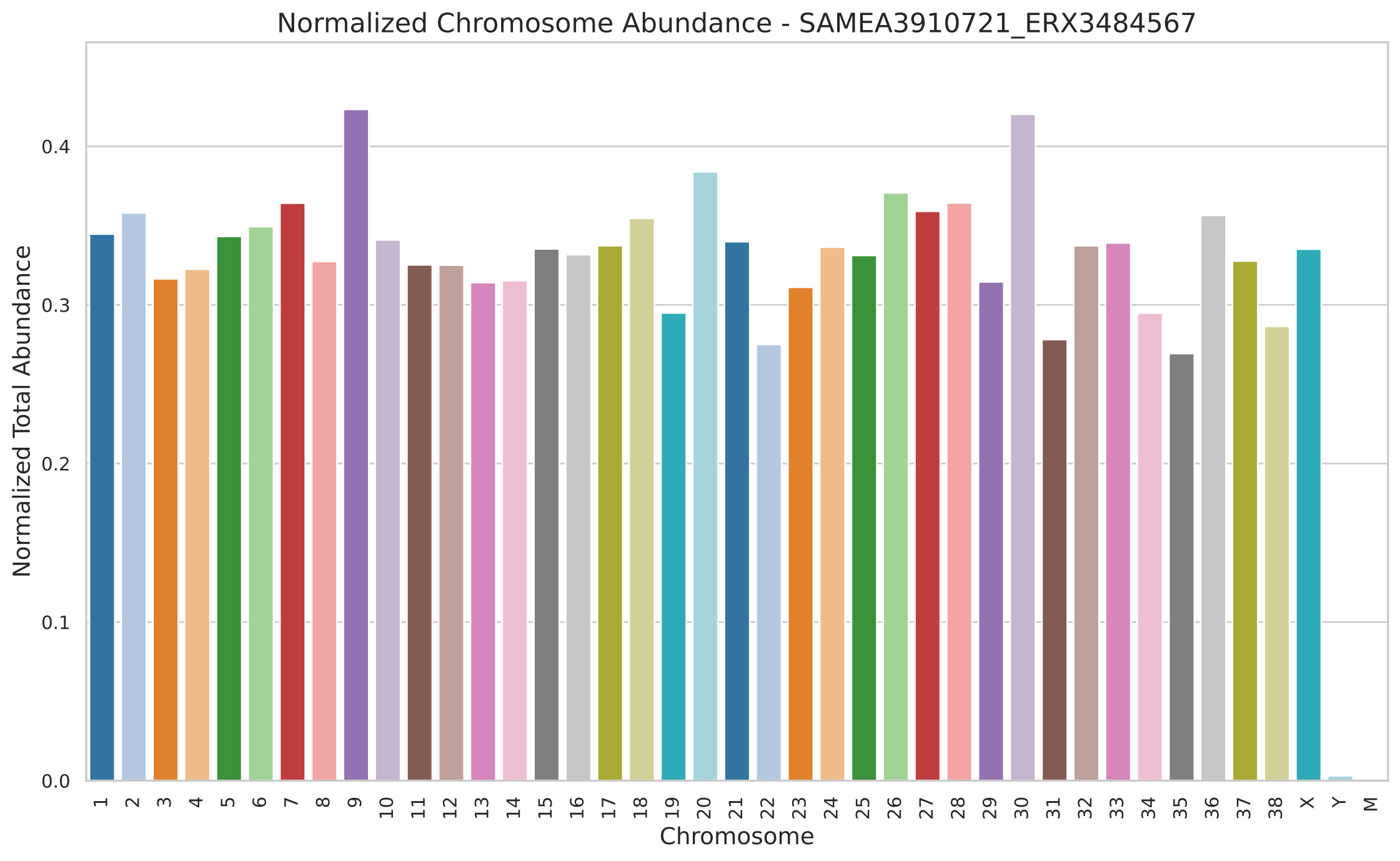

Normalized Chromosome Abundance - SAMEA3907295_ERX3484606
Normalized Total Abundance
0.4
0.3
0.2
0.2
0.1
0.1
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

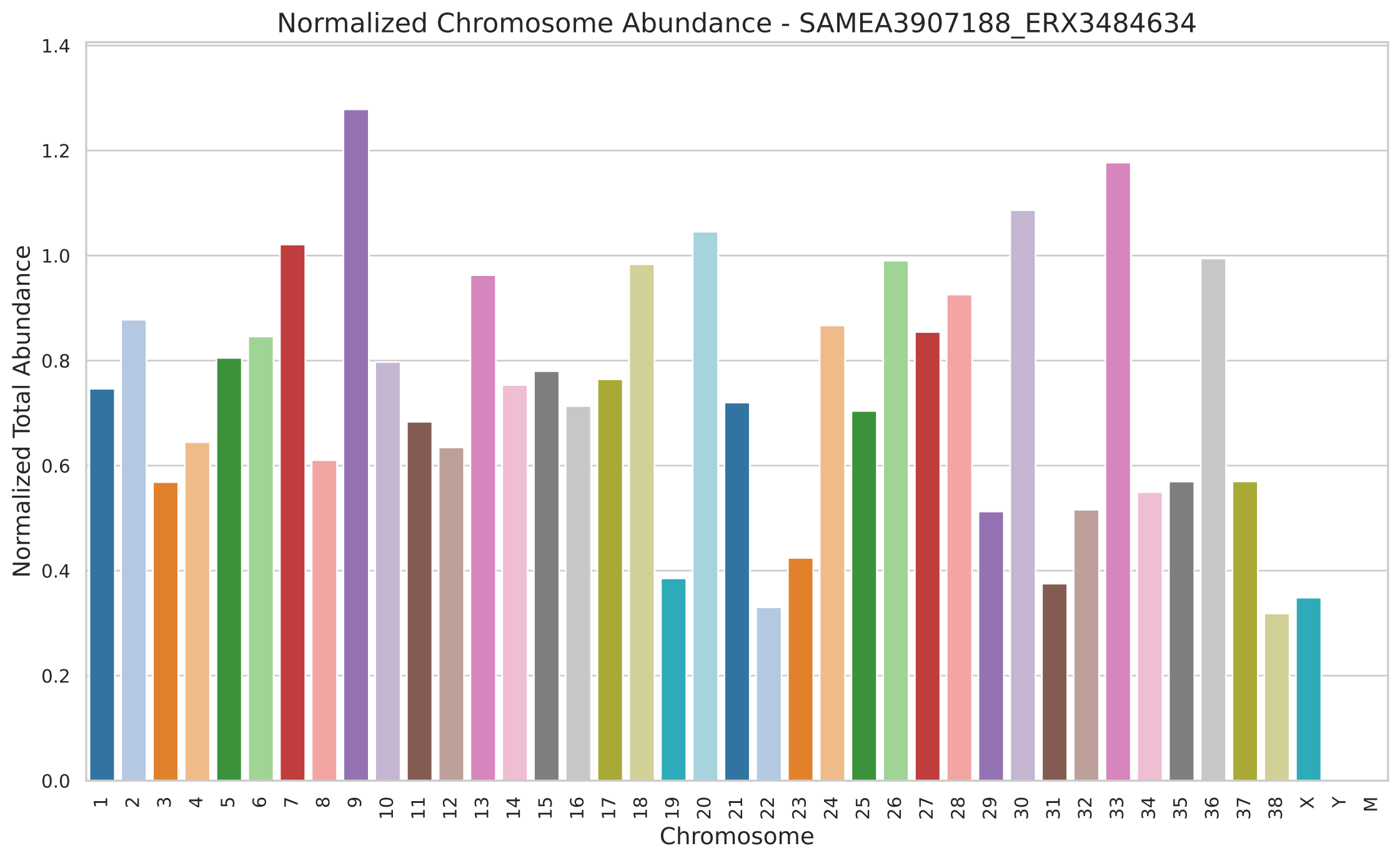

Normalized Chromosome Abundance - SAMEA3907265_ERX3484586
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.4
0.2
0.1
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

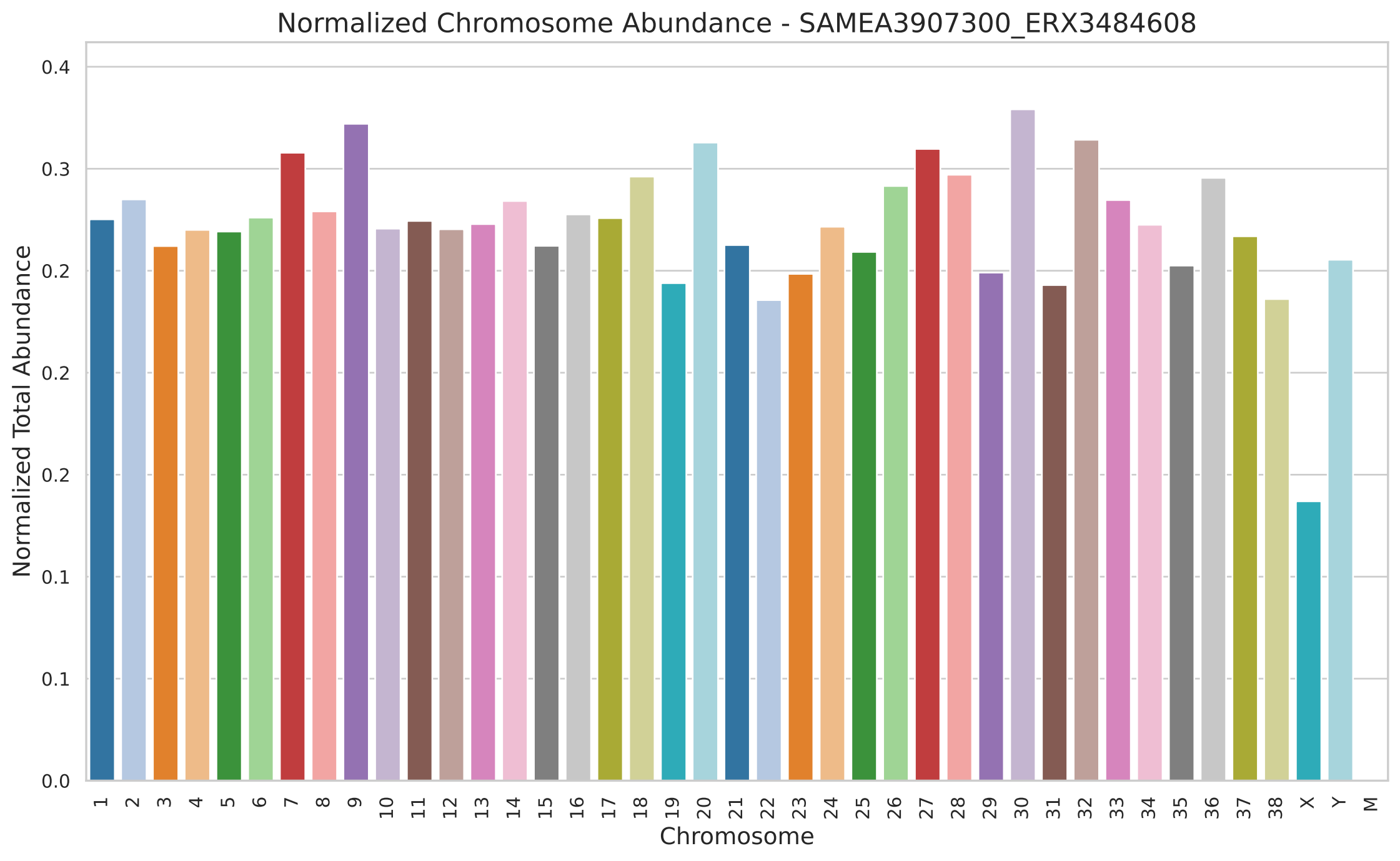

Normalized Chromosome Abundance - SAMEA3907292_ERX3484615
Normalized Total Abundance
0.4
0.3
0.2
0.2
0.1
0.1
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

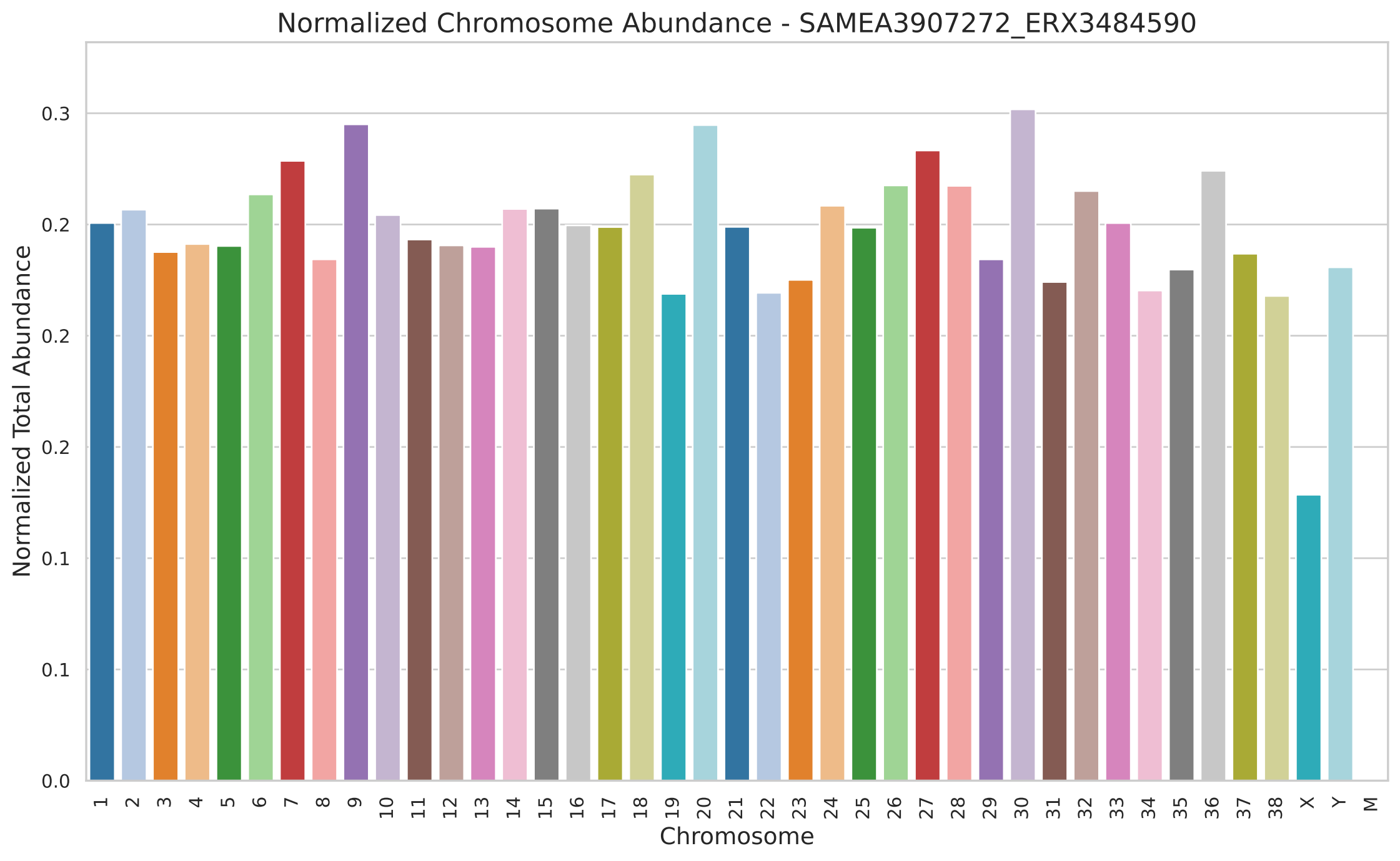

Normalized Chromosome Abundance - SAMEA3907308_ERX3484613
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

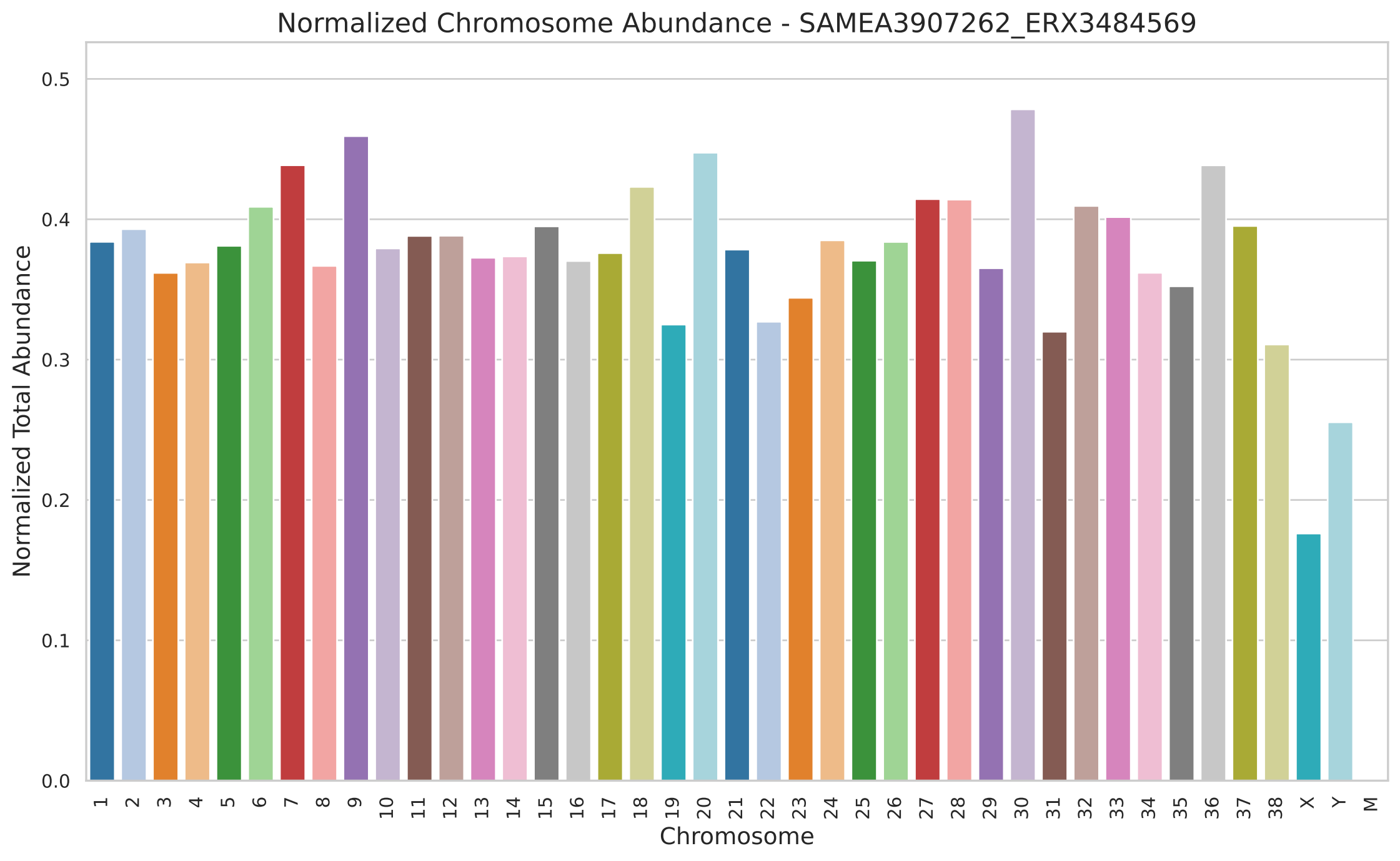

Normalized Chromosome Abundance - SAMEA3907384_ERX3484600
Normalized Total Abundance
0.4
0.3
0.2
0.2
0.1
0.1
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

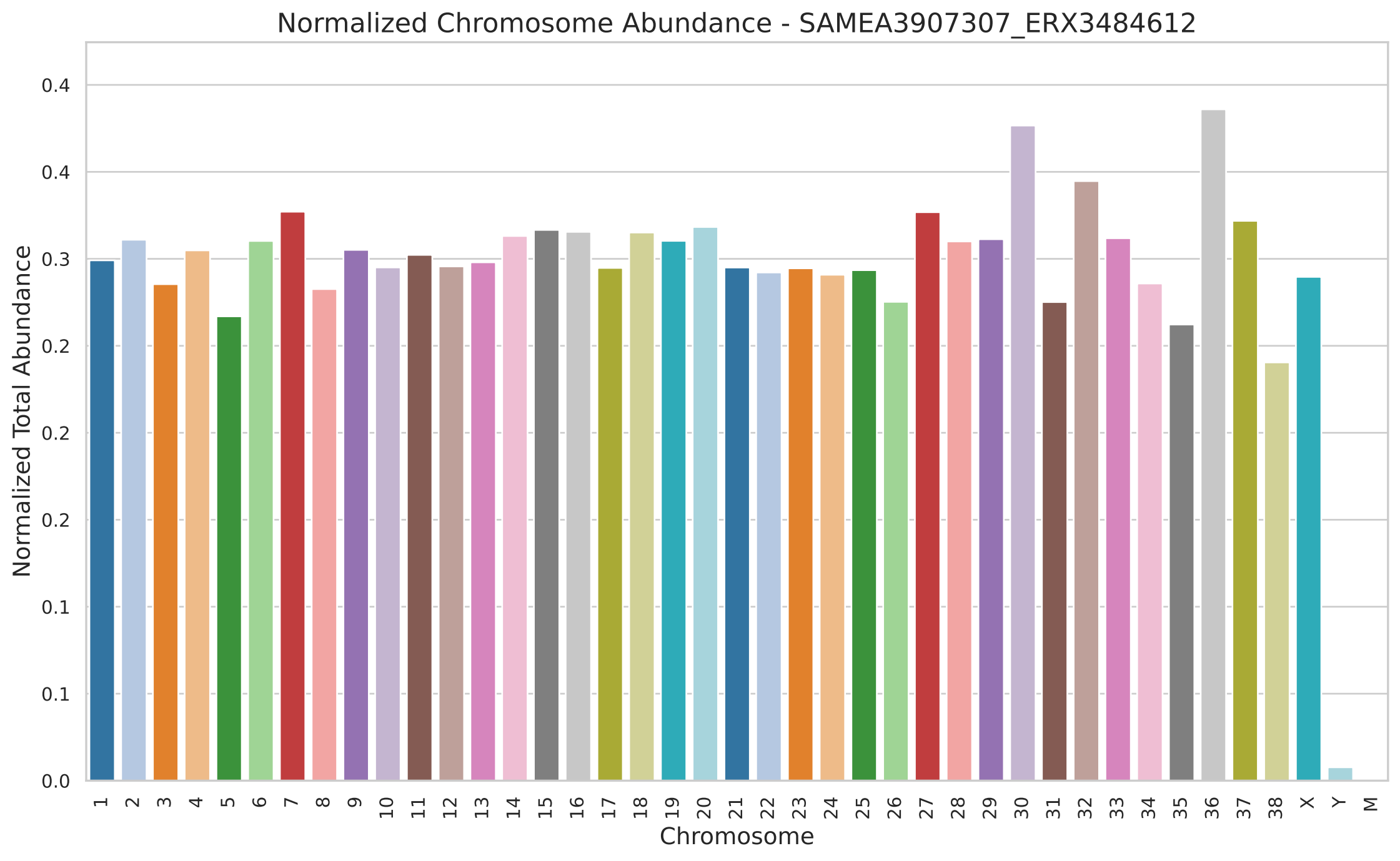

Normalized Chromosome Abundance - SAMEA3910721_ERX3484567
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

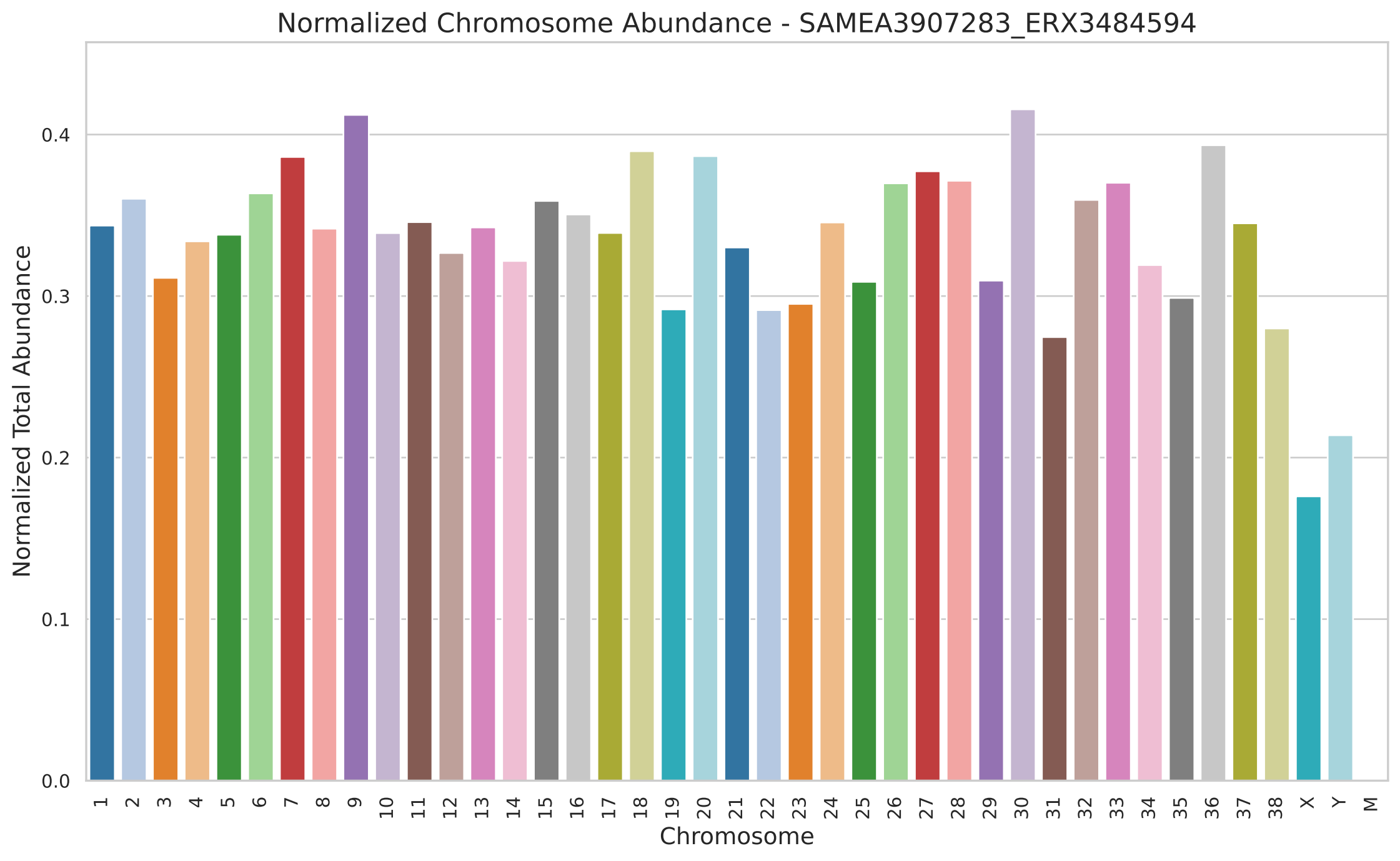

Normalized Chromosome Abundance - SAMEA3907188_ERX3484634
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

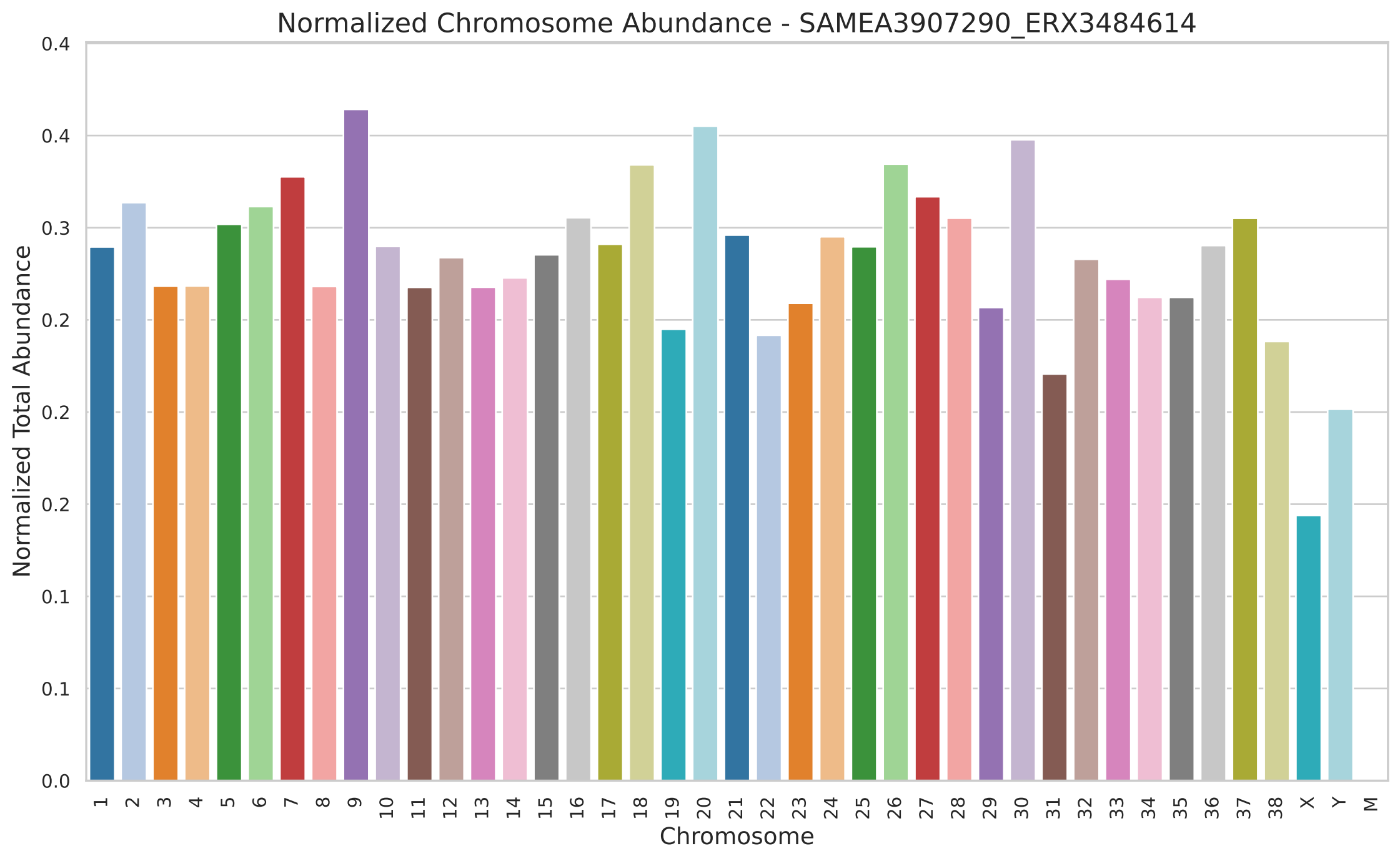

Normalized Chromosome Abundance - SAMEA3907300_ERX3484608
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

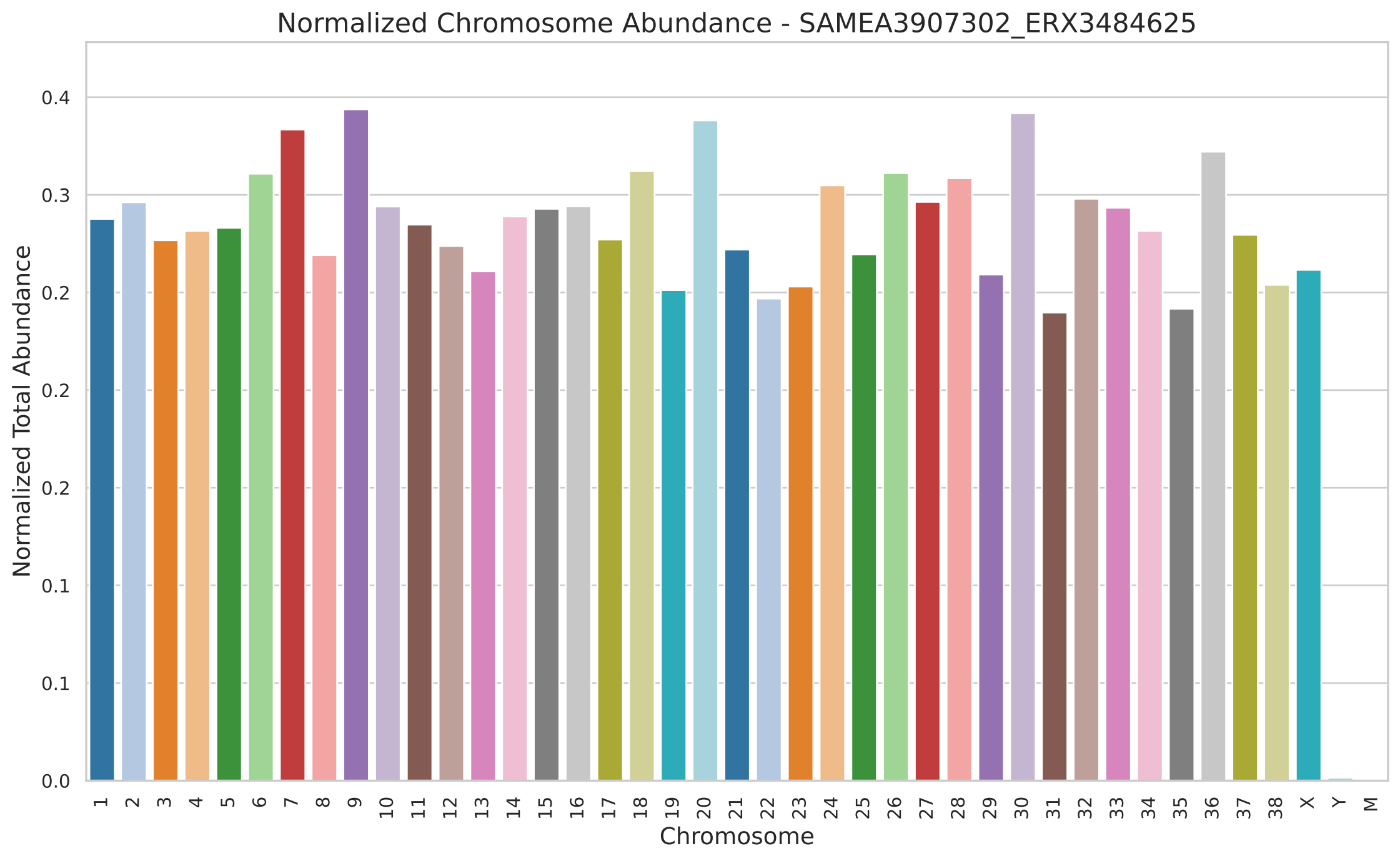

Normalized Chromosome Abundance - SAMEA3907272_ERX3484590
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

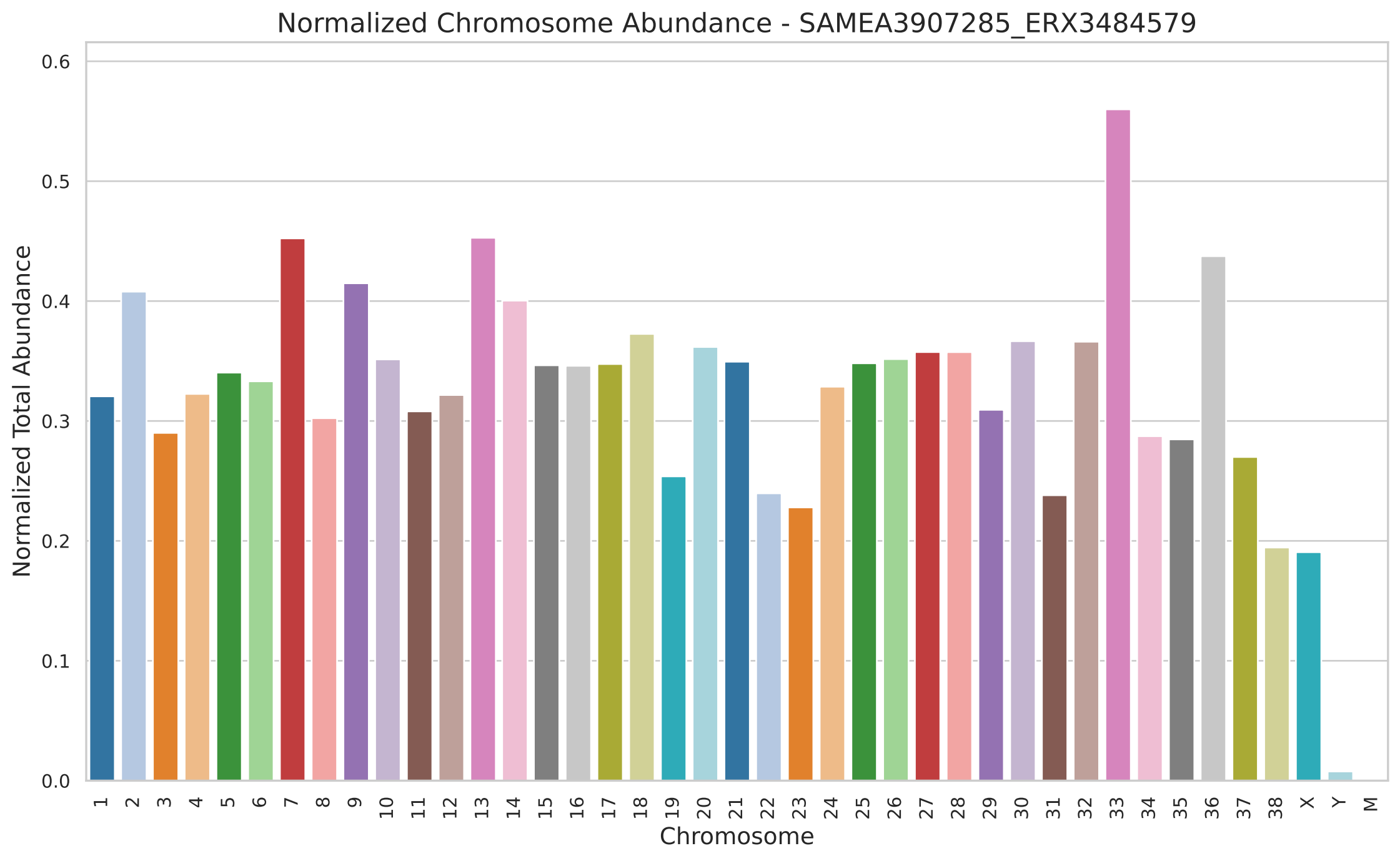

Normalized Chromosome Abundance - SAMEA3907262_ERX3484569
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

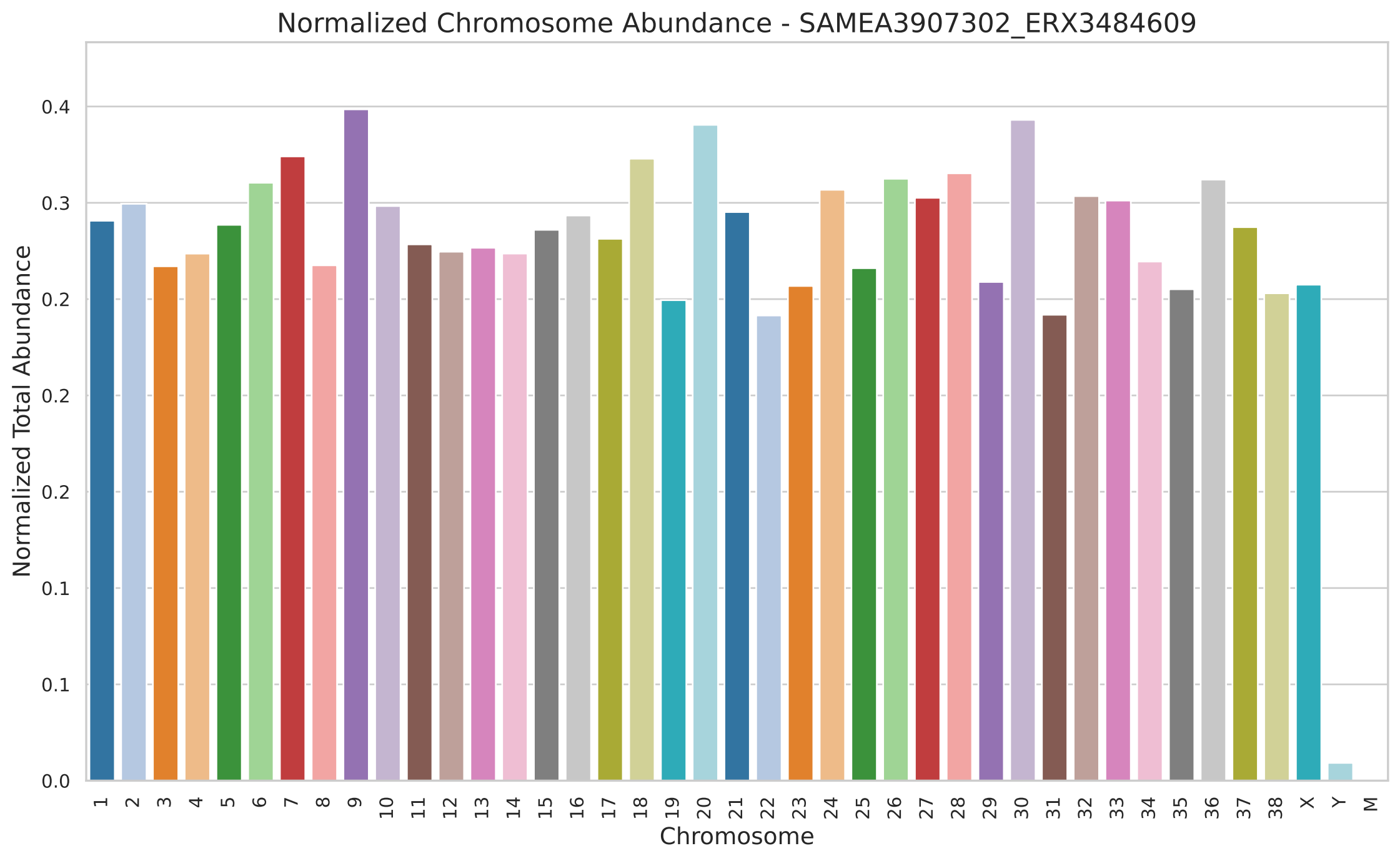

Normalized Chromosome Abundance - SAMEA3907307_ERX3484612
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

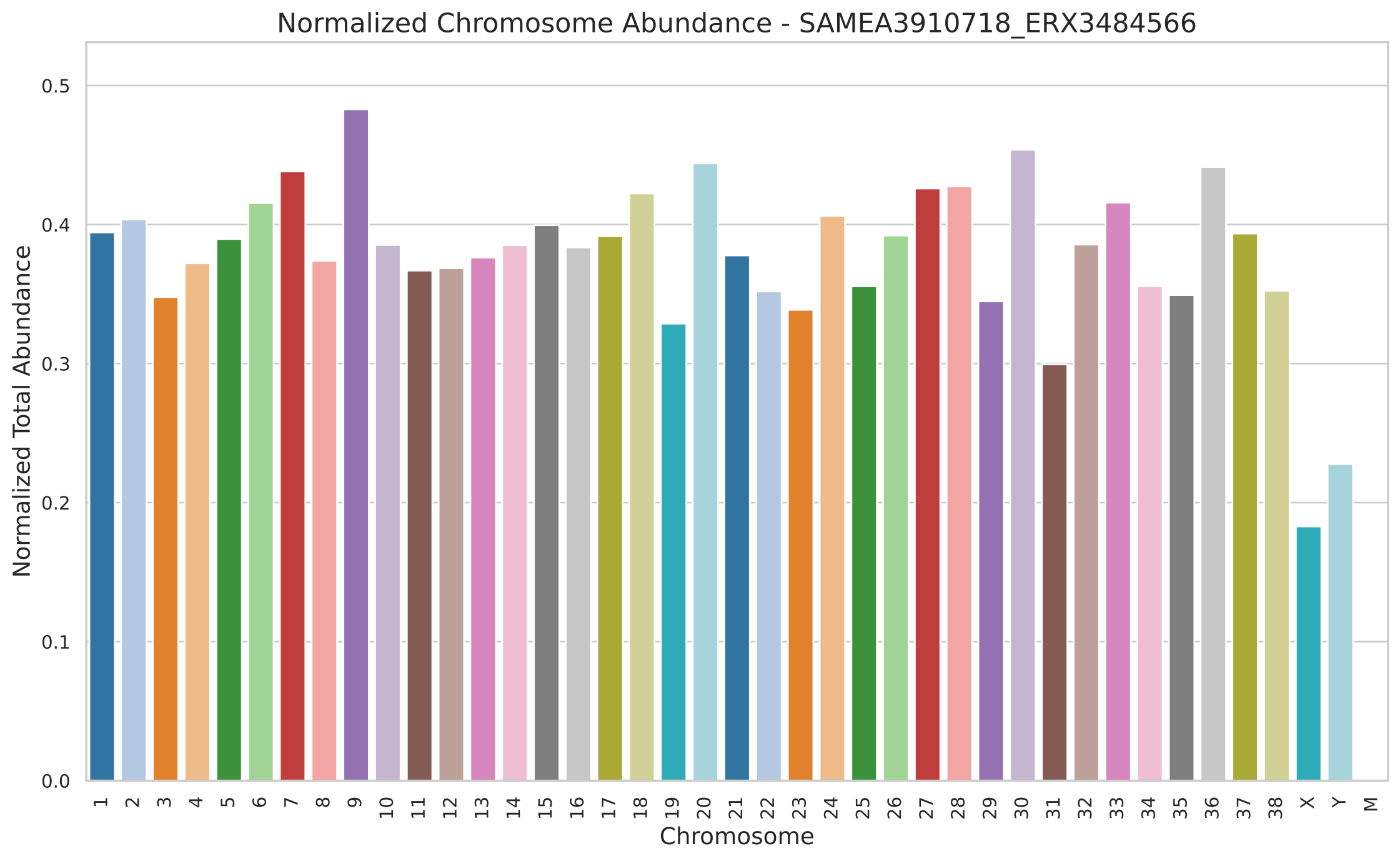

Normalized Chromosome Abundance - SAMEA3907283_ERX3484594
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

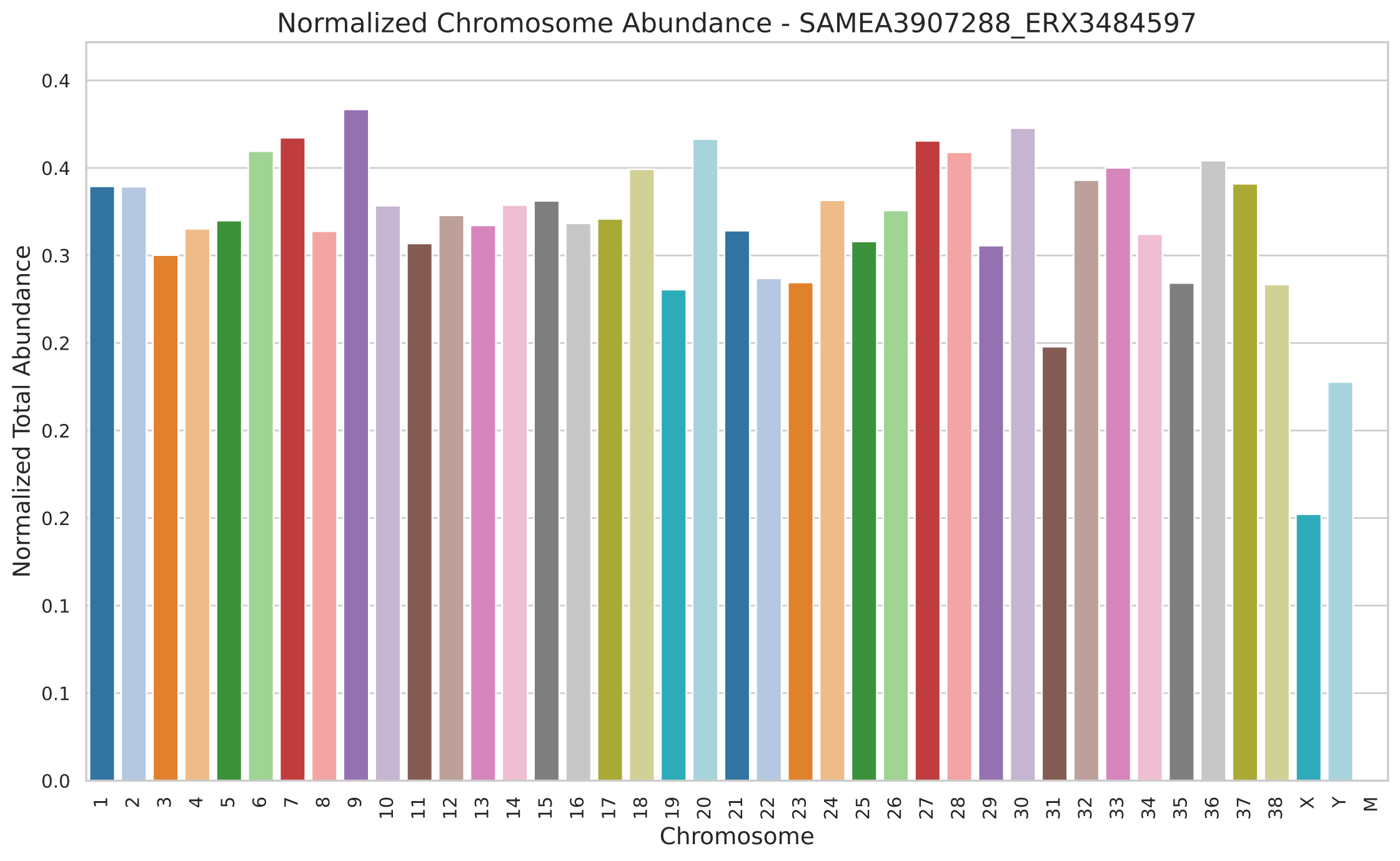

Normalized Chromosome Abundance - SAMEA3907290_ERX3484614
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

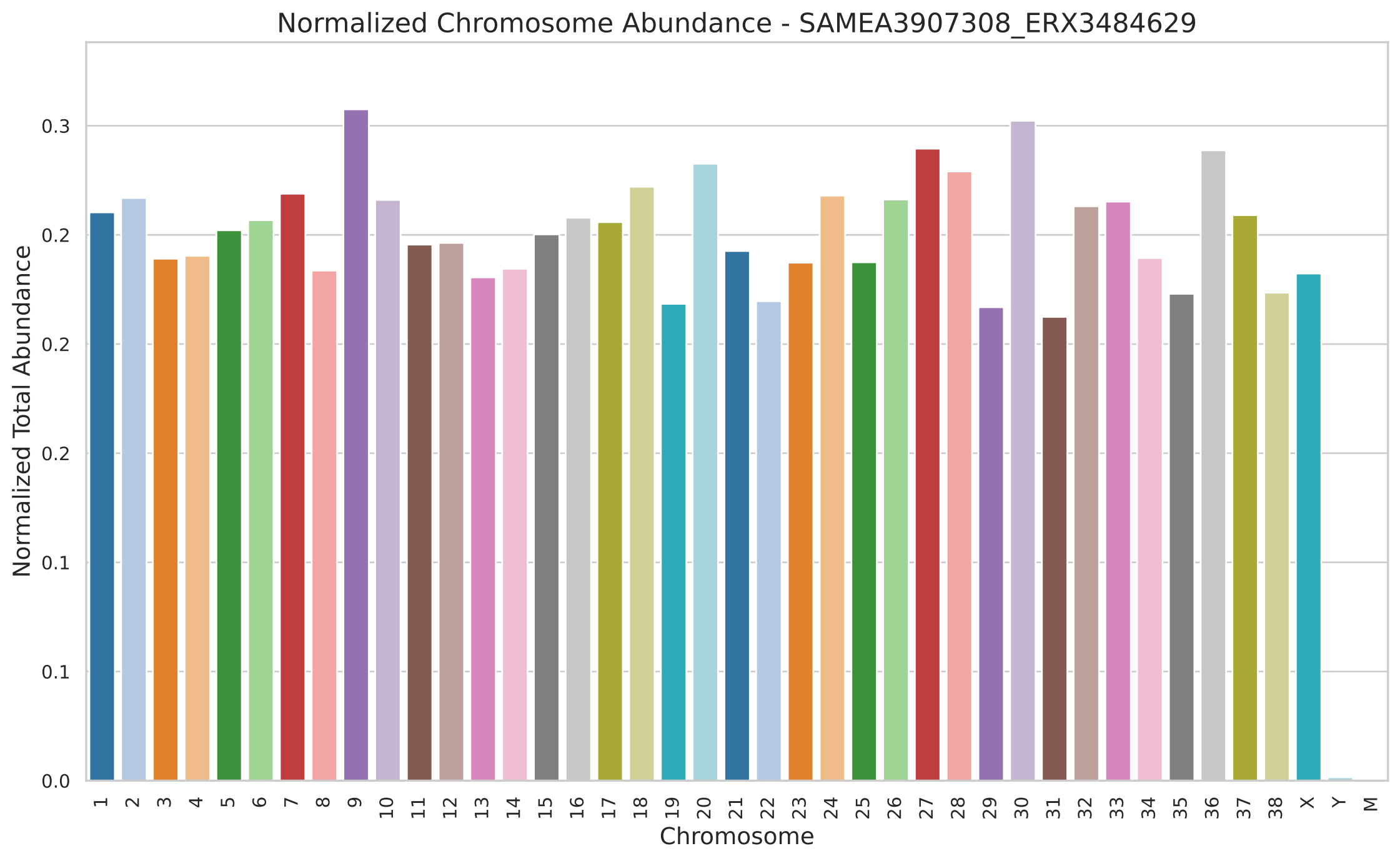

Normalized Chromosome Abundance - SAMEA3907302_ERX3484625
Normalized Total Abundance
0.4
0.3
0.2
0.2
0.1
0.1
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

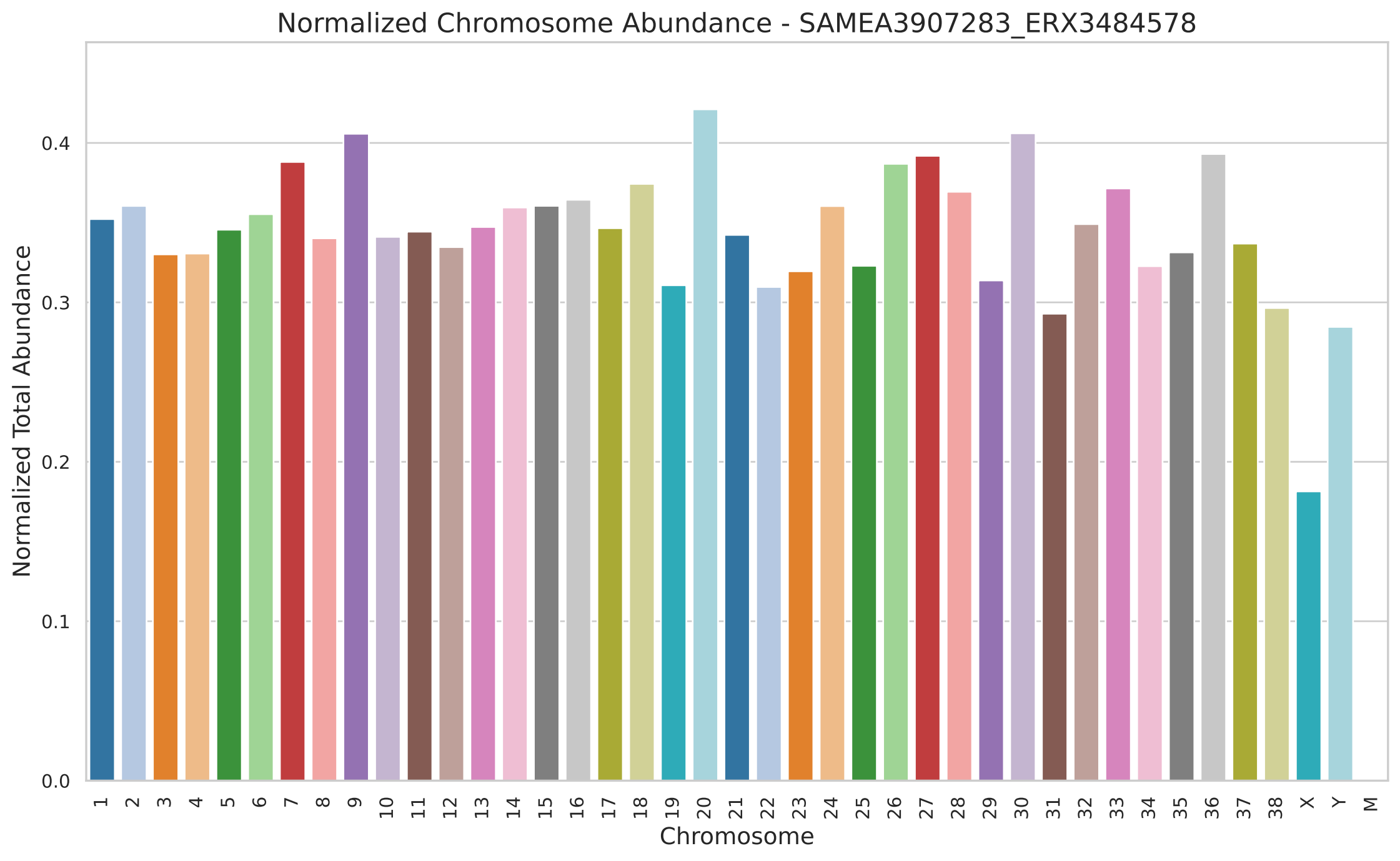

Normalized Chromosome Abundance - SAMEA3907285_ERX3484579
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

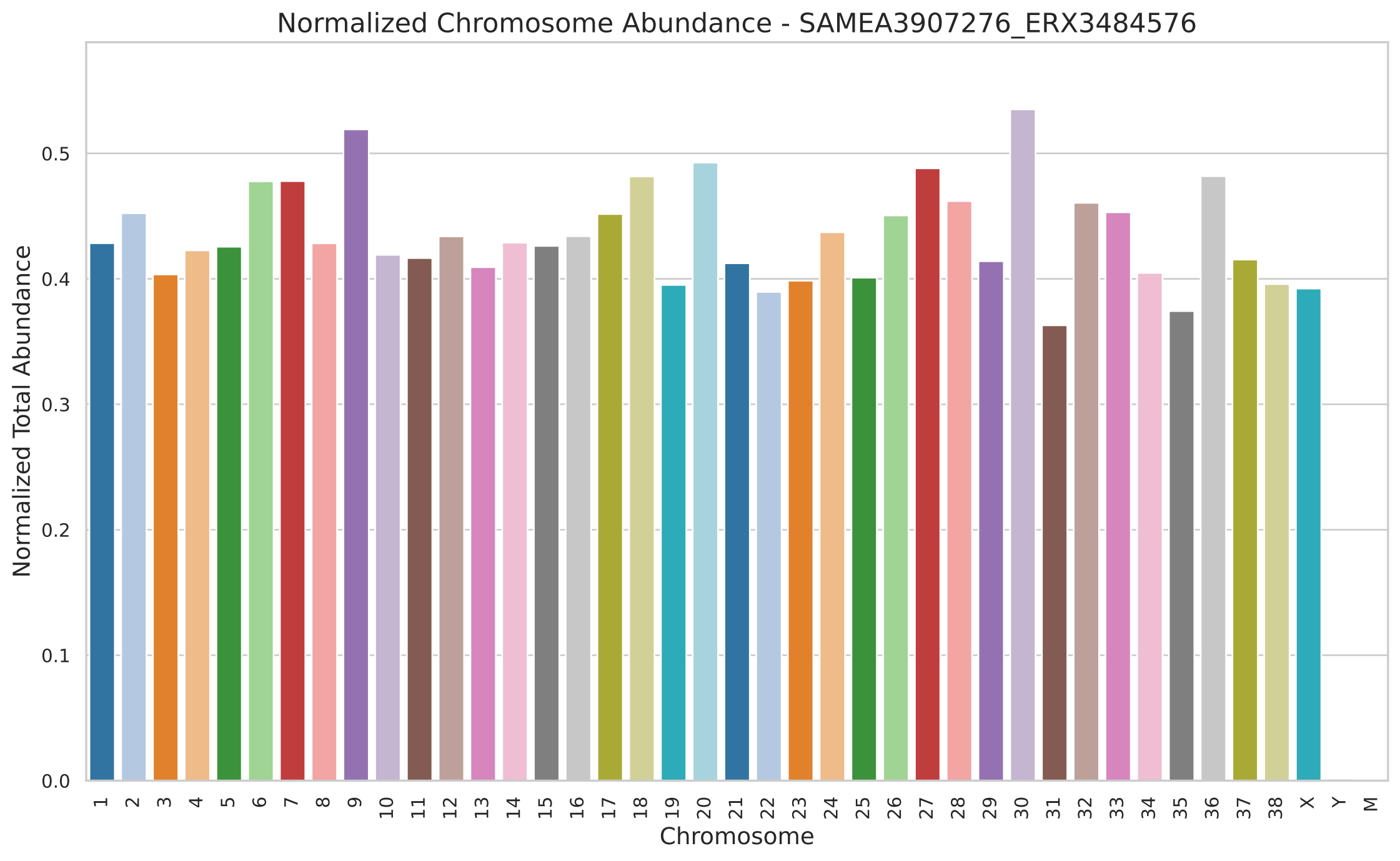

Normalized Chromosome Abundance - SAMEA3907302_ERX3484609
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

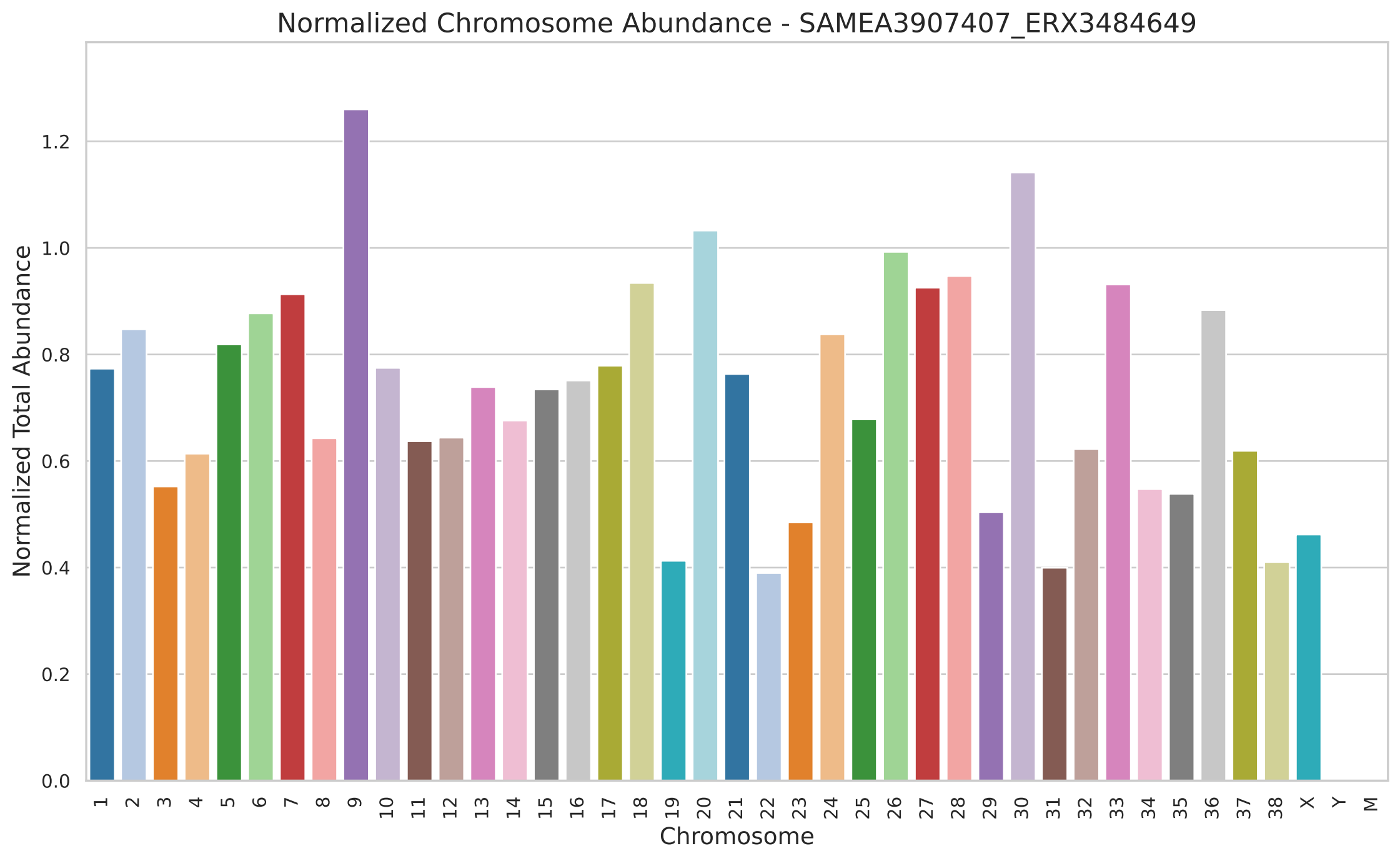

Normalized Chromosome Abundance - SAMEA3910718_ERX3484566
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

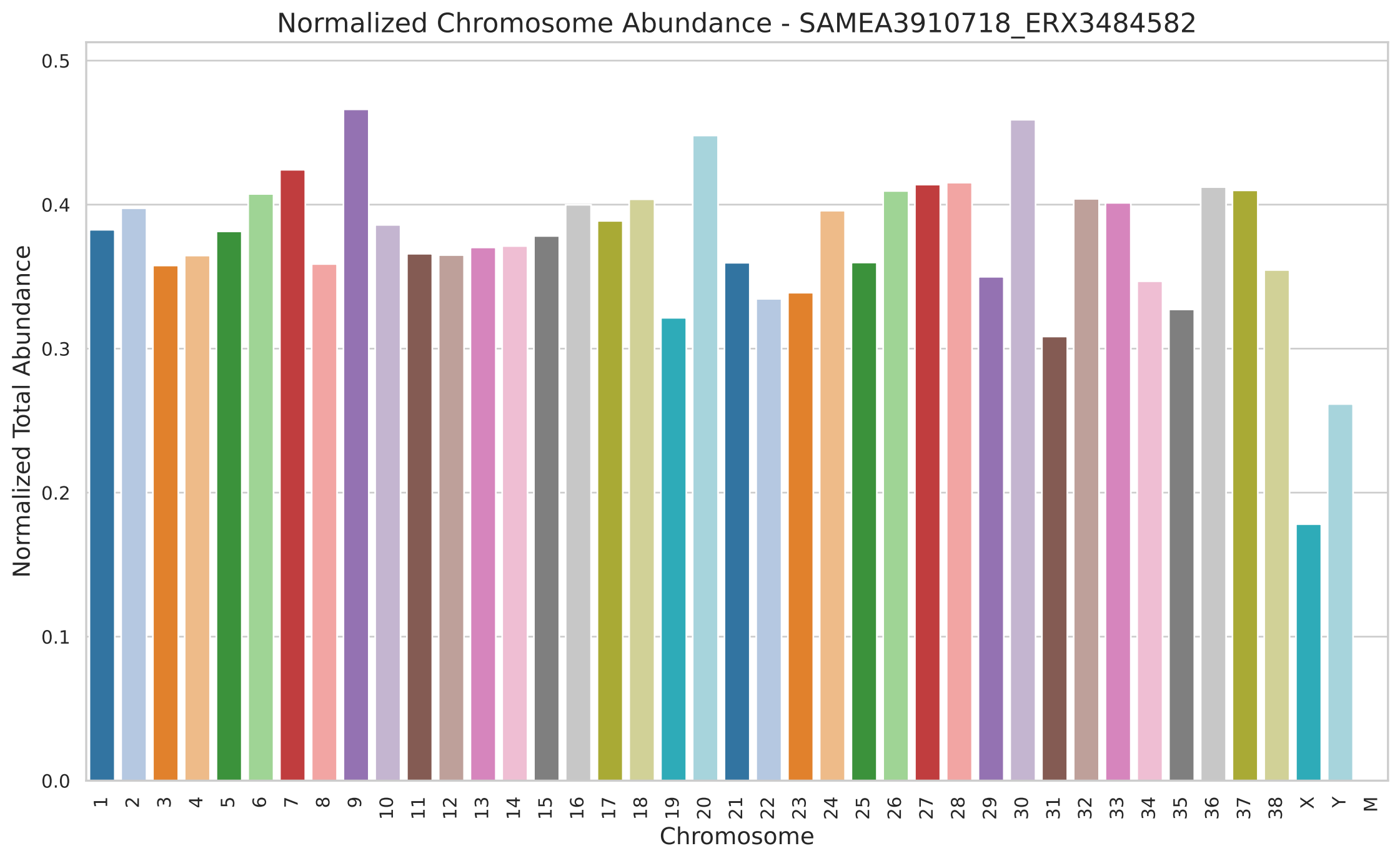

Normalized Chromosome Abundance - SAMEA3907288_ERX3484597
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

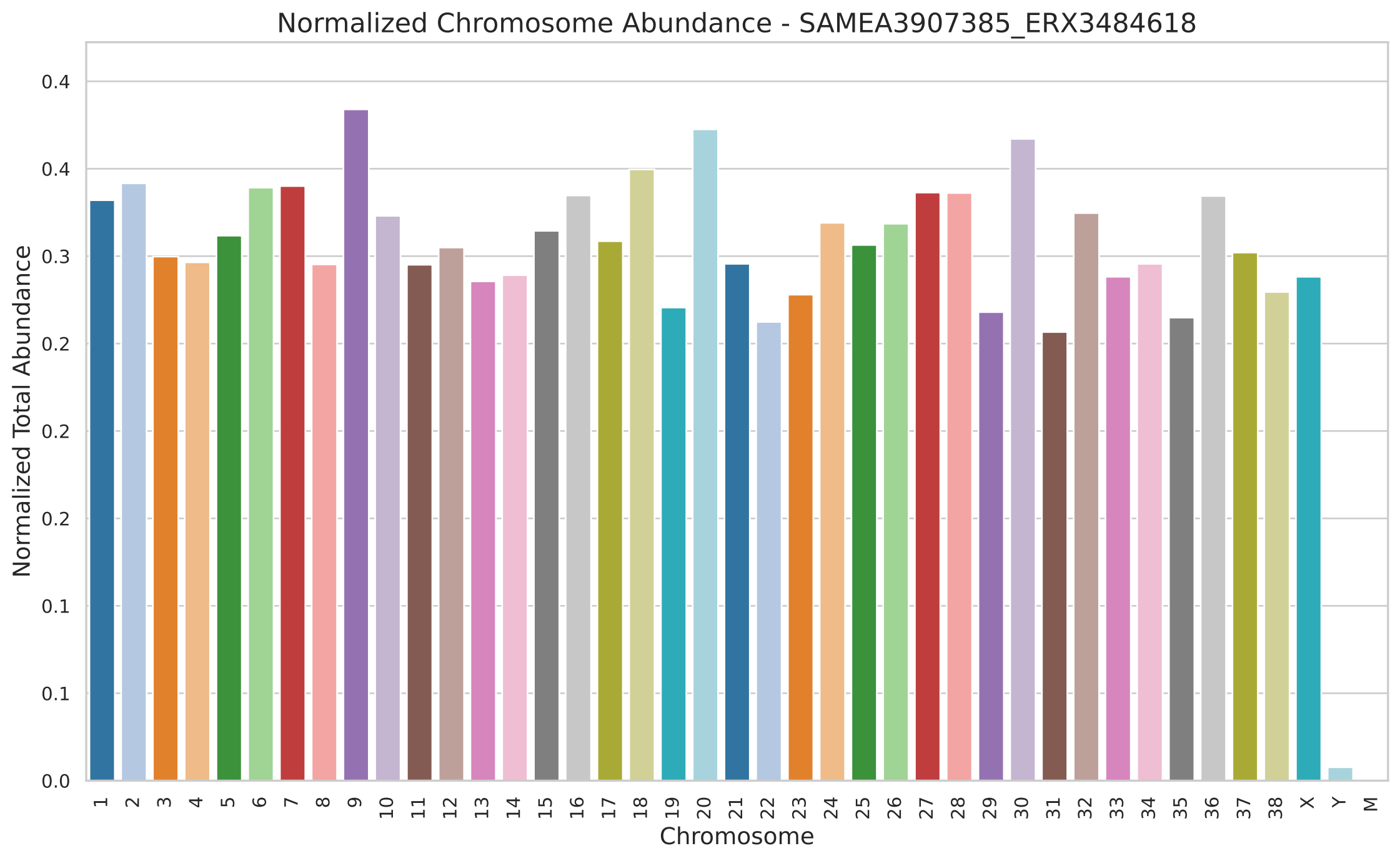

Normalized Chromosome Abundance - SAMEA3907308_ERX3484629
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

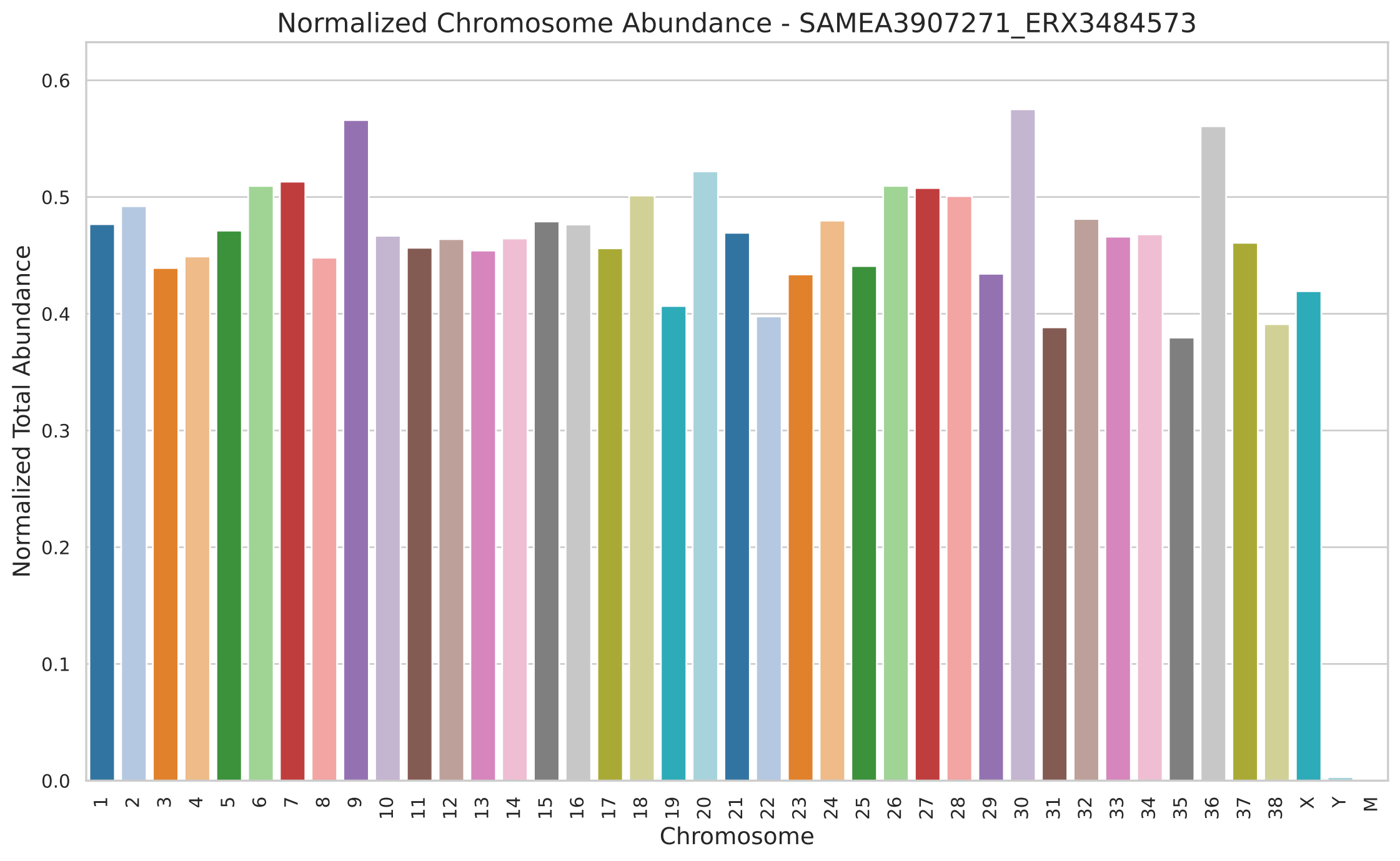

Normalized Chromosome Abundance - SAMEA3907283_ERX3484578
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

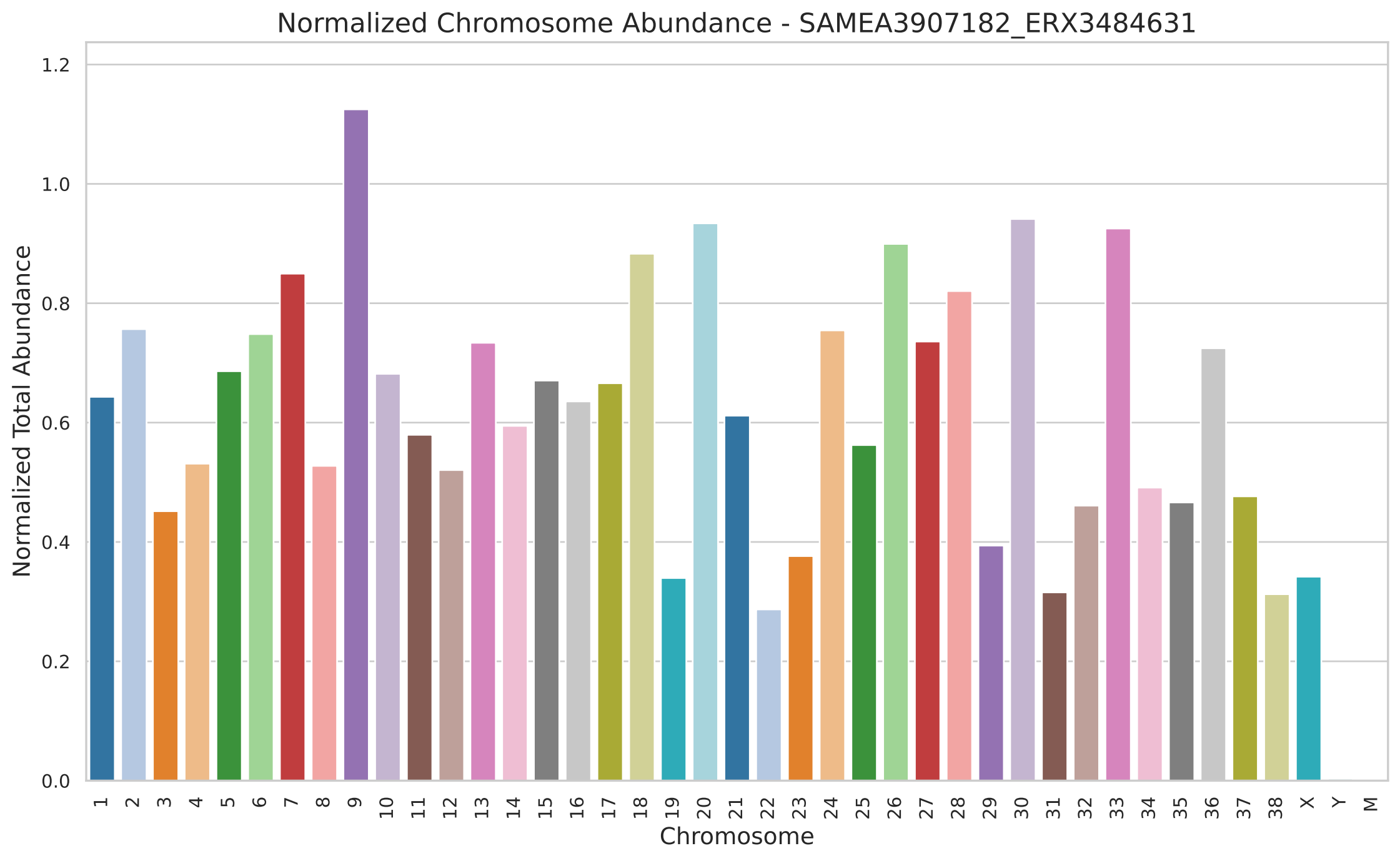

Normalized Chromosome Abundance - SAMEA3907276_ERX3484576
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

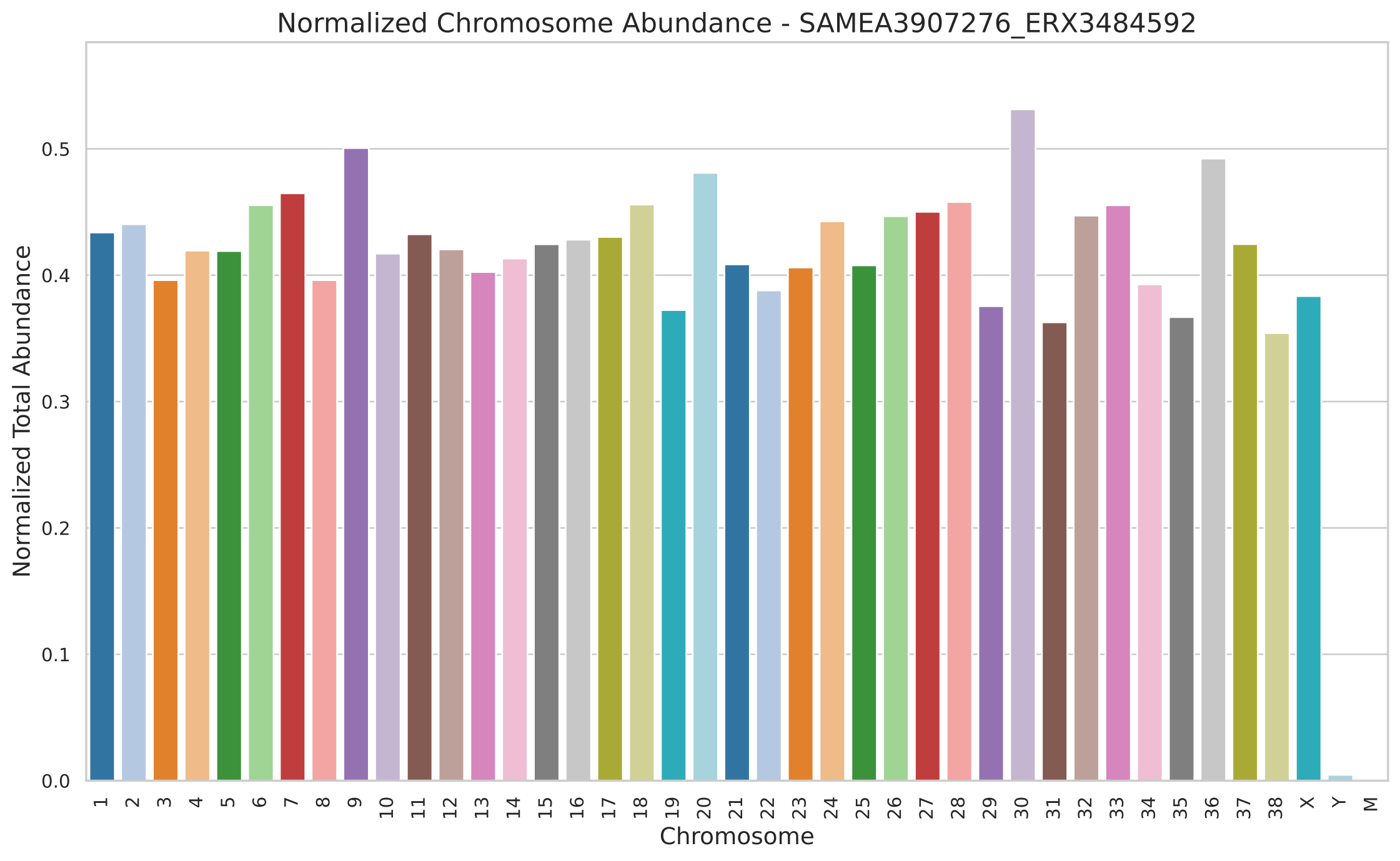

Normalized Chromosome Abundance - SAMEA3907407_ERX3484649
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

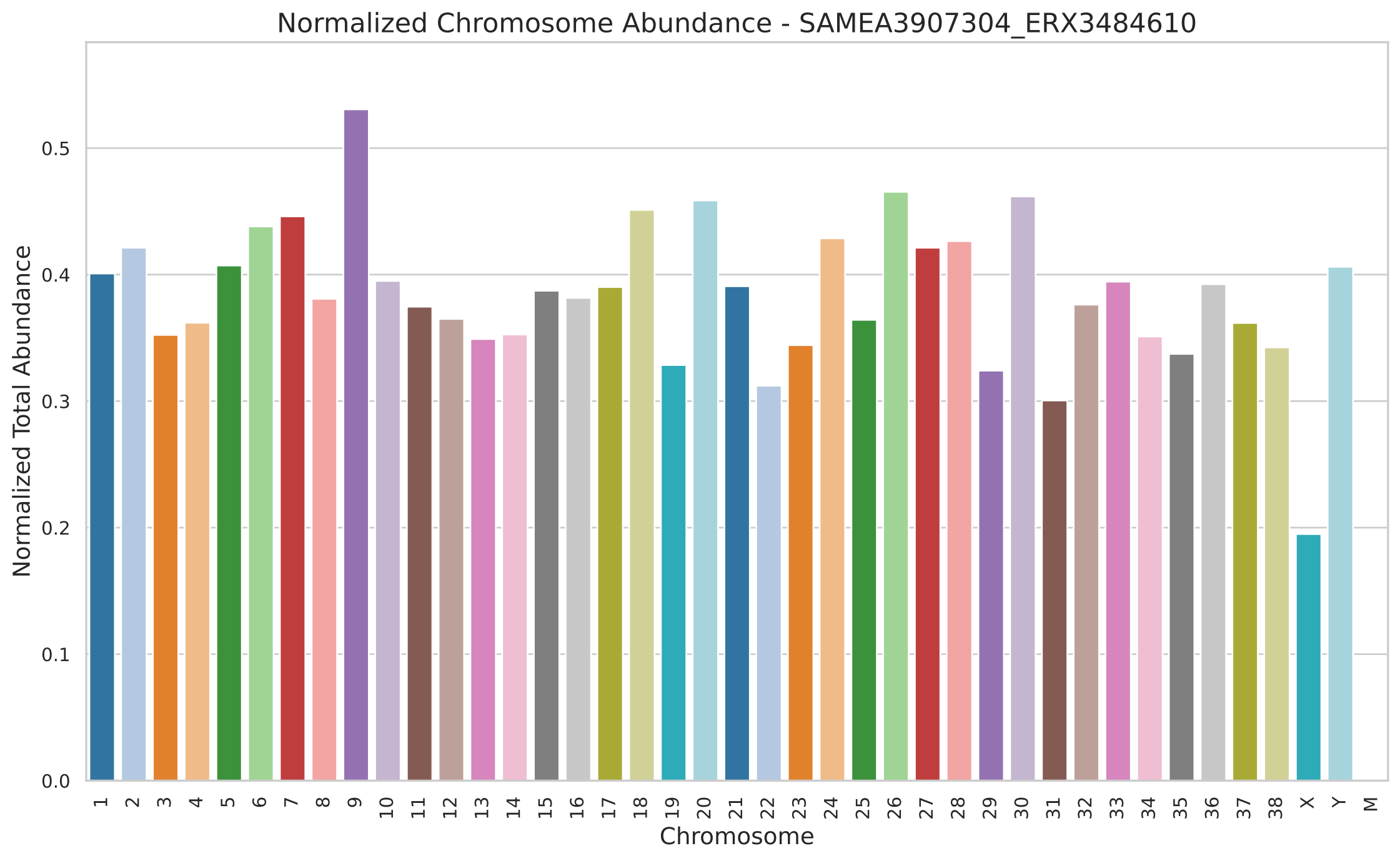

Normalized Chromosome Abundance - SAMEA3910718_ERX3484582
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

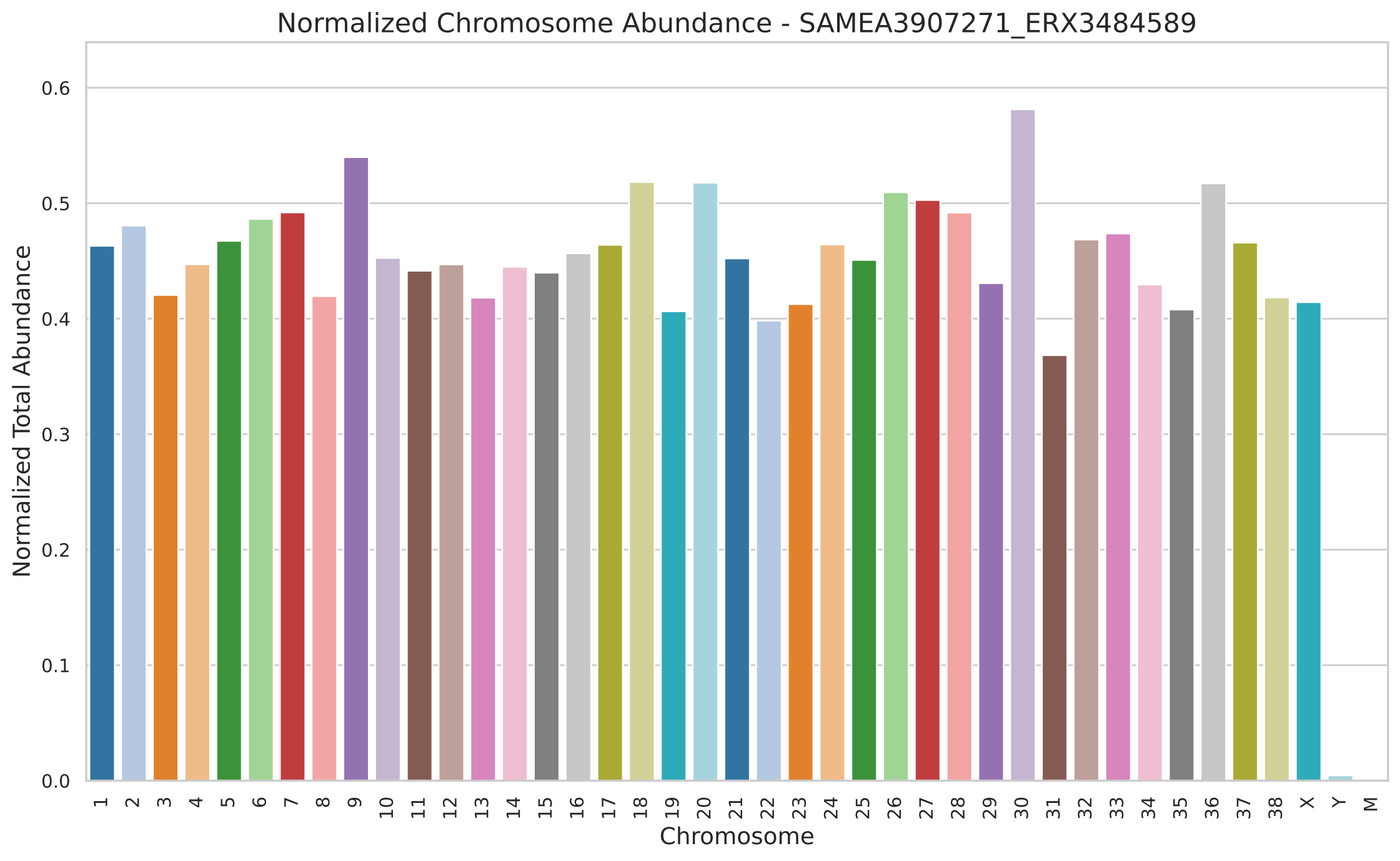

Normalized Chromosome Abundance - SAMEA3907385_ERX3484618
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

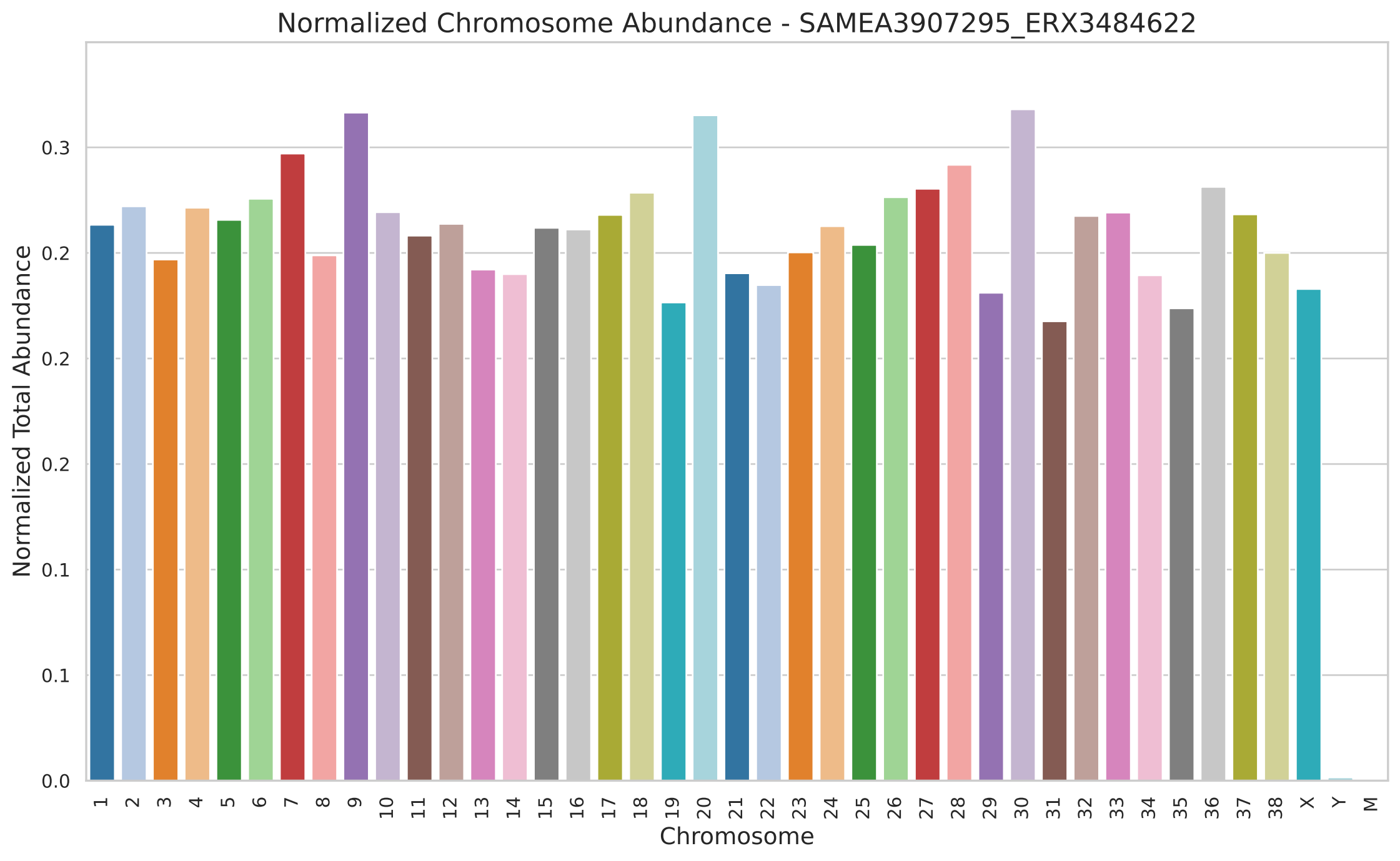

Normalized Chromosome Abundance - SAMEA3907271_ERX3484573
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

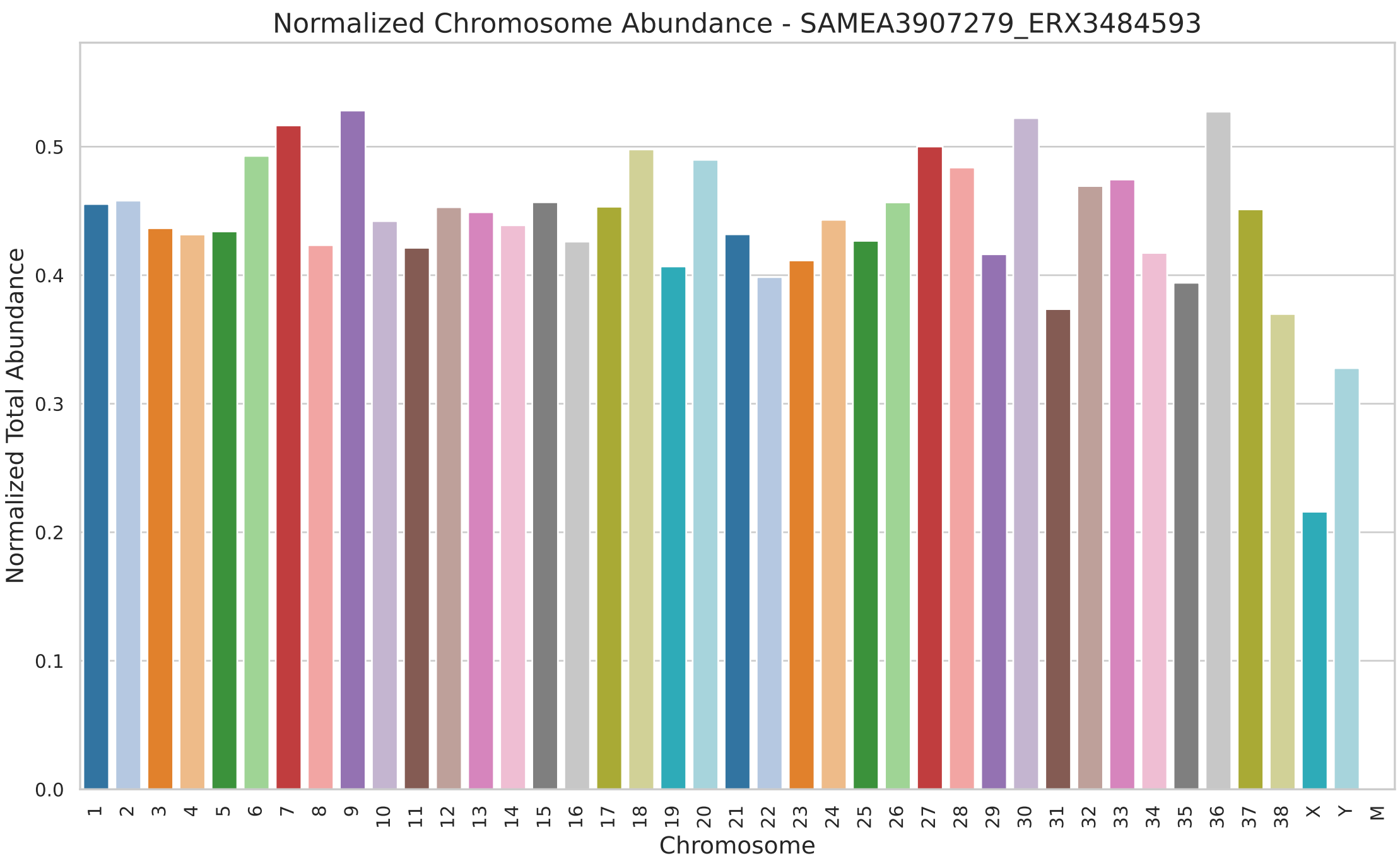

Normalized Chromosome Abundance - SAMEA3907182_ERX3484631
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

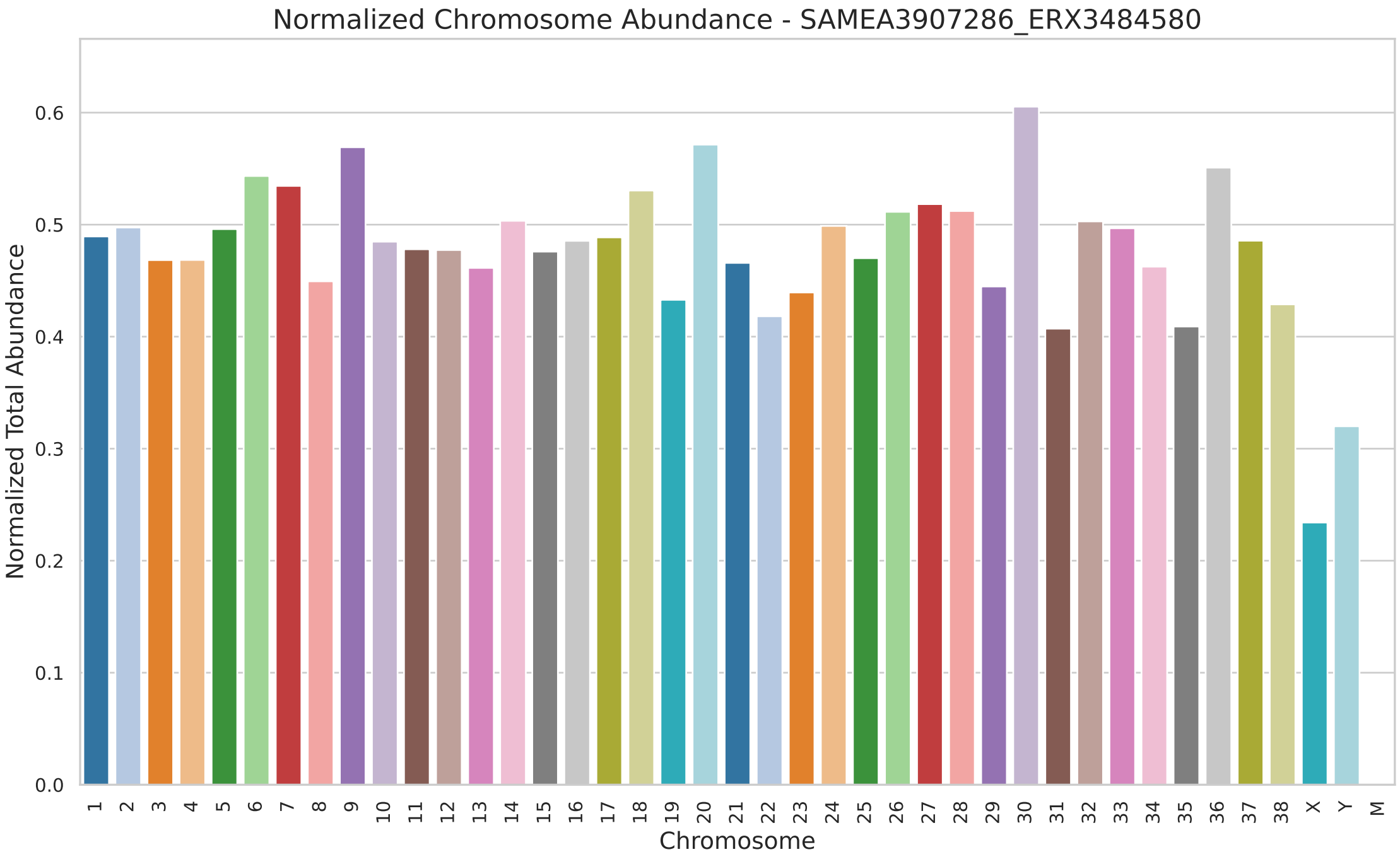

Normalized Chromosome Abundance - SAMEA3907276_ERX3484592
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

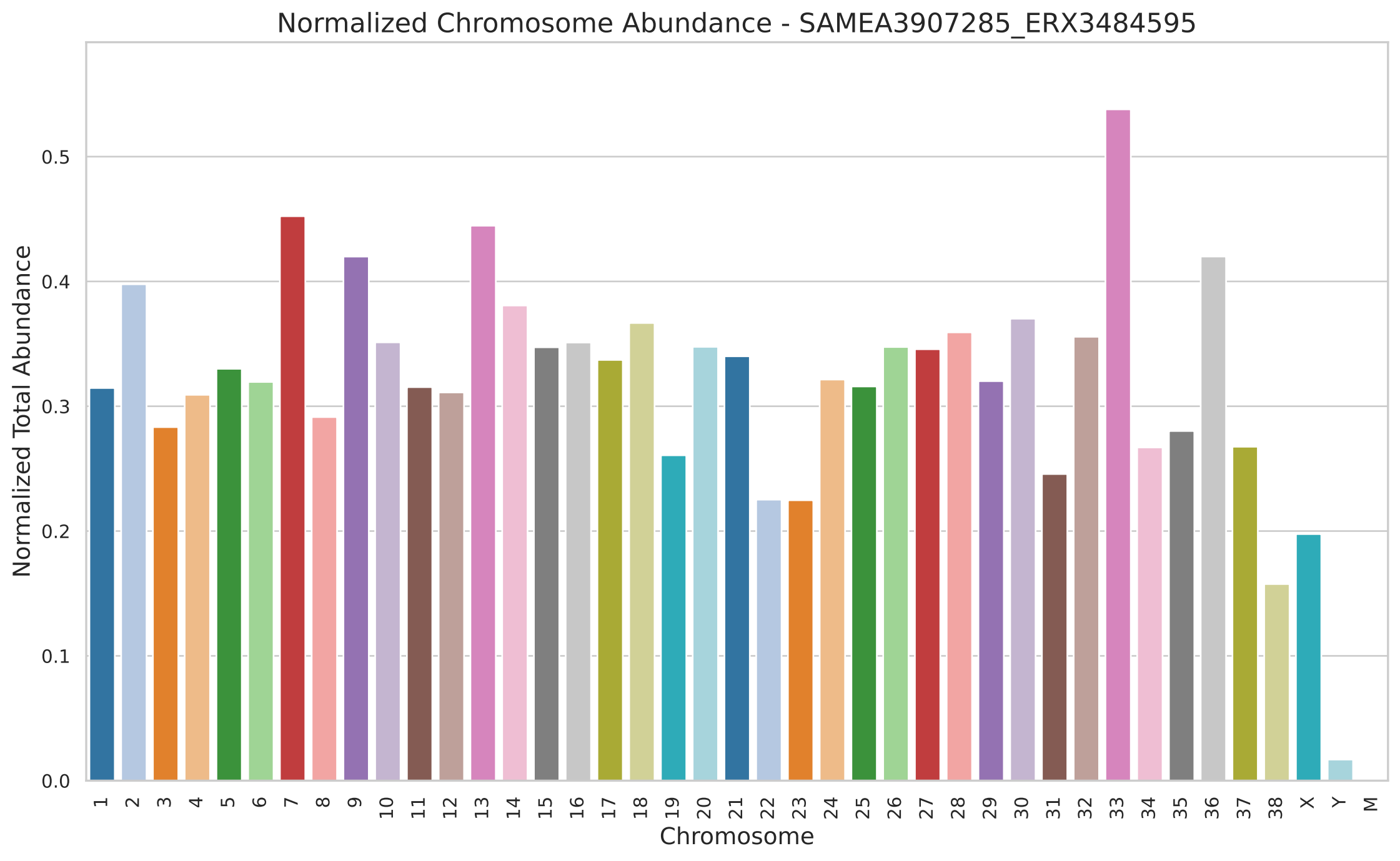

Normalized Chromosome Abundance - SAMEA3907304_ERX3484610
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

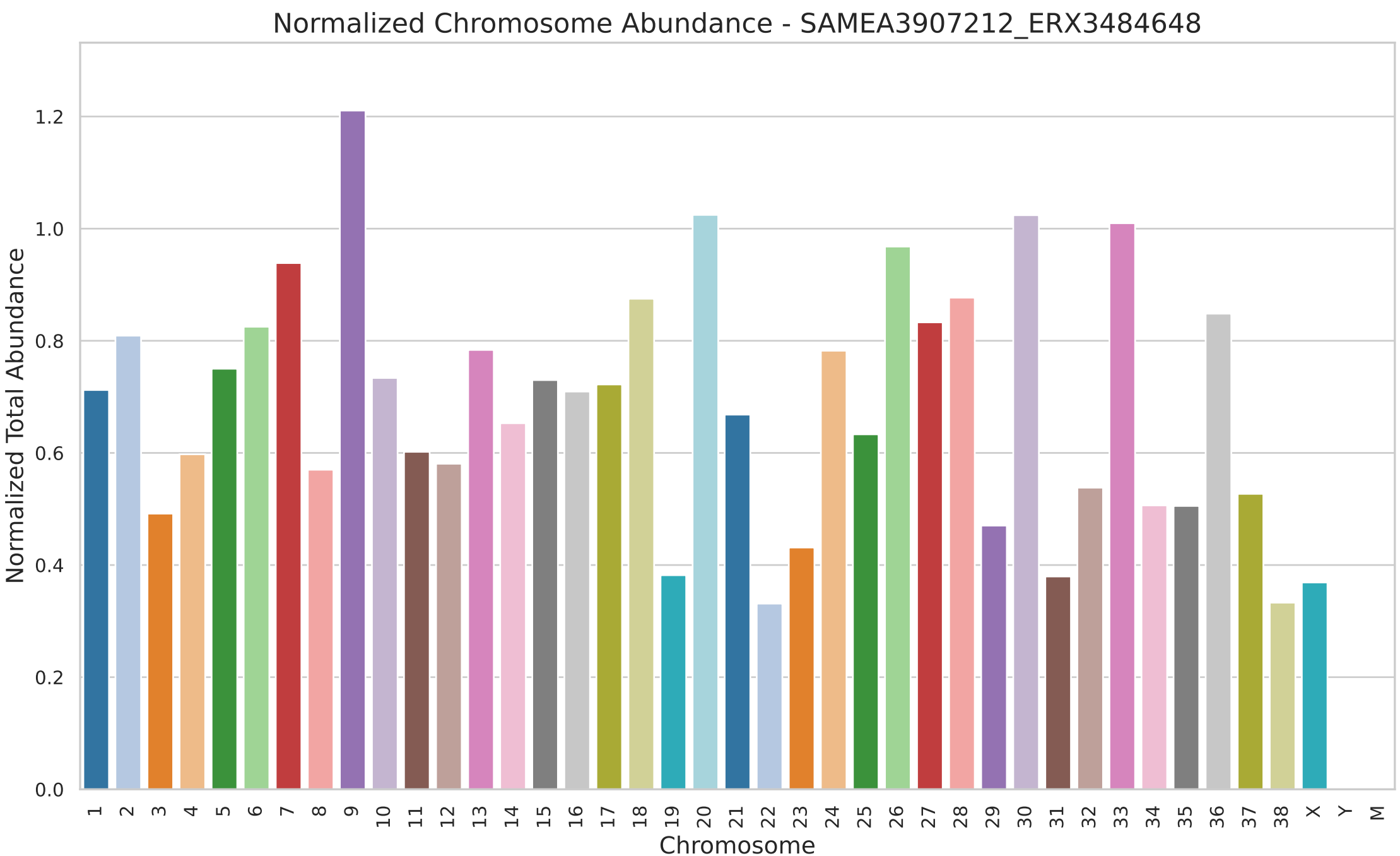

Normalized Chromosome Abundance - SAMEA3907271_ERX3484589
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

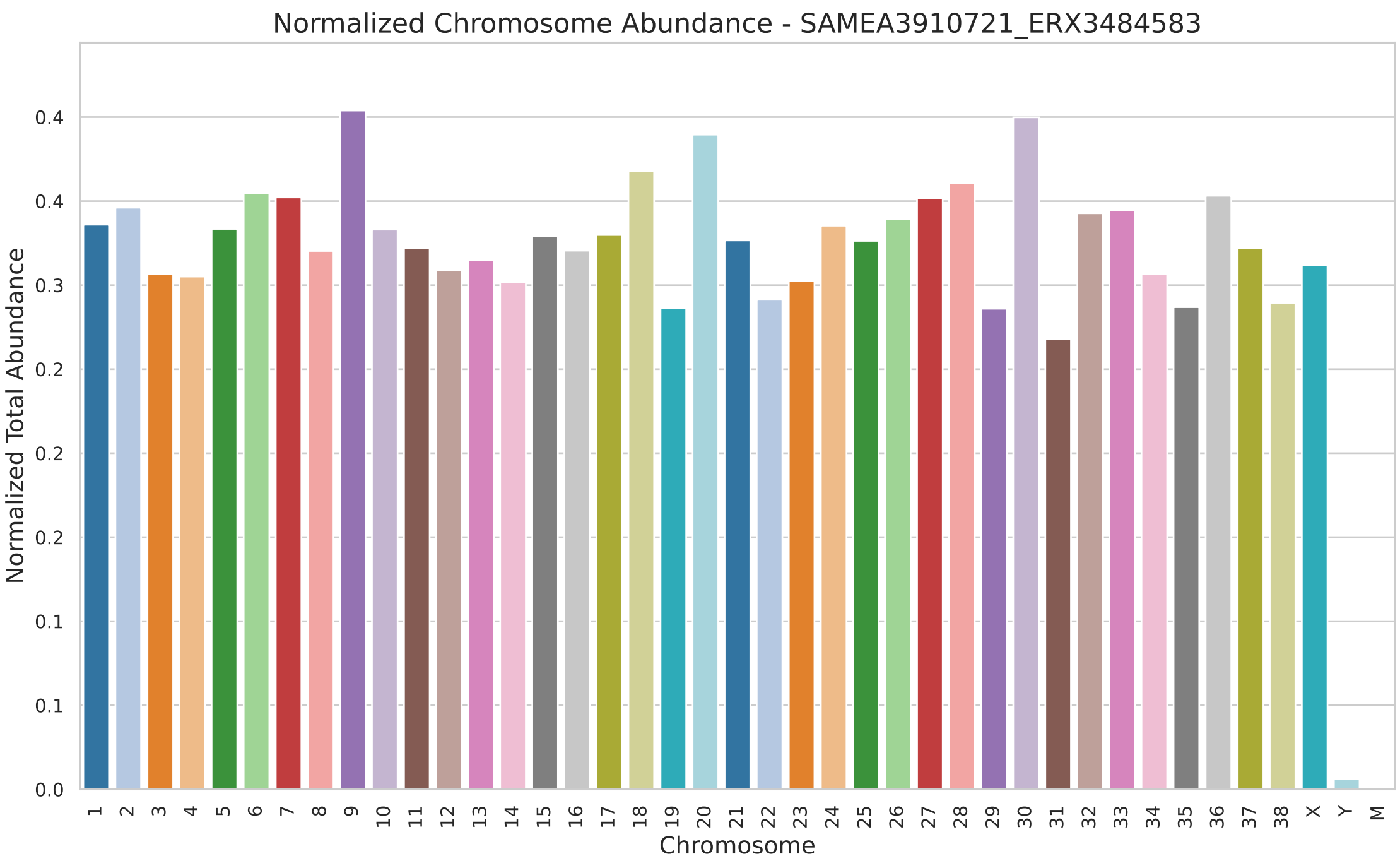

Normalized Chromosome Abundance - SAMEA3907295_ERX3484622
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

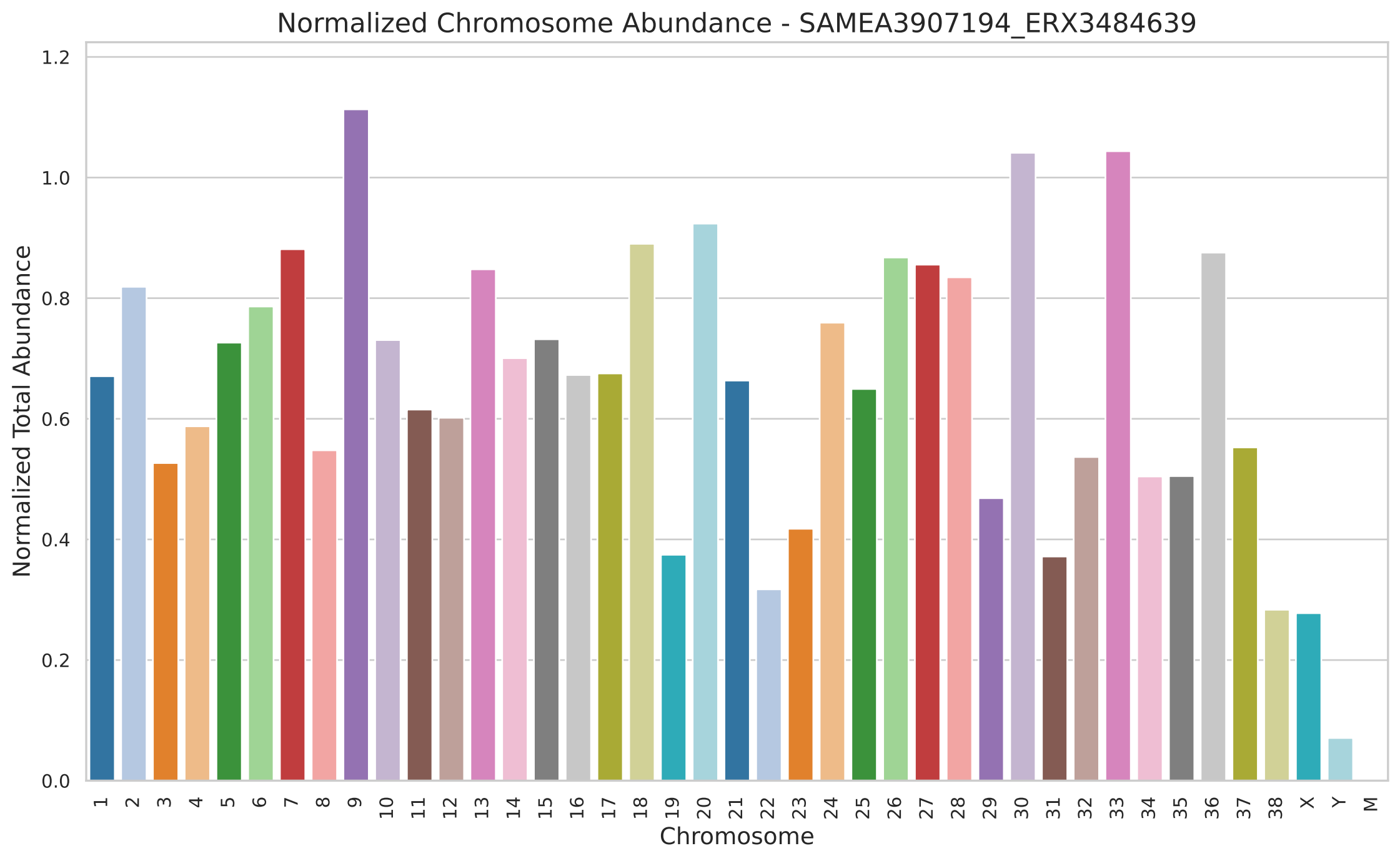

Normalized Chromosome Abundance - SAMEA3907279_ERX3484593
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

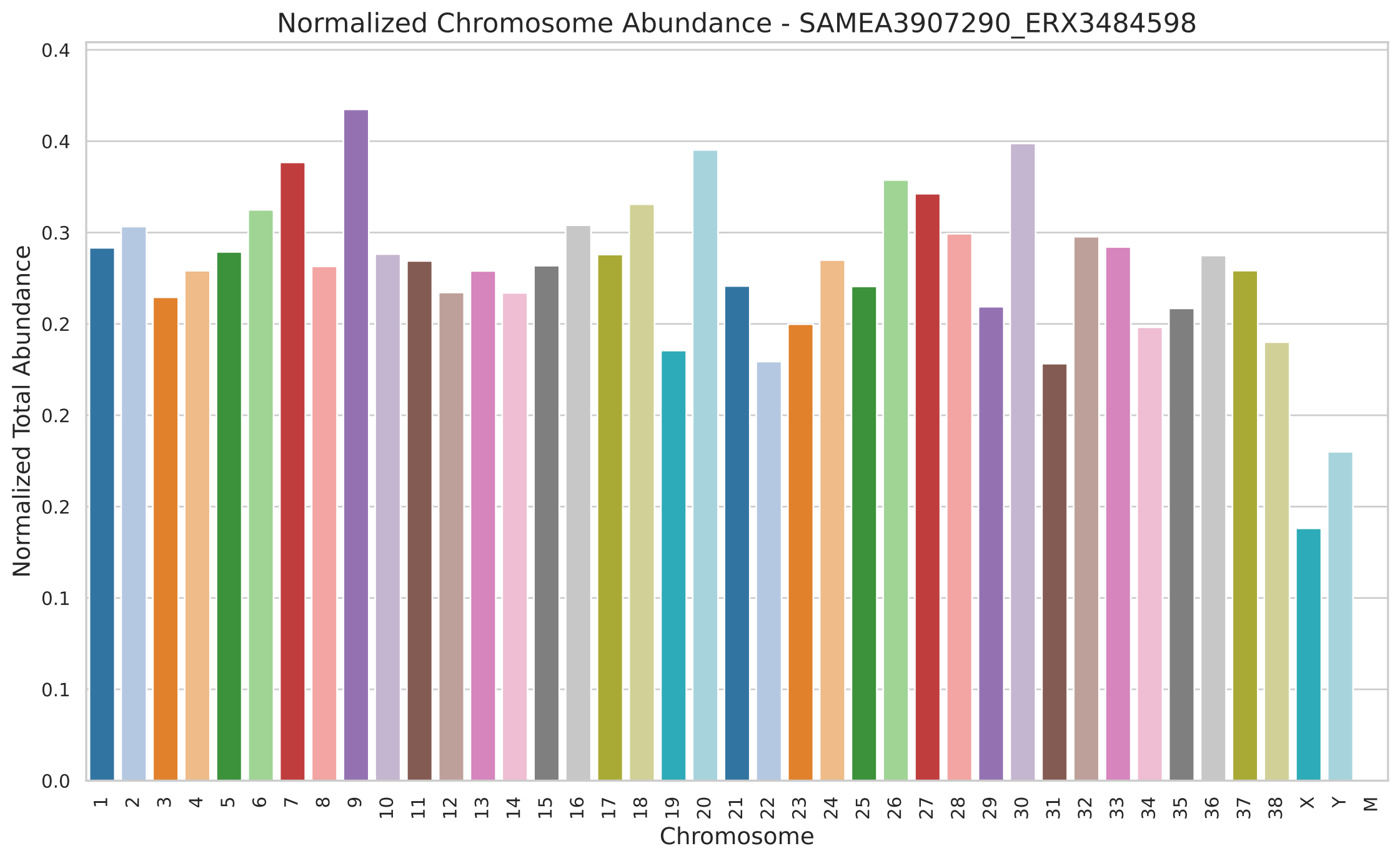

Normalized Chromosome Abundance - SAMEA3907286_ERX3484580
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

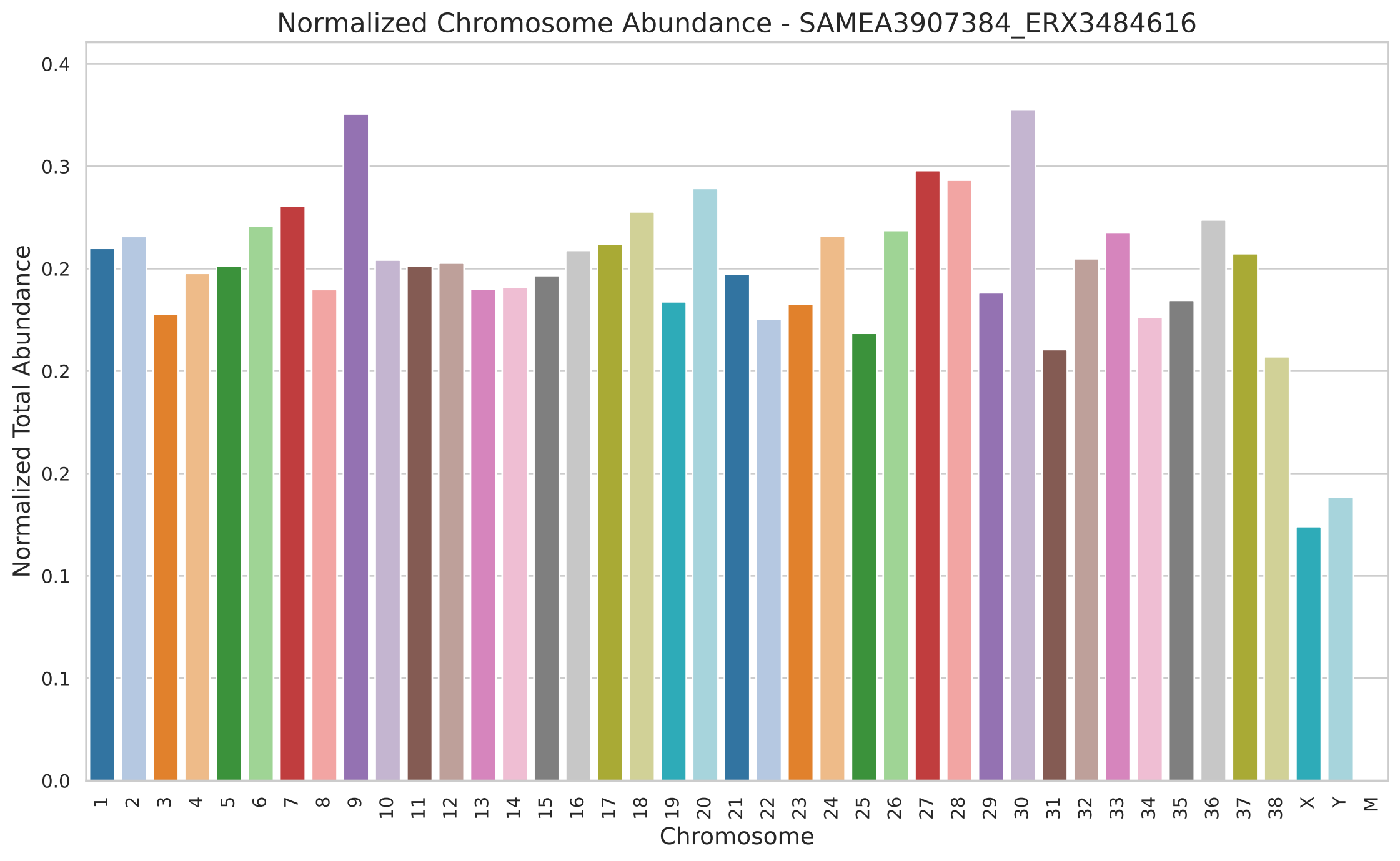

Normalized Chromosome Abundance - SAMEA3907285_ERX3484595
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

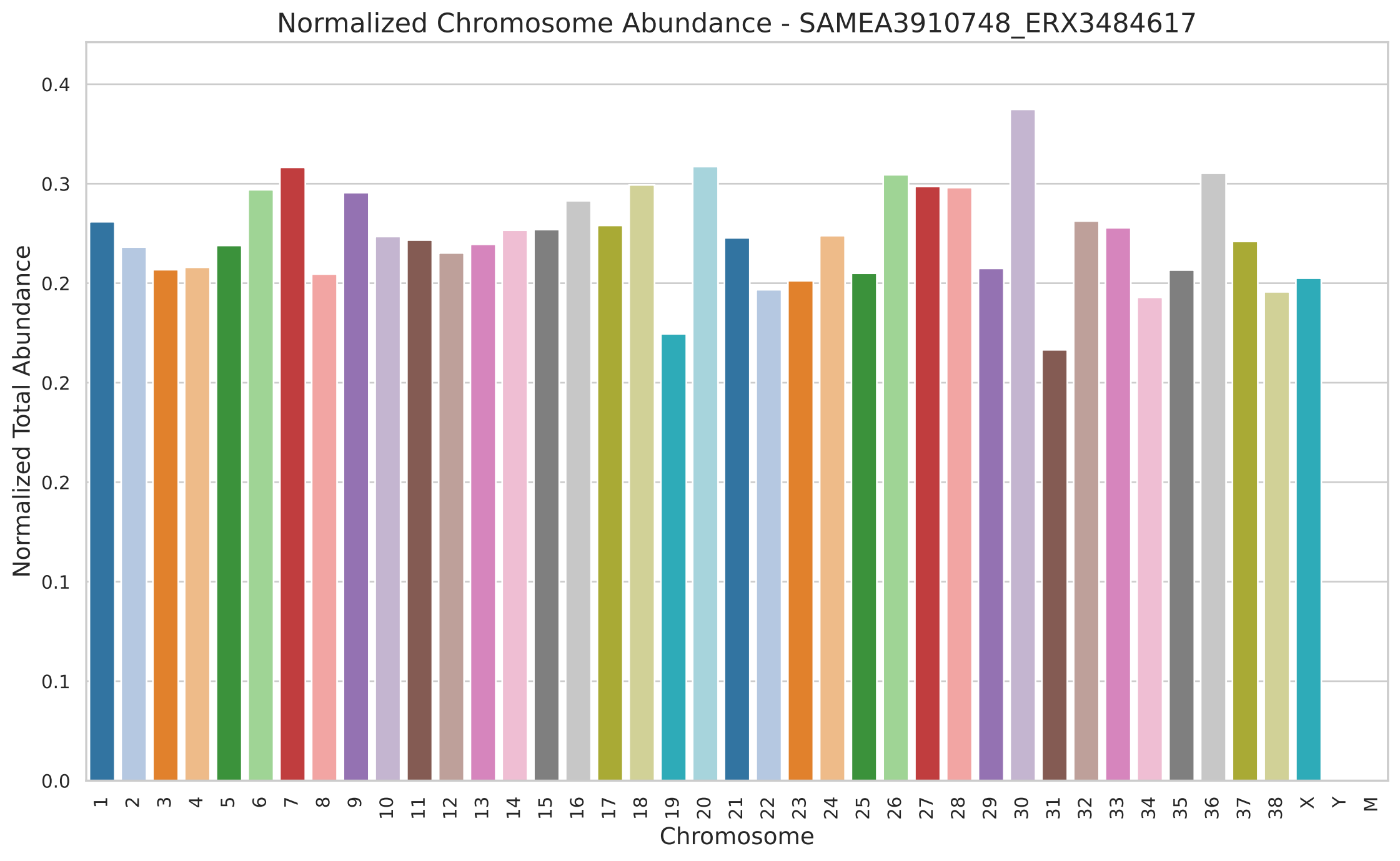

Normalized Chromosome Abundance - SAMEA3907212_ERX3484648
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

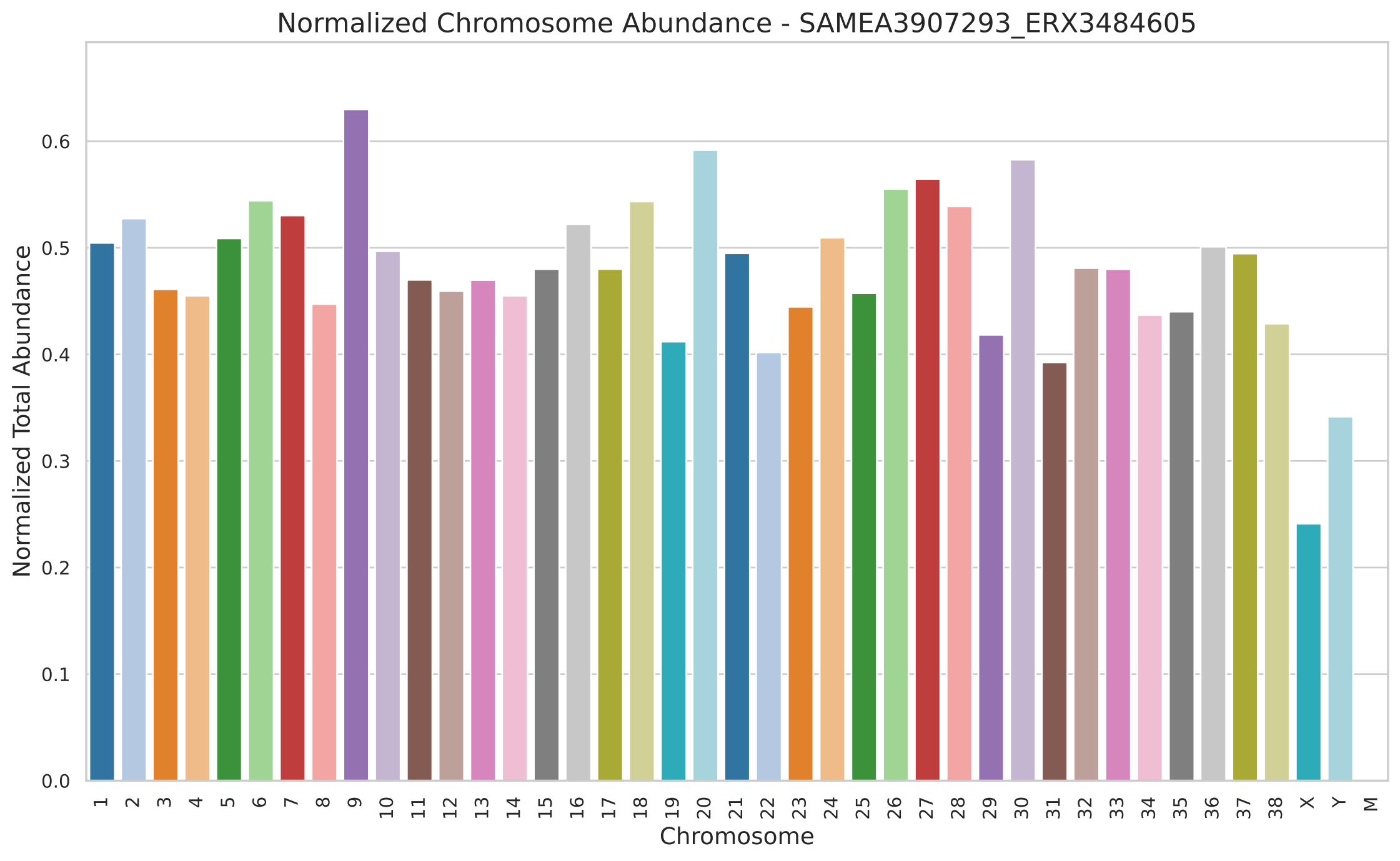

Normalized Chromosome Abundance - SAMEA3910721_ERX3484583
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
0.4
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

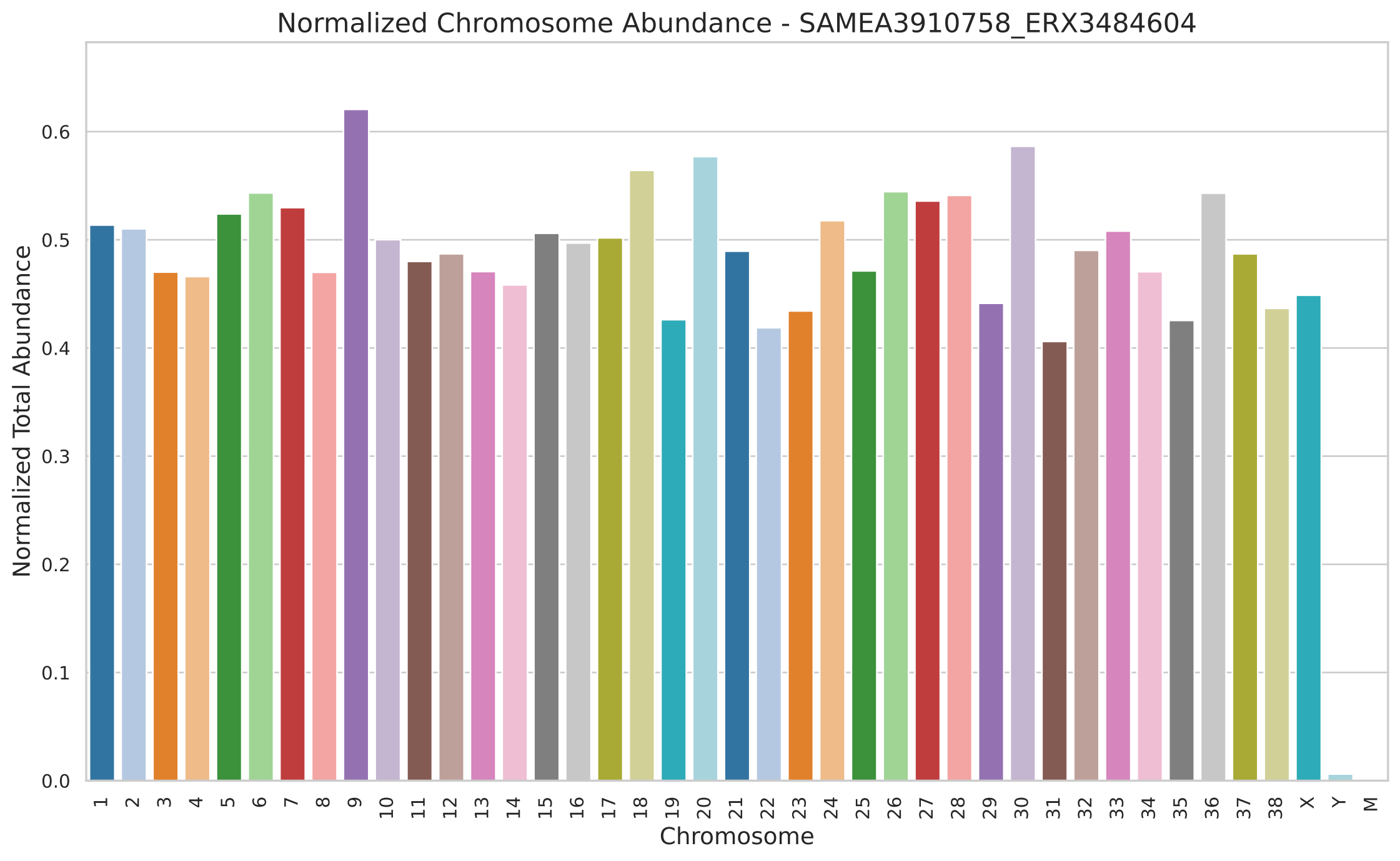

Normalized Chromosome Abundance - SAMEA3907194_ERX3484639
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

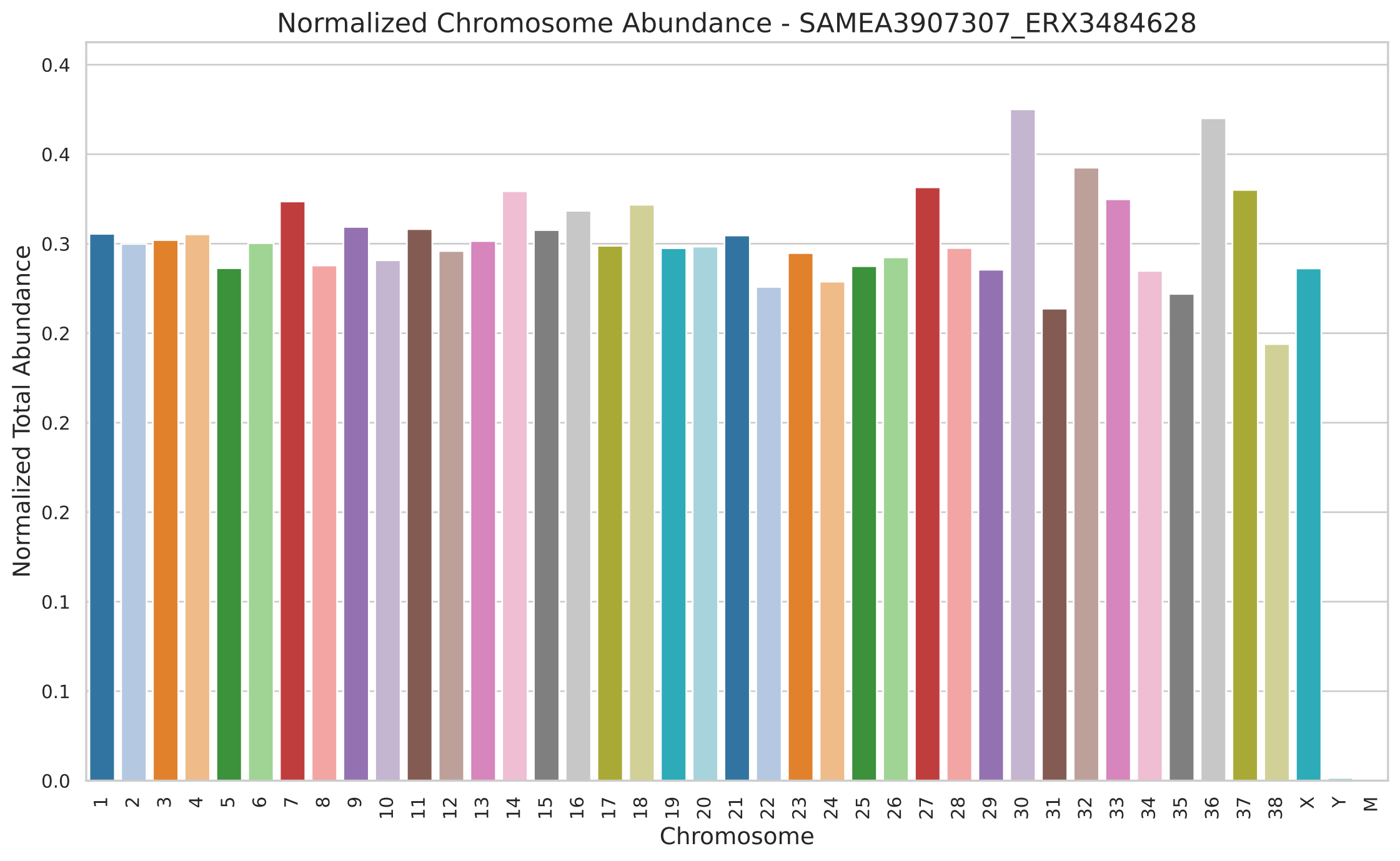

Normalized Chromosome Abundance - SAMEA3907290_ERX3484598
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

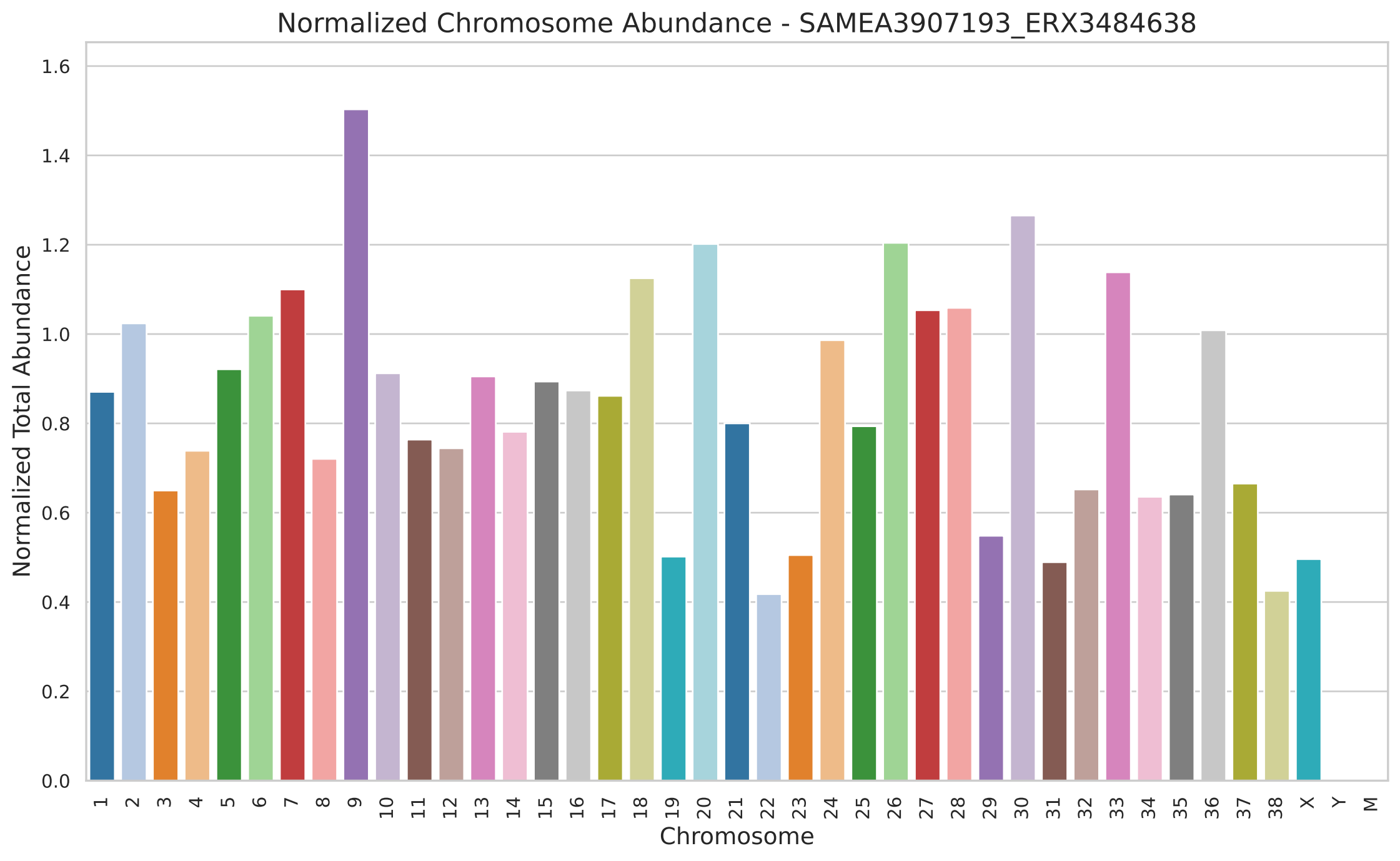

Normalized Chromosome Abundance - SAMEA3907384_ERX3484616
Normalized Total Abundance
0.4
0.3
0.2
0.2
0.1
0.1
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

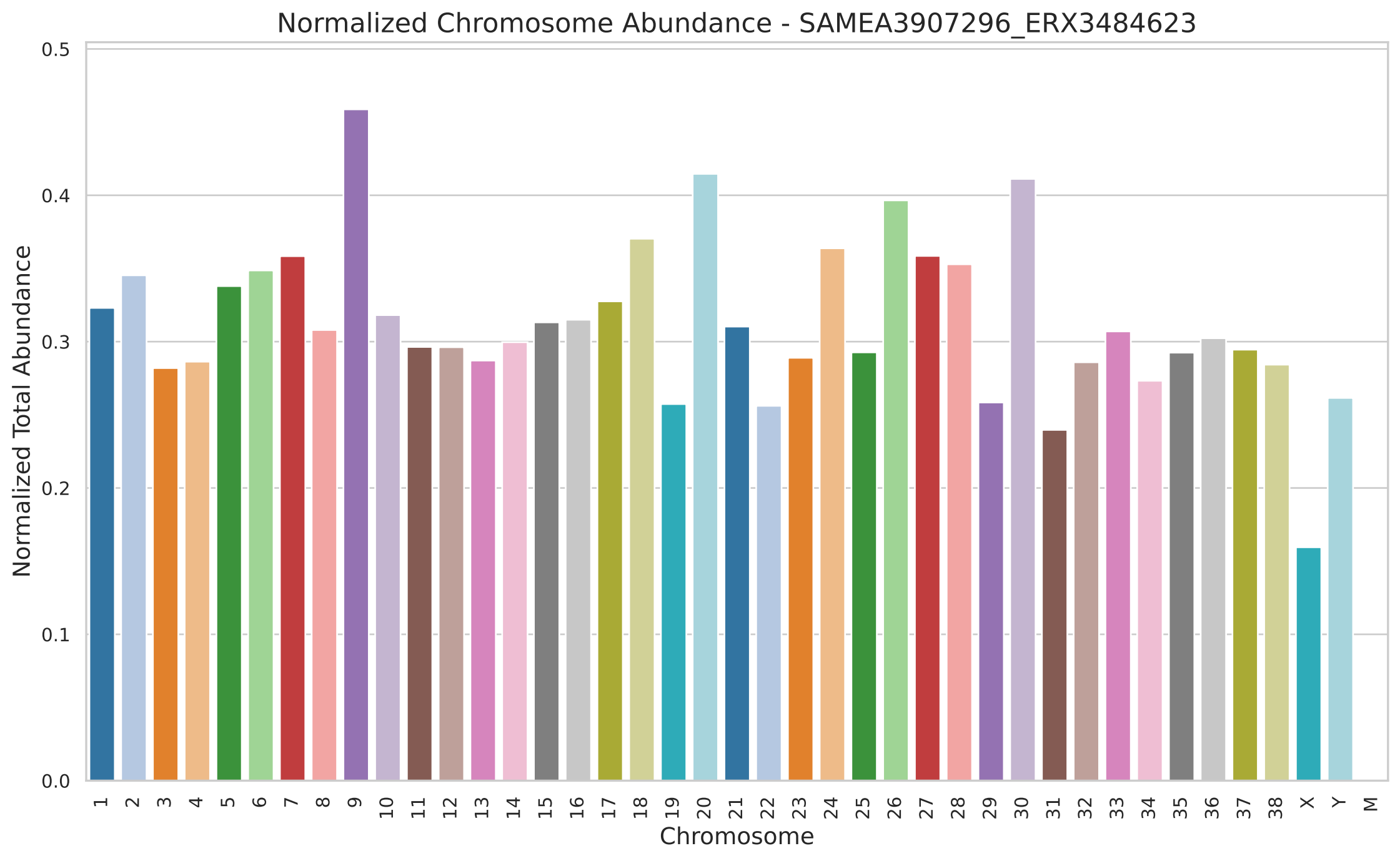

Normalized Chromosome Abundance - SAMEA3910748_ERX3484617
Normalized Total Abundance
0.4
0.3
0.2
0.2
0.1
0.1
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

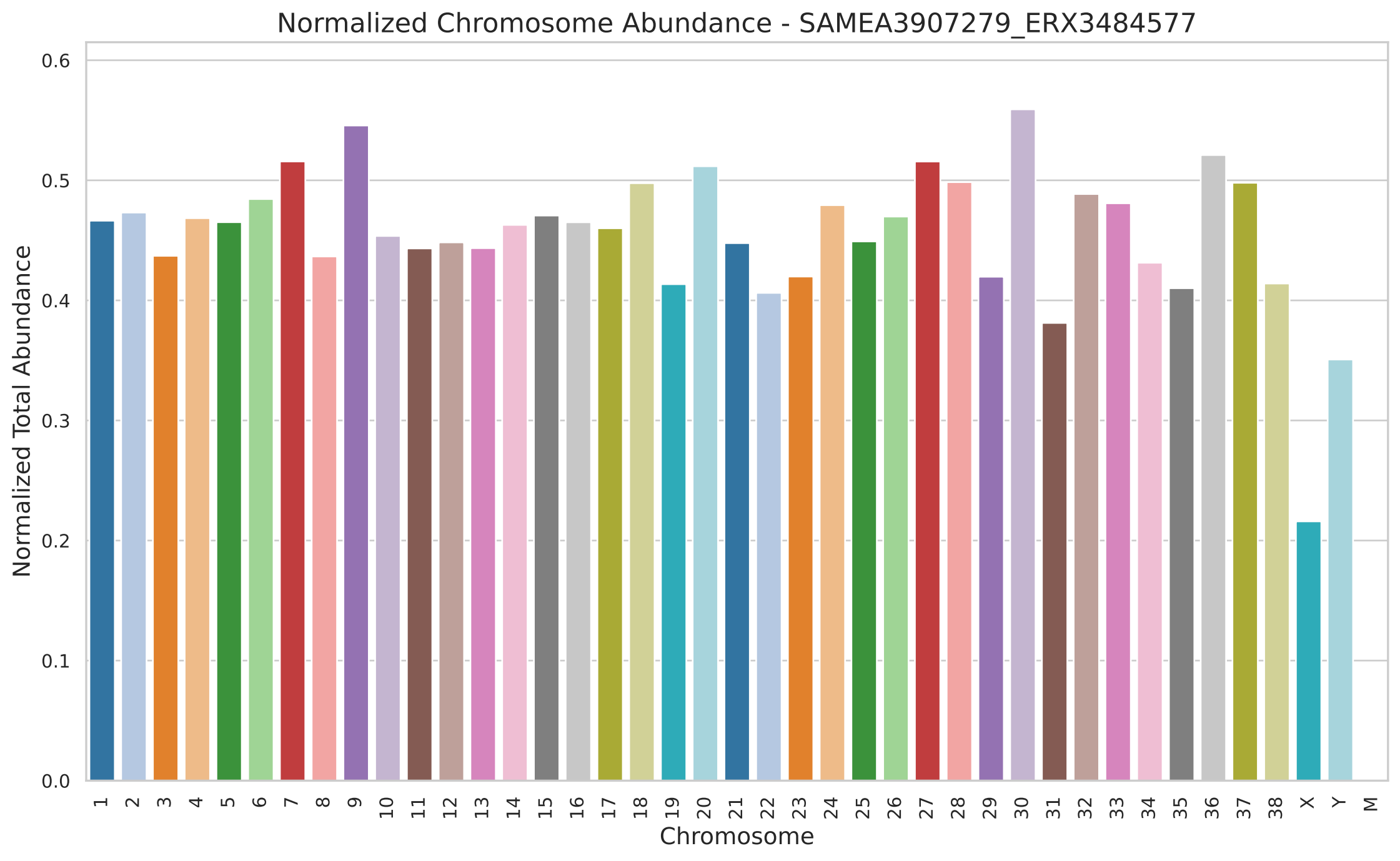

Normalized Chromosome Abundance - SAMEA3907293_ERX3484605
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

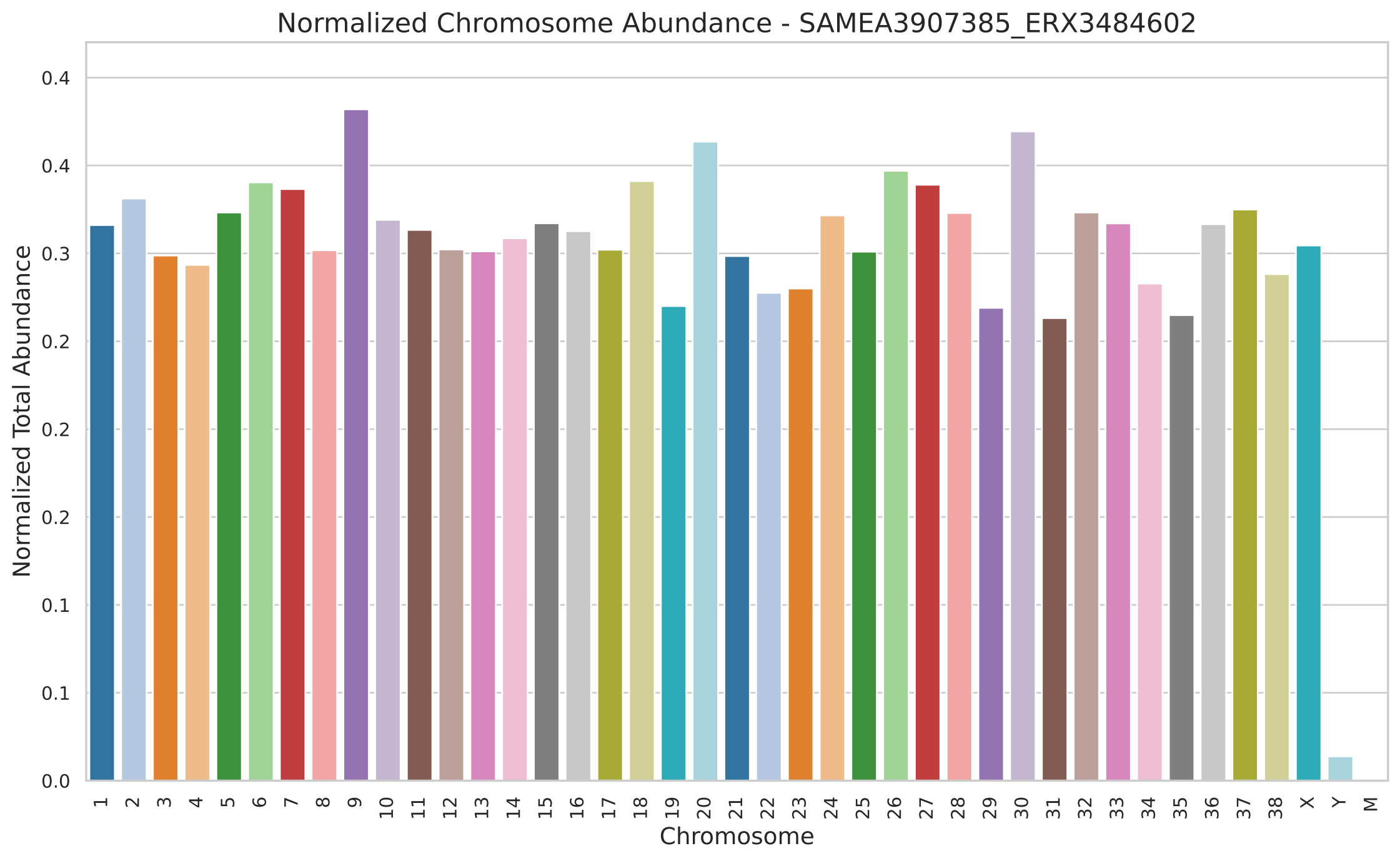

Normalized Chromosome Abundance - SAMEA3910758_ERX3484604
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

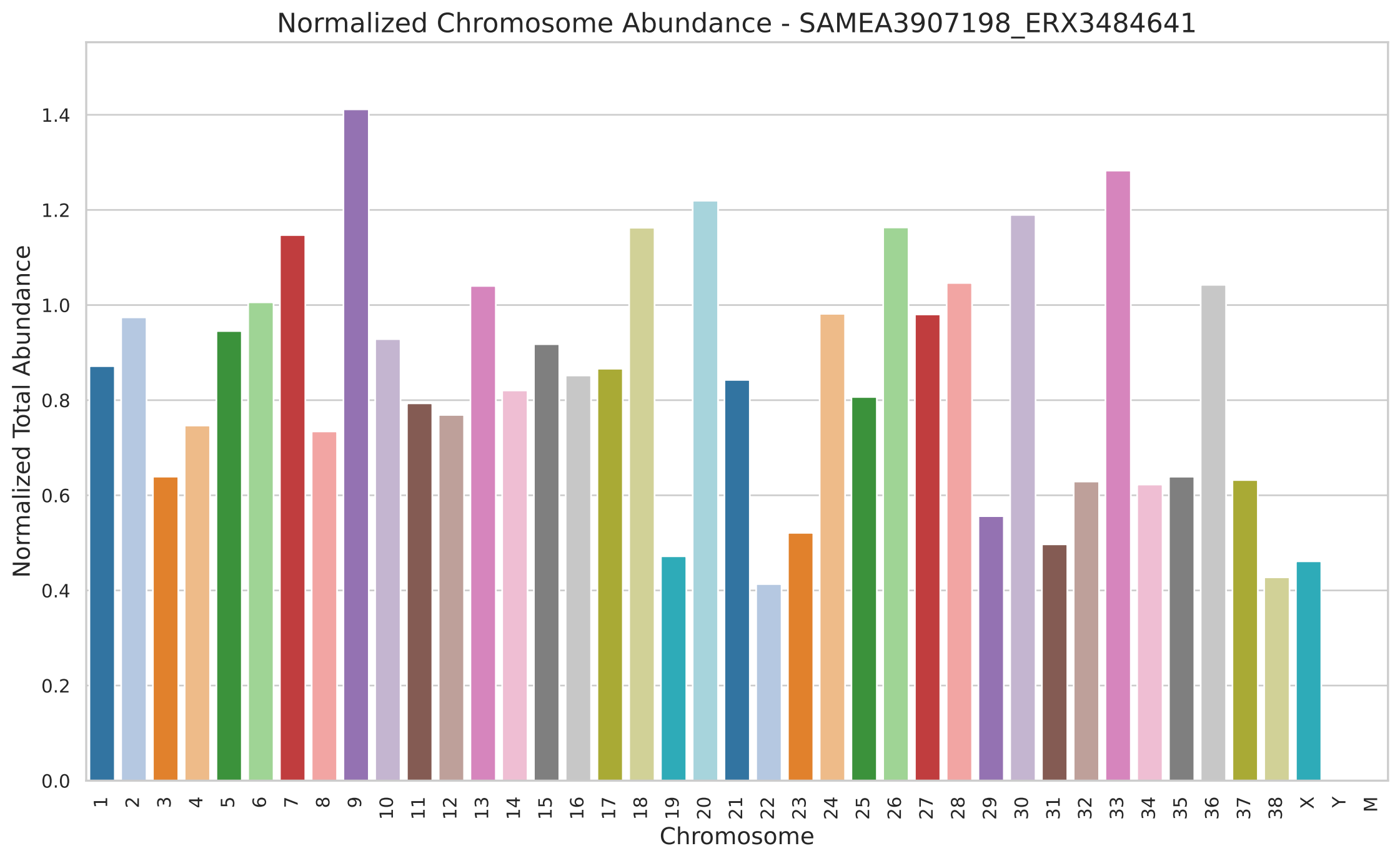

Normalized Chromosome Abundance - SAMEA3907307_ERX3484628
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

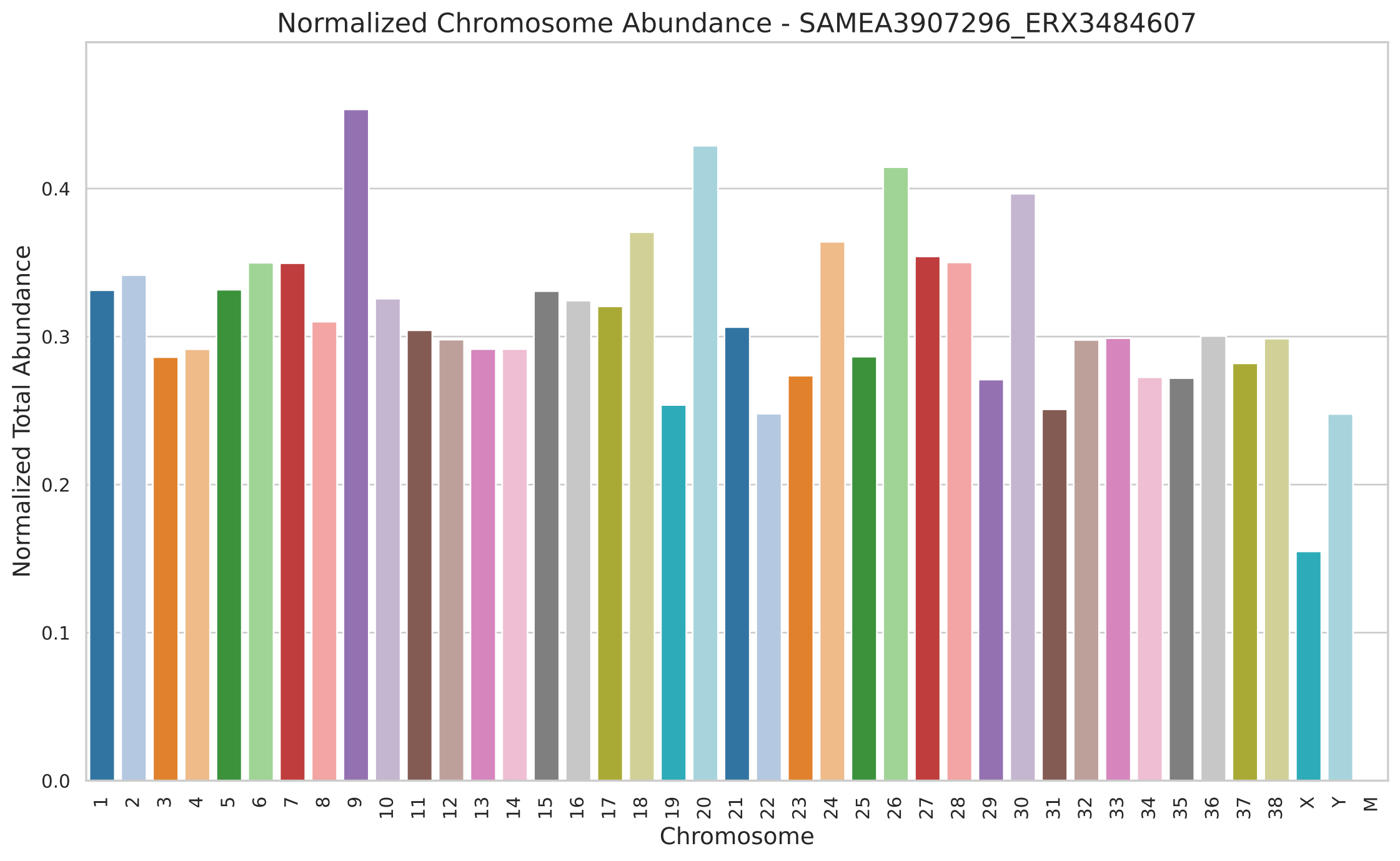

Normalized Chromosome Abundance - SAMEA3907193_ERX3484638
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

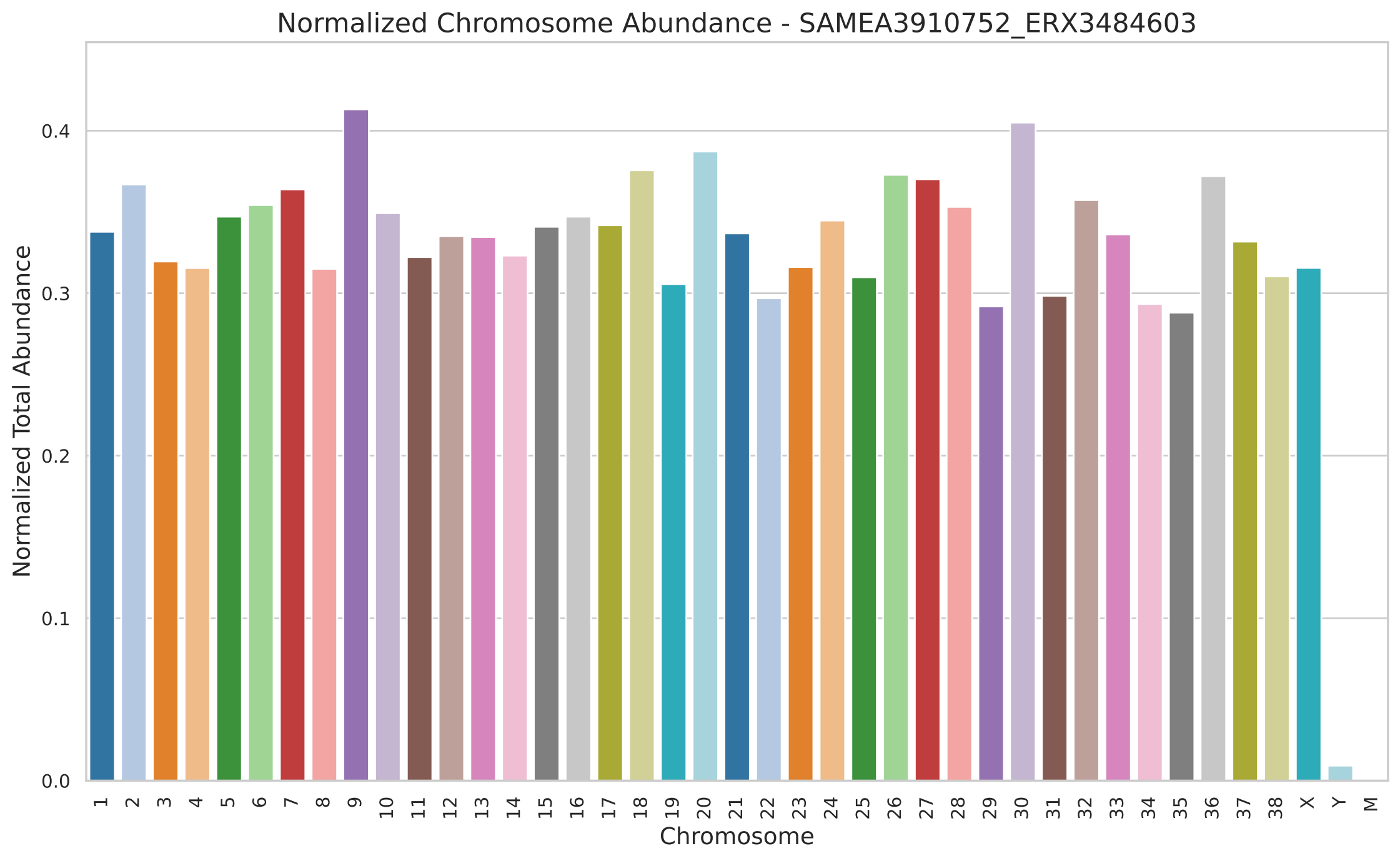

Normalized Chromosome Abundance - SAMEA3907296_ERX3484623
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

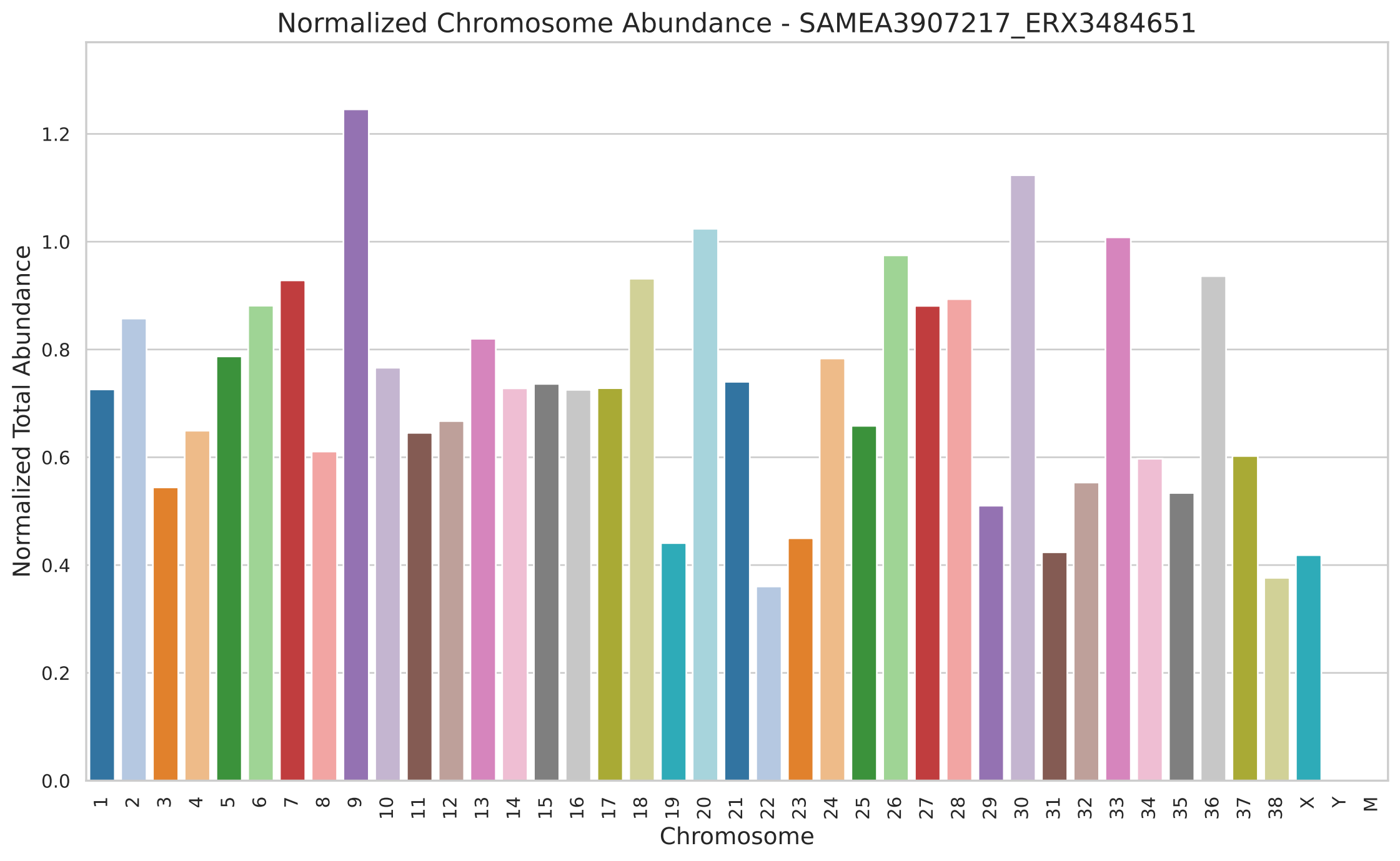

Normalized Chromosome Abundance - SAMEA3907279_ERX3484577
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

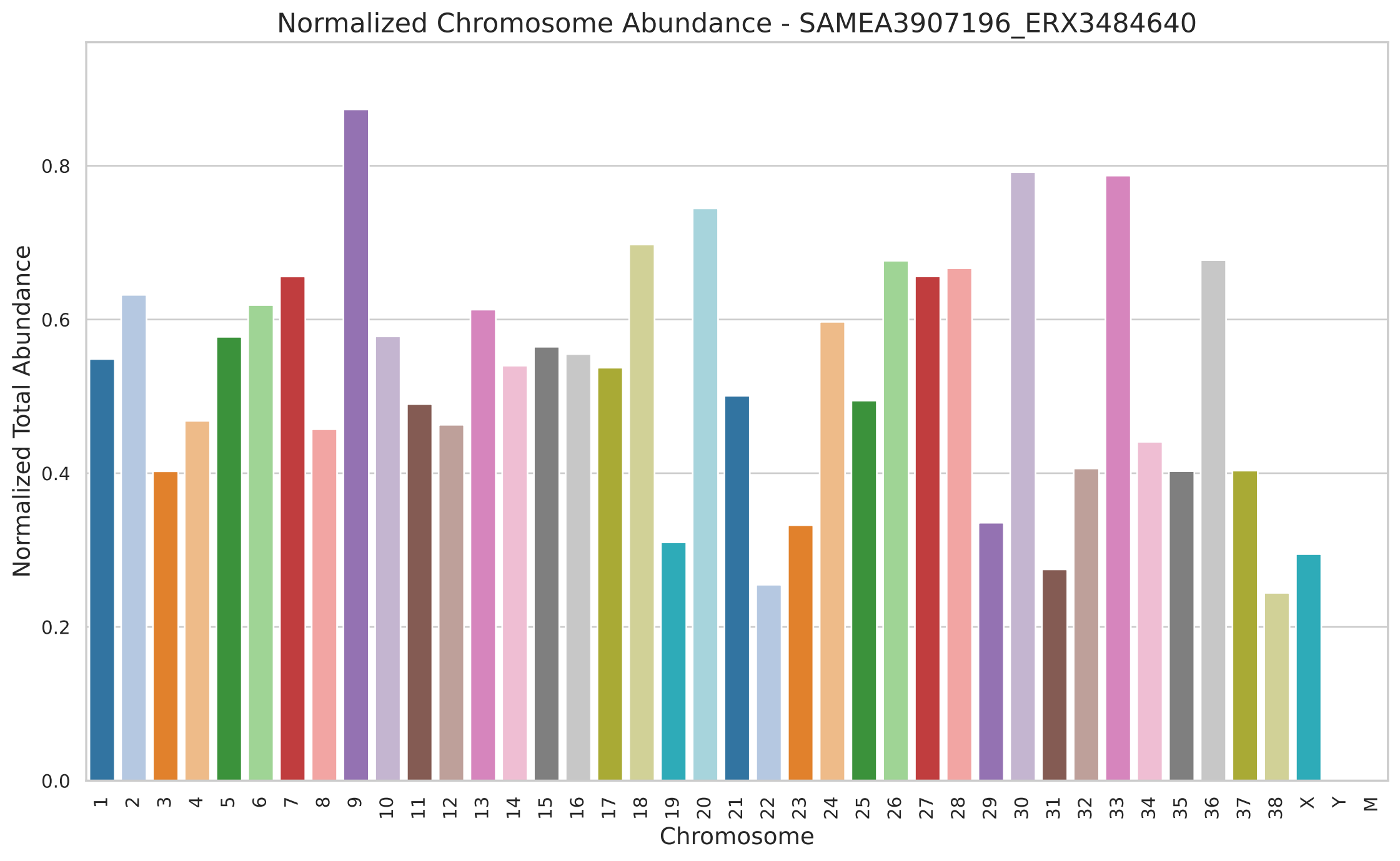

Normalized Chromosome Abundance - SAMEA3907385_ERX3484602
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

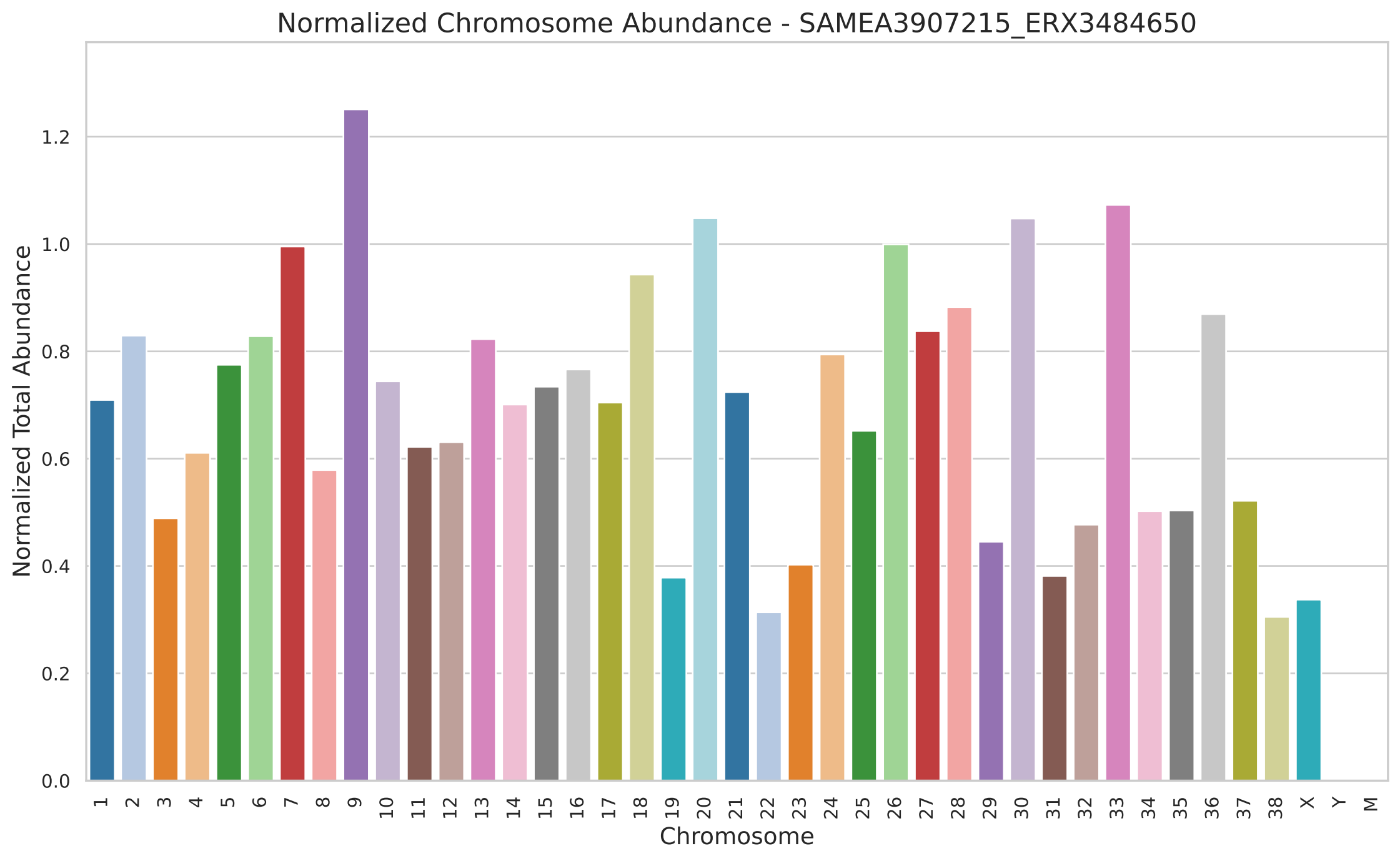

Normalized Chromosome Abundance - SAMEA3907198_ERX3484641
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

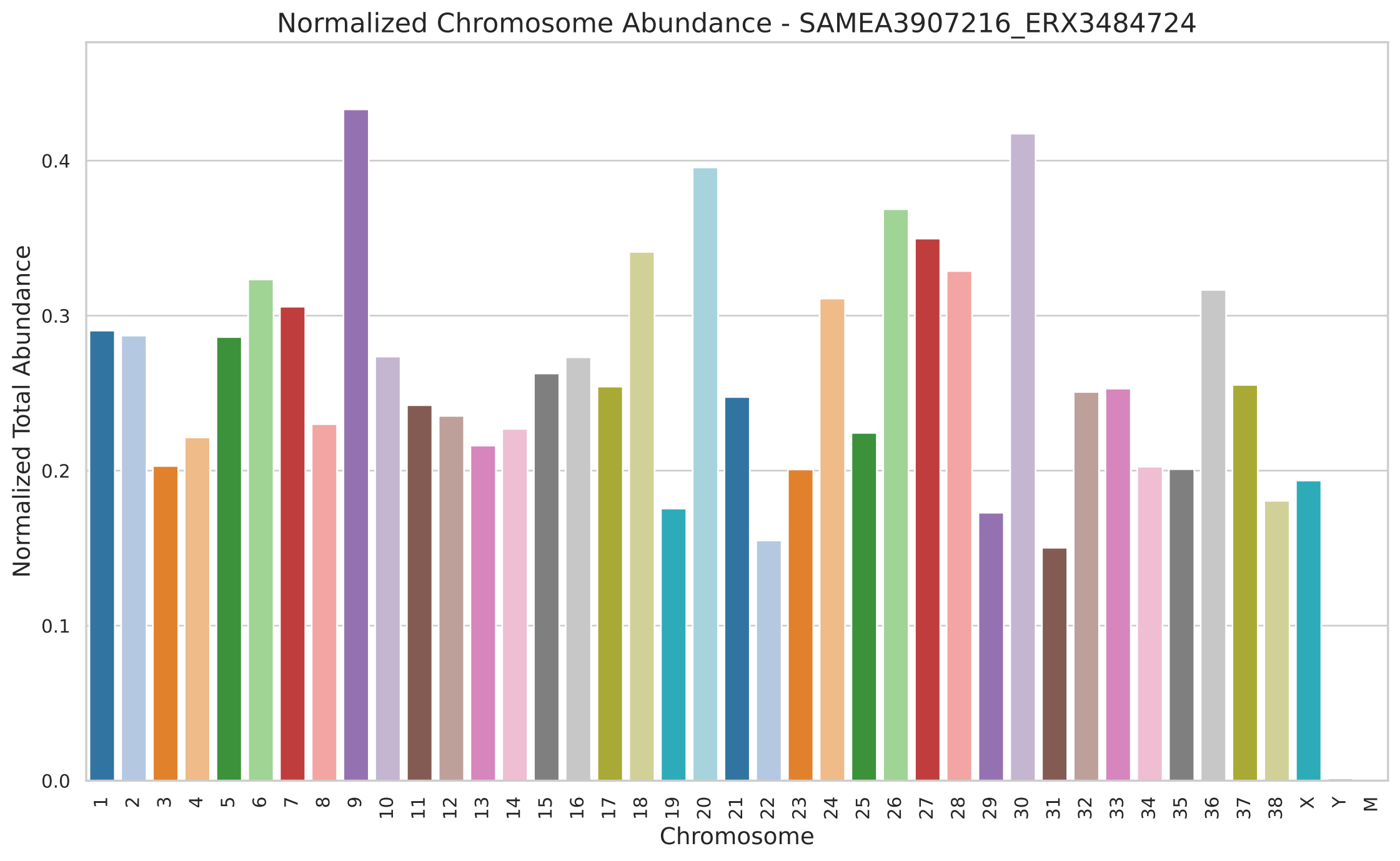

Normalized Chromosome Abundance - SAMEA3907296_ERX3484607
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

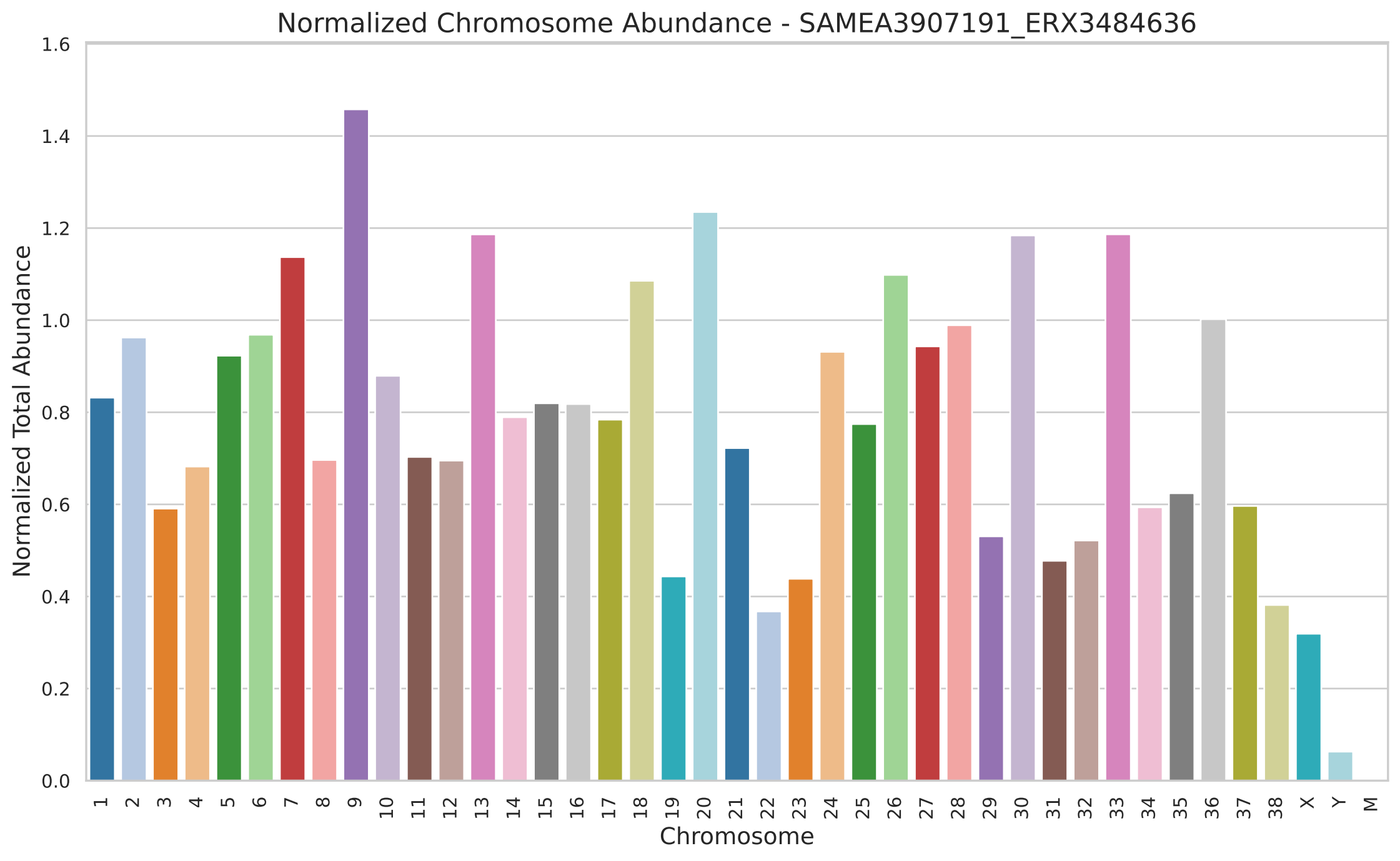

Normalized Chromosome Abundance - SAMEA3910752_ERX3484603
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

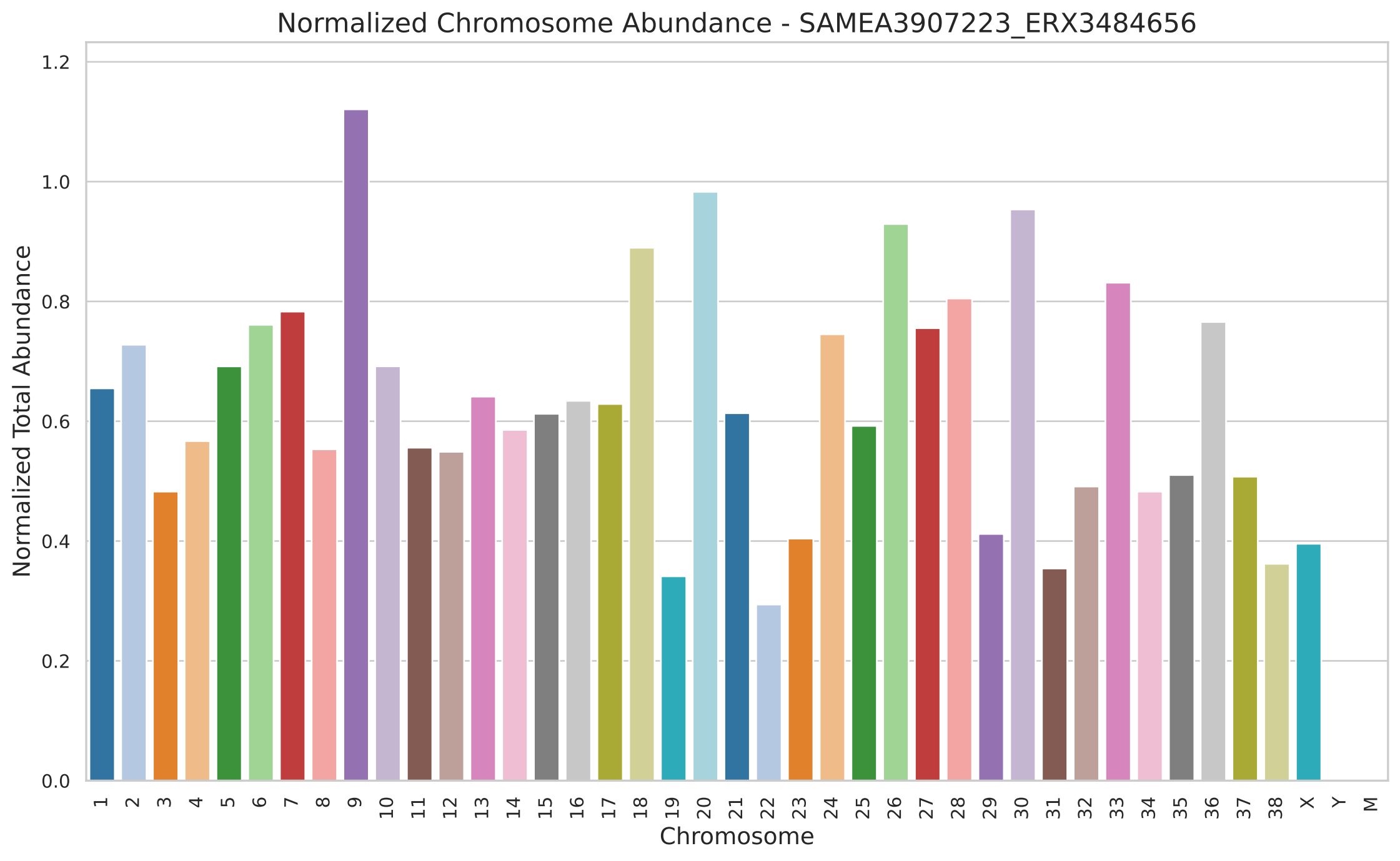

Normalized Chromosome Abundance - SAMEA3907217_ERX3484651
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

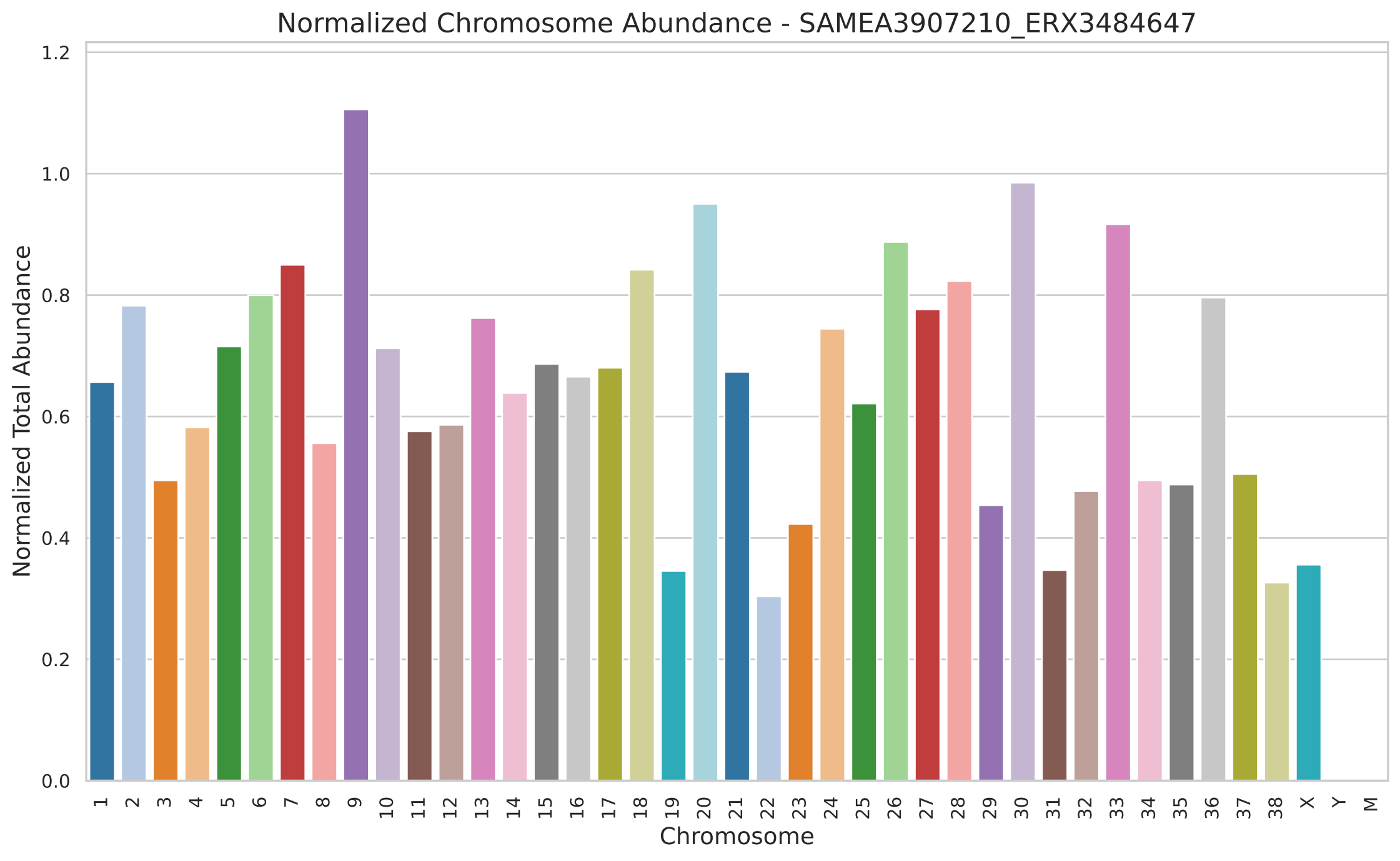

Normalized Chromosome Abundance - SAMEA3907196_ERX3484640
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

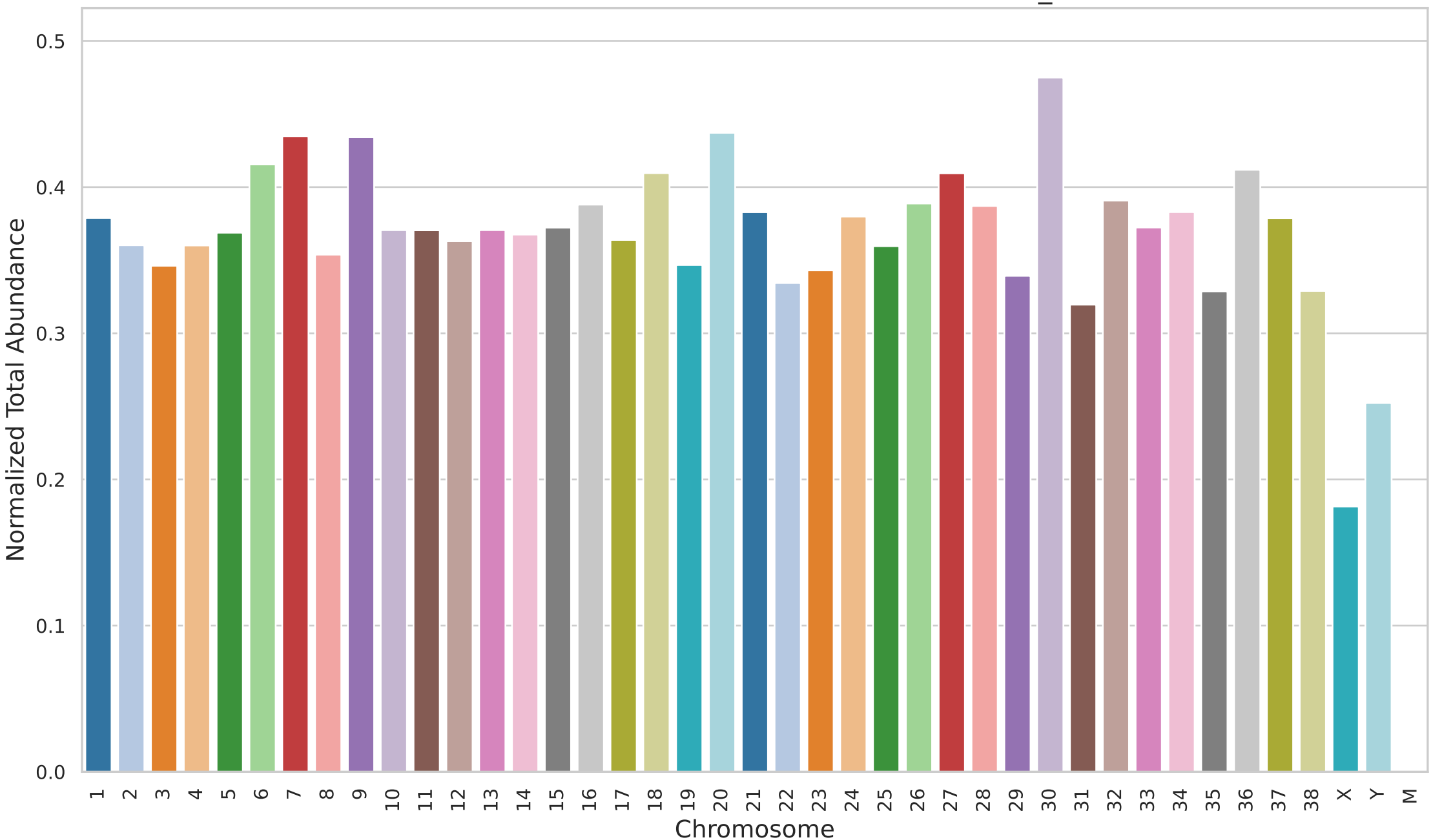

Normalized Chromosome Abundance - SAMEA3907215_ERX3484650
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

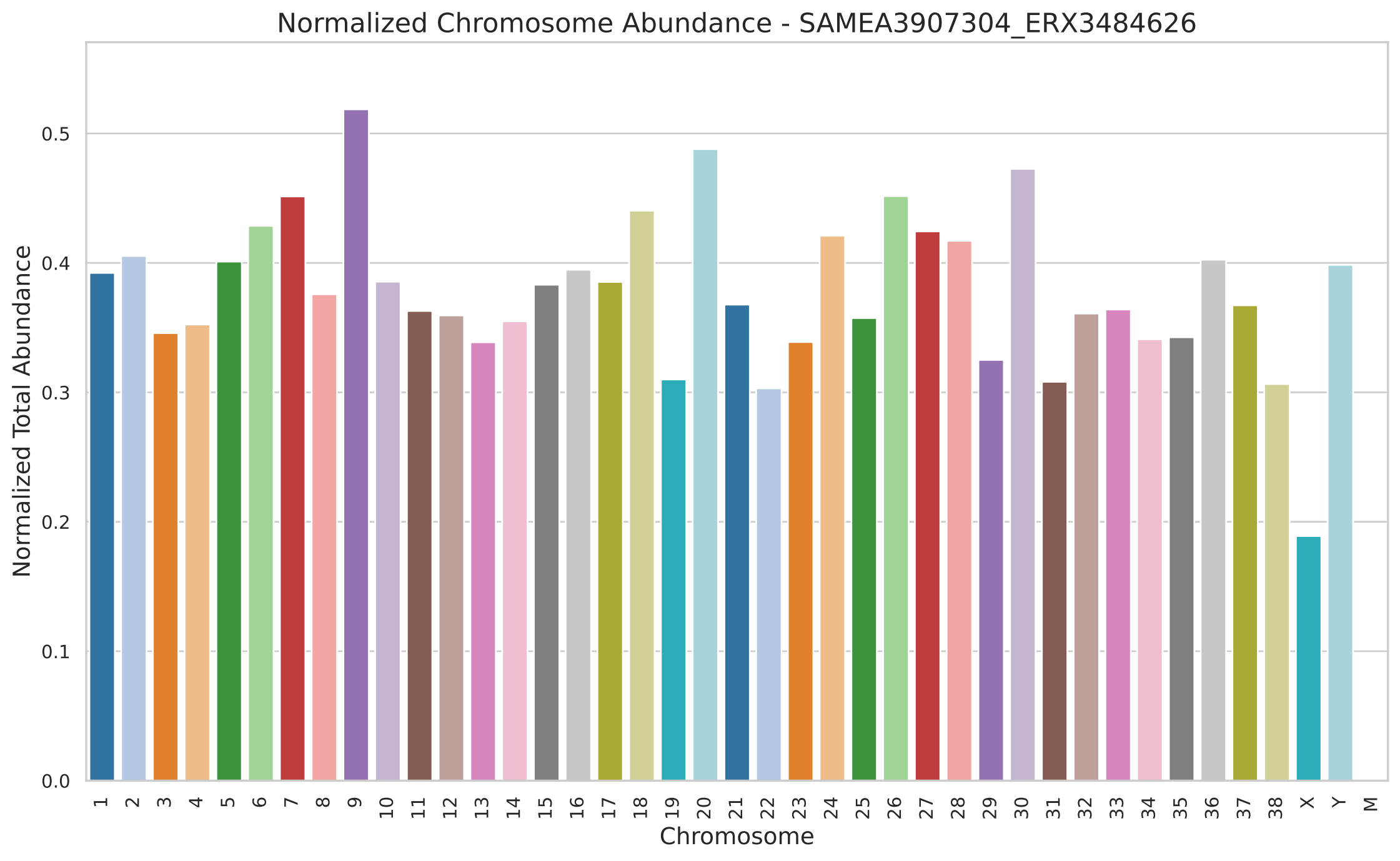

Normalized Chromosome Abundance - SAMEA3907216_ERX3484724
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

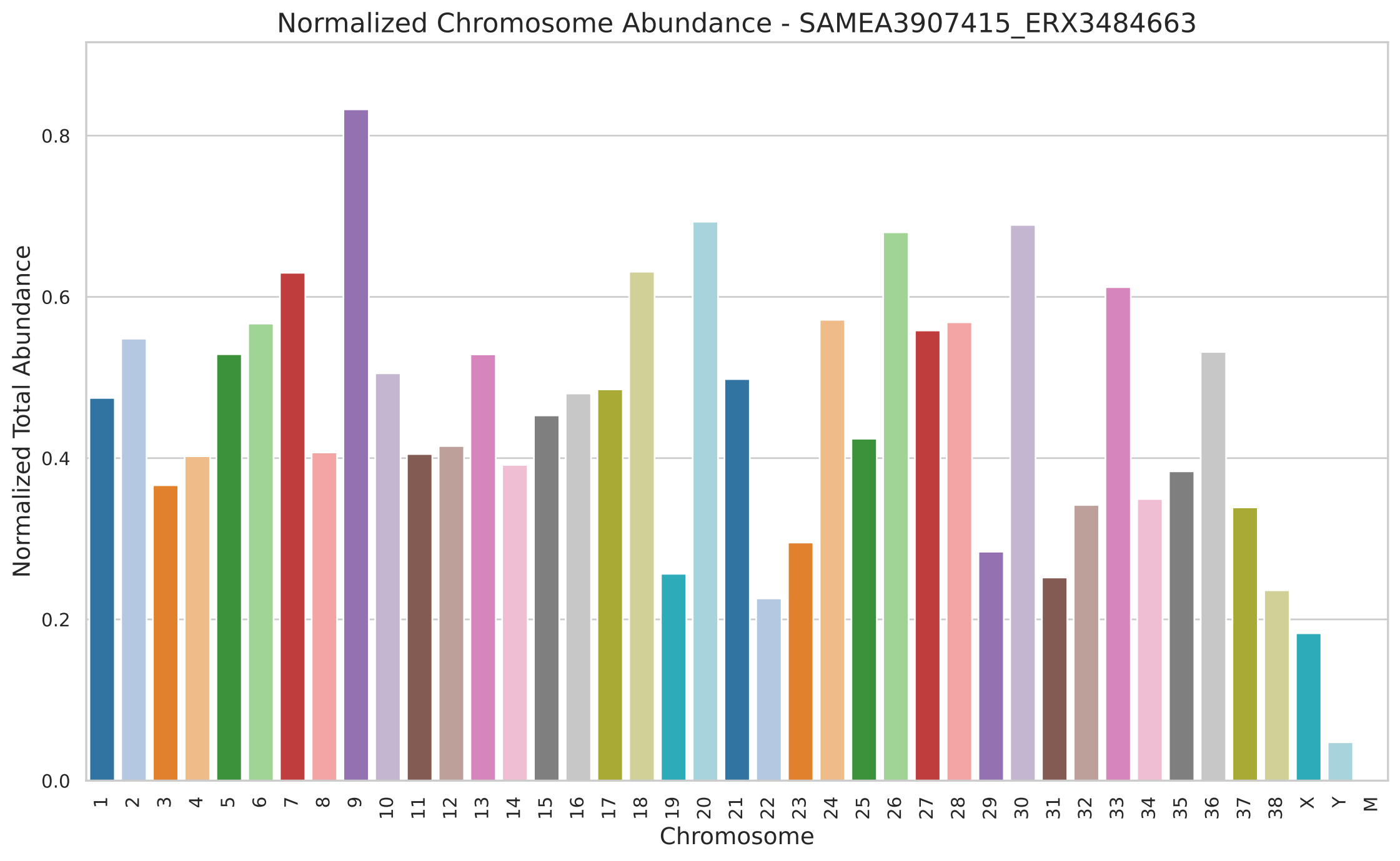

Normalized Chromosome Abundance - SAMEA3907191_ERX3484636
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

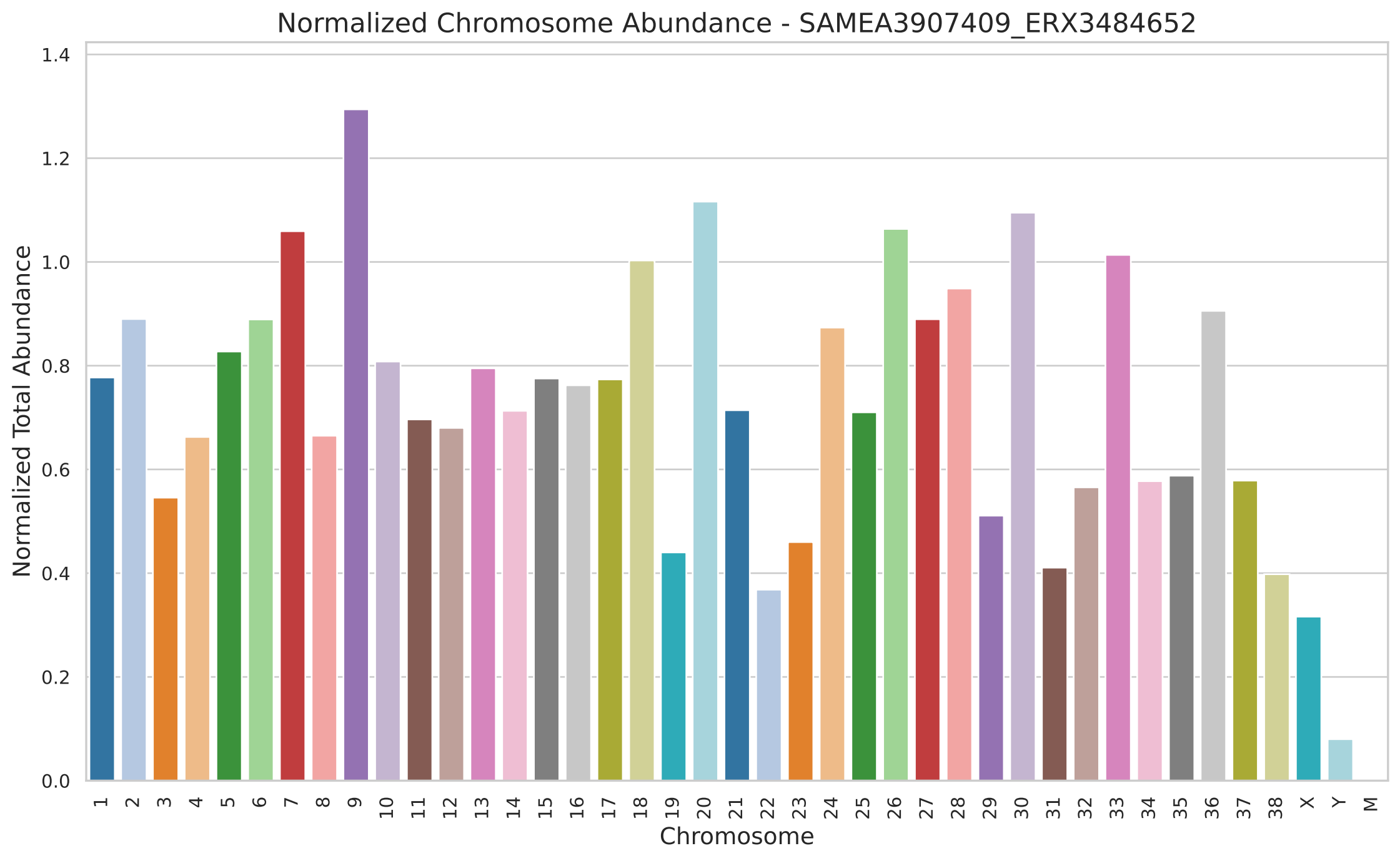

Normalized Chromosome Abundance - SAMEA3907223_ERX3484656
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

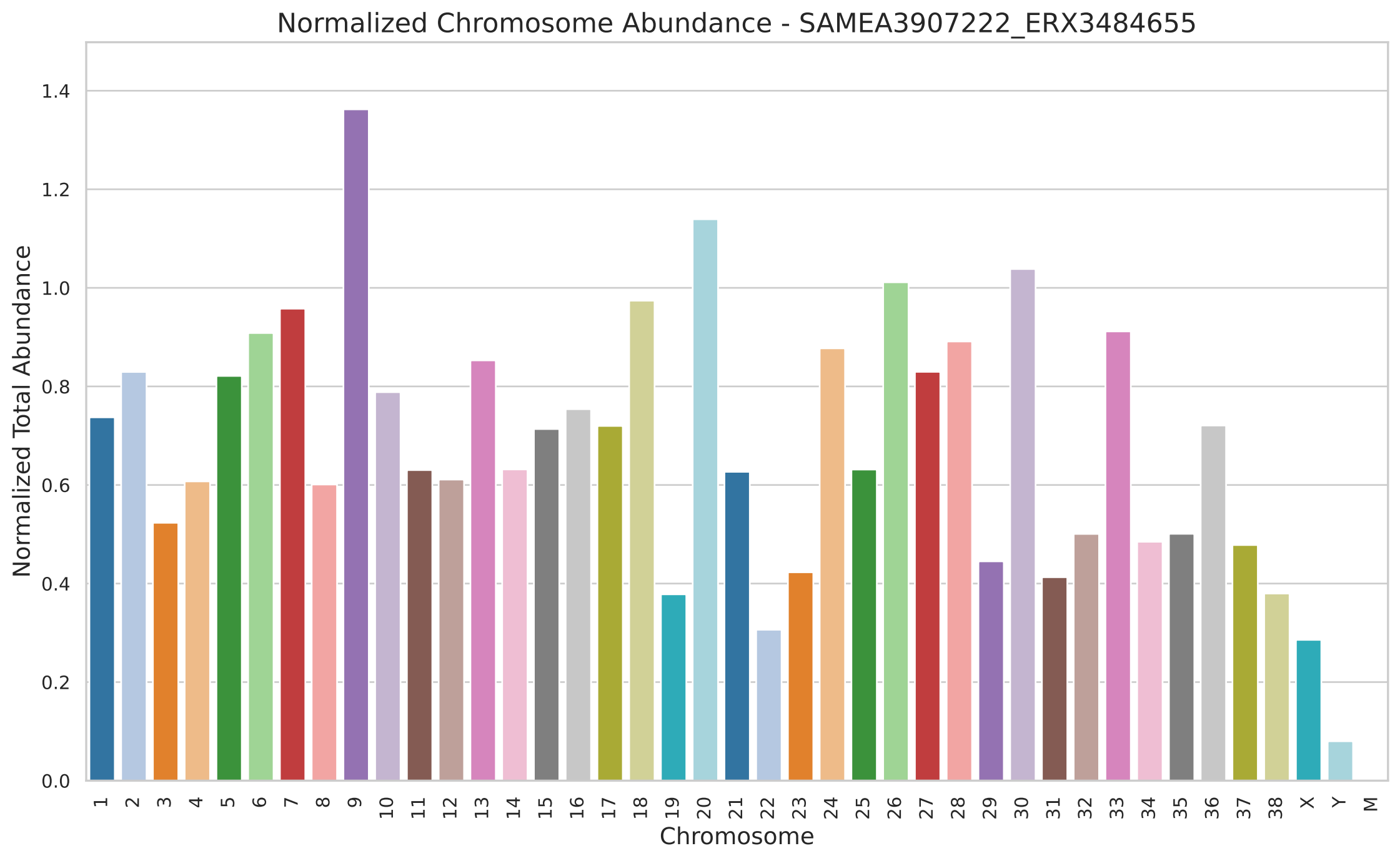

Normalized Chromosome Abundance - SAMEA3907210_ERX3484647
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

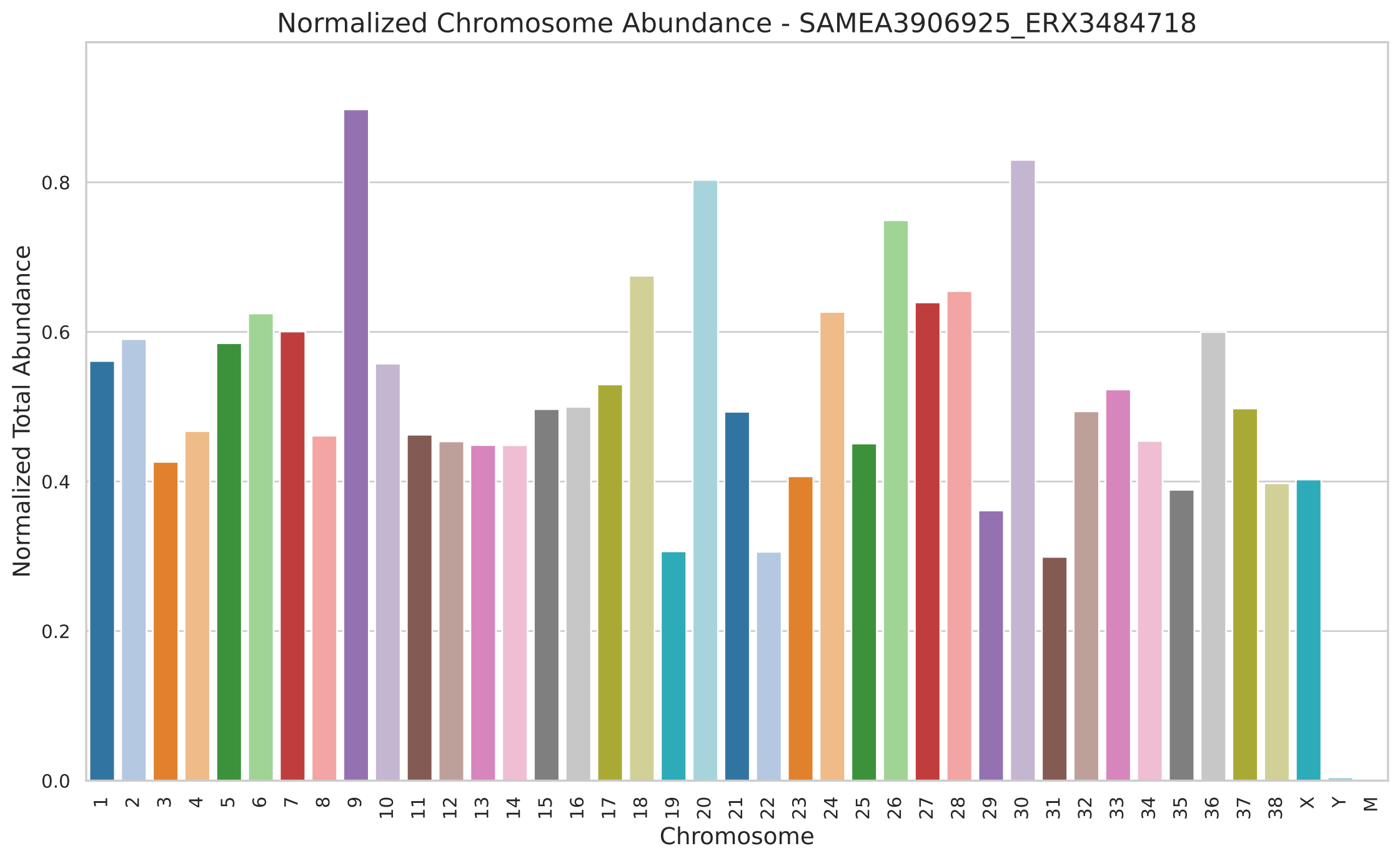

Normalized Chromosome Abundance - SAMEA3907262_ERX3484585
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

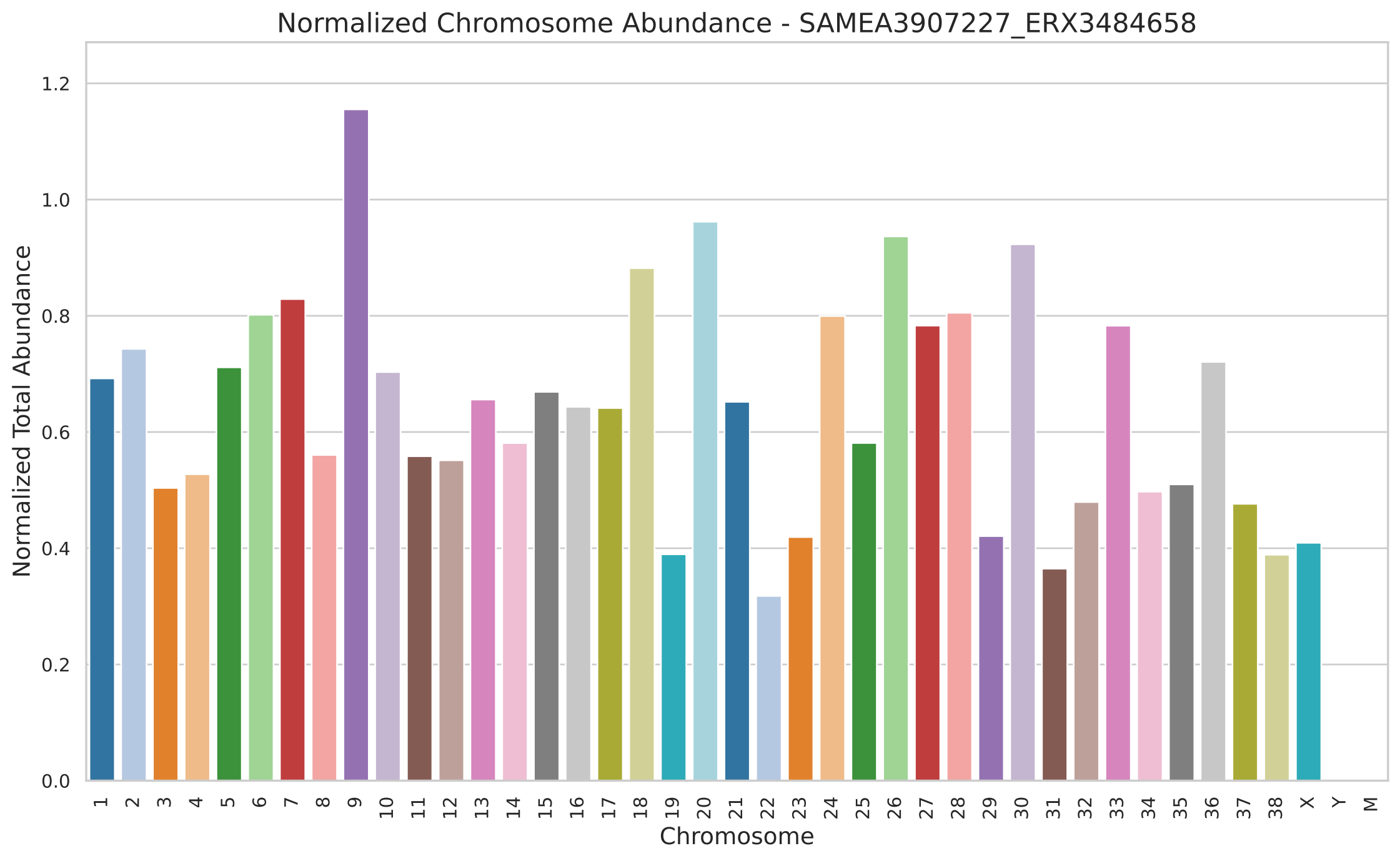

Normalized Chromosome Abundance - SAMEA3907304_ERX3484626
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

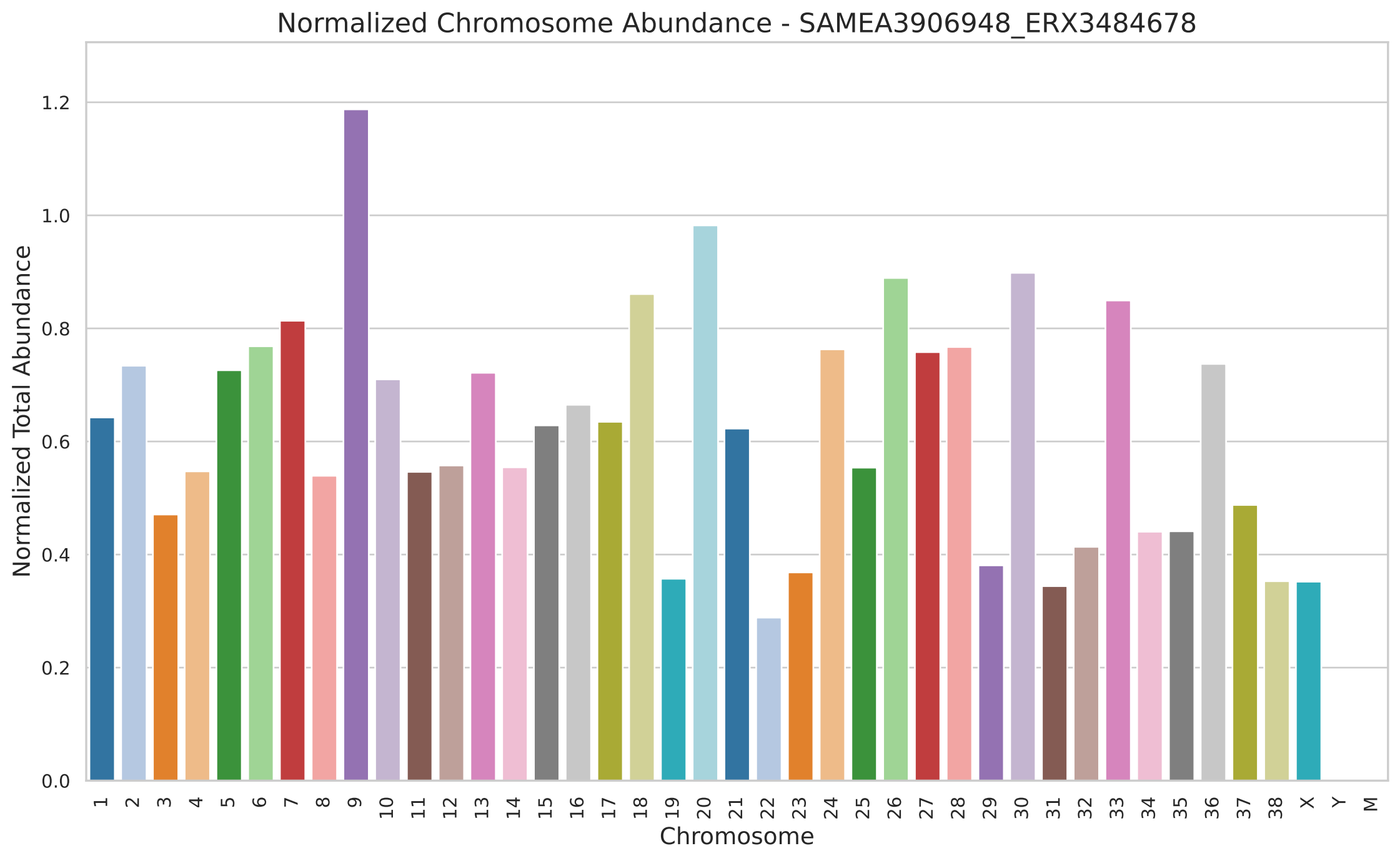

Normalized Chromosome Abundance - SAMEA3907415_ERX3484663
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

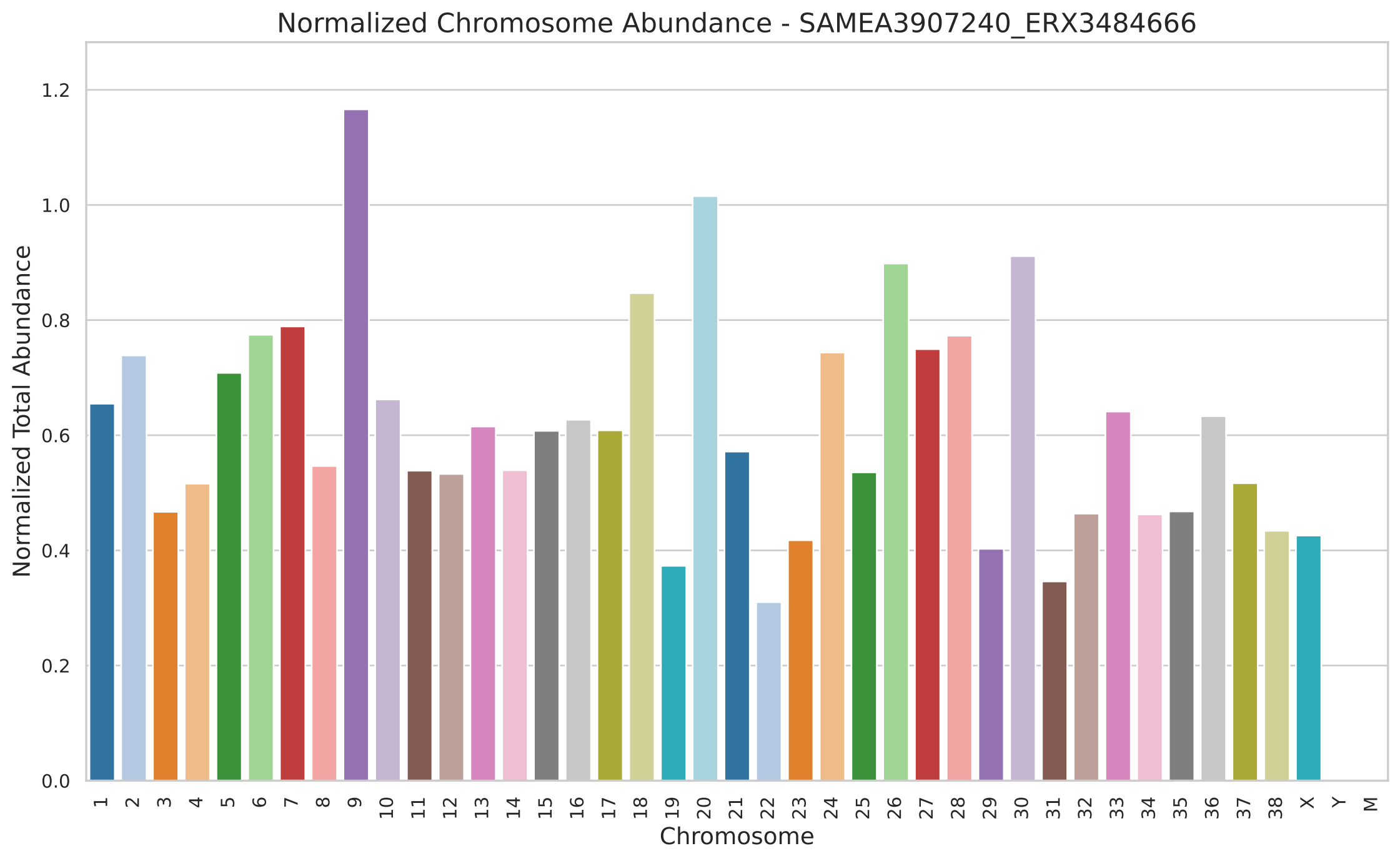

Normalized Chromosome Abundance - SAMEA3907409_ERX3484652
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

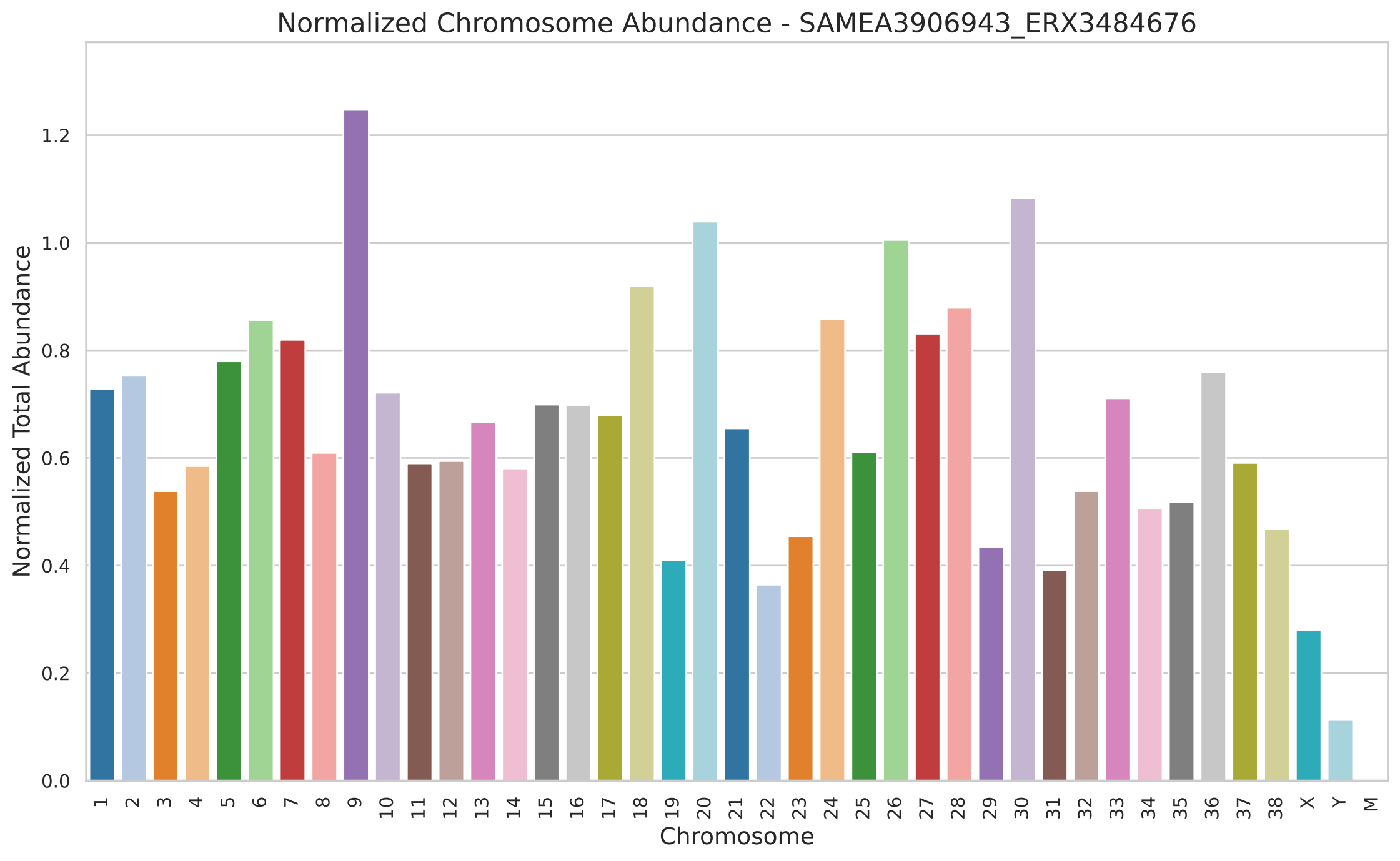

Normalized Chromosome Abundance - SAMEA3907222_ERX3484655
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

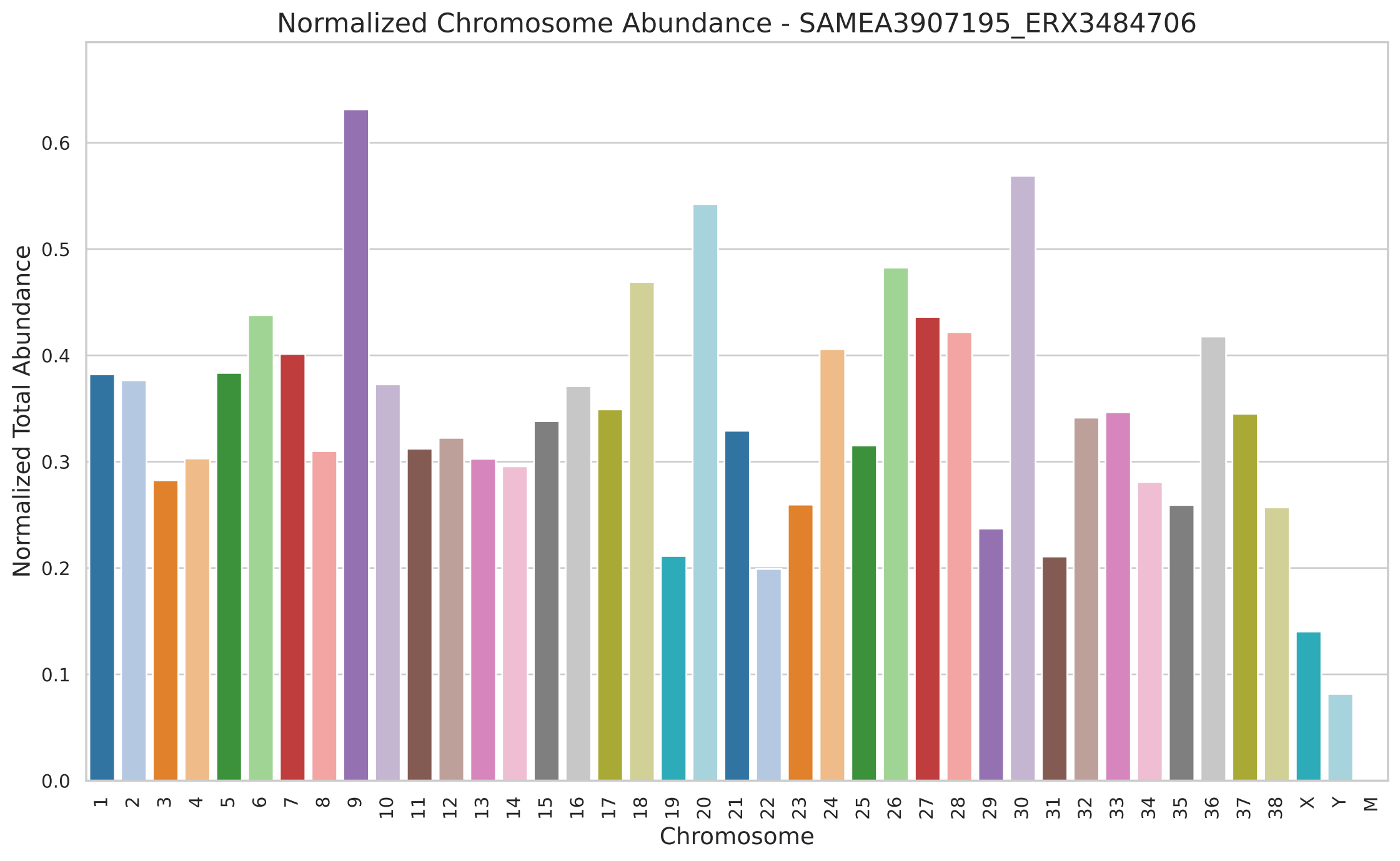

Normalized Chromosome Abundance - SAMEA3906925_ERX3484718
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

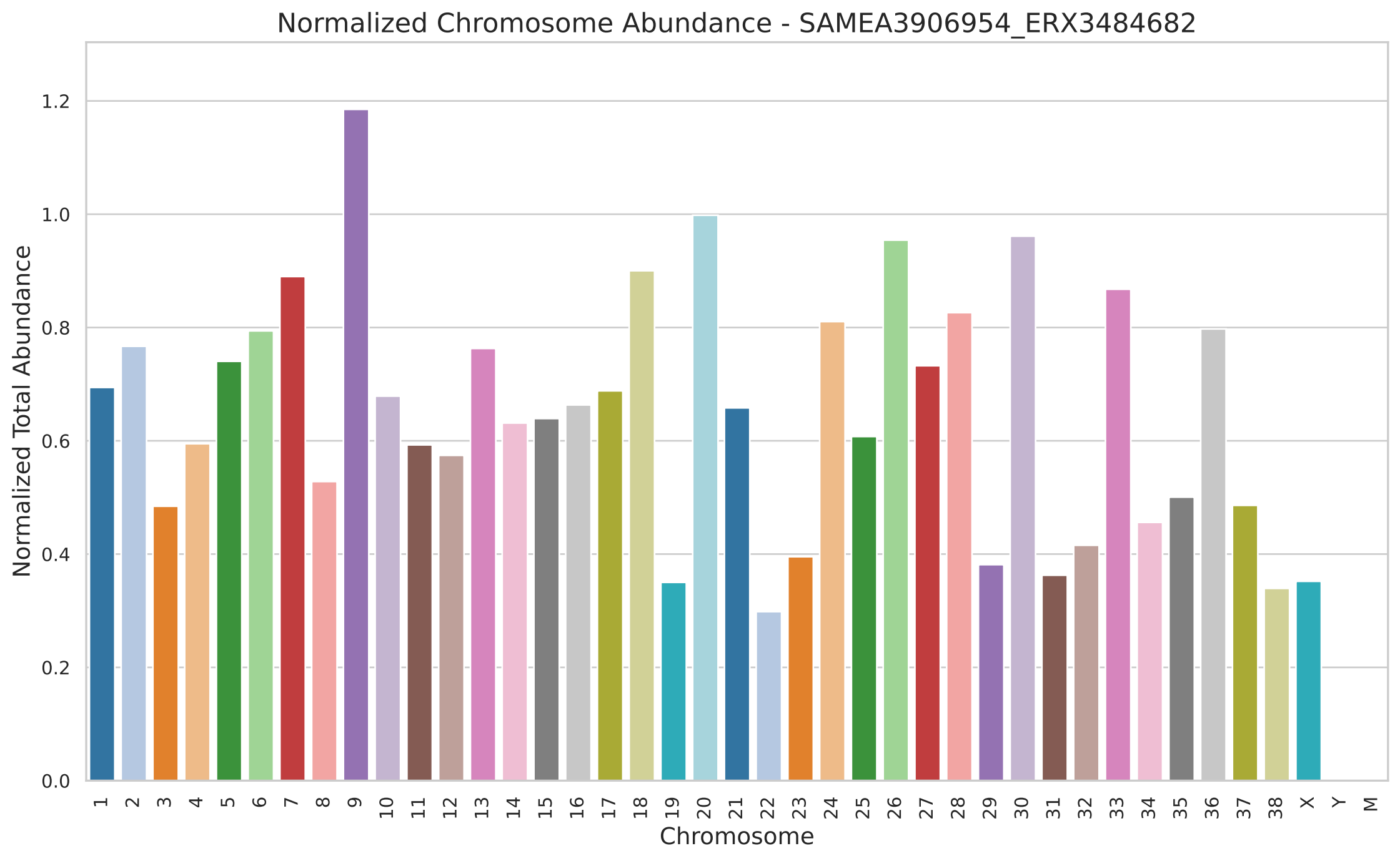

Normalized Chromosome Abundance - SAMEA3907227_ERX3484658
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

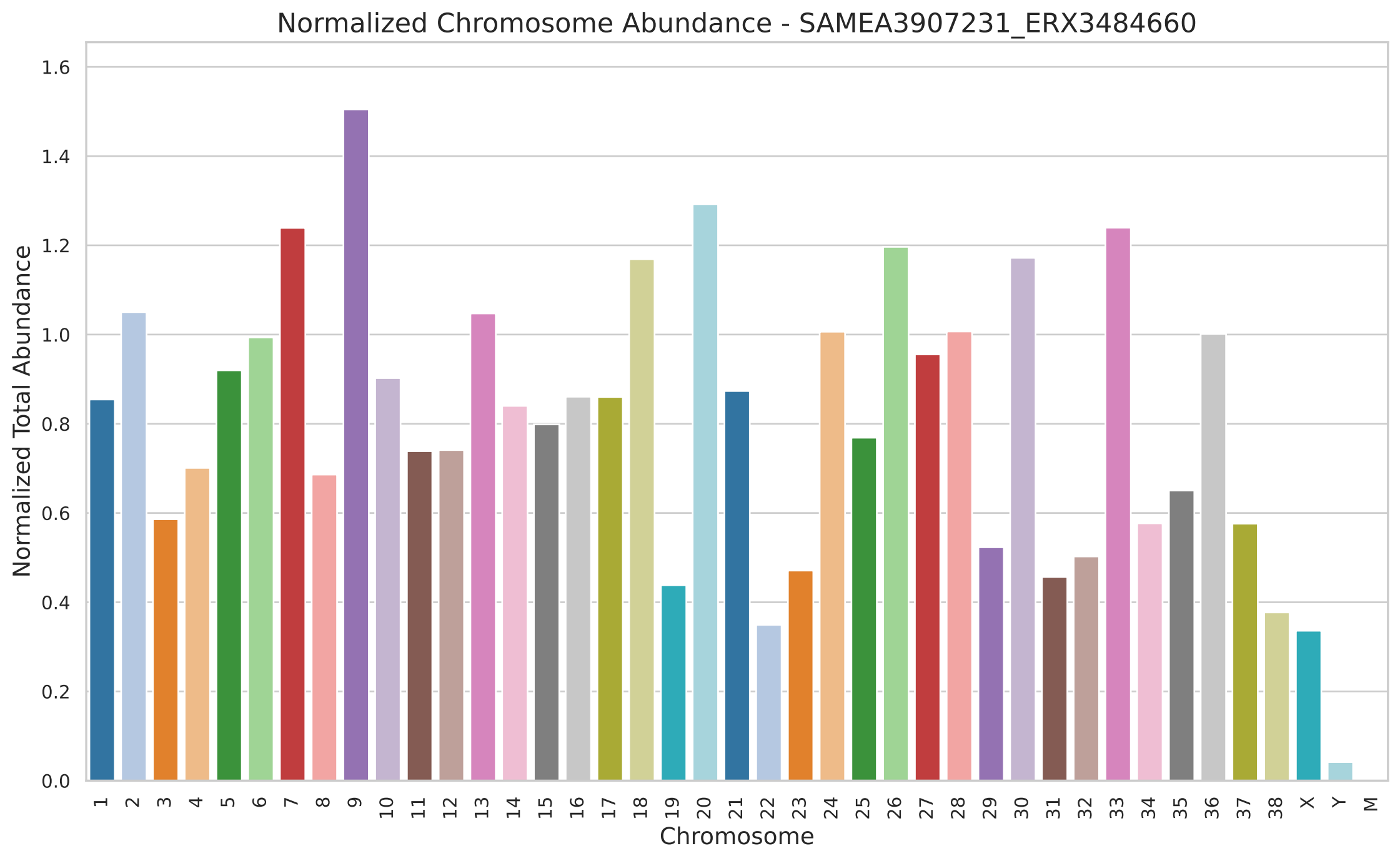

Normalized Chromosome Abundance - SAMEA3906948_ERX3484678
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

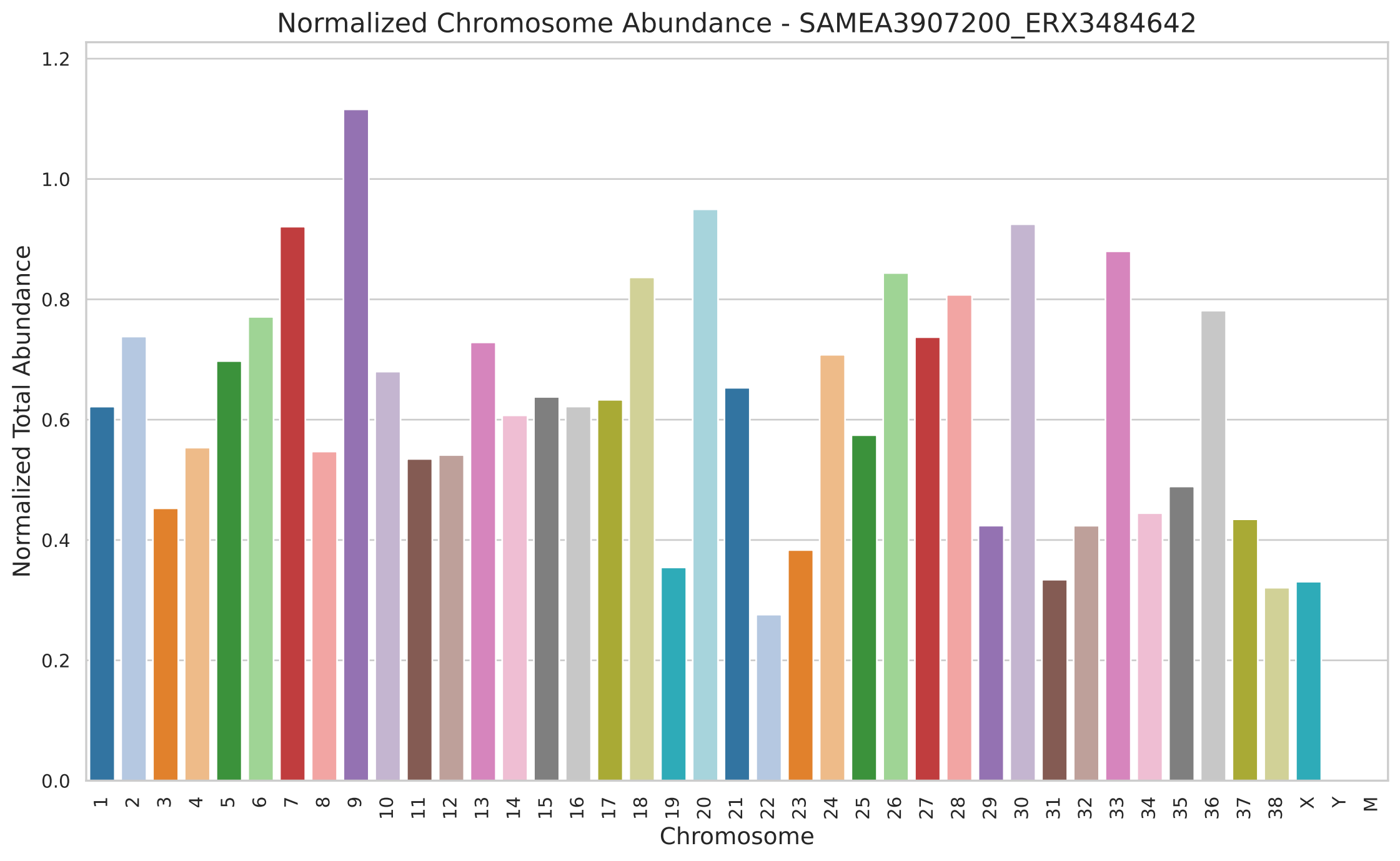

Normalized Chromosome Abundance - SAMEA3907240_ERX3484666
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

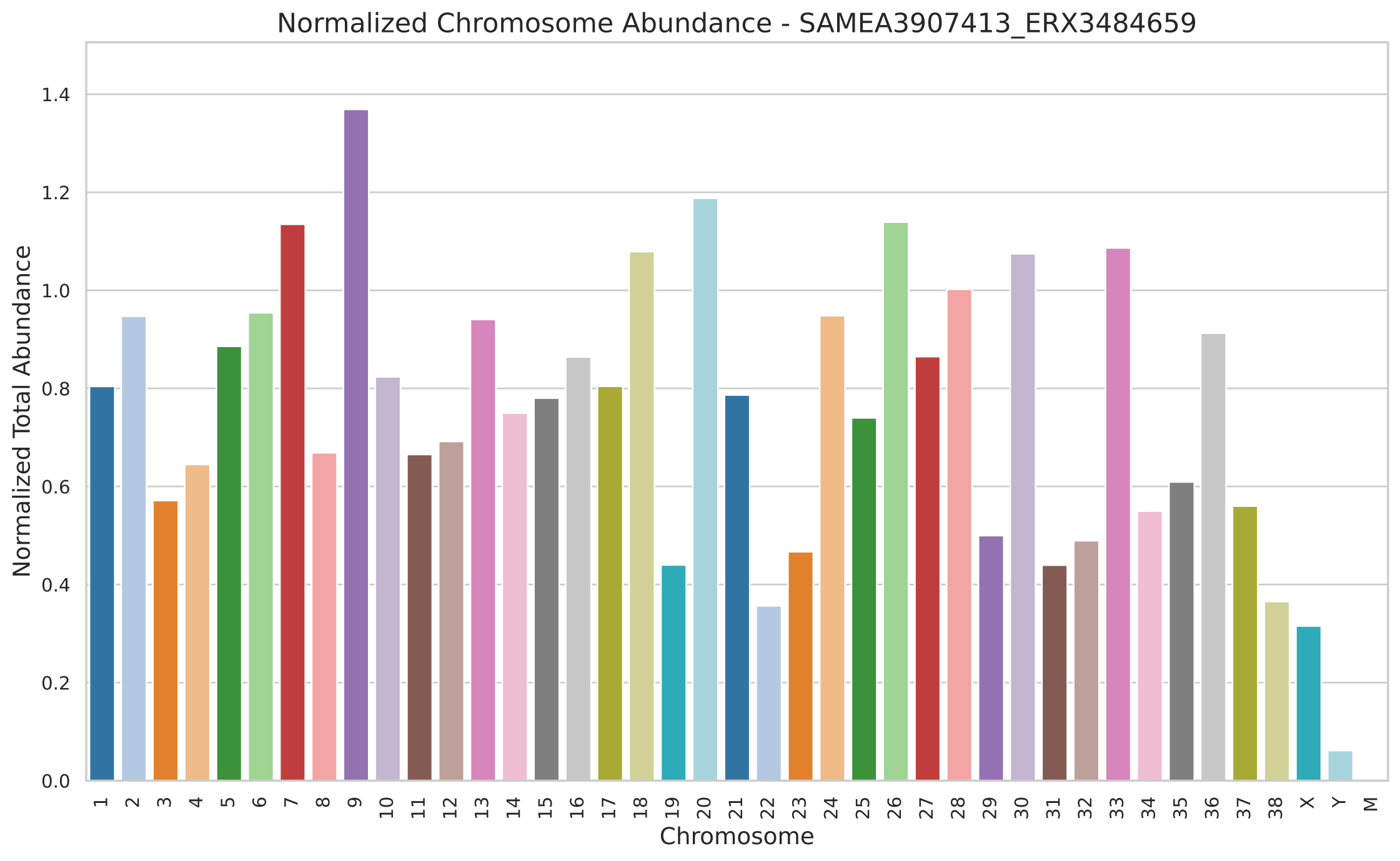

Normalized Chromosome Abundance - SAMEA3906943_ERX3484676
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

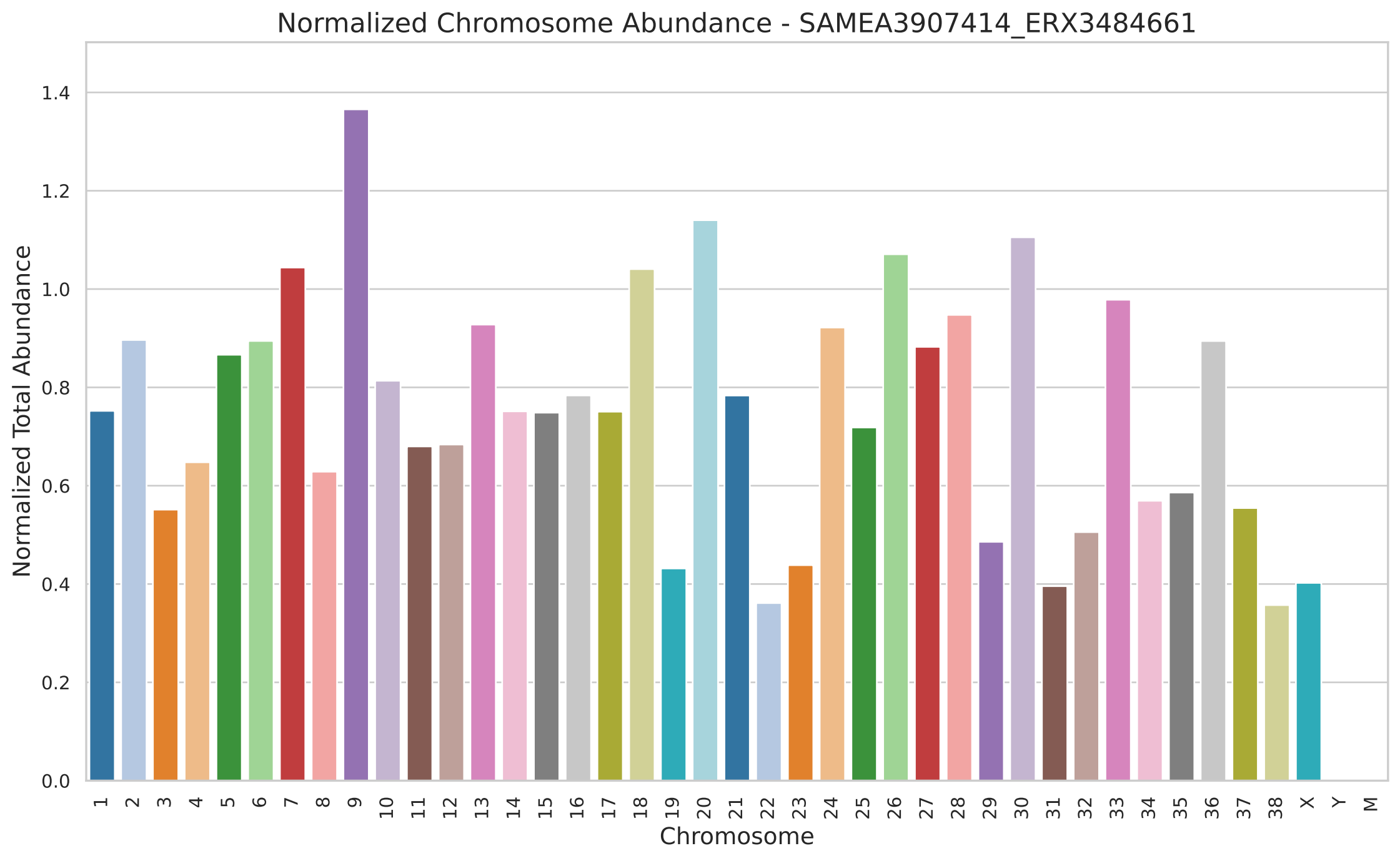

Normalized Chromosome Abundance - SAMEA3907195_ERX3484706
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

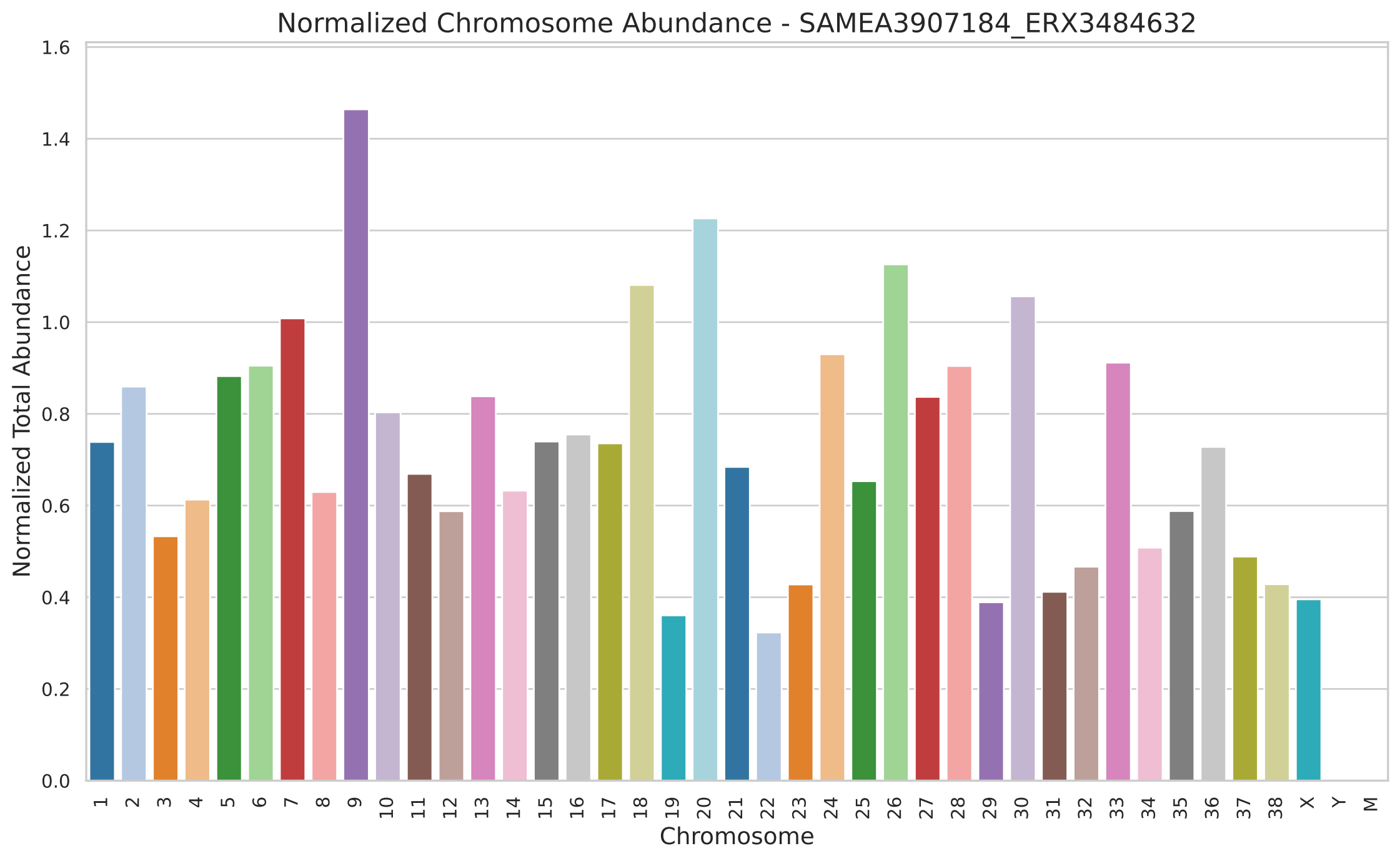

Normalized Chromosome Abundance - SAMEA3906954_ERX3484682
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

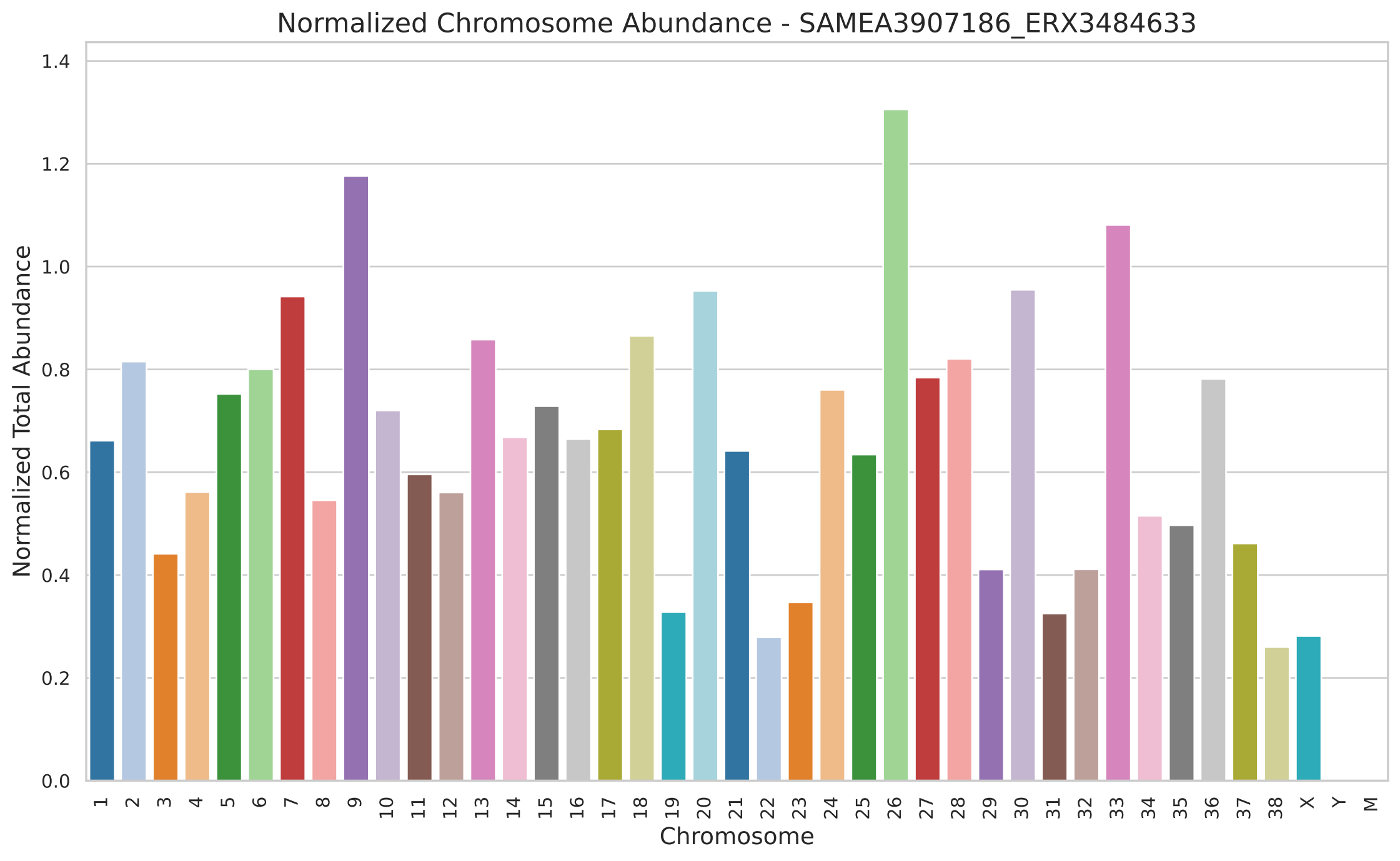

Normalized Chromosome Abundance - SAMEA3907231_ERX3484660
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

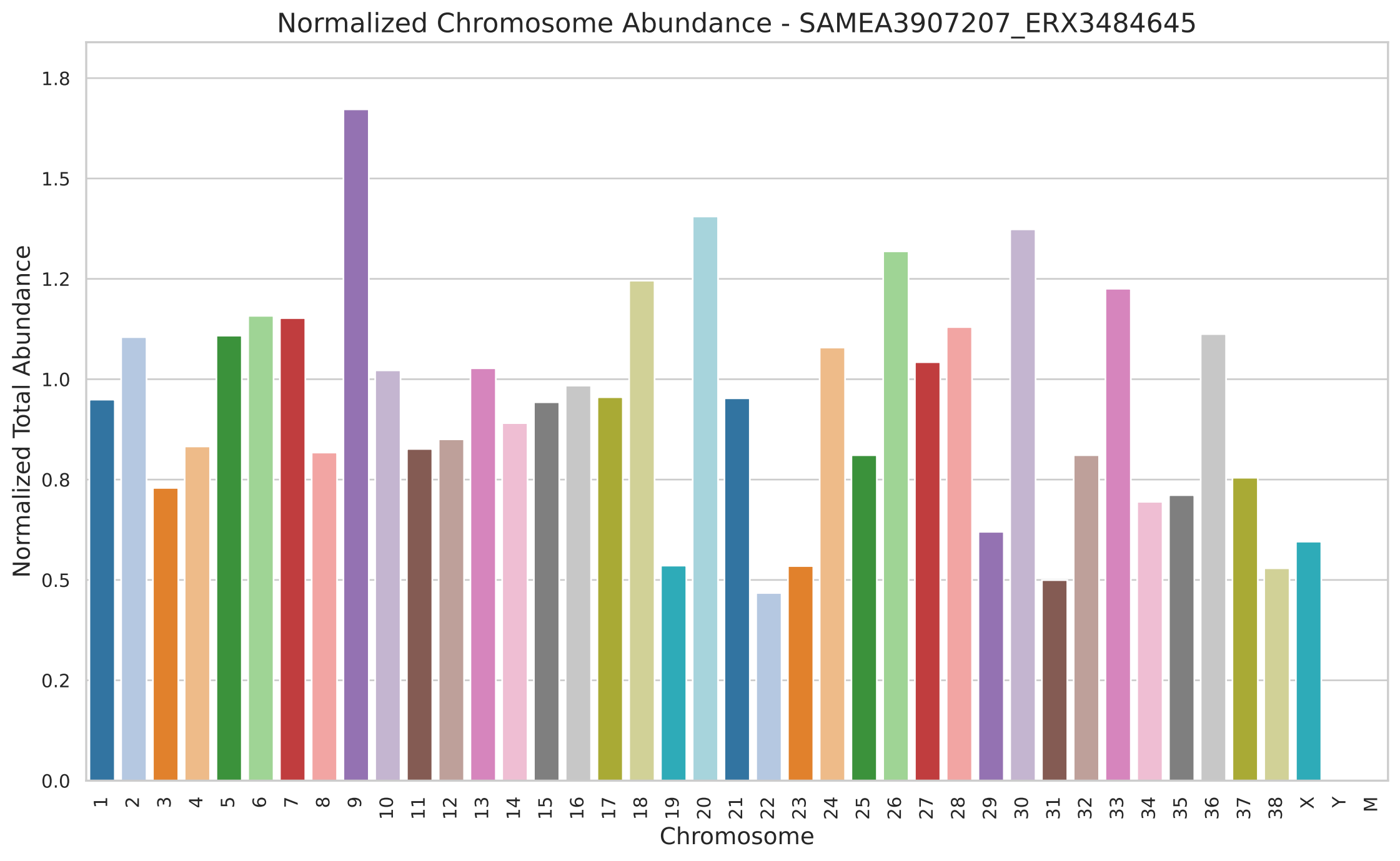

Normalized Chromosome Abundance - SAMEA3907200_ERX3484642
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

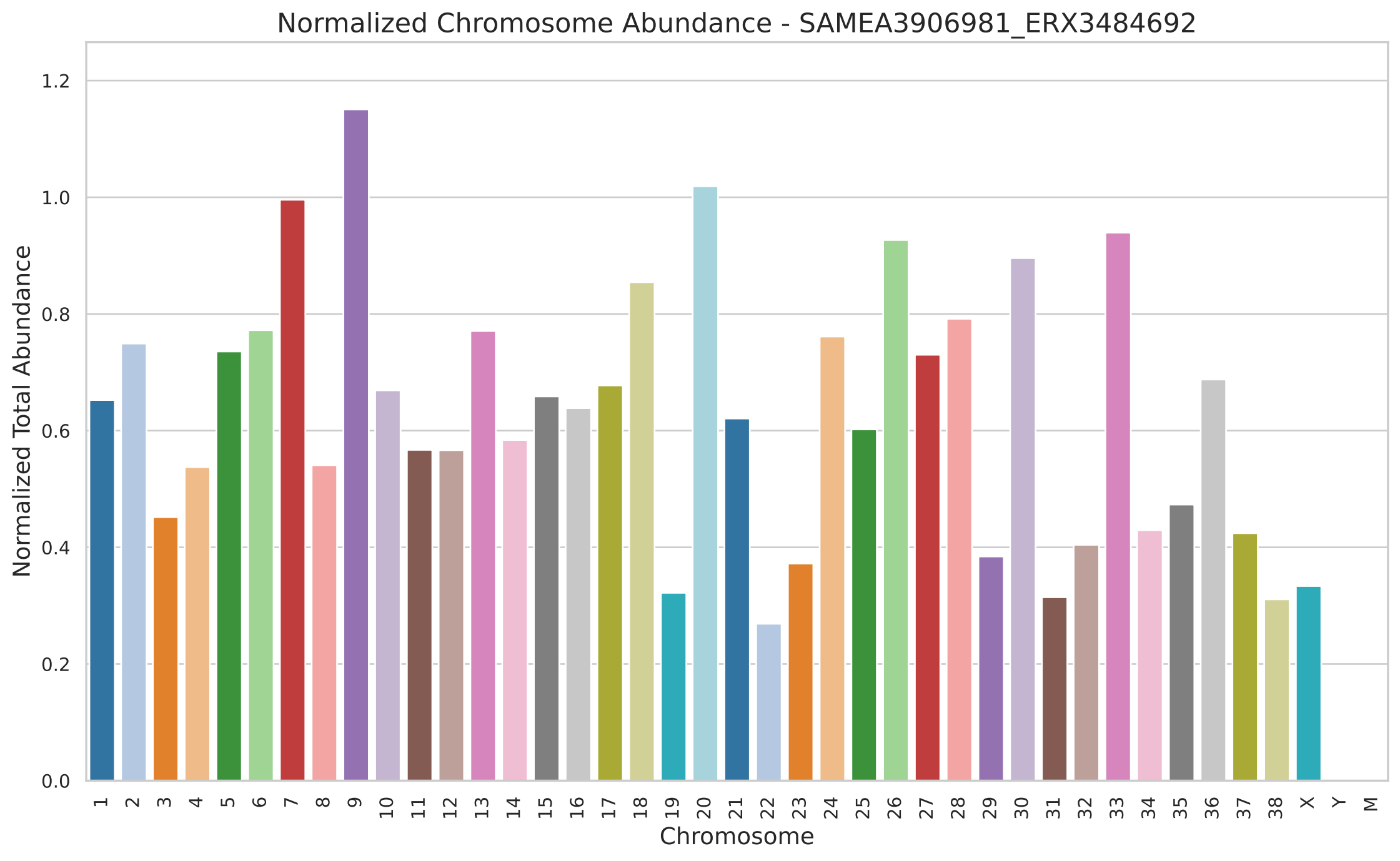

Normalized Chromosome Abundance - SAMEA3907413_ERX3484659
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

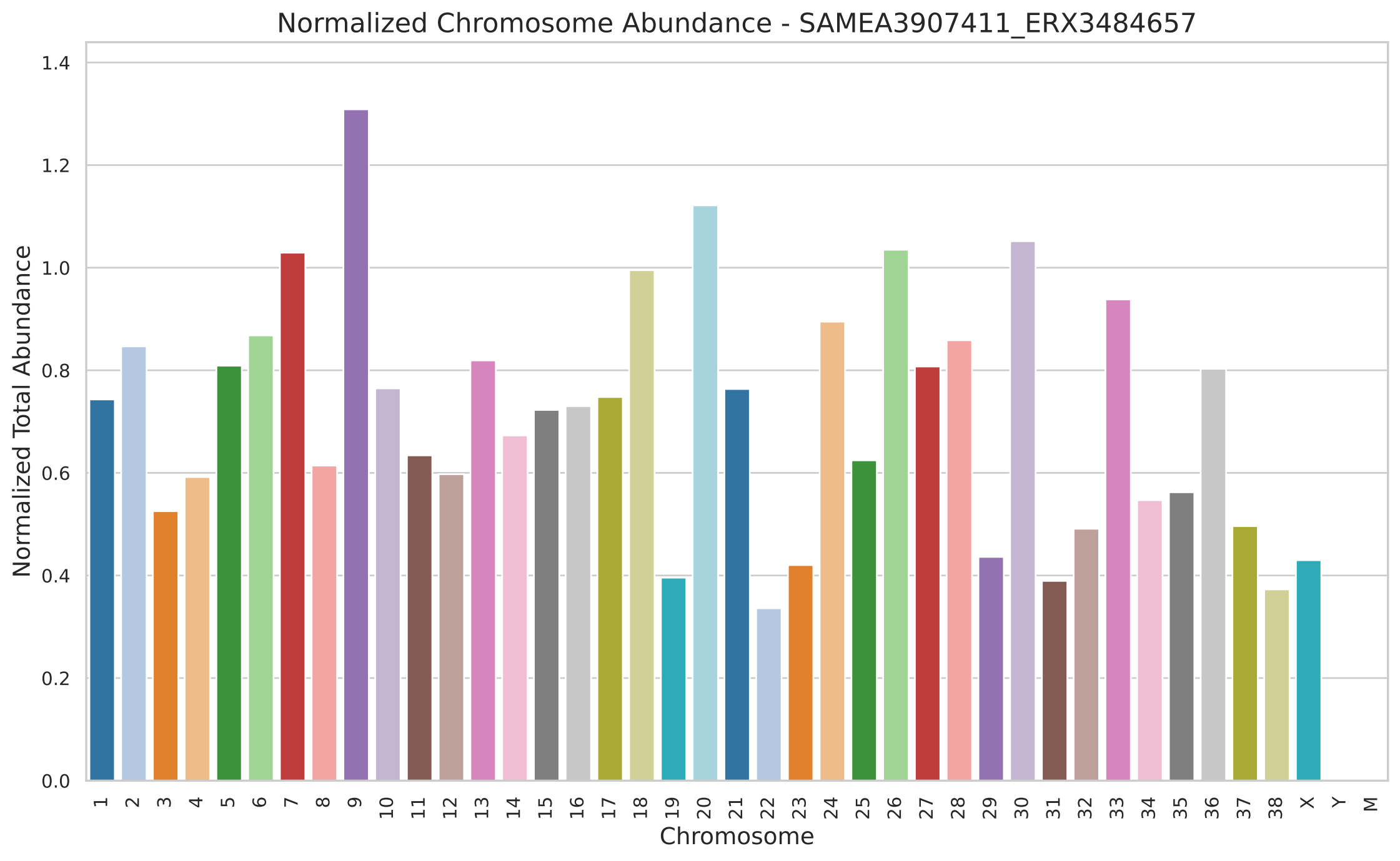

Normalized Chromosome Abundance - SAMEA3907414_ERX3484661
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

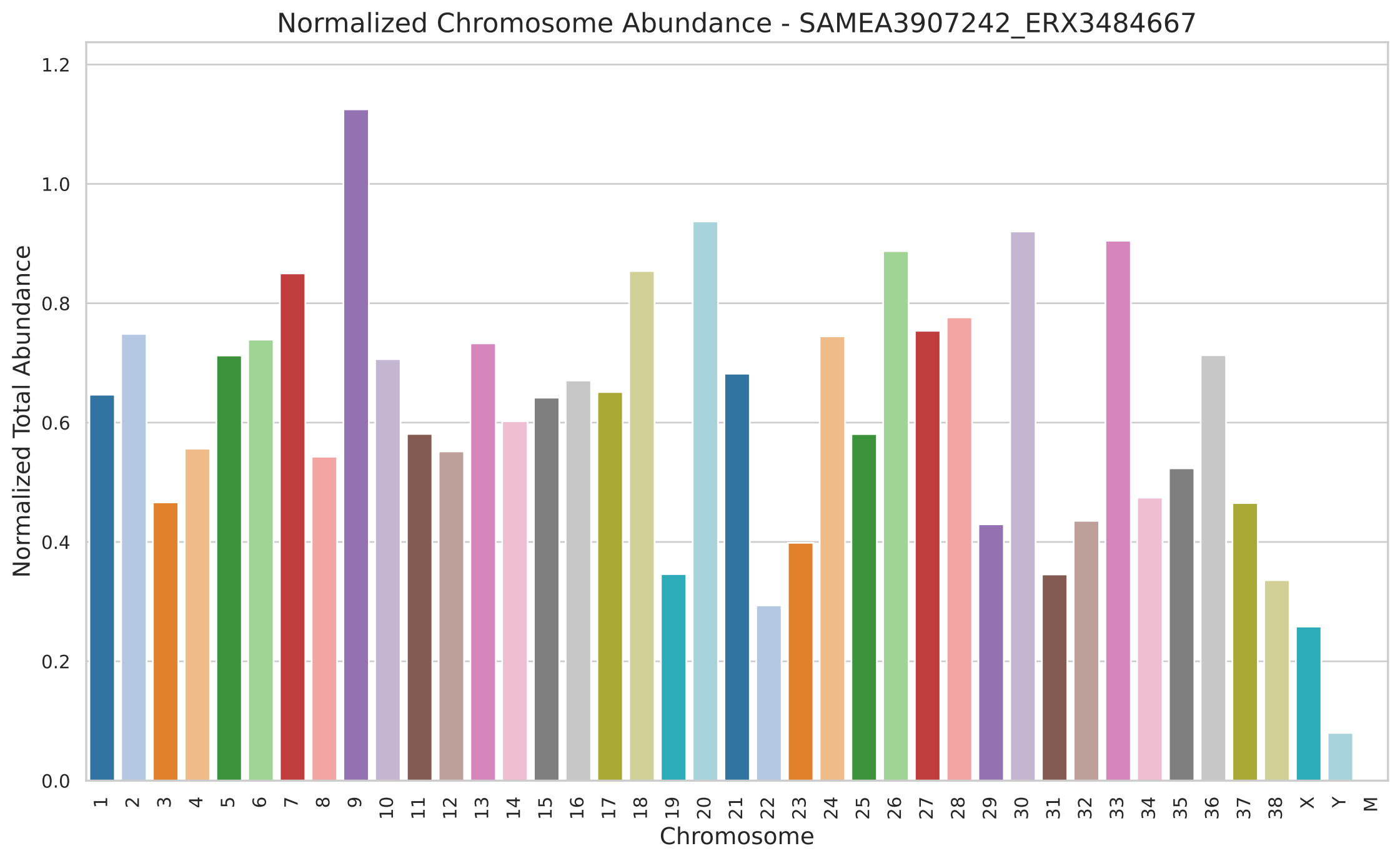

Normalized Chromosome Abundance - SAMEA3907184_ERX3484632
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

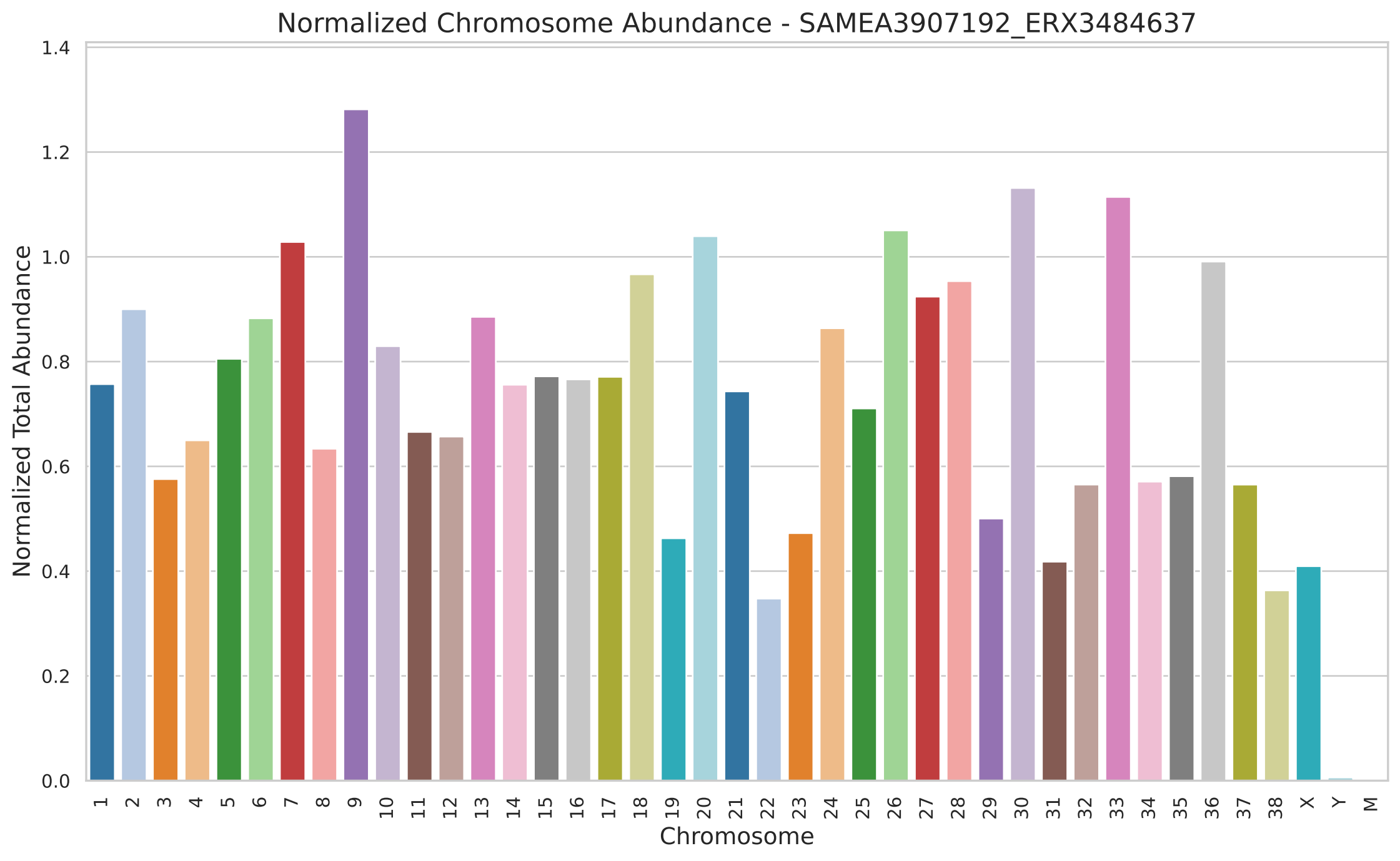

Normalized Chromosome Abundance - SAMEA3907186_ERX3484633
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

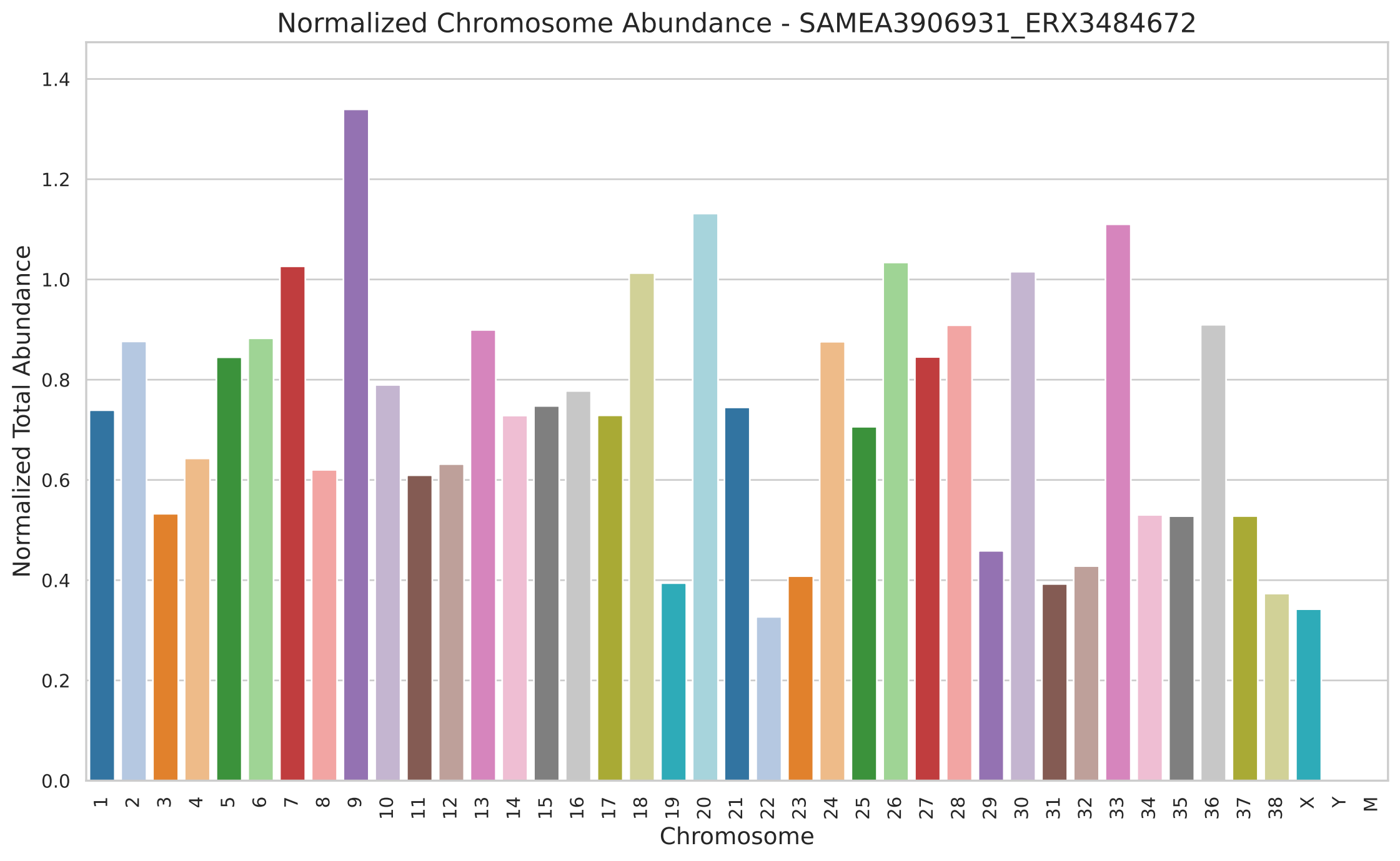

Normalized Chromosome Abundance - SAMEA3907207_ERX3484645
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

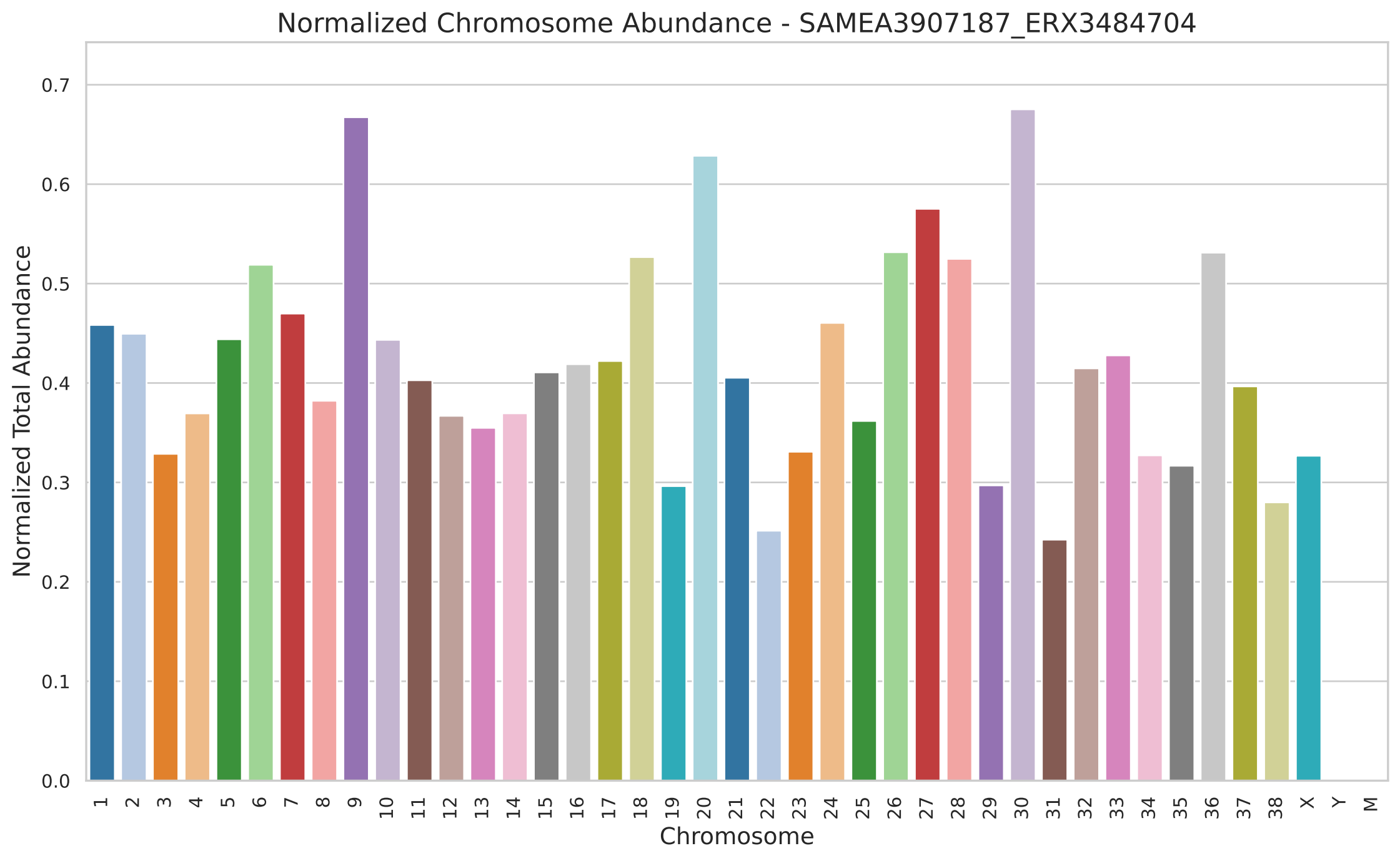

Normalized Chromosome Abundance - SAMEA3906981_ERX3484692
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

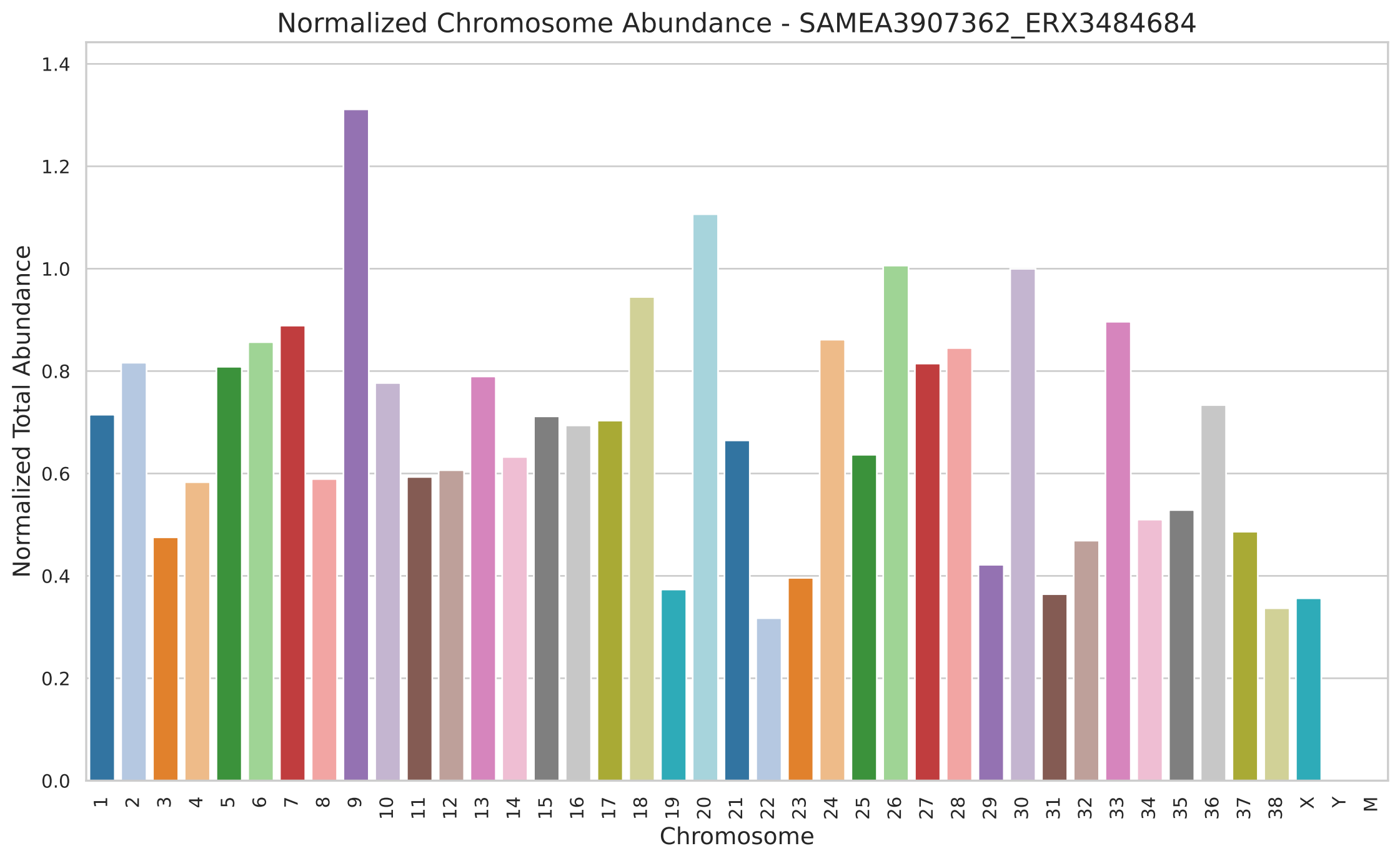

Normalized Chromosome Abundance - SAMEA3907411_ERX3484657
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

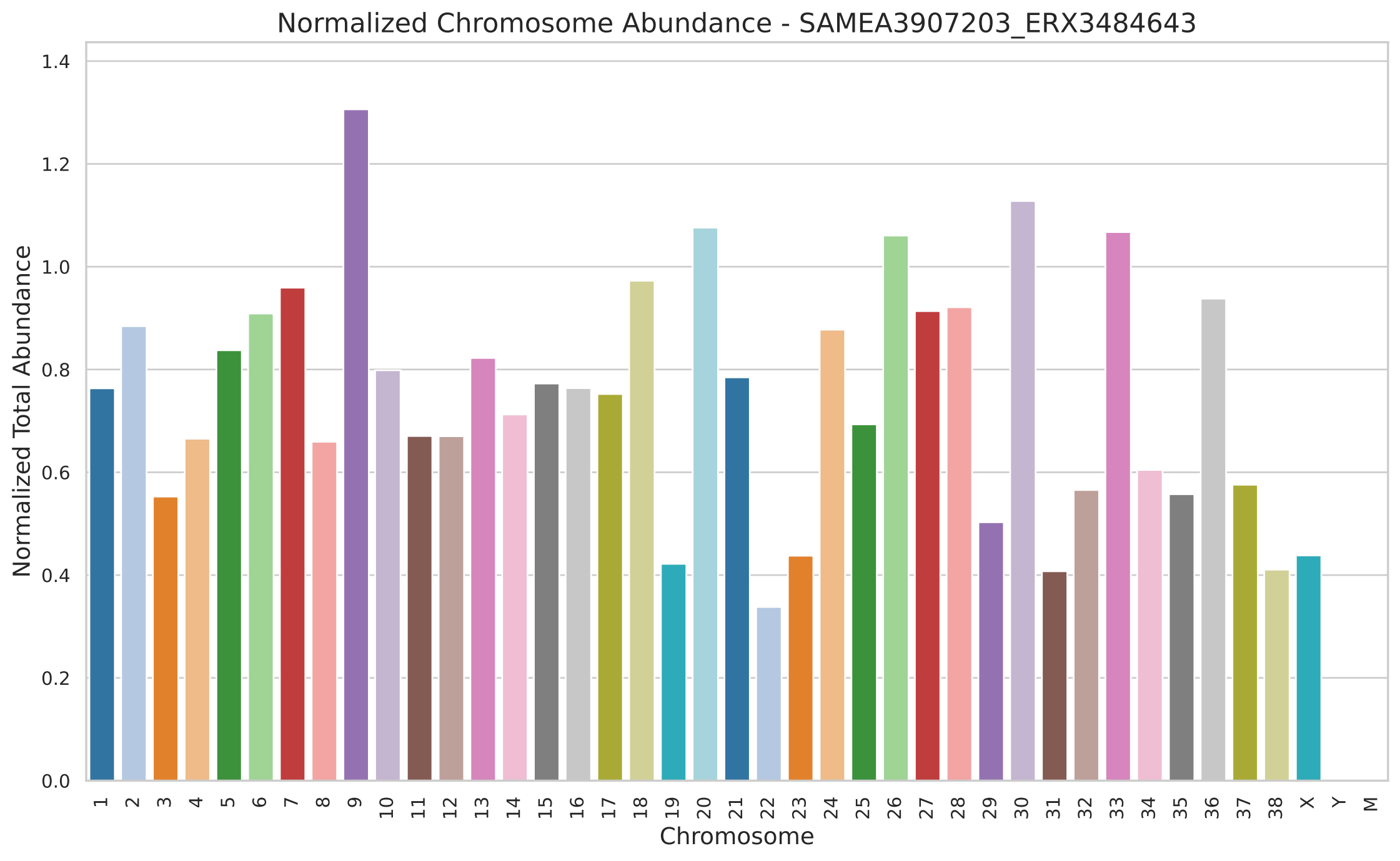

Normalized Chromosome Abundance - SAMEA3907242_ERX3484667
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

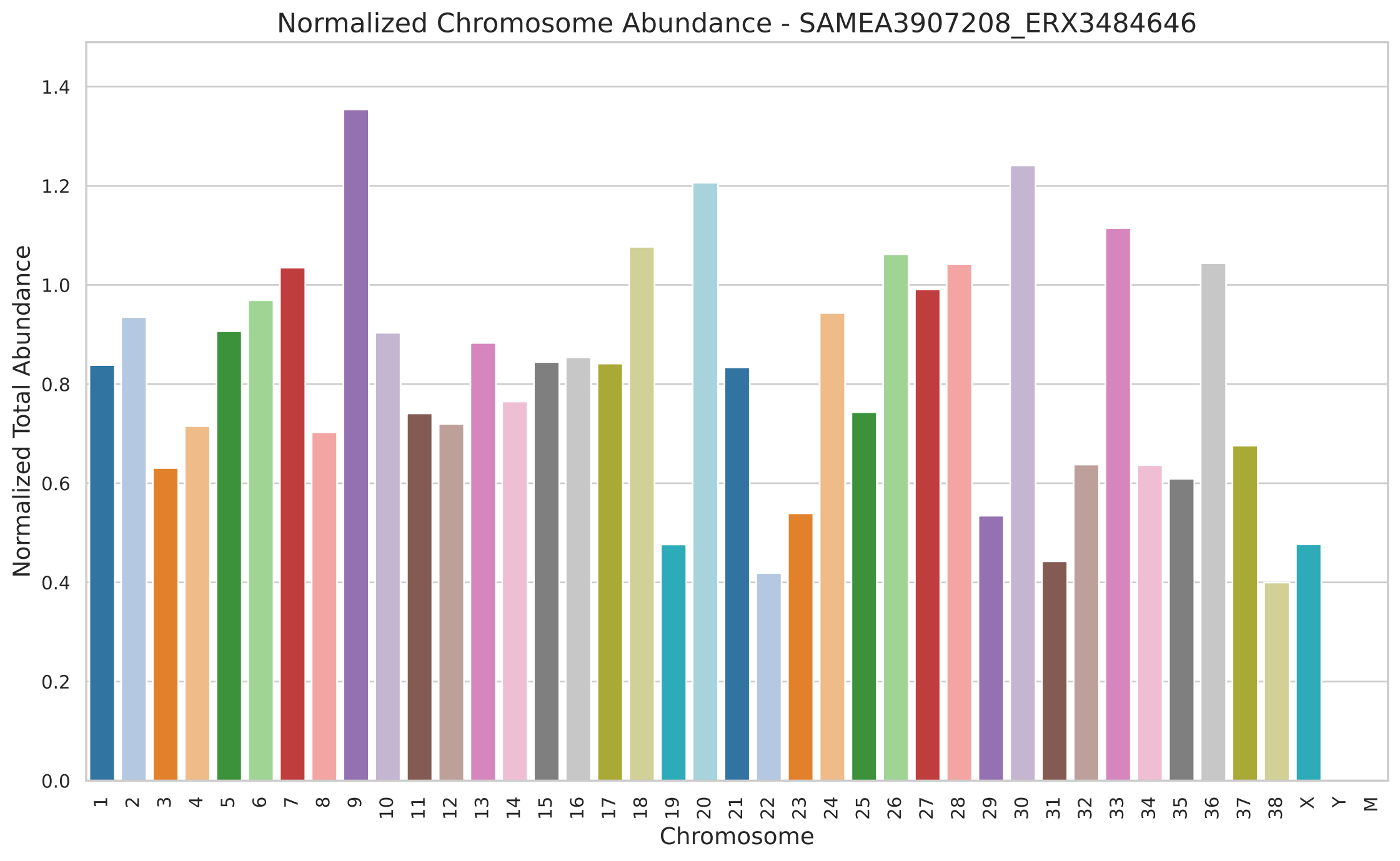

Normalized Chromosome Abundance - SAMEA3907192_ERX3484637
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

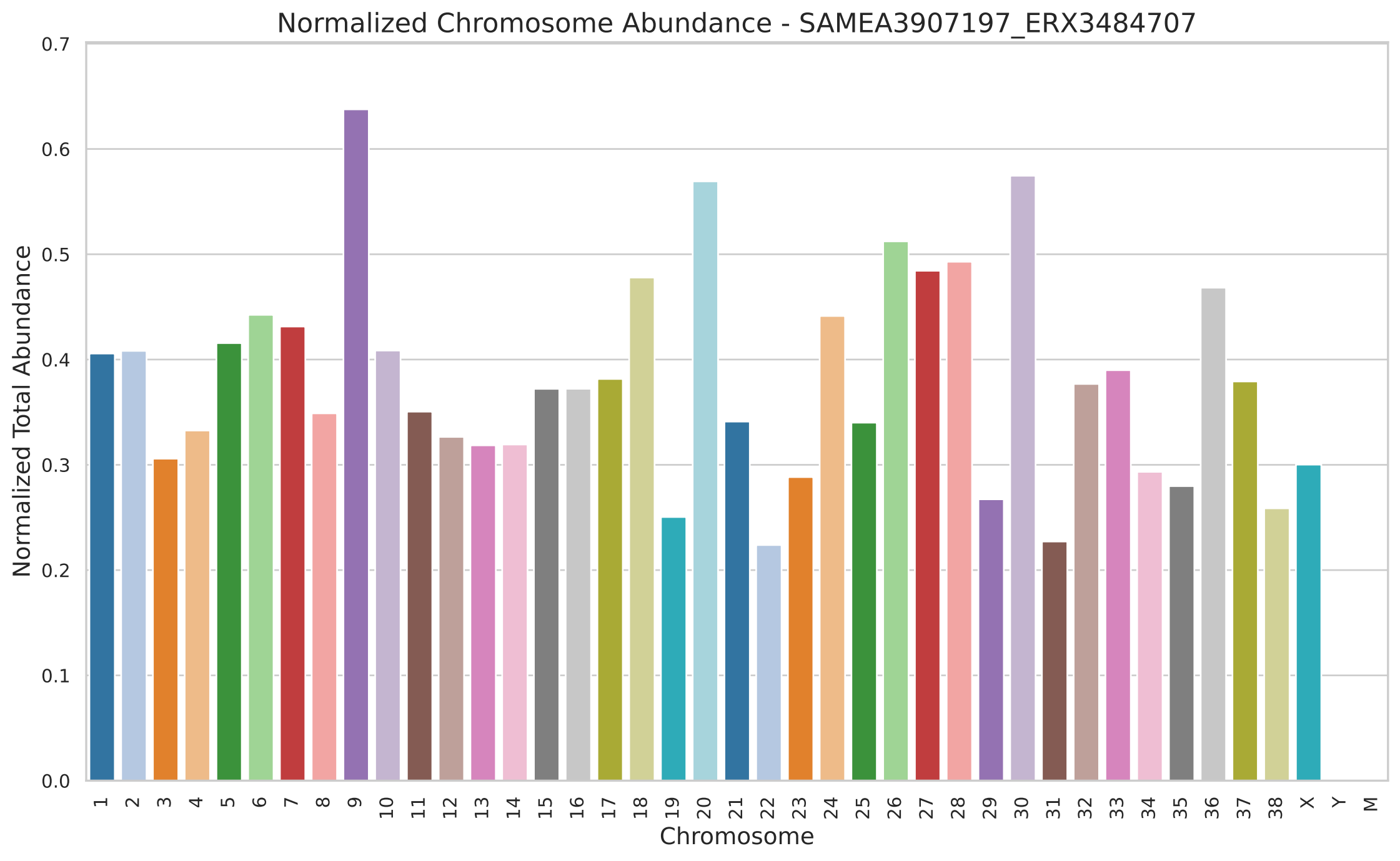

Normalized Chromosome Abundance - SAMEA3906931_ERX3484672
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

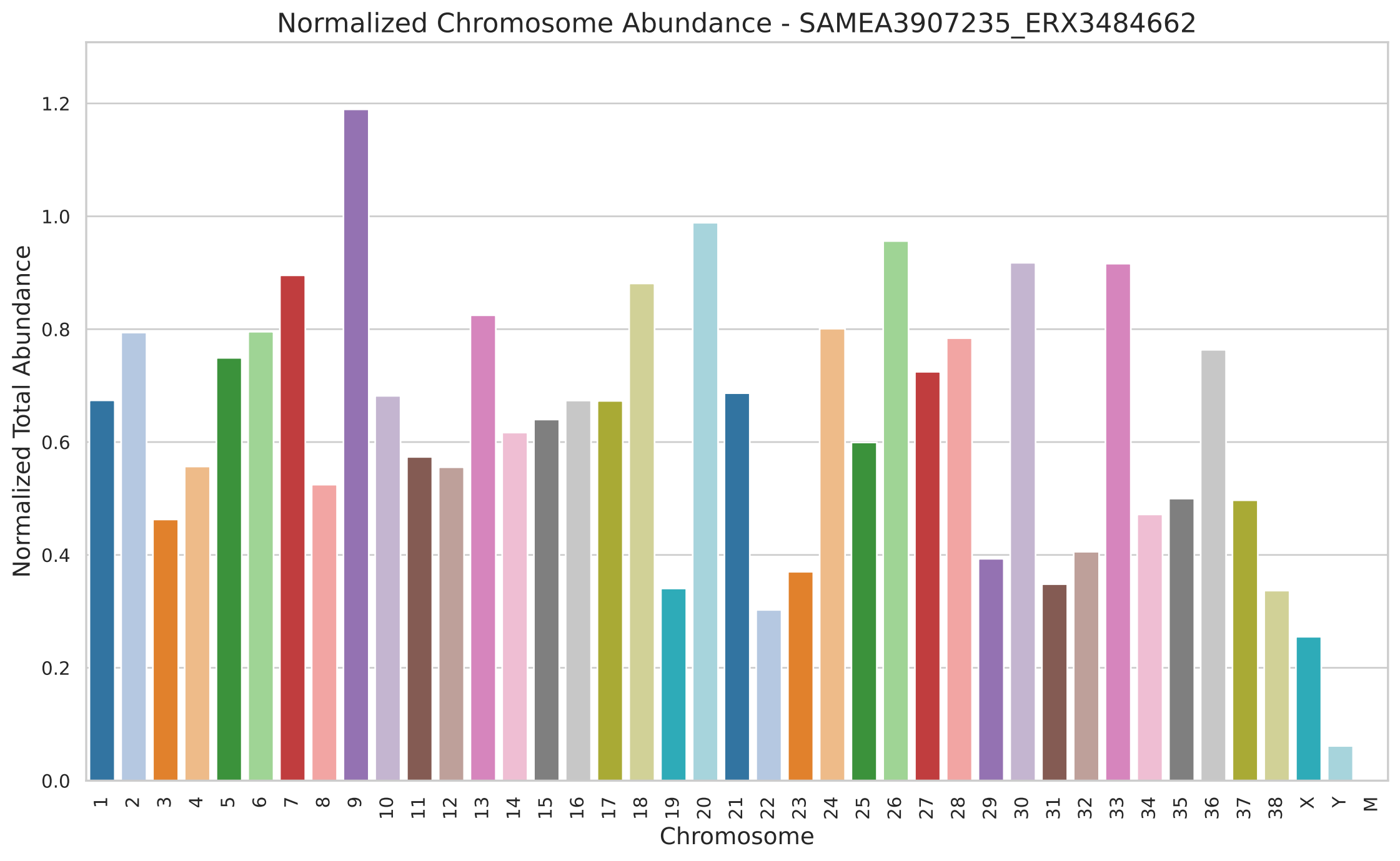

Normalized Chromosome Abundance - SAMEA3907187_ERX3484704
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

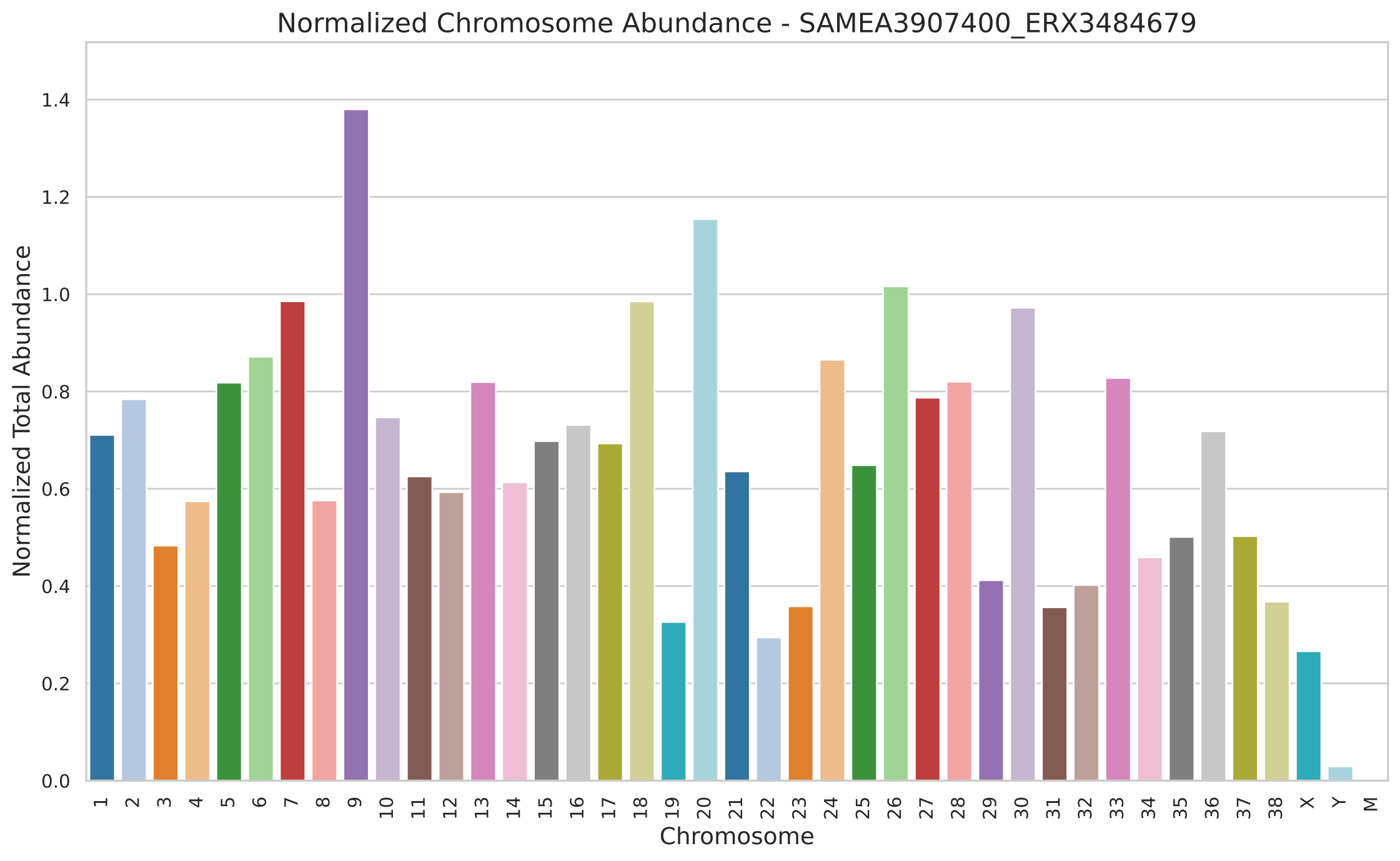

Normalized Chromosome Abundance - SAMEA3907362_ERX3484684
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

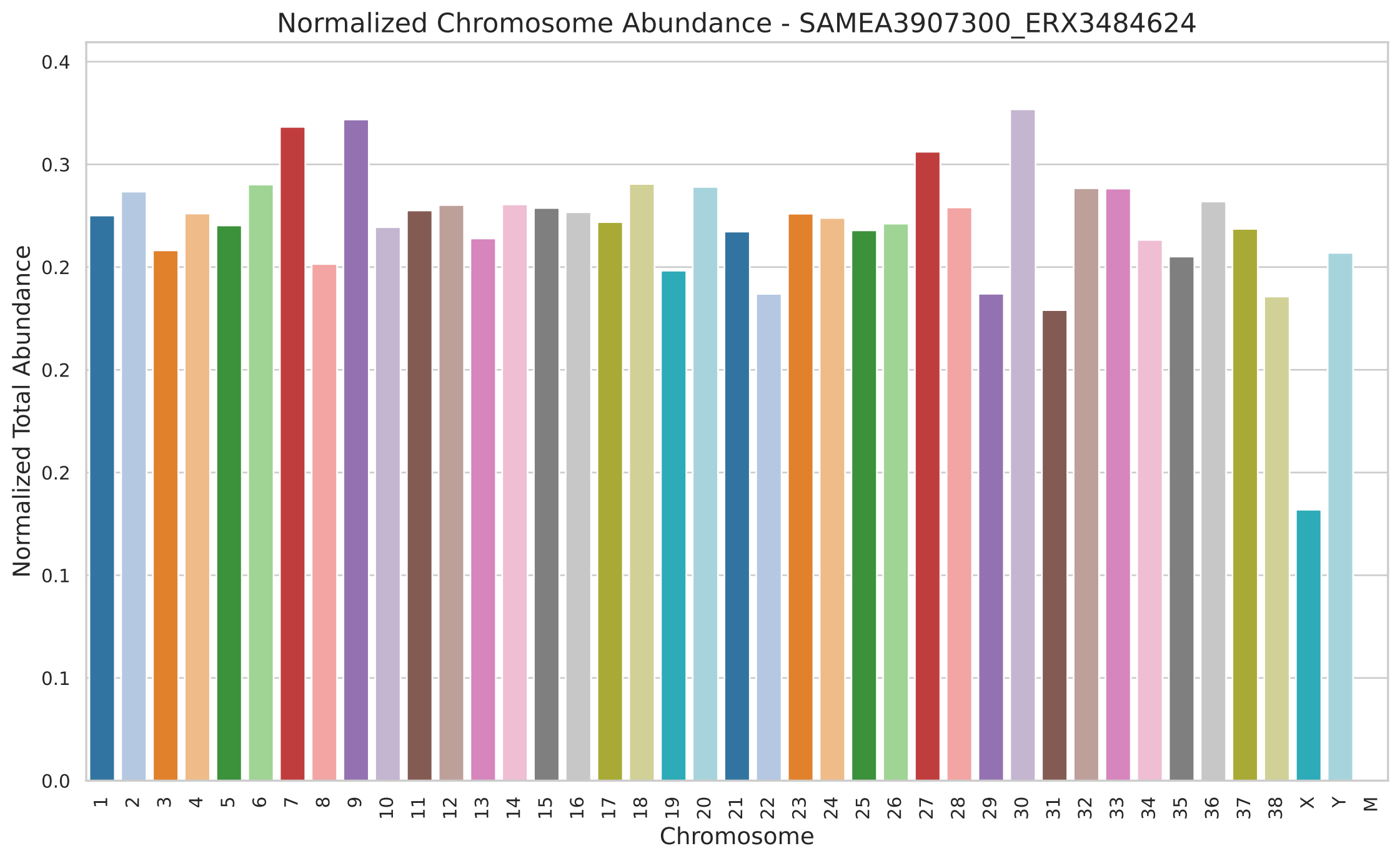

Normalized Chromosome Abundance - SAMEA3907203_ERX3484643
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

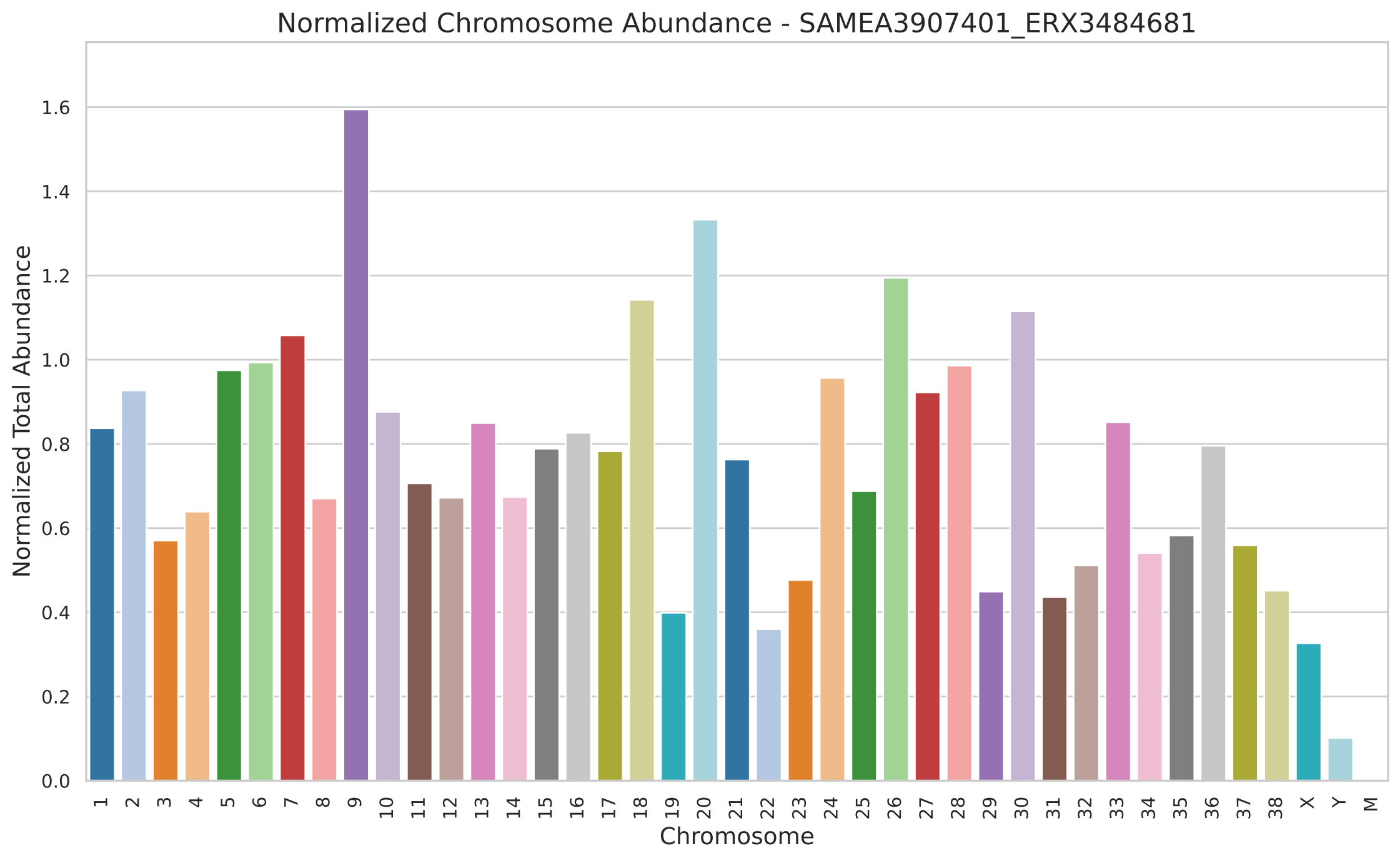

Normalized Chromosome Abundance - SAMEA3907208_ERX3484646
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

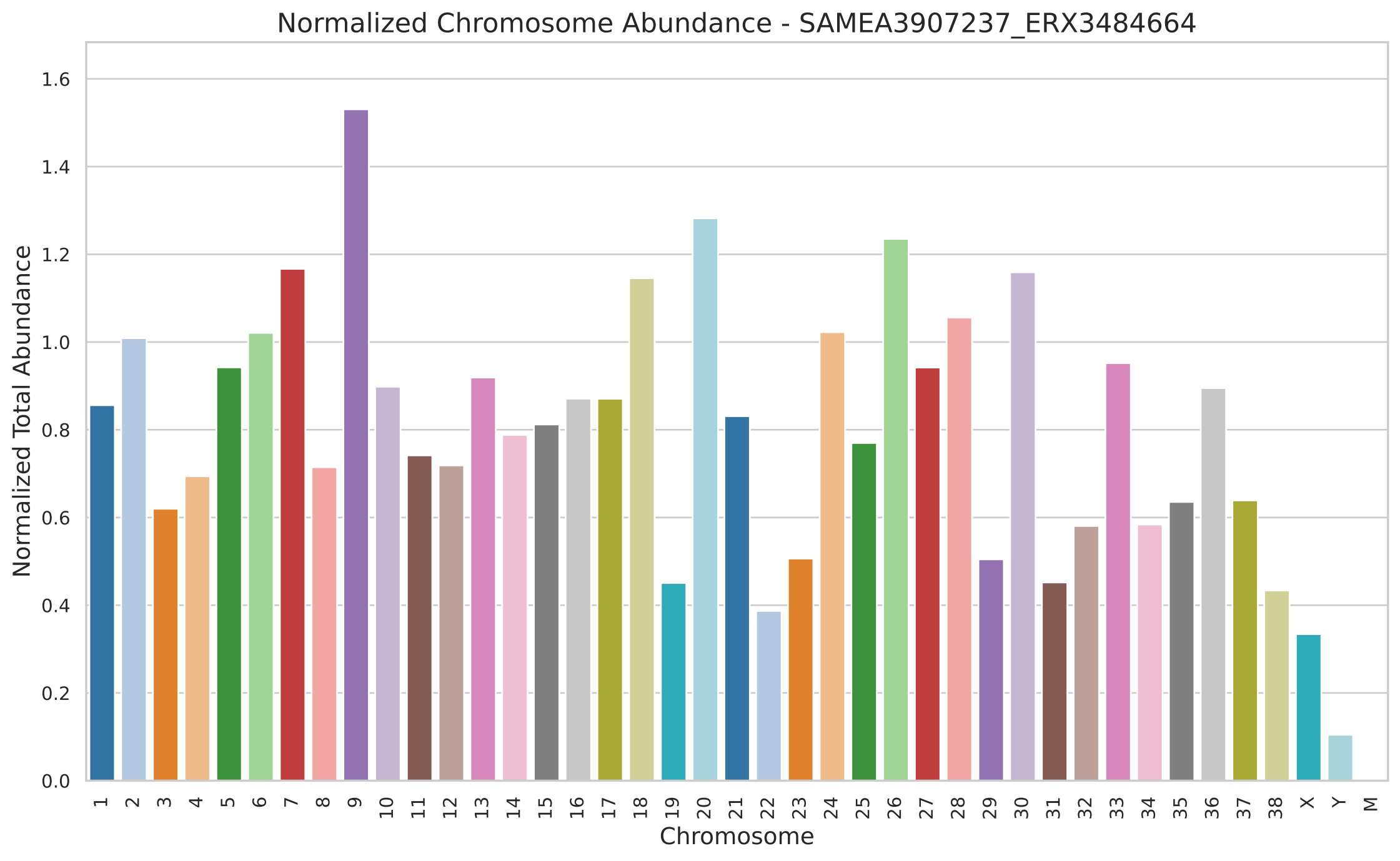

Normalized Chromosome Abundance - SAMEA3907197_ERX3484707
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

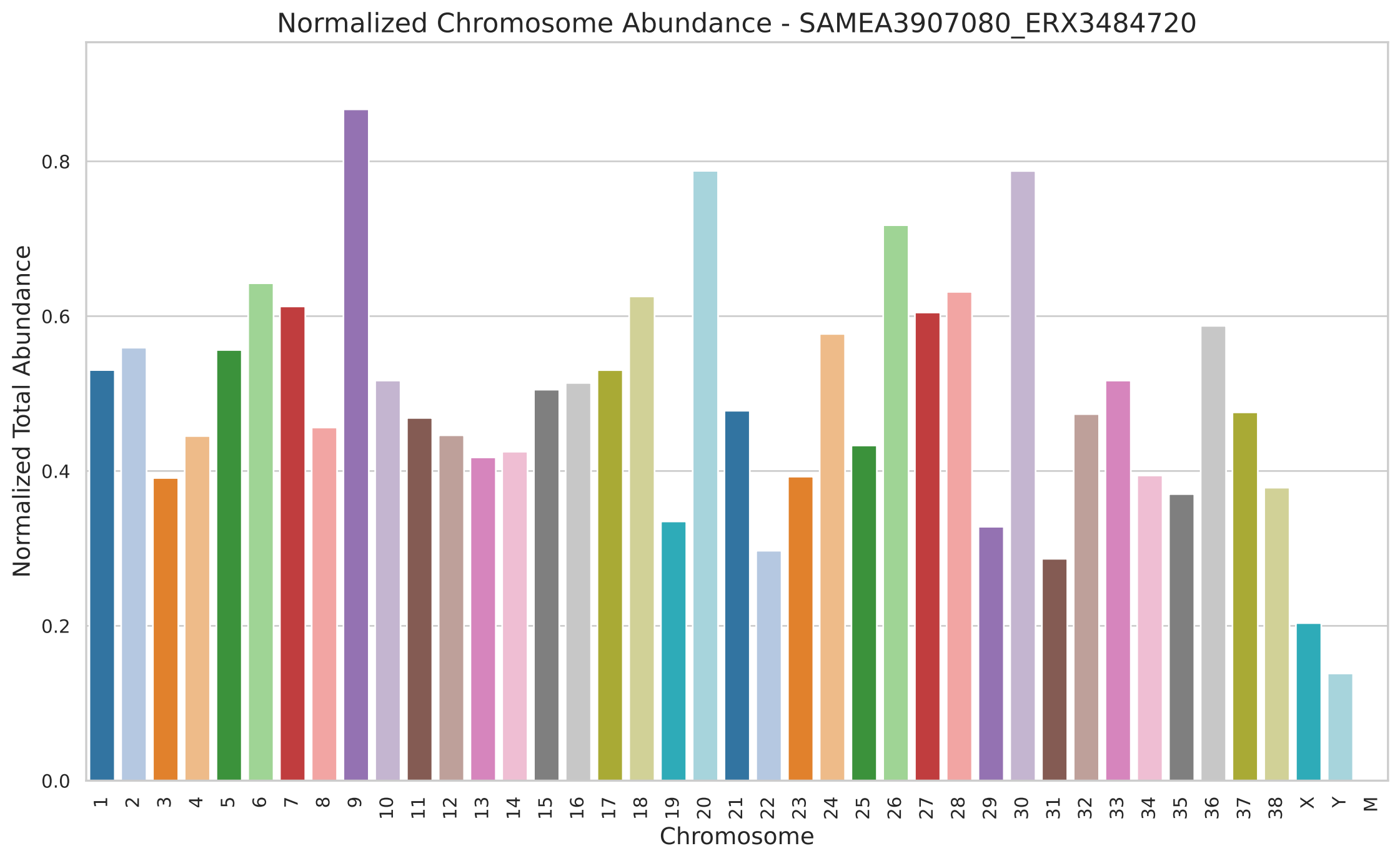

Normalized Chromosome Abundance - SAMEA3907235_ERX3484662
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

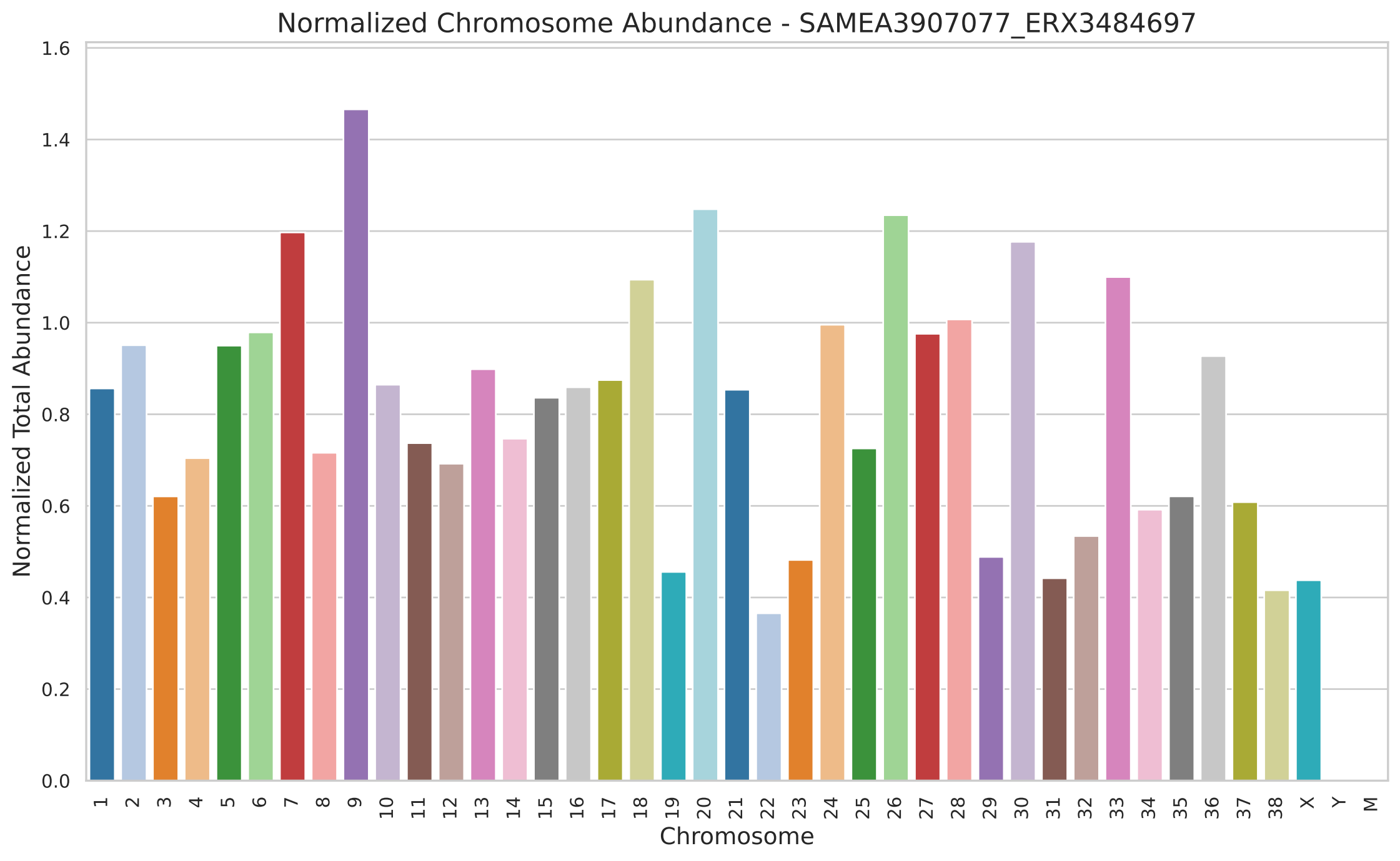

Normalized Chromosome Abundance - SAMEA3907400_ERX3484679
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

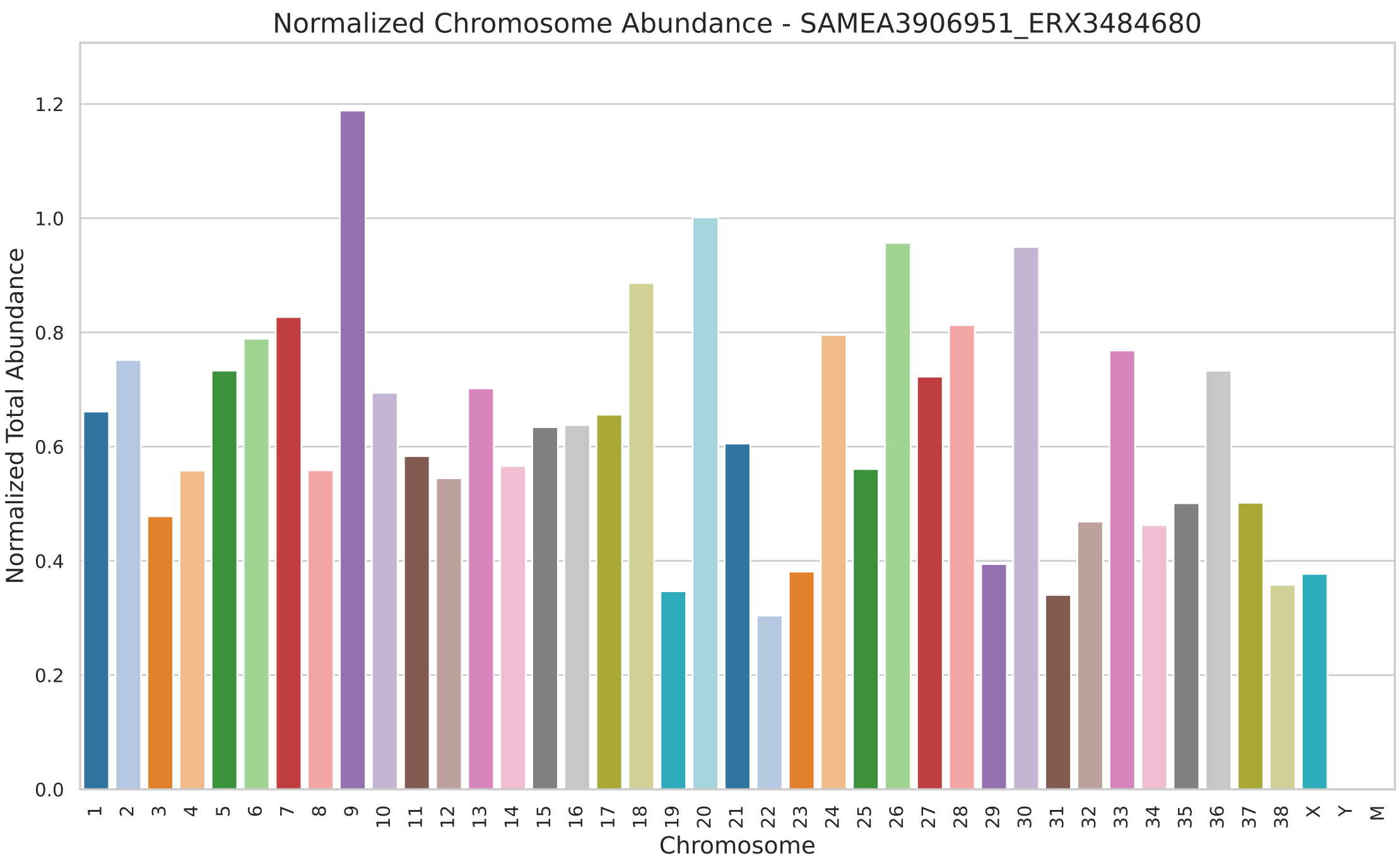

Normalized Chromosome Abundance - SAMEA3907300_ERX3484624
Normalized Total Abundance
0.4
0.3
0.2
0.2
0.1
0.1
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

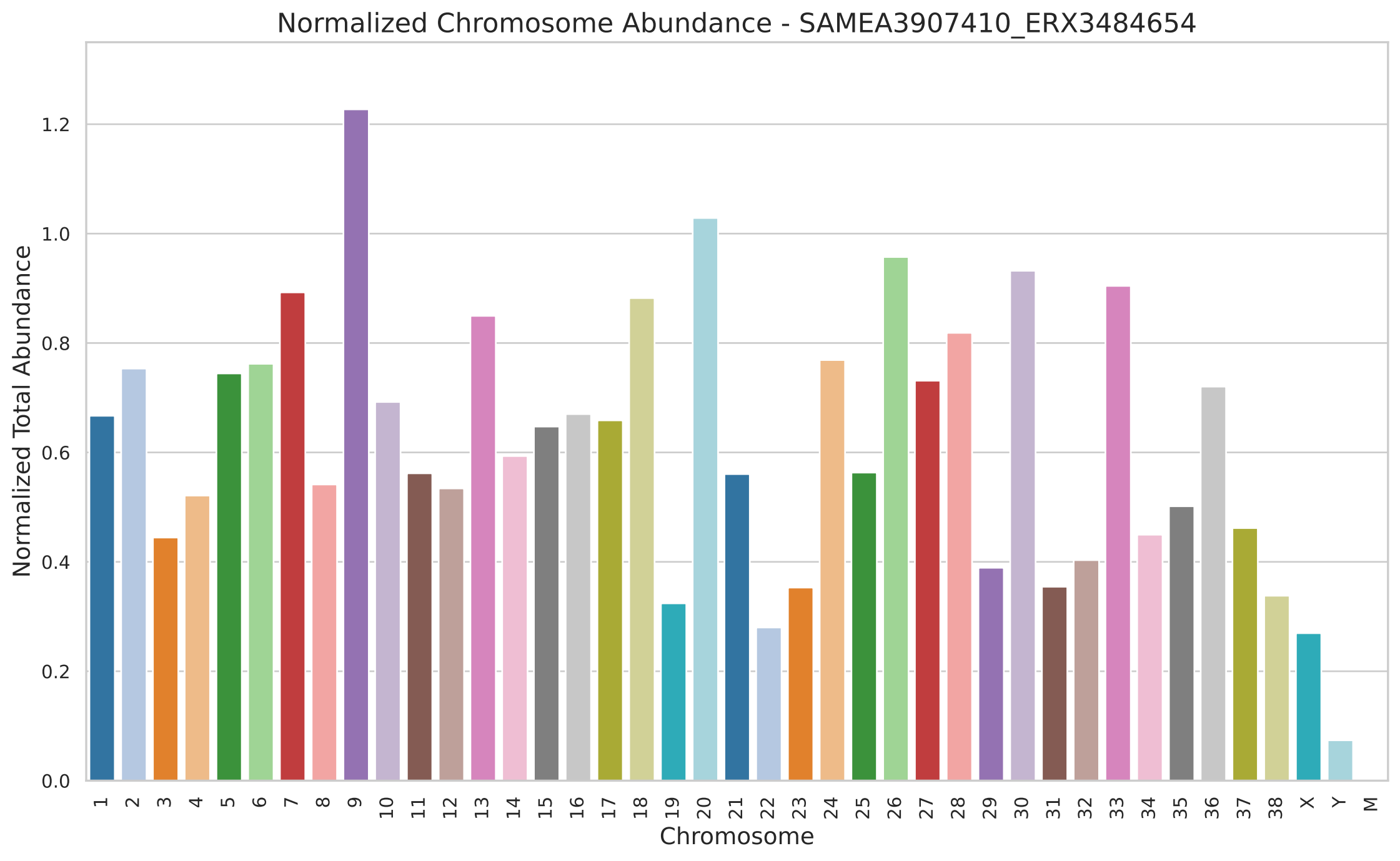

Normalized Chromosome Abundance - SAMEA3907401_ERX3484681
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

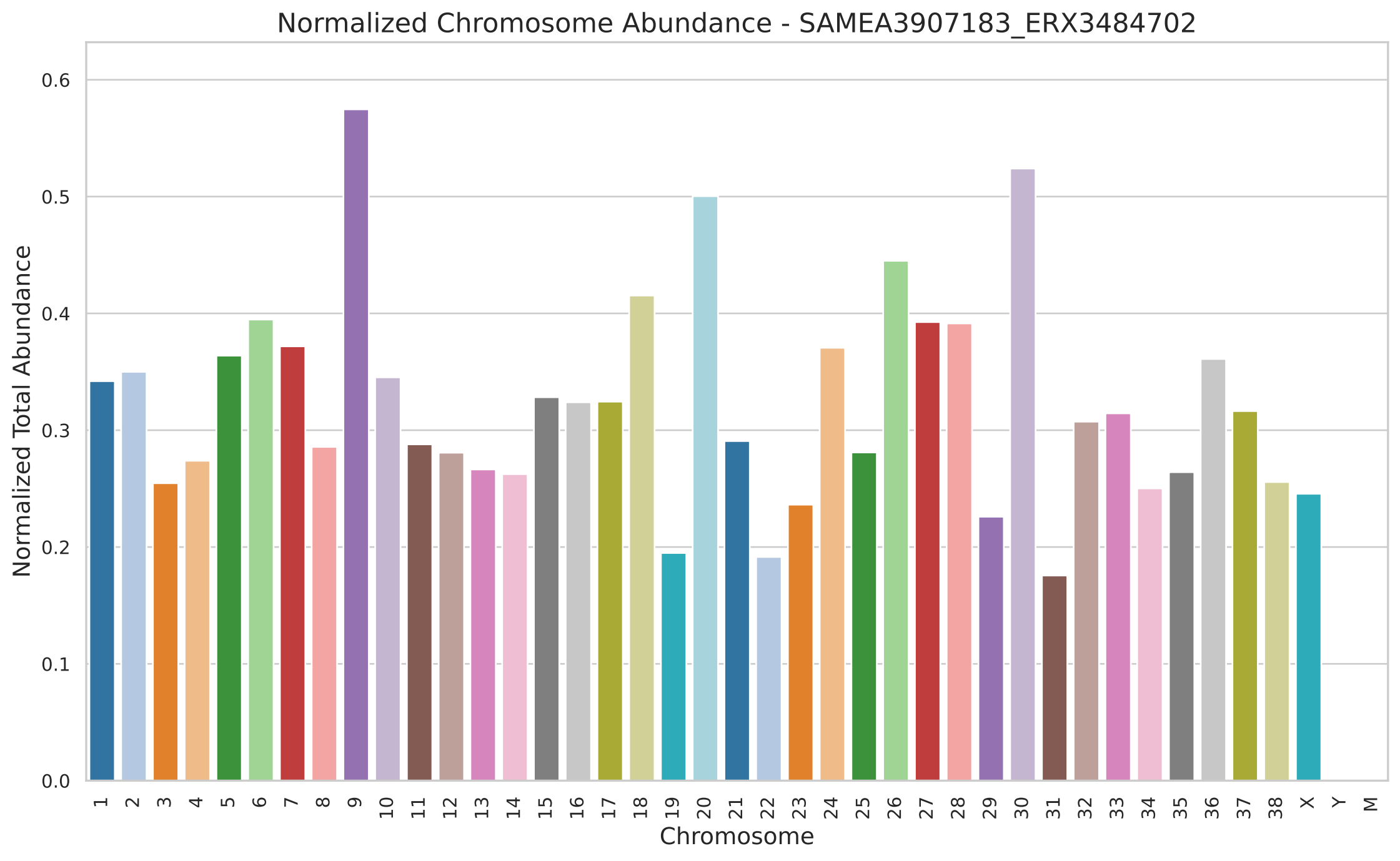

Normalized Chromosome Abundance - SAMEA3907237_ERX3484664
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

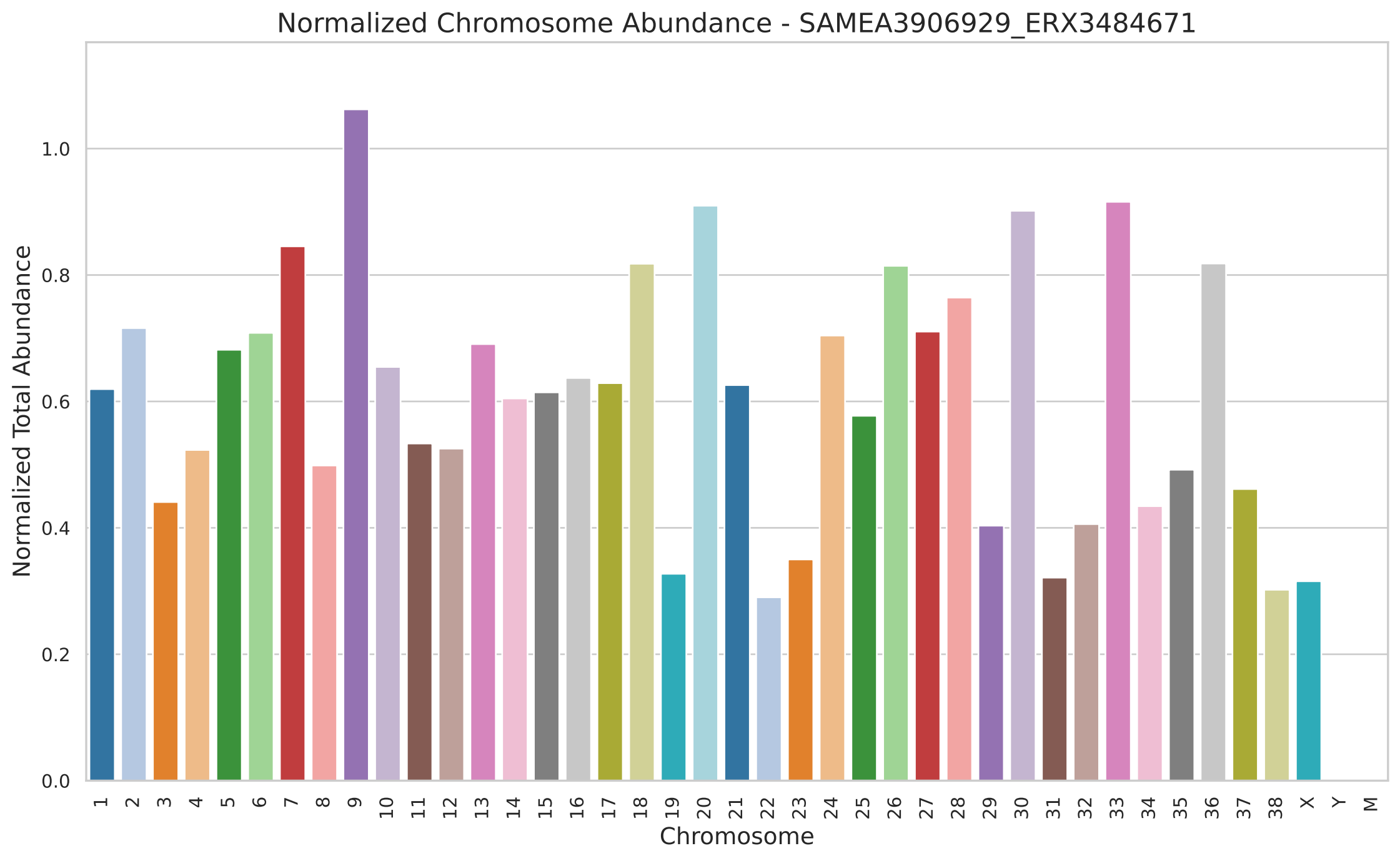

Normalized Chromosome Abundance - SAMEA3907080_ERX3484720
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

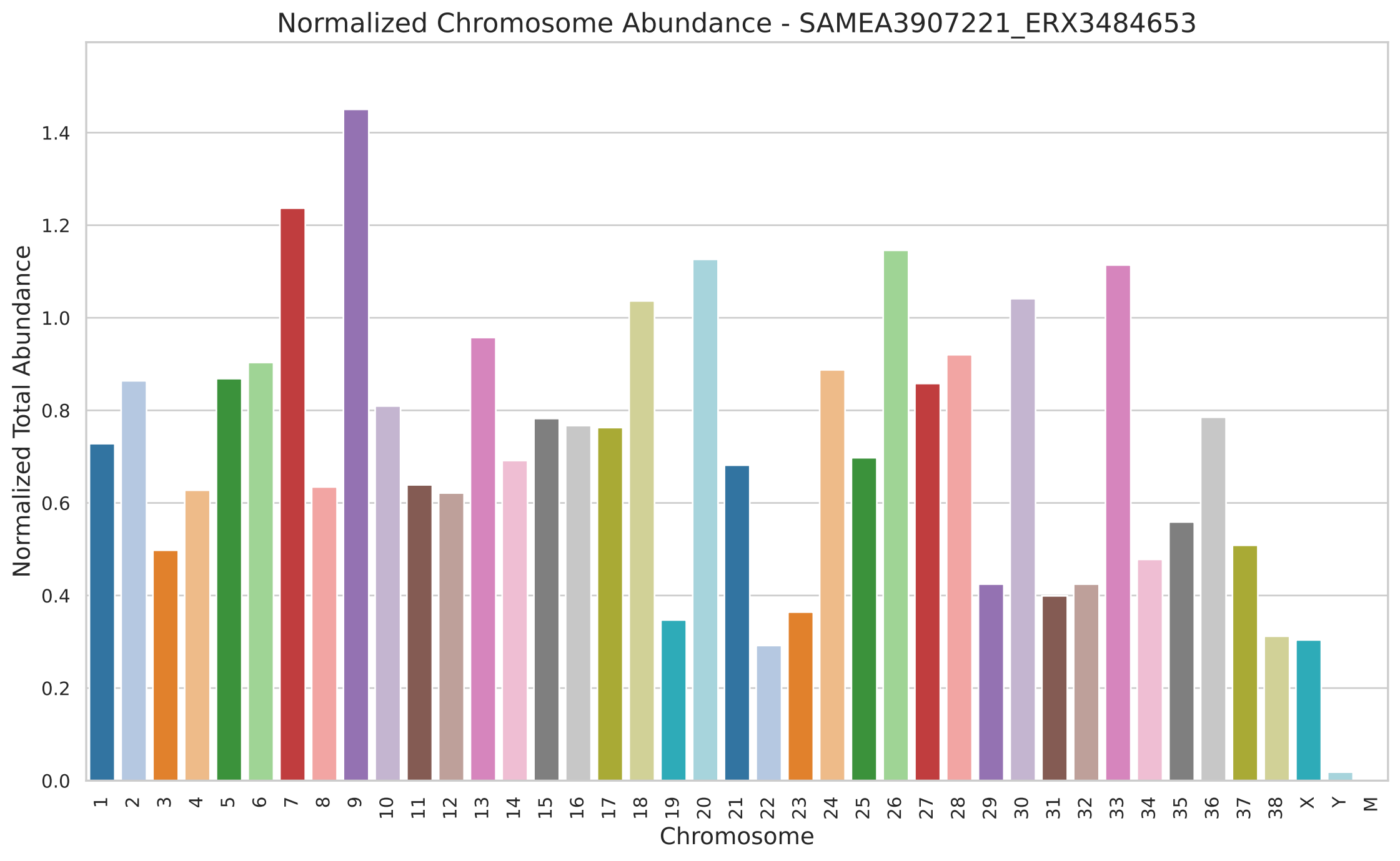

Normalized Chromosome Abundance - SAMEA3907077_ERX3484697
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

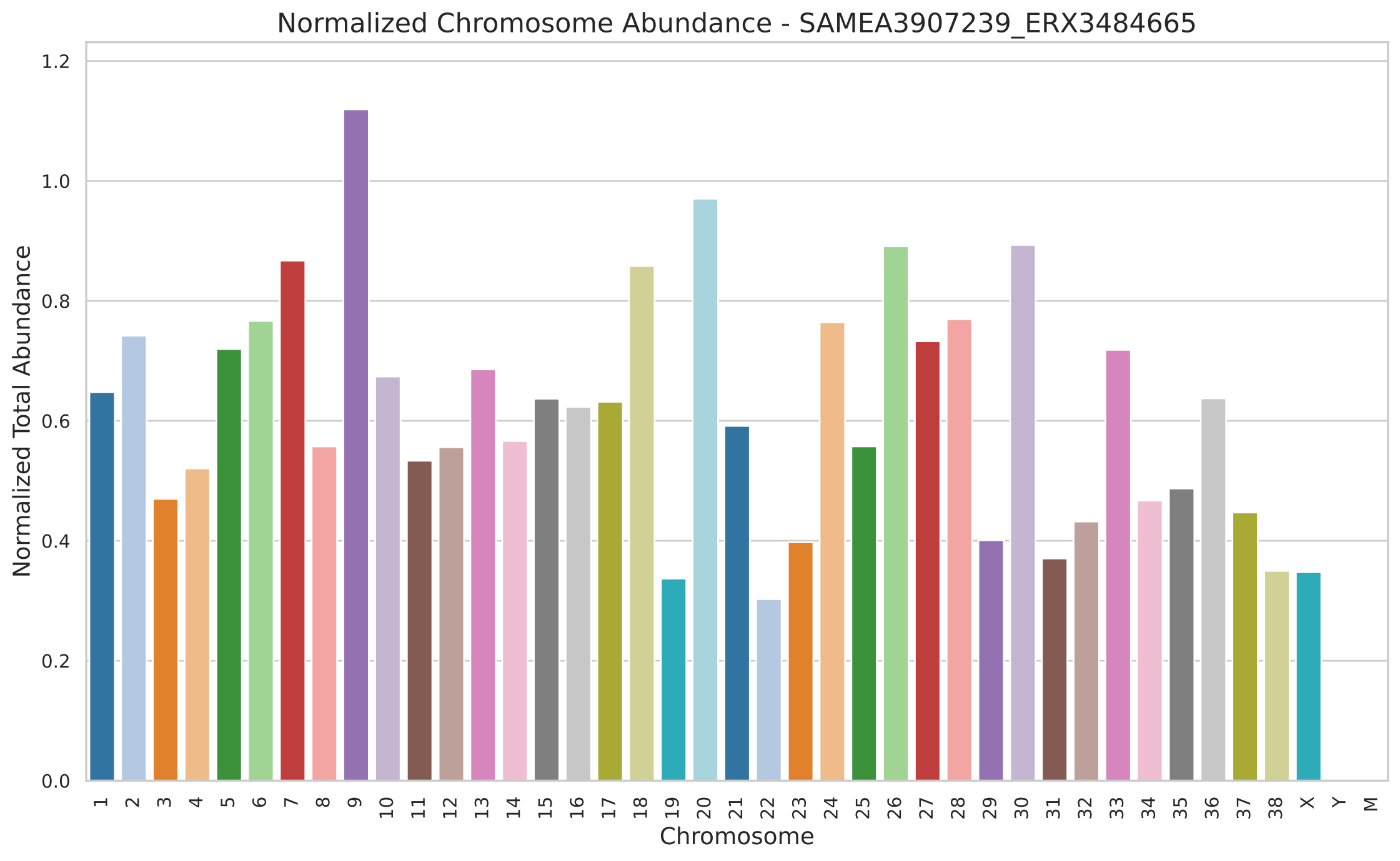

Normalized Chromosome Abundance - SAMEA3906951_ERX3484680
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

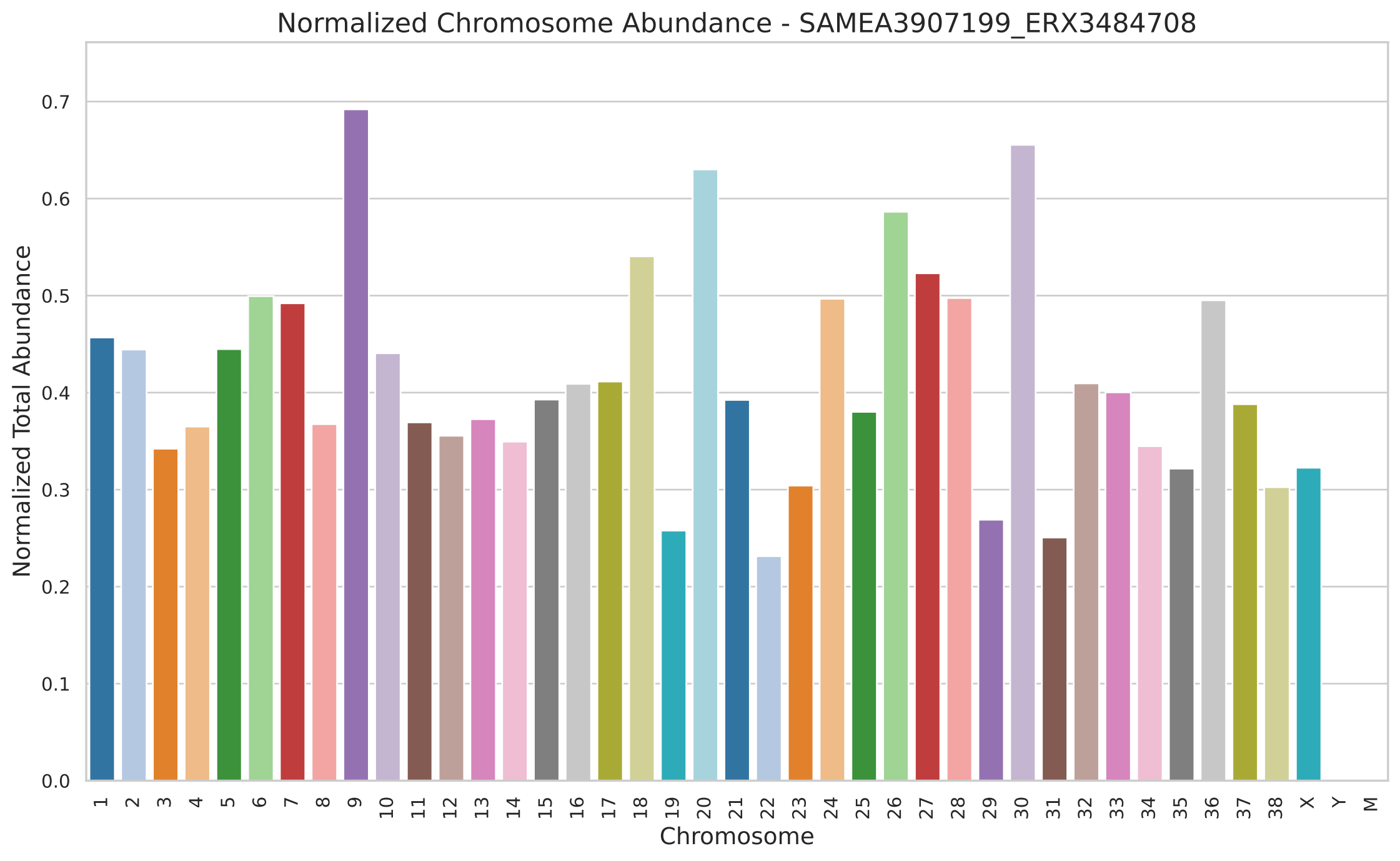

Normalized Chromosome Abundance - SAMEA3907410_ERX3484654
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

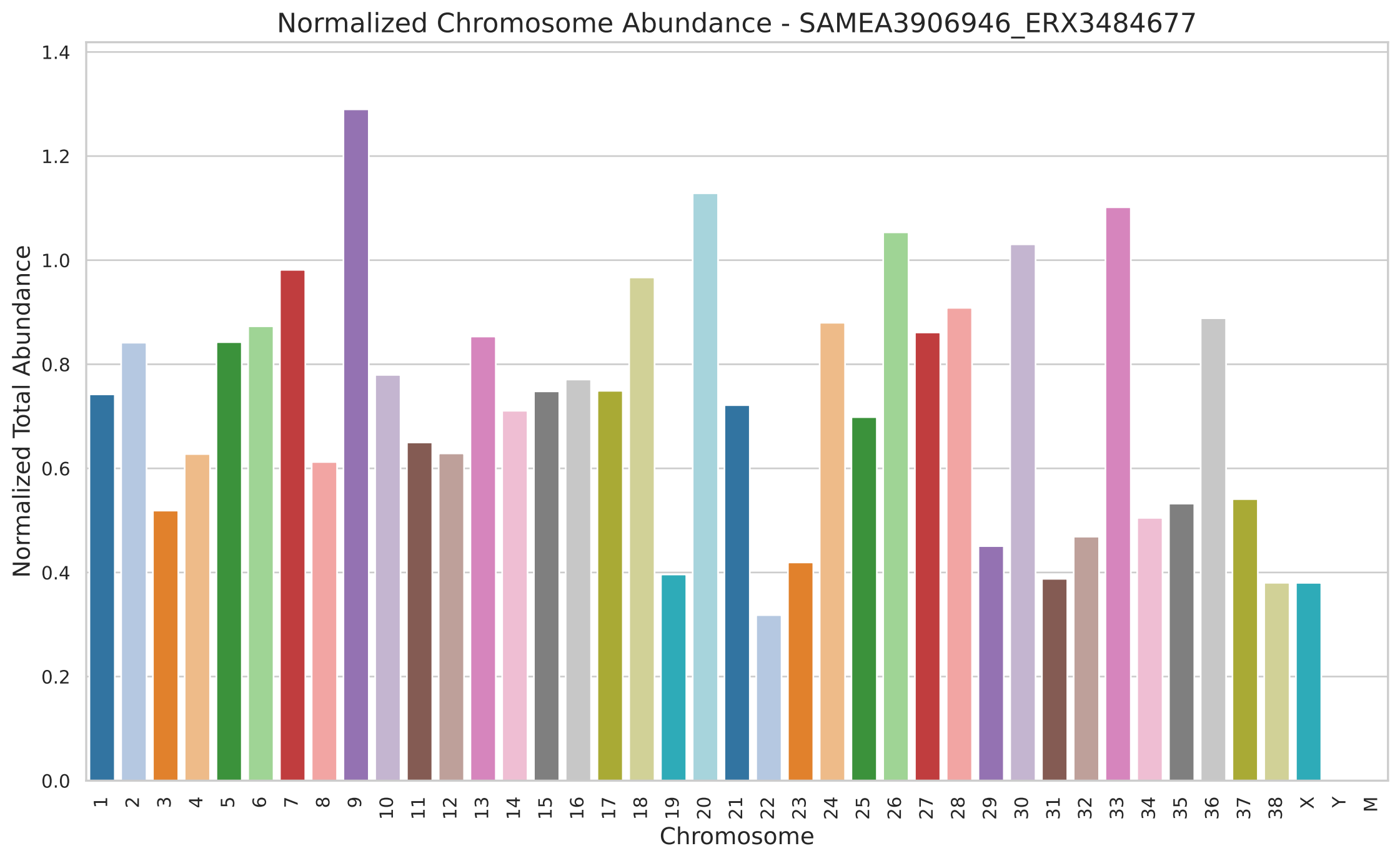

Normalized Chromosome Abundance - SAMEA3907183_ERX3484702
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

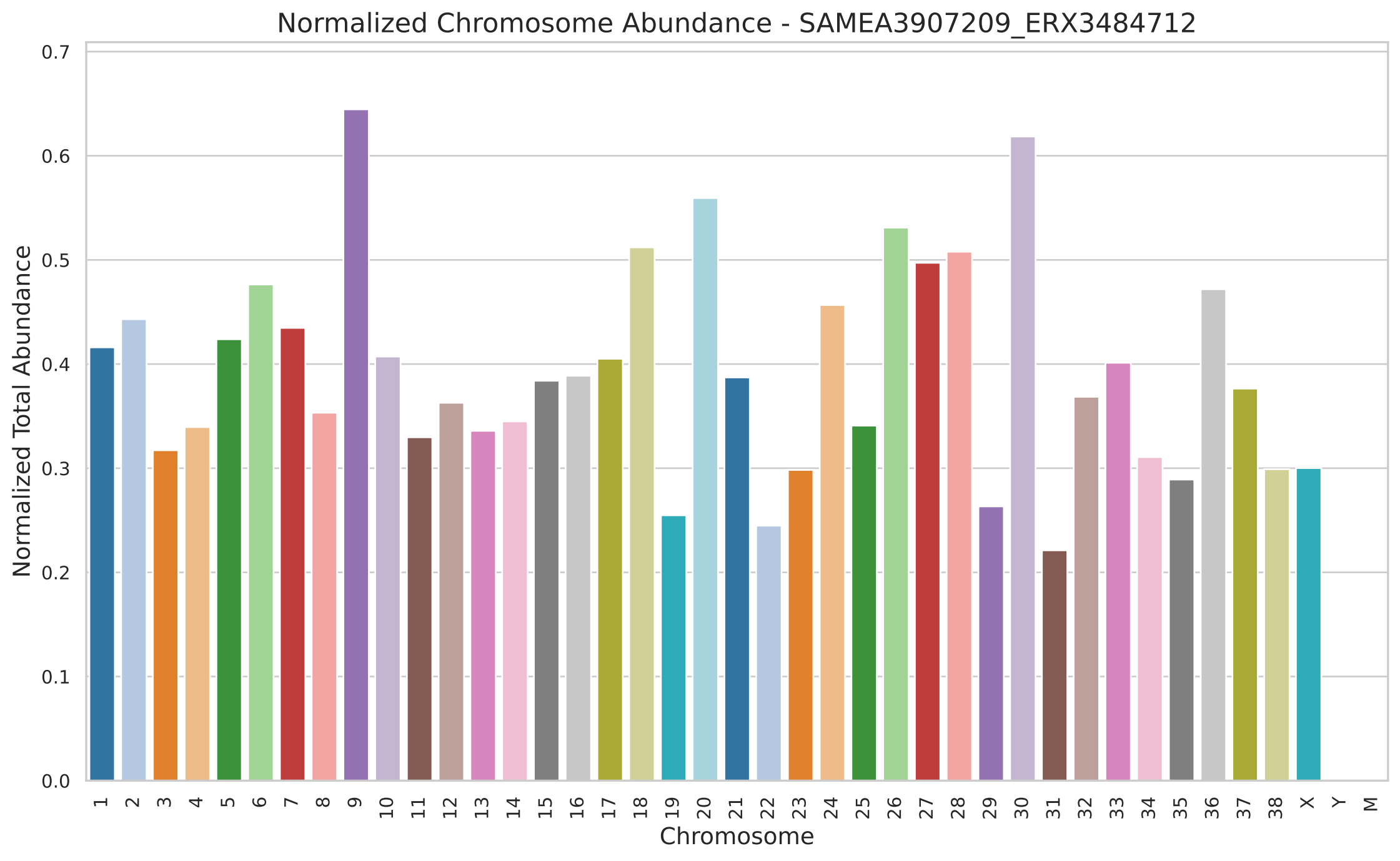

Normalized Chromosome Abundance - SAMEA3906929_ERX3484671
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

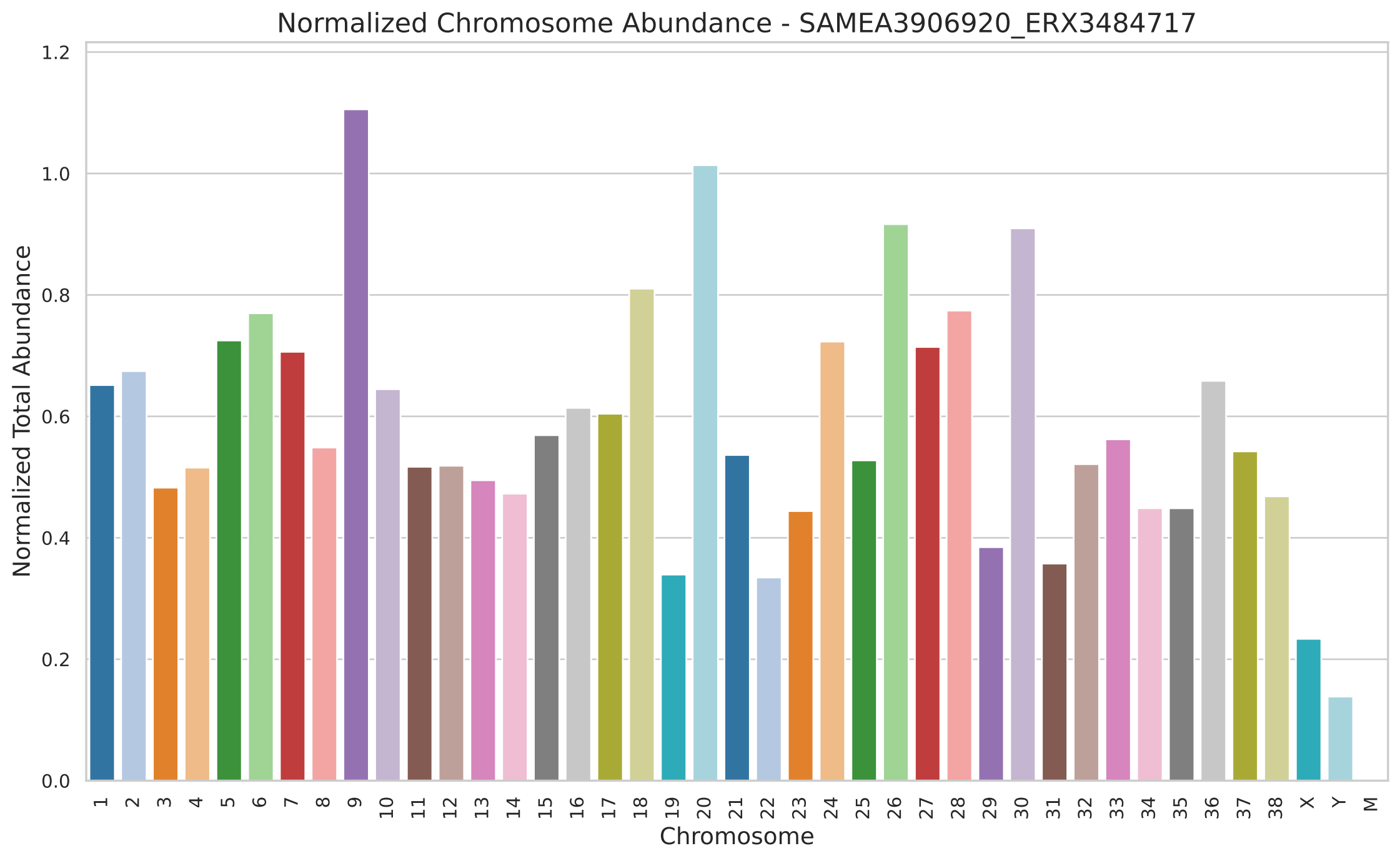

Normalized Chromosome Abundance - SAMEA3907221_ERX3484653
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

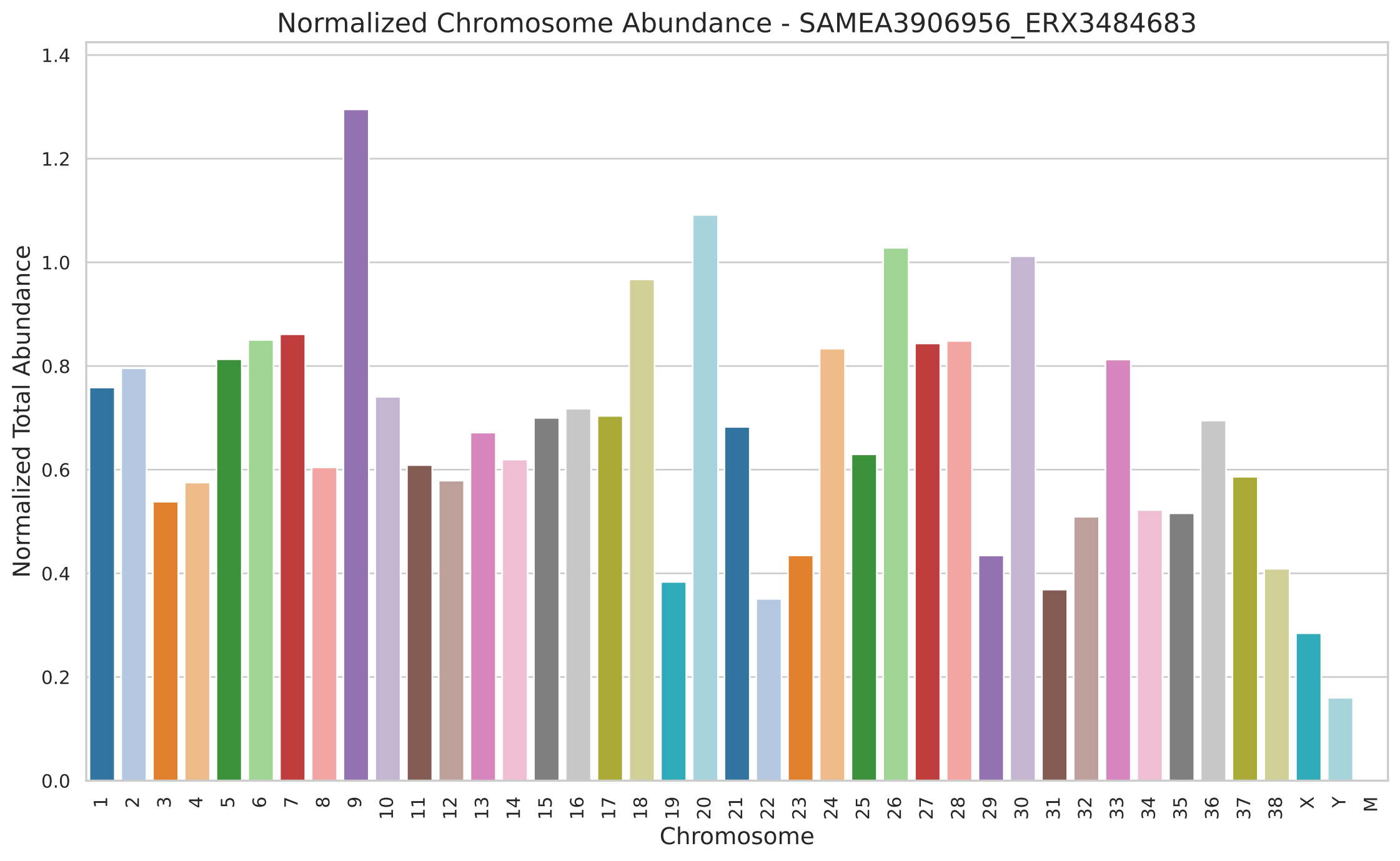

Normalized Chromosome Abundance - SAMEA3907239_ERX3484665
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

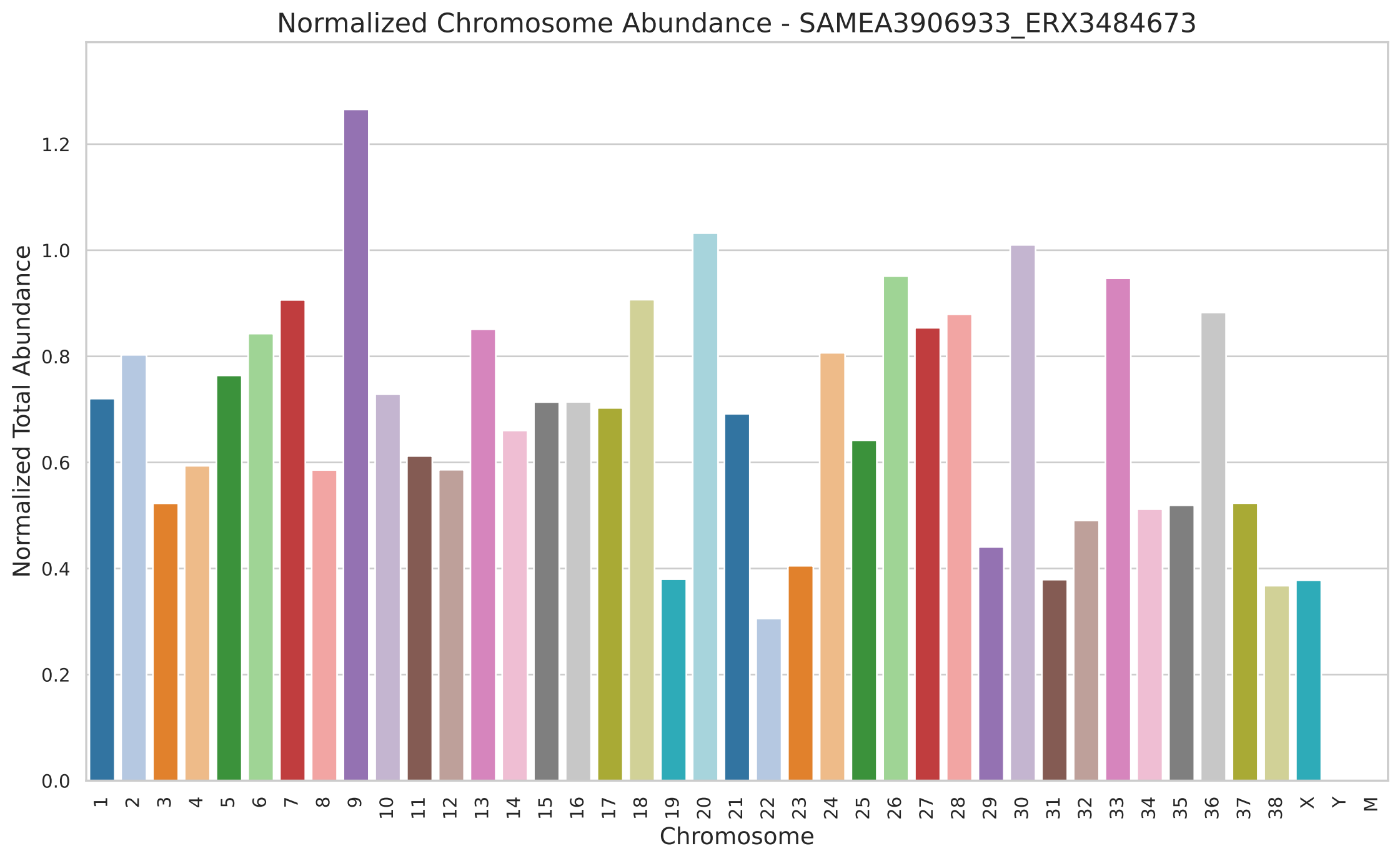

Normalized Chromosome Abundance - SAMEA3907199_ERX3484708
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

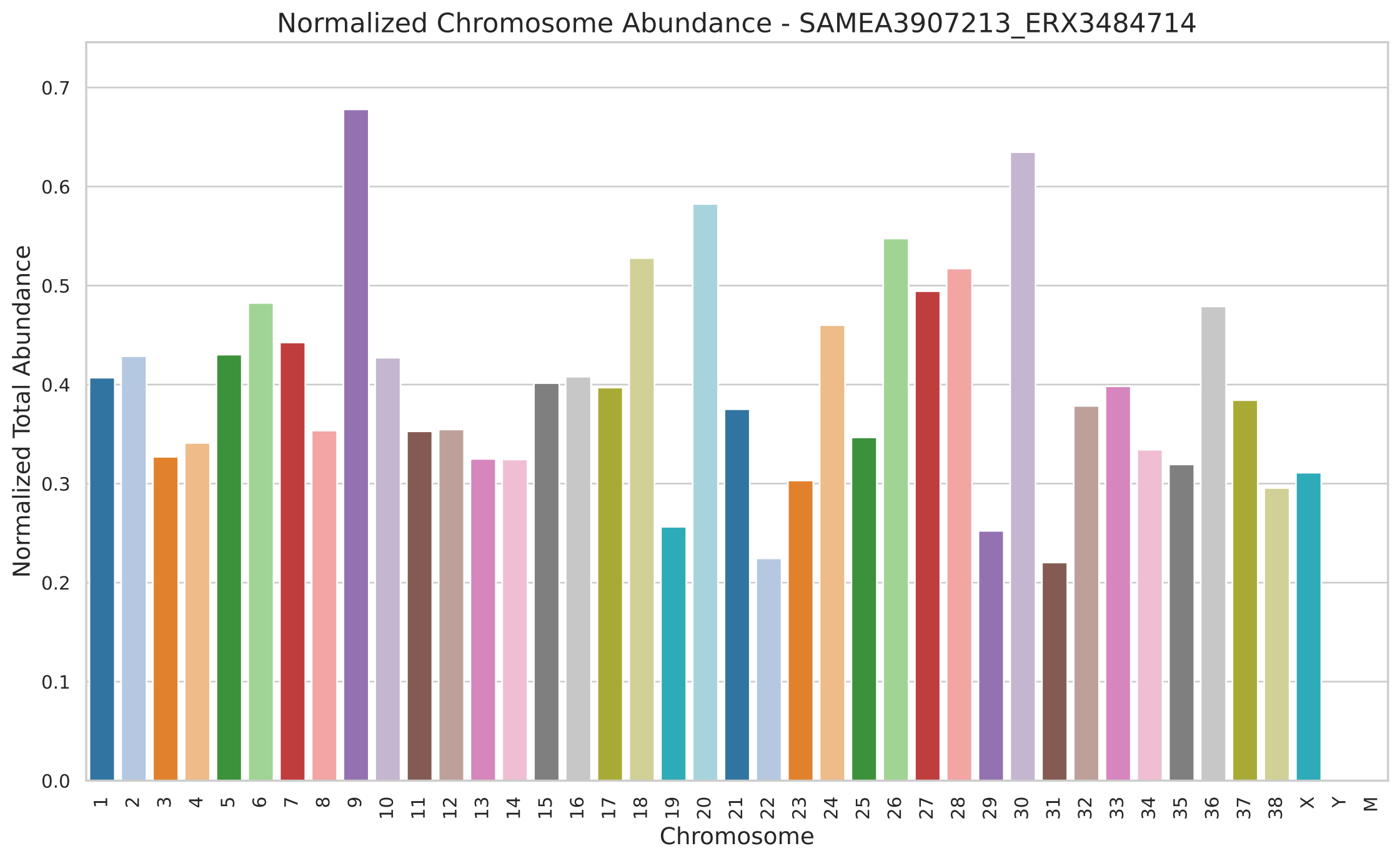

Normalized Chromosome Abundance - SAMEA3906946_ERX3484677
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

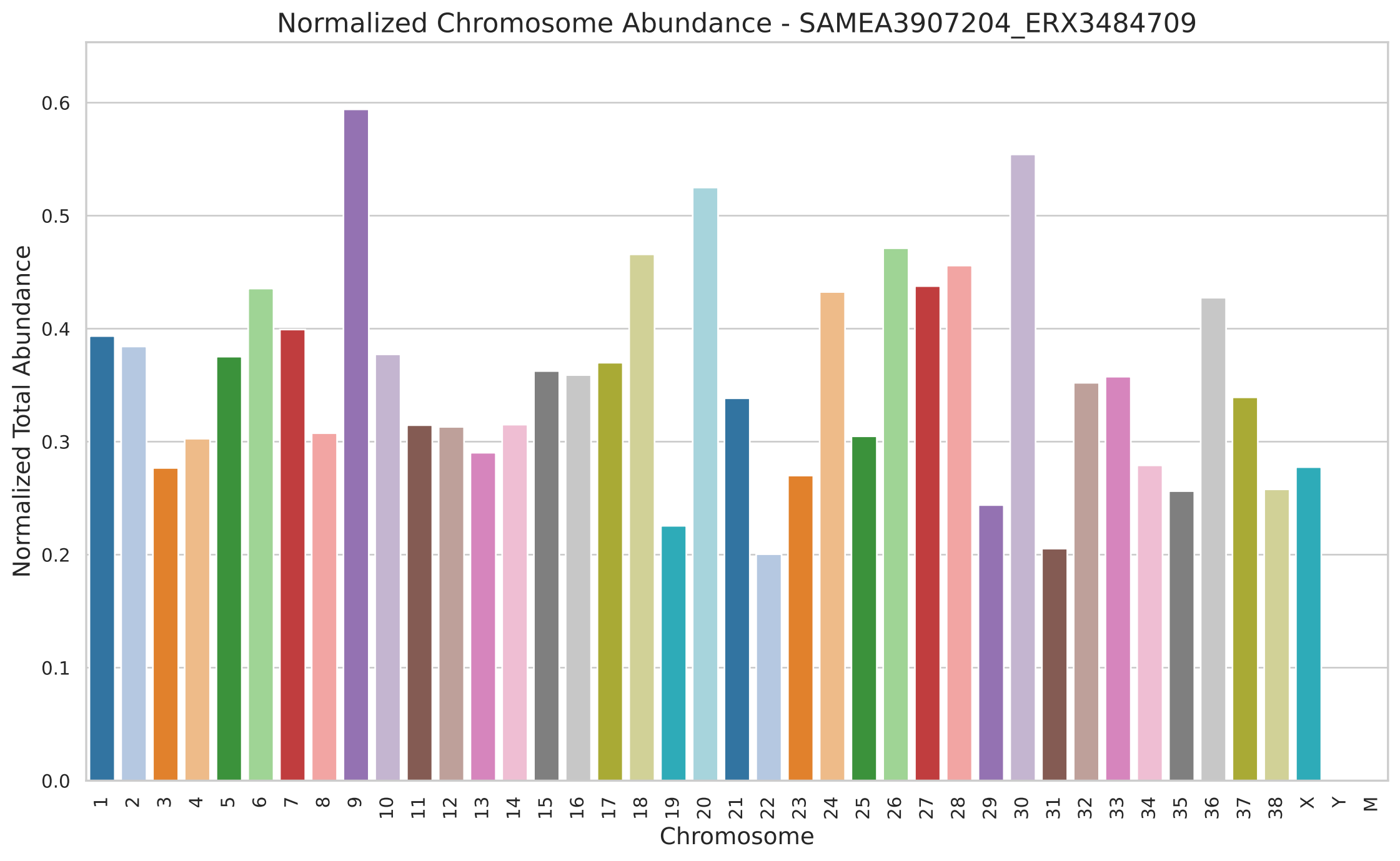

Normalized Chromosome Abundance - SAMEA3907209_ERX3484712
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

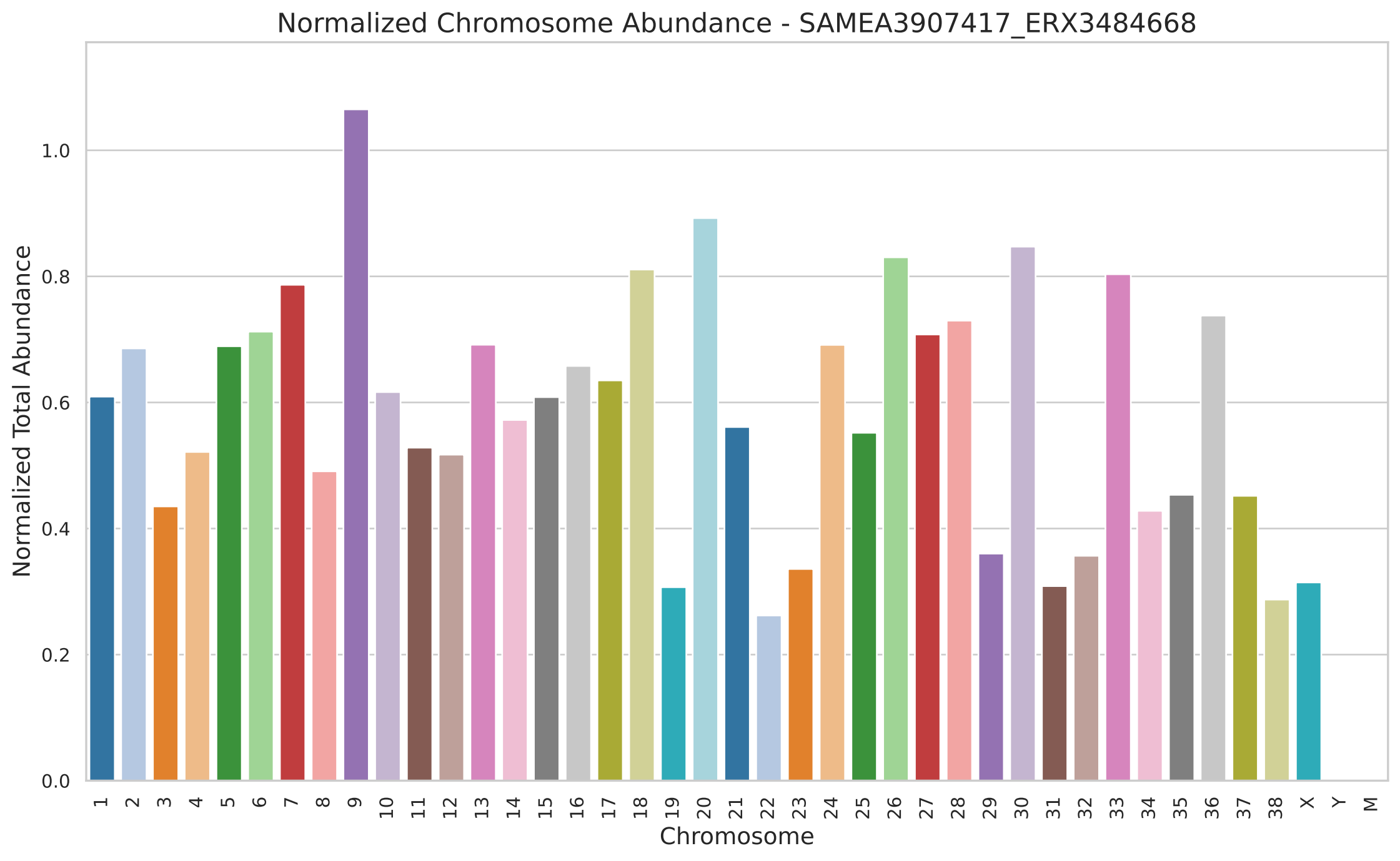

Normalized Chromosome Abundance - SAMEA3906920_ERX3484717
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

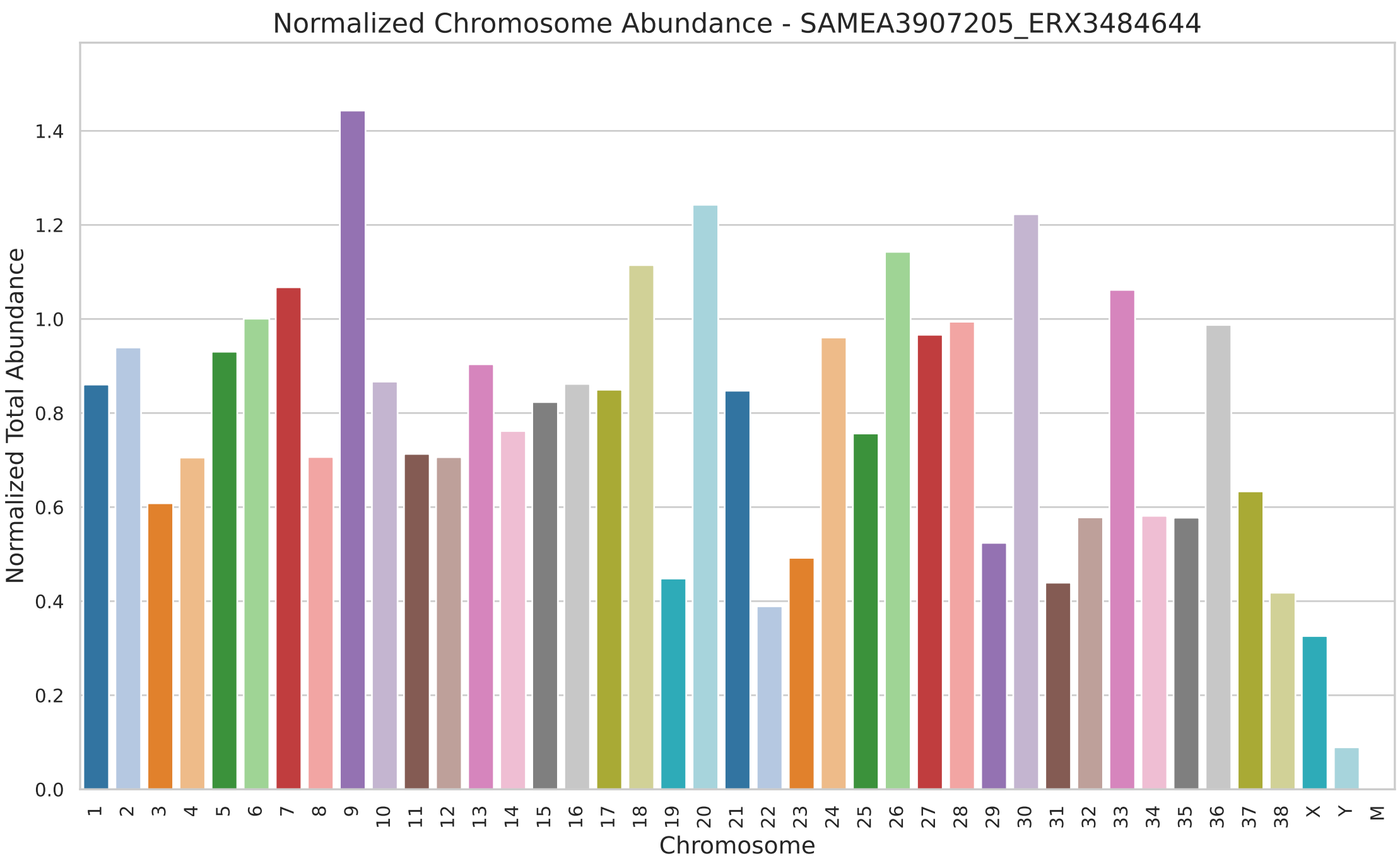

Normalized Chromosome Abundance - SAMEA3906956_ERX3484683
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

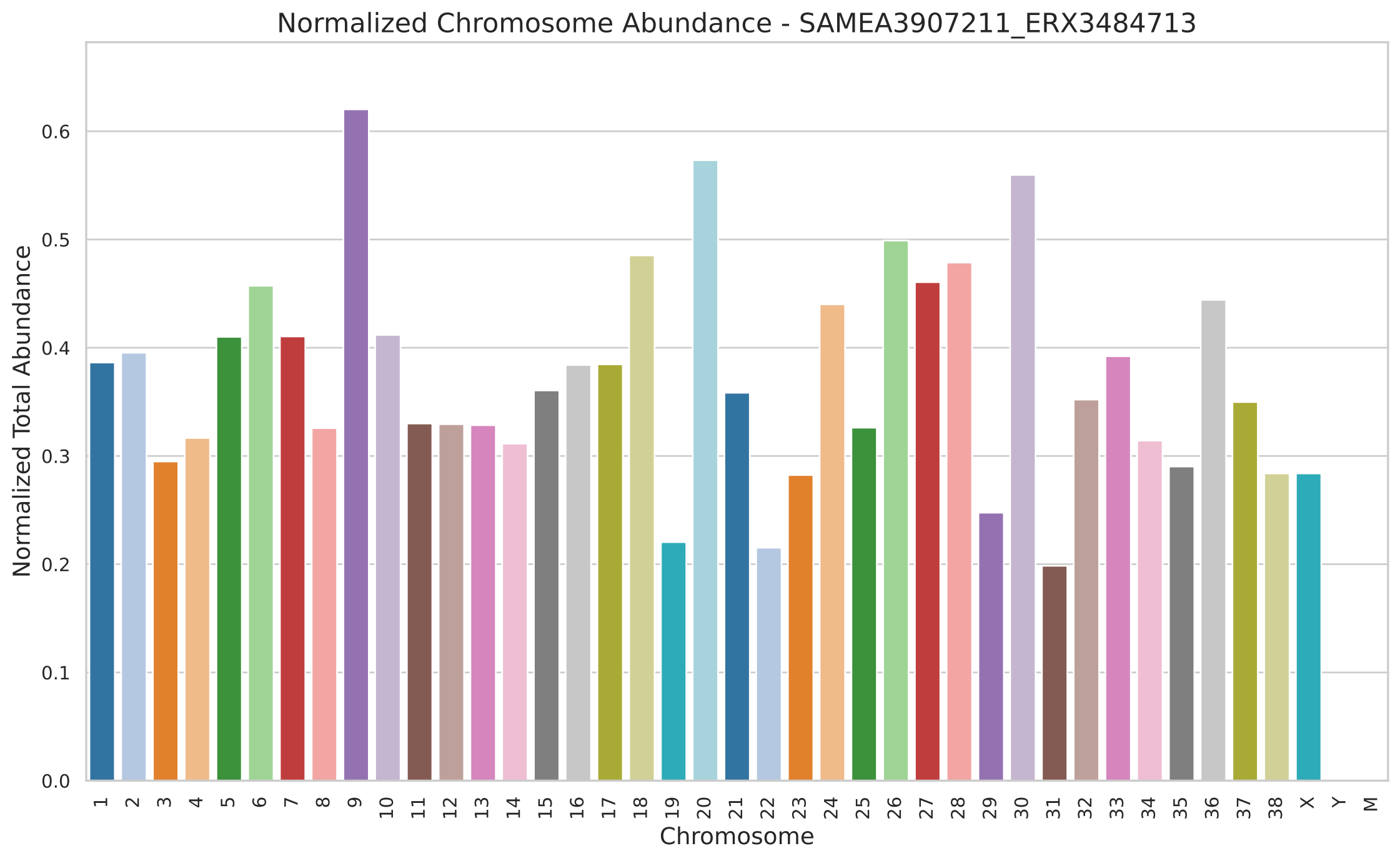

Normalized Chromosome Abundance - SAMEA3906933_ERX3484673
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

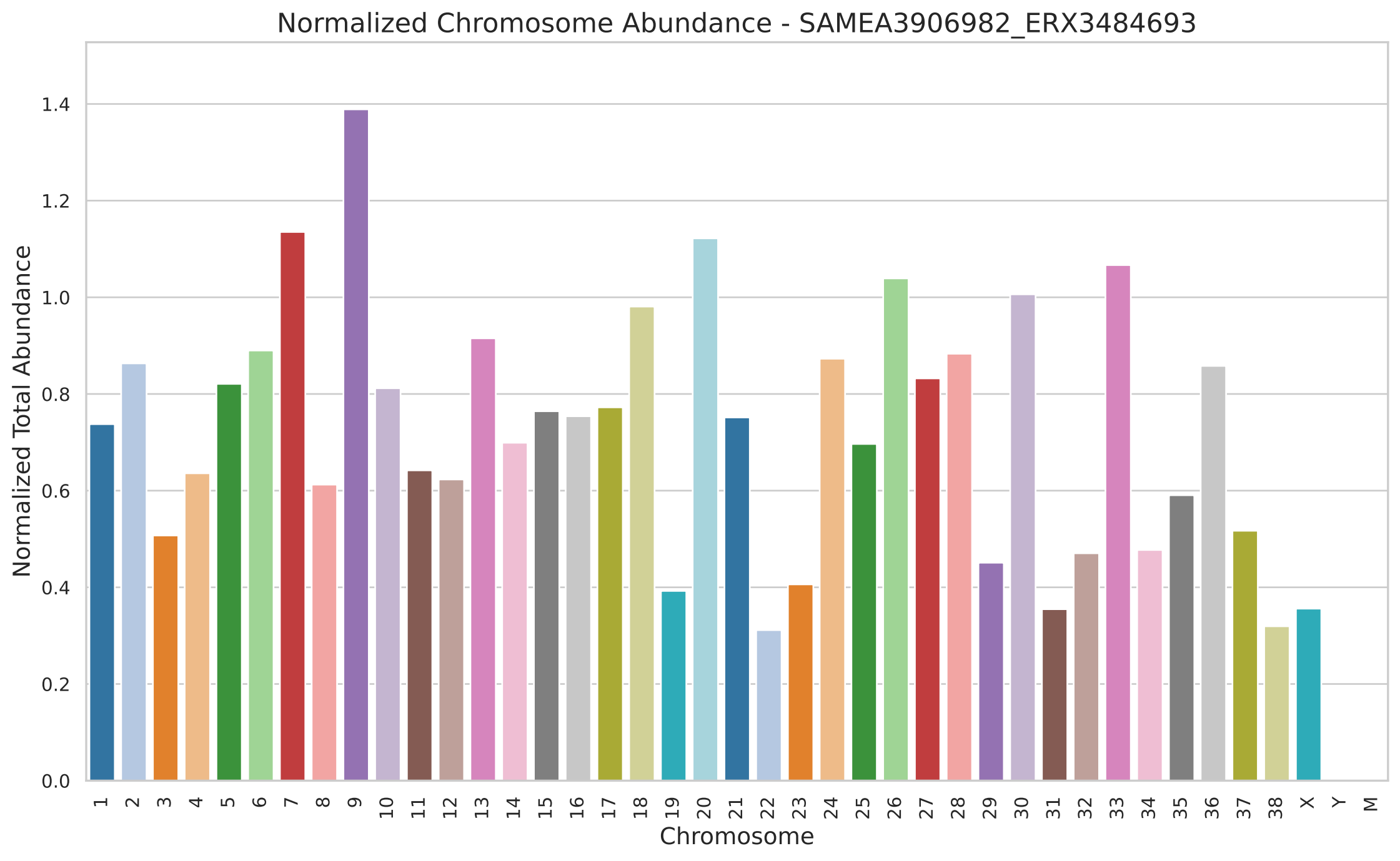

Normalized Chromosome Abundance - SAMEA3907213_ERX3484714
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

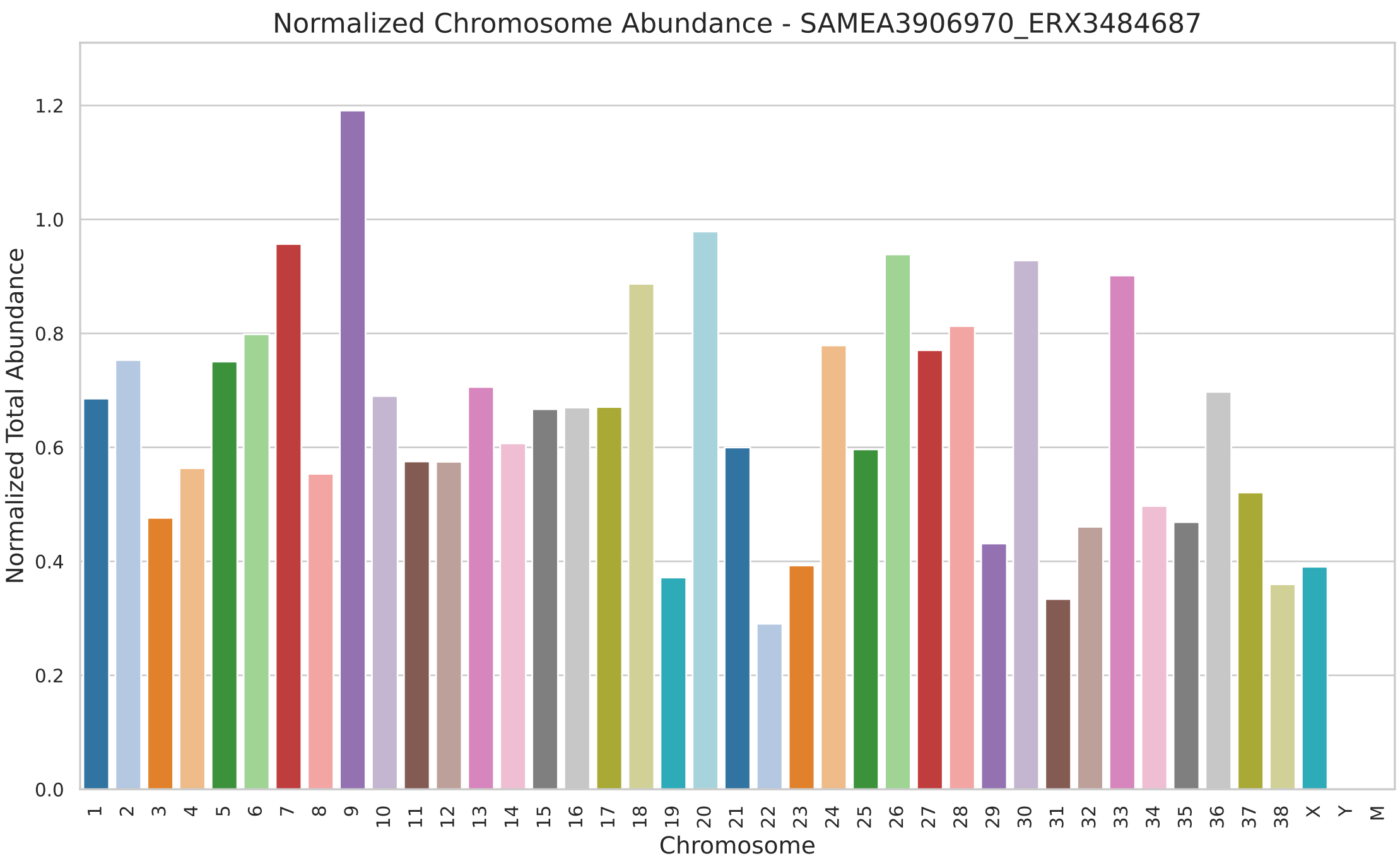

Normalized Chromosome Abundance - SAMEA3907204_ERX3484709
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

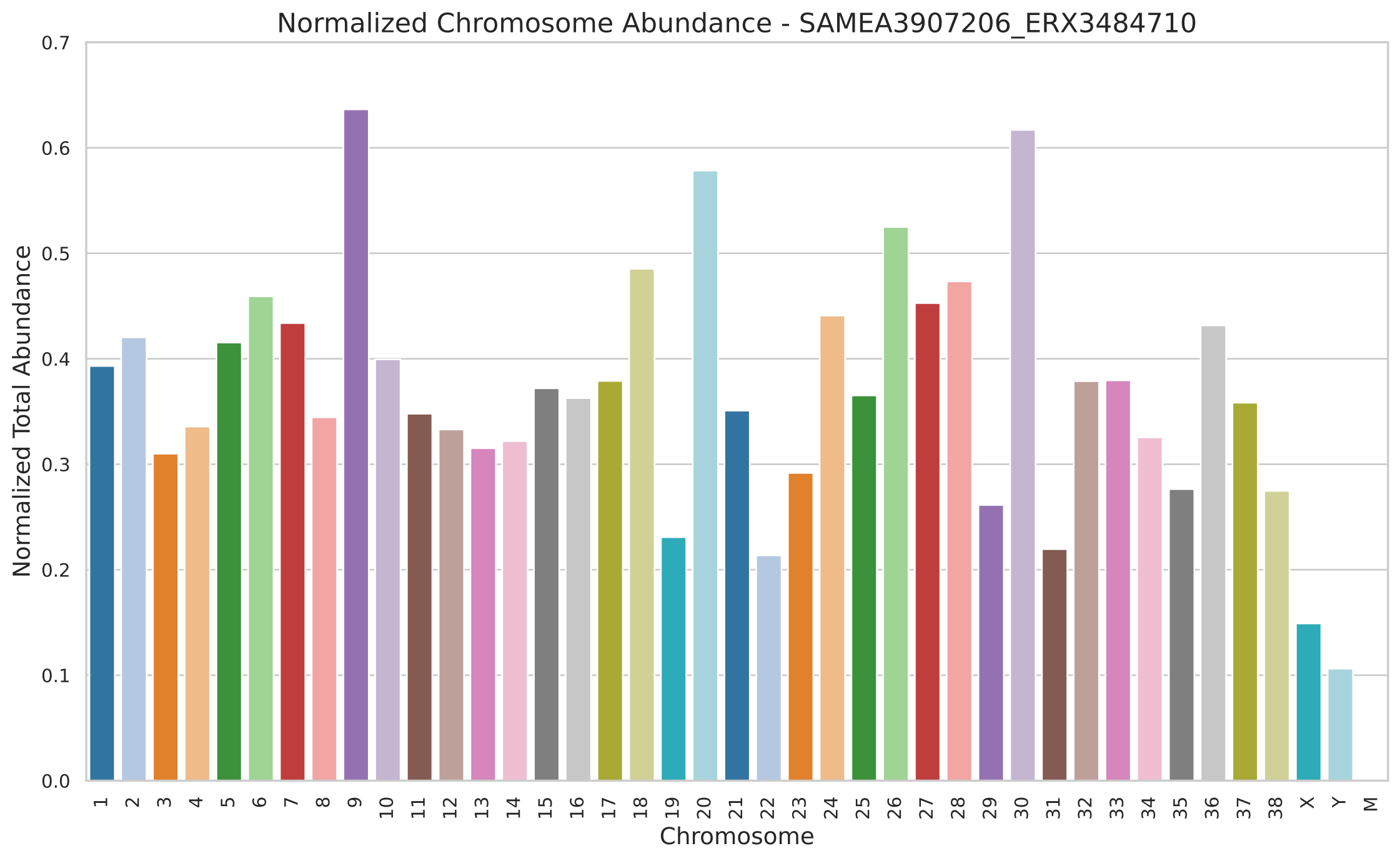

Normalized Chromosome Abundance - SAMEA3907417_ERX3484668
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

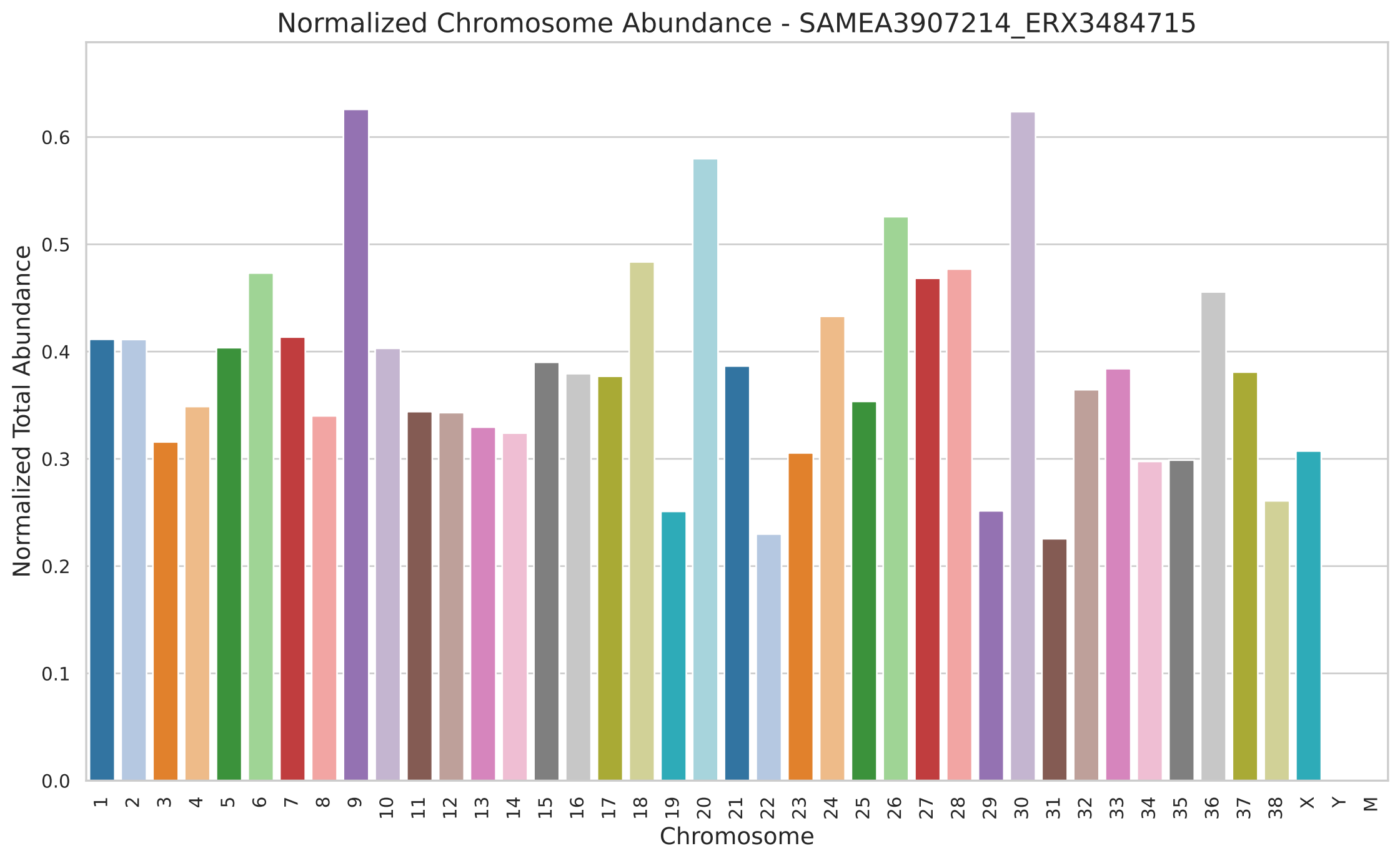

Normalized Chromosome Abundance - SAMEA3907205_ERX3484644
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

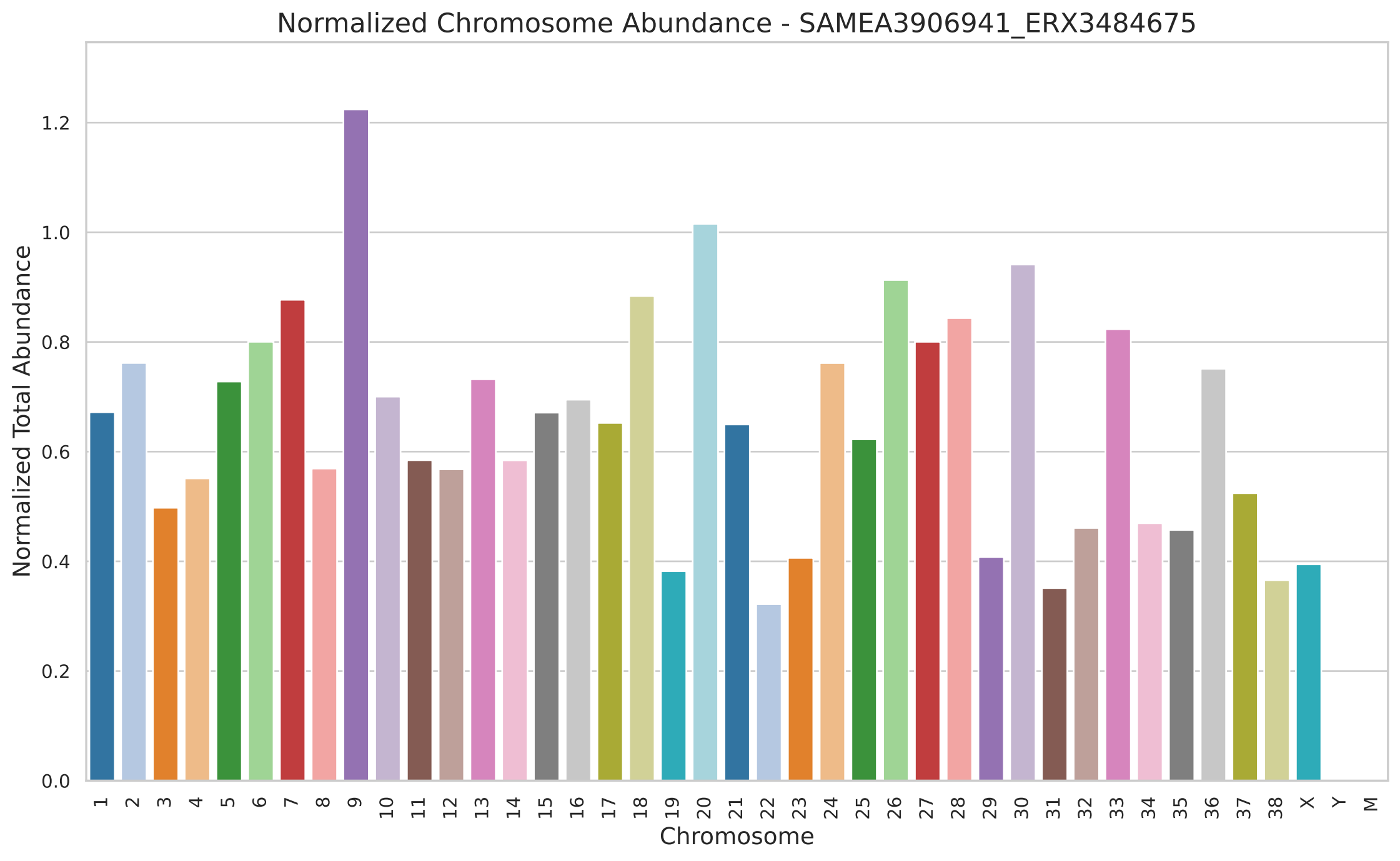

Normalized Chromosome Abundance - SAMEA3907211_ERX3484713
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

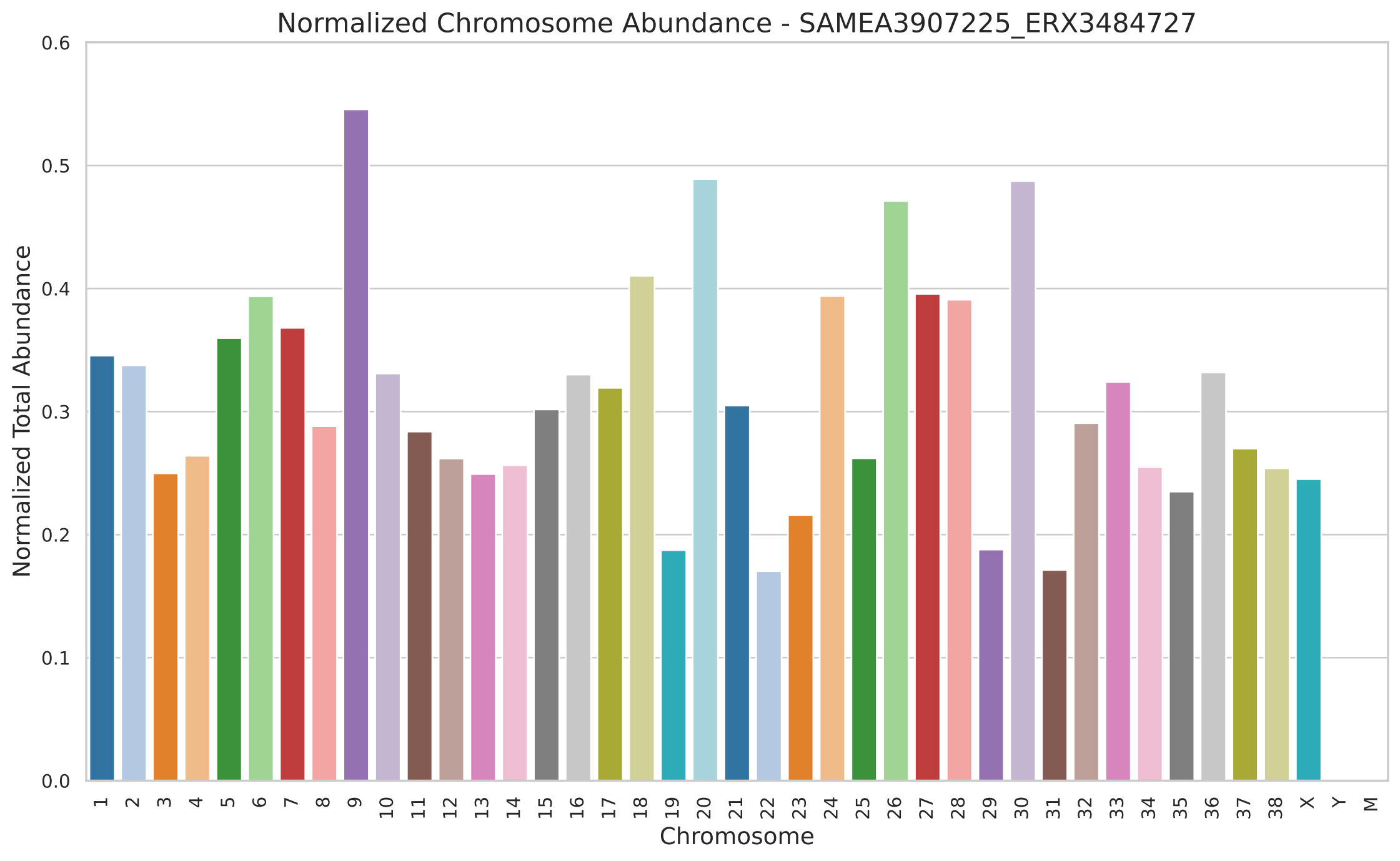

Normalized Chromosome Abundance - SAMEA3906982_ERX3484693
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

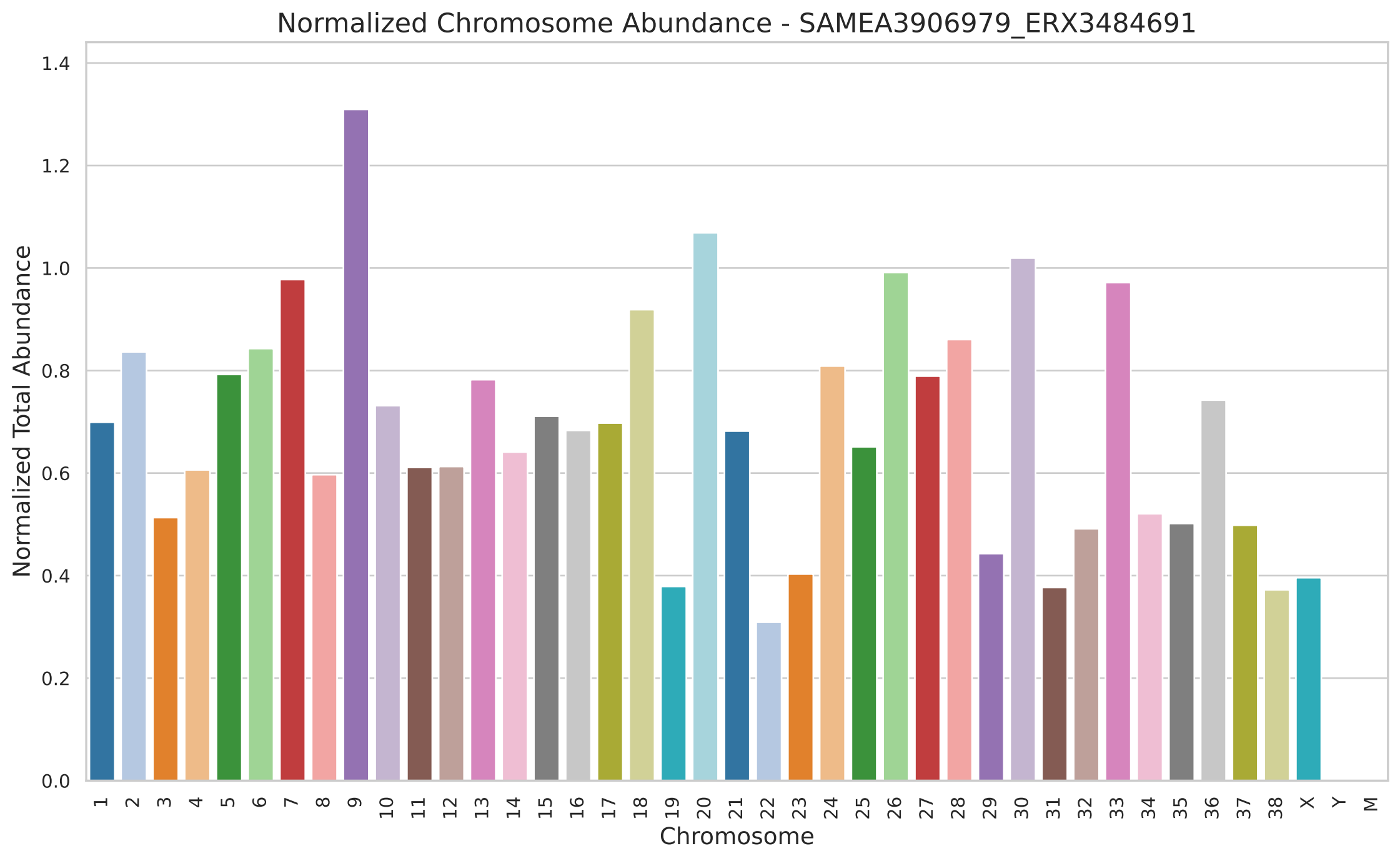

Normalized Chromosome Abundance - SAMEA3906970_ERX3484687
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

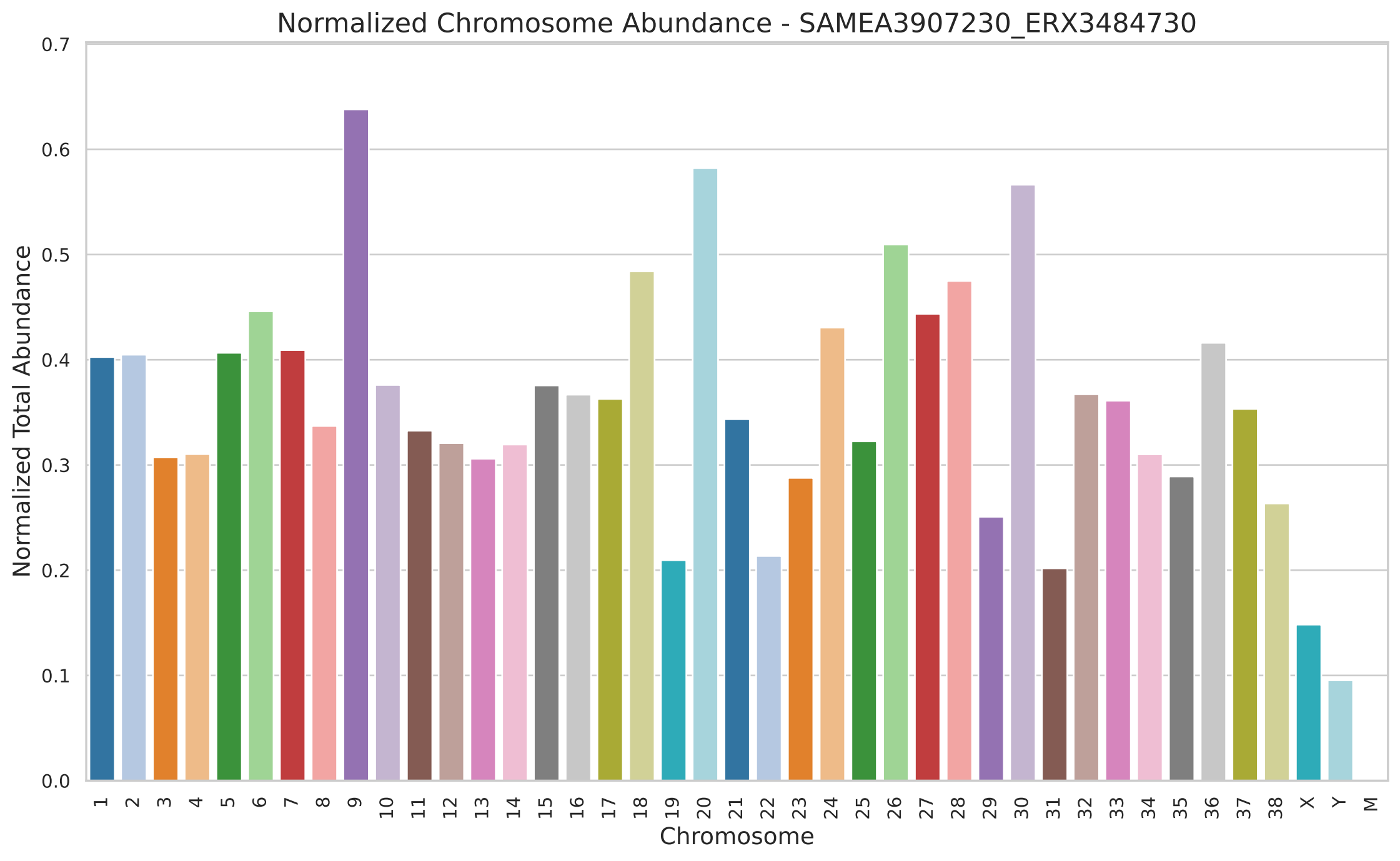

Normalized Chromosome Abundance - SAMEA3907206_ERX3484710
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

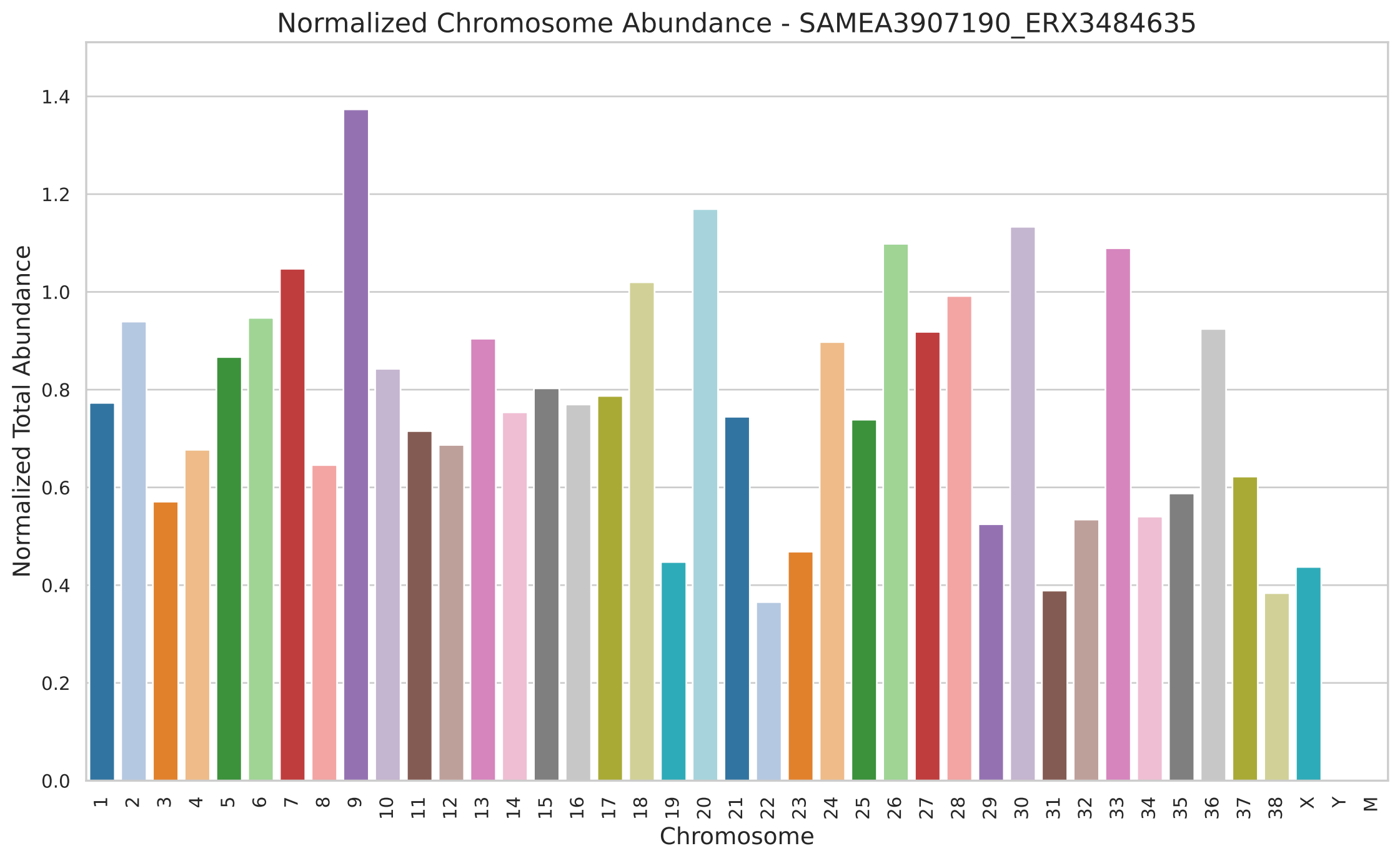

Normalized Chromosome Abundance - SAMEA3907214_ERX3484715
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

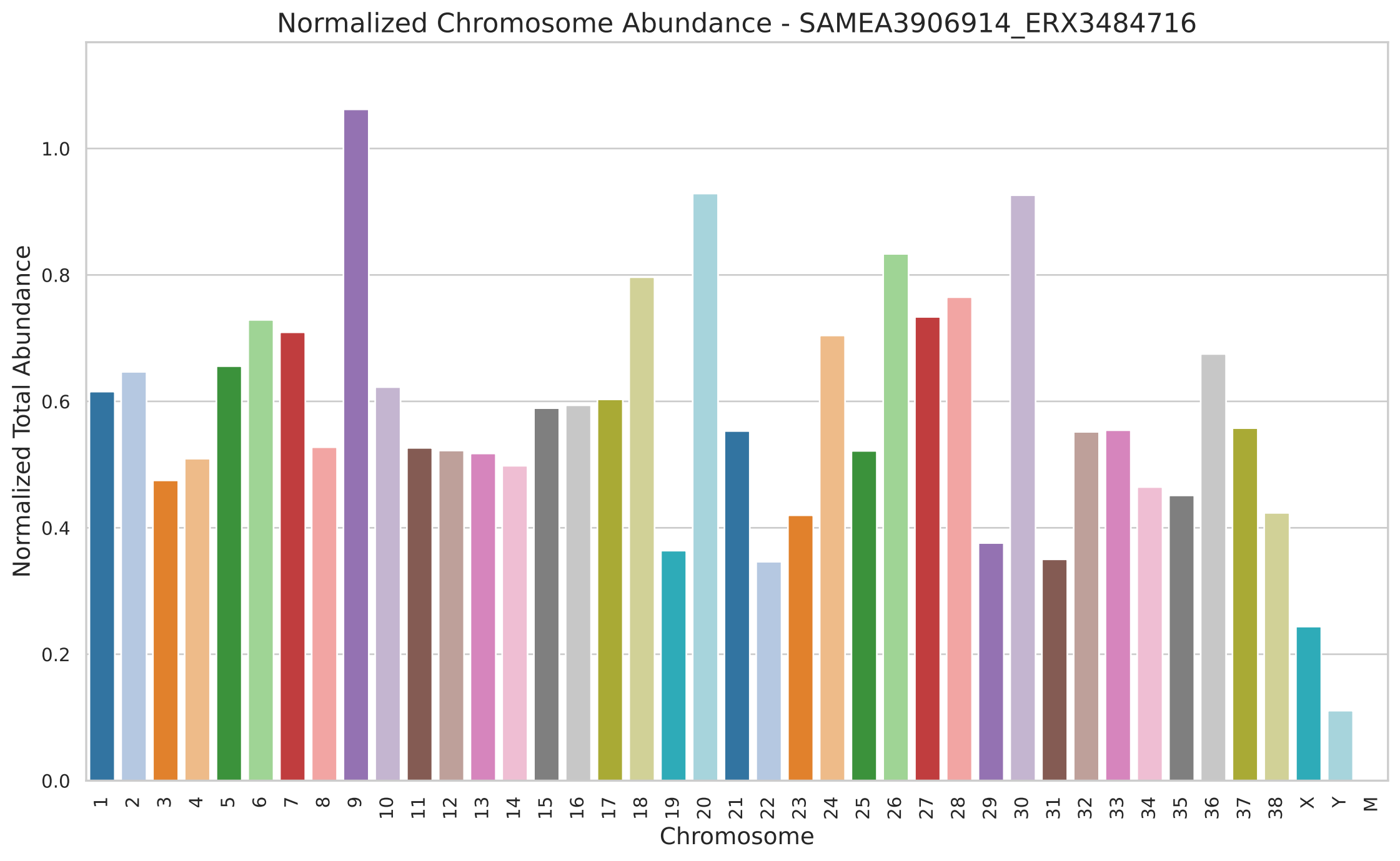

Normalized Chromosome Abundance - SAMEA3906941_ERX3484675
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

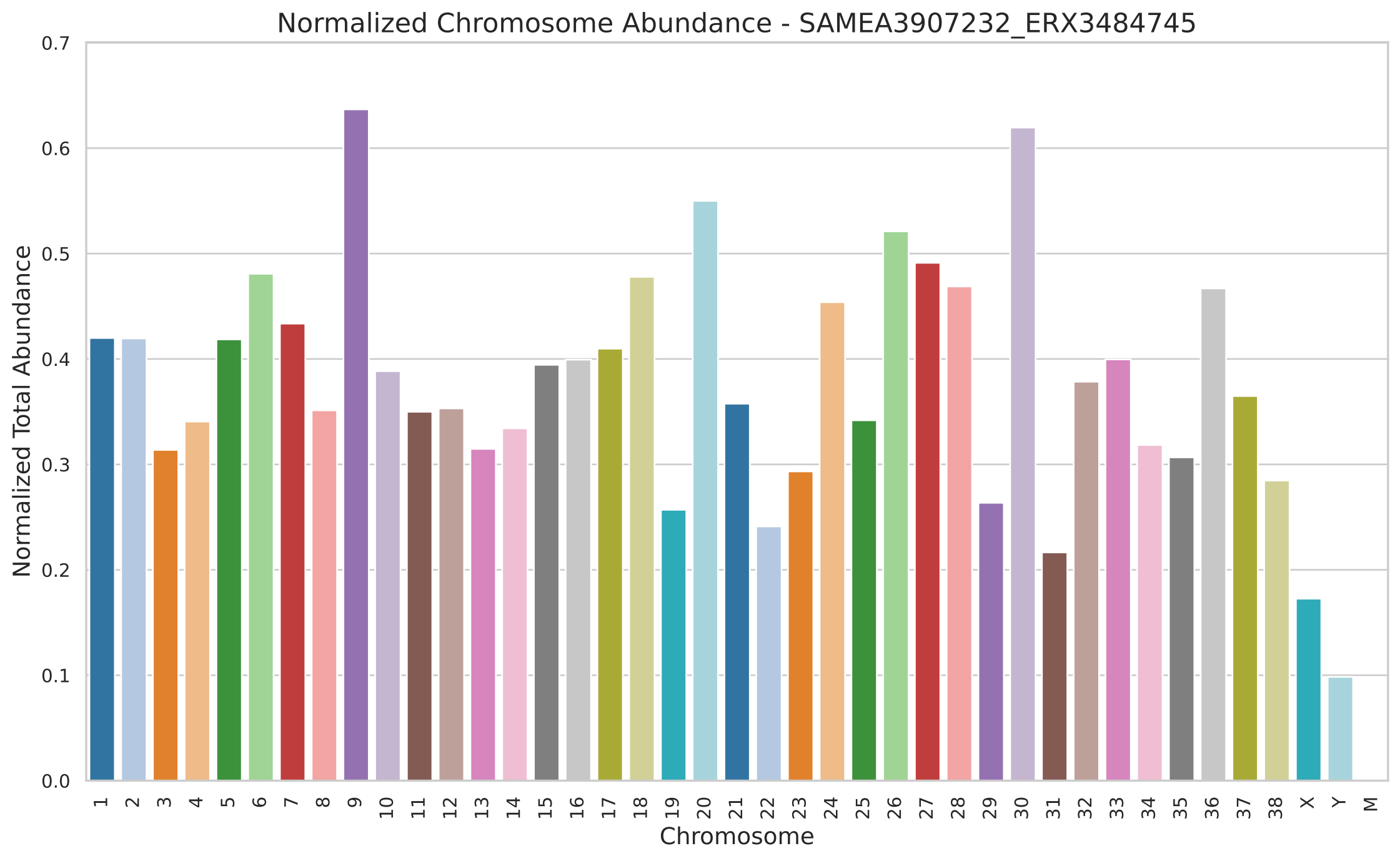

Normalized Chromosome Abundance - SAMEA3907225_ERX3484727
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

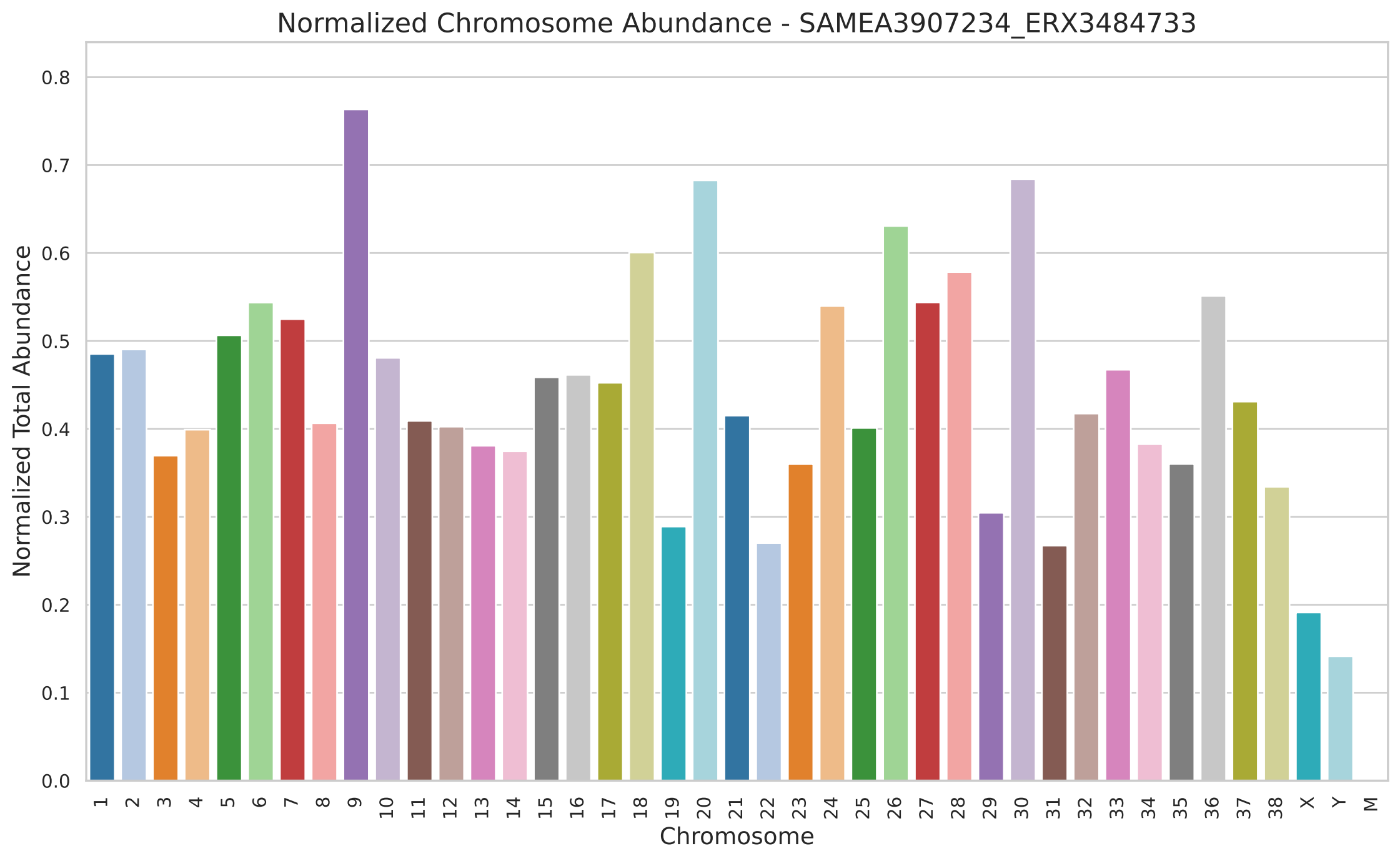

Normalized Chromosome Abundance - SAMEA3906979_ERX3484691
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

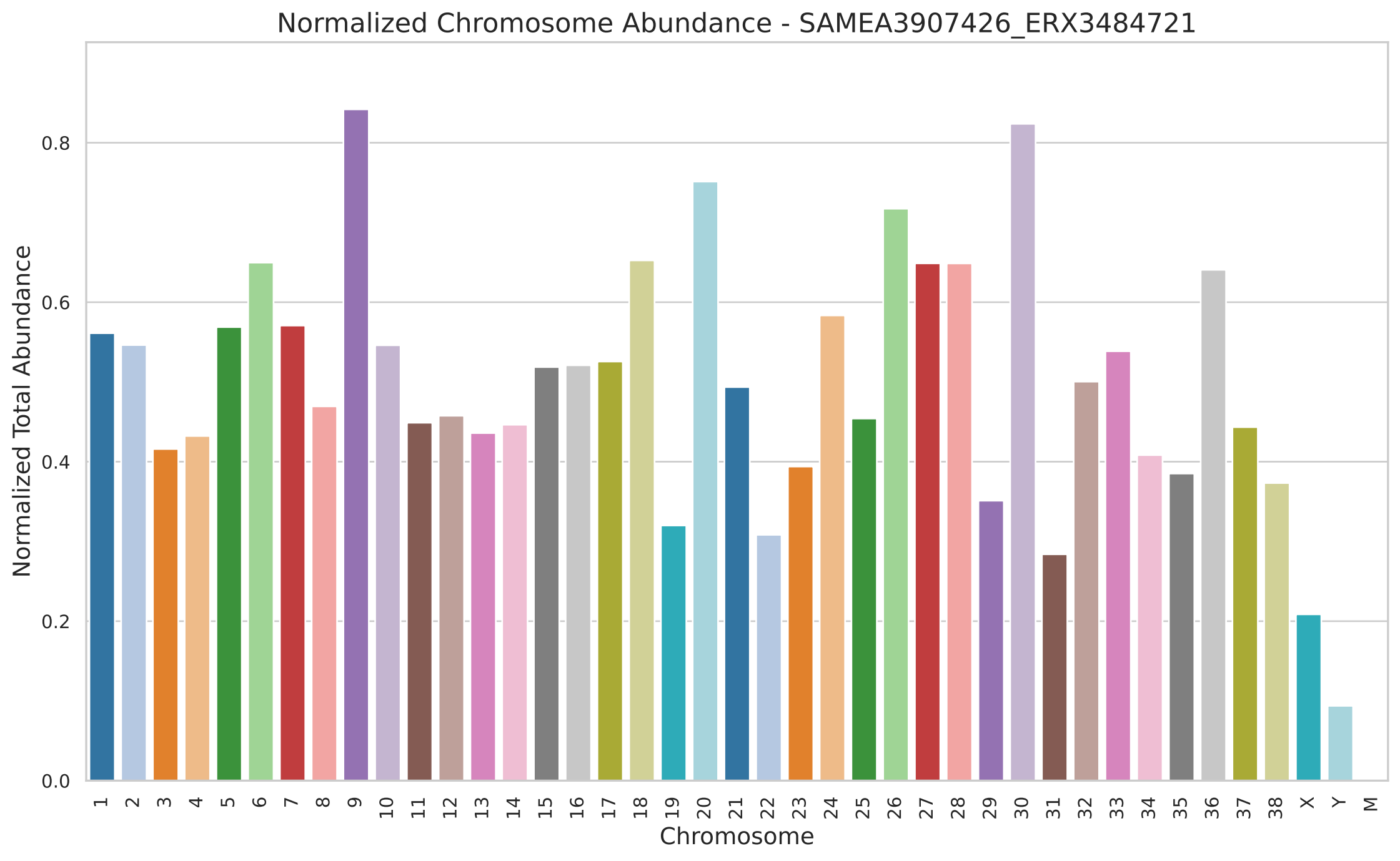

Normalized Chromosome Abundance - SAMEA3907230_ERX3484730
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

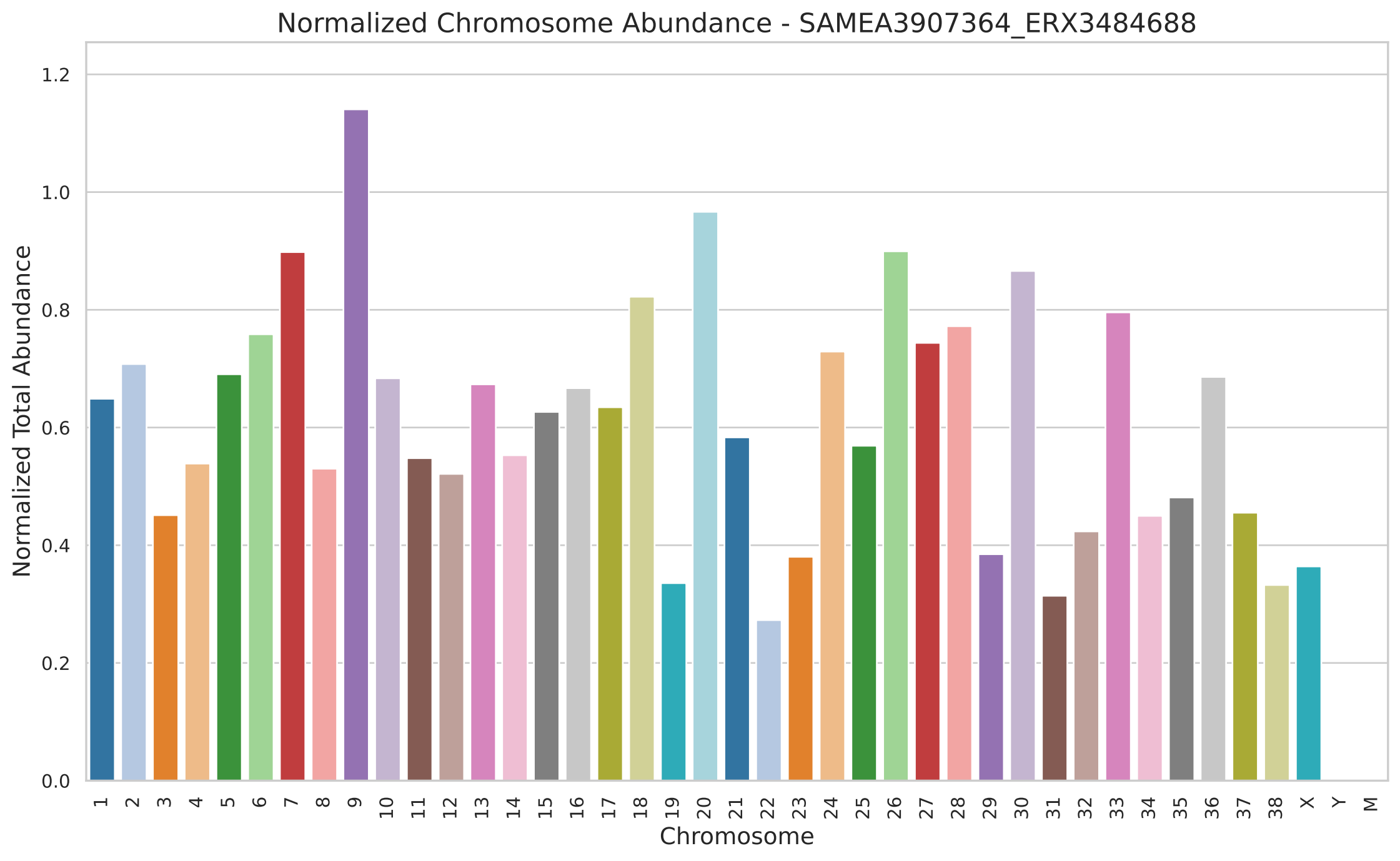

Normalized Chromosome Abundance - SAMEA3907190_ERX3484635
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

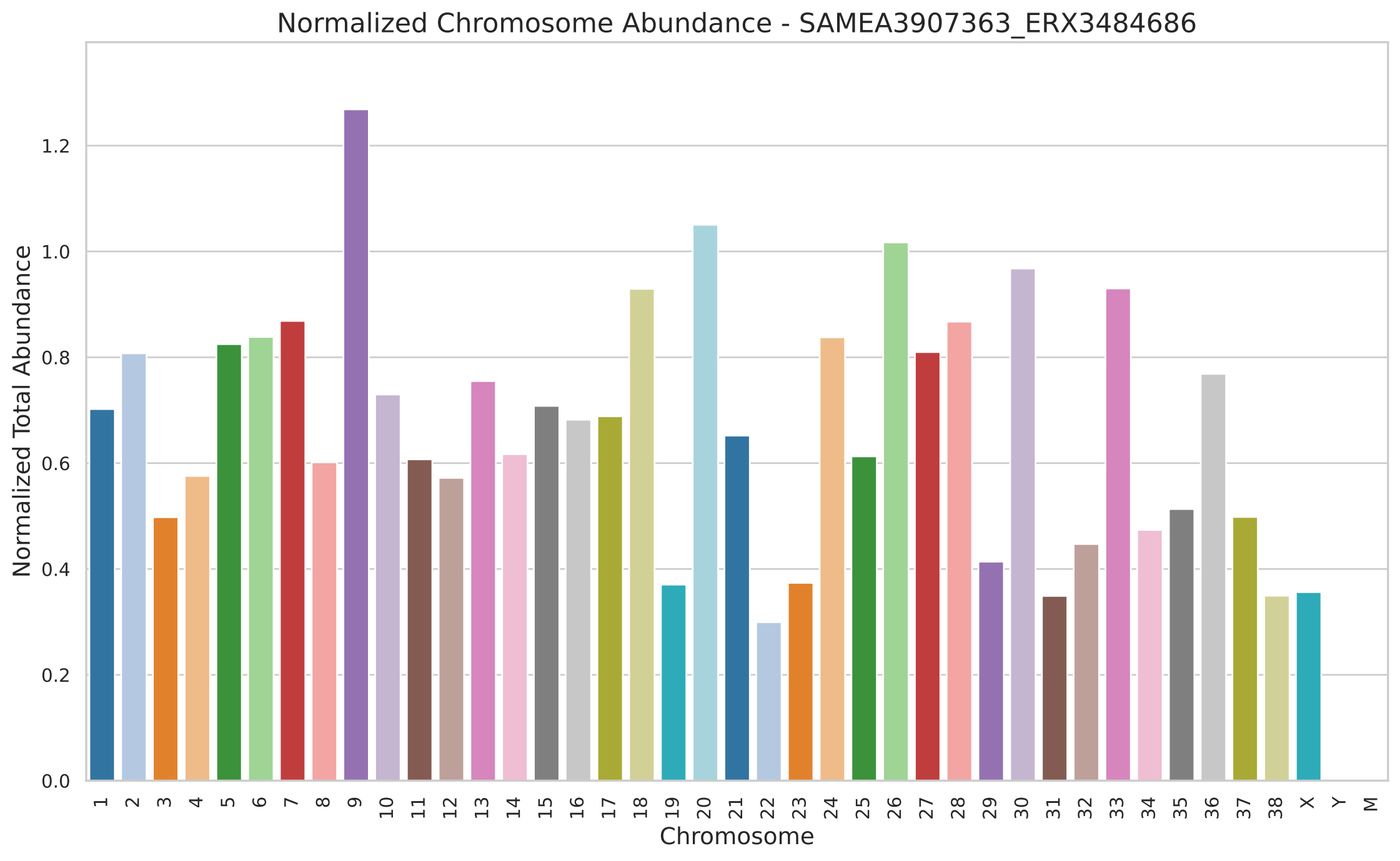

Normalized Chromosome Abundance - SAMEA3906914_ERX3484716
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

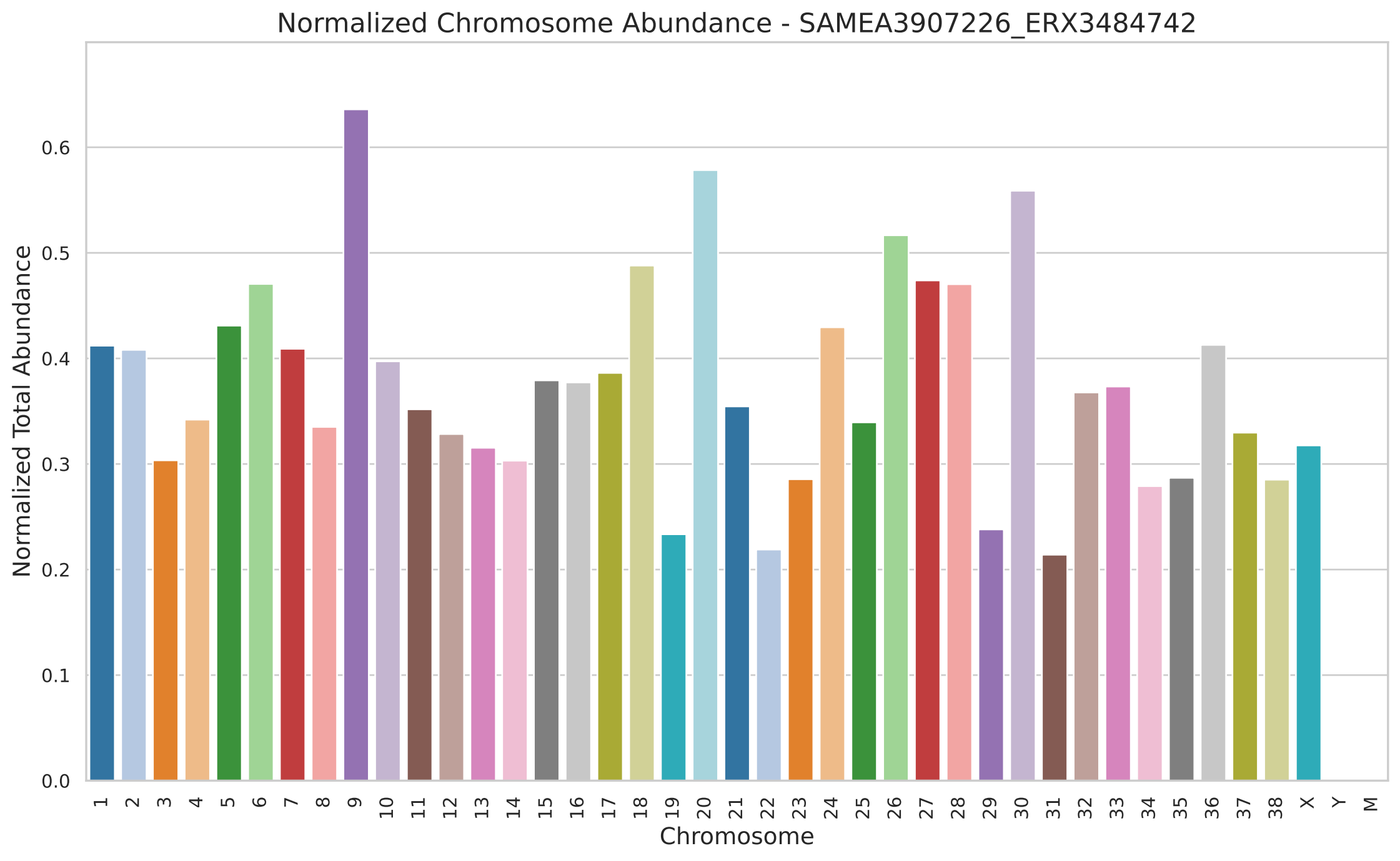

Normalized Chromosome Abundance - SAMEA3907232_ERX3484745
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

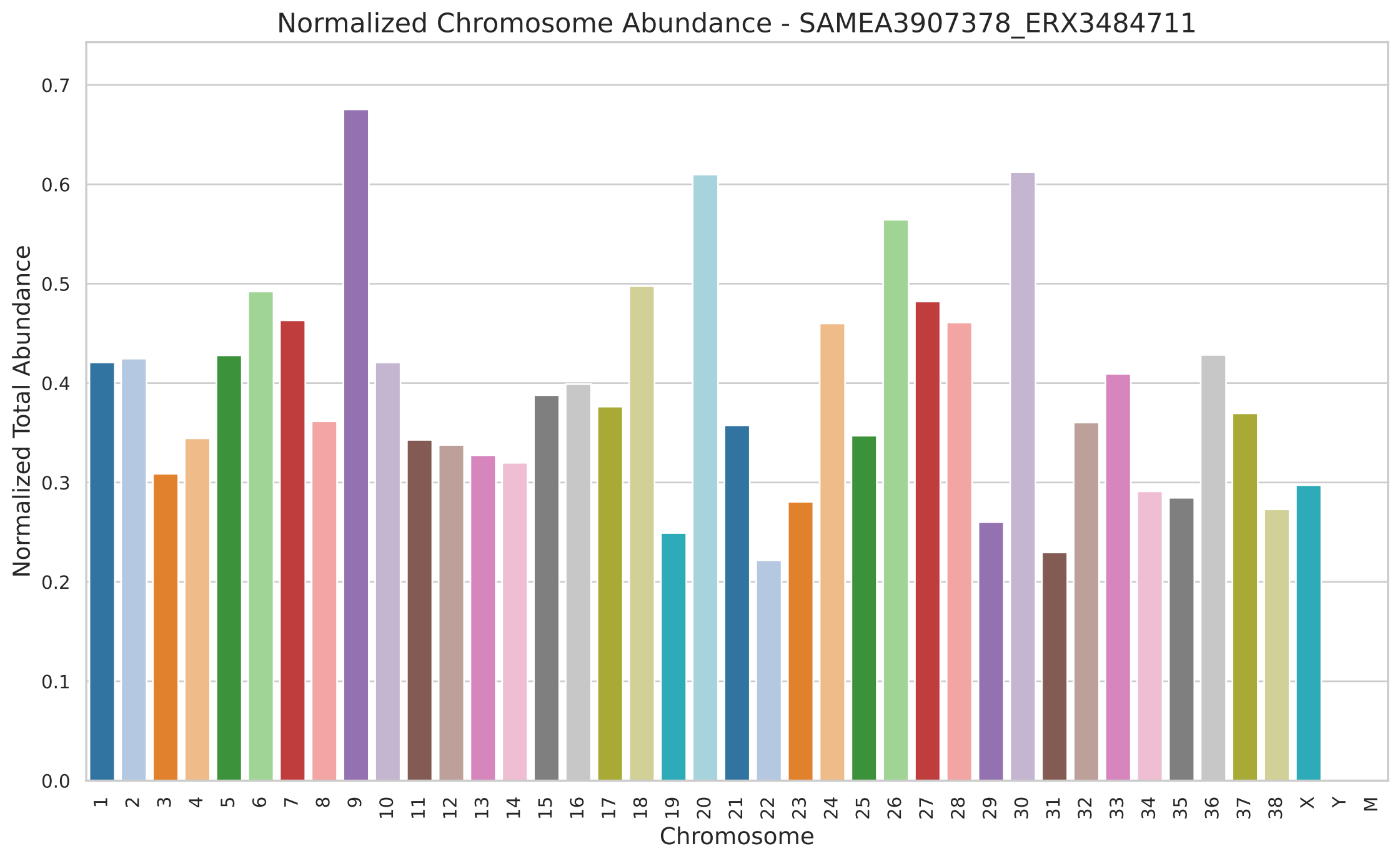

Normalized Chromosome Abundance - SAMEA3907234_ERX3484733
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

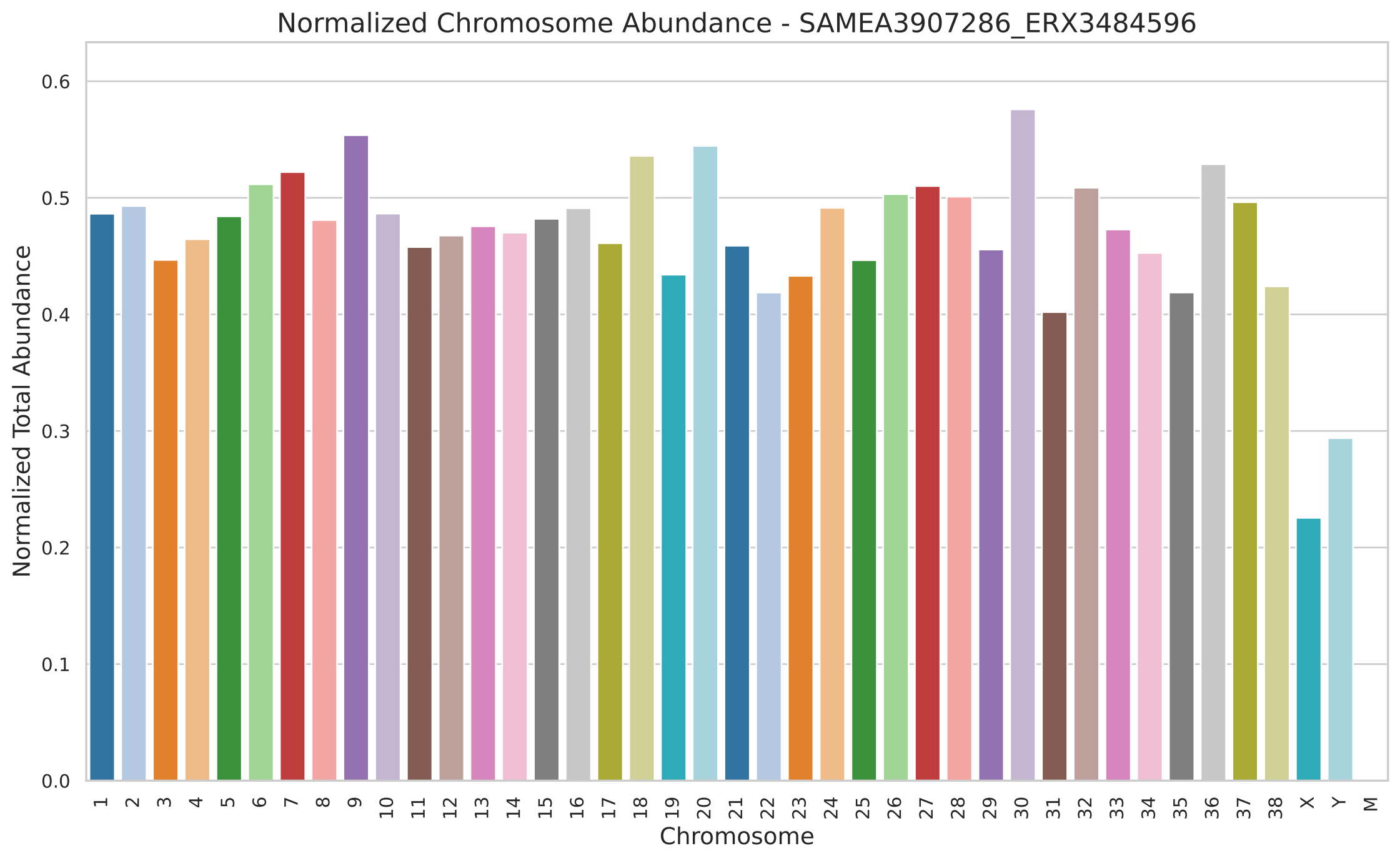

Normalized Chromosome Abundance - SAMEA3907426_ERX3484721
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

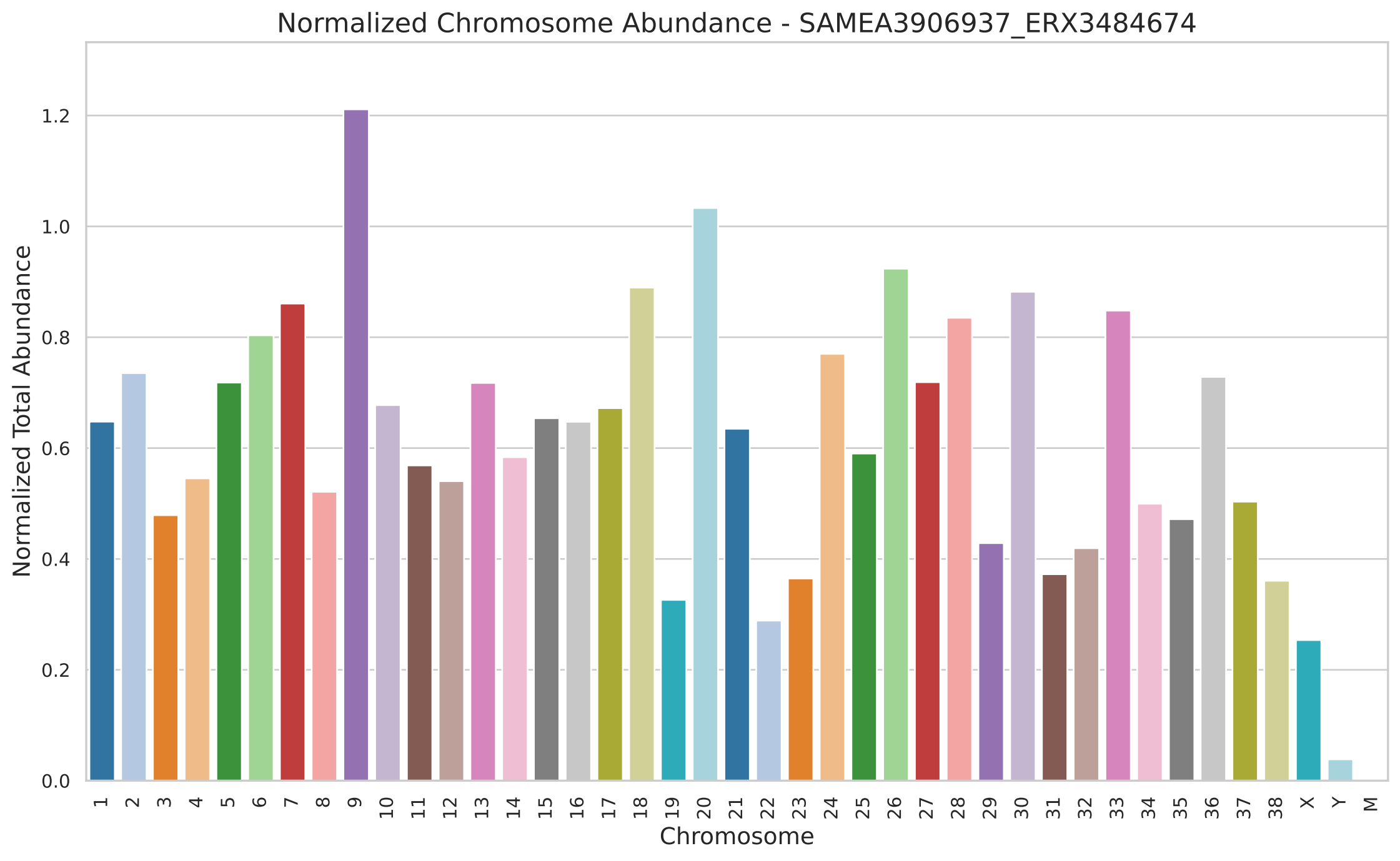

Normalized Chromosome Abundance - SAMEA3907364_ERX3484688
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

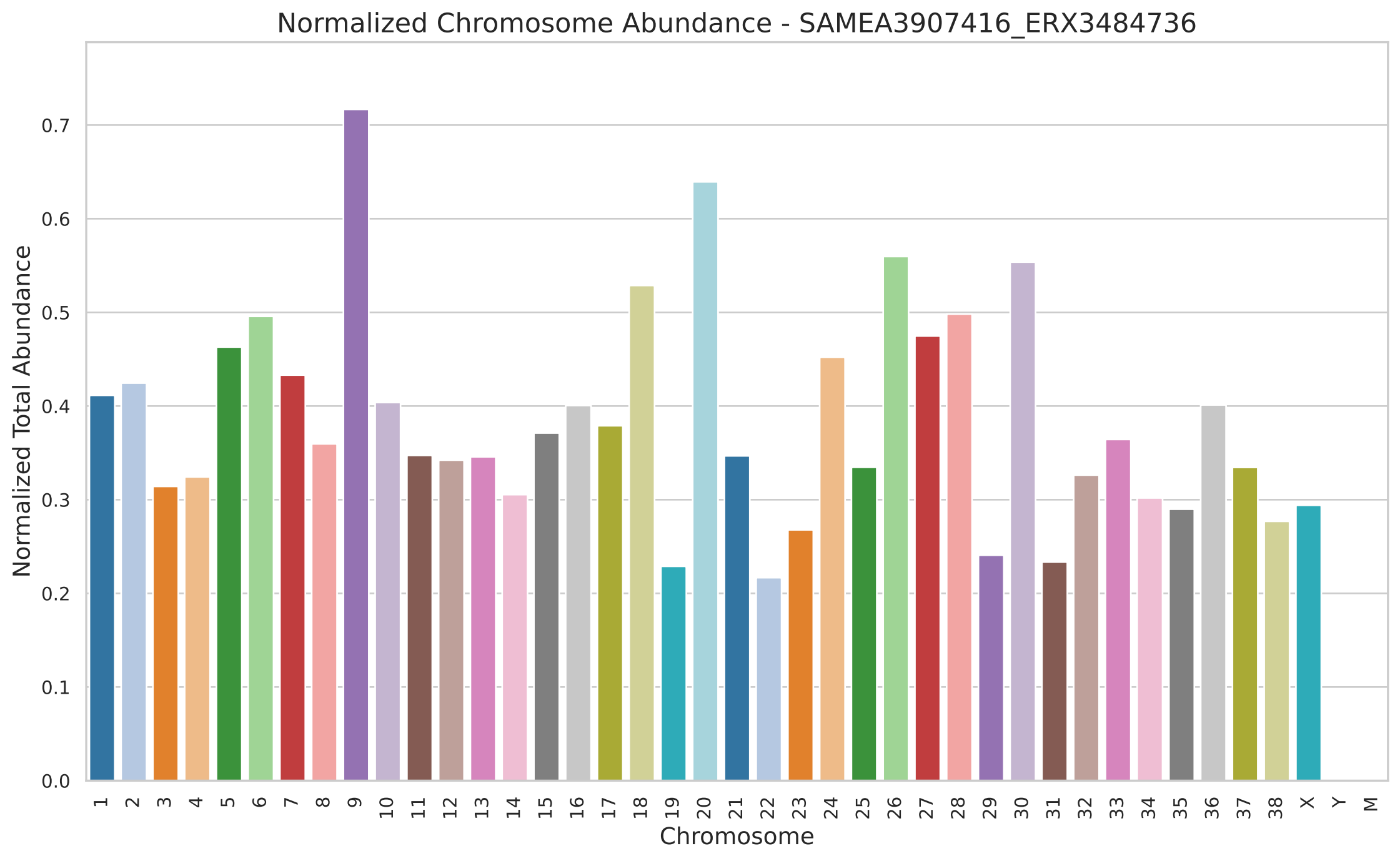

Normalized Chromosome Abundance - SAMEA3907363_ERX3484686
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

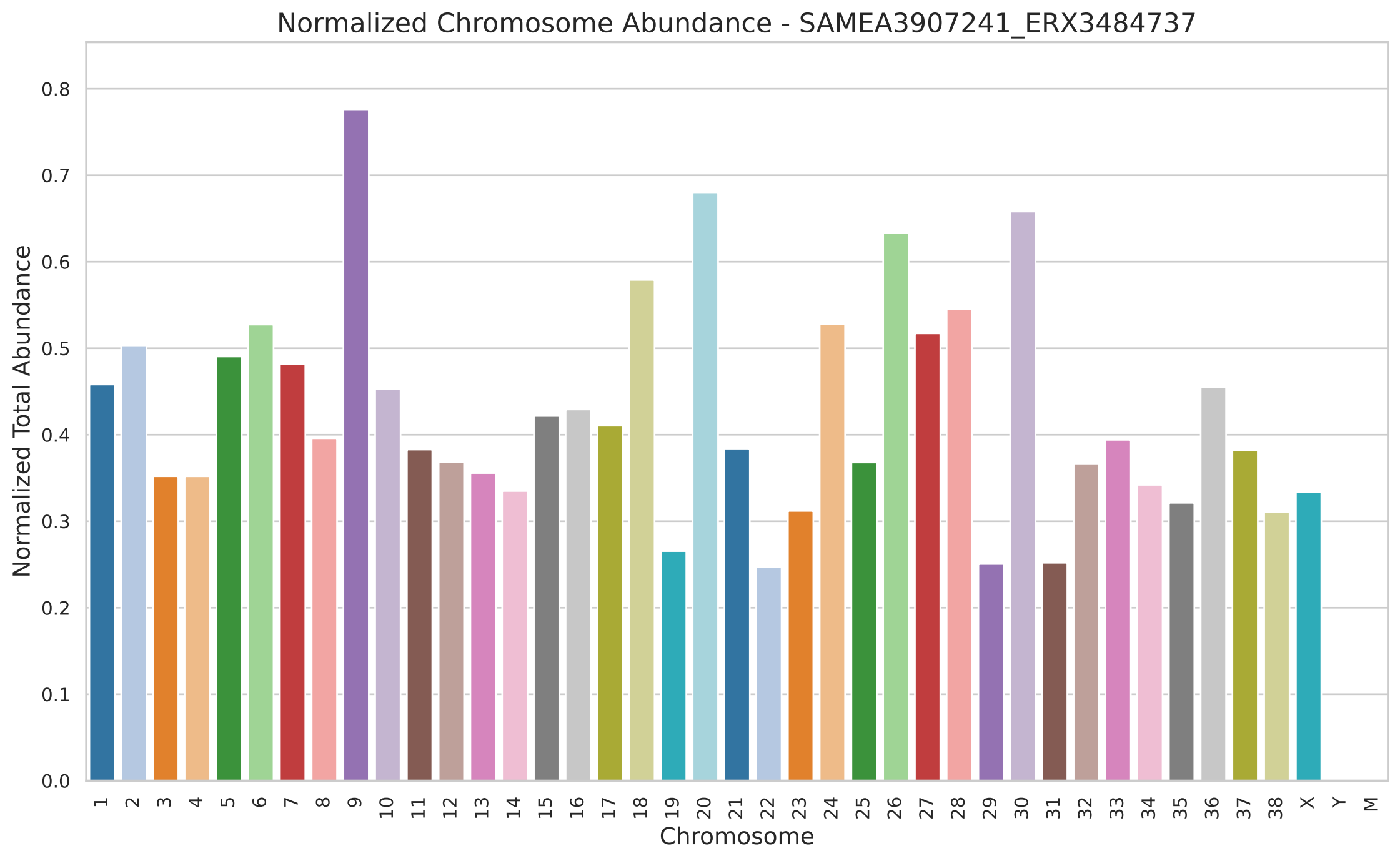

Normalized Chromosome Abundance - SAMEA3907226_ERX3484742
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

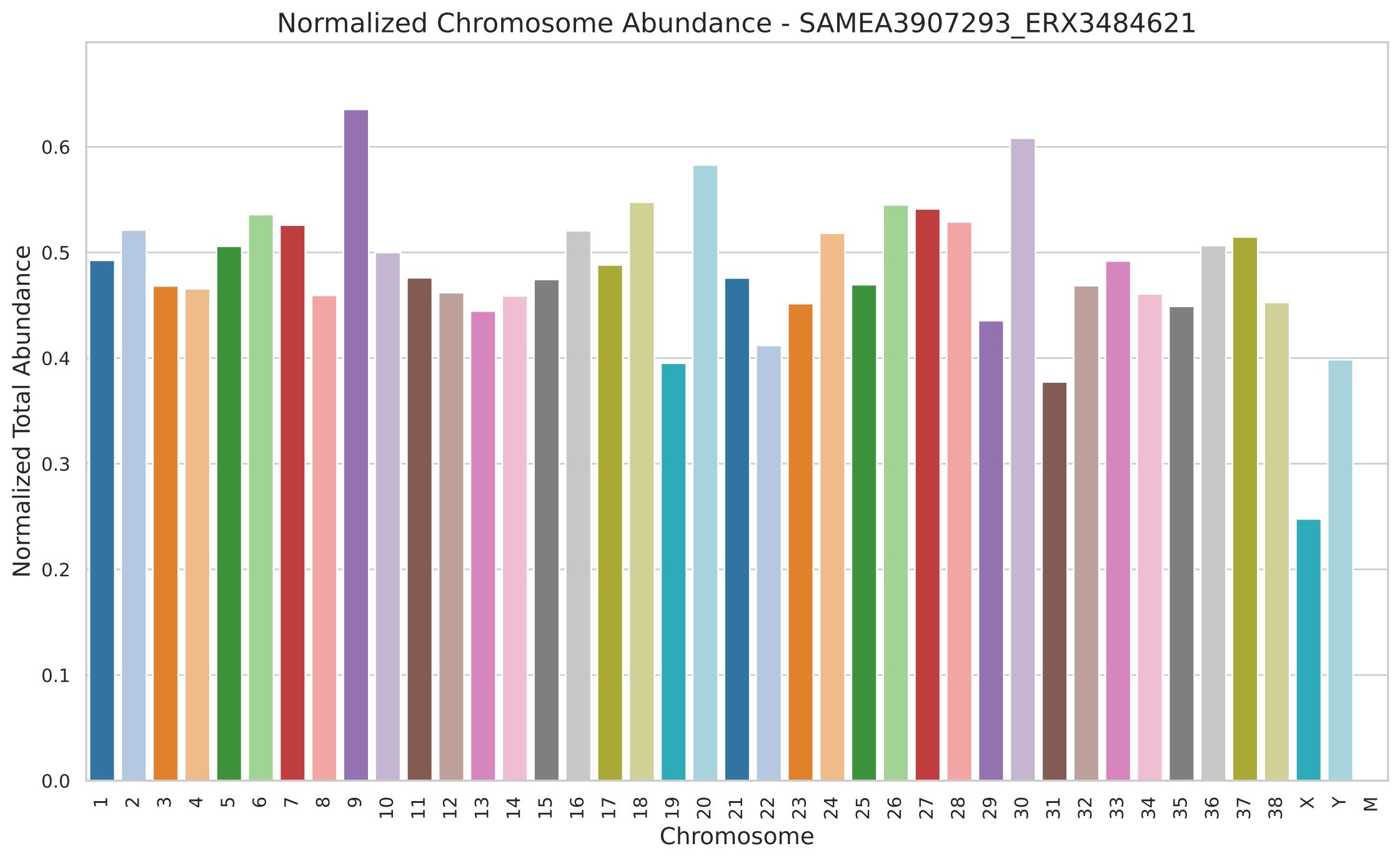

Normalized Chromosome Abundance - SAMEA3907378_ERX3484711
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

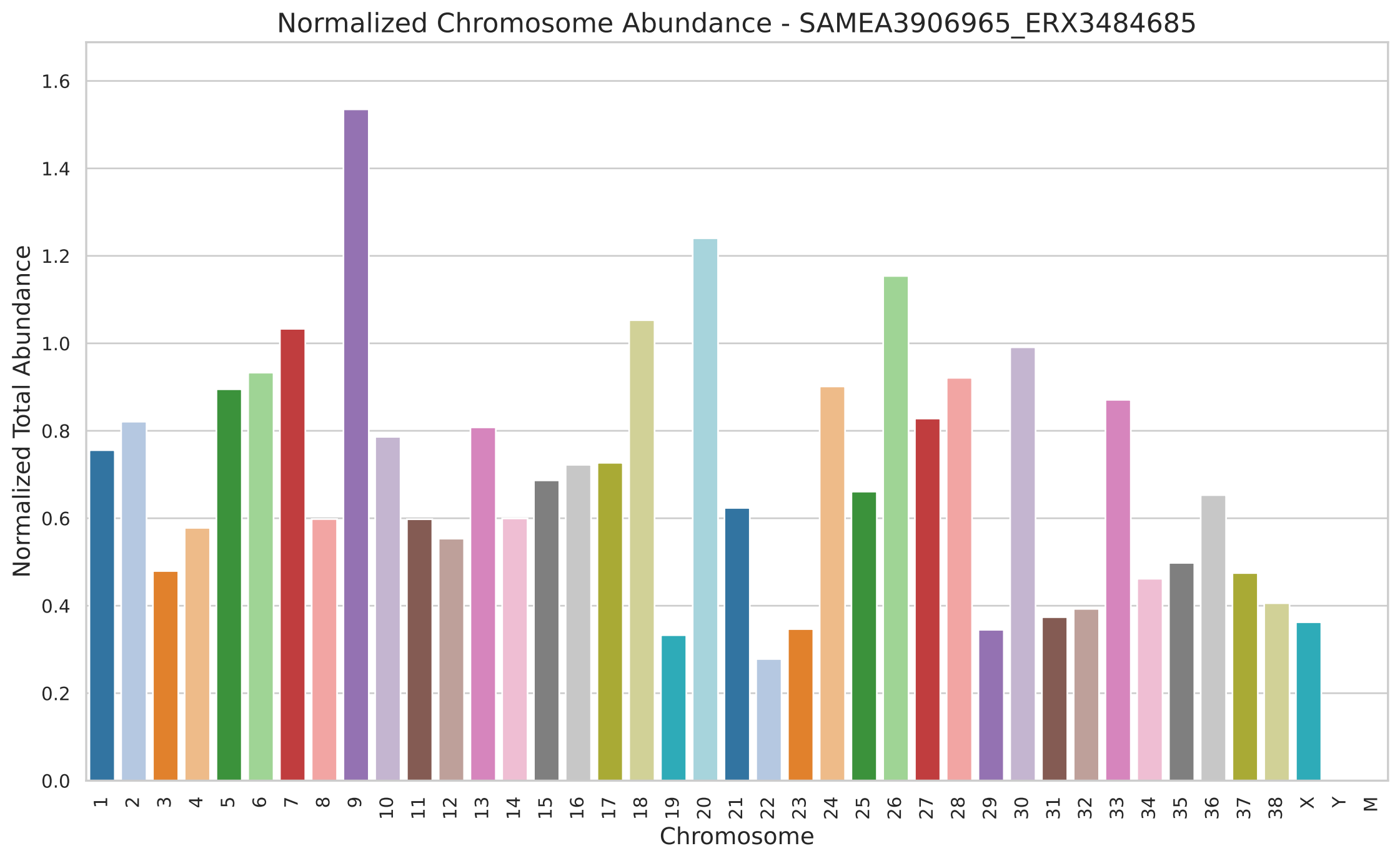

Normalized Chromosome Abundance - SAMEA3907286_ERX3484596
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

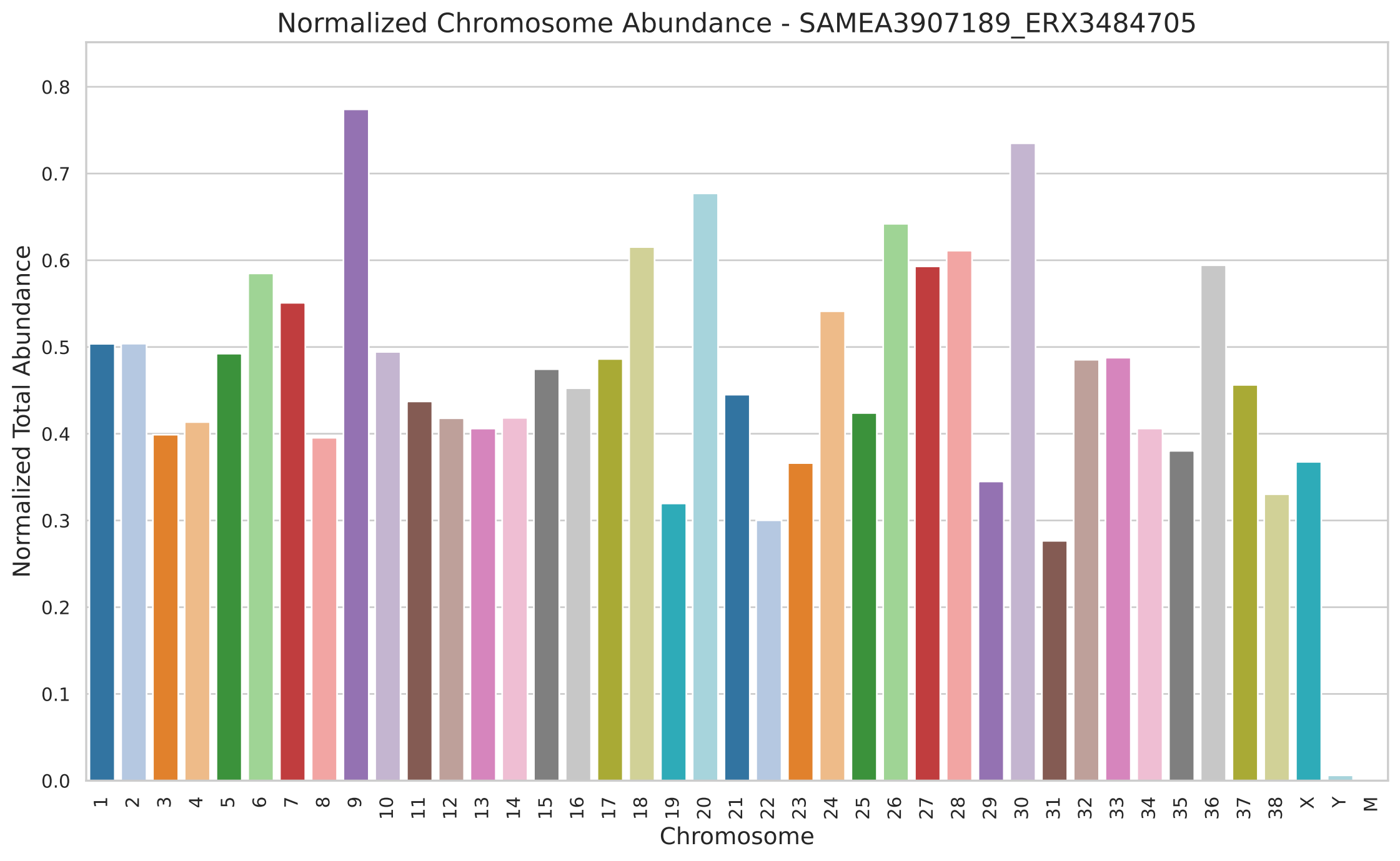

Normalized Chromosome Abundance - SAMEA3906937_ERX3484674
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

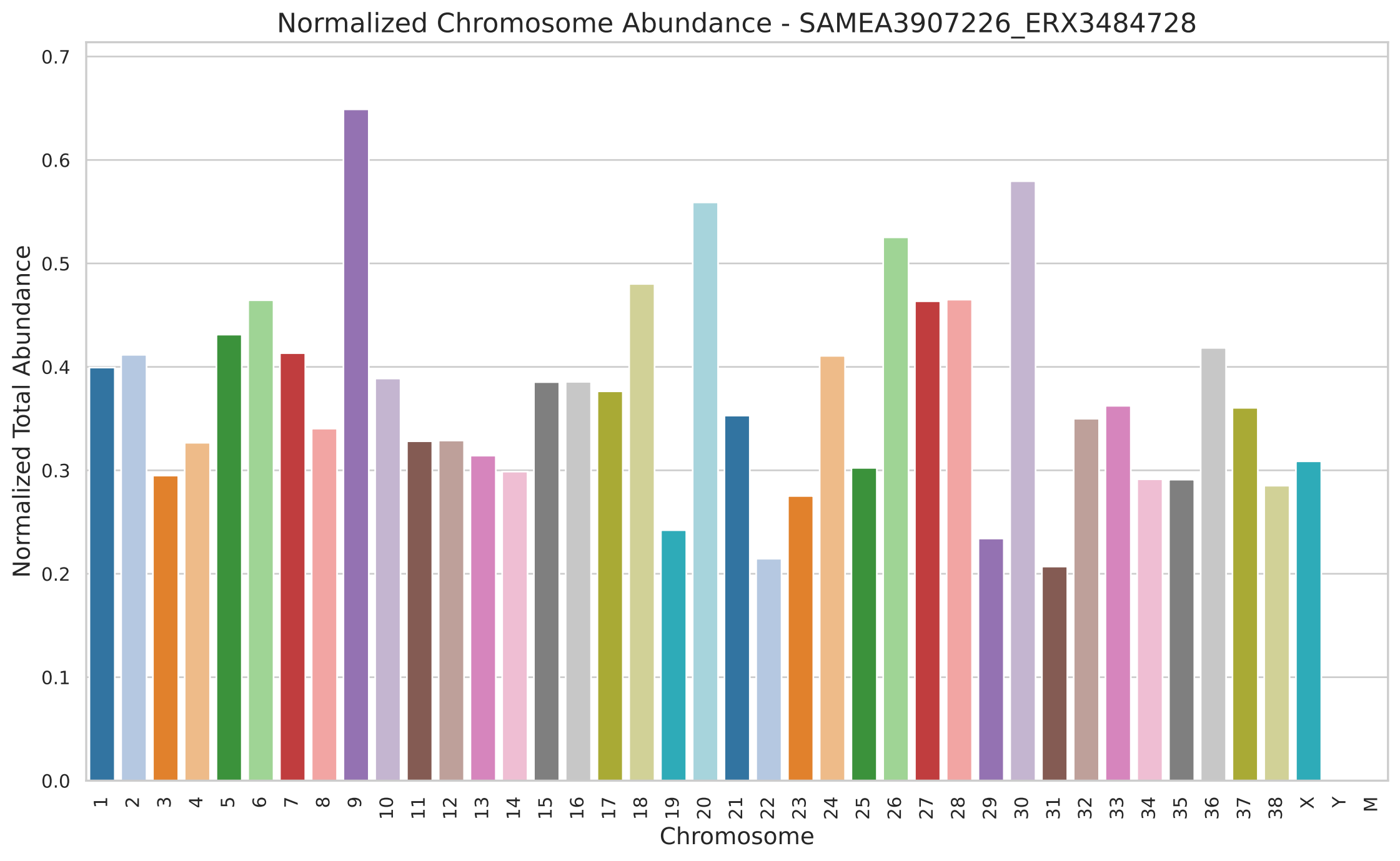

Normalized Chromosome Abundance - SAMEA3907416_ERX3484736
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

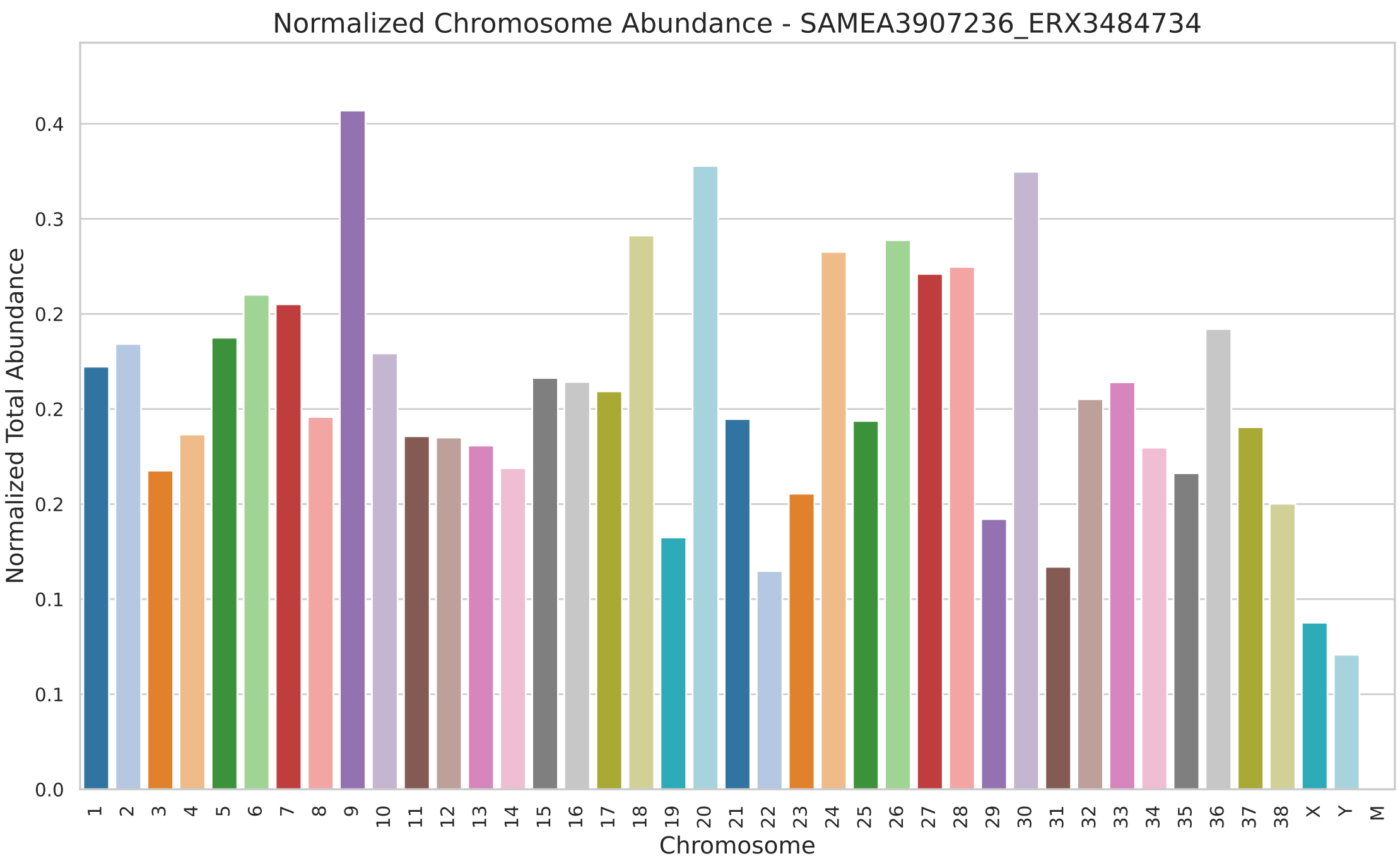

Normalized Chromosome Abundance - SAMEA3907241_ERX3484737
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

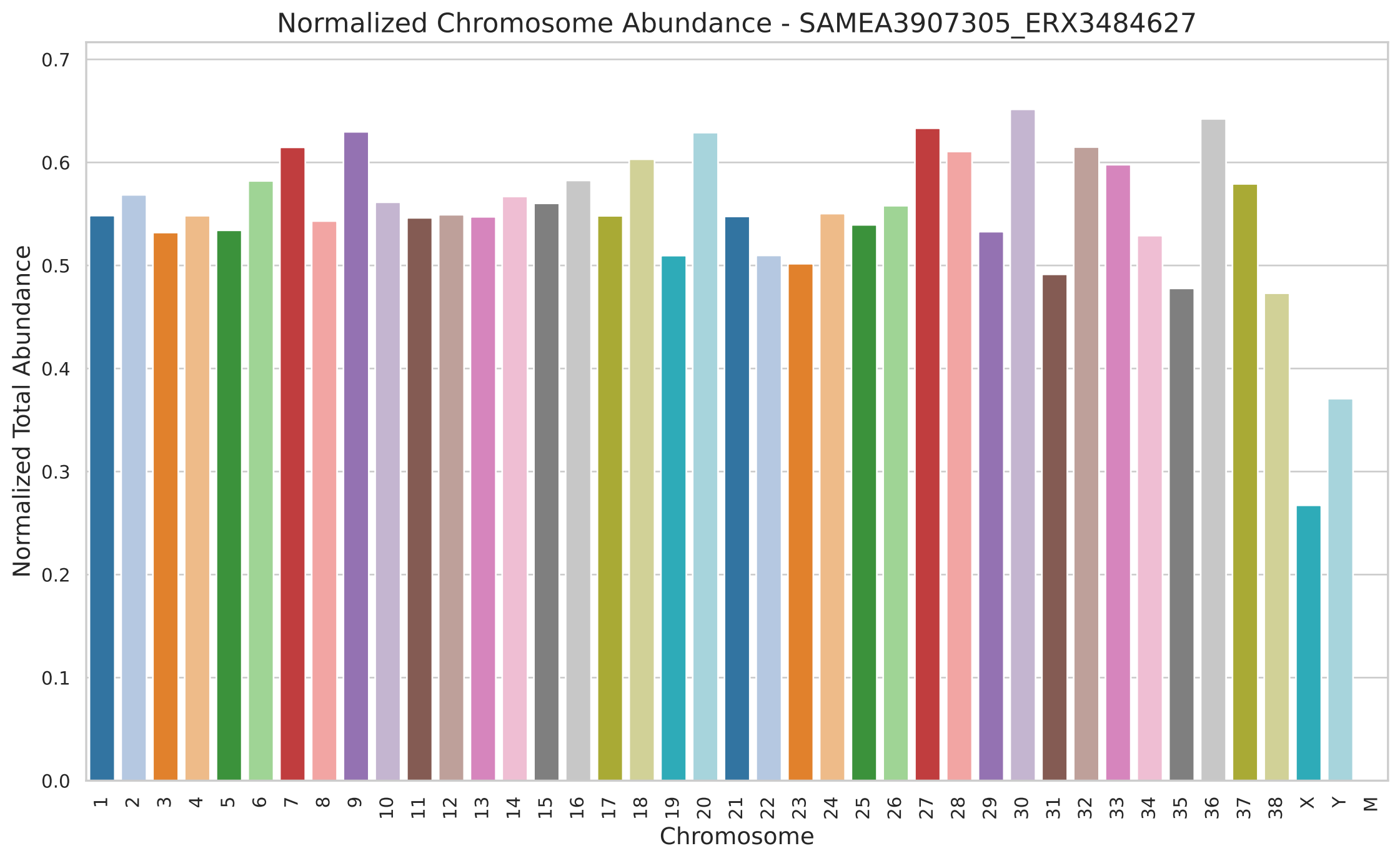

Normalized Chromosome Abundance - SAMEA3907293_ERX3484621
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

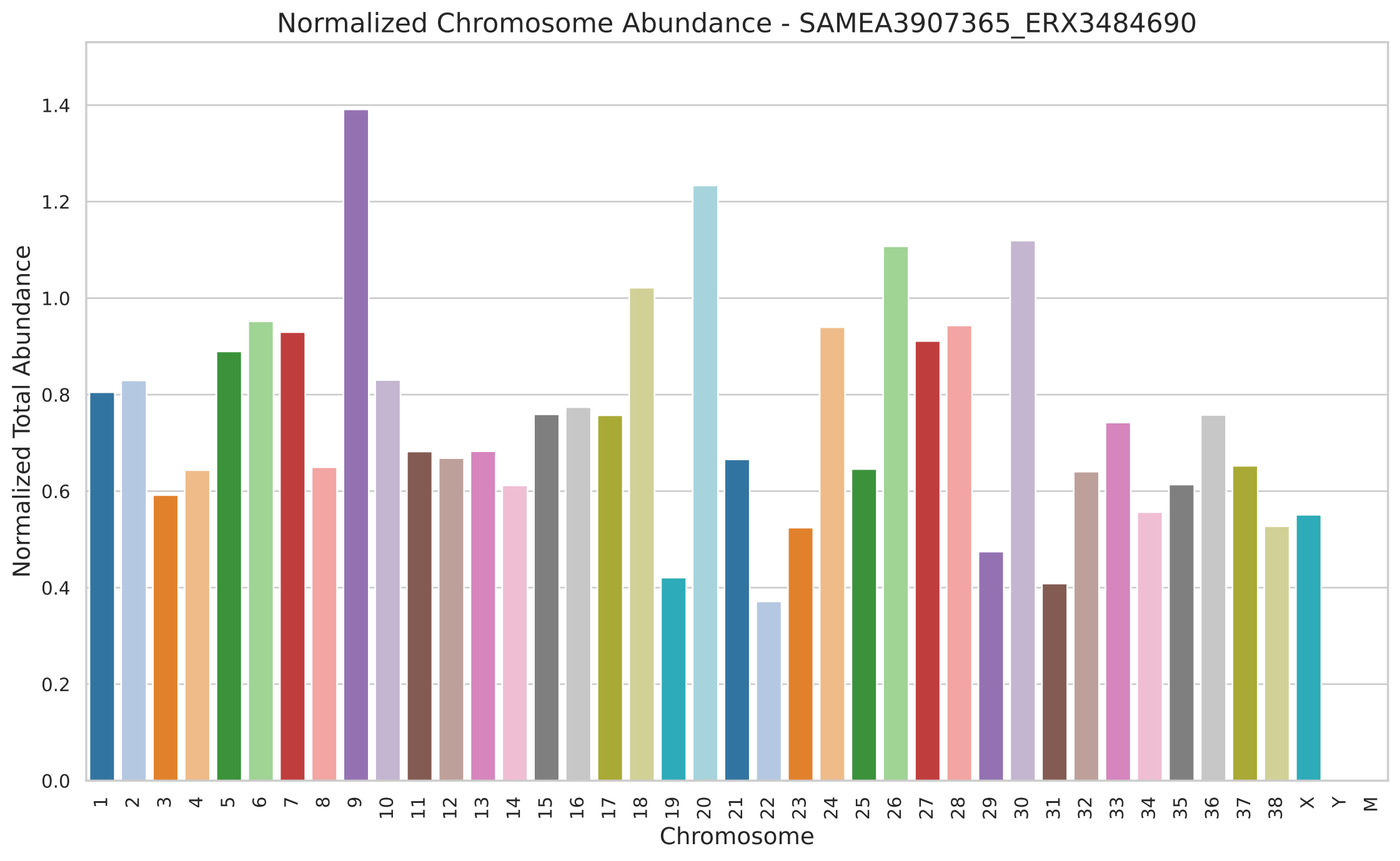

Normalized Chromosome Abundance - SAMEA3906965_ERX3484685
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

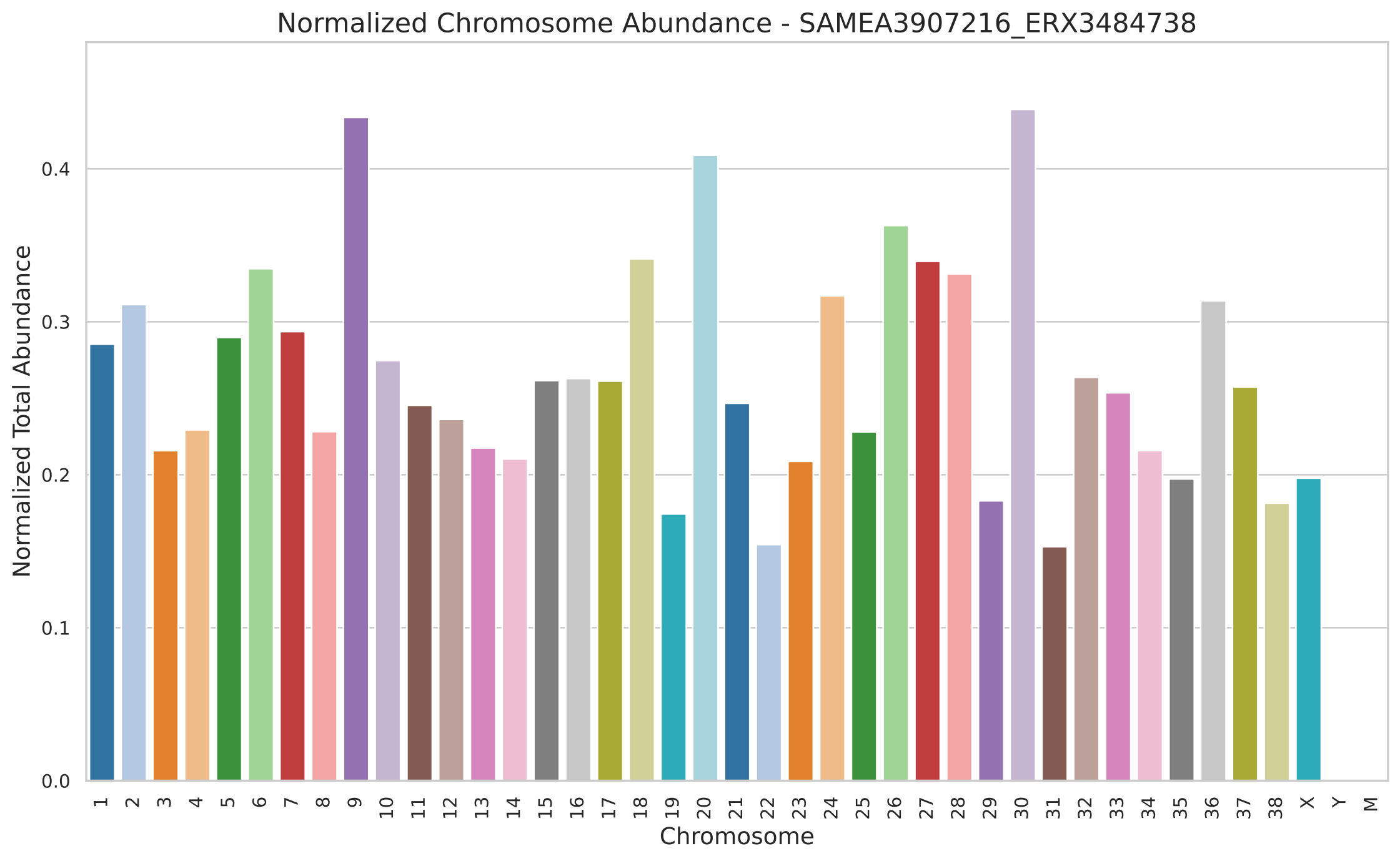

Normalized Chromosome Abundance - SAMEA3907189_ERX3484705
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

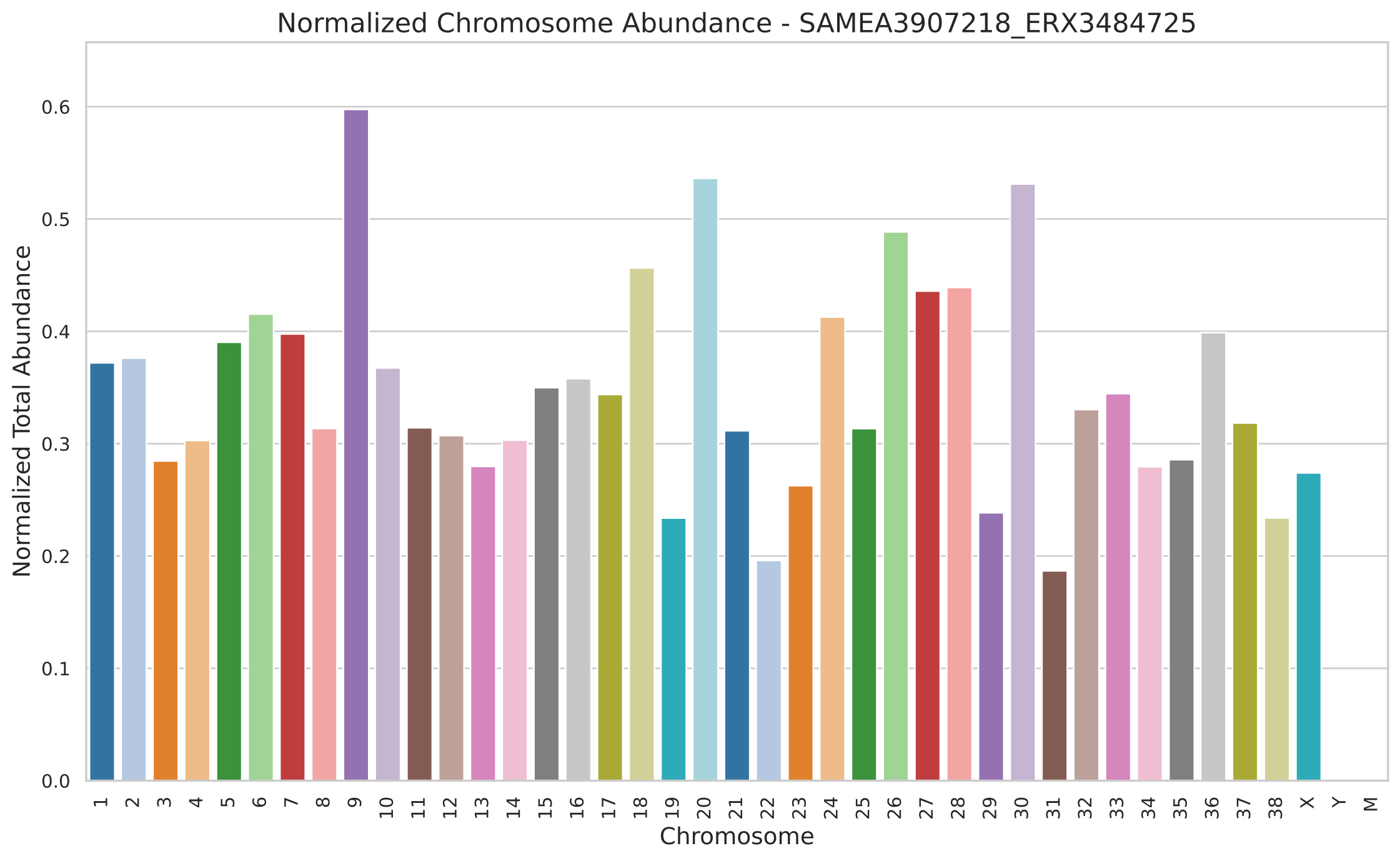

Normalized Chromosome Abundance - SAMEA3907226_ERX3484728
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

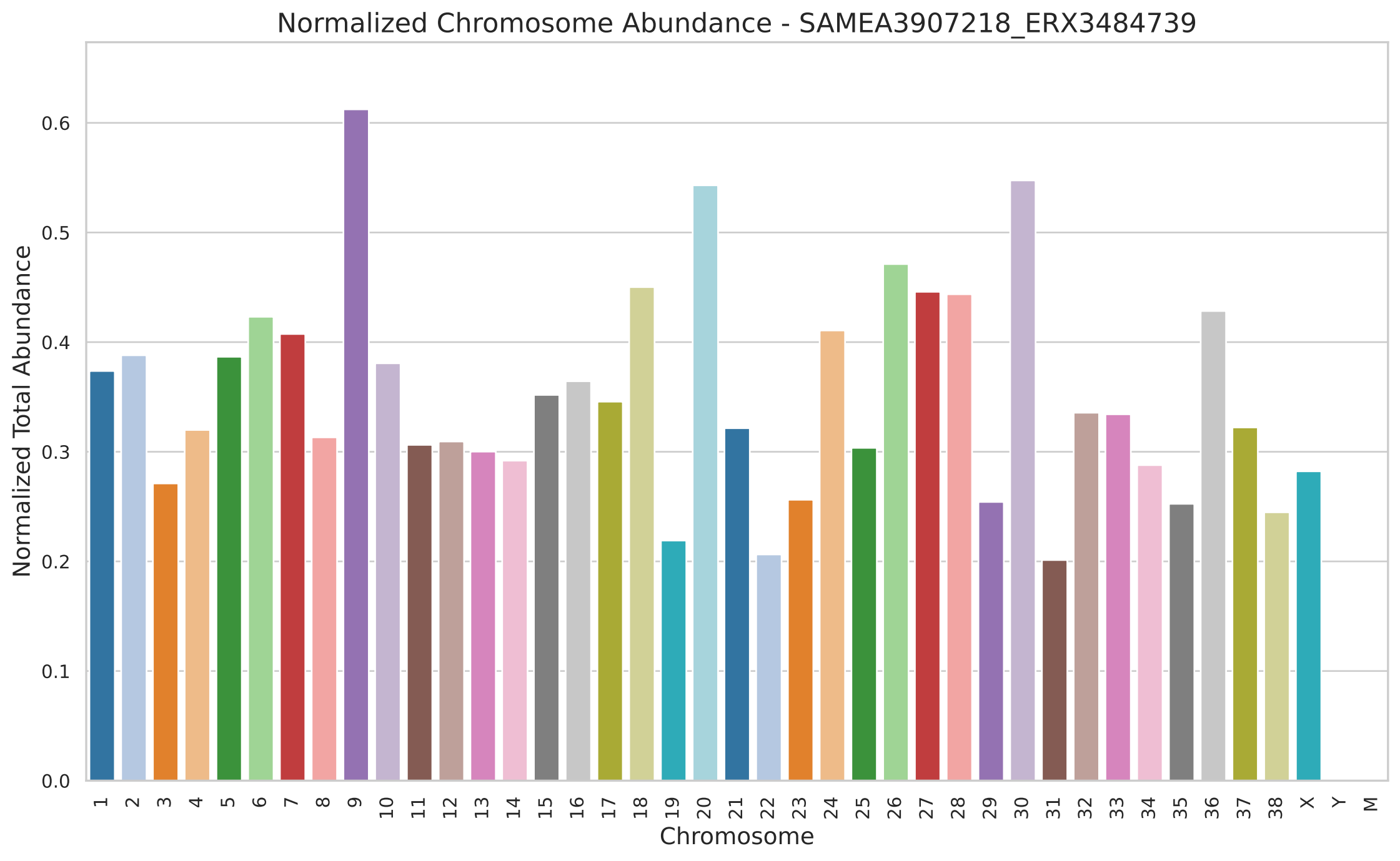

Normalized Chromosome Abundance - SAMEA3907236_ERX3484734
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

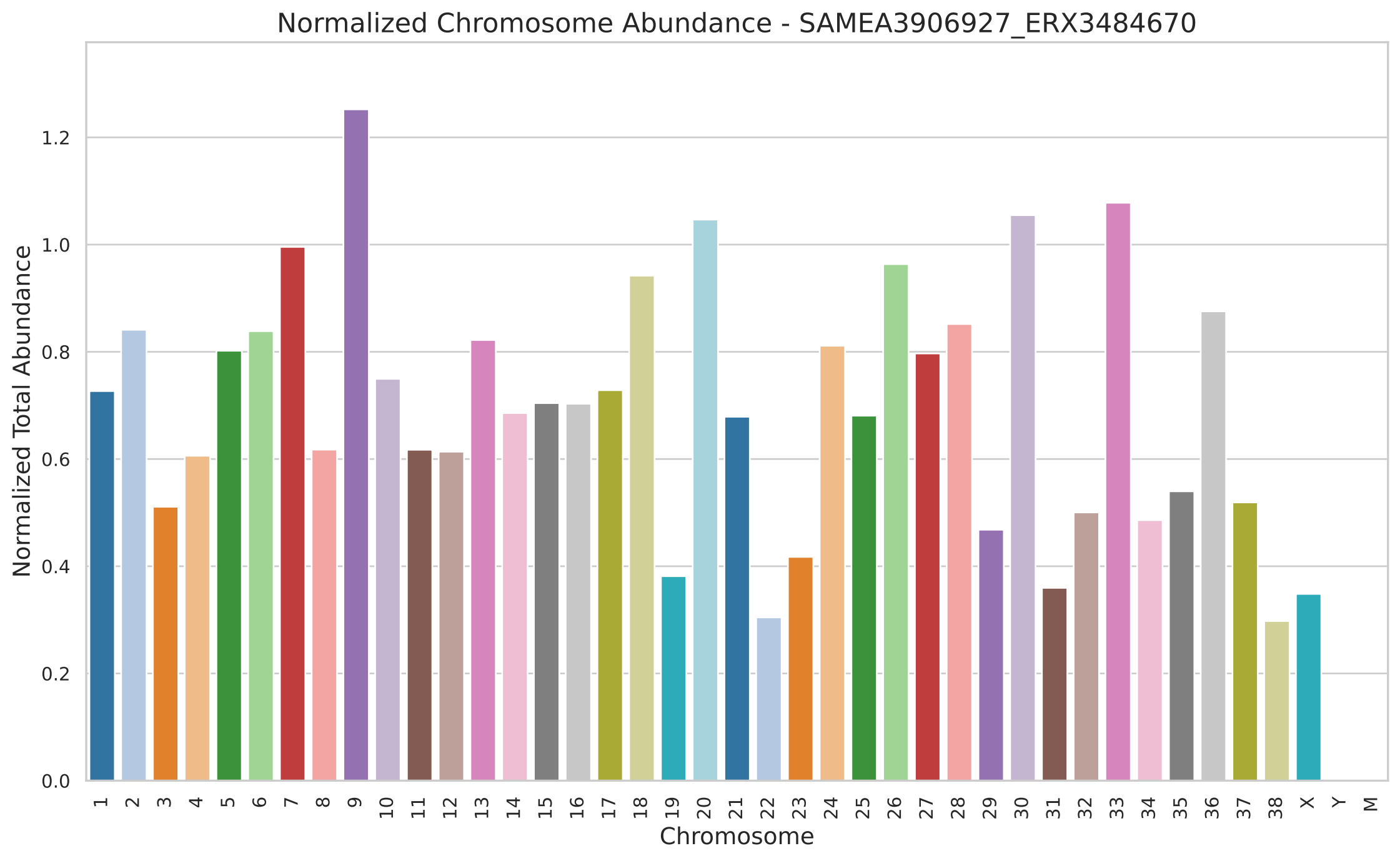

Normalized Chromosome Abundance - SAMEA3907305_ERX3484627
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

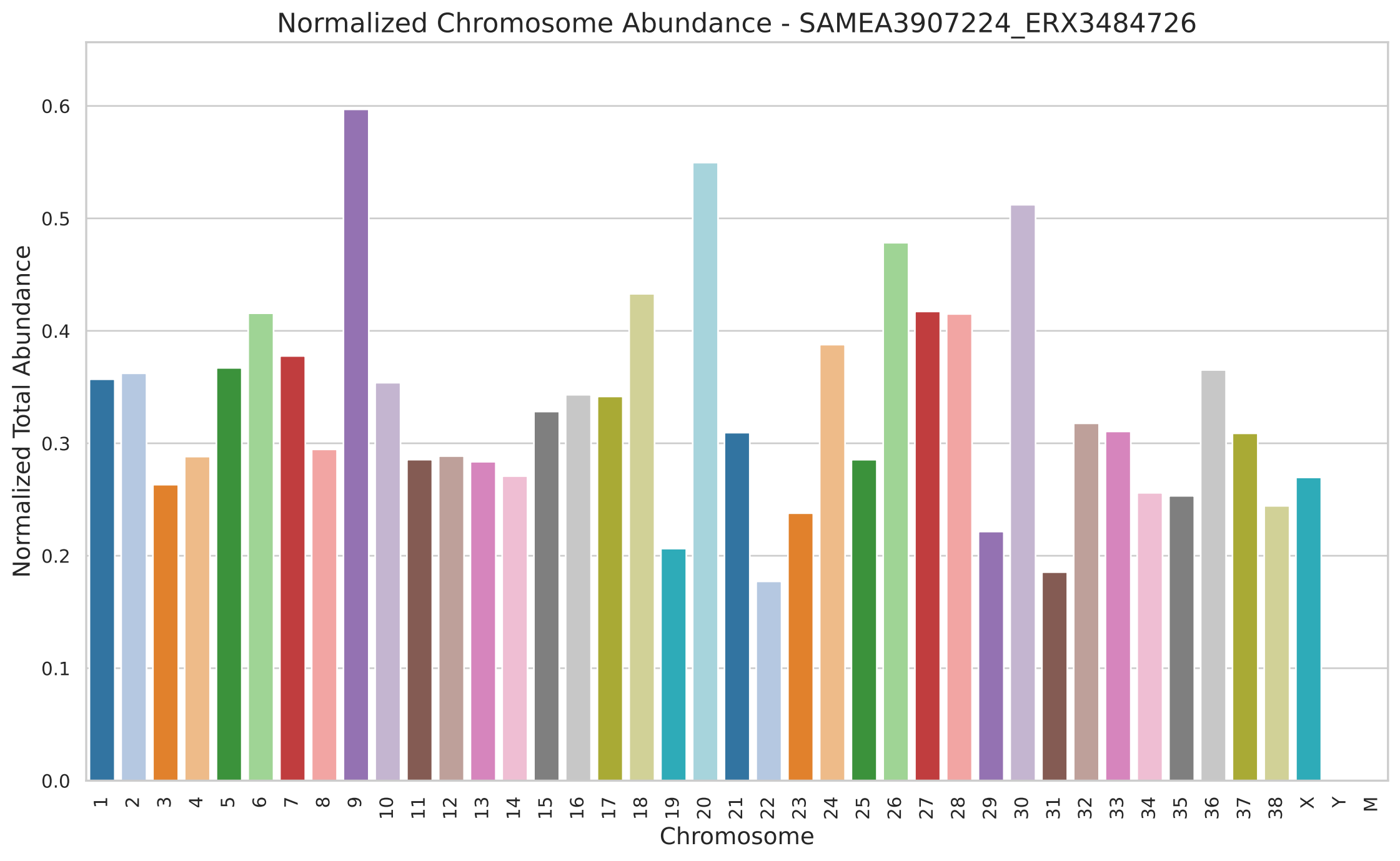

Normalized Chromosome Abundance - SAMEA3907365_ERX3484690
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

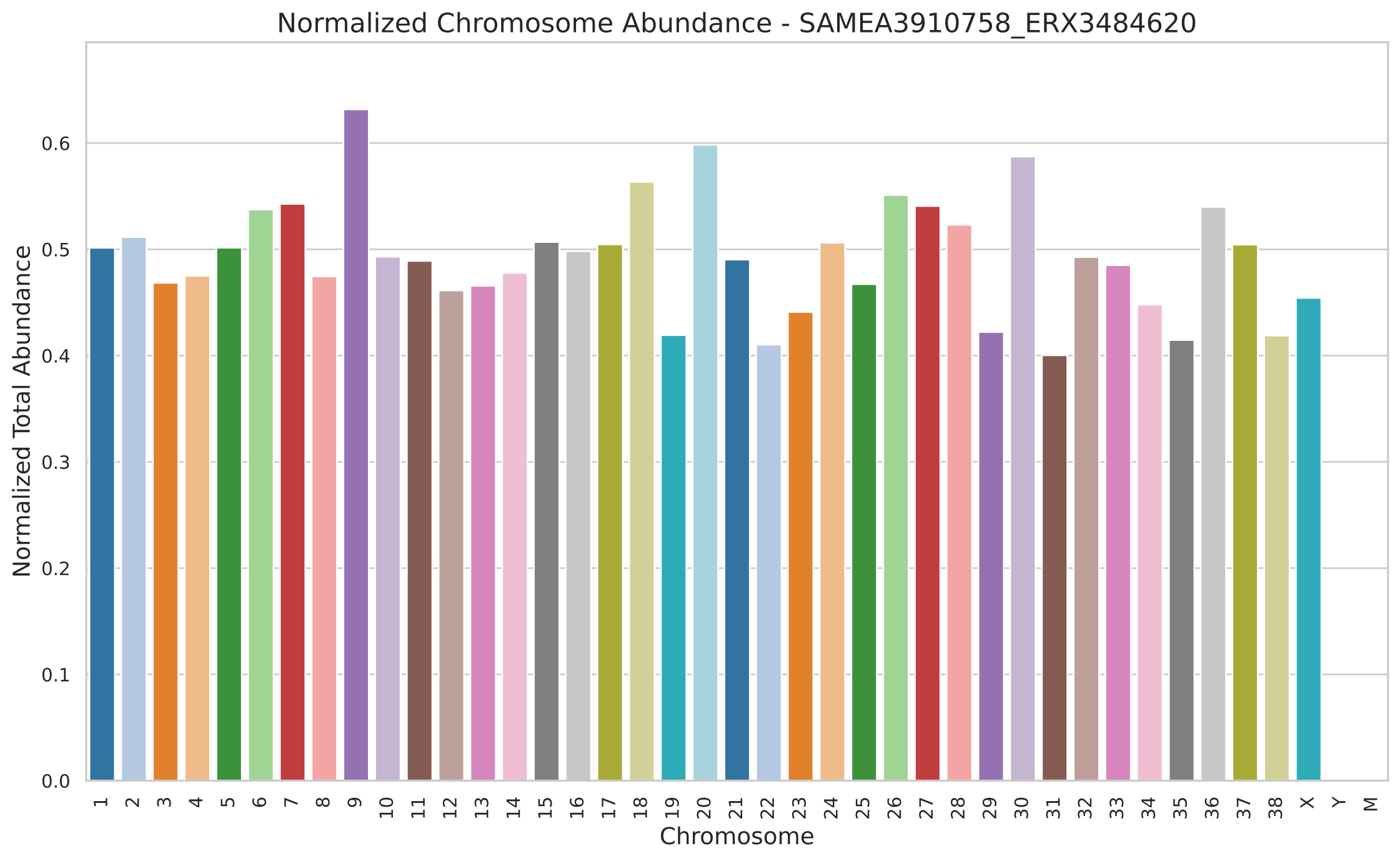

Normalized Chromosome Abundance - SAMEA3907216_ERX3484738
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

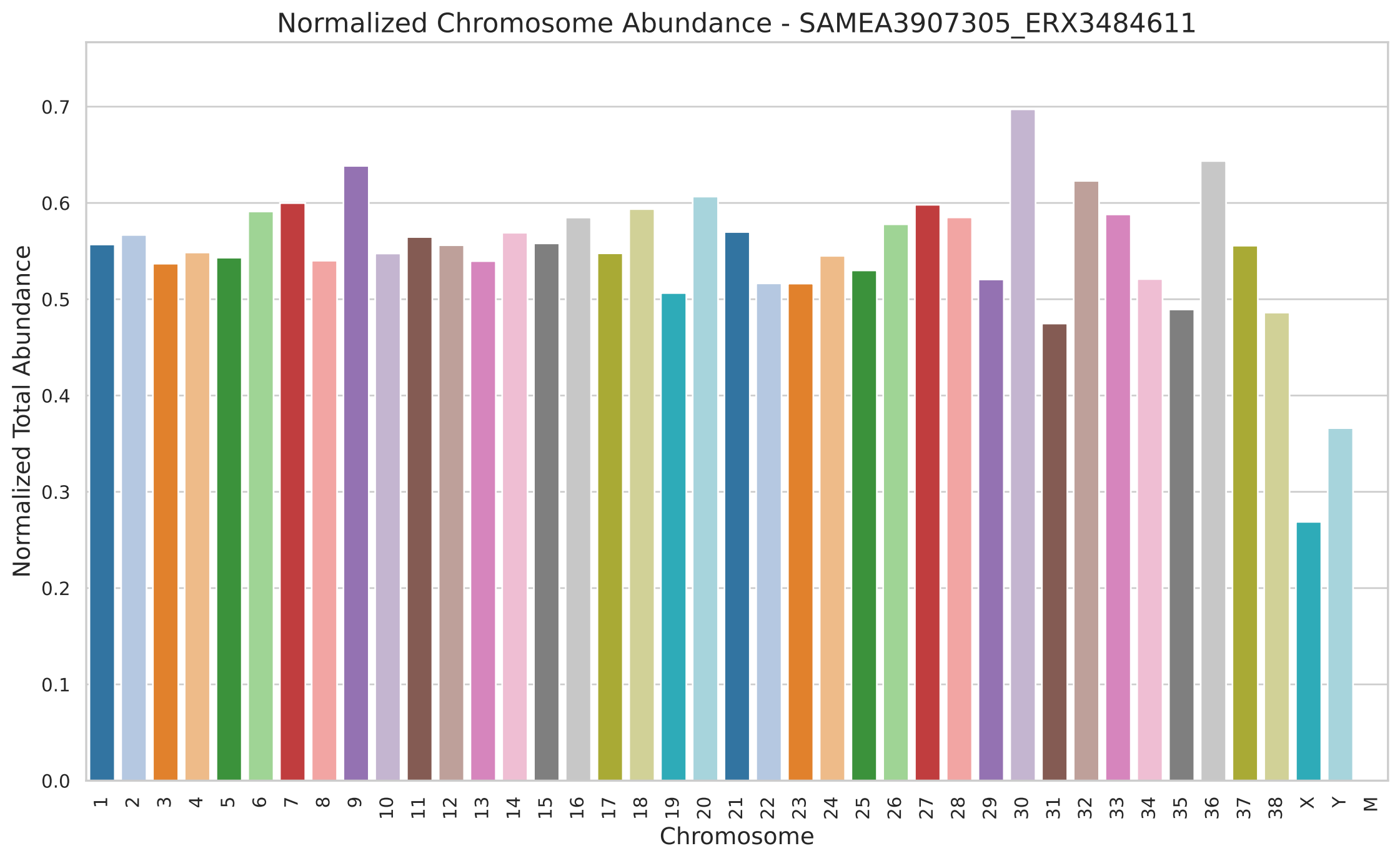

Normalized Chromosome Abundance - SAMEA3907218_ERX3484725
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

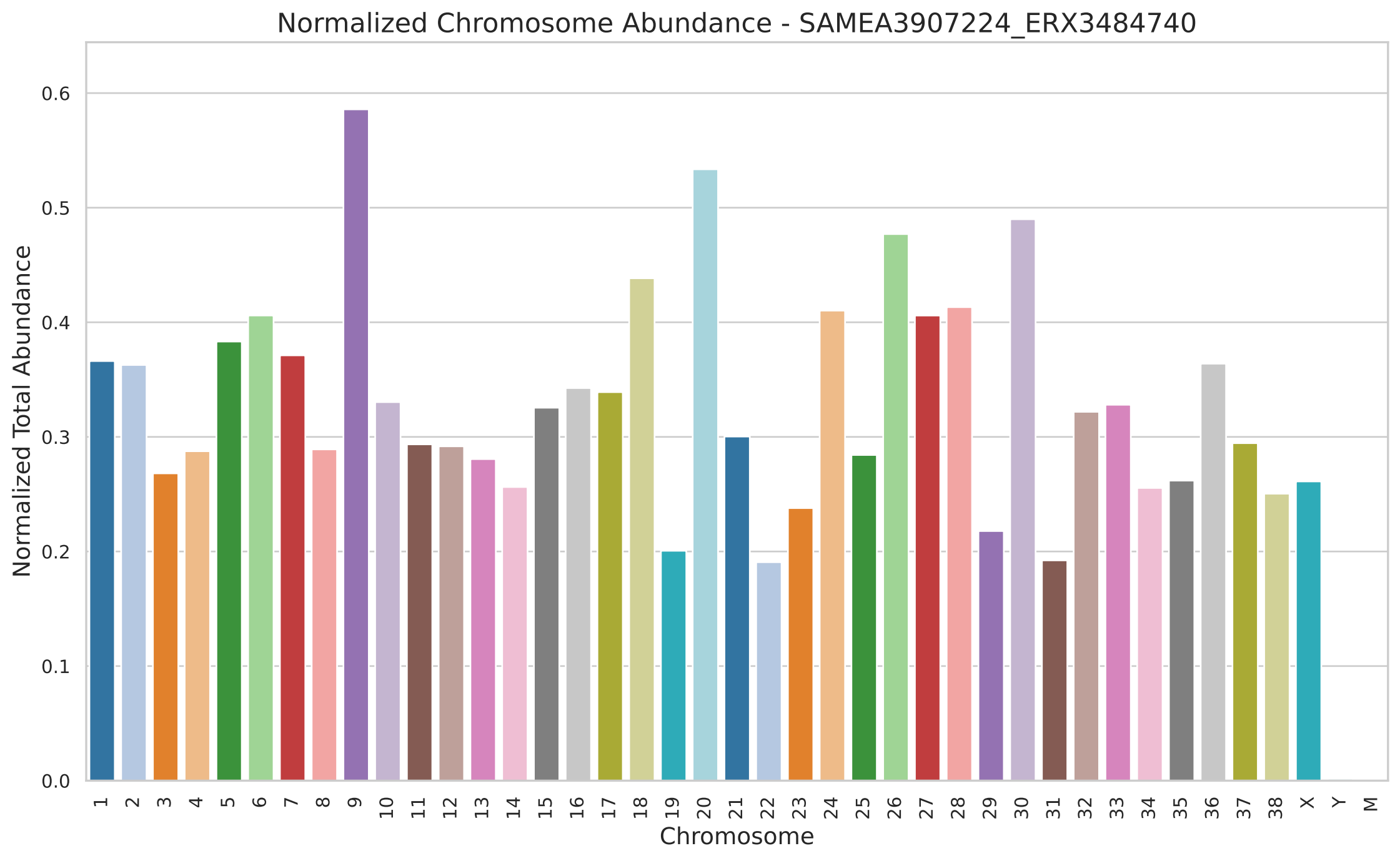

Normalized Chromosome Abundance - SAMEA3907218_ERX3484739
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

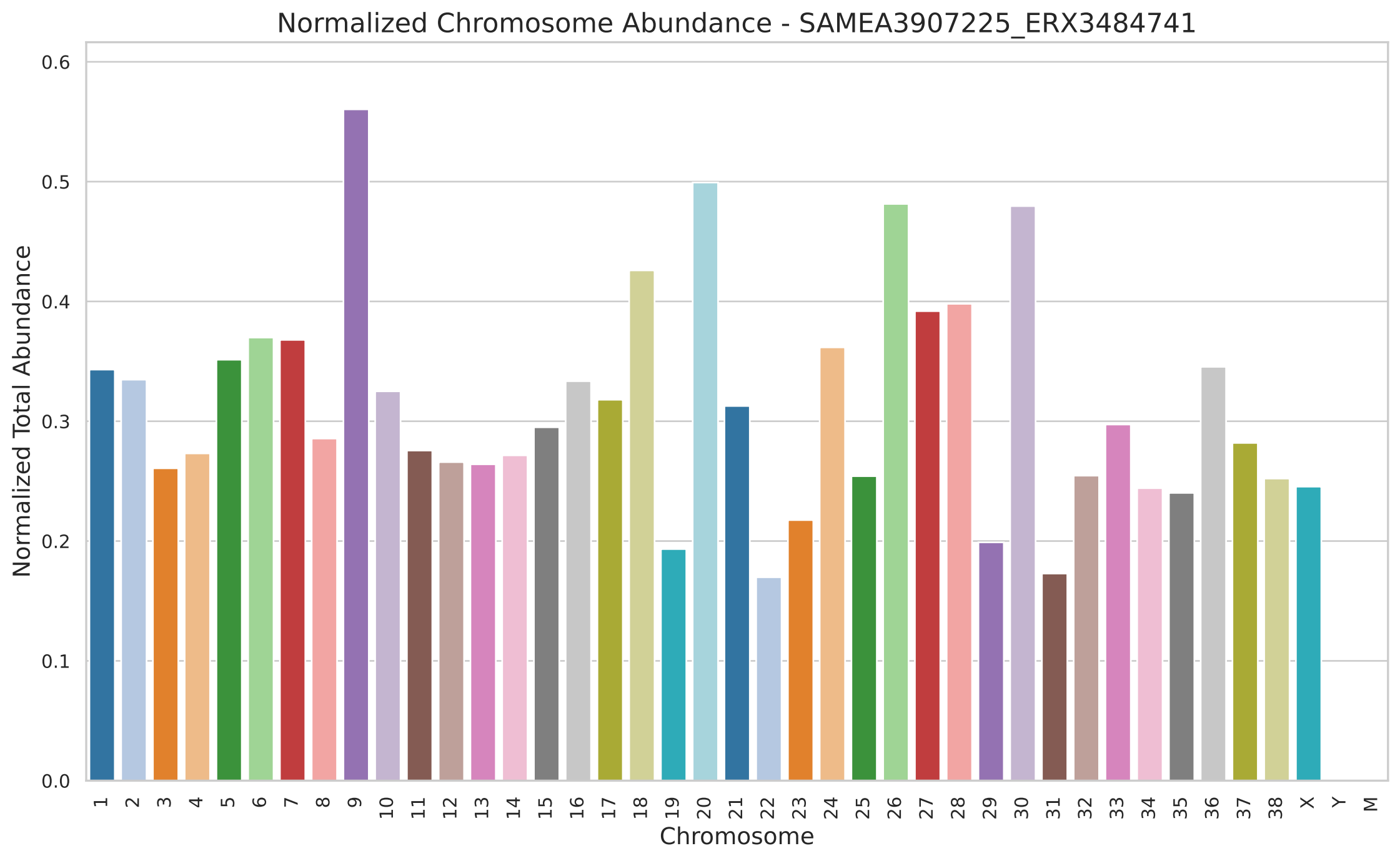

Normalized Chromosome Abundance - SAMEA3906927_ERX3484670
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

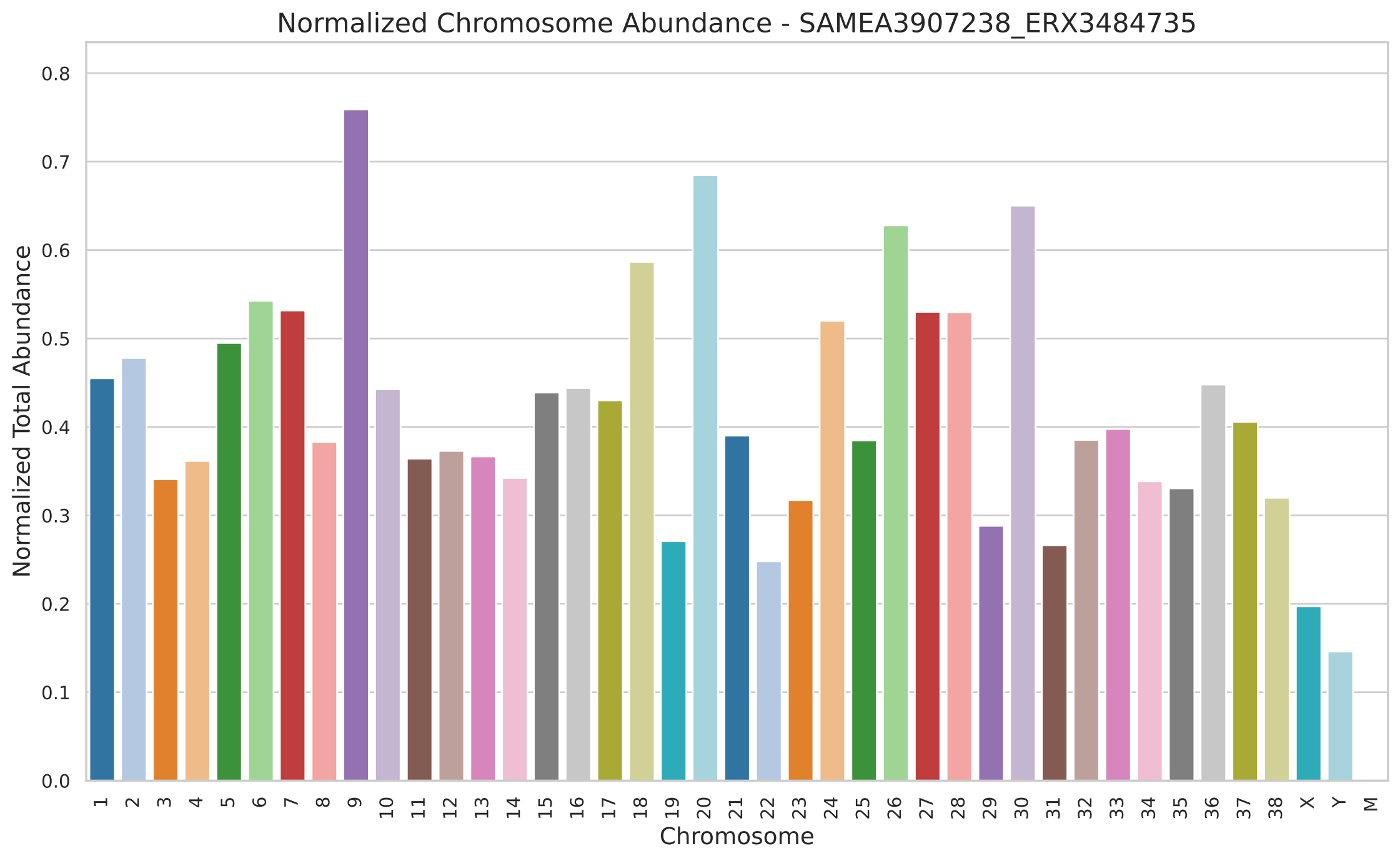

Normalized Chromosome Abundance - SAMEA3907224_ERX3484726
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

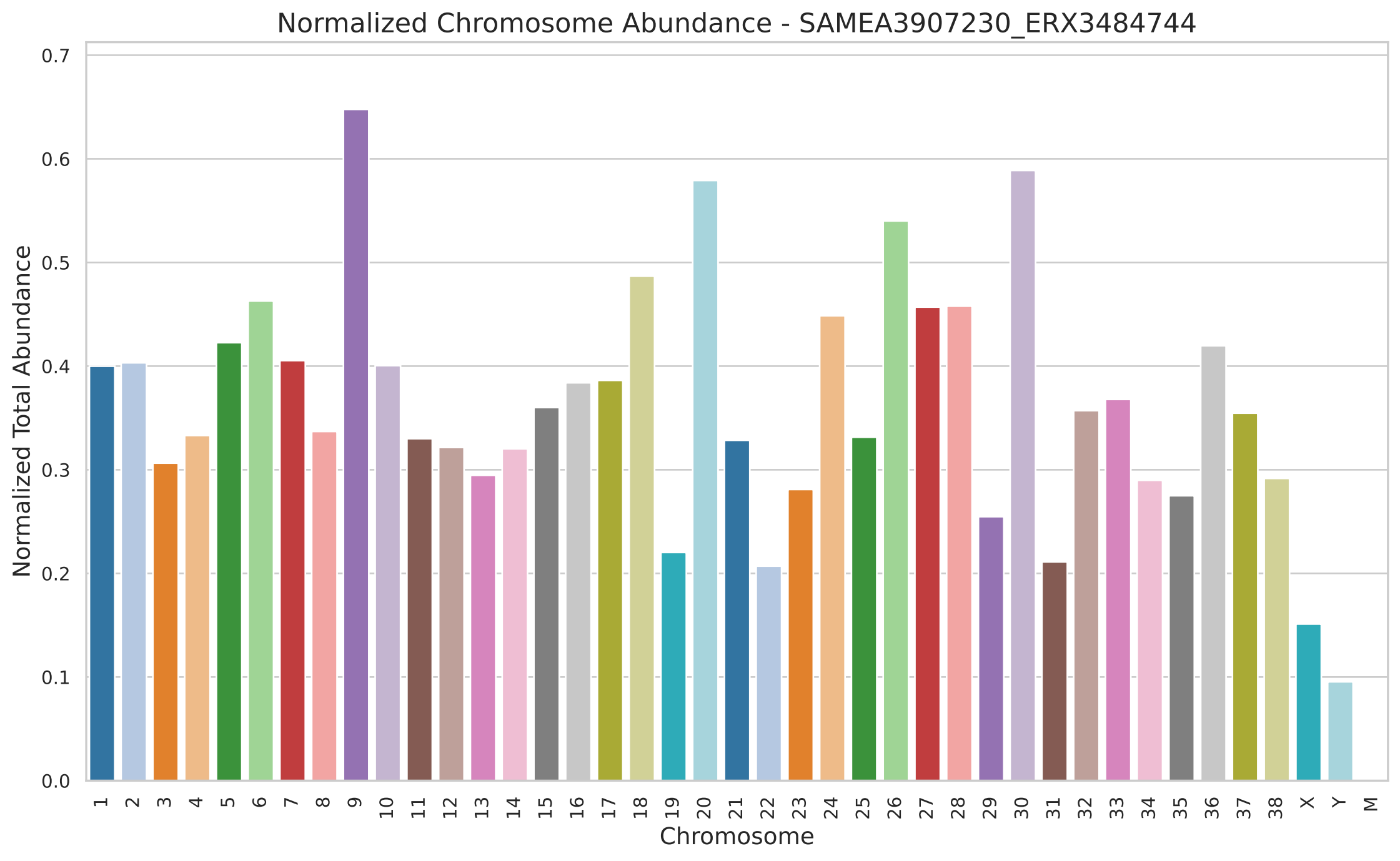

Normalized Chromosome Abundance - SAMEA3910758_ERX3484620
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

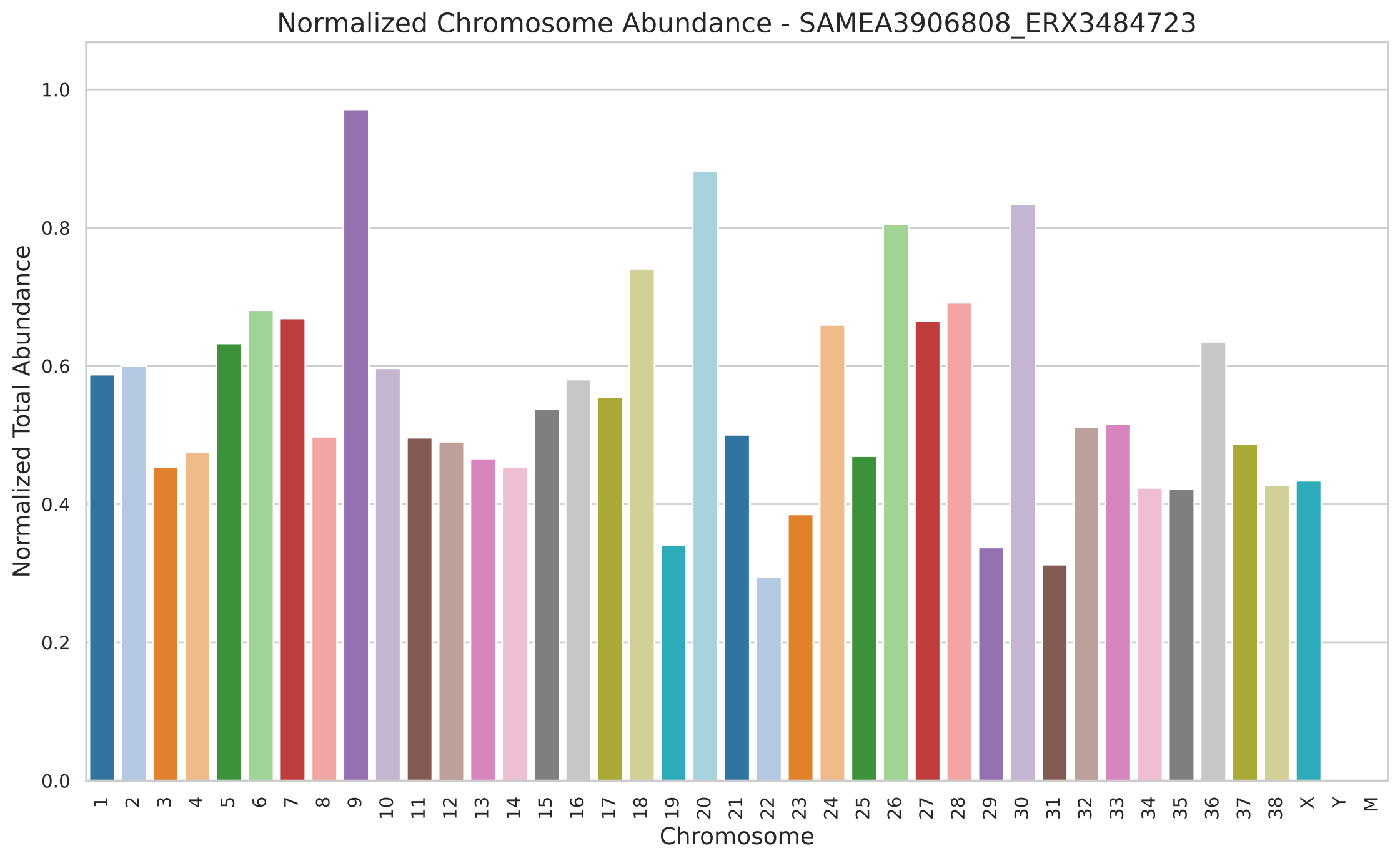

Normalized Chromosome Abundance - SAMEA3907305_ERX3484611
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

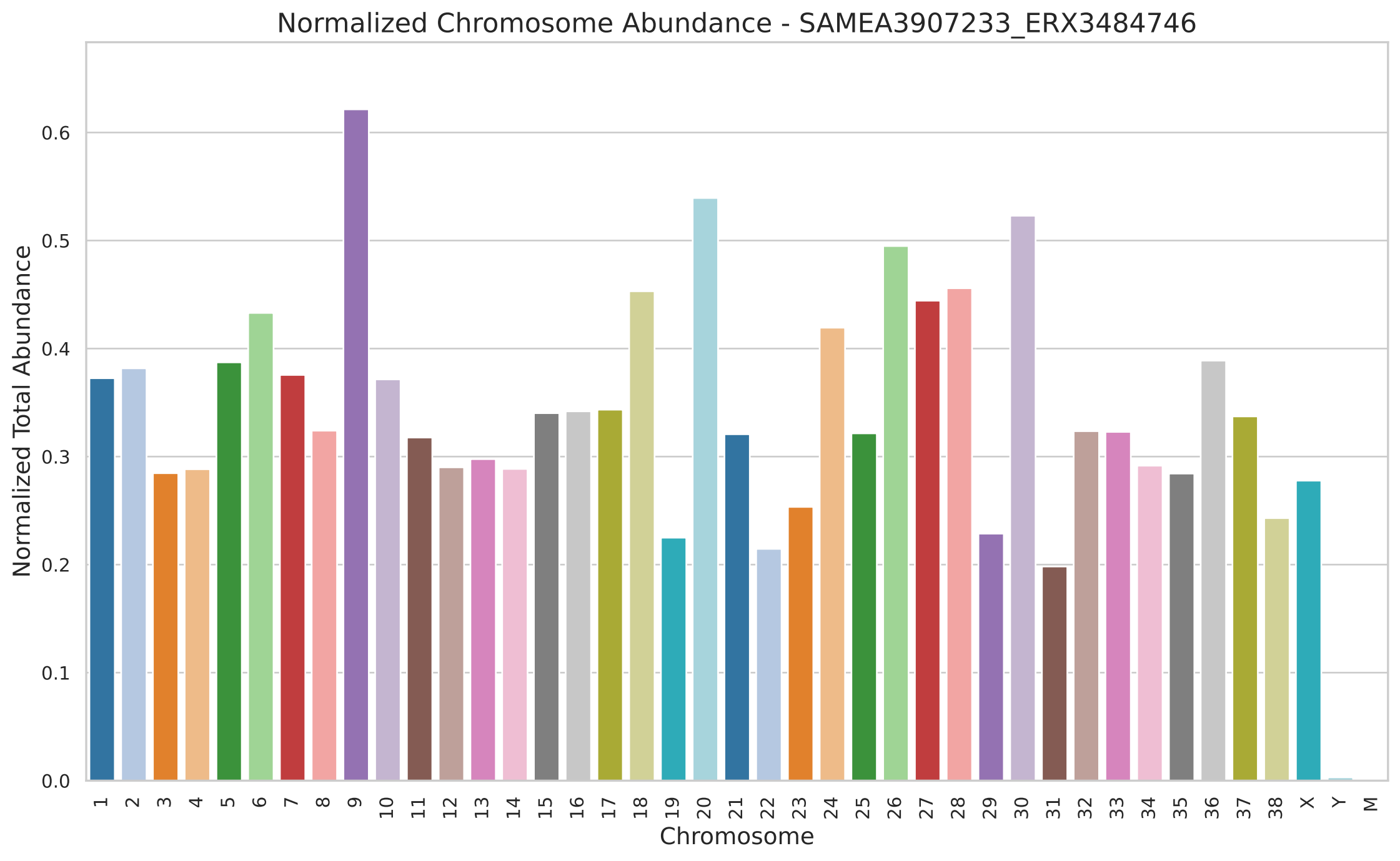

Normalized Chromosome Abundance - SAMEA3907224_ERX3484740
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

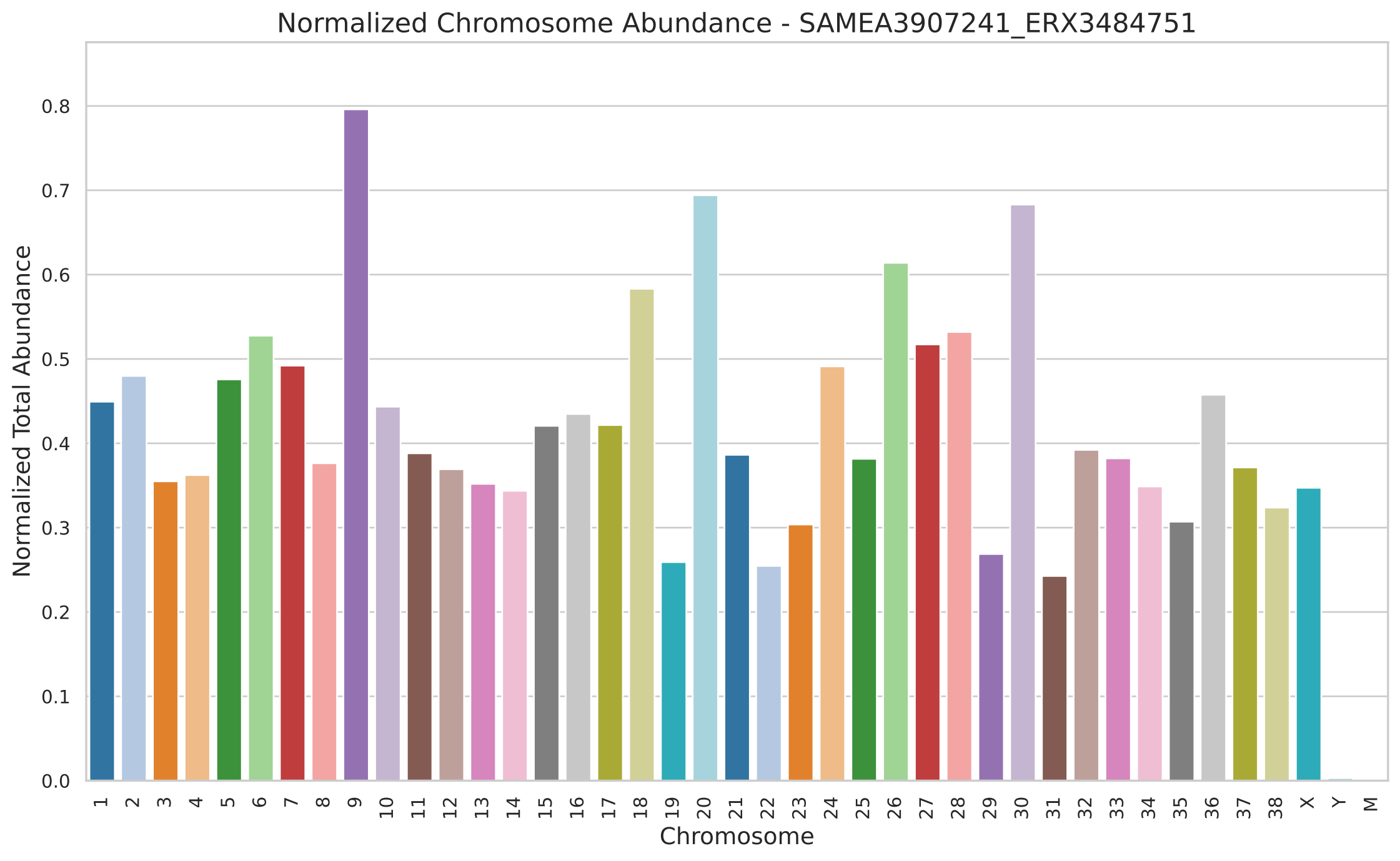

Normalized Chromosome Abundance - SAMEA3907225_ERX3484741
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

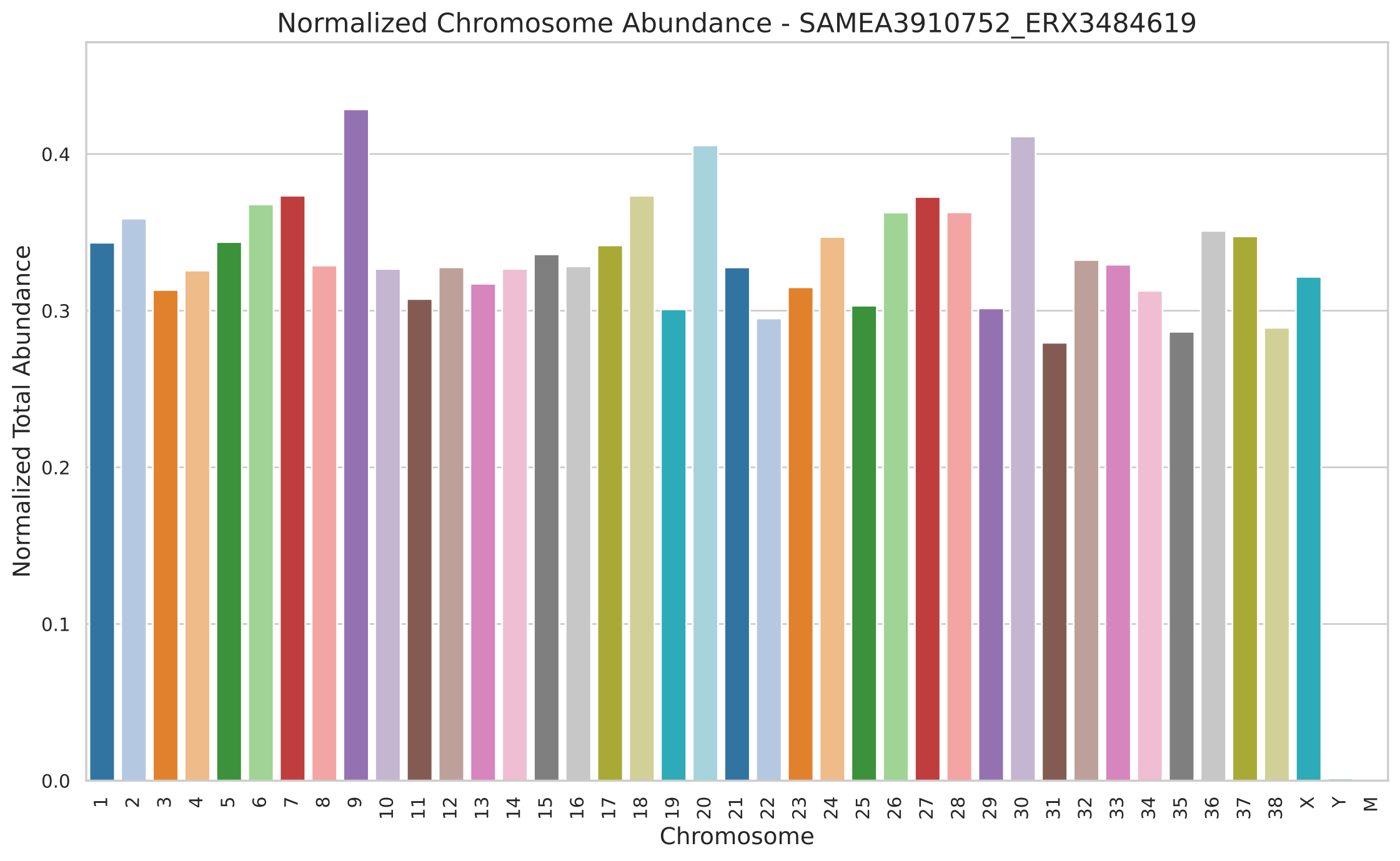

Normalized Chromosome Abundance - SAMEA3907238_ERX3484735
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

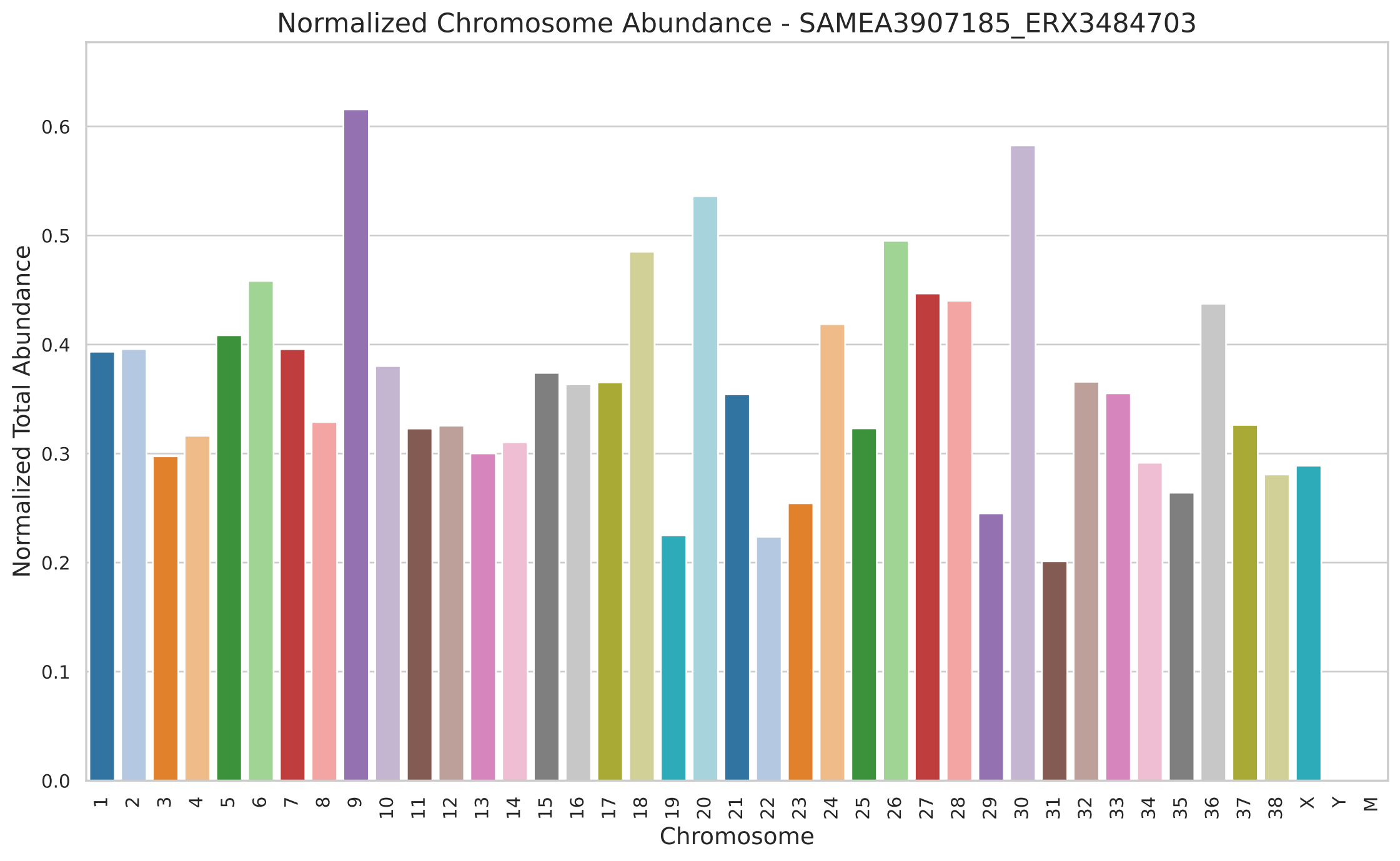

Normalized Chromosome Abundance - SAMEA3907230_ERX3484744
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

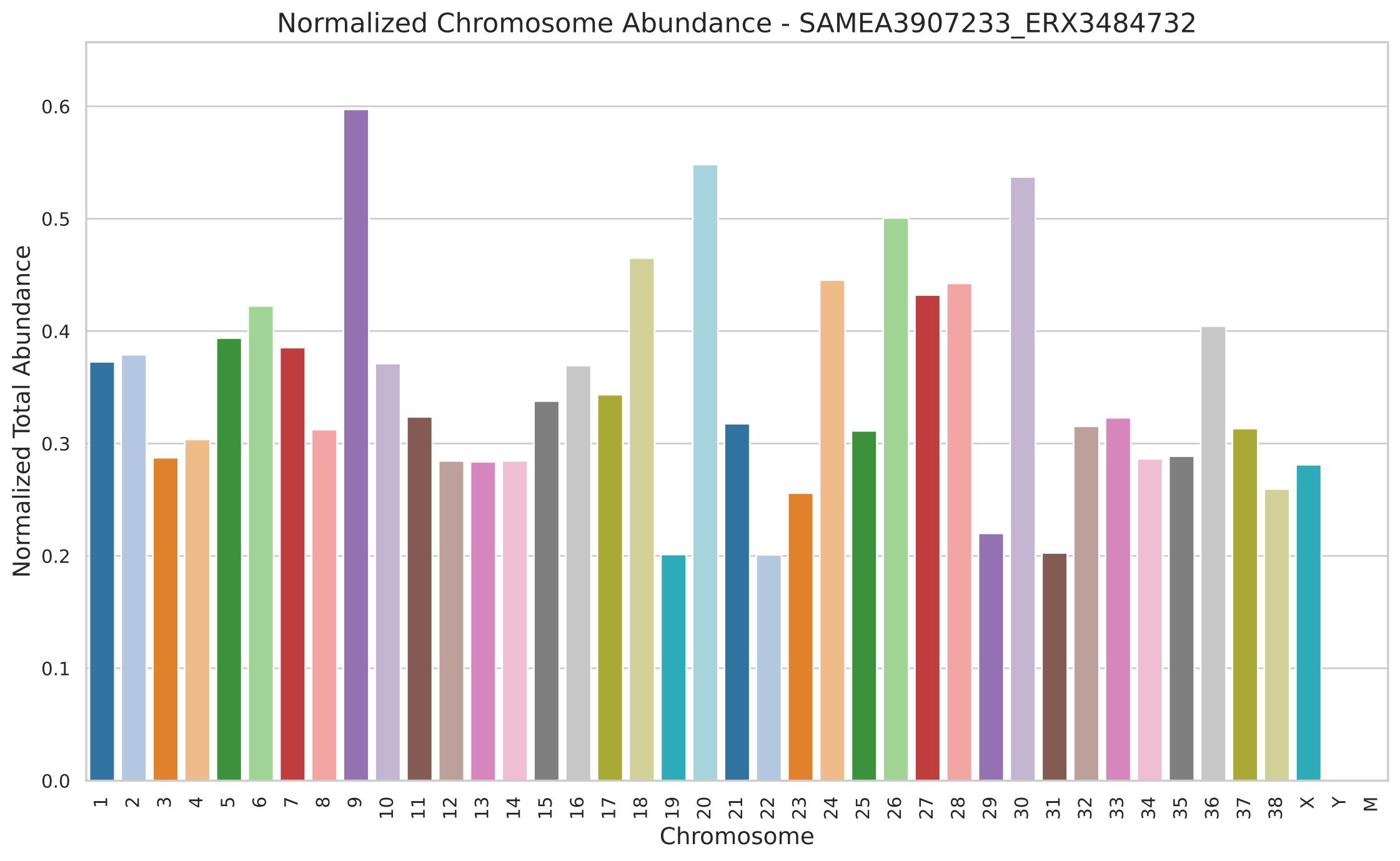

Normalized Chromosome Abundance - SAMEA3906808_ERX3484723
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

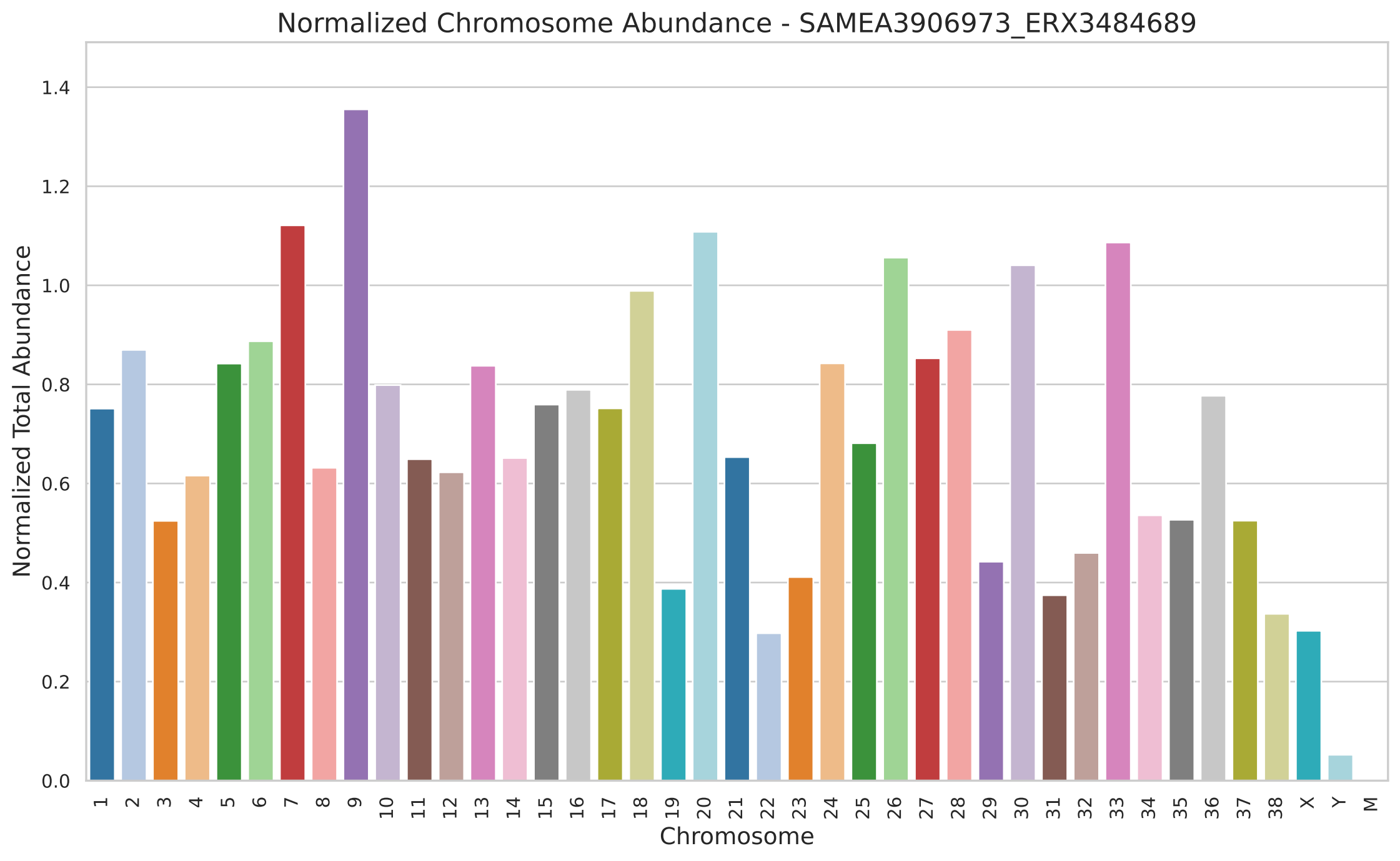

Normalized Chromosome Abundance - SAMEA3907233_ERX3484746
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

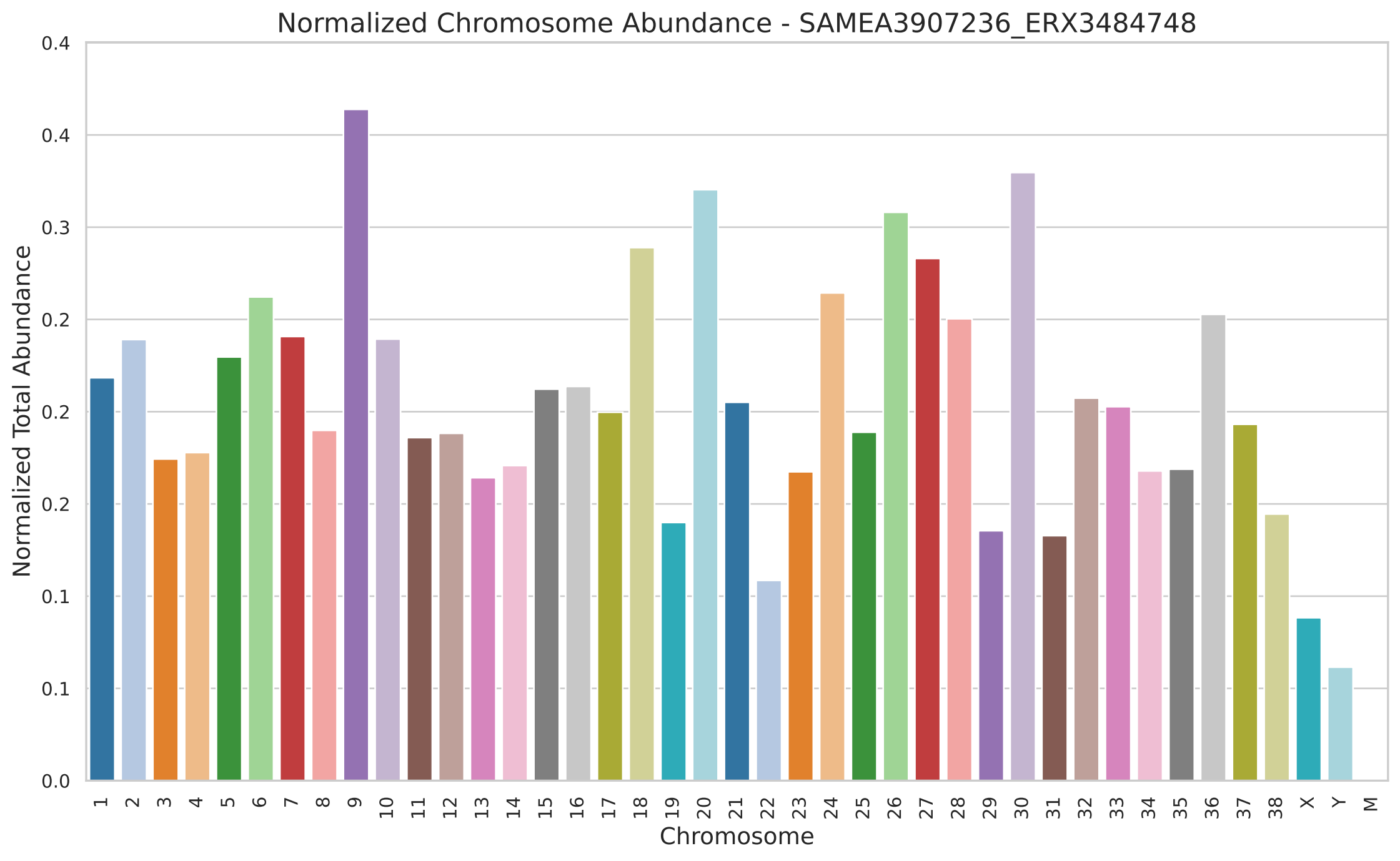

Normalized Chromosome Abundance - SAMEA3907241_ERX3484751
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

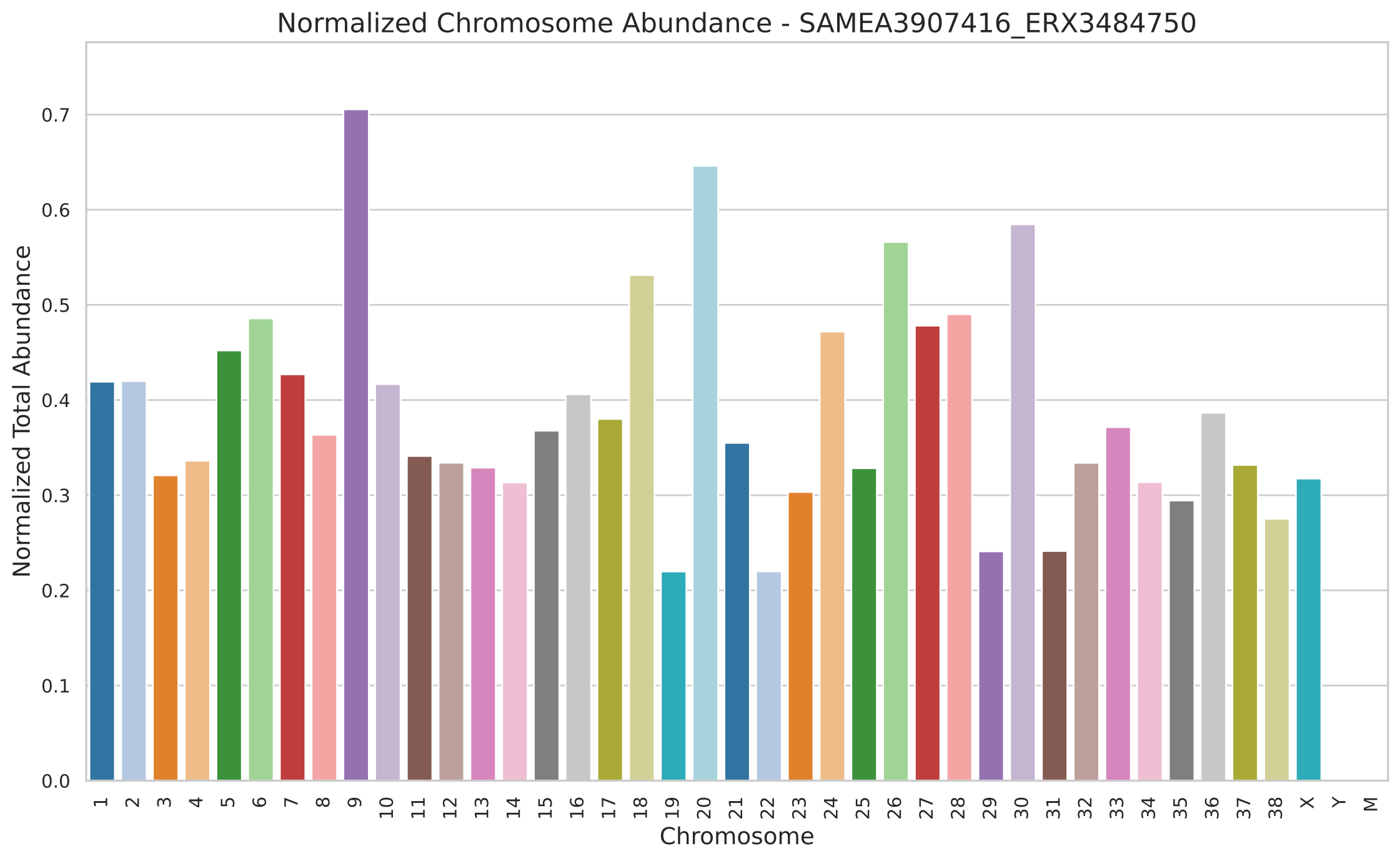

Normalized Chromosome Abundance - SAMEA3910752_ERX3484619
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

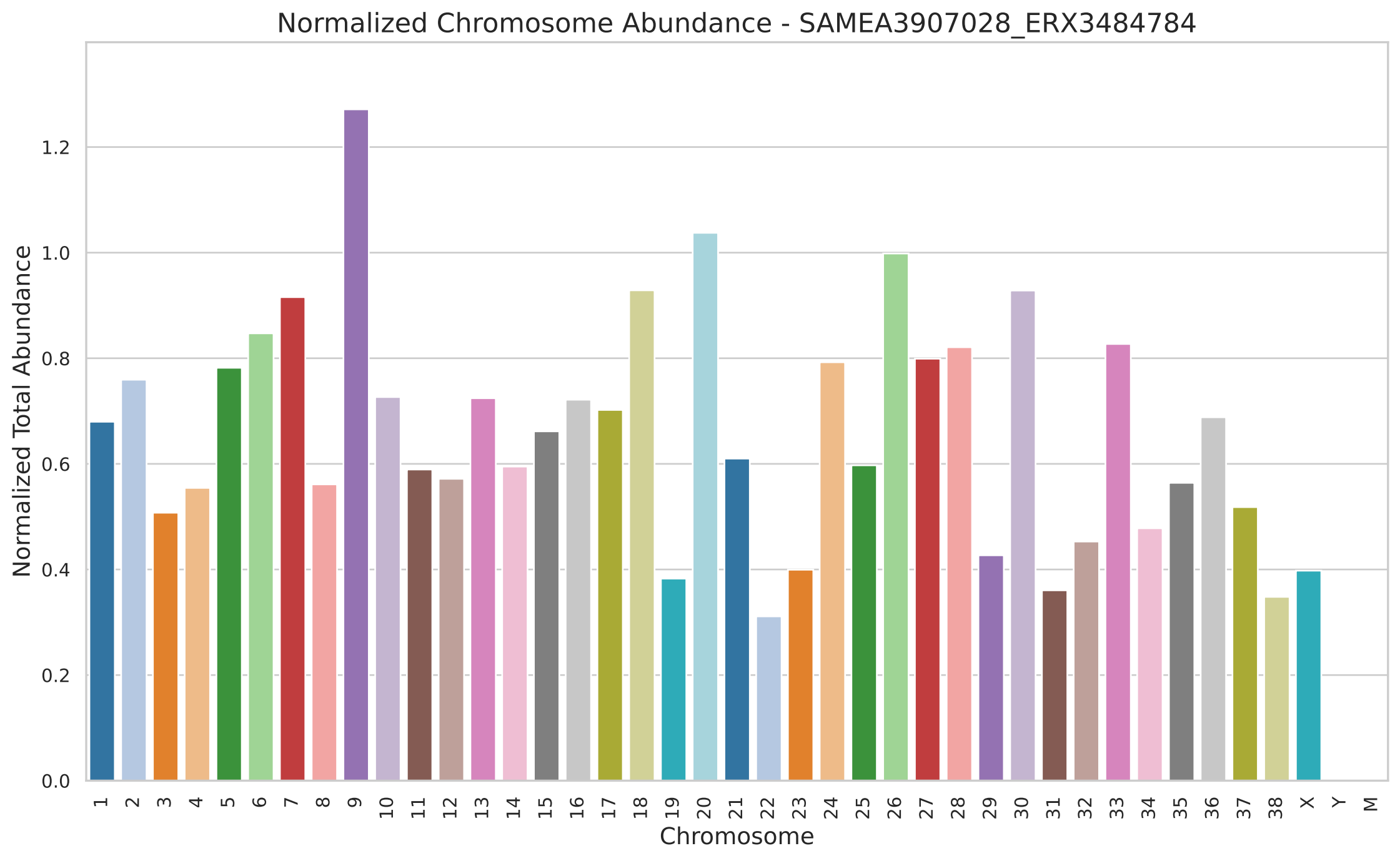

Normalized Chromosome Abundance - SAMEA3907185_ERX3484703
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

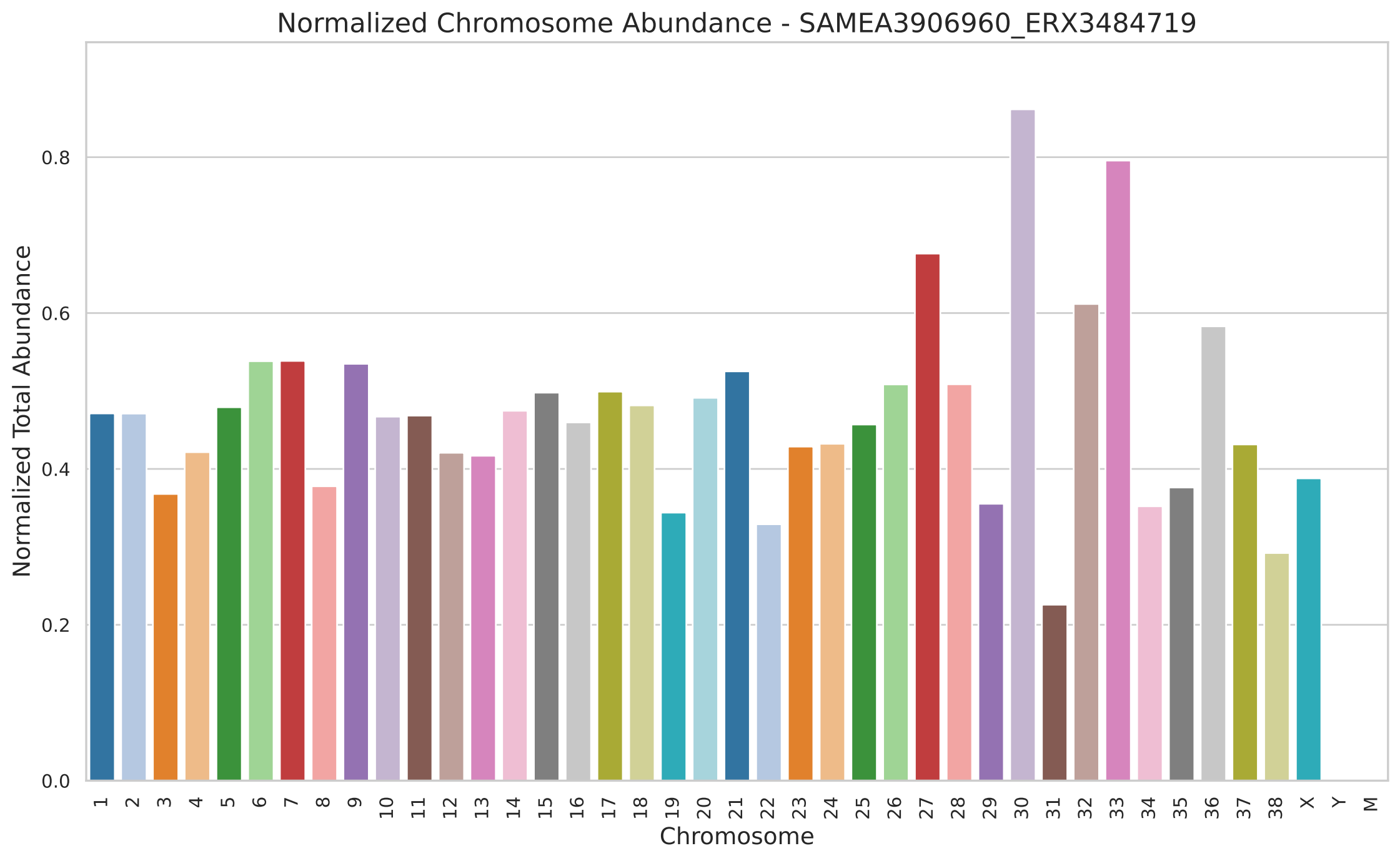

Normalized Chromosome Abundance - SAMEA3907233_ERX3484732
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

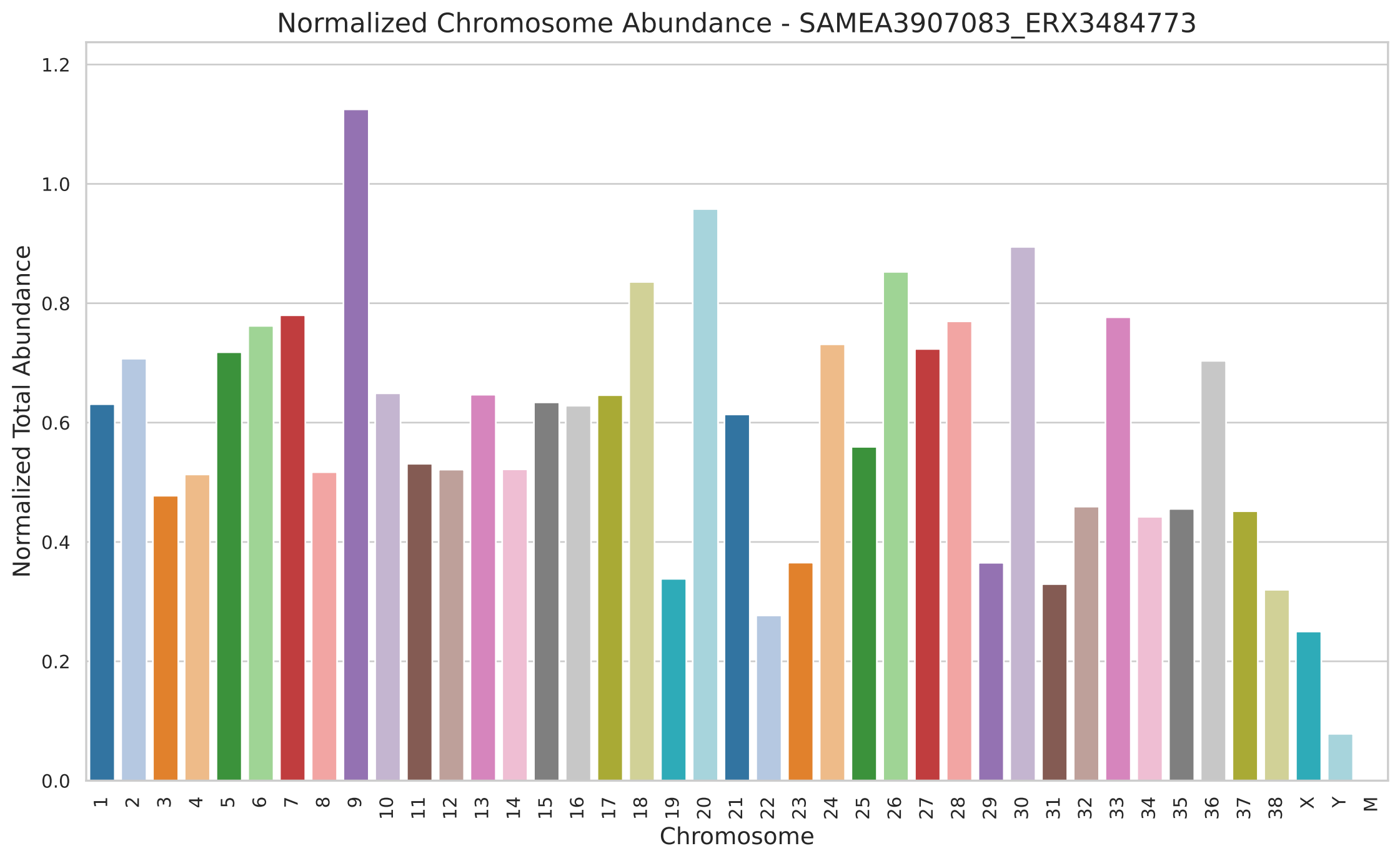

Normalized Chromosome Abundance - SAMEA3906973_ERX3484689
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

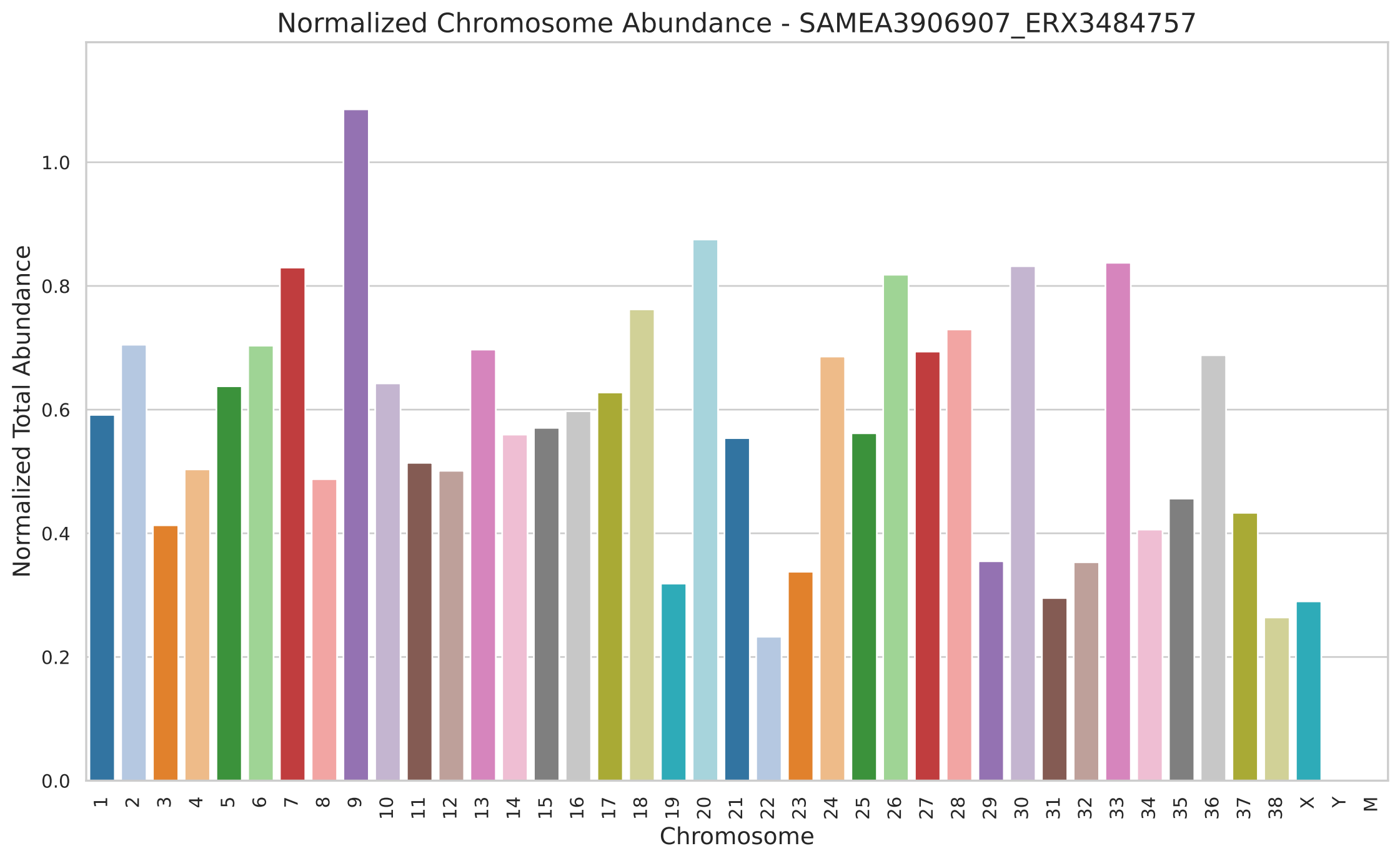

Normalized Chromosome Abundance - SAMEA3907236_ERX3484748
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
0.4
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

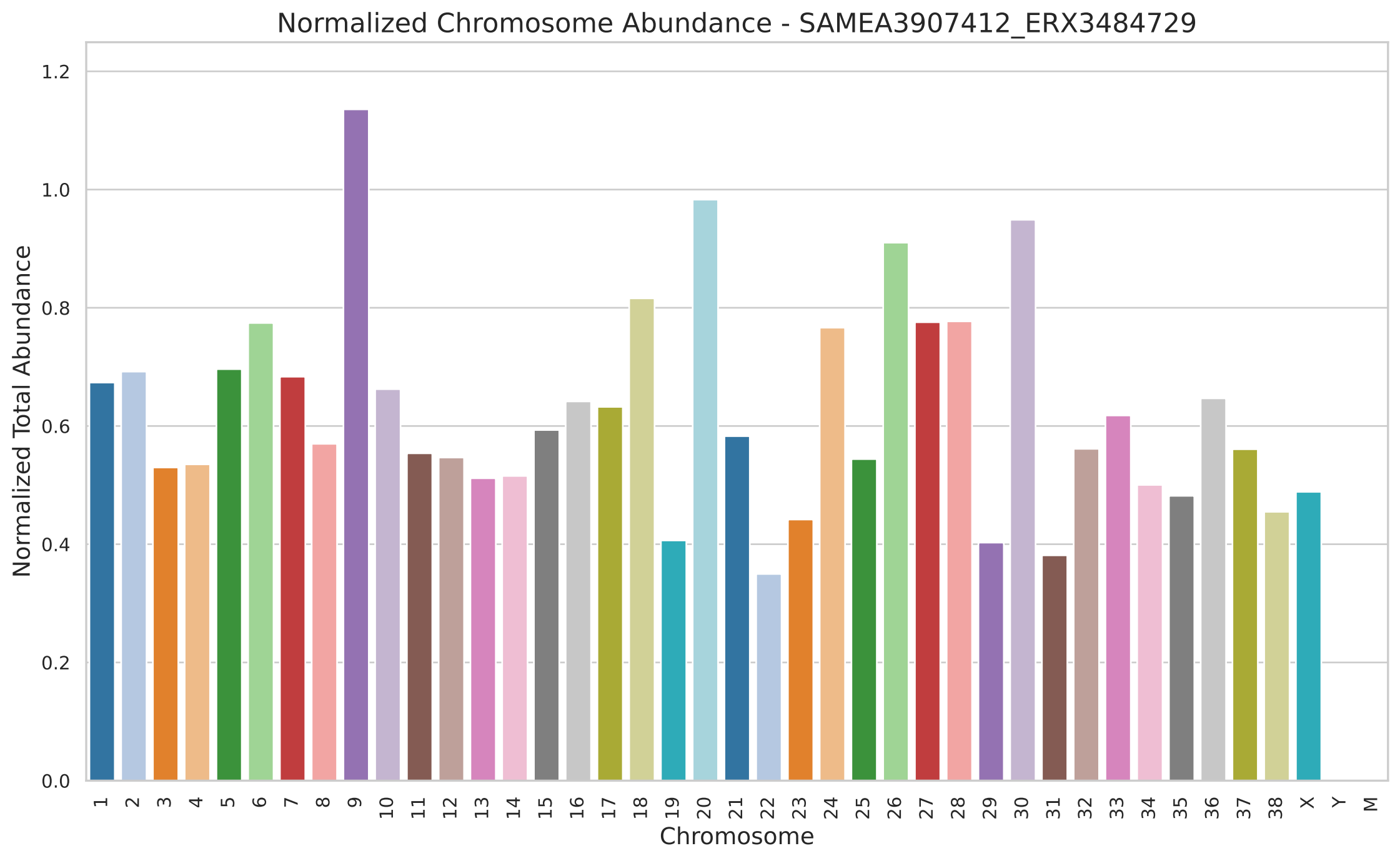

Normalized Chromosome Abundance - SAMEA3907416_ERX3484750
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

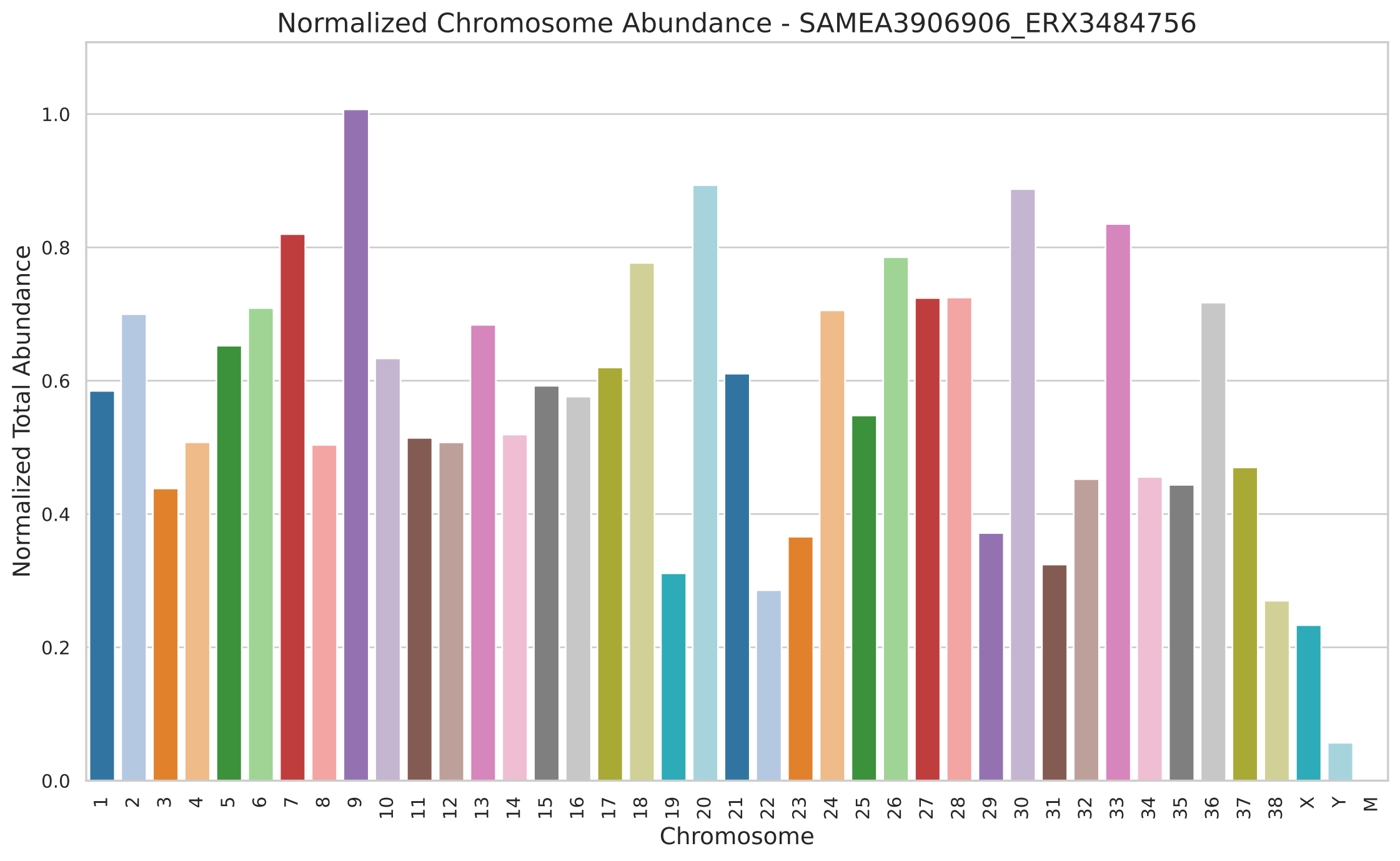

Normalized Chromosome Abundance - SAMEA3907028_ERX3484784
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

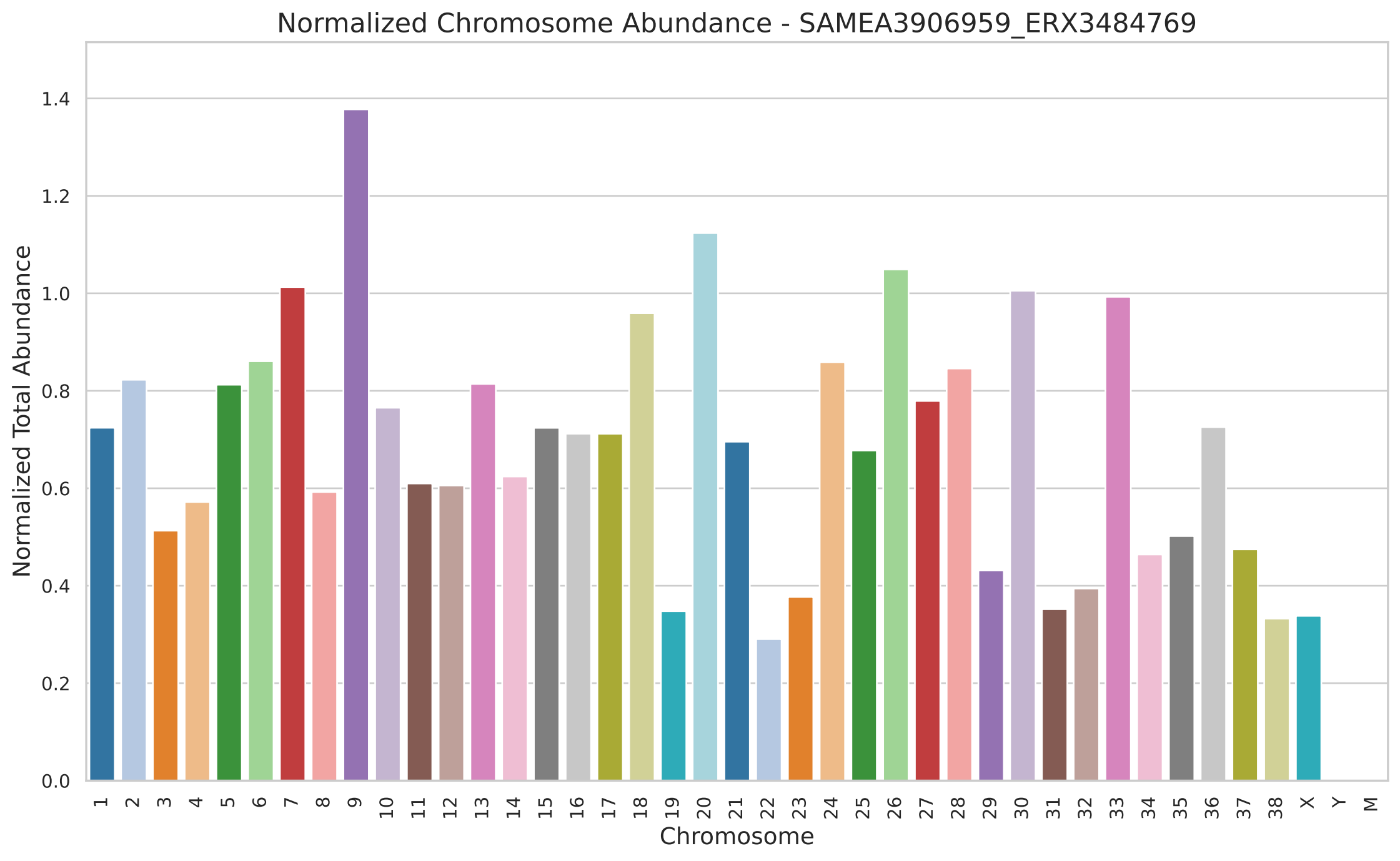

Normalized Chromosome Abundance - SAMEA3906960_ERX3484719
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

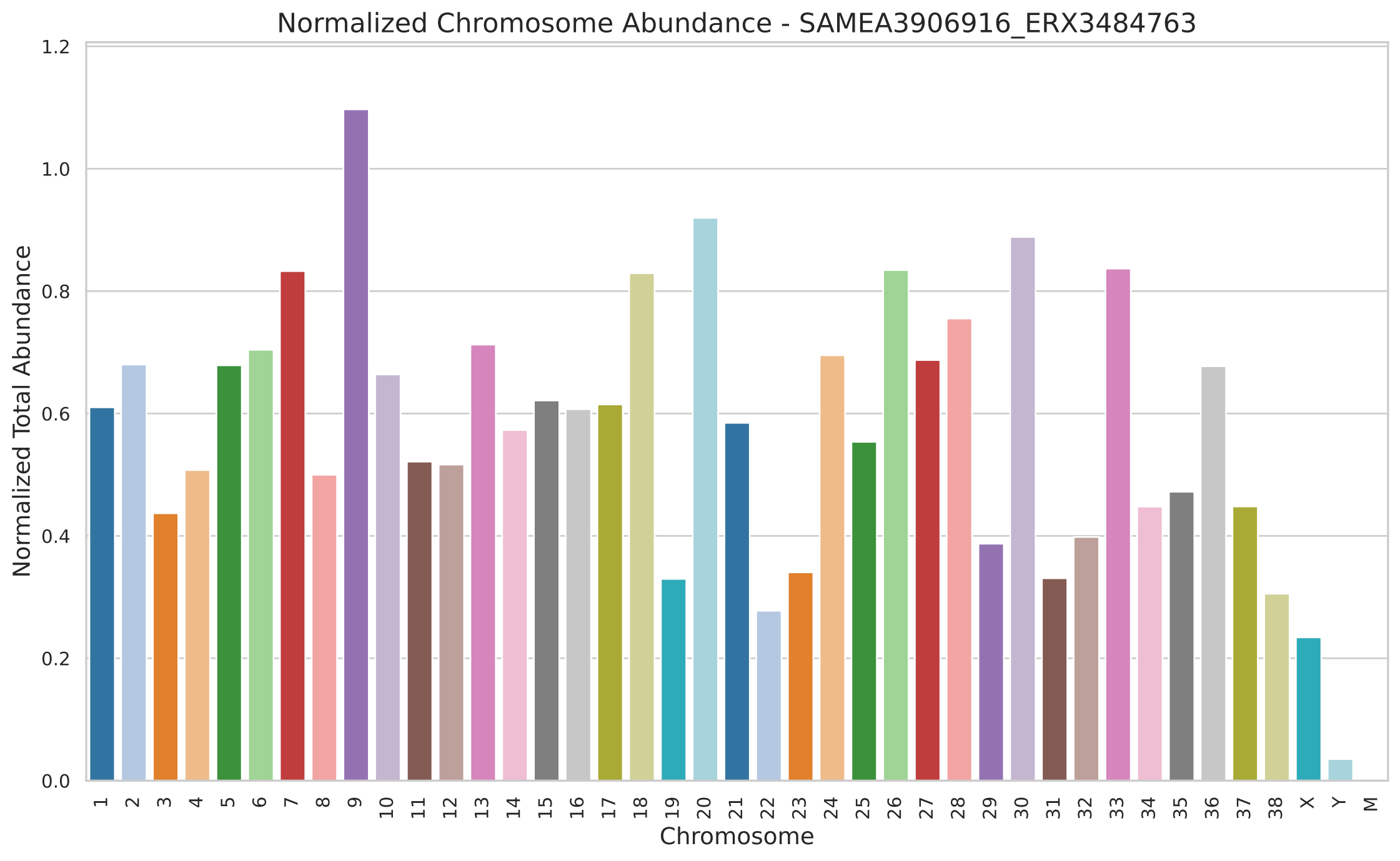

Normalized Chromosome Abundance - SAMEA3907083_ERX3484773
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

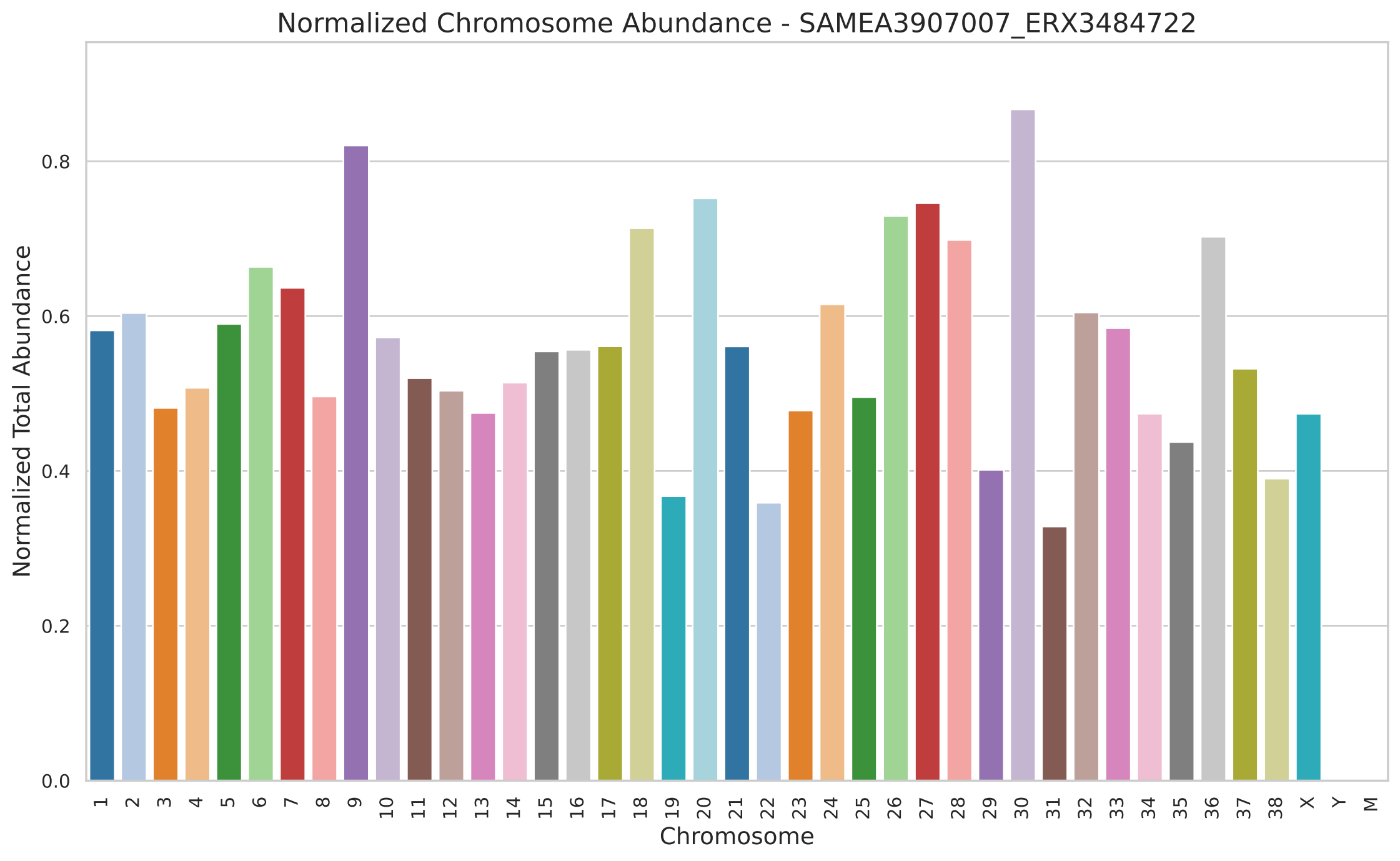

Normalized Chromosome Abundance - SAMEA3906907_ERX3484757
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

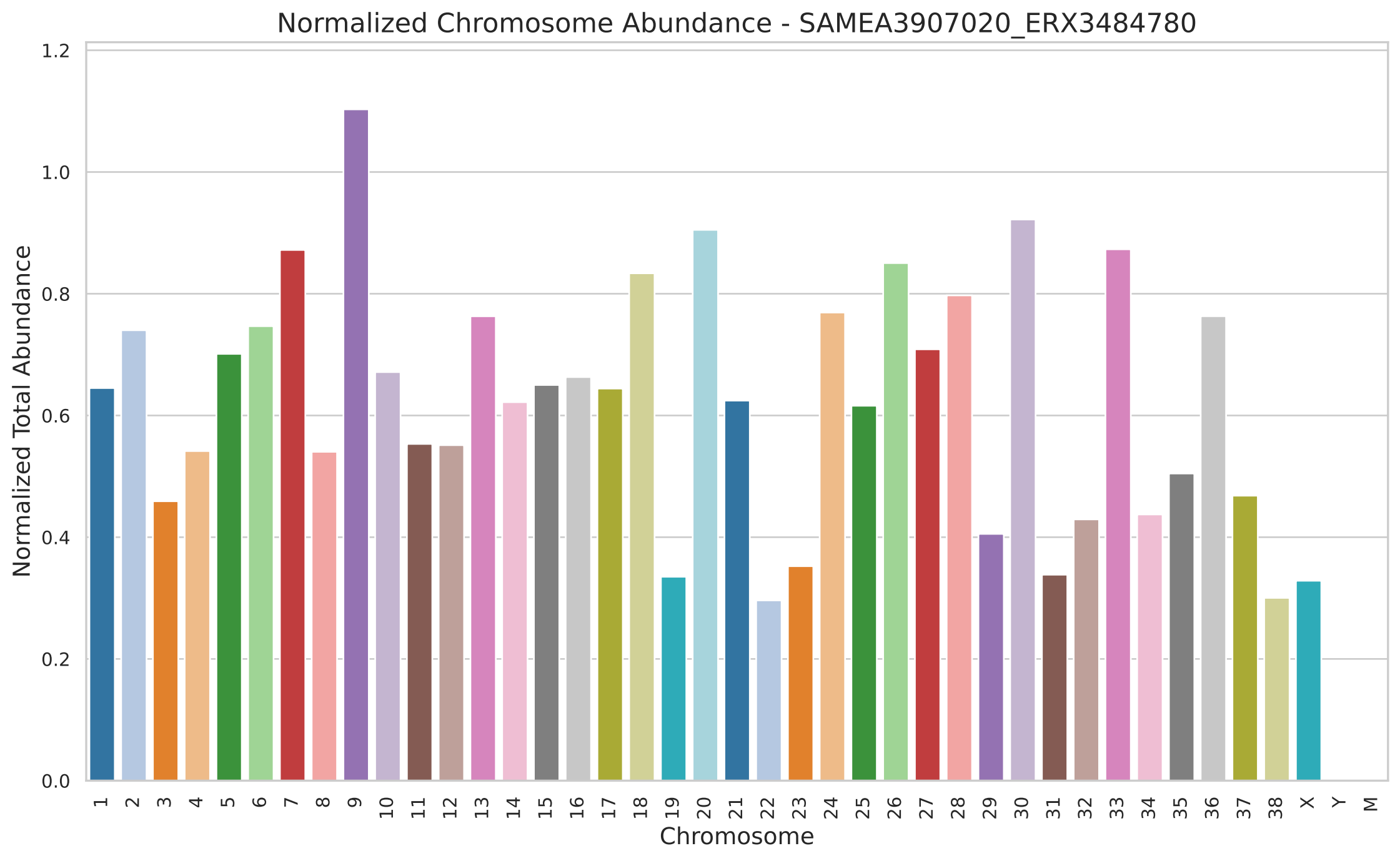

Normalized Chromosome Abundance - SAMEA3907412_ERX3484729
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

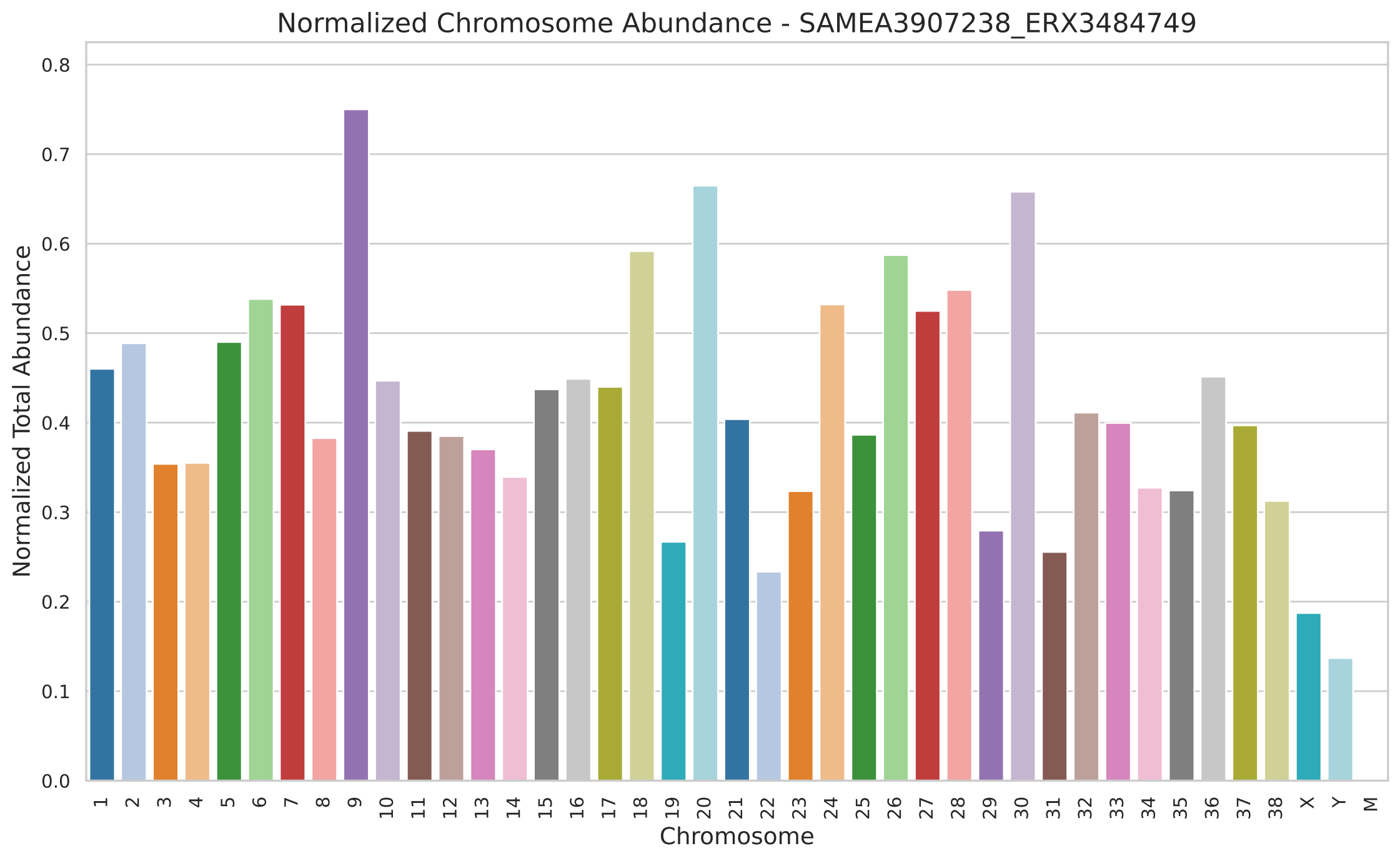

Normalized Chromosome Abundance - SAMEA3906906_ERX3484756
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

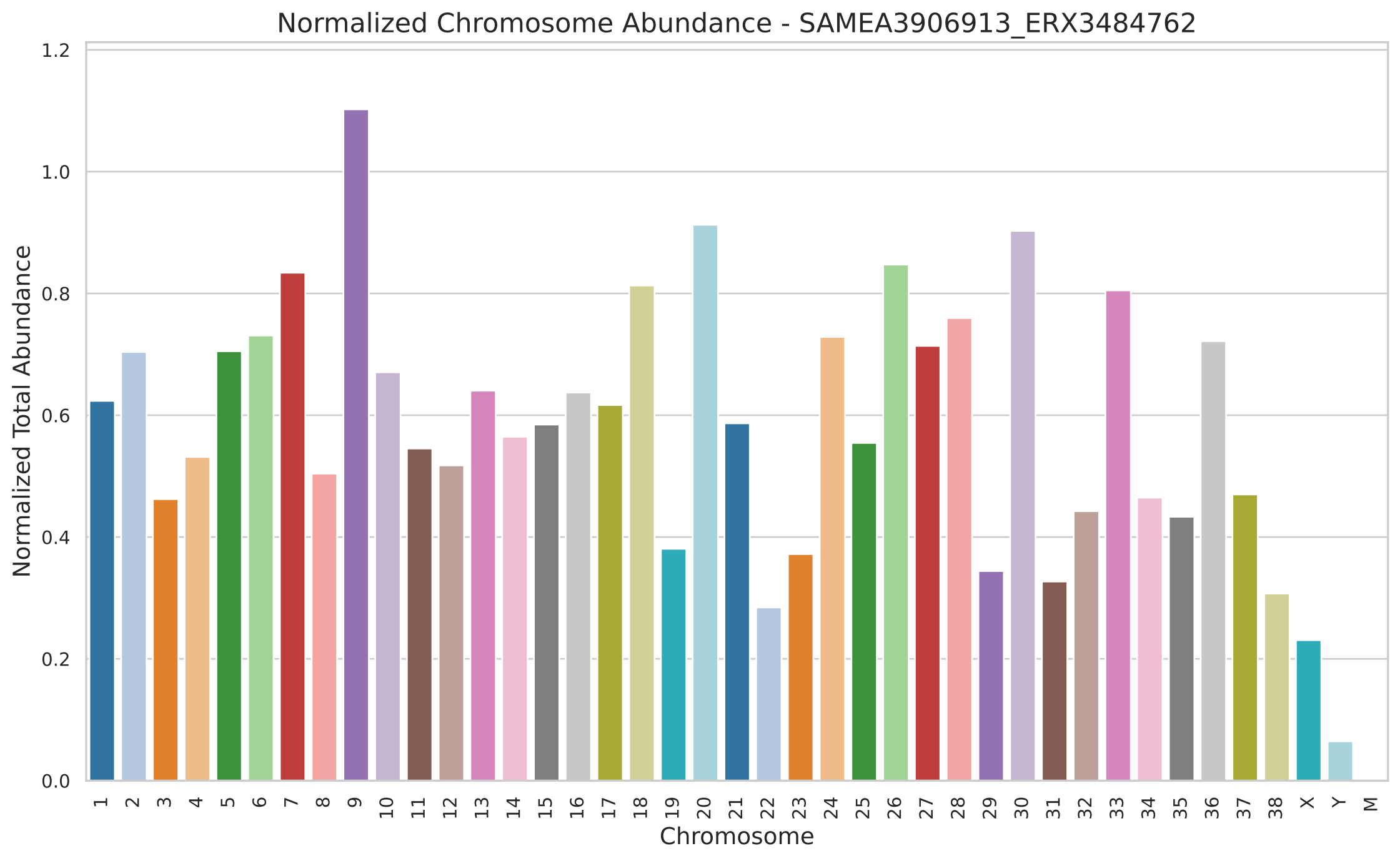

Normalized Chromosome Abundance - SAMEA3906959_ERX3484769
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

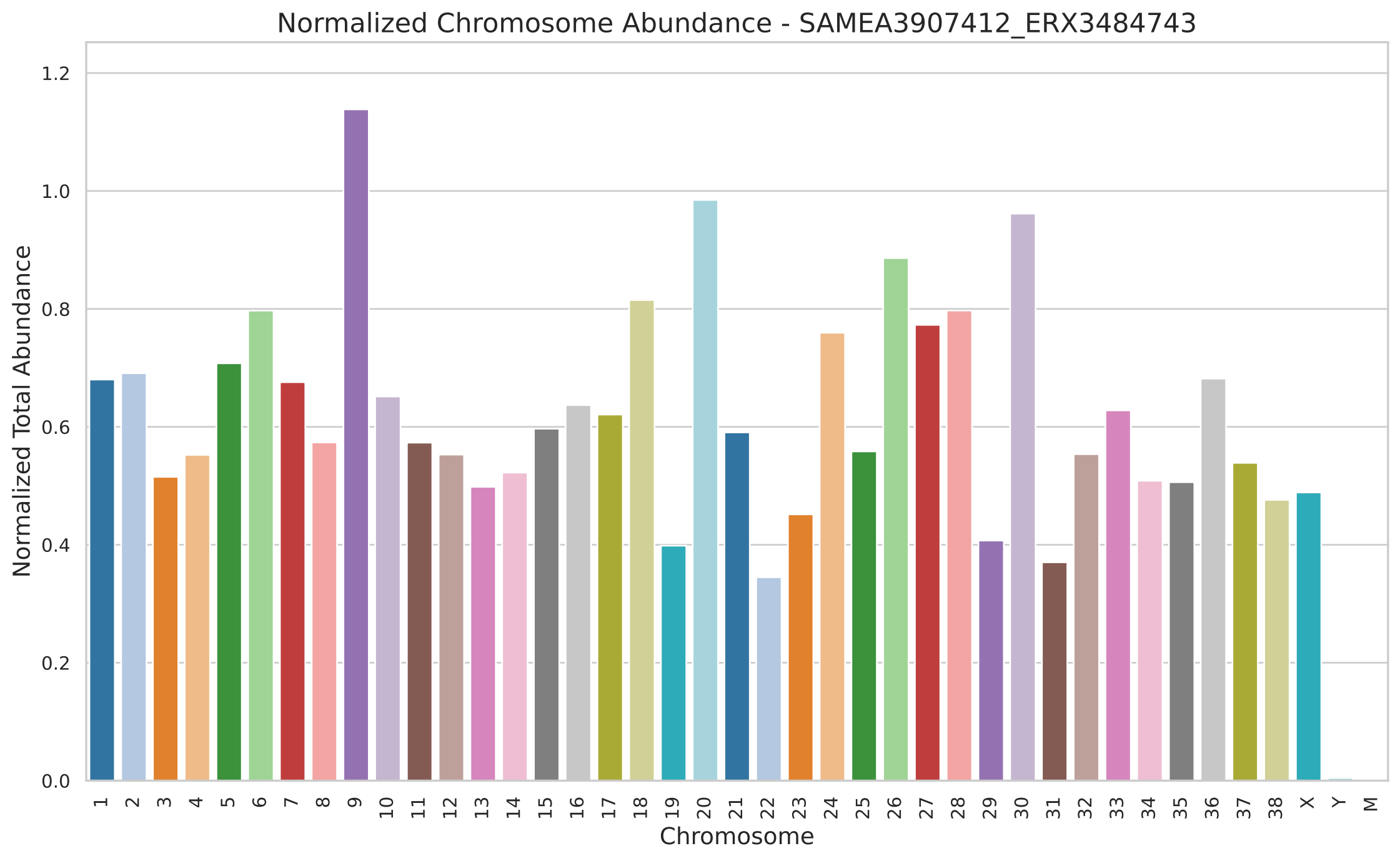

Normalized Chromosome Abundance - SAMEA3906916_ERX3484763
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

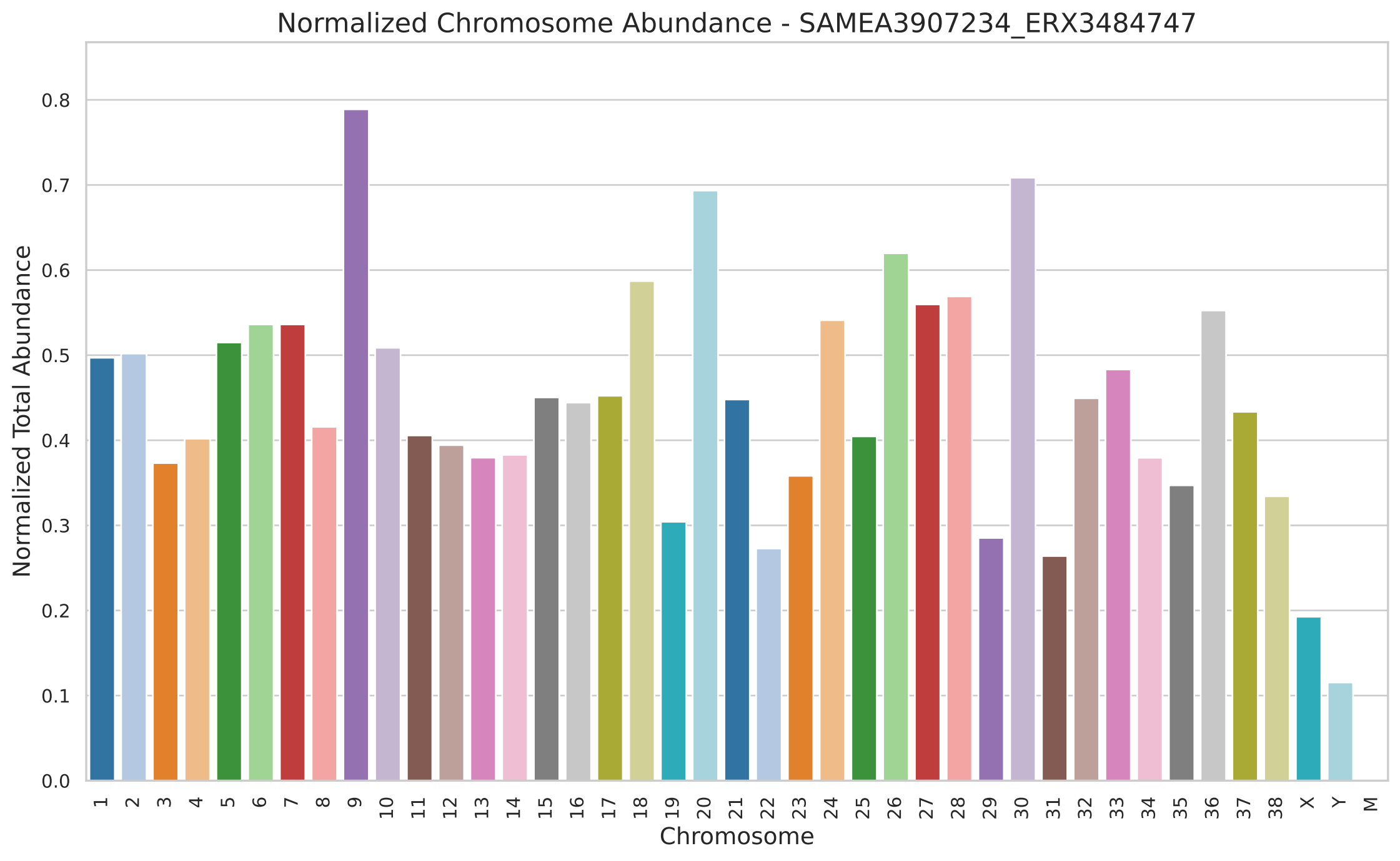

Normalized Chromosome Abundance - SAMEA3907007_ERX3484722
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

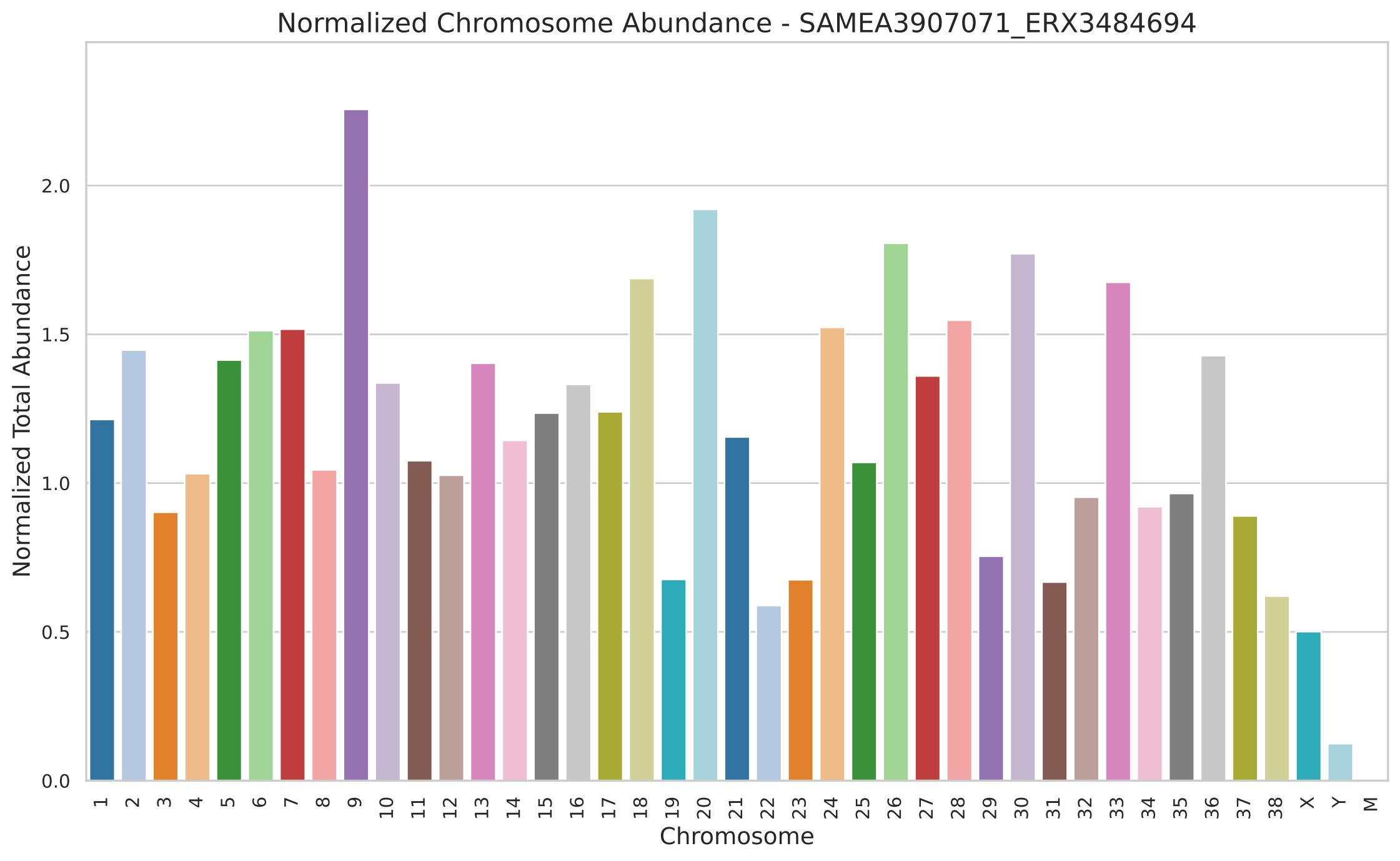

Normalized Chromosome Abundance - SAMEA3907020_ERX3484780
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

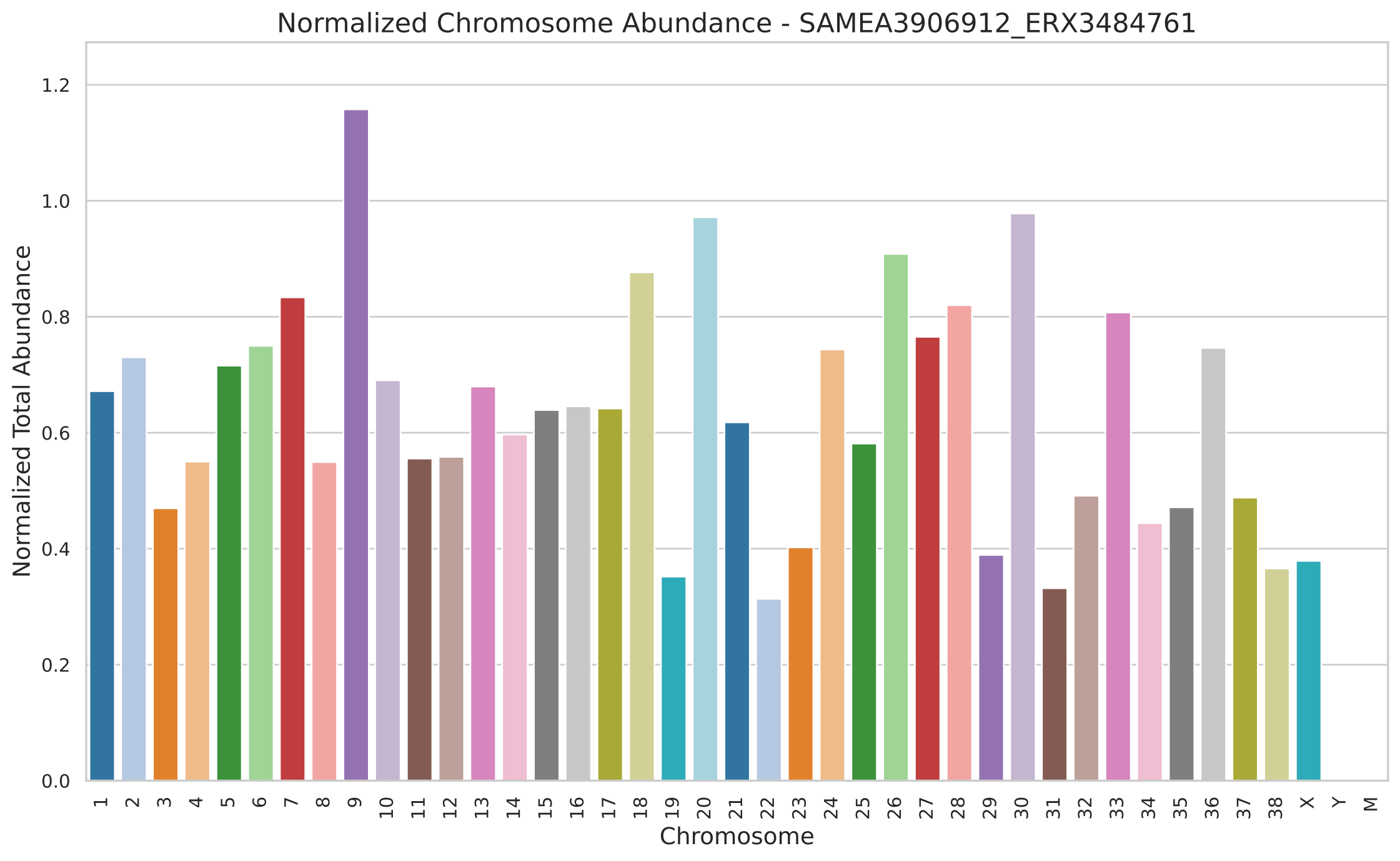

Normalized Chromosome Abundance - SAMEA3907238_ERX3484749
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

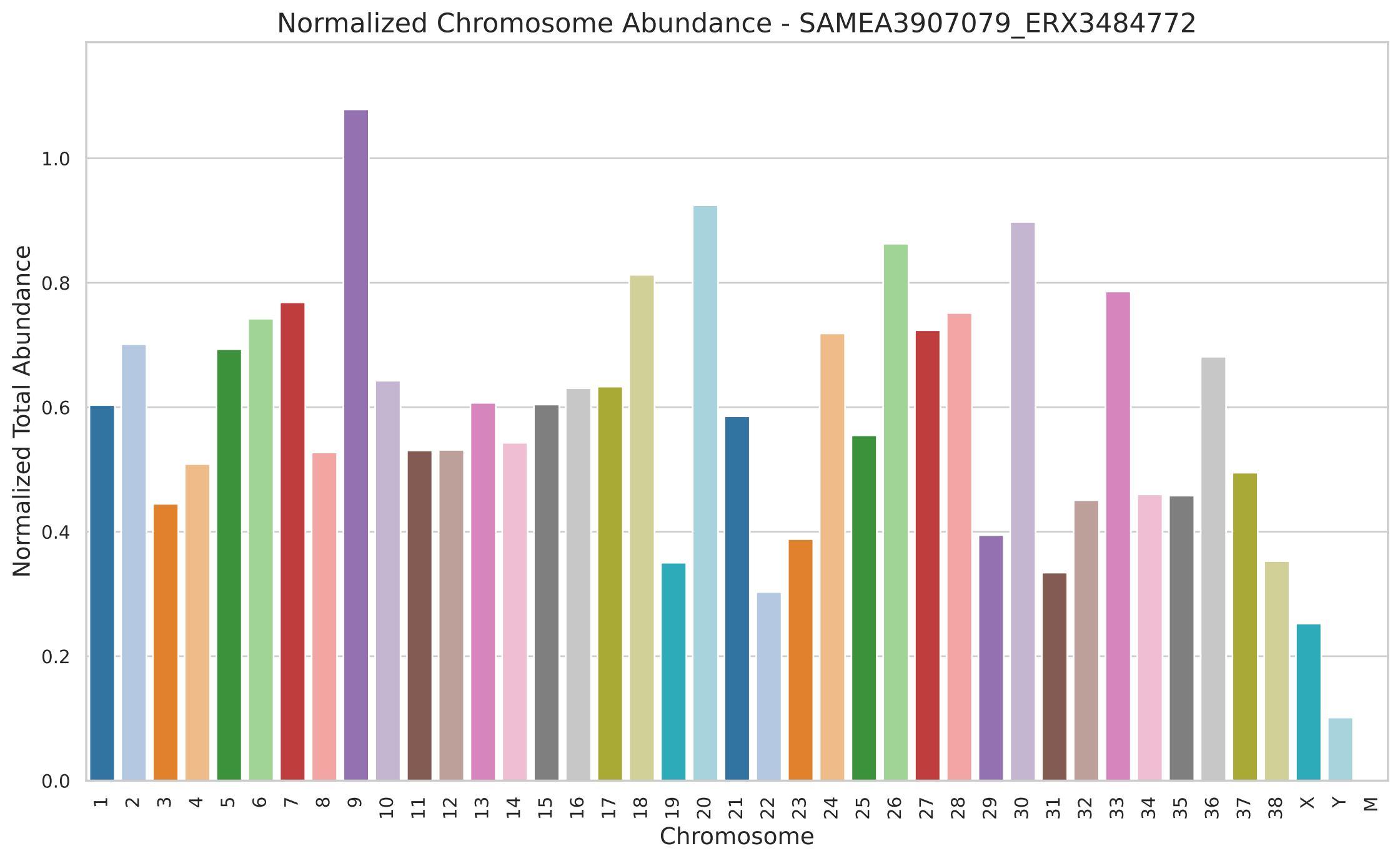

Normalized Chromosome Abundance - SAMEA3906913_ERX3484762
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

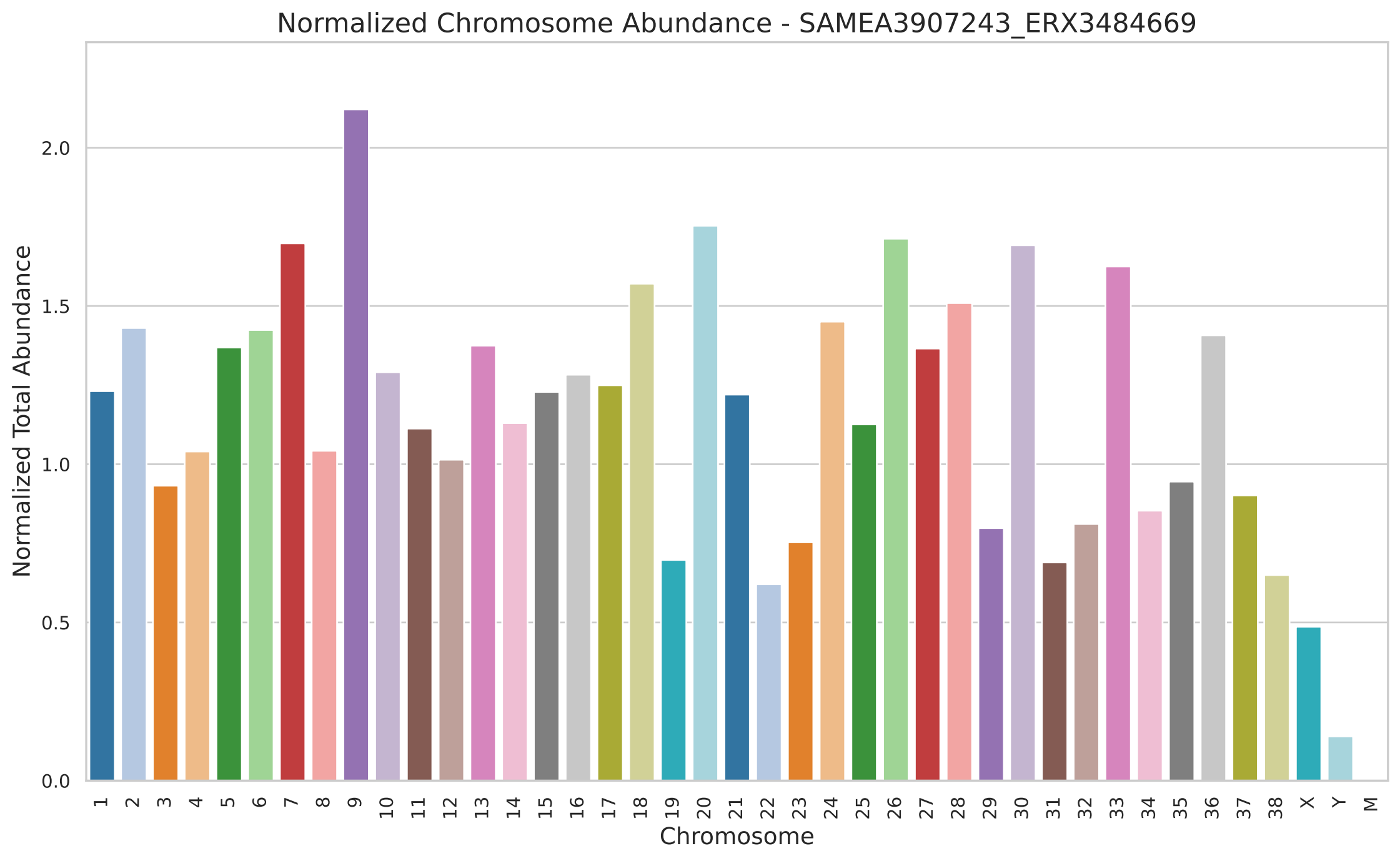

Normalized Chromosome Abundance - SAMEA3907412_ERX3484743
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

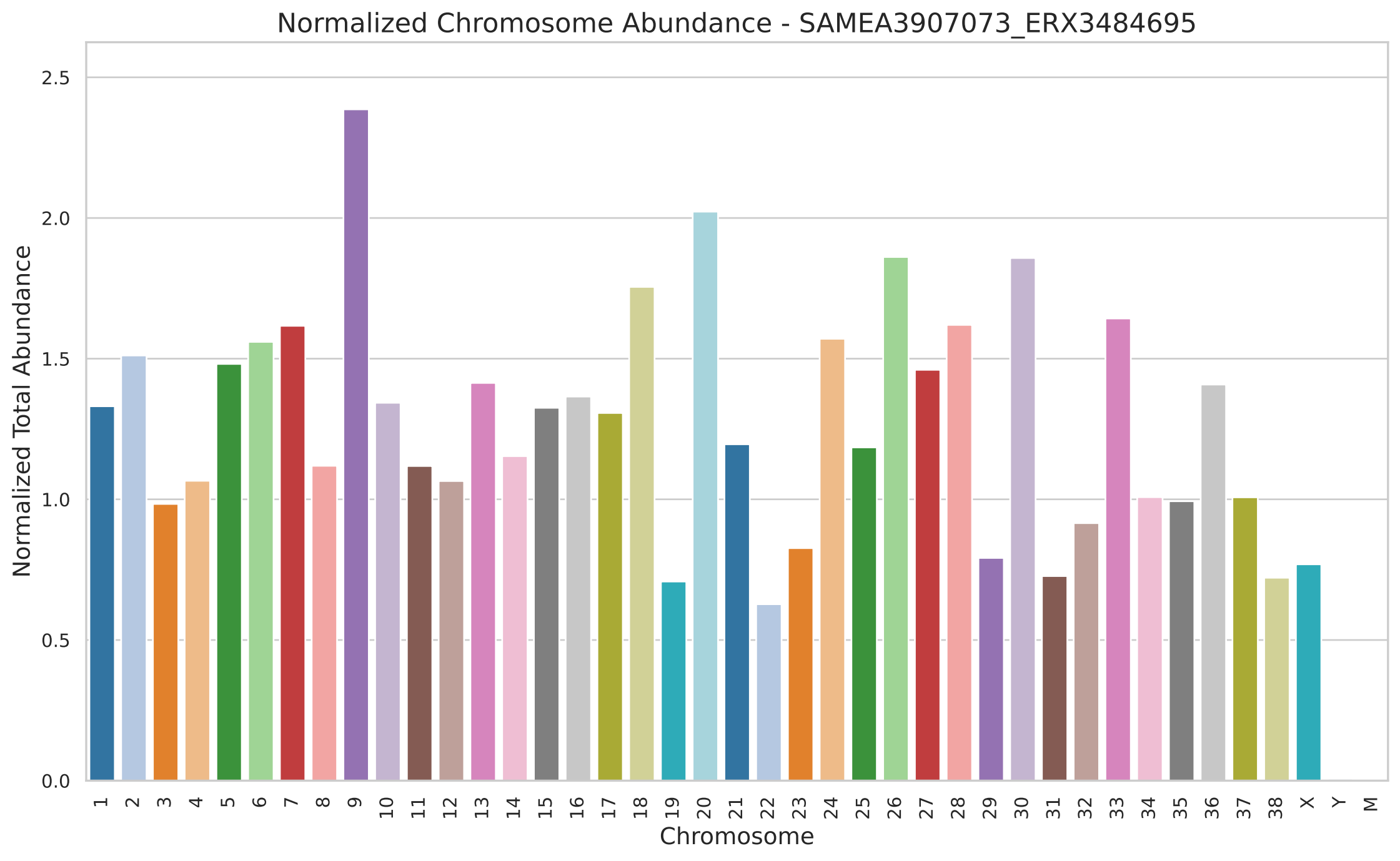

Normalized Chromosome Abundance - SAMEA3907234_ERX3484747
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

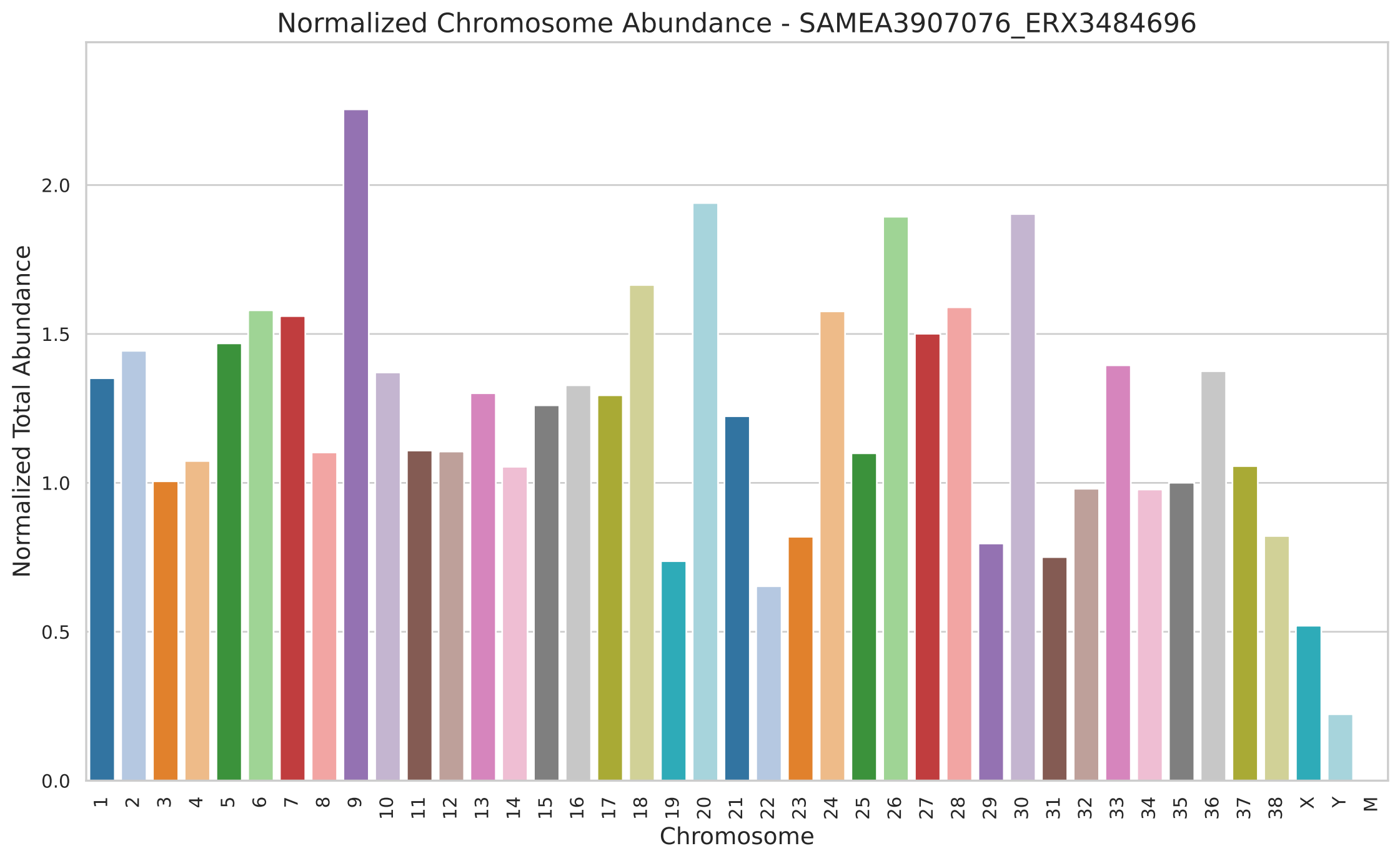

Normalized Chromosome Abundance - SAMEA3907071_ERX3484694
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

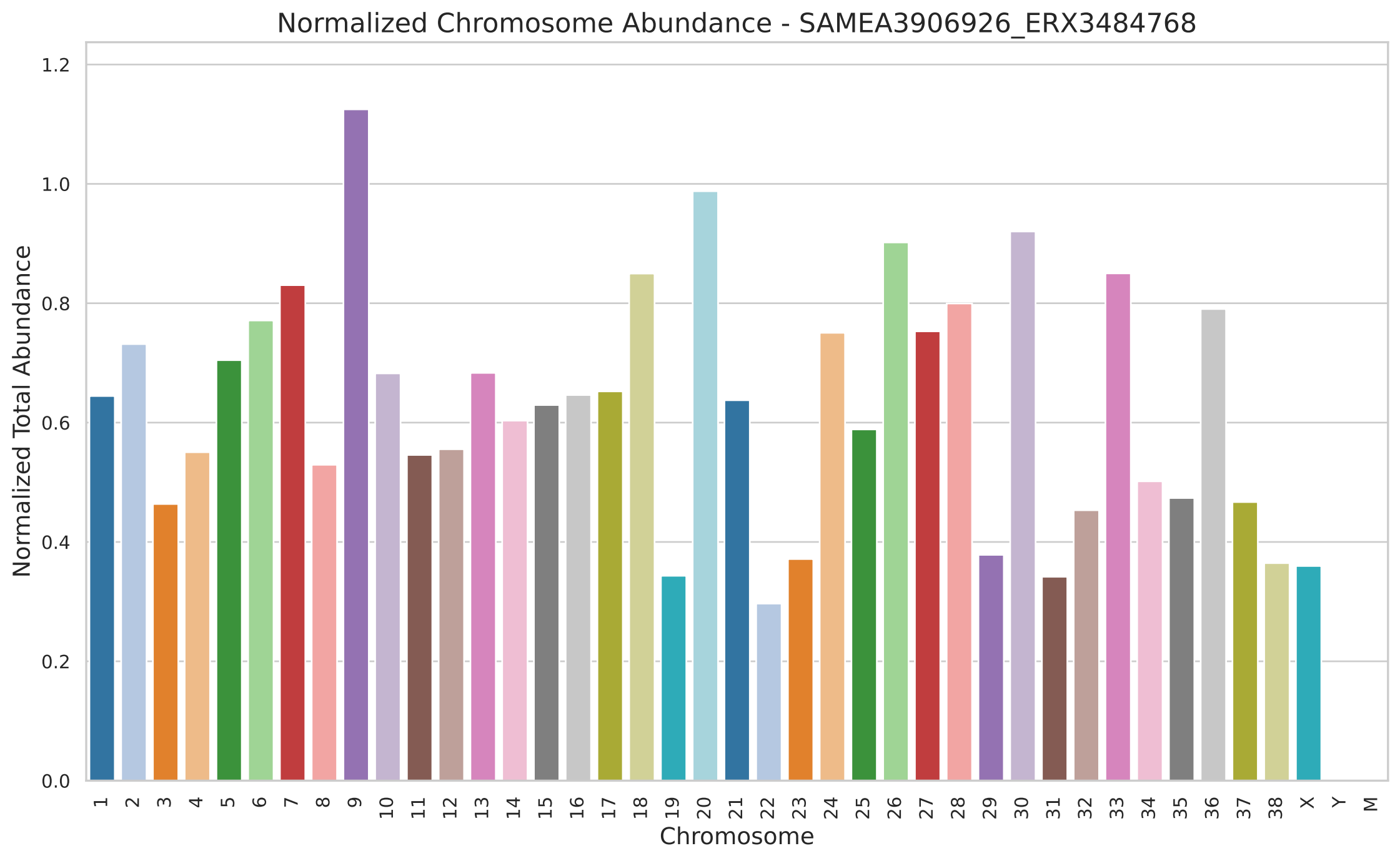

Normalized Chromosome Abundance - SAMEA3906912_ERX3484761
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

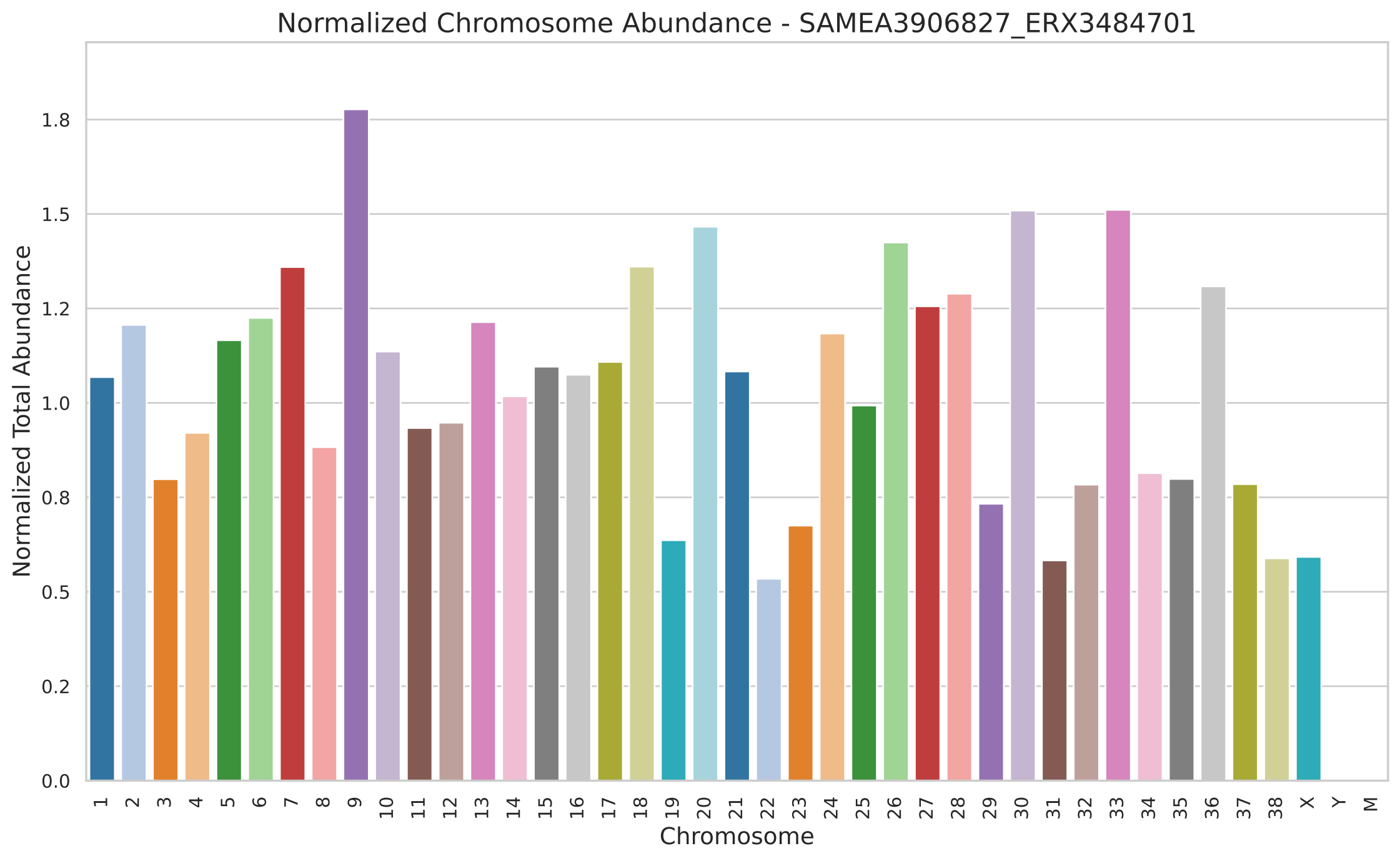

Normalized Chromosome Abundance - SAMEA3907079_ERX3484772
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

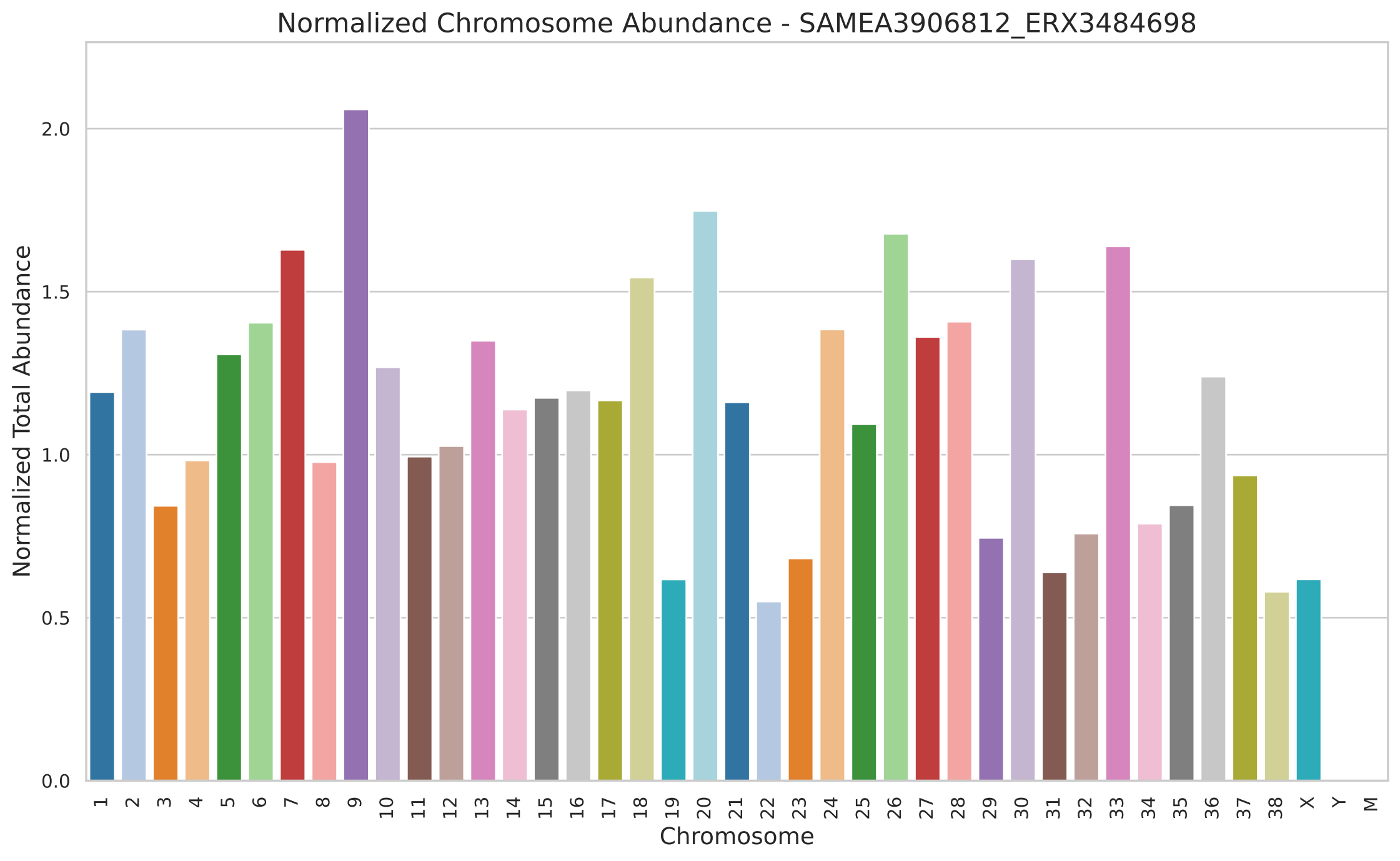

Normalized Chromosome Abundance - SAMEA3907243_ERX3484669
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

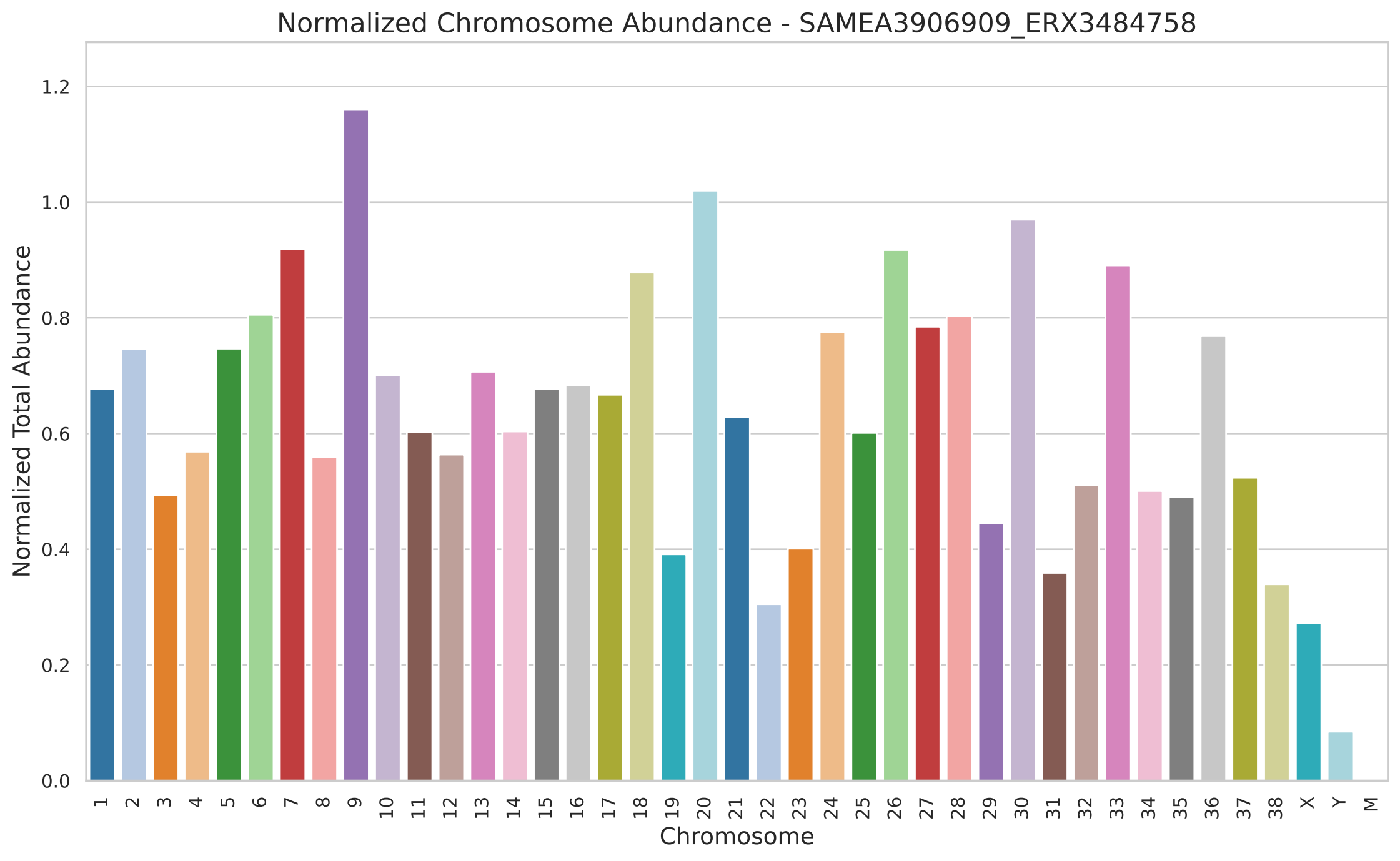

Normalized Chromosome Abundance - SAMEA3907073_ERX3484695
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

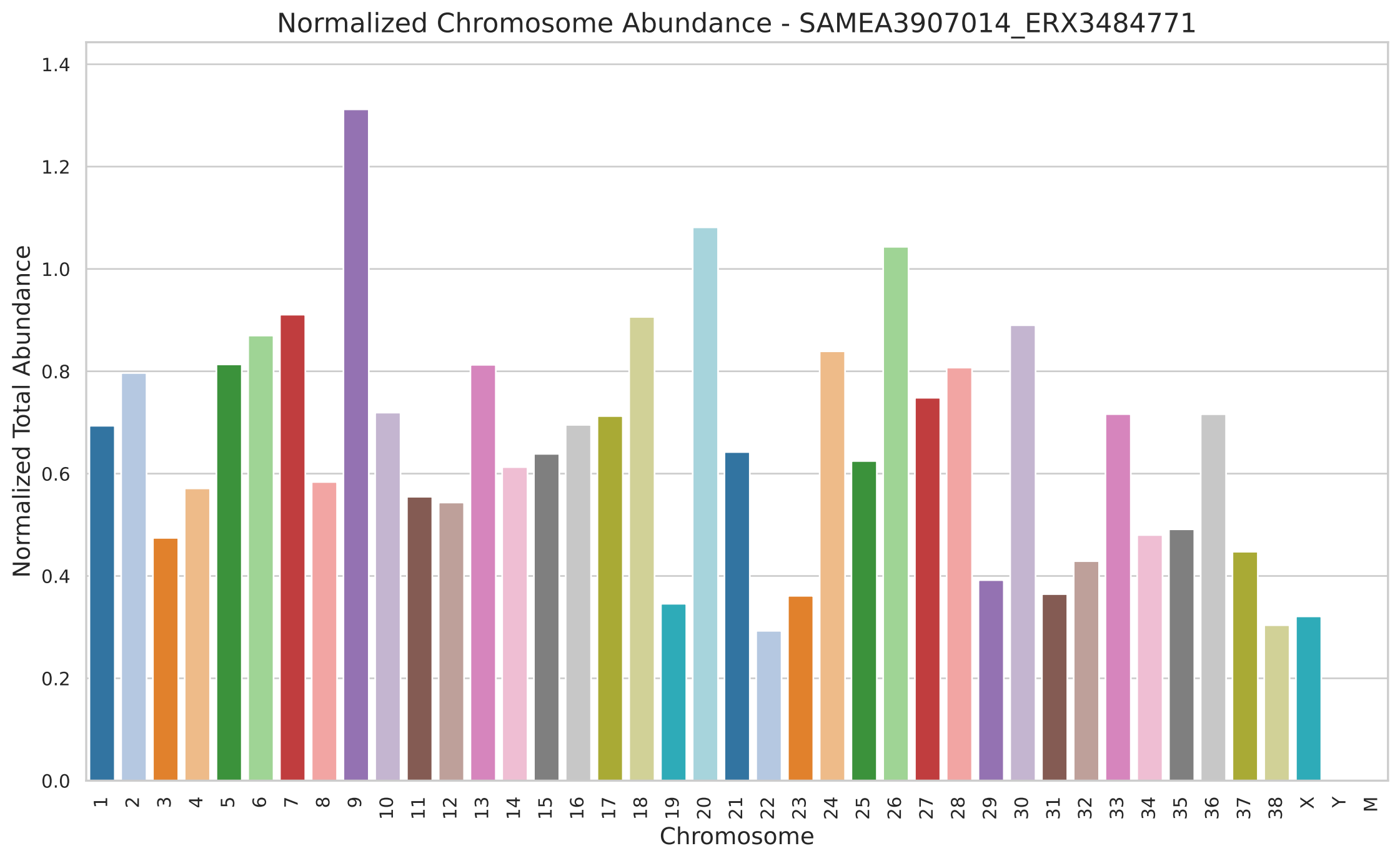

Normalized Chromosome Abundance - SAMEA3907076_ERX3484696
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

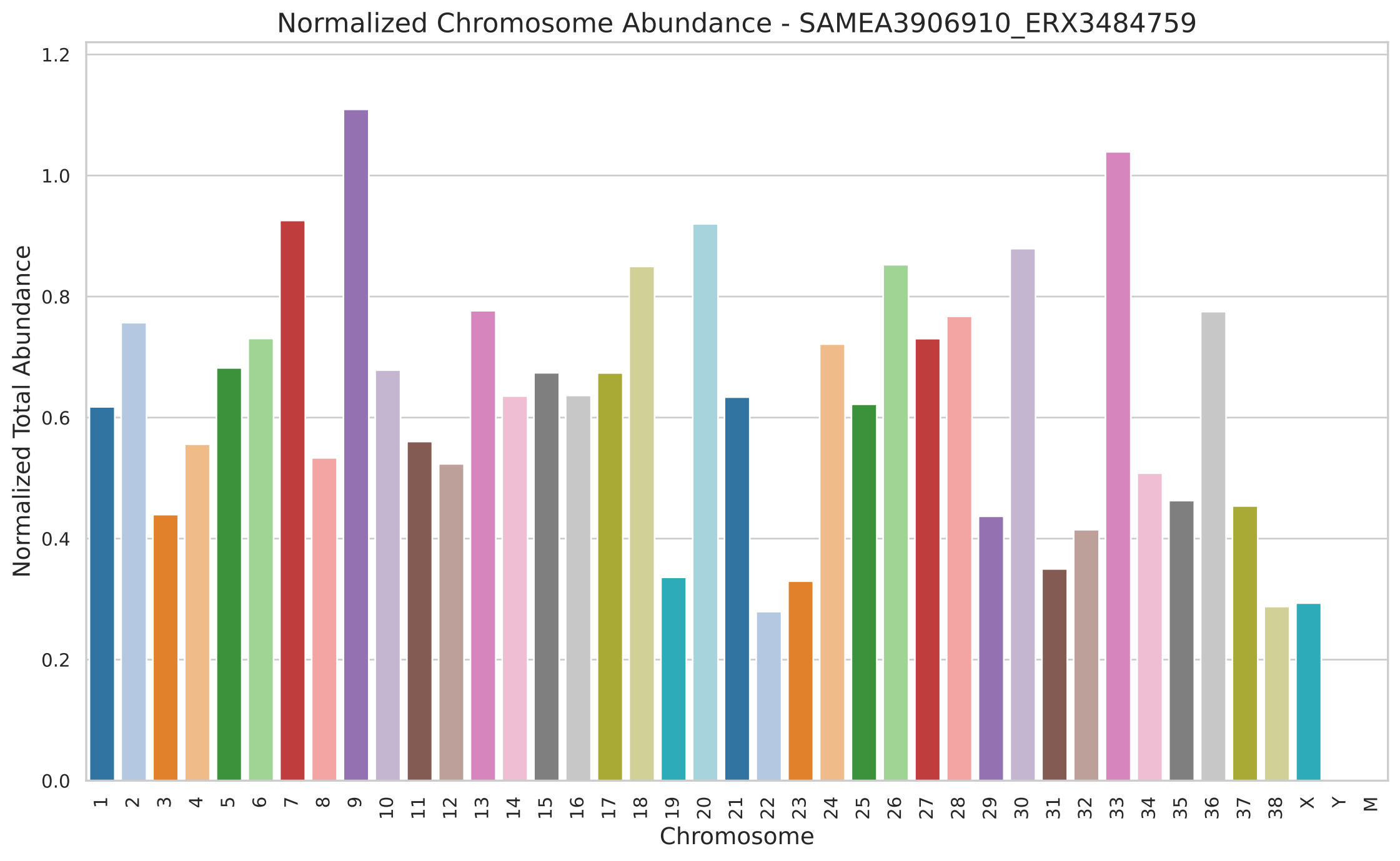

Normalized Chromosome Abundance - SAMEA3906926_ERX3484768
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

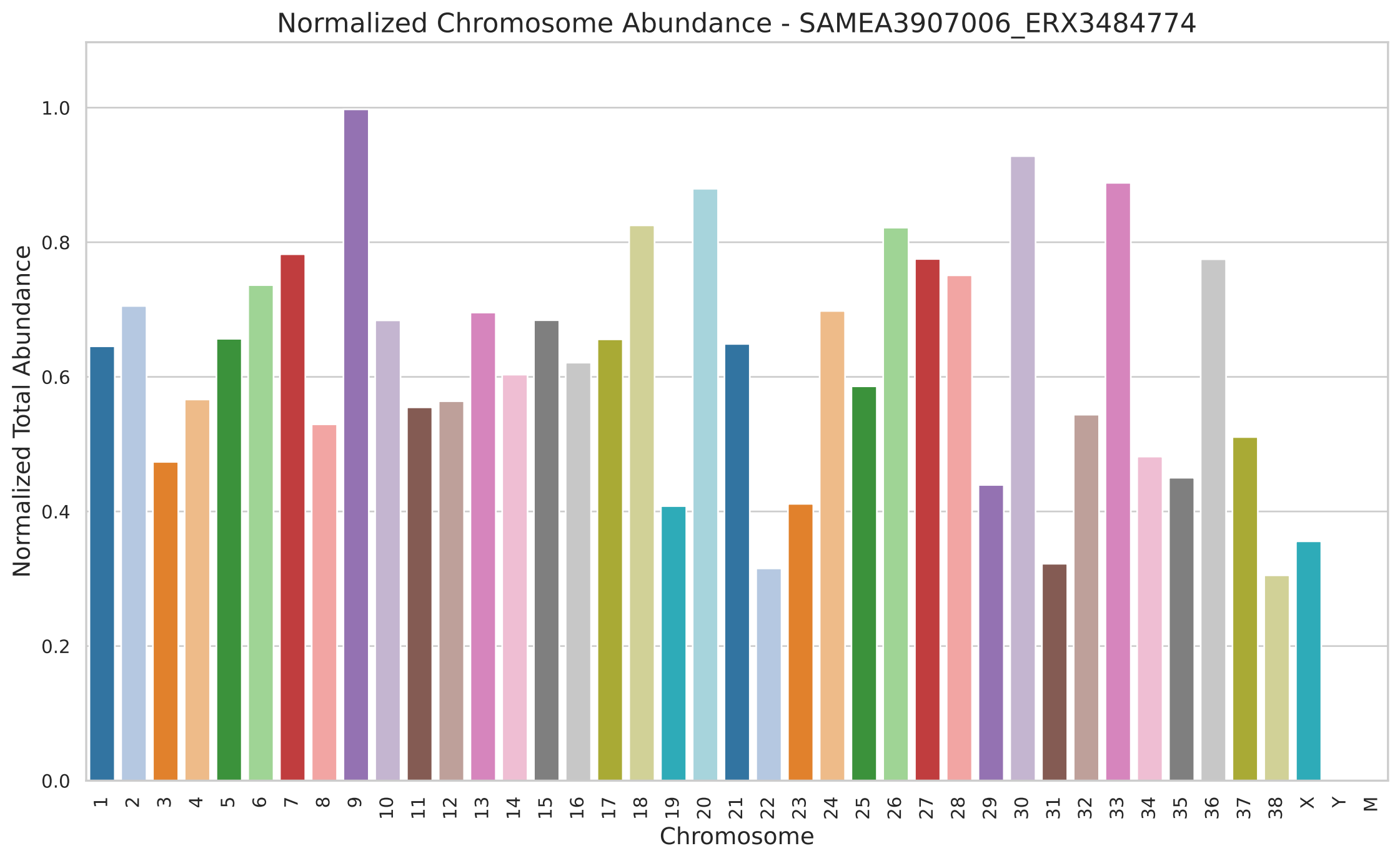

Normalized Chromosome Abundance - SAMEA3906827_ERX3484701
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

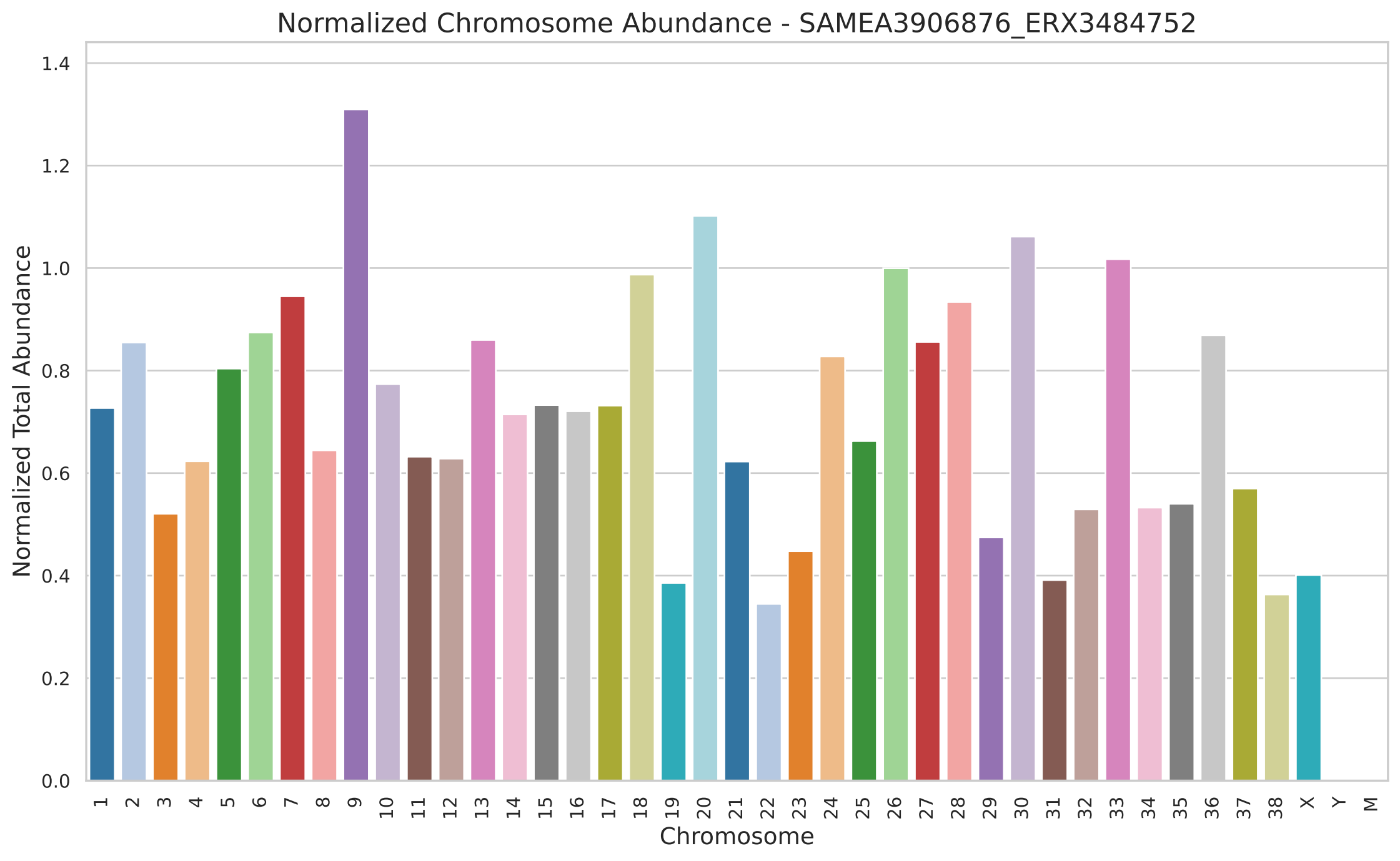

Normalized Chromosome Abundance - SAMEA3906812_ERX3484698
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

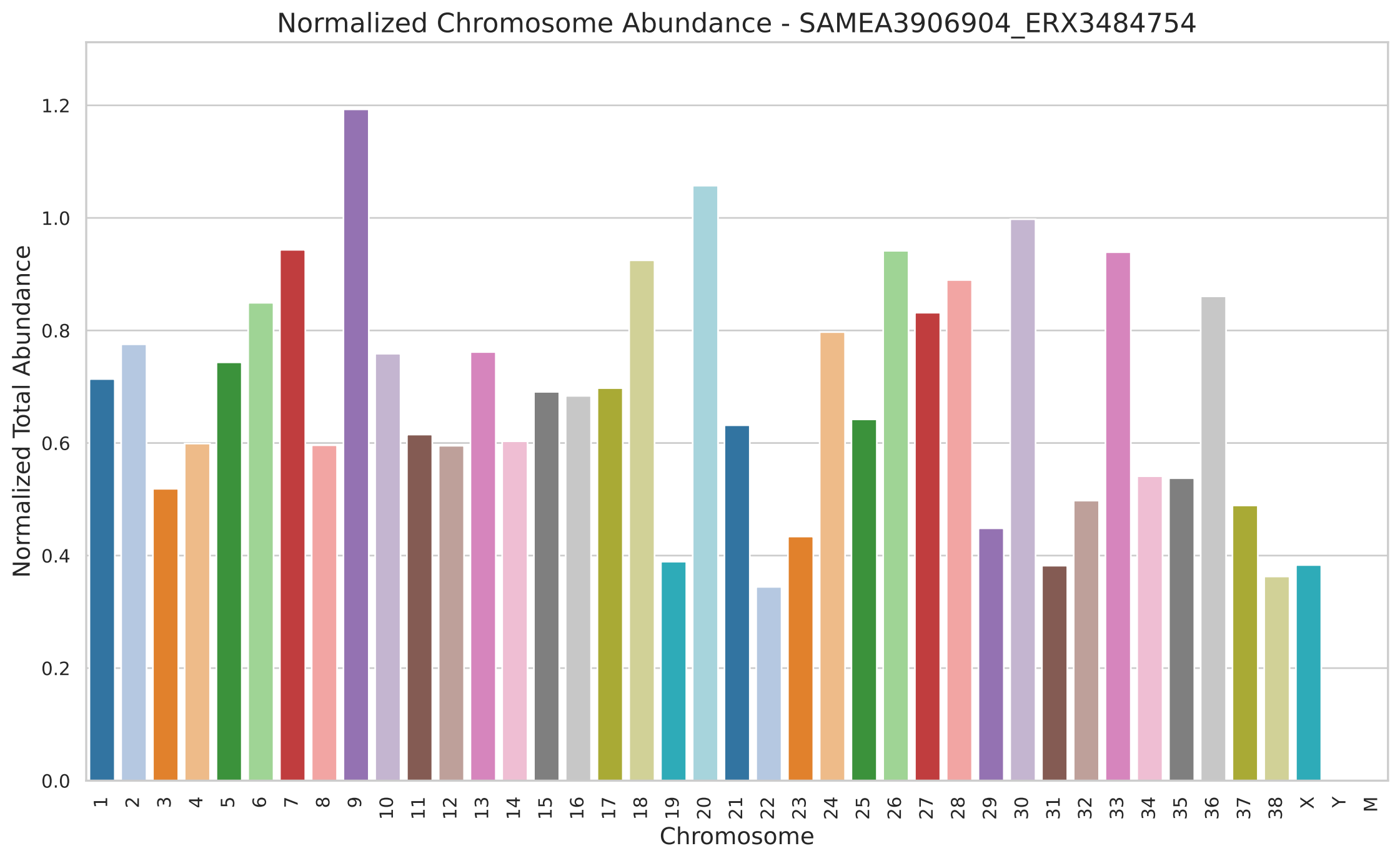

Normalized Chromosome Abundance - SAMEA3906909_ERX3484758
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

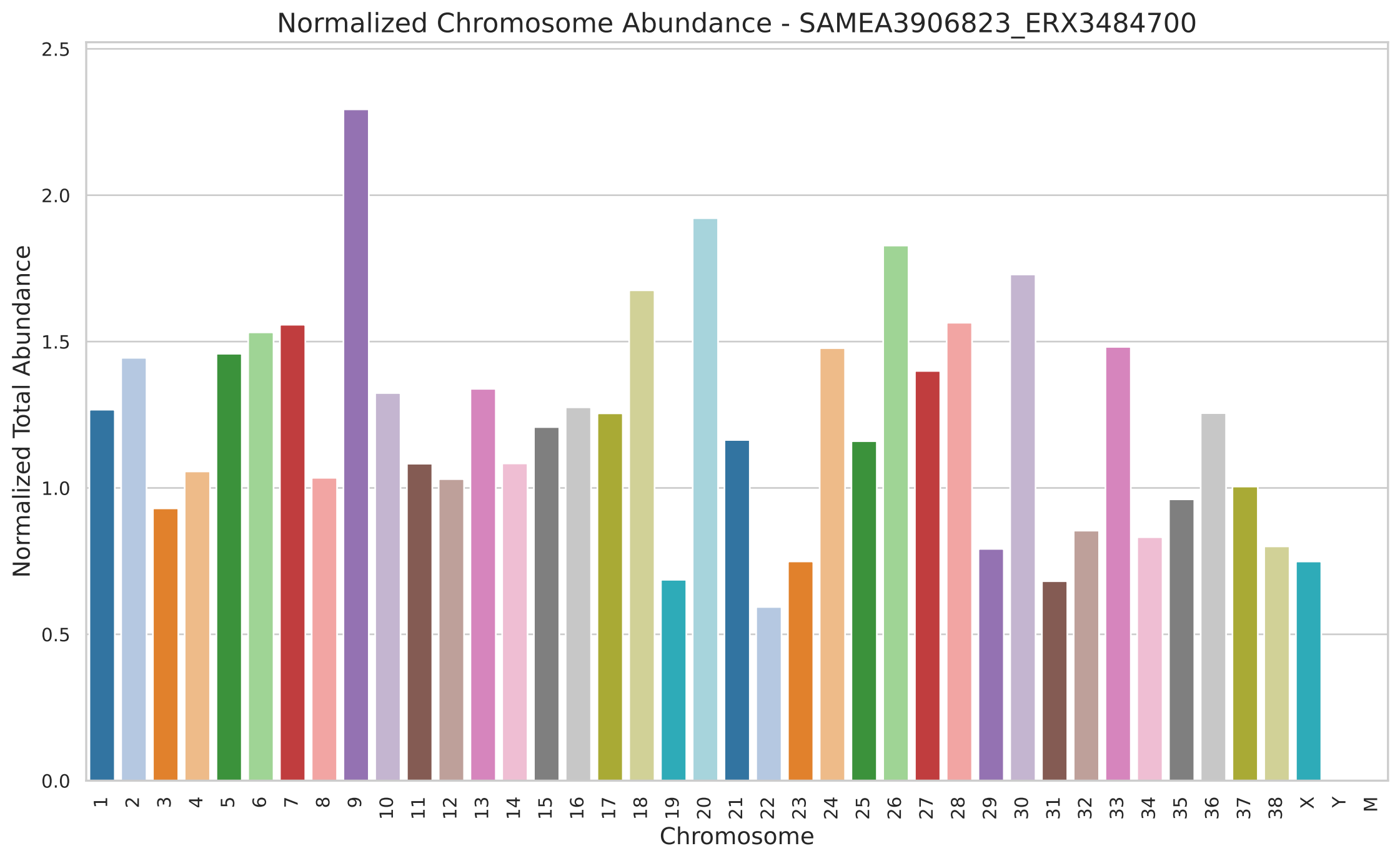

Normalized Chromosome Abundance - SAMEA3907014_ERX3484771
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

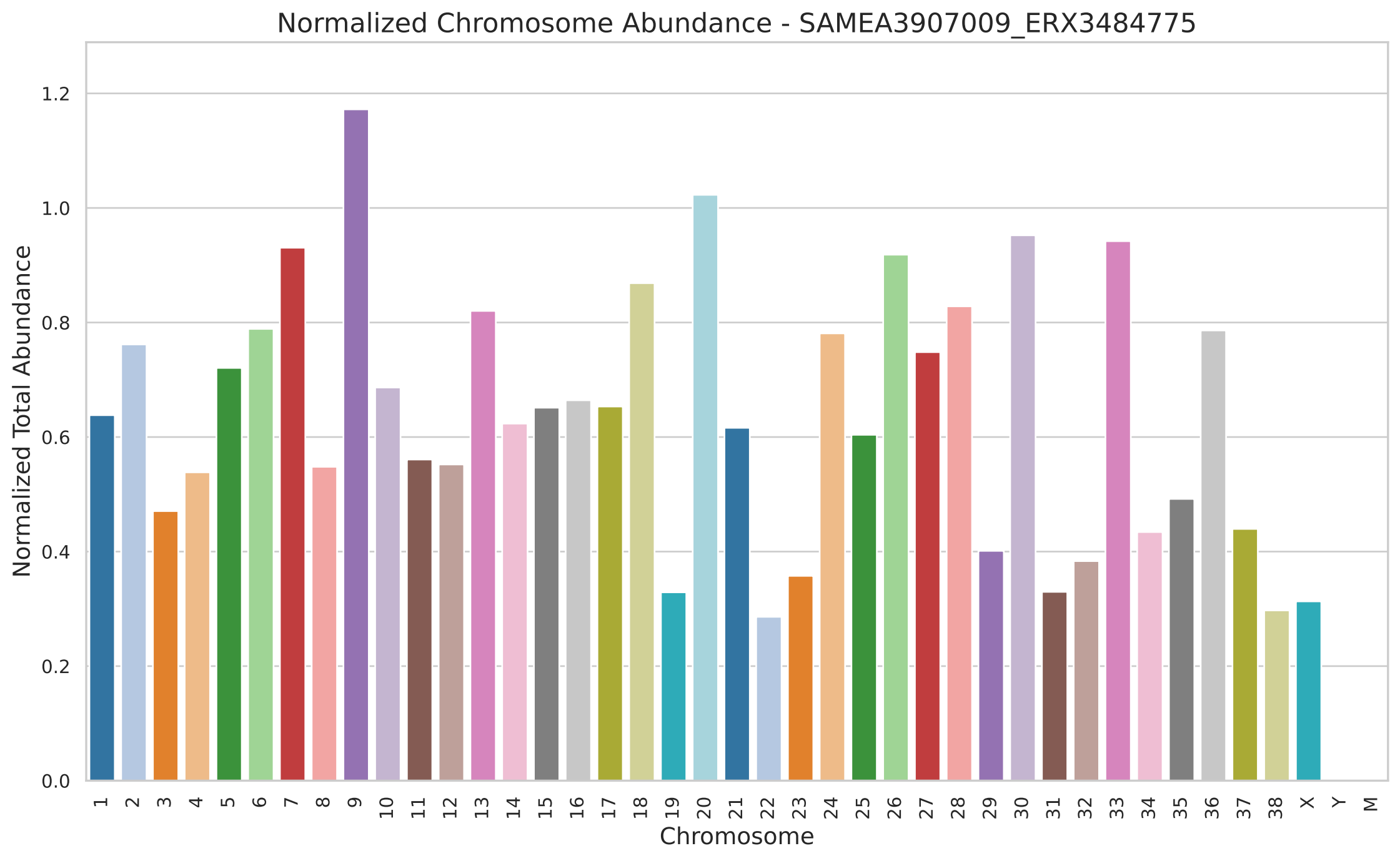

Normalized Chromosome Abundance - SAMEA3906910_ERX3484759
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

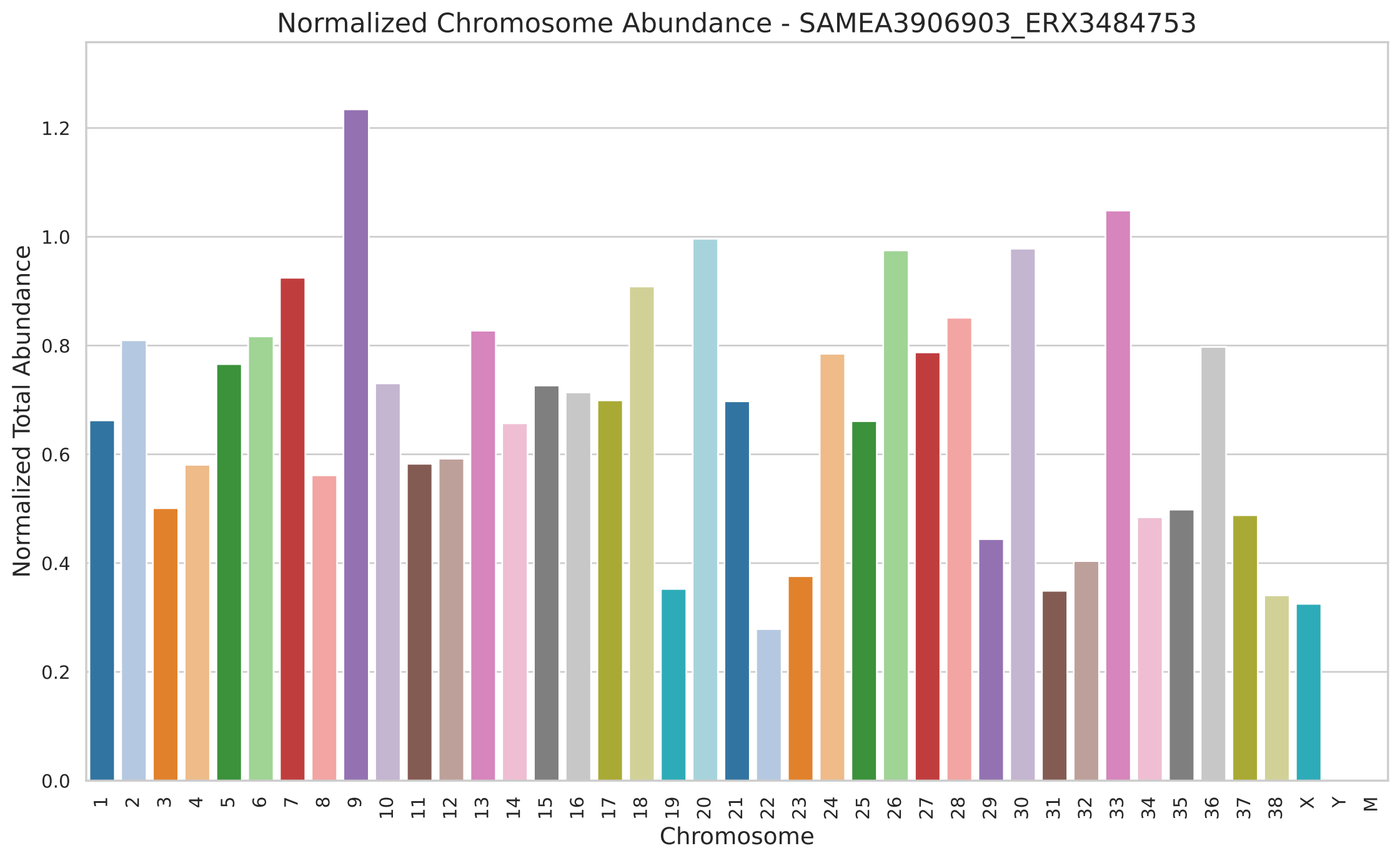

Normalized Chromosome Abundance - SAMEA3907006_ERX3484774
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

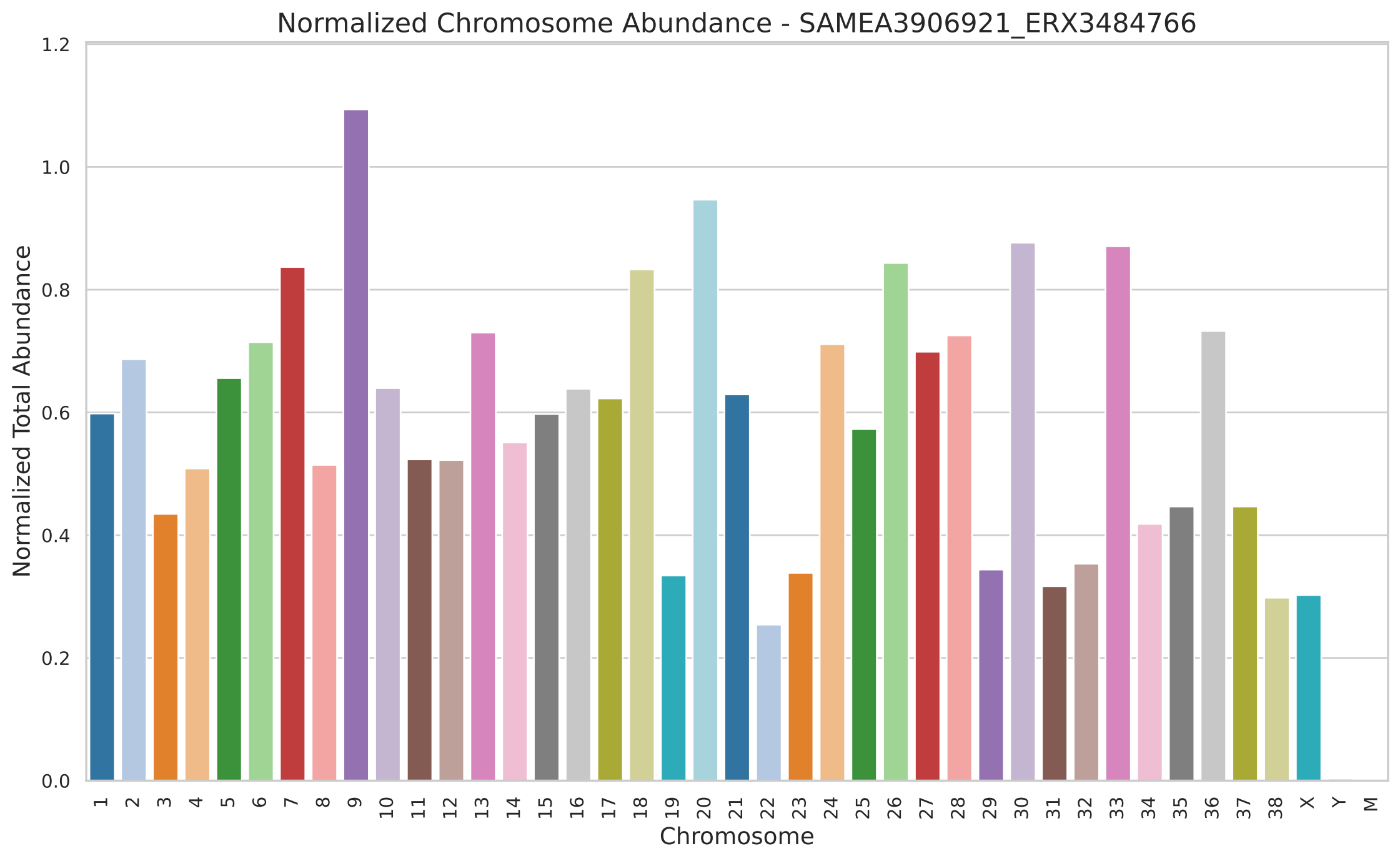

Normalized Chromosome Abundance - SAMEA3906876_ERX3484752
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

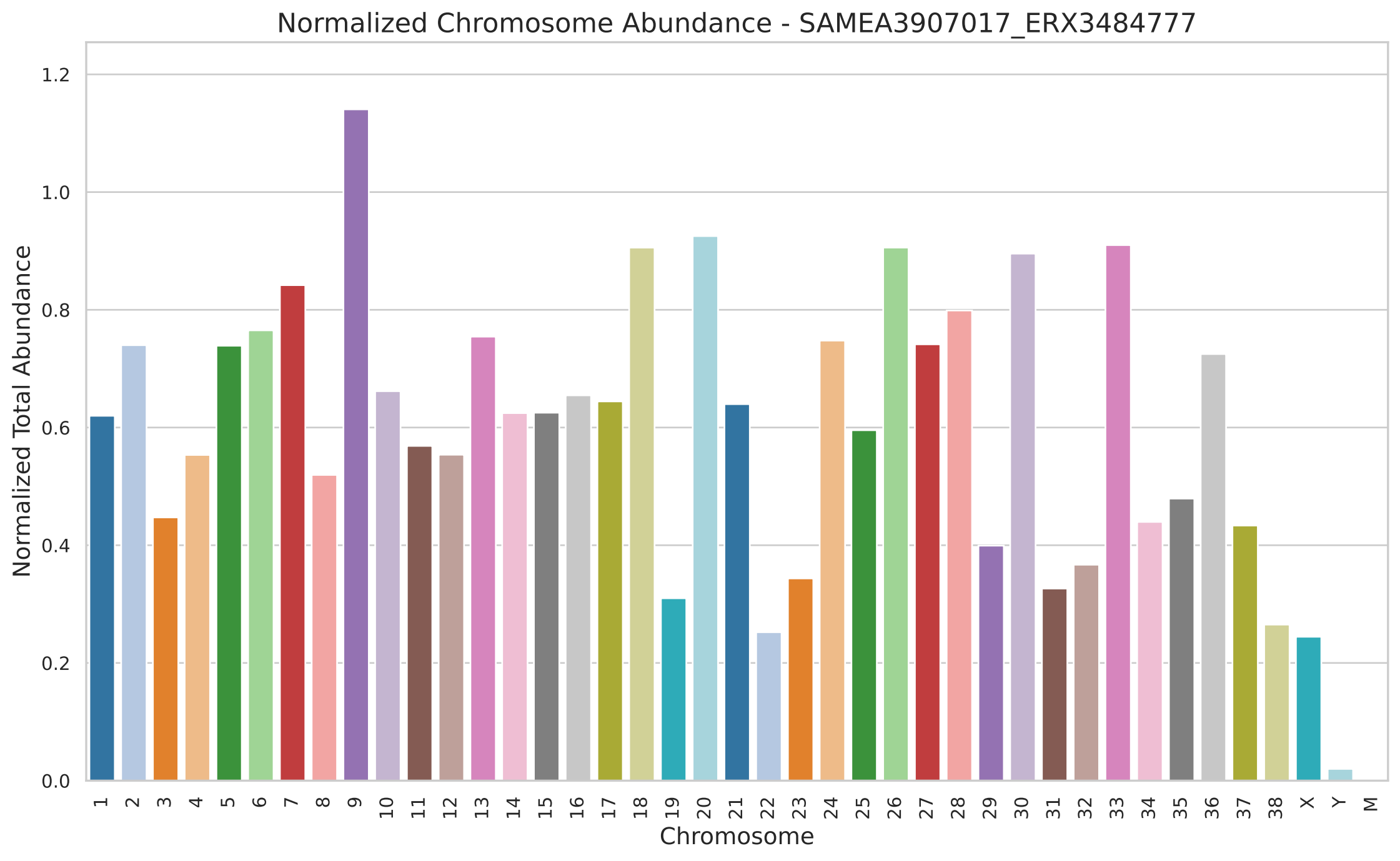

Normalized Chromosome Abundance - SAMEA3906904_ERX3484754
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

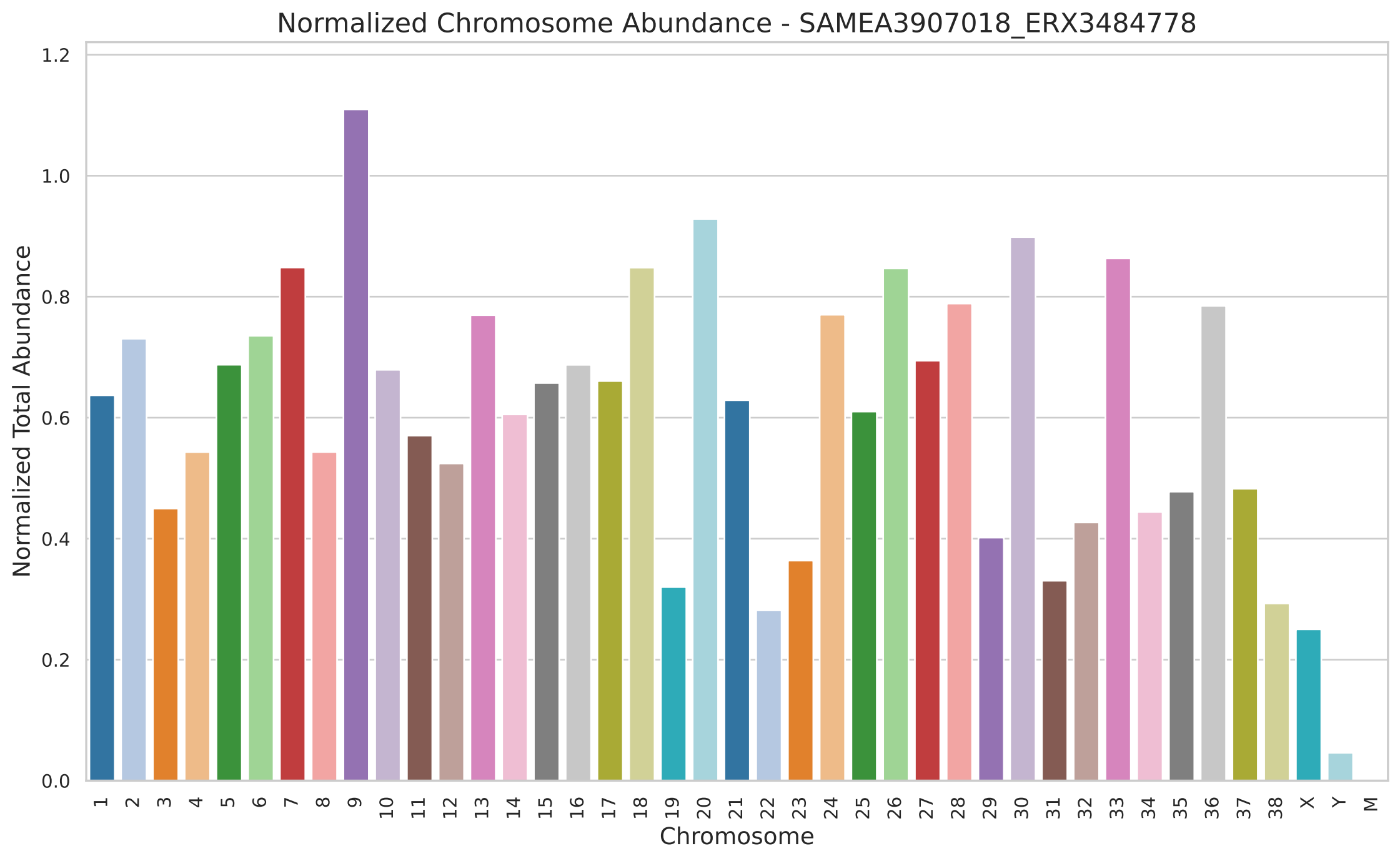

Normalized Chromosome Abundance - SAMEA3906823_ERX3484700
Normalized Total Abundance
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

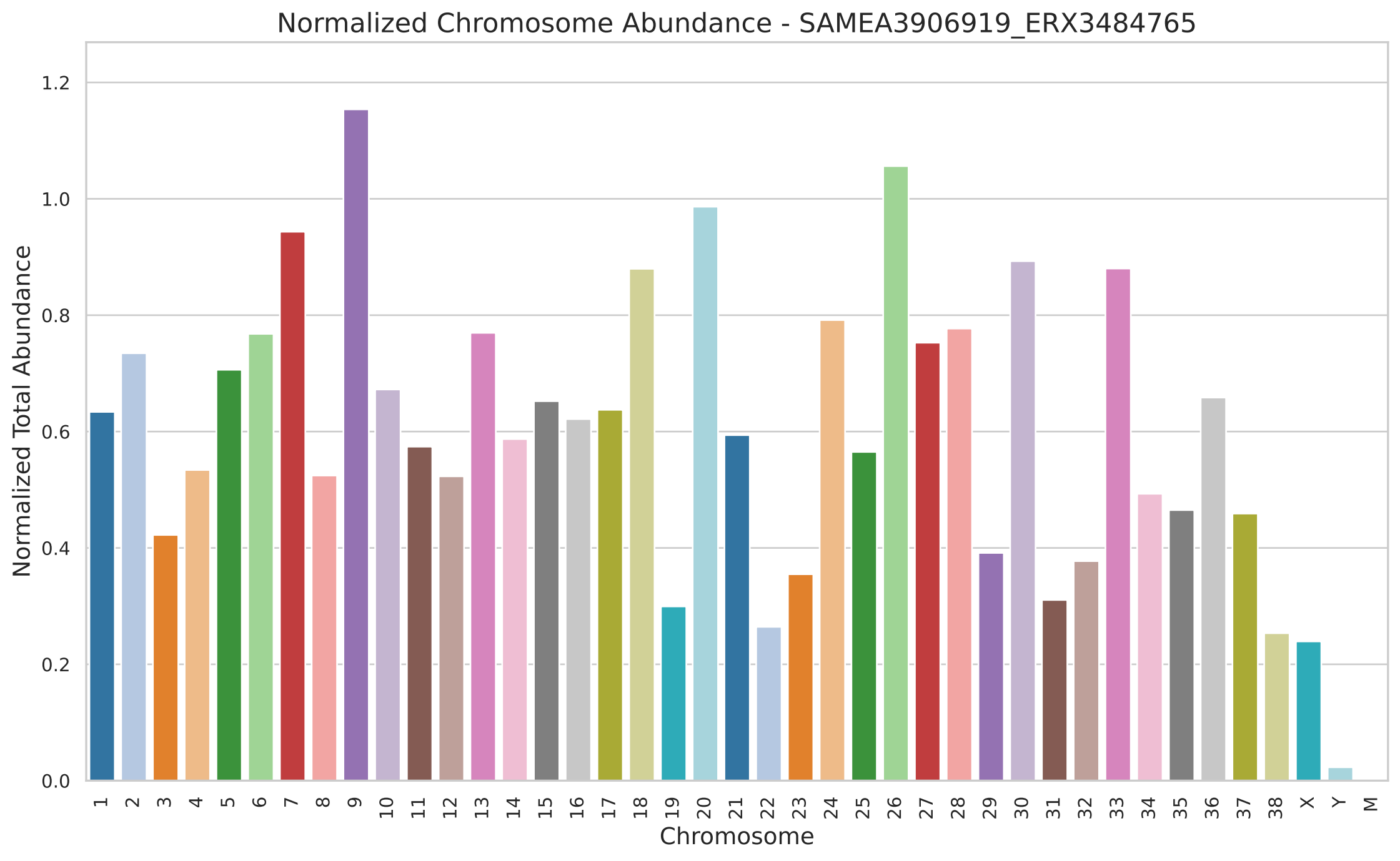

Normalized Chromosome Abundance - SAMEA3907009_ERX3484775
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

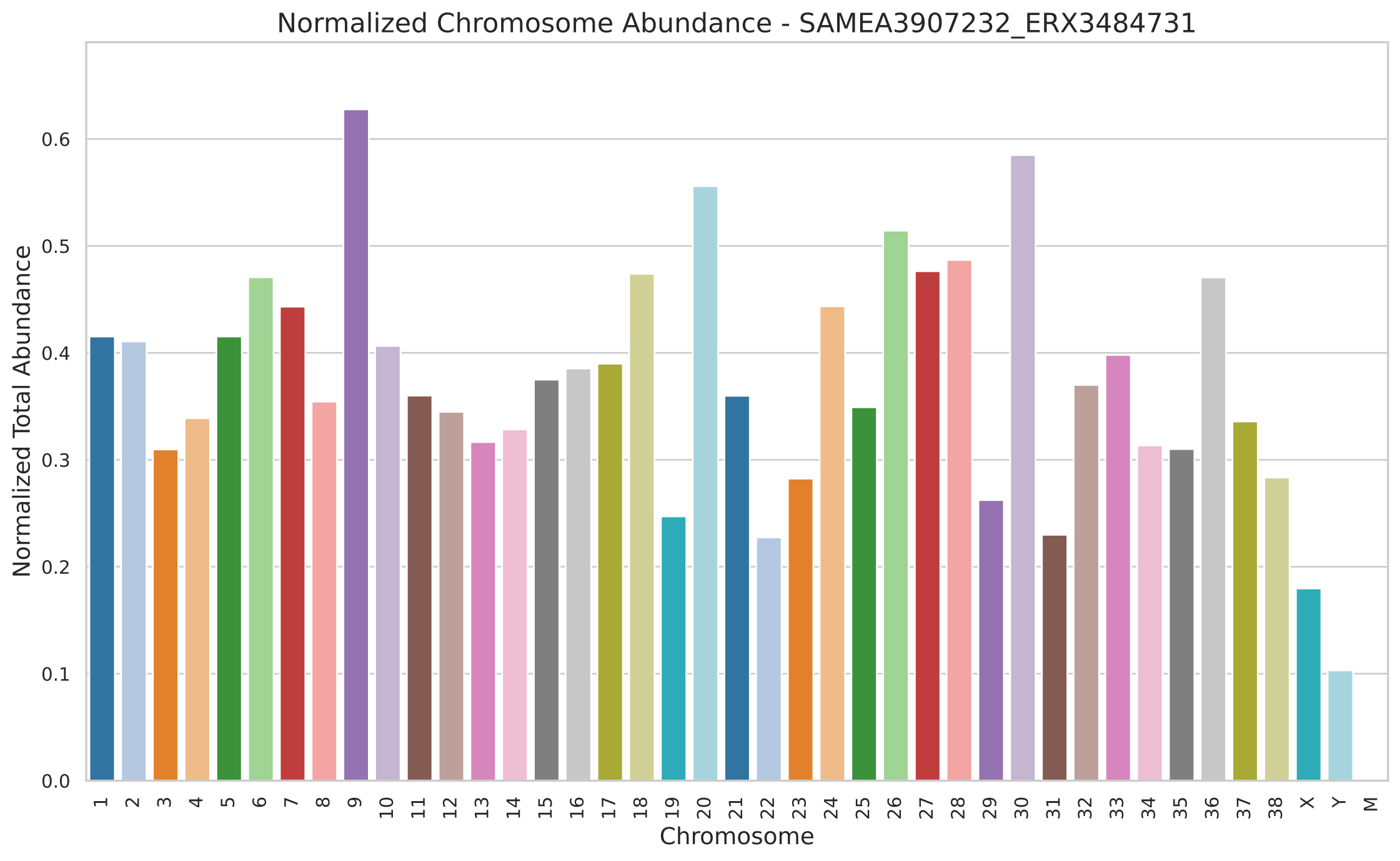

Normalized Chromosome Abundance - SAMEA3906903_ERX3484753
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

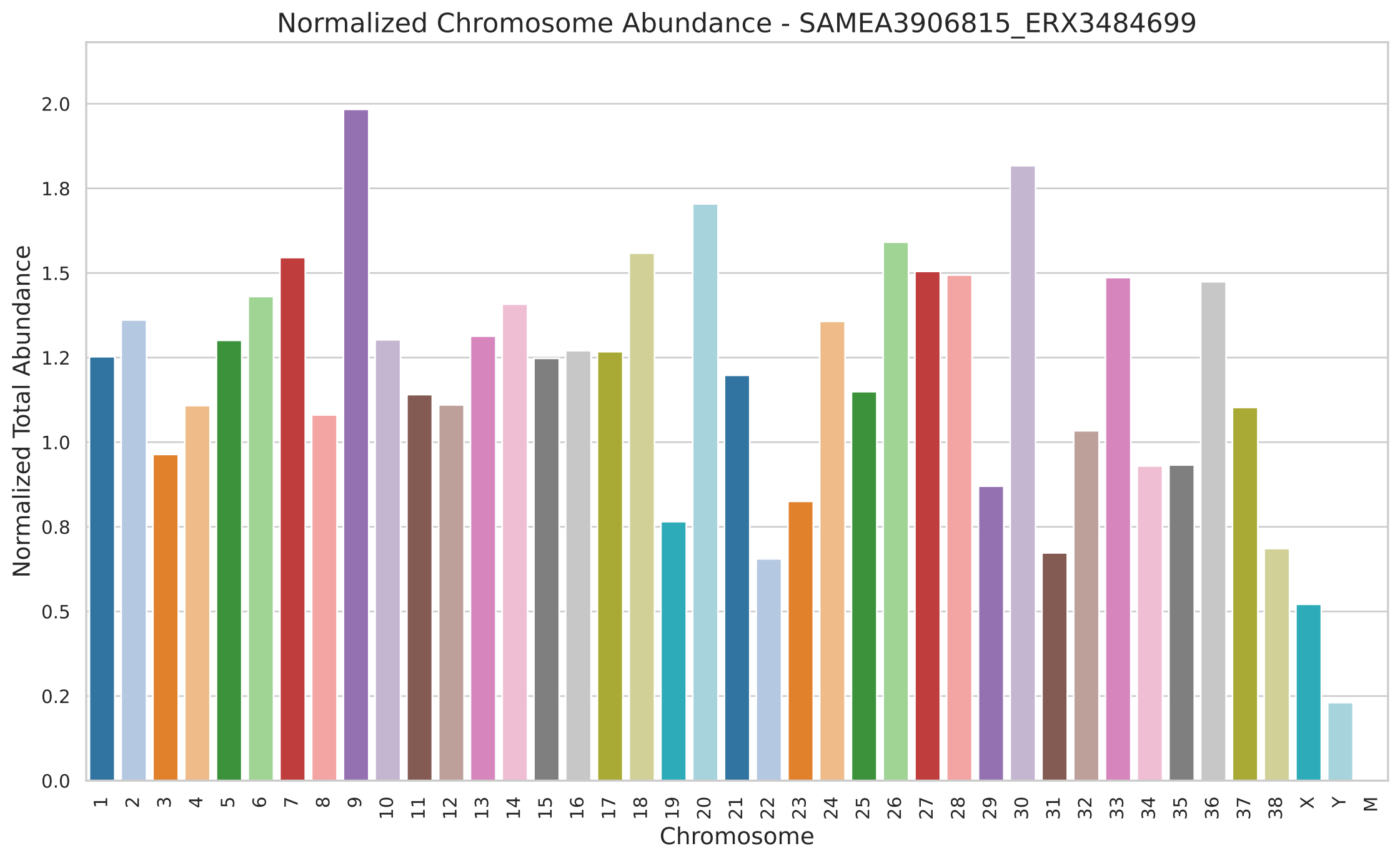

Normalized Chromosome Abundance - SAMEA3906921_ERX3484766
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

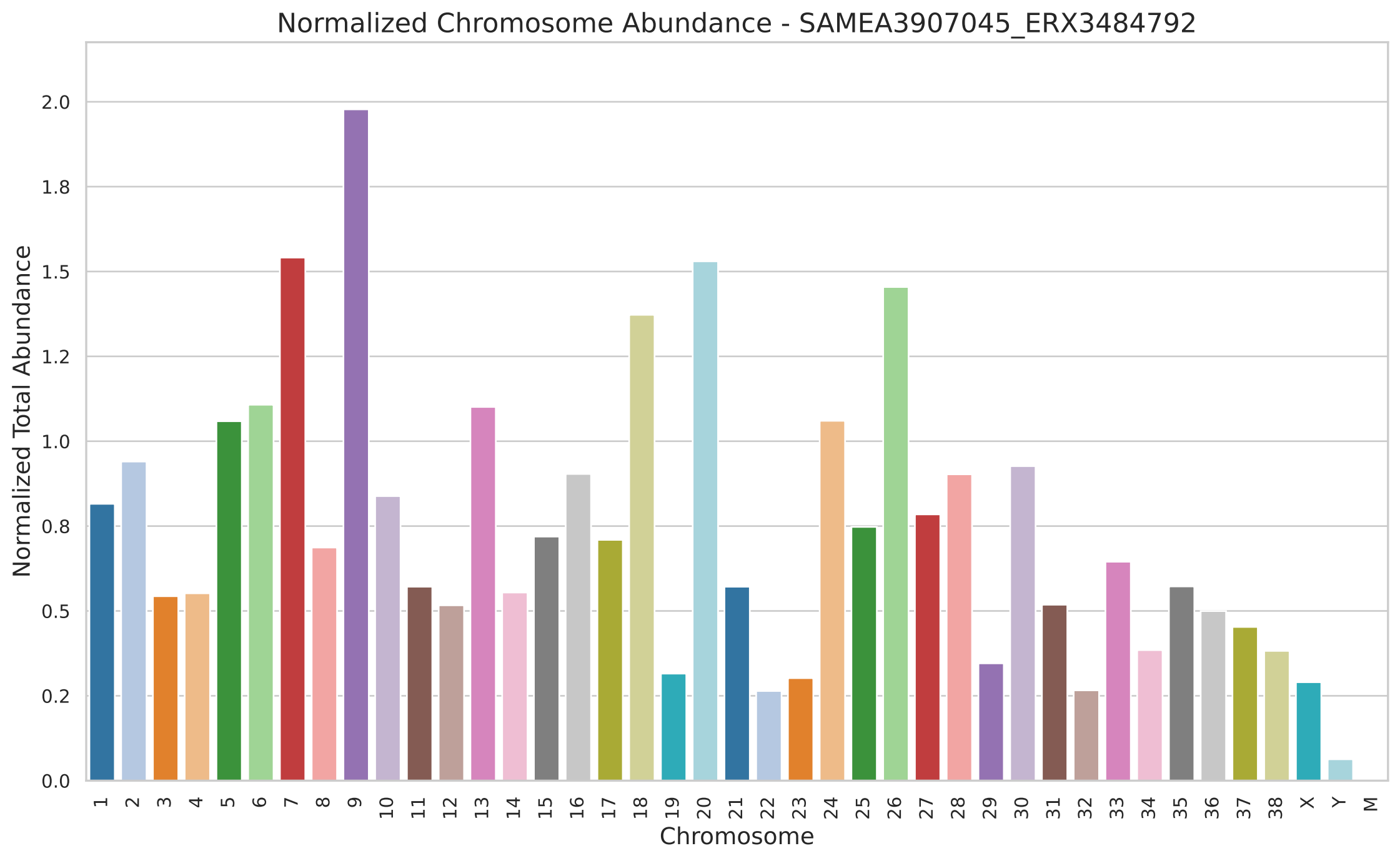

Normalized Chromosome Abundance - SAMEA3907017_ERX3484777
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

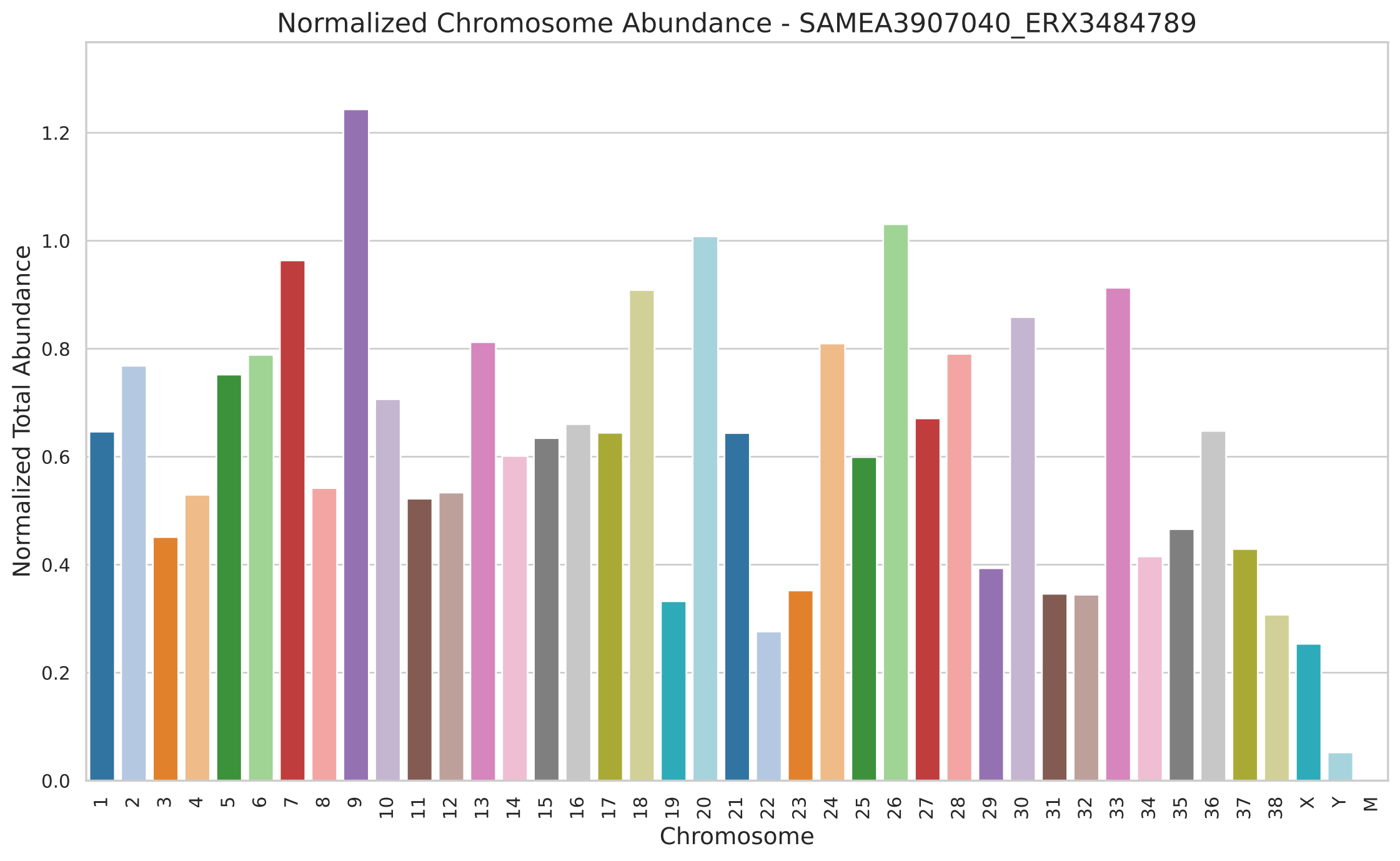

Normalized Chromosome Abundance - SAMEA3907018_ERX3484778
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

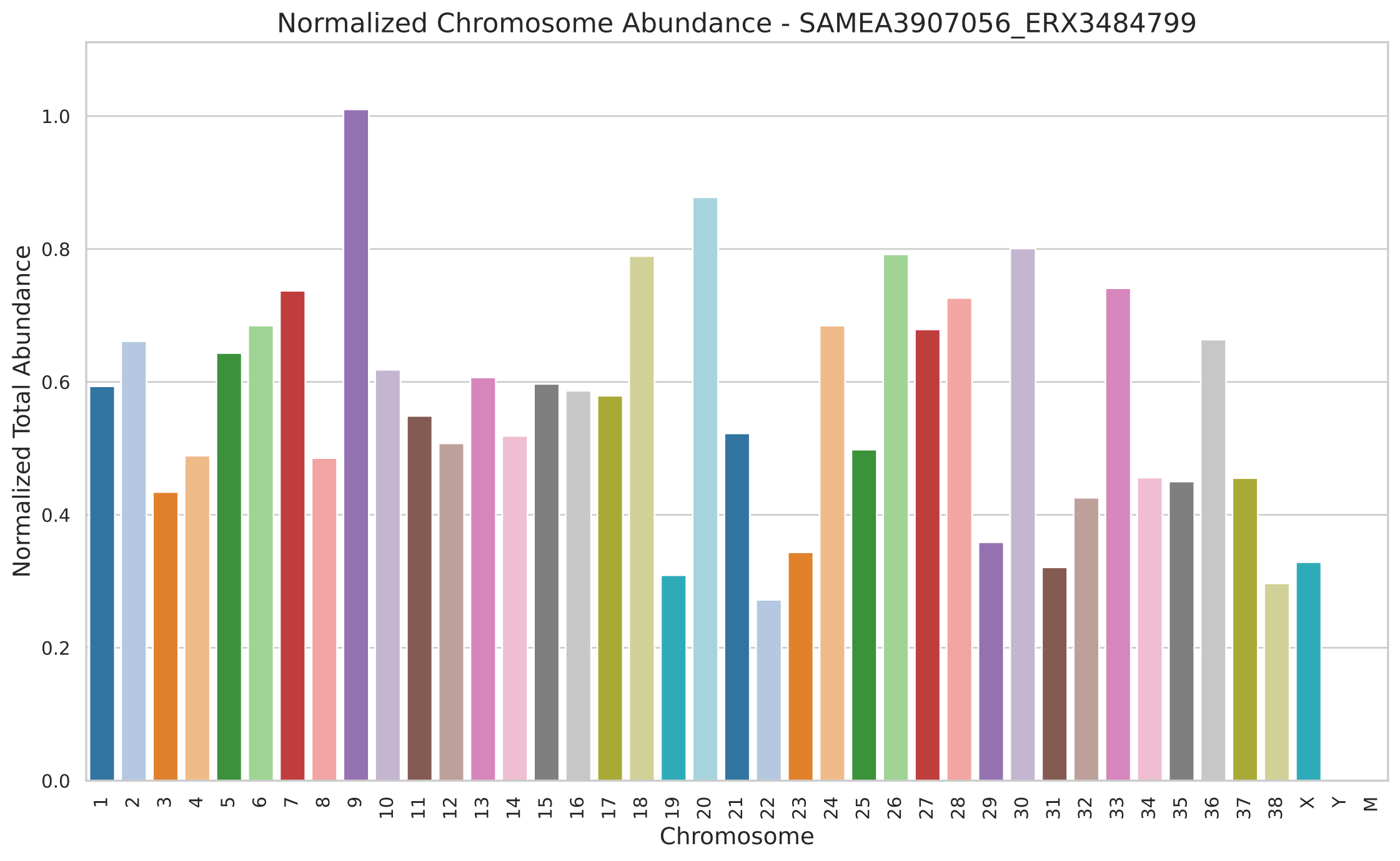

Normalized Chromosome Abundance - SAMEA3906919_ERX3484765
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

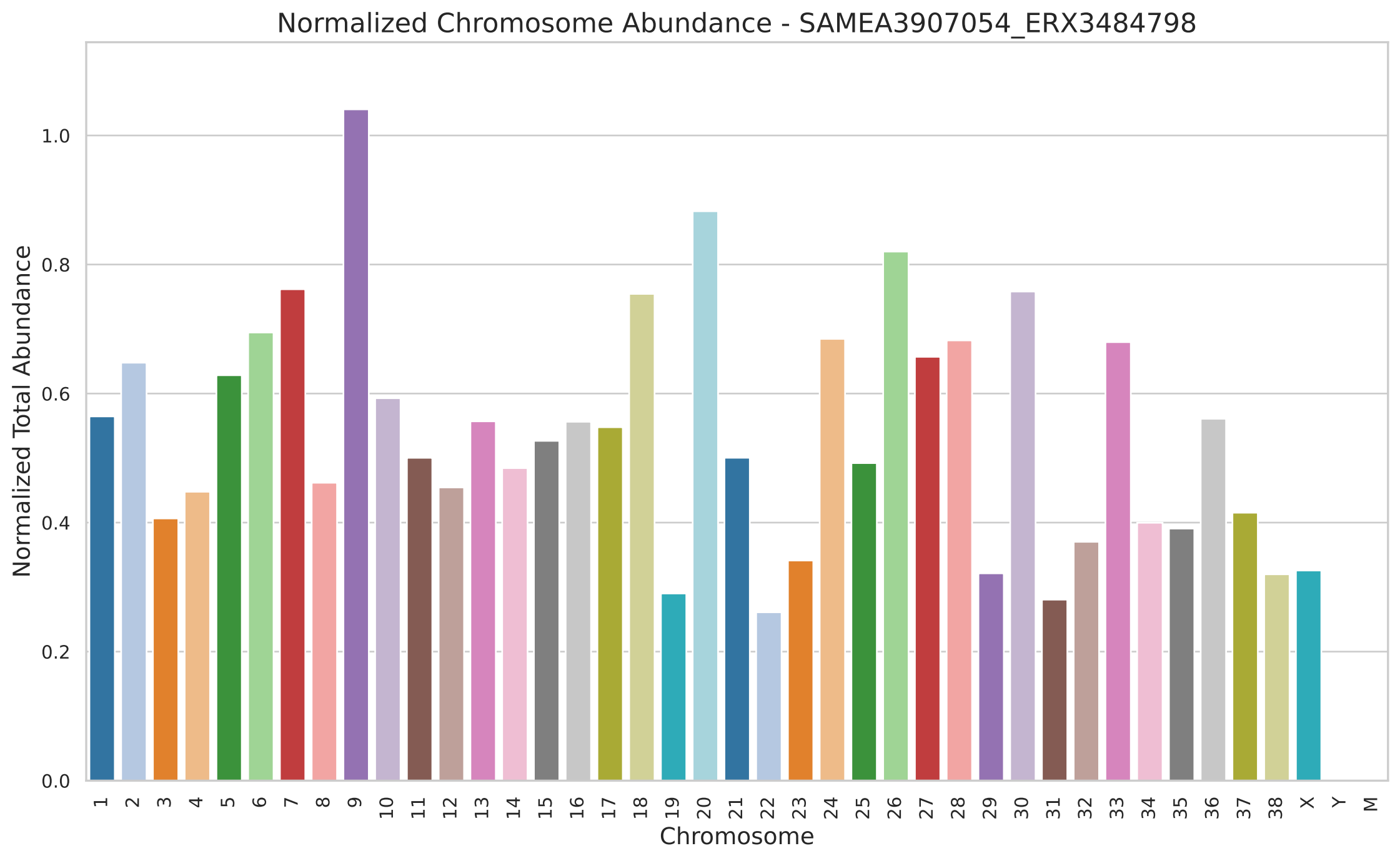

Normalized Chromosome Abundance - SAMEA3907232_ERX3484731
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

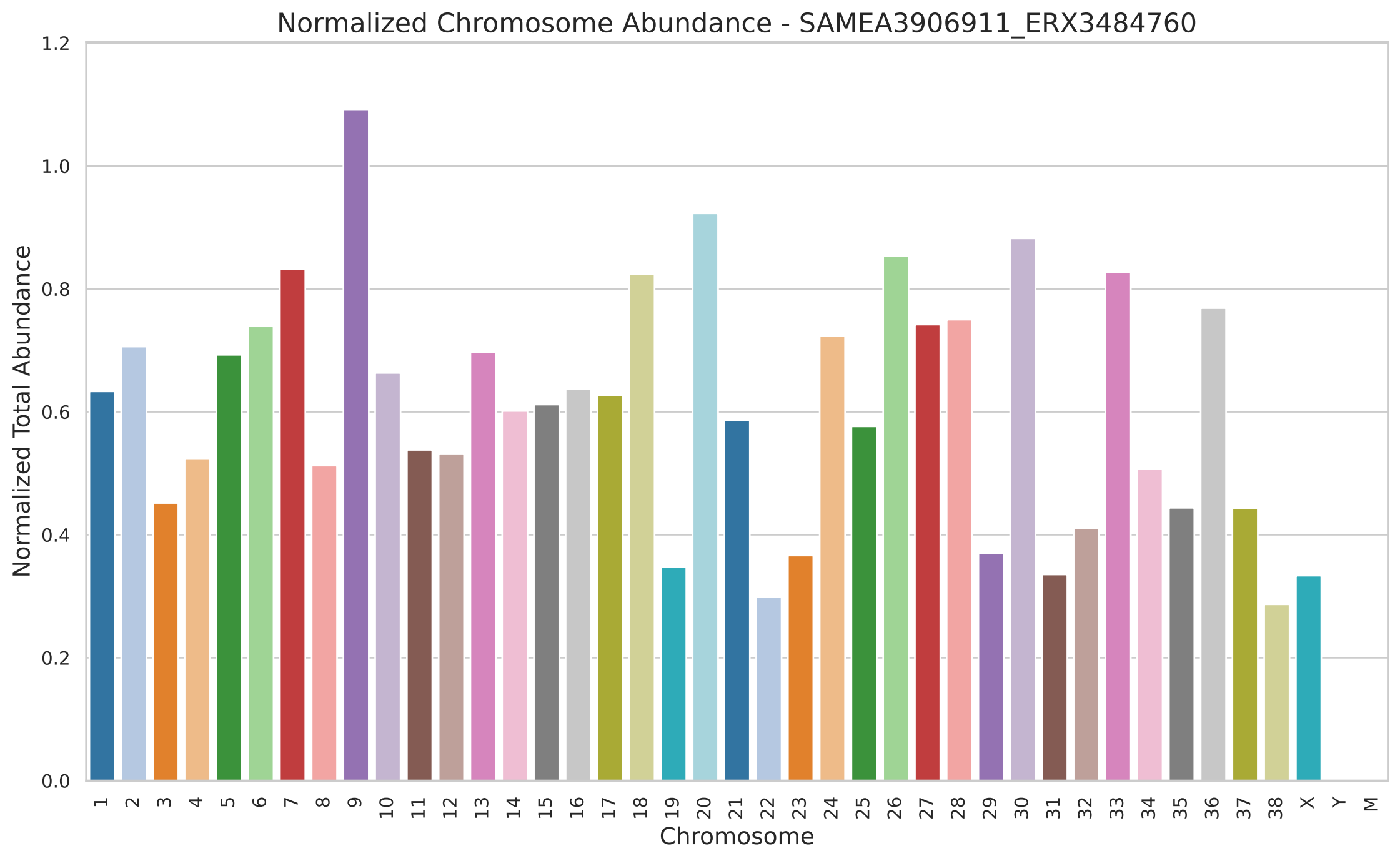

Normalized Chromosome Abundance - SAMEA3906815_ERX3484699
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

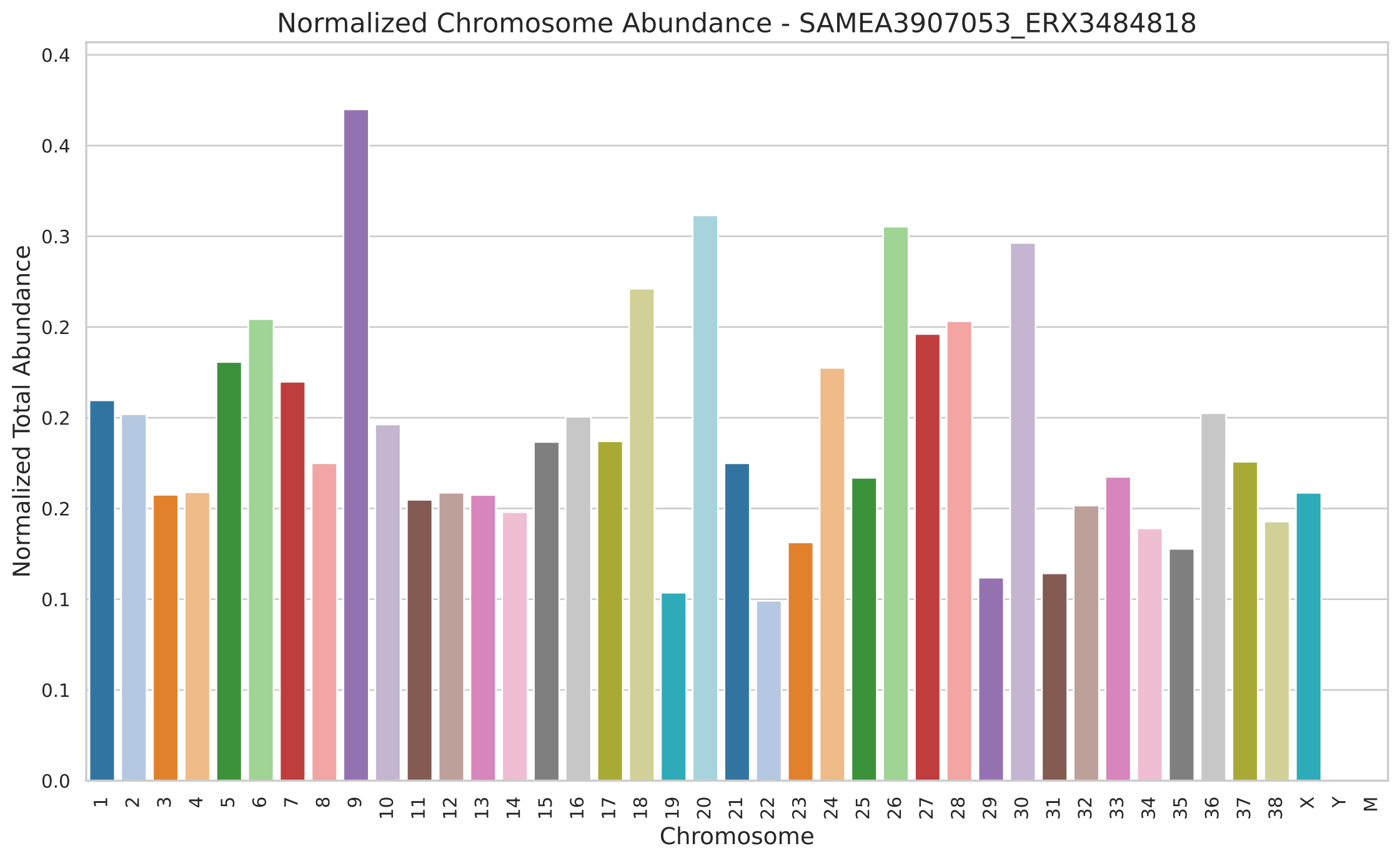

Normalized Chromosome Abundance - SAMEA3907045_ERX3484792
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

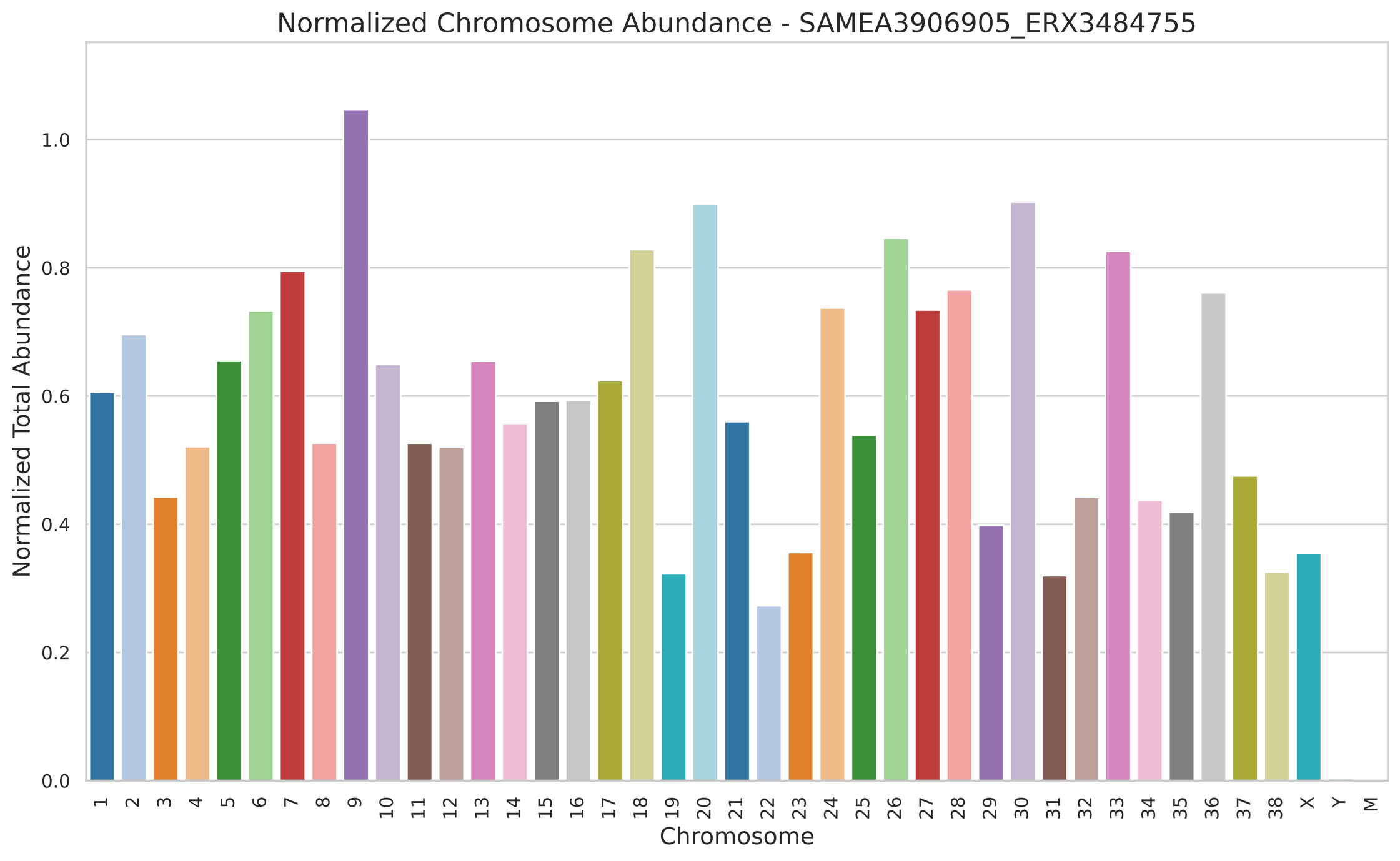

Normalized Chromosome Abundance - SAMEA3907040_ERX3484789
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

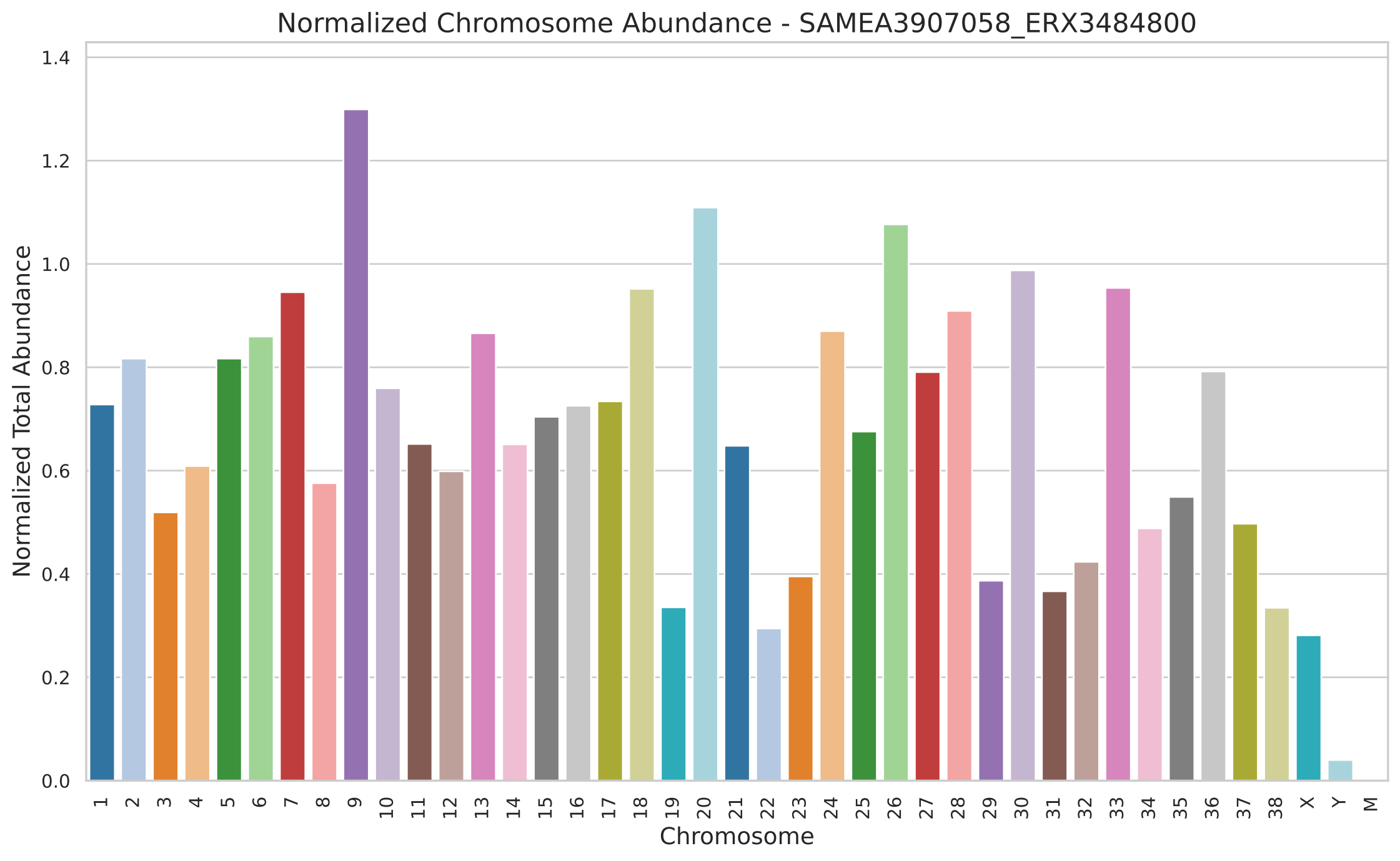

Normalized Chromosome Abundance - SAMEA3907056_ERX3484799
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

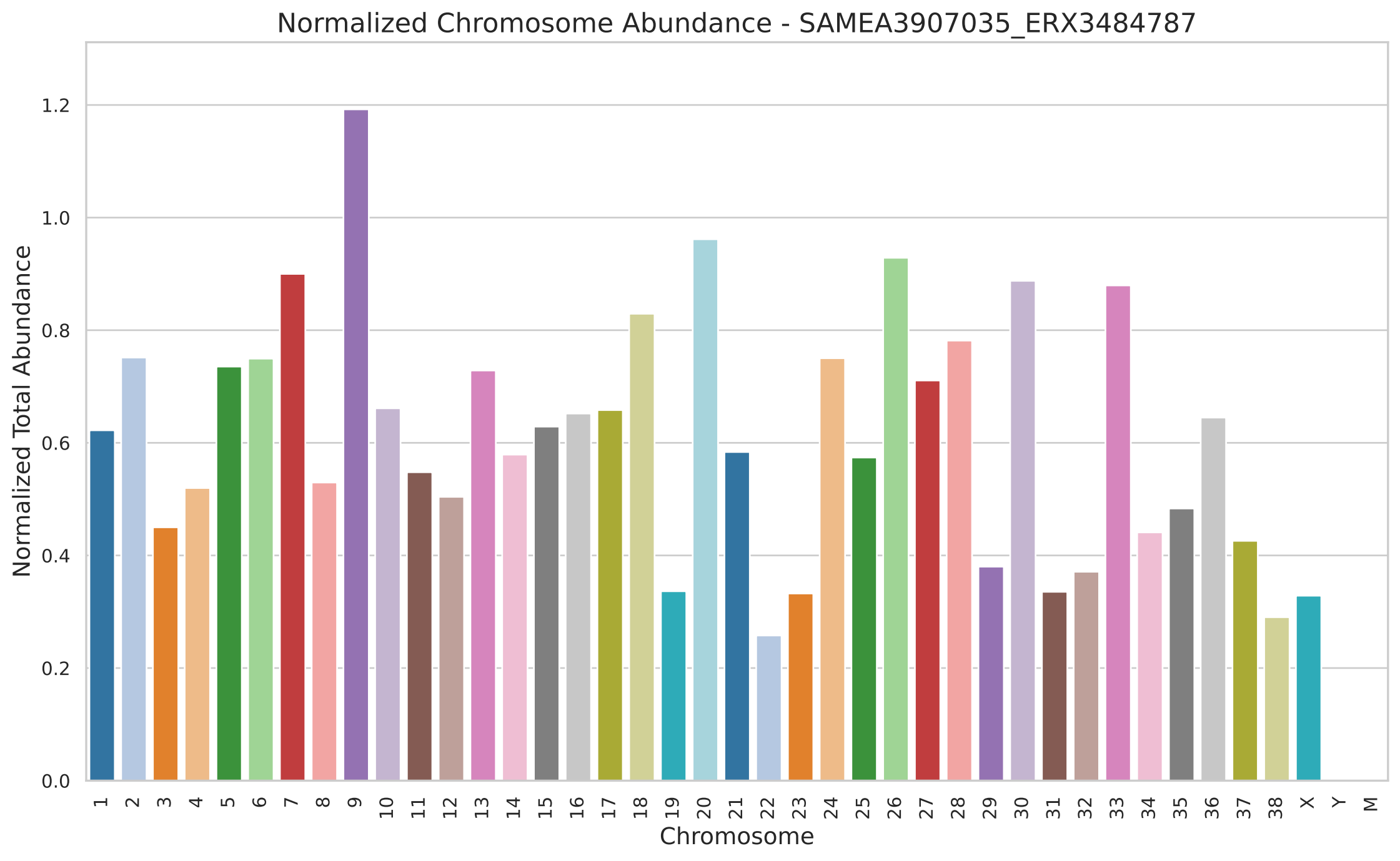

Normalized Chromosome Abundance - SAMEA3907054_ERX3484798
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

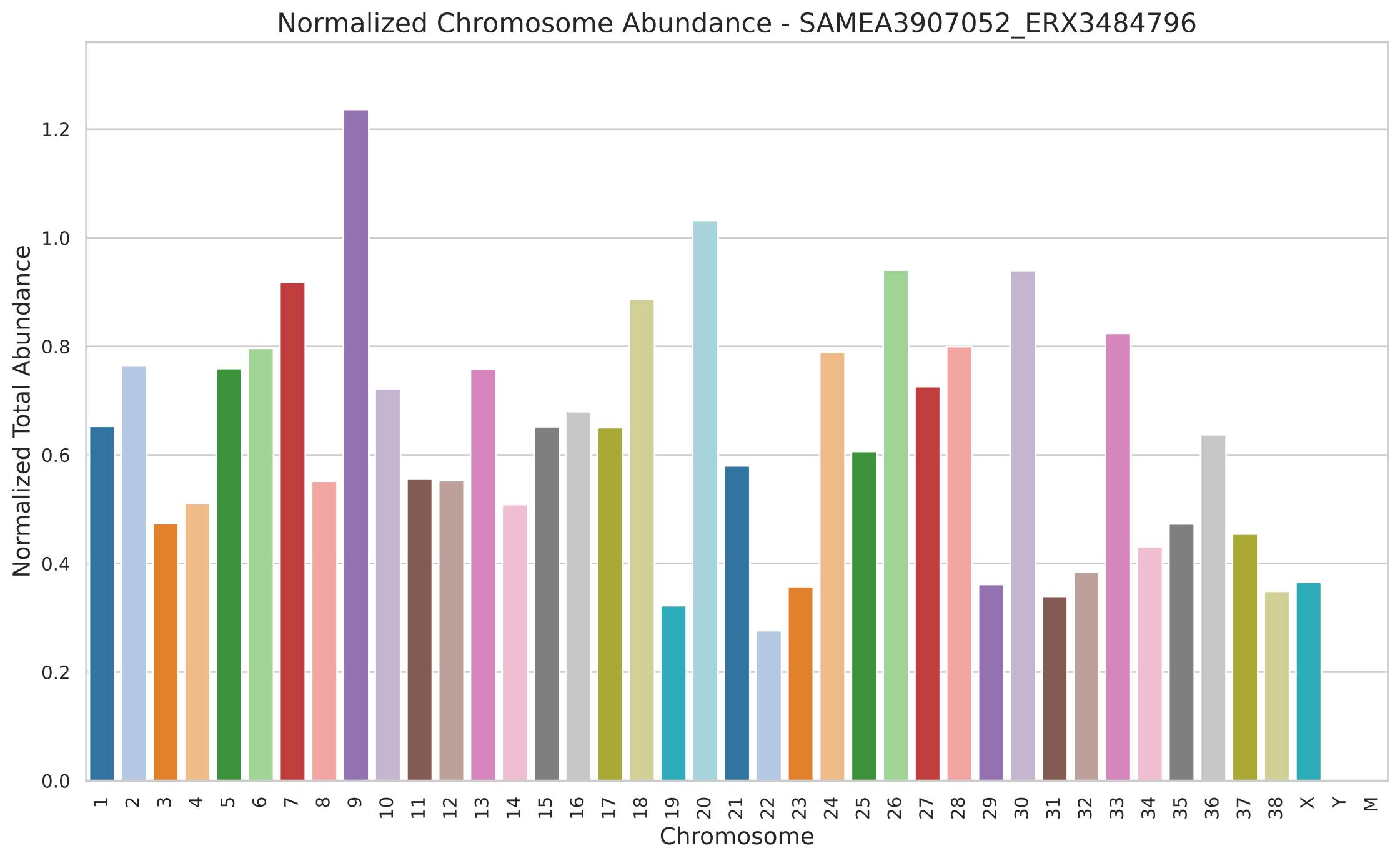

Normalized Chromosome Abundance - SAMEA3906911_ERX3484760
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

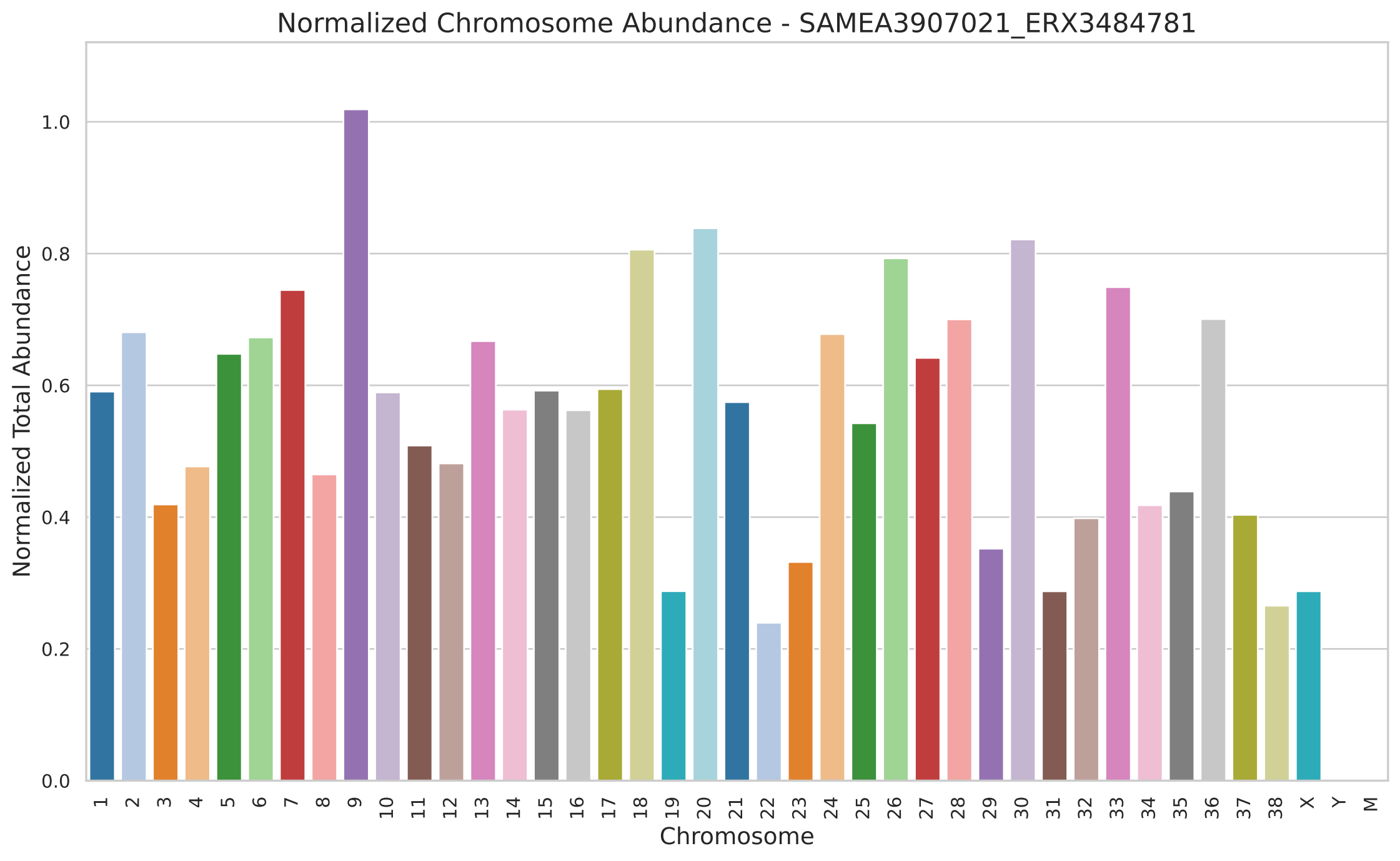

Normalized Chromosome Abundance - SAMEA3907053_ERX3484818
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
0.4
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

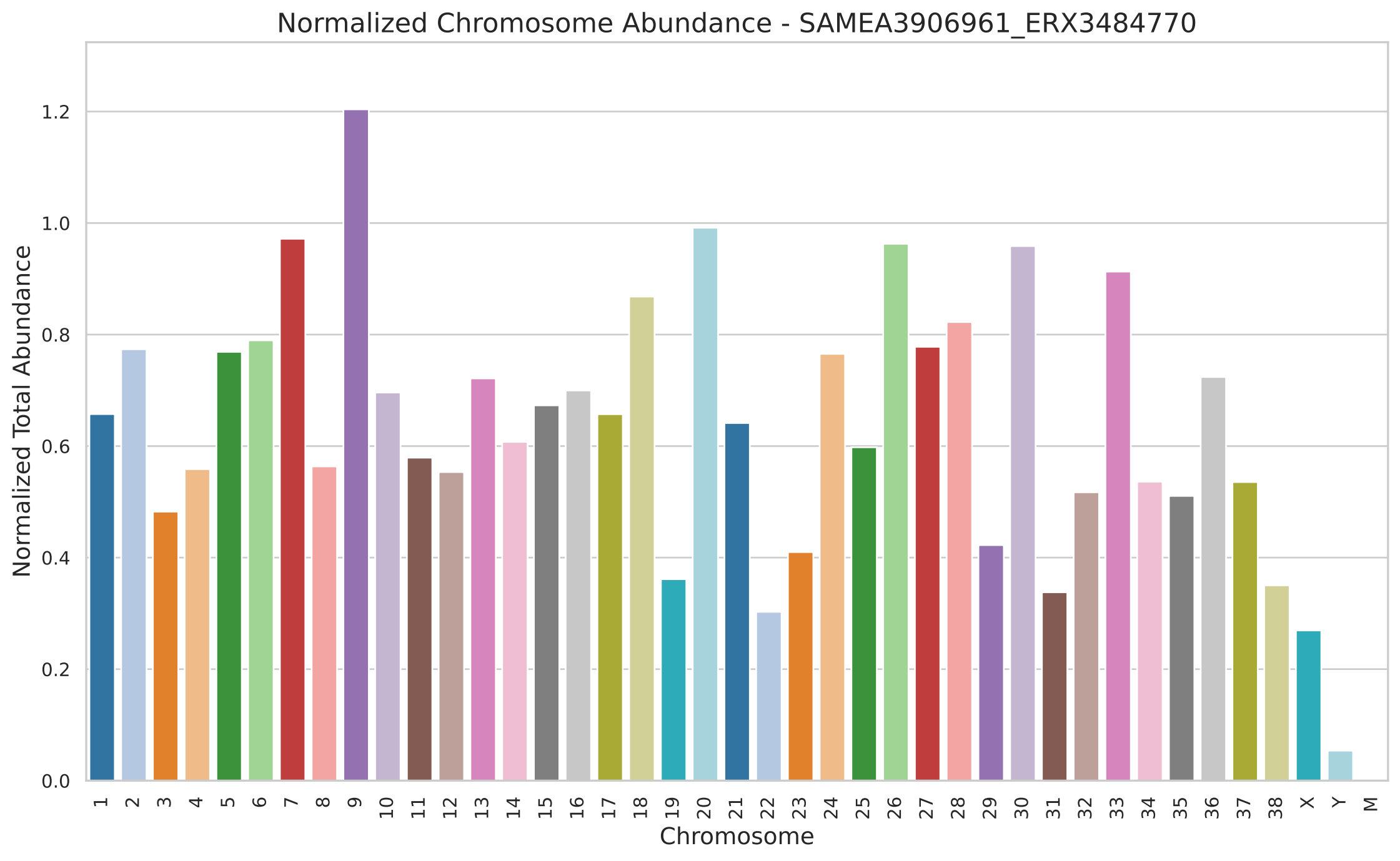

Normalized Chromosome Abundance - SAMEA3906905_ERX3484755
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

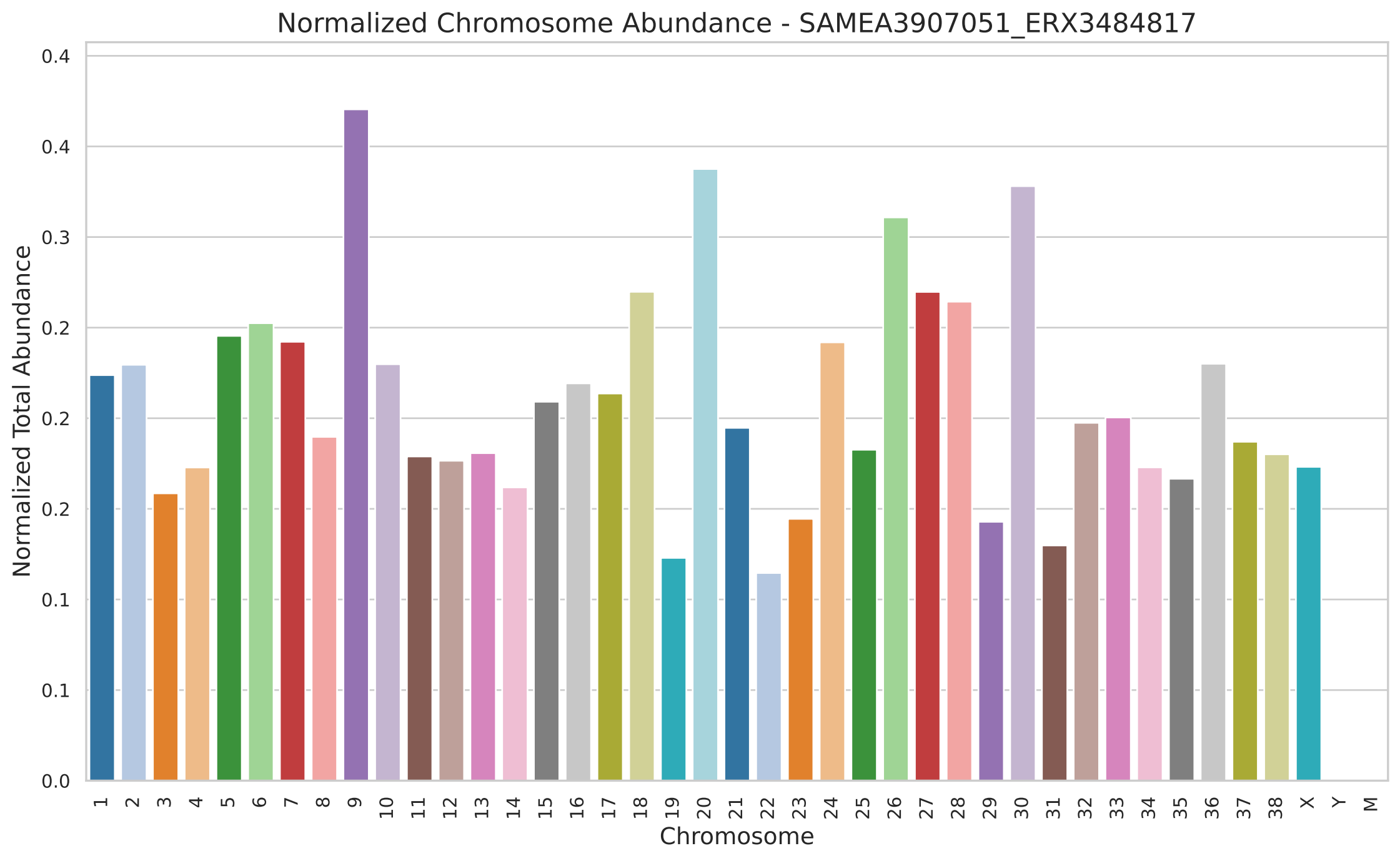

Normalized Chromosome Abundance - SAMEA3907058_ERX3484800
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

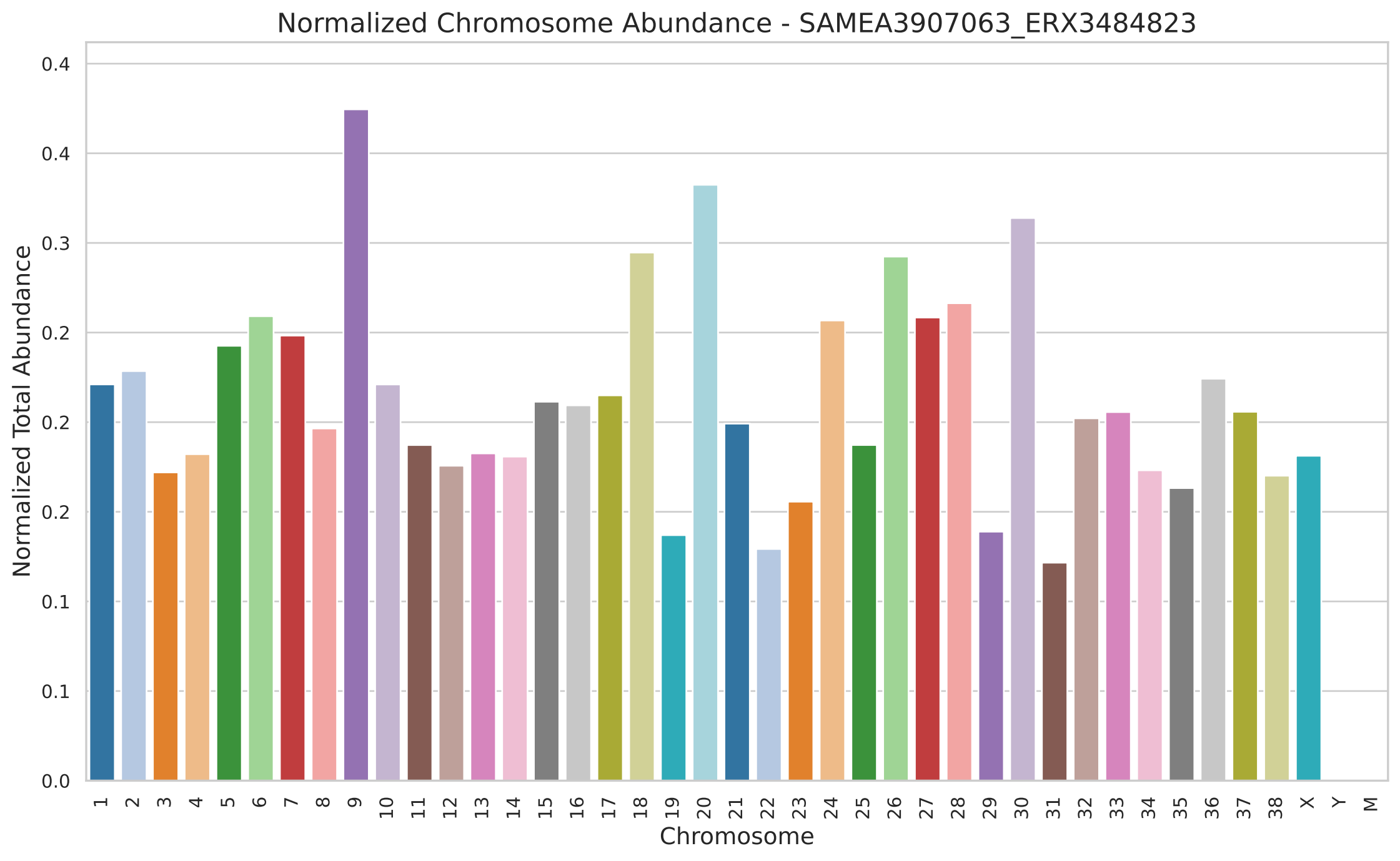

Normalized Chromosome Abundance - SAMEA3907035_ERX3484787
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

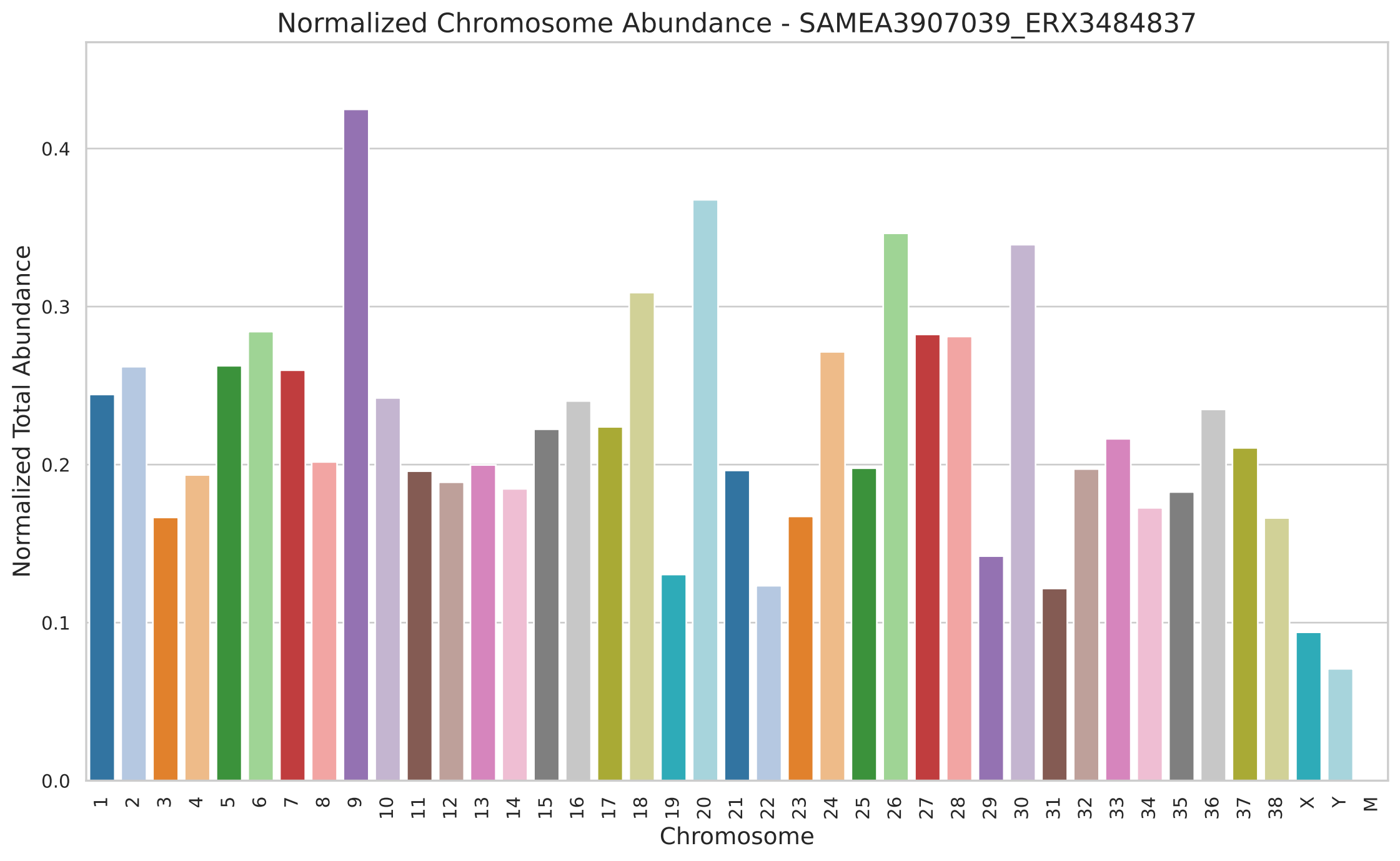

Normalized Chromosome Abundance - SAMEA3907052_ERX3484796
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

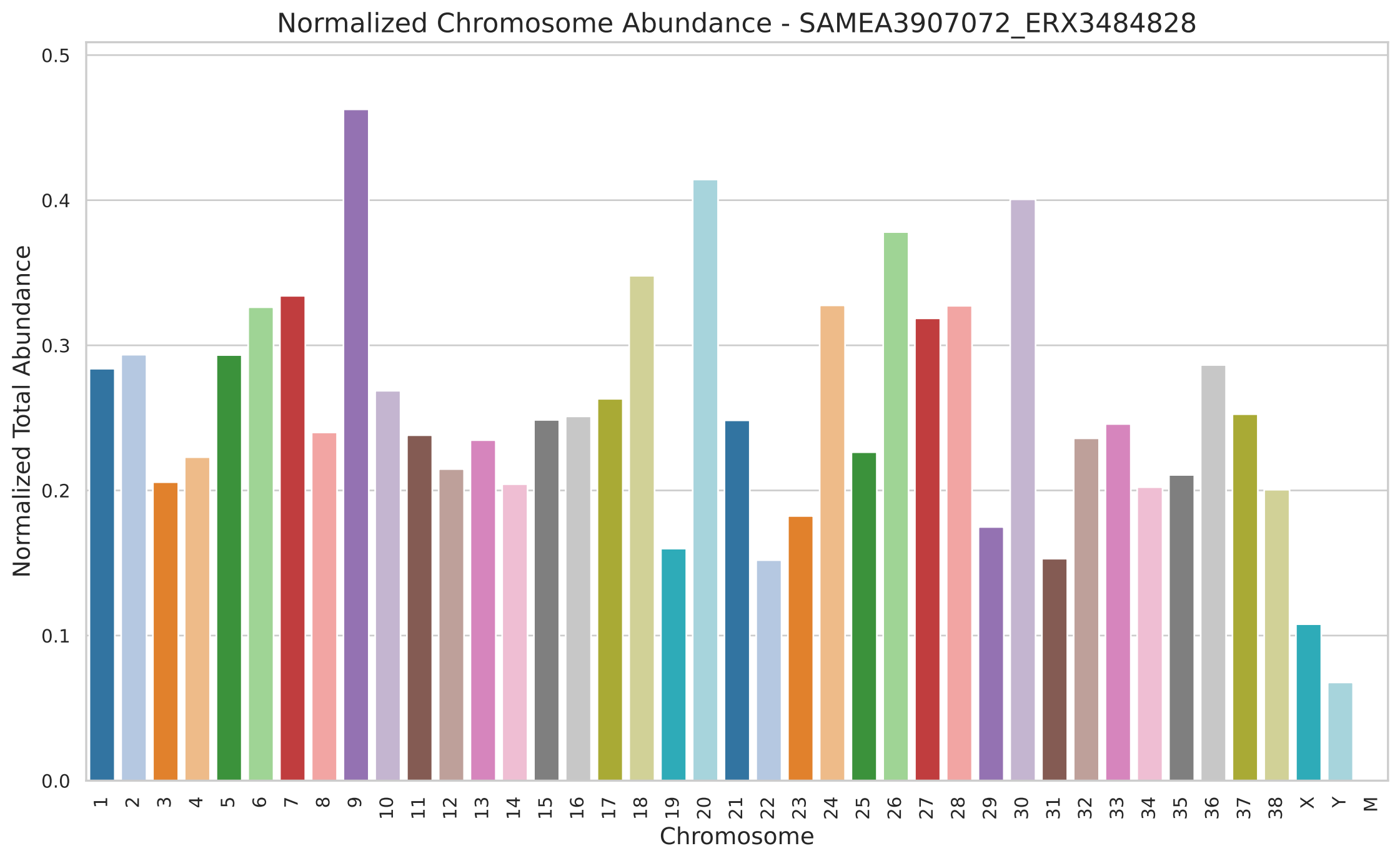

Normalized Chromosome Abundance - SAMEA3907021_ERX3484781
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

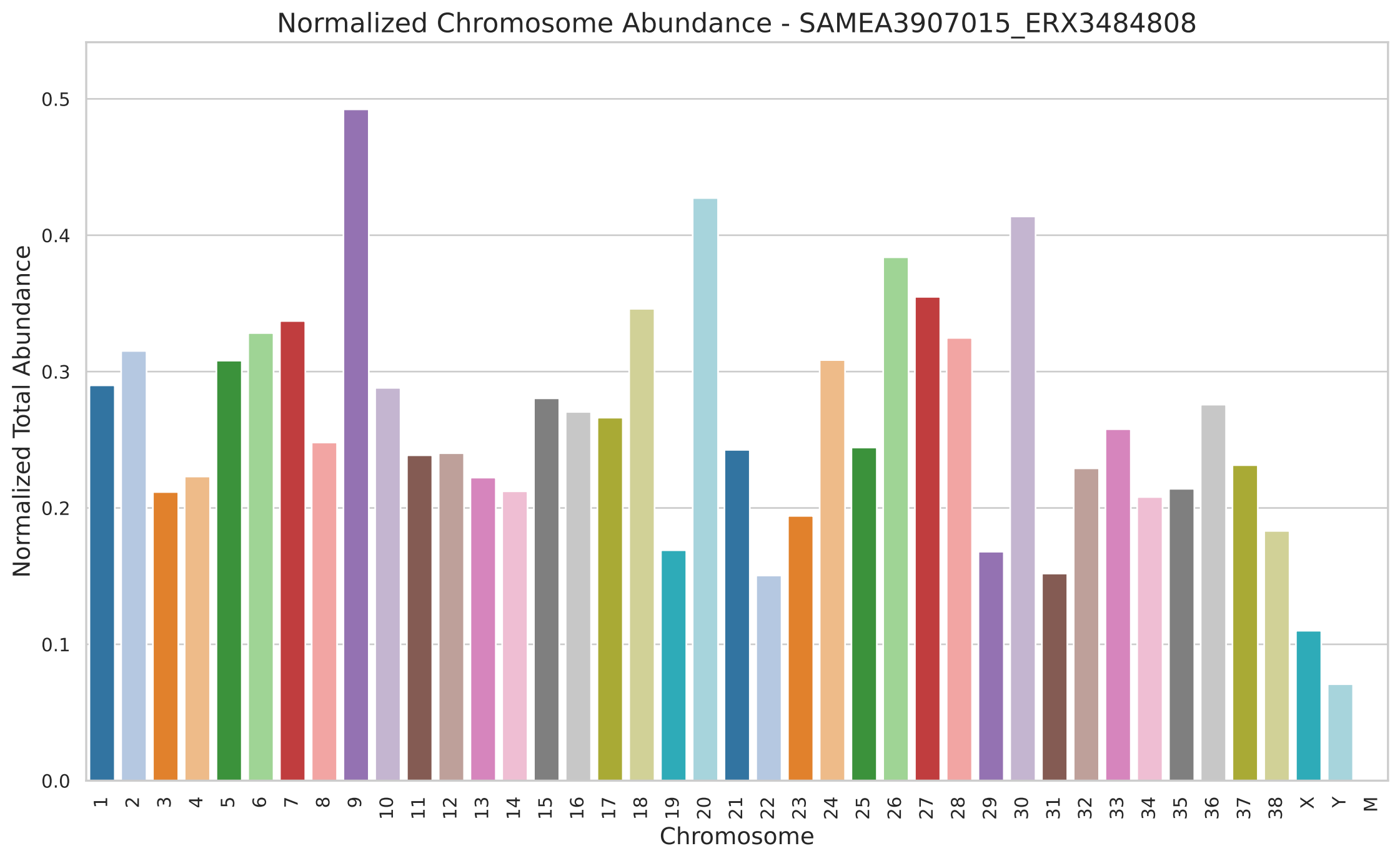

Normalized Chromosome Abundance - SAMEA3906961_ERX3484770
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

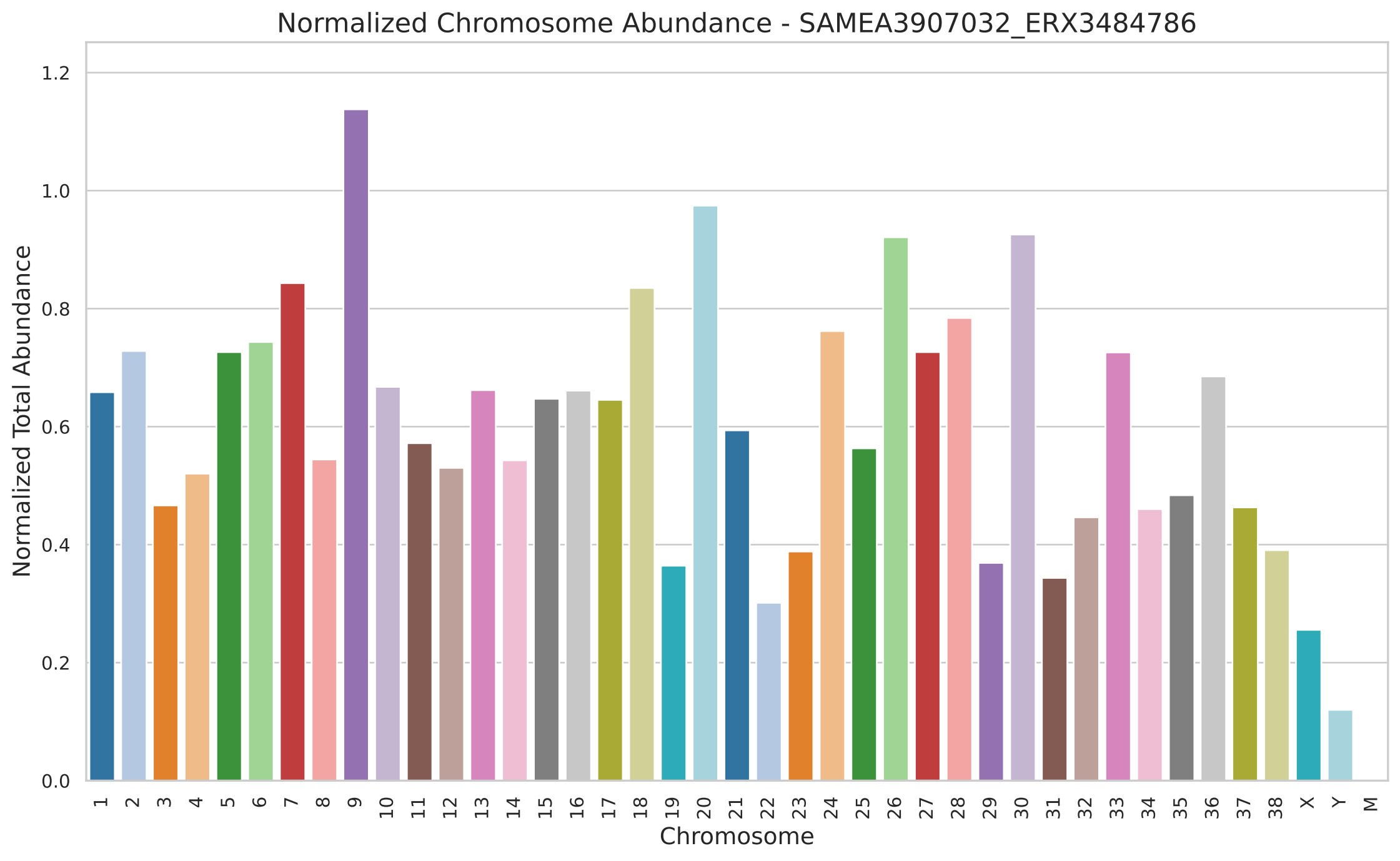

Normalized Chromosome Abundance - SAMEA3907051_ERX3484817
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
0.4
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

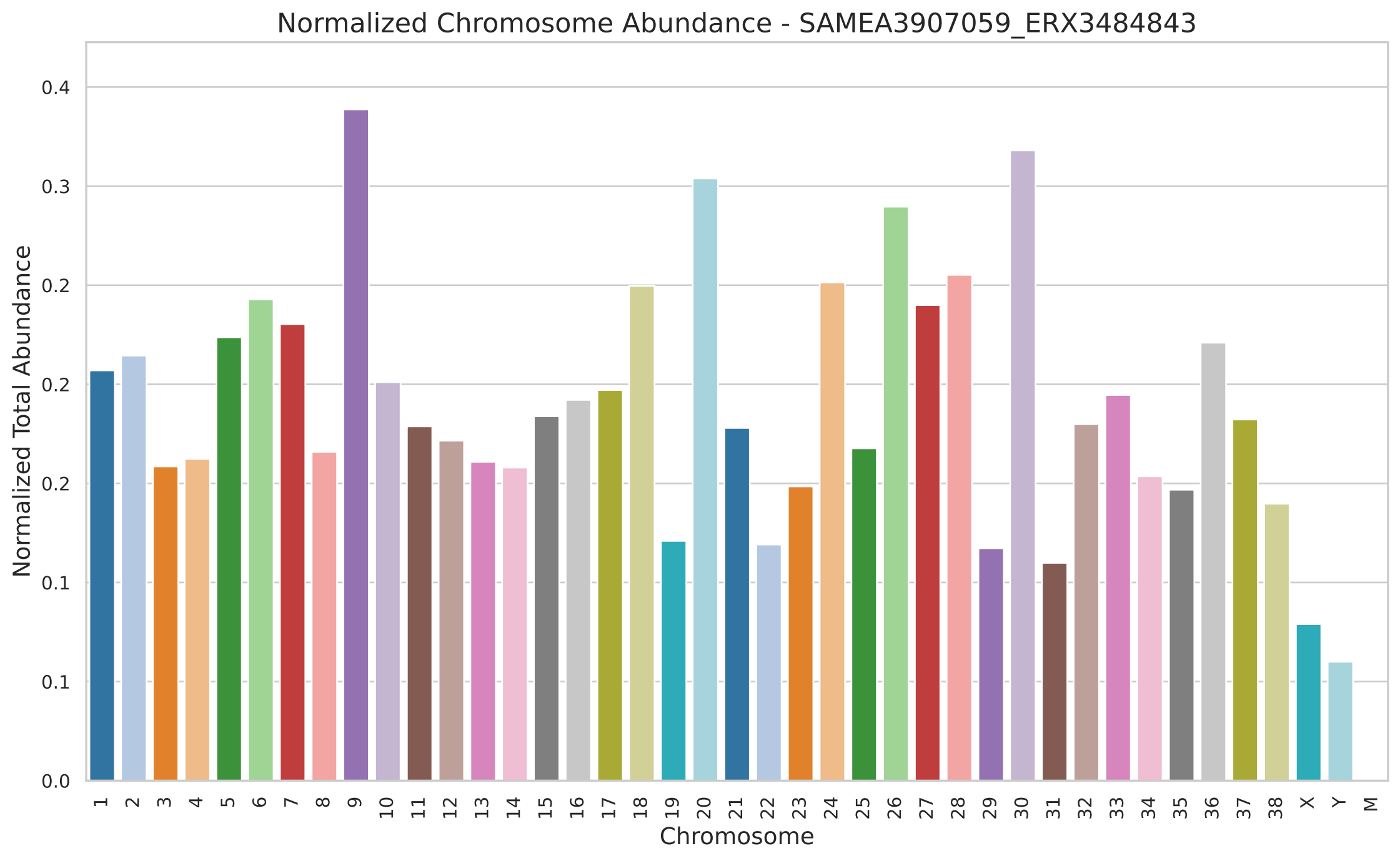

Normalized Chromosome Abundance - SAMEA3907063_ERX3484823
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
0.4
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

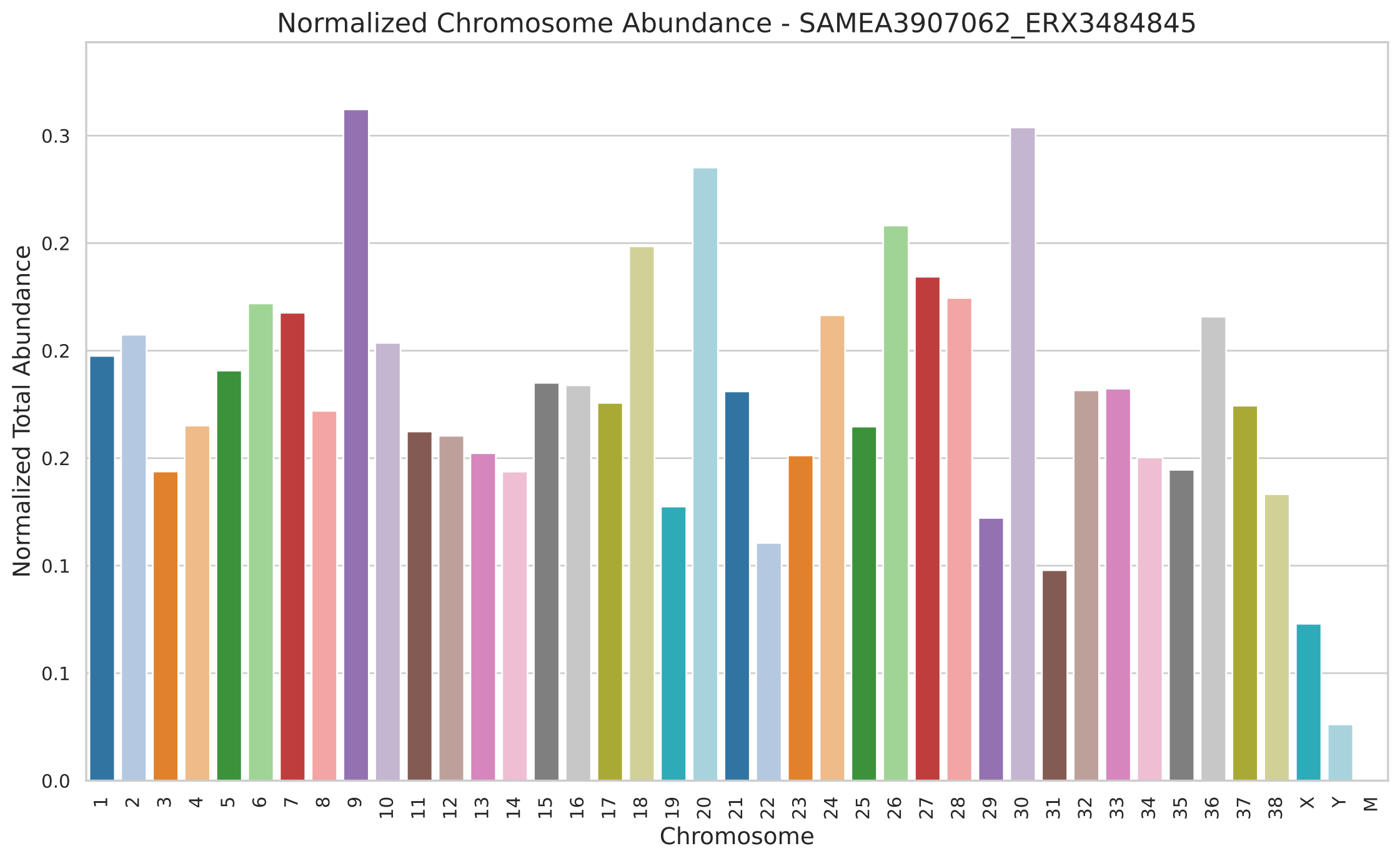

Normalized Chromosome Abundance - SAMEA3907039_ERX3484837
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

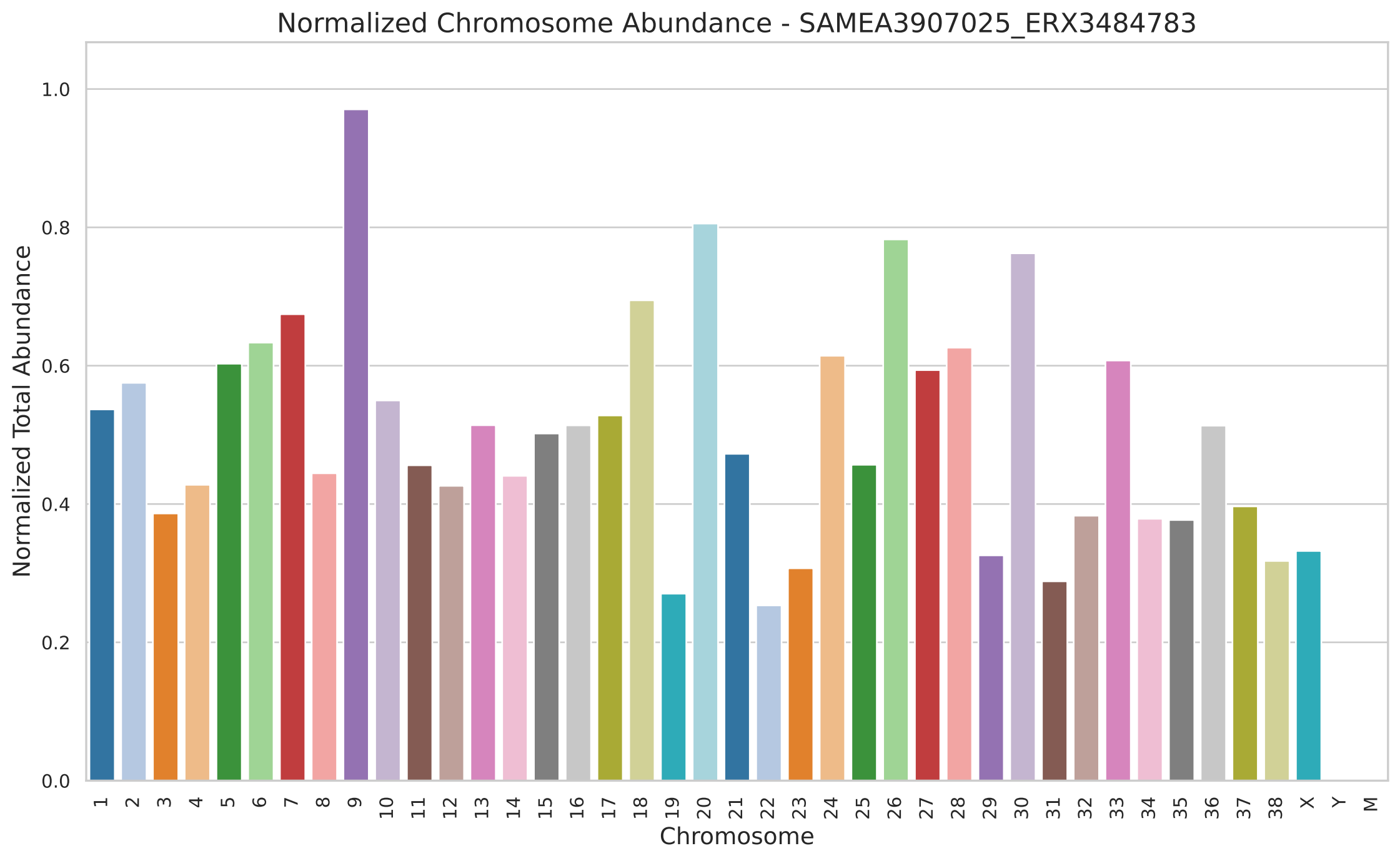

Normalized Chromosome Abundance - SAMEA3907072_ERX3484828
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

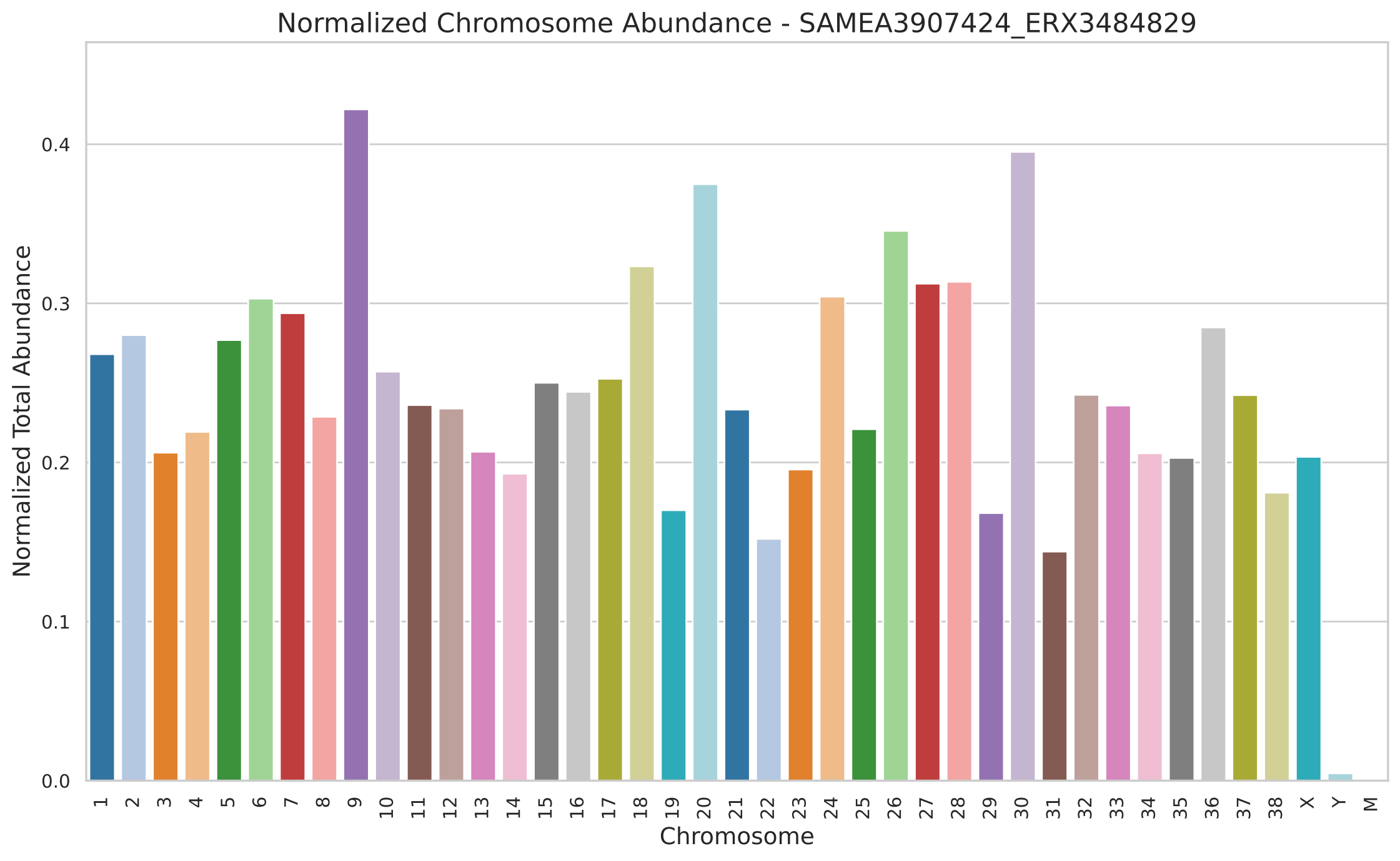

Normalized Chromosome Abundance - SAMEA3907015_ERX3484808
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

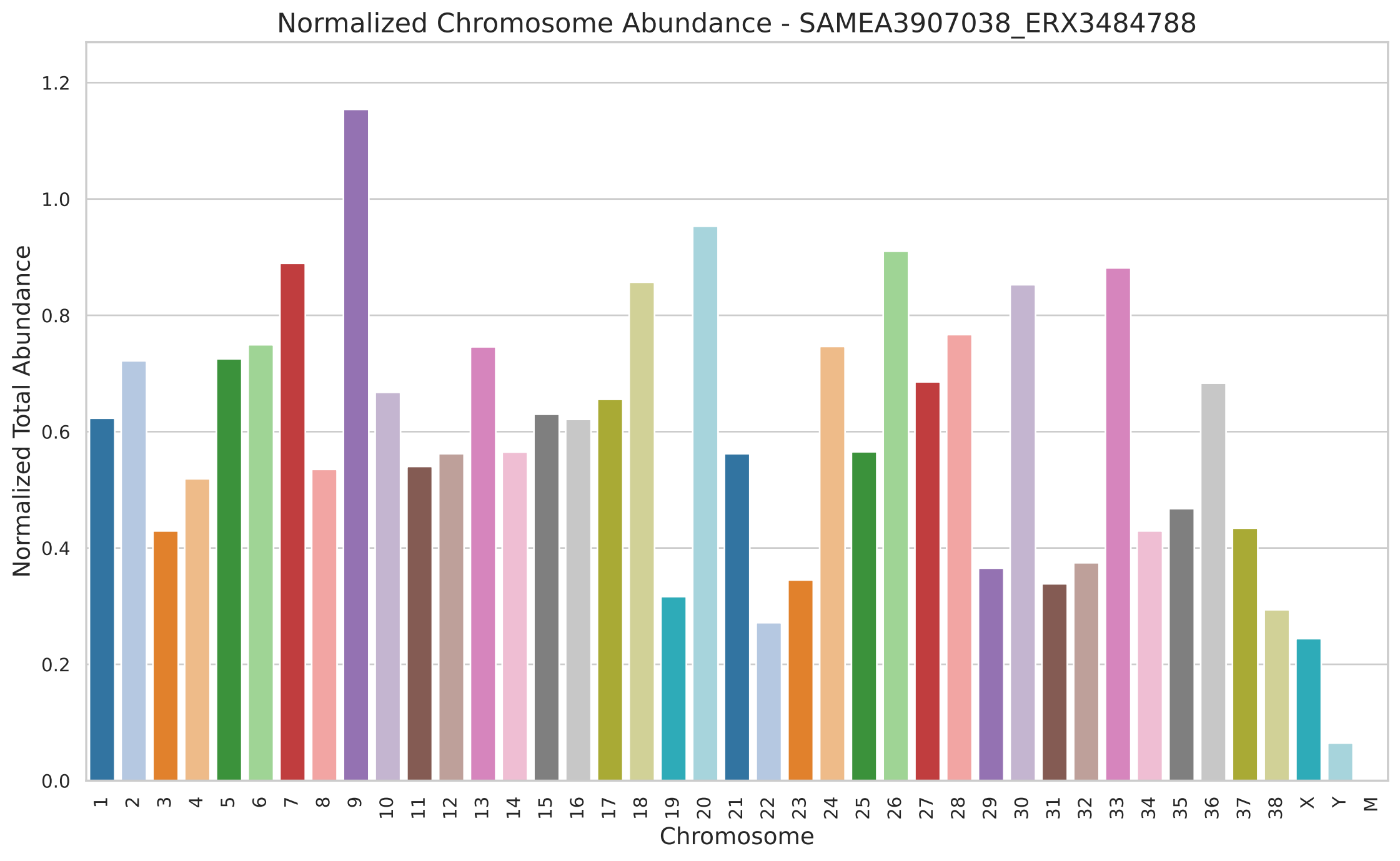

Normalized Chromosome Abundance - SAMEA3907032_ERX3484786
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

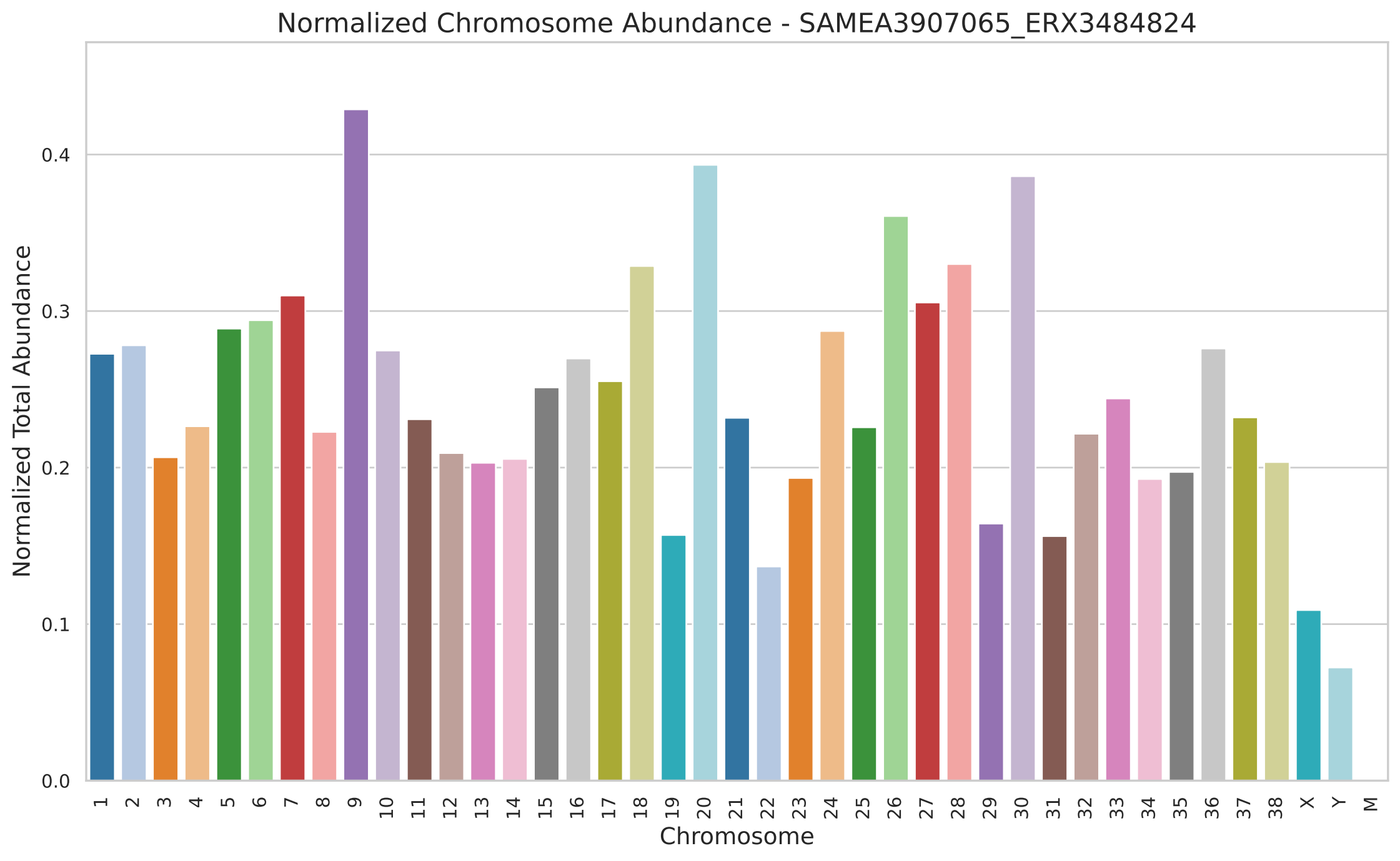

Normalized Chromosome Abundance - SAMEA3907059_ERX3484843
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

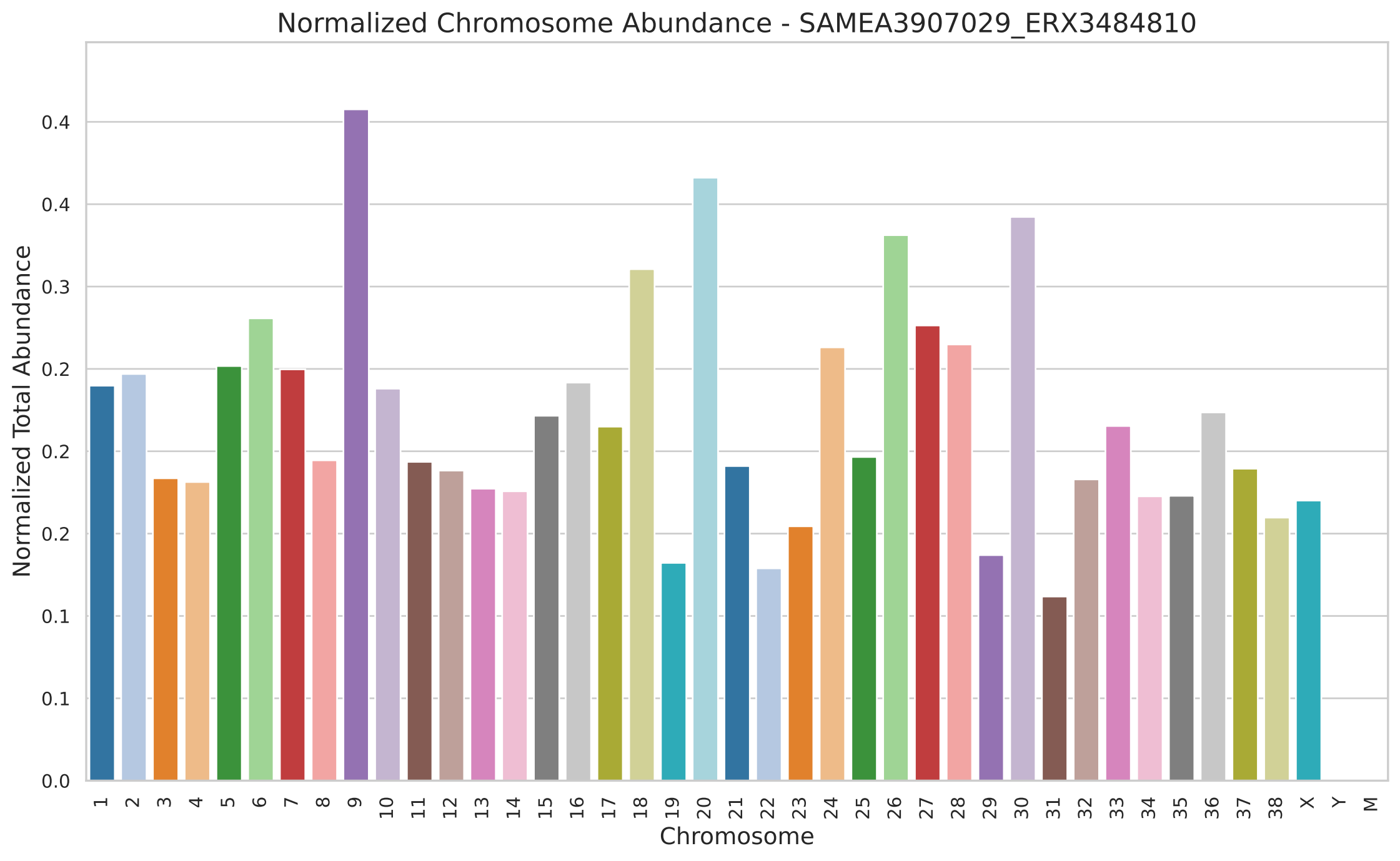

Normalized Chromosome Abundance - SAMEA3907062_ERX3484845
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

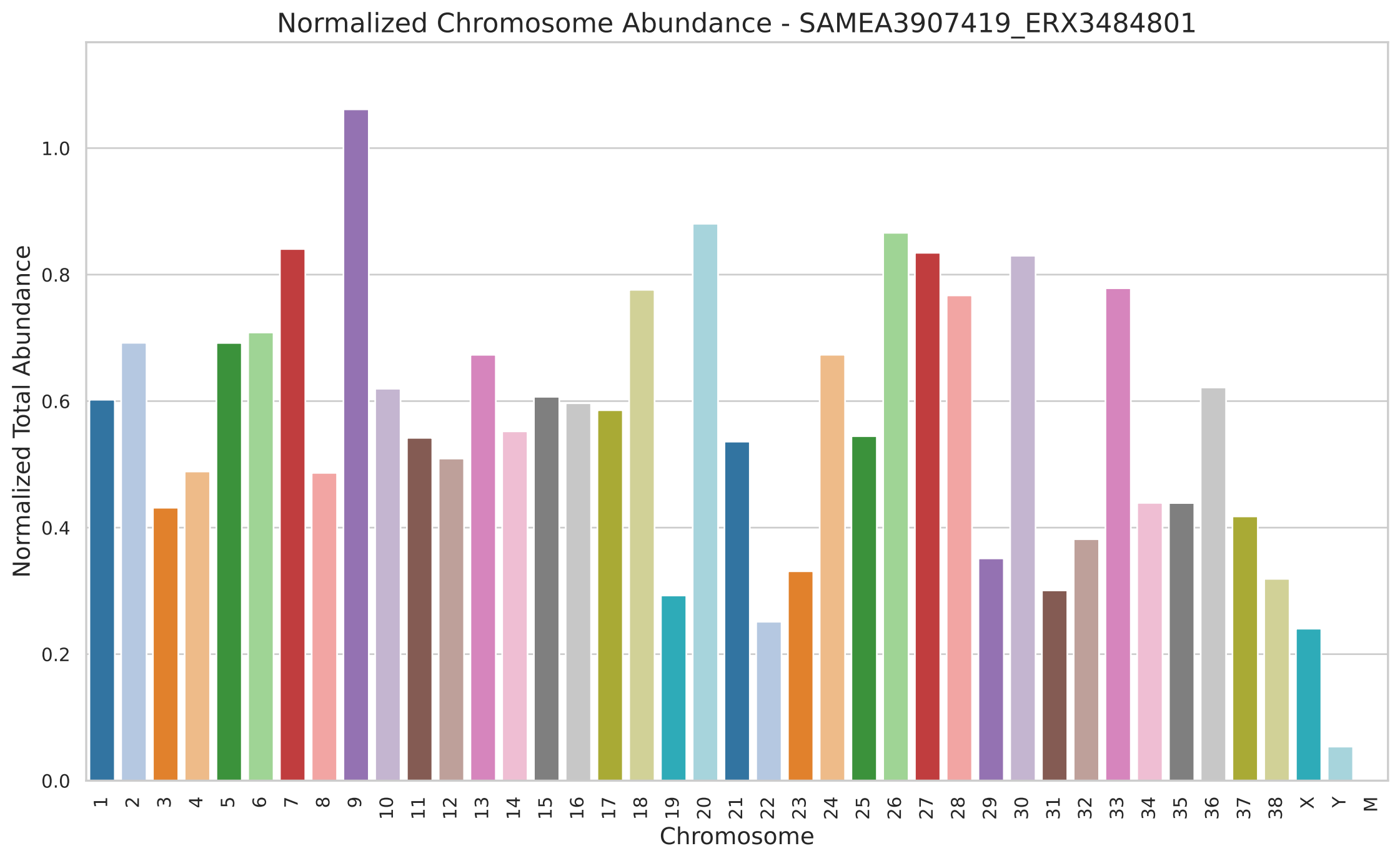

Normalized Chromosome Abundance - SAMEA3907025_ERX3484783
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

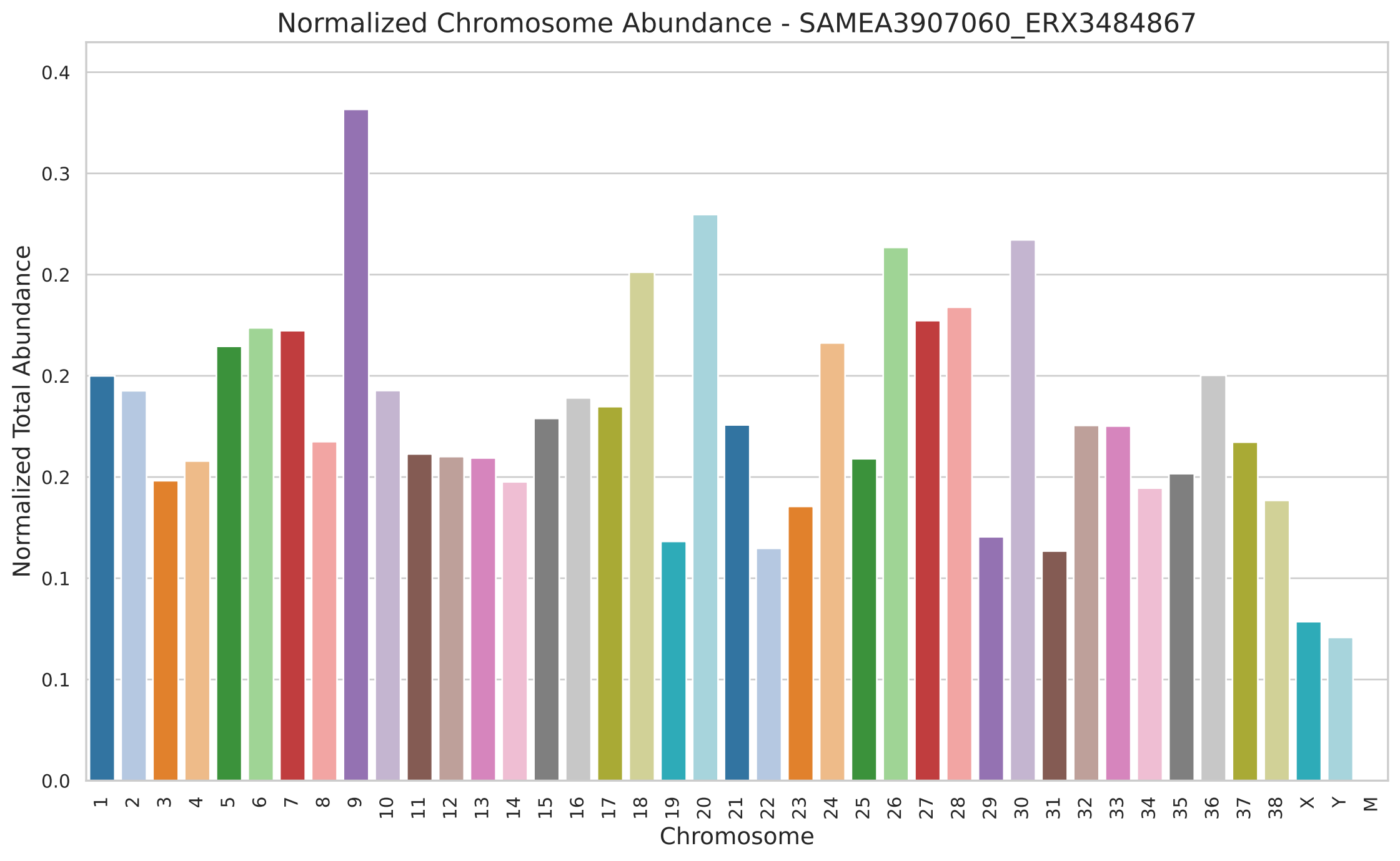

Normalized Chromosome Abundance - SAMEA3907424_ERX3484829
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

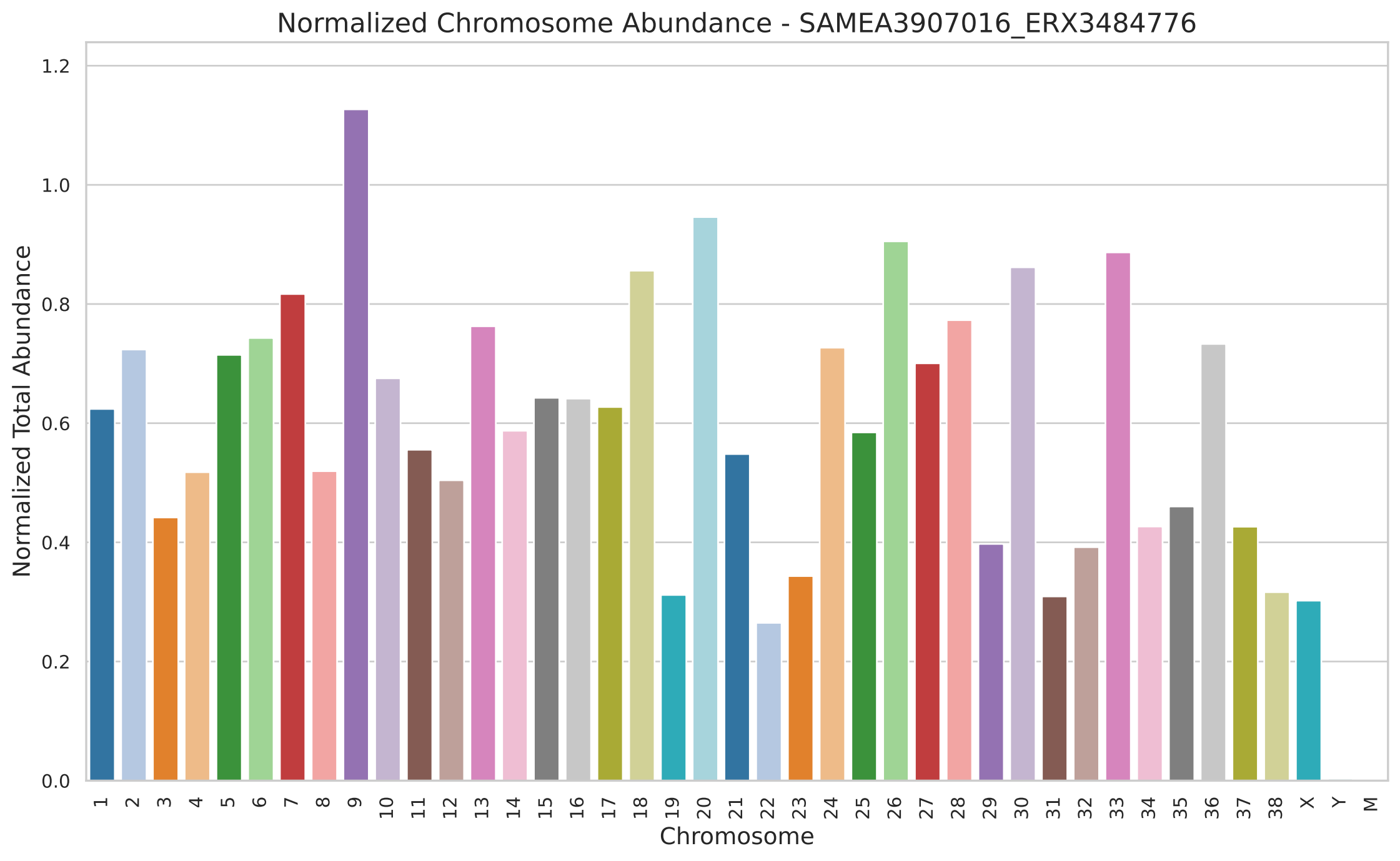

Normalized Chromosome Abundance - SAMEA3907038_ERX3484788
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

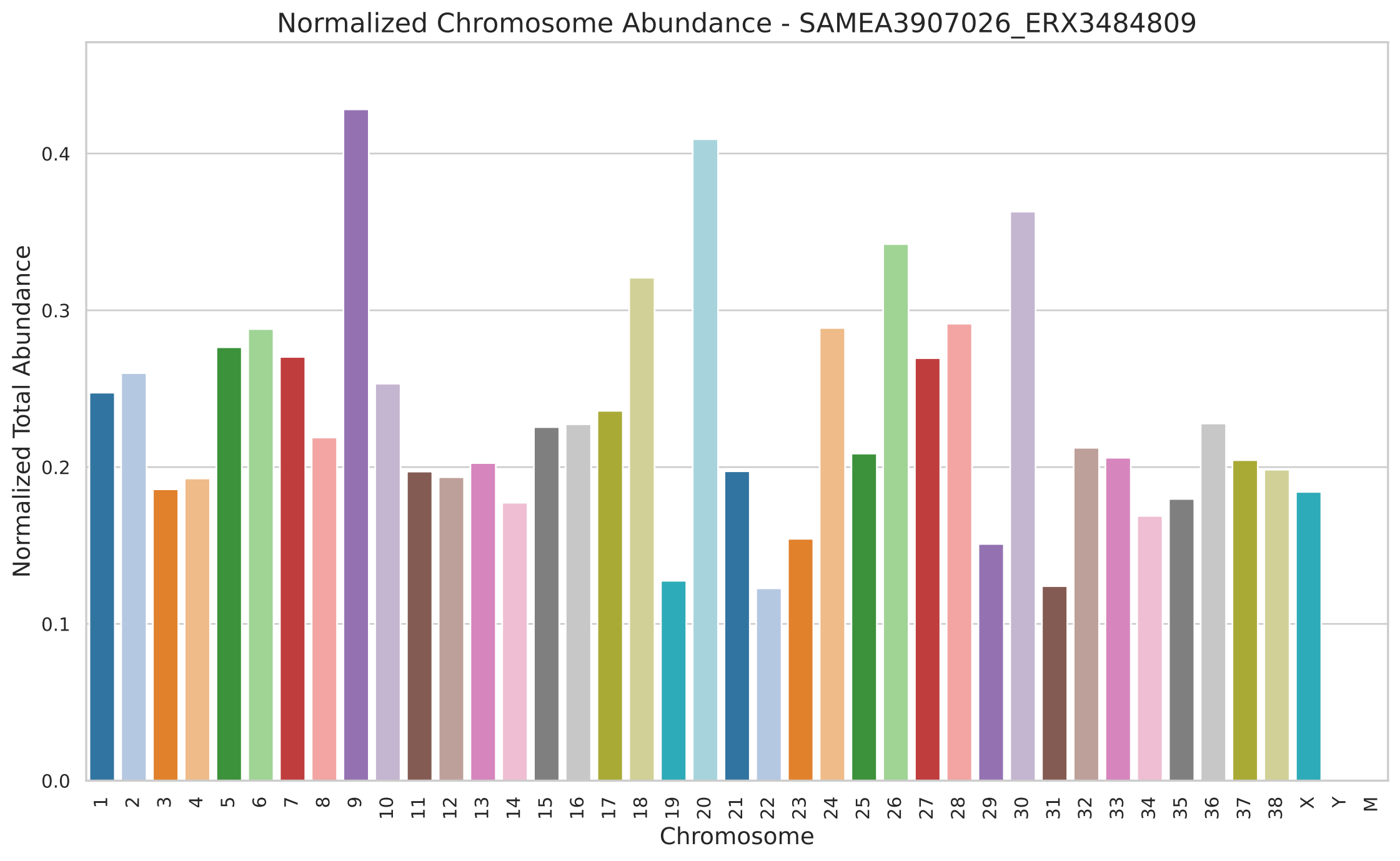

Normalized Chromosome Abundance - SAMEA3907065_ERX3484824
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

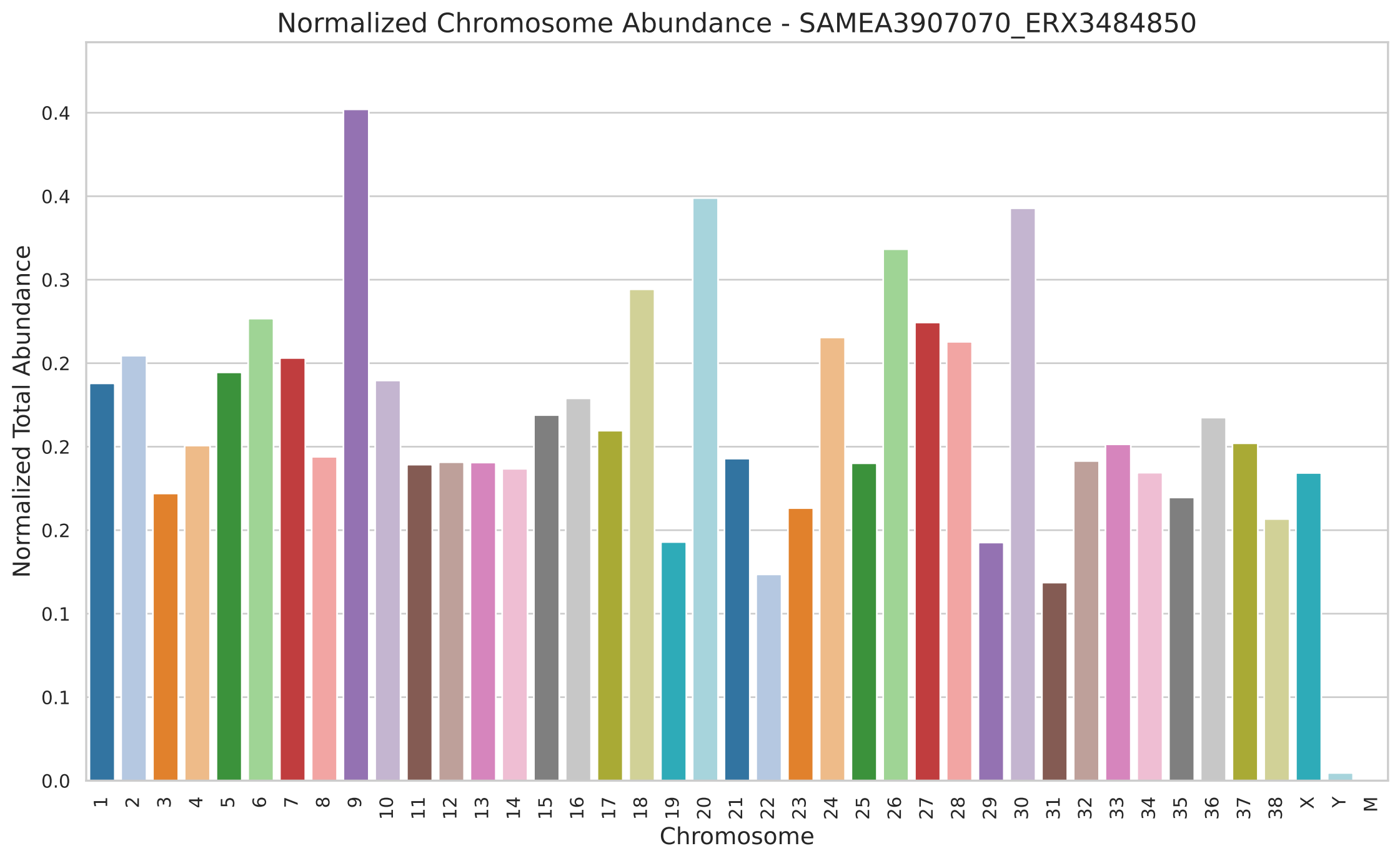

Normalized Chromosome Abundance - SAMEA3907029_ERX3484810
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

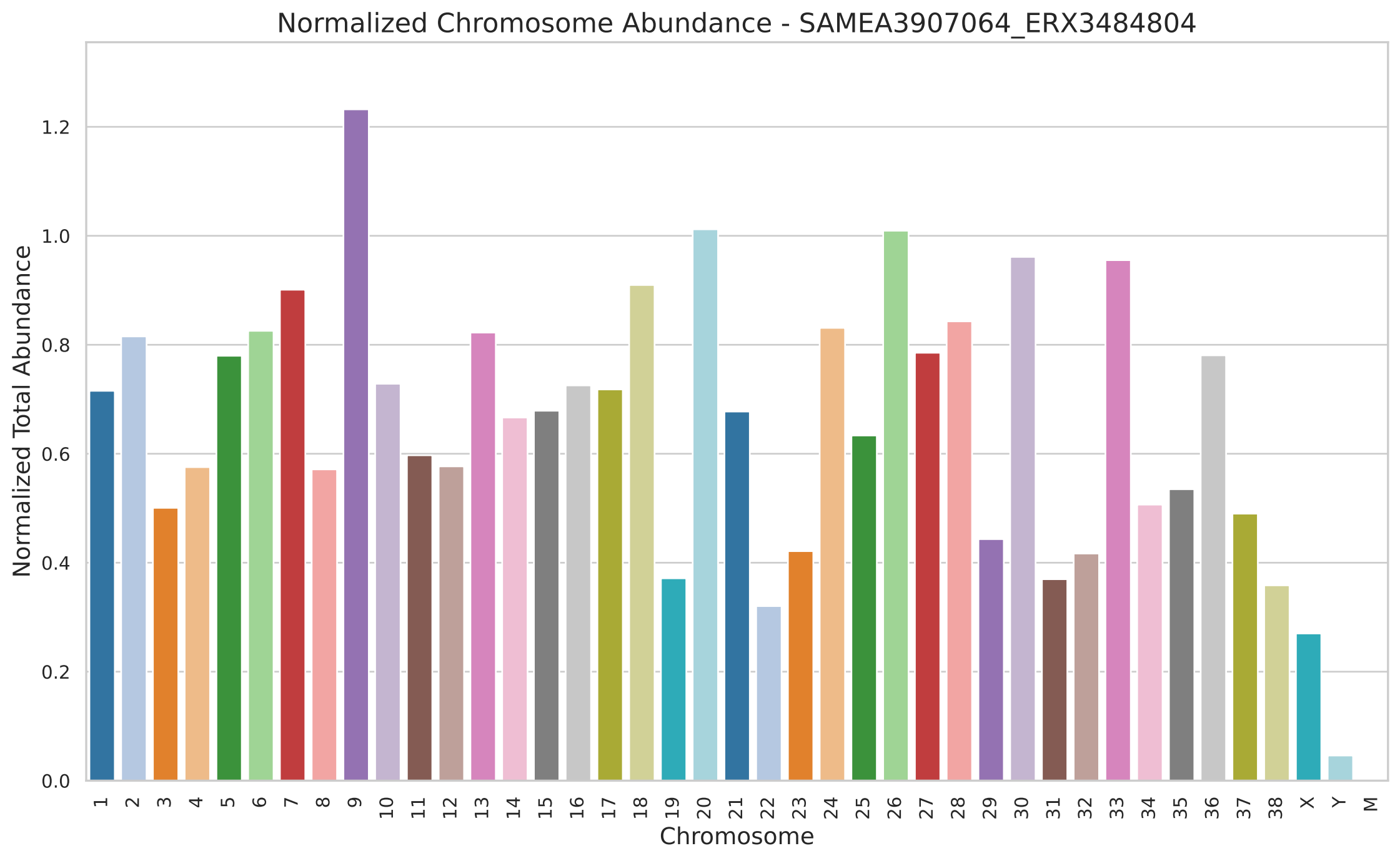

Normalized Chromosome Abundance - SAMEA3907419_ERX3484801
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

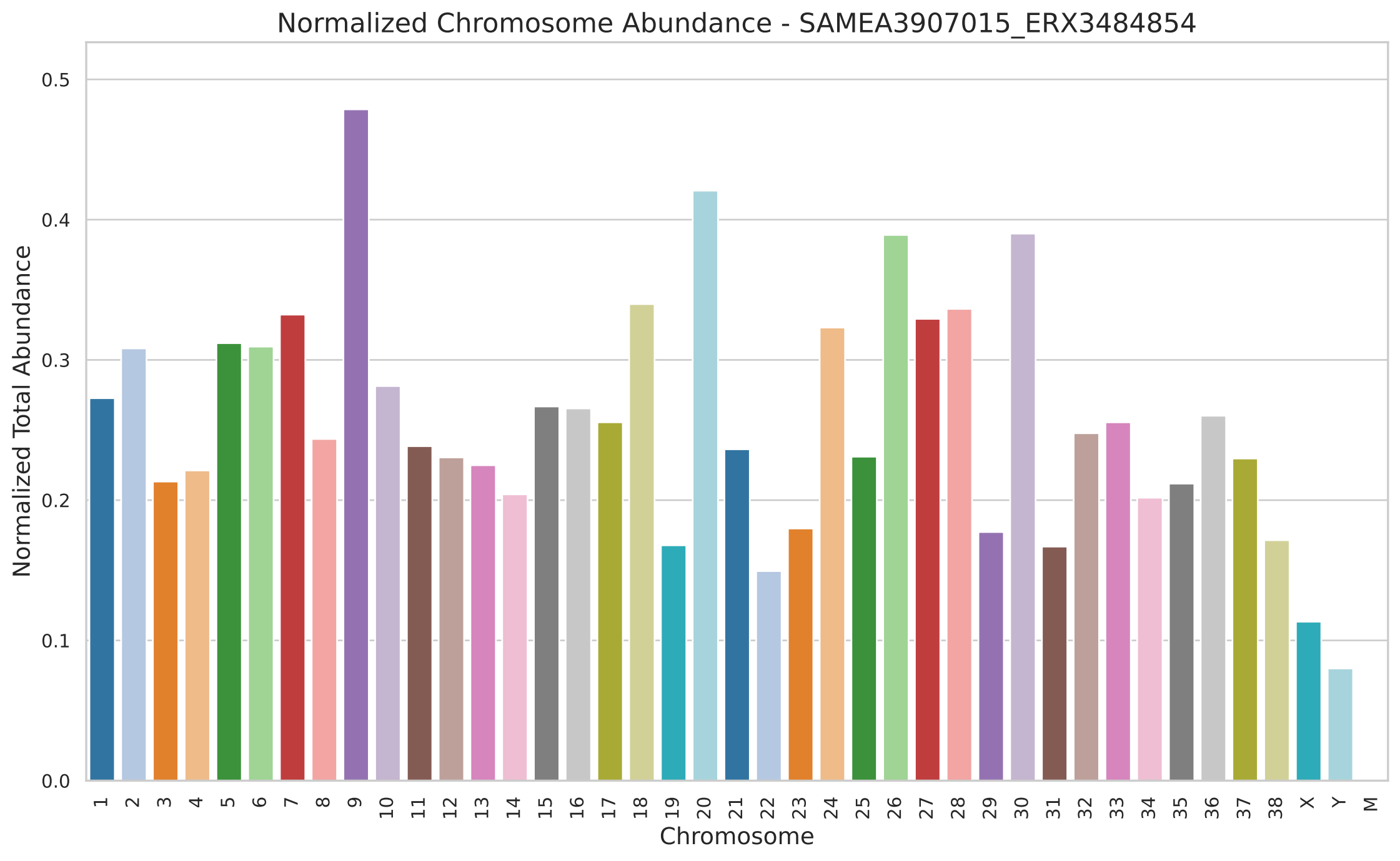

Normalized Chromosome Abundance - SAMEA3907060_ERX3484867
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

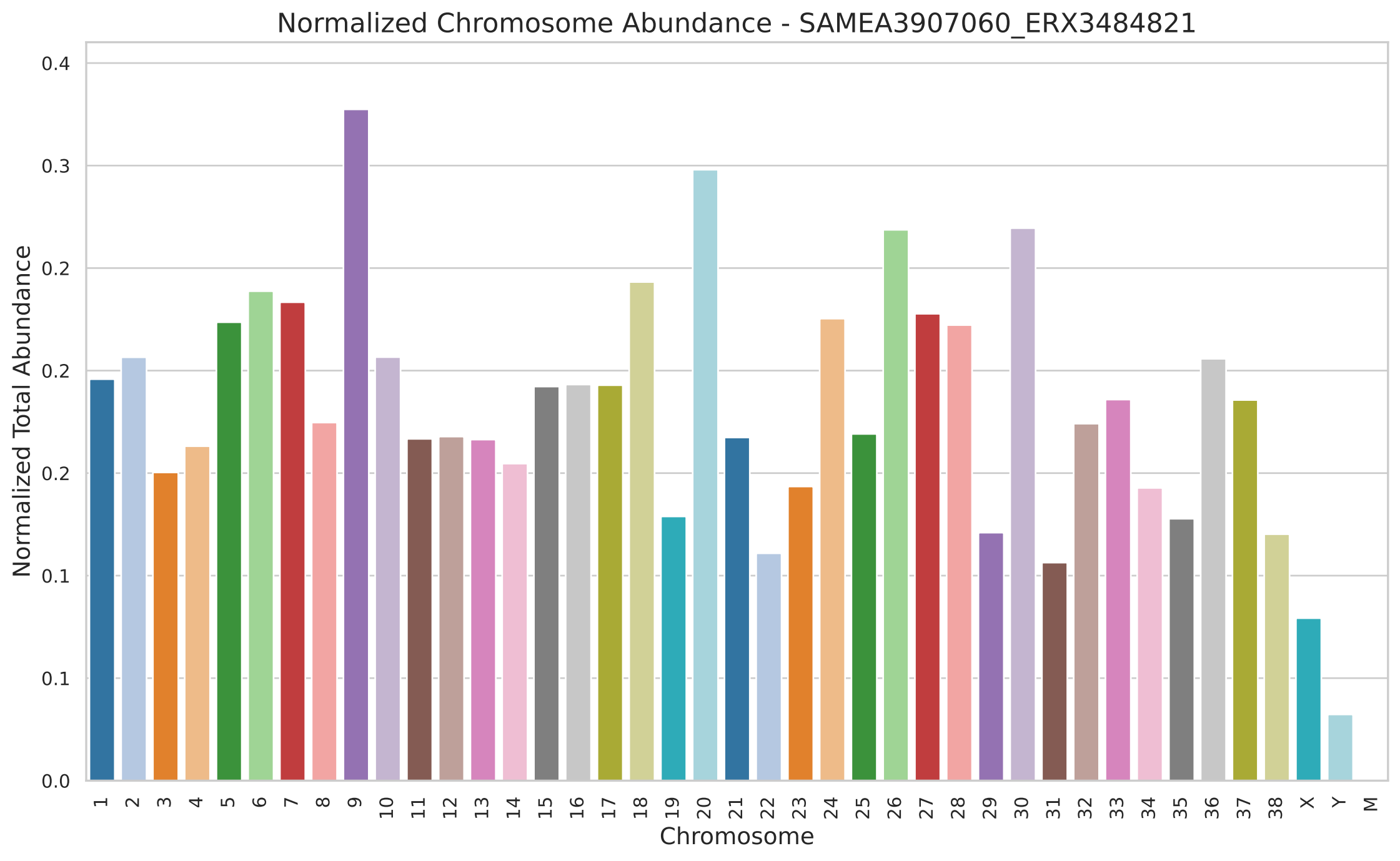

Normalized Chromosome Abundance - SAMEA3907016_ERX3484776
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

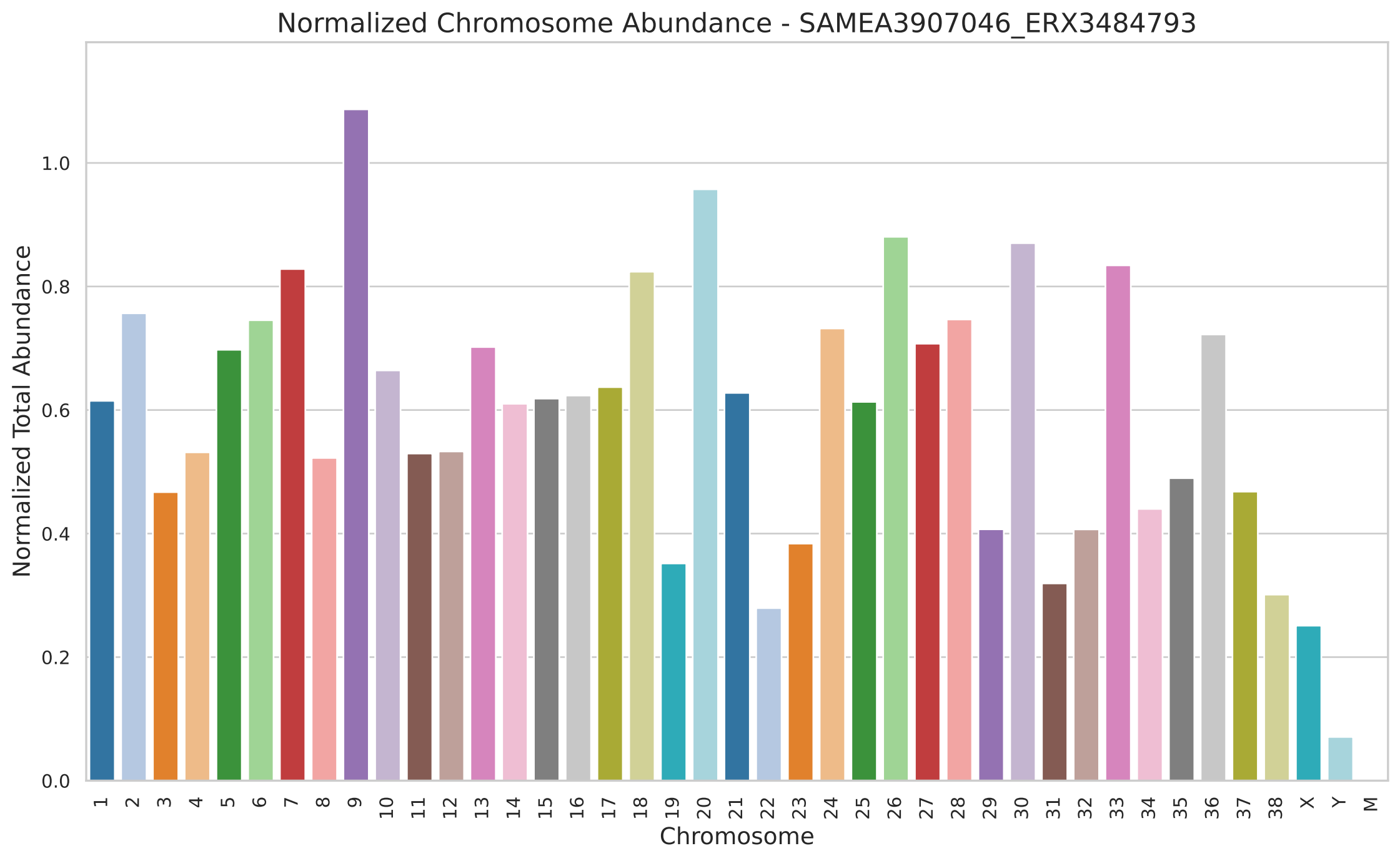

Normalized Chromosome Abundance - SAMEA3907026_ERX3484809
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

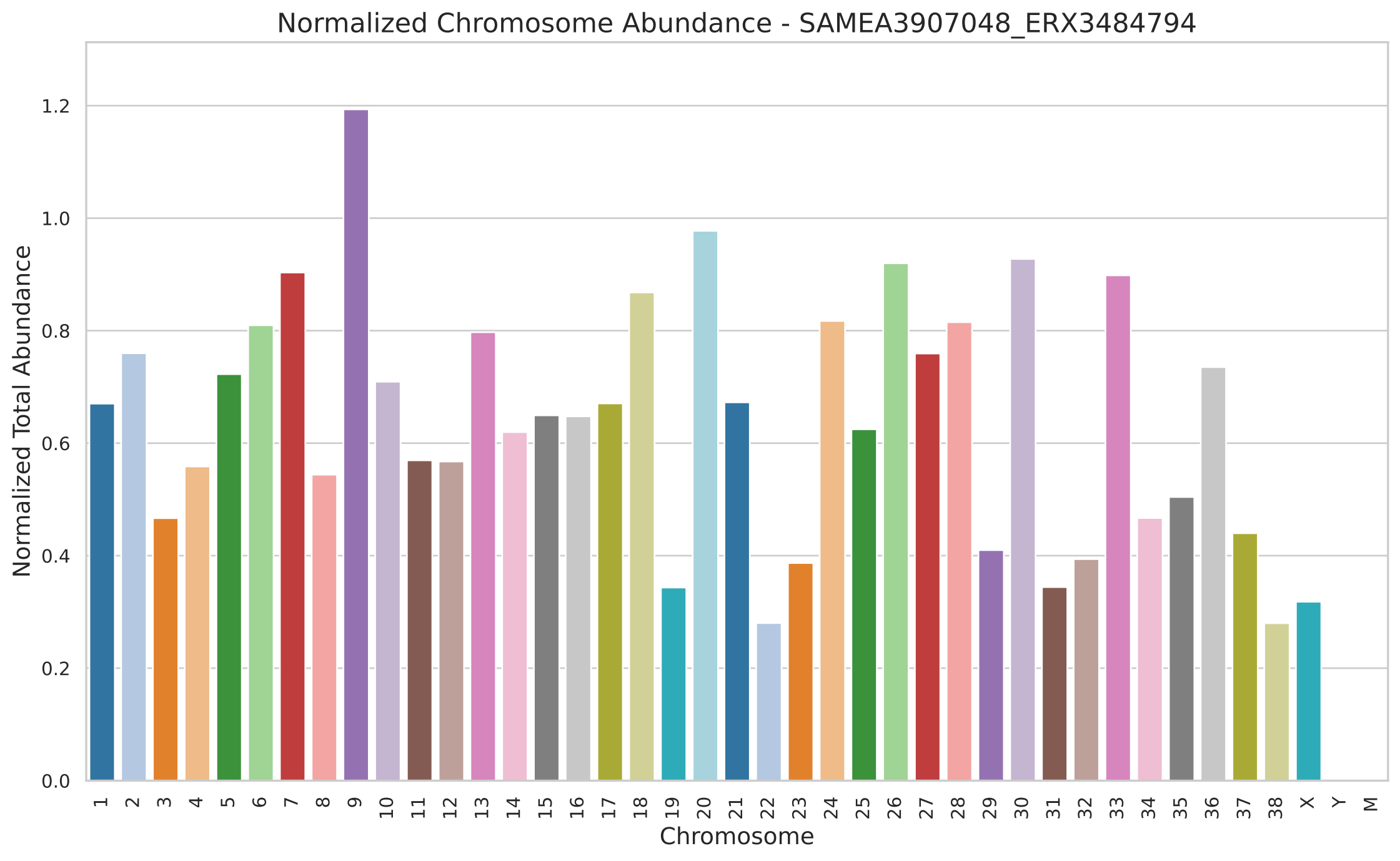

Normalized Chromosome Abundance - SAMEA3907070_ERX3484850
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

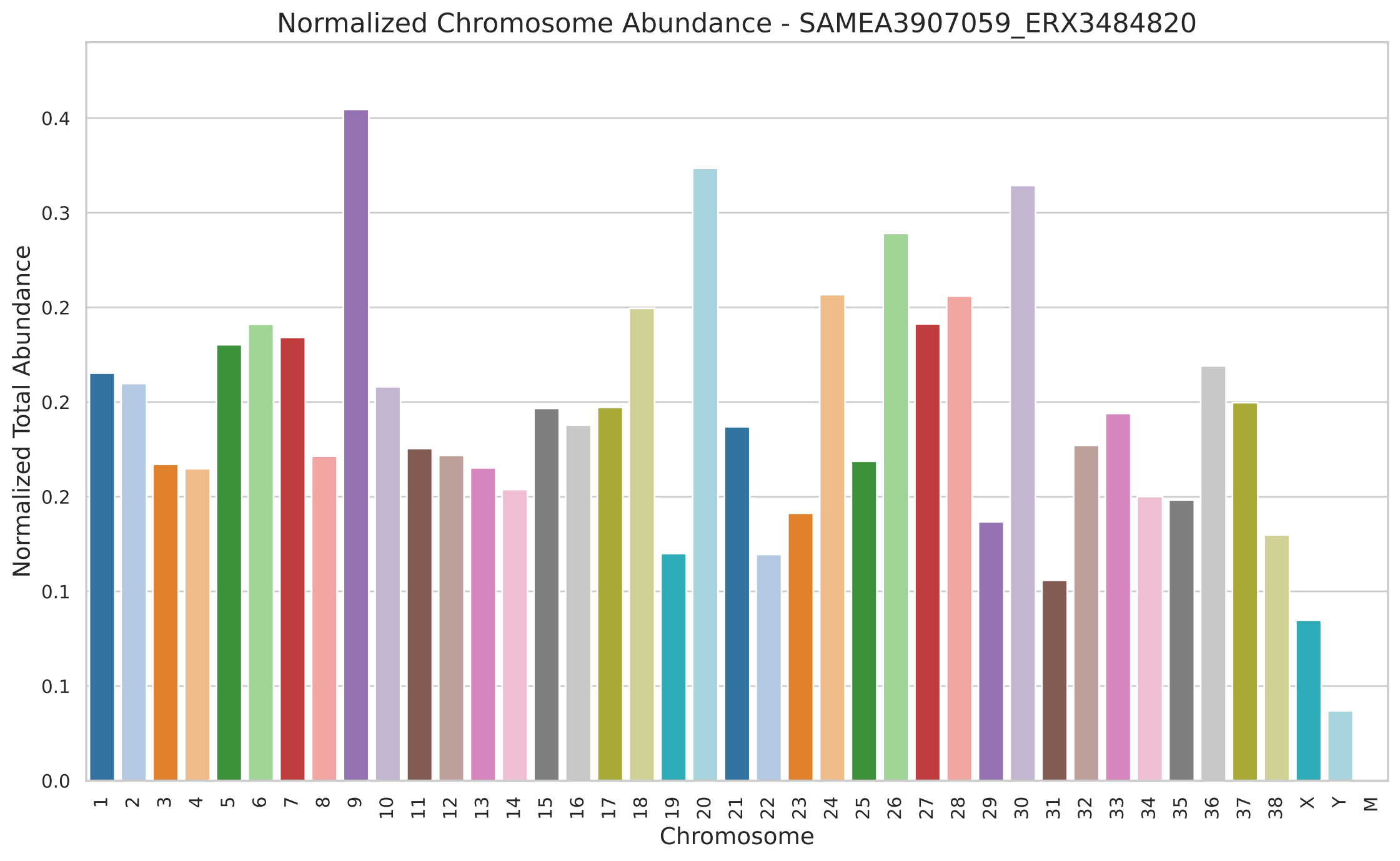

Normalized Chromosome Abundance - SAMEA3907064_ERX3484804
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

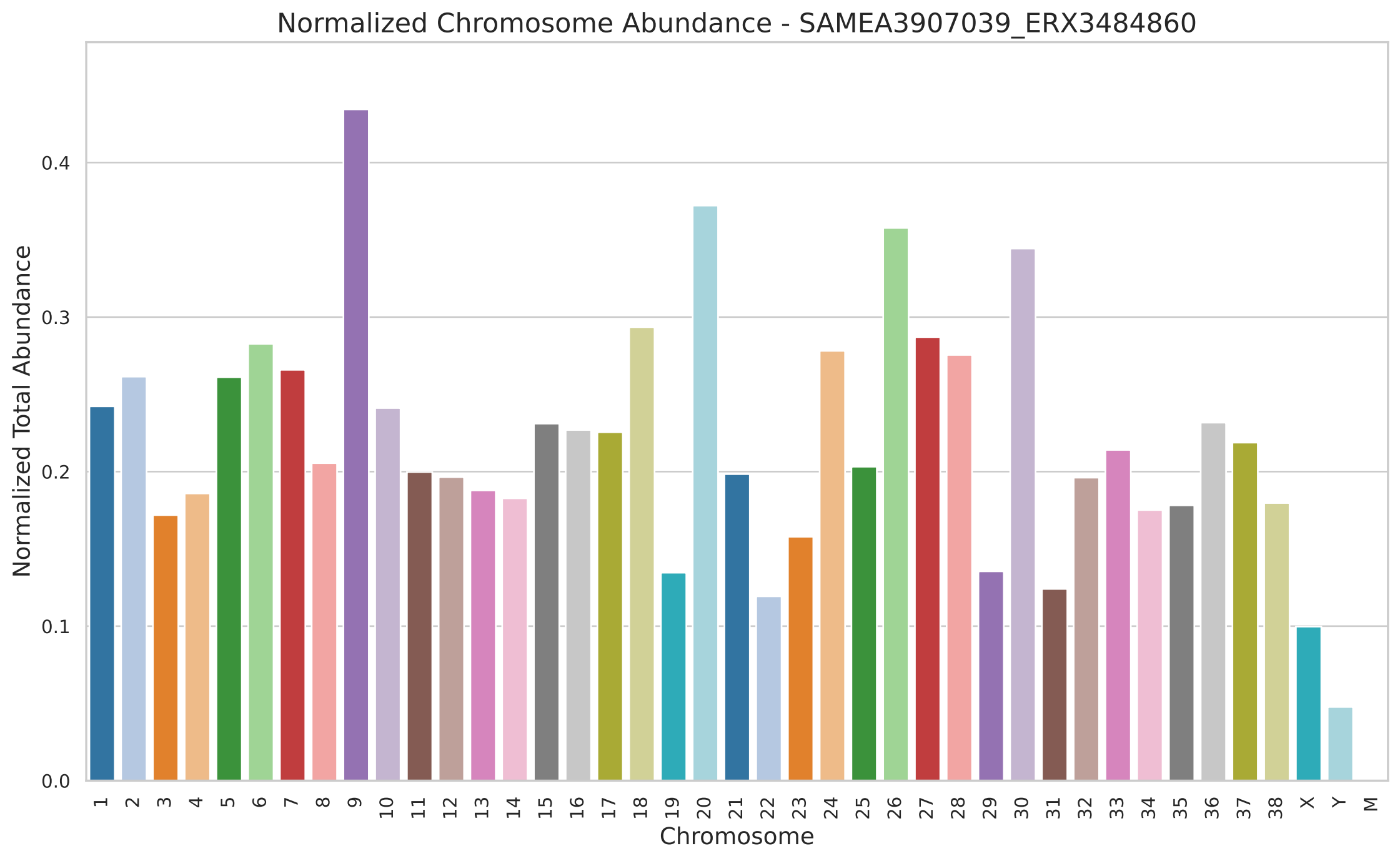

Normalized Chromosome Abundance - SAMEA3907015_ERX3484854
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

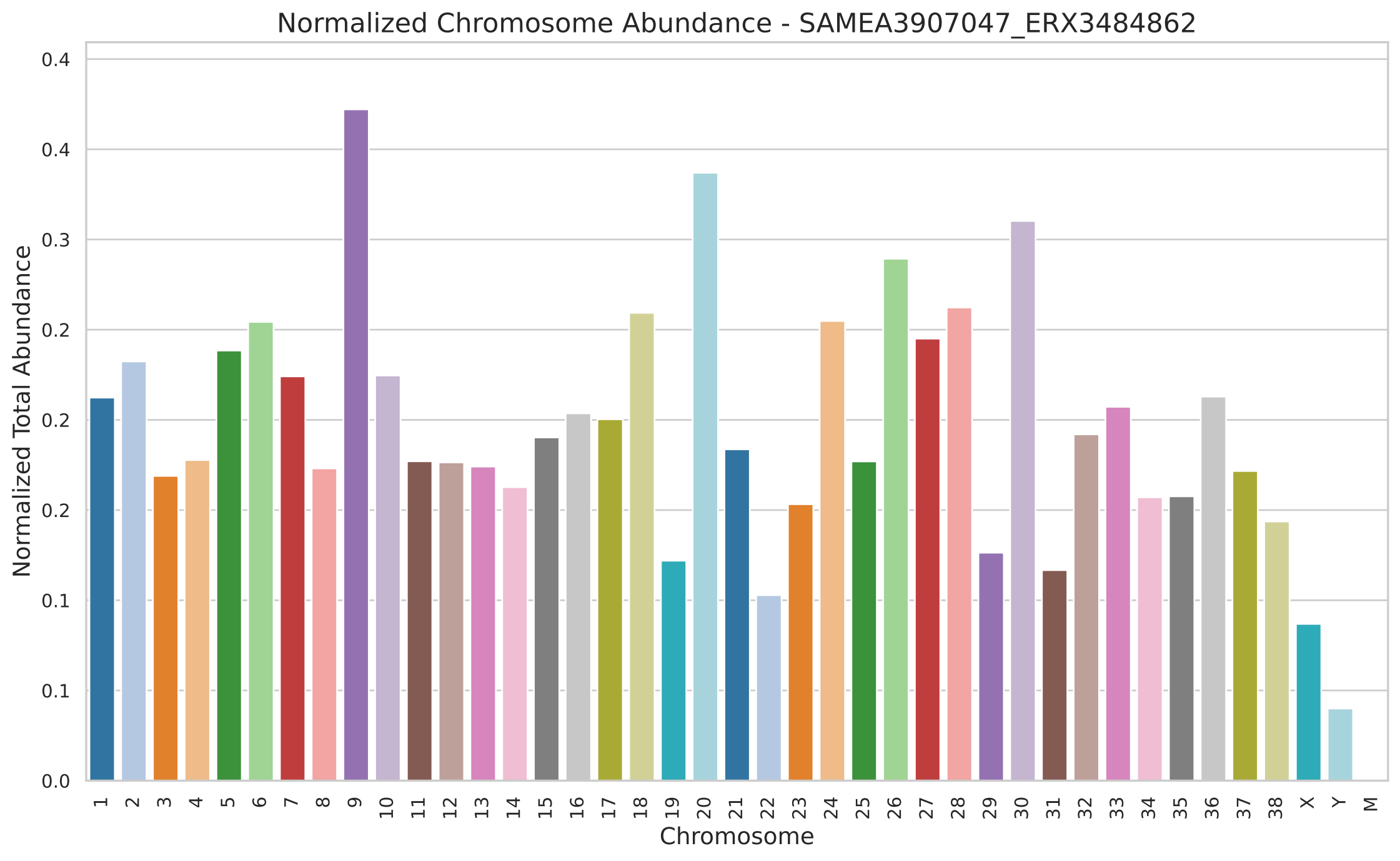

Normalized Chromosome Abundance - SAMEA3907060_ERX3484821
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

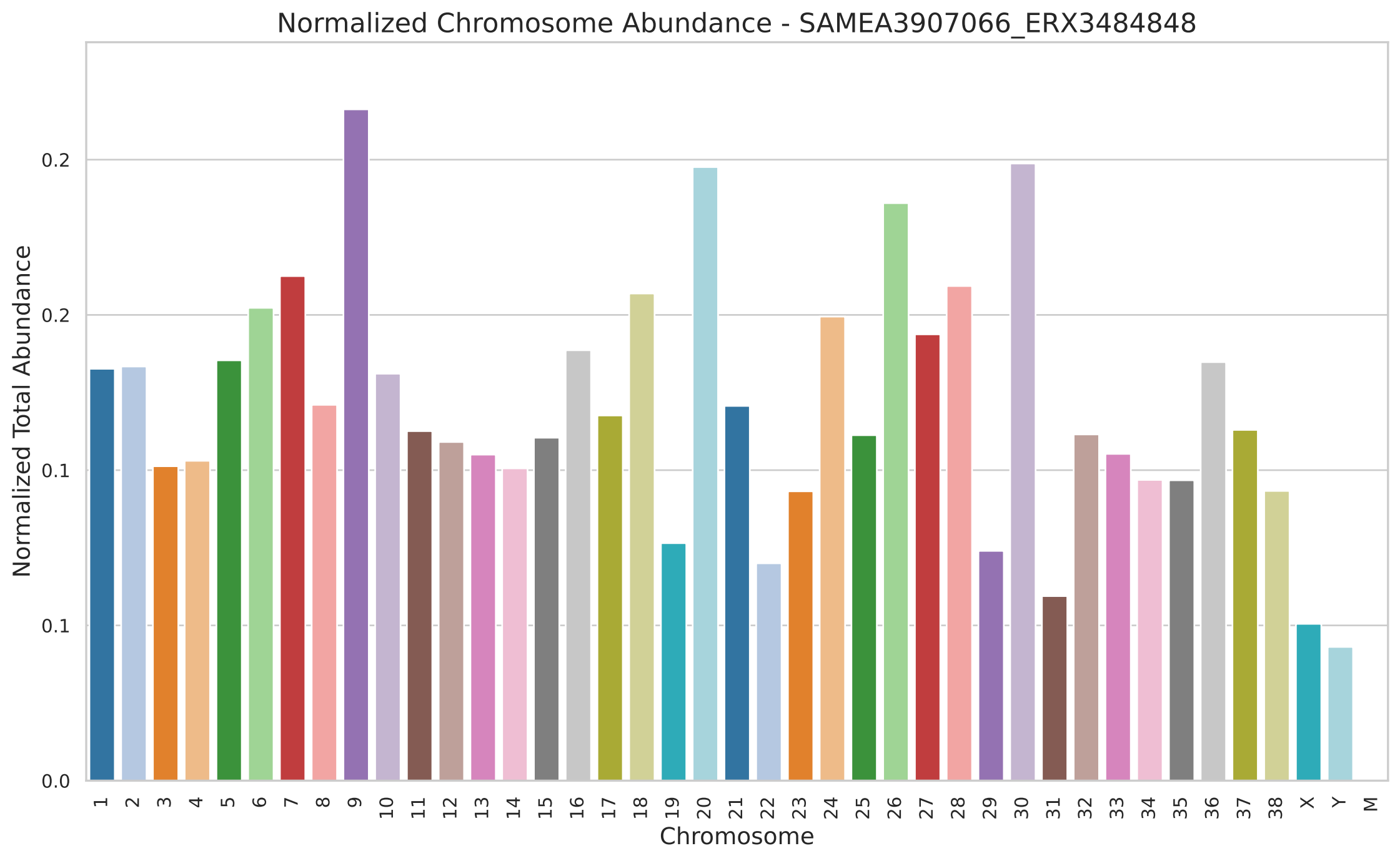

Normalized Chromosome Abundance - SAMEA3907046_ERX3484793
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

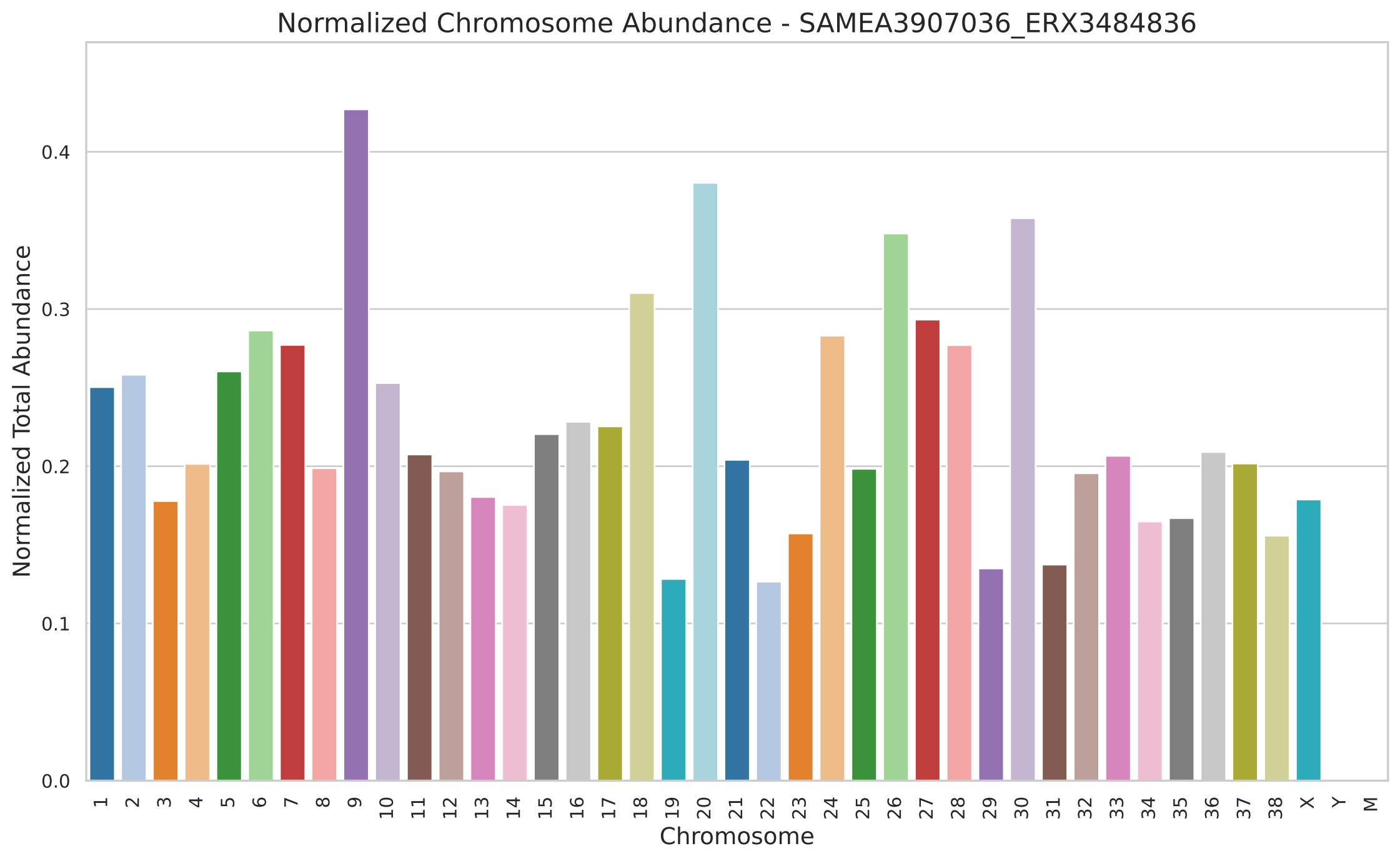

Normalized Chromosome Abundance - SAMEA3907048_ERX3484794
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

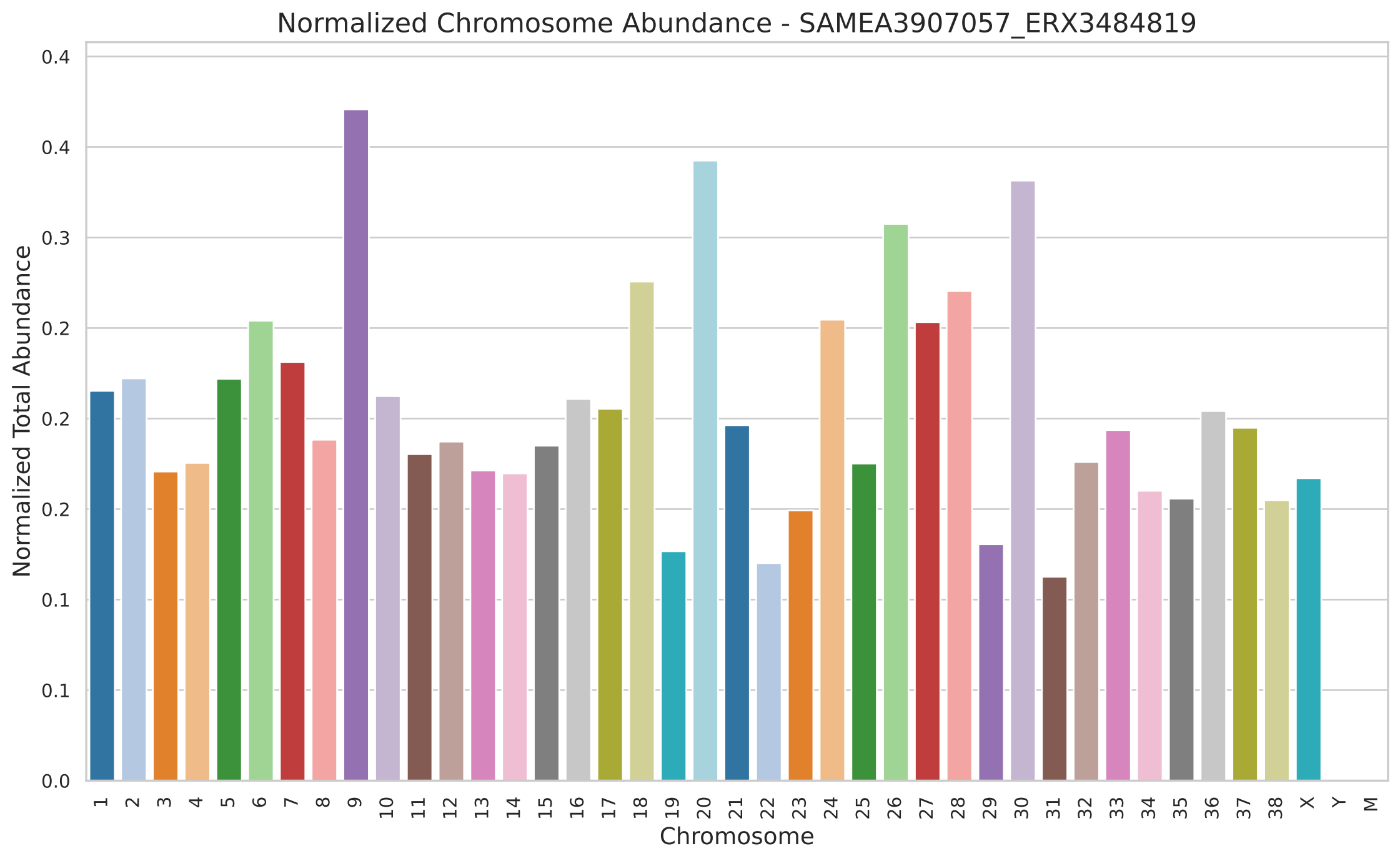

Normalized Chromosome Abundance - SAMEA3907059_ERX3484820
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

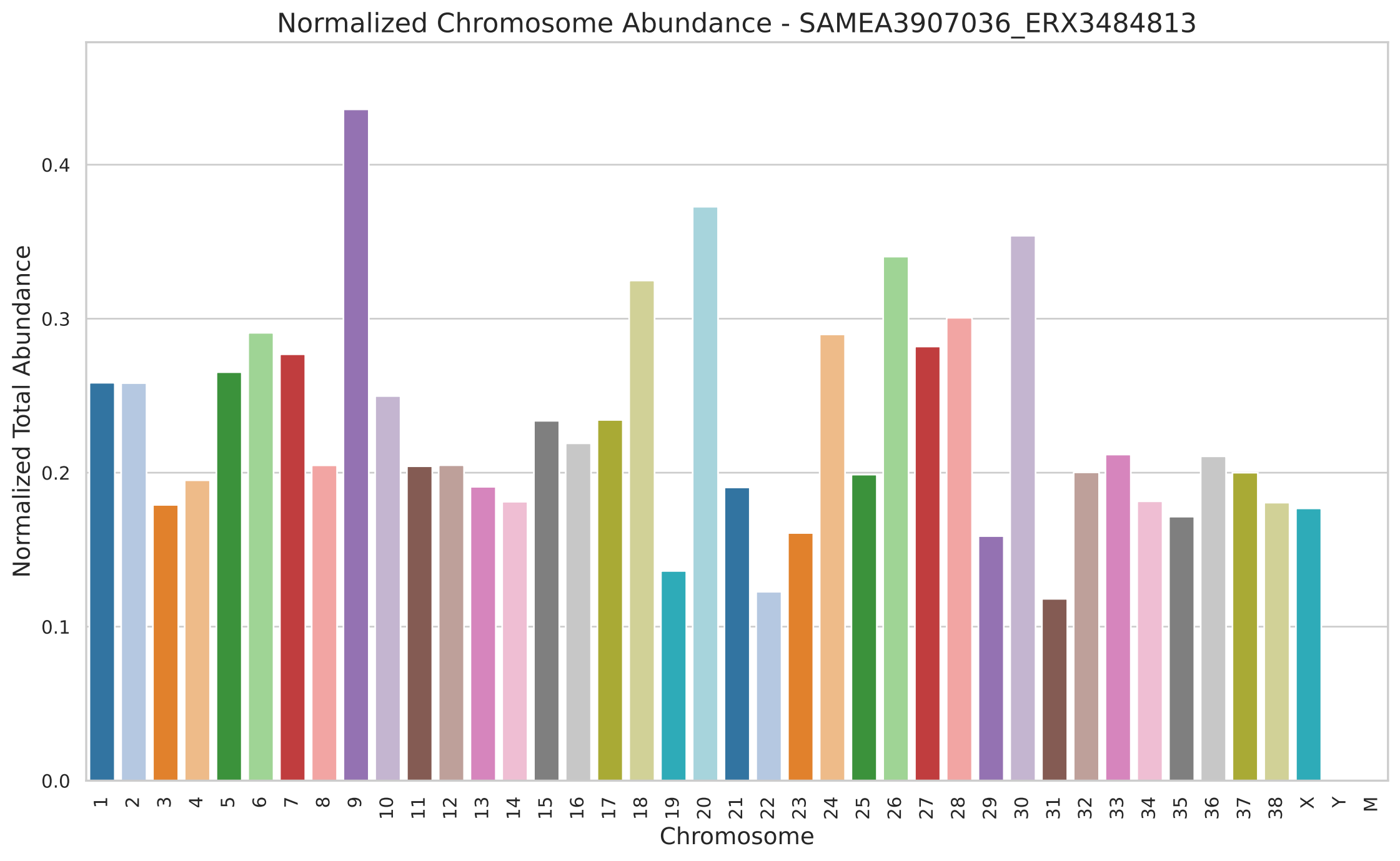

Normalized Chromosome Abundance - SAMEA3907039_ERX3484860
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

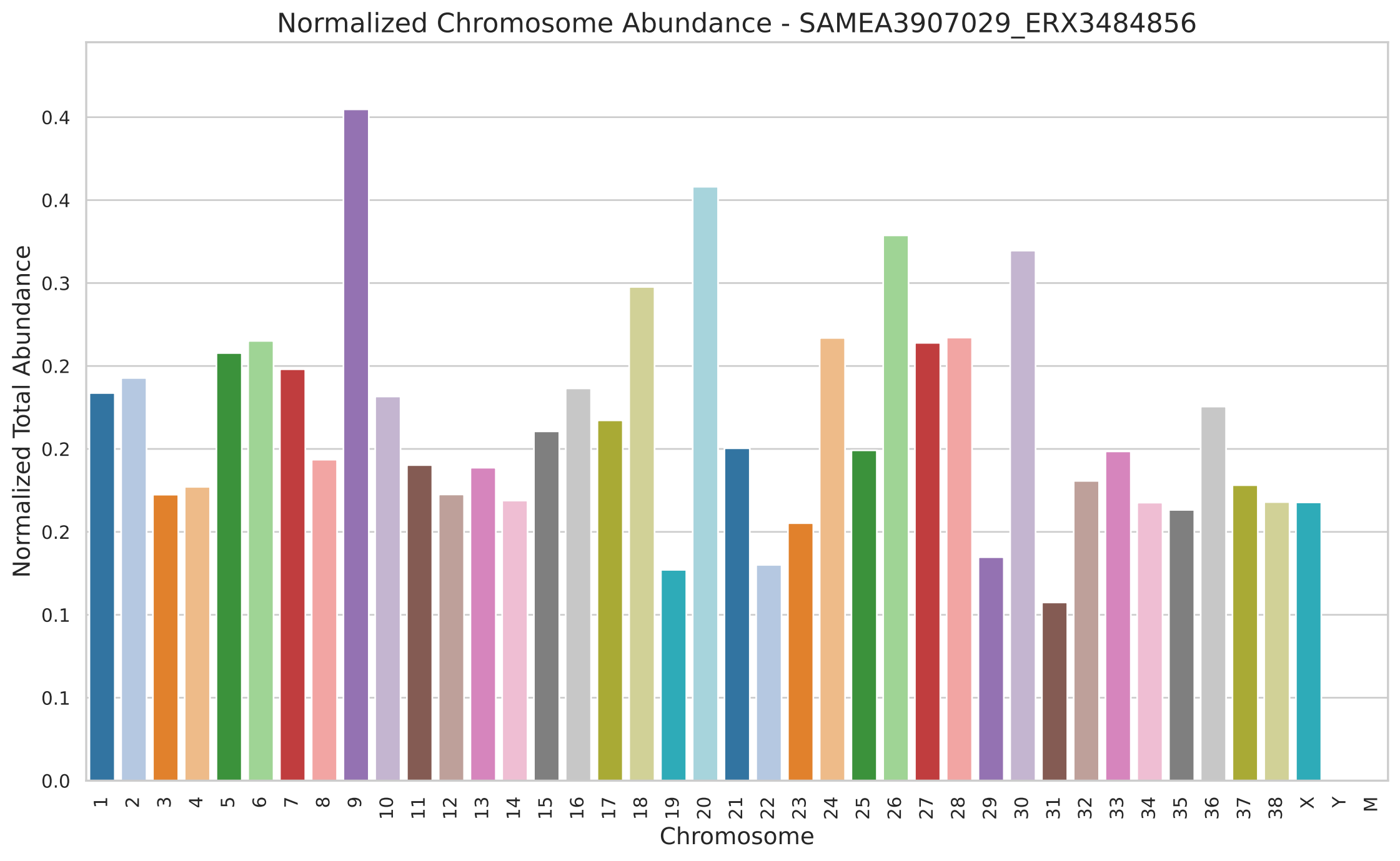

Normalized Chromosome Abundance - SAMEA3907047_ERX3484862
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
0.4
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

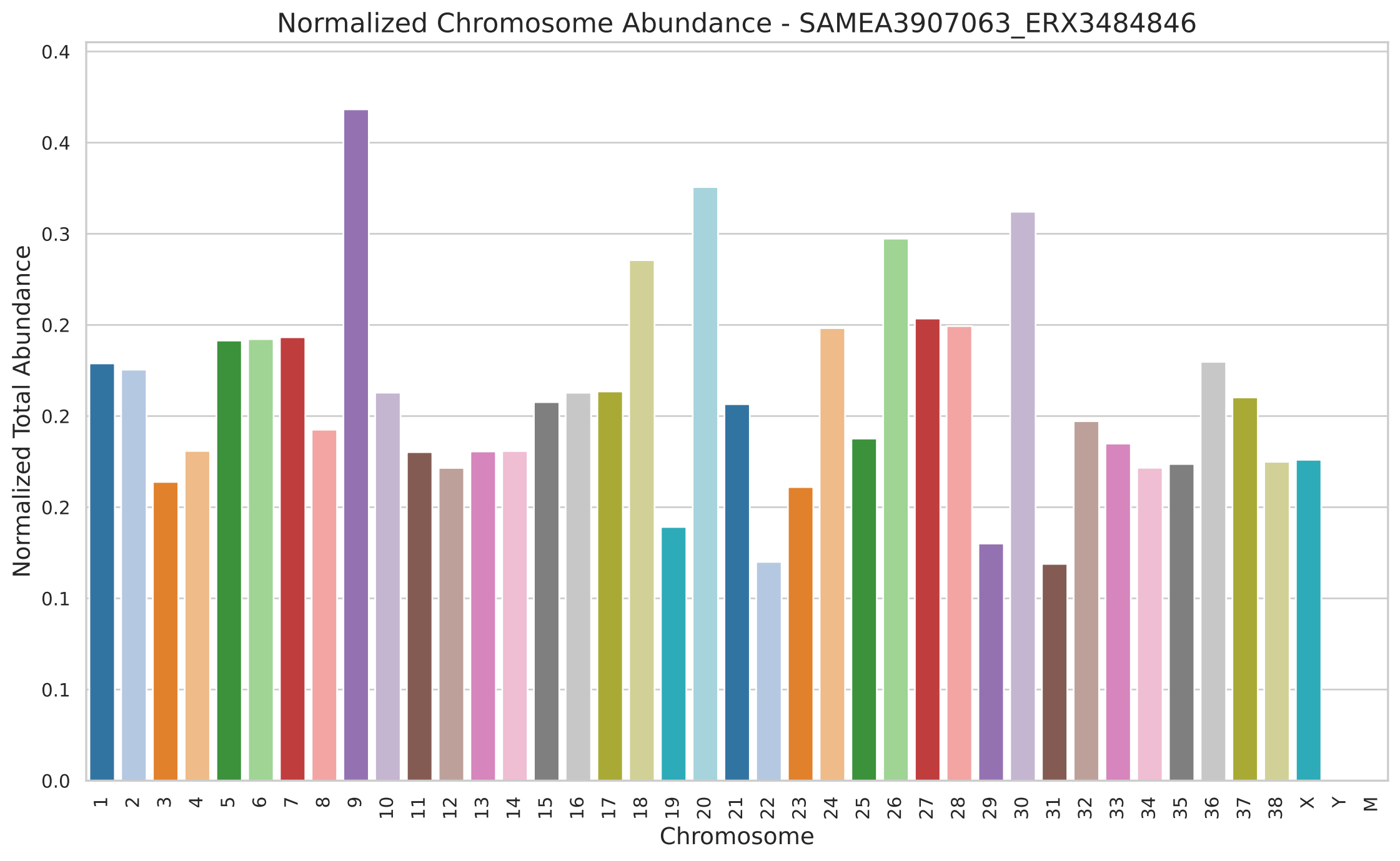

Normalized Chromosome Abundance - SAMEA3907066_ERX3484848
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

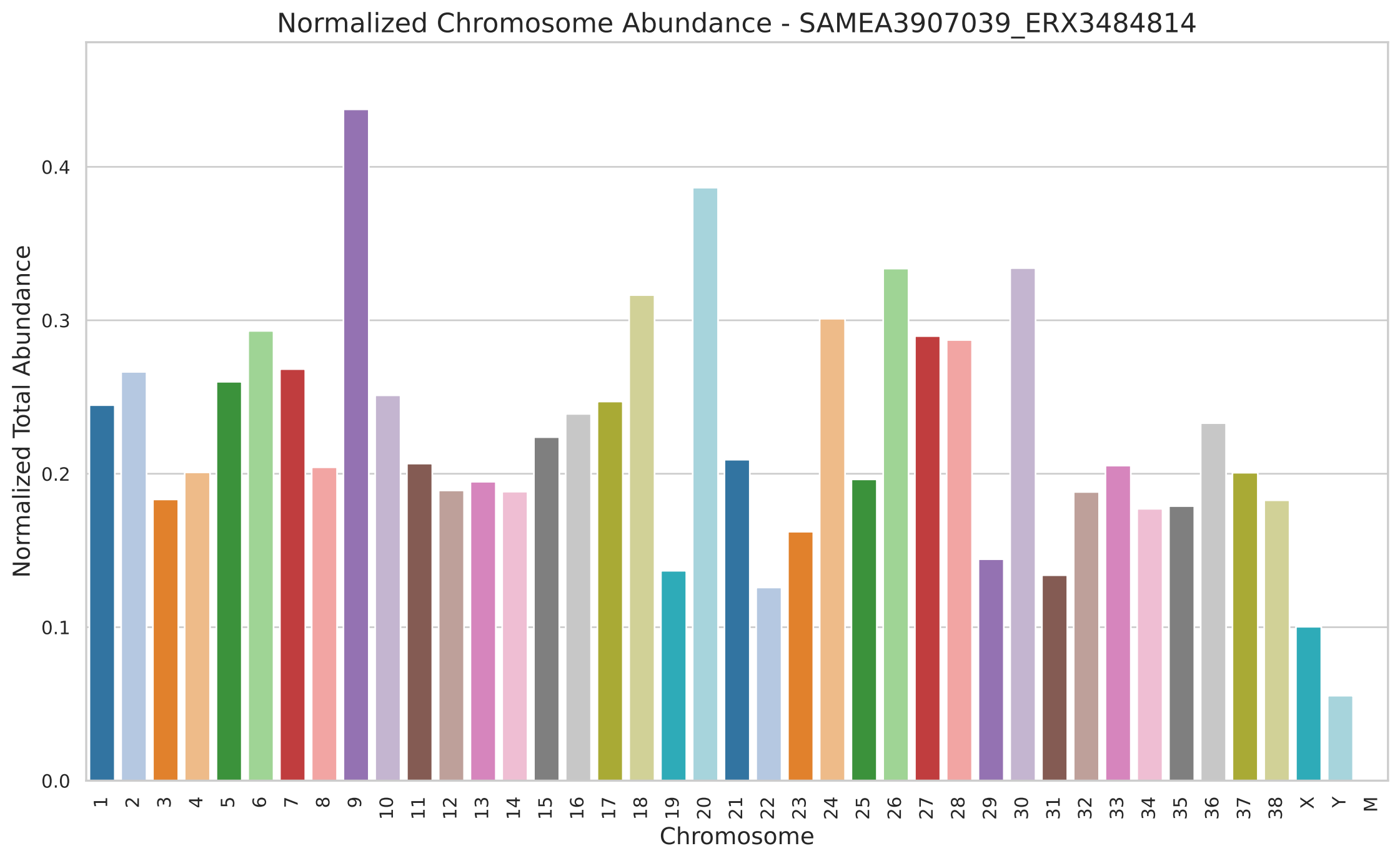

Normalized Chromosome Abundance - SAMEA3907036_ERX3484836
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

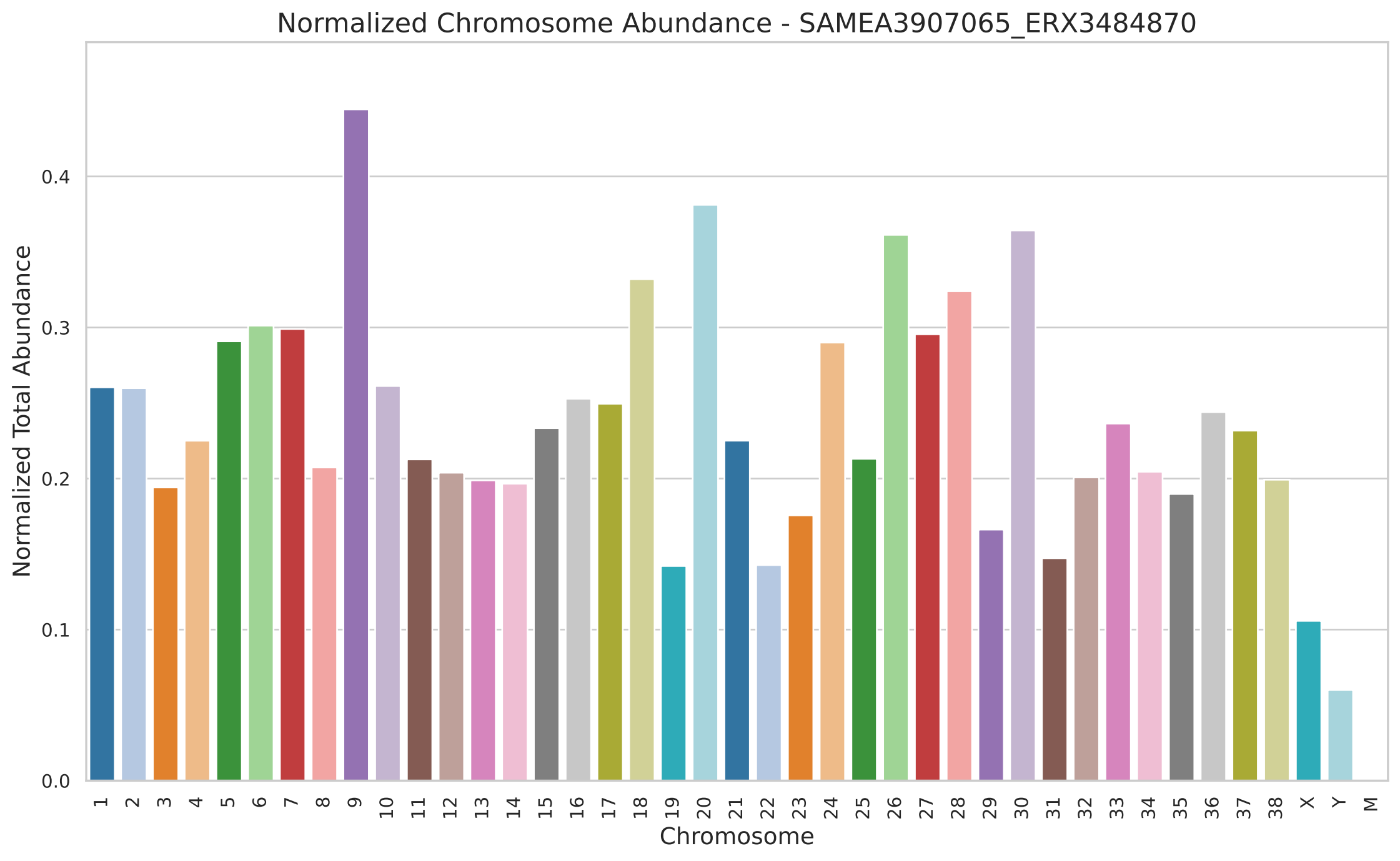

Normalized Chromosome Abundance - SAMEA3907057_ERX3484819
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
0.4
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

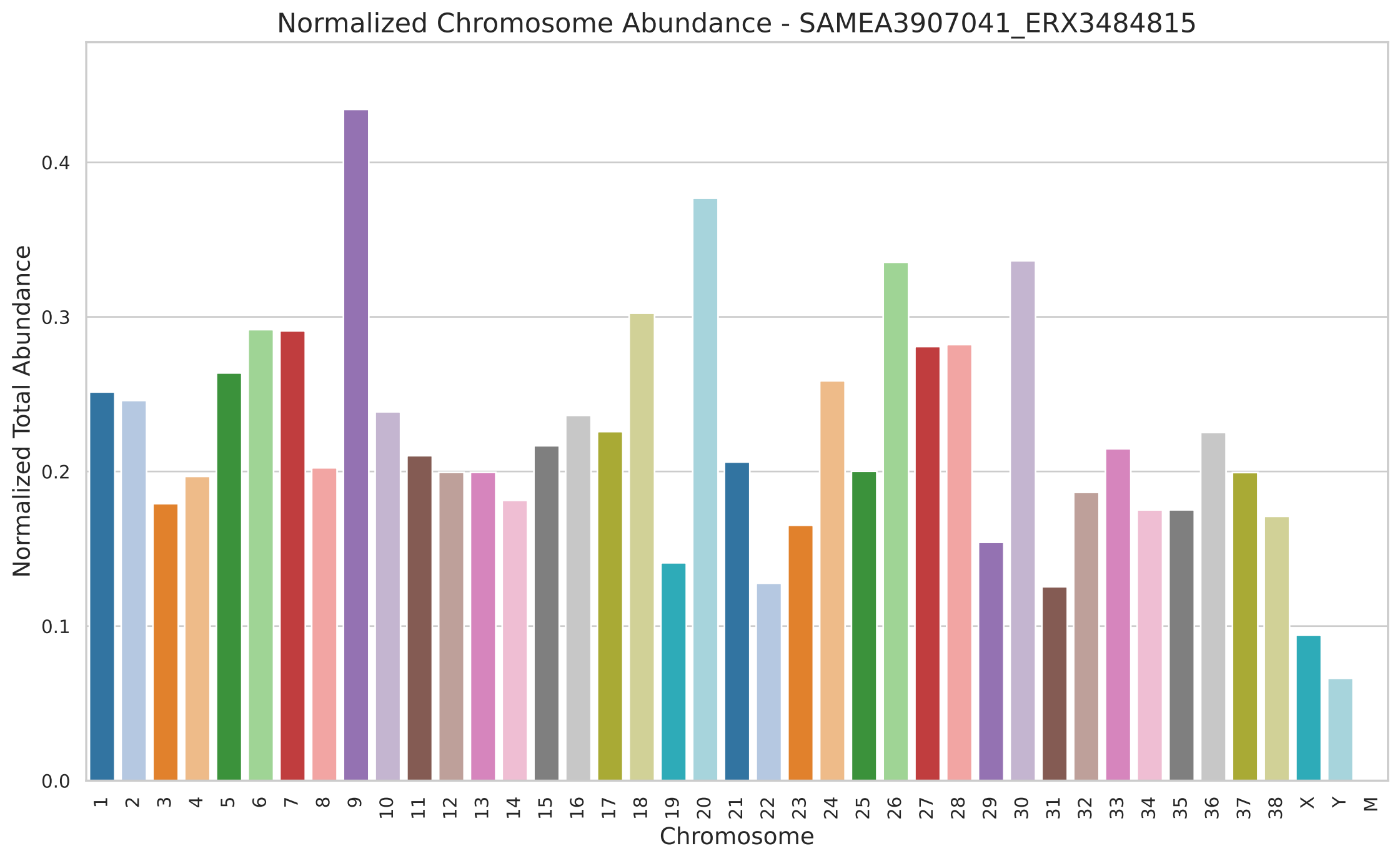

Normalized Chromosome Abundance - SAMEA3907036_ERX3484813
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

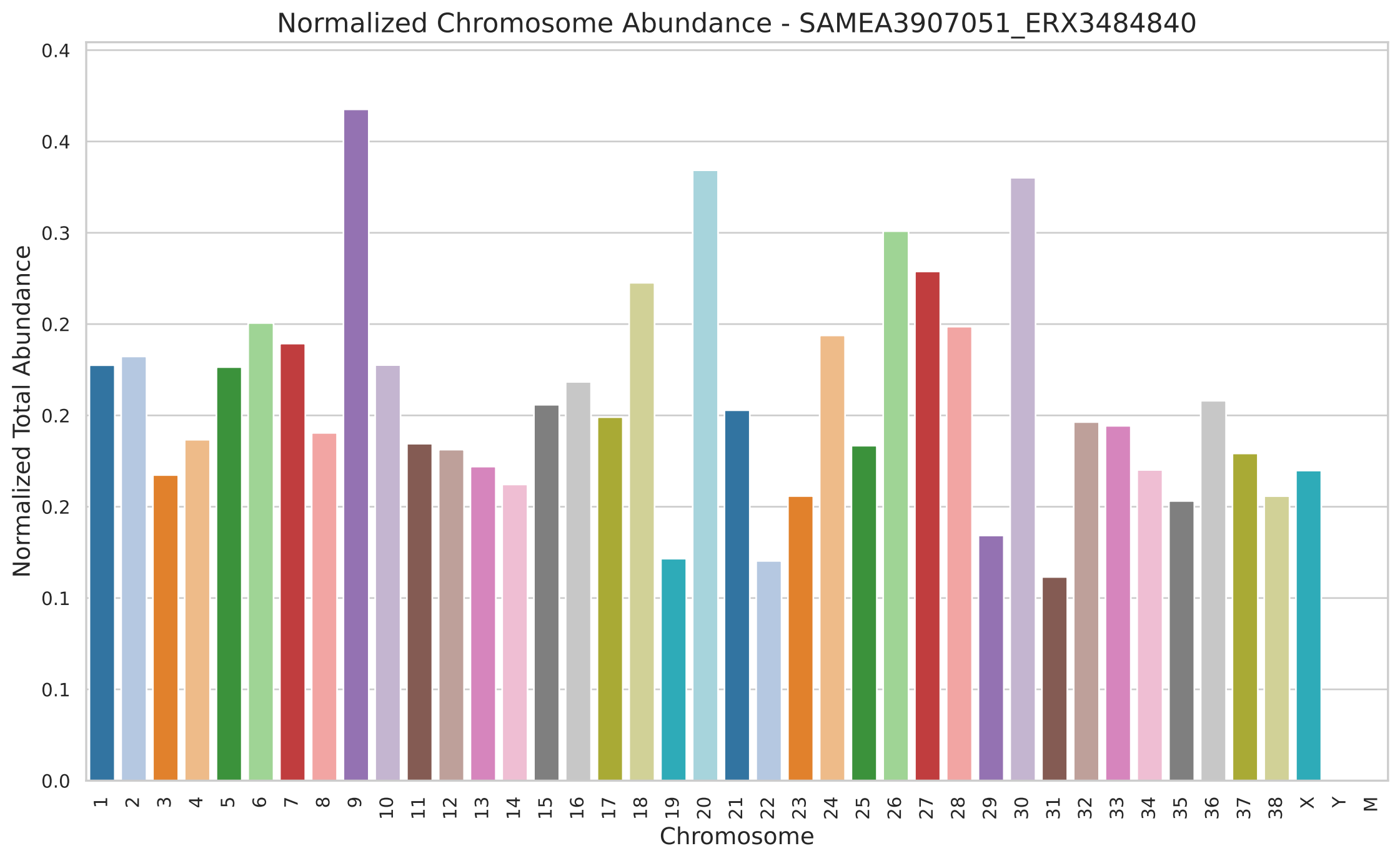

Normalized Chromosome Abundance - SAMEA3907029_ERX3484856
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

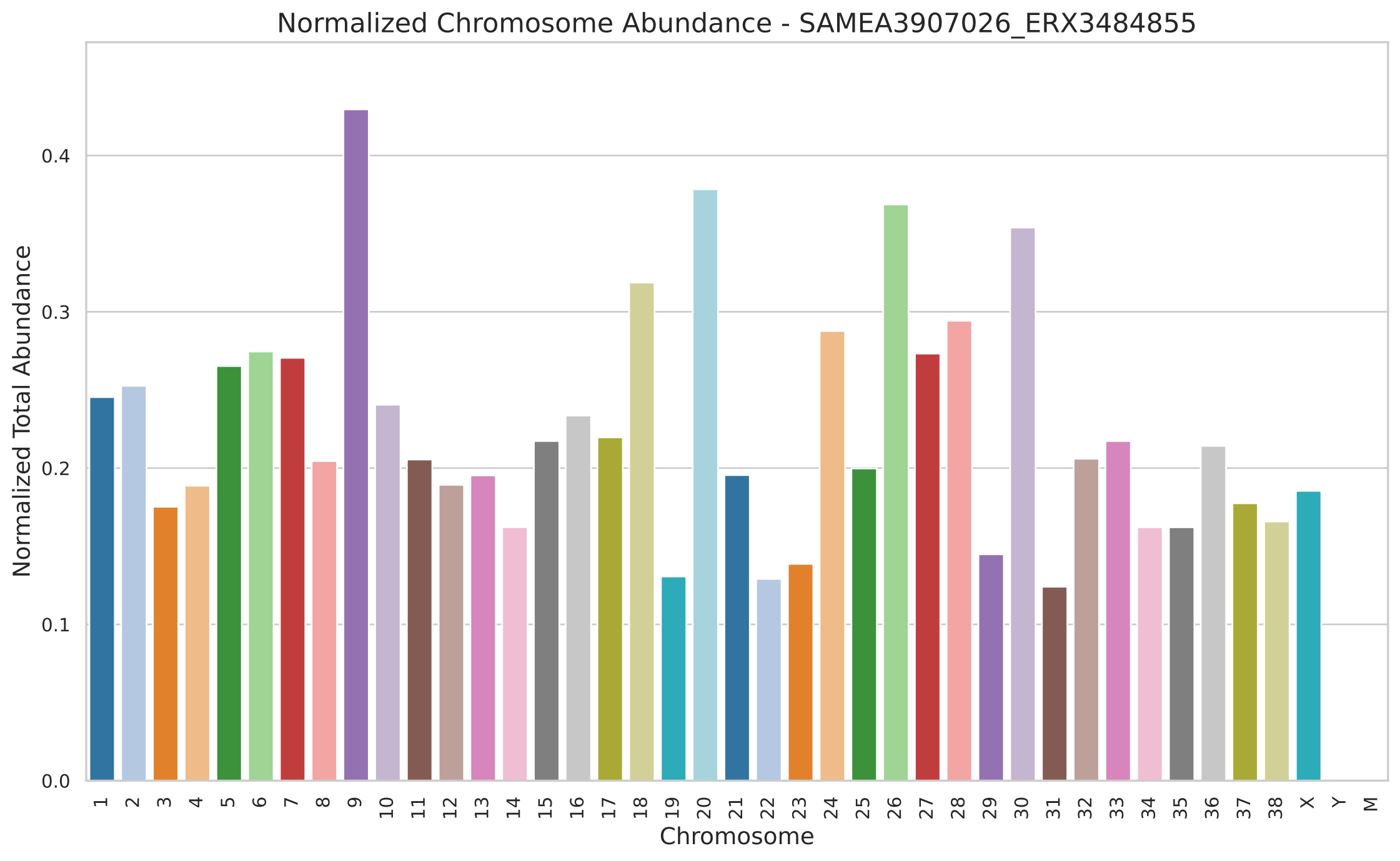

Normalized Chromosome Abundance - SAMEA3907063_ERX3484846
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

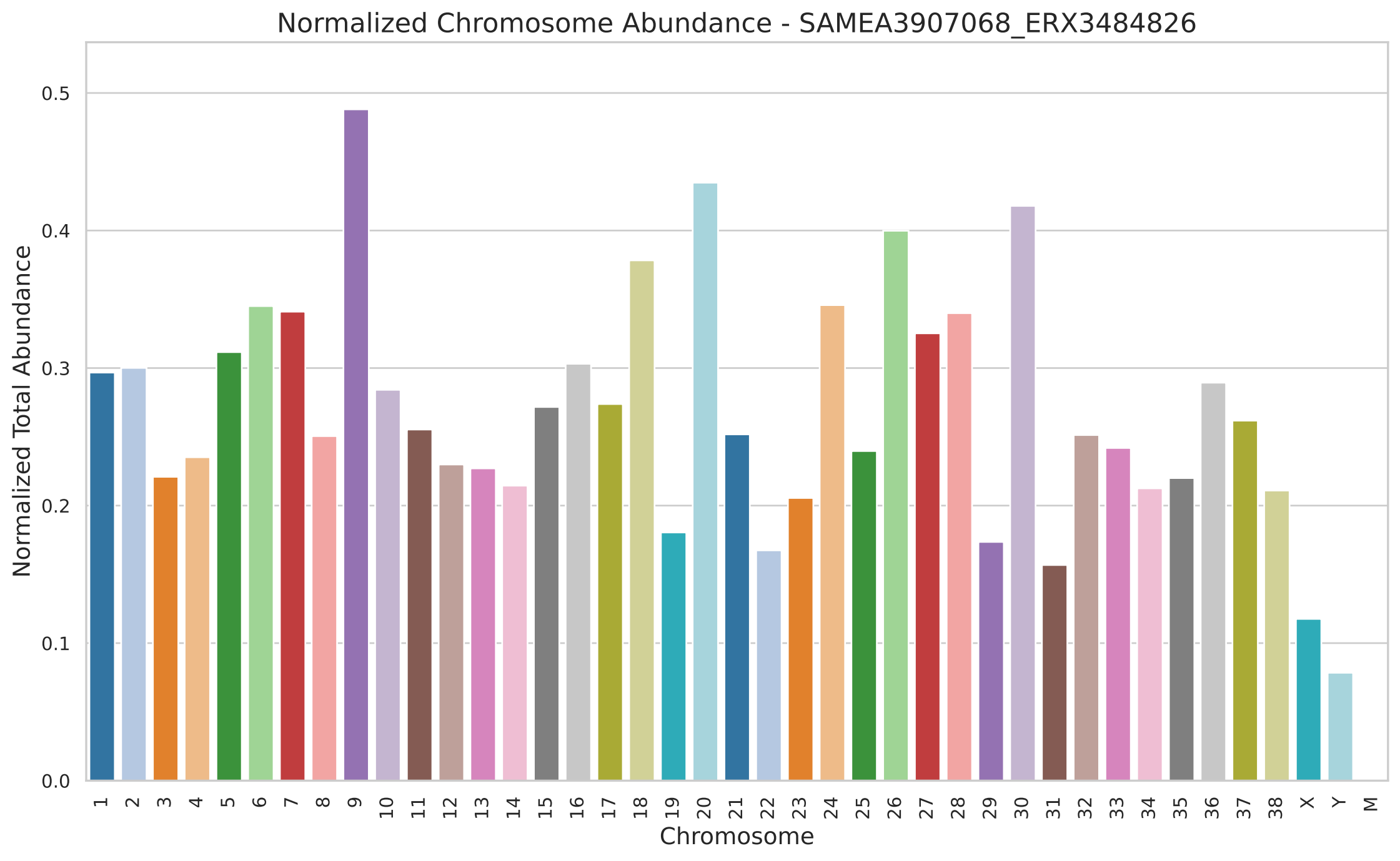

Normalized Chromosome Abundance - SAMEA3907039_ERX3484814
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

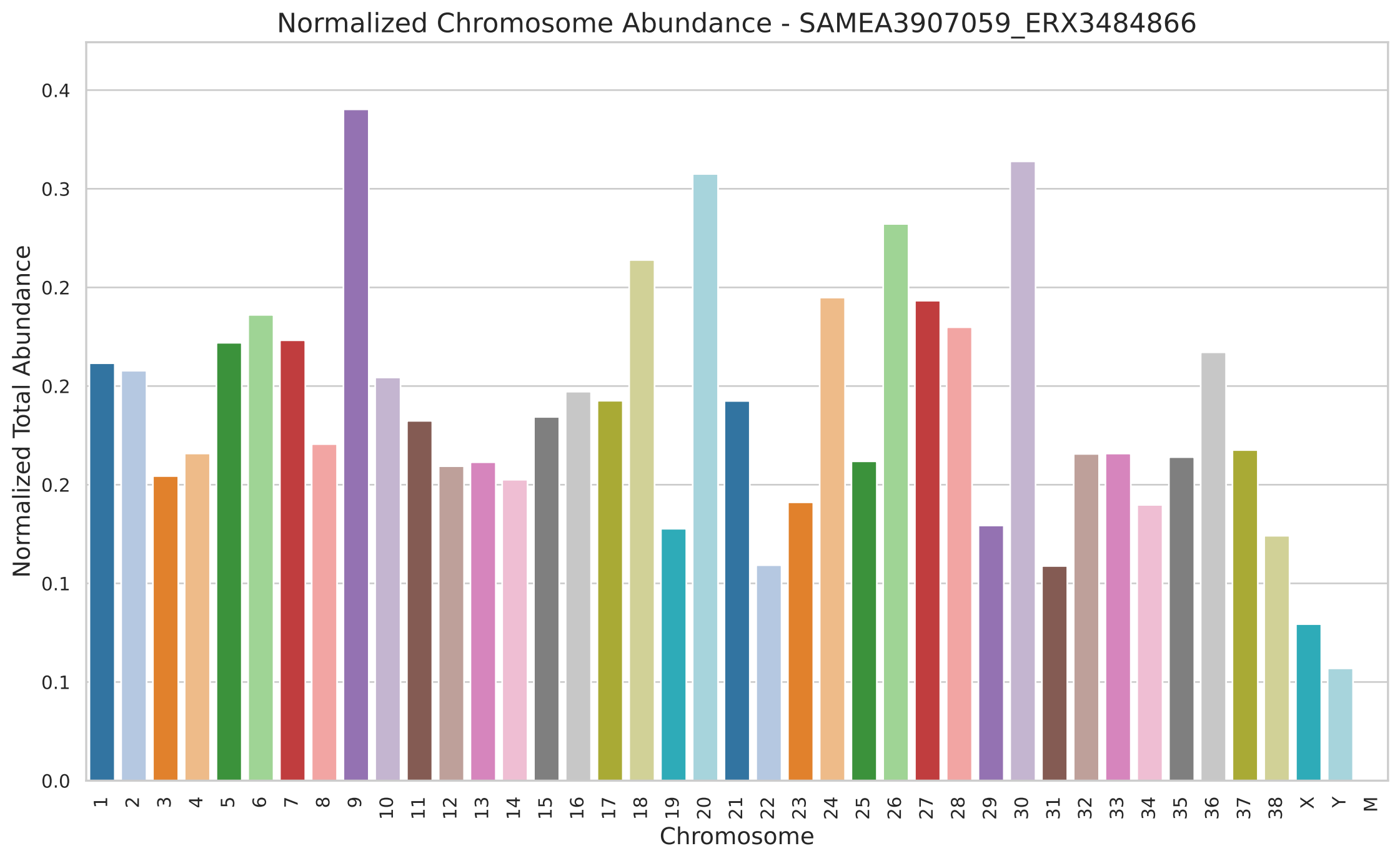

Normalized Chromosome Abundance - SAMEA3907065_ERX3484870
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

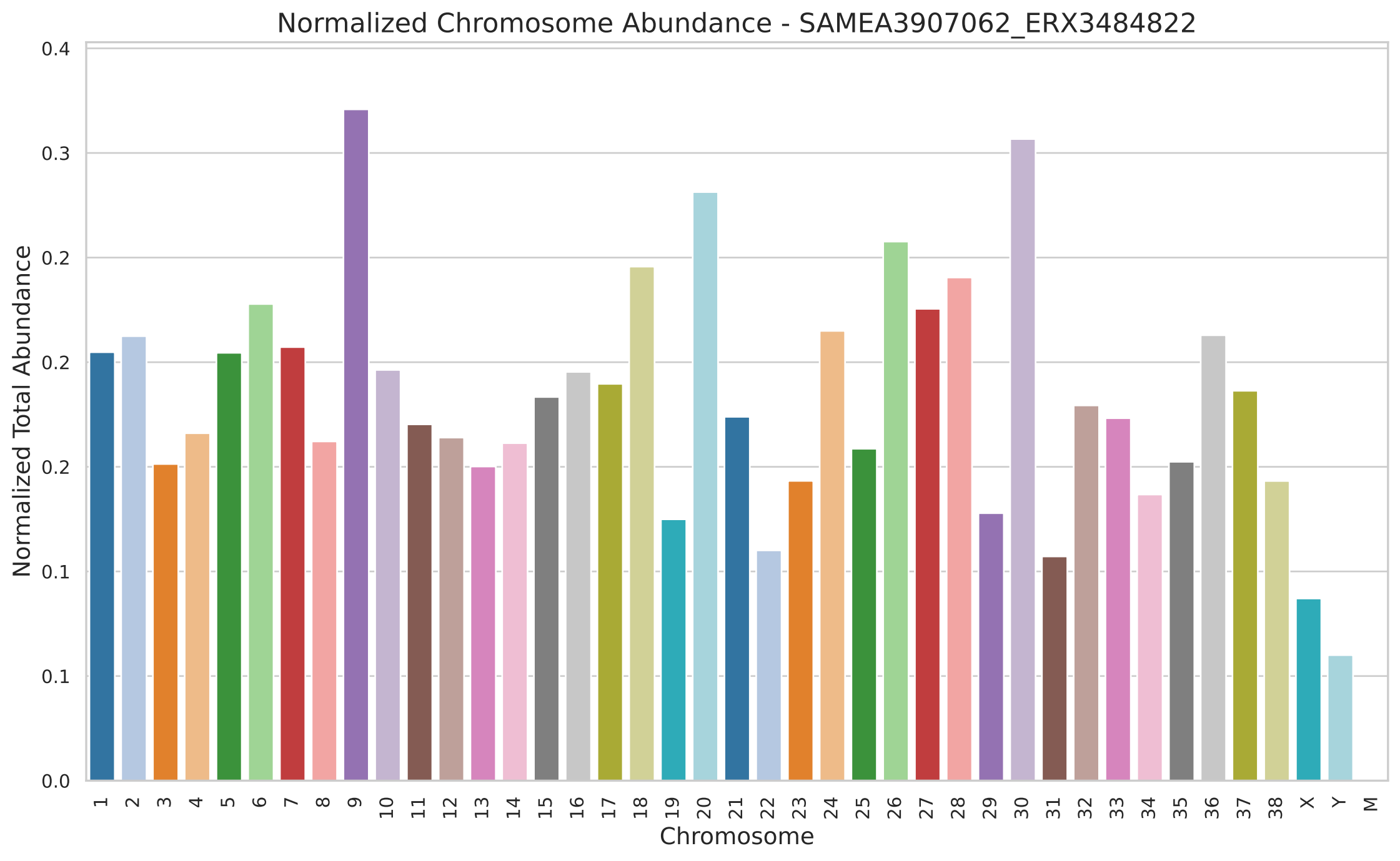

Normalized Chromosome Abundance - SAMEA3907041_ERX3484815
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

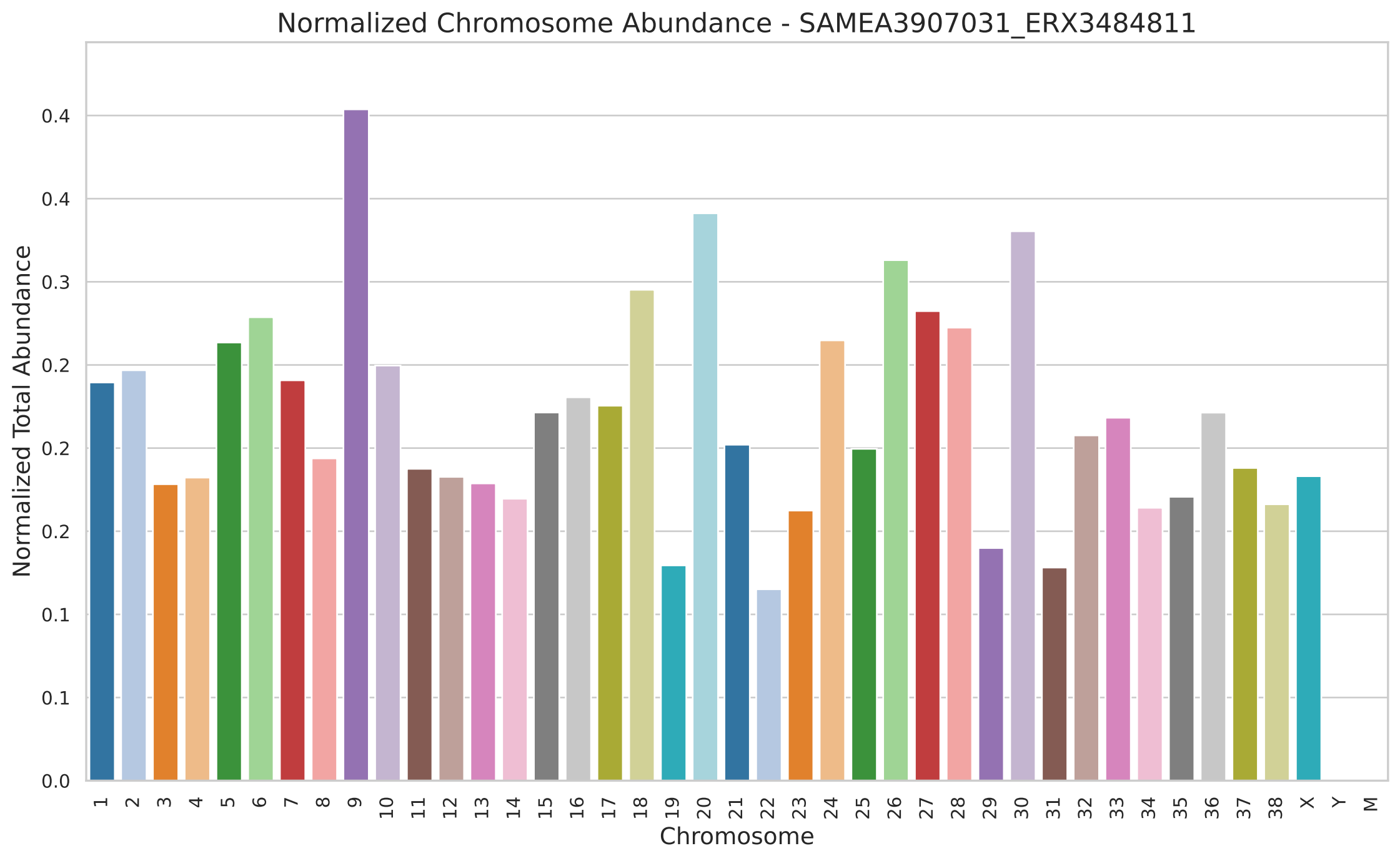

Normalized Chromosome Abundance - SAMEA3907051_ERX3484840
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
0.4
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

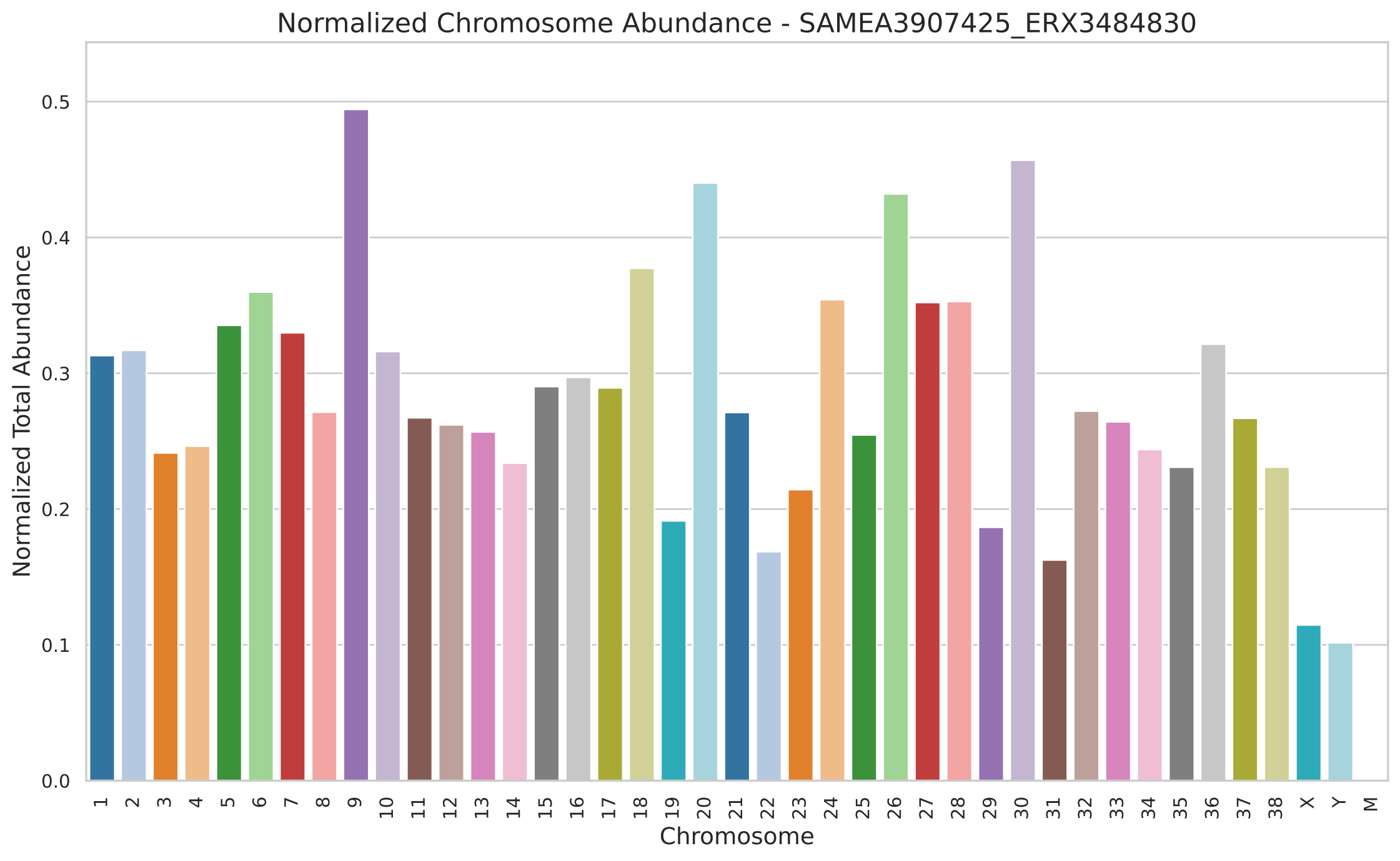

Normalized Chromosome Abundance - SAMEA3907026_ERX3484855
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

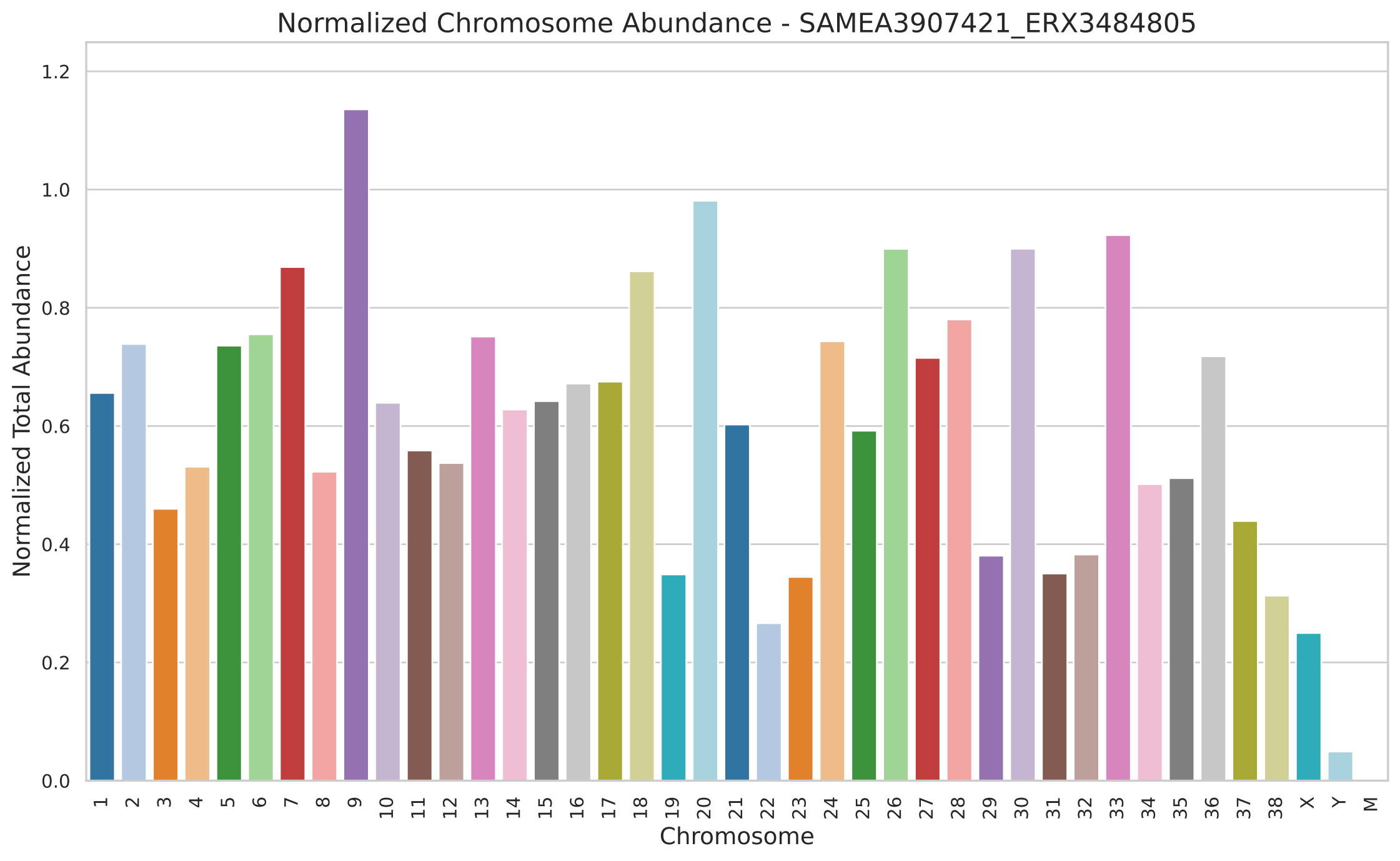

Normalized Chromosome Abundance - SAMEA3907068_ERX3484826
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

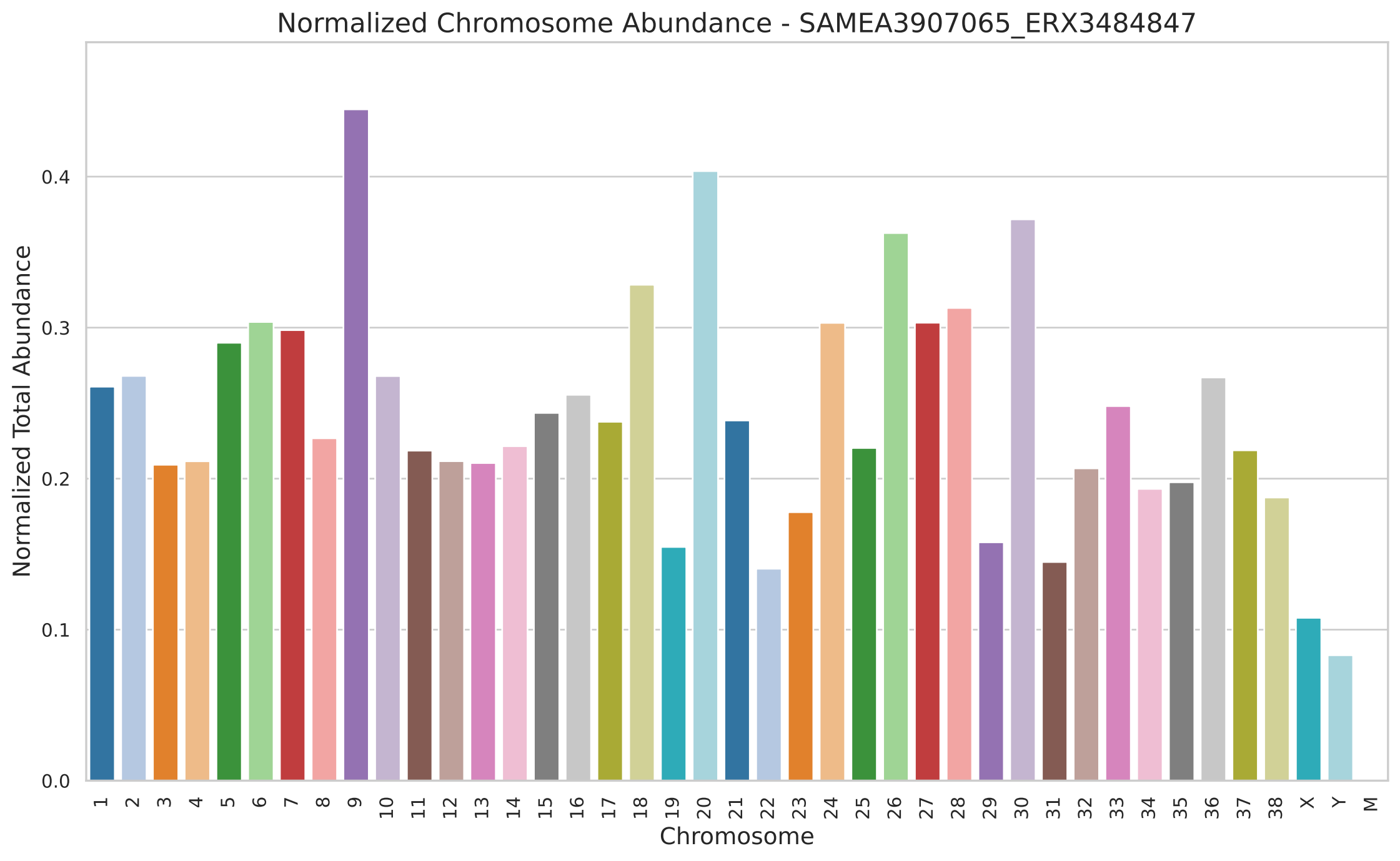

Normalized Chromosome Abundance - SAMEA3907059_ERX3484866
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

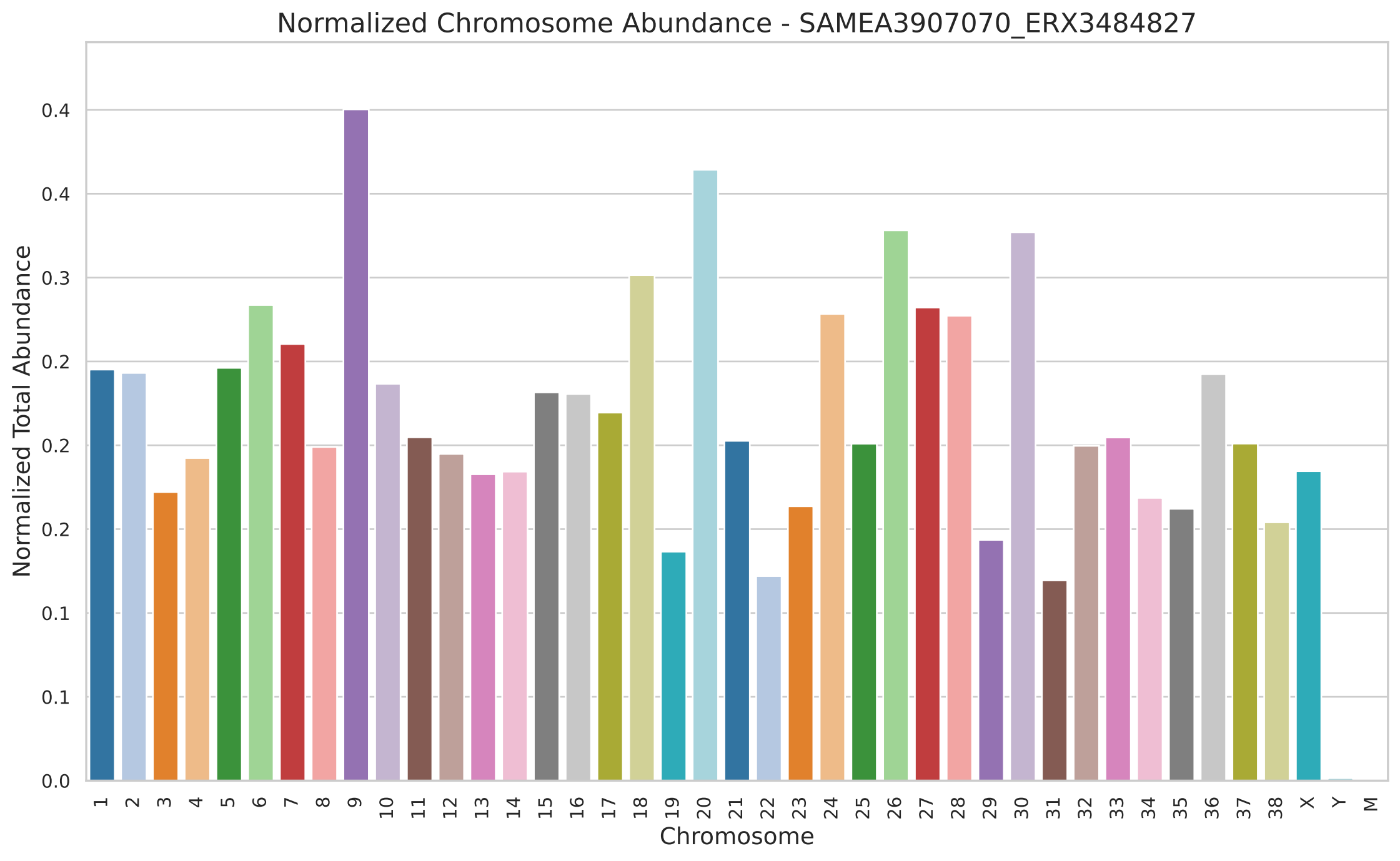

Normalized Chromosome Abundance - SAMEA3907062_ERX3484822
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

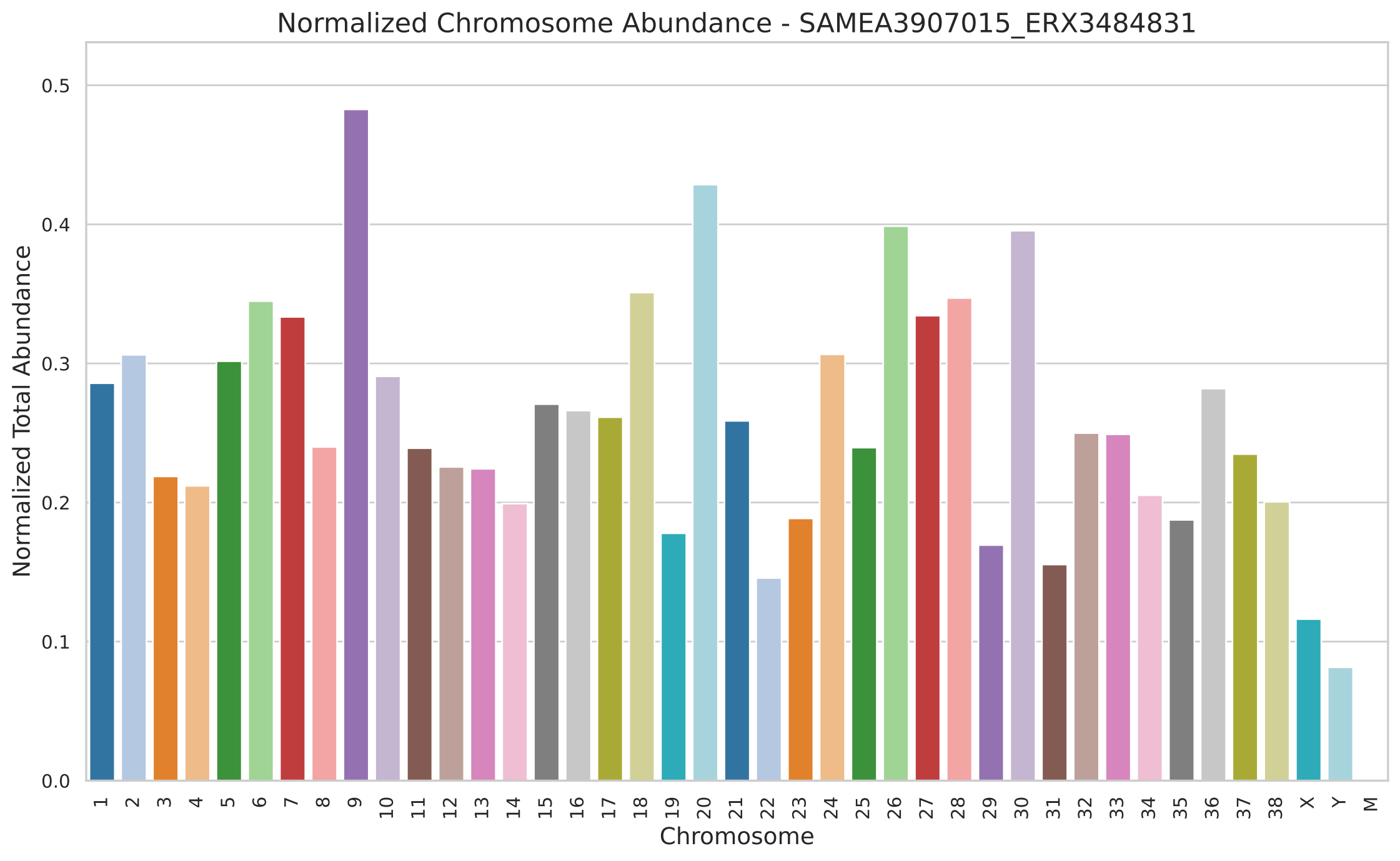

Normalized Chromosome Abundance - SAMEA3907031_ERX3484811
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

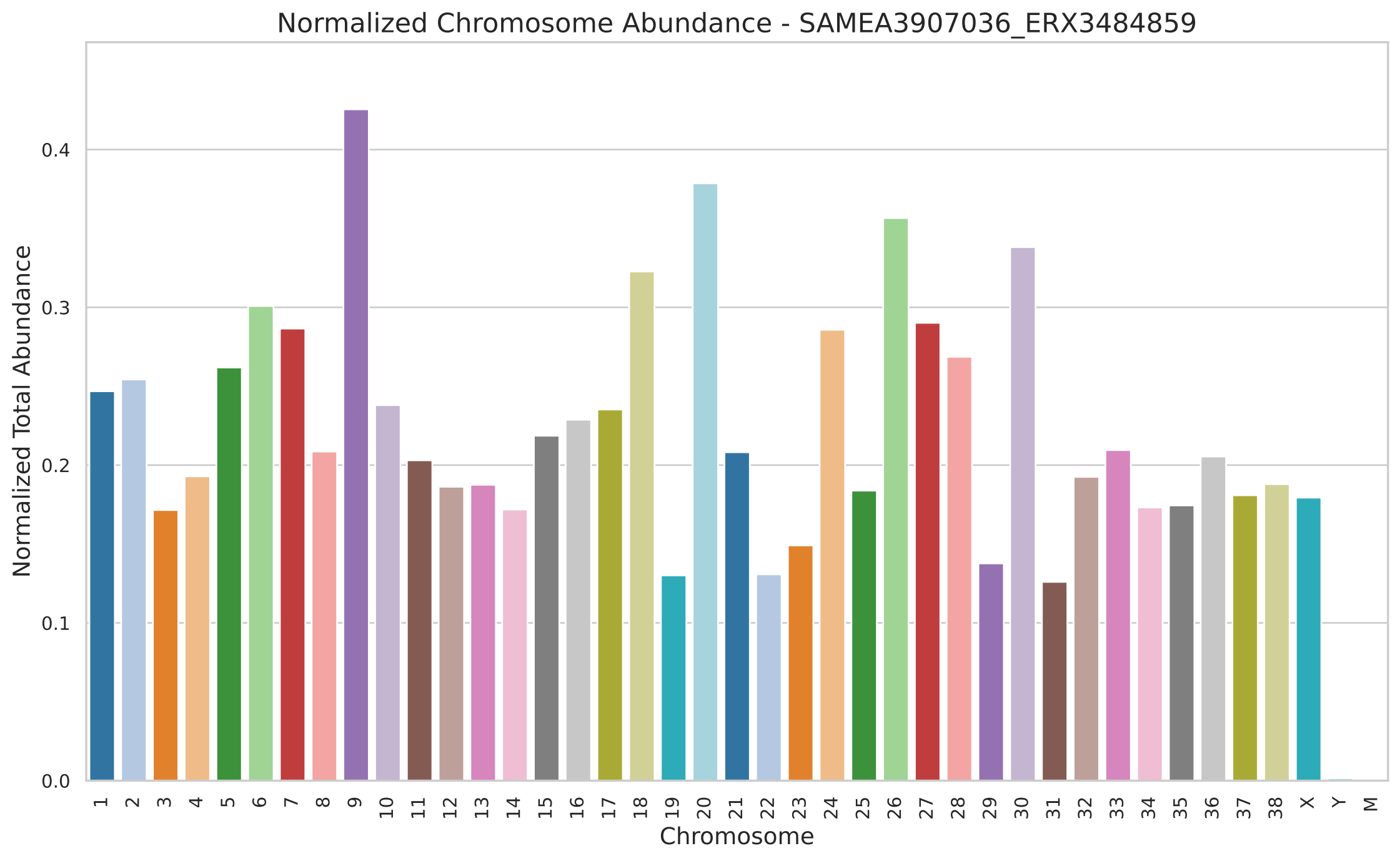

Normalized Chromosome Abundance - SAMEA3907425_ERX3484830
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

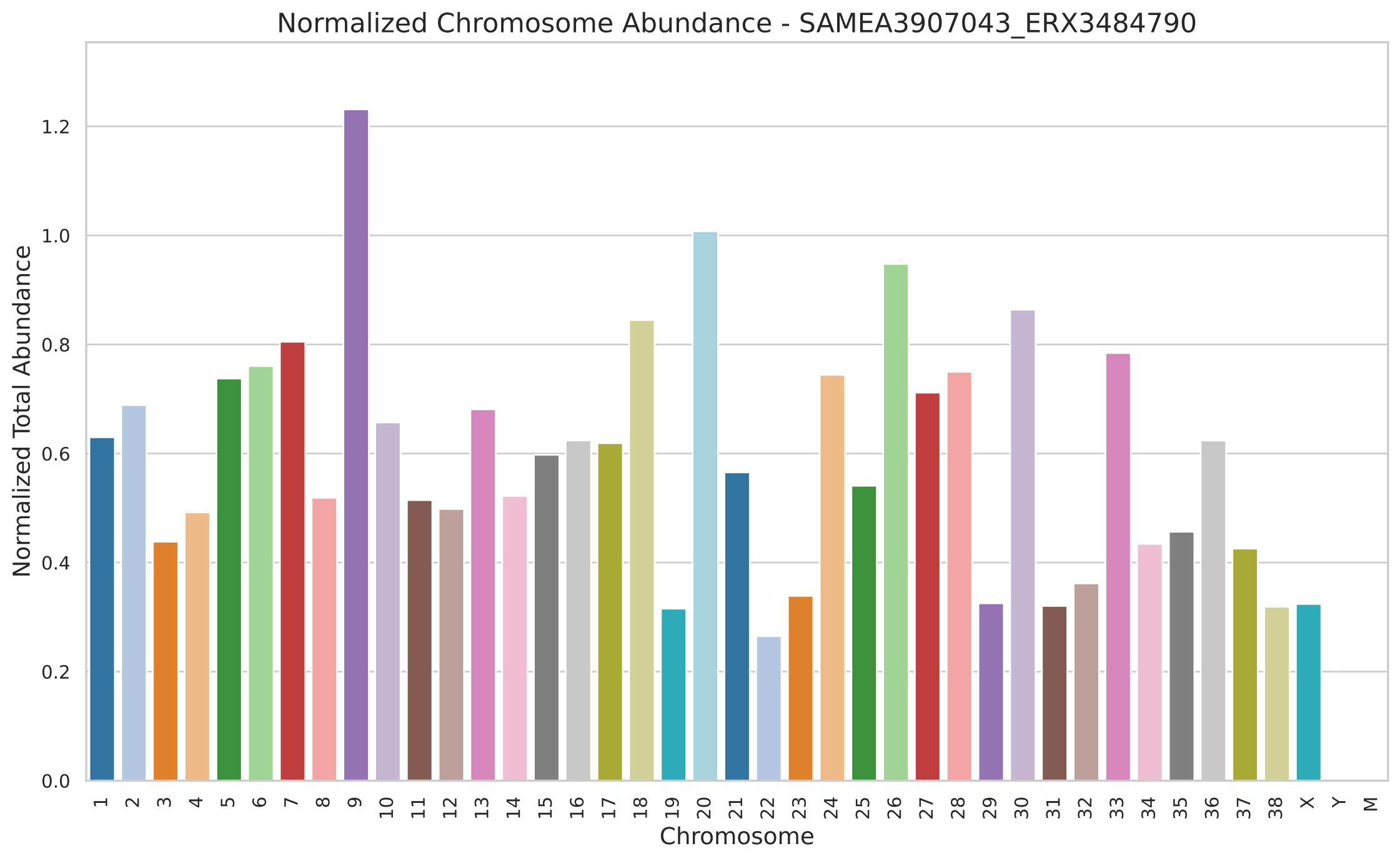

Normalized Chromosome Abundance - SAMEA3907421_ERX3484805
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

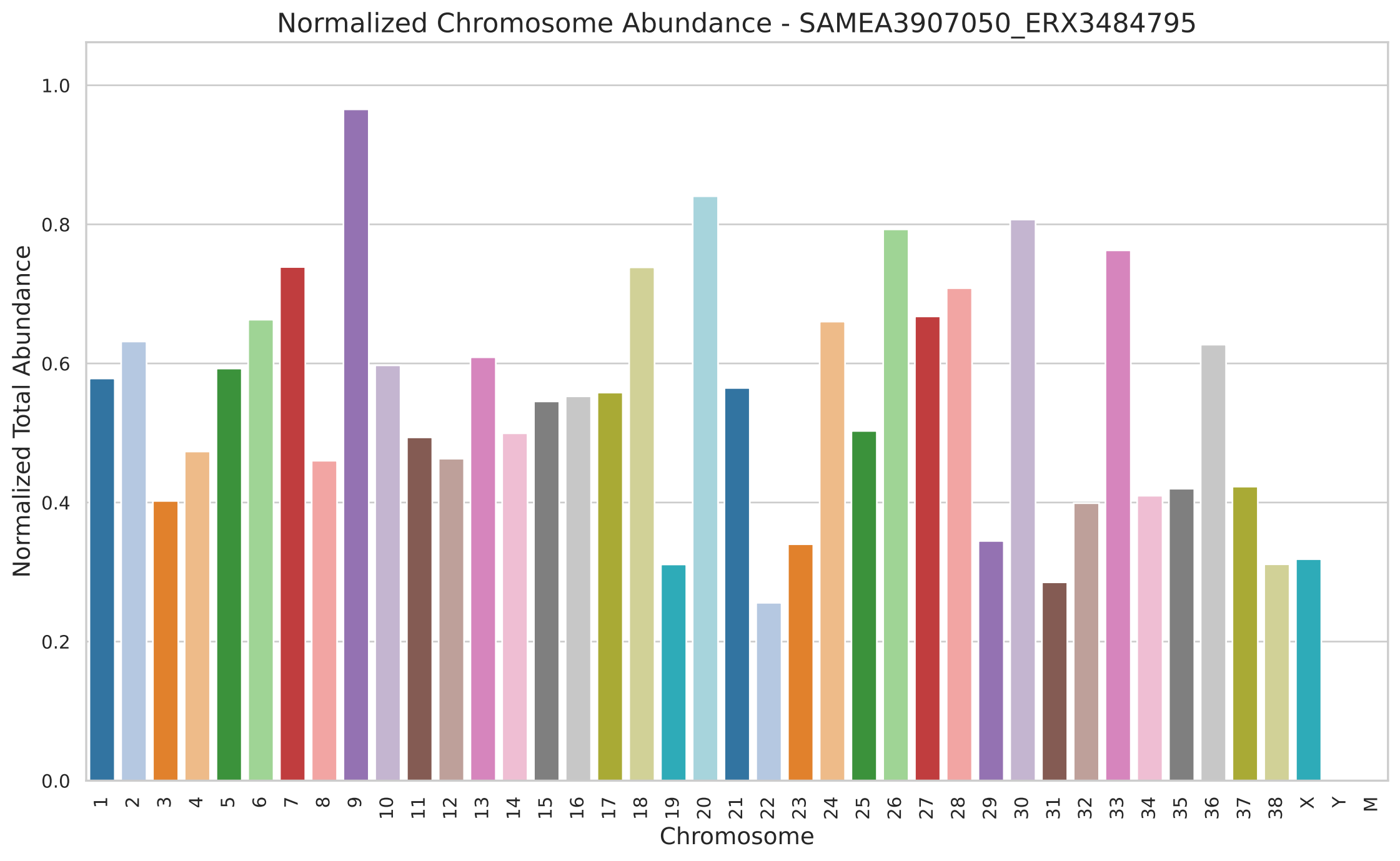

Normalized Chromosome Abundance - SAMEA3907065_ERX3484847
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

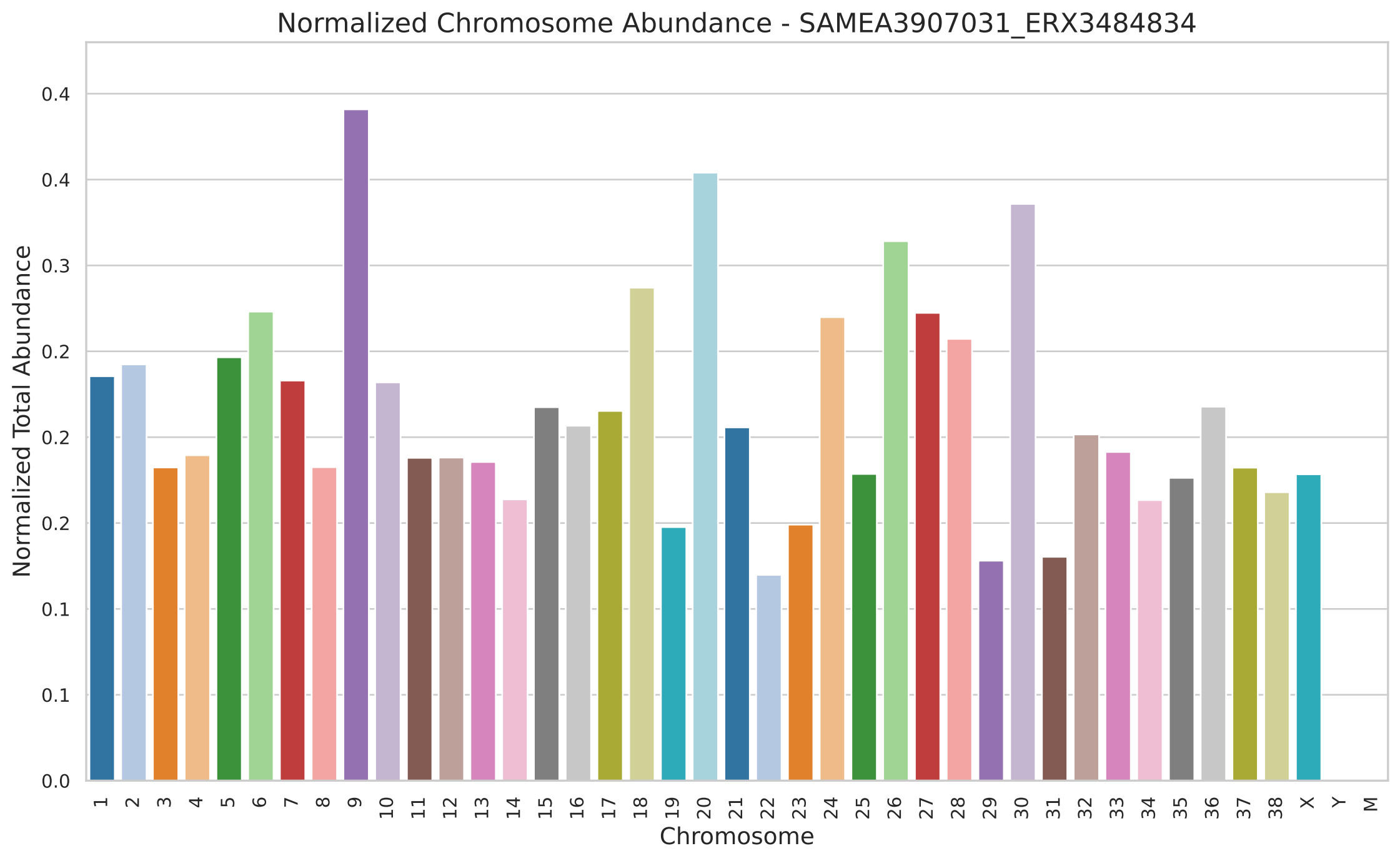

Normalized Chromosome Abundance - SAMEA3907070_ERX3484827
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

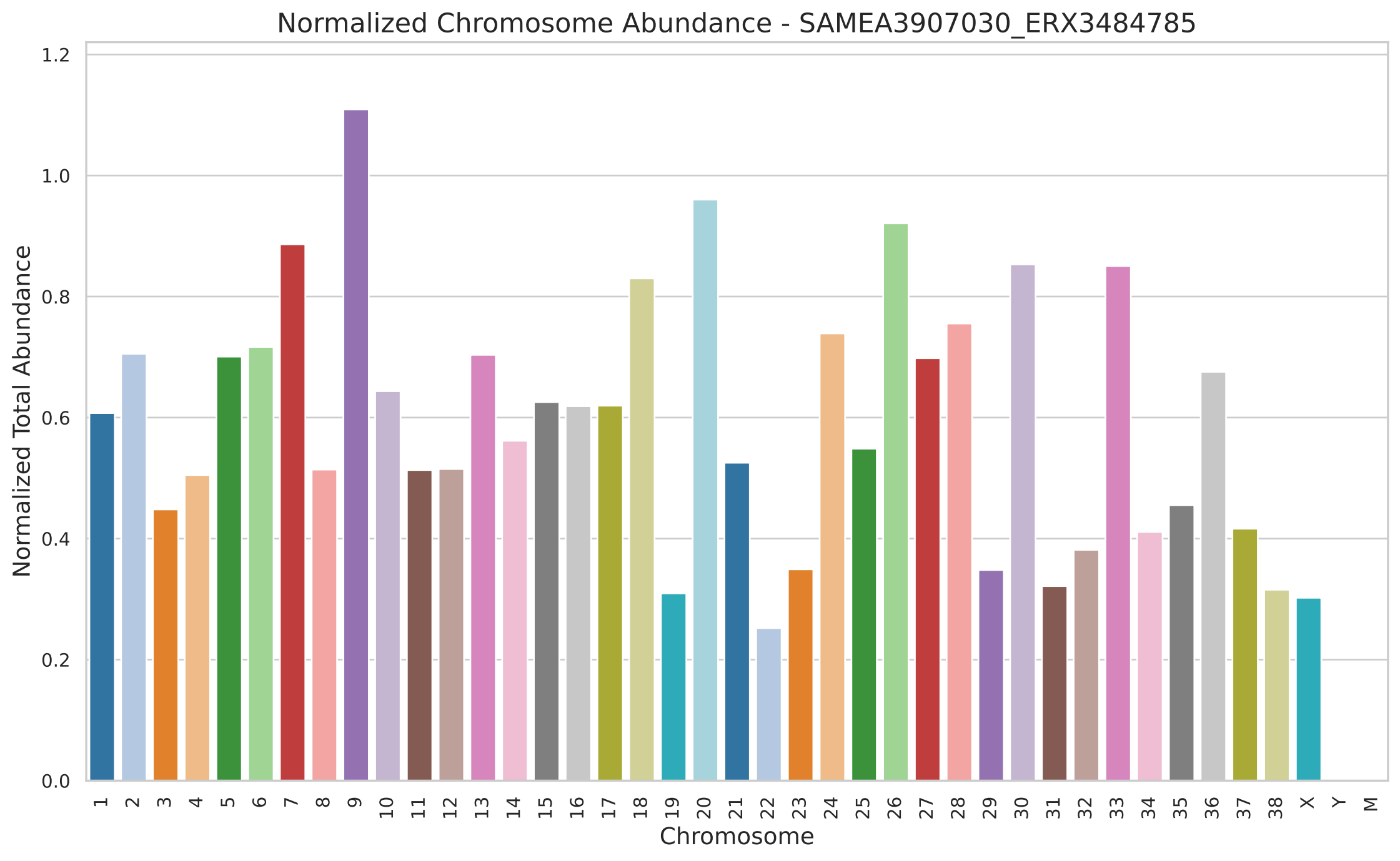

Normalized Chromosome Abundance - SAMEA3907015_ERX3484831
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

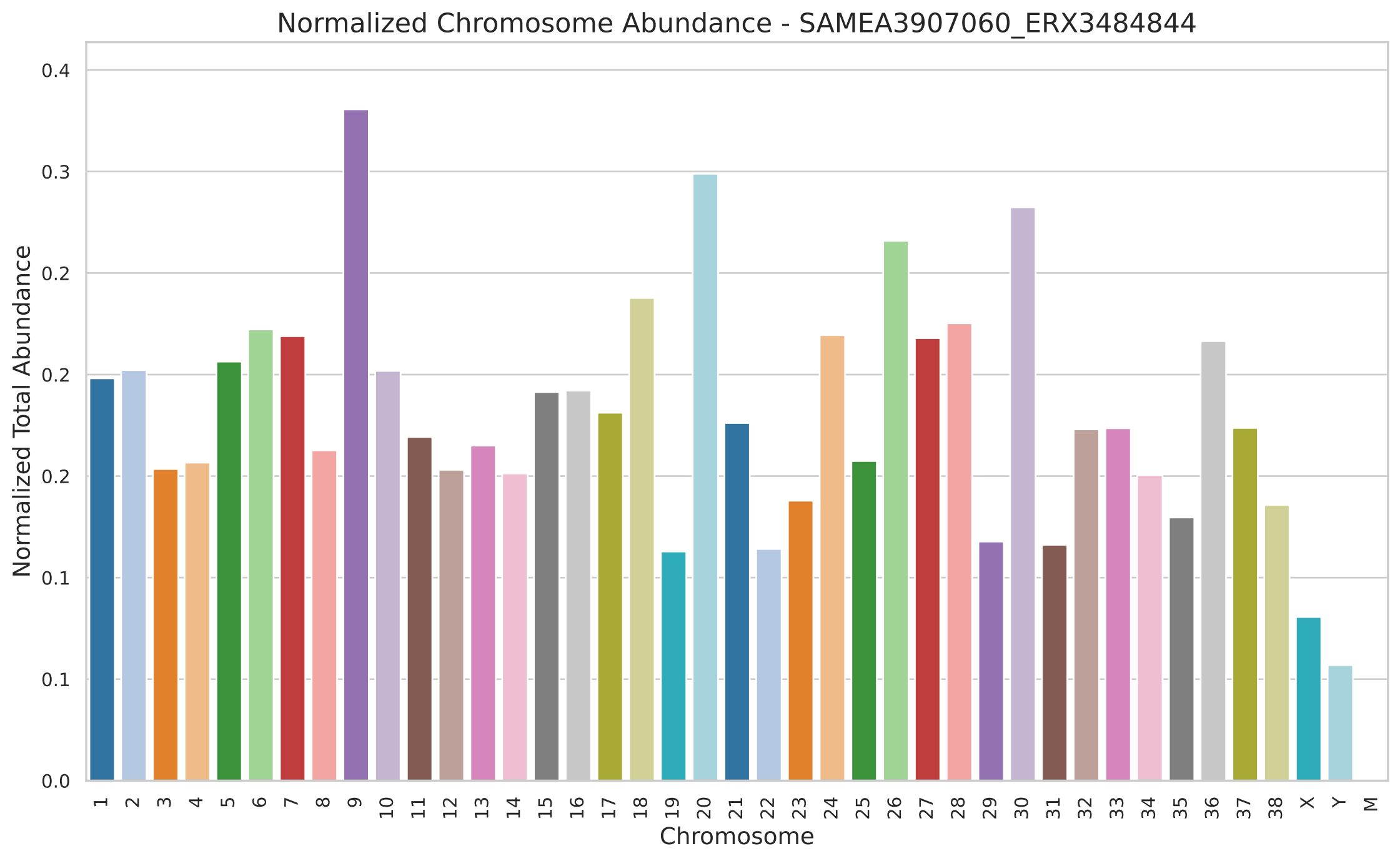

Normalized Chromosome Abundance - SAMEA3907036_ERX3484859
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

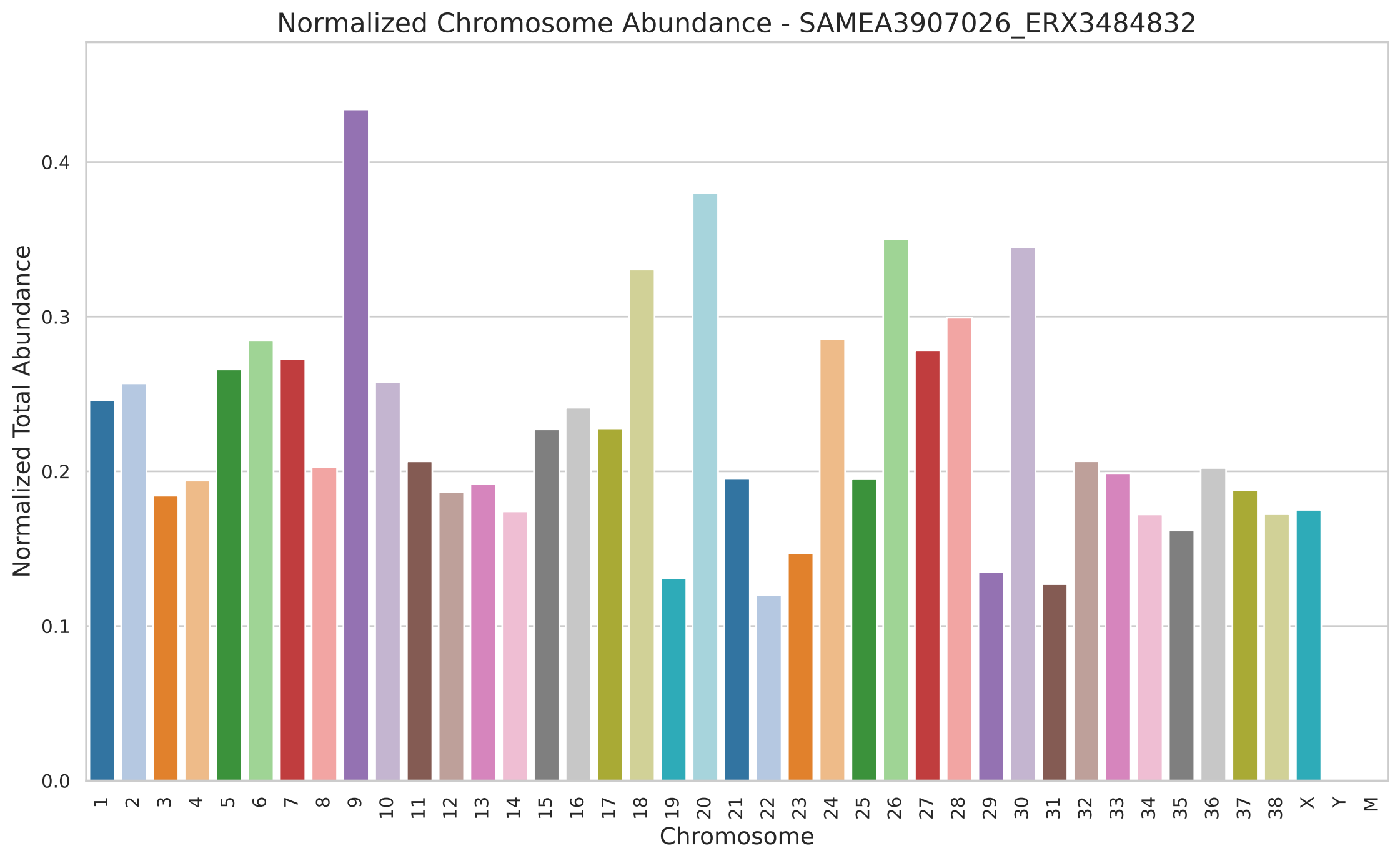

Normalized Chromosome Abundance - SAMEA3907043_ERX3484790
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

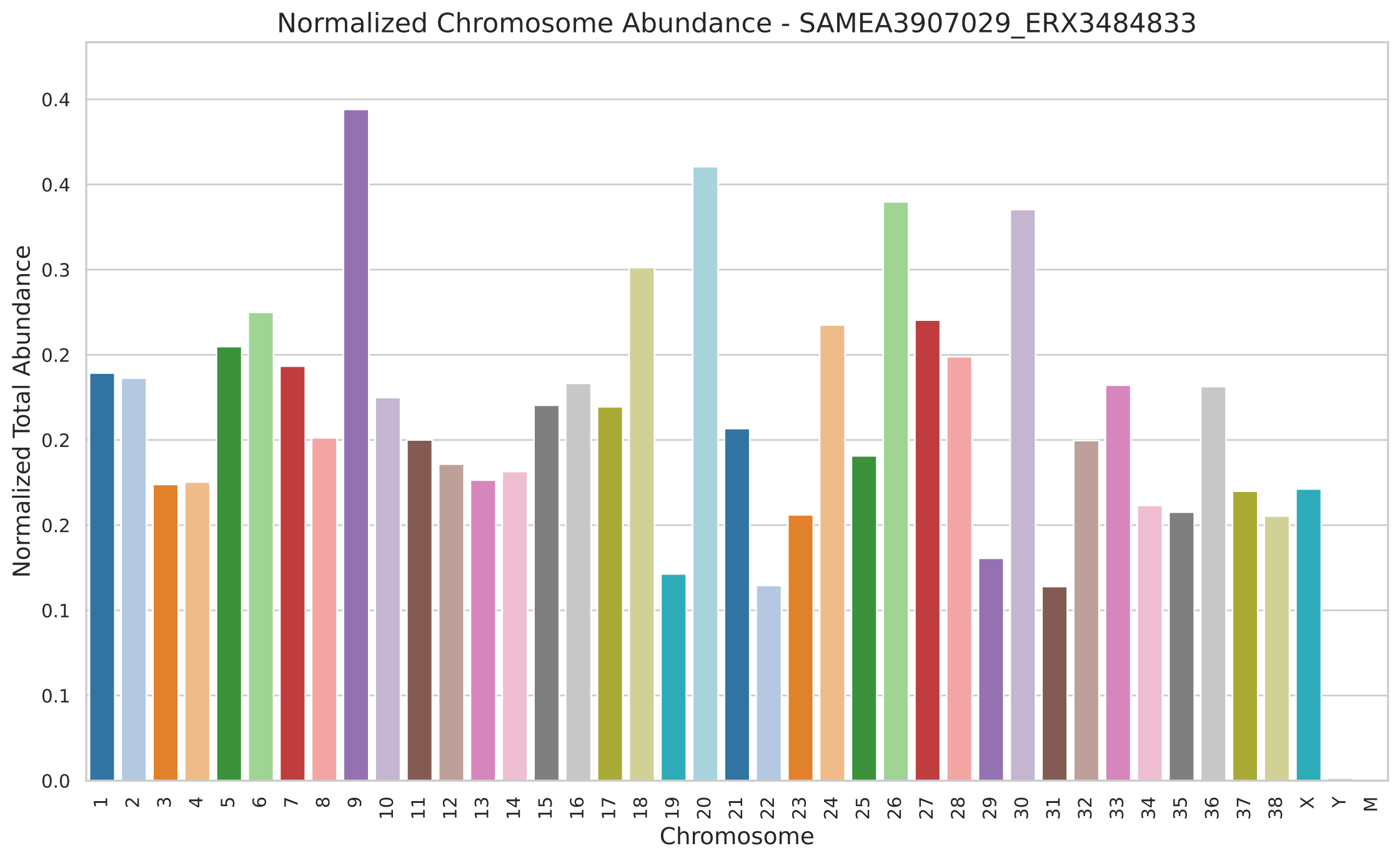

Normalized Chromosome Abundance - SAMEA3907050_ERX3484795
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

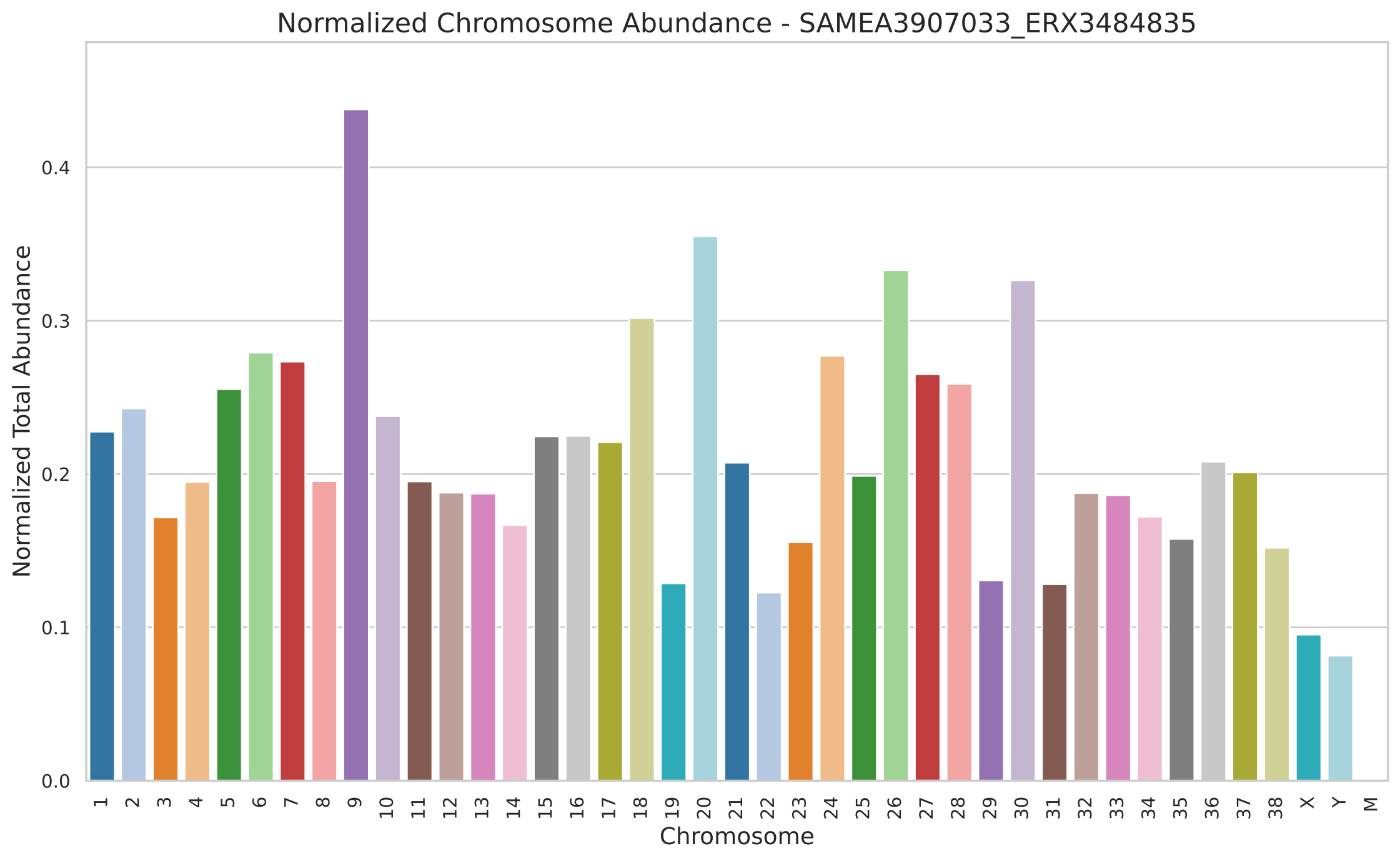

Normalized Chromosome Abundance - SAMEA3907031_ERX3484834
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

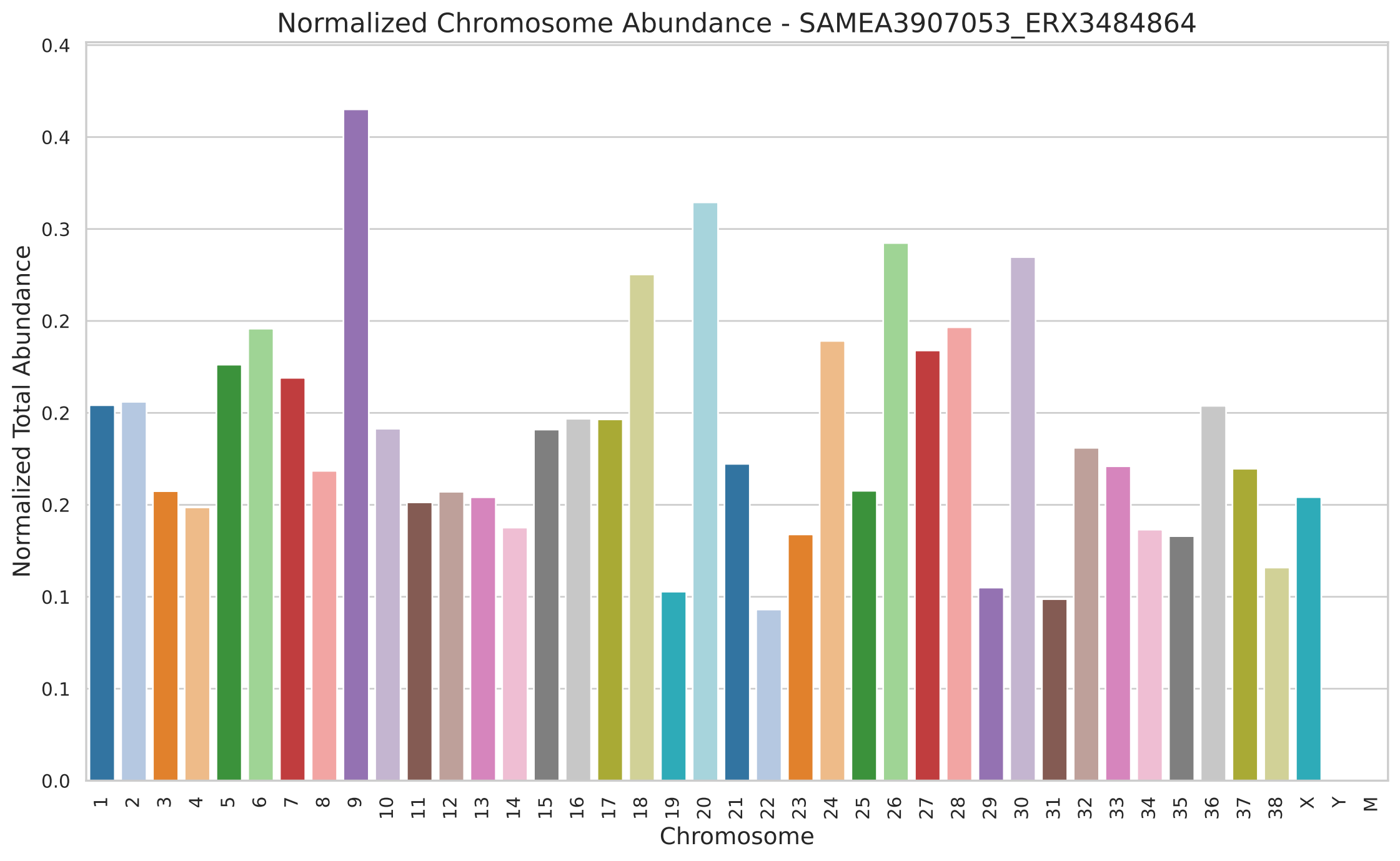

Normalized Chromosome Abundance - SAMEA3907030_ERX3484785
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

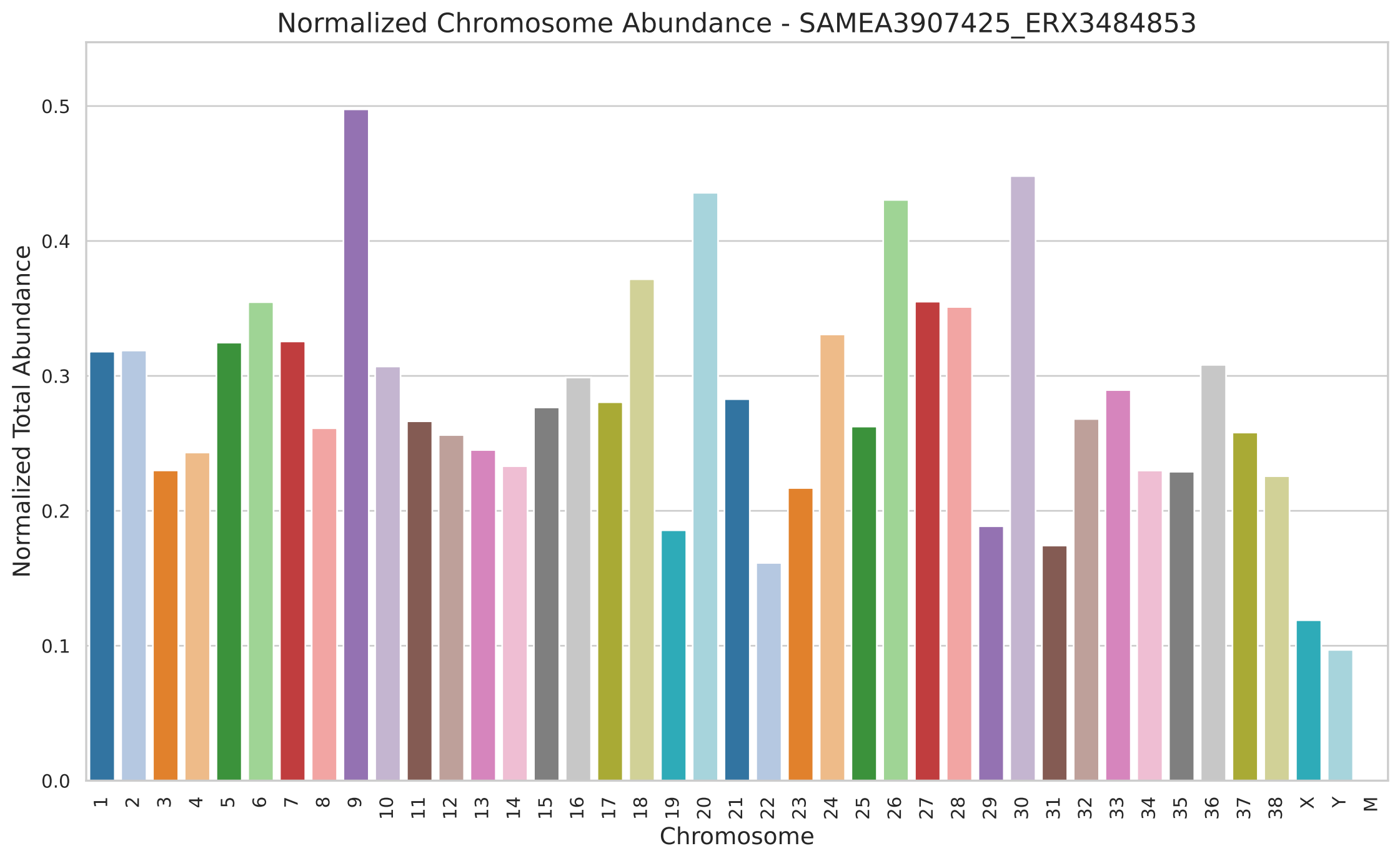

Normalized Chromosome Abundance - SAMEA3907060_ERX3484844
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

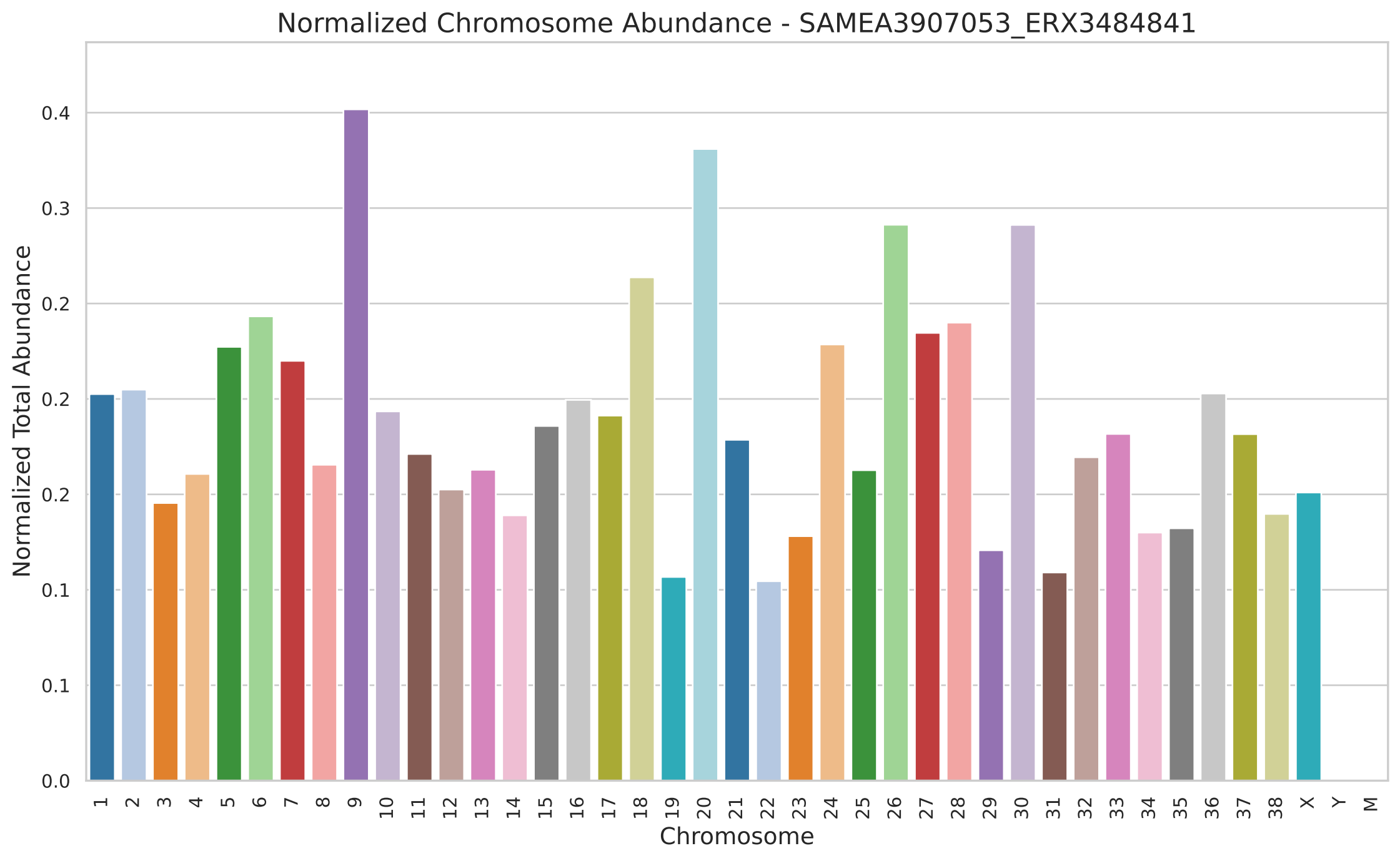

Normalized Chromosome Abundance - SAMEA3907026_ERX3484832
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

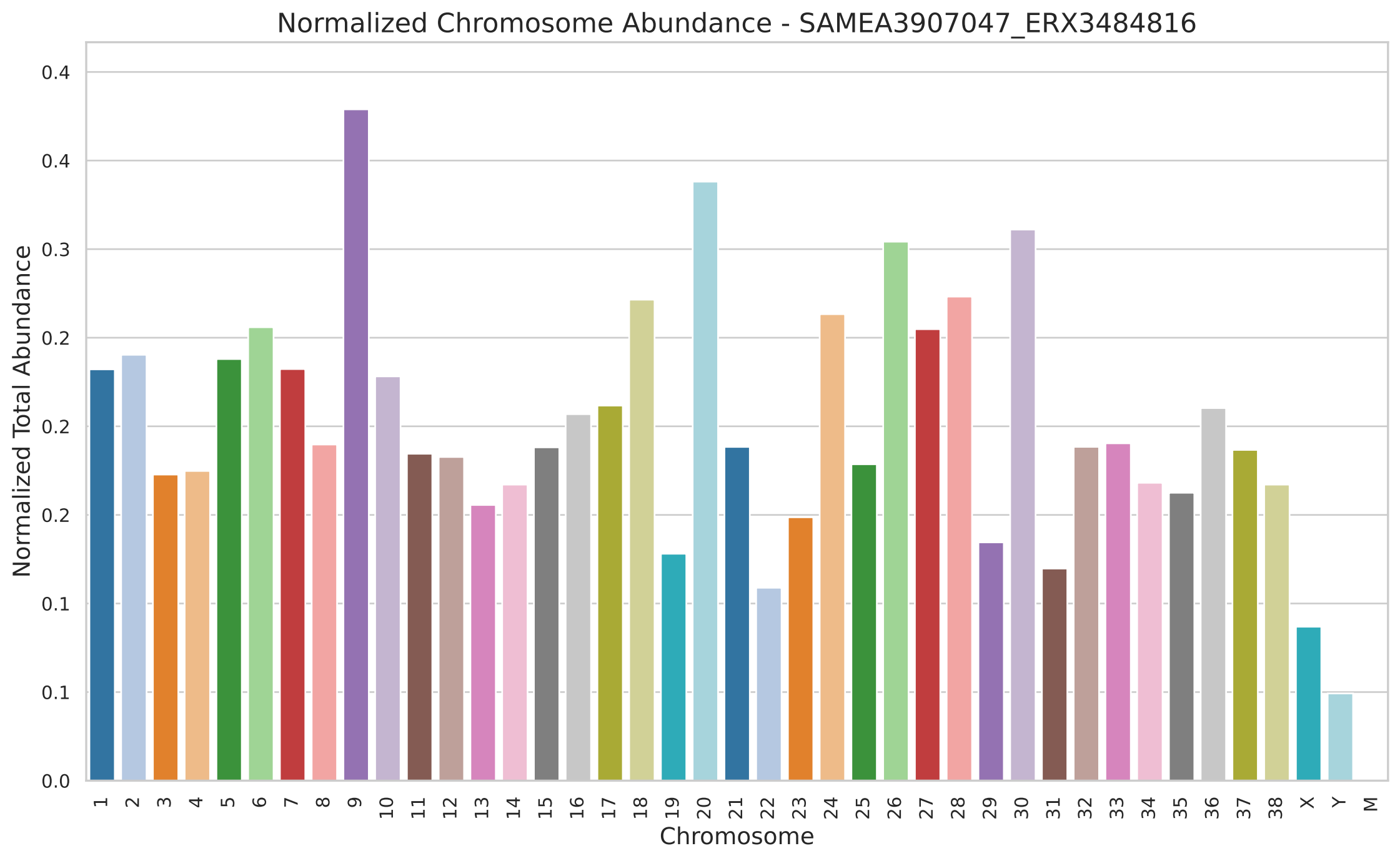

Normalized Chromosome Abundance - SAMEA3907029_ERX3484833
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

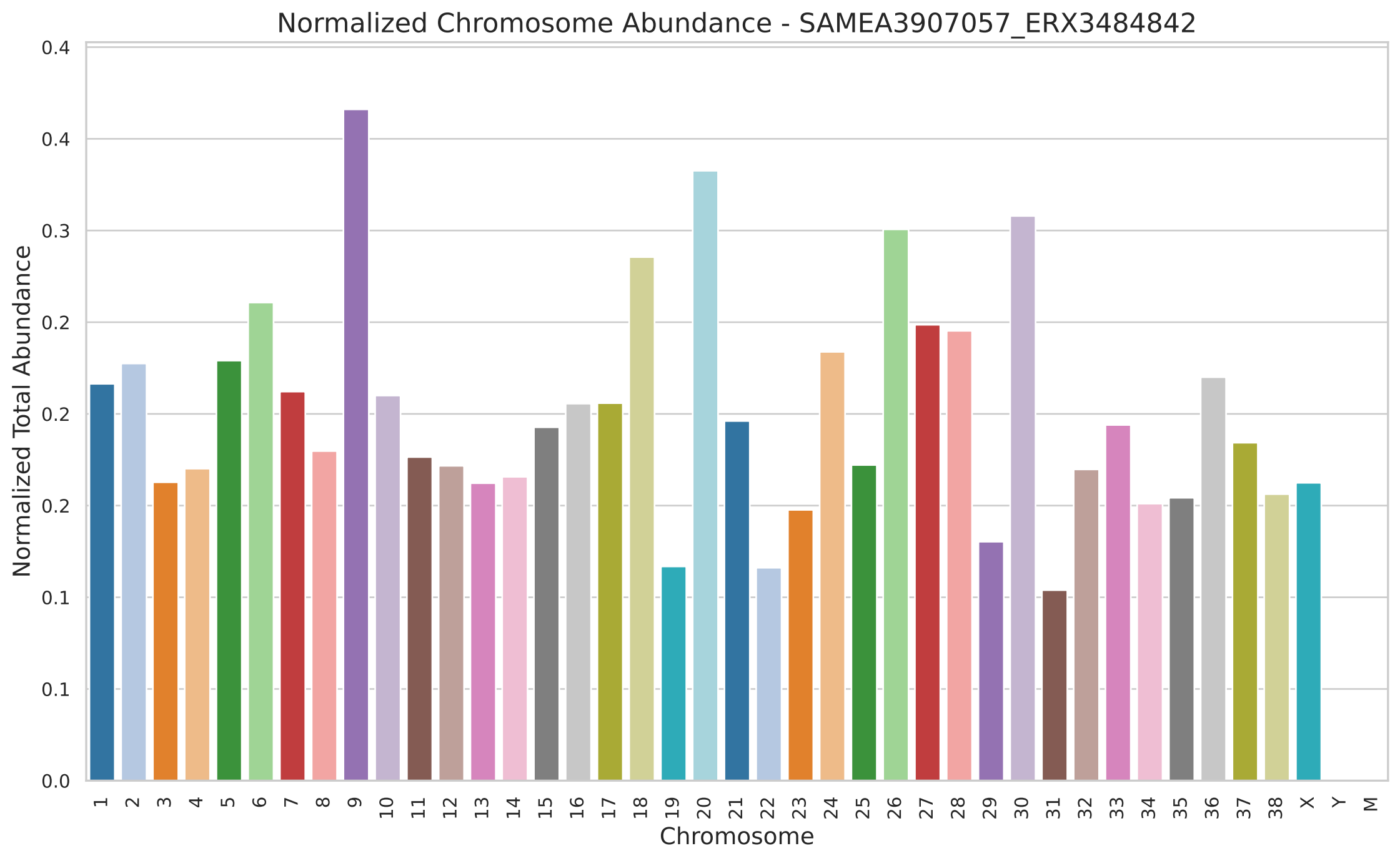

Normalized Chromosome Abundance - SAMEA3907033_ERX3484835
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

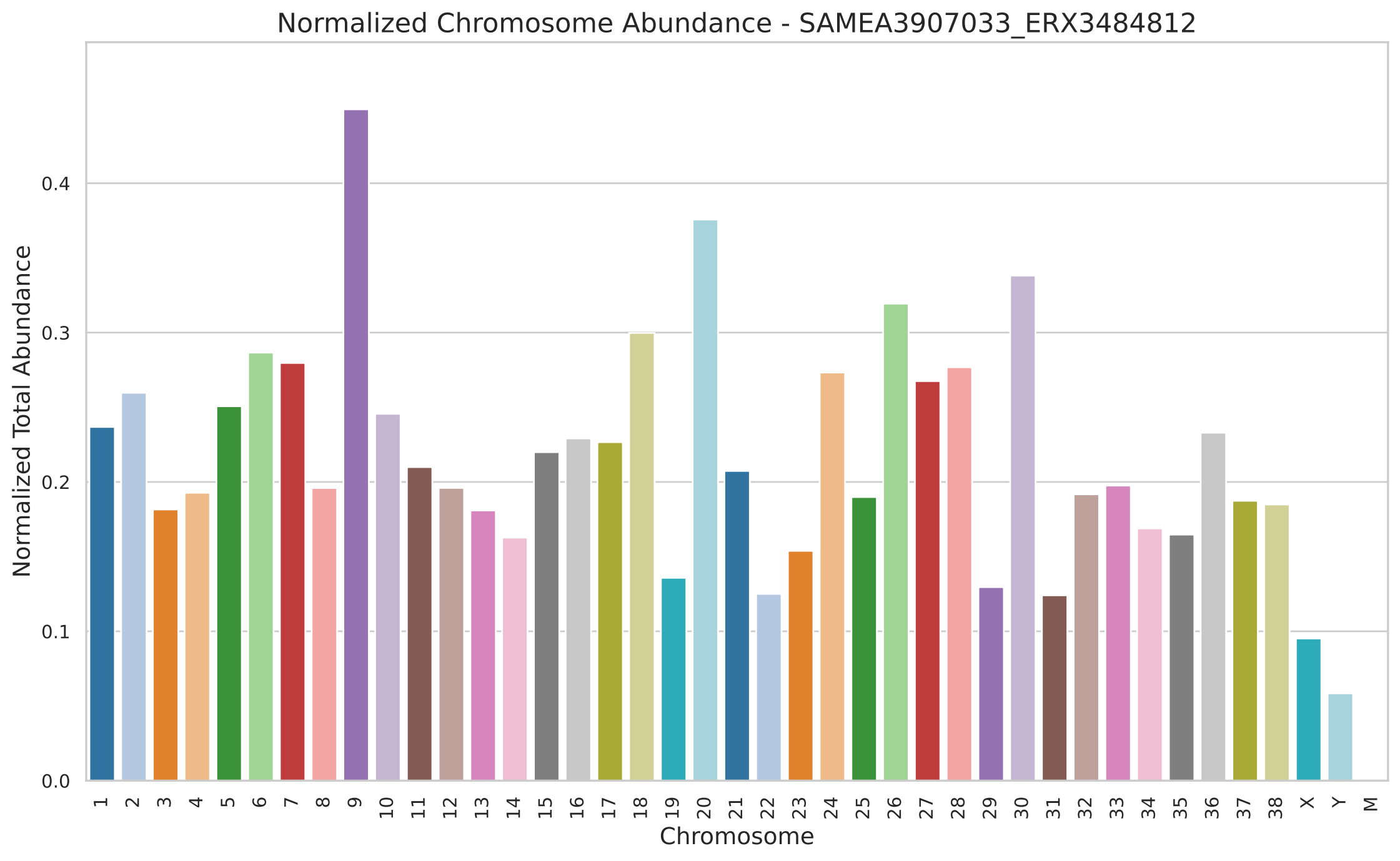

Normalized Chromosome Abundance - SAMEA3907053_ERX3484864
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
0.4
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

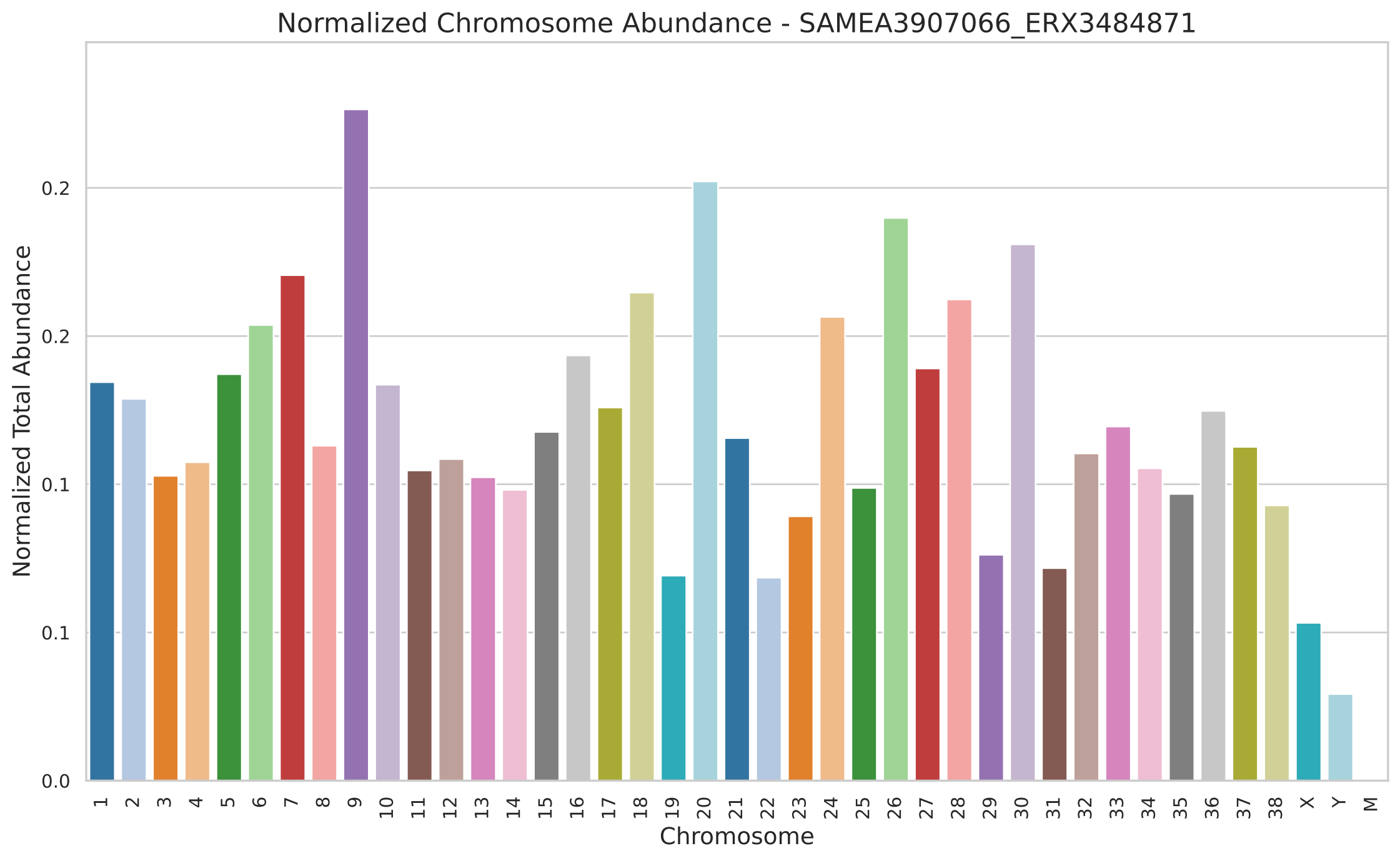

Normalized Chromosome Abundance - SAMEA3907425_ERX3484853
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

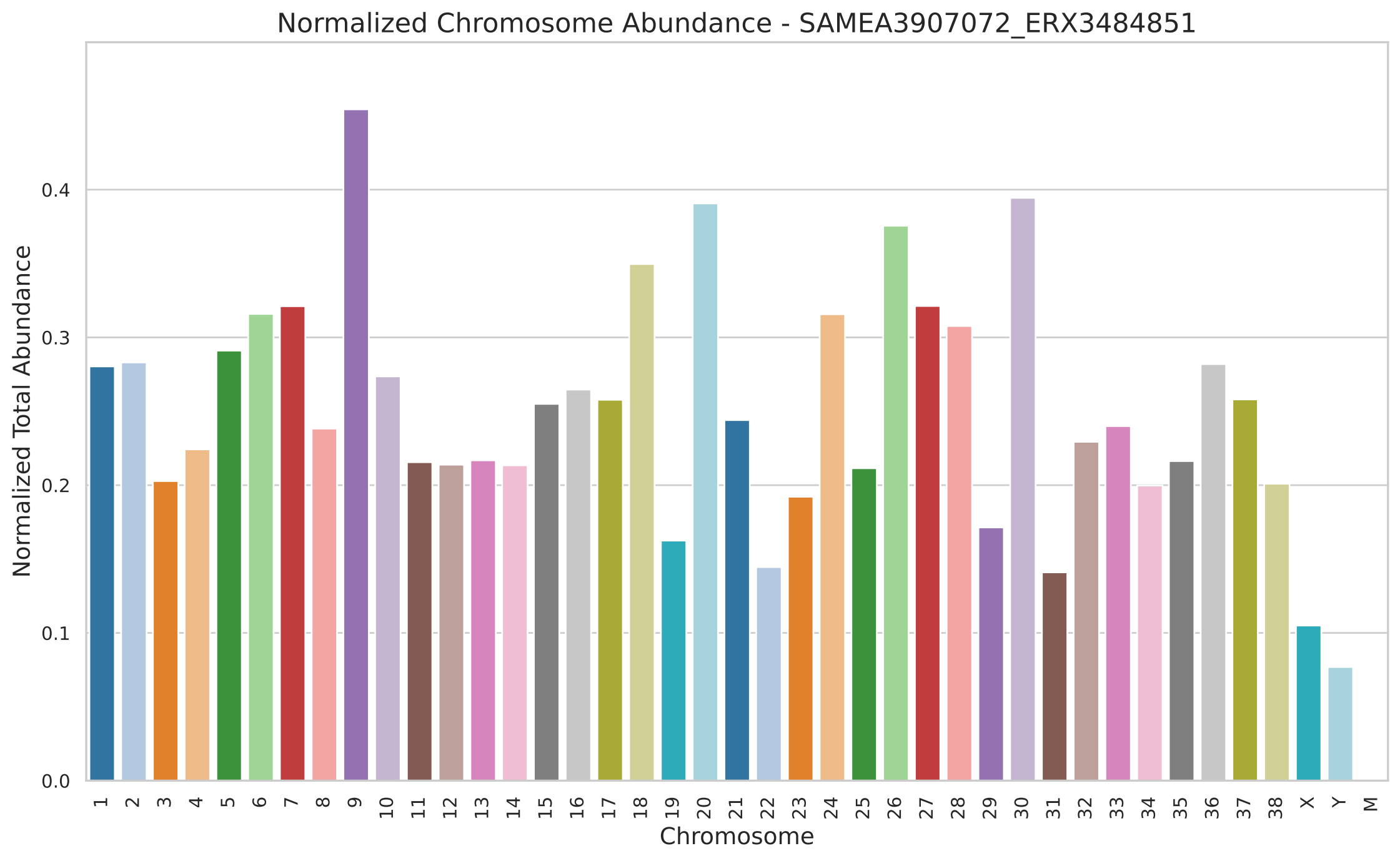

Normalized Chromosome Abundance - SAMEA3907053_ERX3484841
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

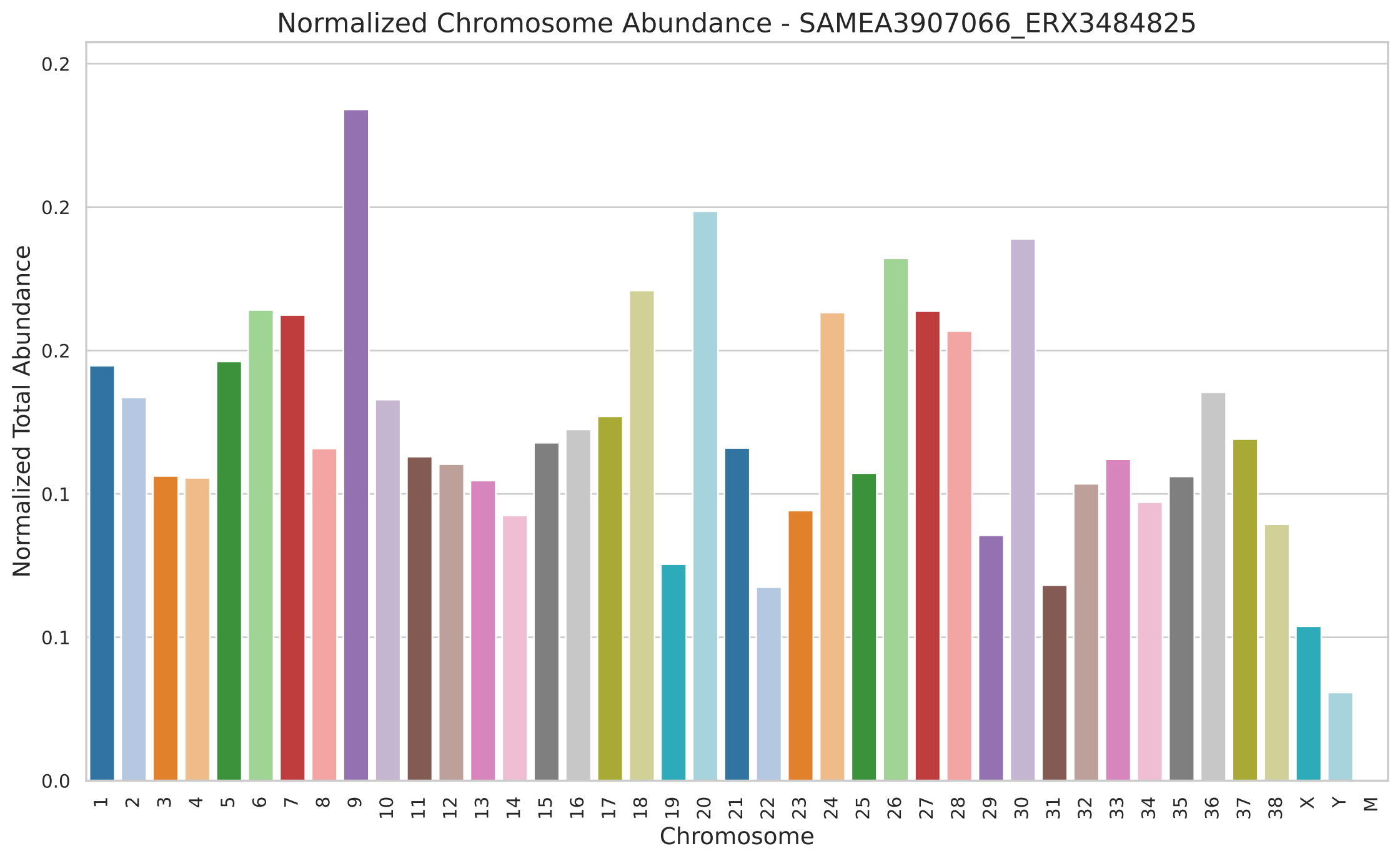

Normalized Chromosome Abundance - SAMEA3907047_ERX3484816
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
0.4
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

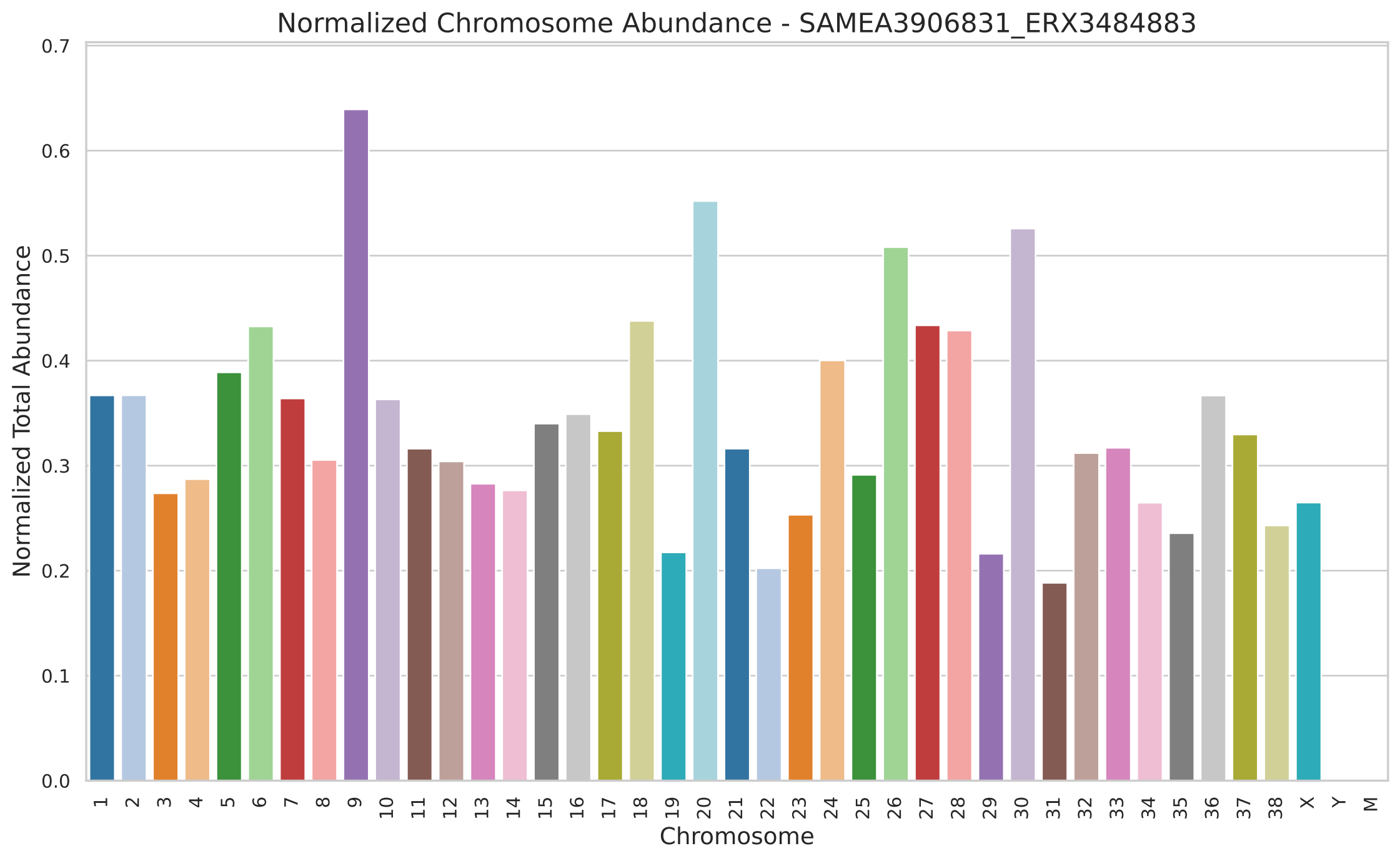

Normalized Chromosome Abundance - SAMEA3907057_ERX3484842
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
0.4
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

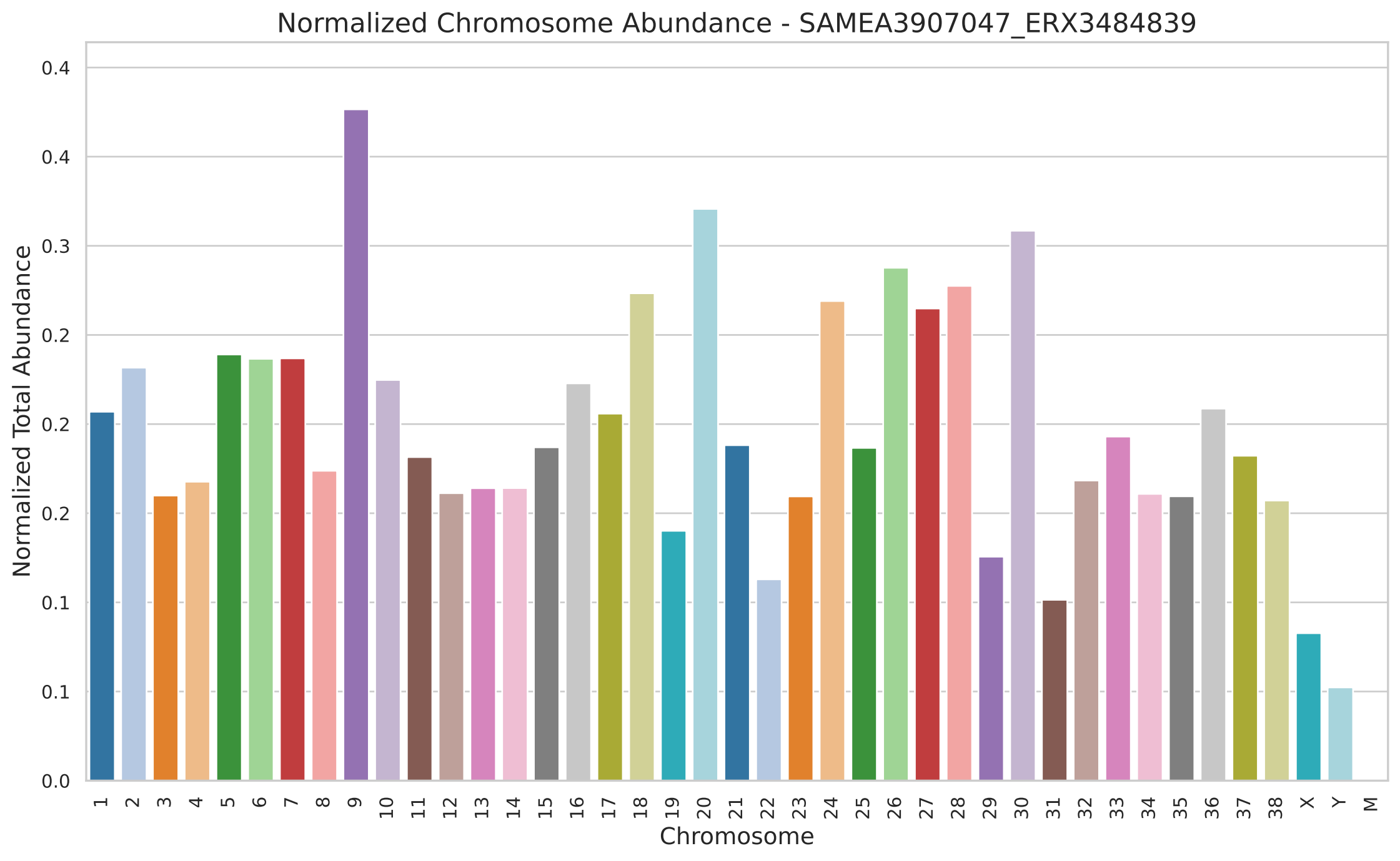

Normalized Chromosome Abundance - SAMEA3907033_ERX3484812
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

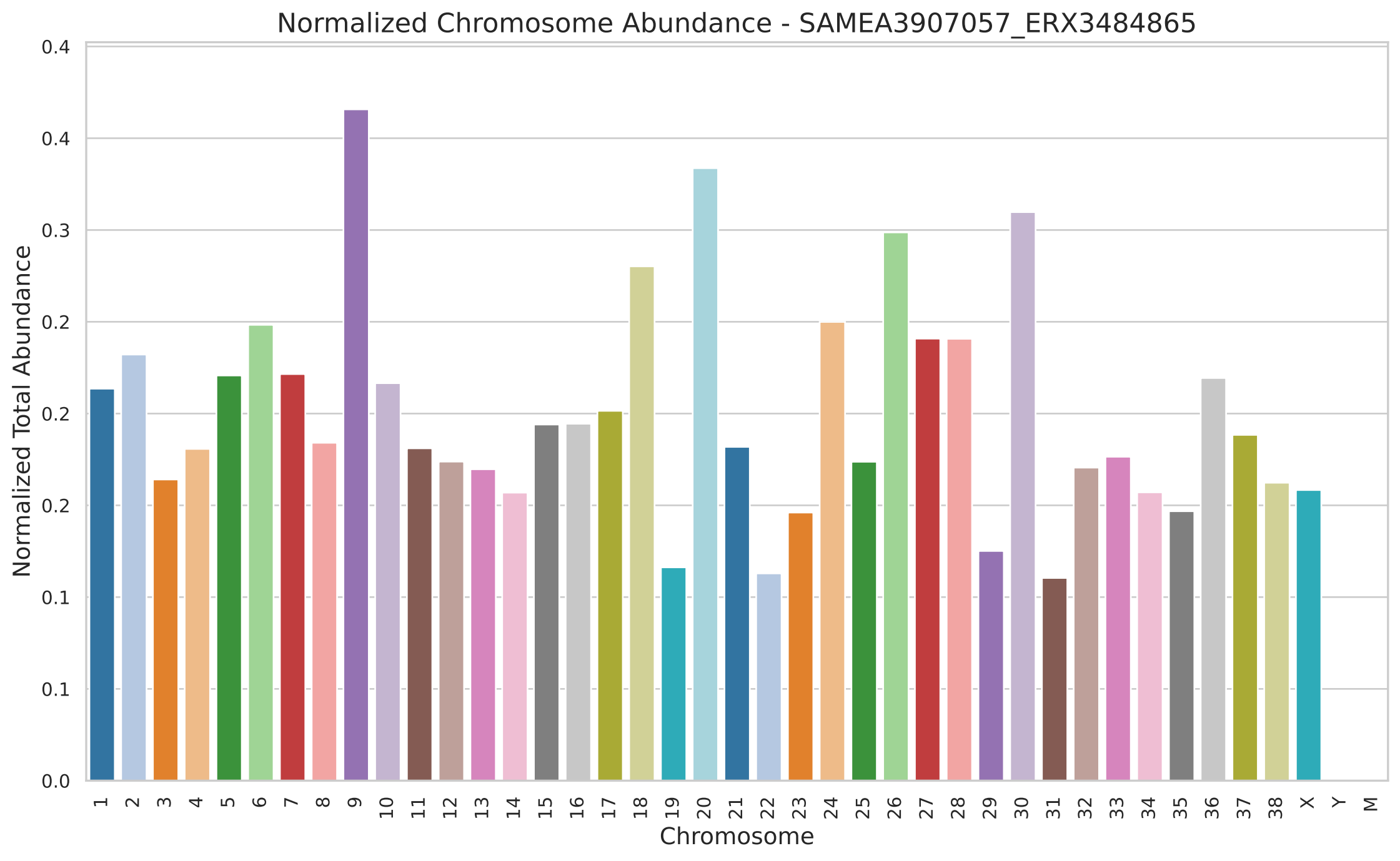

Normalized Chromosome Abundance - SAMEA3907066_ERX3484871
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

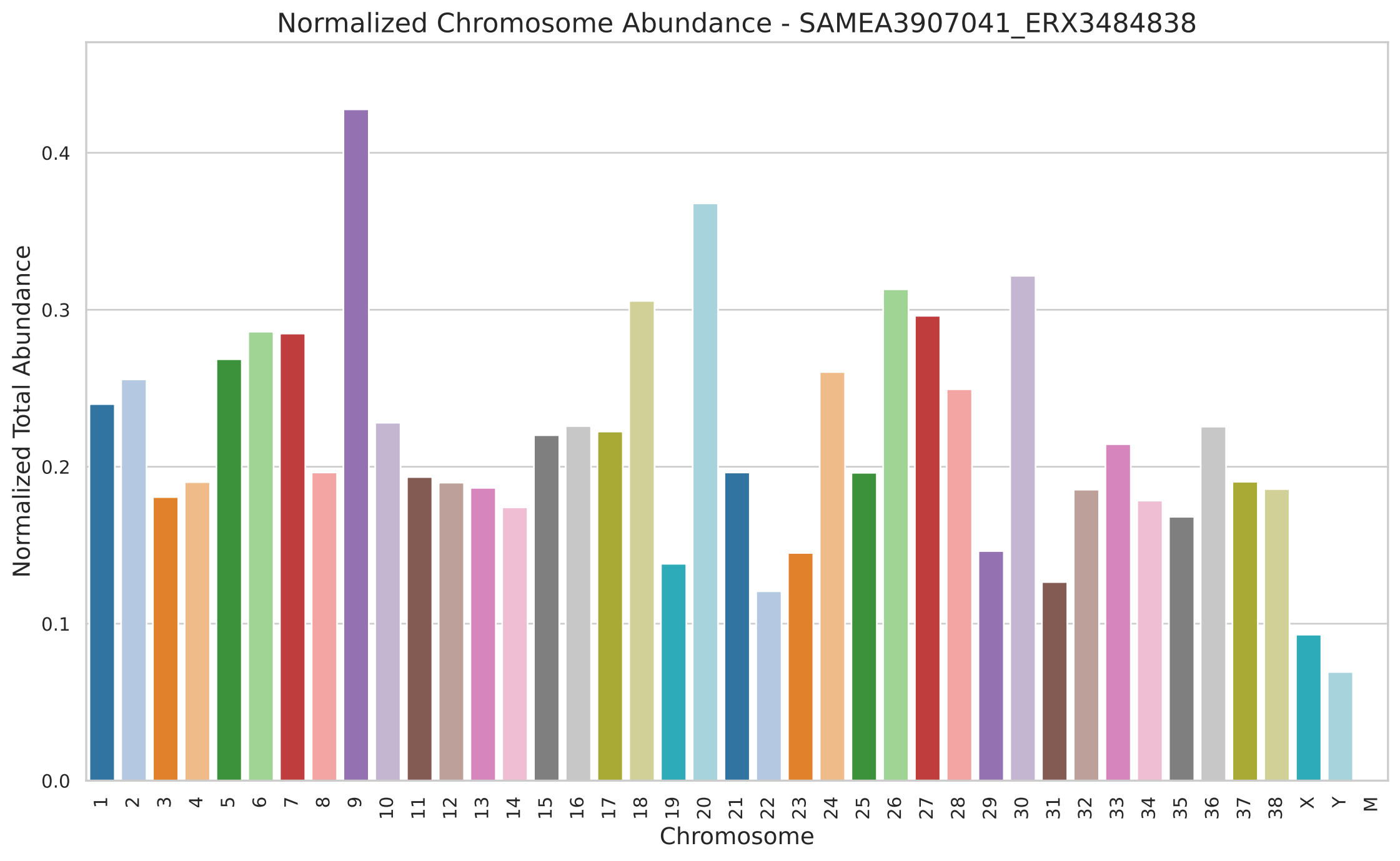

Normalized Chromosome Abundance - SAMEA3907072_ERX3484851
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

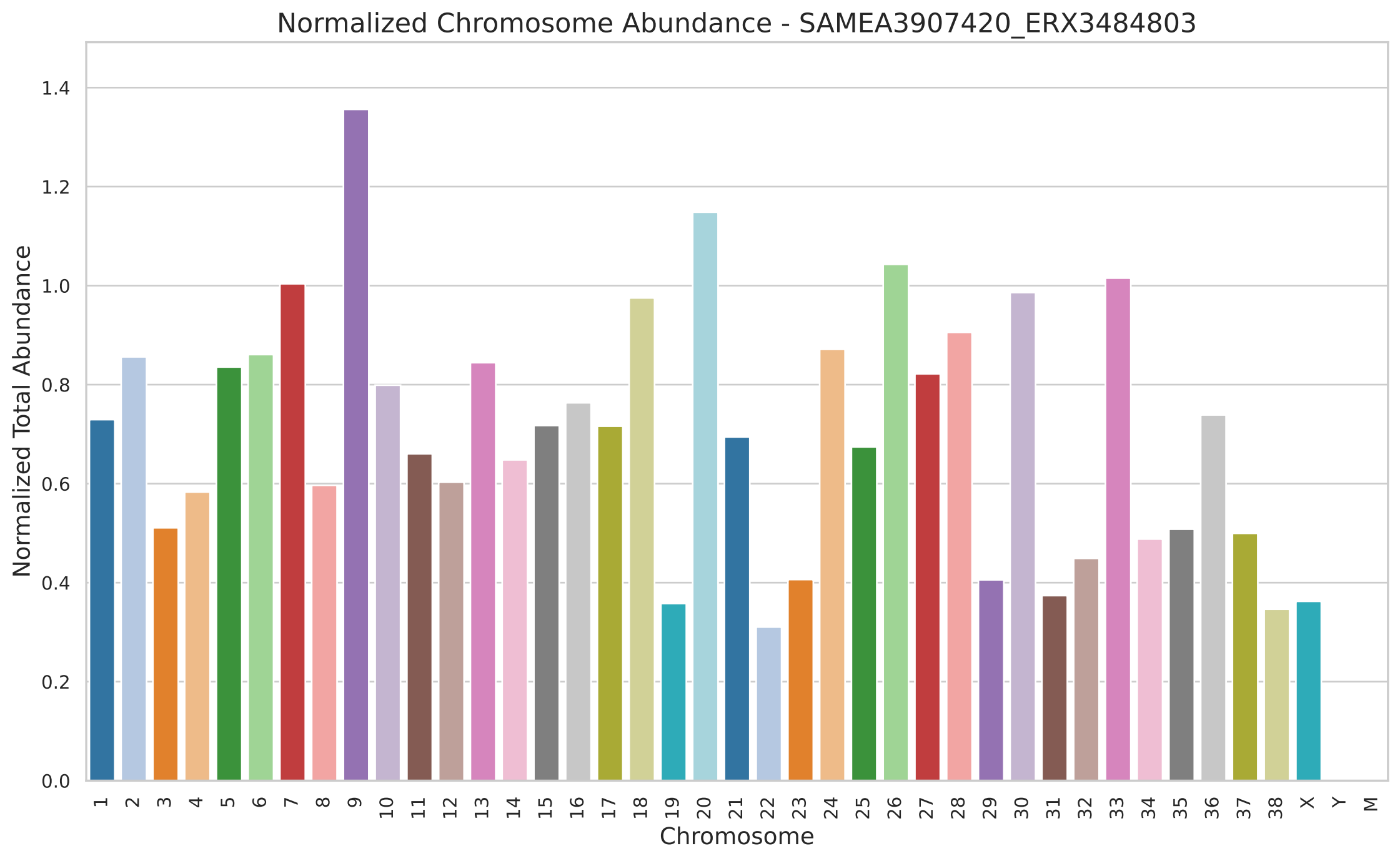

Normalized Chromosome Abundance - SAMEA3907066_ERX3484825
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.2
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

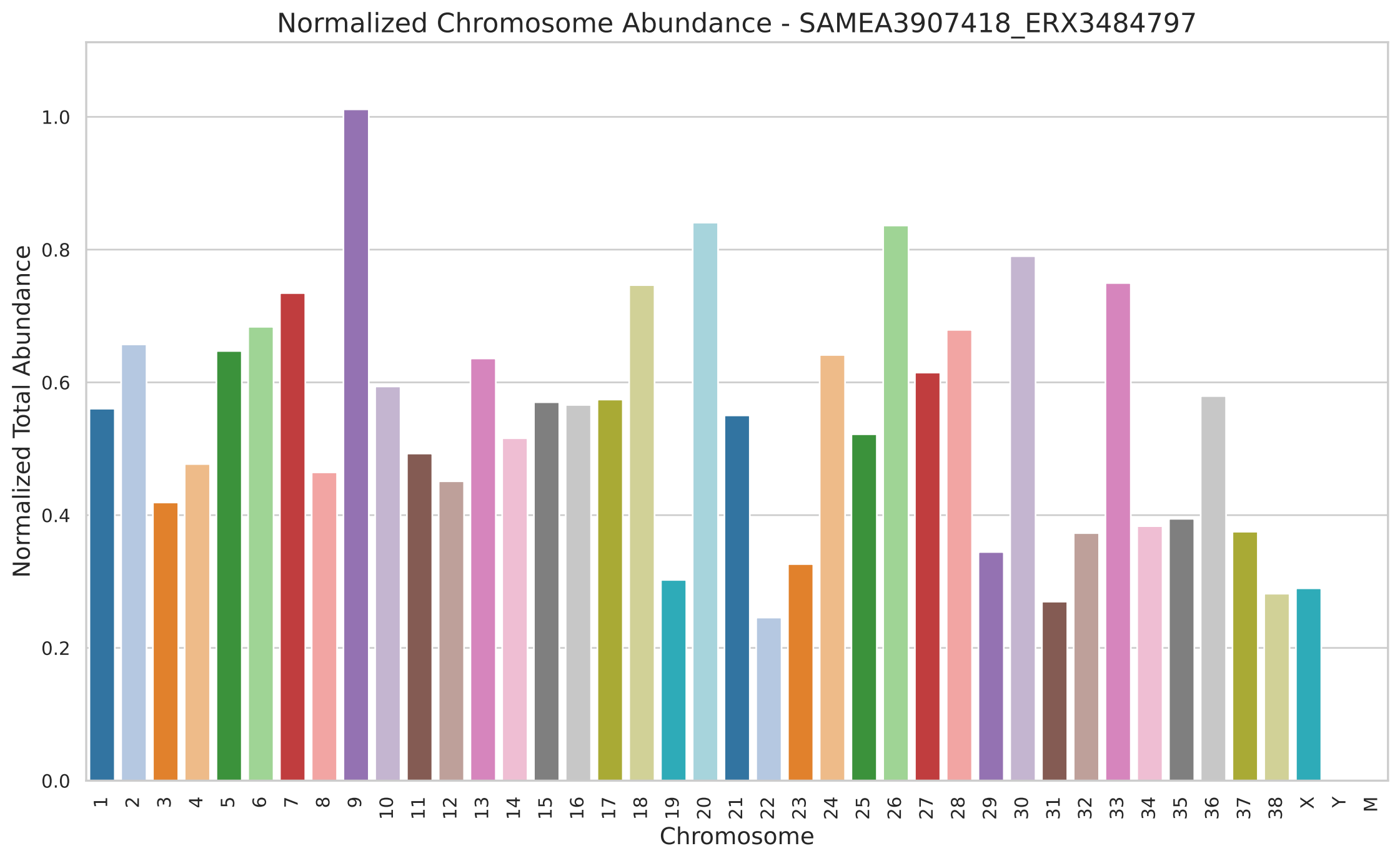

Normalized Chromosome Abundance - SAMEA3906831_ERX3484883
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

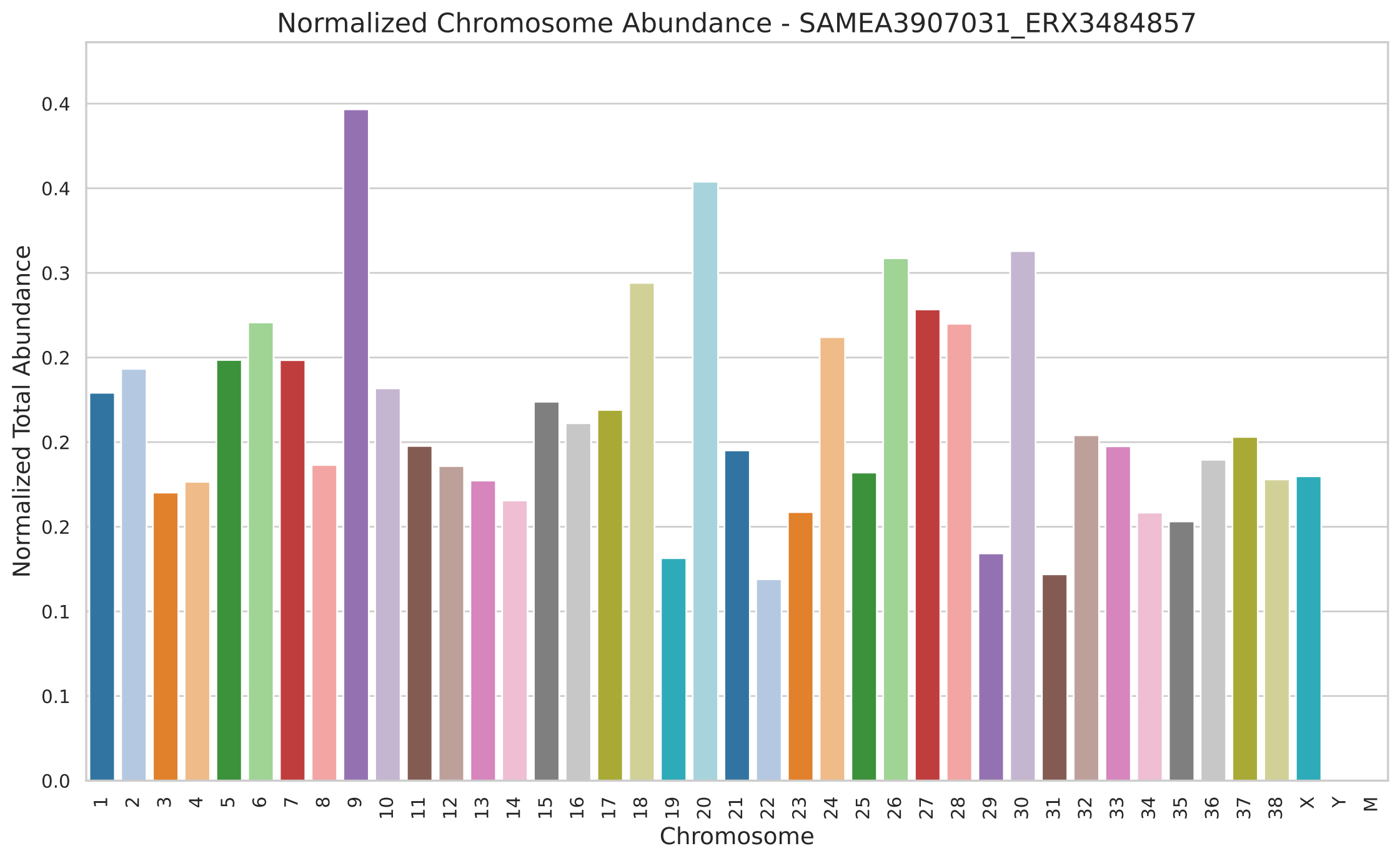

Normalized Chromosome Abundance - SAMEA3907047_ERX3484839
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
0.4
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

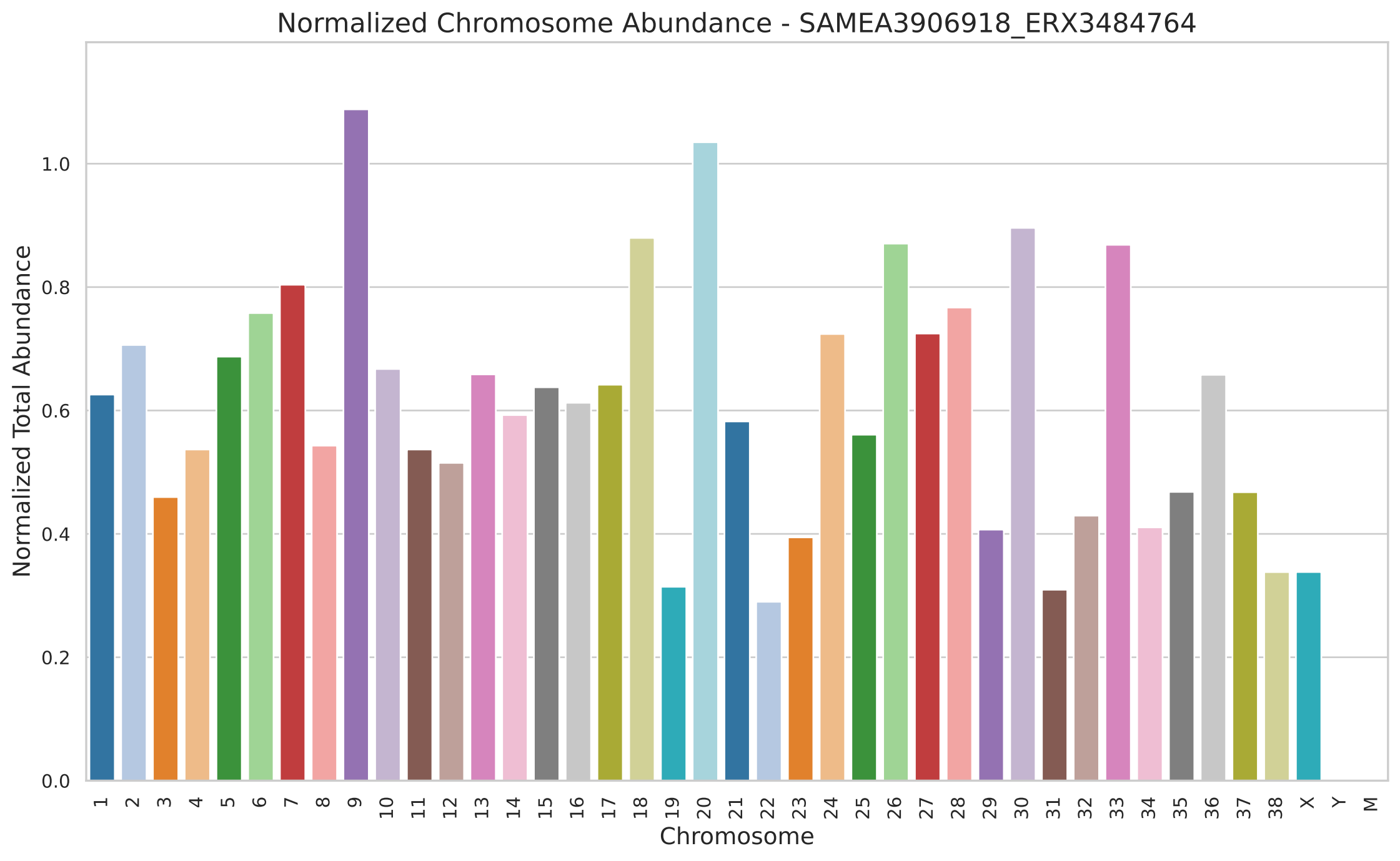

Normalized Chromosome Abundance - SAMEA3907057_ERX3484865
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
0.4
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

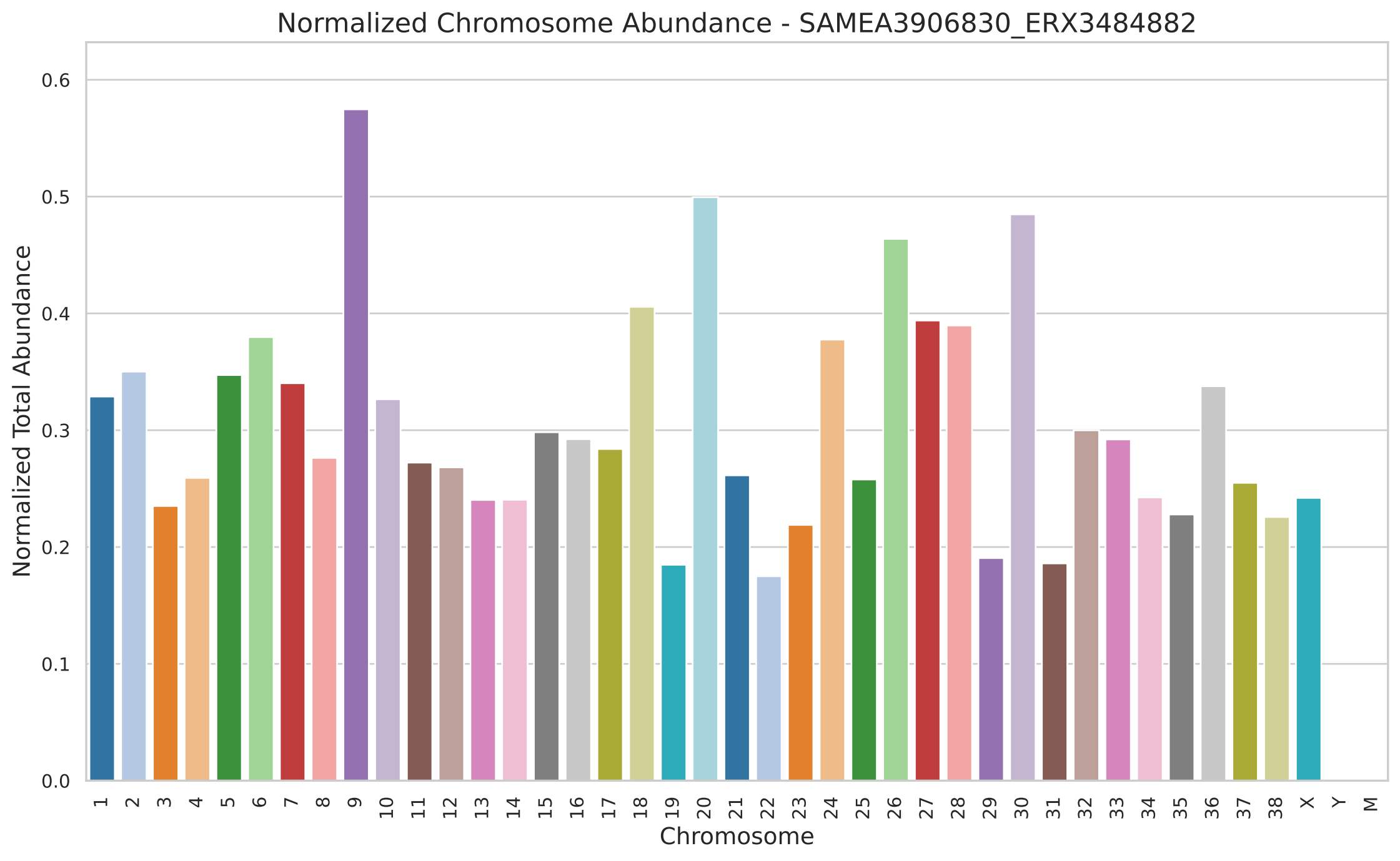

Normalized Chromosome Abundance - SAMEA3907041_ERX3484838
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

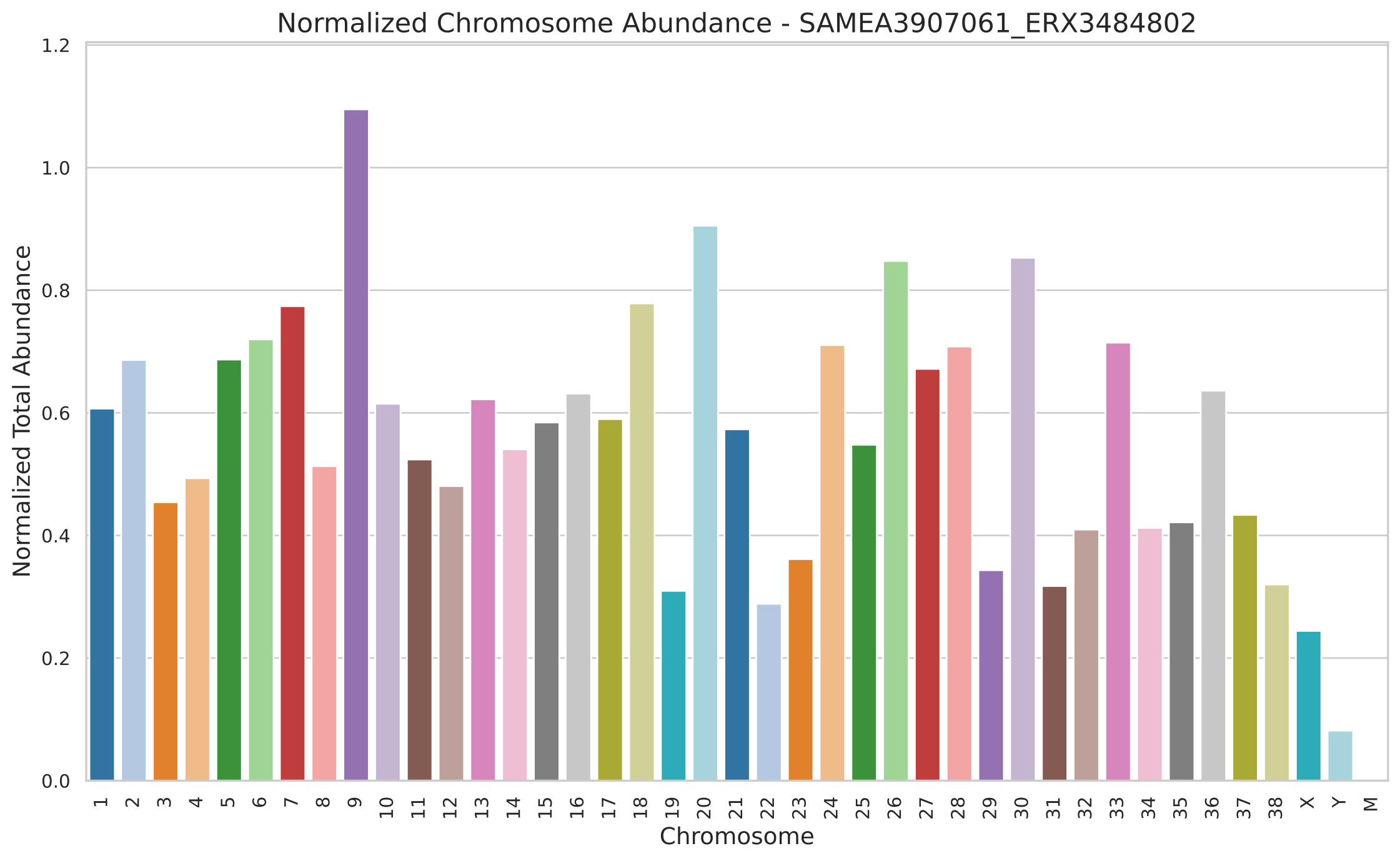

Normalized Chromosome Abundance - SAMEA3907420_ERX3484803
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

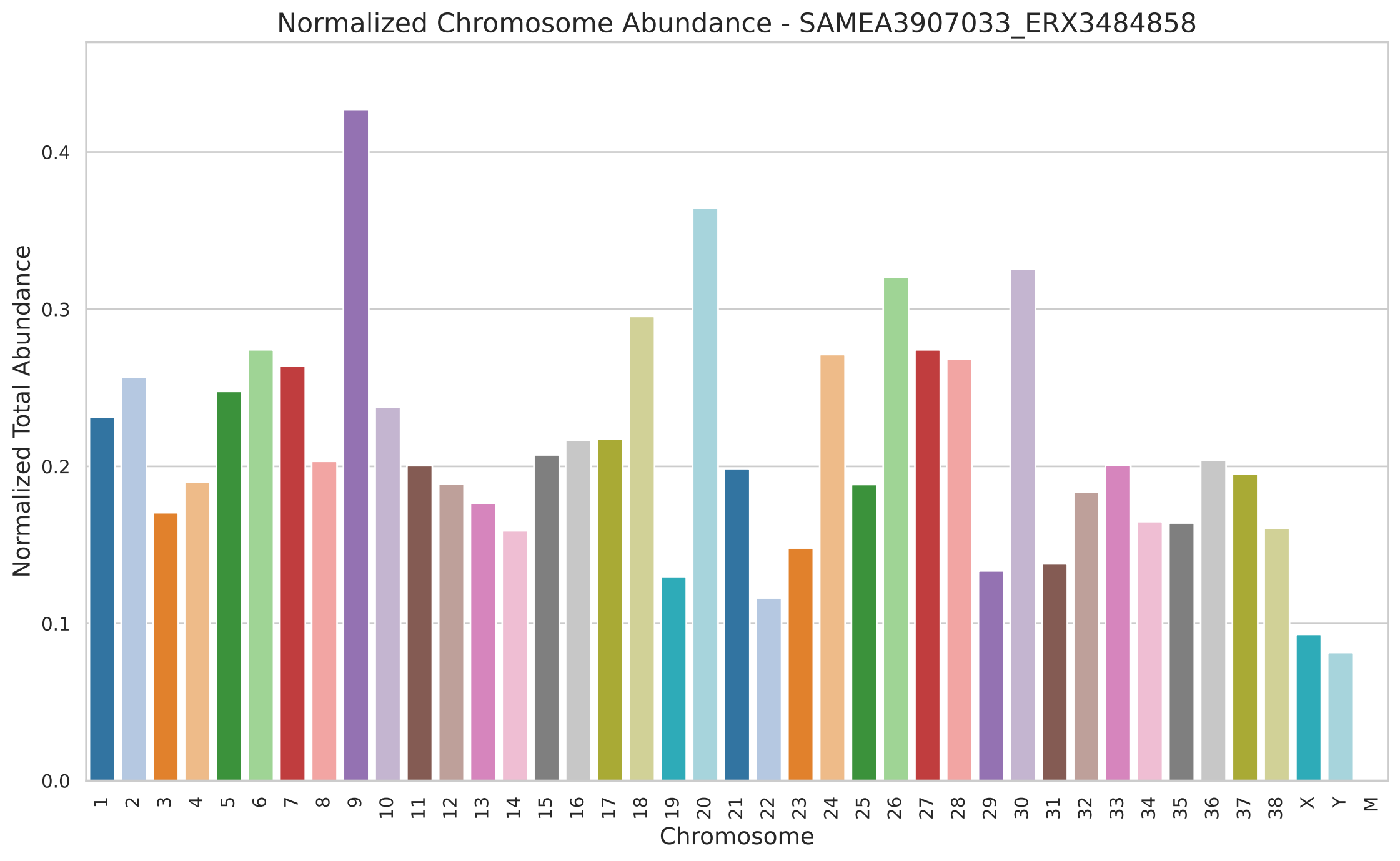

Normalized Chromosome Abundance - SAMEA3907418_ERX3484797
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

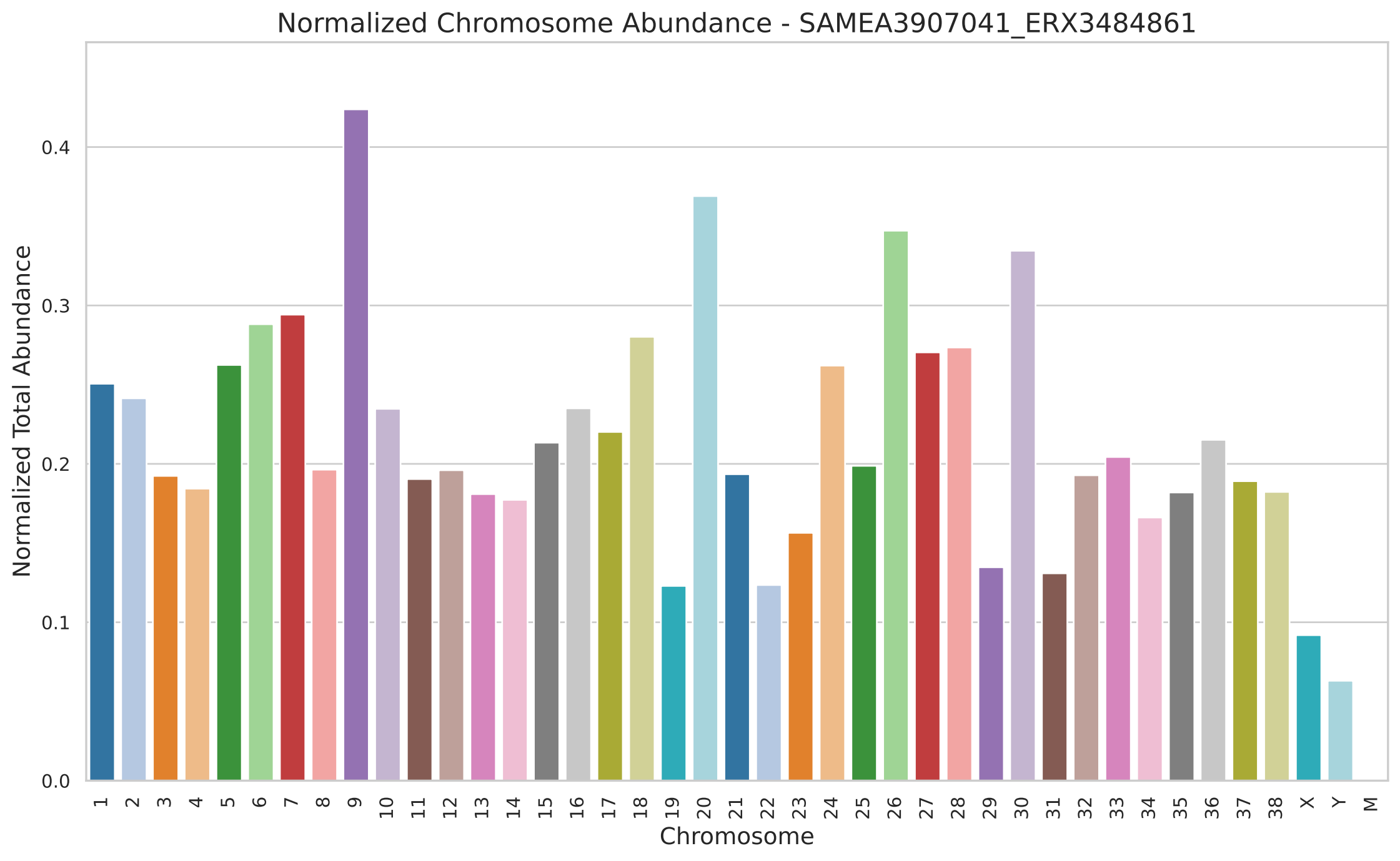

Normalized Chromosome Abundance - SAMEA3907031_ERX3484857
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
0.4
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

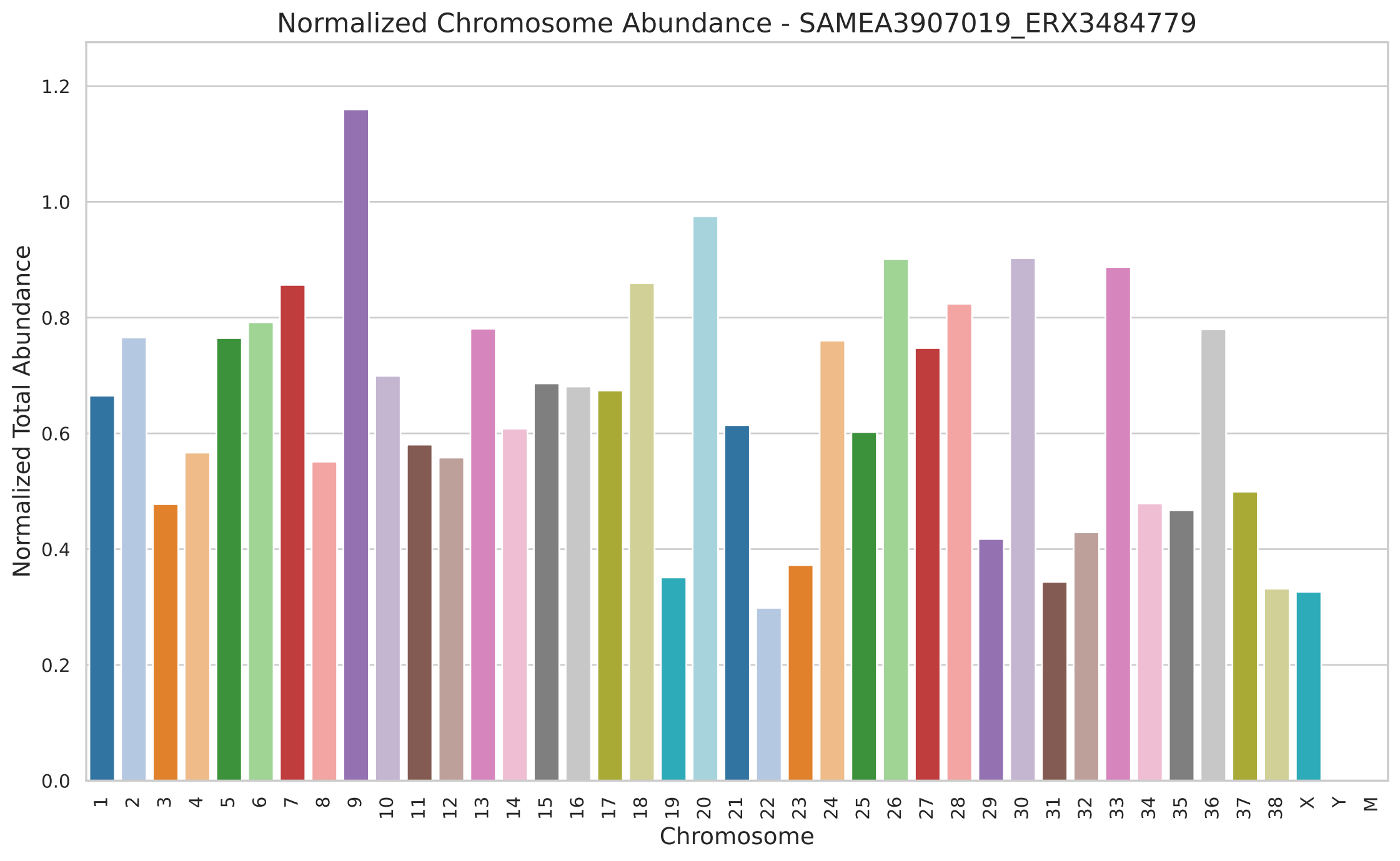

Normalized Chromosome Abundance - SAMEA3906918_ERX3484764
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

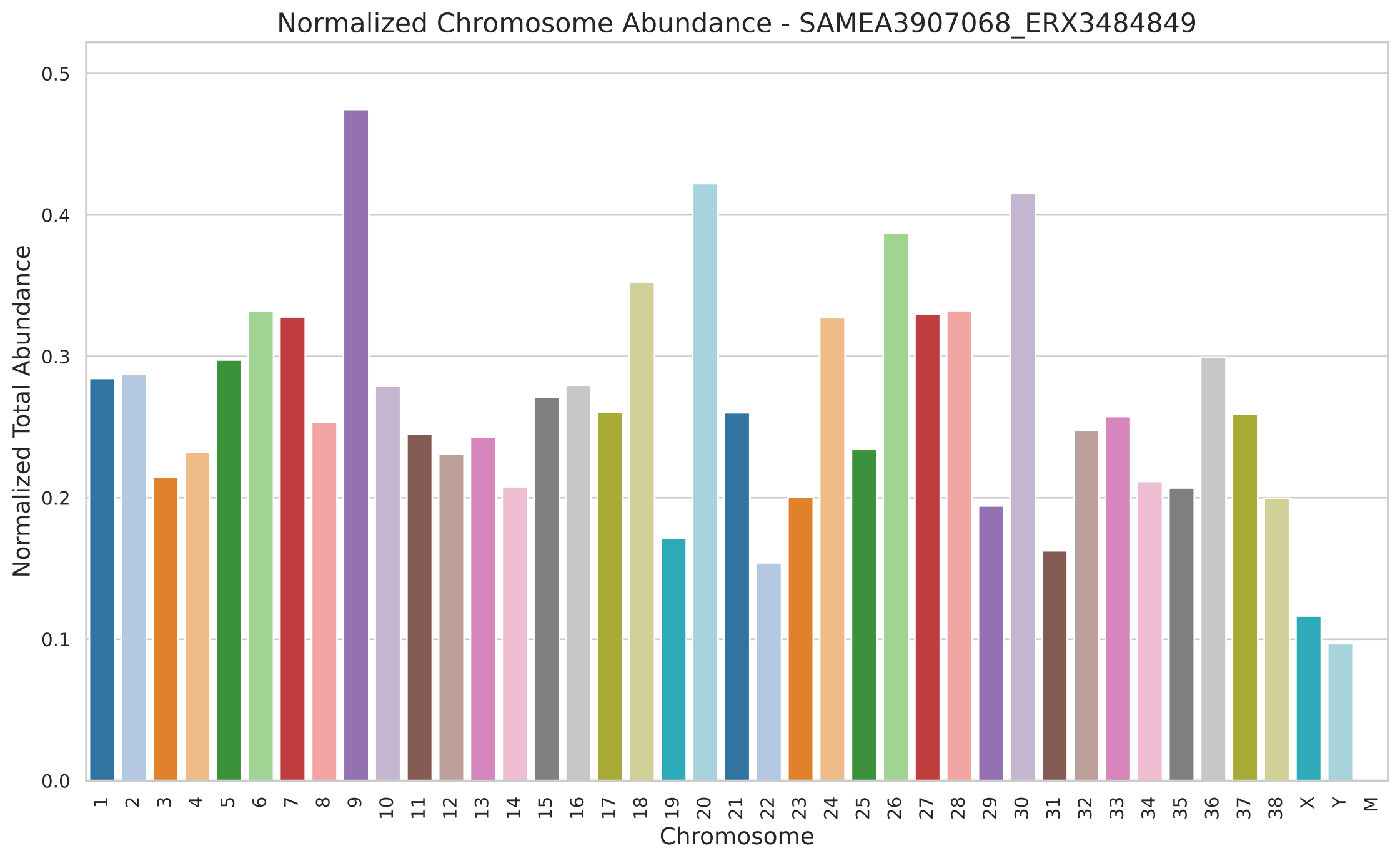

Normalized Chromosome Abundance - SAMEA3906830_ERX3484882
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

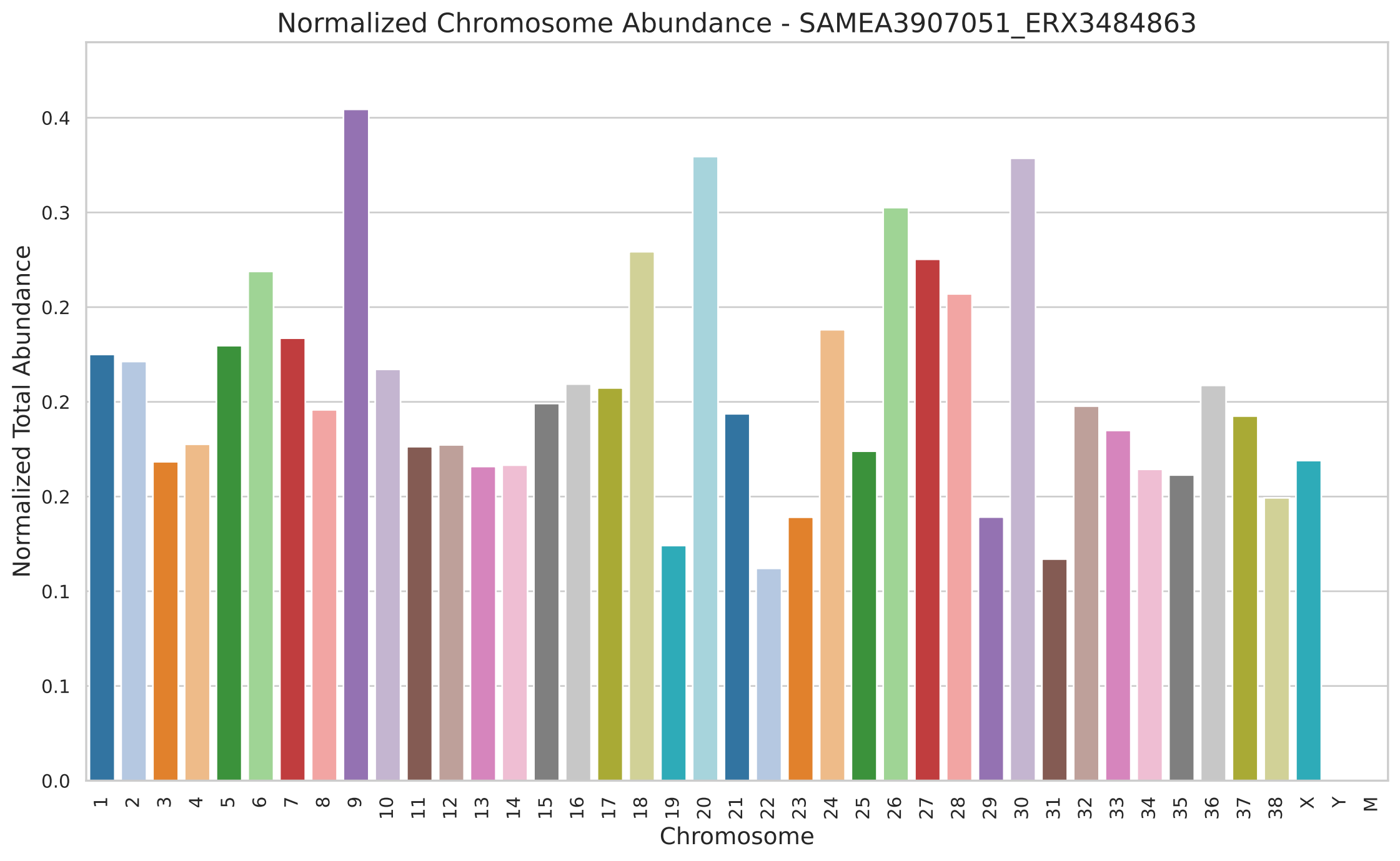

Normalized Chromosome Abundance - SAMEA3907061_ERX3484802
Normalized Total Abundance
1.2
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

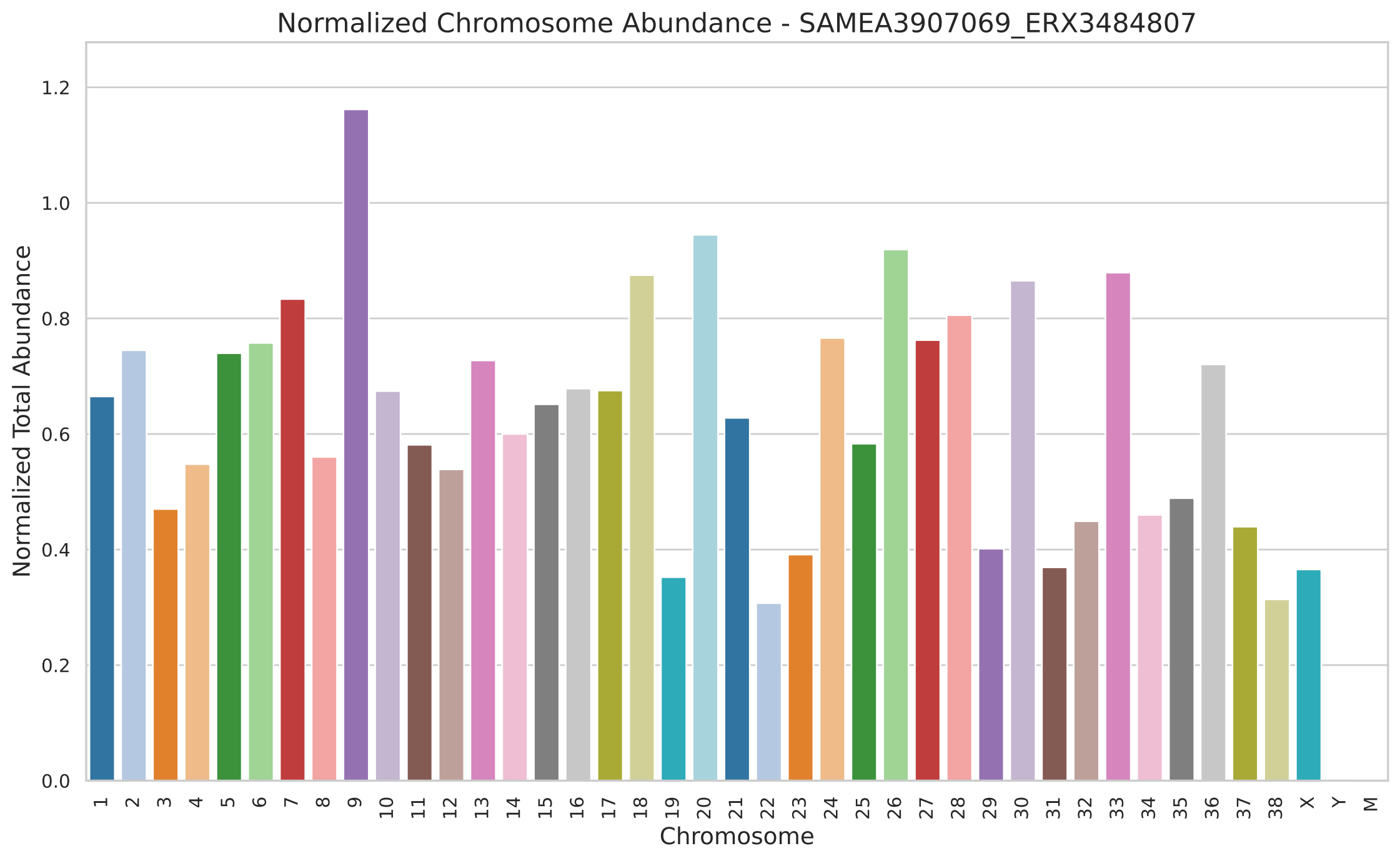

Normalized Chromosome Abundance - SAMEA3907033_ERX3484858
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

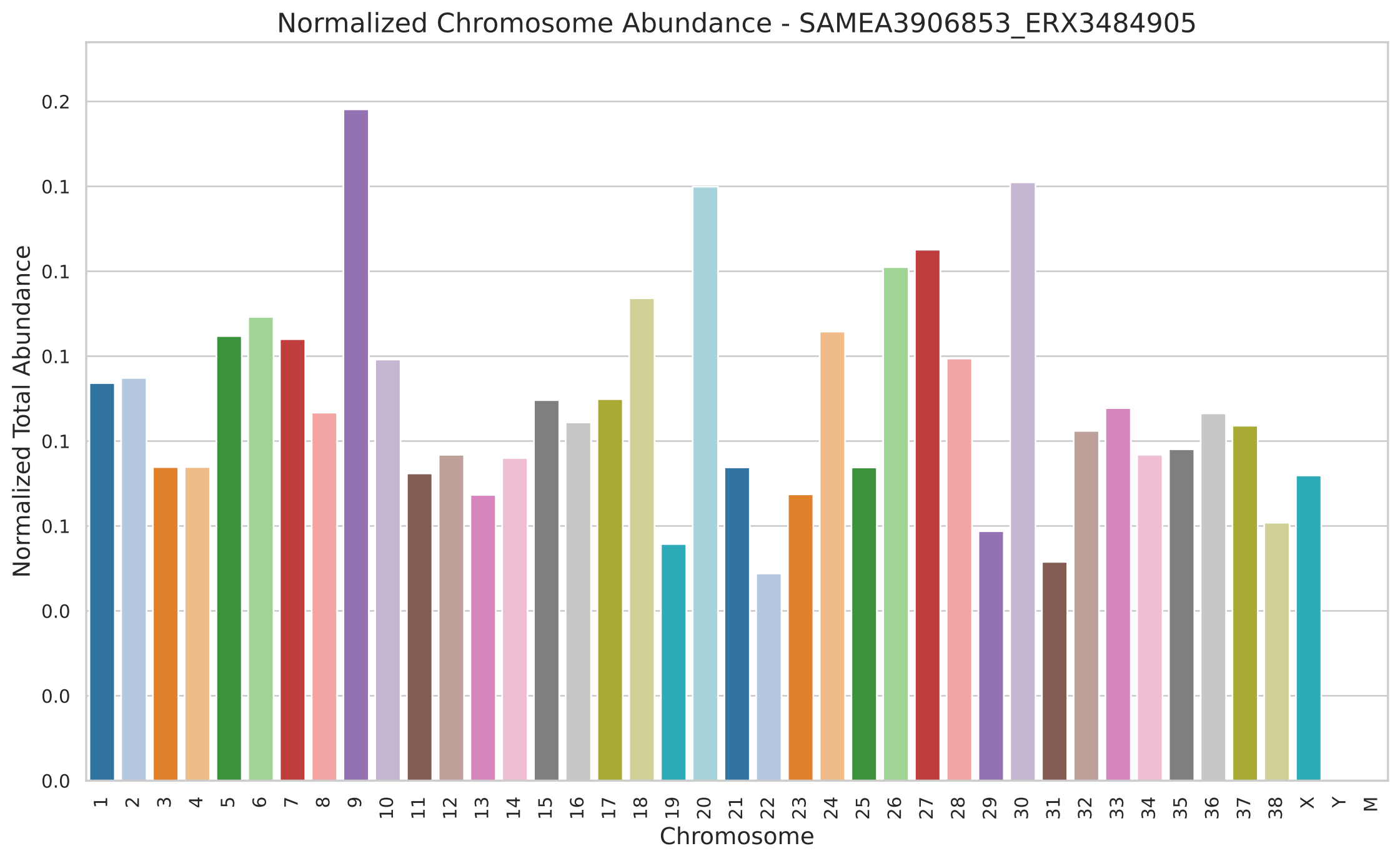

Normalized Chromosome Abundance - SAMEA3907041_ERX3484861
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

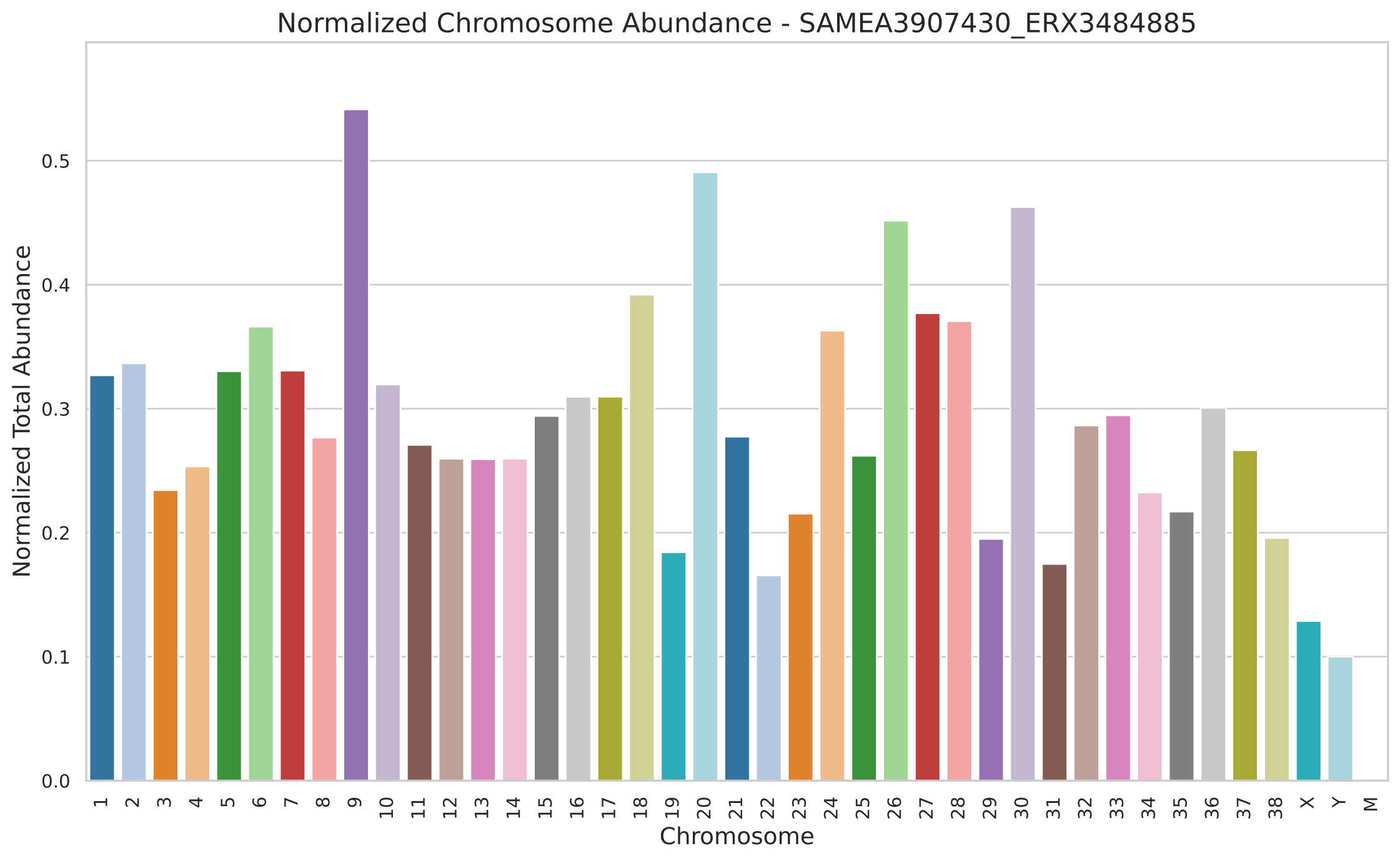

Normalized Chromosome Abundance - SAMEA3907019_ERX3484779
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

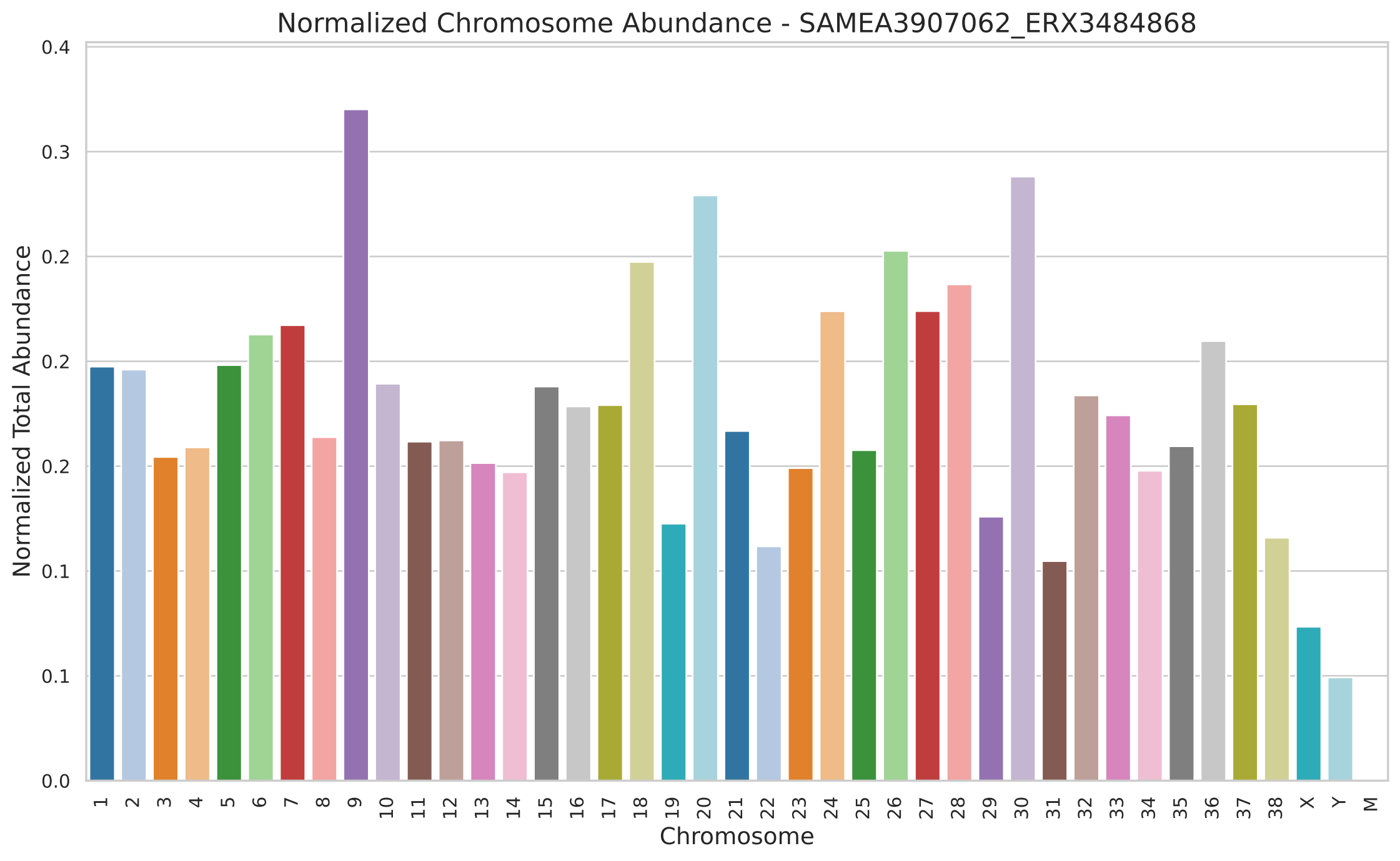

Normalized Chromosome Abundance - SAMEA3907068_ERX3484849
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

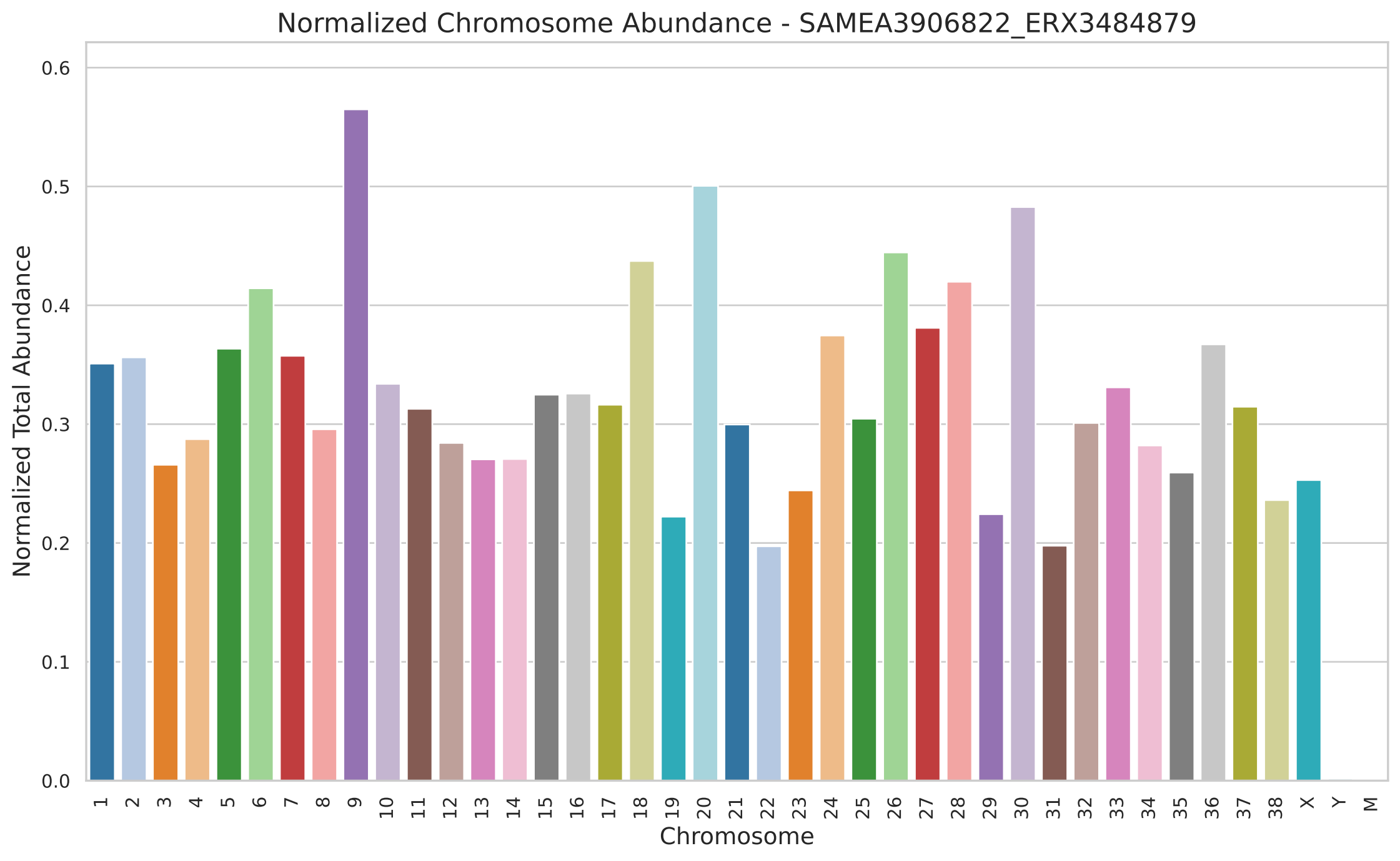

Normalized Chromosome Abundance - SAMEA3907051_ERX3484863
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

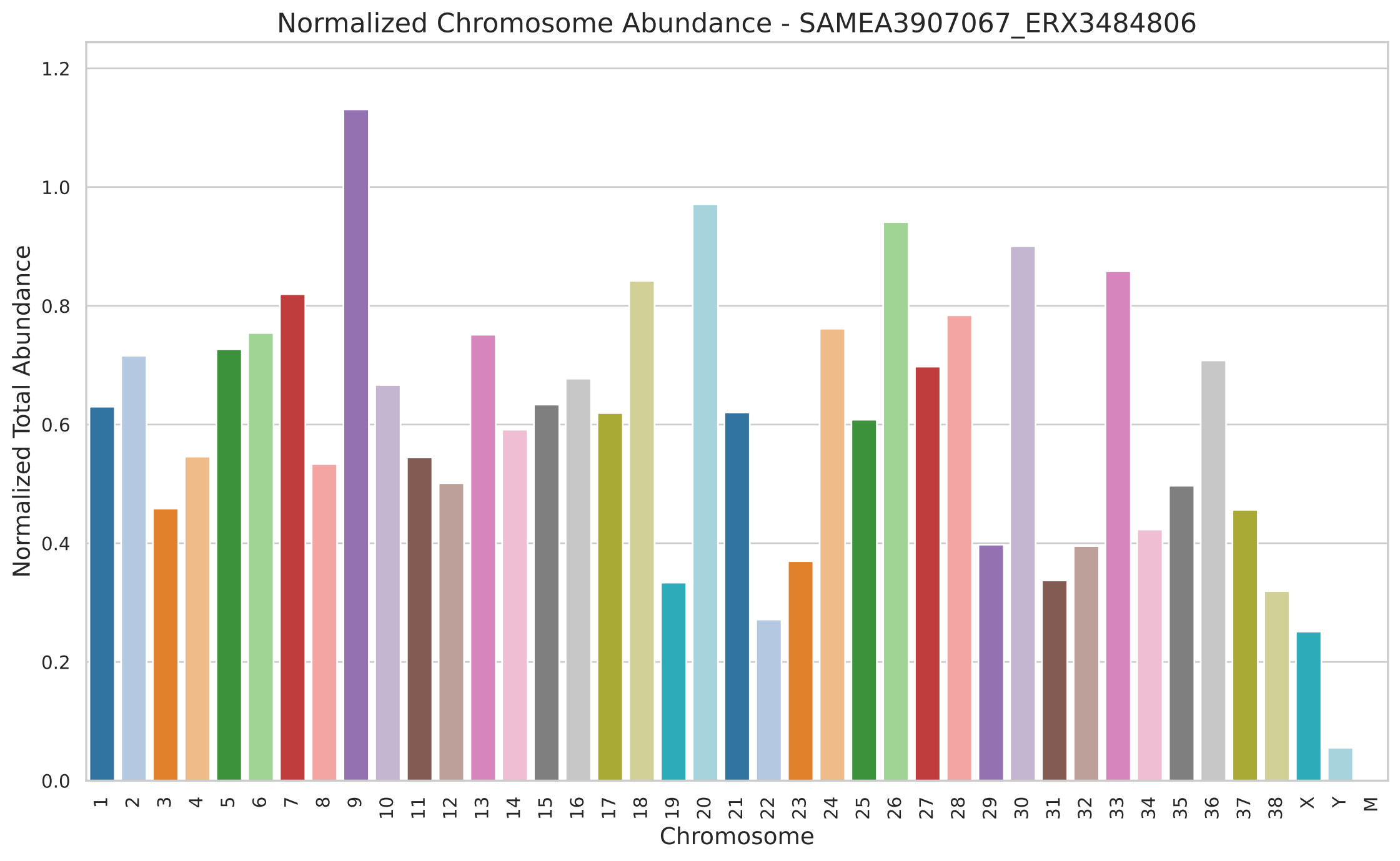

Normalized Chromosome Abundance - SAMEA3907069_ERX3484807
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

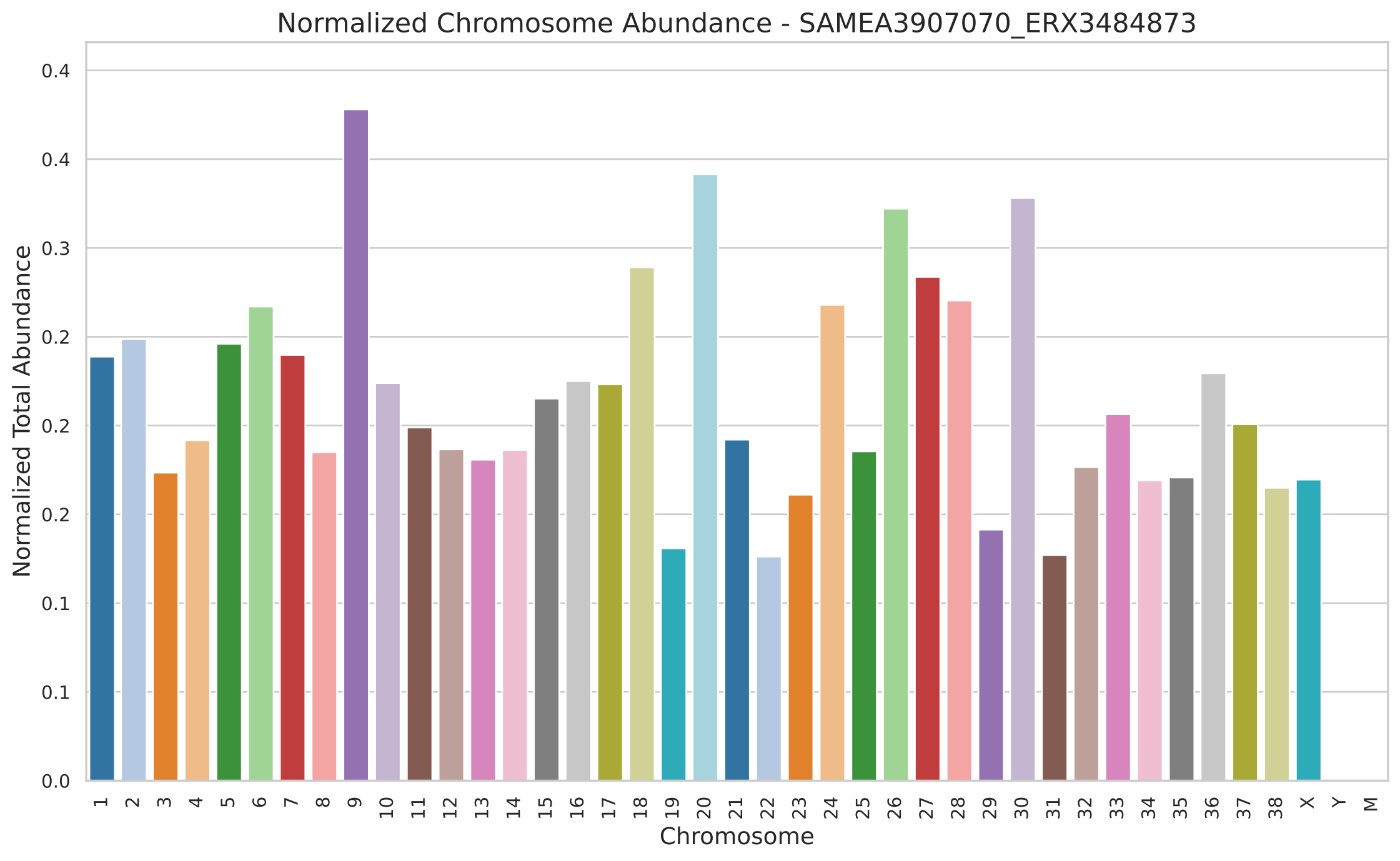

Normalized Chromosome Abundance - SAMEA3906853_ERX3484905
Normalized Total Abundance
0.2
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

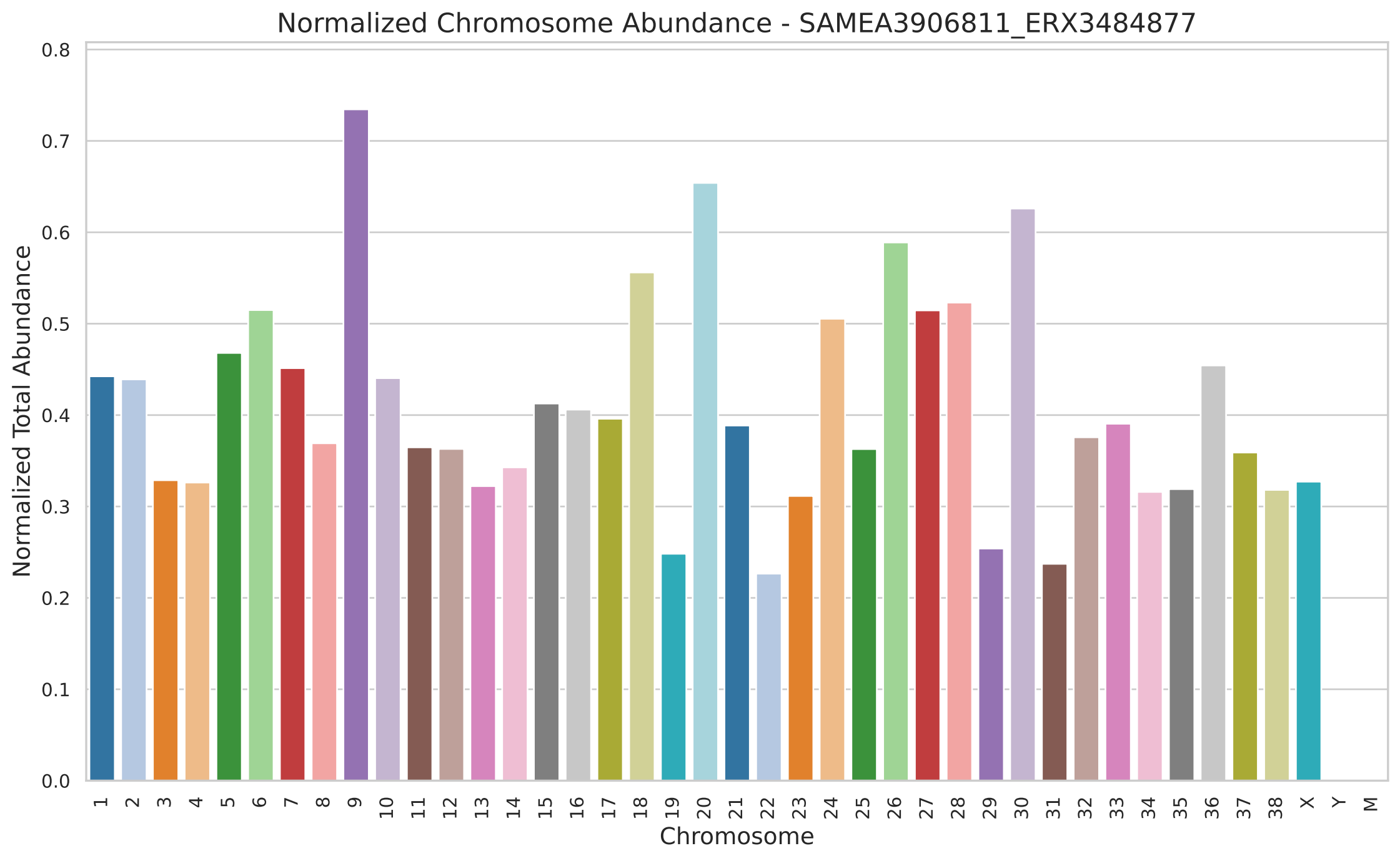

Normalized Chromosome Abundance - SAMEA3907430_ERX3484885
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

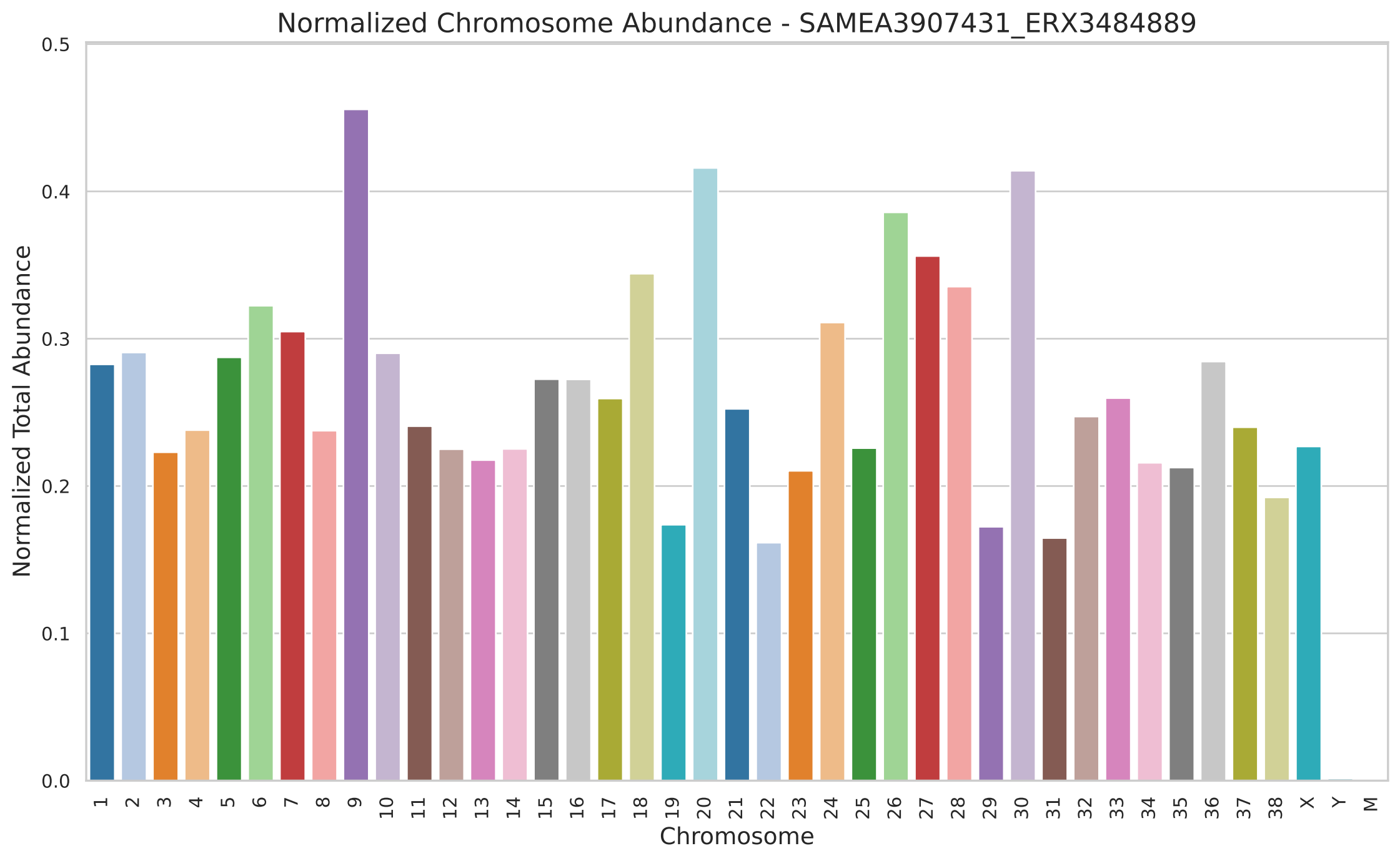

Normalized Chromosome Abundance - SAMEA3907062_ERX3484868
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

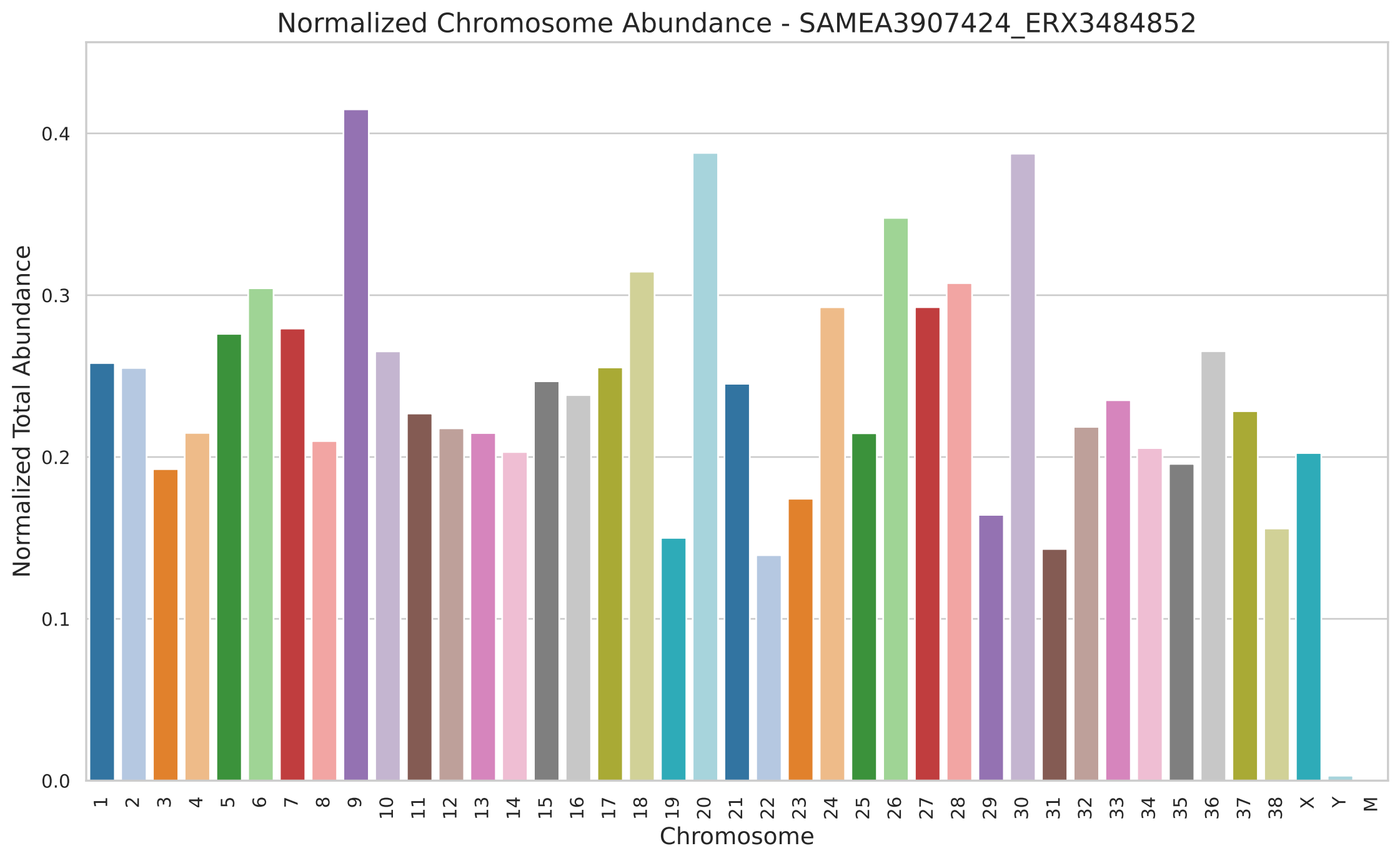

Normalized Chromosome Abundance - SAMEA3906822_ERX3484879
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

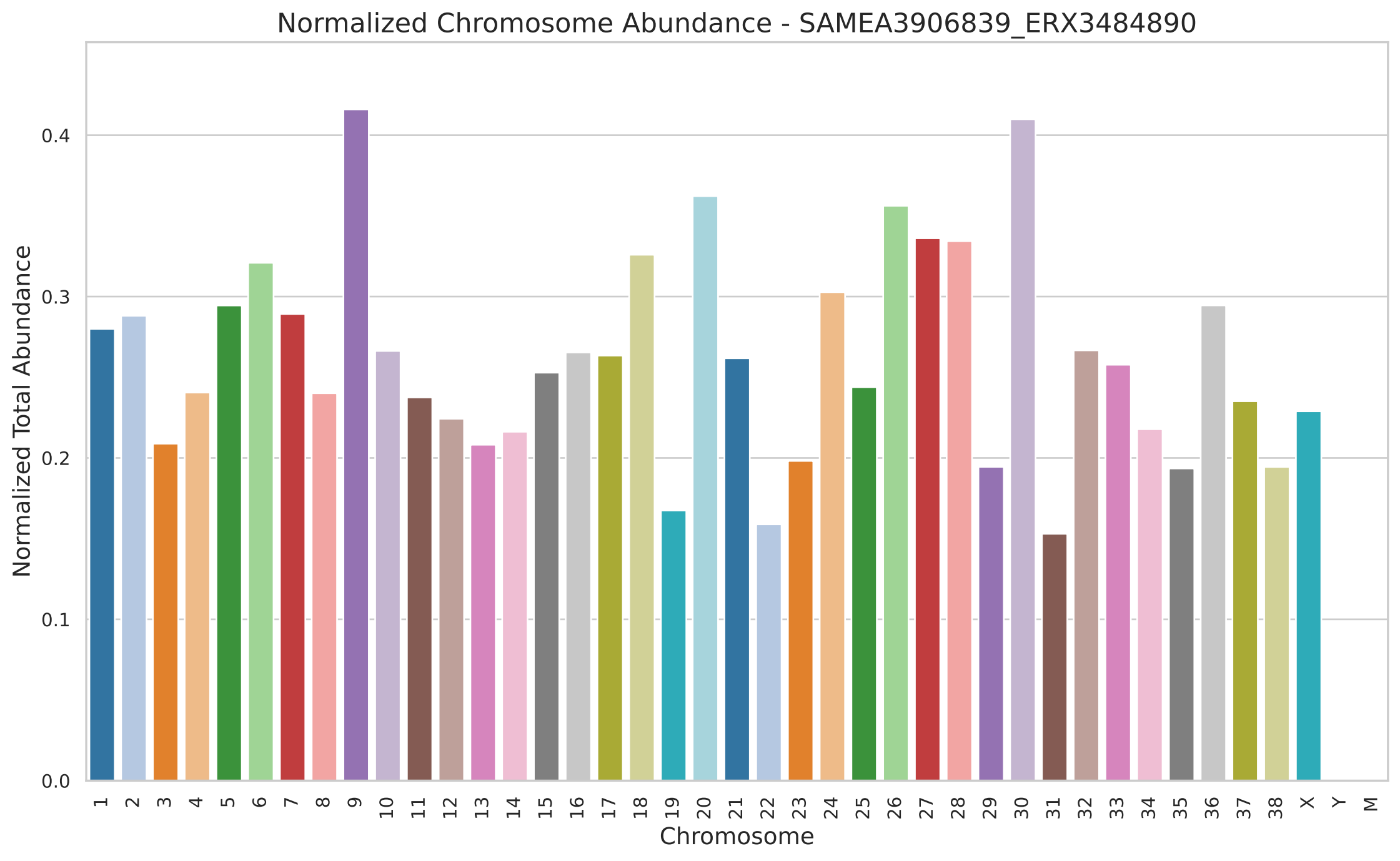

Normalized Chromosome Abundance - SAMEA3907067_ERX3484806
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

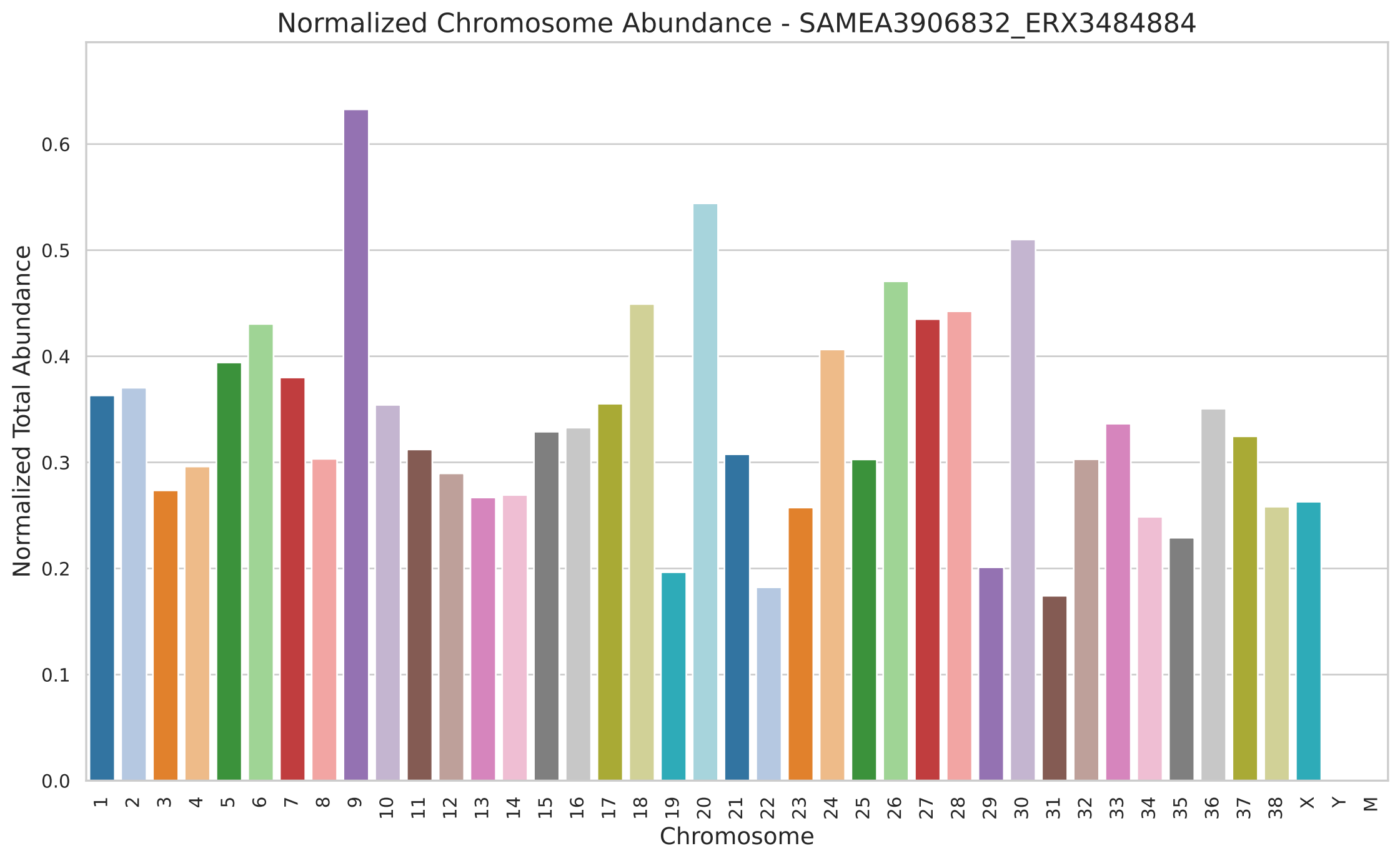

Normalized Chromosome Abundance - SAMEA3907070_ERX3484873
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
0.4
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

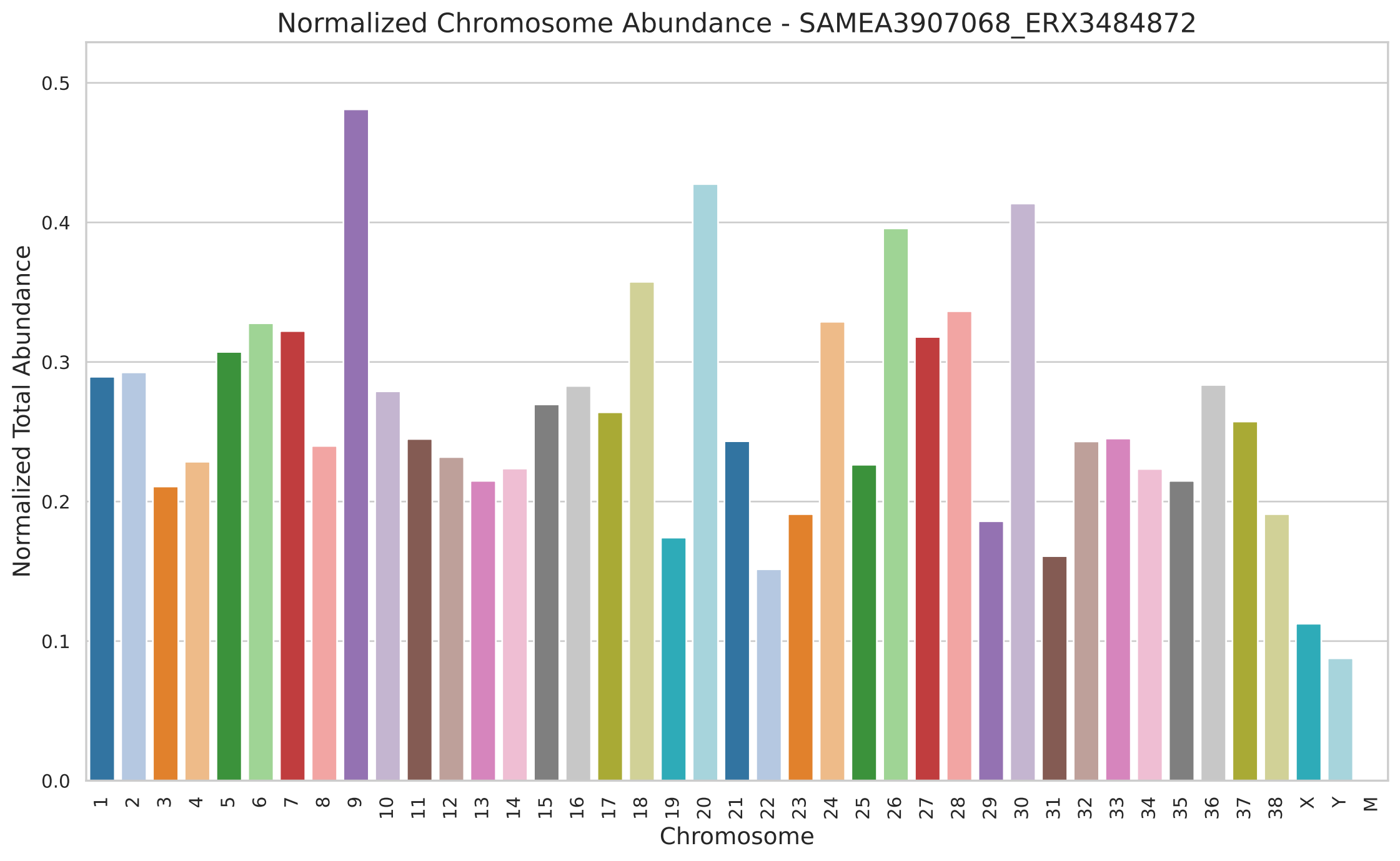

Normalized Chromosome Abundance - SAMEA3906811_ERX3484877
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

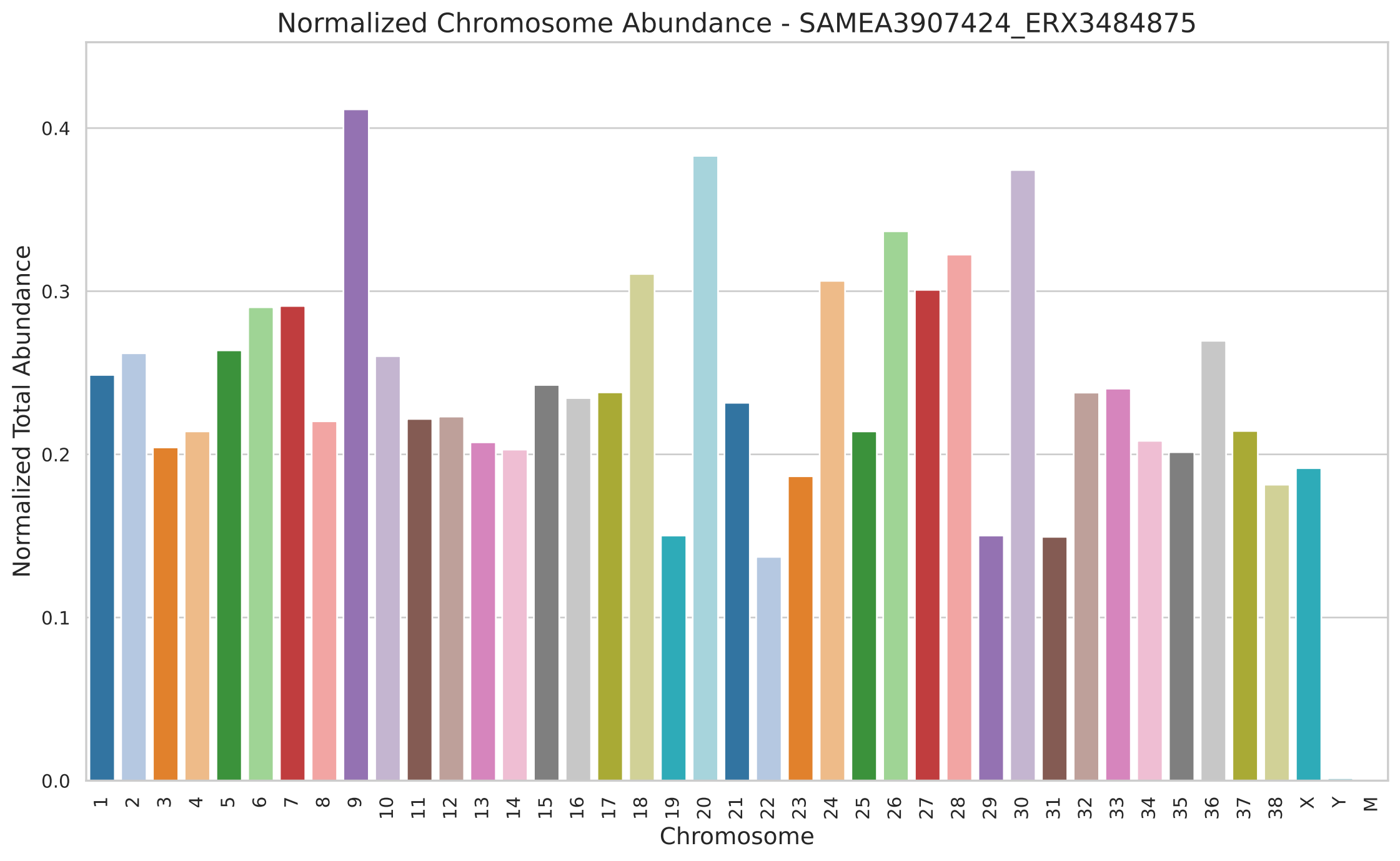

Normalized Chromosome Abundance - SAMEA3907431_ERX3484889
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

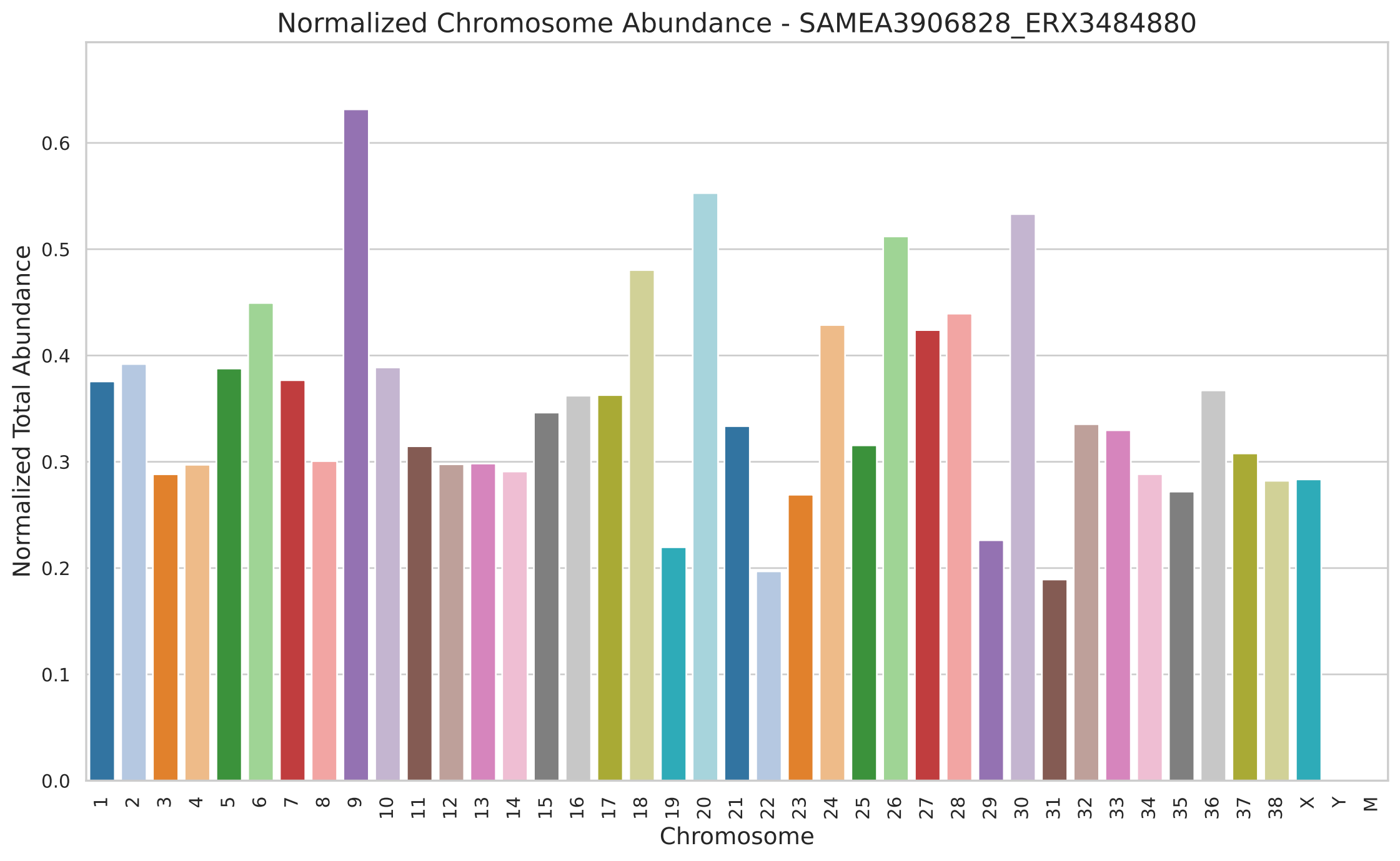

Normalized Chromosome Abundance - SAMEA3907424_ERX3484852
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

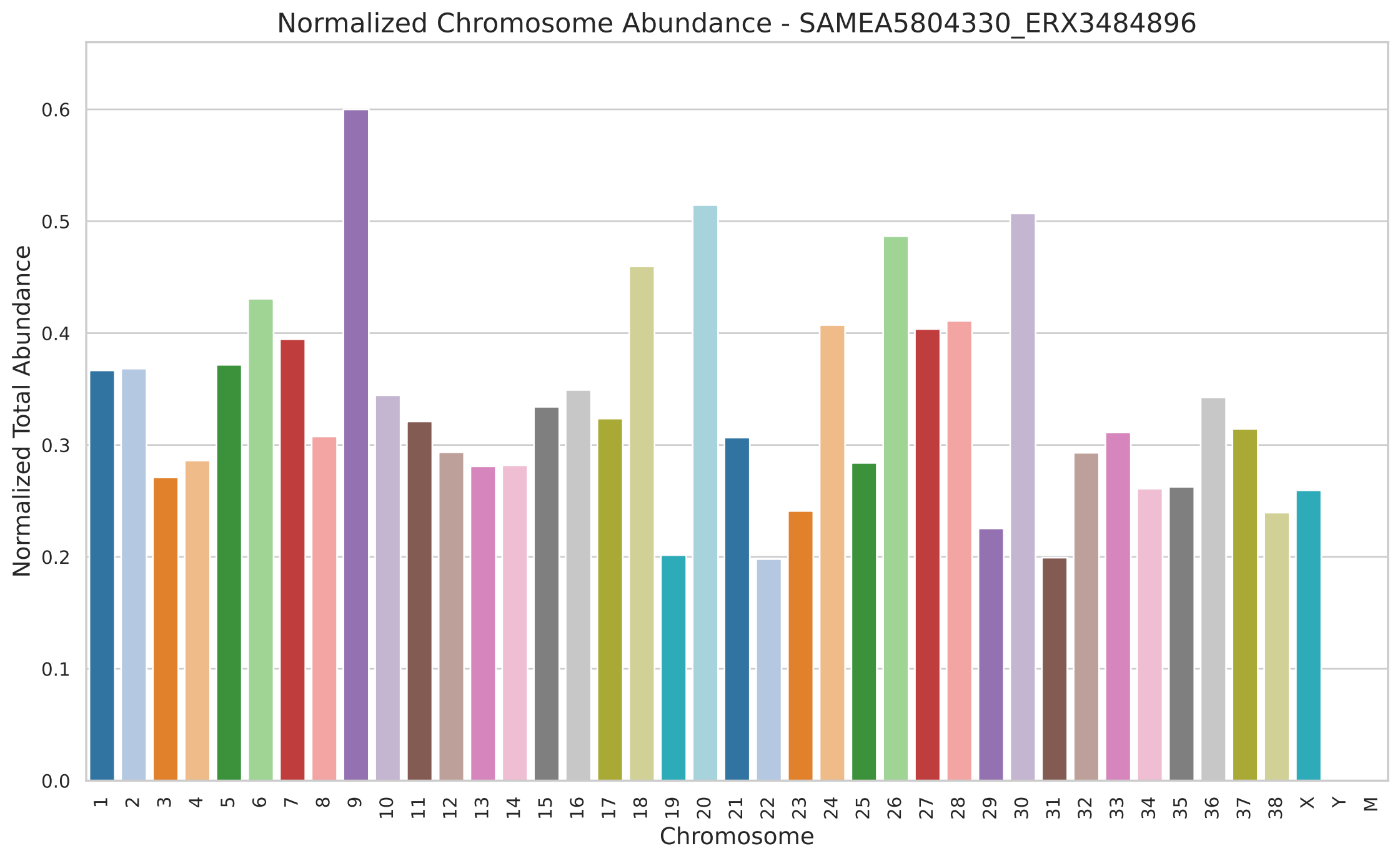

Normalized Chromosome Abundance - SAMEA3906839_ERX3484890
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

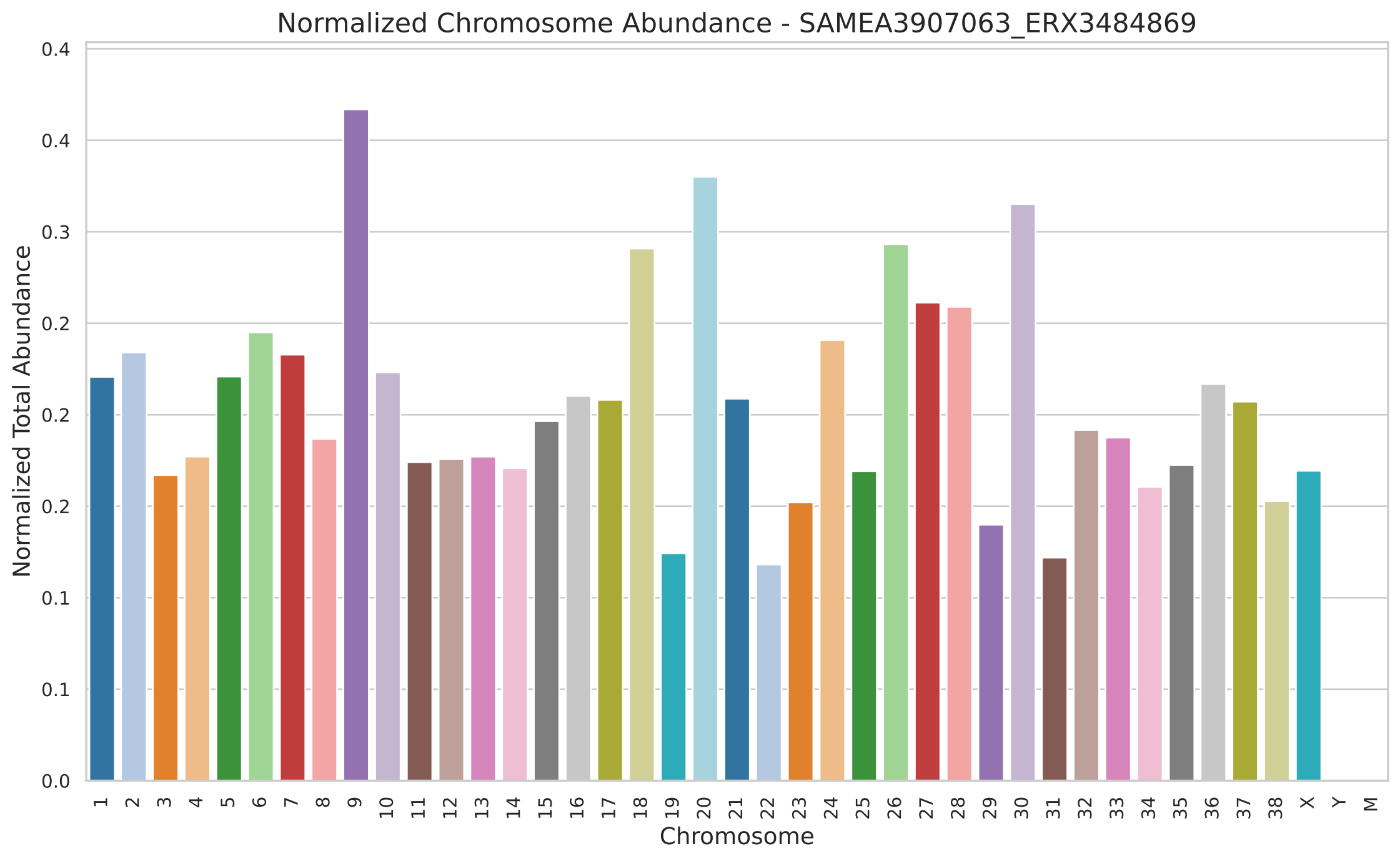

Normalized Chromosome Abundance - SAMEA3906832_ERX3484884
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

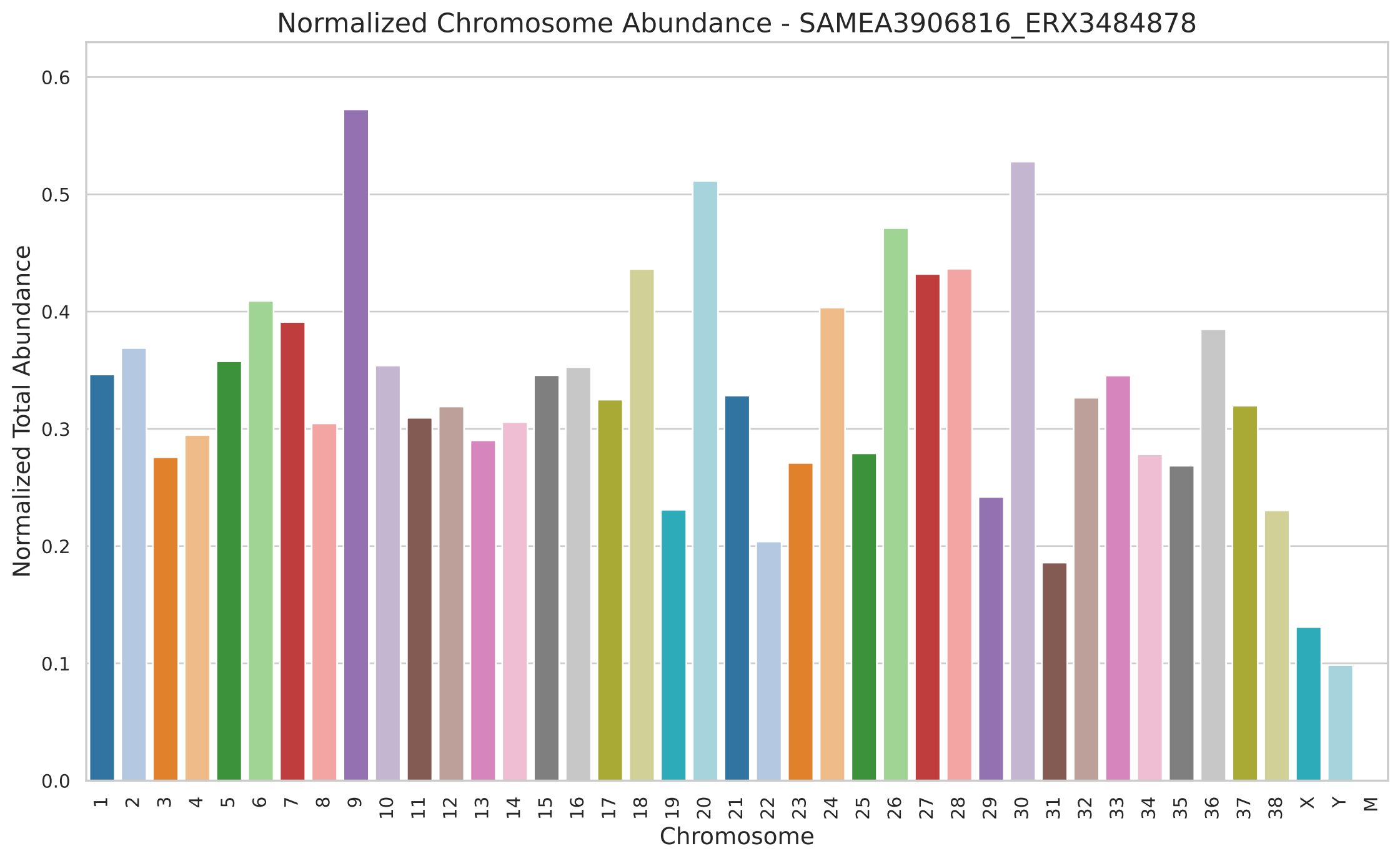

Normalized Chromosome Abundance - SAMEA3907068_ERX3484872
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

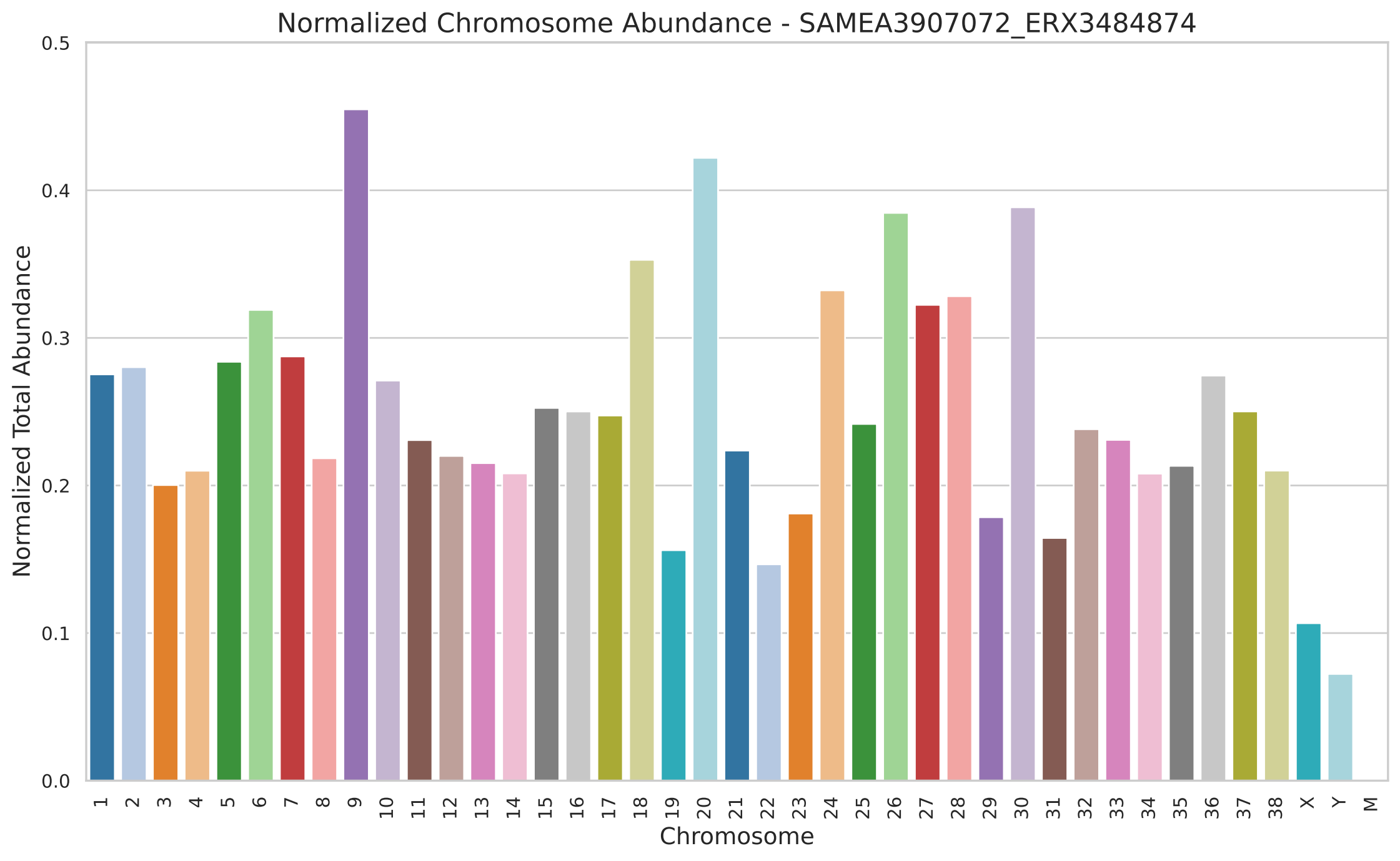

Normalized Chromosome Abundance - SAMEA3907424_ERX3484875
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

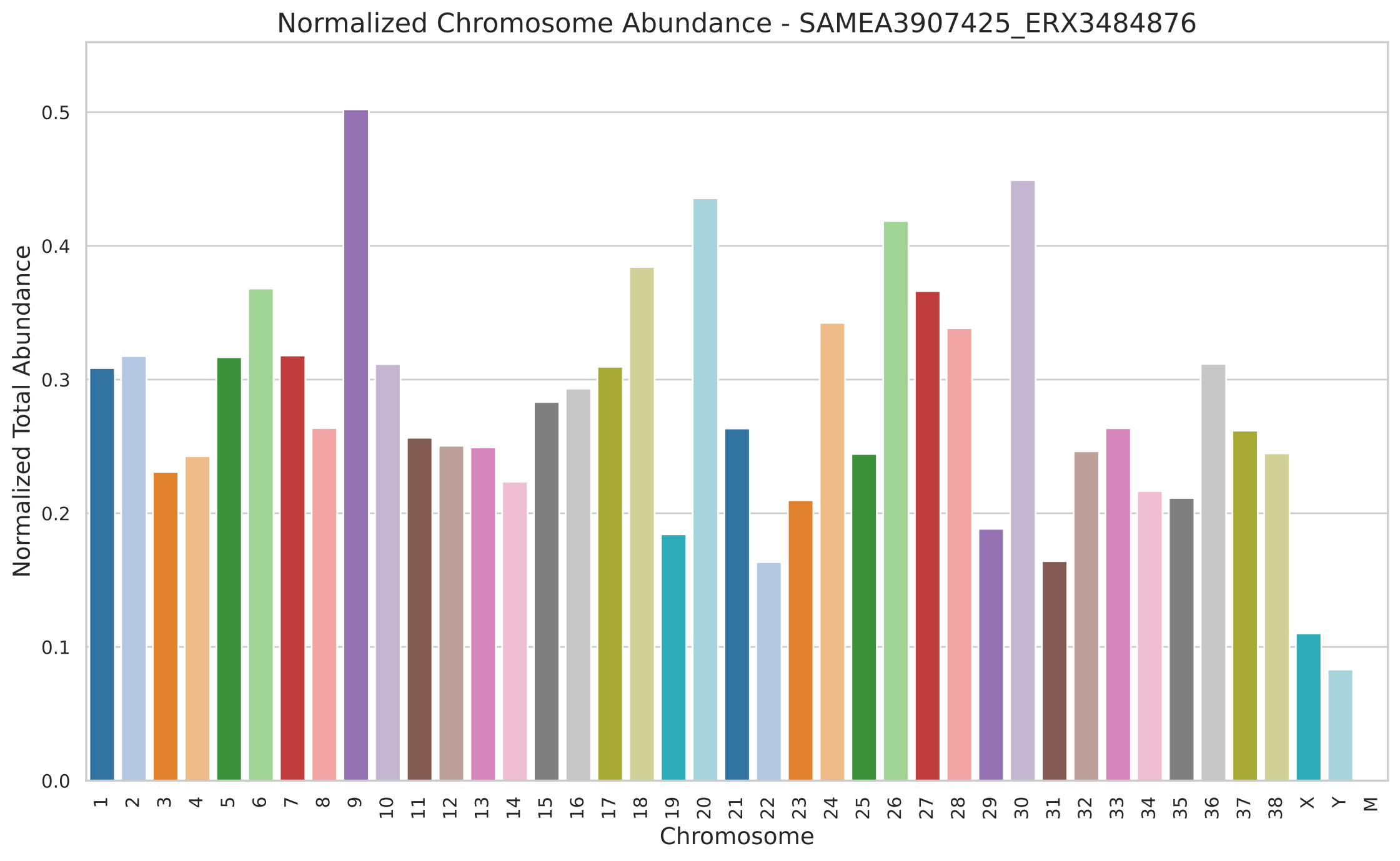

Normalized Chromosome Abundance - SAMEA3906828_ERX3484880
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

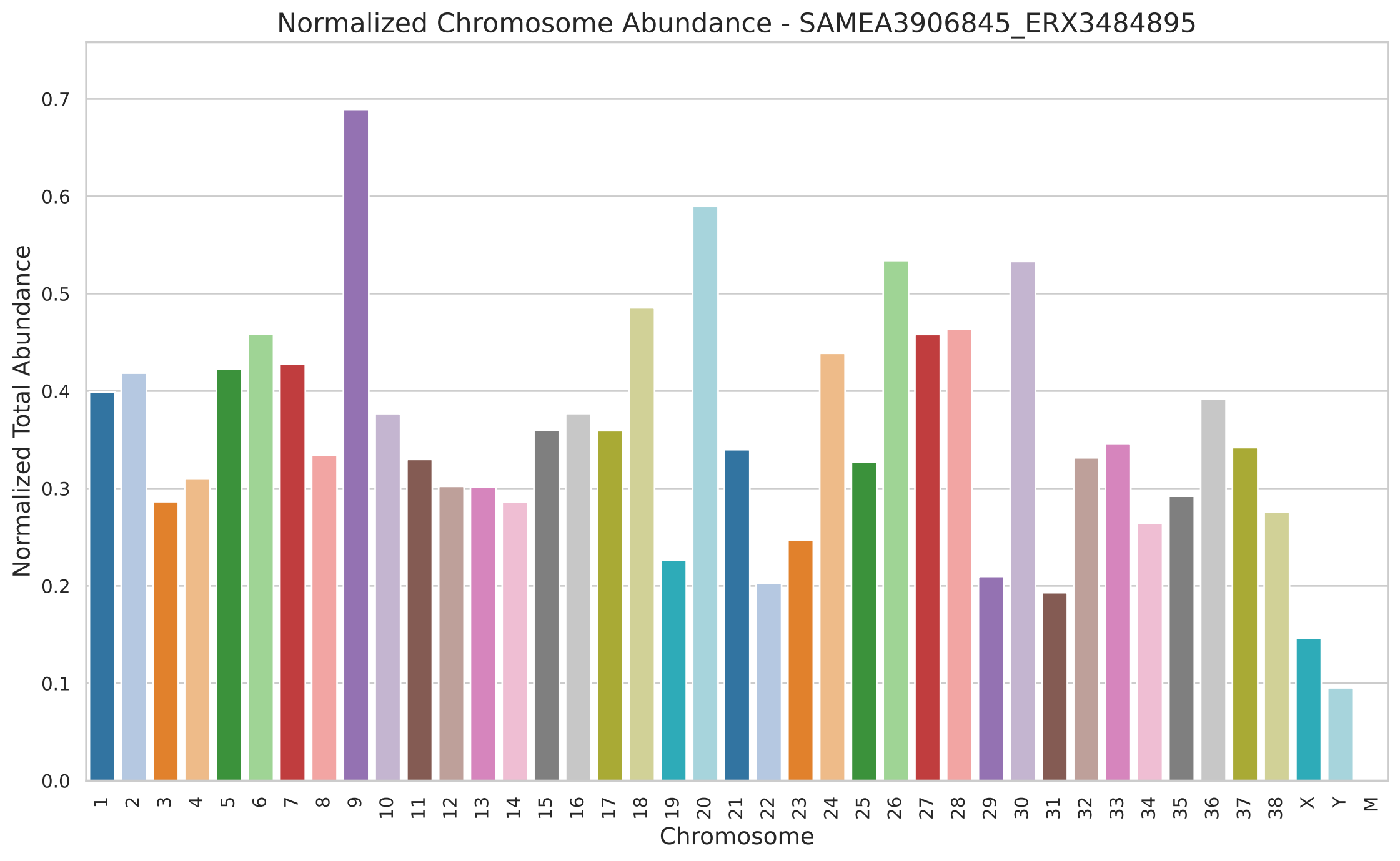

Normalized Chromosome Abundance - SAMEA5804330_ERX3484896
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

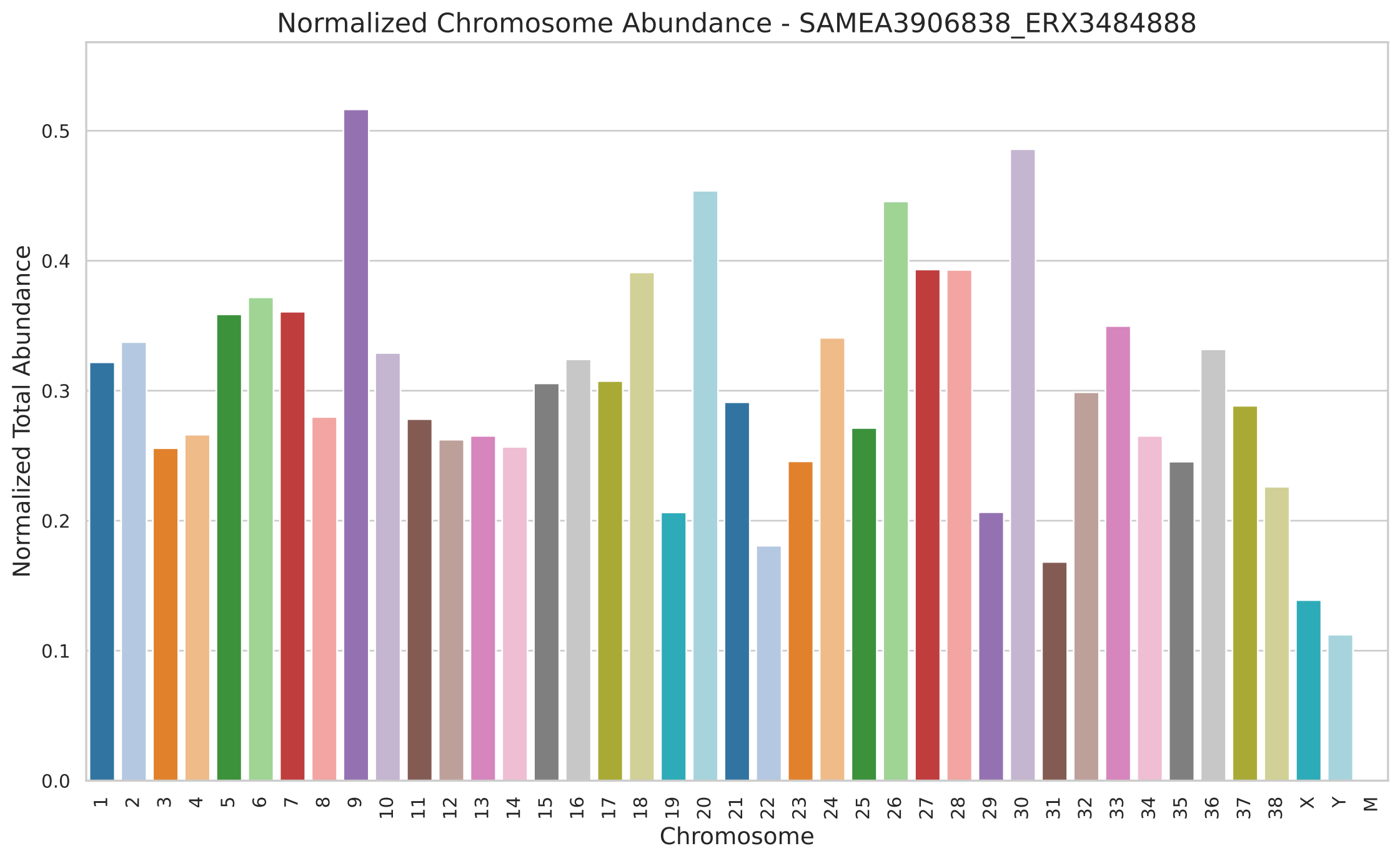

Normalized Chromosome Abundance - SAMEA3907063_ERX3484869
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

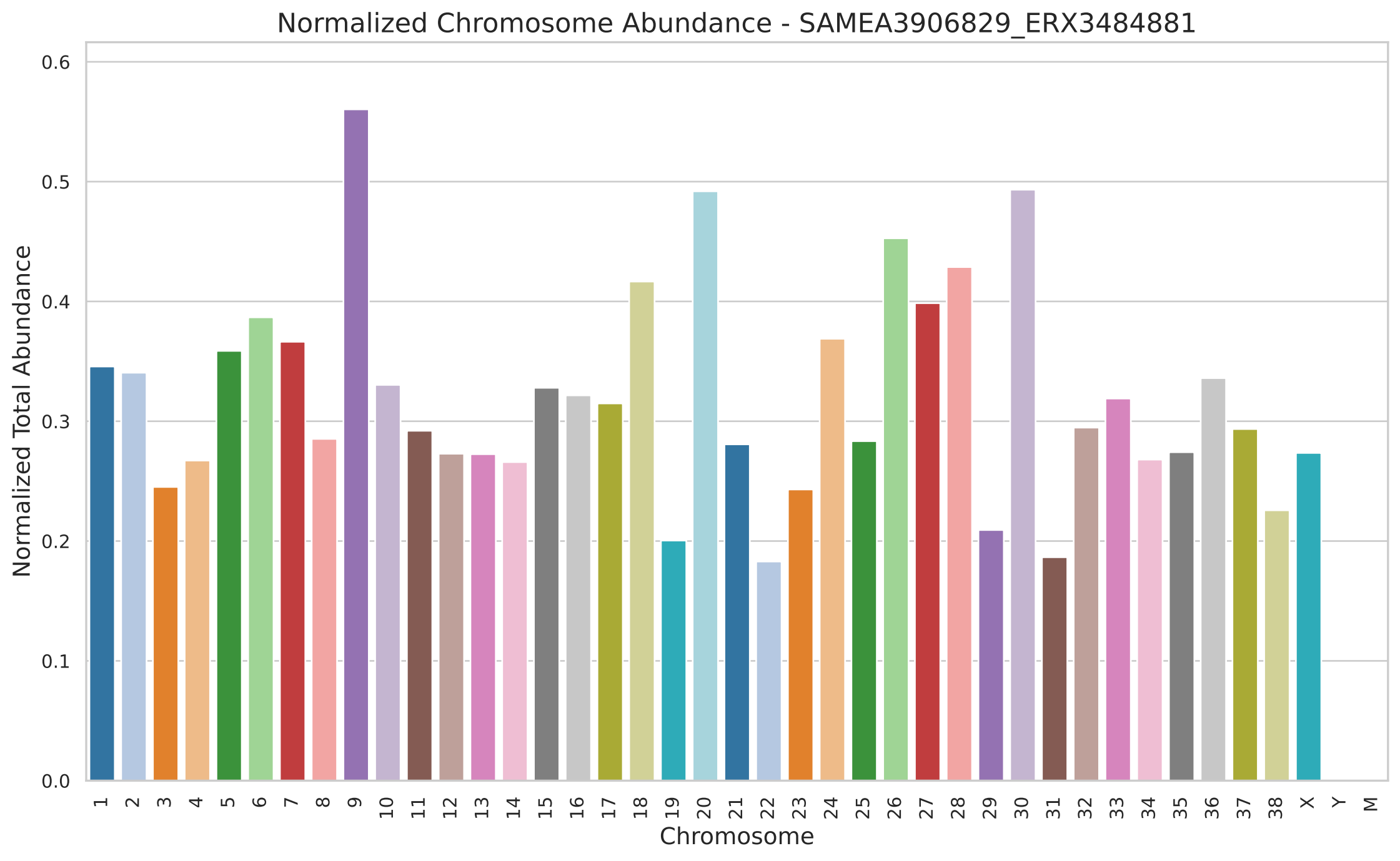

Normalized Chromosome Abundance - SAMEA3906816_ERX3484878
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

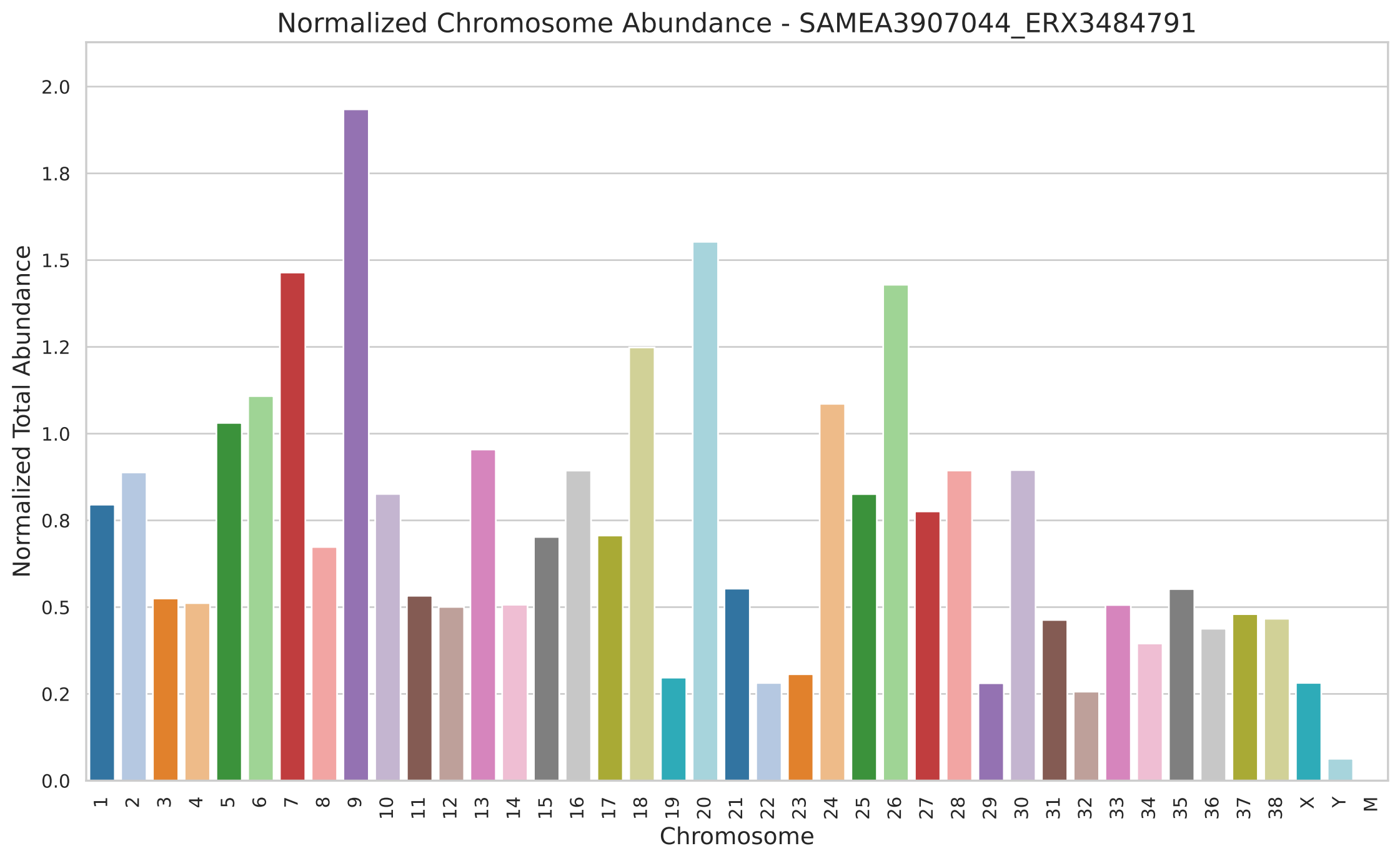

Normalized Chromosome Abundance - SAMEA3907072_ERX3484874
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

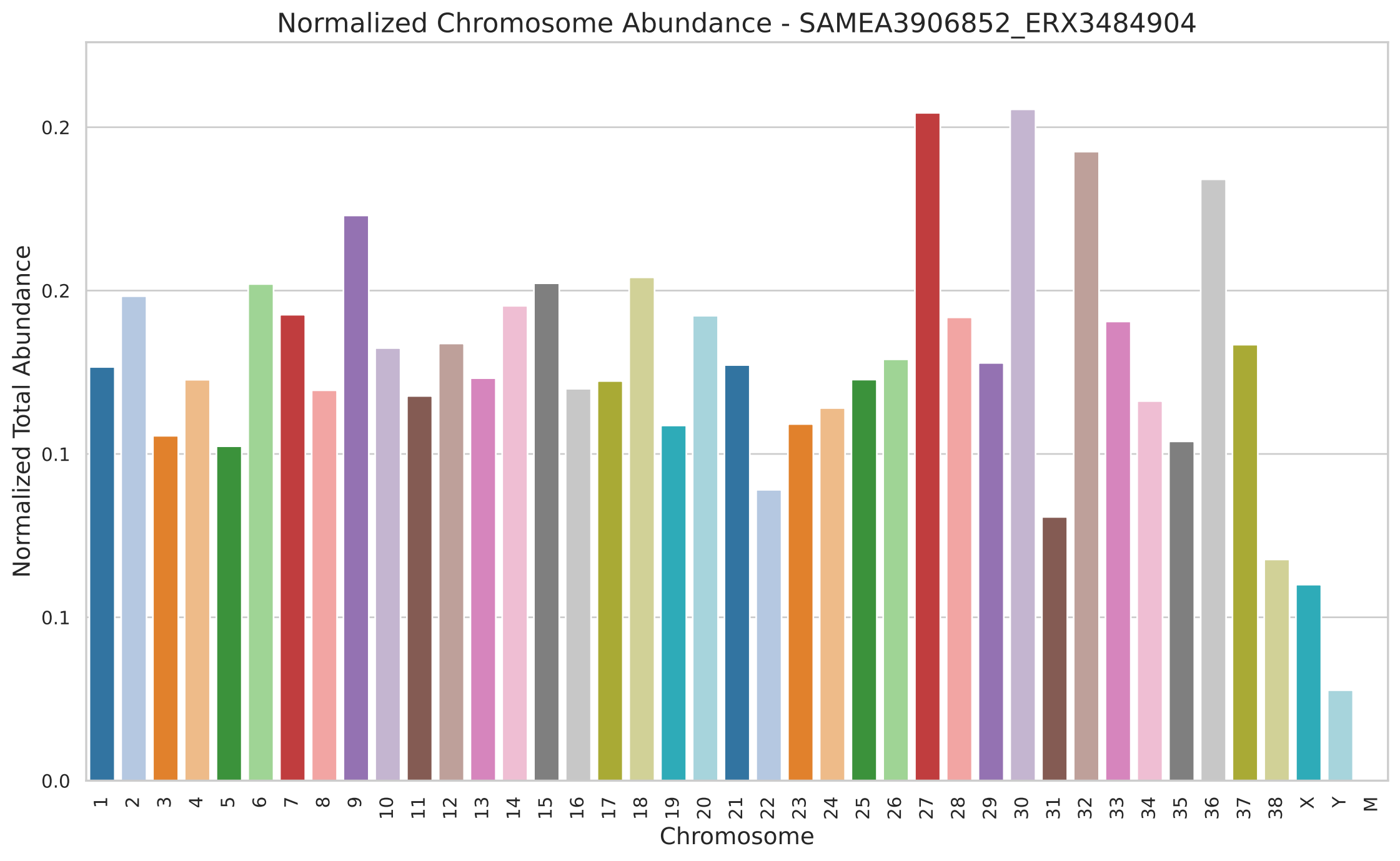

Normalized Chromosome Abundance - SAMEA3907425_ERX3484876
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

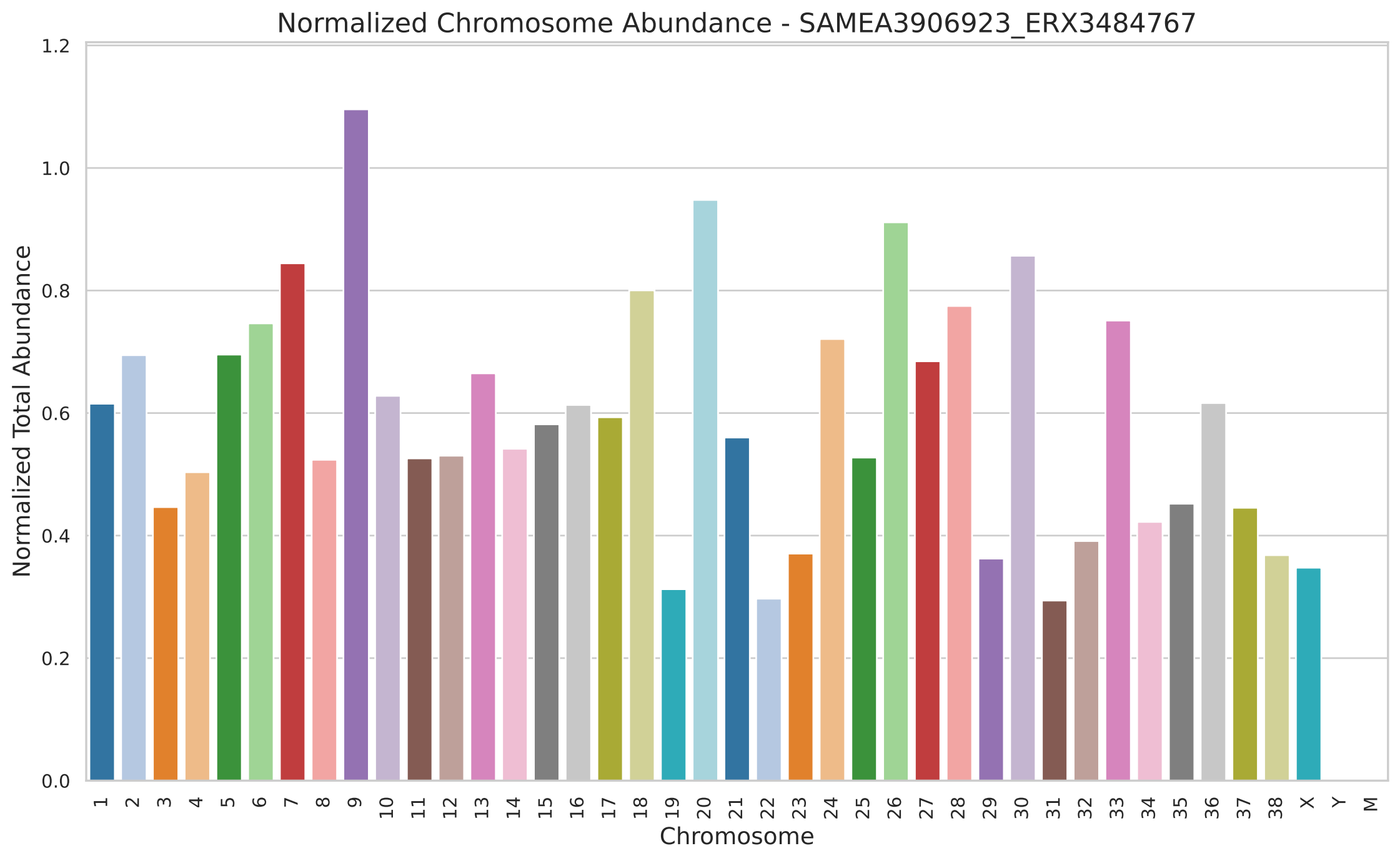

Normalized Chromosome Abundance - SAMEA3906845_ERX3484895
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

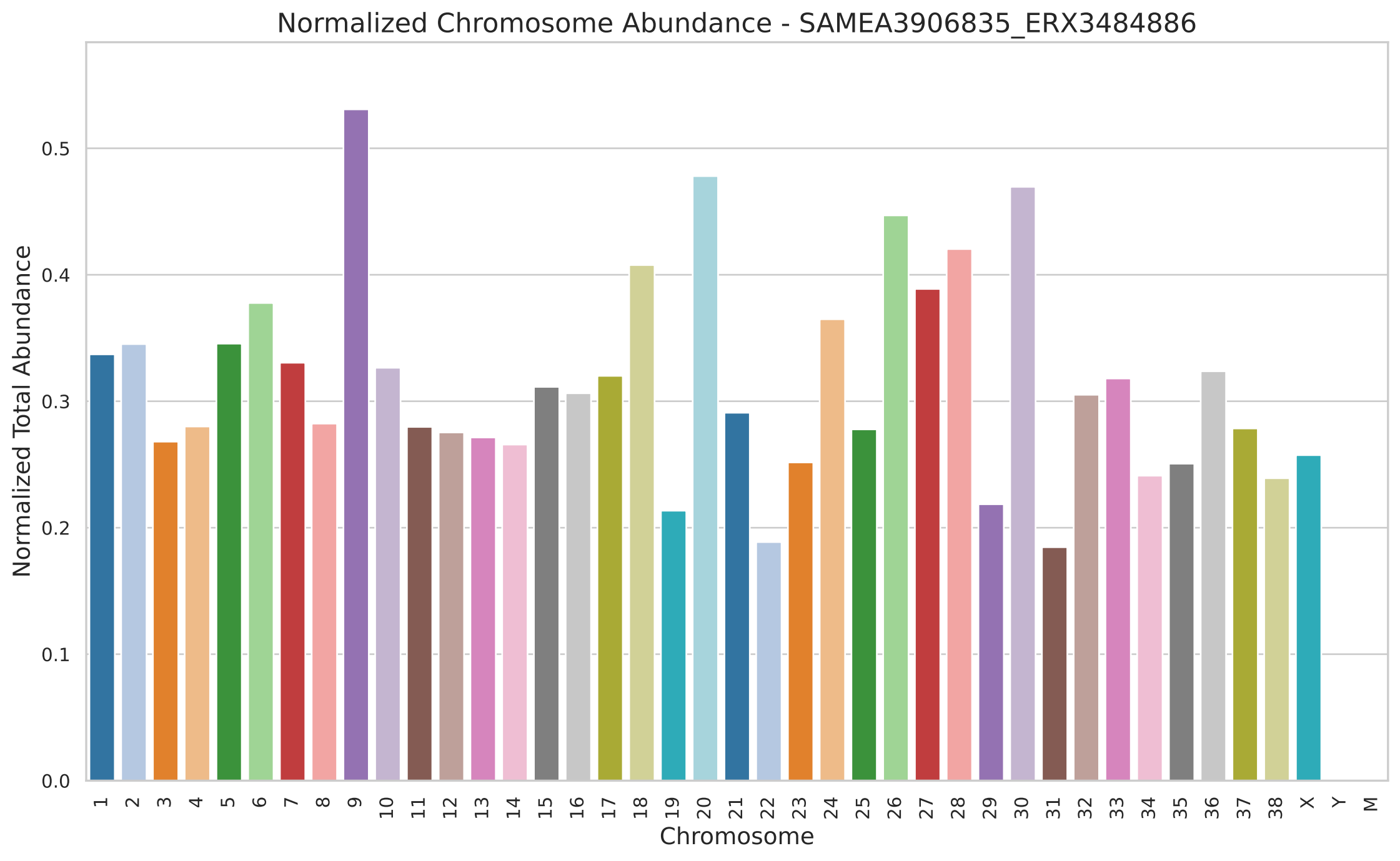

Normalized Chromosome Abundance - SAMEA3906838_ERX3484888
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

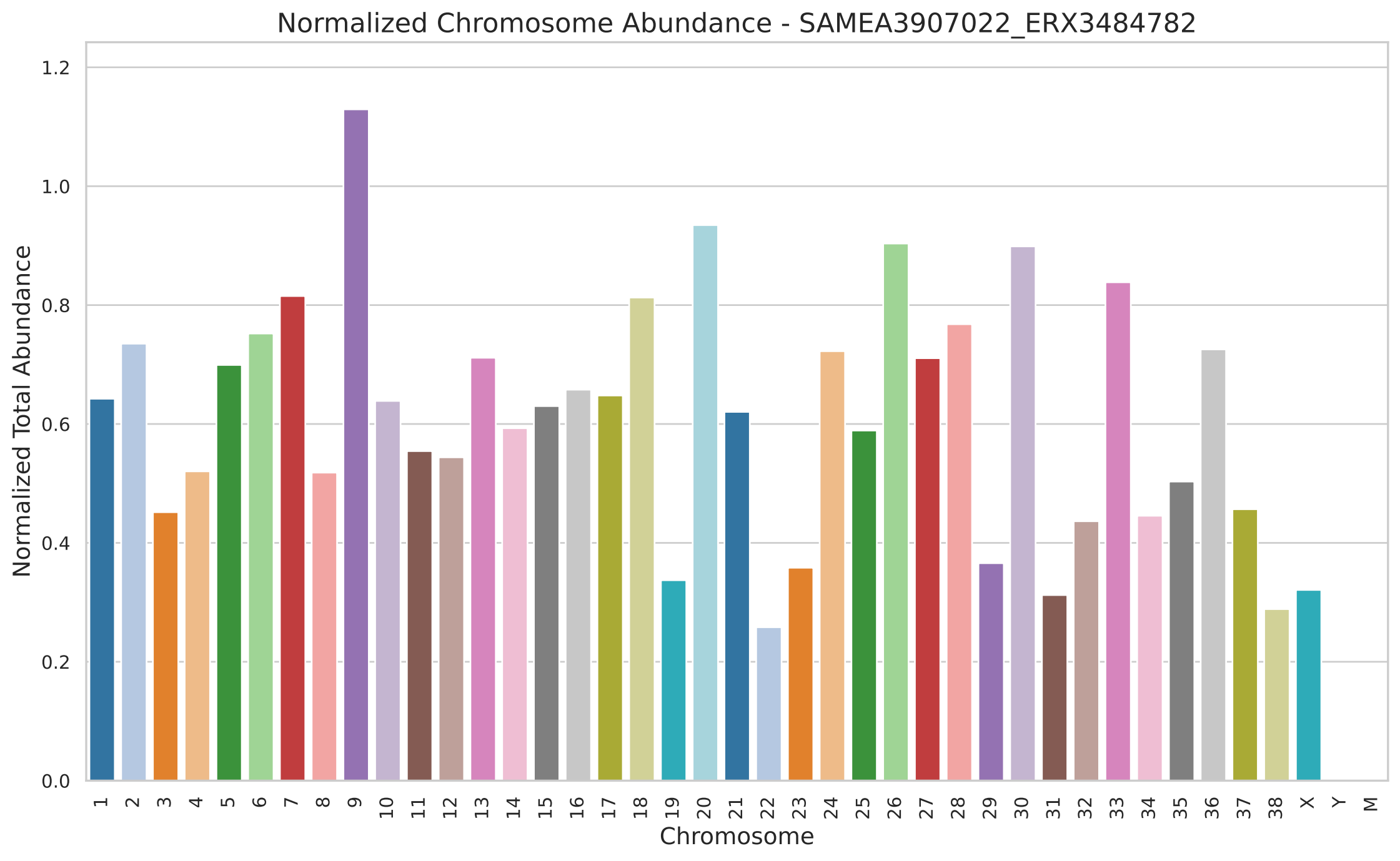

Normalized Chromosome Abundance - SAMEA3906829_ERX3484881
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

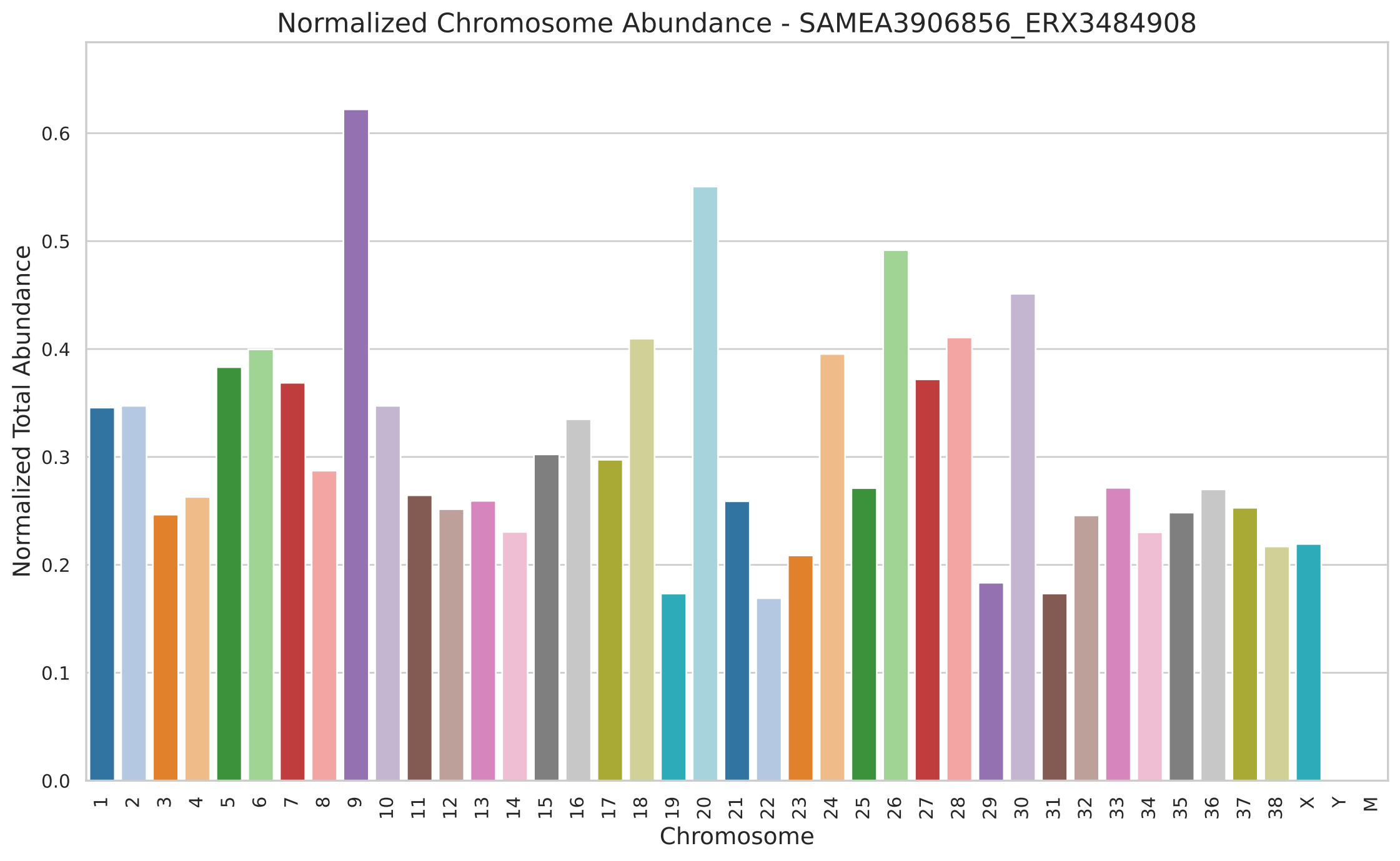

Normalized Chromosome Abundance - SAMEA3907044_ERX3484791
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

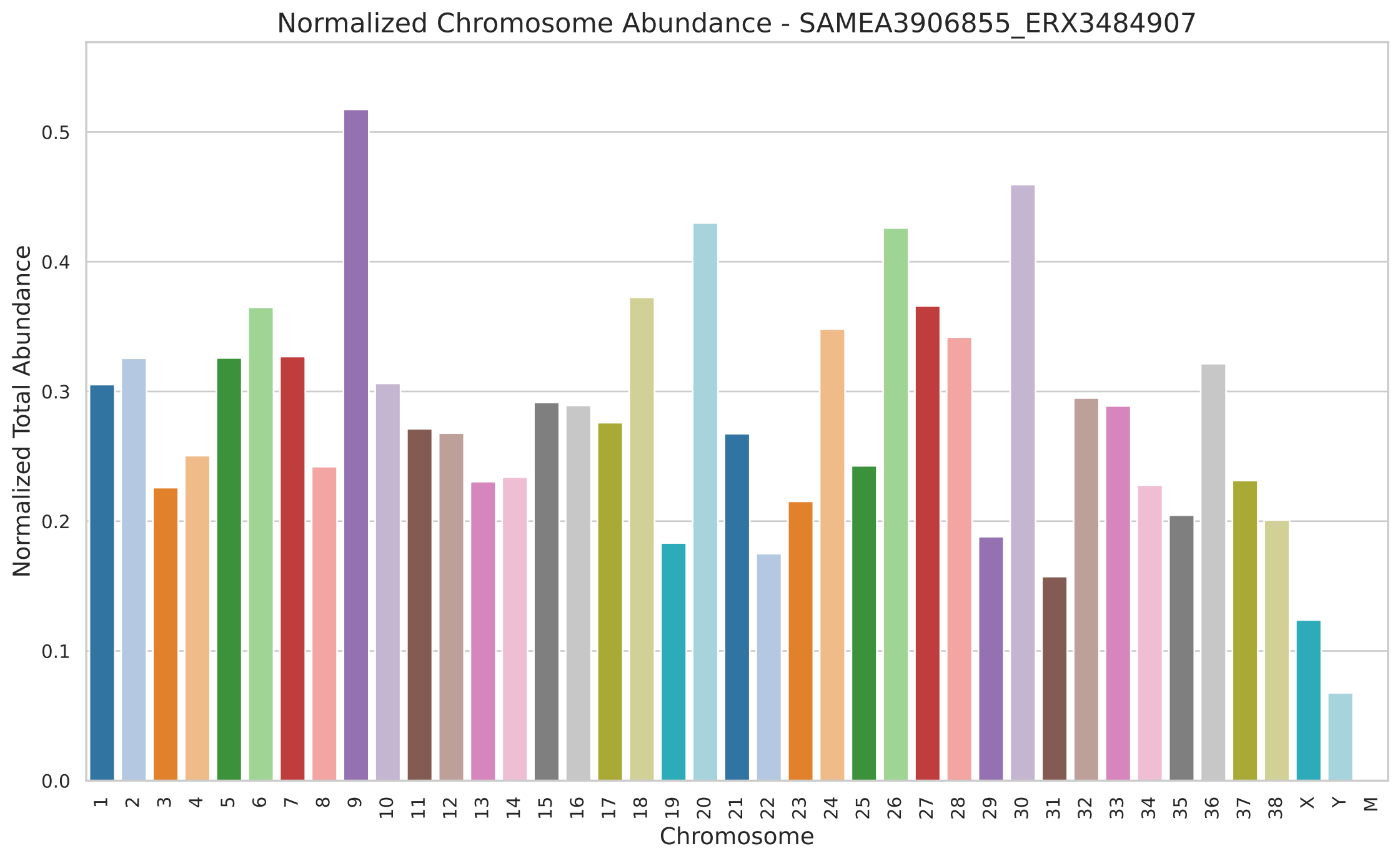

Normalized Chromosome Abundance - SAMEA3906852_ERX3484904
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

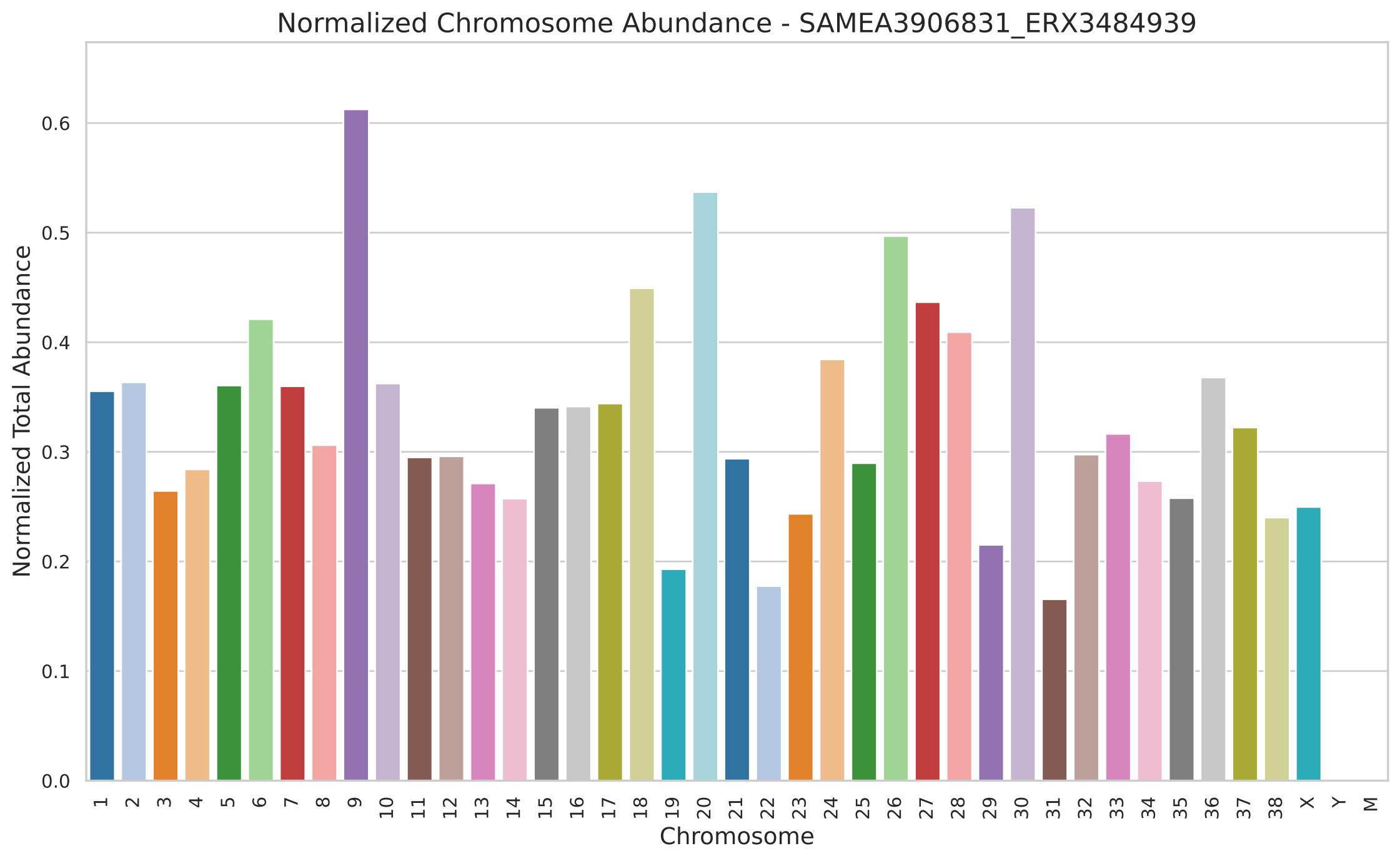

Normalized Chromosome Abundance - SAMEA3906923_ERX3484767
Normalized Total Abundance
1.2
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

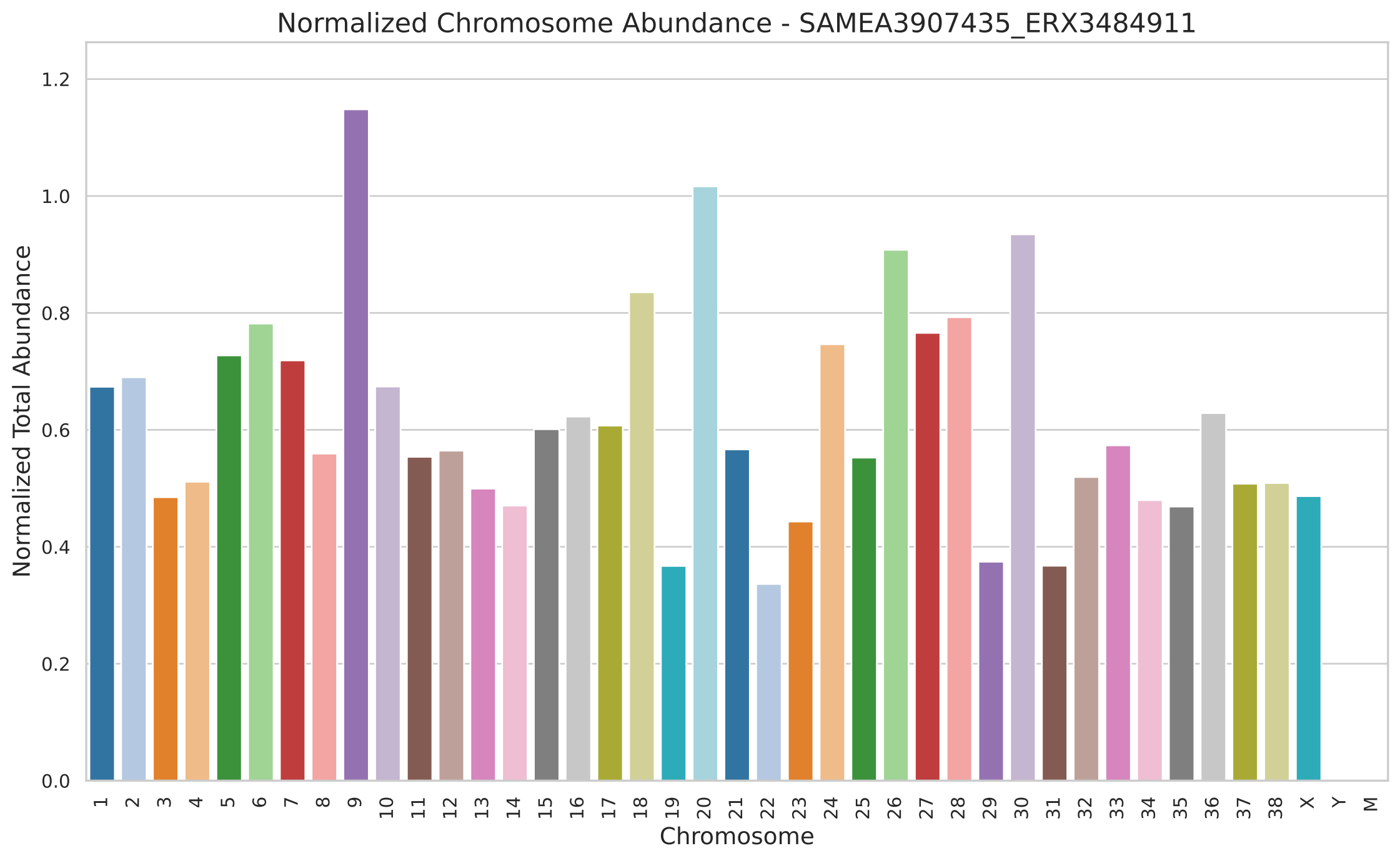

Normalized Chromosome Abundance - SAMEA3906835_ERX3484886
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

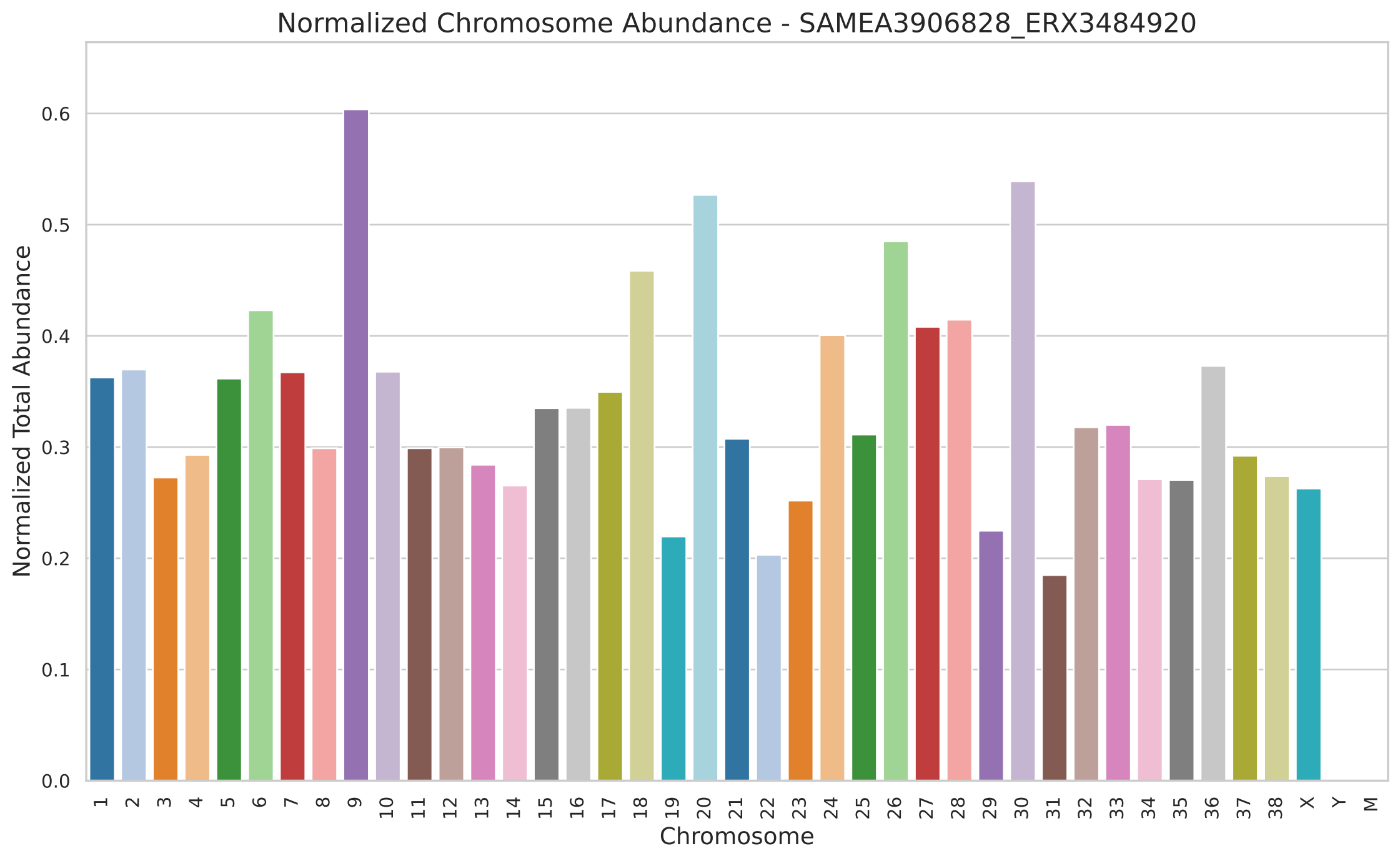

Normalized Chromosome Abundance - SAMEA3907022_ERX3484782
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

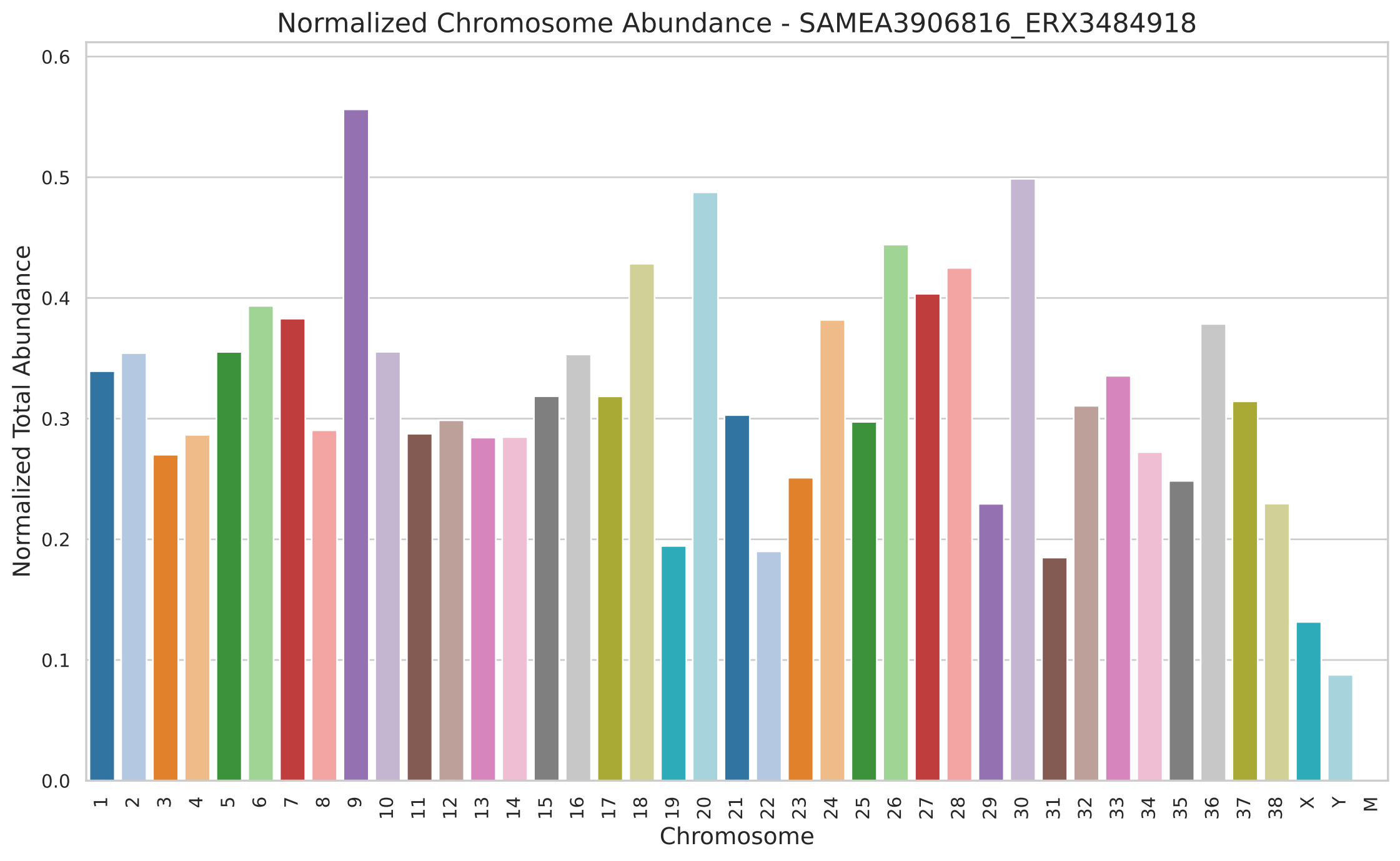

Normalized Chromosome Abundance - SAMEA3906856_ERX3484908
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

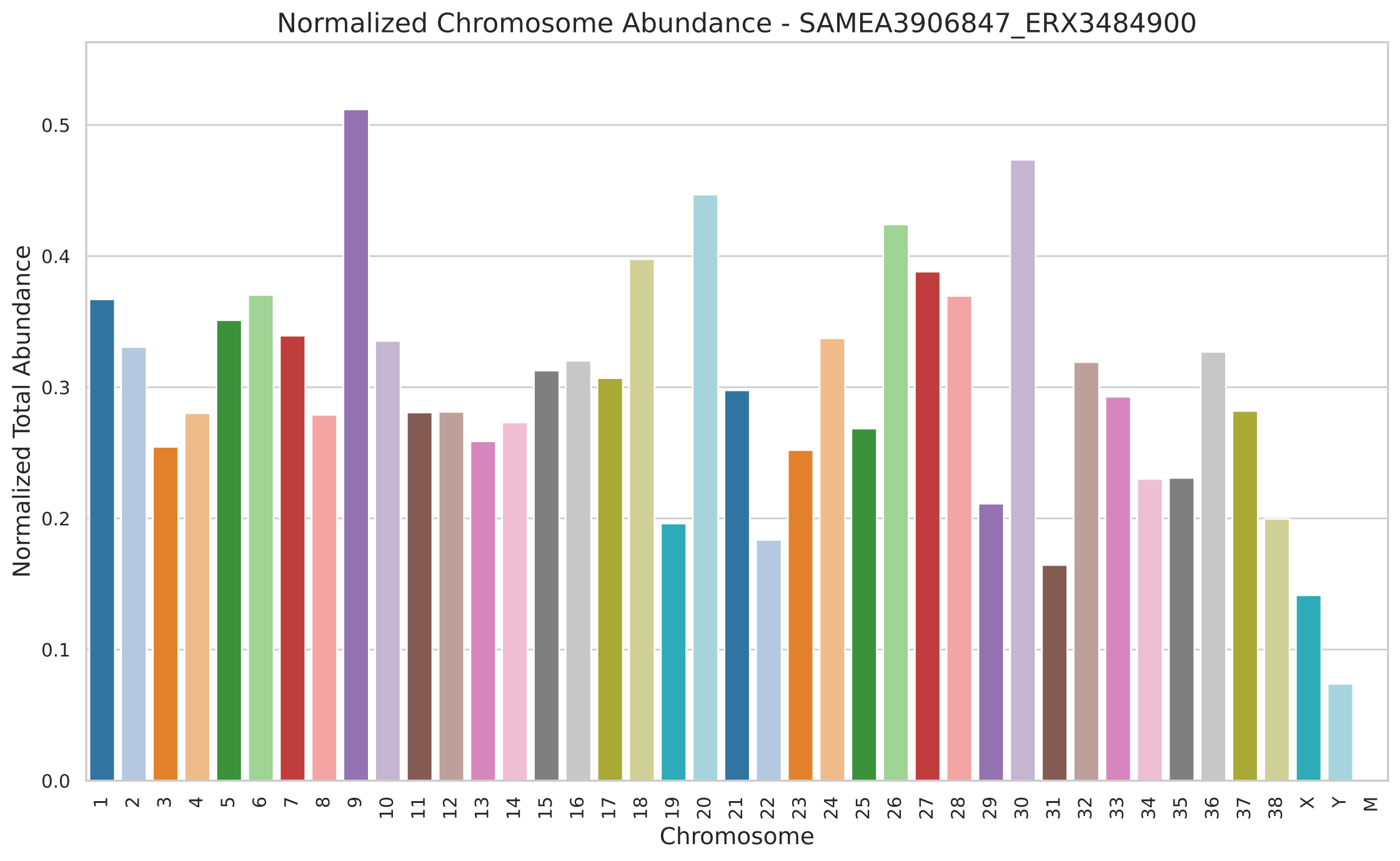

Normalized Chromosome Abundance - SAMEA3906855_ERX3484907
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

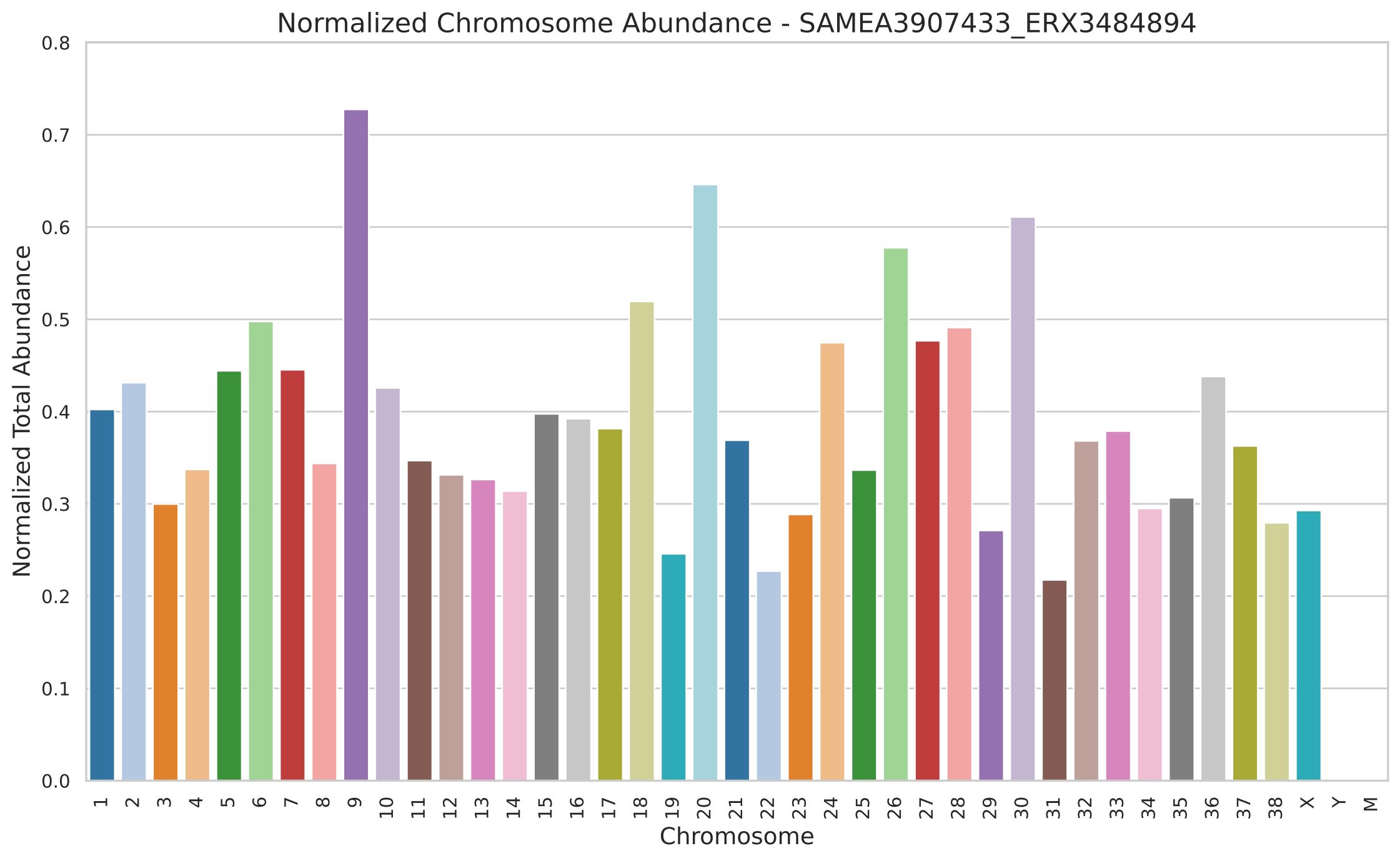

Normalized Chromosome Abundance - SAMEA3906831_ERX3484939
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

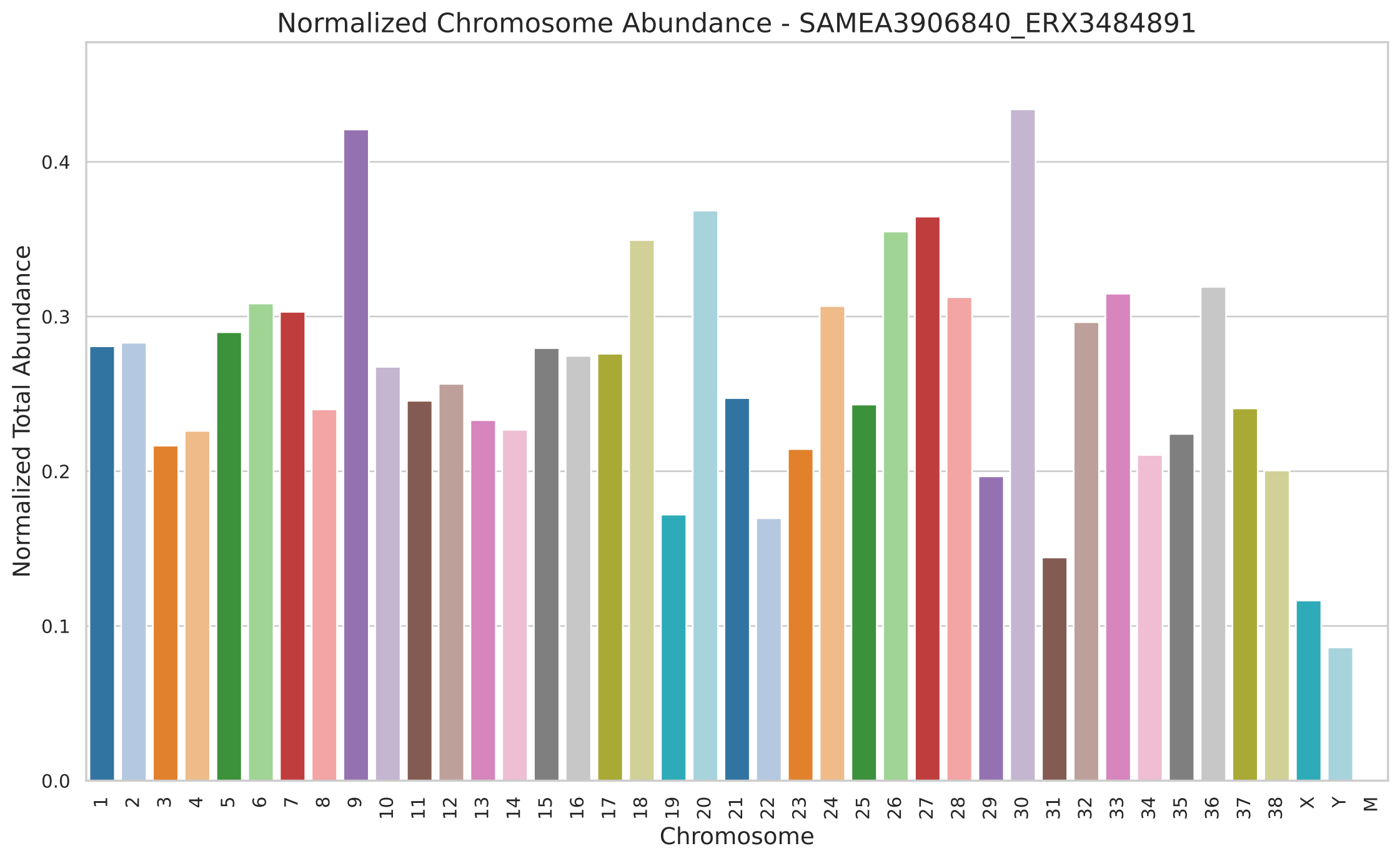

Normalized Chromosome Abundance - SAMEA3907435_ERX3484911
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

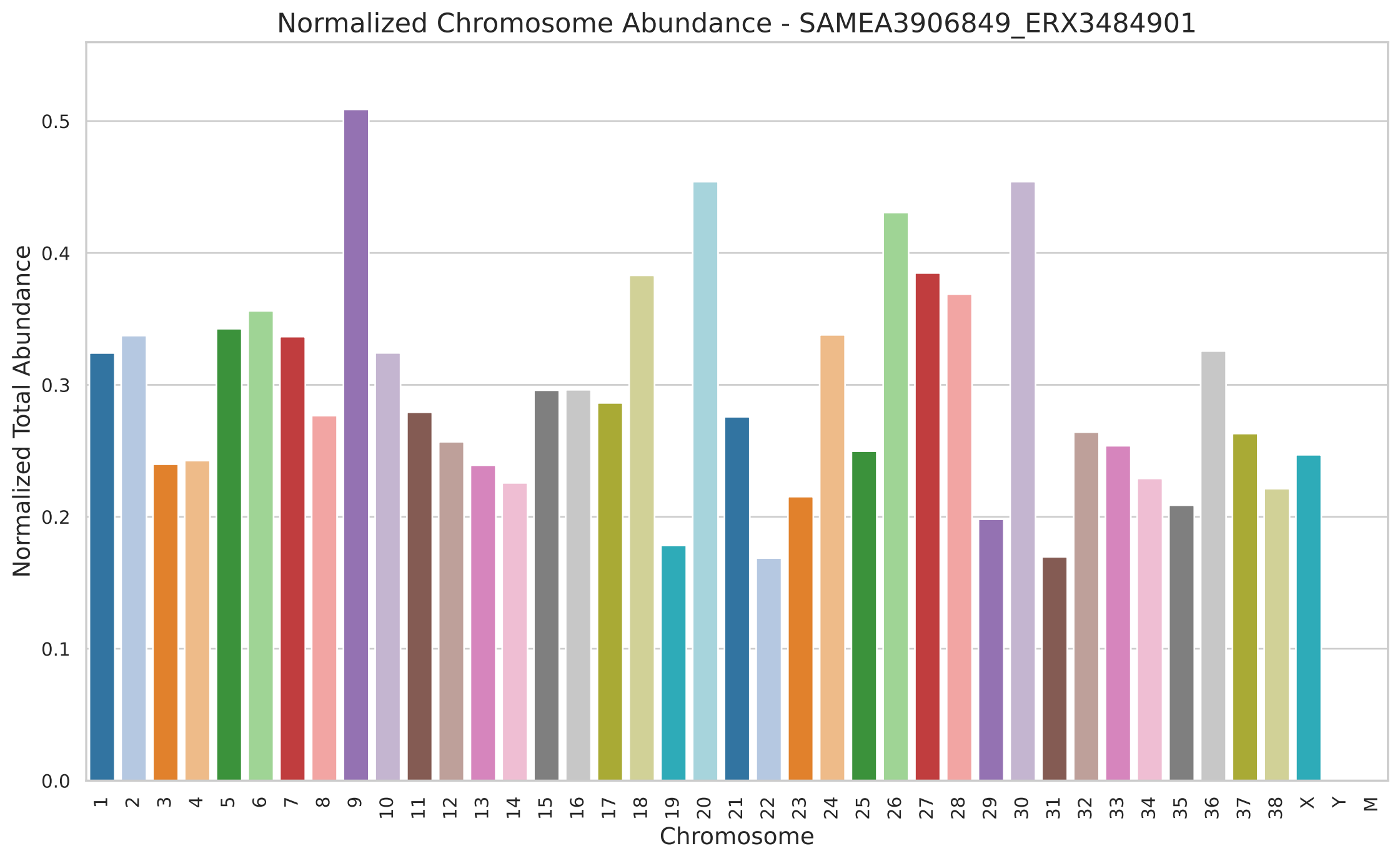

Normalized Chromosome Abundance - SAMEA3906828_ERX3484920
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

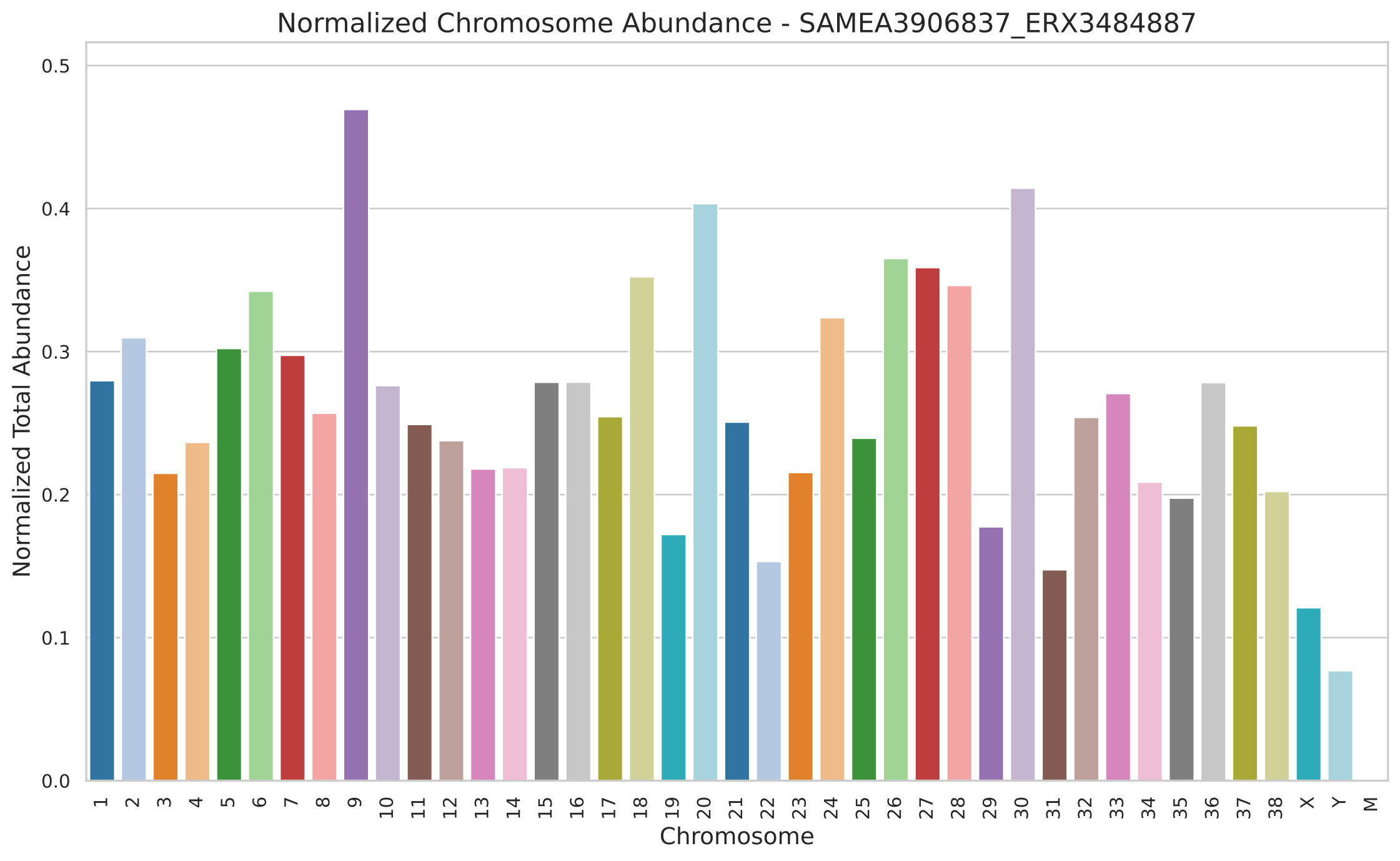

Normalized Chromosome Abundance - SAMEA3906816_ERX3484918
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

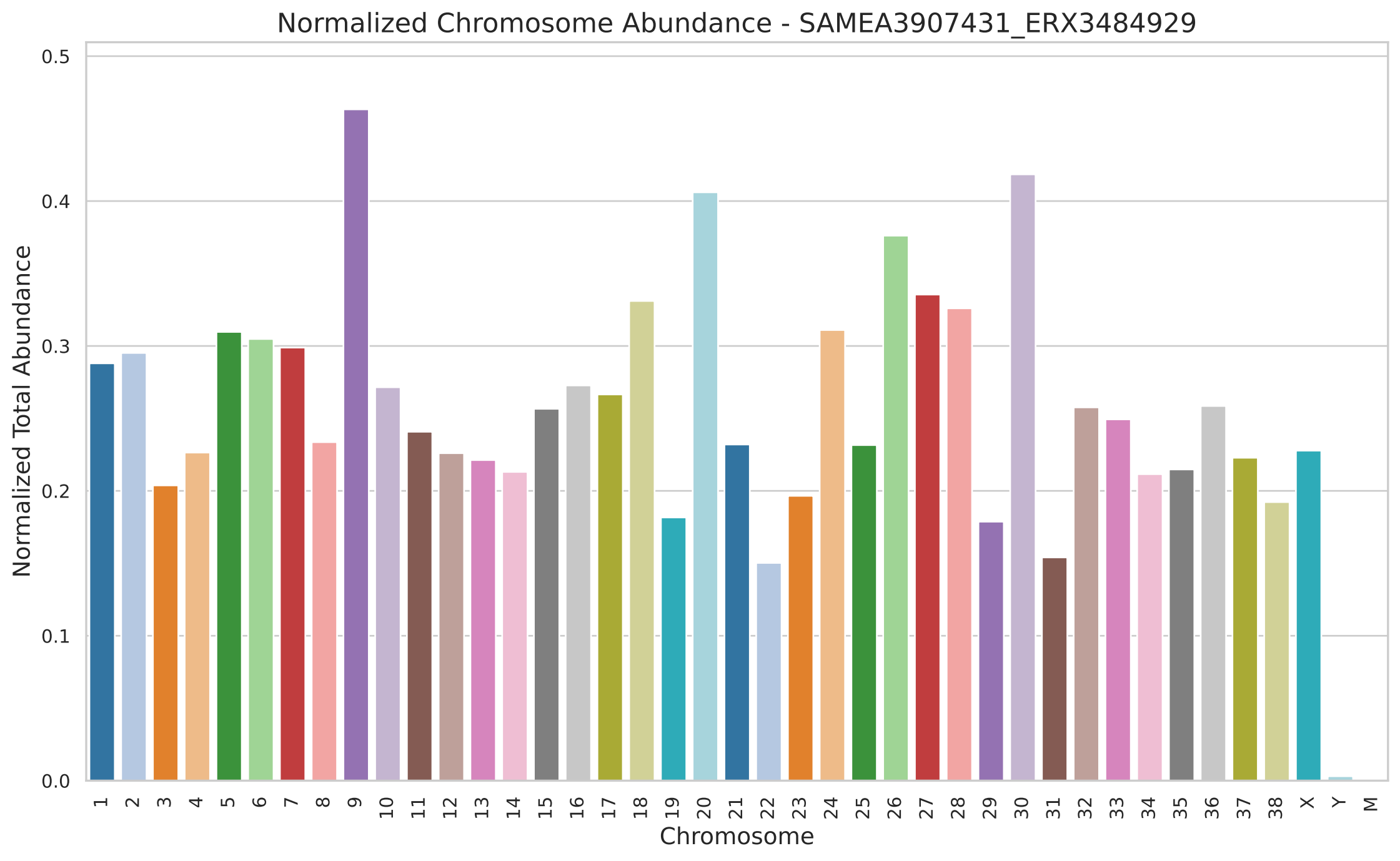

Normalized Chromosome Abundance - SAMEA3906847_ERX3484900
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

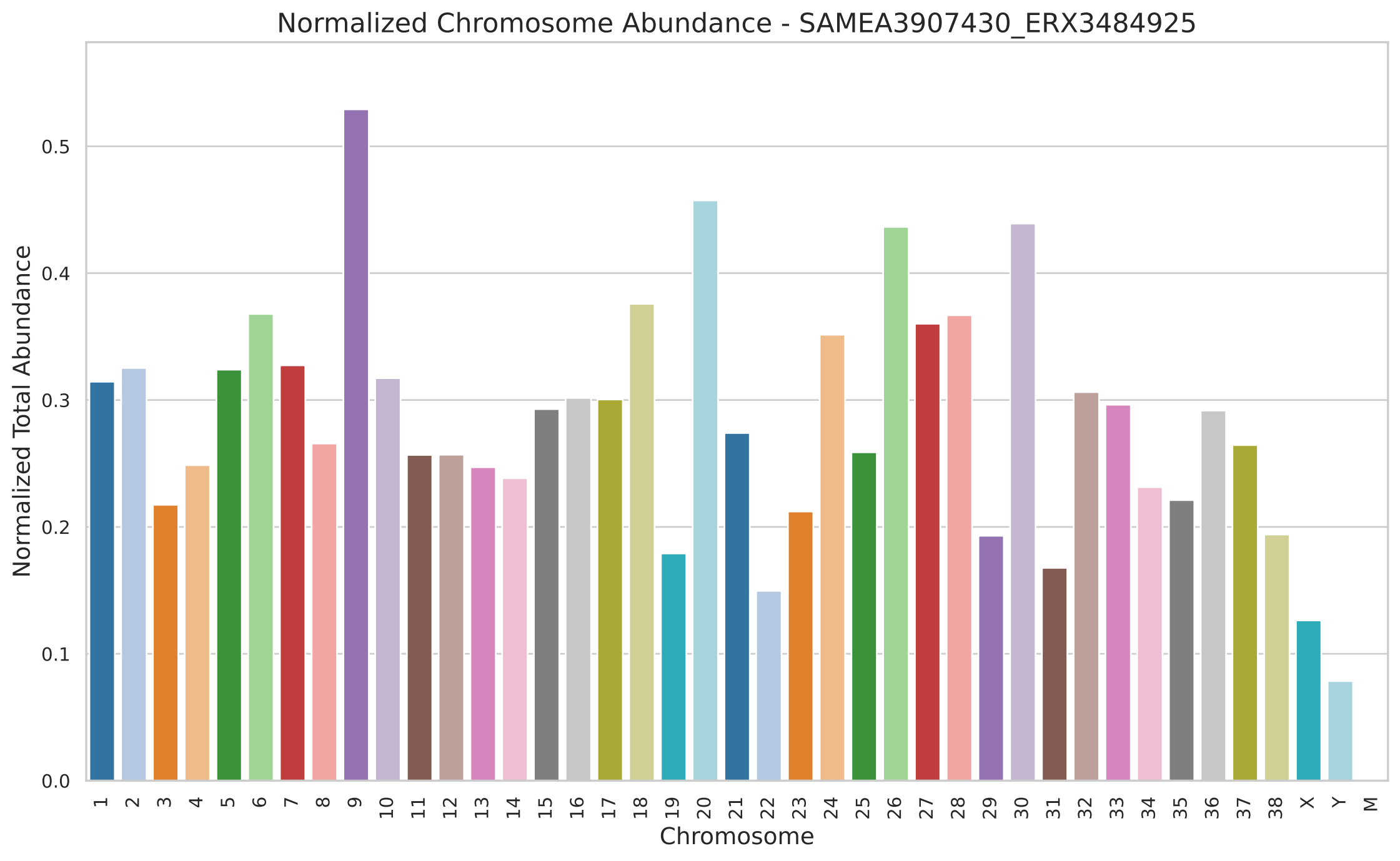

Normalized Chromosome Abundance - SAMEA3907433_ERX3484894
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

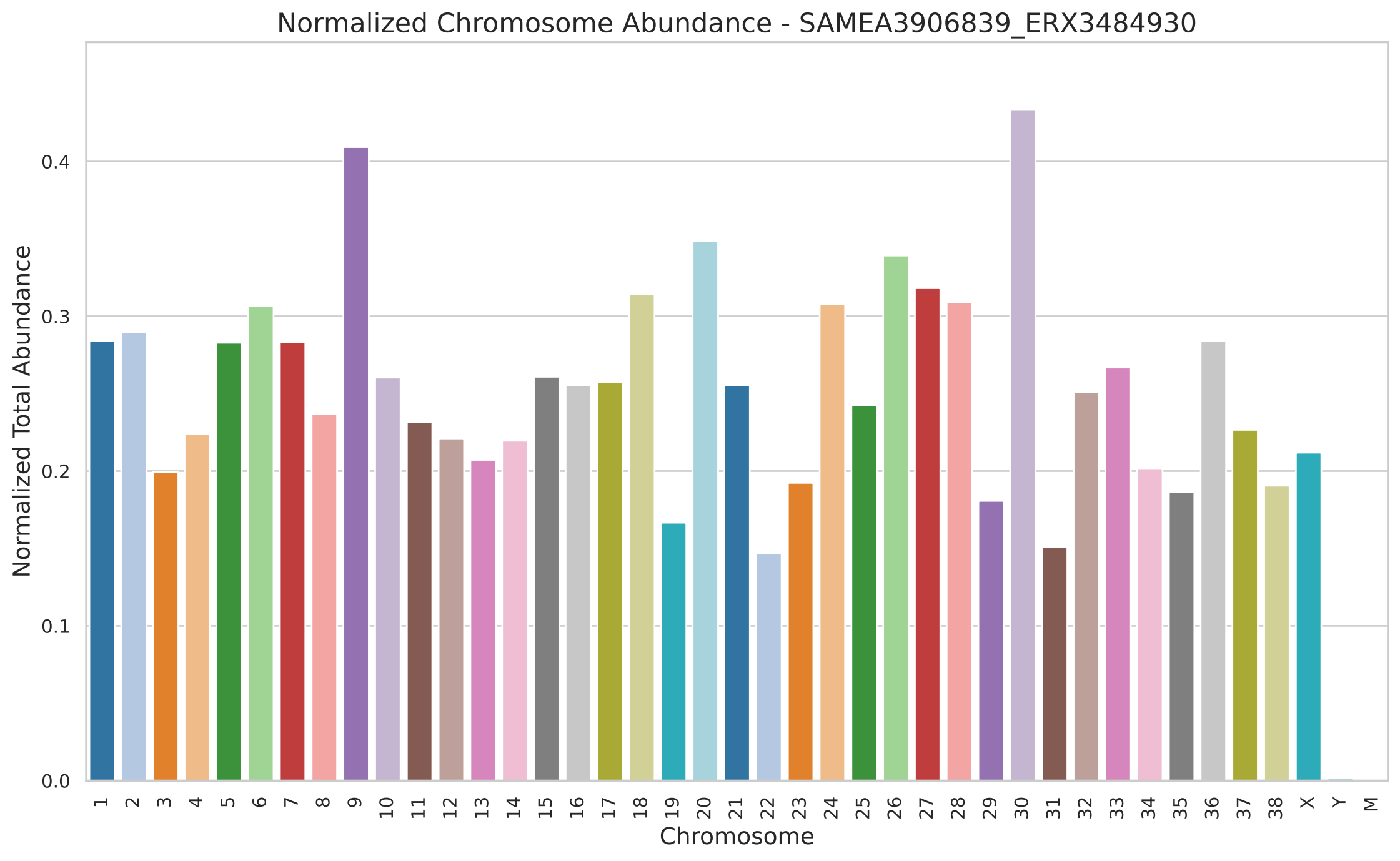

Normalized Chromosome Abundance - SAMEA3906840_ERX3484891
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

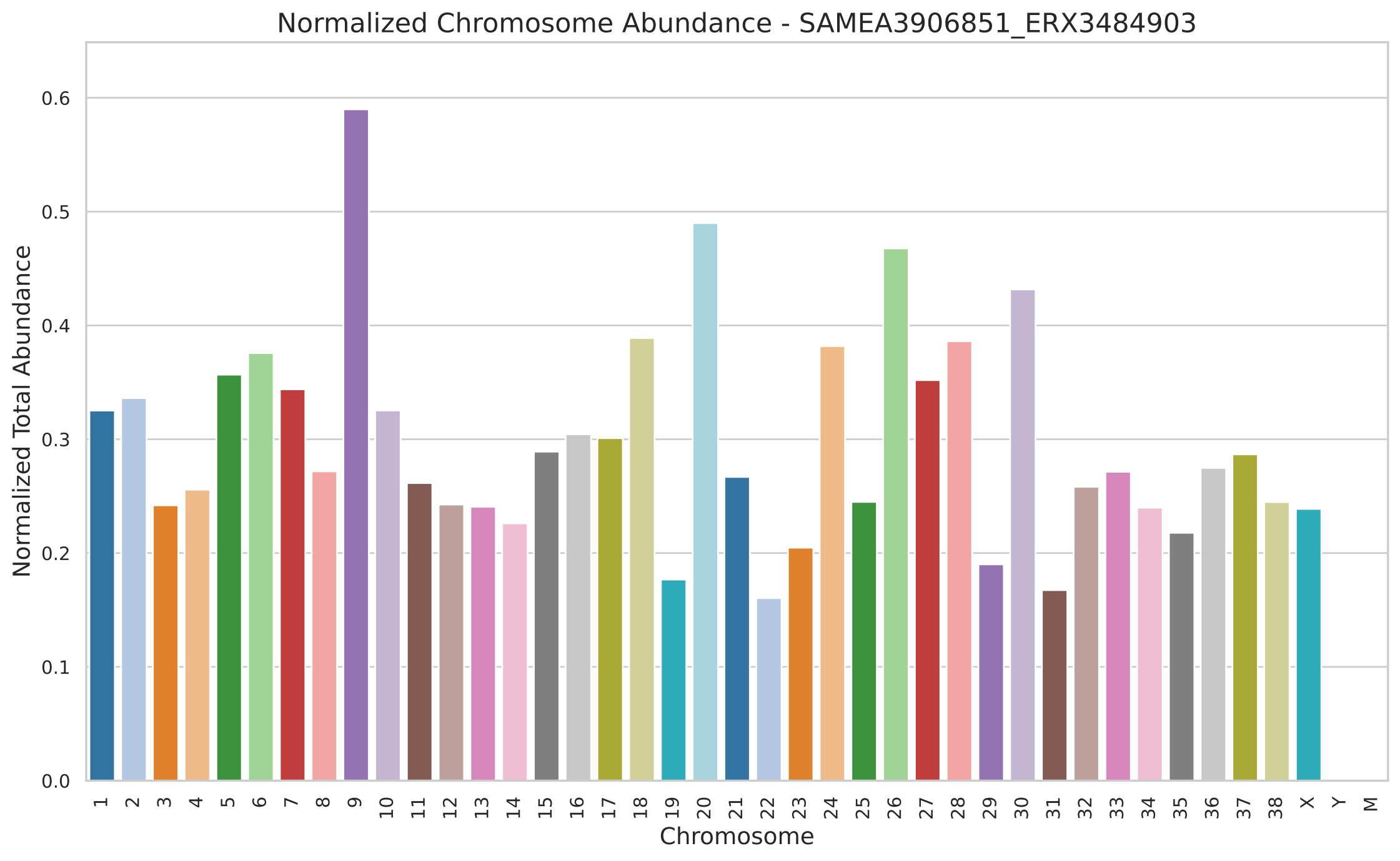

Normalized Chromosome Abundance - SAMEA3906849_ERX3484901
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

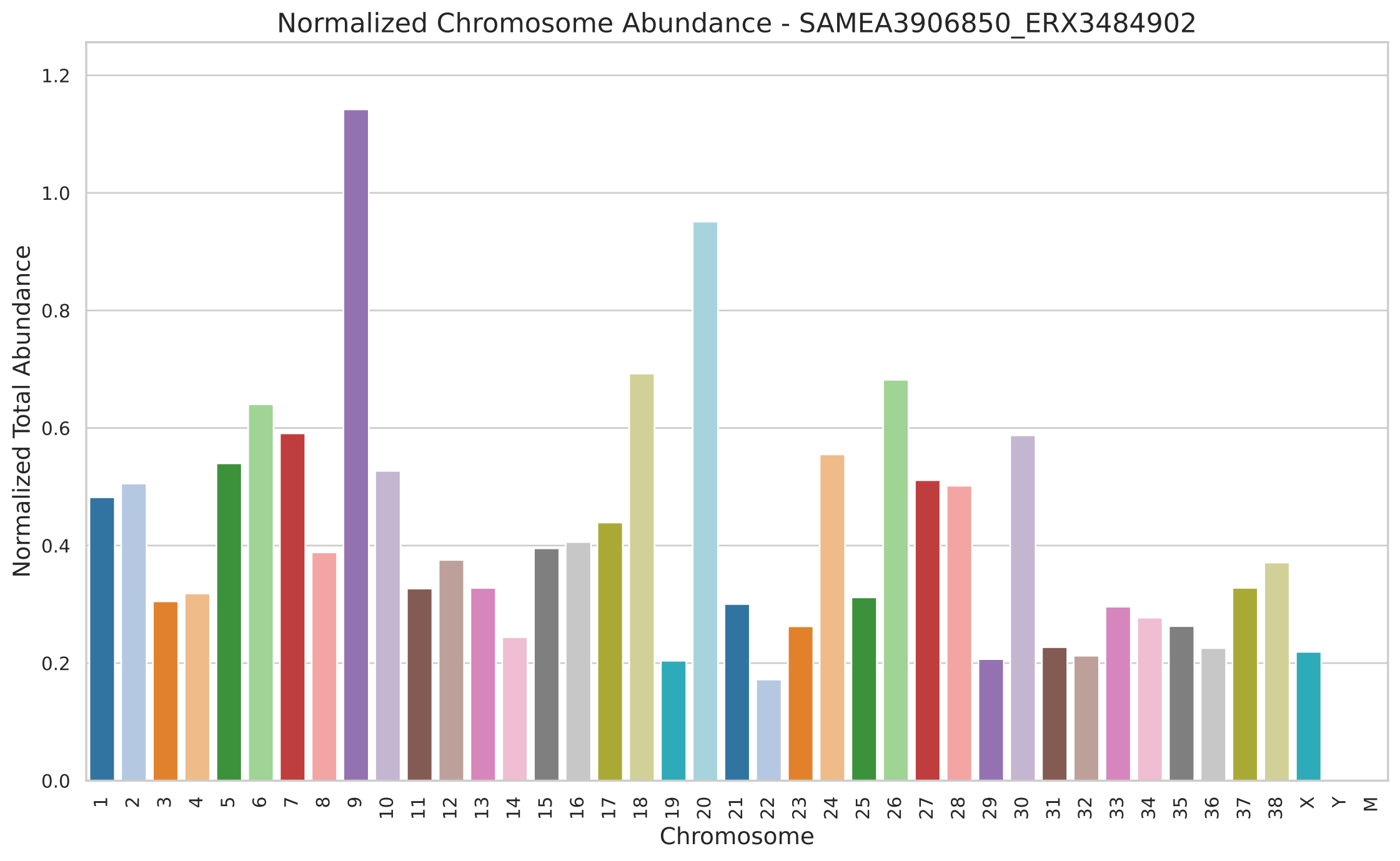

Normalized Chromosome Abundance - SAMEA3906837_ERX3484887
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

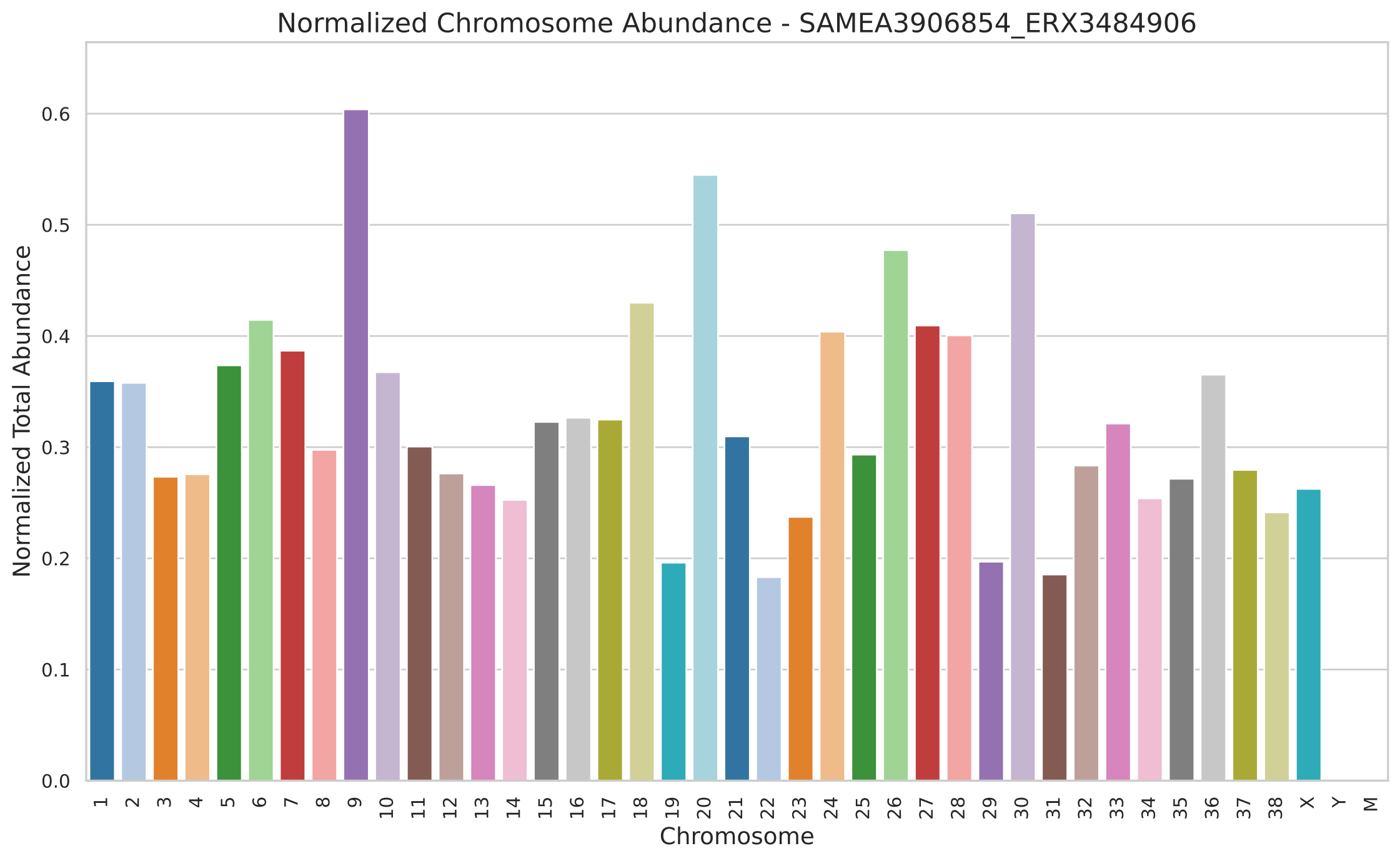

Normalized Chromosome Abundance - SAMEA3907431_ERX3484929
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

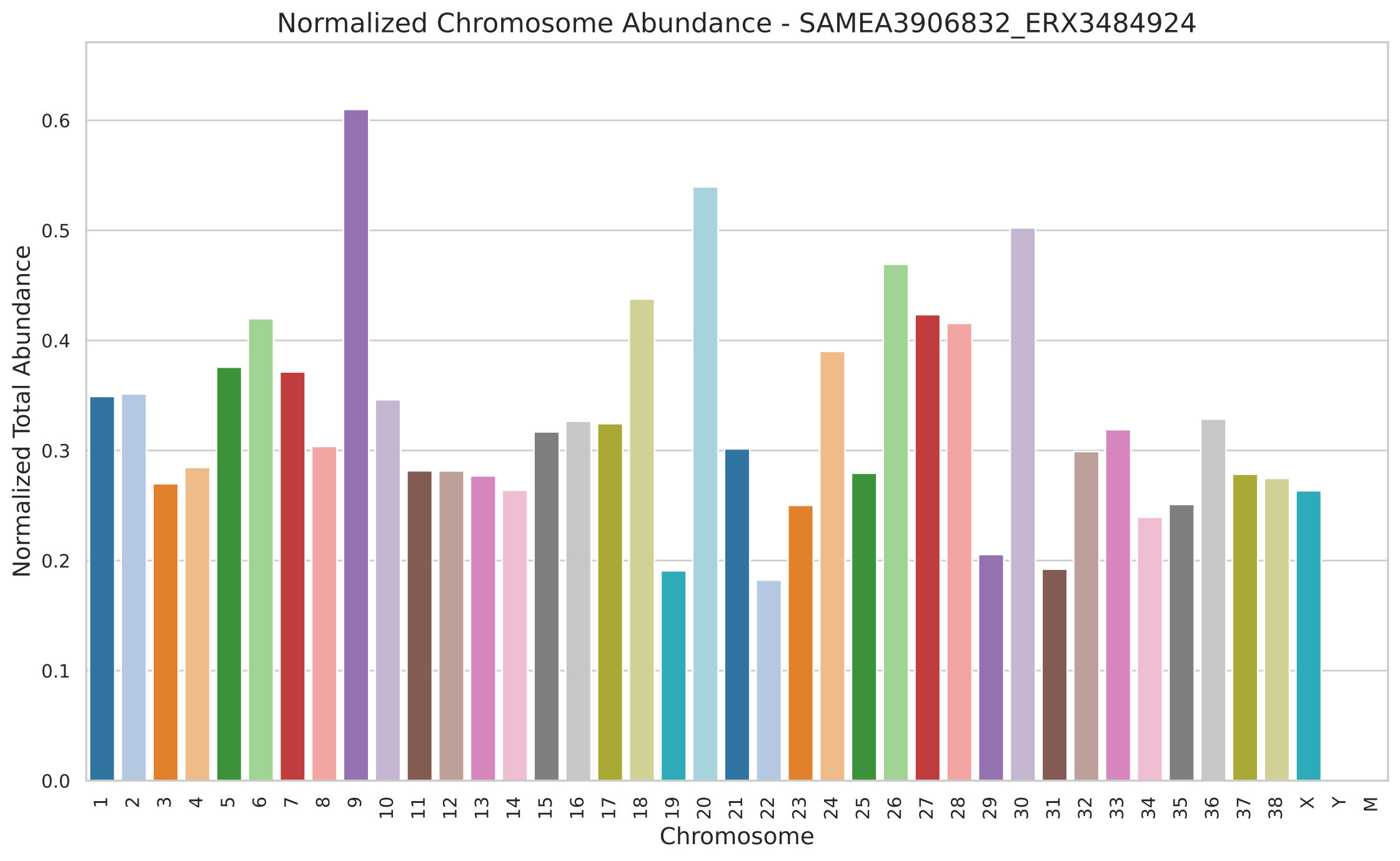

Normalized Chromosome Abundance - SAMEA3907430_ERX3484925
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

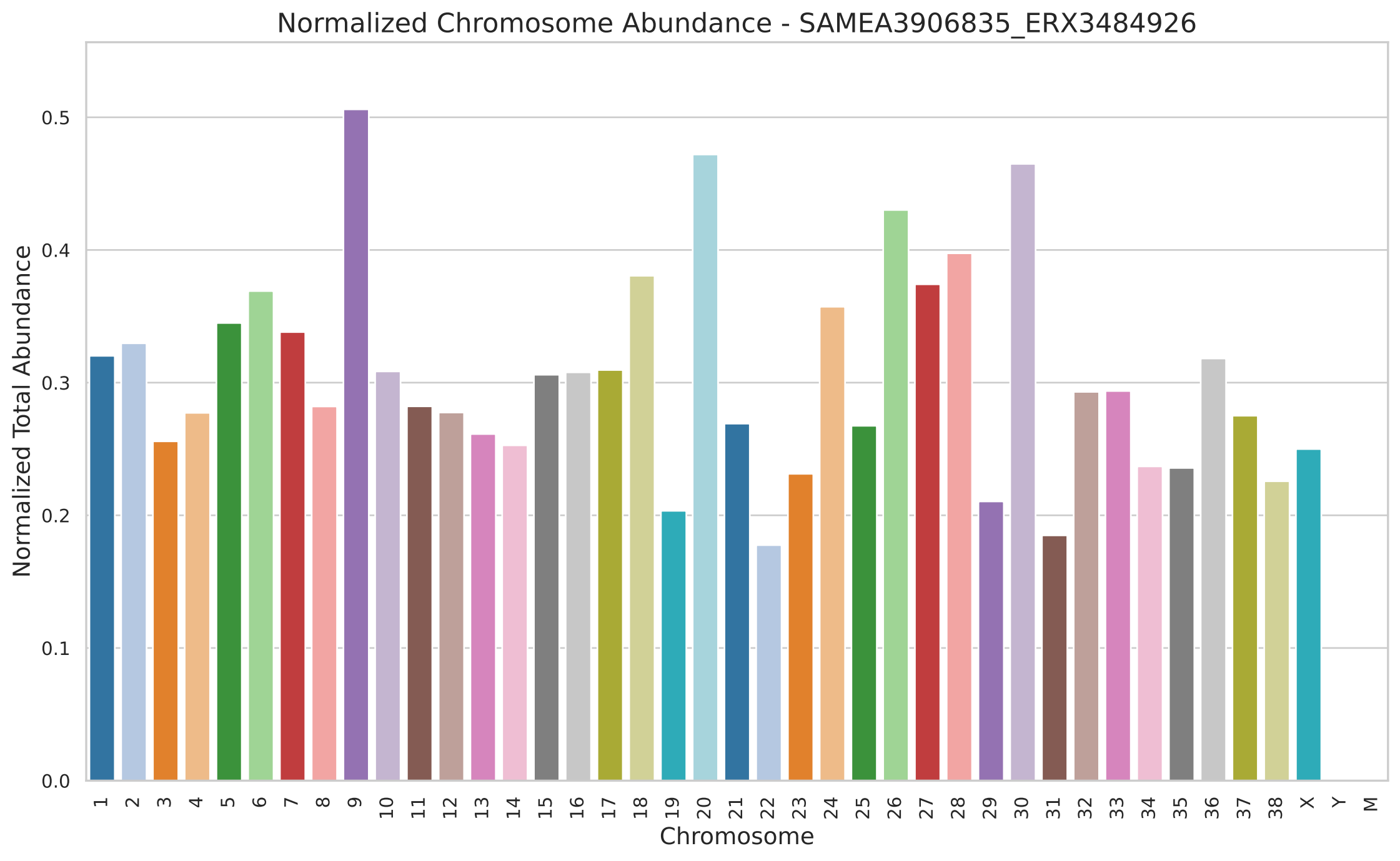

Normalized Chromosome Abundance - SAMEA3906839_ERX3484930
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

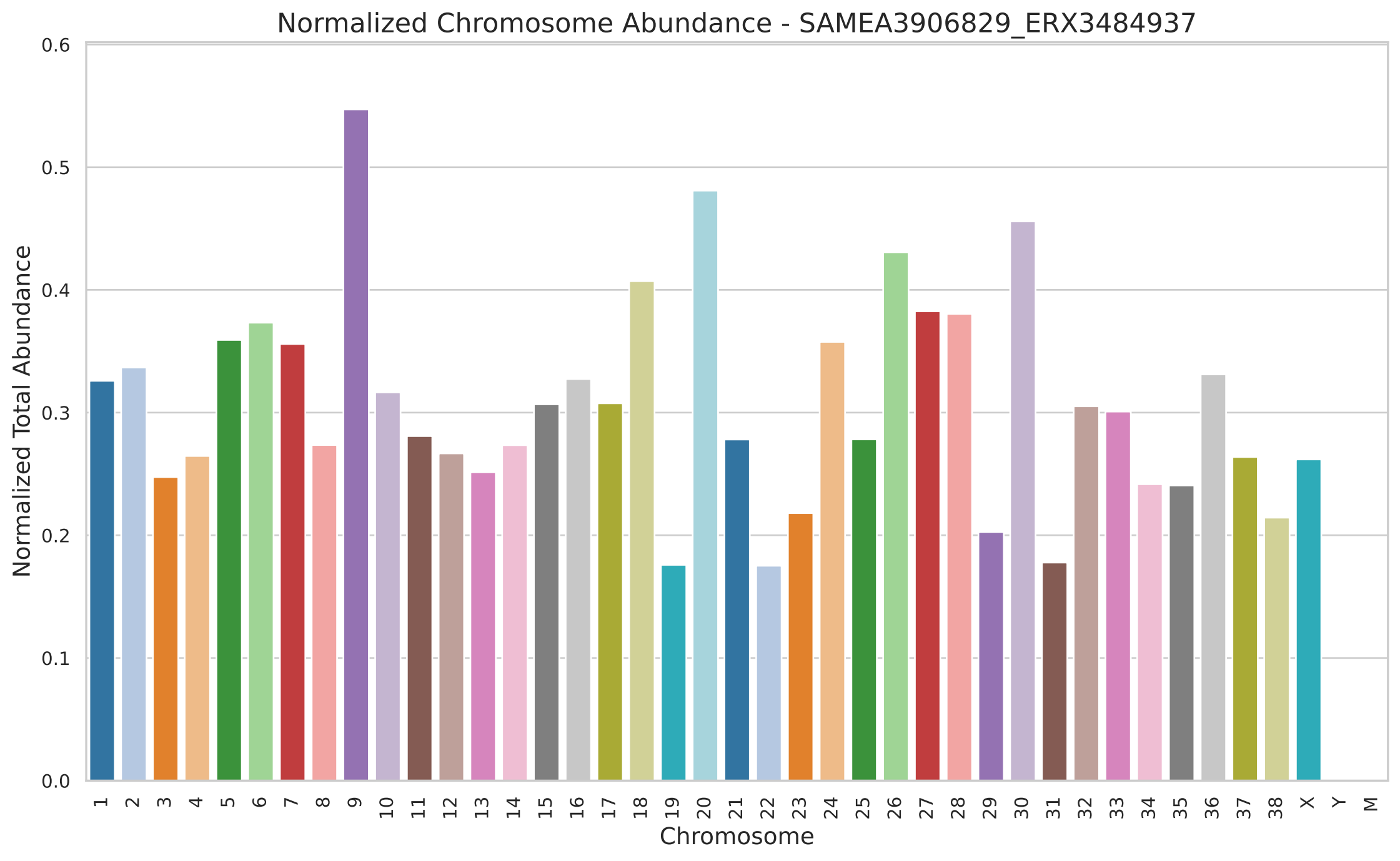

Normalized Chromosome Abundance - SAMEA3906851_ERX3484903
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

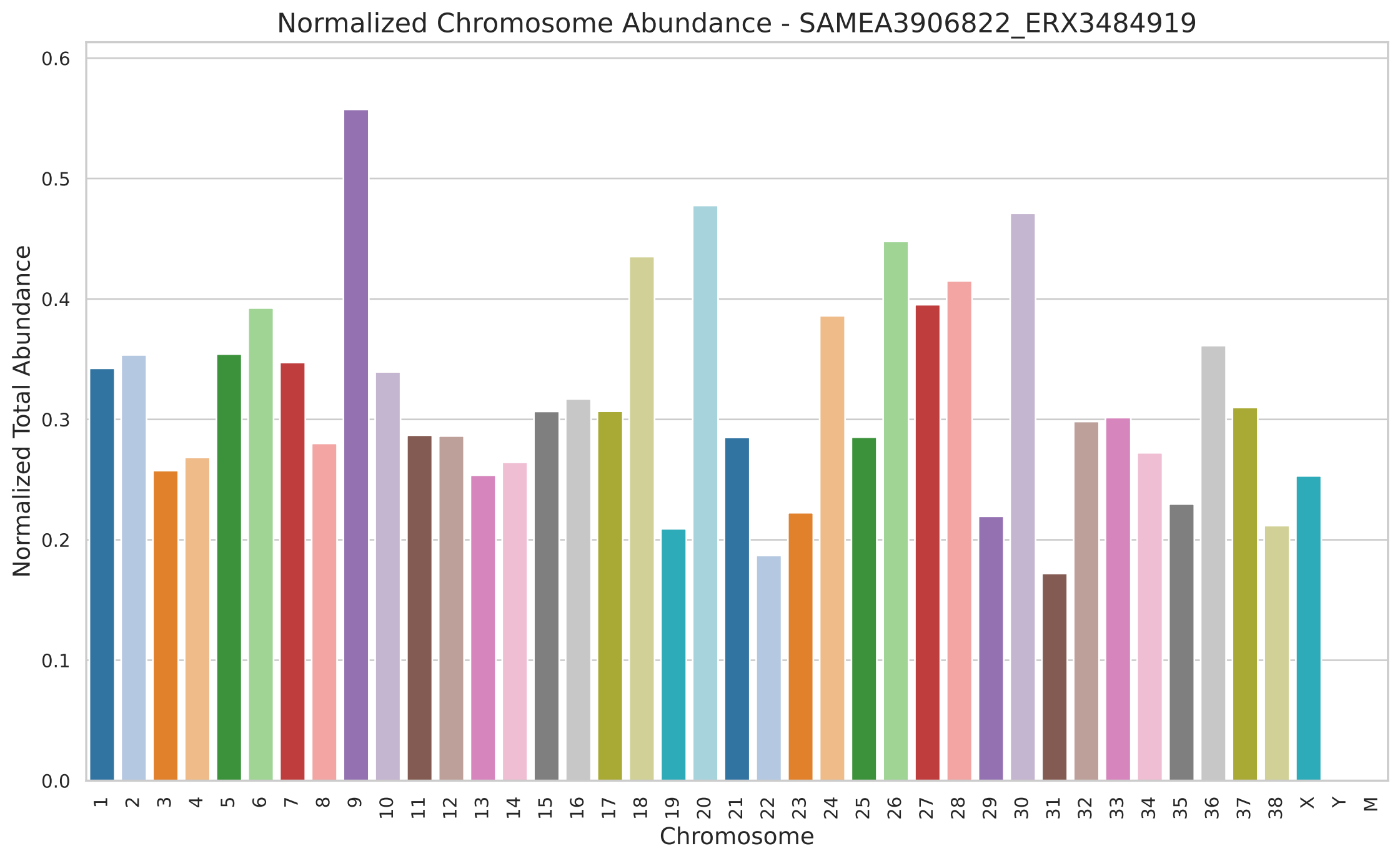

Normalized Chromosome Abundance - SAMEA3906850_ERX3484902
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

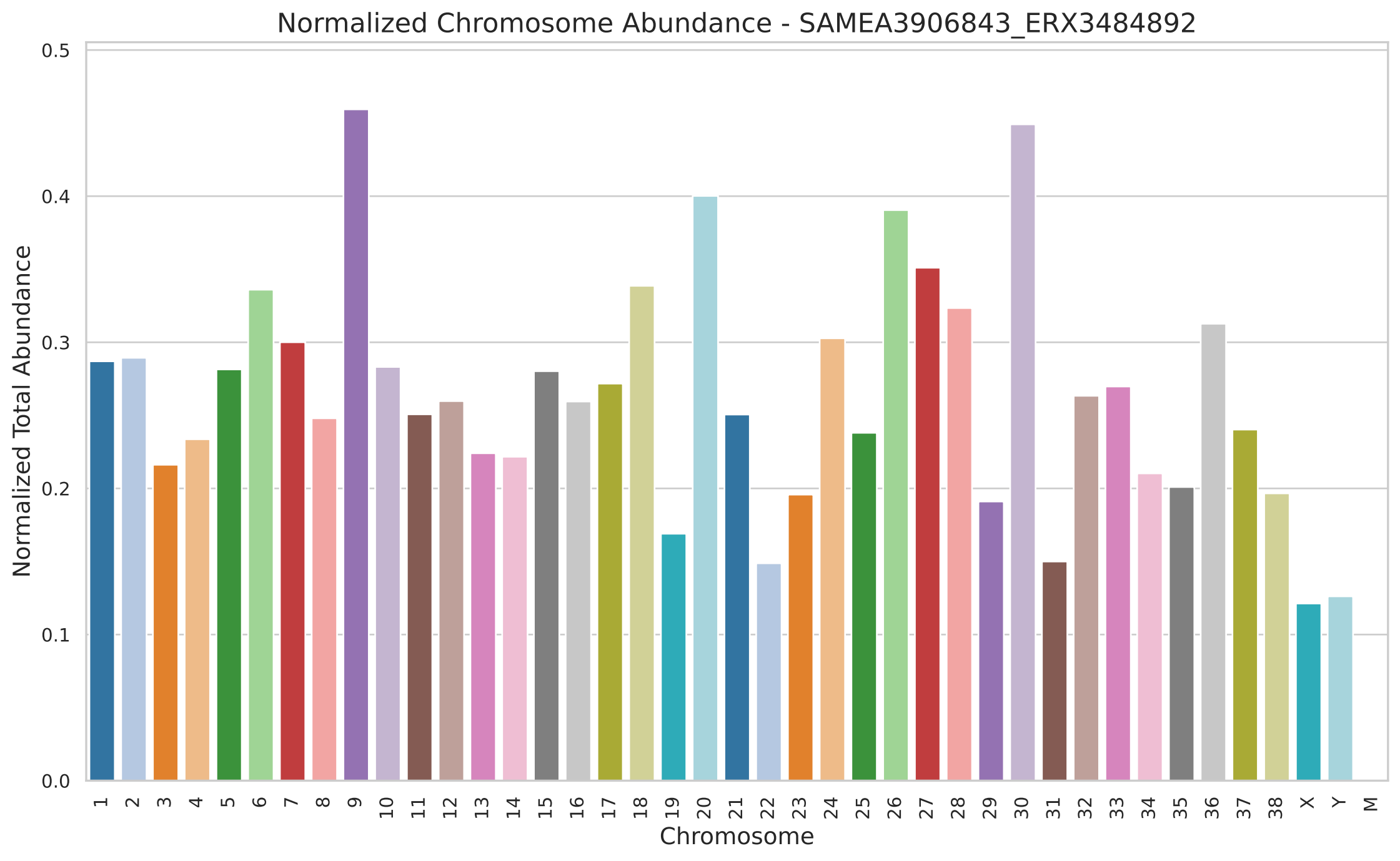

Normalized Chromosome Abundance - SAMEA3906854_ERX3484906
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

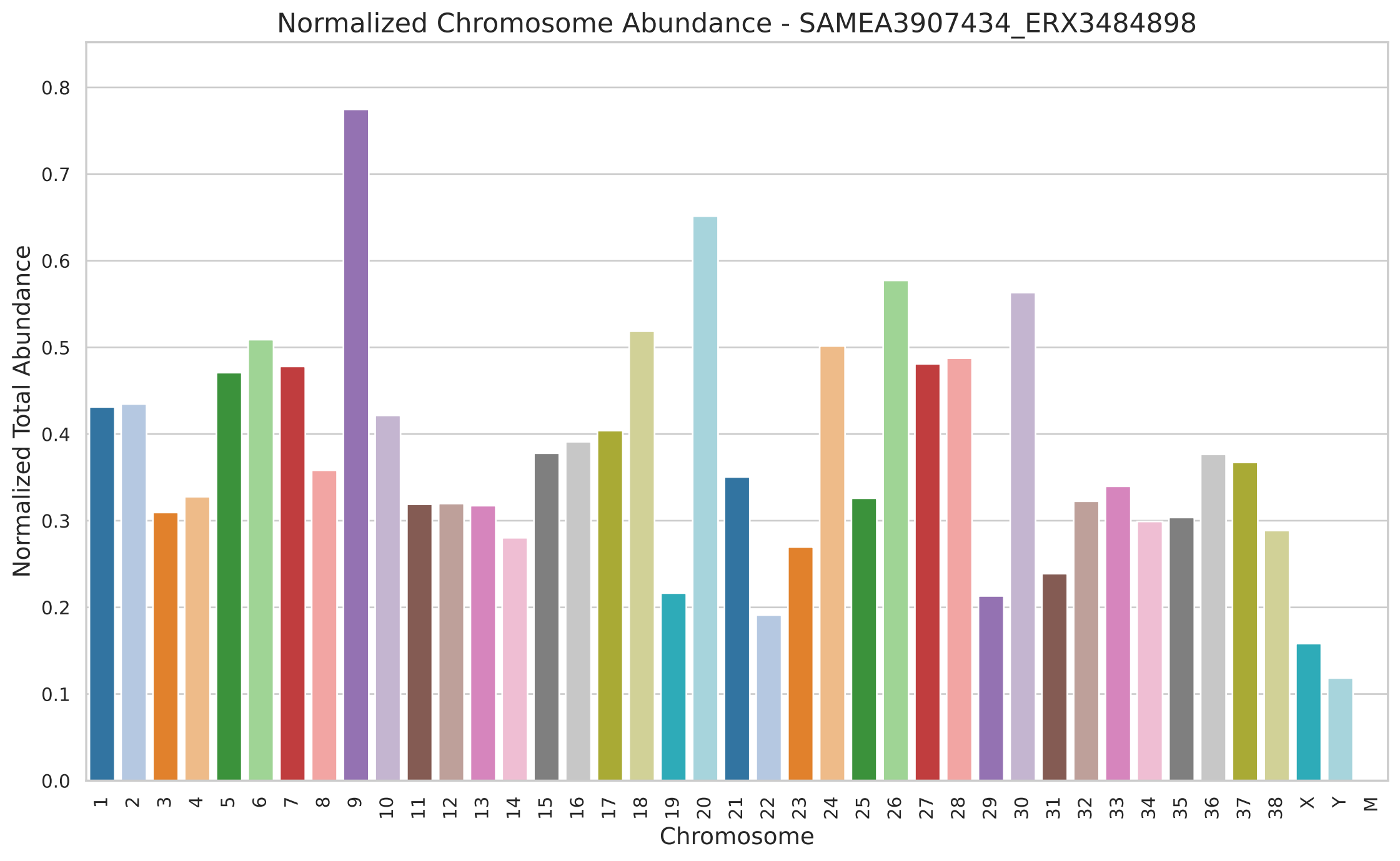

Normalized Chromosome Abundance - SAMEA3906832_ERX3484924
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

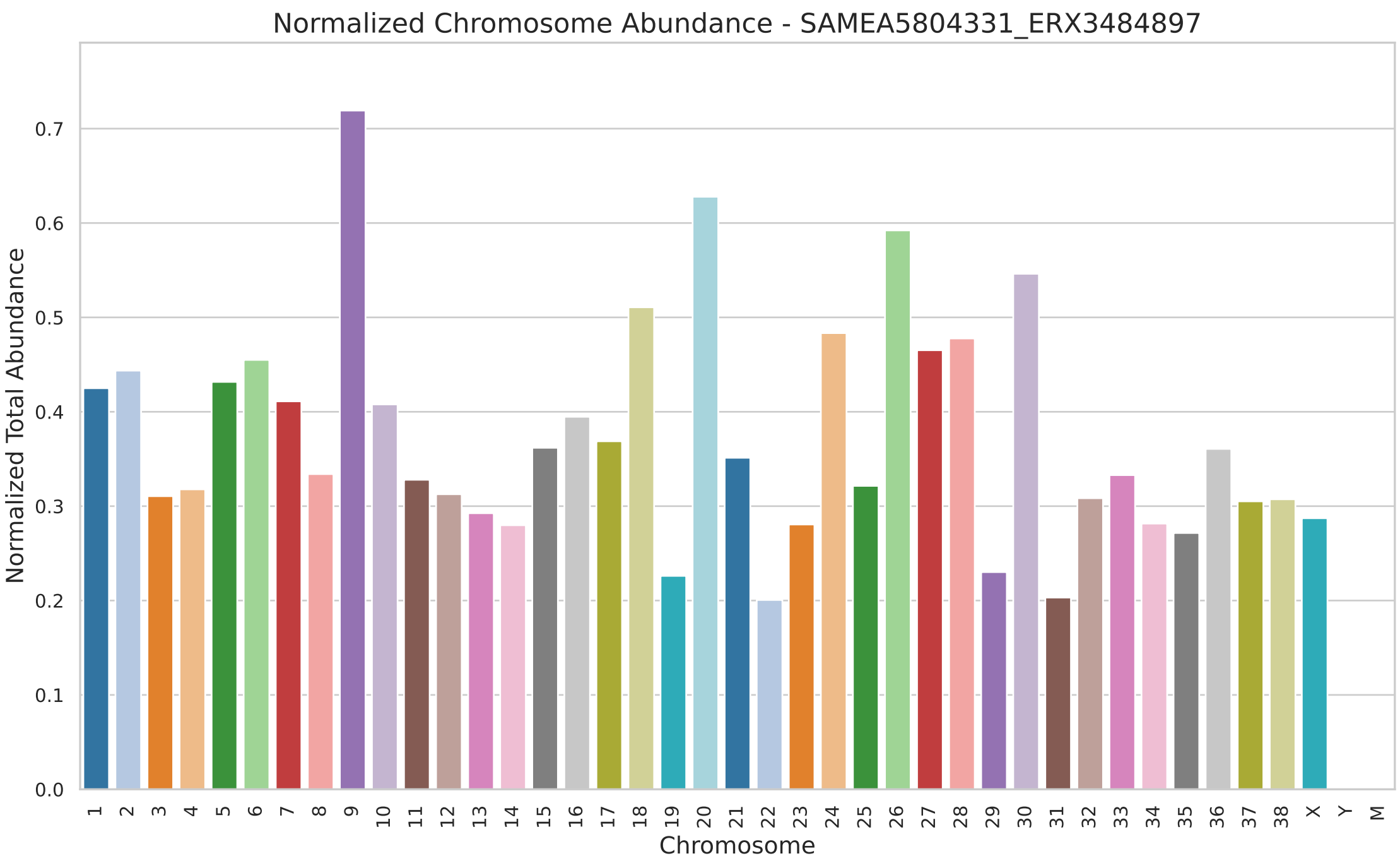

Normalized Chromosome Abundance - SAMEA3906835_ERX3484926
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

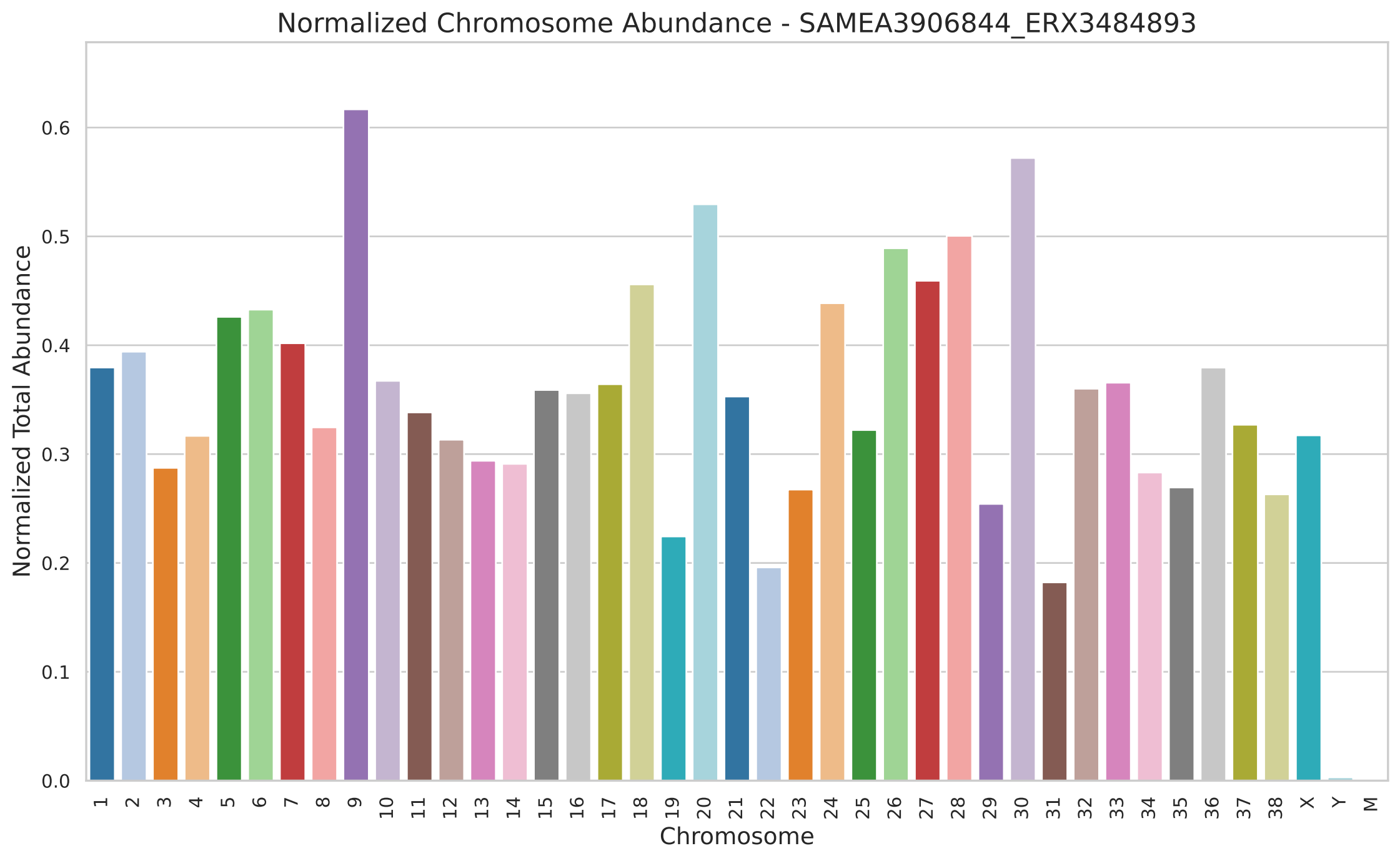

Normalized Chromosome Abundance - SAMEA3906829_ERX3484937
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

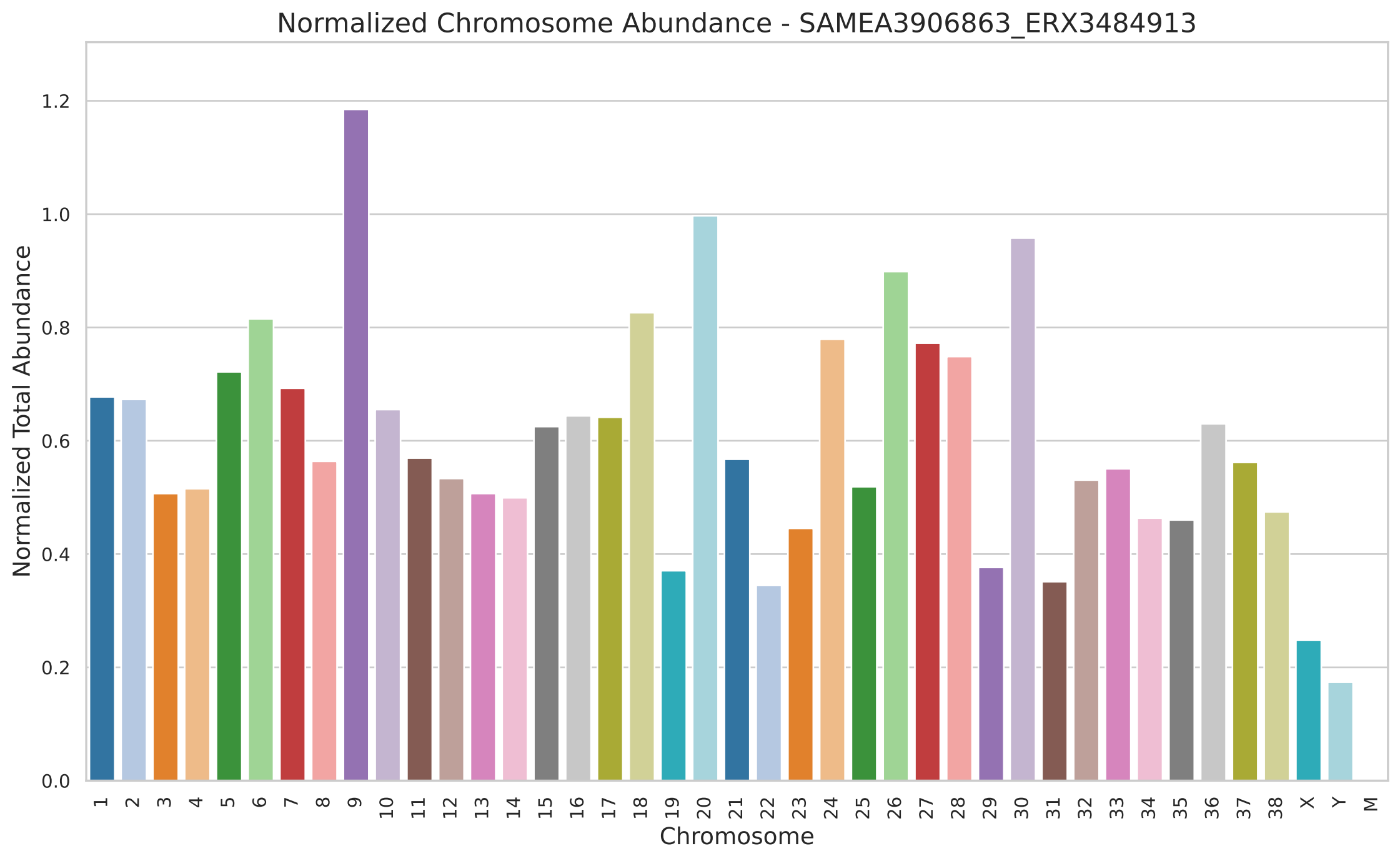

Normalized Chromosome Abundance - SAMEA3906822_ERX3484919
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

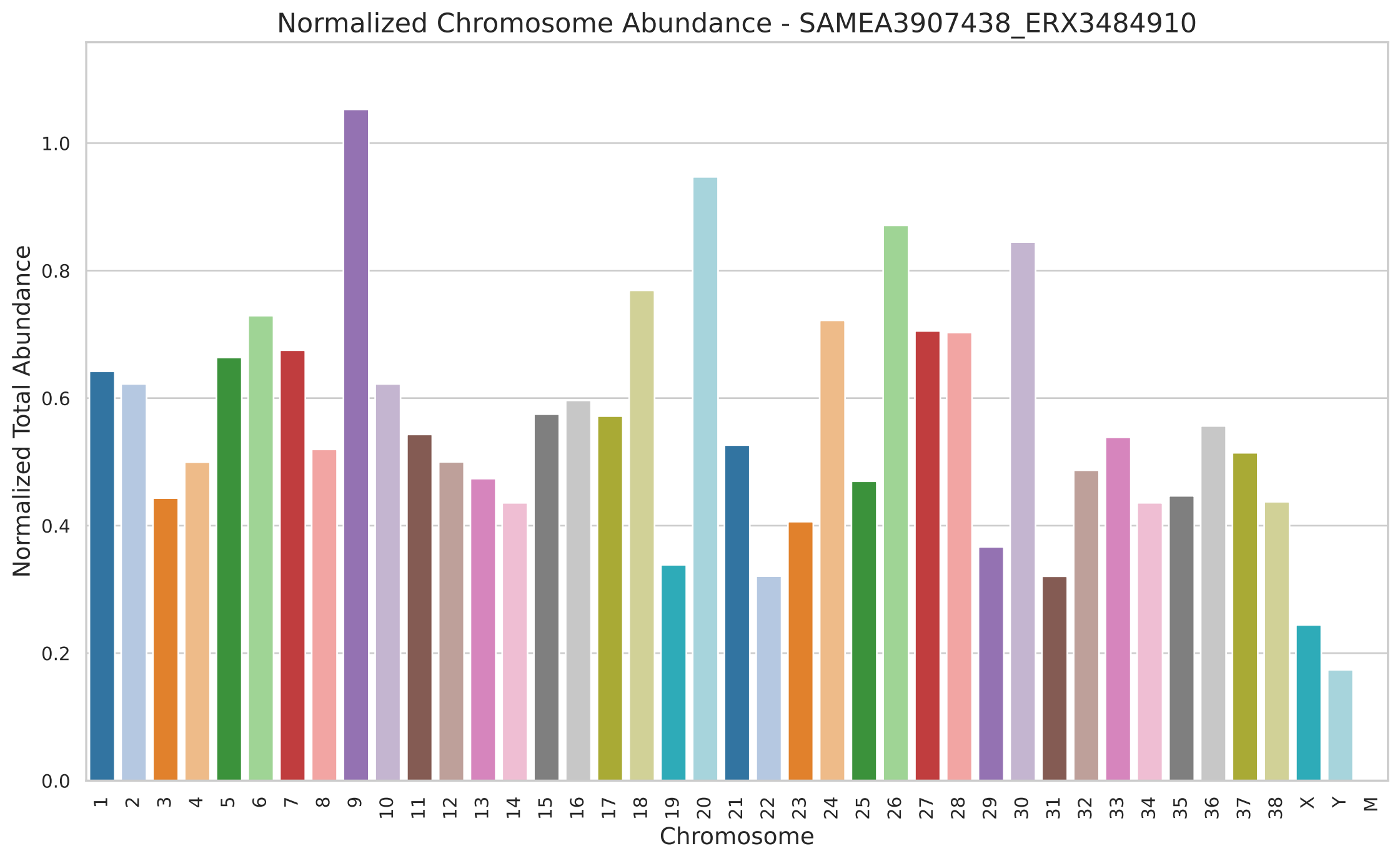

Normalized Chromosome Abundance - SAMEA3906843_ERX3484892
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

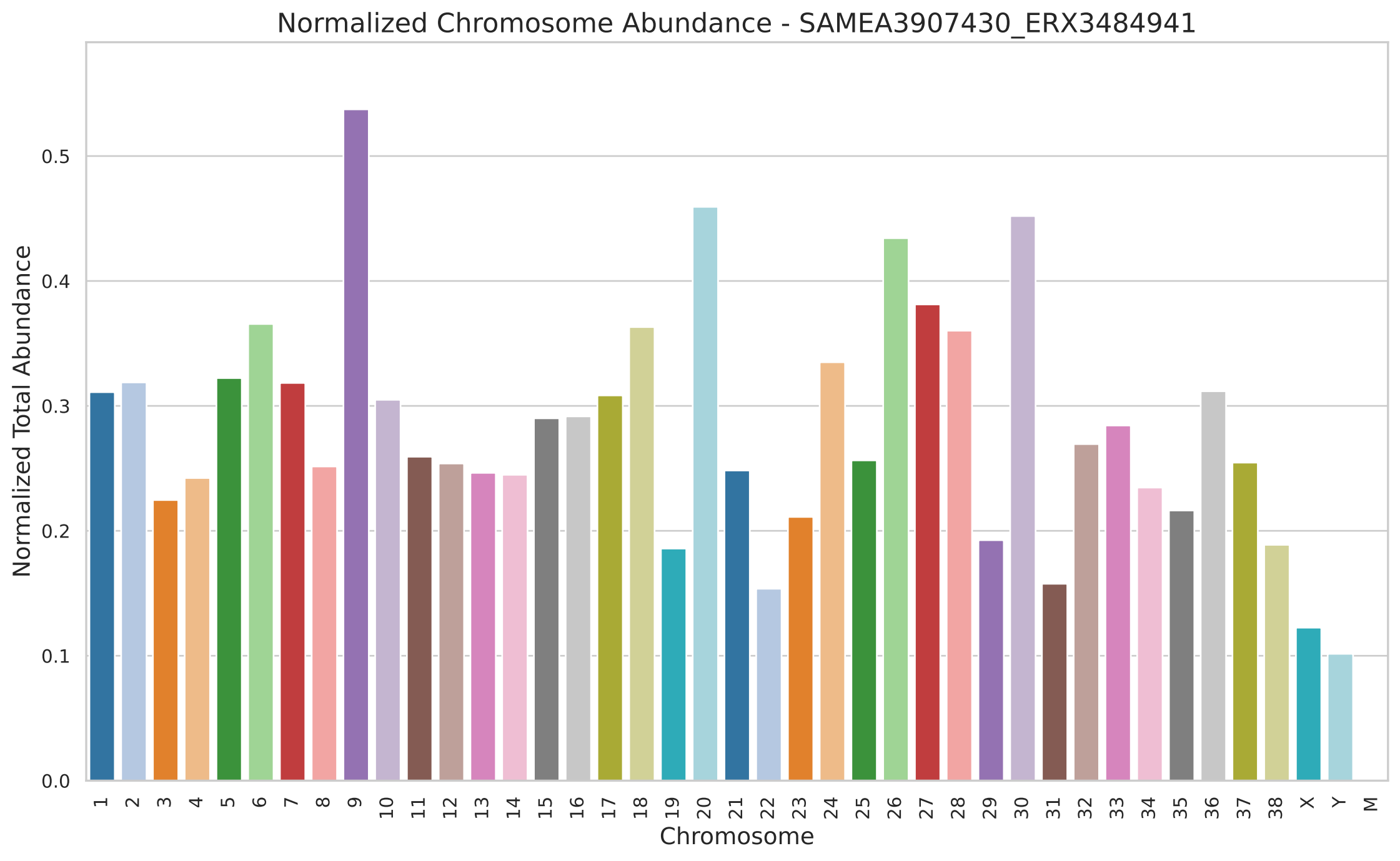

Normalized Chromosome Abundance - SAMEA3907434_ERX3484898
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

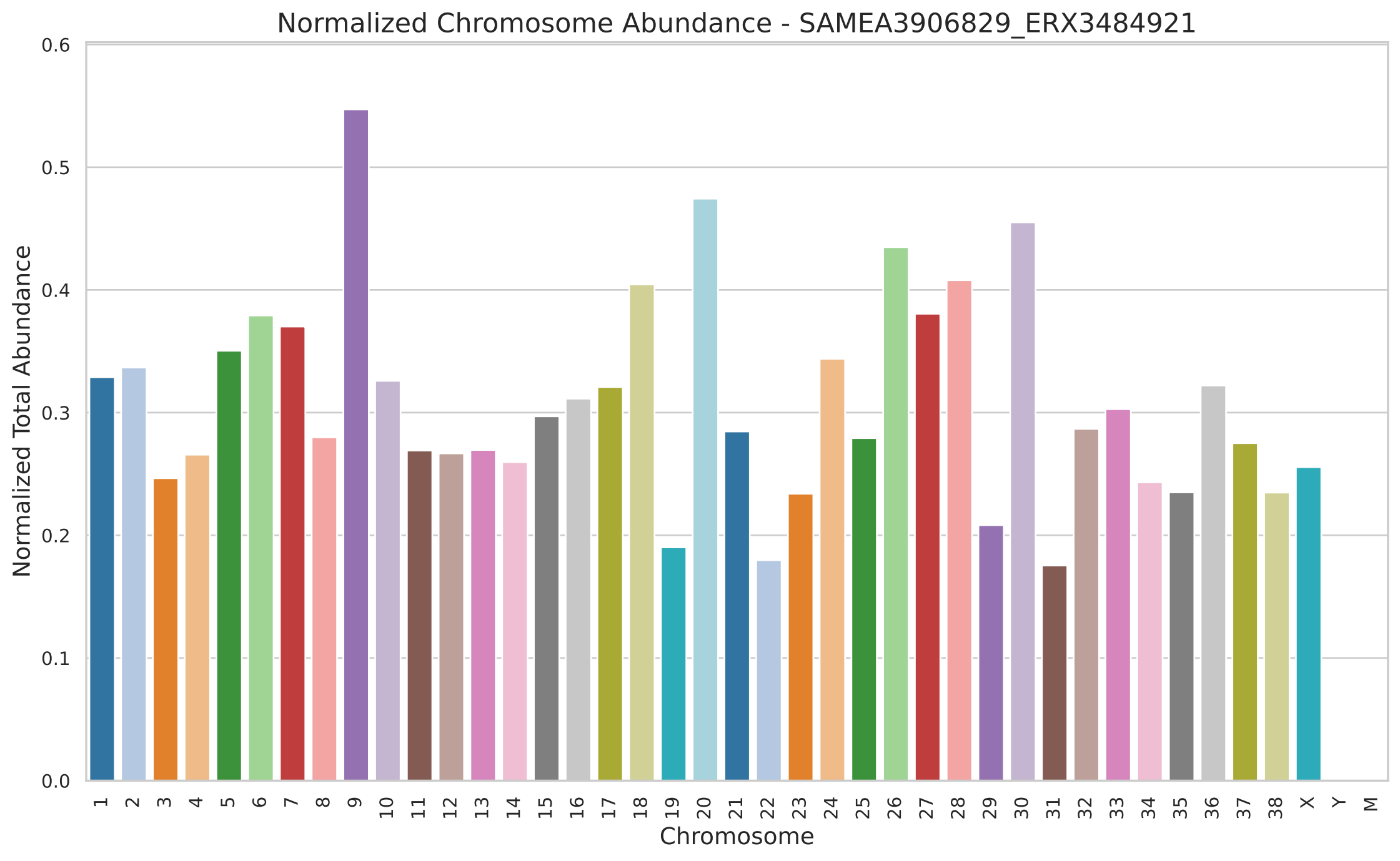

Normalized Chromosome Abundance - SAMEA5804331_ERX3484897
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

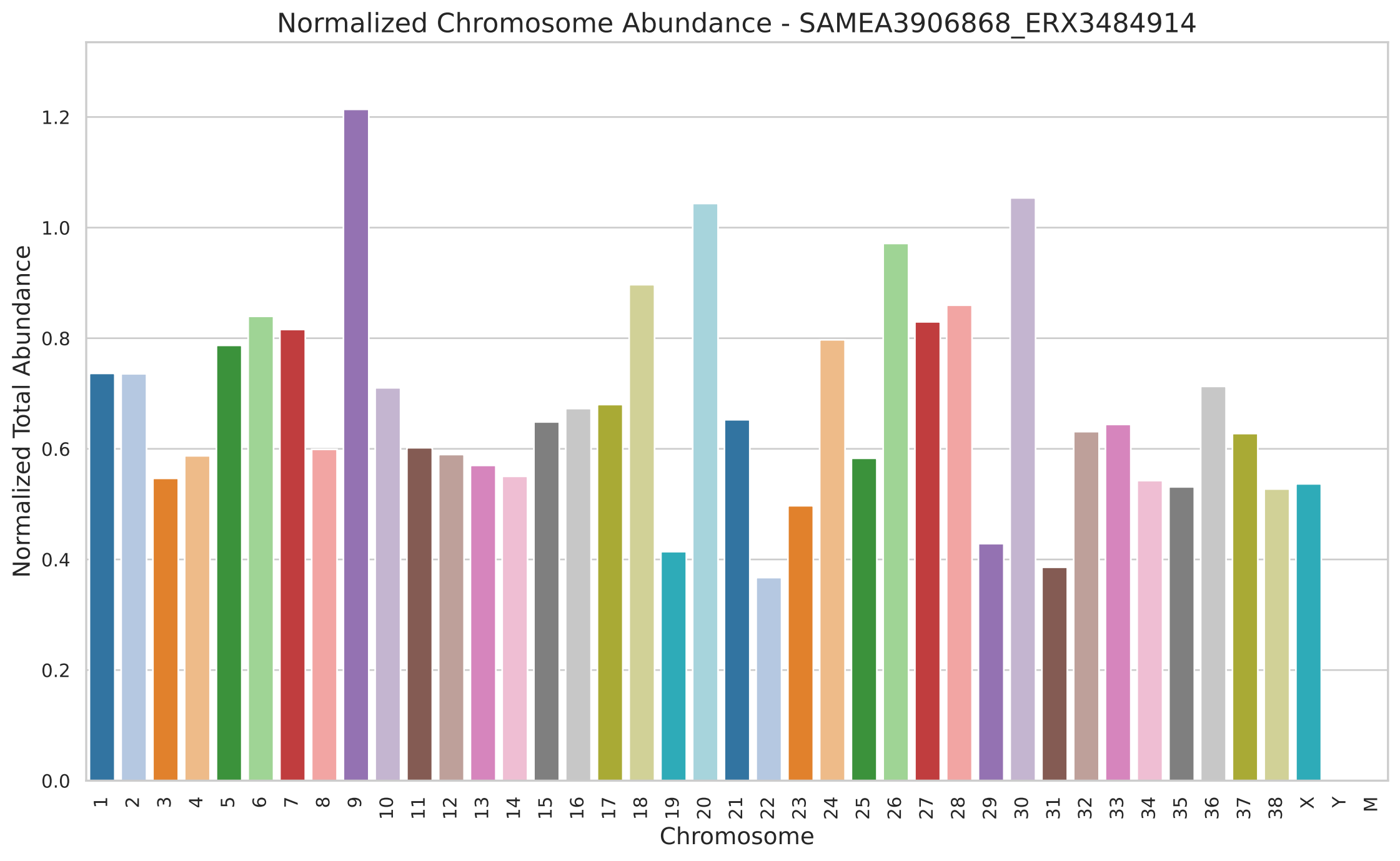

Normalized Chromosome Abundance - SAMEA3906844_ERX3484893
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

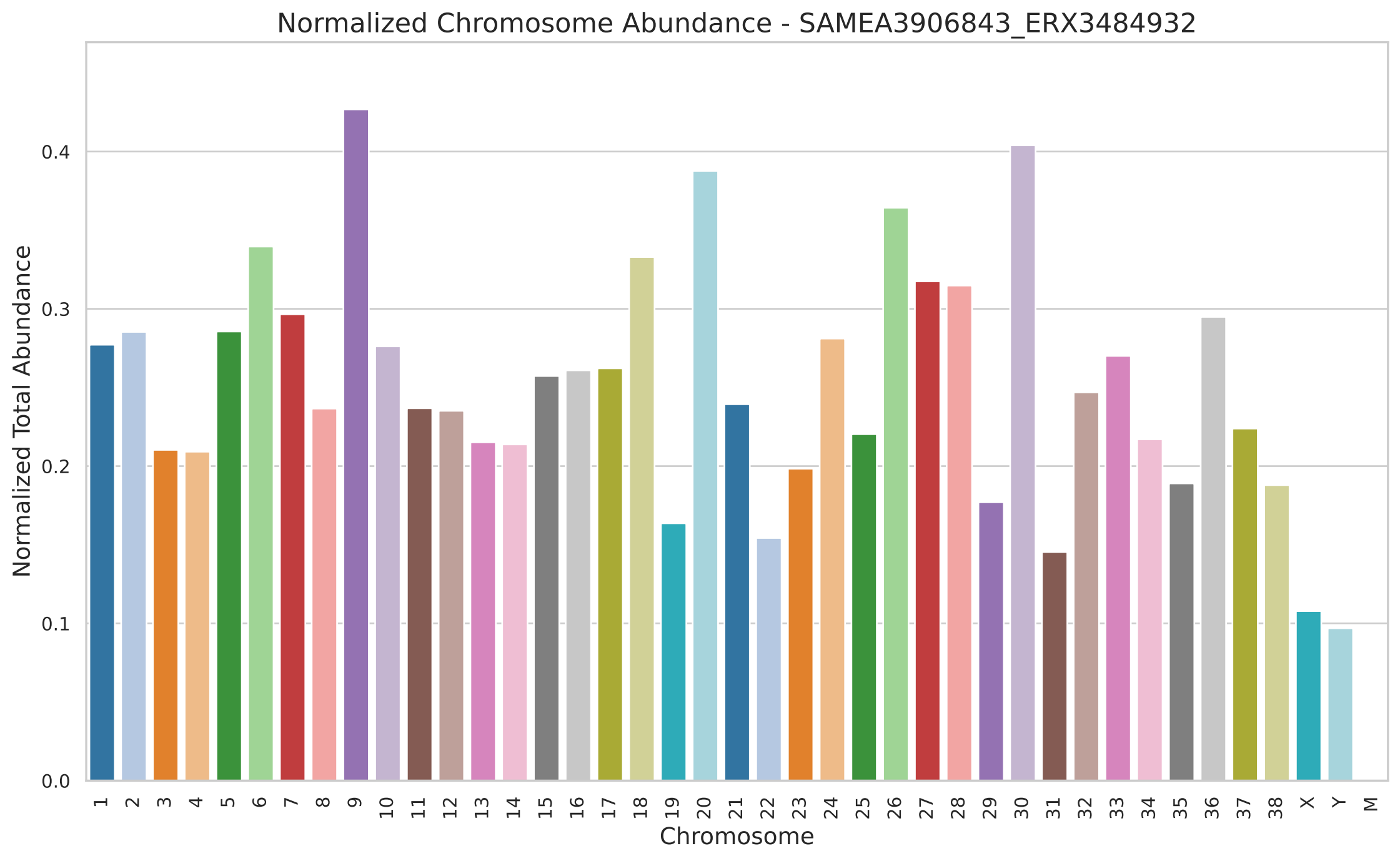

Normalized Chromosome Abundance - SAMEA3906863_ERX3484913
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

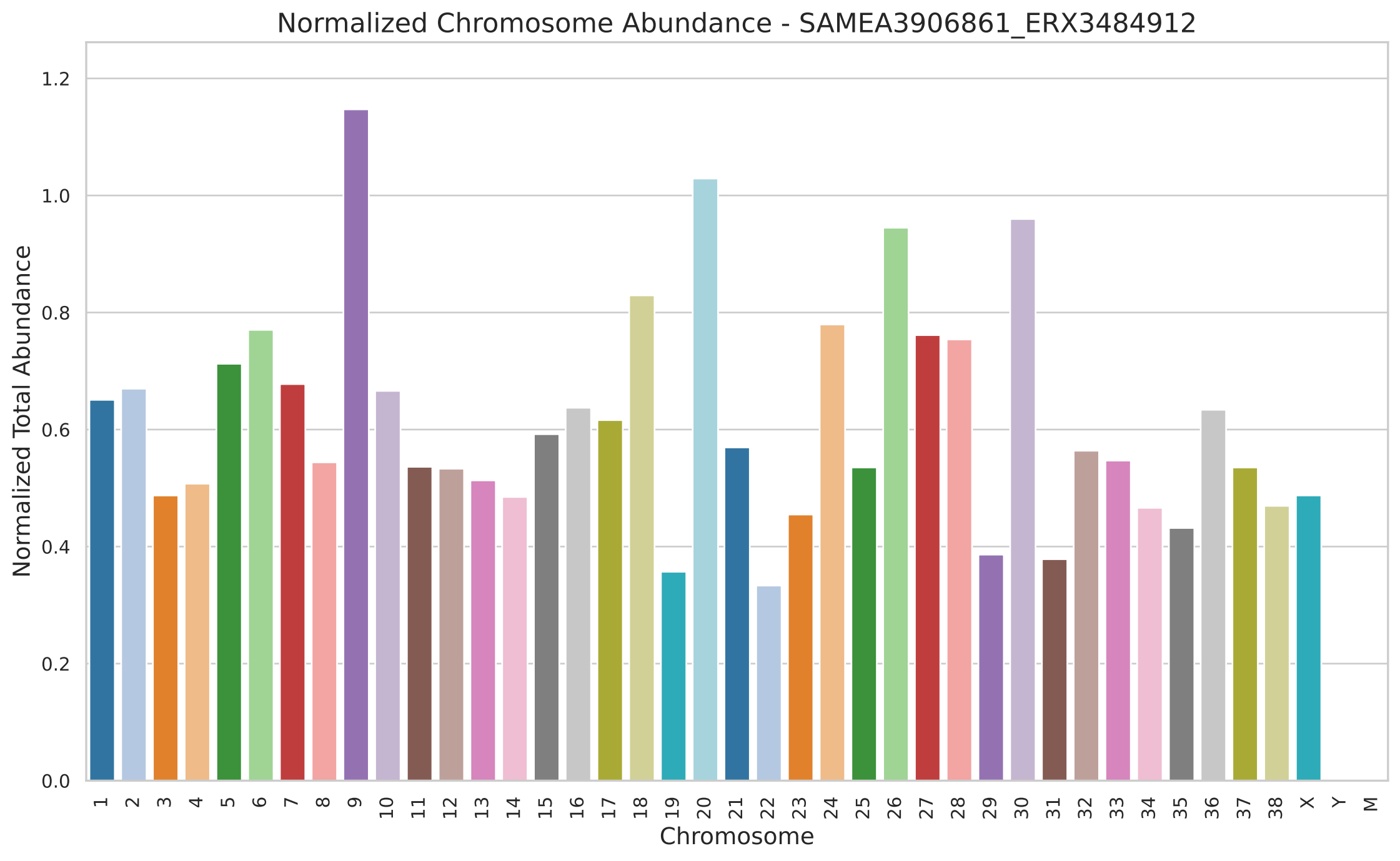

Normalized Chromosome Abundance - SAMEA3907438_ERX3484910
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

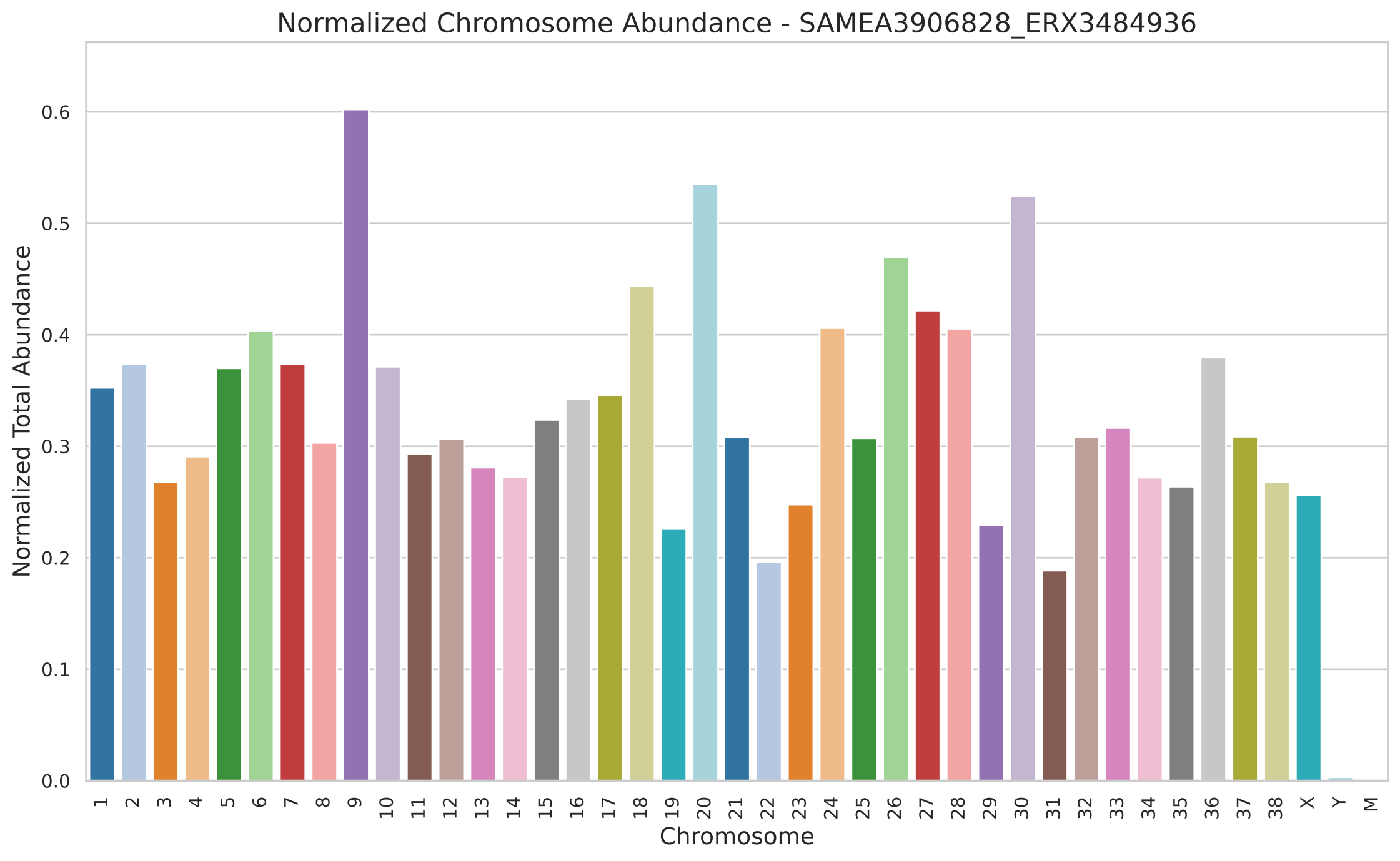

Normalized Chromosome Abundance - SAMEA3907430_ERX3484941
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

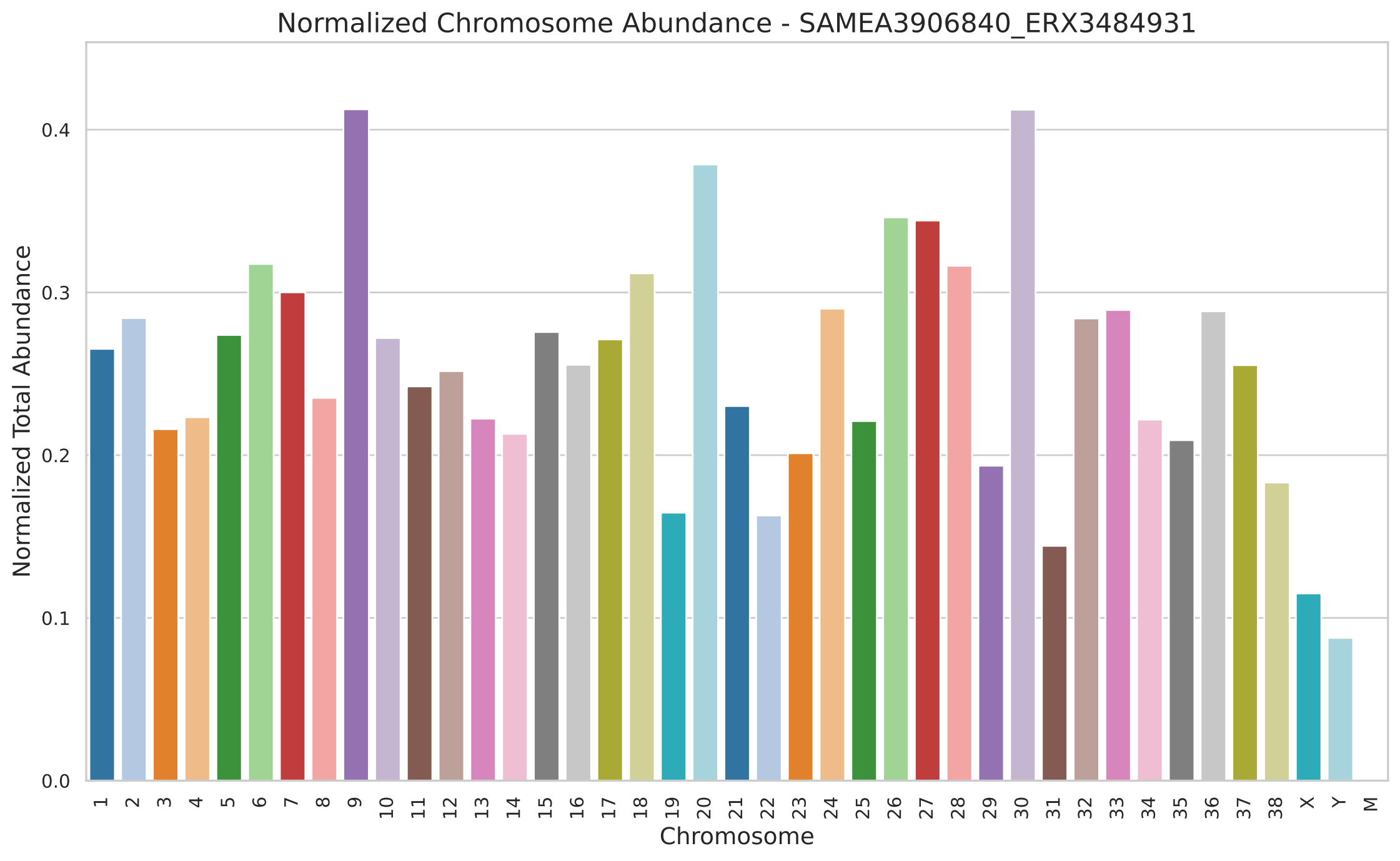

Normalized Chromosome Abundance - SAMEA3906829_ERX3484921
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

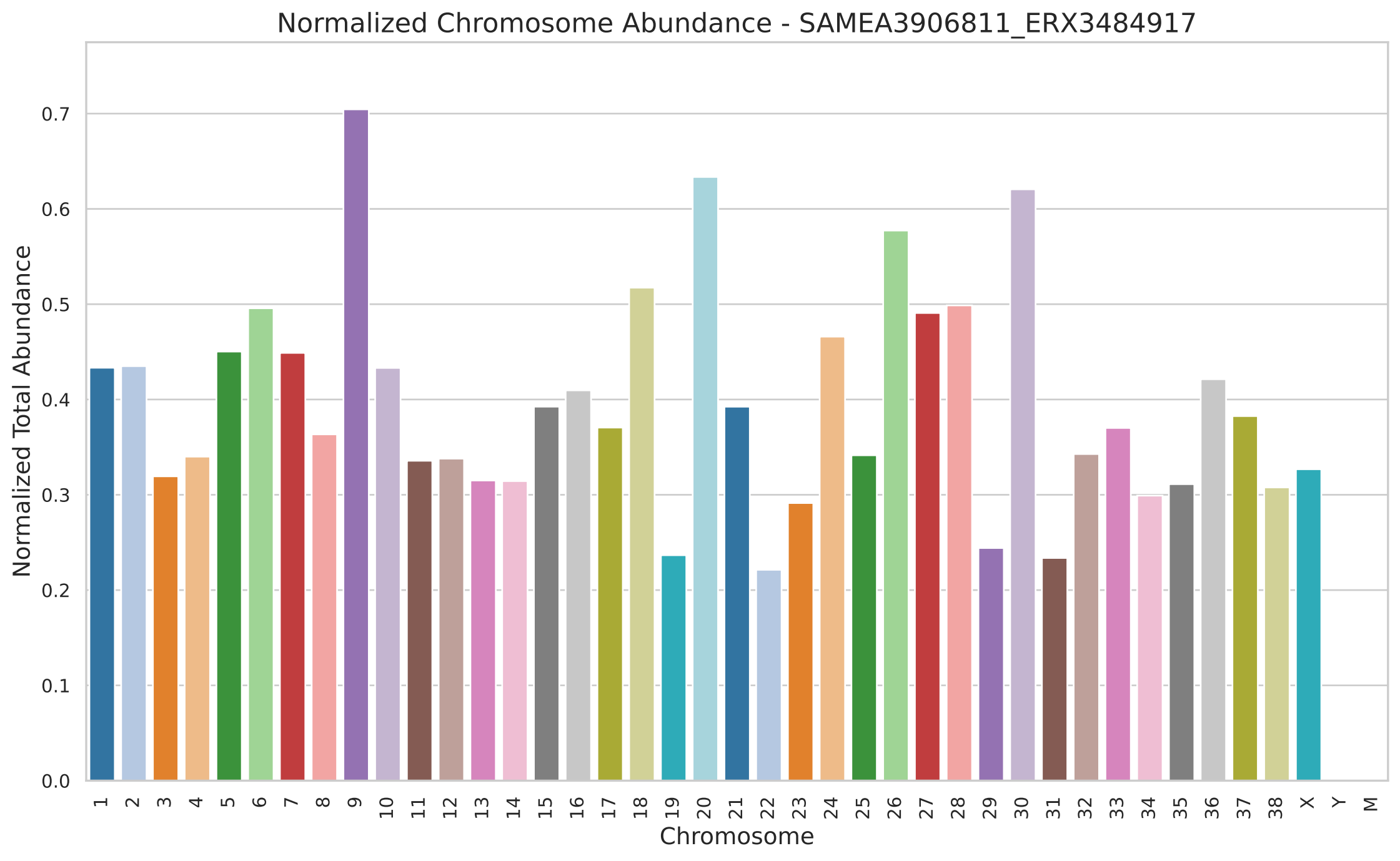

Normalized Chromosome Abundance - SAMEA3906868_ERX3484914
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

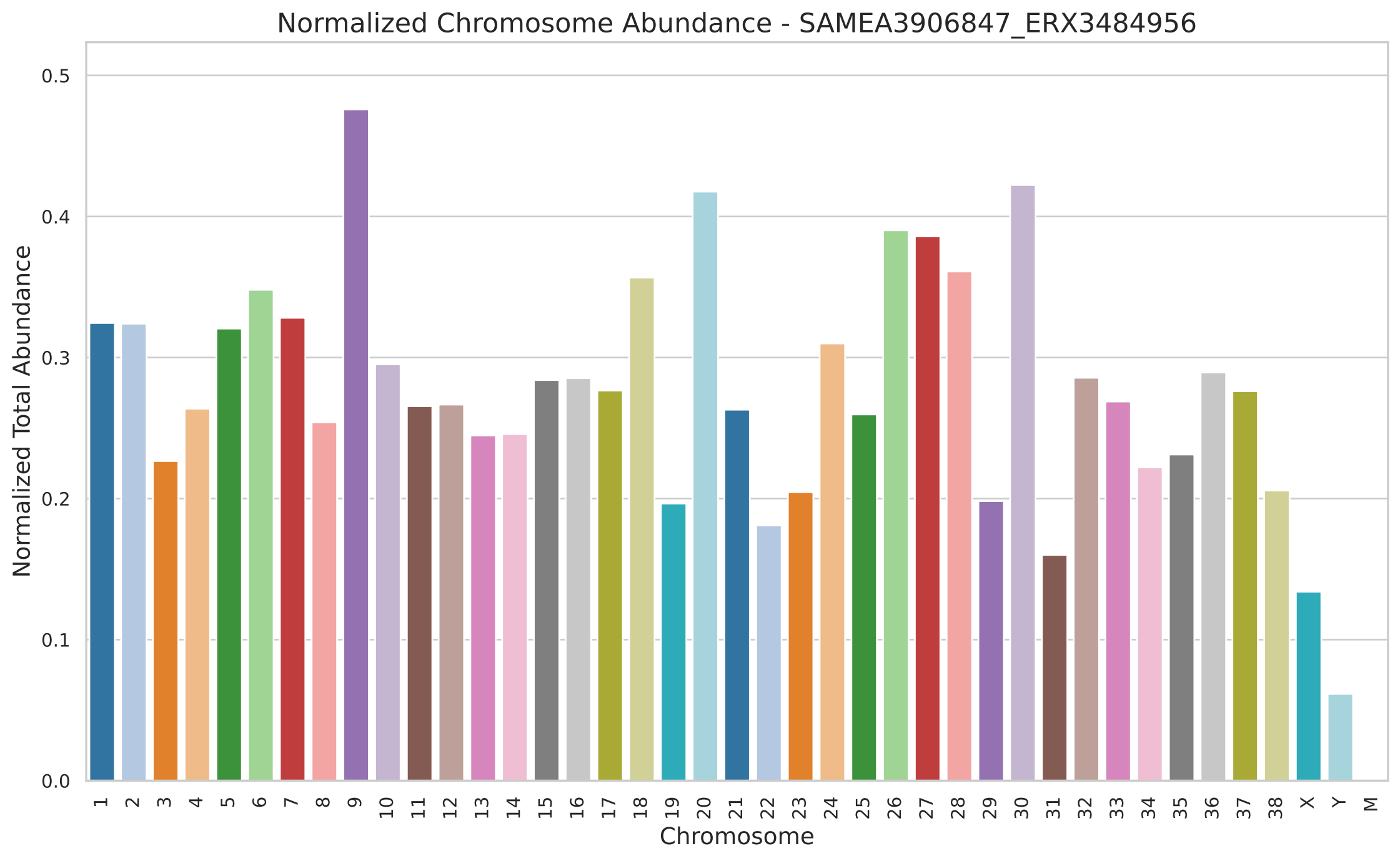

Normalized Chromosome Abundance - SAMEA3906843_ERX3484932
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

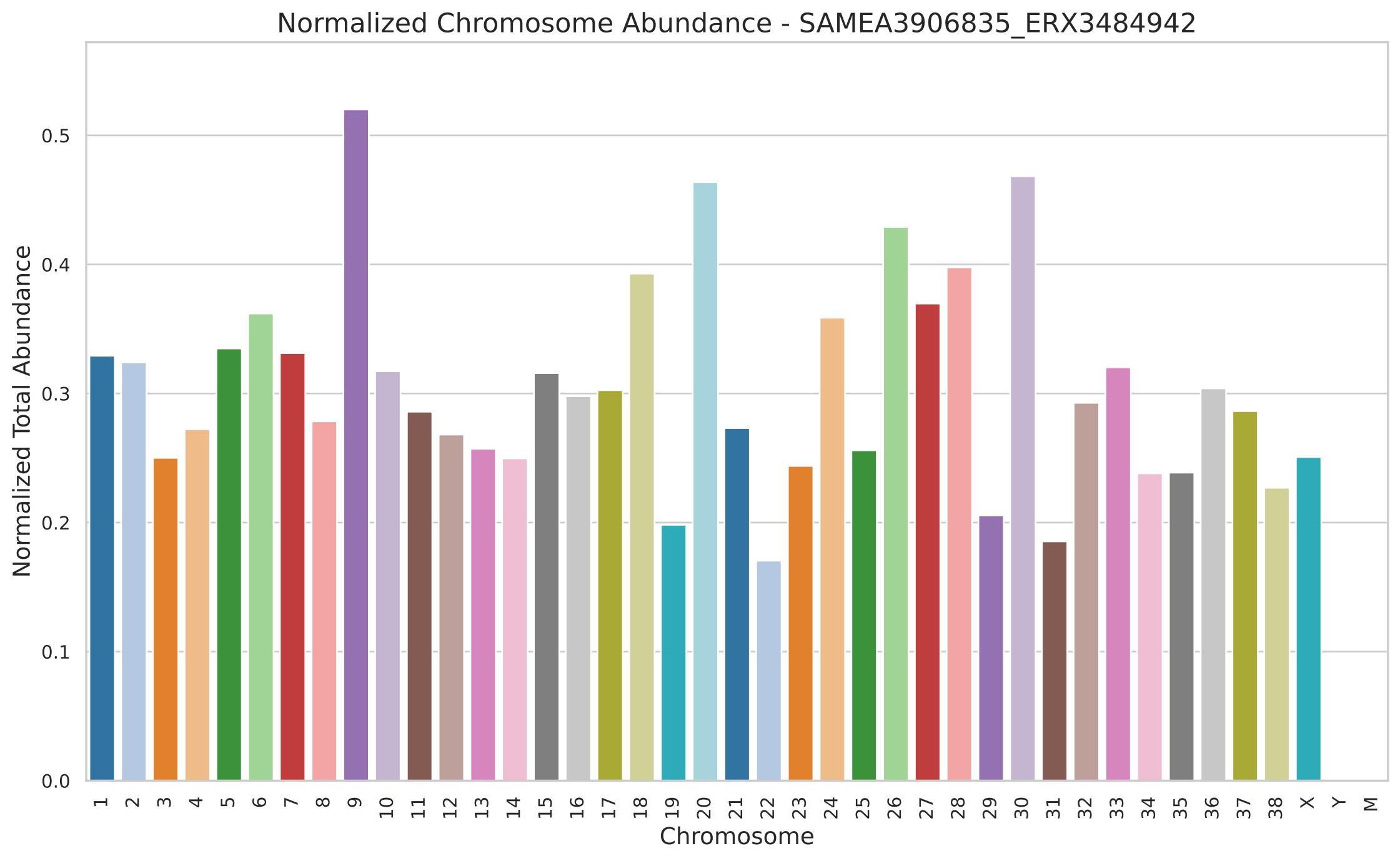

Normalized Chromosome Abundance - SAMEA3906861_ERX3484912
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

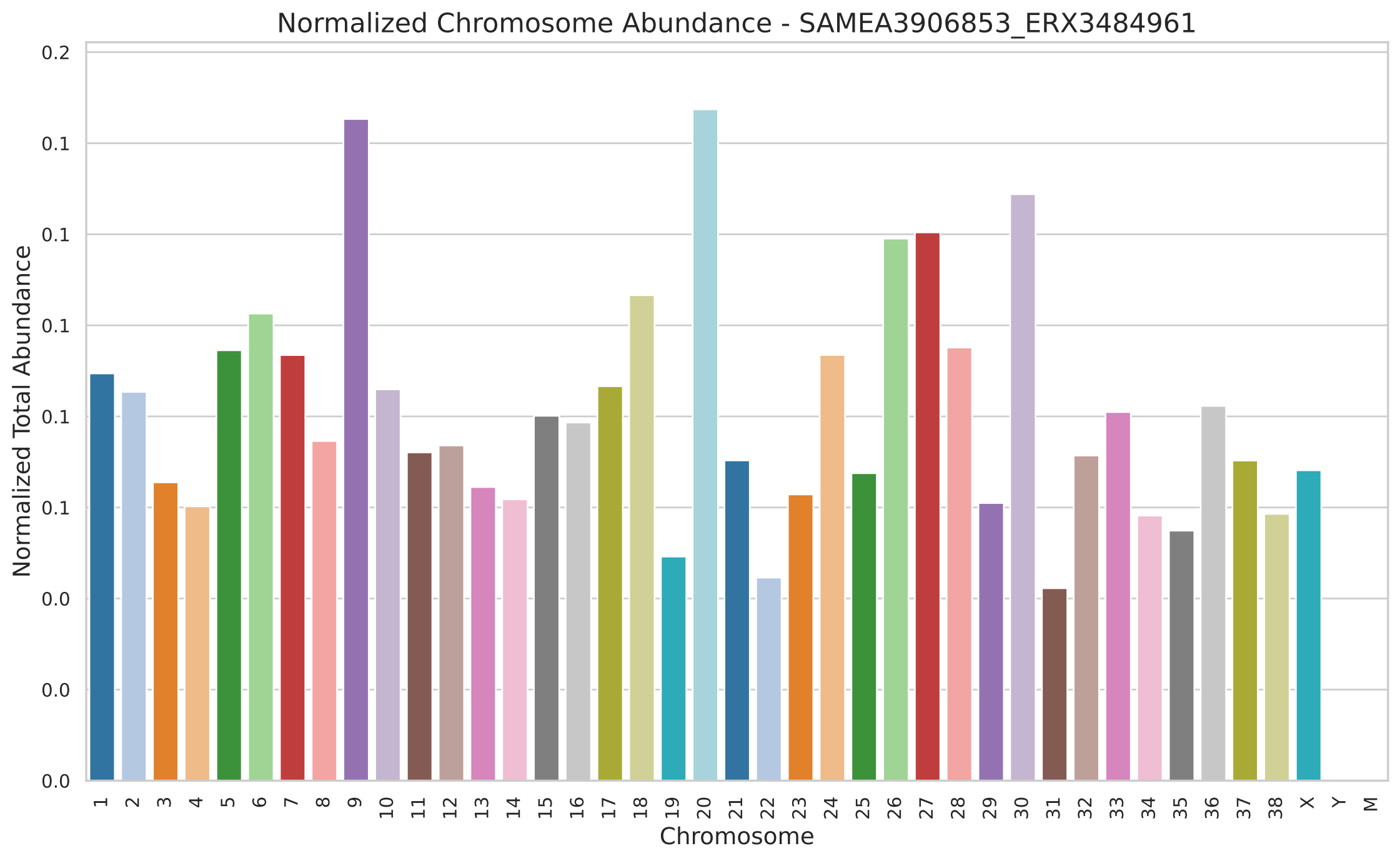

Normalized Chromosome Abundance - SAMEA3906828_ERX3484936
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

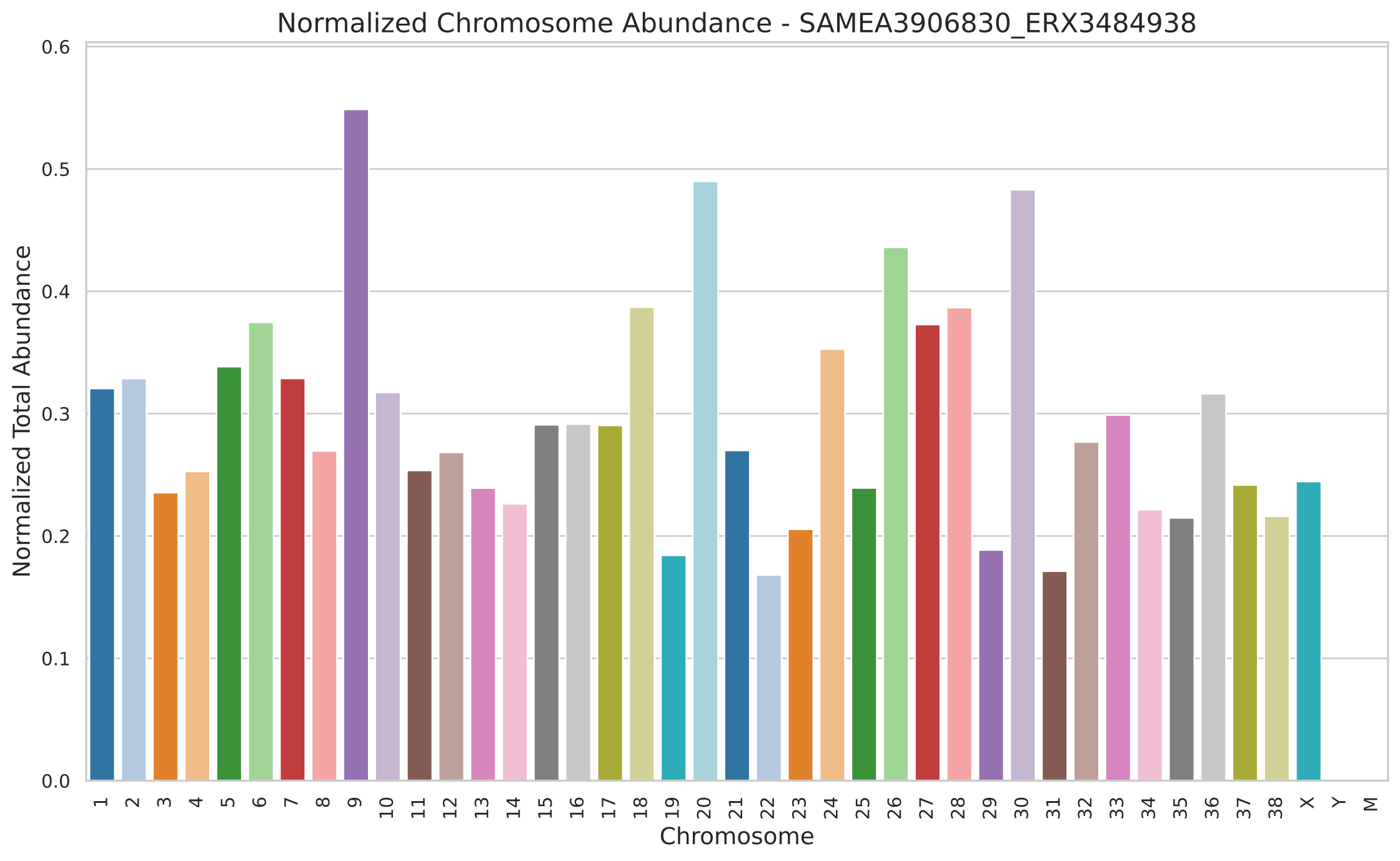

Normalized Chromosome Abundance - SAMEA3906840_ERX3484931
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

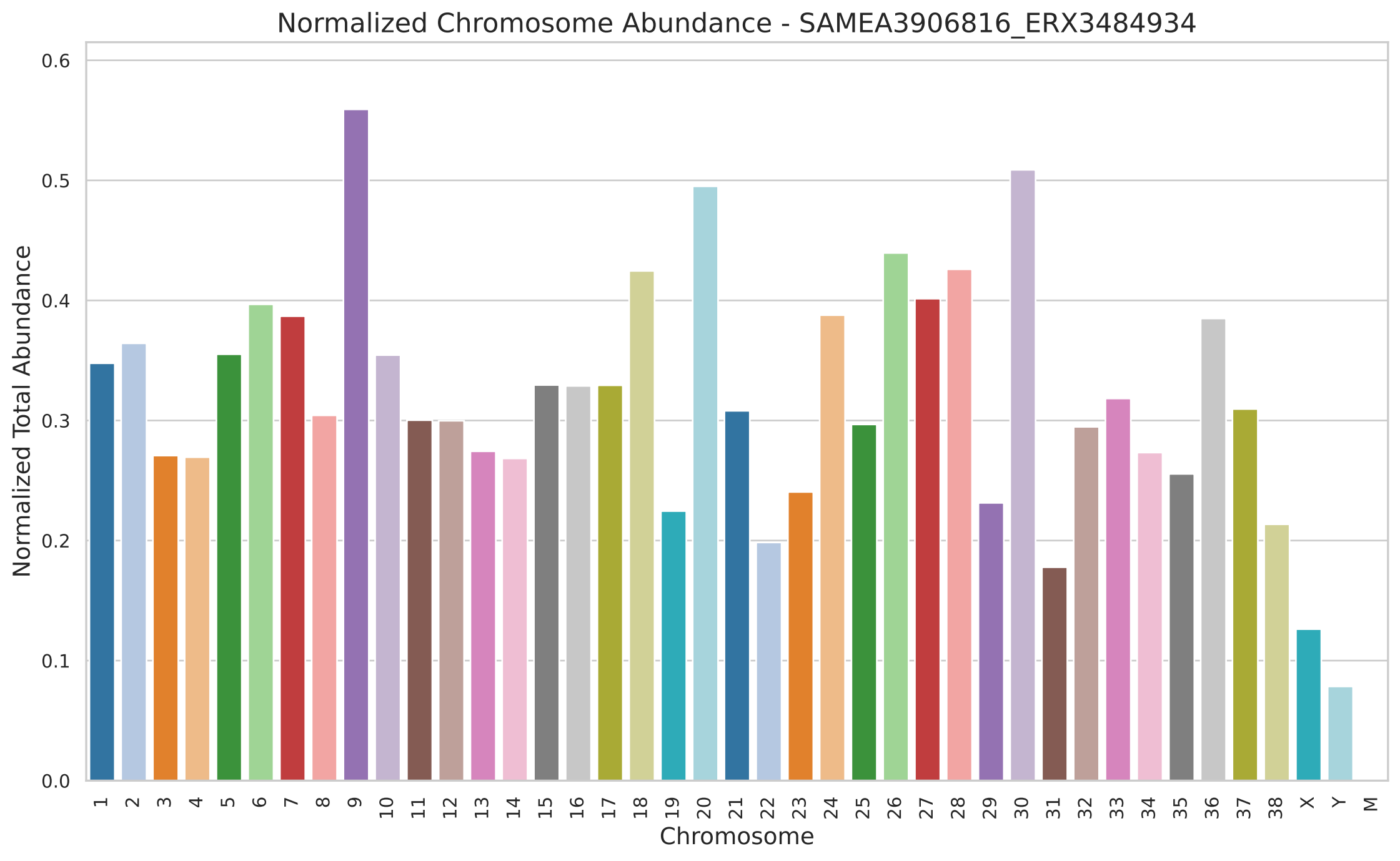

Normalized Chromosome Abundance - SAMEA3906811_ERX3484917
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

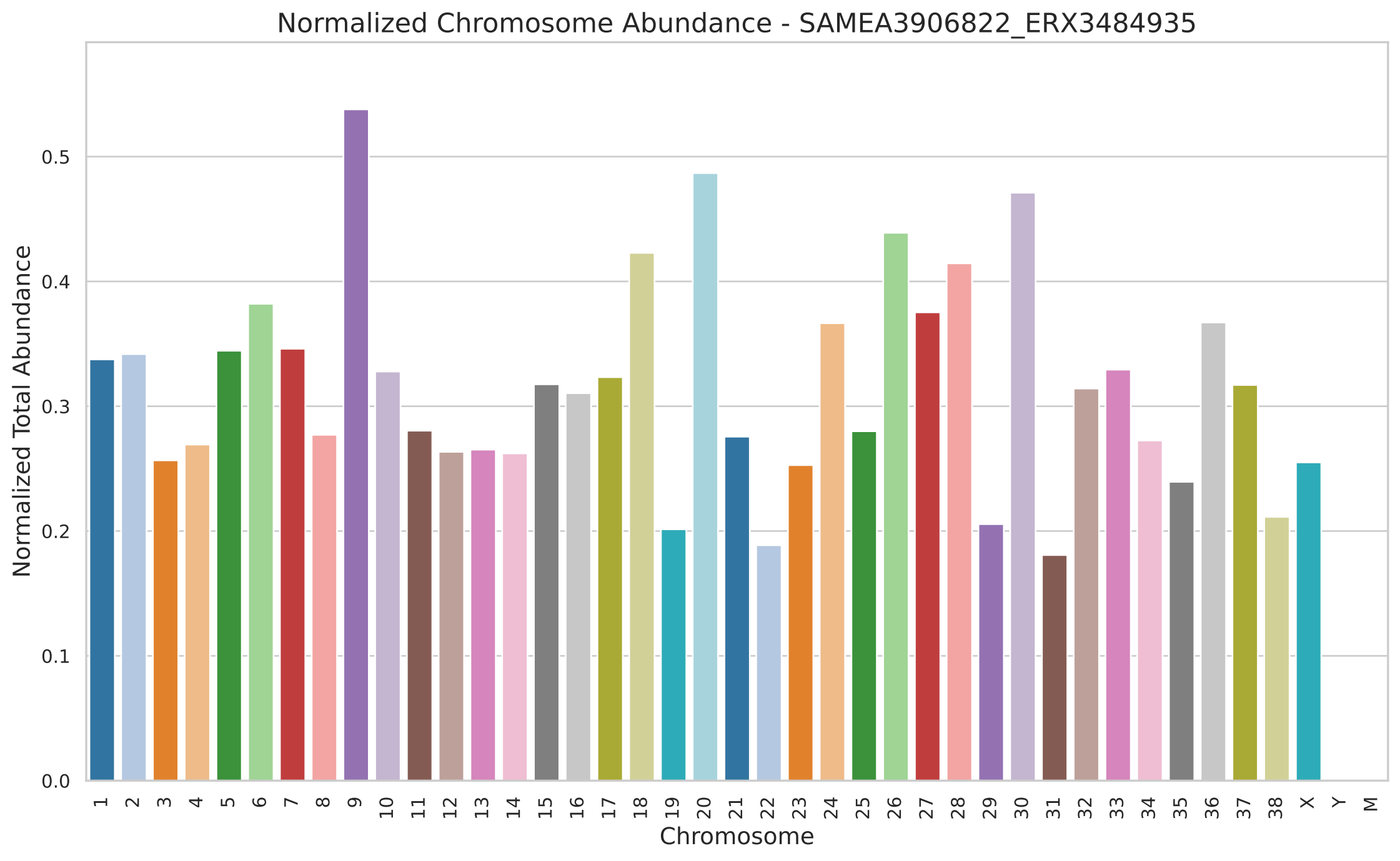

Normalized Chromosome Abundance - SAMEA3906847_ERX3484956
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

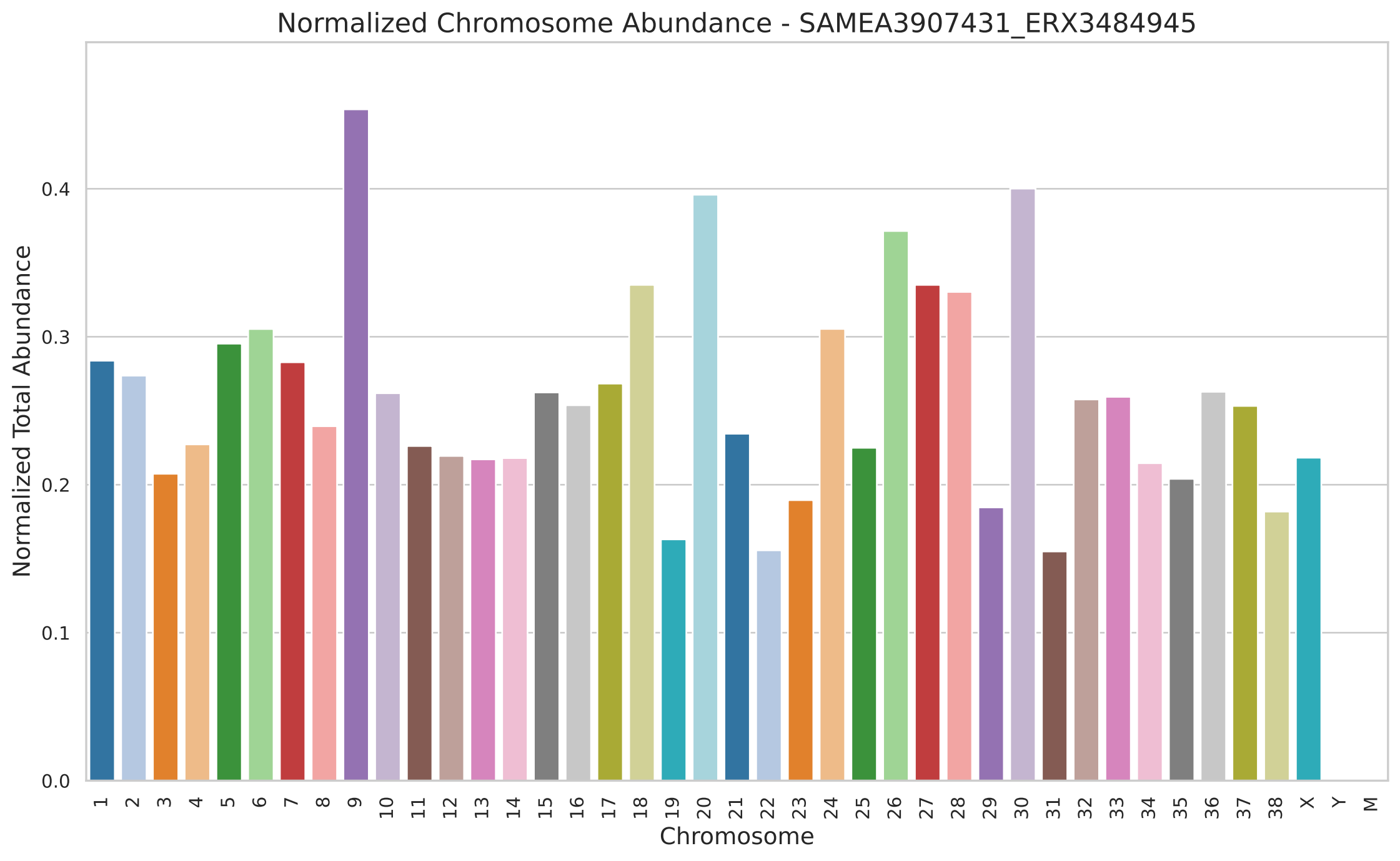

Normalized Chromosome Abundance - SAMEA3906835_ERX3484942
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

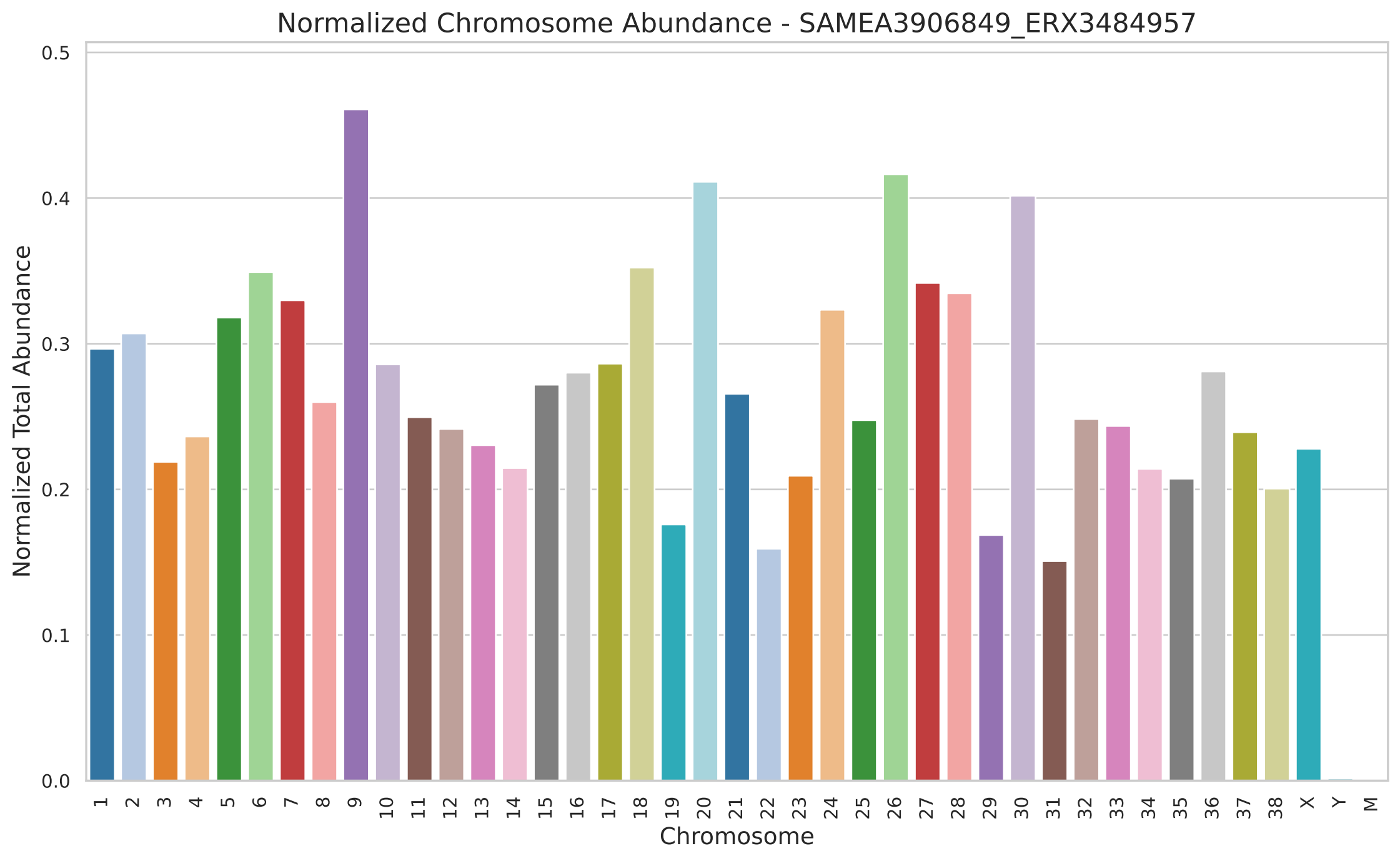

Normalized Chromosome Abundance - SAMEA3906853_ERX3484961
Normalized Total Abundance
0.2
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

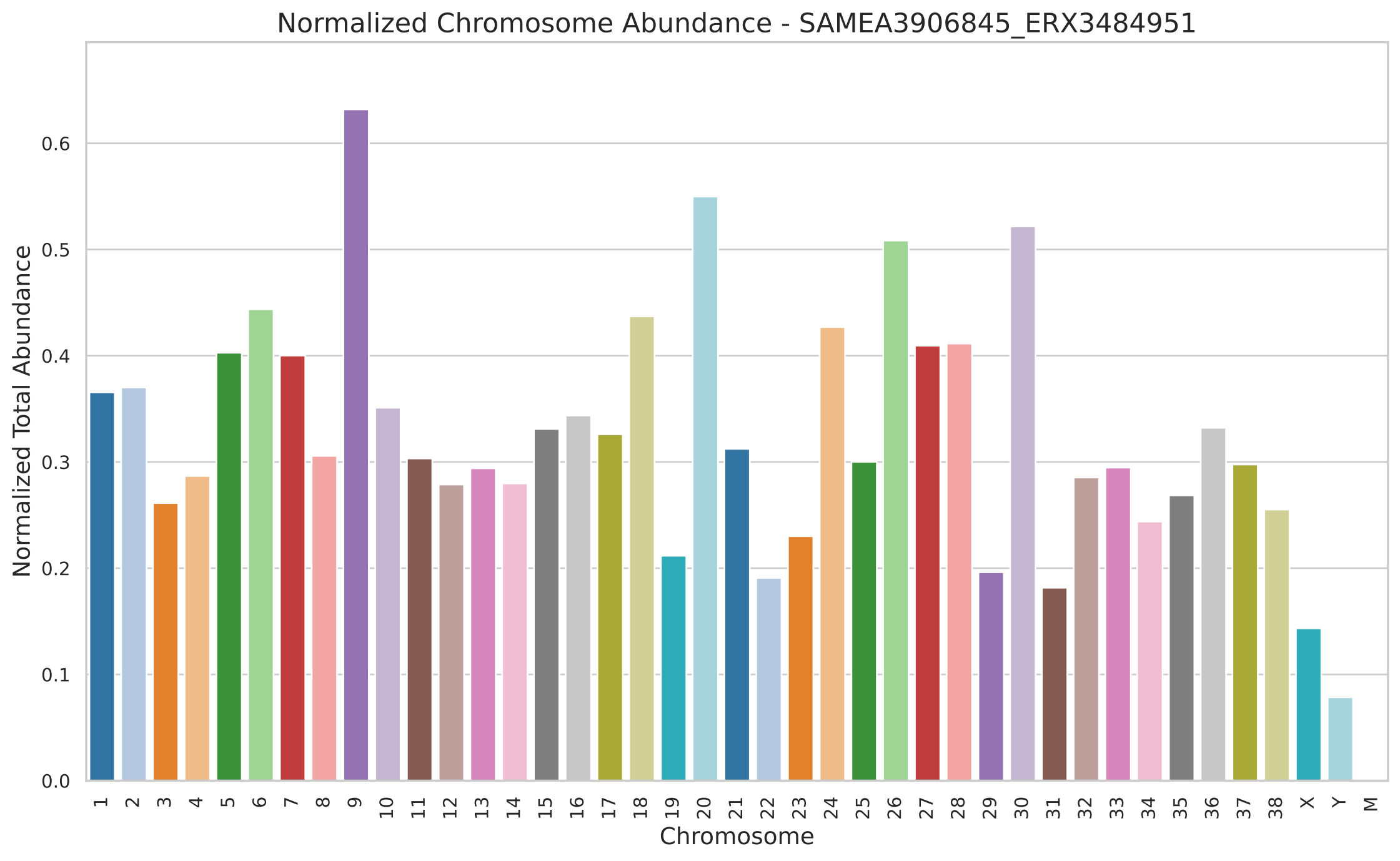

Normalized Chromosome Abundance - SAMEA3906830_ERX3484938
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

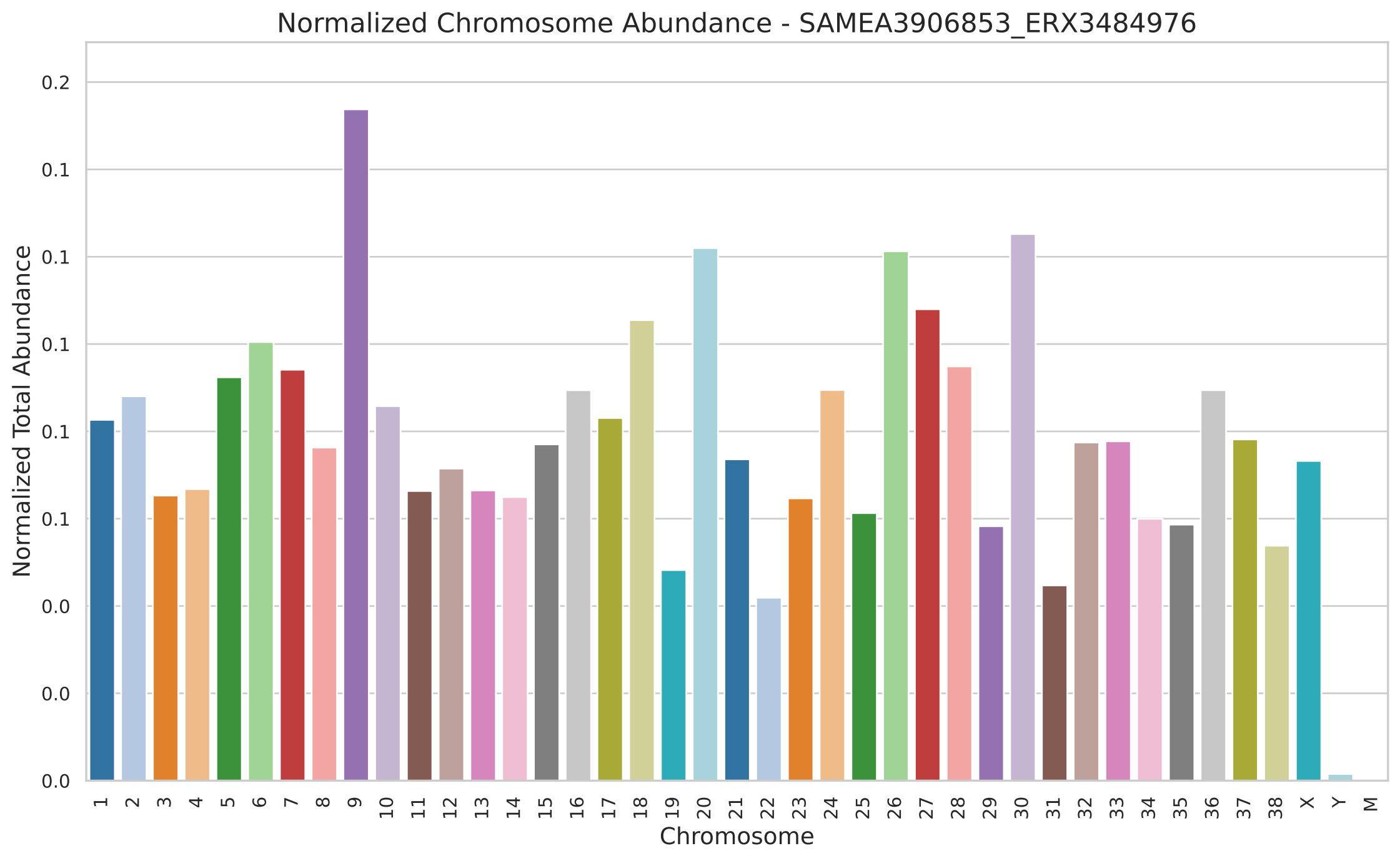

Normalized Chromosome Abundance - SAMEA3906816_ERX3484934
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

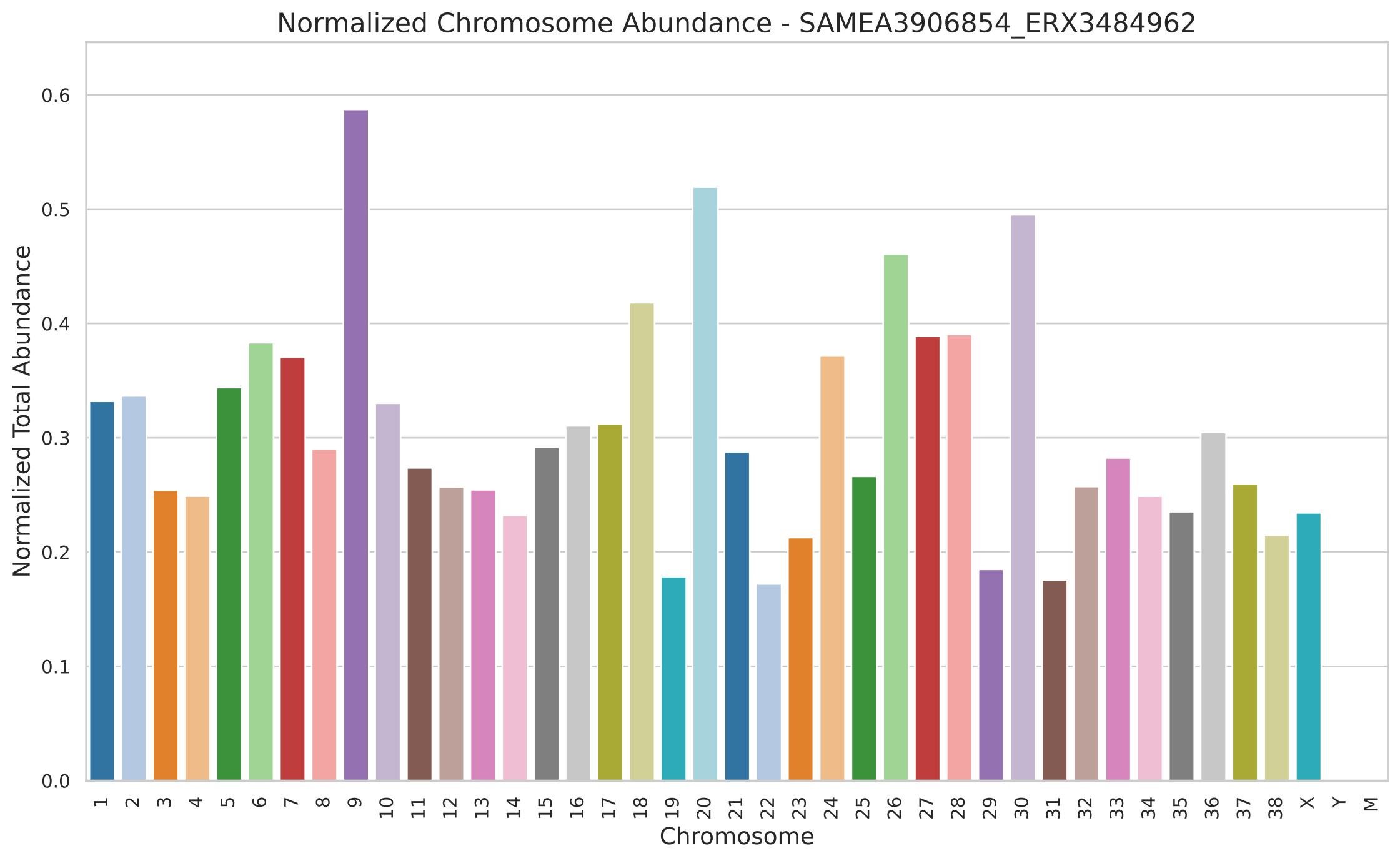

Normalized Chromosome Abundance - SAMEA3906822_ERX3484935
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

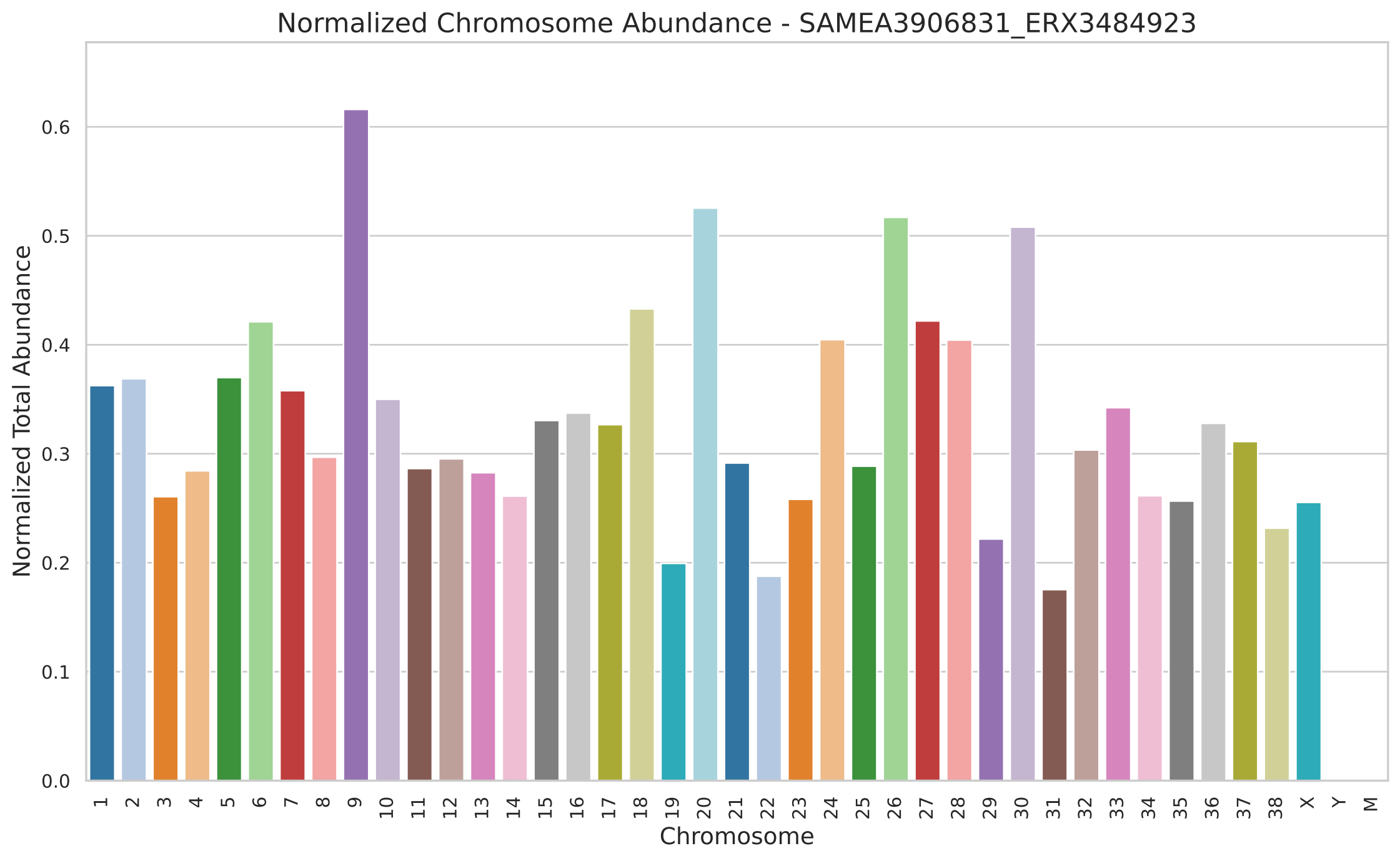

Normalized Chromosome Abundance - SAMEA3907431_ERX3484945
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

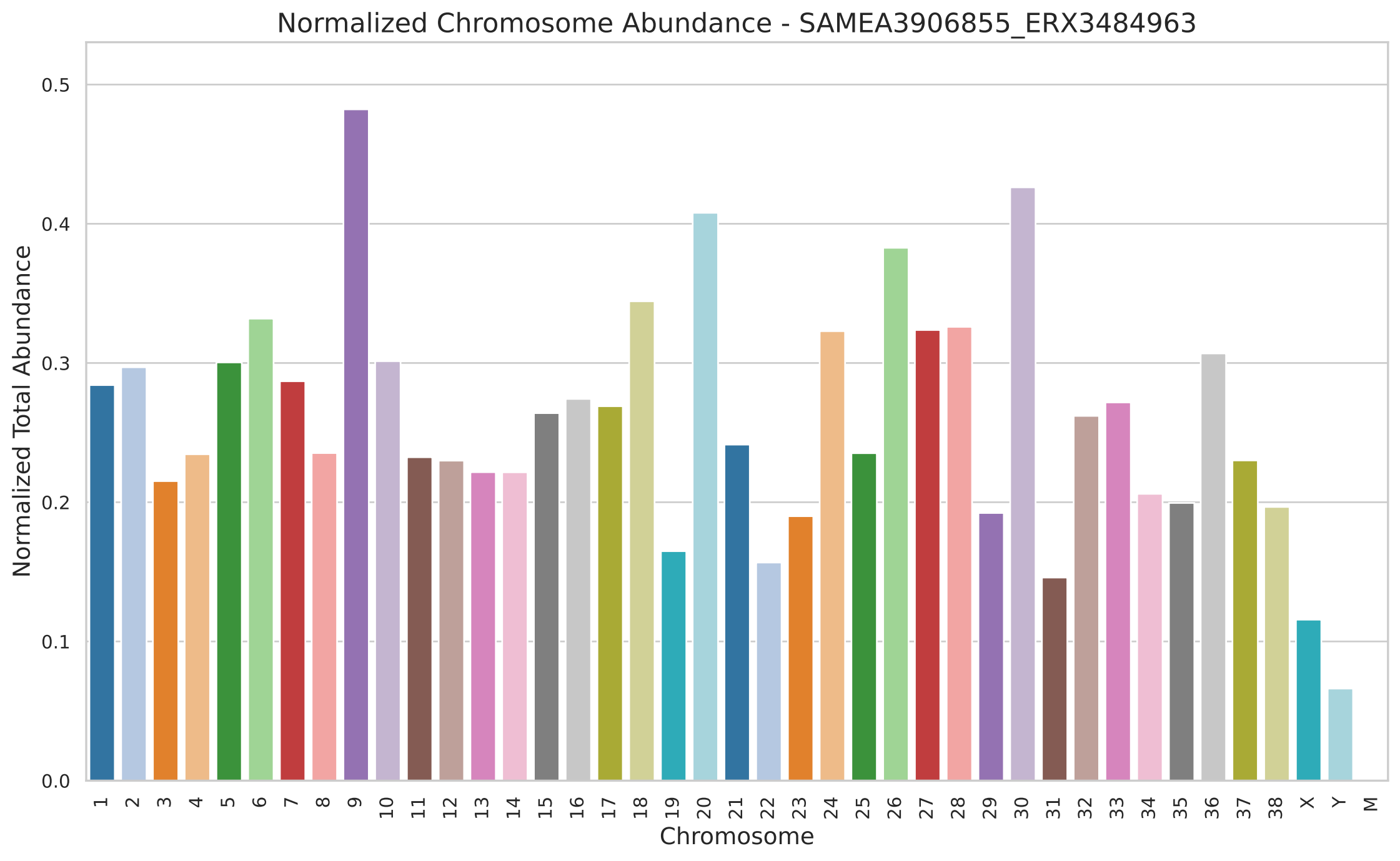

Normalized Chromosome Abundance - SAMEA3906849_ERX3484957
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

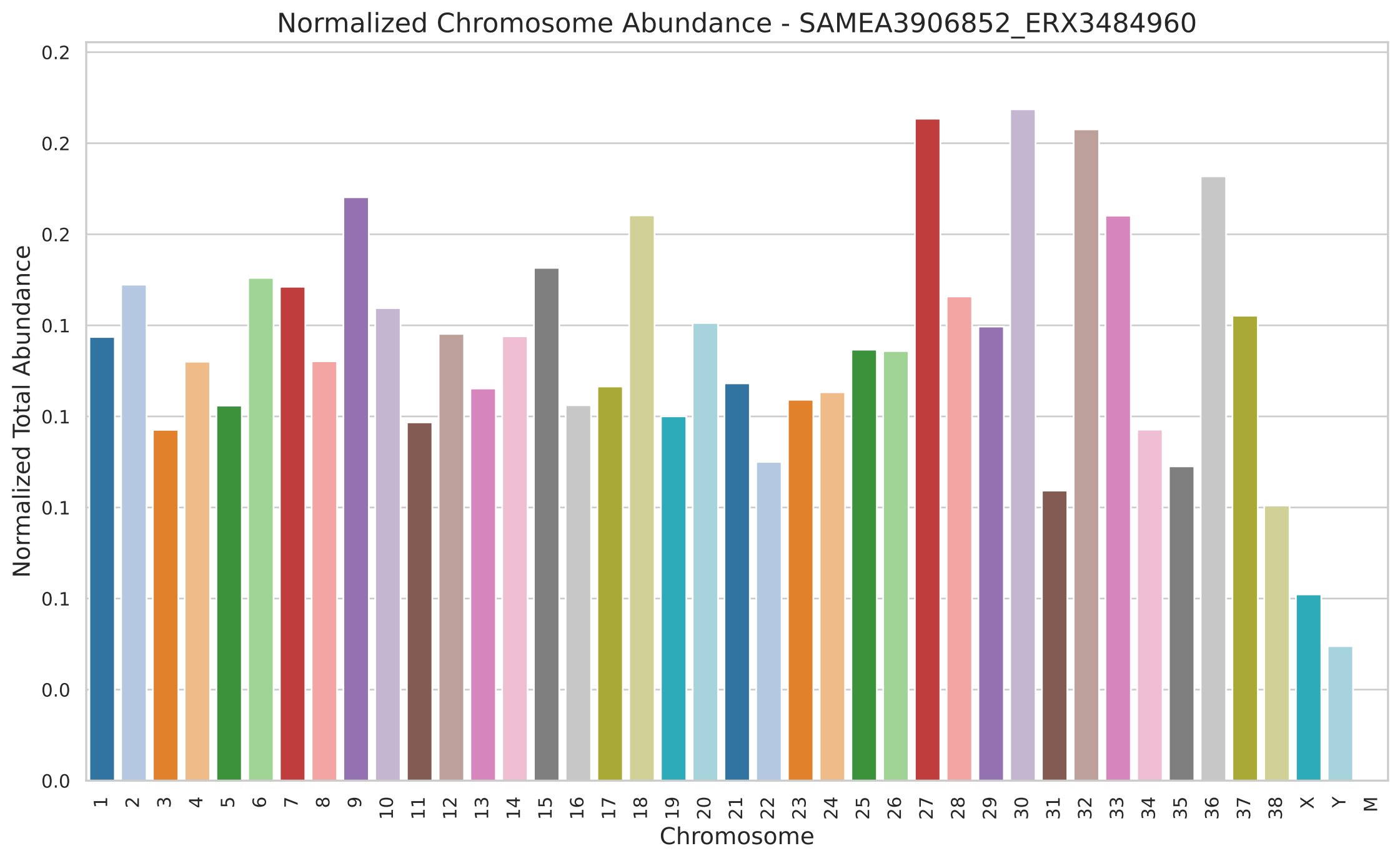

Normalized Chromosome Abundance - SAMEA3906845_ERX3484951
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

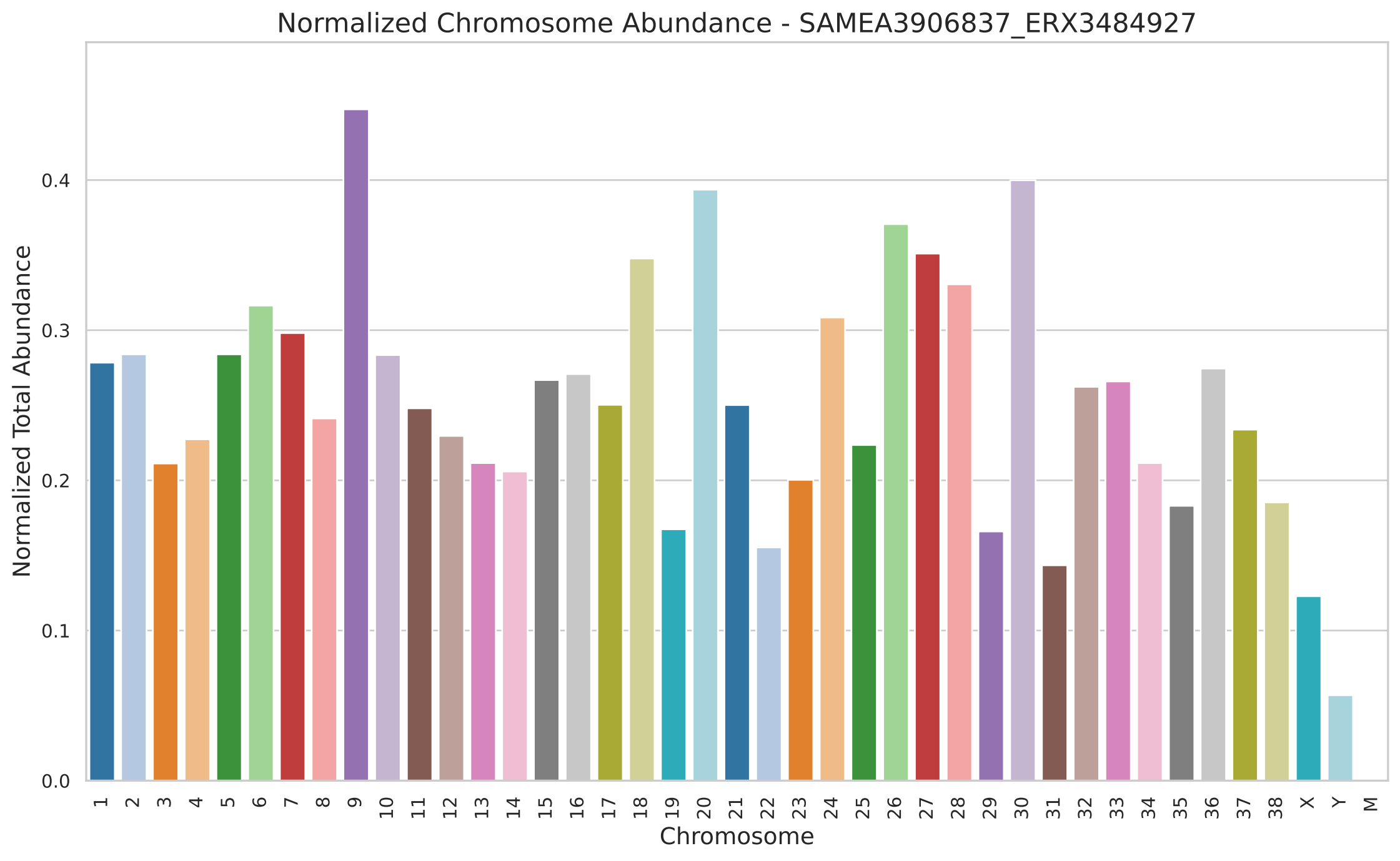

Normalized Chromosome Abundance - SAMEA3906853_ERX3484976
Normalized Total Abundance
0.2
0.1
0.1
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

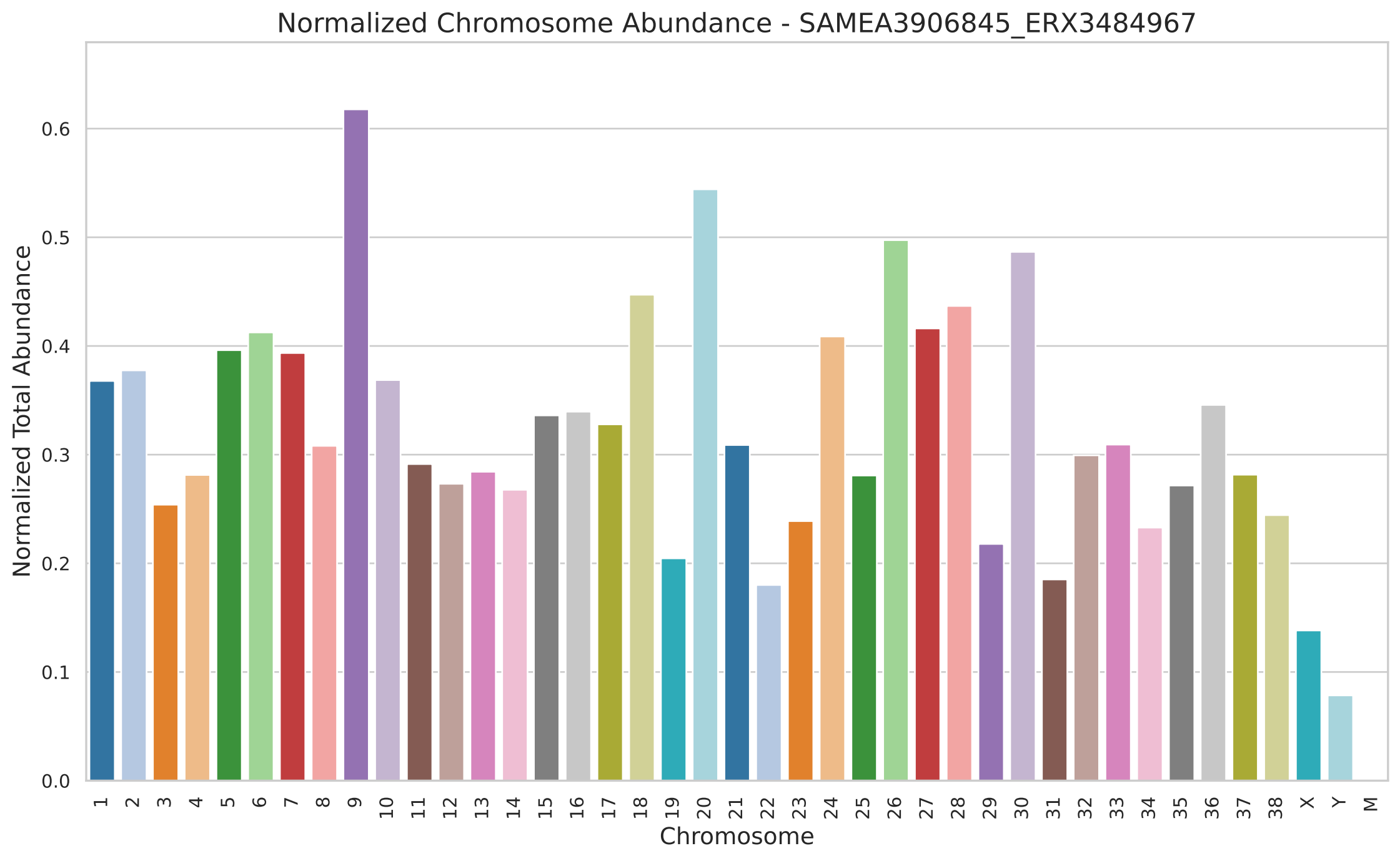

Normalized Chromosome Abundance - SAMEA3906854_ERX3484962
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

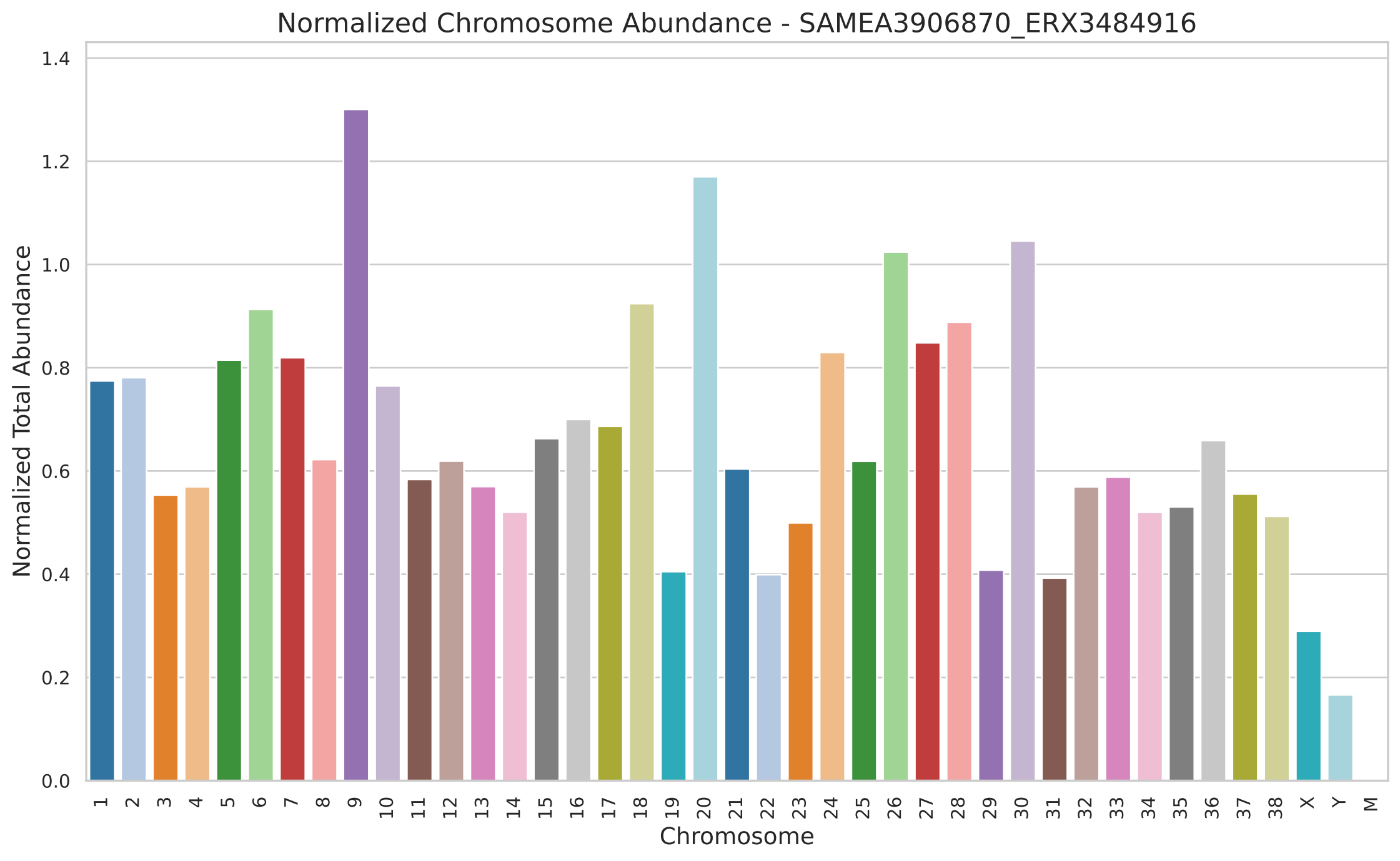

Normalized Chromosome Abundance - SAMEA3906831_ERX3484923
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

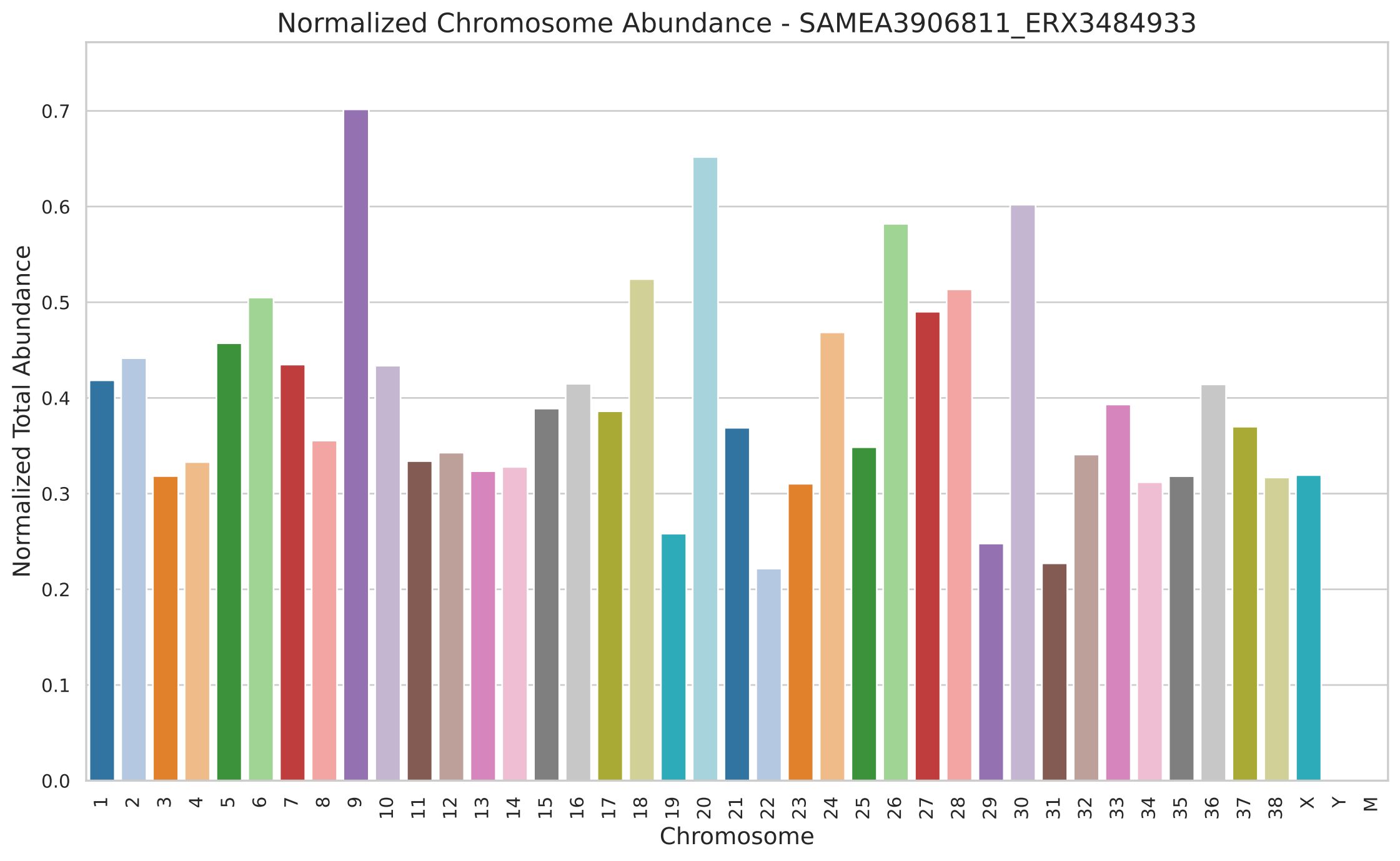

Normalized Chromosome Abundance - SAMEA3906855_ERX3484963
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

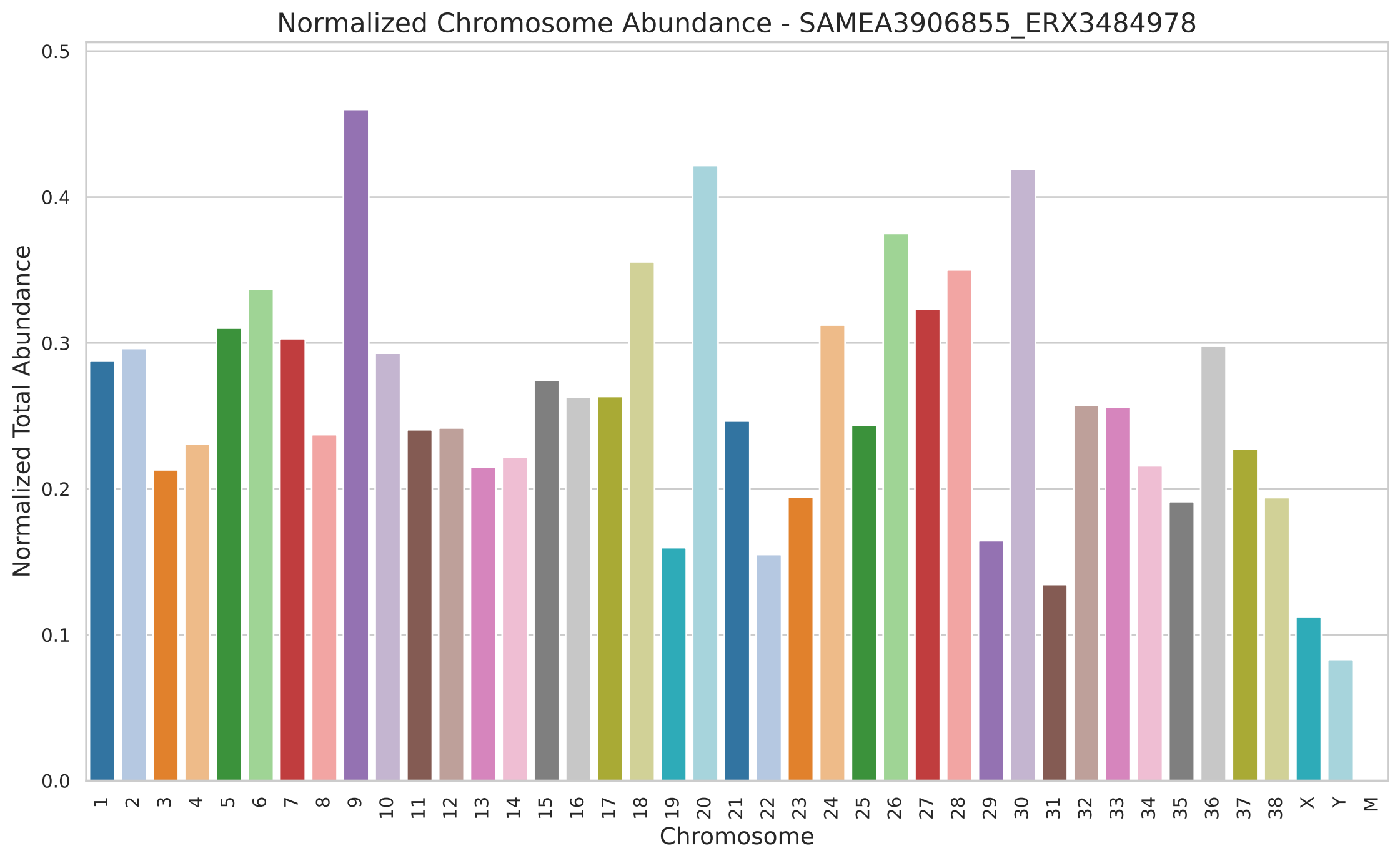

Normalized Chromosome Abundance - SAMEA3906852_ERX3484960
Normalized Total Abundance
0.2
0.2
0.2
0.1
0.1
0.1
0.1
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

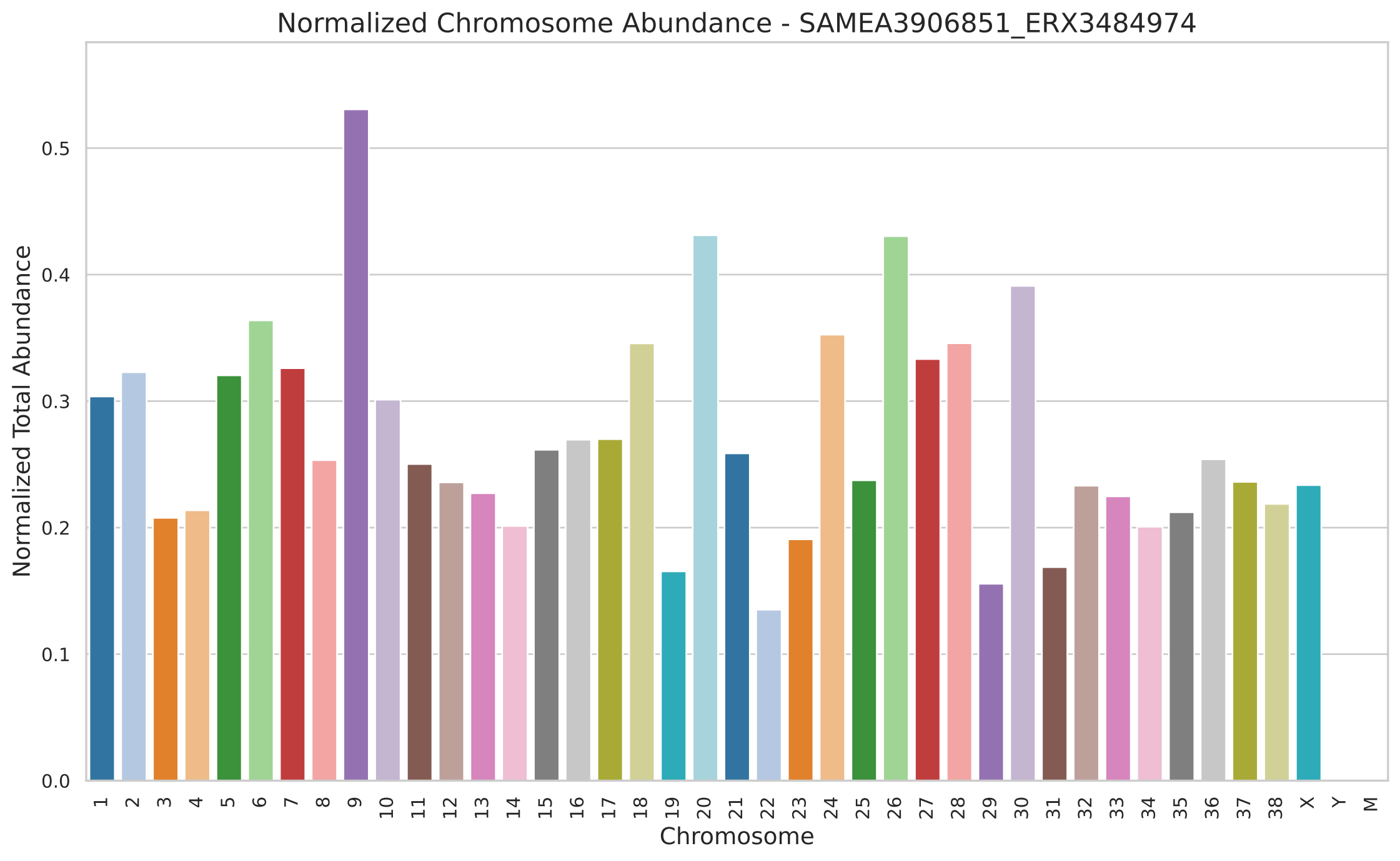

Normalized Chromosome Abundance - SAMEA3906837_ERX3484927
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

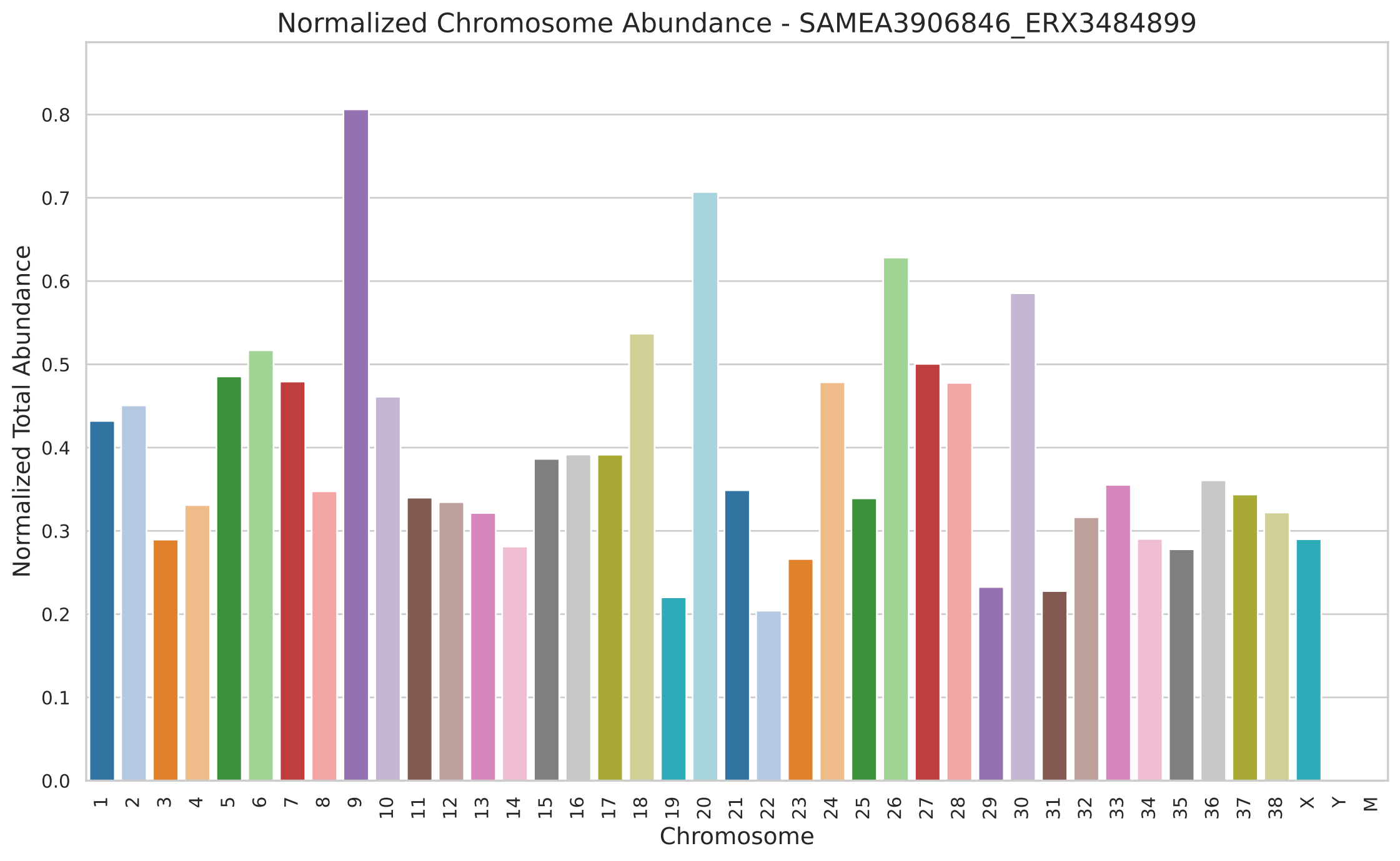

Normalized Chromosome Abundance - SAMEA3906845_ERX3484967
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

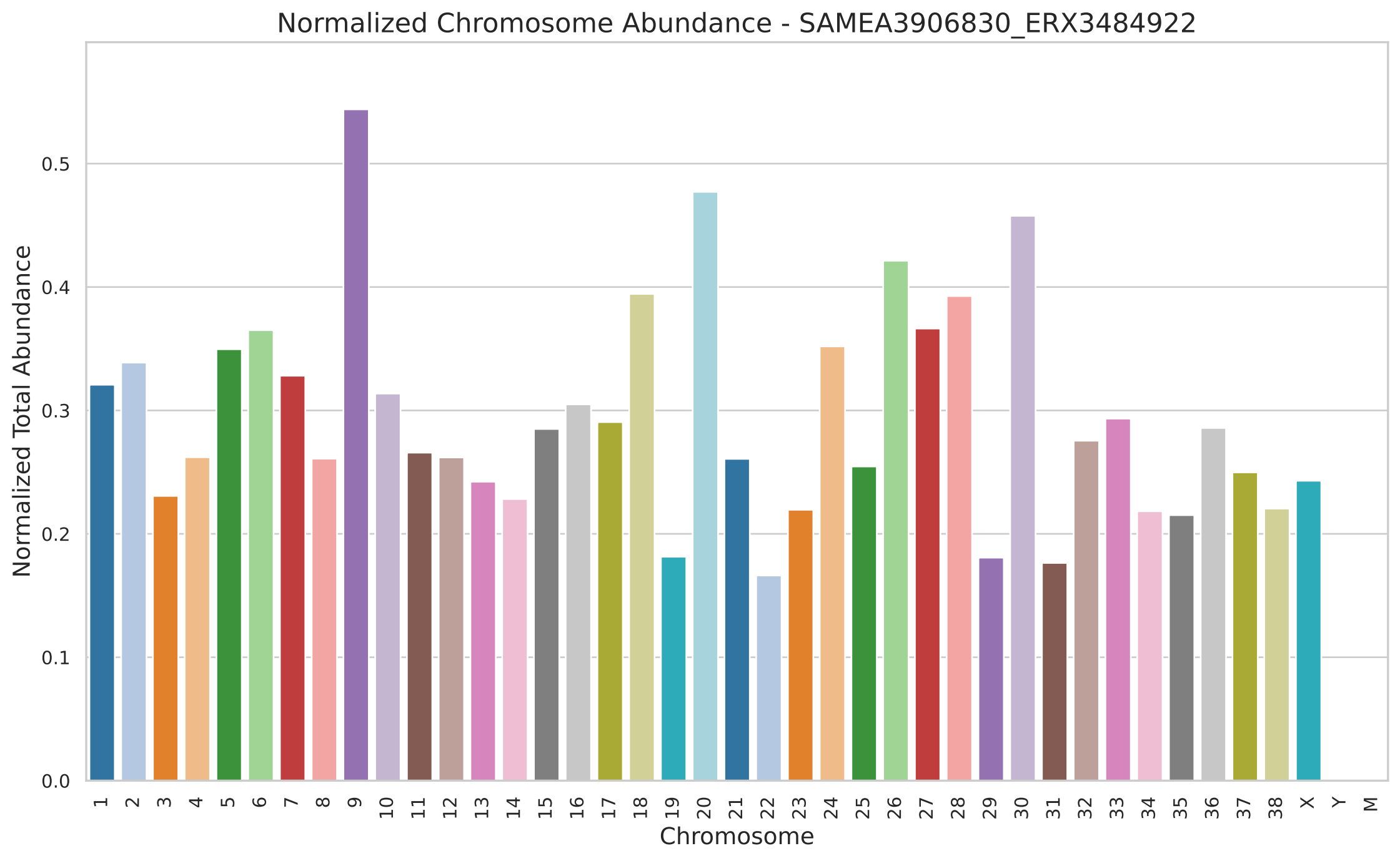

Normalized Chromosome Abundance - SAMEA3906870_ERX3484916
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

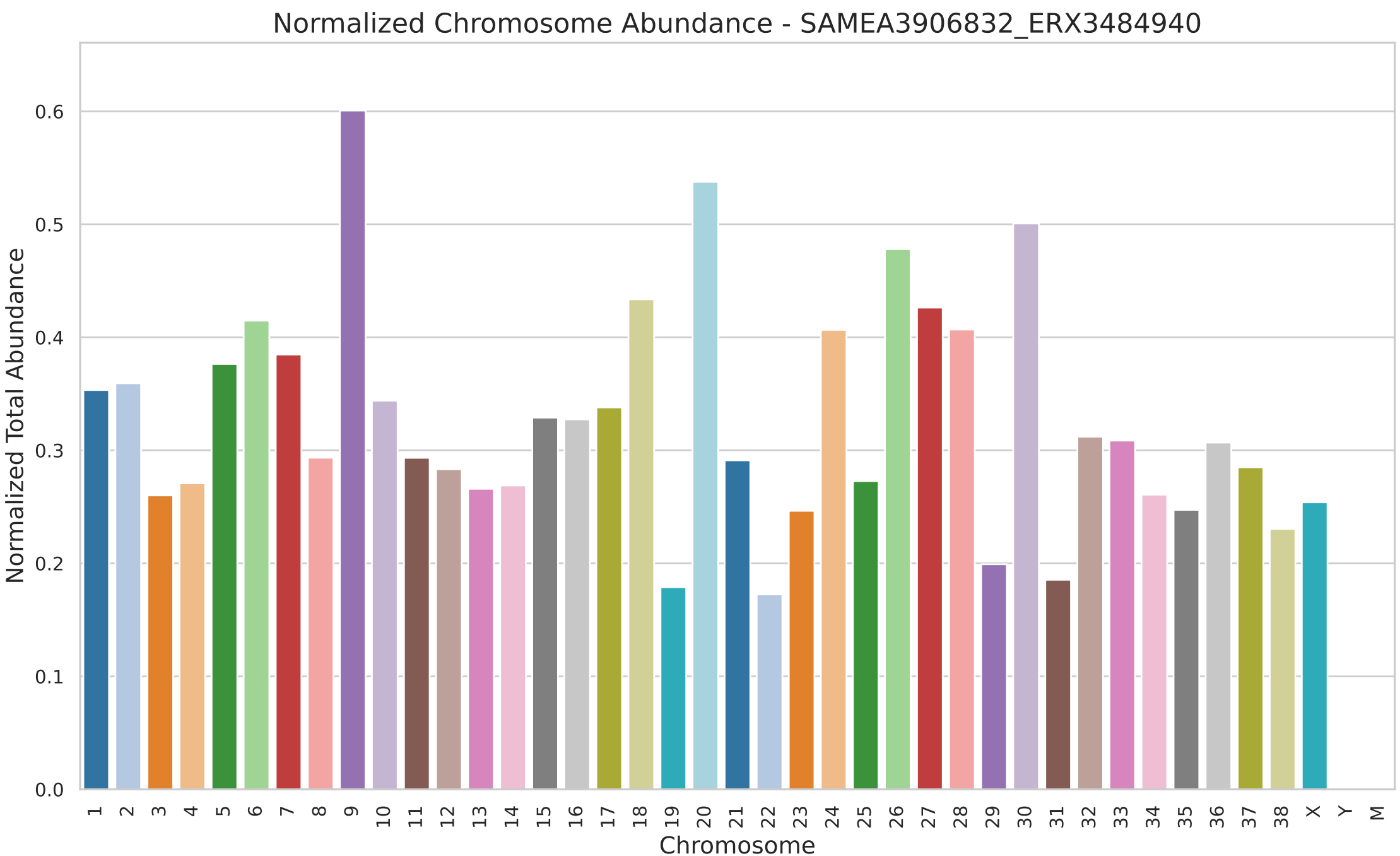

Normalized Chromosome Abundance - SAMEA3906811_ERX3484933
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

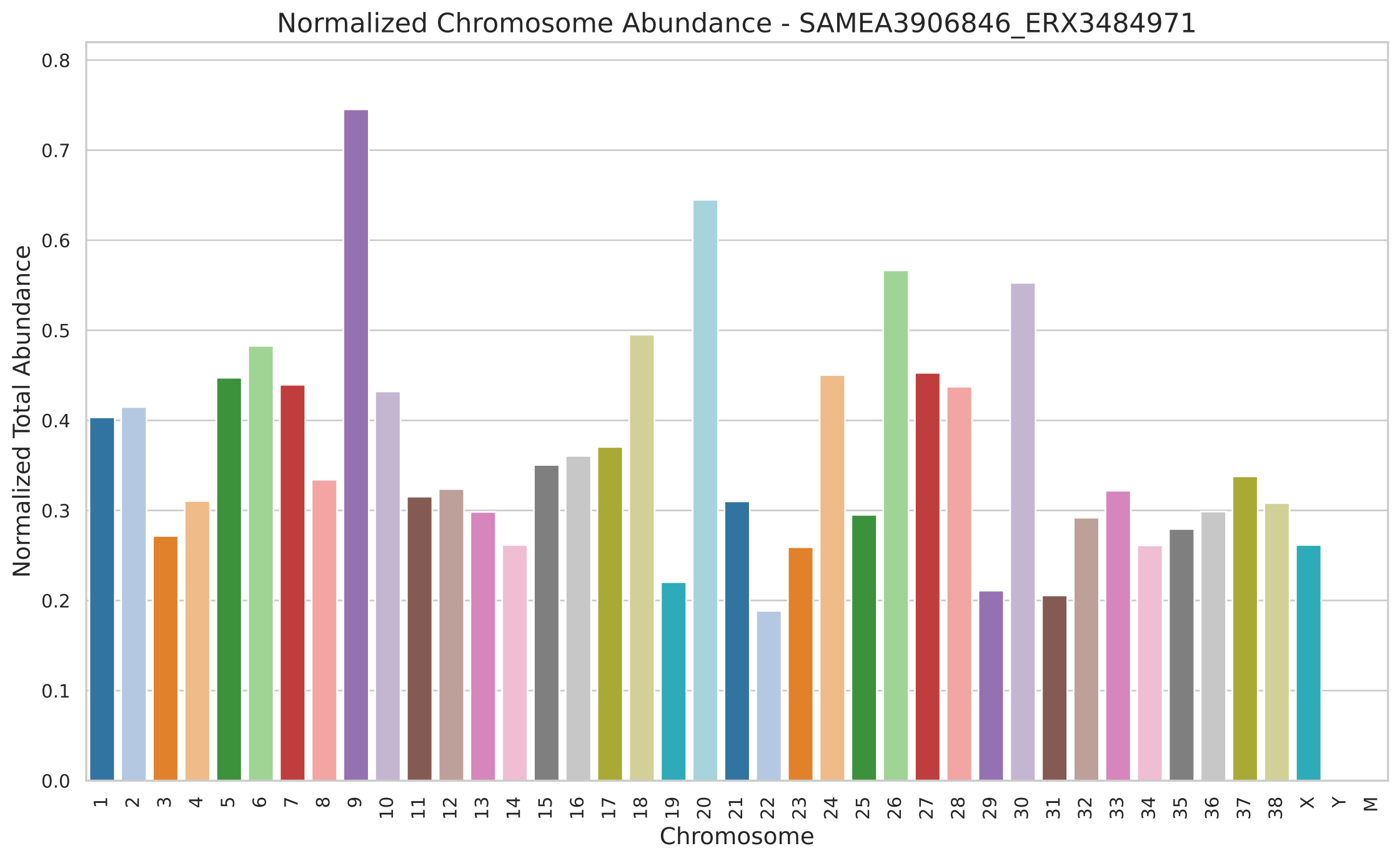

Normalized Chromosome Abundance - SAMEA3906855_ERX3484978
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

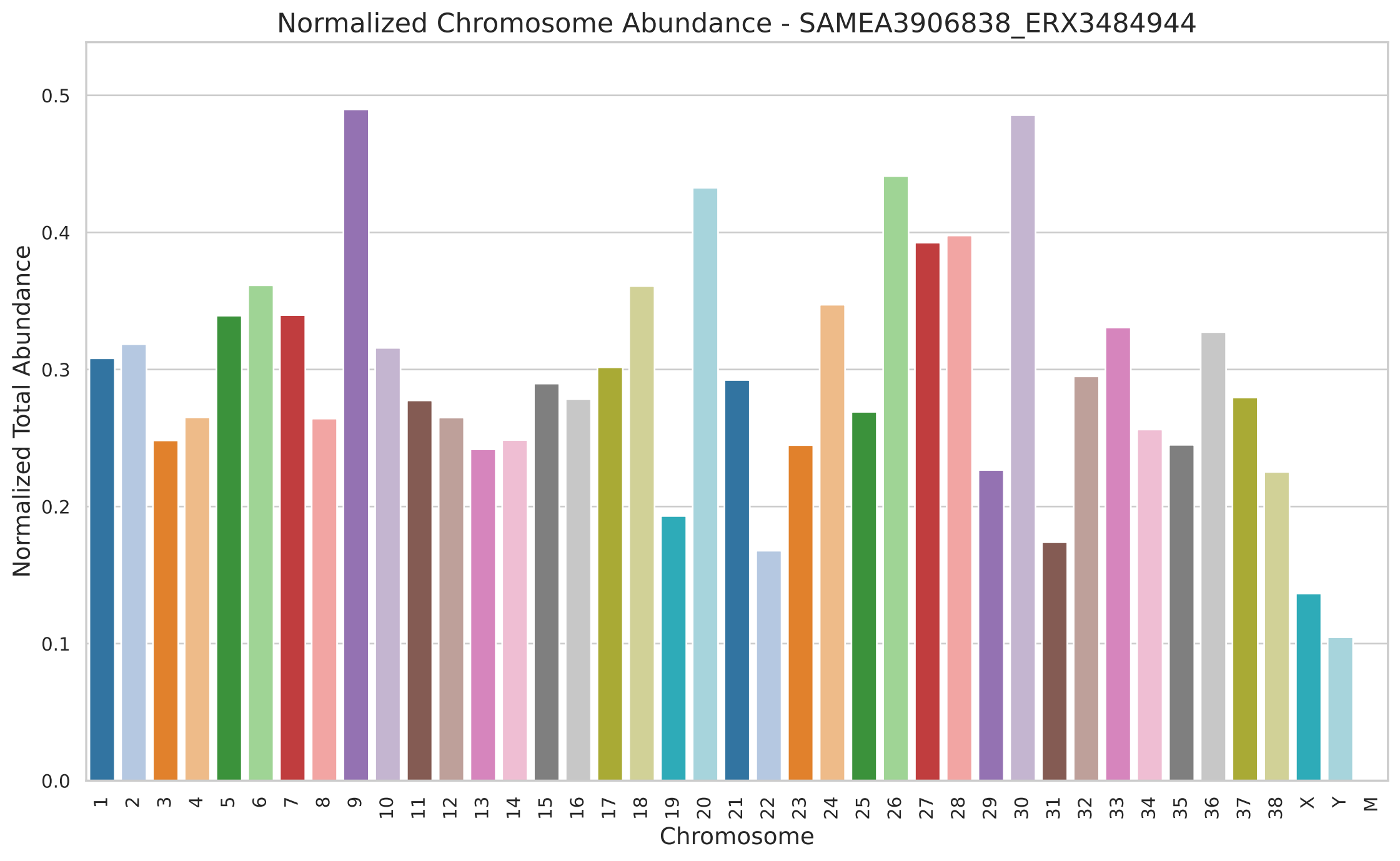

Normalized Chromosome Abundance - SAMEA3906851_ERX3484974
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

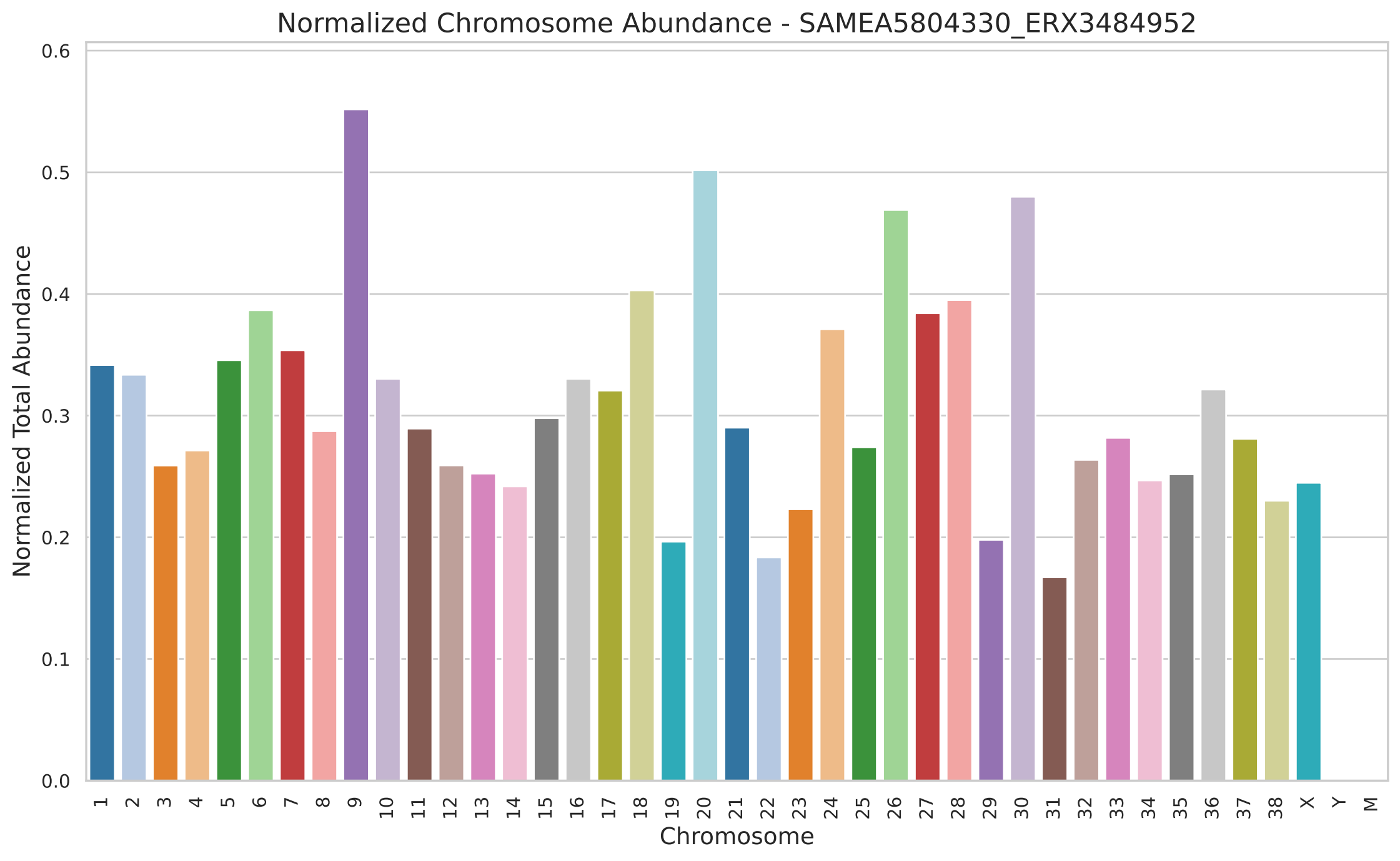

Normalized Chromosome Abundance - SAMEA3906846_ERX3484899
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

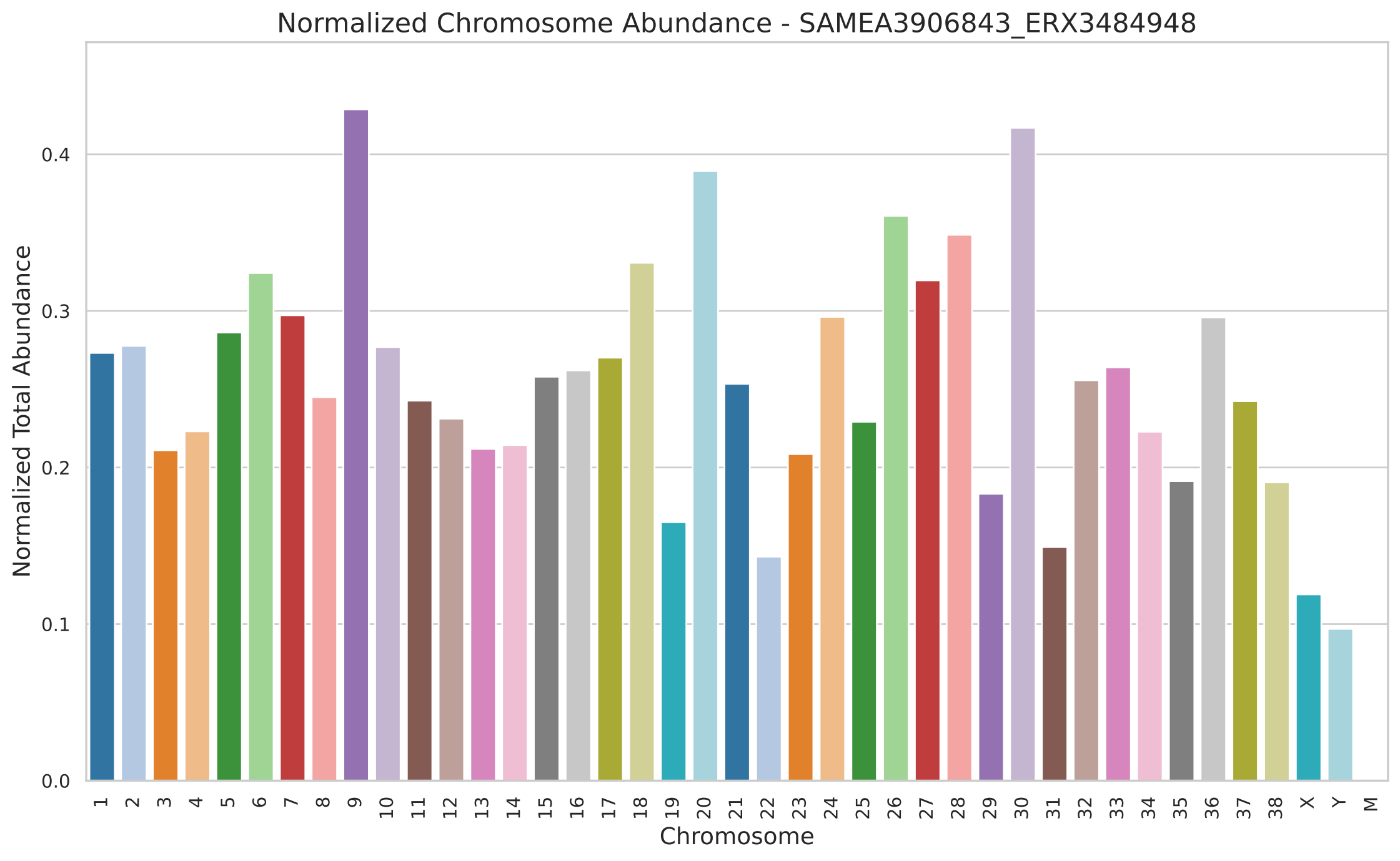

Normalized Chromosome Abundance - SAMEA3906830_ERX3484922
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

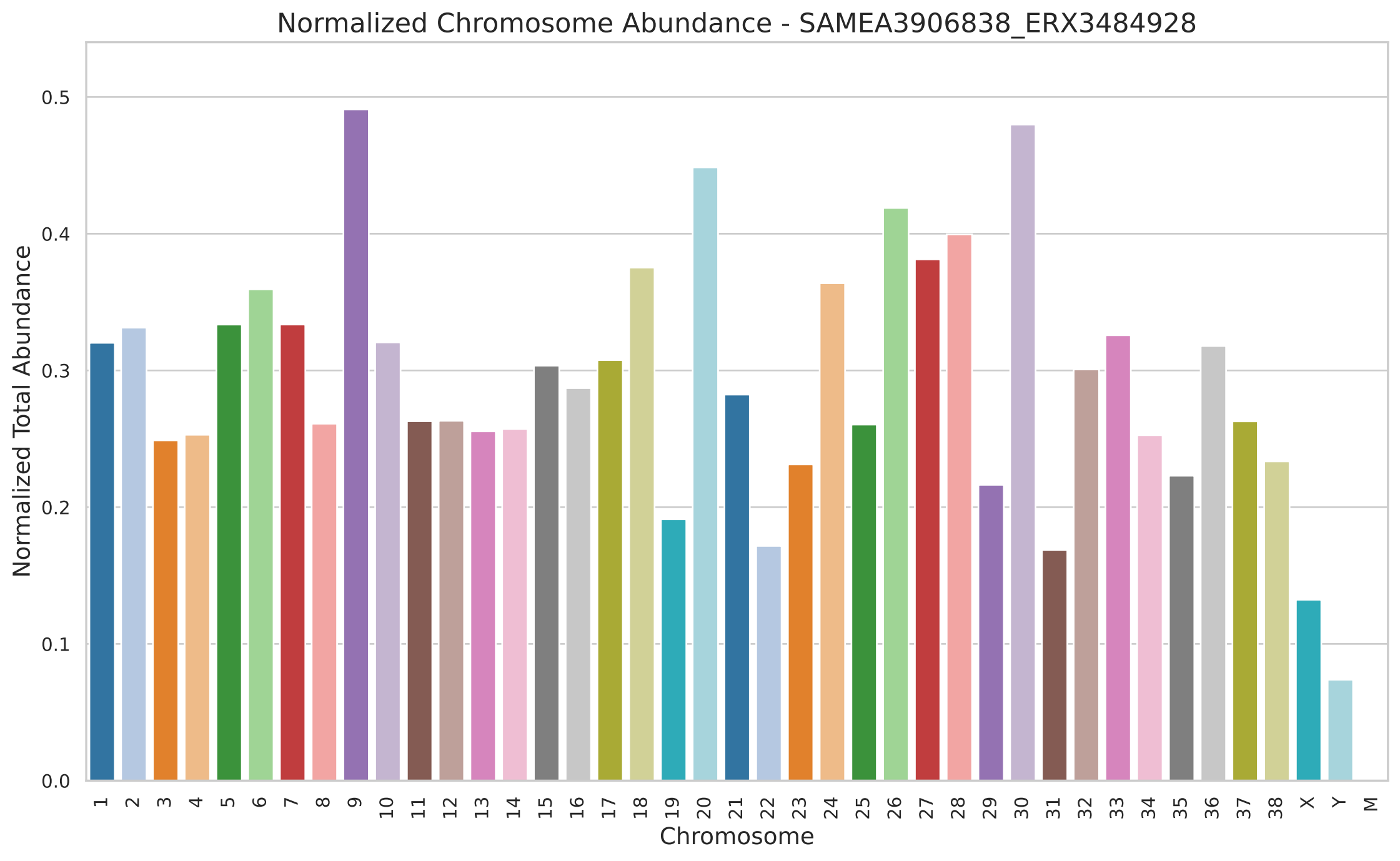

Normalized Chromosome Abundance - SAMEA3906832_ERX3484940
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

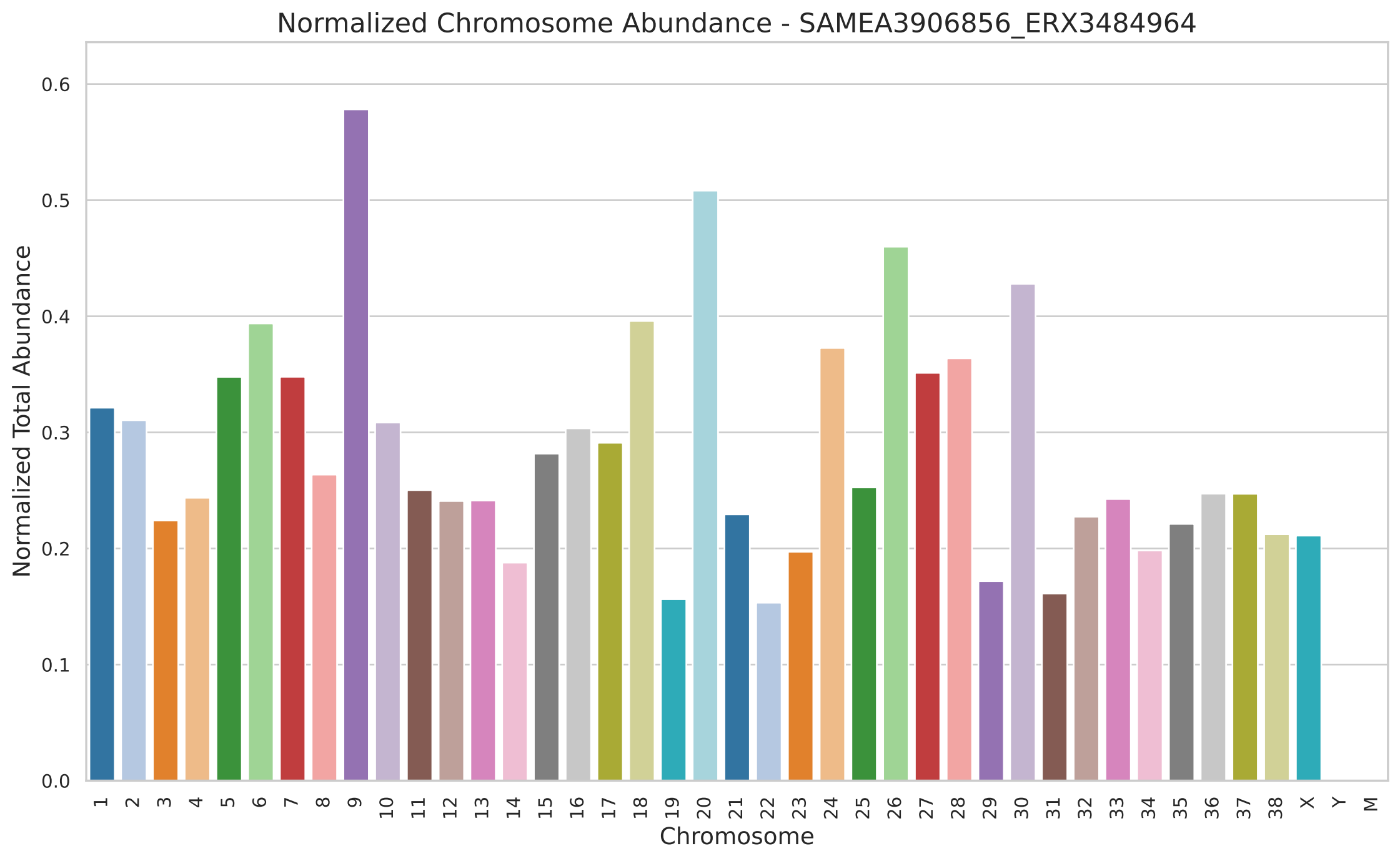

Normalized Chromosome Abundance - SAMEA3906846_ERX3484971
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

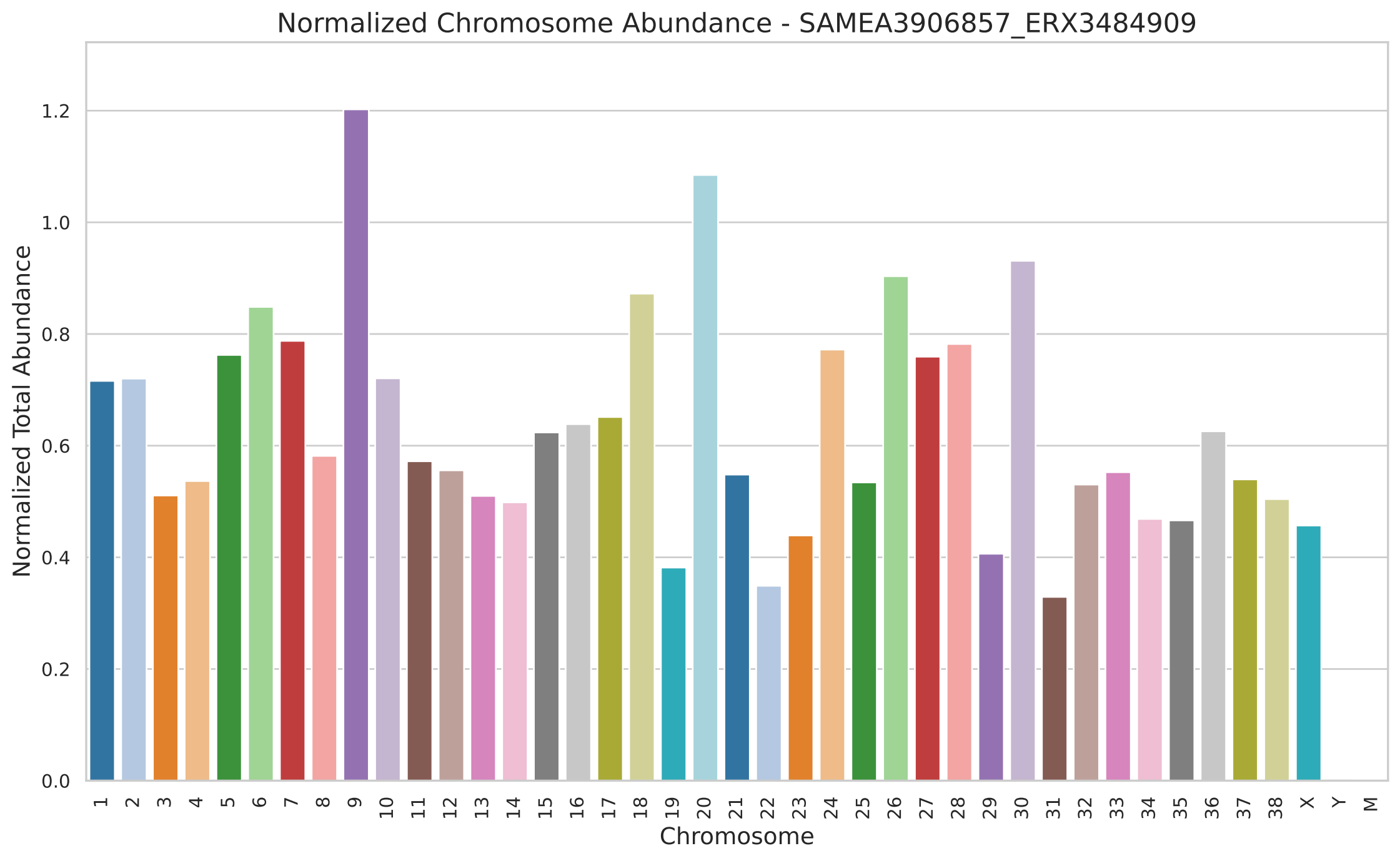

Normalized Chromosome Abundance - SAMEA3906838_ERX3484944
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

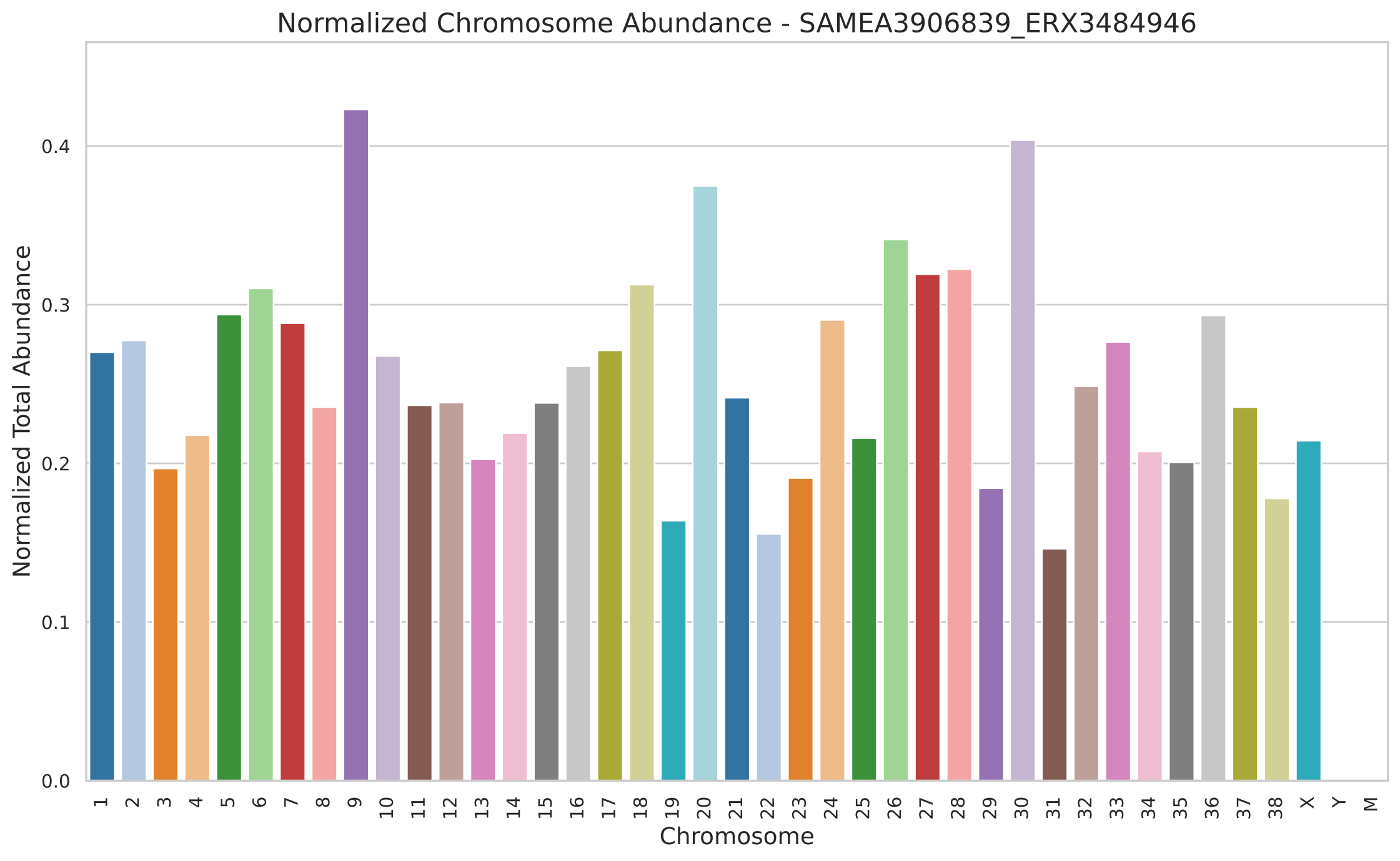

Normalized Chromosome Abundance - SAMEA5804330_ERX3484952
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

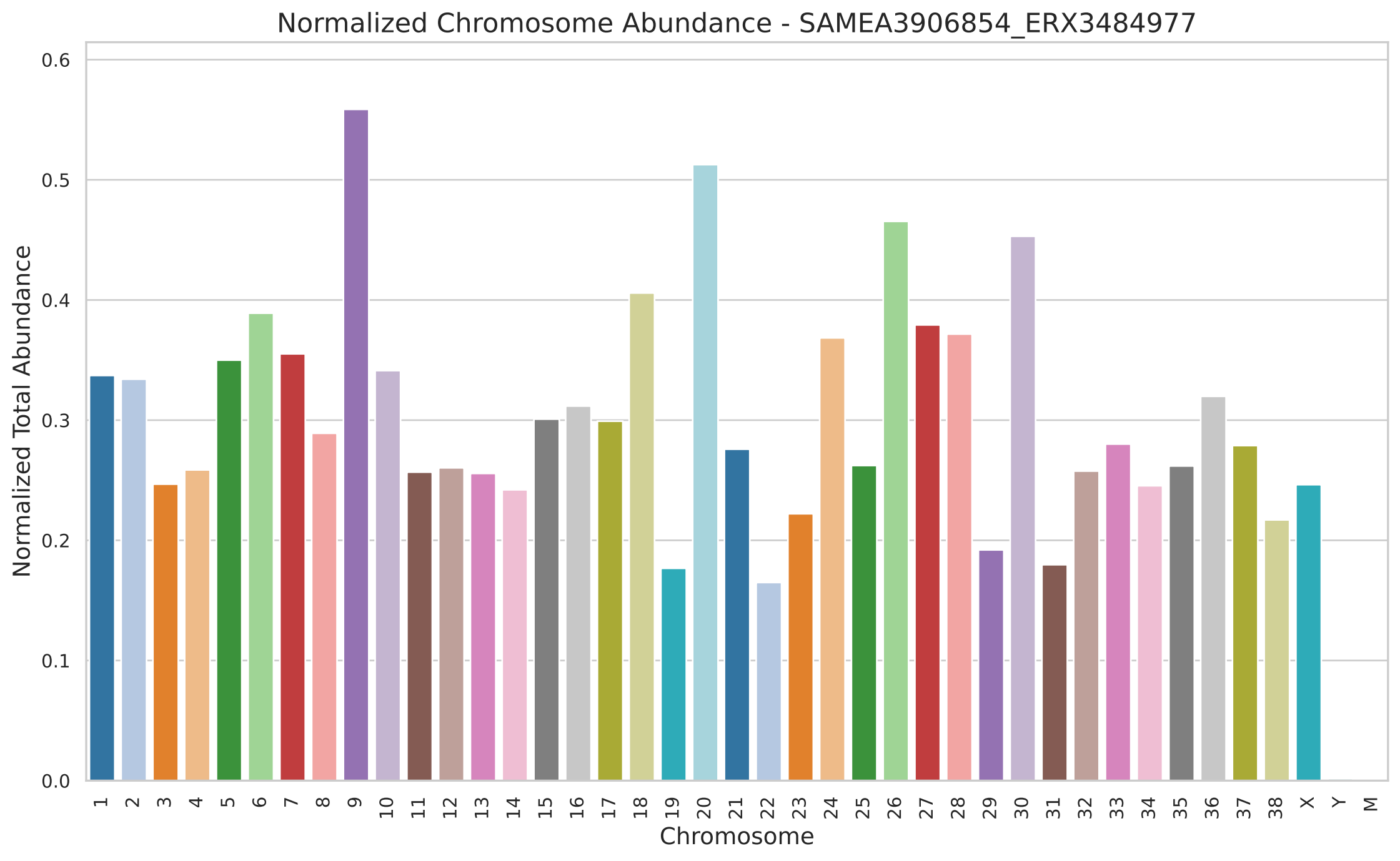

Normalized Chromosome Abundance - SAMEA3906843_ERX3484948
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

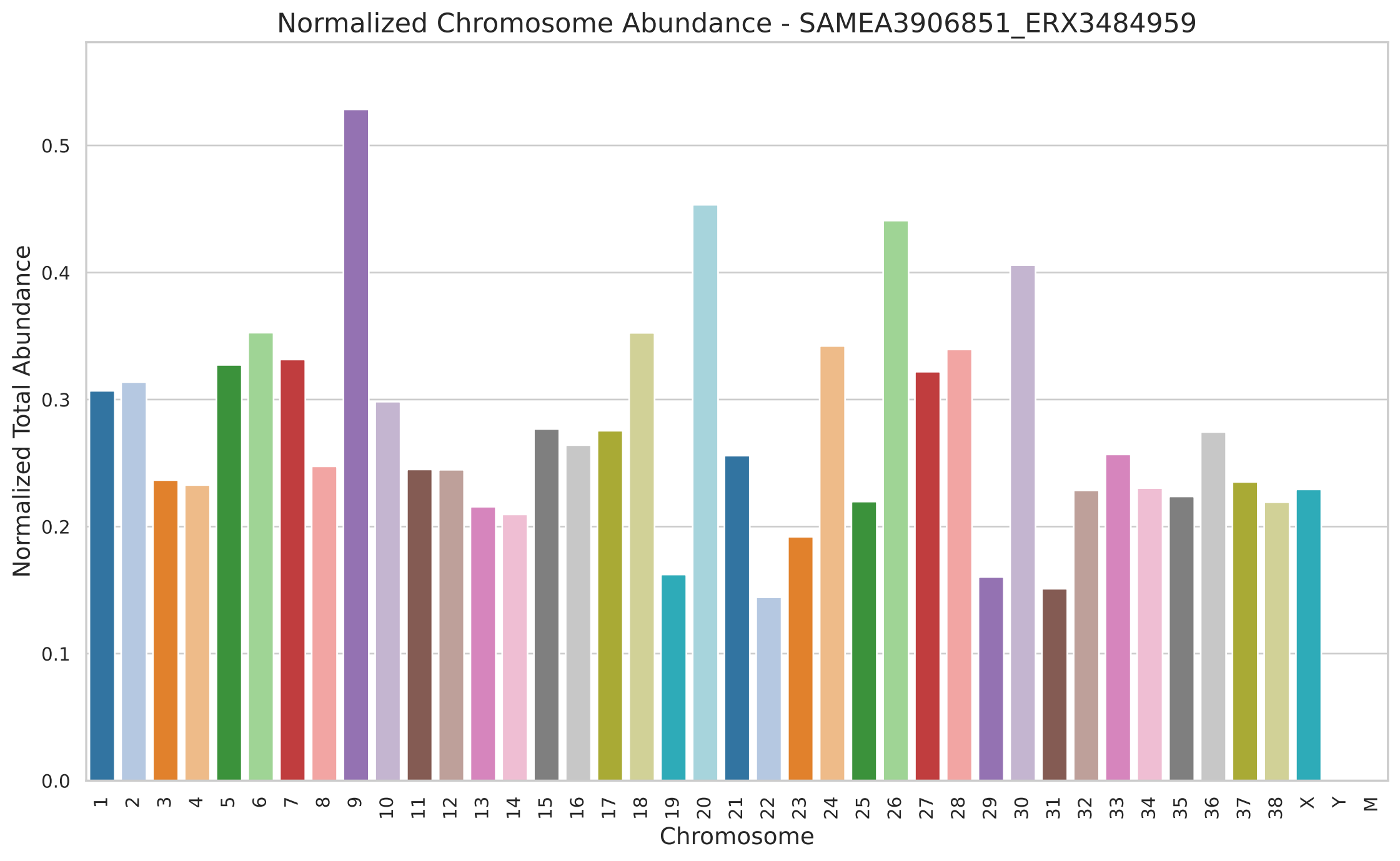

Normalized Chromosome Abundance - SAMEA3906838_ERX3484928
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

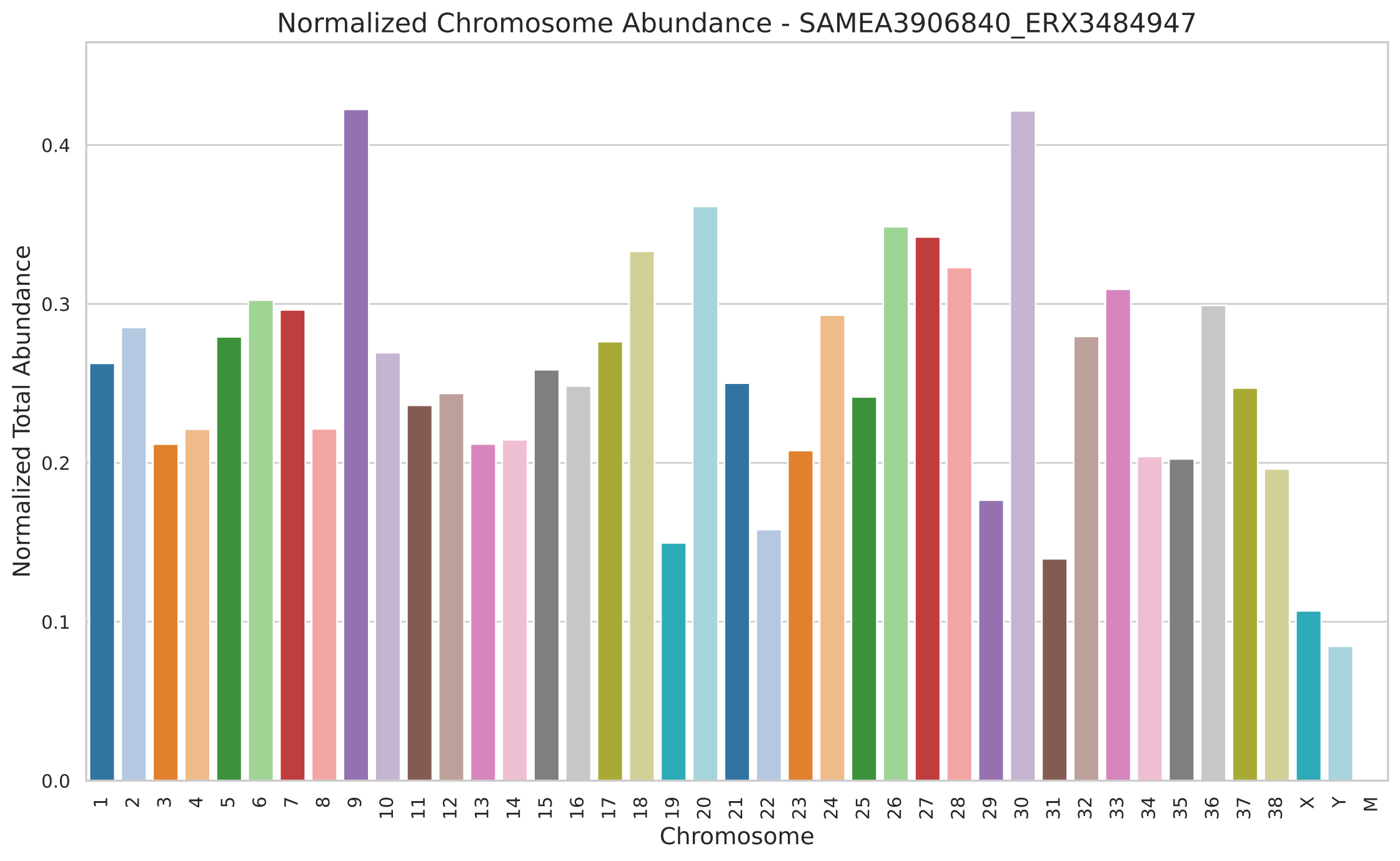

Normalized Chromosome Abundance - SAMEA3906856_ERX3484964
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

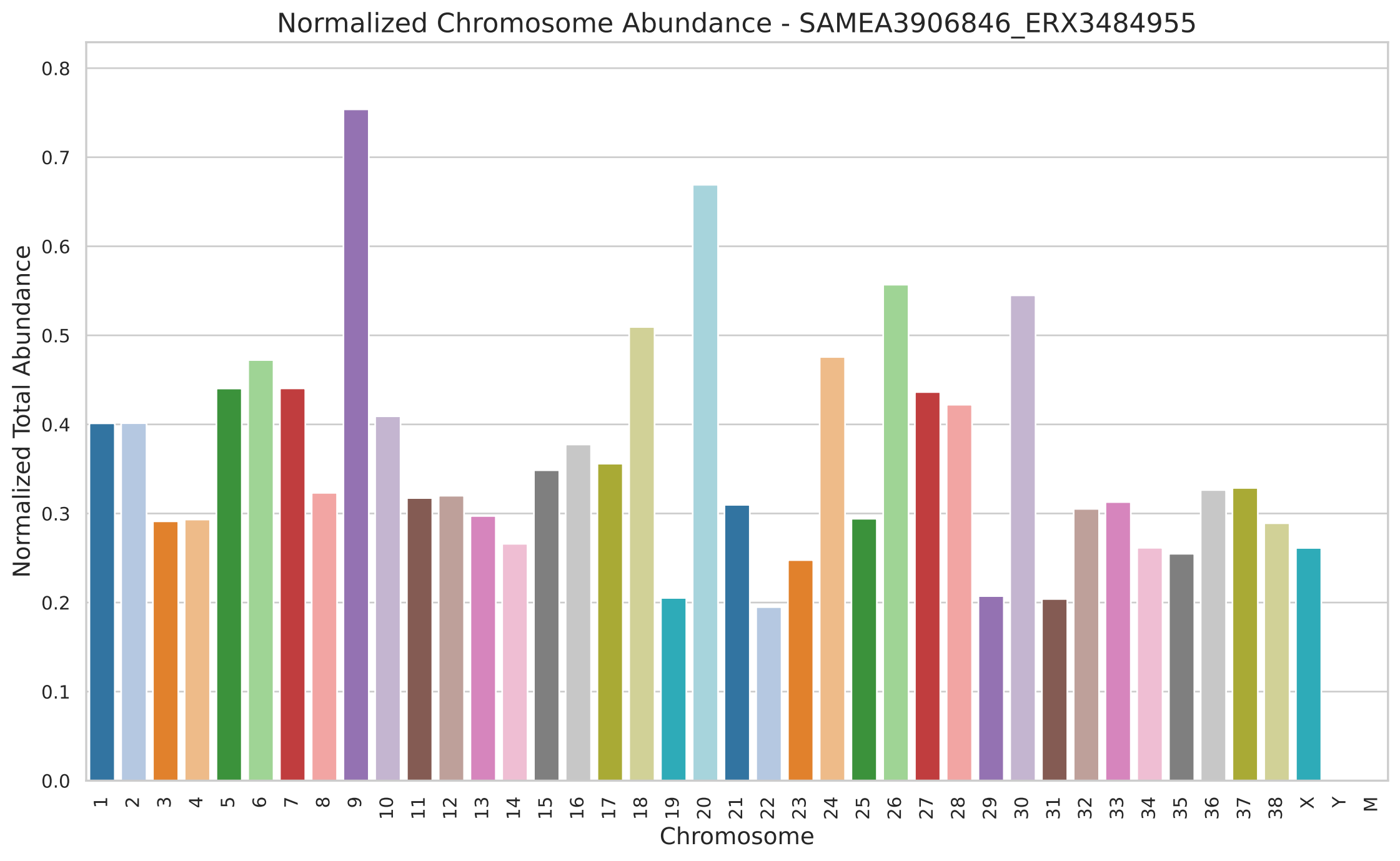

Normalized Chromosome Abundance - SAMEA3906857_ERX3484909
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

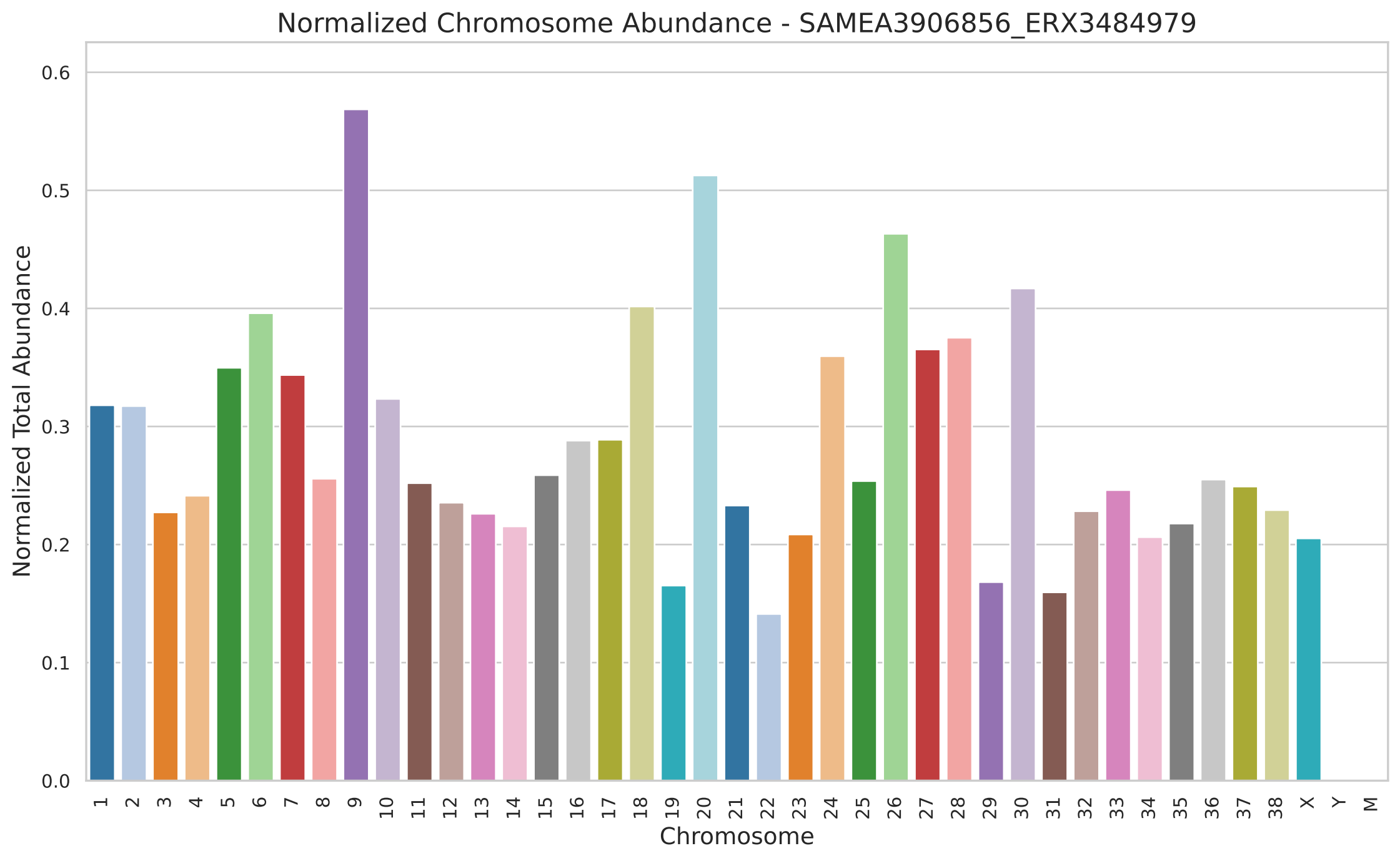

Normalized Chromosome Abundance - SAMEA3906839_ERX3484946
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

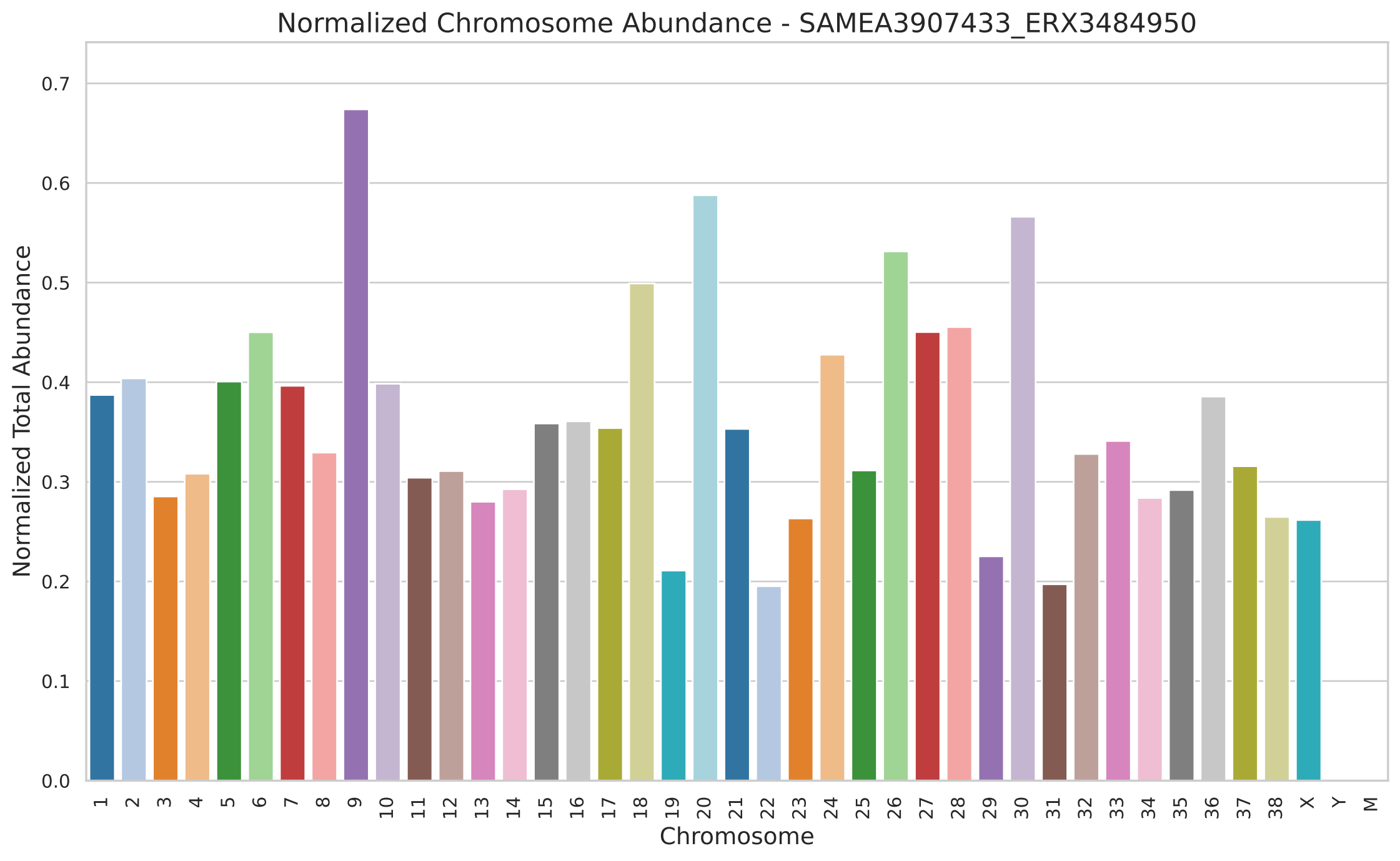

Normalized Chromosome Abundance - SAMEA3906854_ERX3484977
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

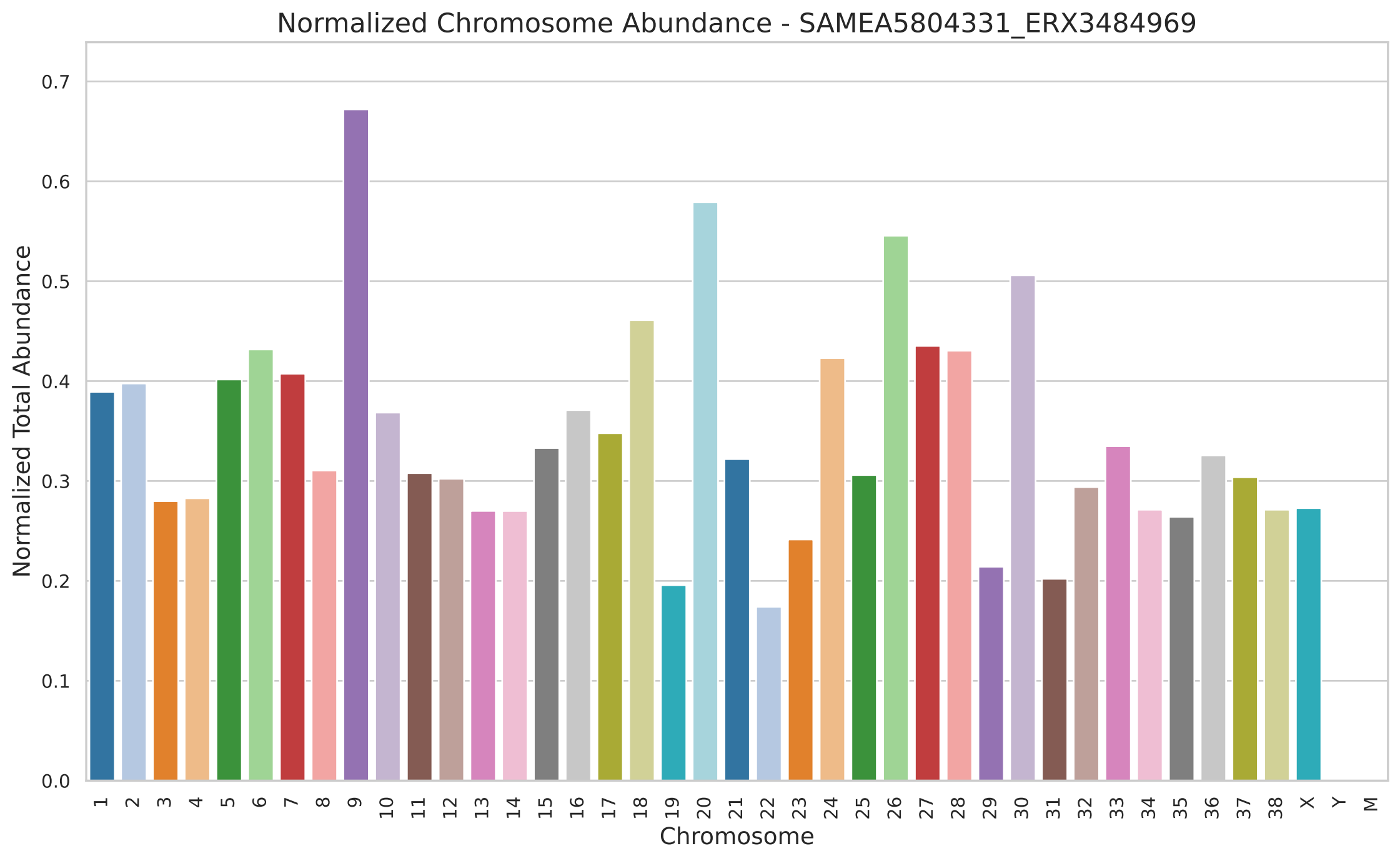

Normalized Chromosome Abundance - SAMEA3906851_ERX3484959
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

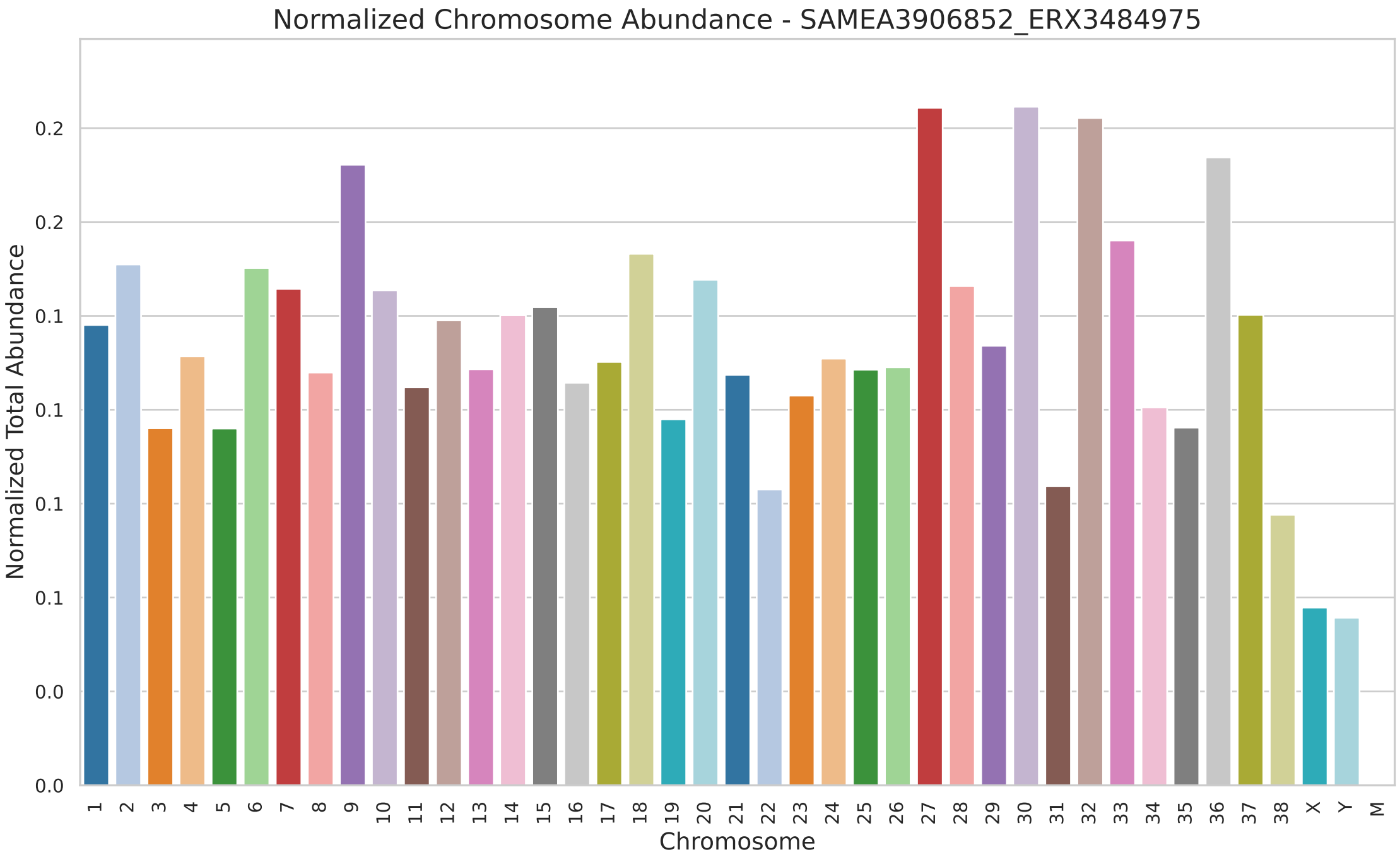

Normalized Chromosome Abundance - SAMEA3906840_ERX3484947
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

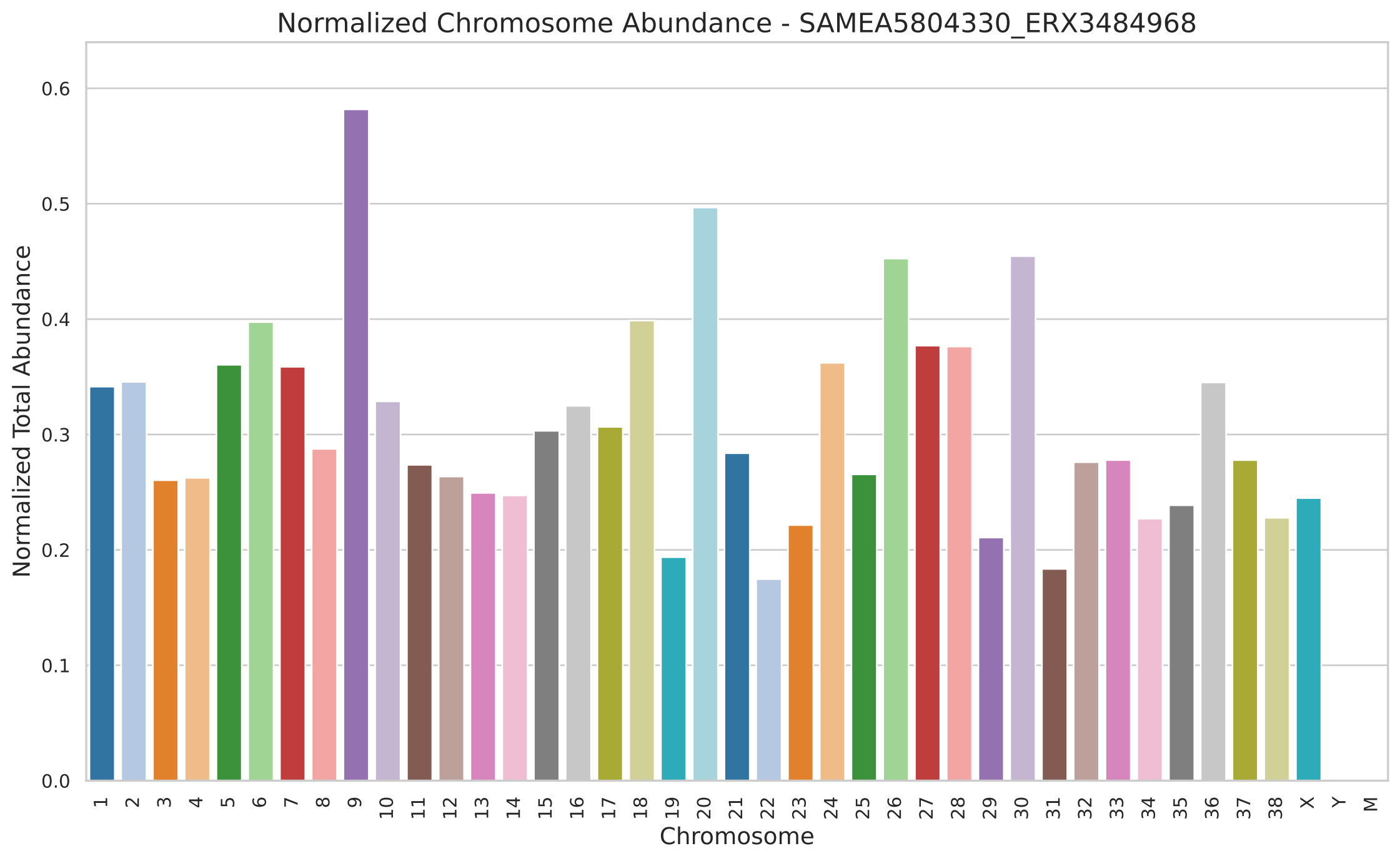

Normalized Chromosome Abundance - SAMEA3906846_ERX3484955
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

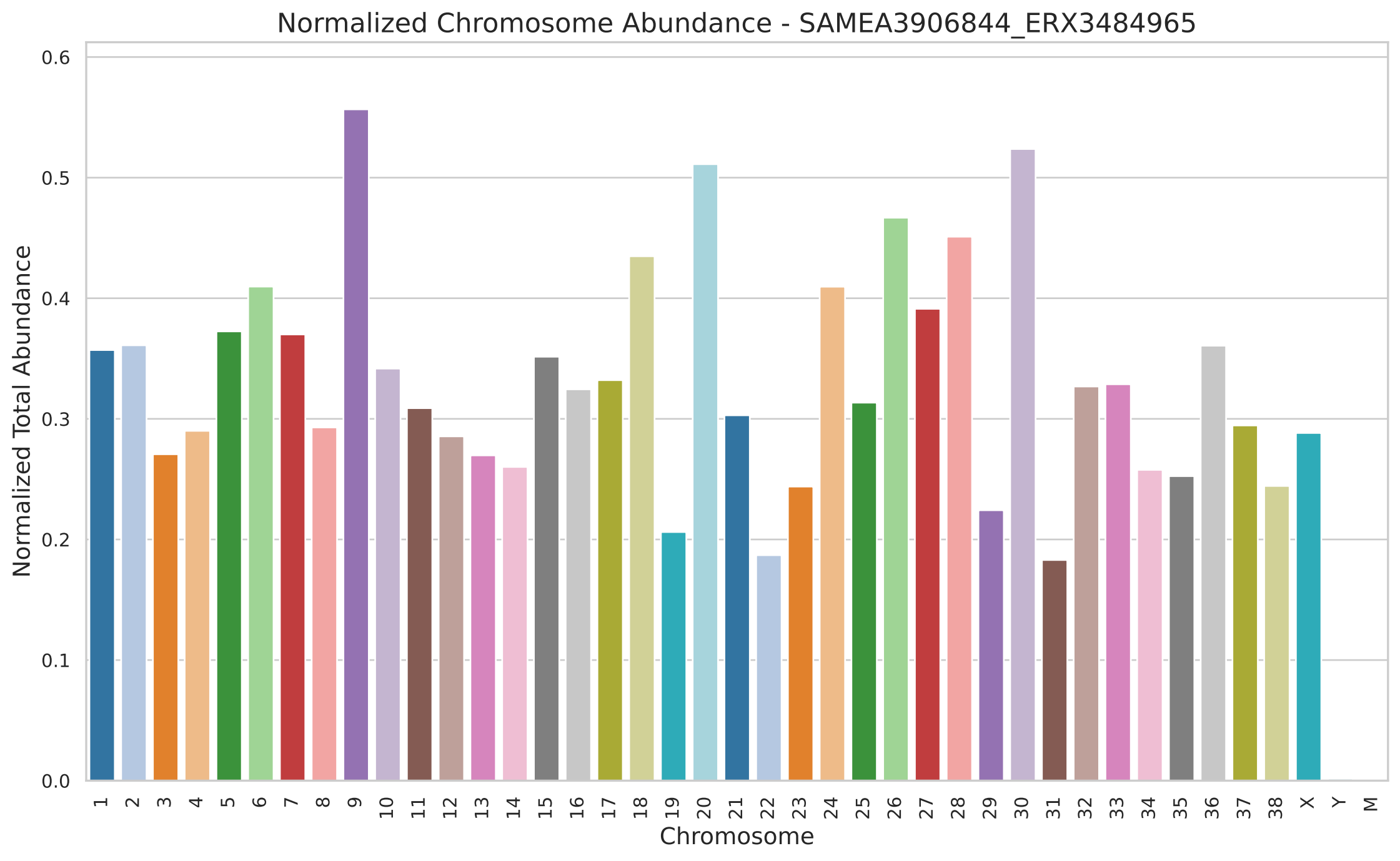

Normalized Chromosome Abundance - SAMEA3906856_ERX3484979
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

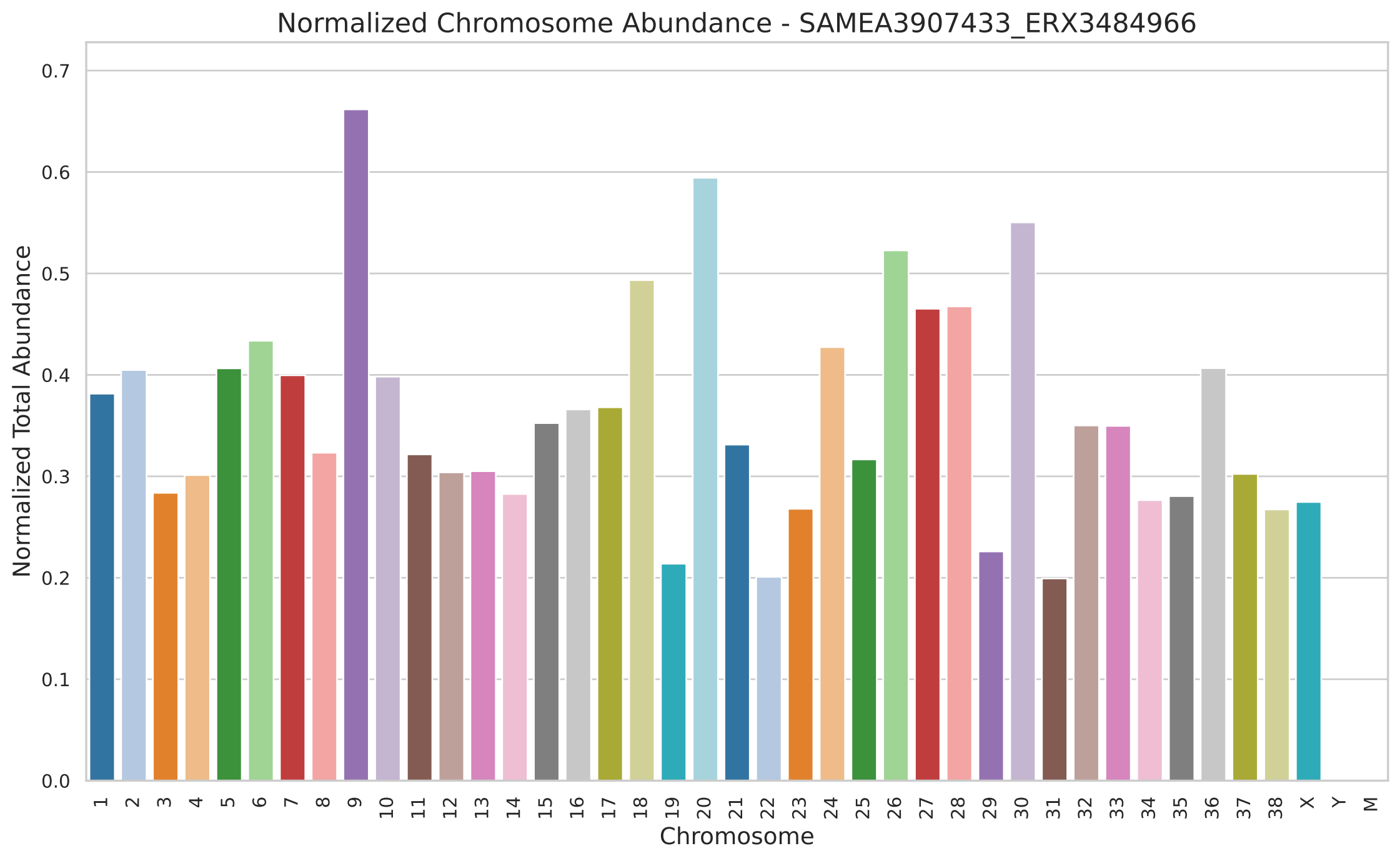

Normalized Chromosome Abundance - SAMEA3907433_ERX3484950
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

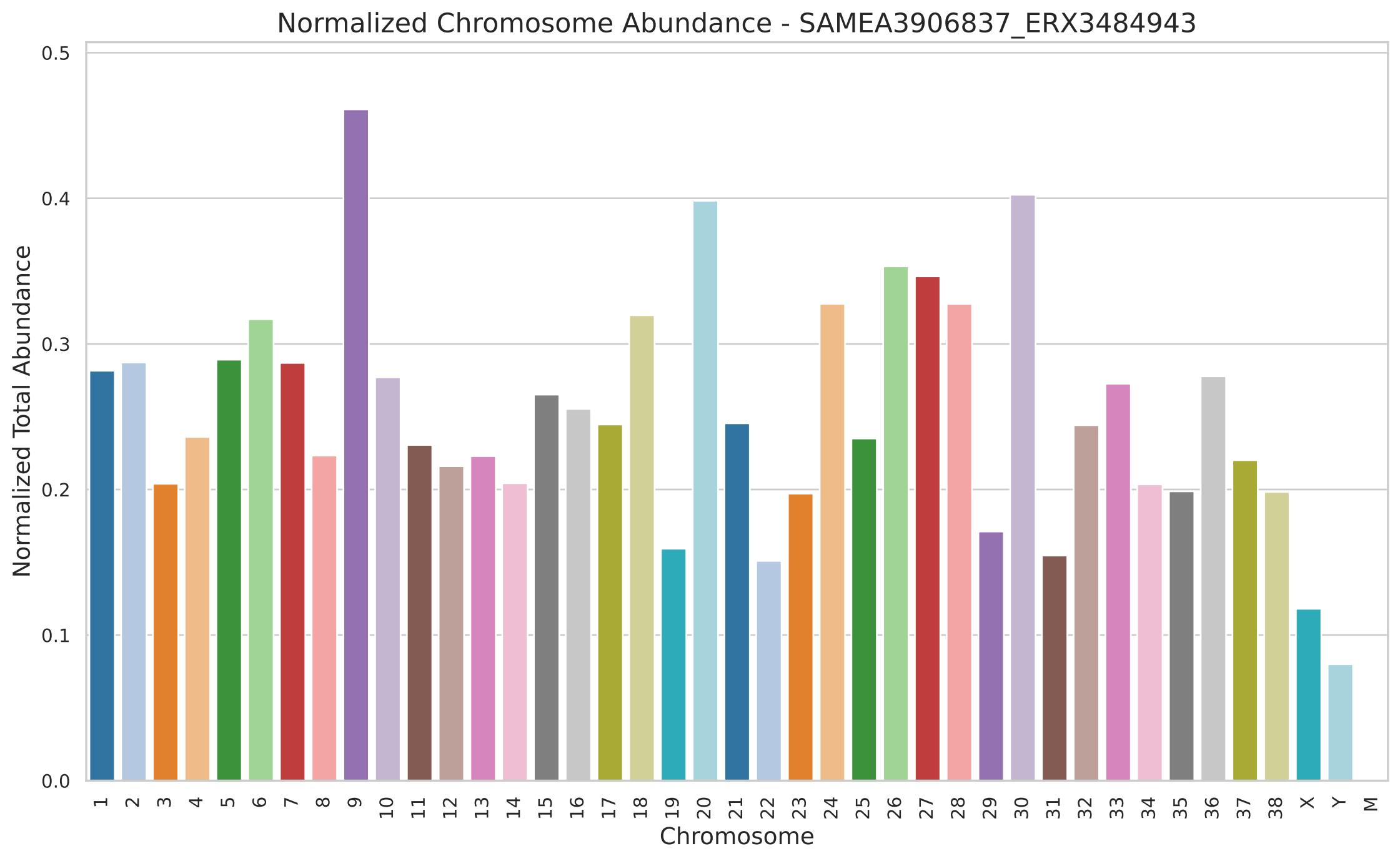

Normalized Chromosome Abundance - SAMEA5804331_ERX3484969
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

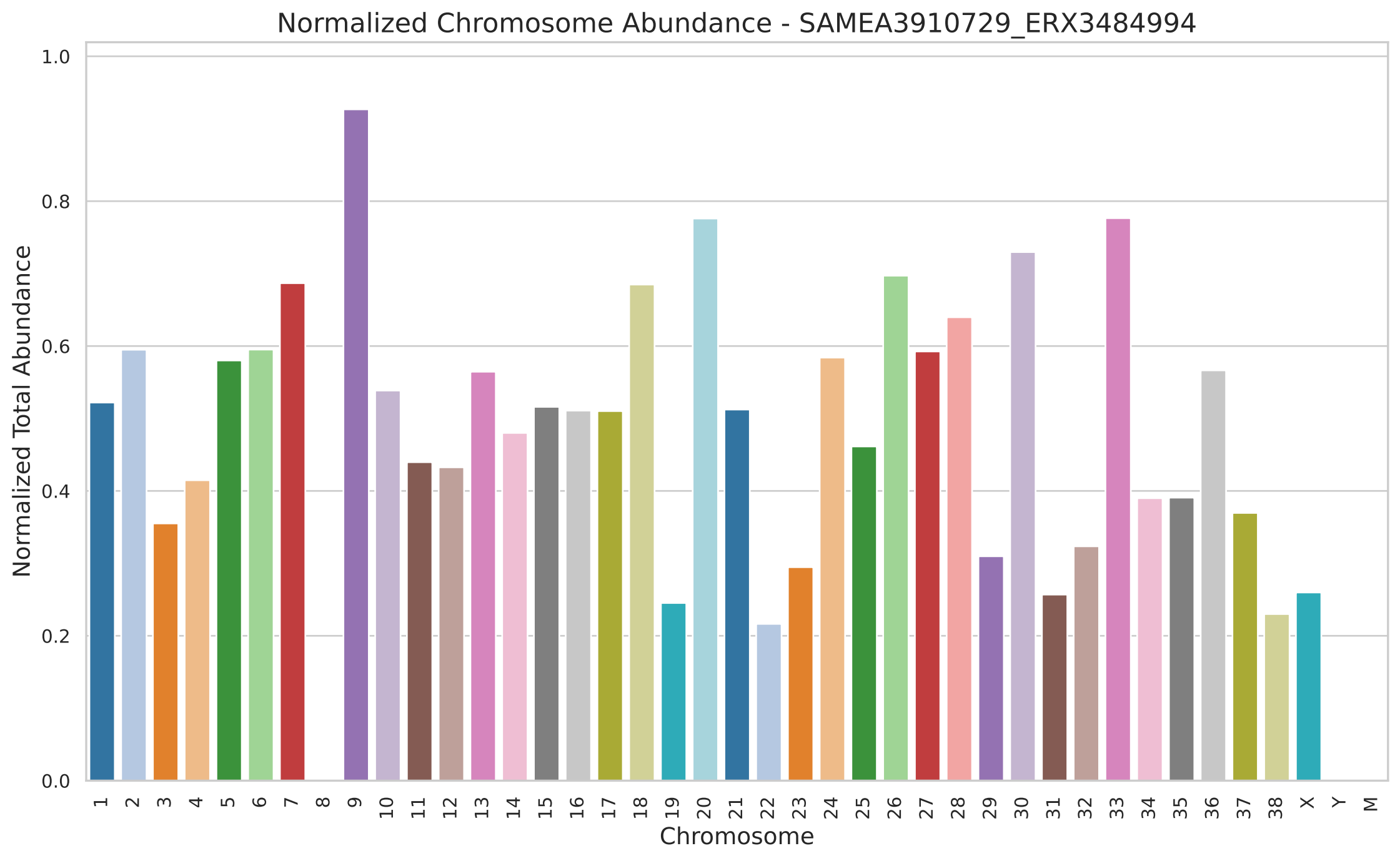

Normalized Chromosome Abundance - SAMEA3906852_ERX3484975
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

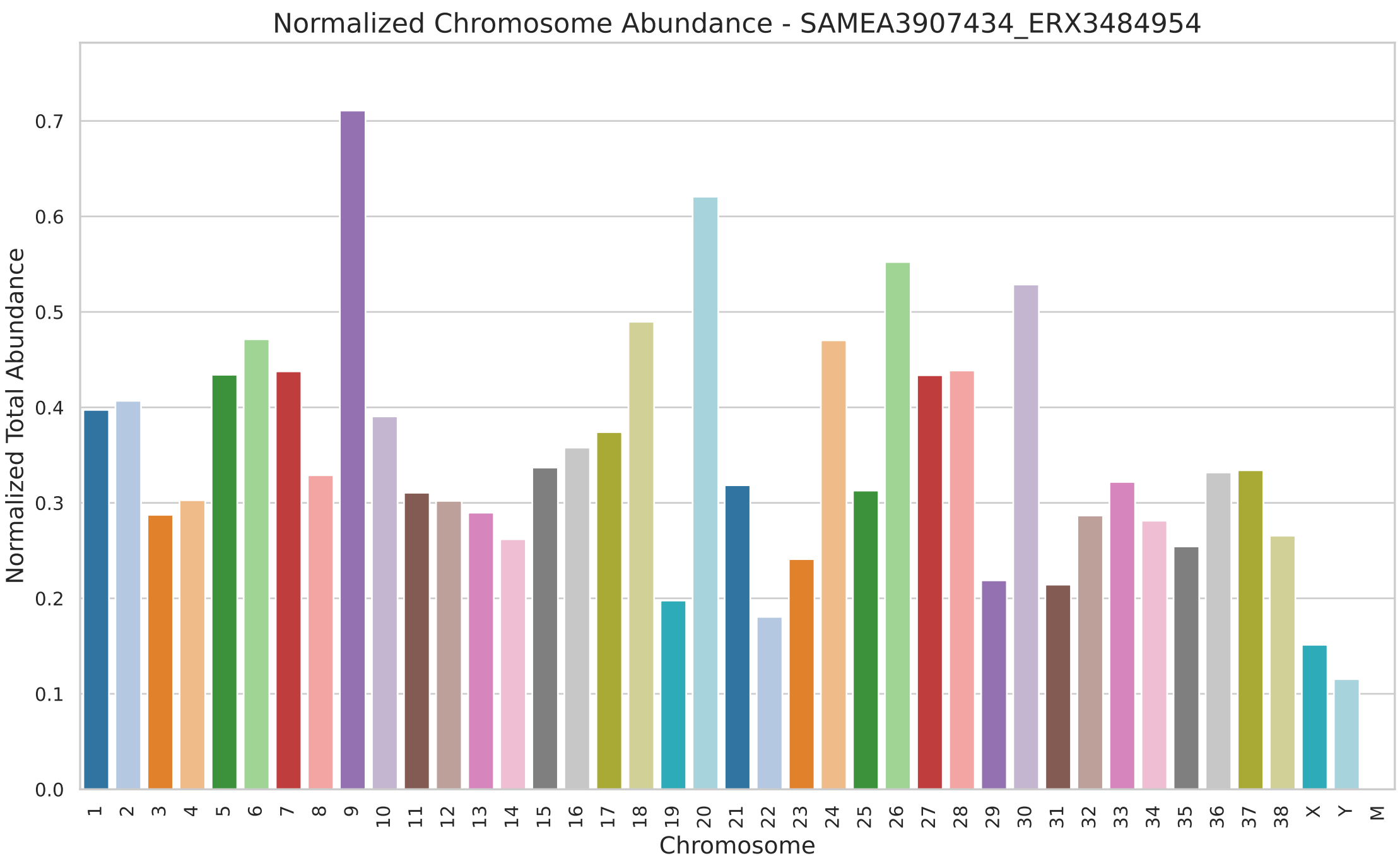

Normalized Chromosome Abundance - SAMEA5804330_ERX3484968
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

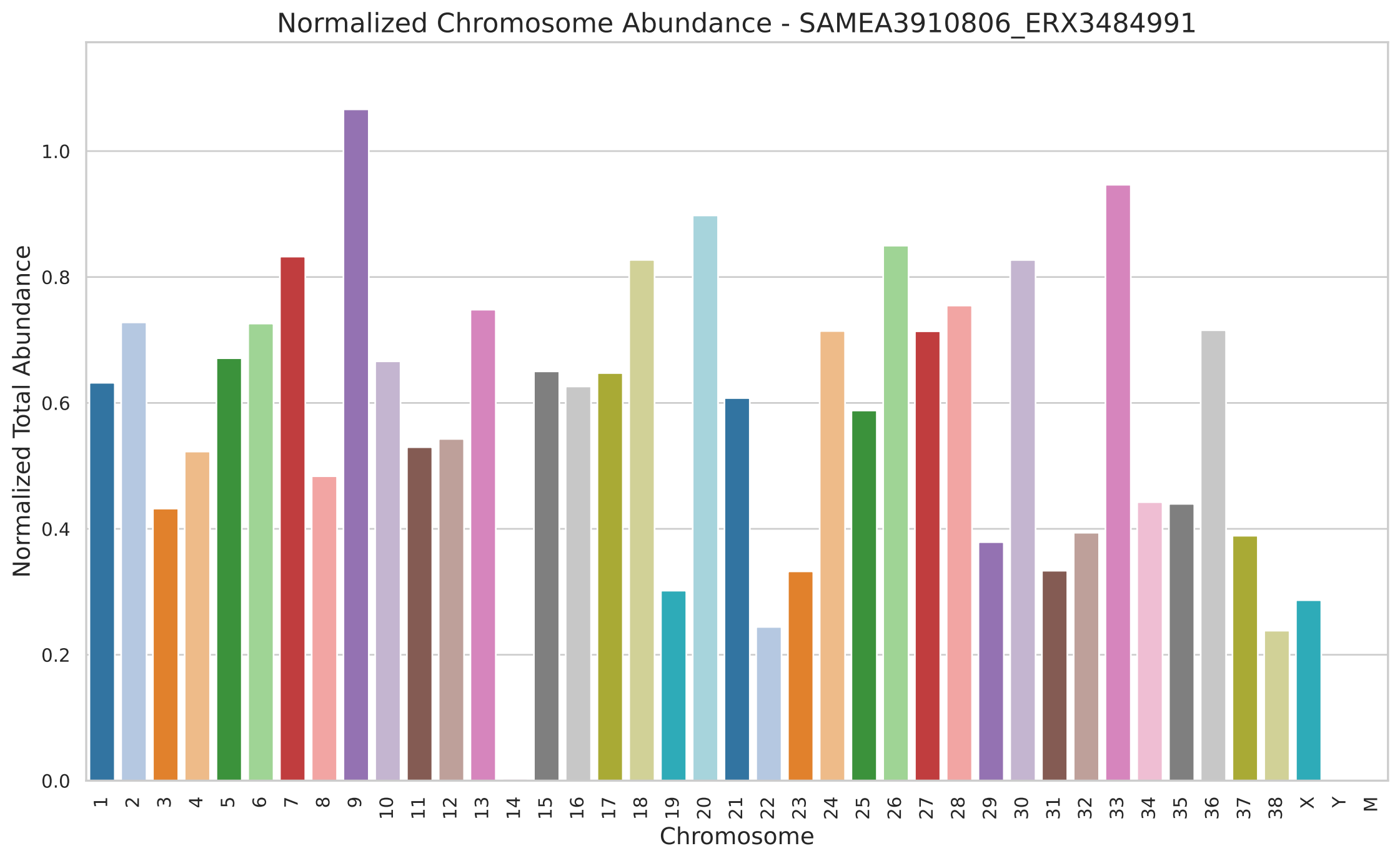

Normalized Chromosome Abundance - SAMEA3906844_ERX3484965
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

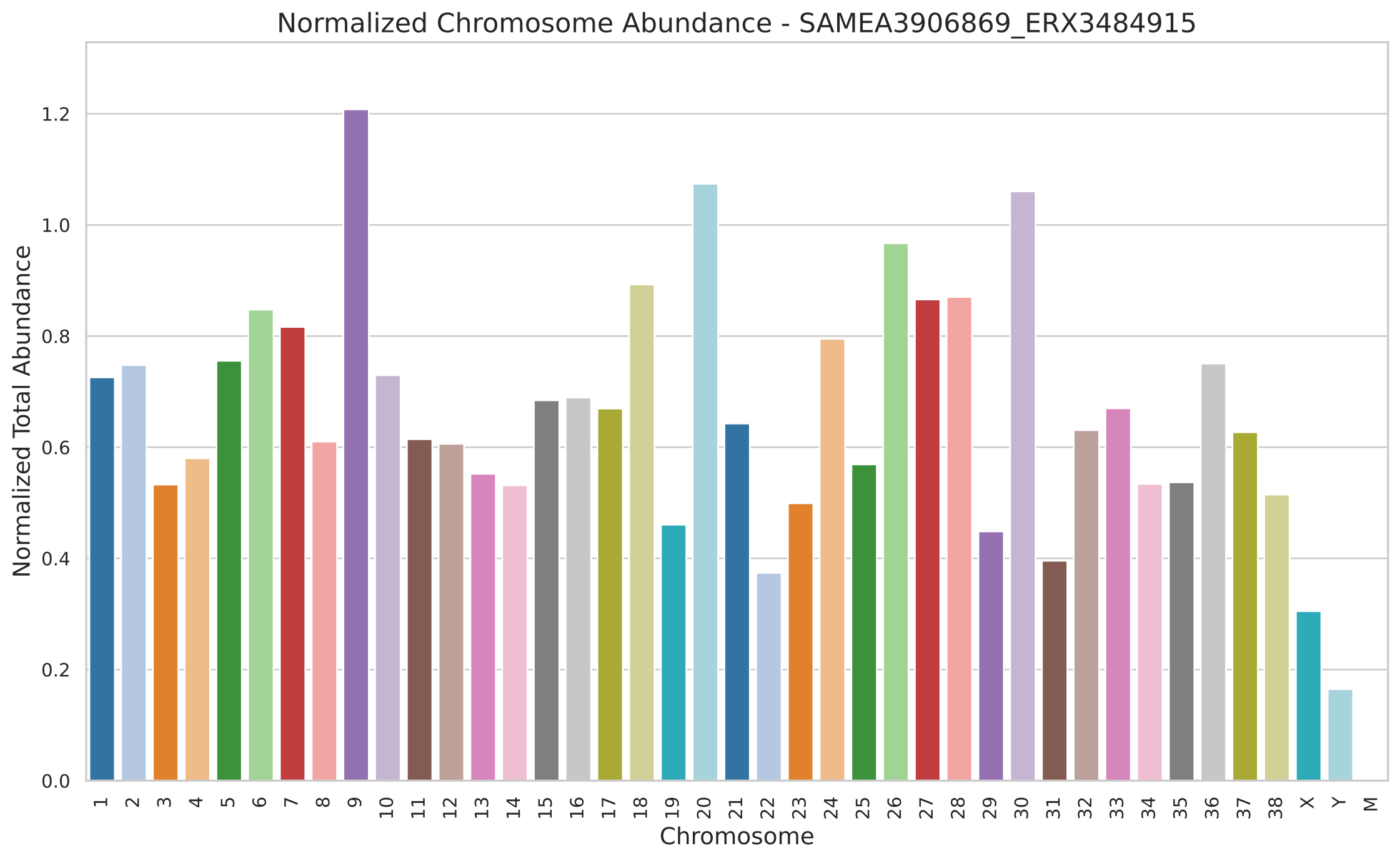

Normalized Chromosome Abundance - SAMEA3907433_ERX3484966
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

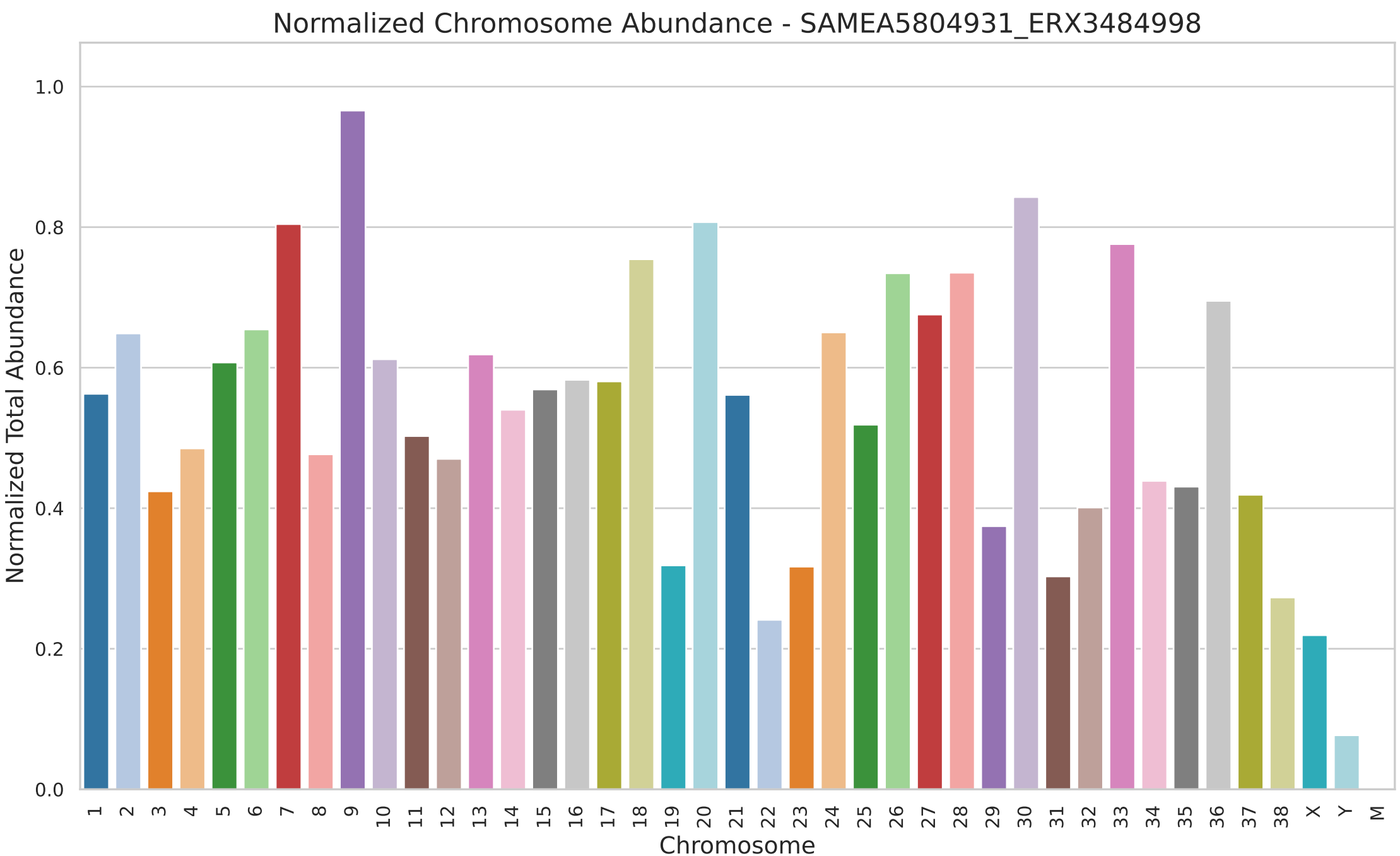

Normalized Chromosome Abundance - SAMEA3906837_ERX3484943
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

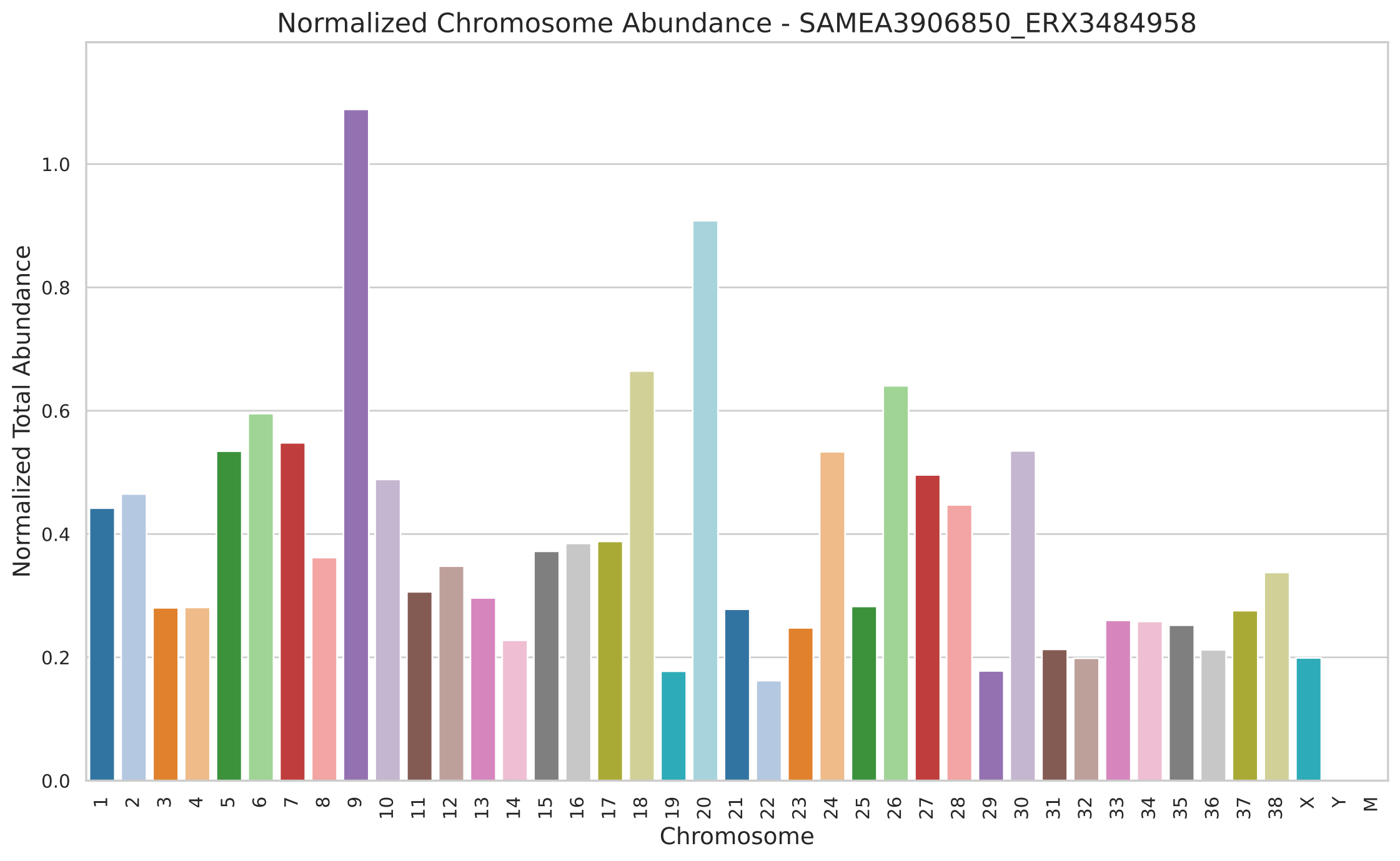

Normalized Chromosome Abundance - SAMEA3910729_ERX3484994
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

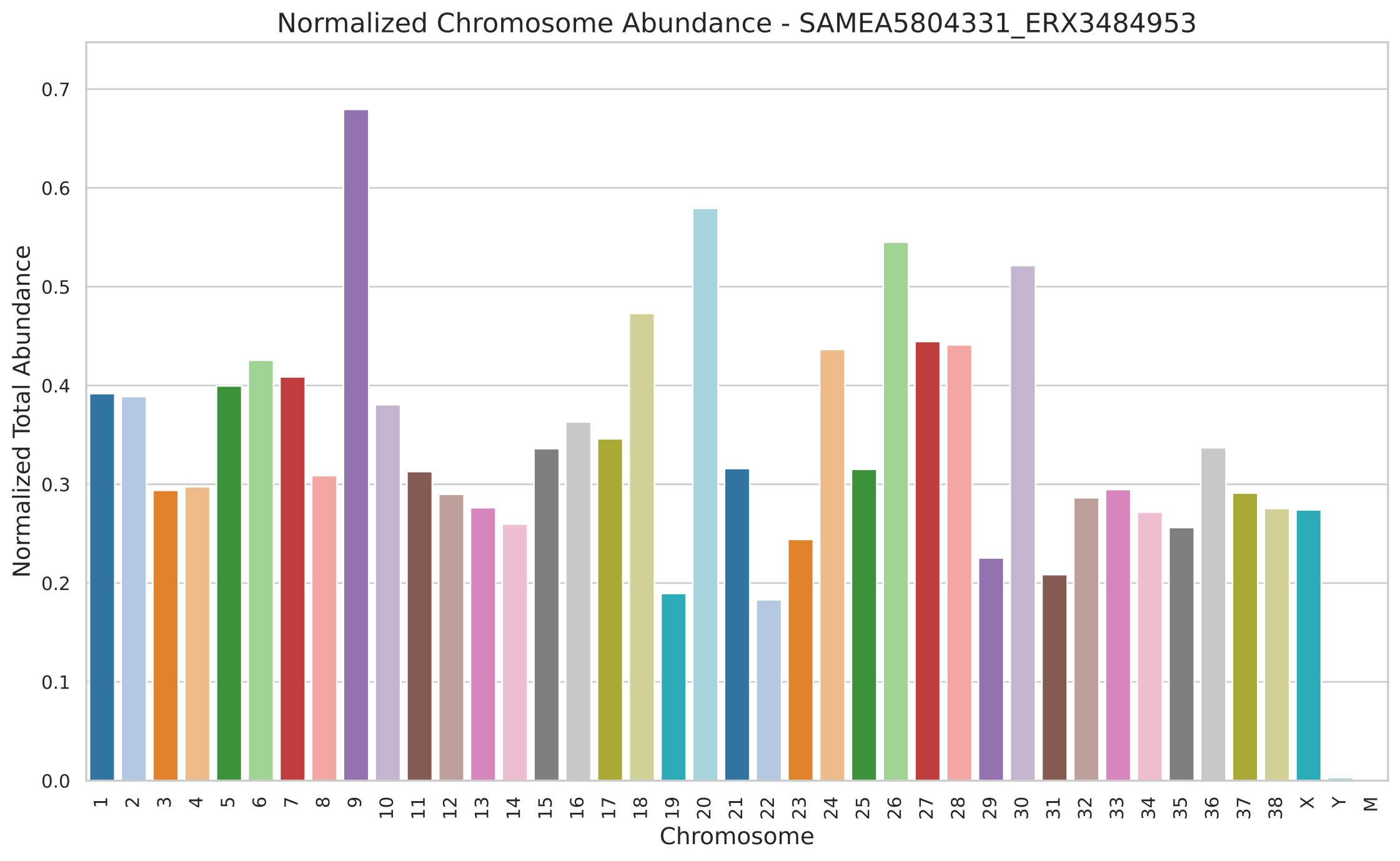

Normalized Chromosome Abundance - SAMEA3907434_ERX3484954
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

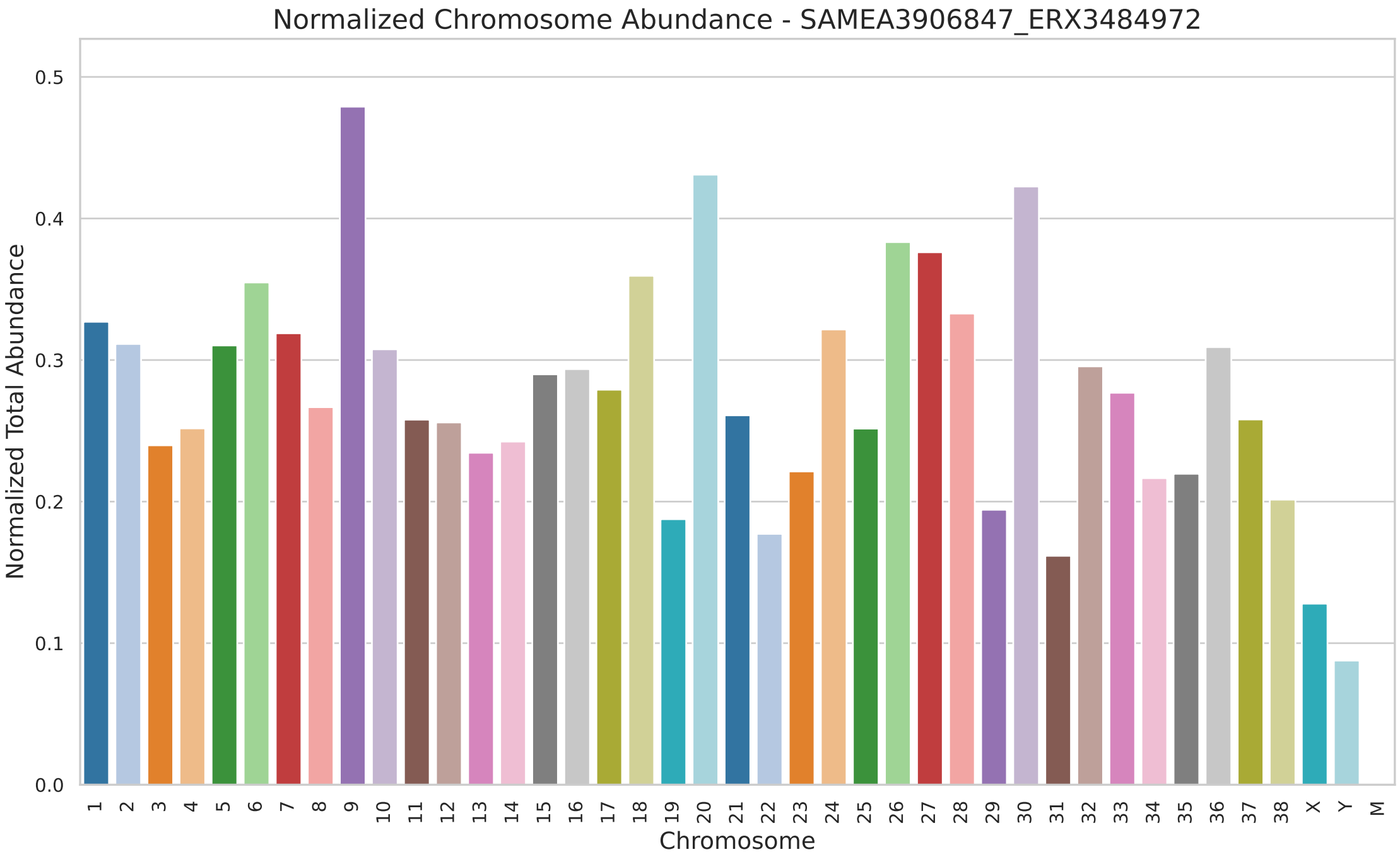

Normalized Chromosome Abundance - SAMEA3910806_ERX3484991
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

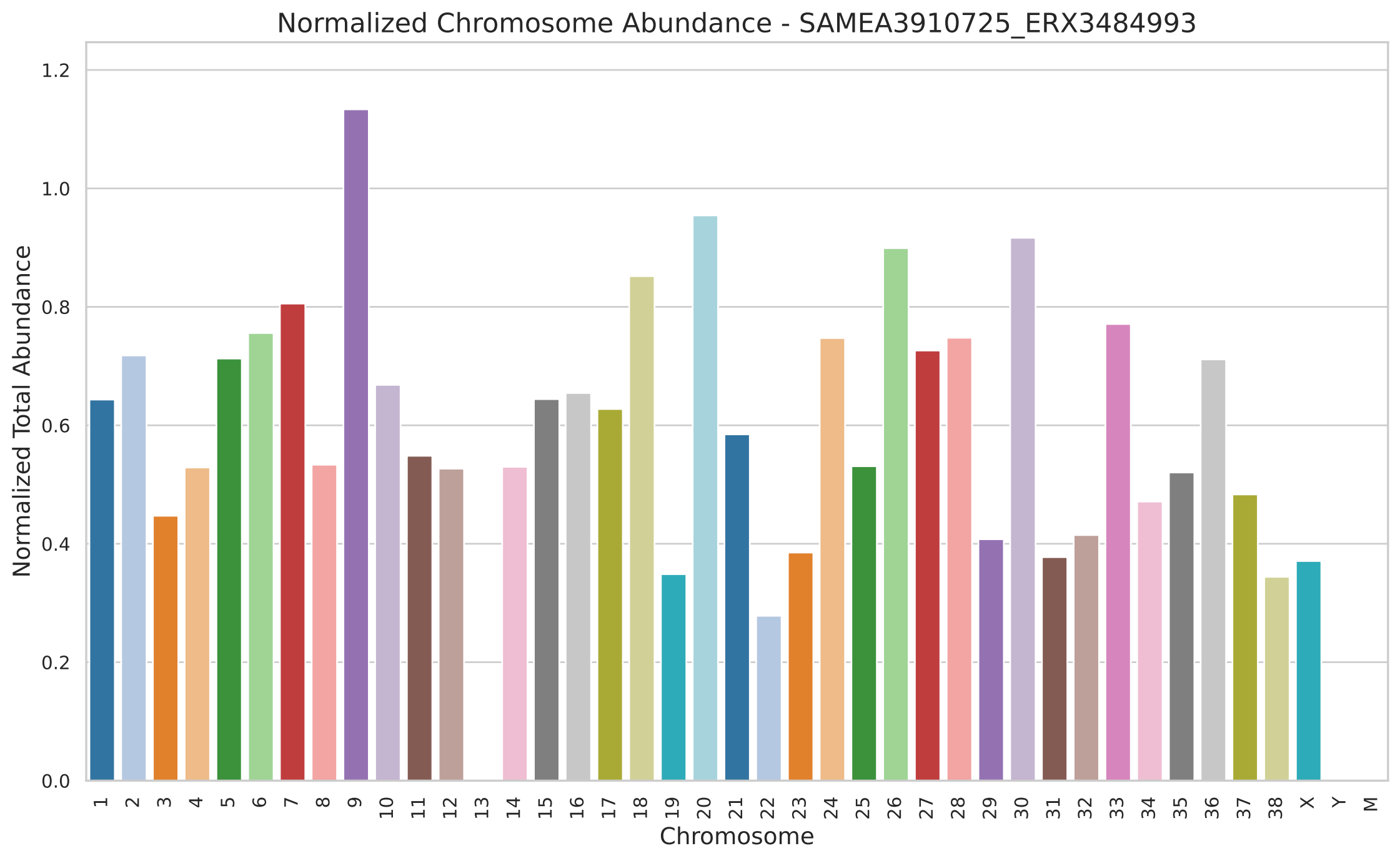

Normalized Chromosome Abundance - SAMEA3906869_ERX3484915
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

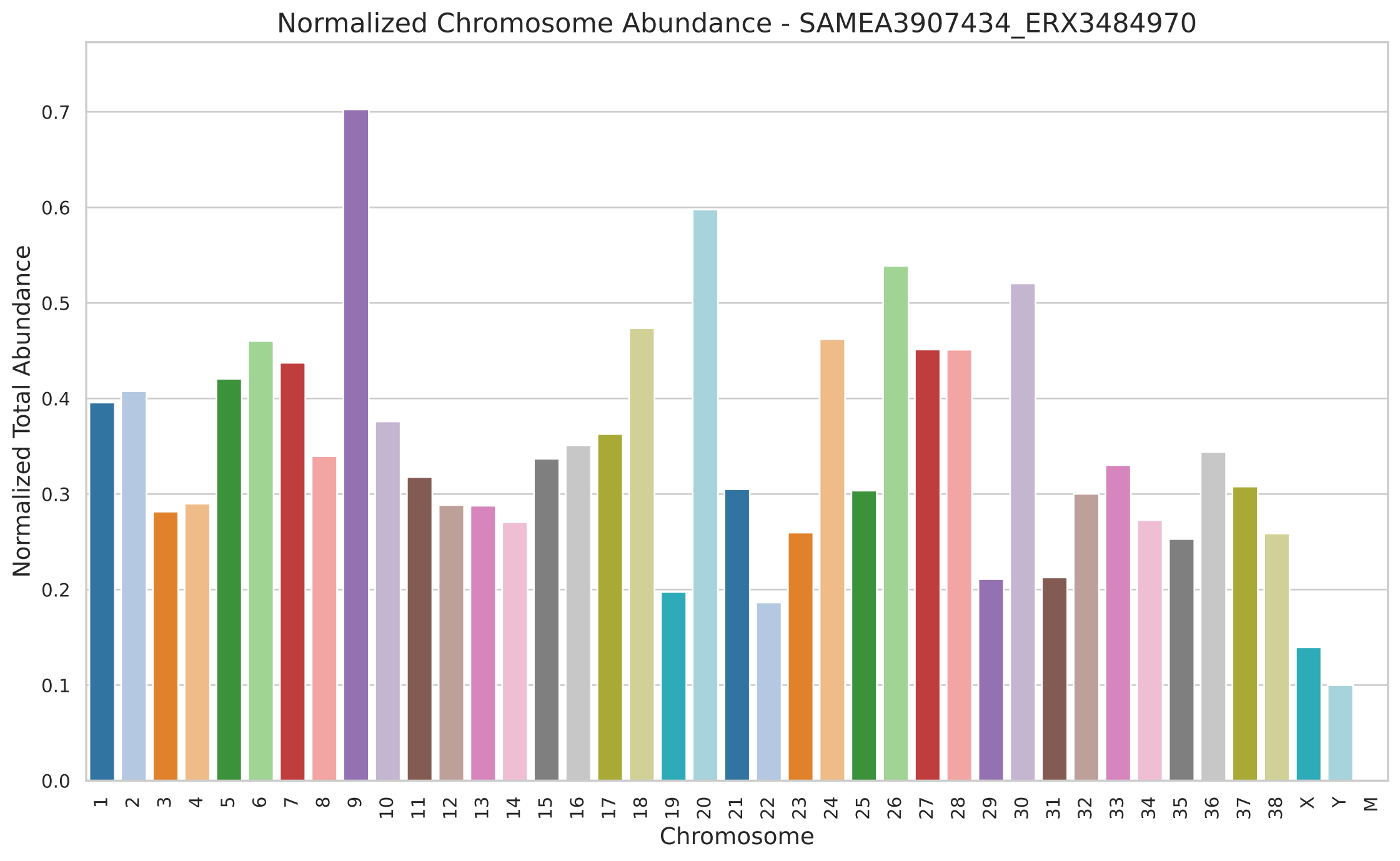

Normalized Chromosome Abundance - SAMEA5804931_ERX3484998
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

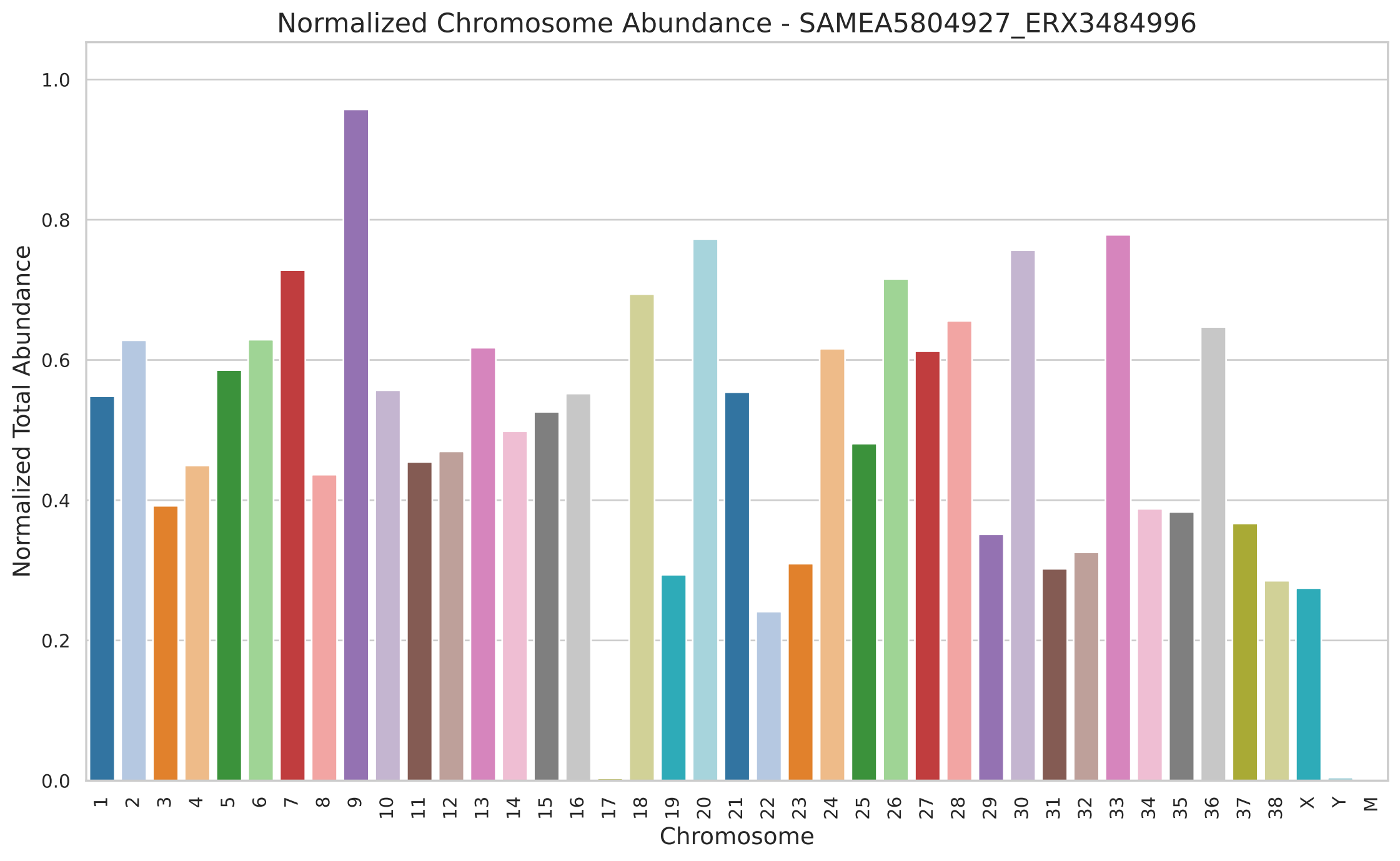

Normalized Chromosome Abundance - SAMEA3906850_ERX3484958
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

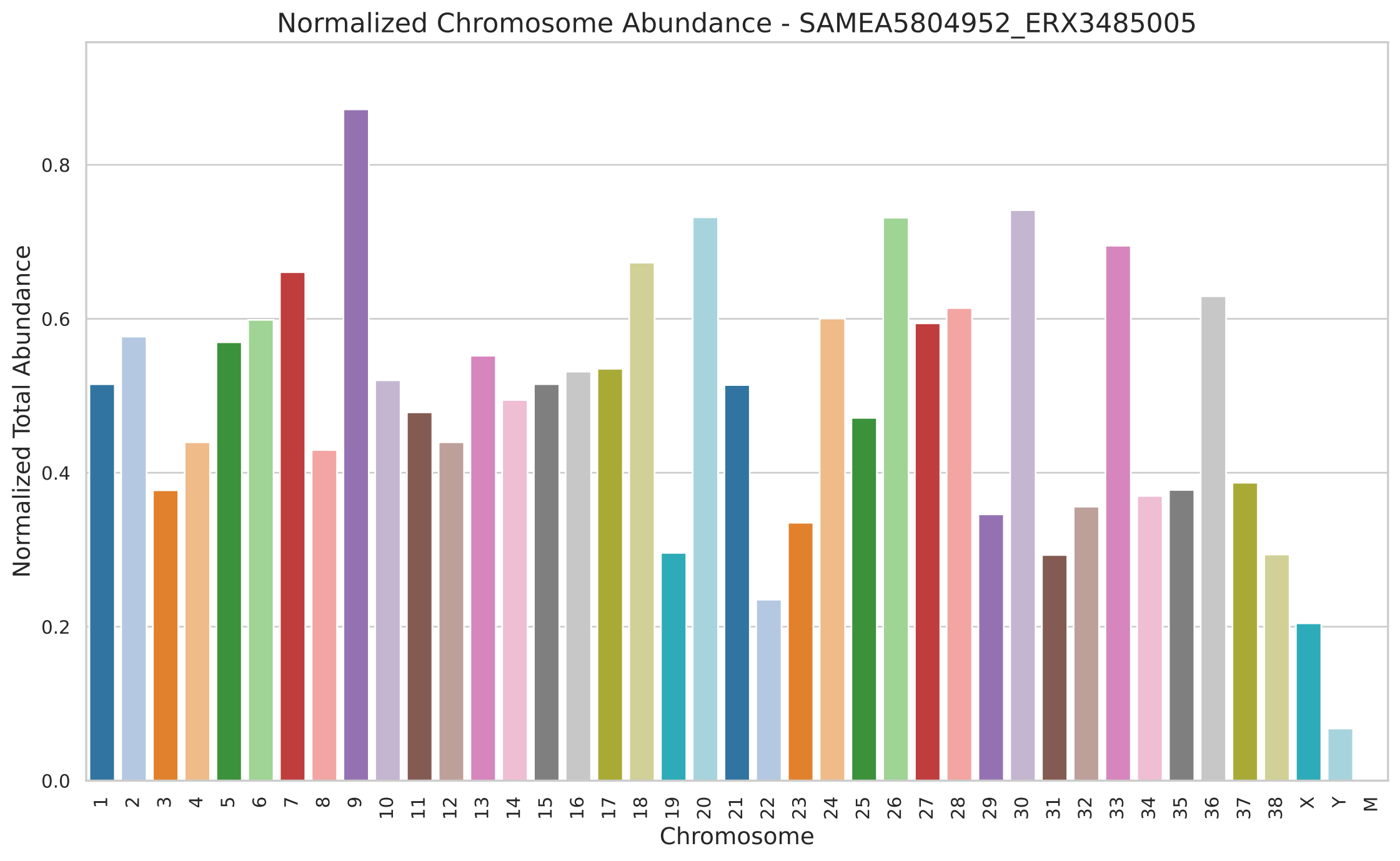

Normalized Chromosome Abundance - SAMEA5804331_ERX3484953
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

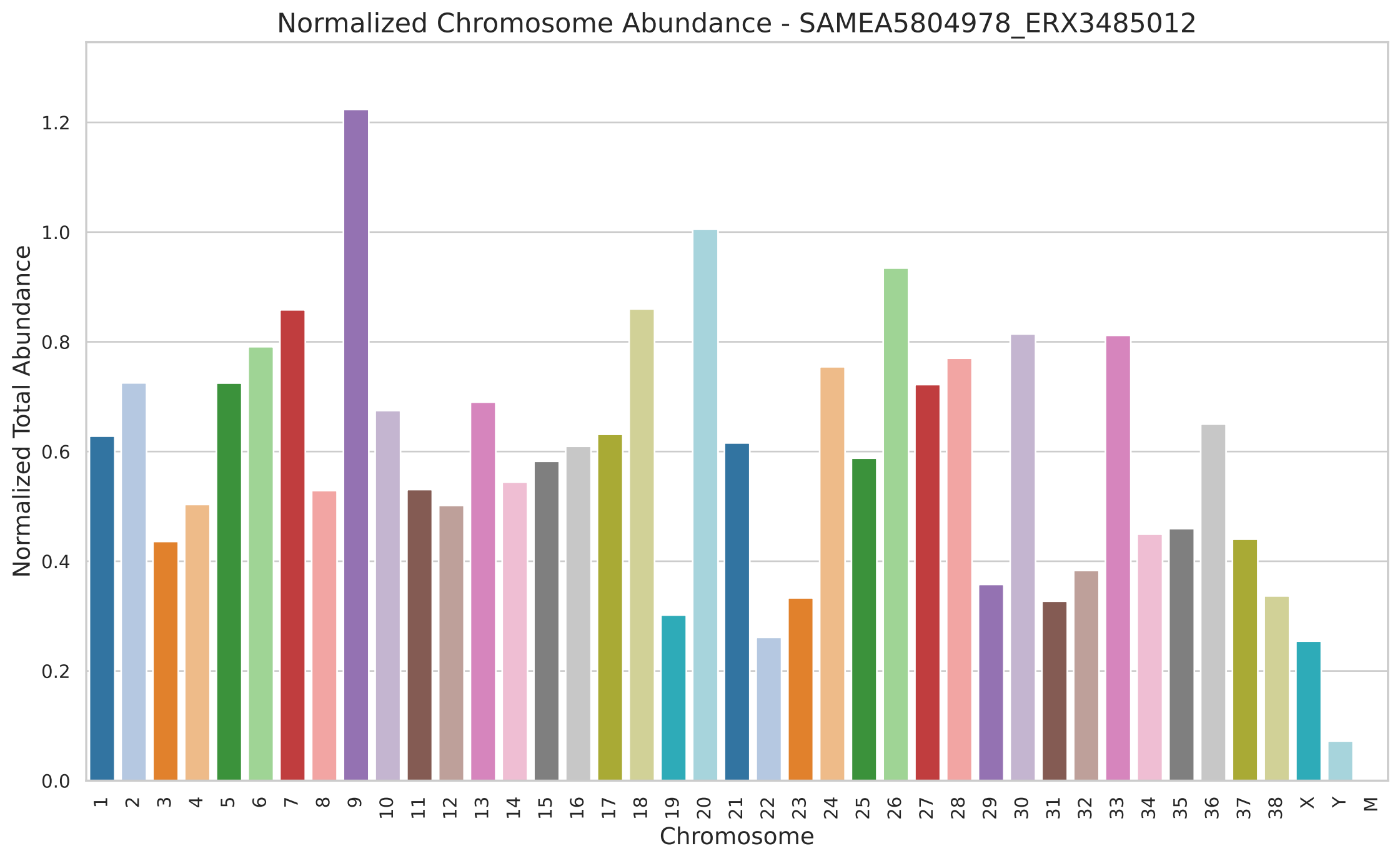

Normalized Chromosome Abundance - SAMEA3906847_ERX3484972
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

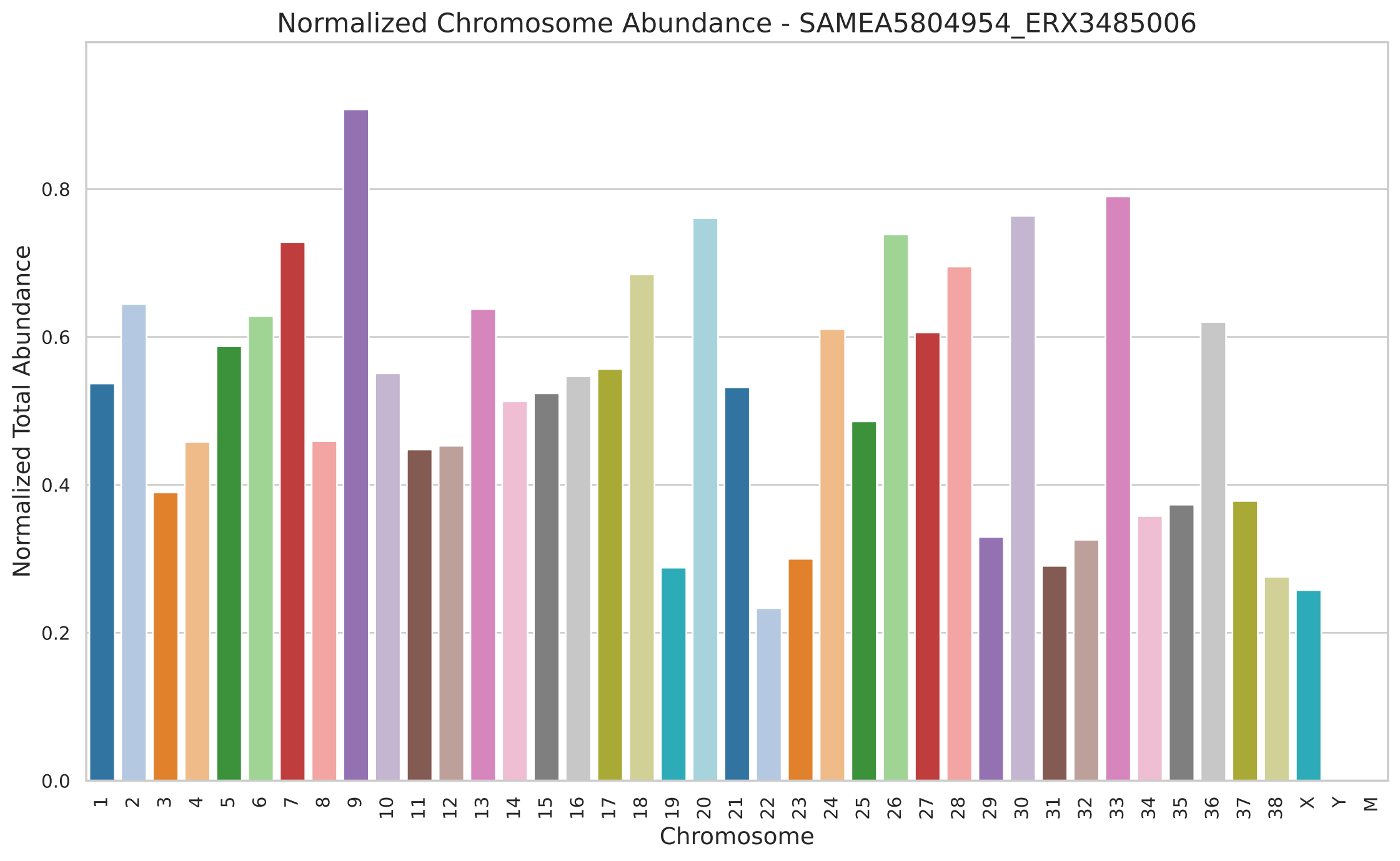

Normalized Chromosome Abundance - SAMEA3910725_ERX3484993
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

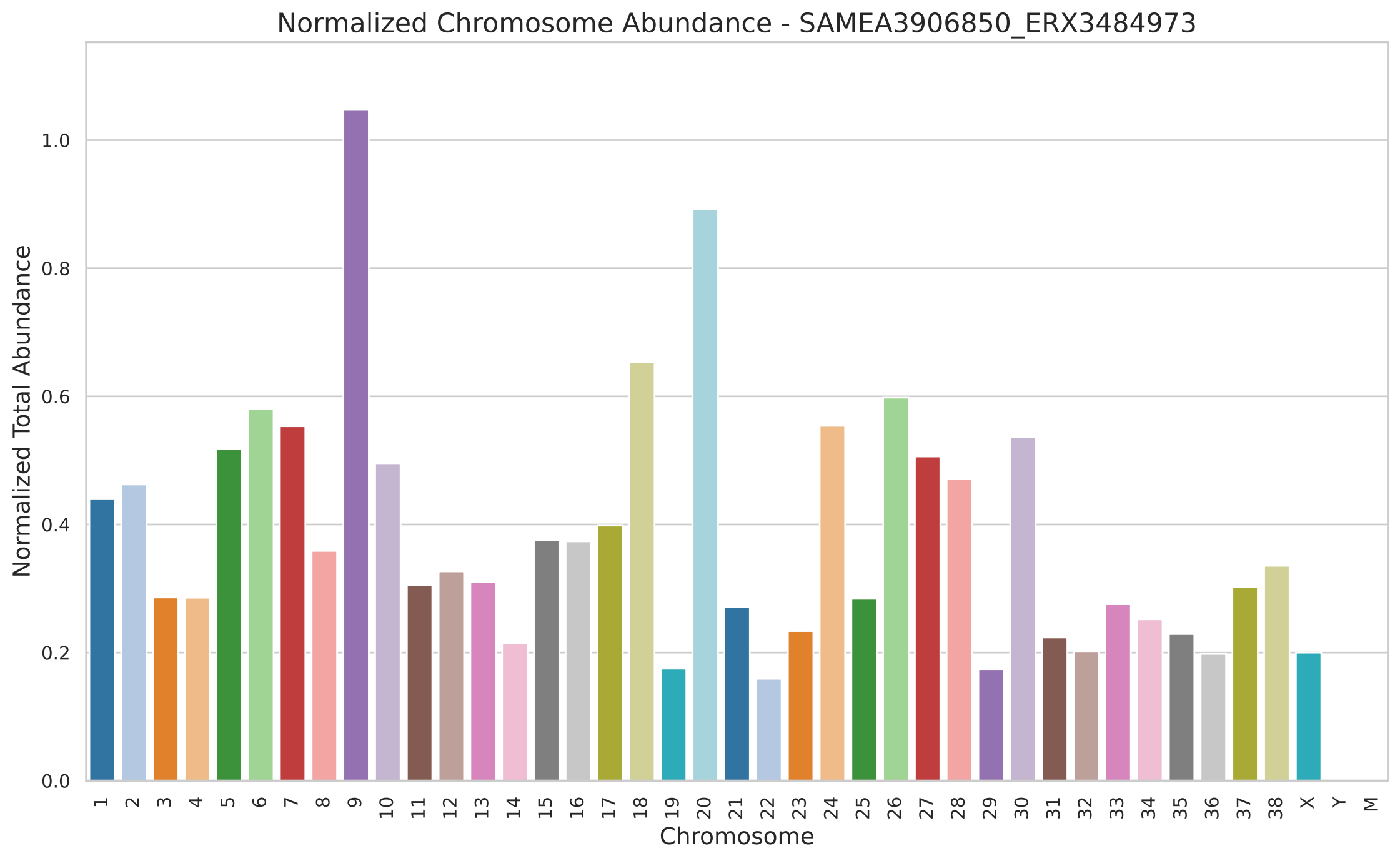

Normalized Chromosome Abundance - SAMEA3907434_ERX3484970
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

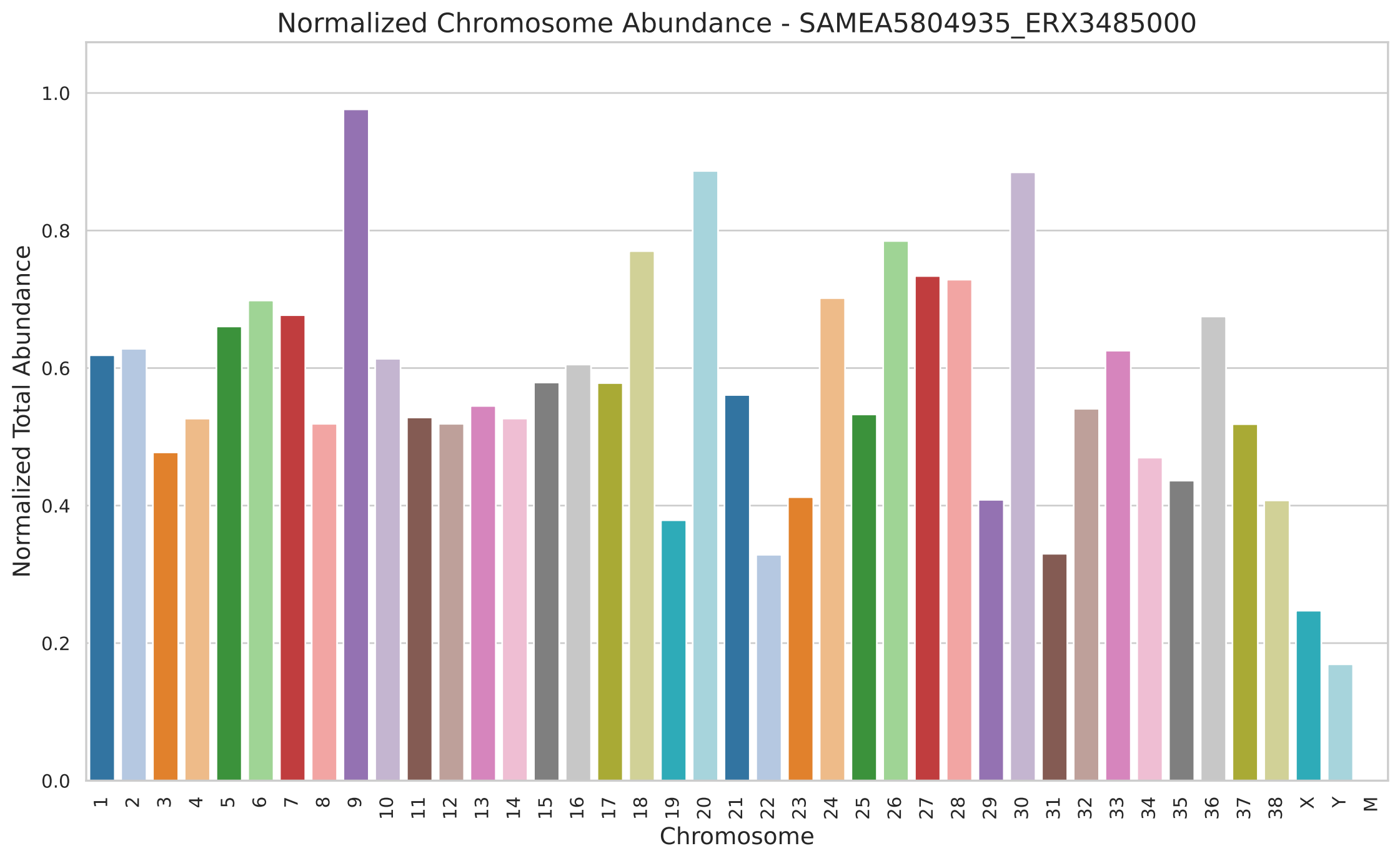

Normalized Chromosome Abundance - SAMEA5804927_ERX3484996
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

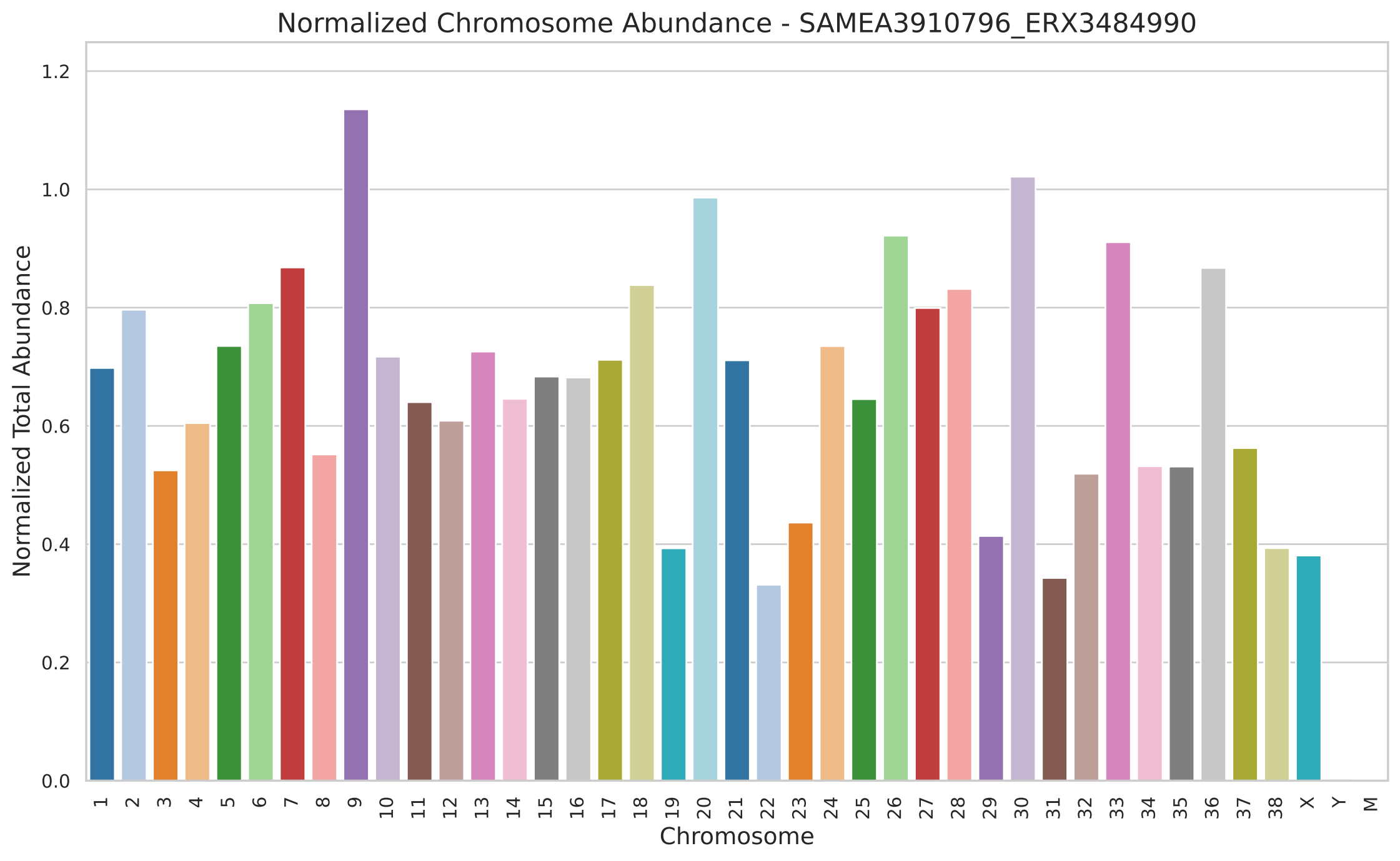

Normalized Chromosome Abundance - SAMEA5804952_ERX3485005
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

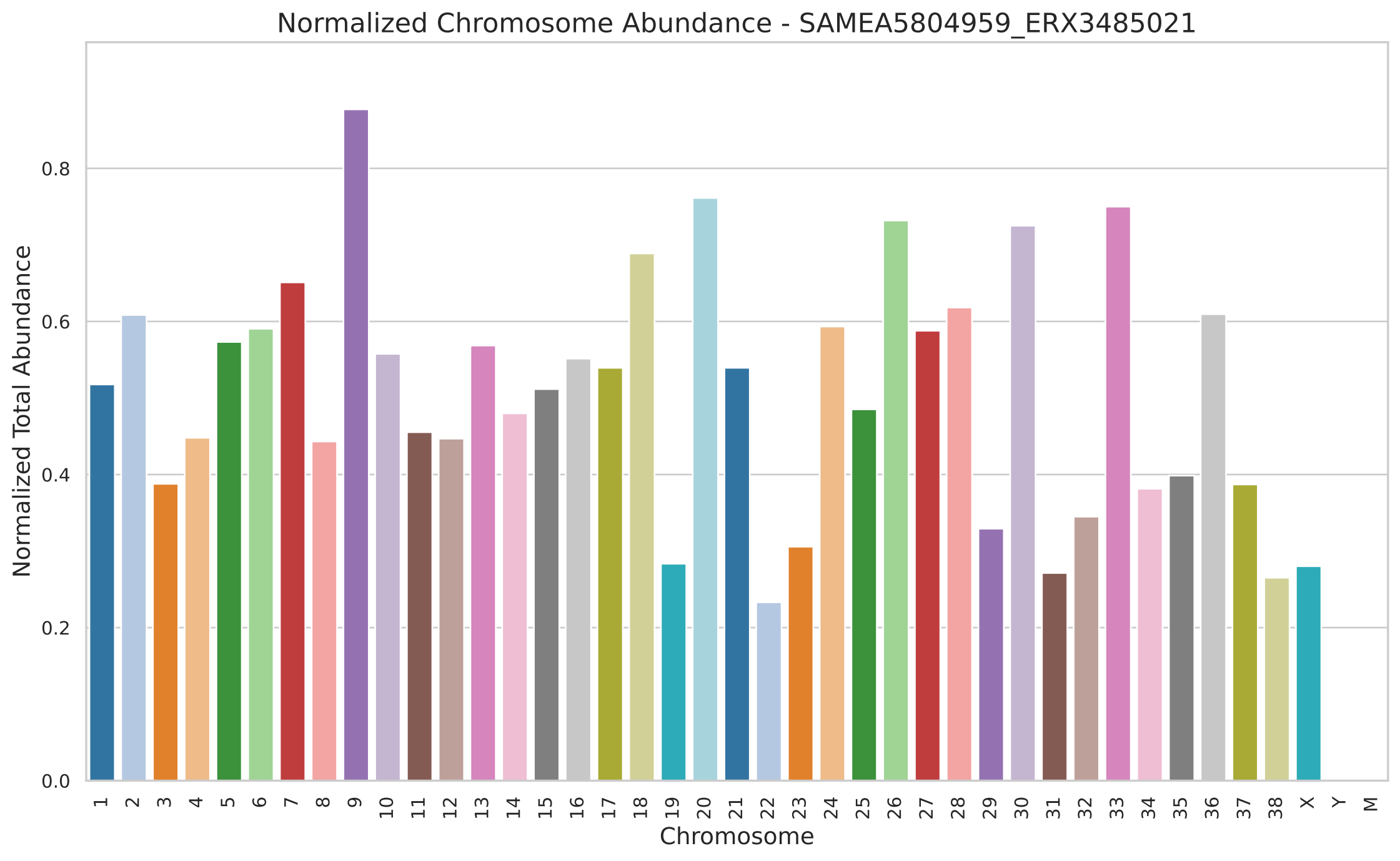

Normalized Chromosome Abundance - SAMEA5804978_ERX3485012
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

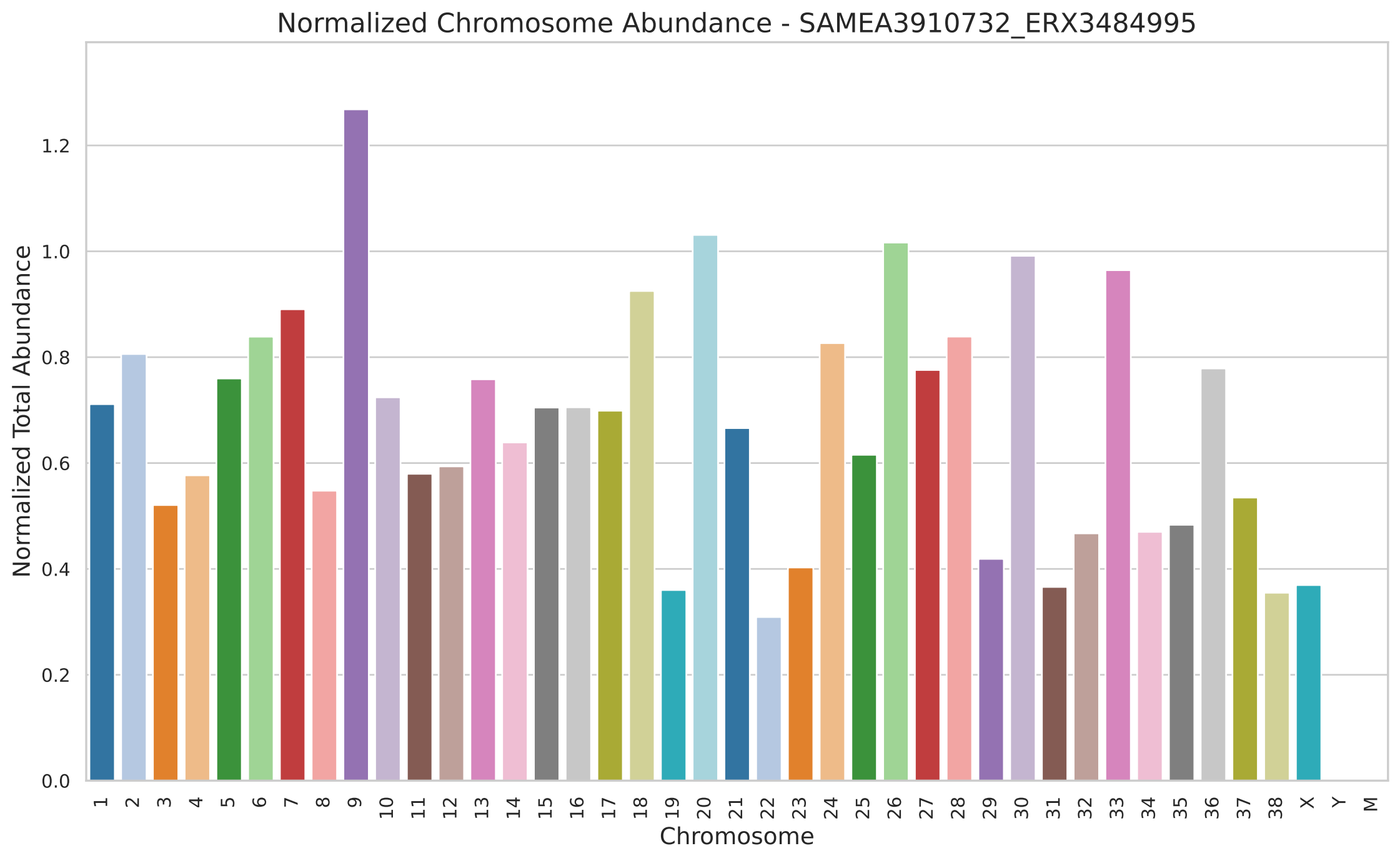

Normalized Chromosome Abundance - SAMEA5804954_ERX3485006
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

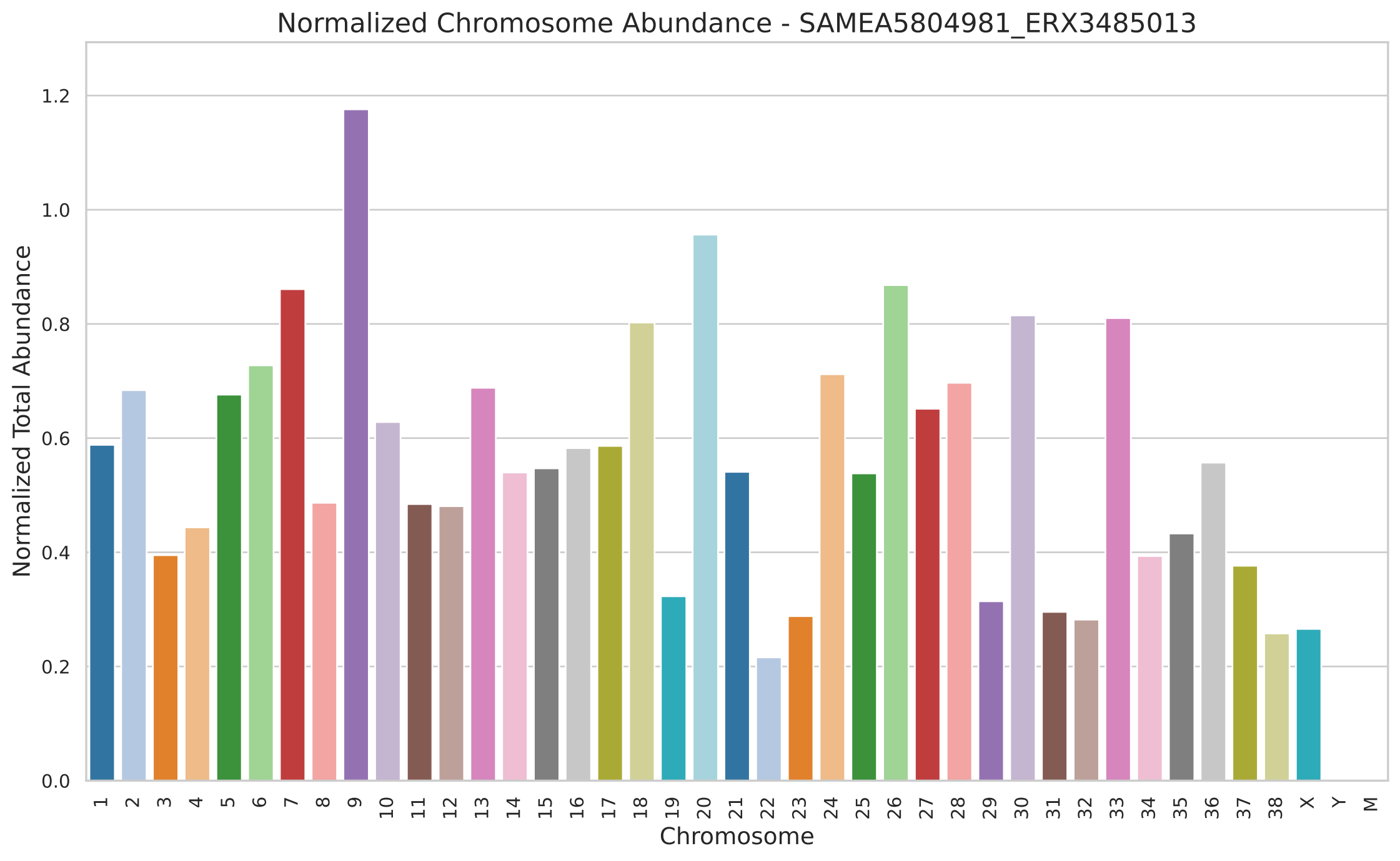

Normalized Chromosome Abundance - SAMEA3906850_ERX3484973
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

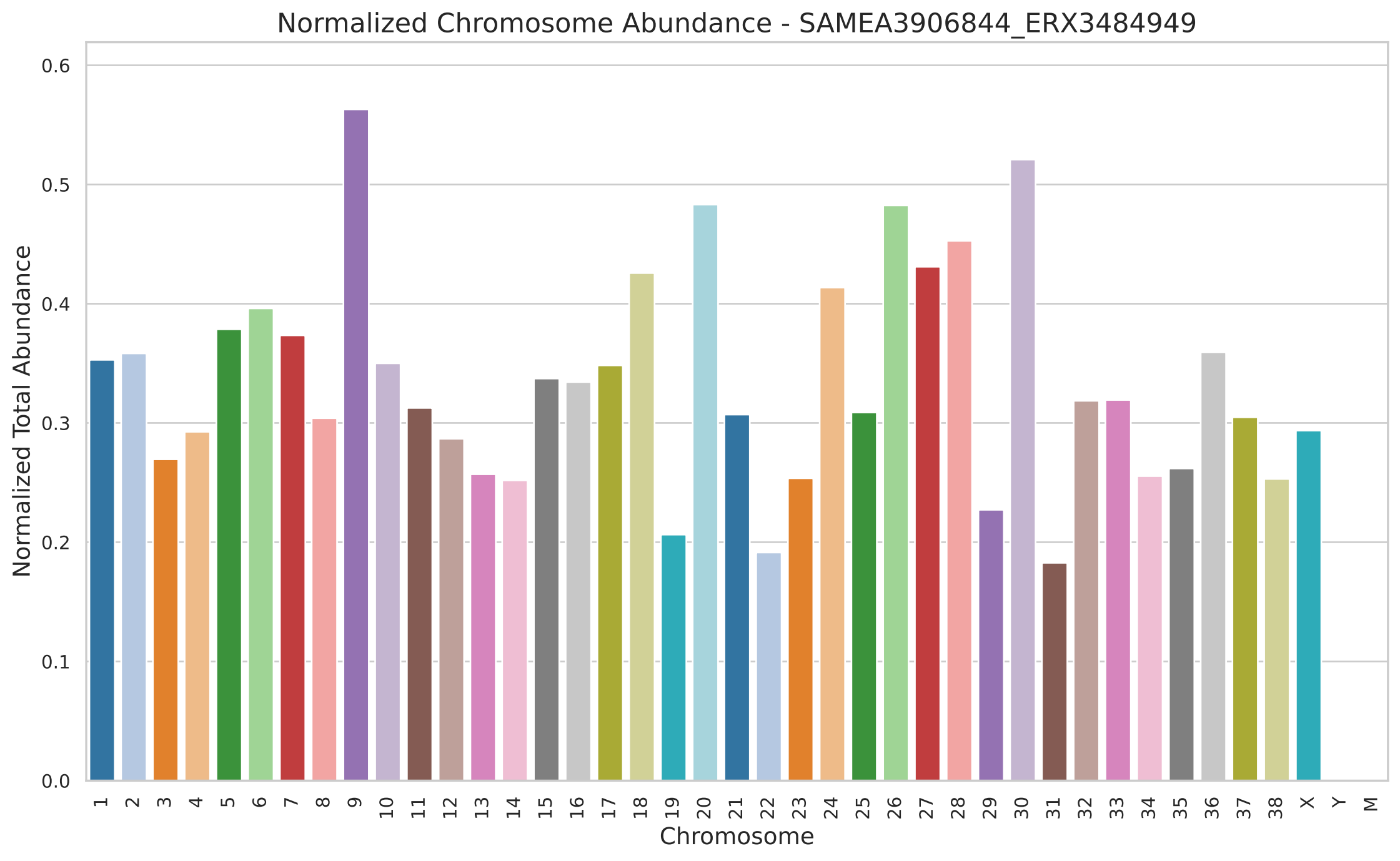

Normalized Chromosome Abundance - SAMEA5804935_ERX3485000
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

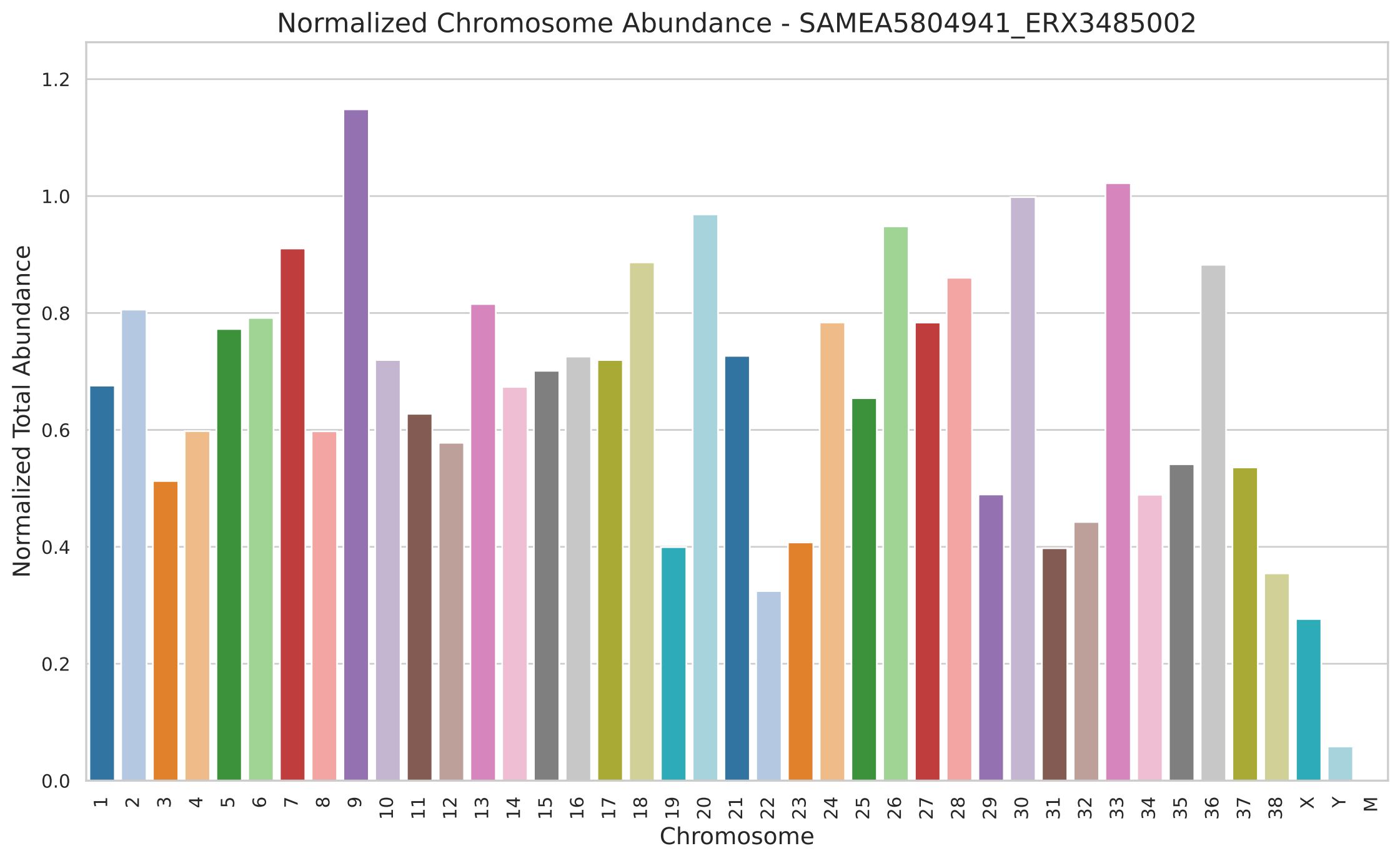

Normalized Chromosome Abundance - SAMEA3910796_ERX3484990
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

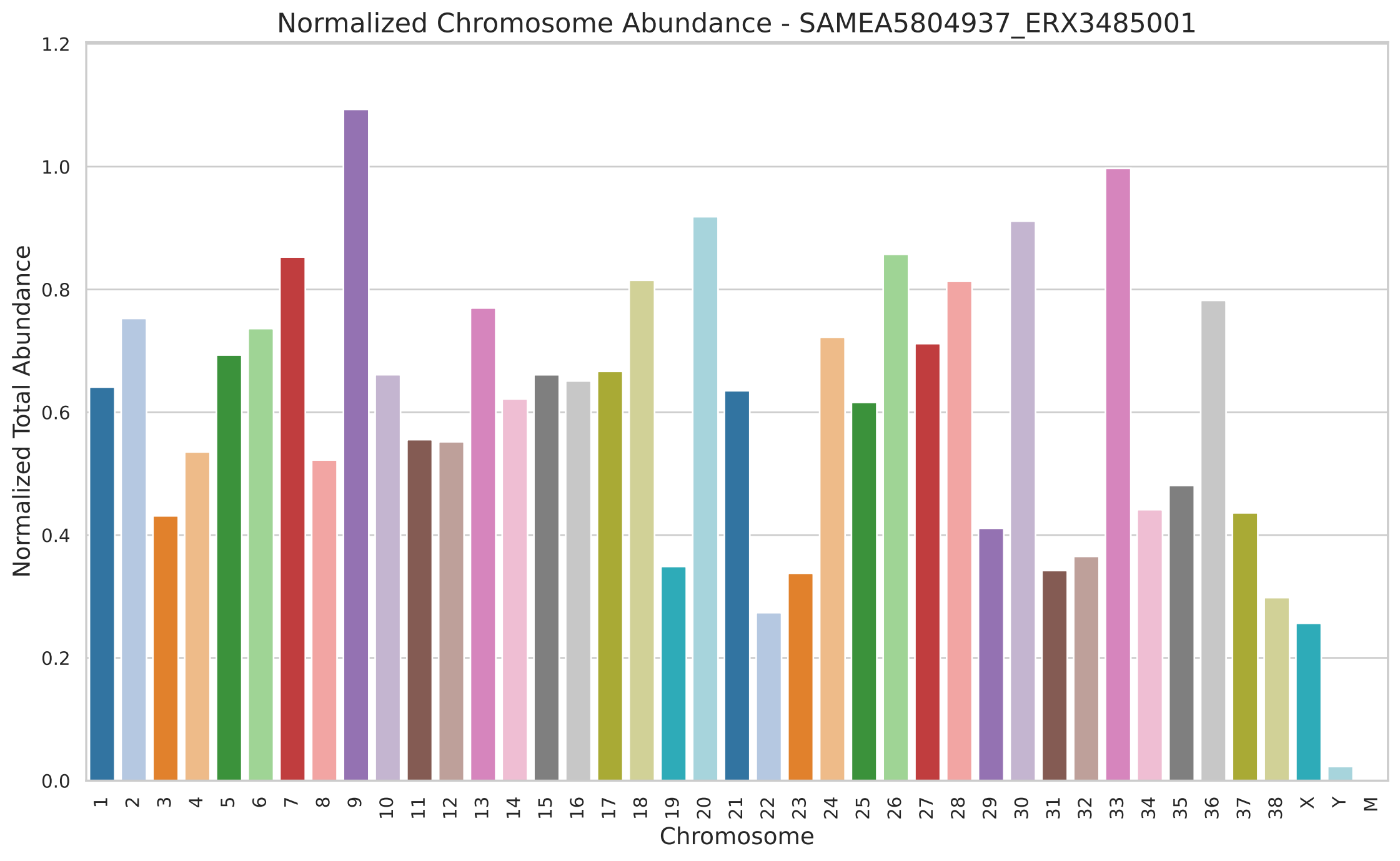

Normalized Chromosome Abundance - SAMEA5804959_ERX3485021
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

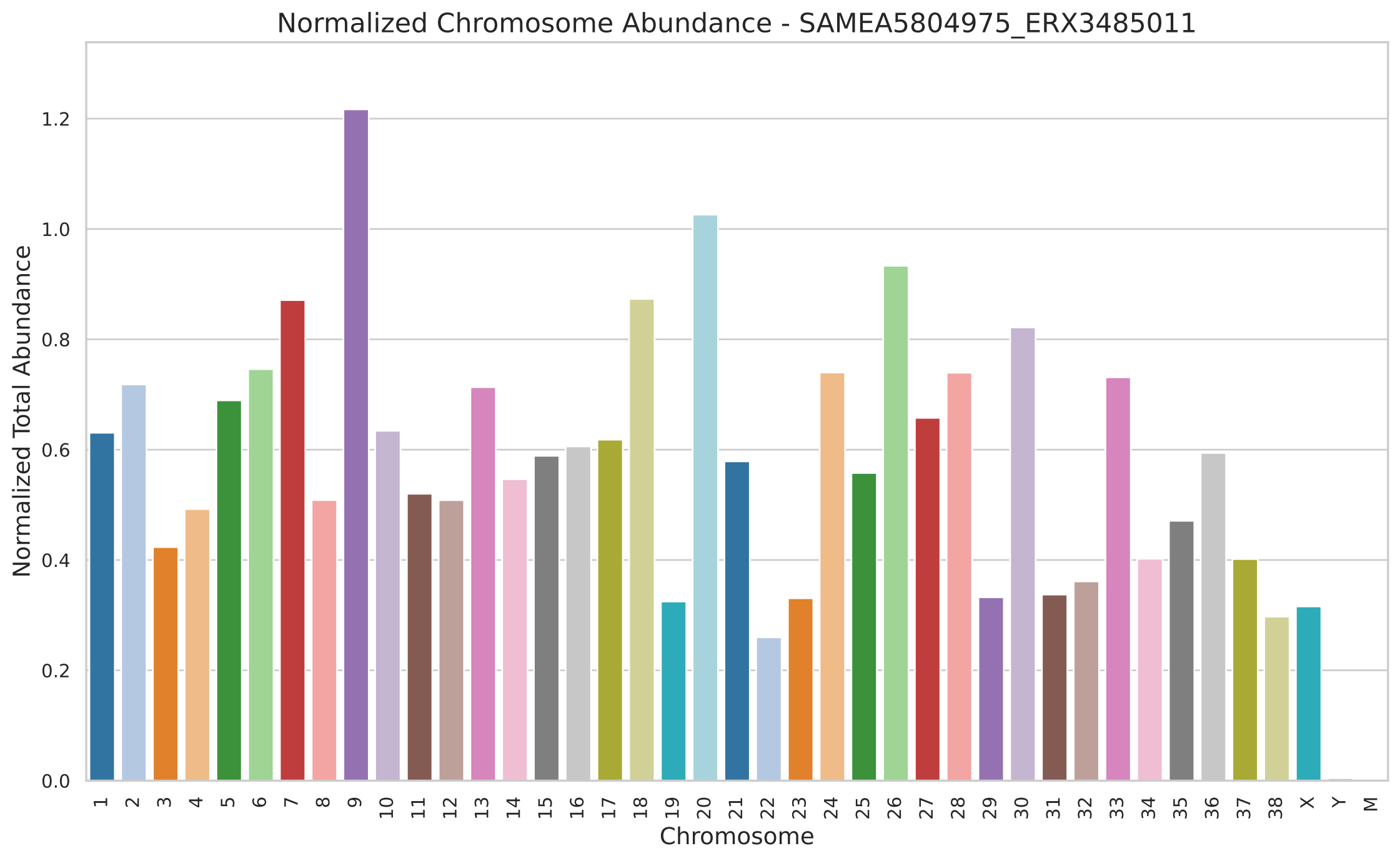

Normalized Chromosome Abundance - SAMEA3910732_ERX3484995
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

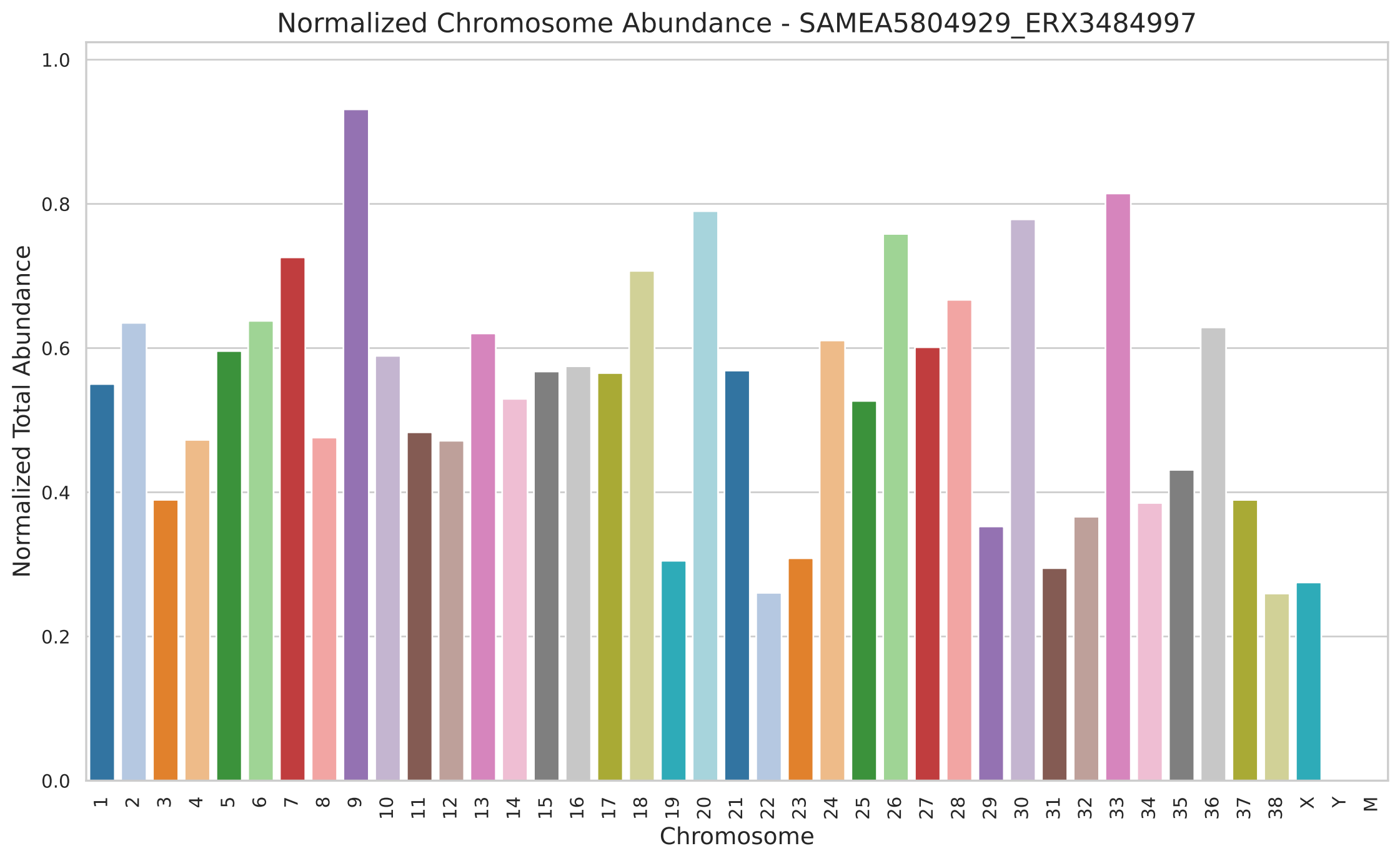

Normalized Chromosome Abundance - SAMEA5804981_ERX3485013
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

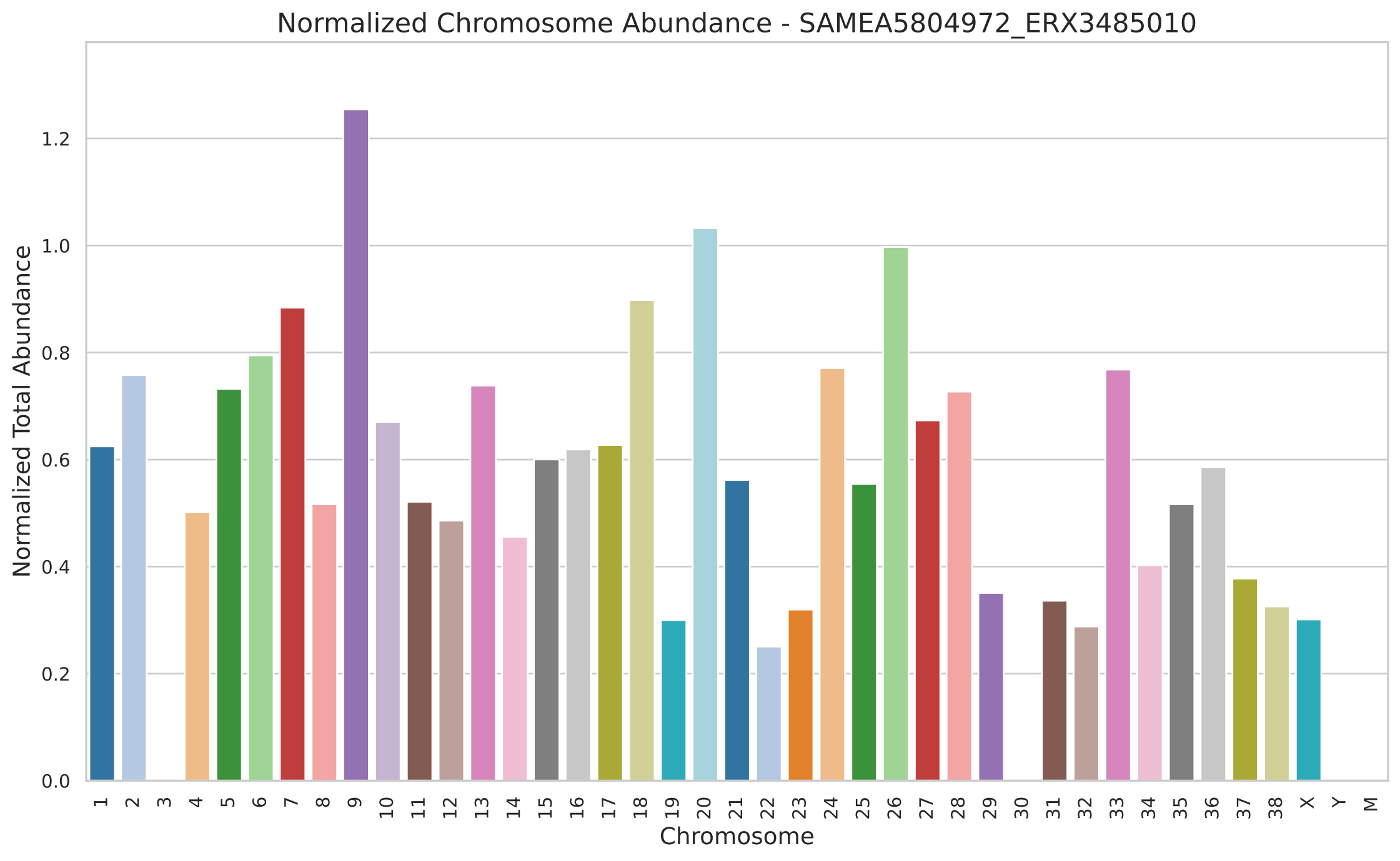

Normalized Chromosome Abundance - SAMEA3906844_ERX3484949
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

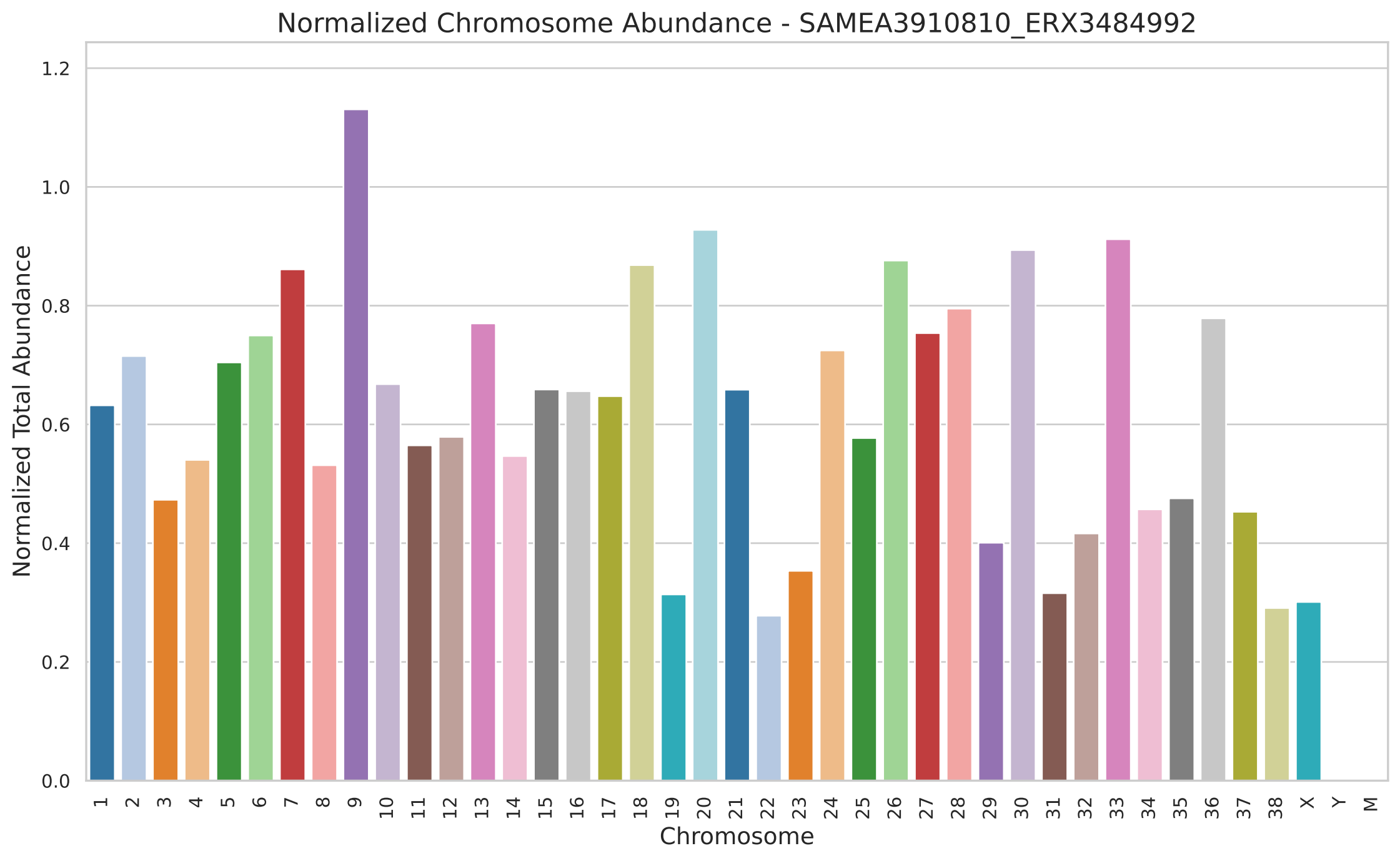

Normalized Chromosome Abundance - SAMEA5804941_ERX3485002
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

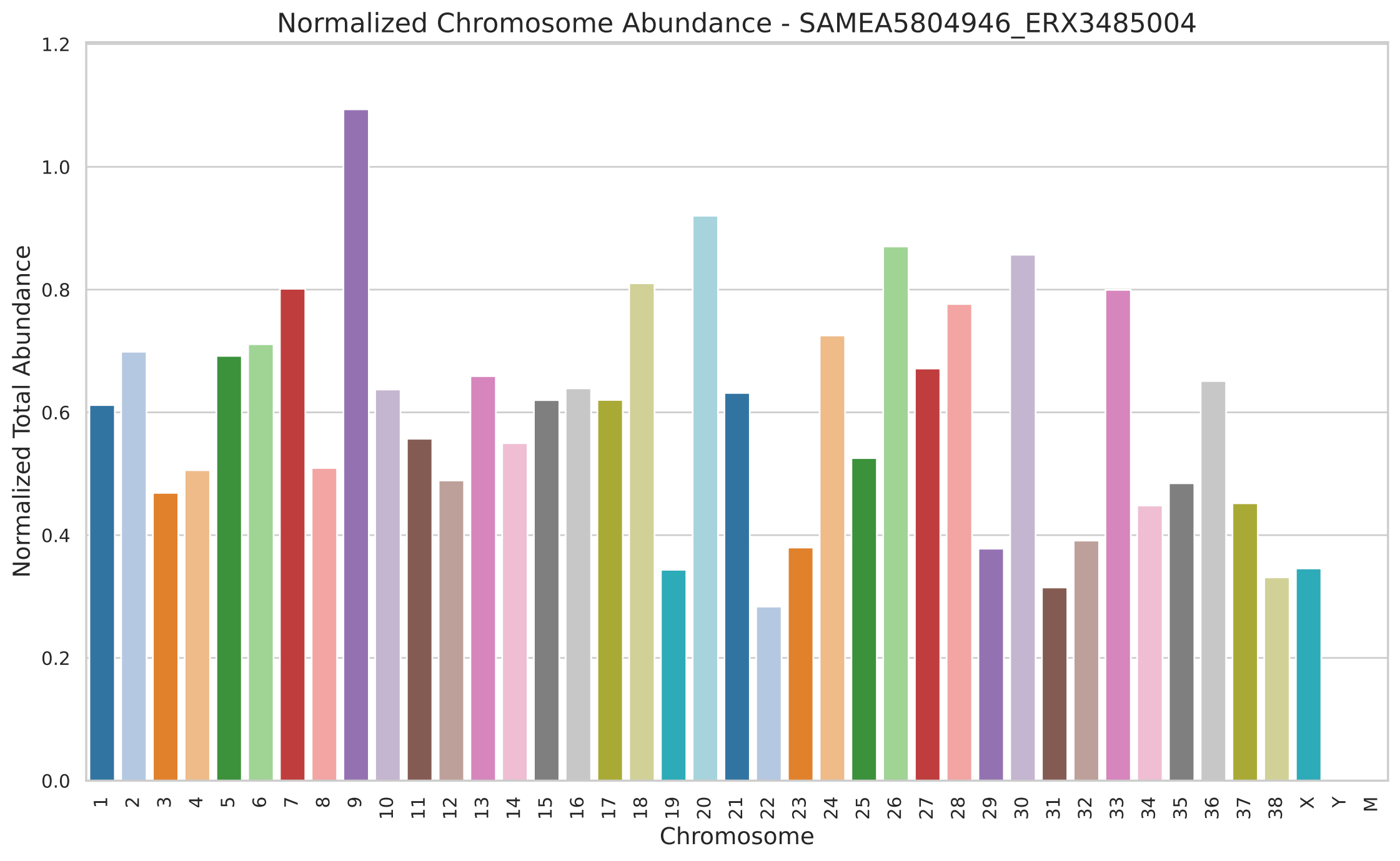

Normalized Chromosome Abundance - SAMEA5804937_ERX3485001
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

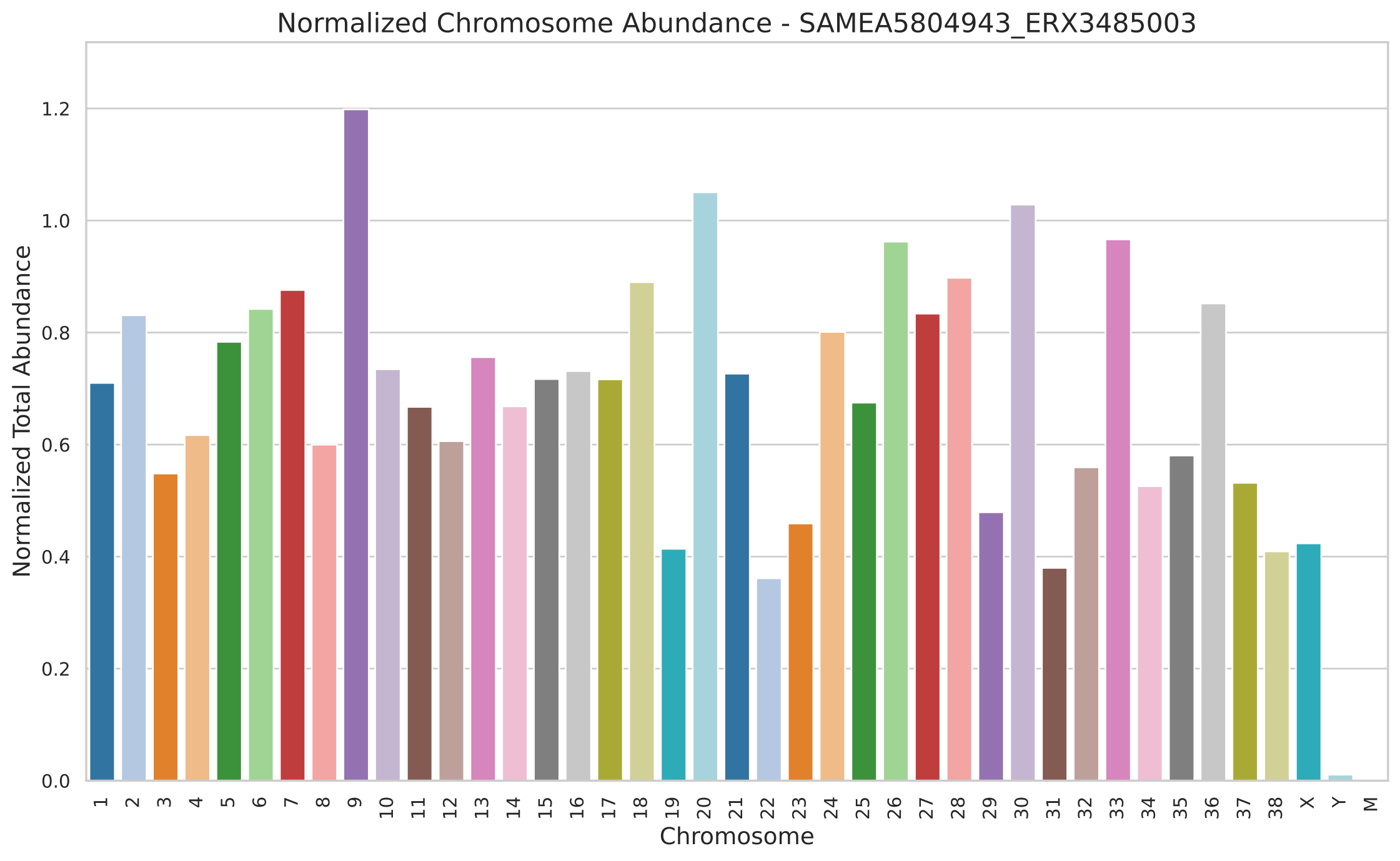

Normalized Chromosome Abundance - SAMEA5804975_ERX3485011
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

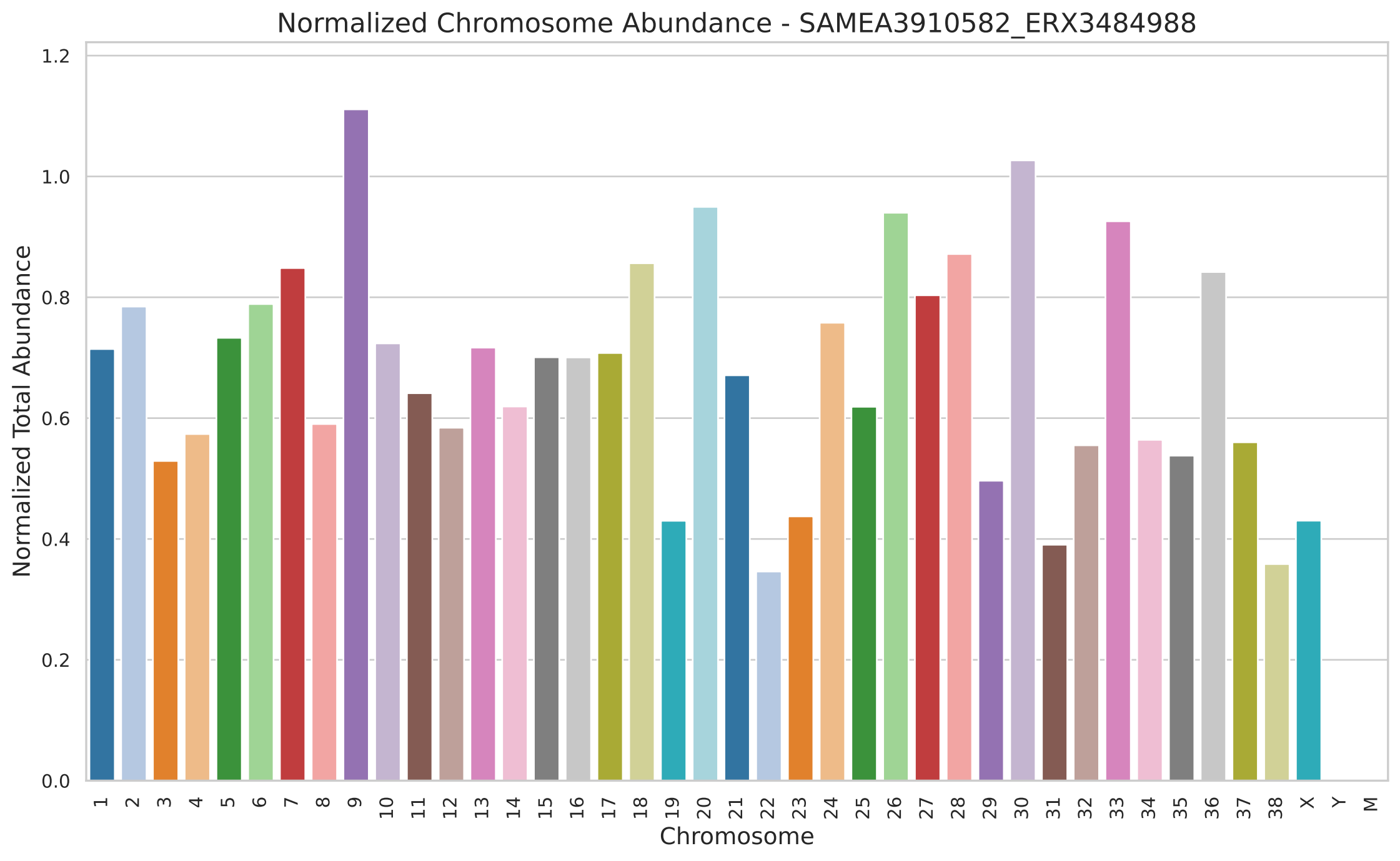

Normalized Chromosome Abundance - SAMEA5804929_ERX3484997
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

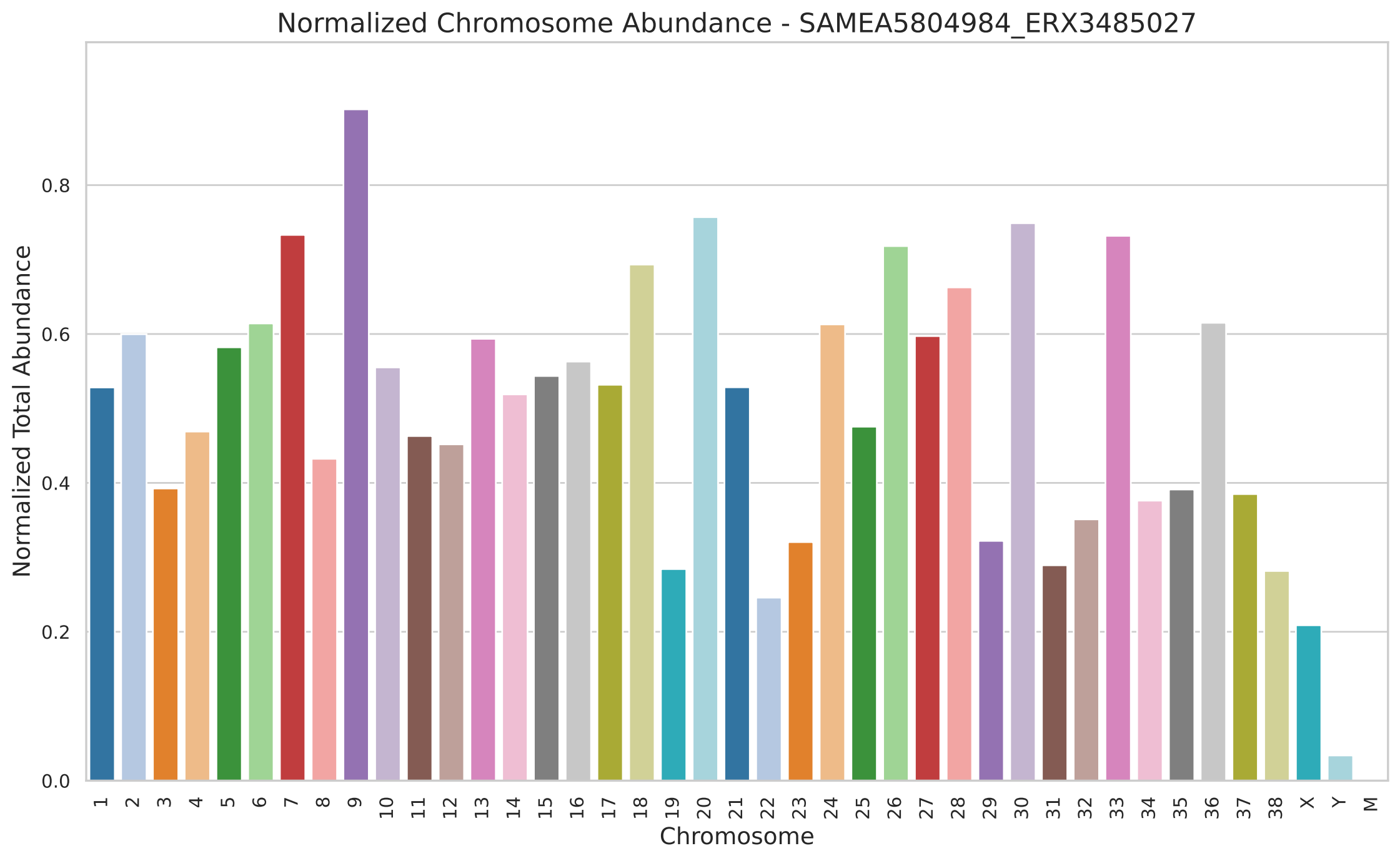

Normalized Chromosome Abundance - SAMEA5804972_ERX3485010
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

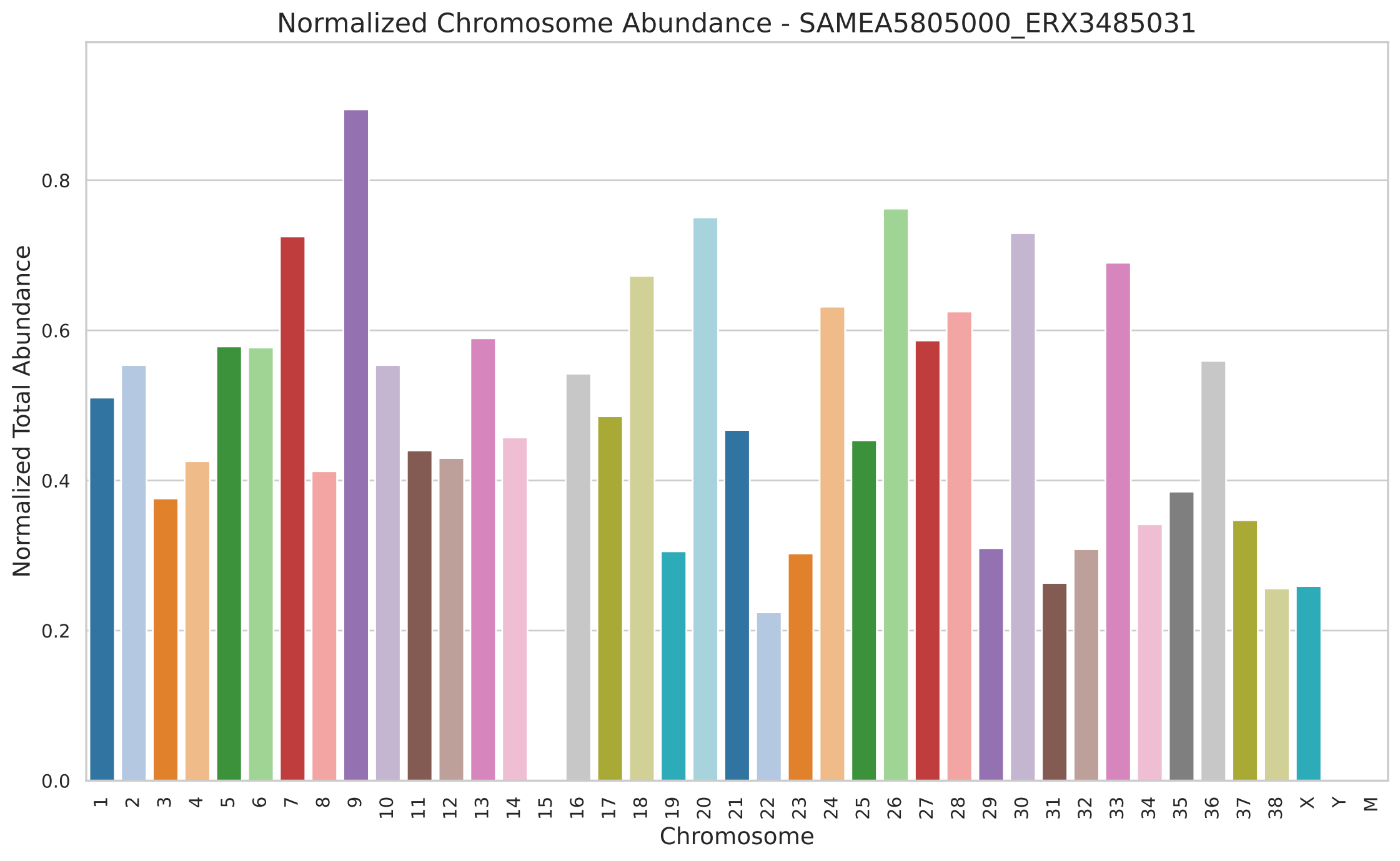

Normalized Chromosome Abundance - SAMEA3910810_ERX3484992
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

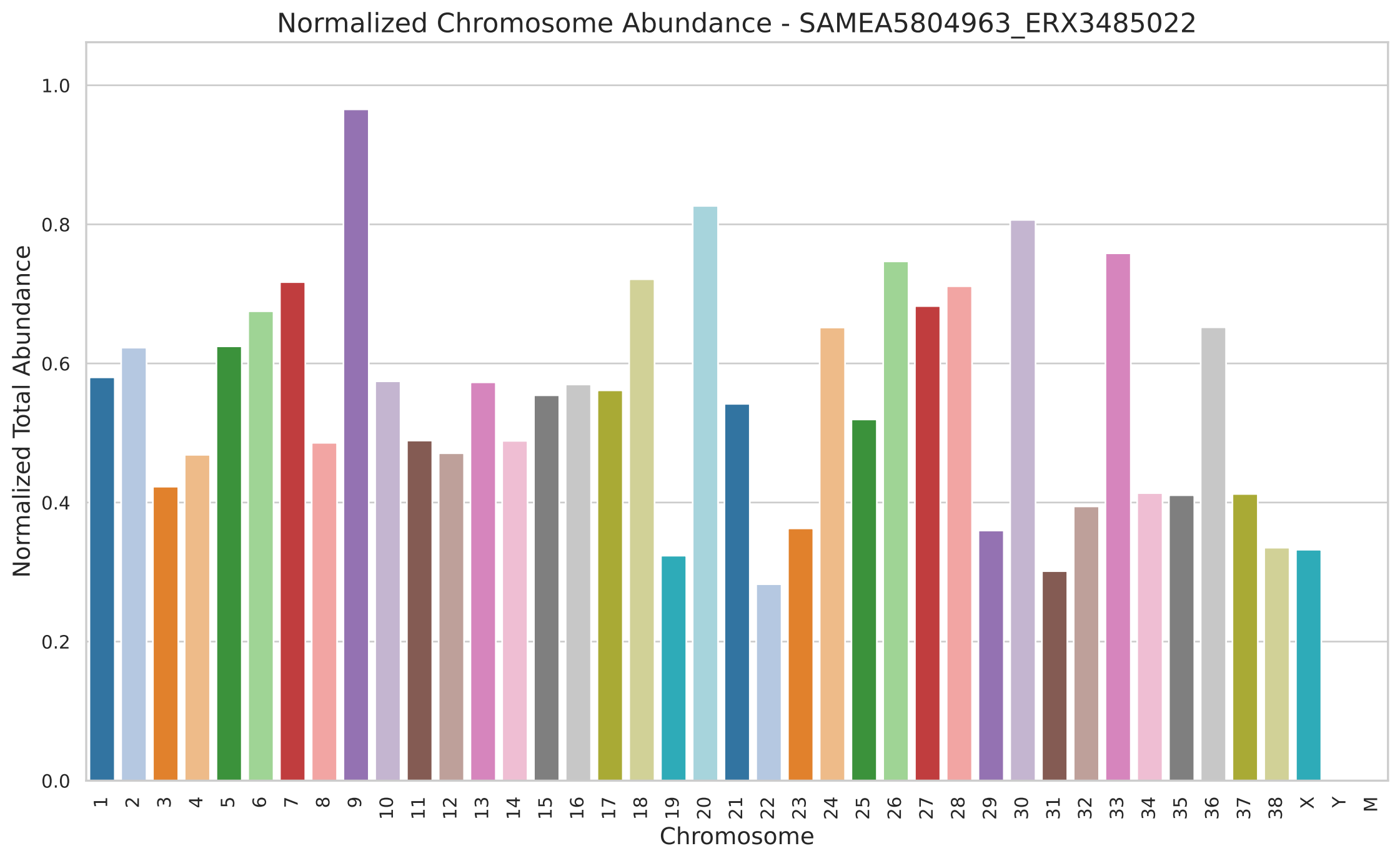

Normalized Chromosome Abundance - SAMEA5804946_ERX3485004
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

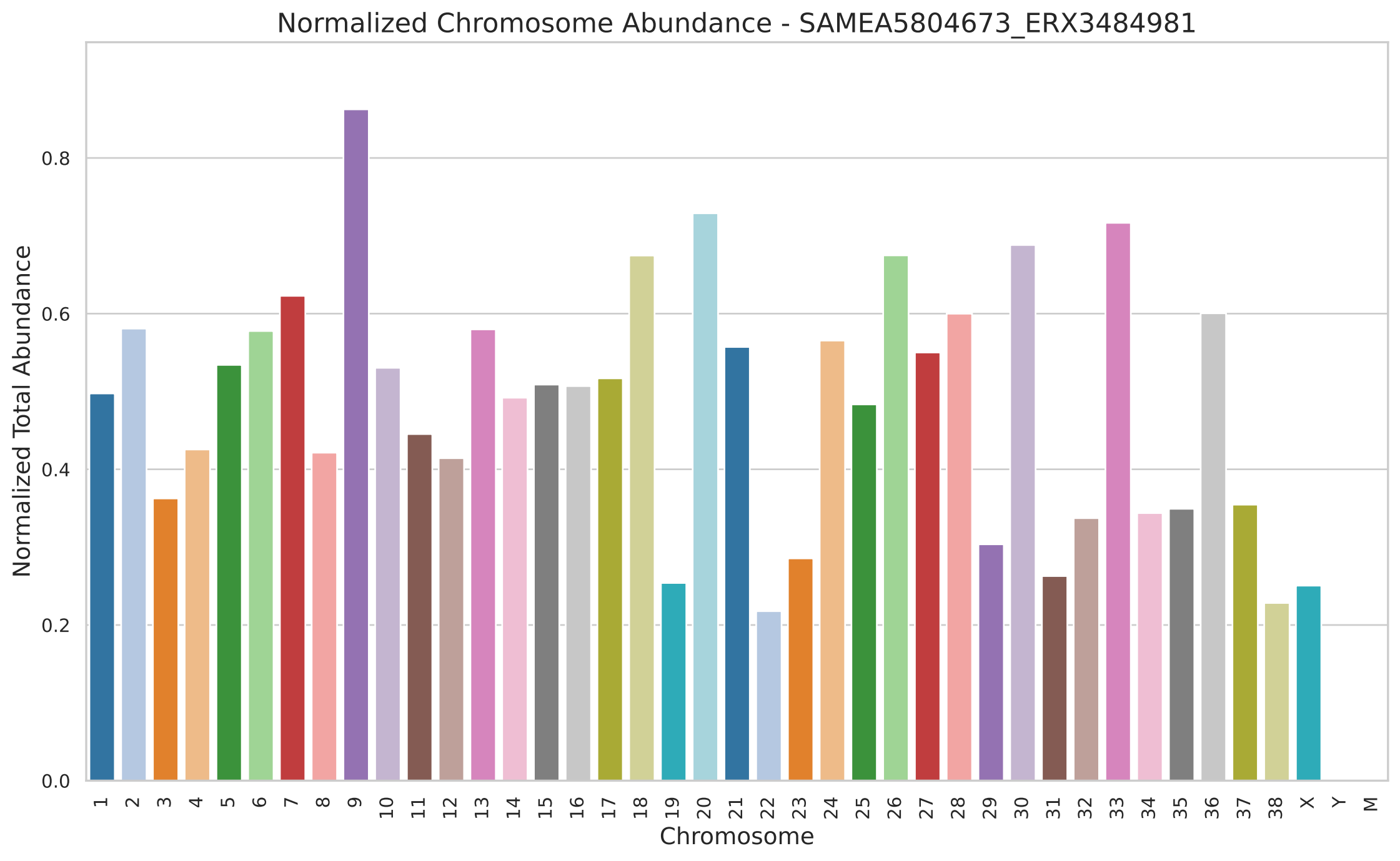

Normalized Chromosome Abundance - SAMEA5804943_ERX3485003
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

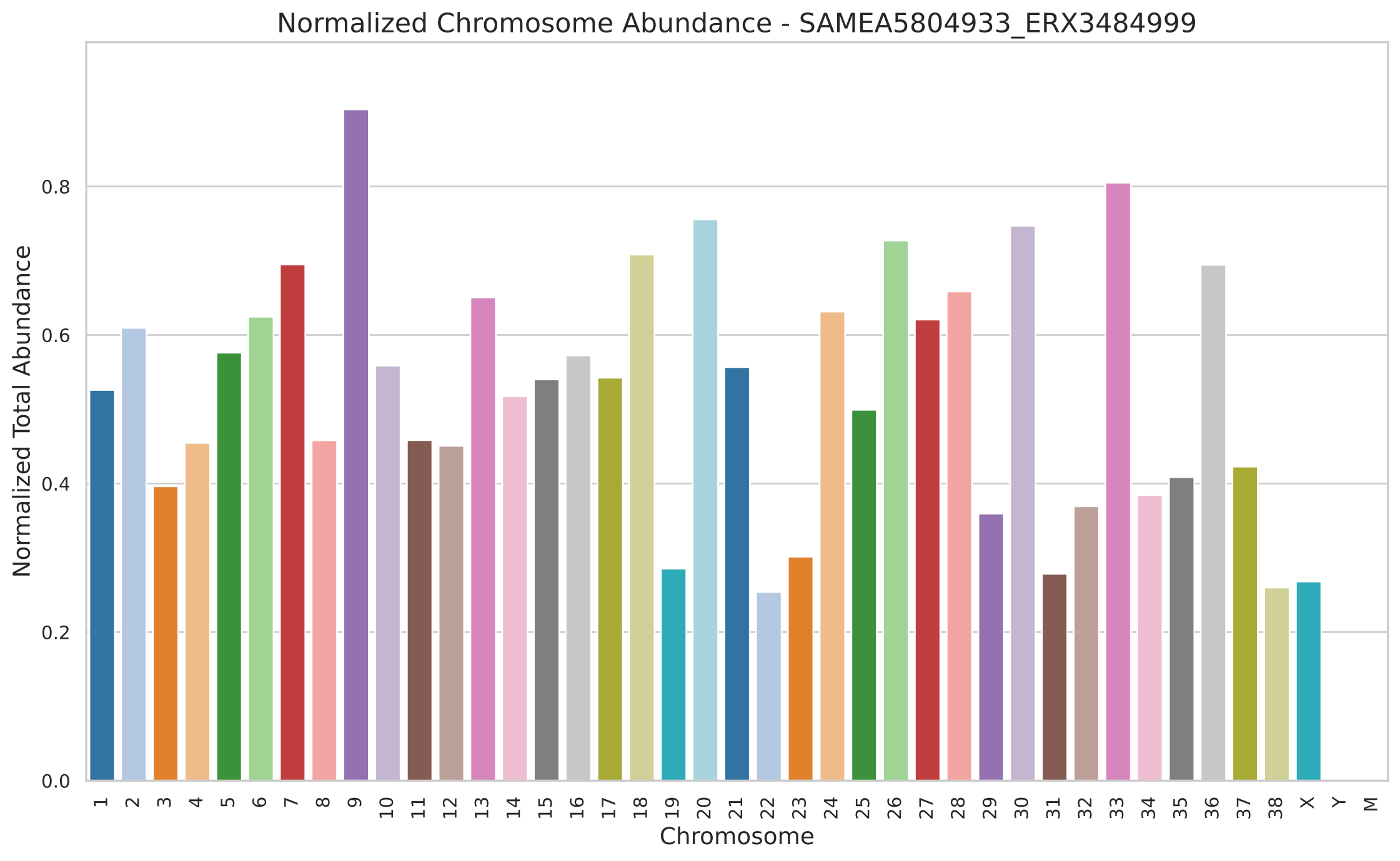

Normalized Chromosome Abundance - SAMEA3910582_ERX3484988
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

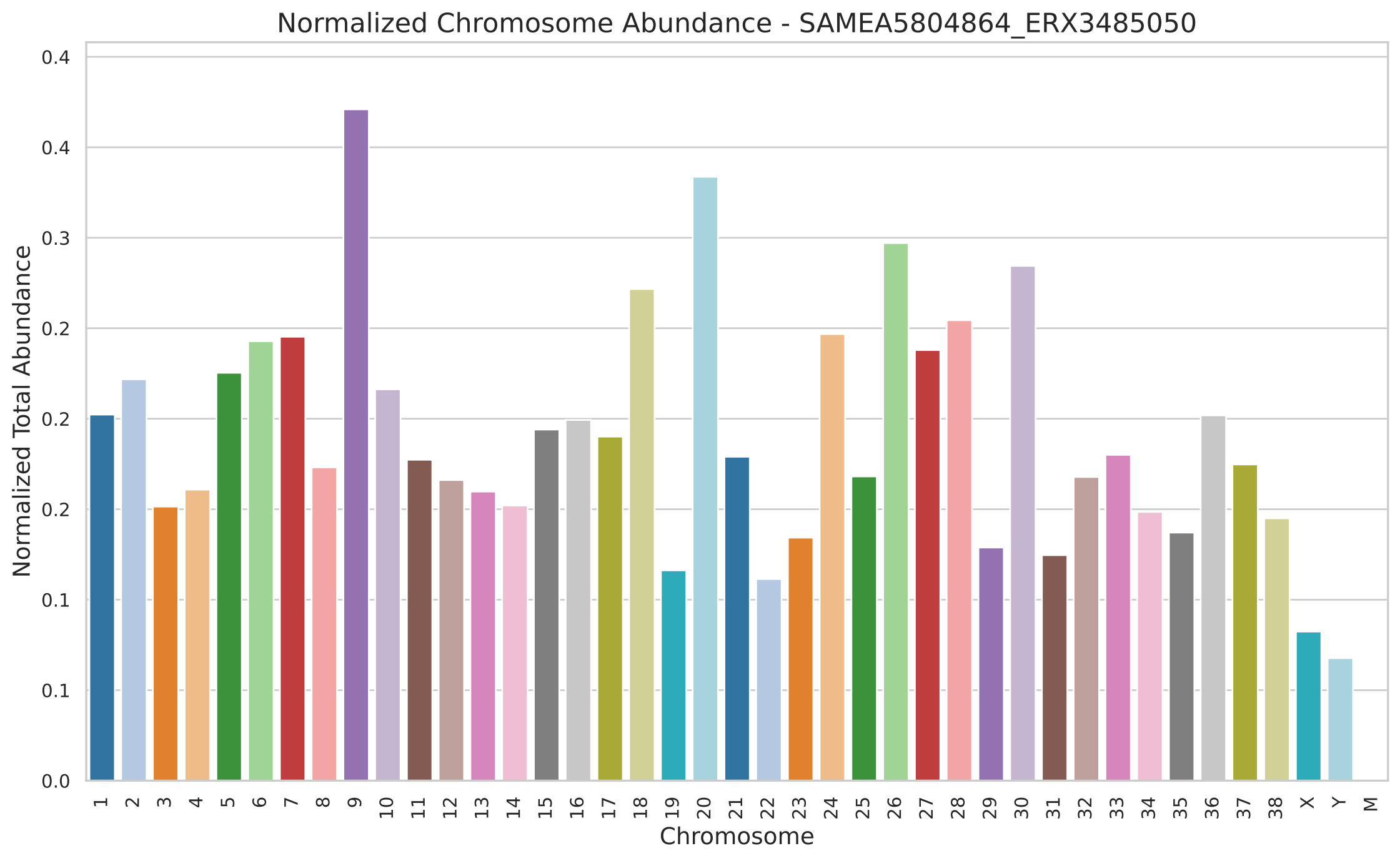

Normalized Chromosome Abundance - SAMEA5804984_ERX3485027
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

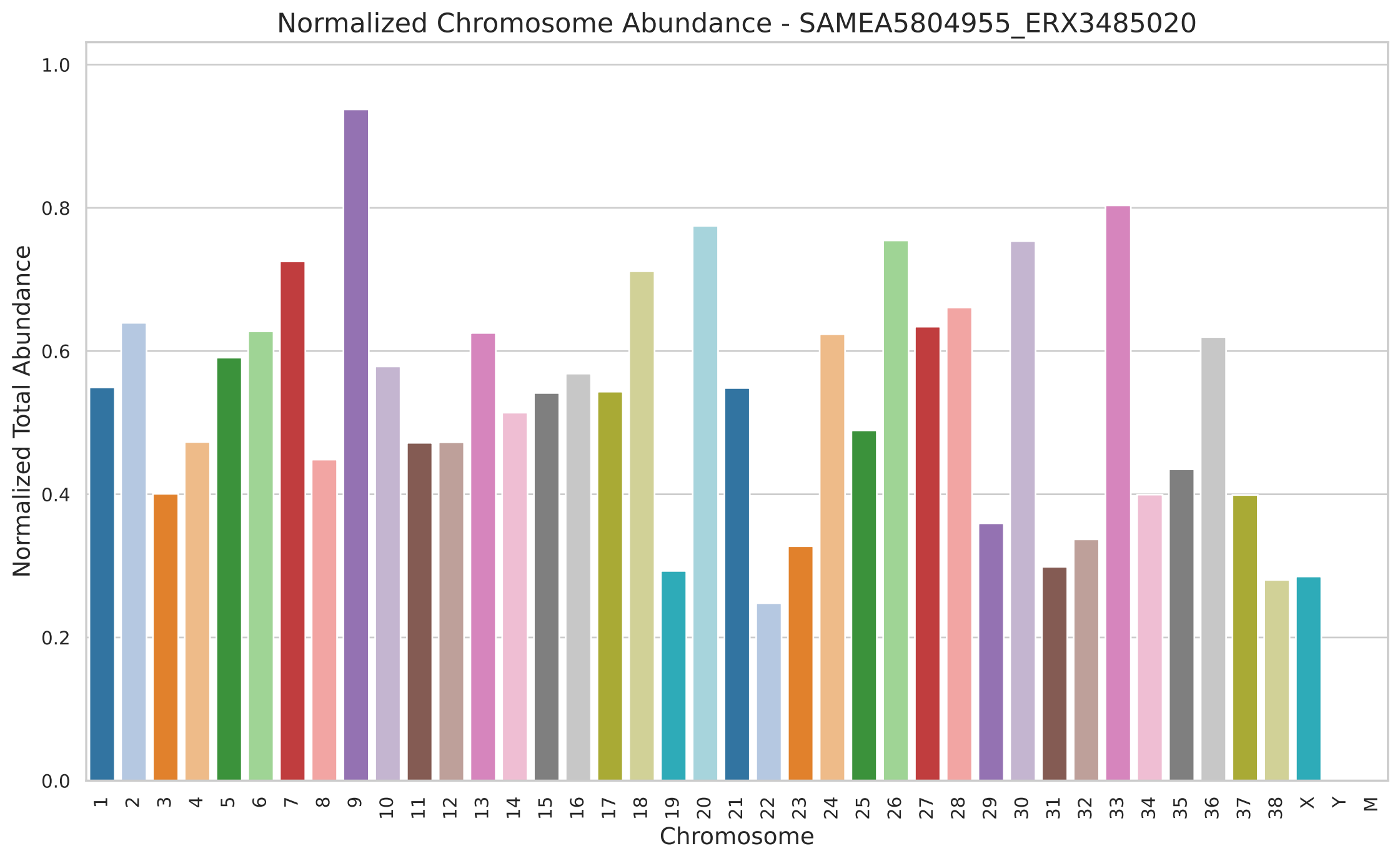

Normalized Chromosome Abundance - SAMEA5805000_ERX3485031
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

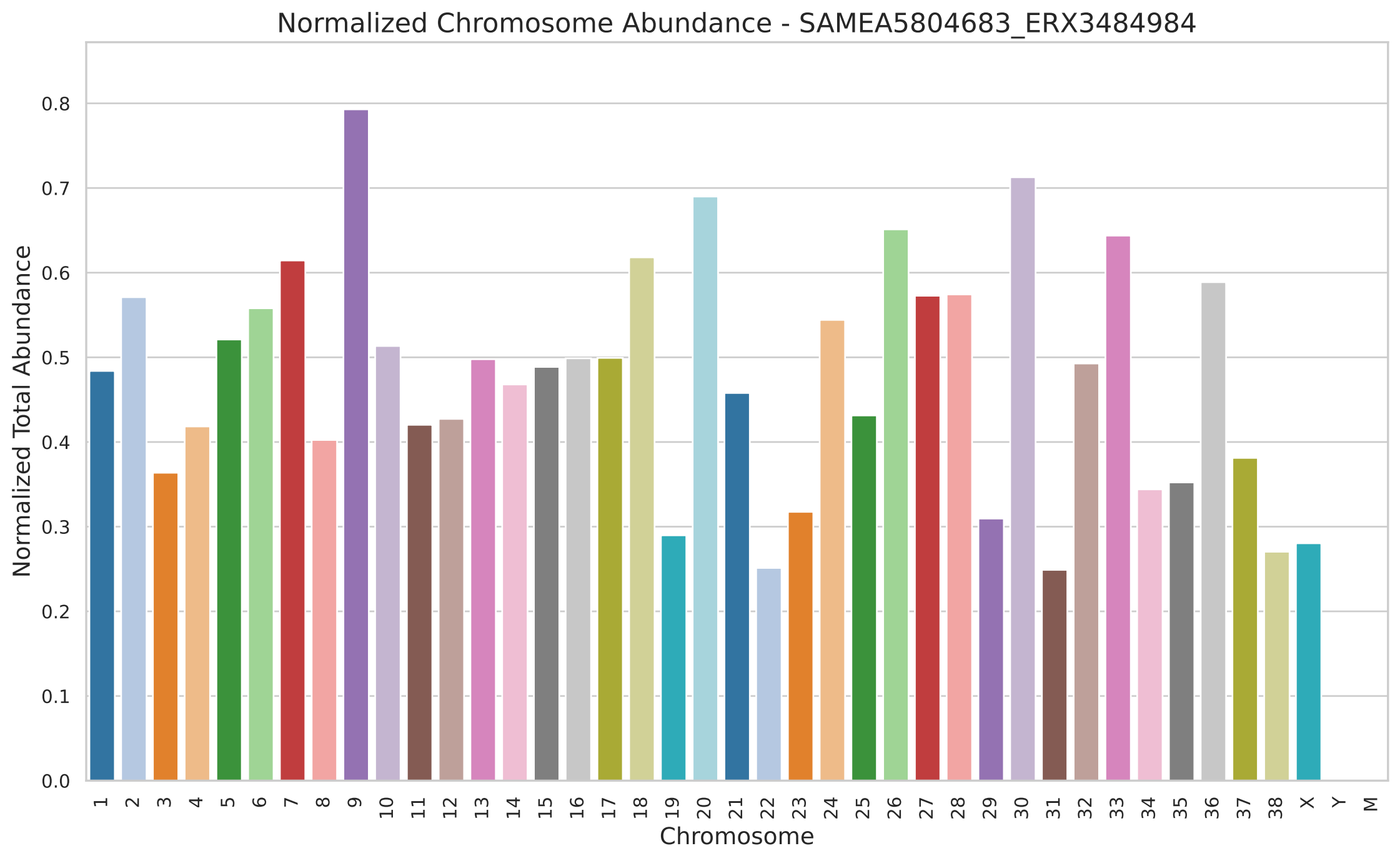

Normalized Chromosome Abundance - SAMEA5804963_ERX3485022
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

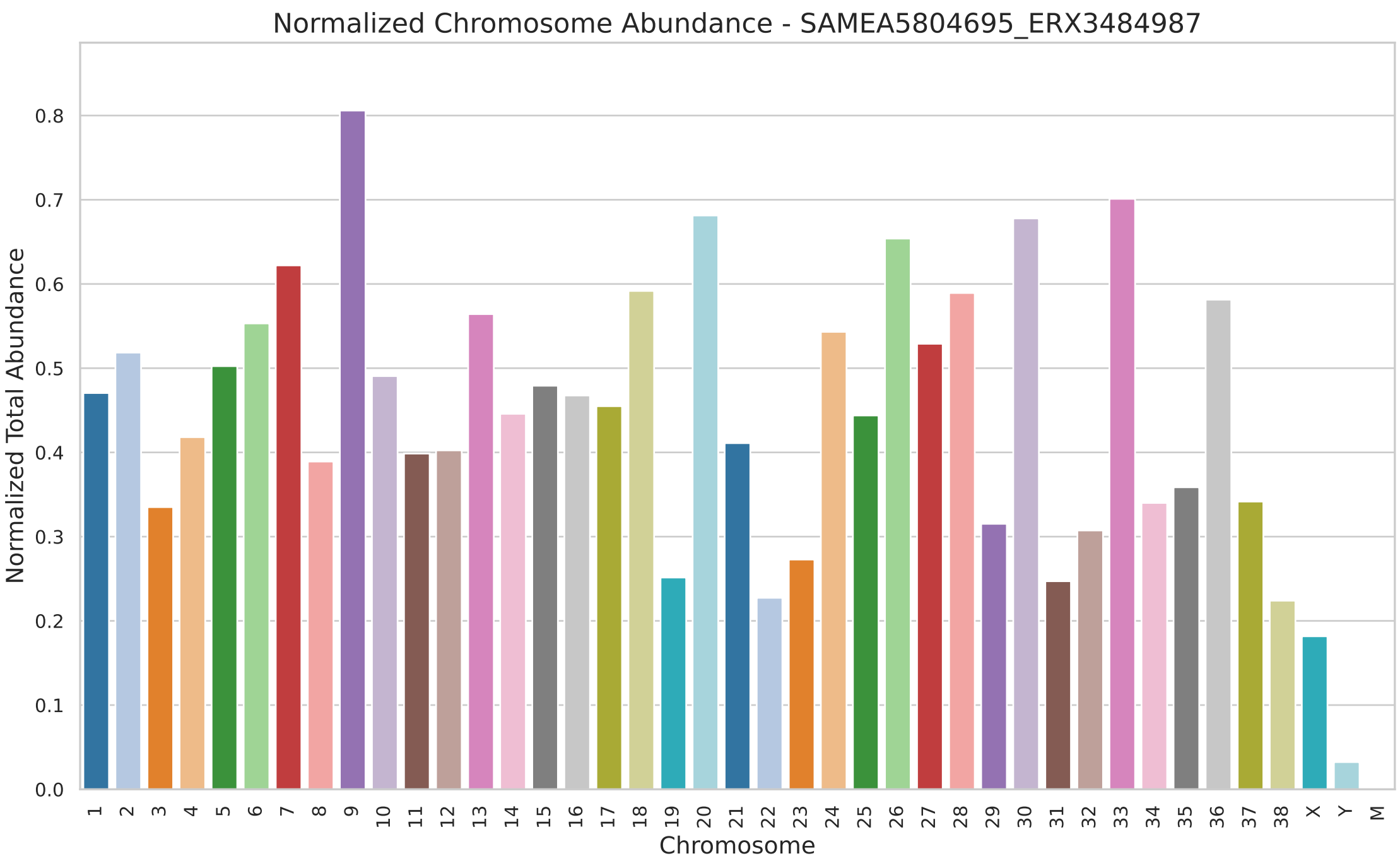

Normalized Chromosome Abundance - SAMEA5804673_ERX3484981
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

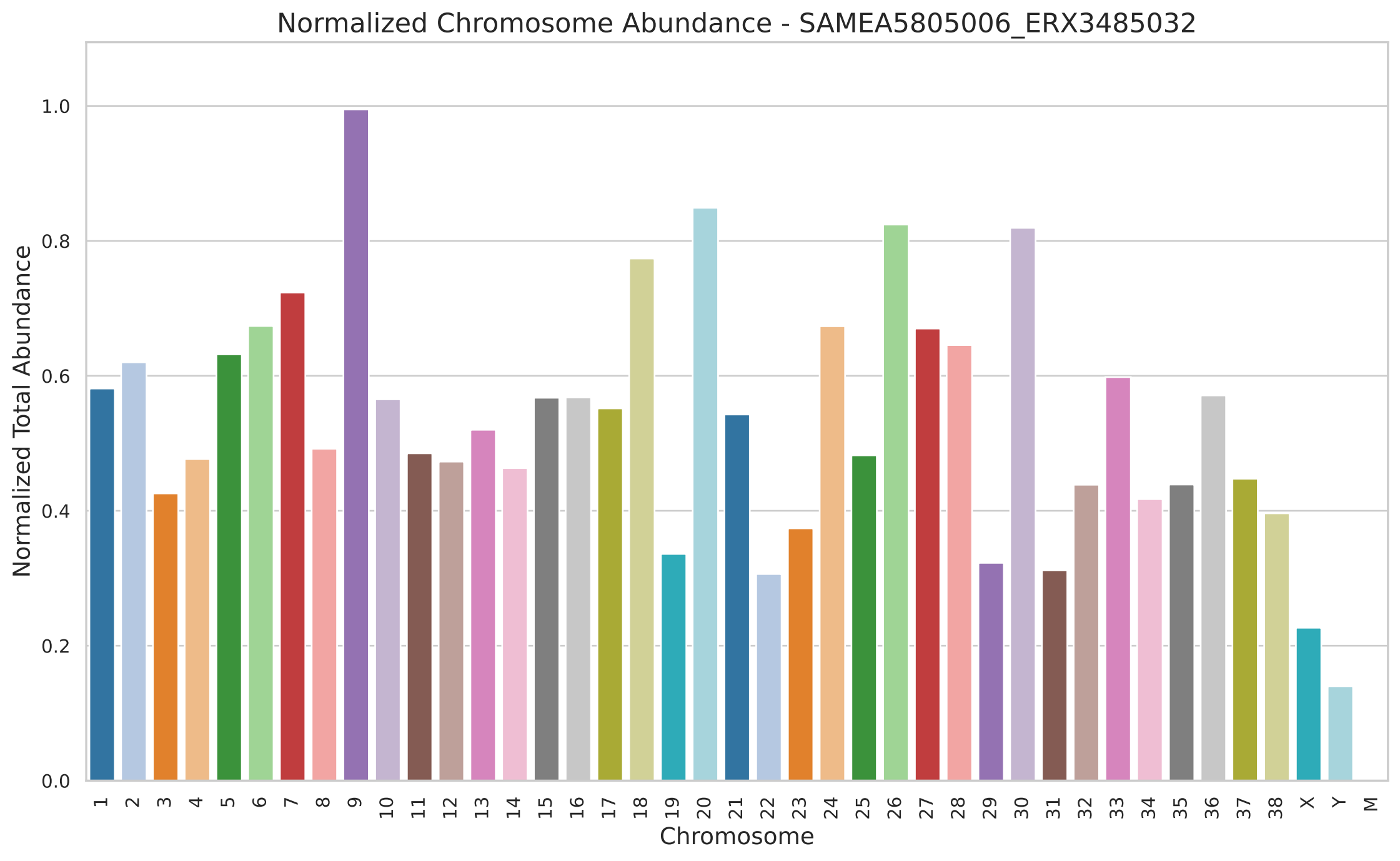

Normalized Chromosome Abundance - SAMEA5804933_ERX3484999
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

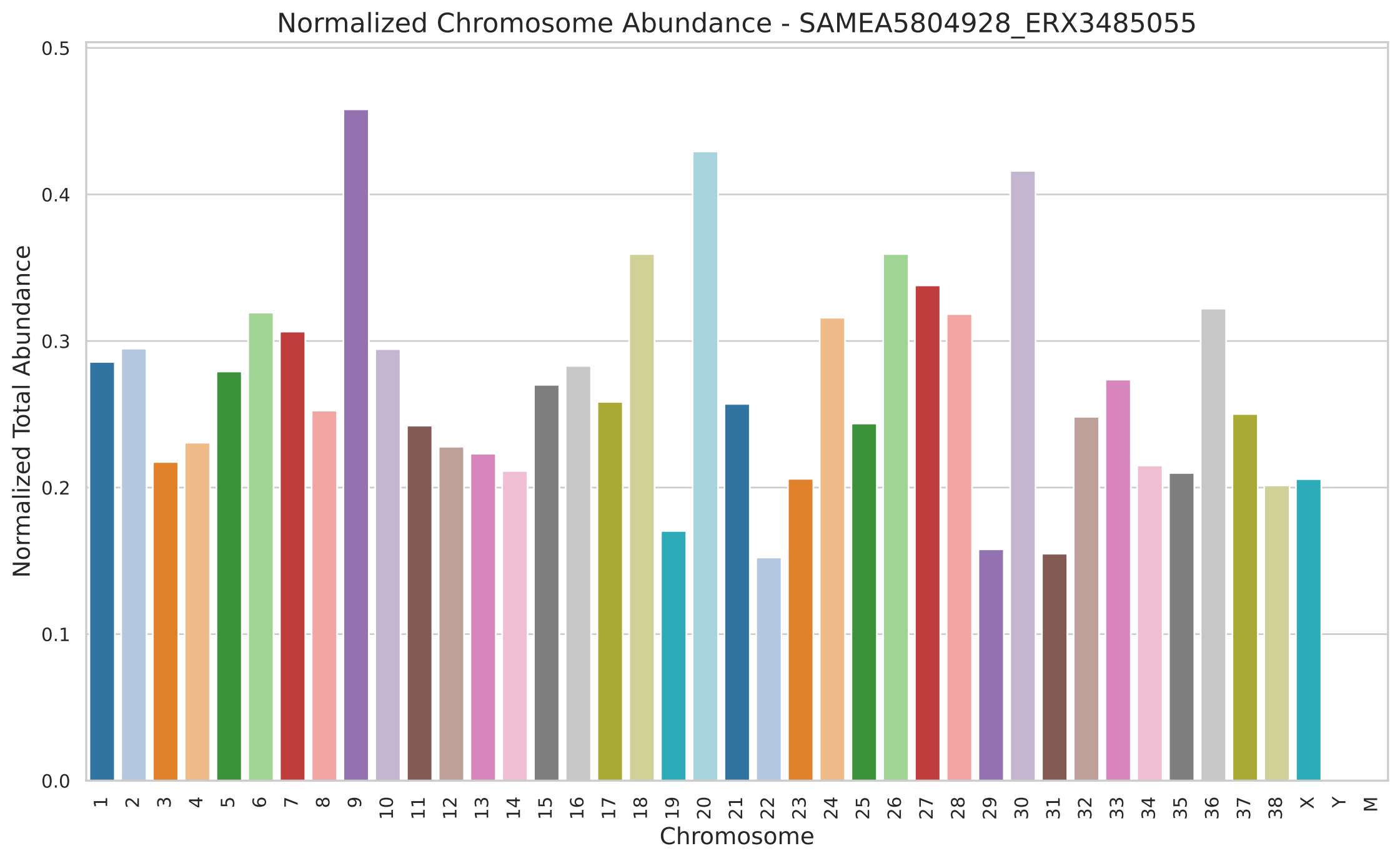

Normalized Chromosome Abundance - SAMEA5804864_ERX3485050
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
0.4
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

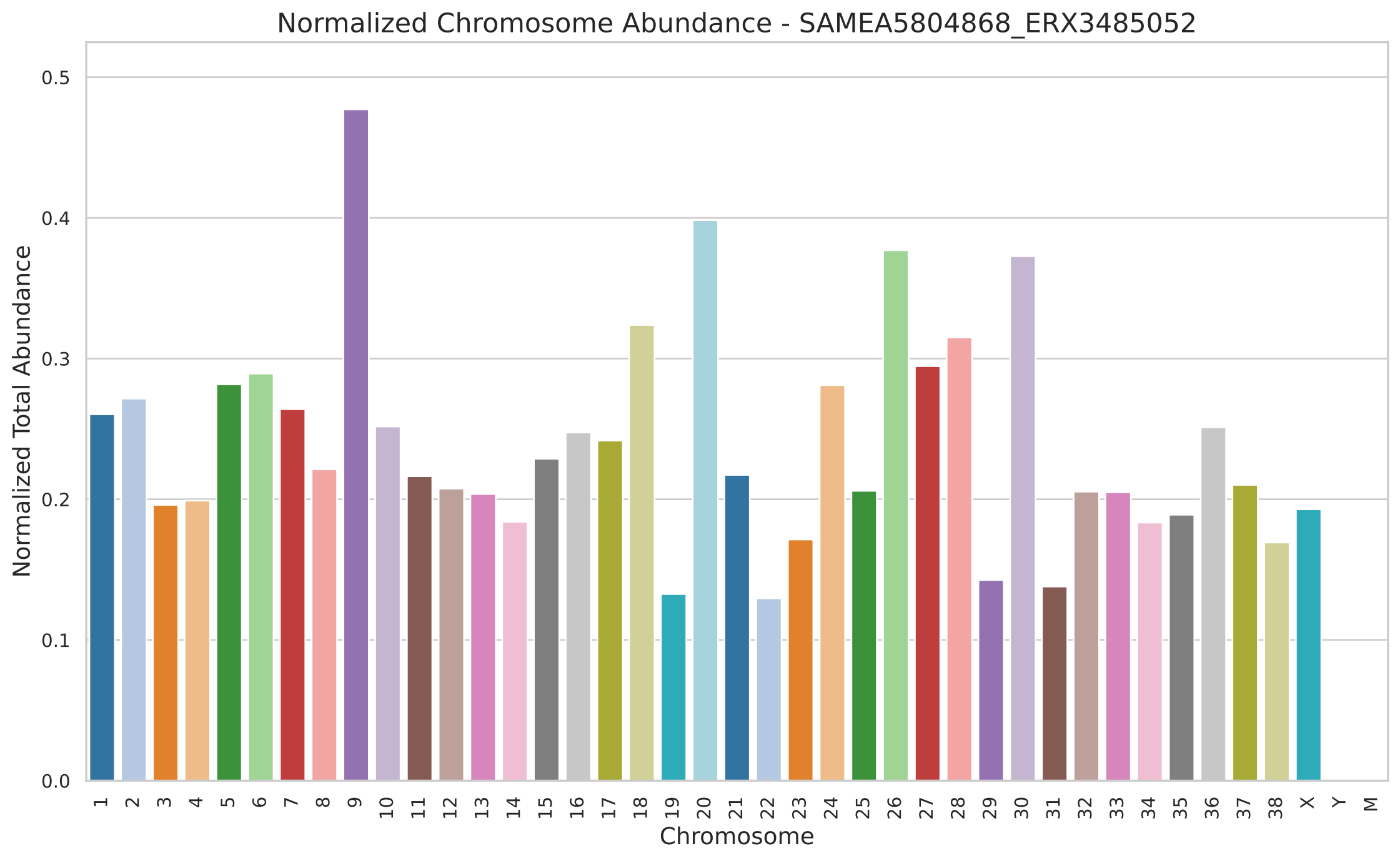

Normalized Chromosome Abundance - SAMEA5804955_ERX3485020
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

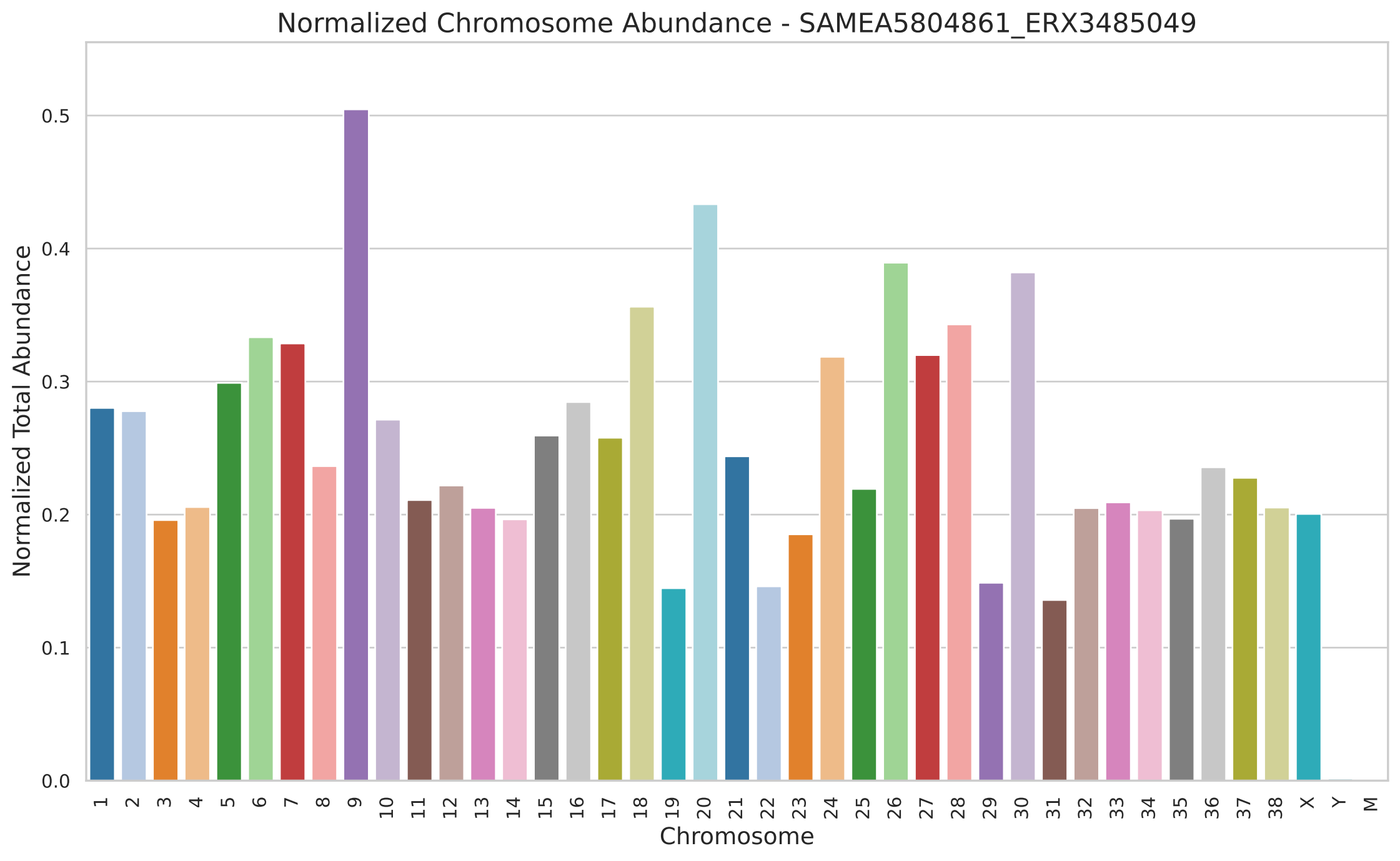

Normalized Chromosome Abundance - SAMEA5804683_ERX3484984
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

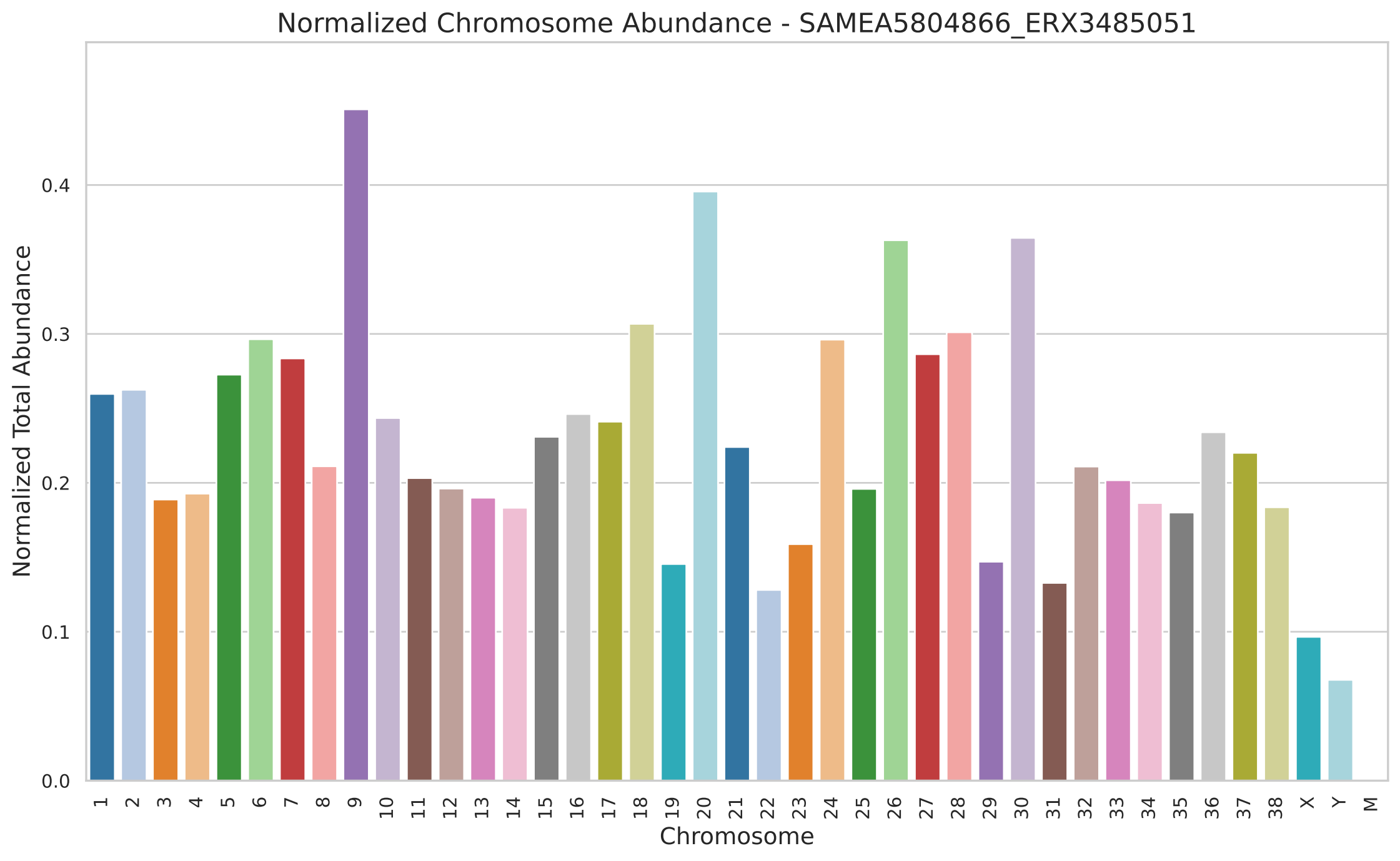

Normalized Chromosome Abundance - SAMEA5804695_ERX3484987
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

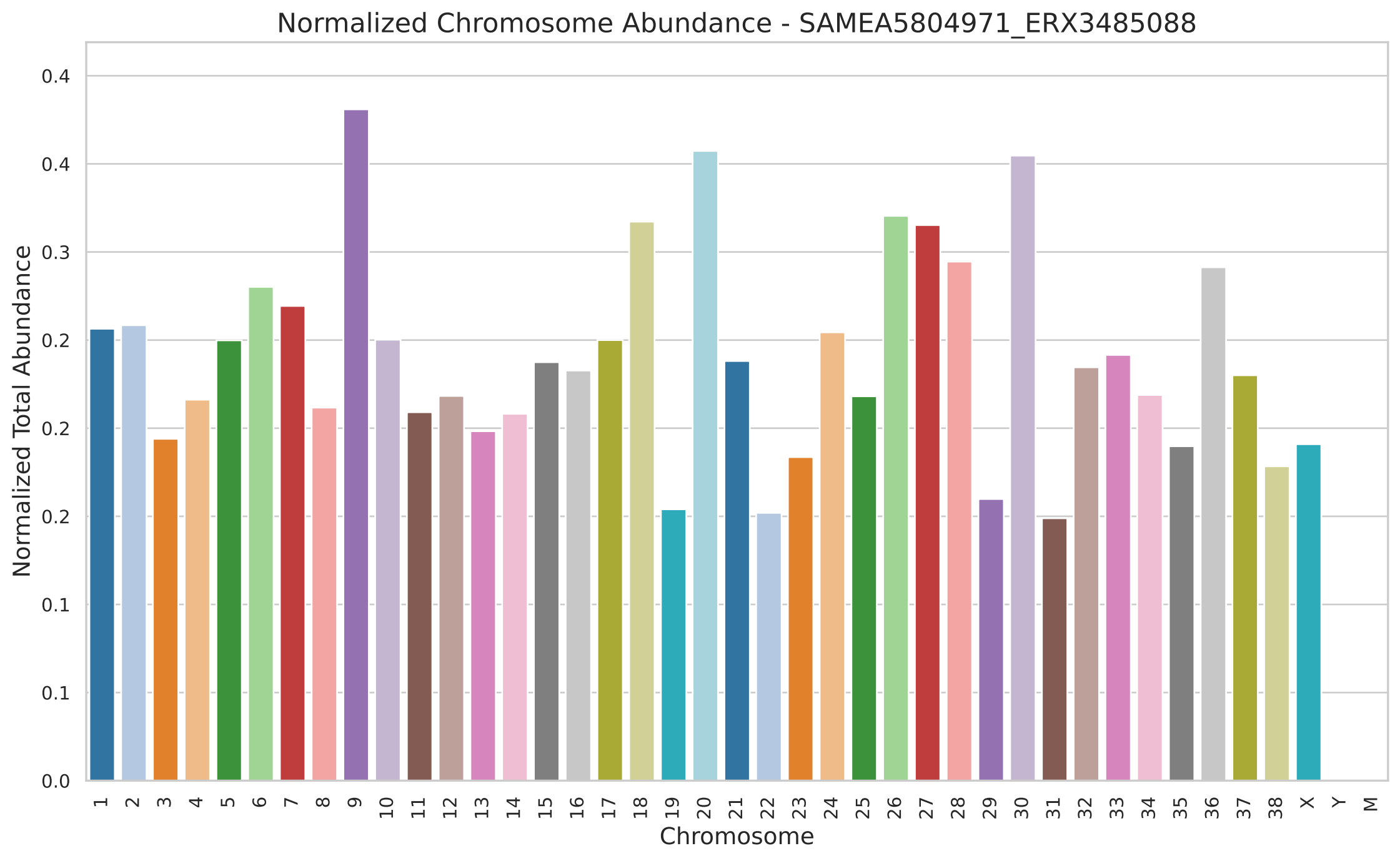

Normalized Chromosome Abundance - SAMEA5805006_ERX3485032
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

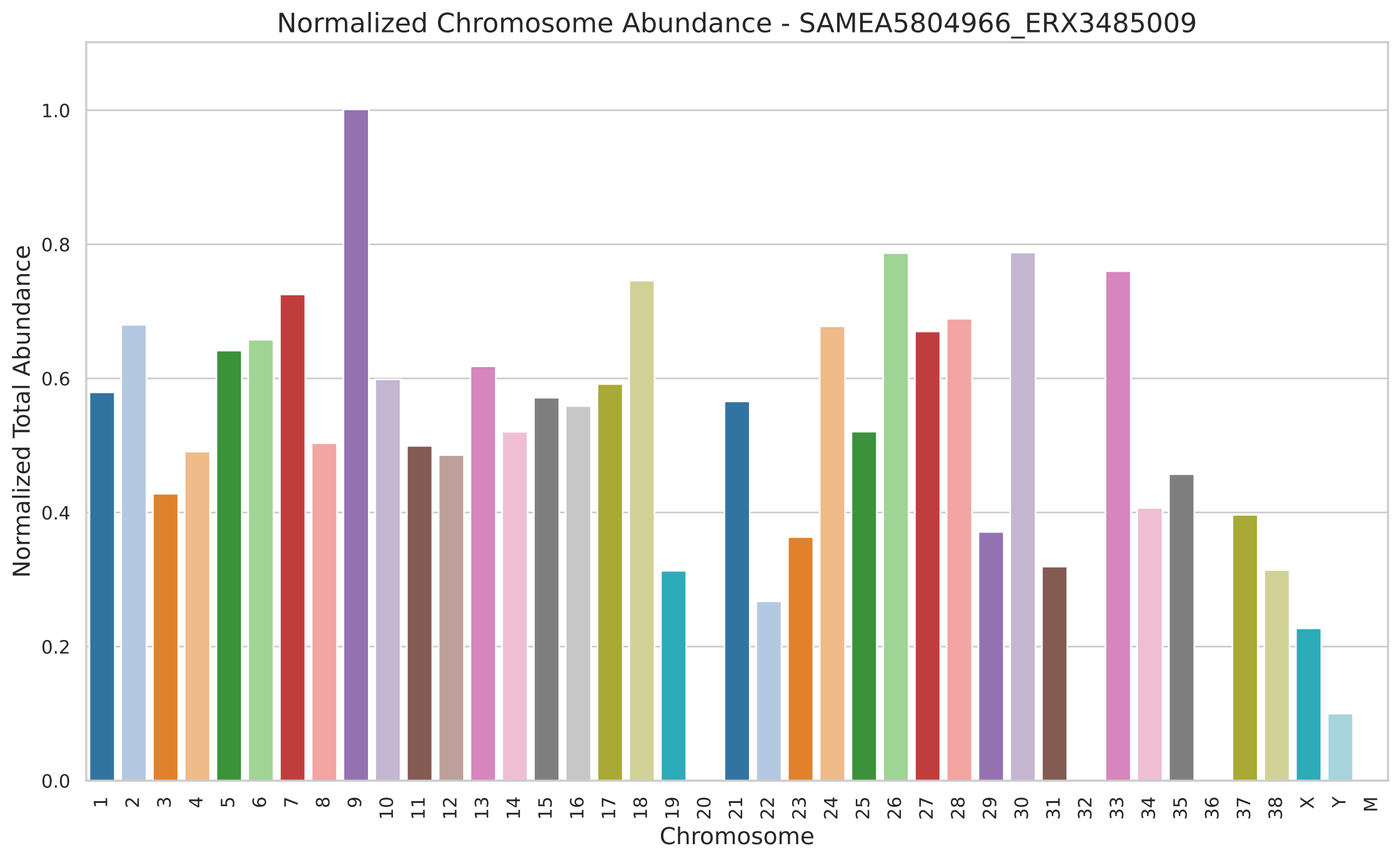

Normalized Chromosome Abundance - SAMEA5804928_ERX3485055
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

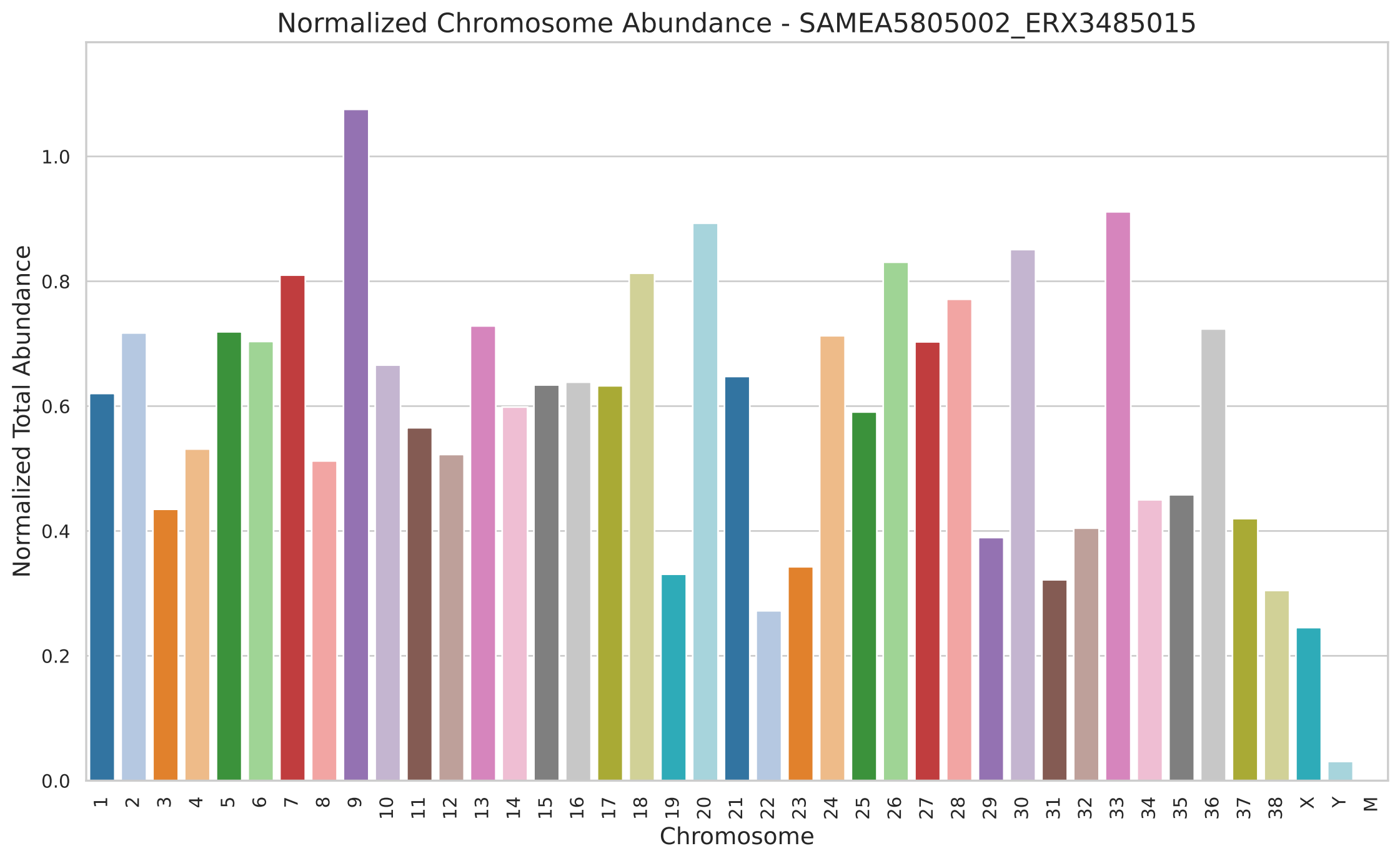

Normalized Chromosome Abundance - SAMEA5804868_ERX3485052
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

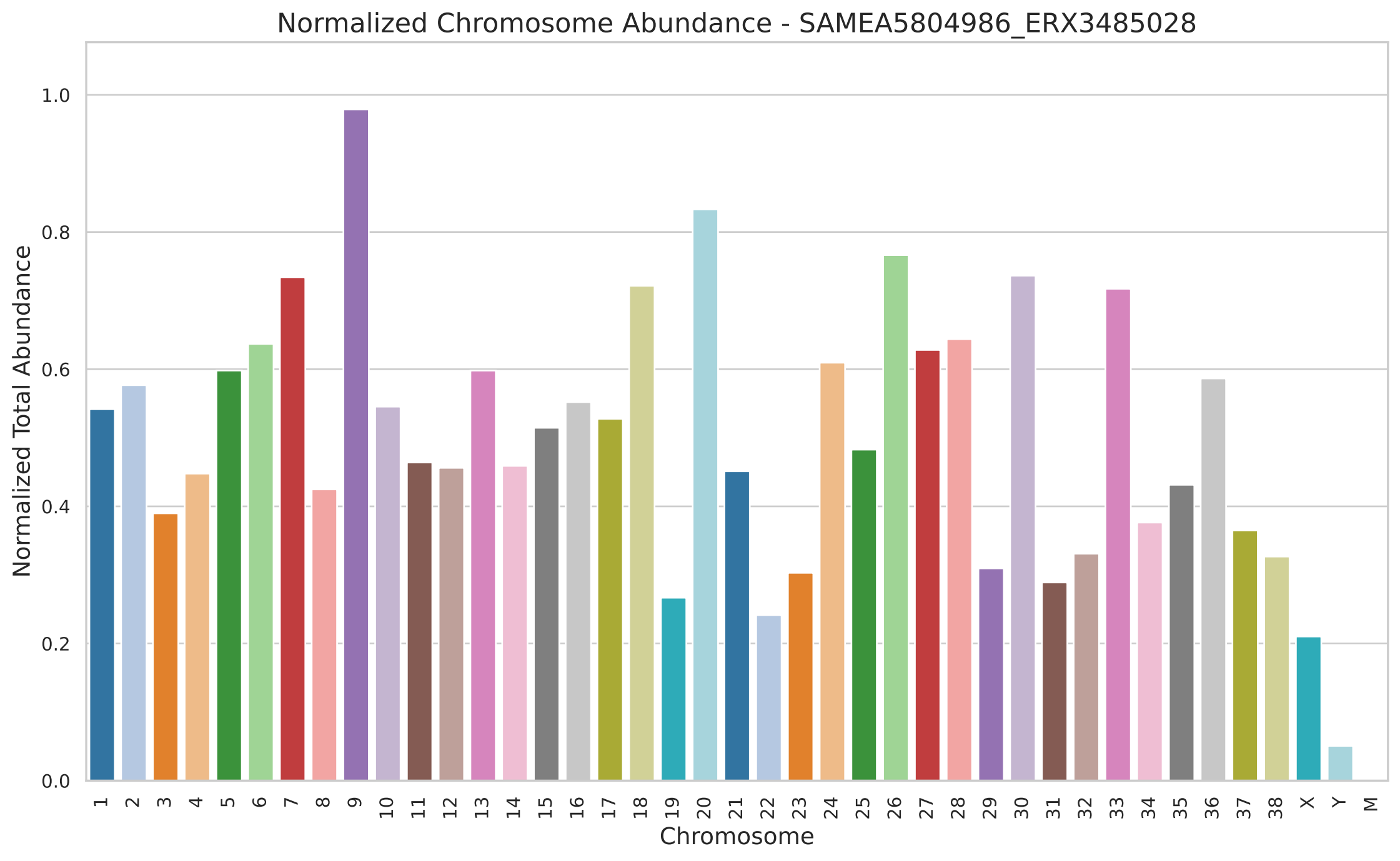

Normalized Chromosome Abundance - SAMEA5804861_ERX3485049
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

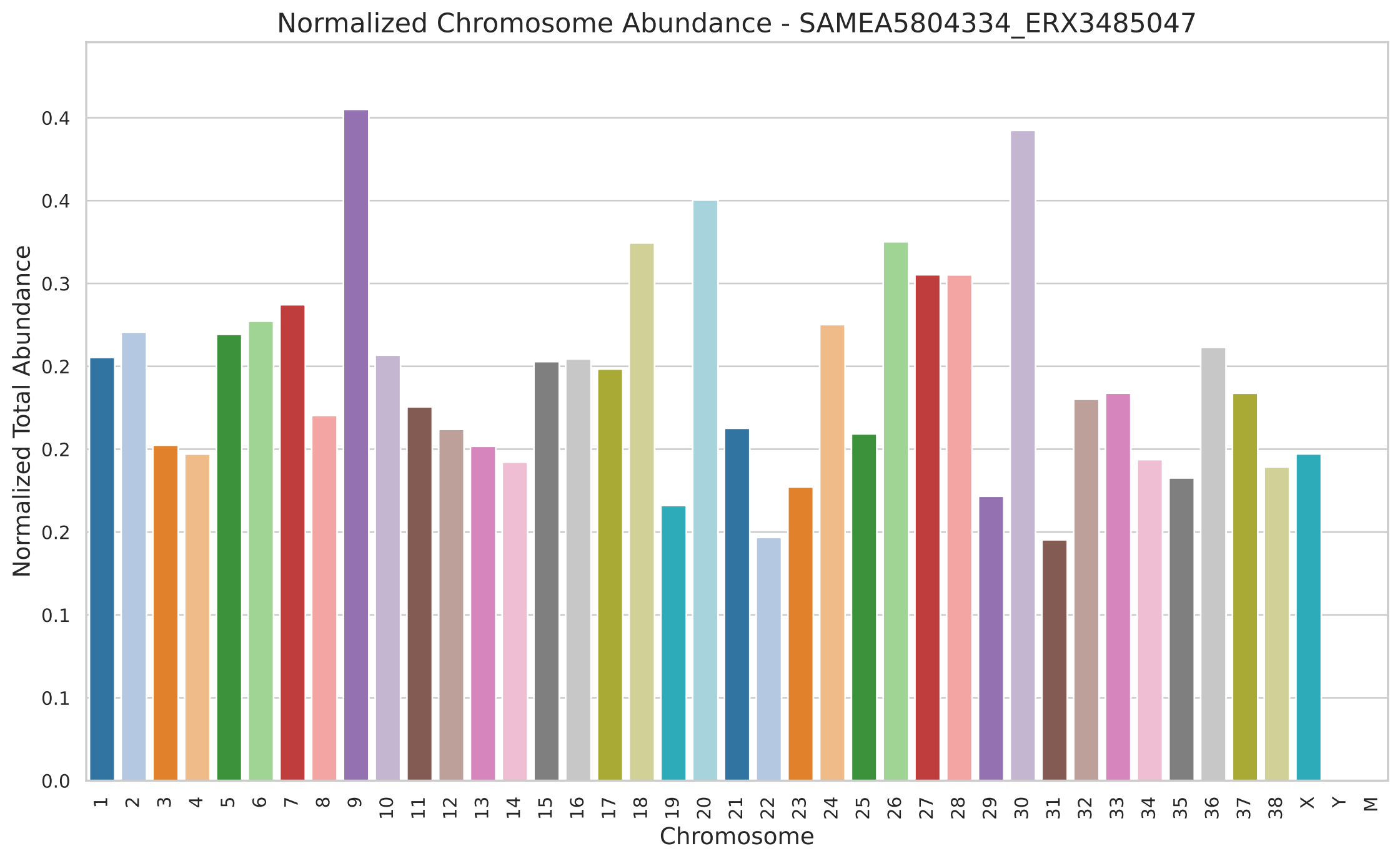

Normalized Chromosome Abundance - SAMEA5804866_ERX3485051
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

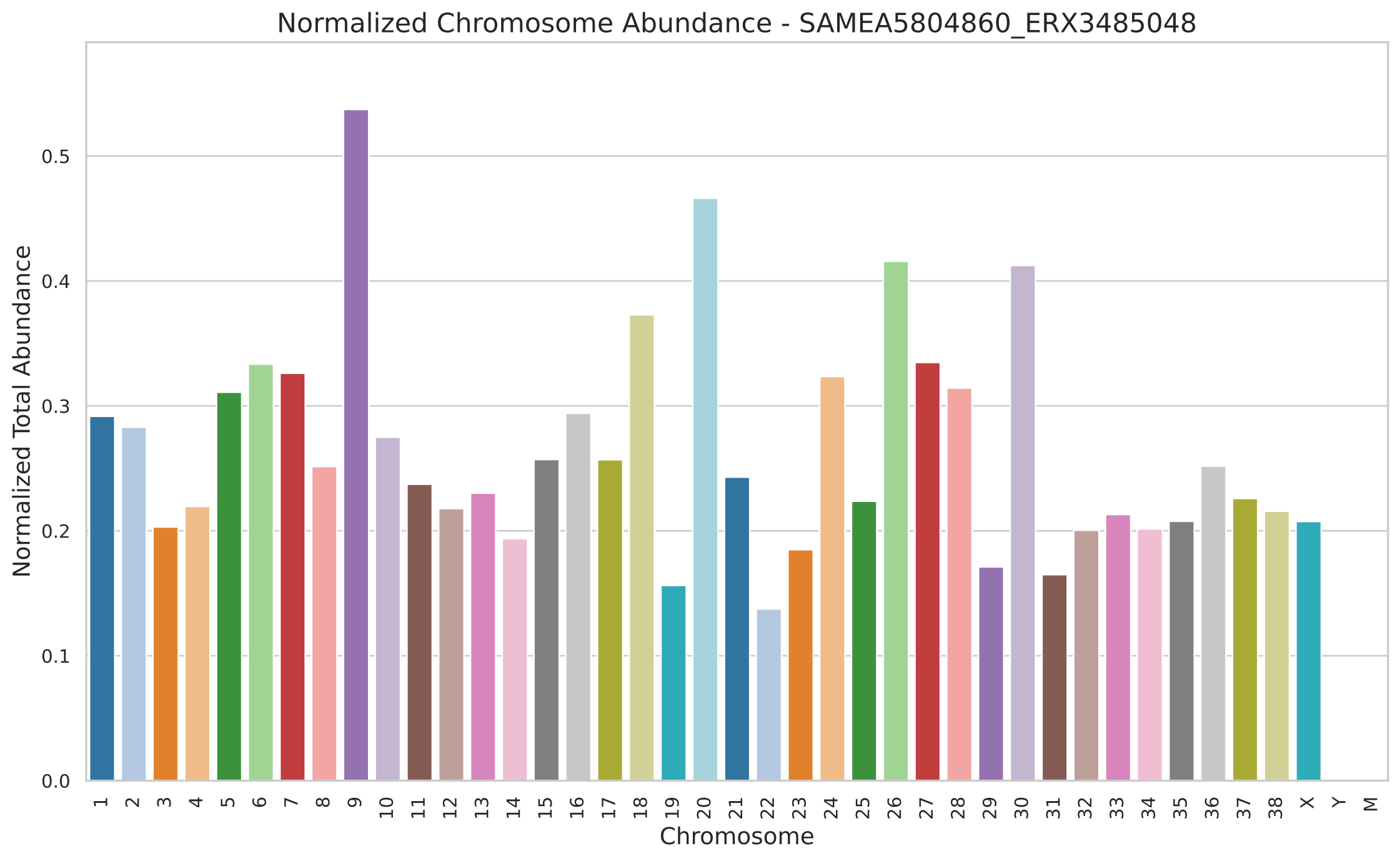

Normalized Chromosome Abundance - SAMEA5804971_ERX3485088
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.4
0.2
0.1
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

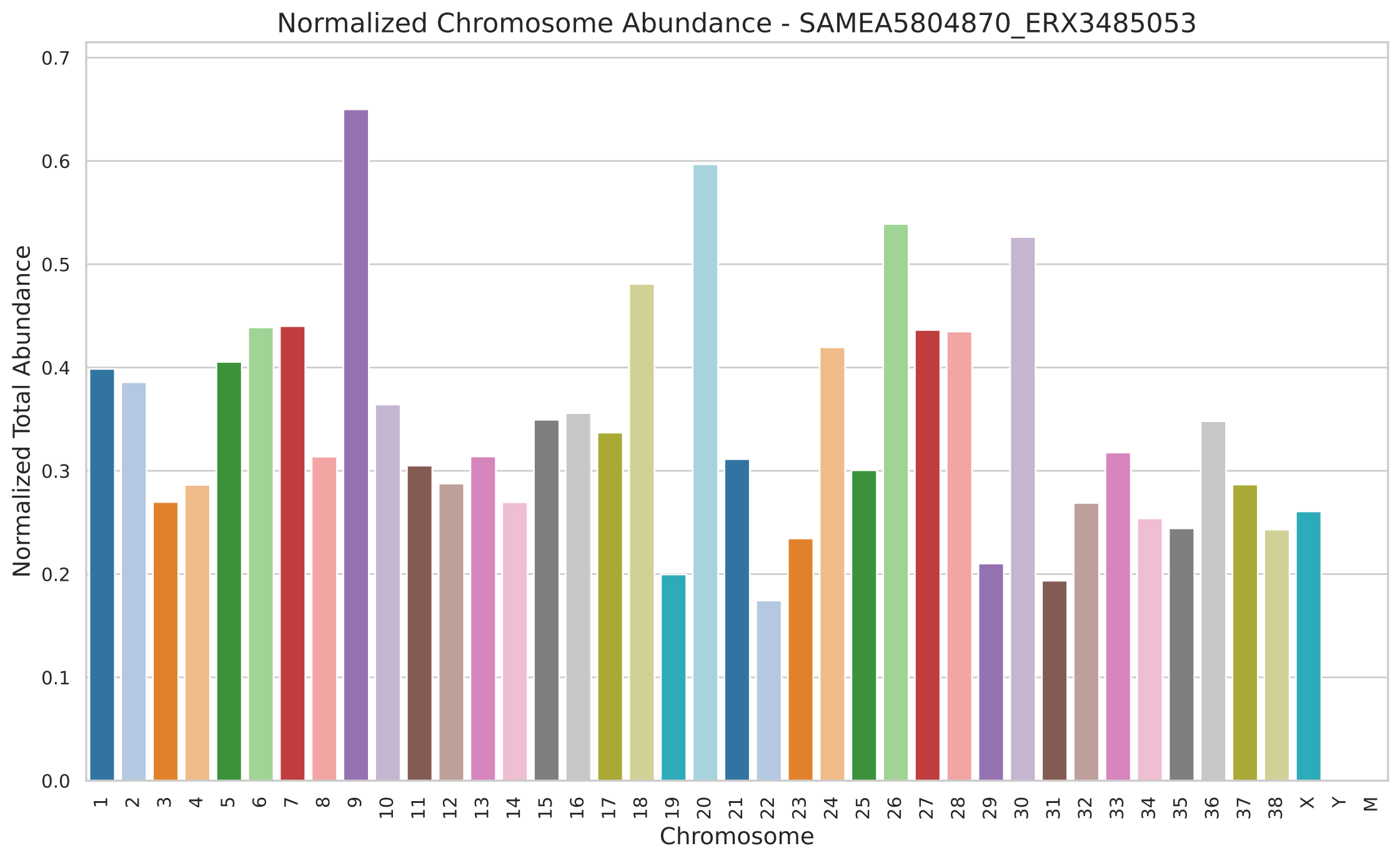

Normalized Chromosome Abundance - SAMEA5804966_ERX3485009
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

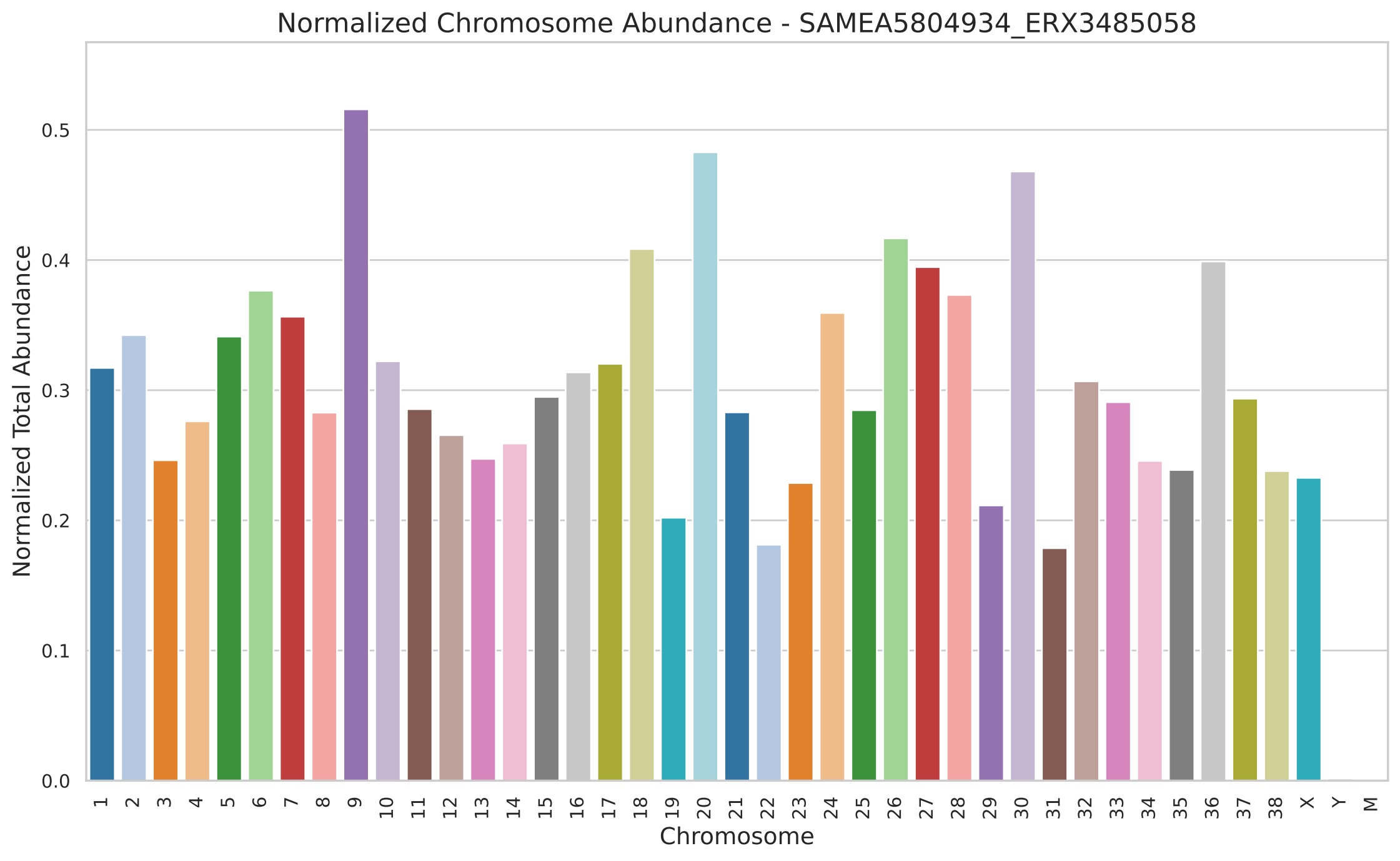

Normalized Chromosome Abundance - SAMEA5805002_ERX3485015
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

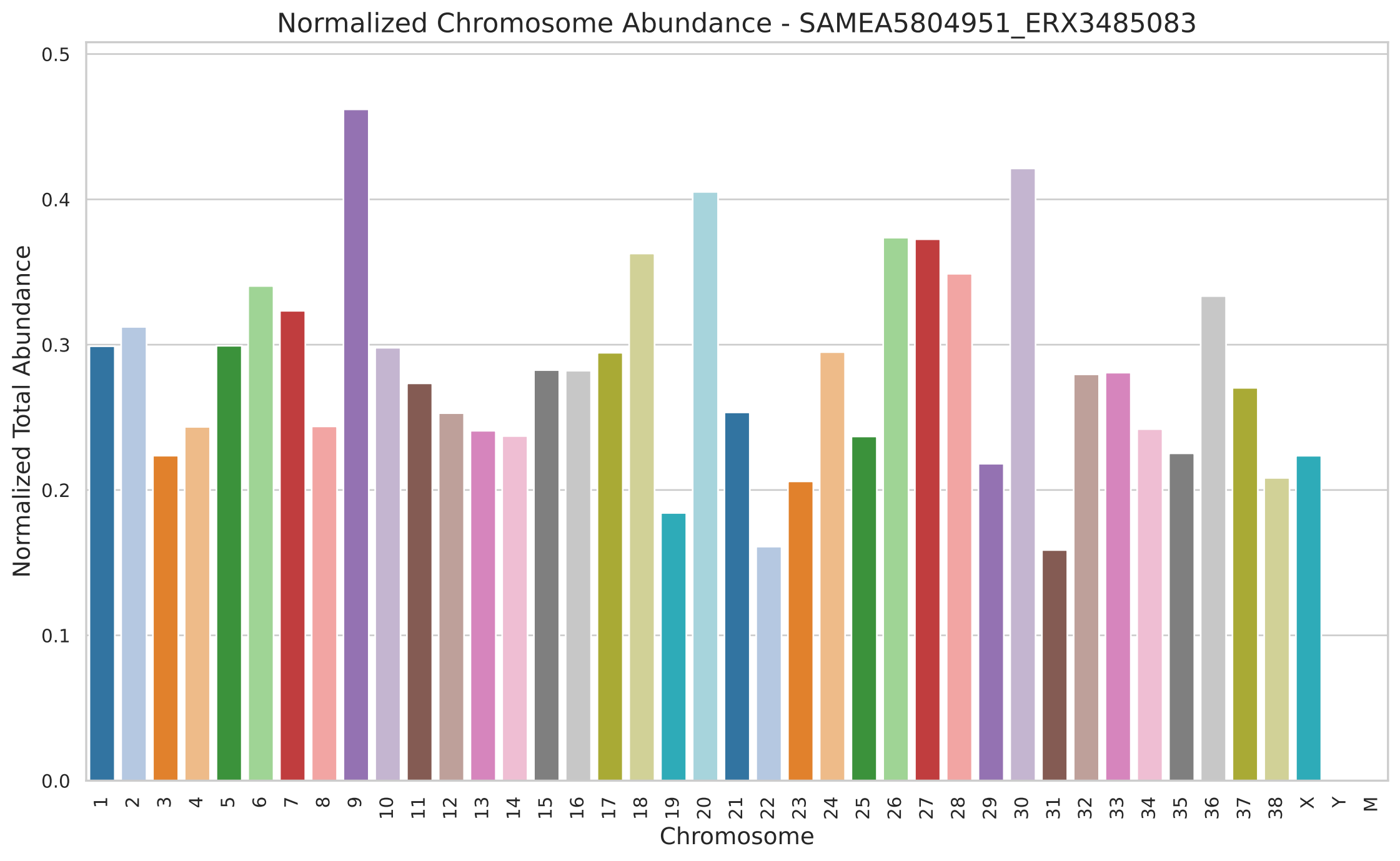

Normalized Chromosome Abundance - SAMEA5804986_ERX3485028
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

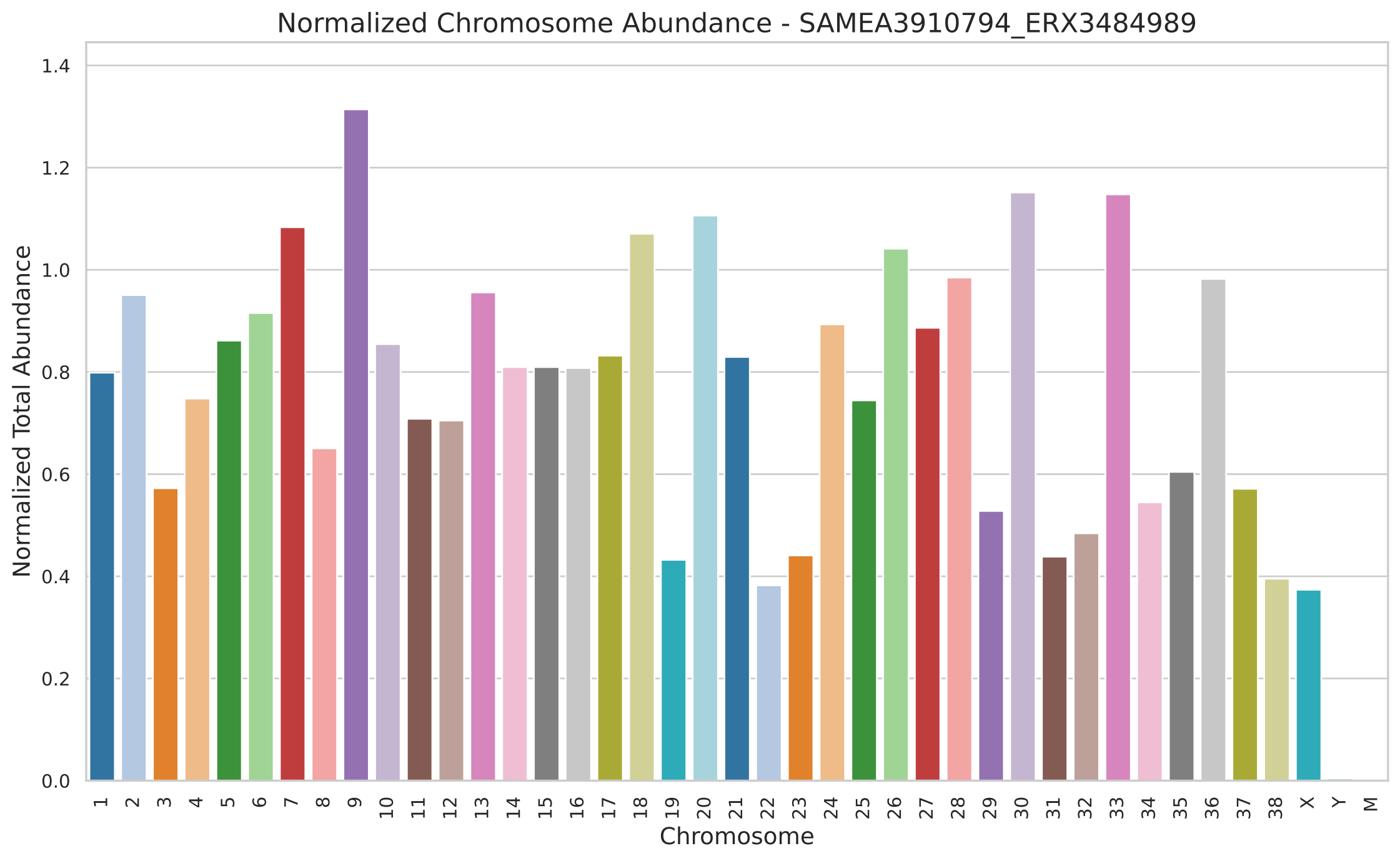

Normalized Chromosome Abundance - SAMEA5804334_ERX3485047
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

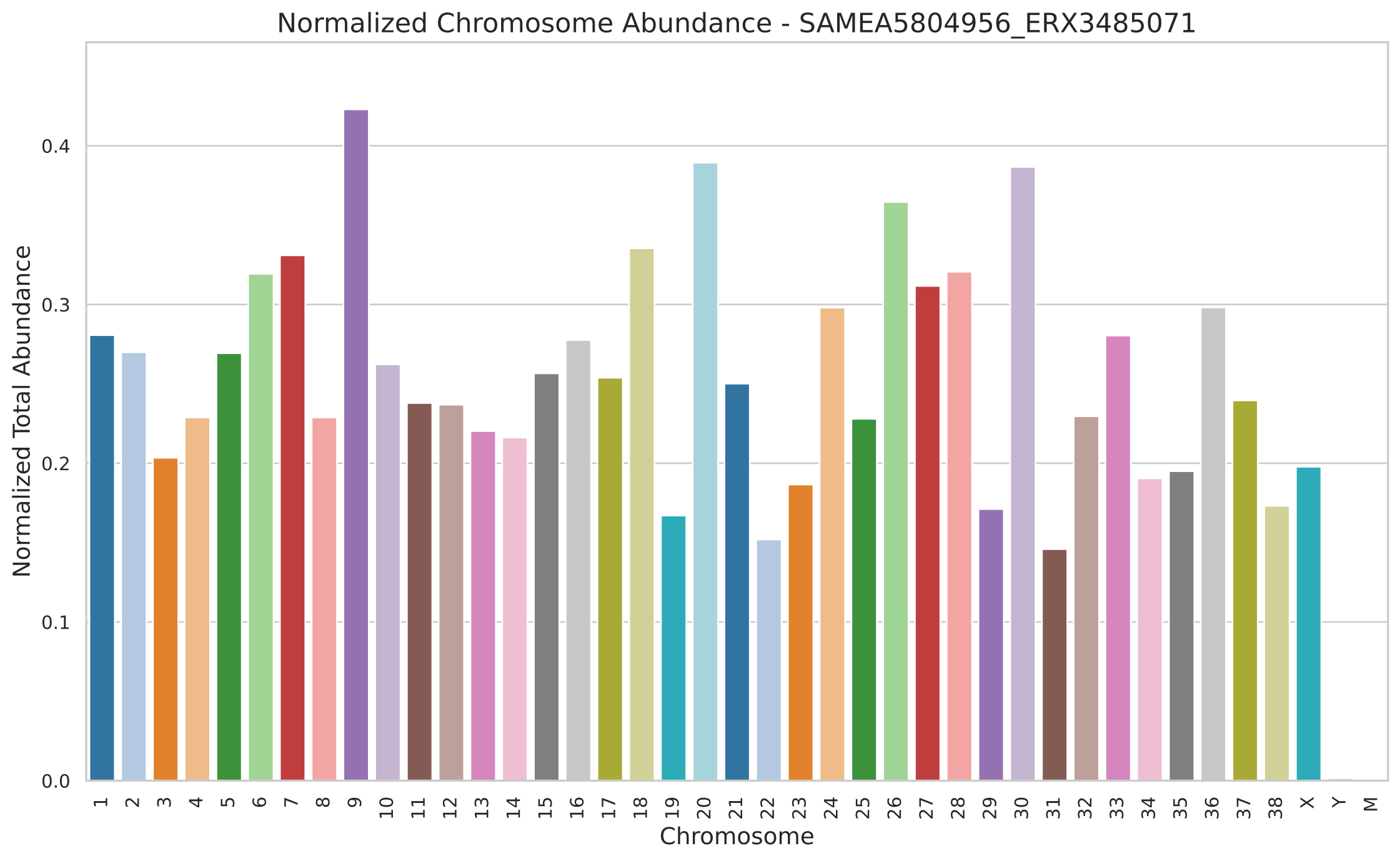

Normalized Chromosome Abundance - SAMEA5804860_ERX3485048
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

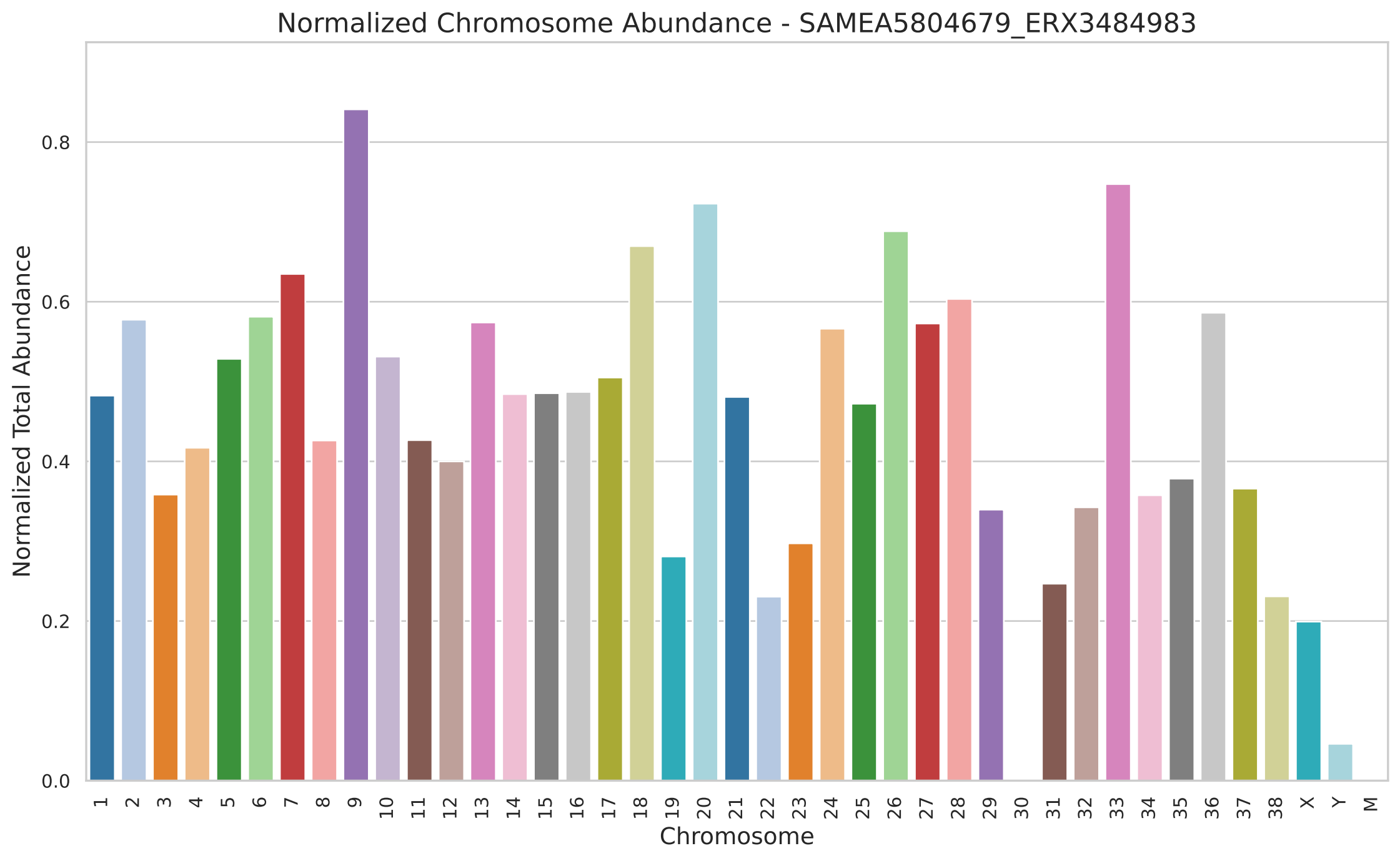

Normalized Chromosome Abundance - SAMEA5804870_ERX3485053
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

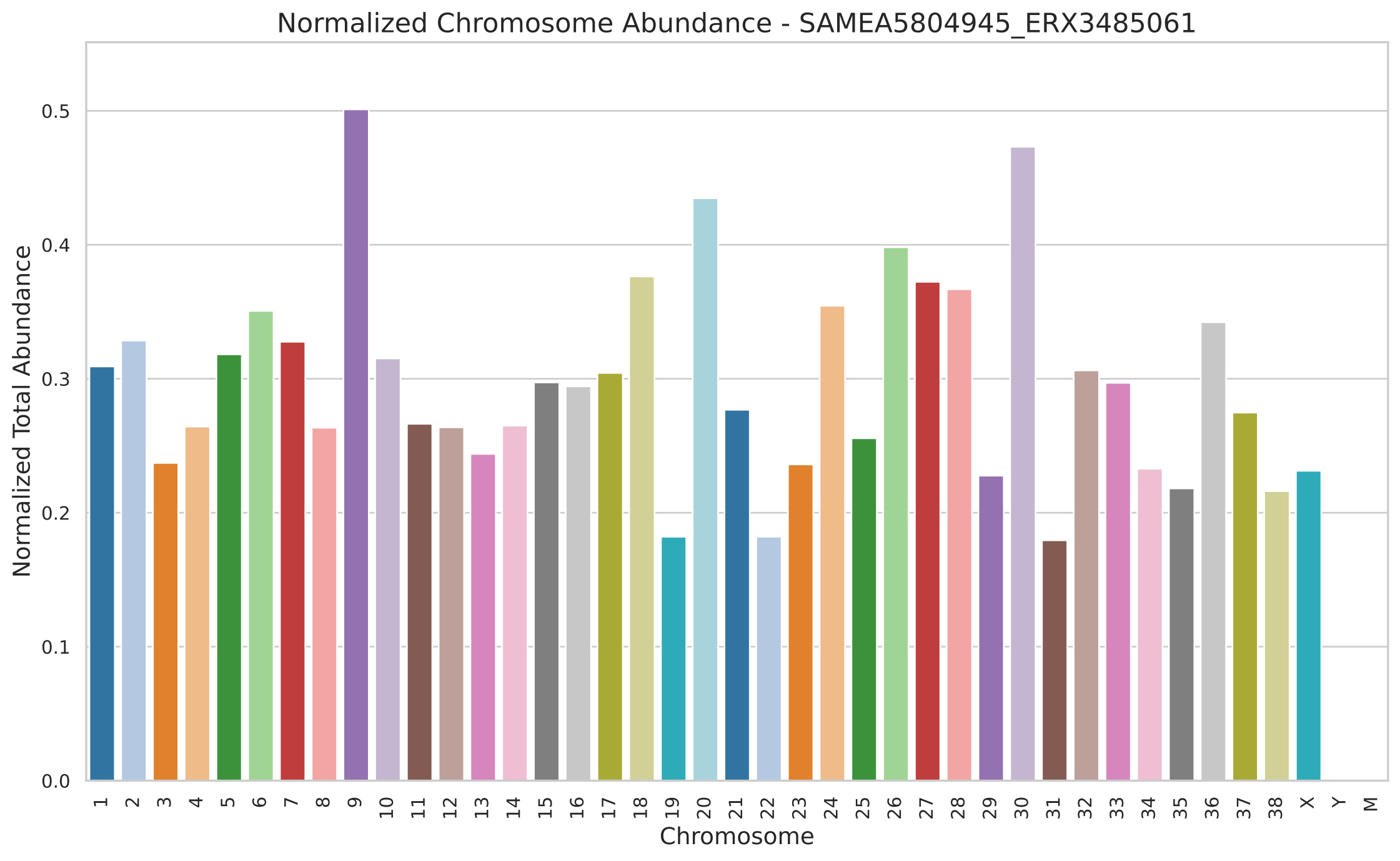

Normalized Chromosome Abundance - SAMEA5804934_ERX3485058
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

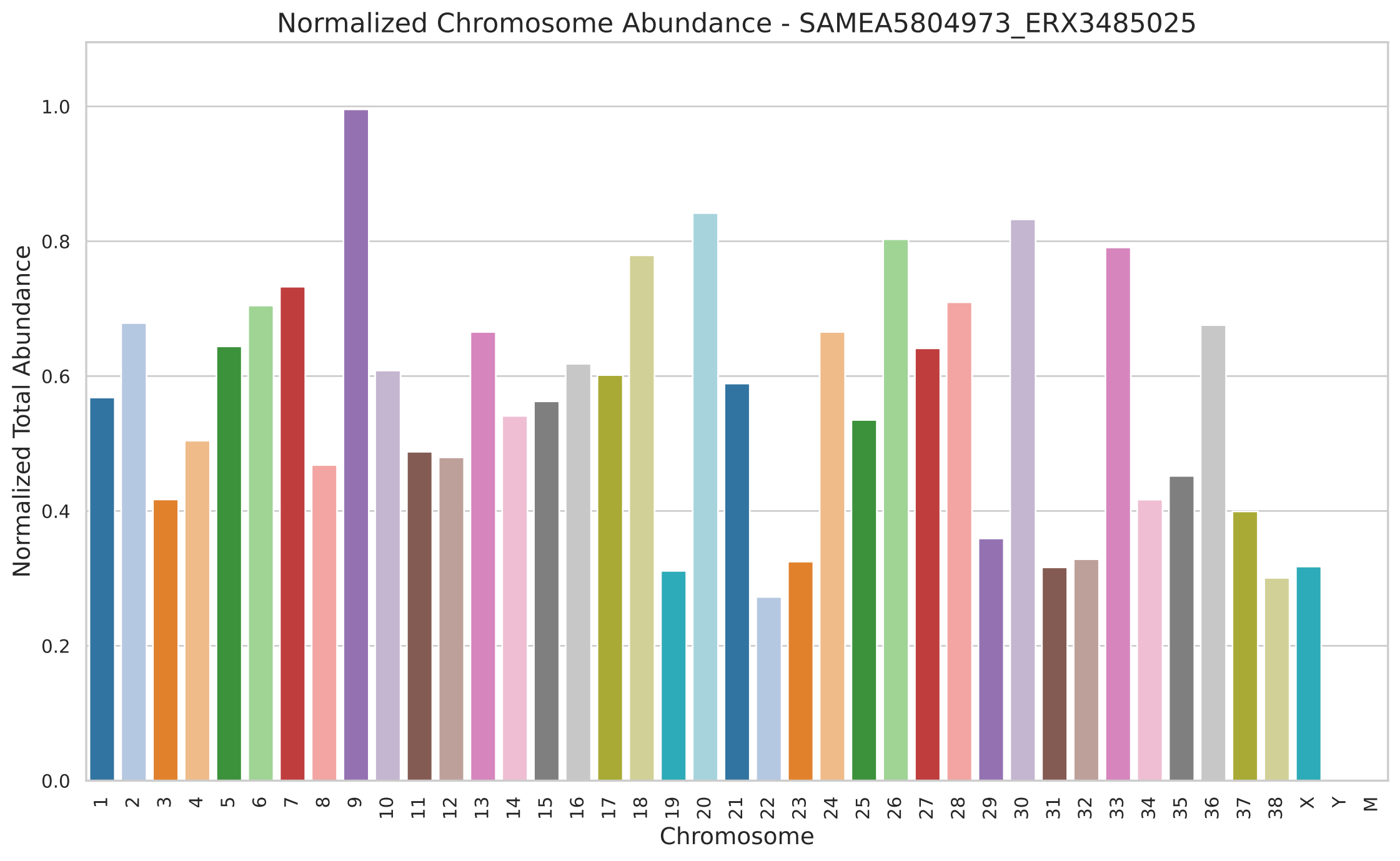

Normalized Chromosome Abundance - SAMEA5804951_ERX3485083
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

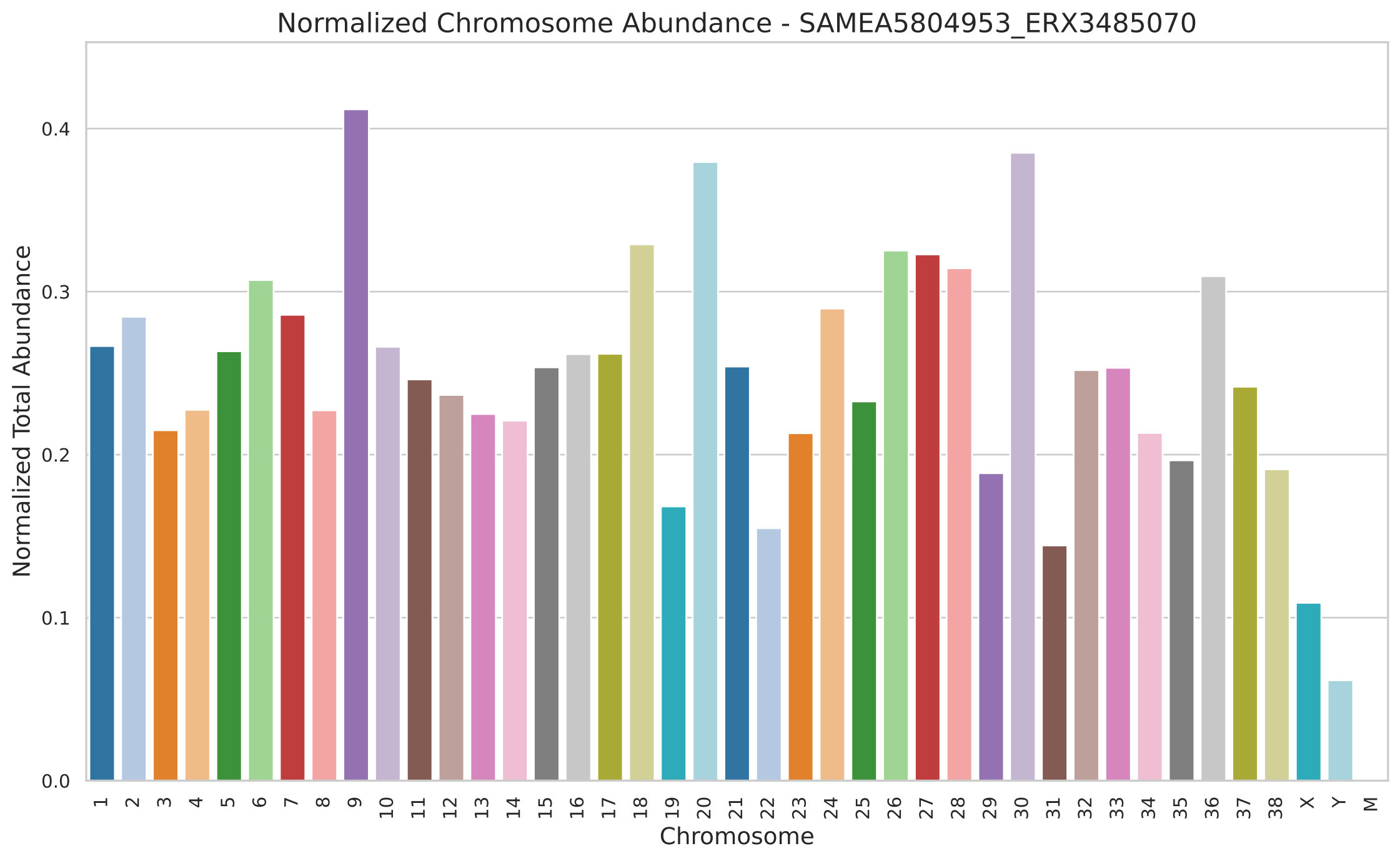

Normalized Chromosome Abundance - SAMEA3910794_ERX3484989
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

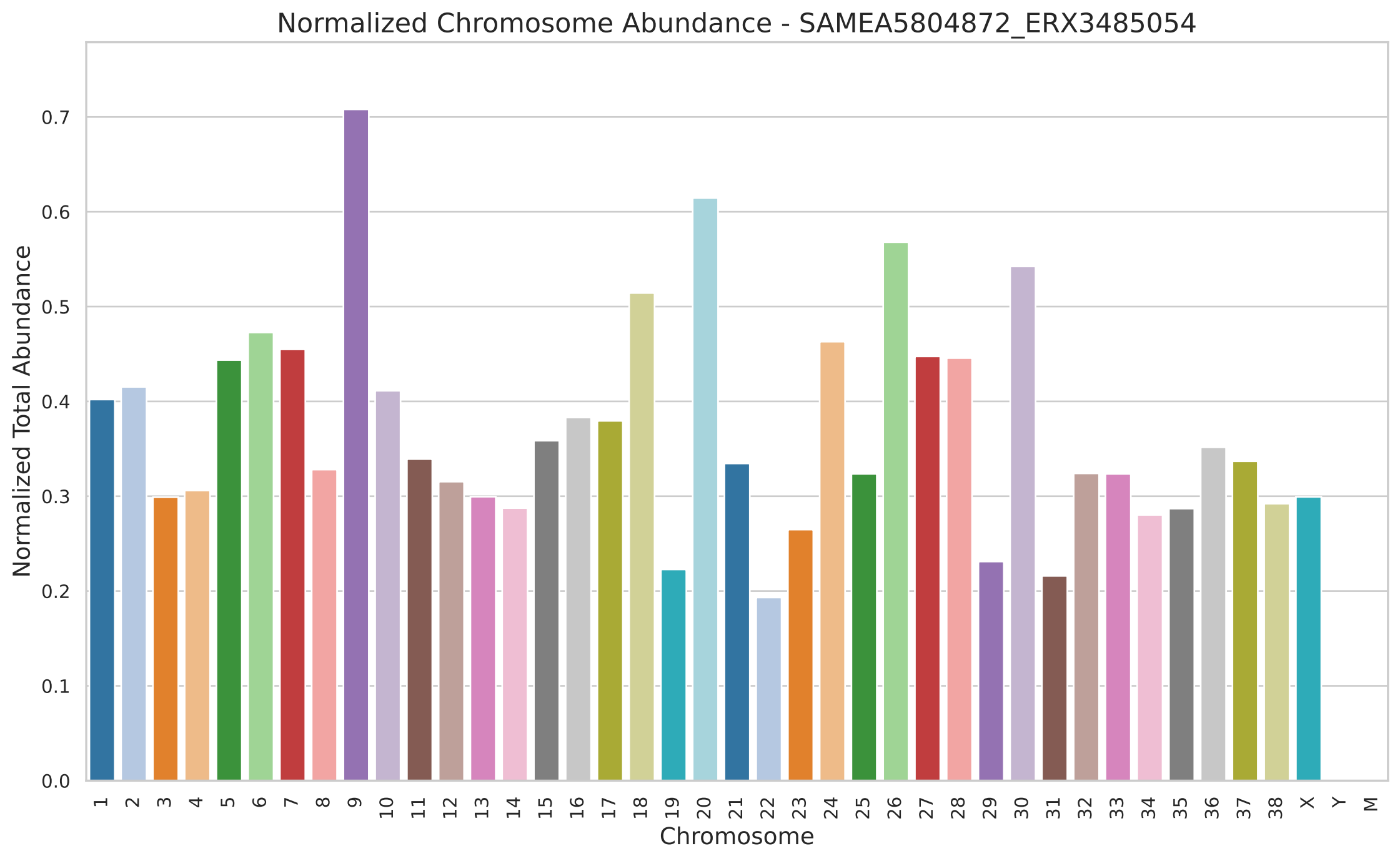

Normalized Chromosome Abundance - SAMEA5804956_ERX3485071
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

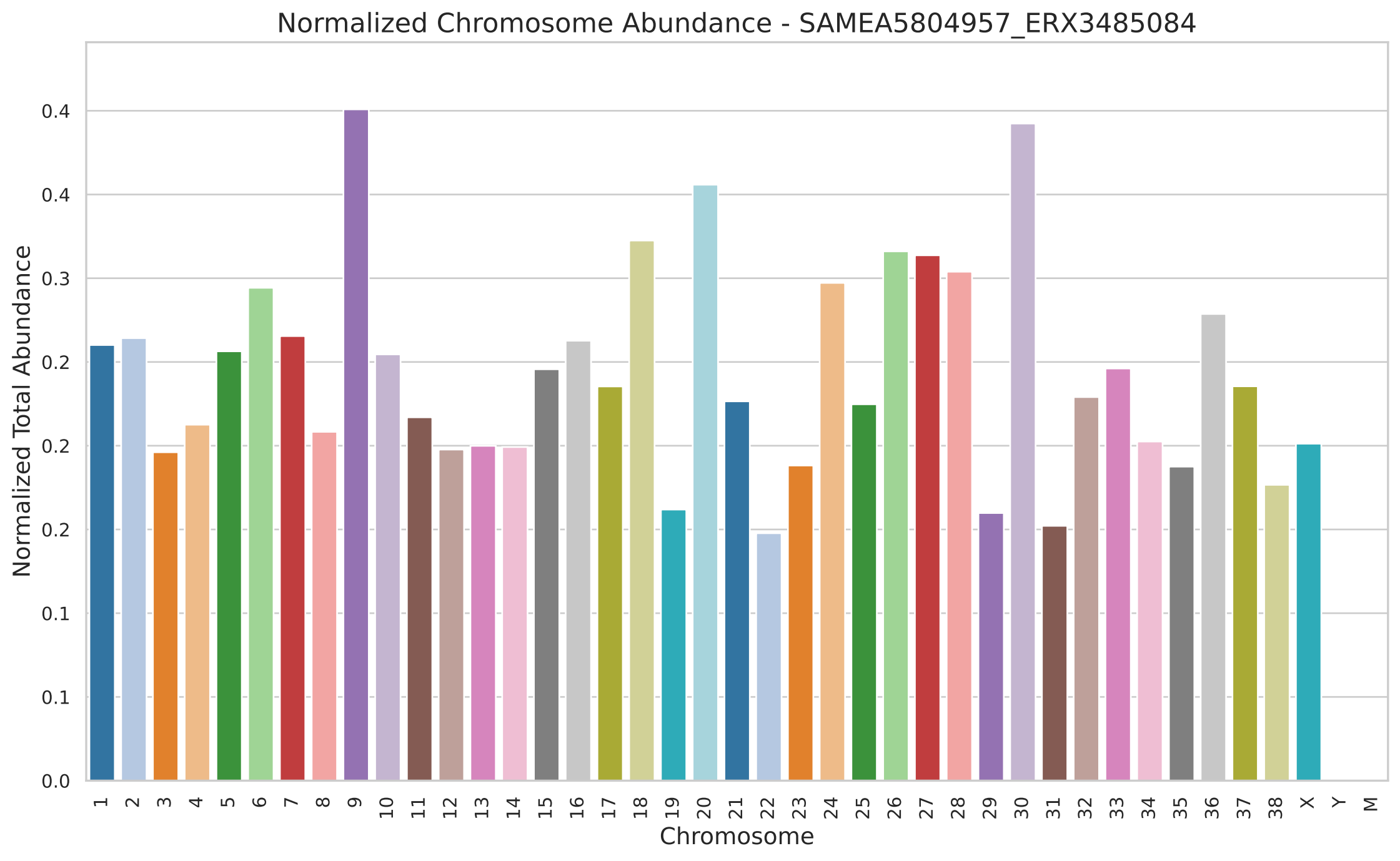

Normalized Chromosome Abundance - SAMEA5804679_ERX3484983
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

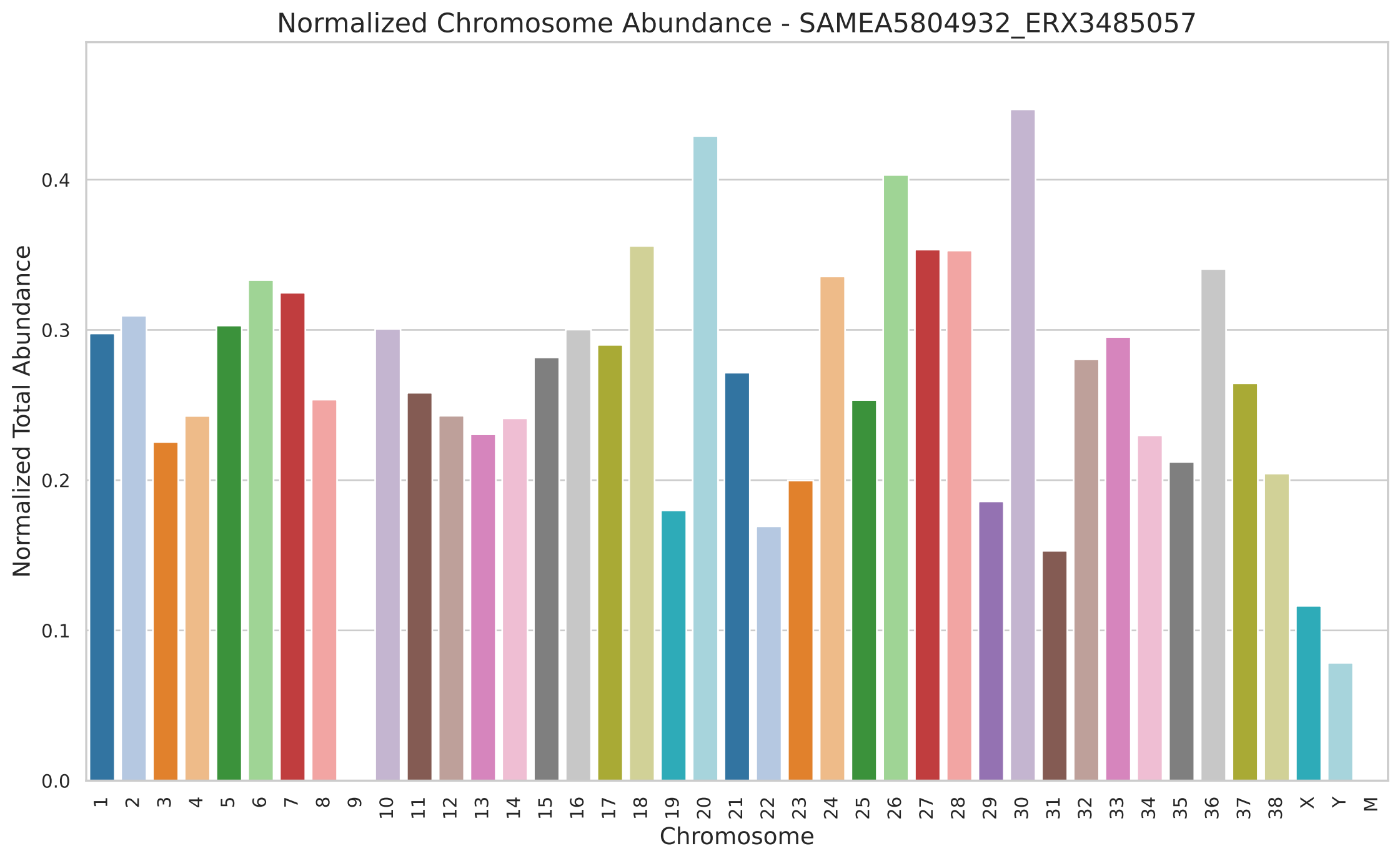

Normalized Chromosome Abundance - SAMEA5804945_ERX3485061
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

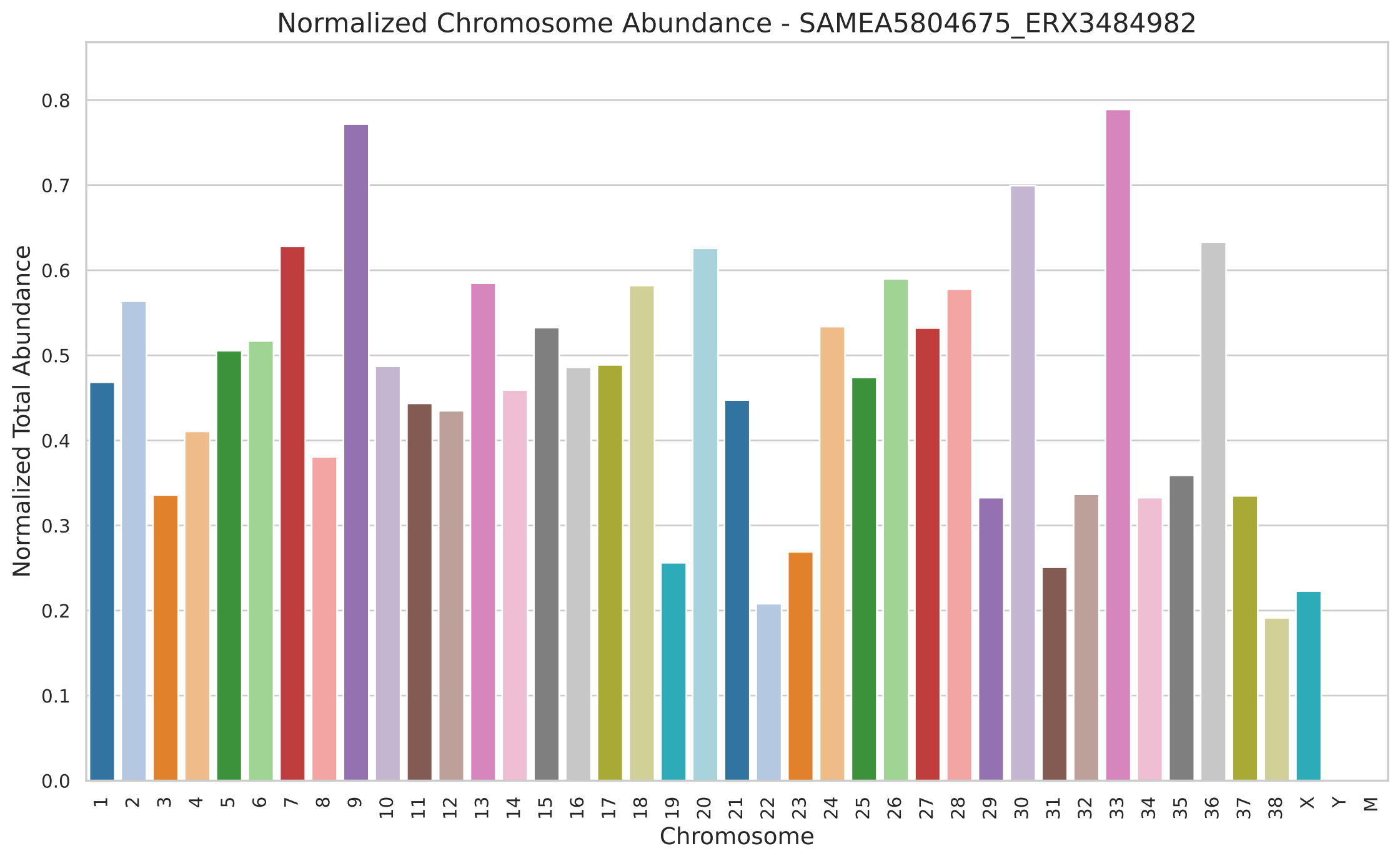

Normalized Chromosome Abundance - SAMEA5804973_ERX3485025
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

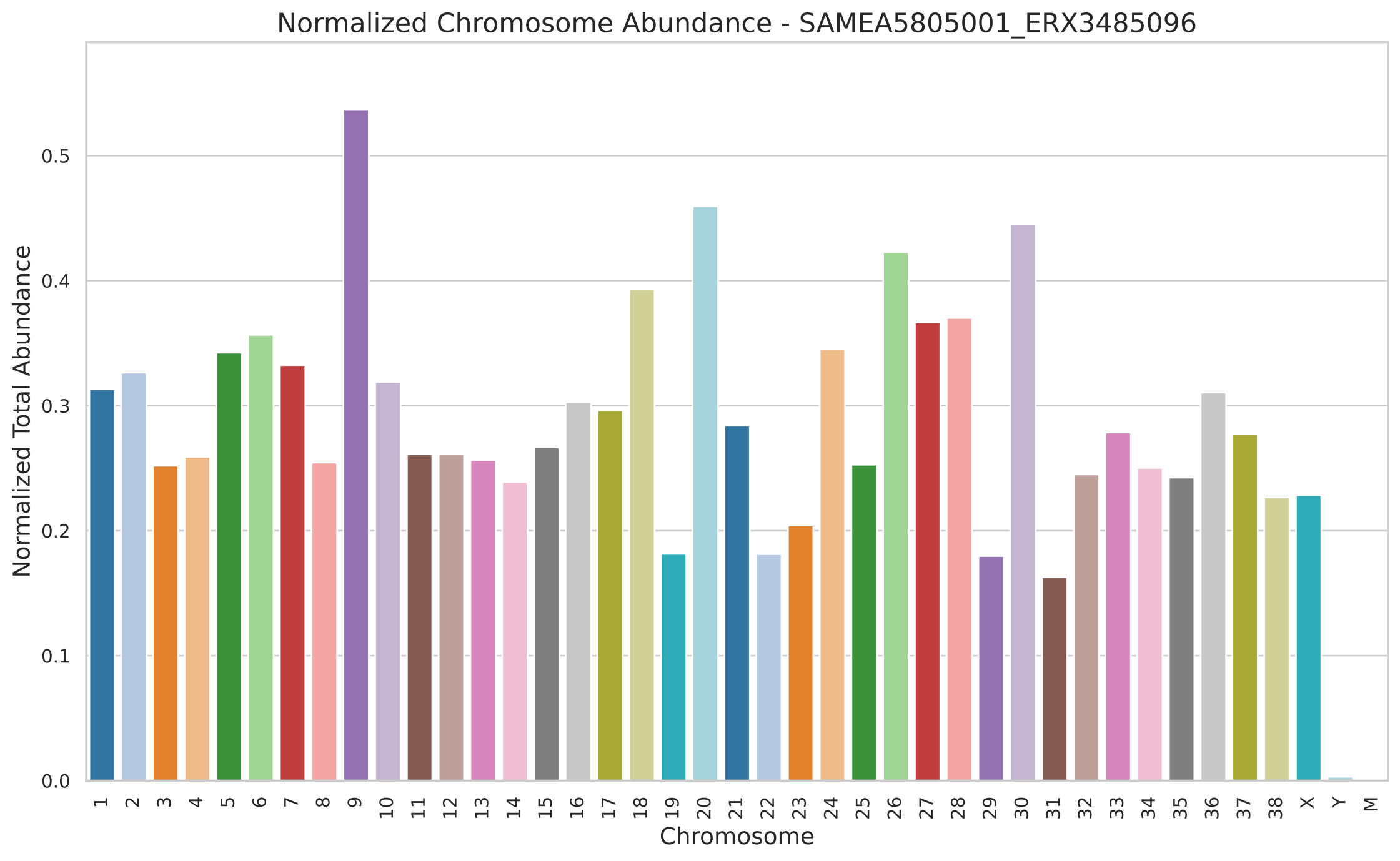

Normalized Chromosome Abundance - SAMEA5804953_ERX3485070
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

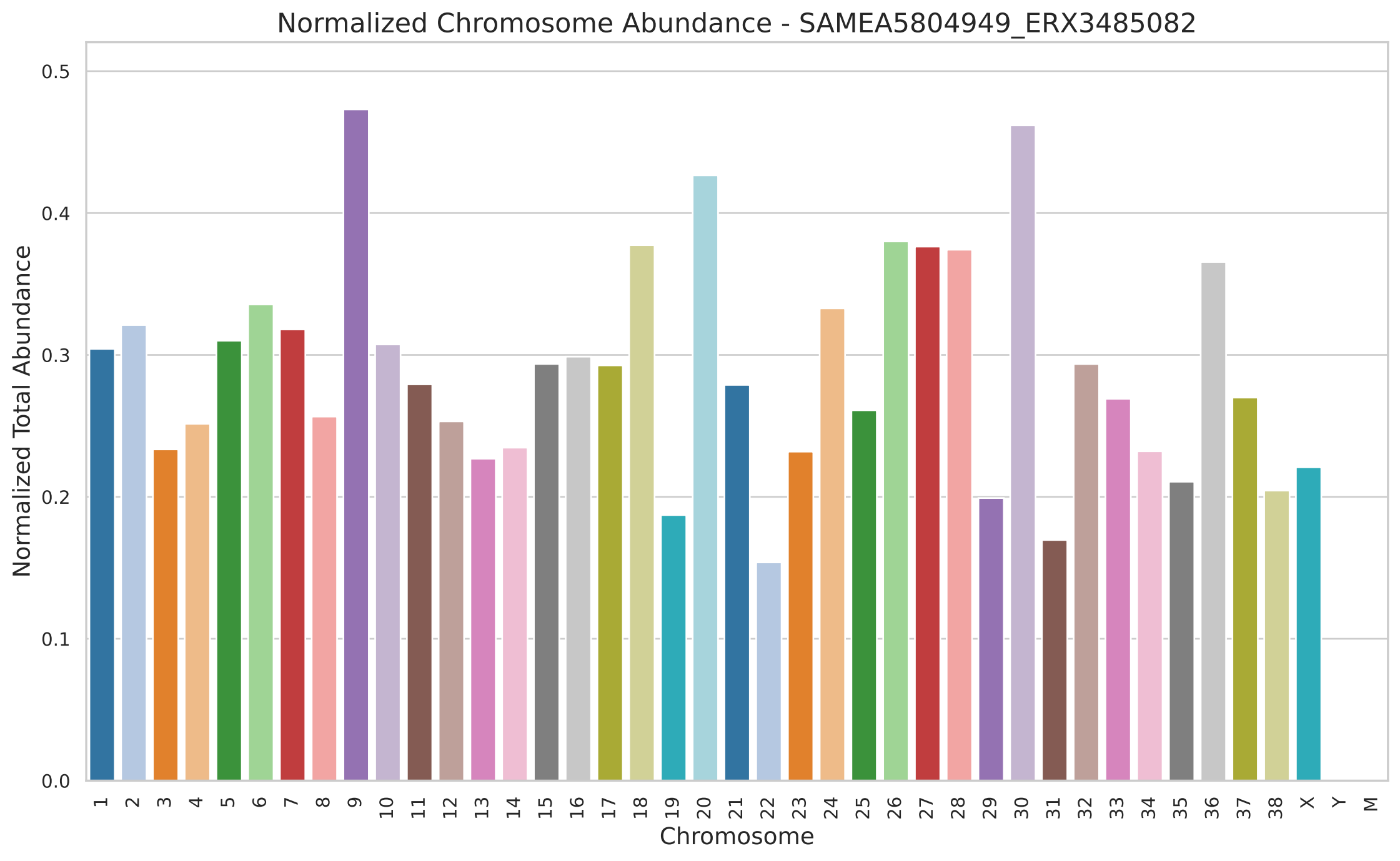

Normalized Chromosome Abundance - SAMEA5804872_ERX3485054
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

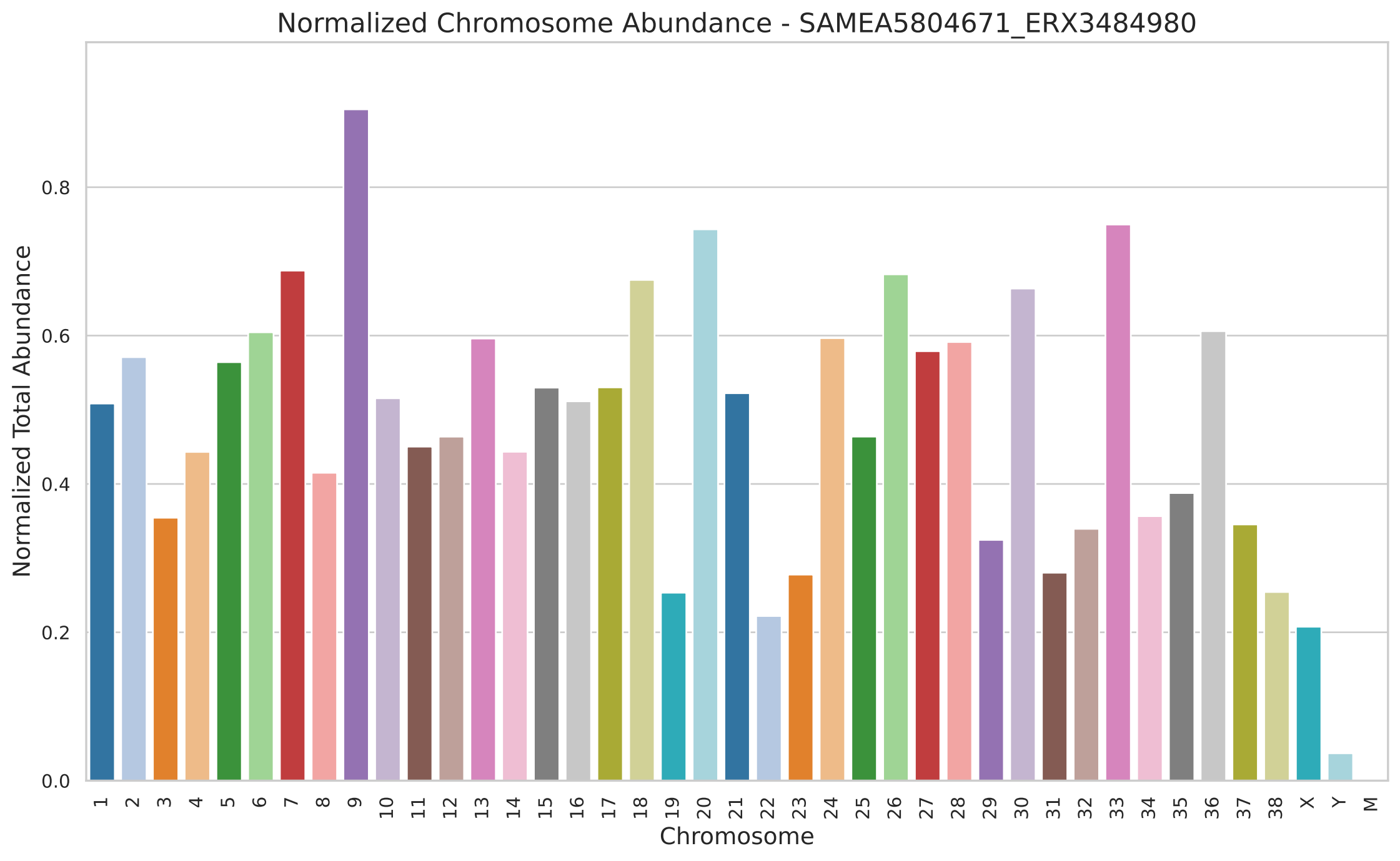

Normalized Chromosome Abundance - SAMEA5804957_ERX3485084
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

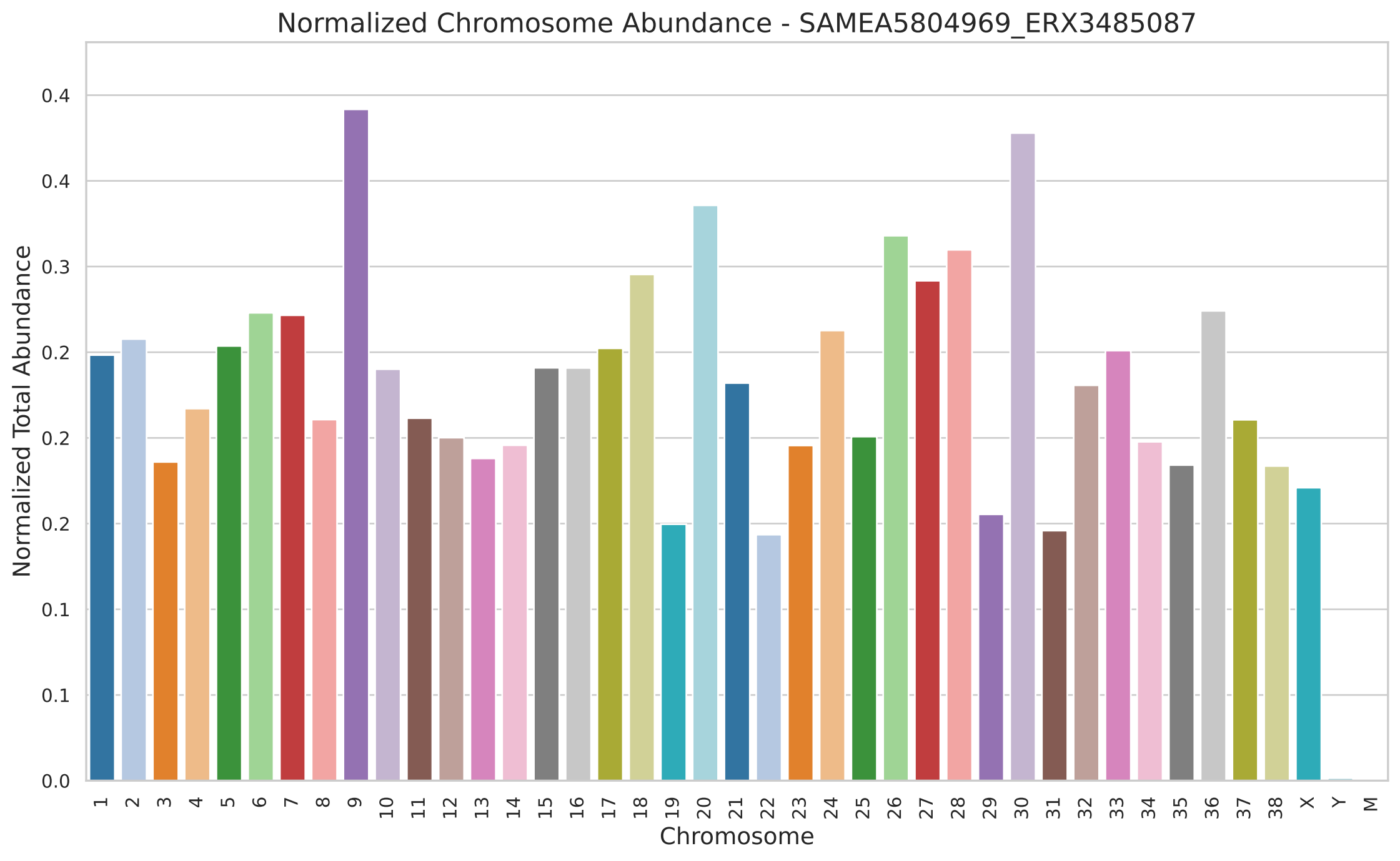

Normalized Chromosome Abundance - SAMEA5804932_ERX3485057
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

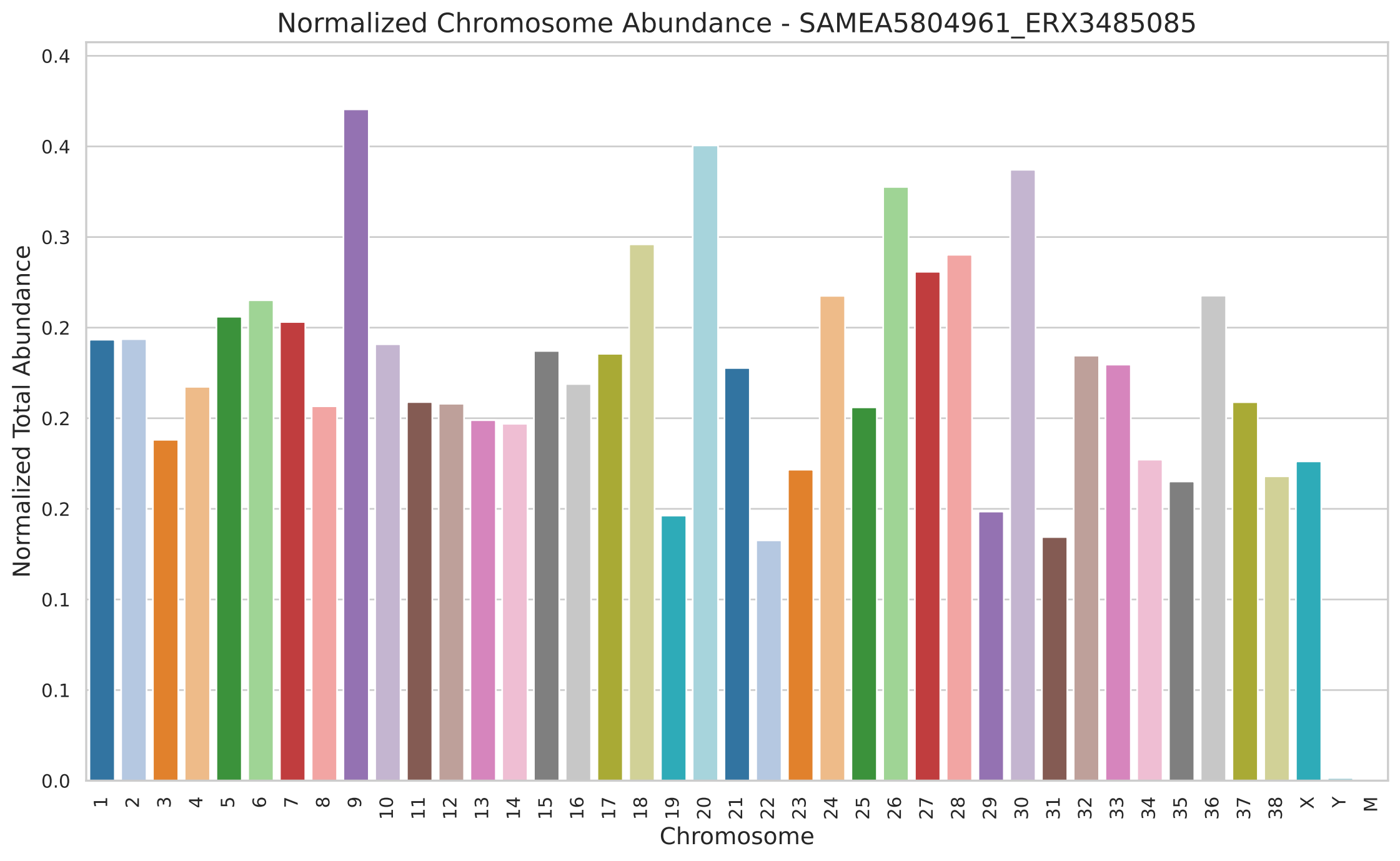

Normalized Chromosome Abundance - SAMEA5804675_ERX3484982
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

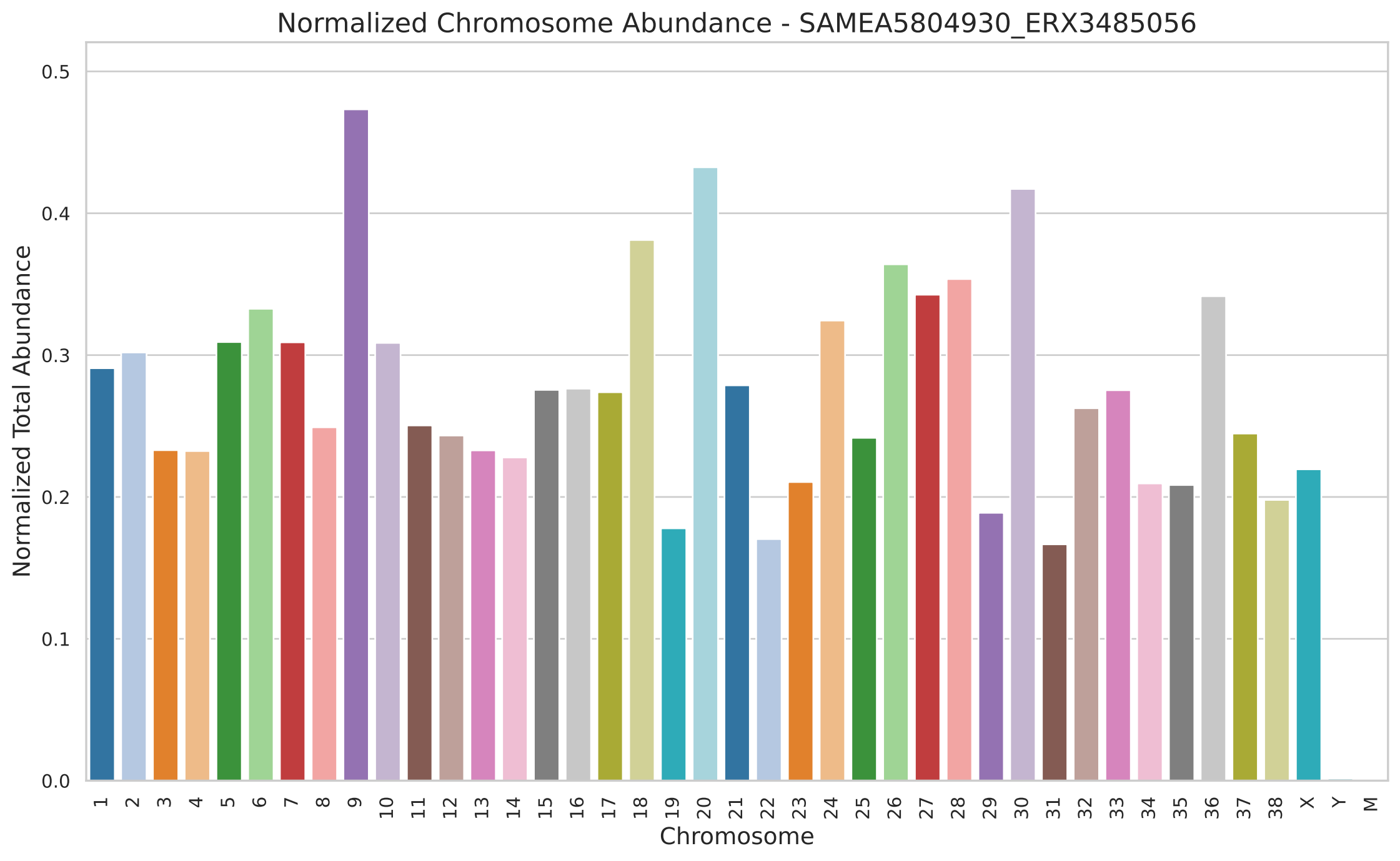

Normalized Chromosome Abundance - SAMEA5805001_ERX3485096
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

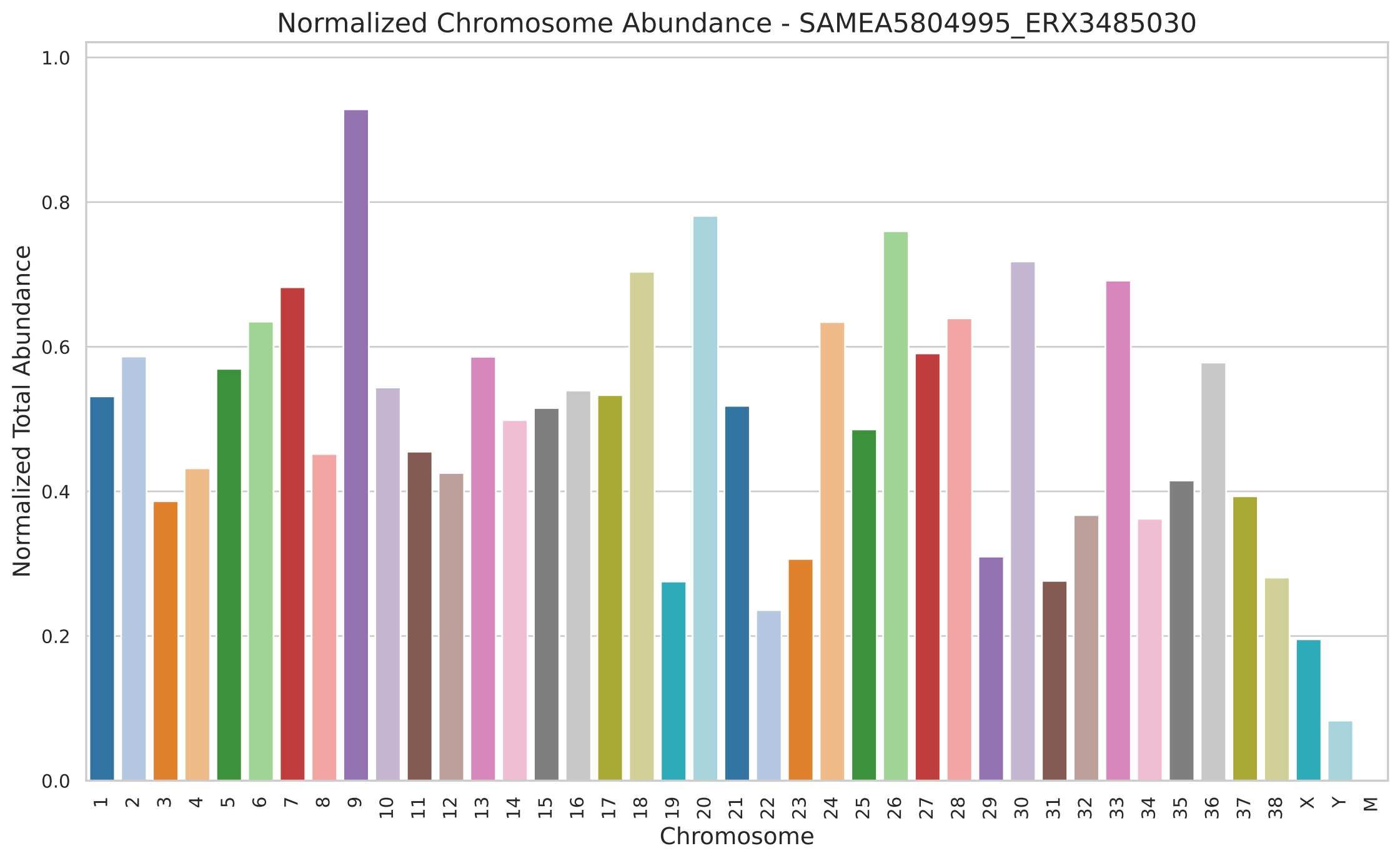

Normalized Chromosome Abundance - SAMEA5804949_ERX3485082
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

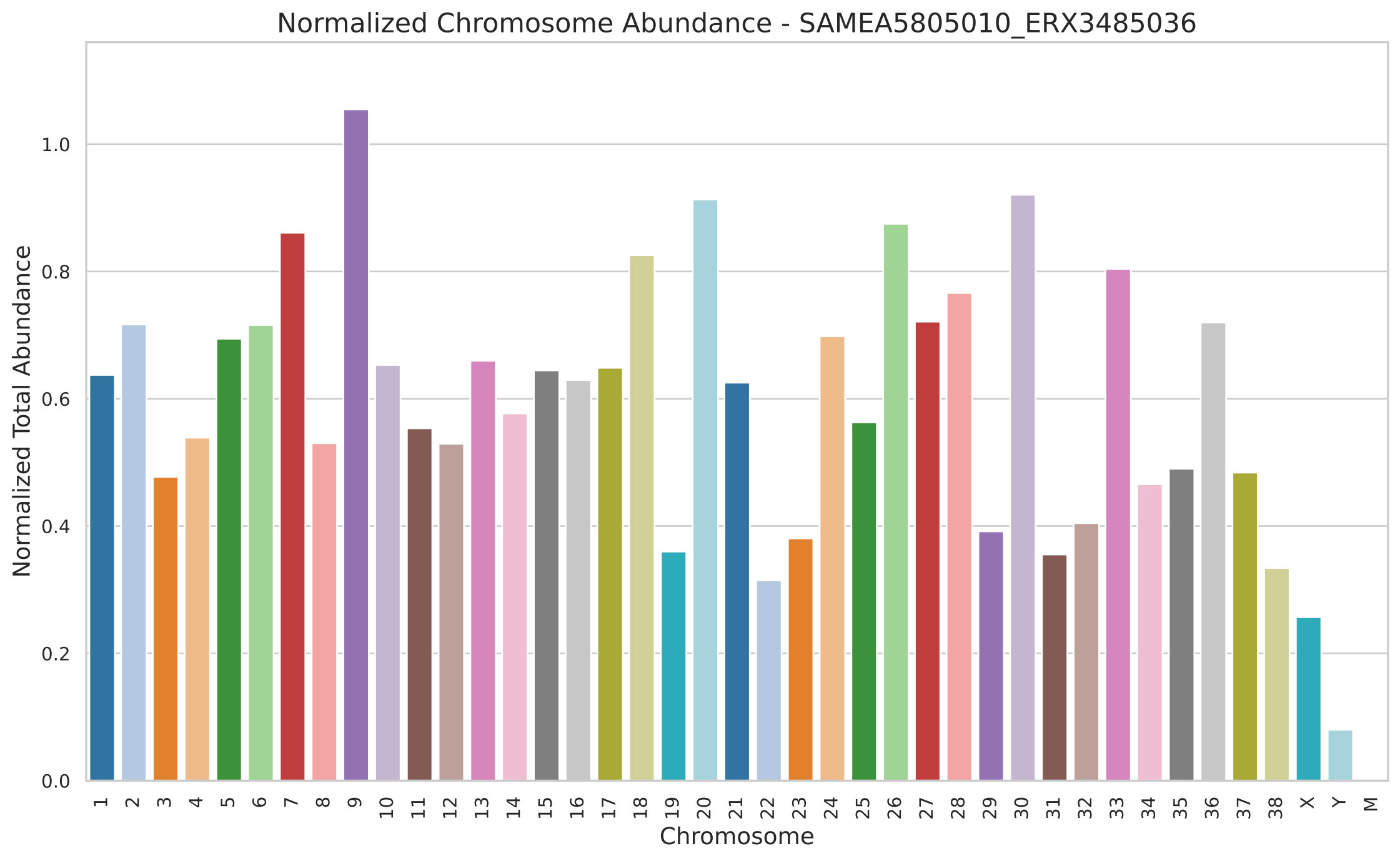

Normalized Chromosome Abundance - SAMEA5804671_ERX3484980
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

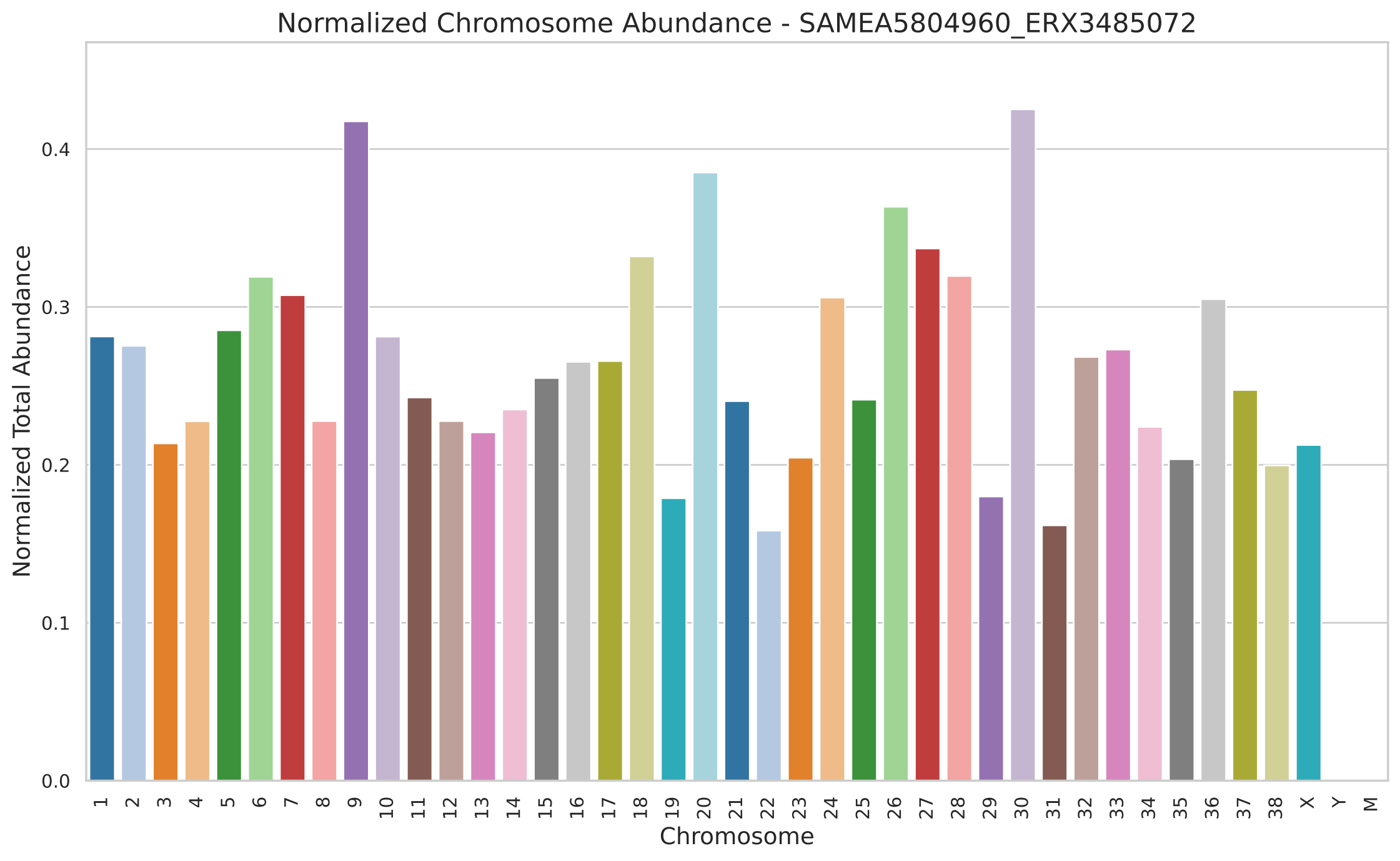

Normalized Chromosome Abundance - SAMEA5804969_ERX3485087
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

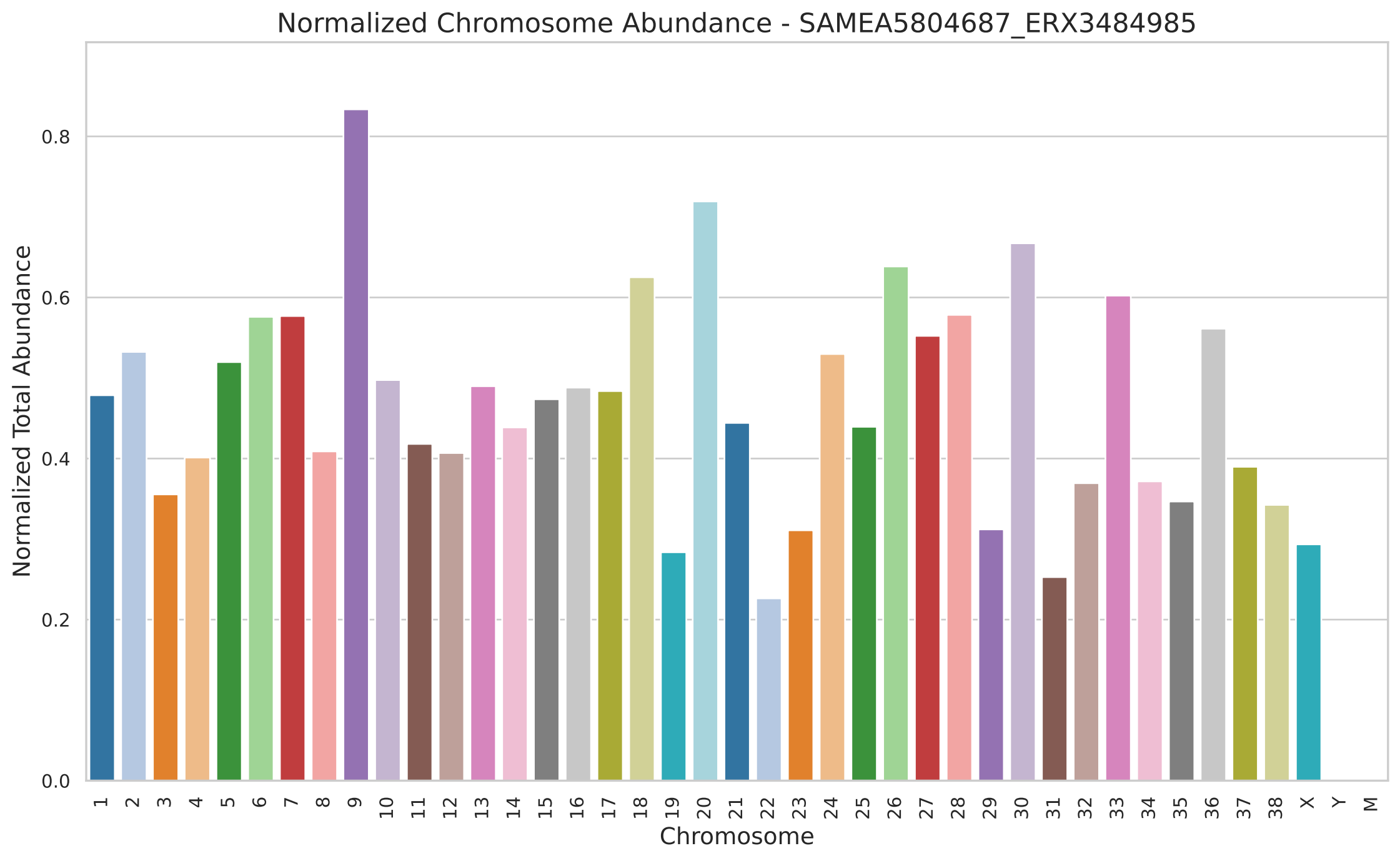

Normalized Chromosome Abundance - SAMEA5804961_ERX3485085
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

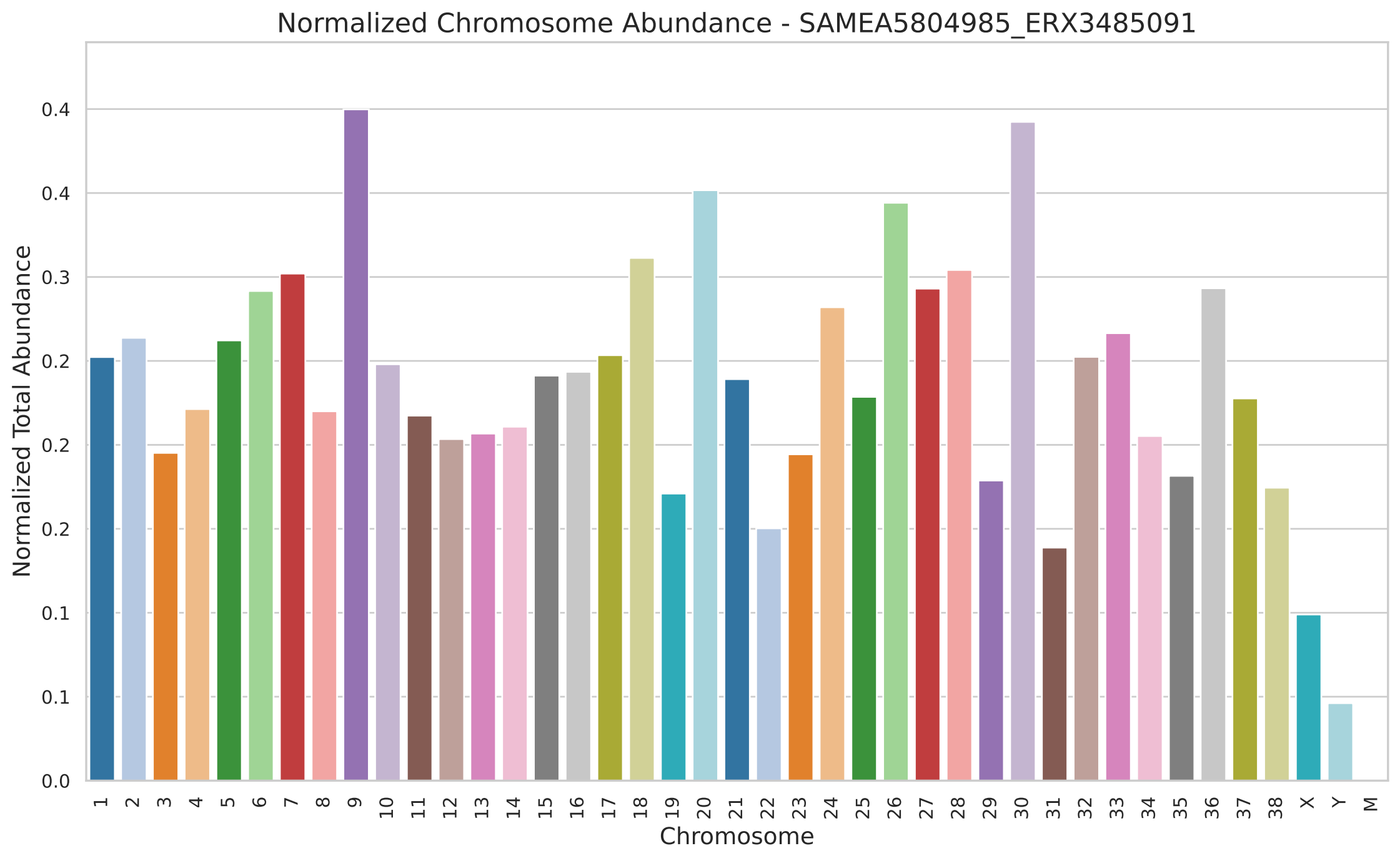

Normalized Chromosome Abundance - SAMEA5804930_ERX3485056
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

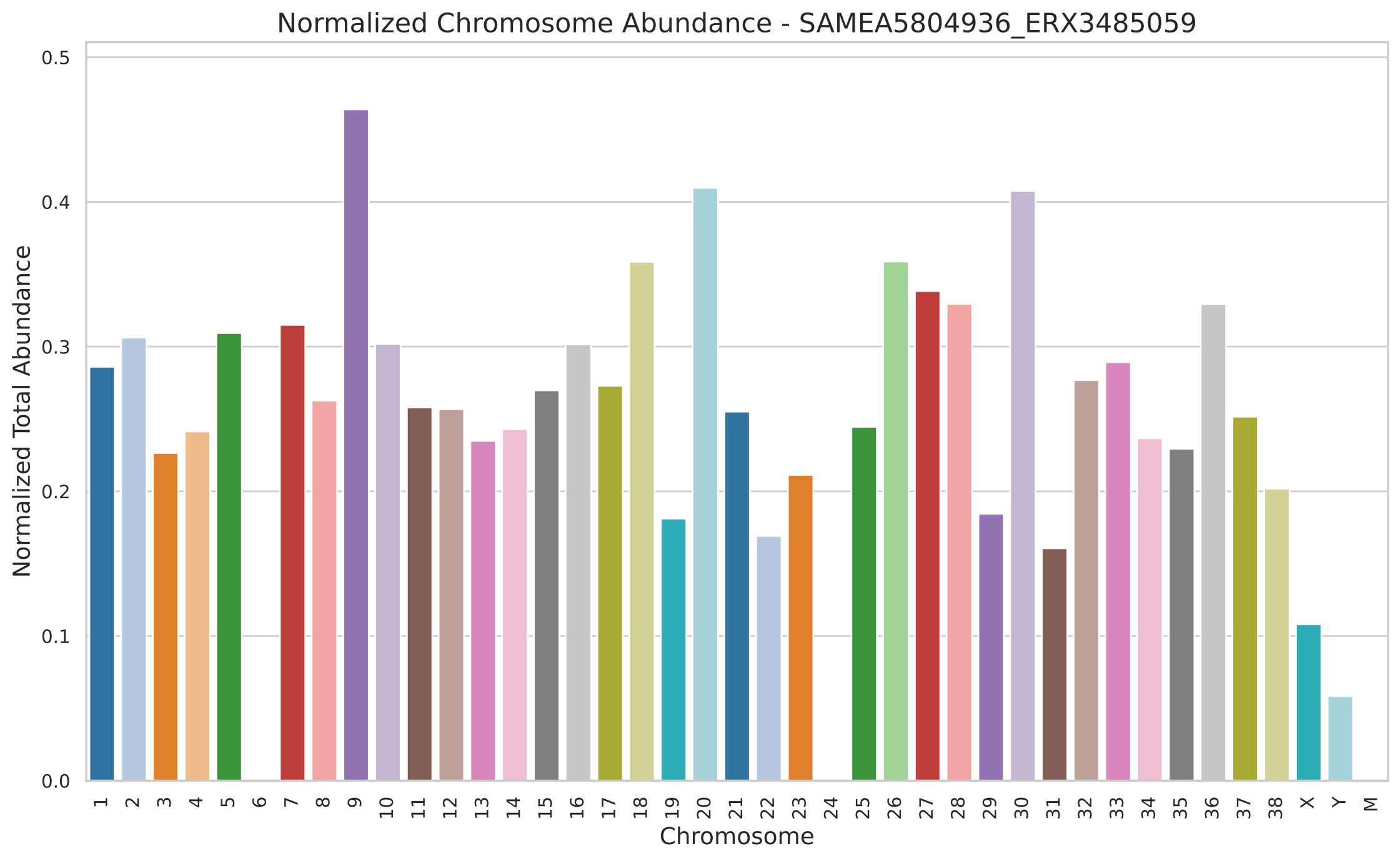

Normalized Chromosome Abundance - SAMEA5804995_ERX3485030
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

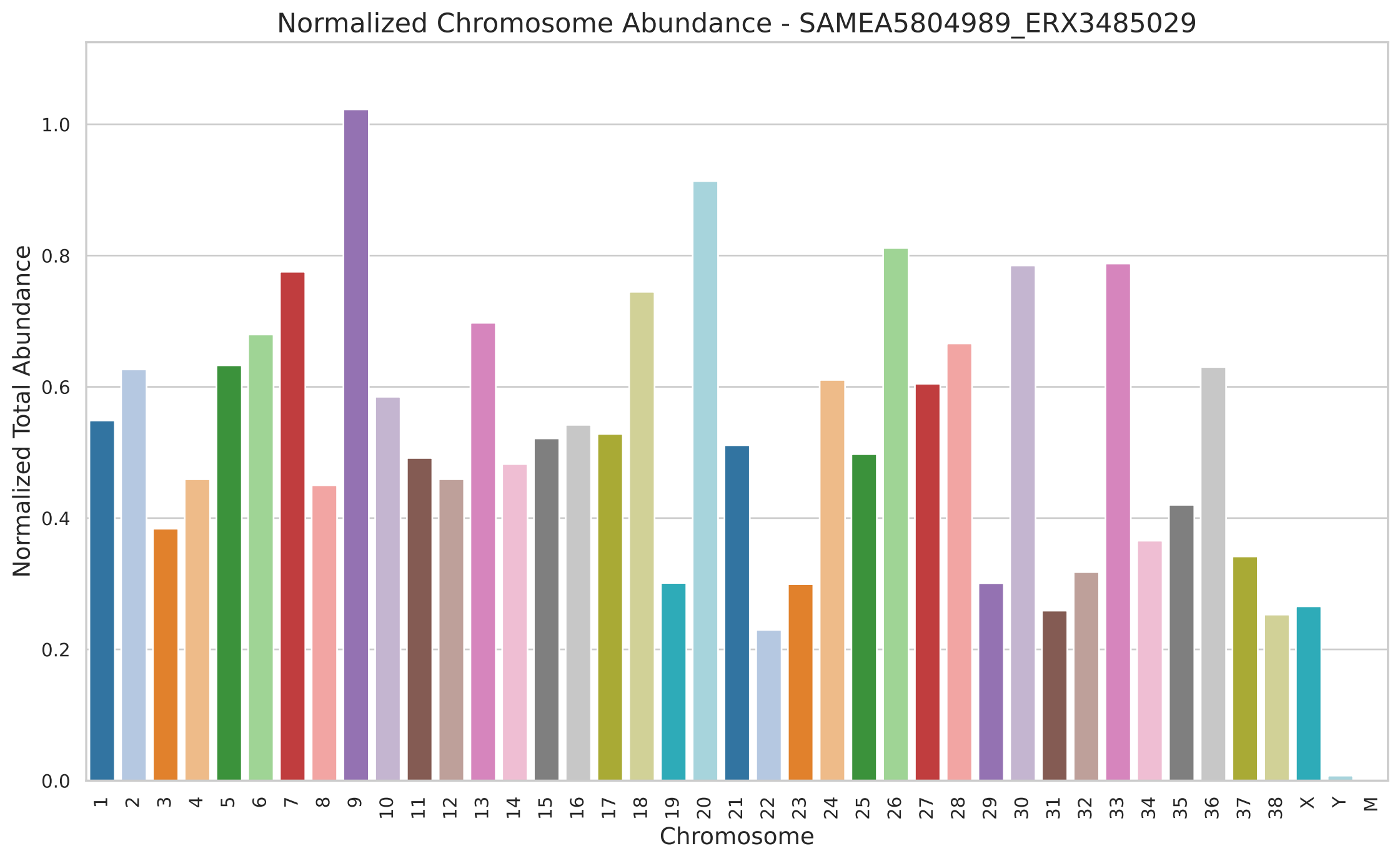

Normalized Chromosome Abundance - SAMEA5805010_ERX3485036
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

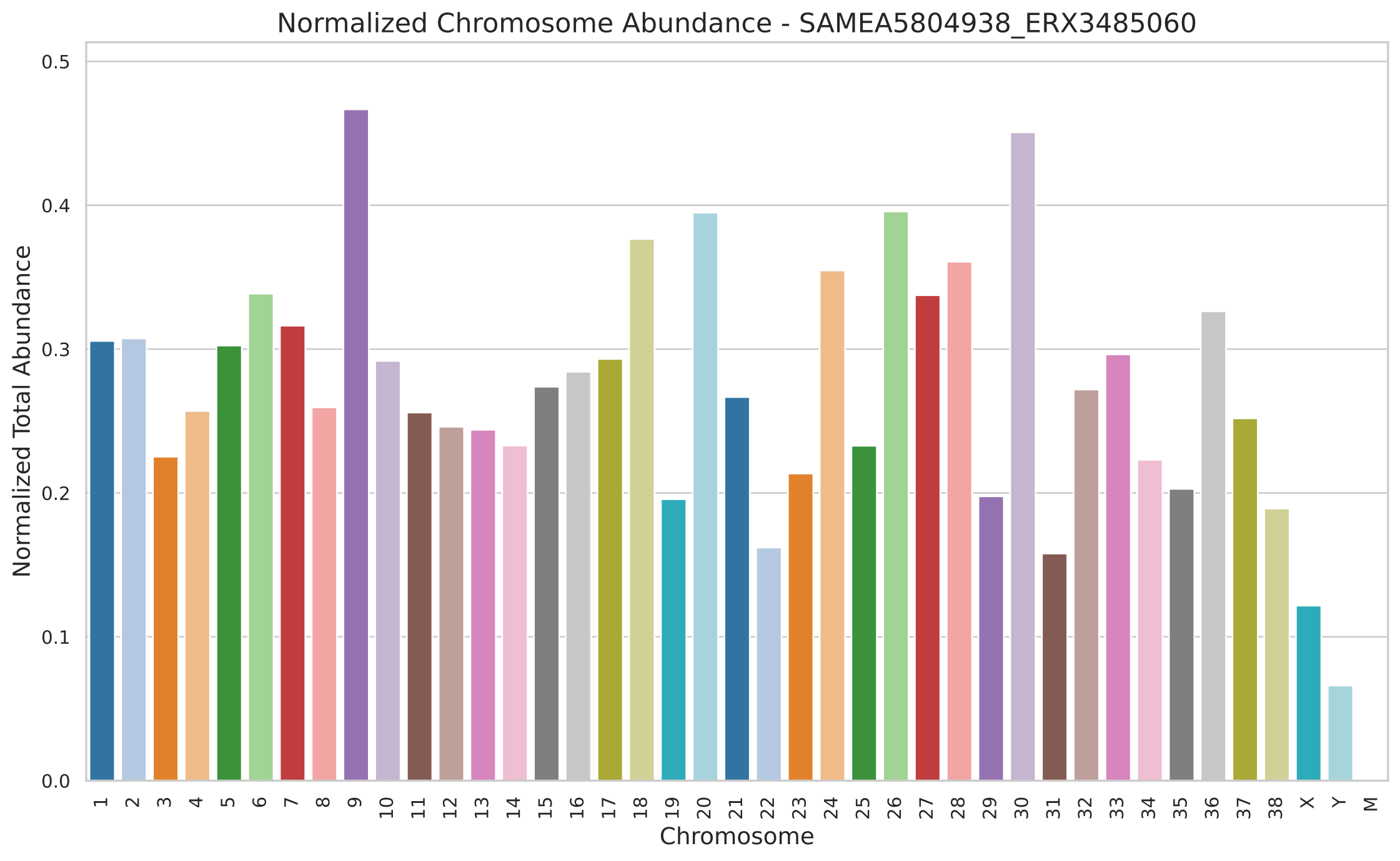

Normalized Chromosome Abundance - SAMEA5804960_ERX3485072
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

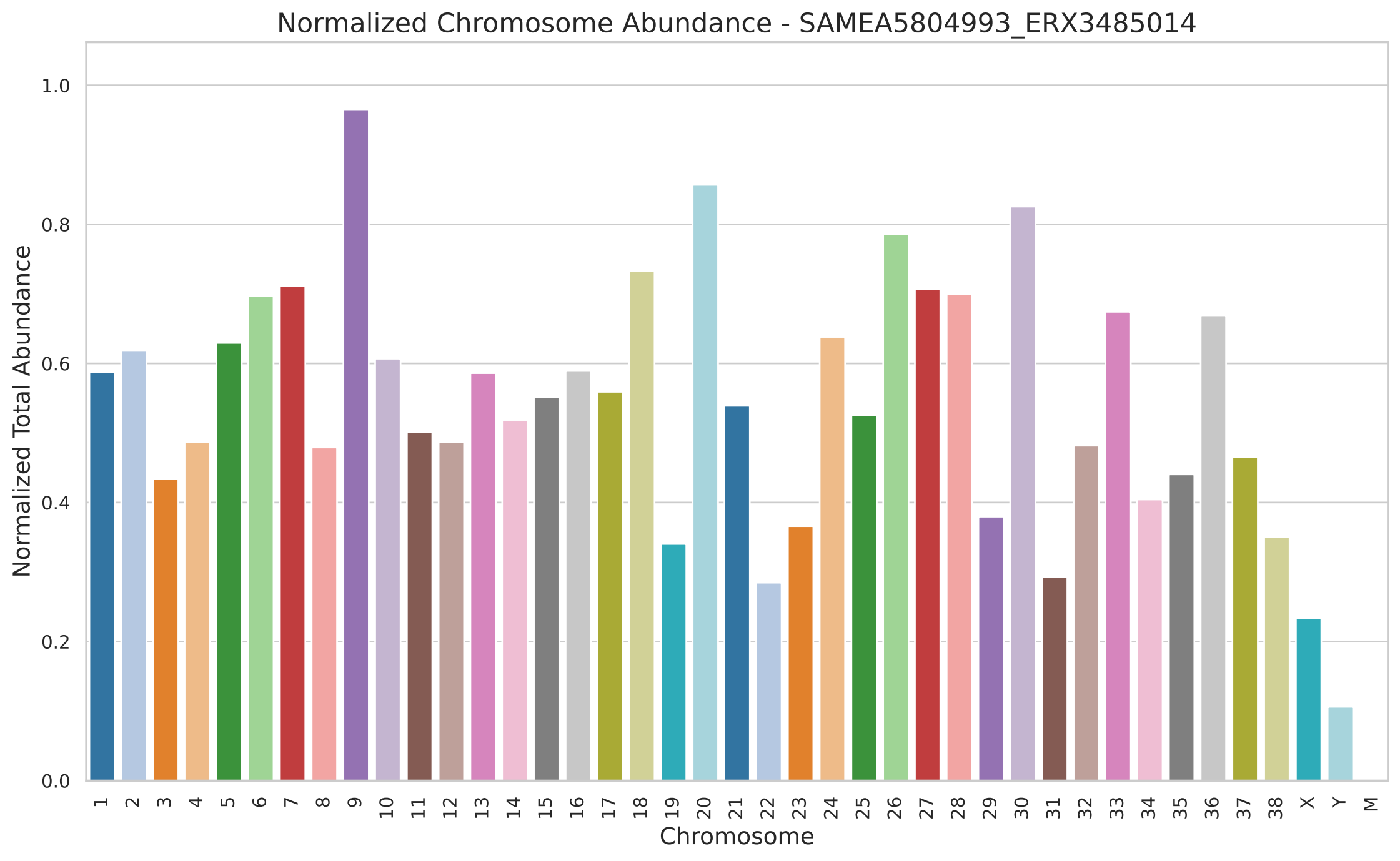

Normalized Chromosome Abundance - SAMEA5804687_ERX3484985
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

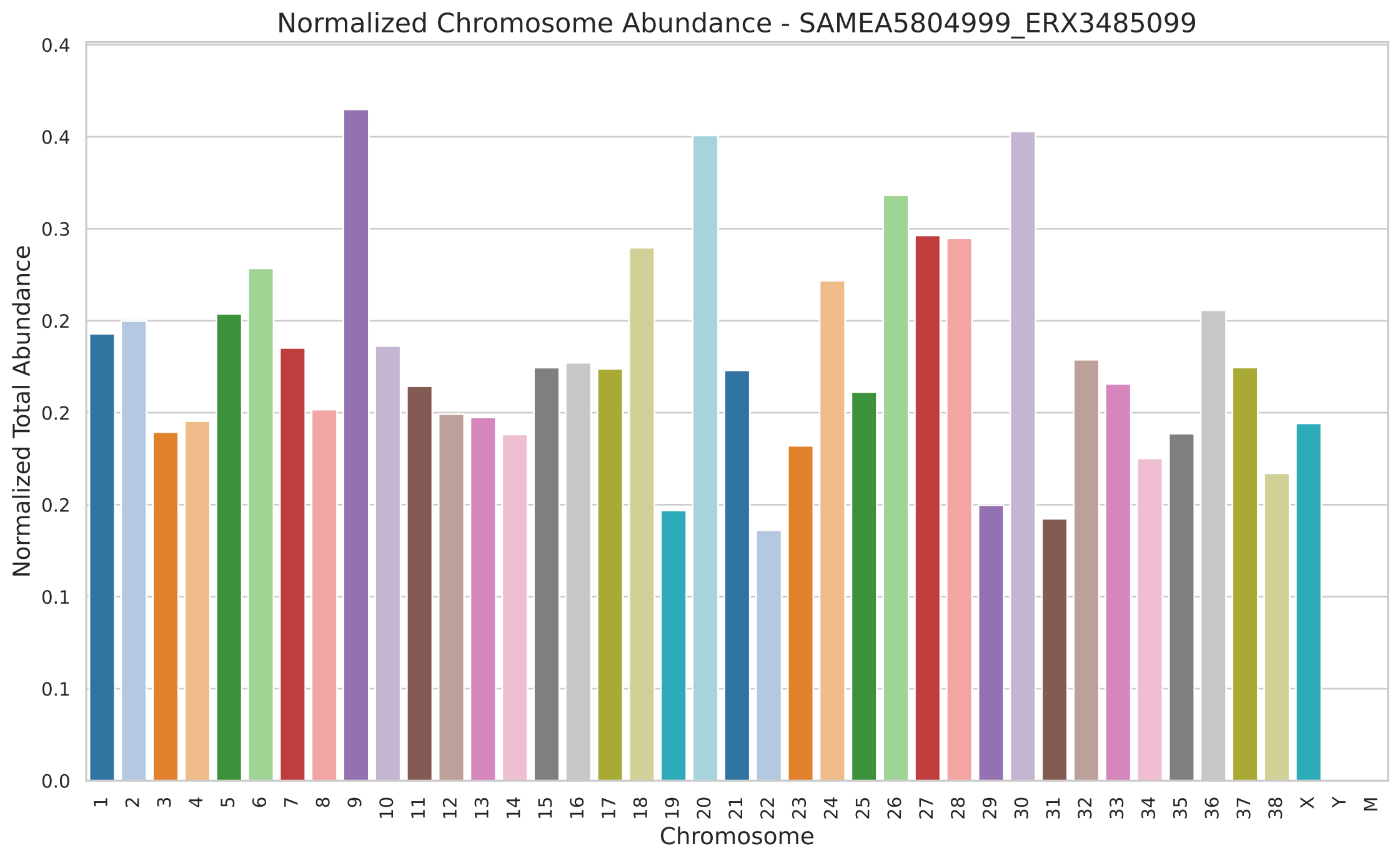

Normalized Chromosome Abundance - SAMEA5804985_ERX3485091
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

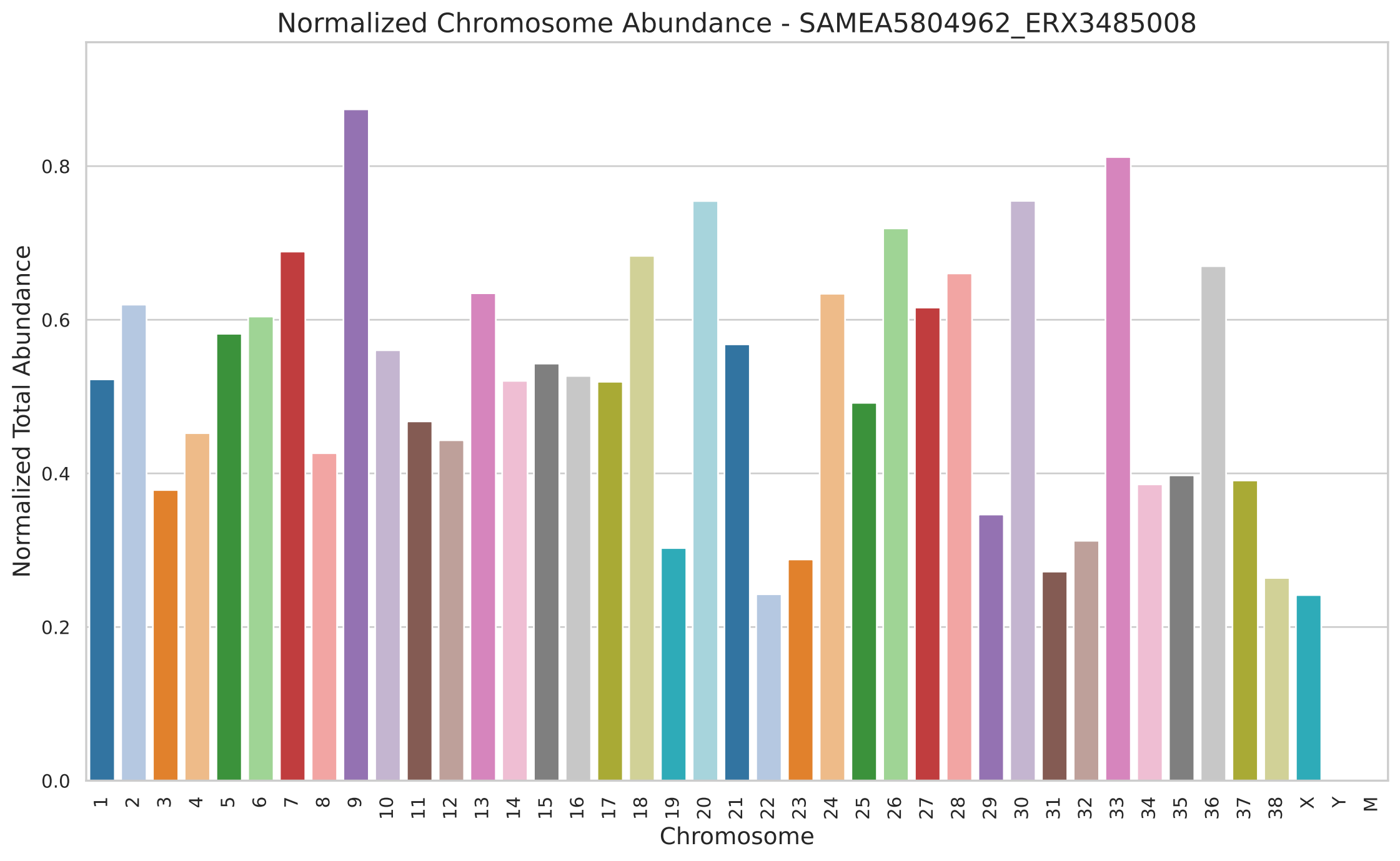

Normalized Chromosome Abundance - SAMEA5804936_ERX3485059
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

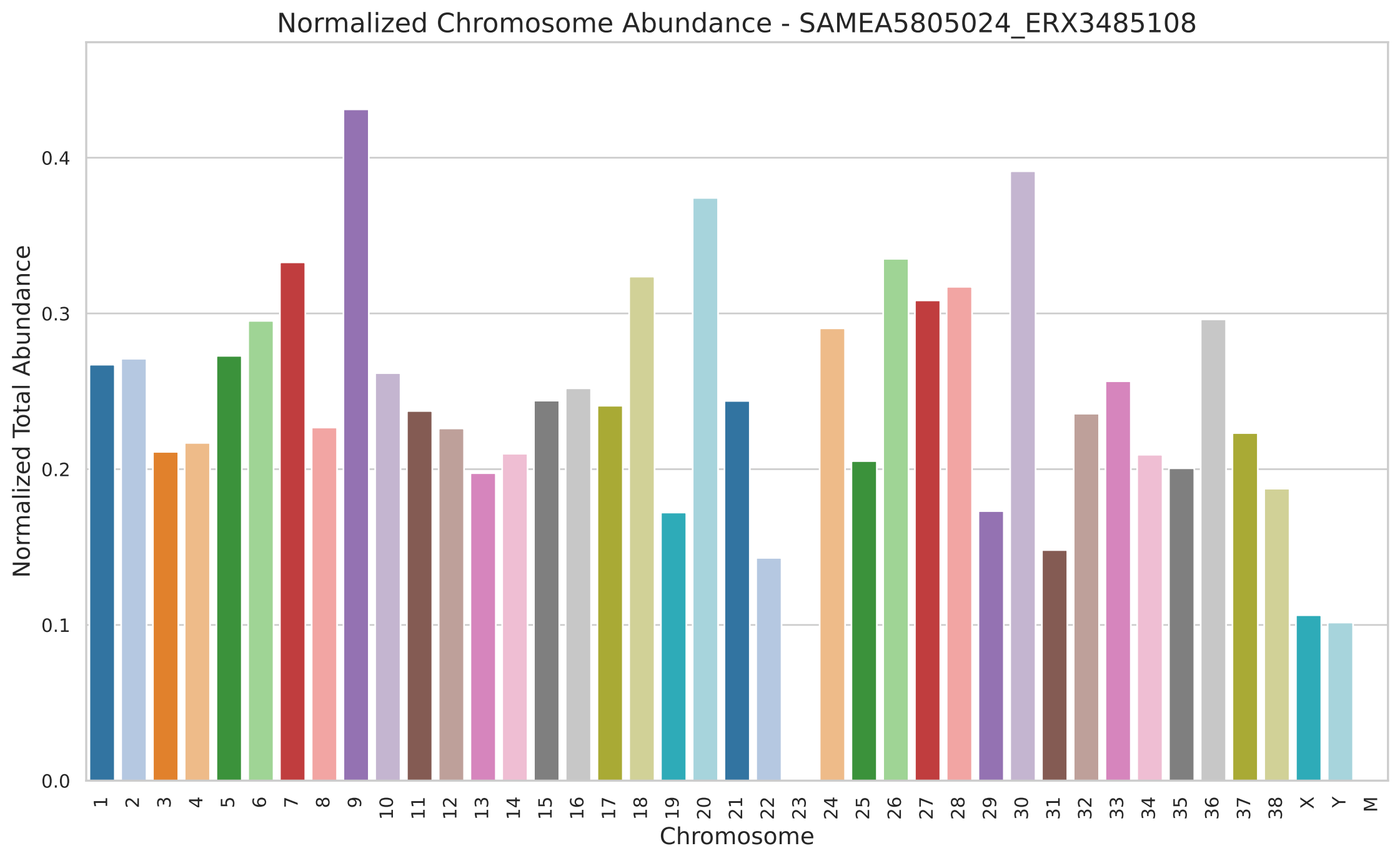

Normalized Chromosome Abundance - SAMEA5804989_ERX3485029
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

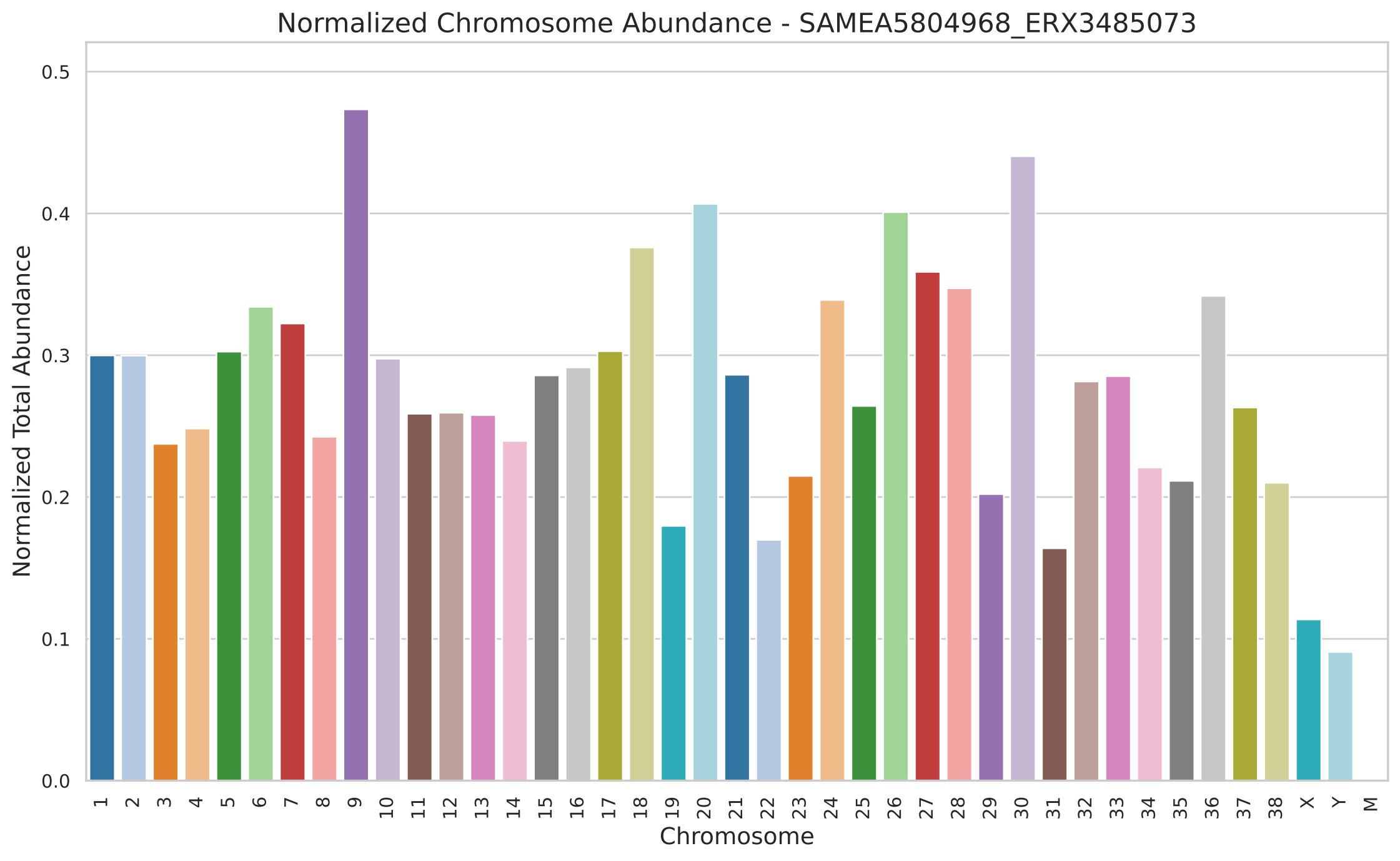

Normalized Chromosome Abundance - SAMEA5804938_ERX3485060
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

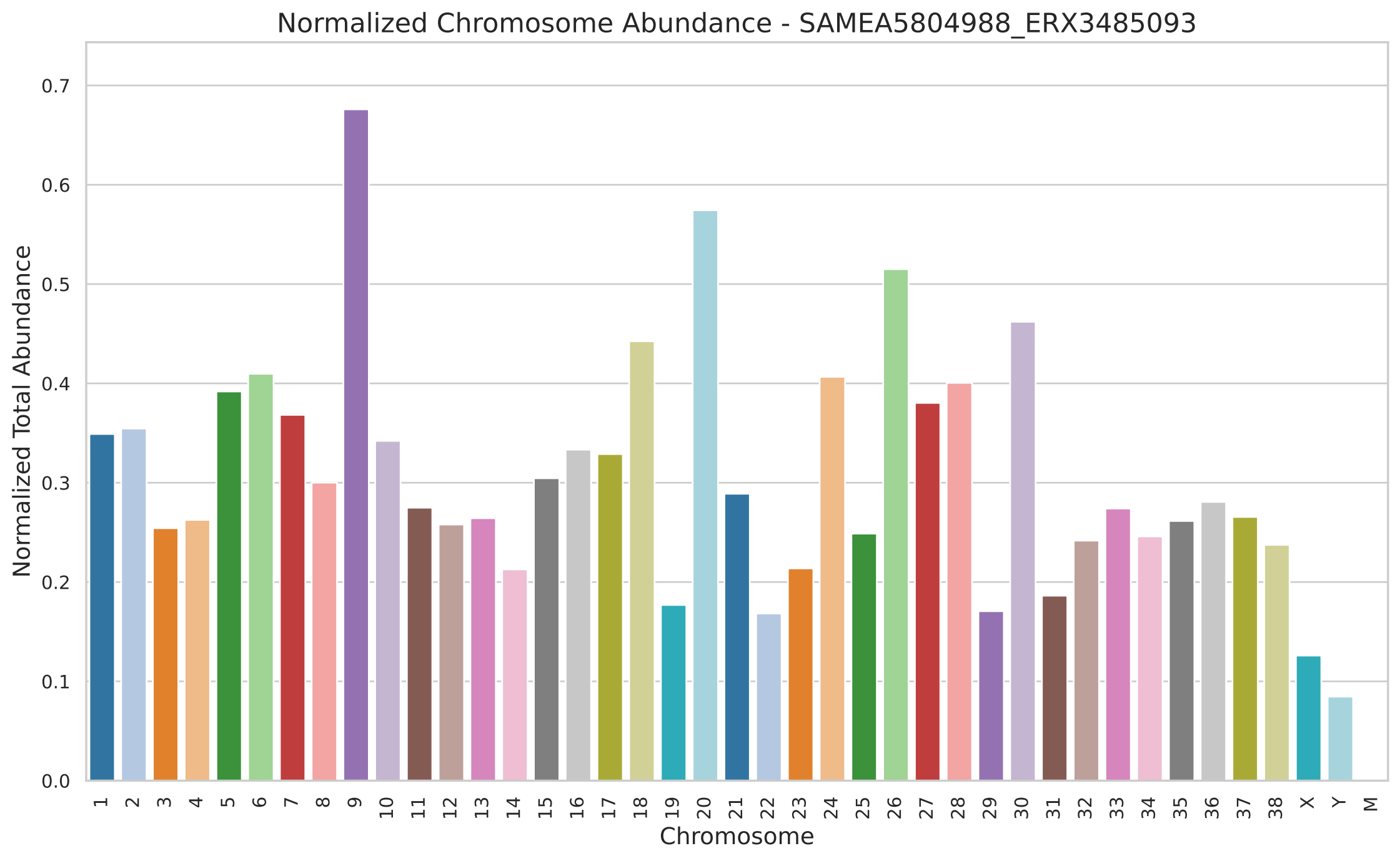

Normalized Chromosome Abundance - SAMEA5804993_ERX3485014
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

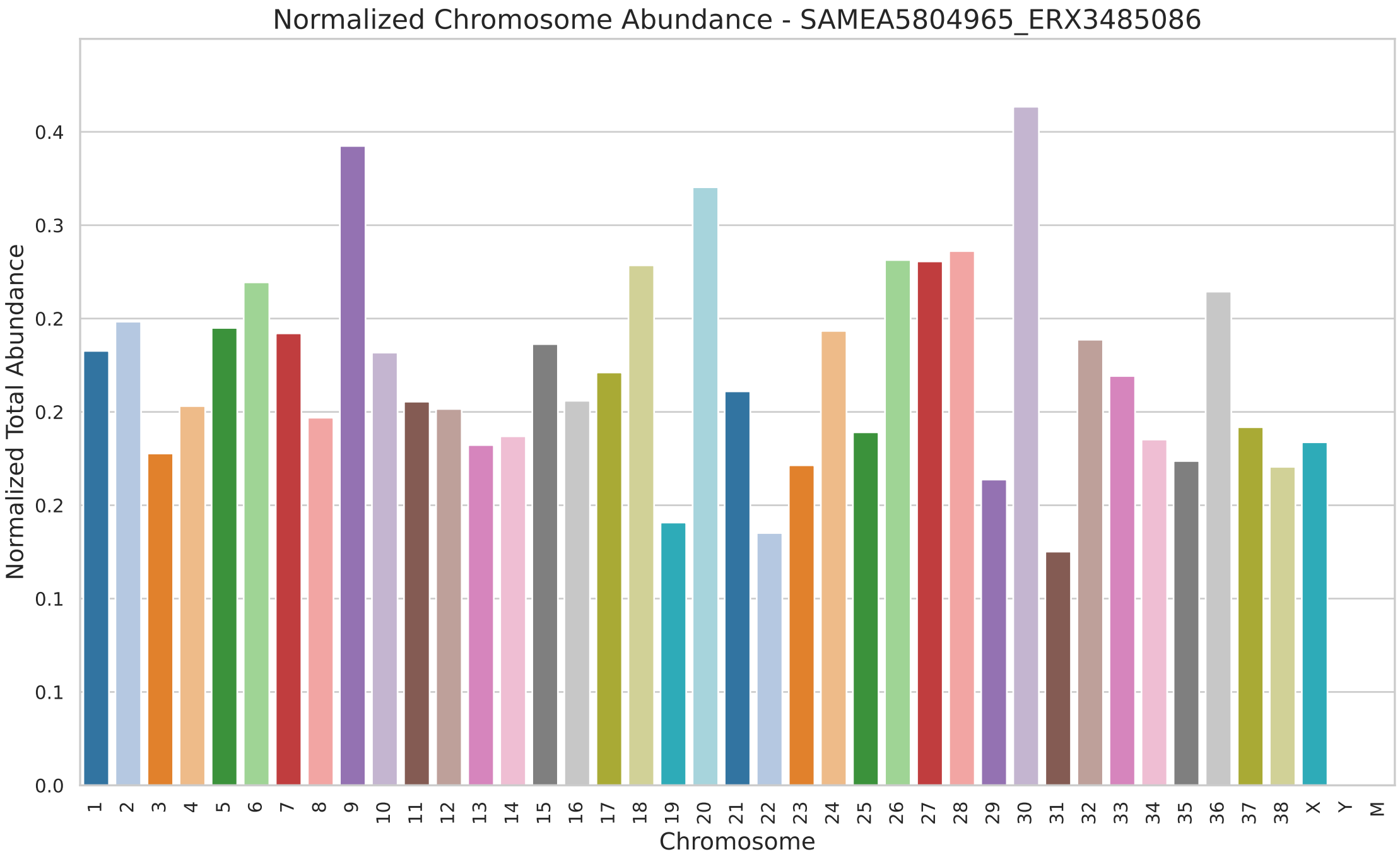

Normalized Chromosome Abundance - SAMEA5804999_ERX3485099
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

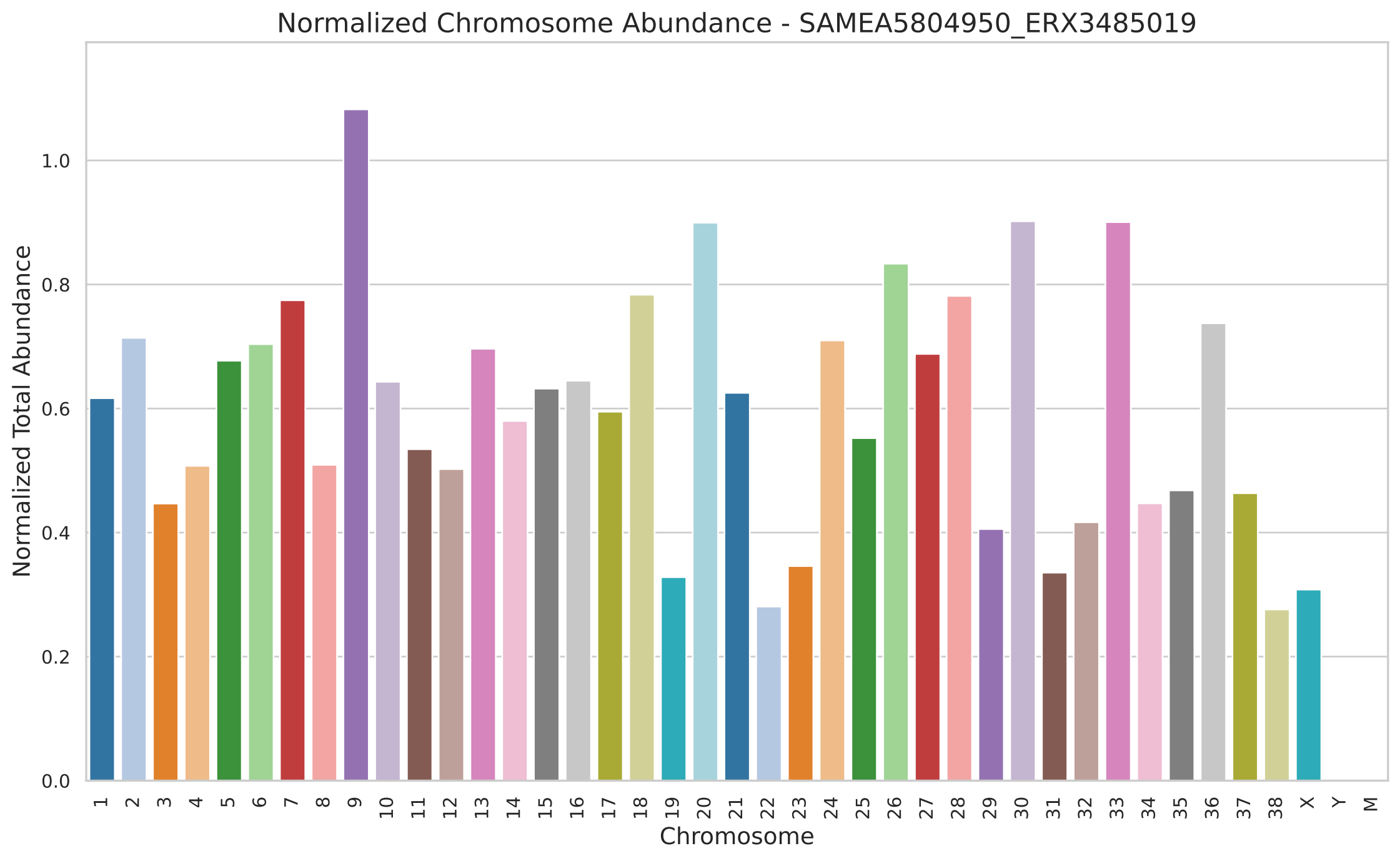

Normalized Chromosome Abundance - SAMEA5804962_ERX3485008
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

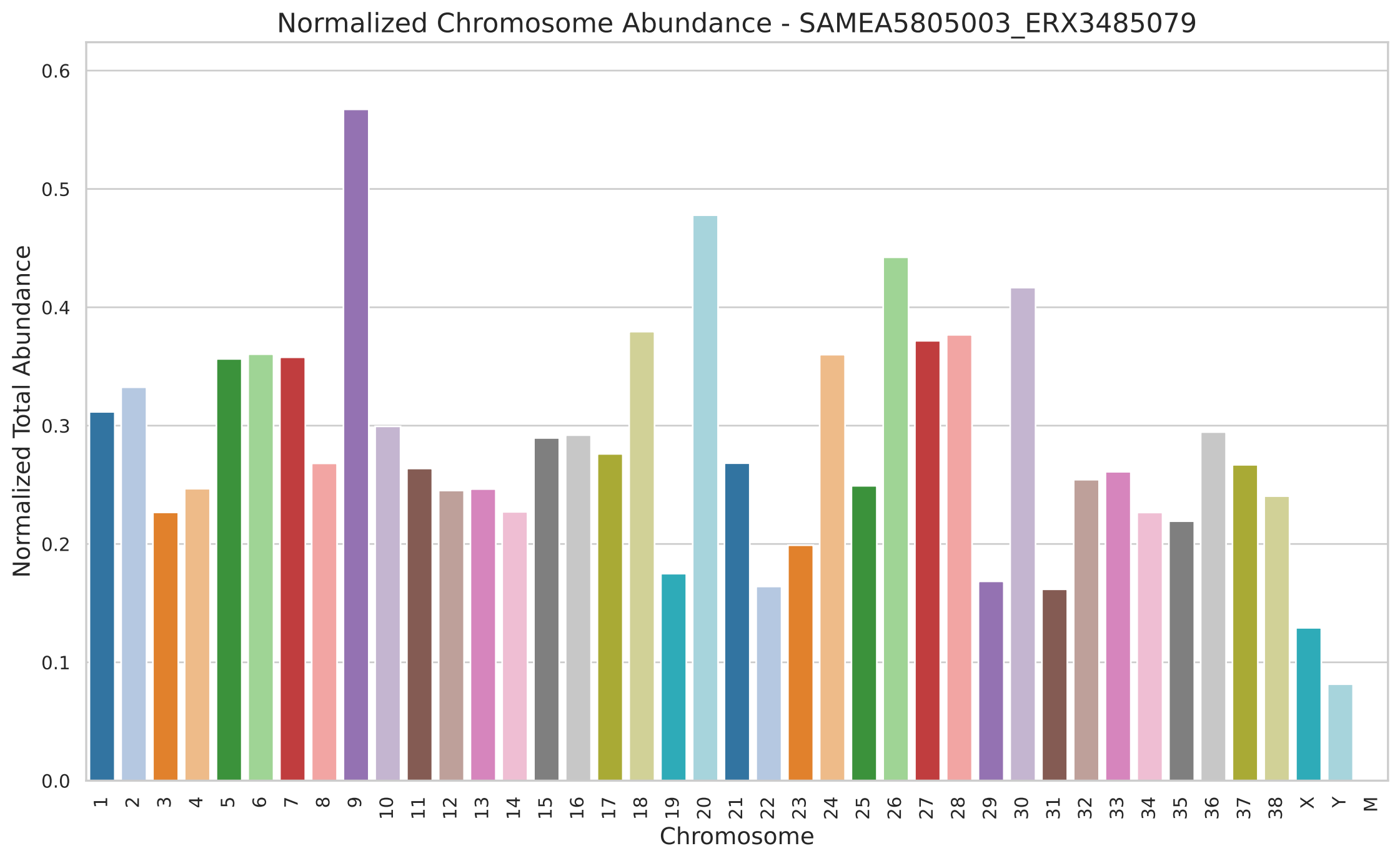

Normalized Chromosome Abundance - SAMEA5805024_ERX3485108
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

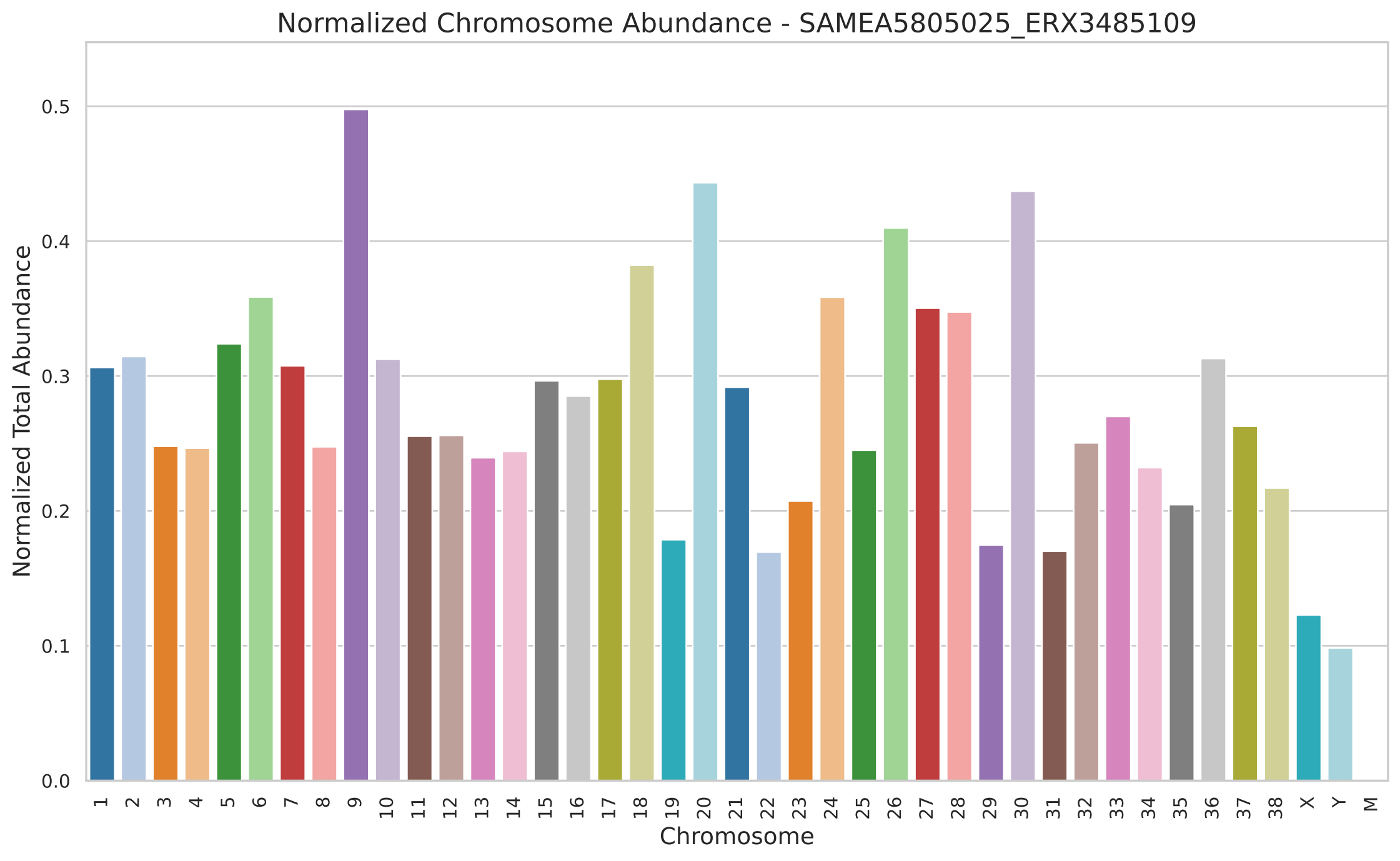

Normalized Chromosome Abundance - SAMEA5804968_ERX3485073
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

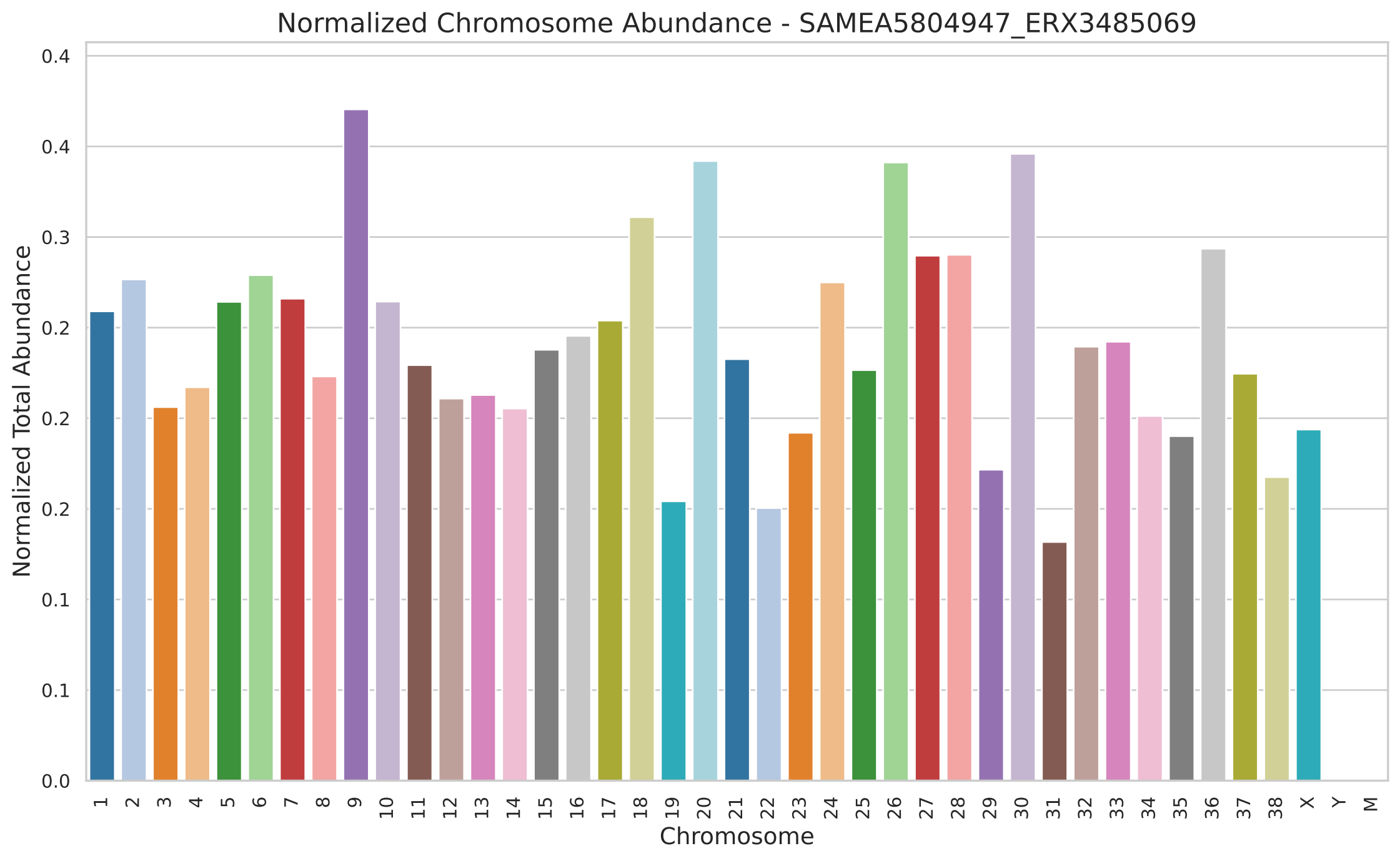

Normalized Chromosome Abundance - SAMEA5804988_ERX3485093
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

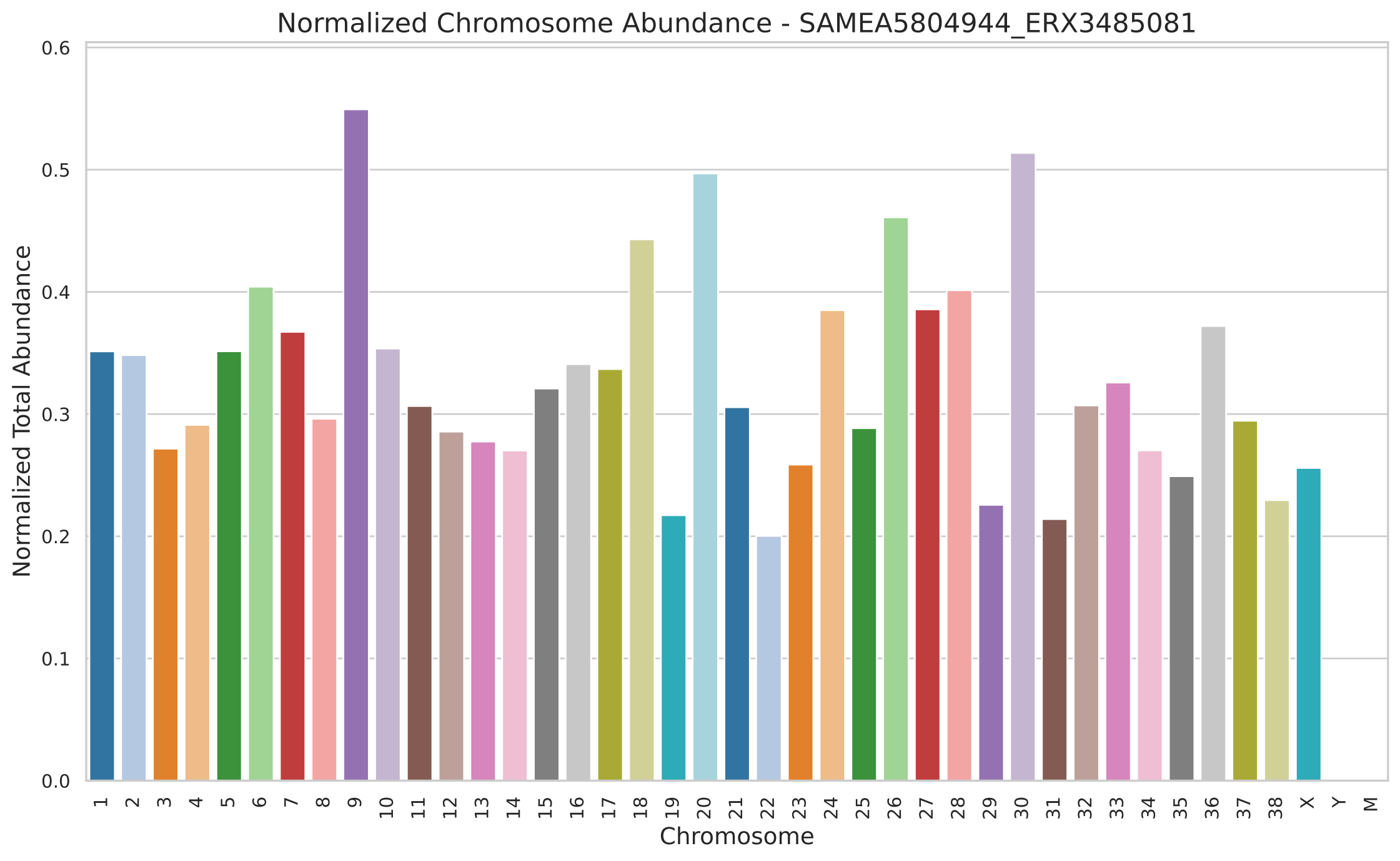

Normalized Chromosome Abundance - SAMEA5804965_ERX3485086
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

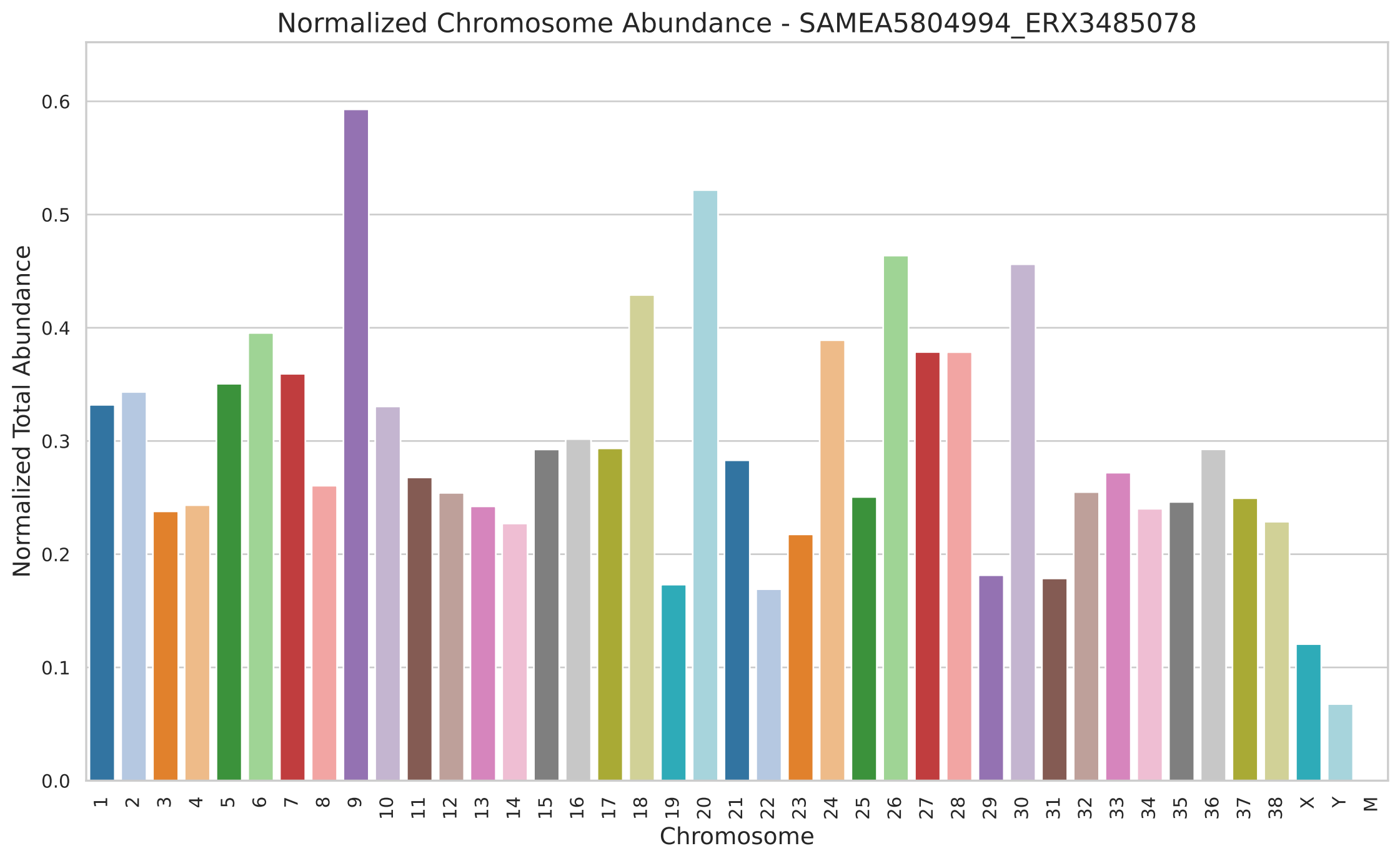

Normalized Chromosome Abundance - SAMEA5804950_ERX3485019
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

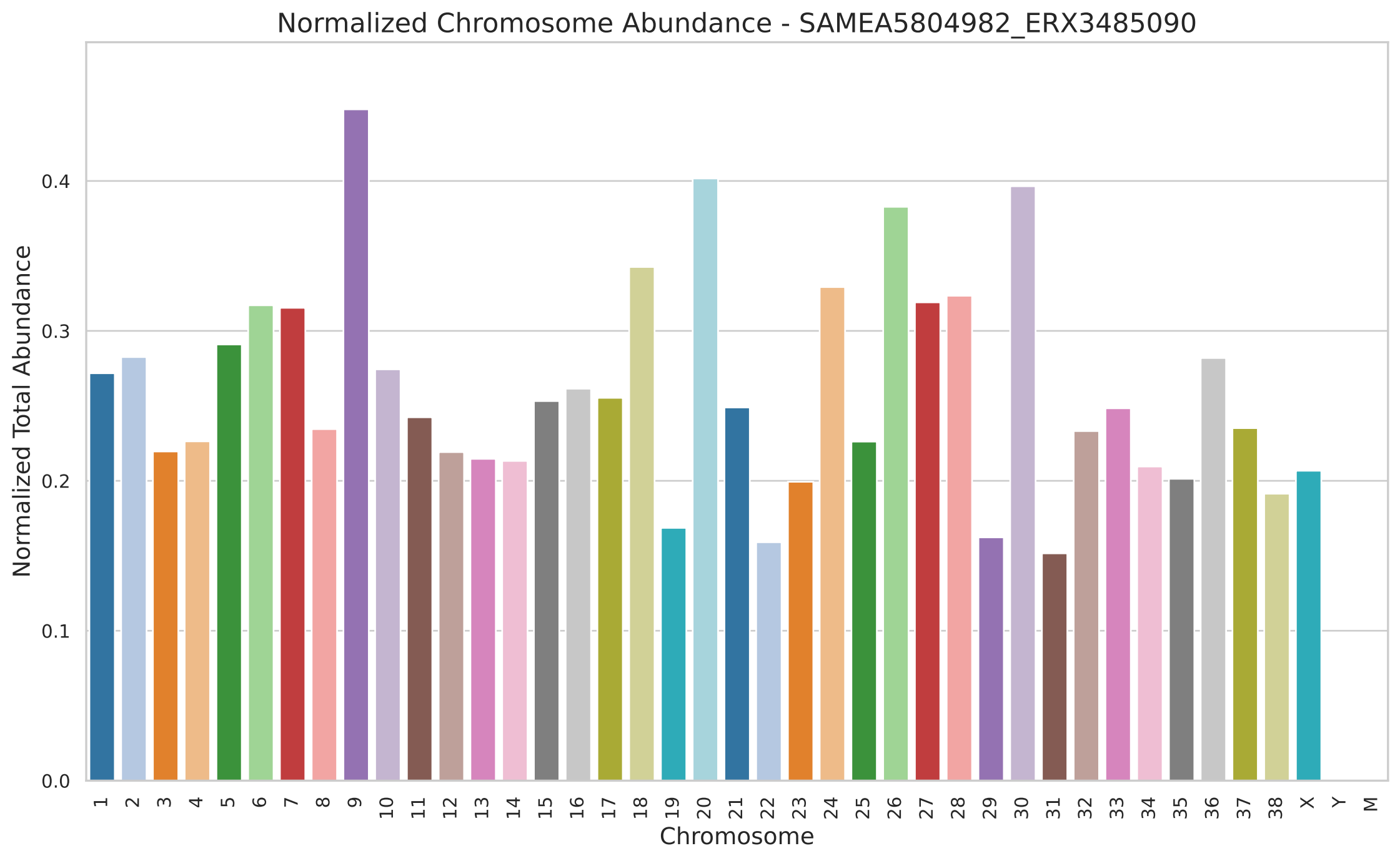

Normalized Chromosome Abundance - SAMEA5805003_ERX3485079
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

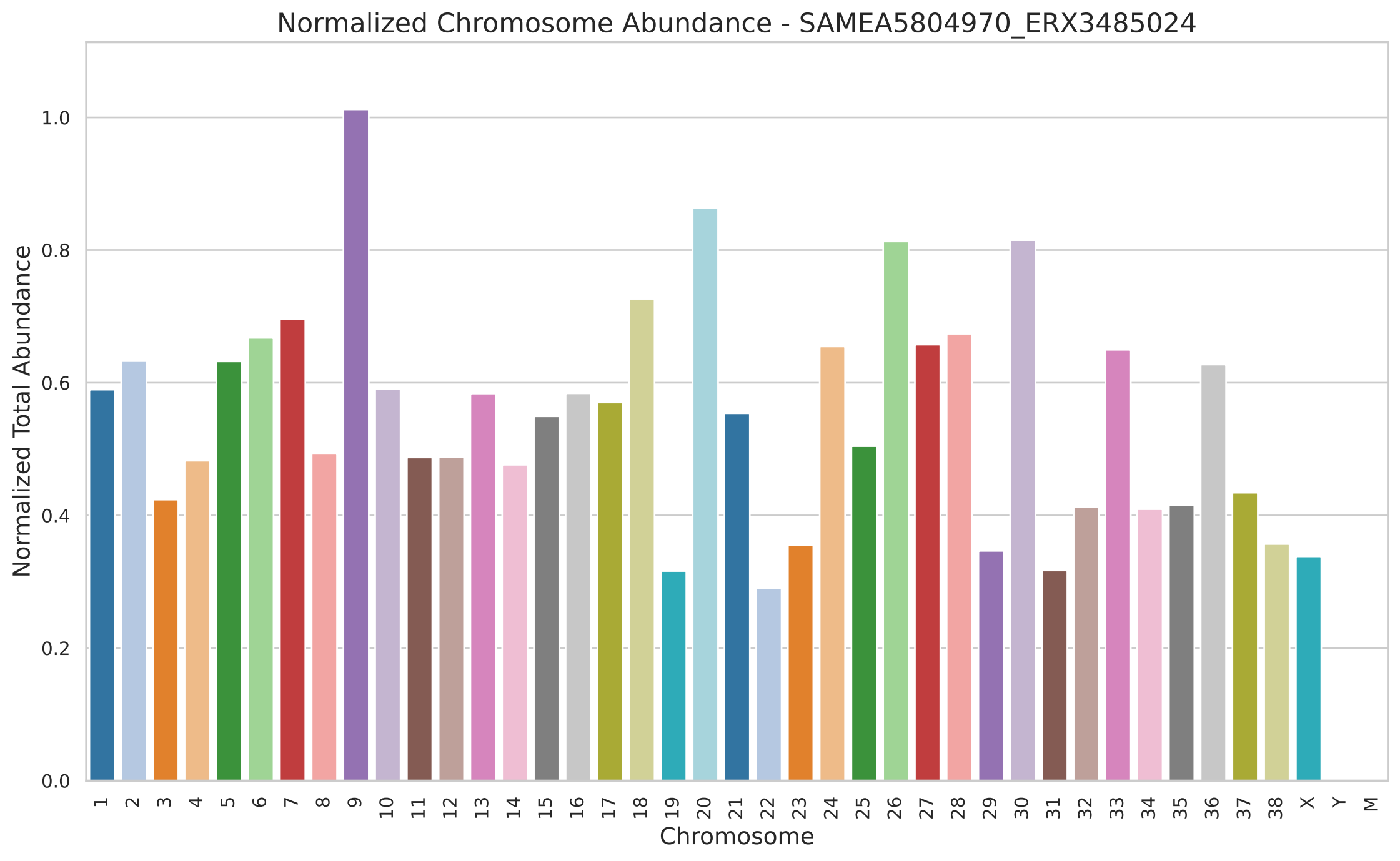

Normalized Chromosome Abundance - SAMEA5805025_ERX3485109
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

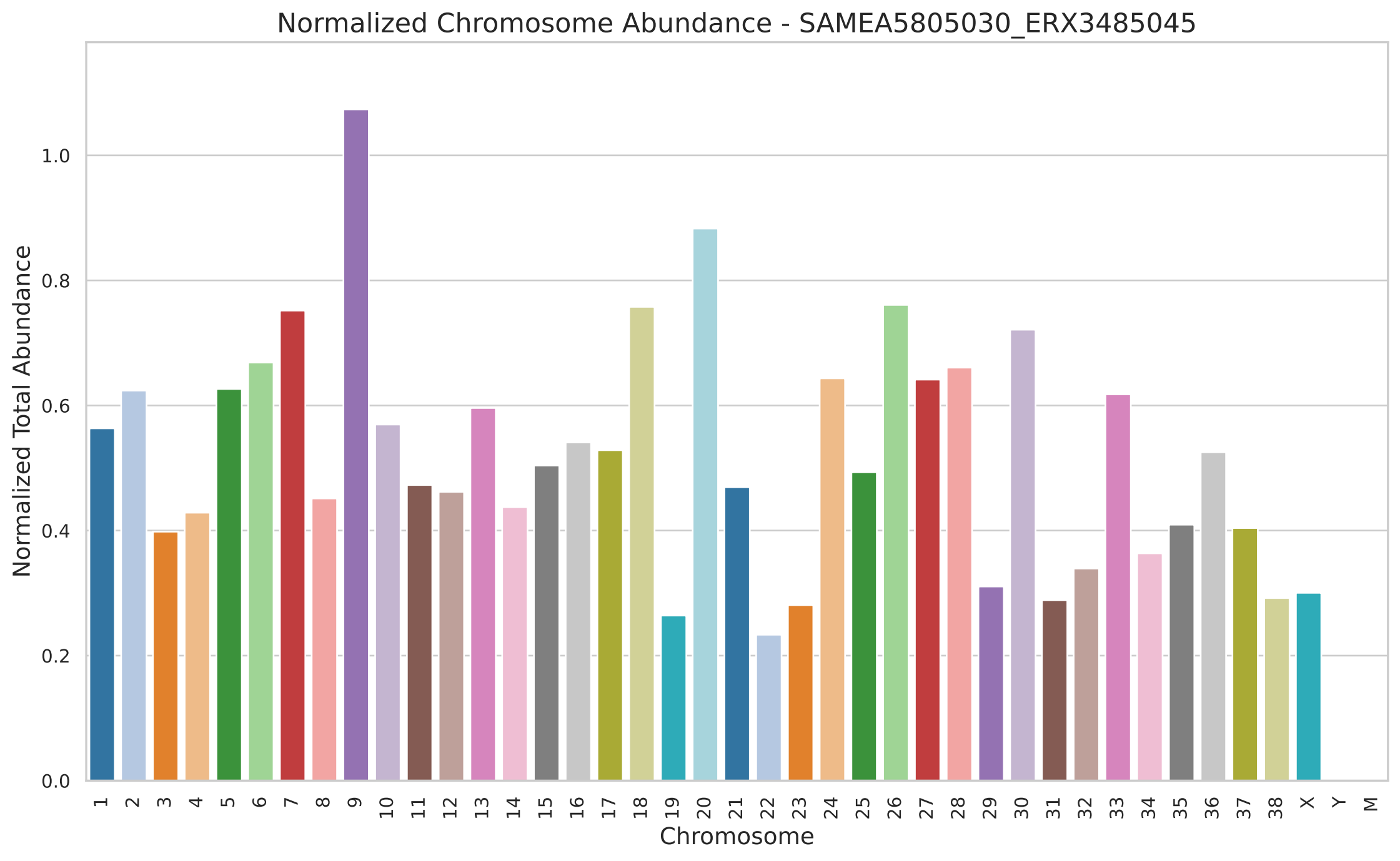

Normalized Chromosome Abundance - SAMEA5804947_ERX3485069
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

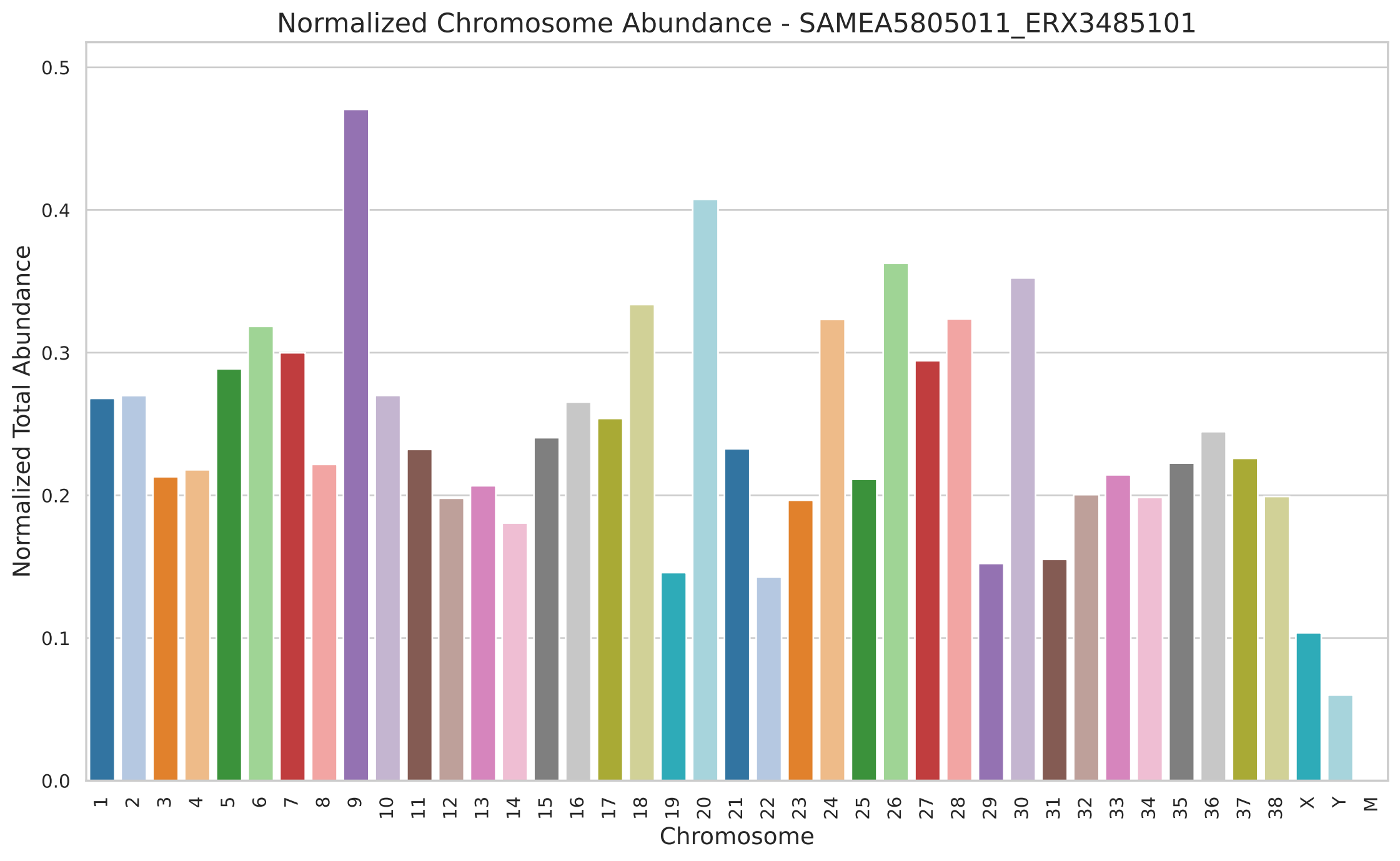

Normalized Chromosome Abundance - SAMEA5804944_ERX3485081
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

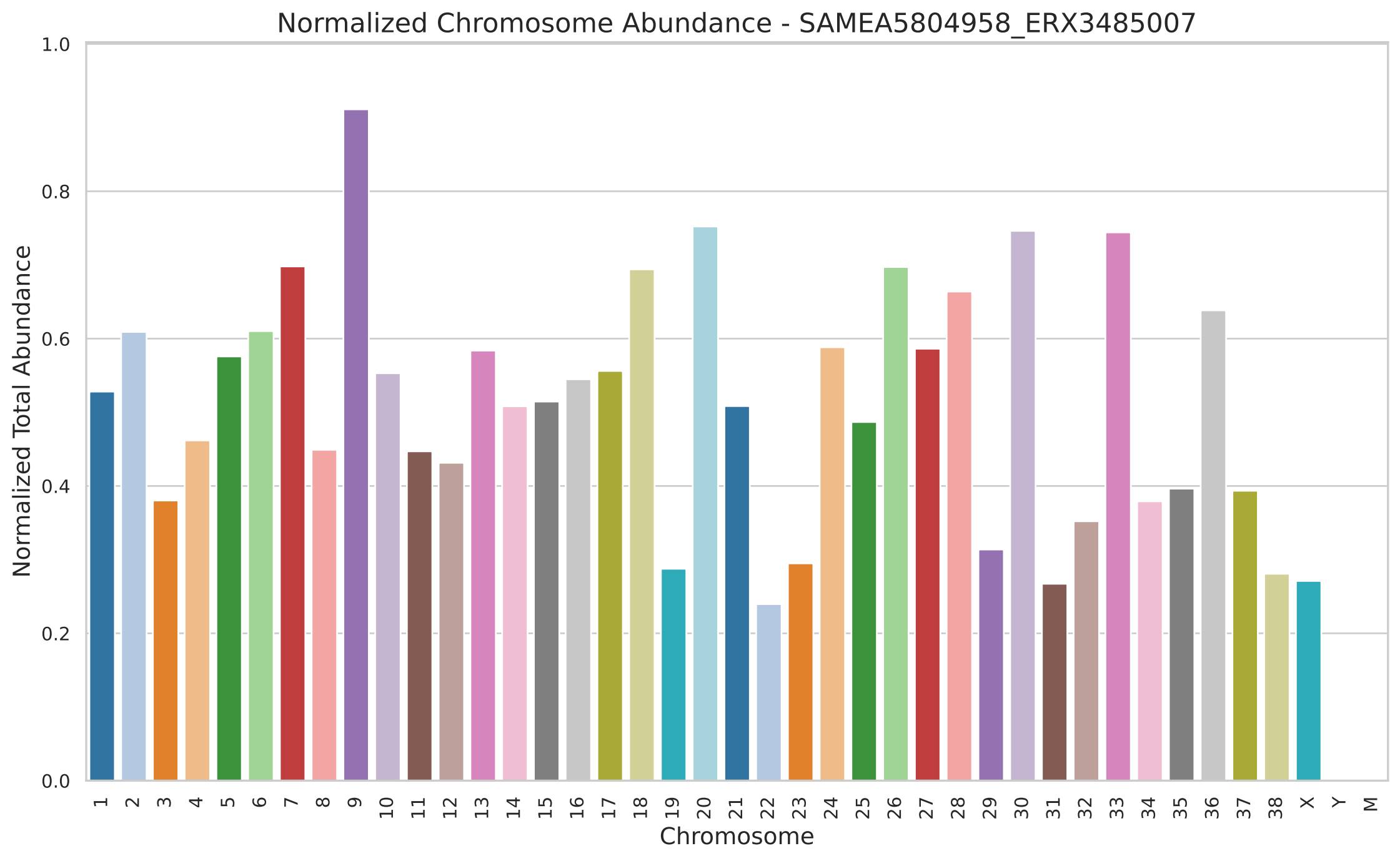

Normalized Chromosome Abundance - SAMEA5804994_ERX3485078
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

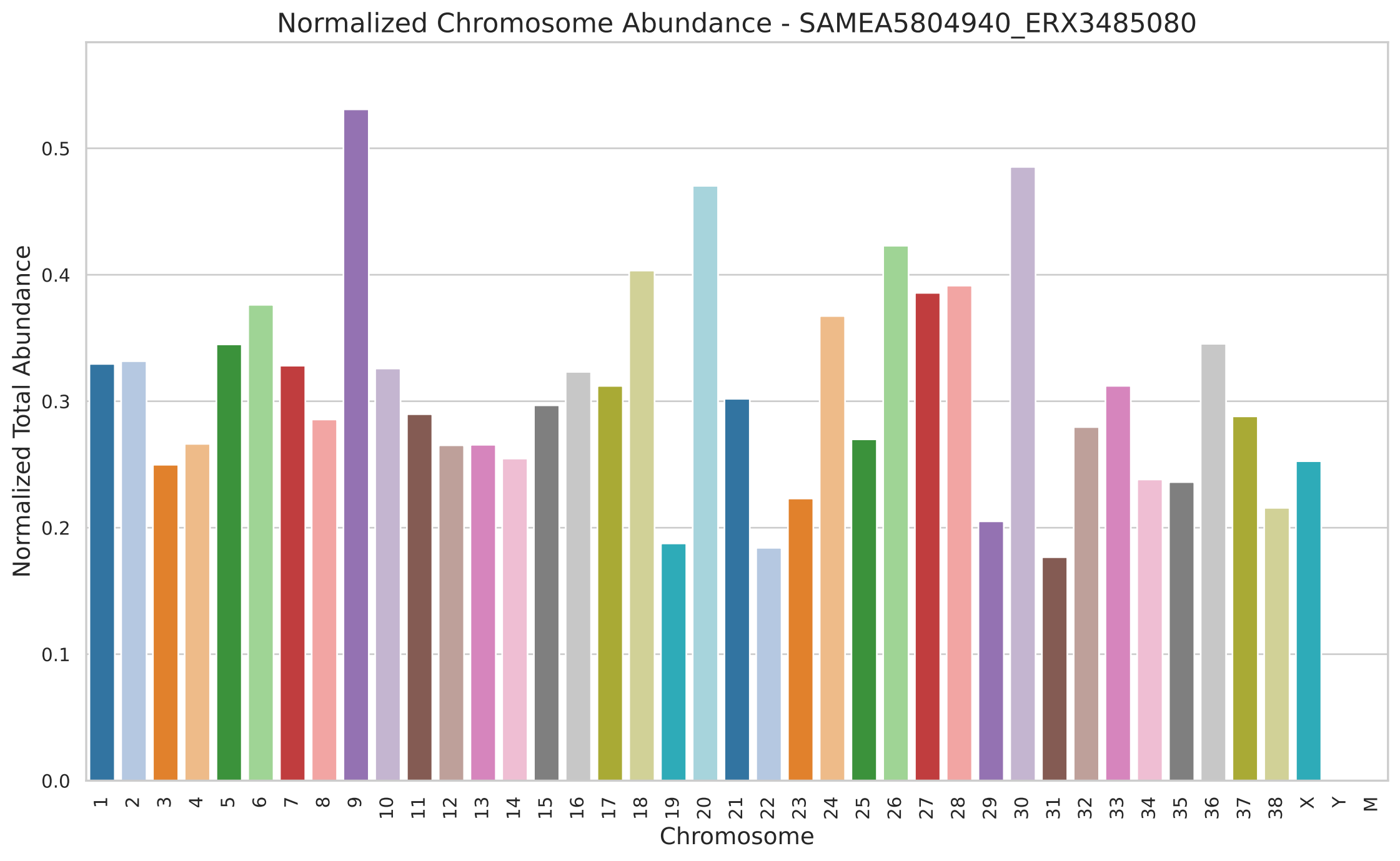

Normalized Chromosome Abundance - SAMEA5804982_ERX3485090
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

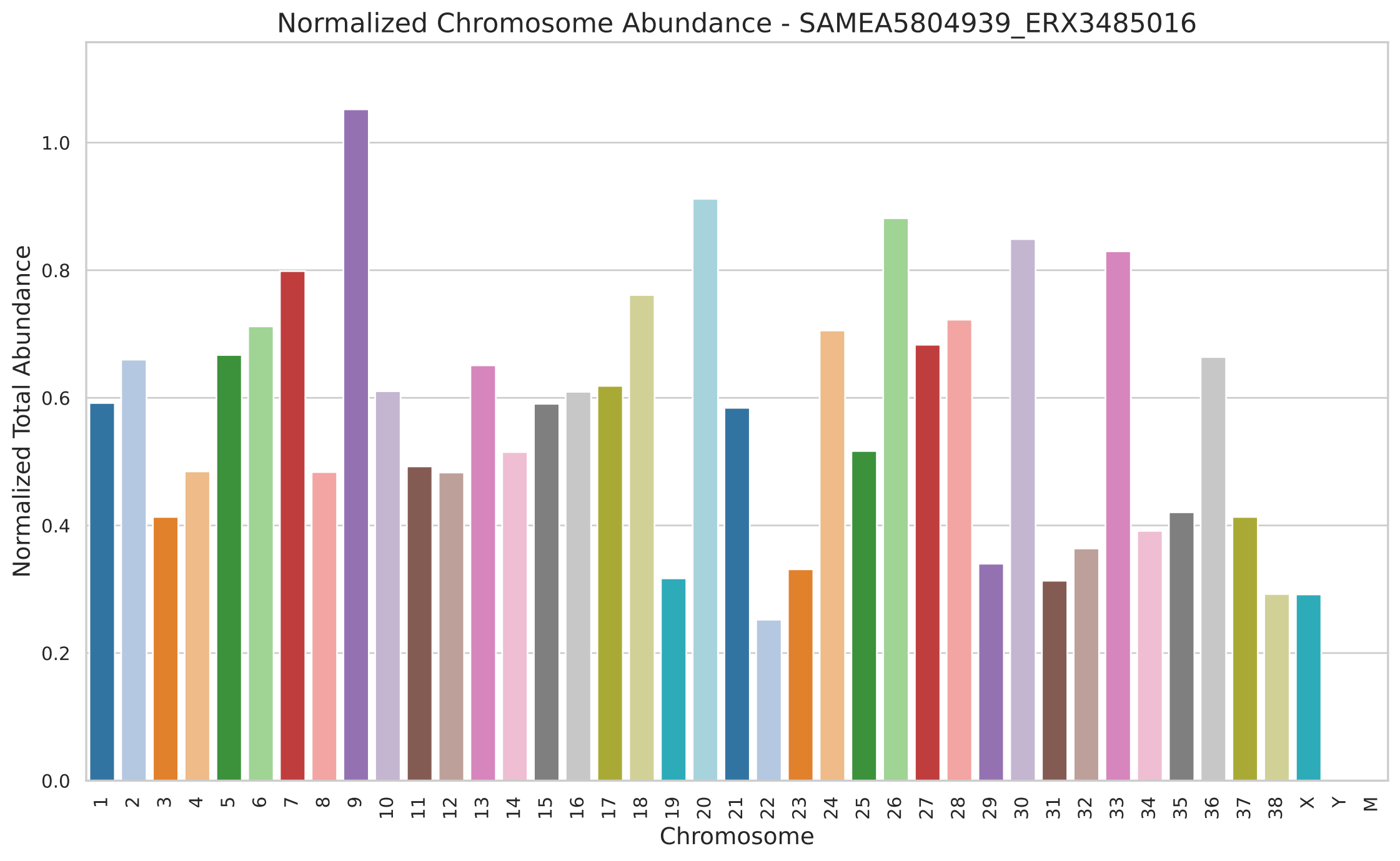

Normalized Chromosome Abundance - SAMEA5804970_ERX3485024
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

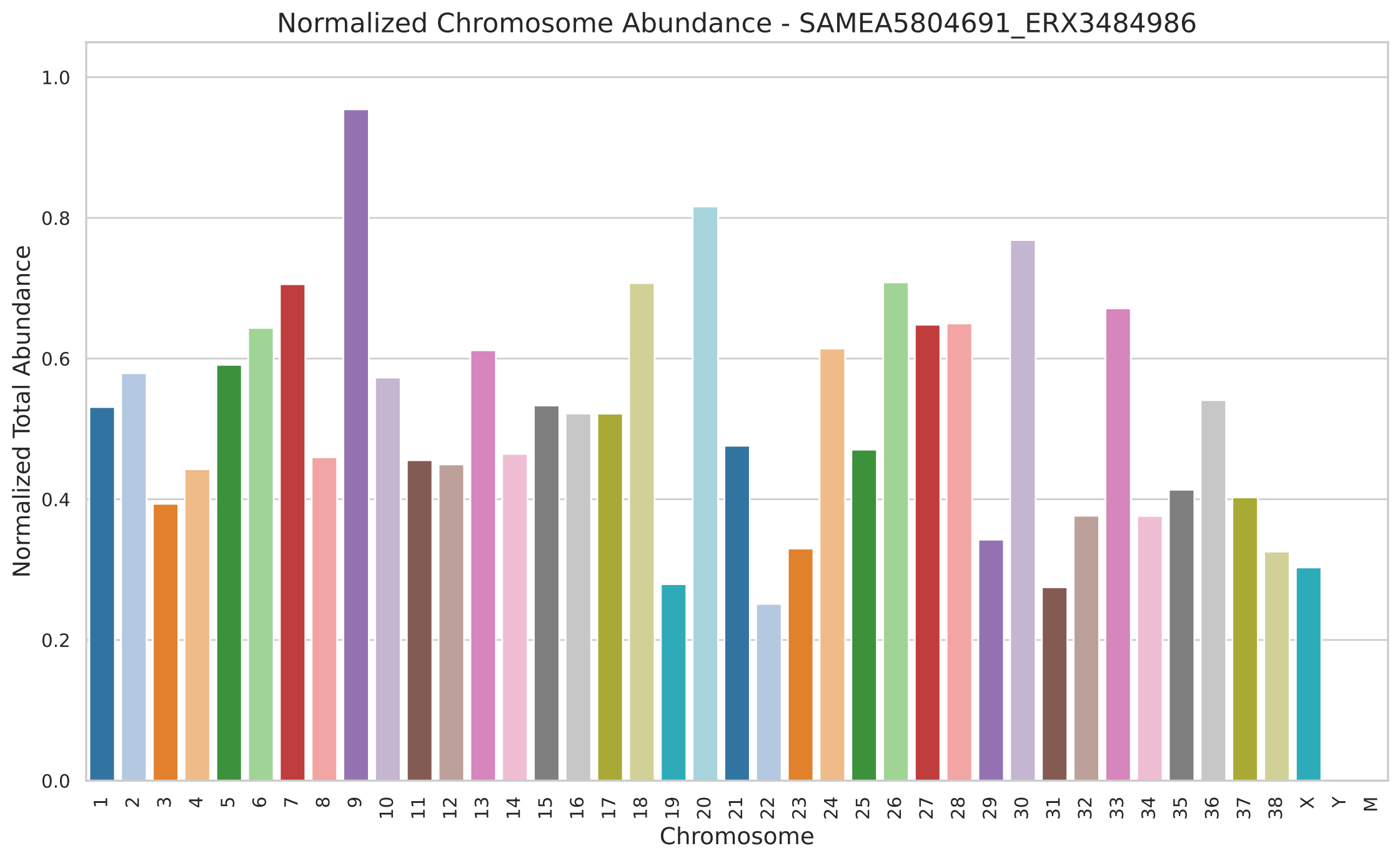

Normalized Chromosome Abundance - SAMEA5805030_ERX3485045
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

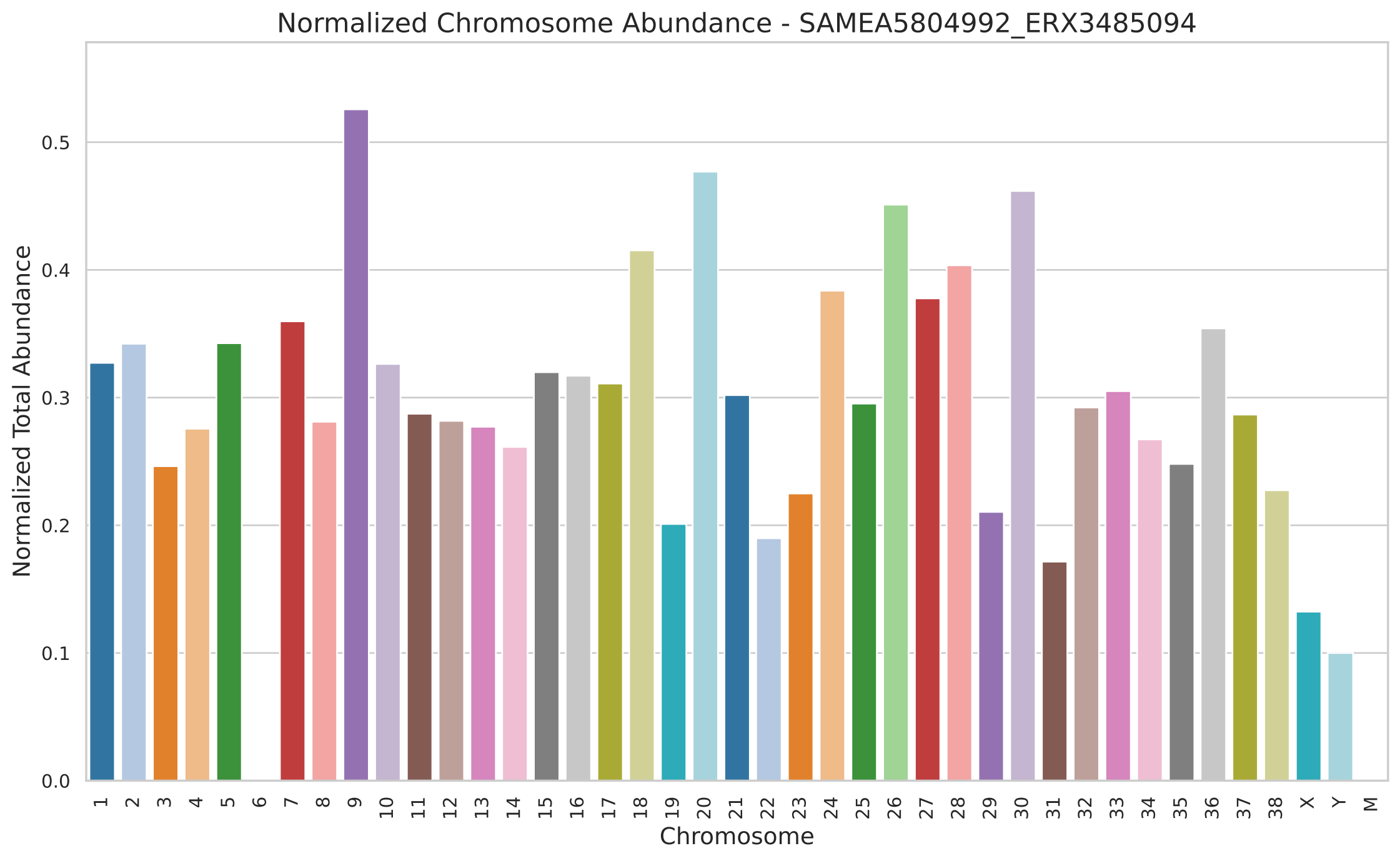

Normalized Chromosome Abundance - SAMEA5805011_ERX3485101
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

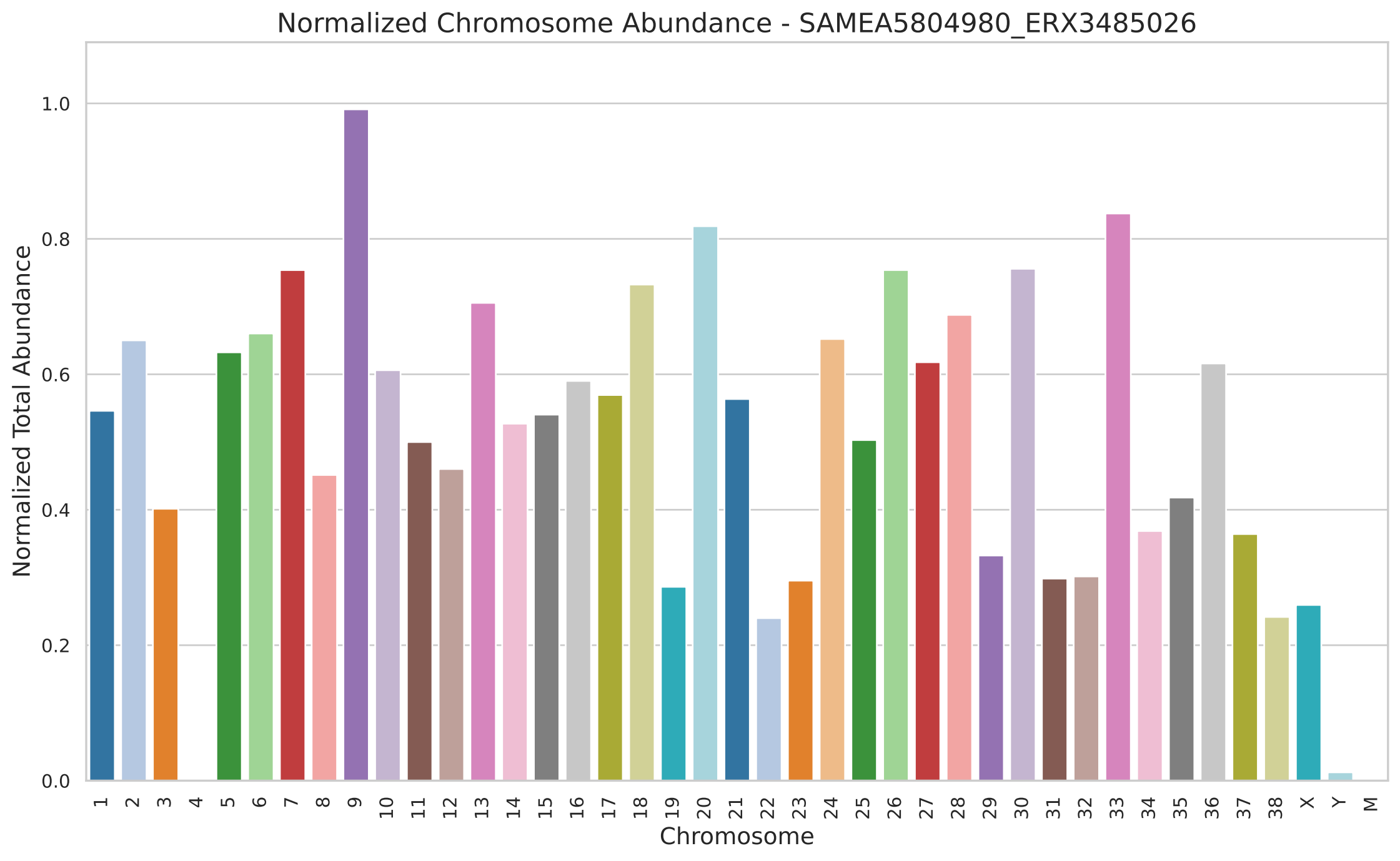

Normalized Chromosome Abundance - SAMEA5804958_ERX3485007
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

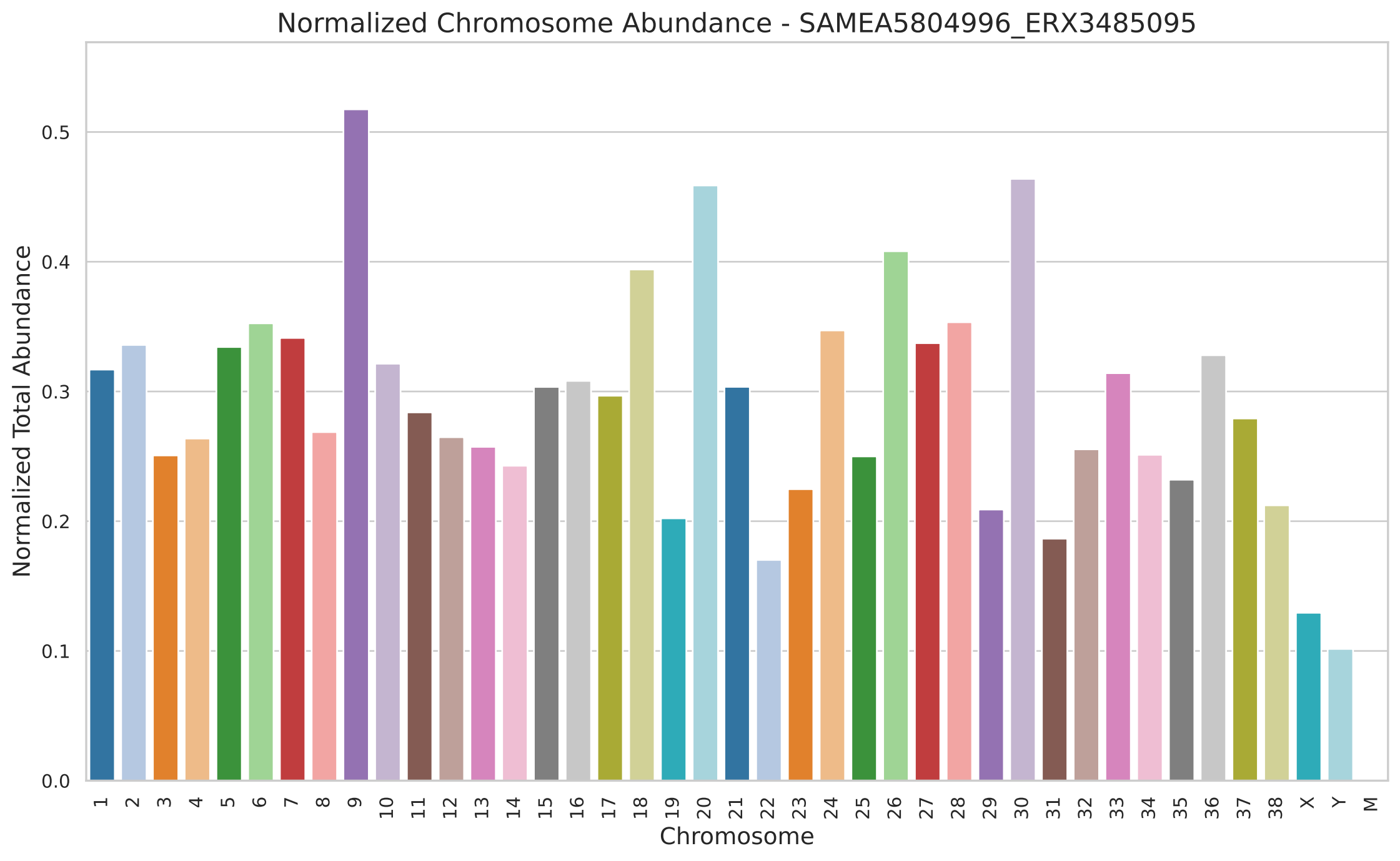

Normalized Chromosome Abundance - SAMEA5804940_ERX3485080
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

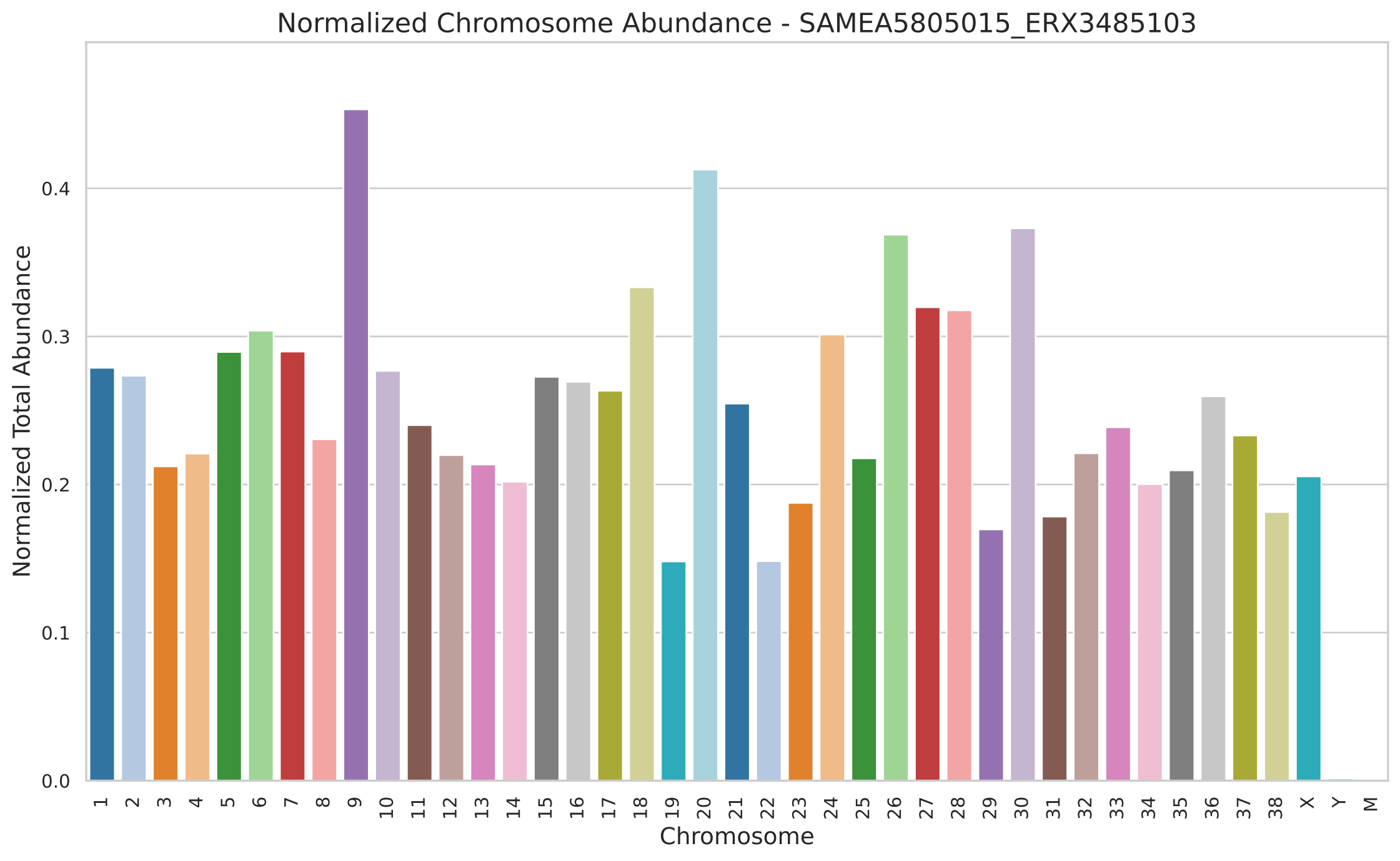

Normalized Chromosome Abundance - SAMEA5804939_ERX3485016
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

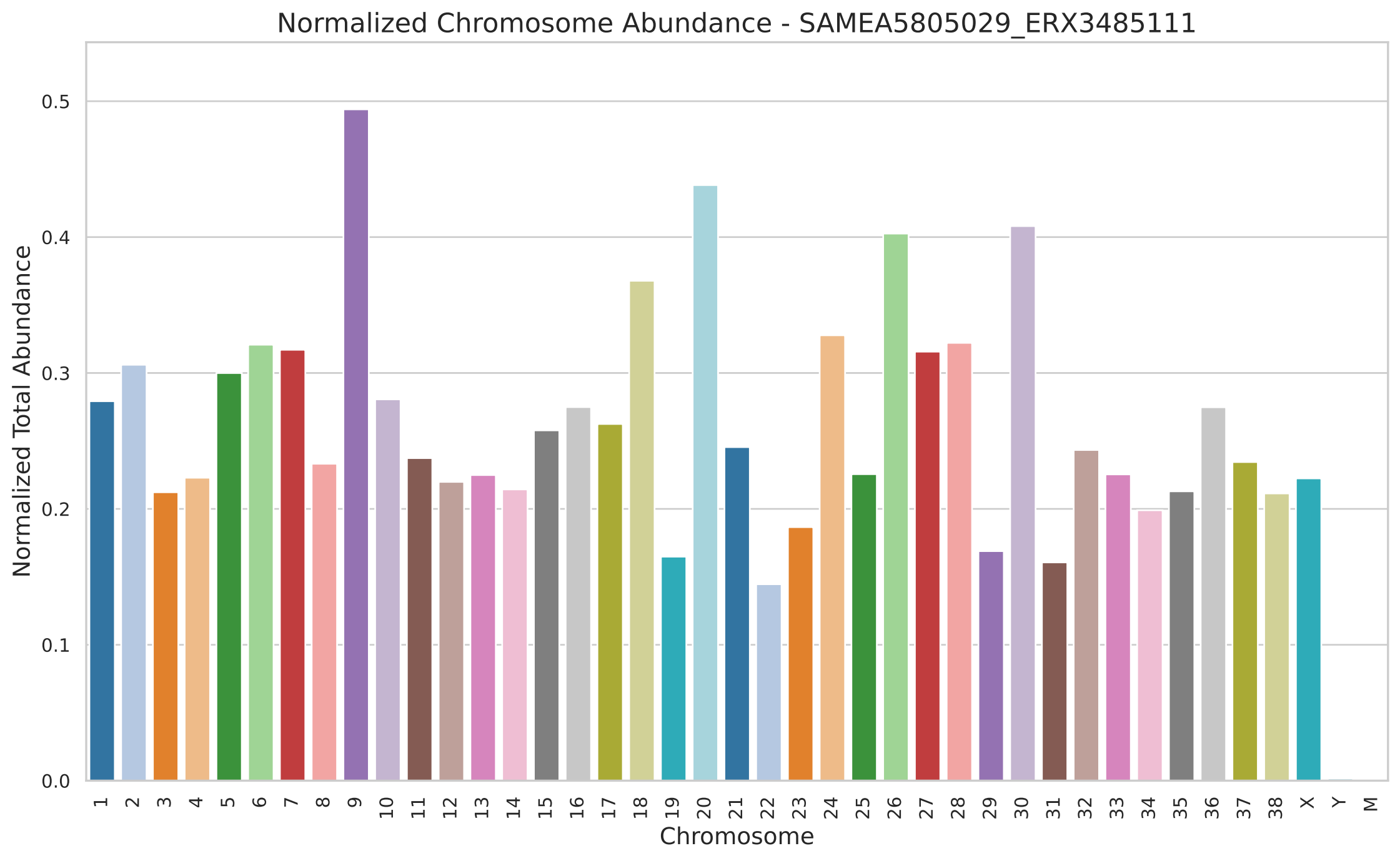

Normalized Chromosome Abundance - SAMEA5804691_ERX3484986
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

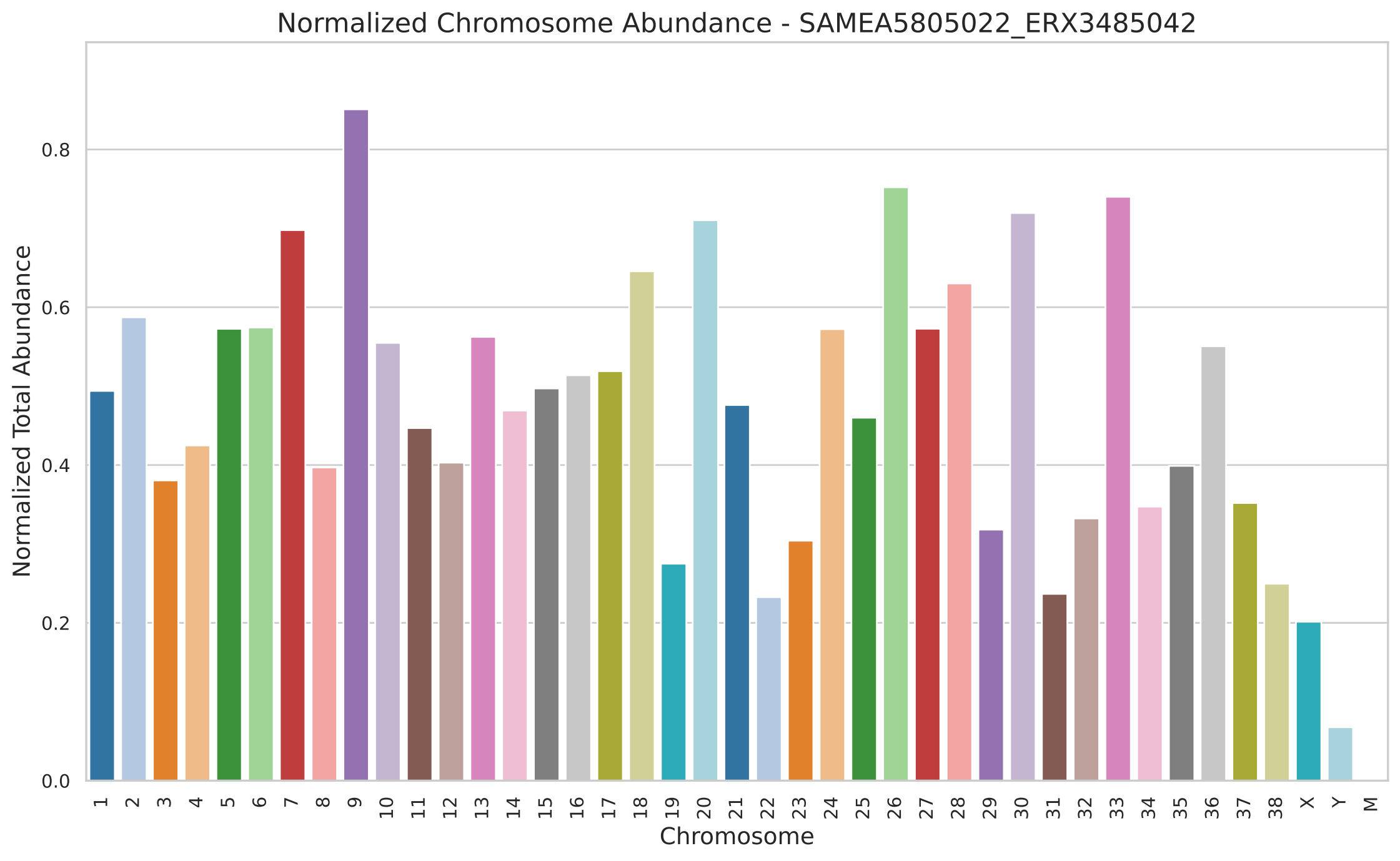

Normalized Chromosome Abundance - SAMEA5804992_ERX3485094
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

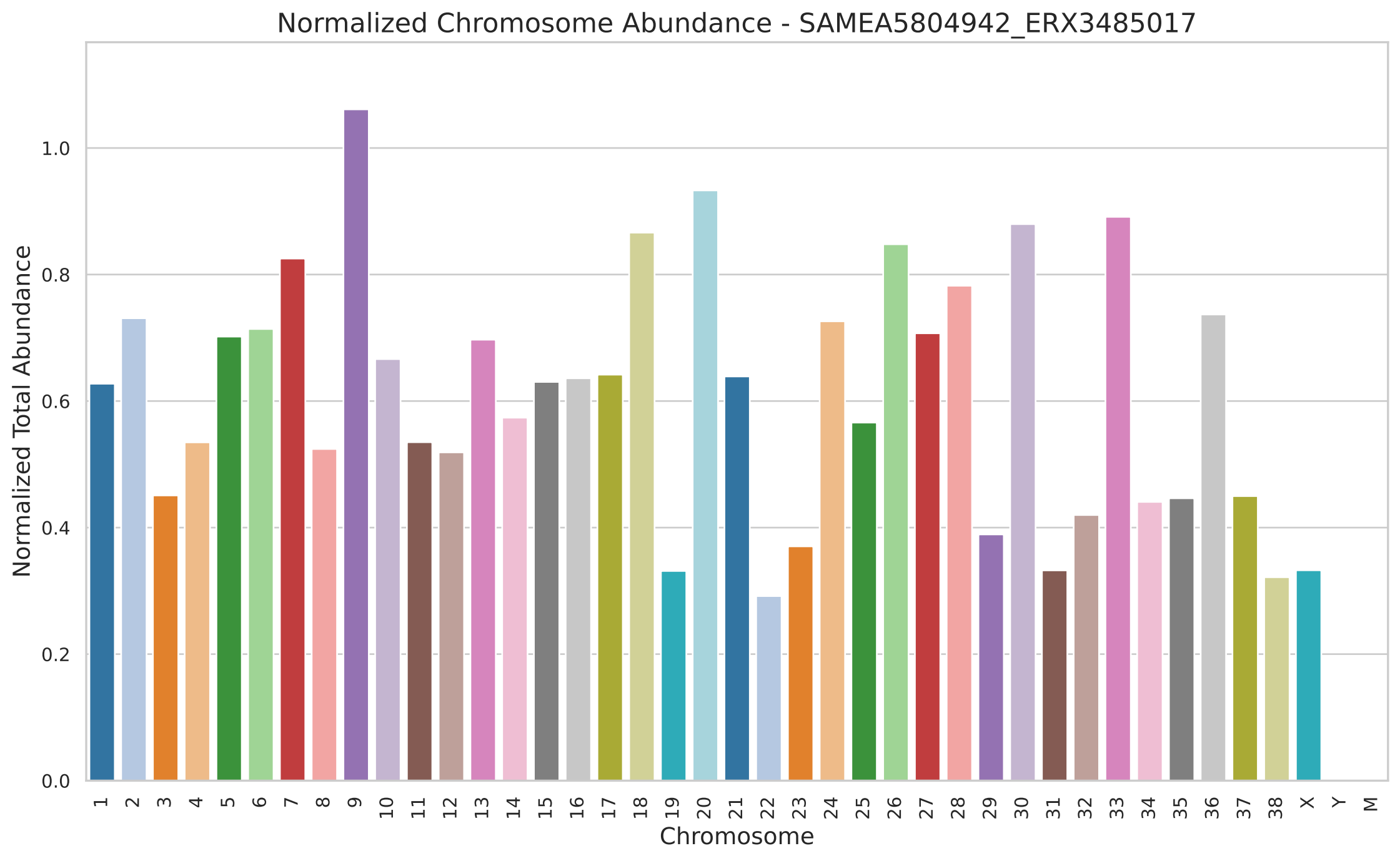

Normalized Chromosome Abundance - SAMEA5804980_ERX3485026
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

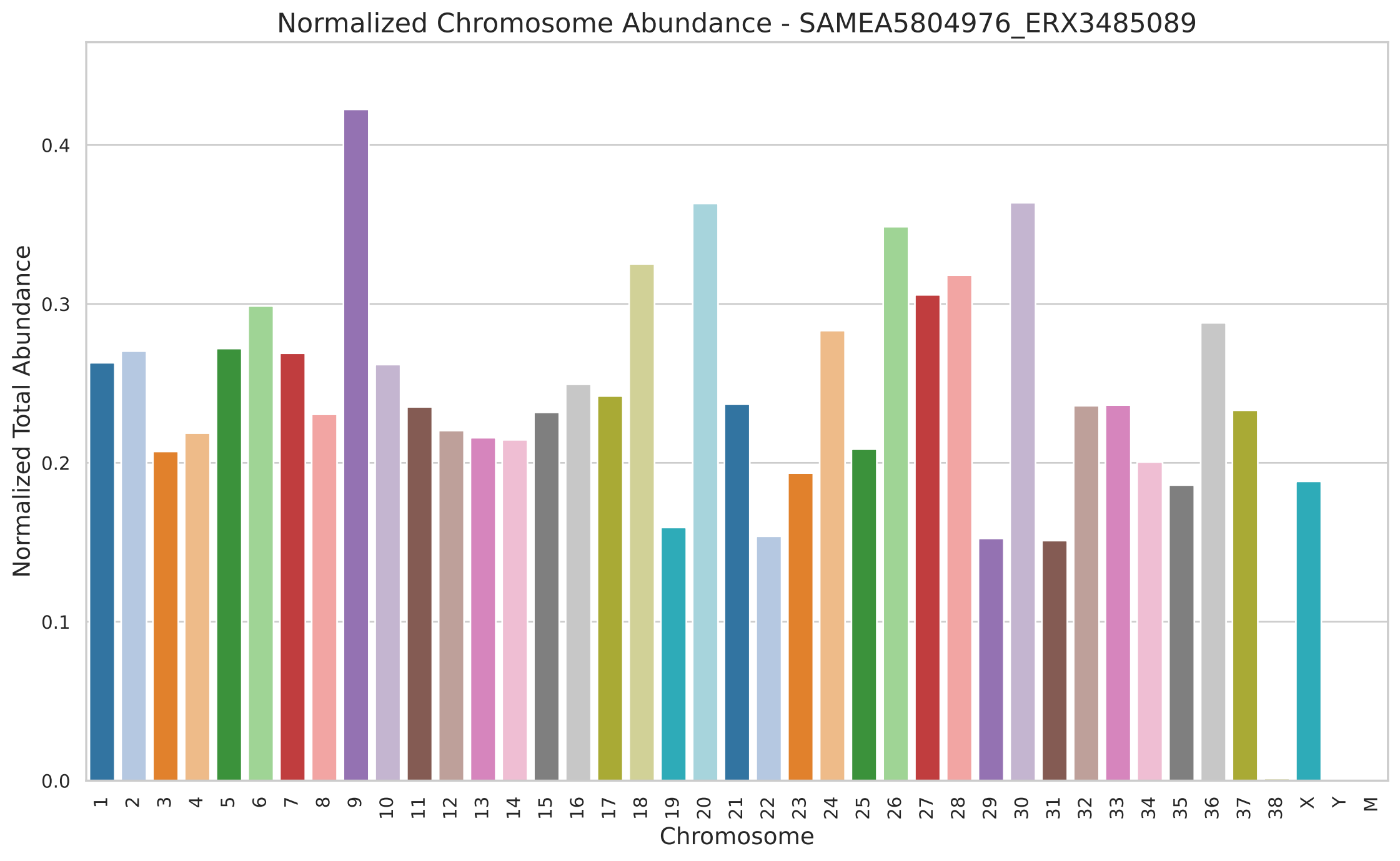

Normalized Chromosome Abundance - SAMEA5804996_ERX3485095
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

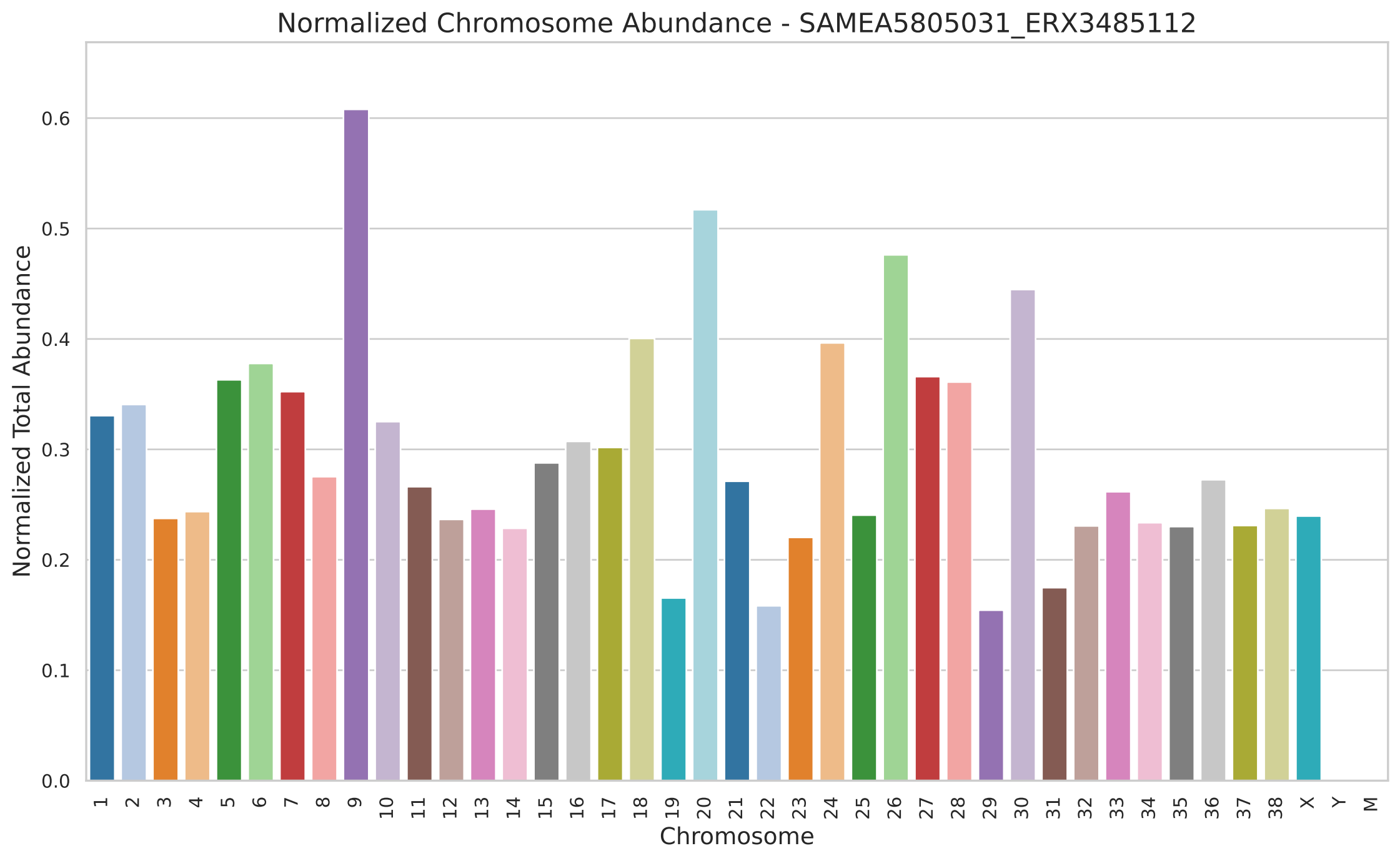

Normalized Chromosome Abundance - SAMEA5805015_ERX3485103
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

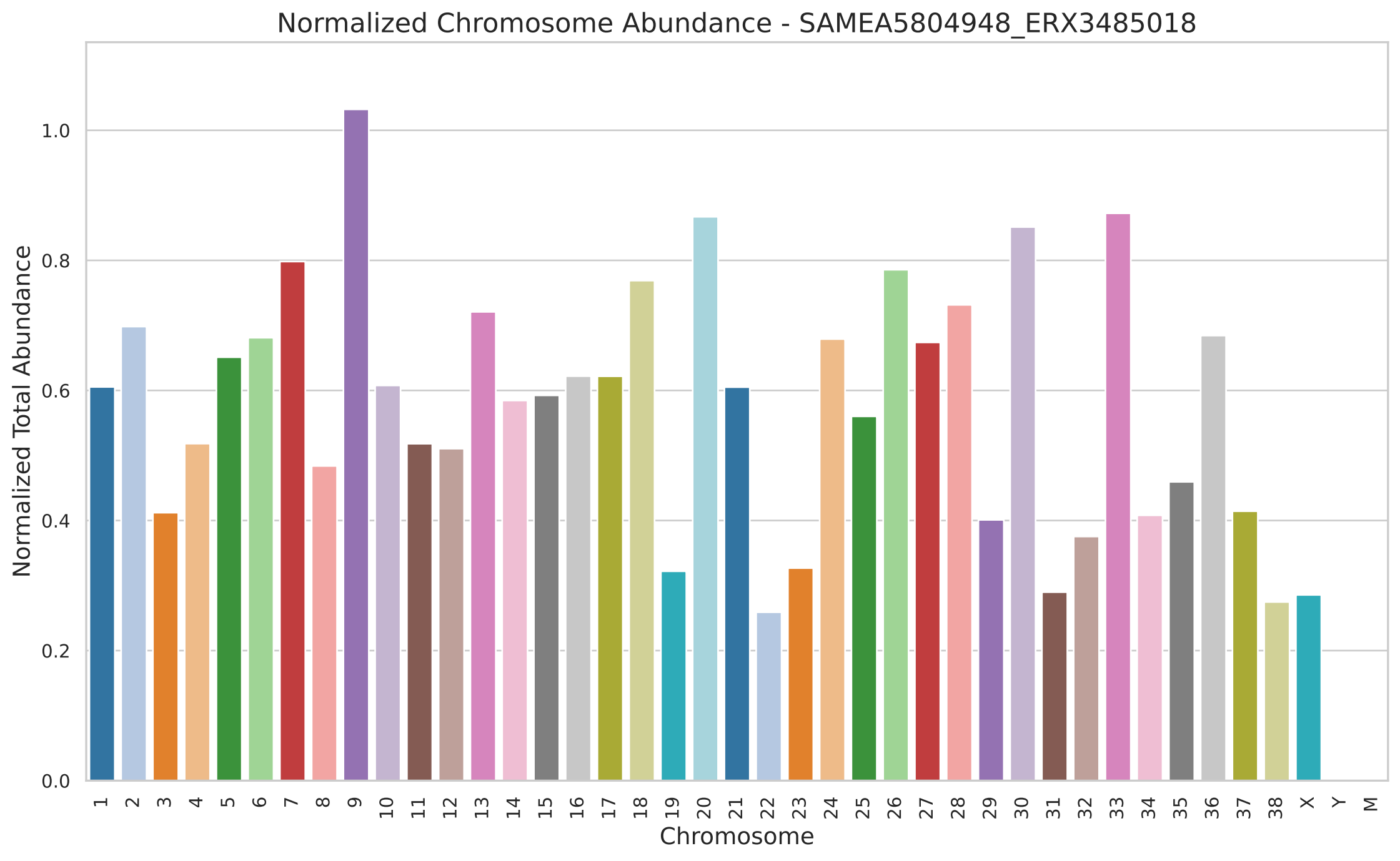

Normalized Chromosome Abundance - SAMEA5805029_ERX3485111
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

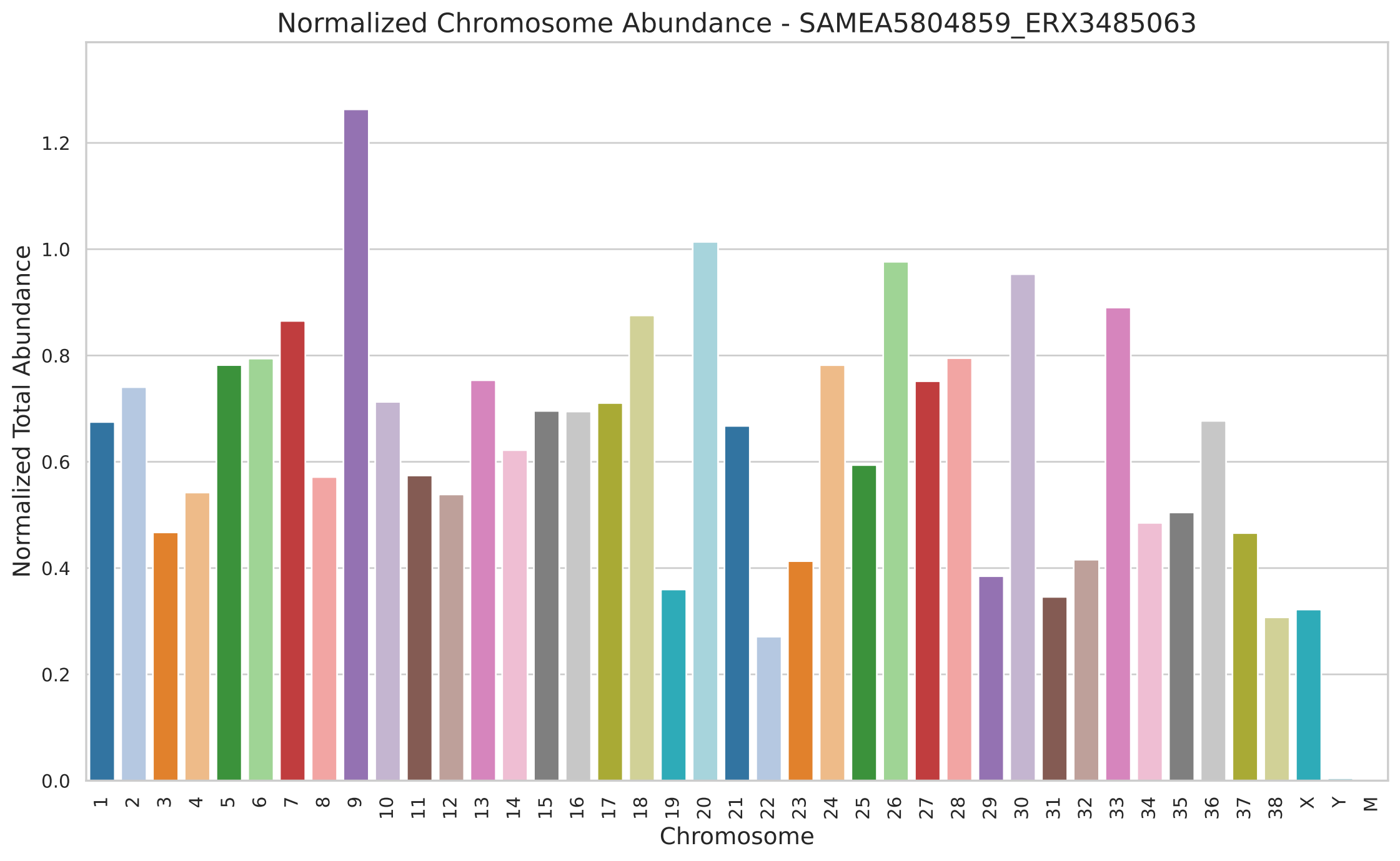

Normalized Chromosome Abundance - SAMEA5805022_ERX3485042
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

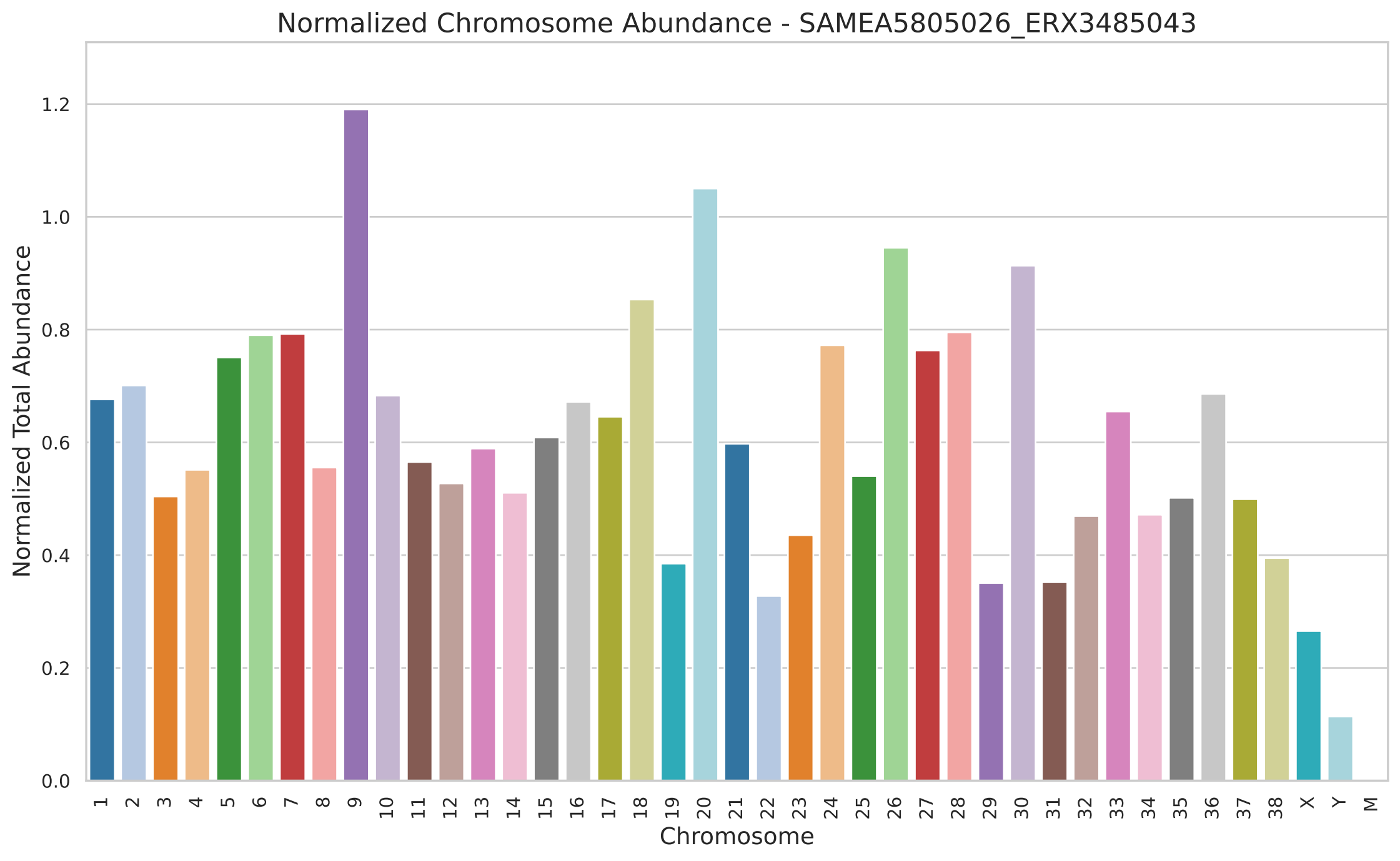

Normalized Chromosome Abundance - SAMEA5804942_ERX3485017
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

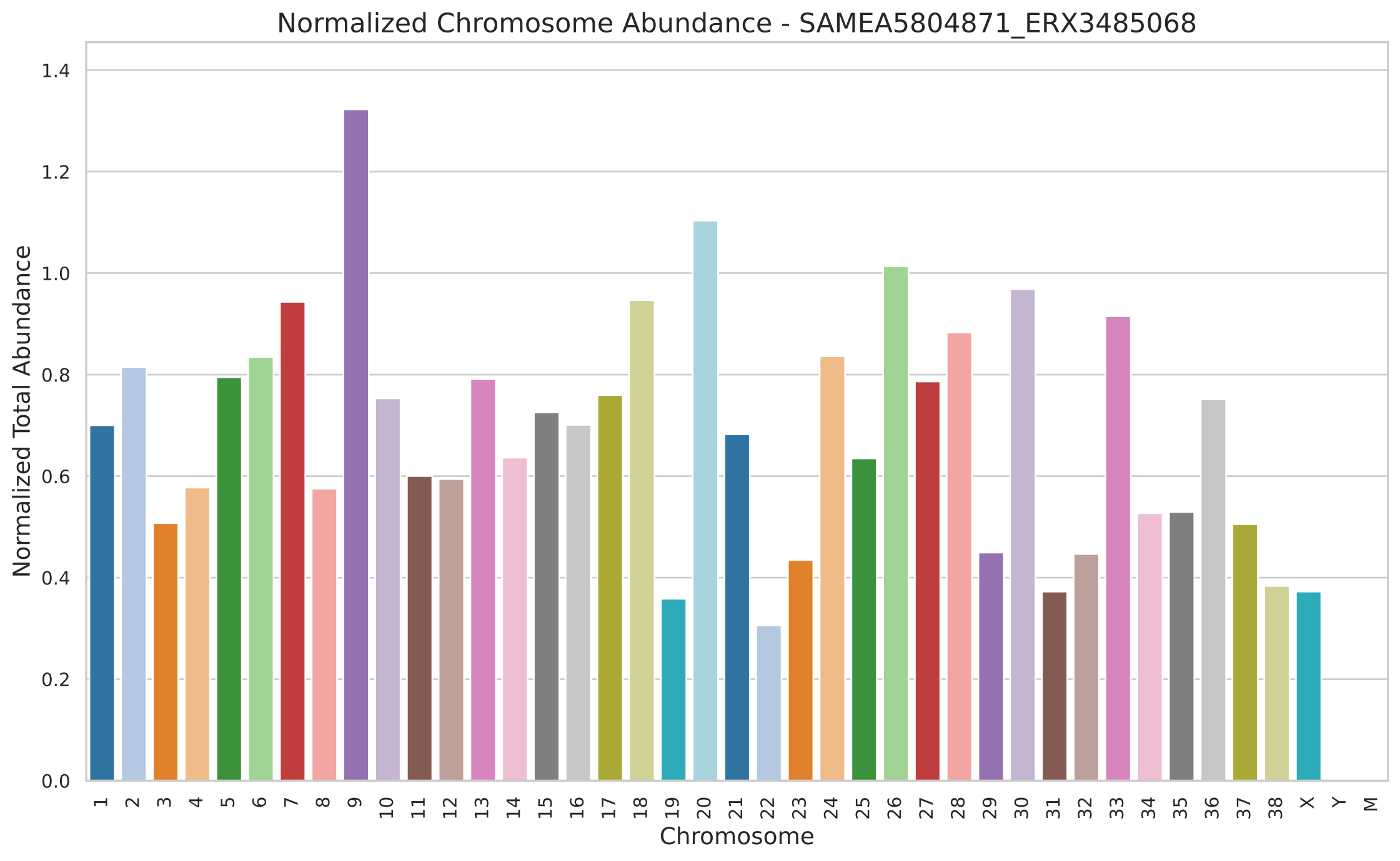

Normalized Chromosome Abundance - SAMEA5804976_ERX3485089
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

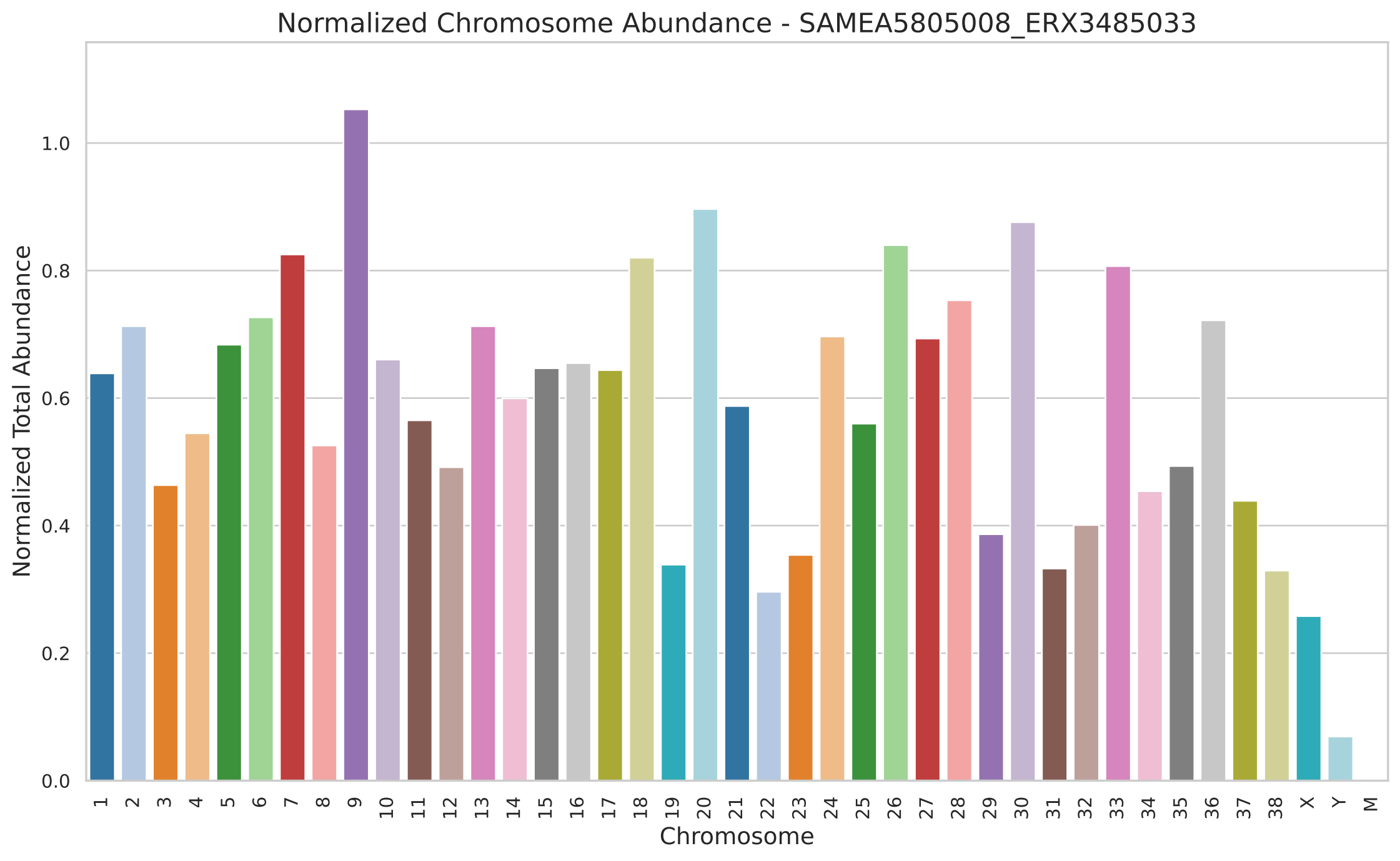

Normalized Chromosome Abundance - SAMEA5805031_ERX3485112
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

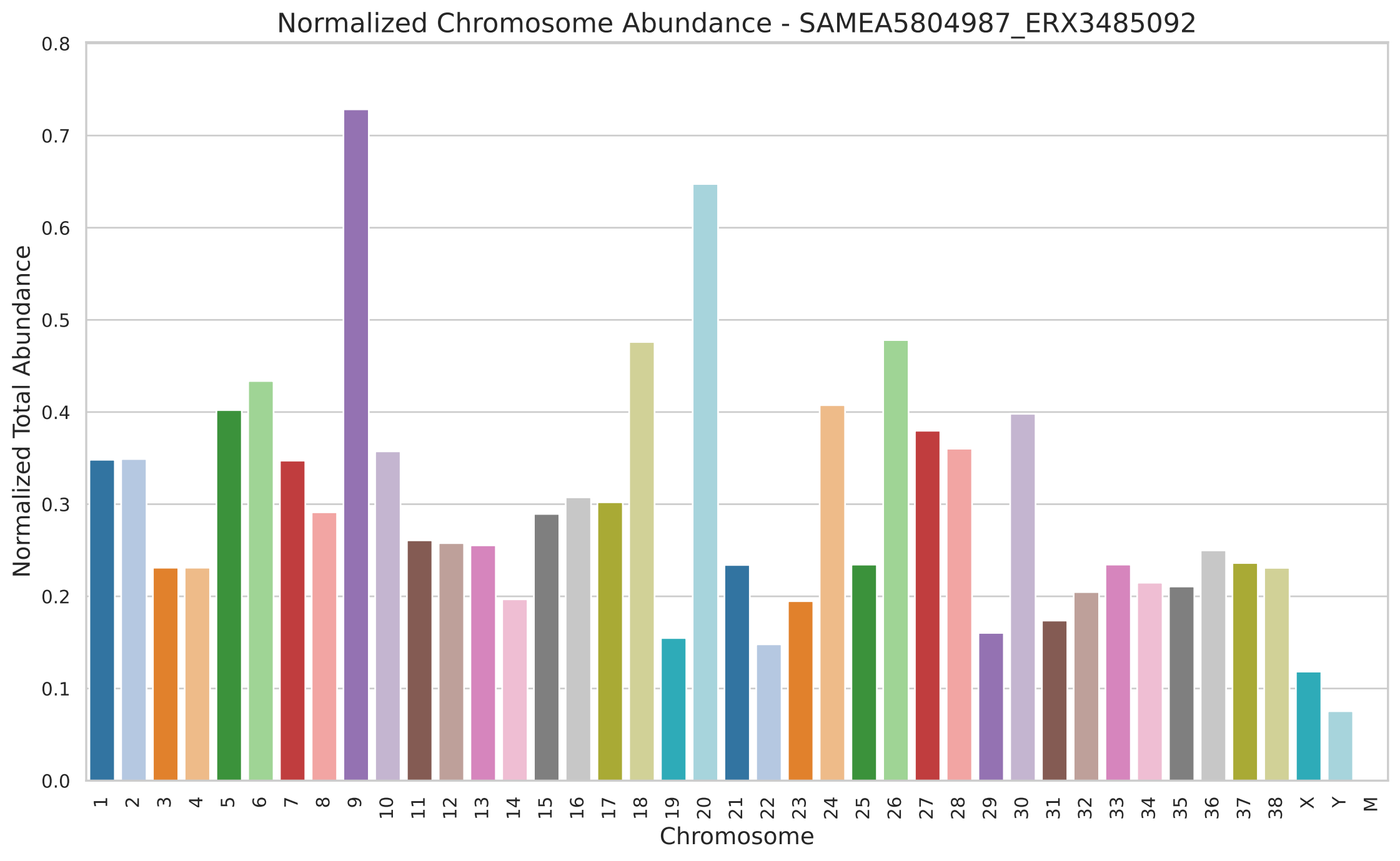

Normalized Chromosome Abundance - SAMEA5804948_ERX3485018
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

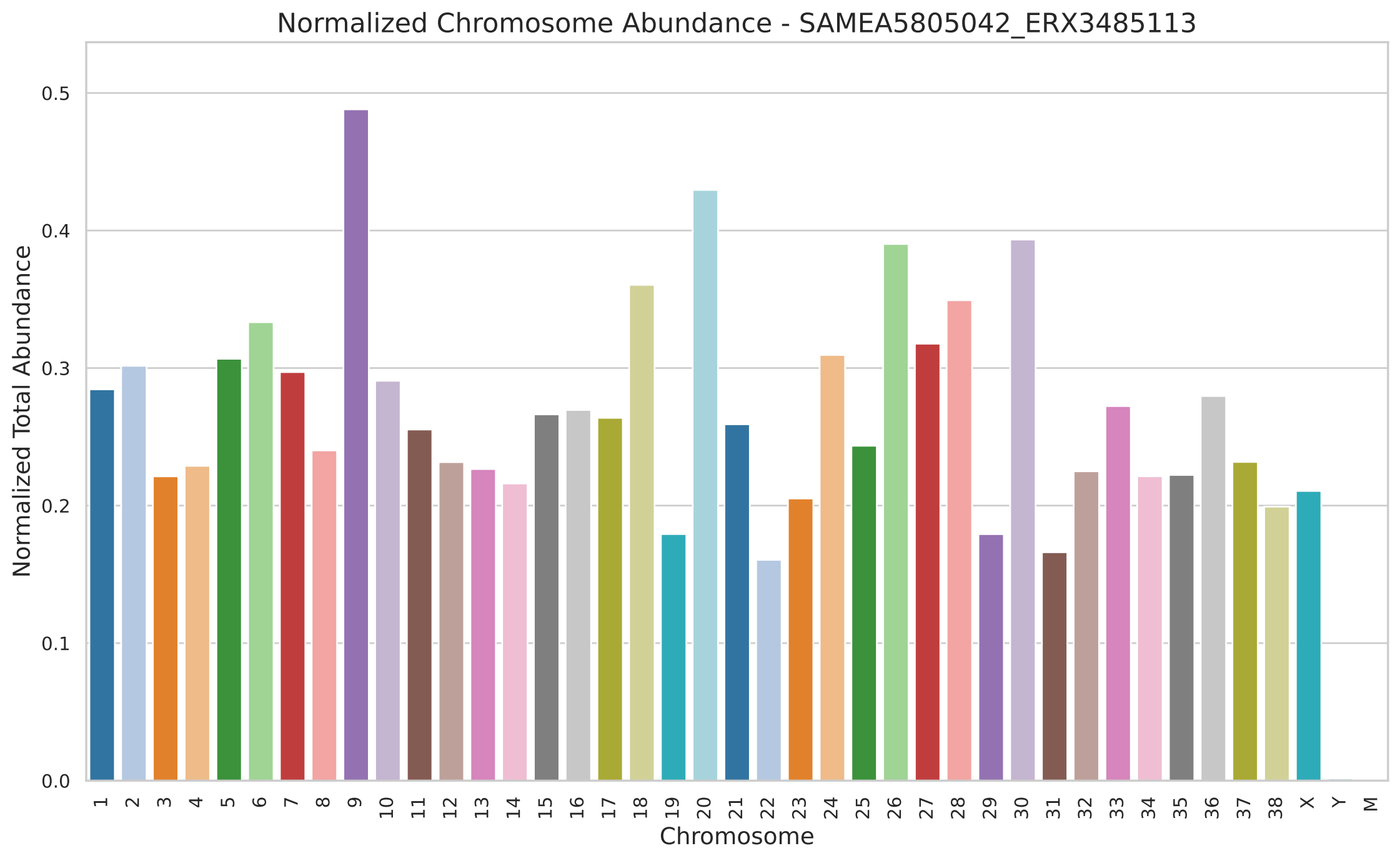

Normalized Chromosome Abundance - SAMEA5804859_ERX3485063
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

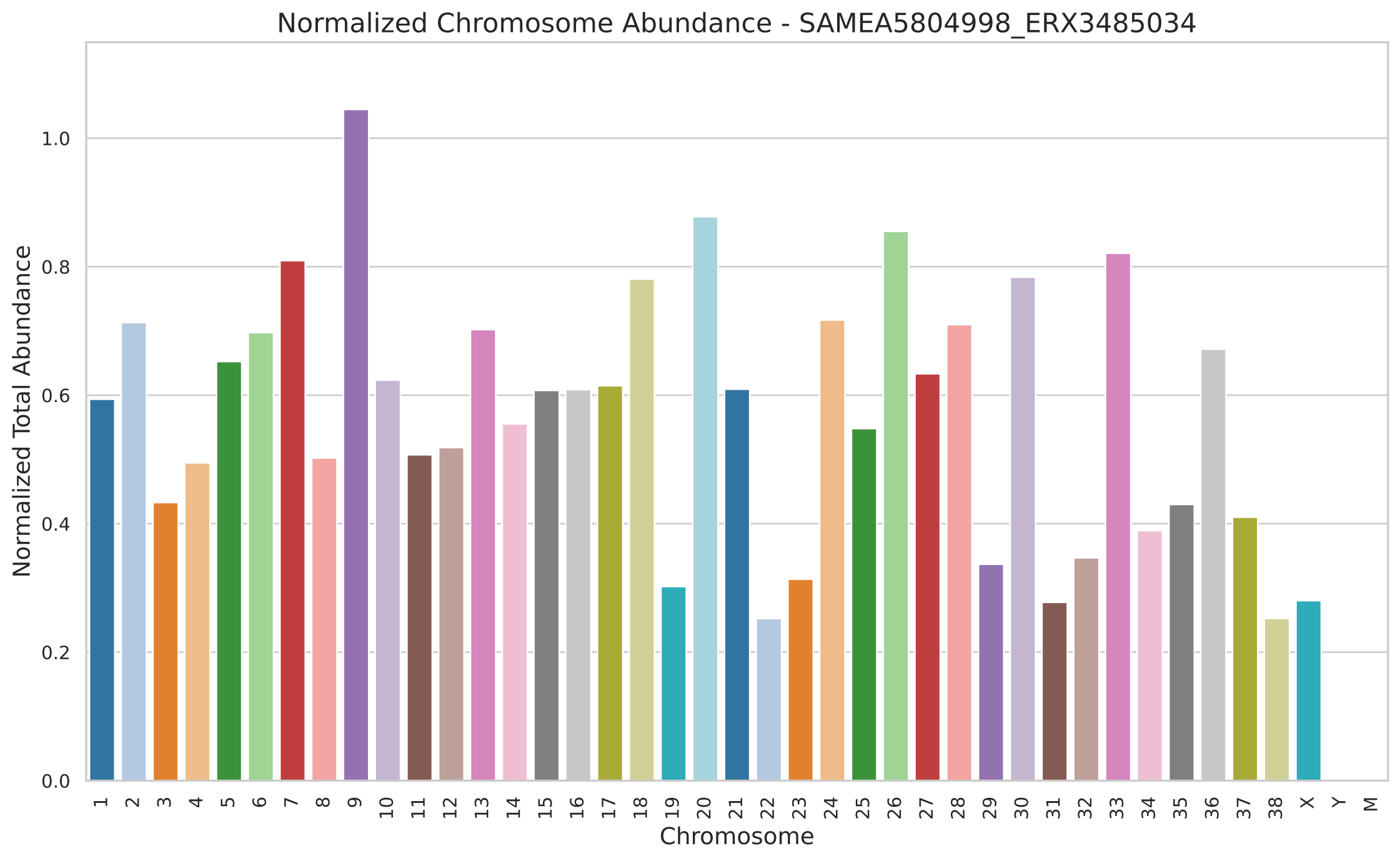

Normalized Chromosome Abundance - SAMEA5805026_ERX3485043
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

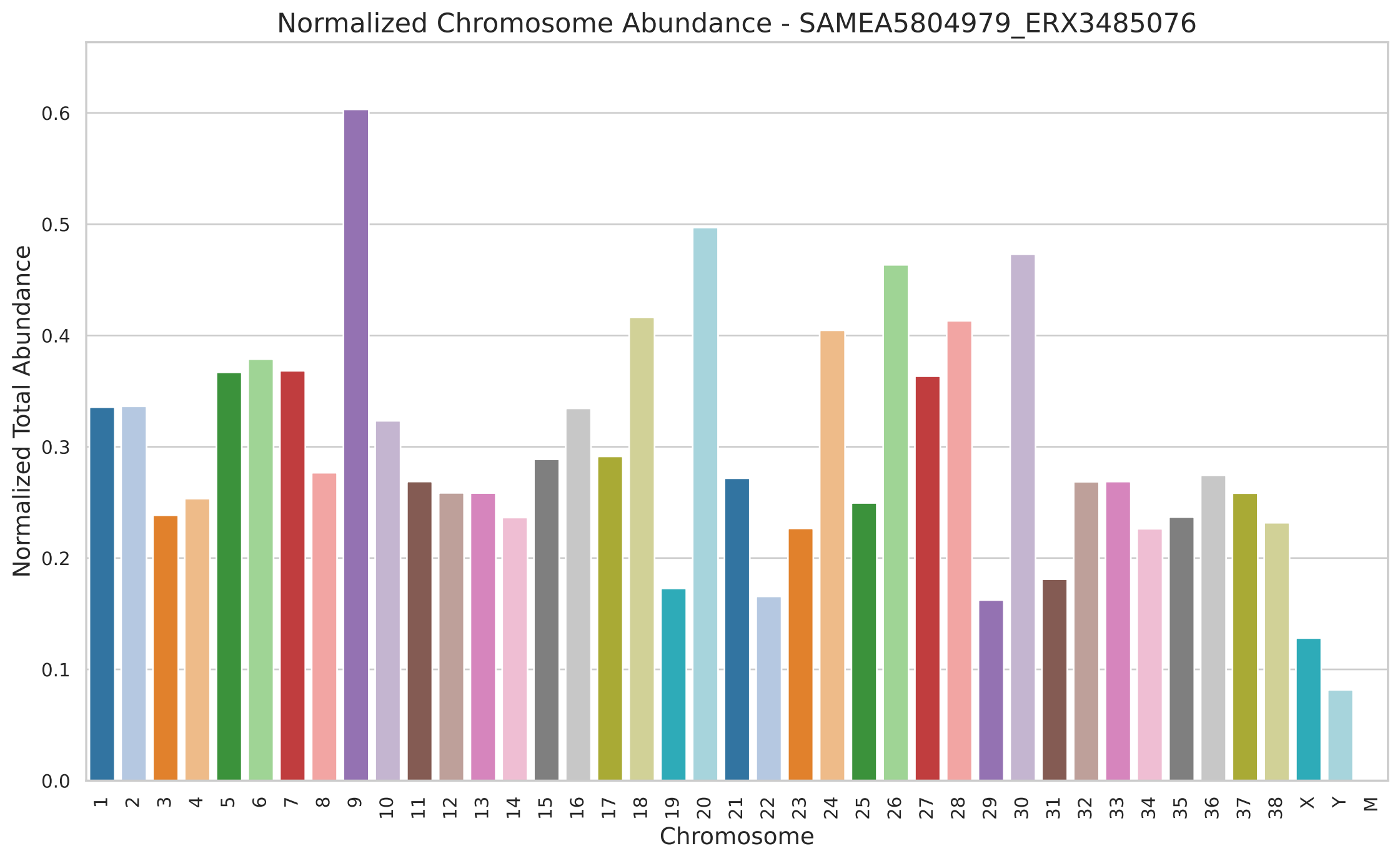

Normalized Chromosome Abundance - SAMEA5804871_ERX3485068
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

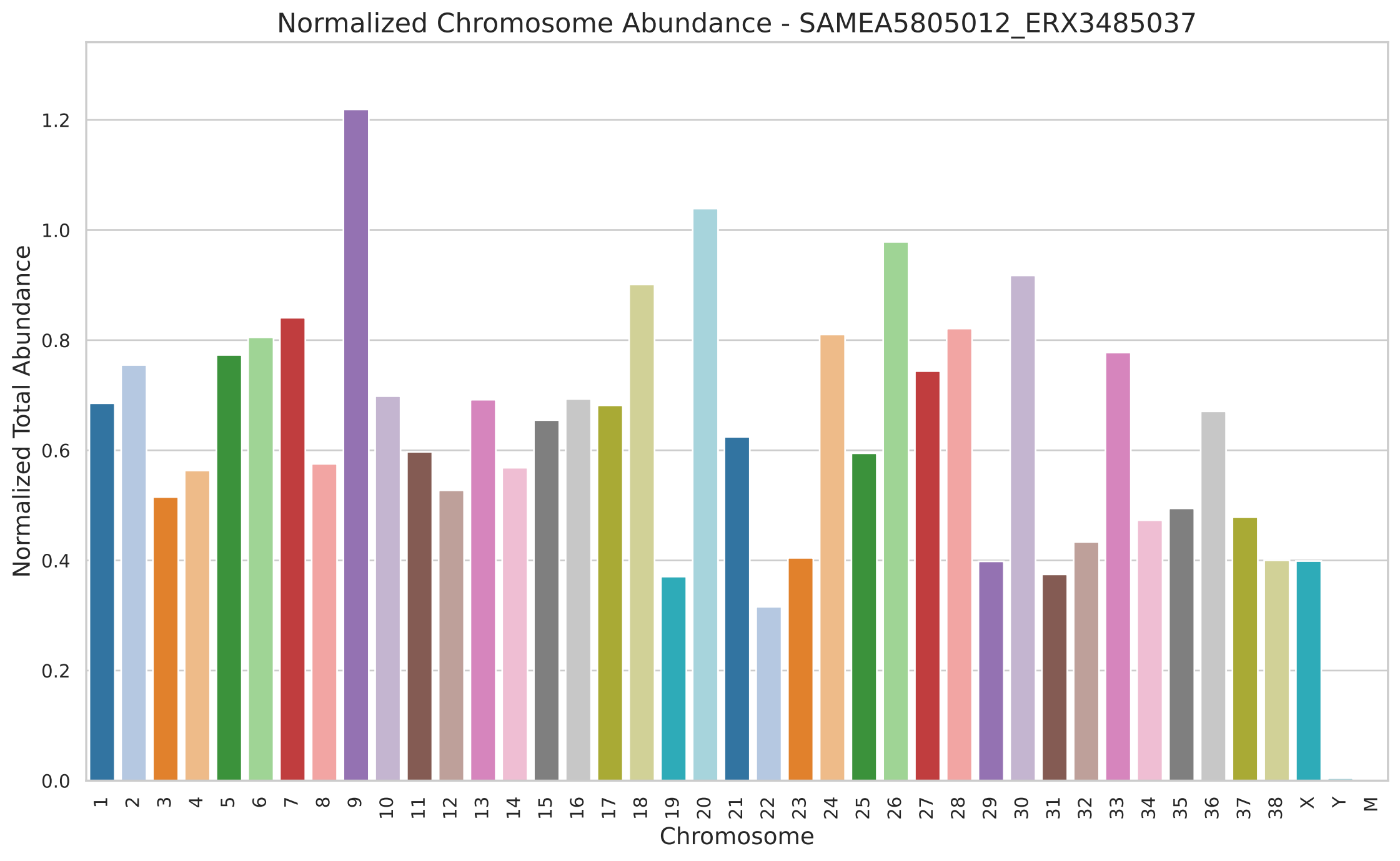

Normalized Chromosome Abundance - SAMEA5805008_ERX3485033
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

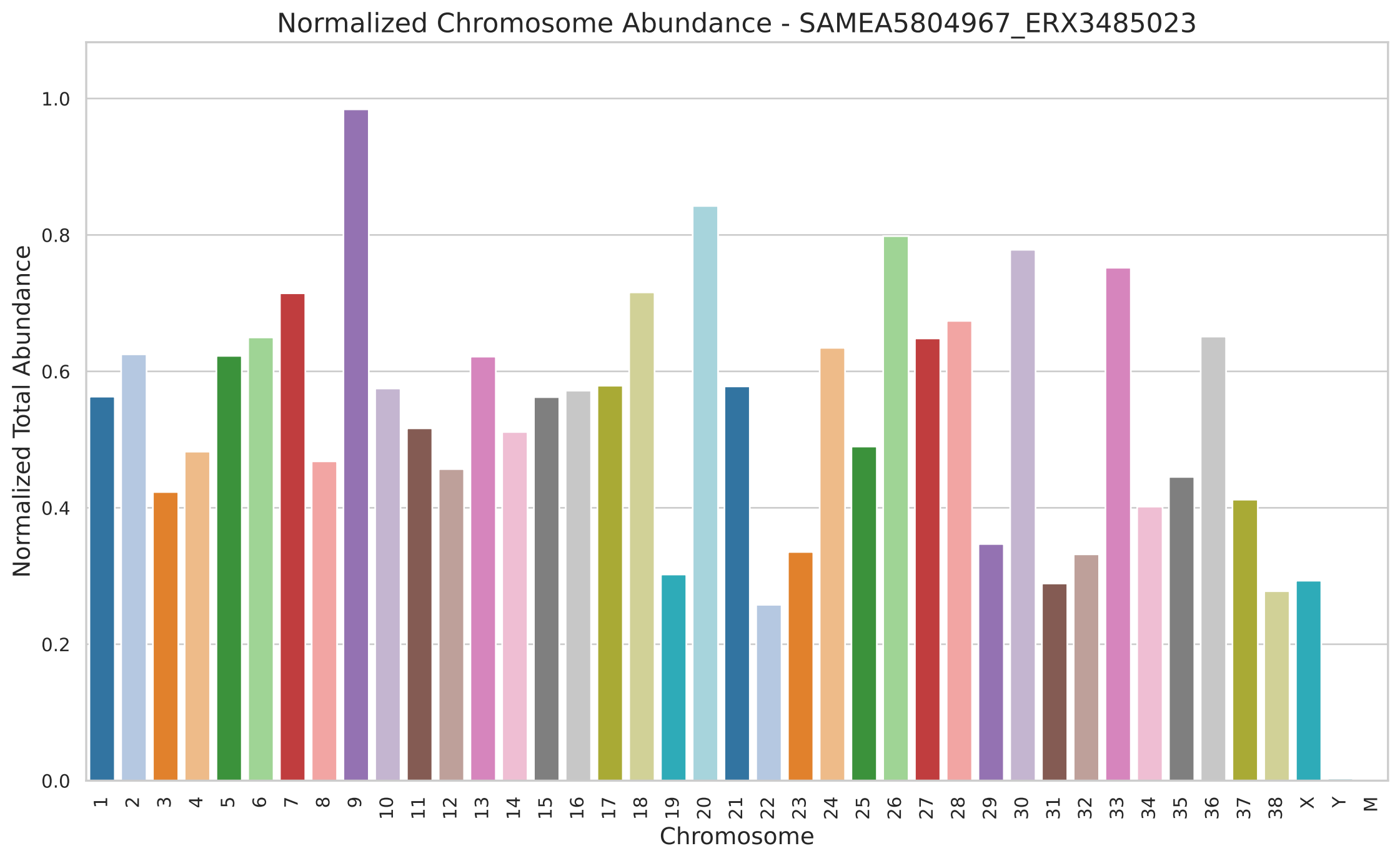

Normalized Chromosome Abundance - SAMEA5804987_ERX3485092
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

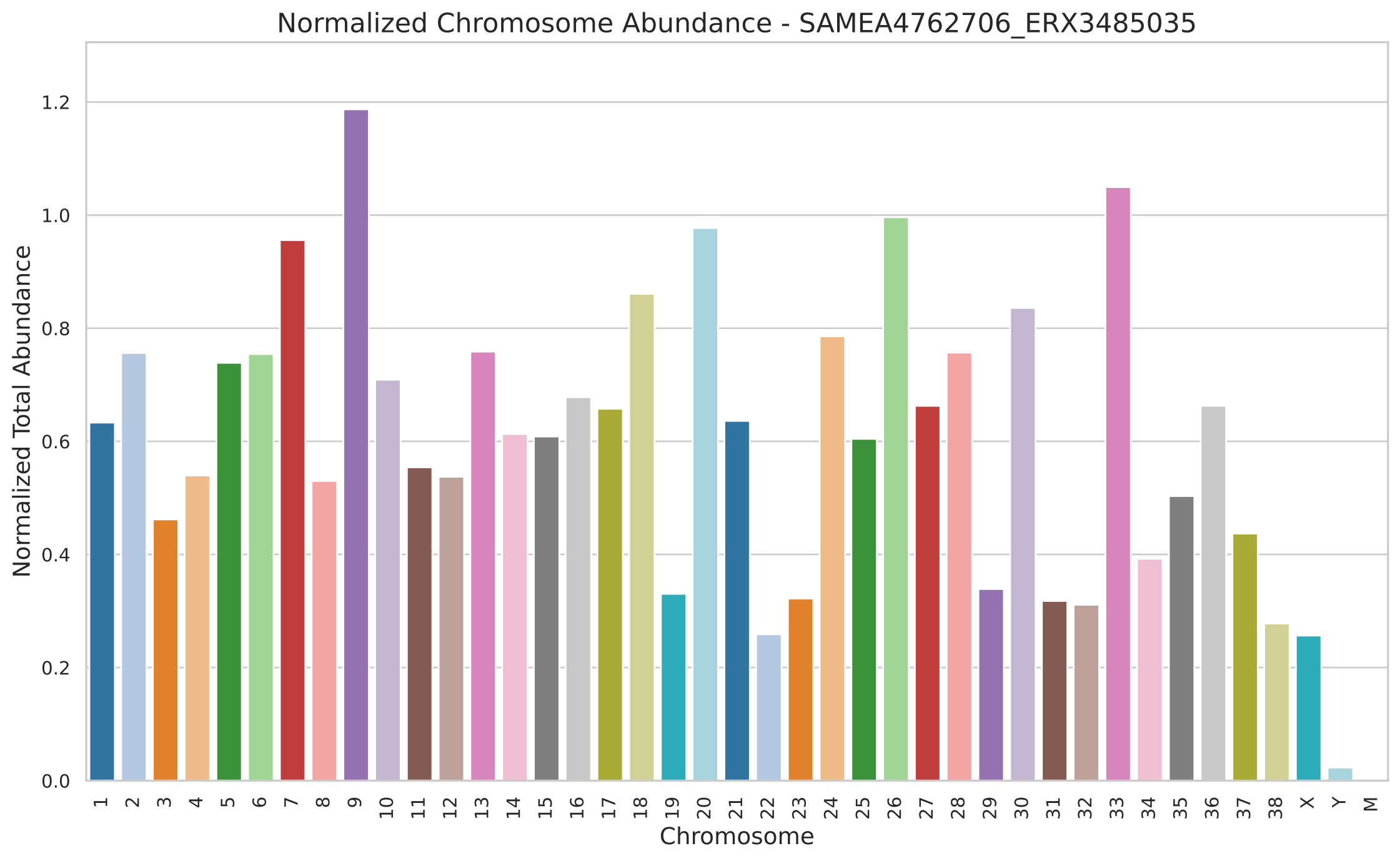

Normalized Chromosome Abundance - SAMEA5805042_ERX3485113
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

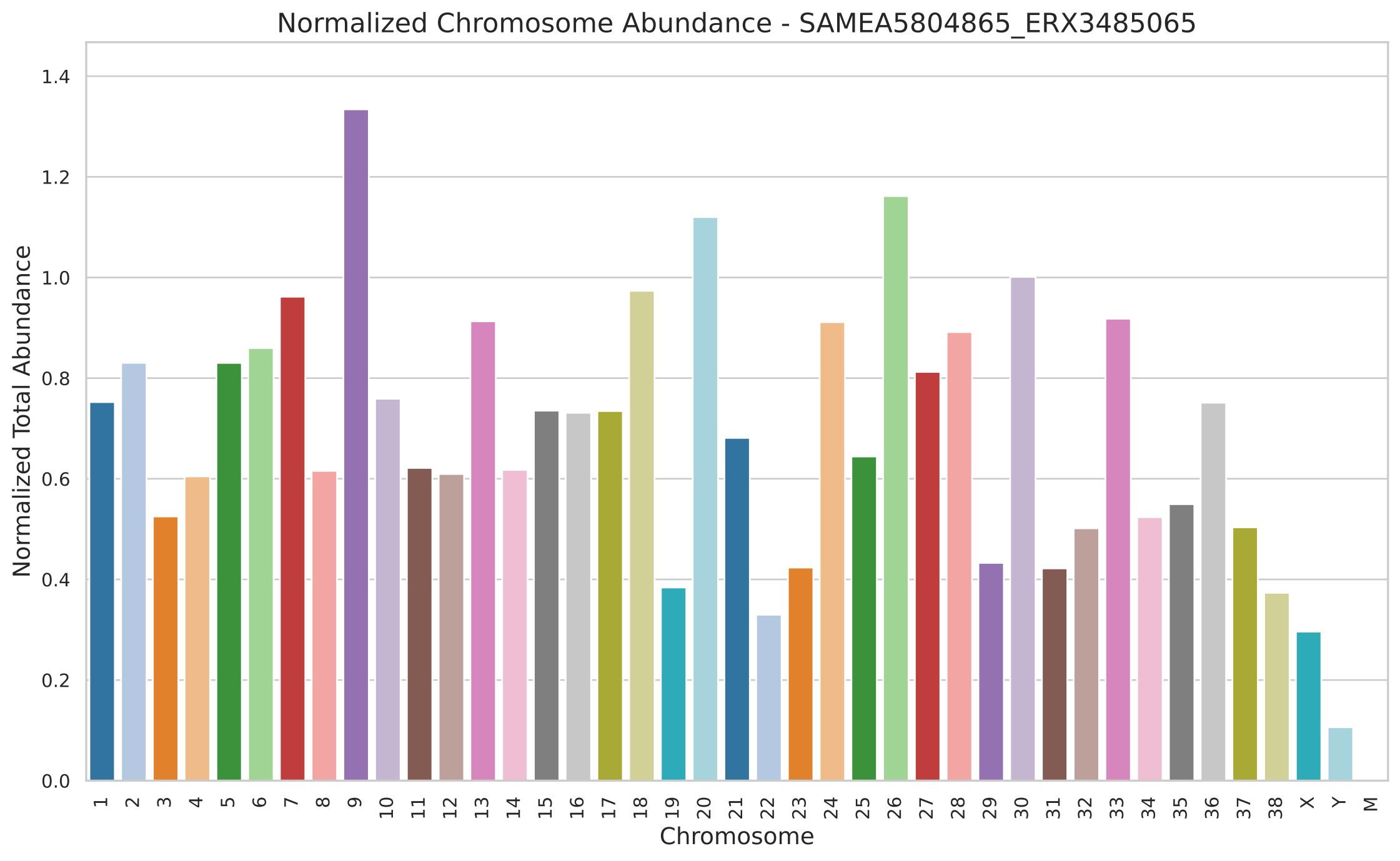

Normalized Chromosome Abundance - SAMEA5804998_ERX3485034
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

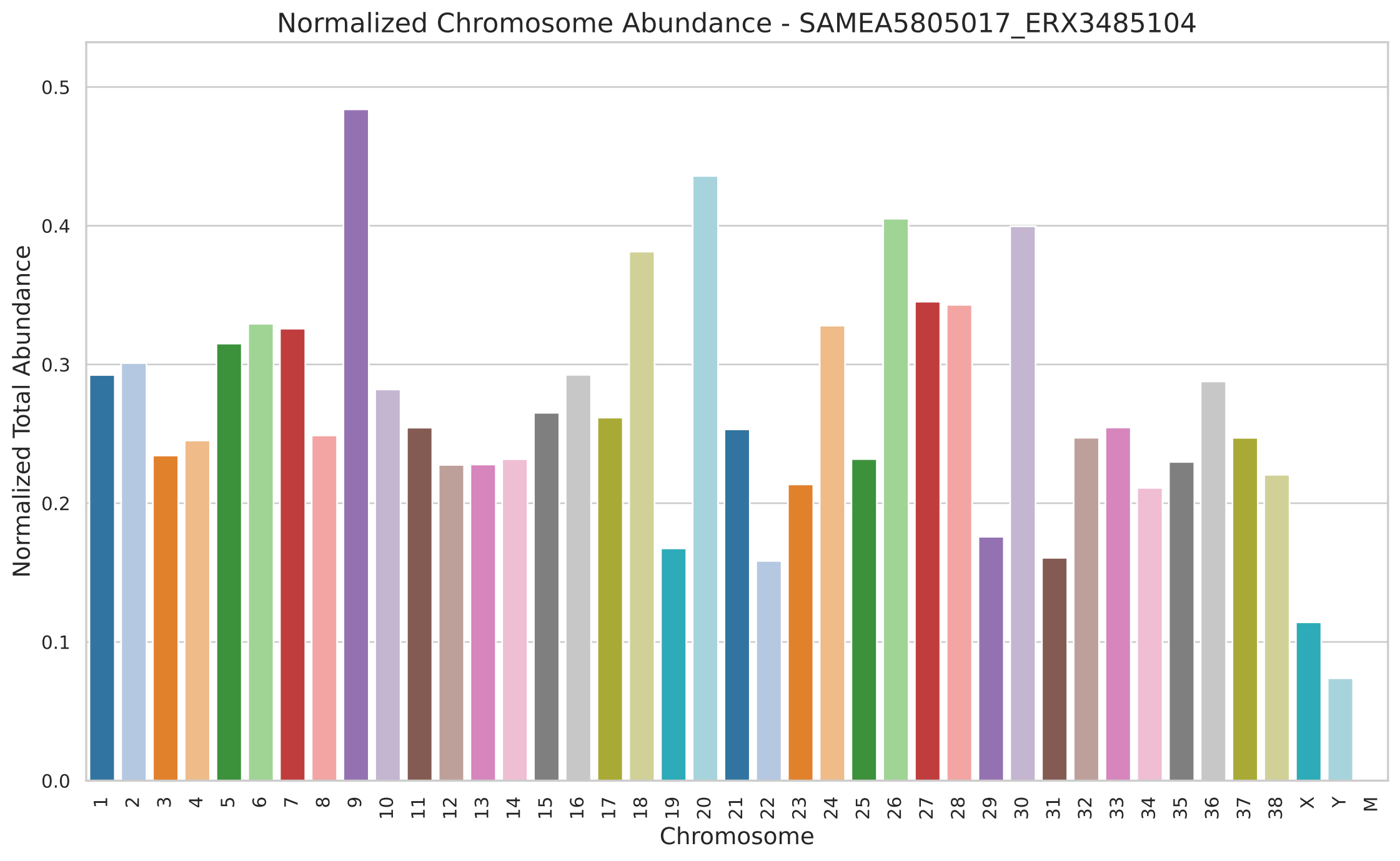

Normalized Chromosome Abundance - SAMEA5804979_ERX3485076
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

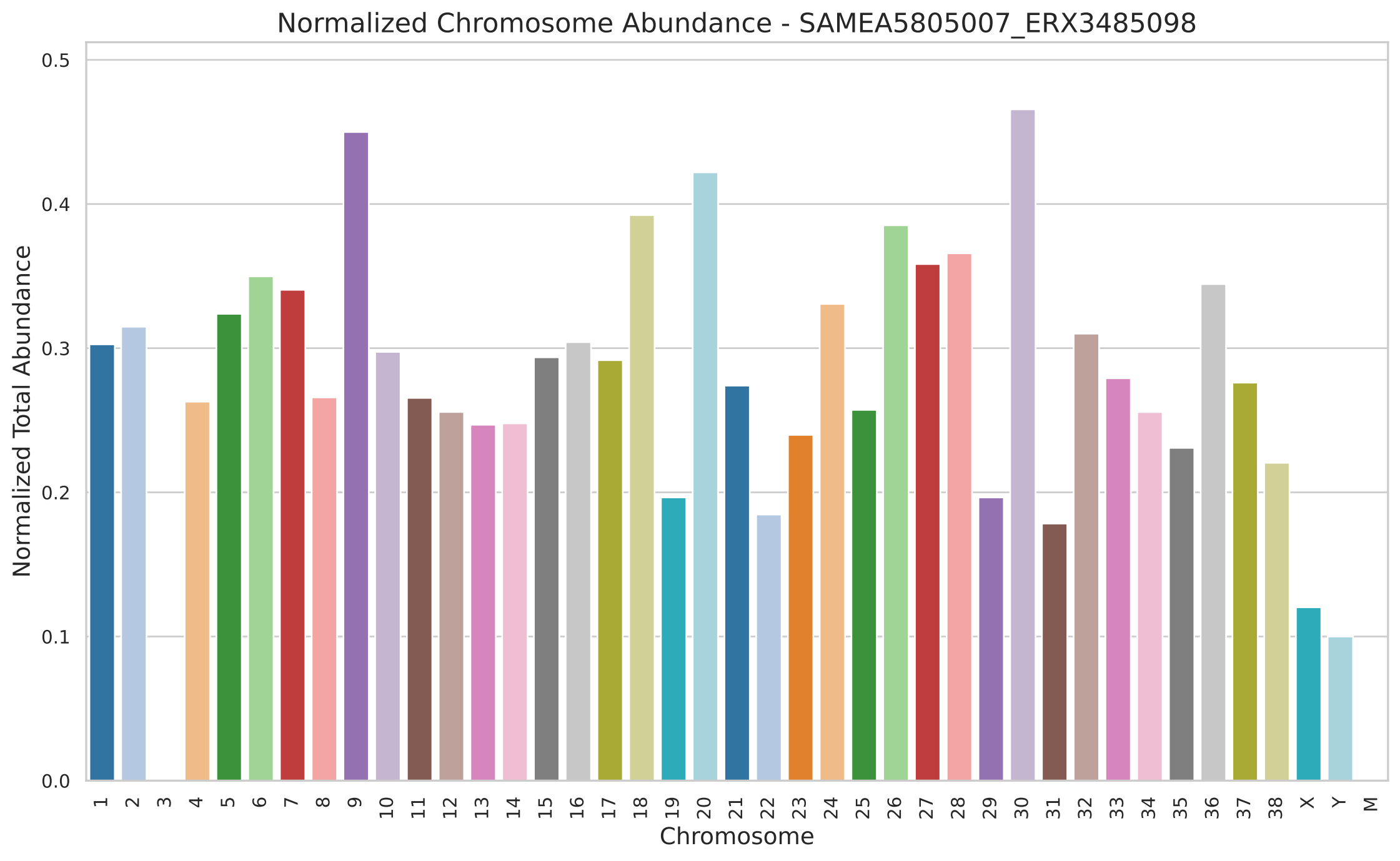

Normalized Chromosome Abundance - SAMEA5805012_ERX3485037
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

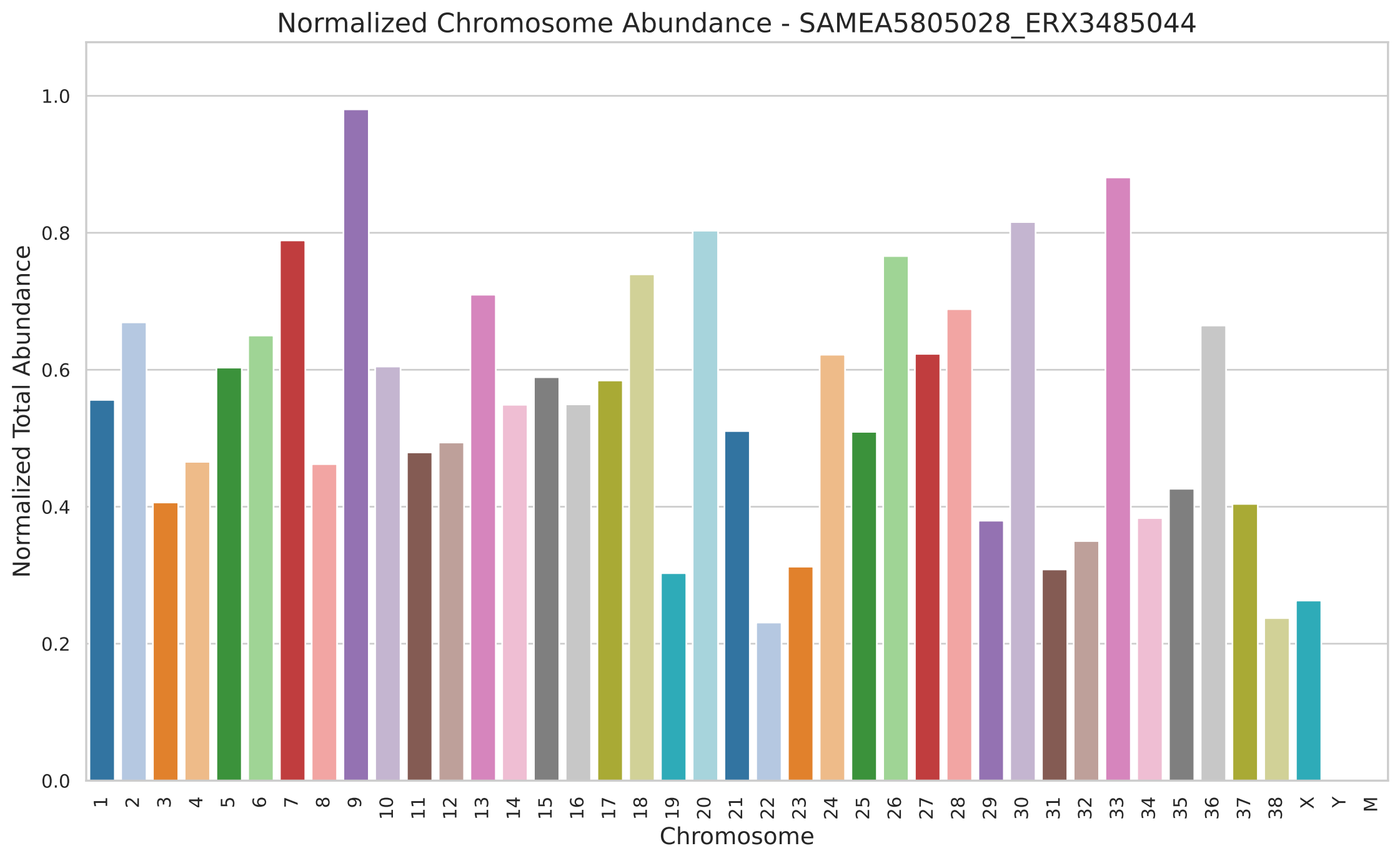

Normalized Chromosome Abundance - SAMEA5804967_ERX3485023
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

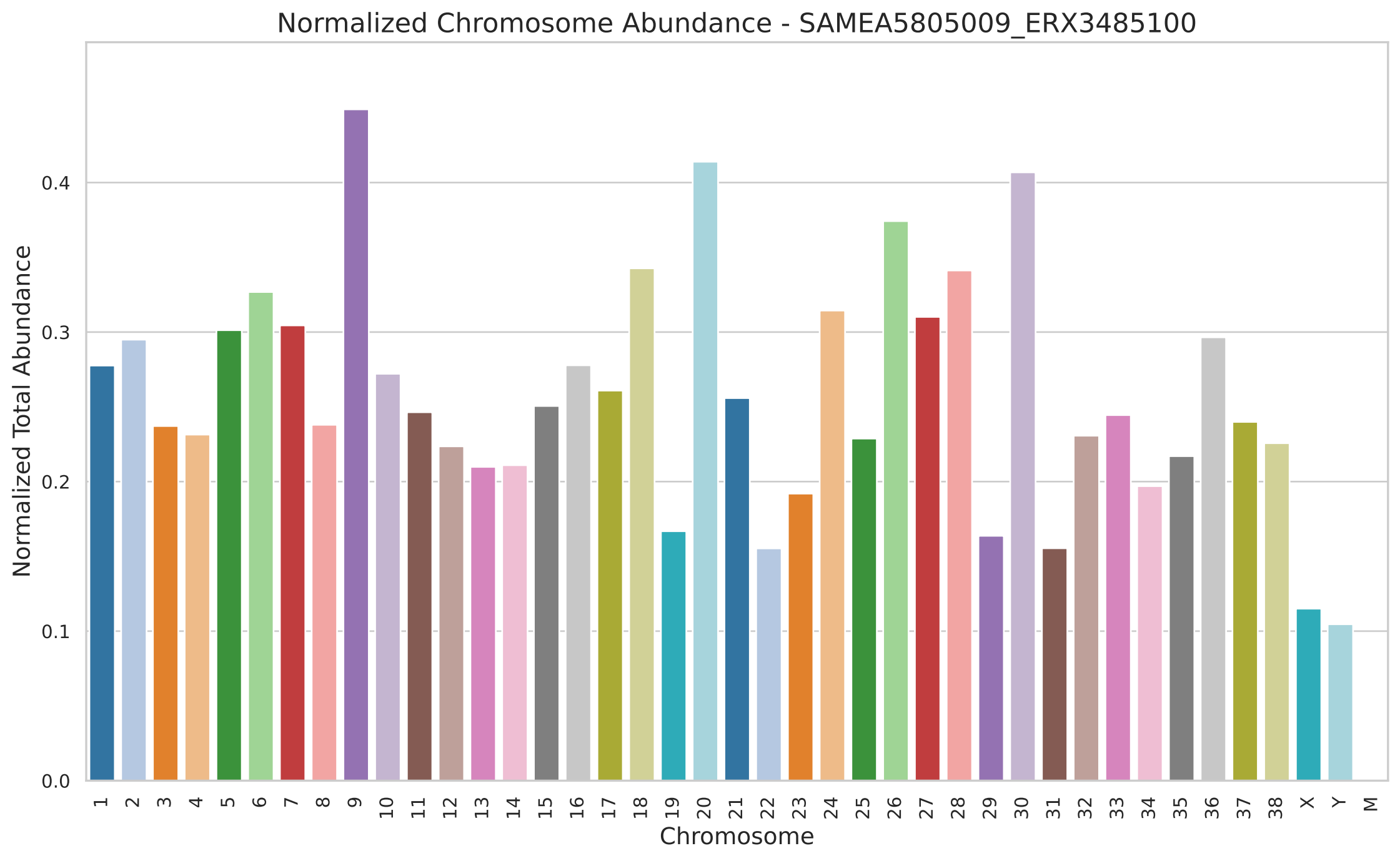

Normalized Chromosome Abundance - SAMEA4762706_ERX3485035
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

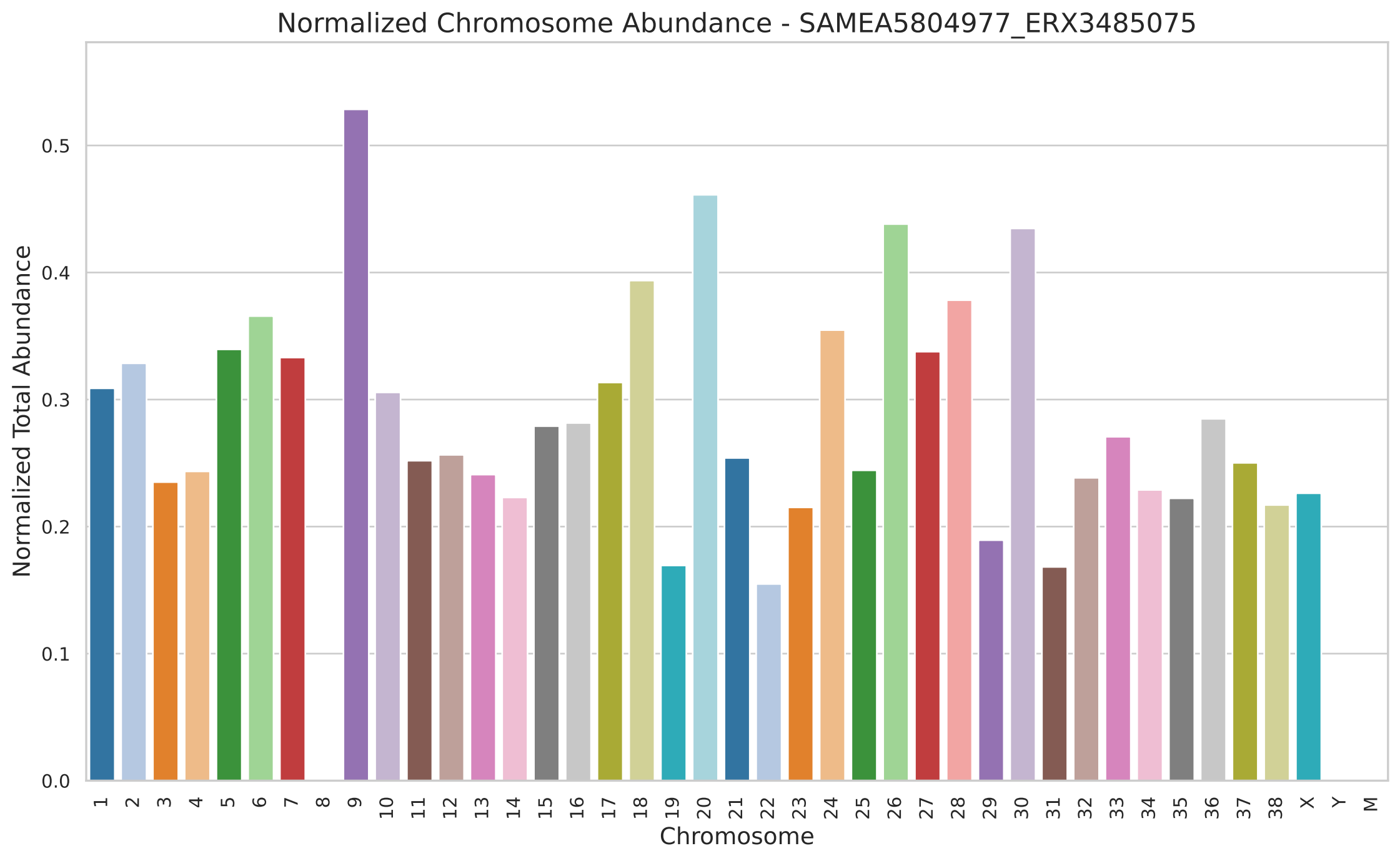

Normalized Chromosome Abundance - SAMEA5804865_ERX3485065
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

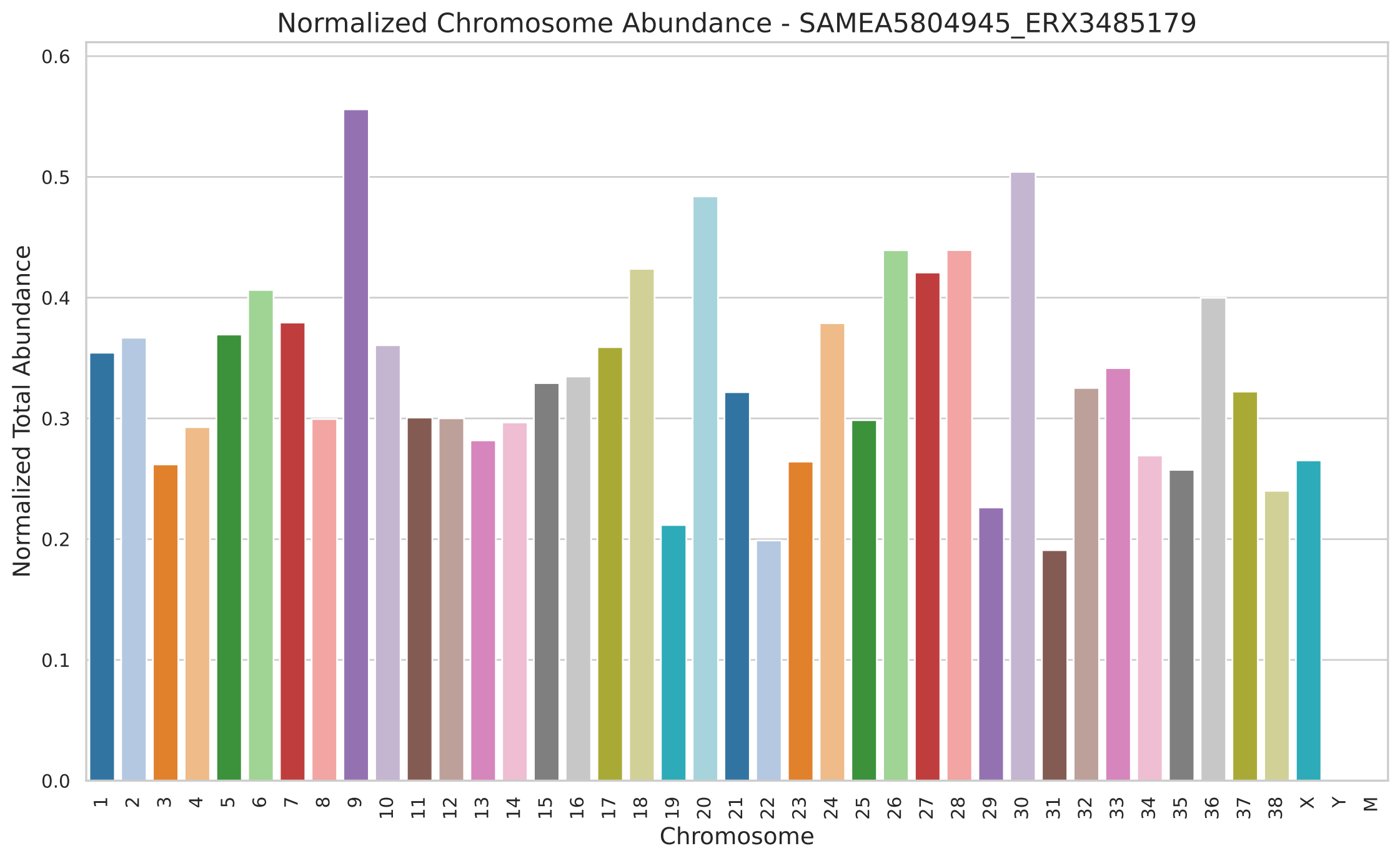

Normalized Chromosome Abundance - SAMEA5805017_ERX3485104
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

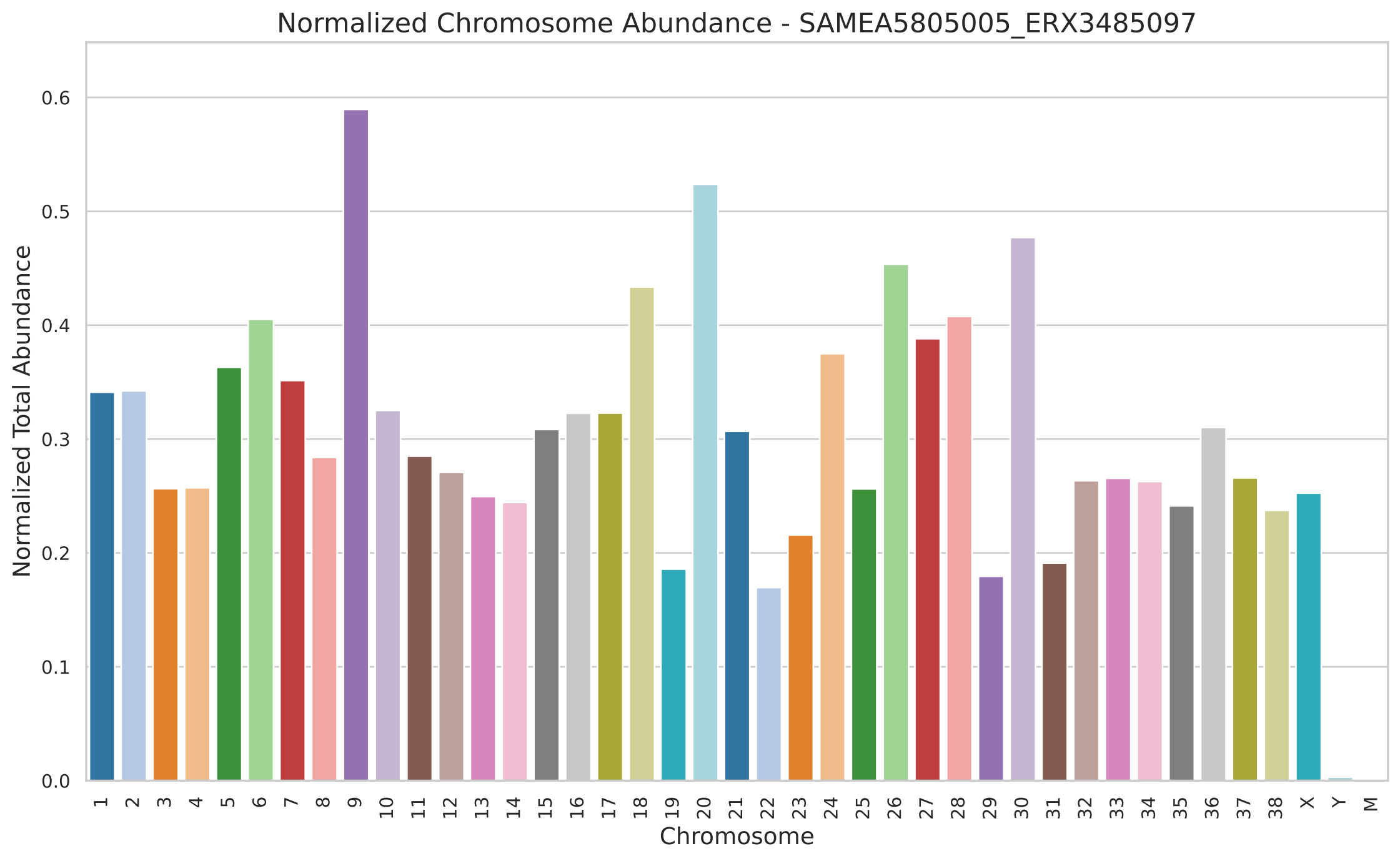

Normalized Chromosome Abundance - SAMEA5805007_ERX3485098
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

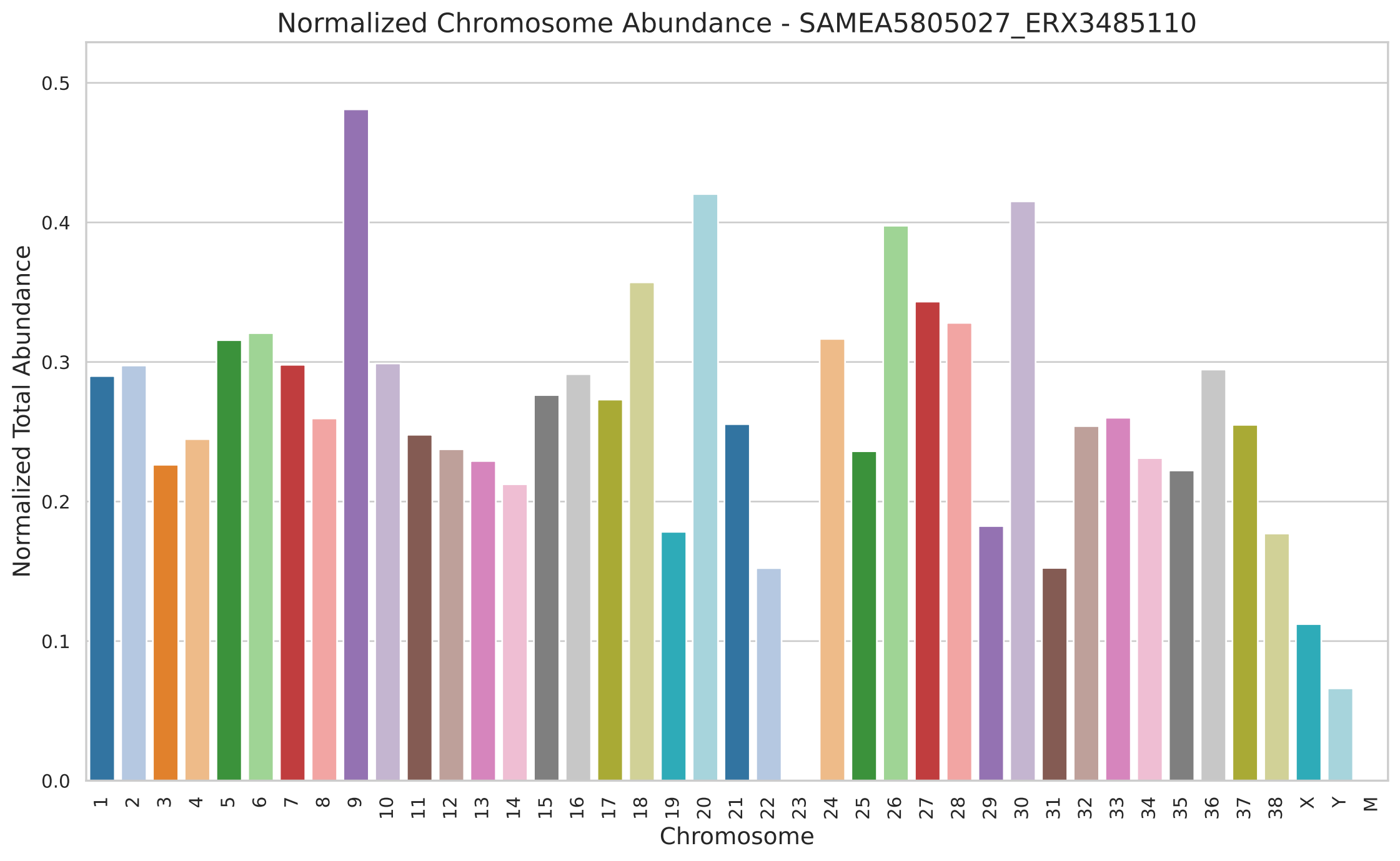

Normalized Chromosome Abundance - SAMEA5805028_ERX3485044
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

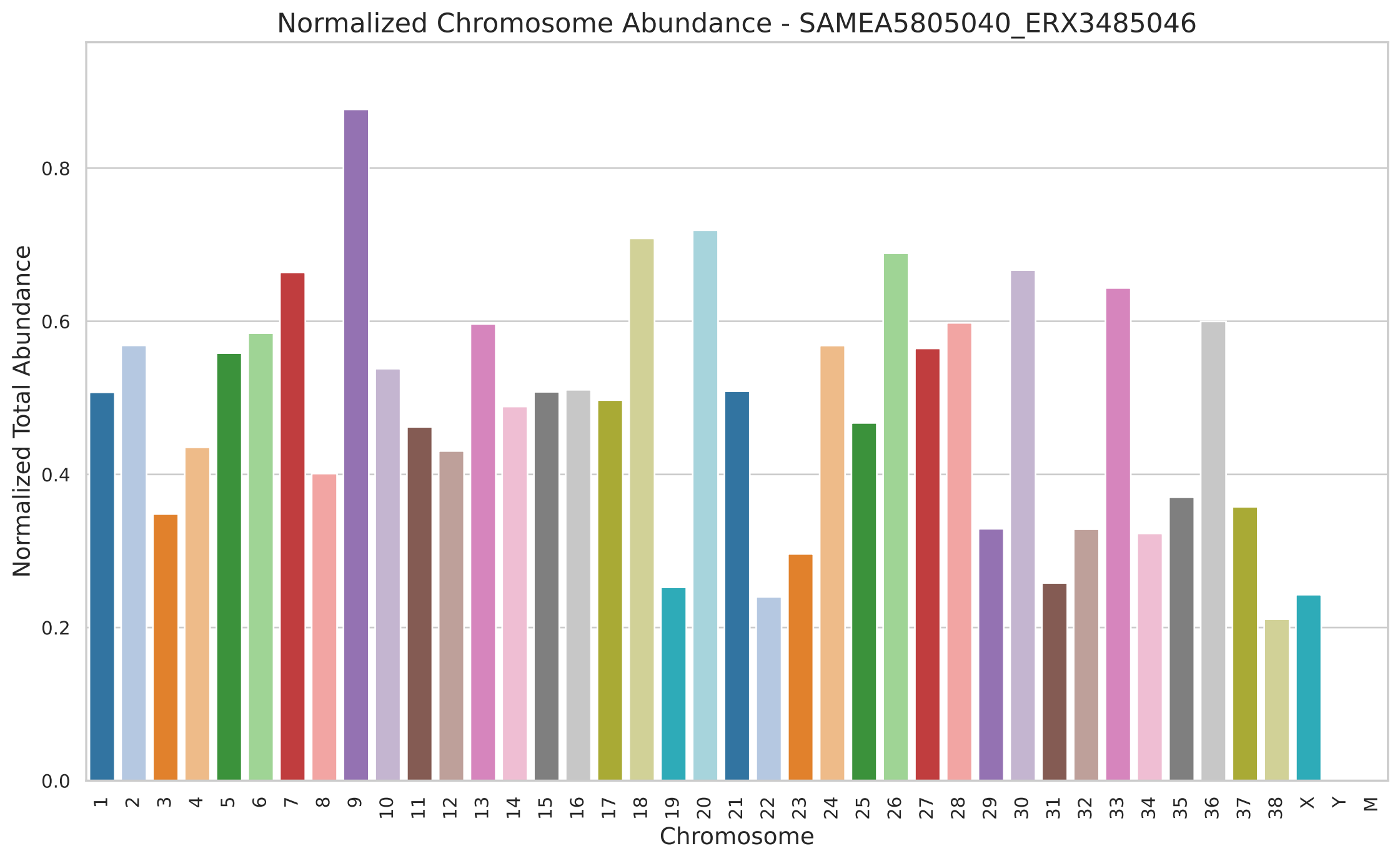

Normalized Chromosome Abundance - SAMEA5805009_ERX3485100
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

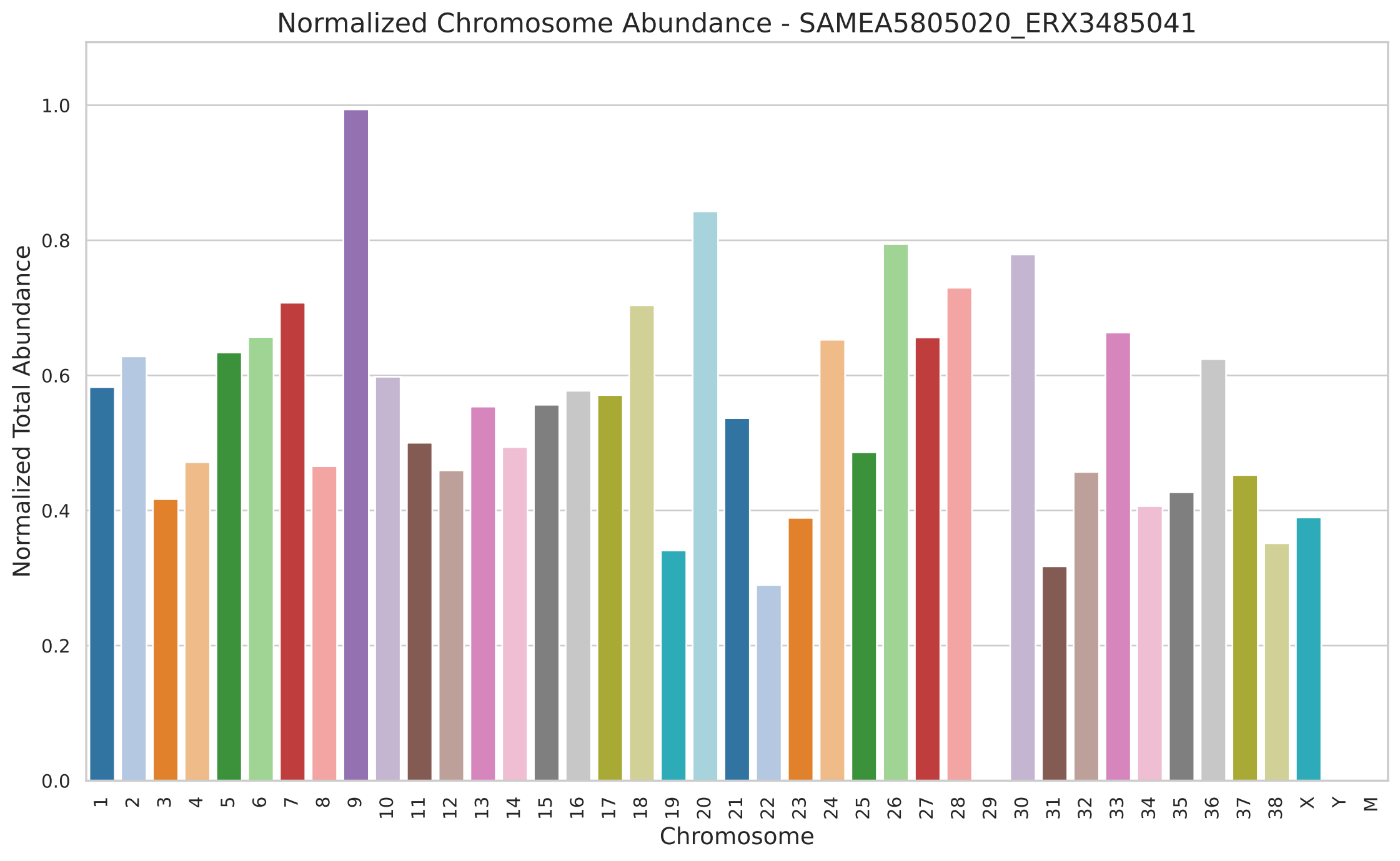

Normalized Chromosome Abundance - SAMEA5804977_ERX3485075
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

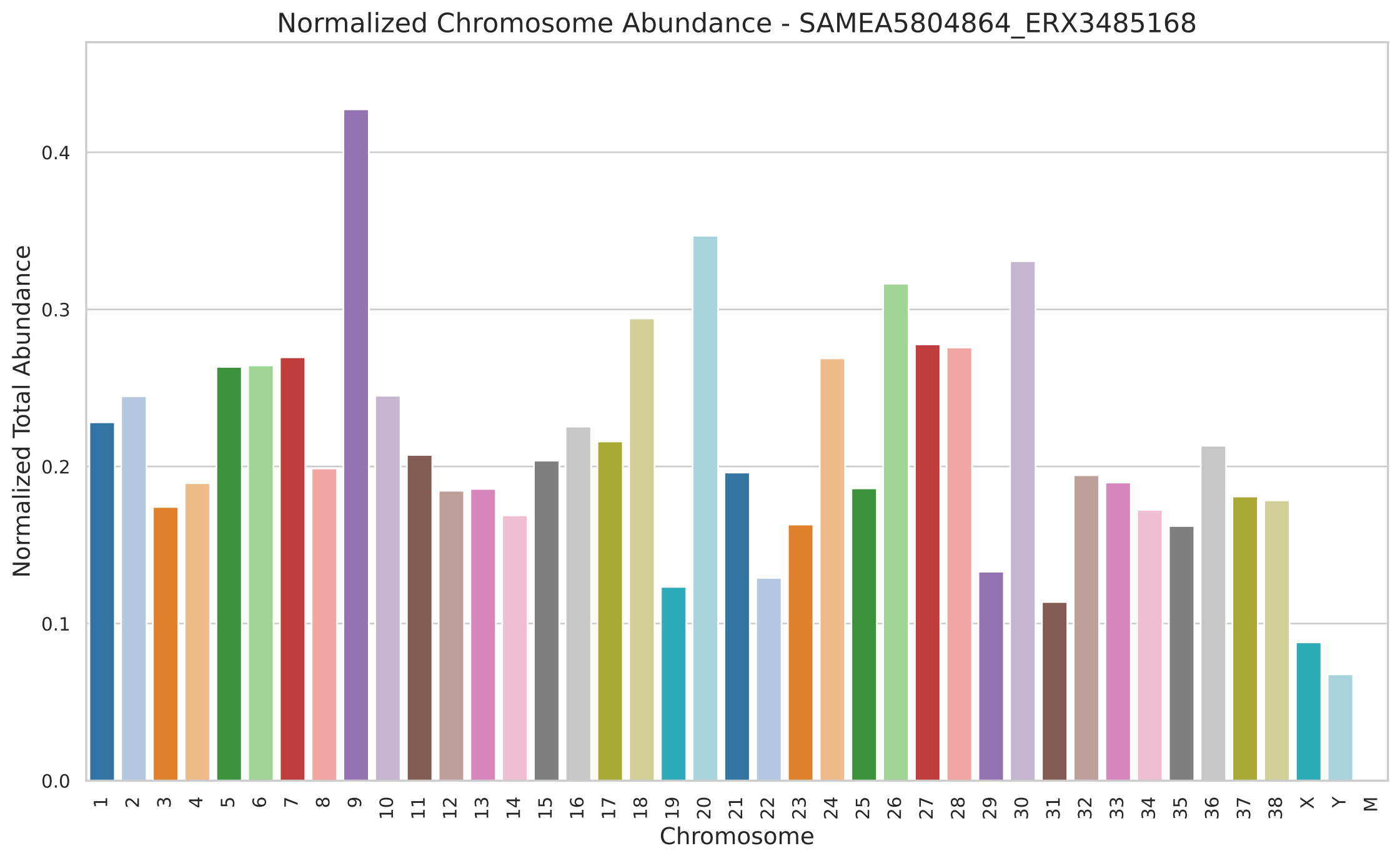

Normalized Chromosome Abundance - SAMEA5804945_ERX3485179
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

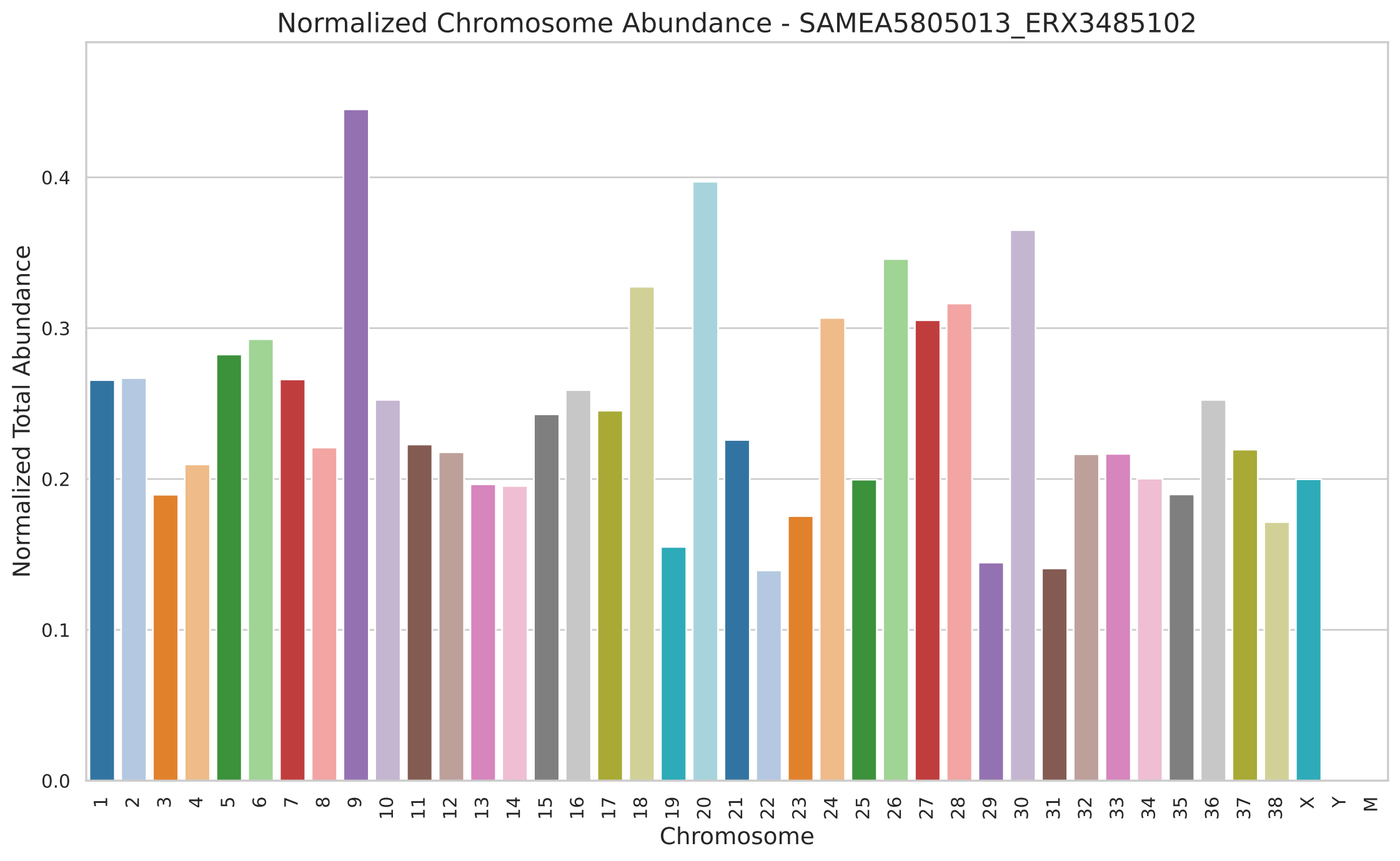

Normalized Chromosome Abundance - SAMEA5805005_ERX3485097
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

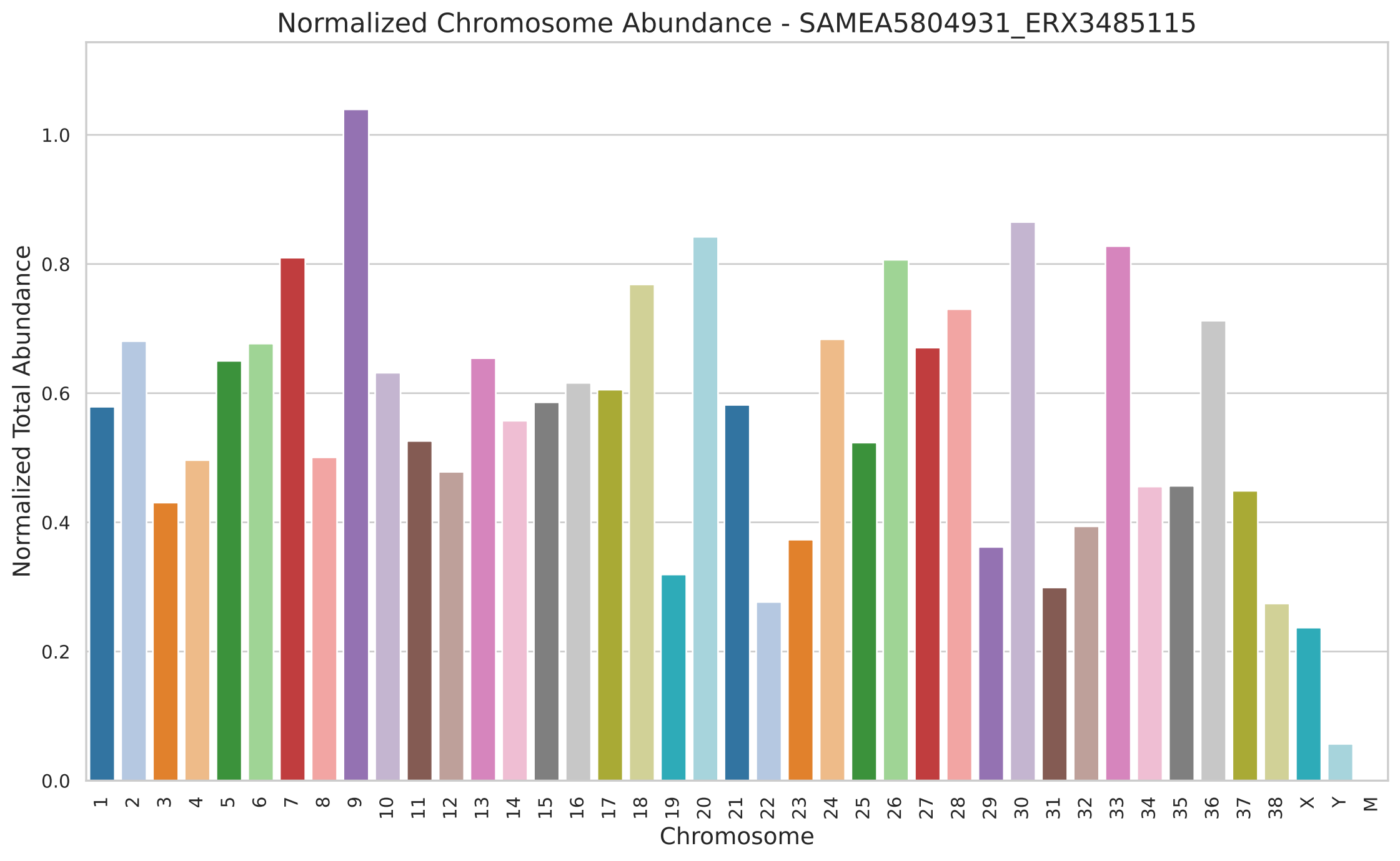

Normalized Chromosome Abundance - SAMEA5805027_ERX3485110
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

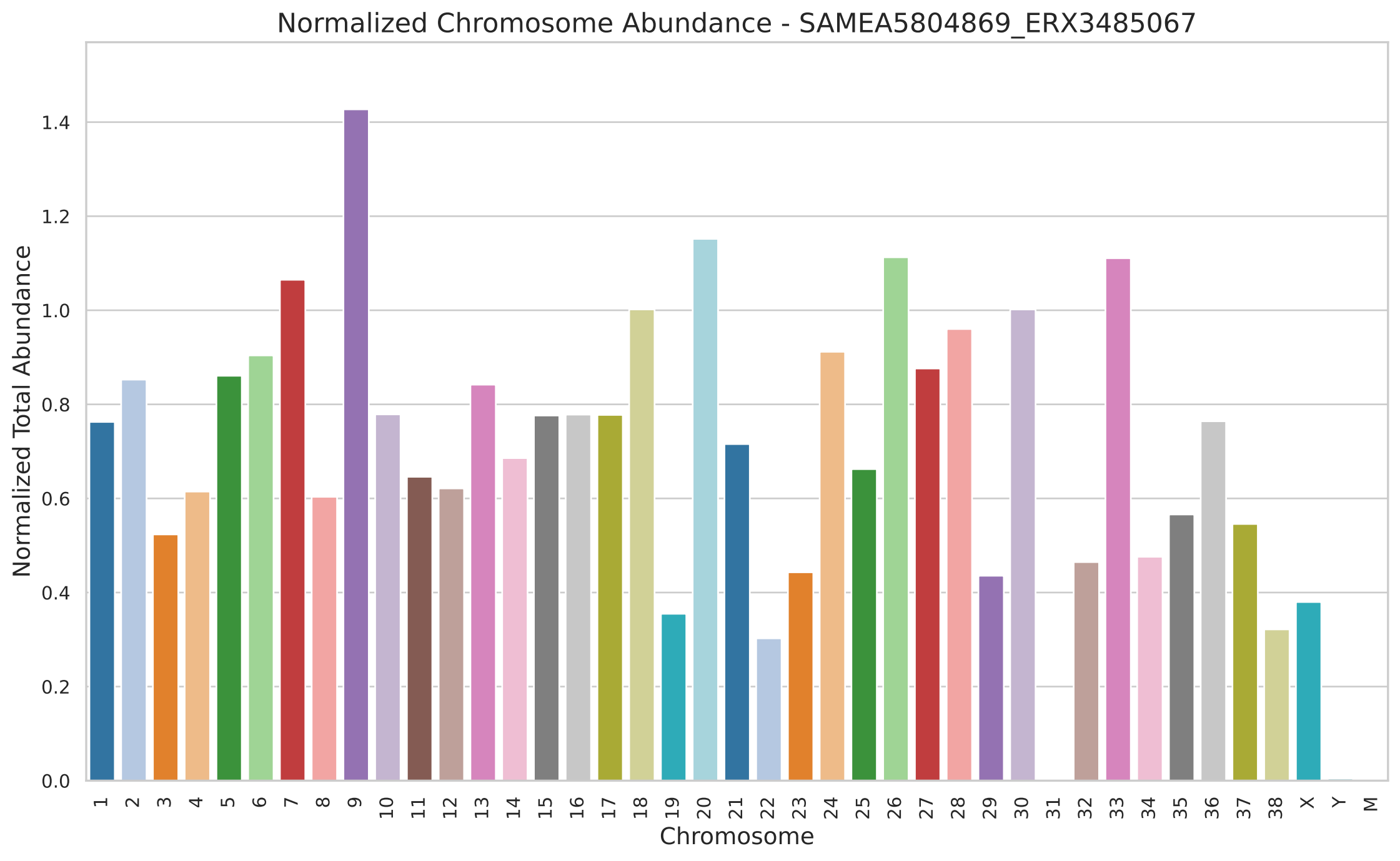

Normalized Chromosome Abundance - SAMEA5805040_ERX3485046
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

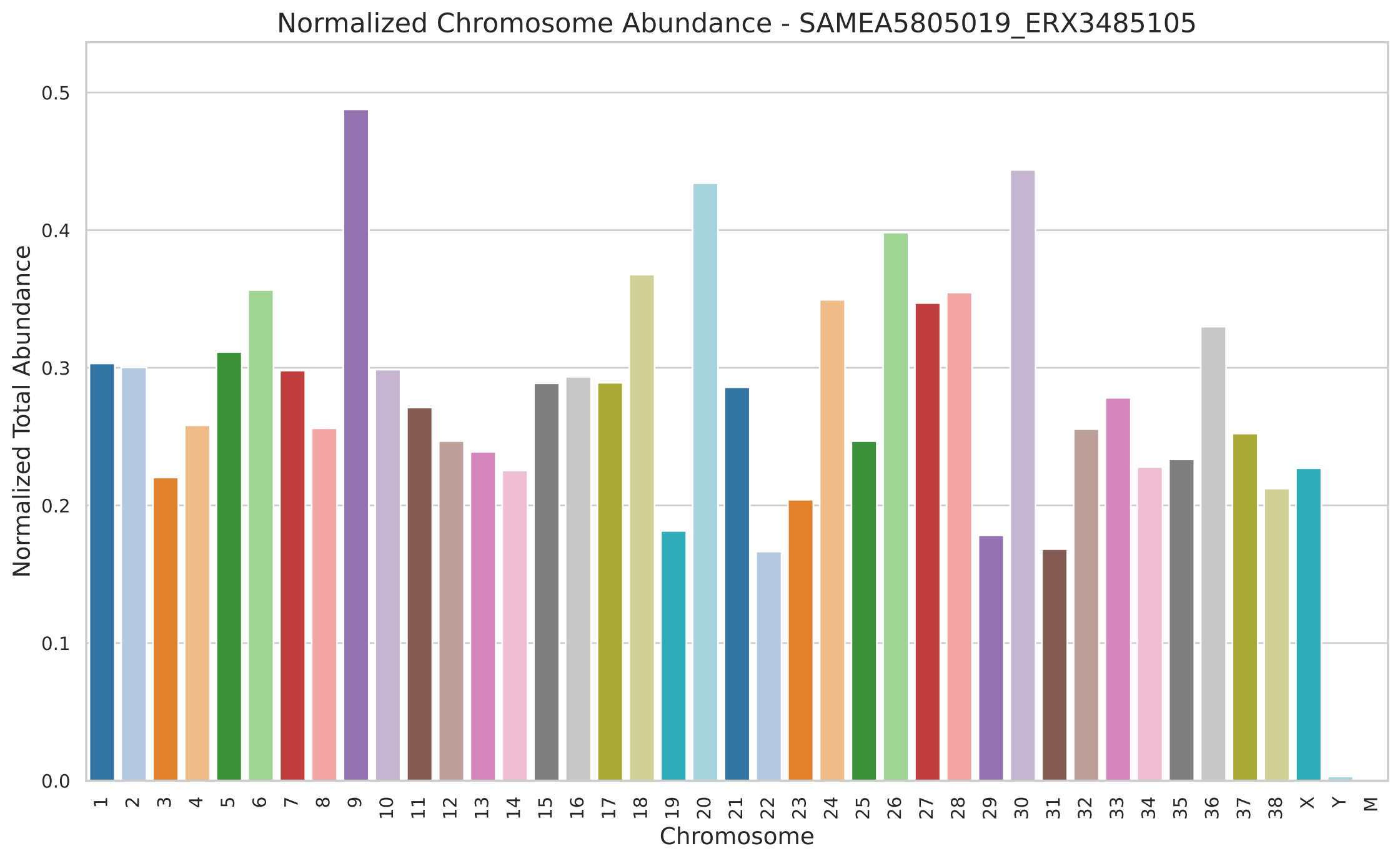

Normalized Chromosome Abundance - SAMEA5805020_ERX3485041
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

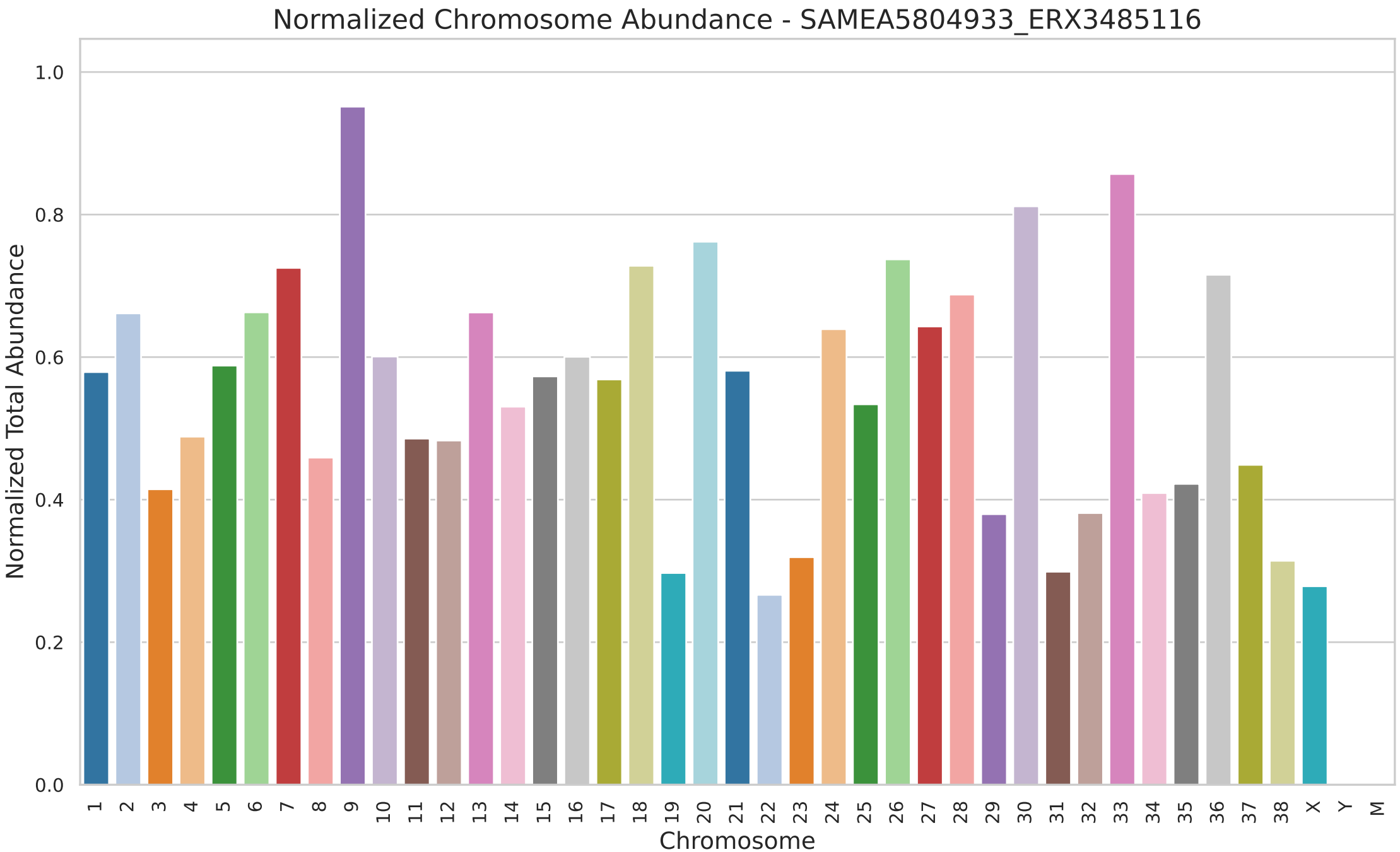

Normalized Chromosome Abundance - SAMEA5804864_ERX3485168
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

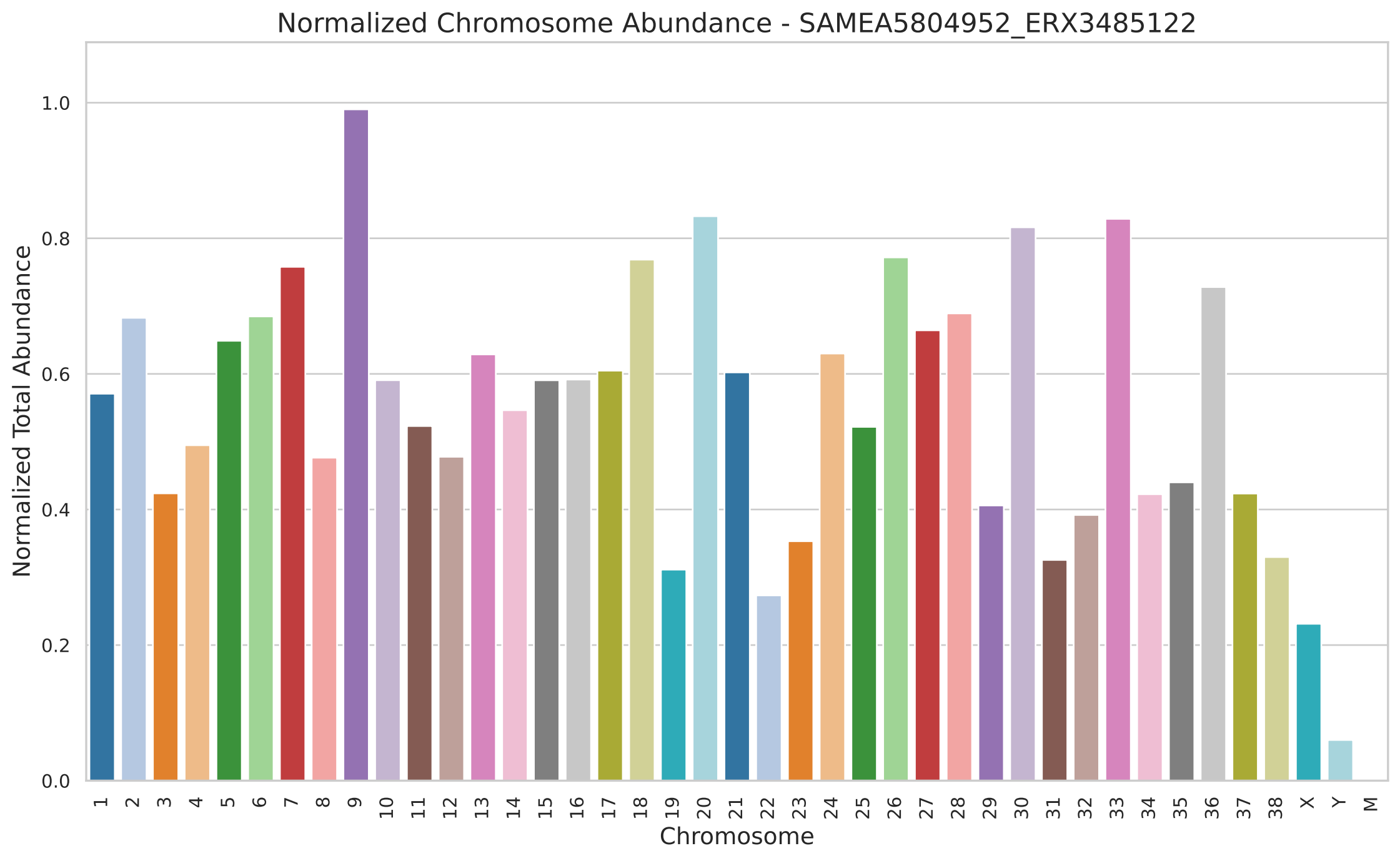

Normalized Chromosome Abundance - SAMEA5805013_ERX3485102
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

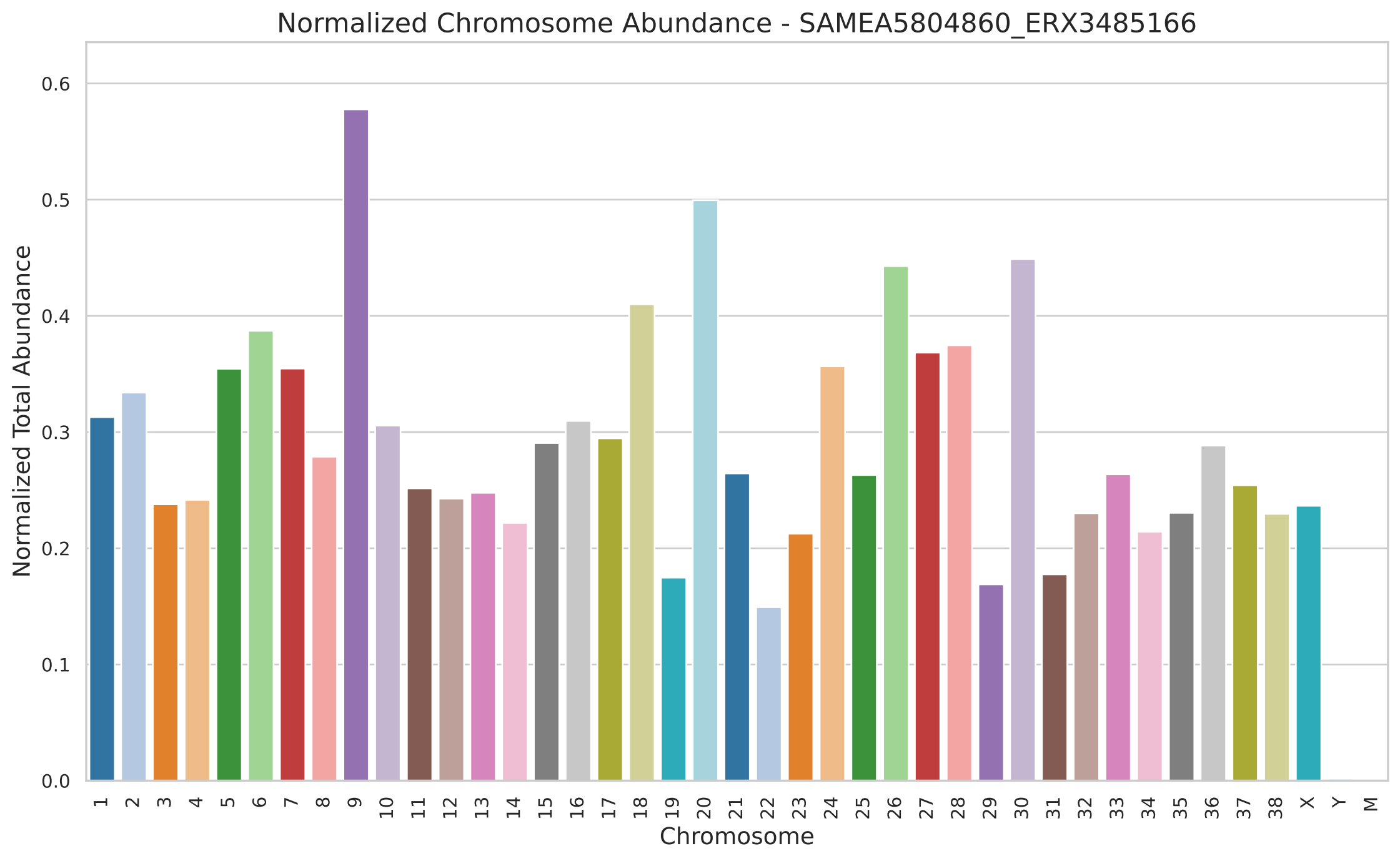

Normalized Chromosome Abundance - SAMEA5804931_ERX3485115
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

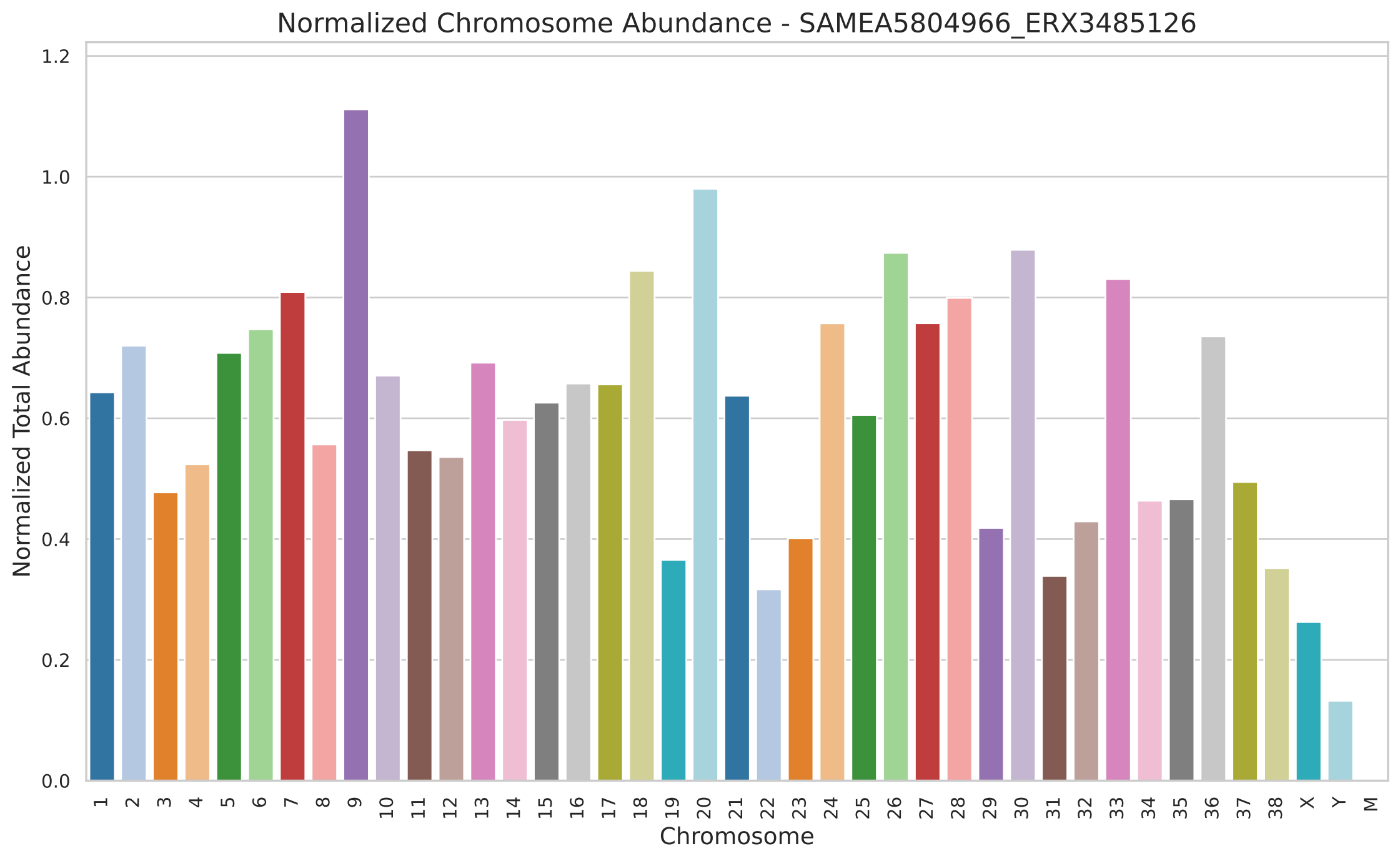

Normalized Chromosome Abundance - SAMEA5804869_ERX3485067
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

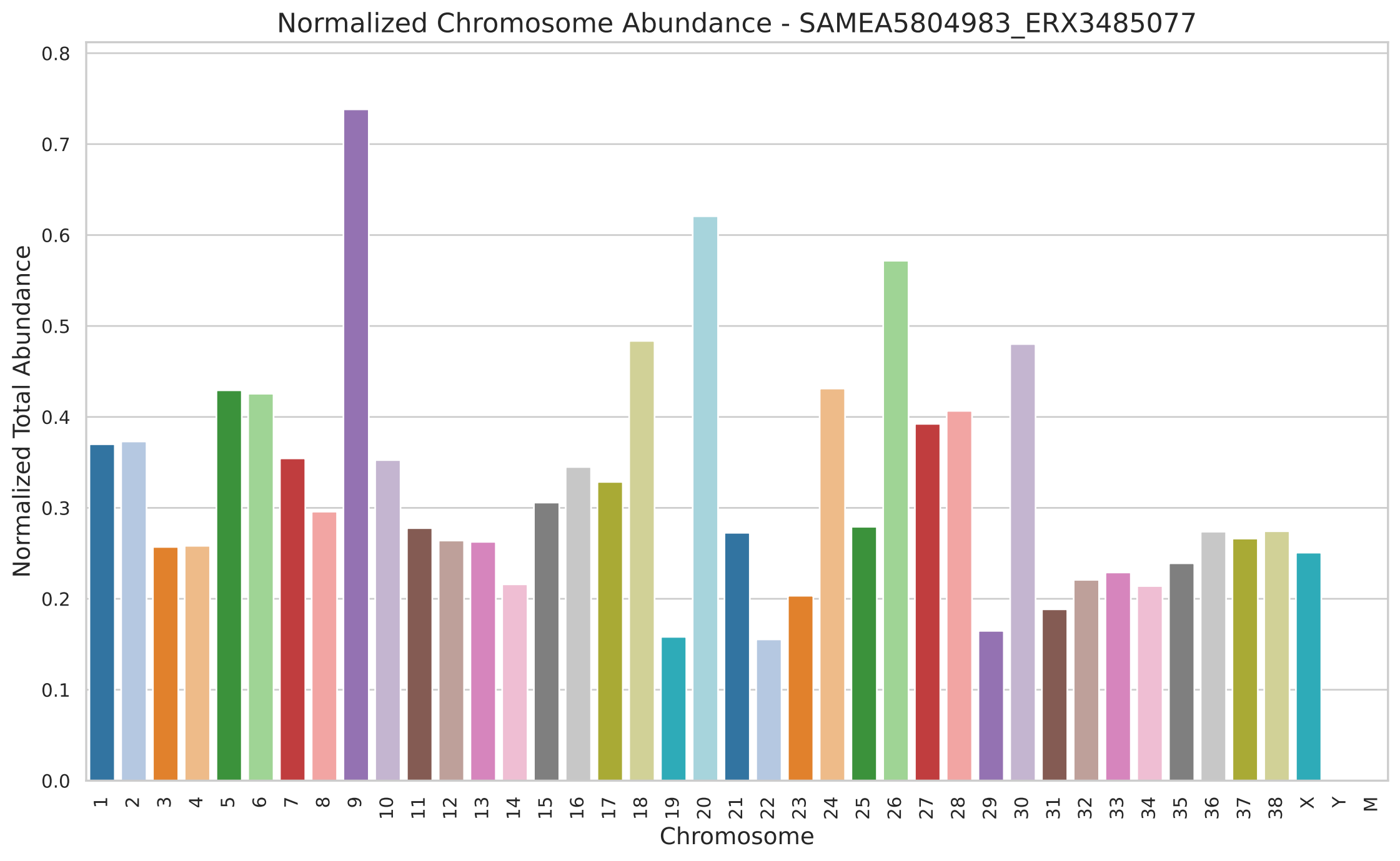

Normalized Chromosome Abundance - SAMEA5805019_ERX3485105
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

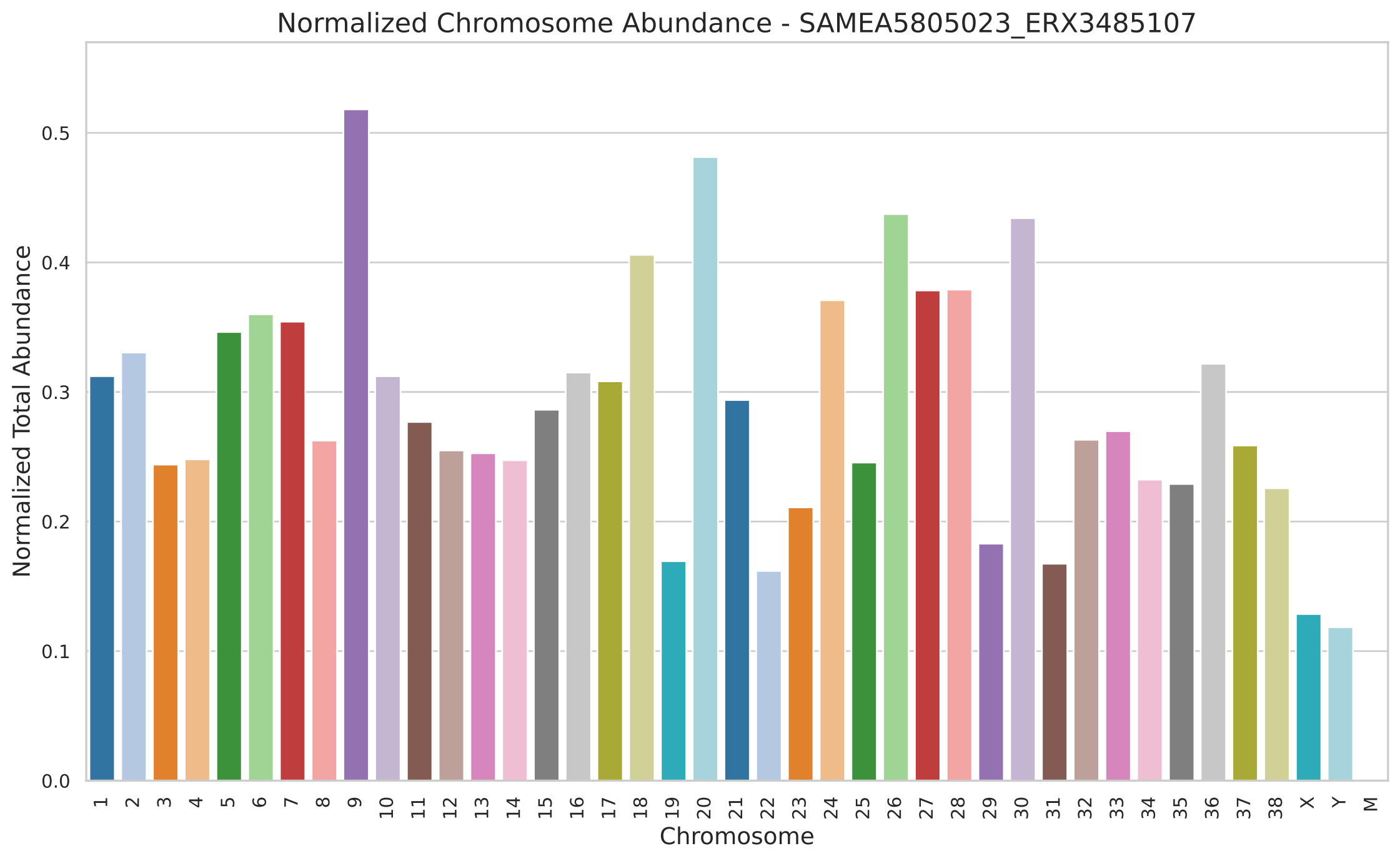

Normalized Chromosome Abundance - SAMEA5804933_ERX3485116
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

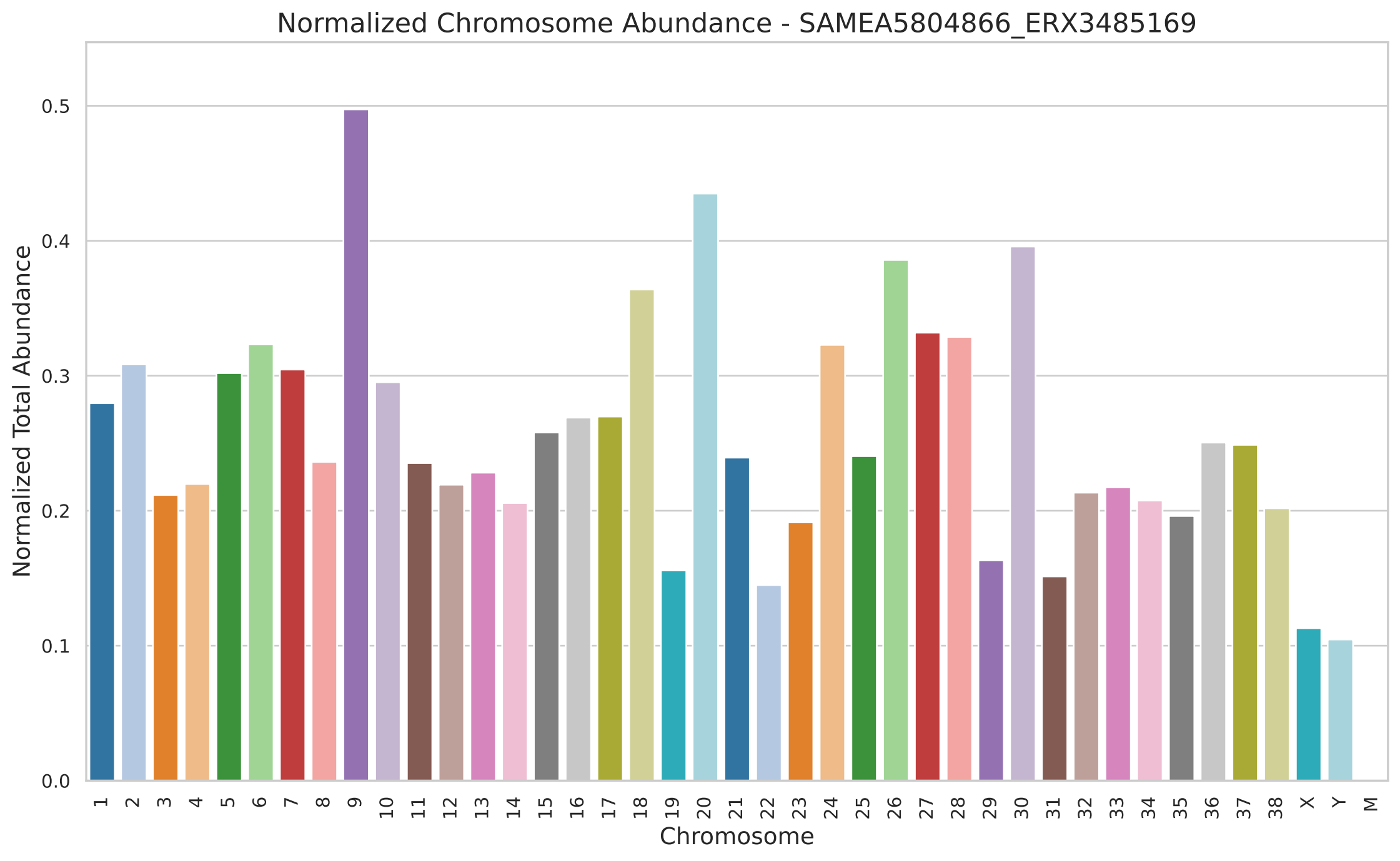

Normalized Chromosome Abundance - SAMEA5804952_ERX3485122
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

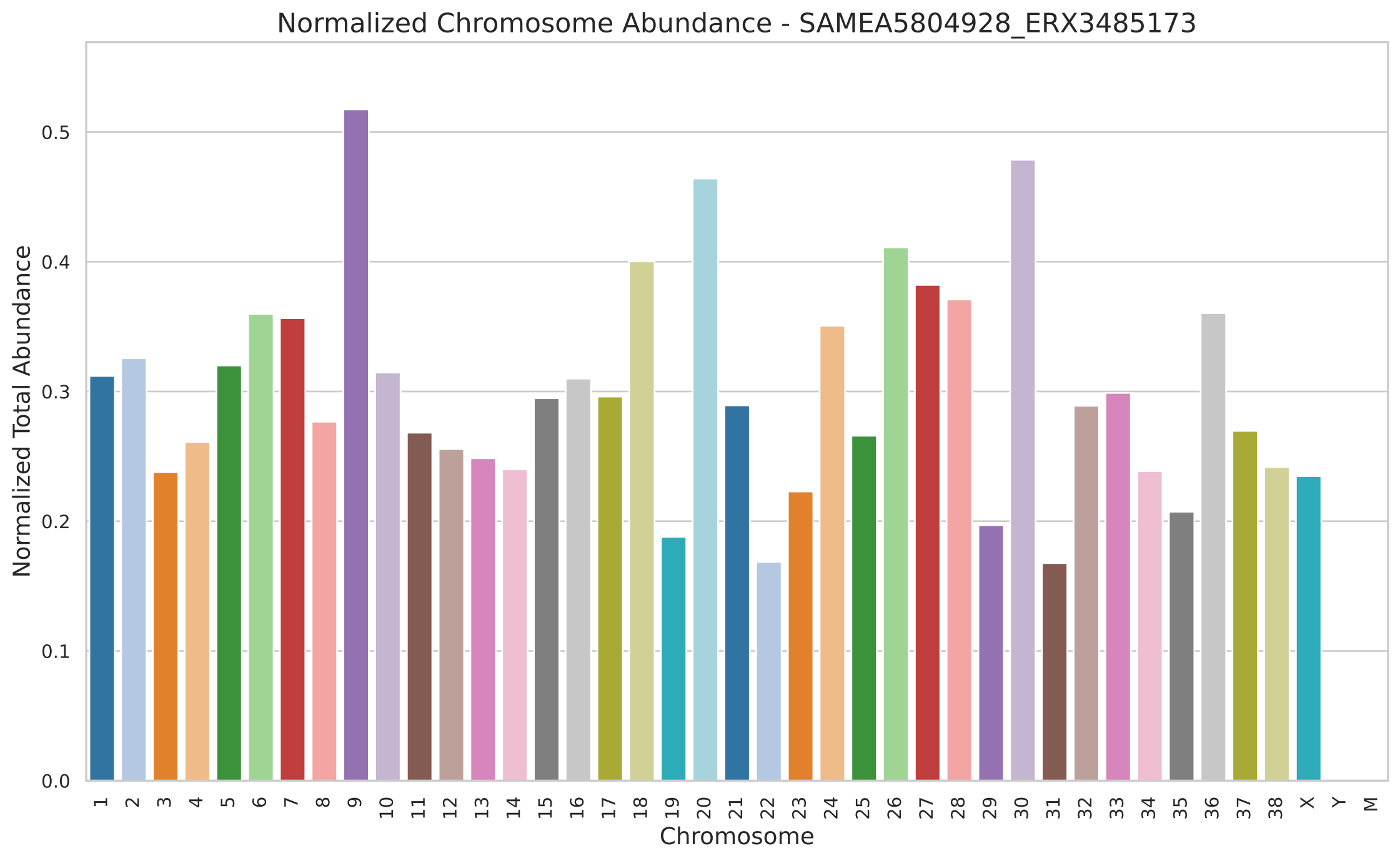

Normalized Chromosome Abundance - SAMEA5804860_ERX3485166
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

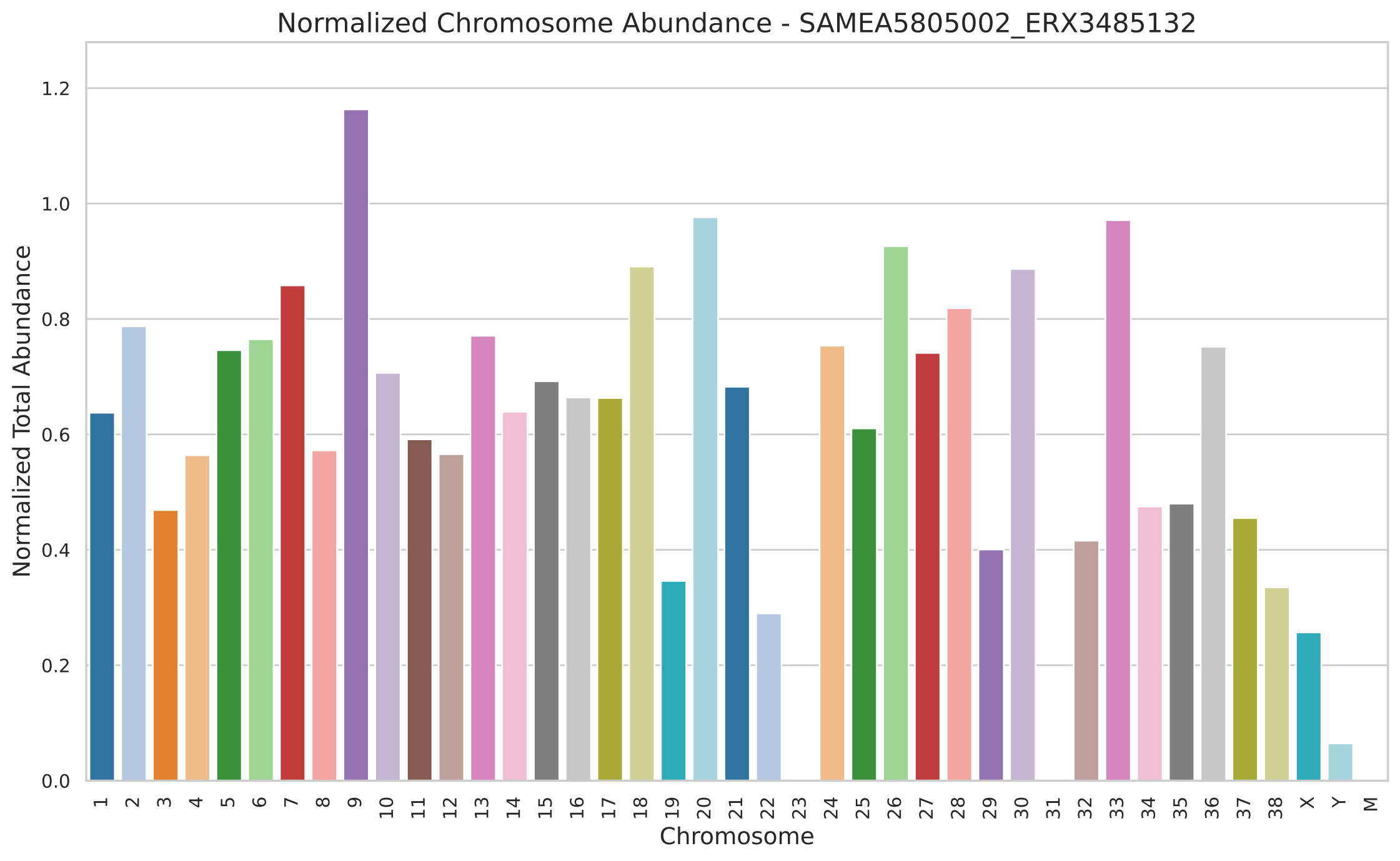

Normalized Chromosome Abundance - SAMEA5804966_ERX3485126
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

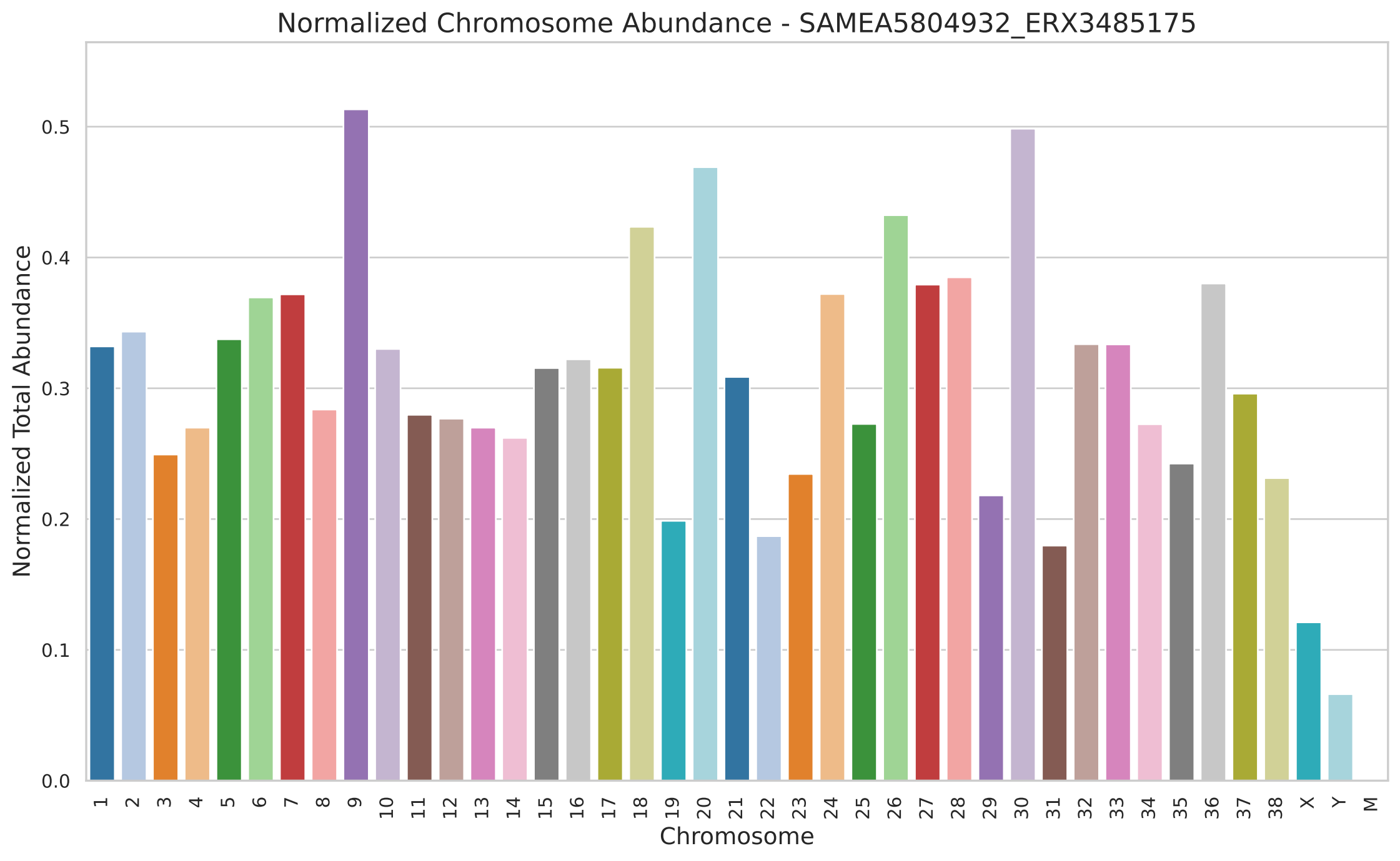

Normalized Chromosome Abundance - SAMEA5804983_ERX3485077
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

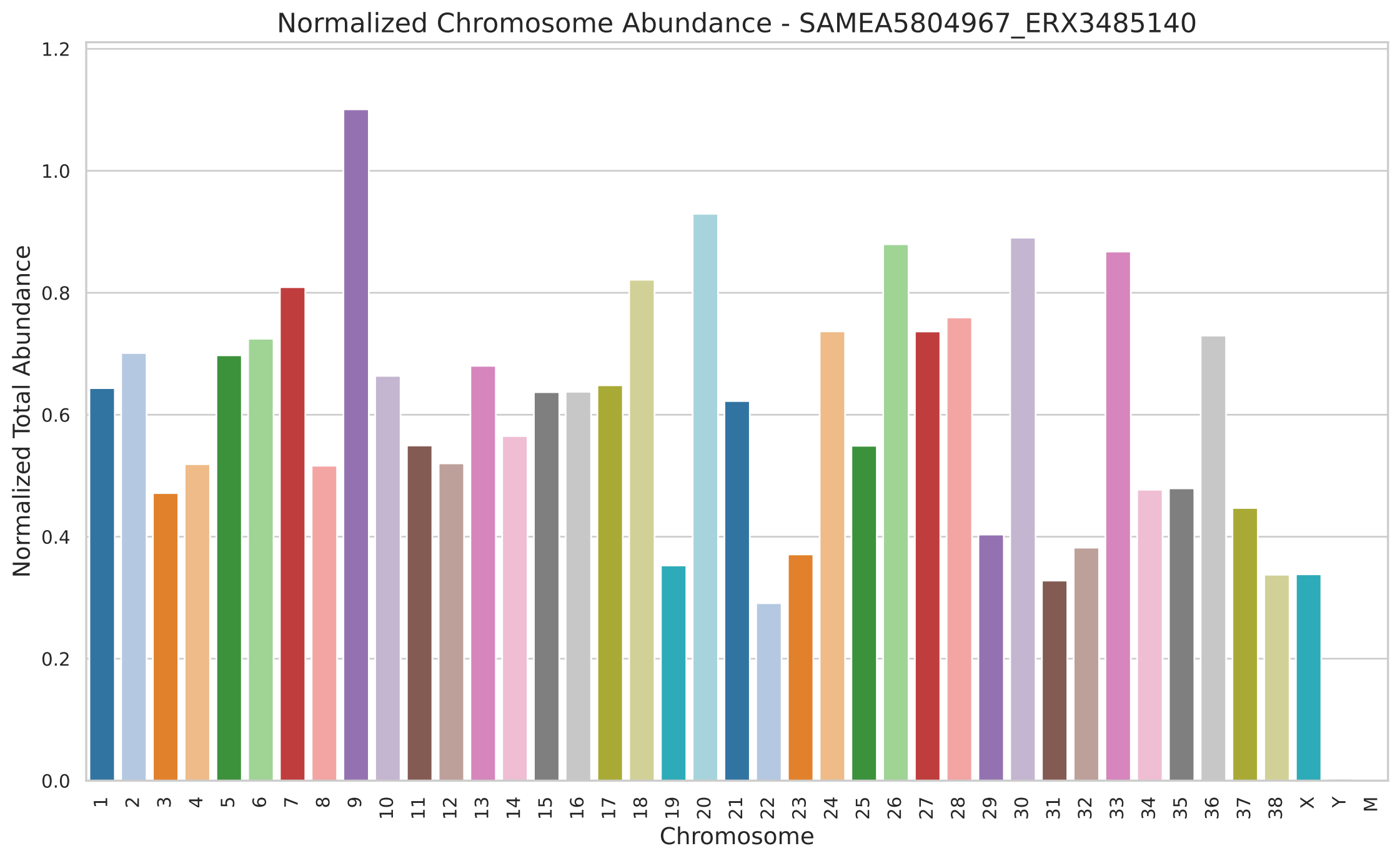

Normalized Chromosome Abundance - SAMEA5805023_ERX3485107
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

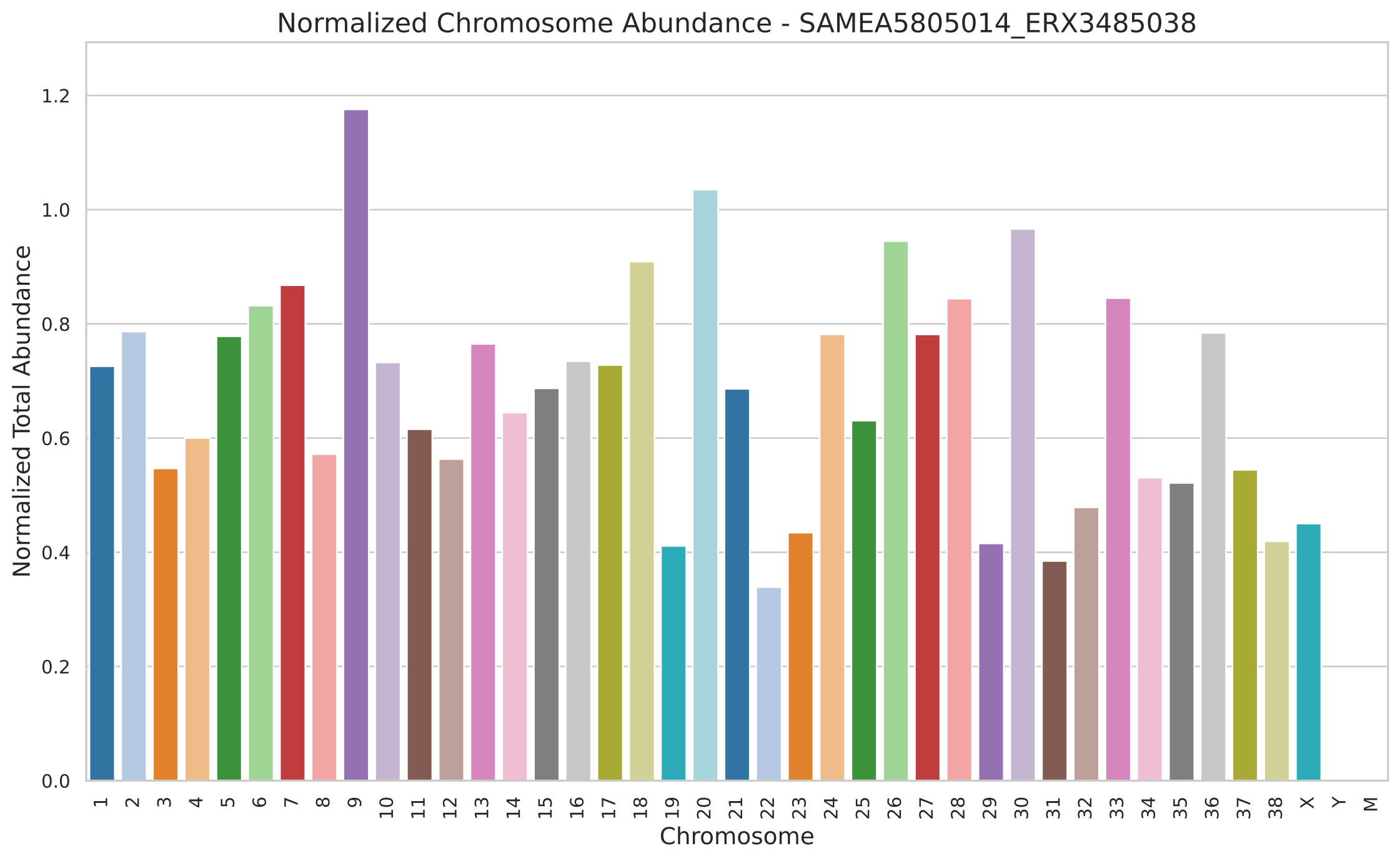

Normalized Chromosome Abundance - SAMEA5804866_ERX3485169
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

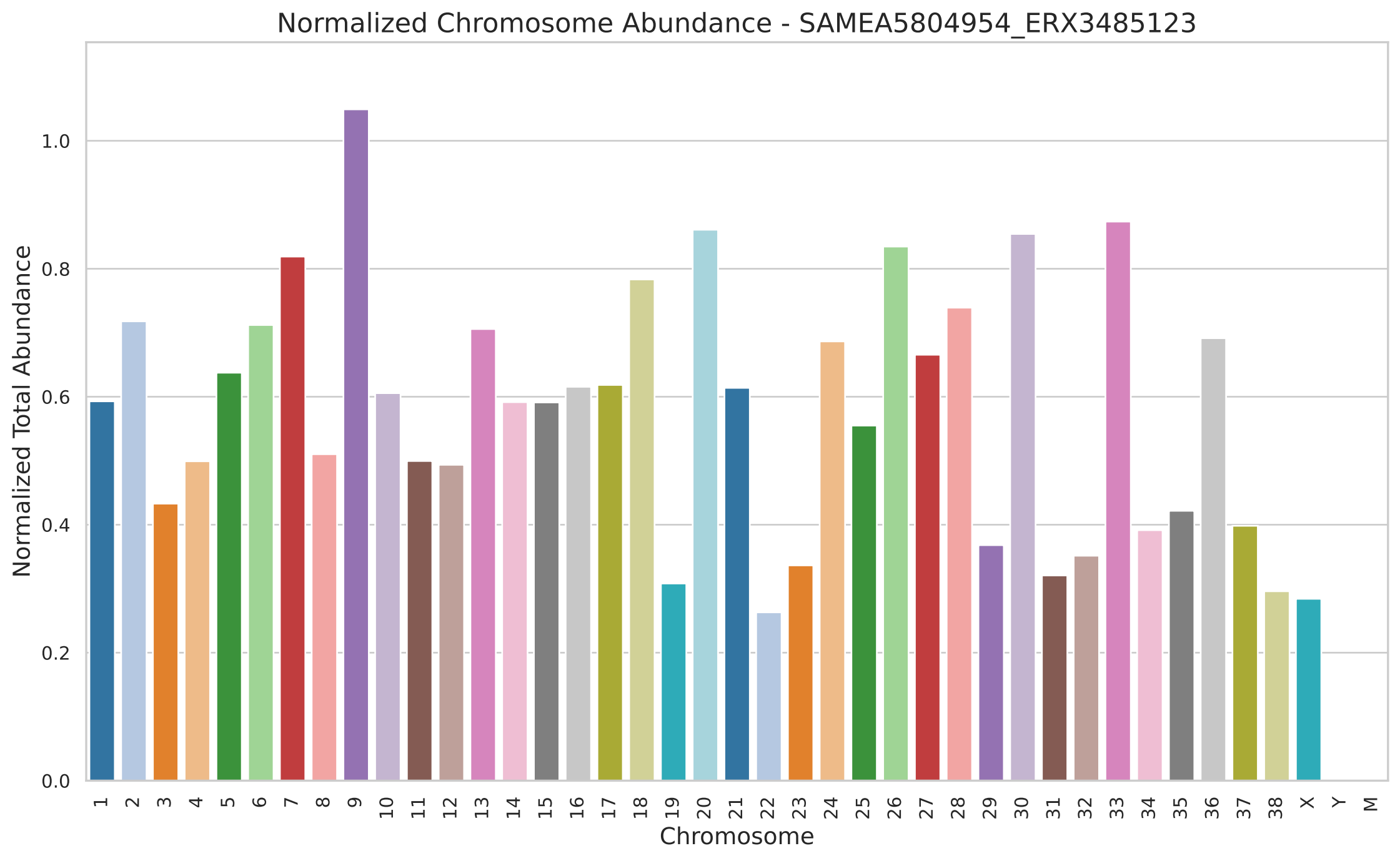

Normalized Chromosome Abundance - SAMEA5804928_ERX3485173
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

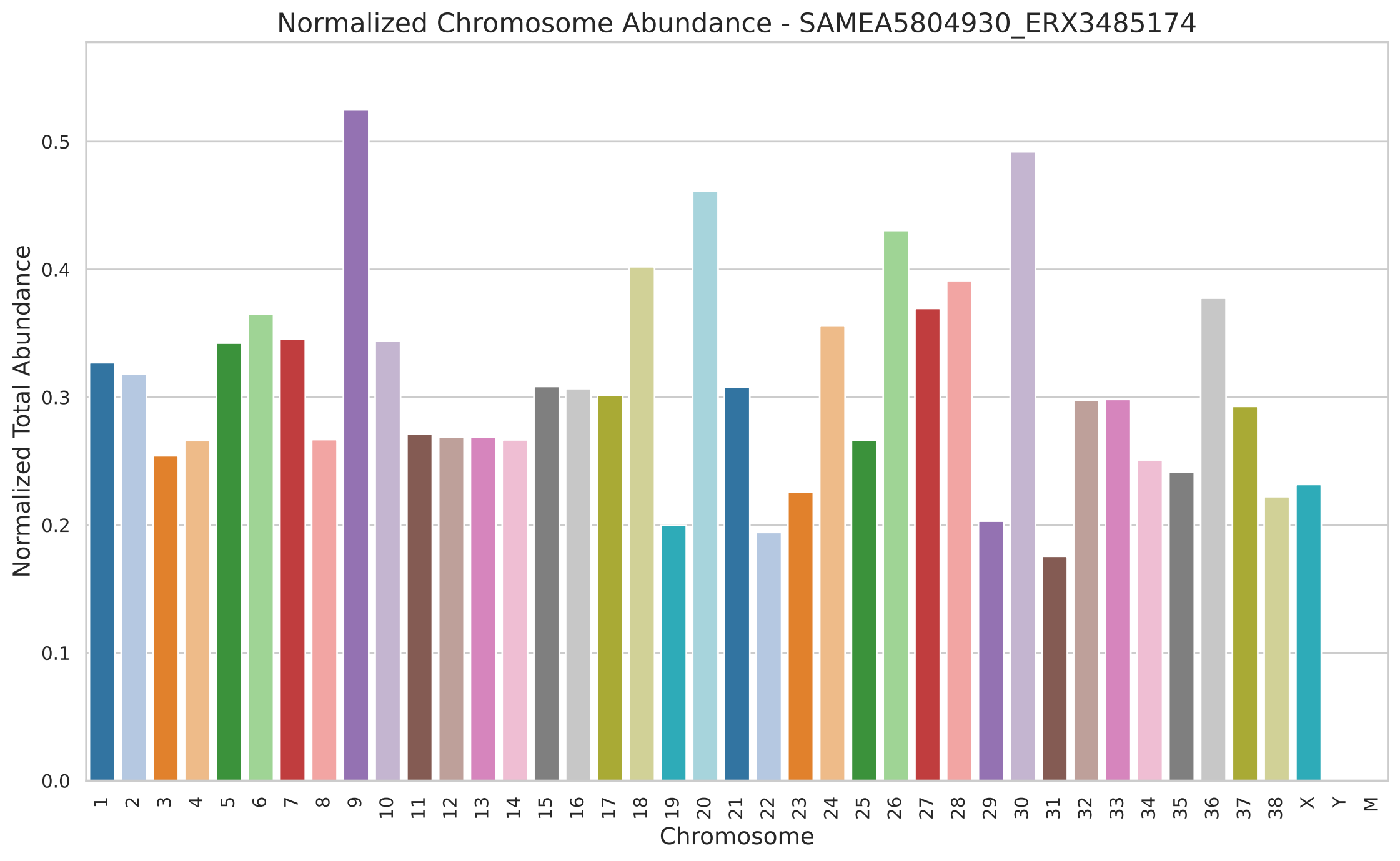

Normalized Chromosome Abundance - SAMEA5805002_ERX3485132
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

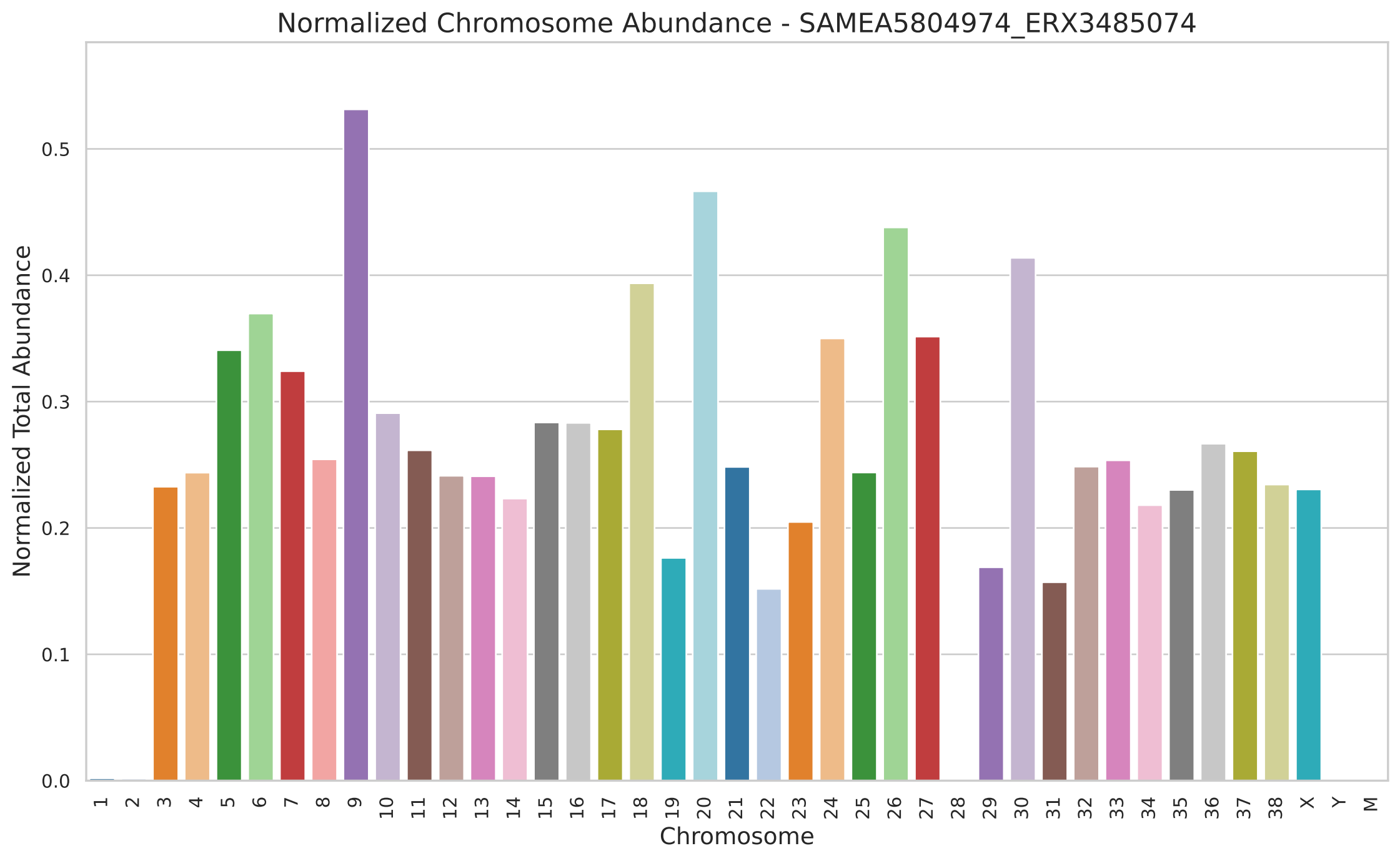

Normalized Chromosome Abundance - SAMEA5804932_ERX3485175
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

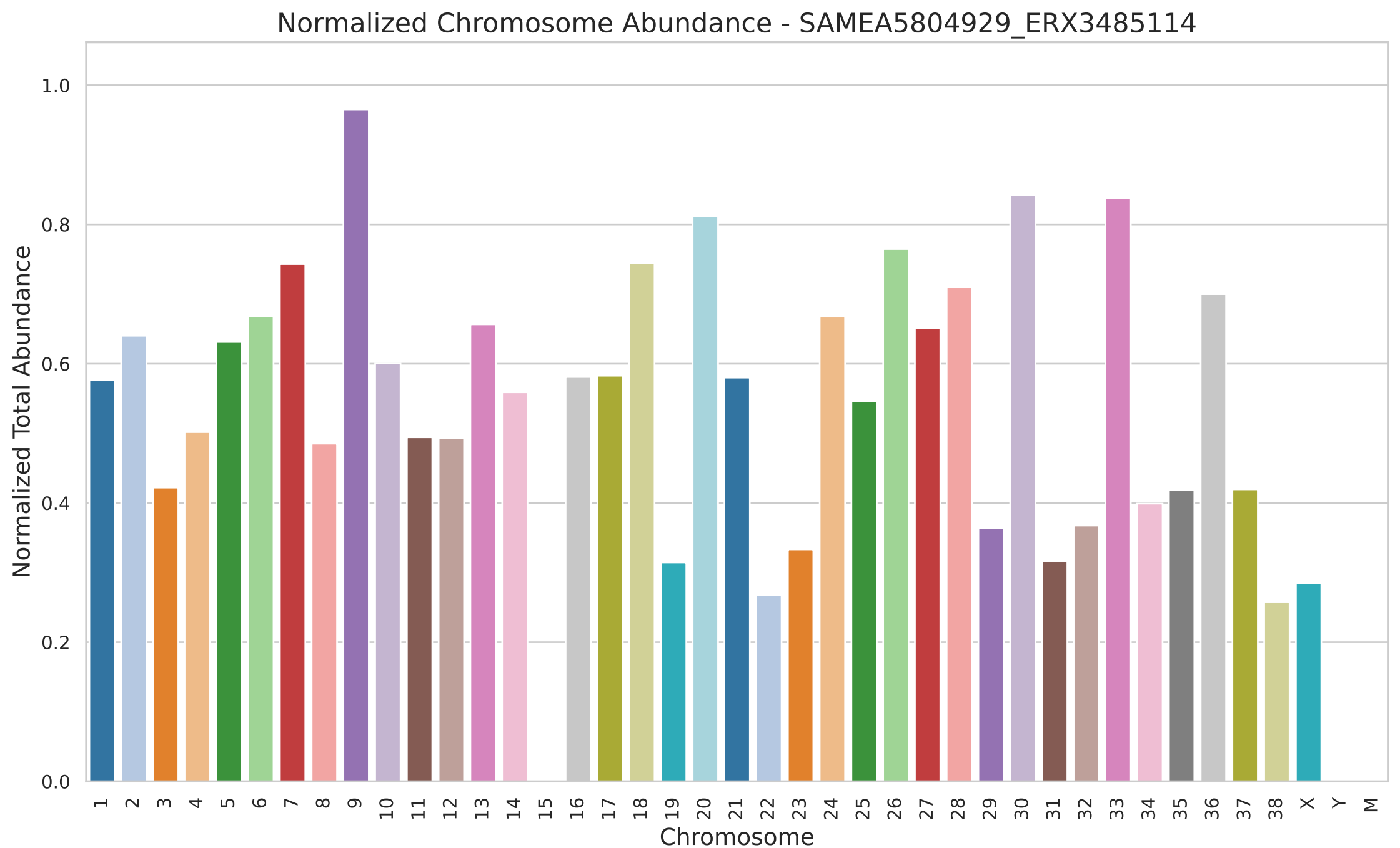

Normalized Chromosome Abundance - SAMEA5804967_ERX3485140
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

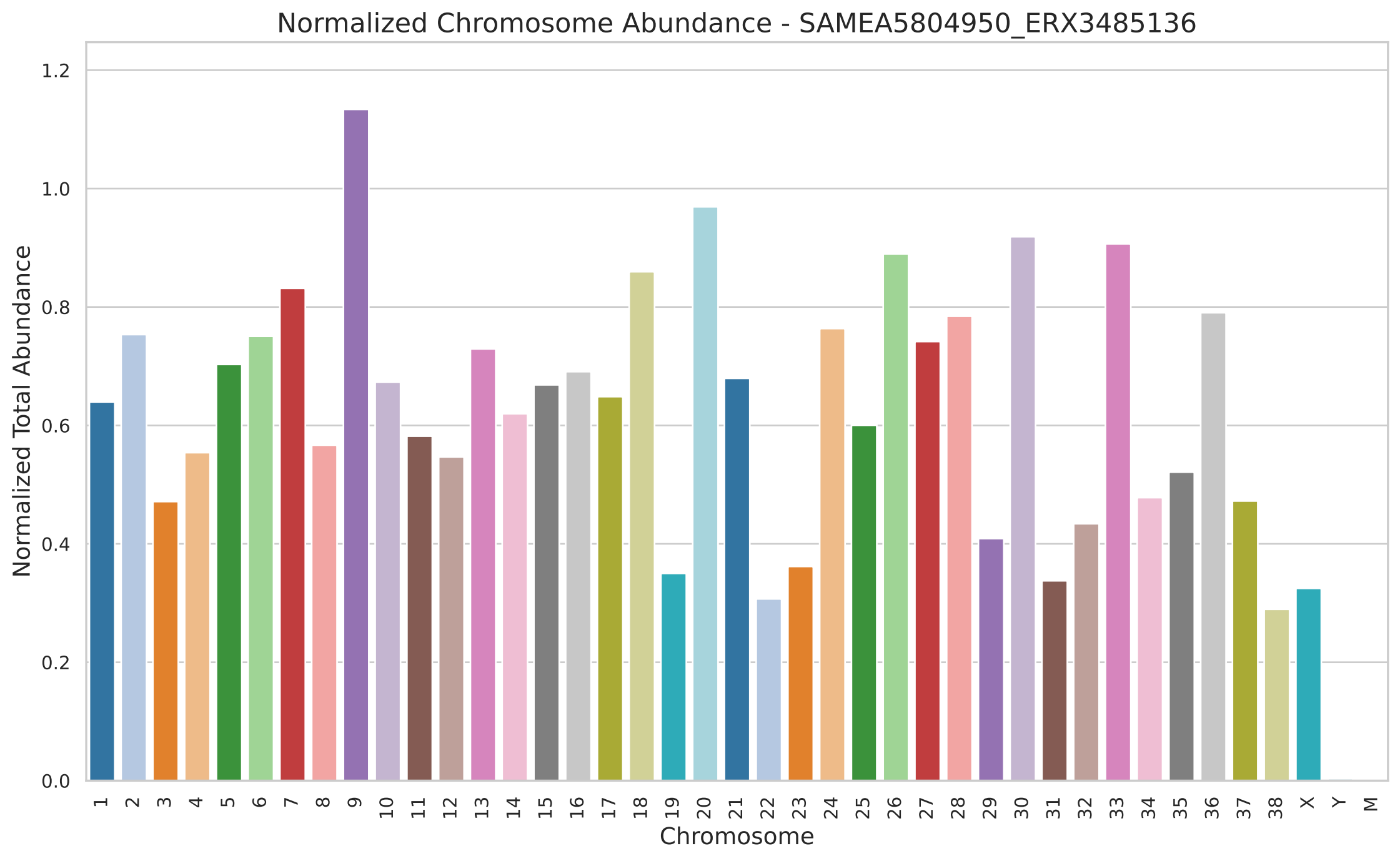

Normalized Chromosome Abundance - SAMEA5805014_ERX3485038
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

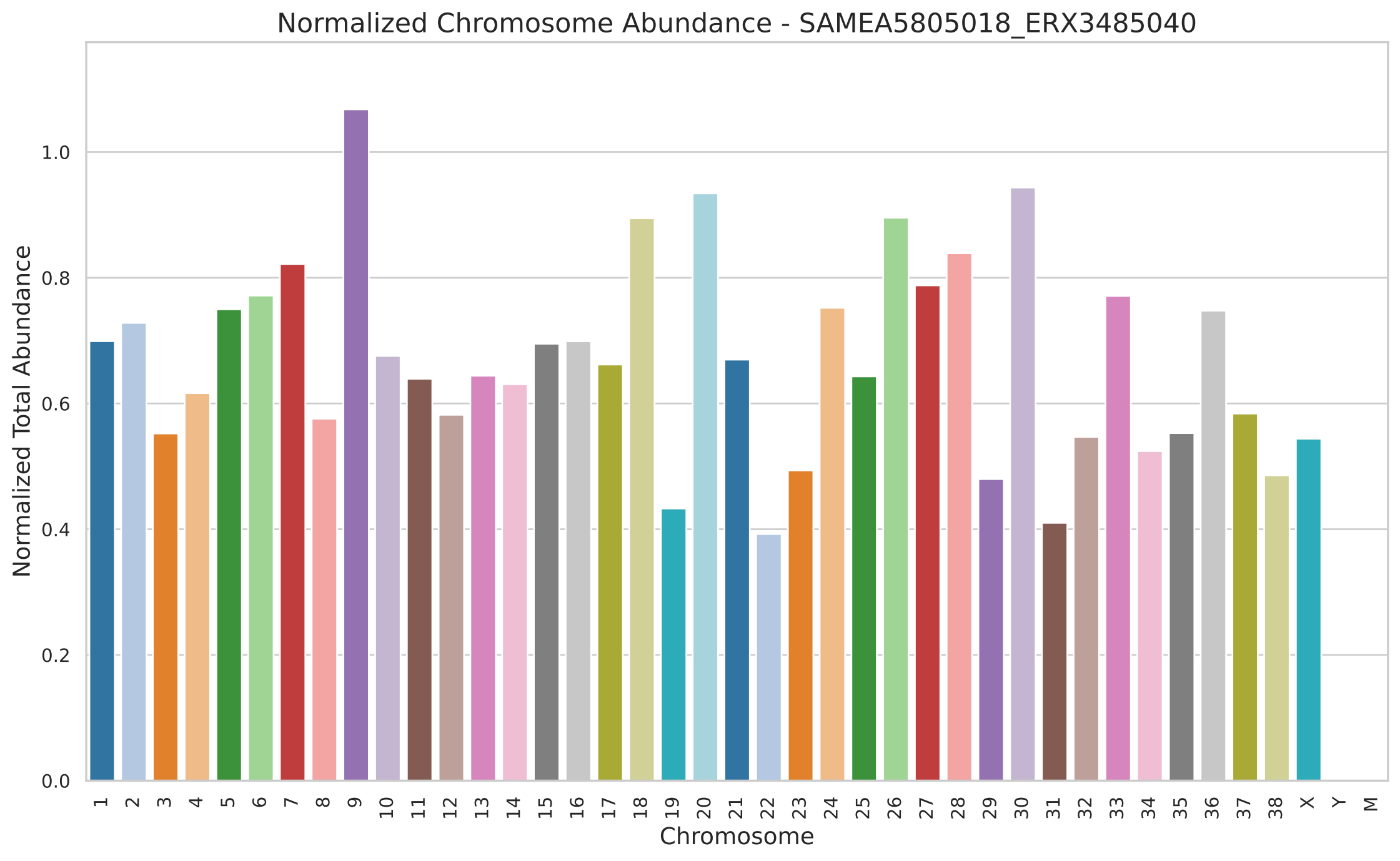

Normalized Chromosome Abundance - SAMEA5804954_ERX3485123
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

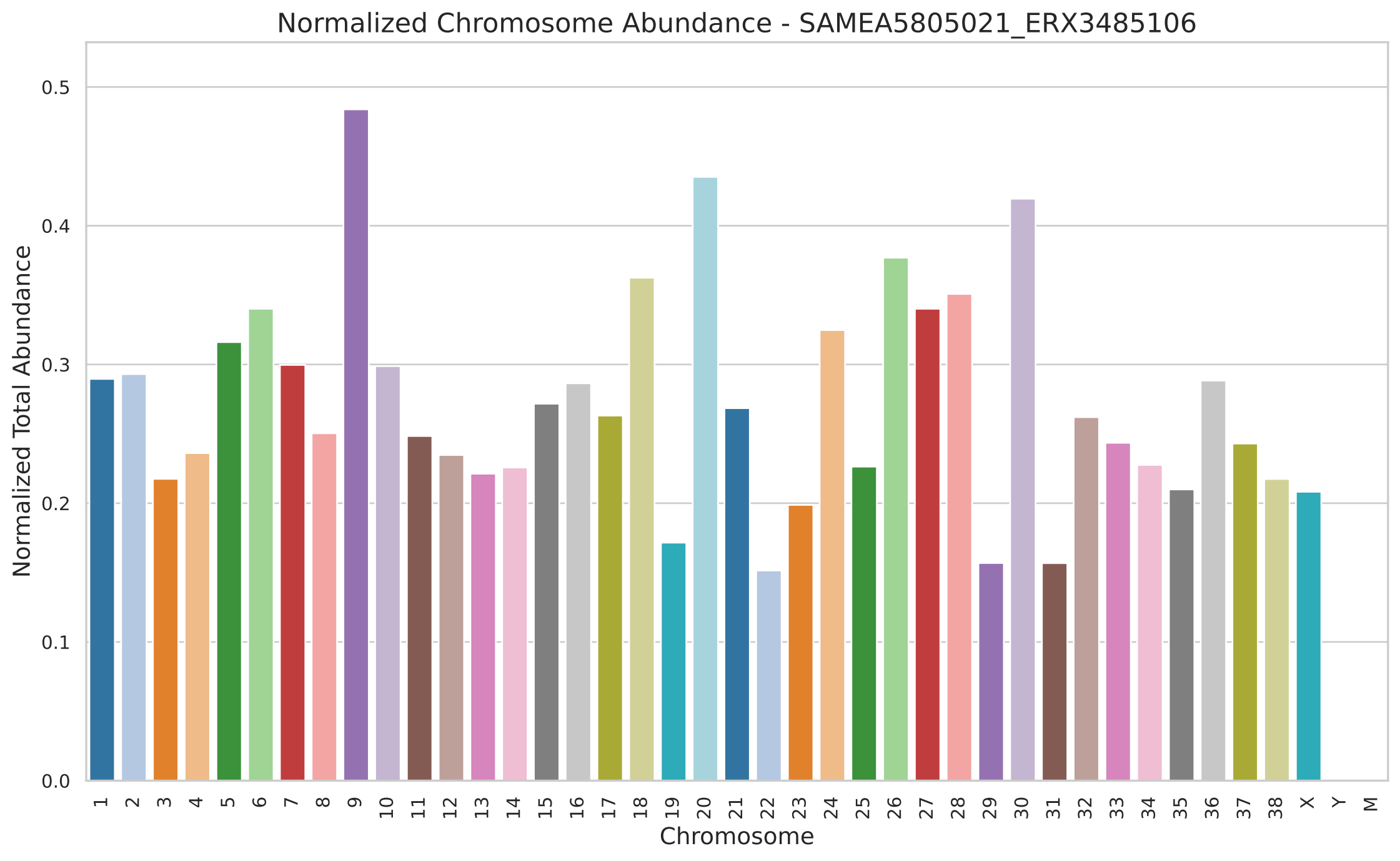

Normalized Chromosome Abundance - SAMEA5804930_ERX3485174
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

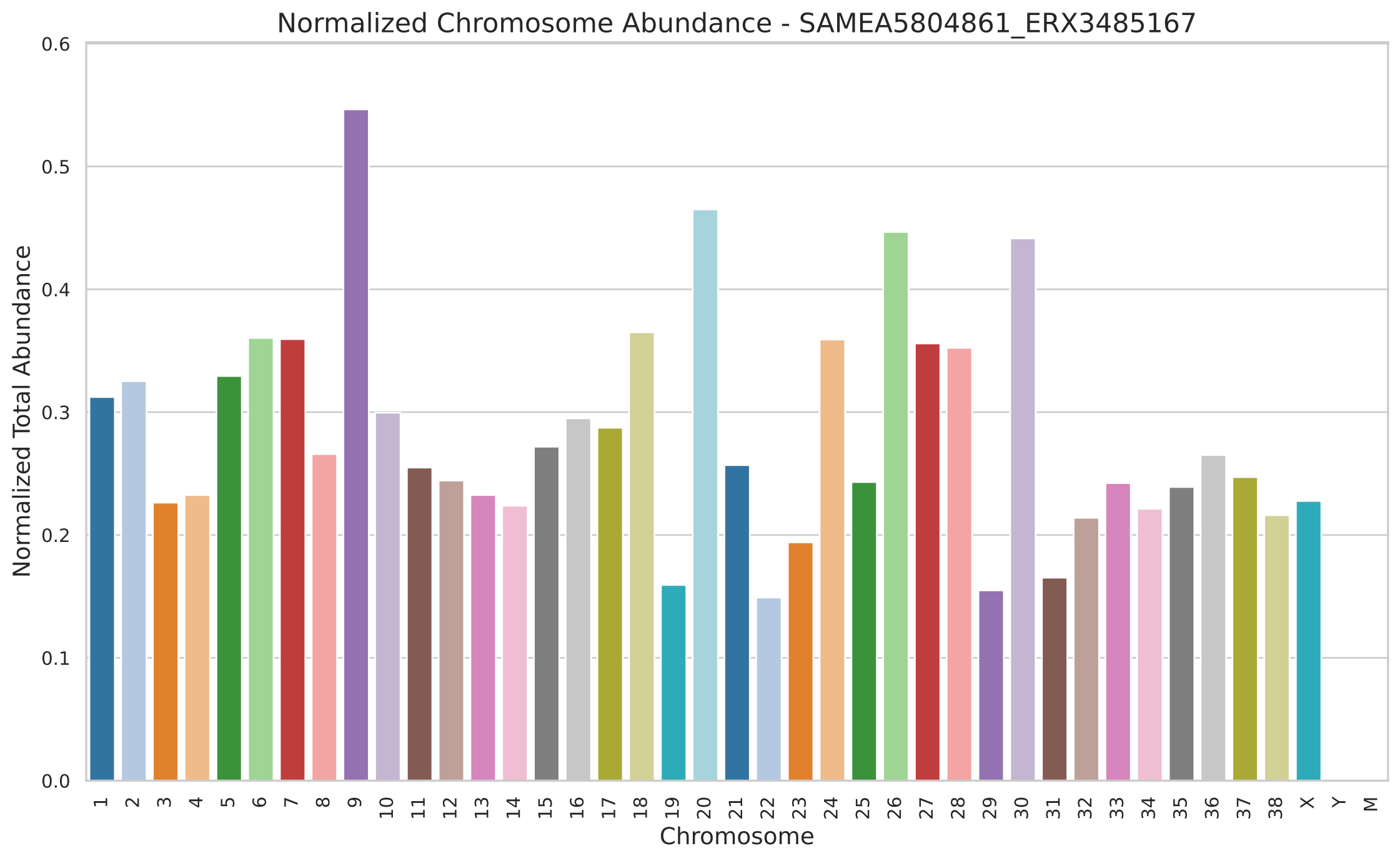

Normalized Chromosome Abundance - SAMEA5804974_ERX3485074
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

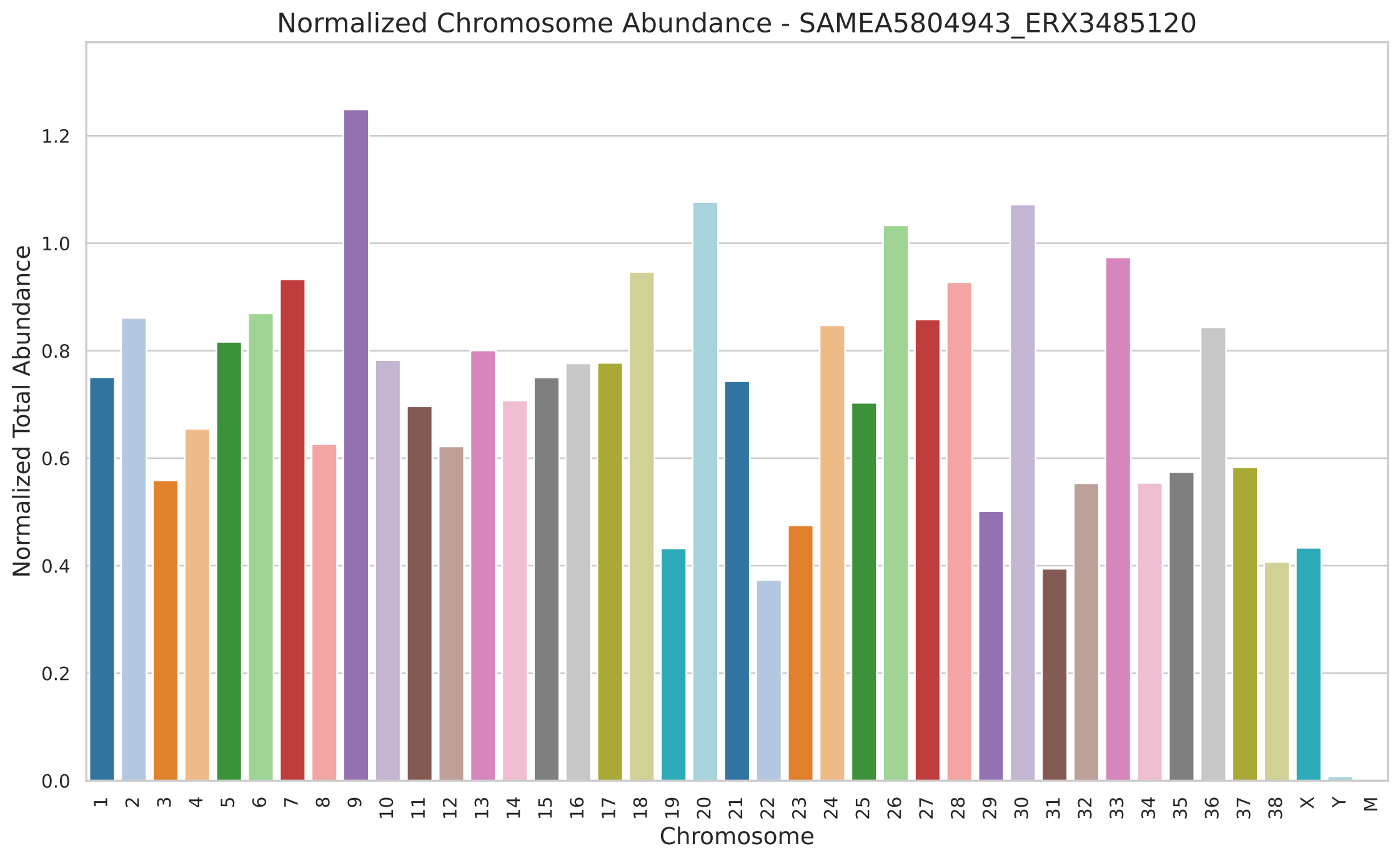

Normalized Chromosome Abundance - SAMEA5804929_ERX3485114
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

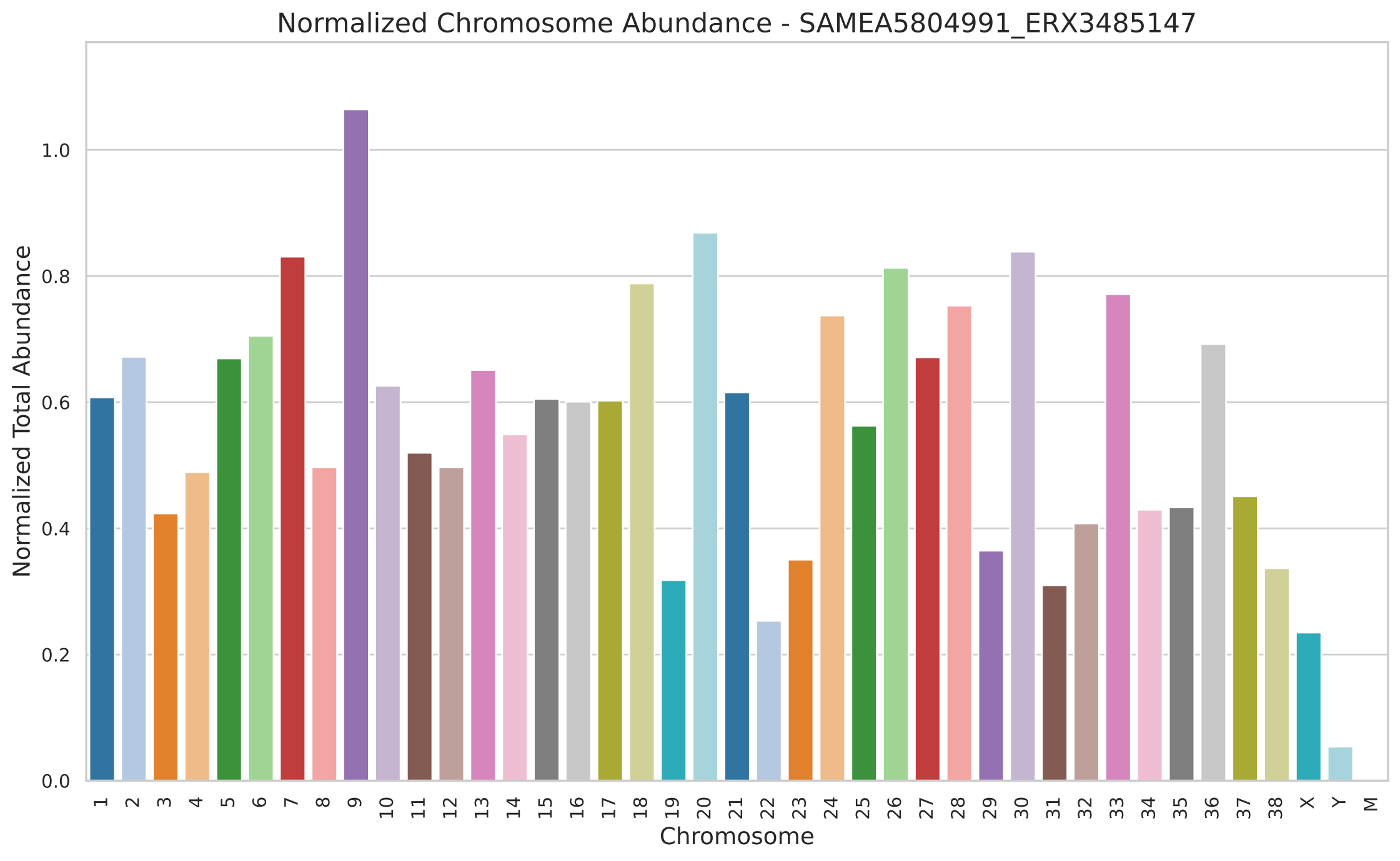

Normalized Chromosome Abundance - SAMEA5804950_ERX3485136
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

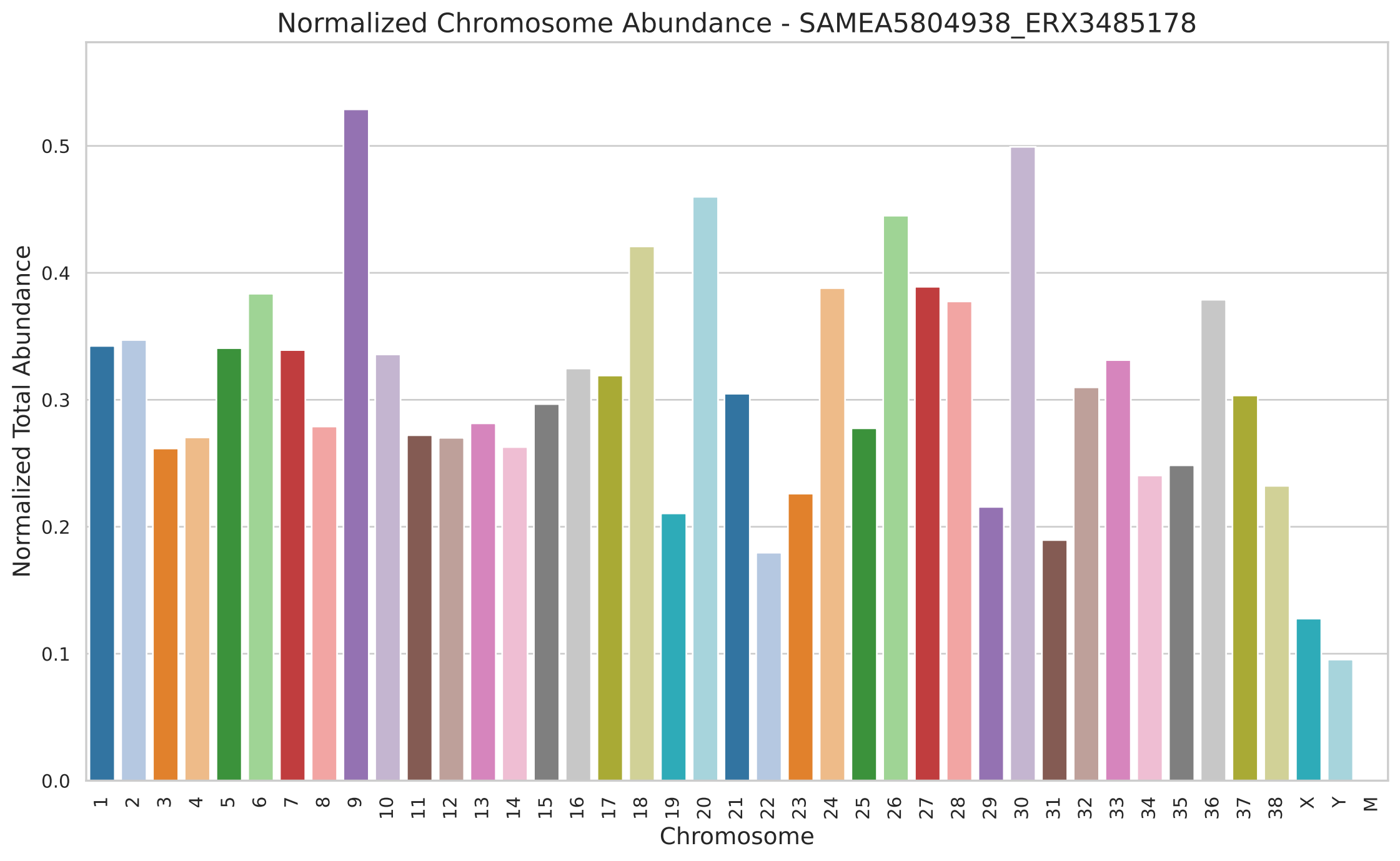

Normalized Chromosome Abundance - SAMEA5805018_ERX3485040
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

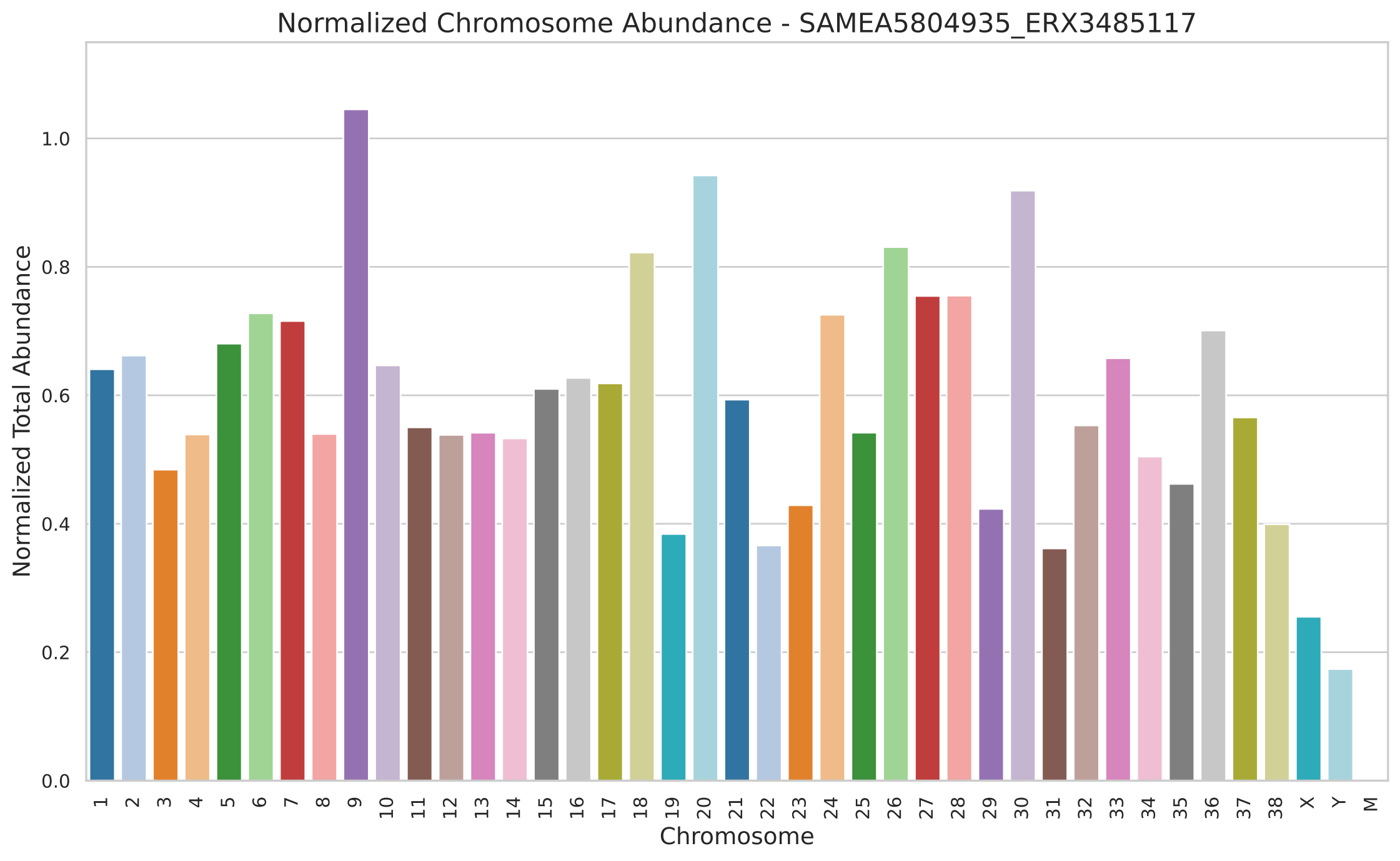

Normalized Chromosome Abundance - SAMEA5805021_ERX3485106
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

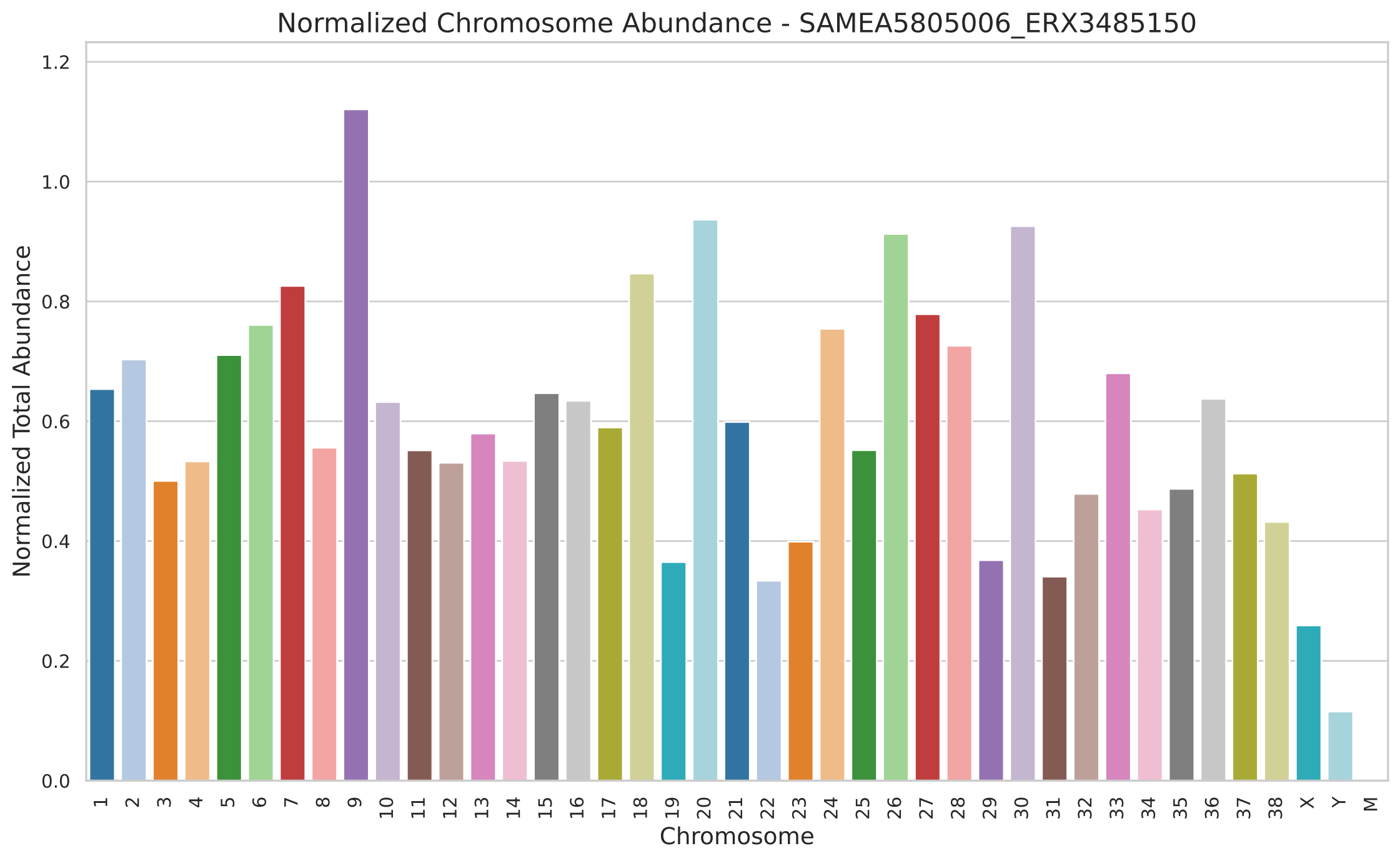

Normalized Chromosome Abundance - SAMEA5804861_ERX3485167
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

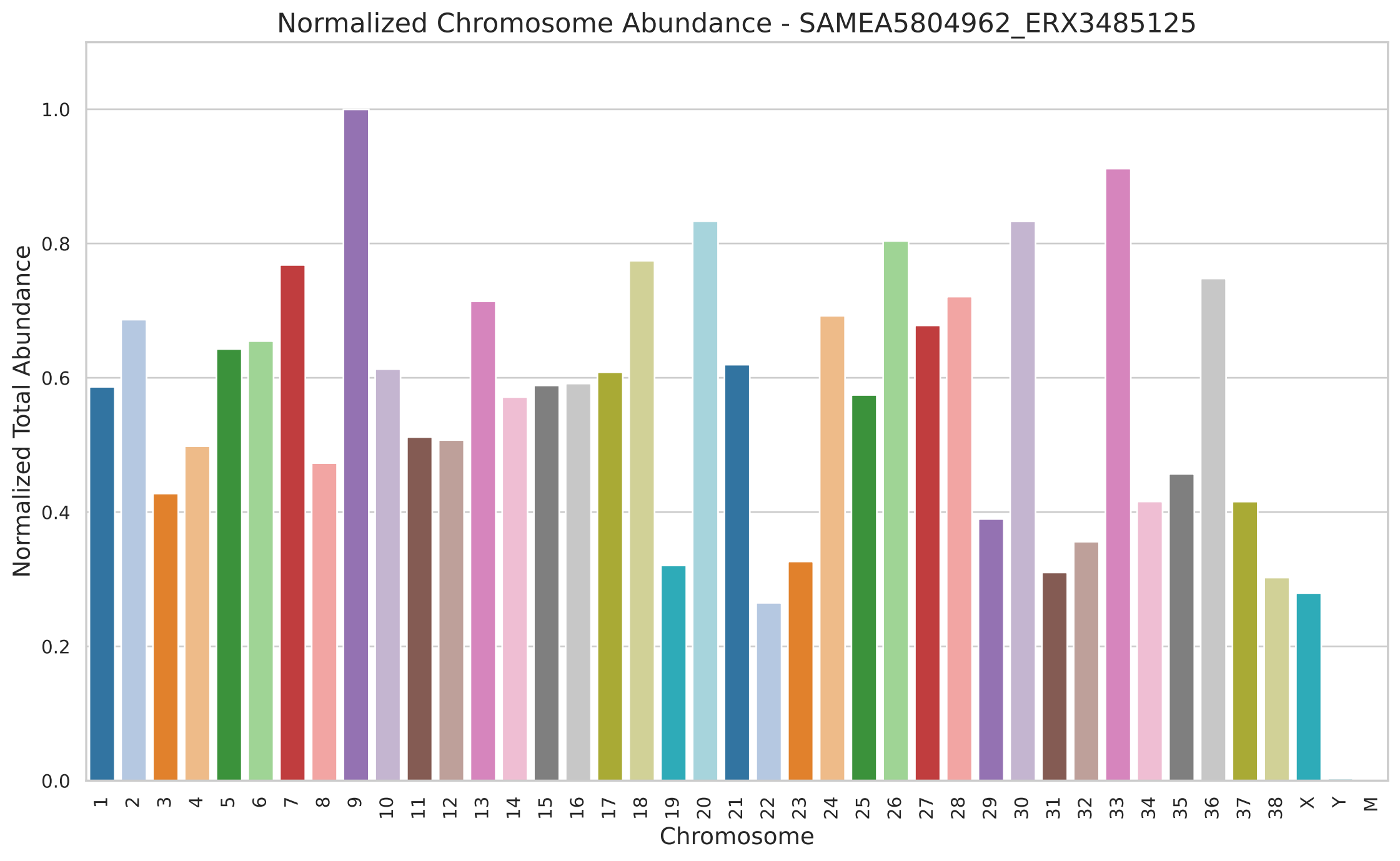

Normalized Chromosome Abundance - SAMEA5804943_ERX3485120
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

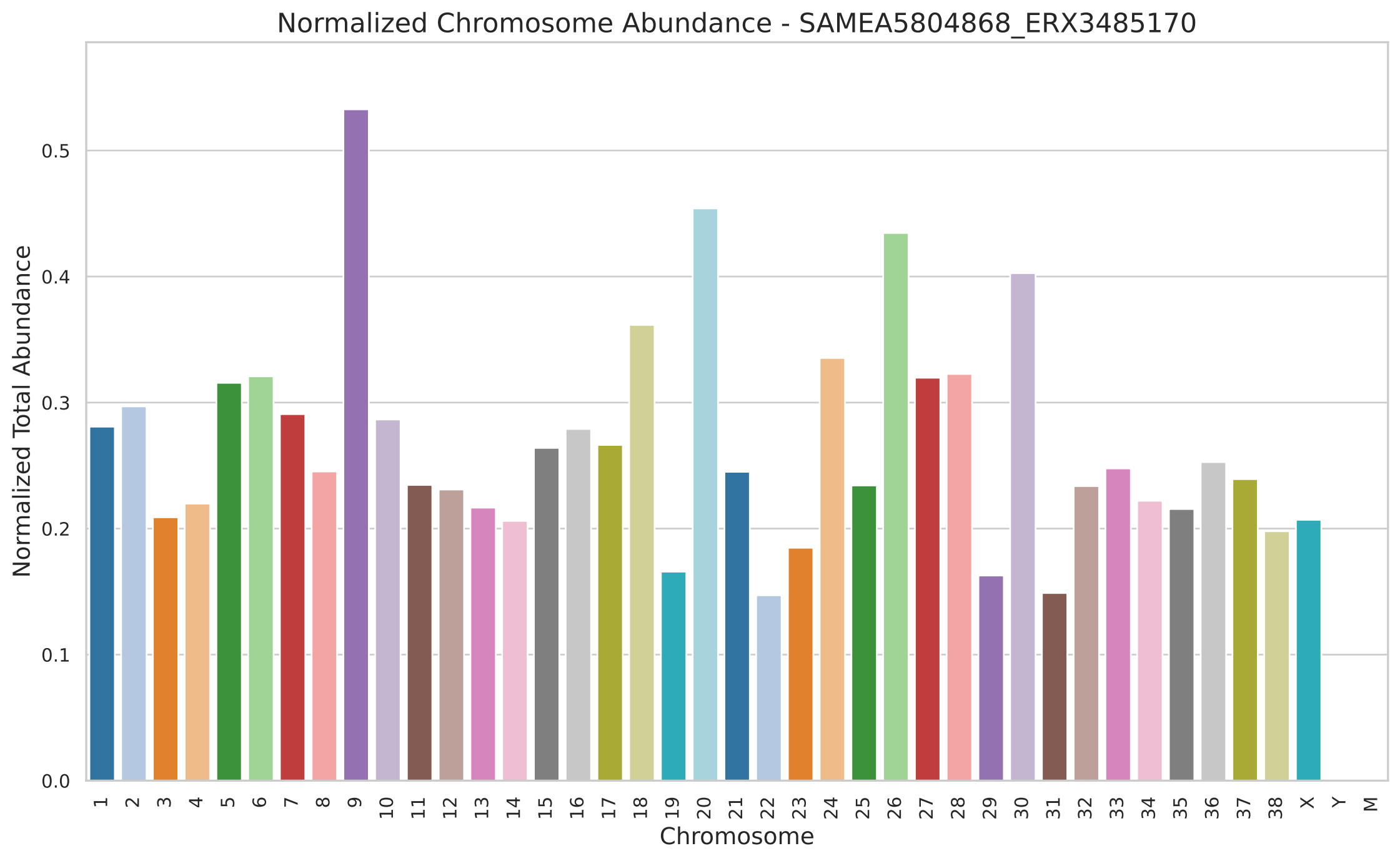

Normalized Chromosome Abundance - SAMEA5804991_ERX3485147
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

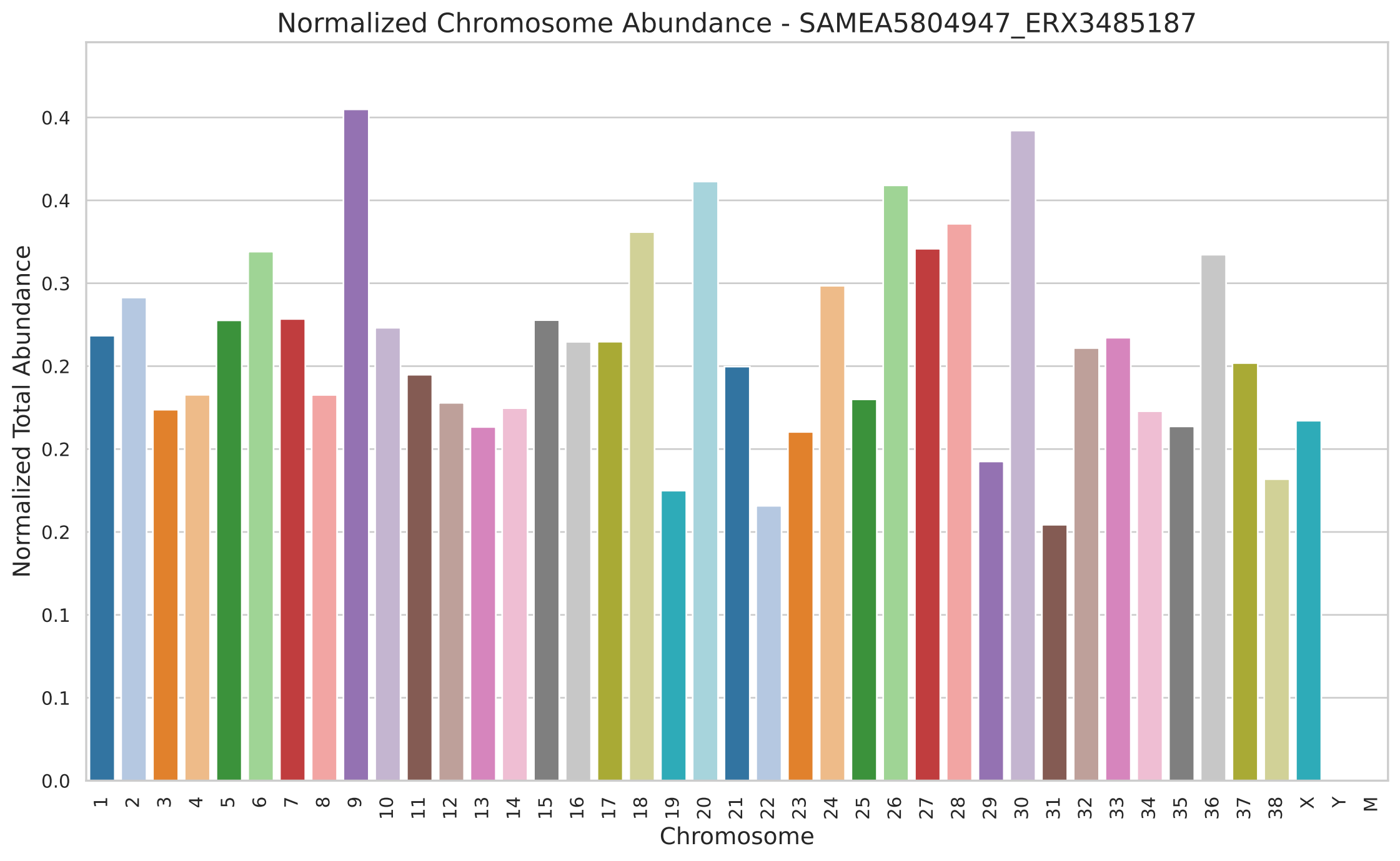

Normalized Chromosome Abundance - SAMEA5804938_ERX3485178
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

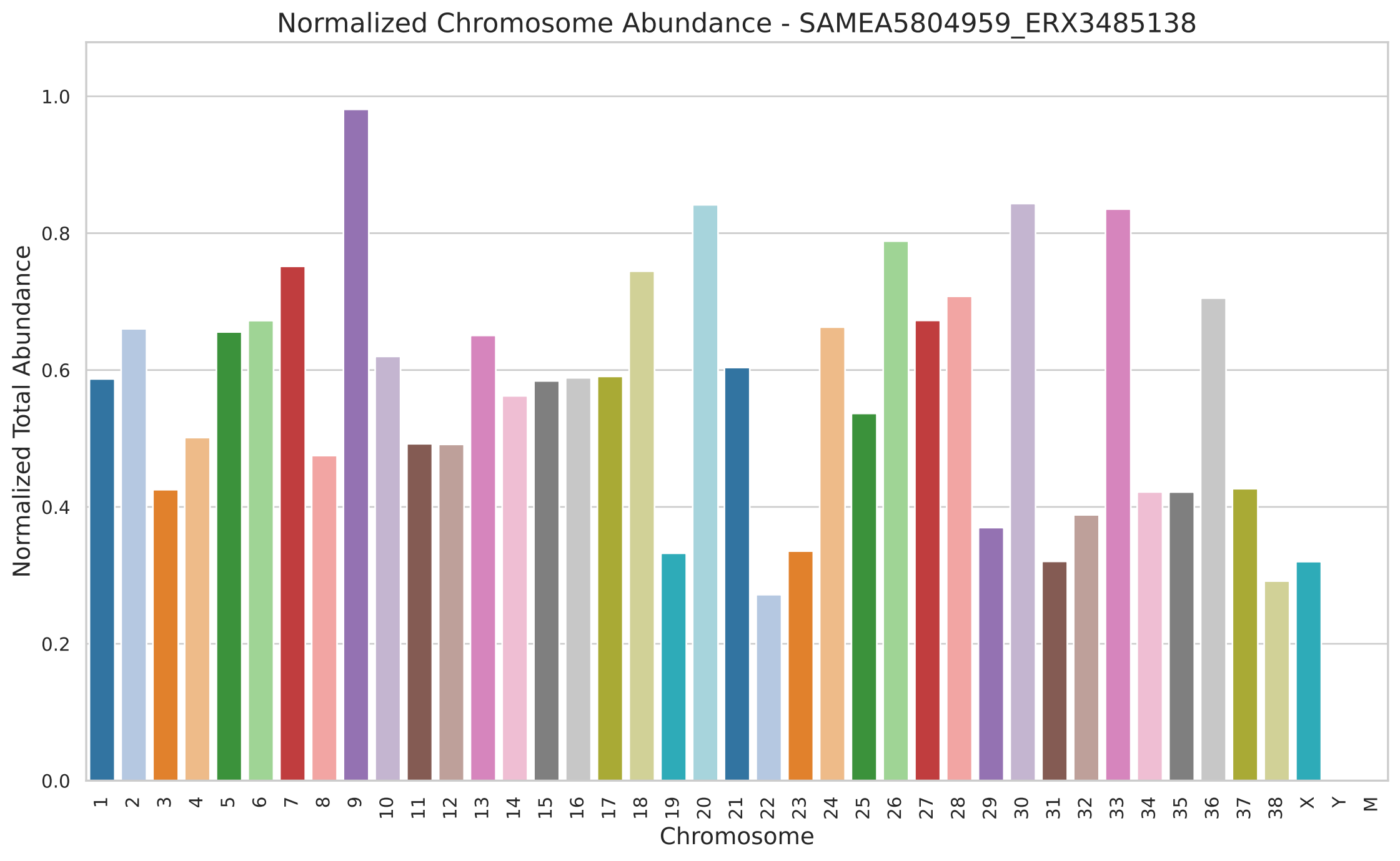

Normalized Chromosome Abundance - SAMEA5804935_ERX3485117
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

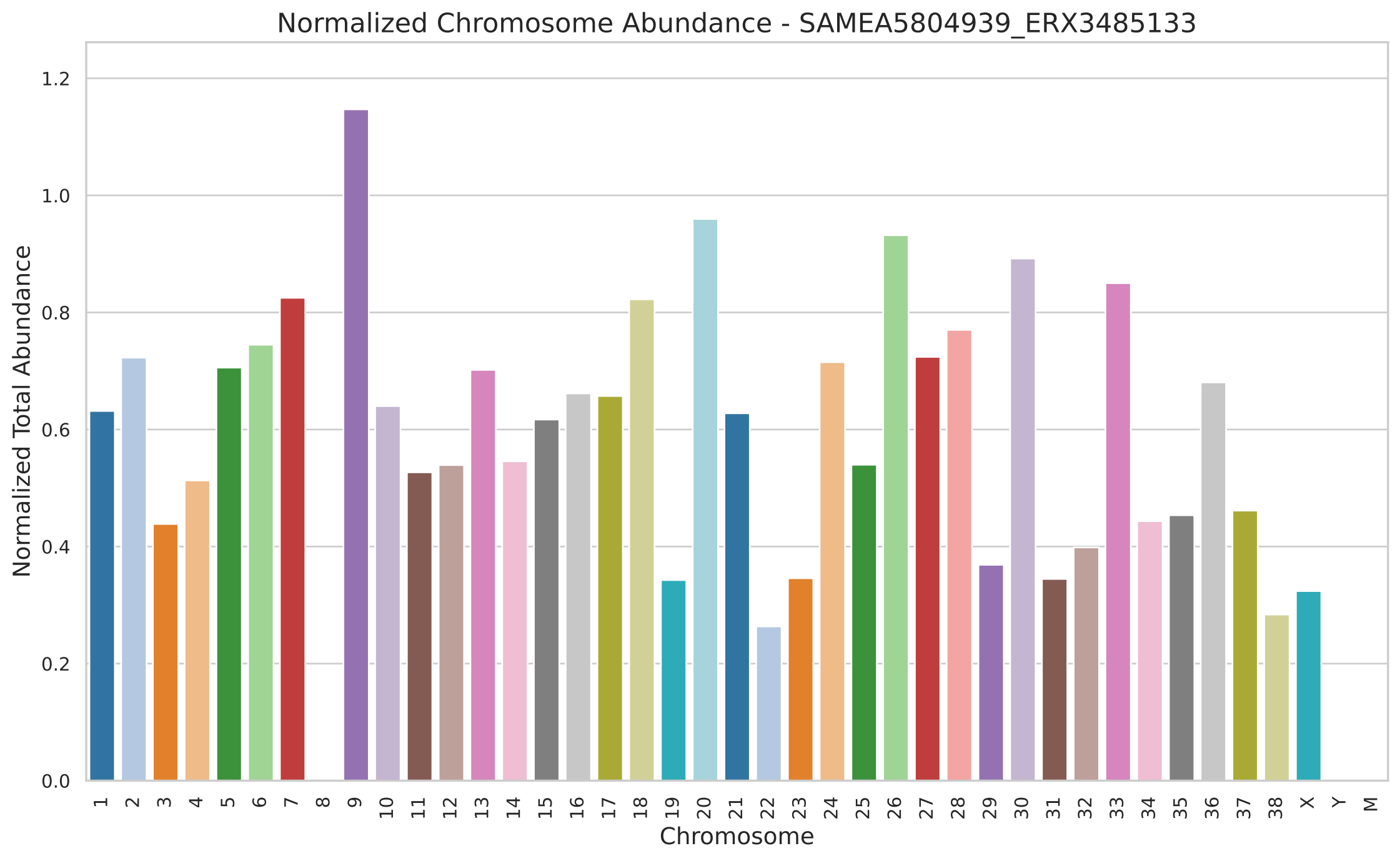

Normalized Chromosome Abundance - SAMEA5805006_ERX3485150
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

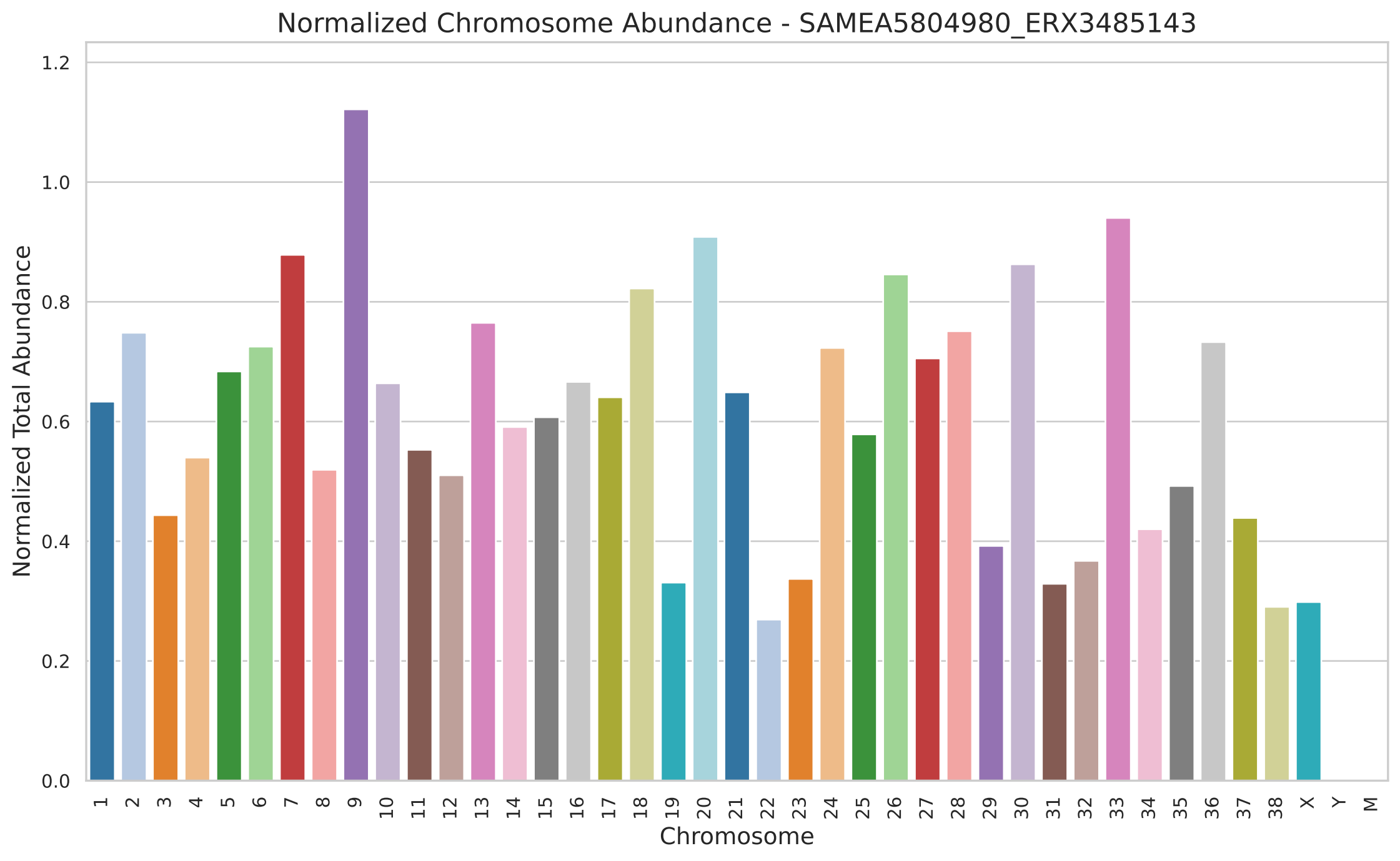

Normalized Chromosome Abundance - SAMEA5804962_ERX3485125
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

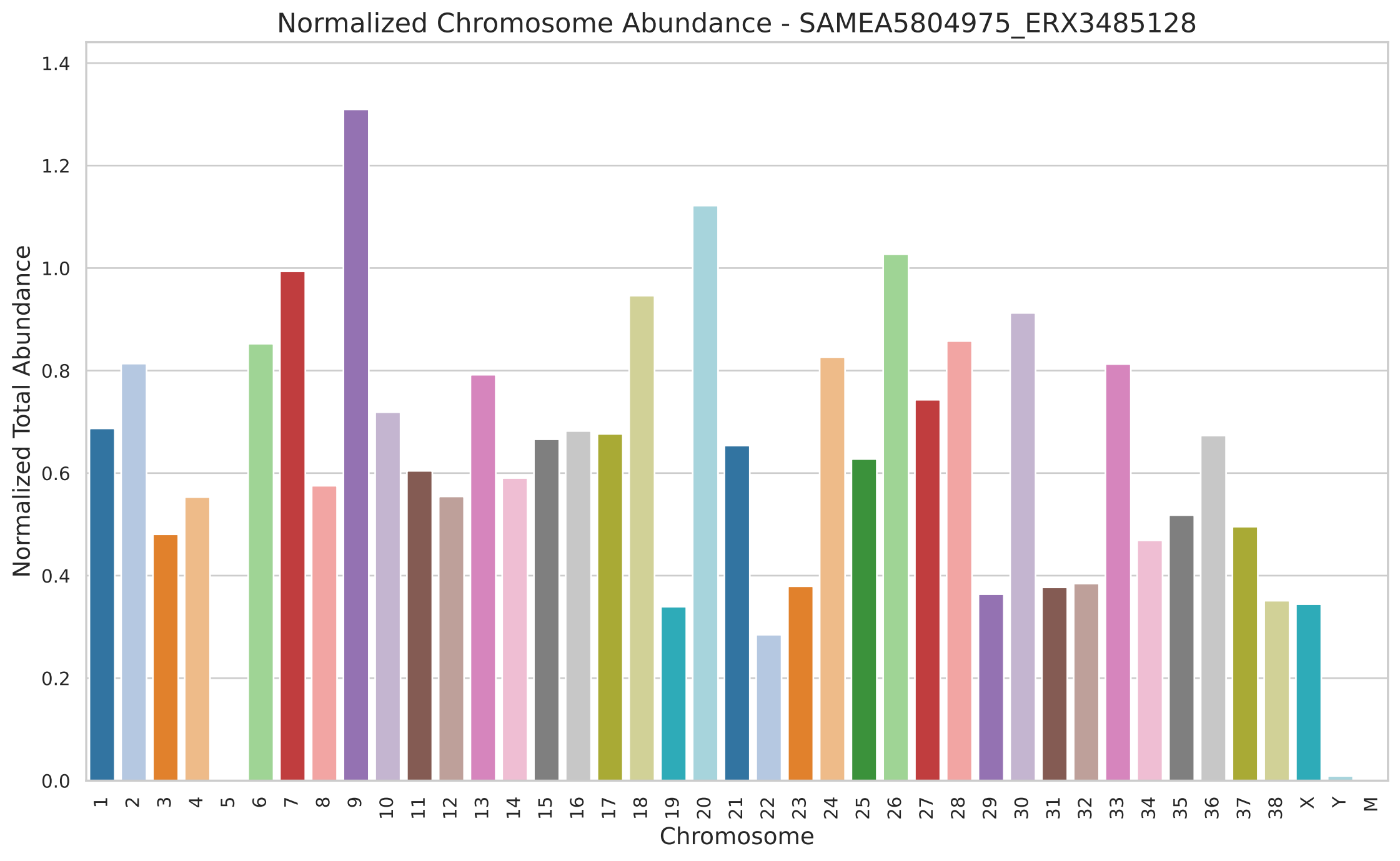

Normalized Chromosome Abundance - SAMEA5804868_ERX3485170
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

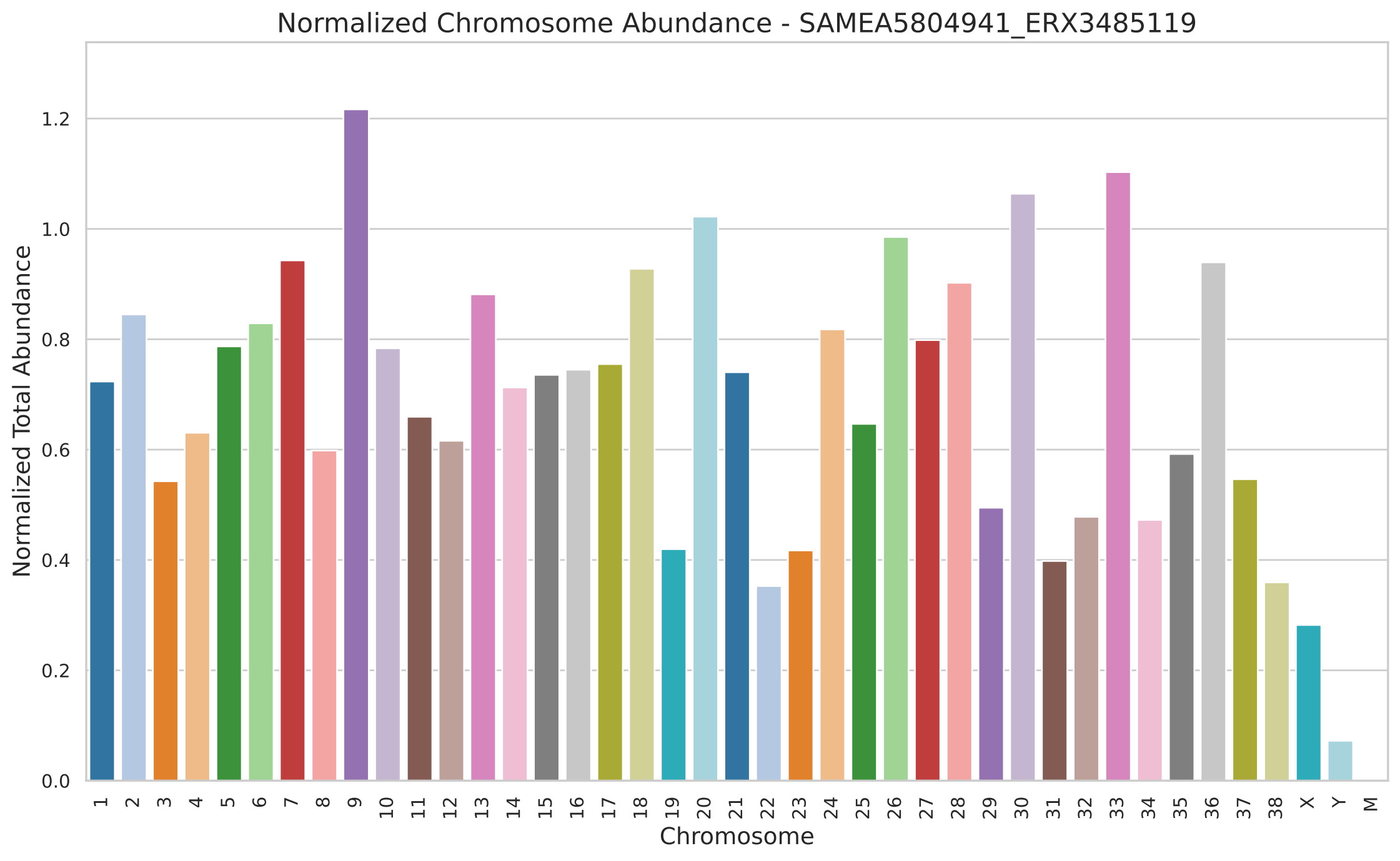

Normalized Chromosome Abundance - SAMEA5804947_ERX3485187
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

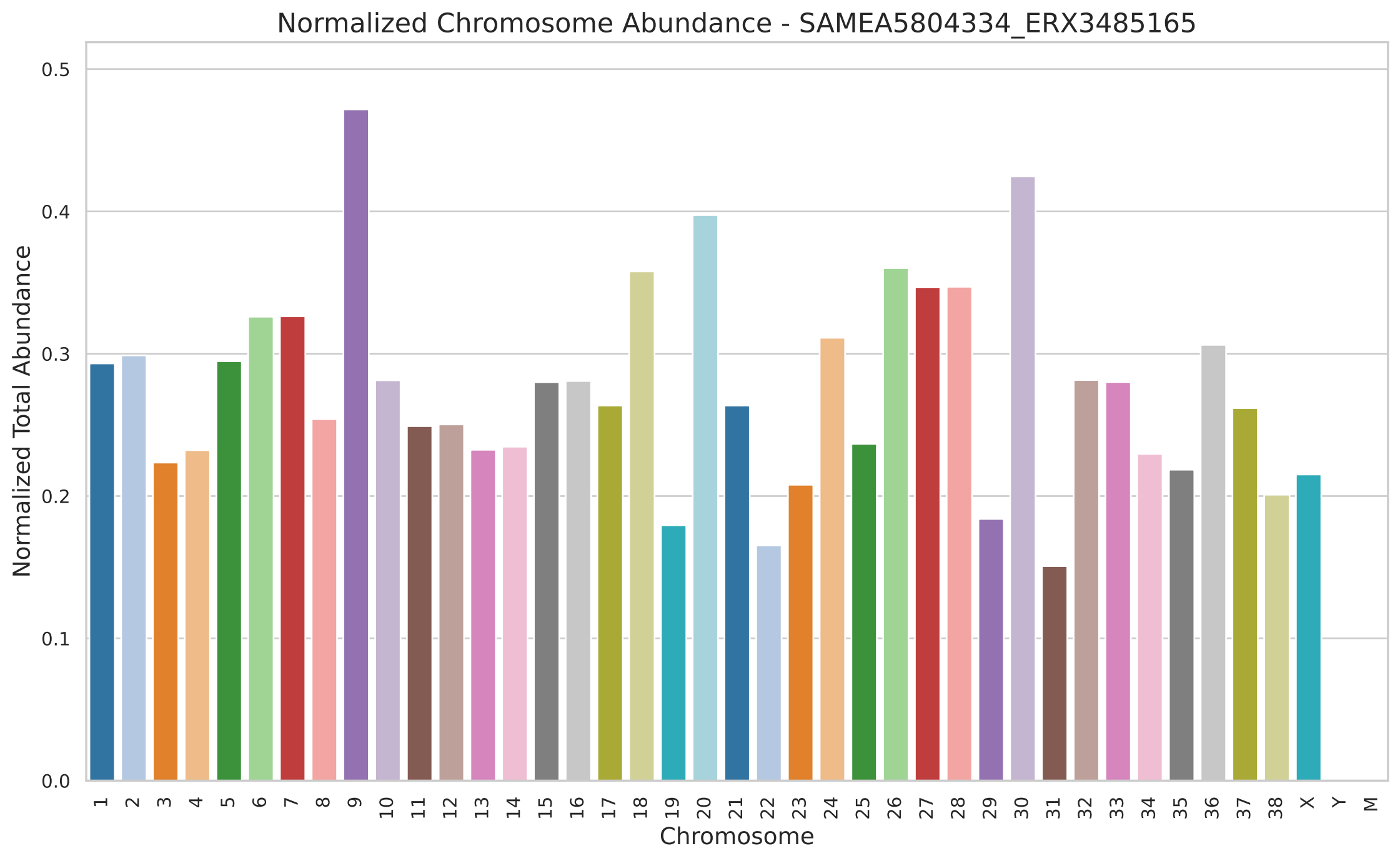

Normalized Chromosome Abundance - SAMEA5804959_ERX3485138
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

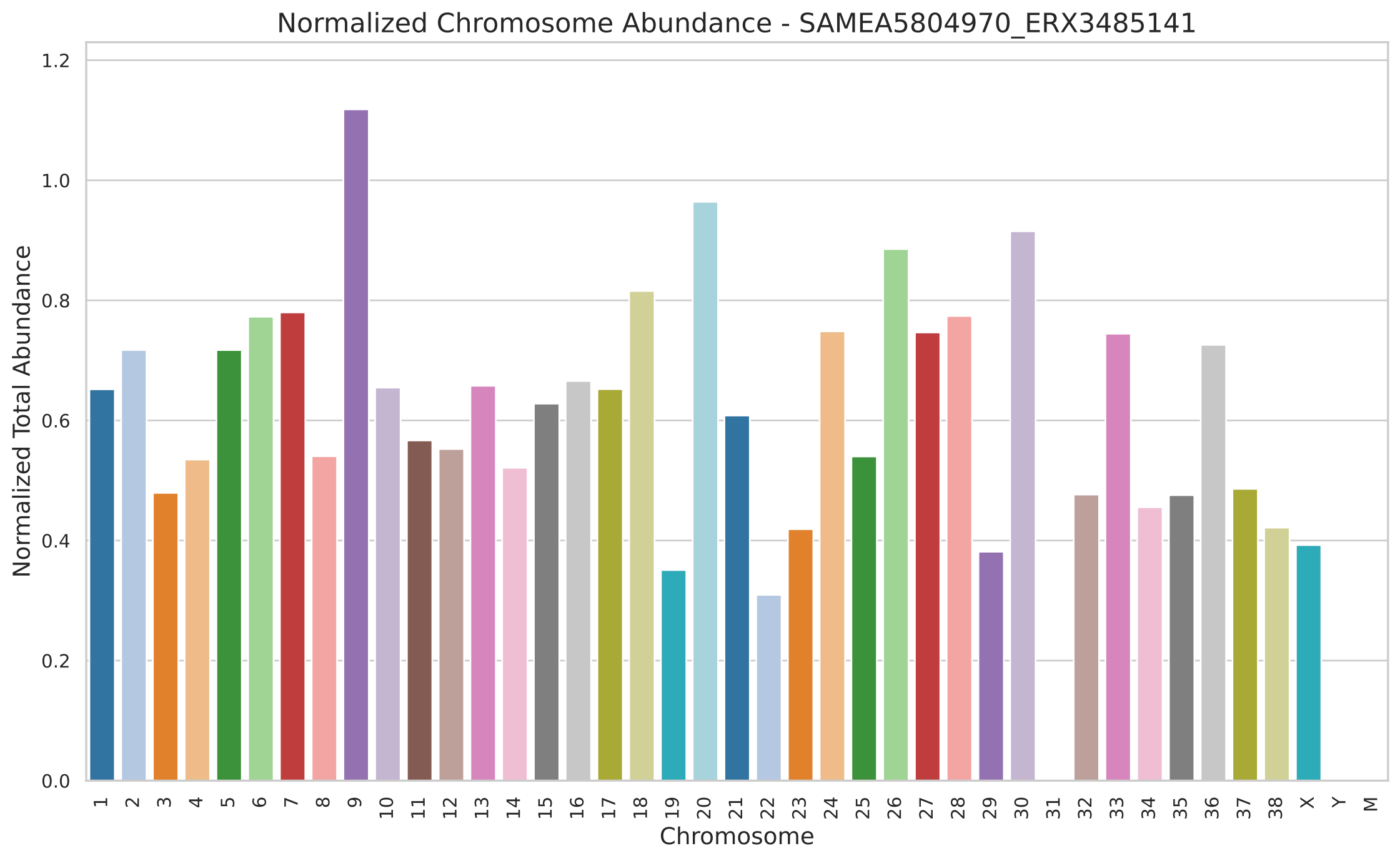

Normalized Chromosome Abundance - SAMEA5804939_ERX3485133
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

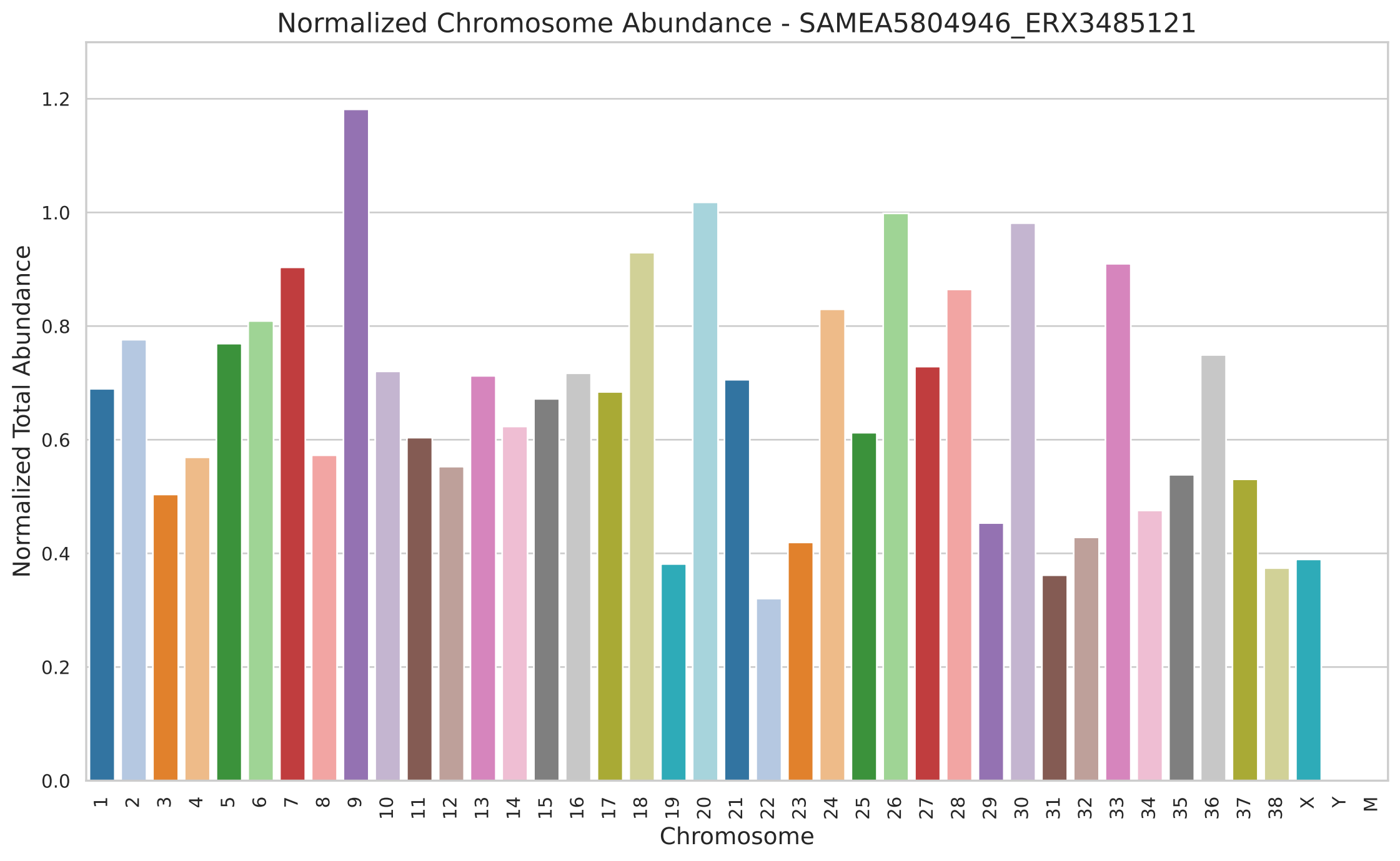

Normalized Chromosome Abundance - SAMEA5804980_ERX3485143
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

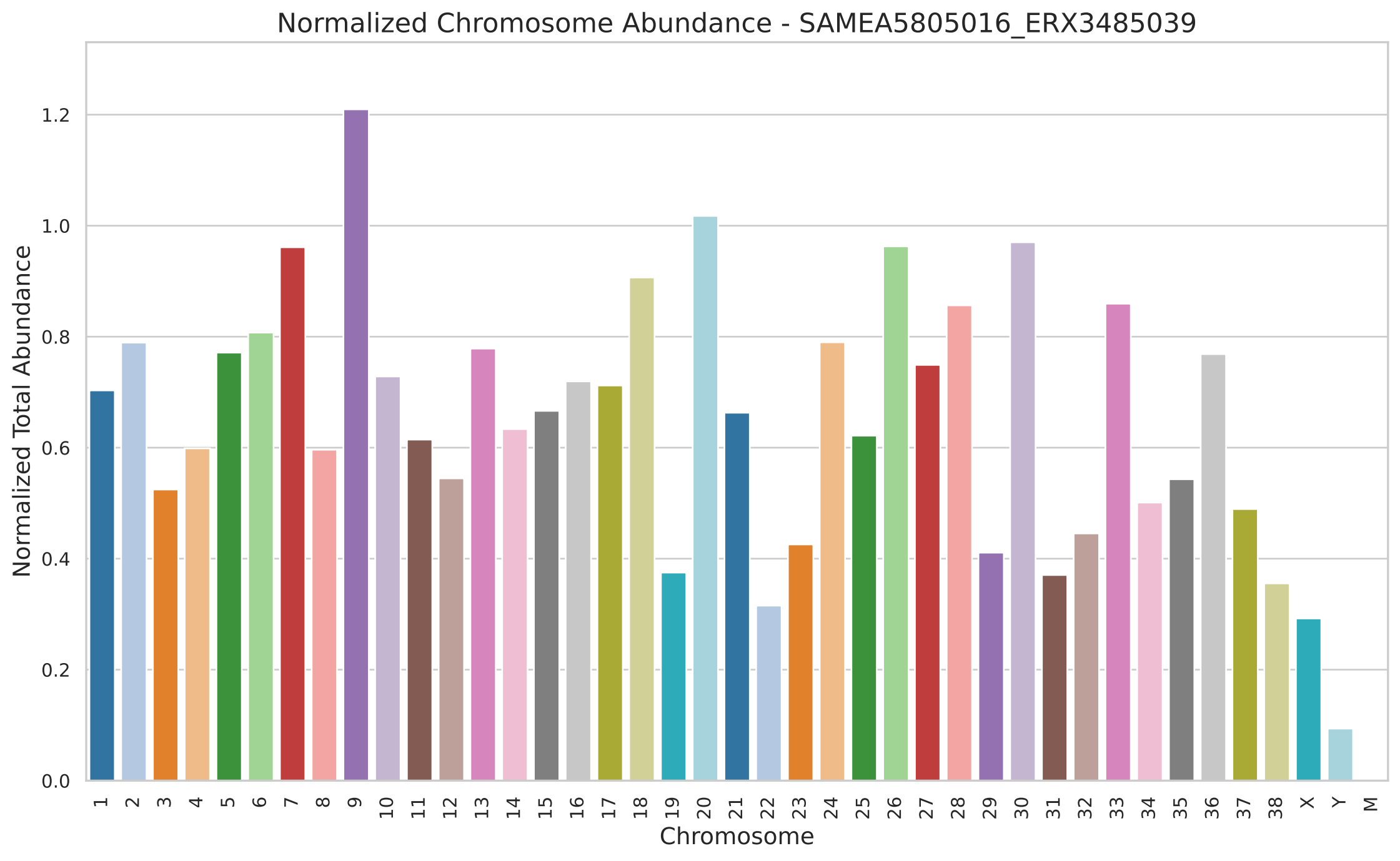

Normalized Chromosome Abundance - SAMEA5804975_ERX3485128
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

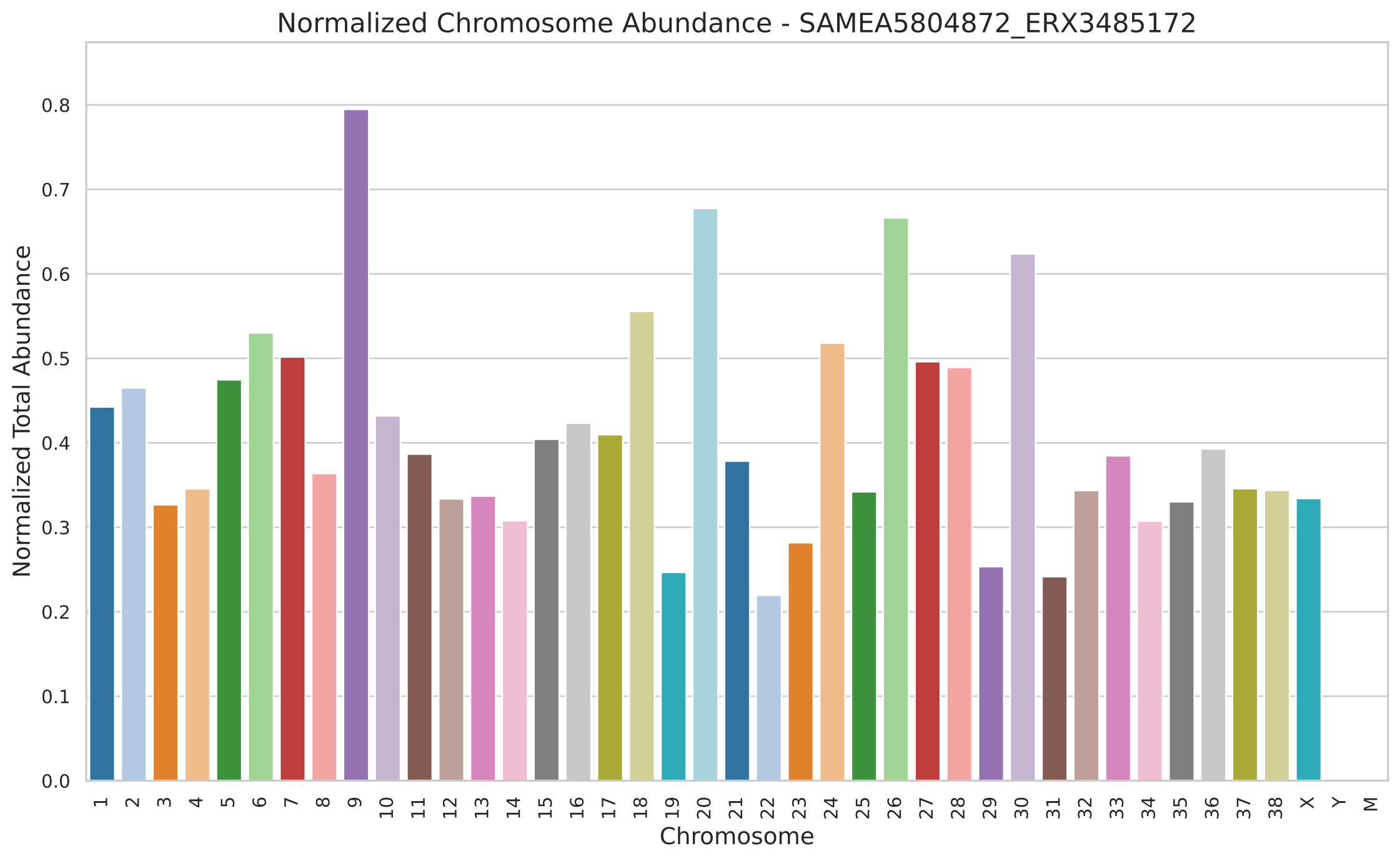

Normalized Chromosome Abundance - SAMEA5804941_ERX3485119
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

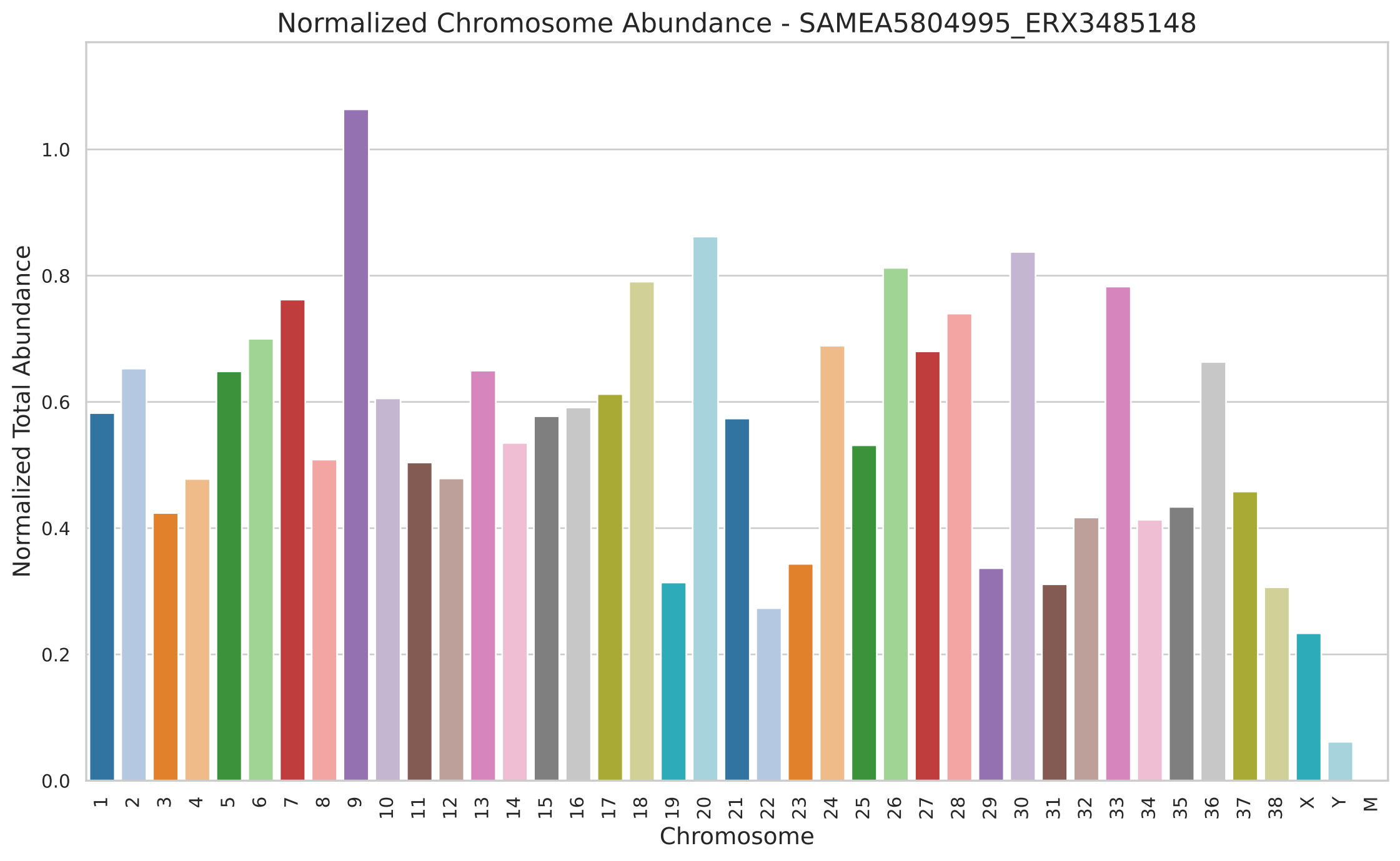

Normalized Chromosome Abundance - SAMEA5804334_ERX3485165
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

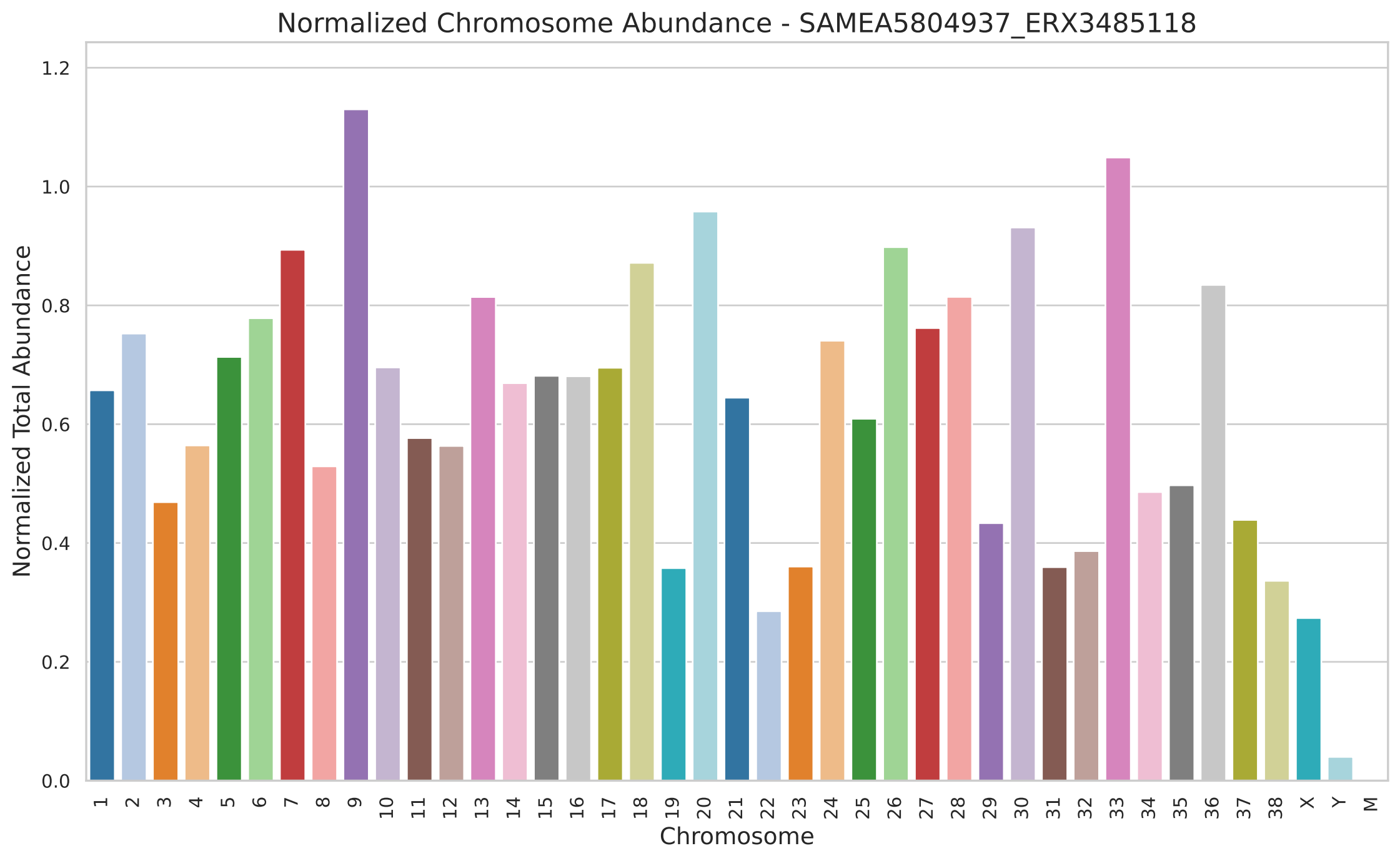

Normalized Chromosome Abundance - SAMEA5804970_ERX3485141
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

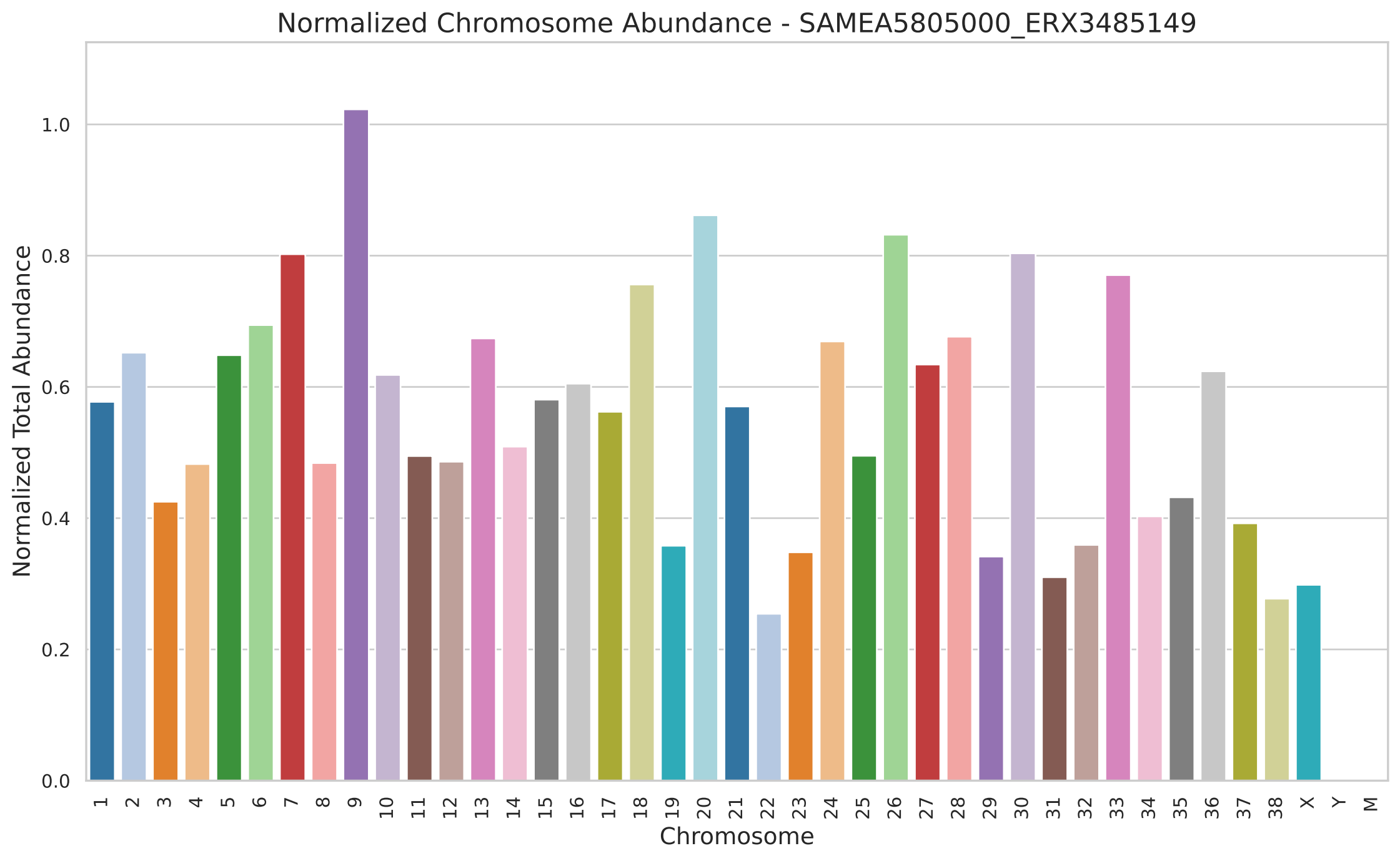

Normalized Chromosome Abundance - SAMEA5804946_ERX3485121
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

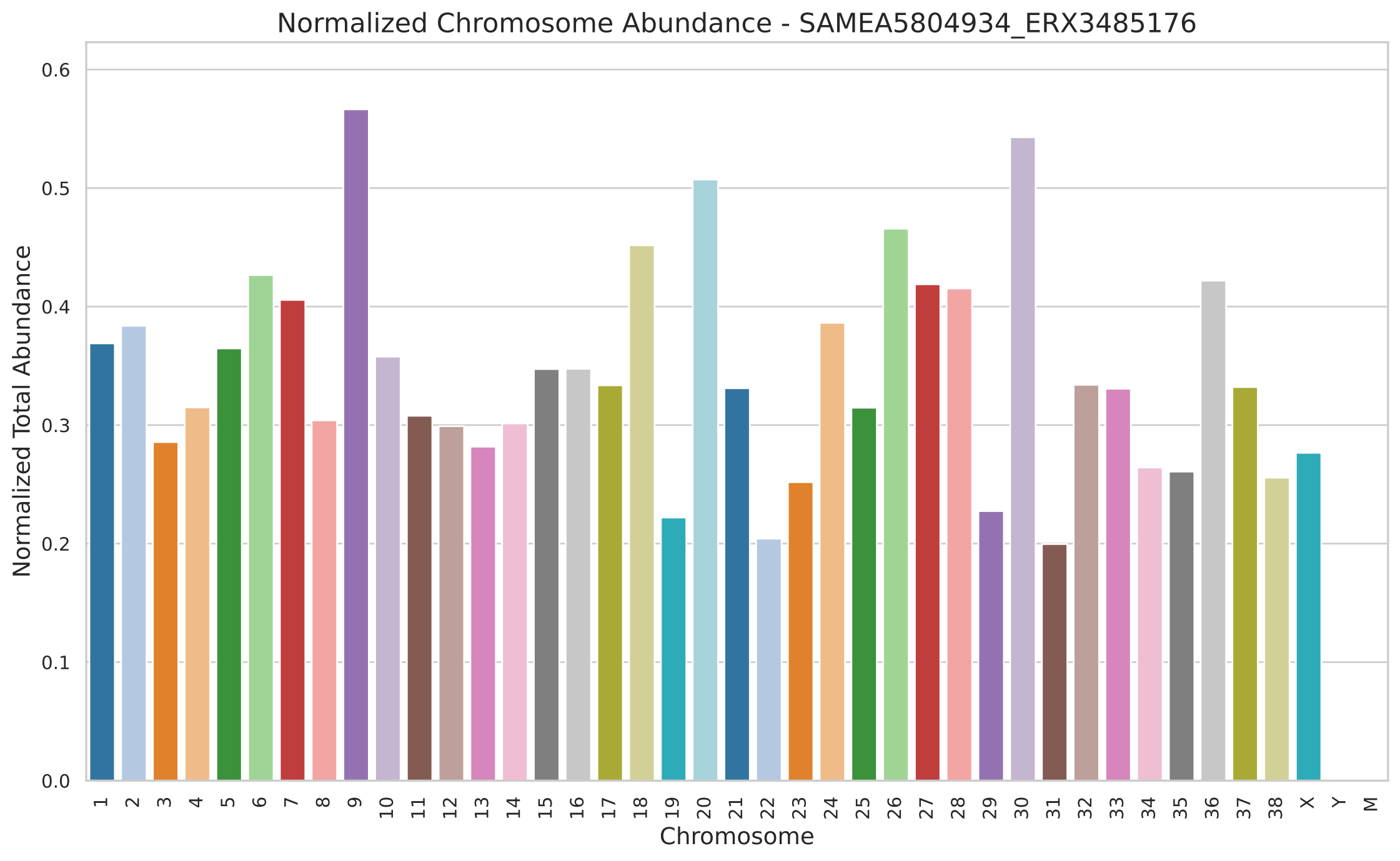

Normalized Chromosome Abundance - SAMEA5805016_ERX3485039
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

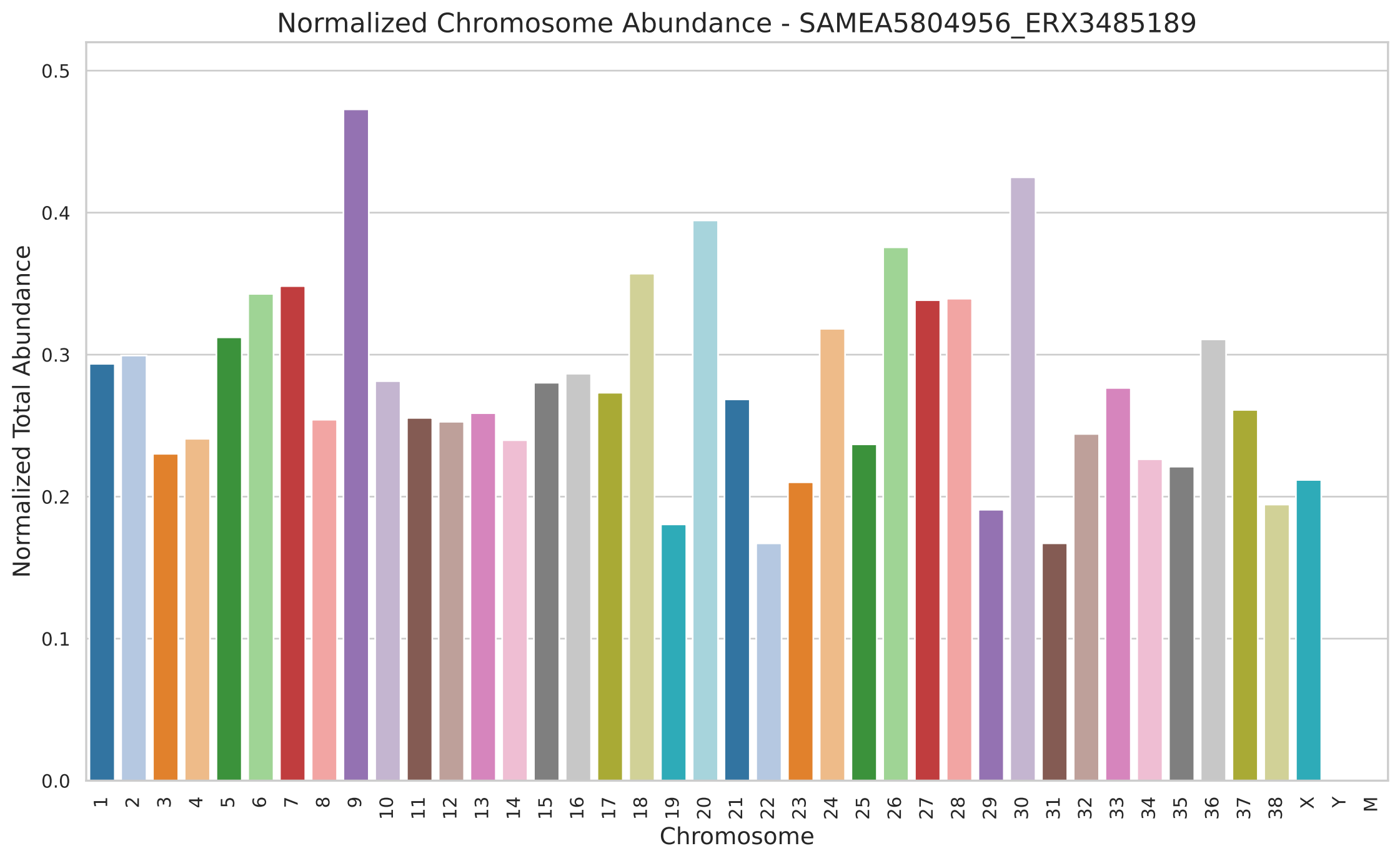

Normalized Chromosome Abundance - SAMEA5804872_ERX3485172
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

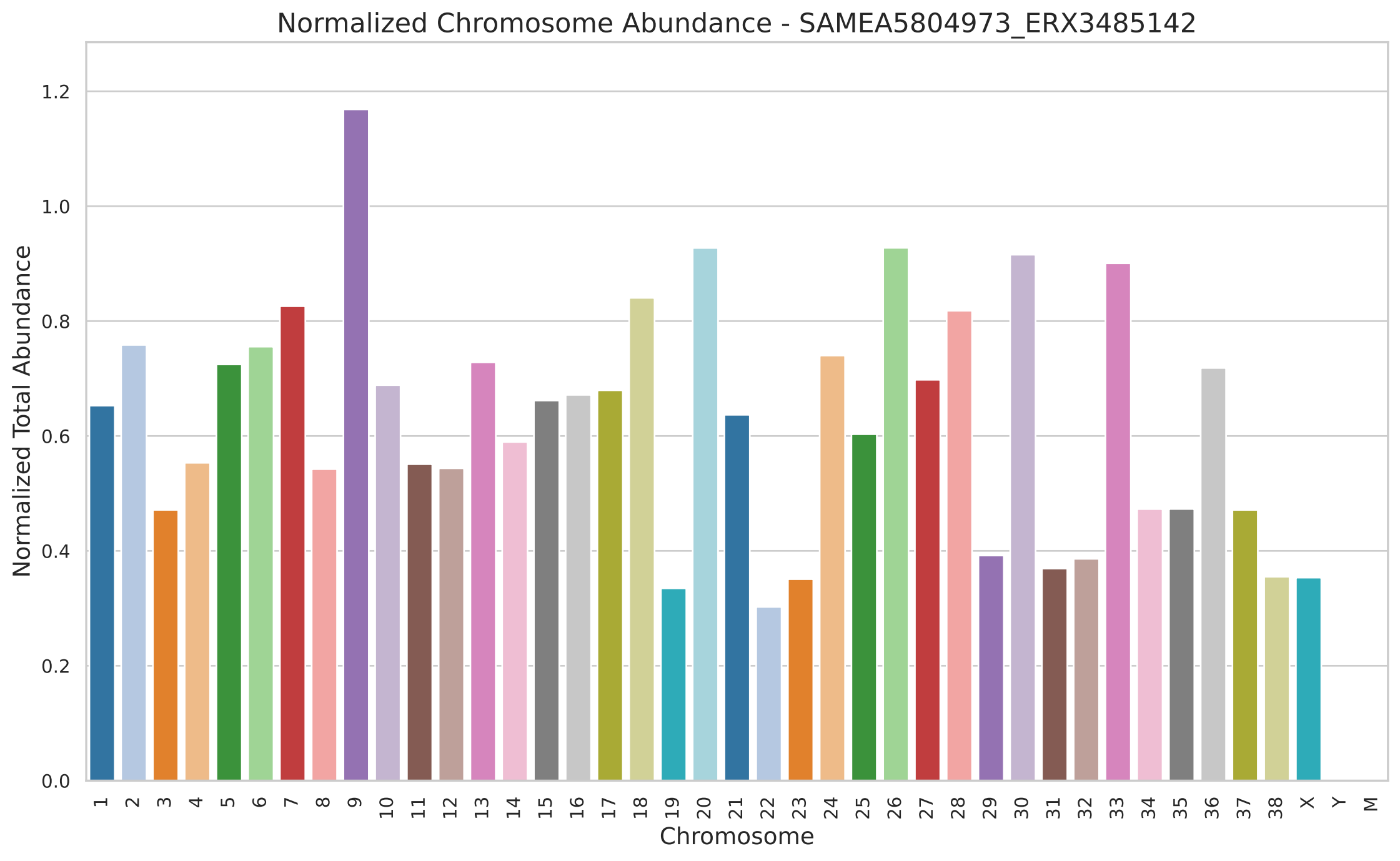

Normalized Chromosome Abundance - SAMEA5804995_ERX3485148
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

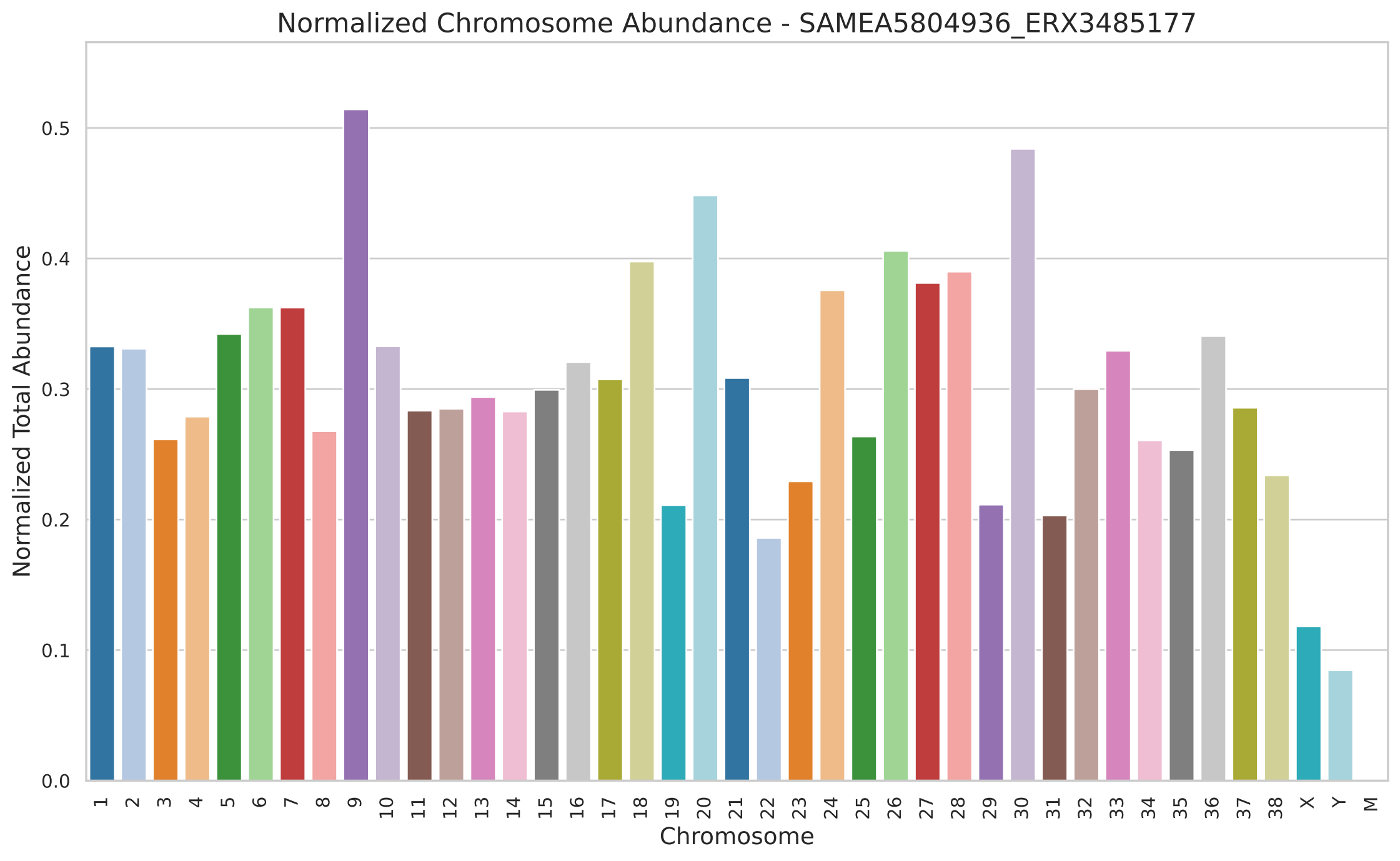

Normalized Chromosome Abundance - SAMEA5804937_ERX3485118
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

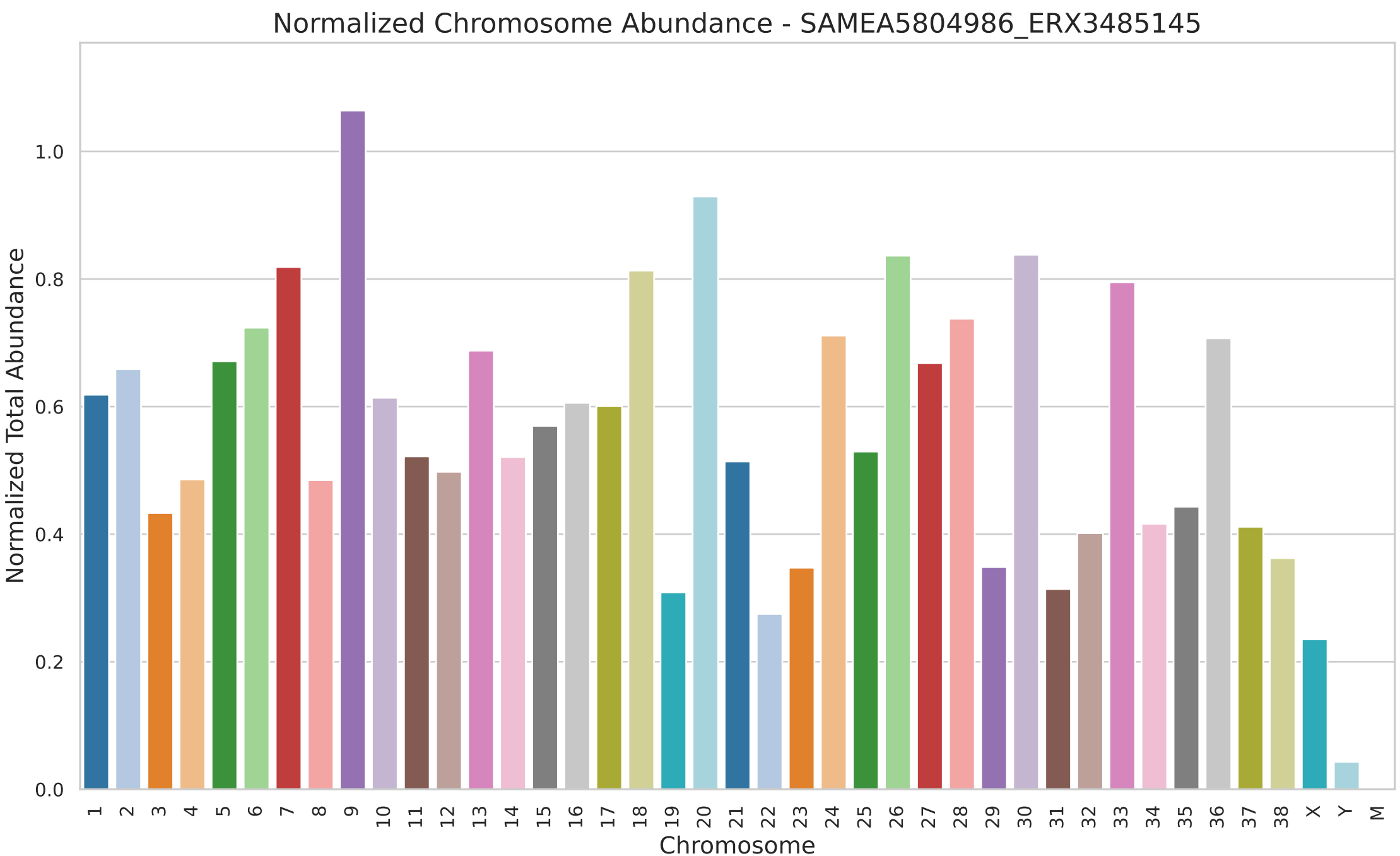

Normalized Chromosome Abundance - SAMEA5805000_ERX3485149
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

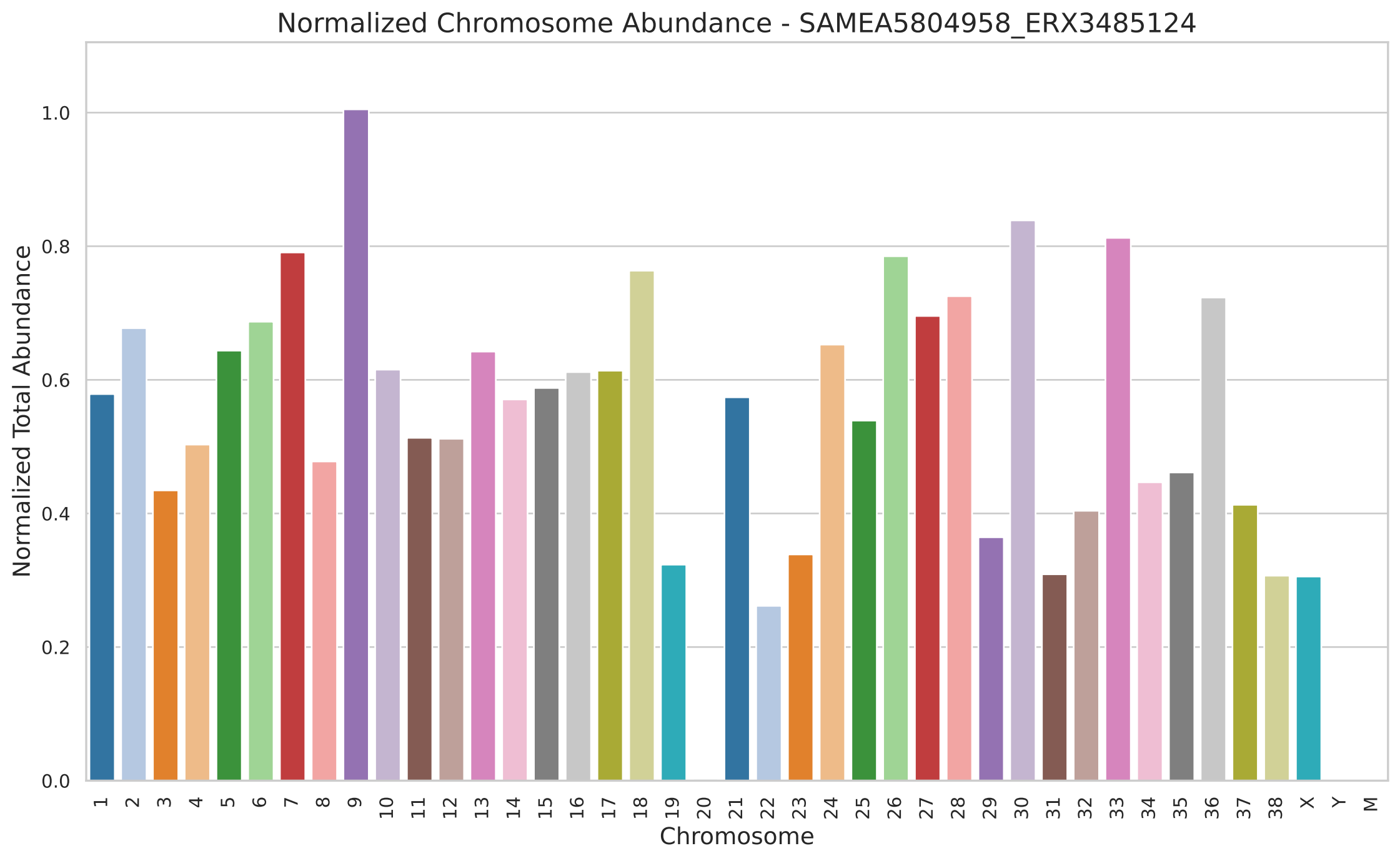

Normalized Chromosome Abundance - SAMEA5804934_ERX3485176
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

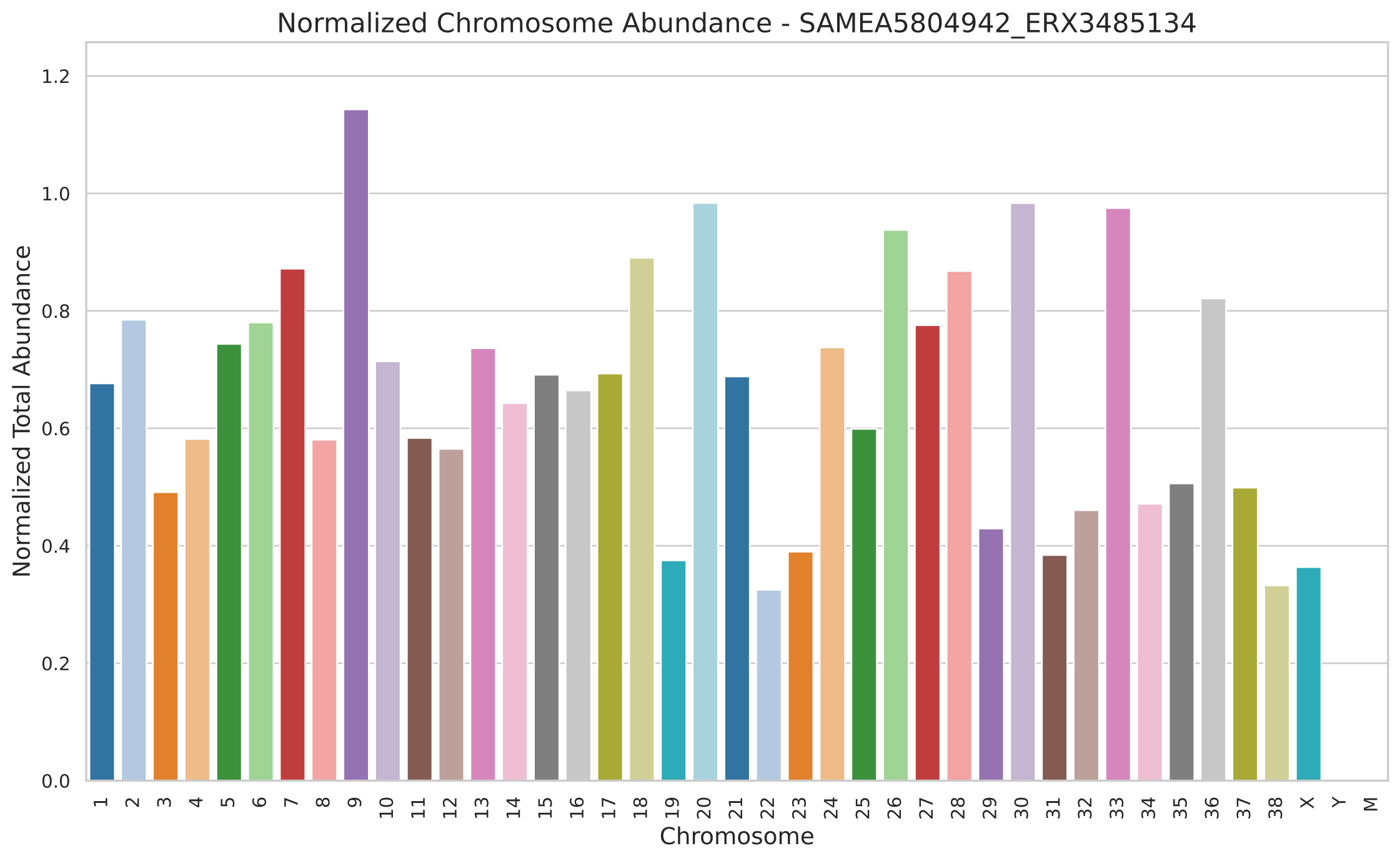

Normalized Chromosome Abundance - SAMEA5804956_ERX3485189
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

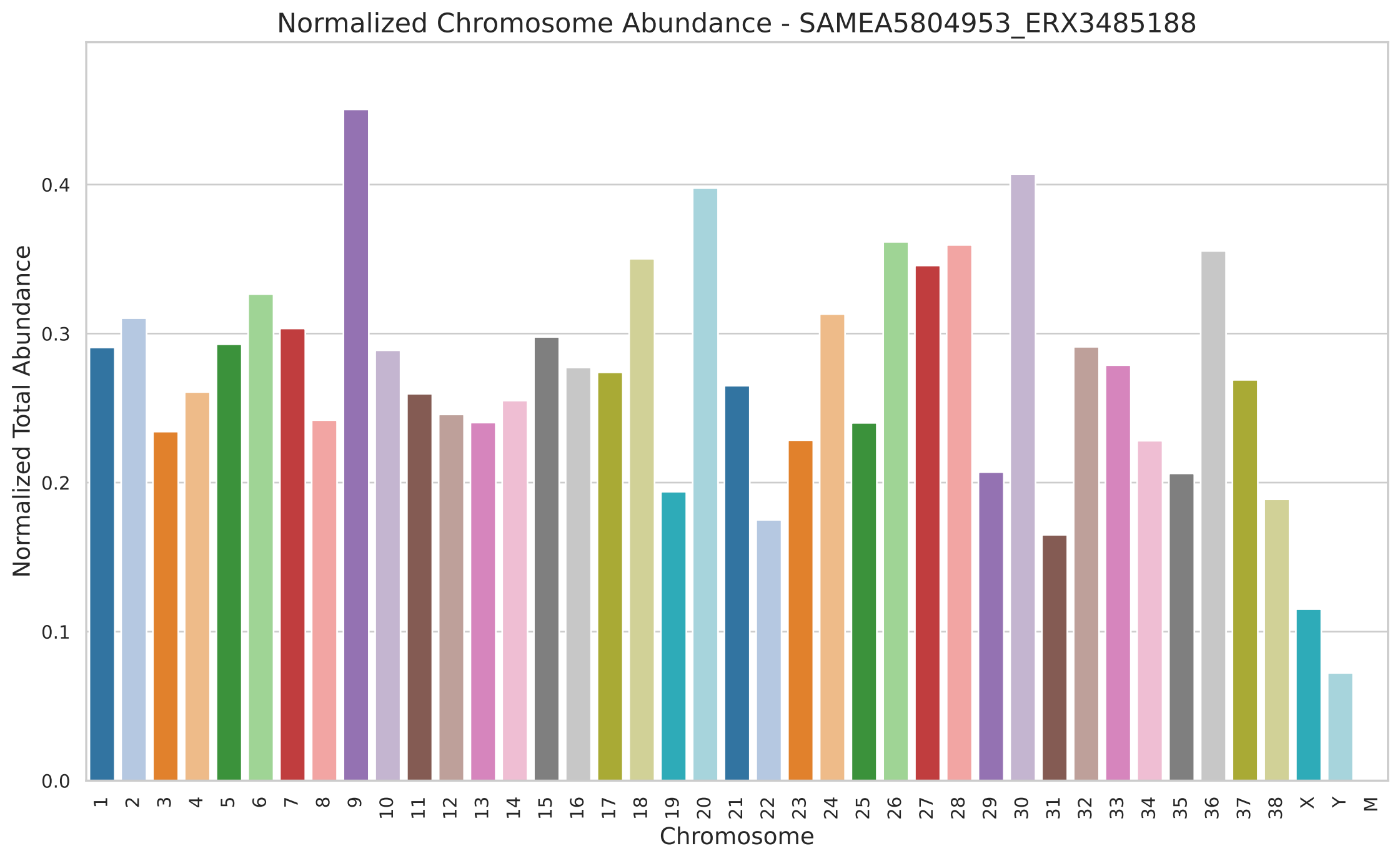

Normalized Chromosome Abundance - SAMEA5804973_ERX3485142
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

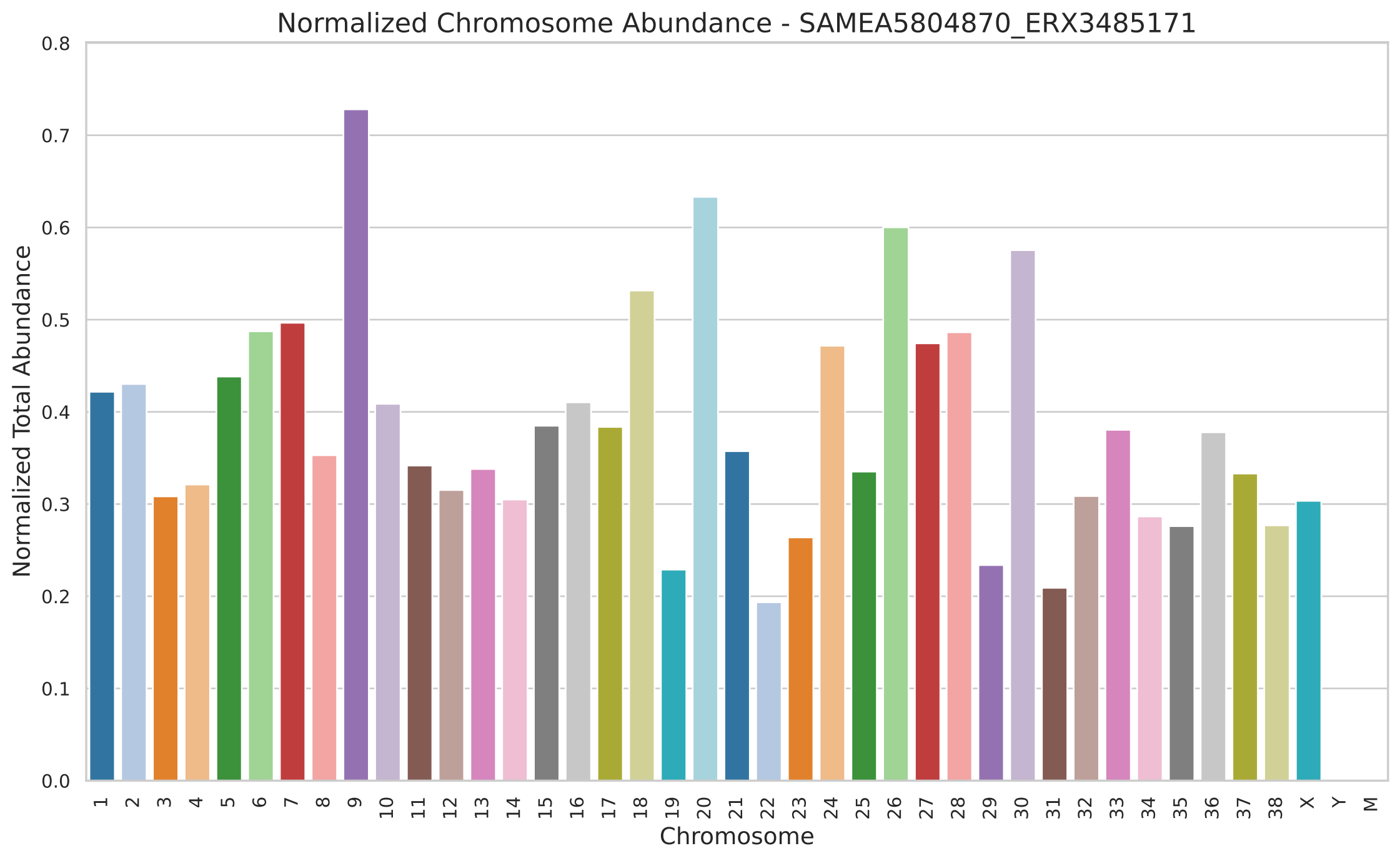

Normalized Chromosome Abundance - SAMEA5804936_ERX3485177
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

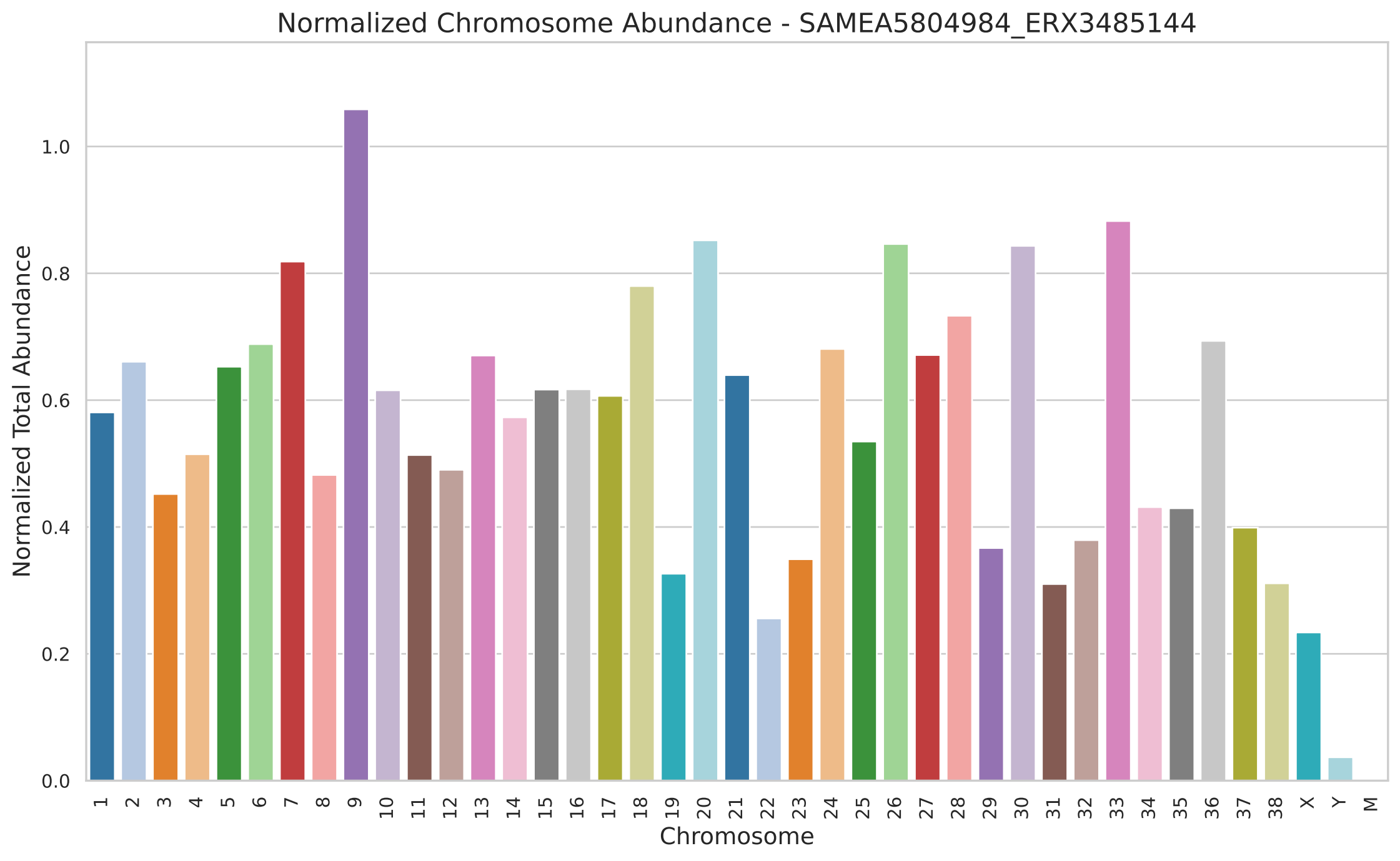

Normalized Chromosome Abundance - SAMEA5804986_ERX3485145
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

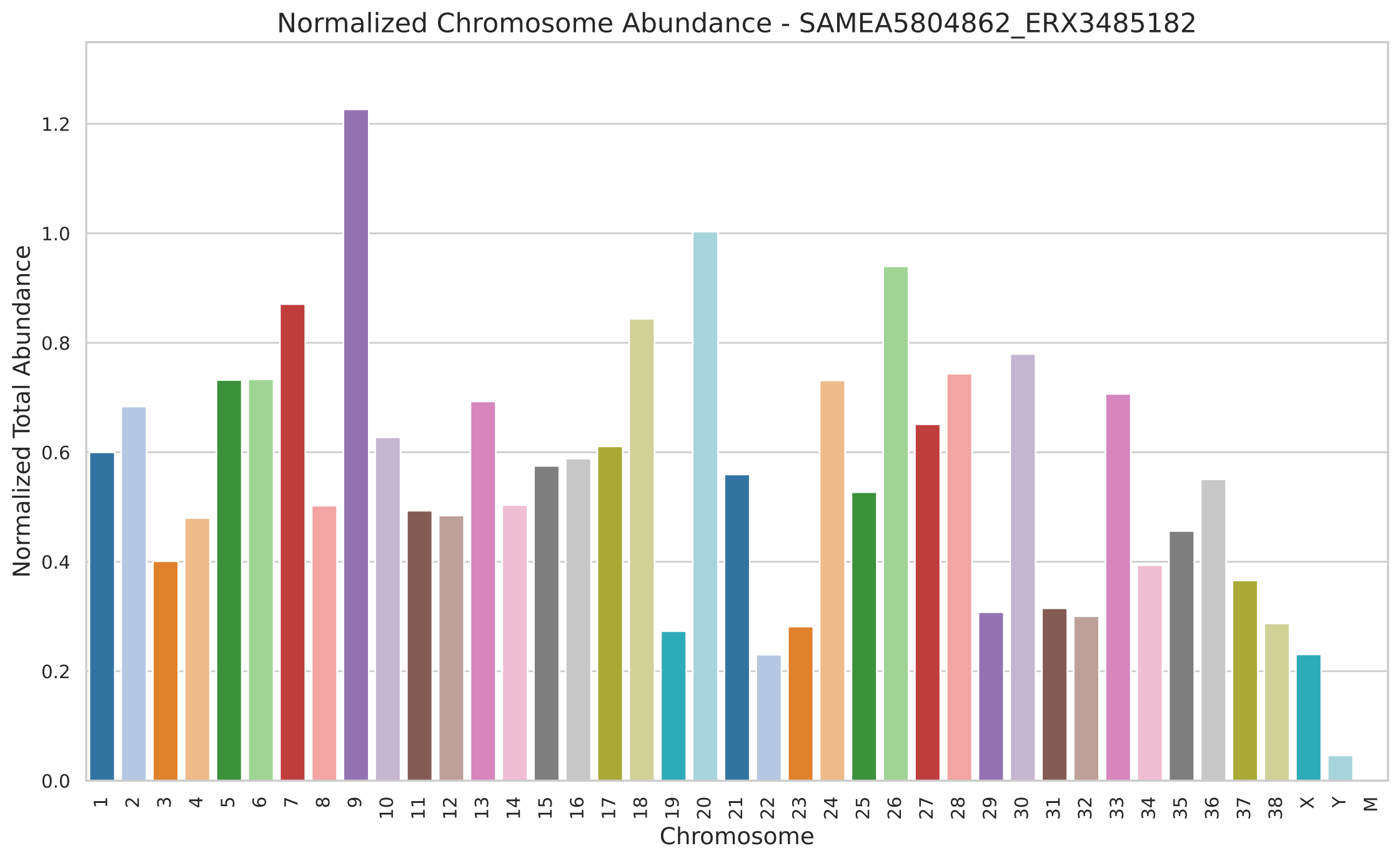

Normalized Chromosome Abundance - SAMEA5804958_ERX3485124
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

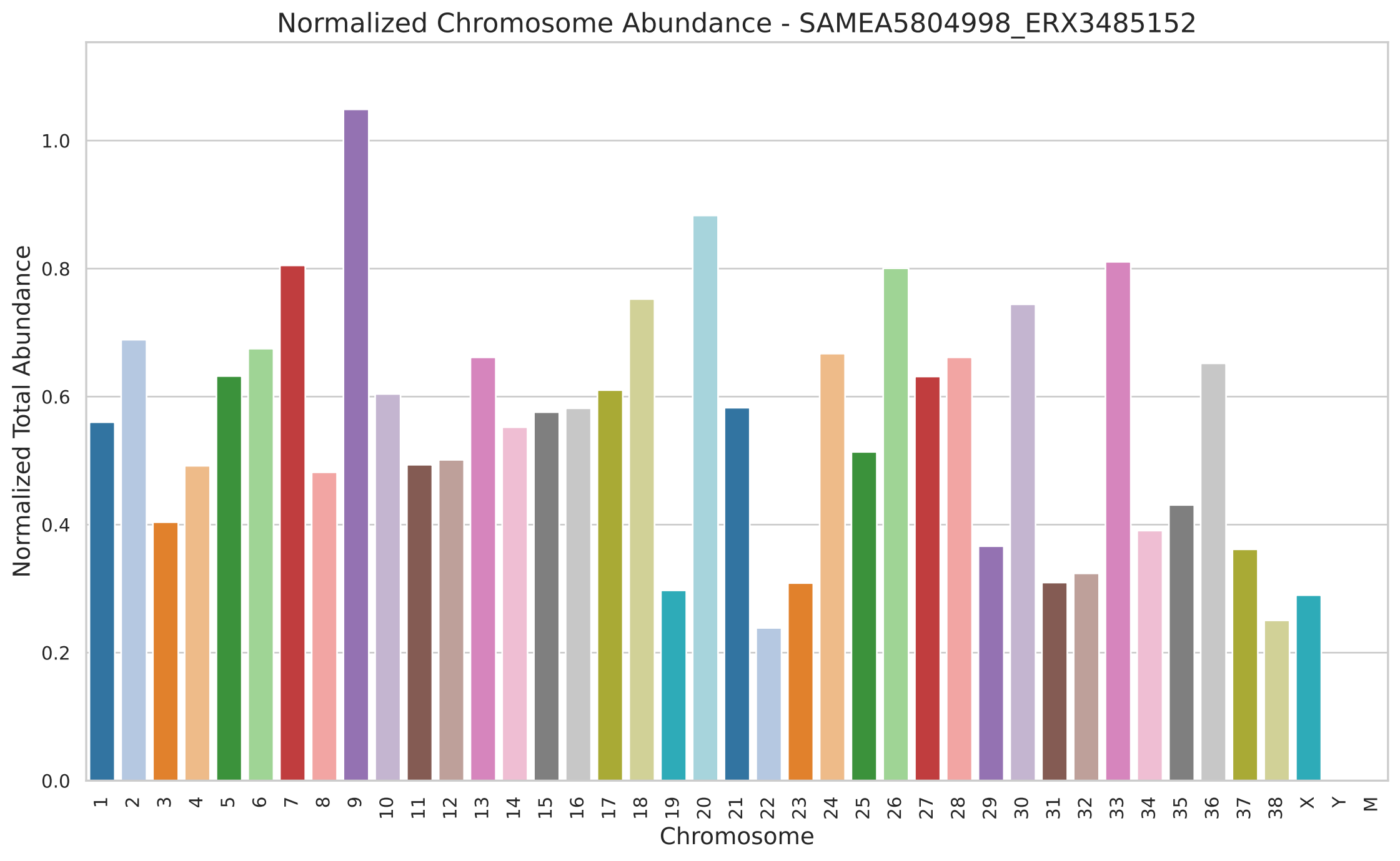

Normalized Chromosome Abundance - SAMEA5804942_ERX3485134
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

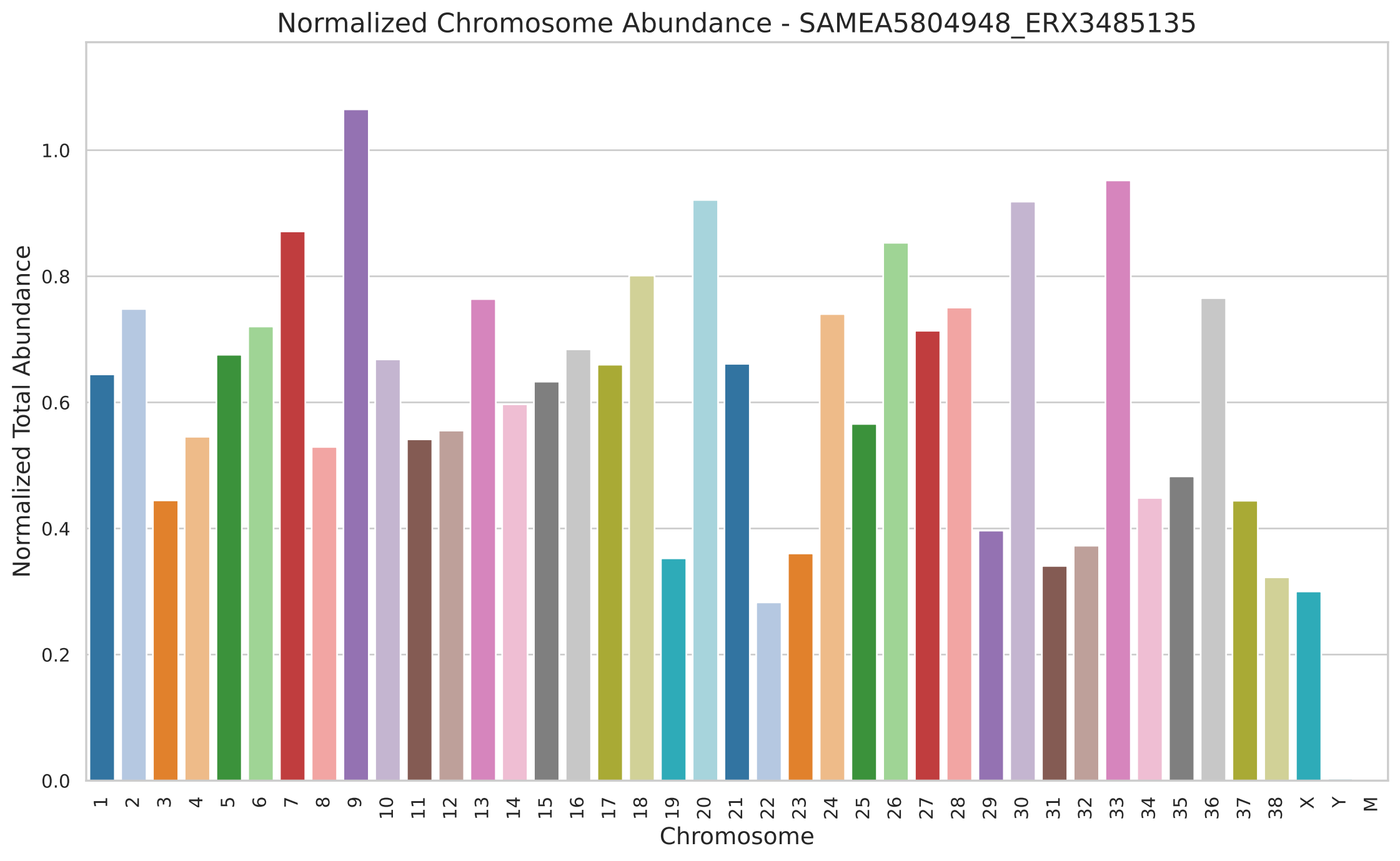

Normalized Chromosome Abundance - SAMEA5804953_ERX3485188
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

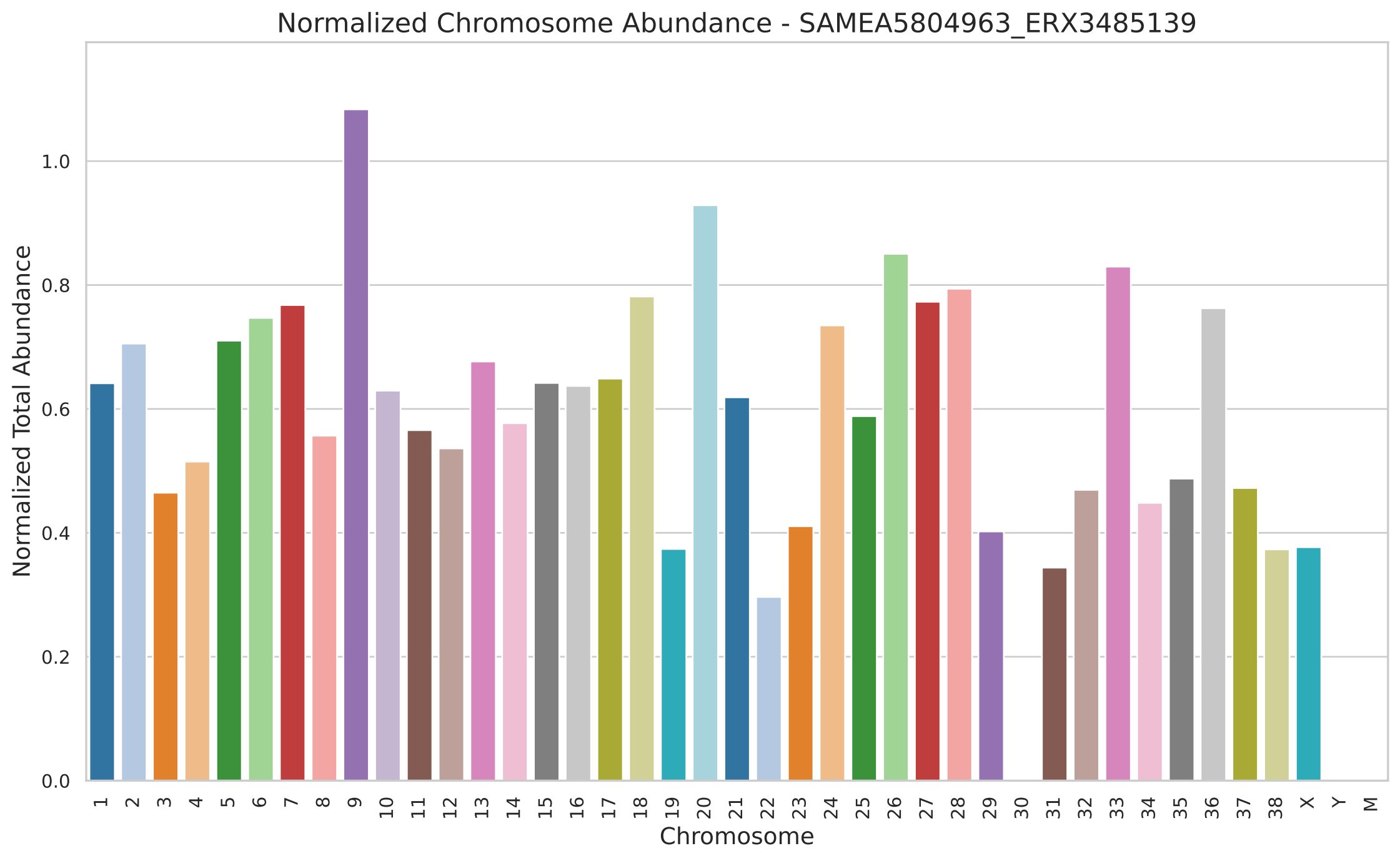

Normalized Chromosome Abundance - SAMEA5804870_ERX3485171
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

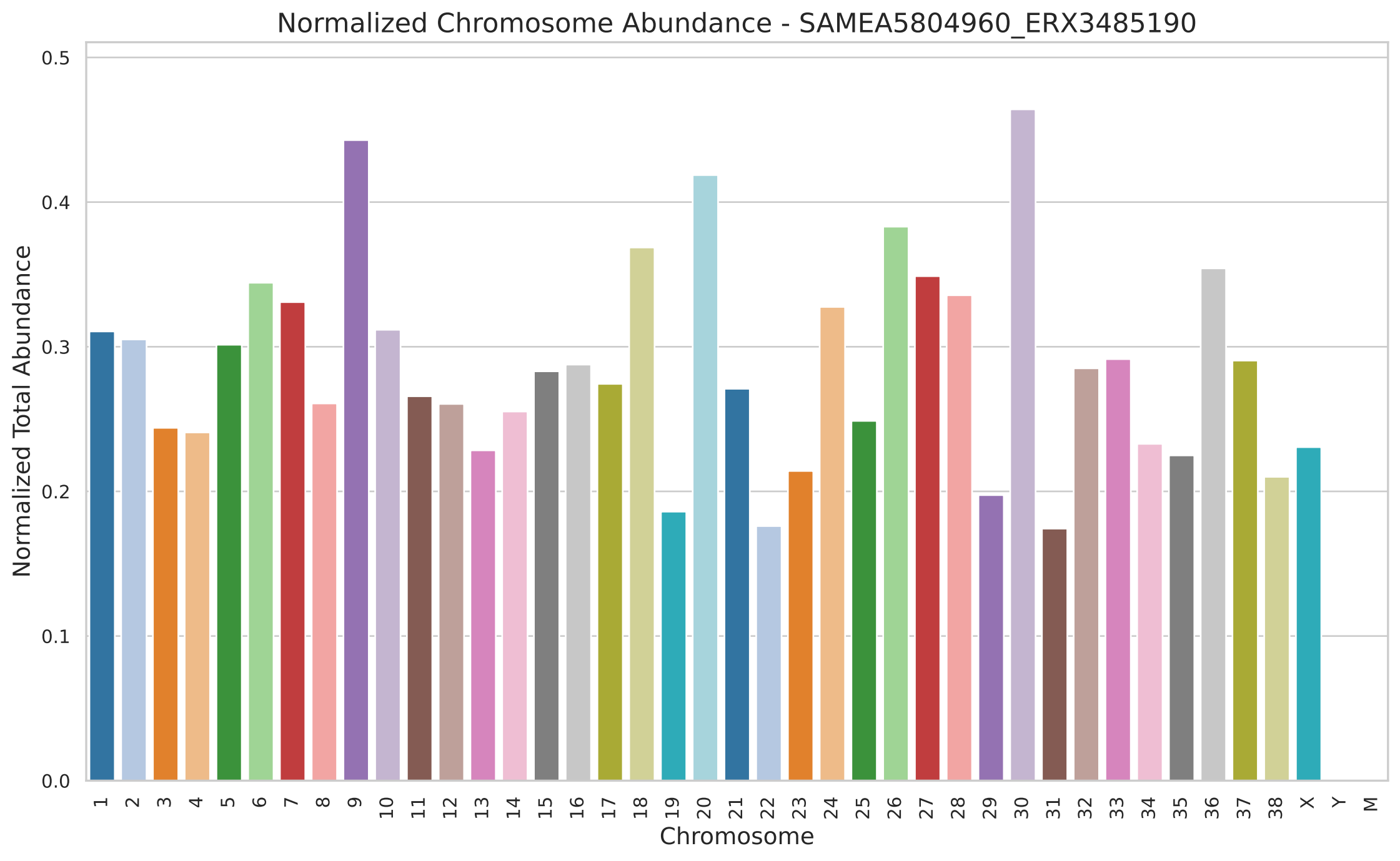

Normalized Chromosome Abundance - SAMEA5804984_ERX3485144
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

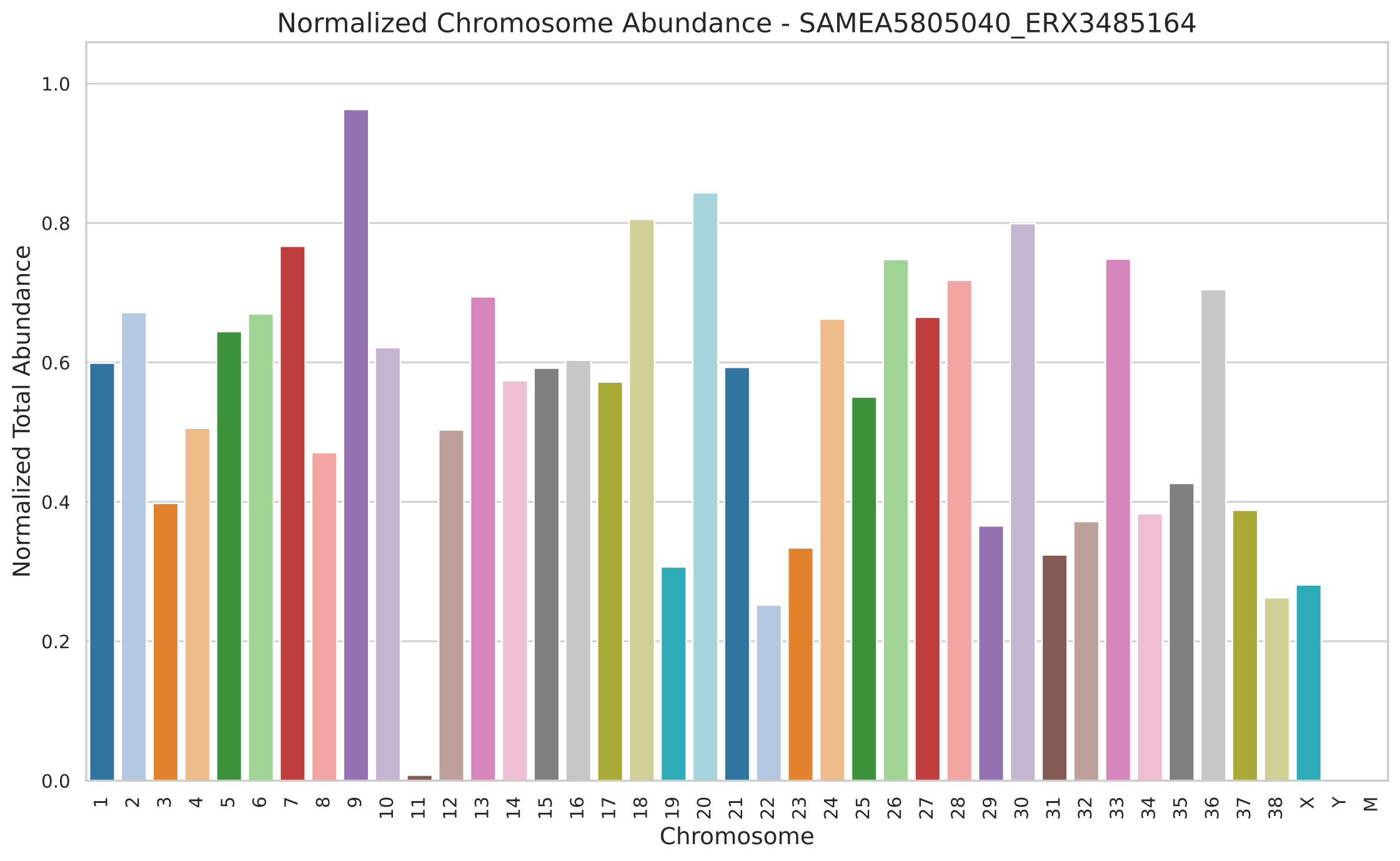

Normalized Chromosome Abundance - SAMEA5804862_ERX3485182
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

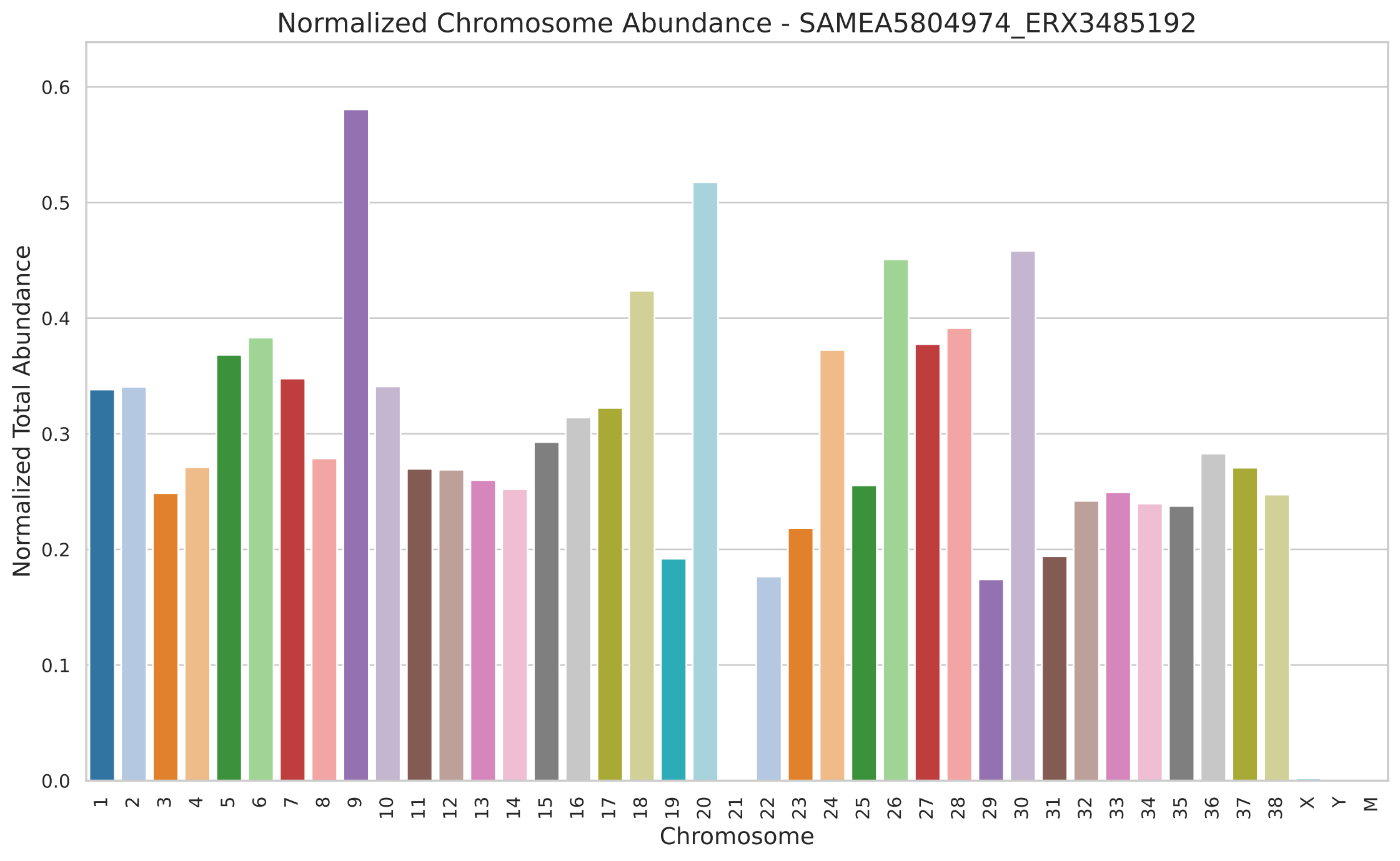

Normalized Chromosome Abundance - SAMEA5804998_ERX3485152
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

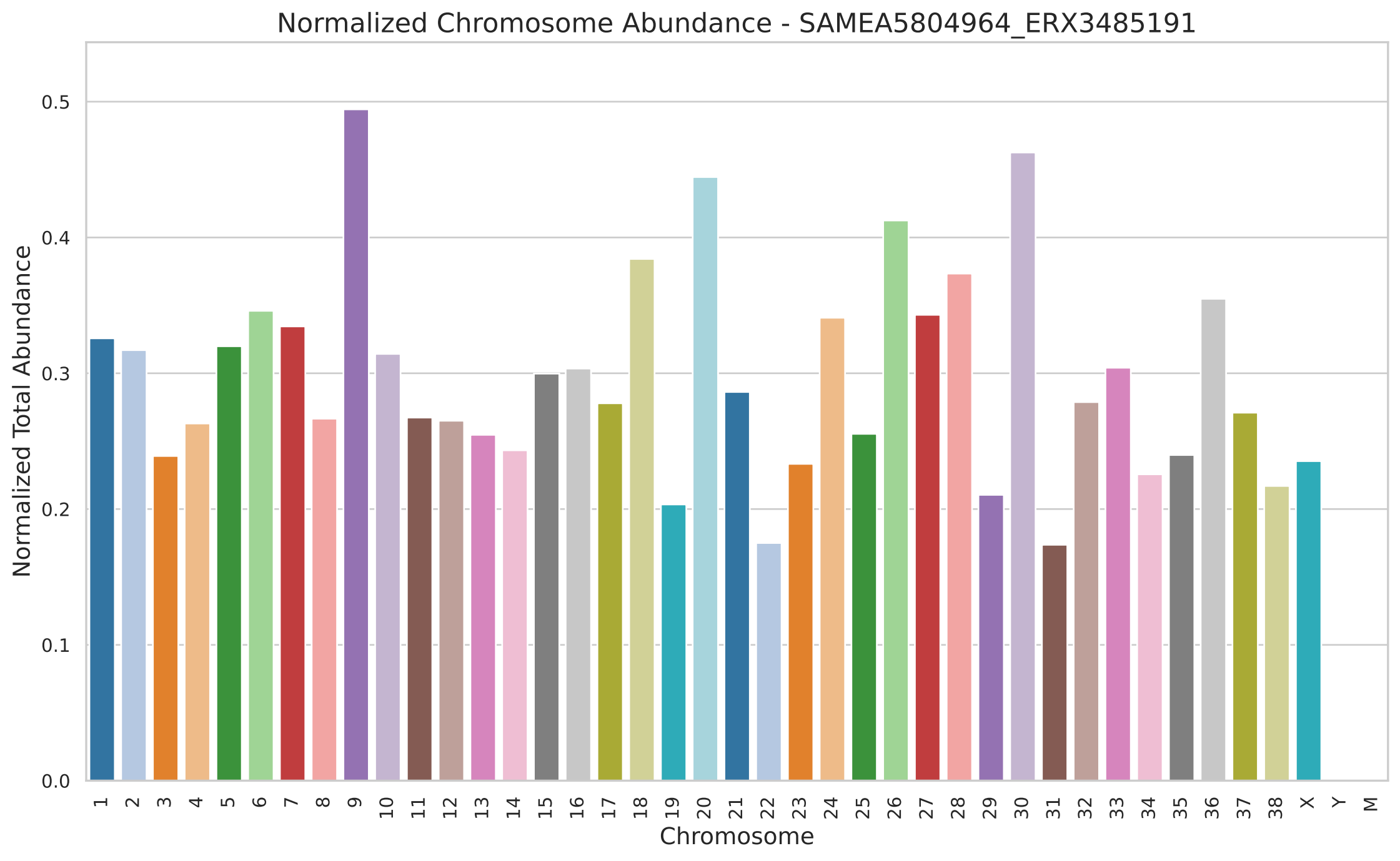

Normalized Chromosome Abundance - SAMEA5804948_ERX3485135
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

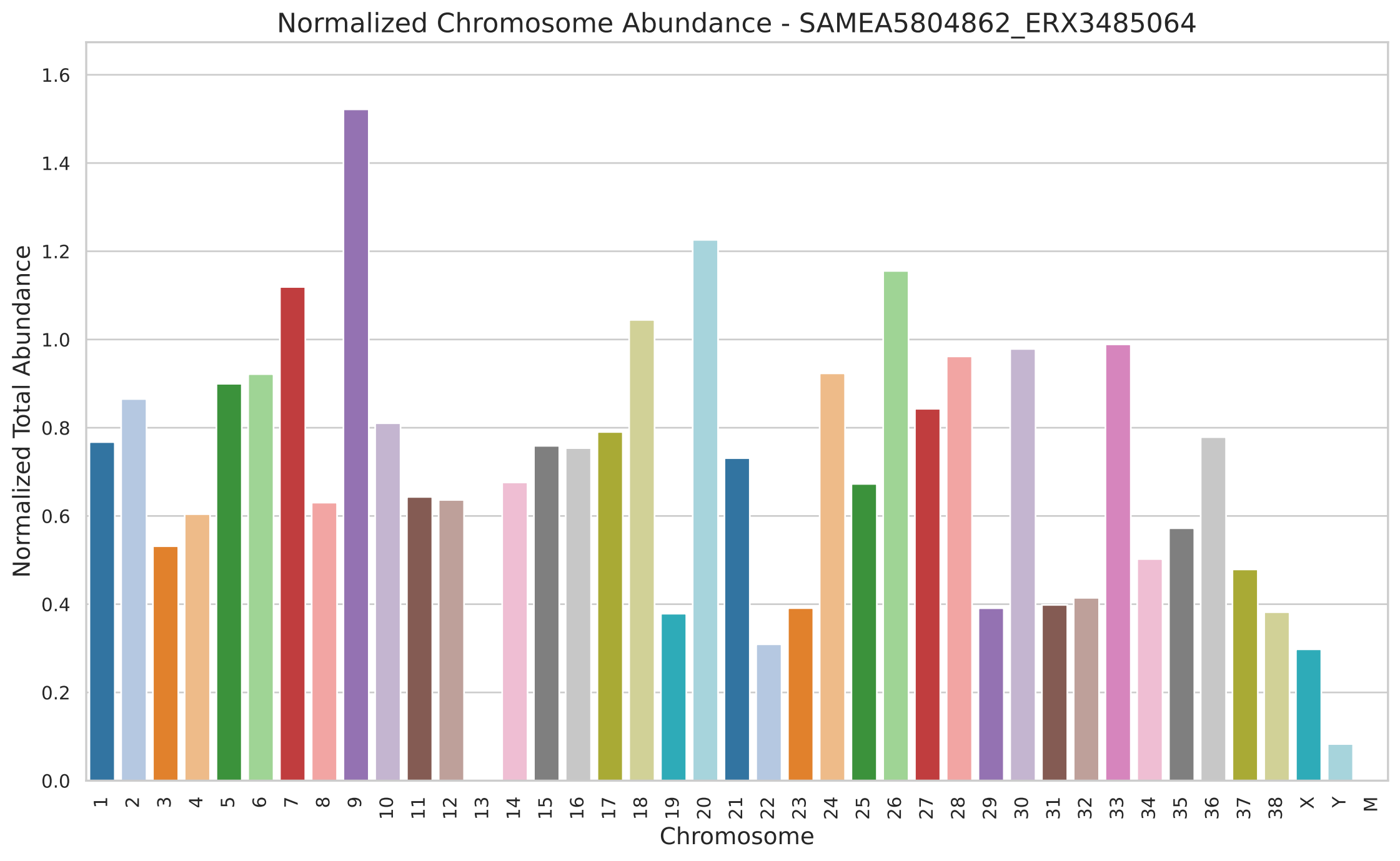

Normalized Chromosome Abundance - SAMEA5804963_ERX3485139
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

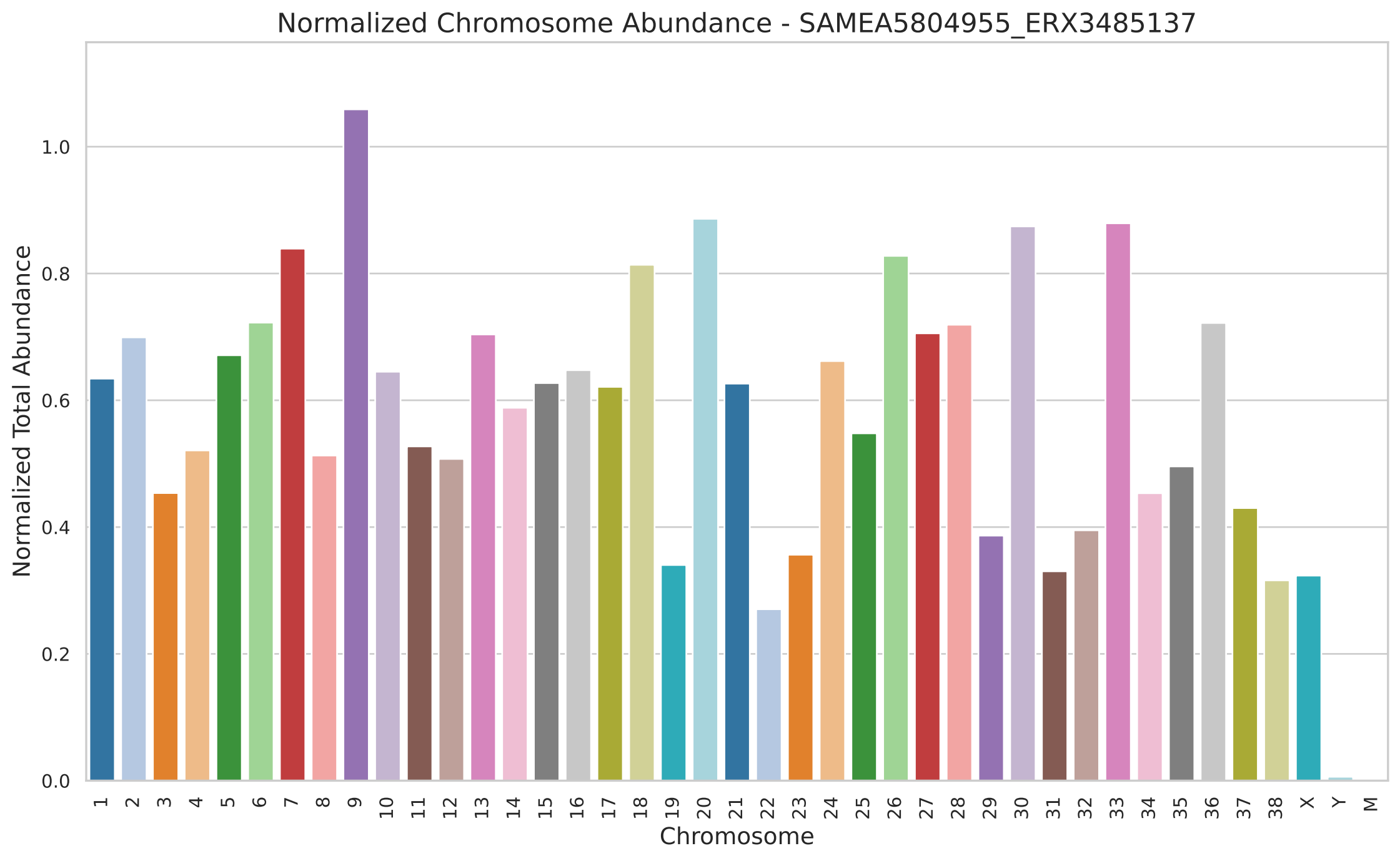

Normalized Chromosome Abundance - SAMEA5804960_ERX3485190
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

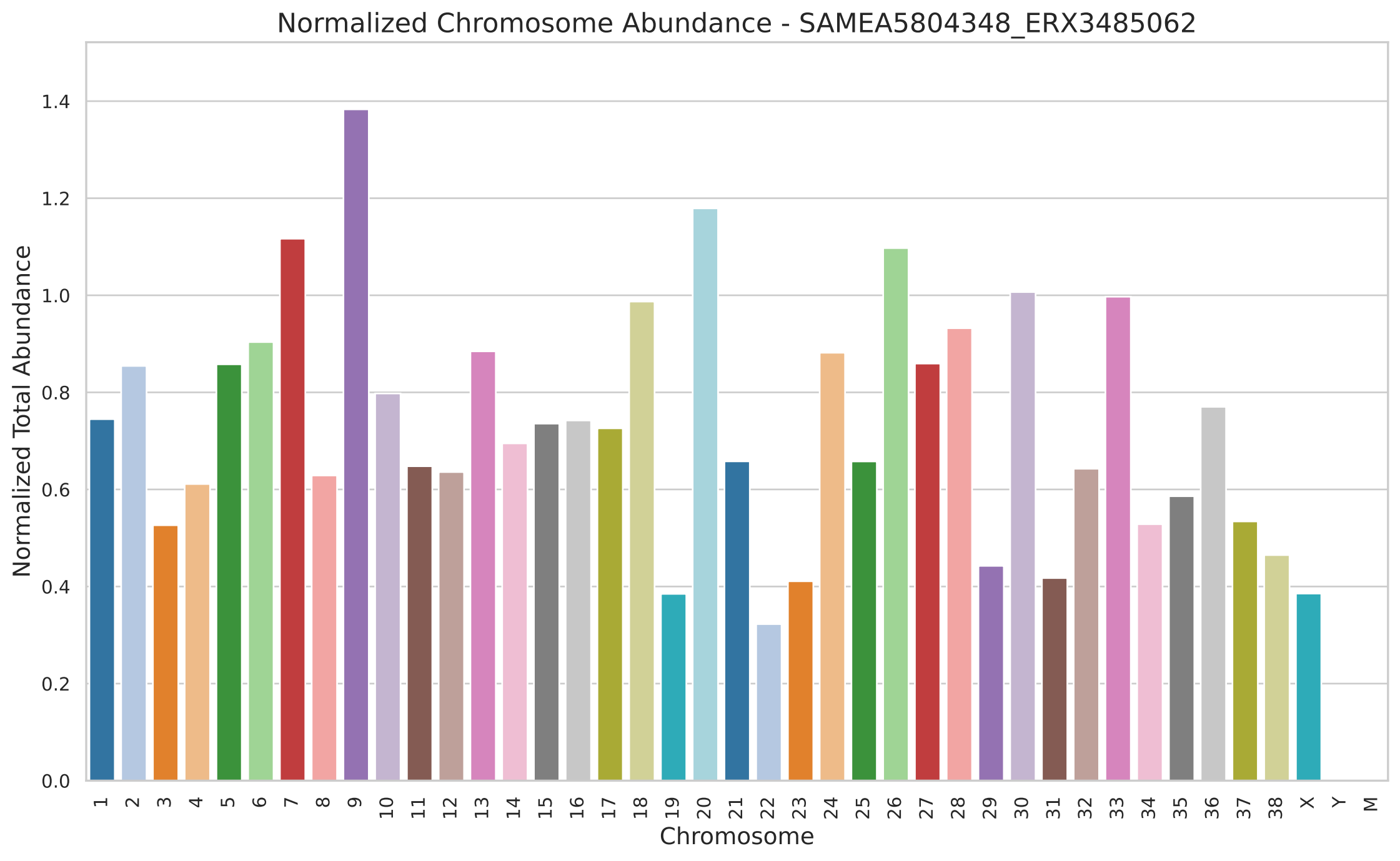

Normalized Chromosome Abundance - SAMEA5805040_ERX3485164
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

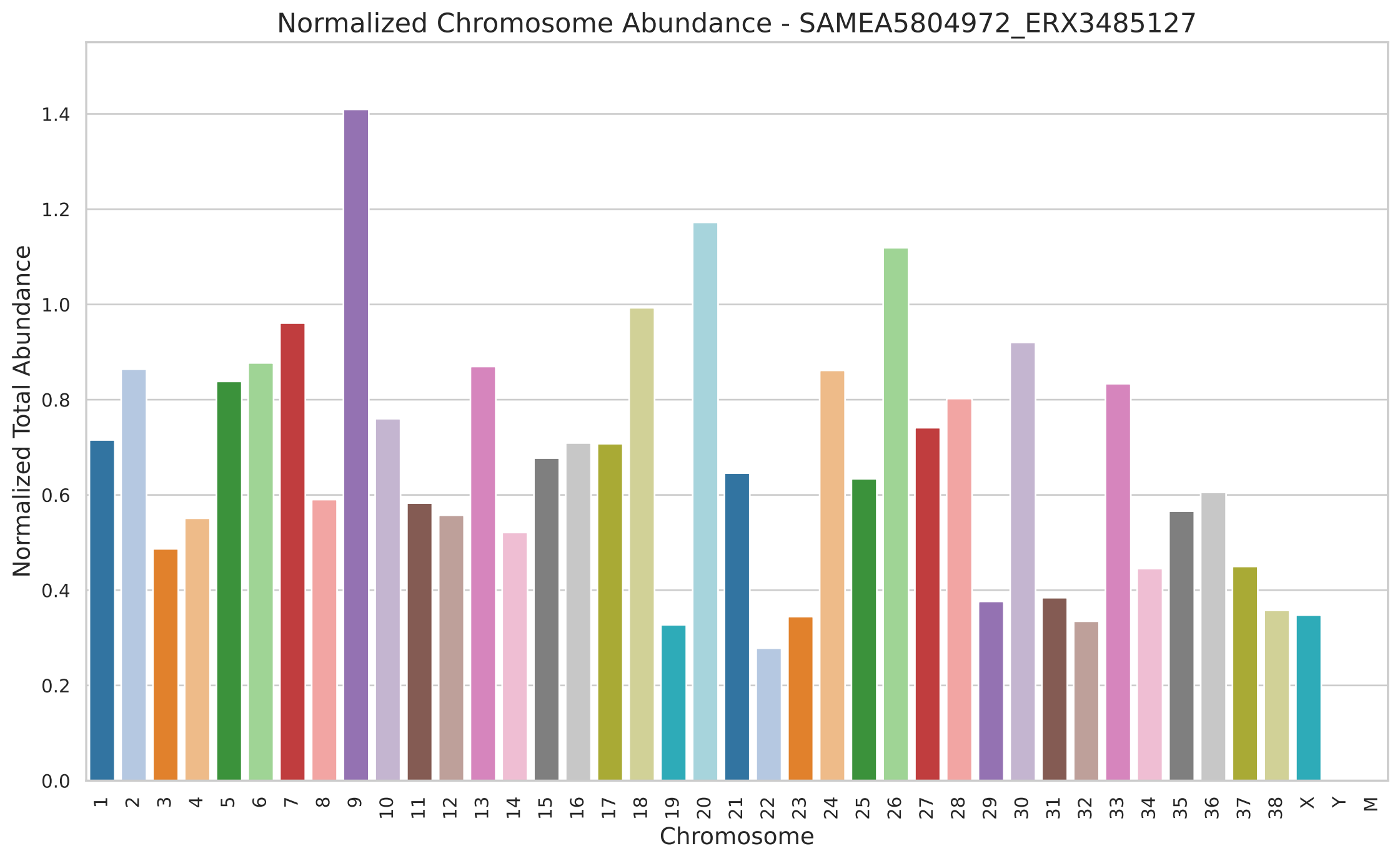

Normalized Chromosome Abundance - SAMEA5804974_ERX3485192
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

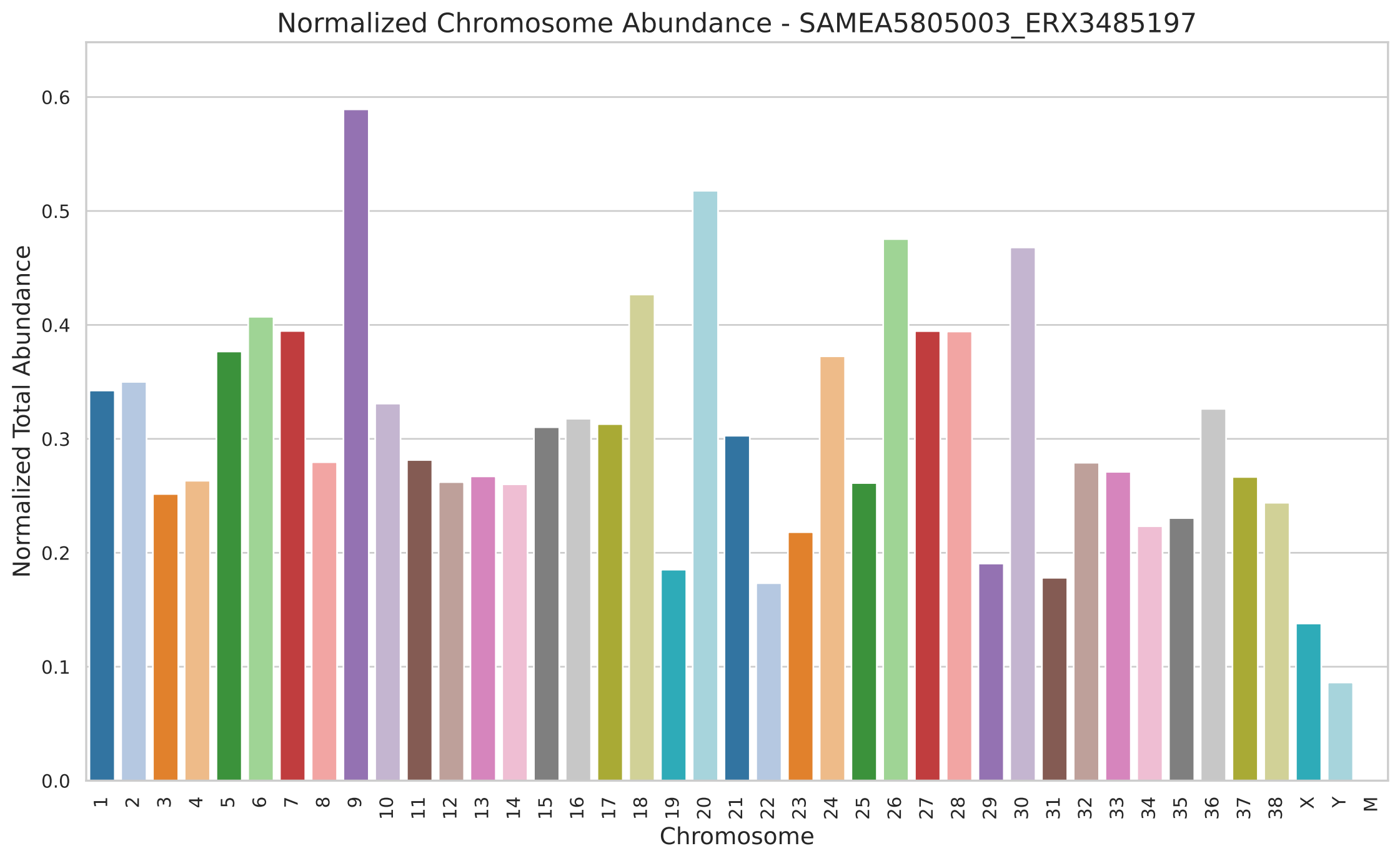

Normalized Chromosome Abundance - SAMEA5804964_ERX3485191
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

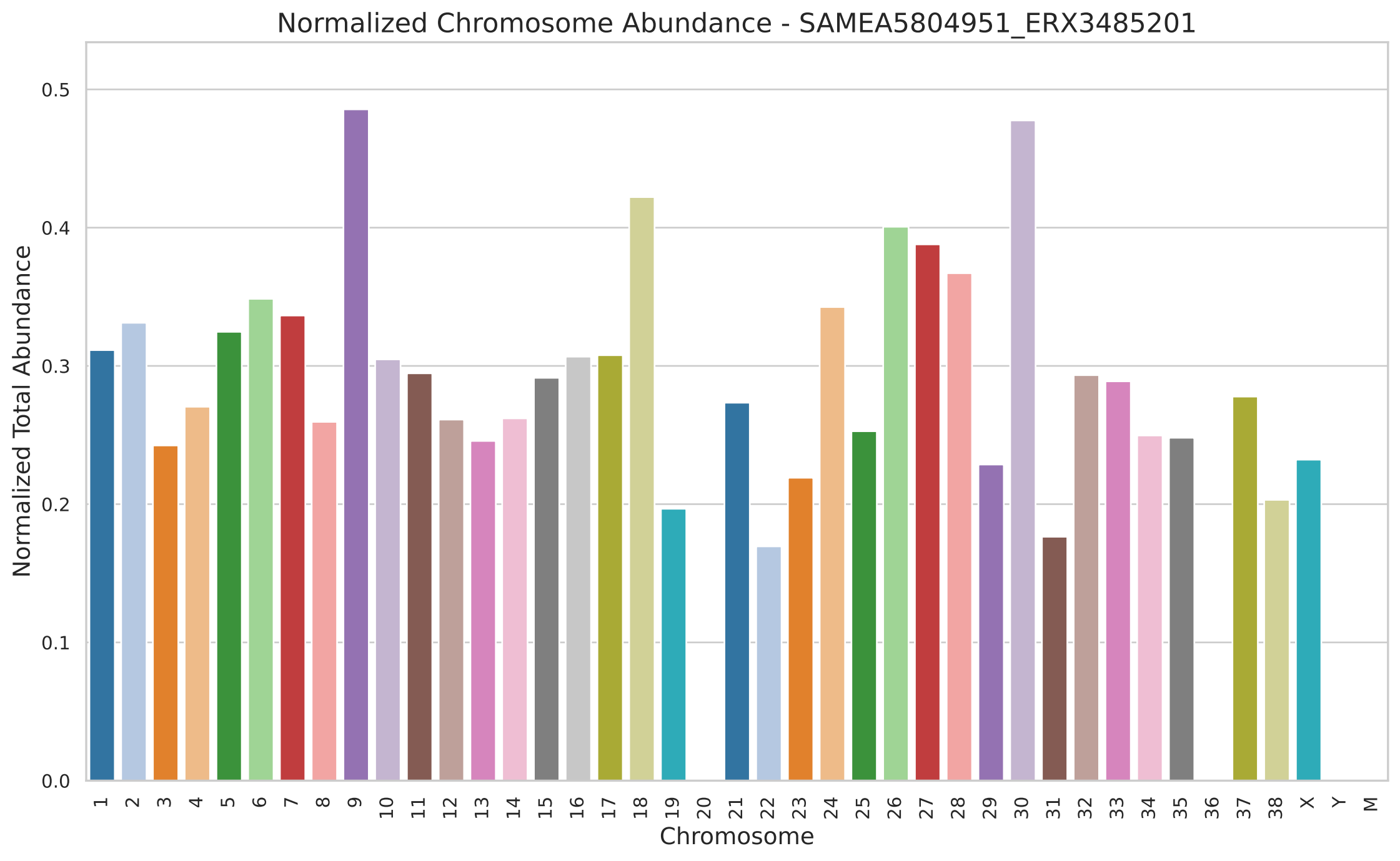

Normalized Chromosome Abundance - SAMEA5804862_ERX3485064
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

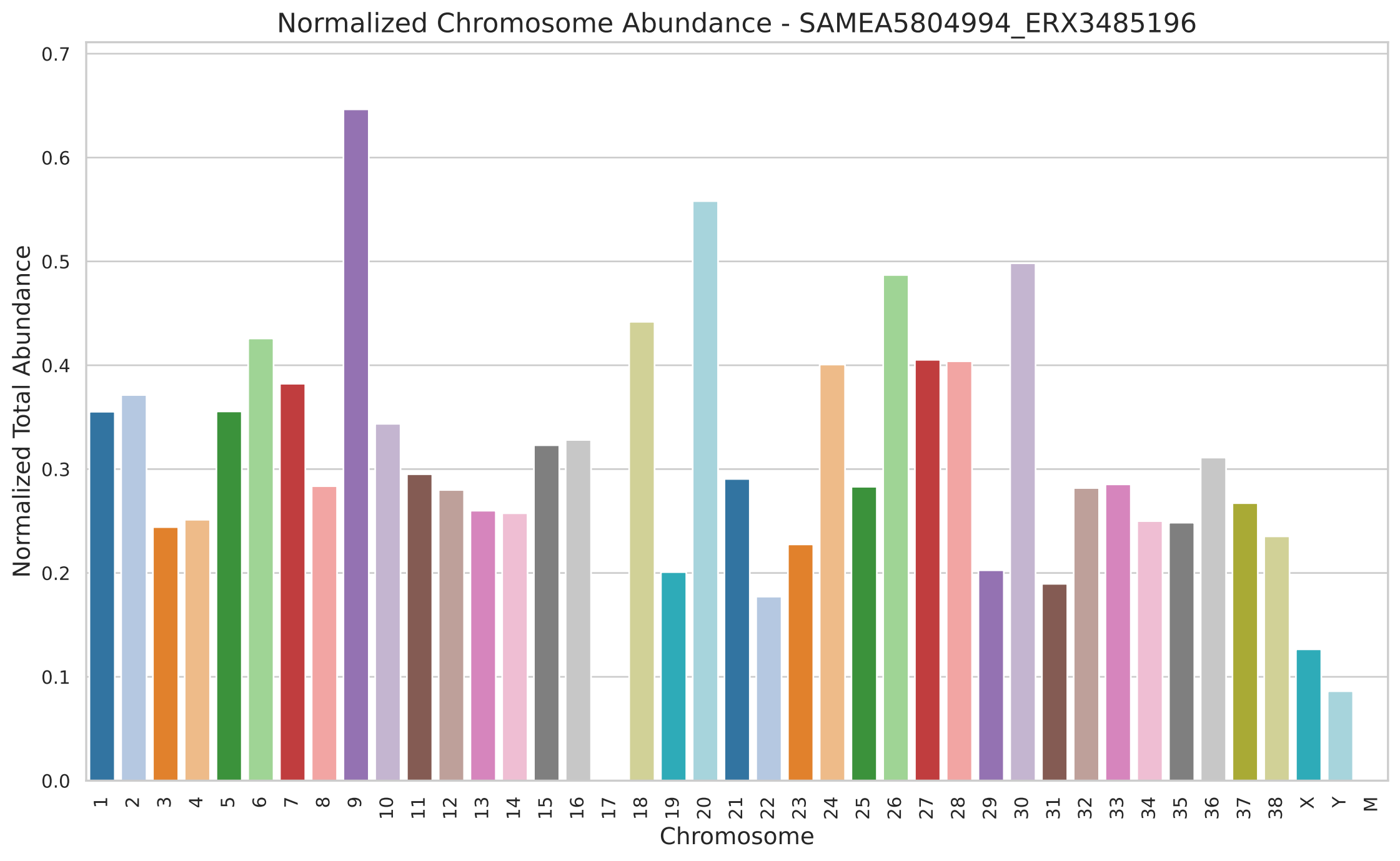

Normalized Chromosome Abundance - SAMEA5804955_ERX3485137
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

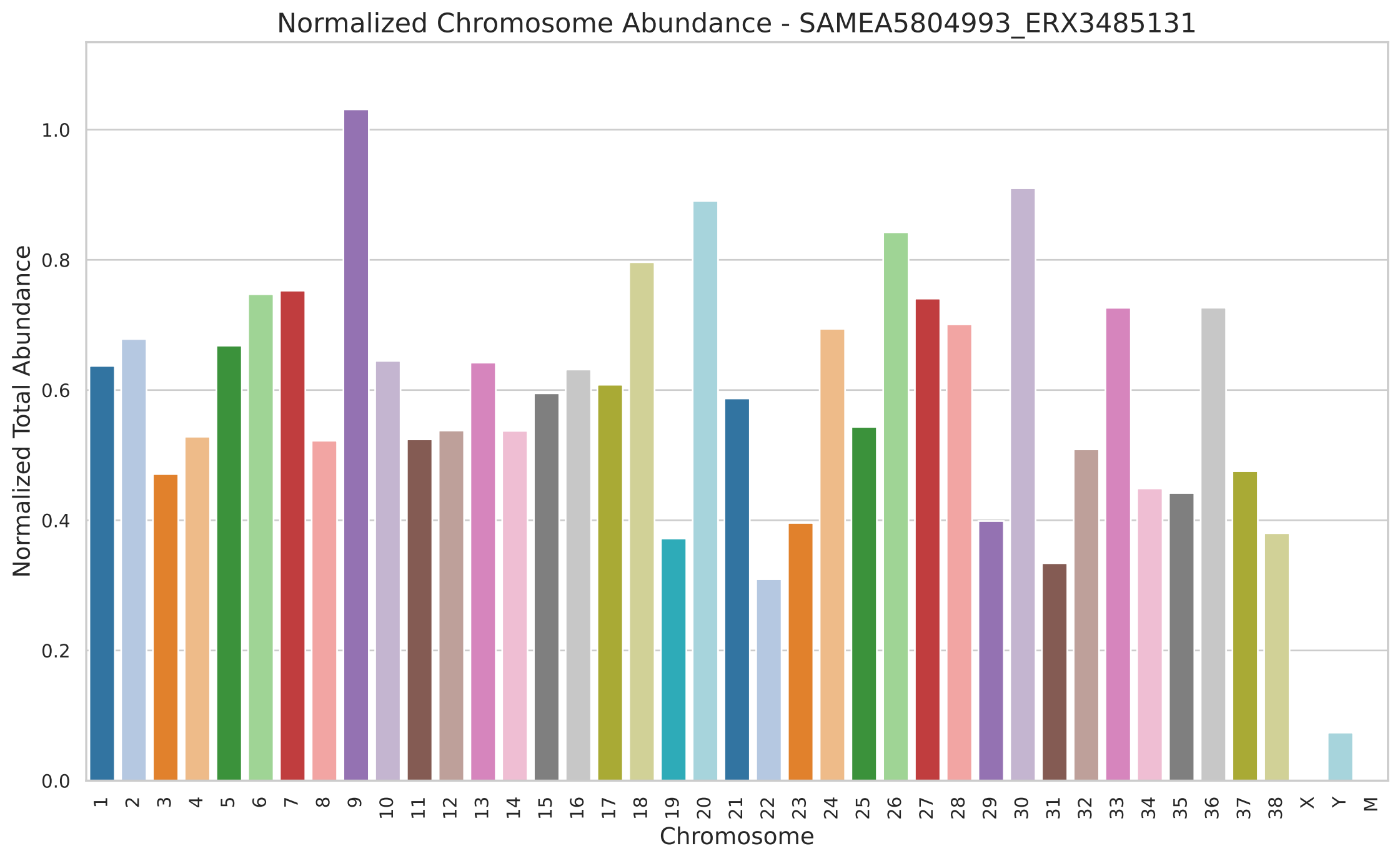

Normalized Chromosome Abundance - SAMEA5804348_ERX3485062
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

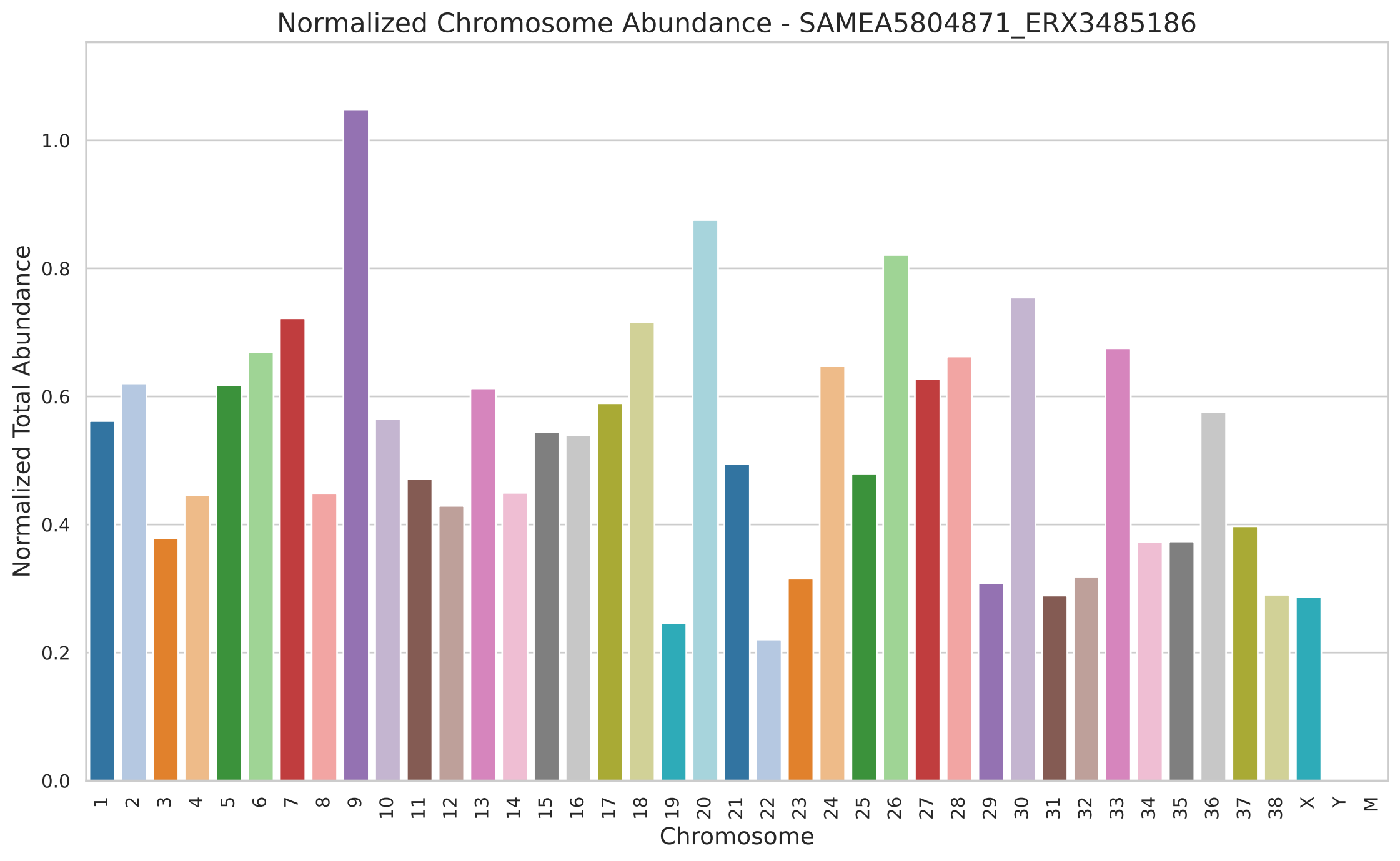

Normalized Chromosome Abundance - SAMEA5804972_ERX3485127
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

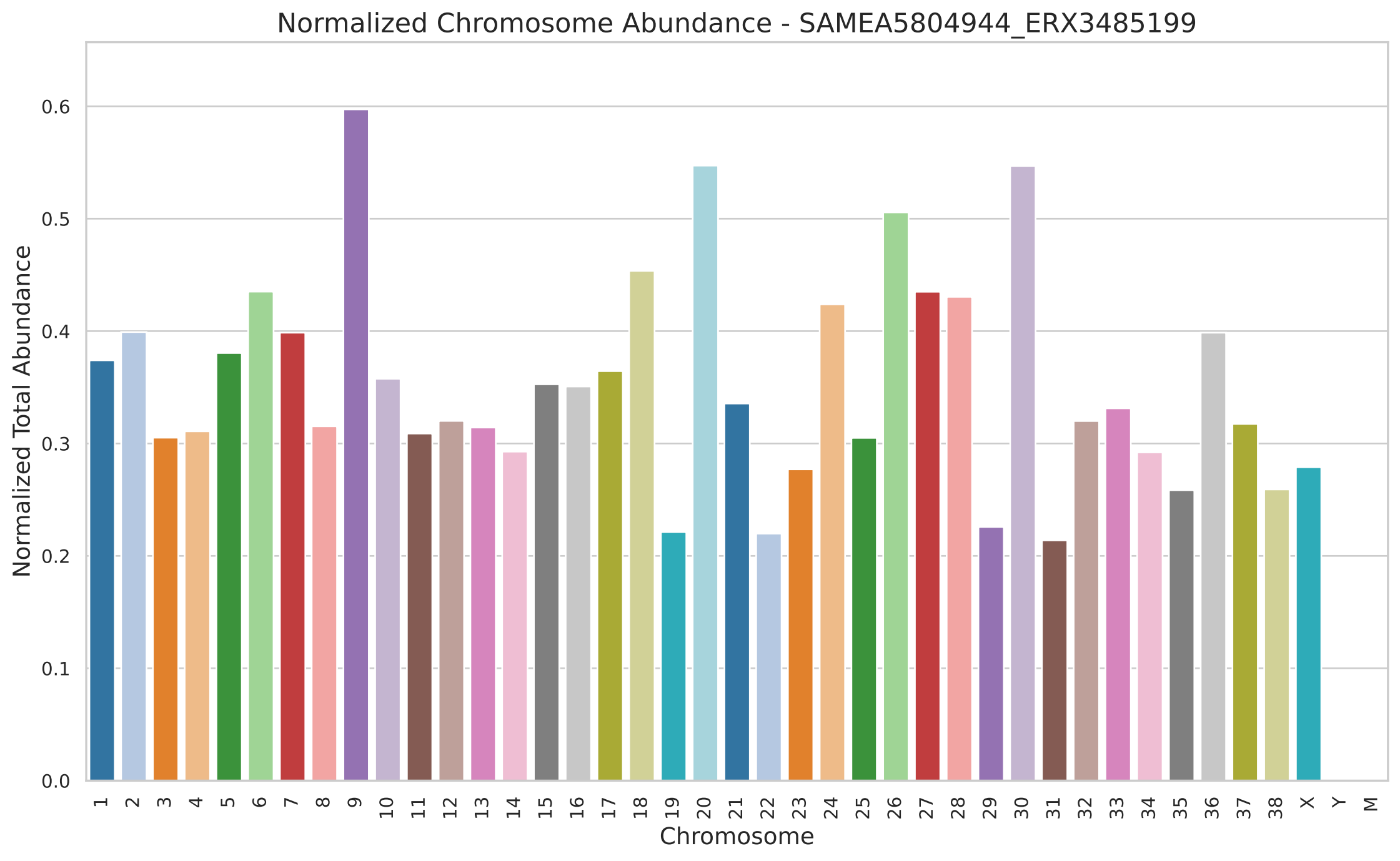

Normalized Chromosome Abundance - SAMEA5805003_ERX3485197
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

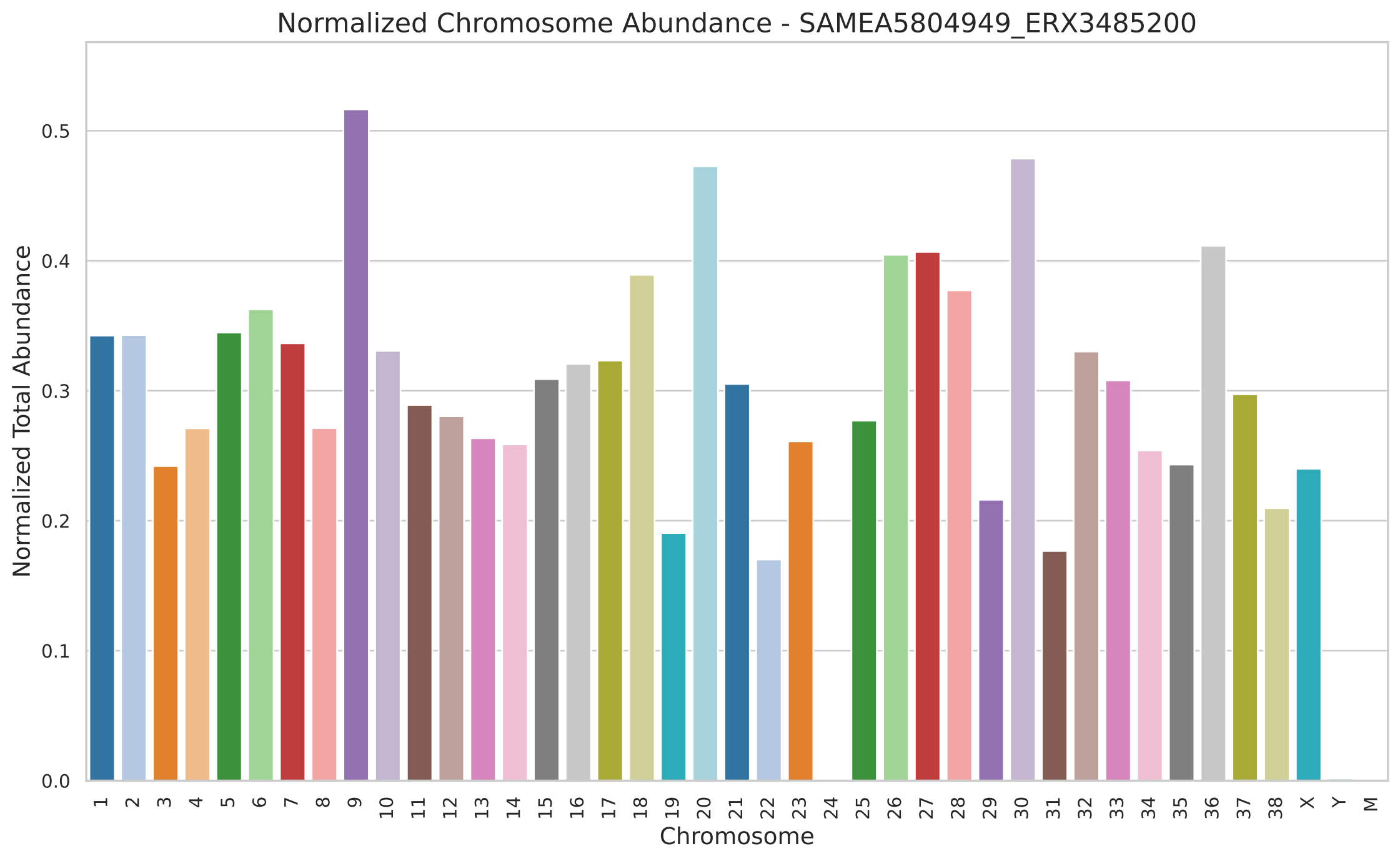

Normalized Chromosome Abundance - SAMEA5804951_ERX3485201
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

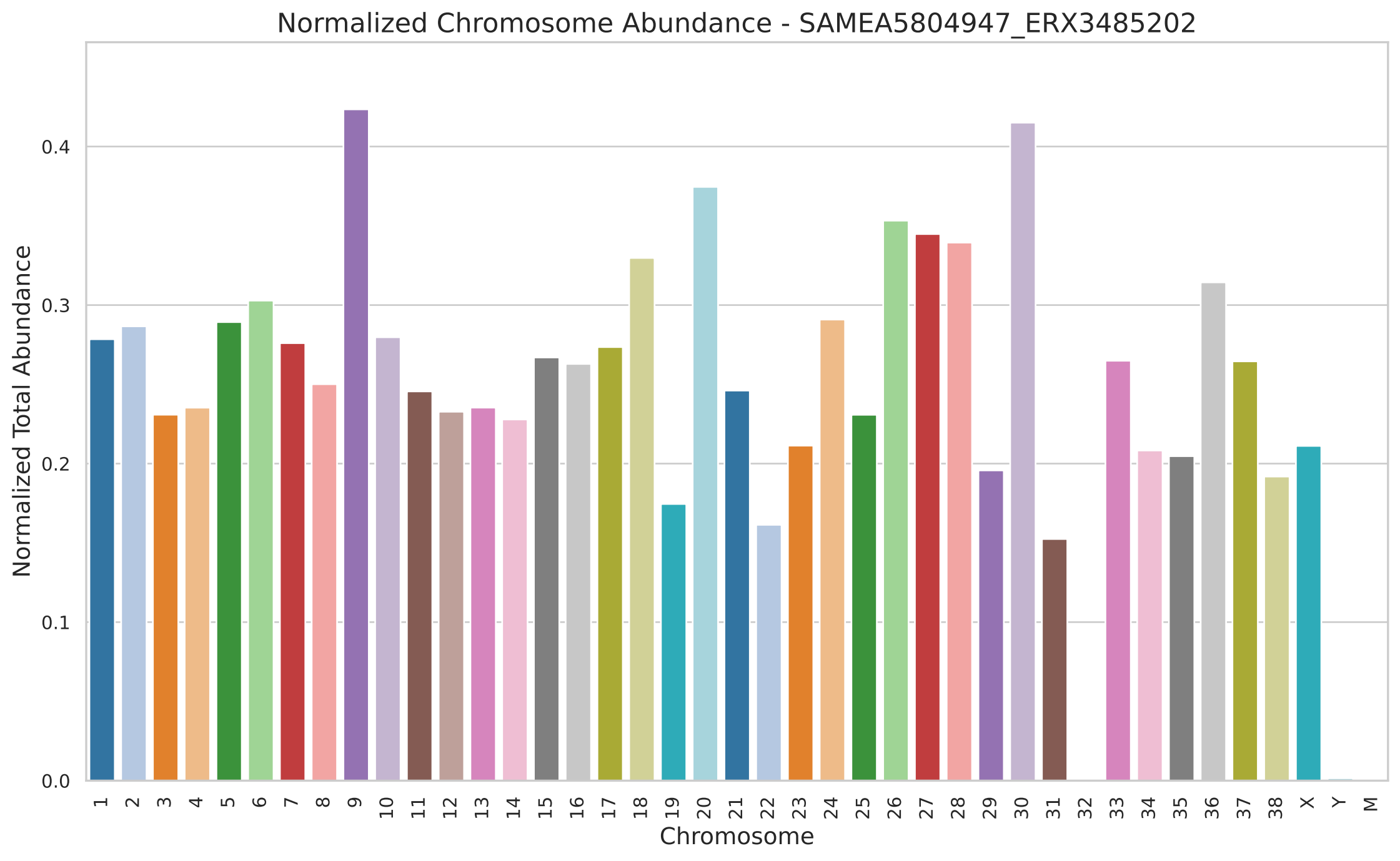

Normalized Chromosome Abundance - SAMEA5804994_ERX3485196
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

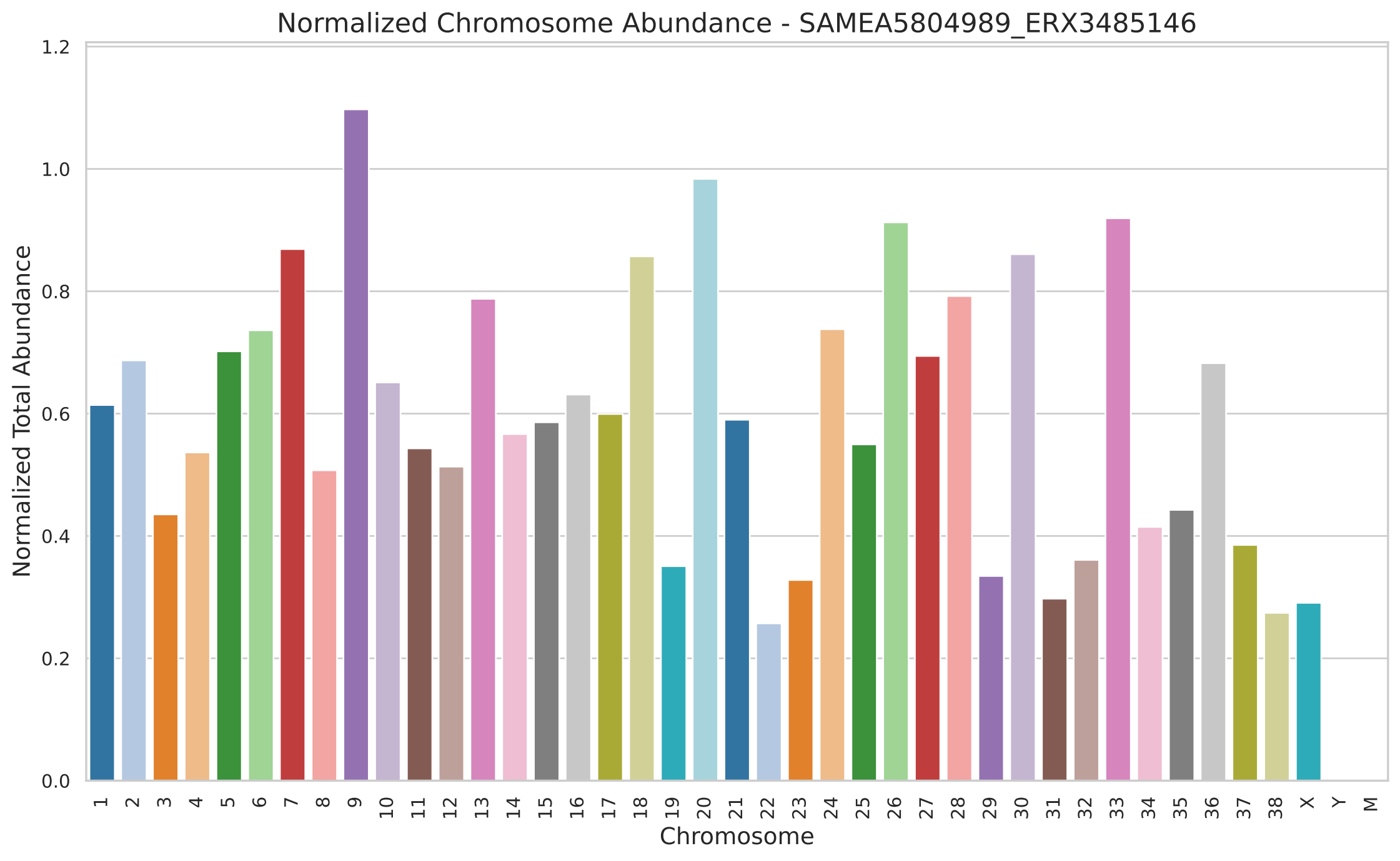

Normalized Chromosome Abundance - SAMEA5804993_ERX3485131
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

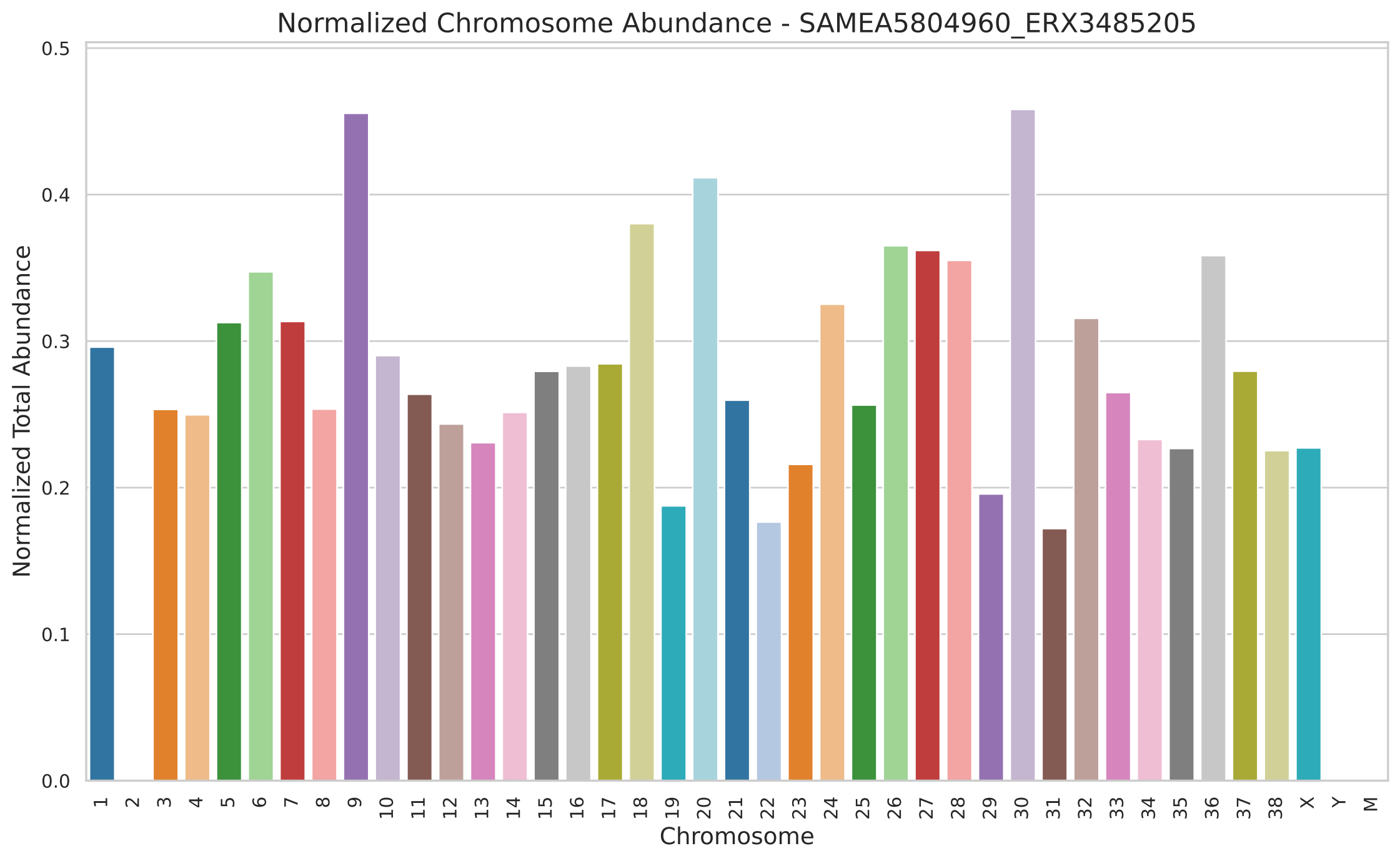

Normalized Chromosome Abundance - SAMEA5804871_ERX3485186
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

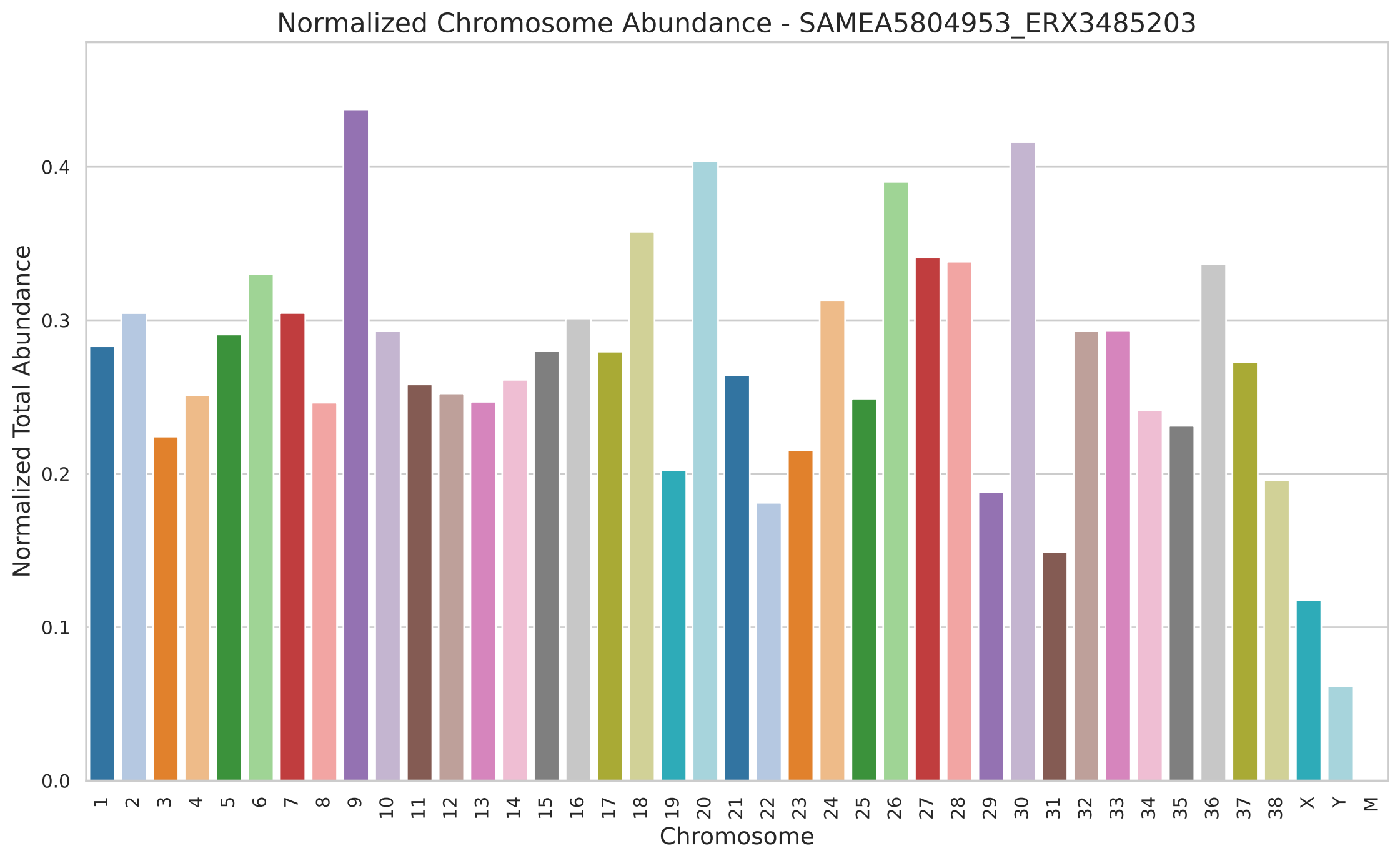

Normalized Chromosome Abundance - SAMEA5804944_ERX3485199
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

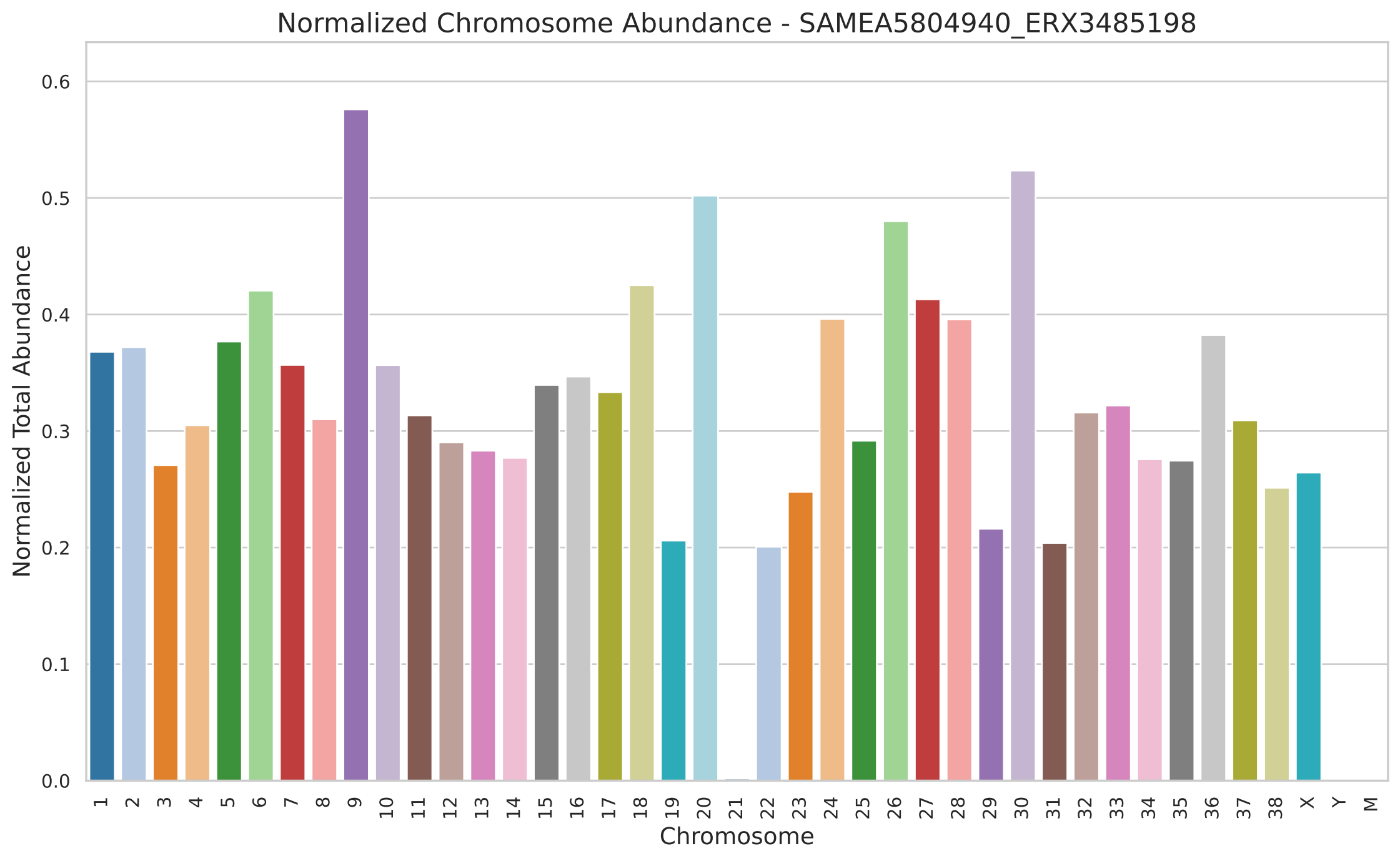

Normalized Chromosome Abundance - SAMEA5804949_ERX3485200
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

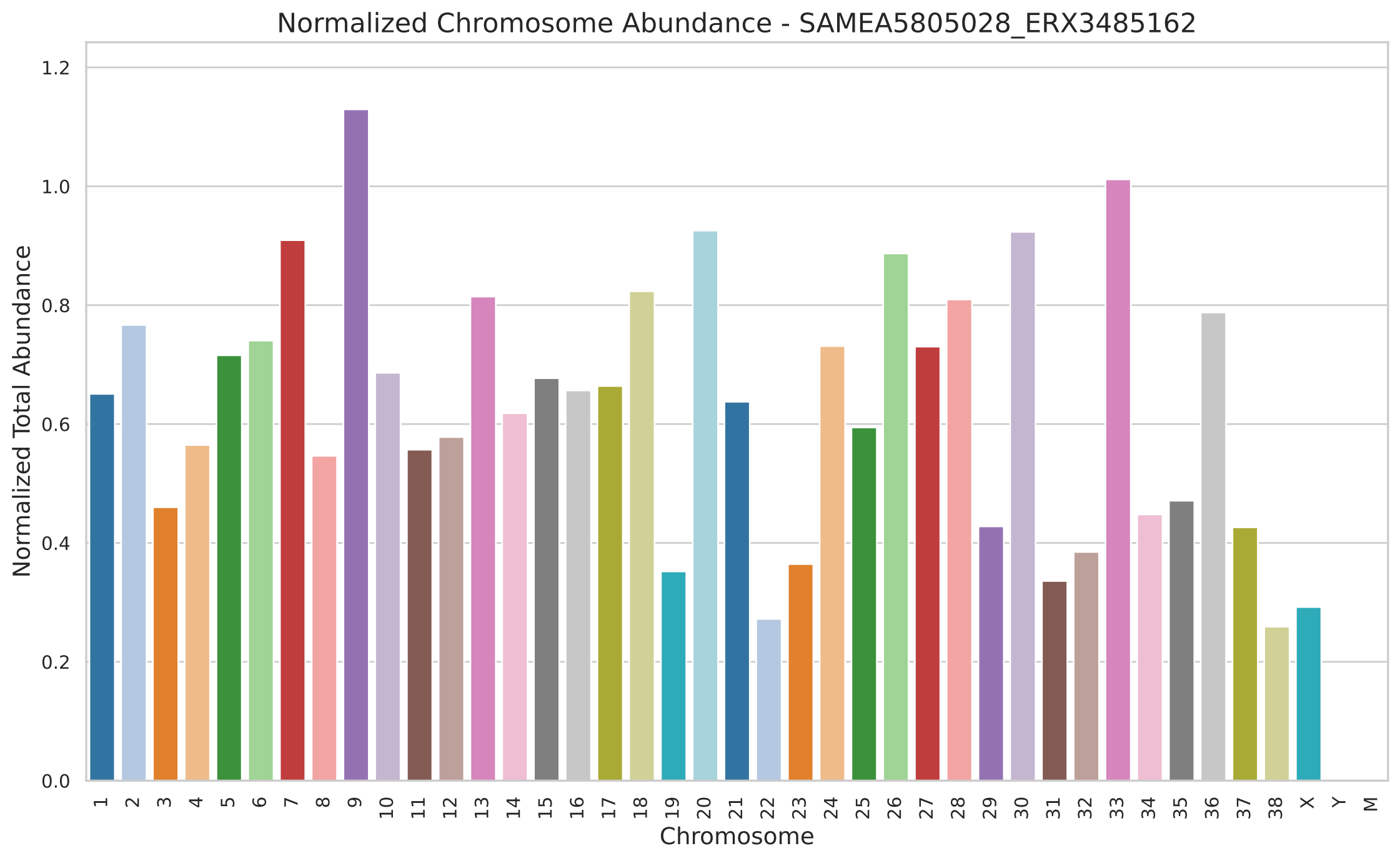

Normalized Chromosome Abundance - SAMEA5804947_ERX3485202
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

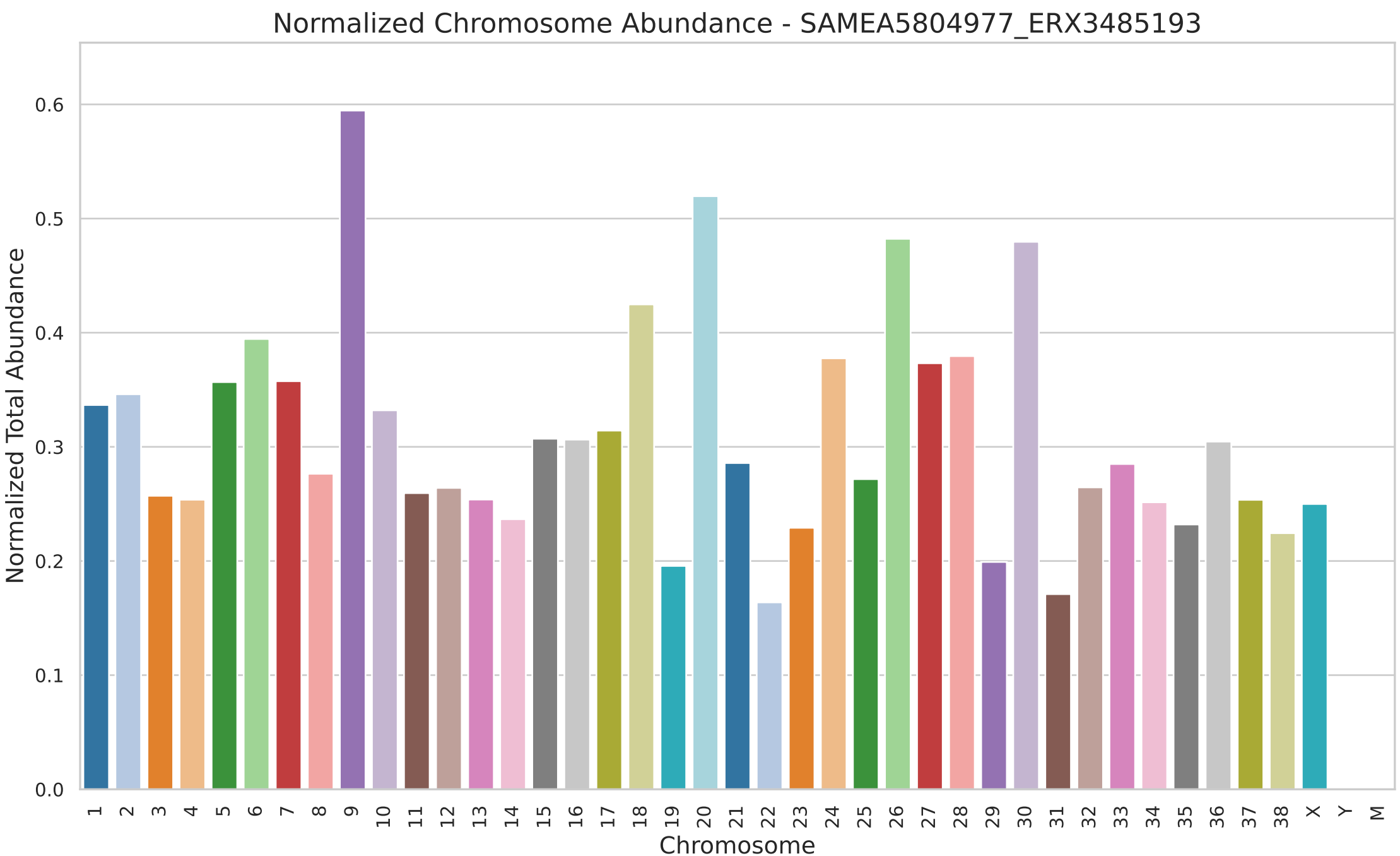

Normalized Chromosome Abundance - SAMEA5804989_ERX3485146
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

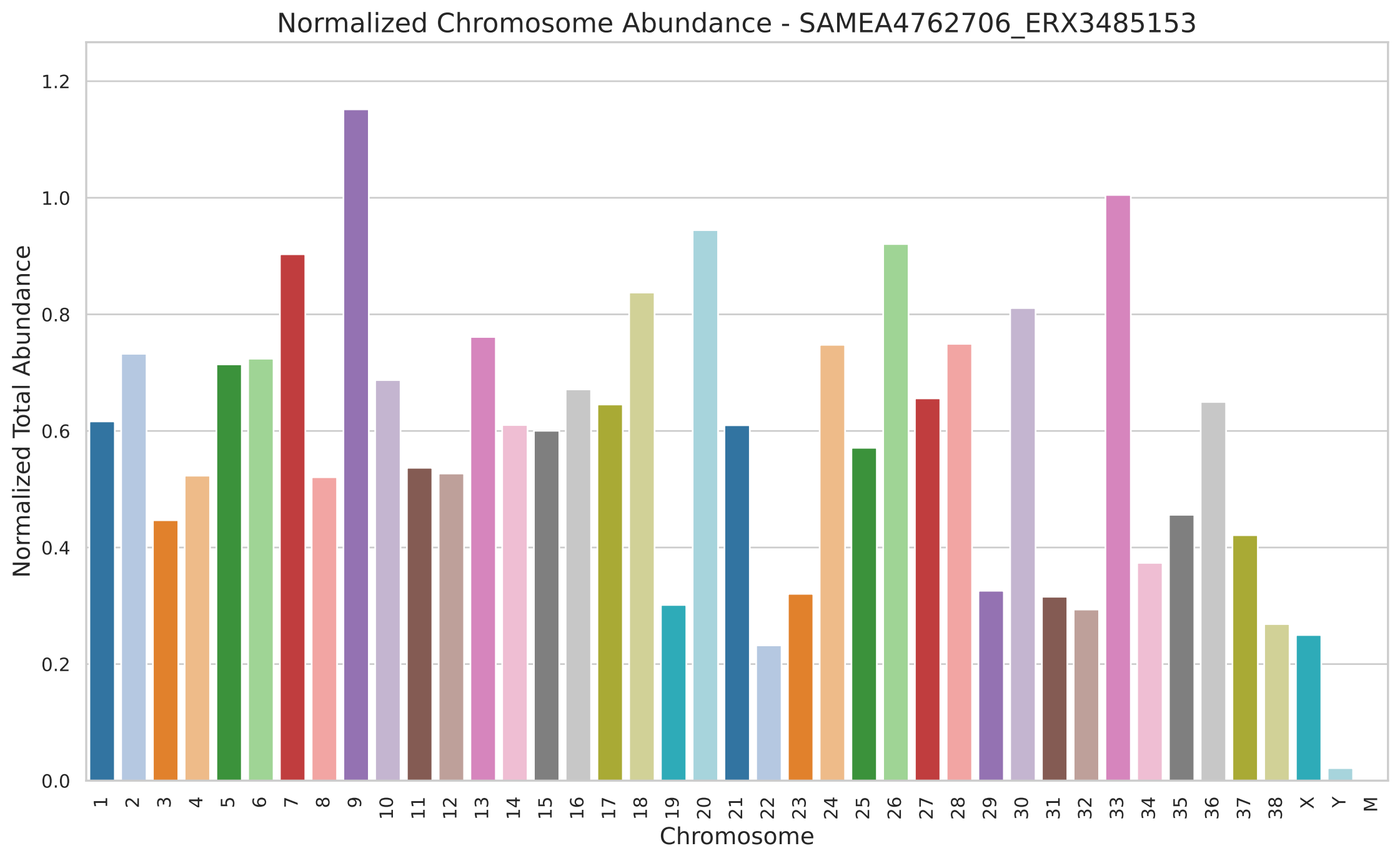

Normalized Chromosome Abundance - SAMEA5804960_ERX3485205
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

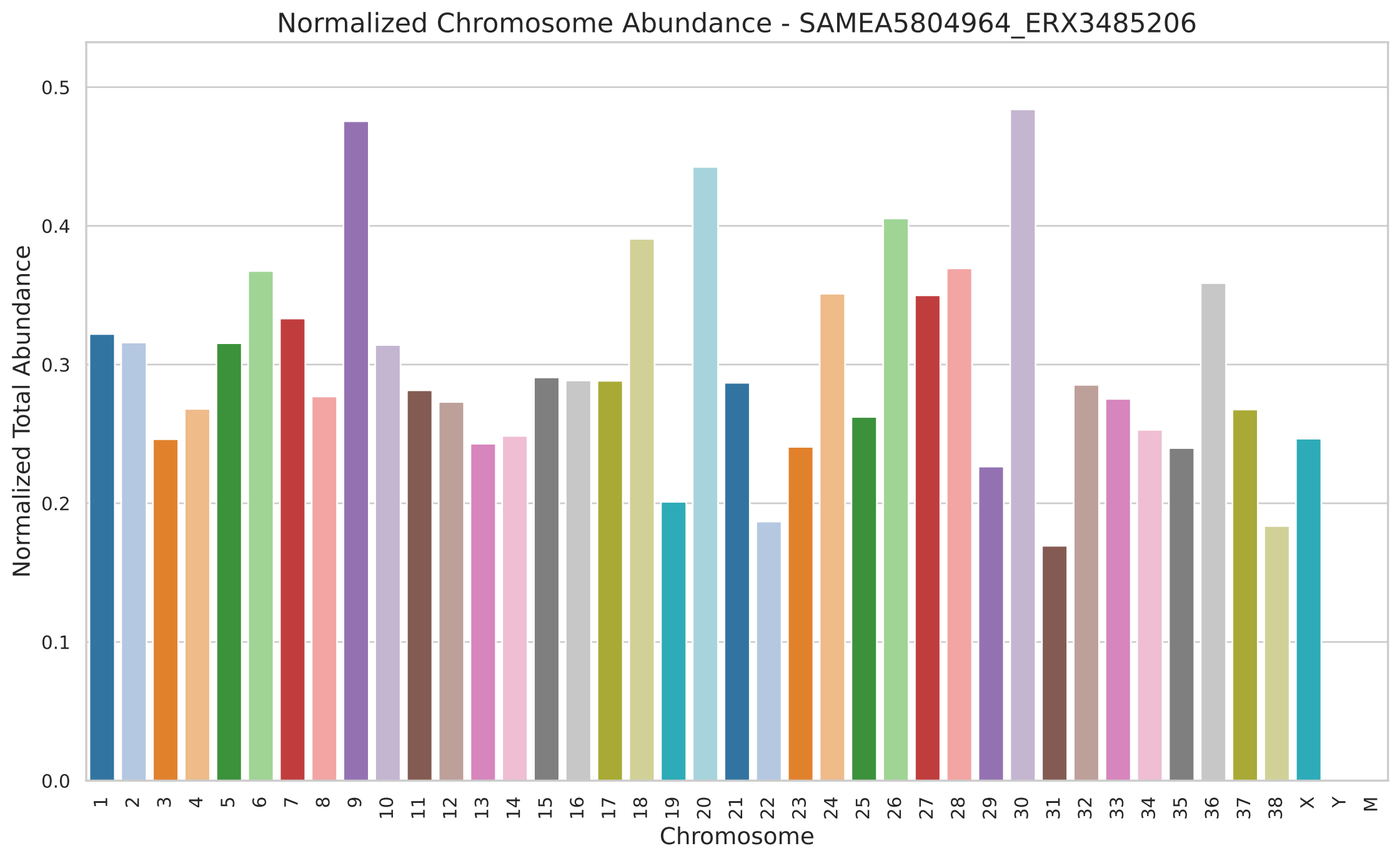

Normalized Chromosome Abundance - SAMEA5804953_ERX3485203
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

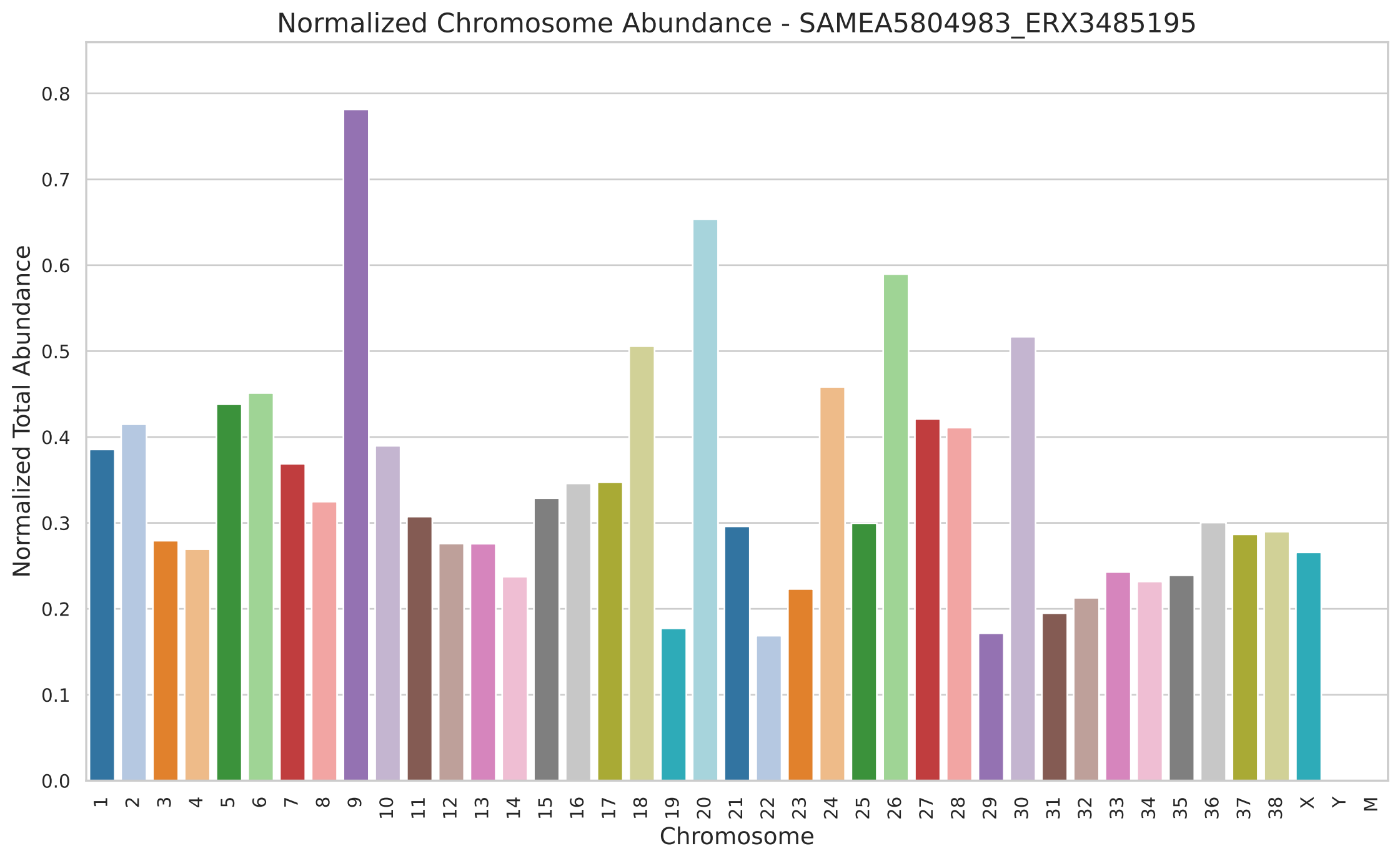

Normalized Chromosome Abundance - SAMEA5804940_ERX3485198
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

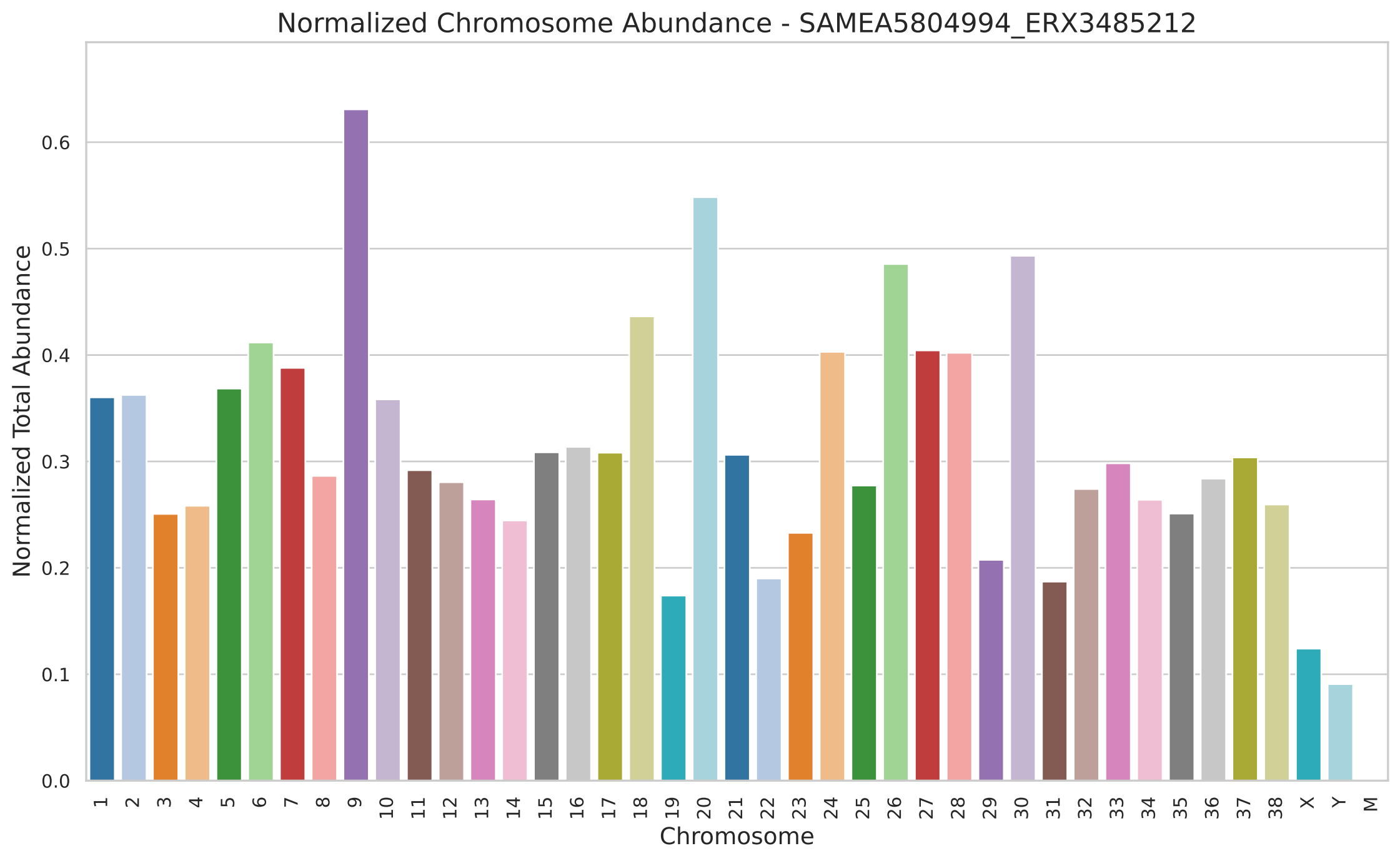

Normalized Chromosome Abundance - SAMEA5805028_ERX3485162
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

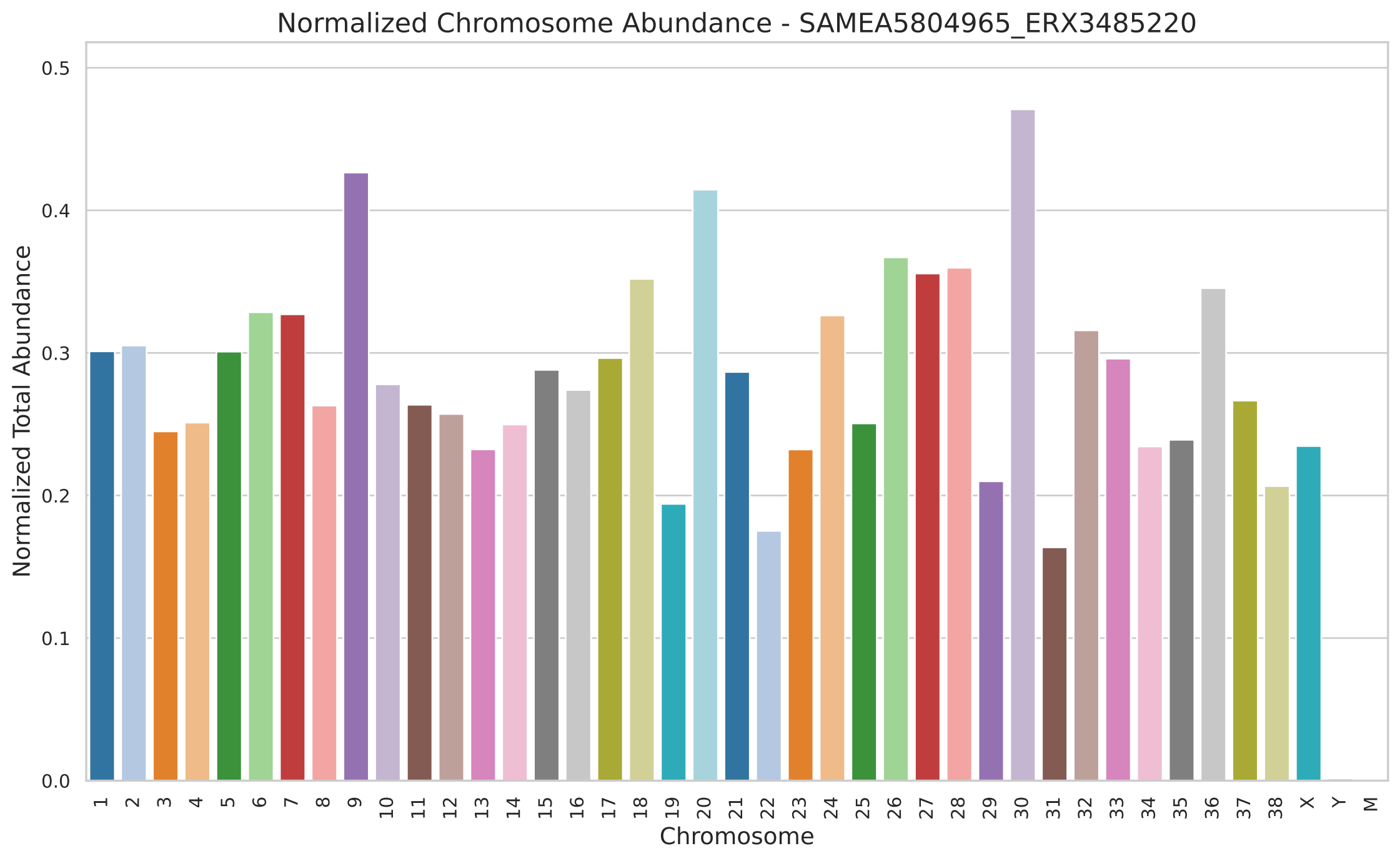

Normalized Chromosome Abundance - SAMEA5804977_ERX3485193
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

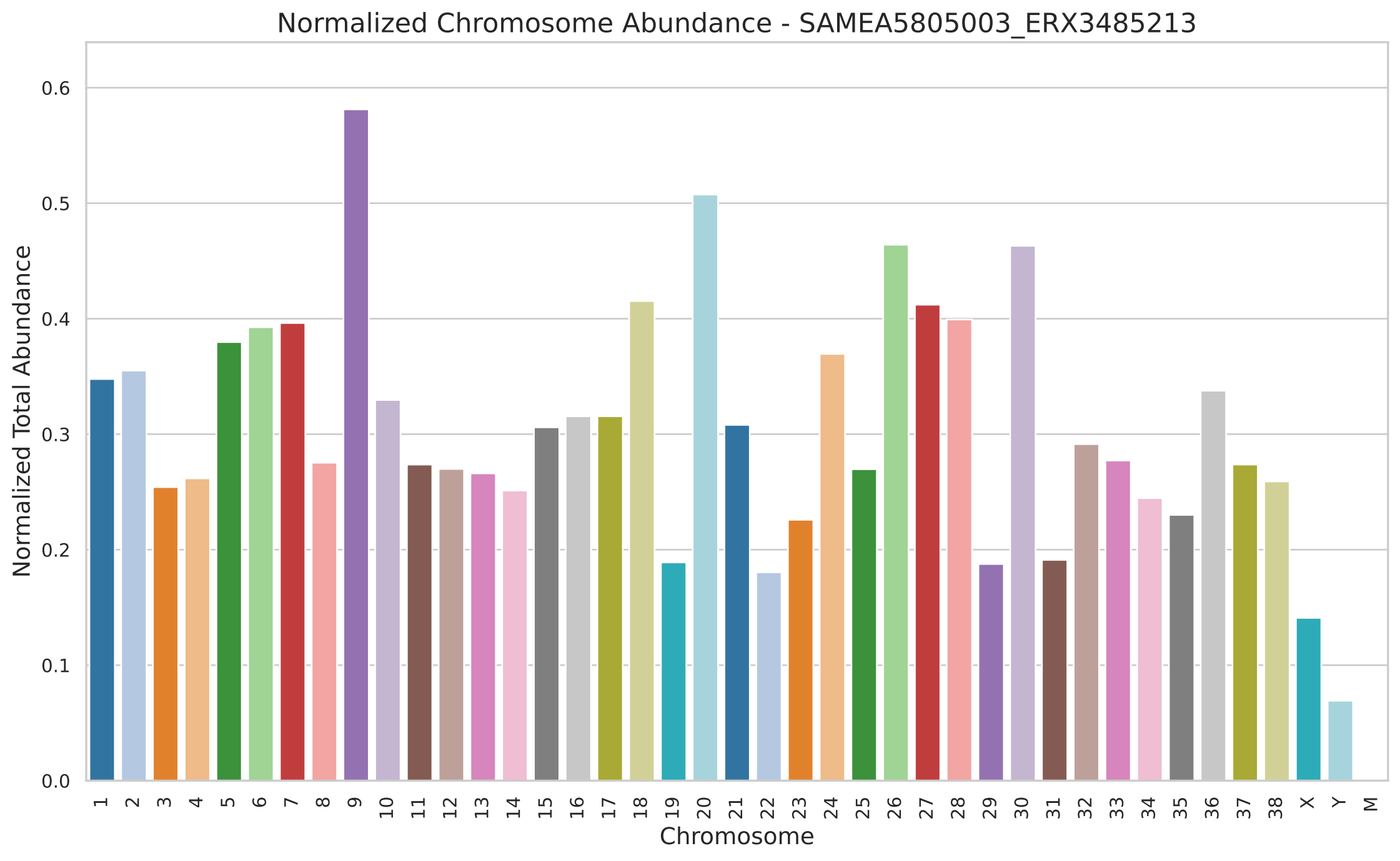

Normalized Chromosome Abundance - SAMEA4762706_ERX3485153
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

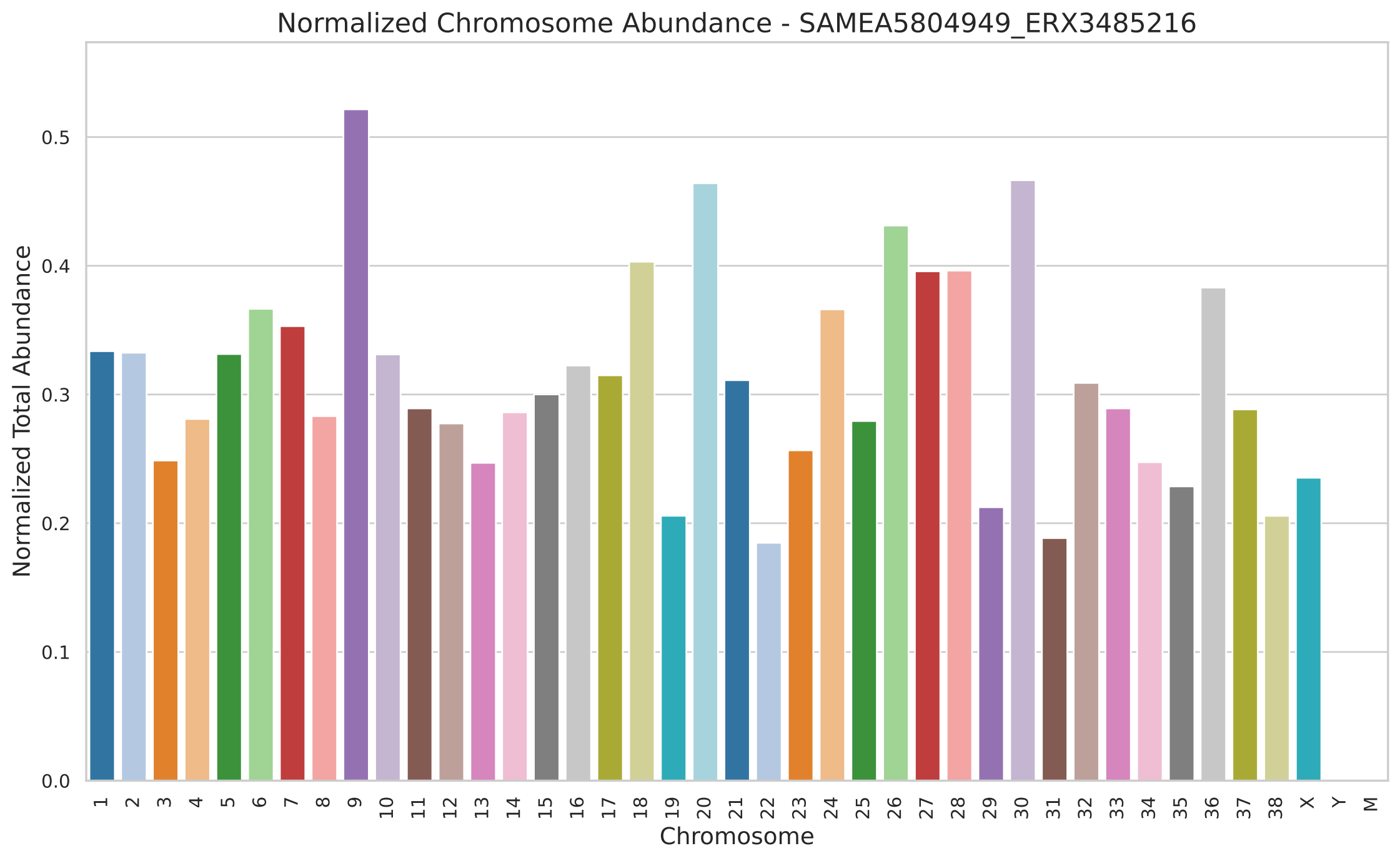

Normalized Chromosome Abundance - SAMEA5804964_ERX3485206
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

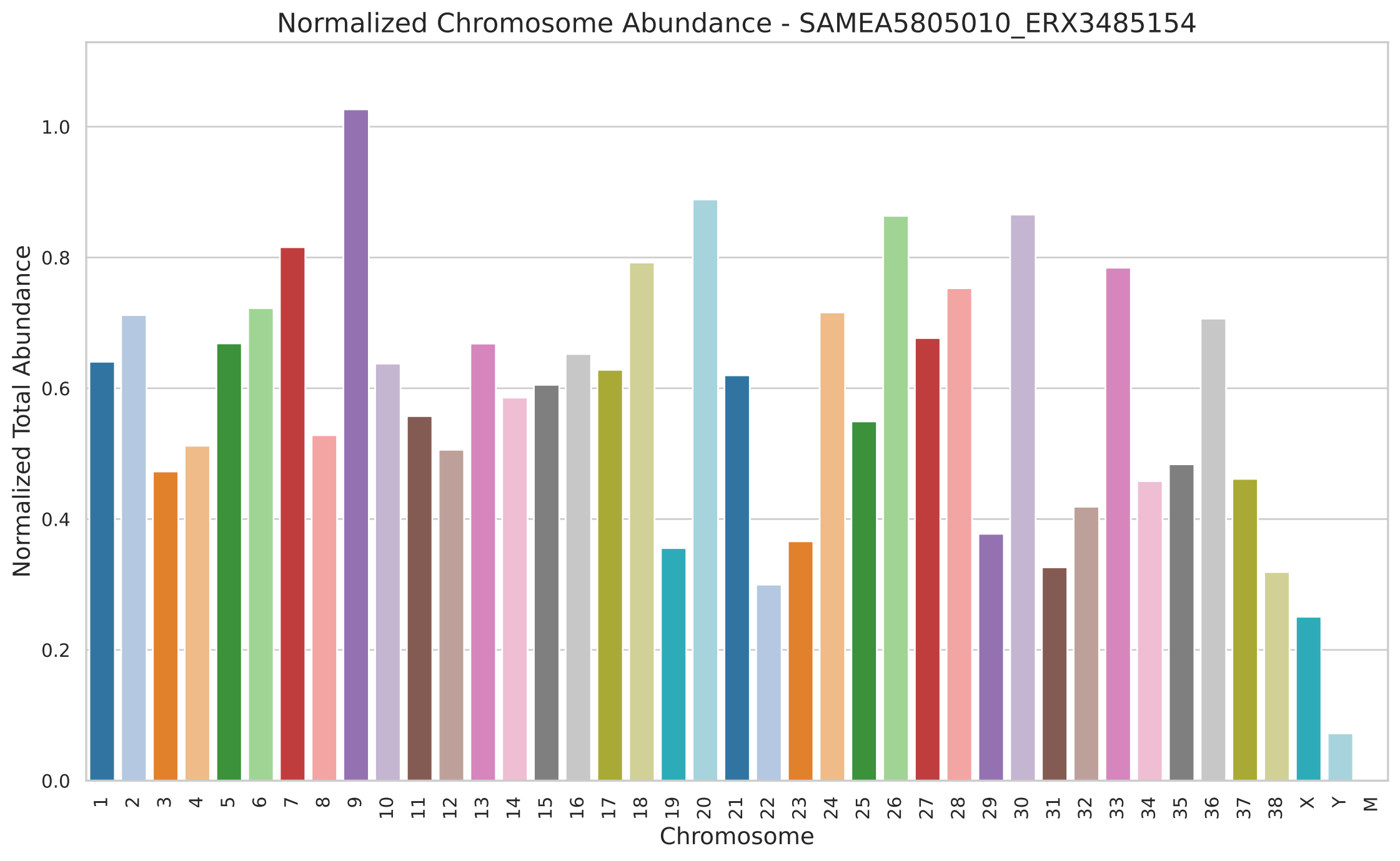

Normalized Chromosome Abundance - SAMEA5804983_ERX3485195
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

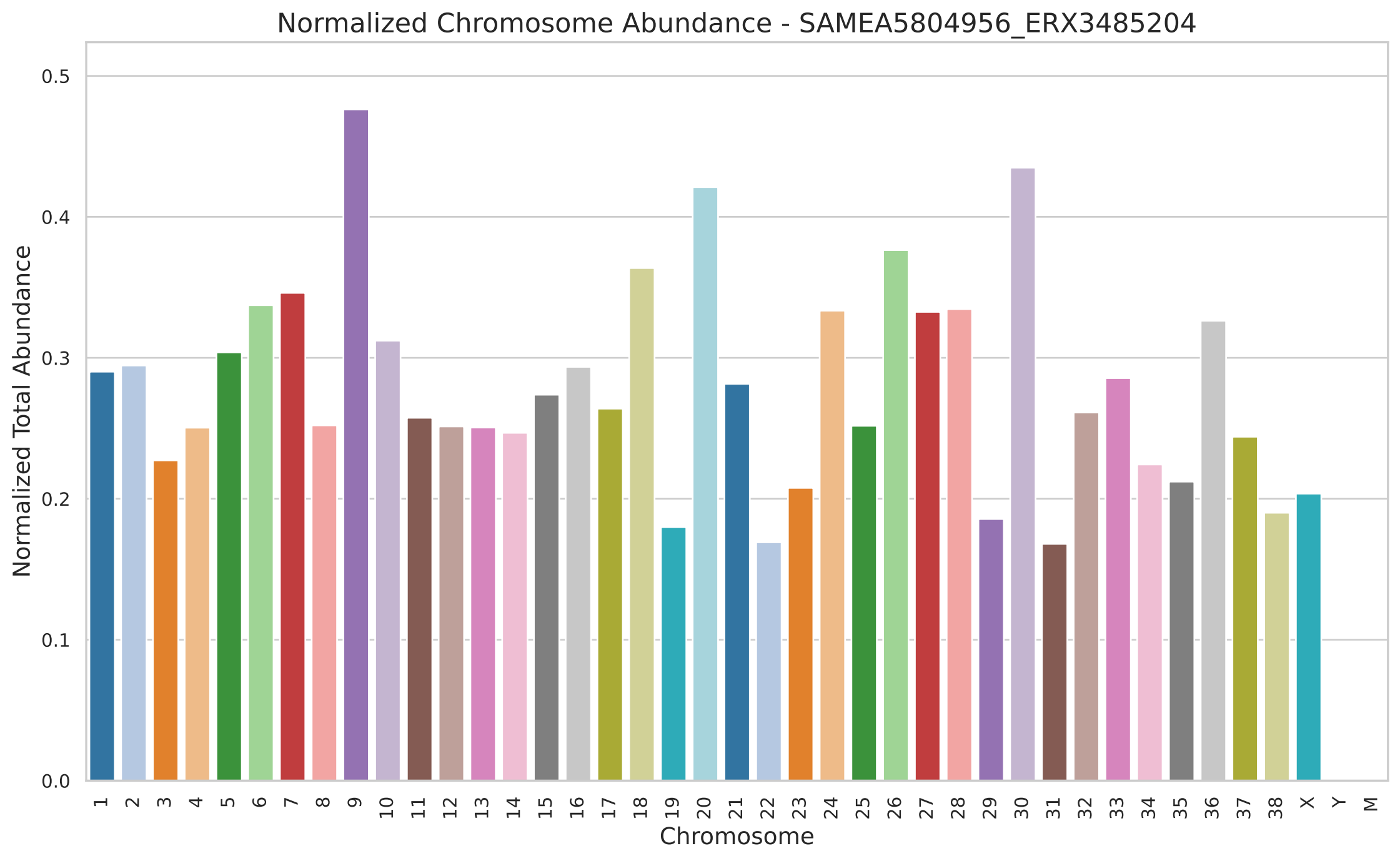

Normalized Chromosome Abundance - SAMEA5804994_ERX3485212
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

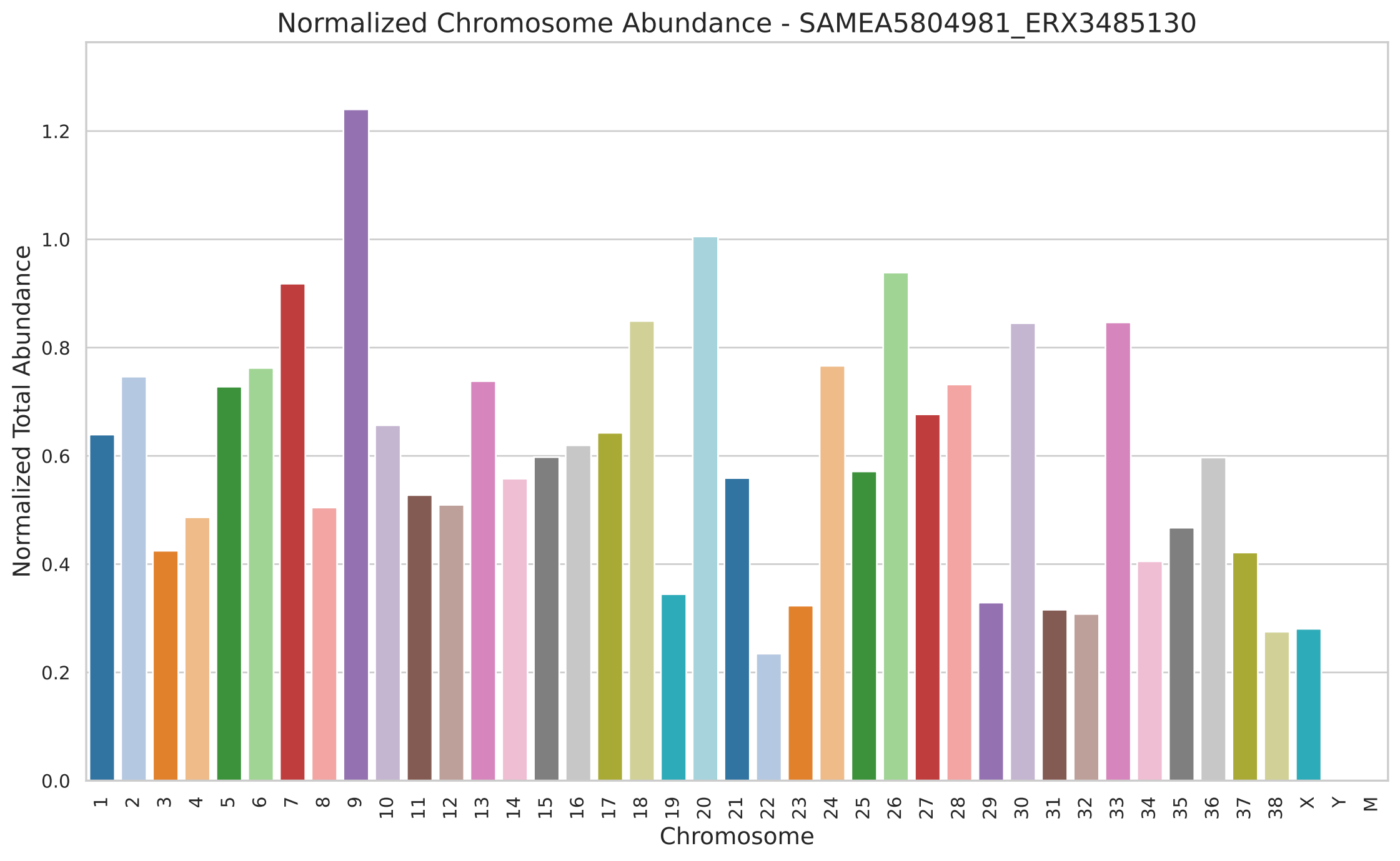

Normalized Chromosome Abundance - SAMEA5804965_ERX3485220
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

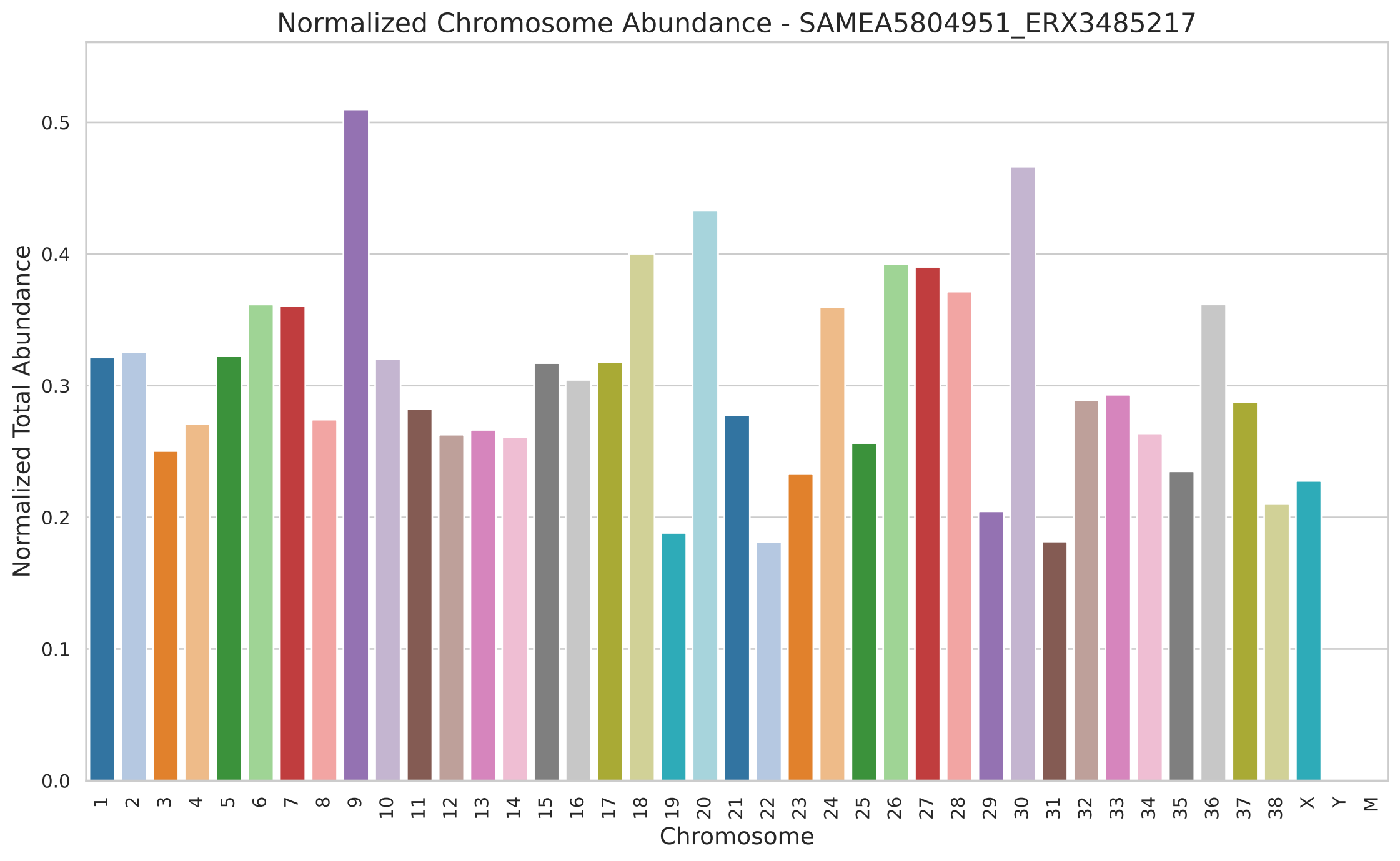

Normalized Chromosome Abundance - SAMEA5805003_ERX3485213
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

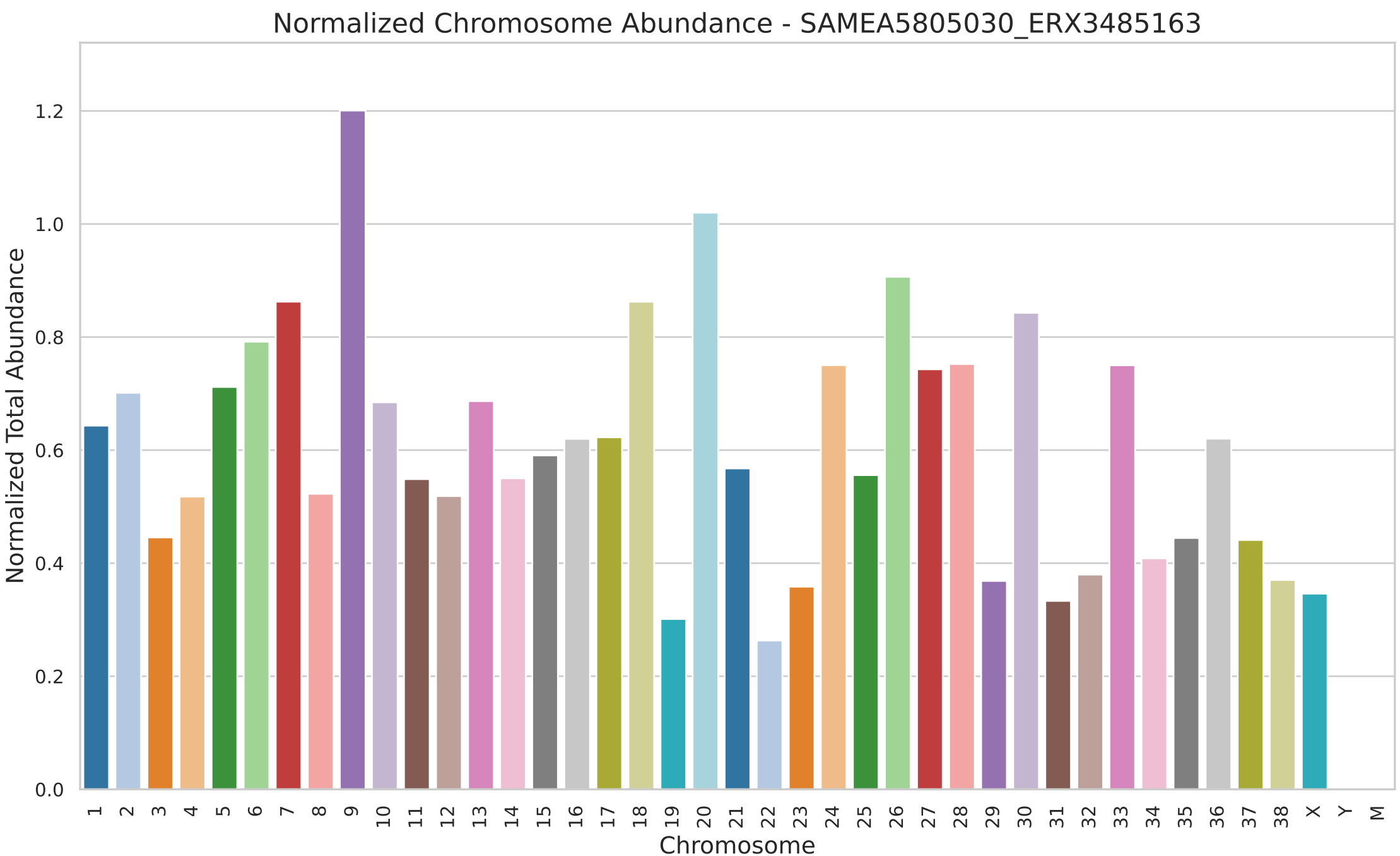

Normalized Chromosome Abundance - SAMEA5804949_ERX3485216
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

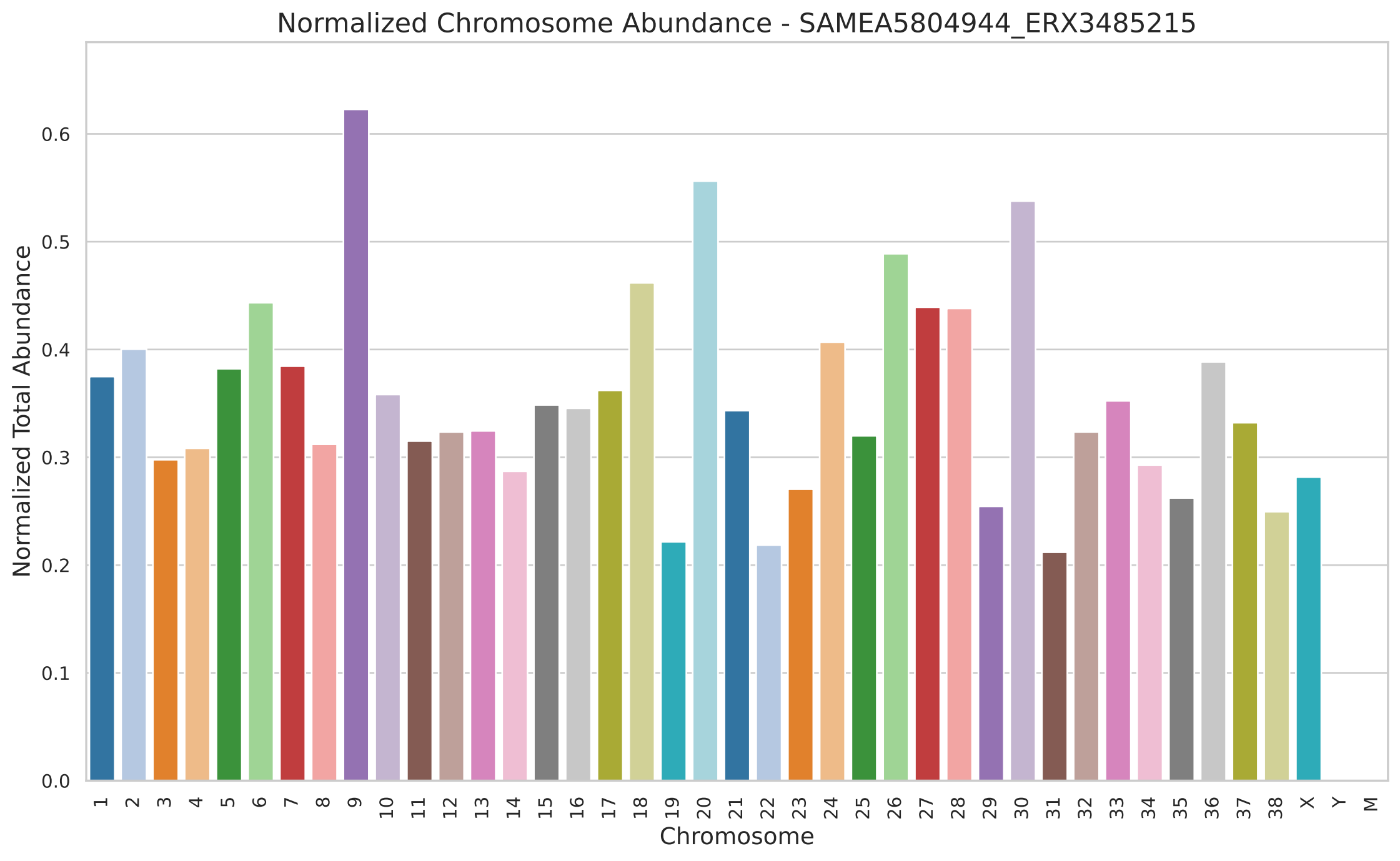

Normalized Chromosome Abundance - SAMEA5805010_ERX3485154
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

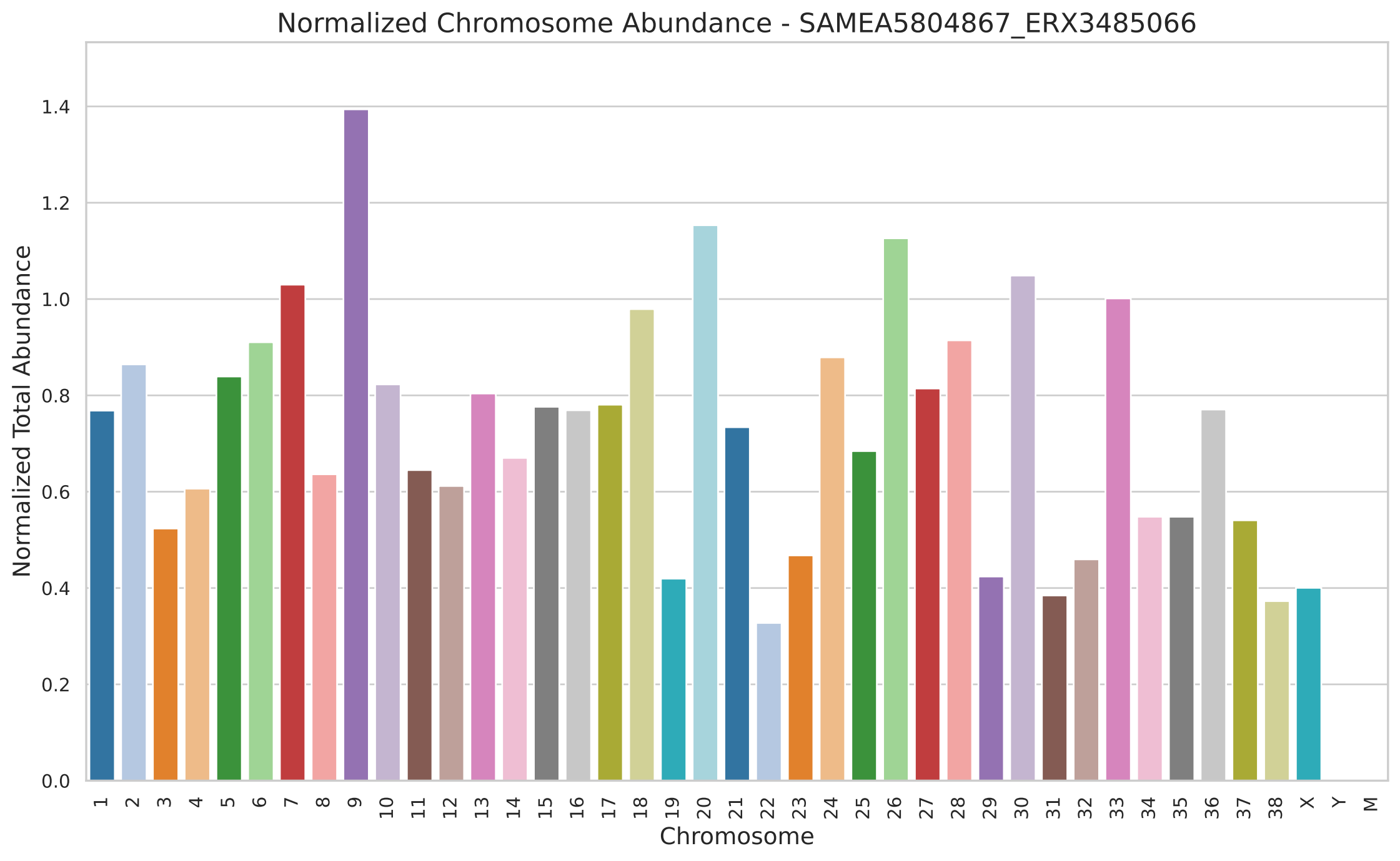

Normalized Chromosome Abundance - SAMEA5804956_ERX3485204
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

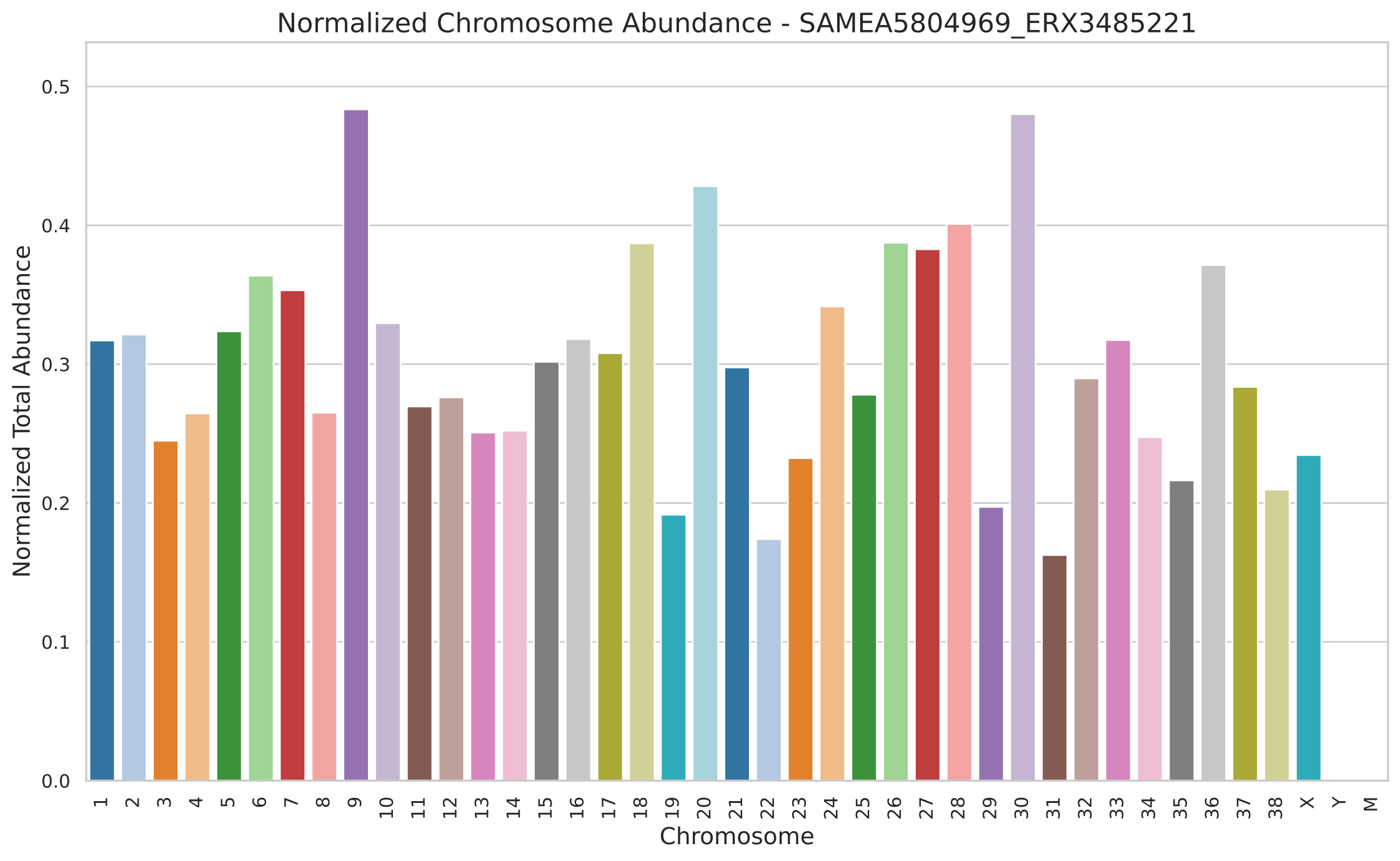

Normalized Chromosome Abundance - SAMEA5804981_ERX3485130
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

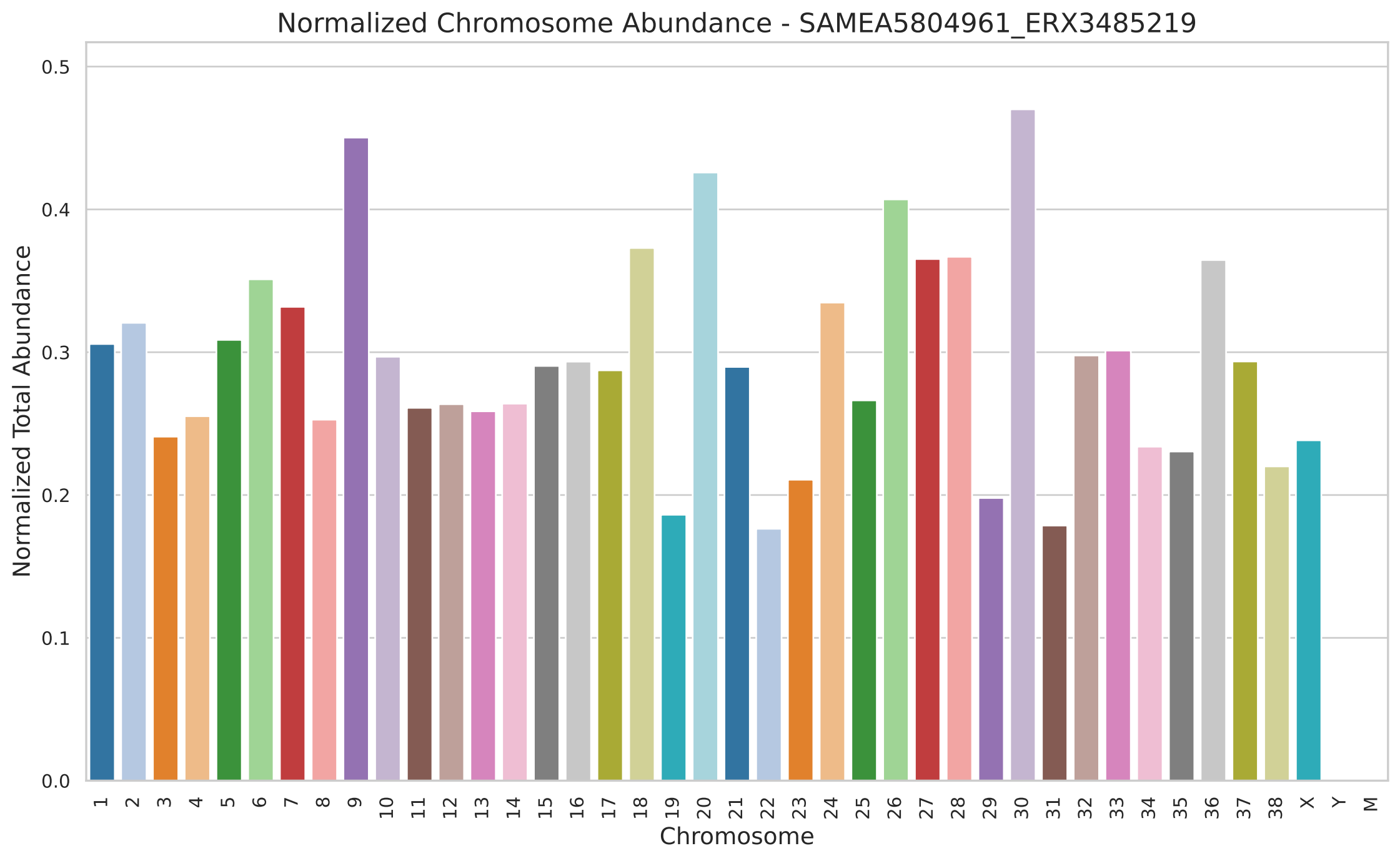

Normalized Chromosome Abundance - SAMEA5804951_ERX3485217
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

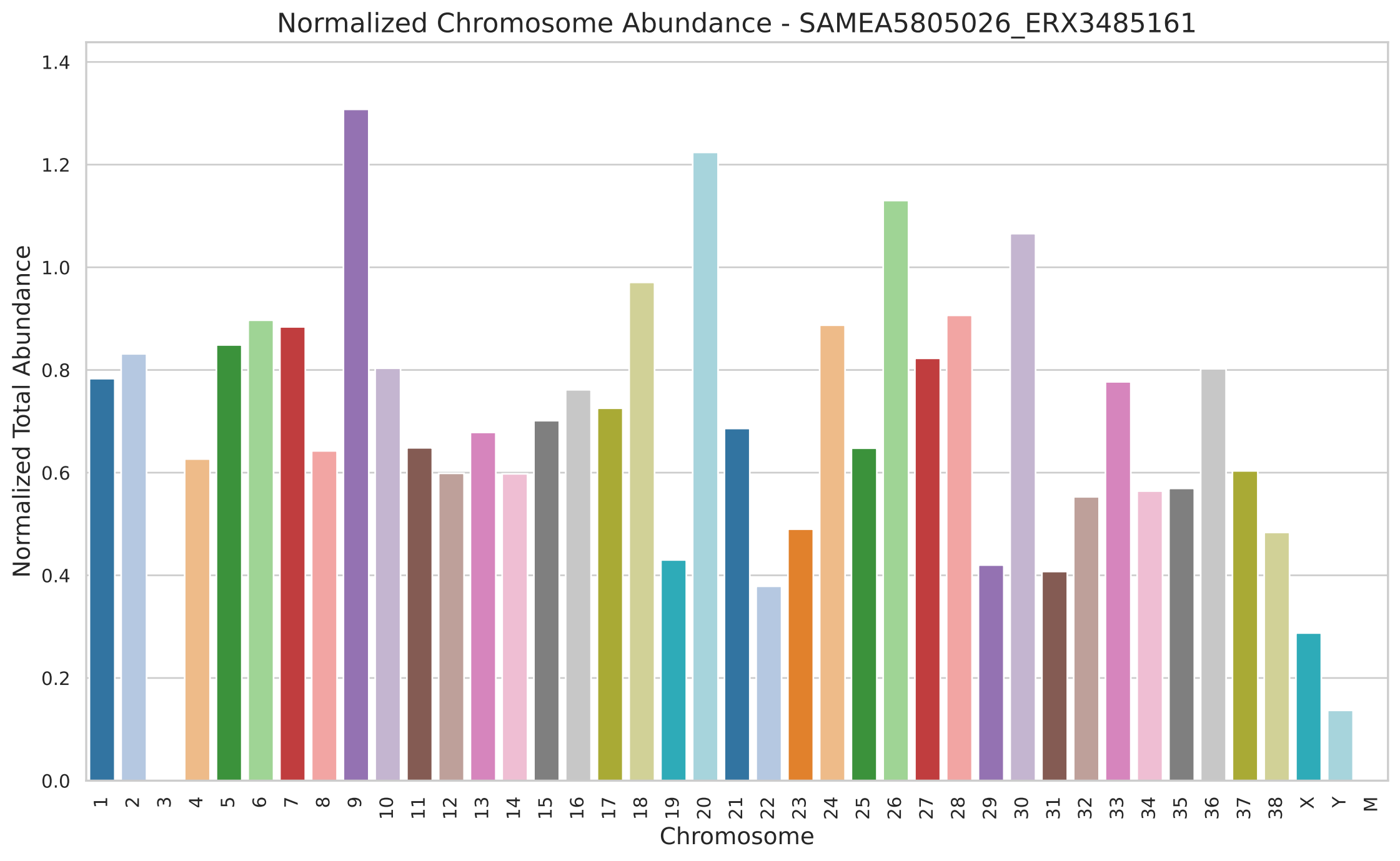

Normalized Chromosome Abundance - SAMEA5805030_ERX3485163
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

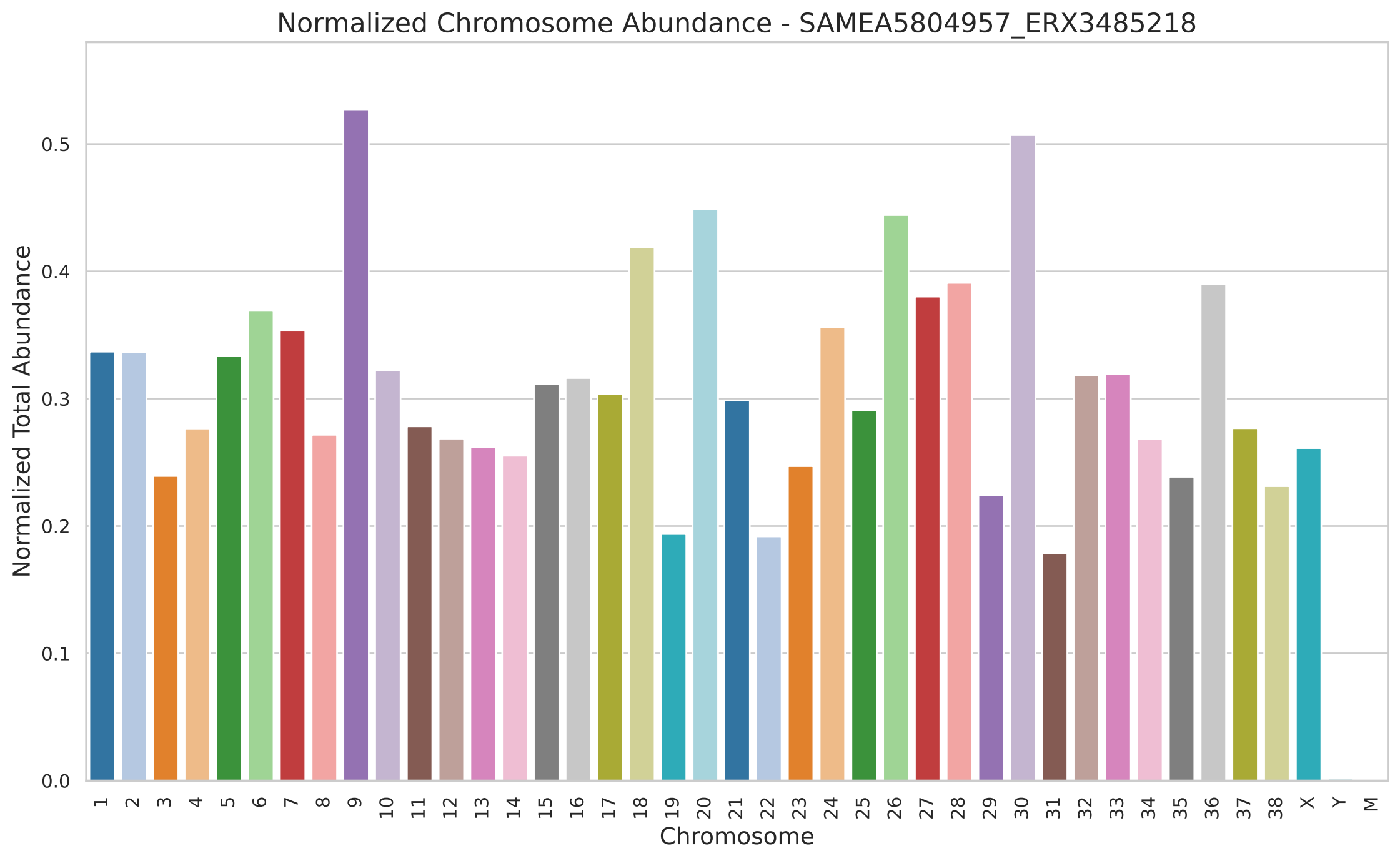

Normalized Chromosome Abundance - SAMEA5804944_ERX3485215
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

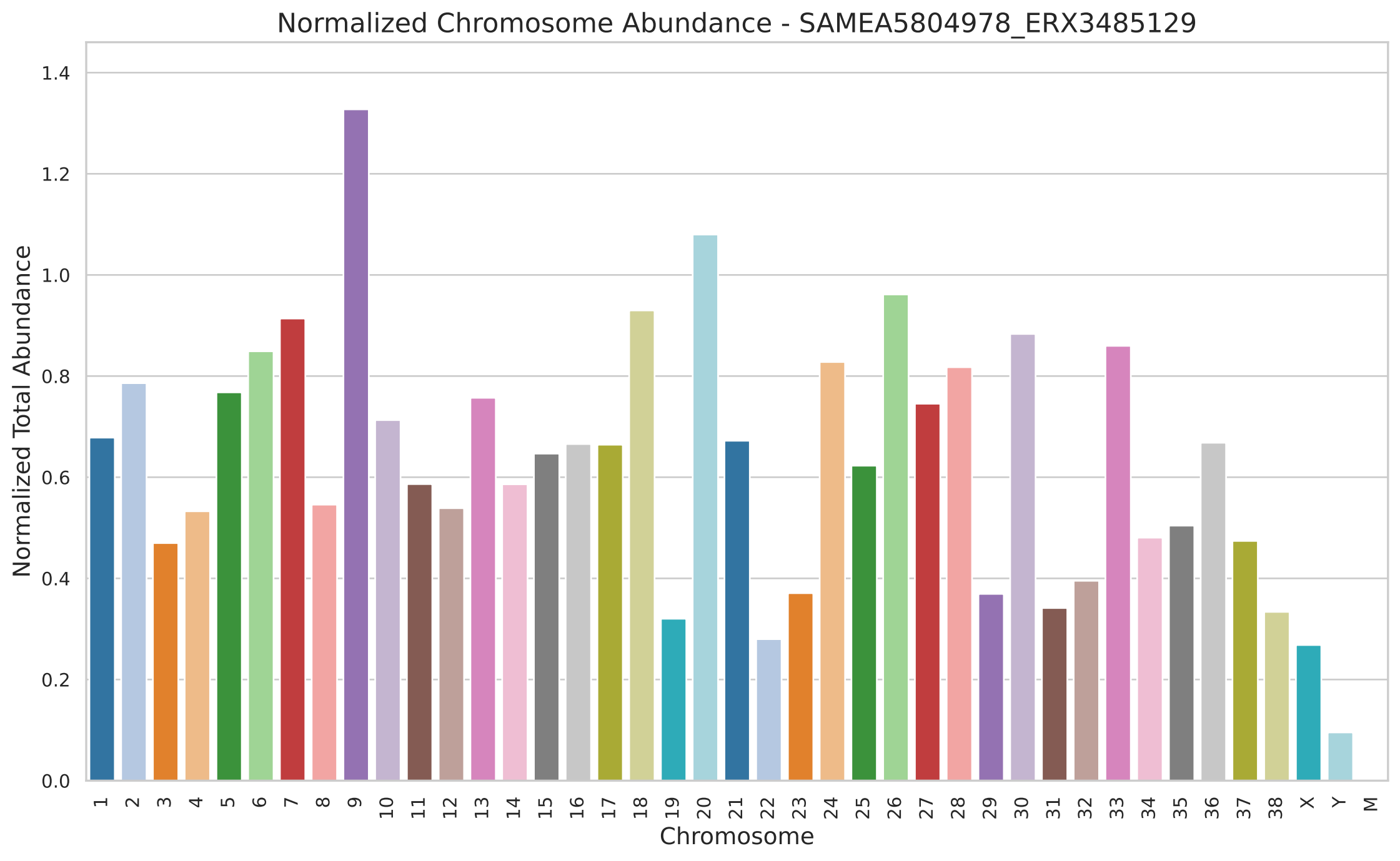

Normalized Chromosome Abundance - SAMEA5804867_ERX3485066
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

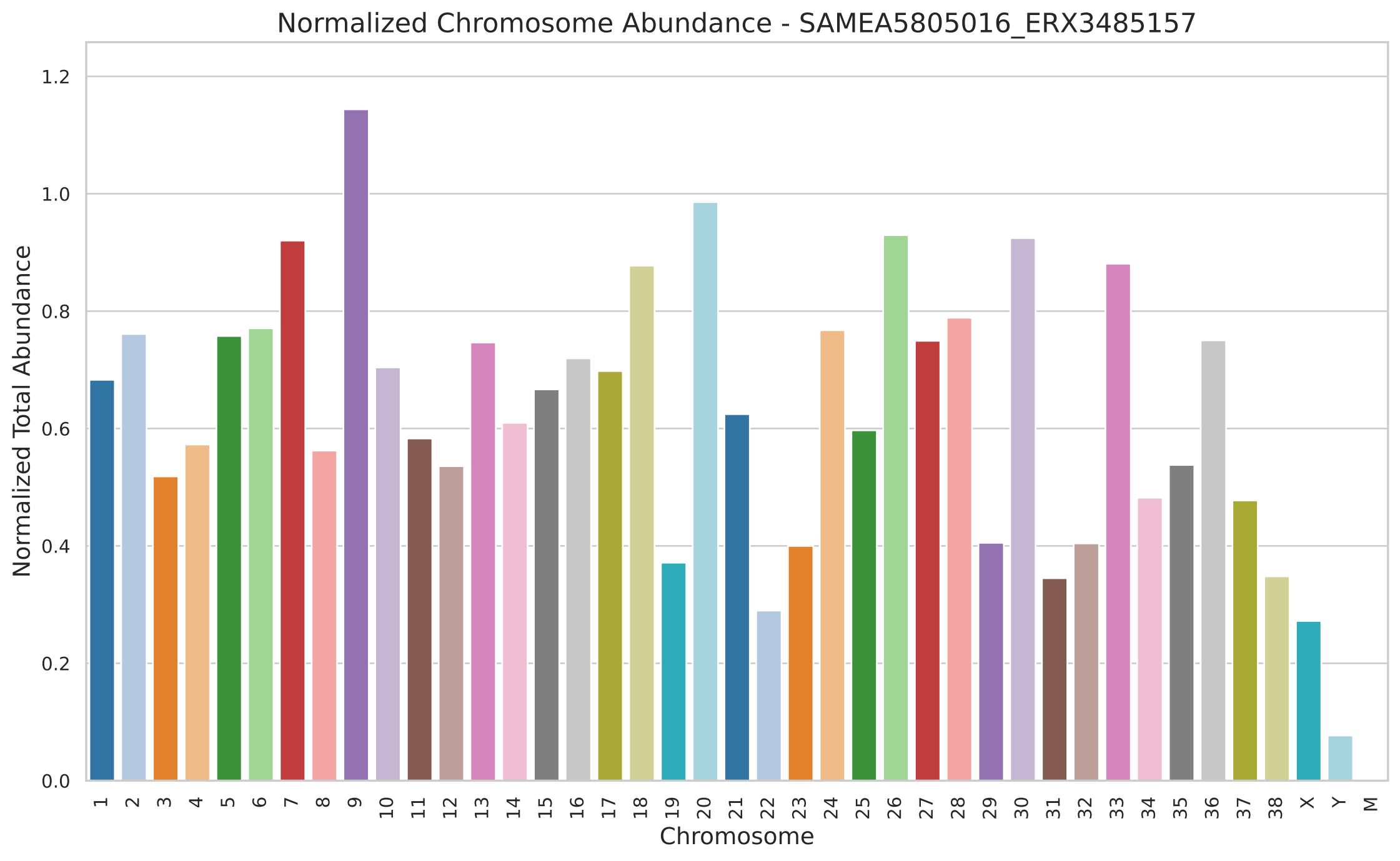

Normalized Chromosome Abundance - SAMEA5804969_ERX3485221
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

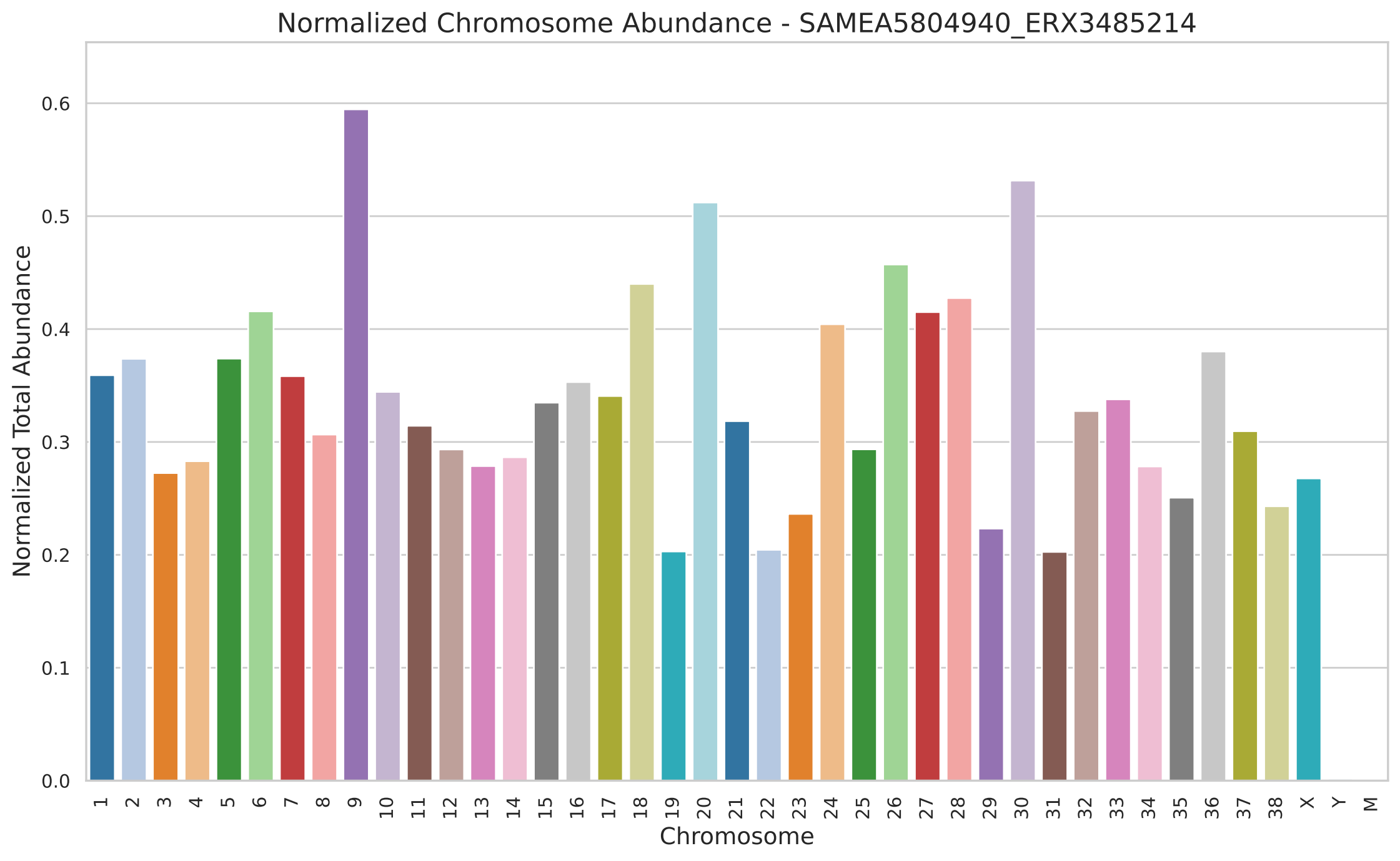

Normalized Chromosome Abundance - SAMEA5804961_ERX3485219
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

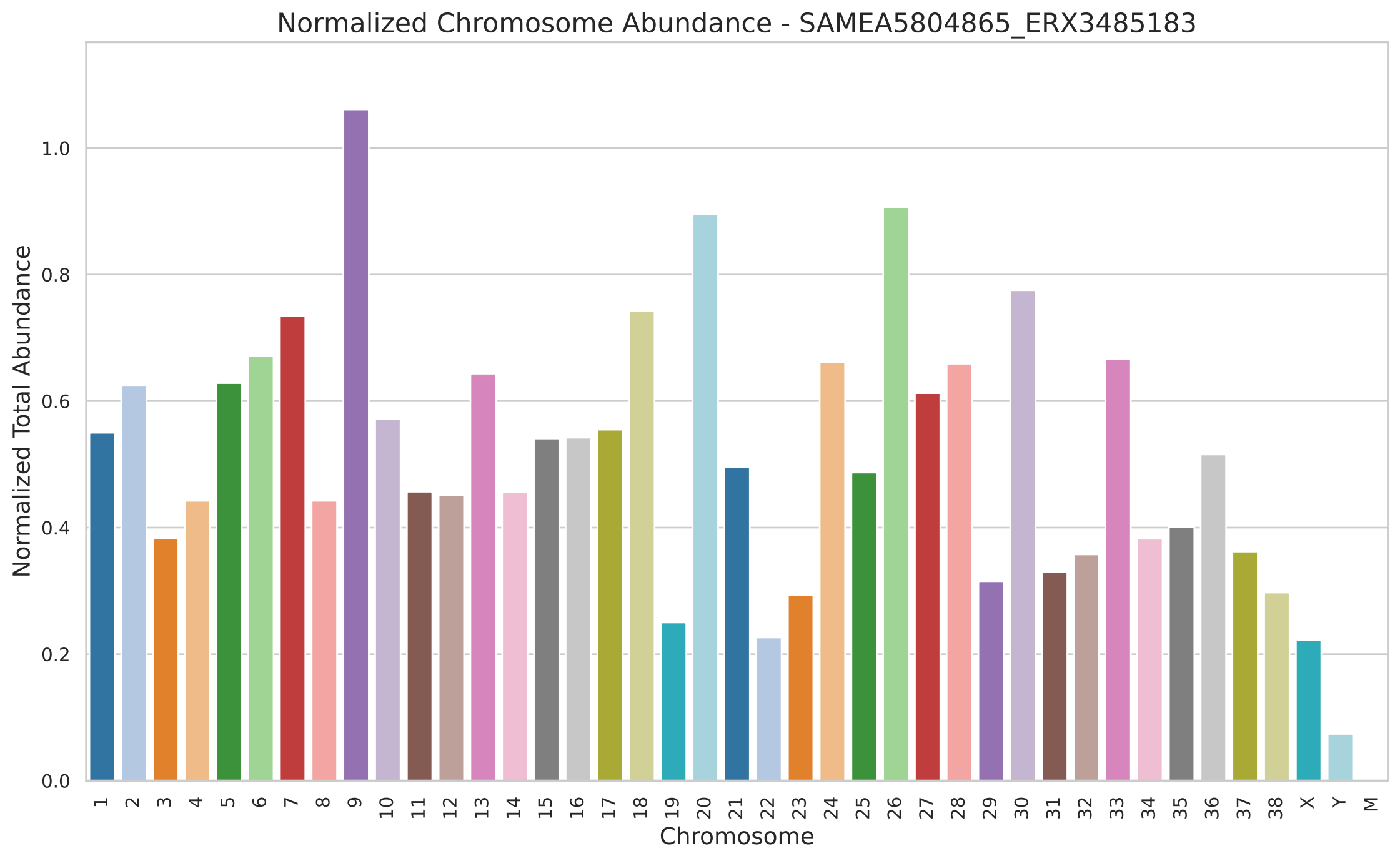

Normalized Chromosome Abundance - SAMEA5805026_ERX3485161
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

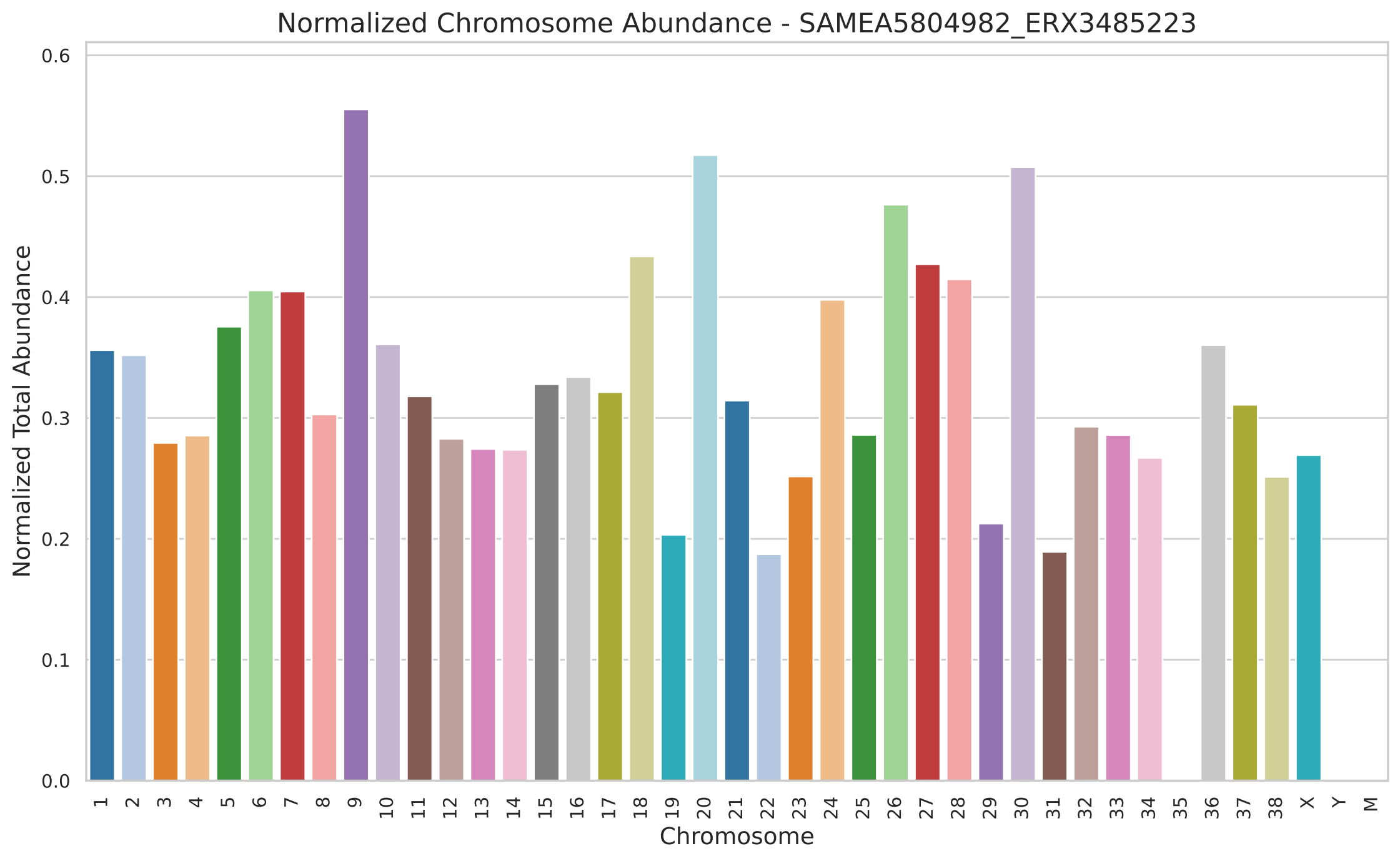

Normalized Chromosome Abundance - SAMEA5804957_ERX3485218
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

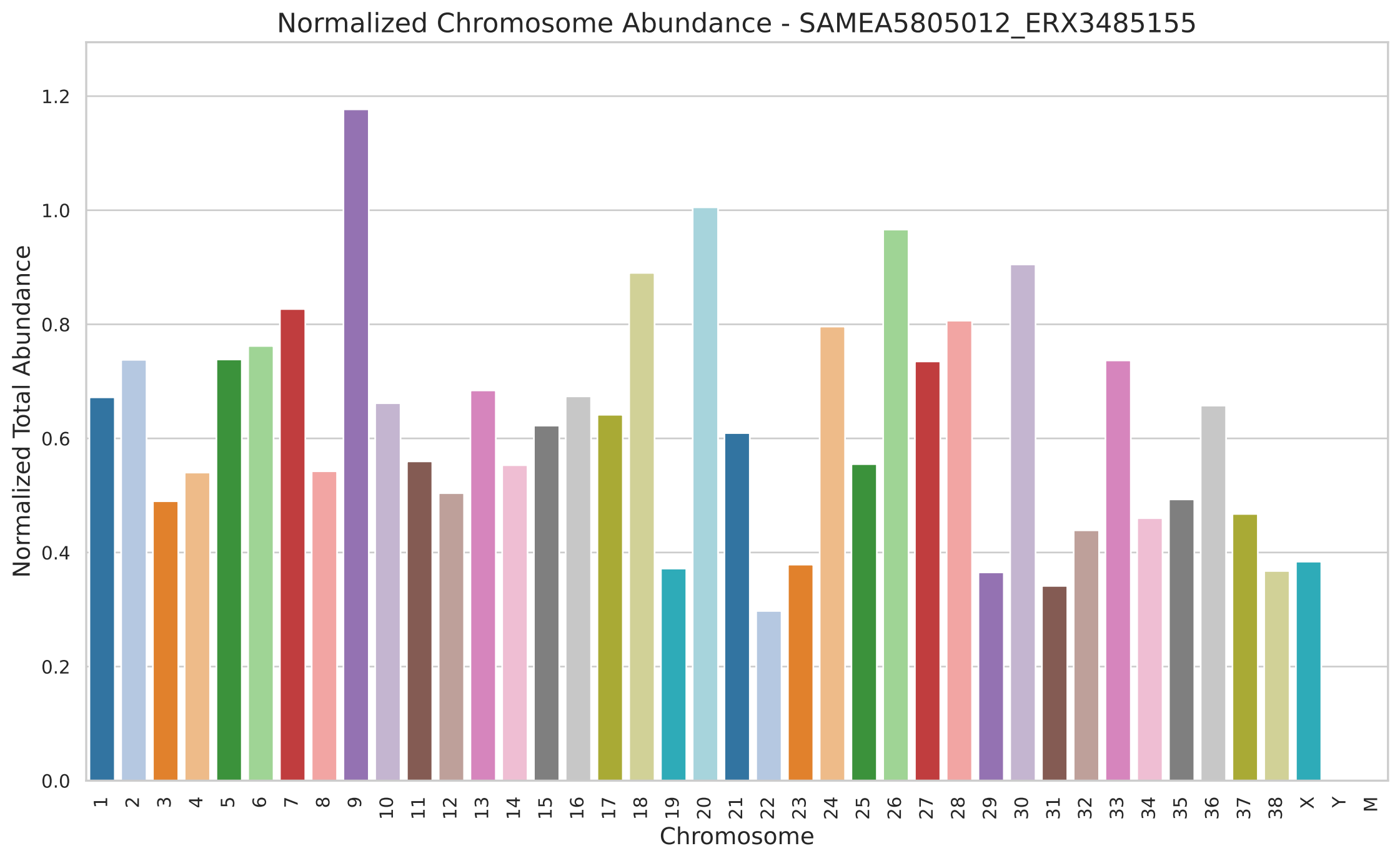

Normalized Chromosome Abundance - SAMEA5804978_ERX3485129
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

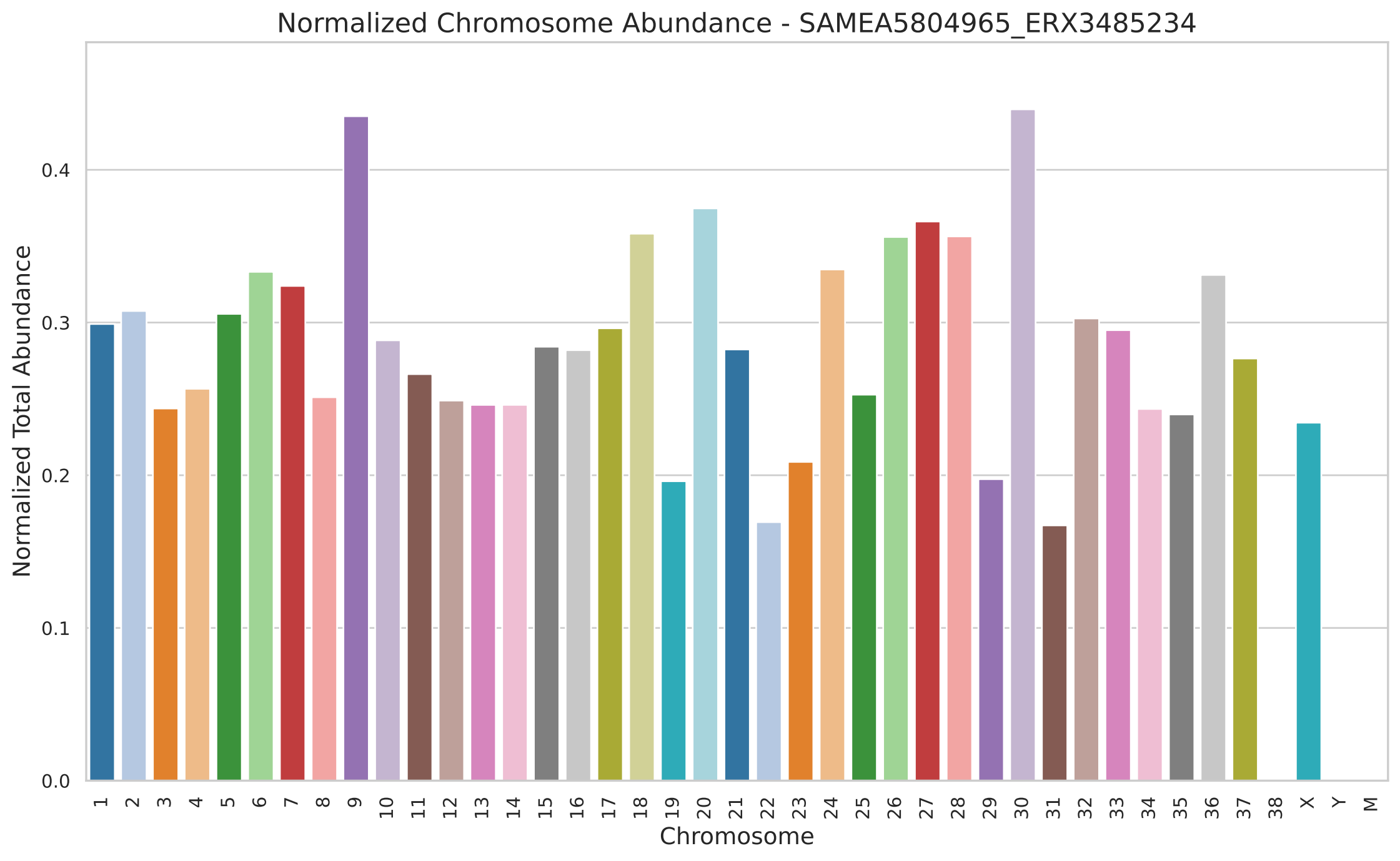

Normalized Chromosome Abundance - SAMEA5805016_ERX3485157
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

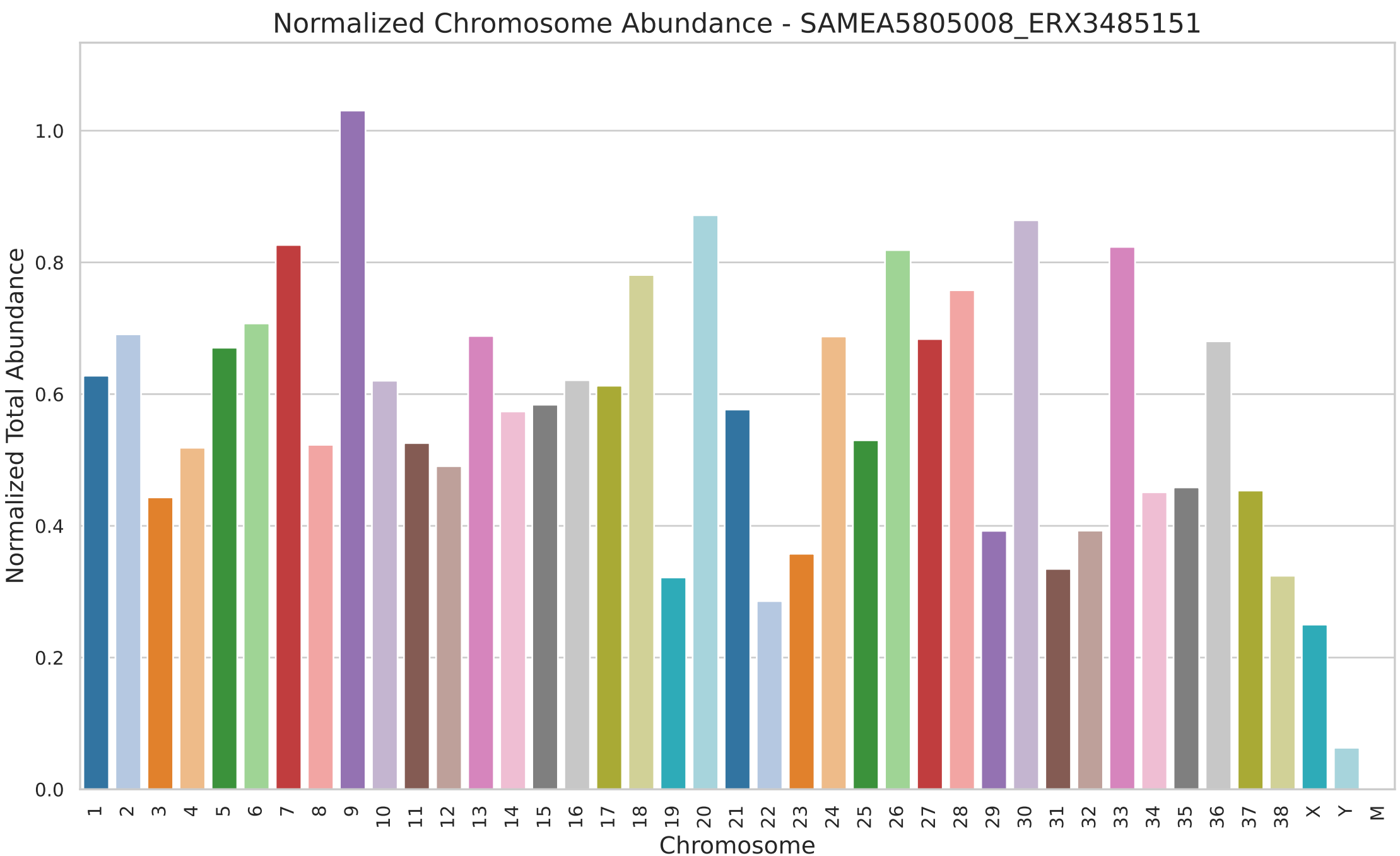

Normalized Chromosome Abundance - SAMEA5804940_ERX3485214
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

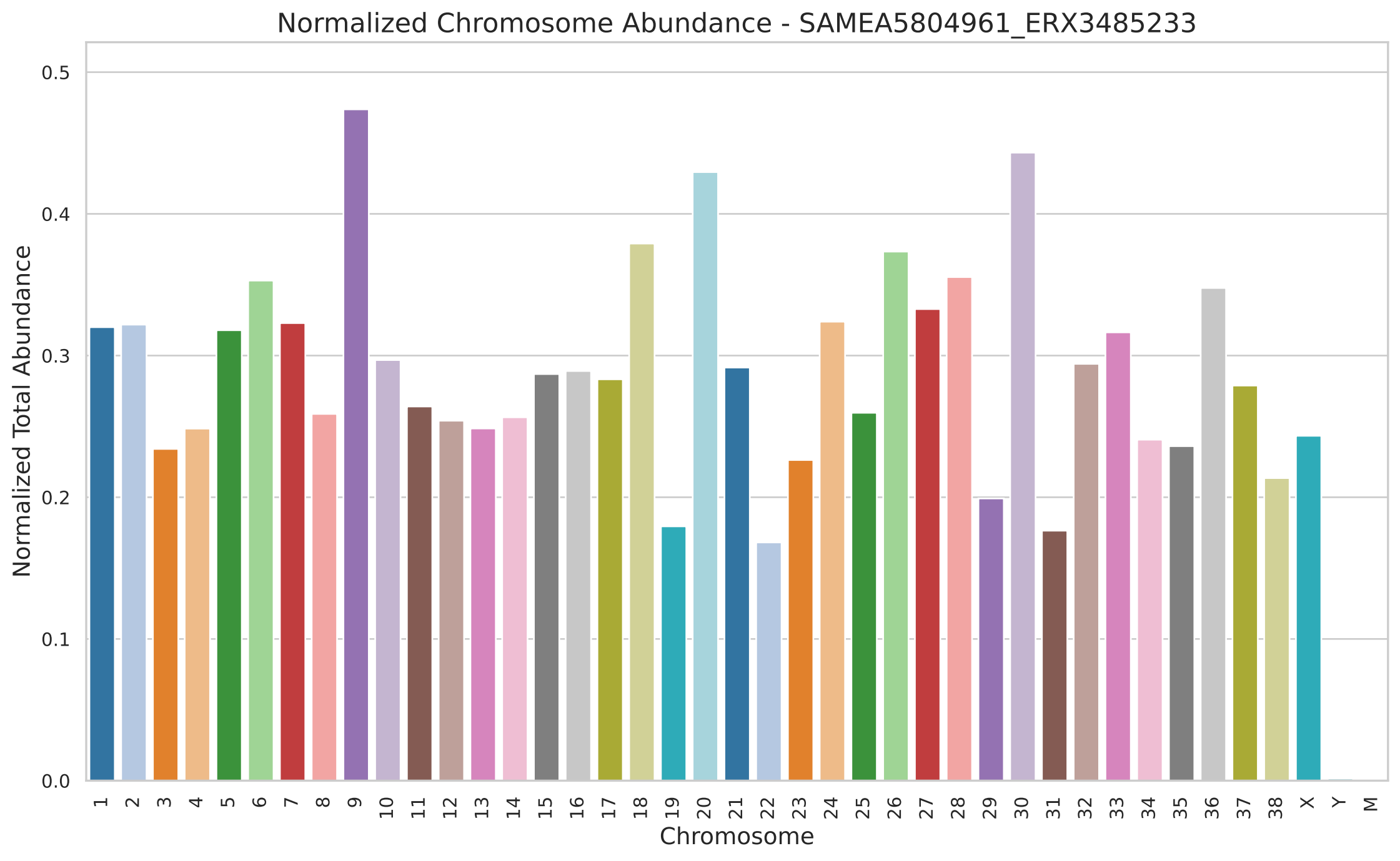

Normalized Chromosome Abundance - SAMEA5804865_ERX3485183
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

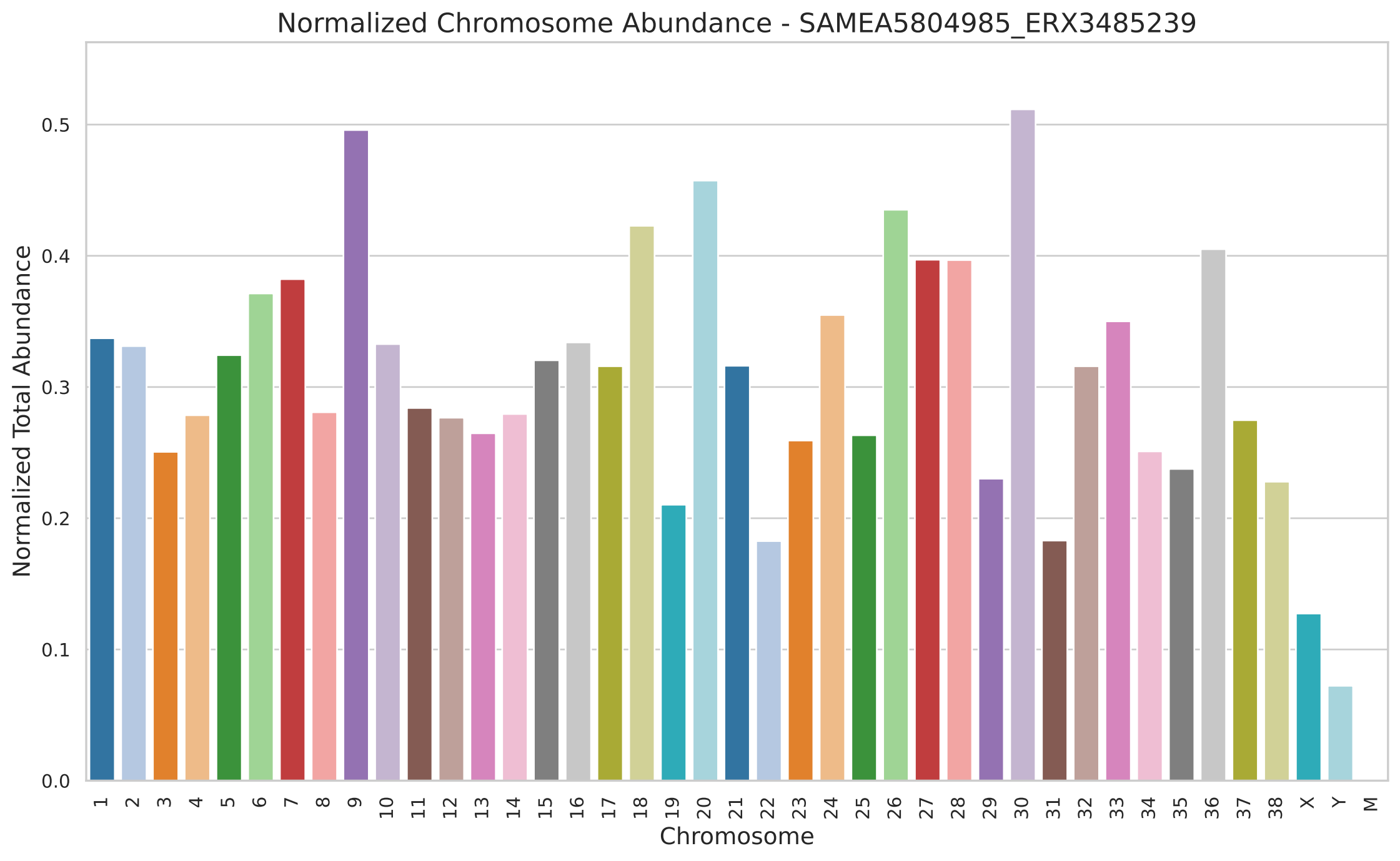

Normalized Chromosome Abundance - SAMEA5804982_ERX3485223
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

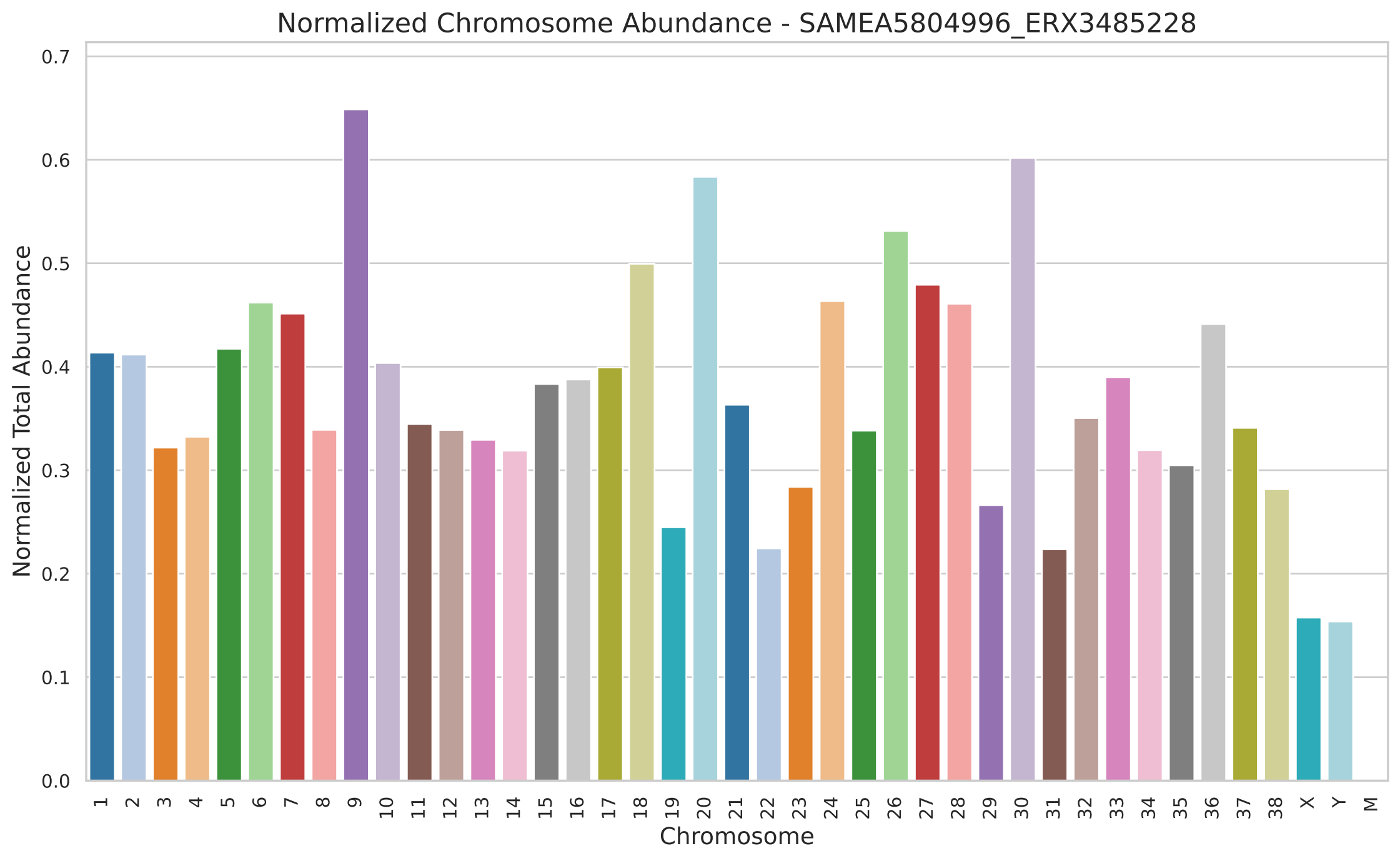

Normalized Chromosome Abundance - SAMEA5805012_ERX3485155
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

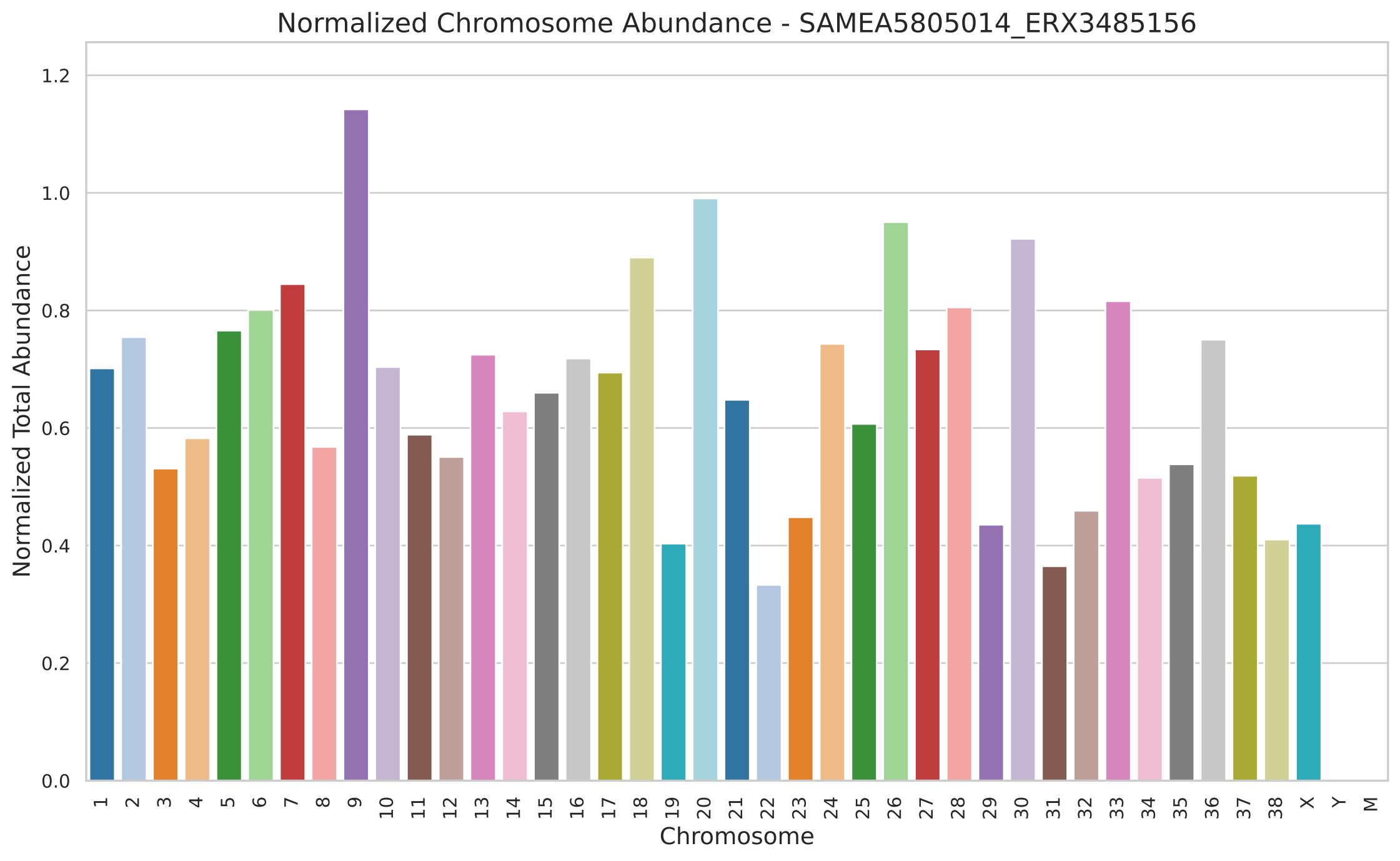

Normalized Chromosome Abundance - SAMEA5804965_ERX3485234
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

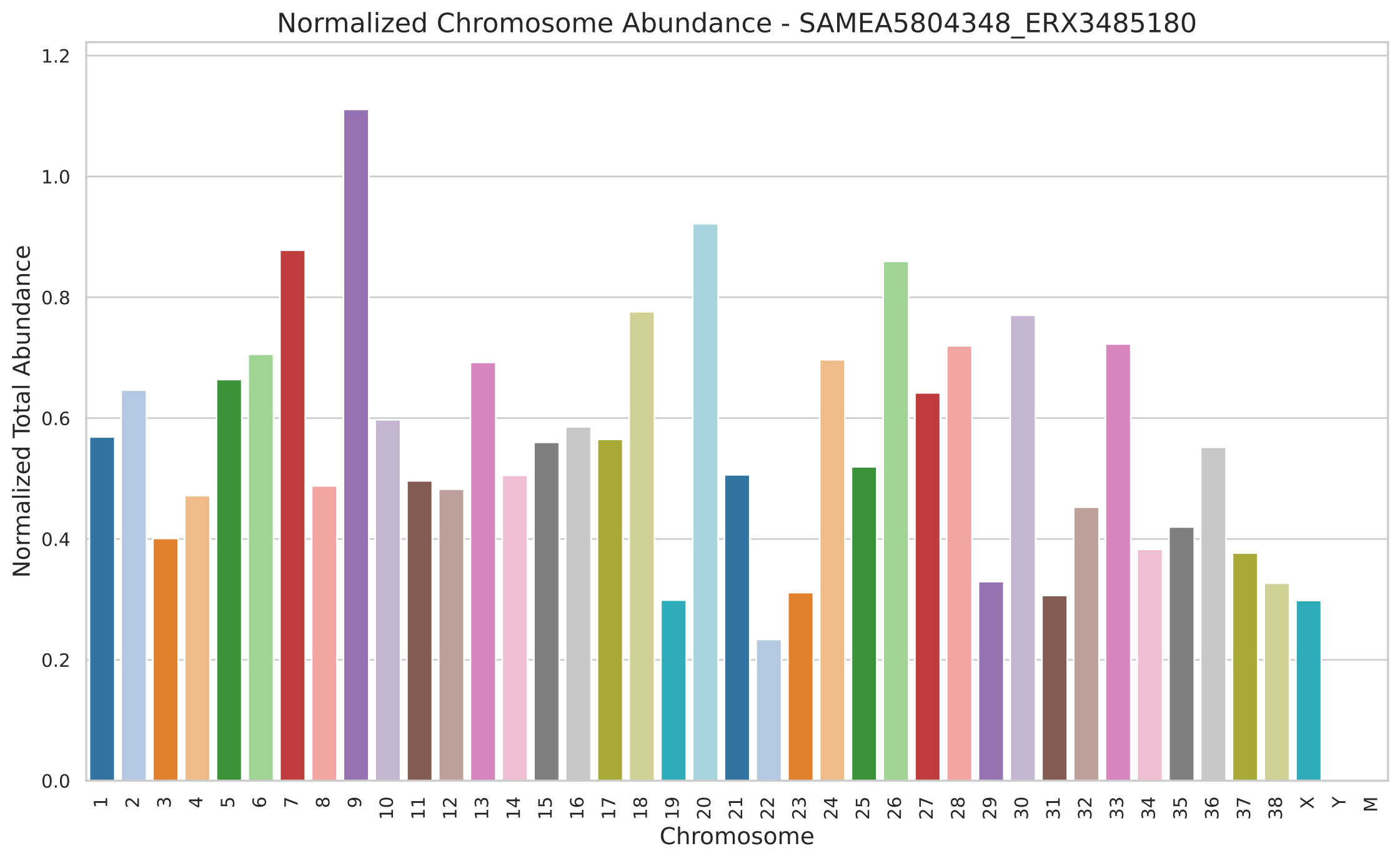

Normalized Chromosome Abundance - SAMEA5805008_ERX3485151
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

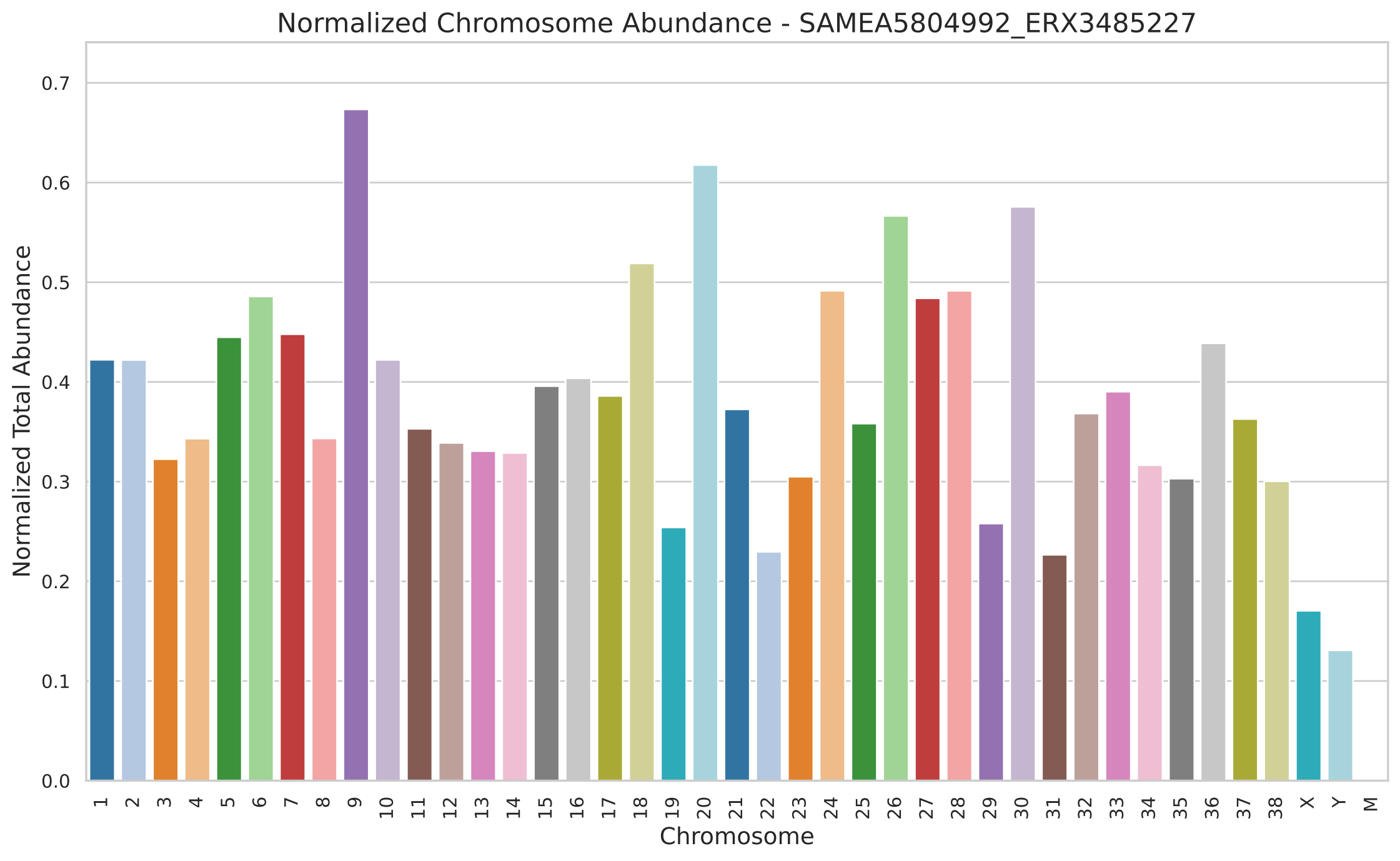

Normalized Chromosome Abundance - SAMEA5804961_ERX3485233
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

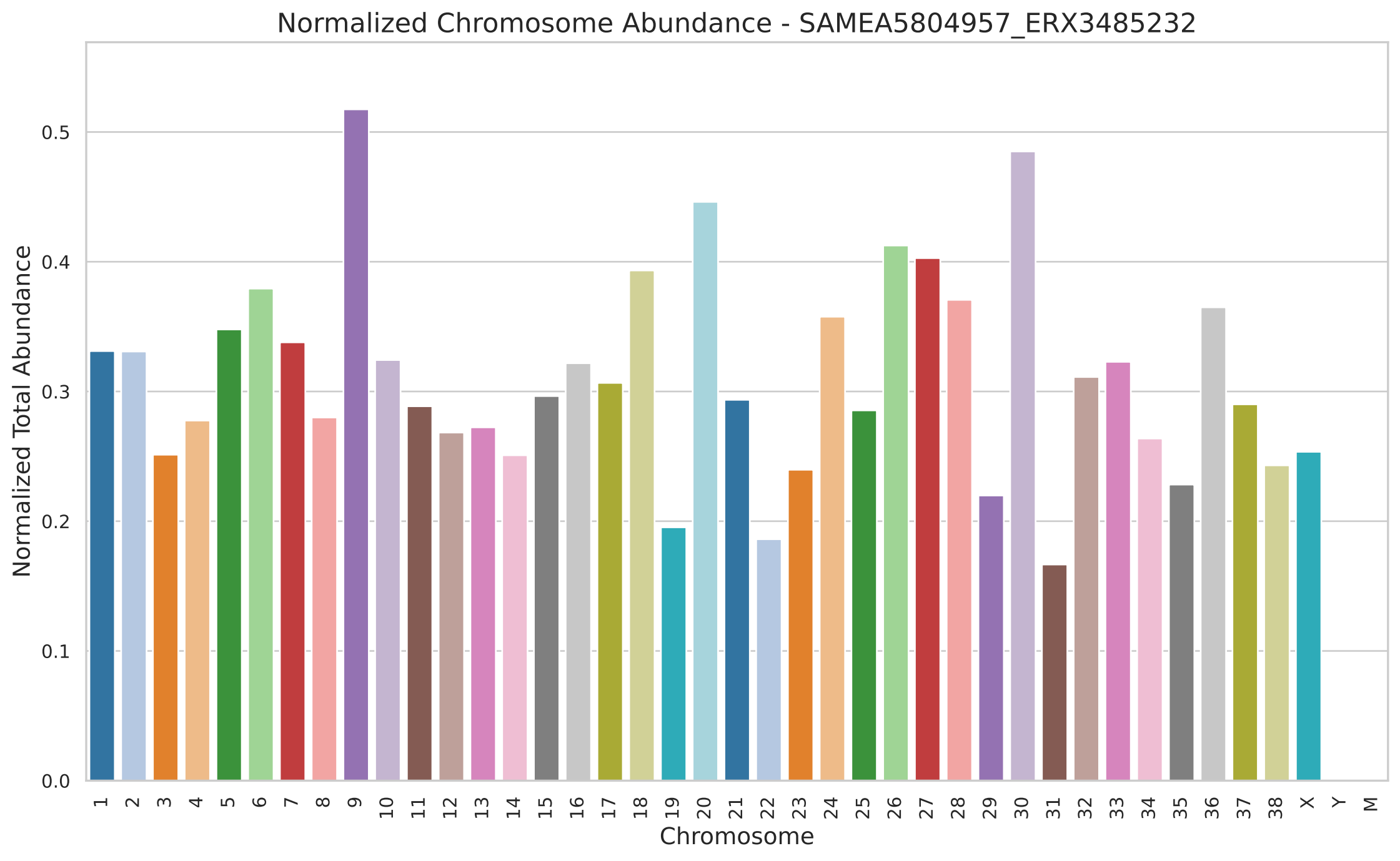

Normalized Chromosome Abundance - SAMEA5804985_ERX3485239
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

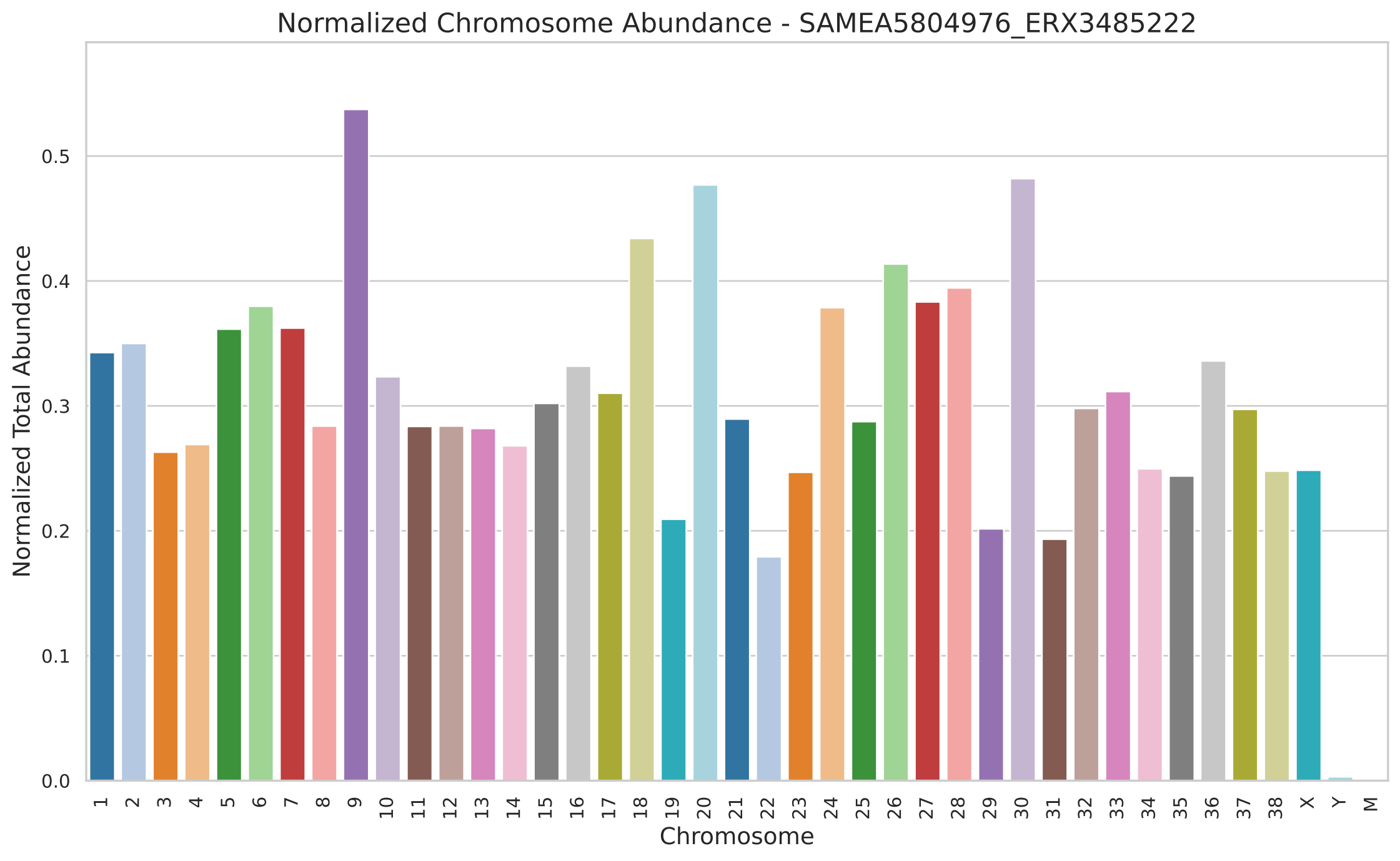

Normalized Chromosome Abundance - SAMEA5804996_ERX3485228
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

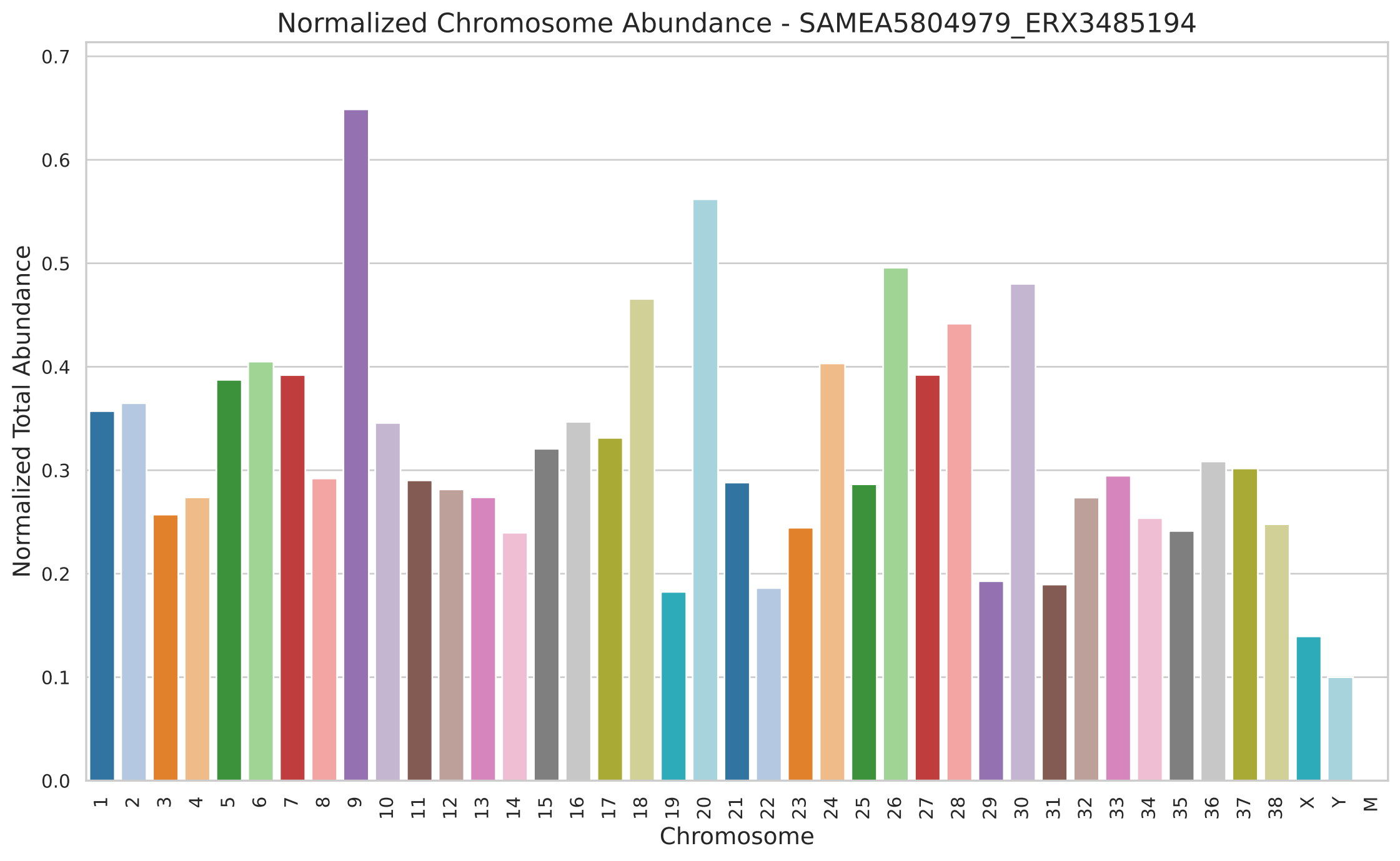

Normalized Chromosome Abundance - SAMEA5805014_ERX3485156
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

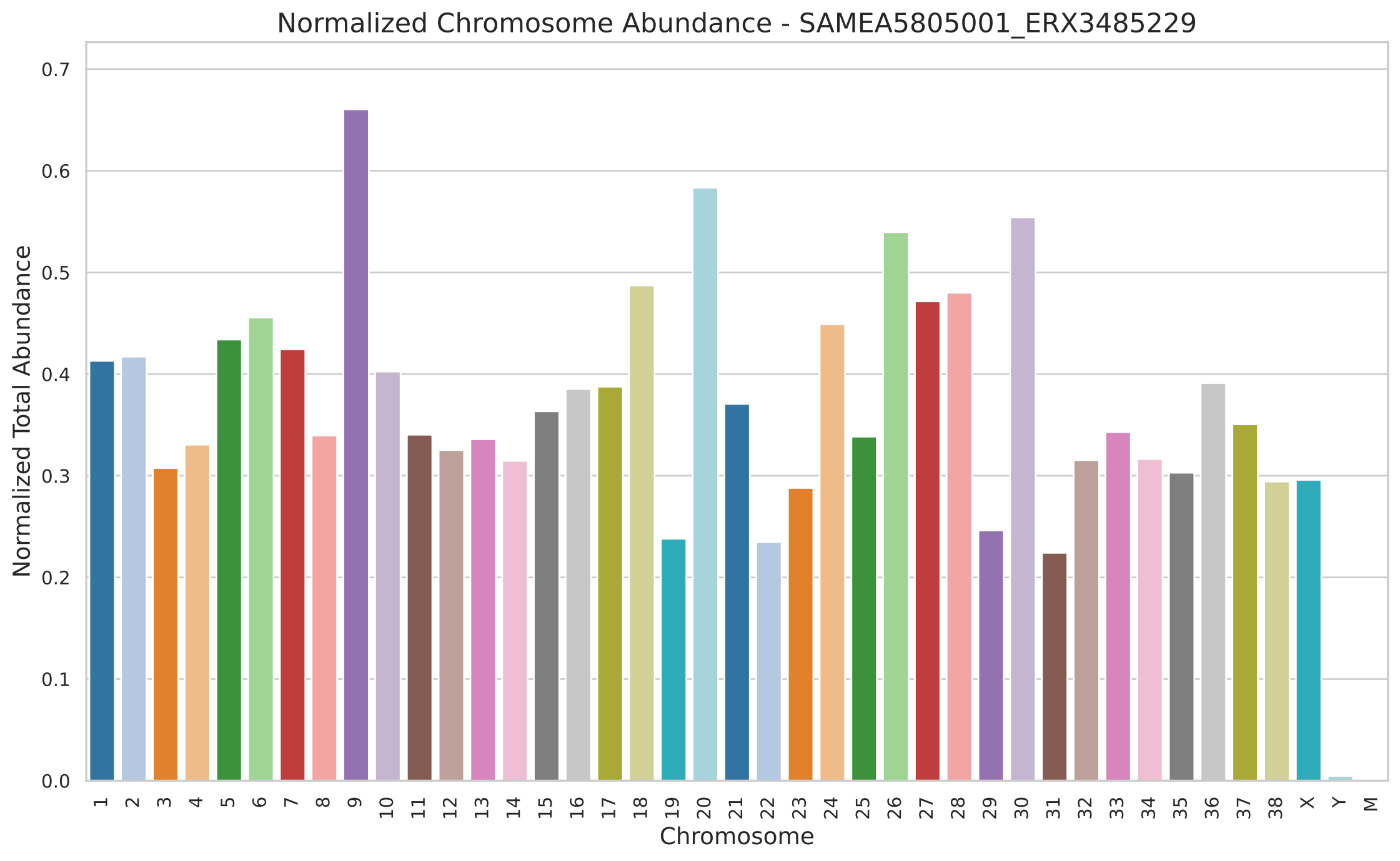

Normalized Chromosome Abundance - SAMEA5804348_ERX3485180
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

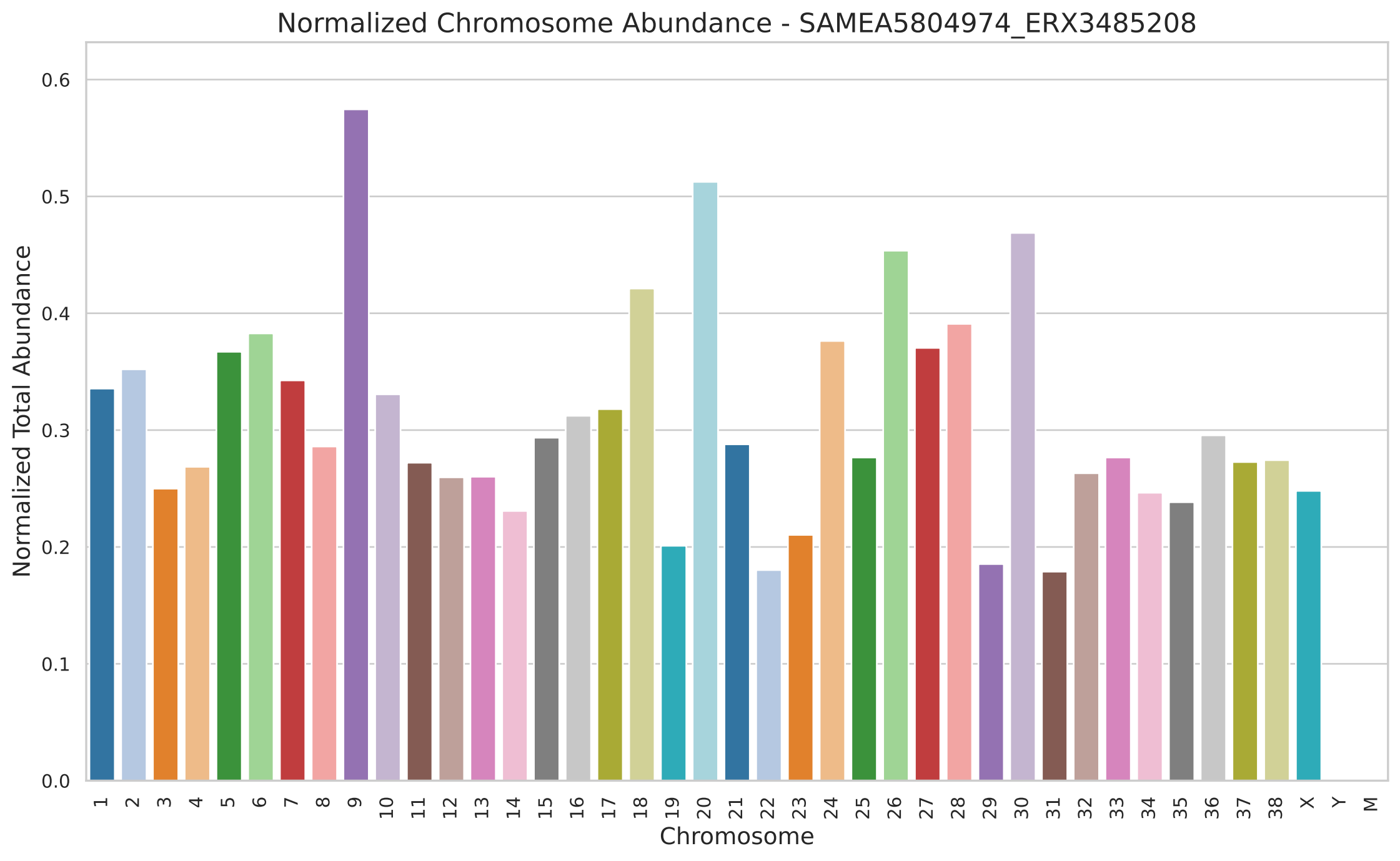

Normalized Chromosome Abundance - SAMEA5804992_ERX3485227
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

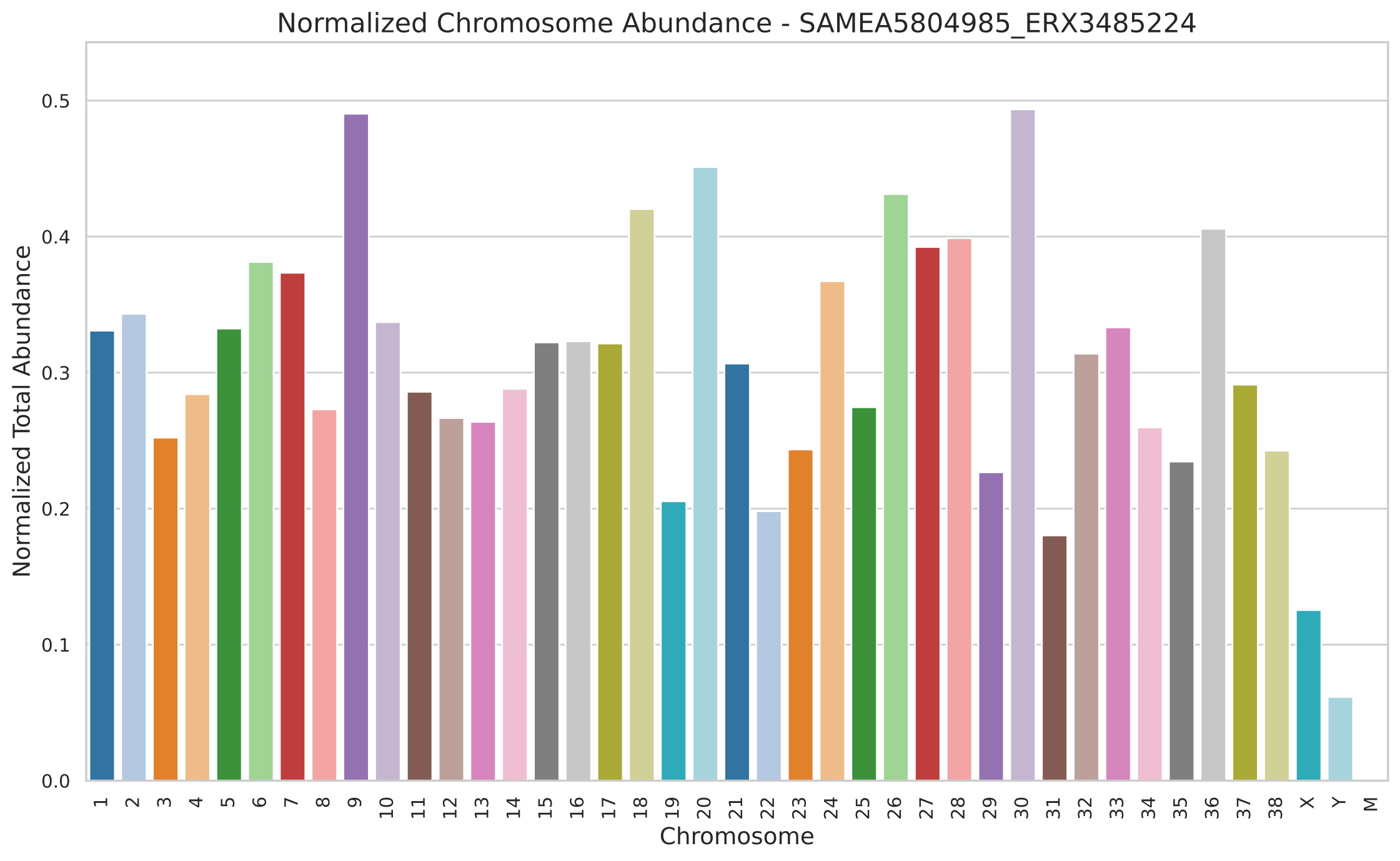

Normalized Chromosome Abundance - SAMEA5804957_ERX3485232
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

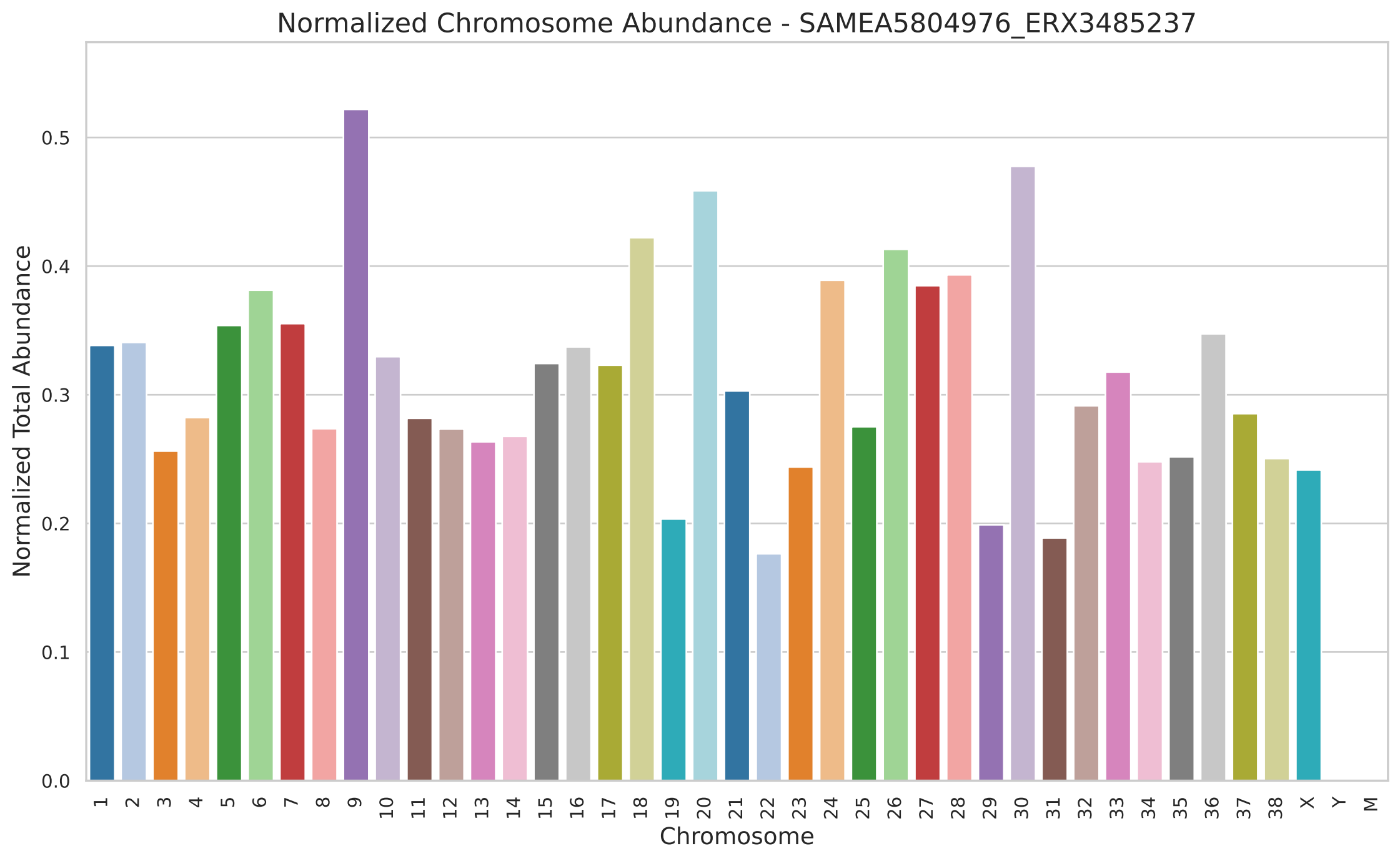

Normalized Chromosome Abundance - SAMEA5804976_ERX3485222
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

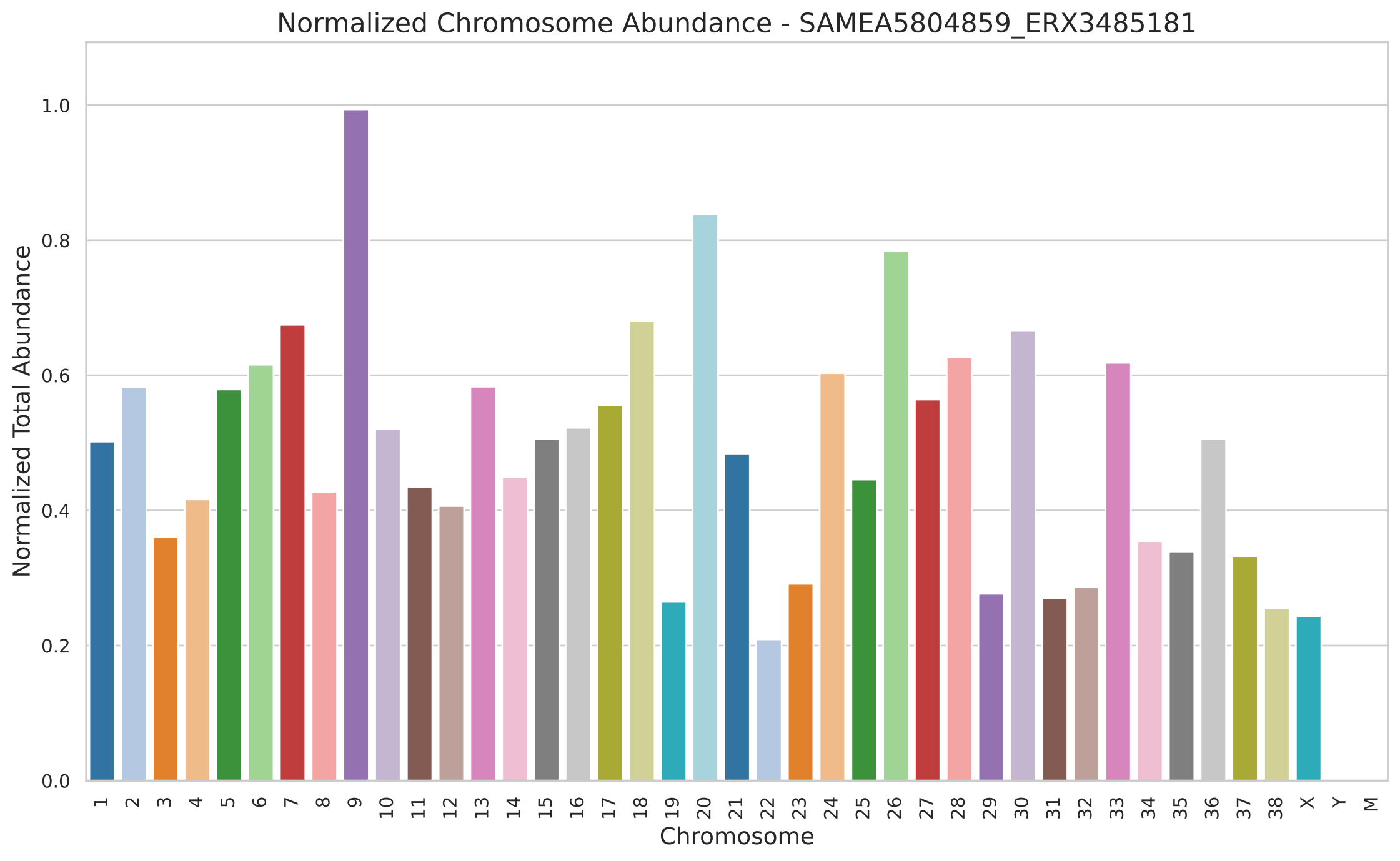

Normalized Chromosome Abundance - SAMEA5804979_ERX3485194
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

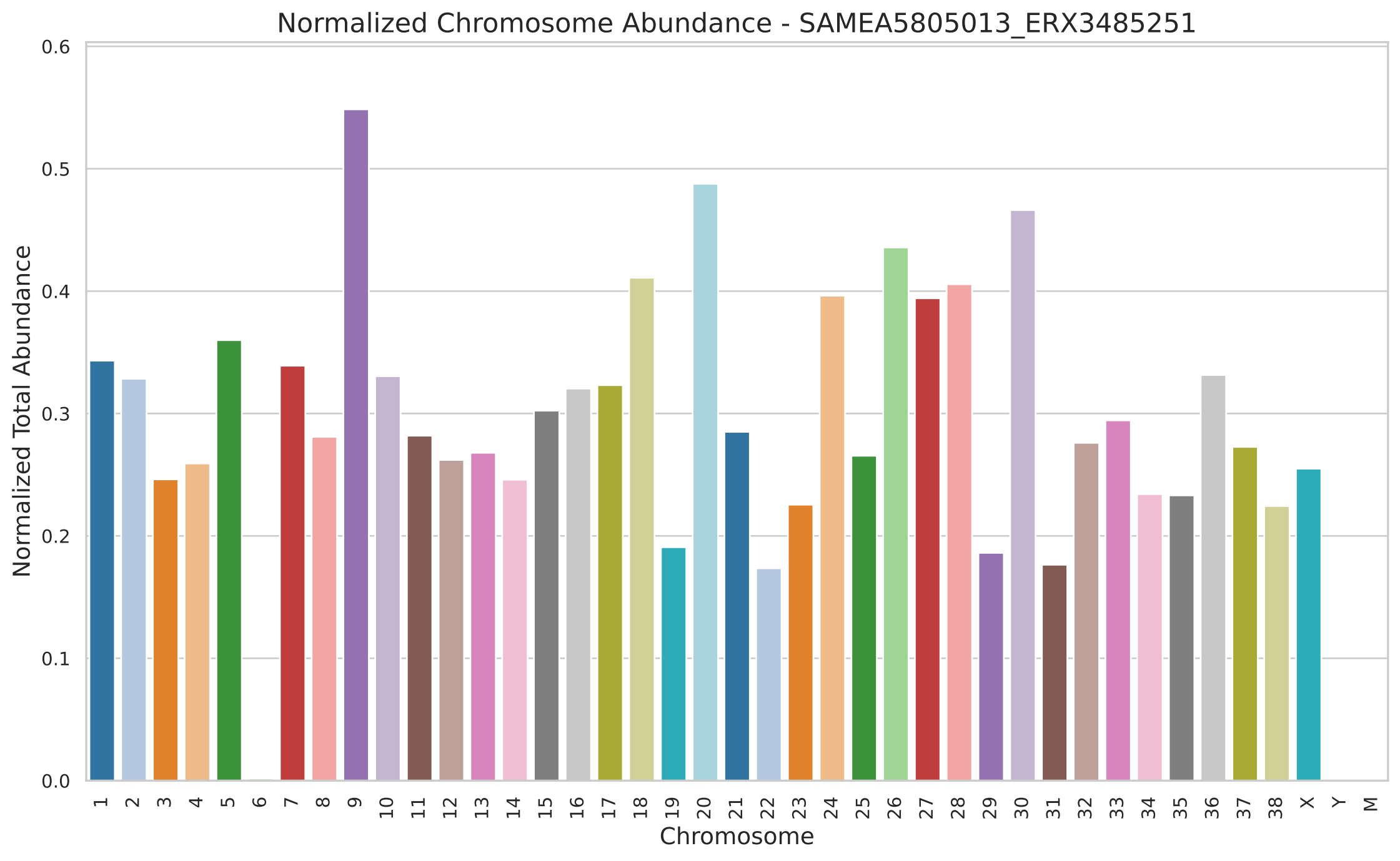

Normalized Chromosome Abundance - SAMEA5805001_ERX3485229
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

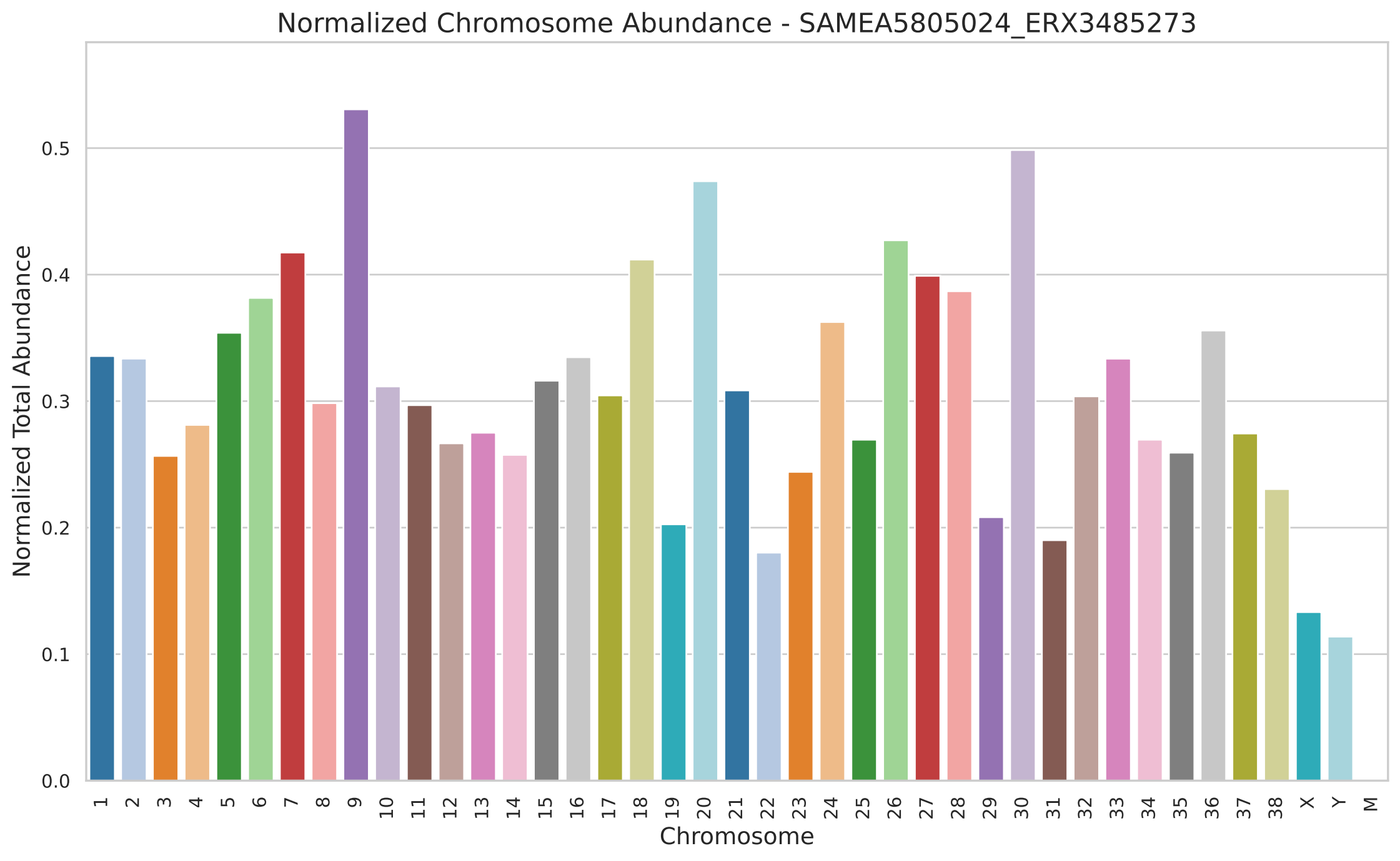

Normalized Chromosome Abundance - SAMEA5804974_ERX3485208
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

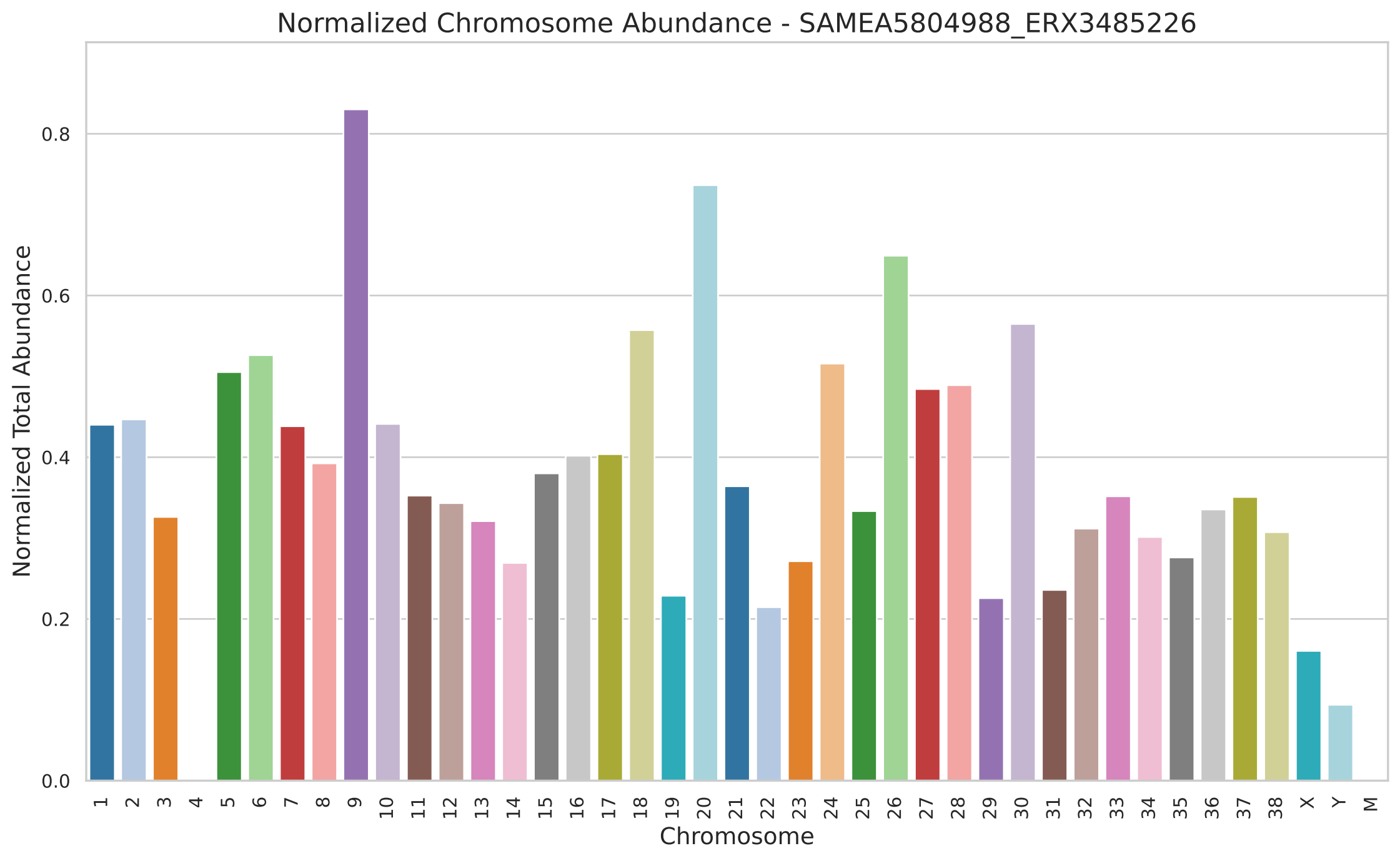

Normalized Chromosome Abundance - SAMEA5804985_ERX3485224
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

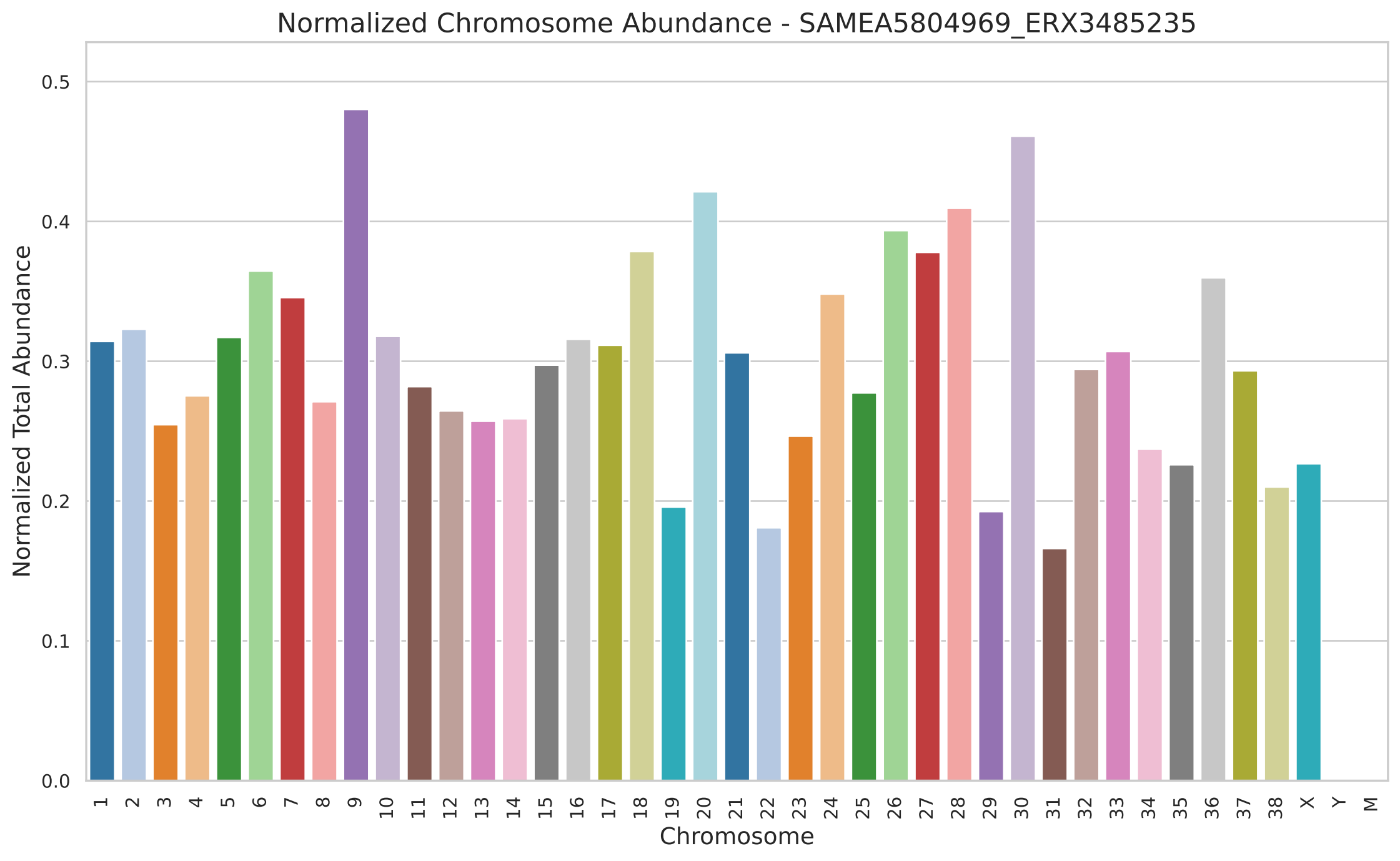

Normalized Chromosome Abundance - SAMEA5804976_ERX3485237
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

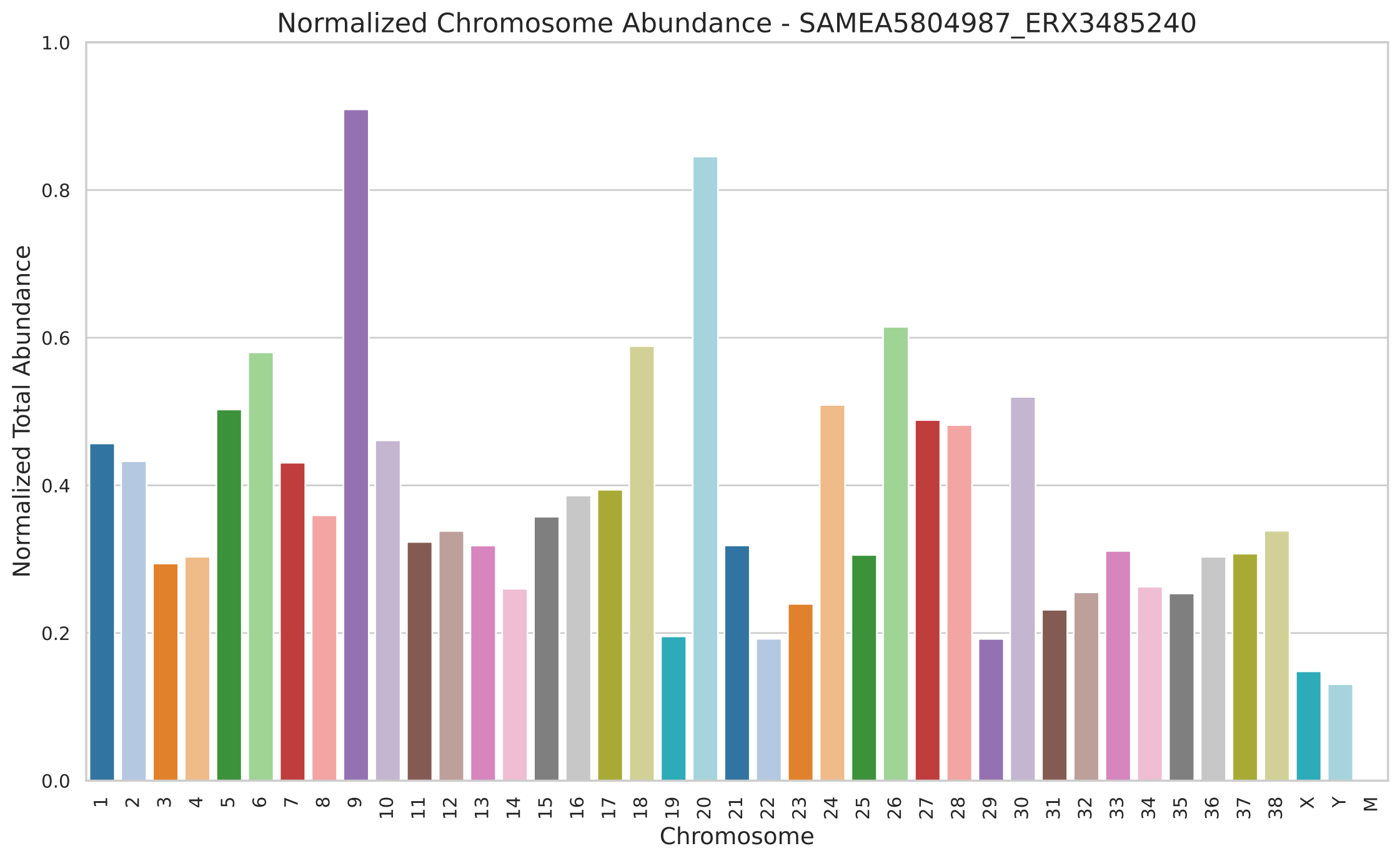

Normalized Chromosome Abundance - SAMEA5804859_ERX3485181
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

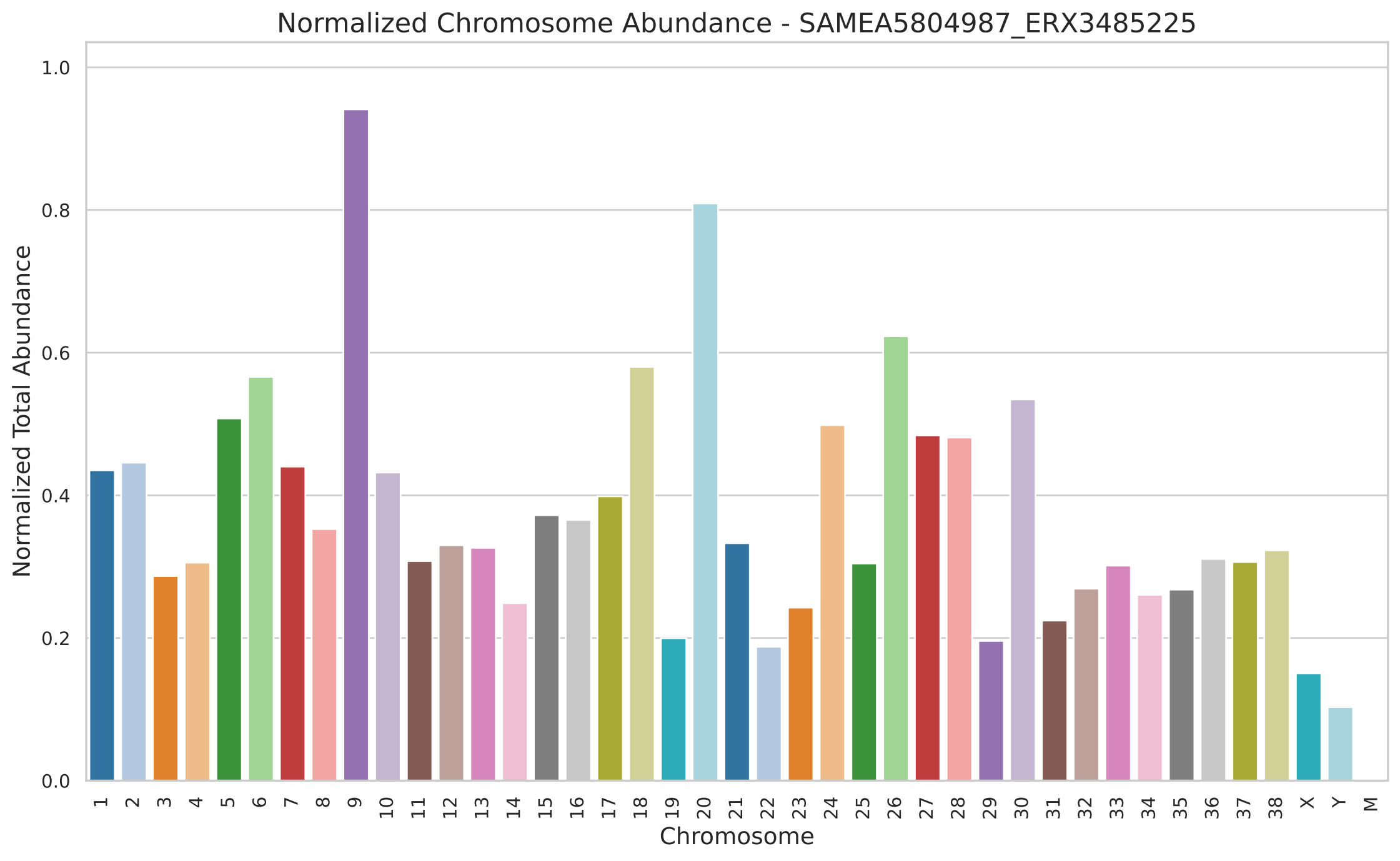

Normalized Chromosome Abundance - SAMEA5805013_ERX3485251
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

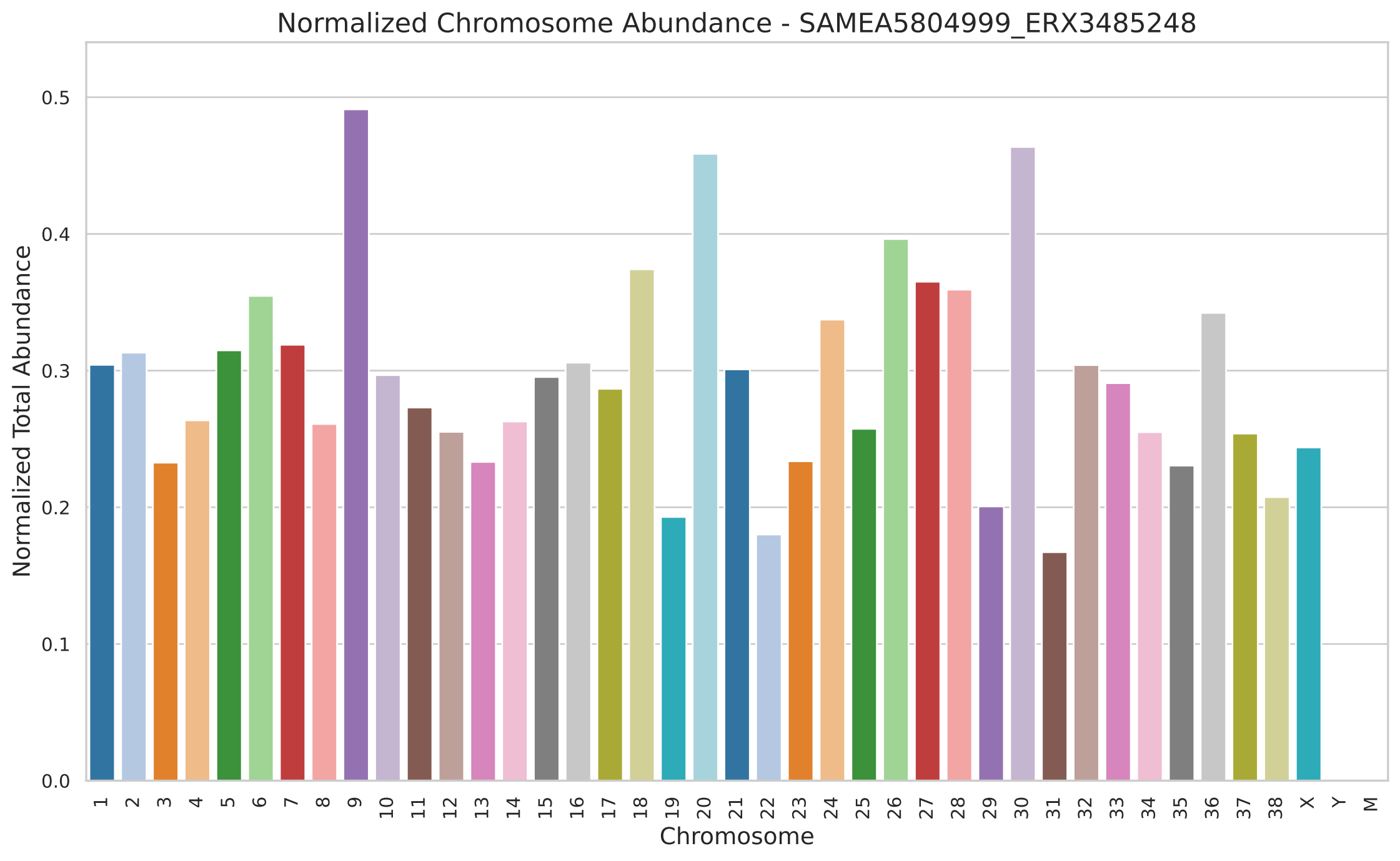

Normalized Chromosome Abundance - SAMEA5805024_ERX3485273
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

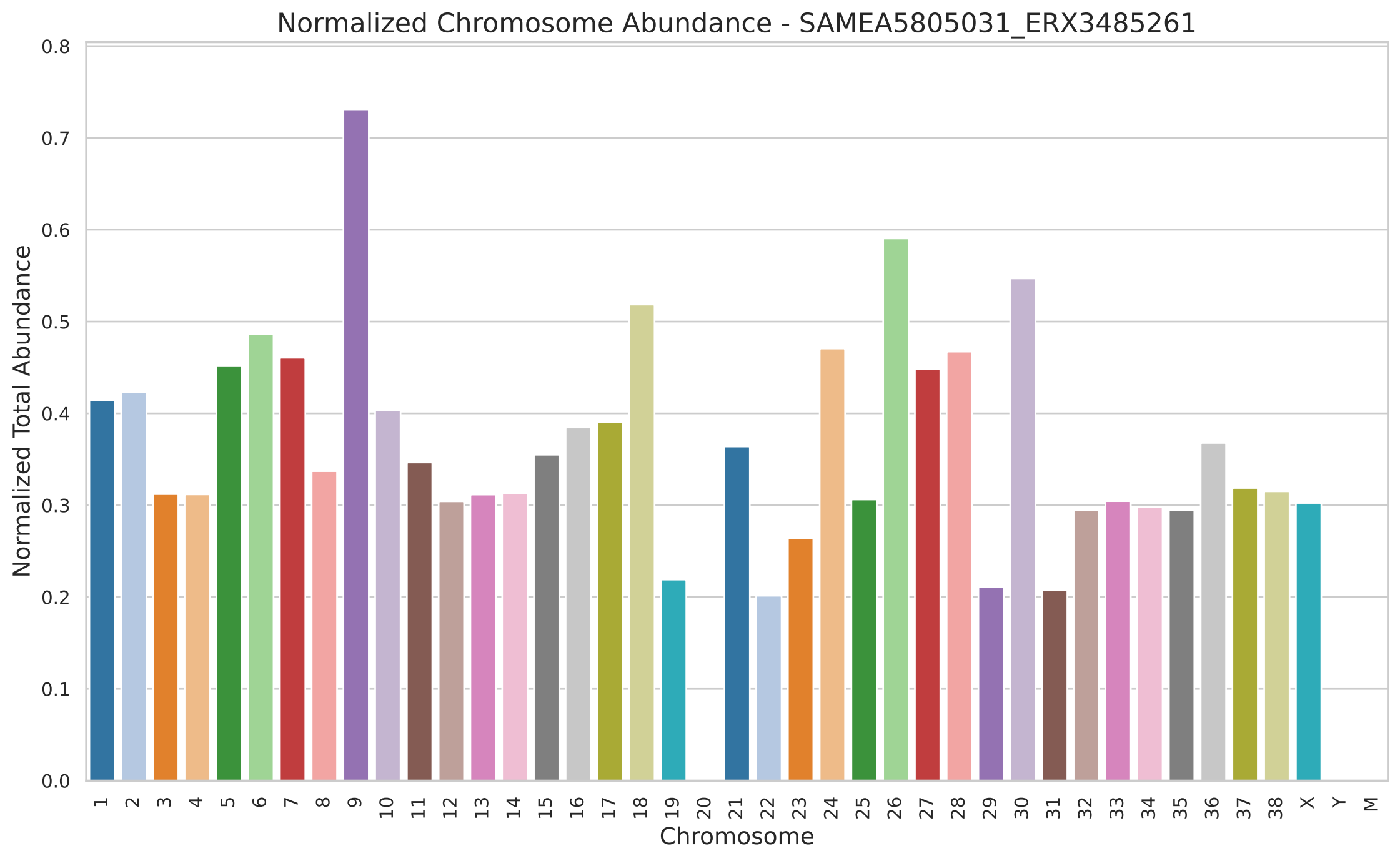

Normalized Chromosome Abundance - SAMEA5804988_ERX3485226
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

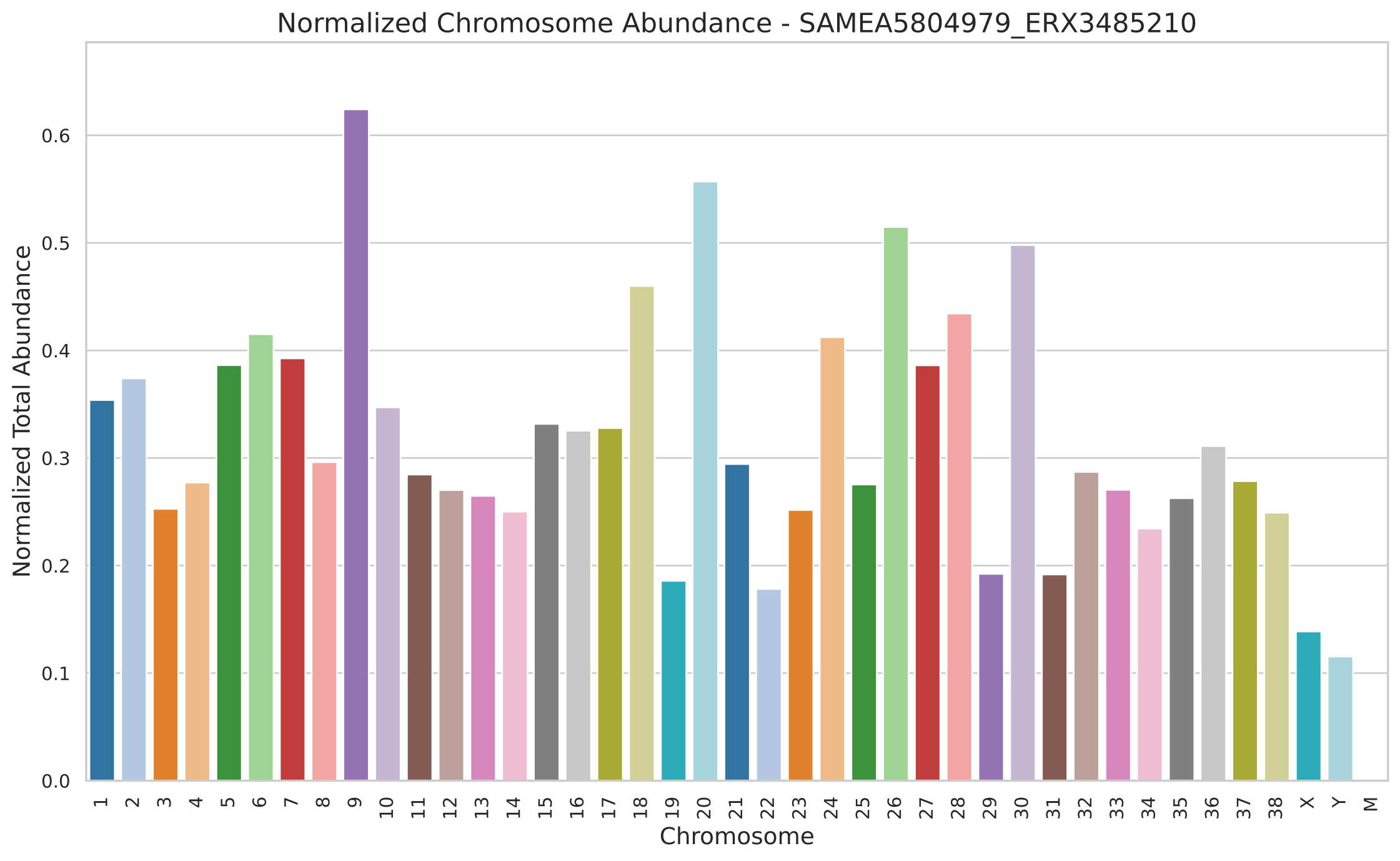

Normalized Chromosome Abundance - SAMEA5804969_ERX3485235
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

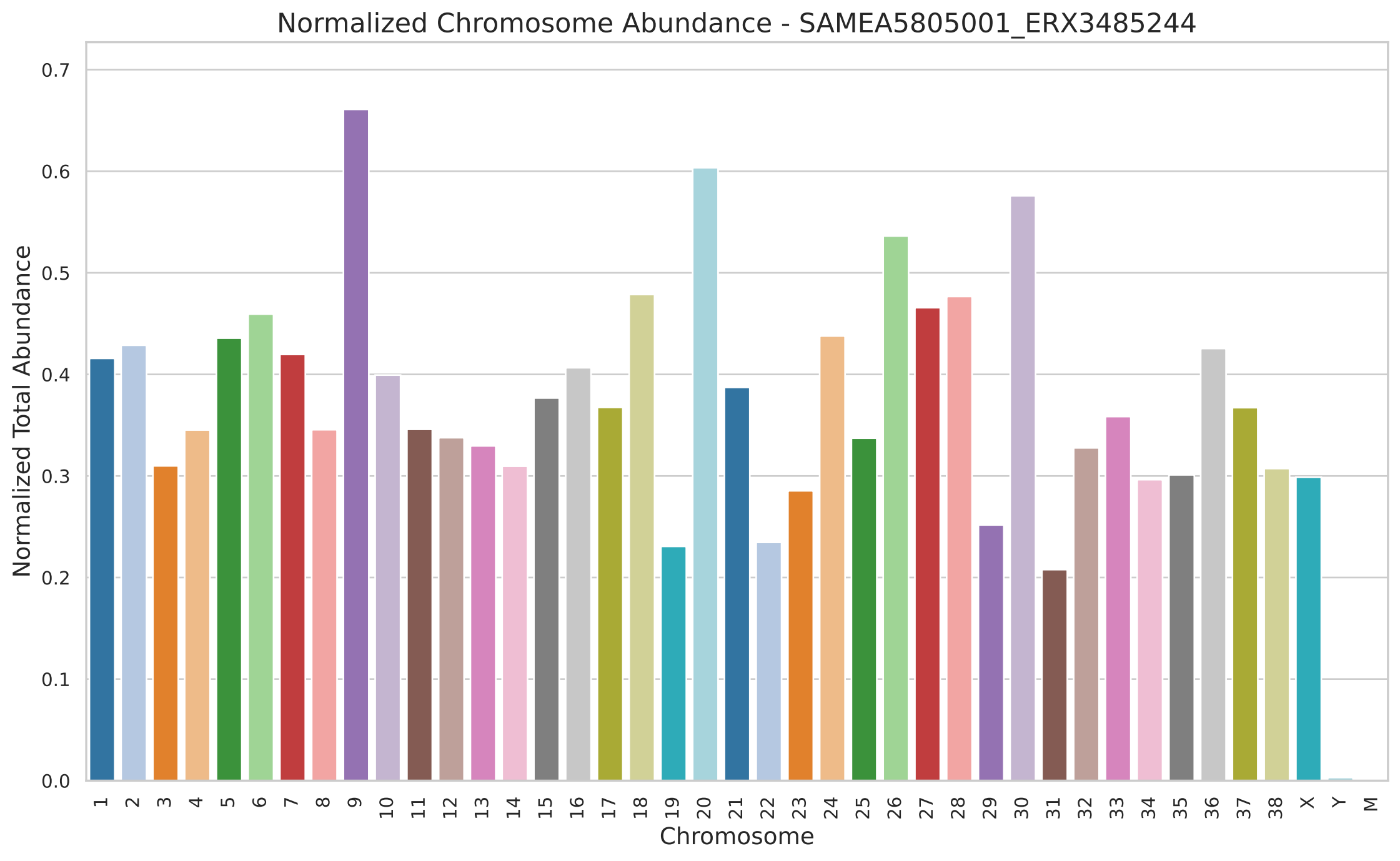

Normalized Chromosome Abundance - SAMEA5804987_ERX3485240
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

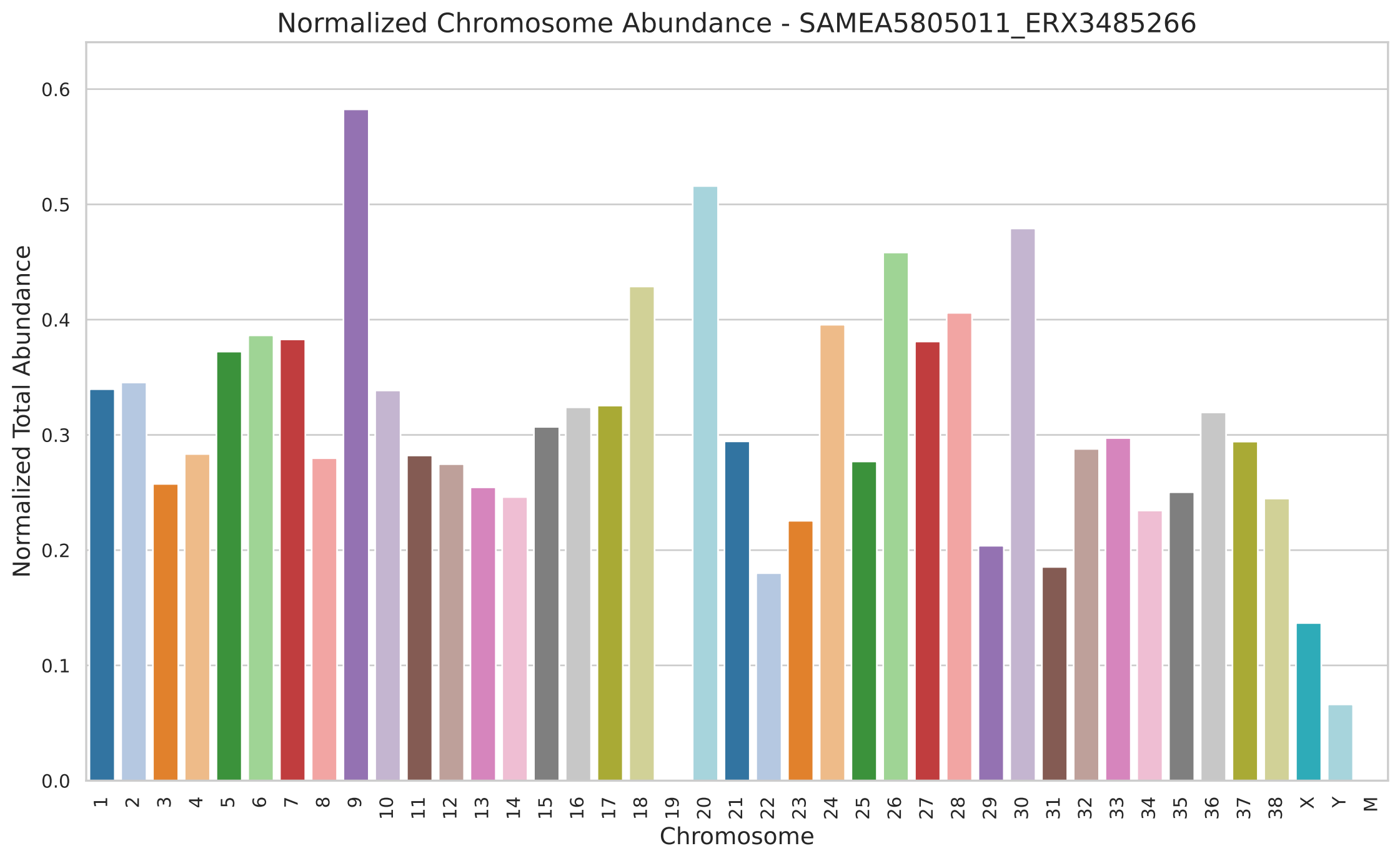

Normalized Chromosome Abundance - SAMEA5804987_ERX3485225
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

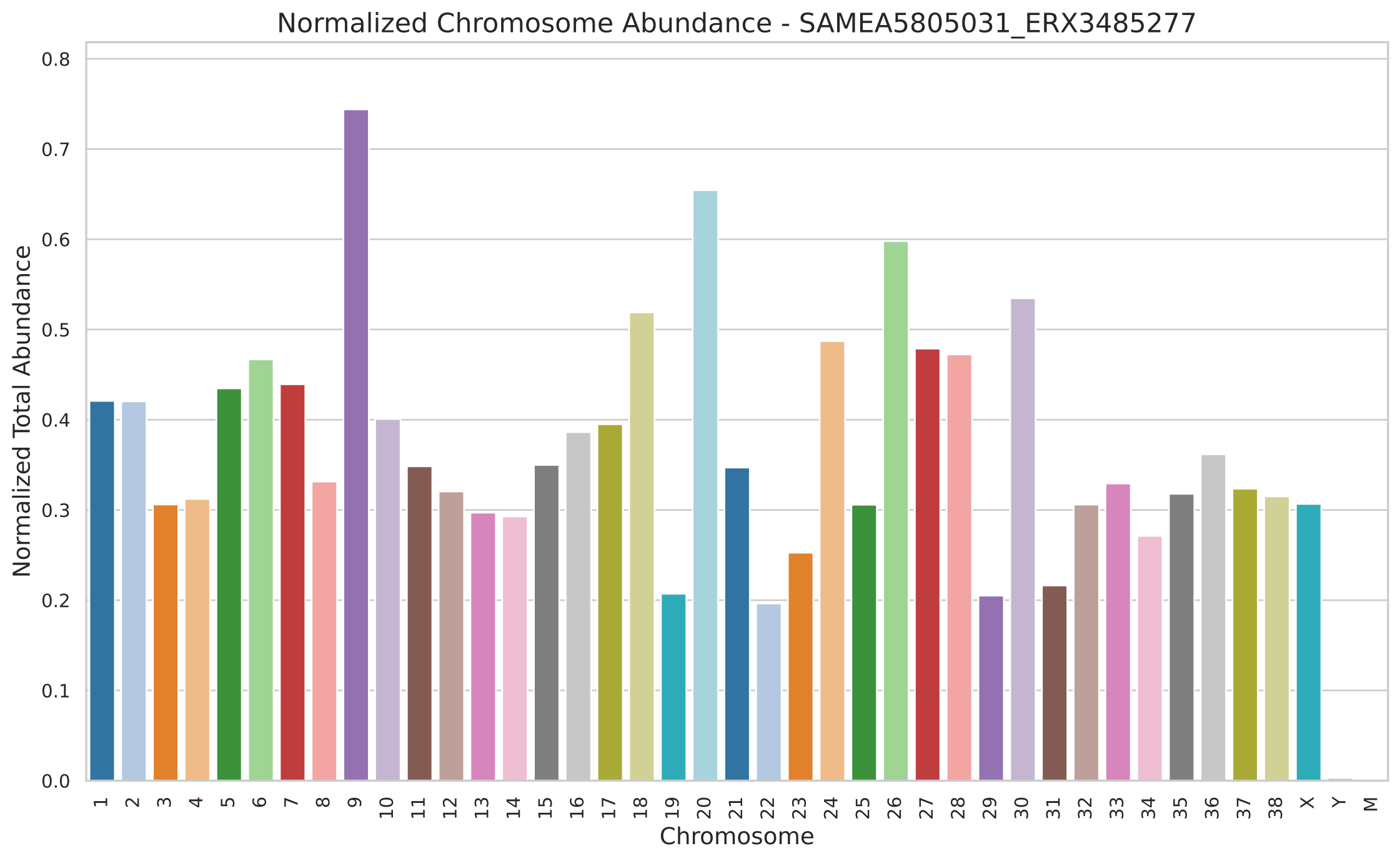

Normalized Chromosome Abundance - SAMEA5804999_ERX3485248
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

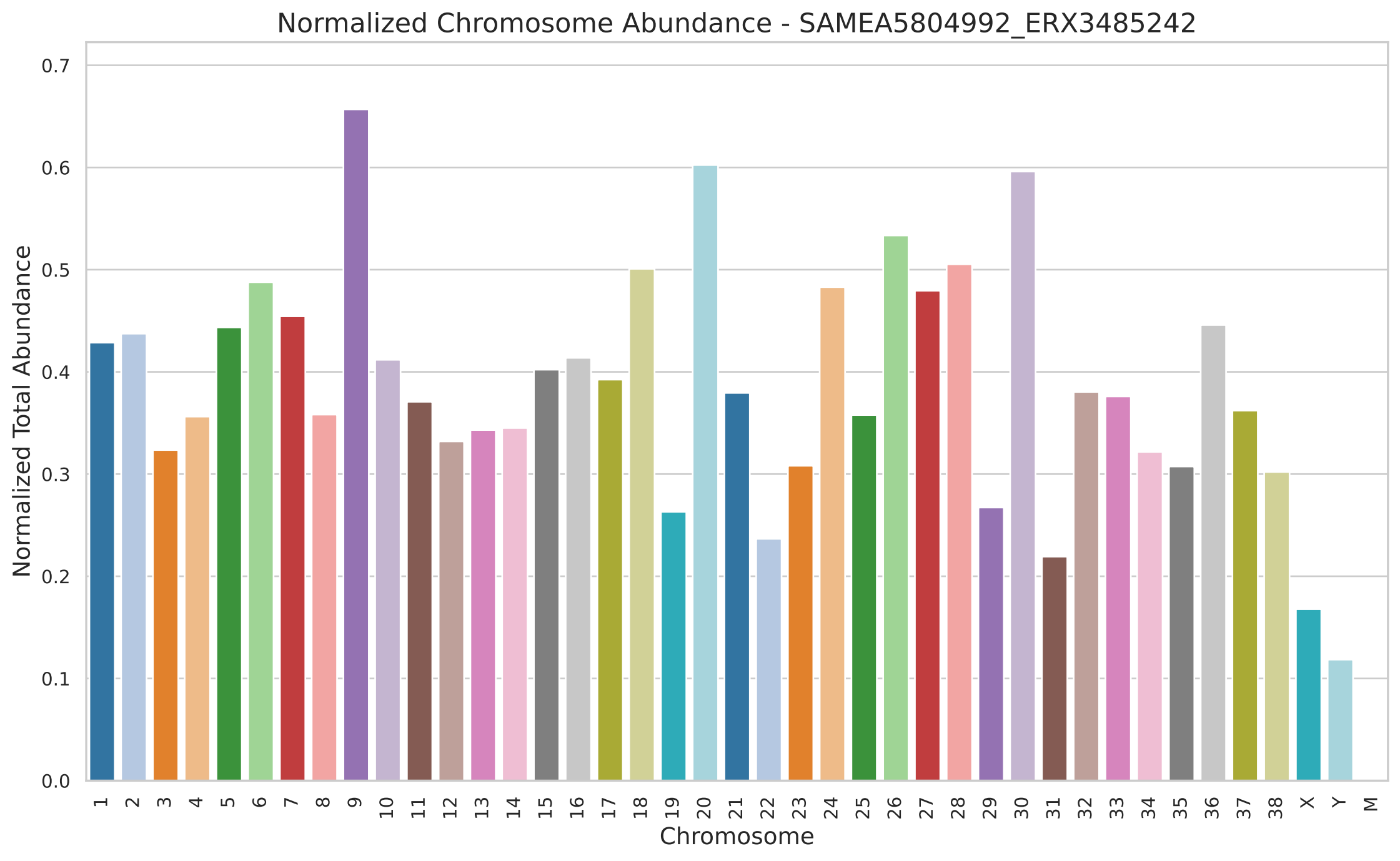

Normalized Chromosome Abundance - SAMEA5805031_ERX3485261
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

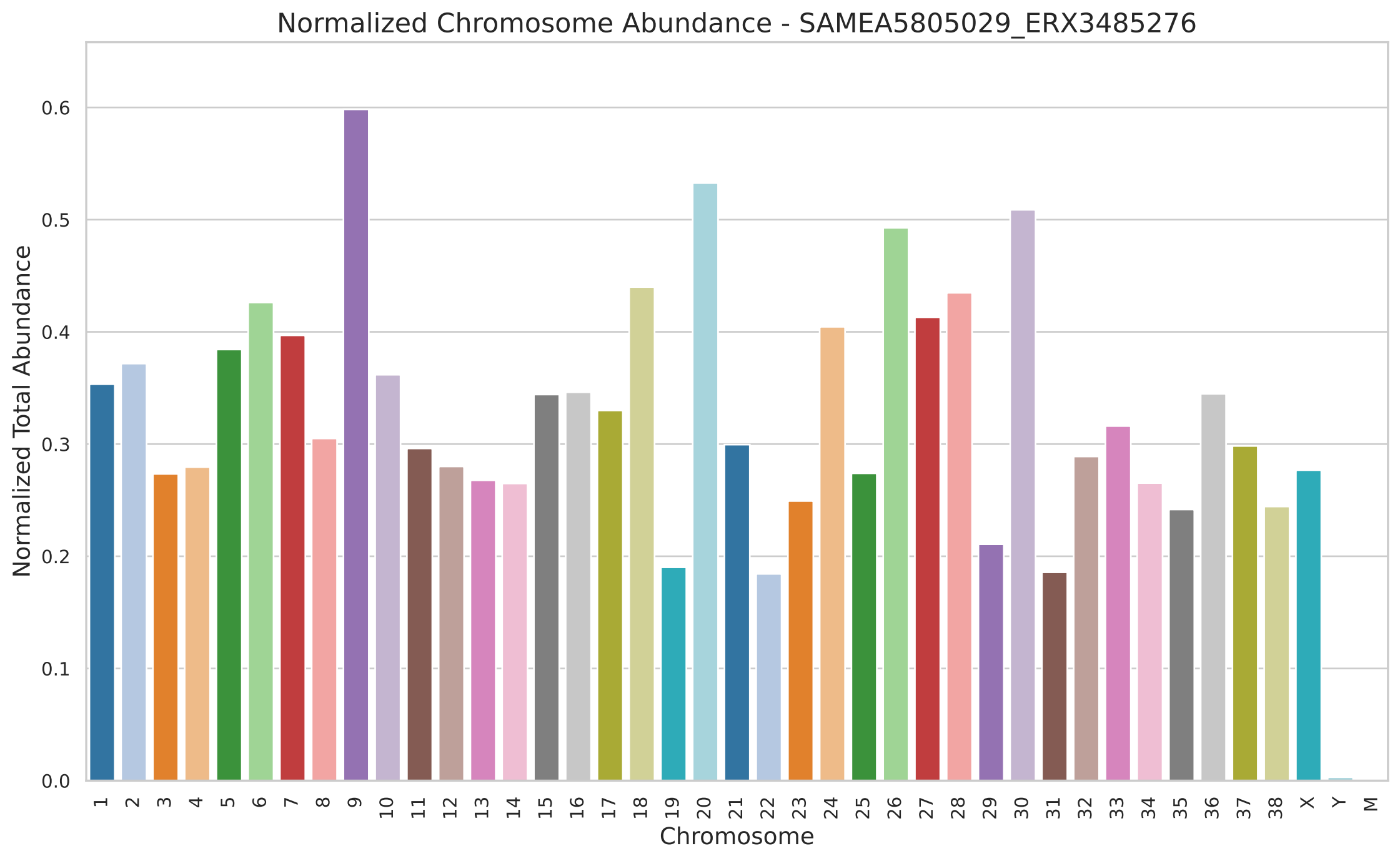

Normalized Chromosome Abundance - SAMEA5804979_ERX3485210
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

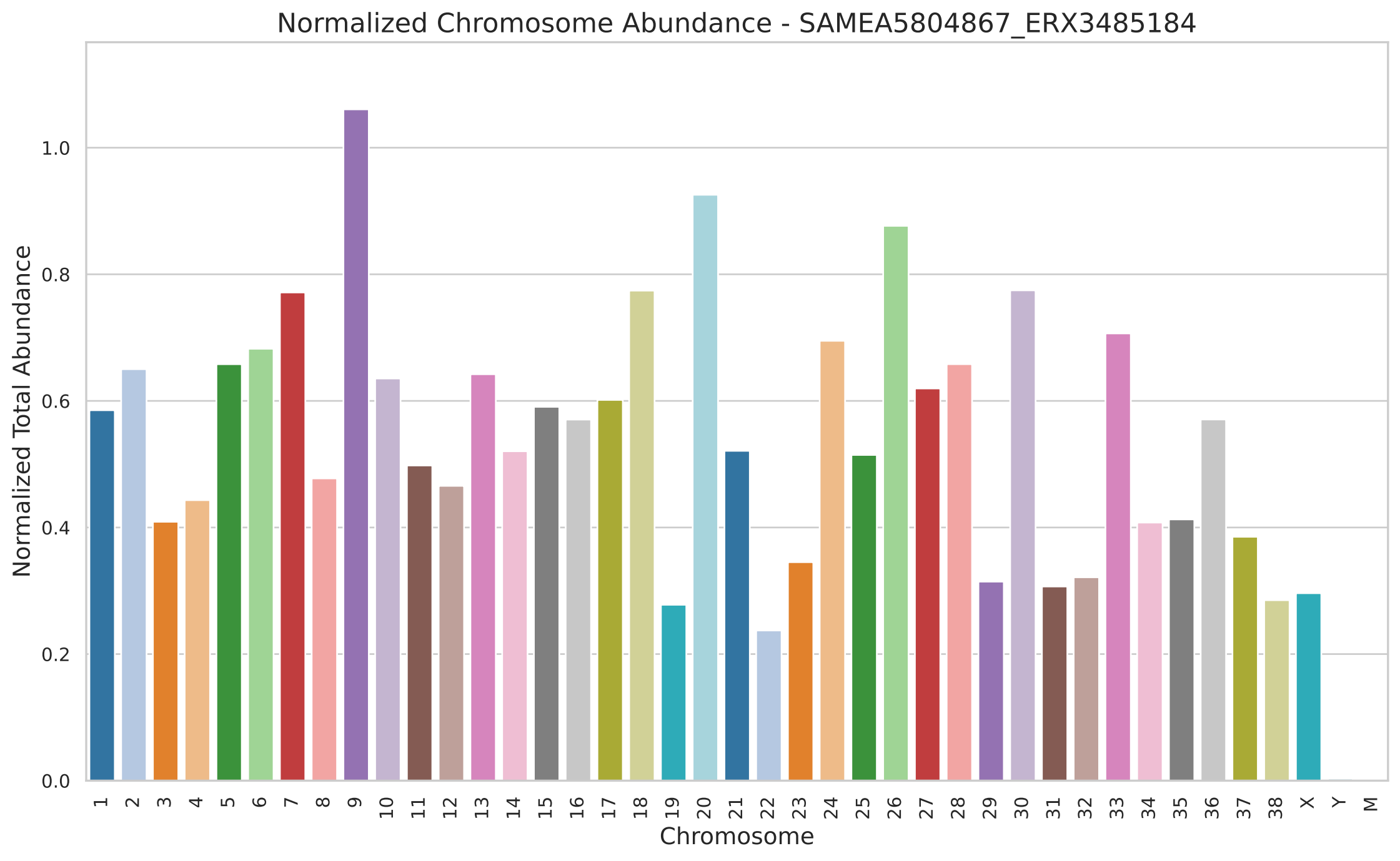

Normalized Chromosome Abundance - SAMEA5805001_ERX3485244
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

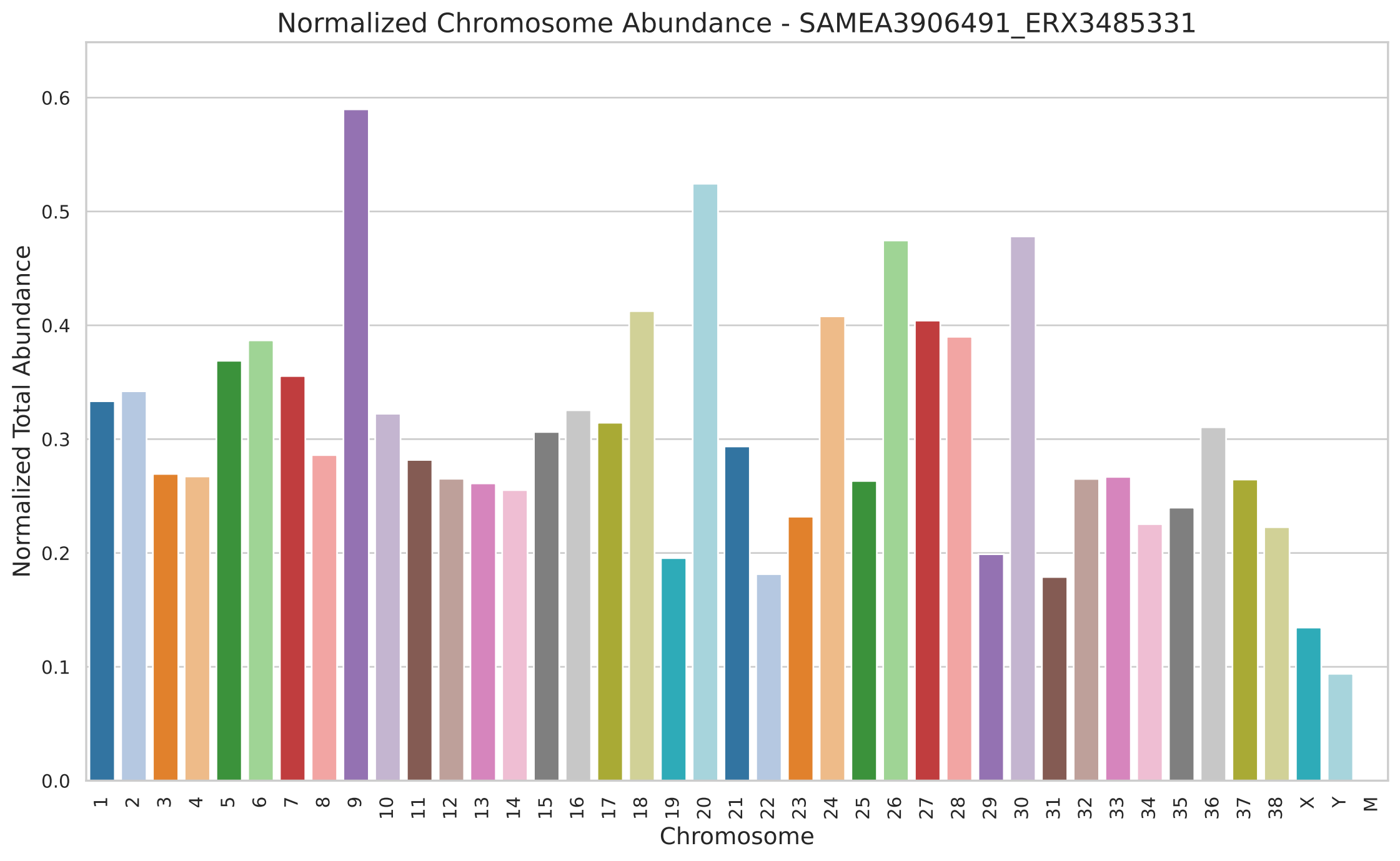

Normalized Chromosome Abundance - SAMEA5805011_ERX3485266
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

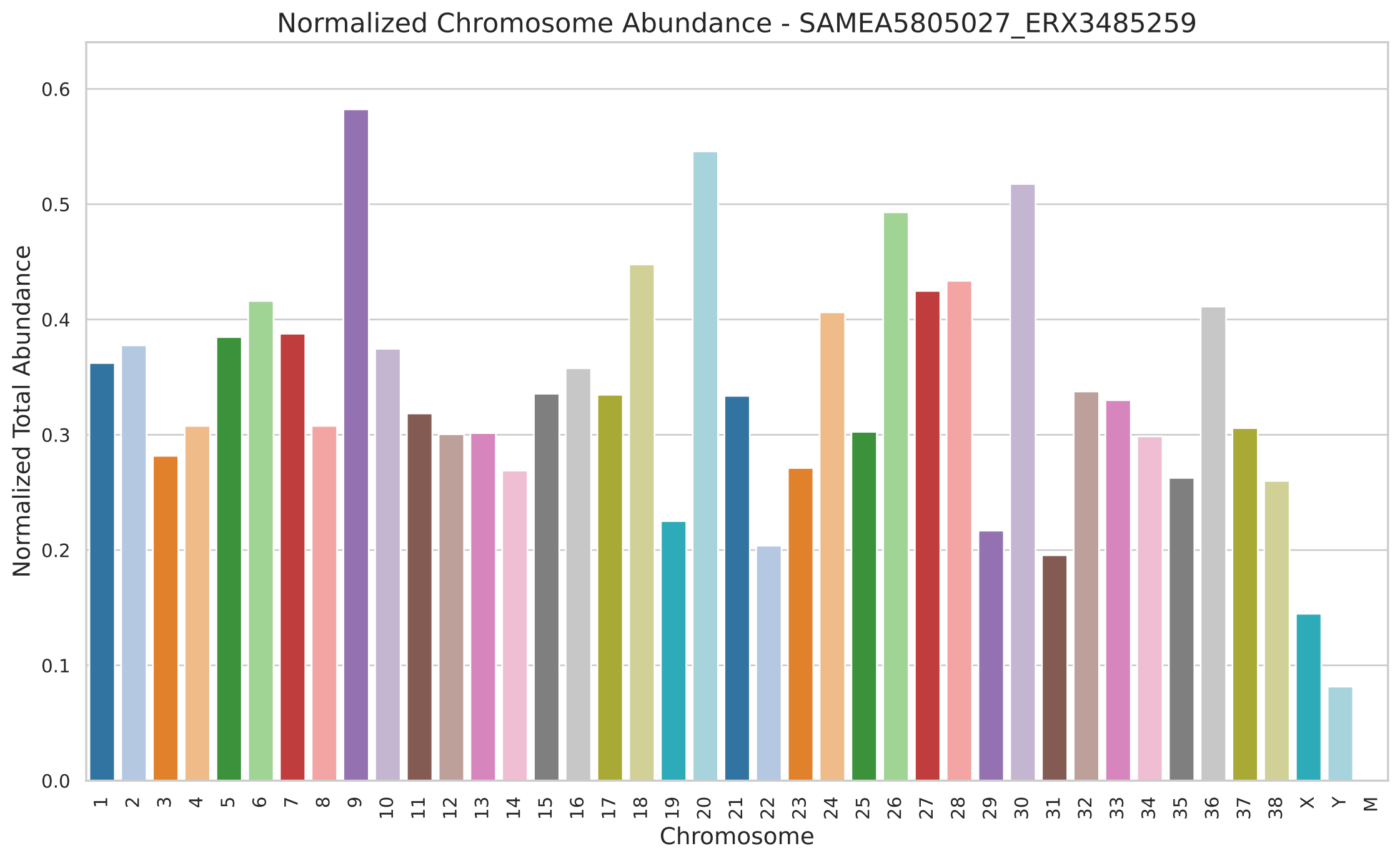

Normalized Chromosome Abundance - SAMEA5805031_ERX3485277
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

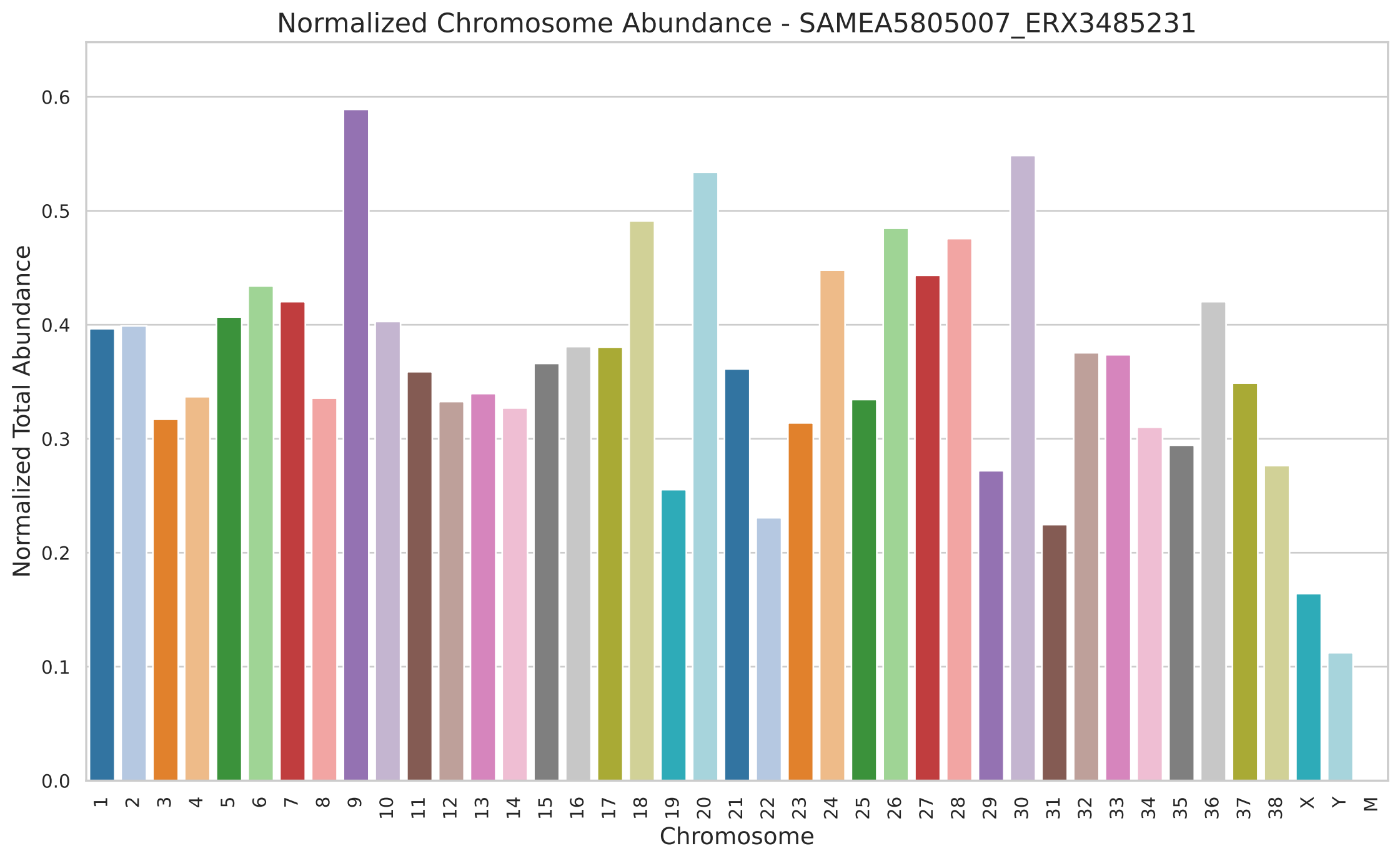

Normalized Chromosome Abundance - SAMEA5804992_ERX3485242
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

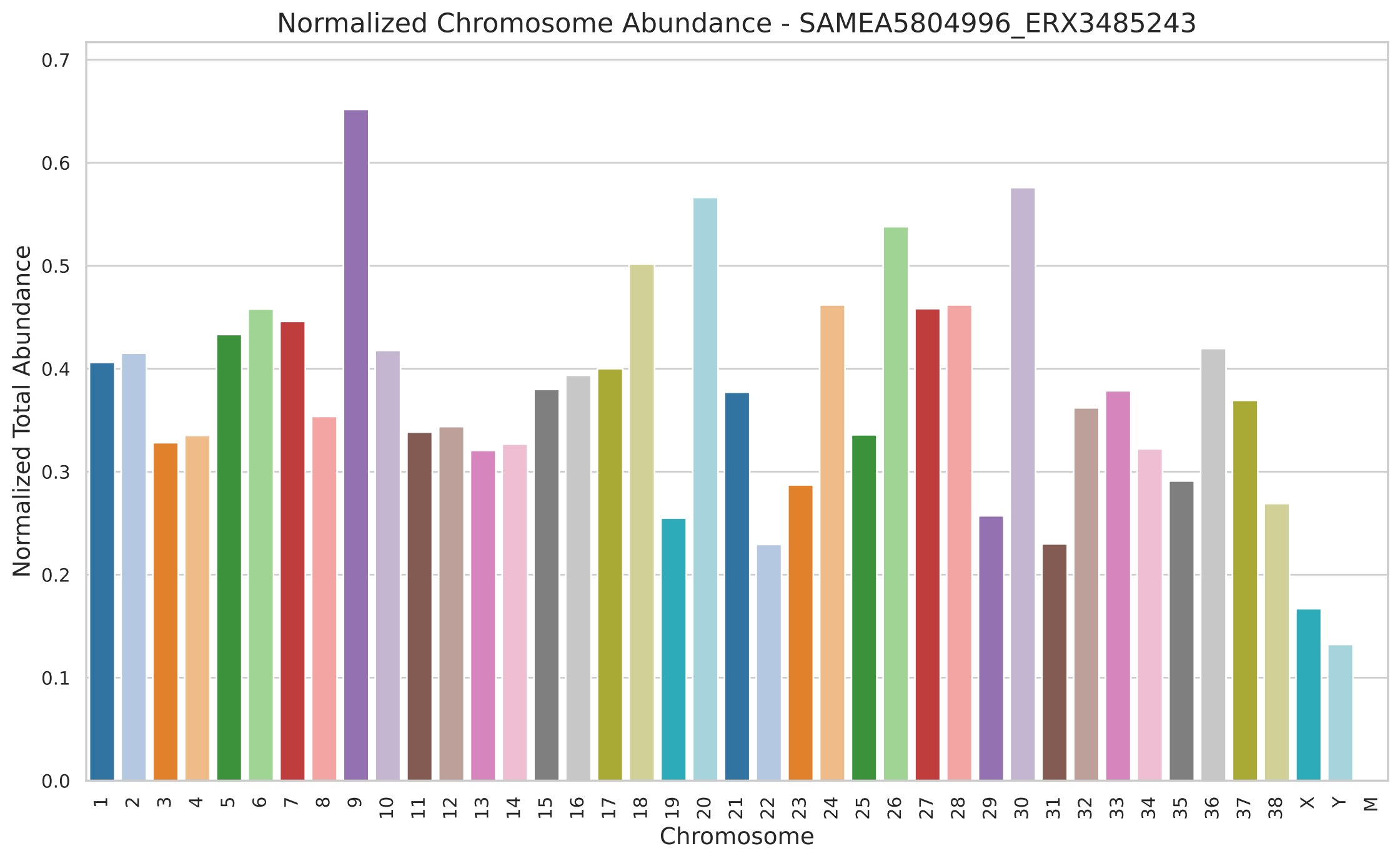

Normalized Chromosome Abundance - SAMEA5805029_ERX3485276
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

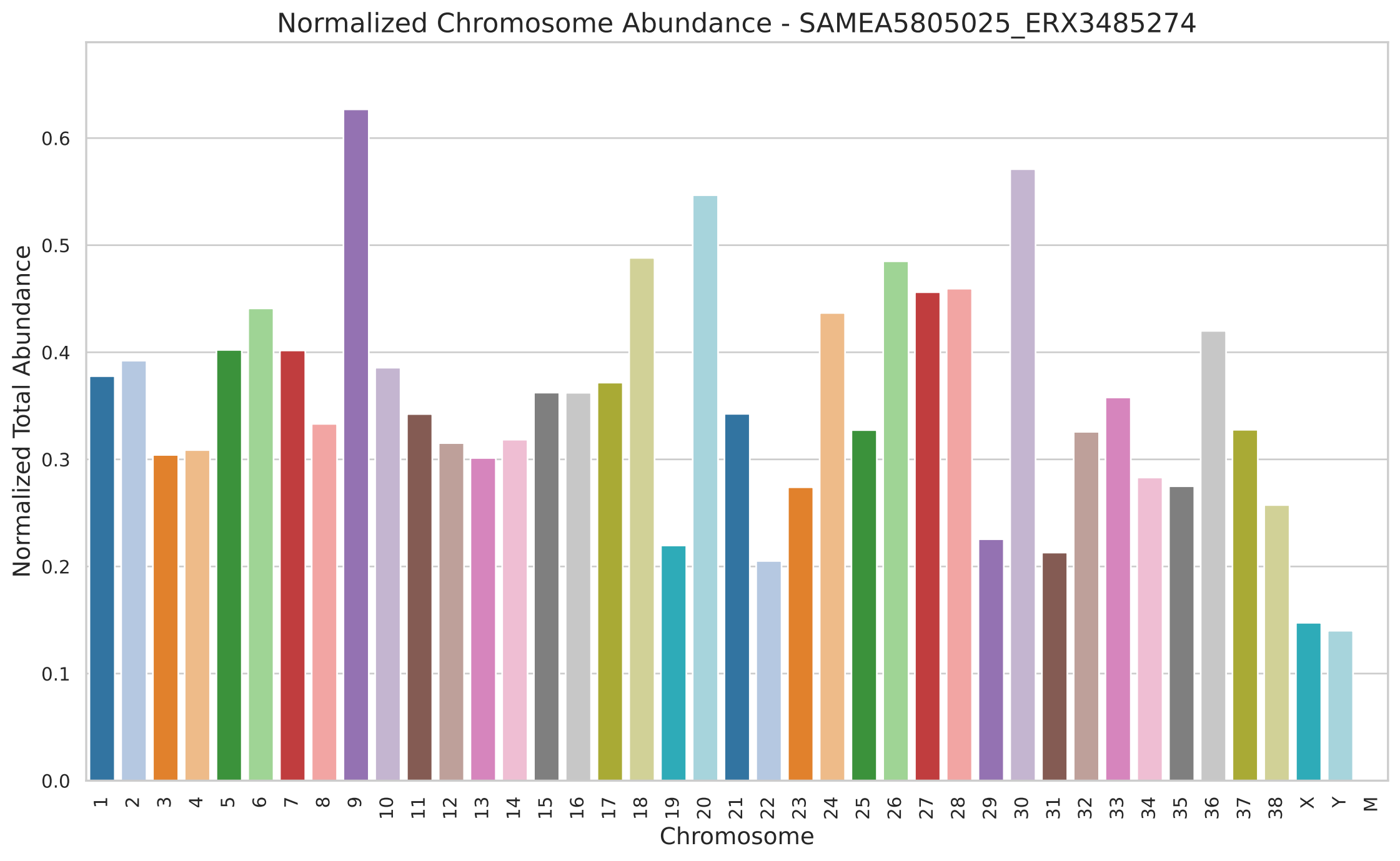

Normalized Chromosome Abundance - SAMEA5804867_ERX3485184
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

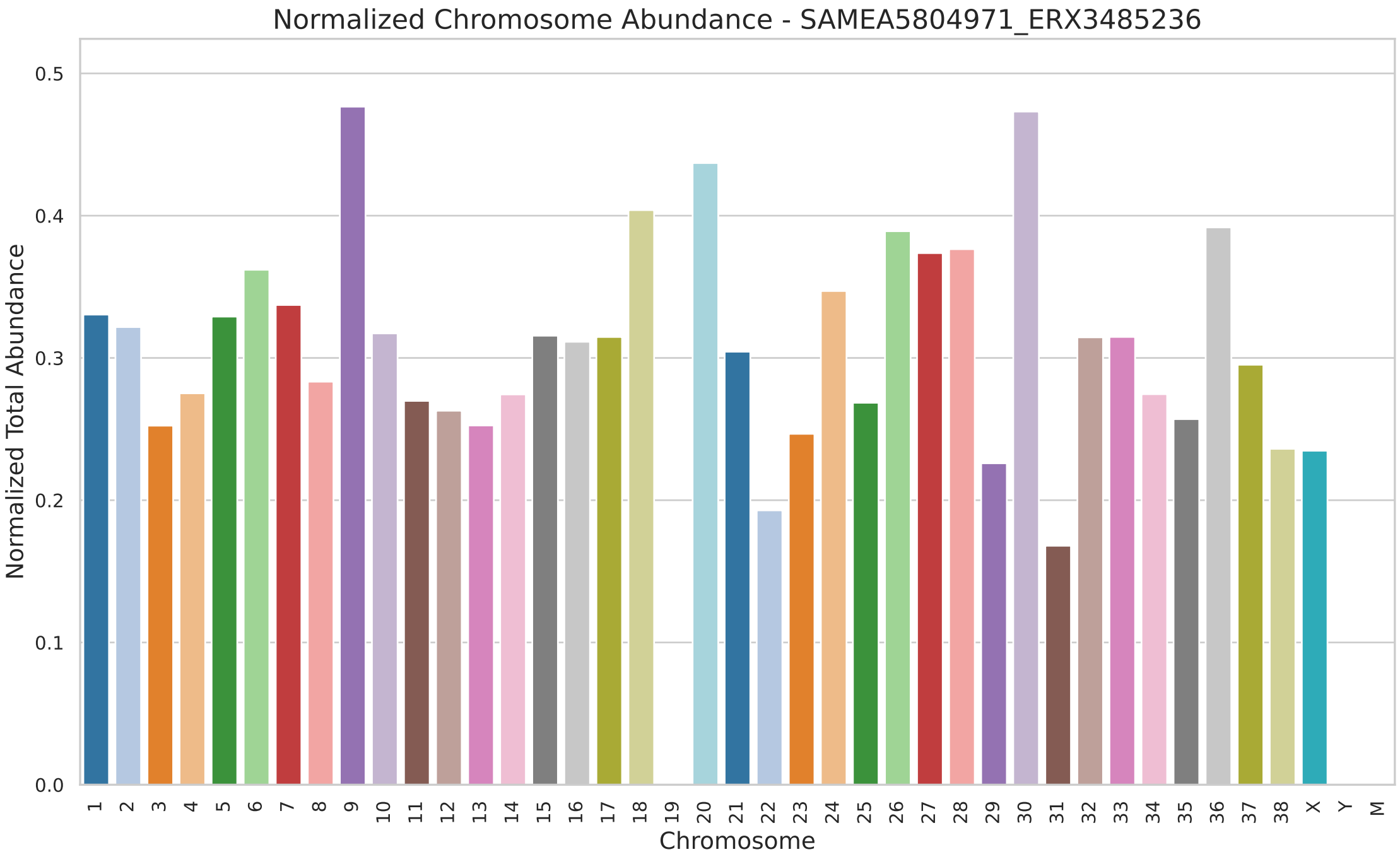

Normalized Chromosome Abundance - SAMEA3906491_ERX3485331
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

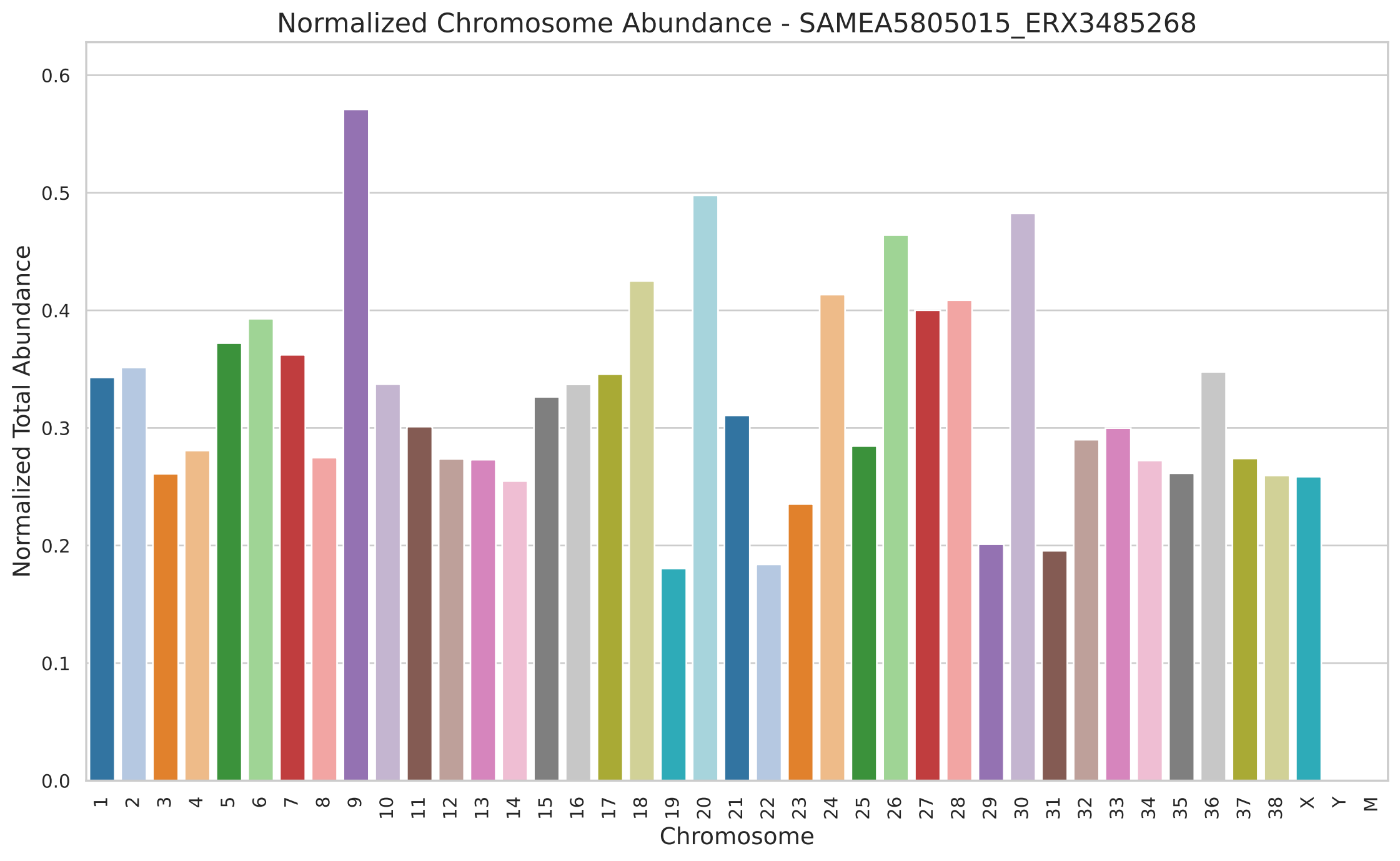

Normalized Chromosome Abundance - SAMEA5805027_ERX3485259
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

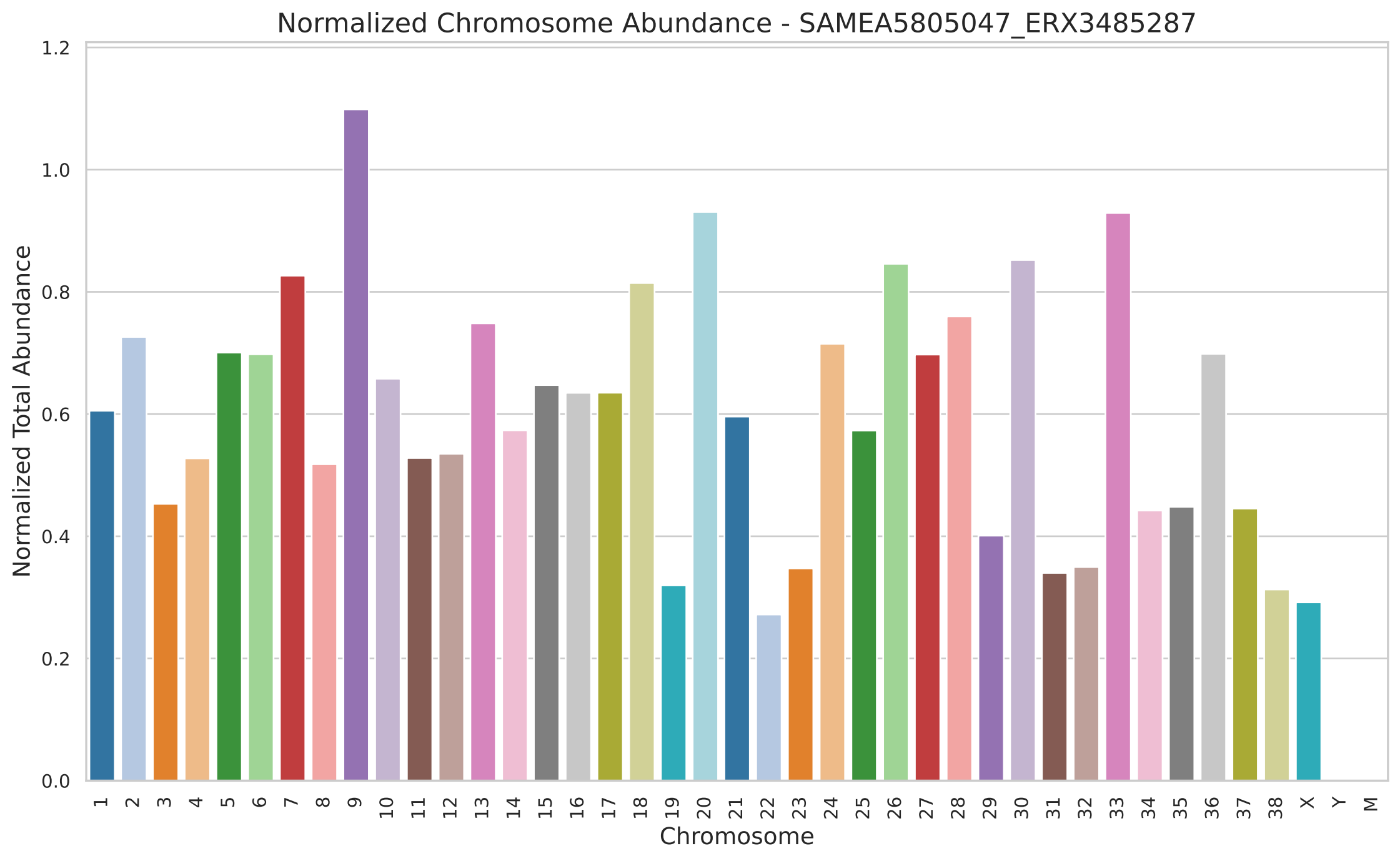

Normalized Chromosome Abundance - SAMEA5805007_ERX3485231
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

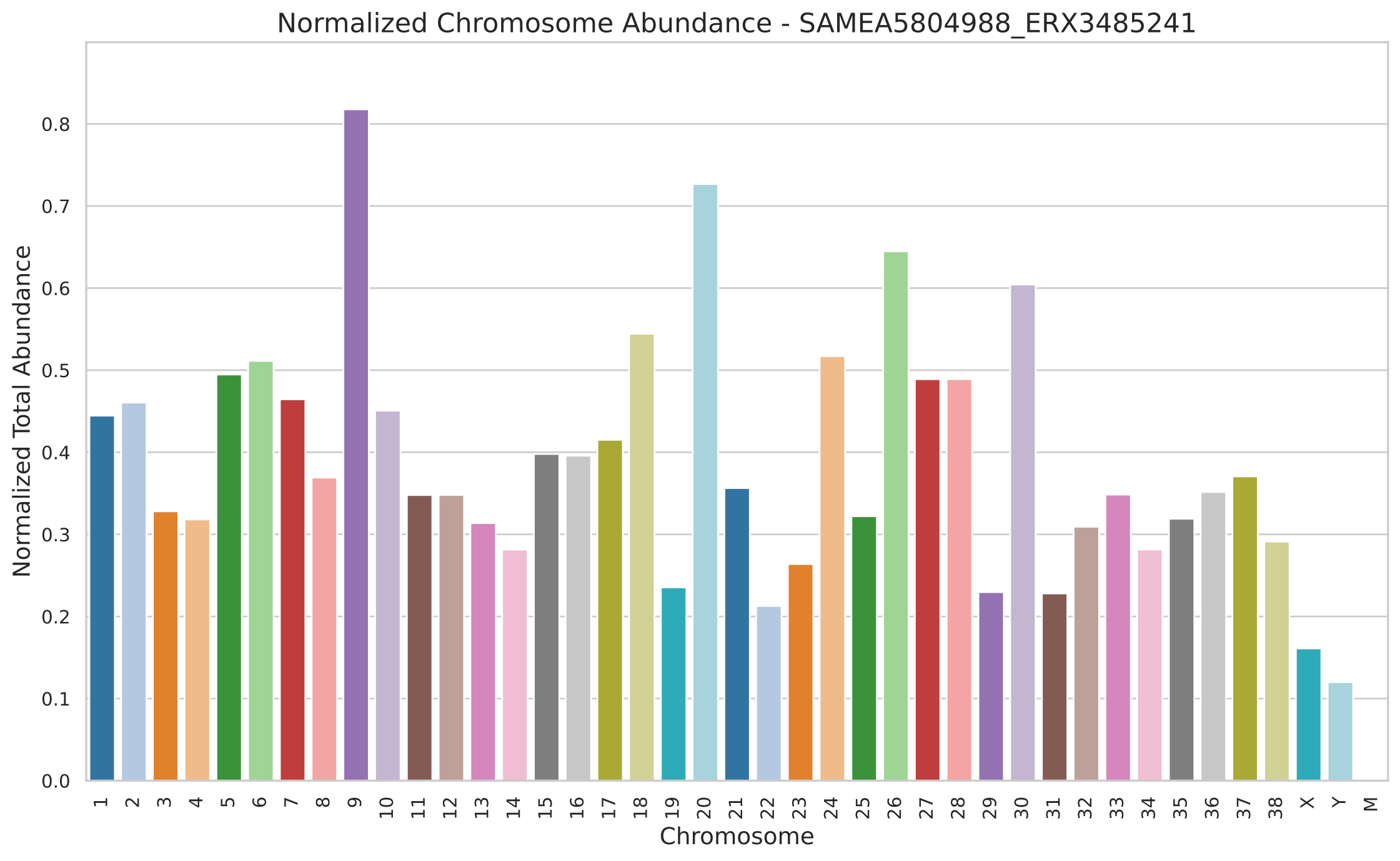

Normalized Chromosome Abundance - SAMEA5804996_ERX3485243
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

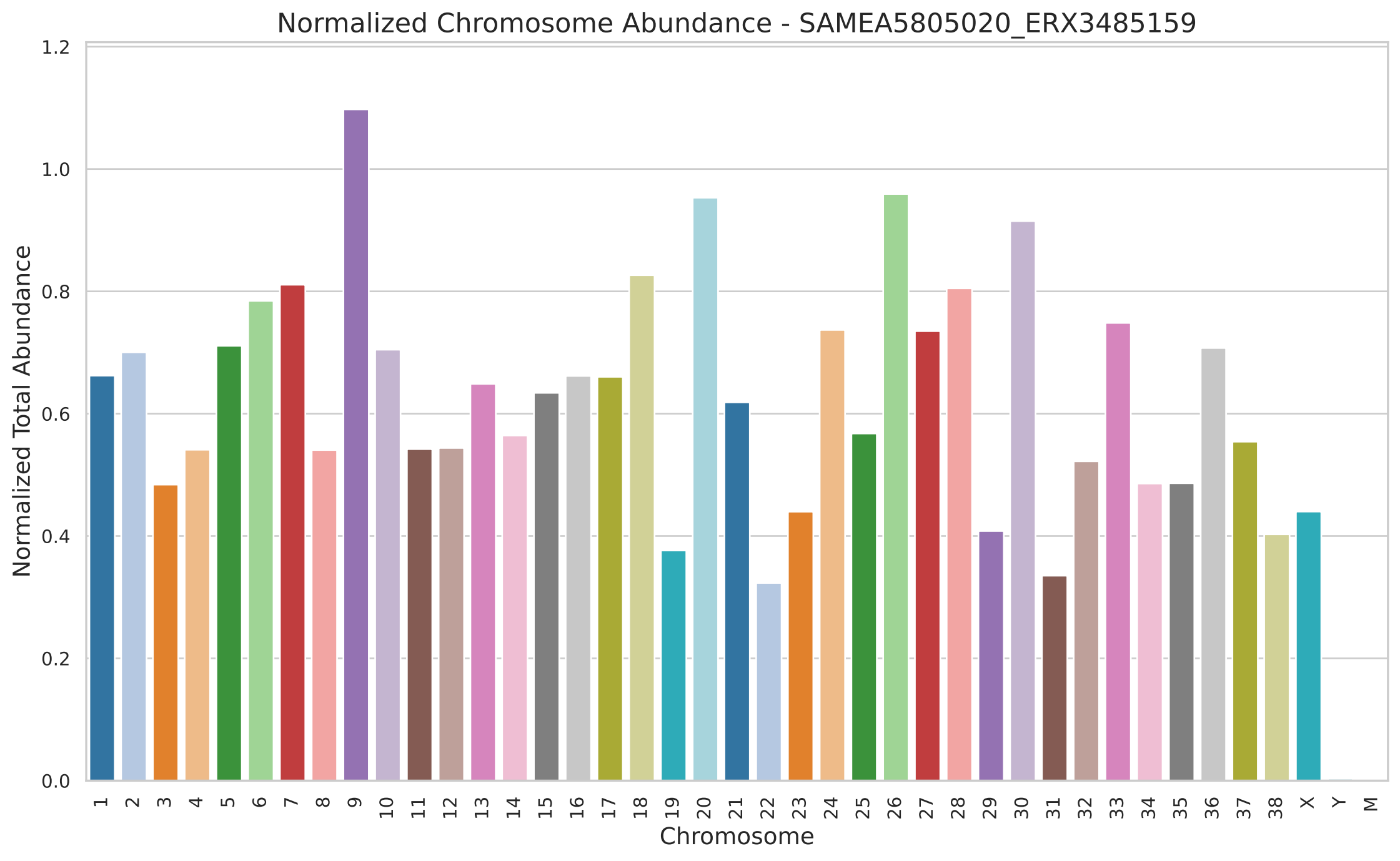

Normalized Chromosome Abundance - SAMEA5805025_ERX3485274
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

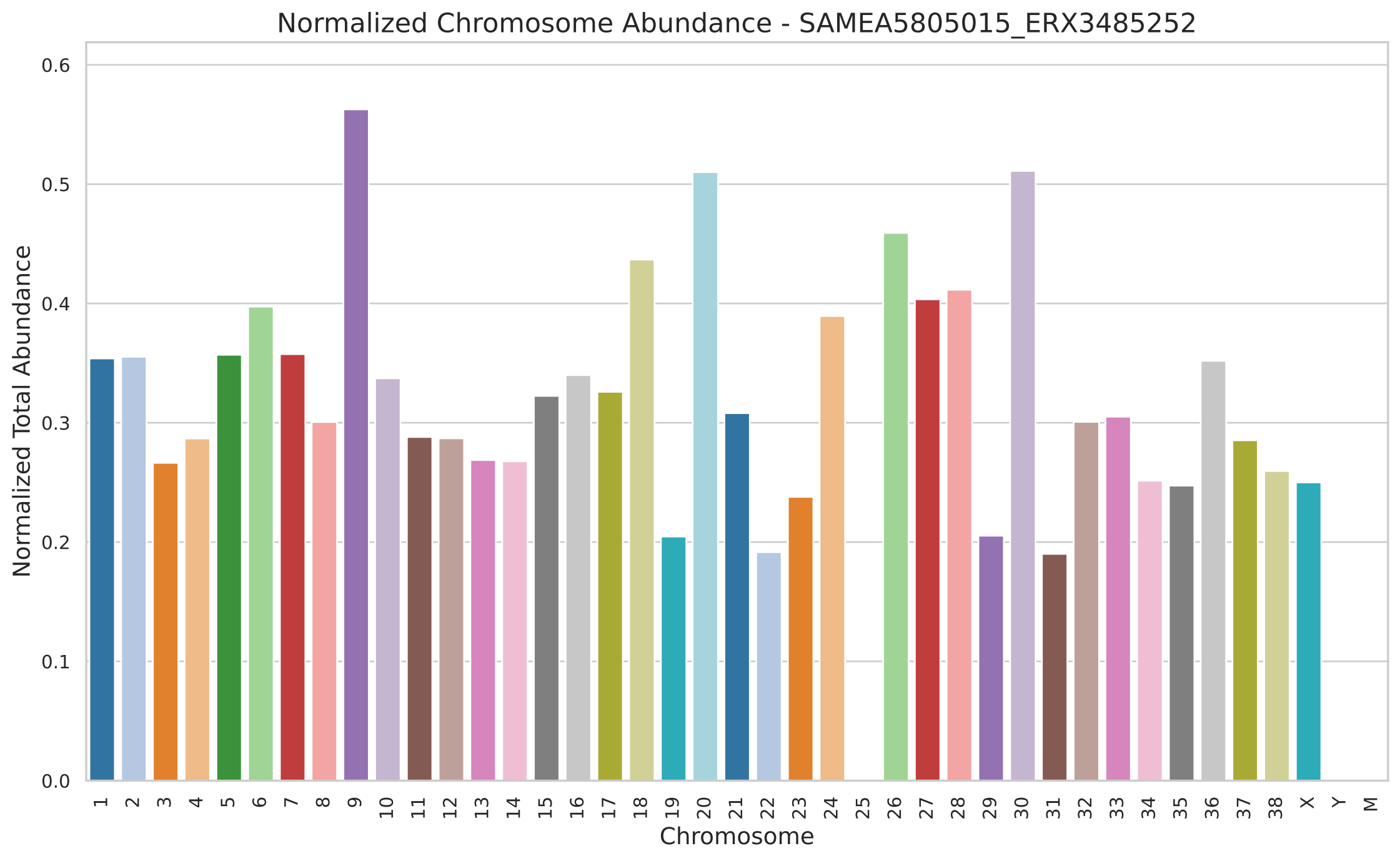

Normalized Chromosome Abundance - SAMEA5804971_ERX3485236
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

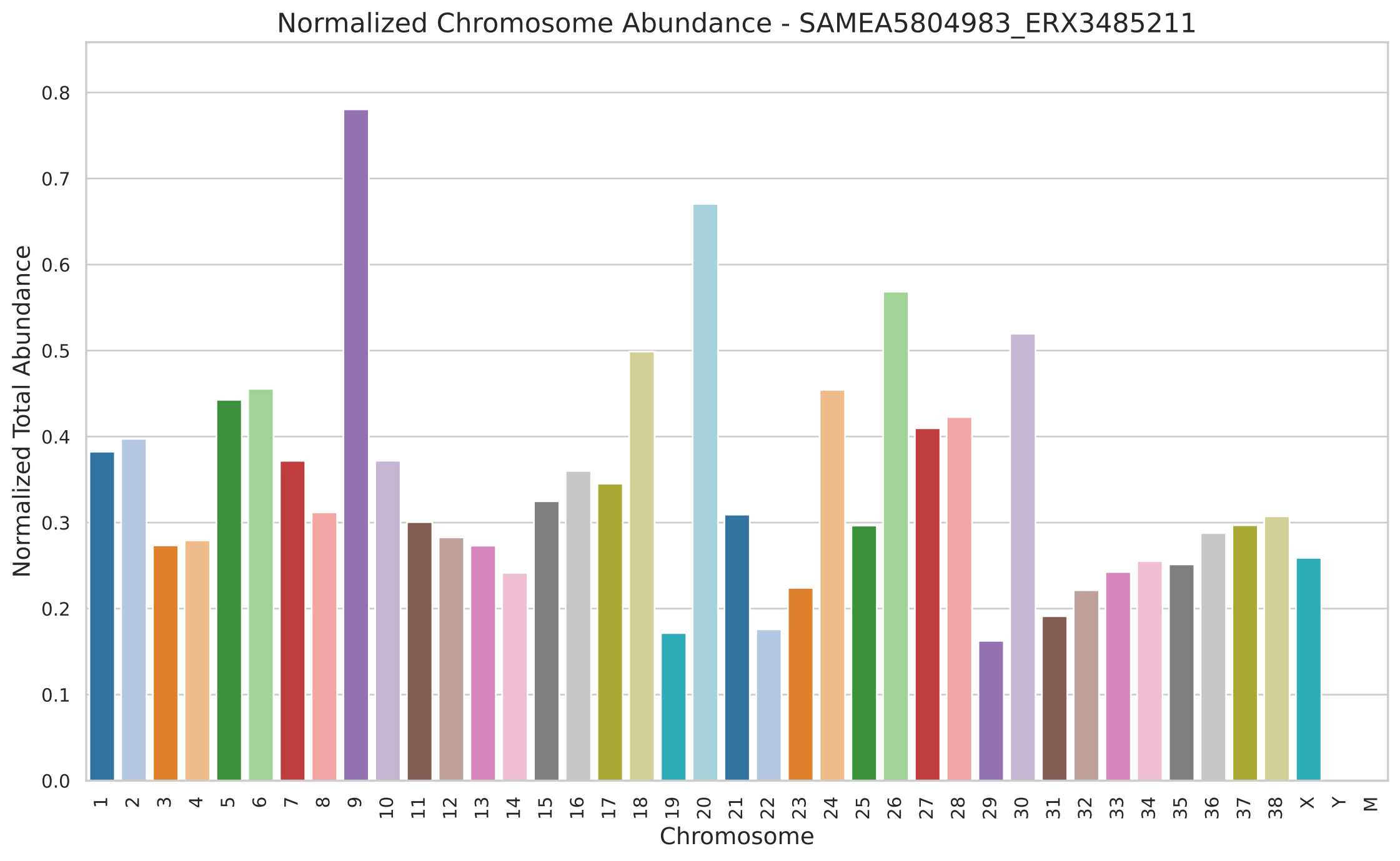

Normalized Chromosome Abundance - SAMEA5805015_ERX3485268
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

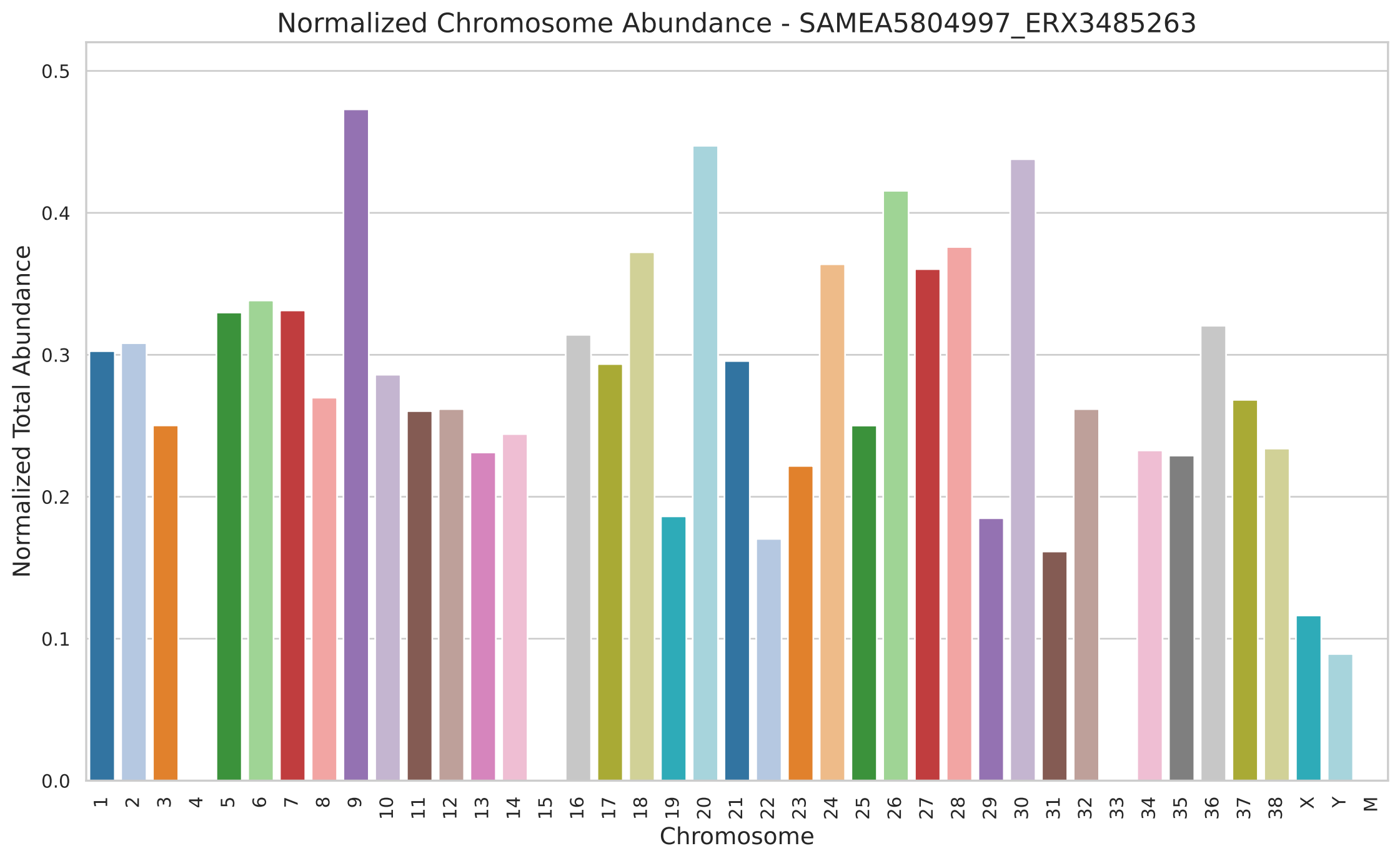

Normalized Chromosome Abundance - SAMEA5805047_ERX3485287
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

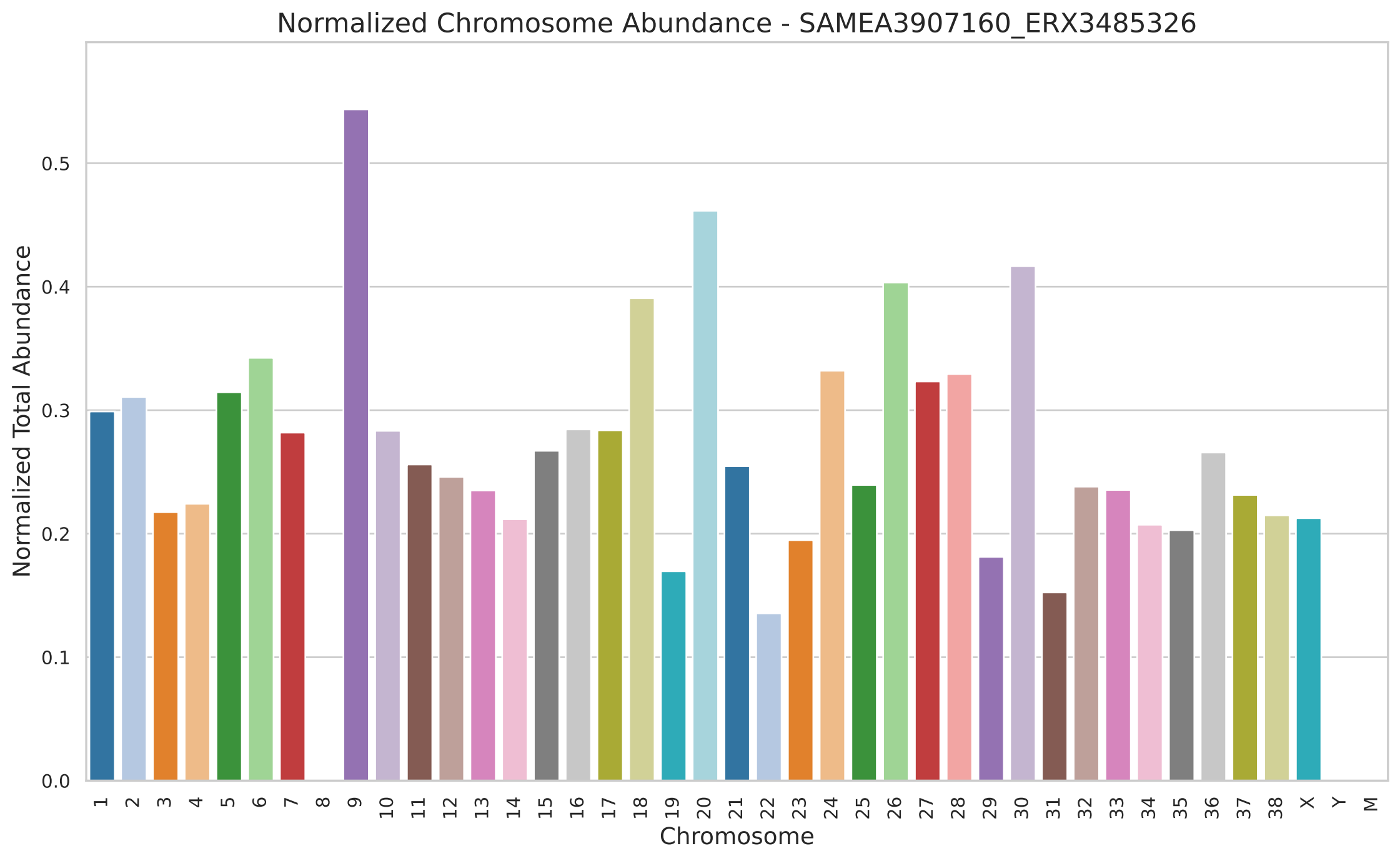

Normalized Chromosome Abundance - SAMEA5804988_ERX3485241
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

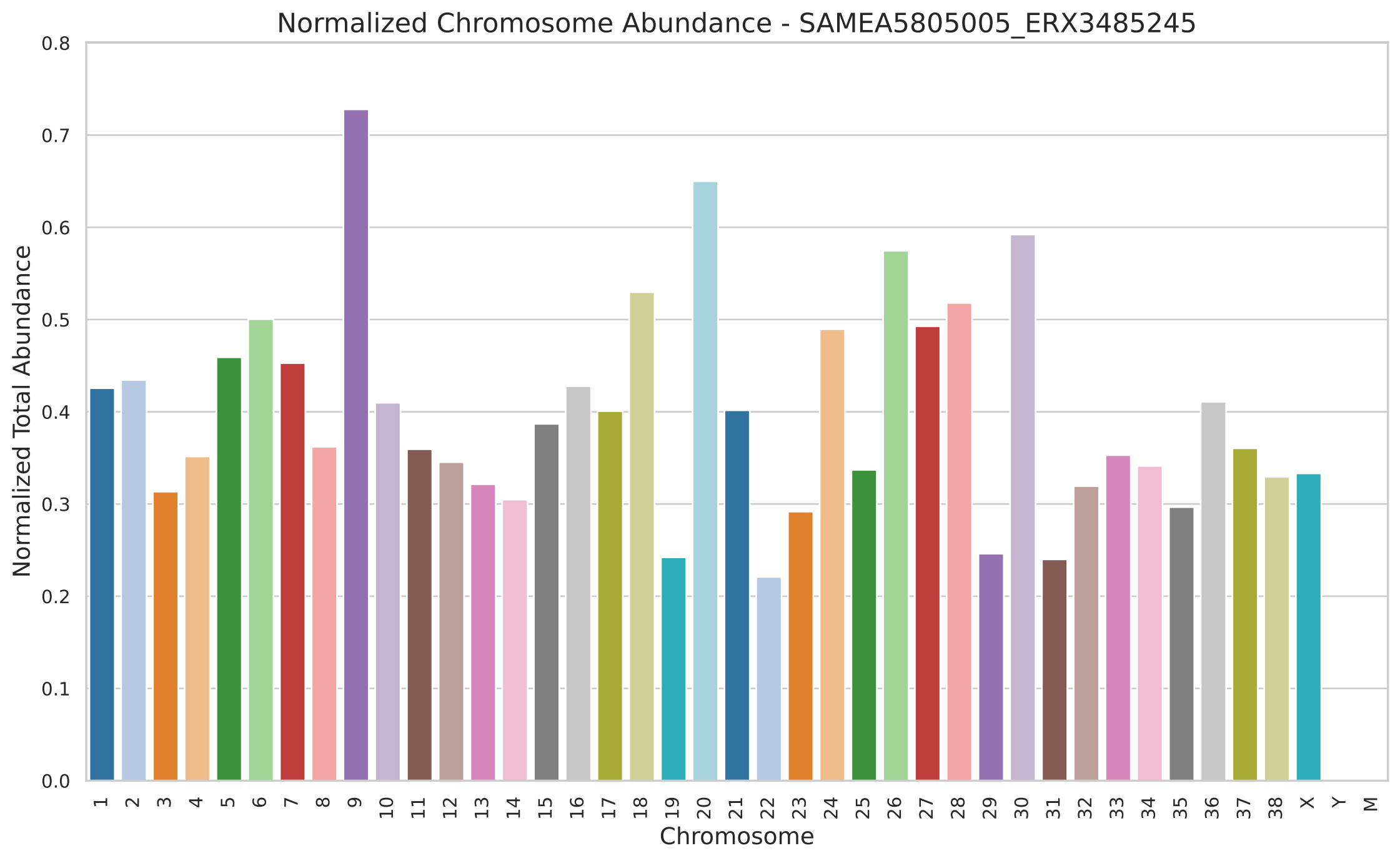

Normalized Chromosome Abundance - SAMEA5805020_ERX3485159
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

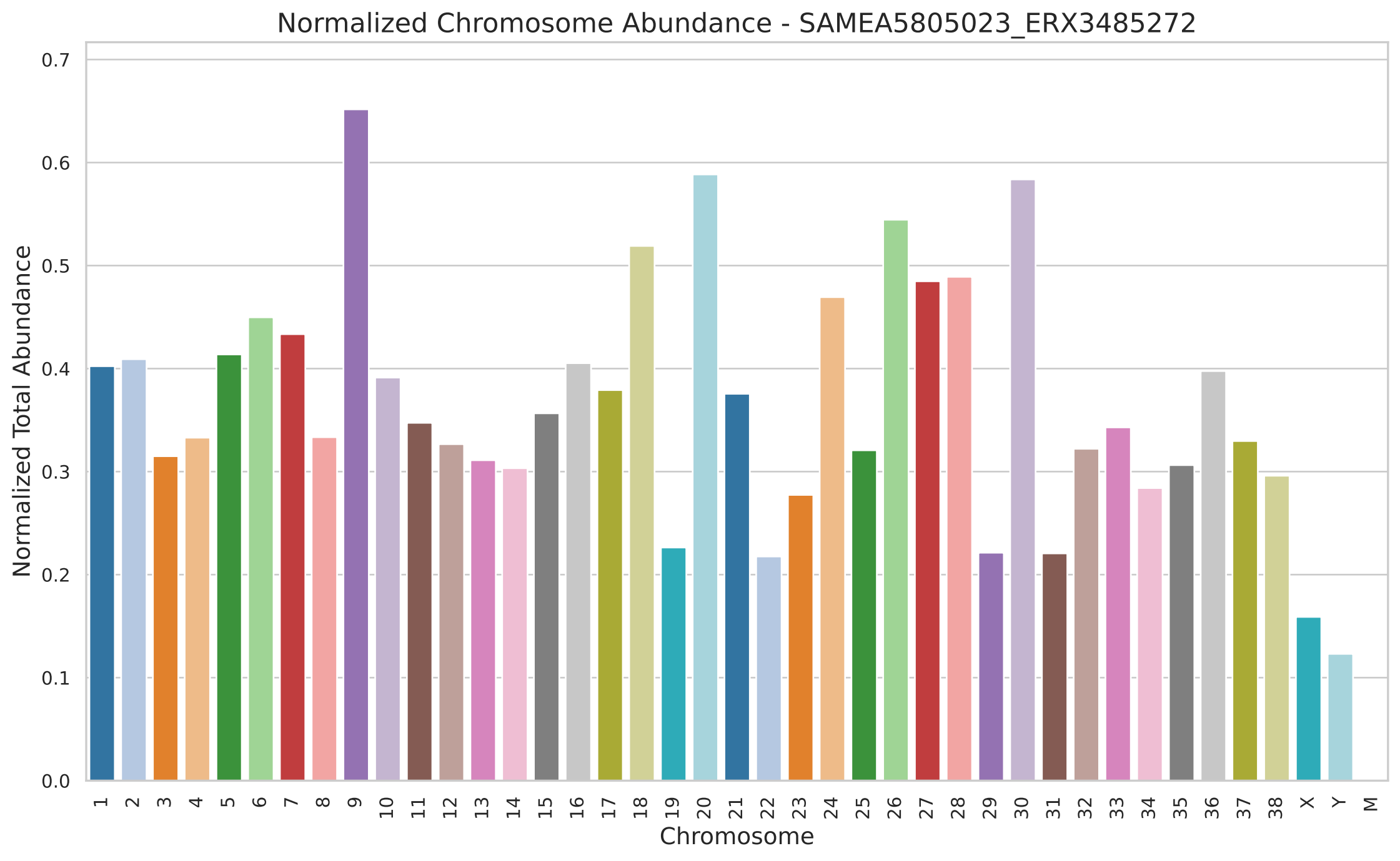

Normalized Chromosome Abundance - SAMEA5805015_ERX3485252
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

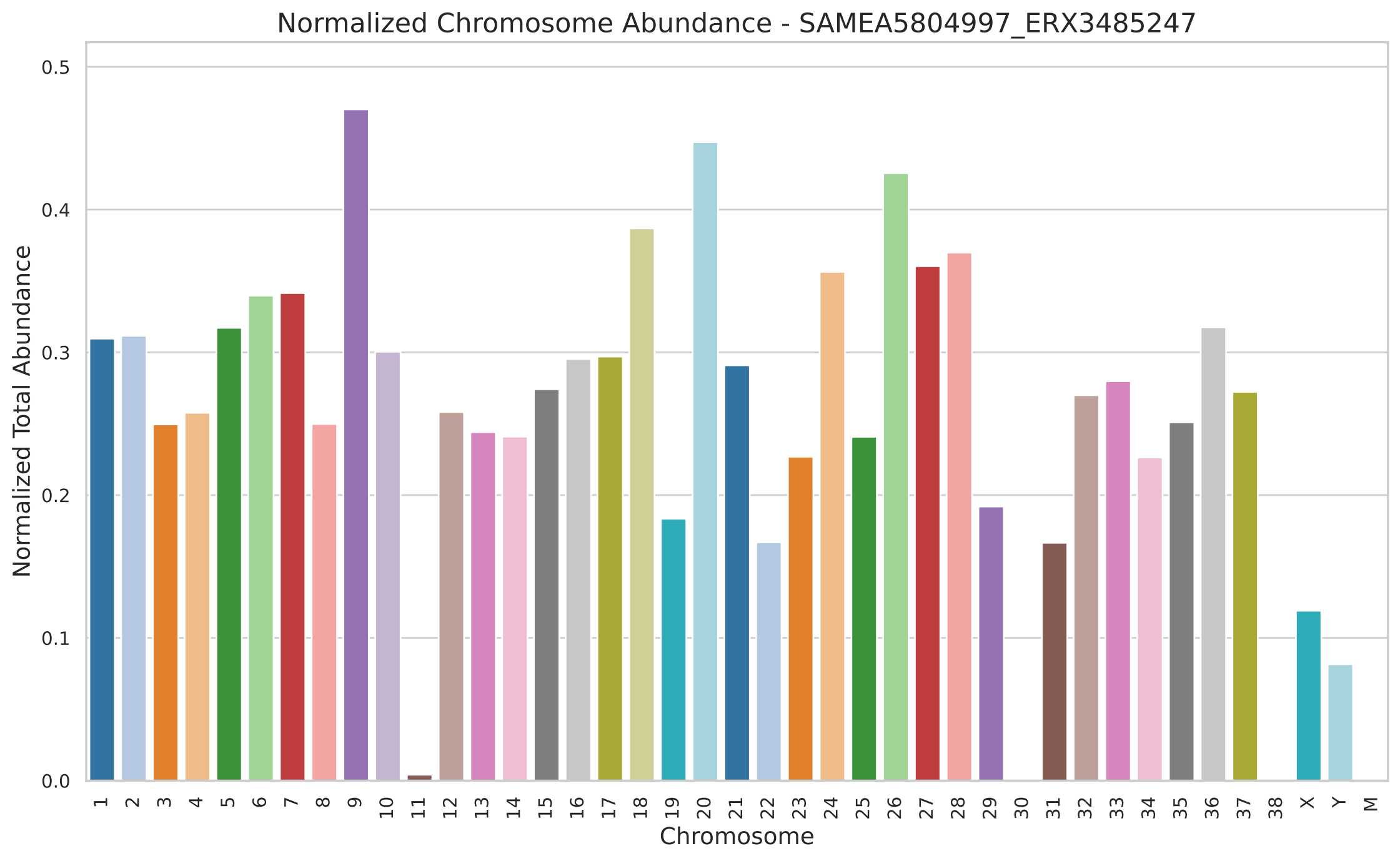

Normalized Chromosome Abundance - SAMEA5804983_ERX3485211
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

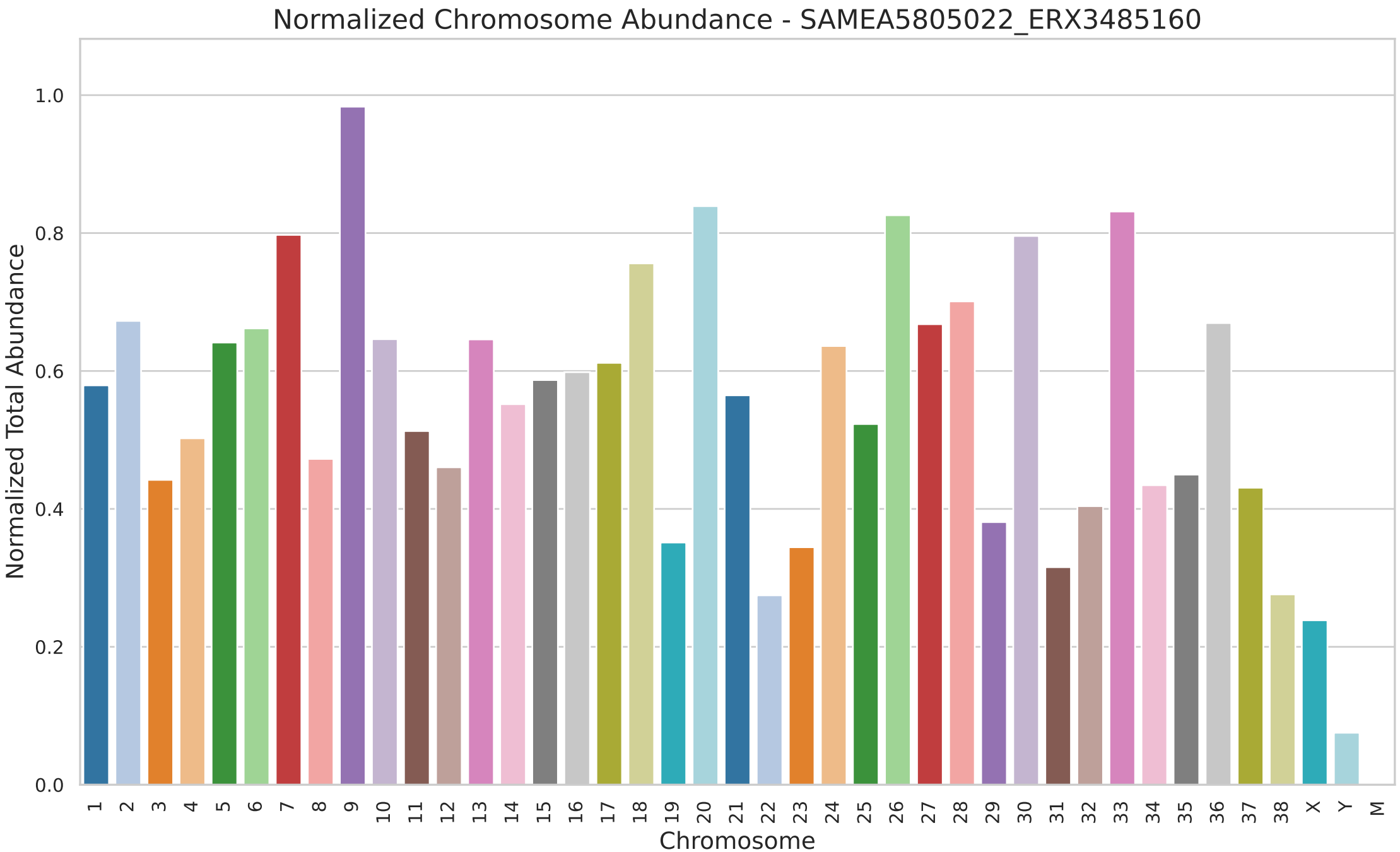

Normalized Chromosome Abundance - SAMEA5804997_ERX3485263
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

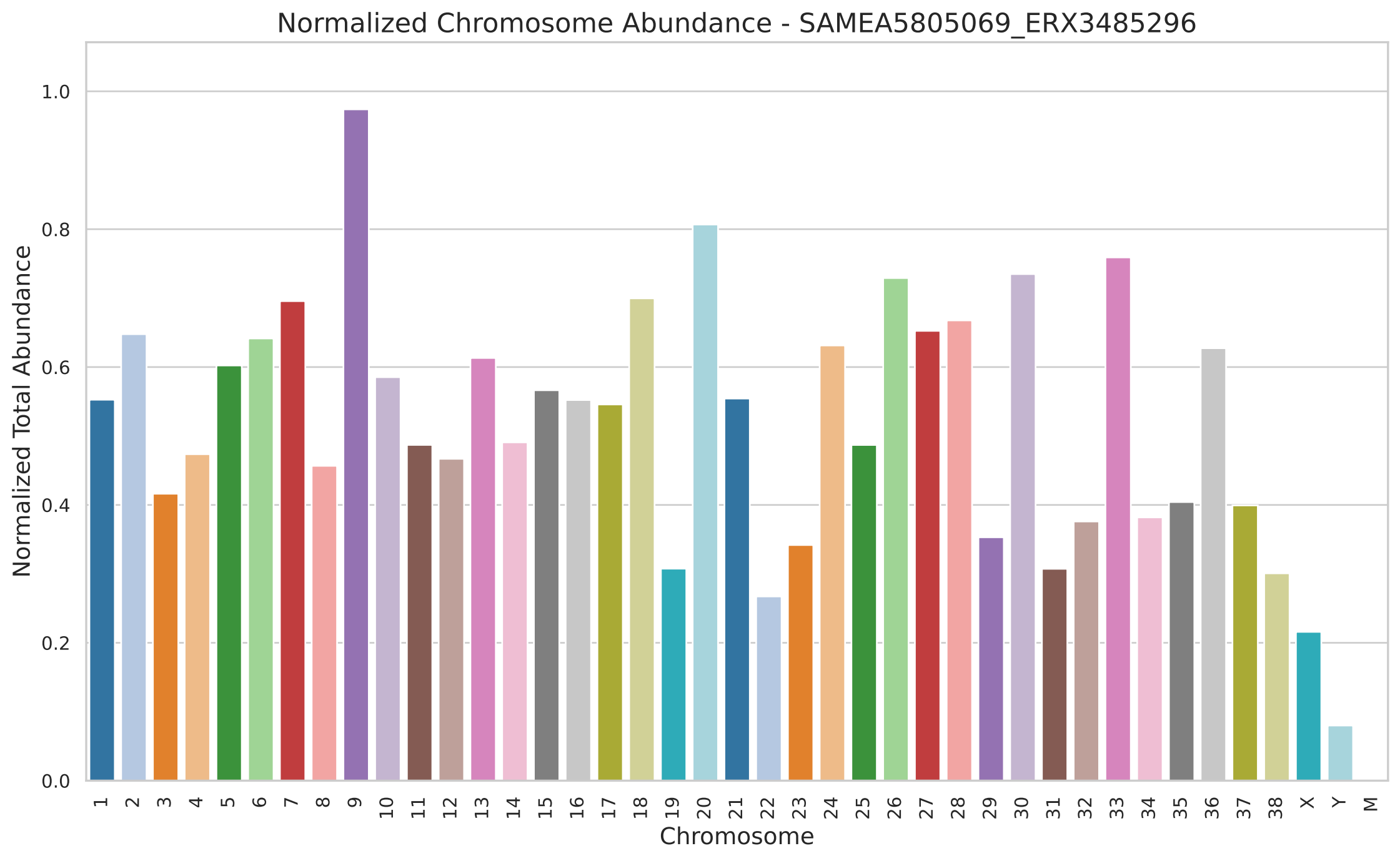

Normalized Chromosome Abundance - SAMEA3907160_ERX3485326
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

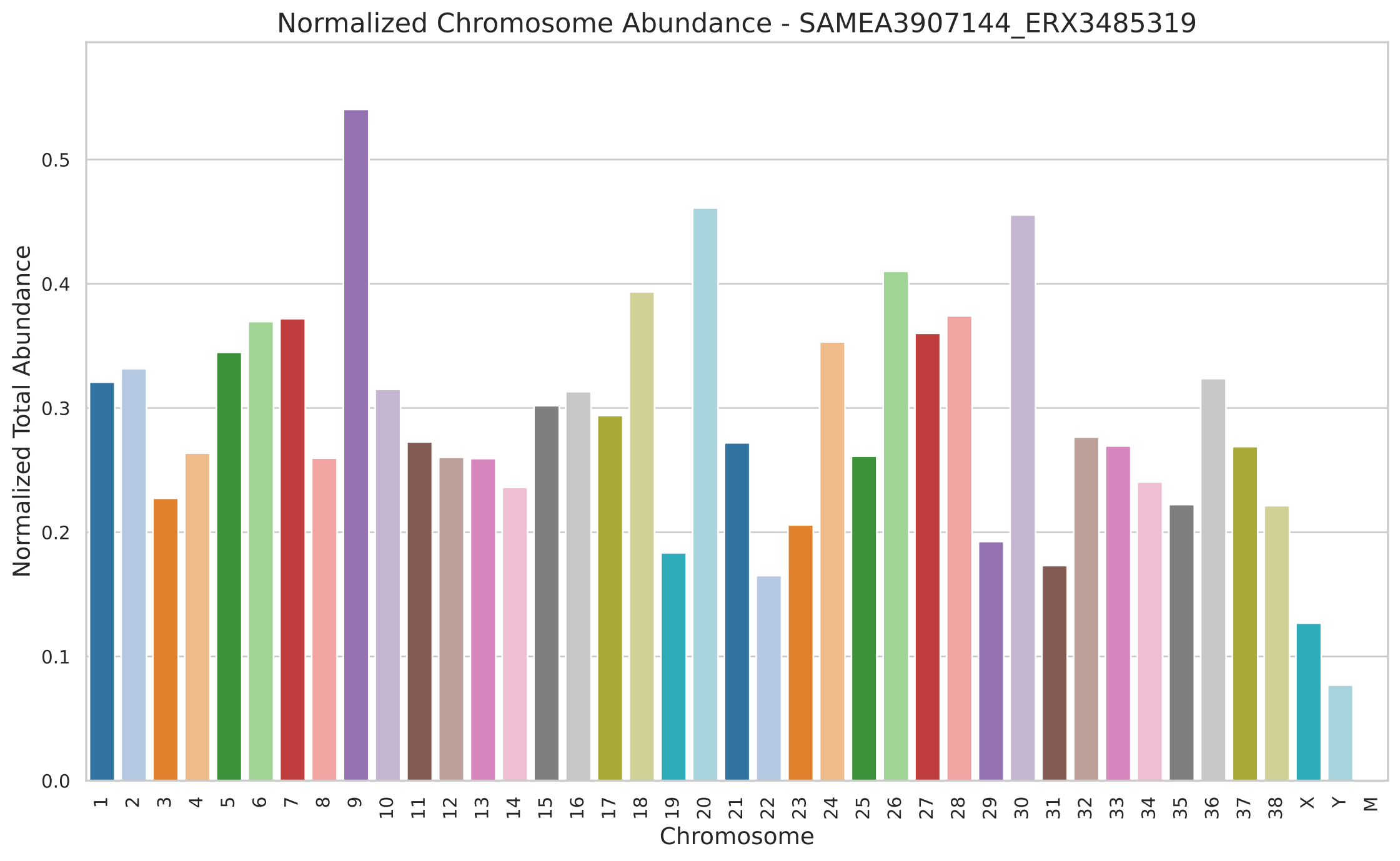

Normalized Chromosome Abundance - SAMEA5805005_ERX3485245
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

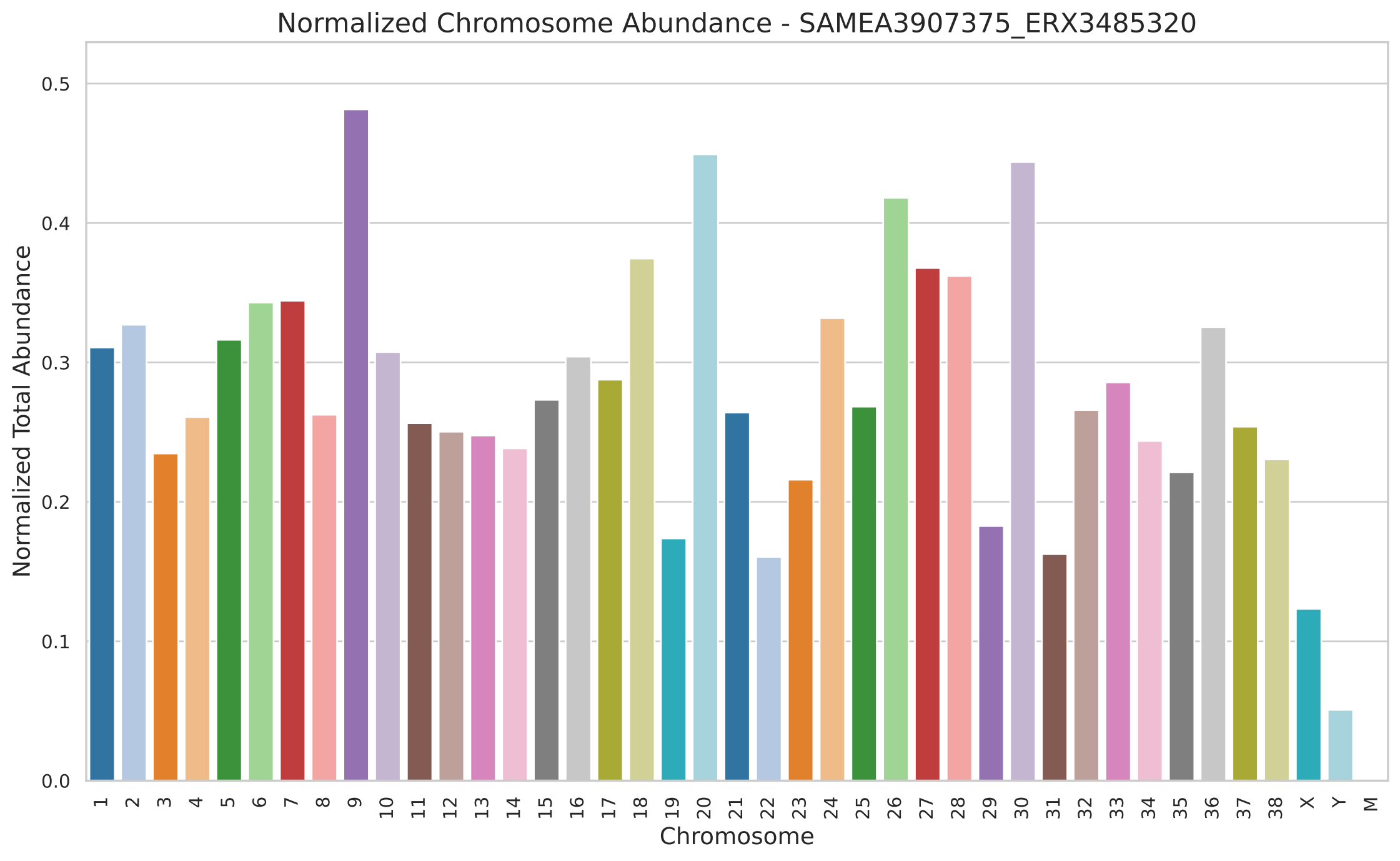

Normalized Chromosome Abundance - SAMEA5805023_ERX3485272
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

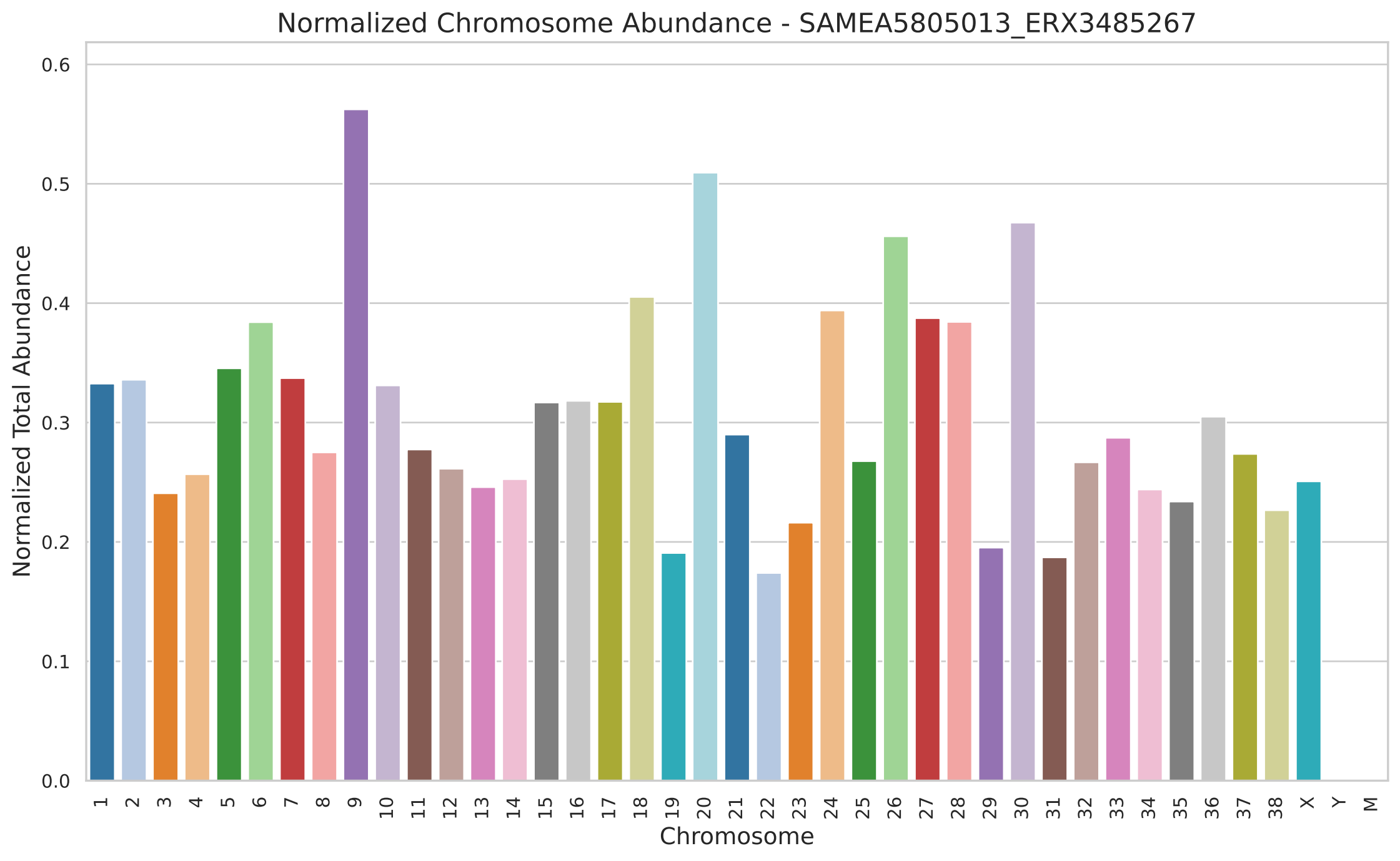

Normalized Chromosome Abundance - SAMEA5804997_ERX3485247
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

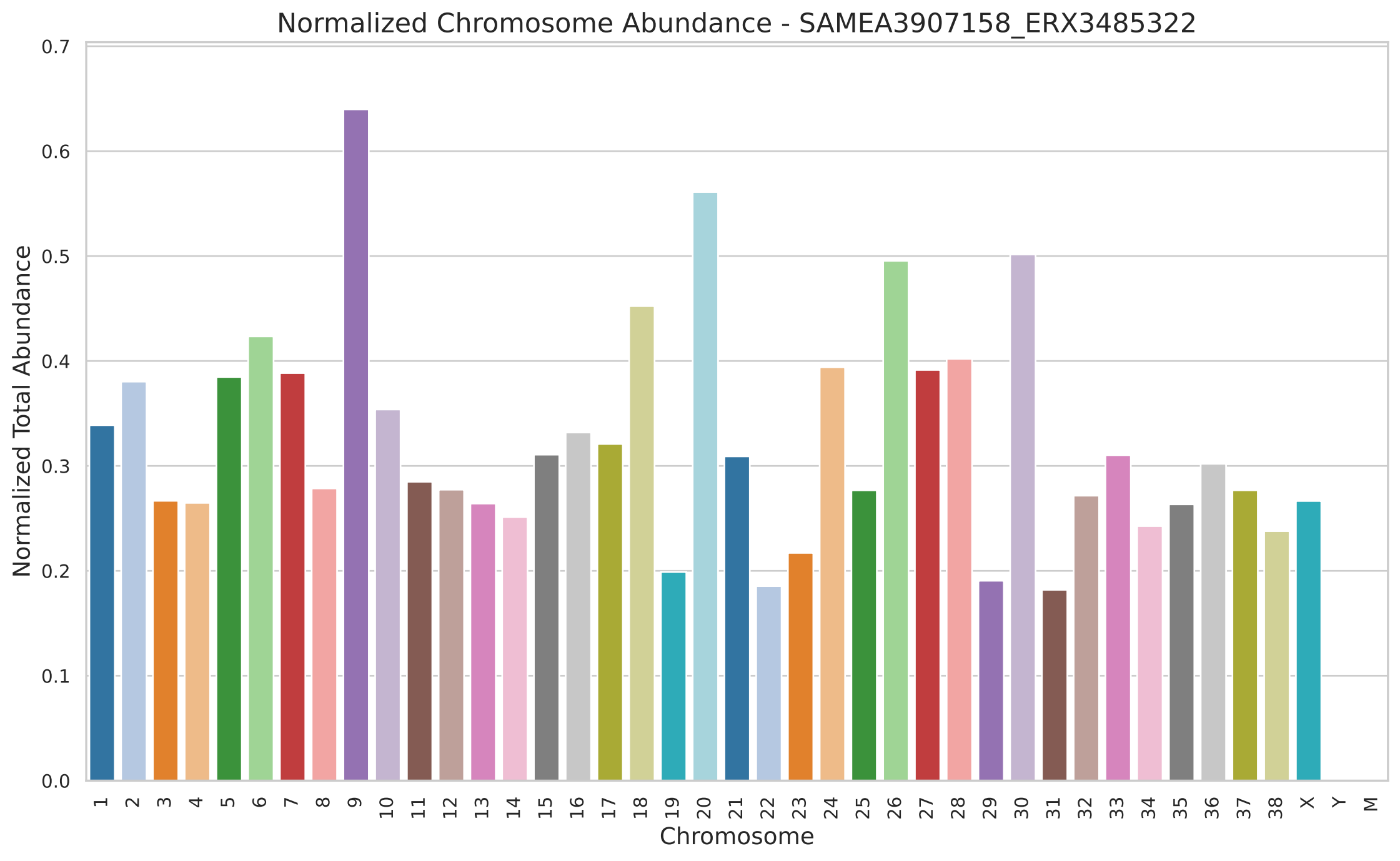

Normalized Chromosome Abundance - SAMEA5805022_ERX3485160
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

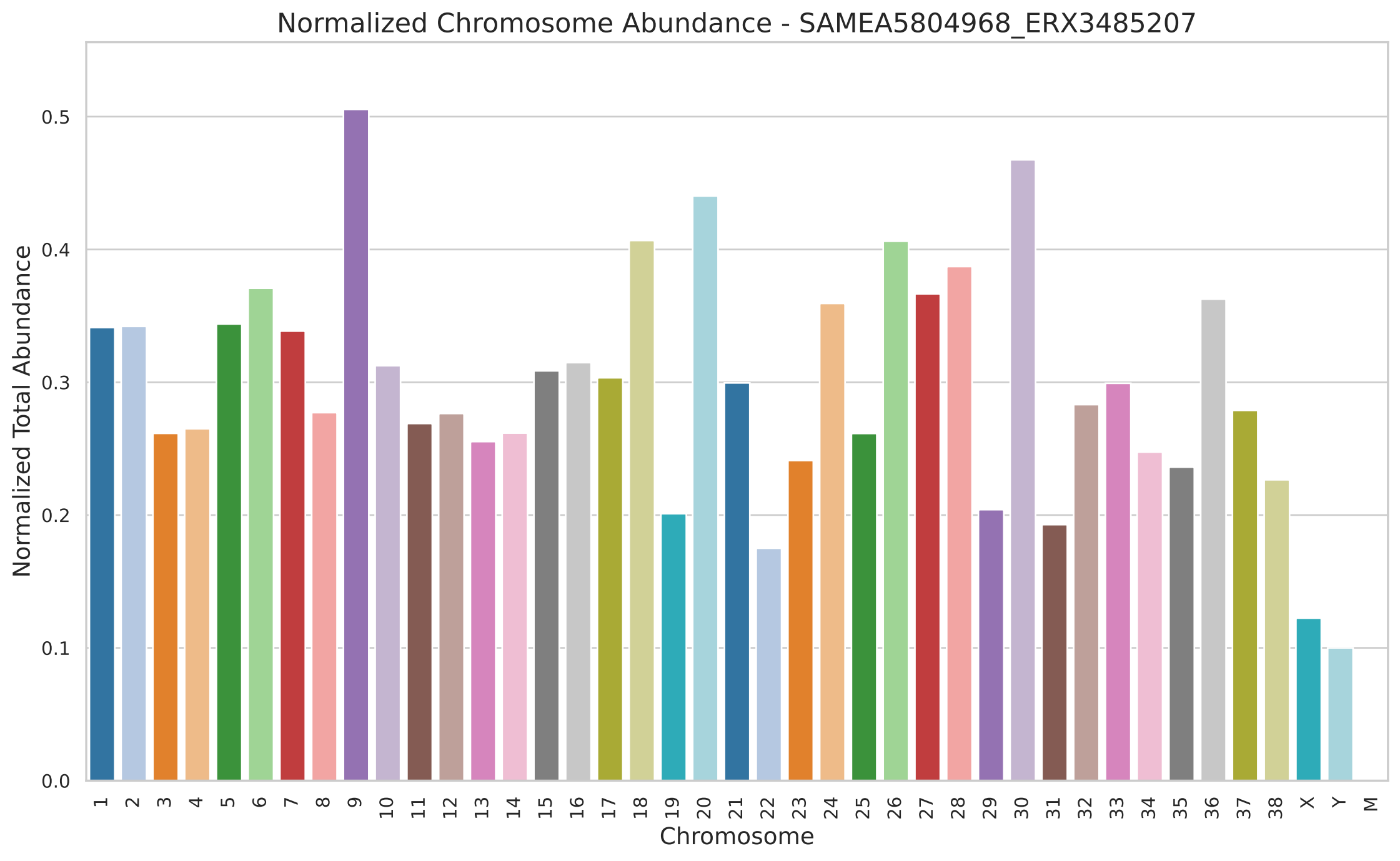

Normalized Chromosome Abundance - SAMEA5805069_ERX3485296
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

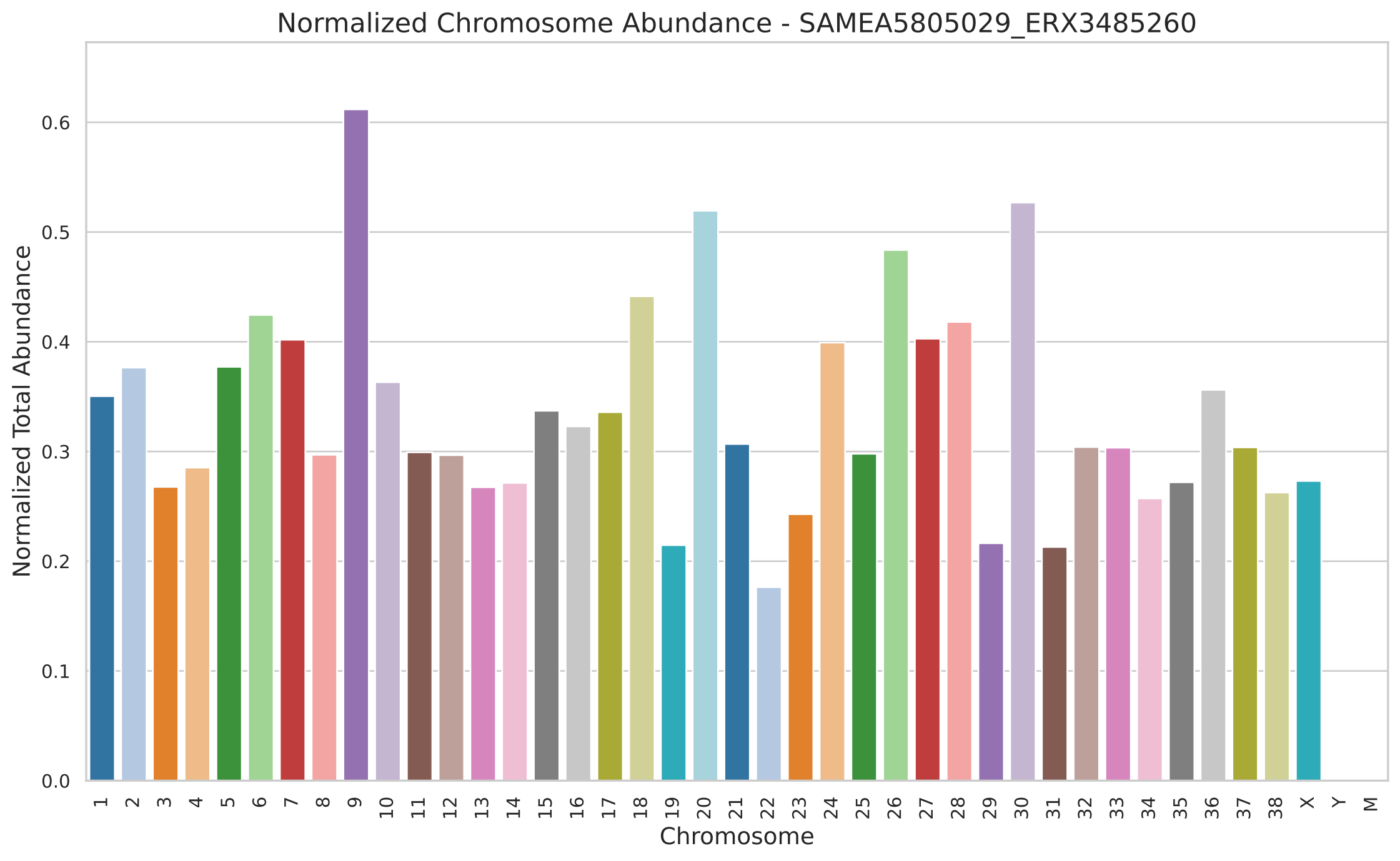

Normalized Chromosome Abundance - SAMEA3907144_ERX3485319
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

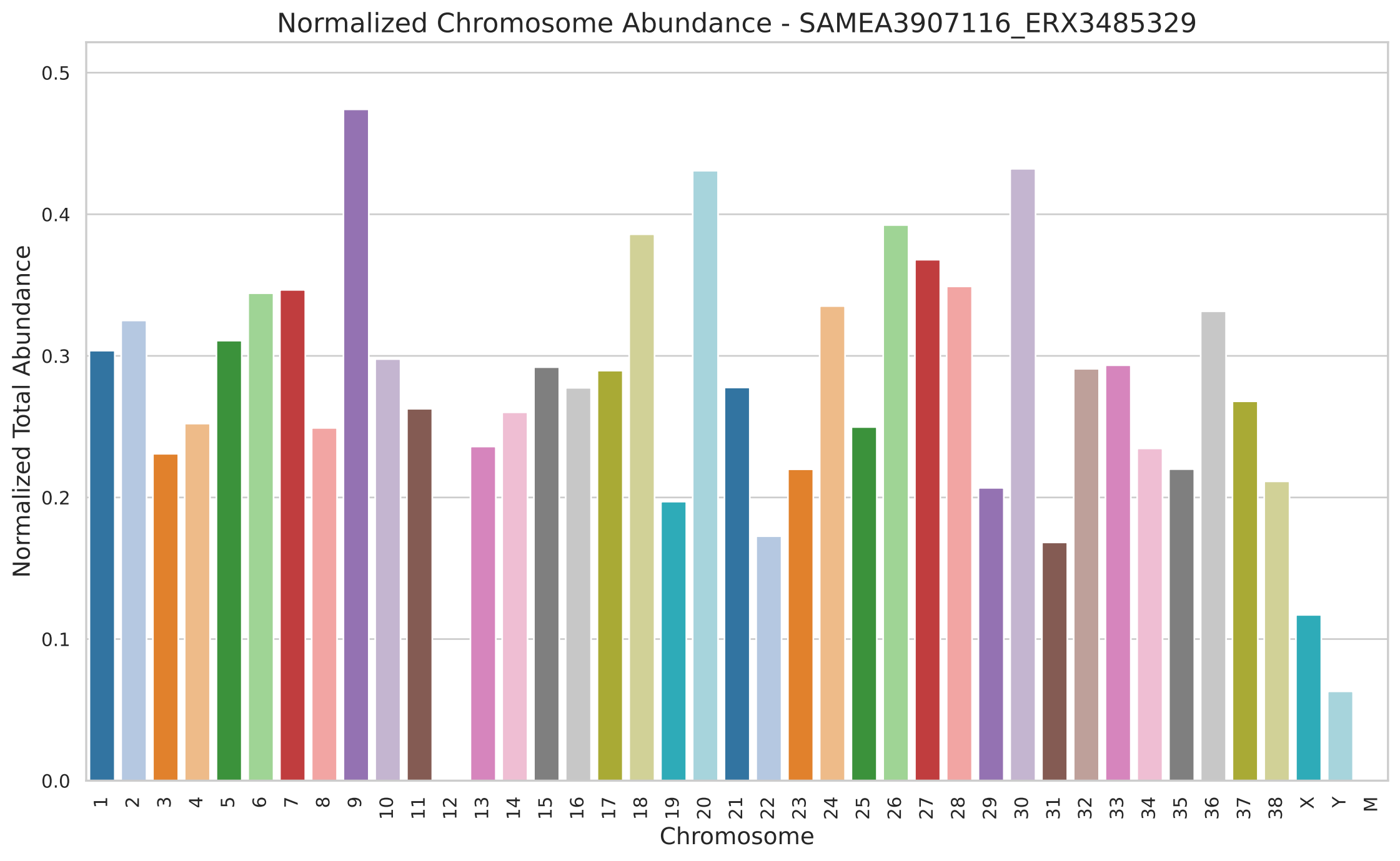

Normalized Chromosome Abundance - SAMEA3907375_ERX3485320
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

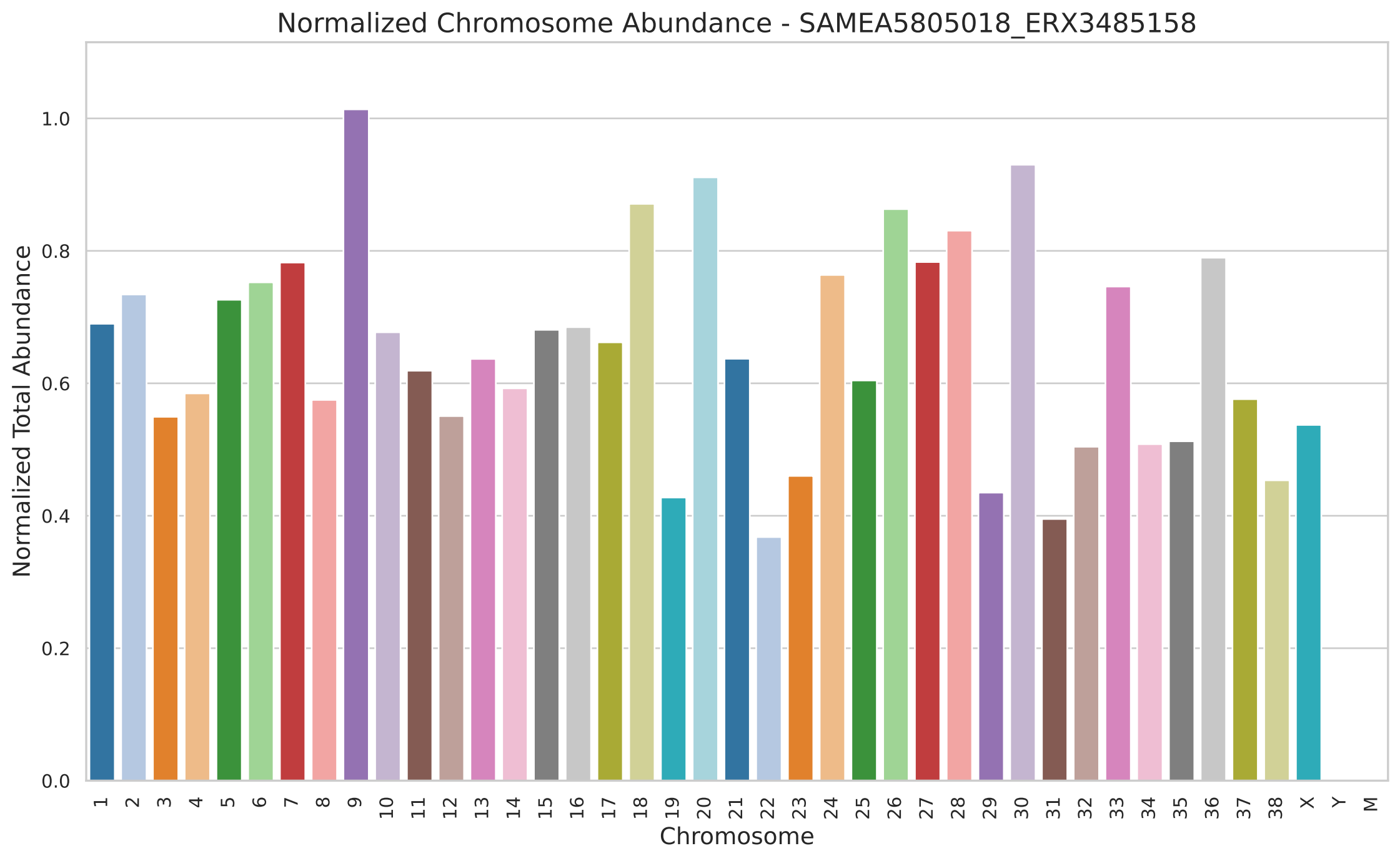

Normalized Chromosome Abundance - SAMEA5805013_ERX3485267
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

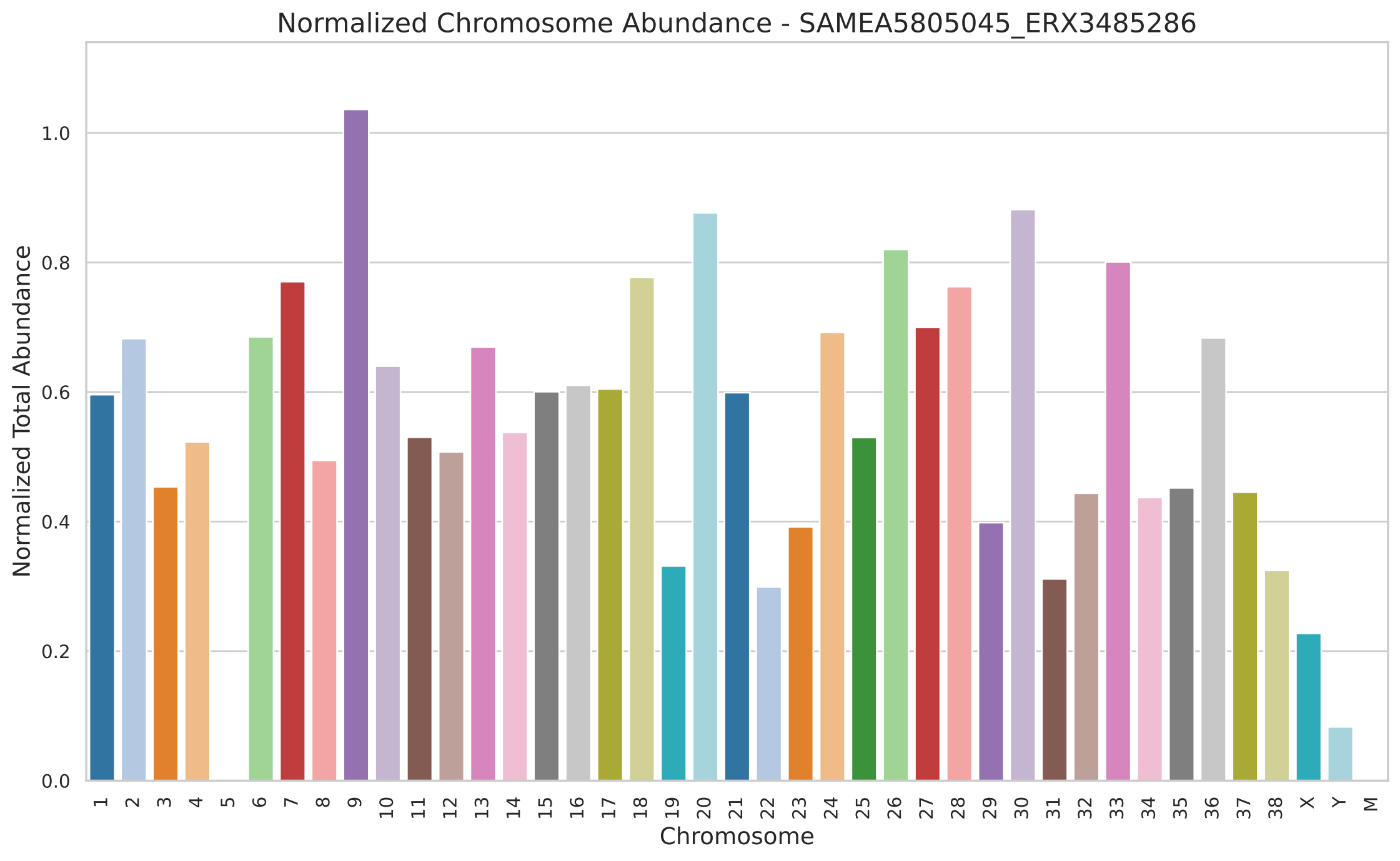

Normalized Chromosome Abundance - SAMEA3907158_ERX3485322
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

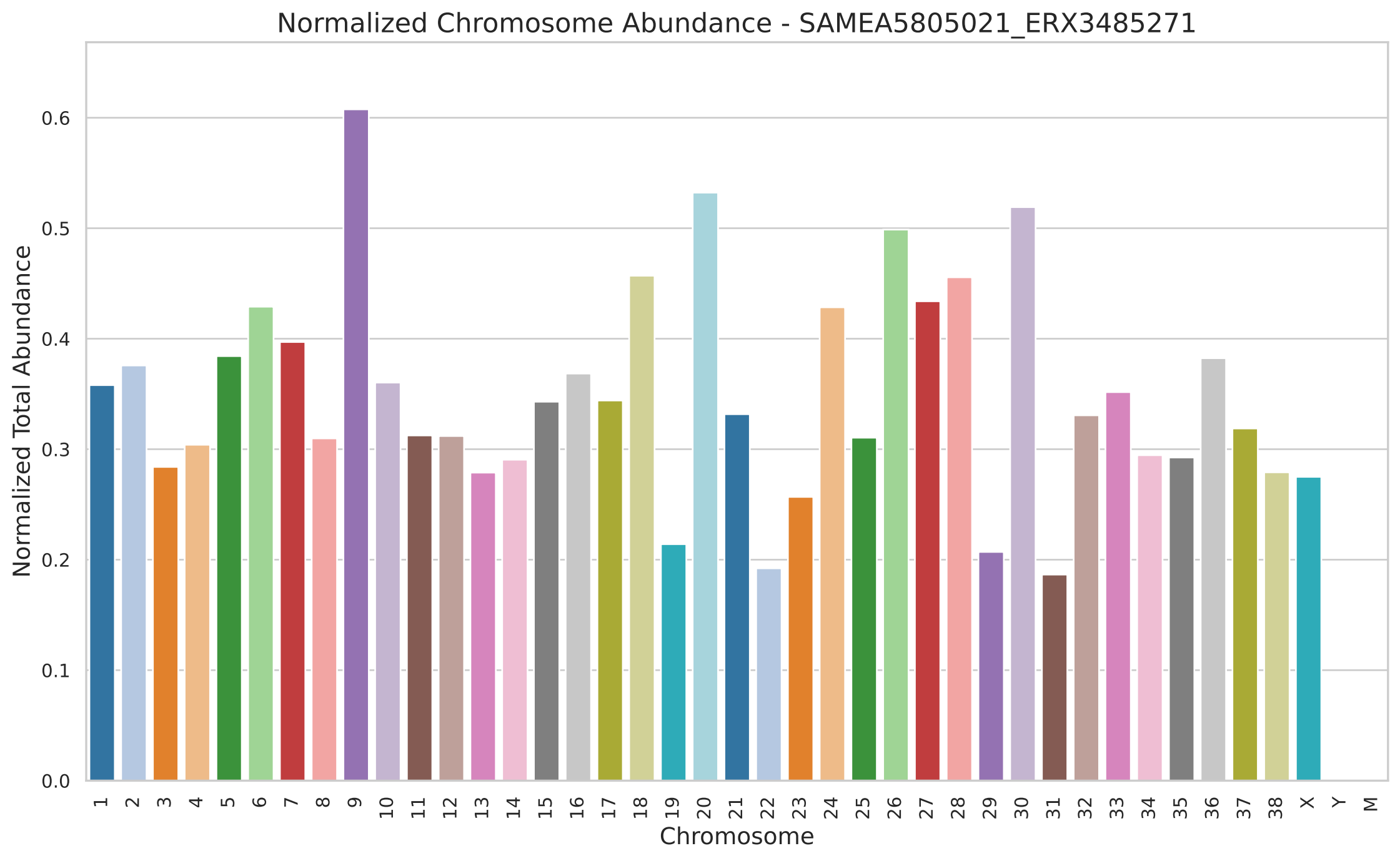

Normalized Chromosome Abundance - SAMEA5804968_ERX3485207
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

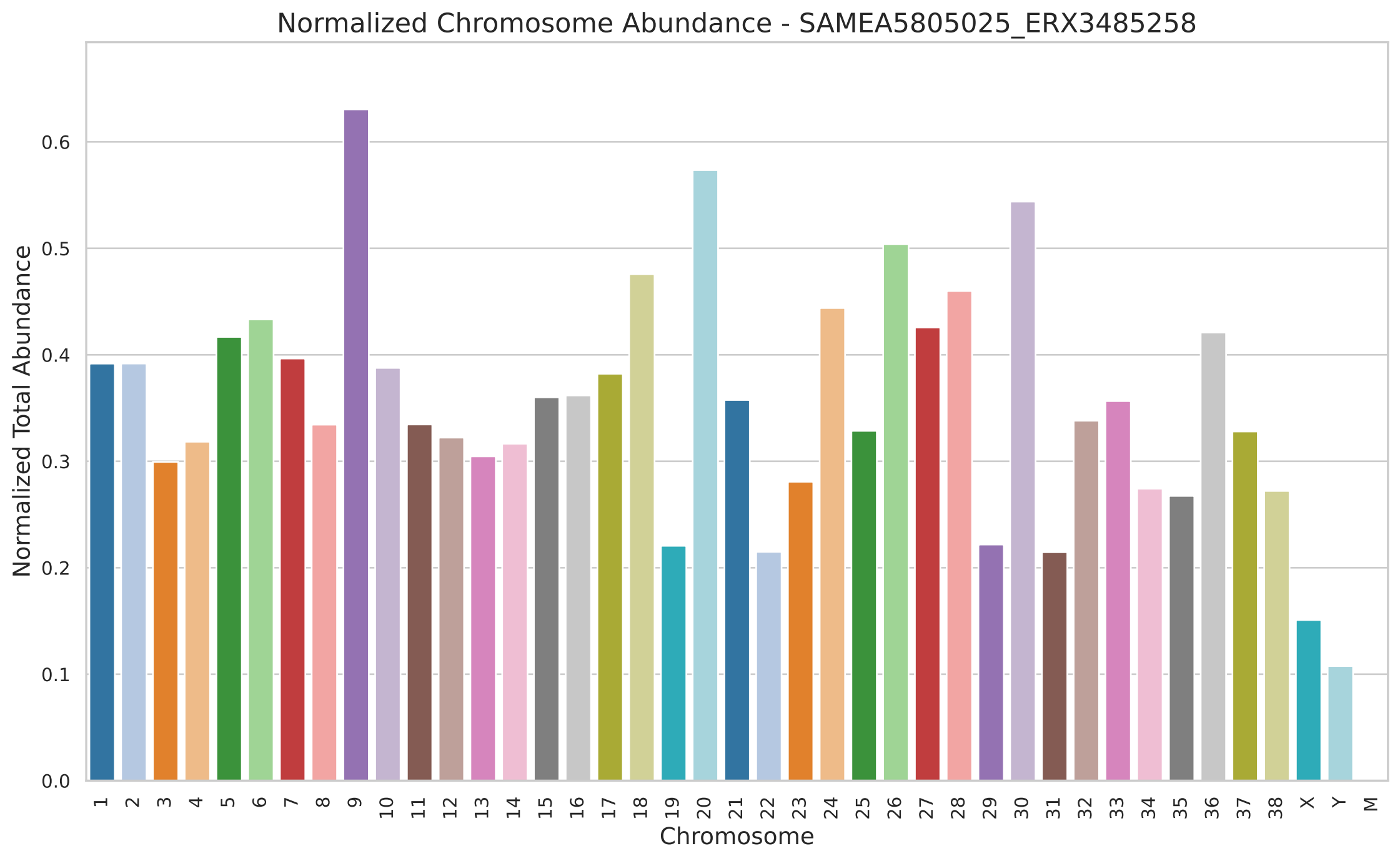

Normalized Chromosome Abundance - SAMEA5805029_ERX3485260
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

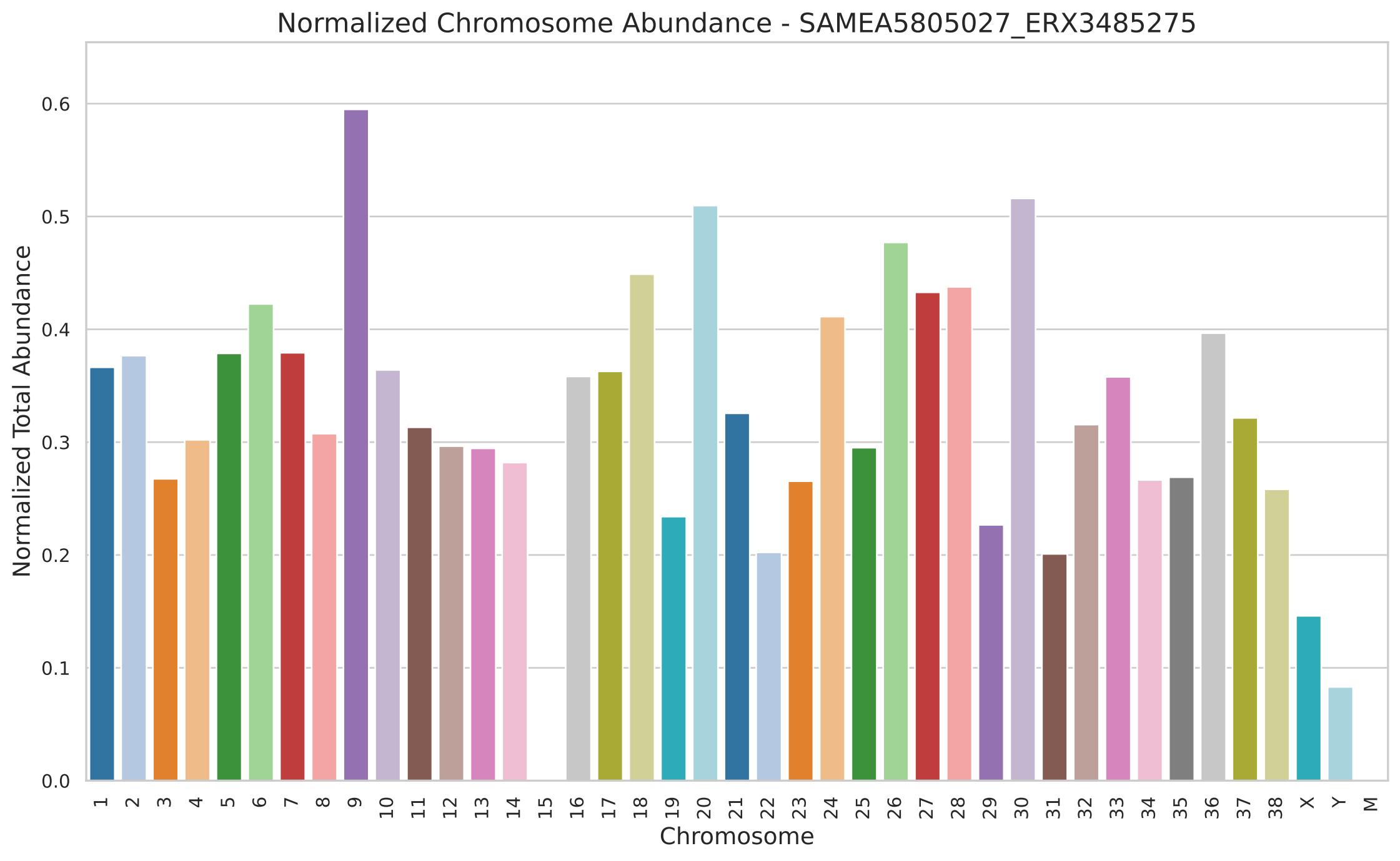

Normalized Chromosome Abundance - SAMEA3907116_ERX3485329
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

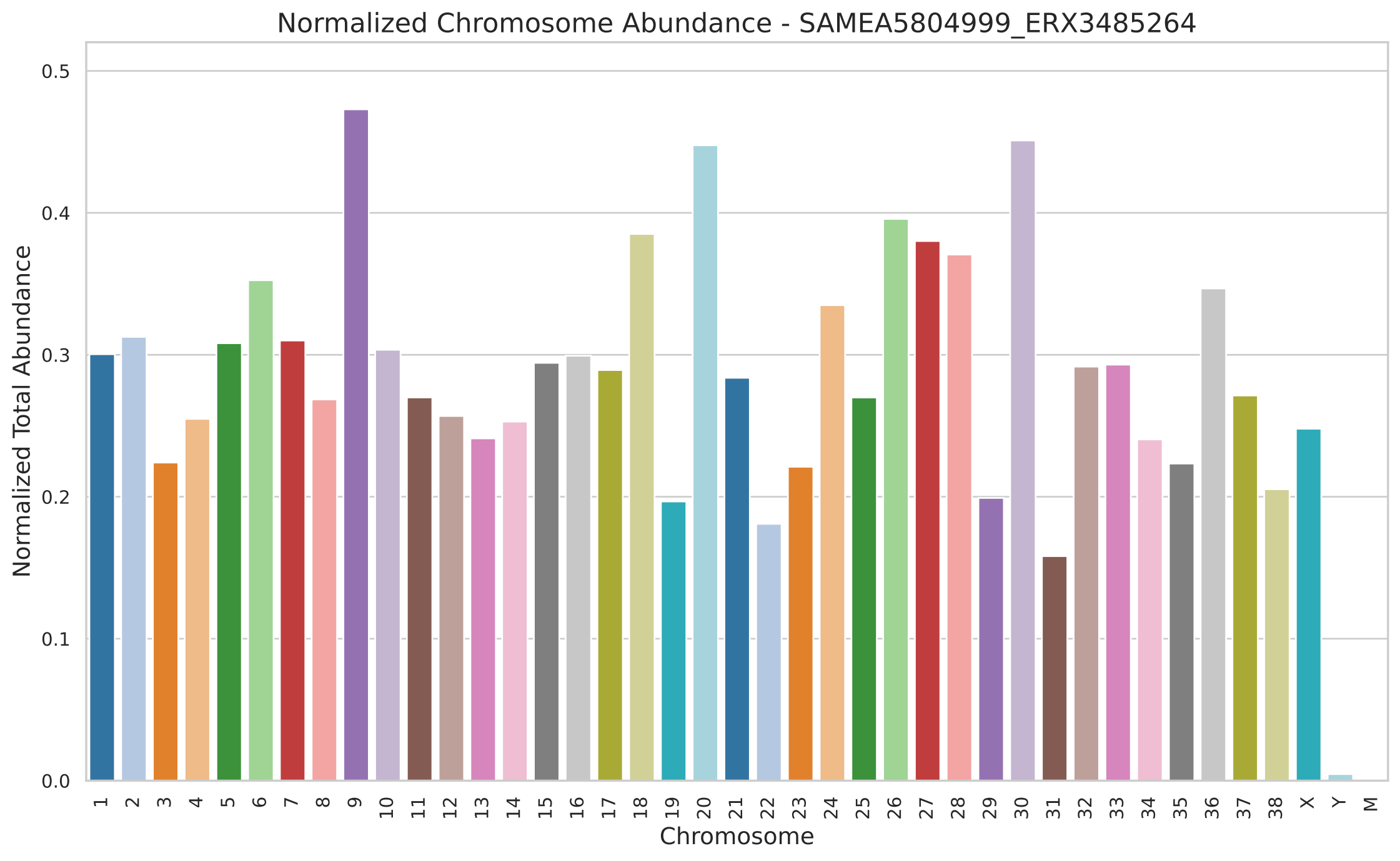

Normalized Chromosome Abundance - SAMEA5805018_ERX3485158
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

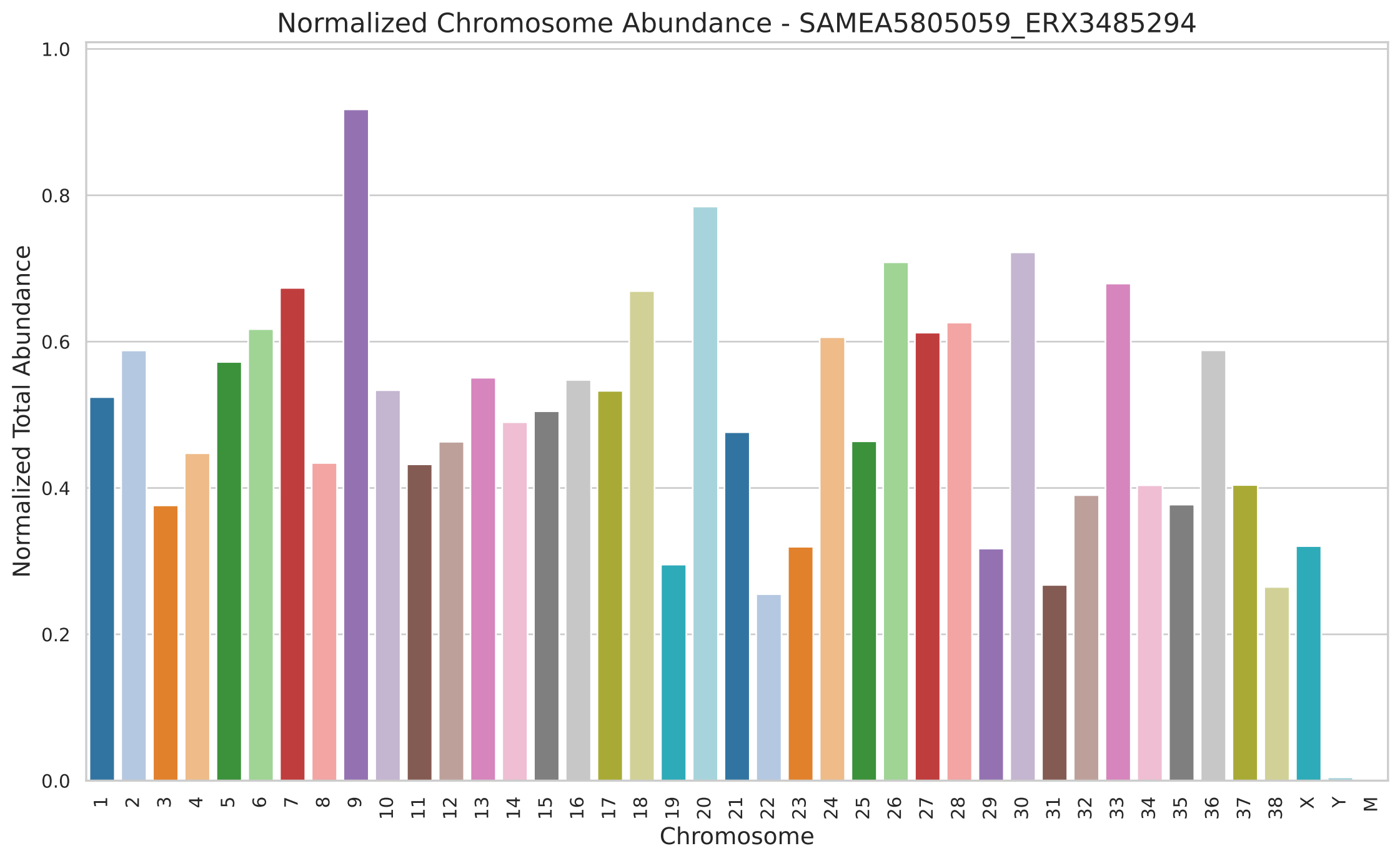

Normalized Chromosome Abundance - SAMEA5805045_ERX3485286
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

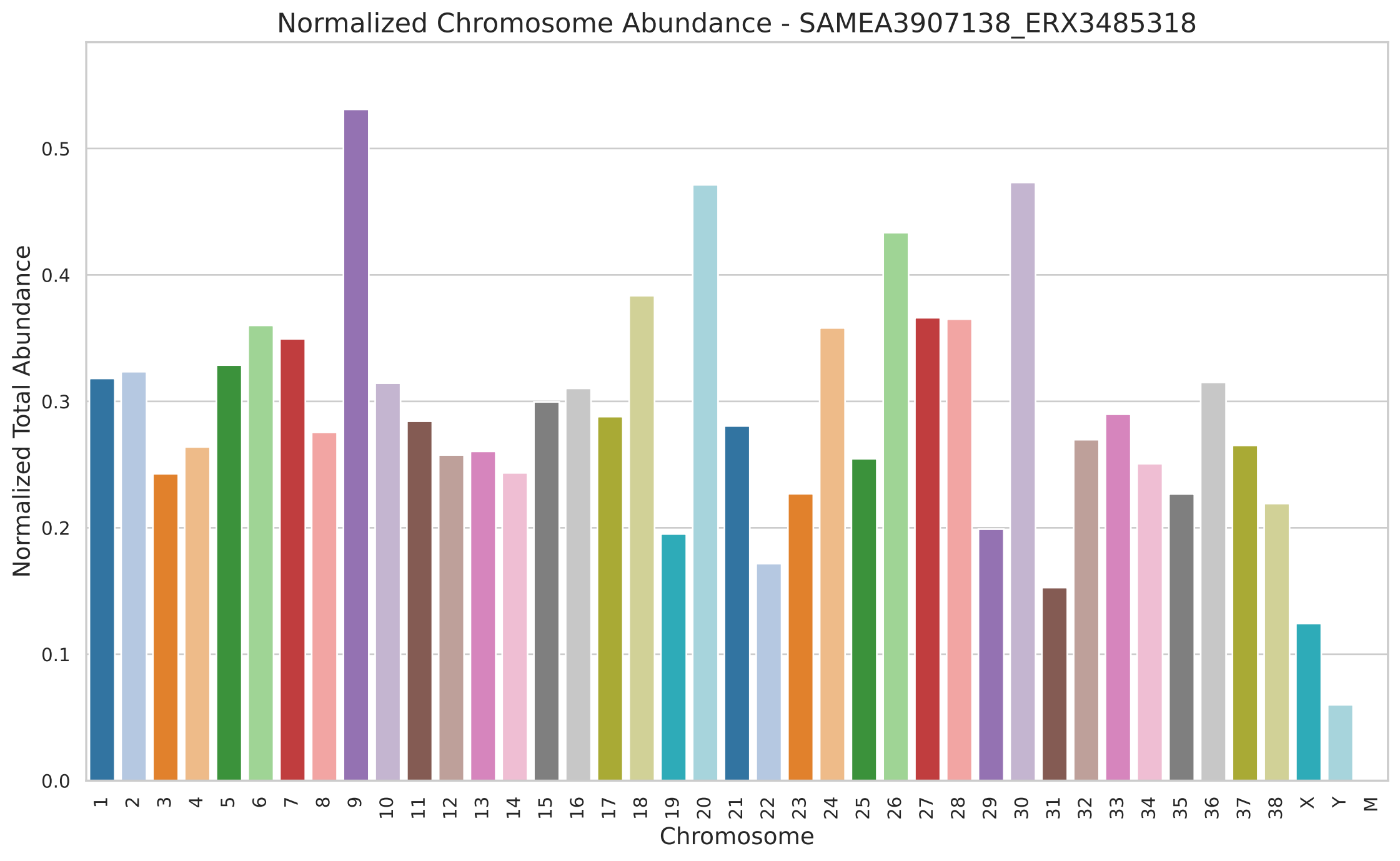

Normalized Chromosome Abundance - SAMEA5805021_ERX3485271
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

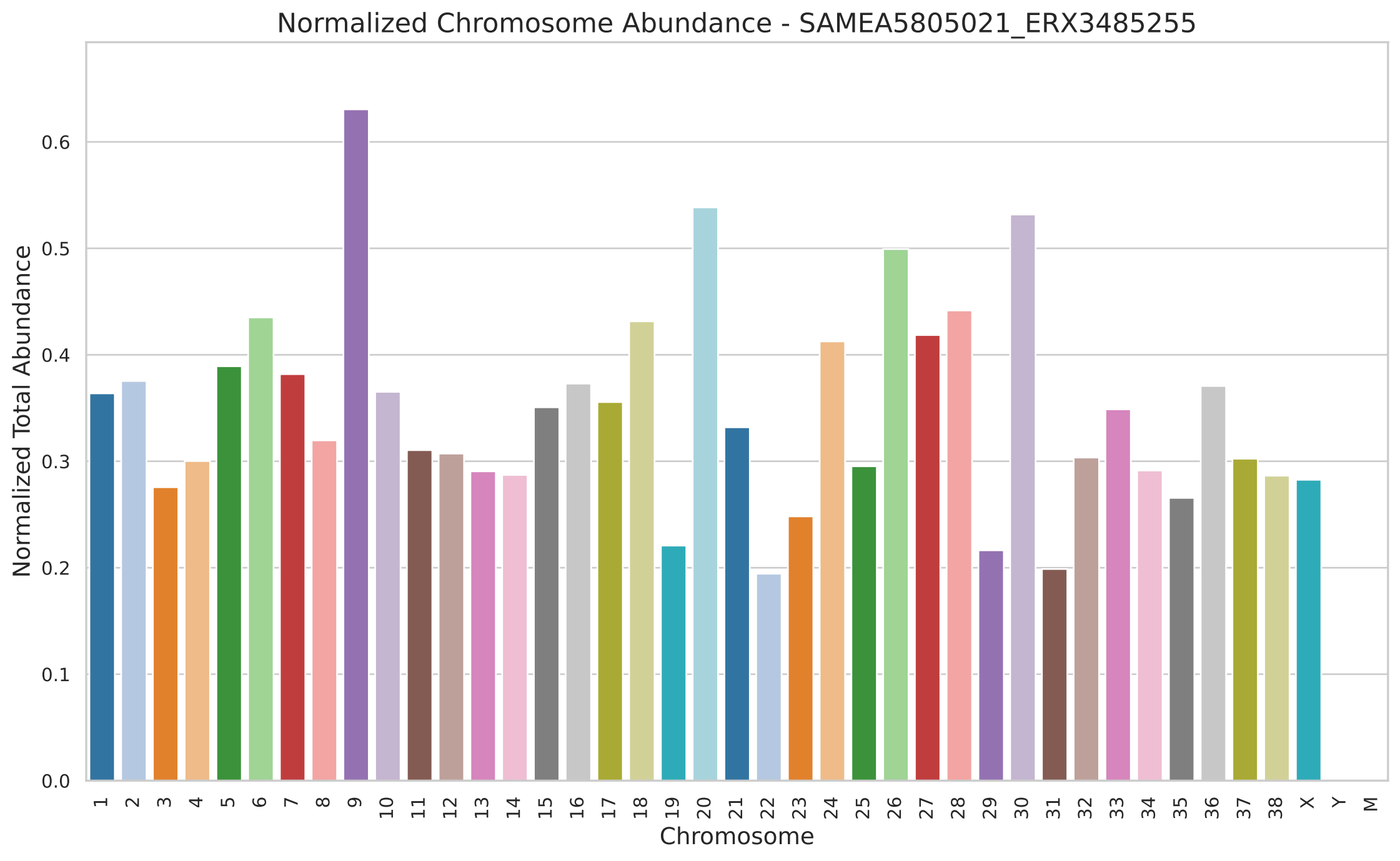

Normalized Chromosome Abundance - SAMEA5805025_ERX3485258
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

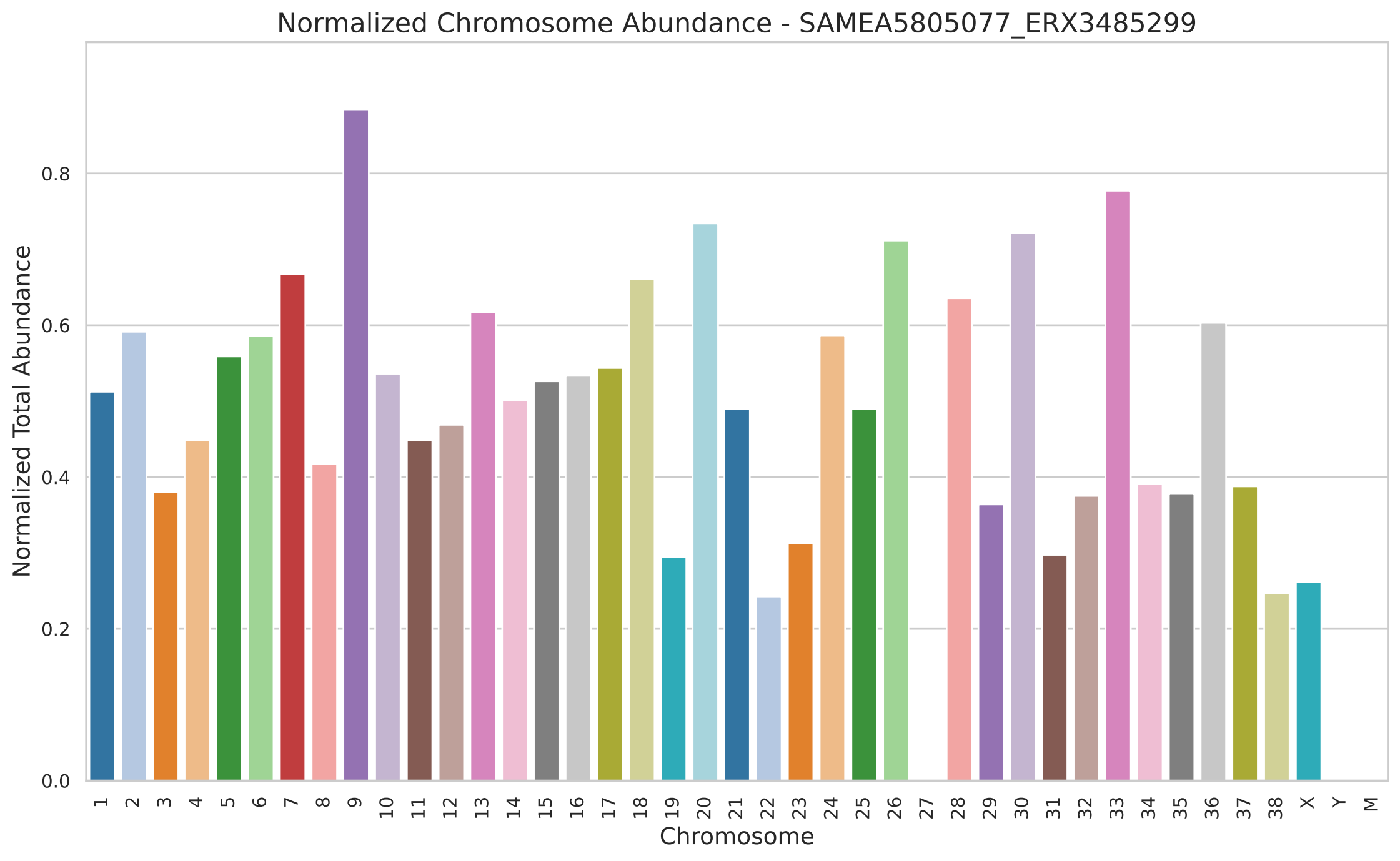

Normalized Chromosome Abundance - SAMEA5805027_ERX3485275
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

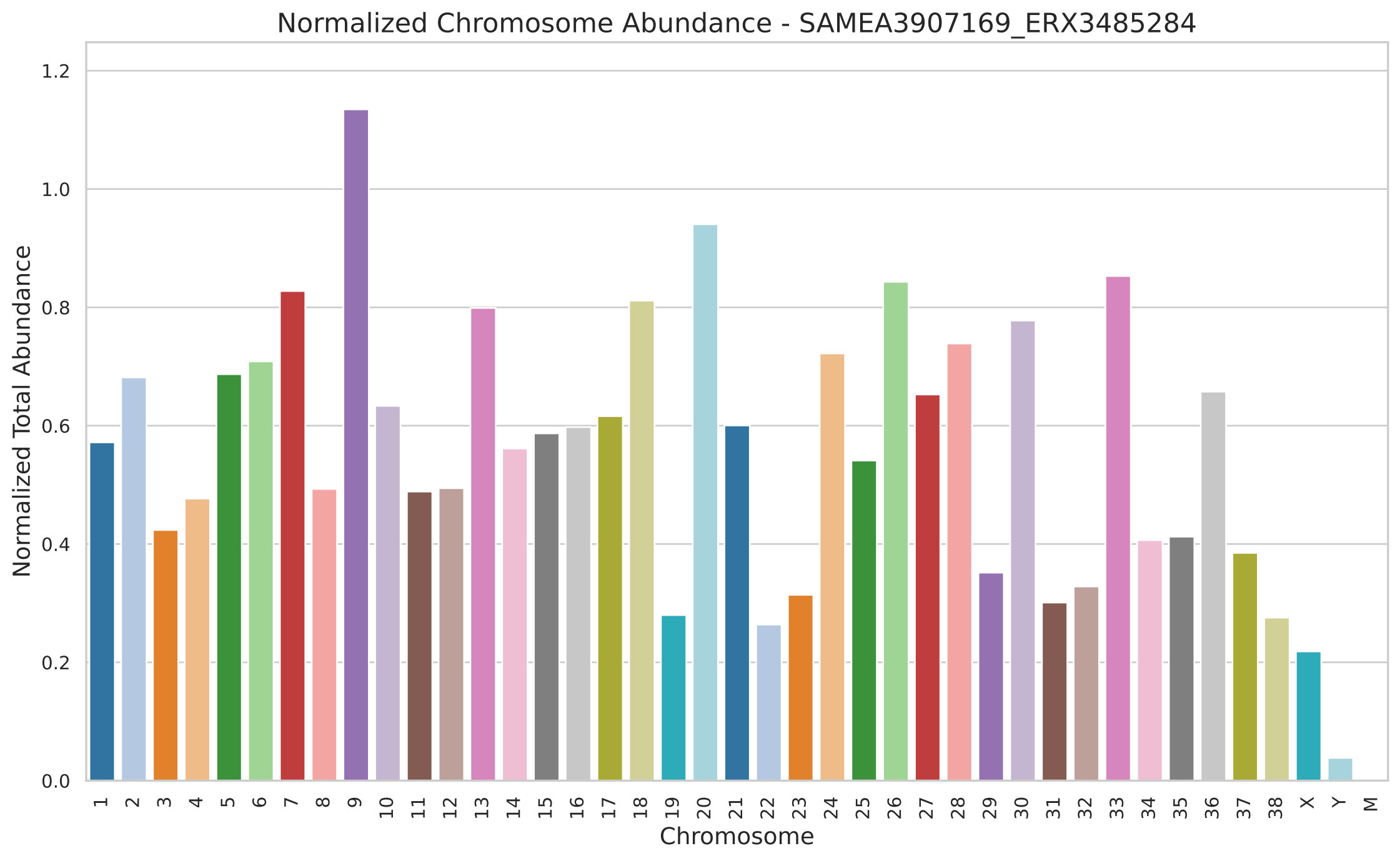

Normalized Chromosome Abundance - SAMEA5804999_ERX3485264
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

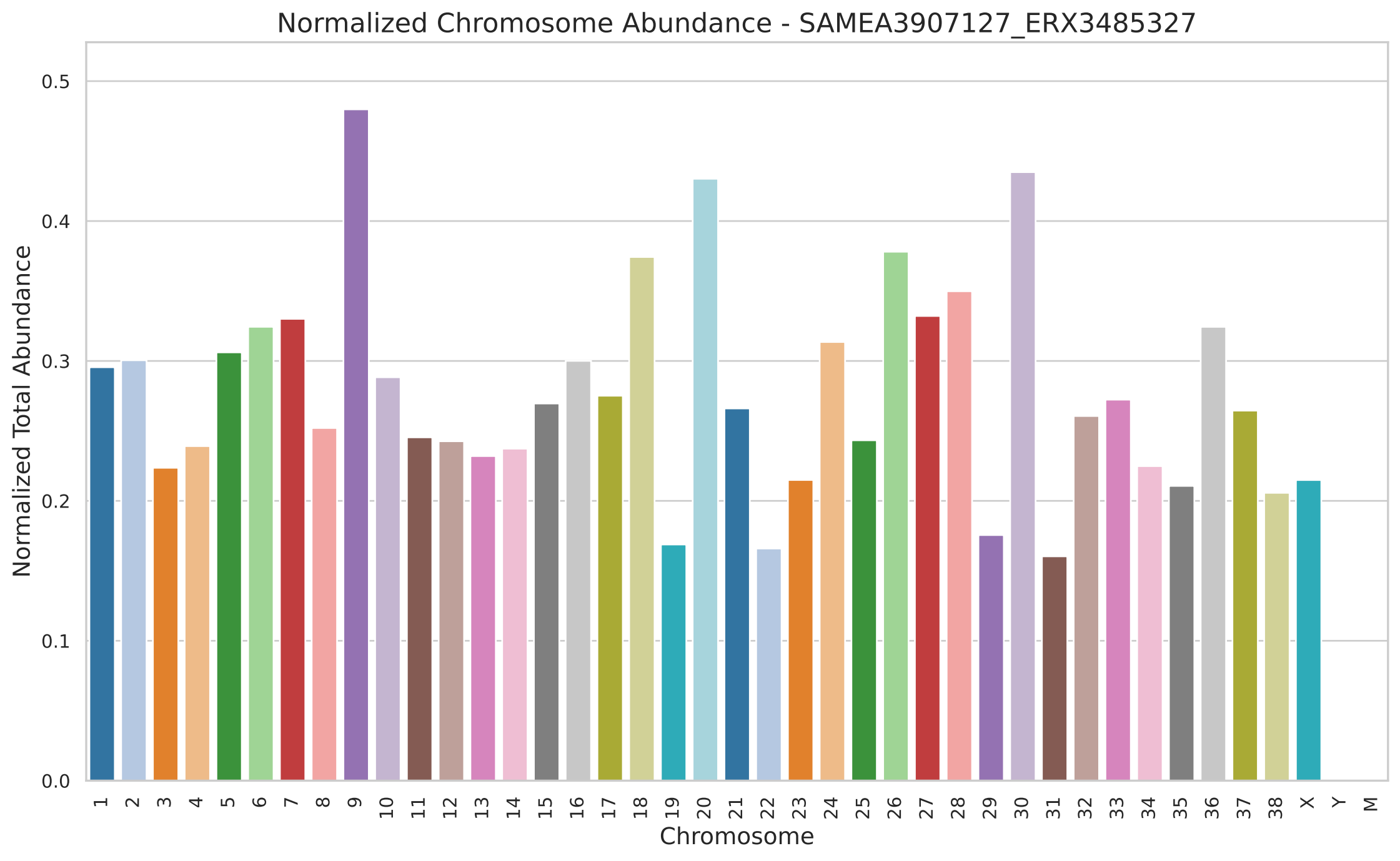

Normalized Chromosome Abundance - SAMEA5805059_ERX3485294
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

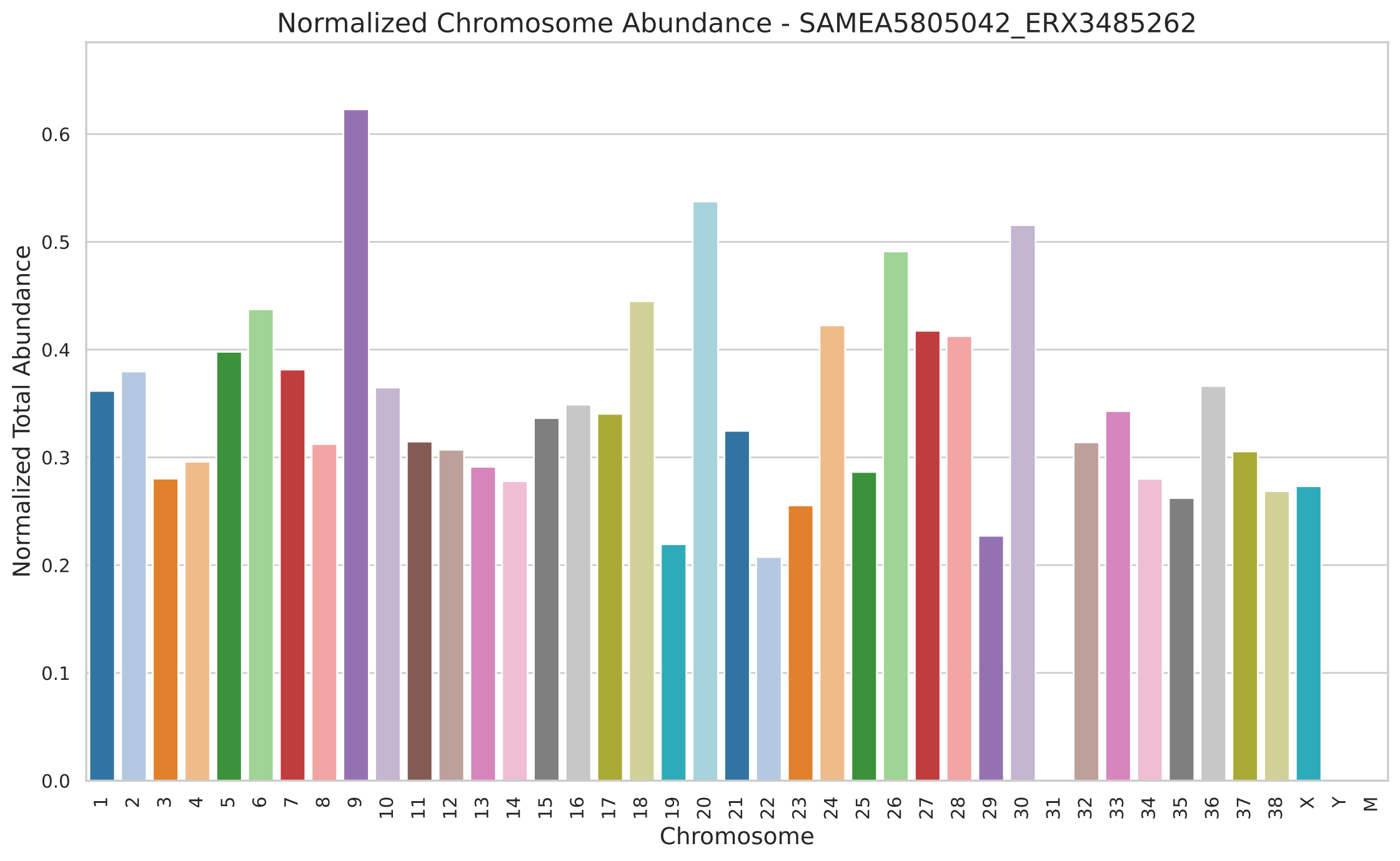

Normalized Chromosome Abundance - SAMEA3907138_ERX3485318
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

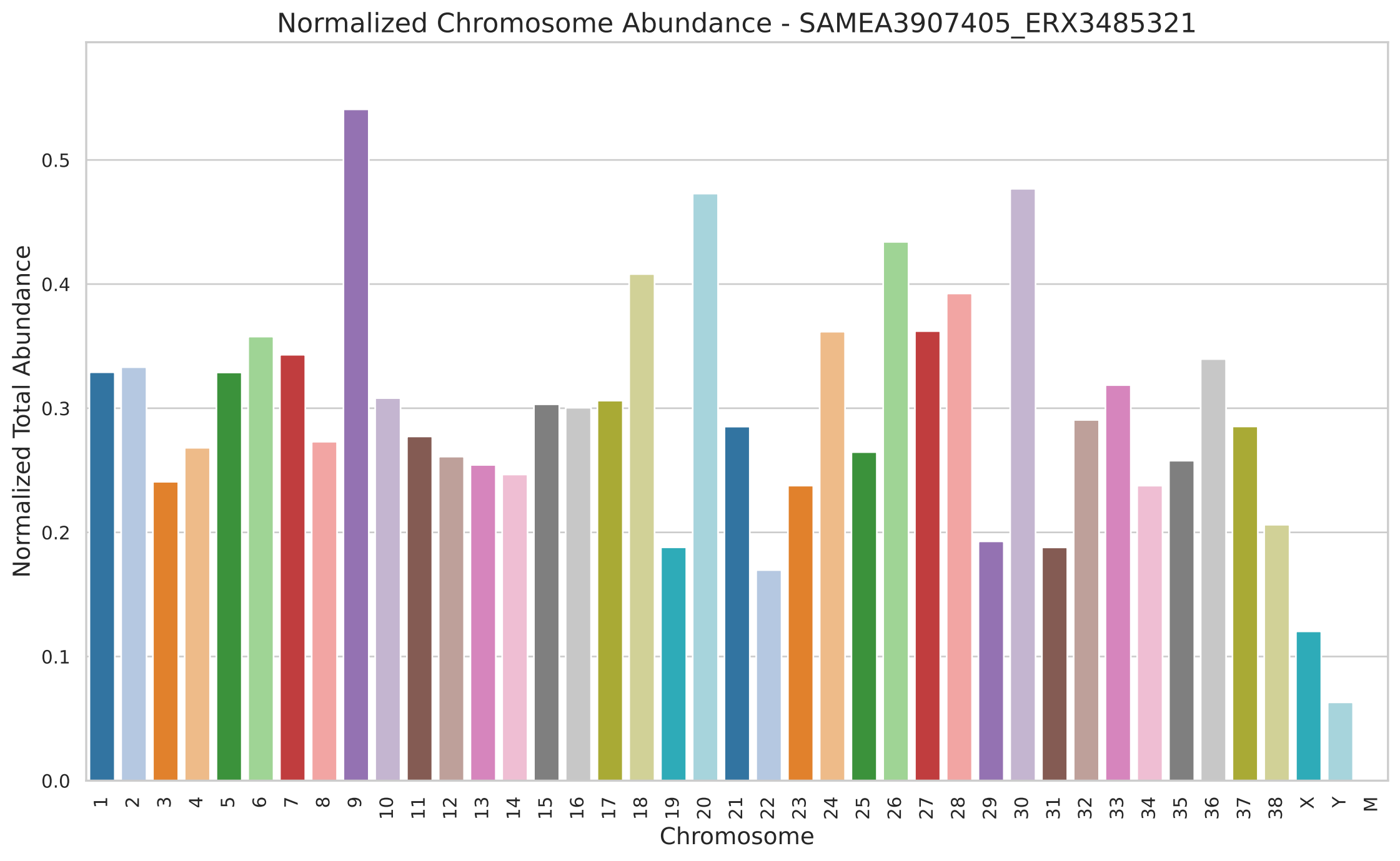

Normalized Chromosome Abundance - SAMEA5805021_ERX3485255
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

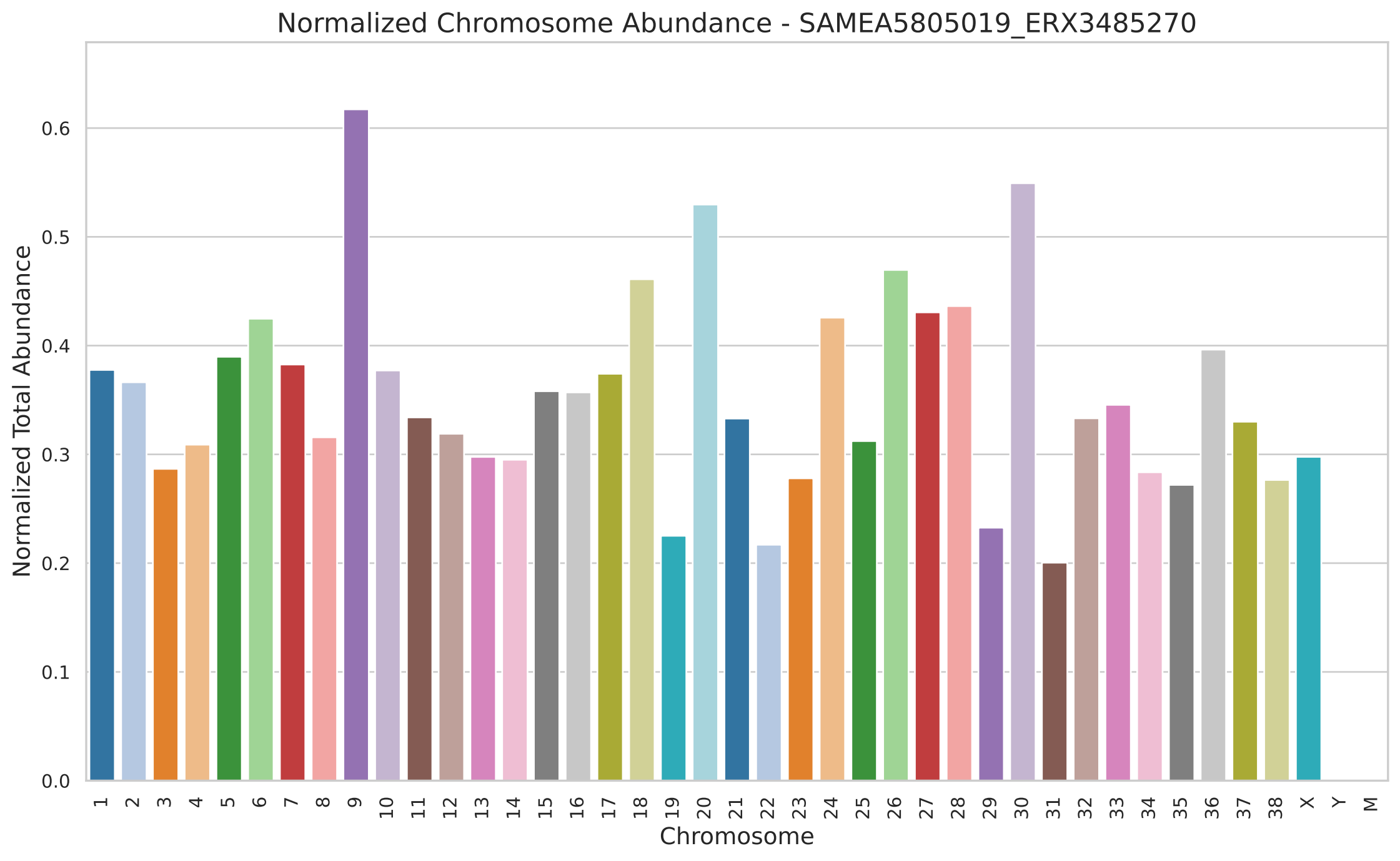

Normalized Chromosome Abundance - SAMEA5805077_ERX3485299
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

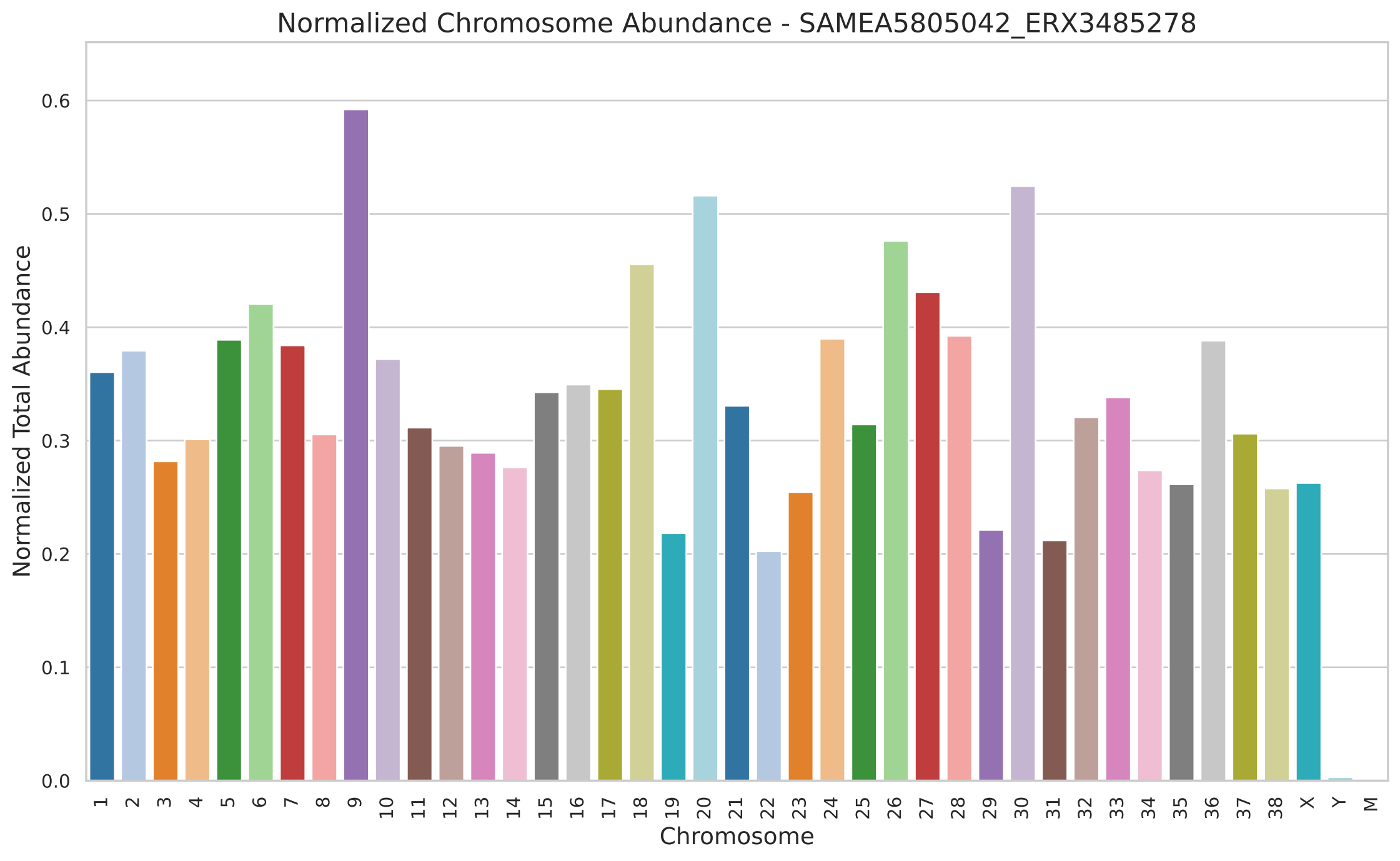

Normalized Chromosome Abundance - SAMEA3907169_ERX3485284
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

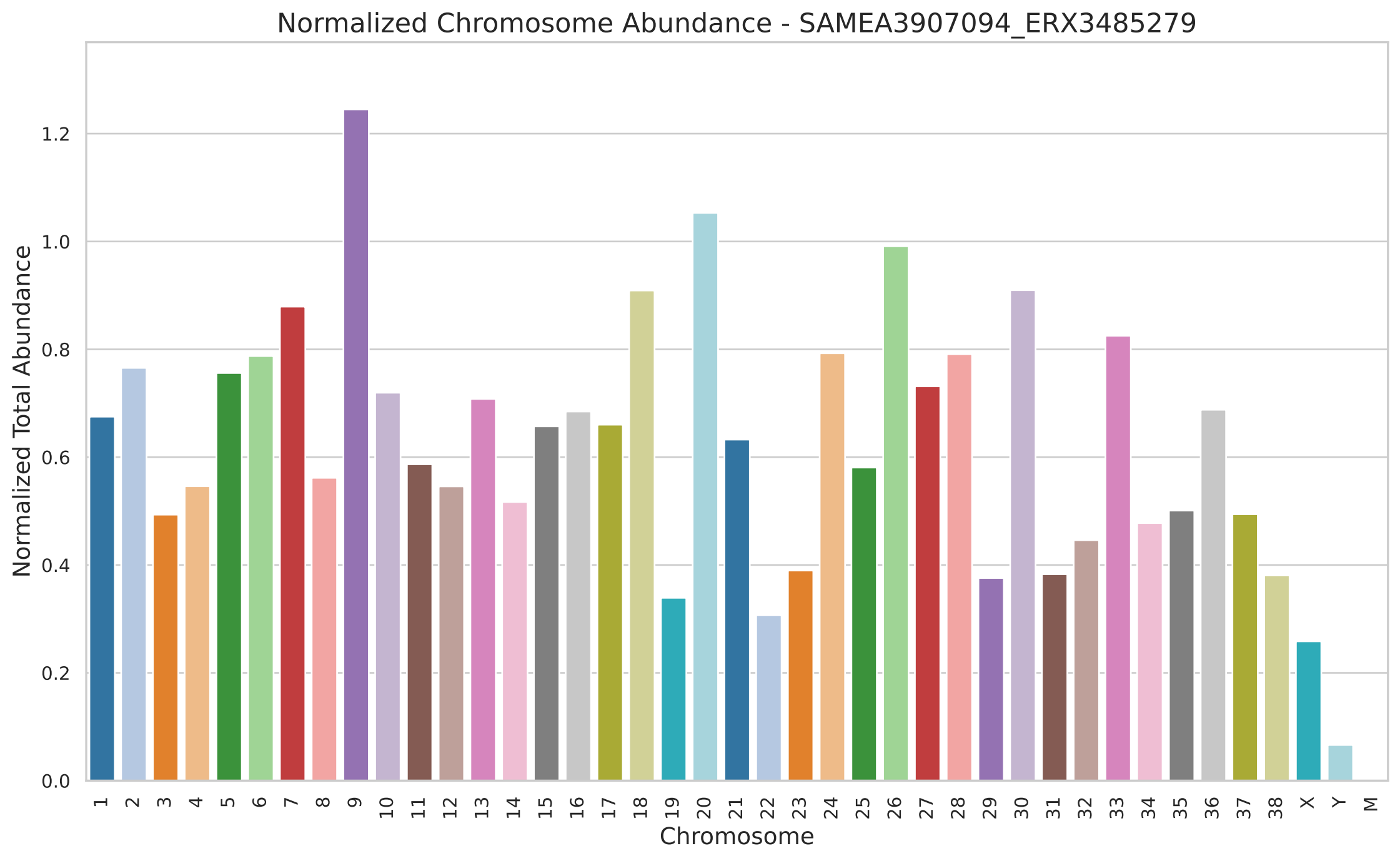

Normalized Chromosome Abundance - SAMEA3907127_ERX3485327
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

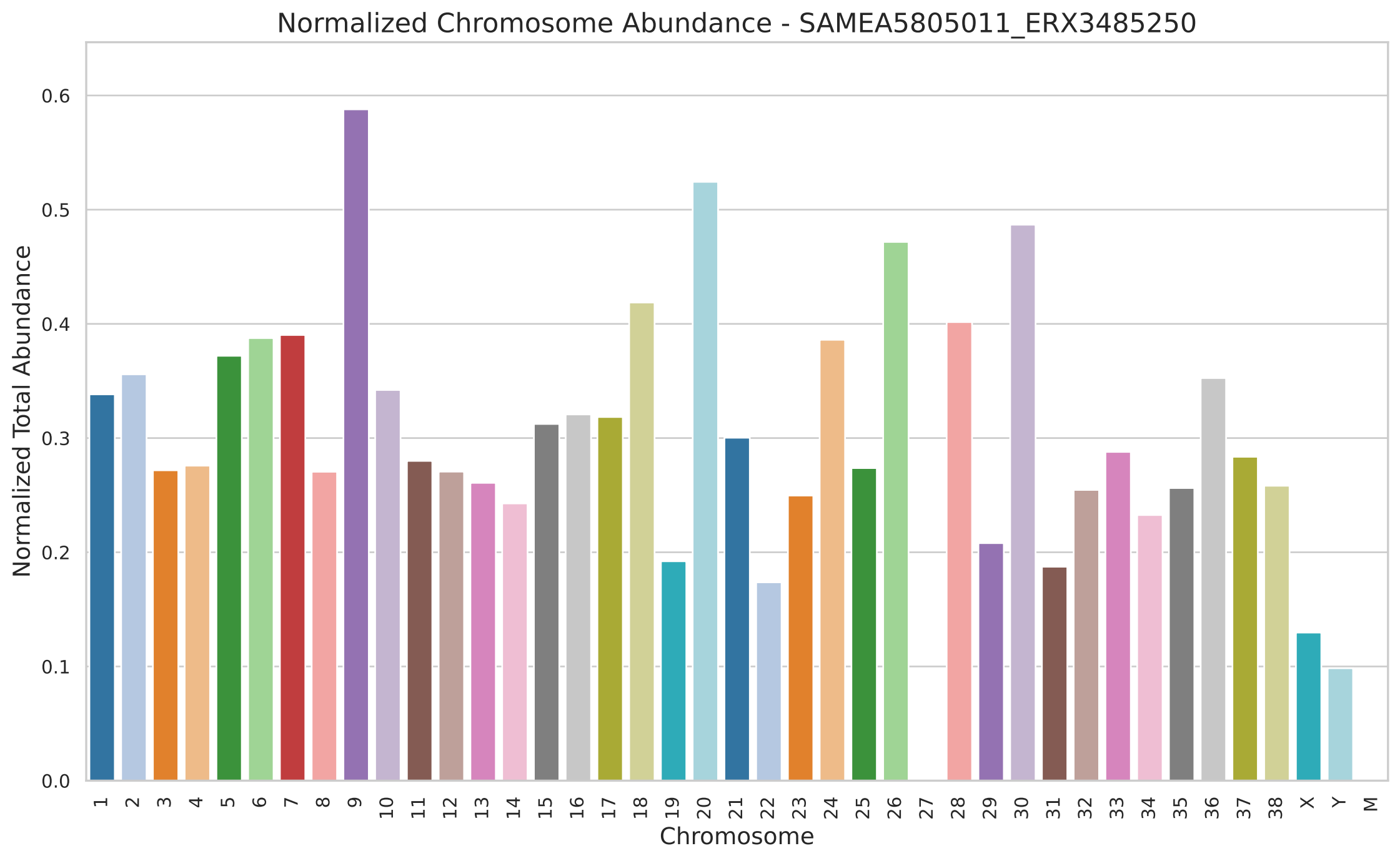

Normalized Chromosome Abundance - SAMEA5805042_ERX3485262
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

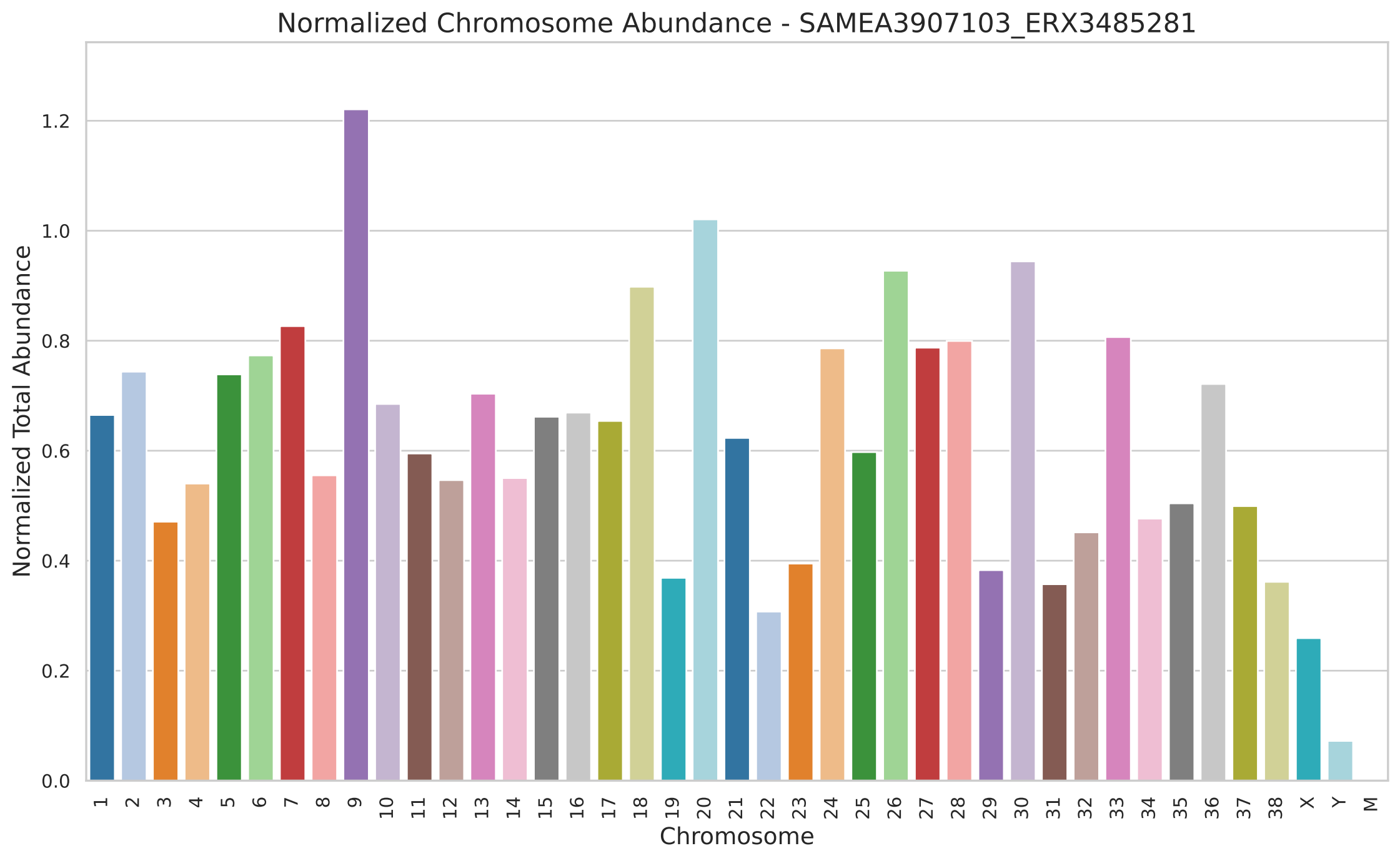

Normalized Chromosome Abundance - SAMEA3907405_ERX3485321
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

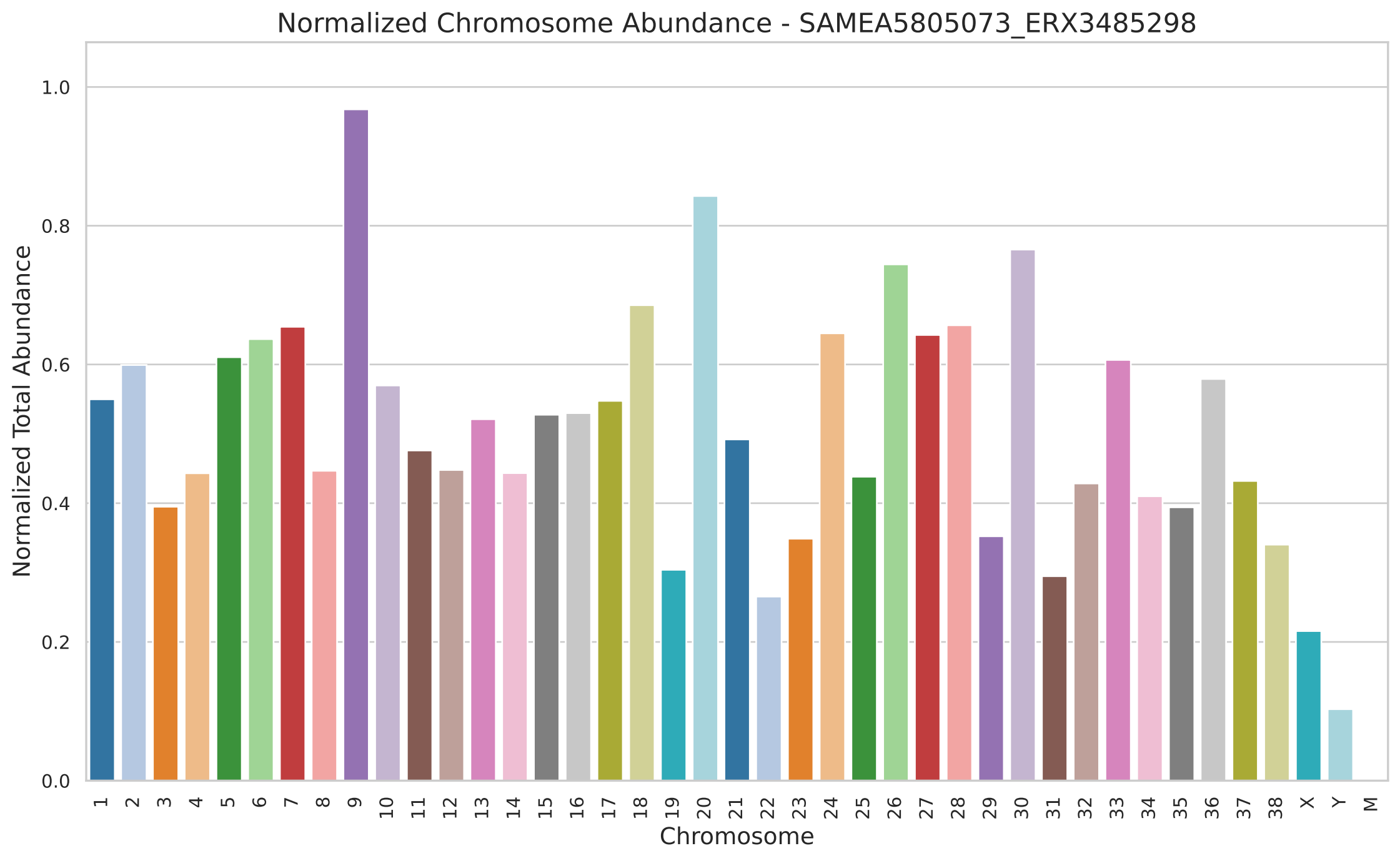

Normalized Chromosome Abundance - SAMEA5805019_ERX3485270
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

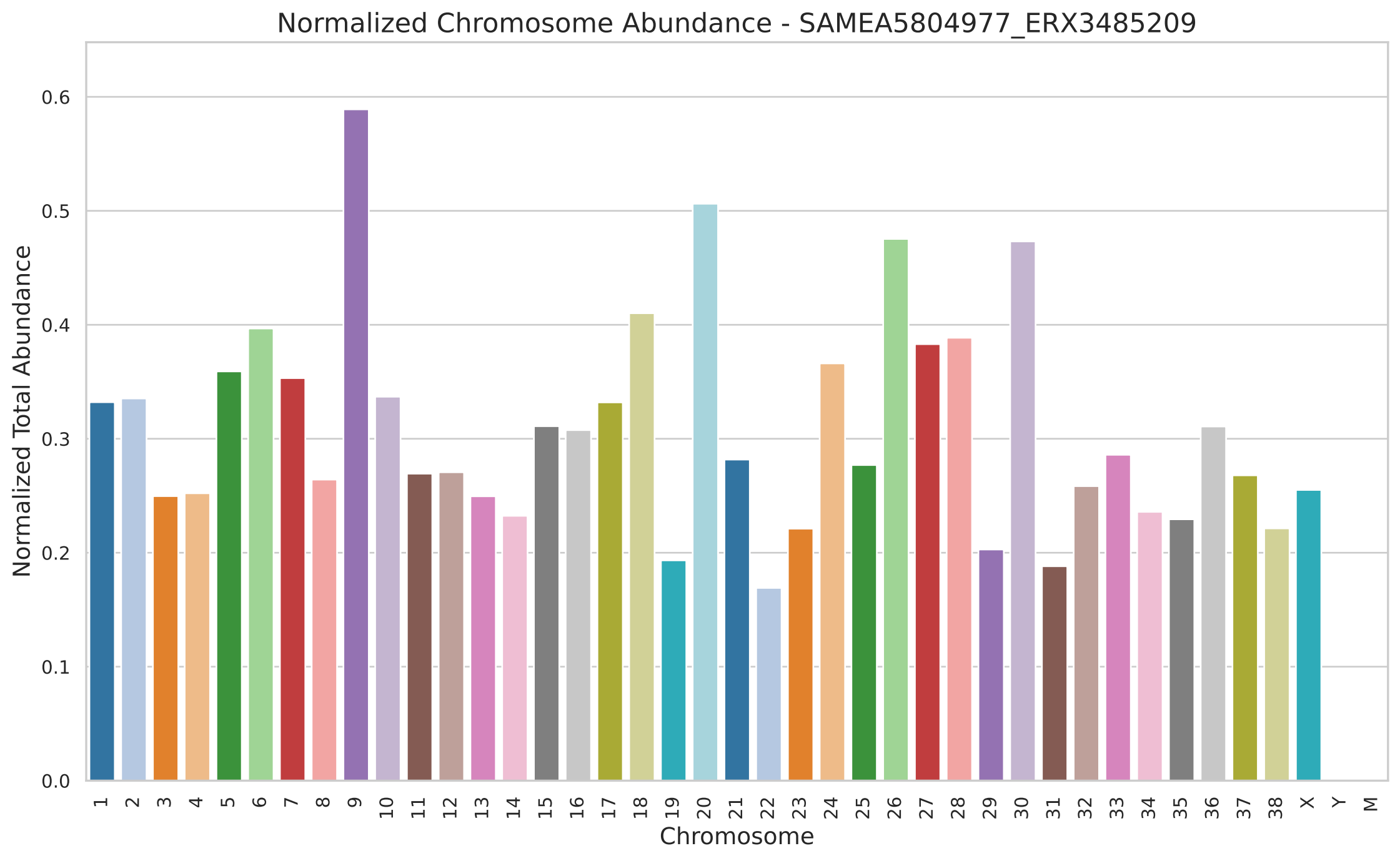

Normalized Chromosome Abundance - SAMEA5805042_ERX3485278
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

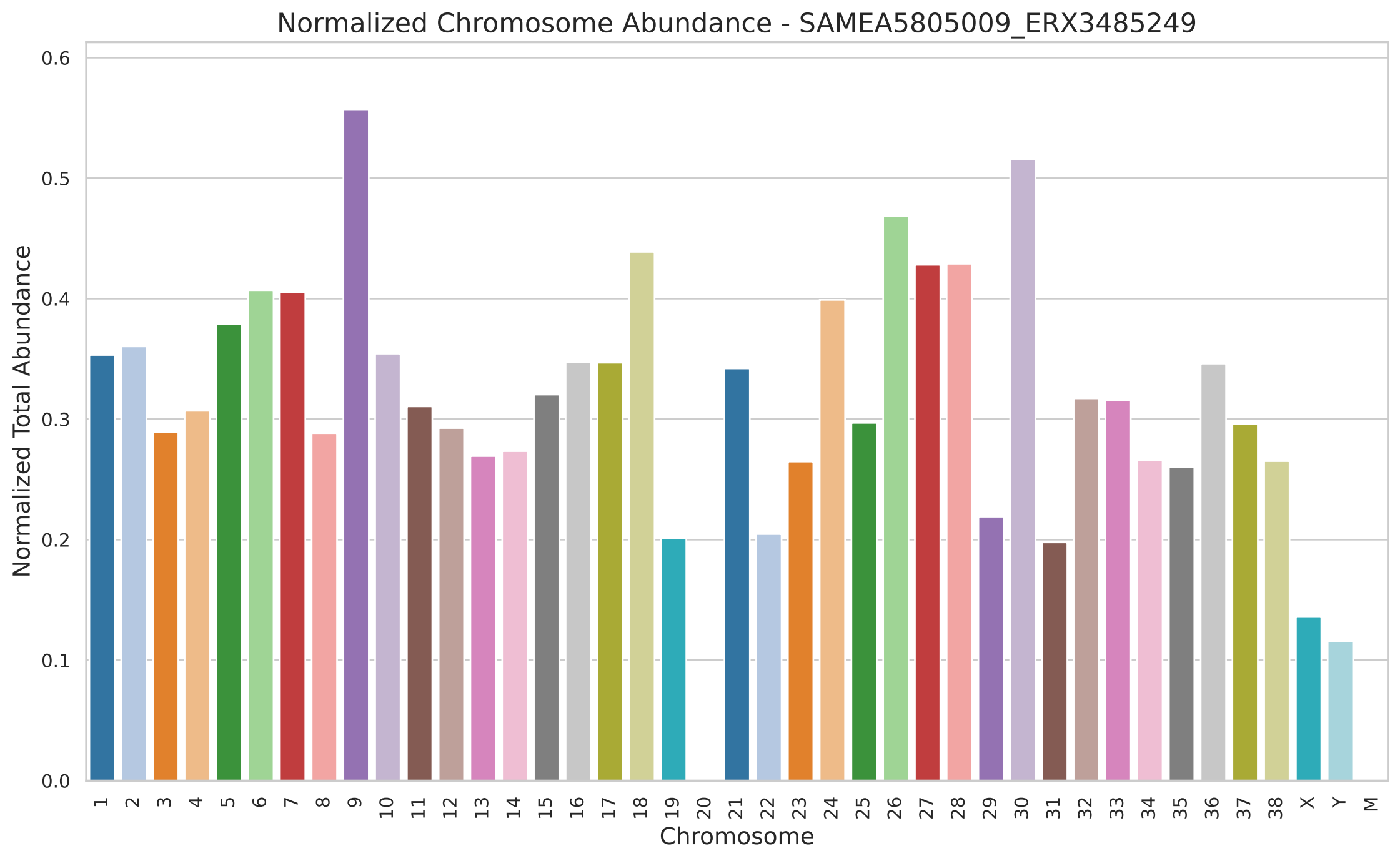

Normalized Chromosome Abundance - SAMEA3907094_ERX3485279
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

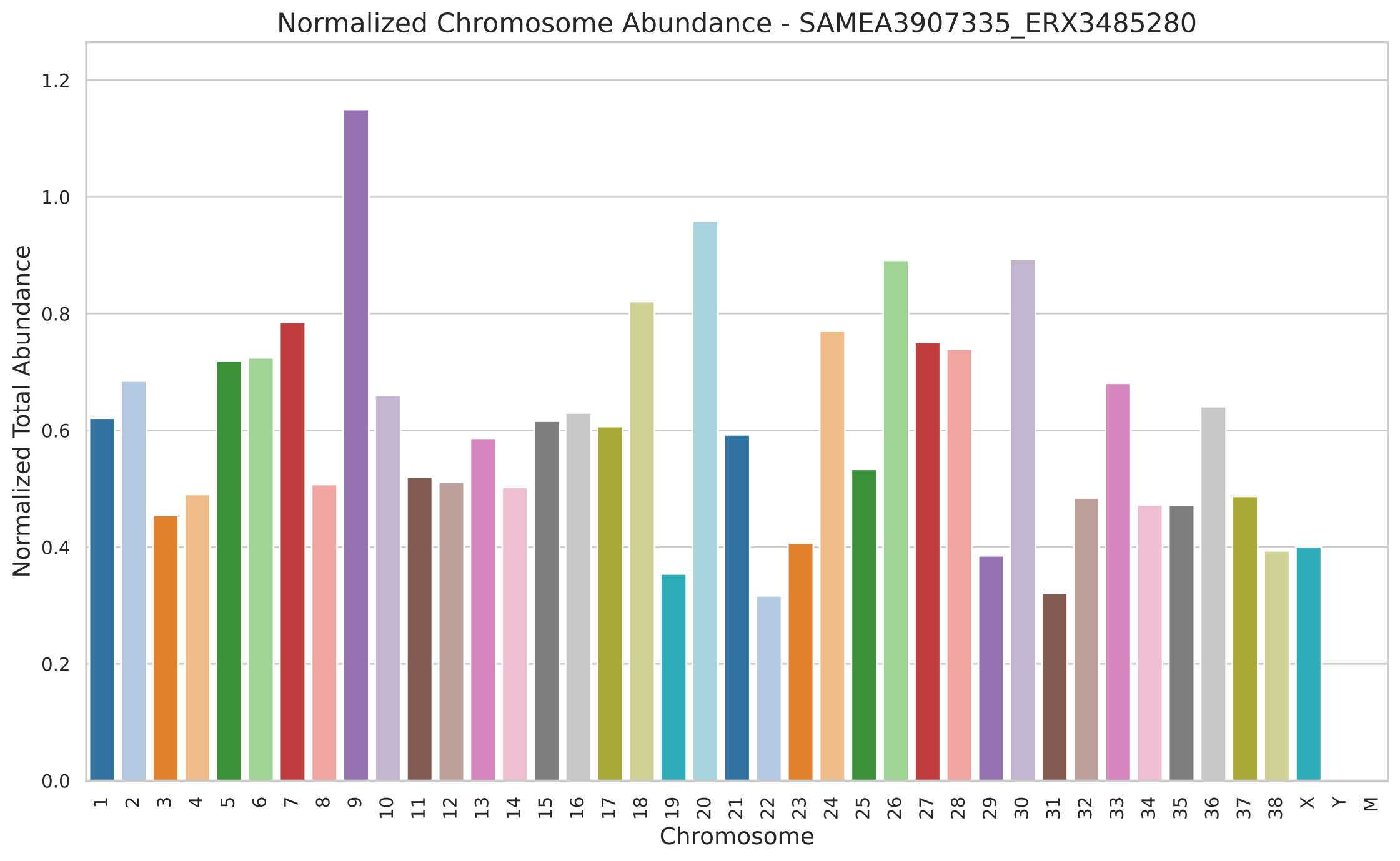

Normalized Chromosome Abundance - SAMEA5805011_ERX3485250
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

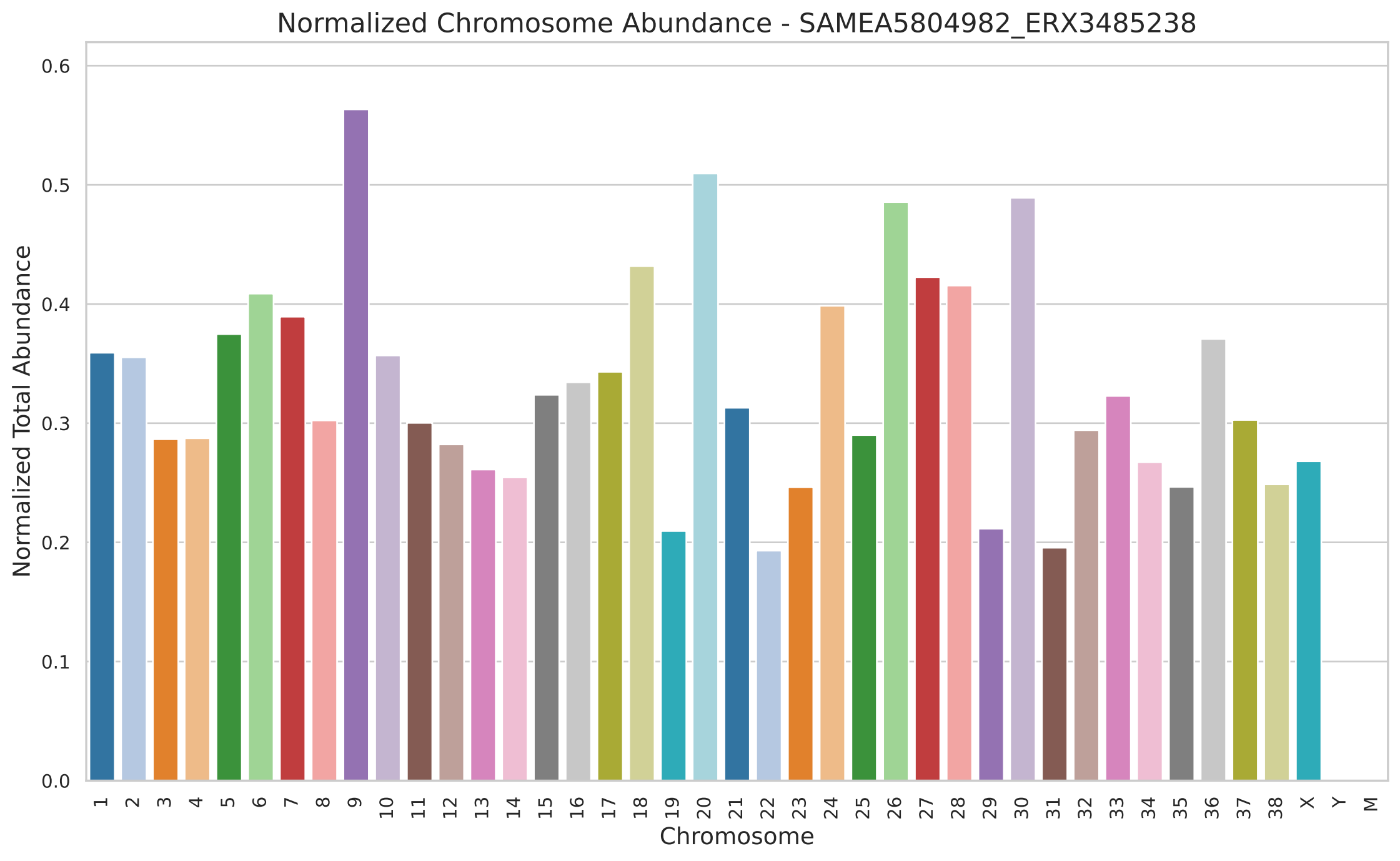

Normalized Chromosome Abundance - SAMEA3907103_ERX3485281
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

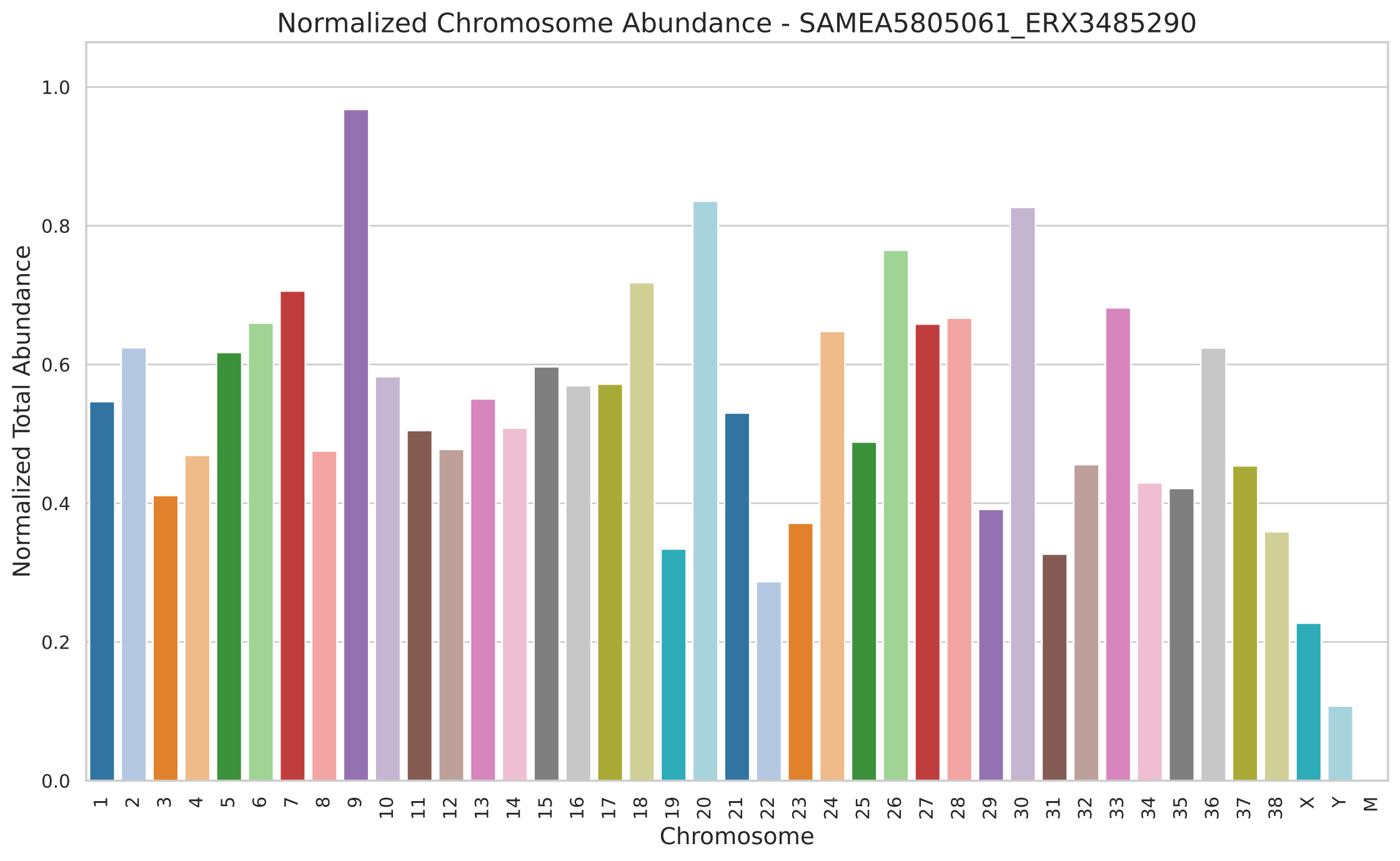

Normalized Chromosome Abundance - SAMEA5805073_ERX3485298
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

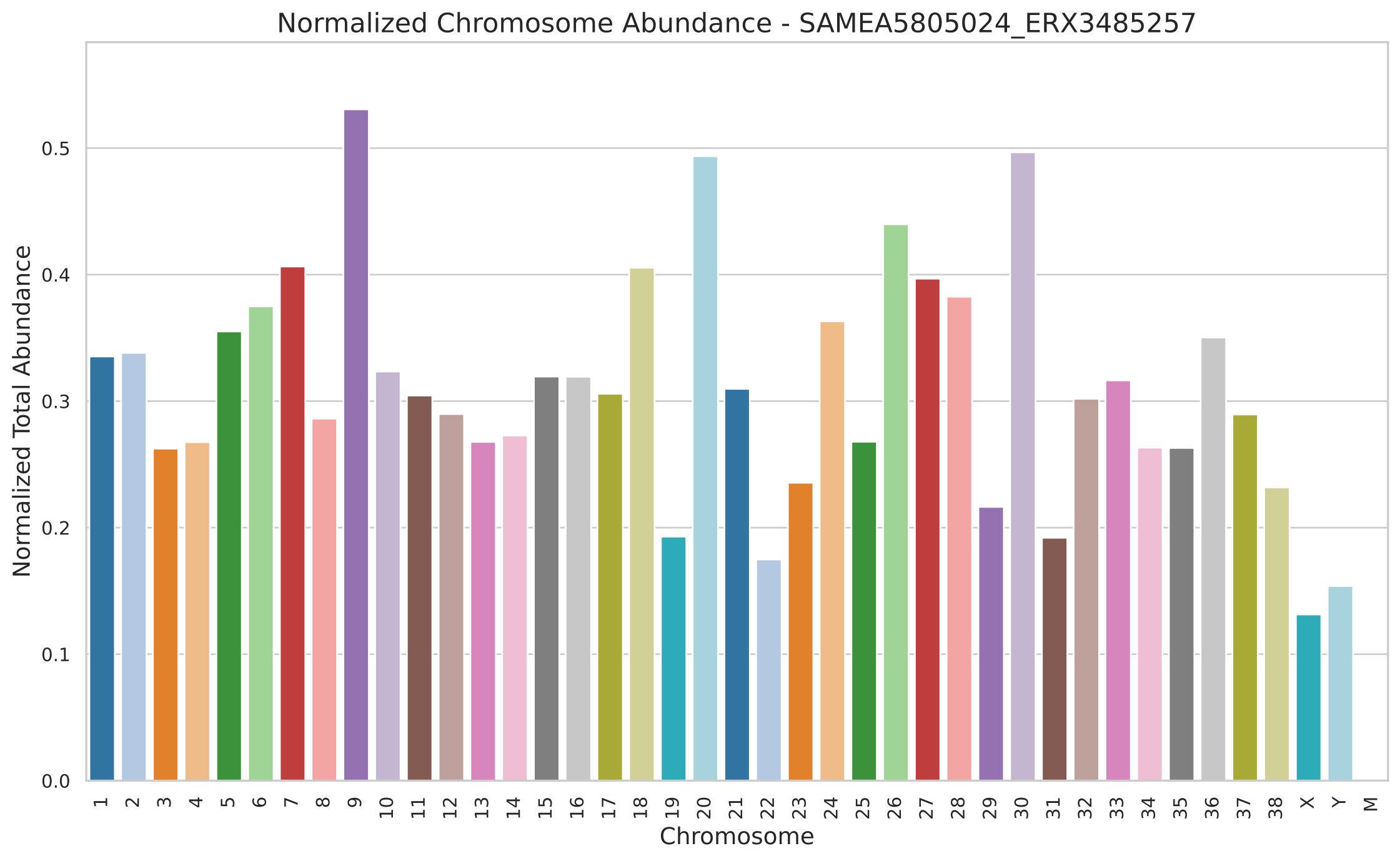

Normalized Chromosome Abundance - SAMEA5804977_ERX3485209
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

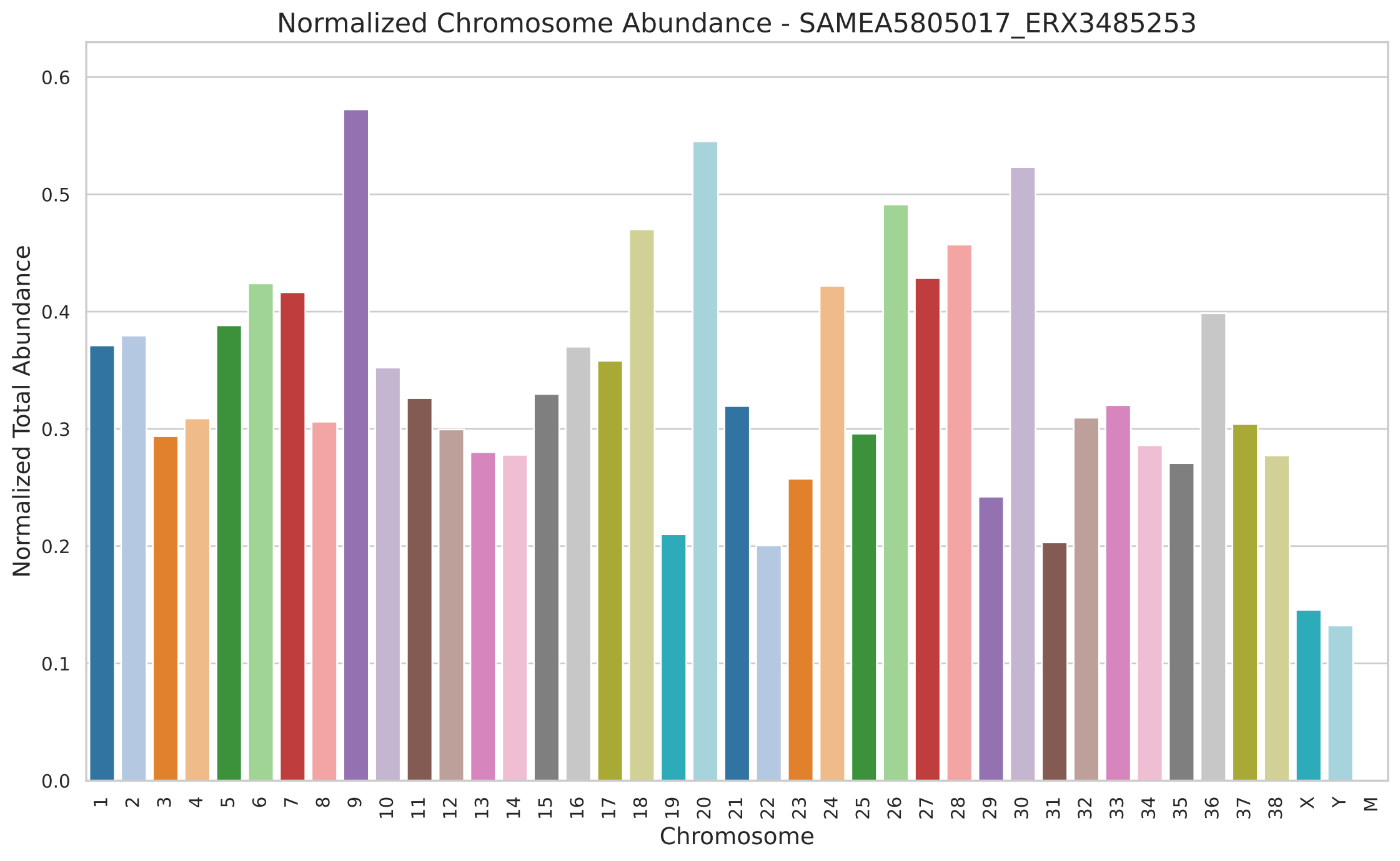

Normalized Chromosome Abundance - SAMEA5805009_ERX3485249
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

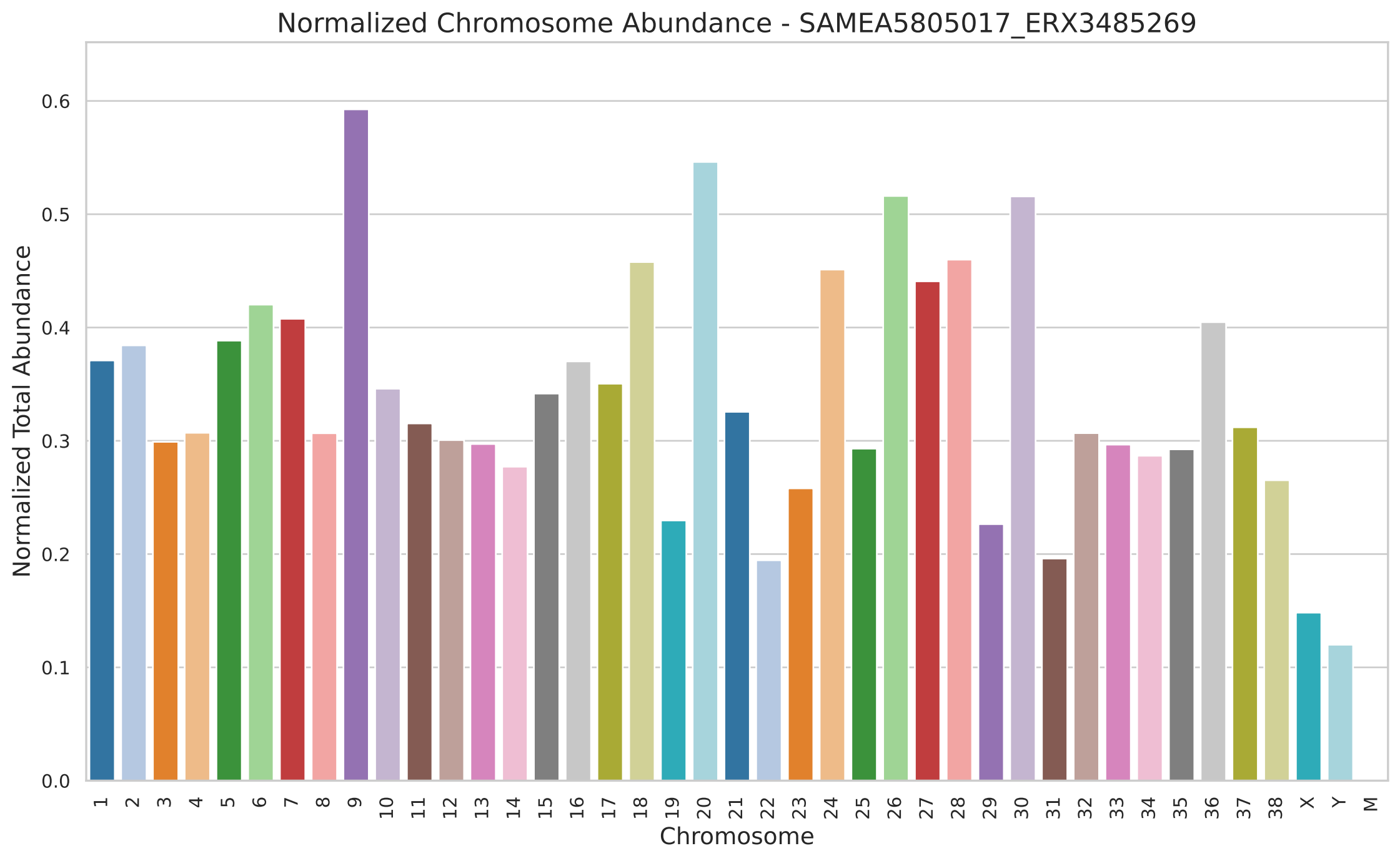

Normalized Chromosome Abundance - SAMEA3907335_ERX3485280
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

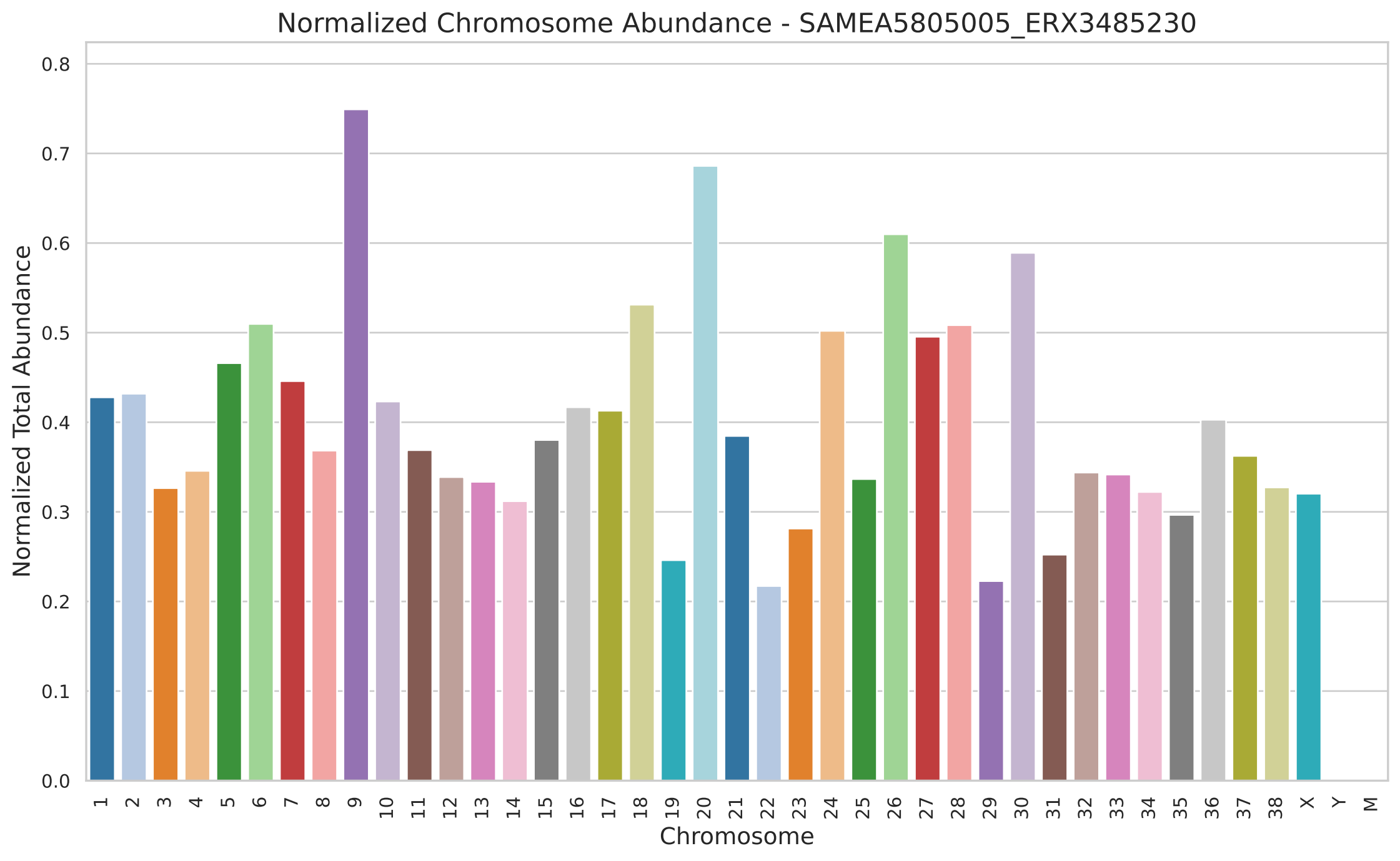

Normalized Chromosome Abundance - SAMEA5804982_ERX3485238
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

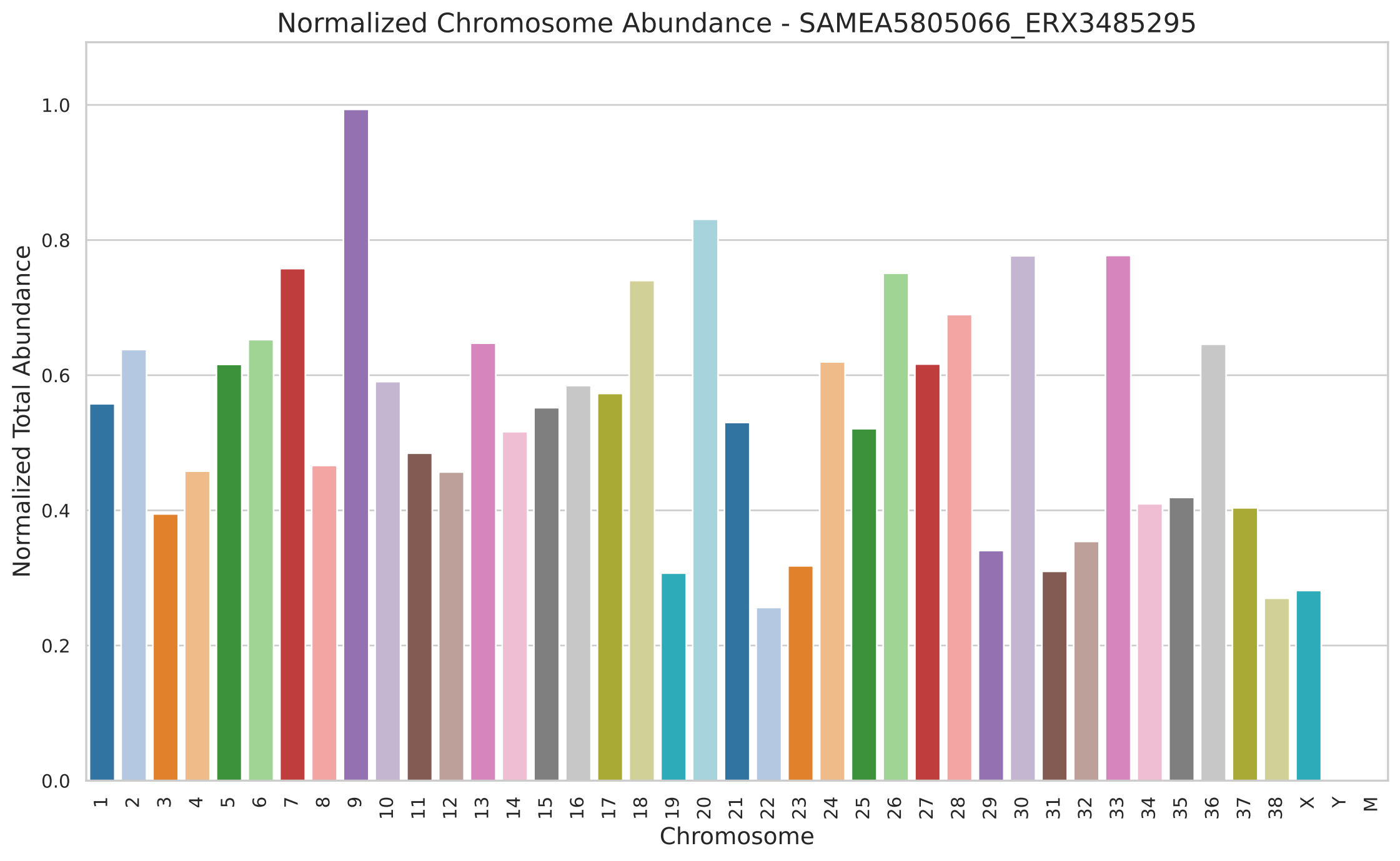

Normalized Chromosome Abundance - SAMEA5805061_ERX3485290
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

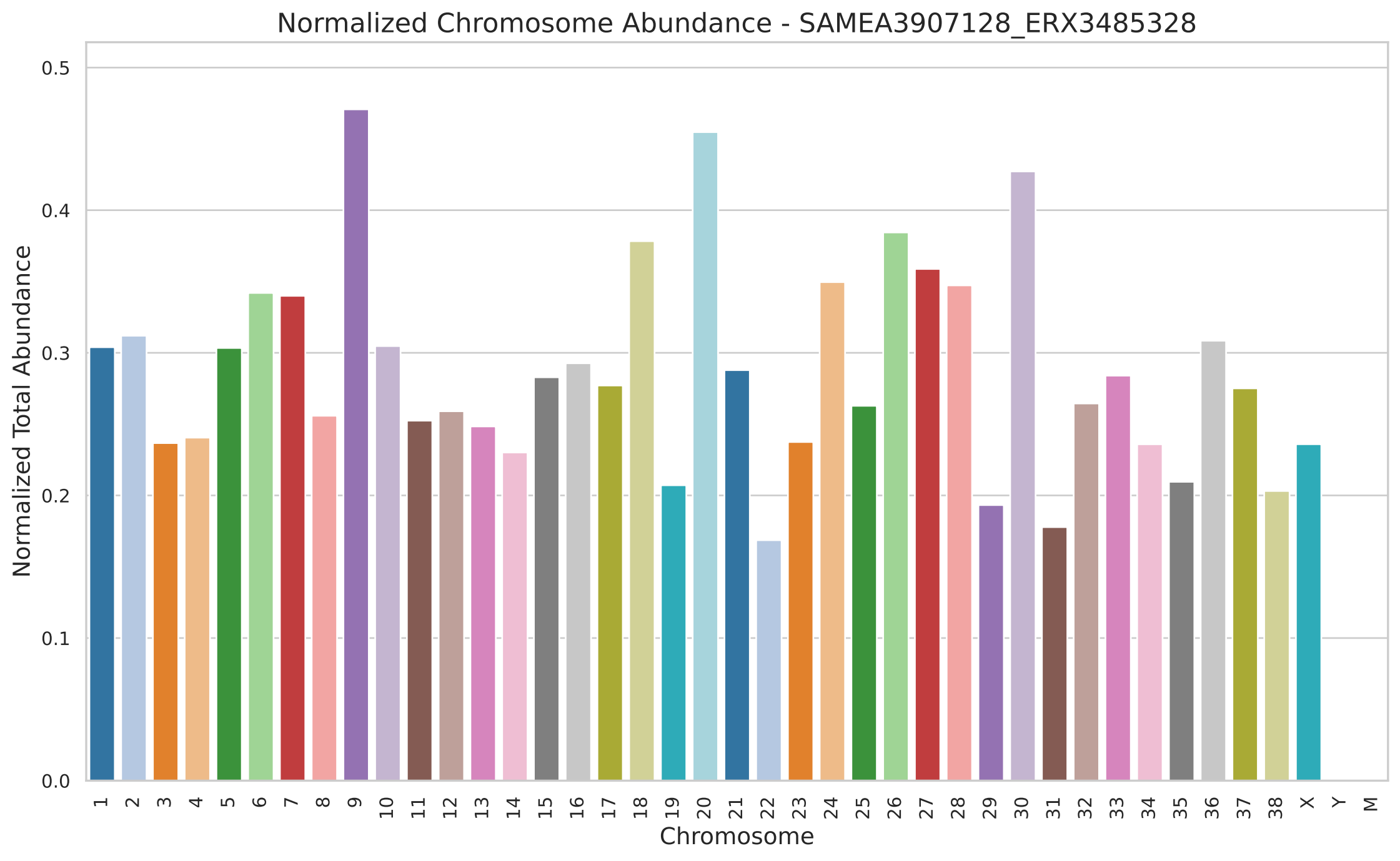

Normalized Chromosome Abundance - SAMEA5805024_ERX3485257
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

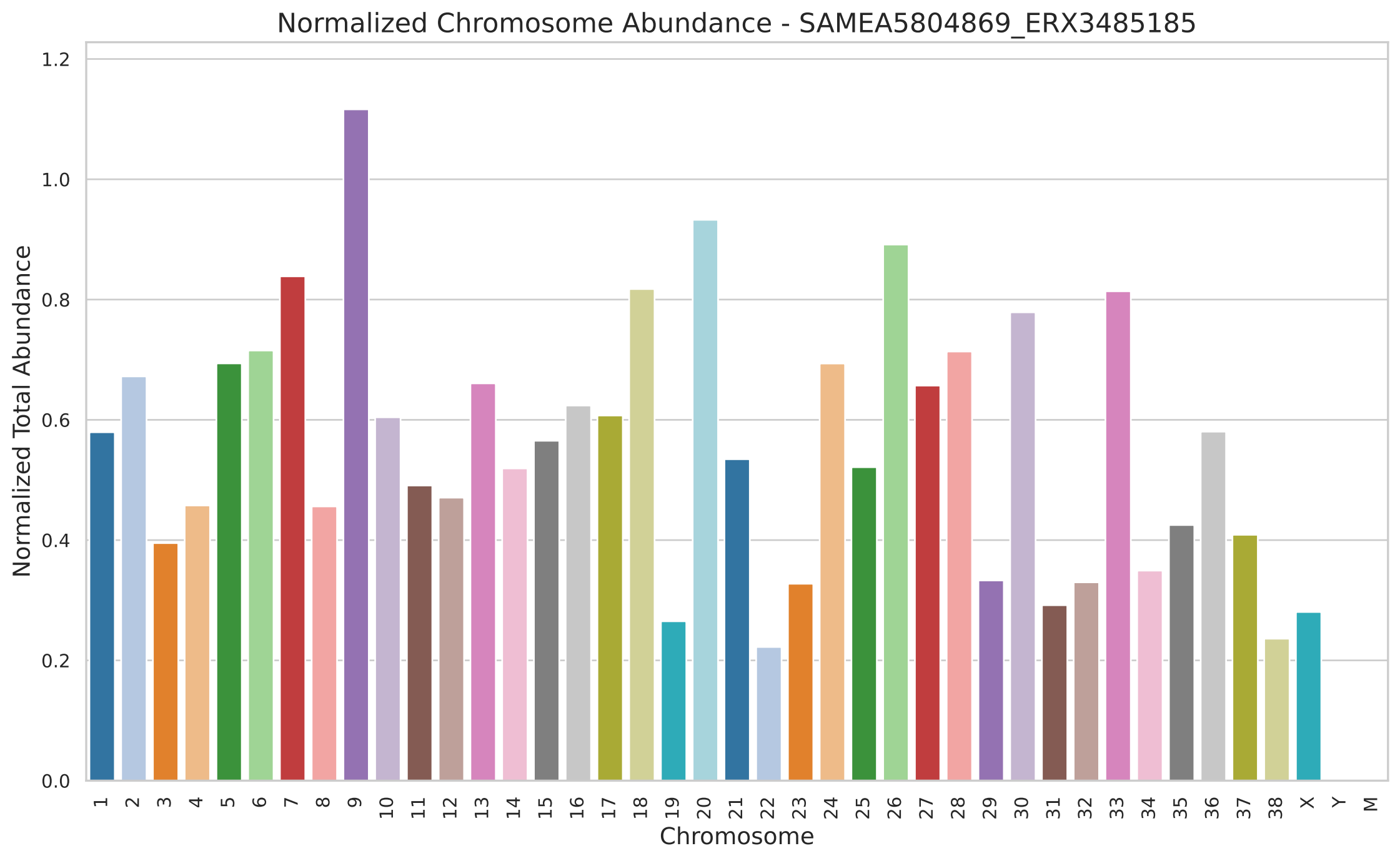

Normalized Chromosome Abundance - SAMEA5805017_ERX3485253
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

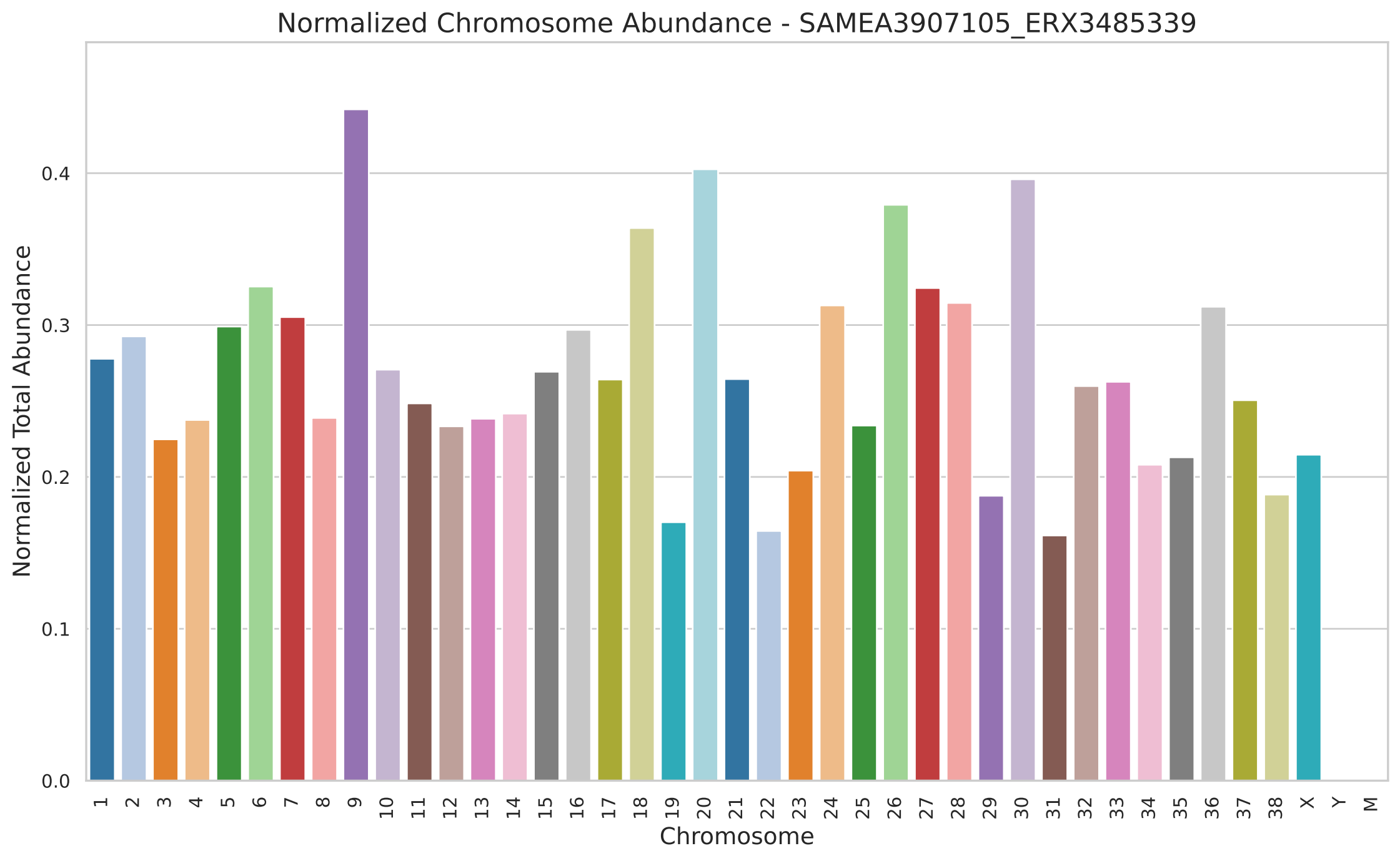

Normalized Chromosome Abundance - SAMEA5805017_ERX3485269
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

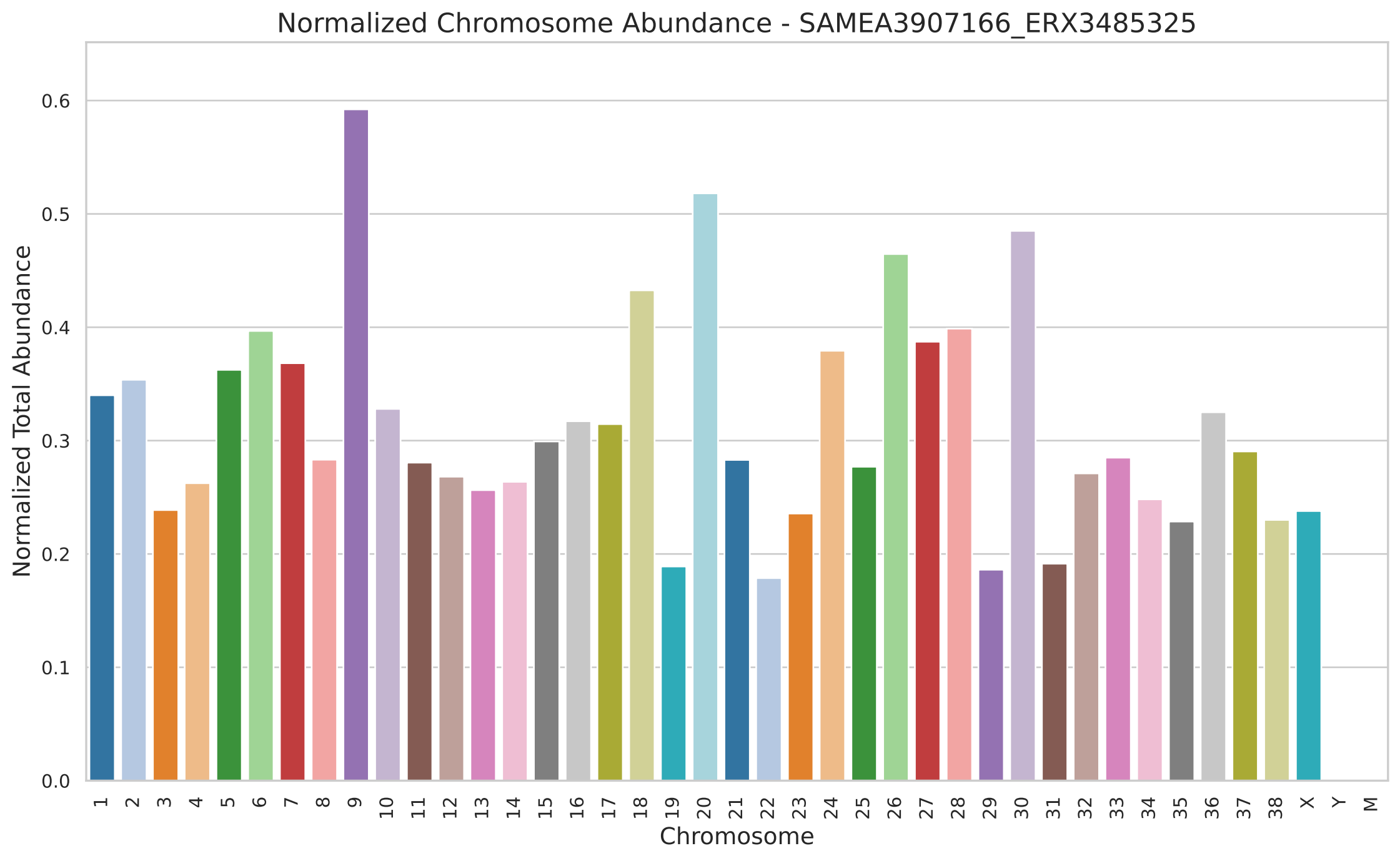

Normalized Chromosome Abundance - SAMEA5805005_ERX3485230
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

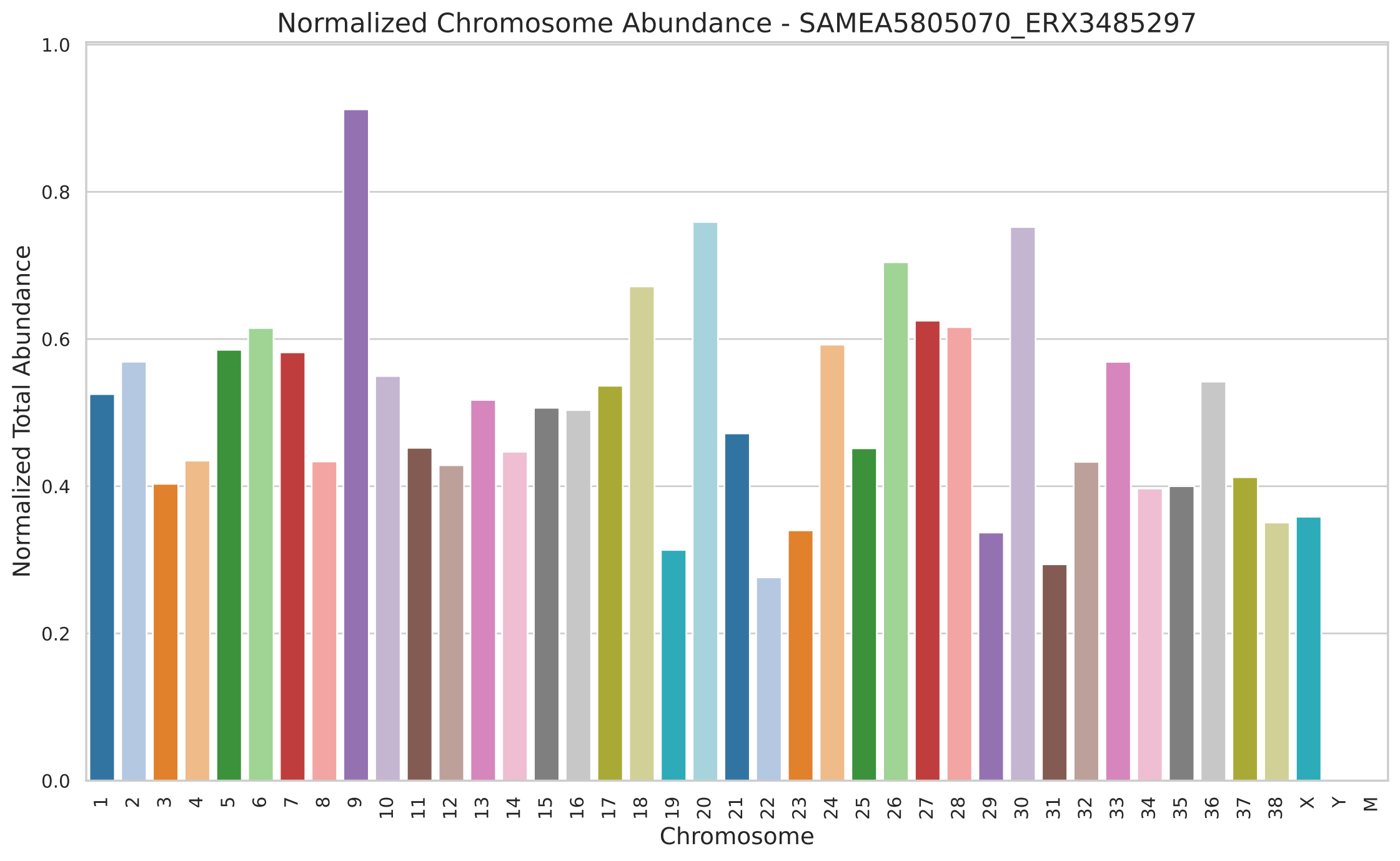

Normalized Chromosome Abundance - SAMEA5805066_ERX3485295
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

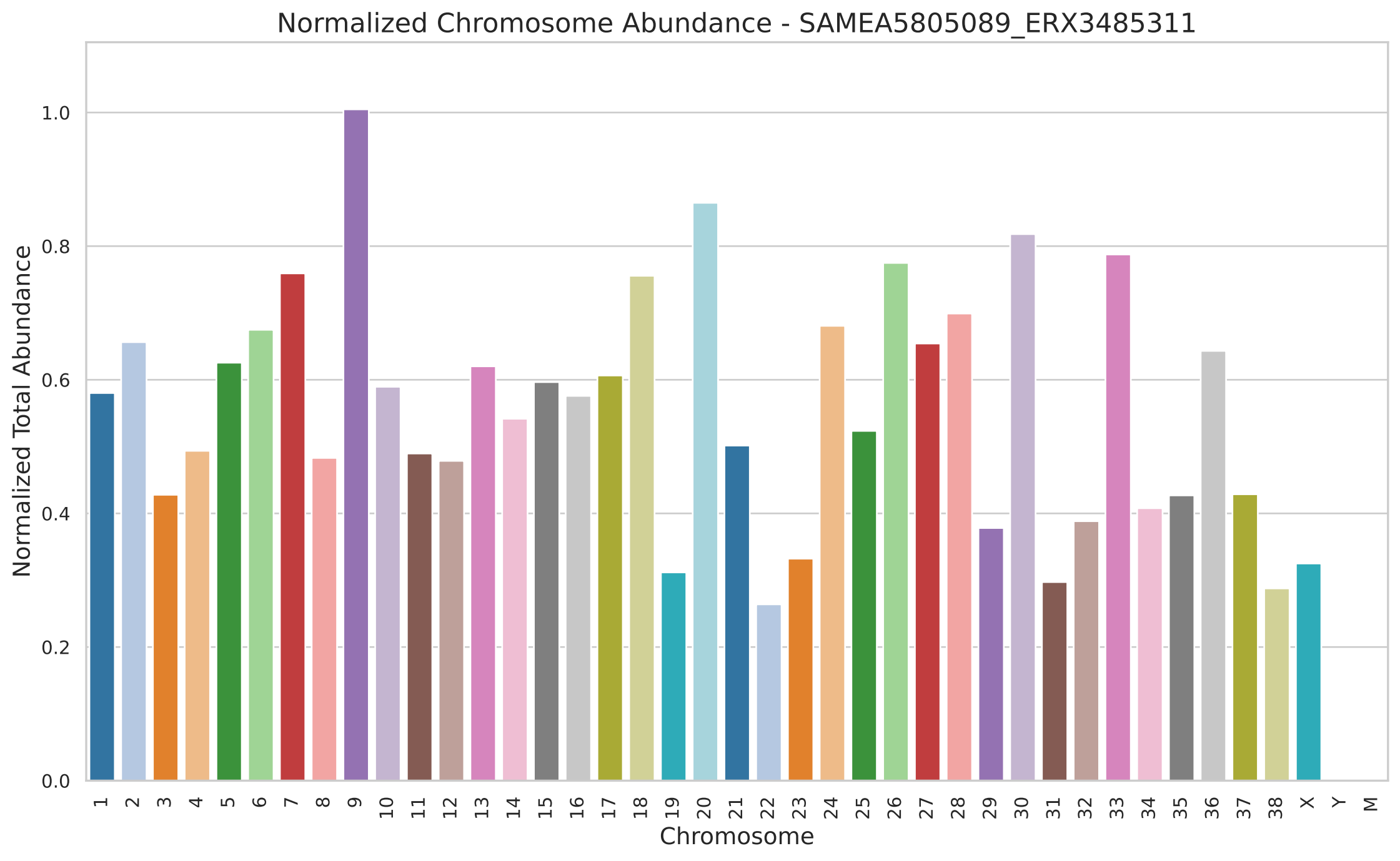

Normalized Chromosome Abundance - SAMEA3907128_ERX3485328
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

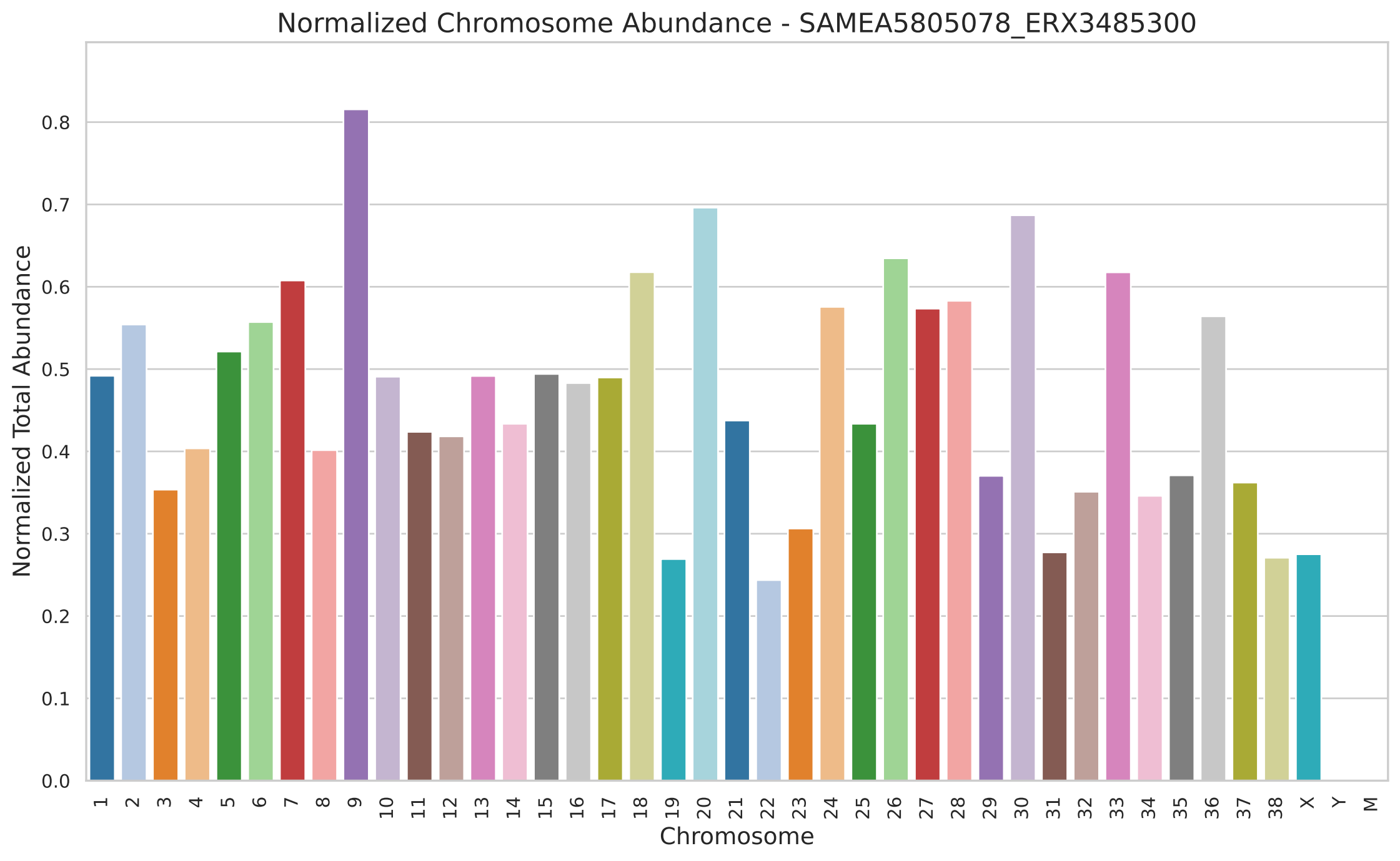

Normalized Chromosome Abundance - SAMEA5804869_ERX3485185
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

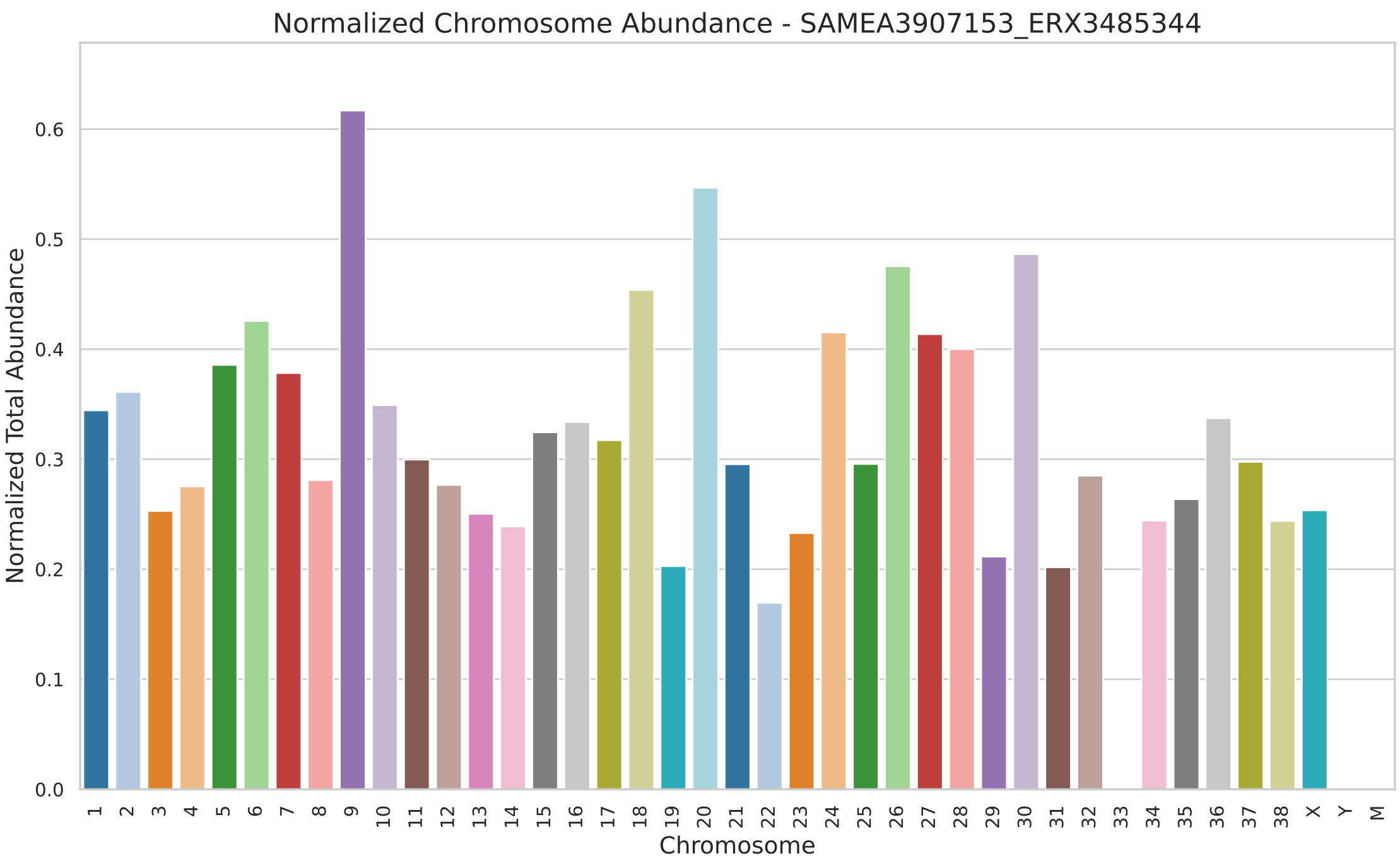

Normalized Chromosome Abundance - SAMEA3907105_ERX3485339
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

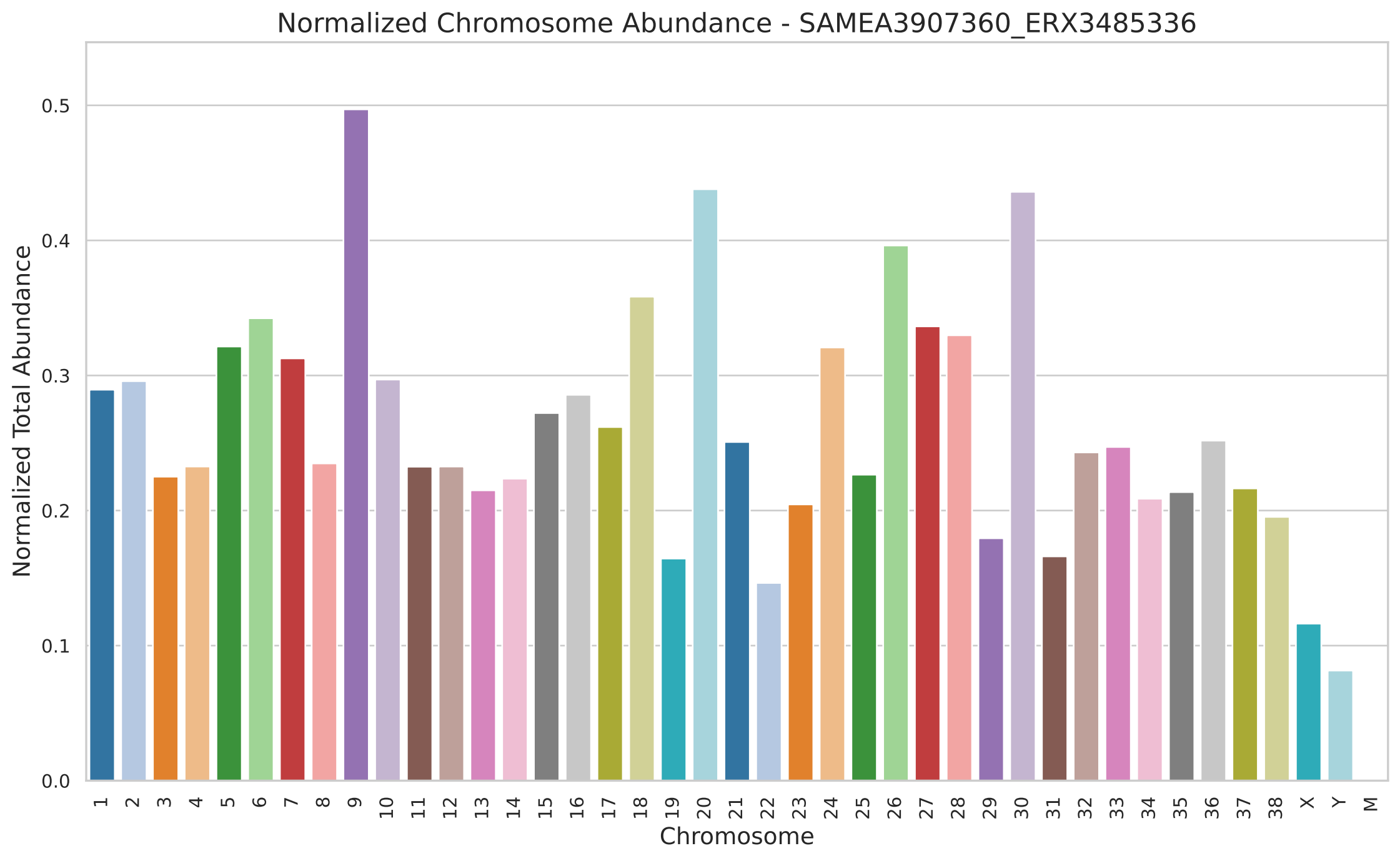

Normalized Chromosome Abundance - SAMEA3907166_ERX3485325
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

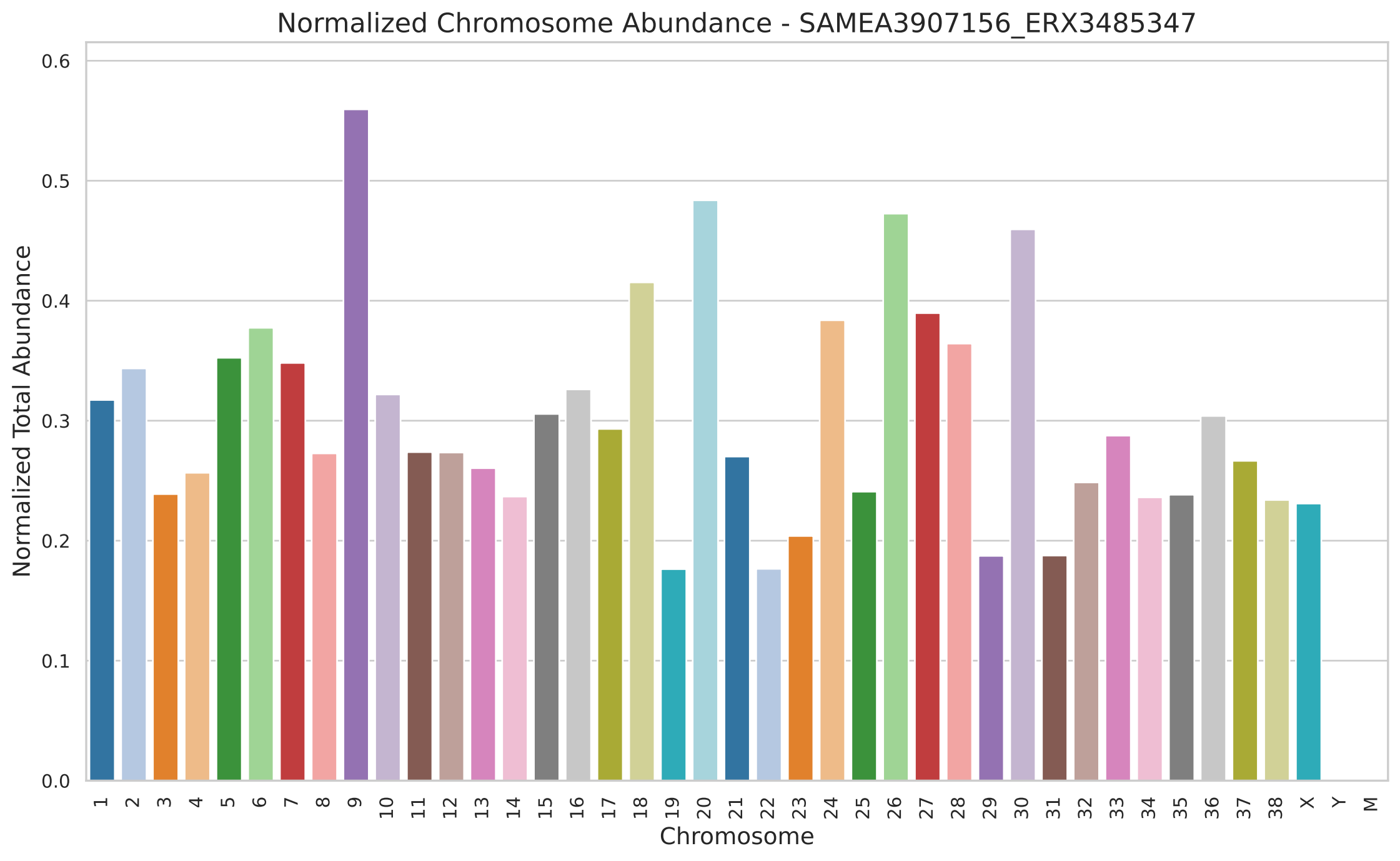

Normalized Chromosome Abundance - SAMEA5805070_ERX3485297
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

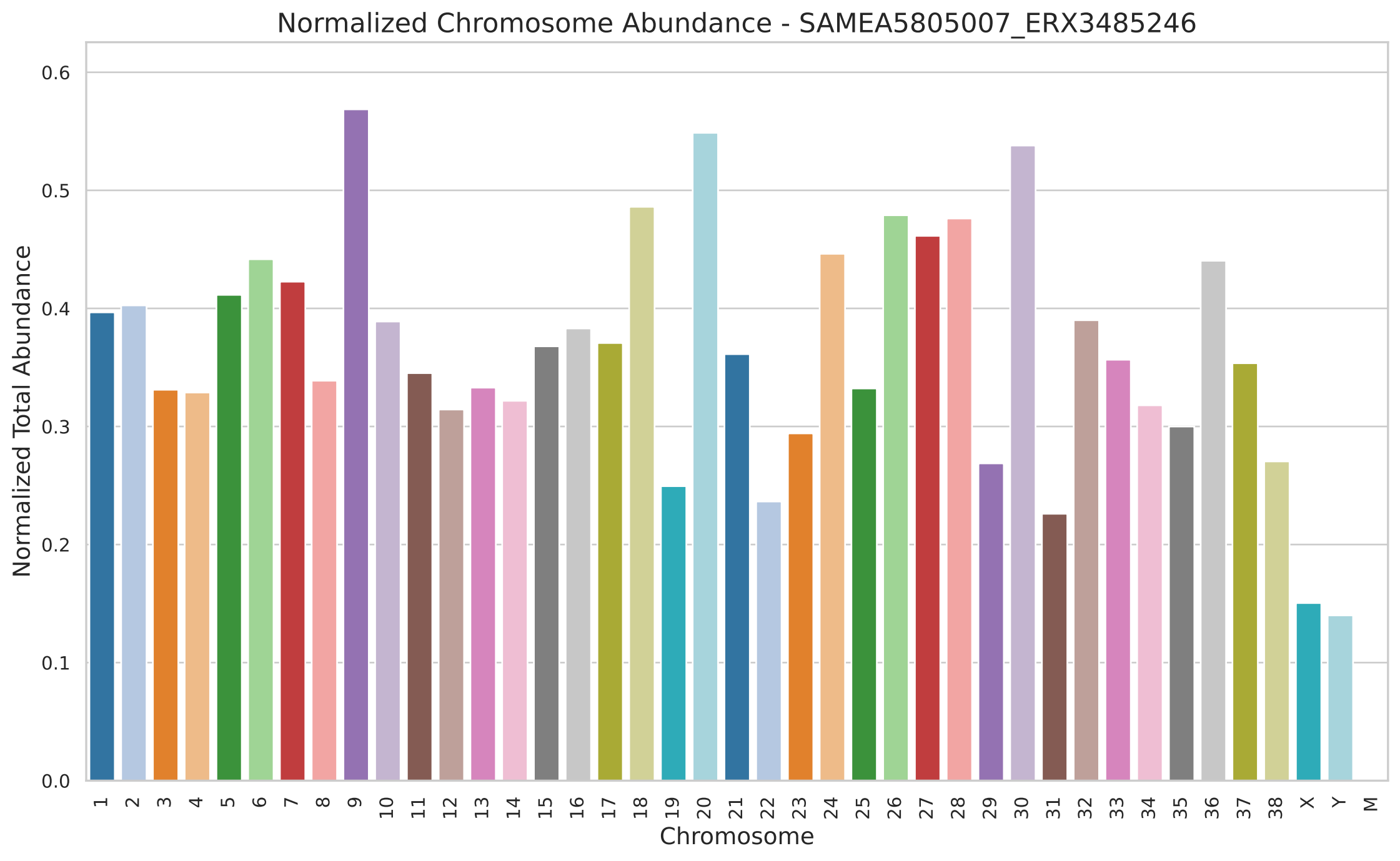

Normalized Chromosome Abundance - SAMEA5805089_ERX3485311
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

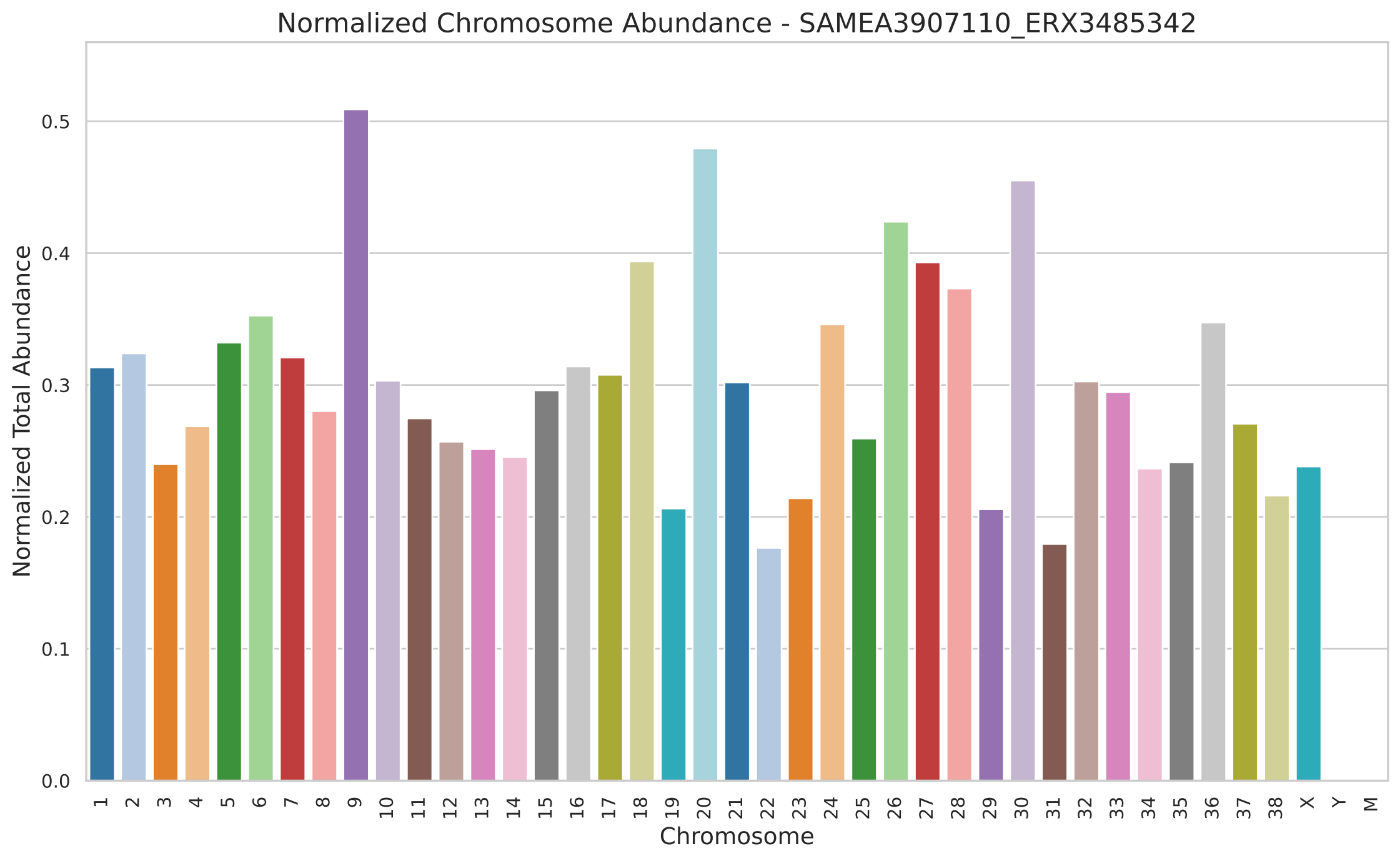

Normalized Chromosome Abundance - SAMEA5805078_ERX3485300
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

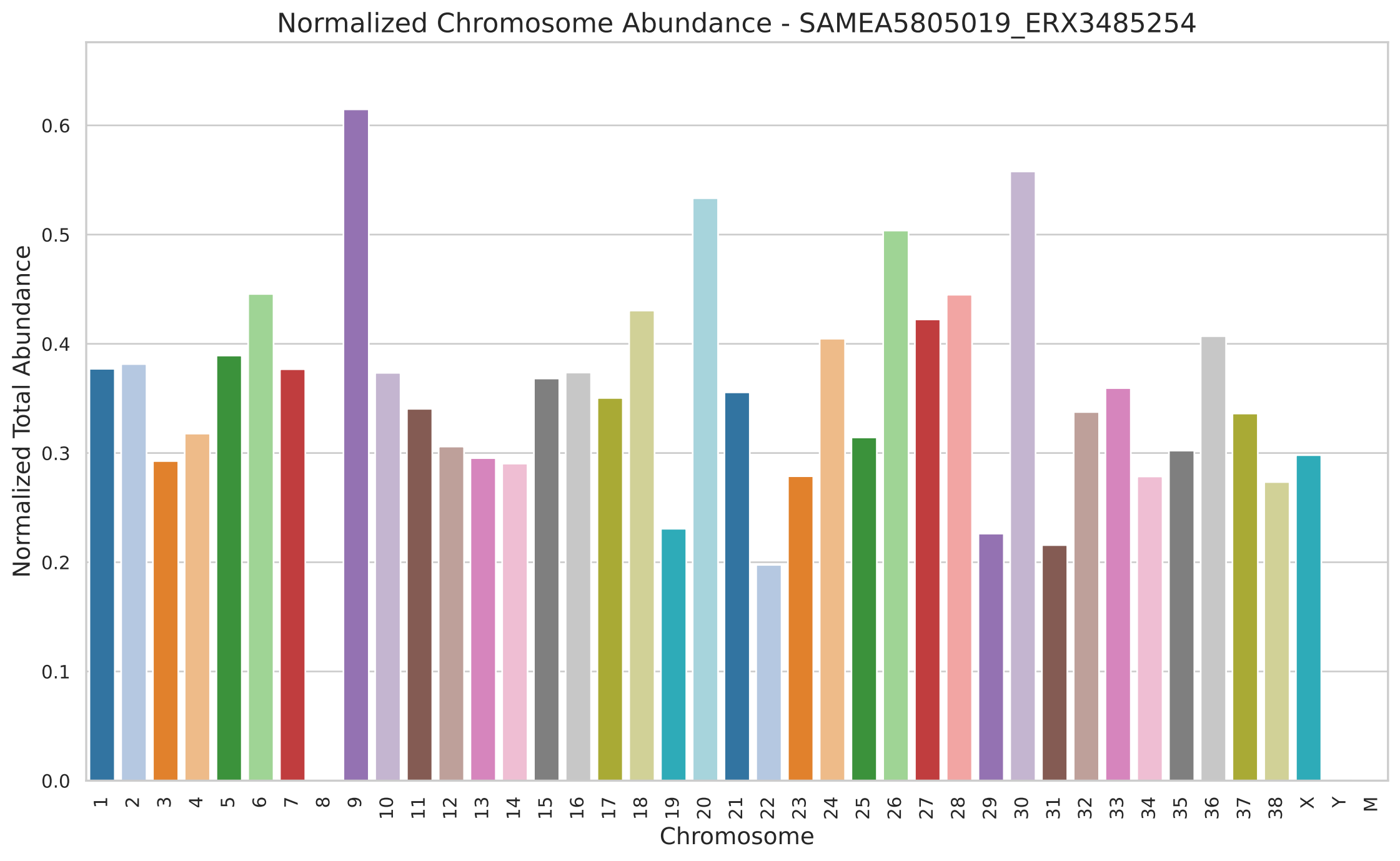

Normalized Chromosome Abundance - SAMEA3907153_ERX3485344
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

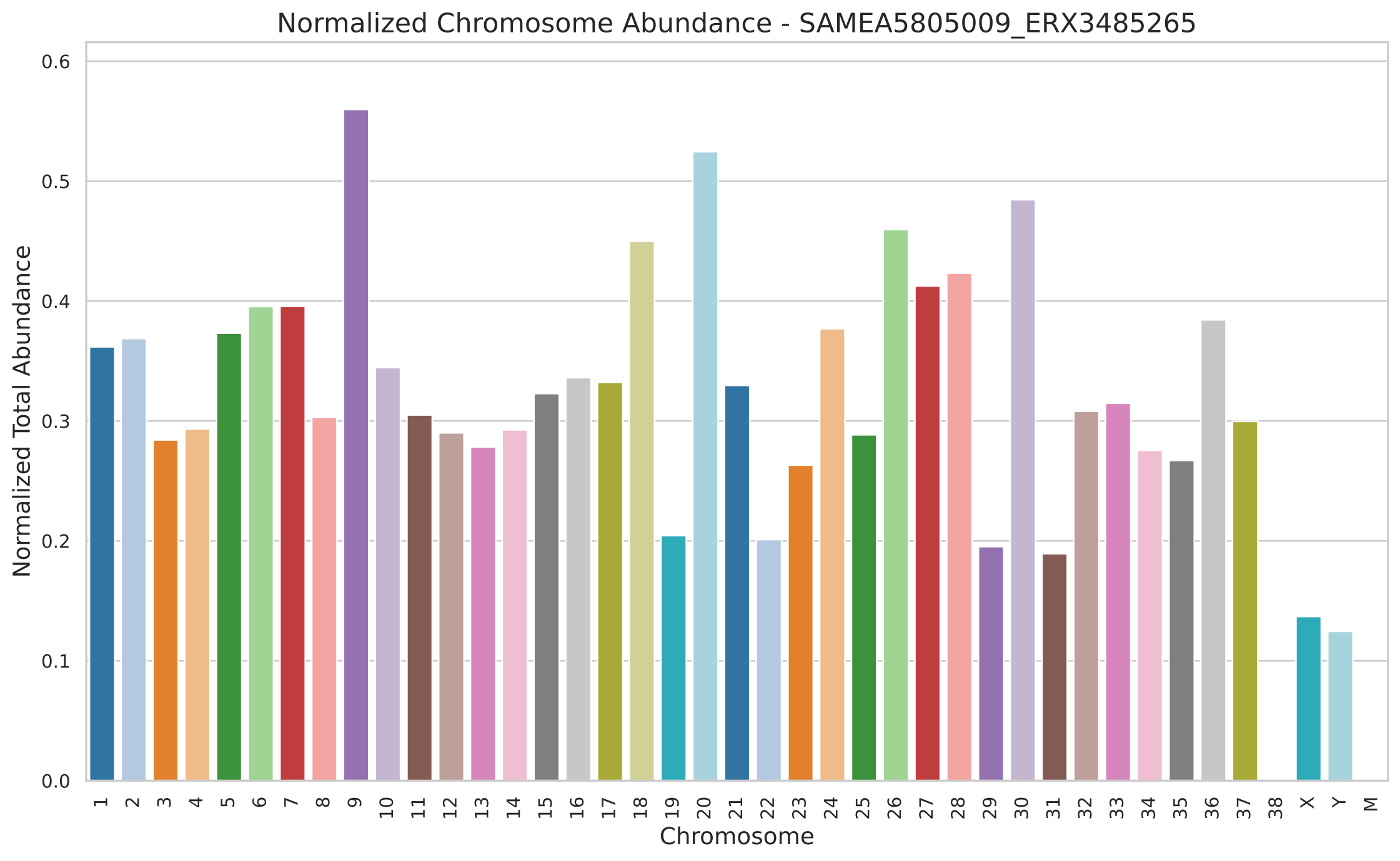

Normalized Chromosome Abundance - SAMEA3907360_ERX3485336
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

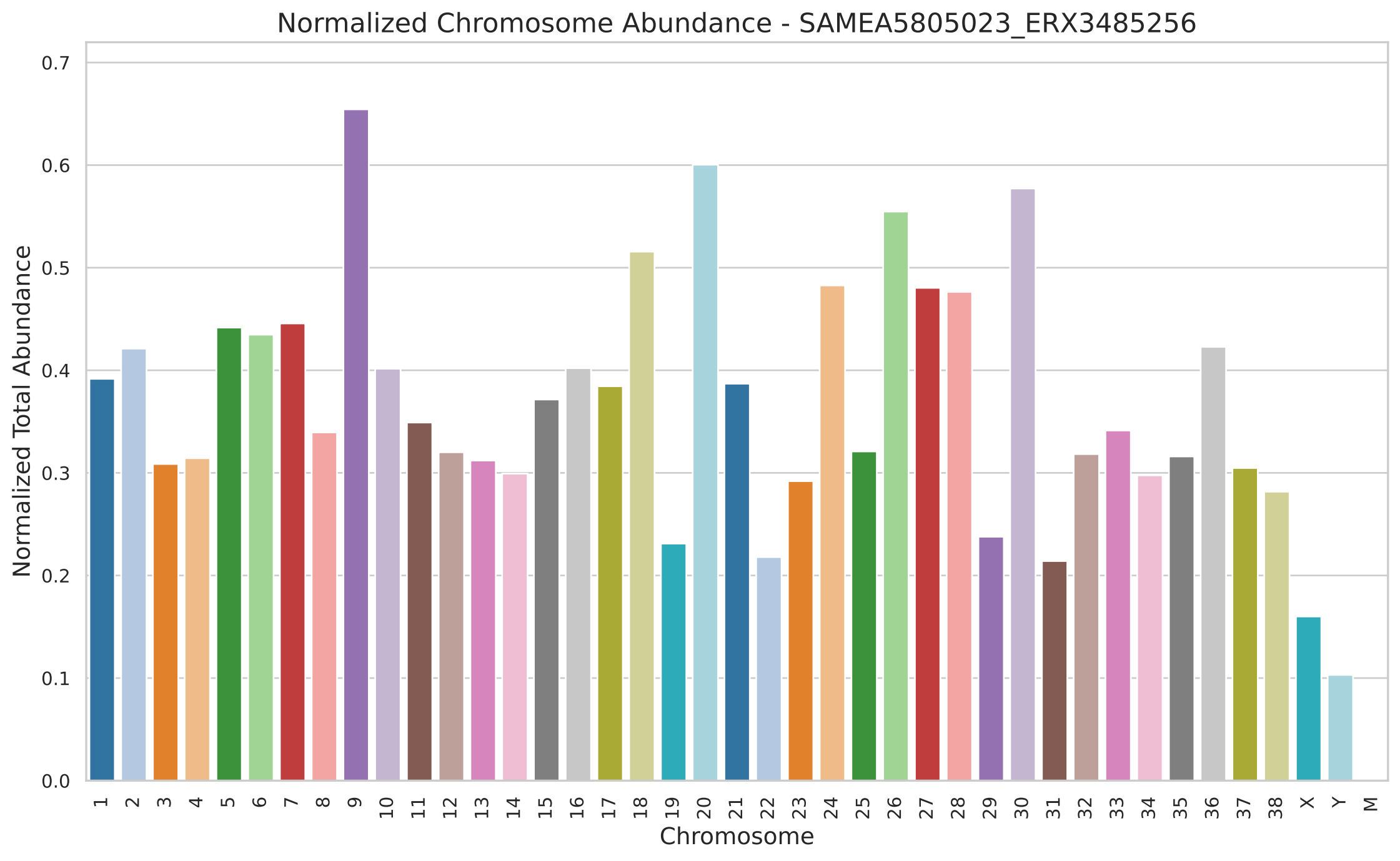

Normalized Chromosome Abundance - SAMEA3907156_ERX3485347
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

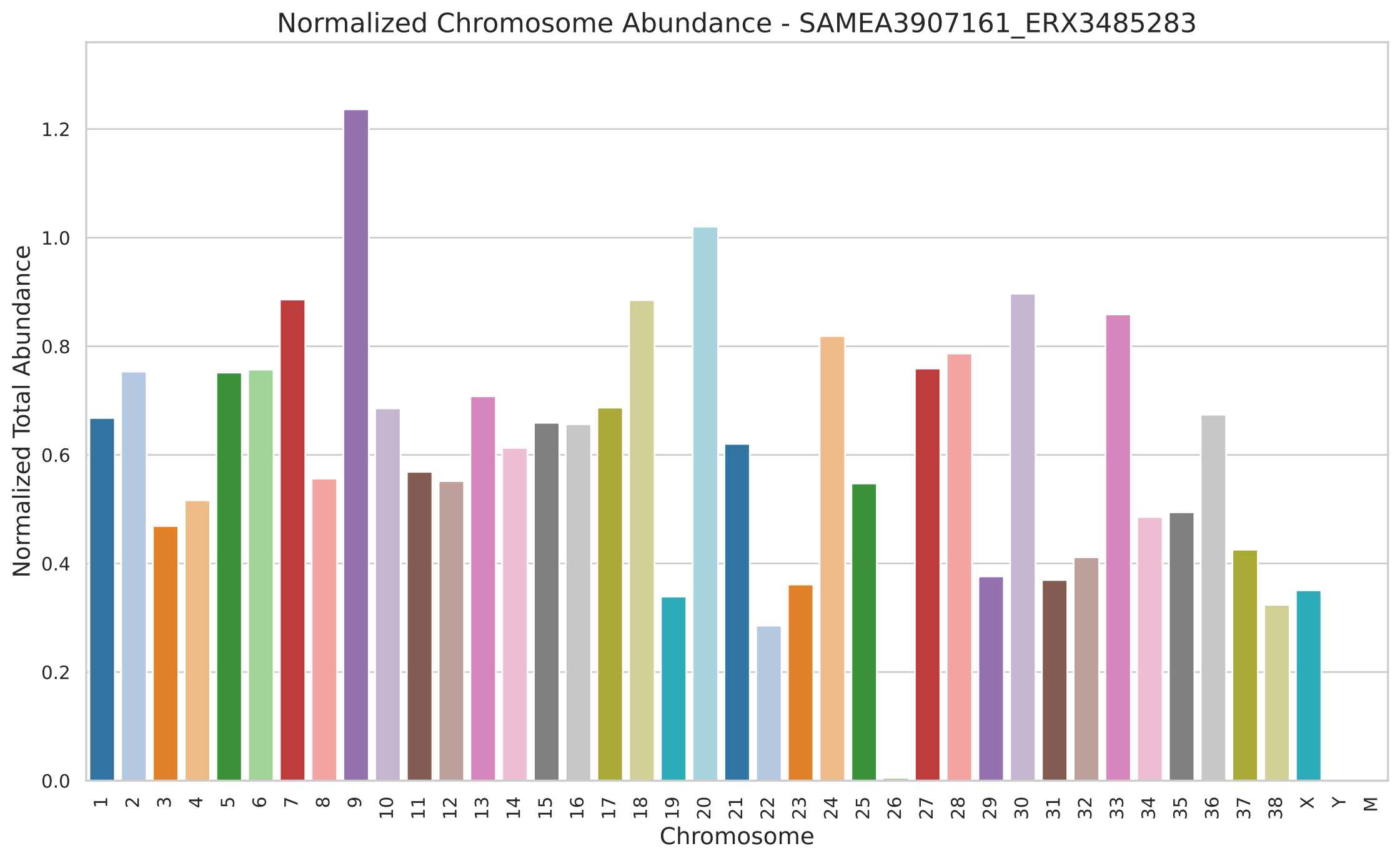

Normalized Chromosome Abundance - SAMEA5805007_ERX3485246
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

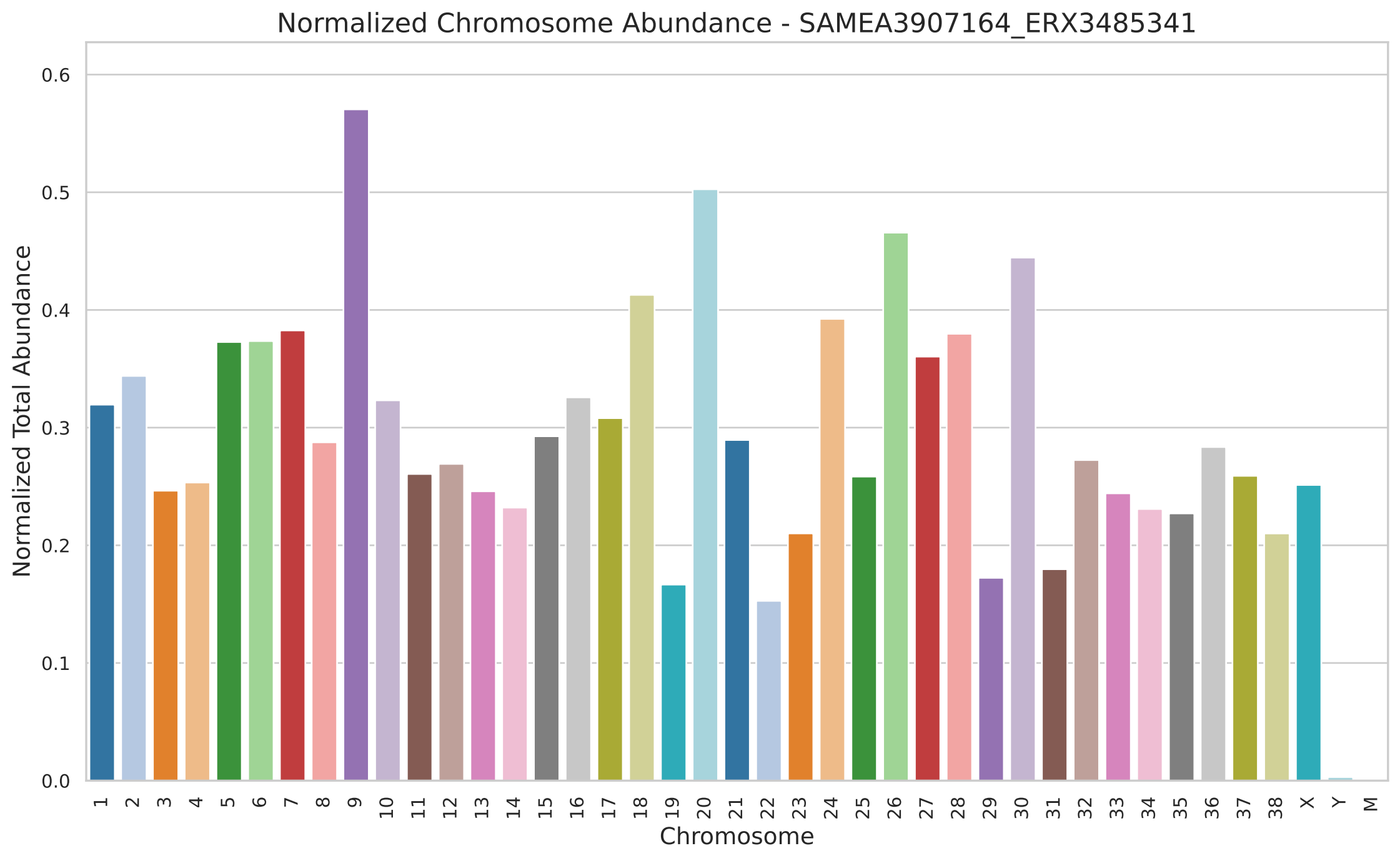

Normalized Chromosome Abundance - SAMEA3907110_ERX3485342
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

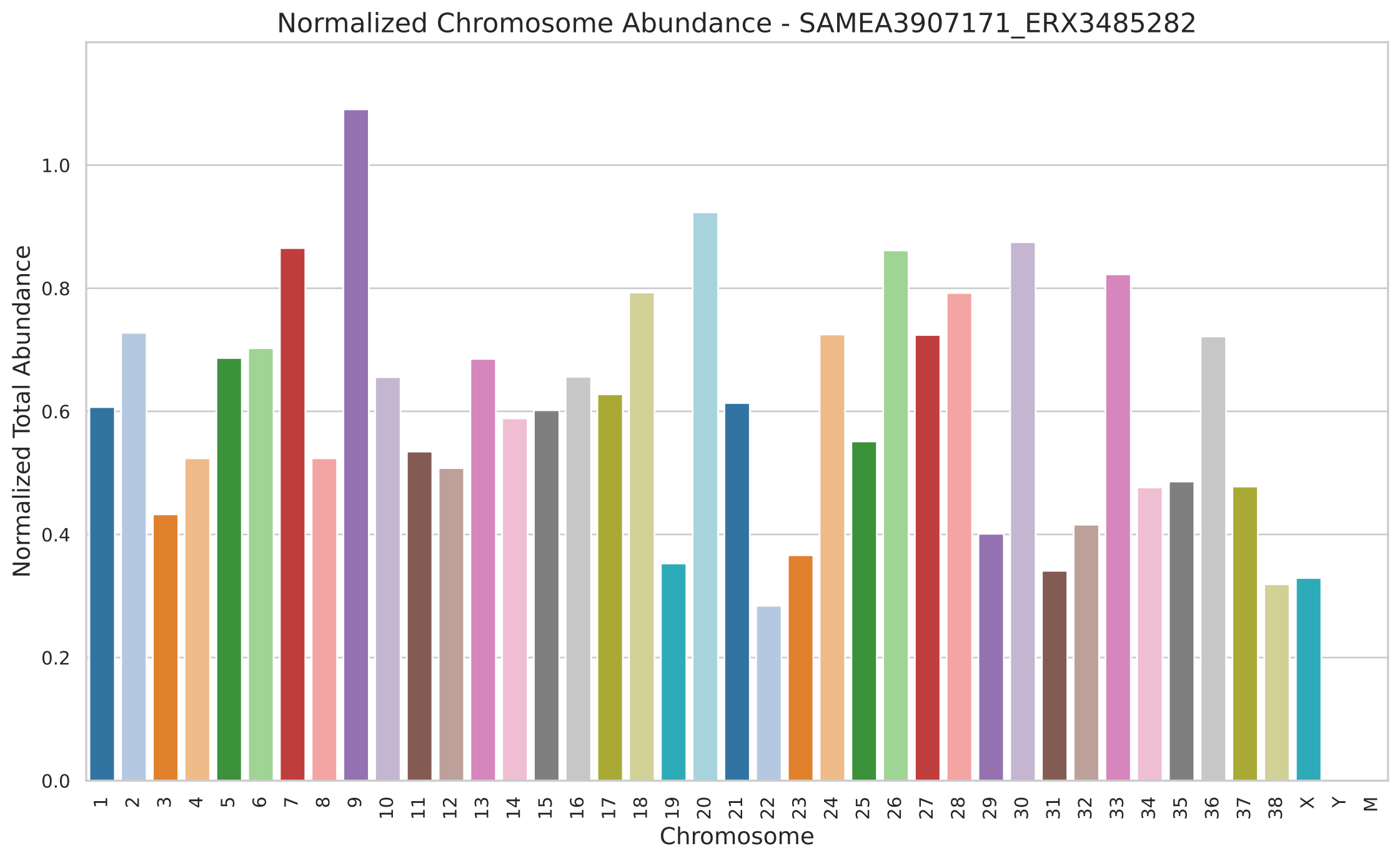

Normalized Chromosome Abundance - SAMEA5805019_ERX3485254
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

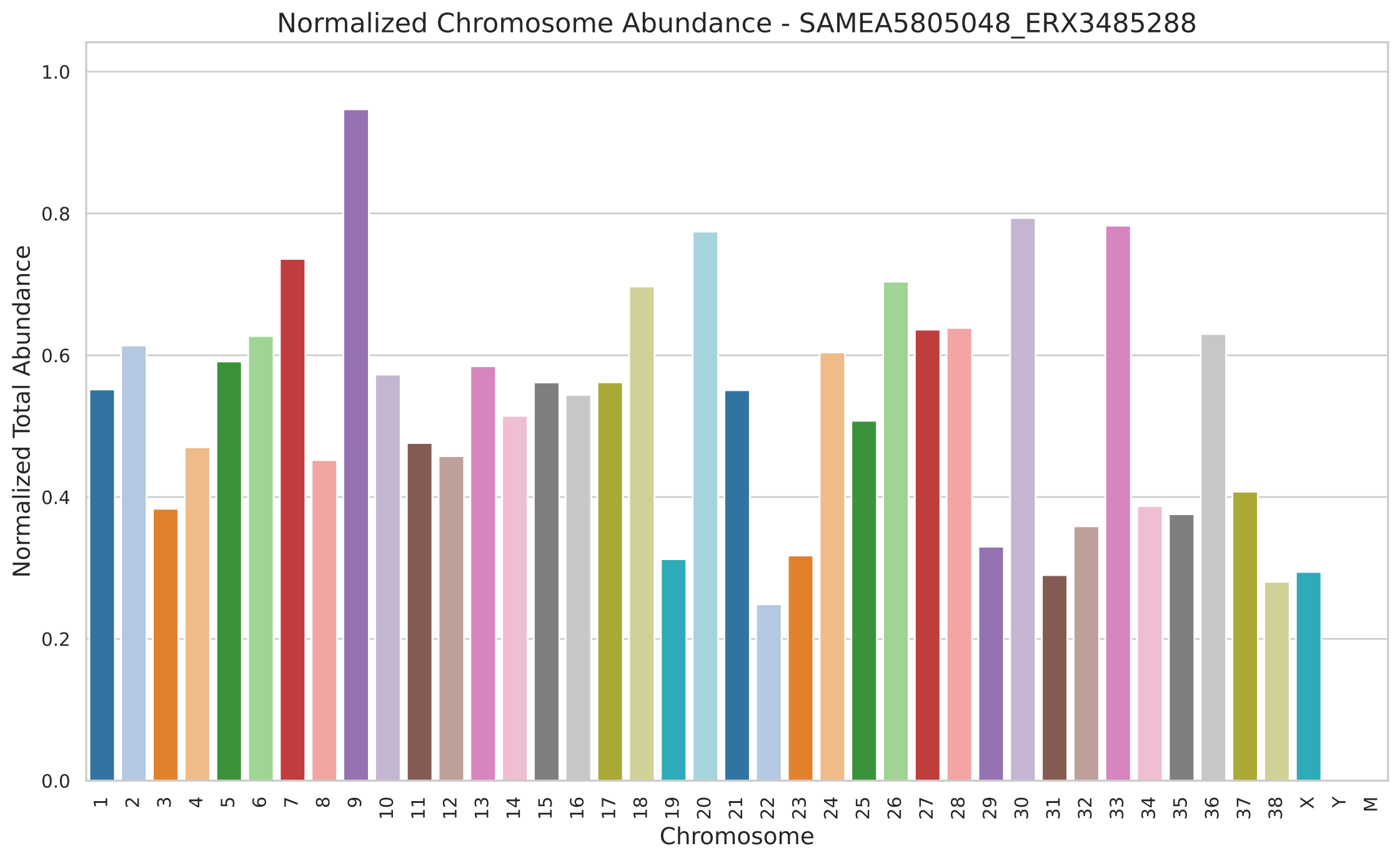

Normalized Chromosome Abundance - SAMEA5805009_ERX3485265
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

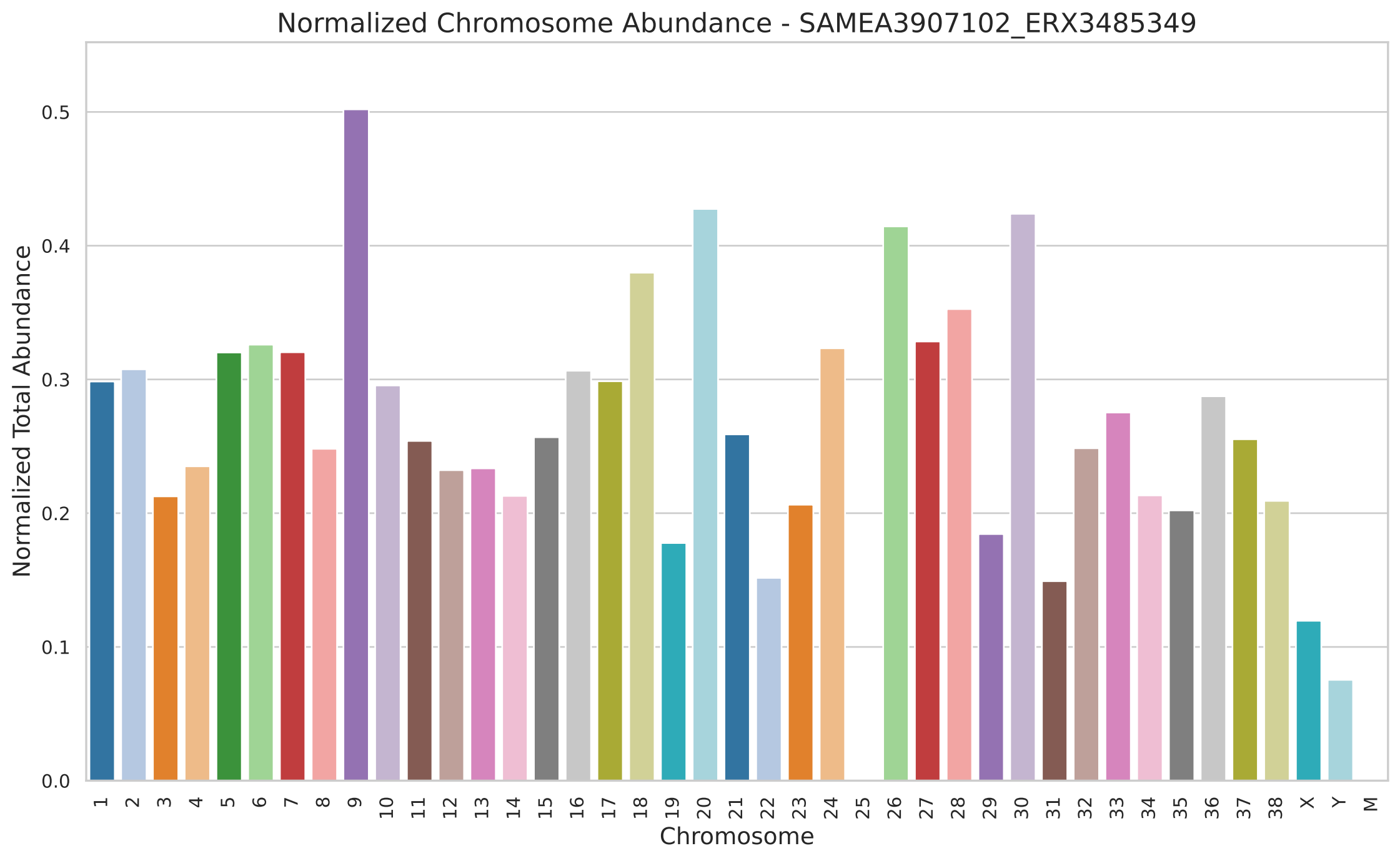

Normalized Chromosome Abundance - SAMEA5805023_ERX3485256
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

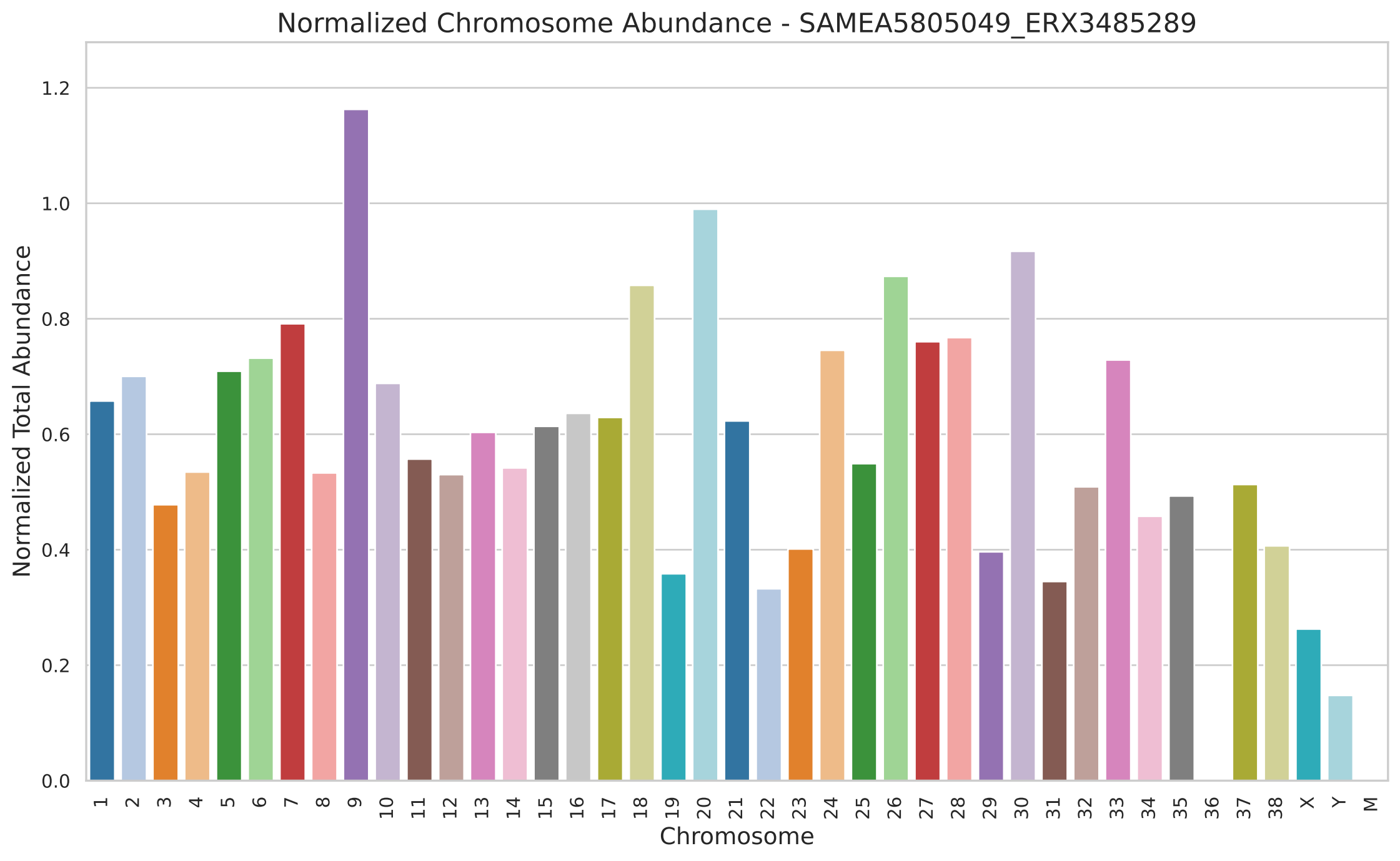

Normalized Chromosome Abundance - SAMEA3907161_ERX3485283
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

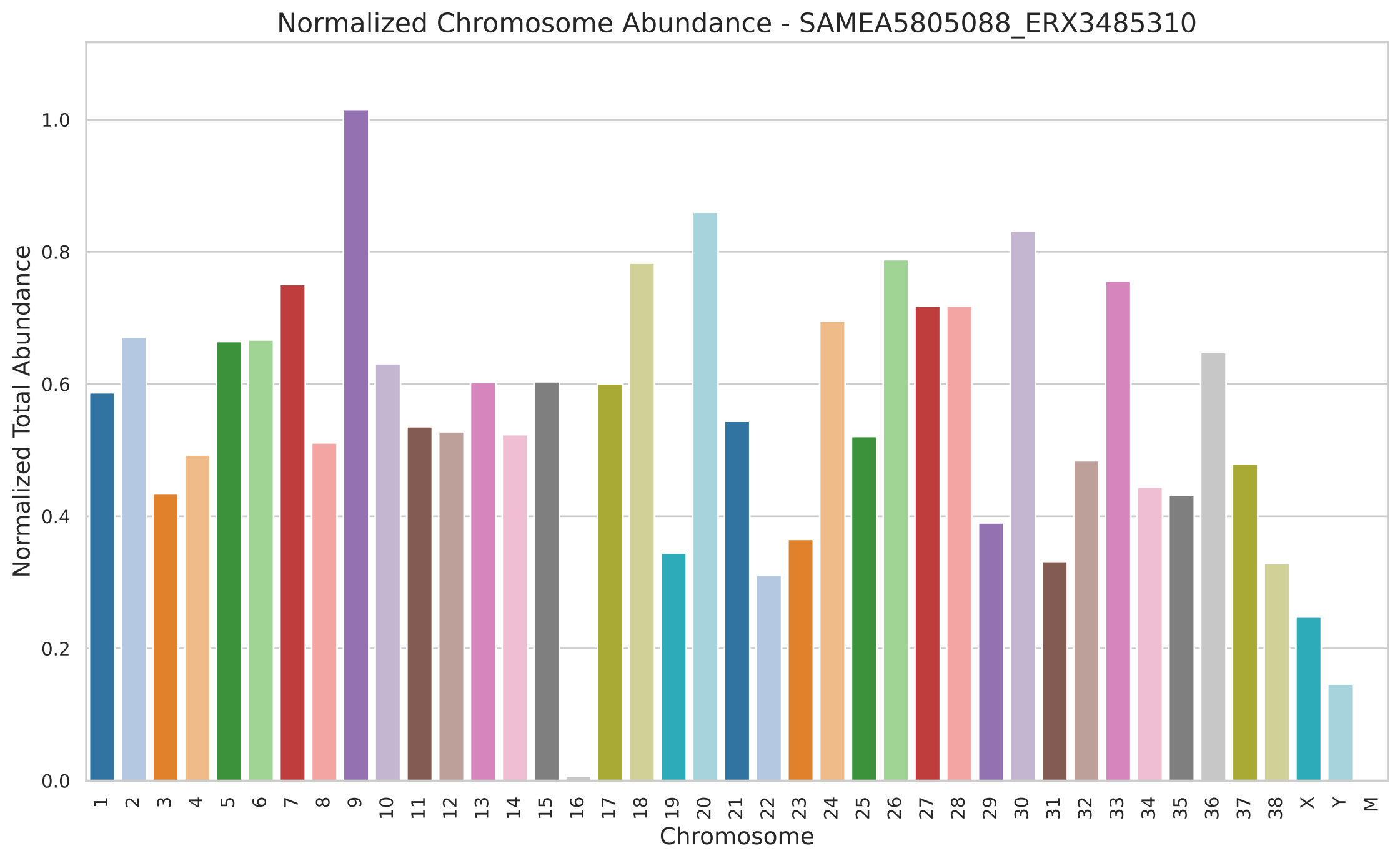

Normalized Chromosome Abundance - SAMEA3907164_ERX3485341
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

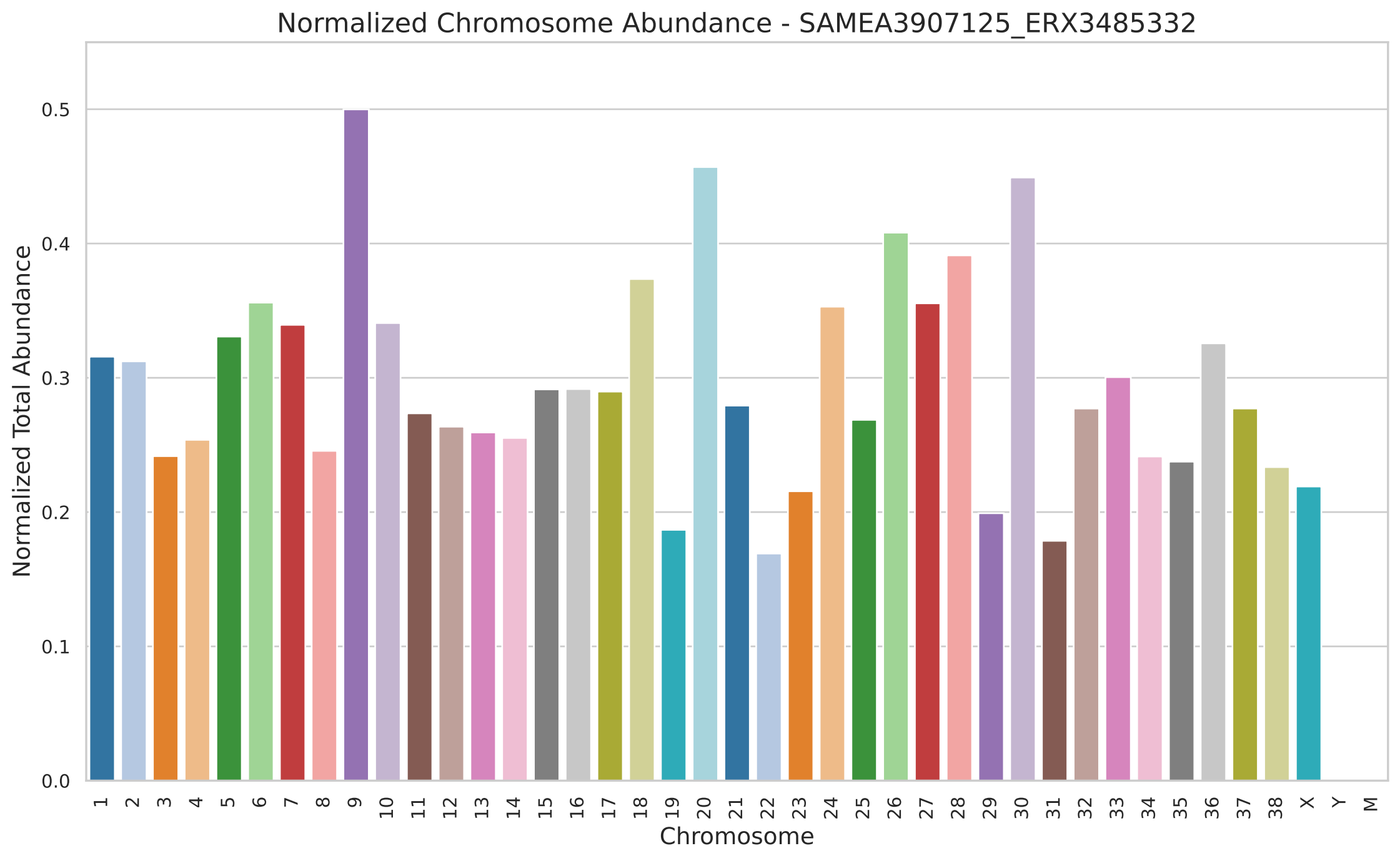

Normalized Chromosome Abundance - SAMEA3907171_ERX3485282
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

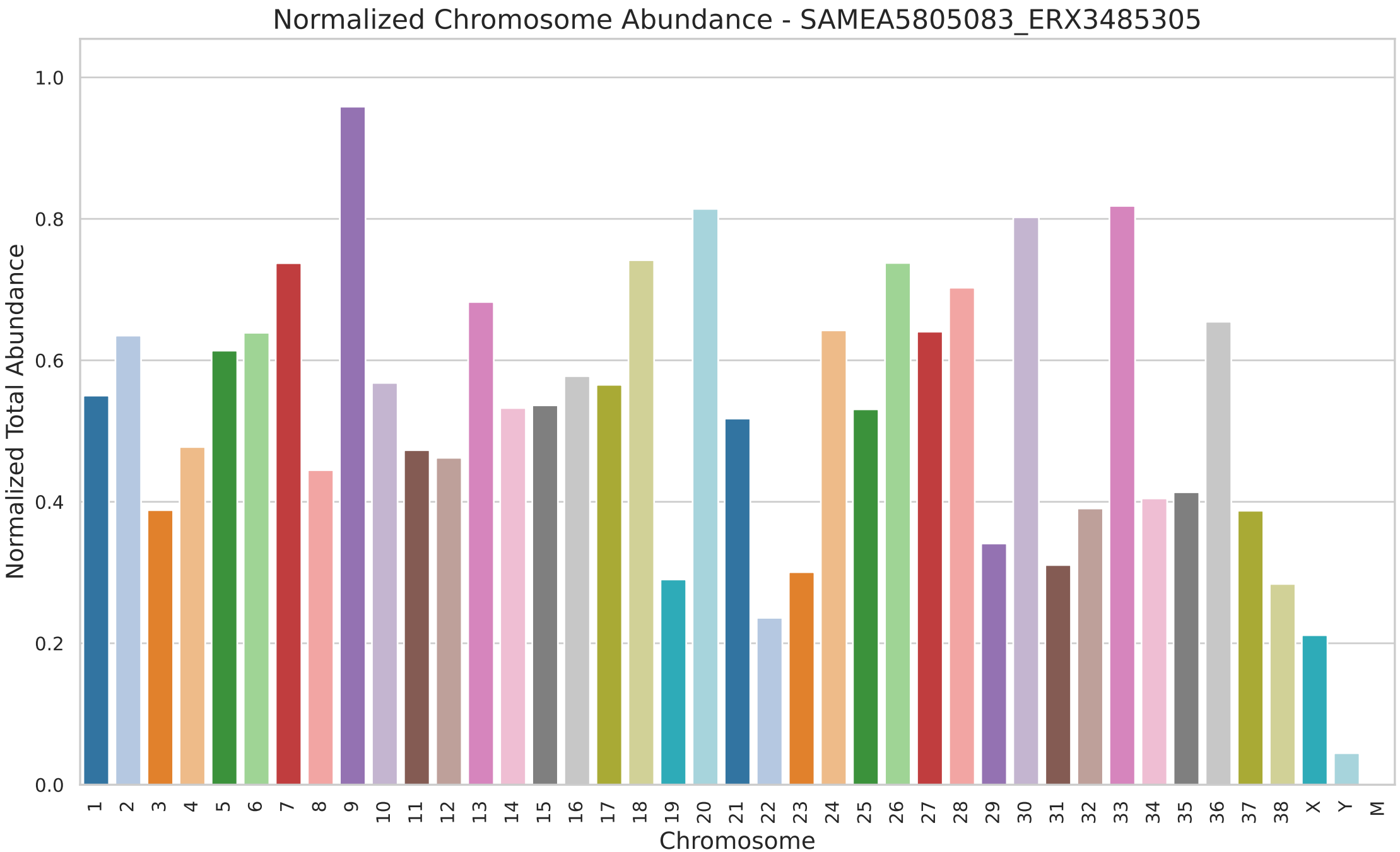

Normalized Chromosome Abundance - SAMEA5805048_ERX3485288
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

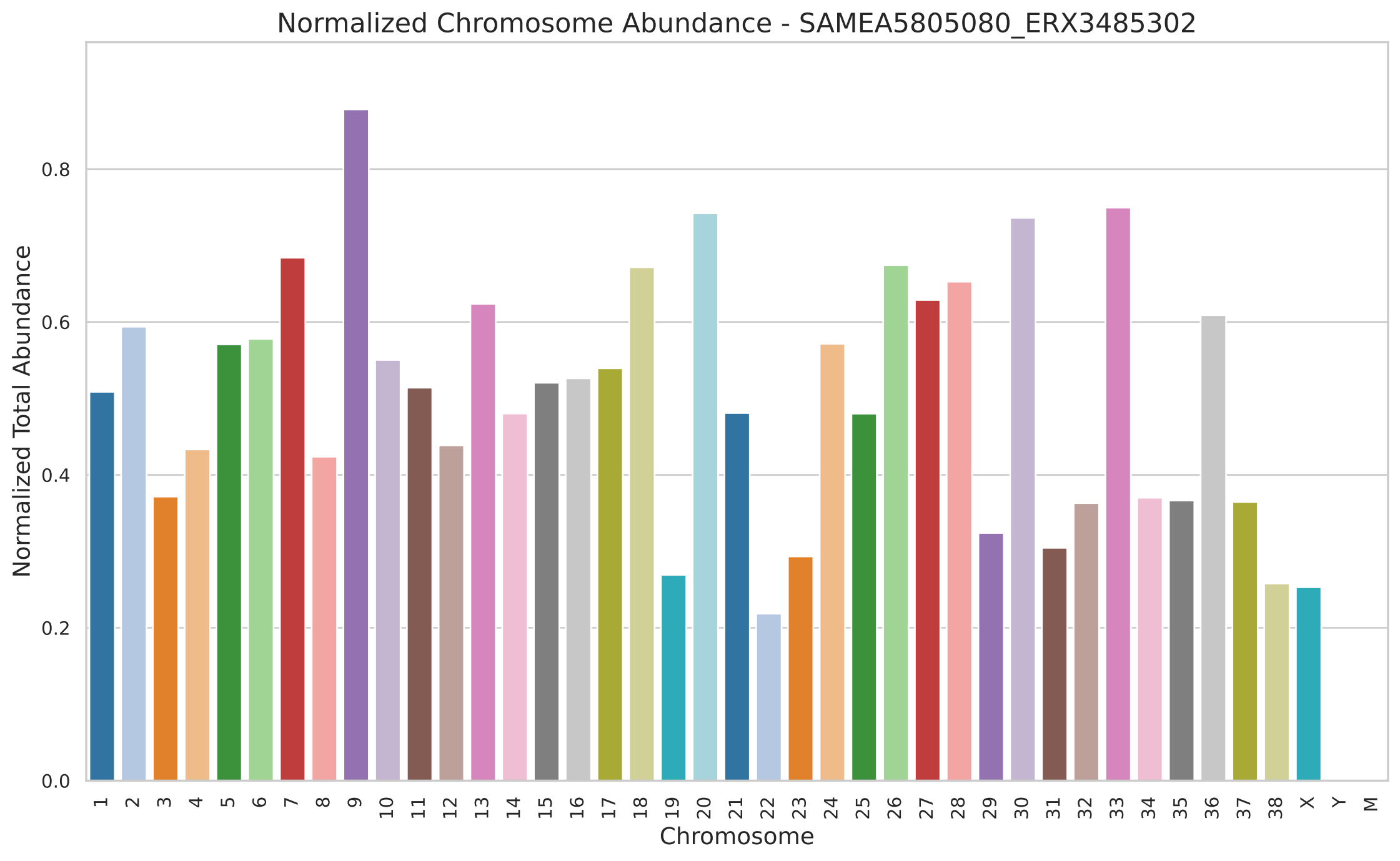

Normalized Chromosome Abundance - SAMEA3907102_ERX3485349
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

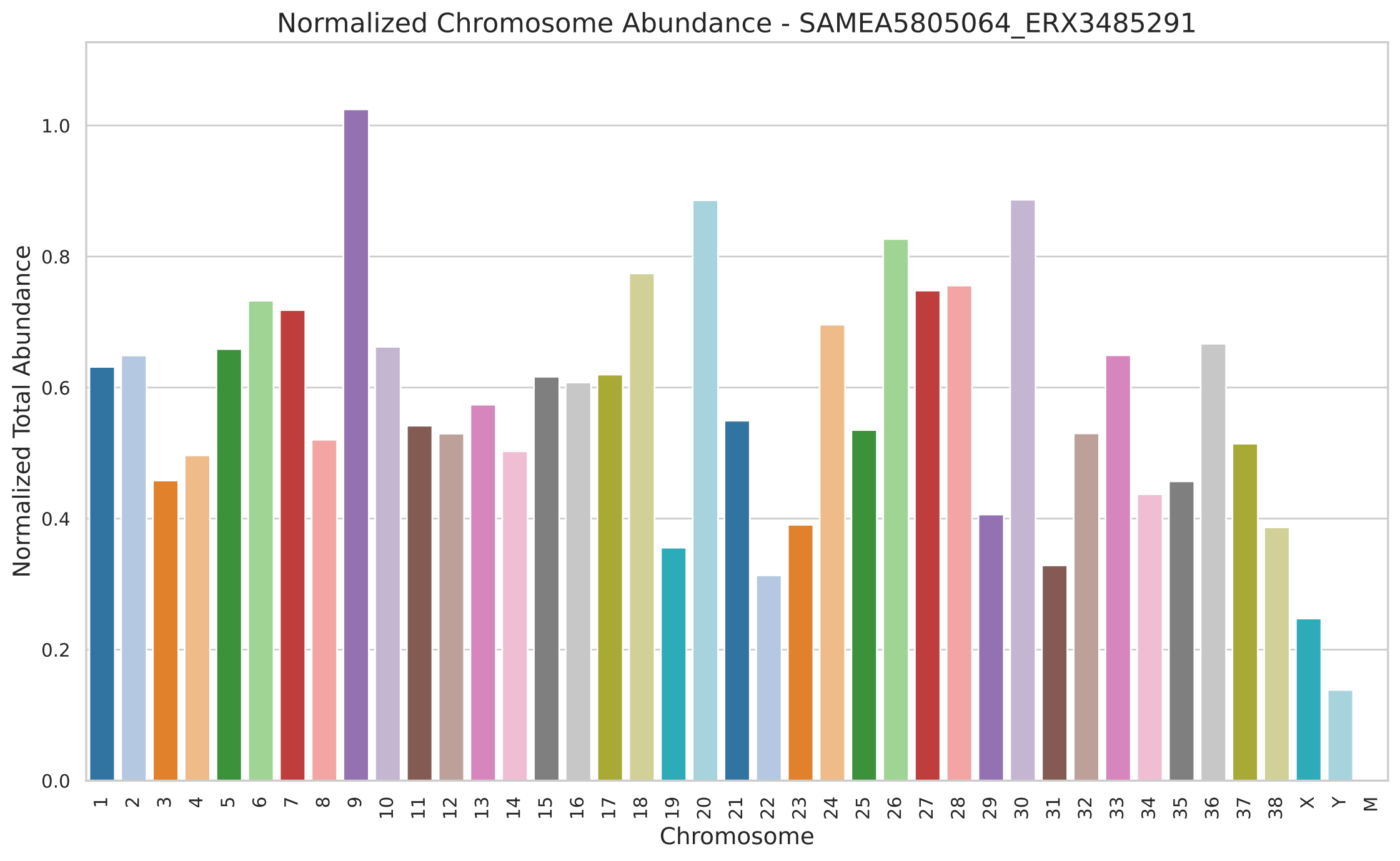

Normalized Chromosome Abundance - SAMEA5805049_ERX3485289
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

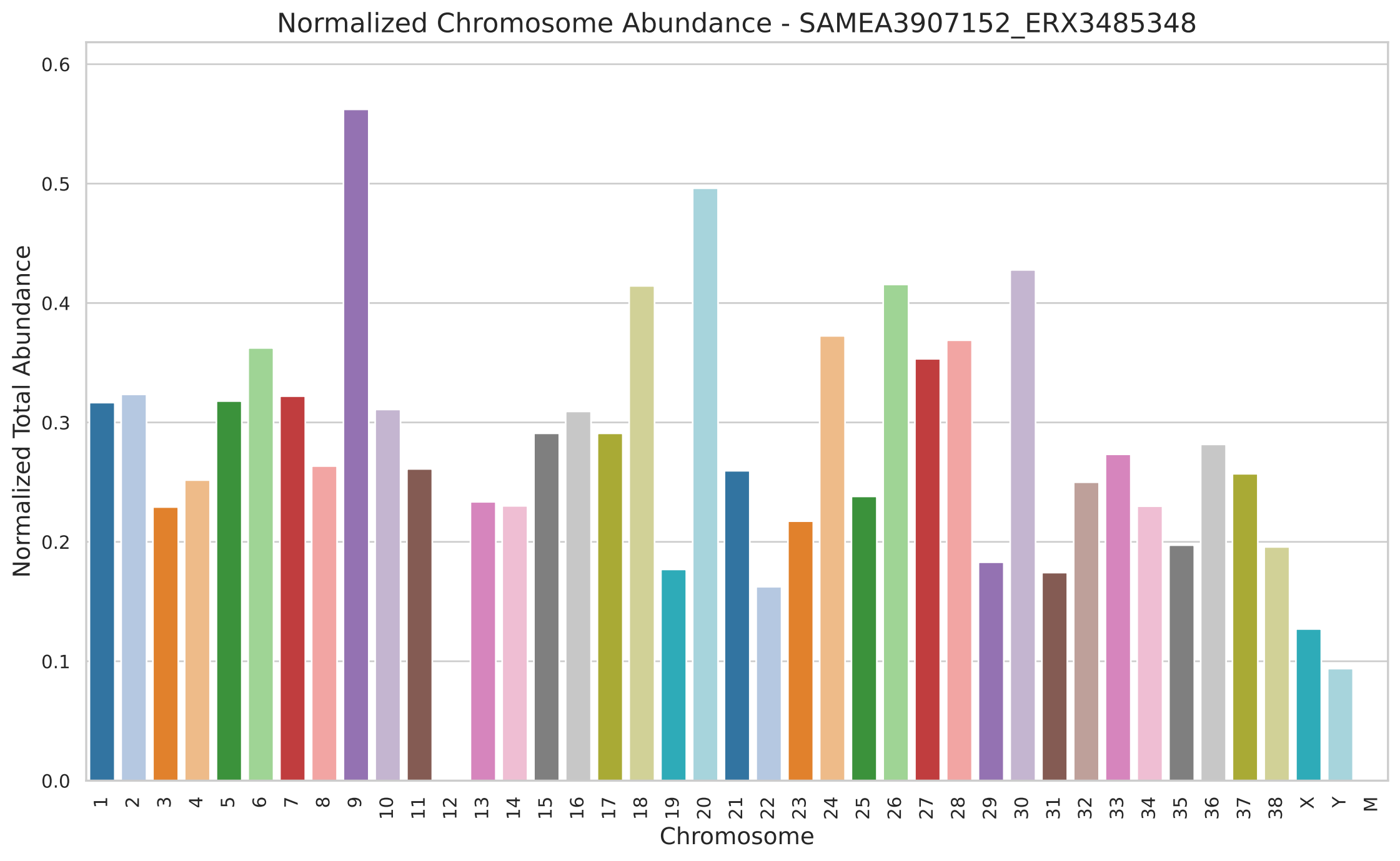

Normalized Chromosome Abundance - SAMEA5805088_ERX3485310
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

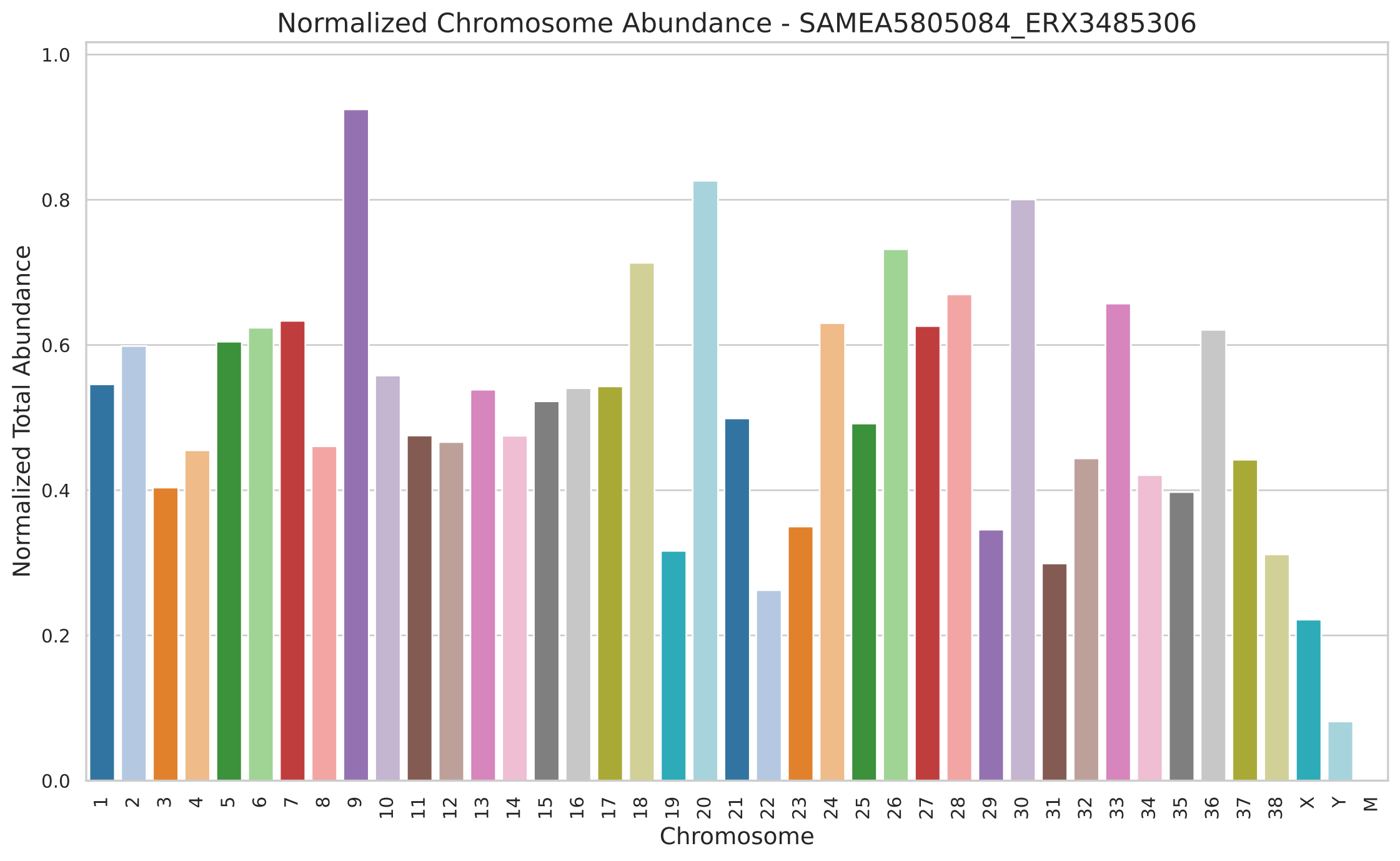

Normalized Chromosome Abundance - SAMEA3907125_ERX3485332
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

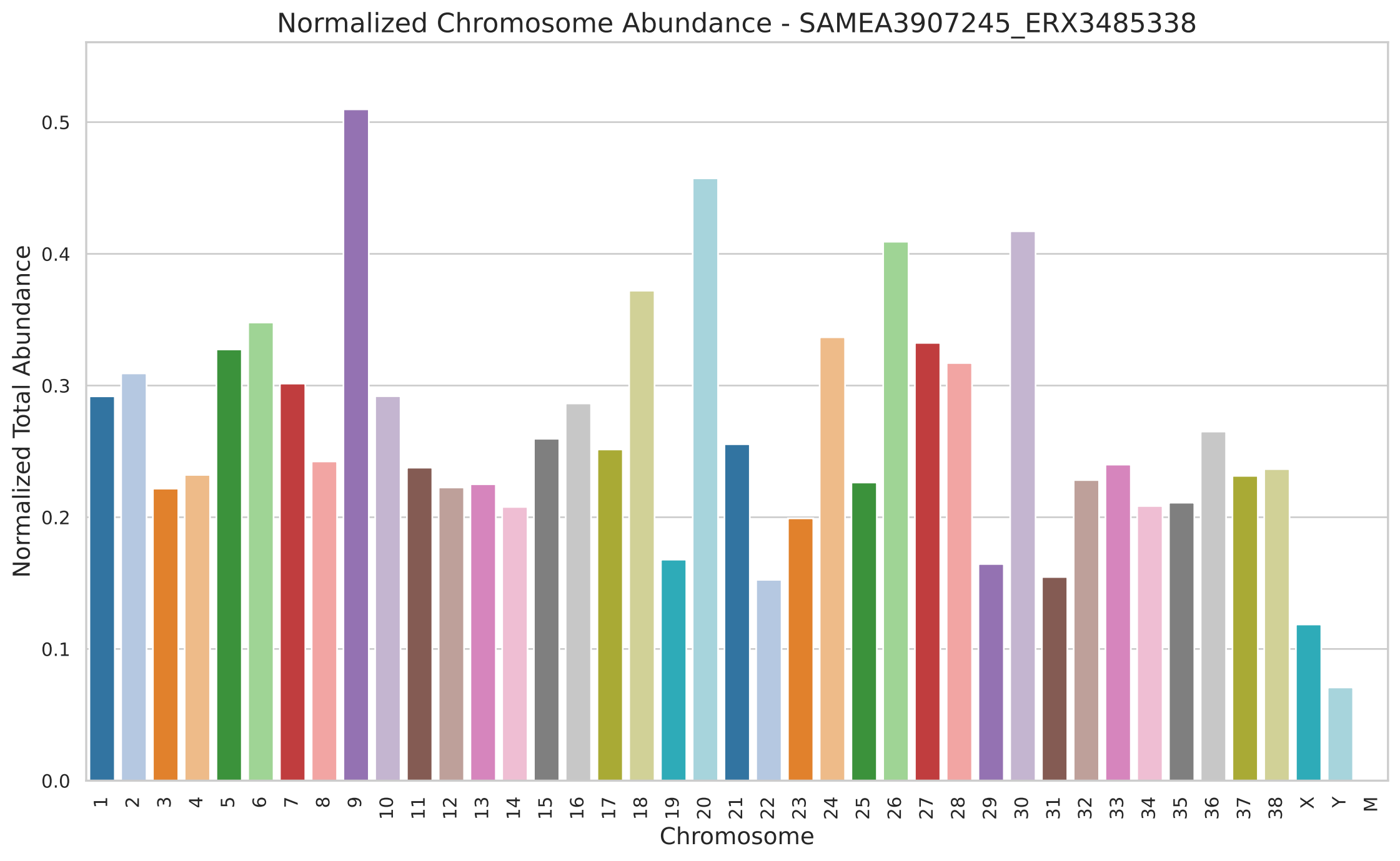

Normalized Chromosome Abundance - SAMEA5805083_ERX3485305
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

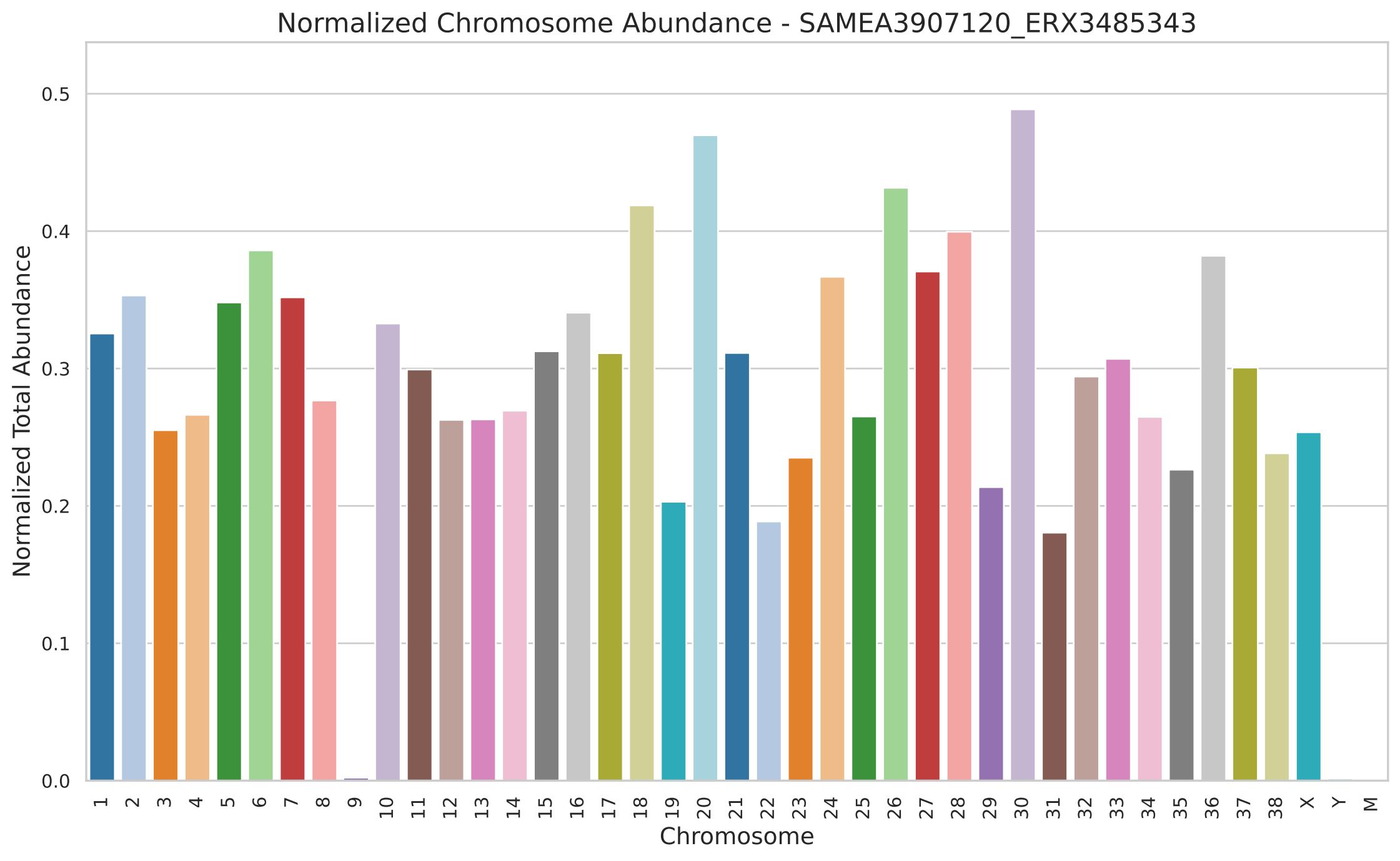

Normalized Chromosome Abundance - SAMEA5805080_ERX3485302
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

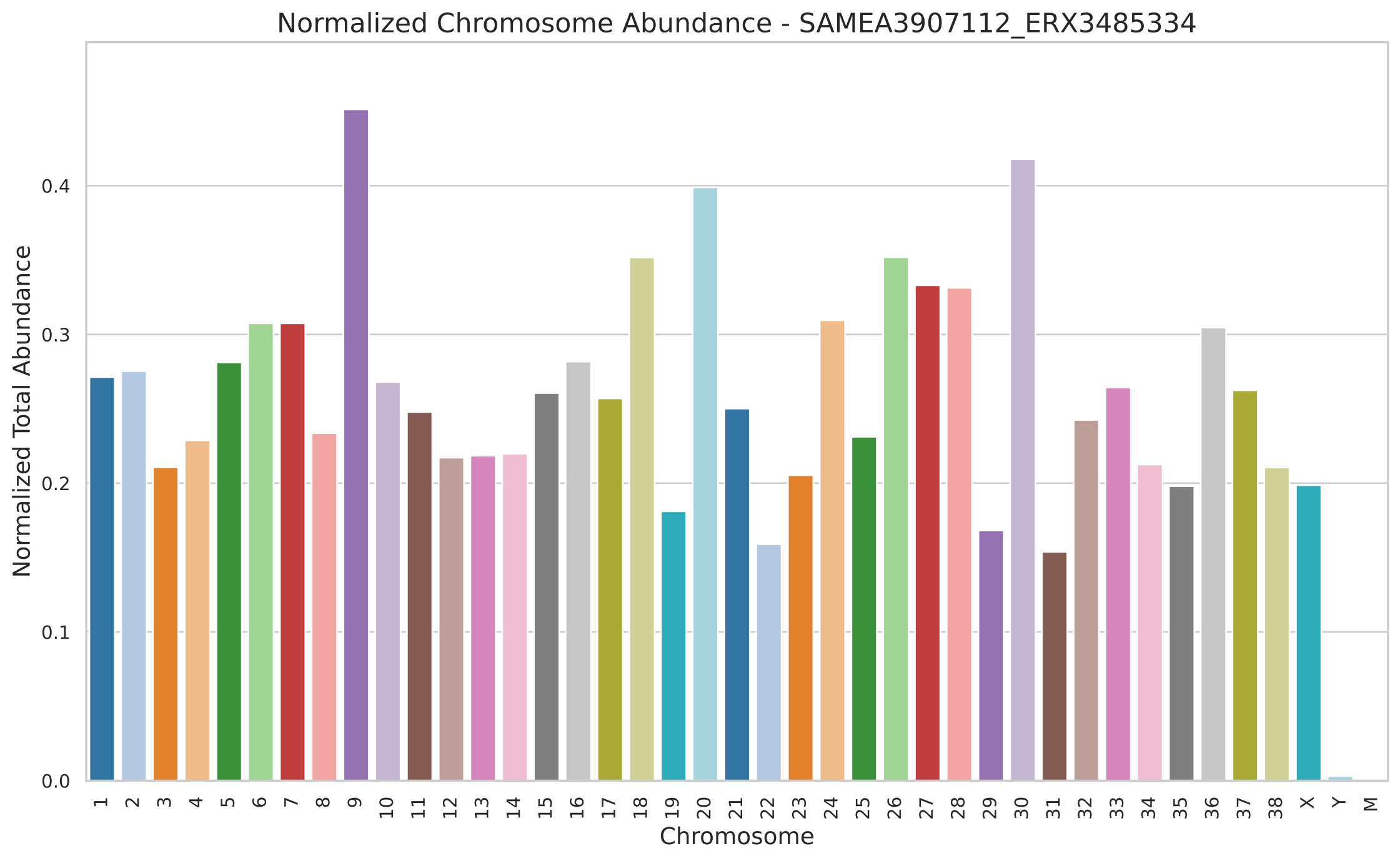

Normalized Chromosome Abundance - SAMEA5805064_ERX3485291
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

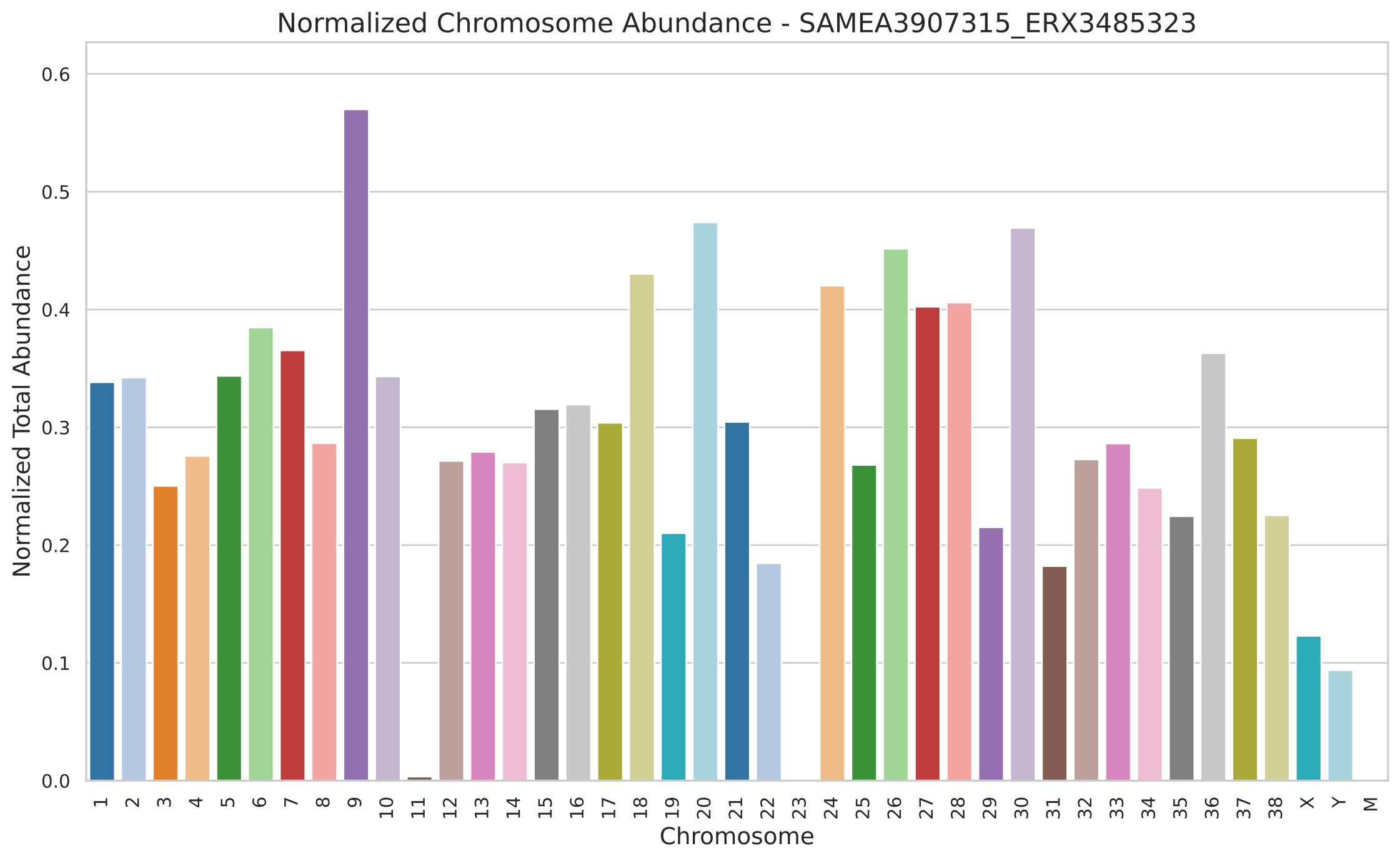

Normalized Chromosome Abundance - SAMEA3907152_ERX3485348
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

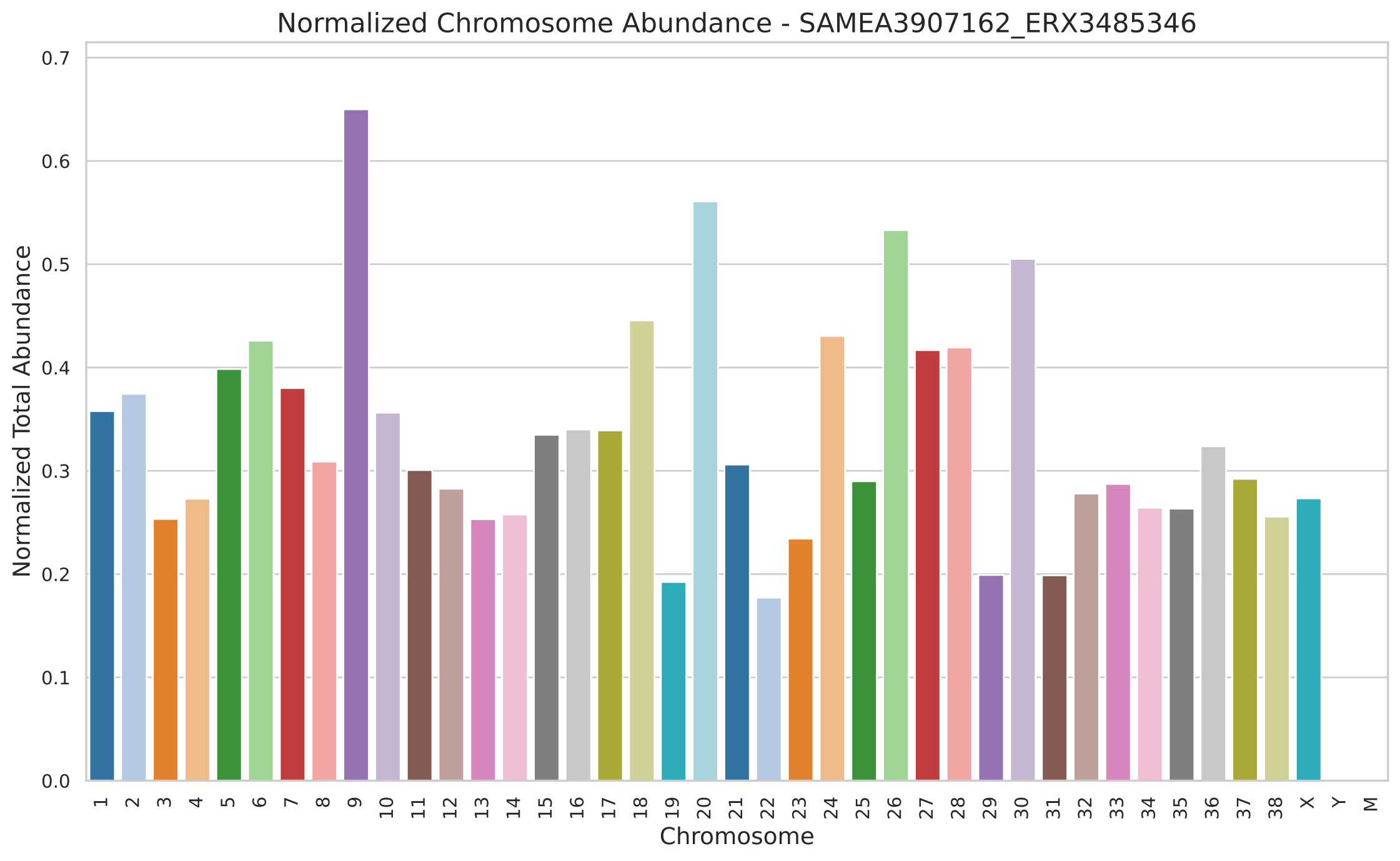

Normalized Chromosome Abundance - SAMEA5805084_ERX3485306
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

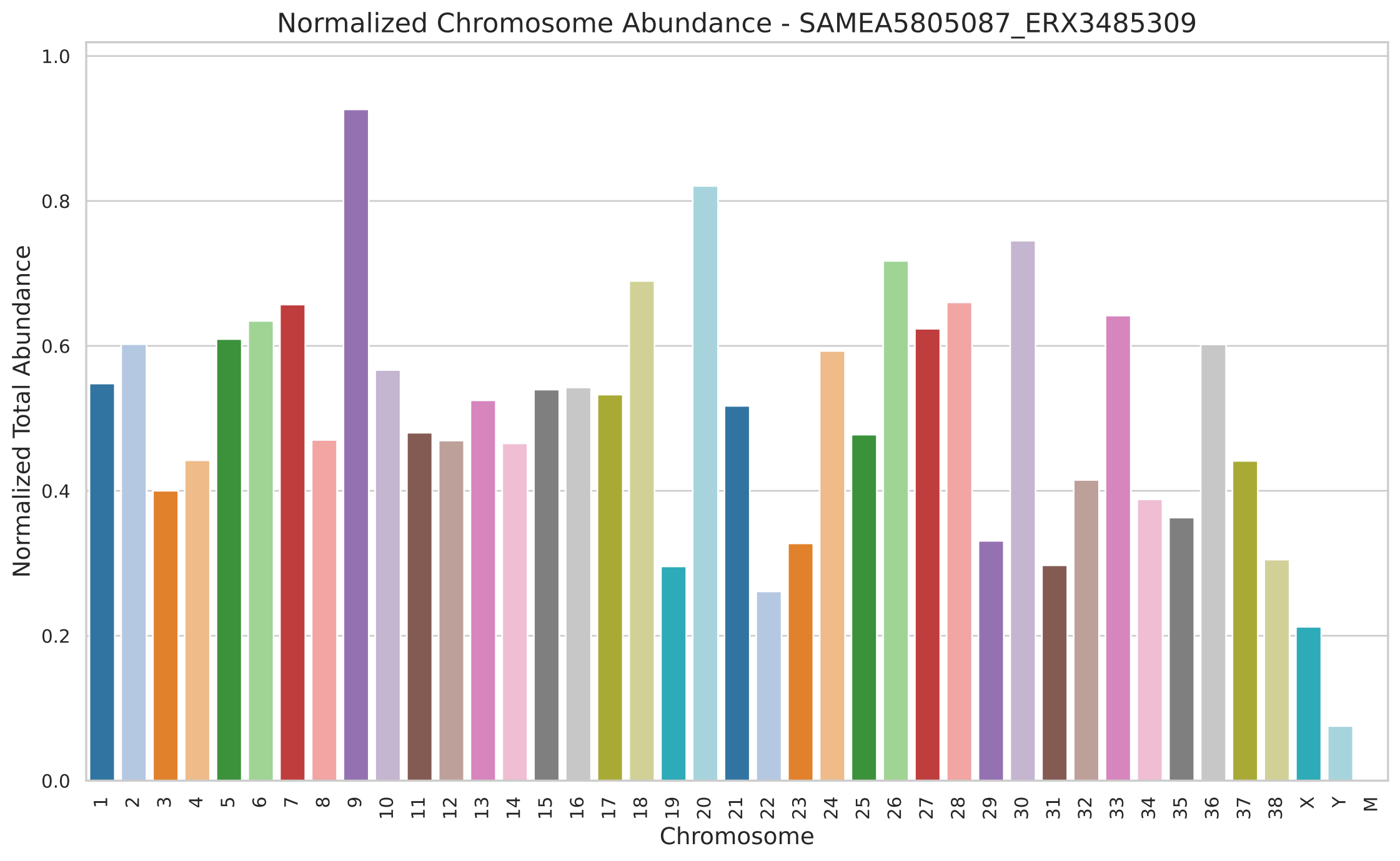

Normalized Chromosome Abundance - SAMEA3907245_ERX3485338
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

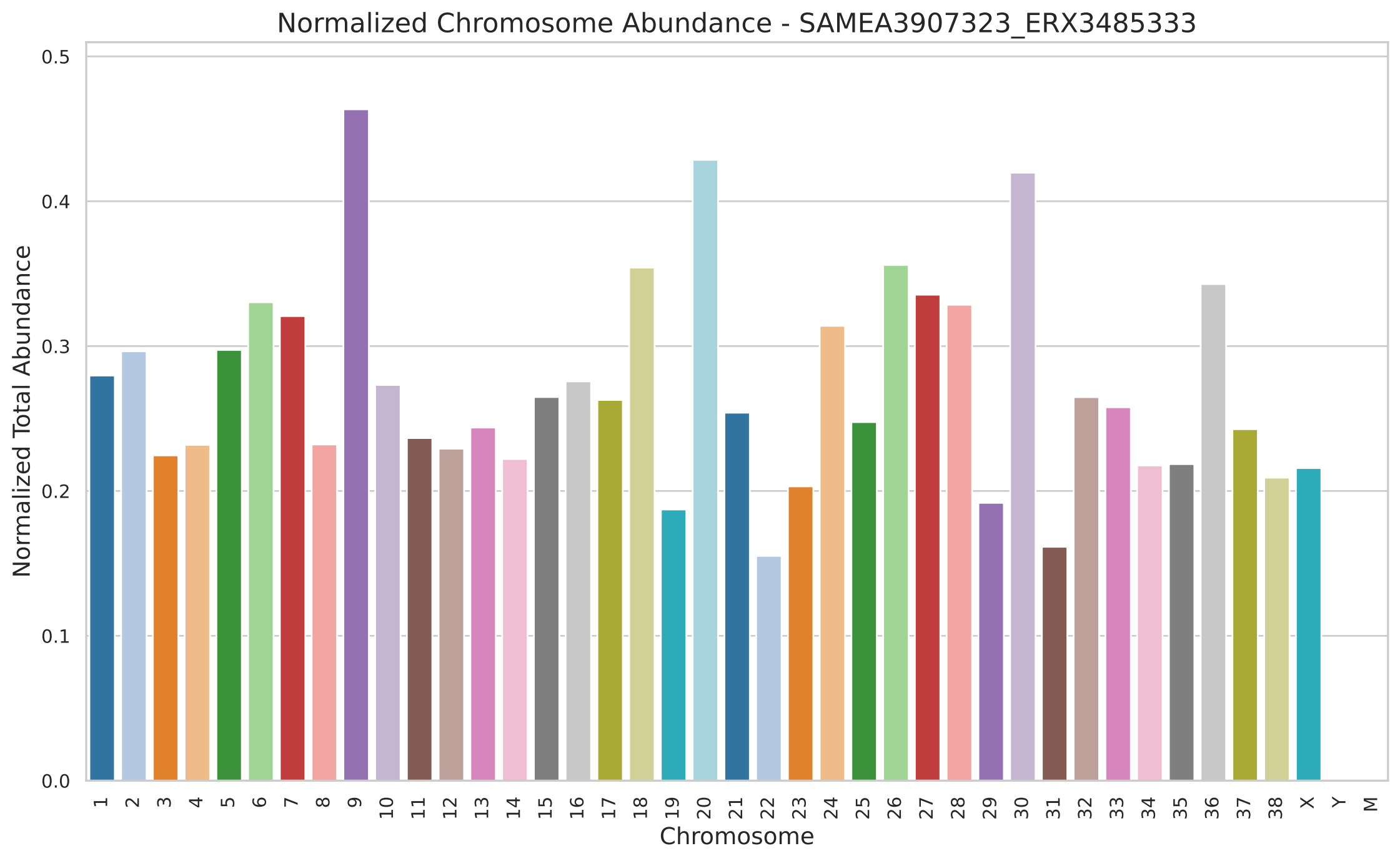

Normalized Chromosome Abundance - SAMEA3907120_ERX3485343
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

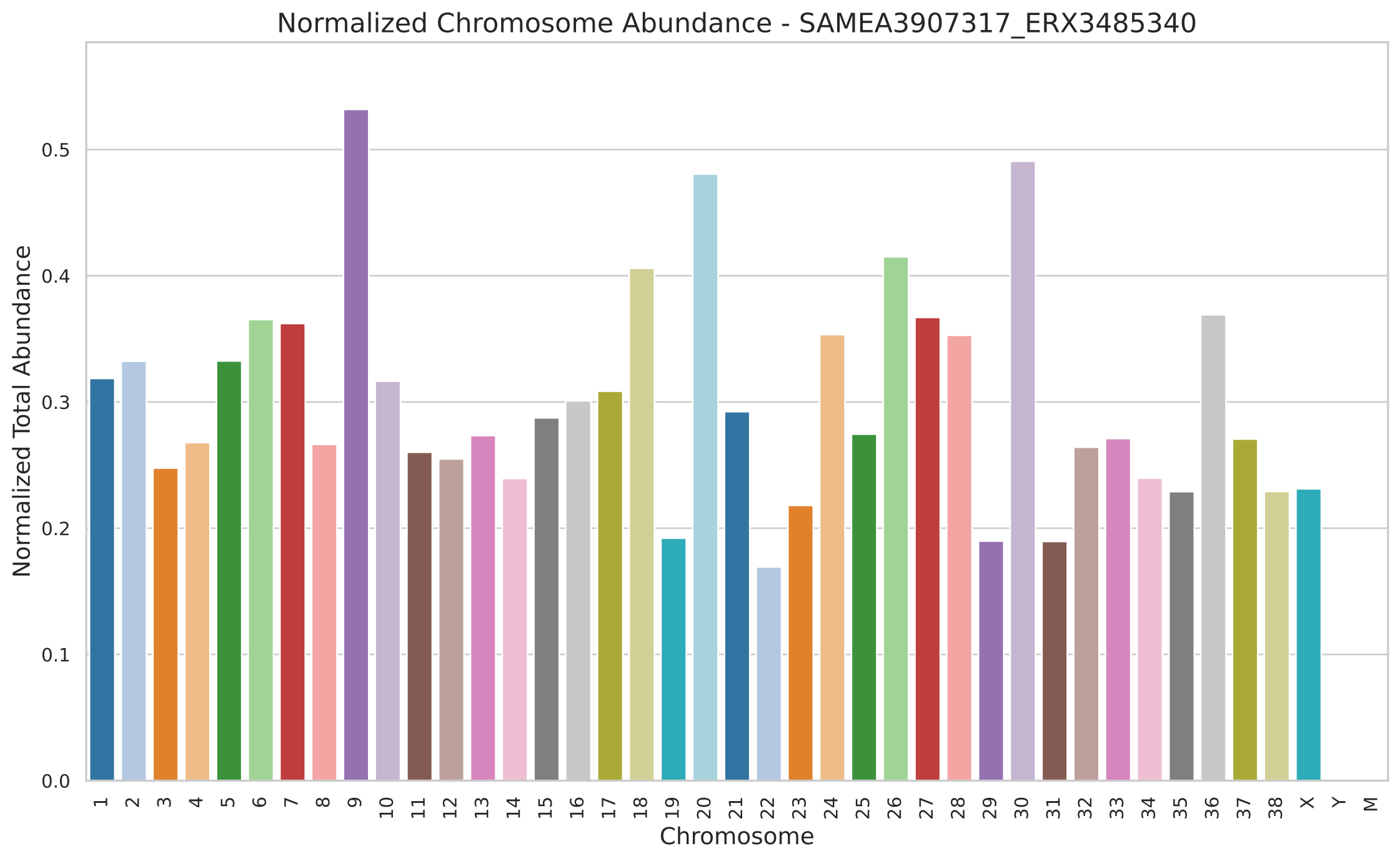

Normalized Chromosome Abundance - SAMEA3907112_ERX3485334
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

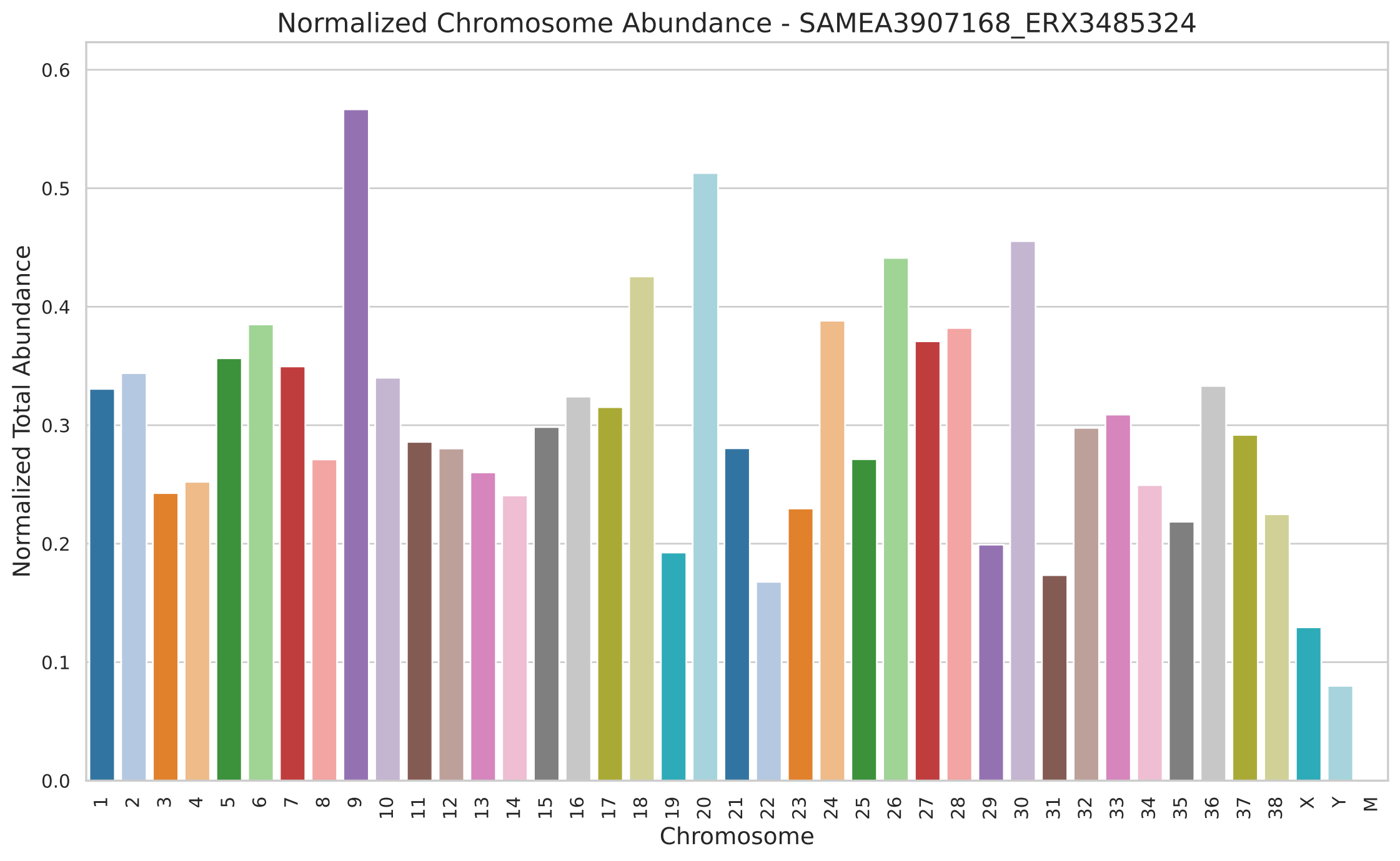

Normalized Chromosome Abundance - SAMEA3907315_ERX3485323
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

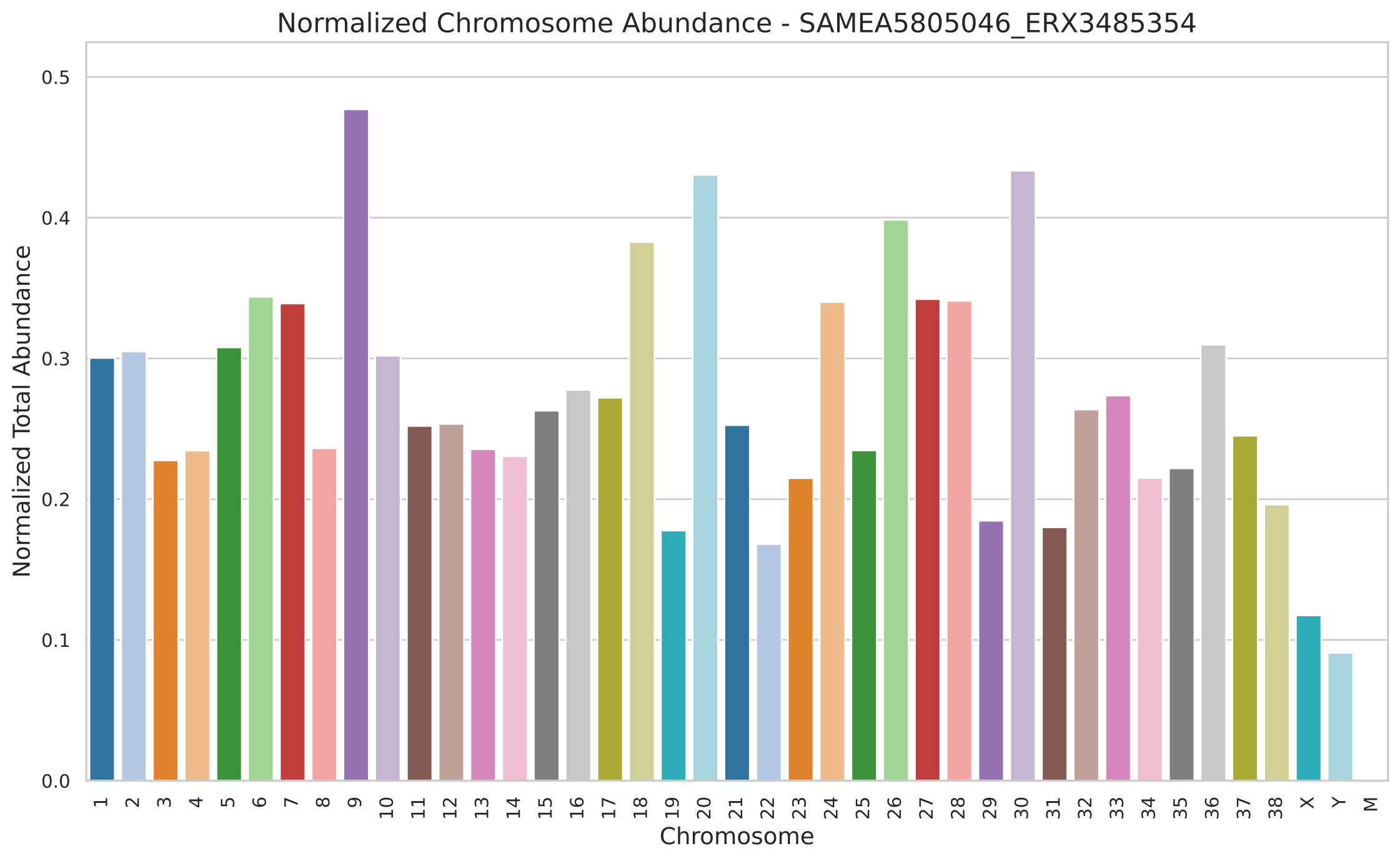

Normalized Chromosome Abundance - SAMEA3907162_ERX3485346
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

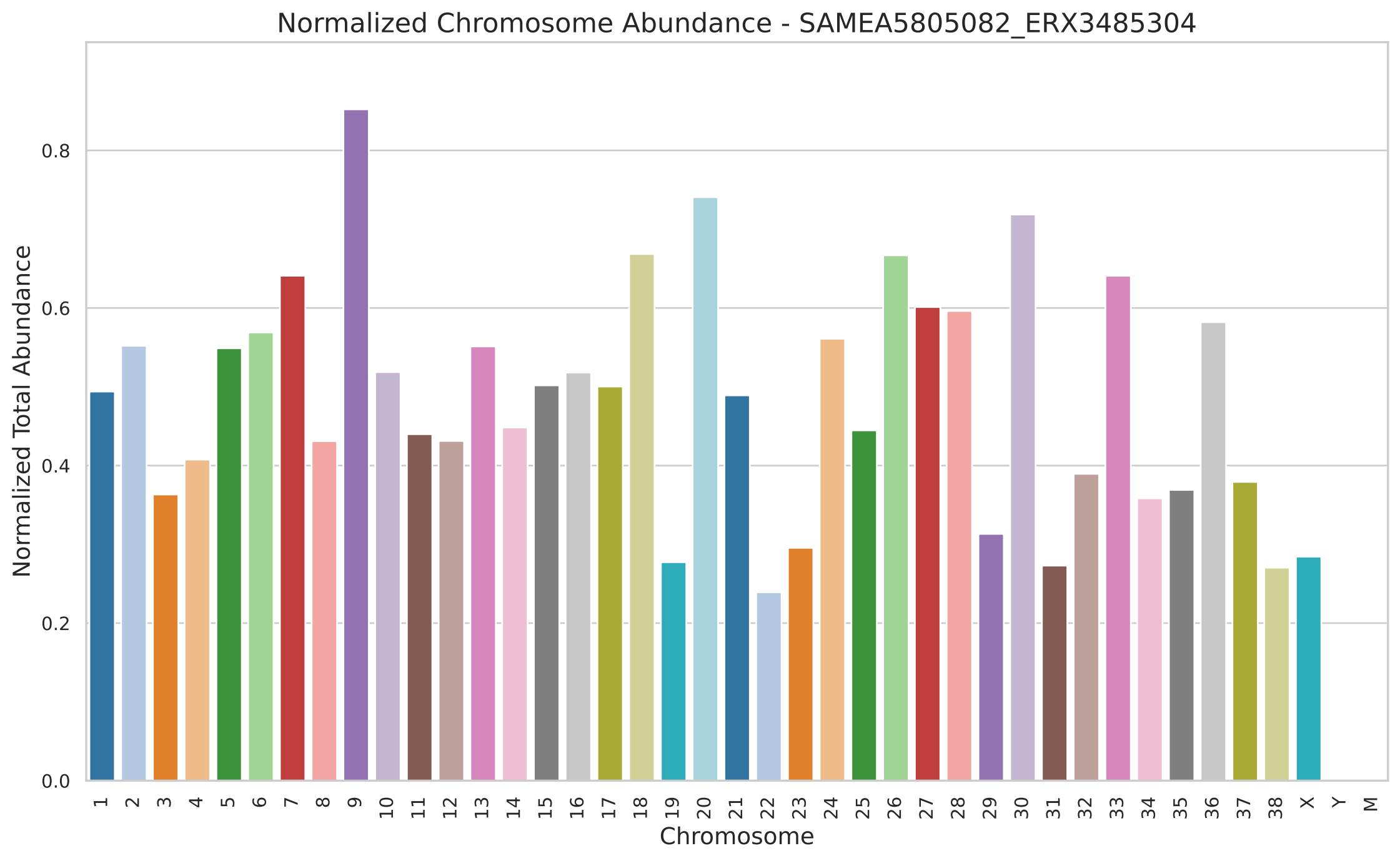

Normalized Chromosome Abundance - SAMEA5805087_ERX3485309
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

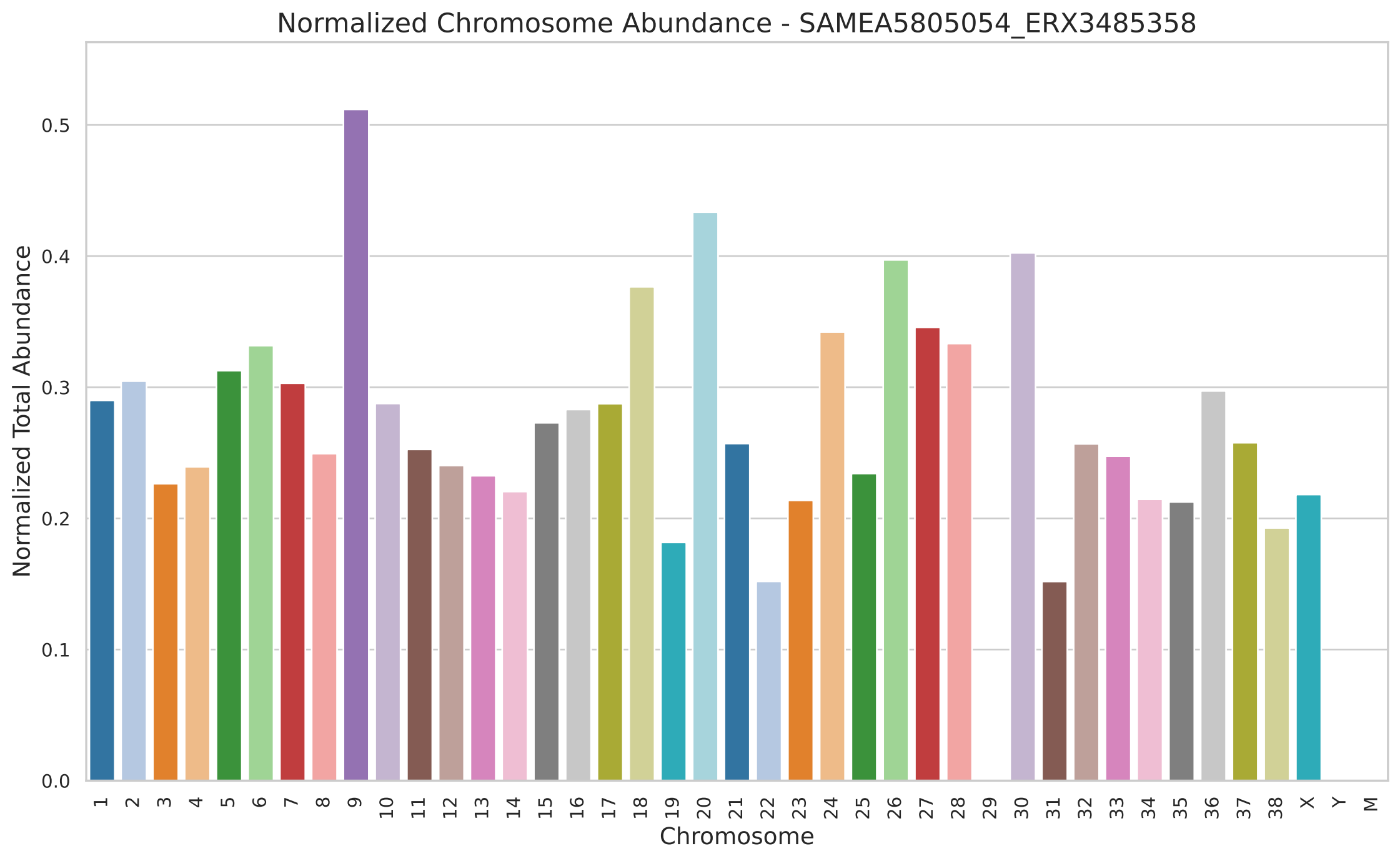

Normalized Chromosome Abundance - SAMEA3907323_ERX3485333
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

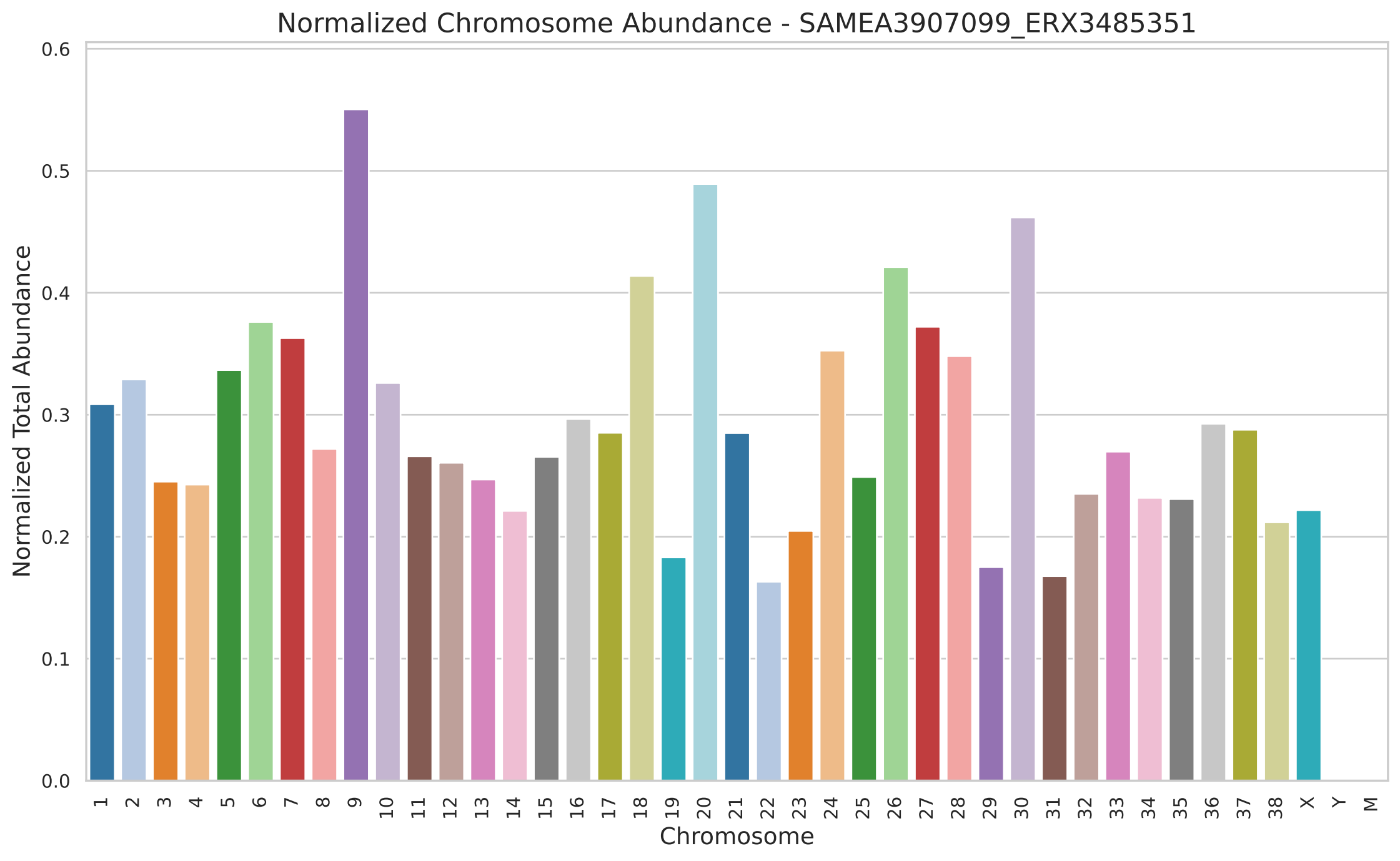

Normalized Chromosome Abundance - SAMEA3907317_ERX3485340
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

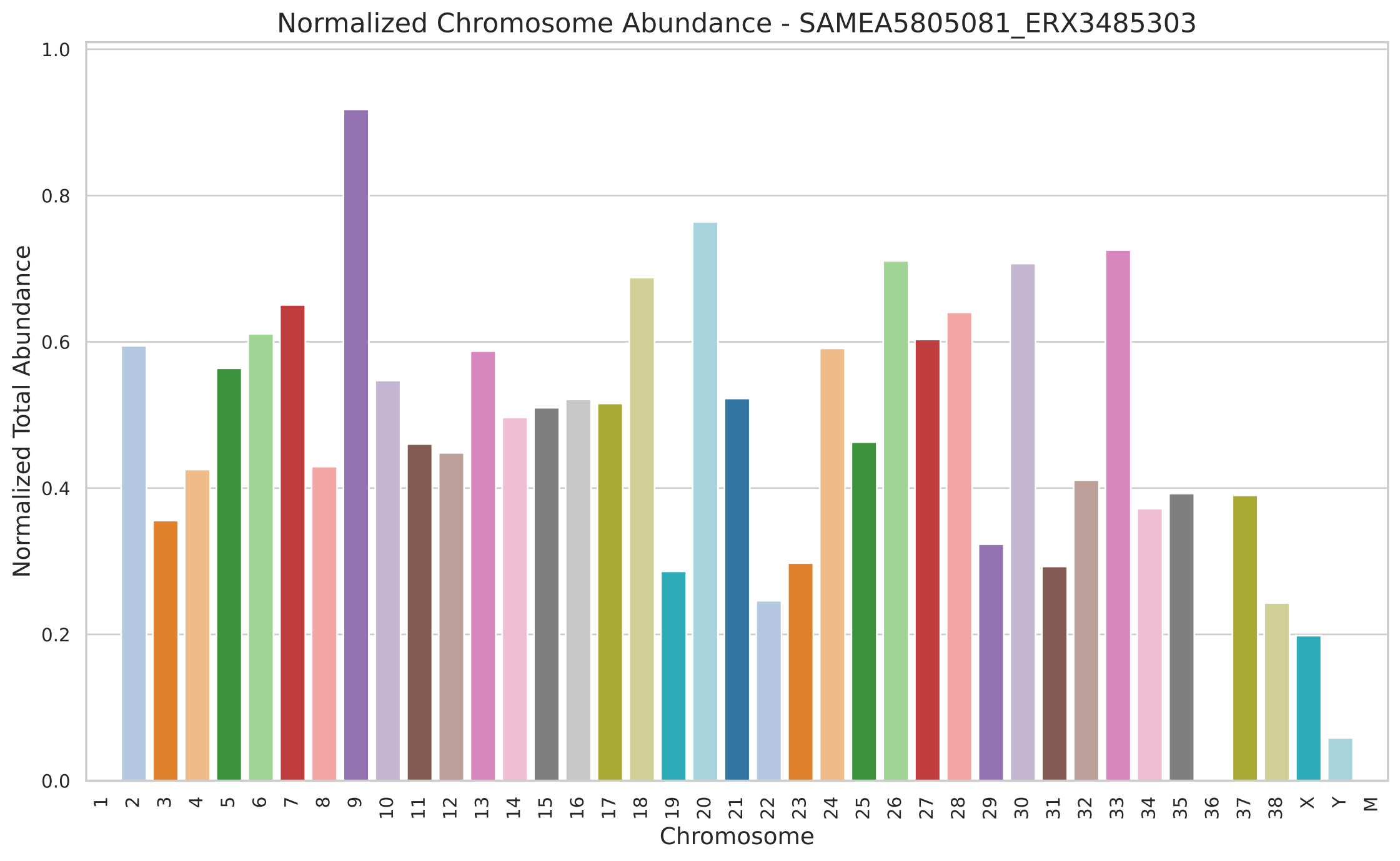

Normalized Chromosome Abundance - SAMEA3907168_ERX3485324
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

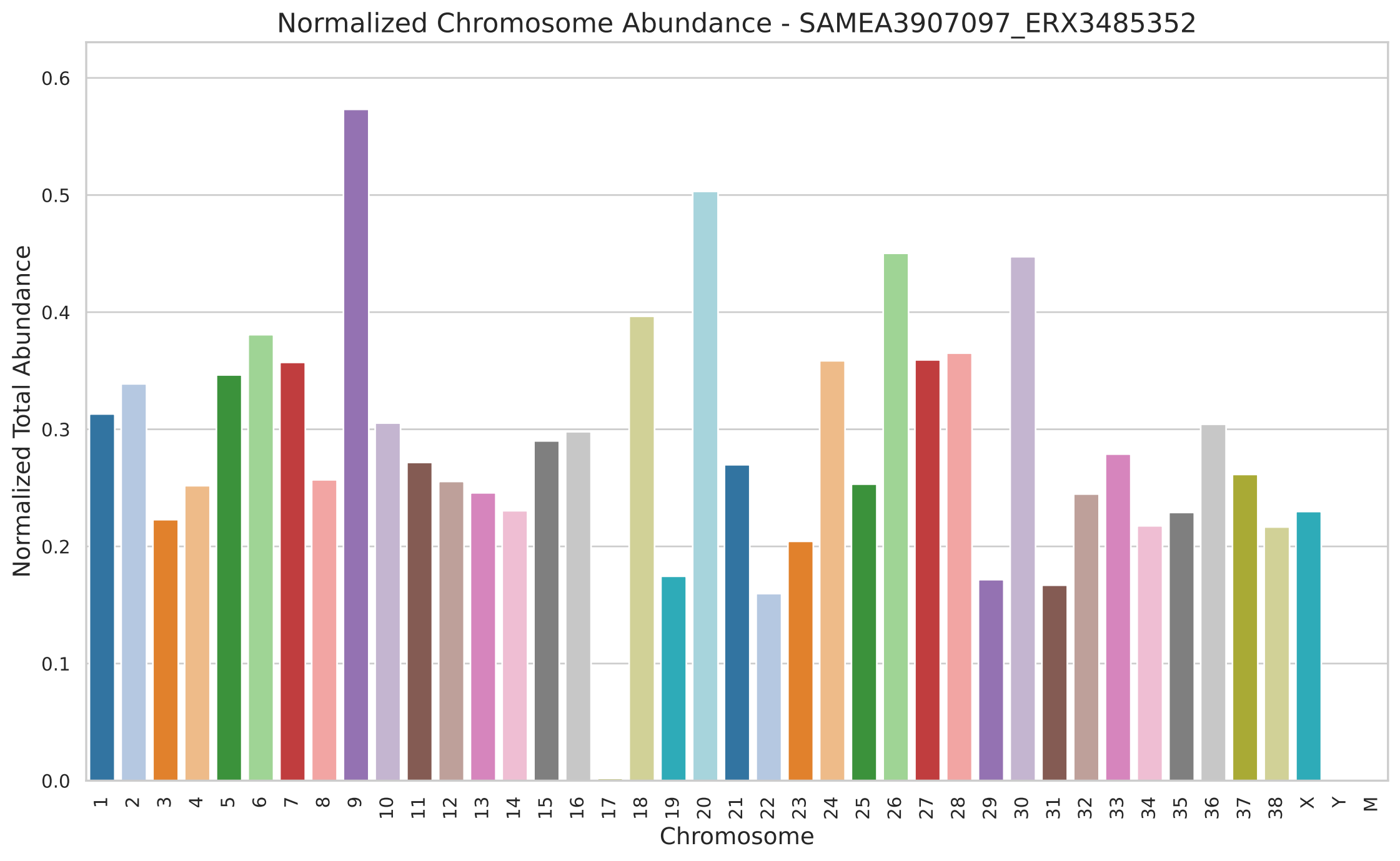

Normalized Chromosome Abundance - SAMEA5805046_ERX3485354
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

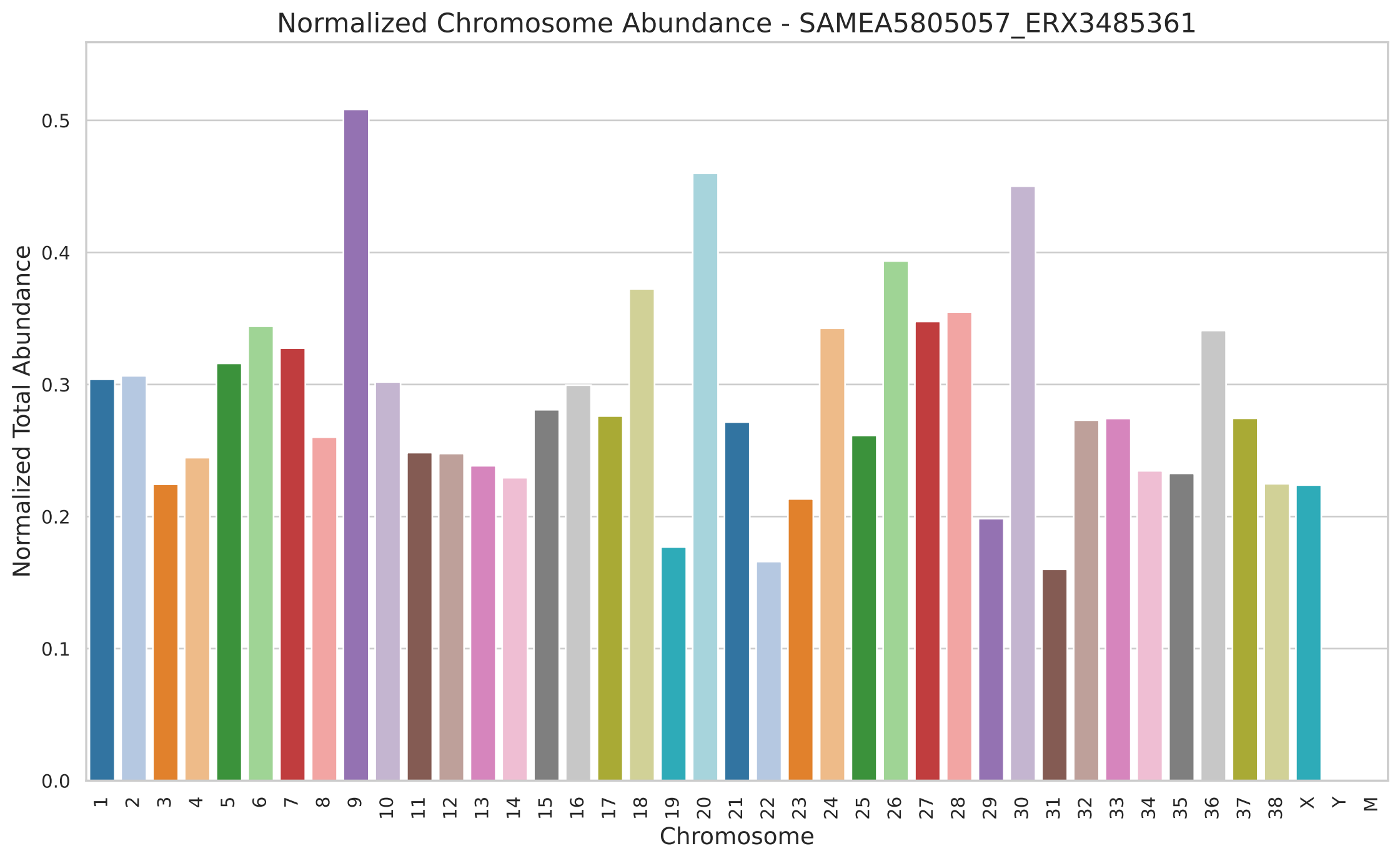

Normalized Chromosome Abundance - SAMEA5805082_ERX3485304
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

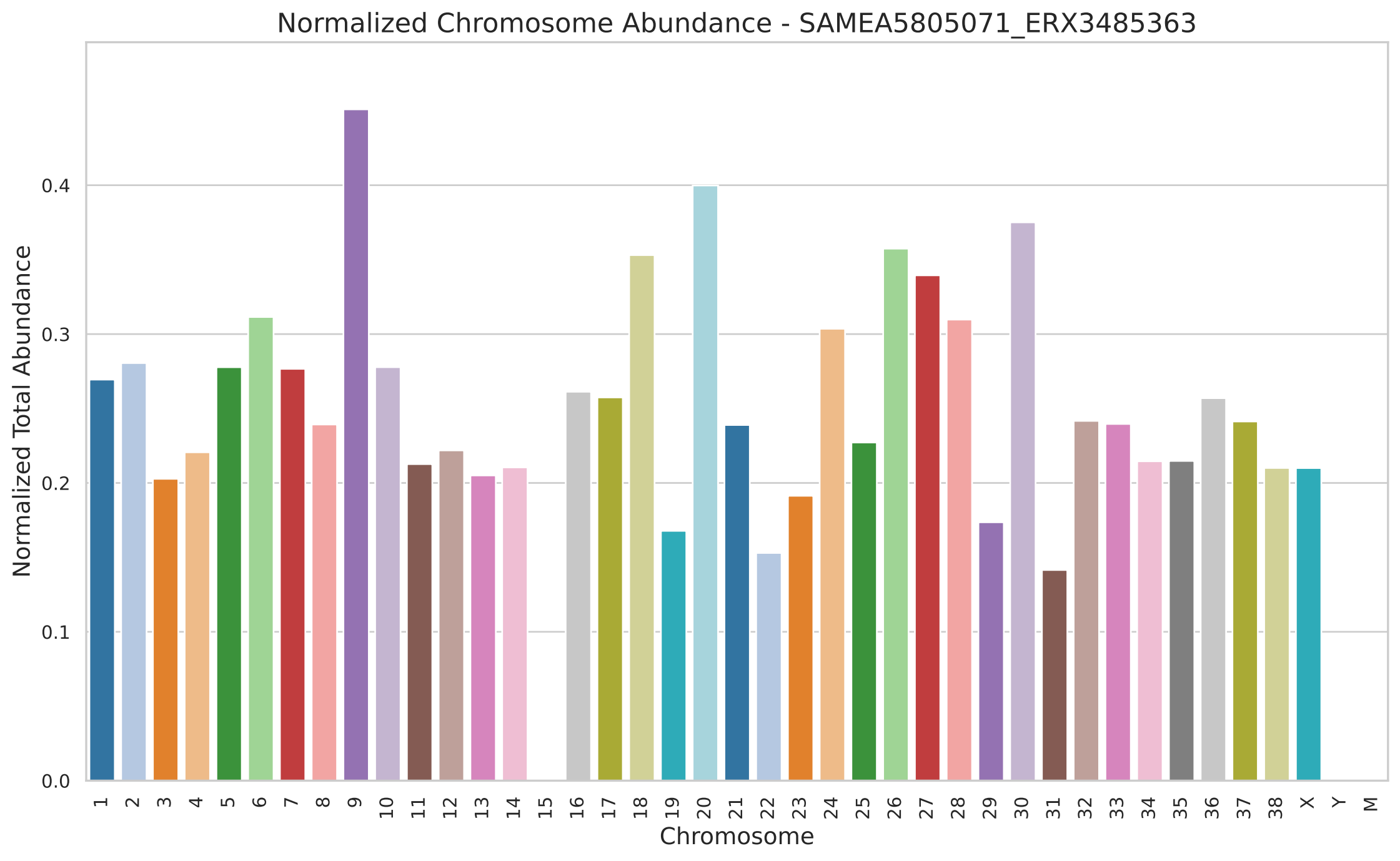

Normalized Chromosome Abundance - SAMEA5805054_ERX3485358
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

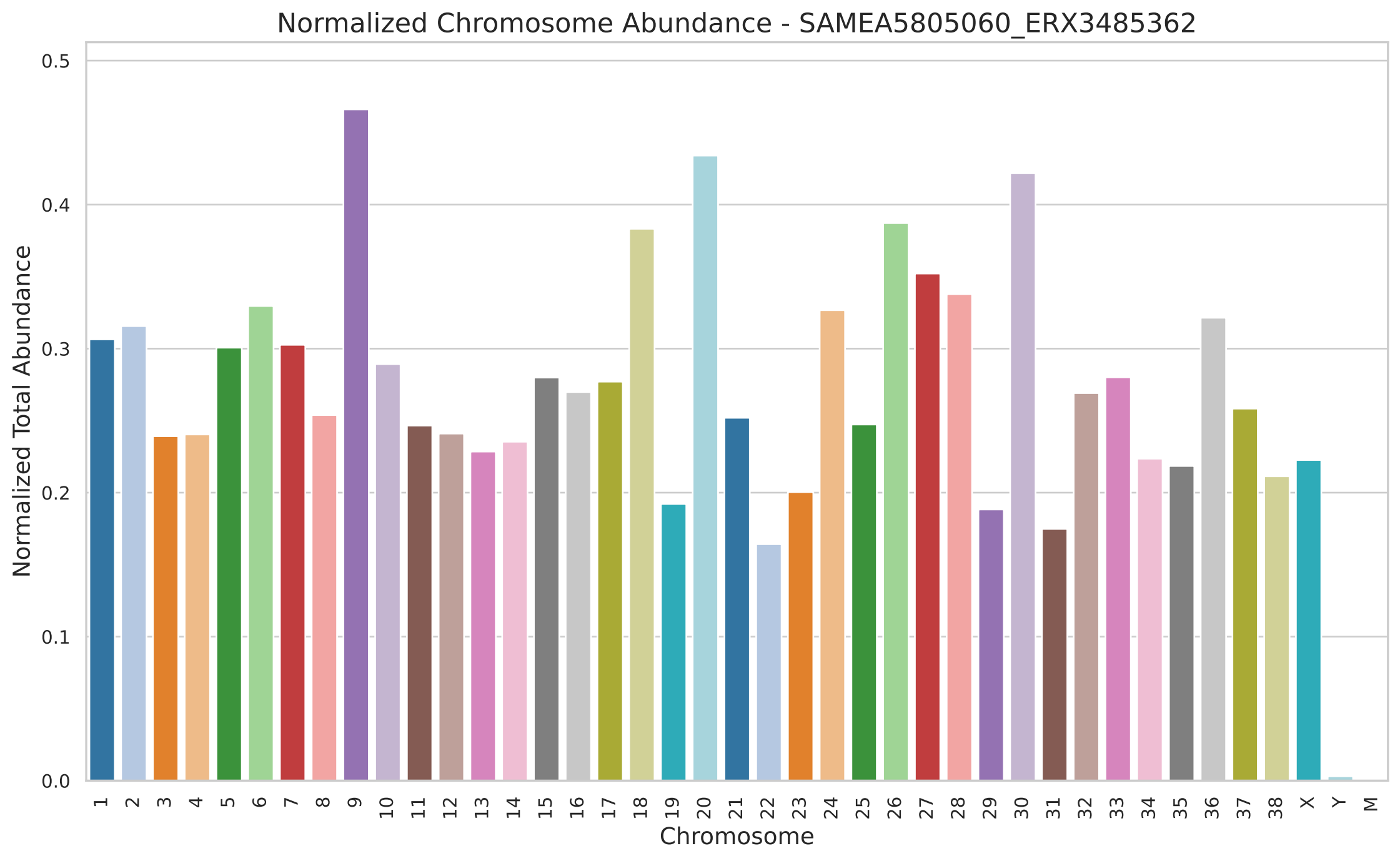

Normalized Chromosome Abundance - SAMEA3907099_ERX3485351
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

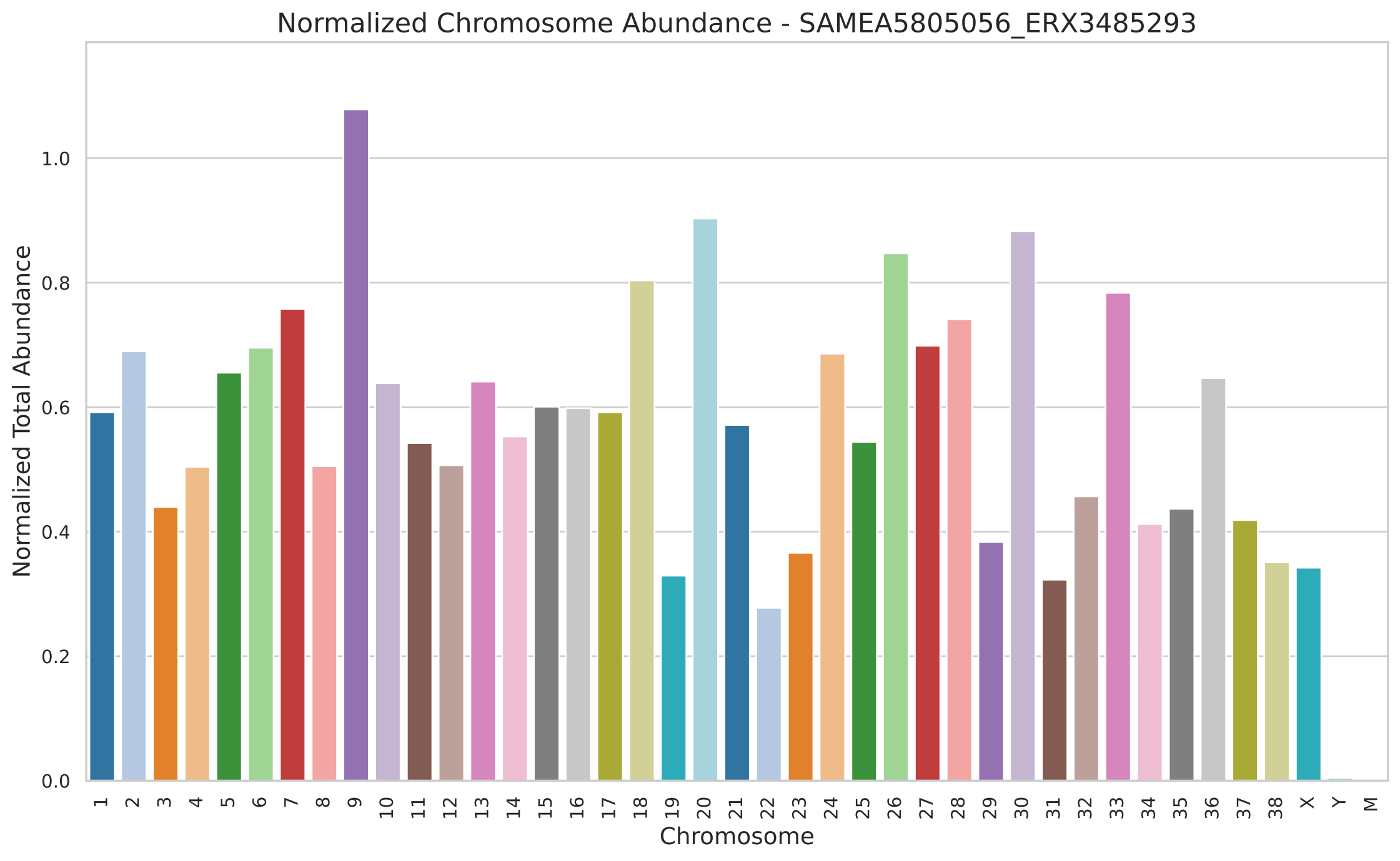

Normalized Chromosome Abundance - SAMEA5805081_ERX3485303
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

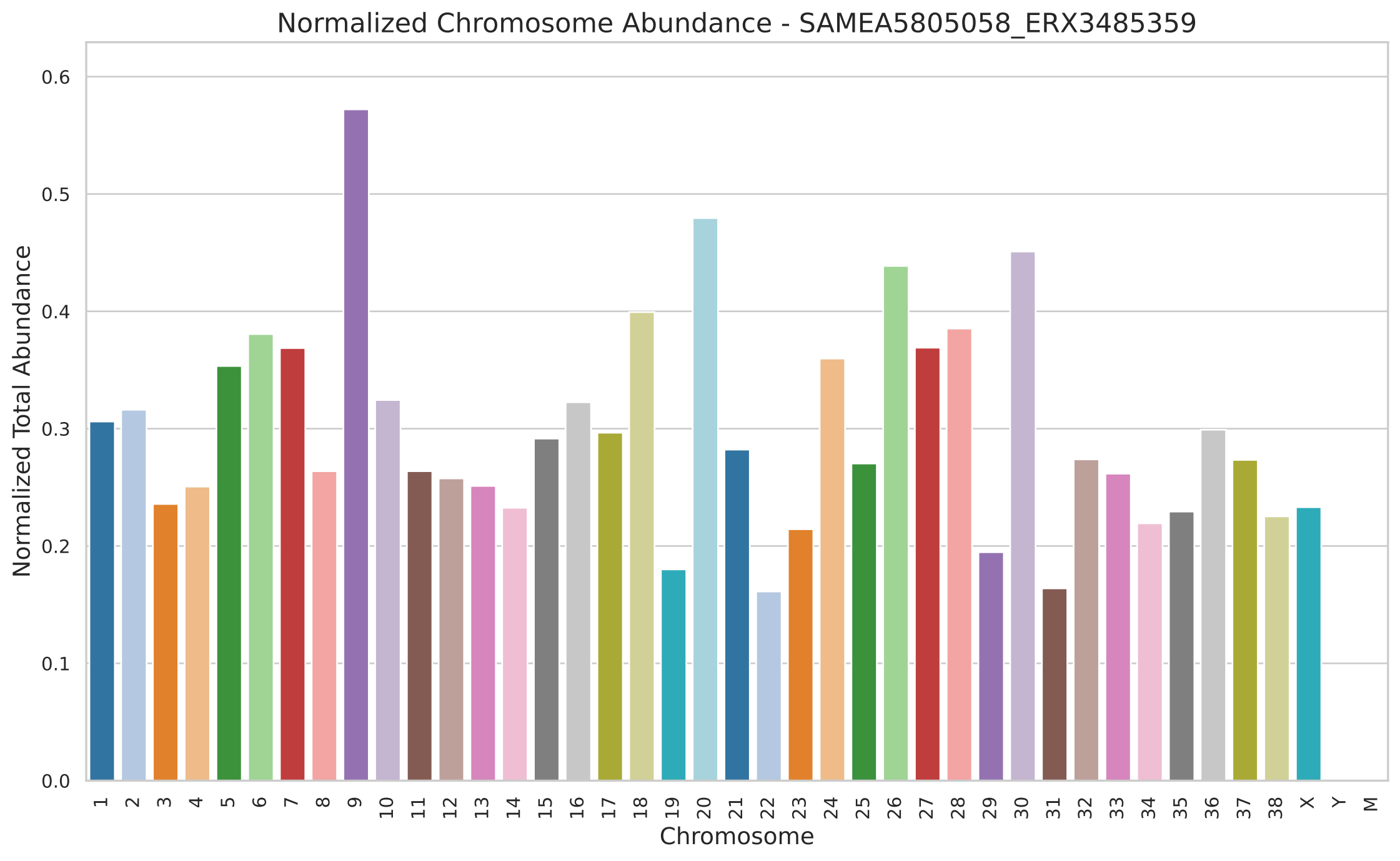

Normalized Chromosome Abundance - SAMEA3907097_ERX3485352
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

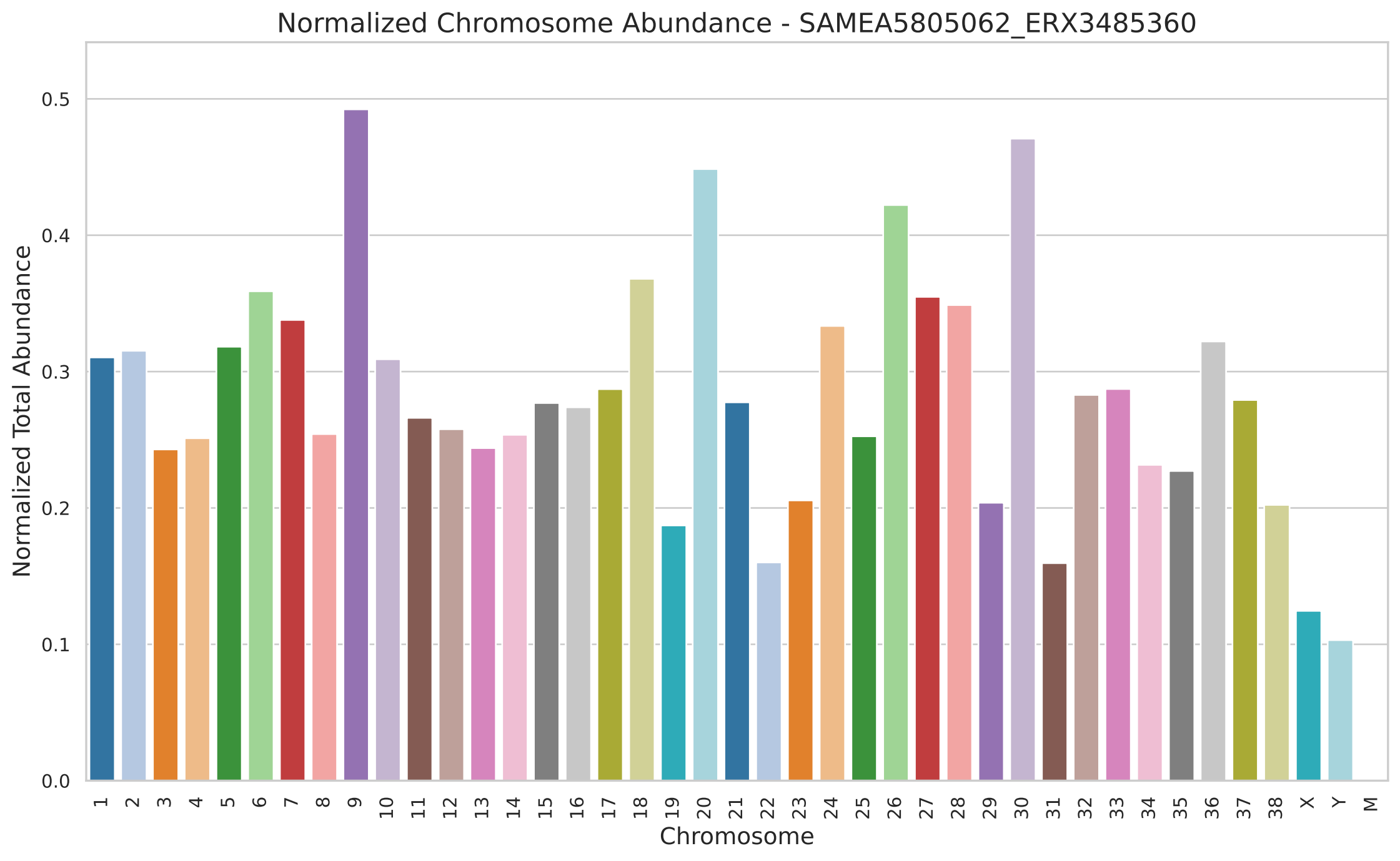

Normalized Chromosome Abundance - SAMEA5805057_ERX3485361
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

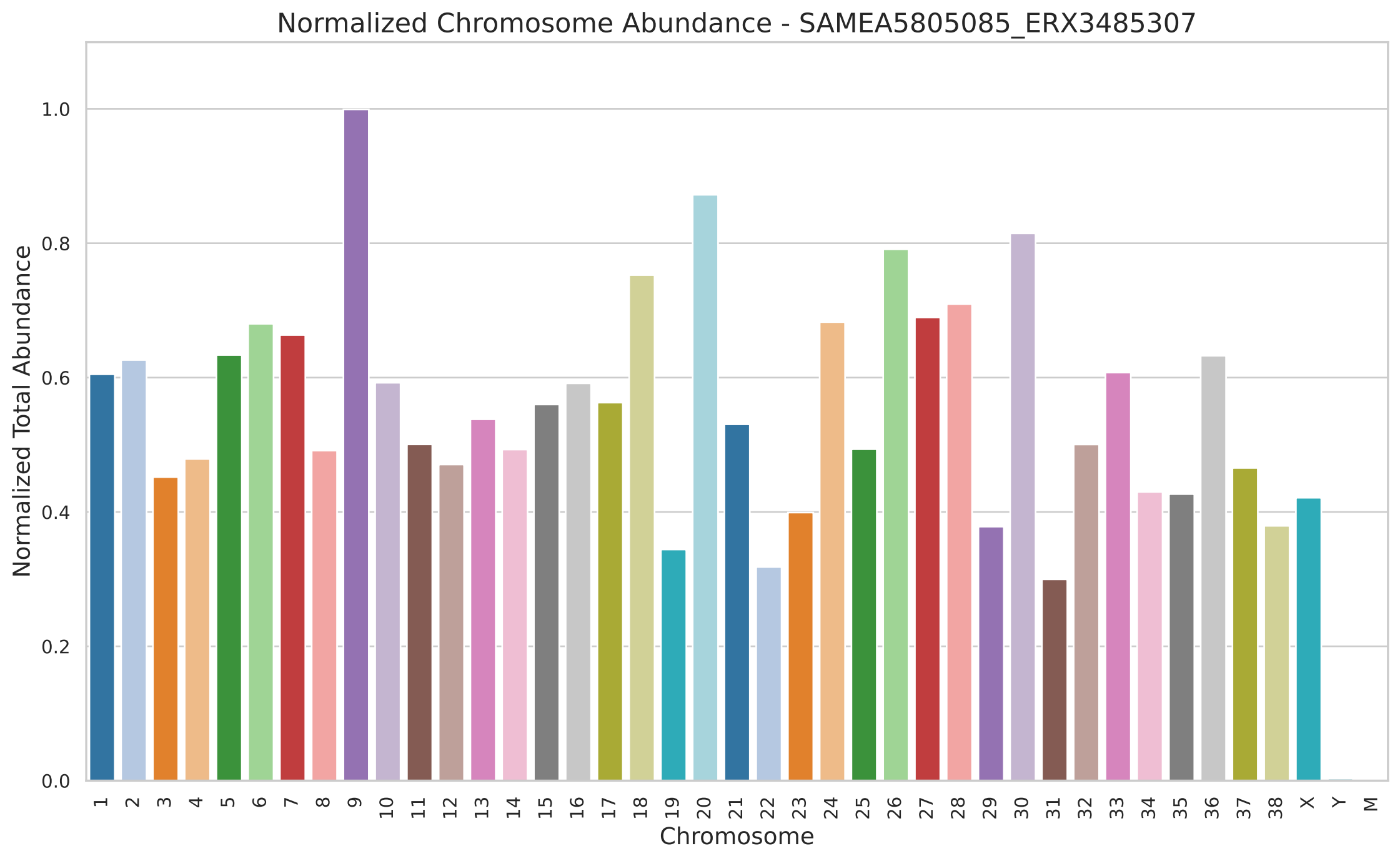

Normalized Chromosome Abundance - SAMEA5805071_ERX3485363
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

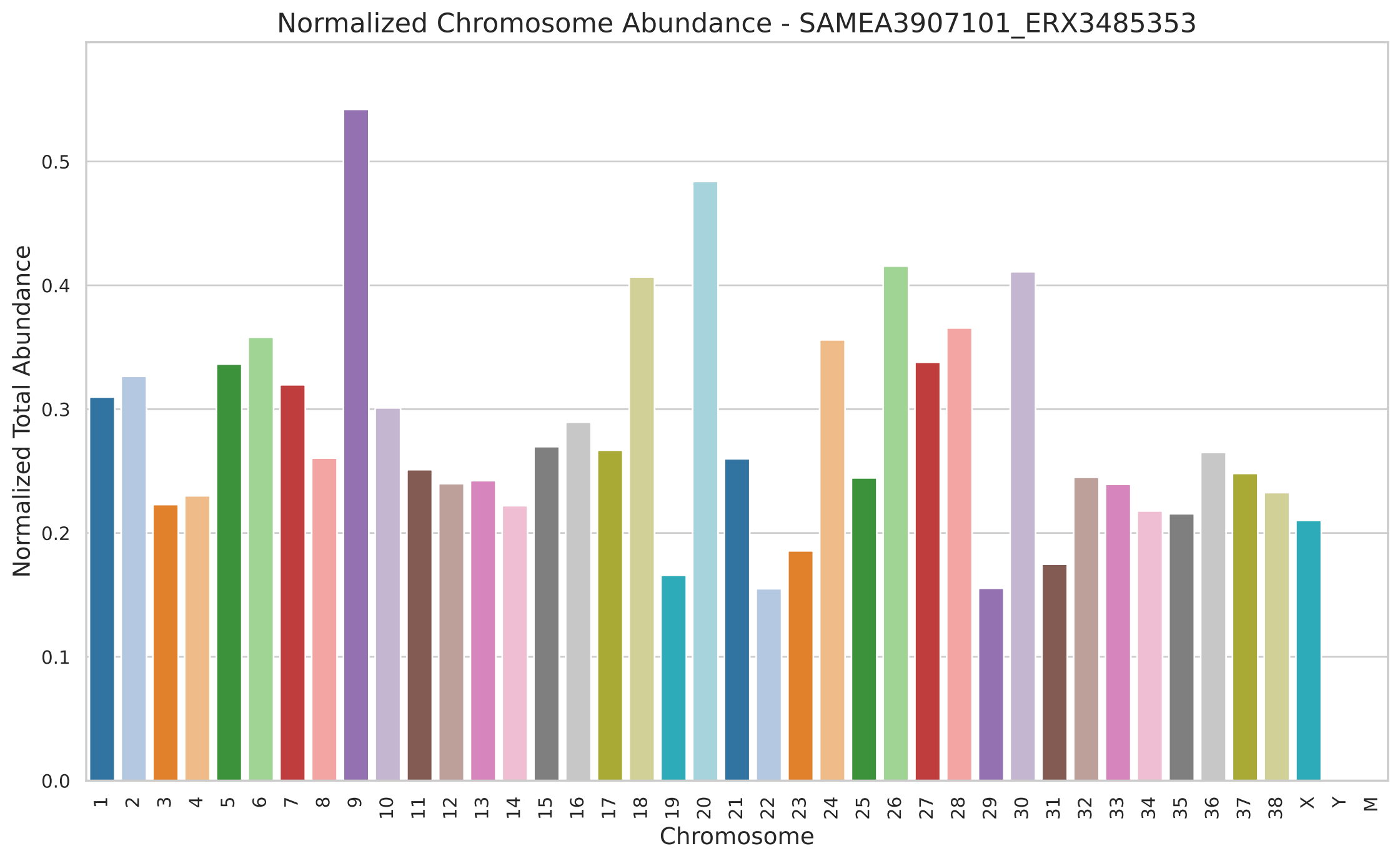

Normalized Chromosome Abundance - SAMEA5805060_ERX3485362
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

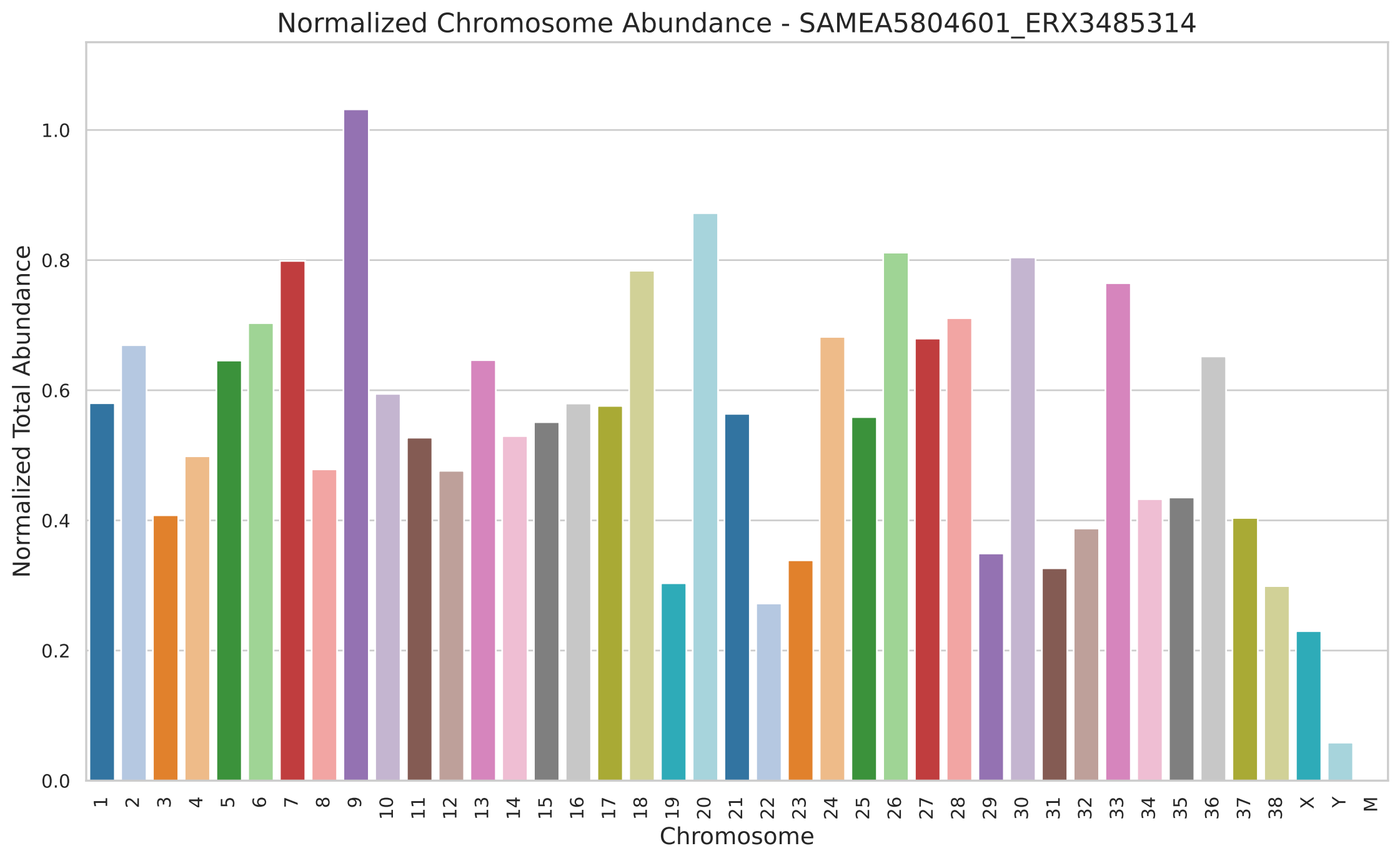

Normalized Chromosome Abundance - SAMEA5805056_ERX3485293
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

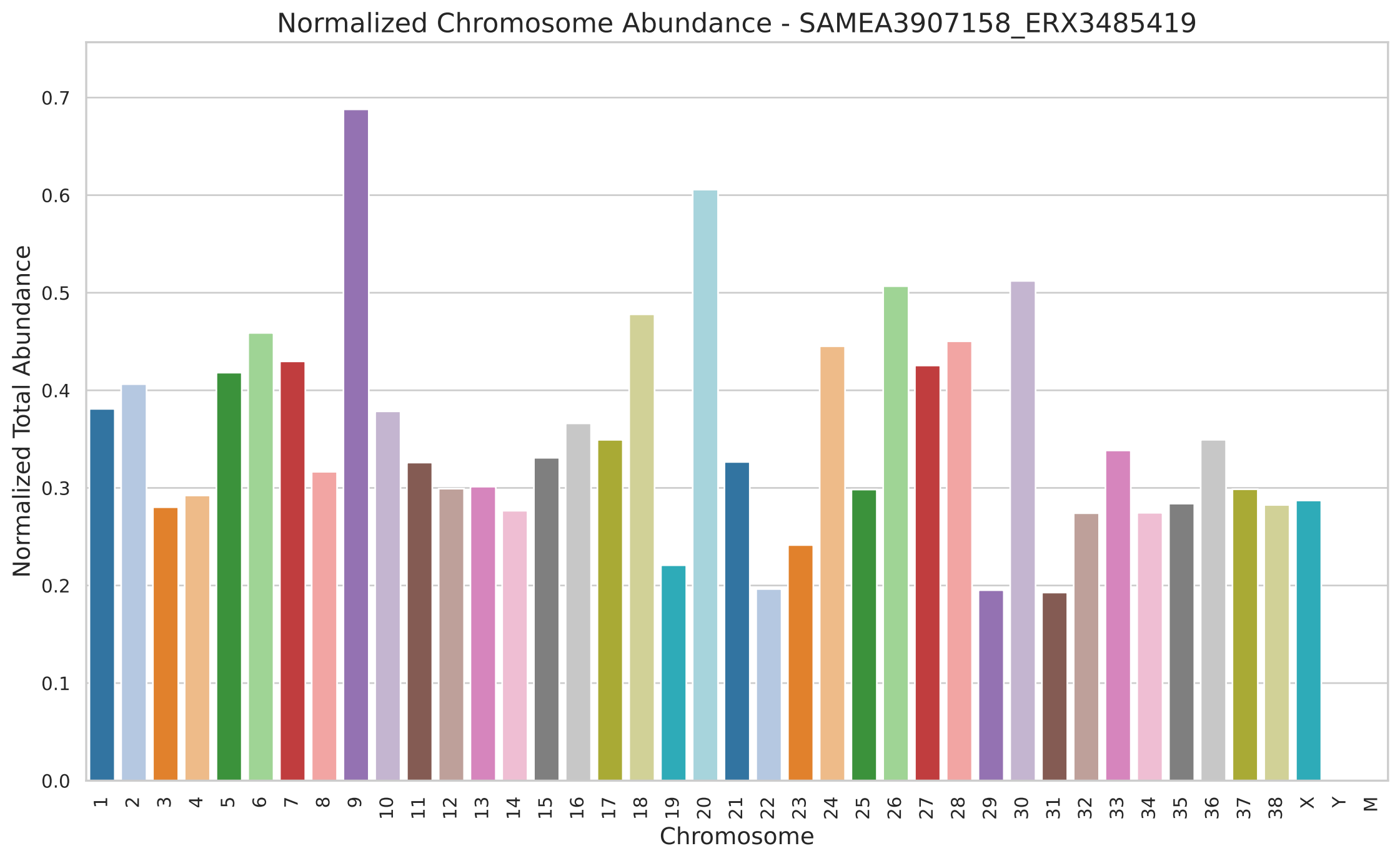

Normalized Chromosome Abundance - SAMEA5805058_ERX3485359
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

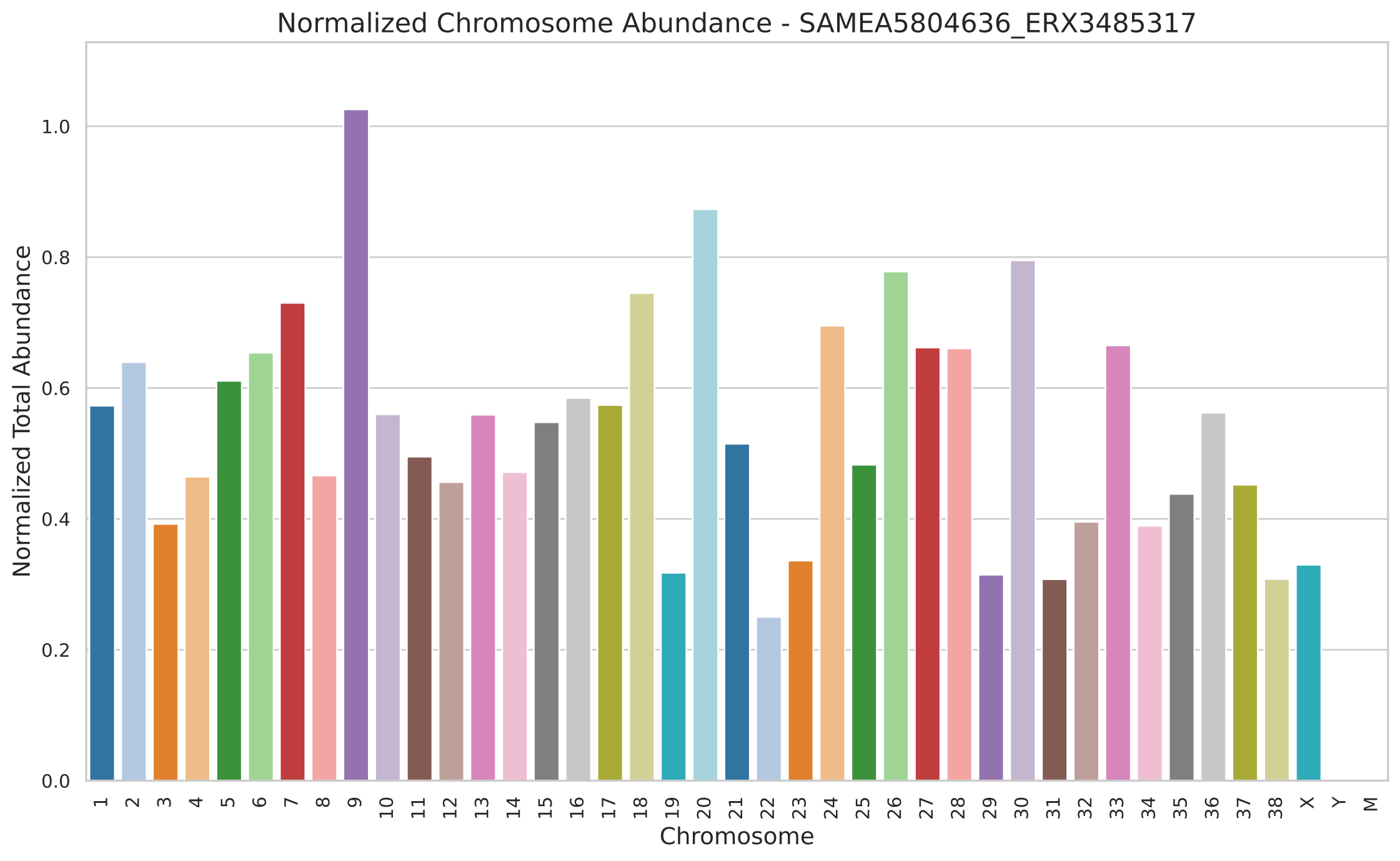

Normalized Chromosome Abundance - SAMEA5805062_ERX3485360
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

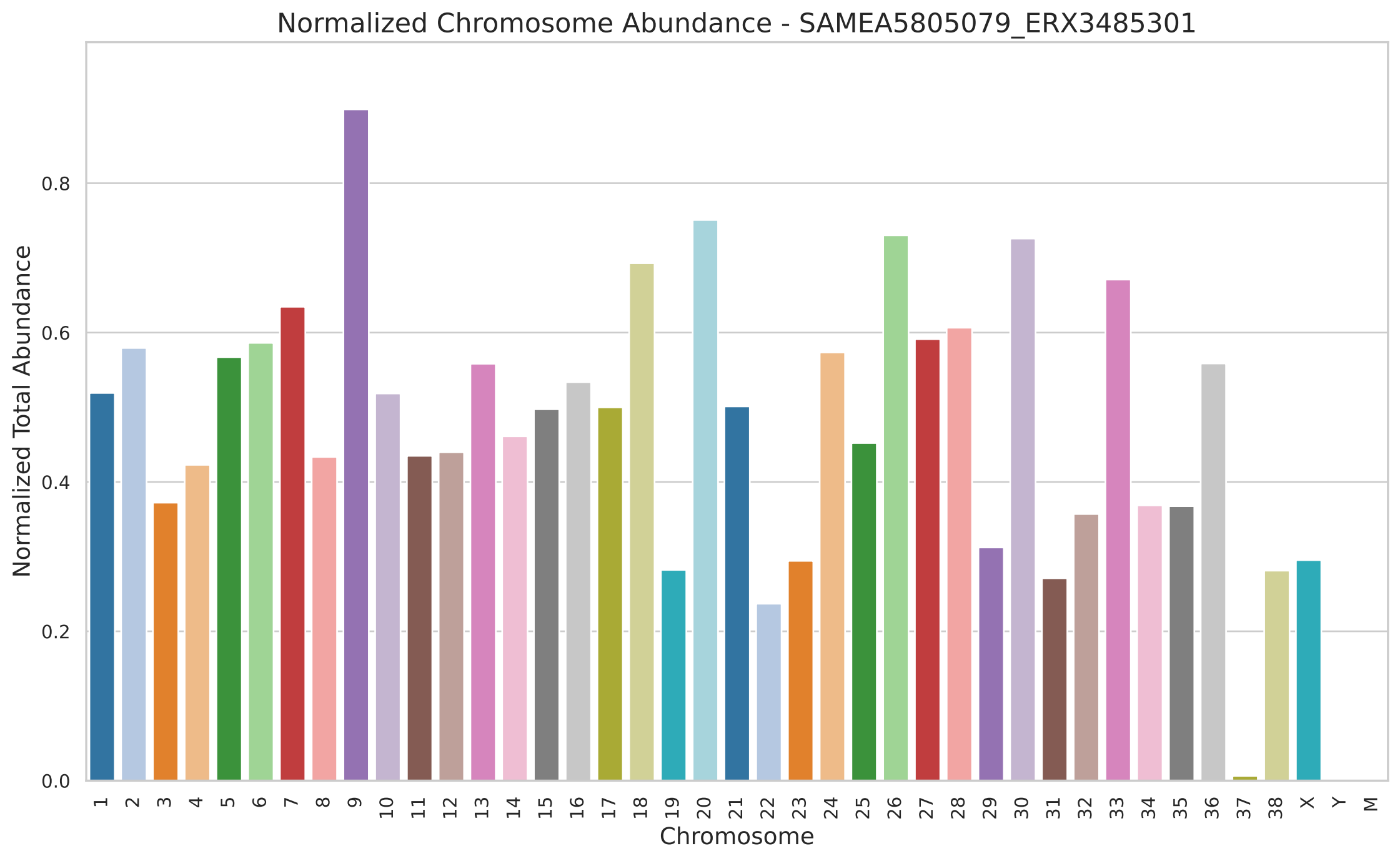

Normalized Chromosome Abundance - SAMEA5805085_ERX3485307
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

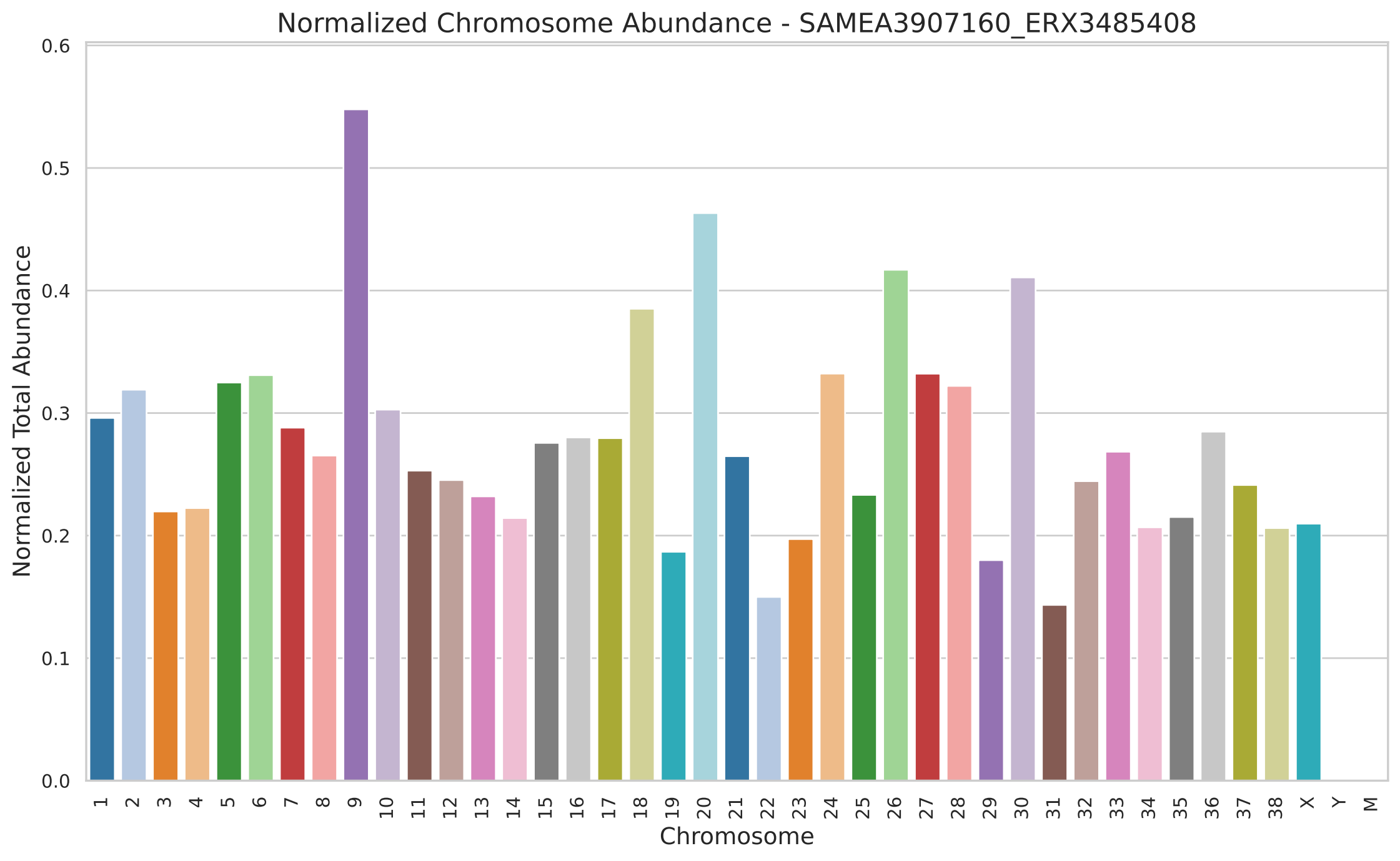

Normalized Chromosome Abundance - SAMEA3907101_ERX3485353
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

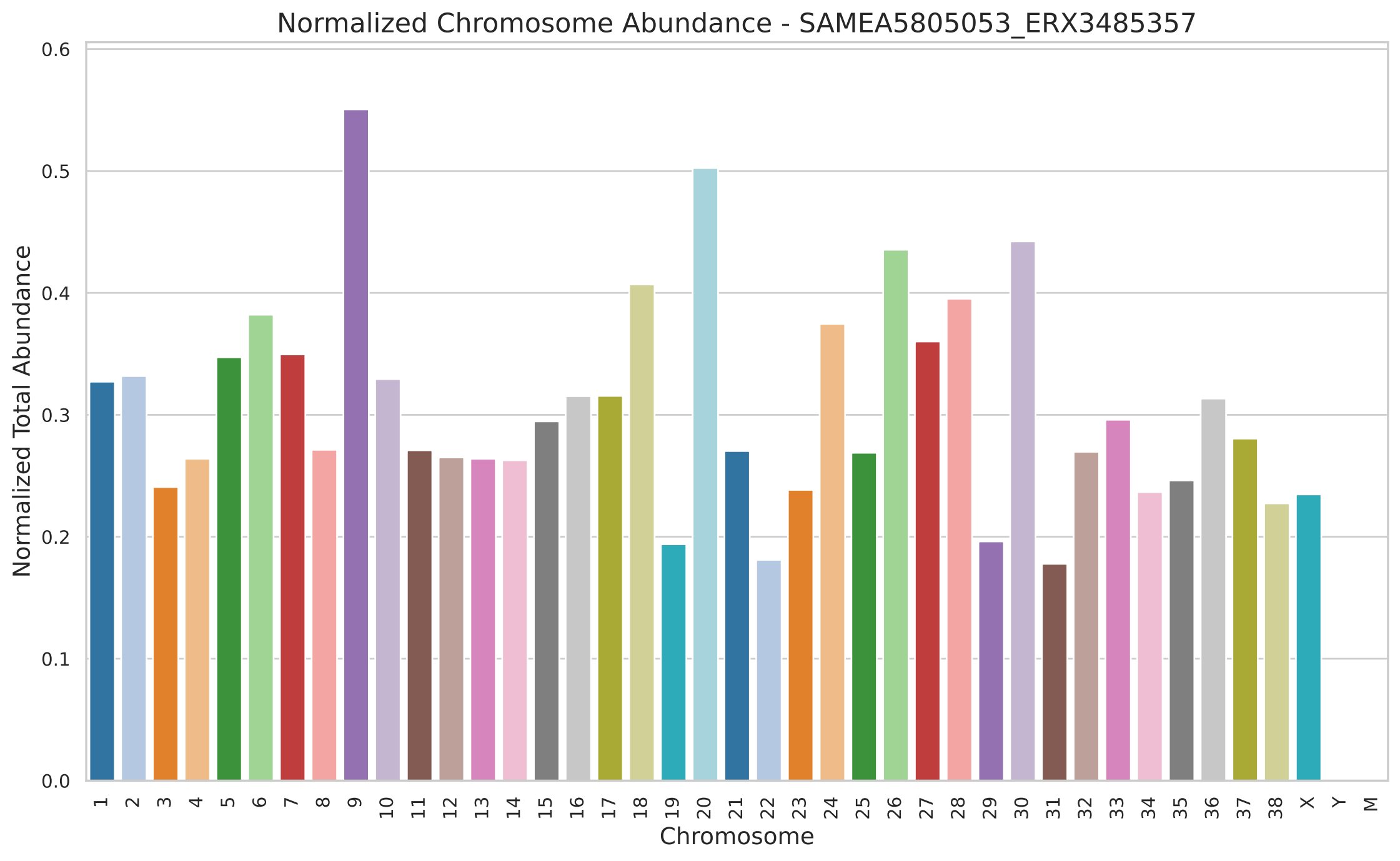

Normalized Chromosome Abundance - SAMEA5804601_ERX3485314
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

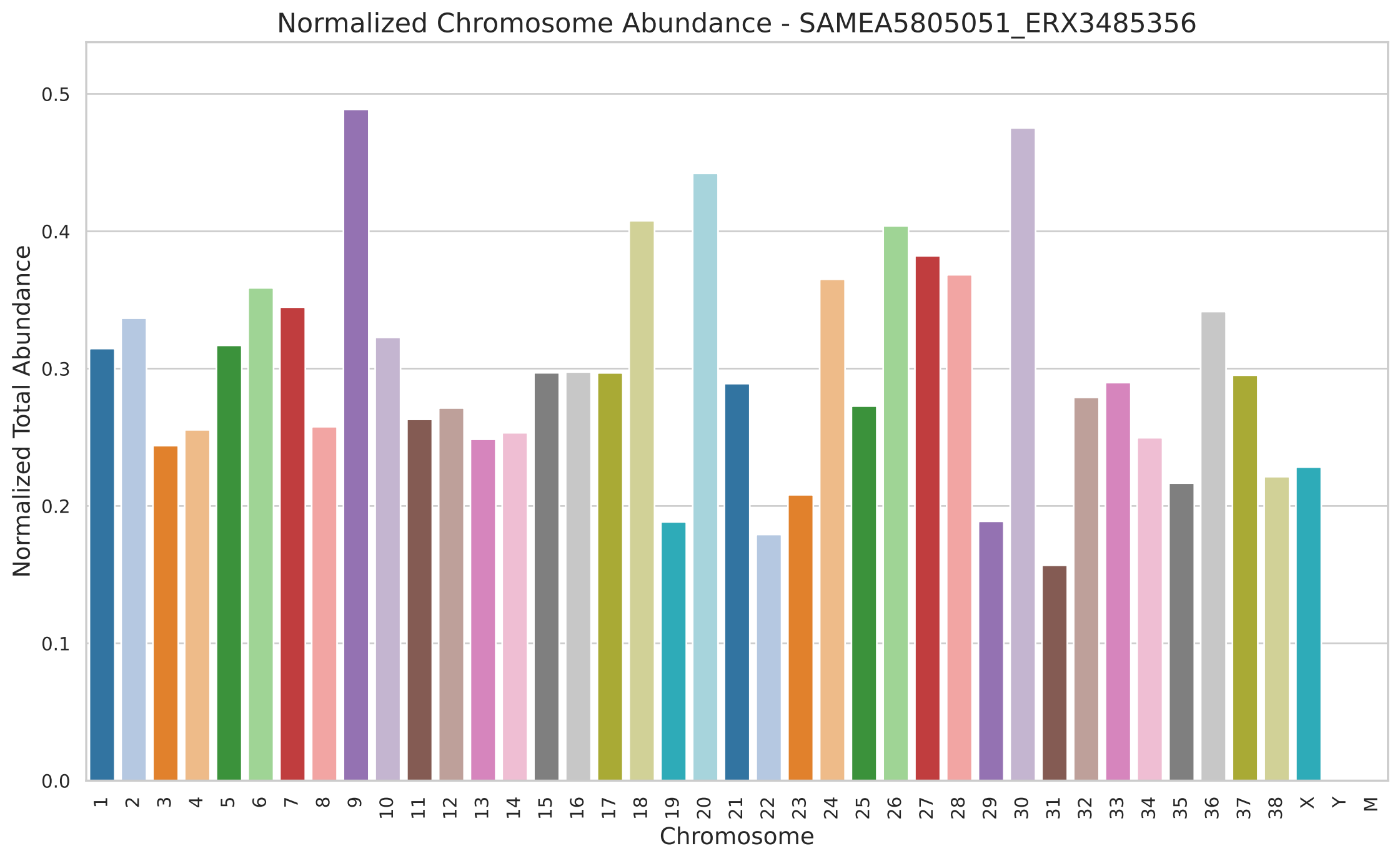

Normalized Chromosome Abundance - SAMEA3907158_ERX3485419
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

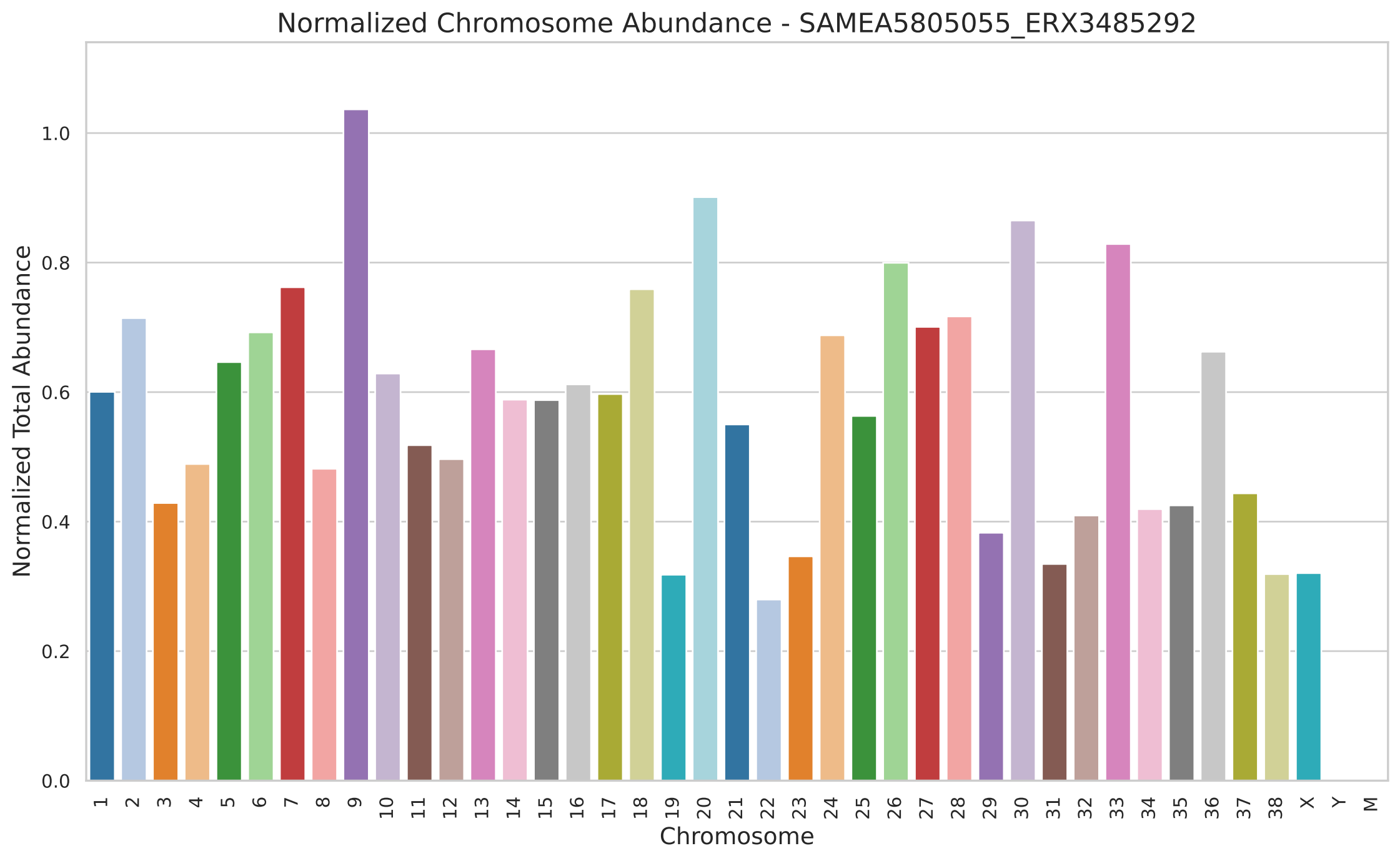

Normalized Chromosome Abundance - SAMEA5804636_ERX3485317
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

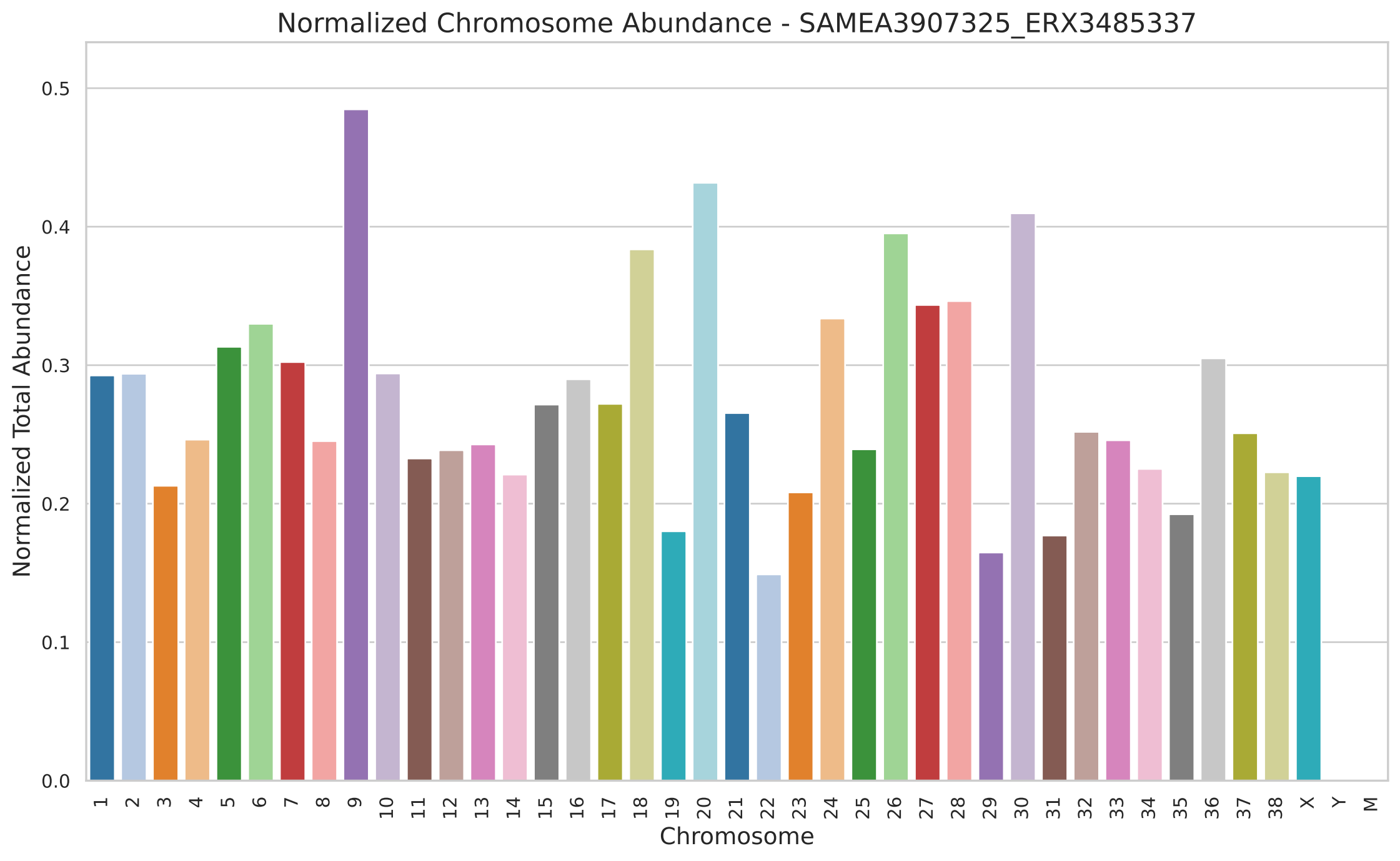

Normalized Chromosome Abundance - SAMEA5805079_ERX3485301
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

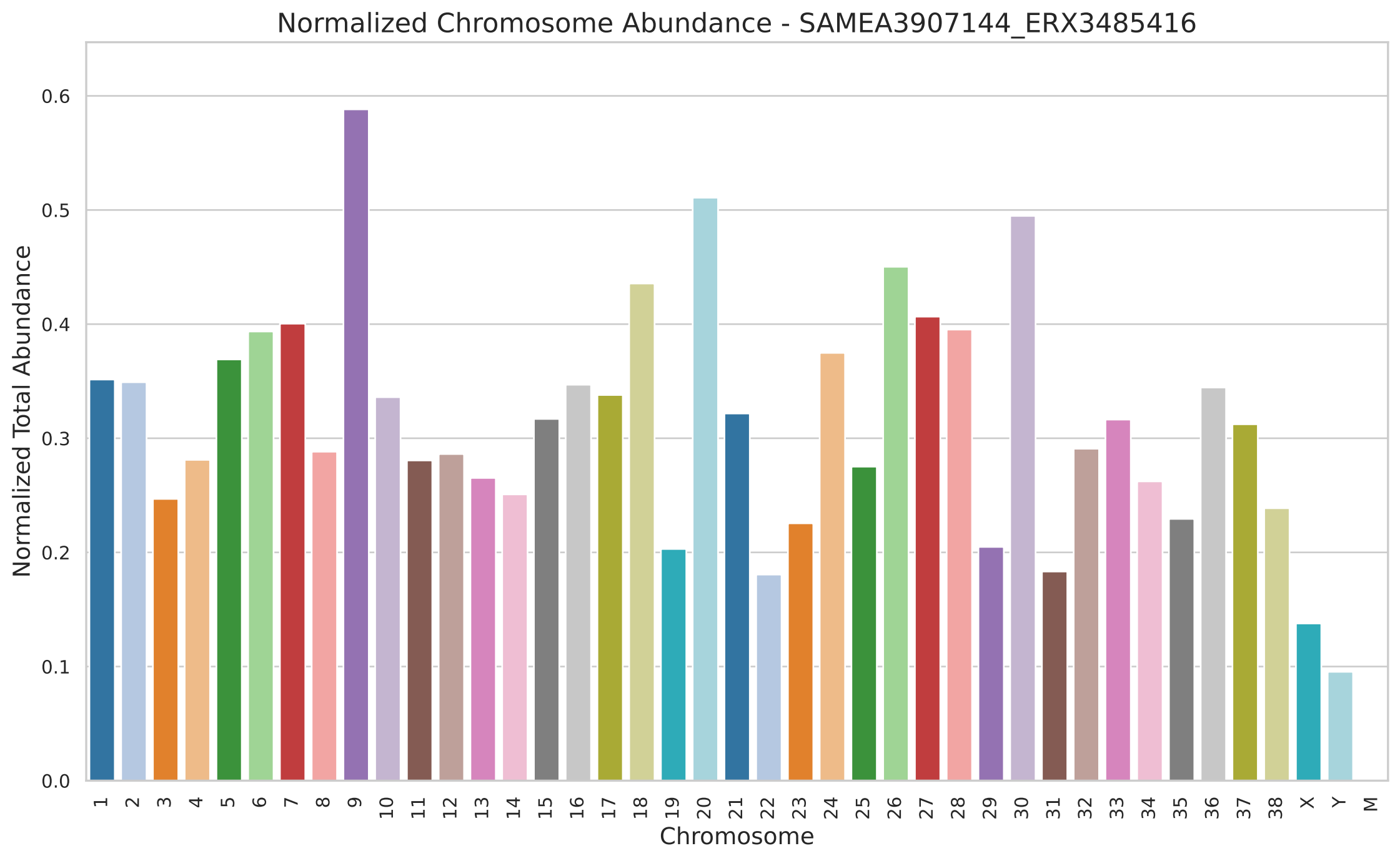

Normalized Chromosome Abundance - SAMEA3907160_ERX3485408
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

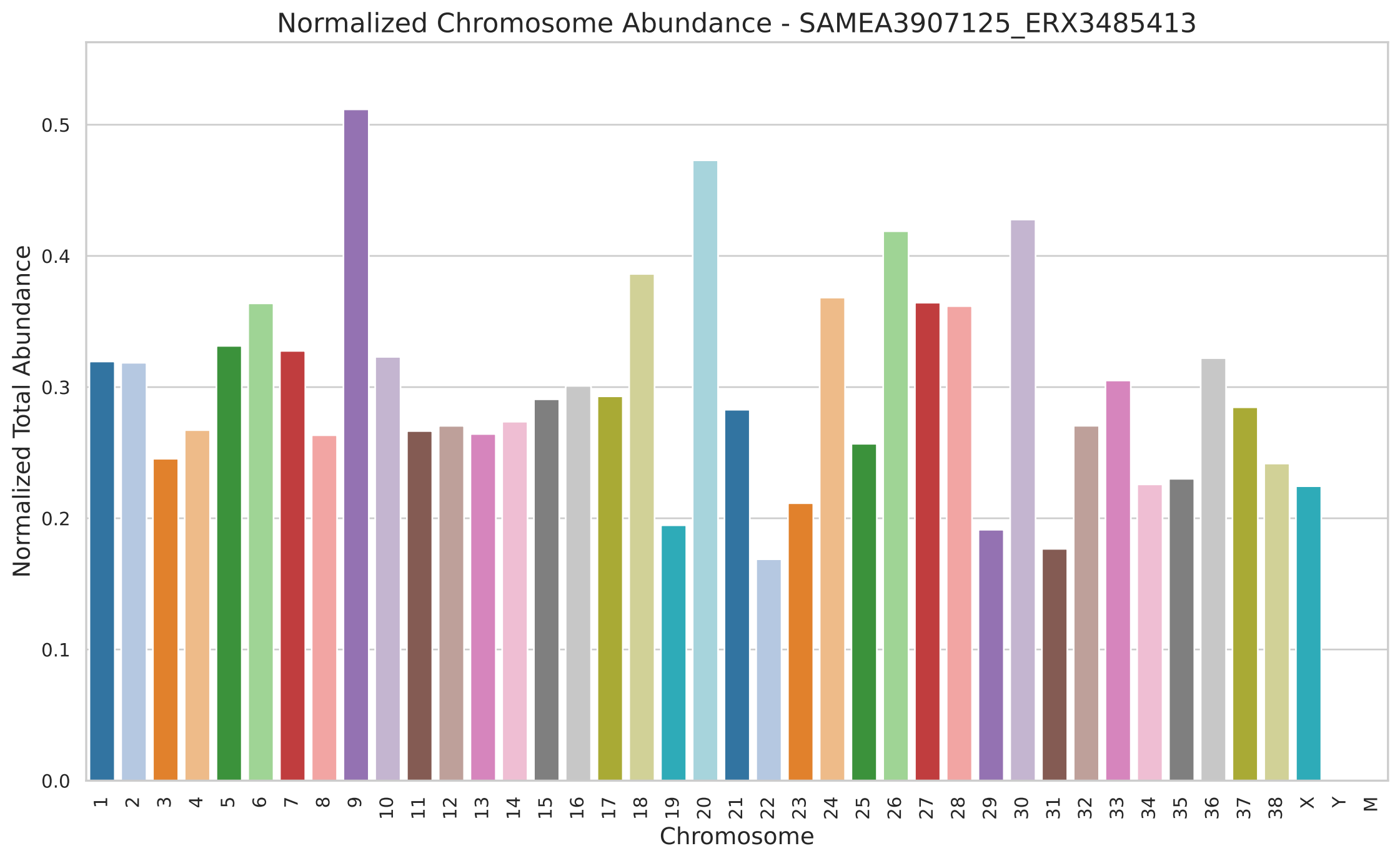

Normalized Chromosome Abundance - SAMEA5805053_ERX3485357
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

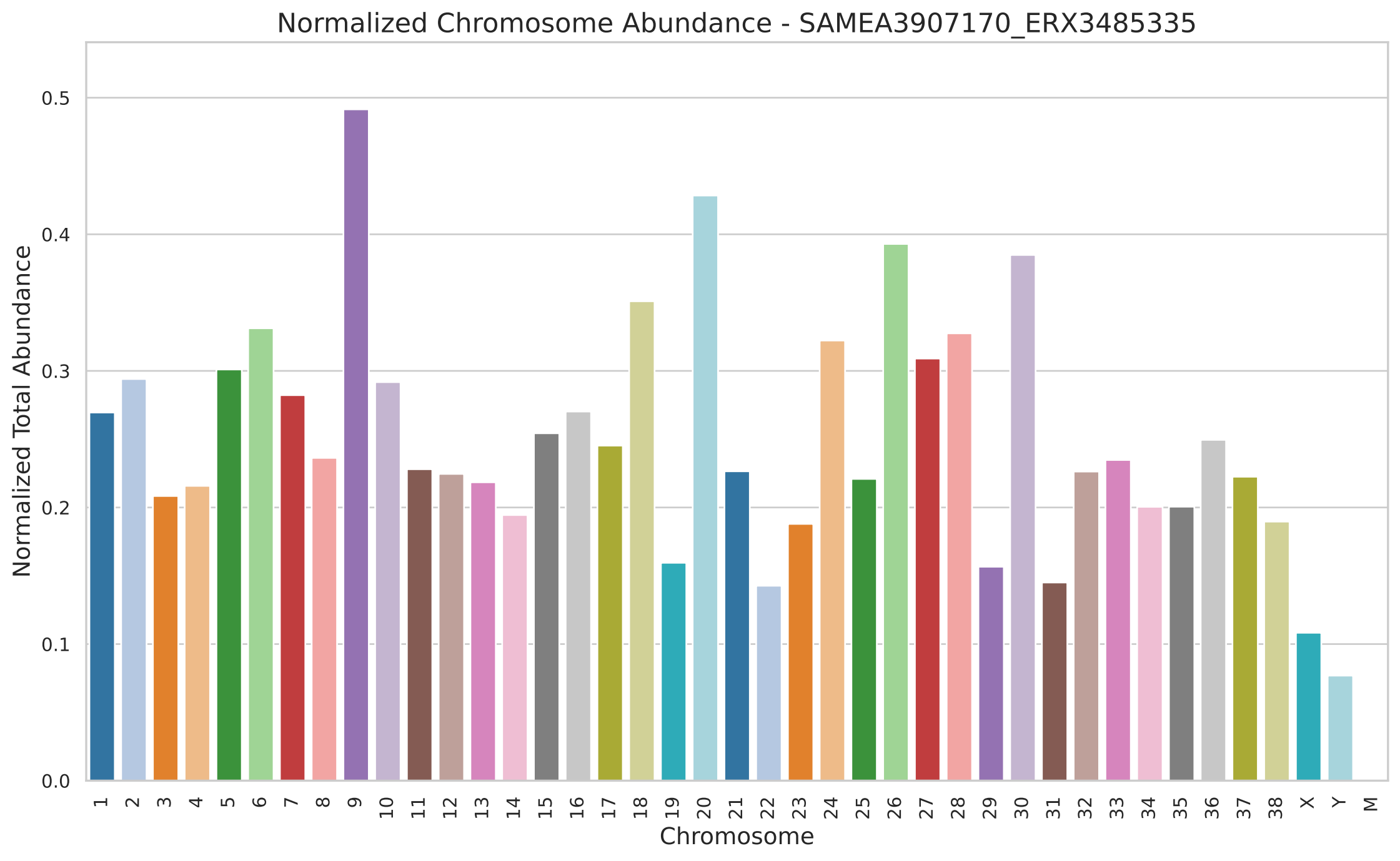

Normalized Chromosome Abundance - SAMEA5805051_ERX3485356
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

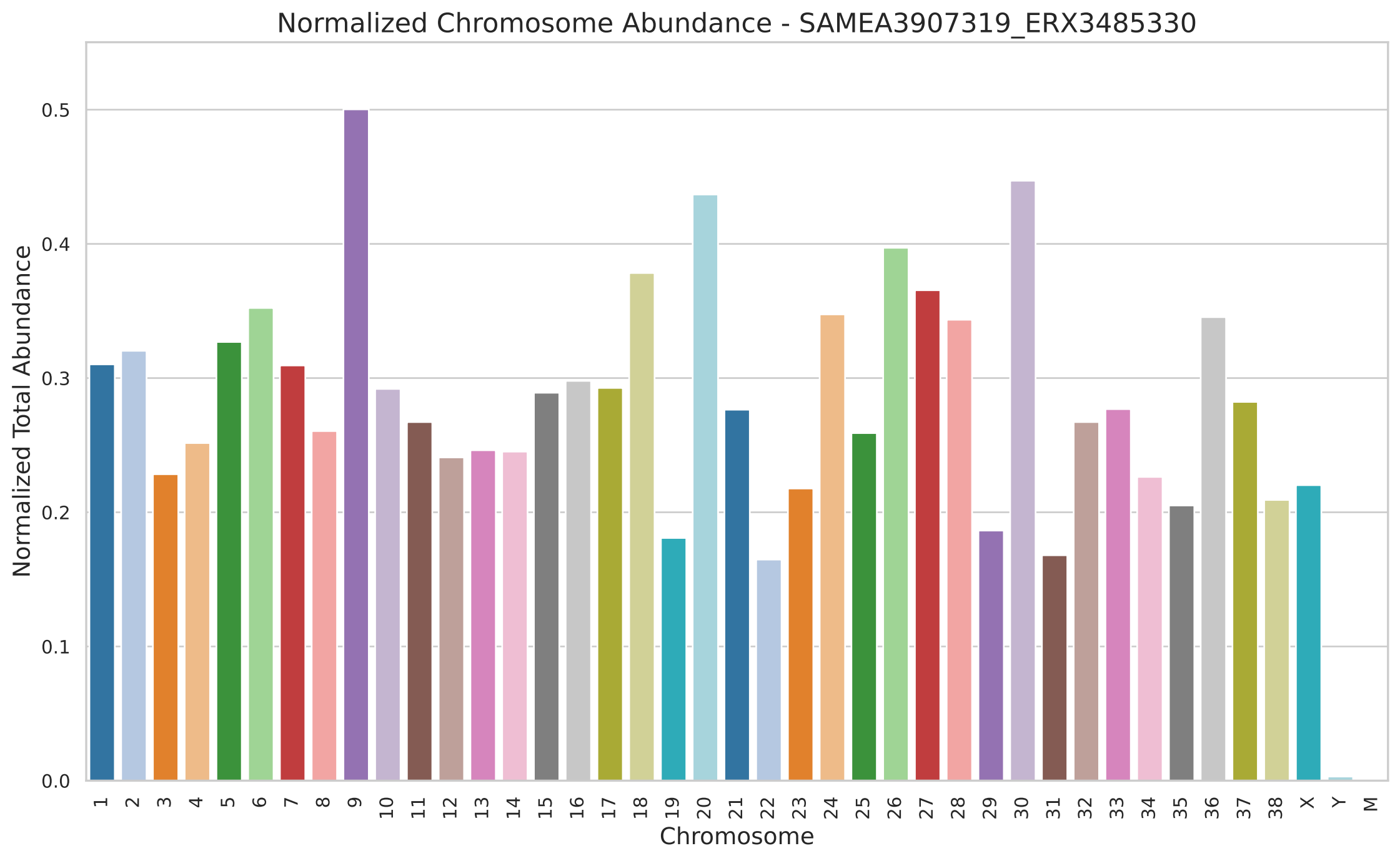

Normalized Chromosome Abundance - SAMEA5805055_ERX3485292
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

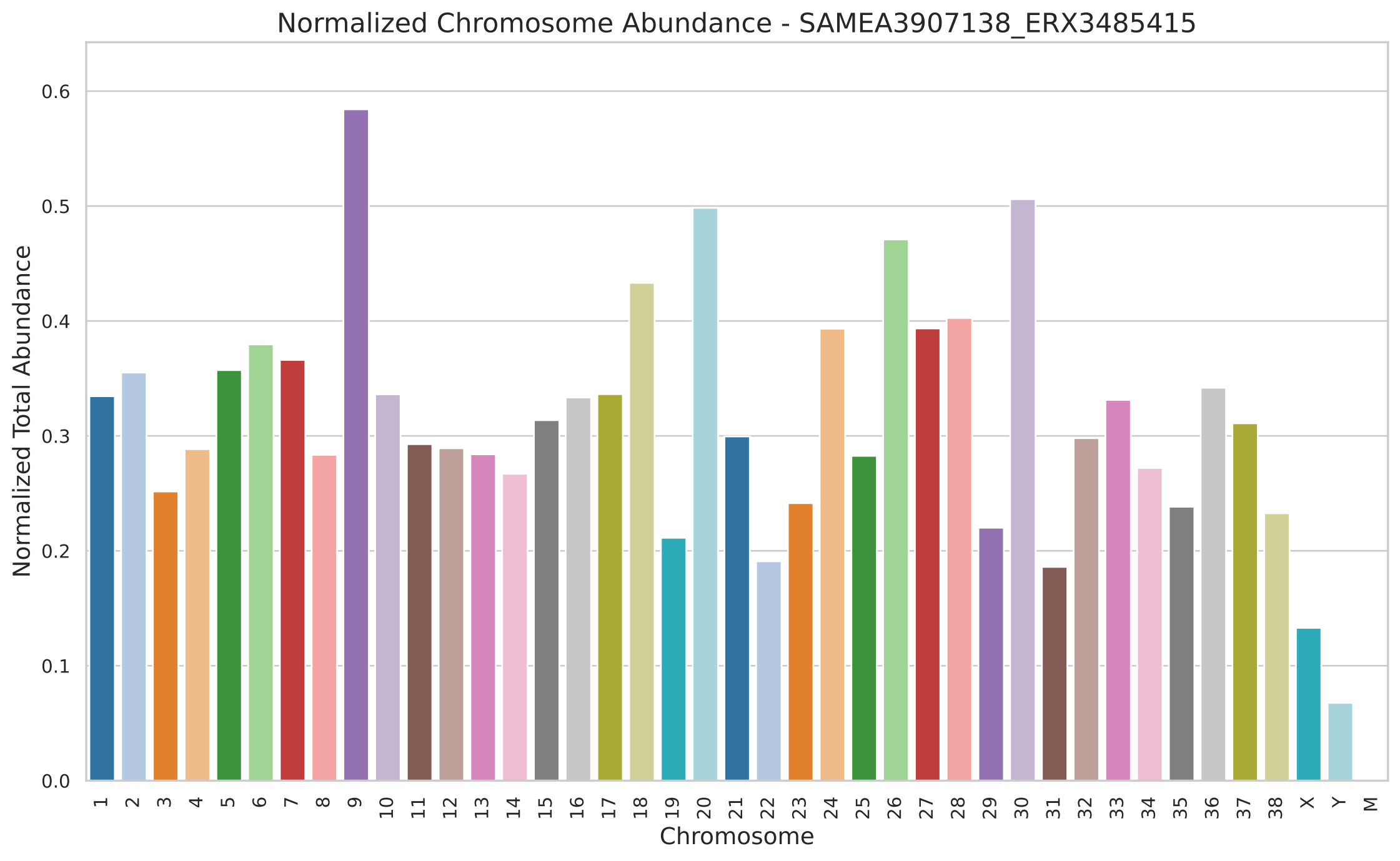

Normalized Chromosome Abundance - SAMEA3907325_ERX3485337
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

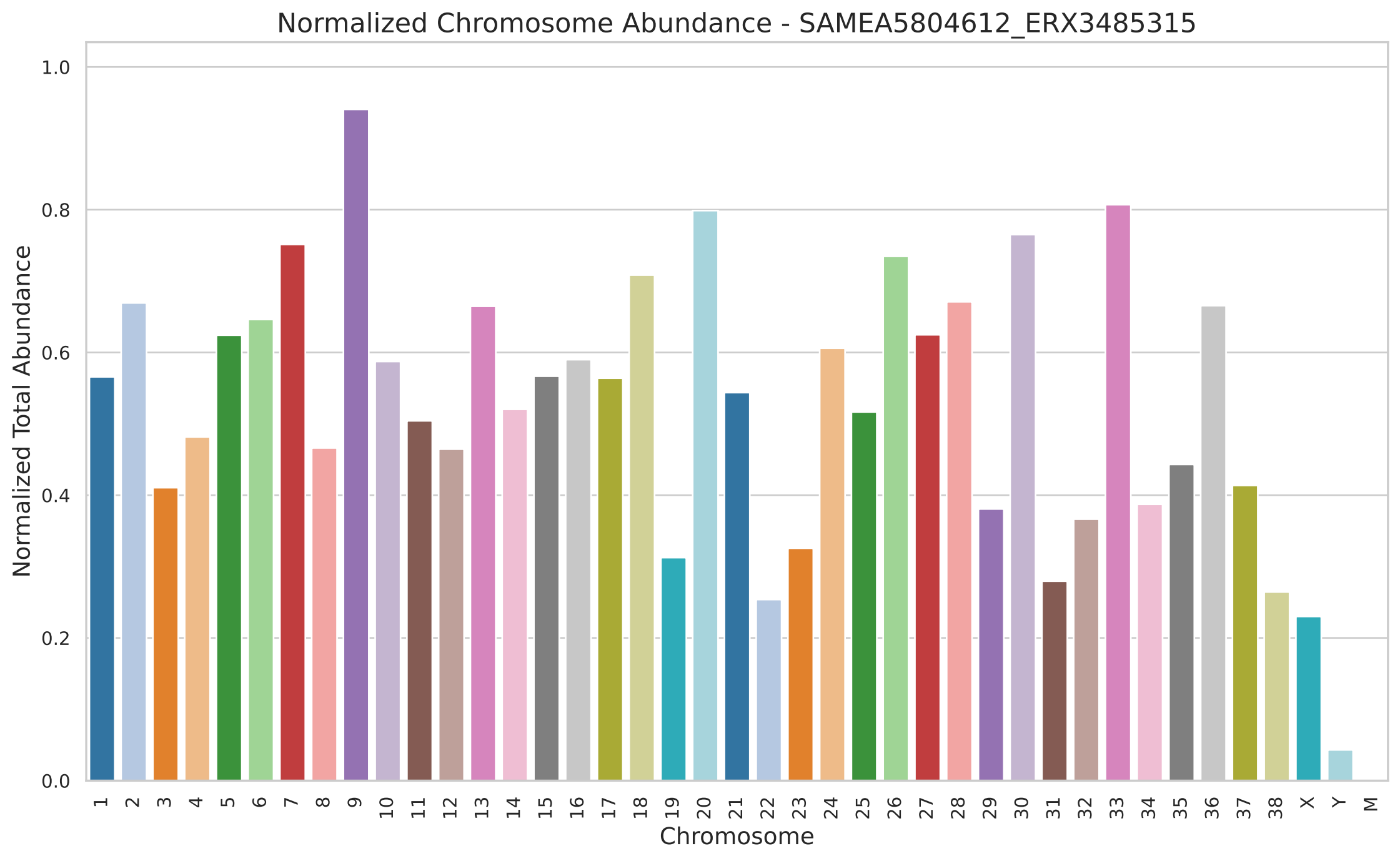

Normalized Chromosome Abundance - SAMEA3907144_ERX3485416
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

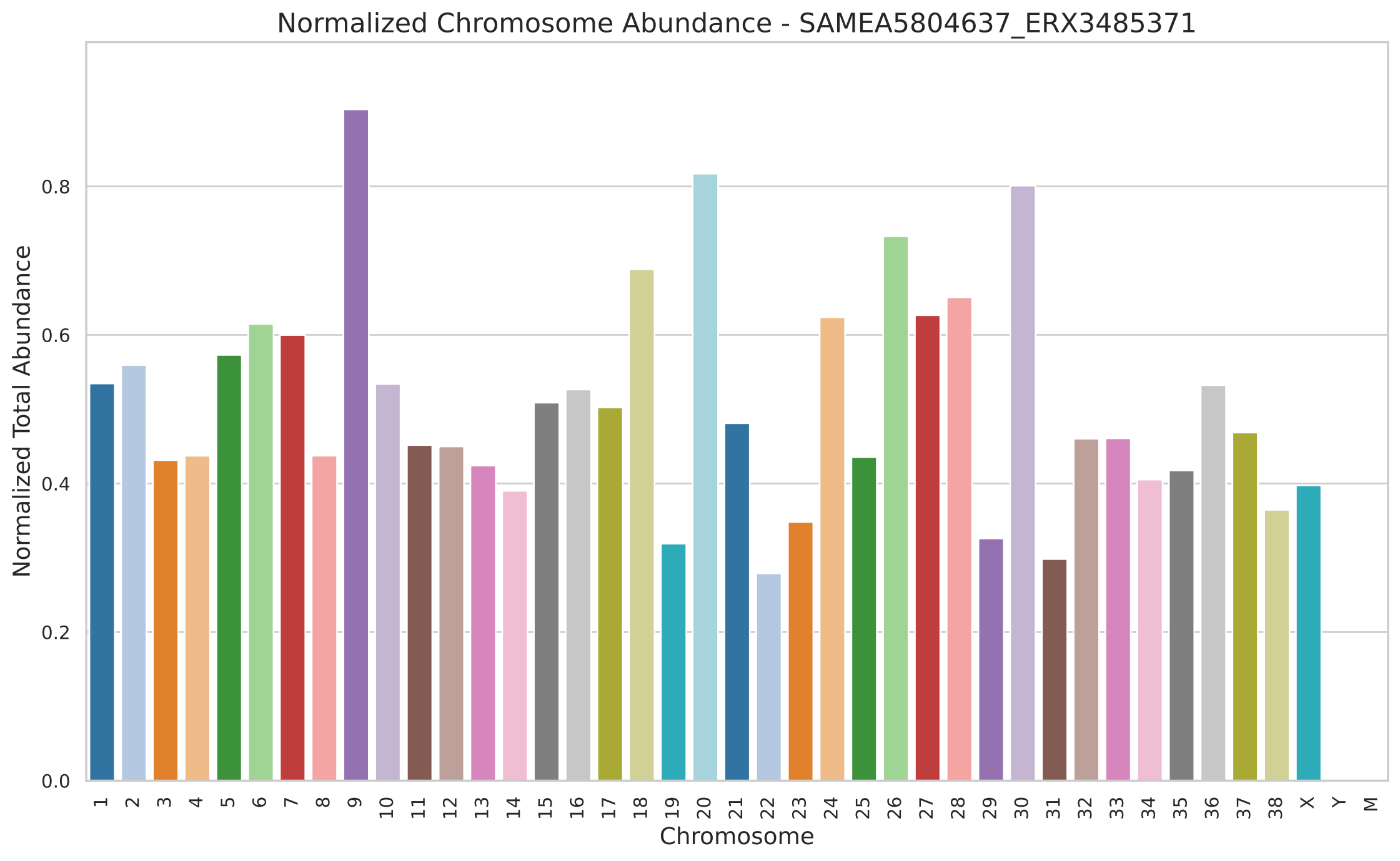

Normalized Chromosome Abundance - SAMEA3907125_ERX3485413
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

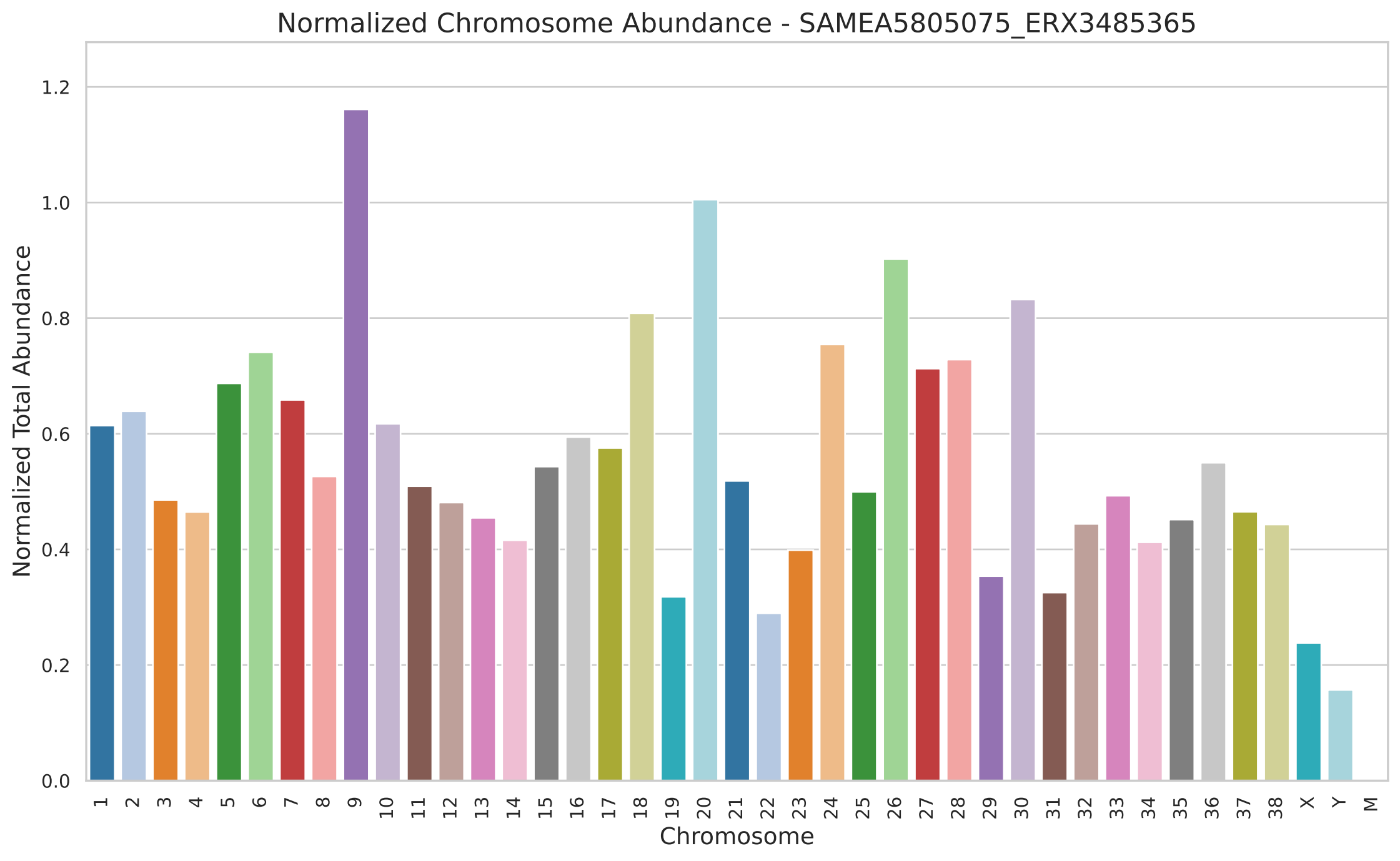

Normalized Chromosome Abundance - SAMEA3907170_ERX3485335
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

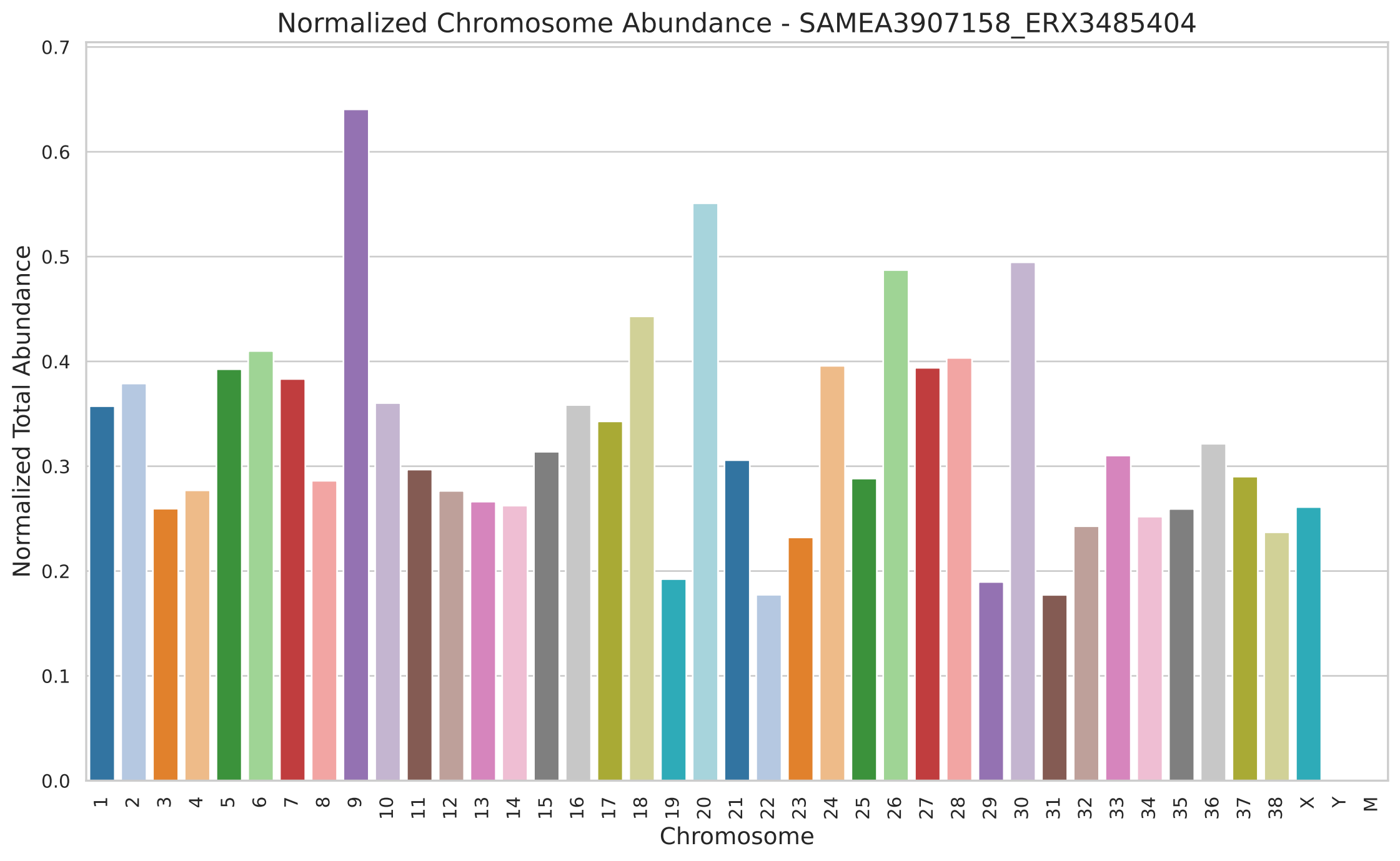

Normalized Chromosome Abundance - SAMEA3907319_ERX3485330
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

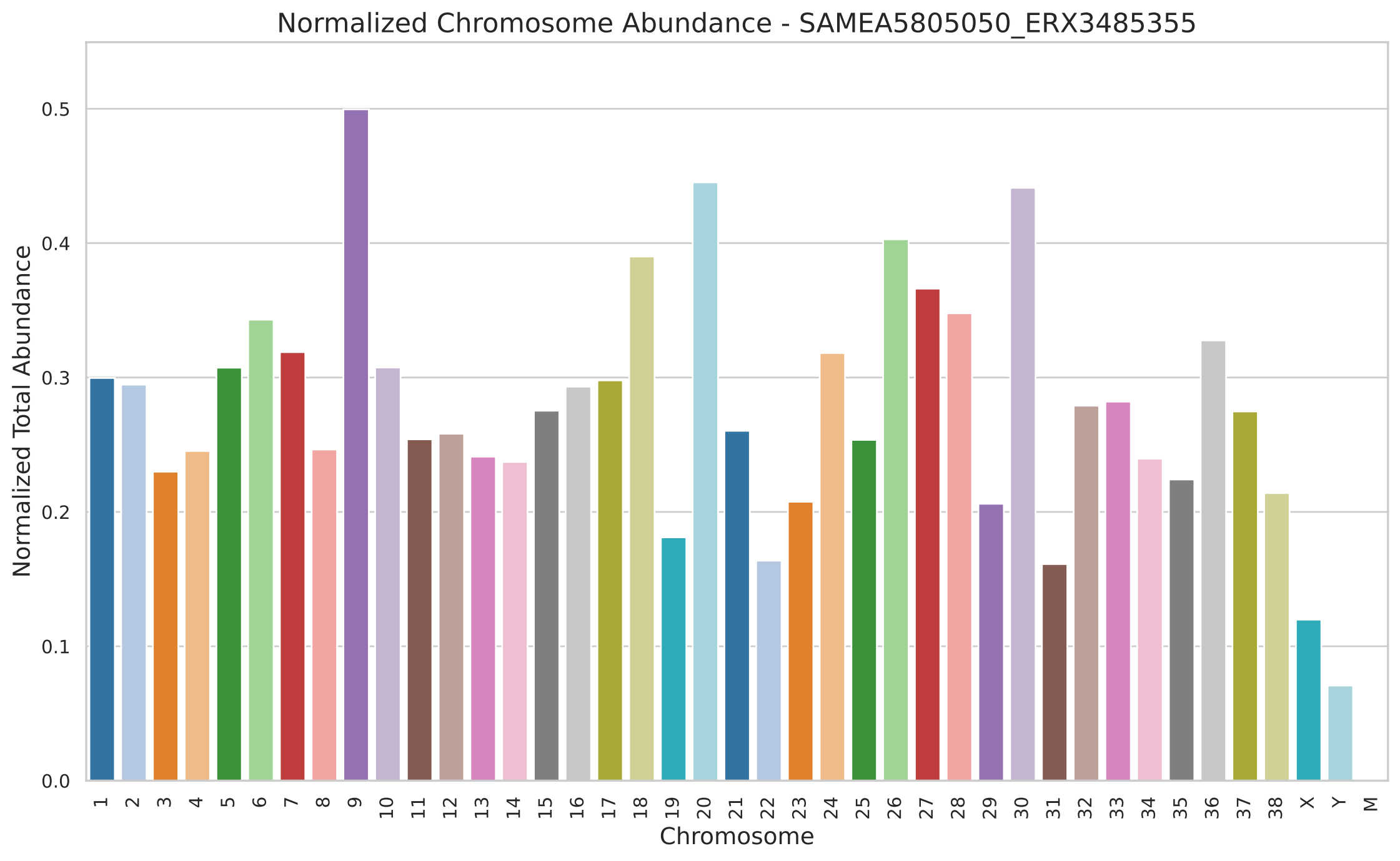

Normalized Chromosome Abundance - SAMEA3907138_ERX3485415
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

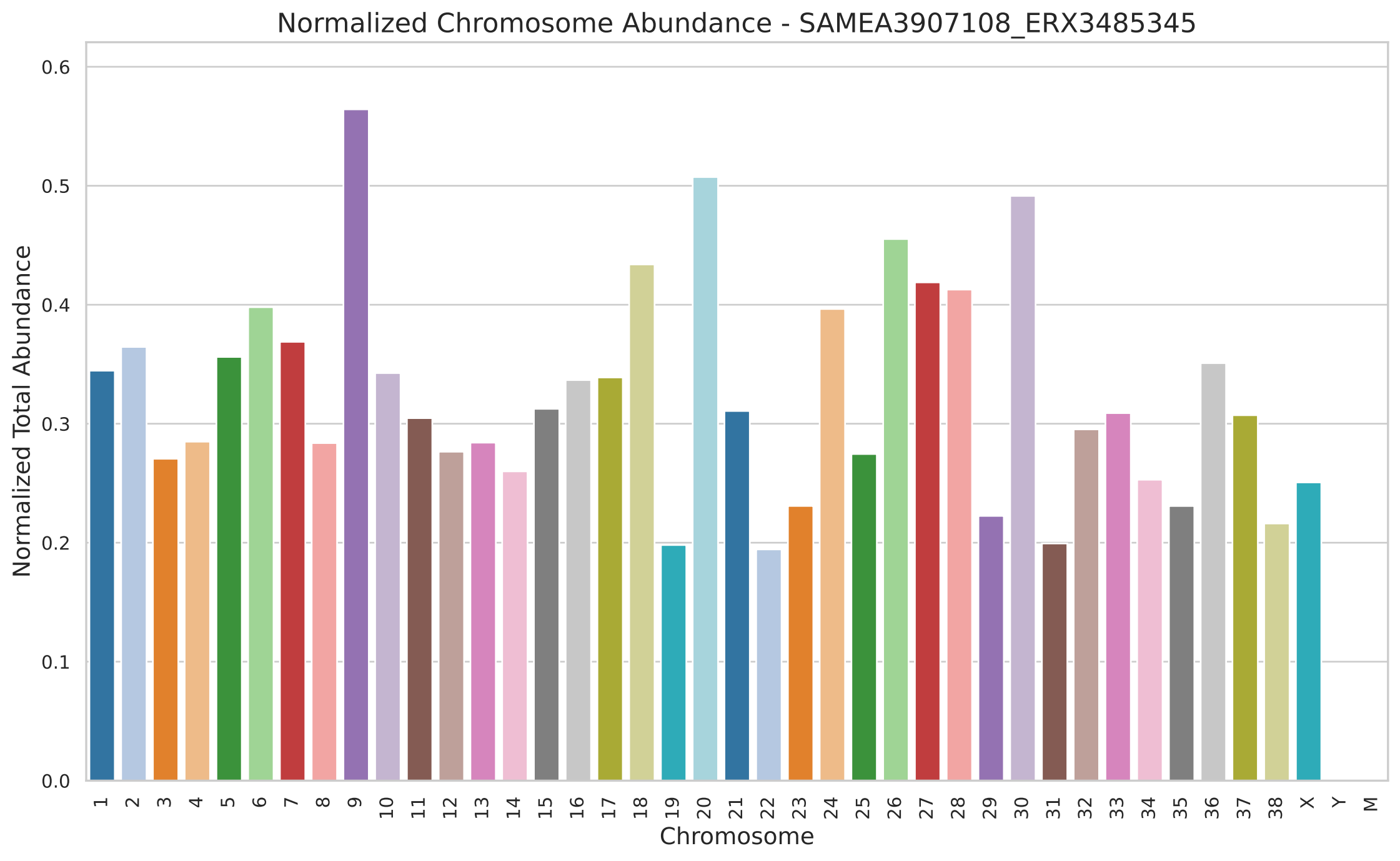

Normalized Chromosome Abundance - SAMEA5804612_ERX3485315
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

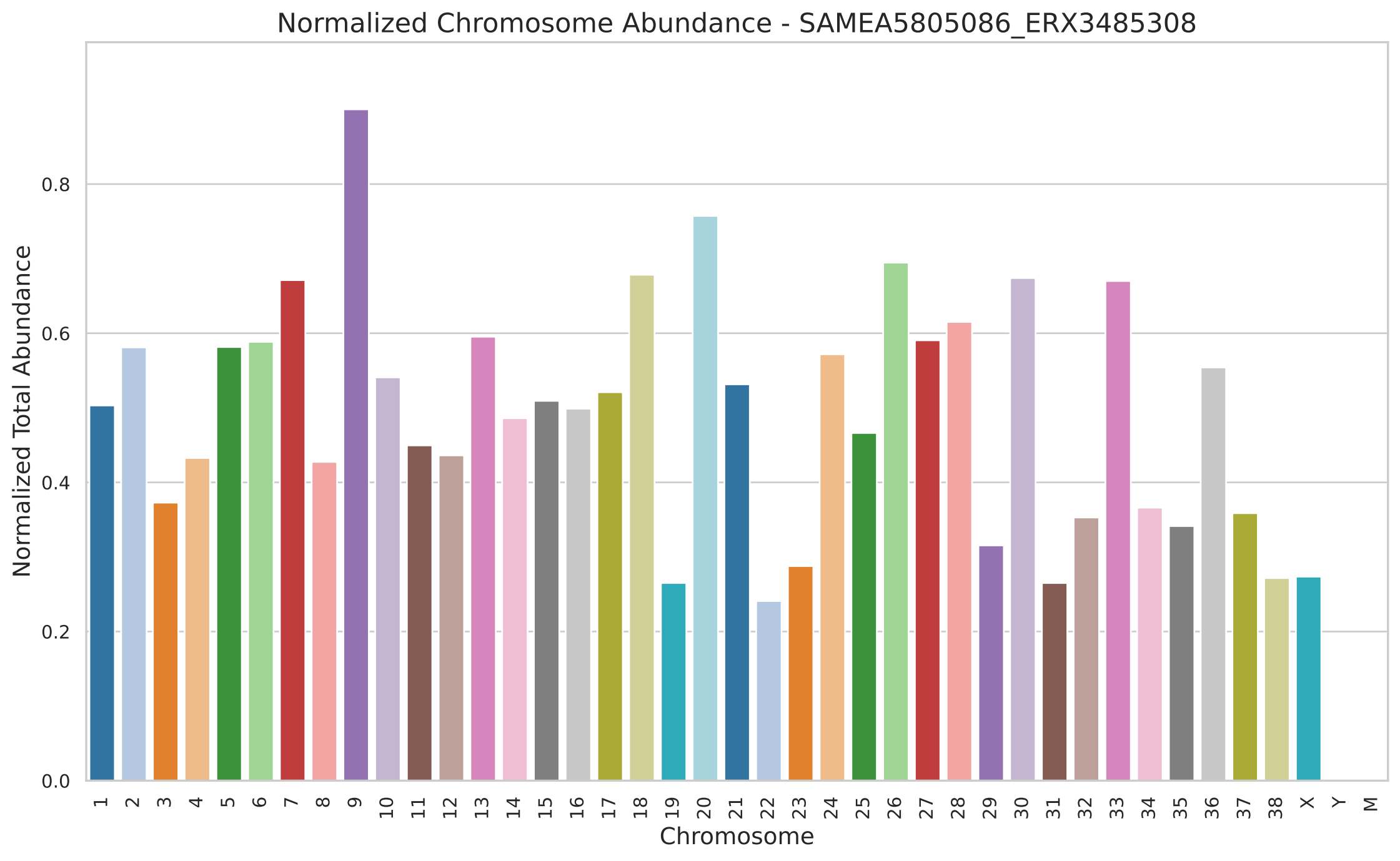

Normalized Chromosome Abundance - SAMEA5804637_ERX3485371
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

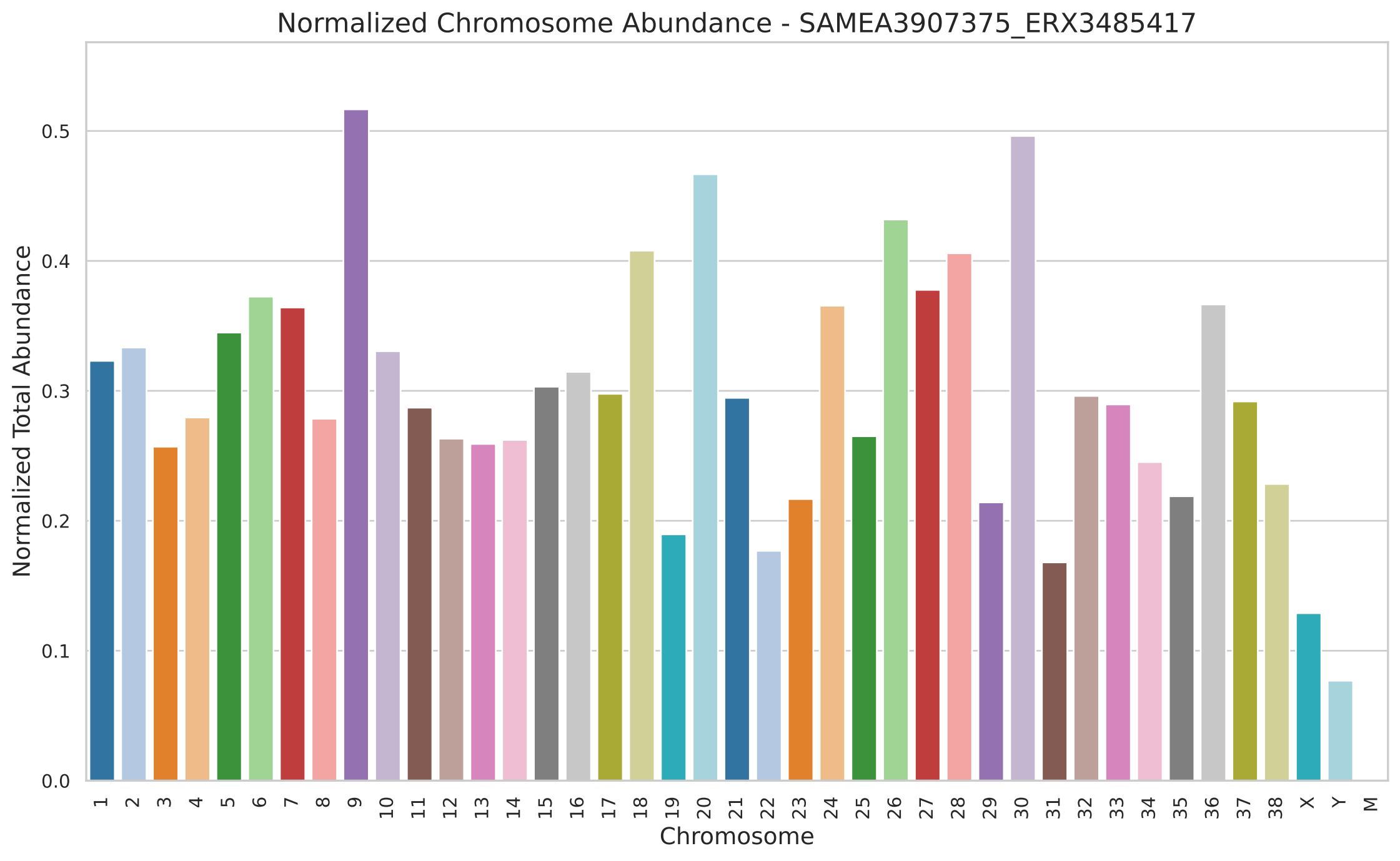

Normalized Chromosome Abundance - SAMEA5805075_ERX3485365
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

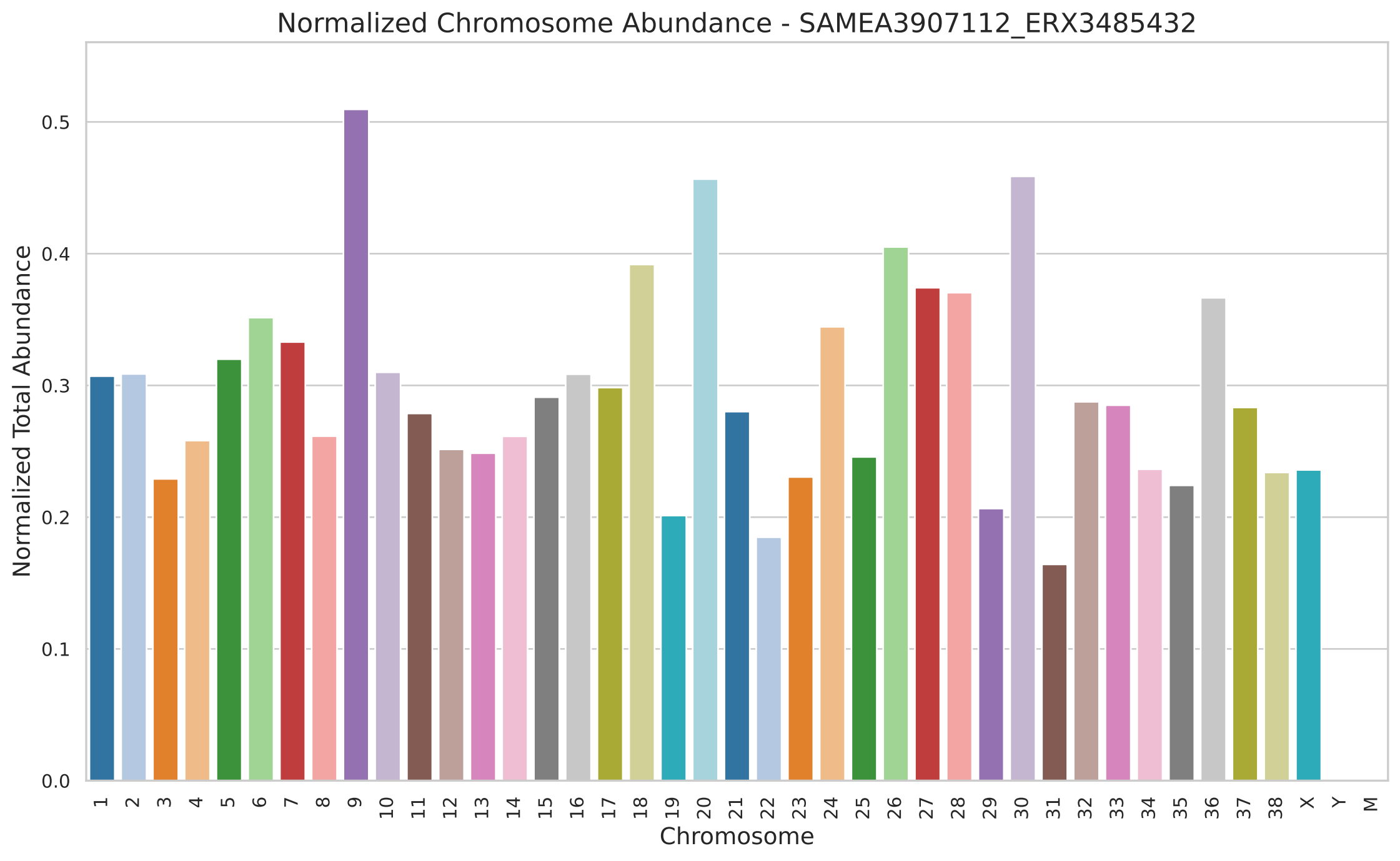

Normalized Chromosome Abundance - SAMEA3907158_ERX3485404
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

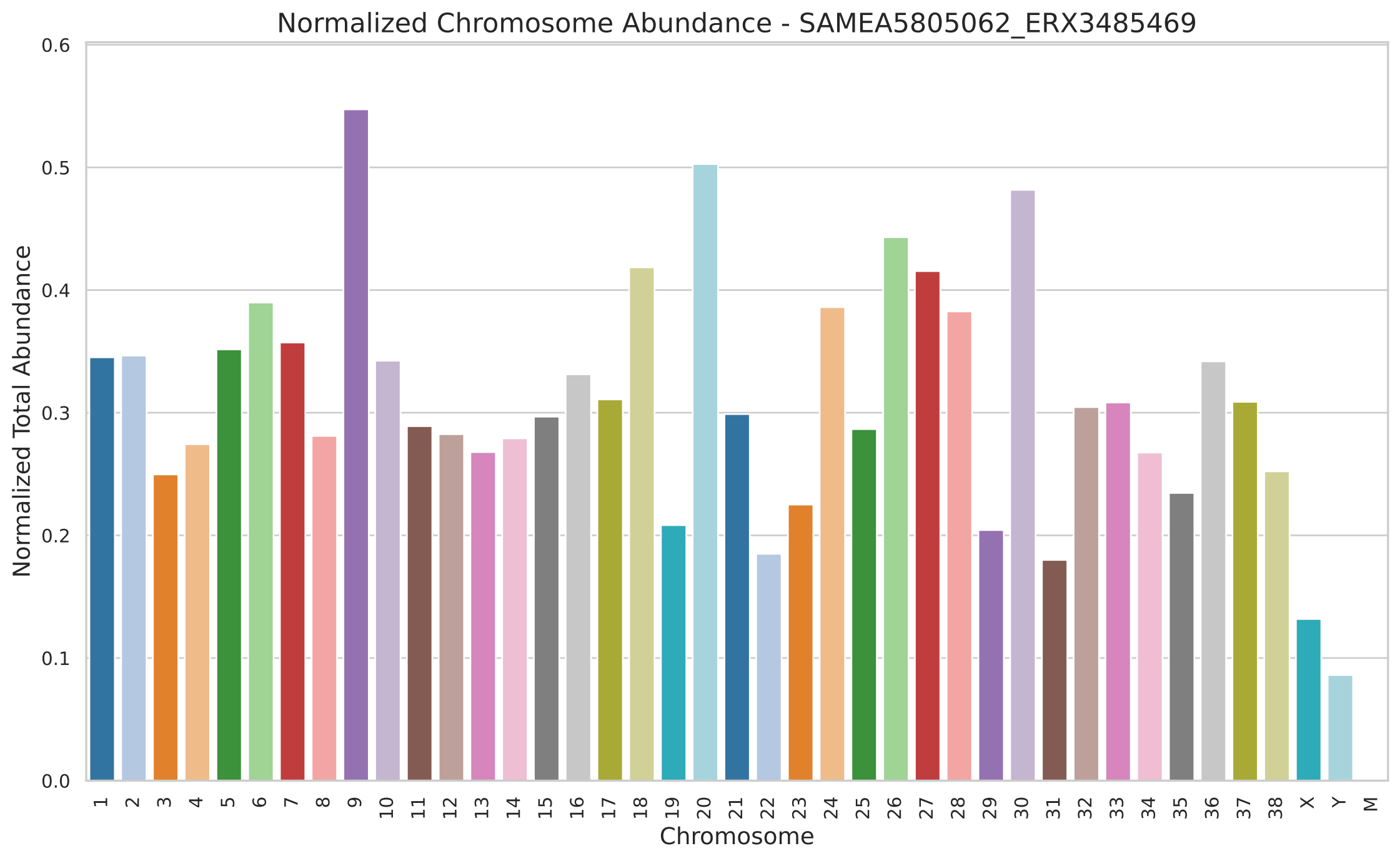

Normalized Chromosome Abundance - SAMEA5805050_ERX3485355
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

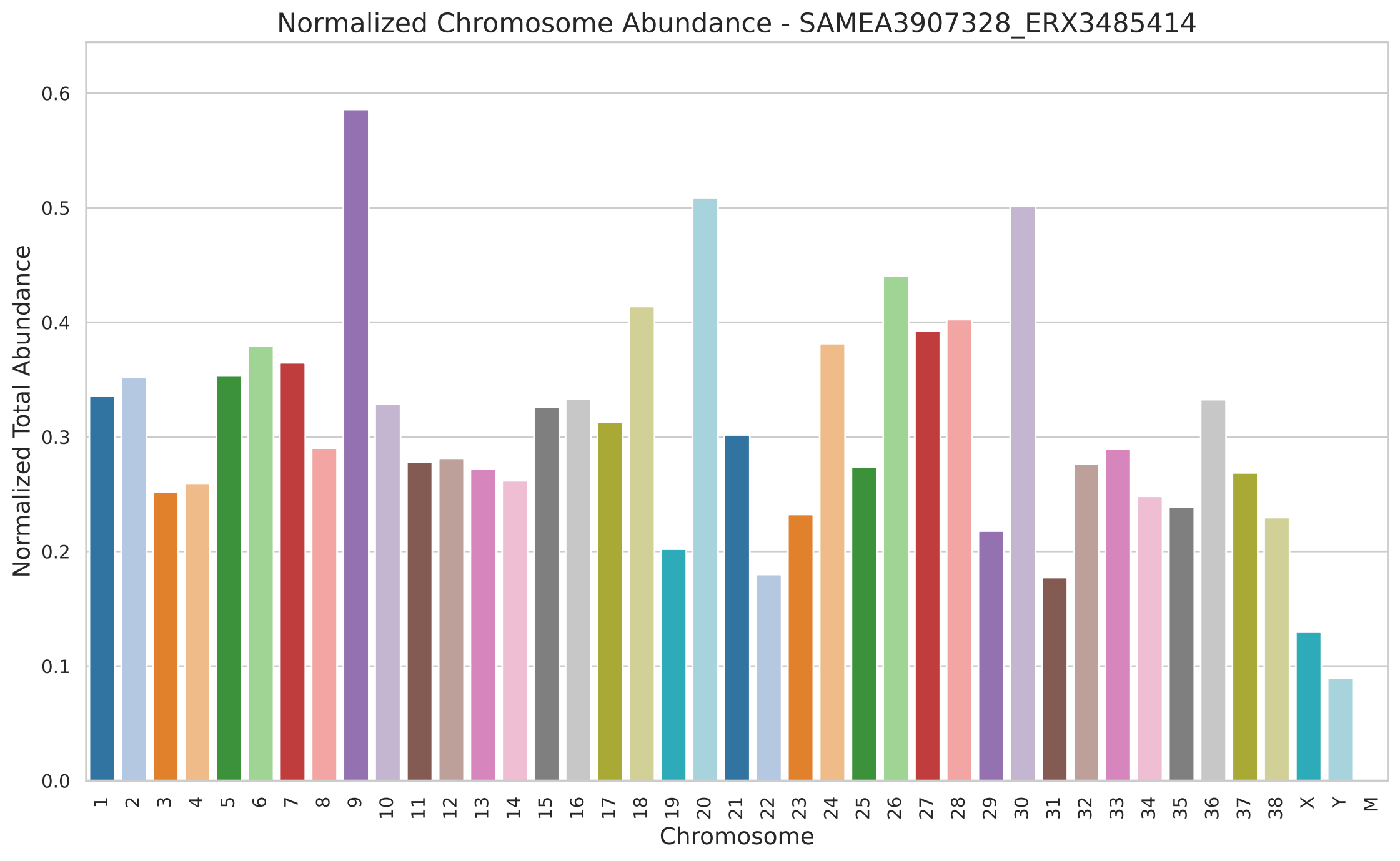

Normalized Chromosome Abundance - SAMEA3907108_ERX3485345
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

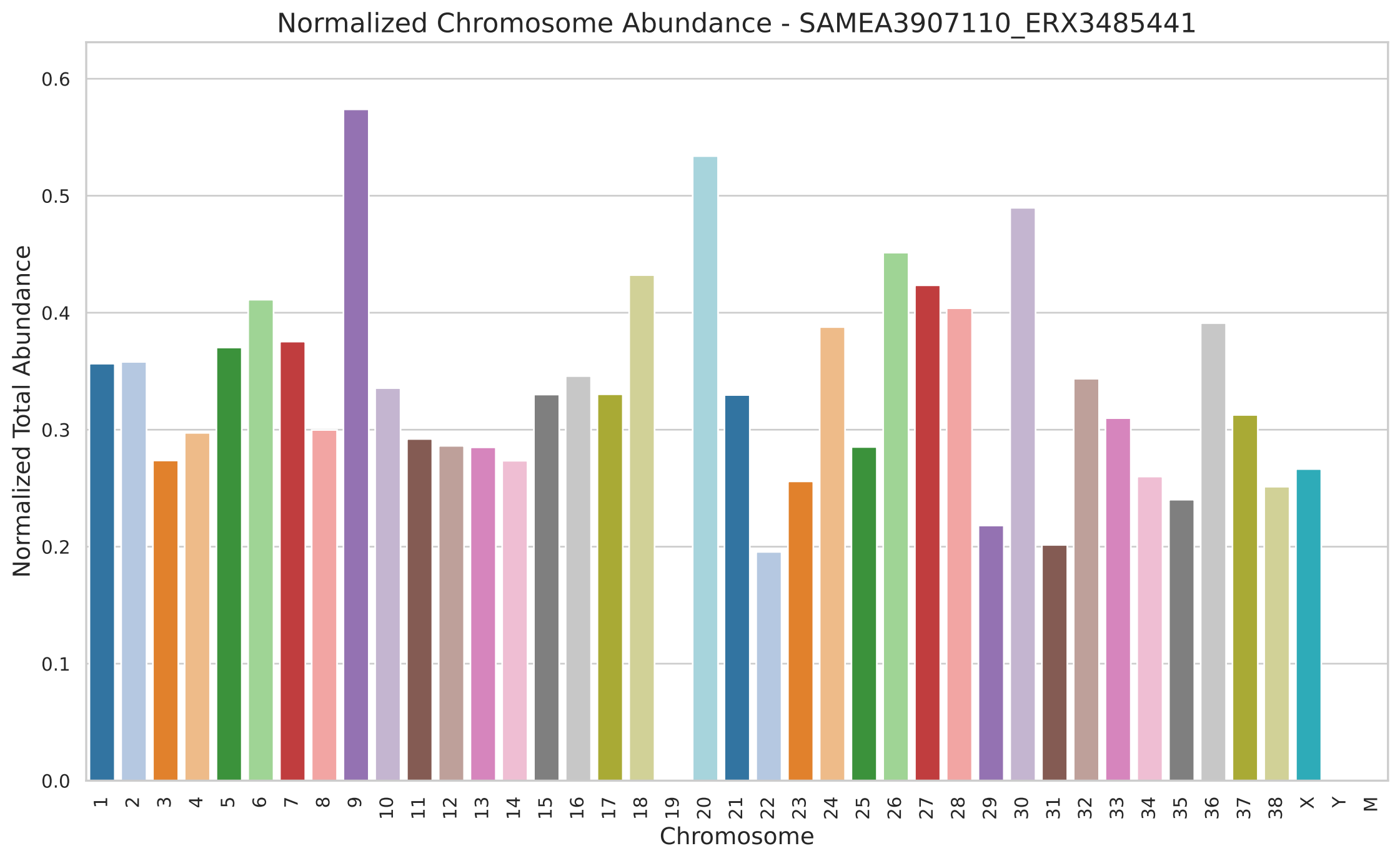

Normalized Chromosome Abundance - SAMEA5805086_ERX3485308
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

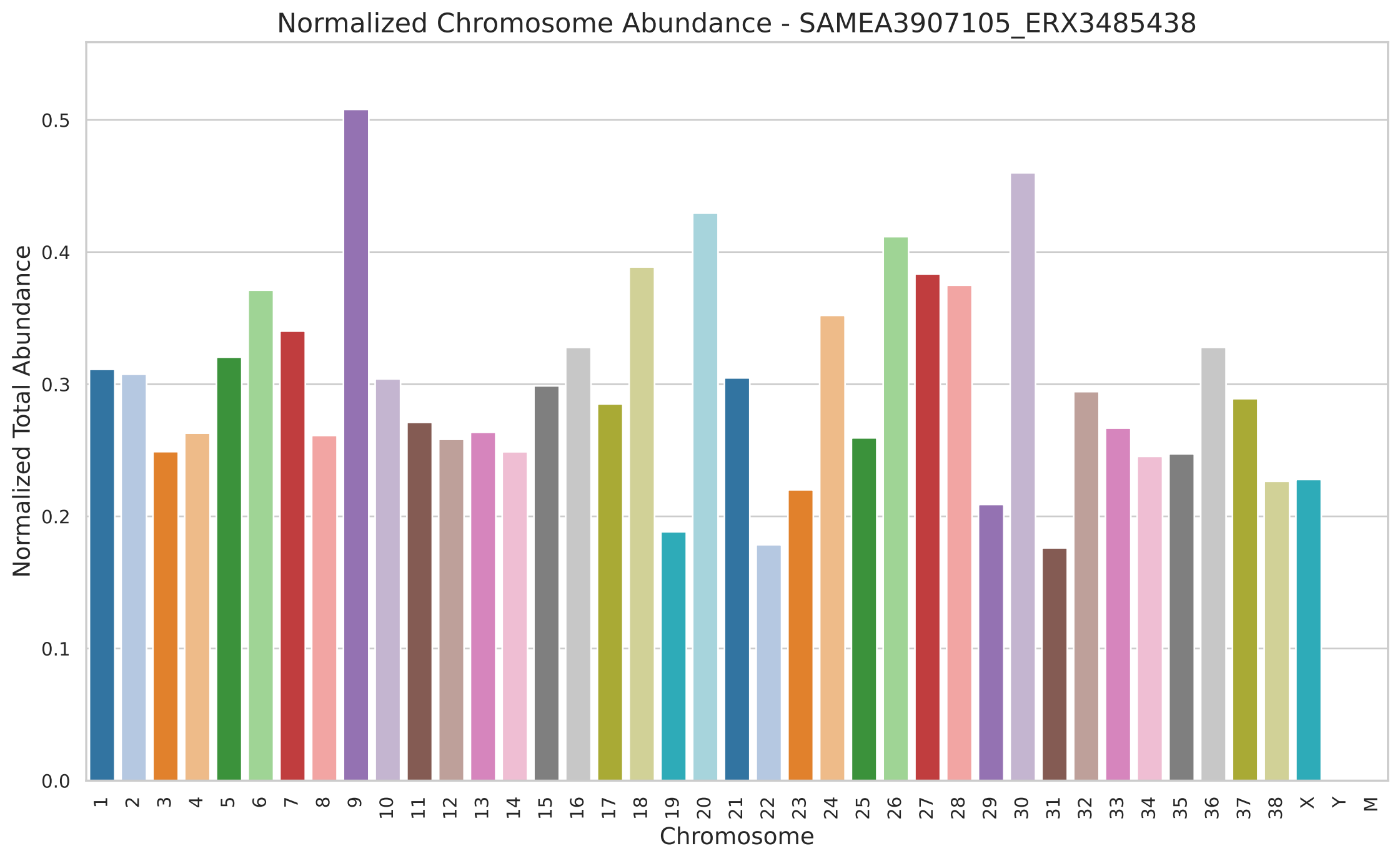

Normalized Chromosome Abundance - SAMEA3907375_ERX3485417
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

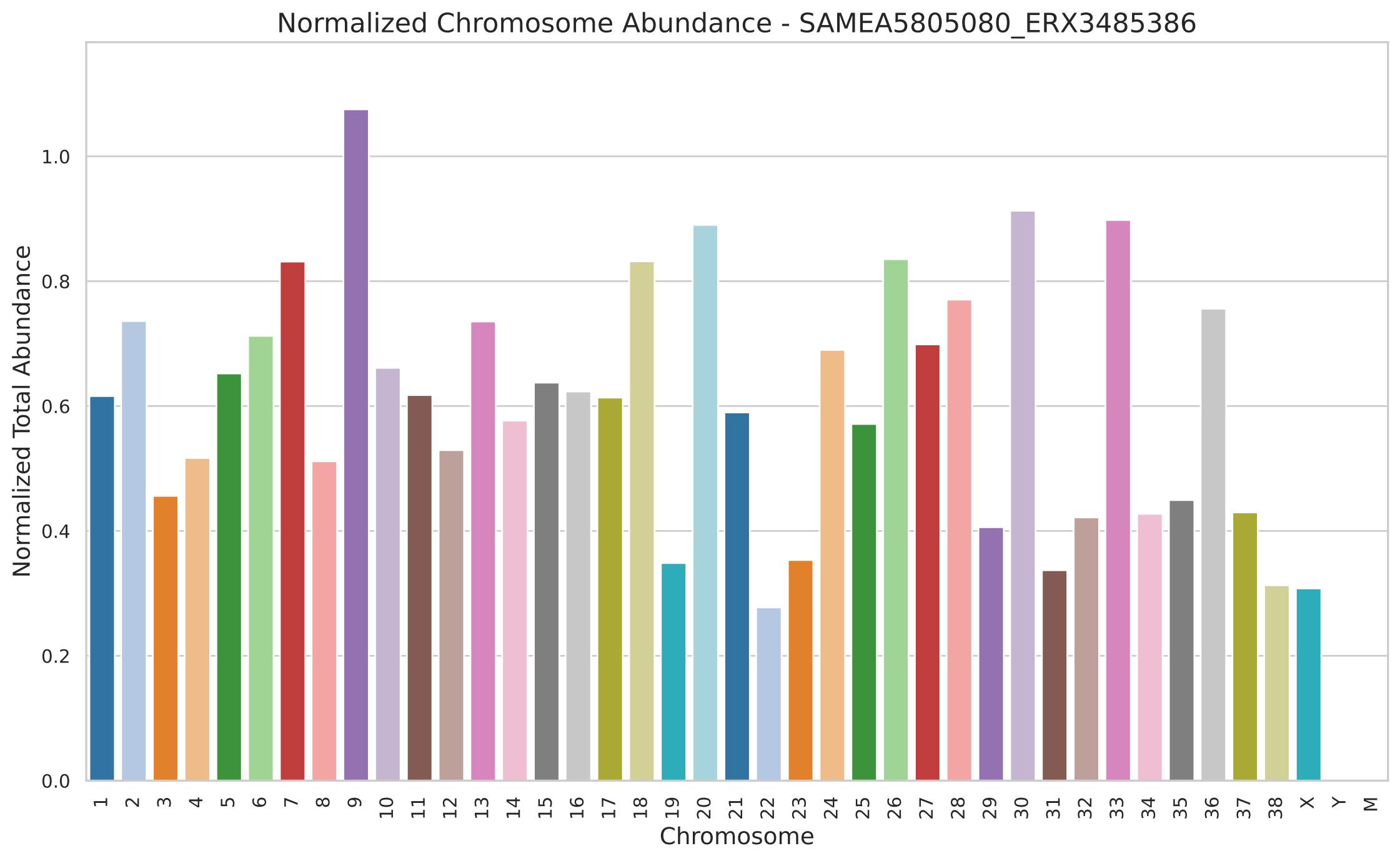

Normalized Chromosome Abundance - SAMEA3907112_ERX3485432
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

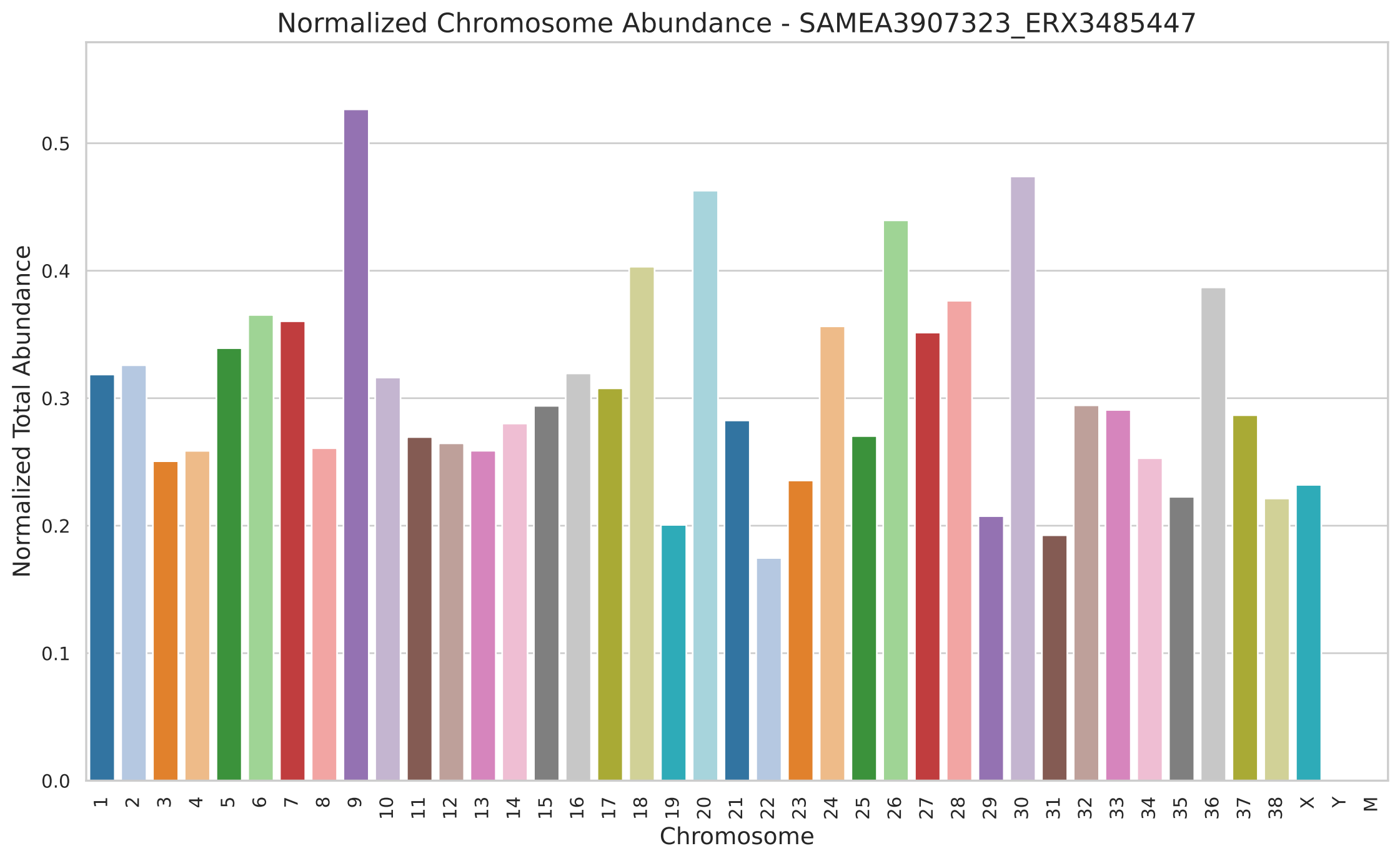

Normalized Chromosome Abundance - SAMEA5805062_ERX3485469
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

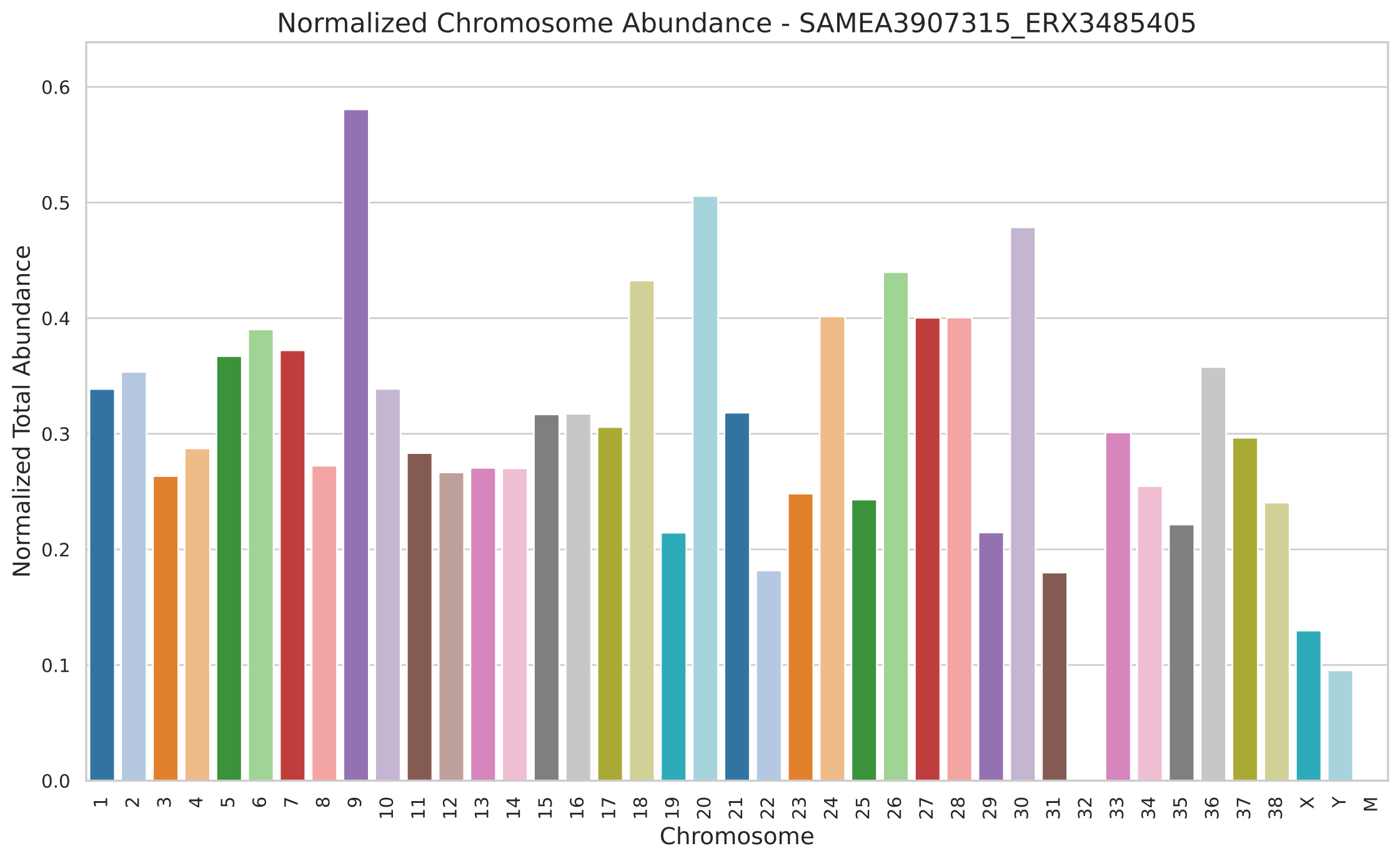

Normalized Chromosome Abundance - SAMEA3907328_ERX3485414
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

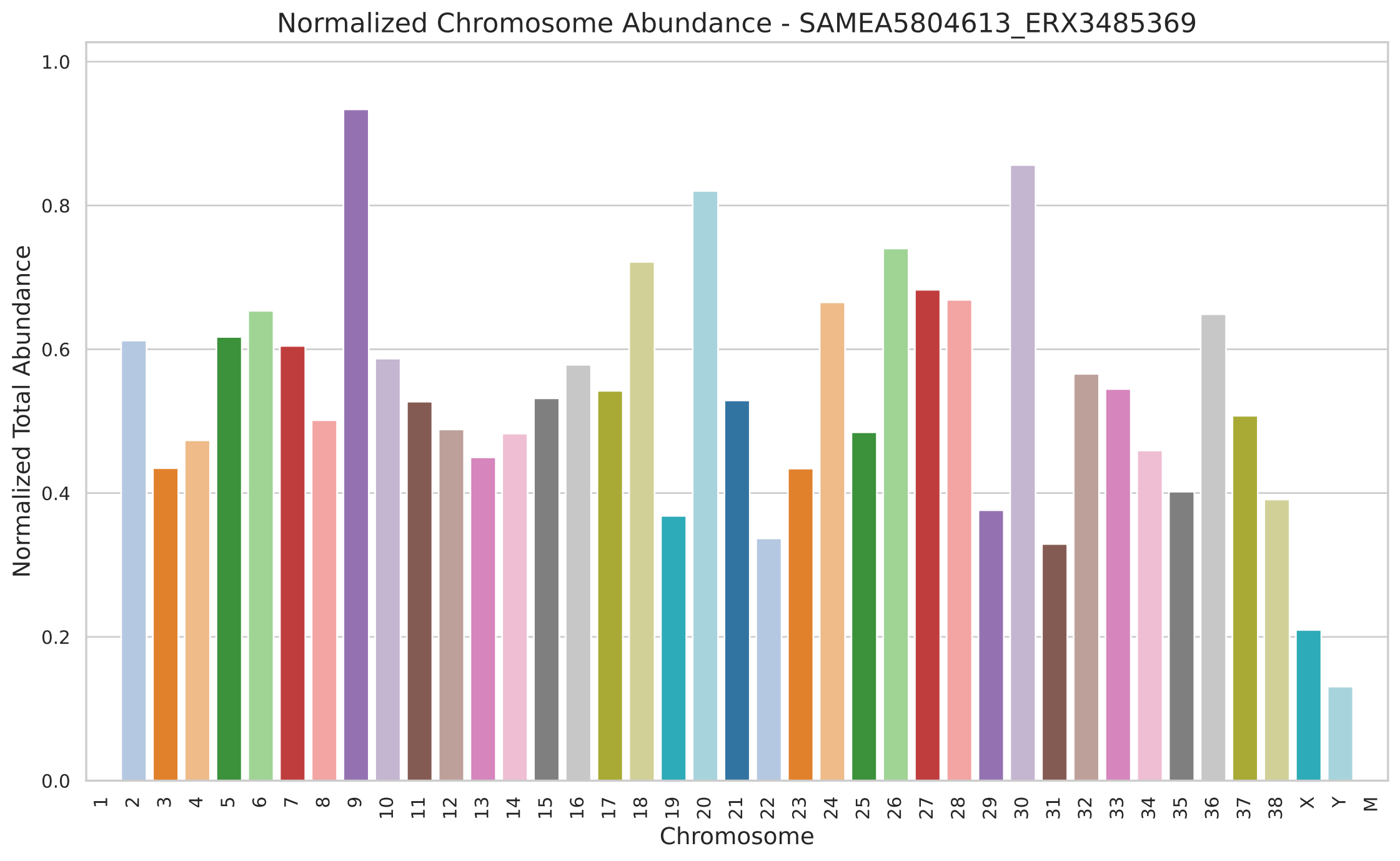

Normalized Chromosome Abundance - SAMEA3907110_ERX3485441
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

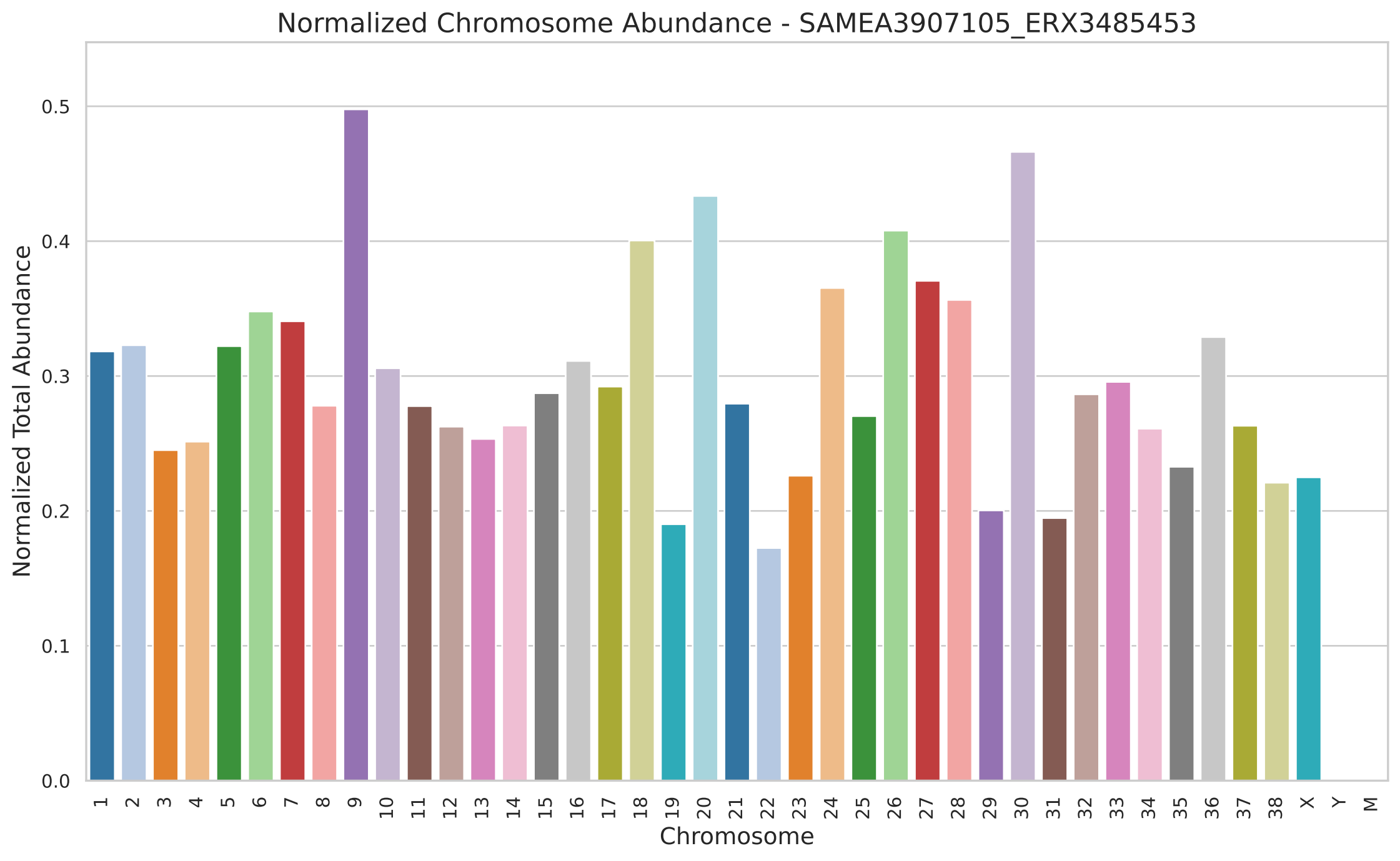

Normalized Chromosome Abundance - SAMEA3907105_ERX3485438
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

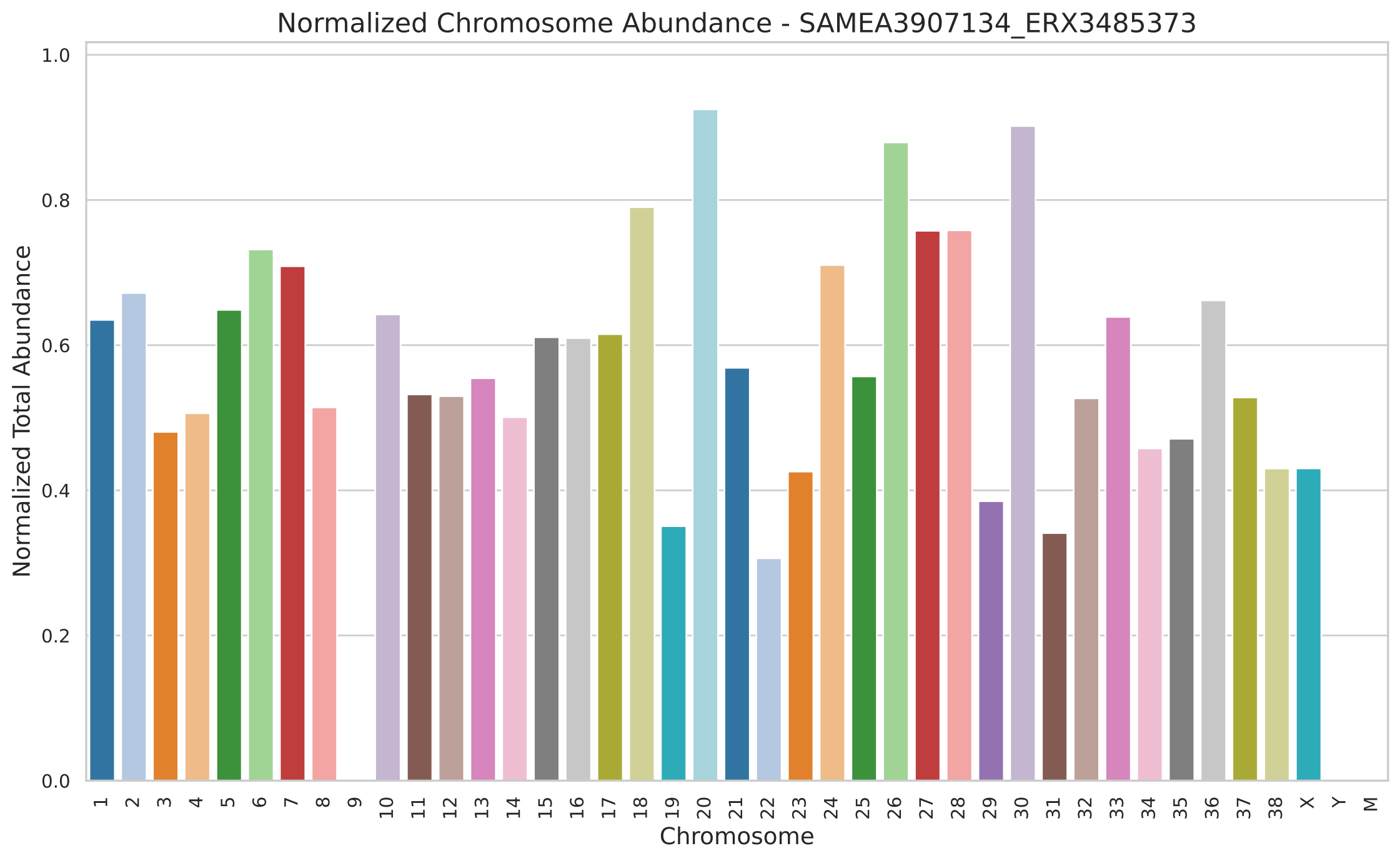

Normalized Chromosome Abundance - SAMEA5805080_ERX3485386
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

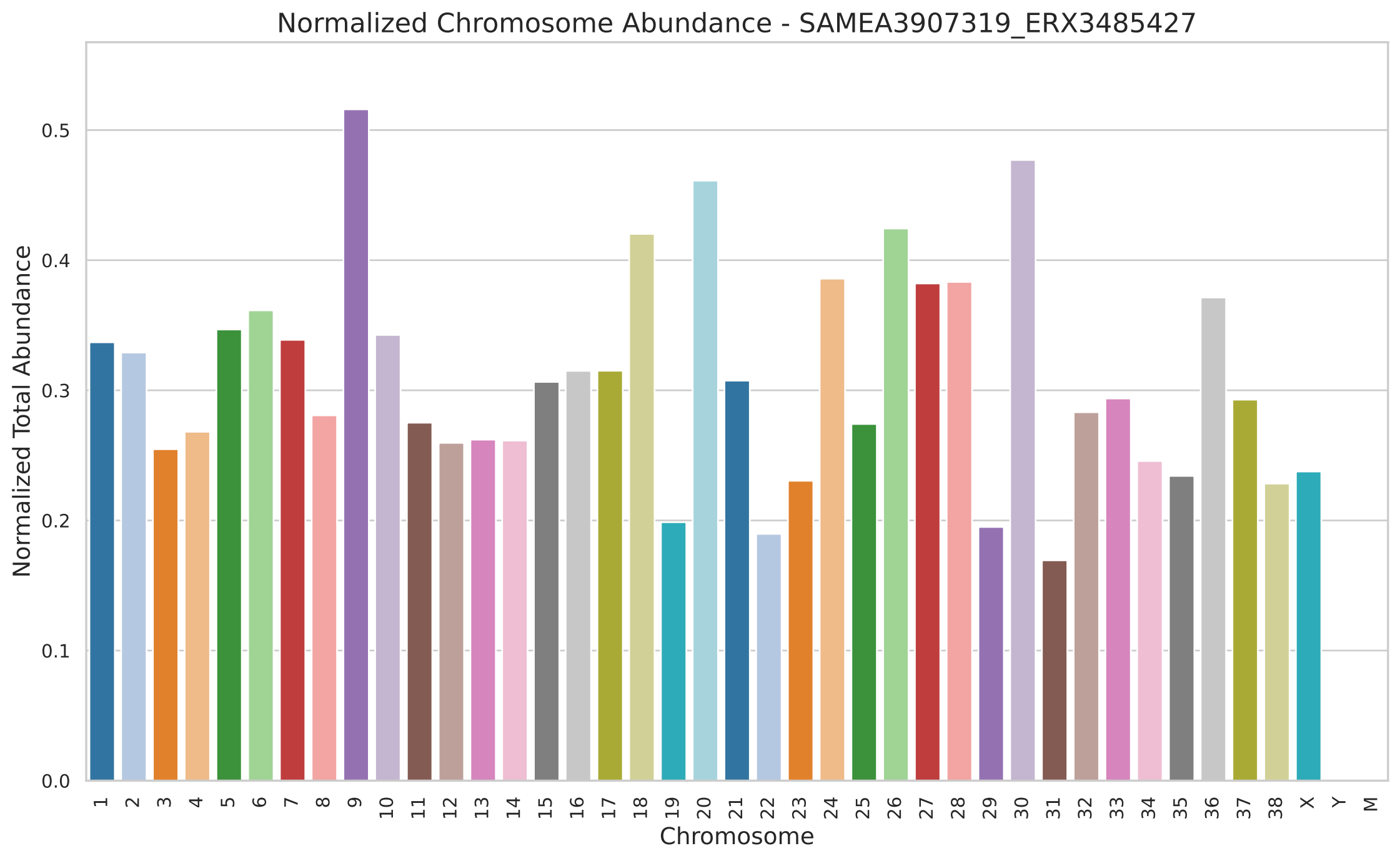

Normalized Chromosome Abundance - SAMEA3907323_ERX3485447
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

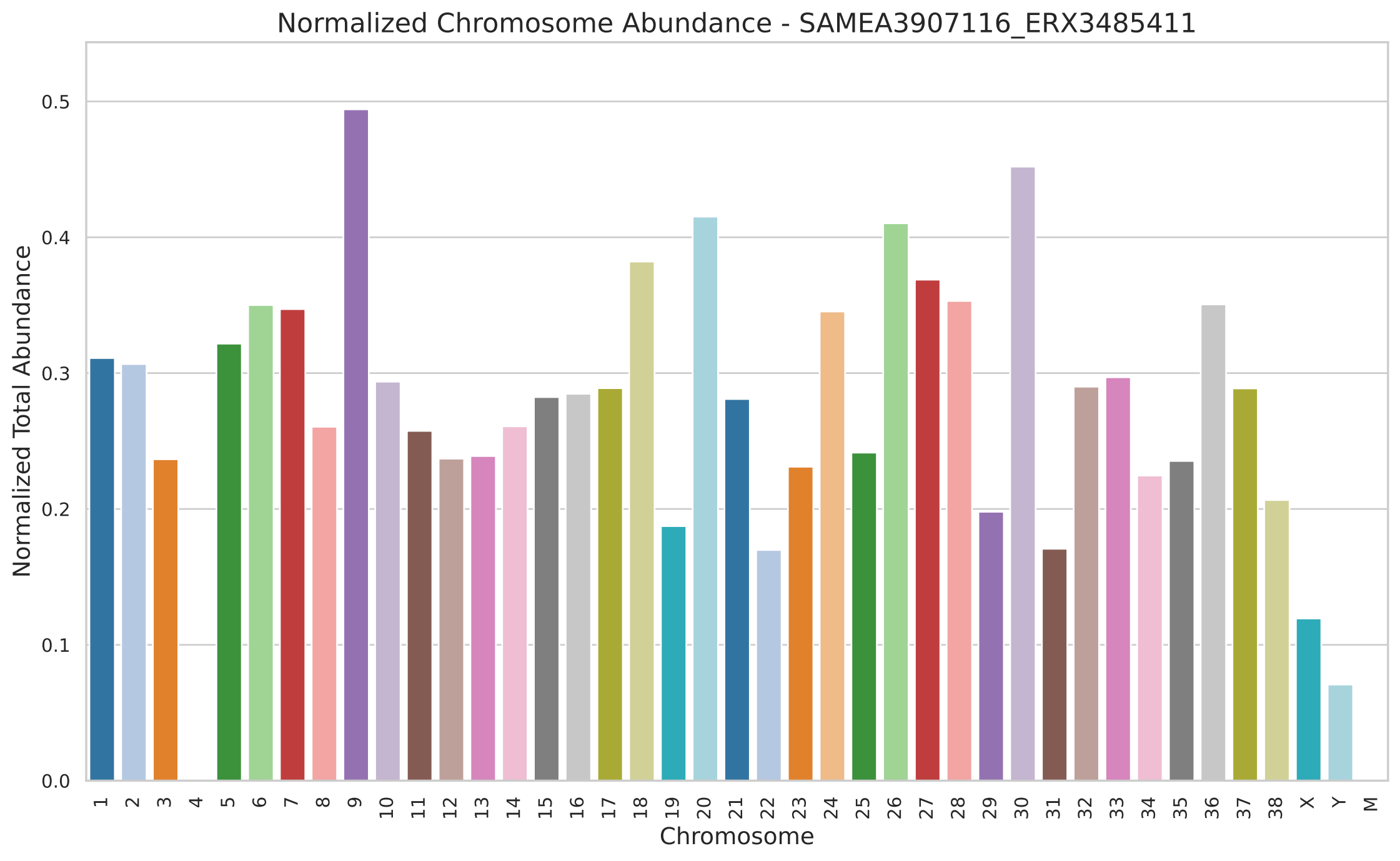

Normalized Chromosome Abundance - SAMEA3907315_ERX3485405
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

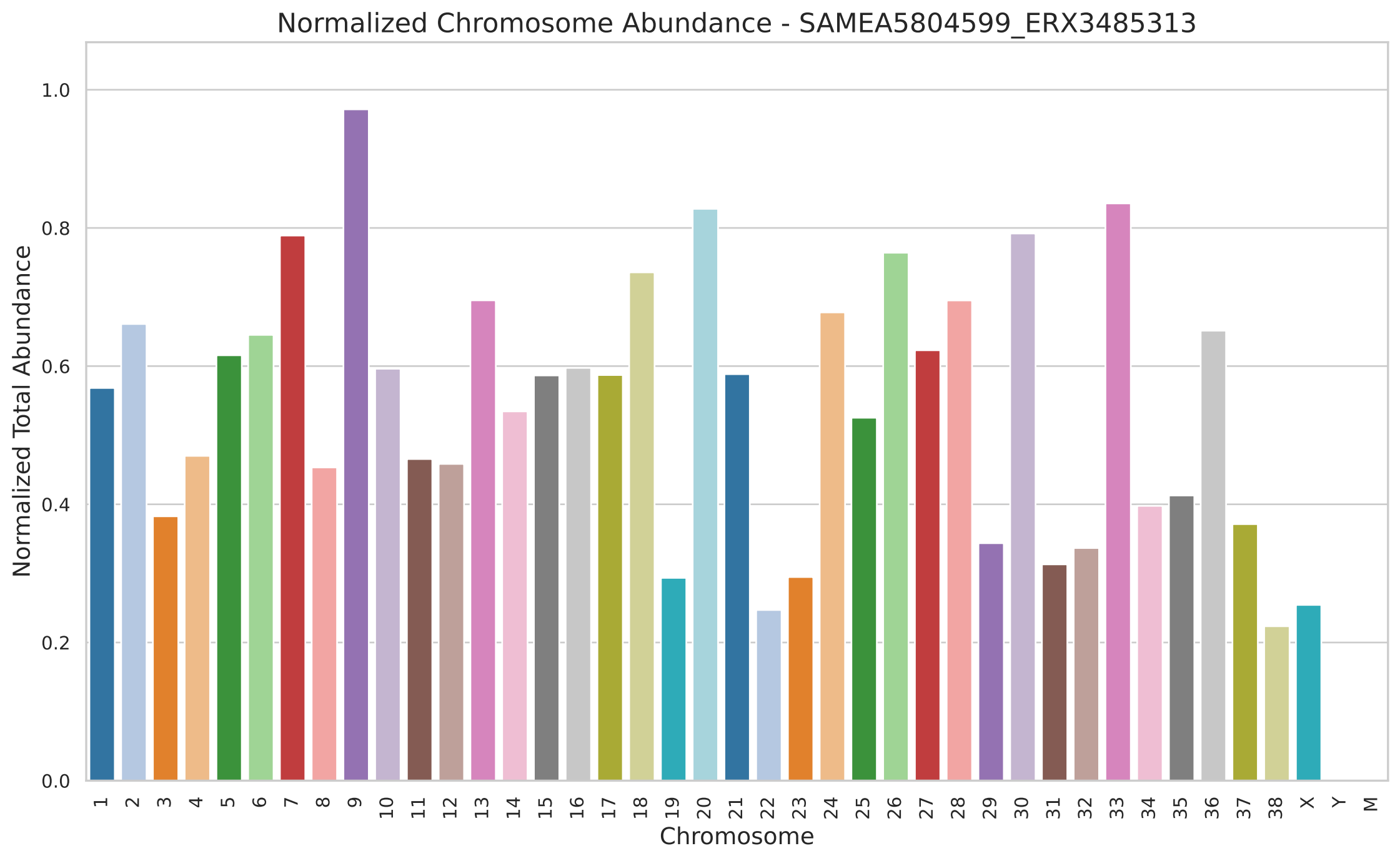

Normalized Chromosome Abundance - SAMEA5804613_ERX3485369
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

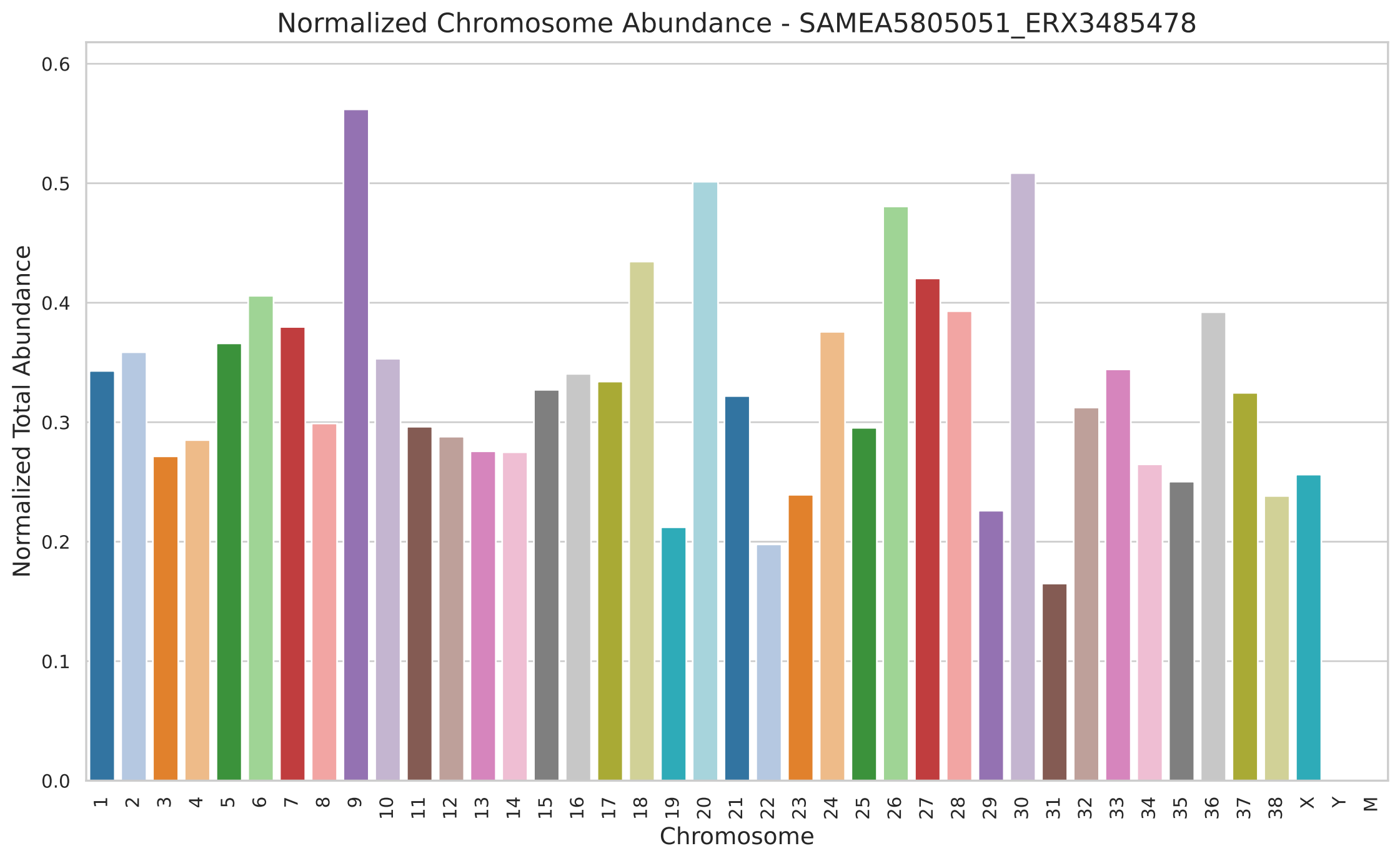

Normalized Chromosome Abundance - SAMEA3907105_ERX3485453
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

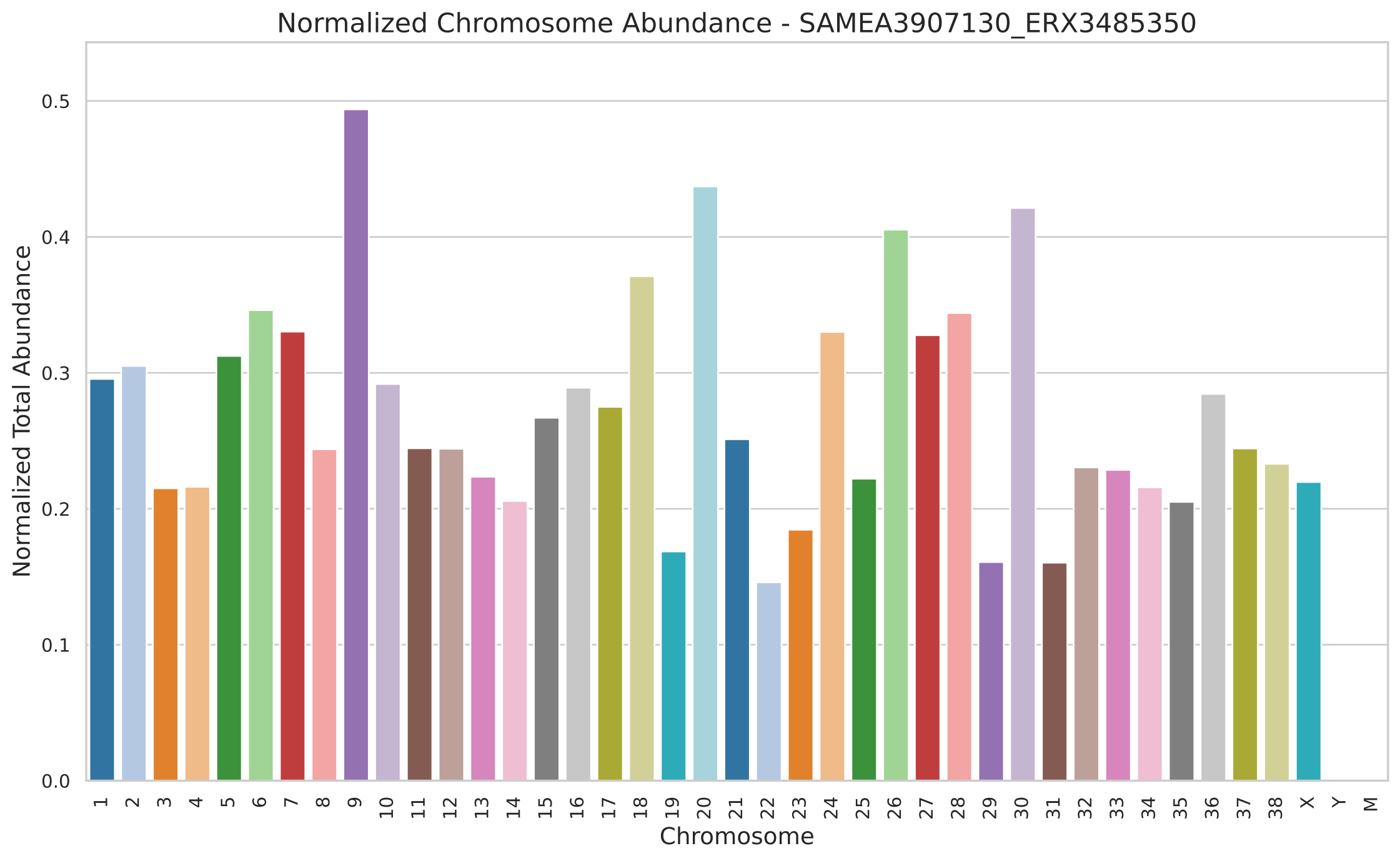

Normalized Chromosome Abundance - SAMEA3907134_ERX3485373
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

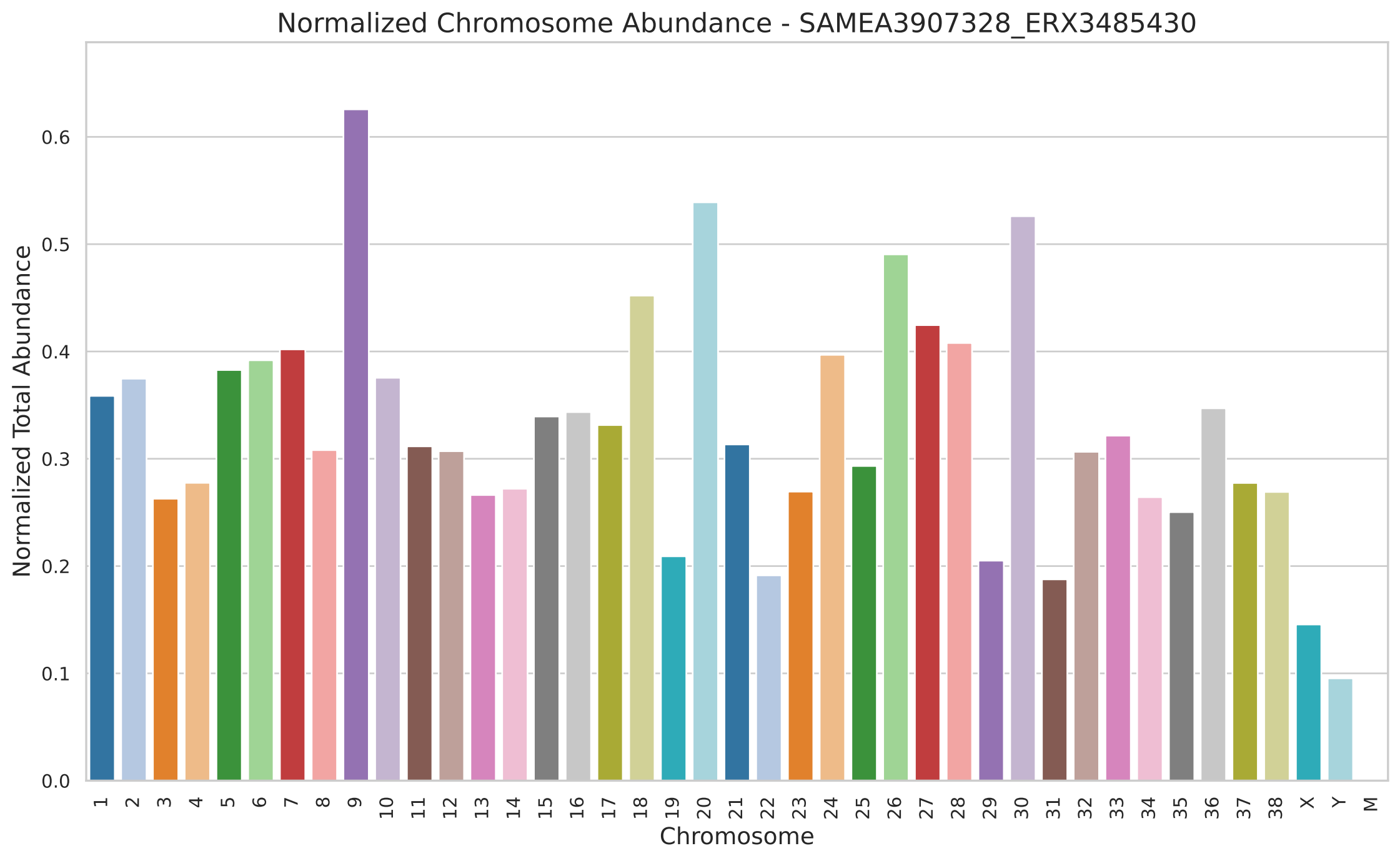

Normalized Chromosome Abundance - SAMEA3907319_ERX3485427
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

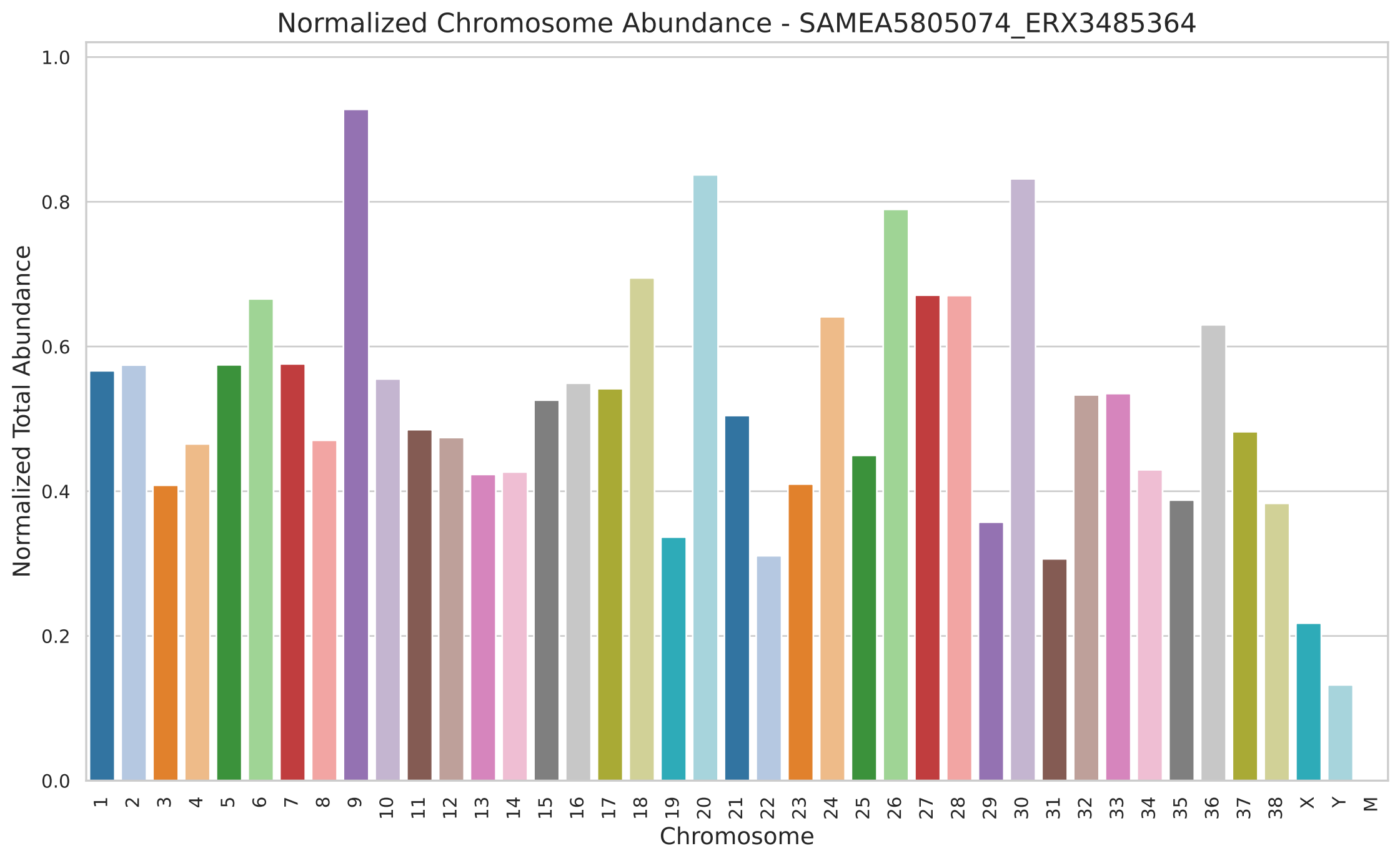

Normalized Chromosome Abundance - SAMEA3907116_ERX3485411
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

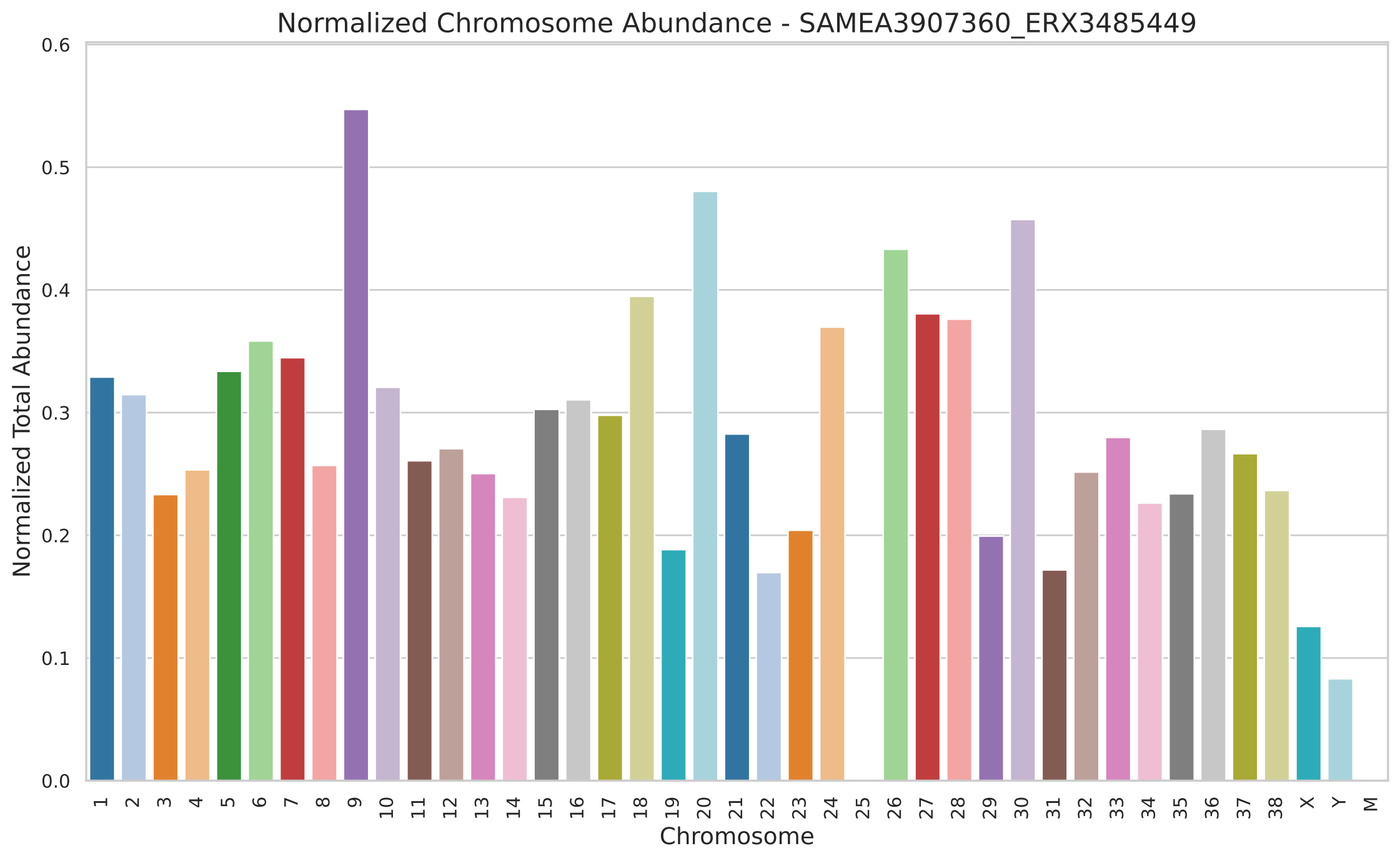

Normalized Chromosome Abundance - SAMEA5804599_ERX3485313
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

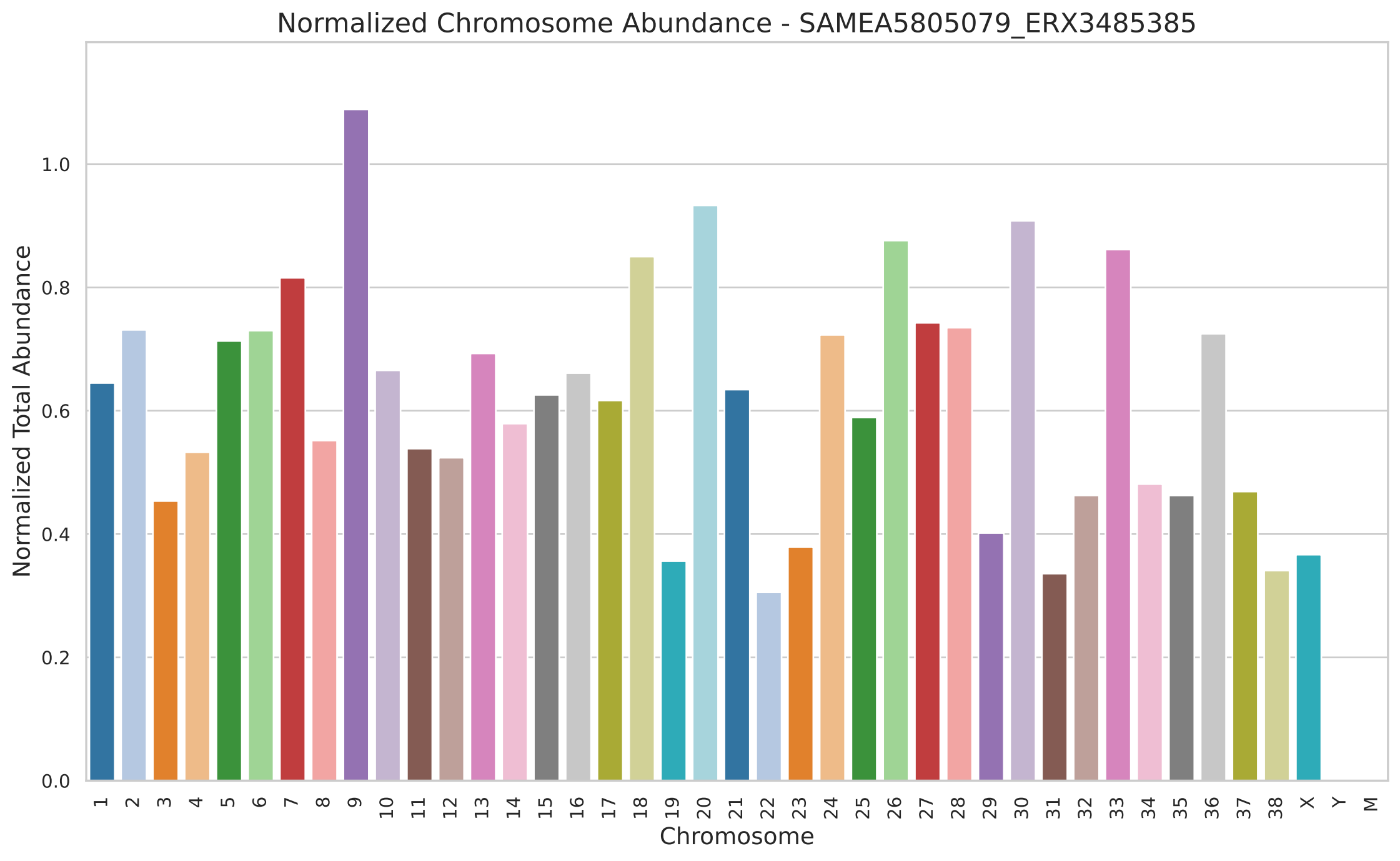

Normalized Chromosome Abundance - SAMEA5805051_ERX3485478
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

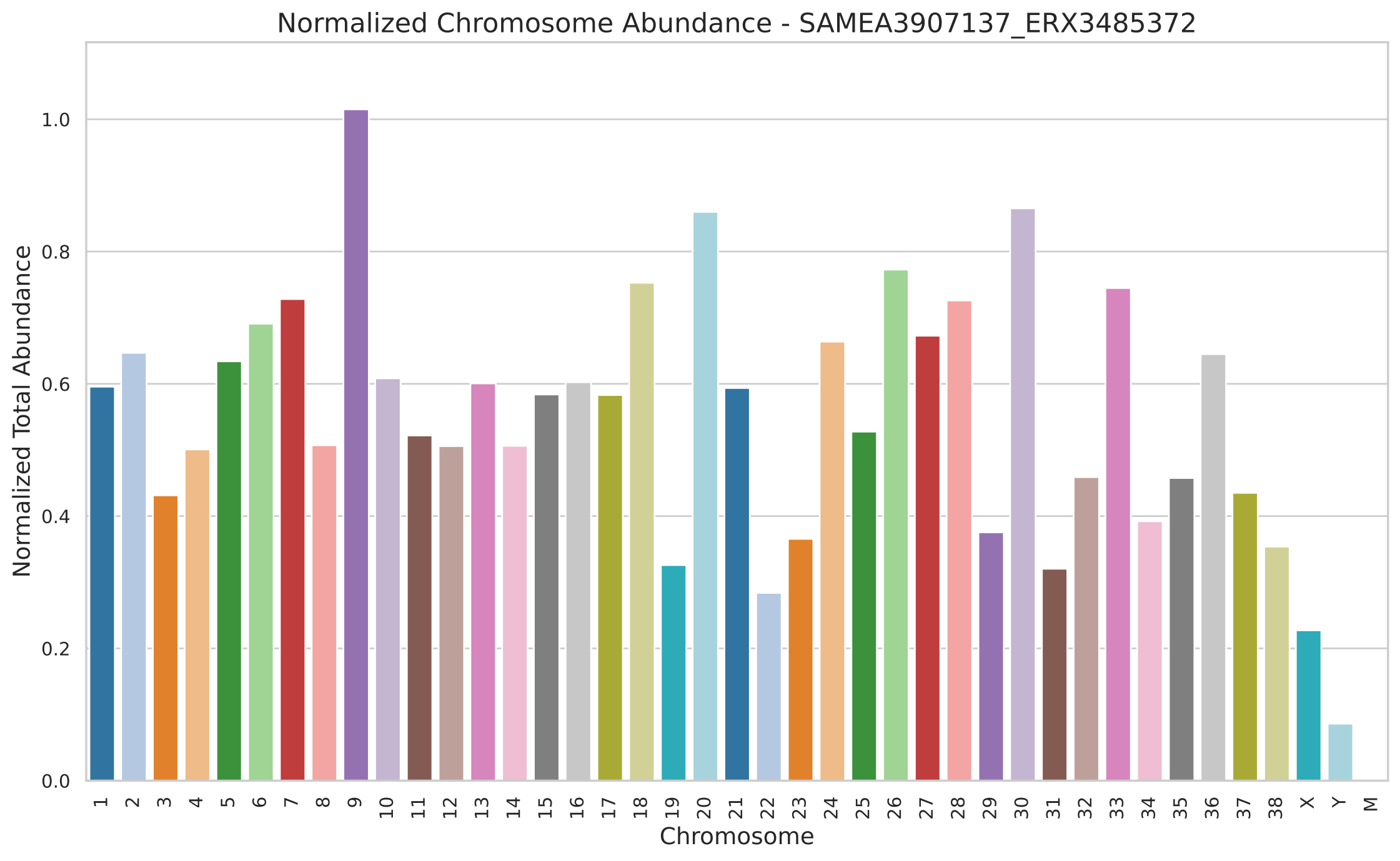

Normalized Chromosome Abundance - SAMEA3907130_ERX3485350
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

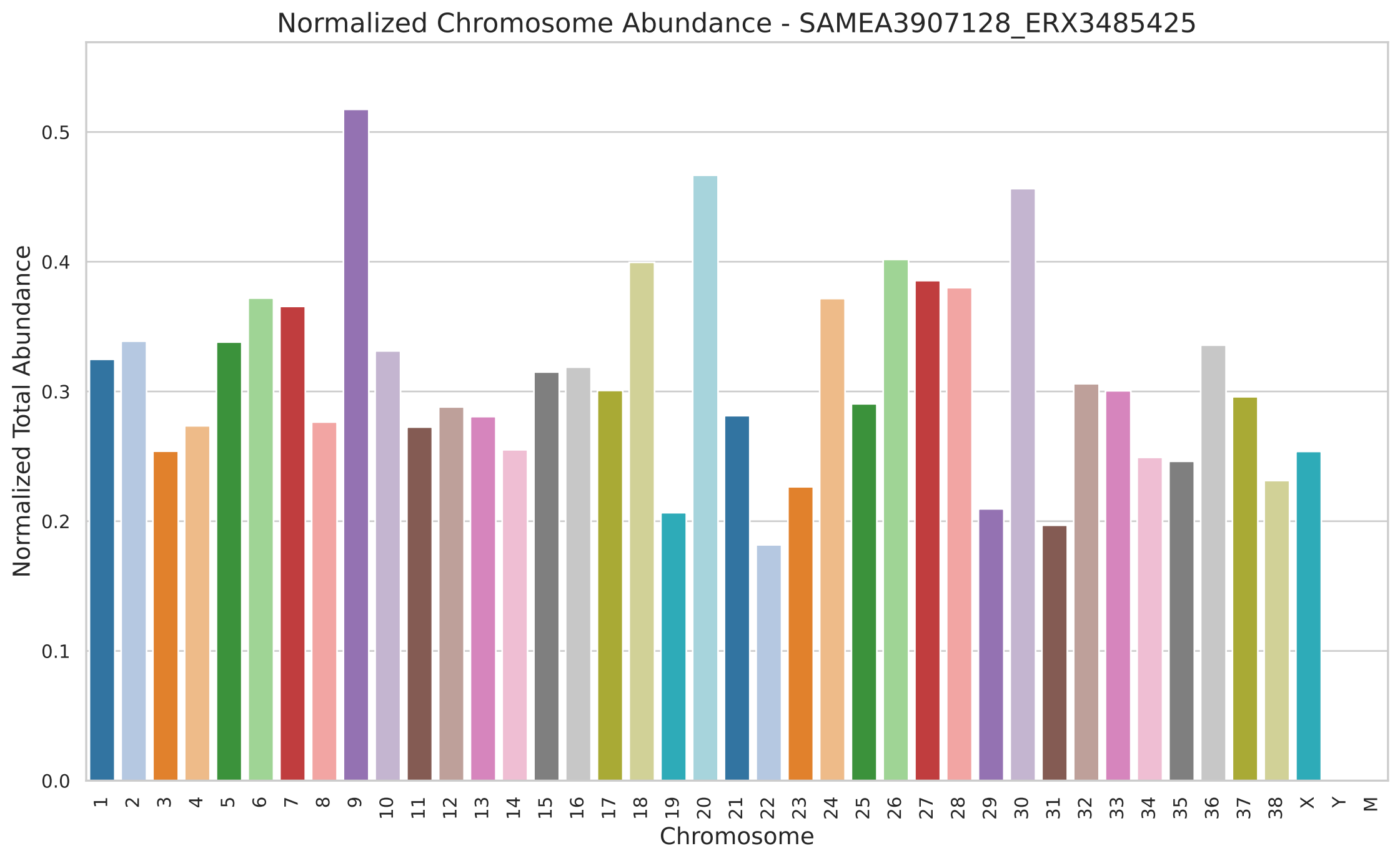

Normalized Chromosome Abundance - SAMEA3907328_ERX3485430
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

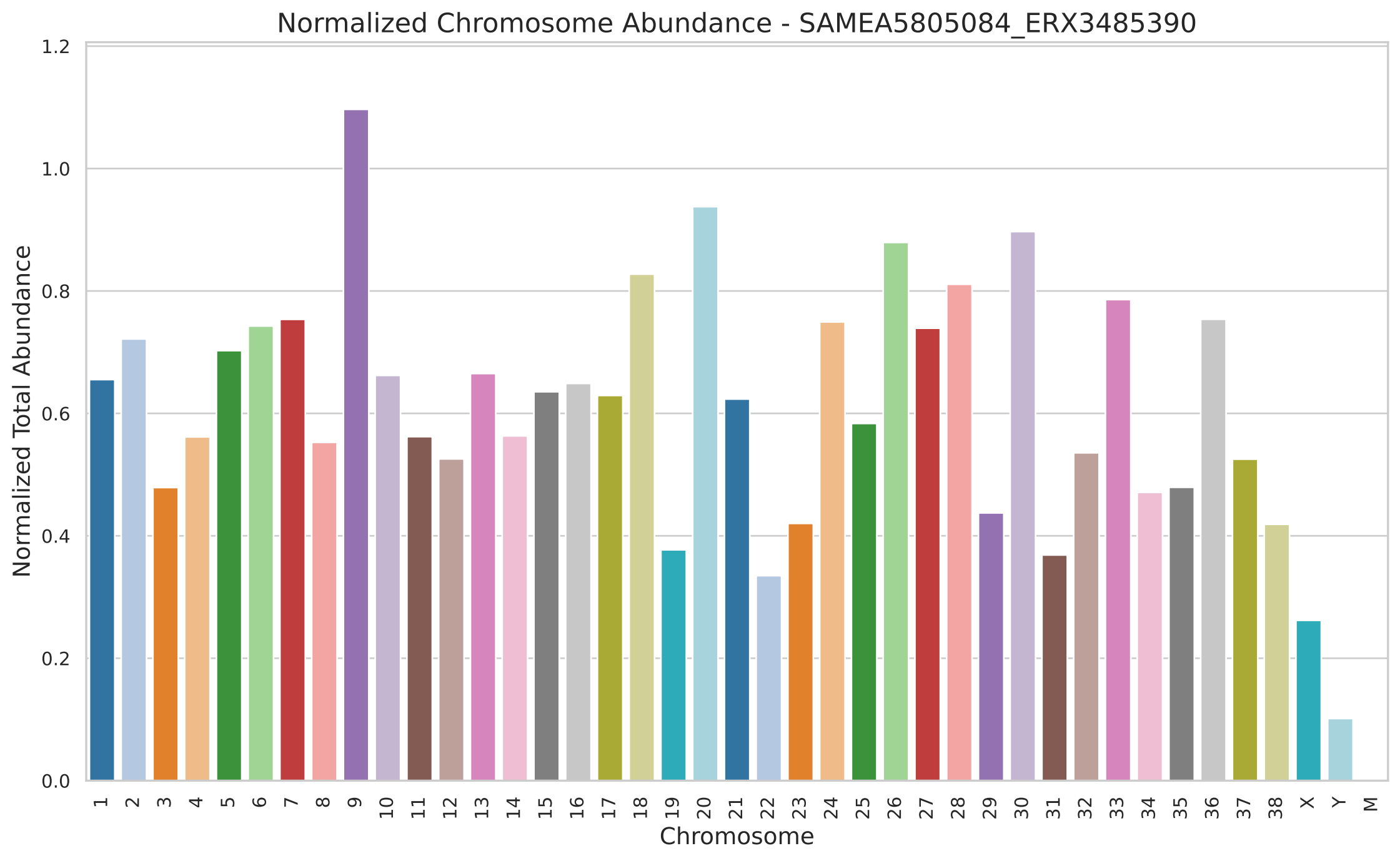

Normalized Chromosome Abundance - SAMEA5805074_ERX3485364
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

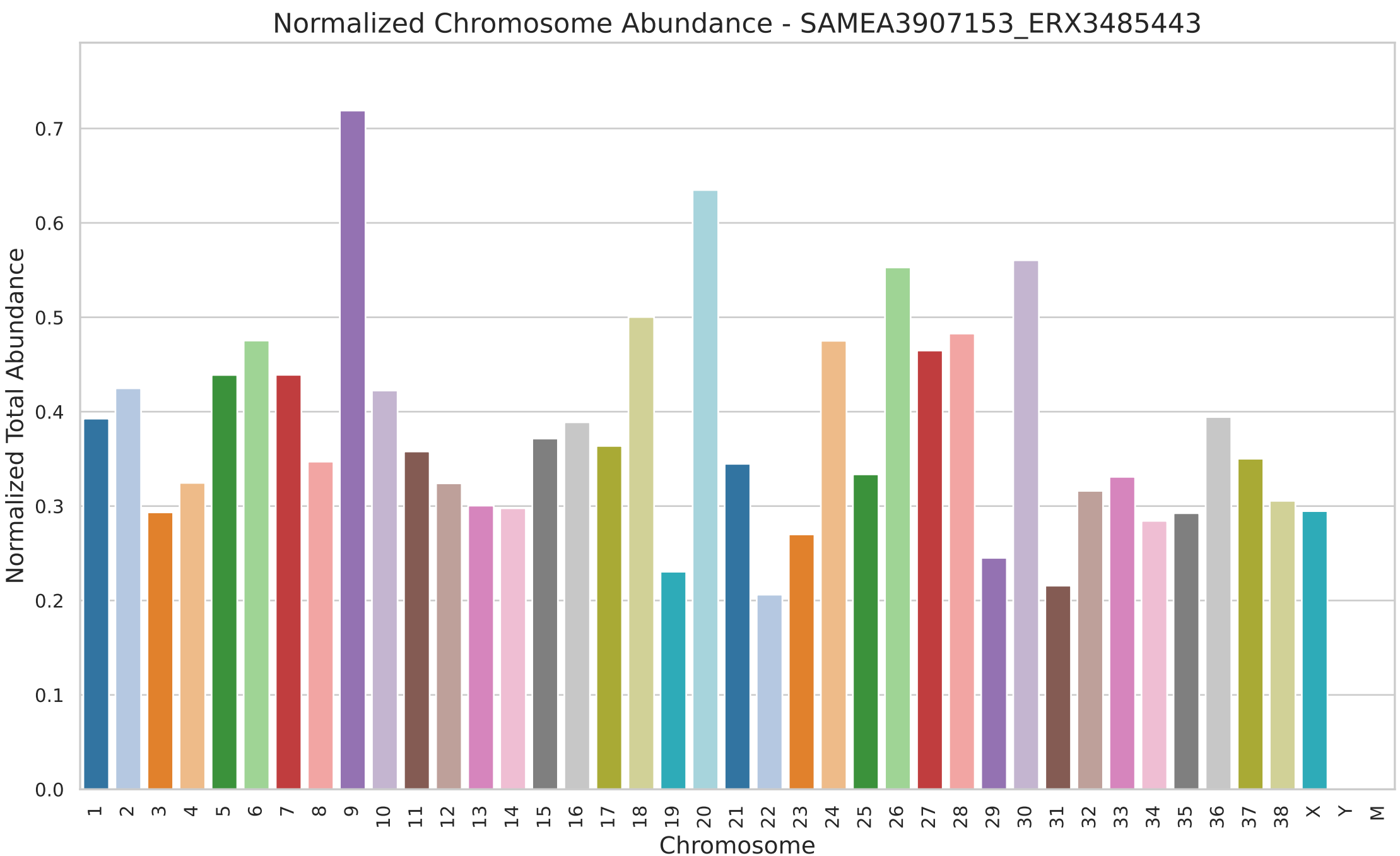

Normalized Chromosome Abundance - SAMEA3907360_ERX3485449
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

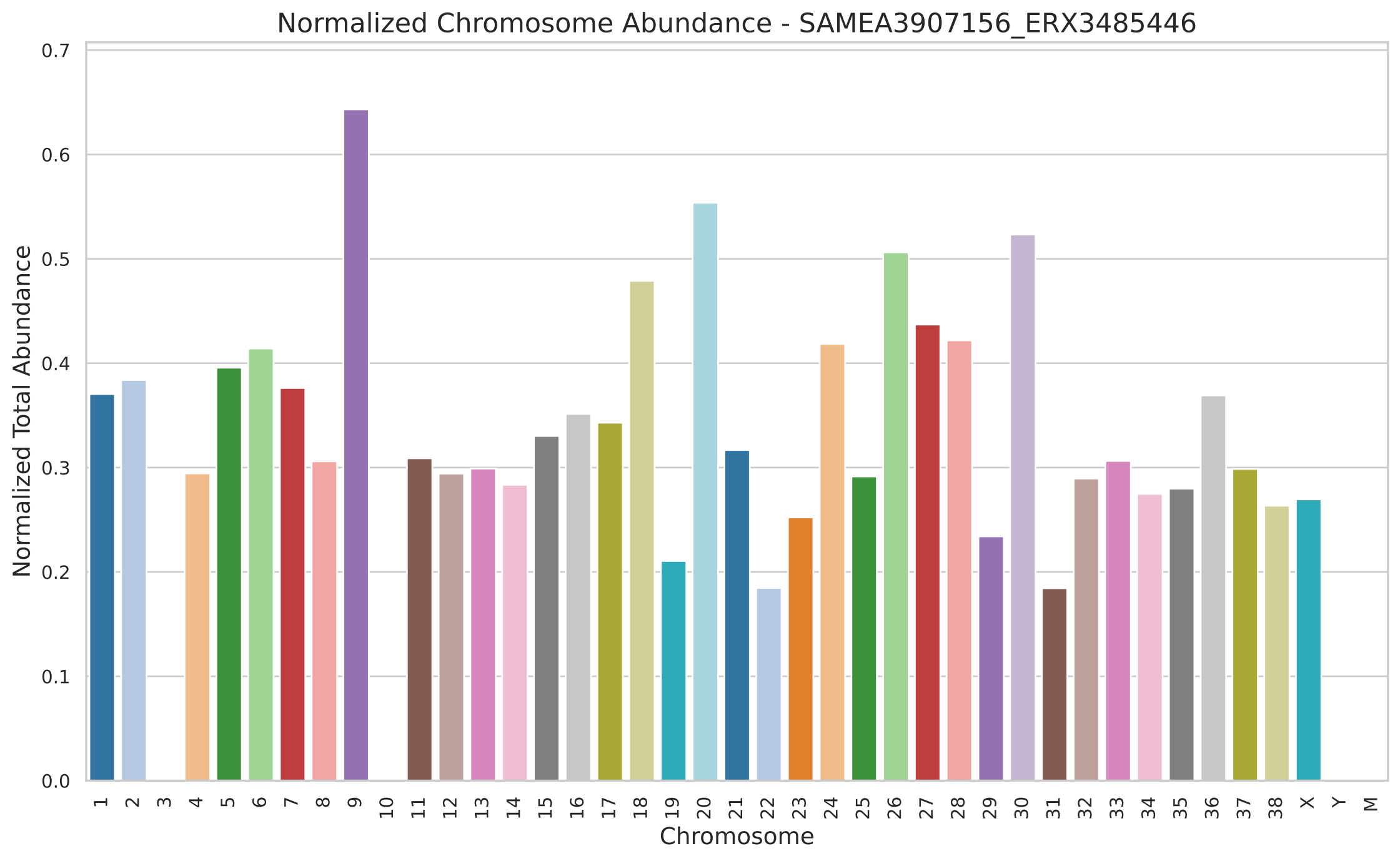

Normalized Chromosome Abundance - SAMEA5805079_ERX3485385
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

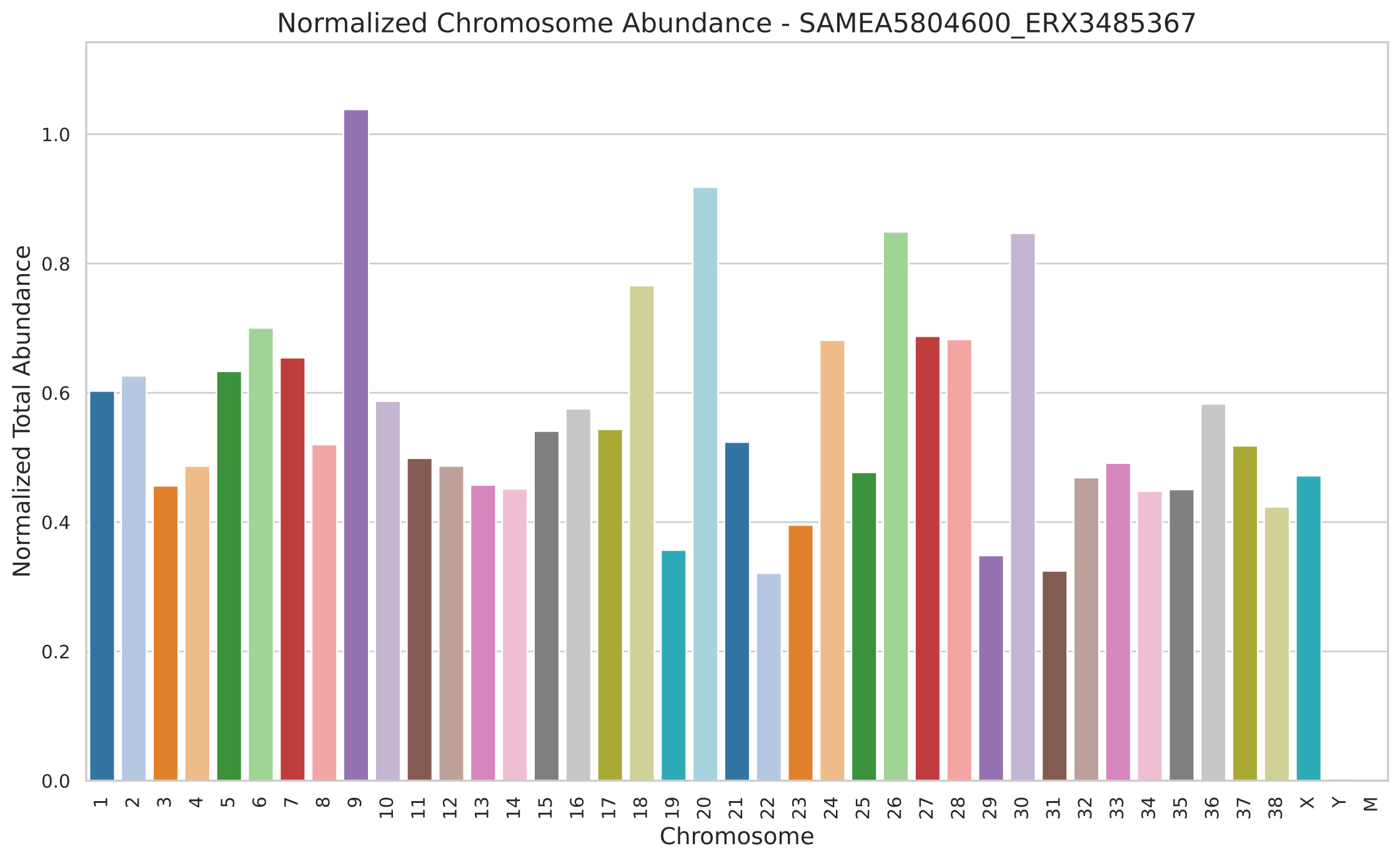

Normalized Chromosome Abundance - SAMEA3907137_ERX3485372
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

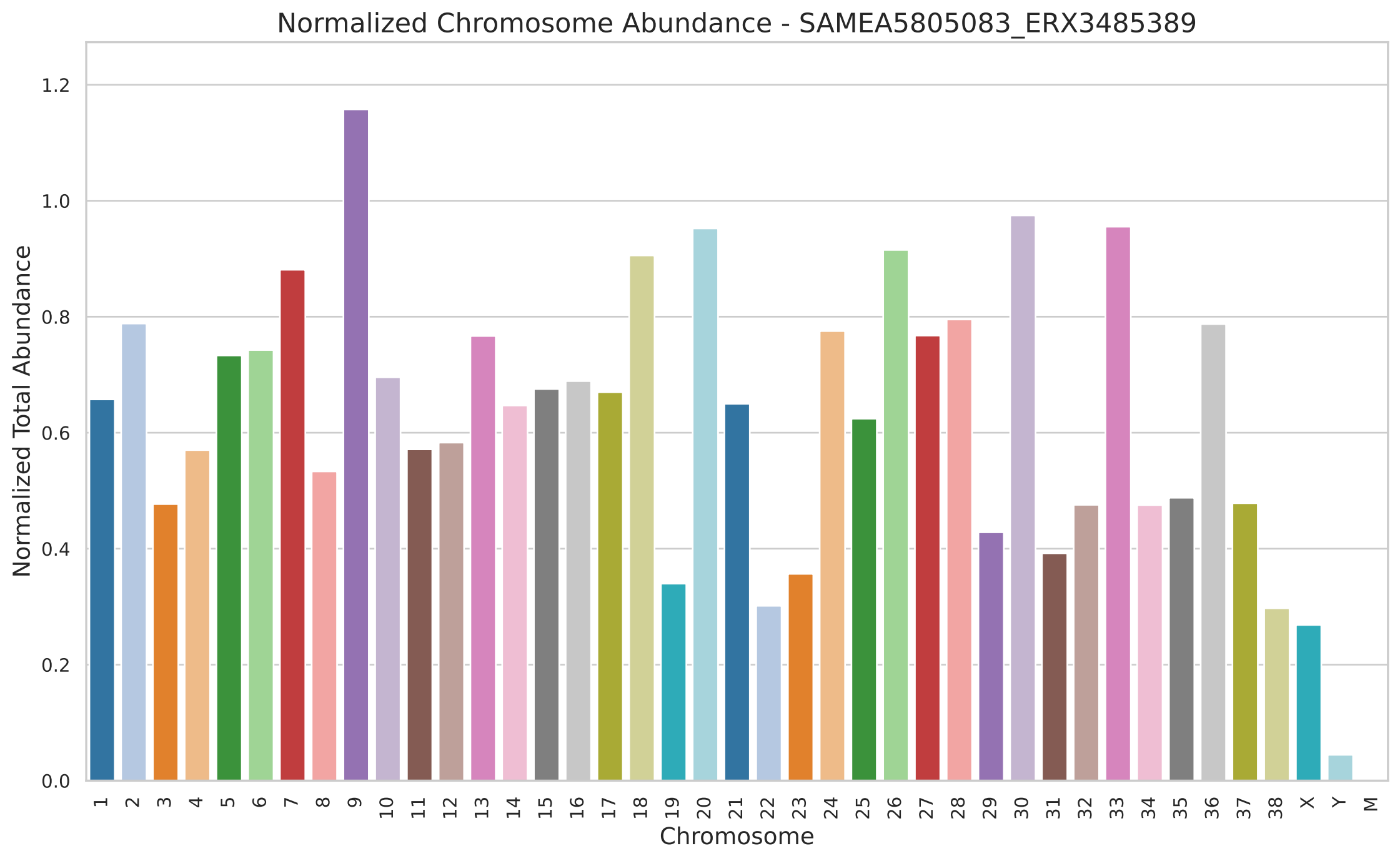

Normalized Chromosome Abundance - SAMEA3907128_ERX3485425
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

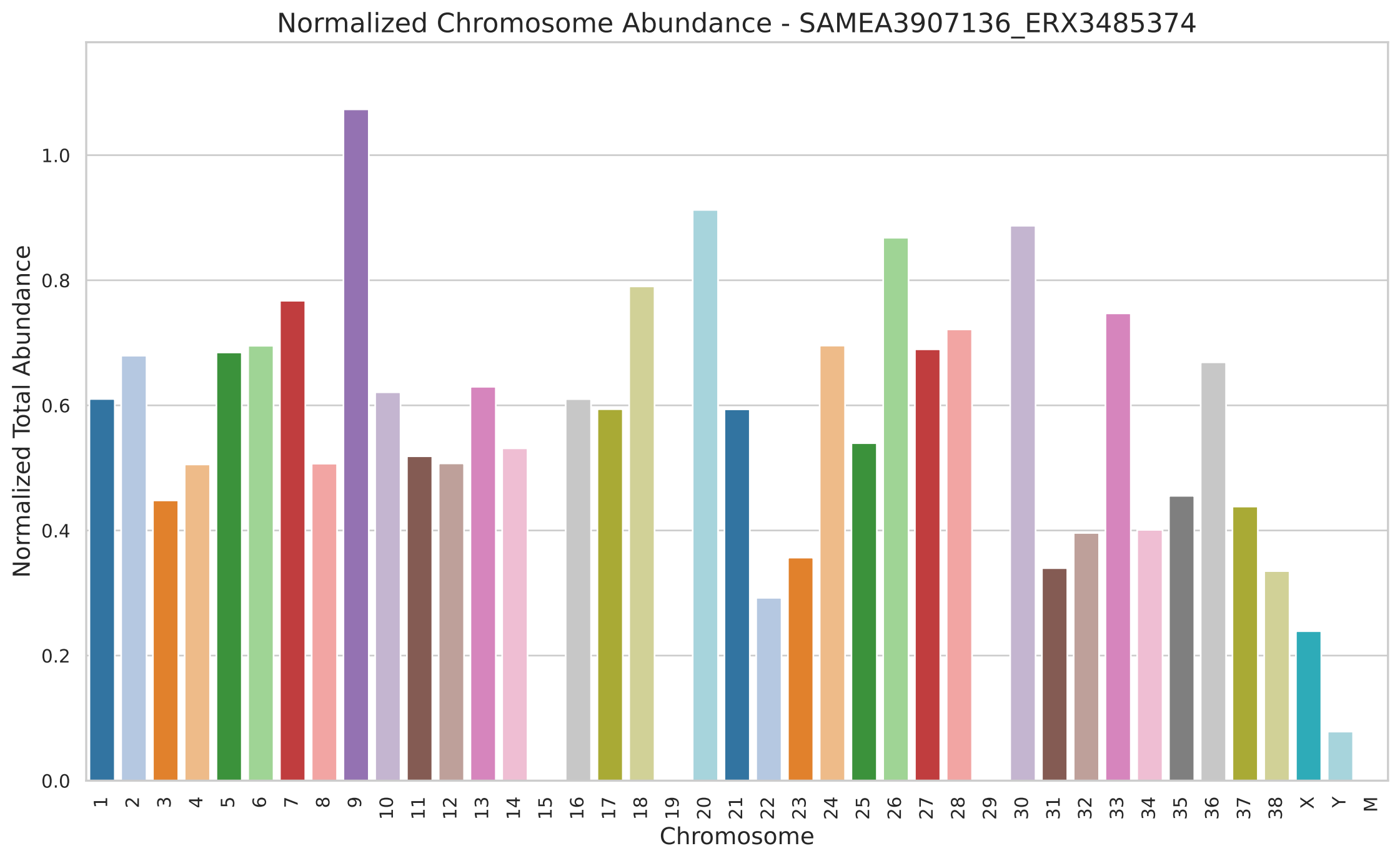

Normalized Chromosome Abundance - SAMEA5805084_ERX3485390
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

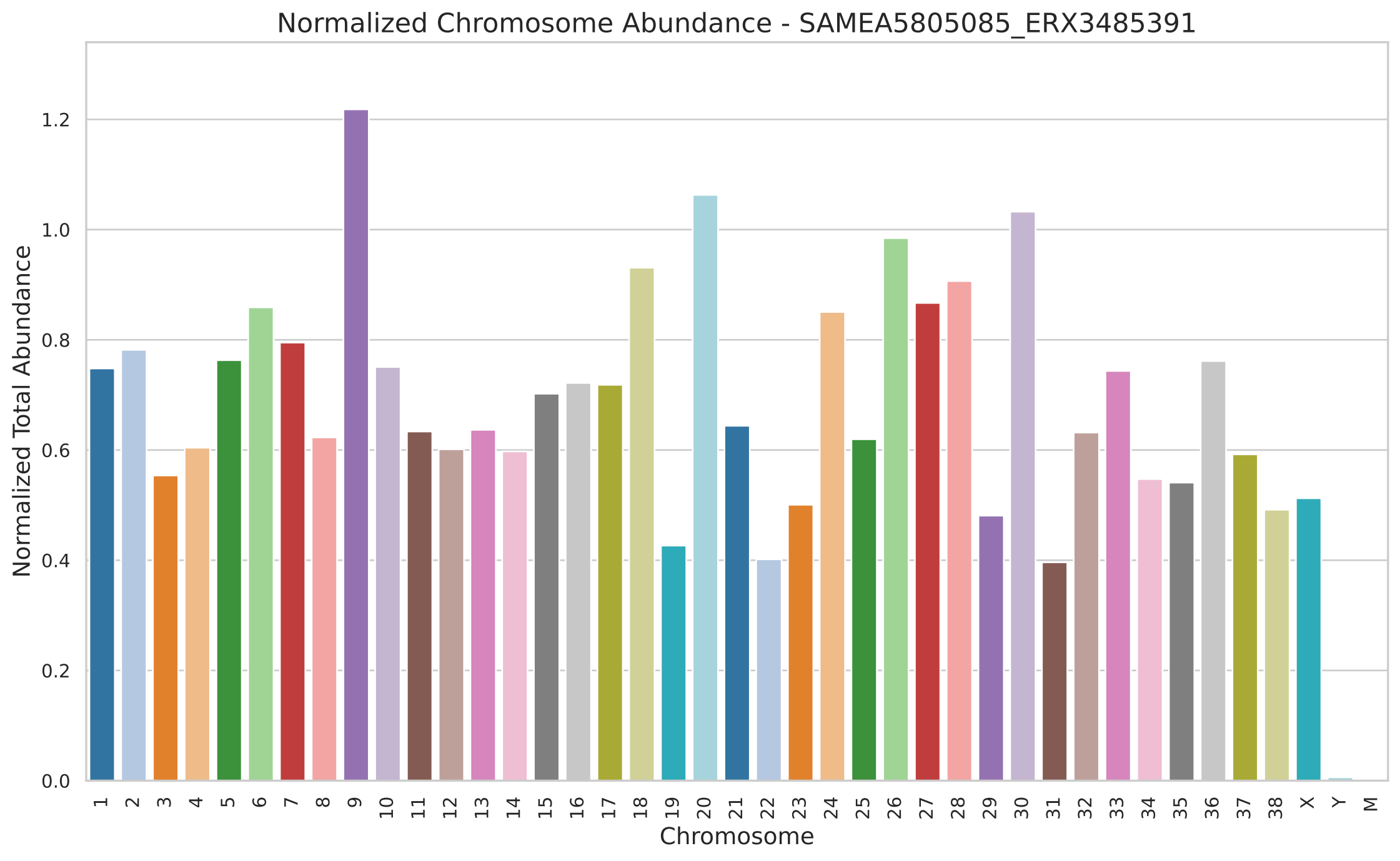

Normalized Chromosome Abundance - SAMEA3907153_ERX3485443
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

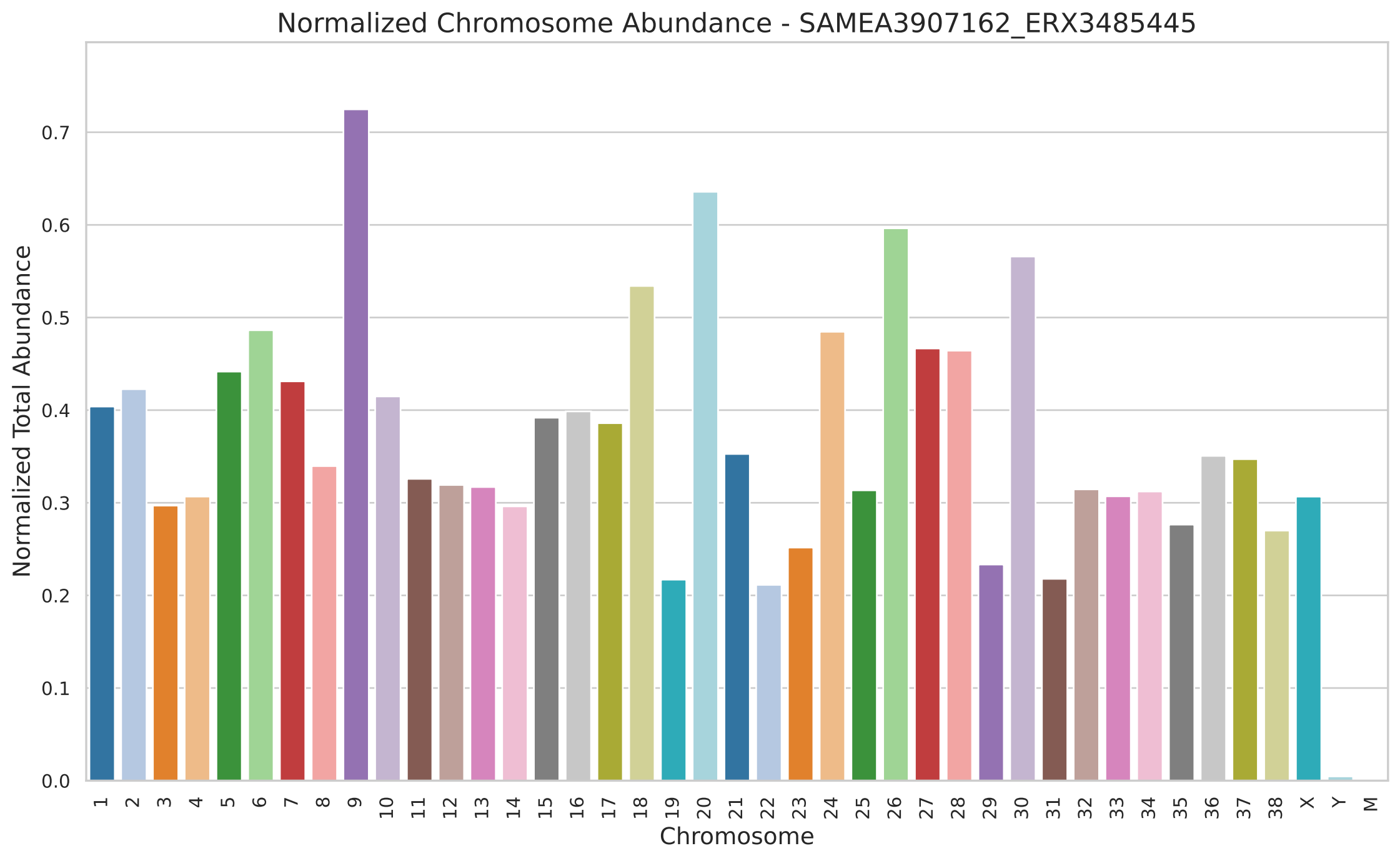

Normalized Chromosome Abundance - SAMEA3907156_ERX3485446
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

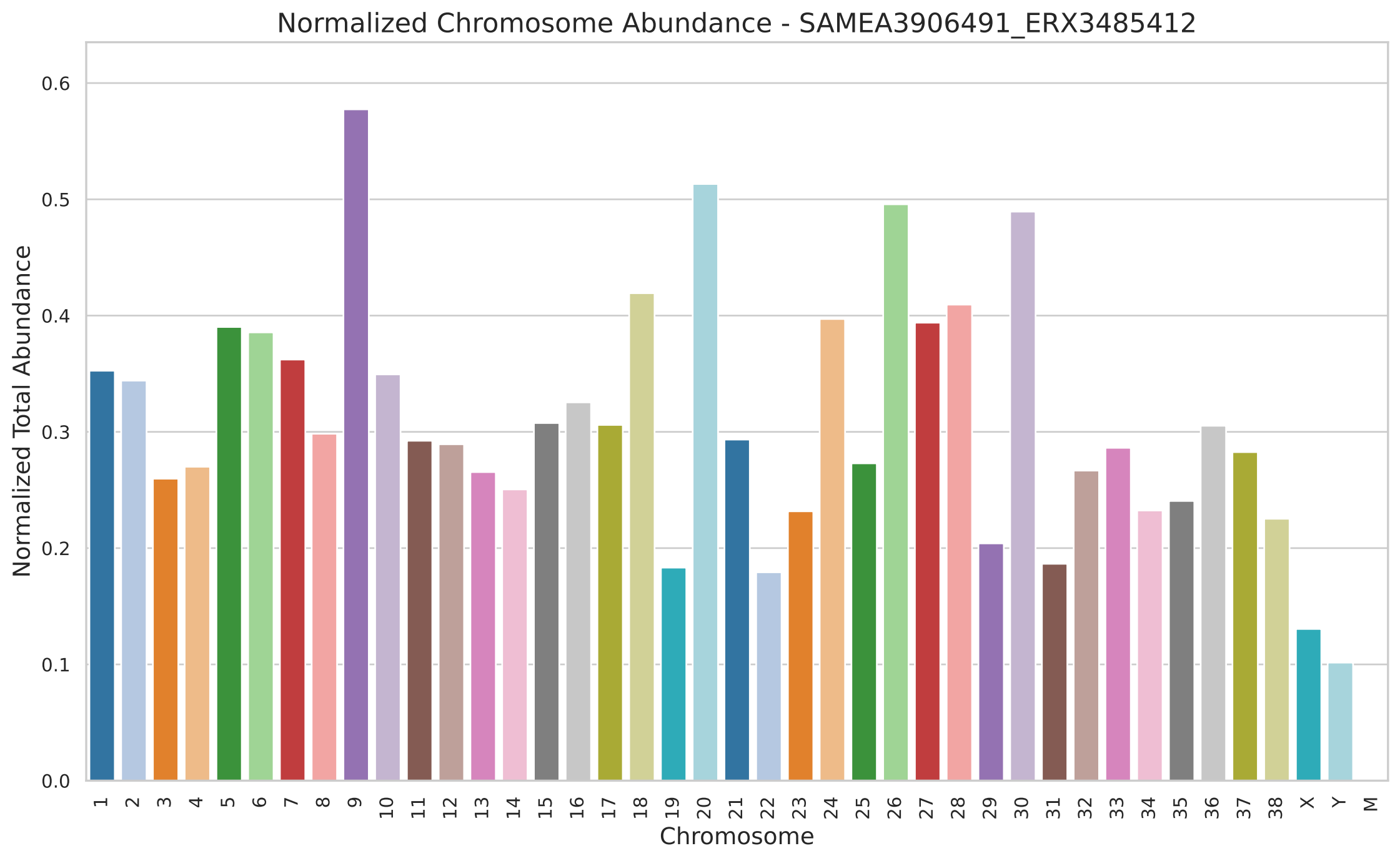

Normalized Chromosome Abundance - SAMEA5804600_ERX3485367
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

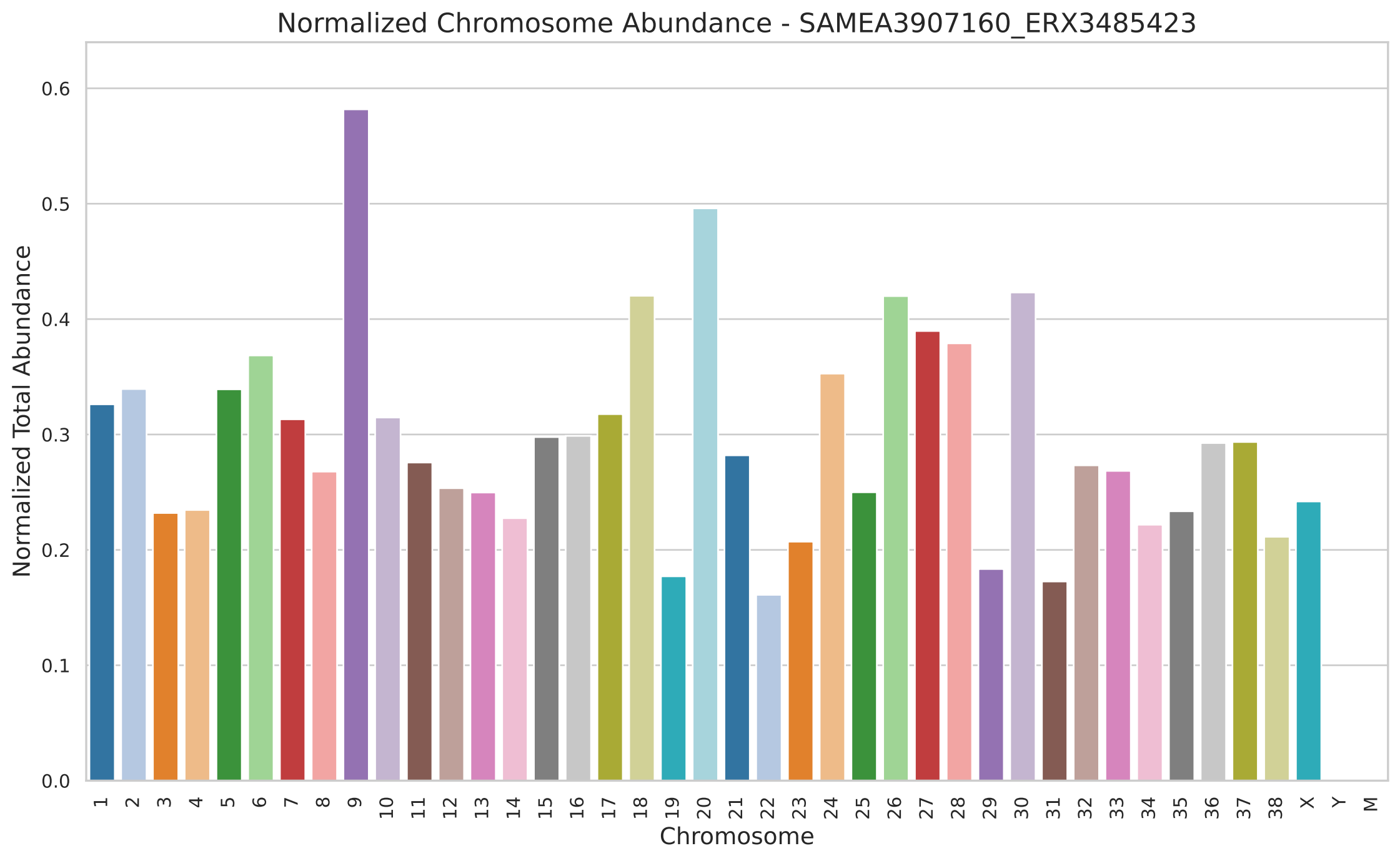

Normalized Chromosome Abundance - SAMEA5805083_ERX3485389
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

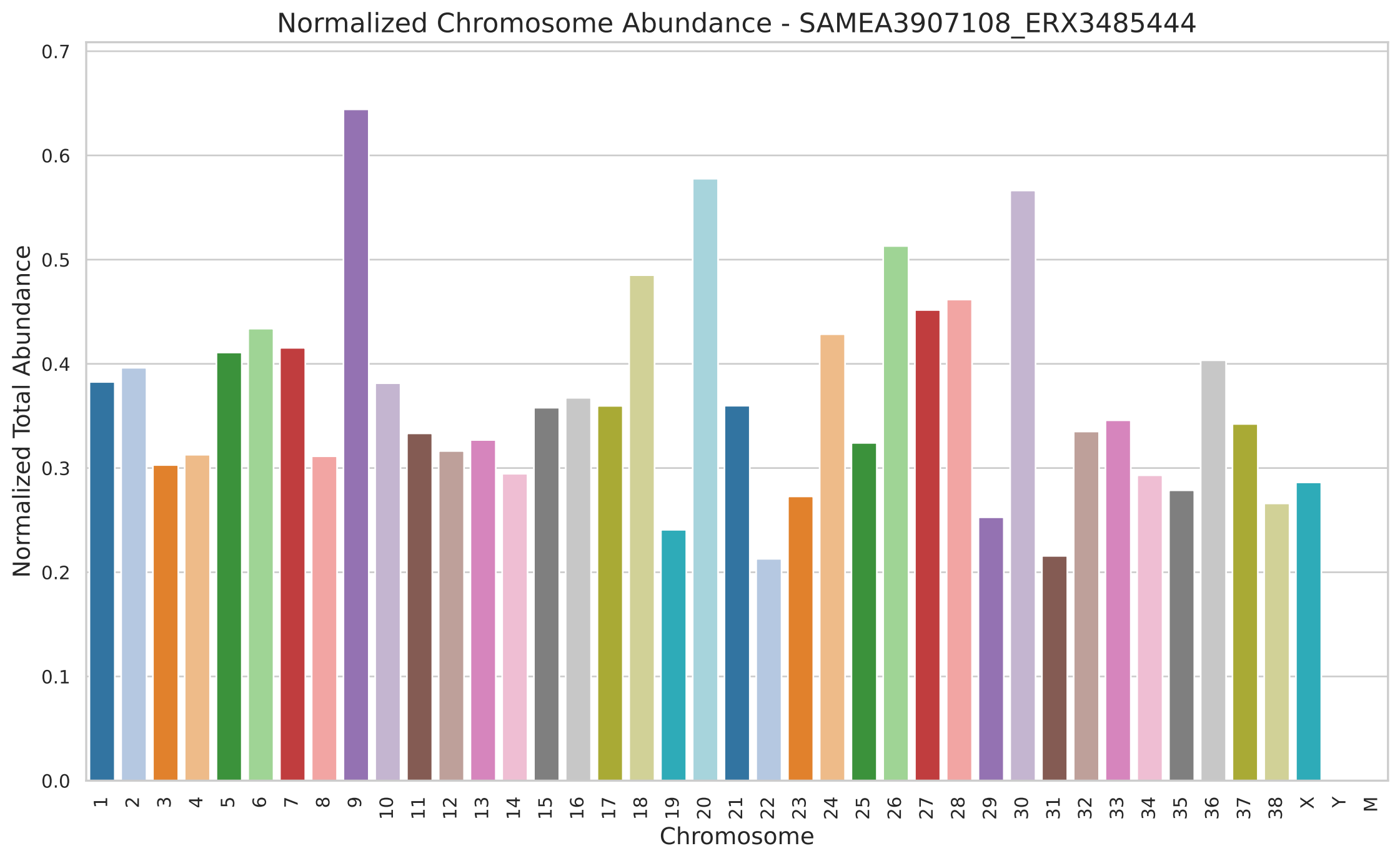

Normalized Chromosome Abundance - SAMEA3907136_ERX3485374
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

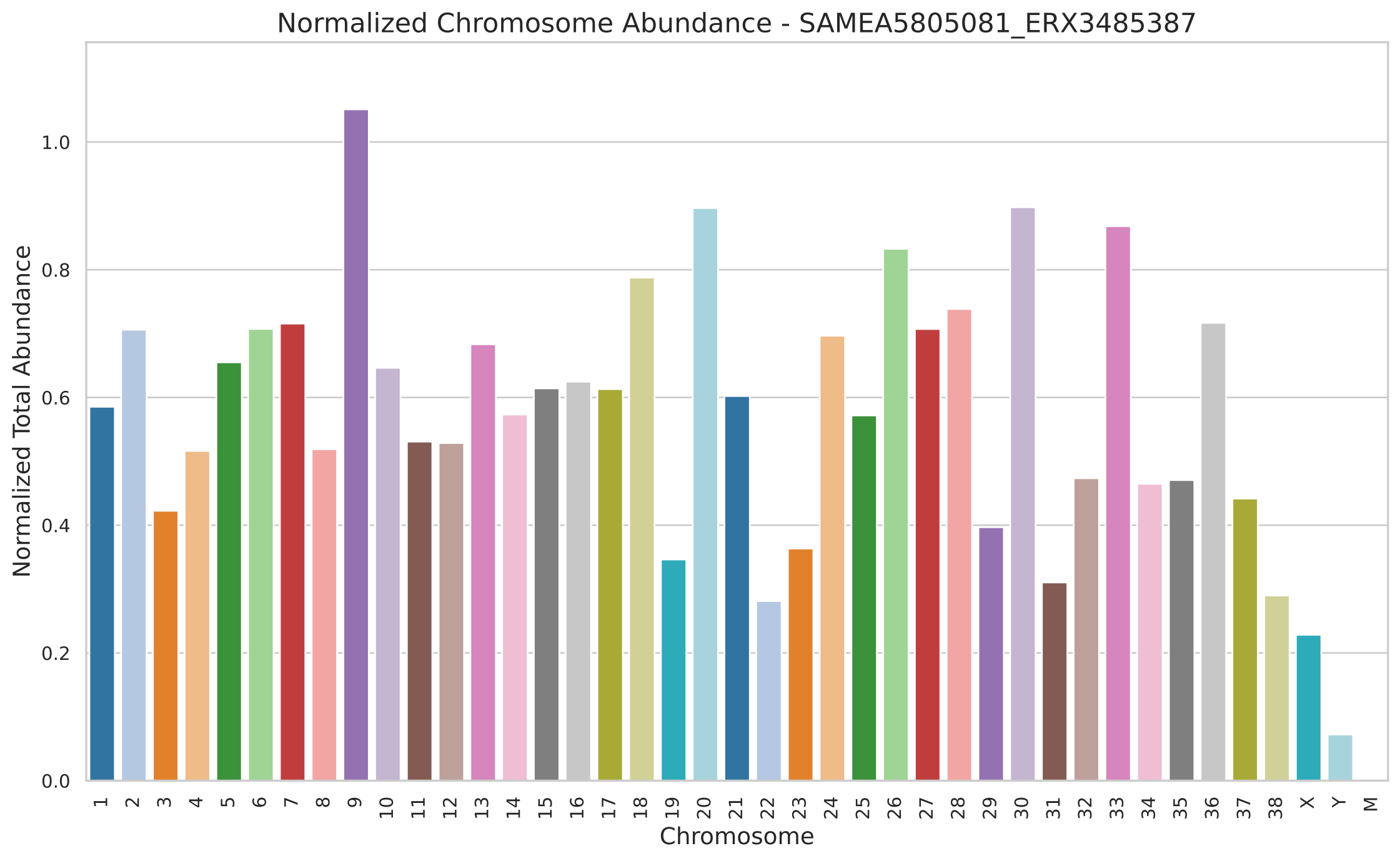

Normalized Chromosome Abundance - SAMEA5805085_ERX3485391
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

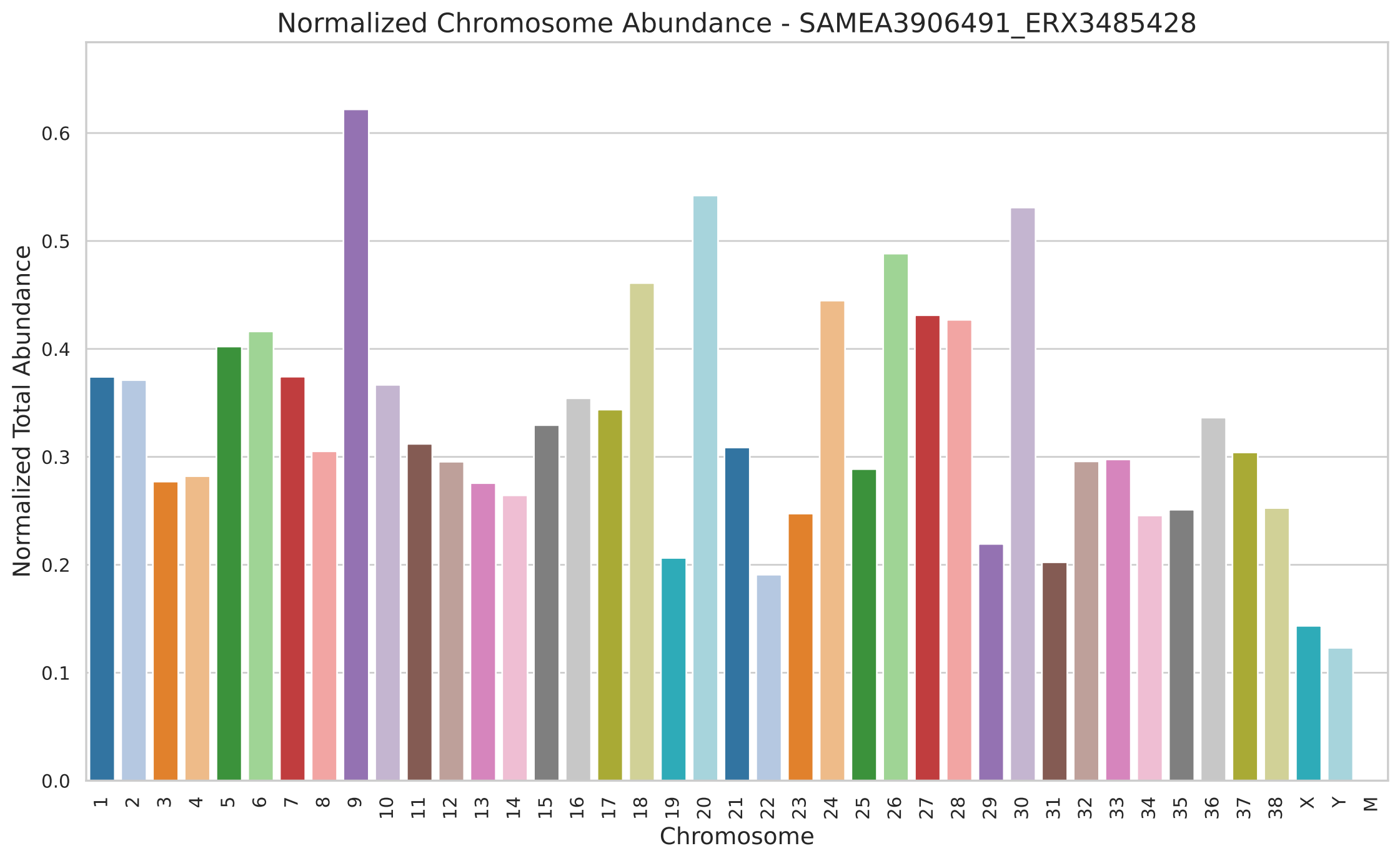

Normalized Chromosome Abundance - SAMEA3907162_ERX3485445
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

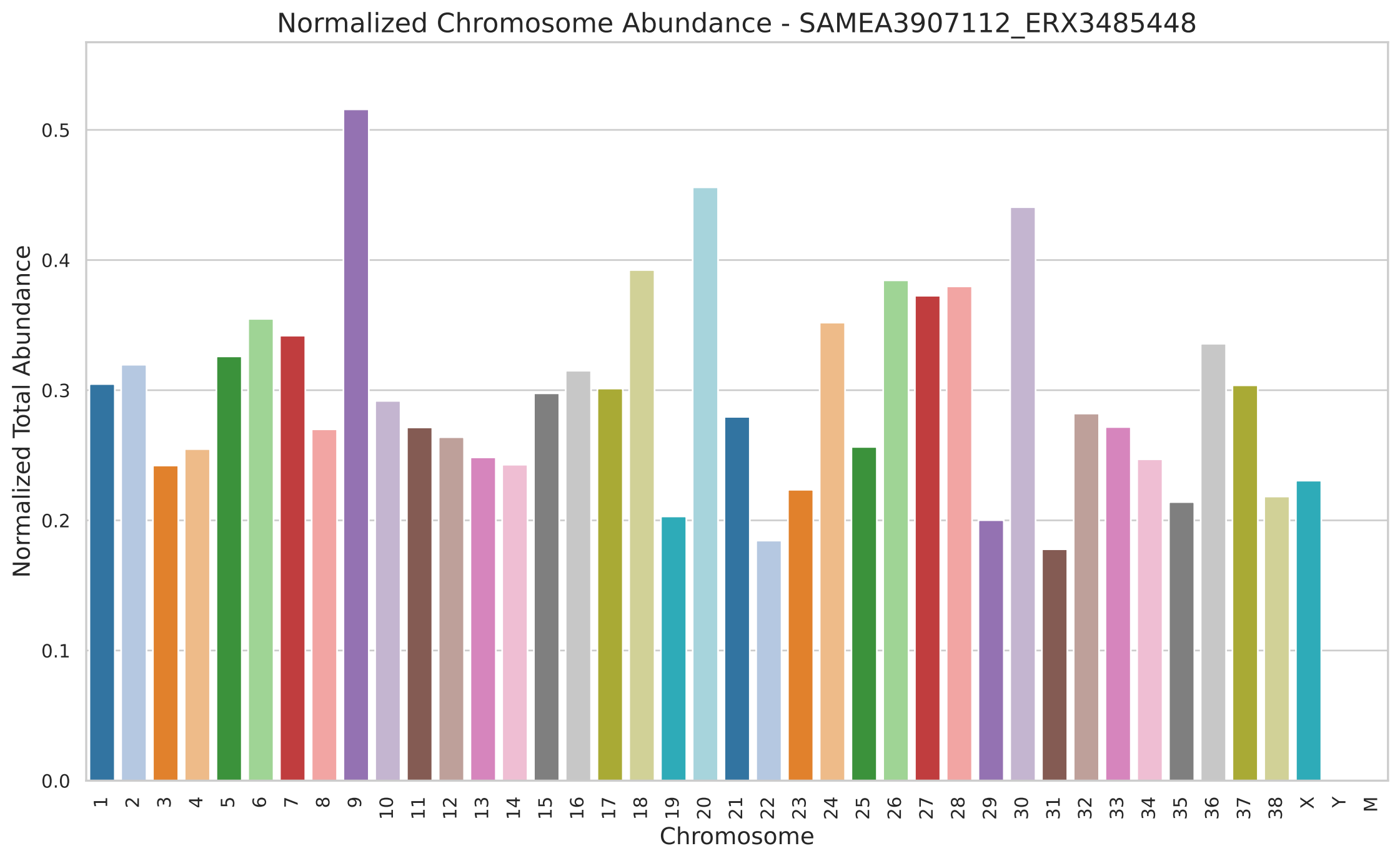

Normalized Chromosome Abundance - SAMEA3906491_ERX3485412
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

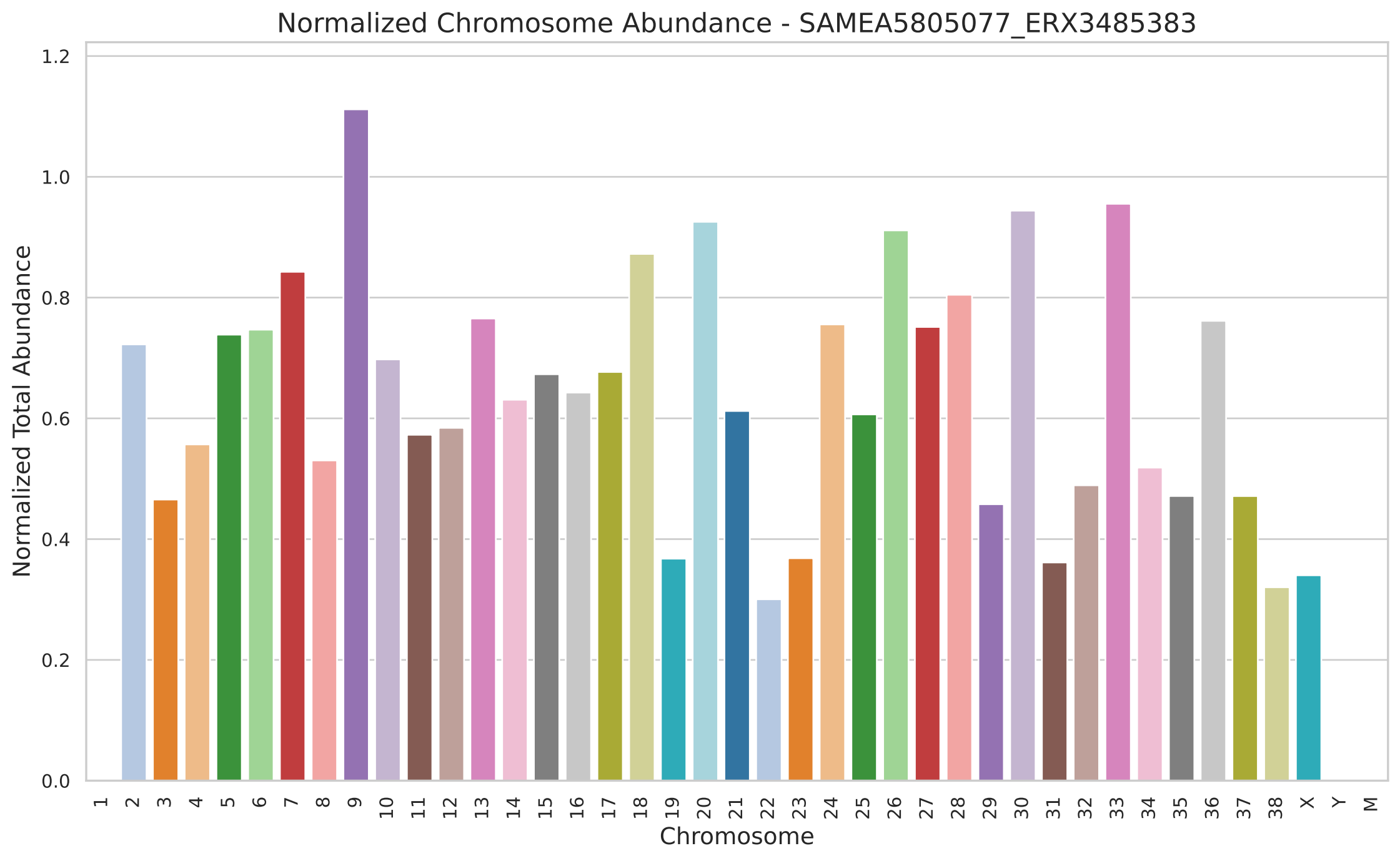

Normalized Chromosome Abundance - SAMEA3907160_ERX3485423
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

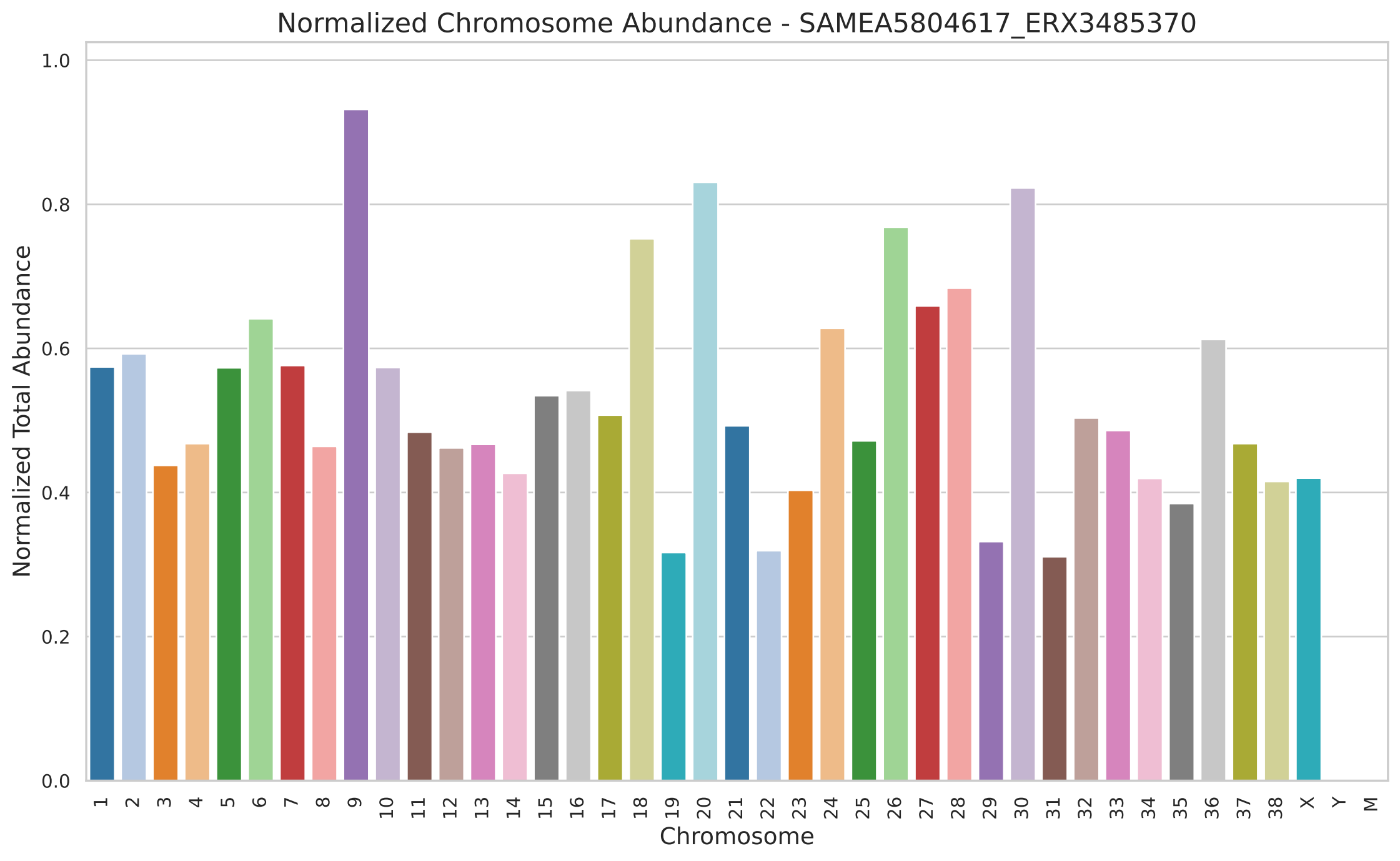

Normalized Chromosome Abundance - SAMEA3907108_ERX3485444
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

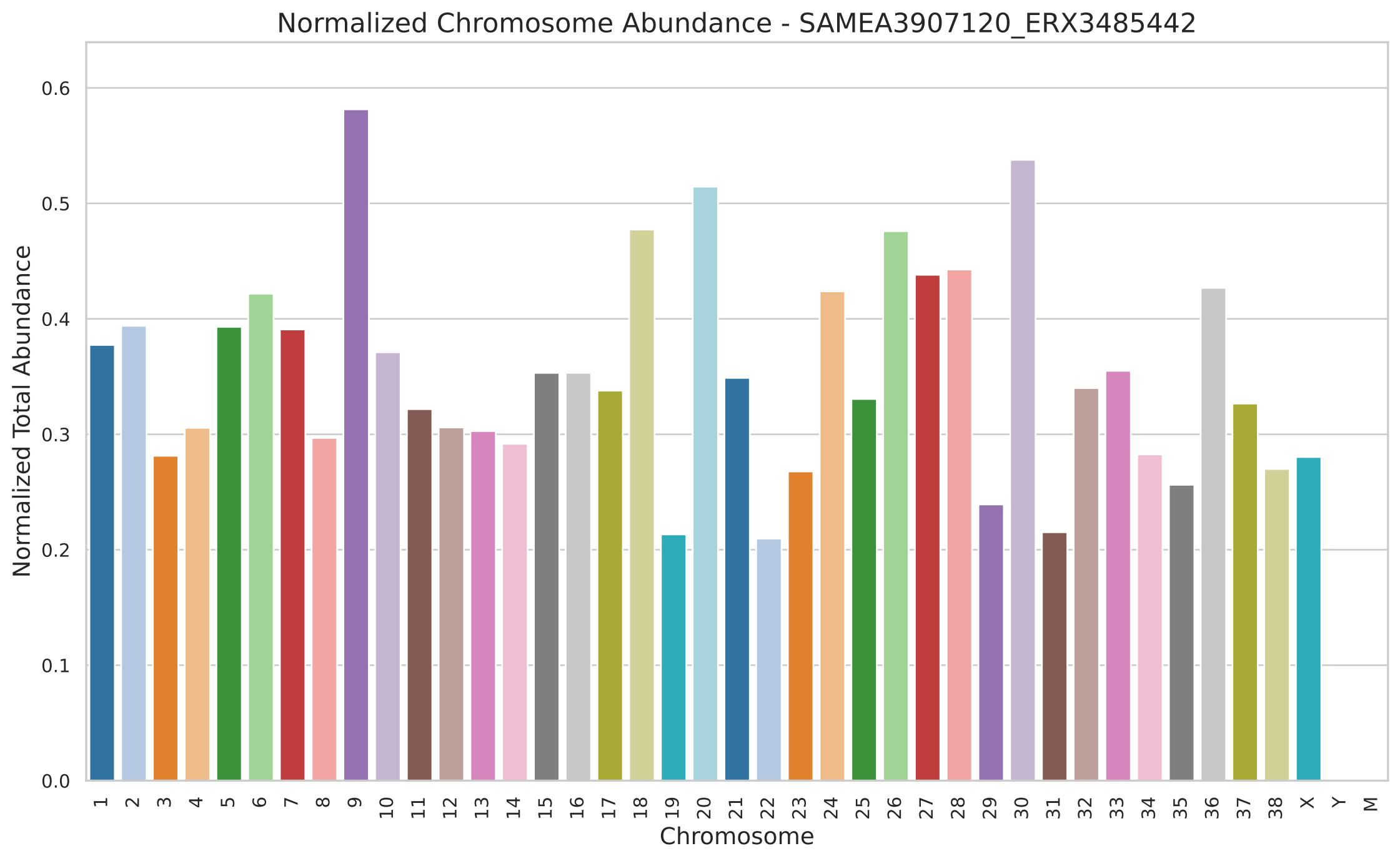

Normalized Chromosome Abundance - SAMEA5805081_ERX3485387
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

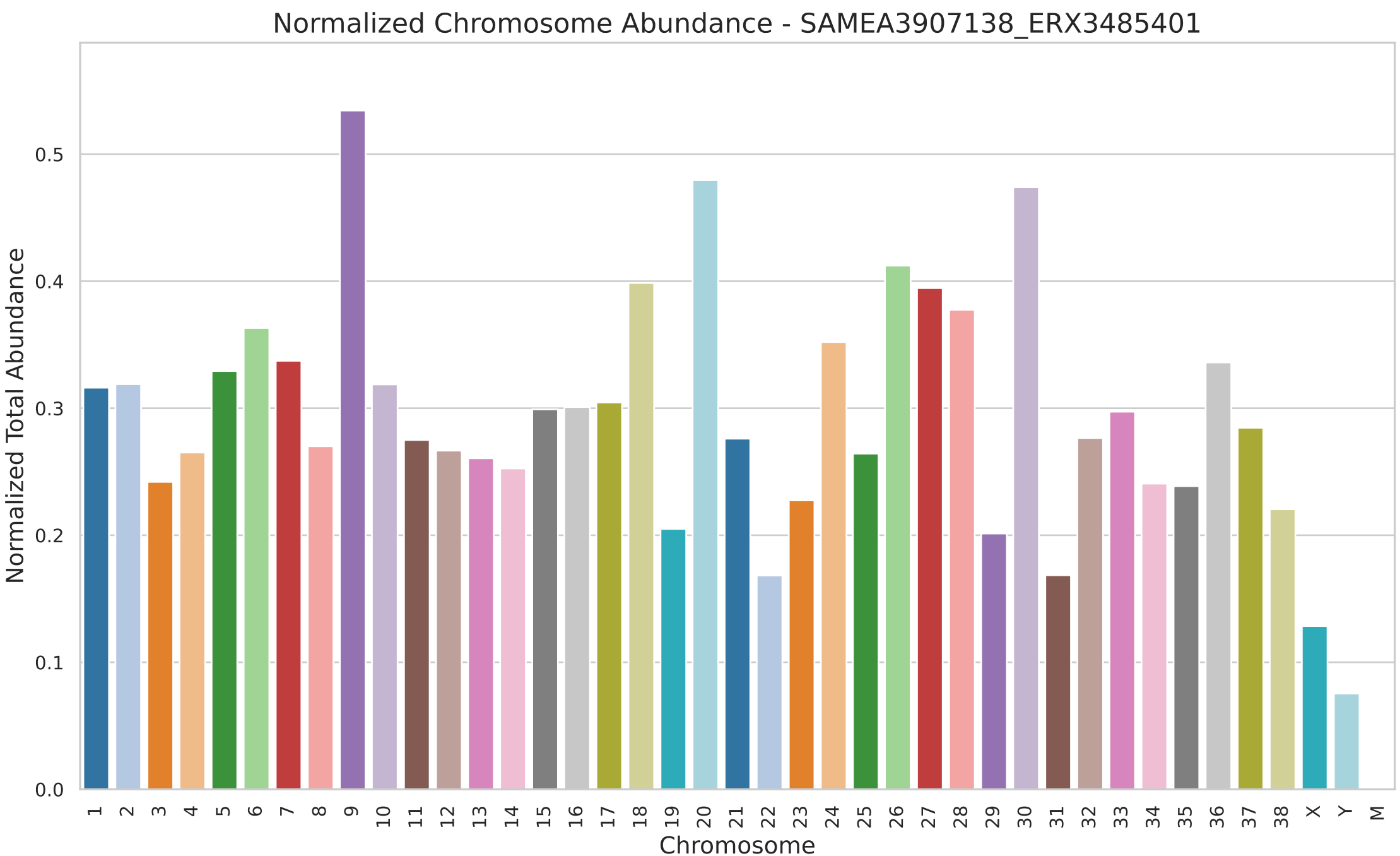

Normalized Chromosome Abundance - SAMEA3906491_ERX3485428
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

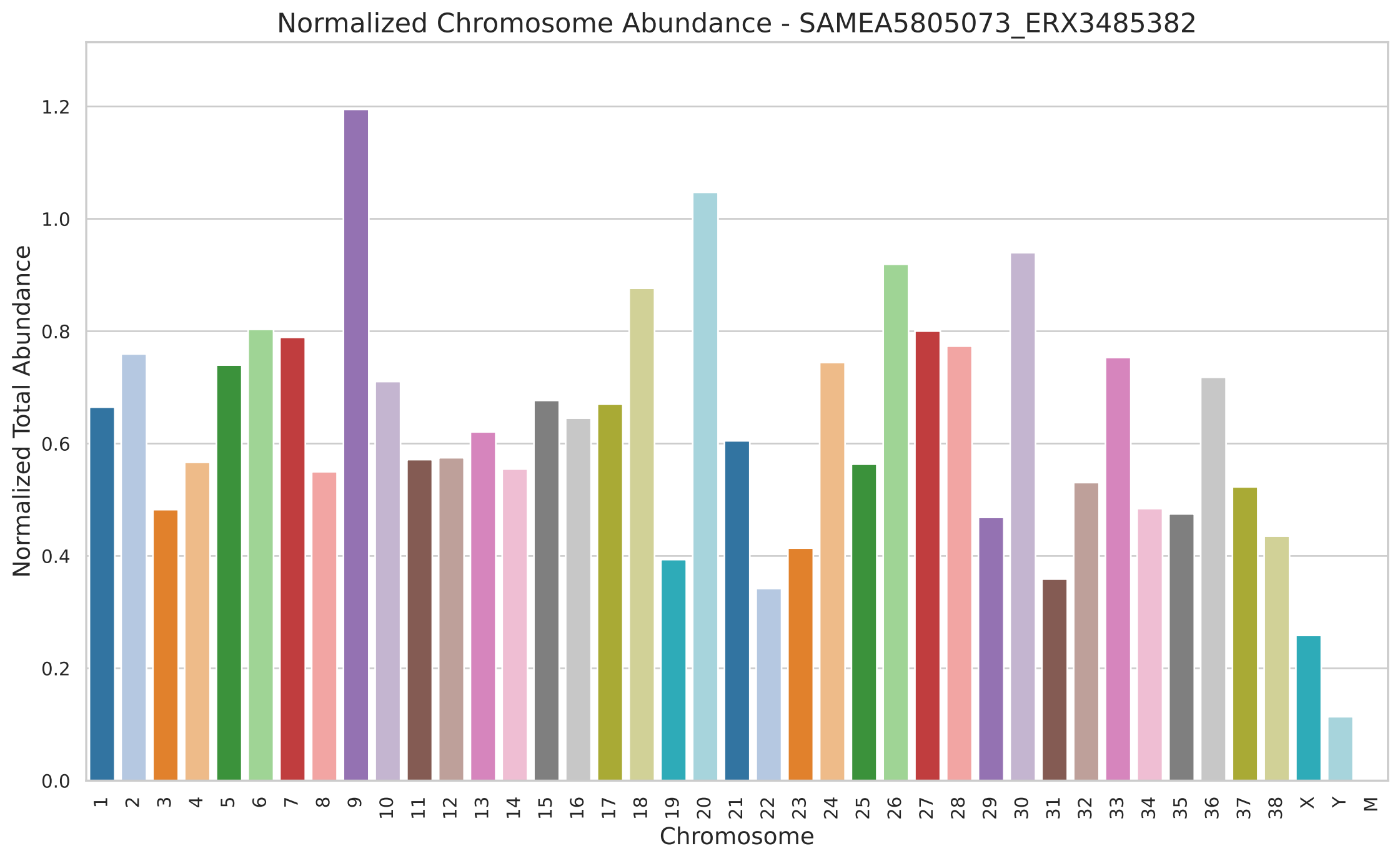

Normalized Chromosome Abundance - SAMEA3907112_ERX3485448
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

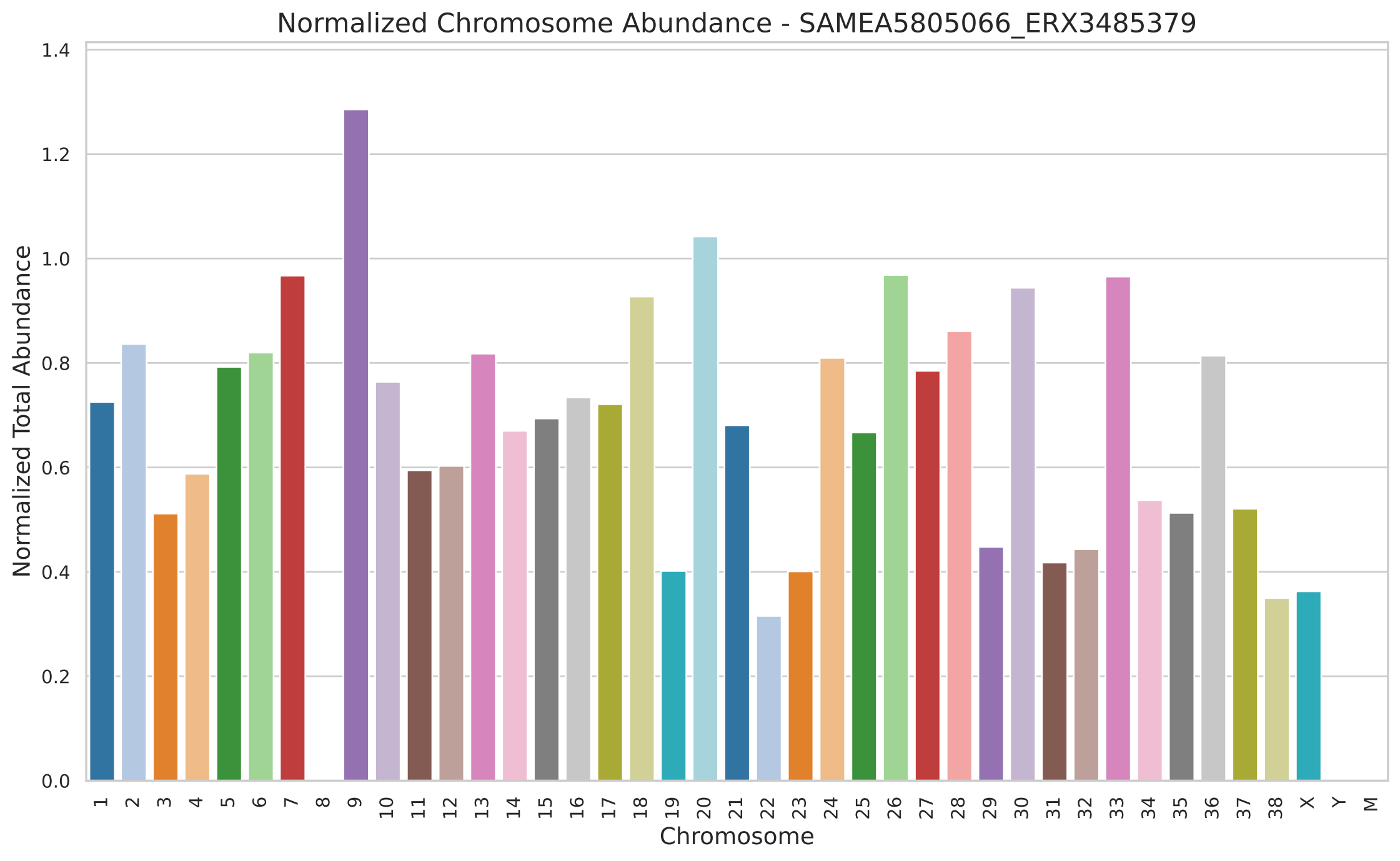

Normalized Chromosome Abundance - SAMEA5805077_ERX3485383
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

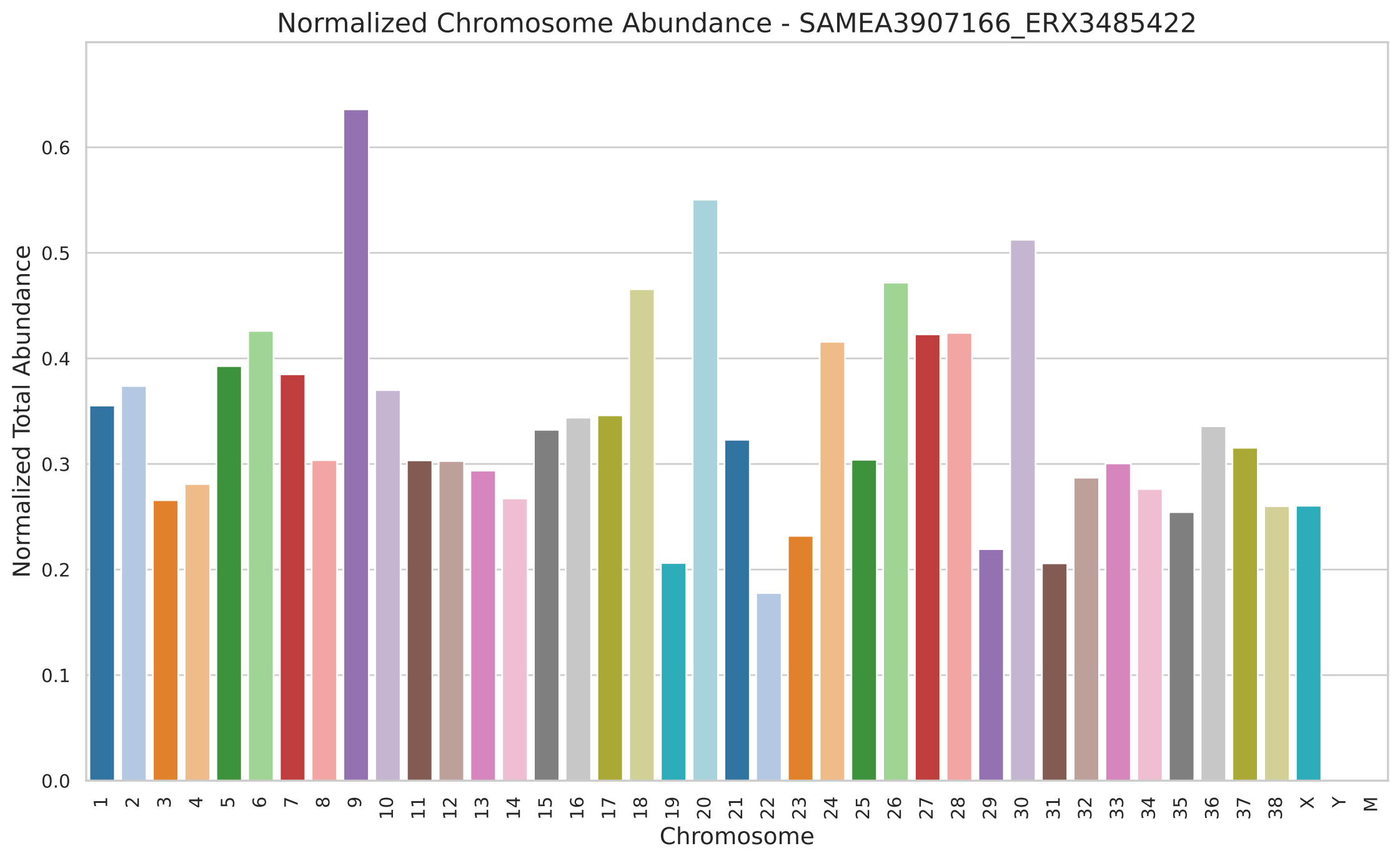

Normalized Chromosome Abundance - SAMEA5804617_ERX3485370
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

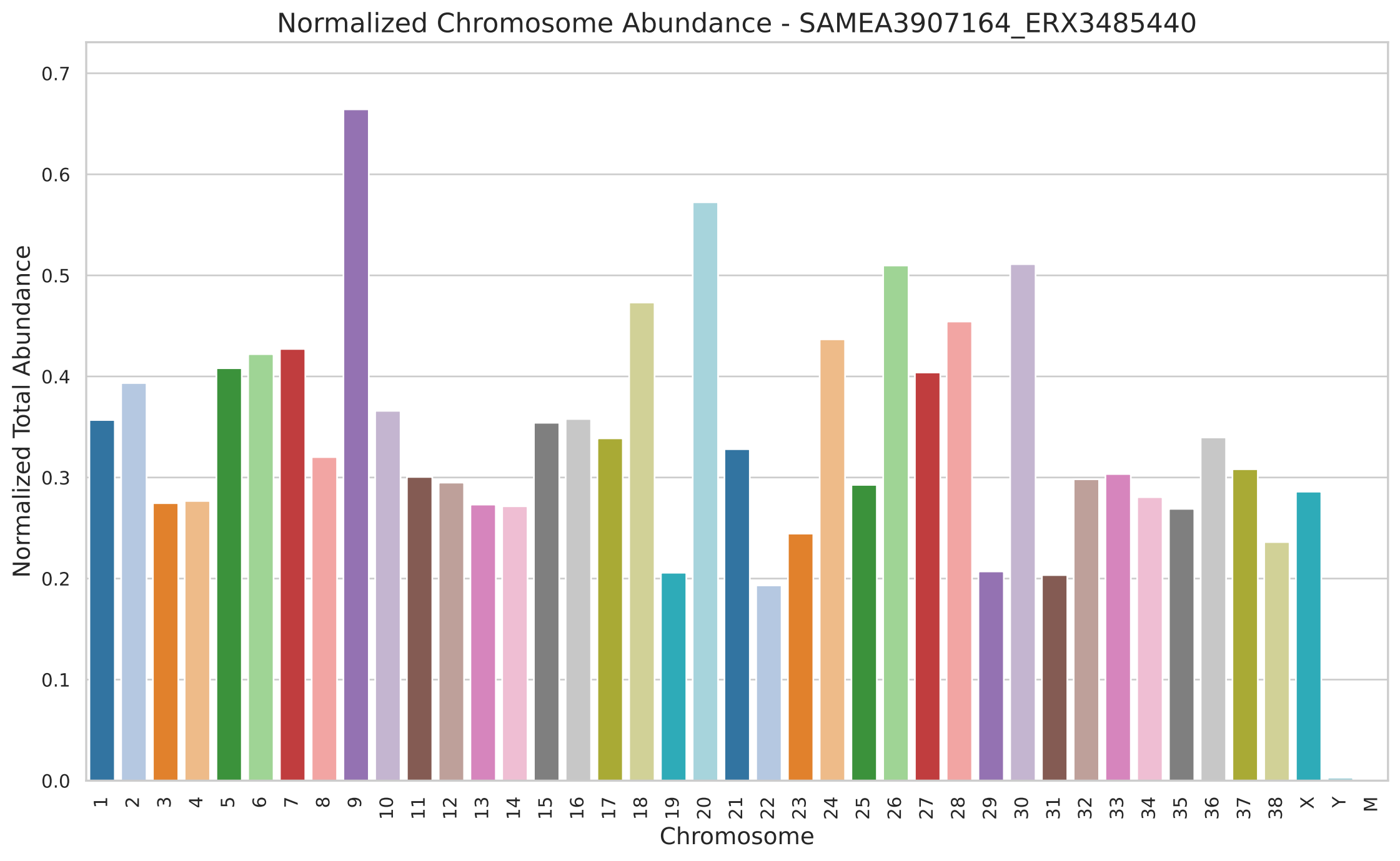

Normalized Chromosome Abundance - SAMEA3907120_ERX3485442
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

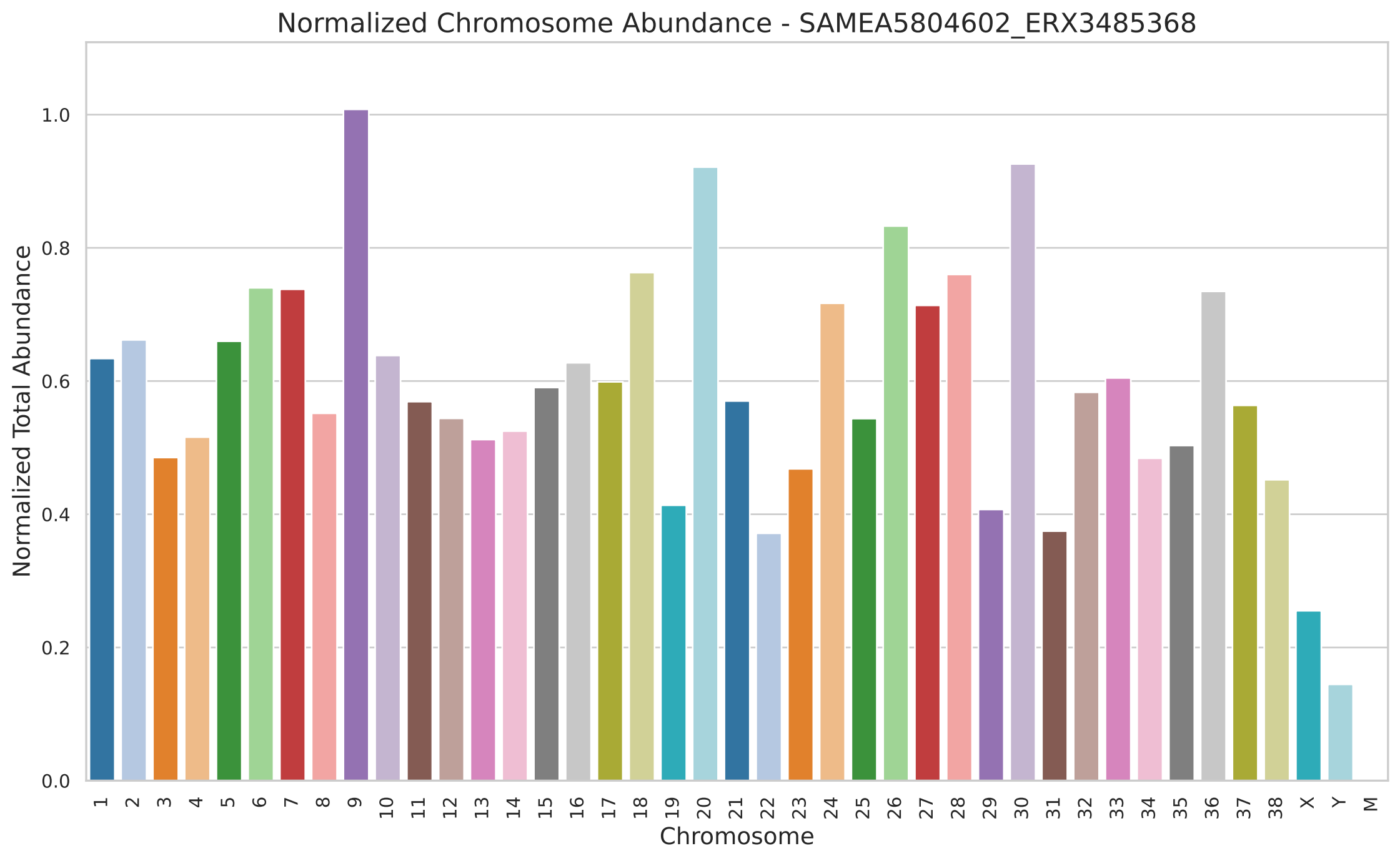

Normalized Chromosome Abundance - SAMEA3907138_ERX3485401
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

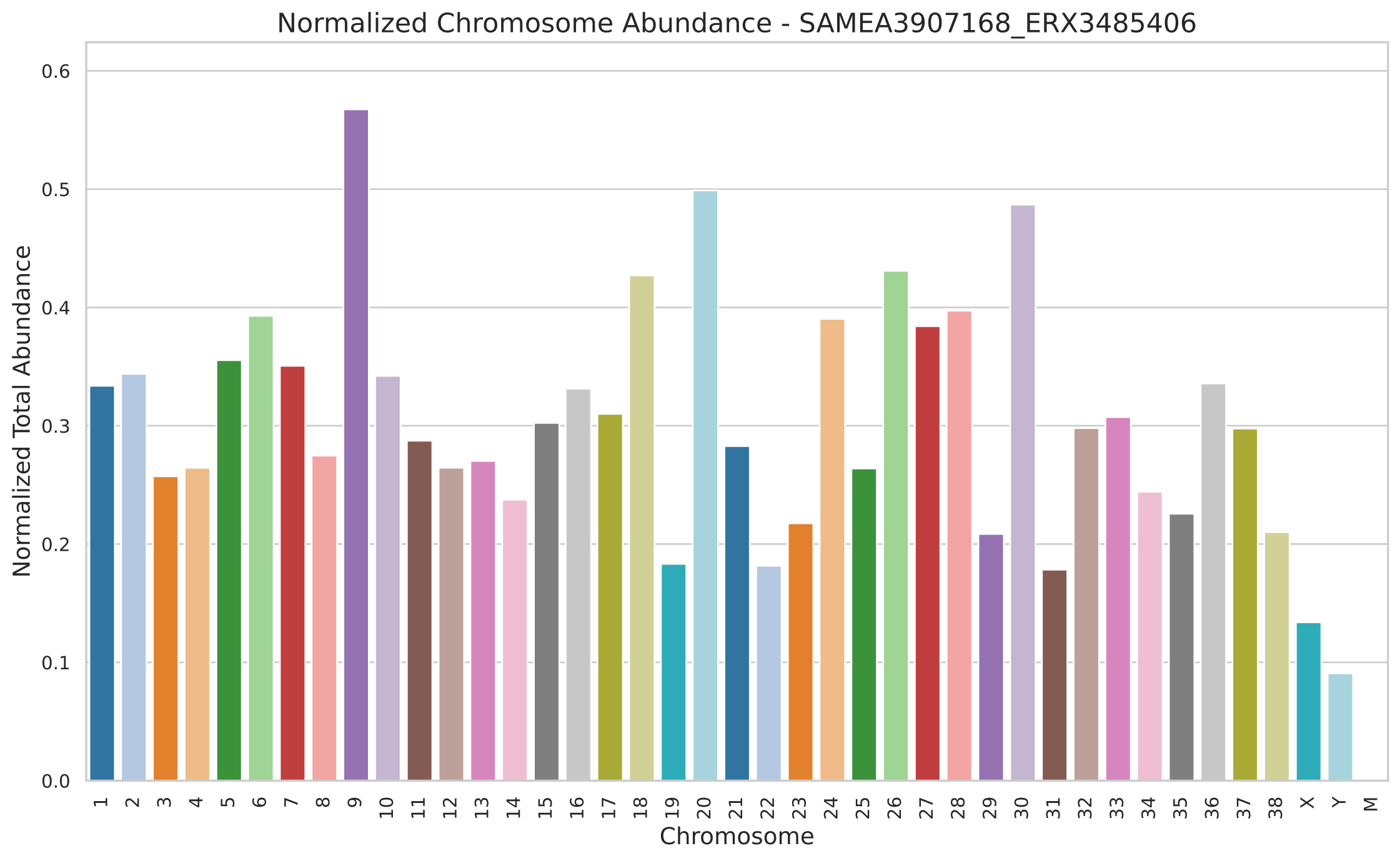

Normalized Chromosome Abundance - SAMEA5805073_ERX3485382
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

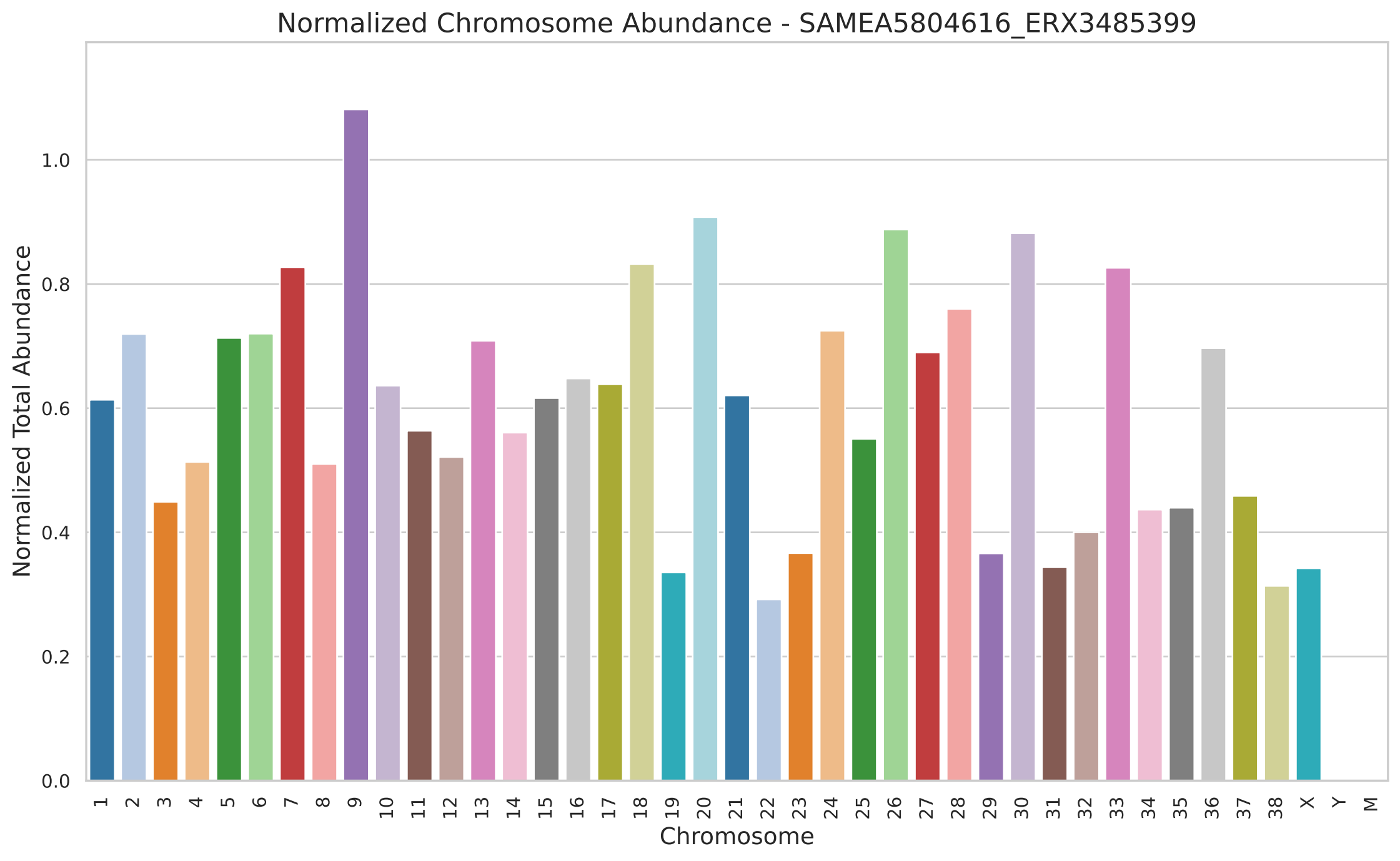

Normalized Chromosome Abundance - SAMEA5805066_ERX3485379
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

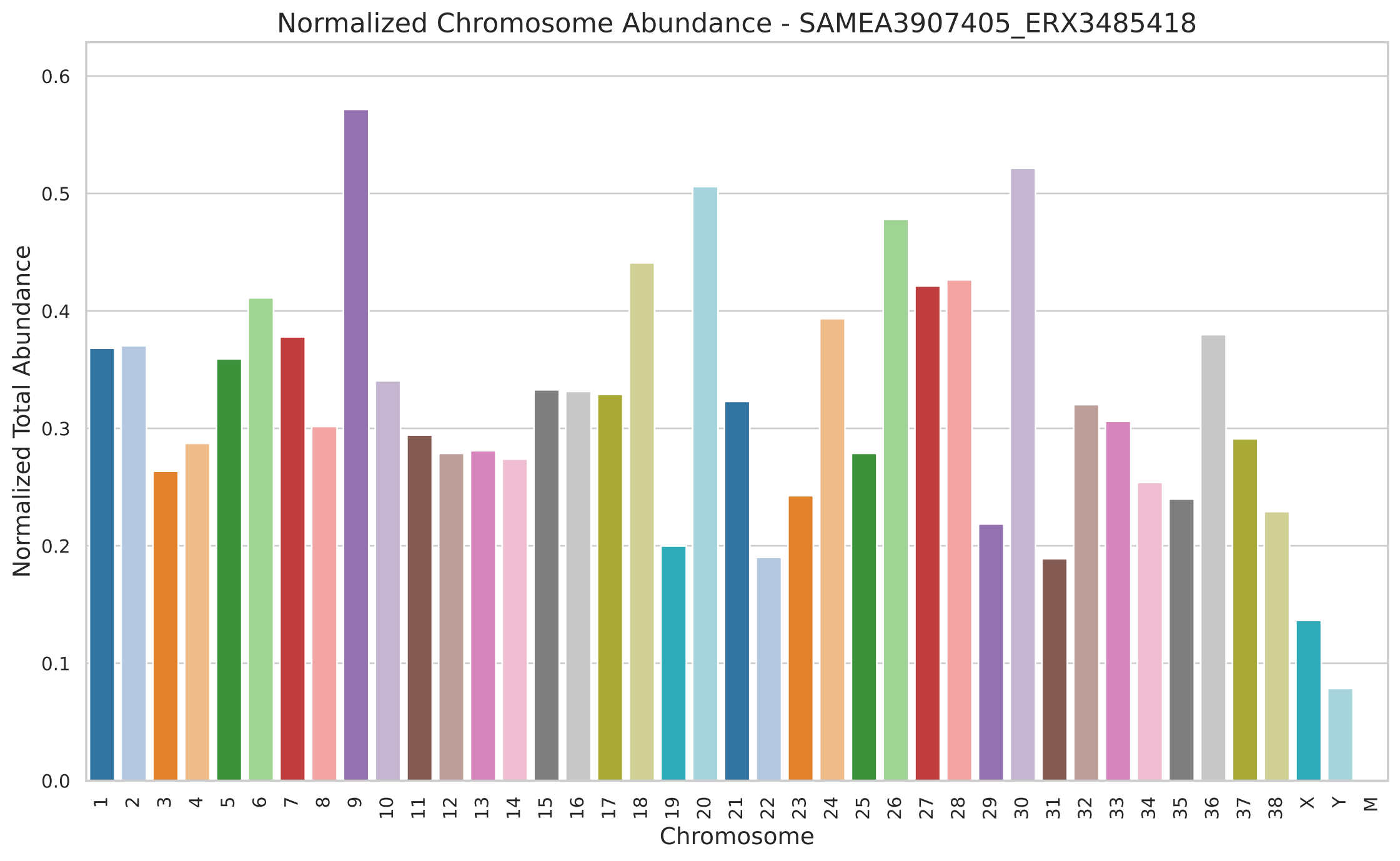

Normalized Chromosome Abundance - SAMEA3907166_ERX3485422
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

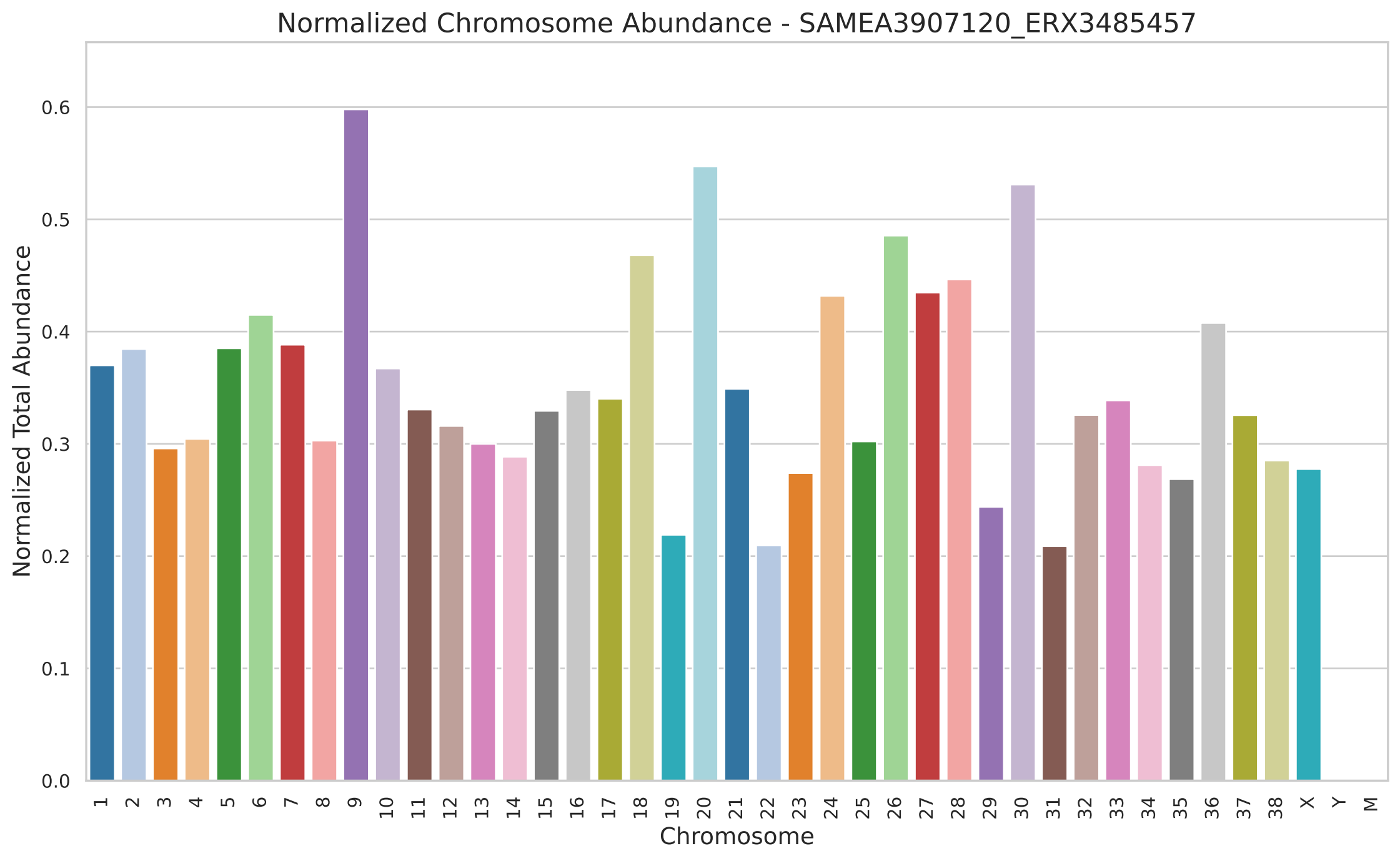

Normalized Chromosome Abundance - SAMEA3907164_ERX3485440
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

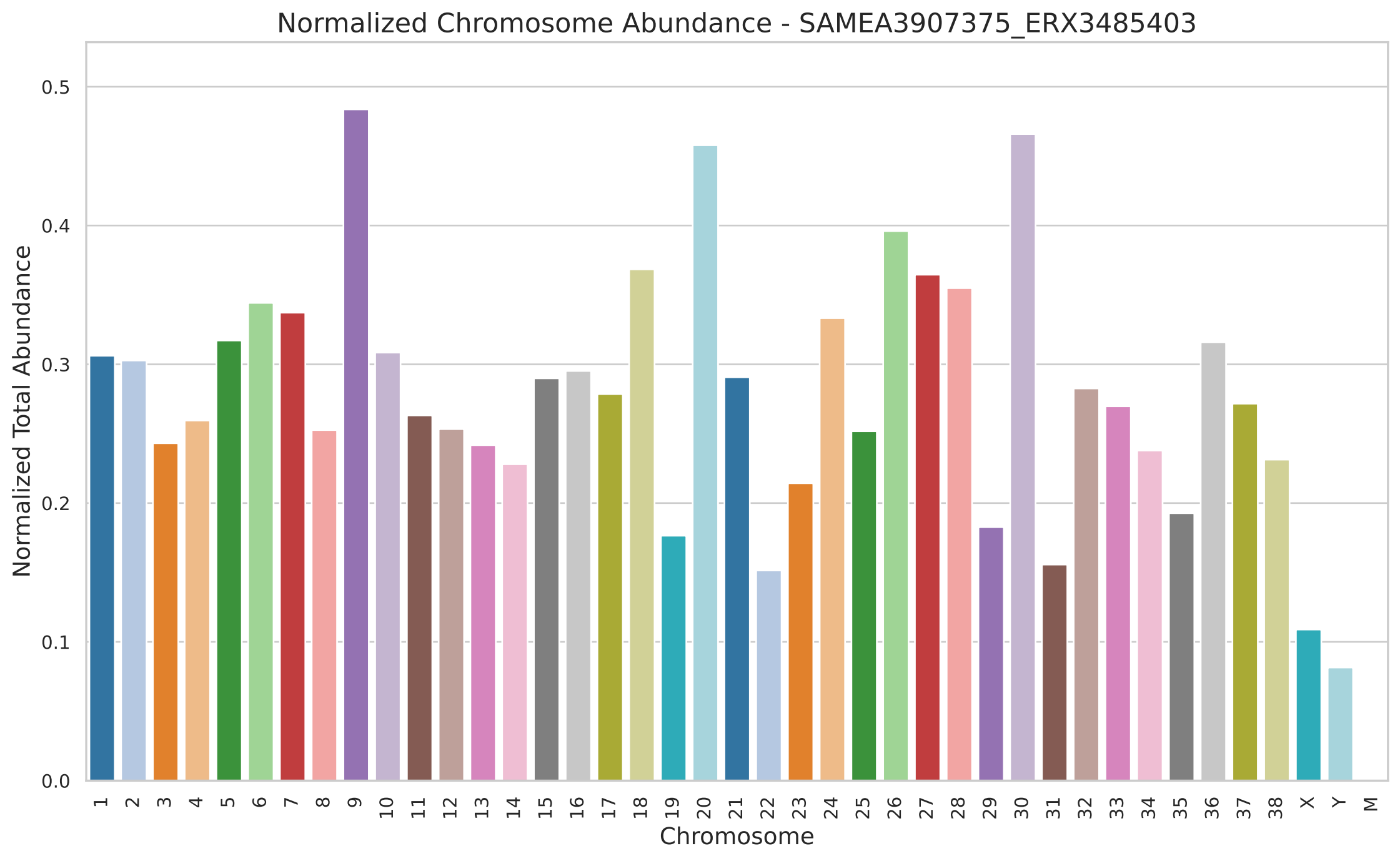

Normalized Chromosome Abundance - SAMEA5804602_ERX3485368
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

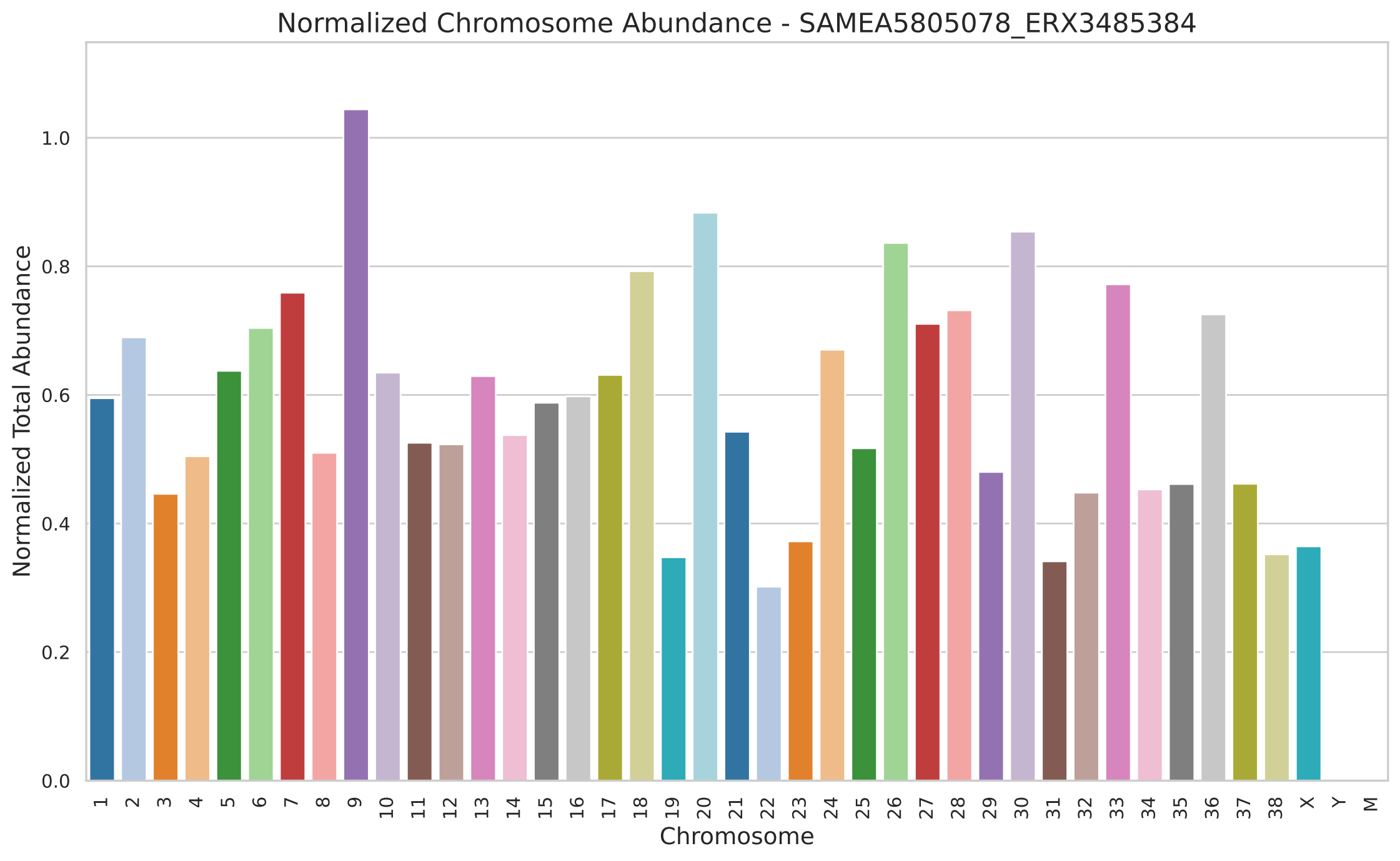

Normalized Chromosome Abundance - SAMEA3907168_ERX3485406
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

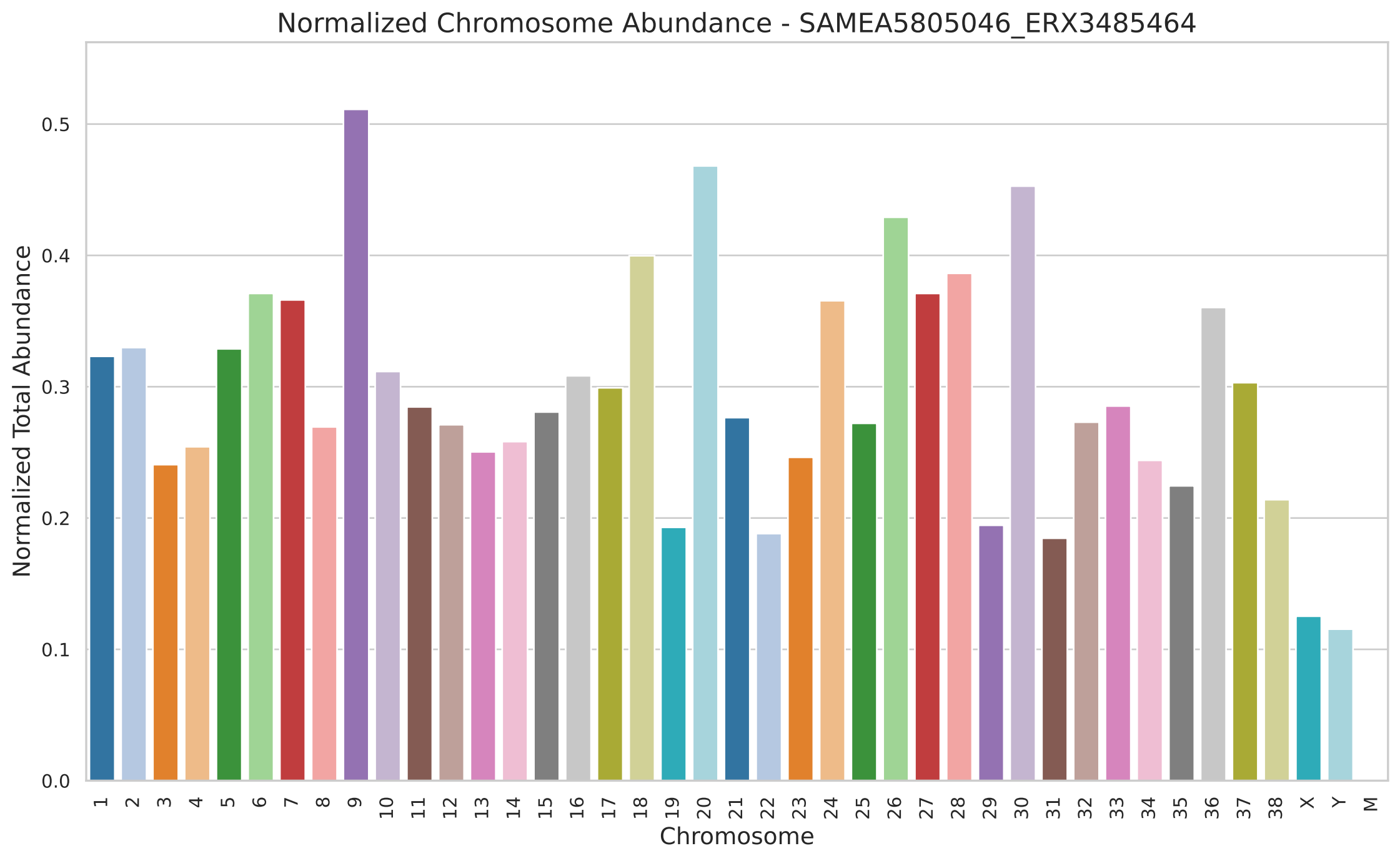

Normalized Chromosome Abundance - SAMEA5804616_ERX3485399
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

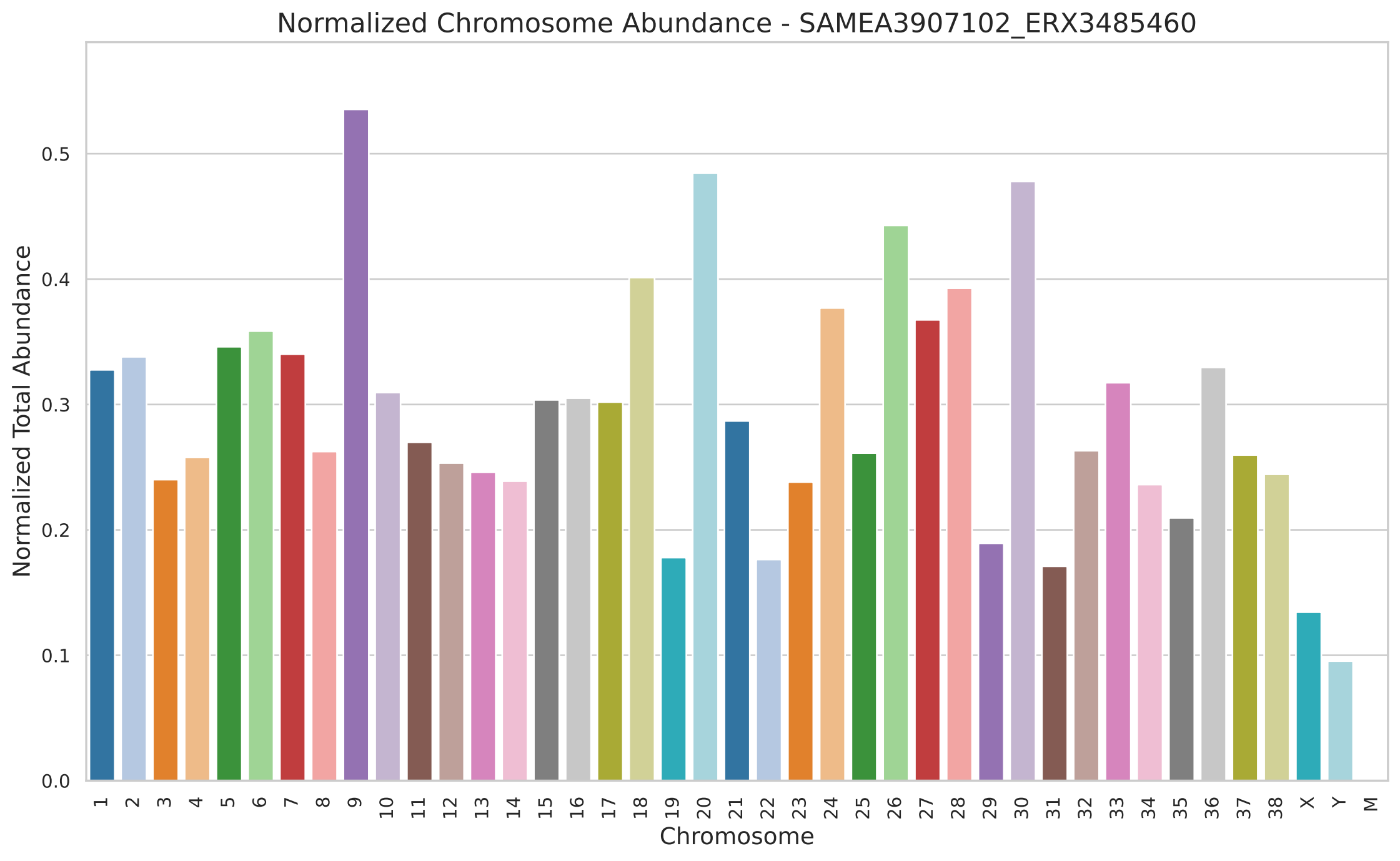

Normalized Chromosome Abundance - SAMEA3907405_ERX3485418
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

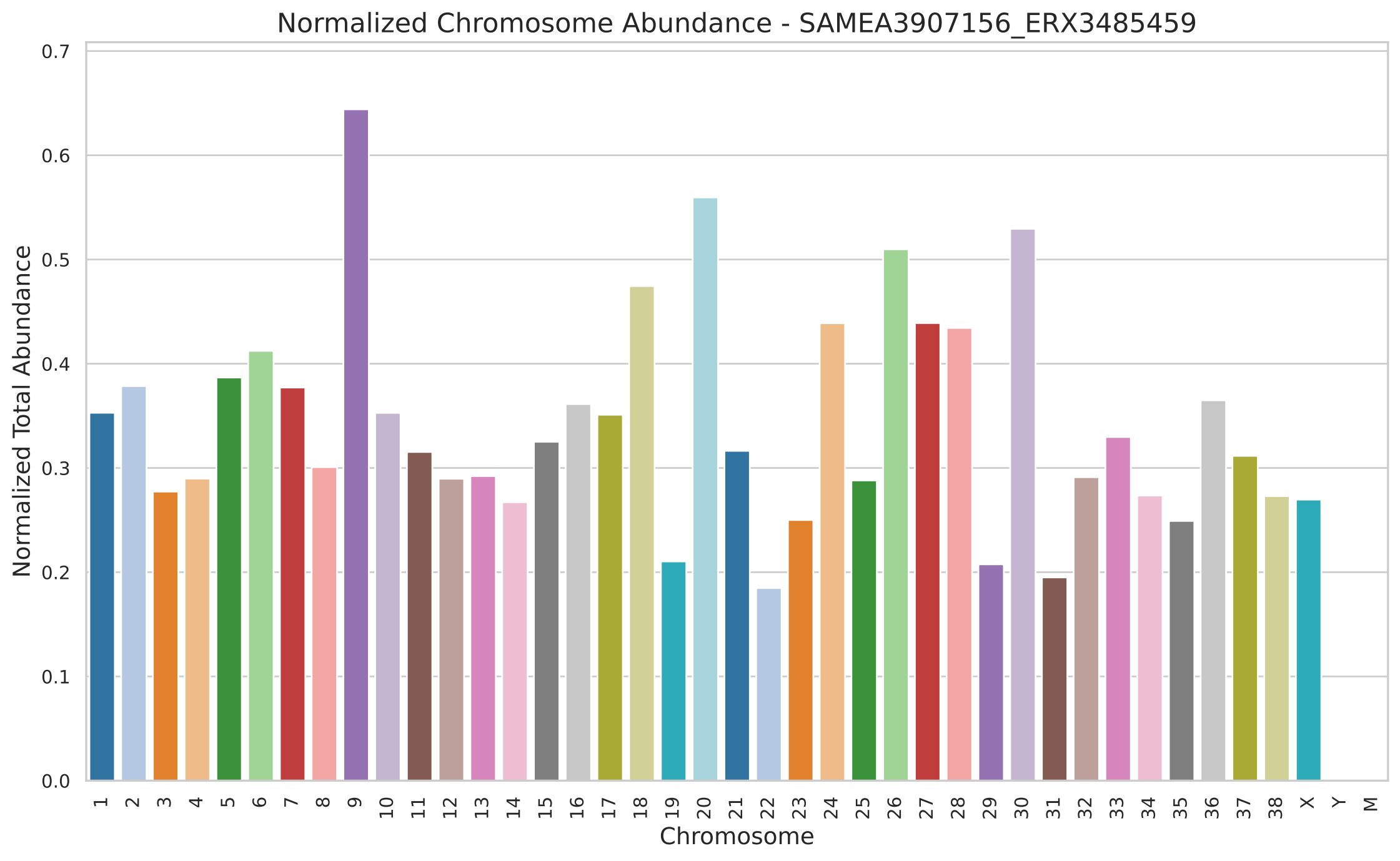

Normalized Chromosome Abundance - SAMEA3907120_ERX3485457
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

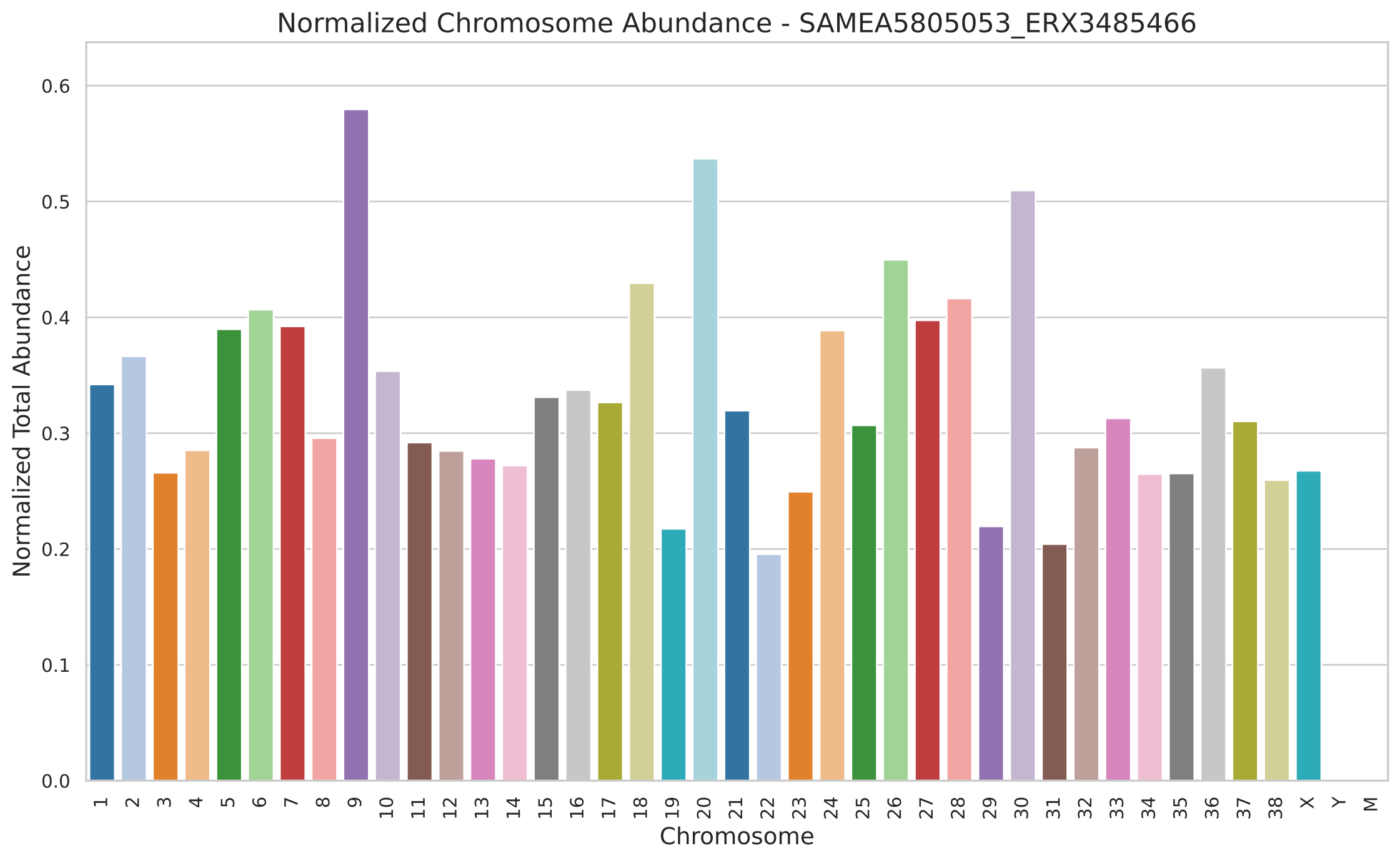

Normalized Chromosome Abundance - SAMEA3907375_ERX3485403
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

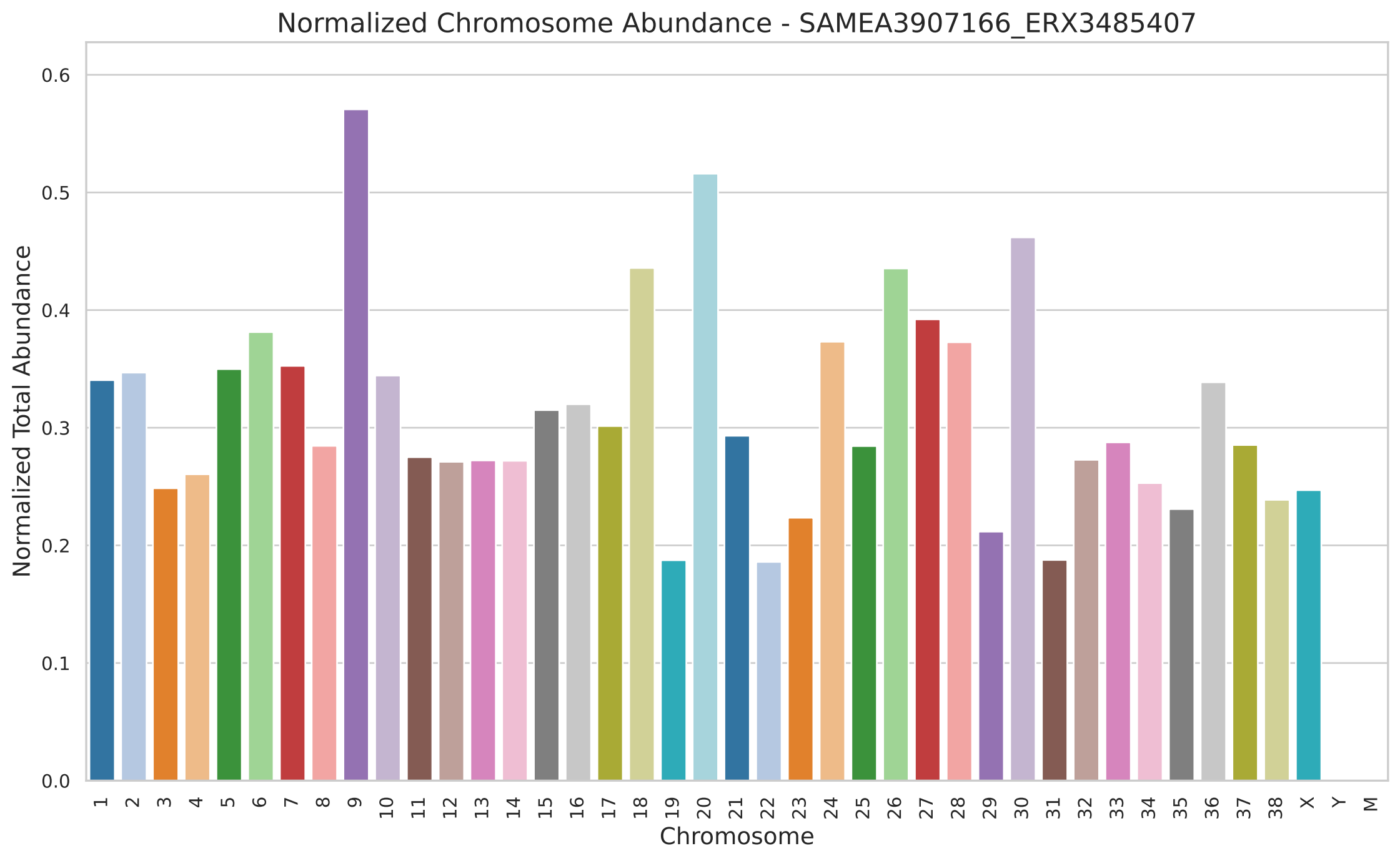

Normalized Chromosome Abundance - SAMEA5805078_ERX3485384
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

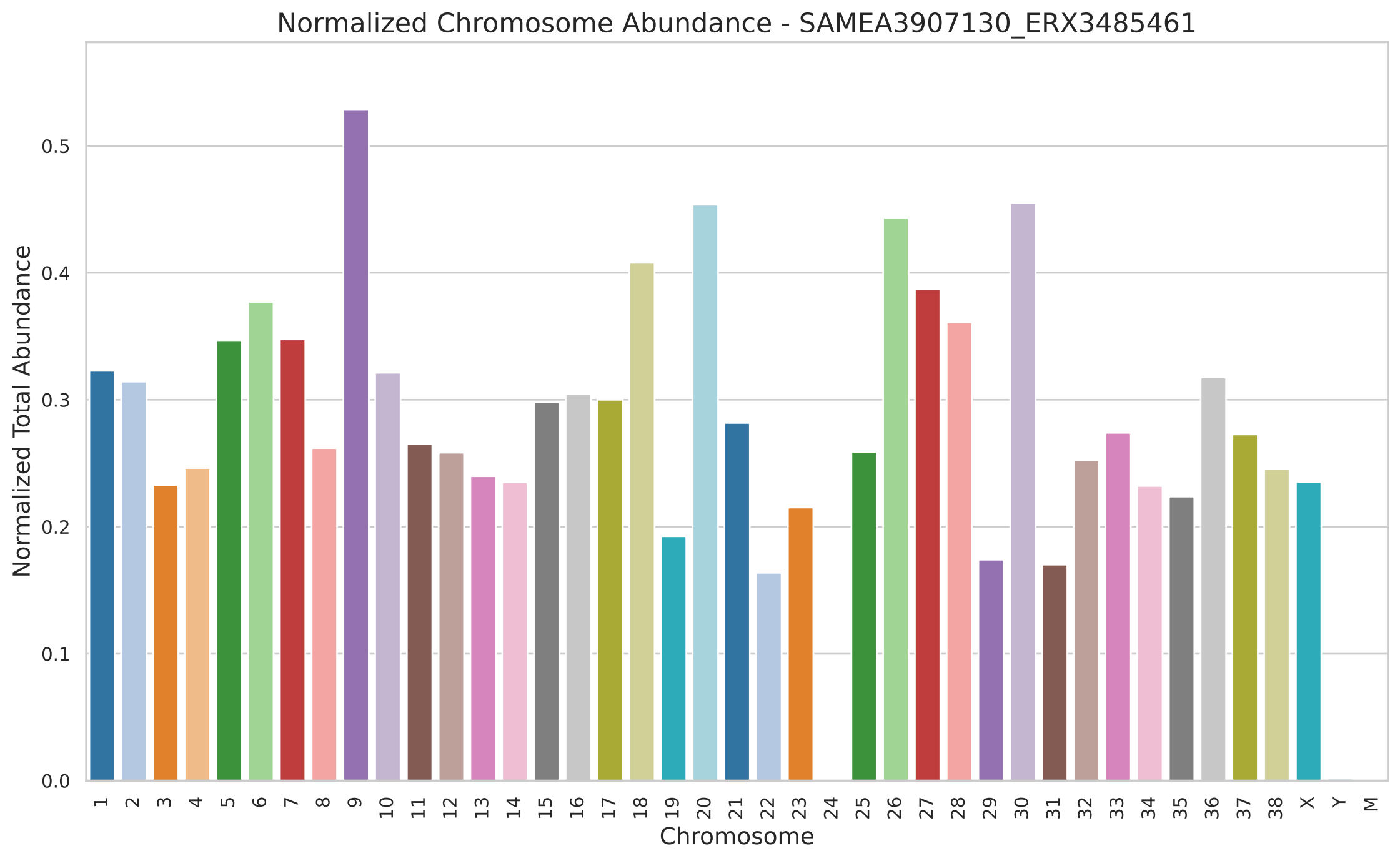

Normalized Chromosome Abundance - SAMEA5805046_ERX3485464
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

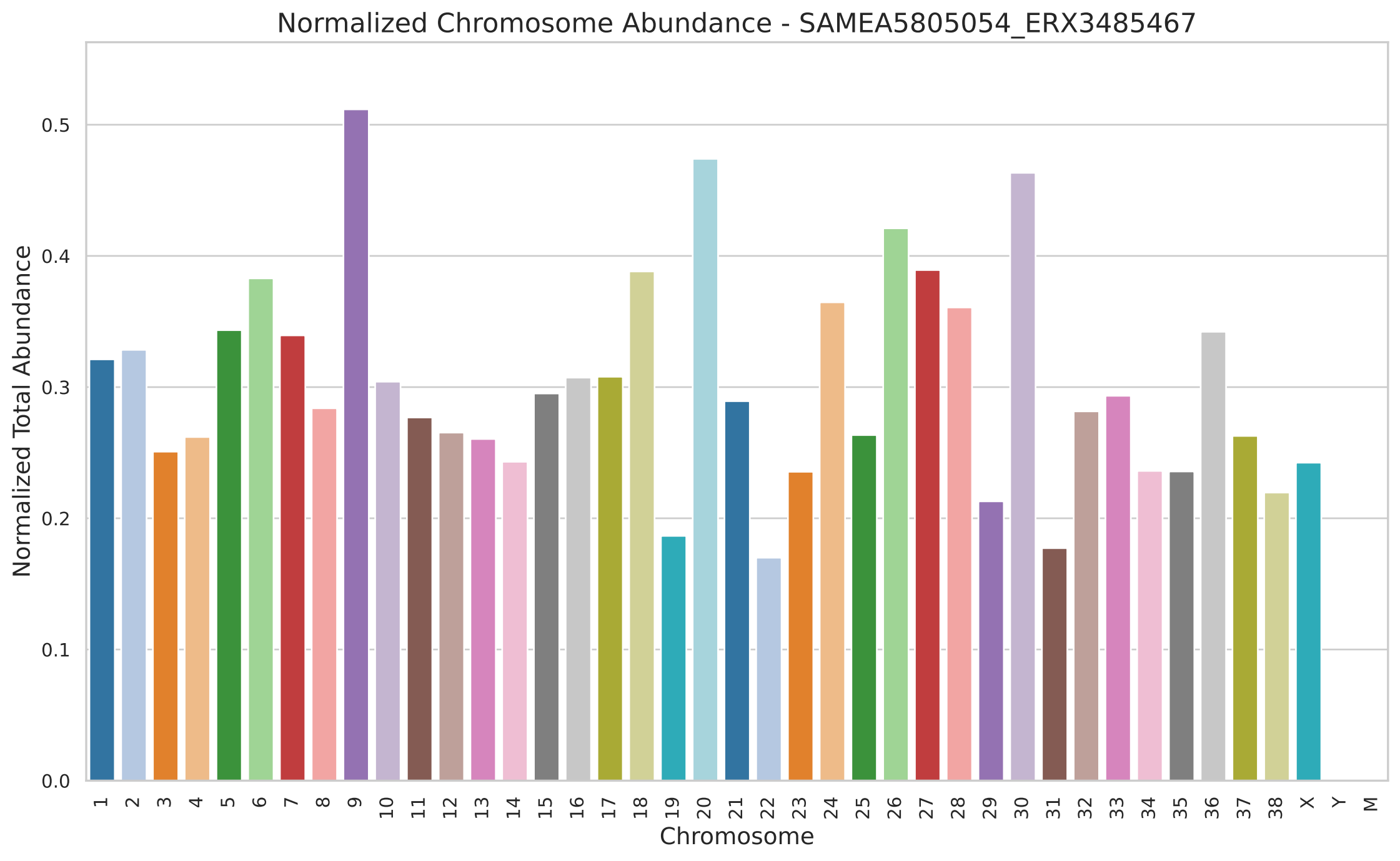

Normalized Chromosome Abundance - SAMEA3907102_ERX3485460
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

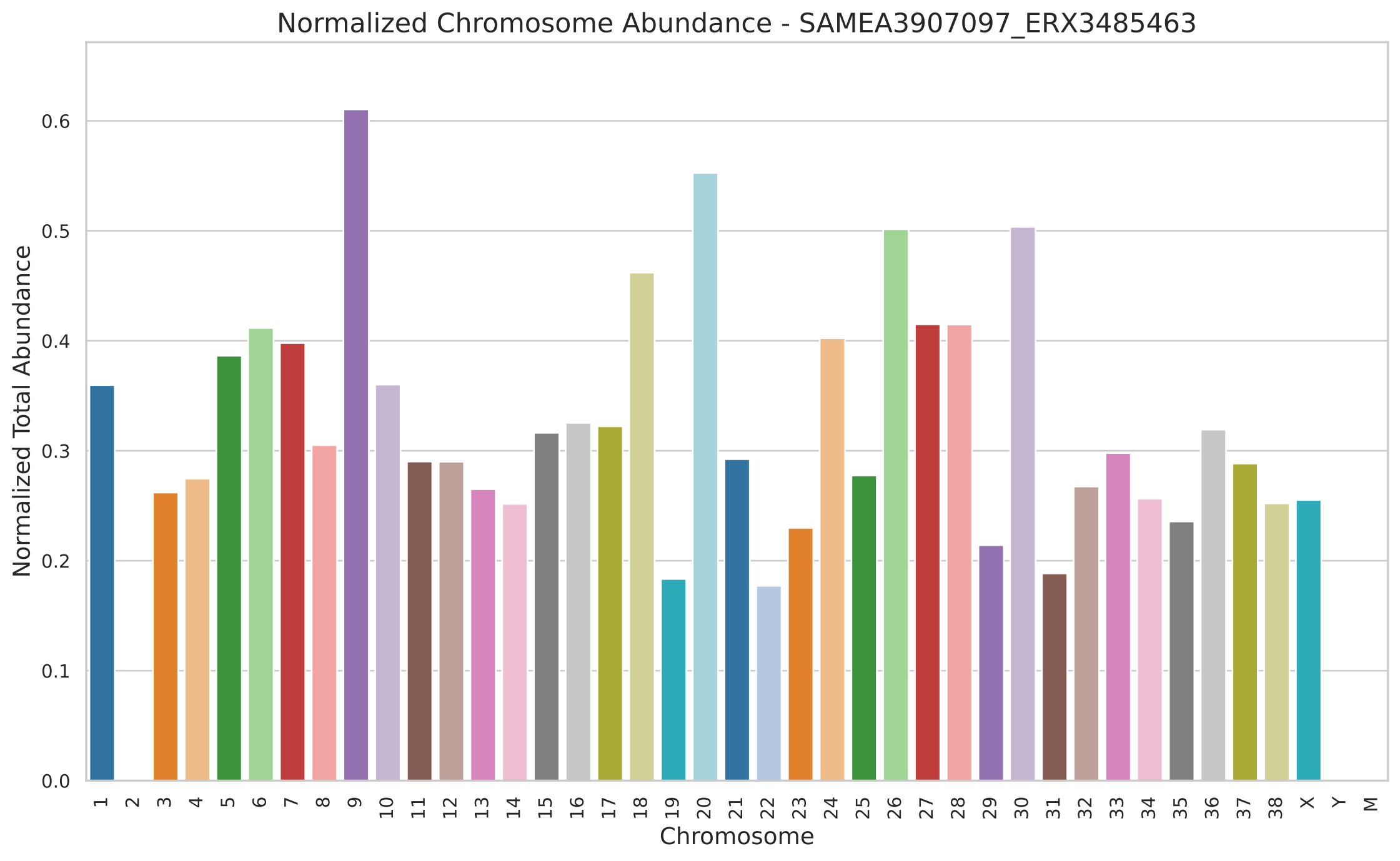

Normalized Chromosome Abundance - SAMEA3907156_ERX3485459
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

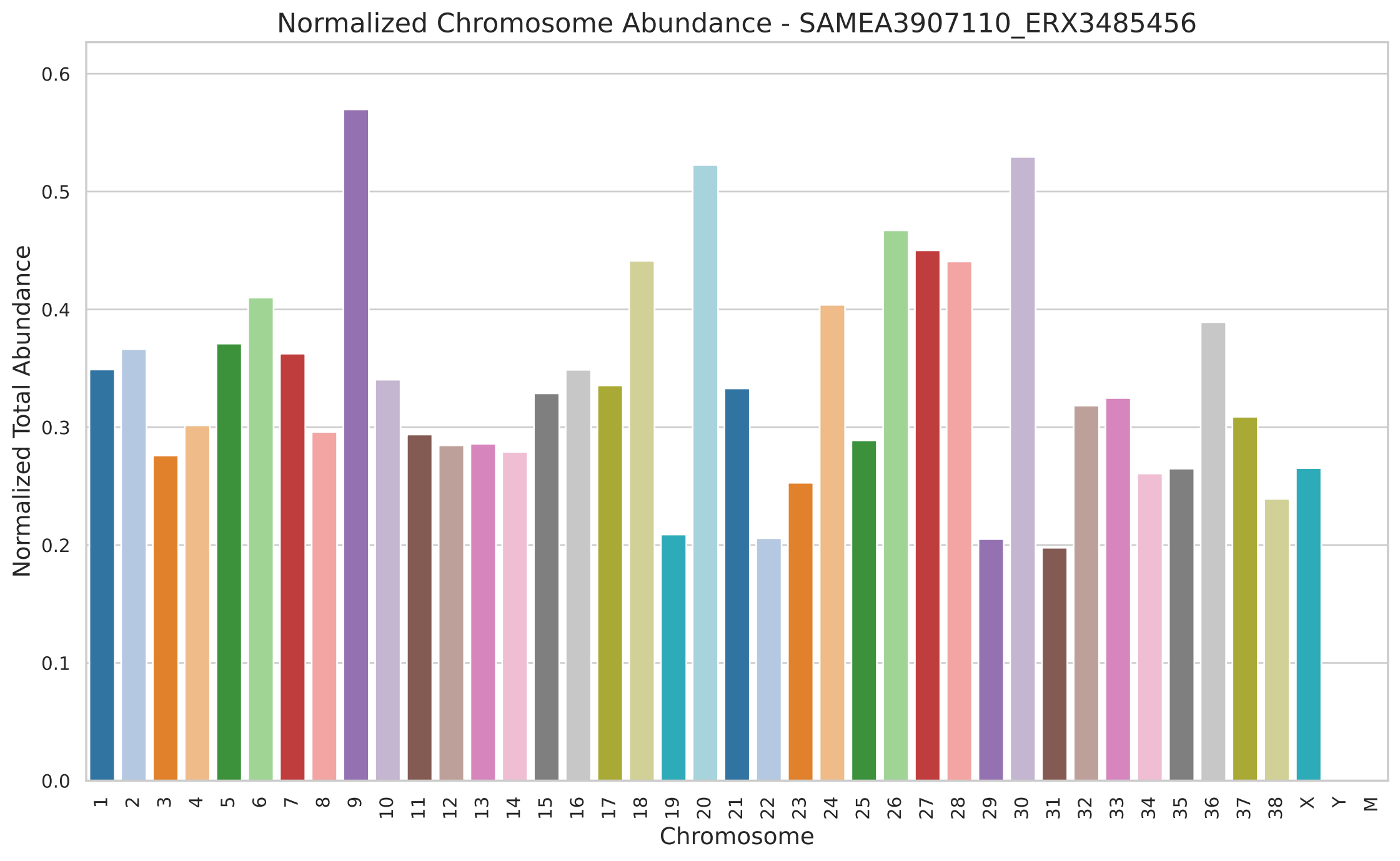

Normalized Chromosome Abundance - SAMEA5805053_ERX3485466
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

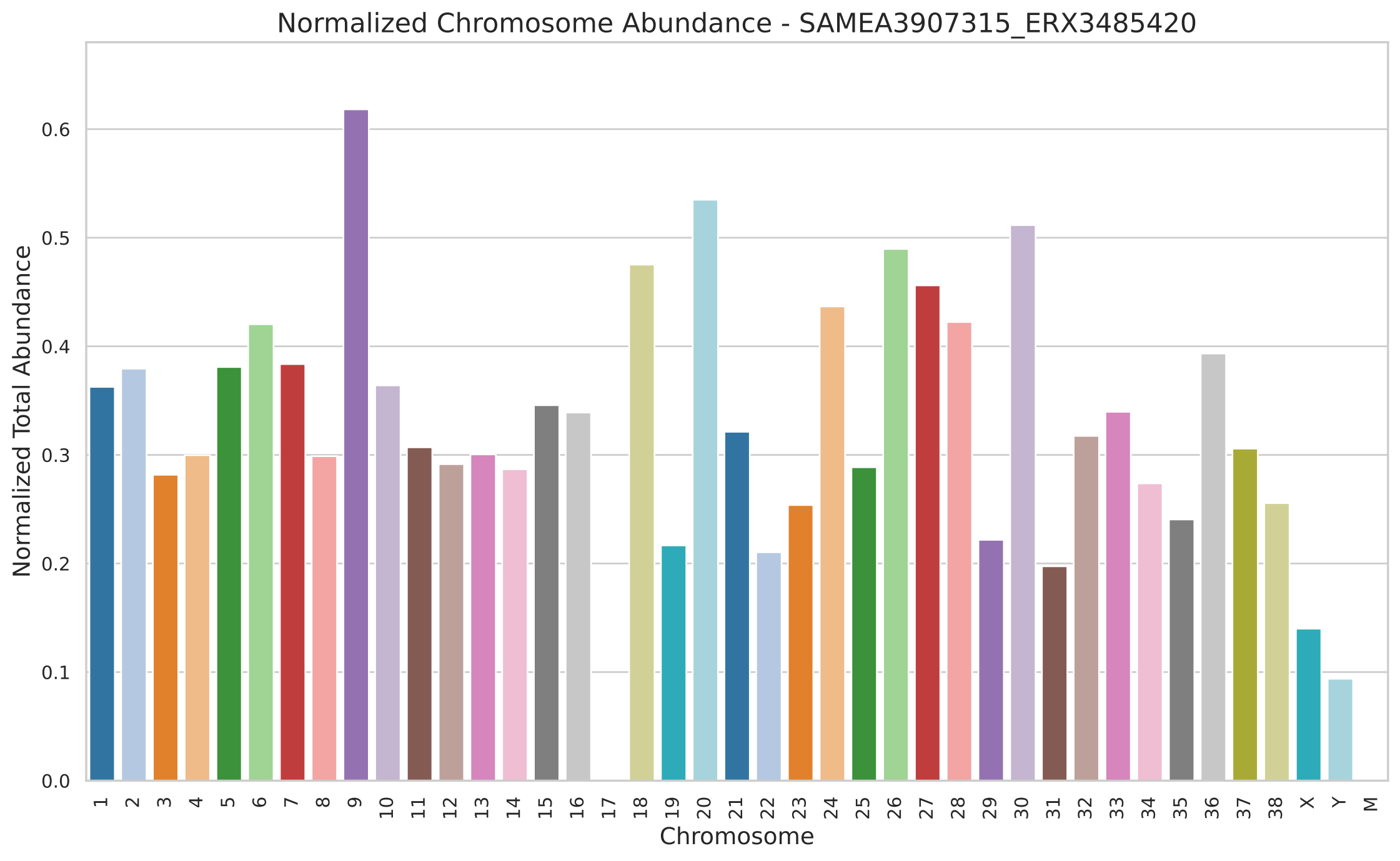

Normalized Chromosome Abundance - SAMEA3907166_ERX3485407
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

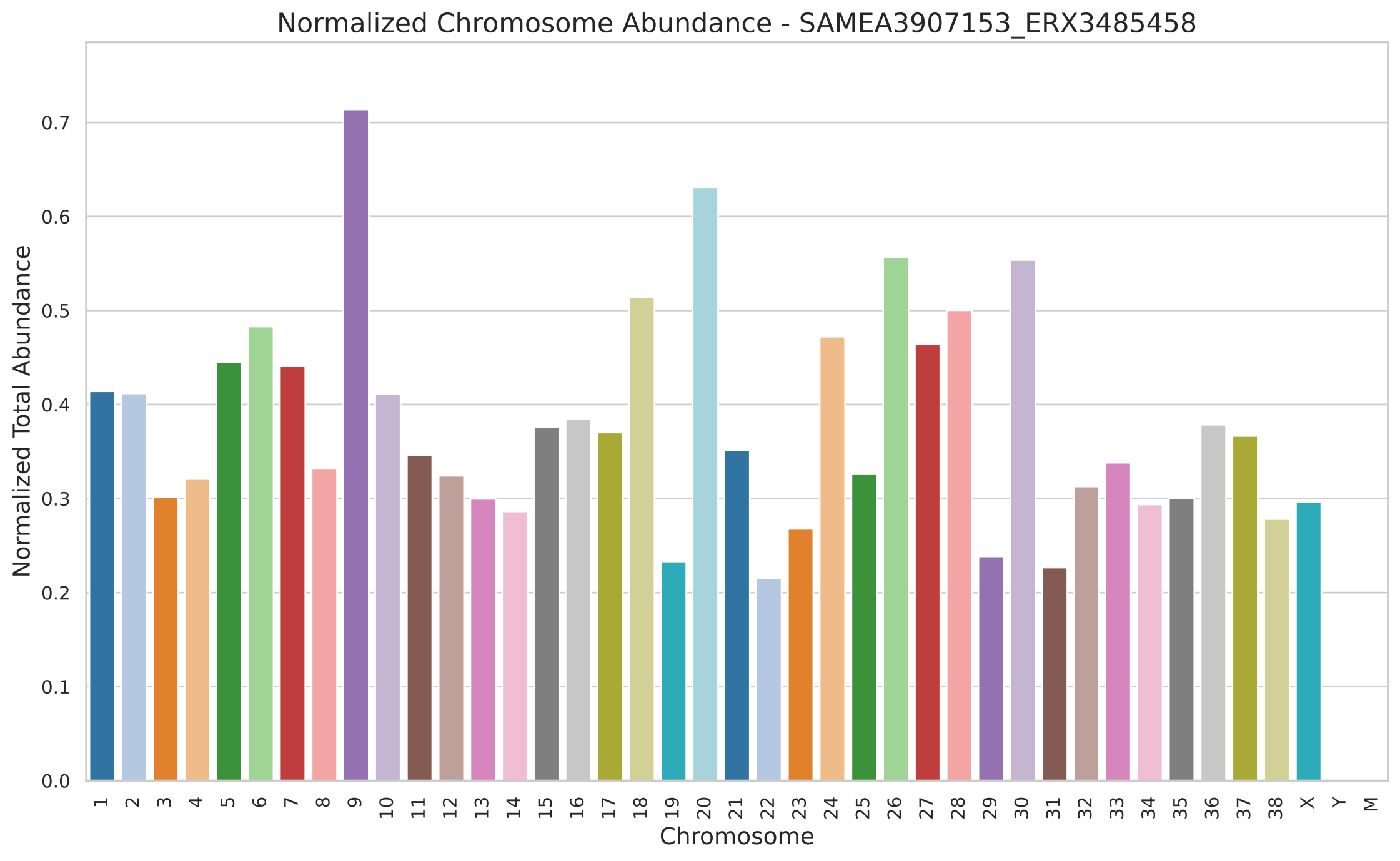

Normalized Chromosome Abundance - SAMEA3907130_ERX3485461
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

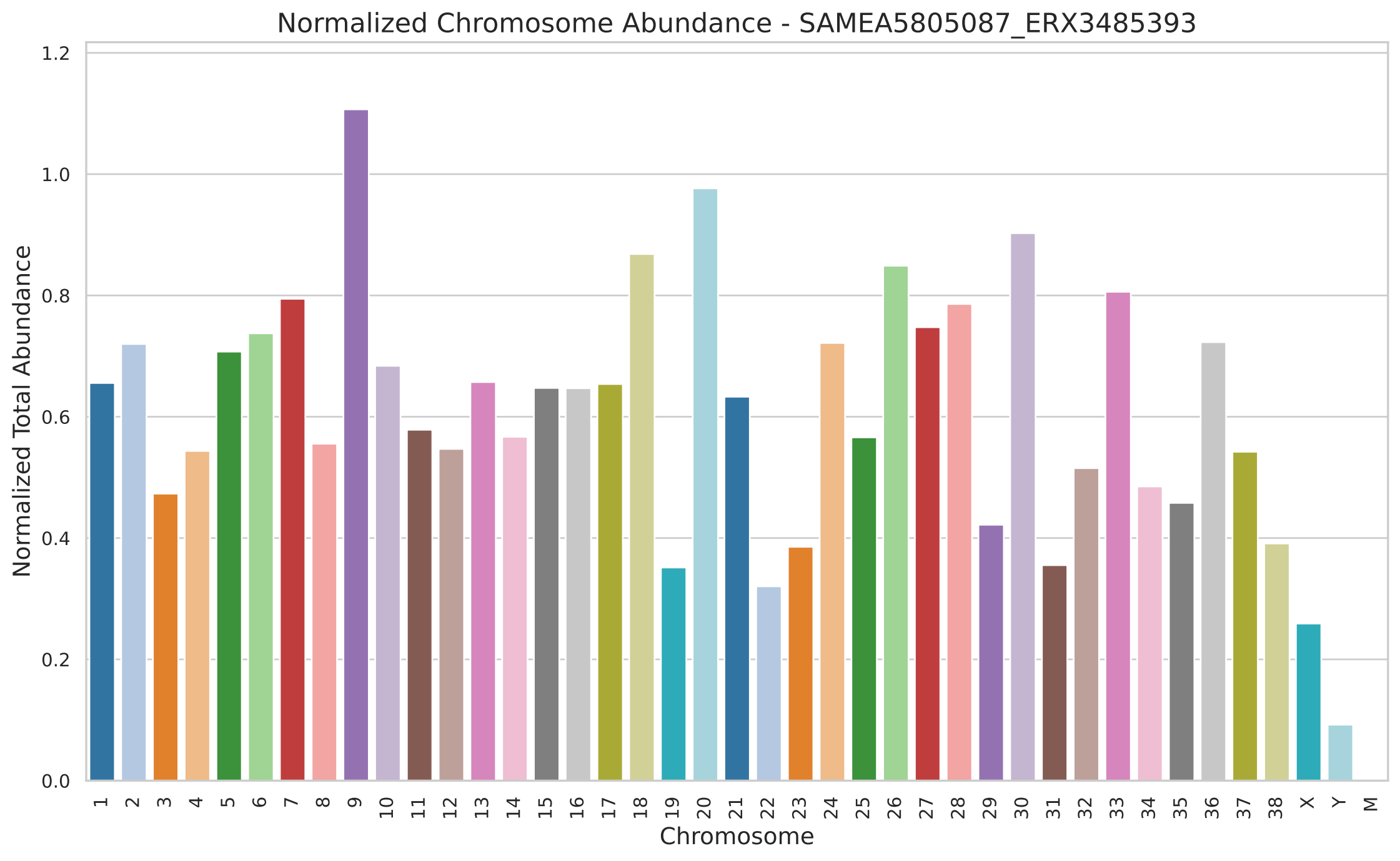

Normalized Chromosome Abundance - SAMEA5805054_ERX3485467
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

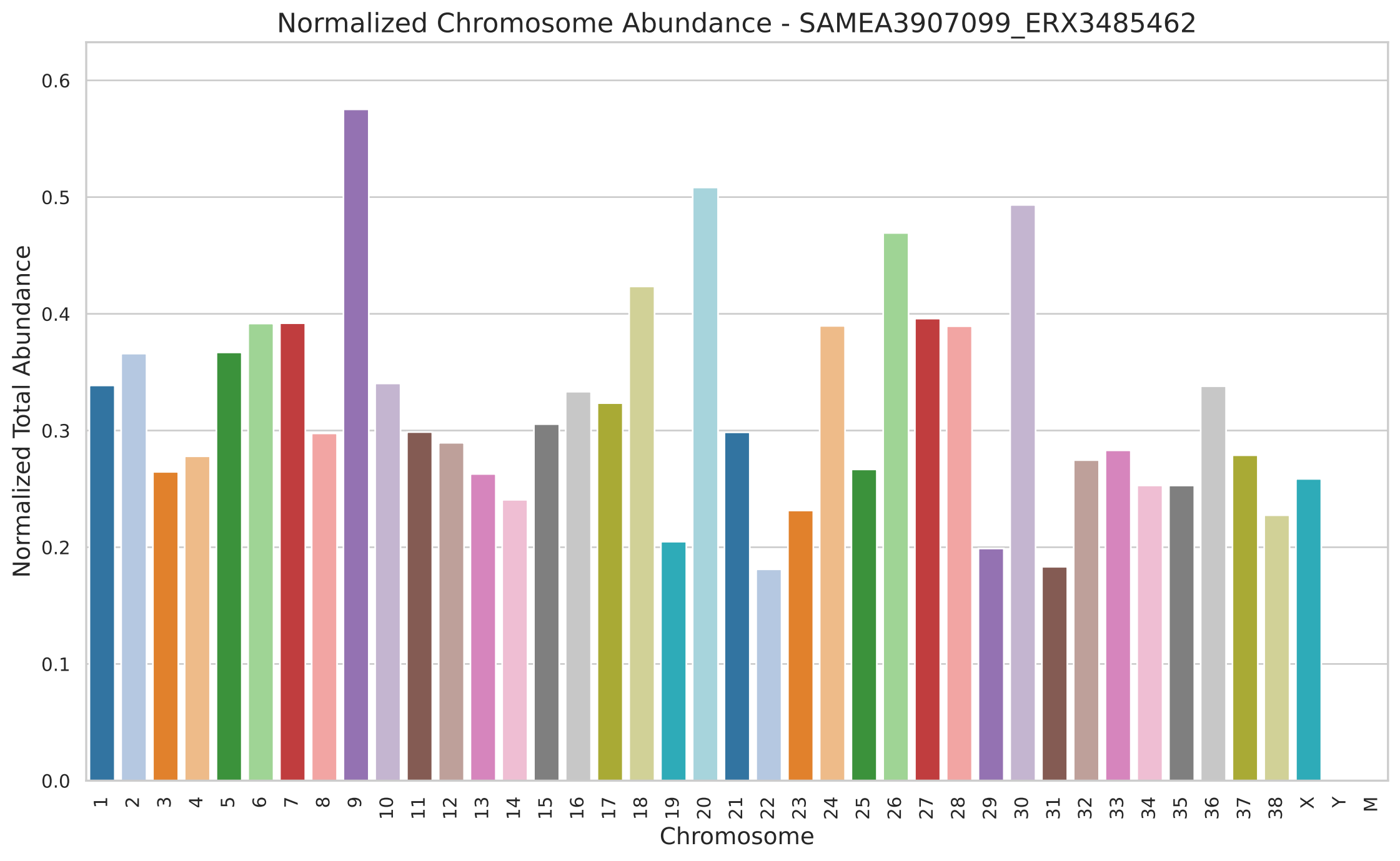

Normalized Chromosome Abundance - SAMEA3907097_ERX3485463
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

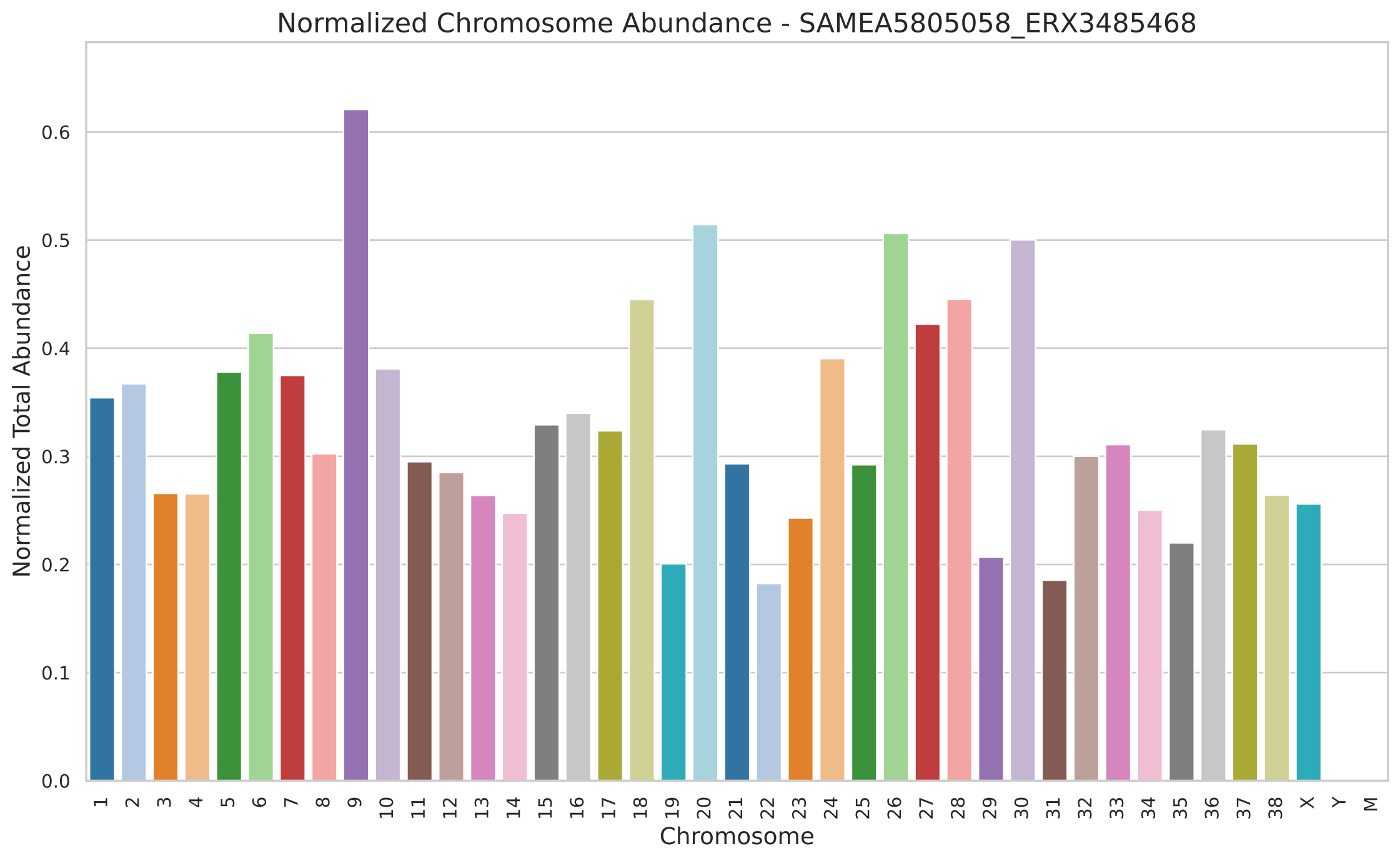

Normalized Chromosome Abundance - SAMEA3907110_ERX3485456
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

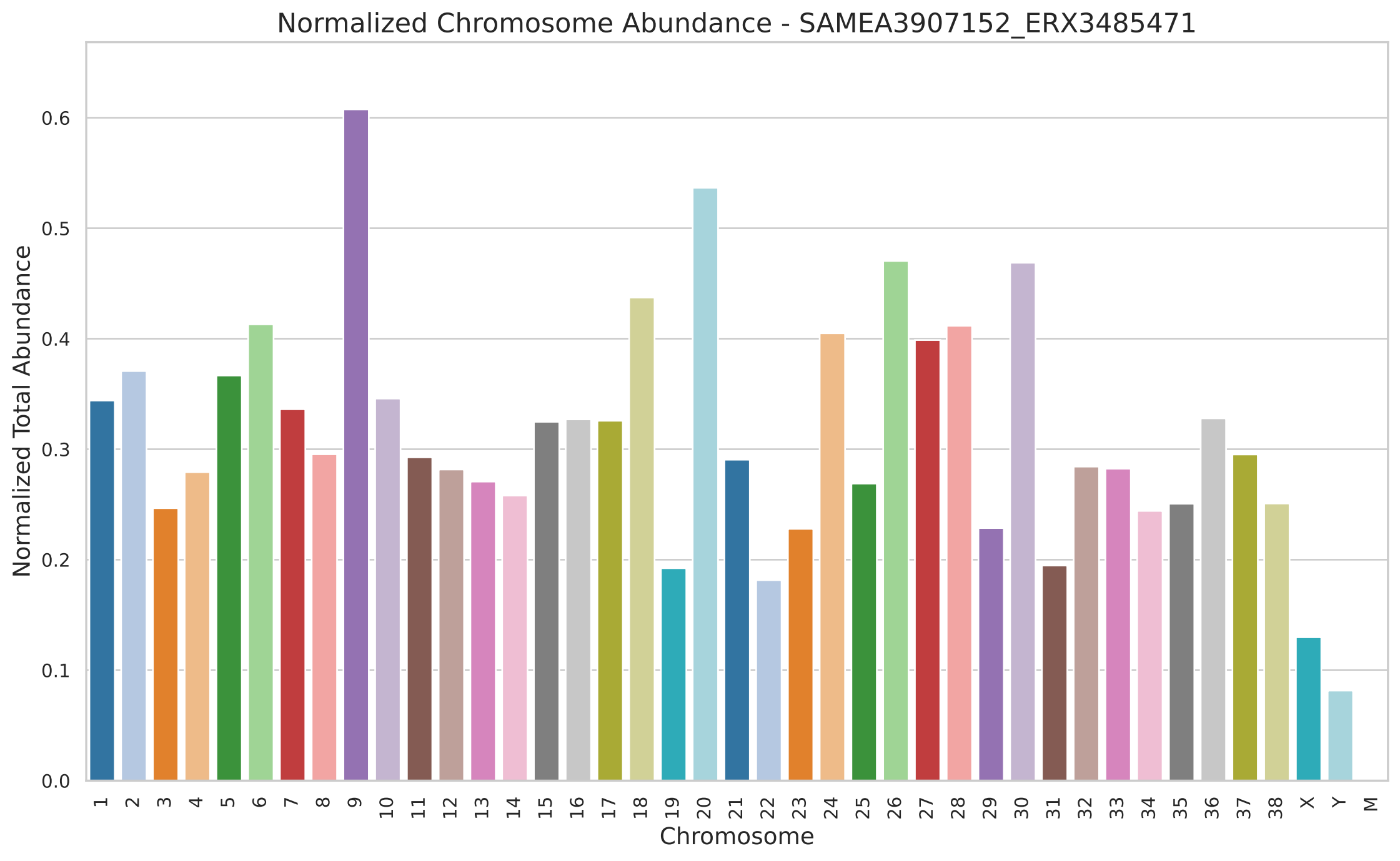

Normalized Chromosome Abundance - SAMEA3907315_ERX3485420
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

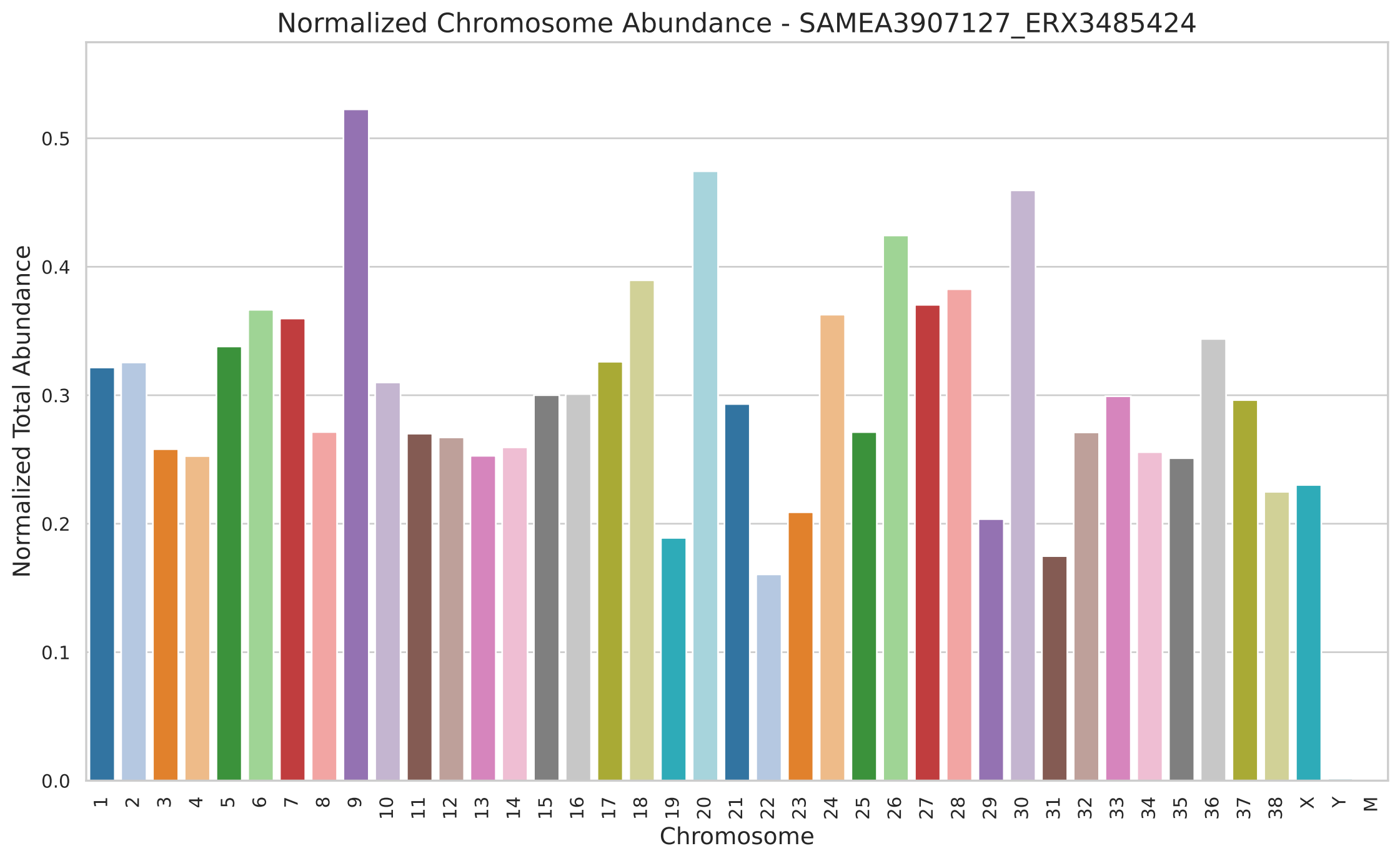

Normalized Chromosome Abundance - SAMEA3907153_ERX3485458
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

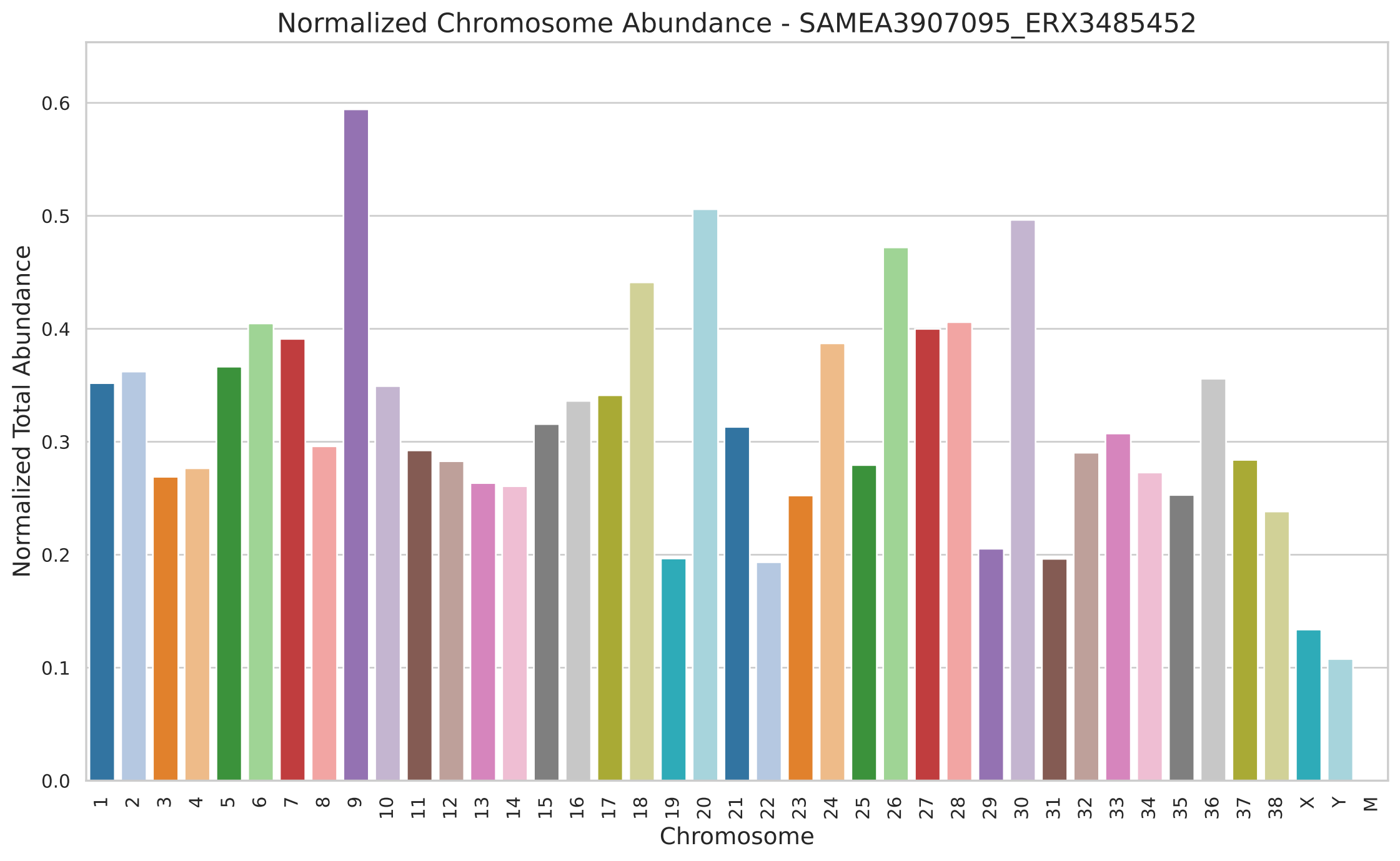

Normalized Chromosome Abundance - SAMEA5805087_ERX3485393
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

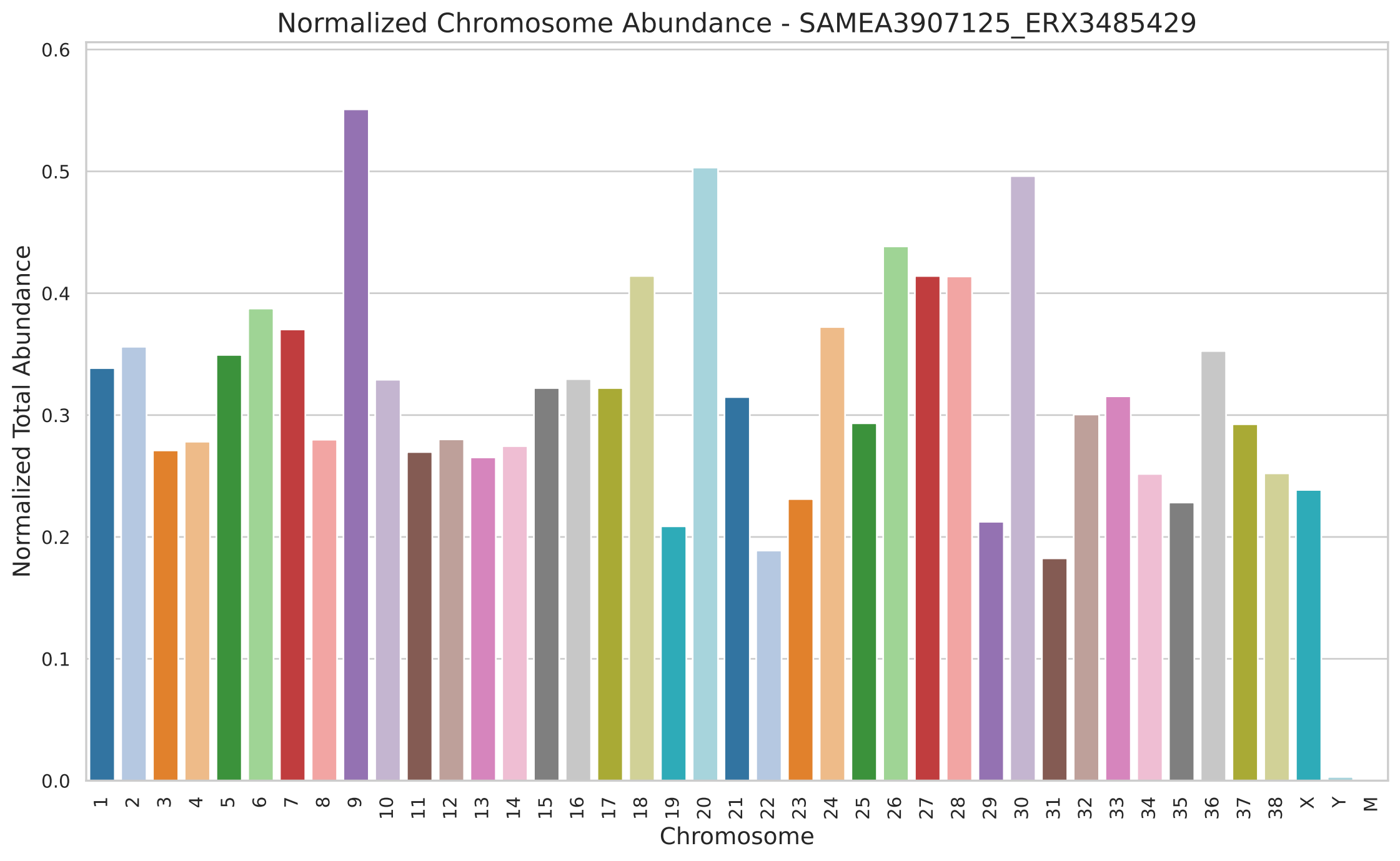

Normalized Chromosome Abundance - SAMEA3907099_ERX3485462
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

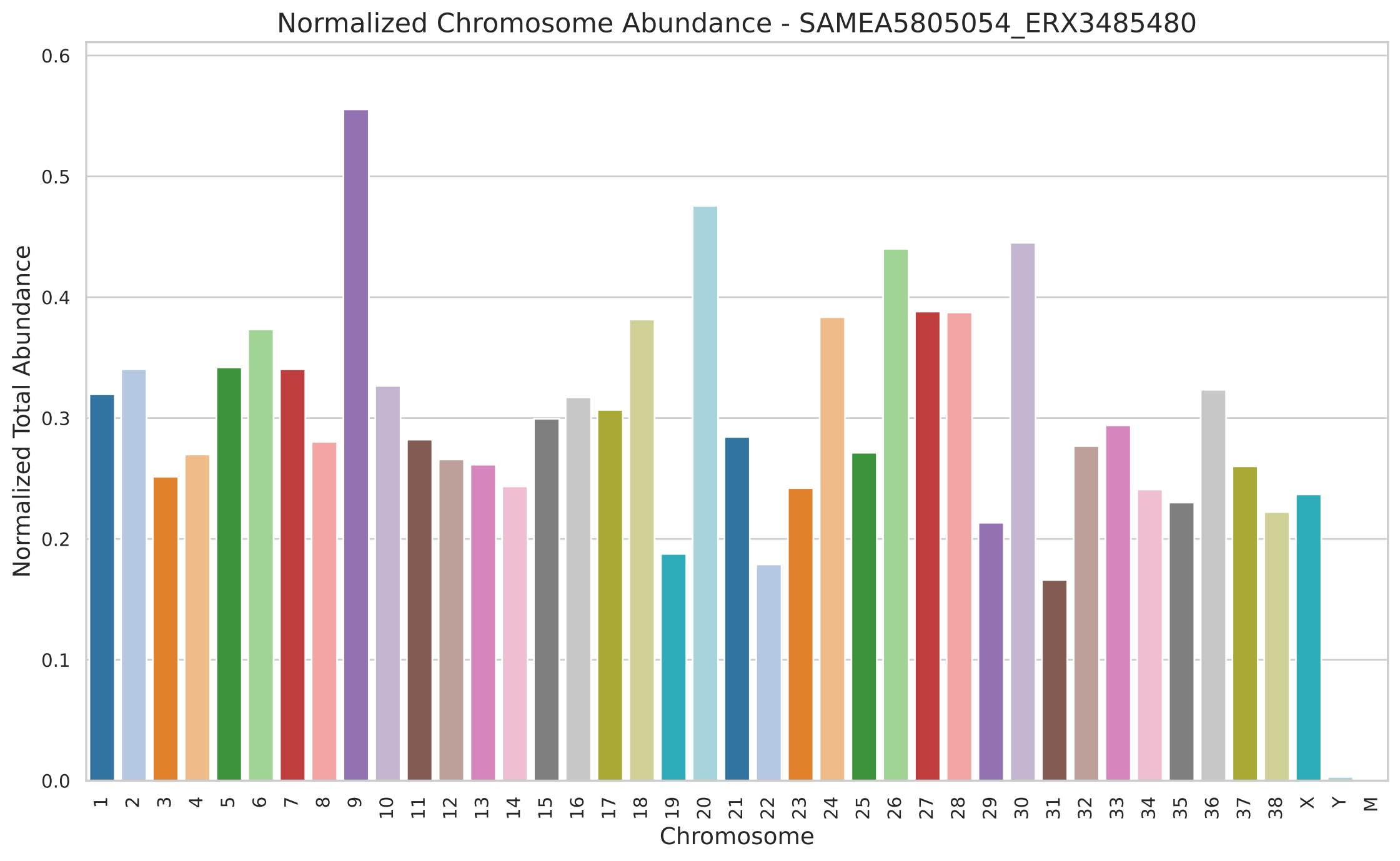

Normalized Chromosome Abundance - SAMEA5805058_ERX3485468
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

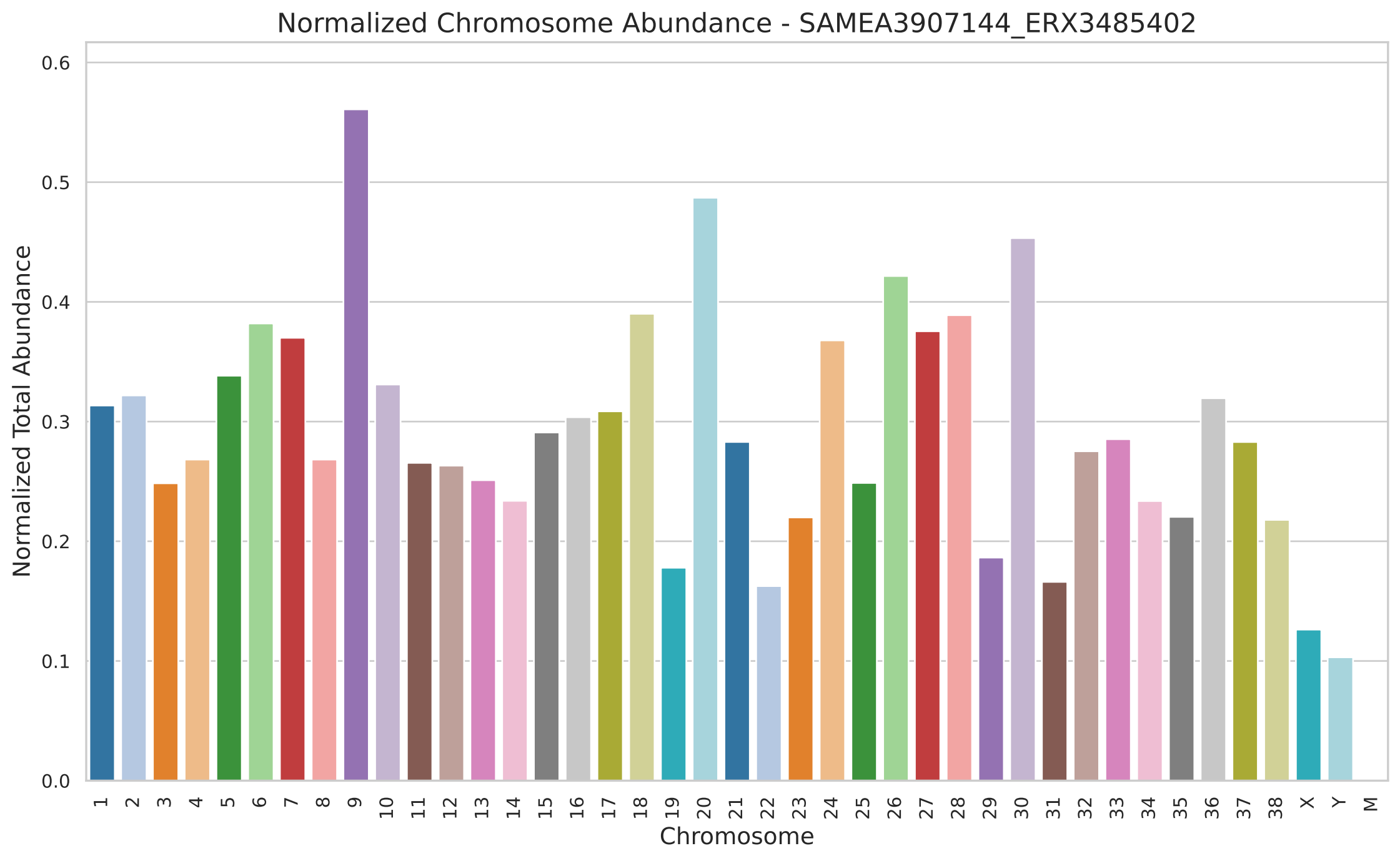

Normalized Chromosome Abundance - SAMEA3907152_ERX3485471
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

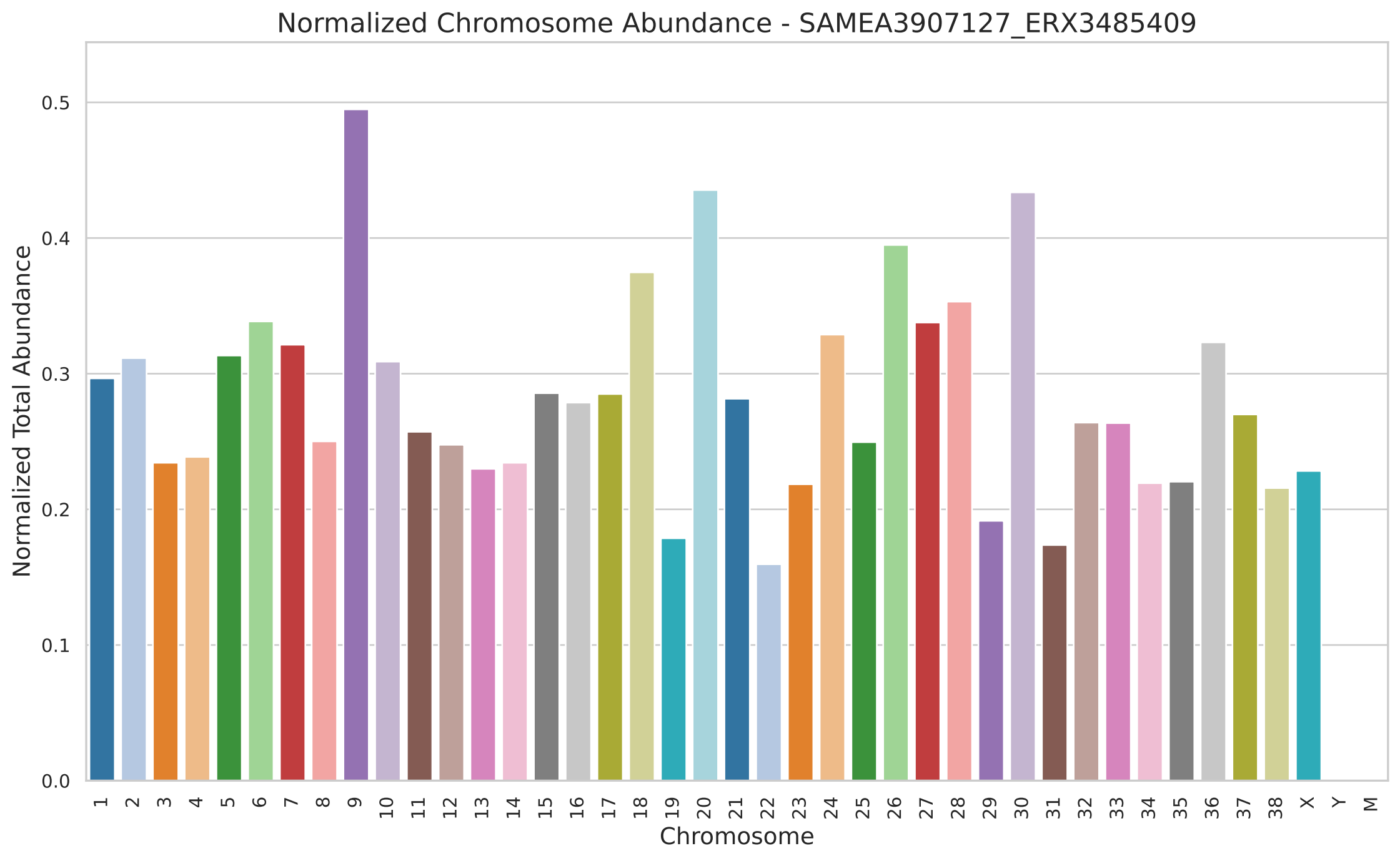

Normalized Chromosome Abundance - SAMEA3907127_ERX3485424
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

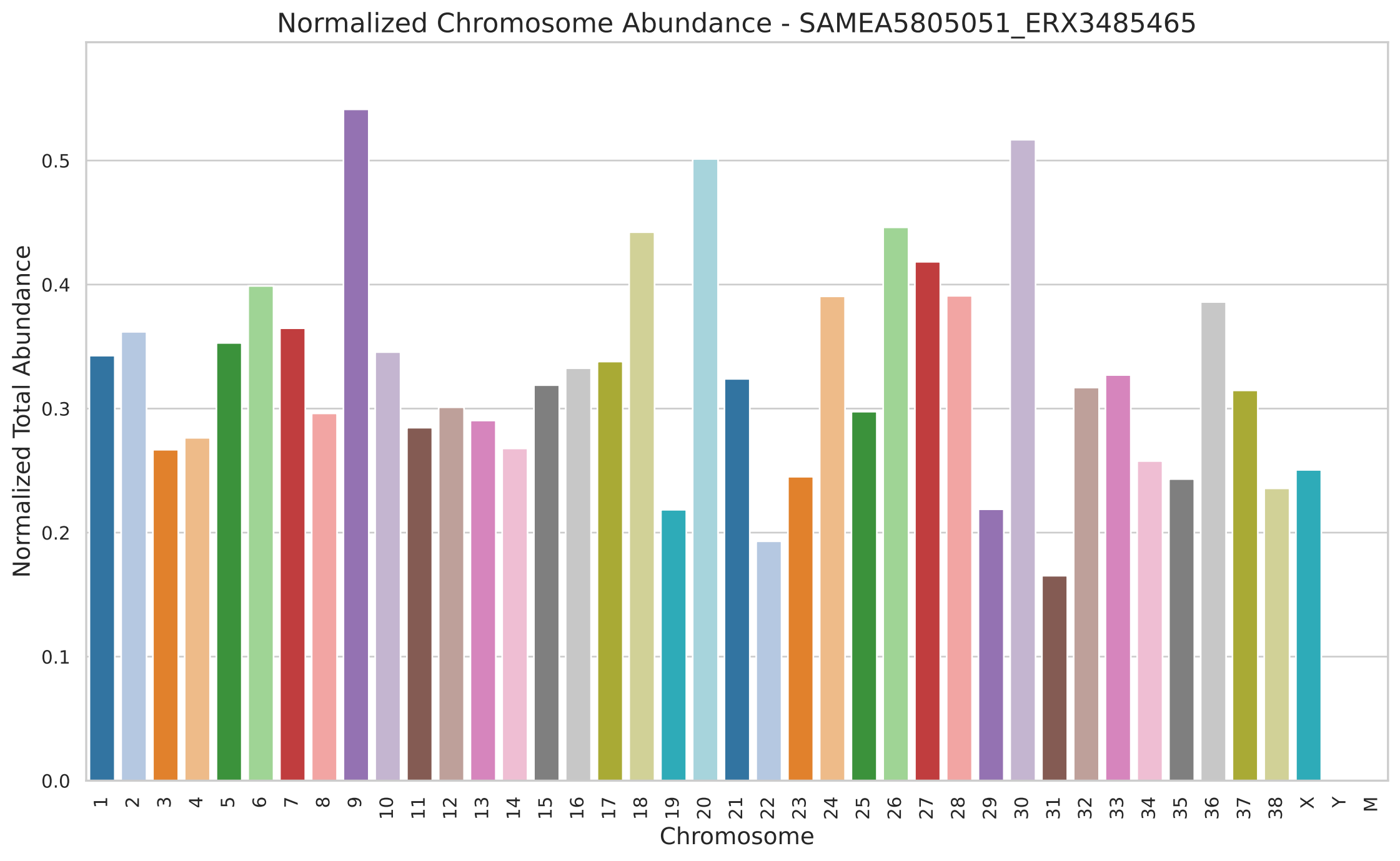

Normalized Chromosome Abundance - SAMEA3907095_ERX3485452
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

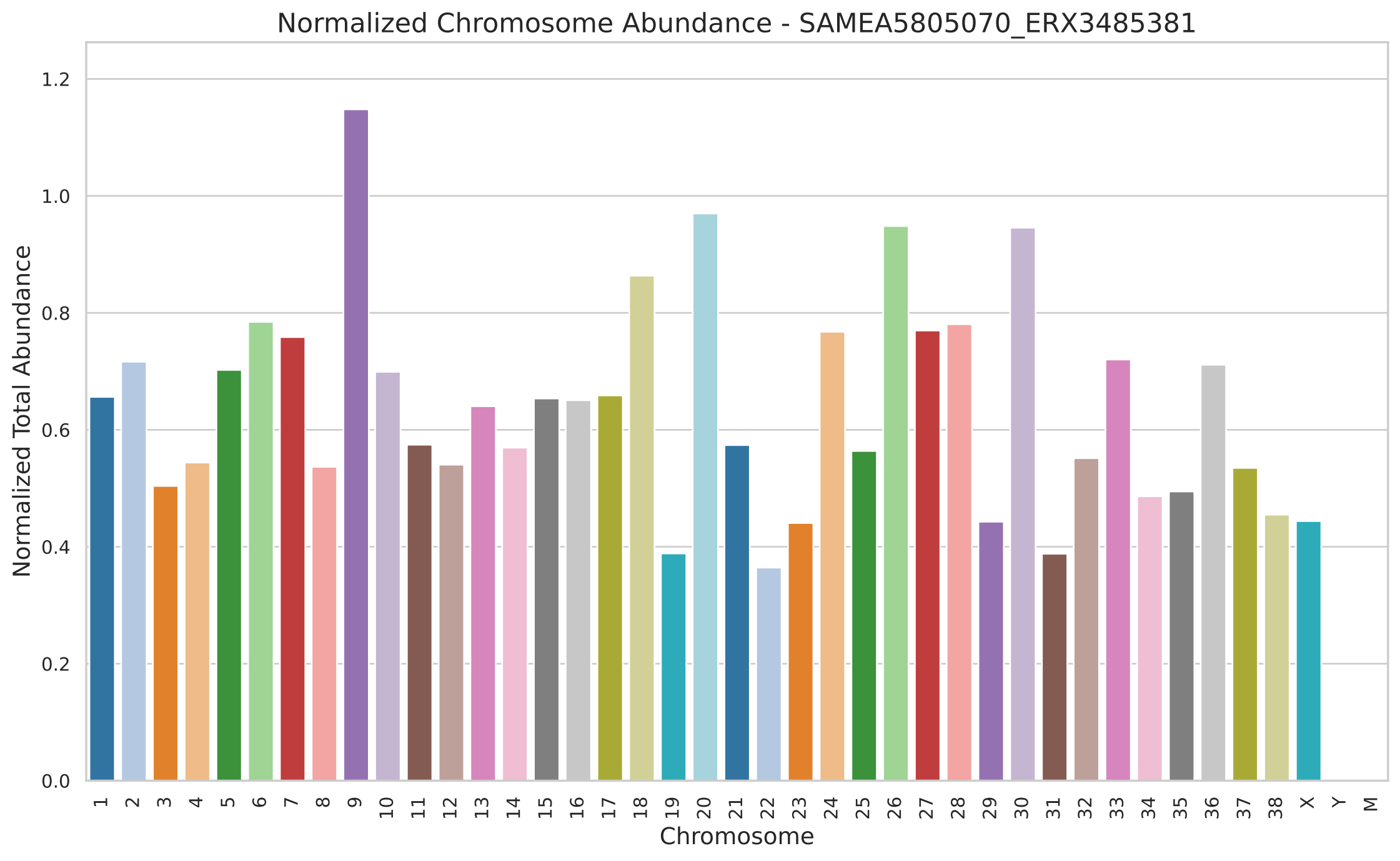

Normalized Chromosome Abundance - SAMEA3907125_ERX3485429
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

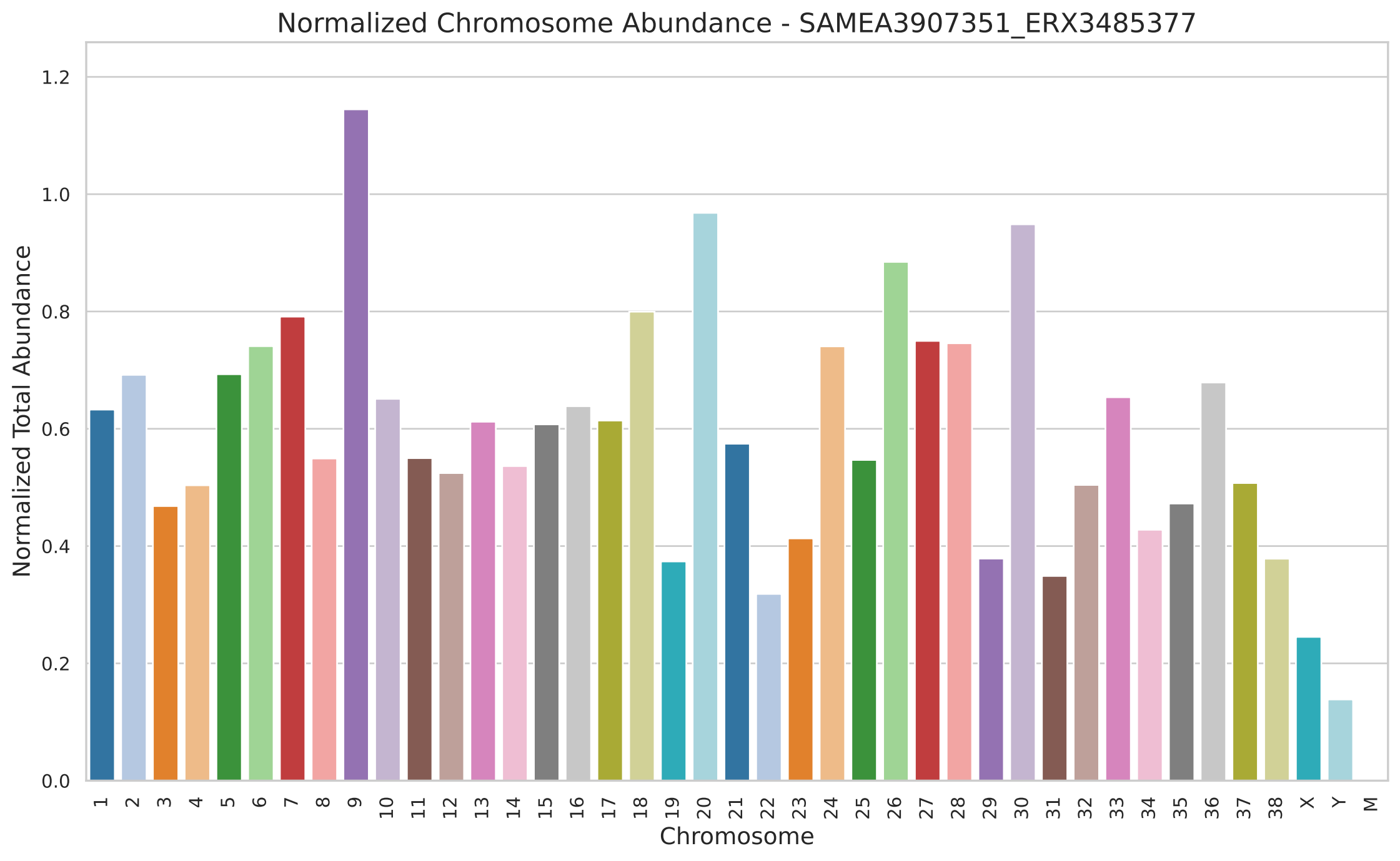

Normalized Chromosome Abundance - SAMEA5805054_ERX3485480
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

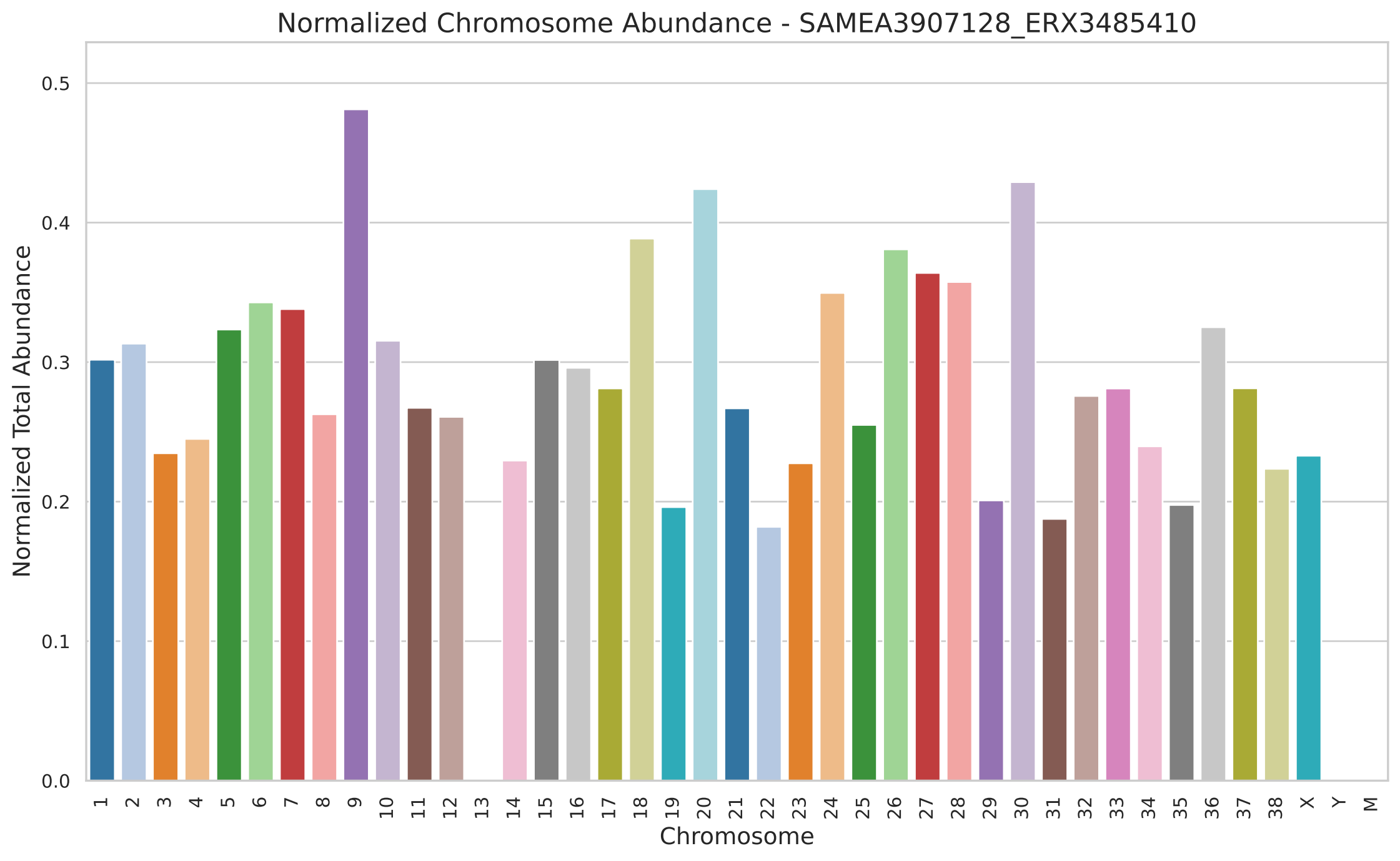

Normalized Chromosome Abundance - SAMEA3907144_ERX3485402
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

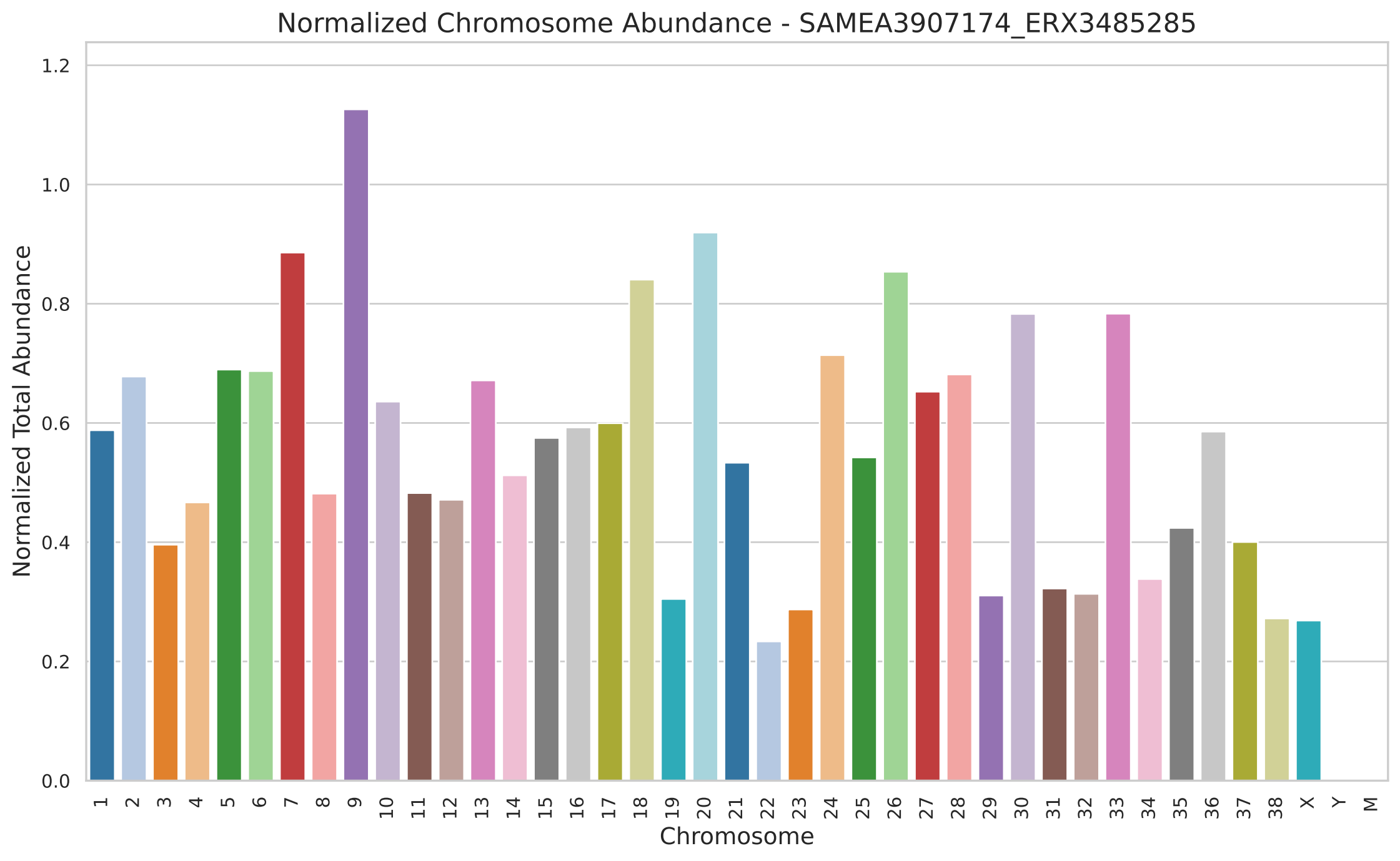

Normalized Chromosome Abundance - SAMEA3907127_ERX3485409
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

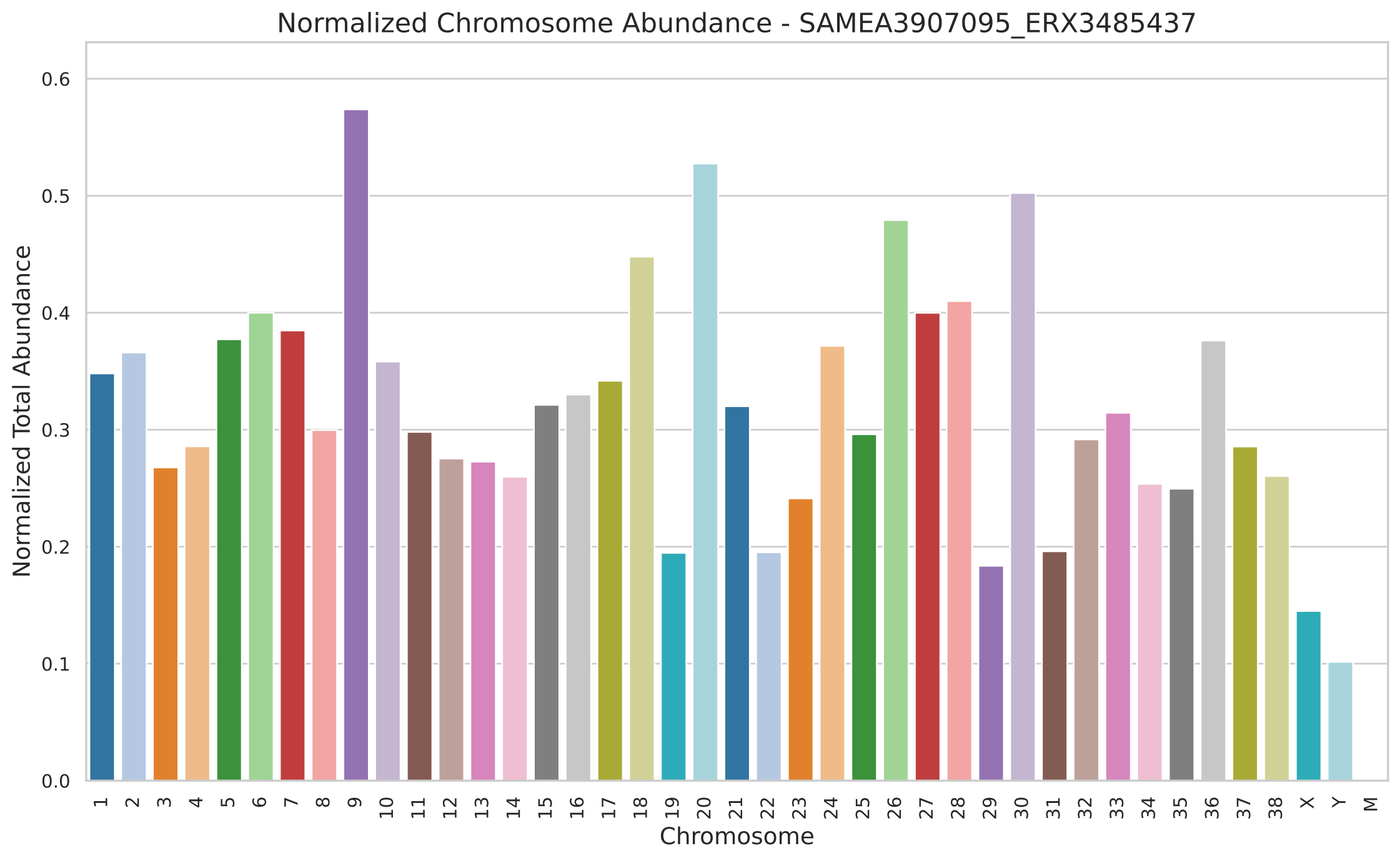

Normalized Chromosome Abundance - SAMEA5805051_ERX3485465
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

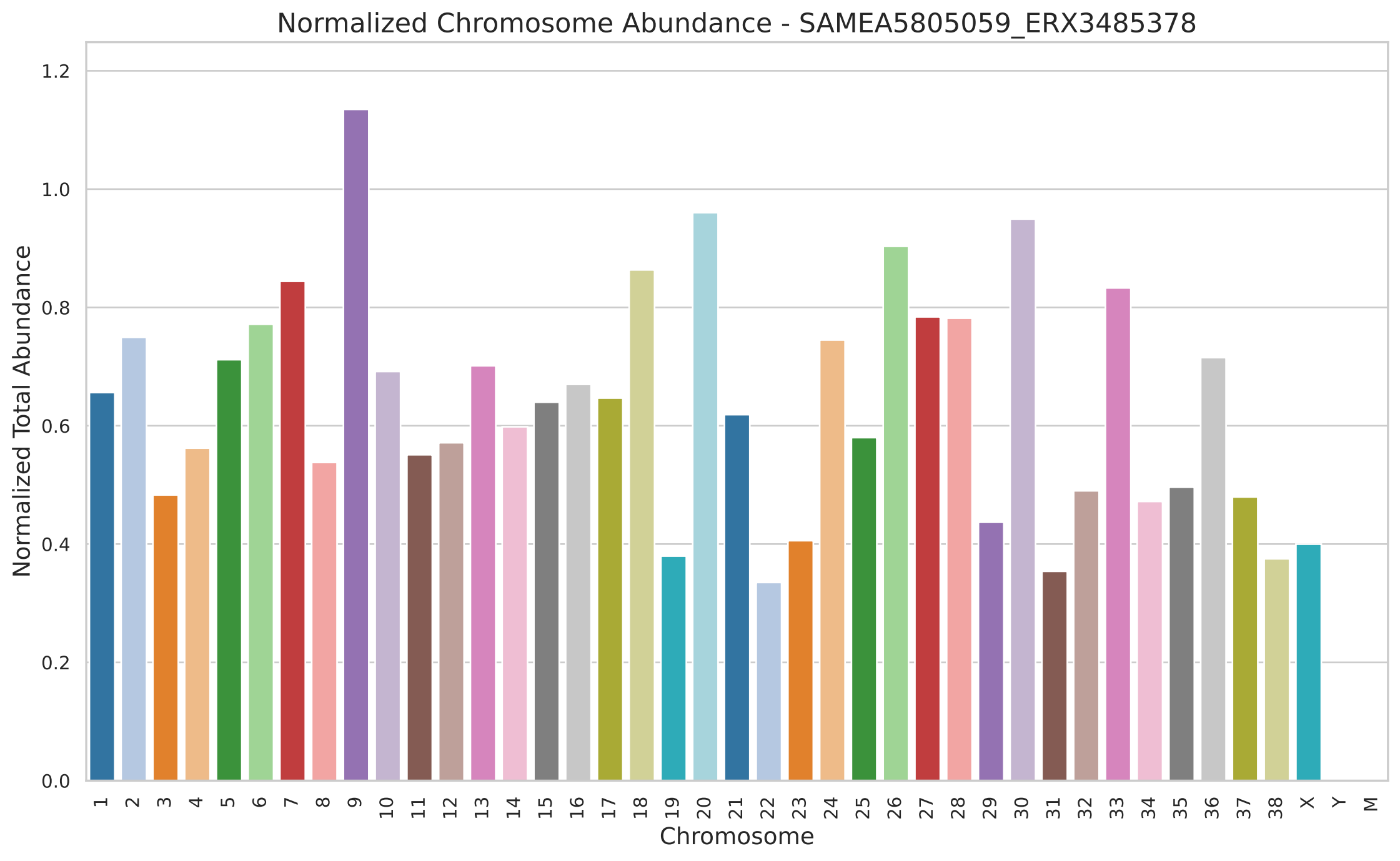

Normalized Chromosome Abundance - SAMEA5805070_ERX3485381
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

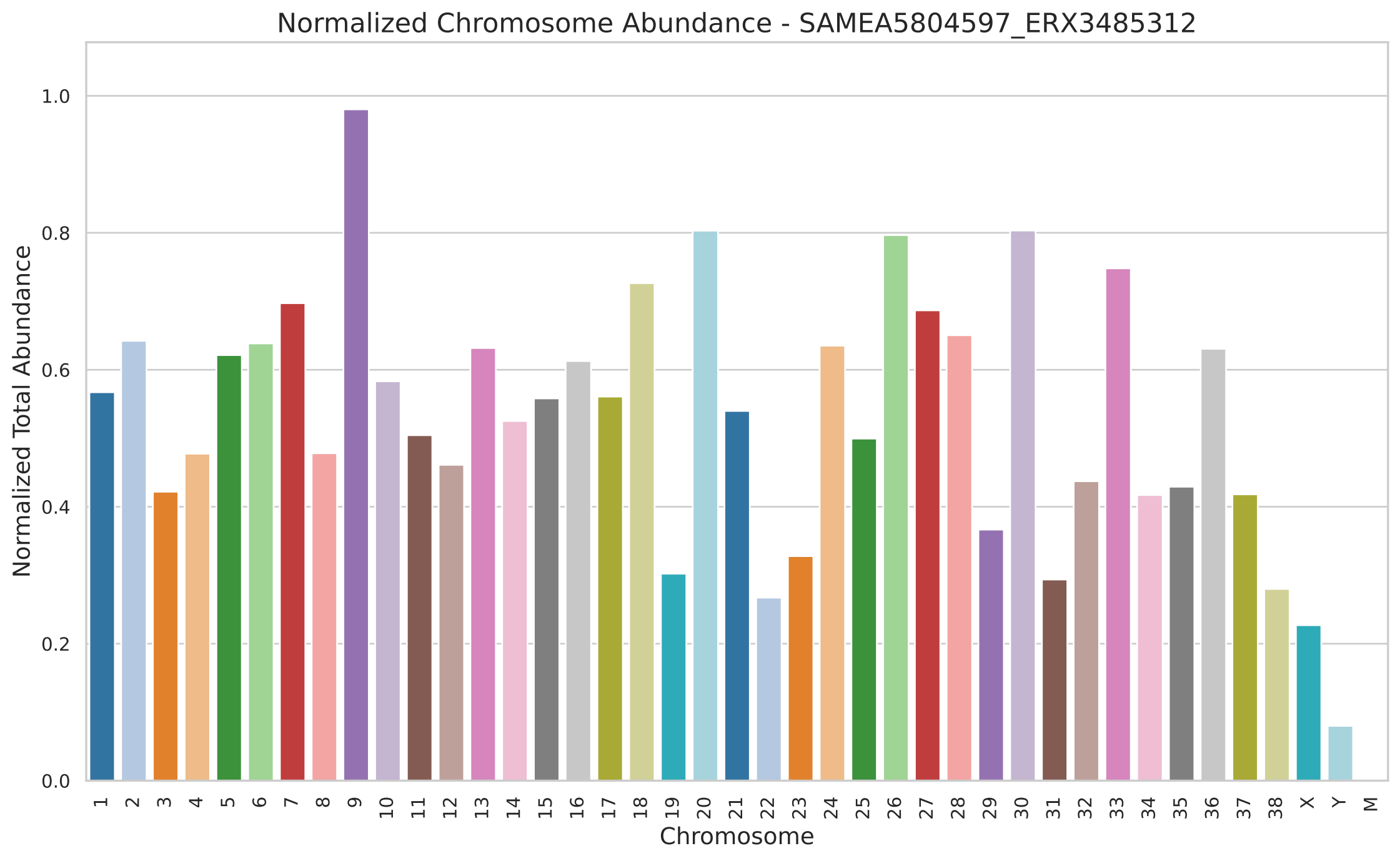

Normalized Chromosome Abundance - SAMEA3907351_ERX3485377
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

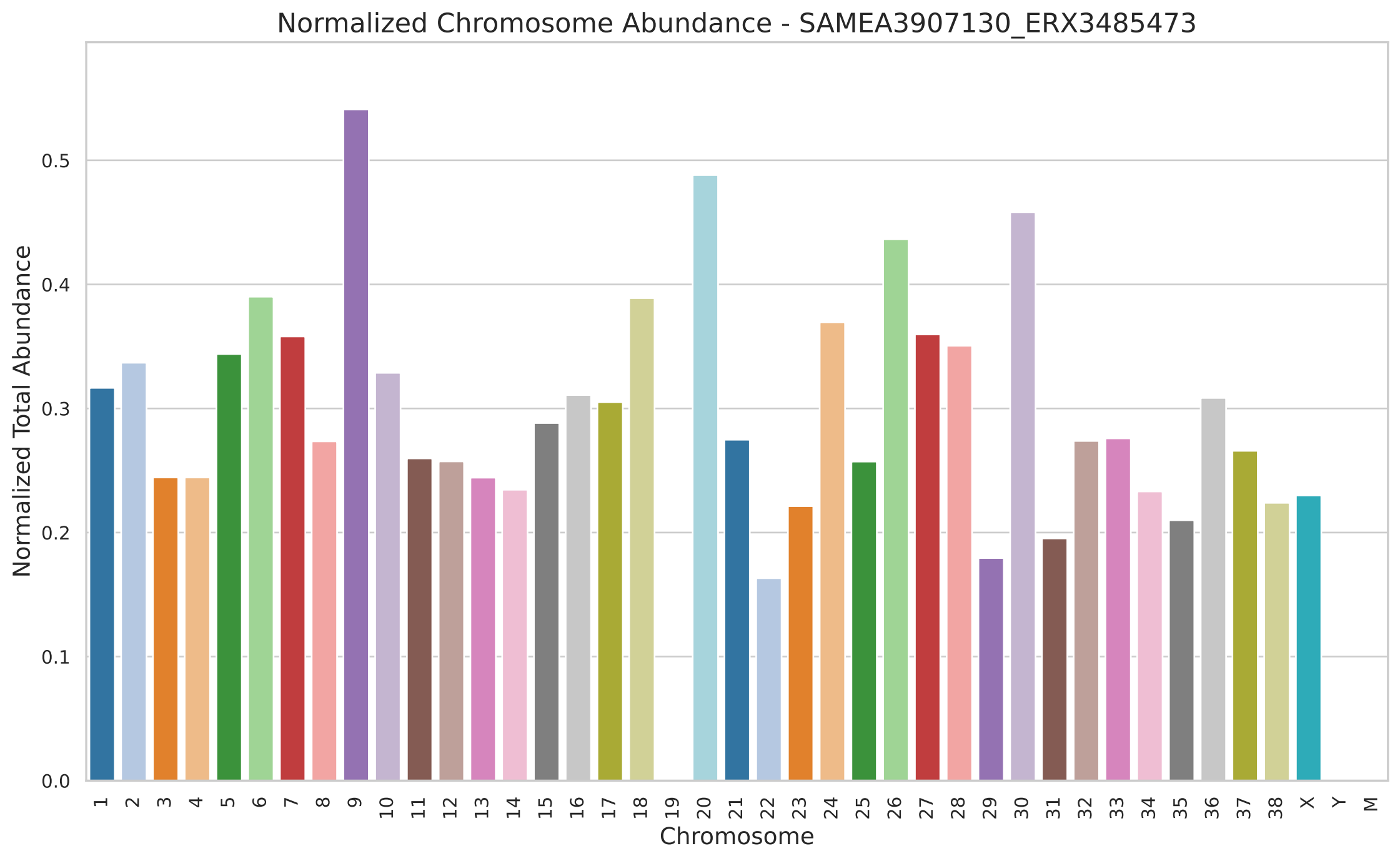

Normalized Chromosome Abundance - SAMEA3907128_ERX3485410
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

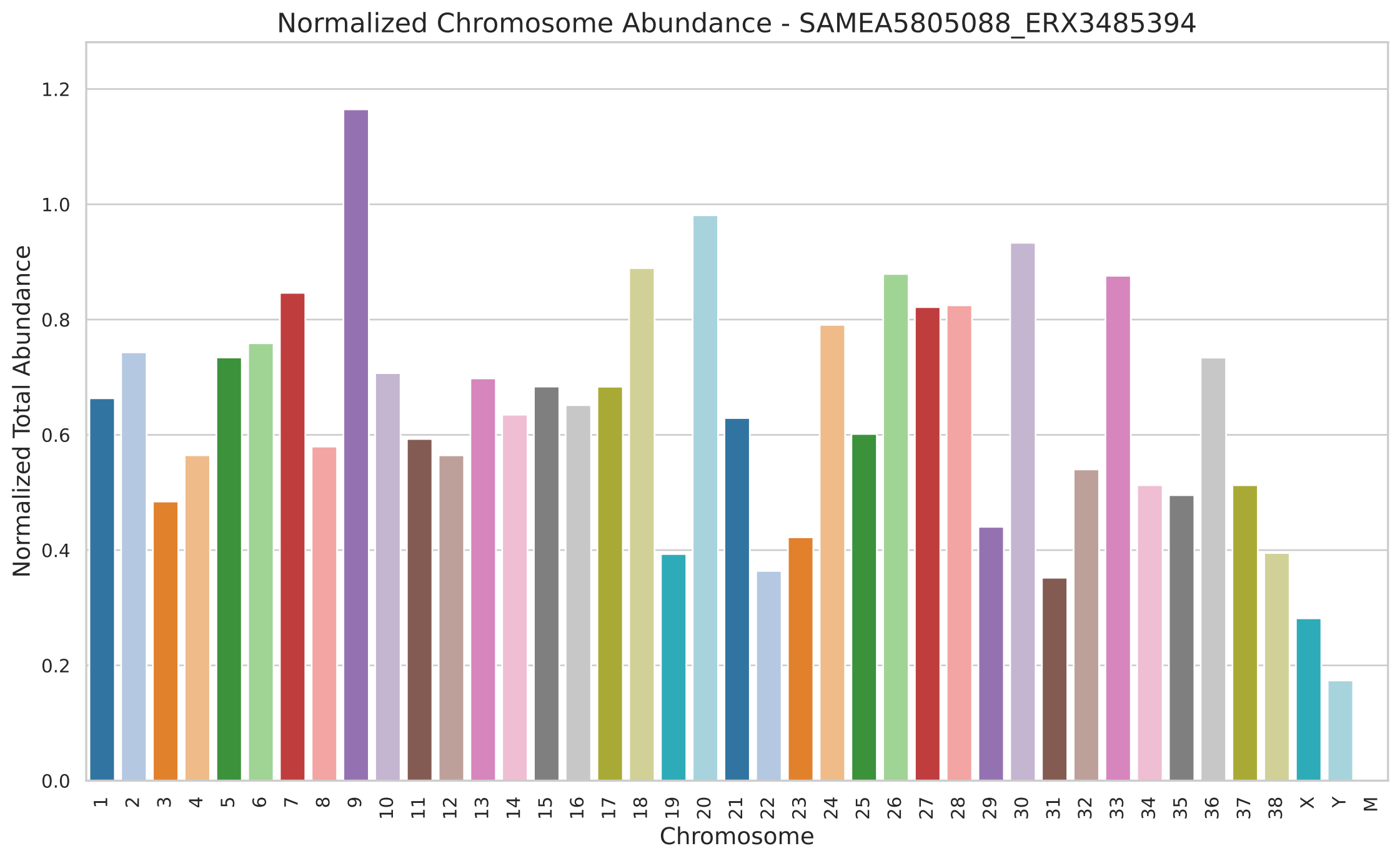

Normalized Chromosome Abundance - SAMEA3907174_ERX3485285
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

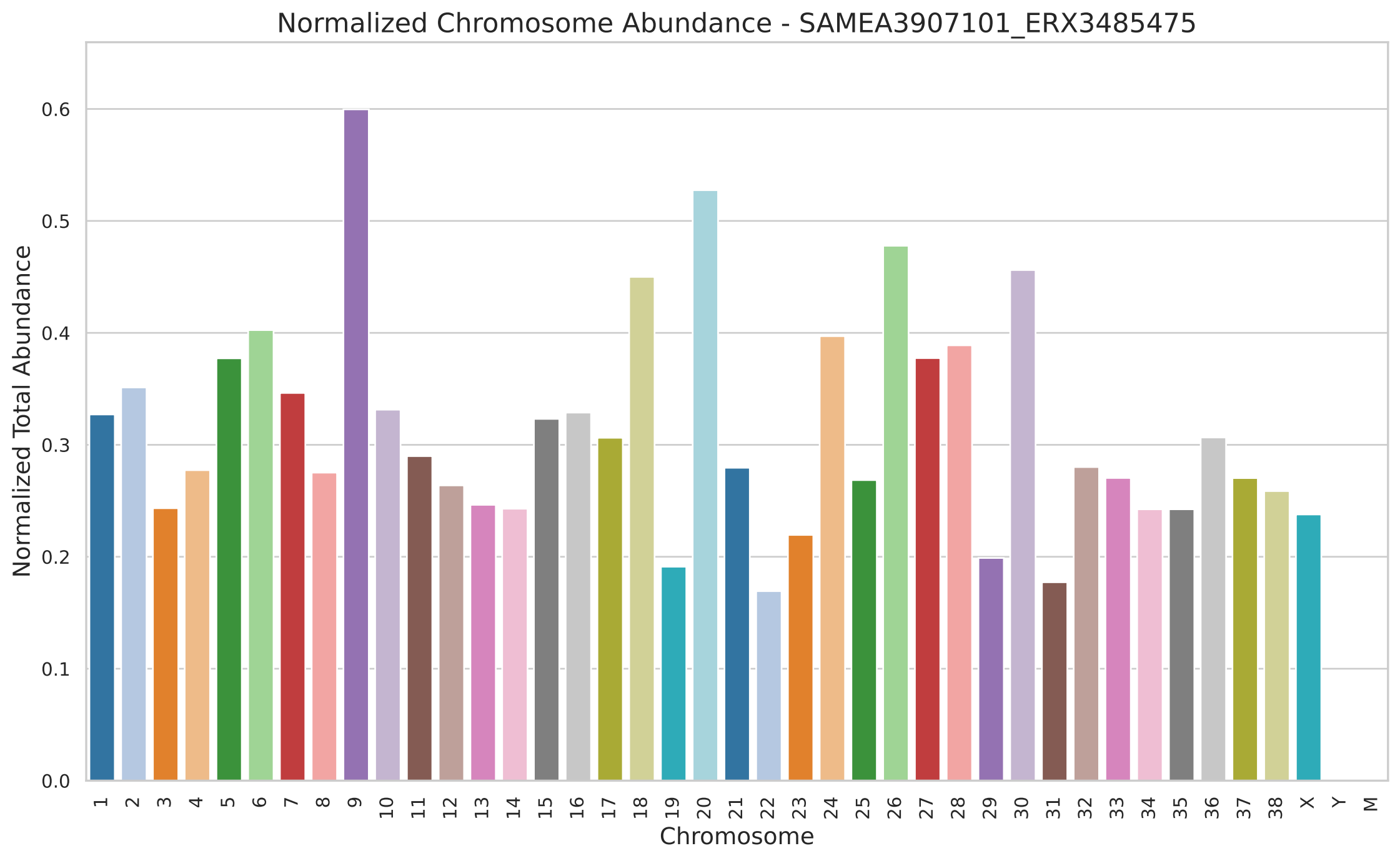

Normalized Chromosome Abundance - SAMEA3907095_ERX3485437
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

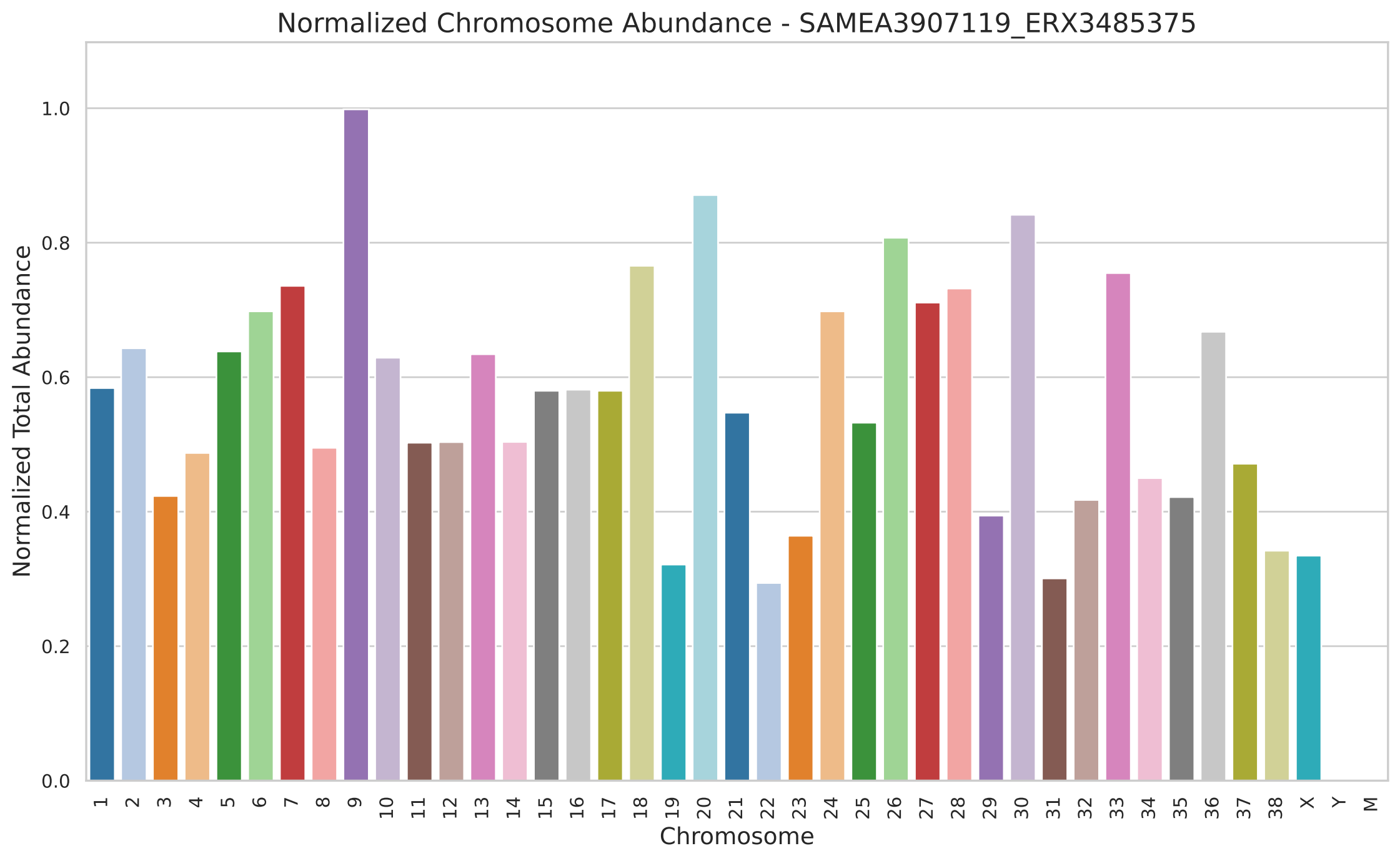

Normalized Chromosome Abundance - SAMEA5805059_ERX3485378
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

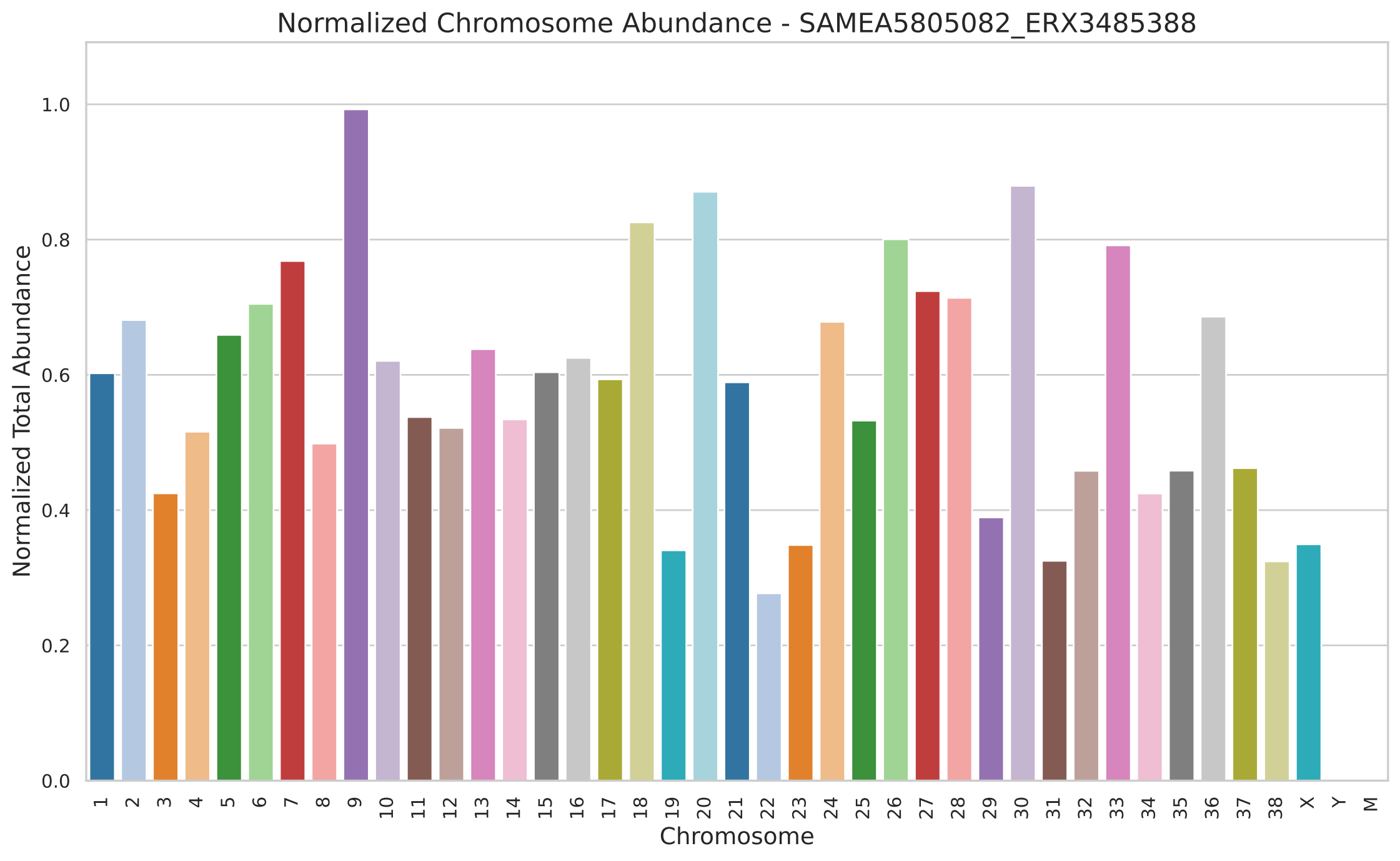

Normalized Chromosome Abundance - SAMEA5804597_ERX3485312
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

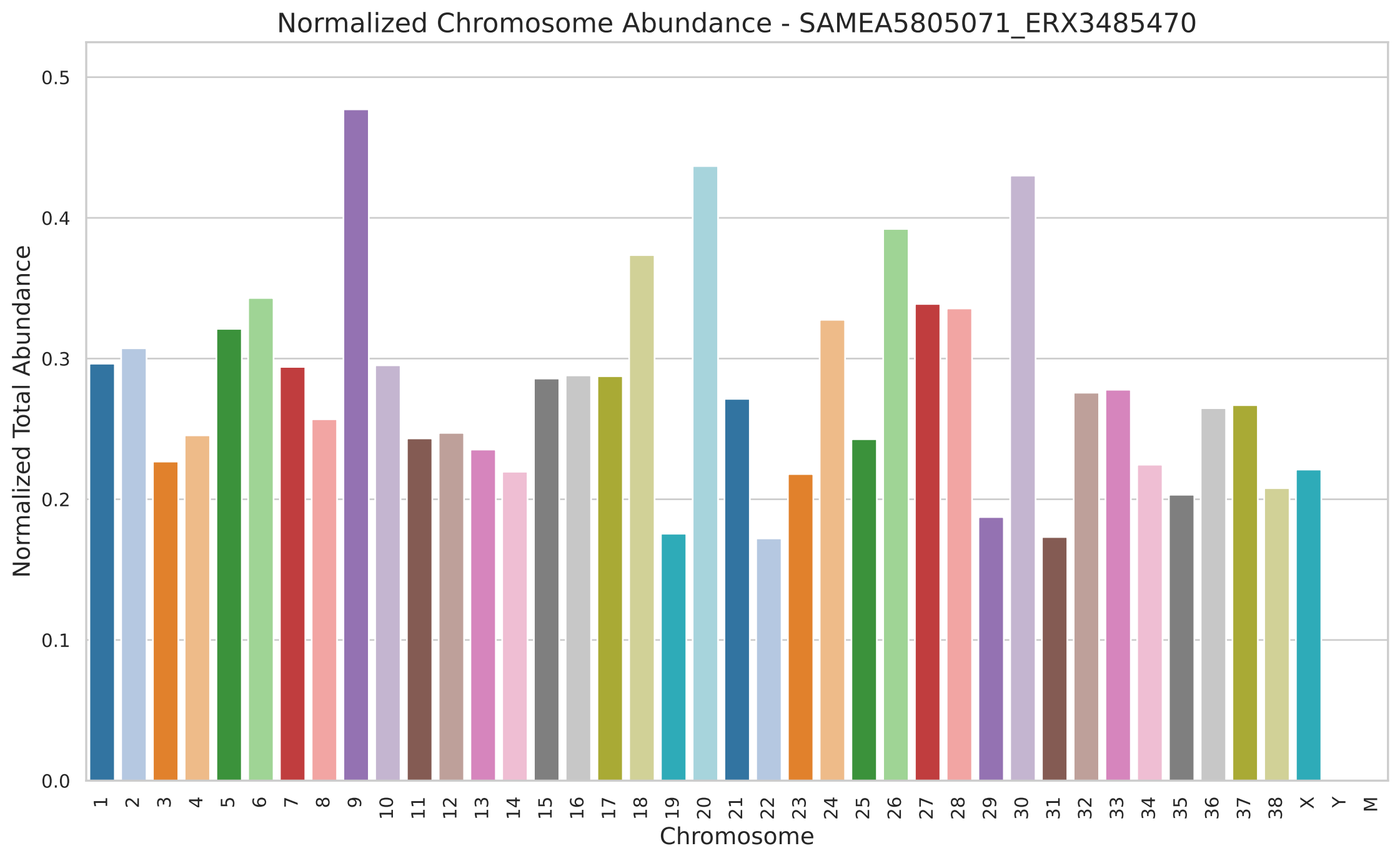

Normalized Chromosome Abundance - SAMEA3907130_ERX3485473
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

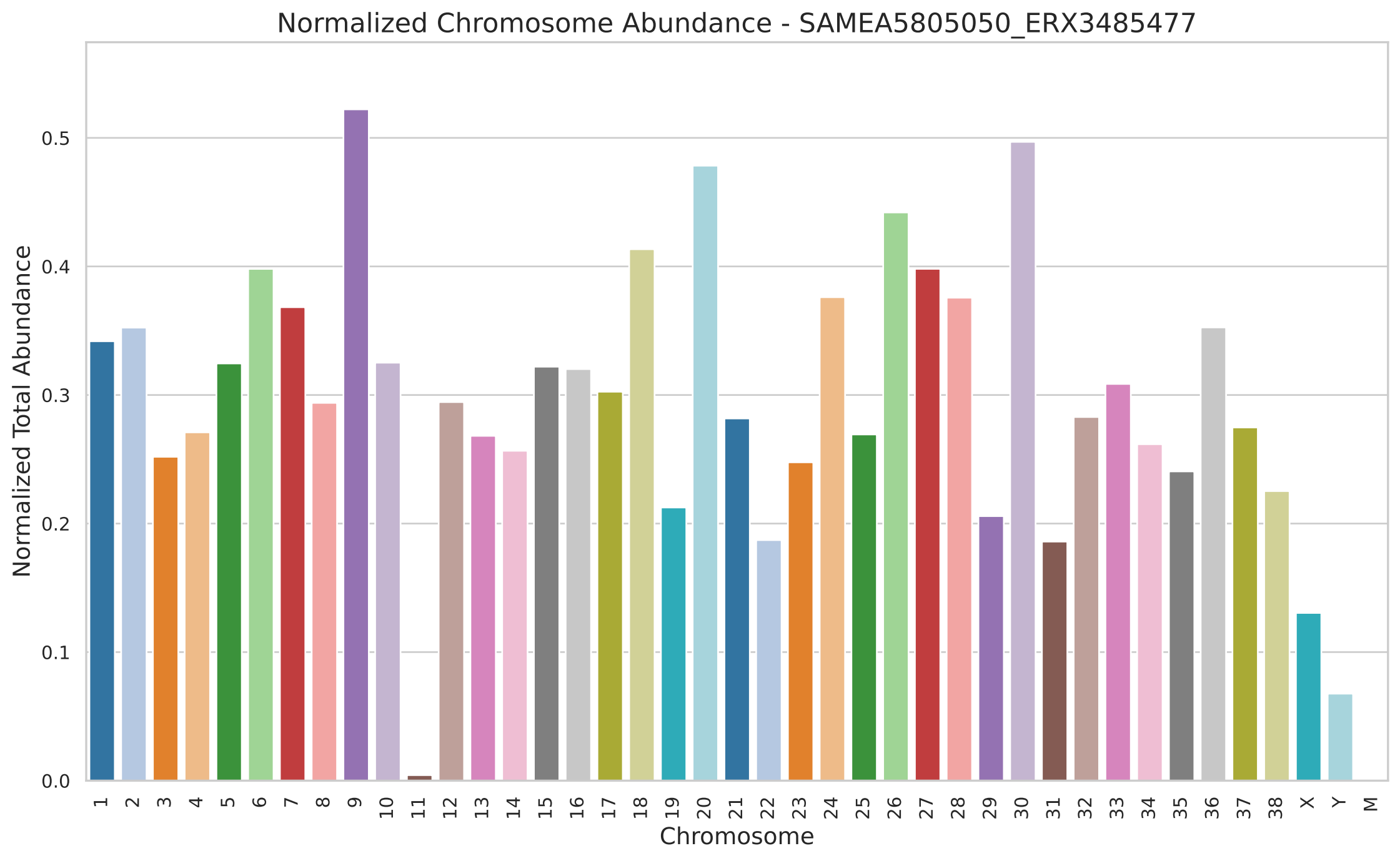

Normalized Chromosome Abundance - SAMEA5805088_ERX3485394
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

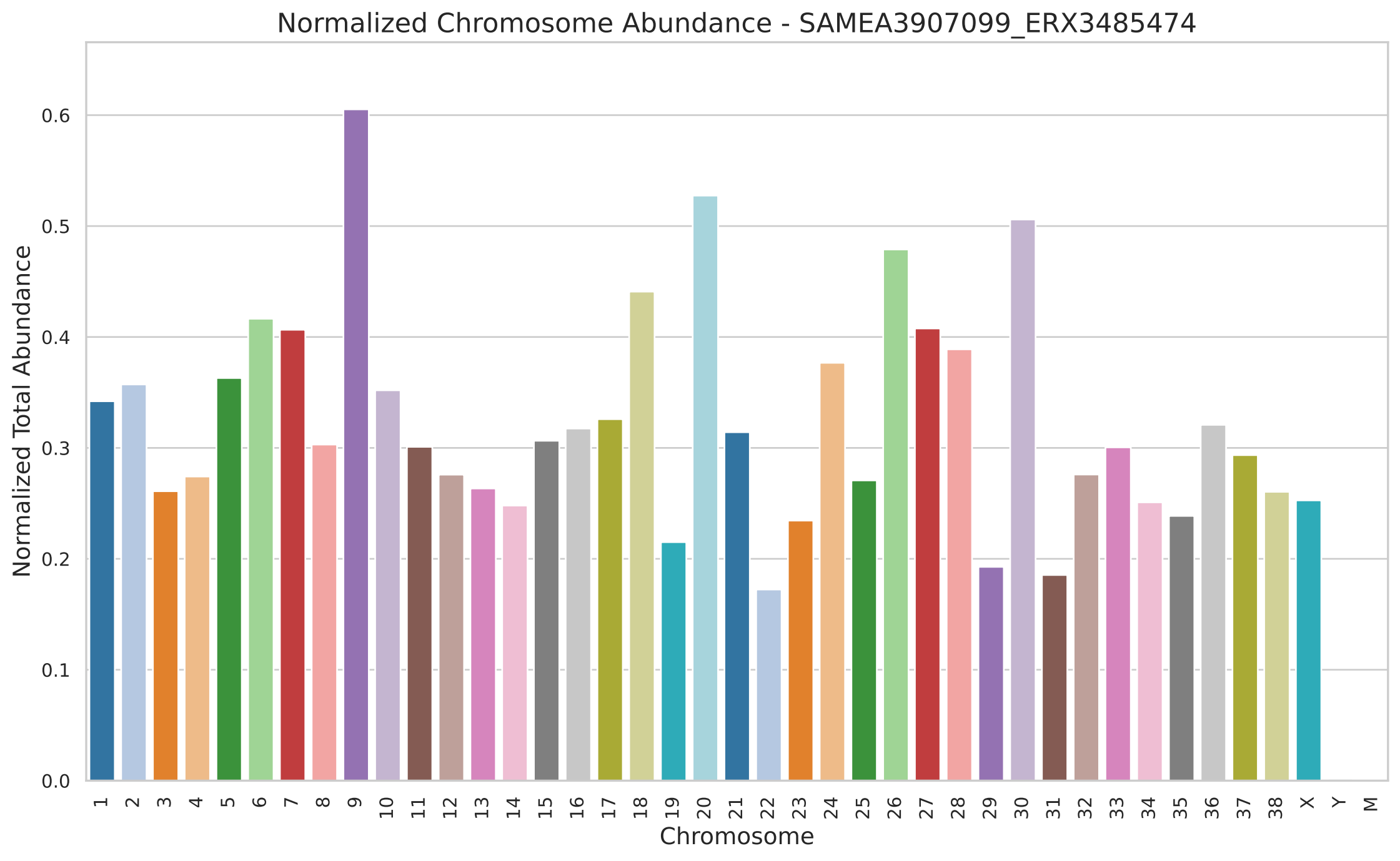

Normalized Chromosome Abundance - SAMEA3907101_ERX3485475
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

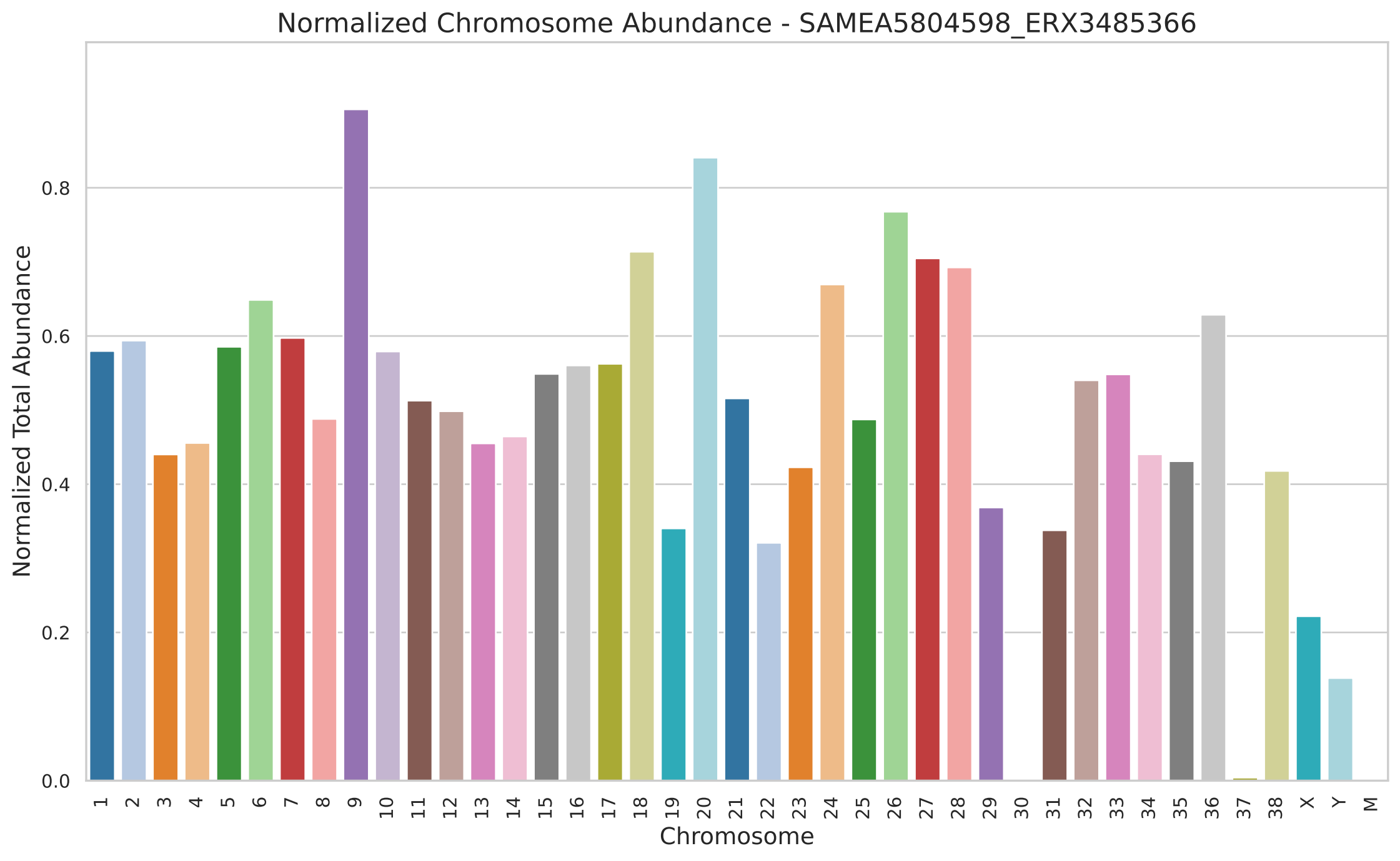

Normalized Chromosome Abundance - SAMEA3907119_ERX3485375
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

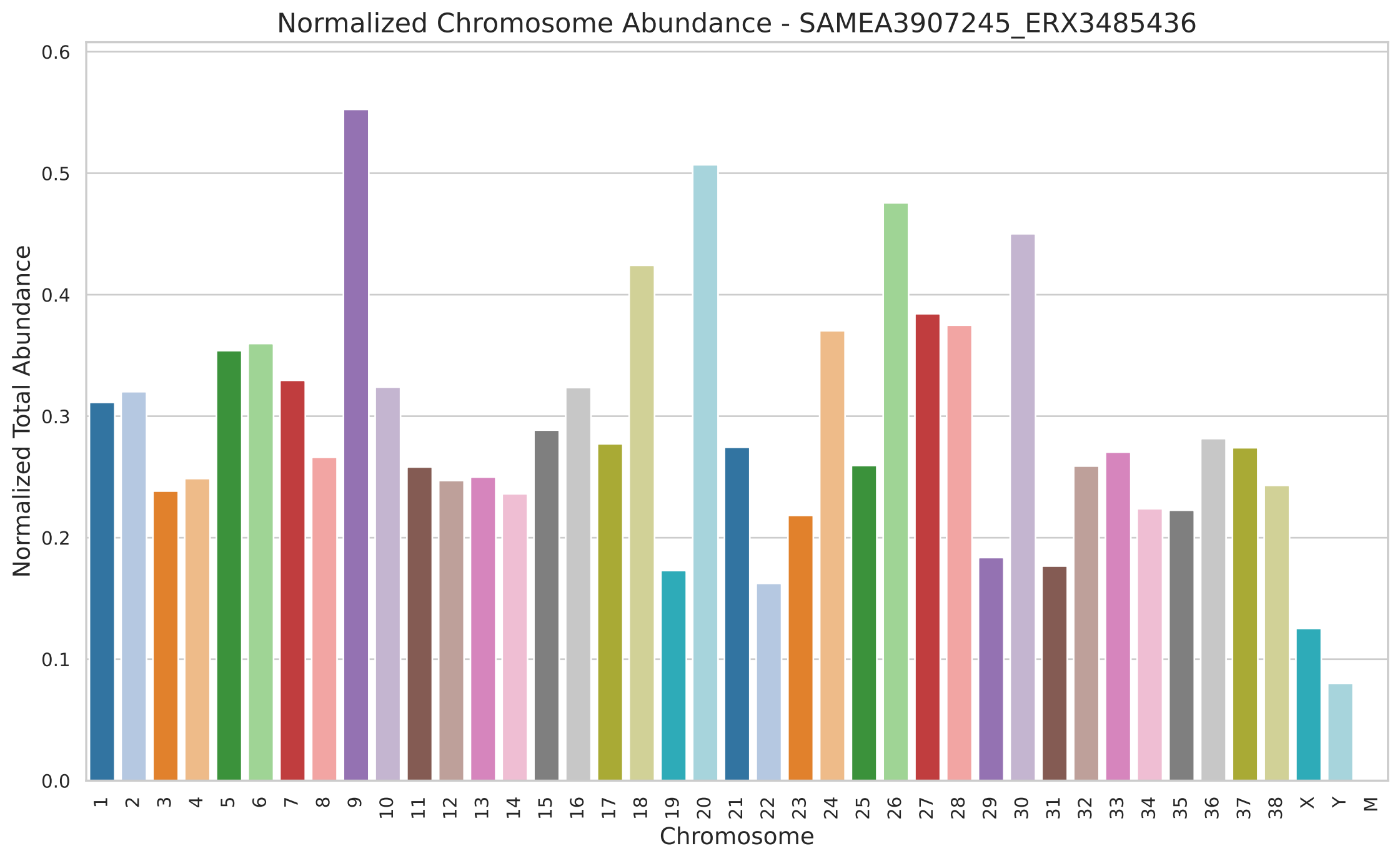

Normalized Chromosome Abundance - SAMEA5805082_ERX3485388
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

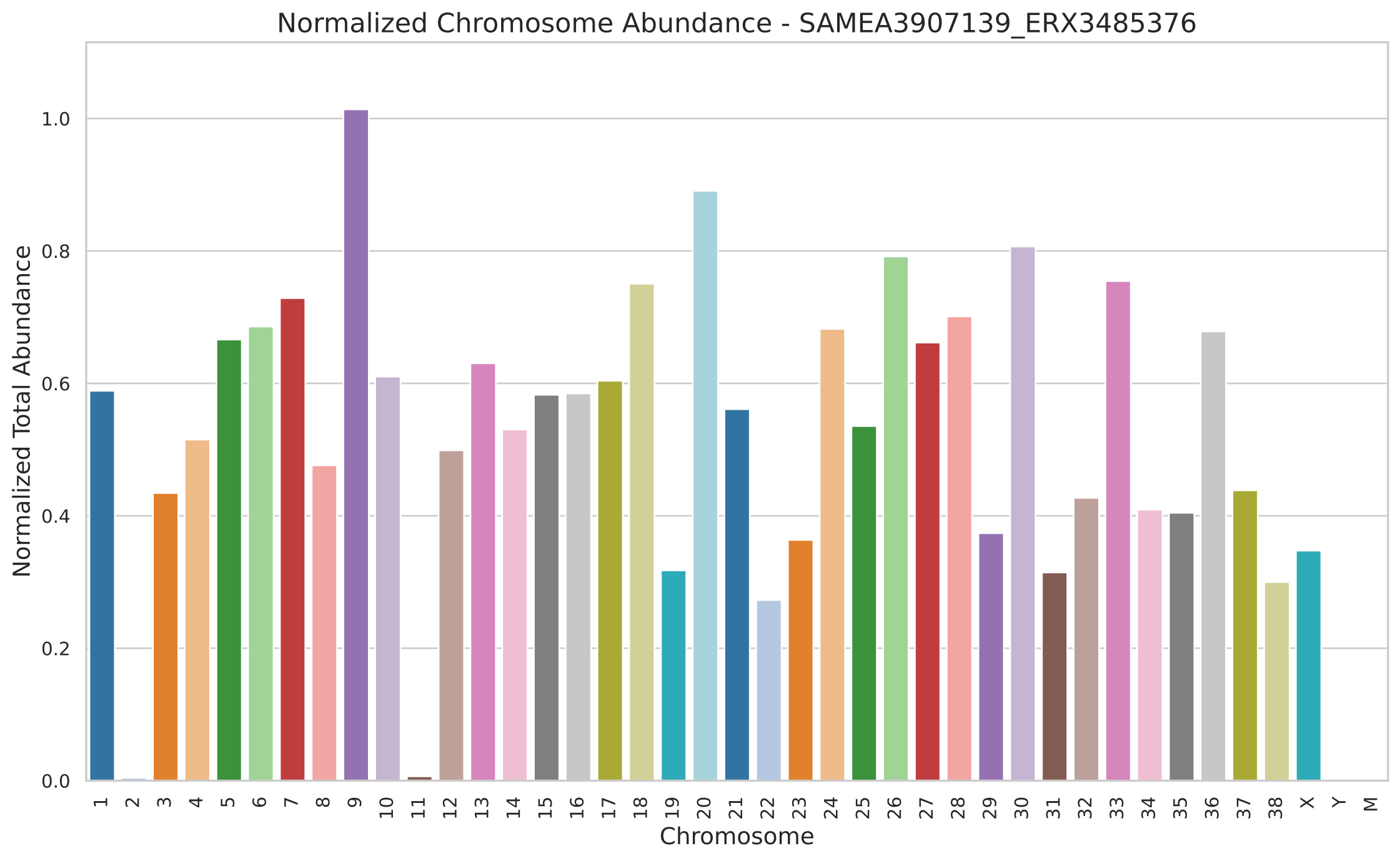

Normalized Chromosome Abundance - SAMEA5805071_ERX3485470
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

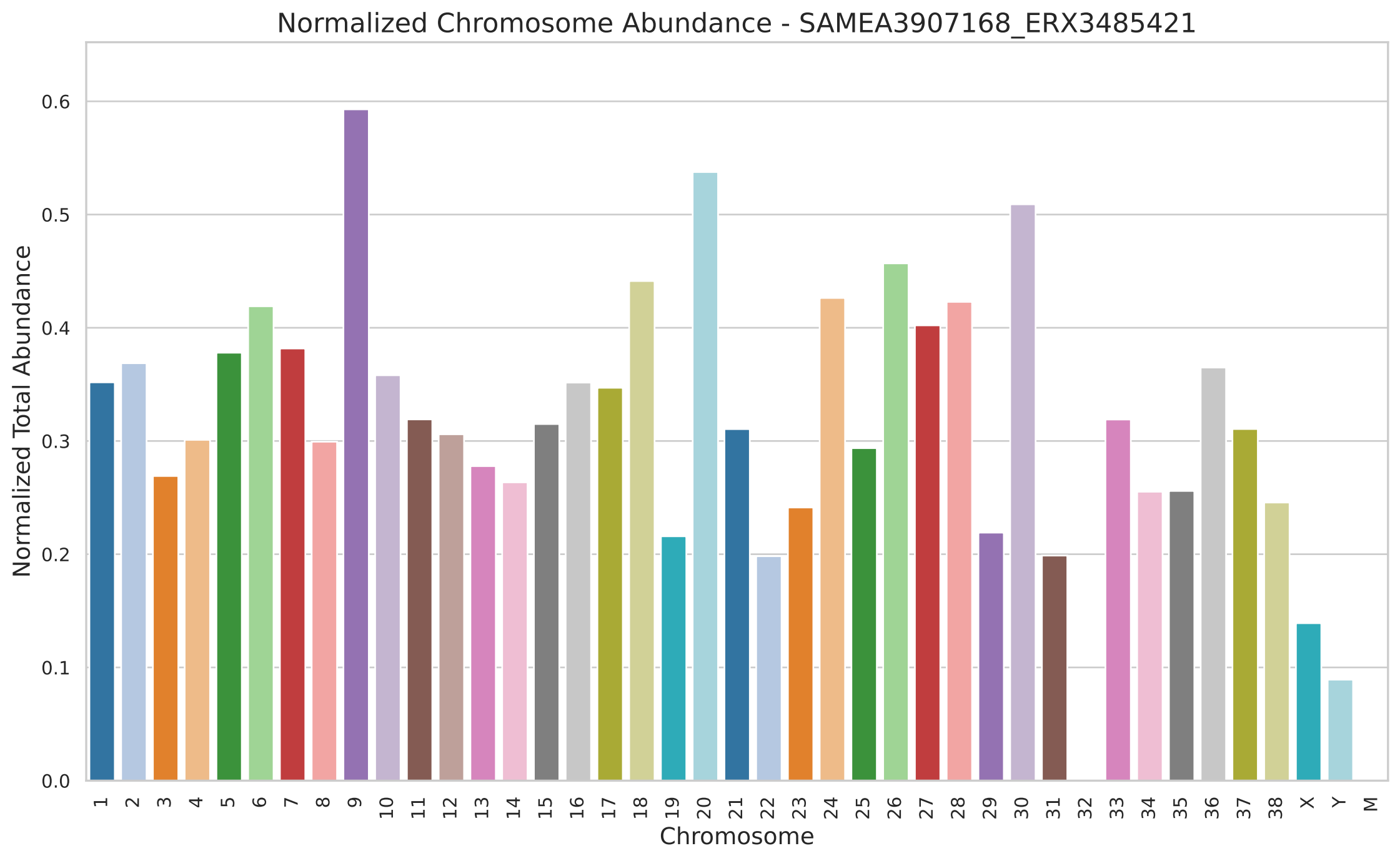

Normalized Chromosome Abundance - SAMEA5805050_ERX3485477
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

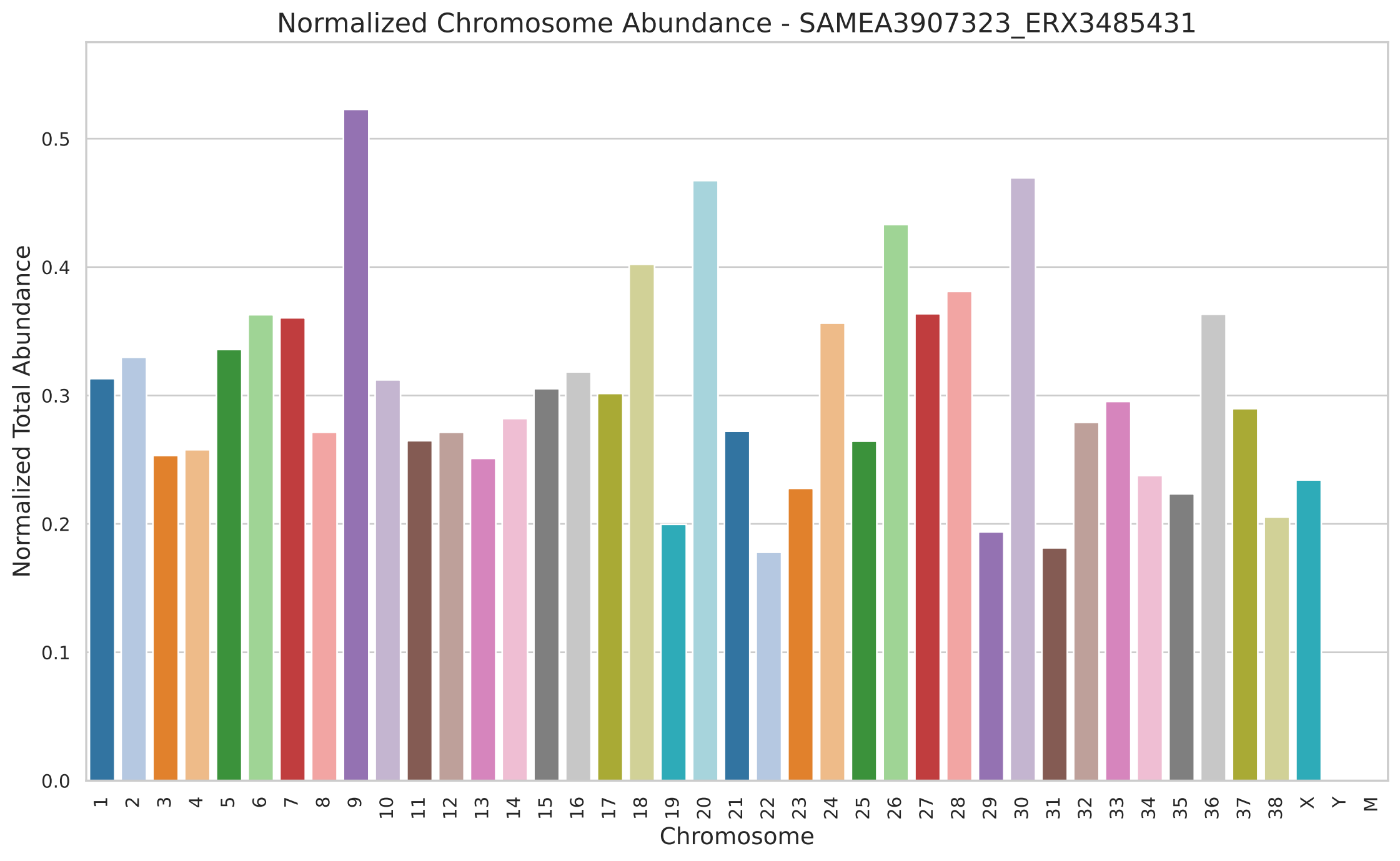

Normalized Chromosome Abundance - SAMEA3907099_ERX3485474
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

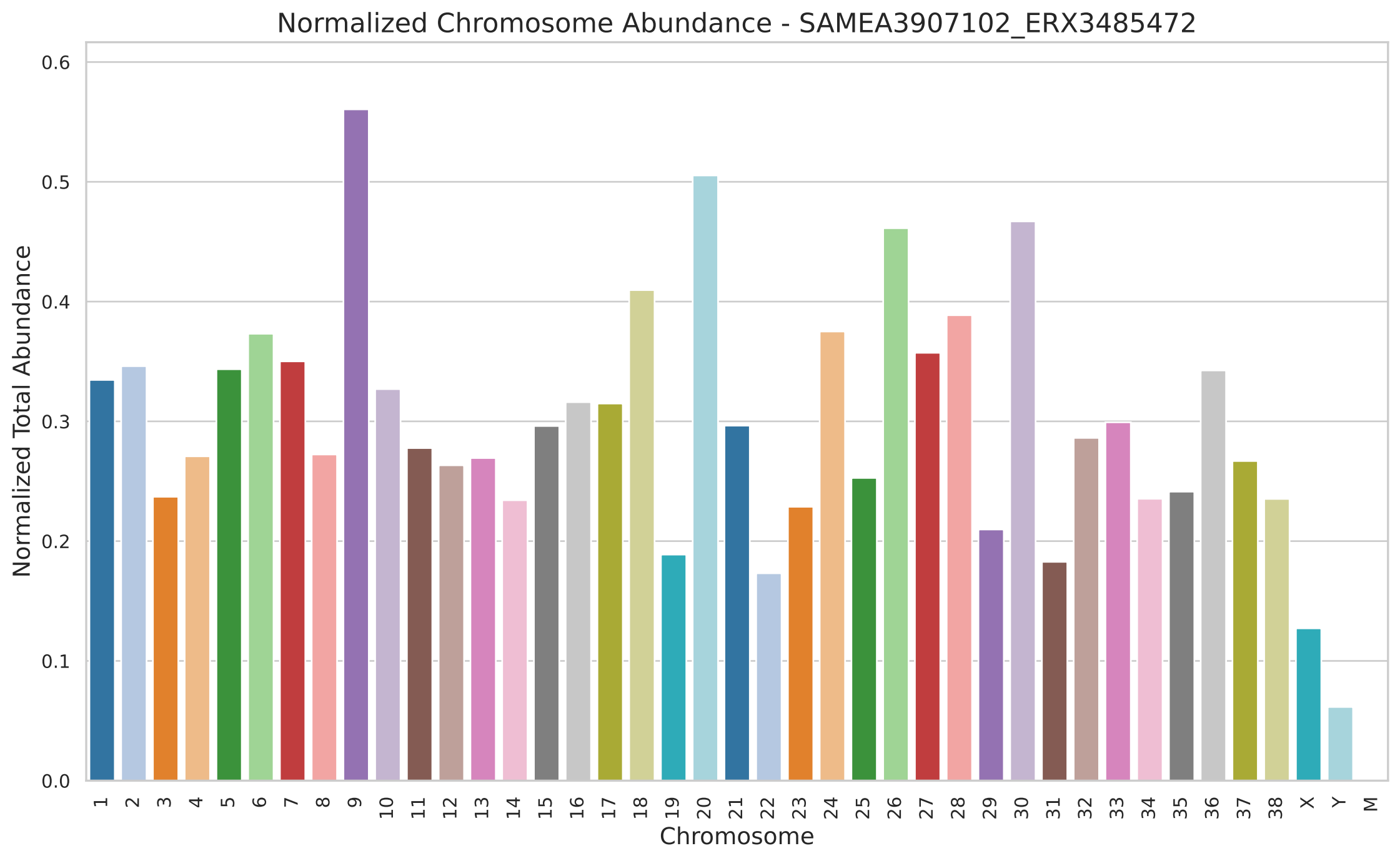

Normalized Chromosome Abundance - SAMEA5804598_ERX3485366
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

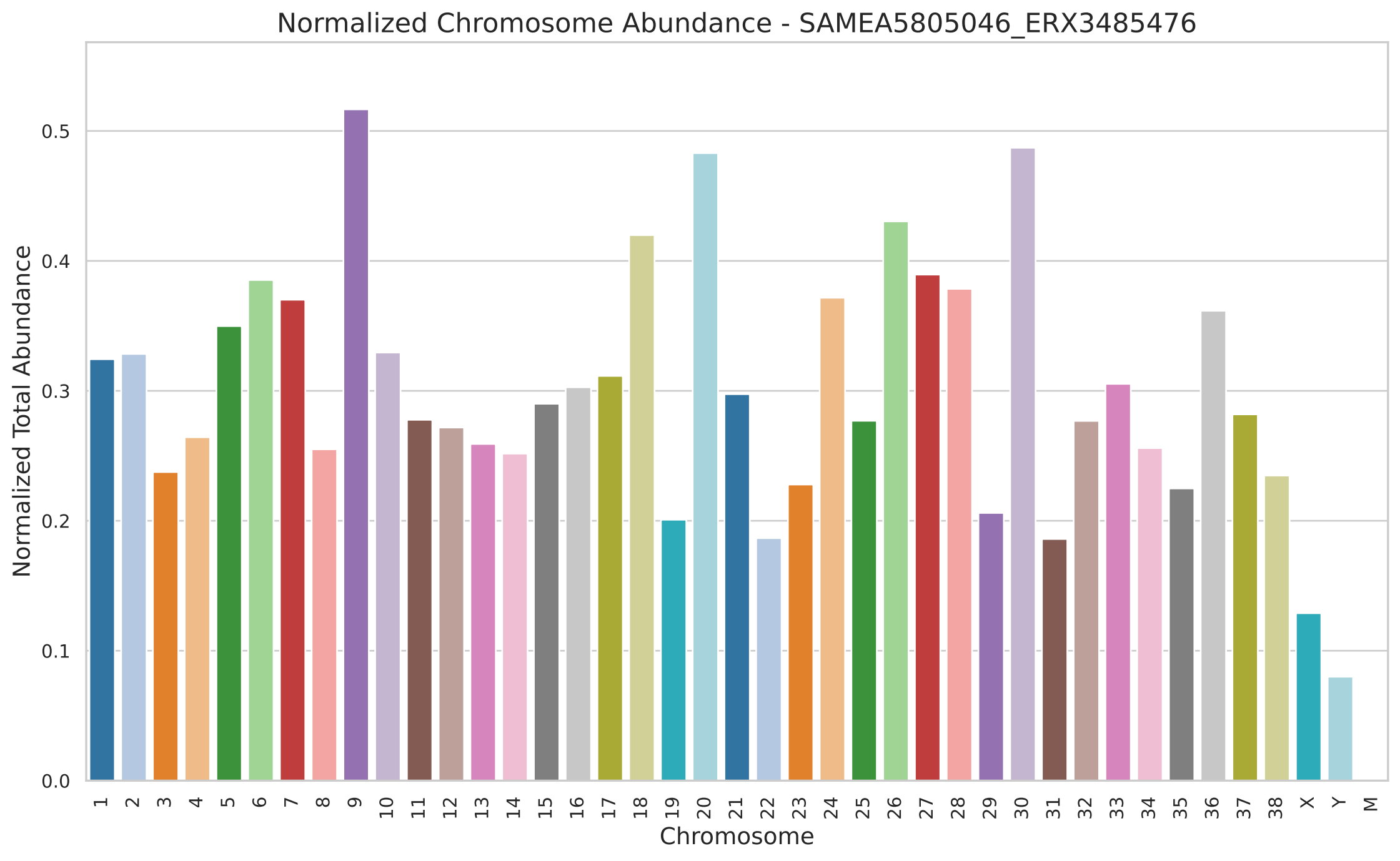

Normalized Chromosome Abundance - SAMEA3907245_ERX3485436
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

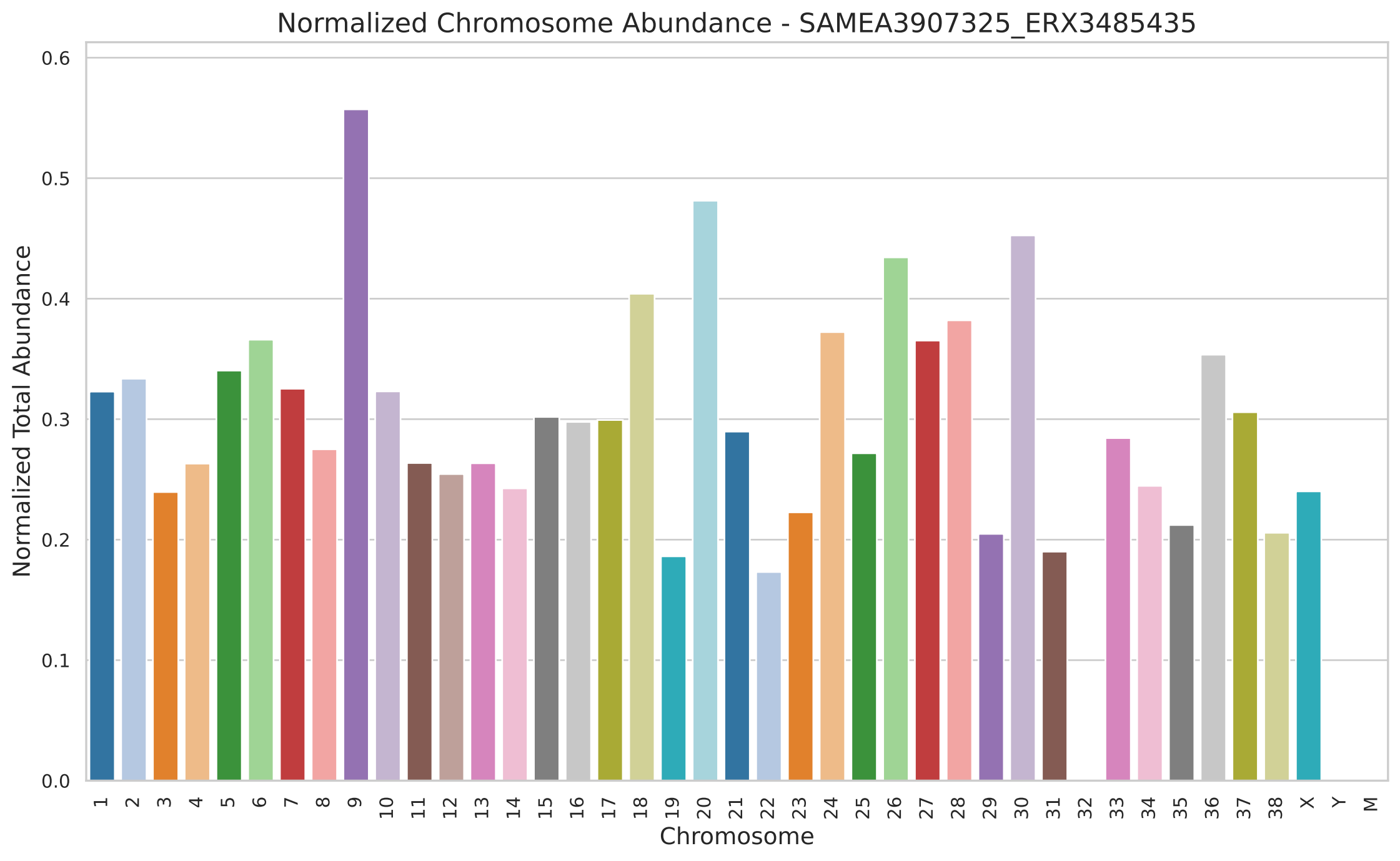

Normalized Chromosome Abundance - SAMEA3907139_ERX3485376
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

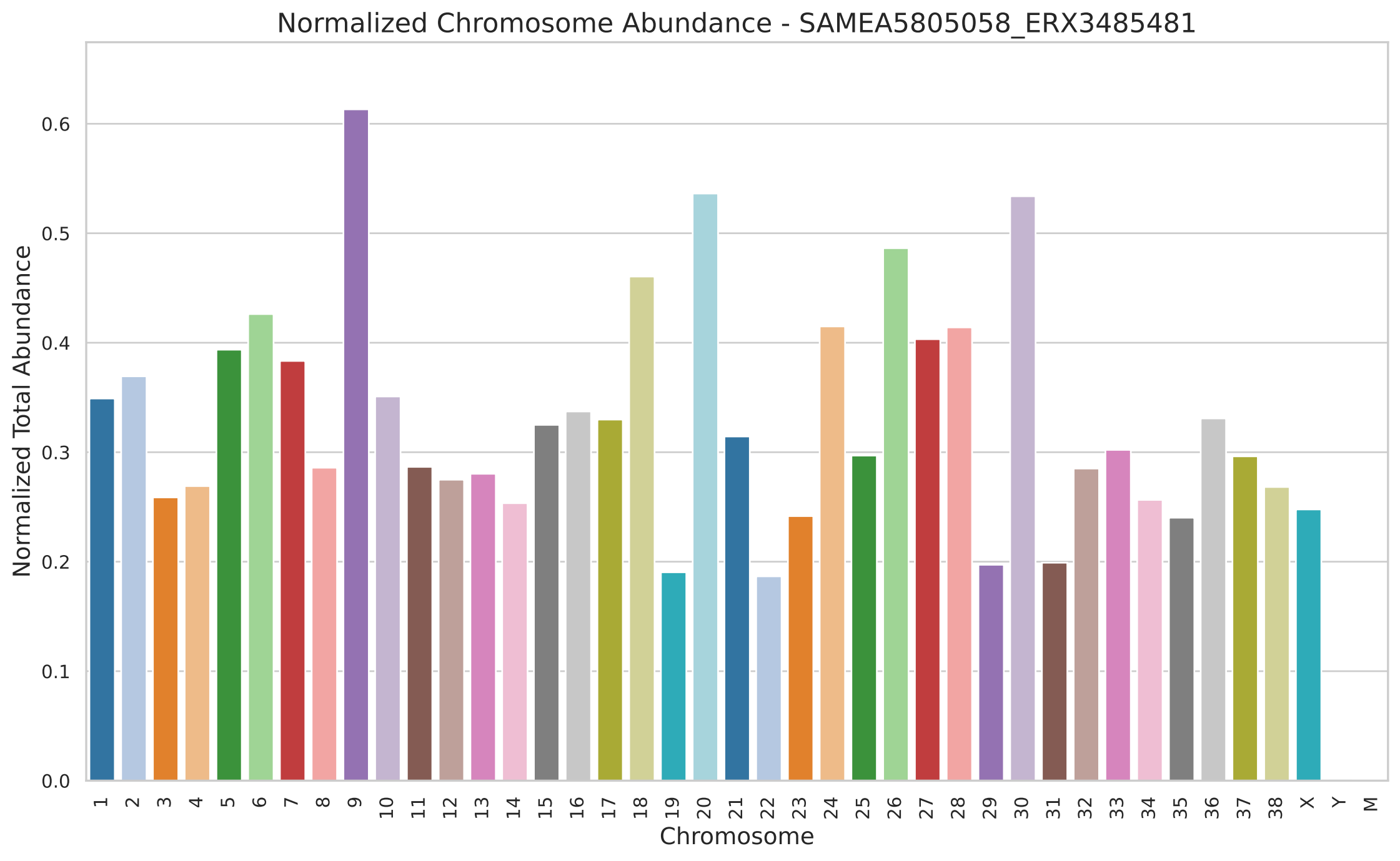

Normalized Chromosome Abundance - SAMEA3907168_ERX3485421
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

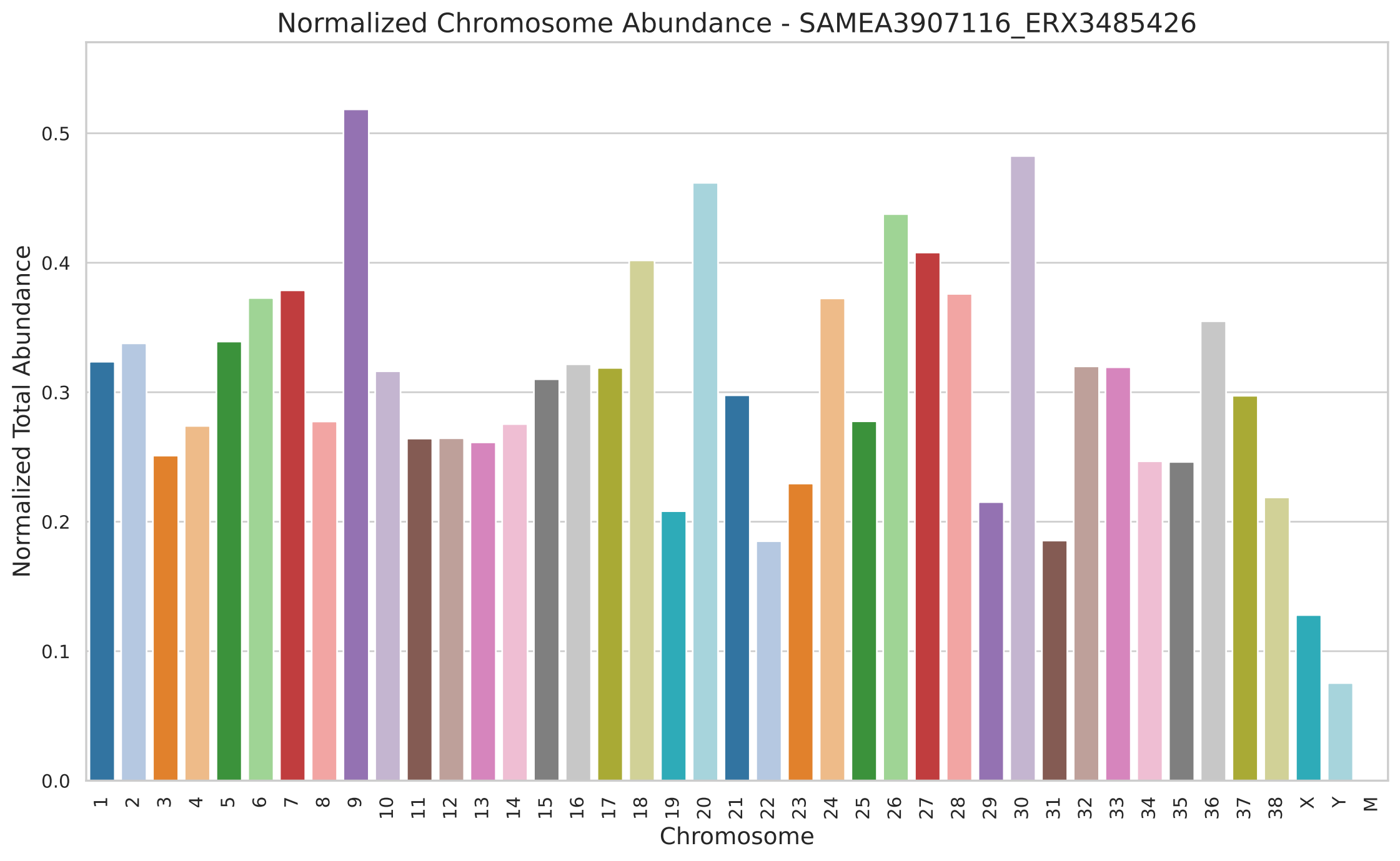

Normalized Chromosome Abundance - SAMEA3907323_ERX3485431
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

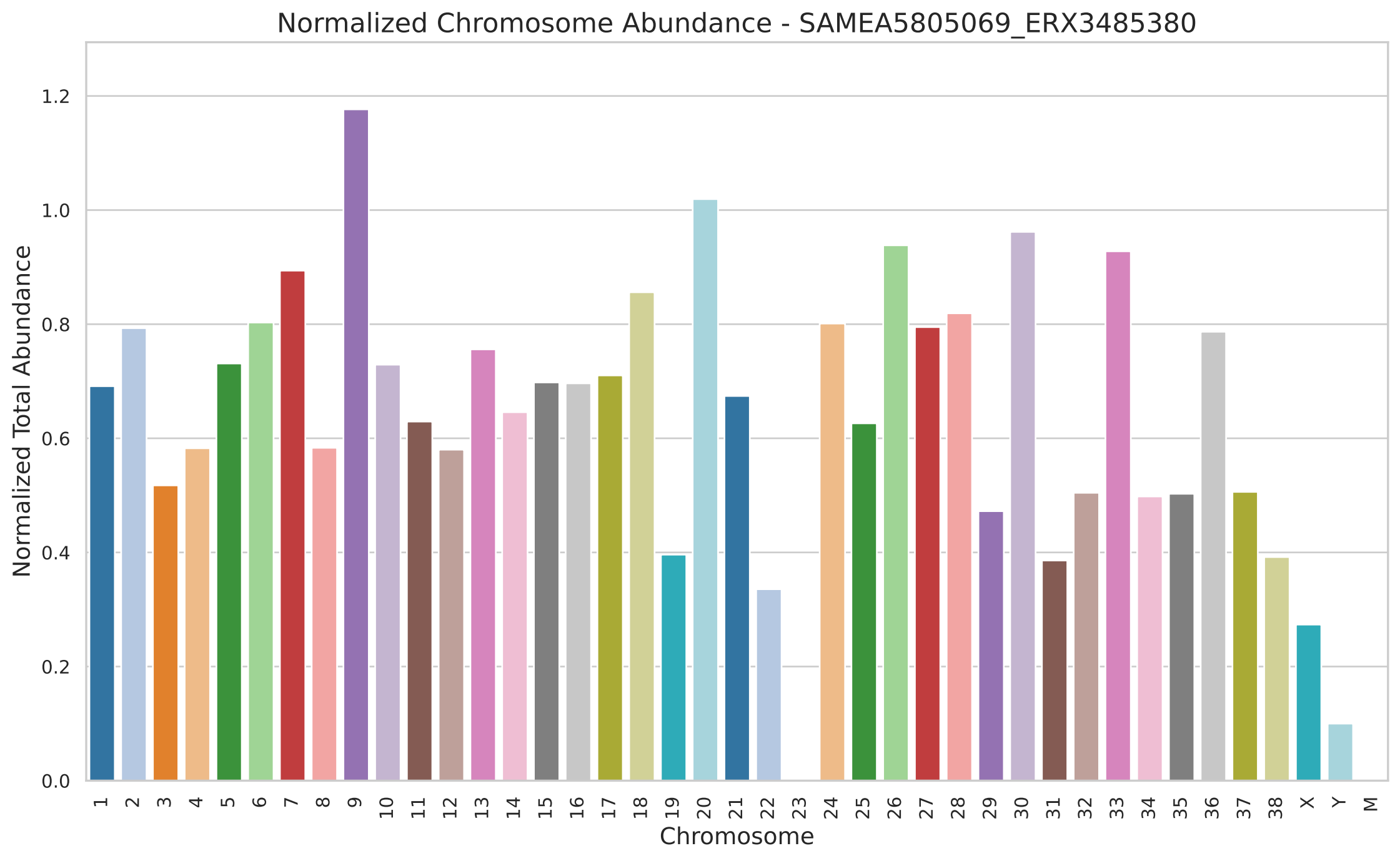

Normalized Chromosome Abundance - SAMEA3907102_ERX3485472
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

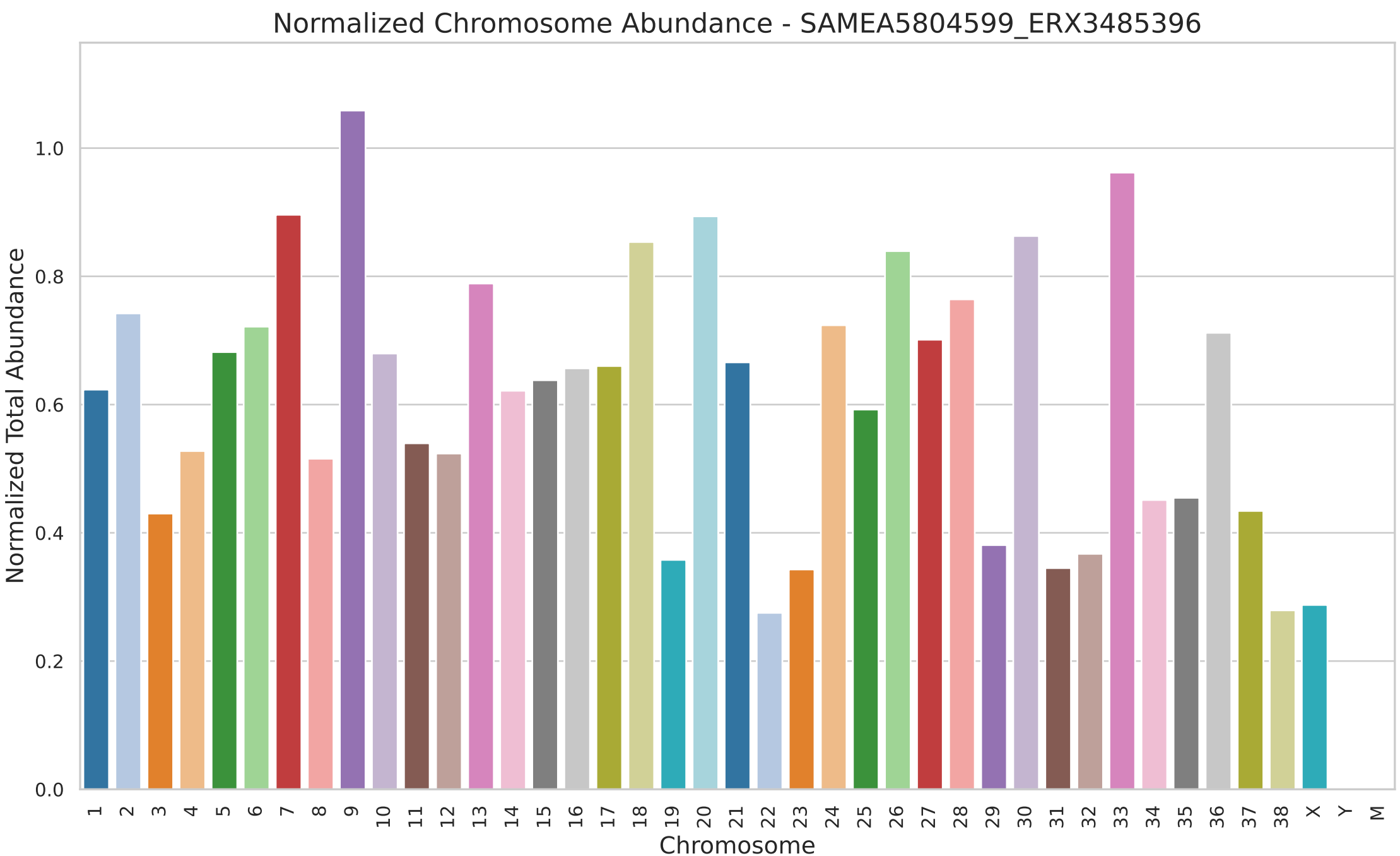

Normalized Chromosome Abundance - SAMEA5805046_ERX3485476
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

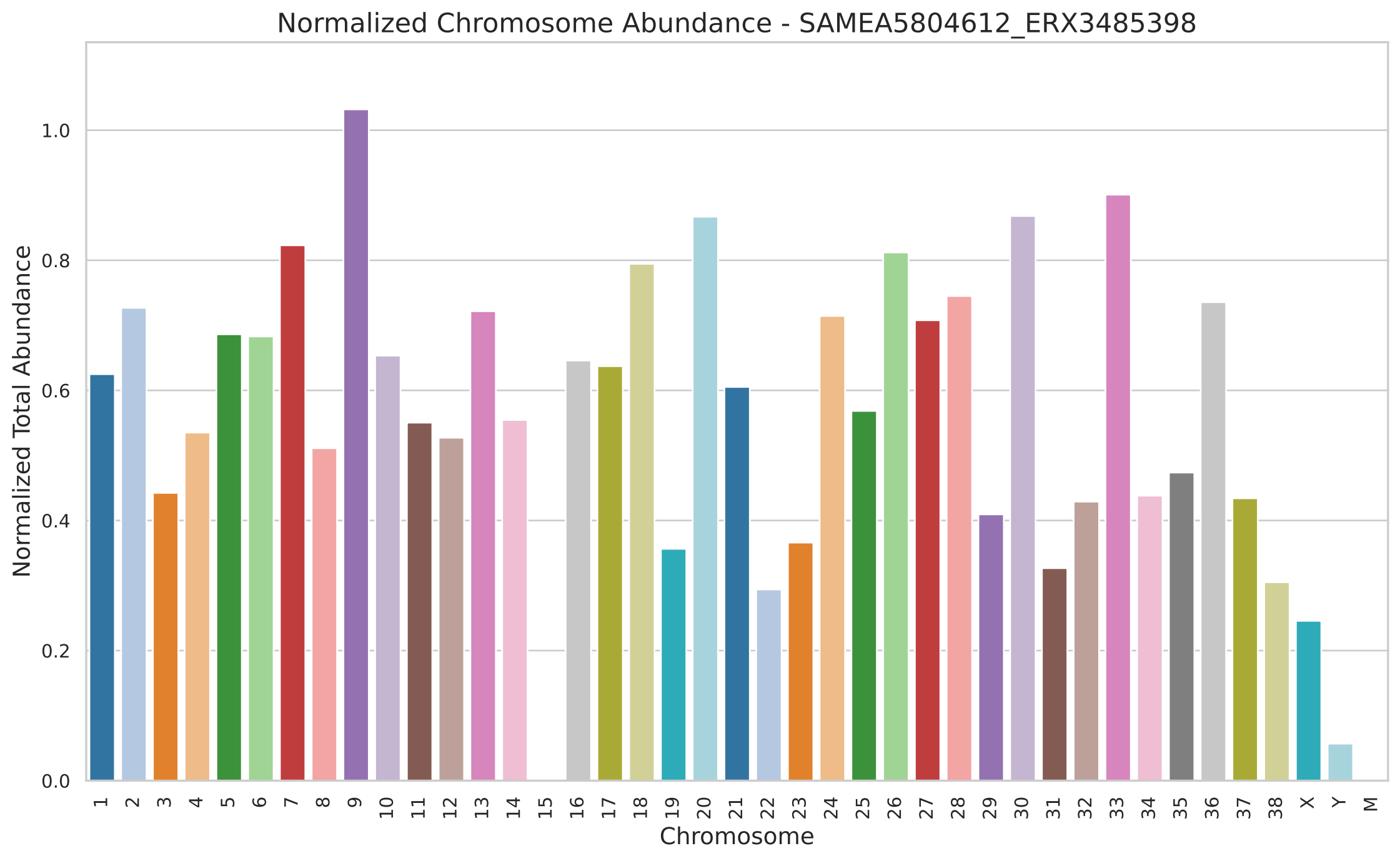

Normalized Chromosome Abundance - SAMEA3907325_ERX3485435
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

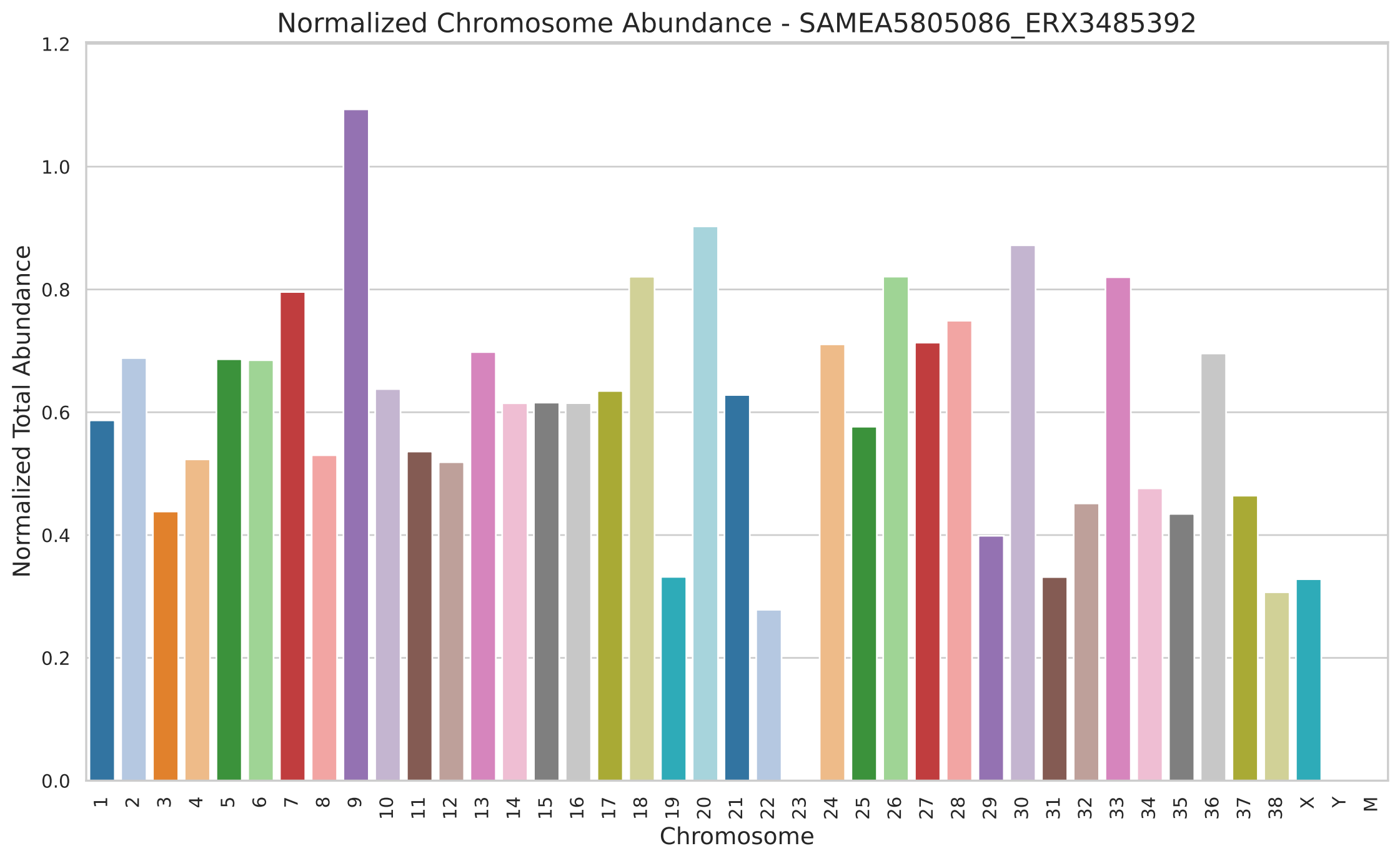

Normalized Chromosome Abundance - SAMEA5805058_ERX3485481
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

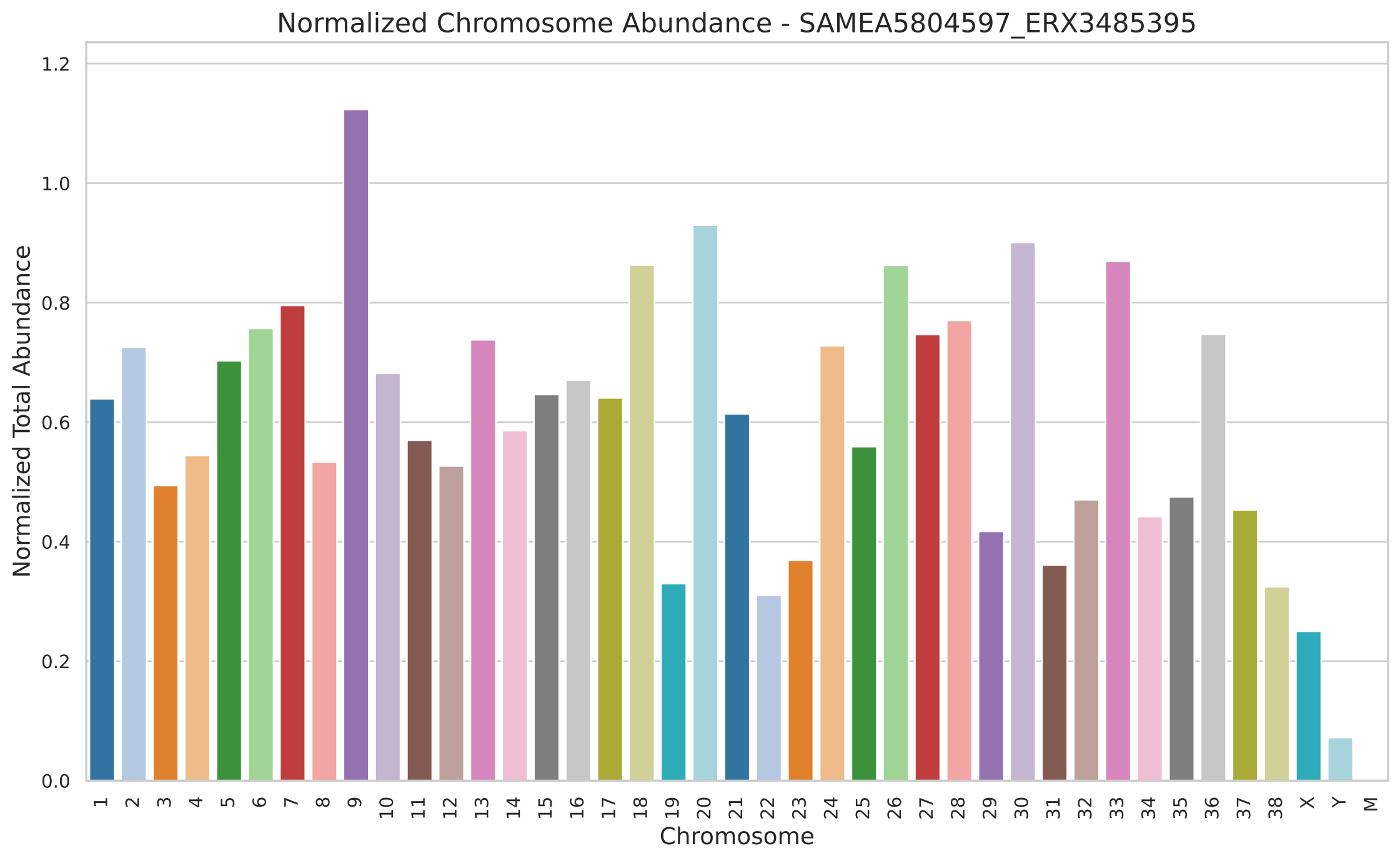

Normalized Chromosome Abundance - SAMEA3907116_ERX3485426
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

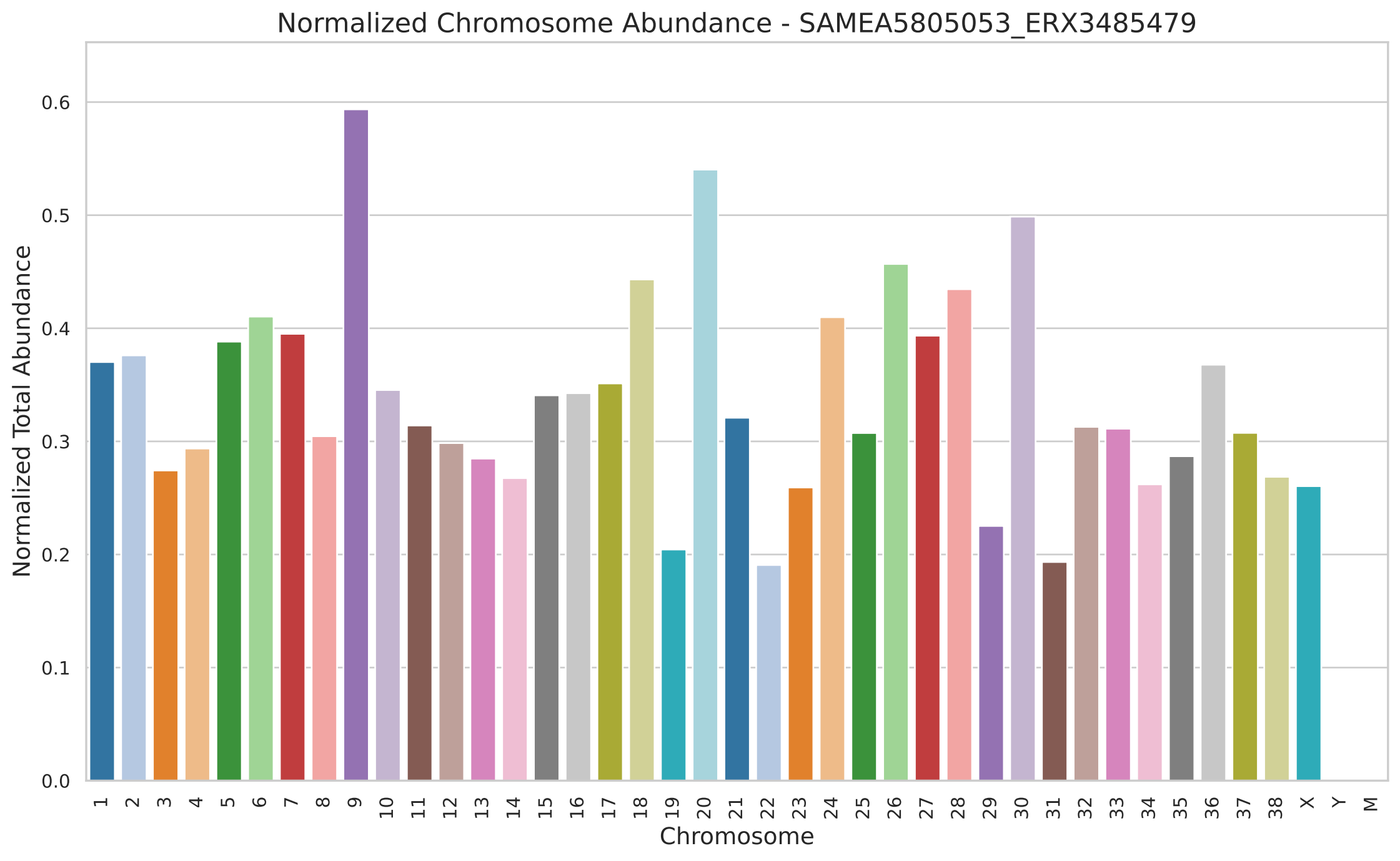

Normalized Chromosome Abundance - SAMEA5805069_ERX3485380
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

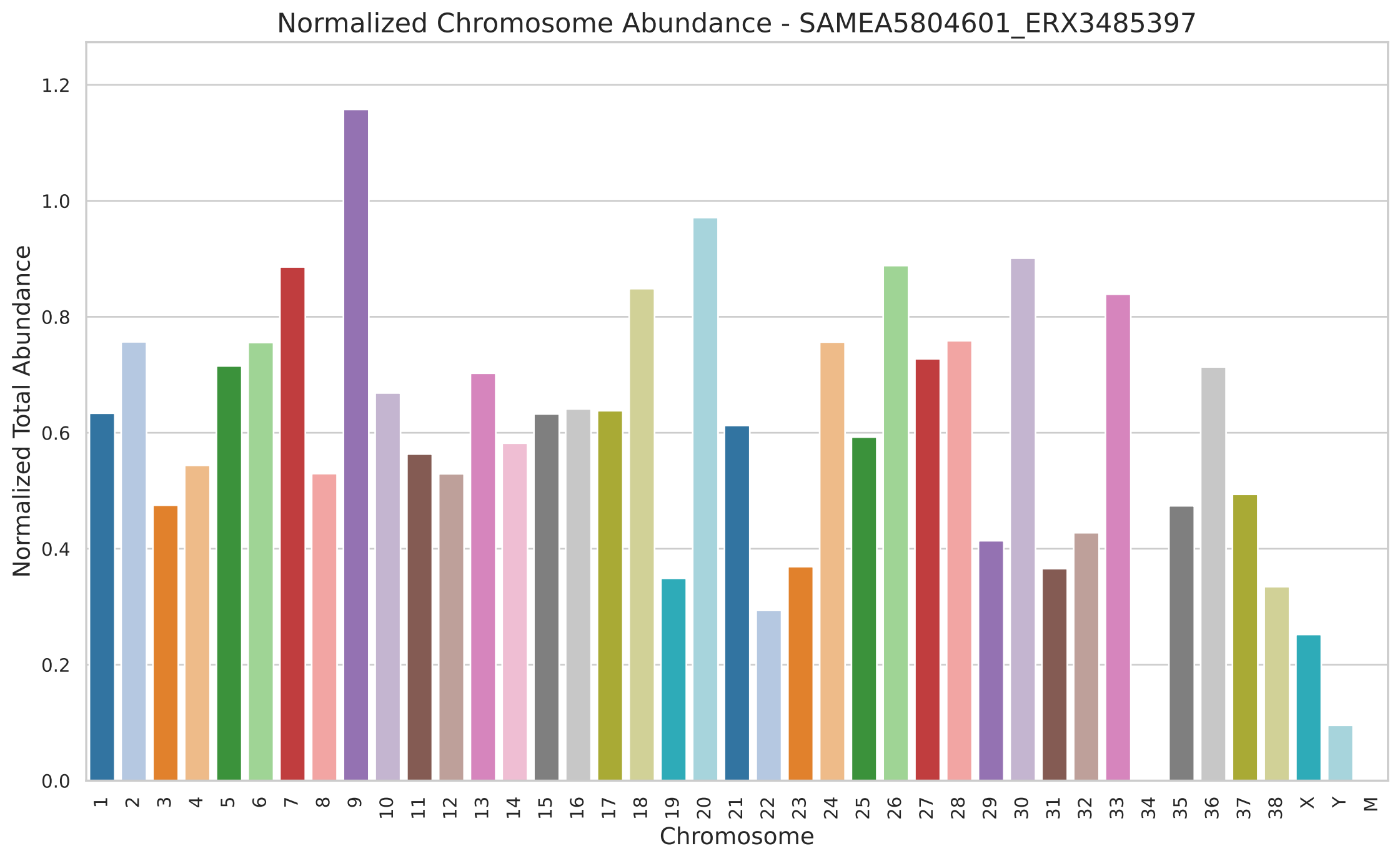

Normalized Chromosome Abundance - SAMEA5804599_ERX3485396
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

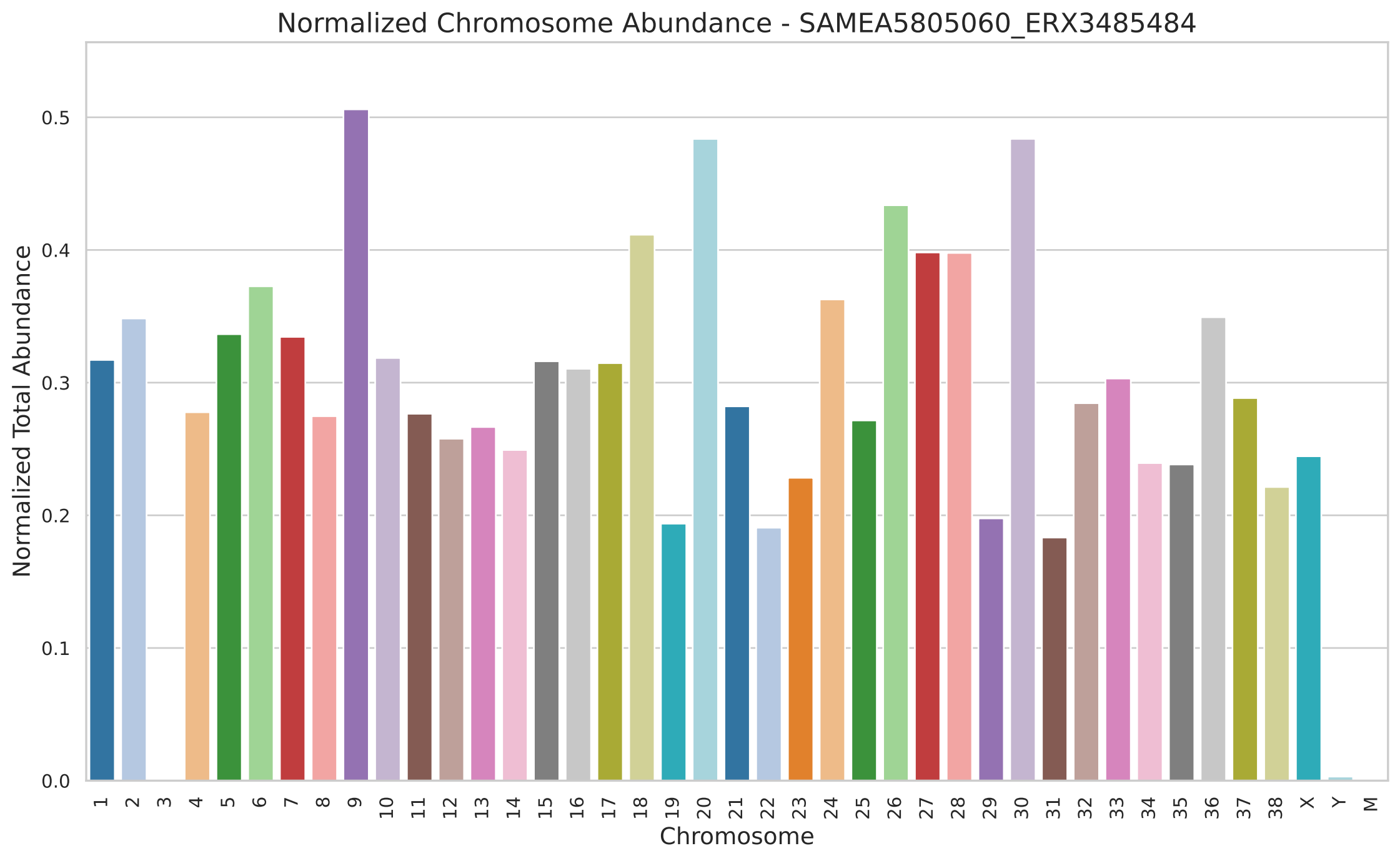

Normalized Chromosome Abundance - SAMEA5804612_ERX3485398
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

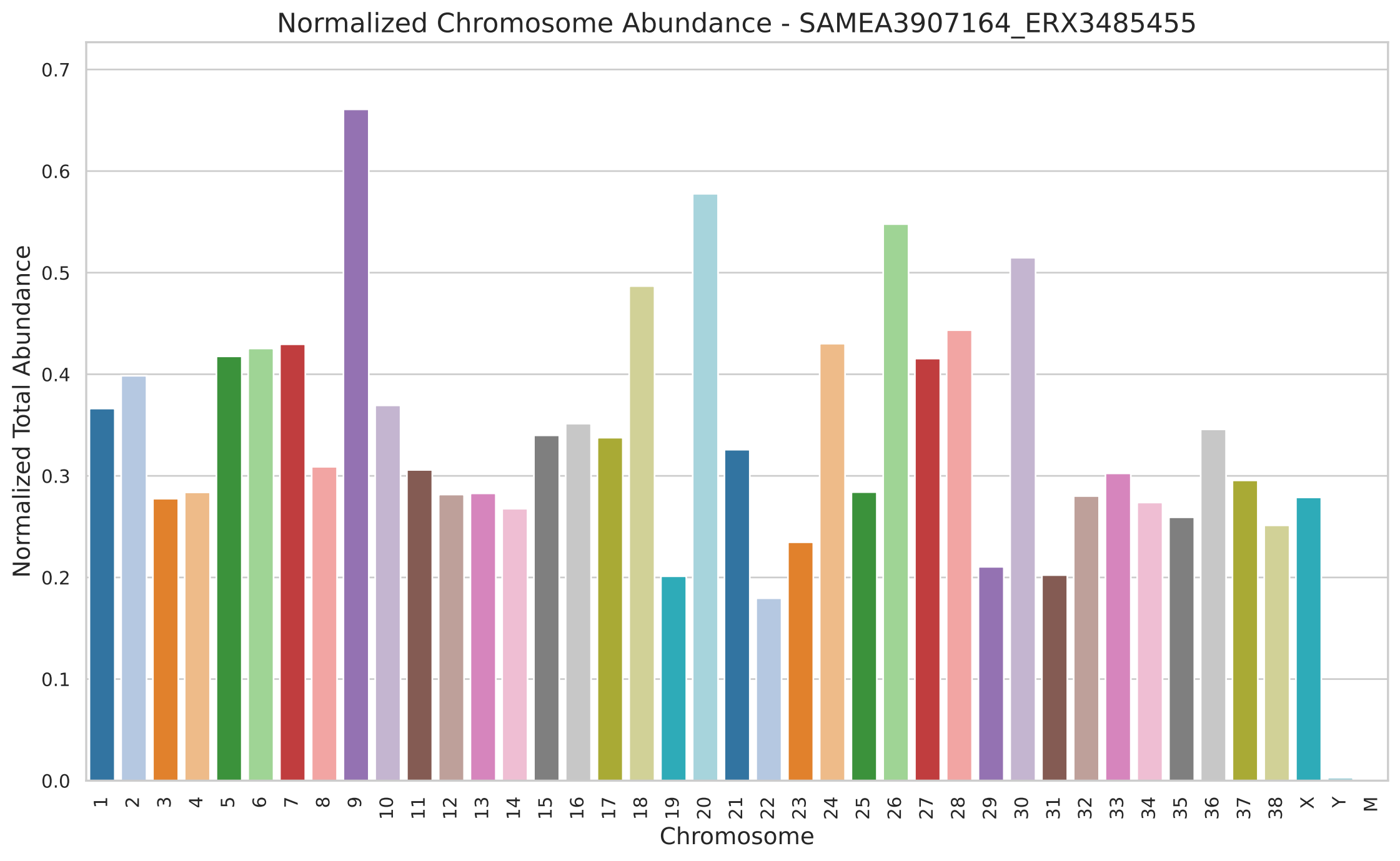

Normalized Chromosome Abundance - SAMEA5805086_ERX3485392
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

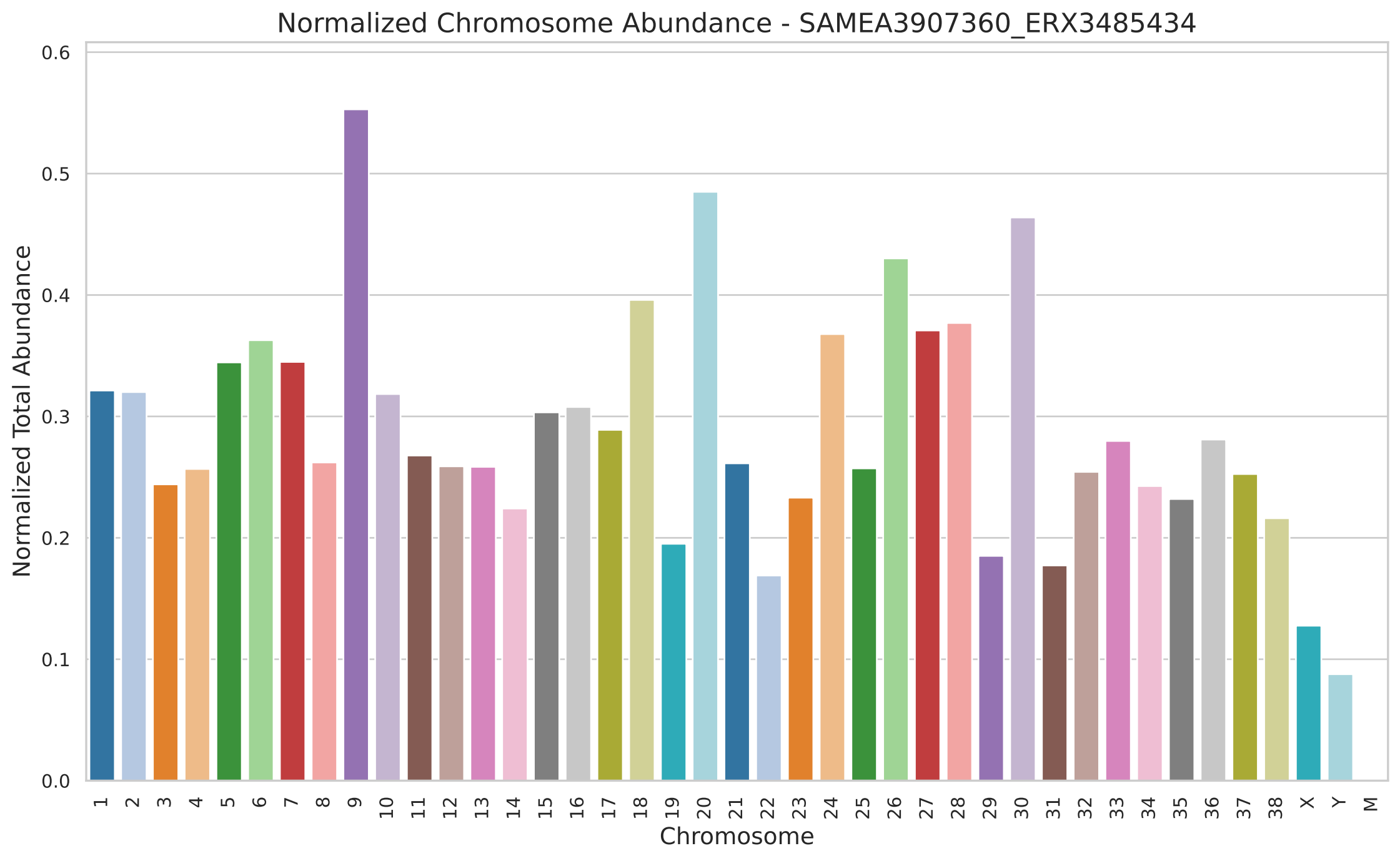

Normalized Chromosome Abundance - SAMEA5804597_ERX3485395
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

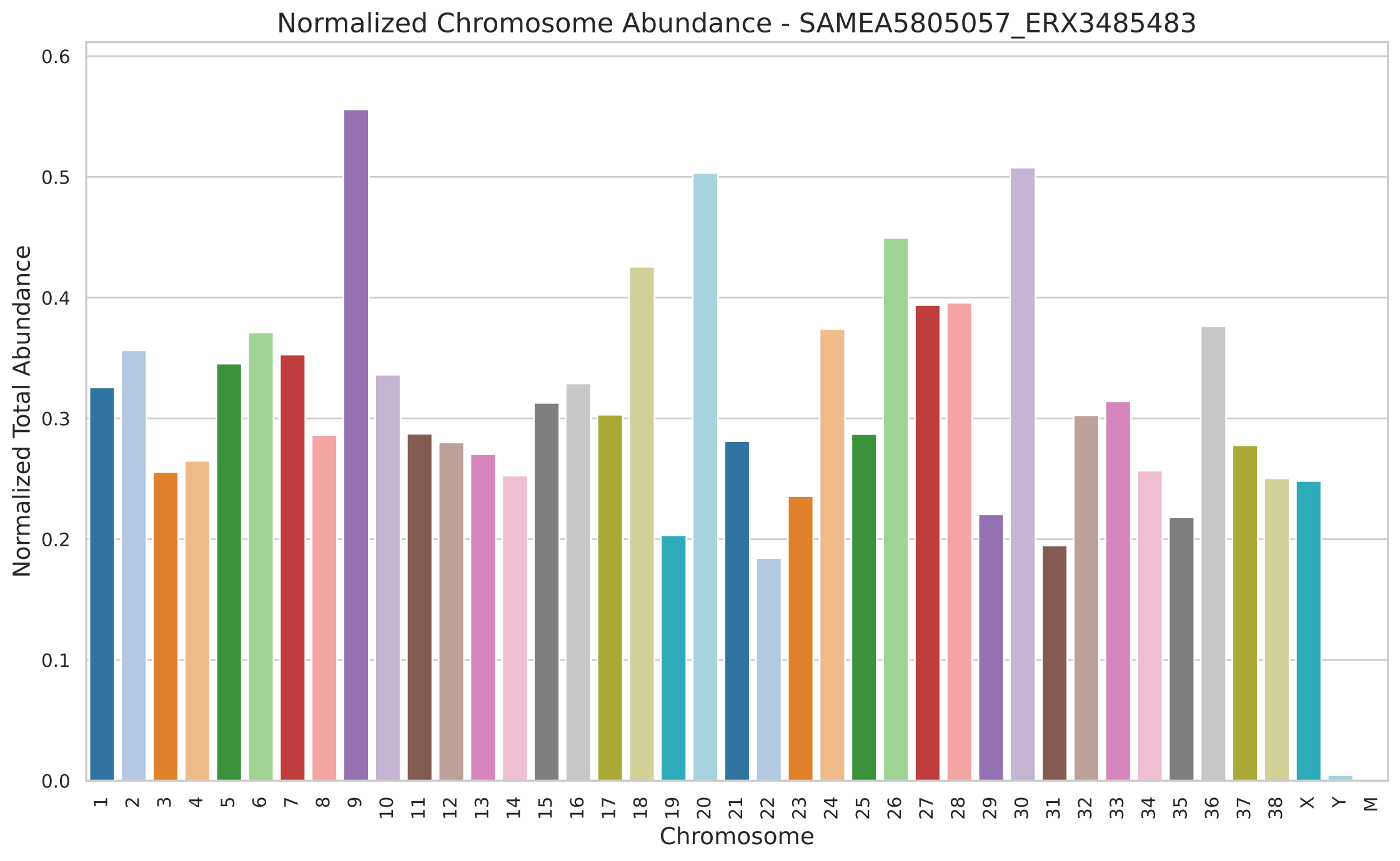

Normalized Chromosome Abundance - SAMEA5805053_ERX3485479
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

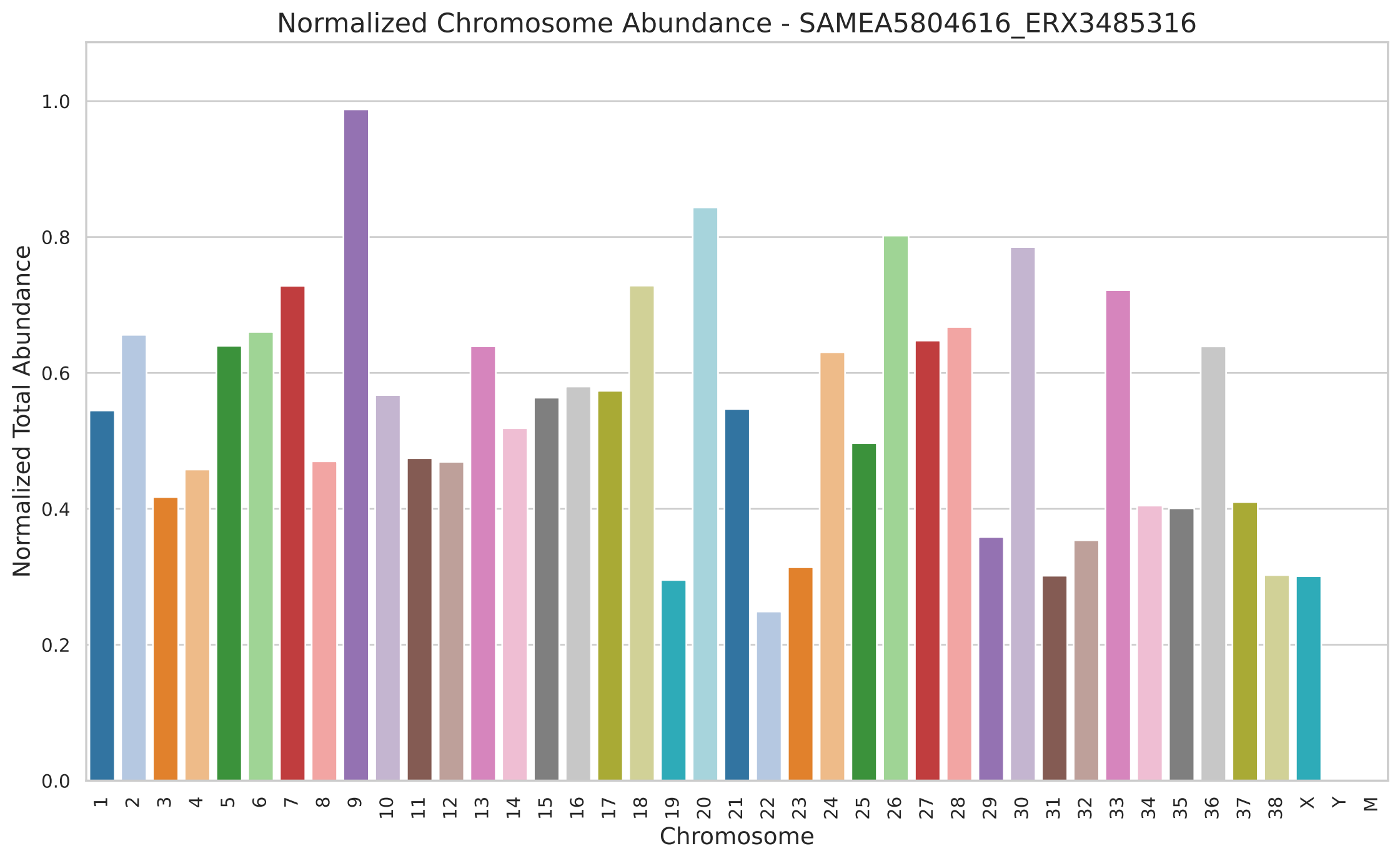

Normalized Chromosome Abundance - SAMEA5804601_ERX3485397
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

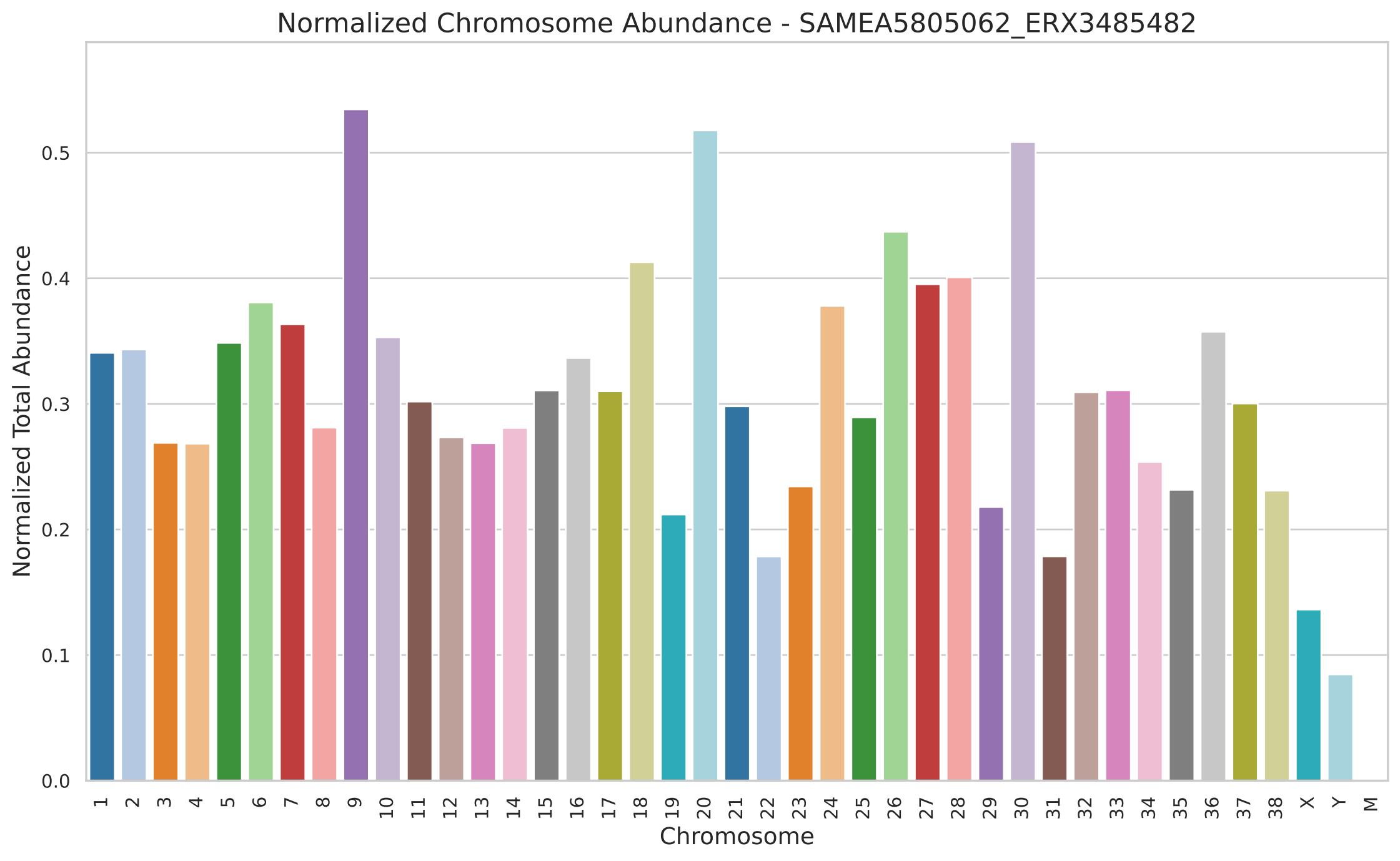

Normalized Chromosome Abundance - SAMEA5805060_ERX3485484
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

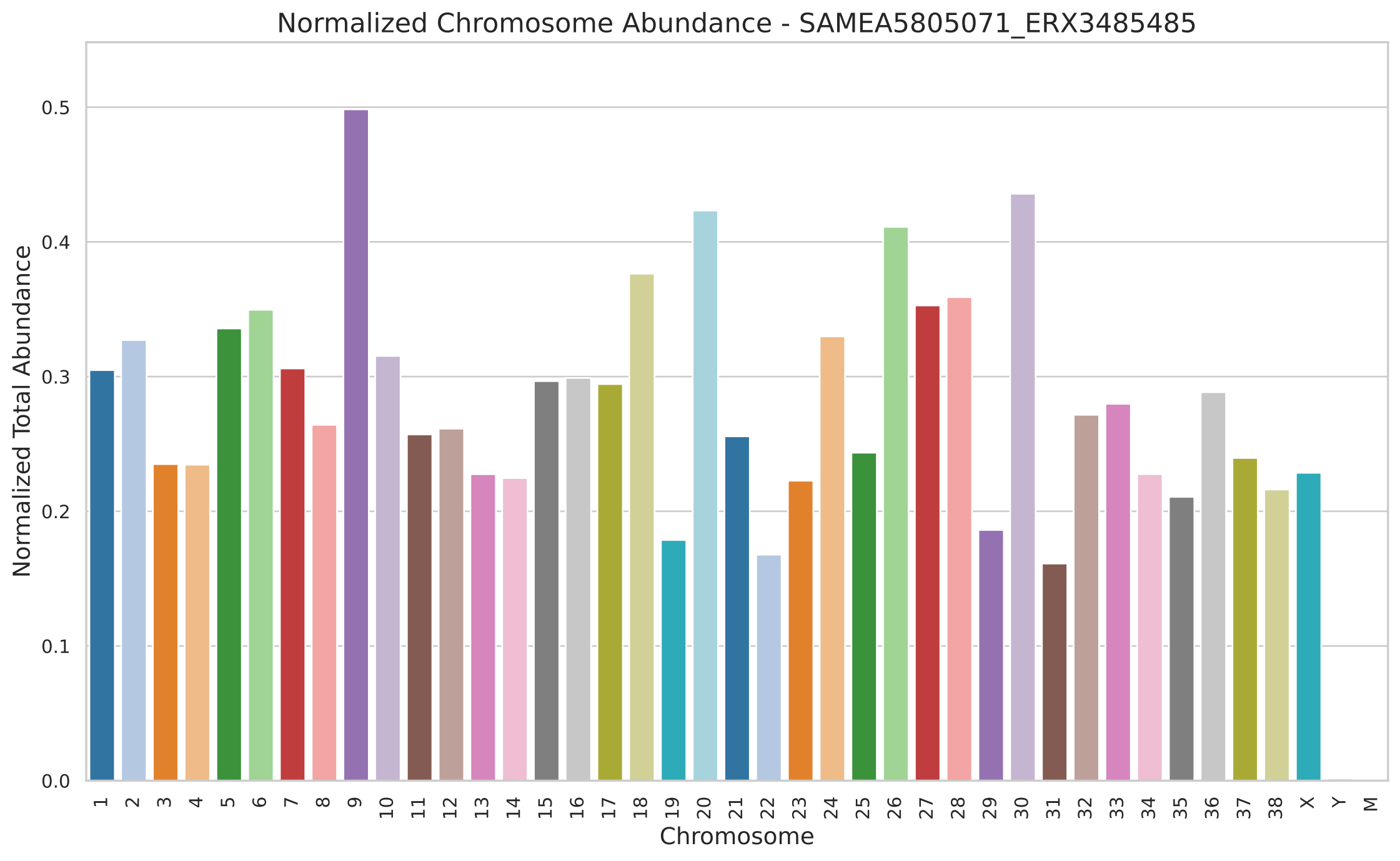

Normalized Chromosome Abundance - SAMEA3907164_ERX3485455
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

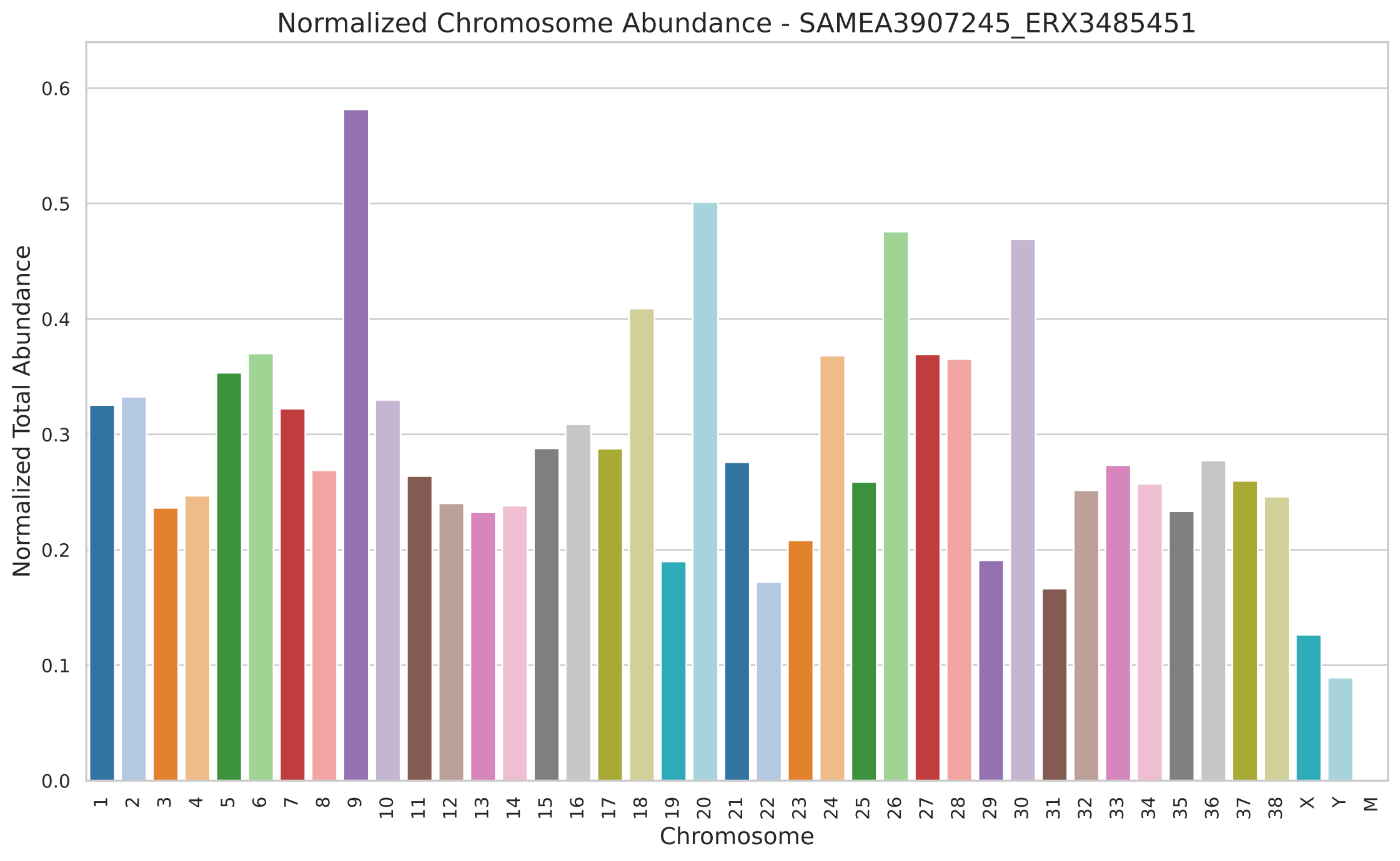

Normalized Chromosome Abundance - SAMEA3907360_ERX3485434
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

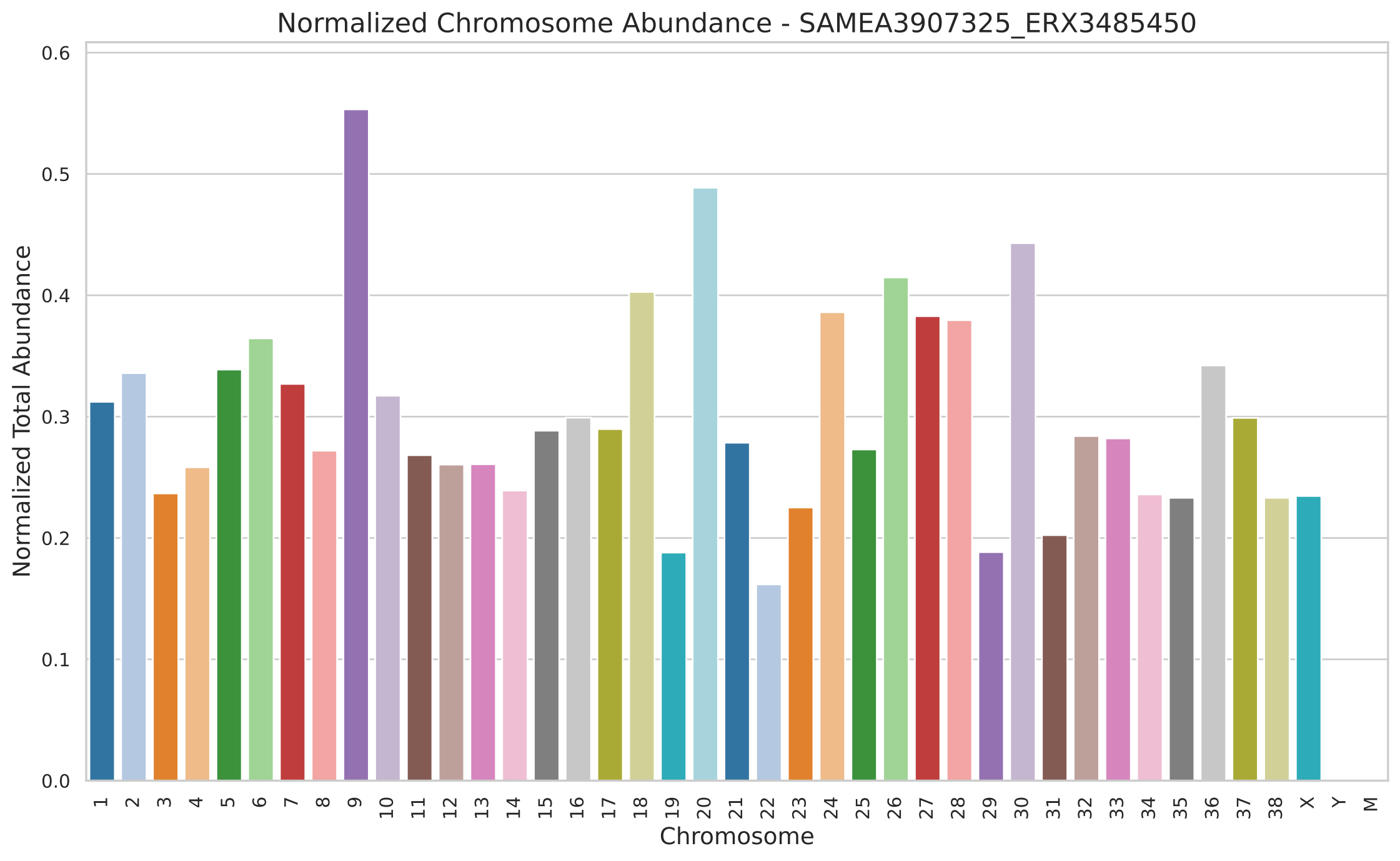

Normalized Chromosome Abundance - SAMEA5805057_ERX3485483
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

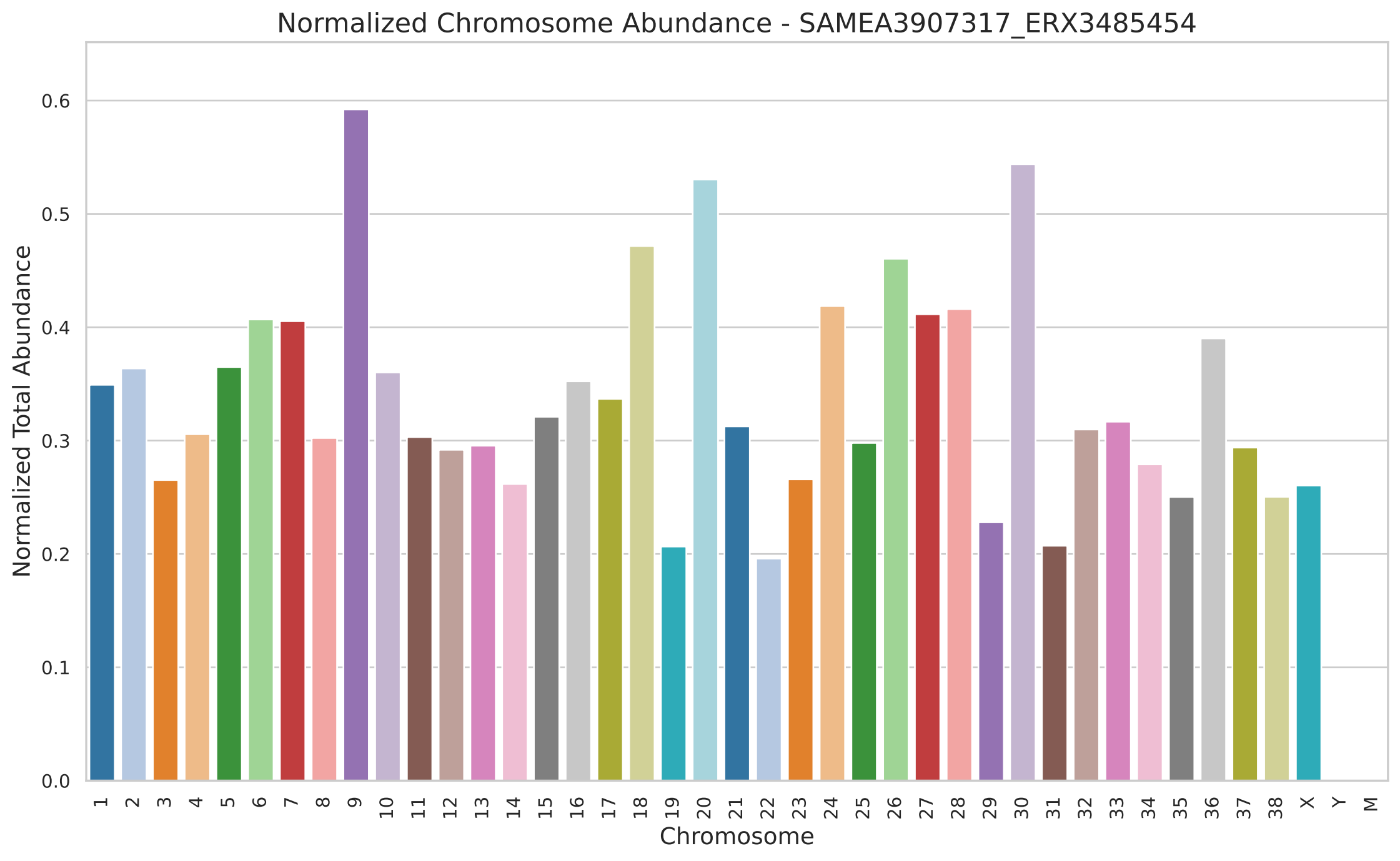

Normalized Chromosome Abundance - SAMEA5804616_ERX3485316
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

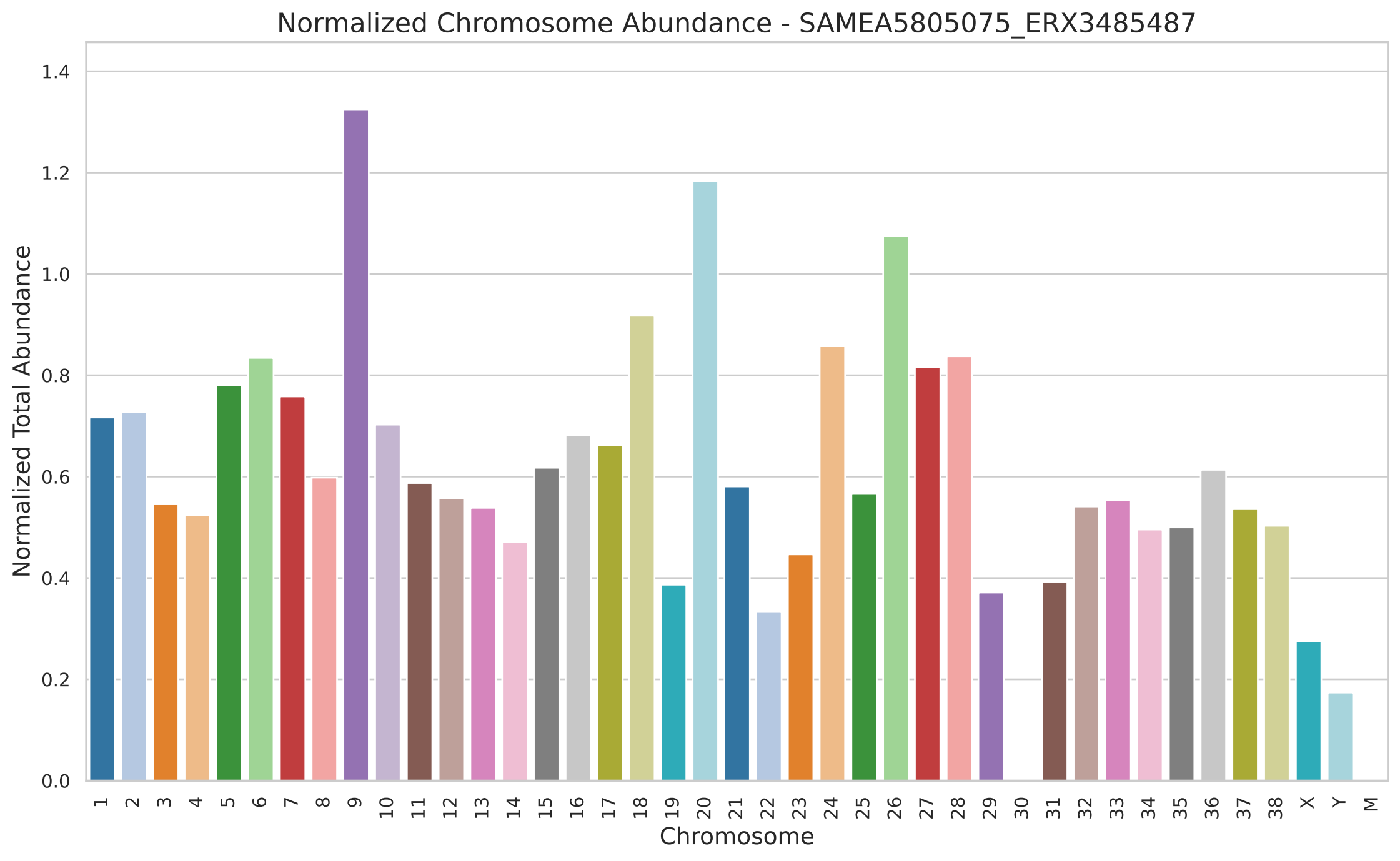

Normalized Chromosome Abundance - SAMEA5805062_ERX3485482
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

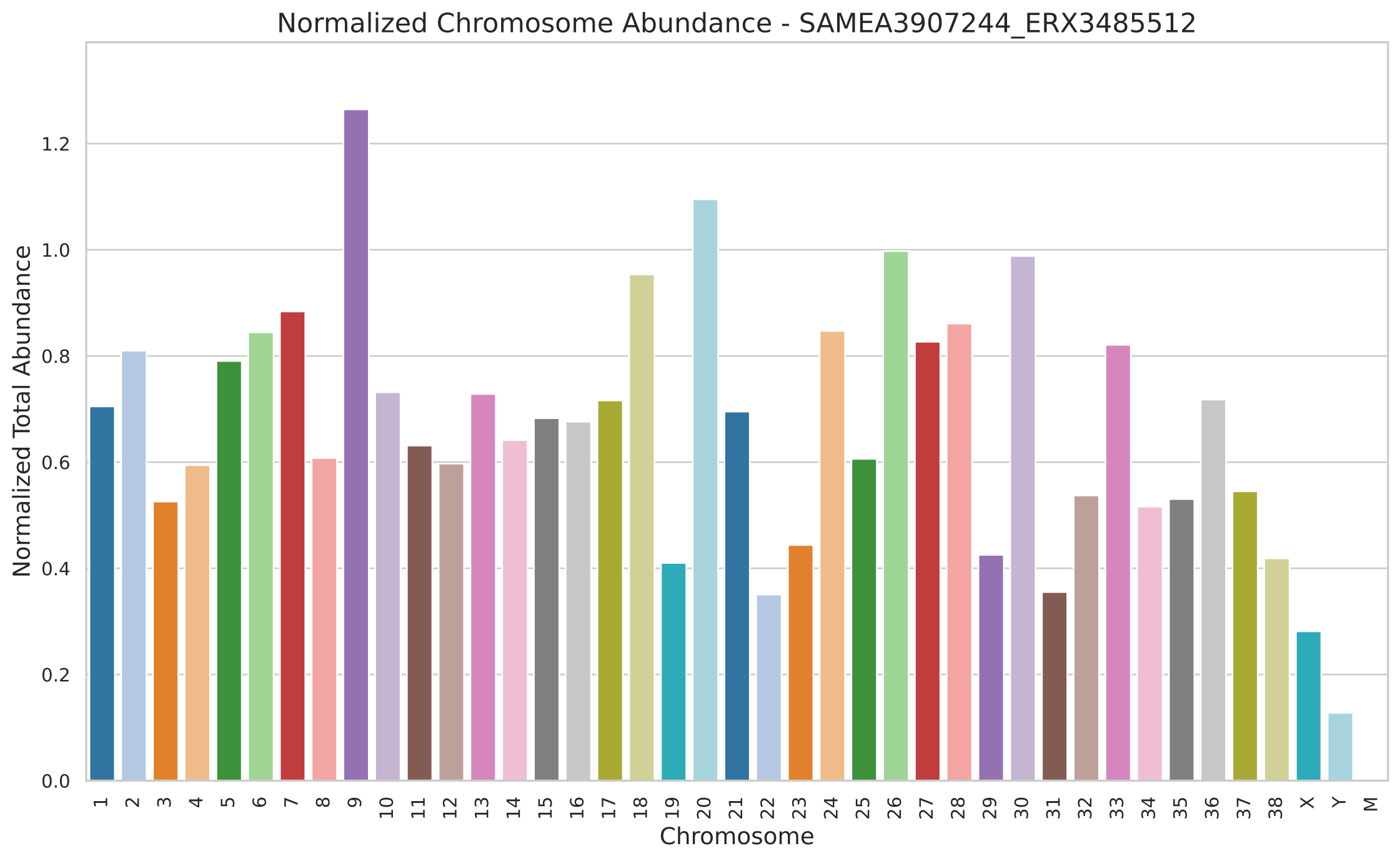

Normalized Chromosome Abundance - SAMEA5805071_ERX3485485
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

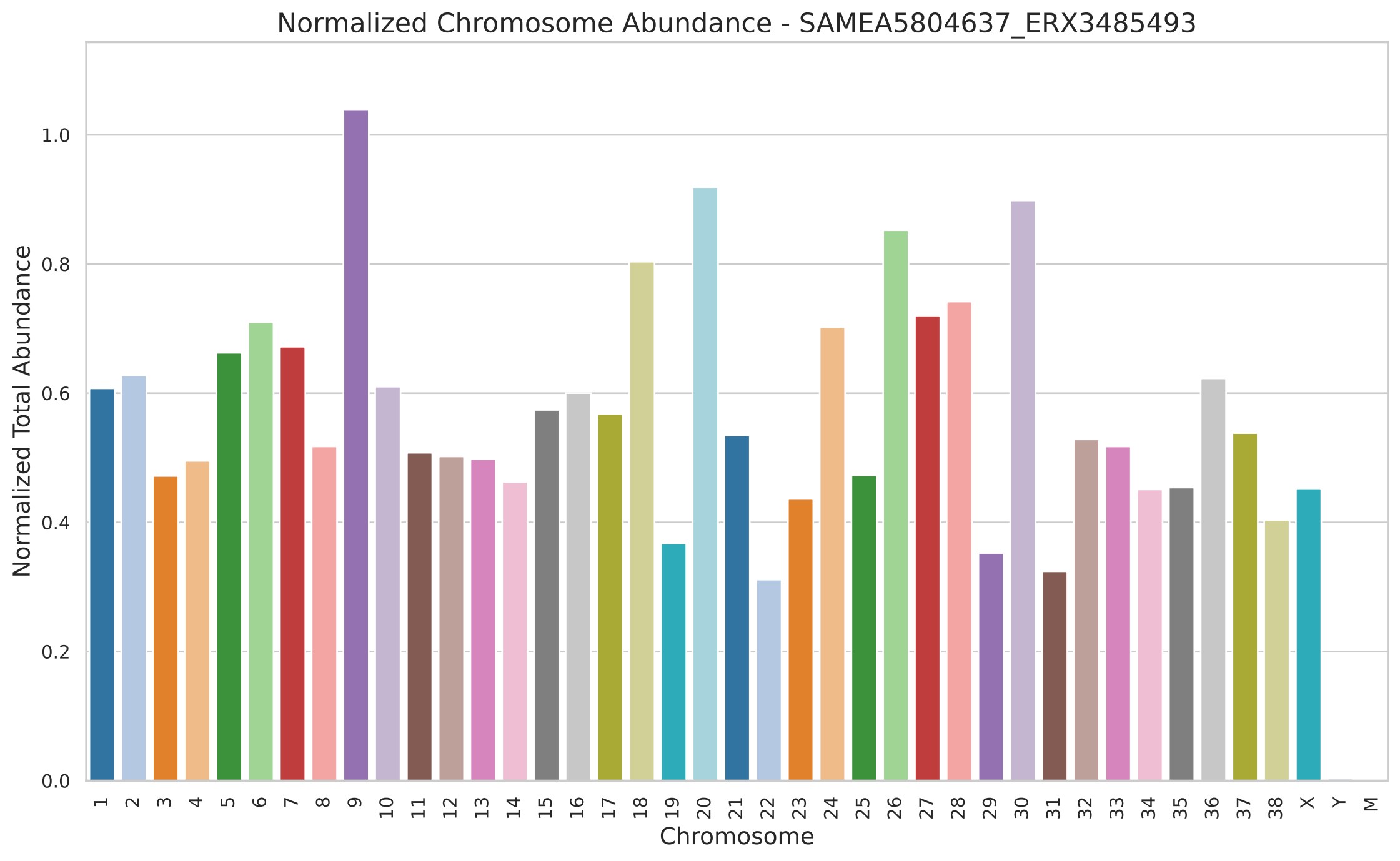

Normalized Chromosome Abundance - SAMEA3907245_ERX3485451
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

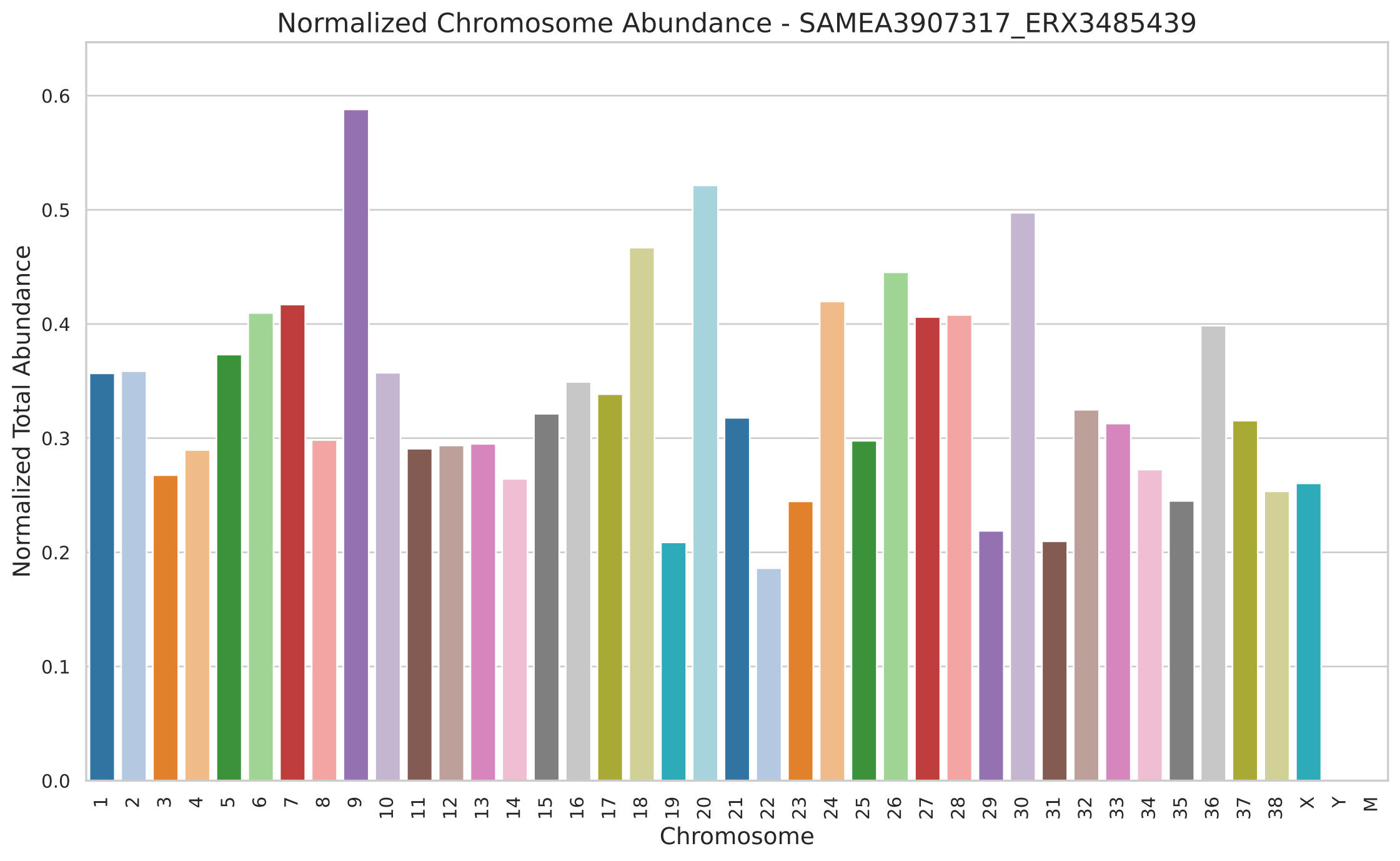

Normalized Chromosome Abundance - SAMEA3907325_ERX3485450
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

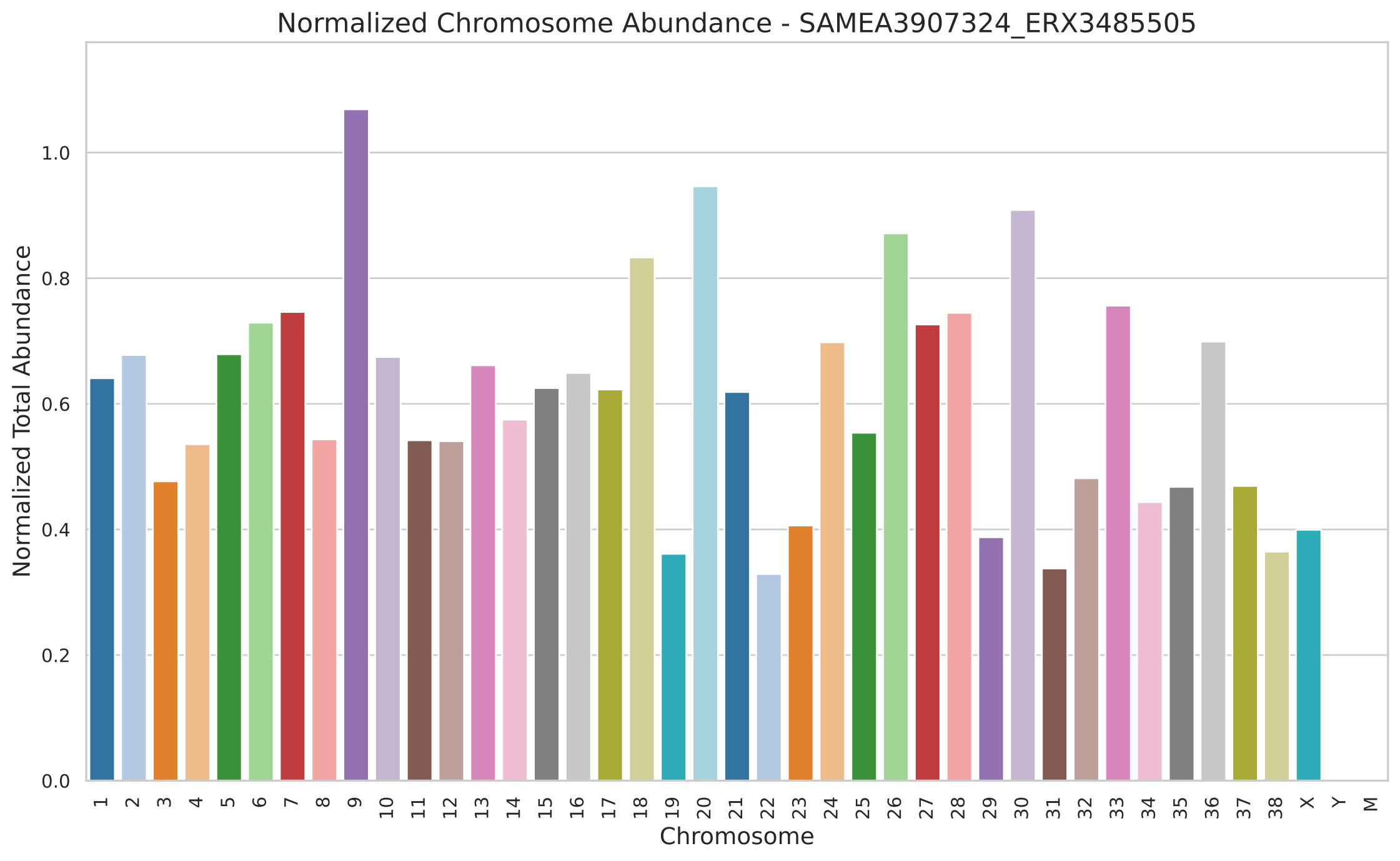

Normalized Chromosome Abundance - SAMEA3907317_ERX3485454
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

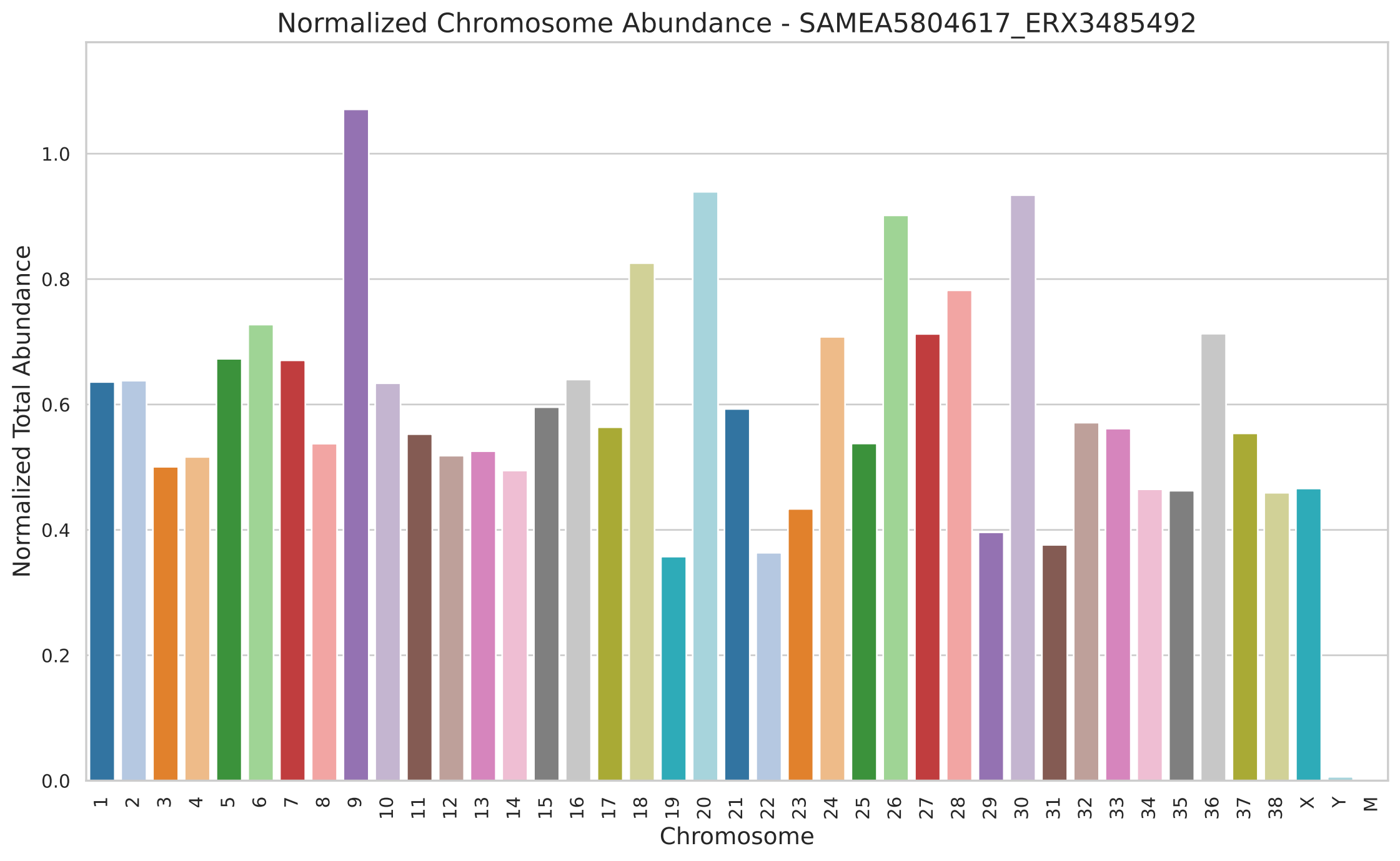

Normalized Chromosome Abundance - SAMEA5805075_ERX3485487
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

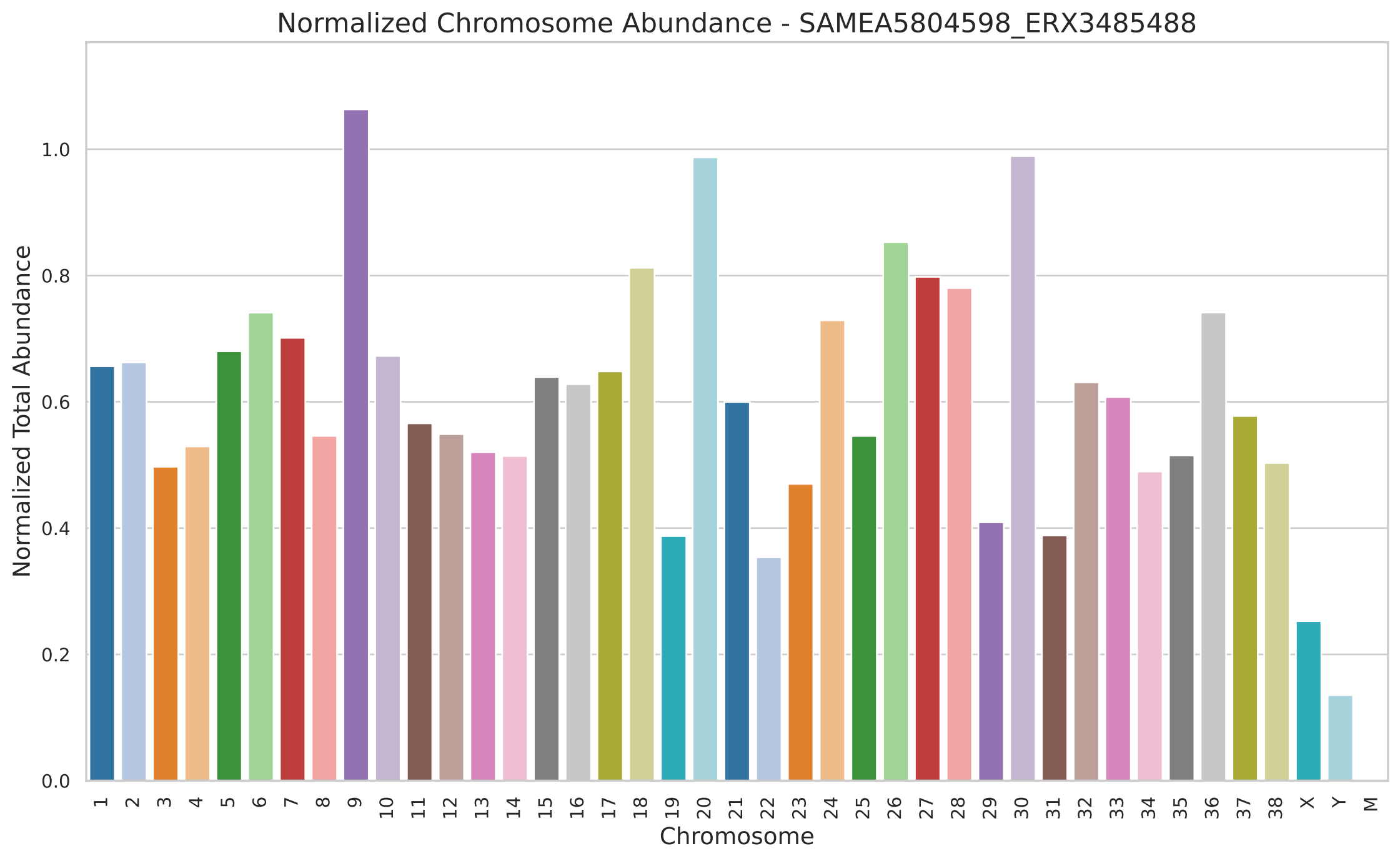

Normalized Chromosome Abundance - SAMEA3907244_ERX3485512
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

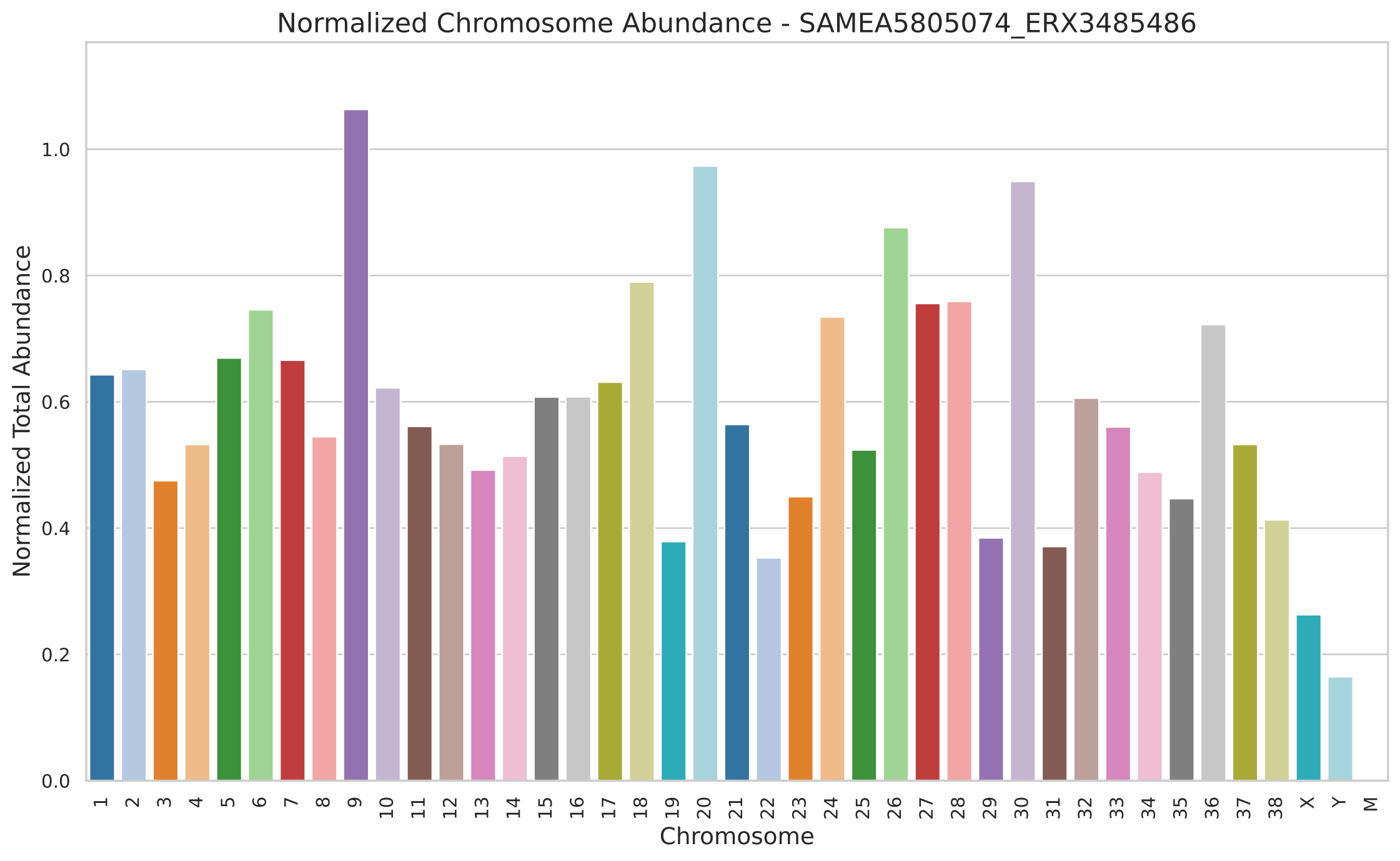

Normalized Chromosome Abundance - SAMEA5804637_ERX3485493
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

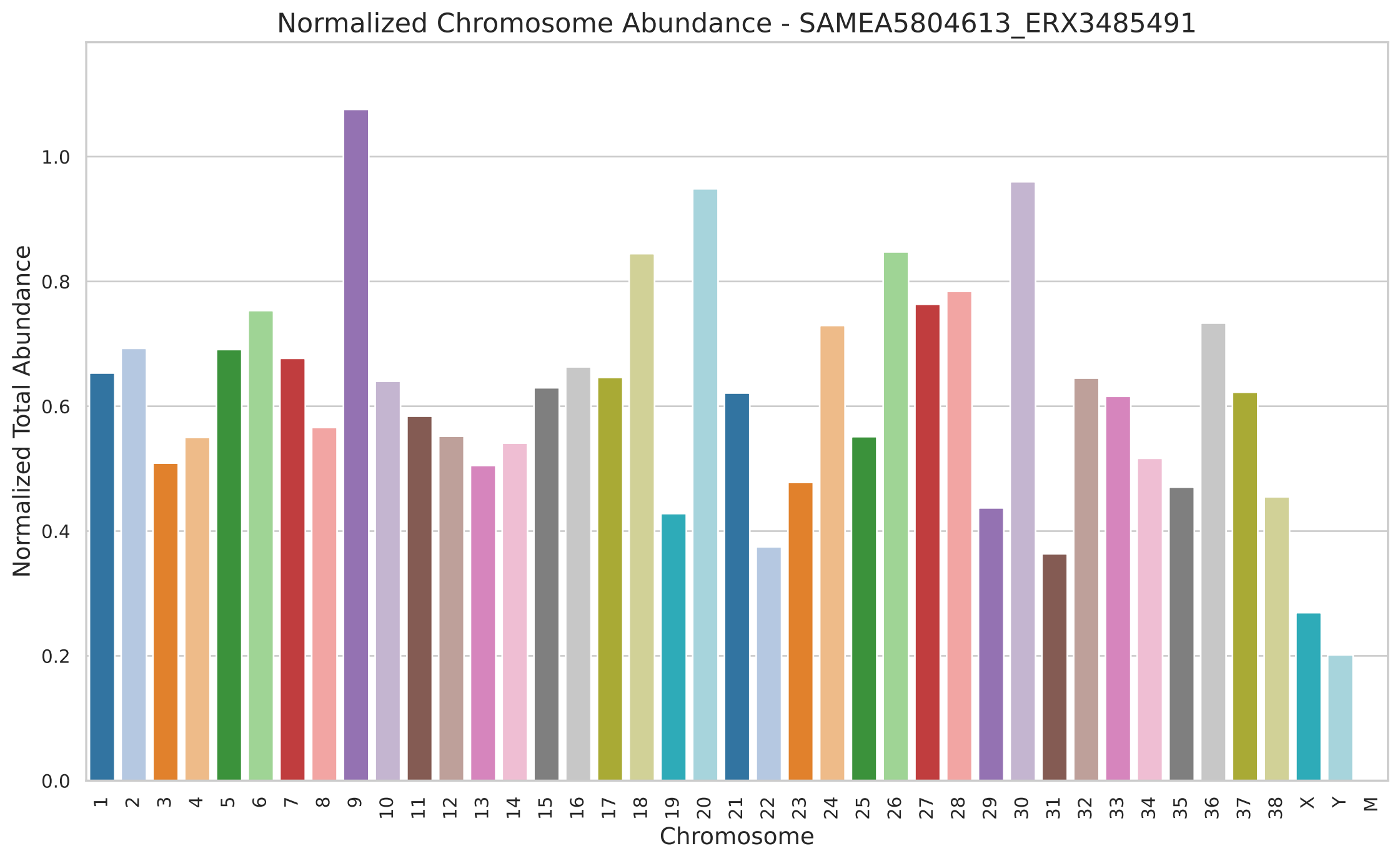

Normalized Chromosome Abundance - SAMEA3907317_ERX3485439
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

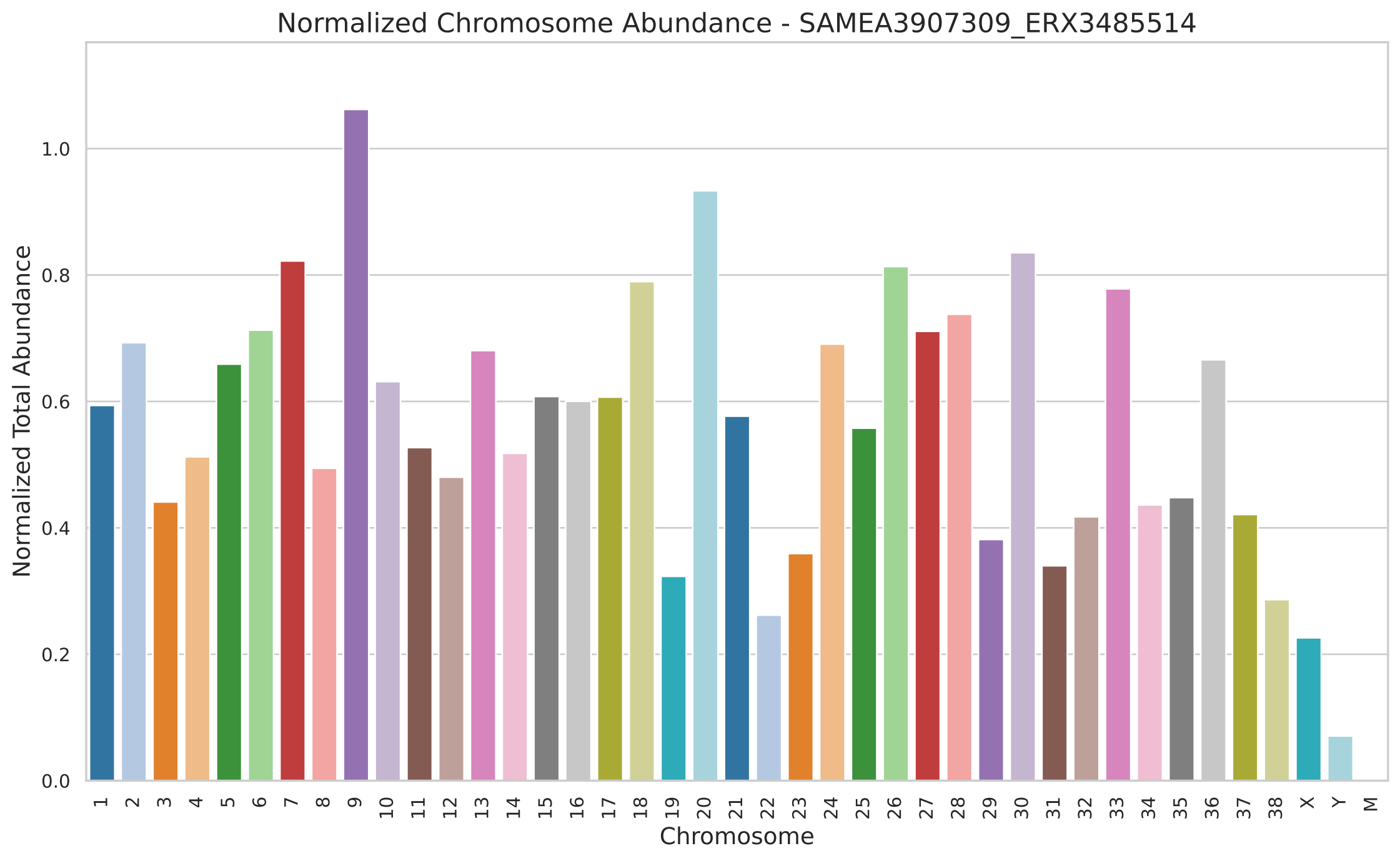

Normalized Chromosome Abundance - SAMEA3907324_ERX3485505
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

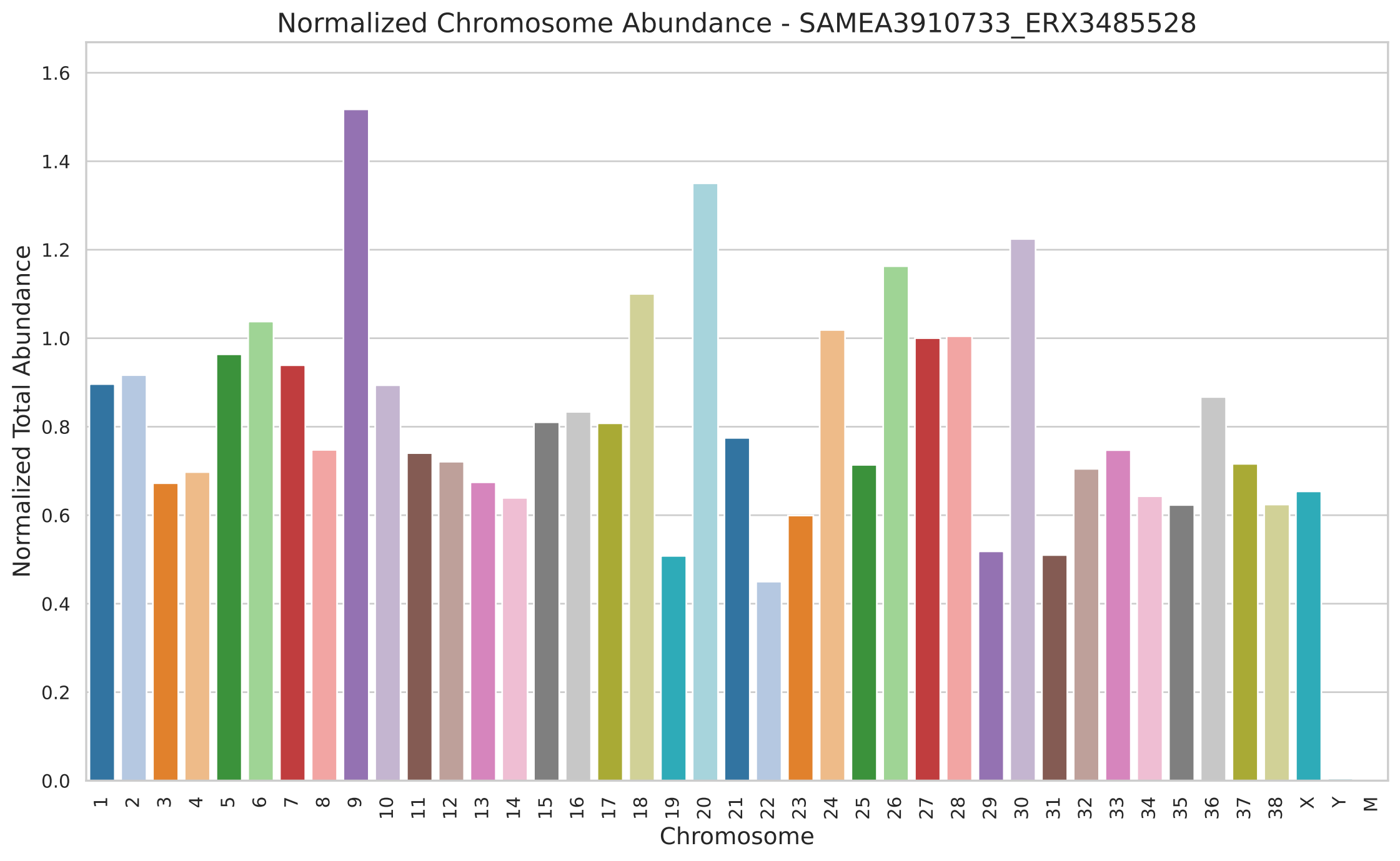

Normalized Chromosome Abundance - SAMEA5804617_ERX3485492
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

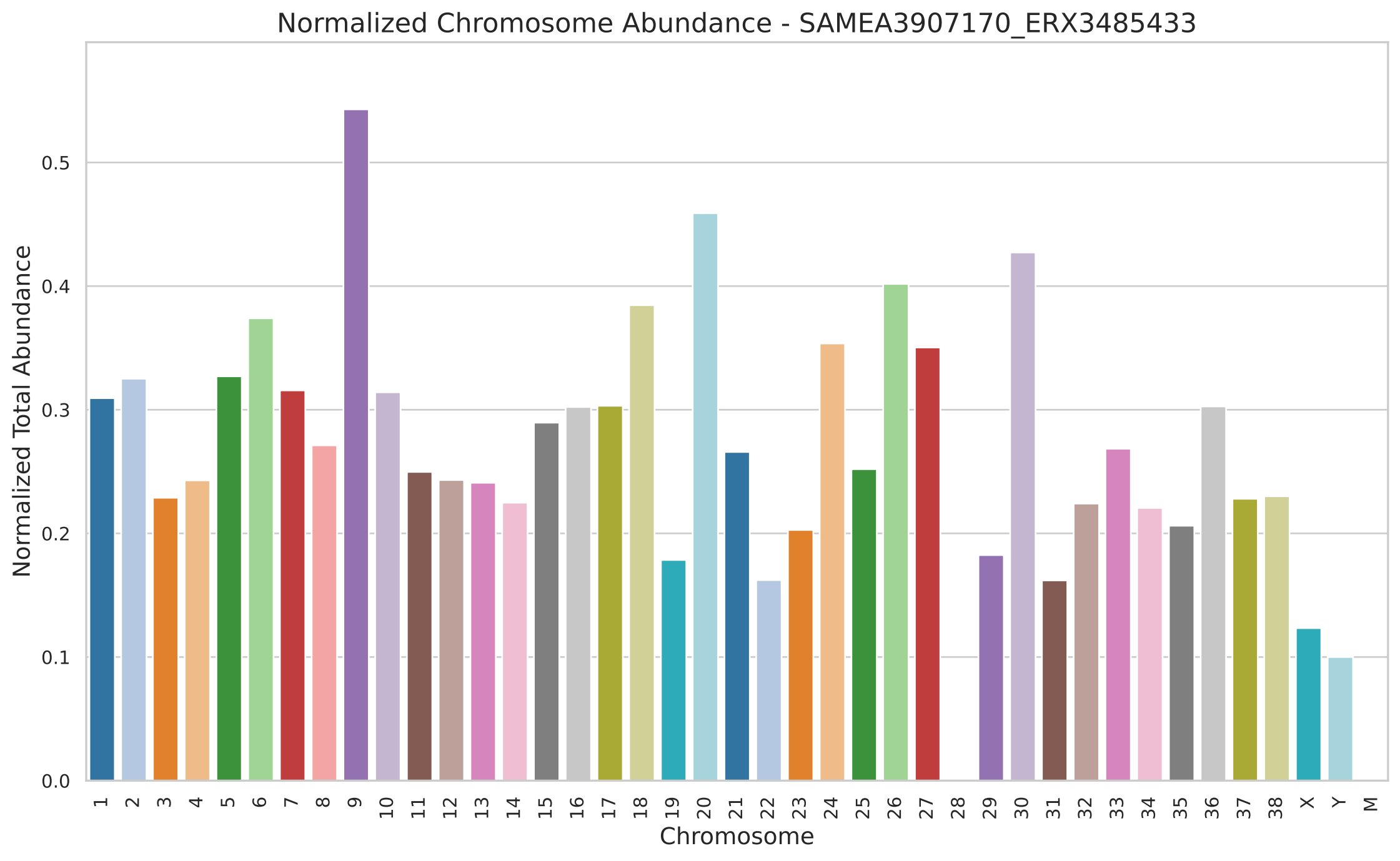

Normalized Chromosome Abundance - SAMEA5804598_ERX3485488
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

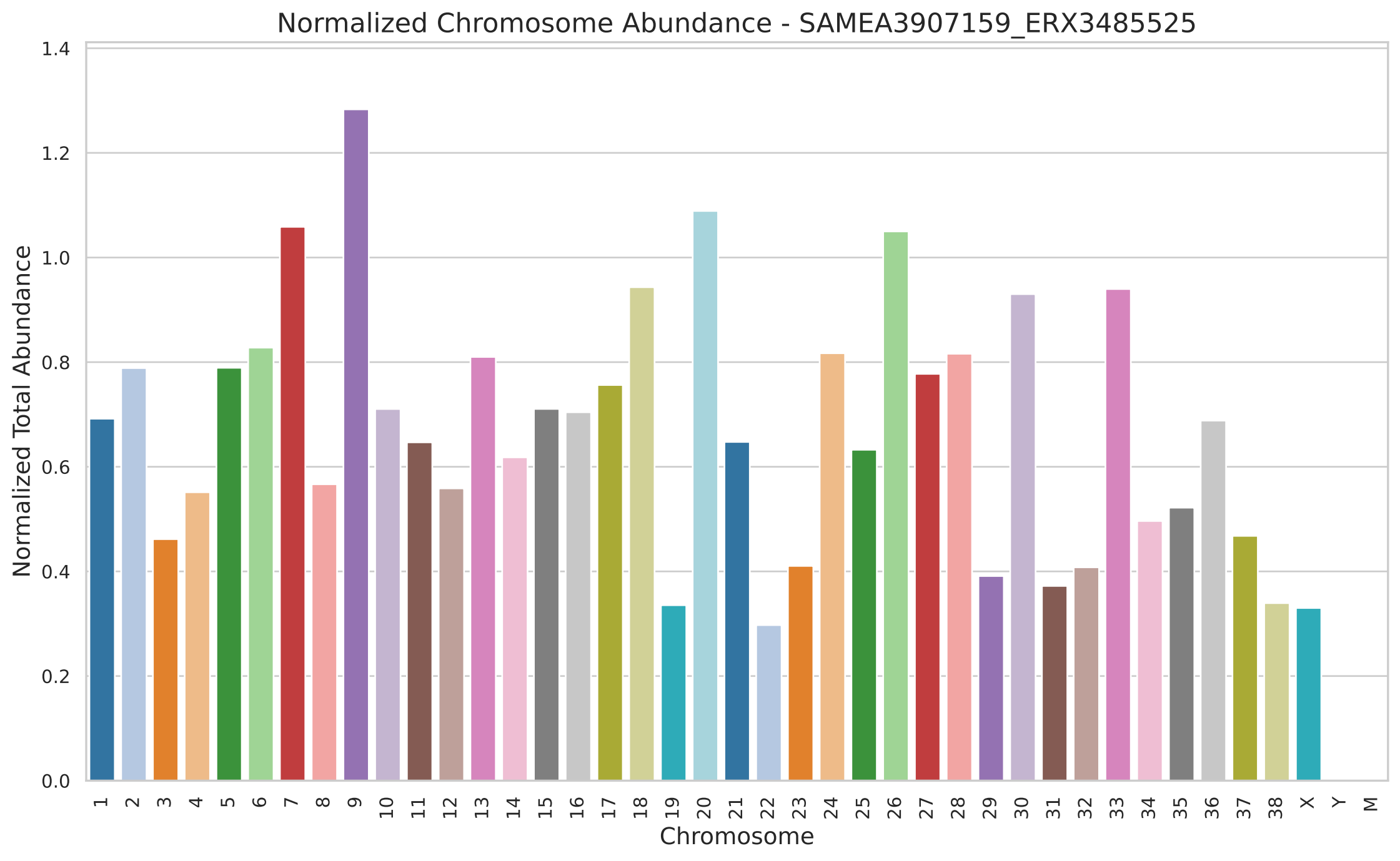

Normalized Chromosome Abundance - SAMEA5805074_ERX3485486
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

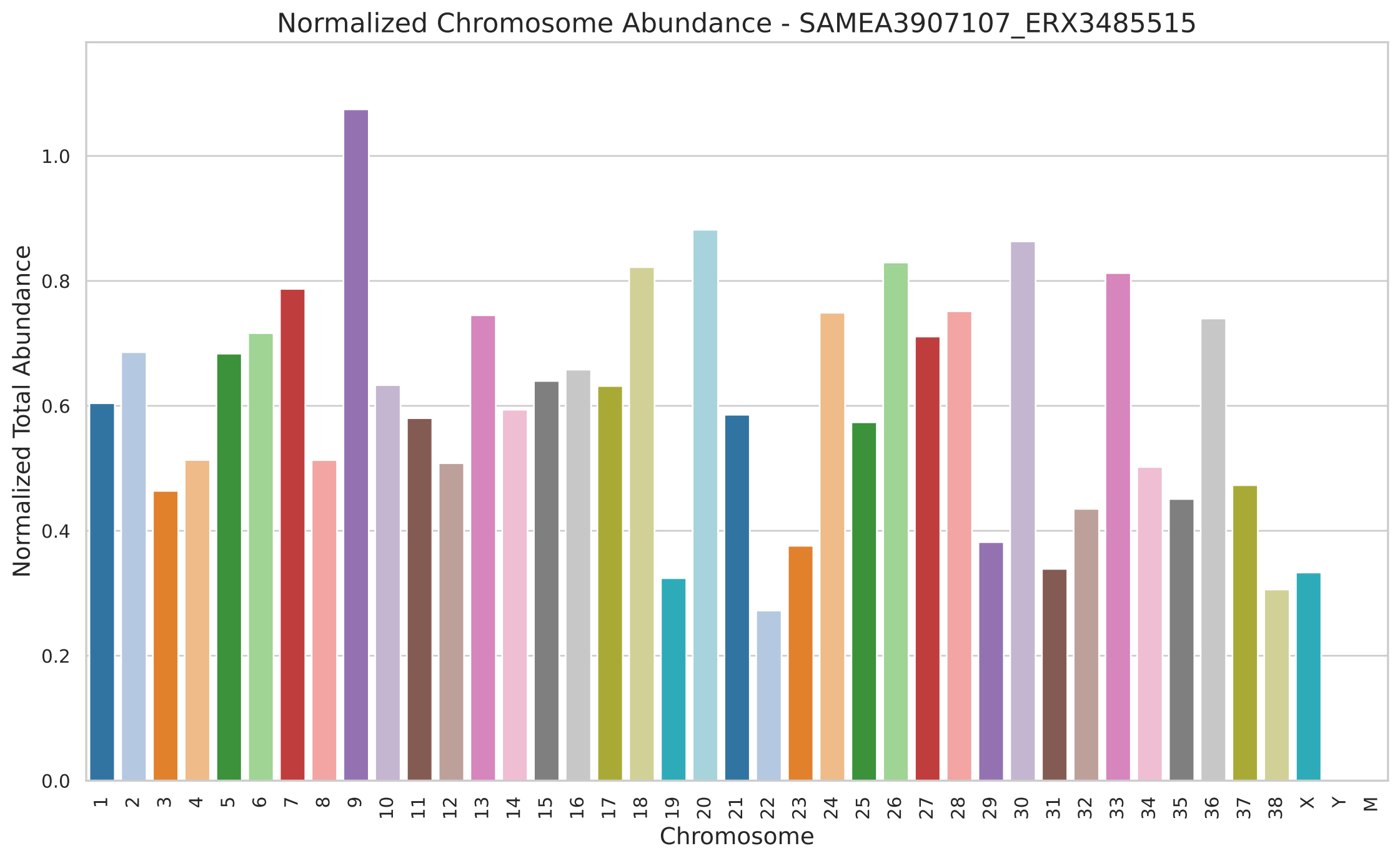

Normalized Chromosome Abundance - SAMEA5804613_ERX3485491
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

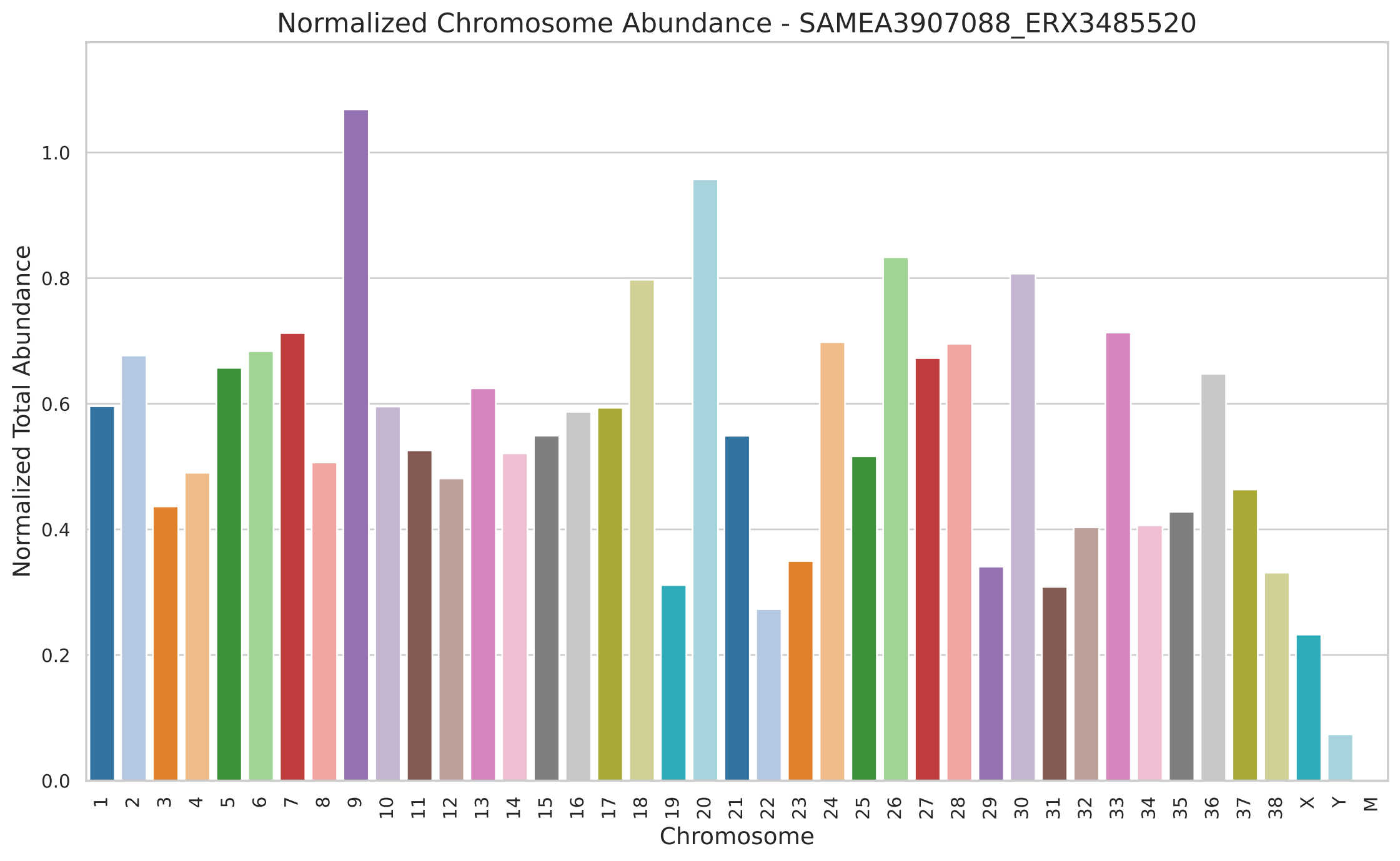

Normalized Chromosome Abundance - SAMEA3907309_ERX3485514
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

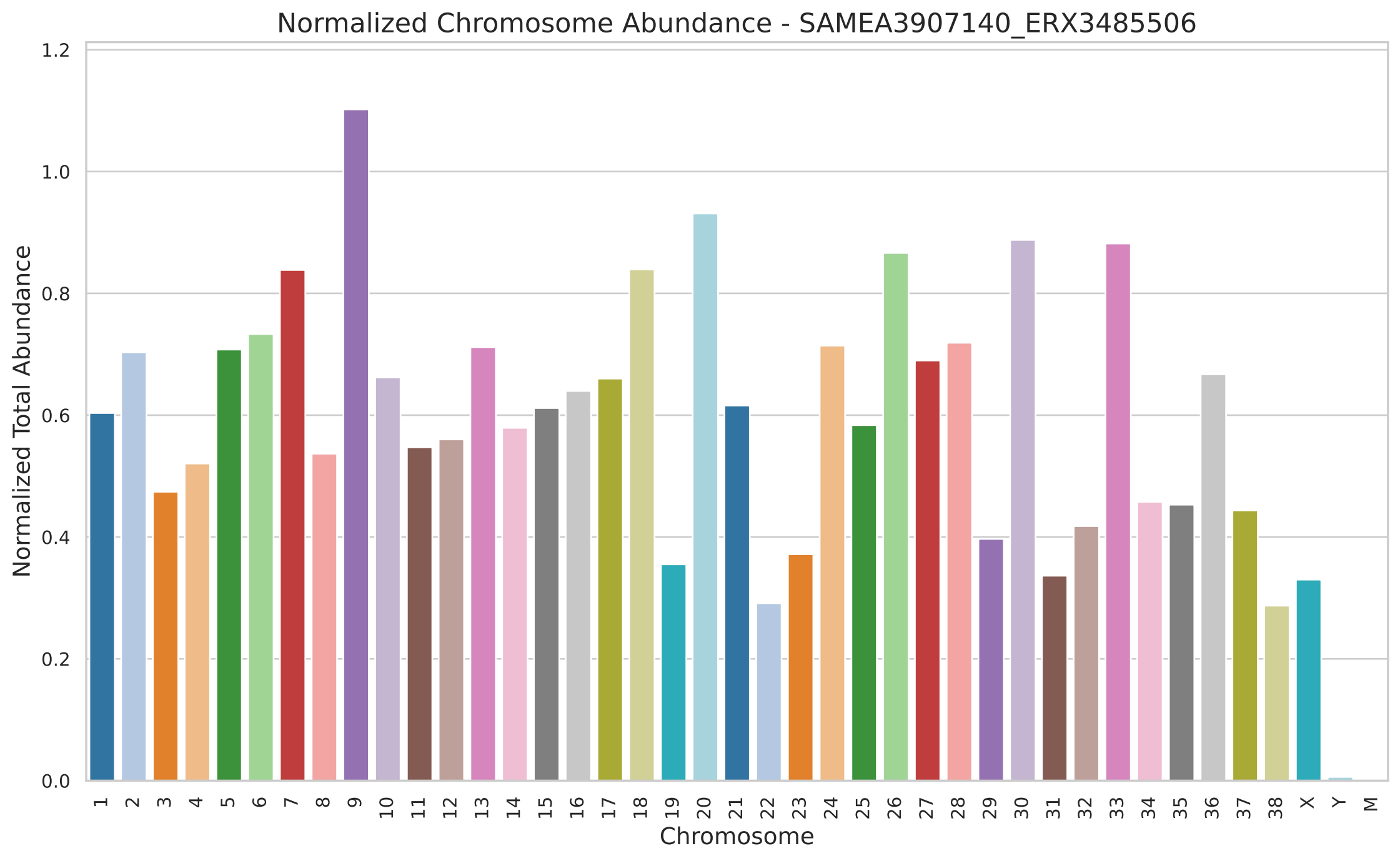

Normalized Chromosome Abundance - SAMEA3910733_ERX3485528
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

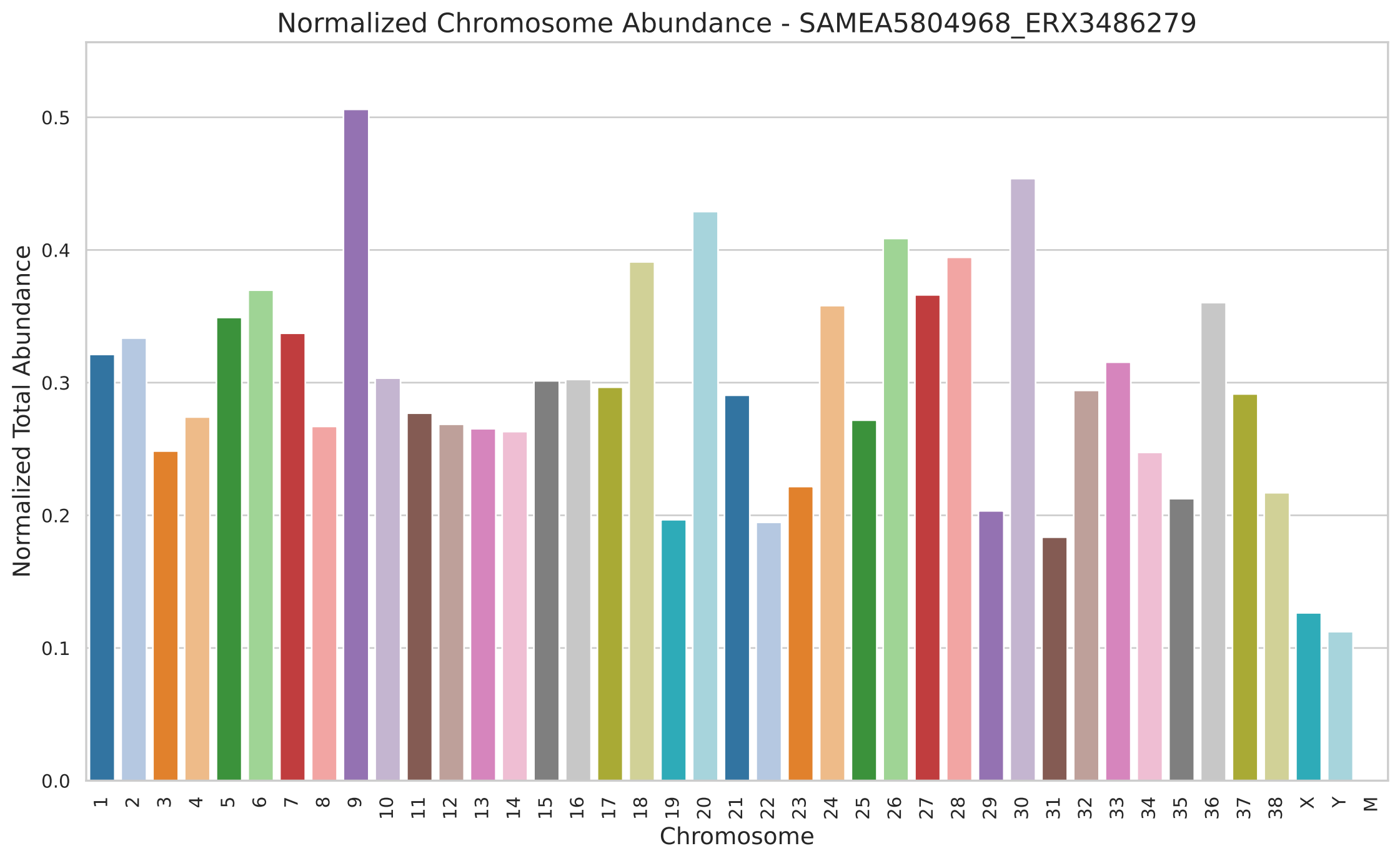

Normalized Chromosome Abundance - SAMEA3907170_ERX3485433
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

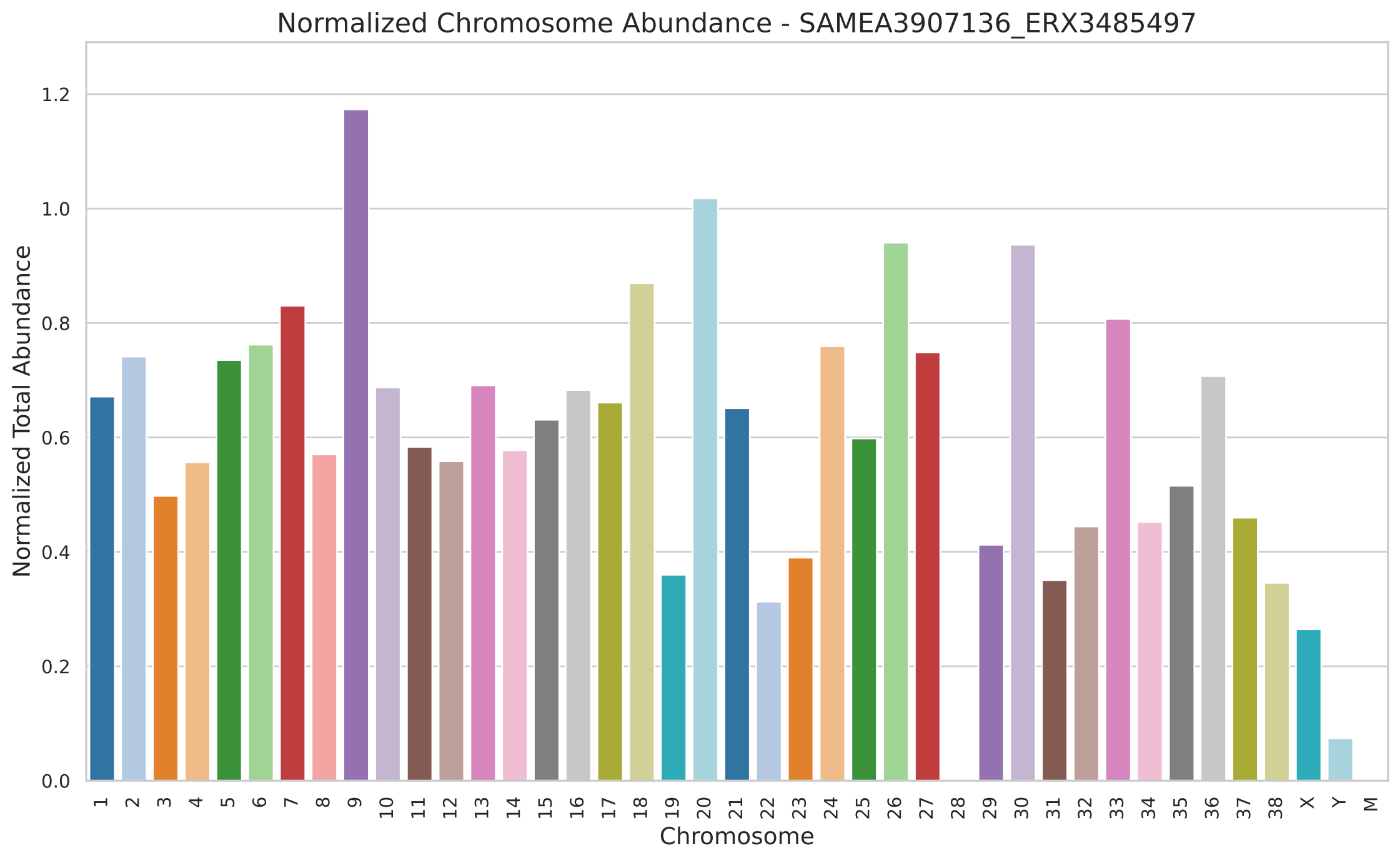

Normalized Chromosome Abundance - SAMEA3907159_ERX3485525
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

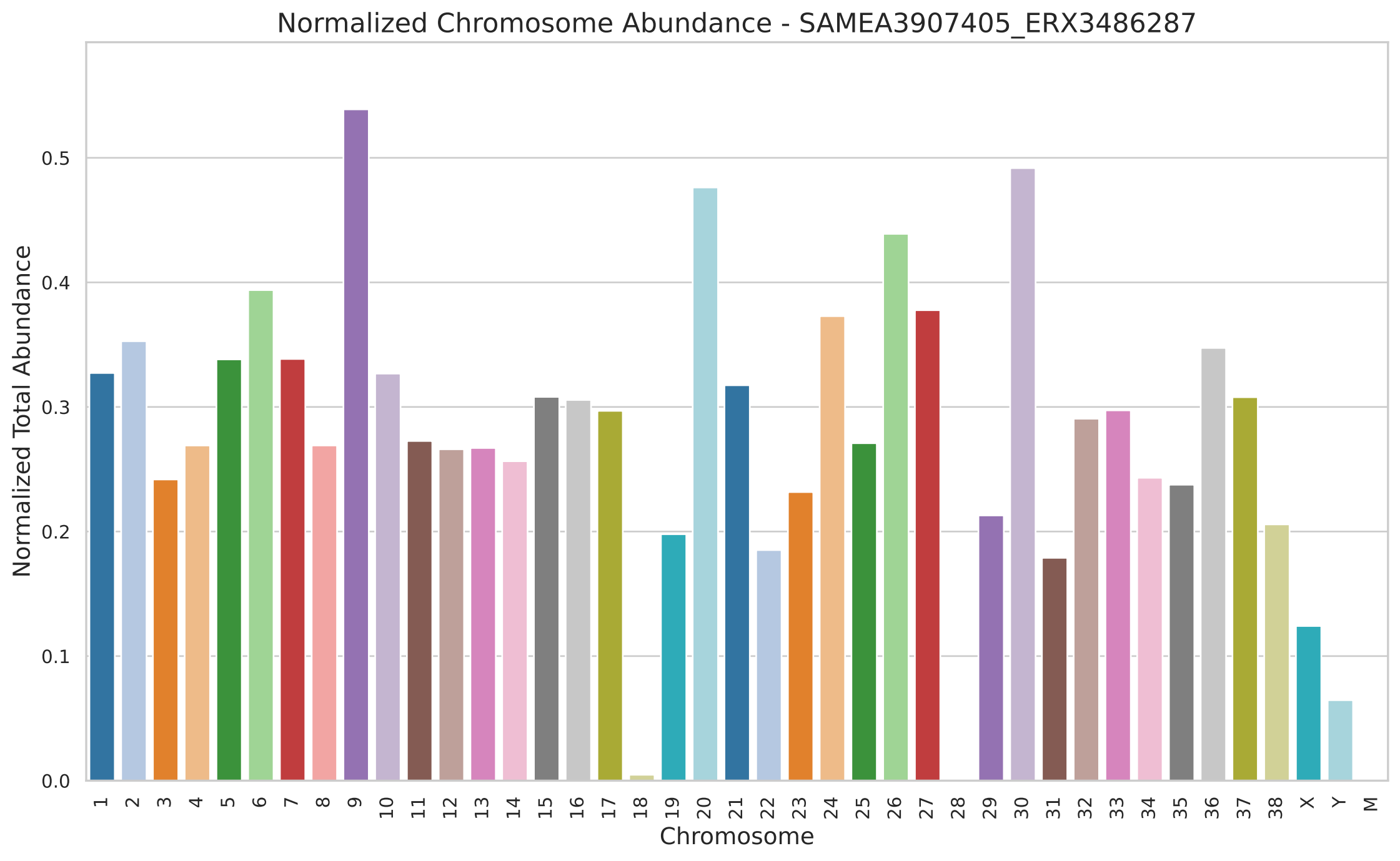

Normalized Chromosome Abundance - SAMEA3907107_ERX3485515
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

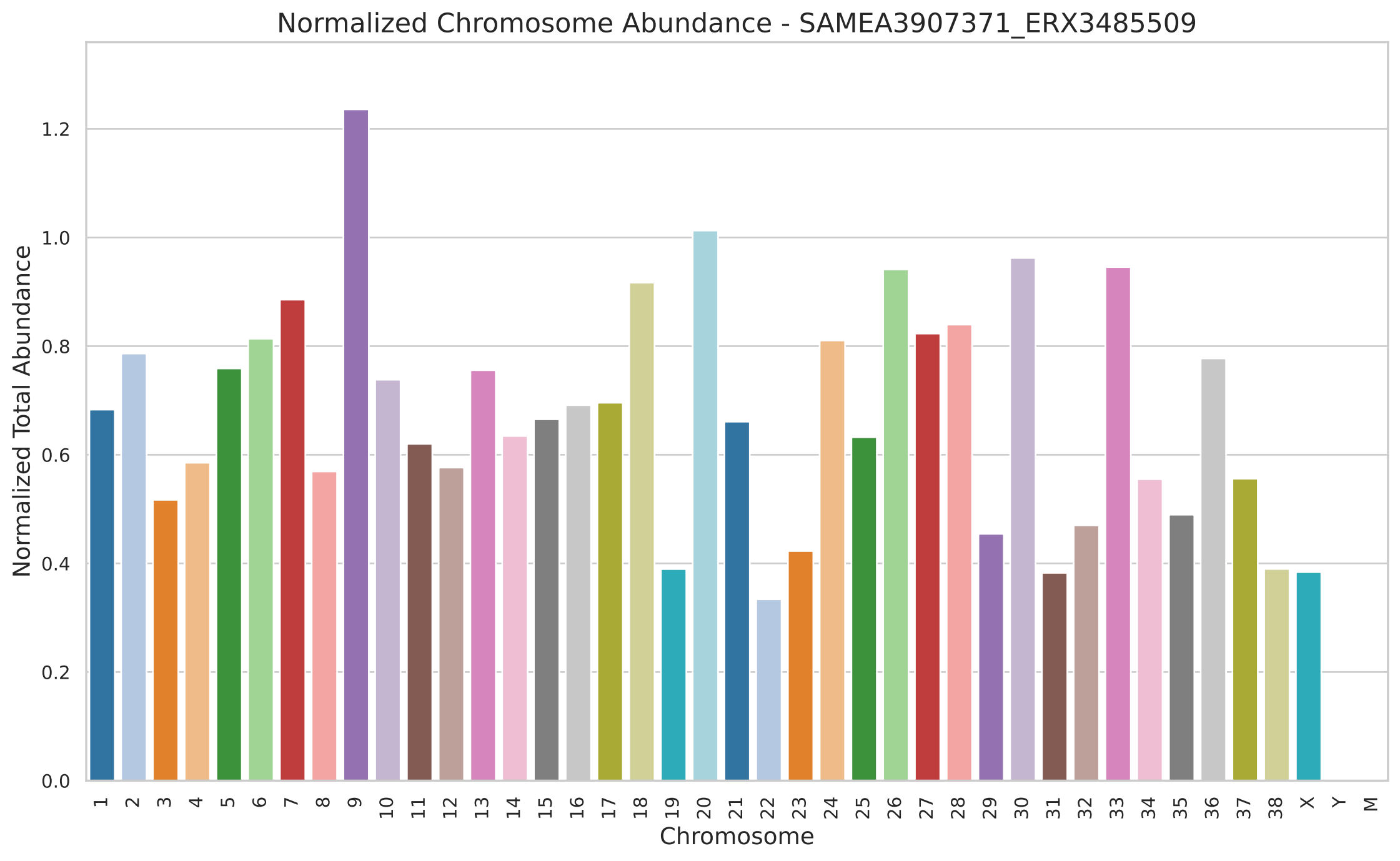

Normalized Chromosome Abundance - SAMEA3907088_ERX3485520
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

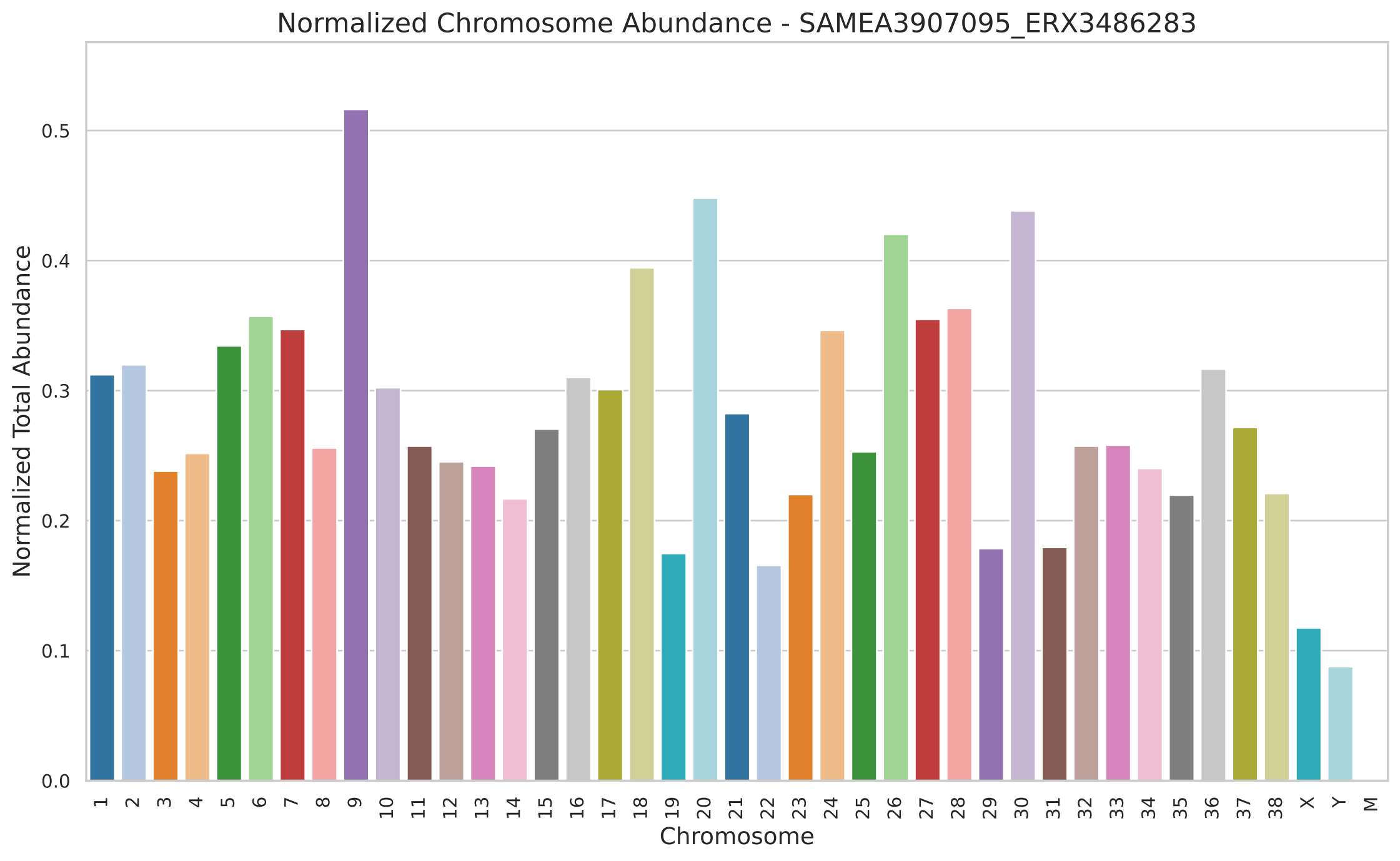

Normalized Chromosome Abundance - SAMEA3907140_ERX3485506
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

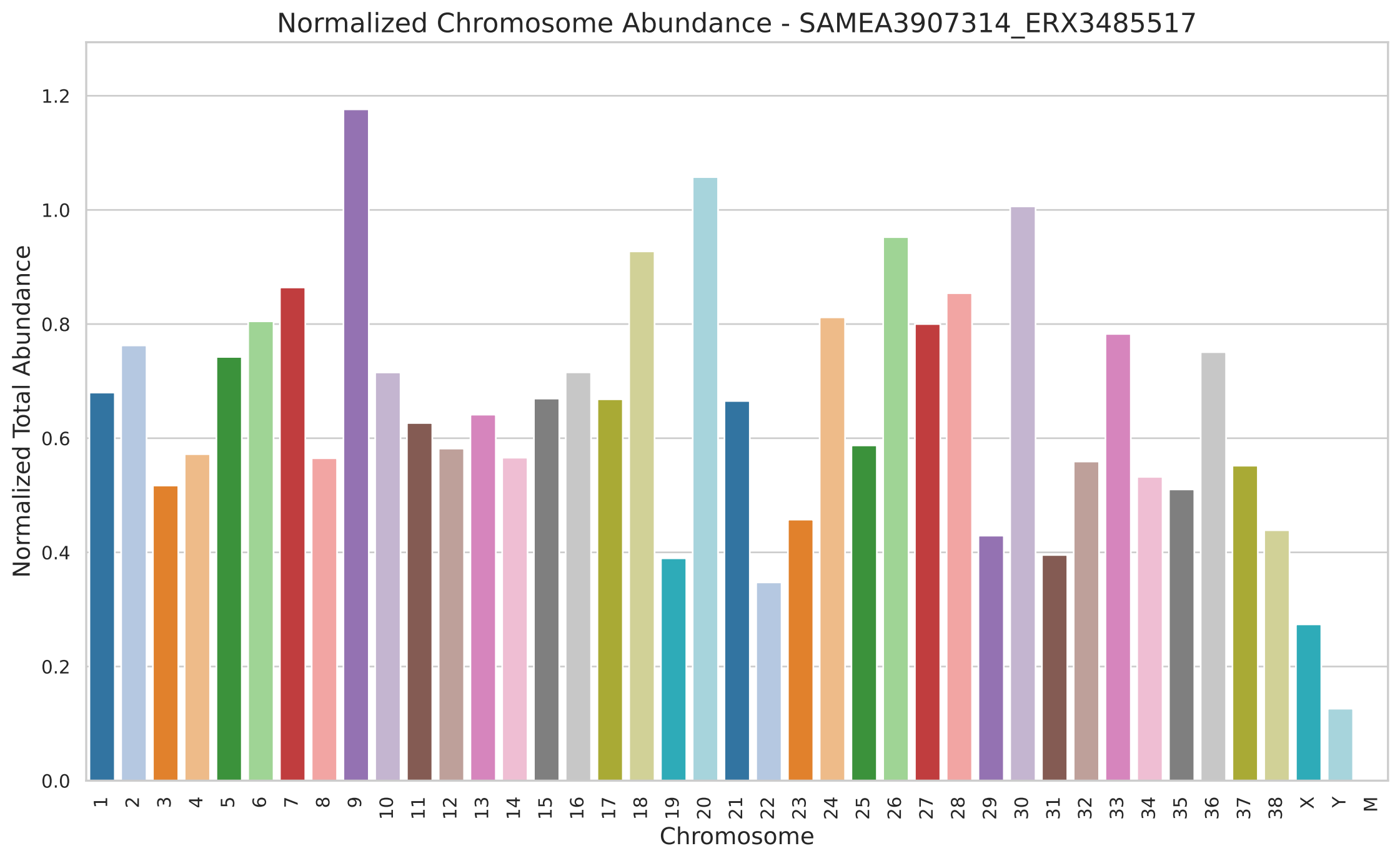

Normalized Chromosome Abundance - SAMEA5804968_ERX3486279
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

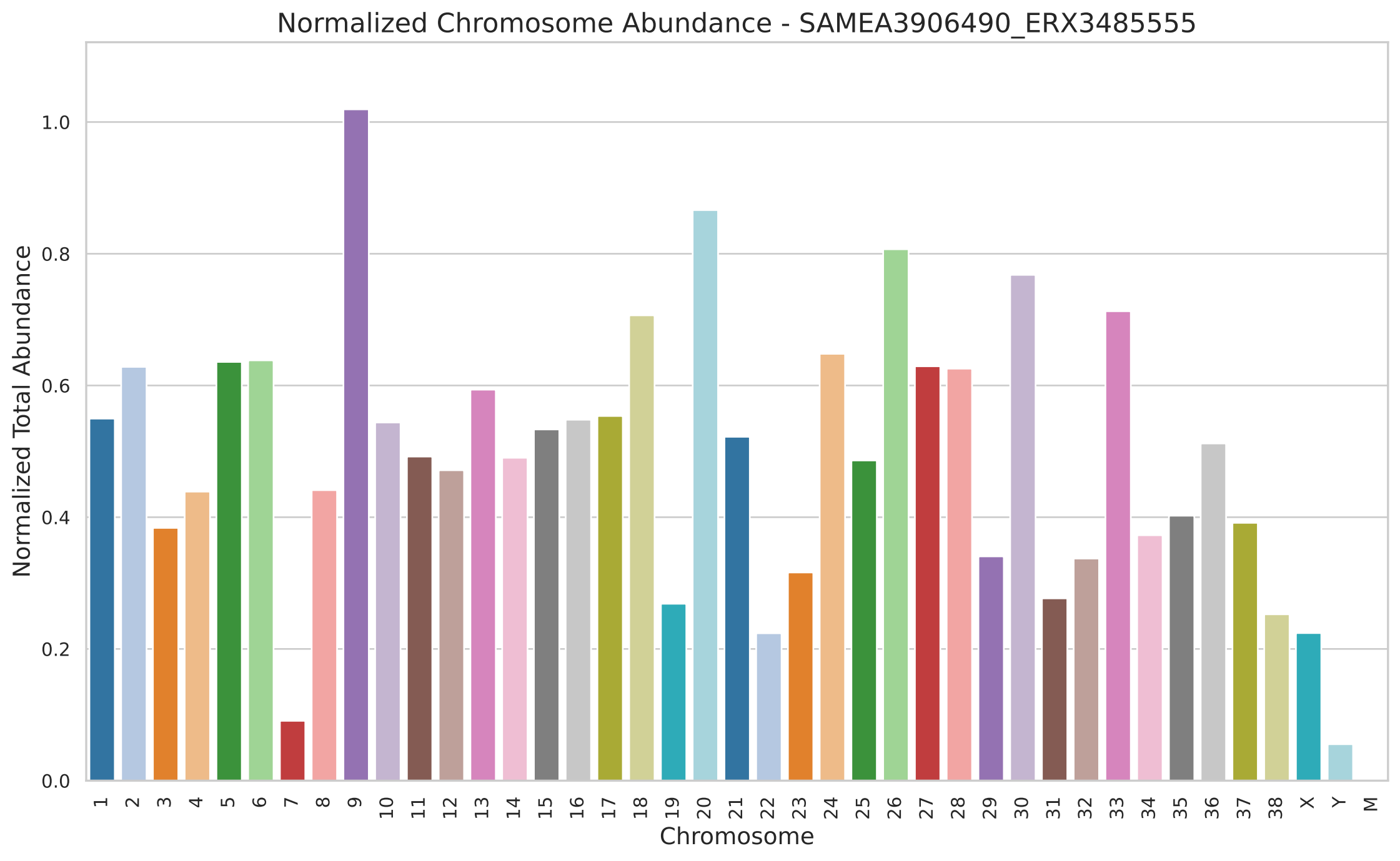

Normalized Chromosome Abundance - SAMEA3907136_ERX3485497
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

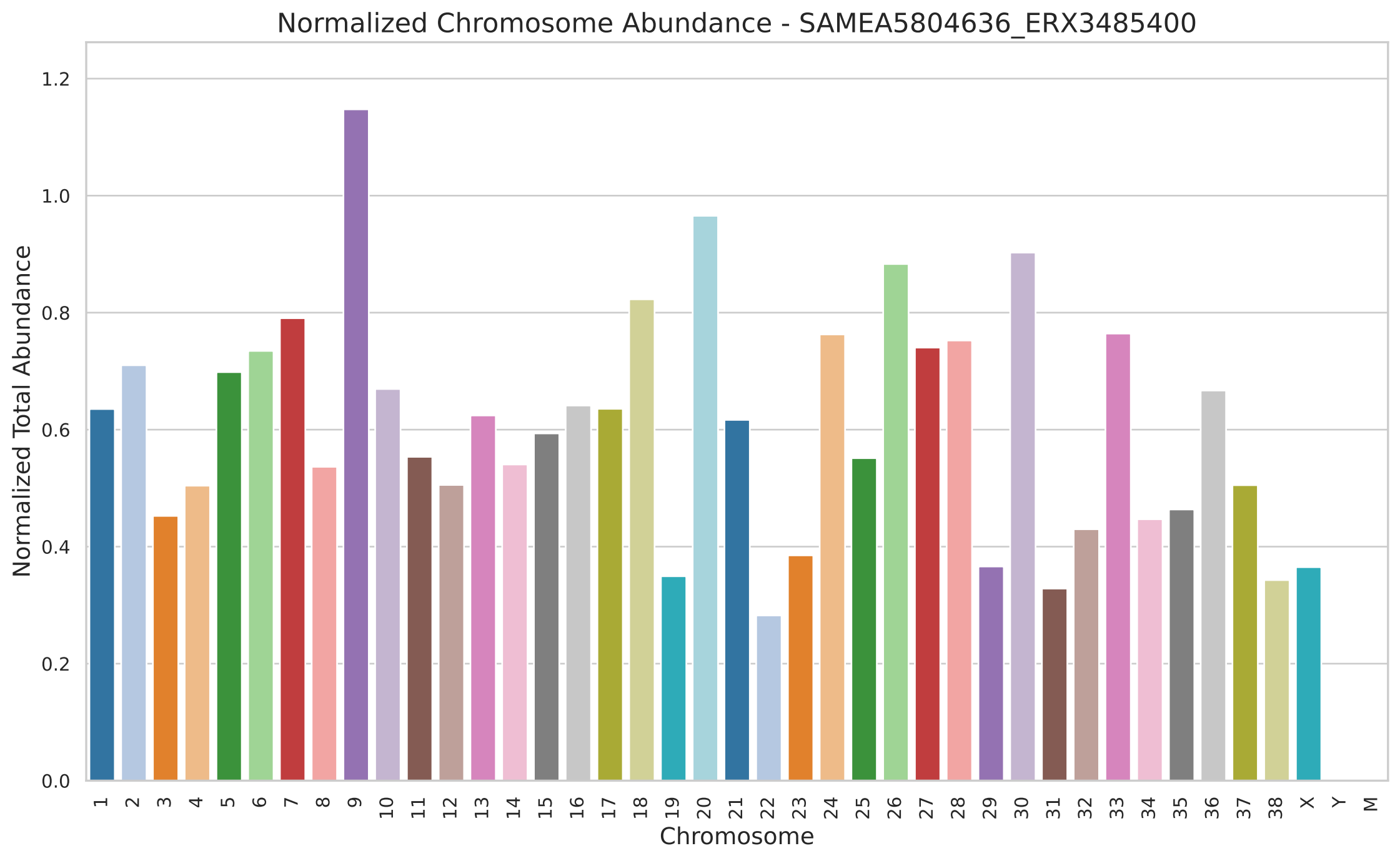

Normalized Chromosome Abundance - SAMEA3907405_ERX3486287
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

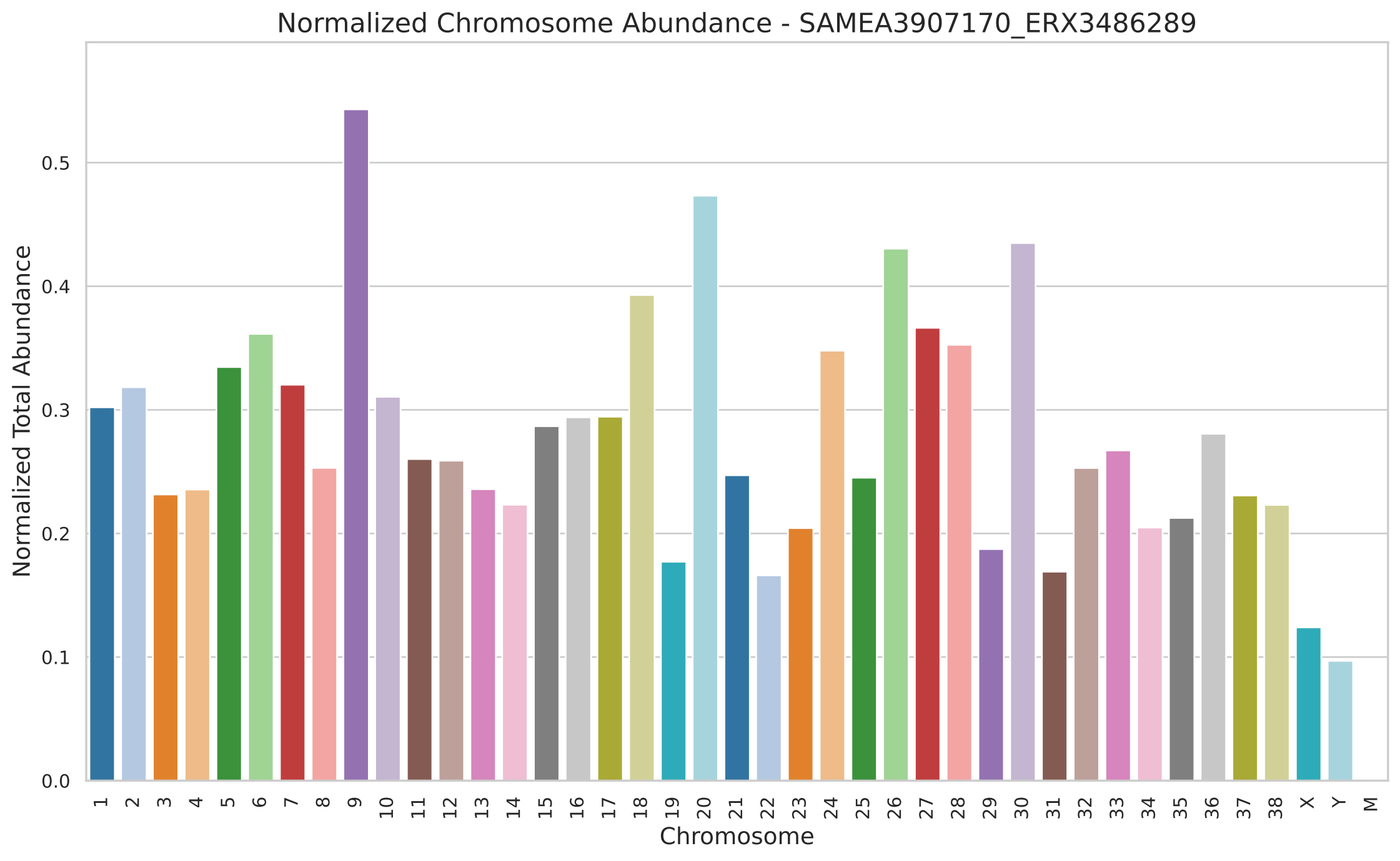

Normalized Chromosome Abundance - SAMEA3907371_ERX3485509
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

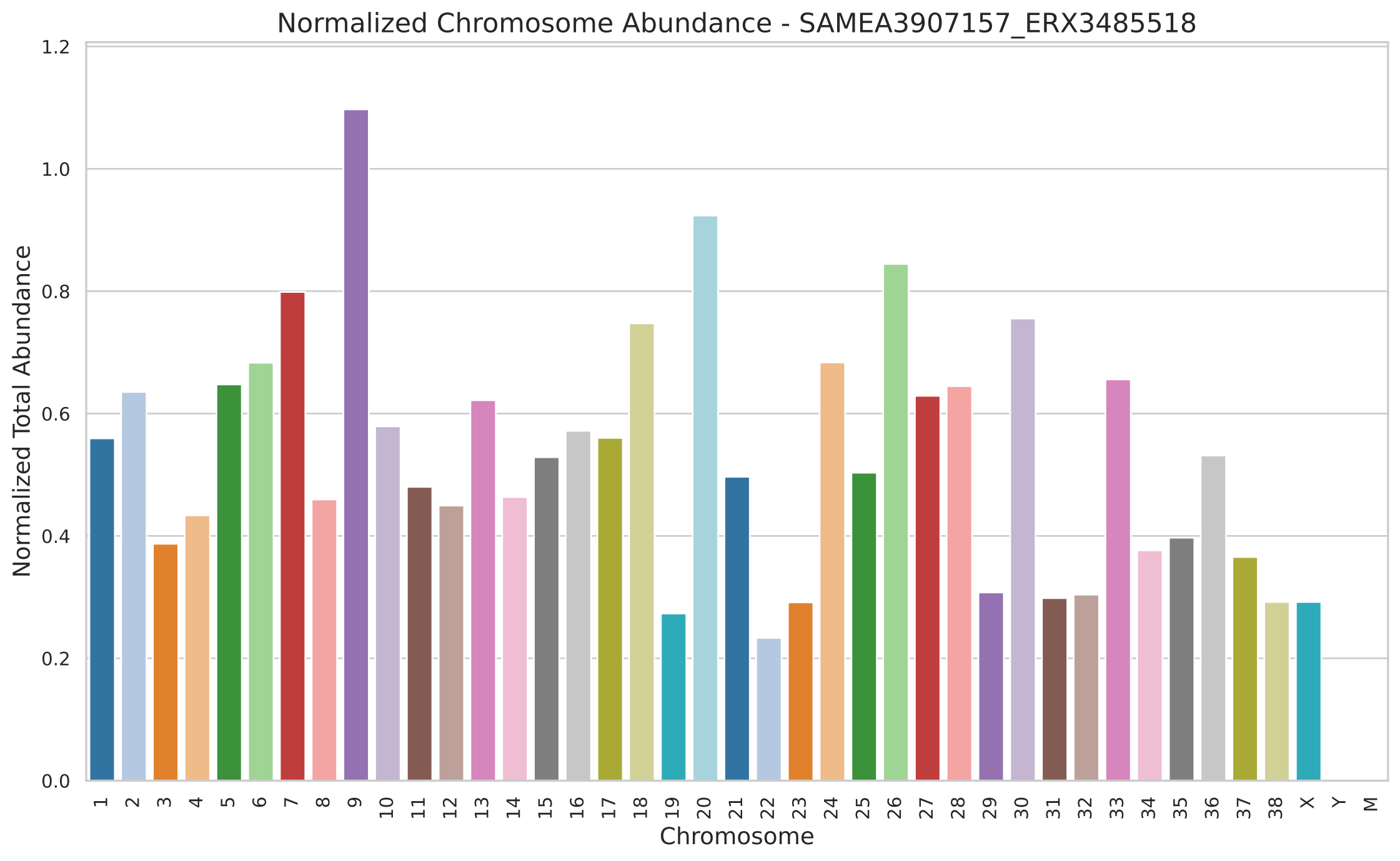

Normalized Chromosome Abundance - SAMEA3907095_ERX3486283
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

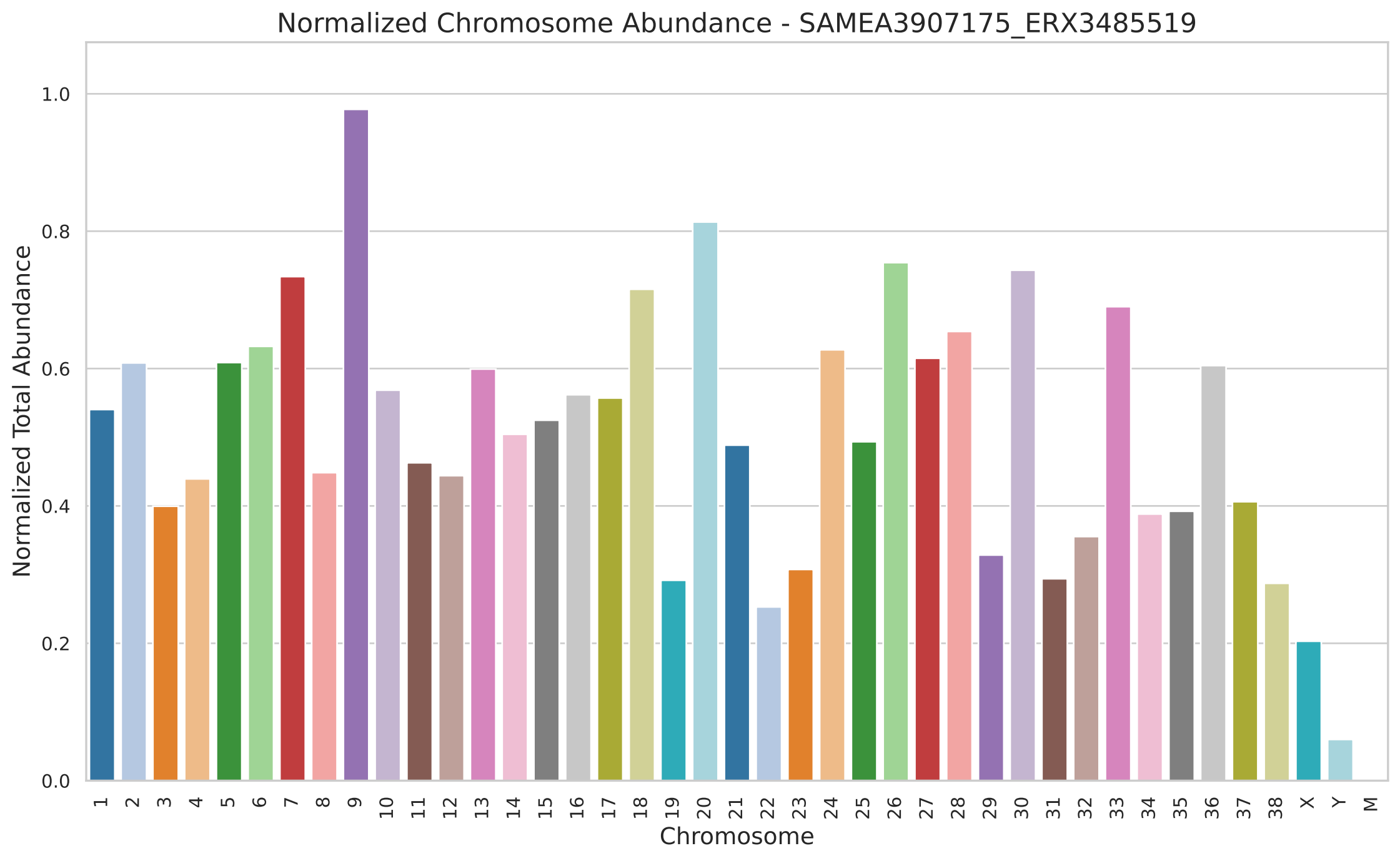

Normalized Chromosome Abundance - SAMEA3907314_ERX3485517
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

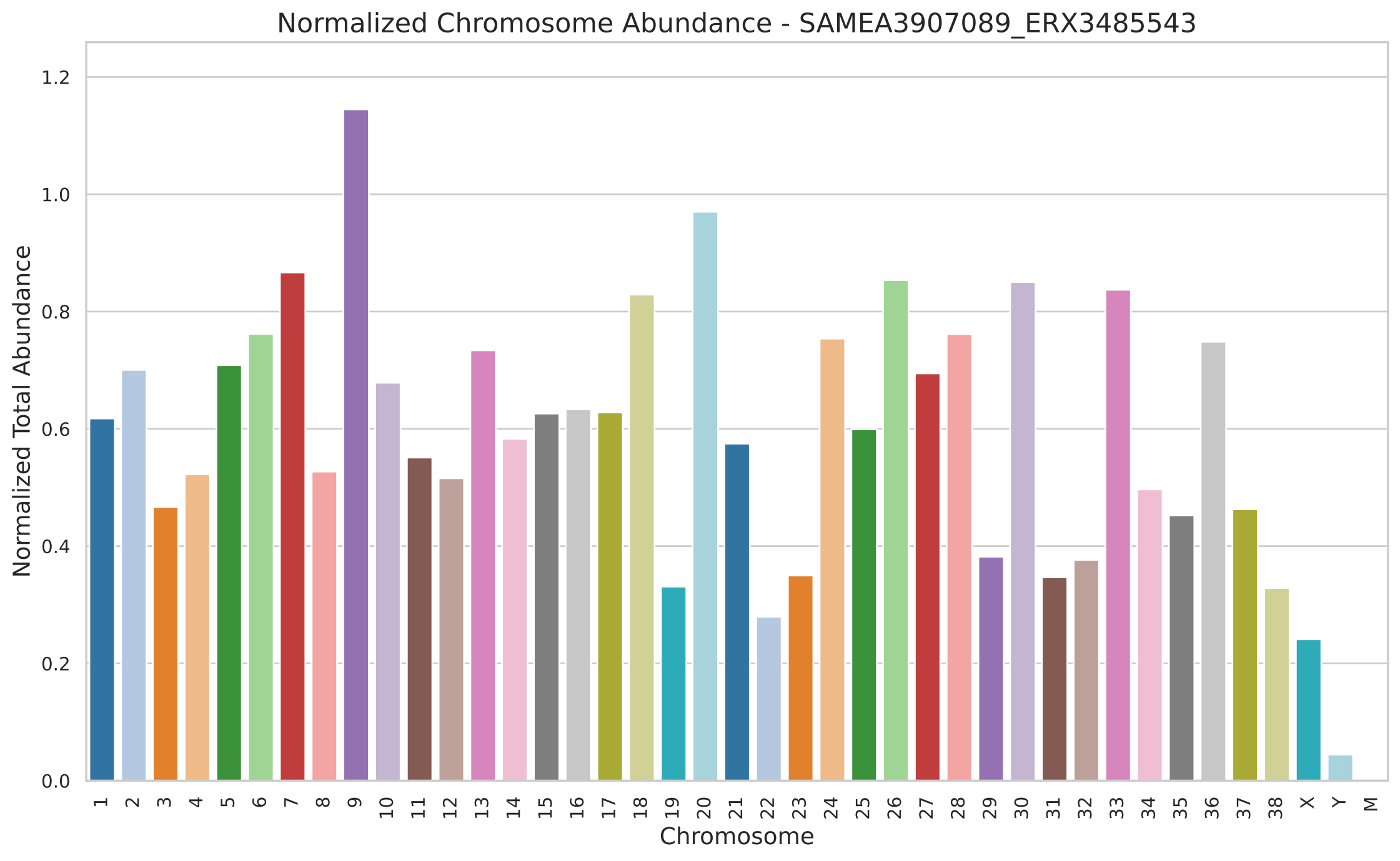

Normalized Chromosome Abundance - SAMEA3906490_ERX3485555
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

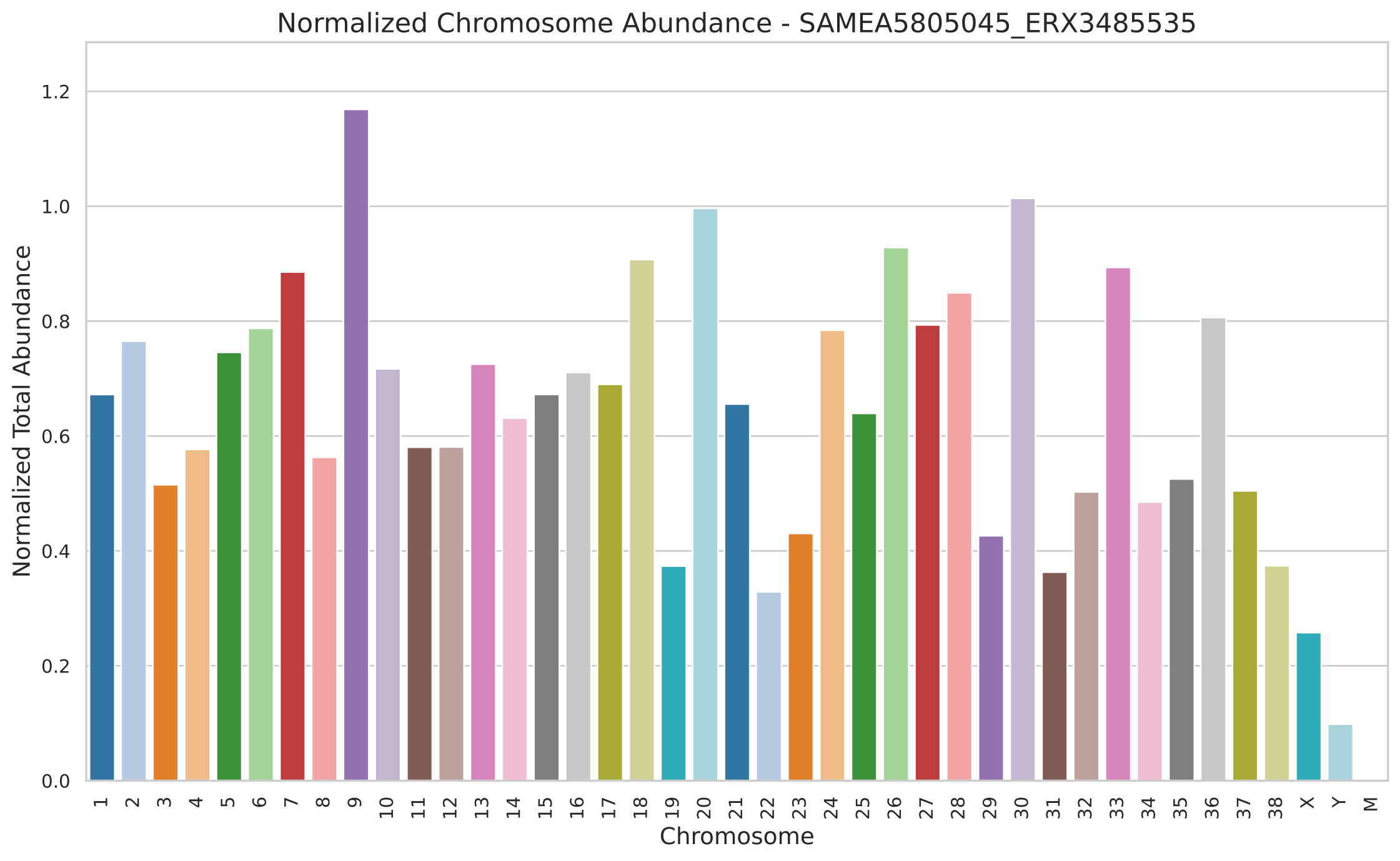

Normalized Chromosome Abundance - SAMEA5804636_ERX3485400
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

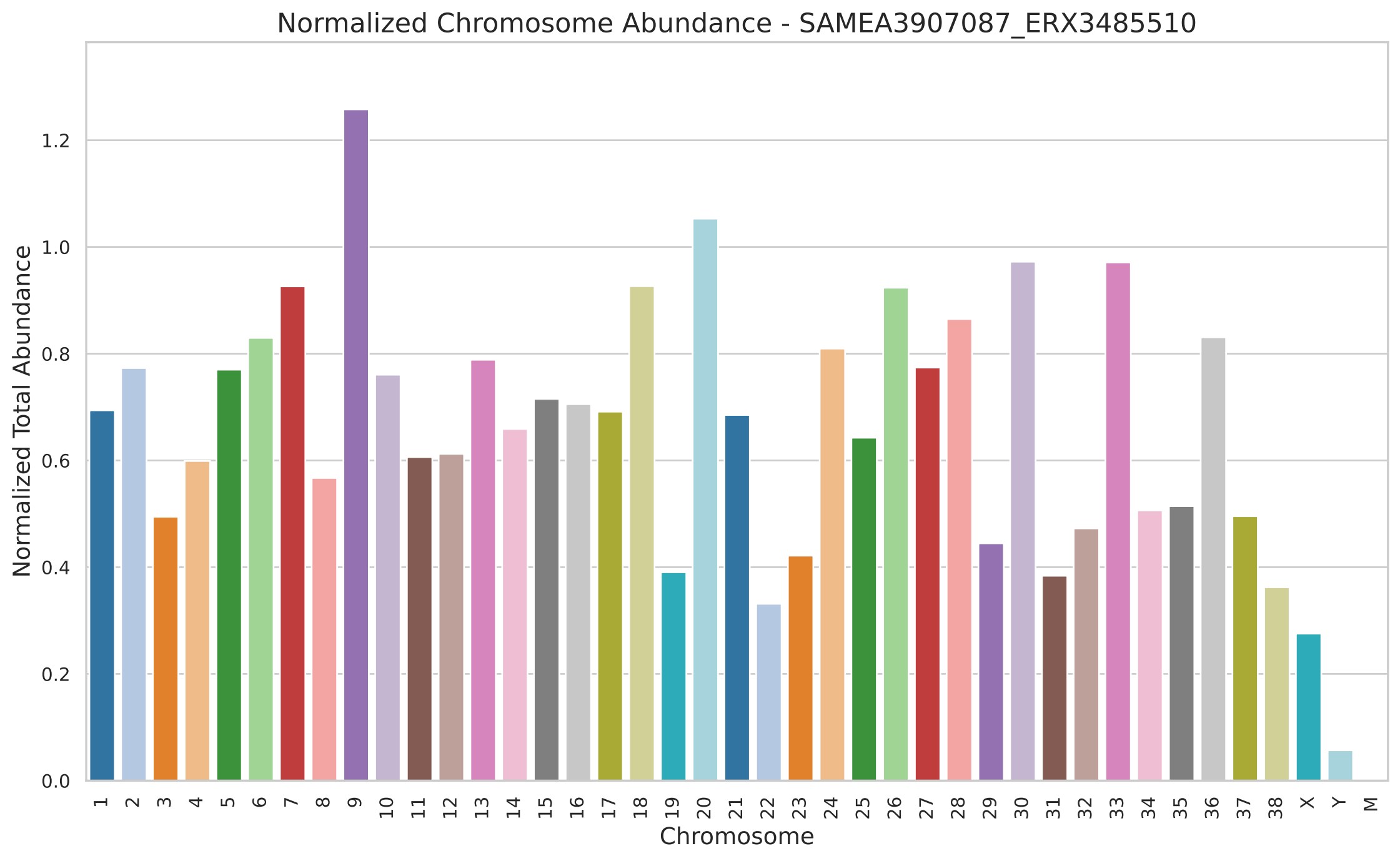

Normalized Chromosome Abundance - SAMEA3907170_ERX3486289
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

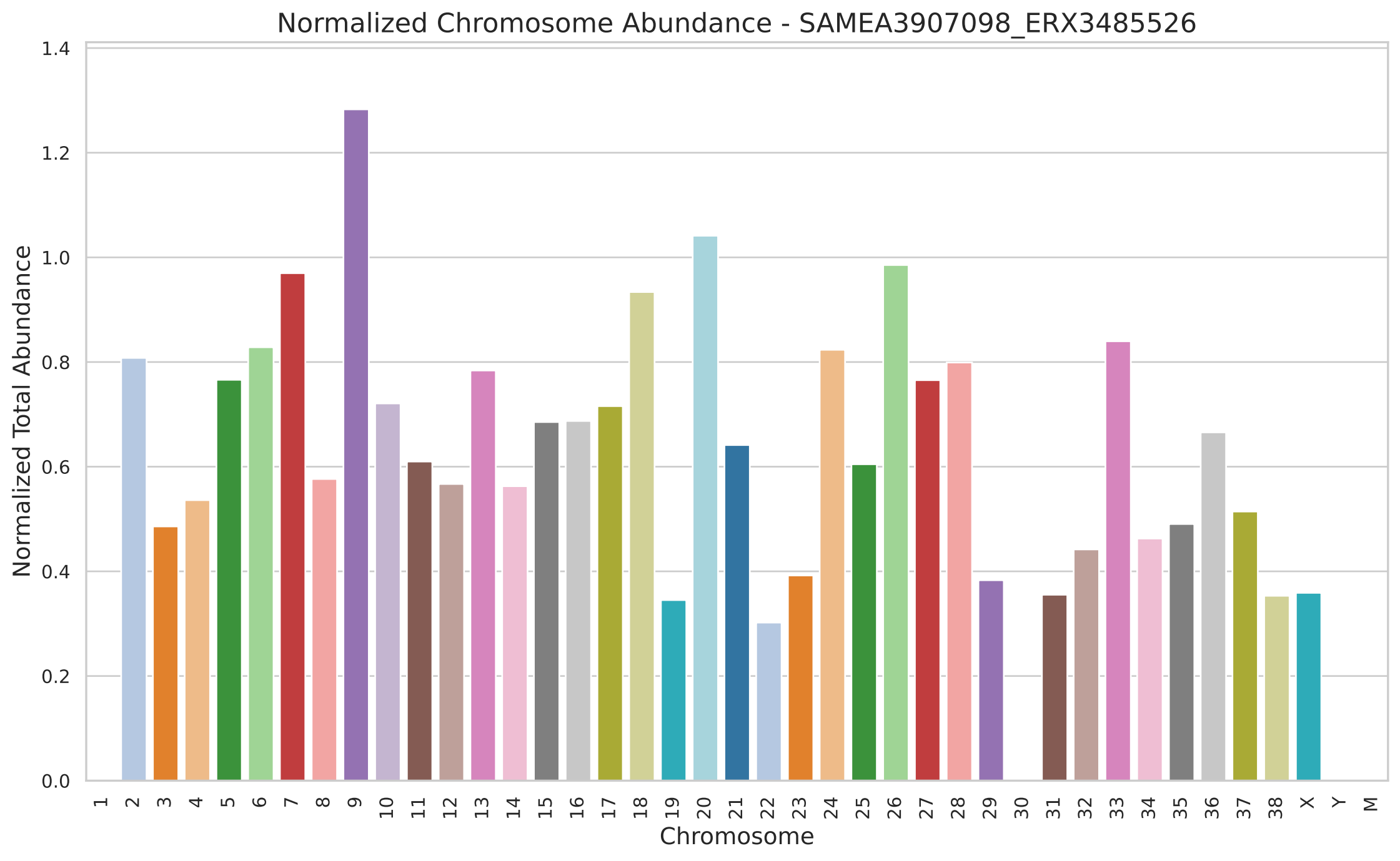

Normalized Chromosome Abundance - SAMEA3907157_ERX3485518
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

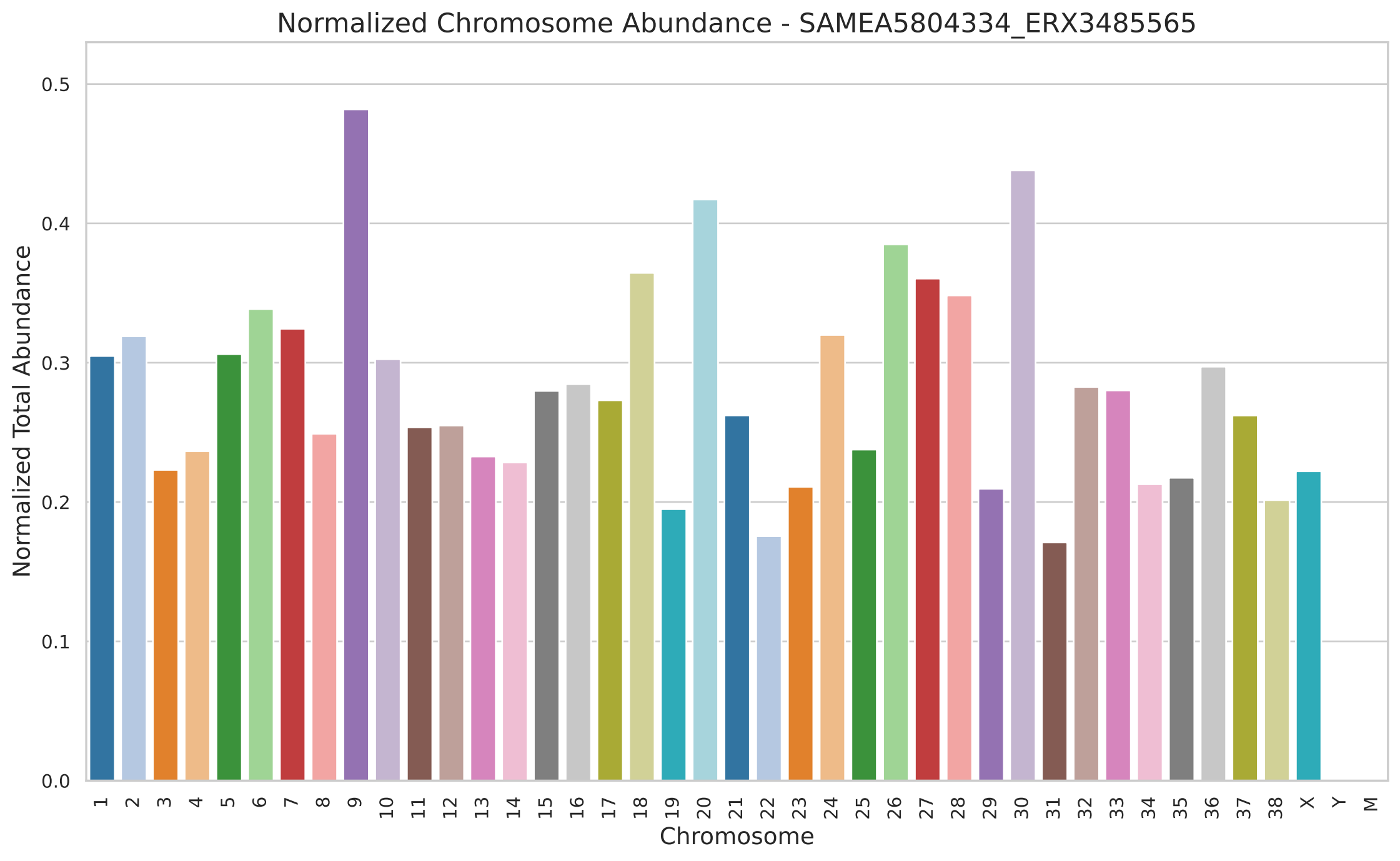

Normalized Chromosome Abundance - SAMEA3907175_ERX3485519
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

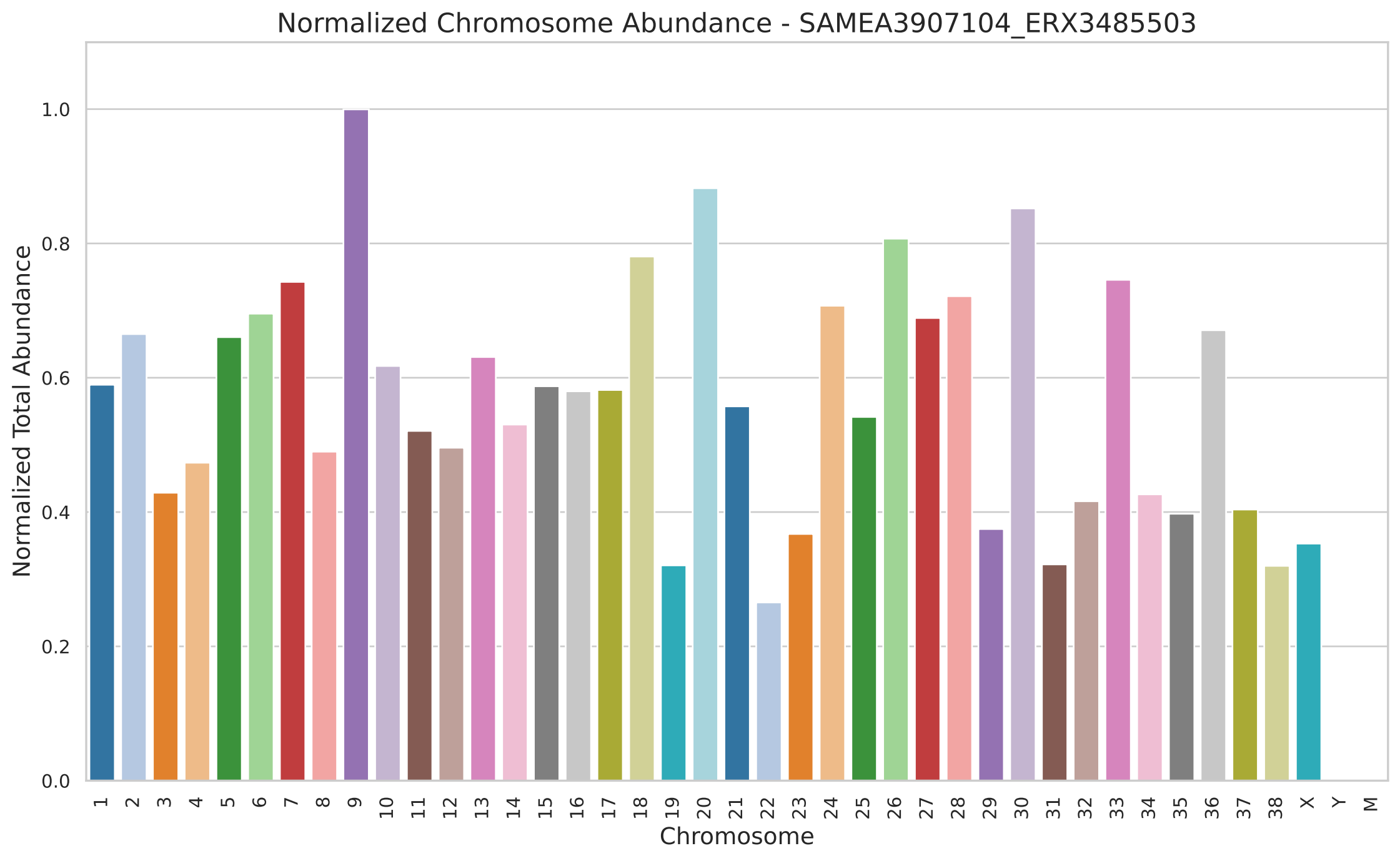

Normalized Chromosome Abundance - SAMEA3907089_ERX3485543
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

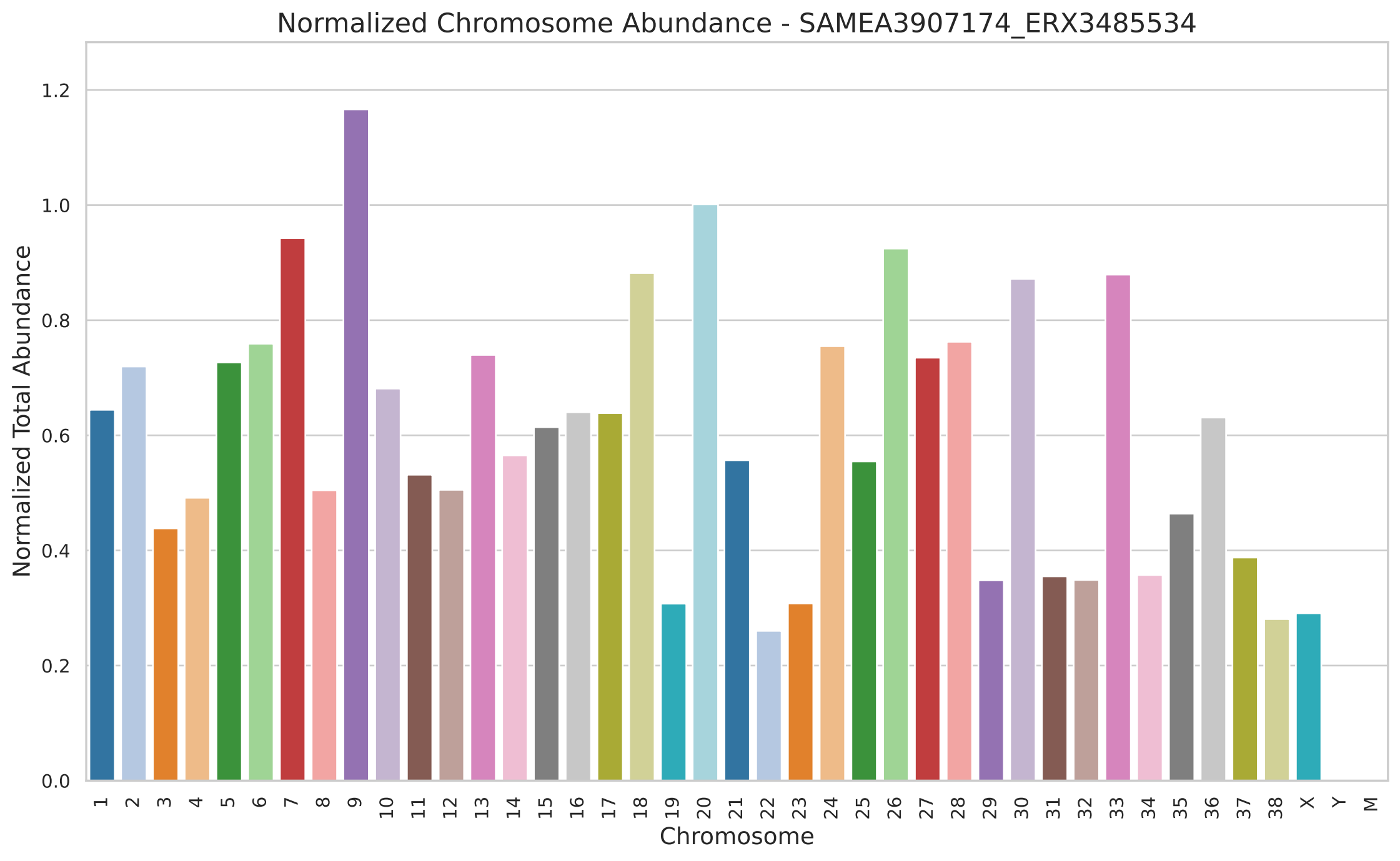

Normalized Chromosome Abundance - SAMEA5805045_ERX3485535
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

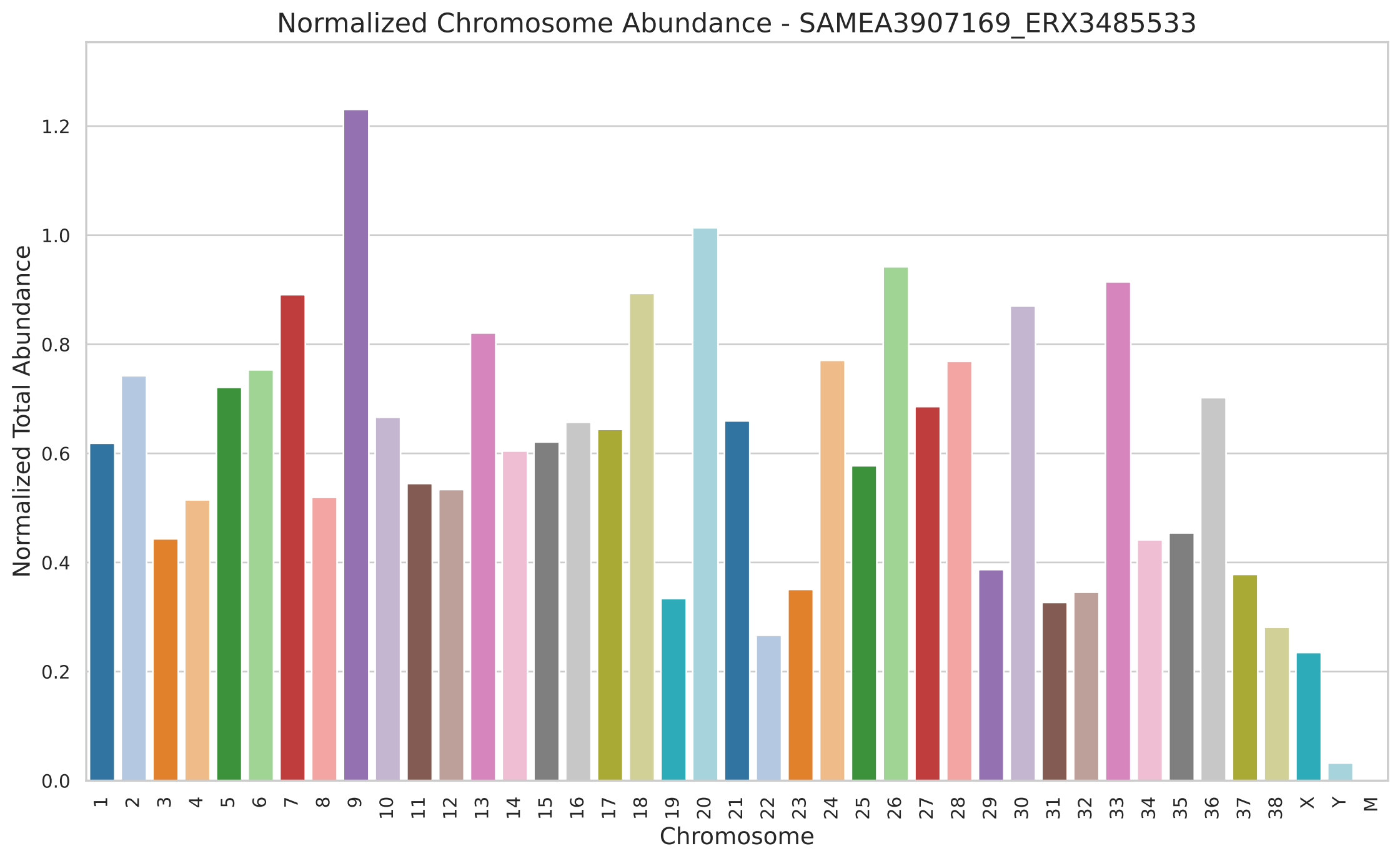

Normalized Chromosome Abundance - SAMEA3907087_ERX3485510
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

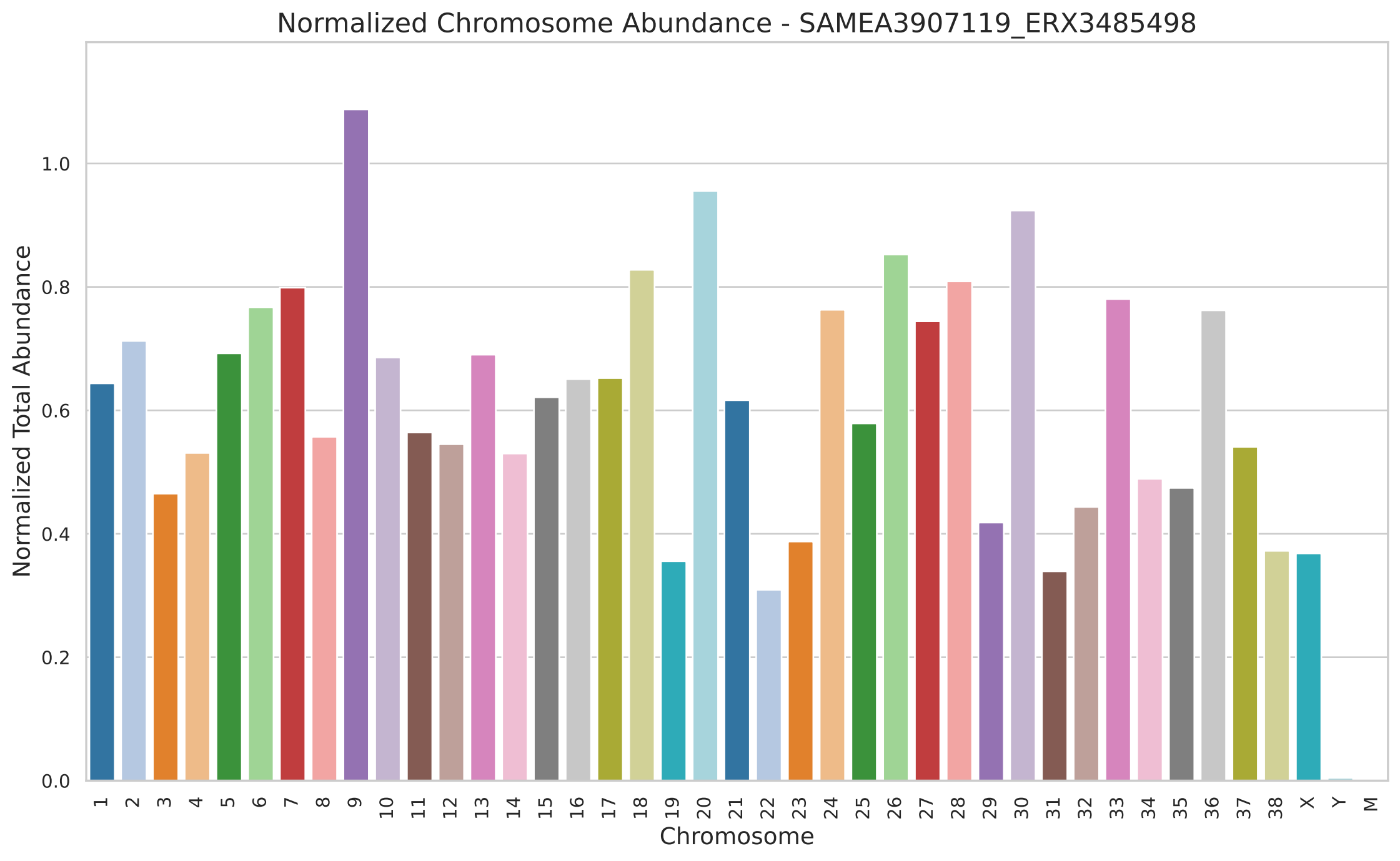

Normalized Chromosome Abundance - SAMEA3907098_ERX3485526
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

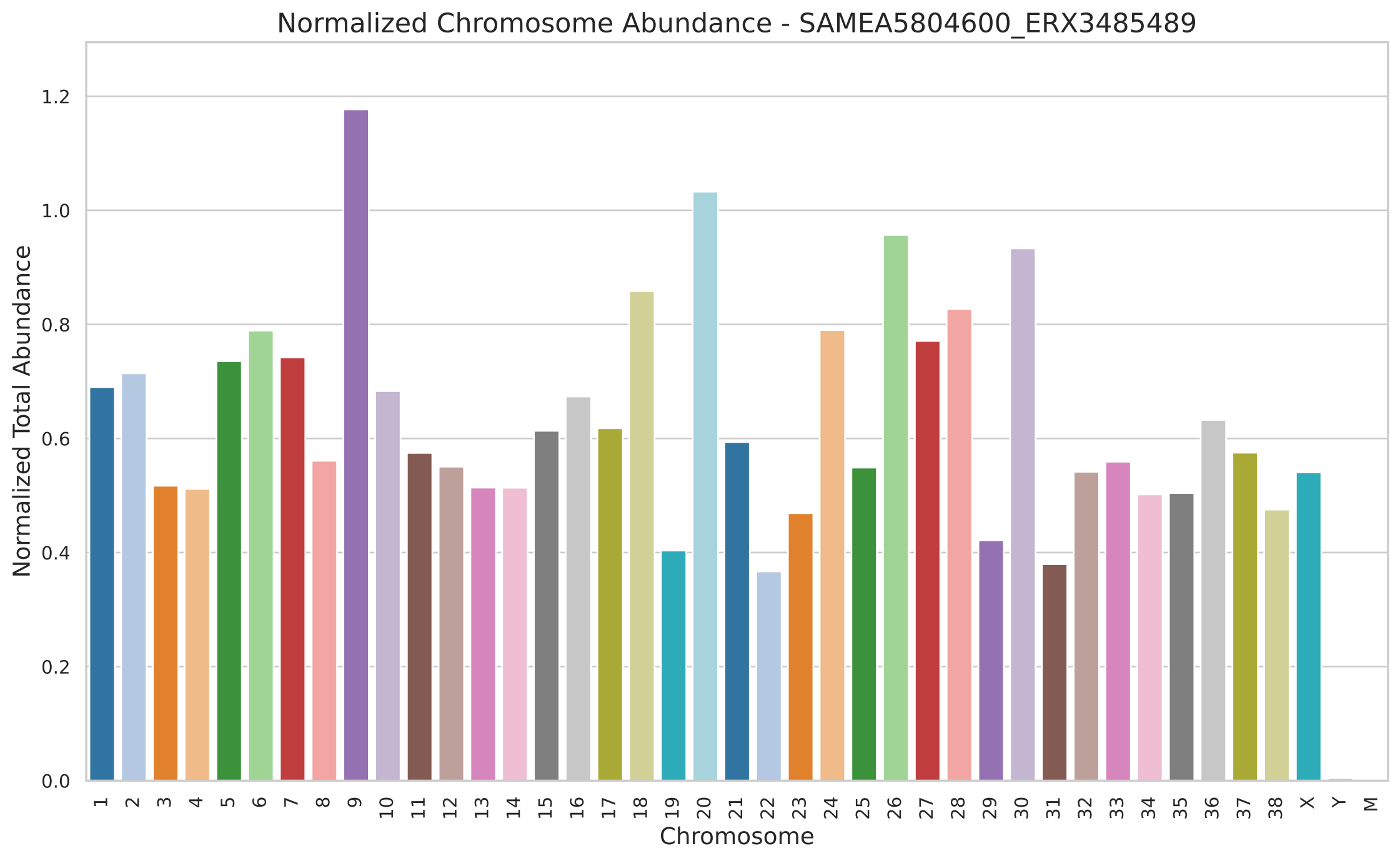

Normalized Chromosome Abundance - SAMEA5804334_ERX3485565
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

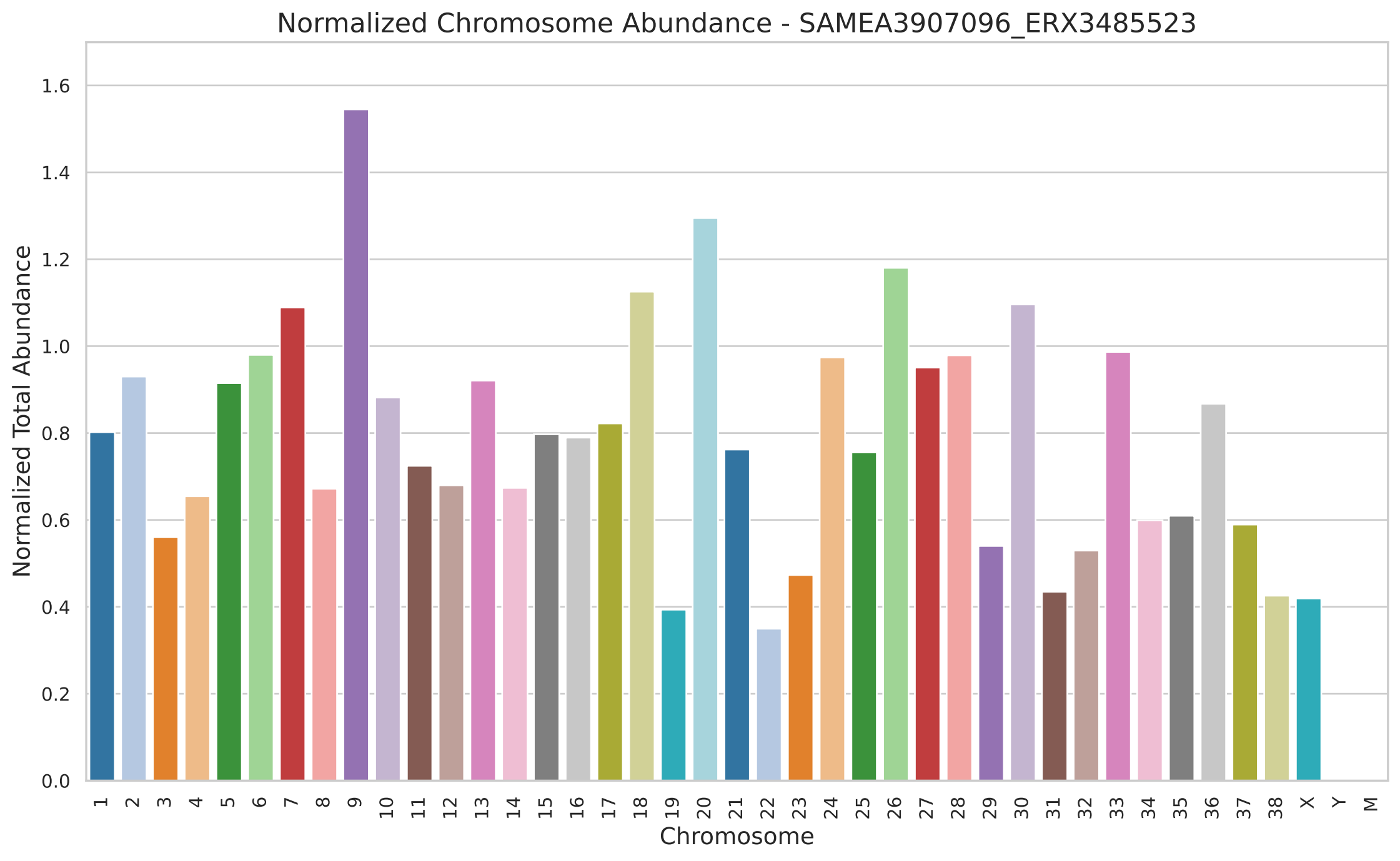

Normalized Chromosome Abundance - SAMEA3907104_ERX3485503
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

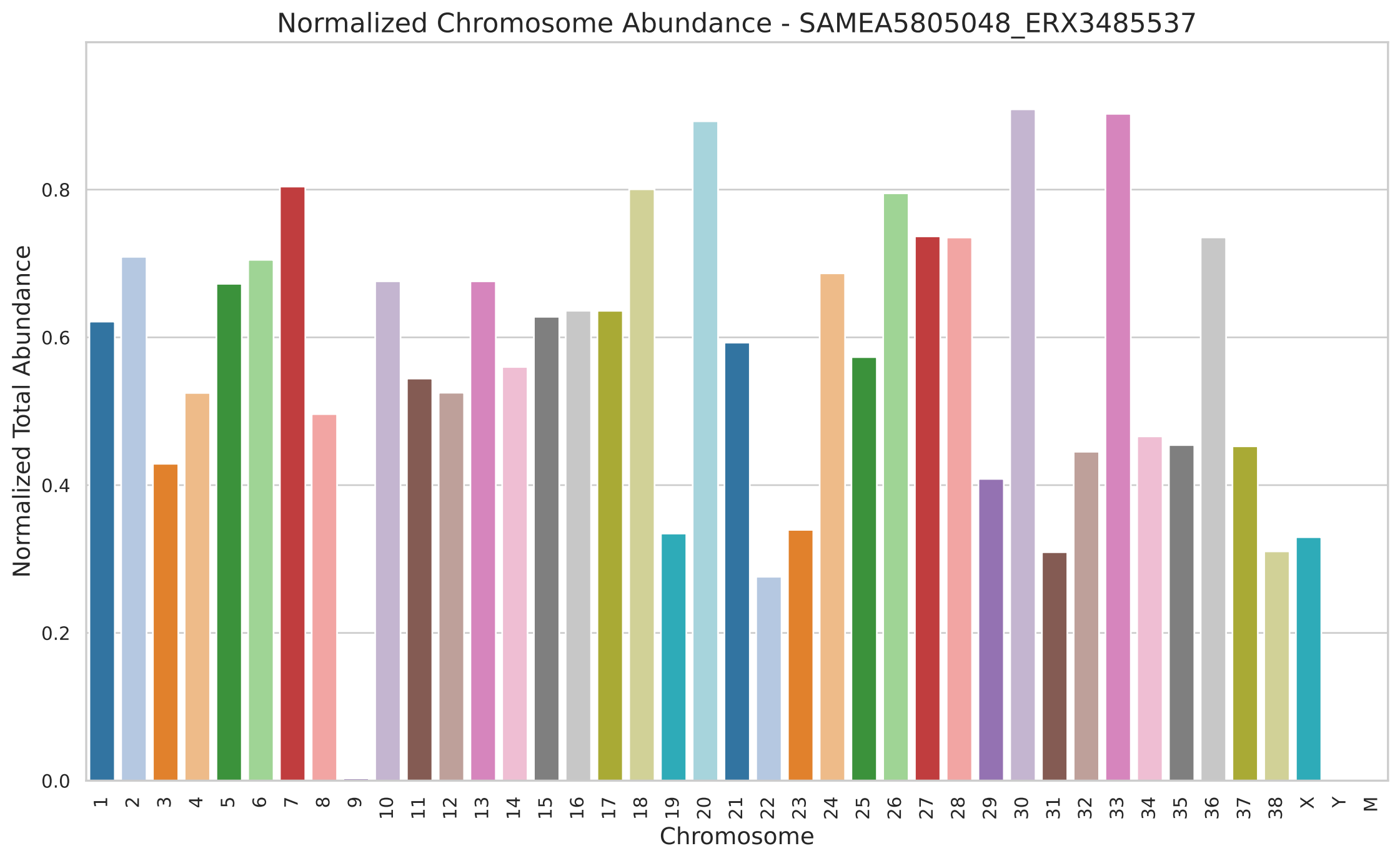

Normalized Chromosome Abundance - SAMEA3907174_ERX3485534
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

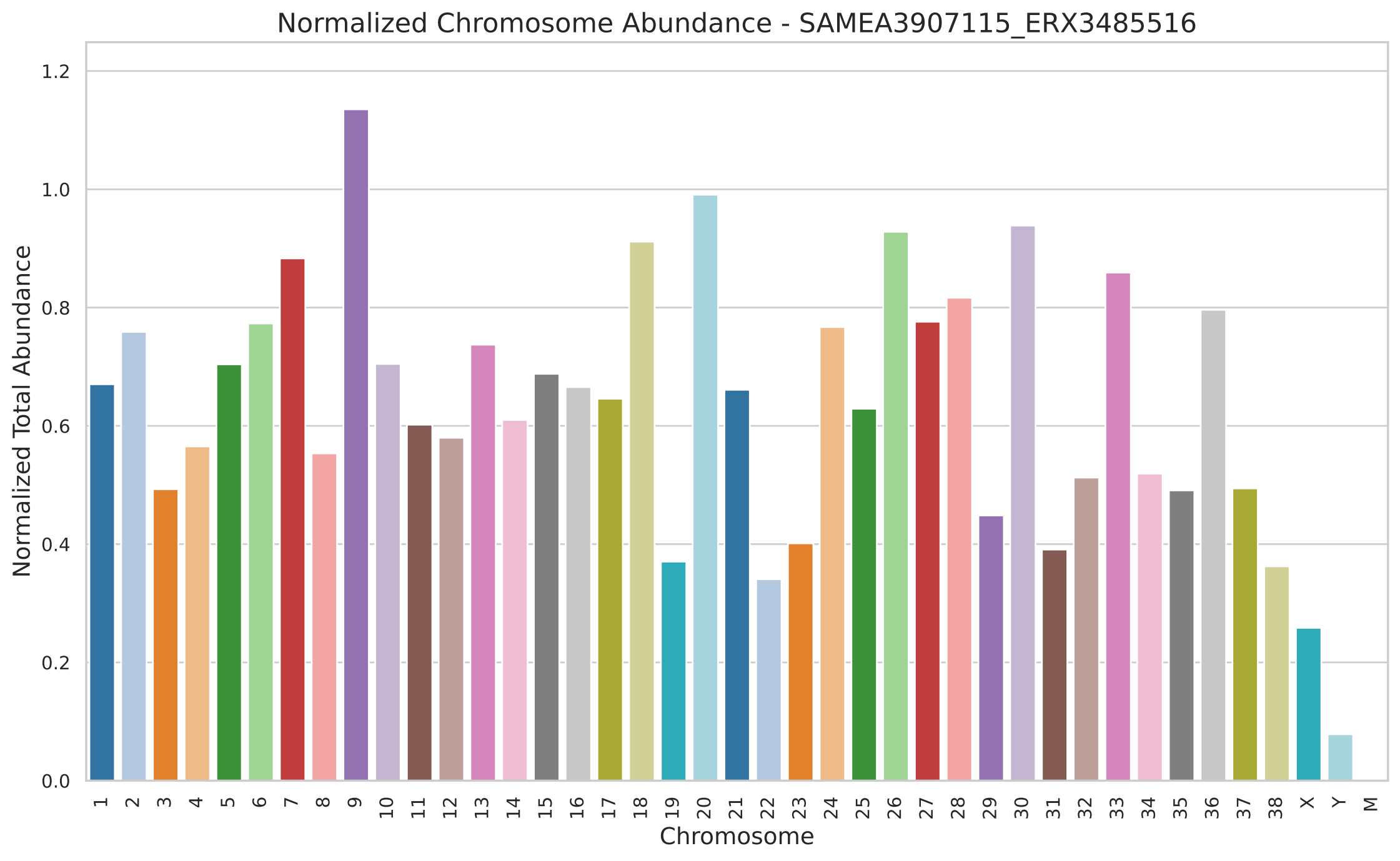

Normalized Chromosome Abundance - SAMEA3907169_ERX3485533
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

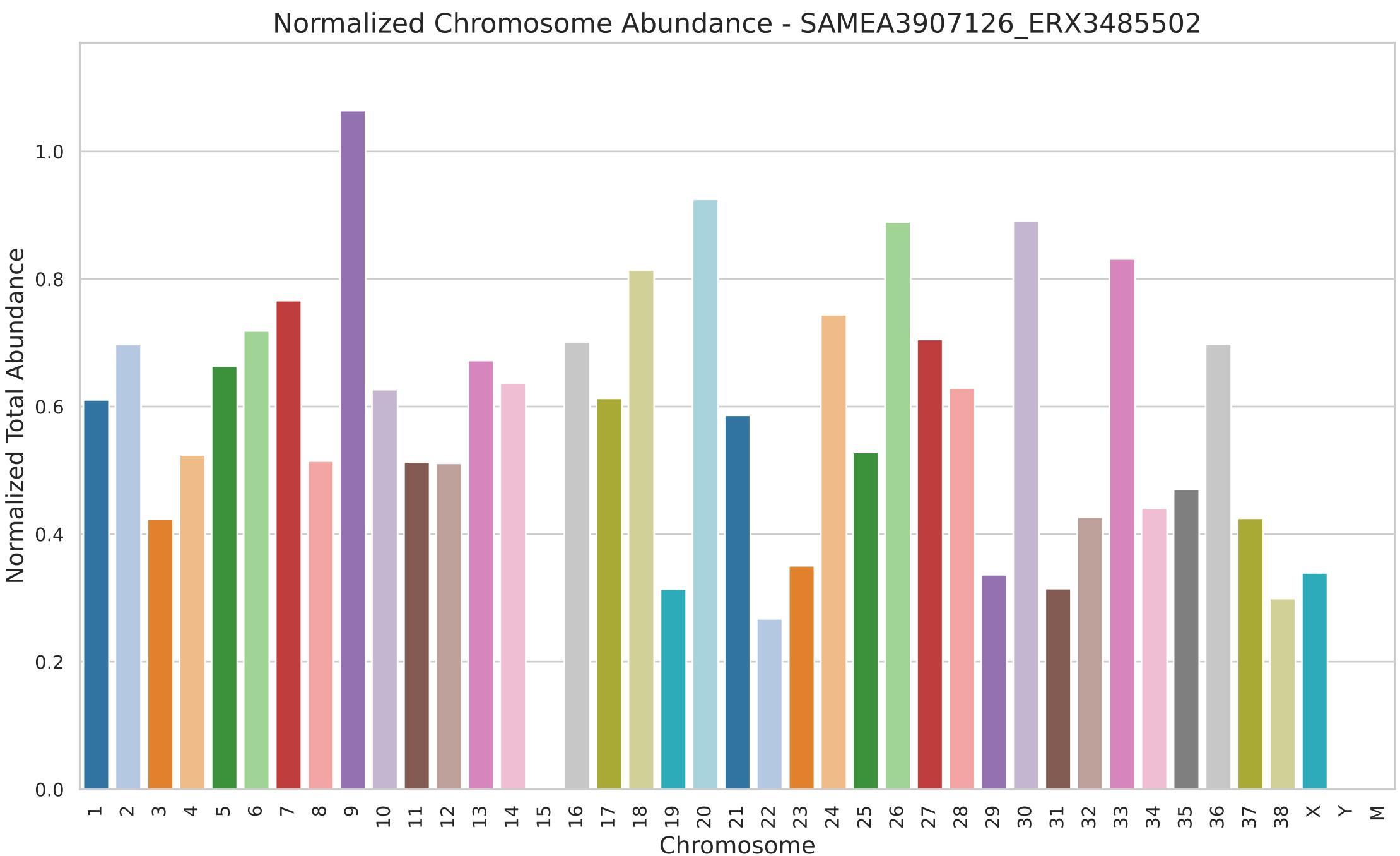

Normalized Chromosome Abundance - SAMEA3907119_ERX3485498
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

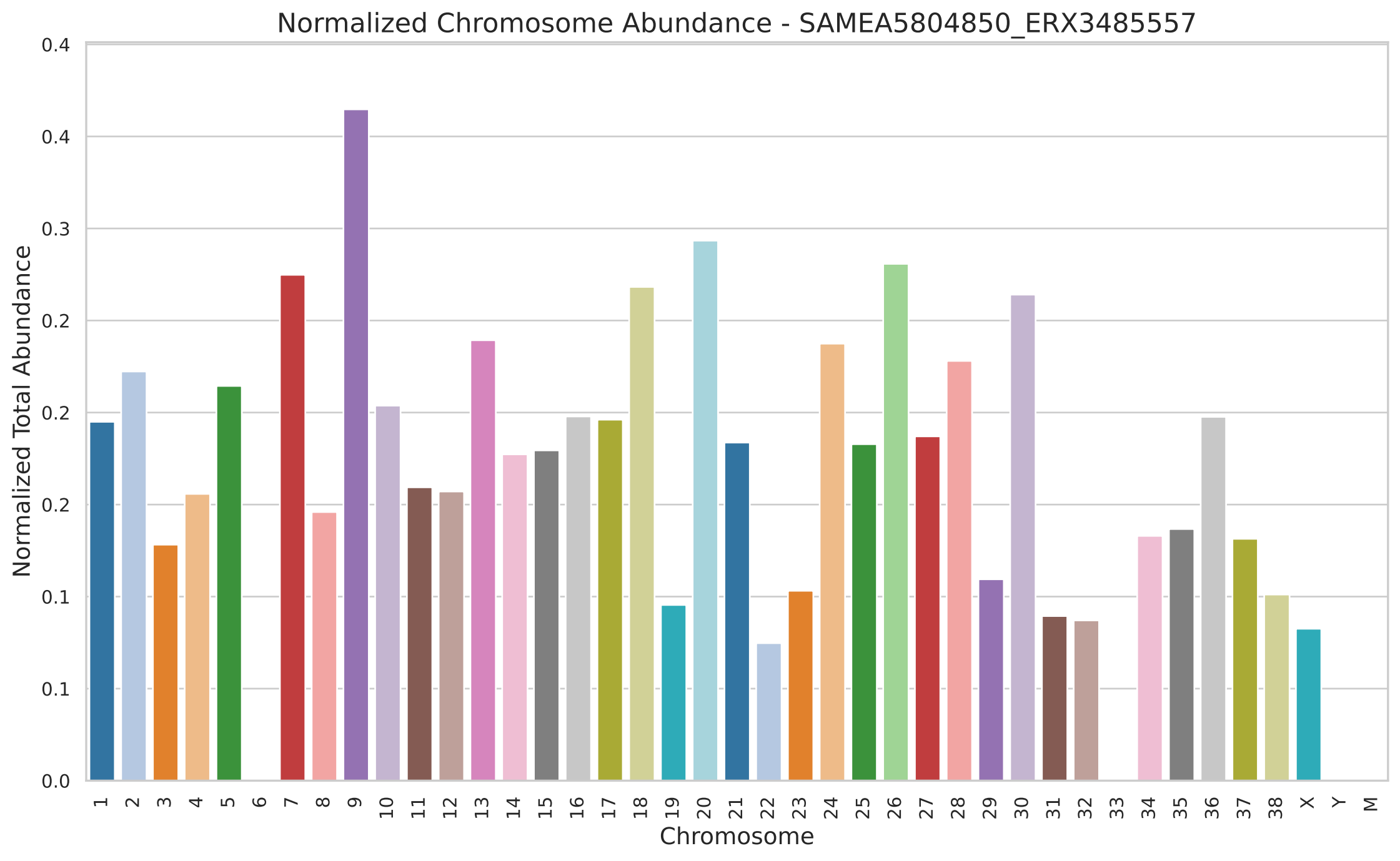

Normalized Chromosome Abundance - SAMEA5804600_ERX3485489
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

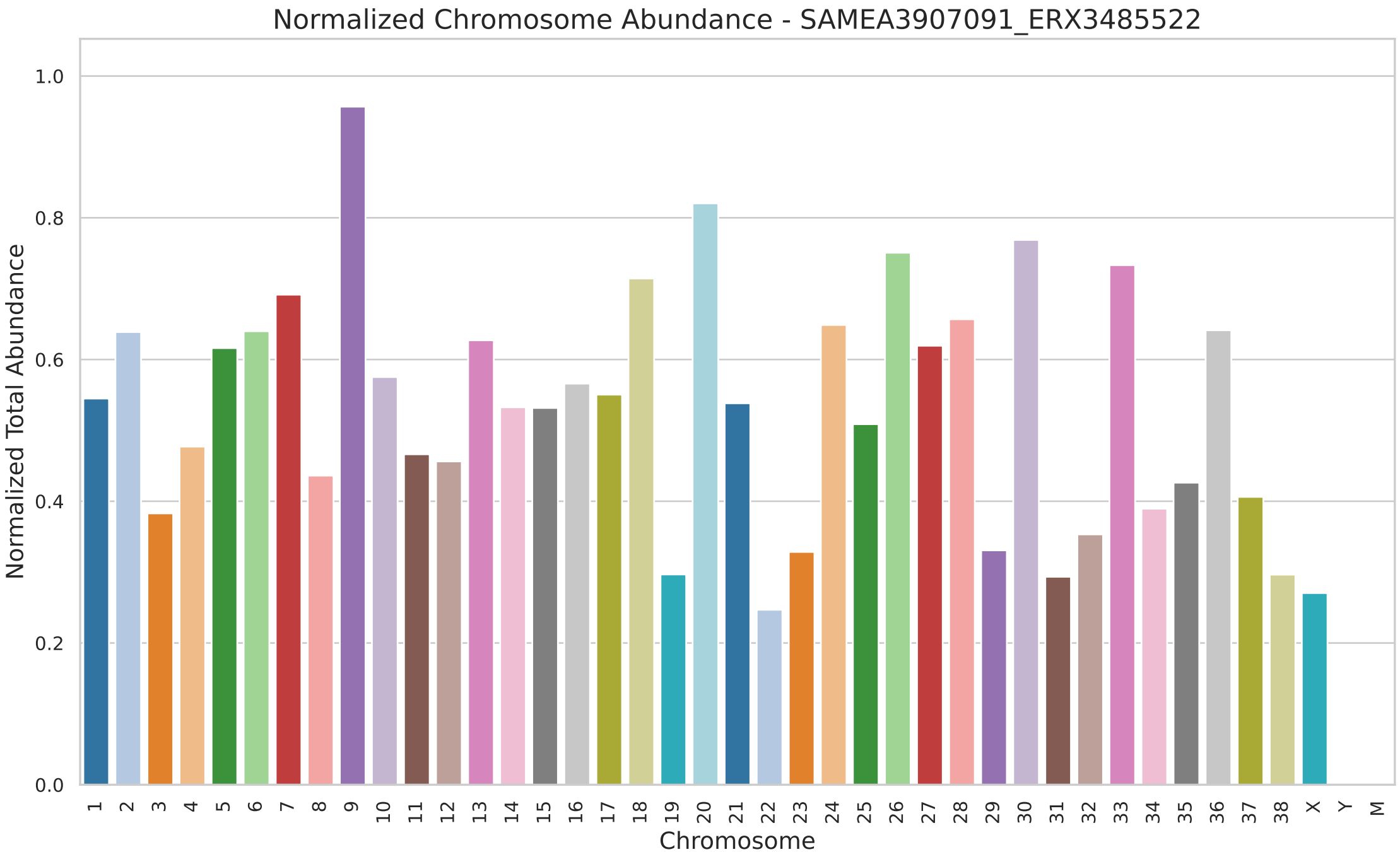

Normalized Chromosome Abundance - SAMEA3907096_ERX3485523
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

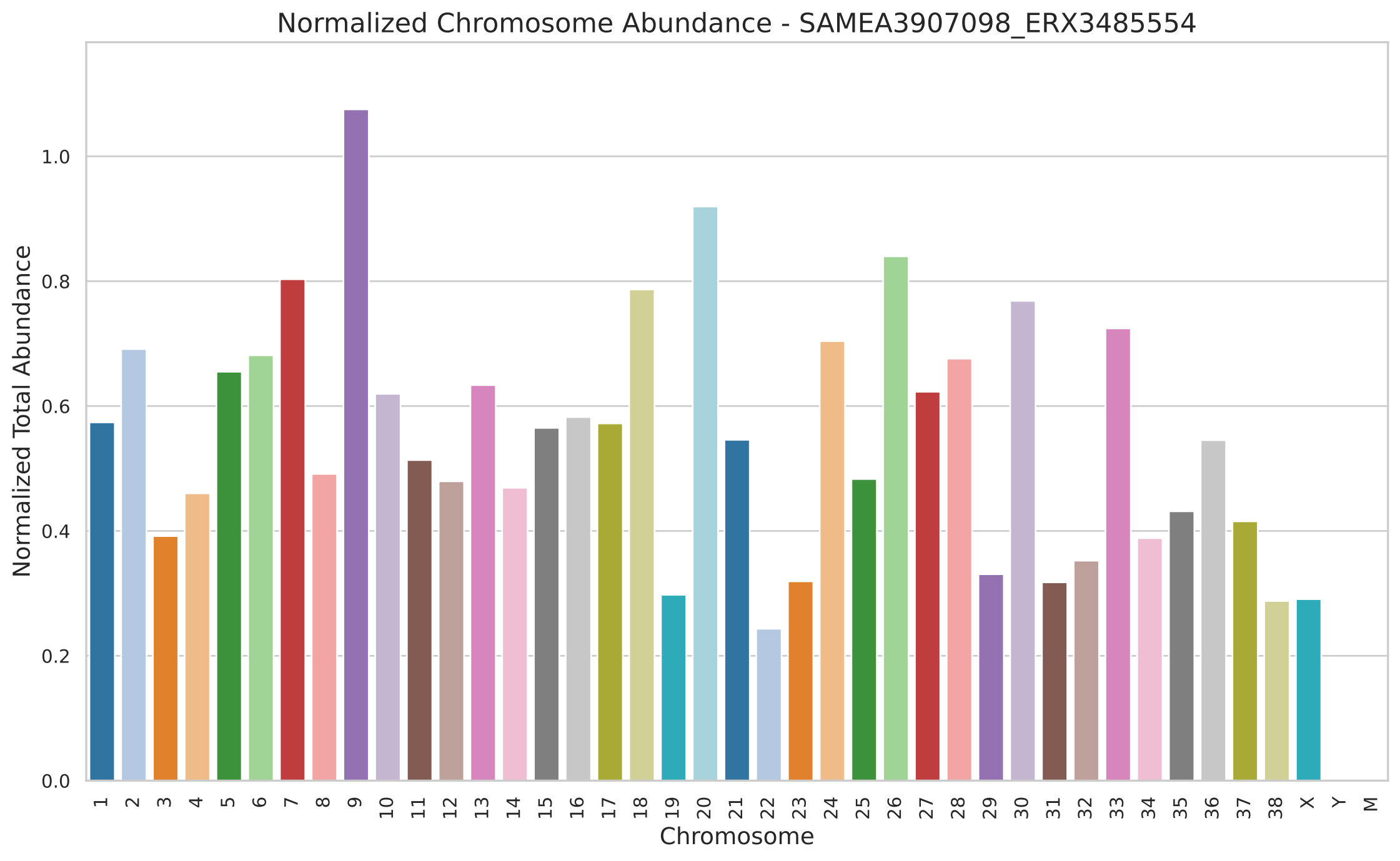

Normalized Chromosome Abundance - SAMEA5805048_ERX3485537
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

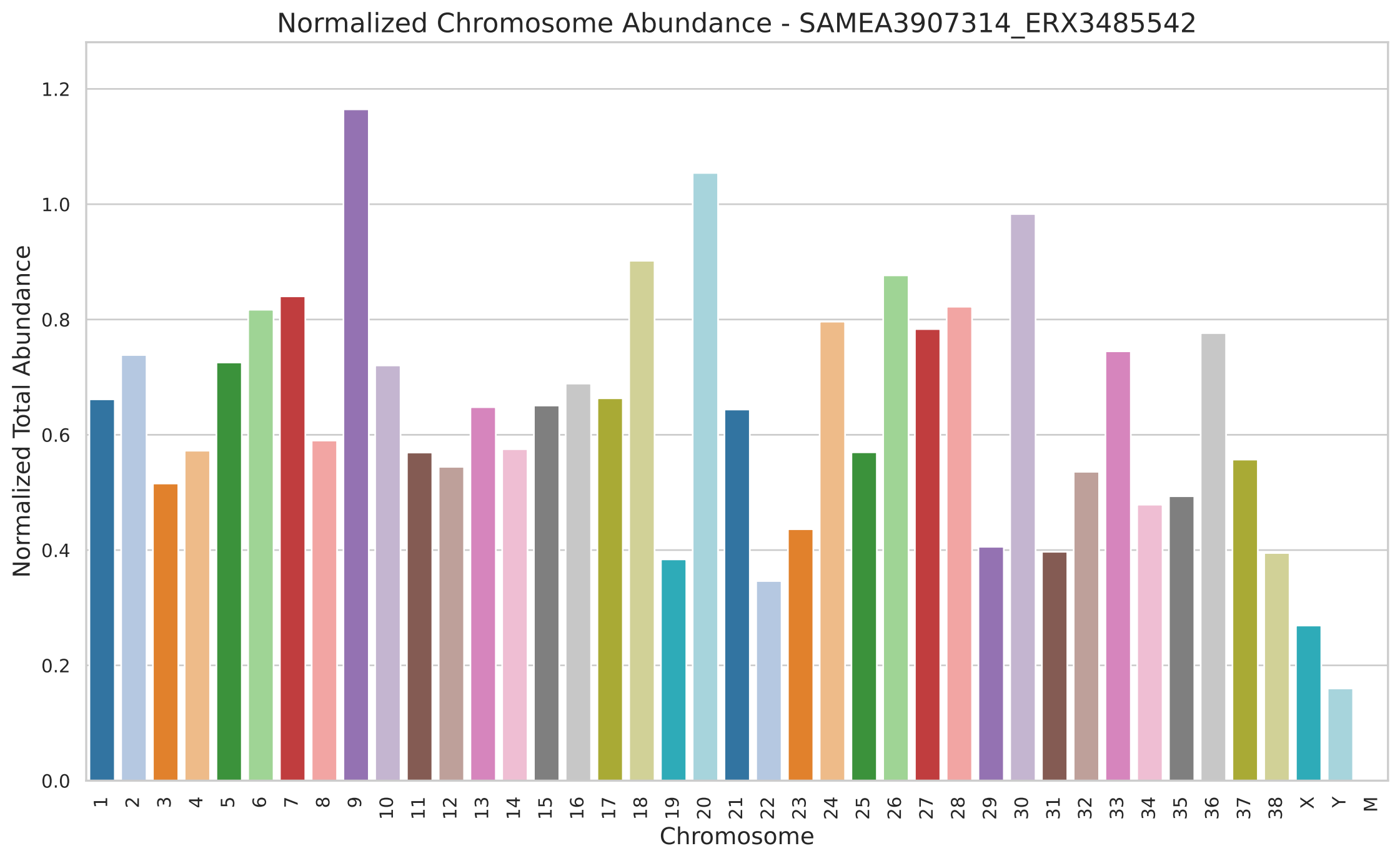

Normalized Chromosome Abundance - SAMEA3907115_ERX3485516
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

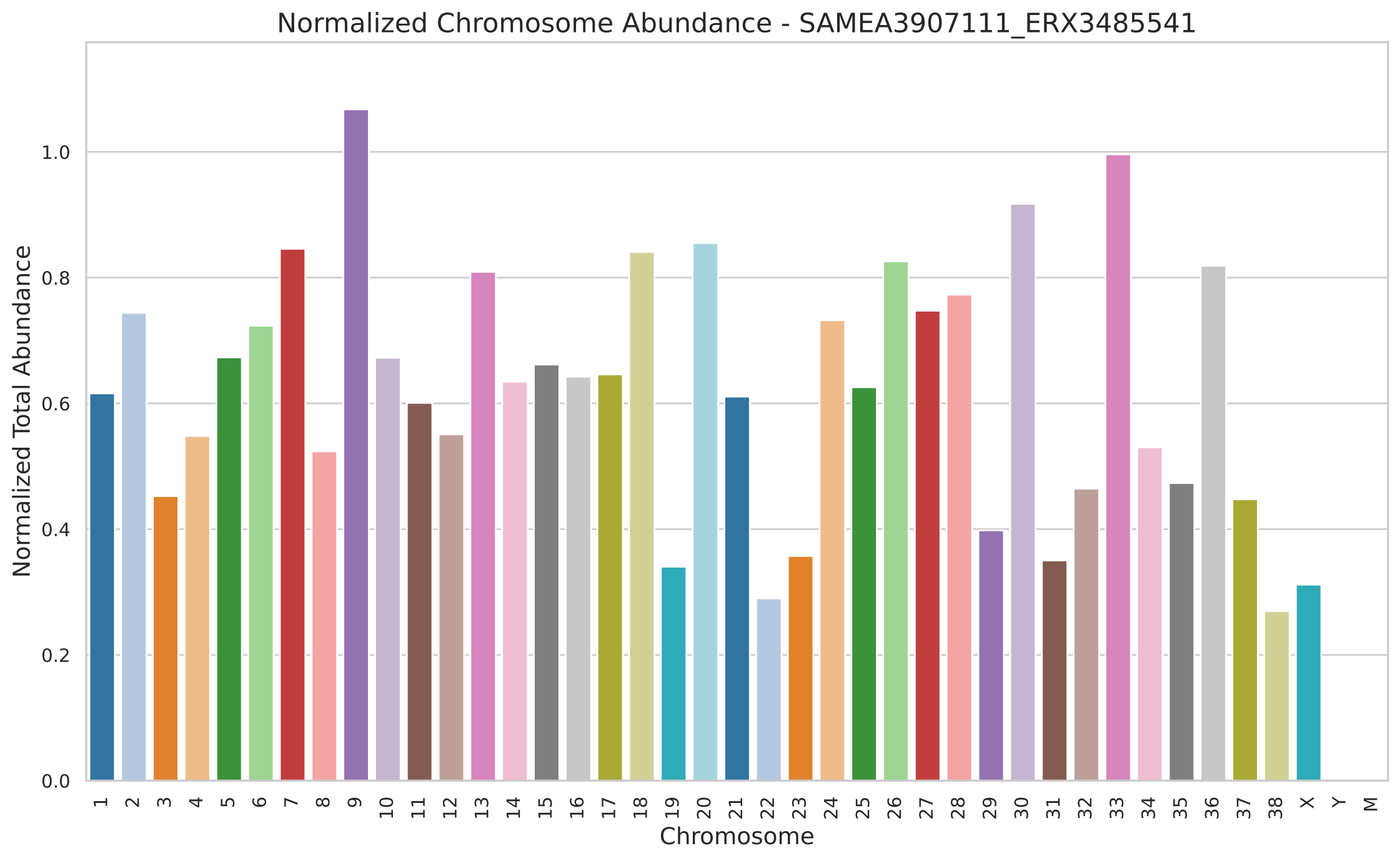

Normalized Chromosome Abundance - SAMEA3907126_ERX3485502
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

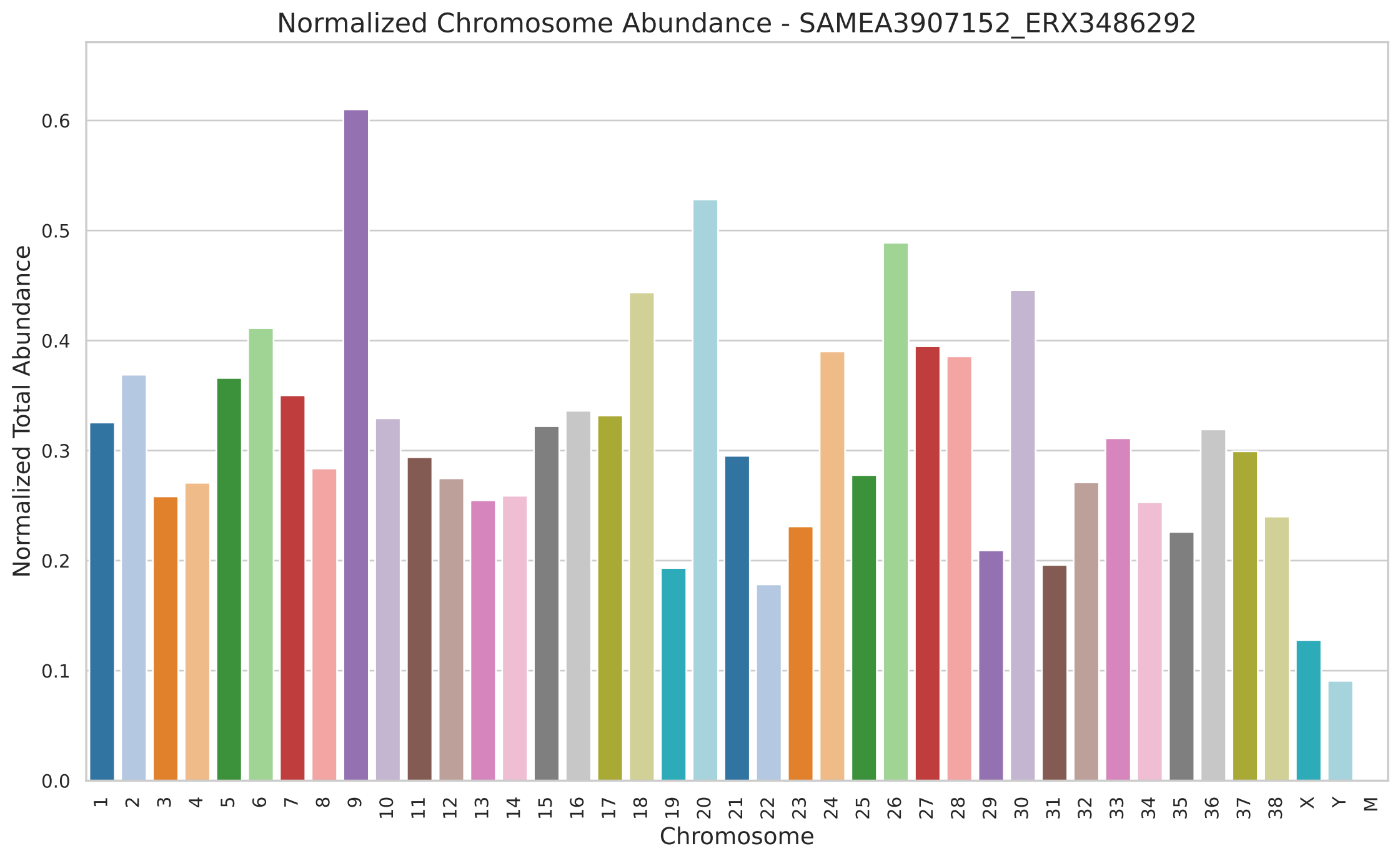

Normalized Chromosome Abundance - SAMEA5804850_ERX3485557
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
0.4
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

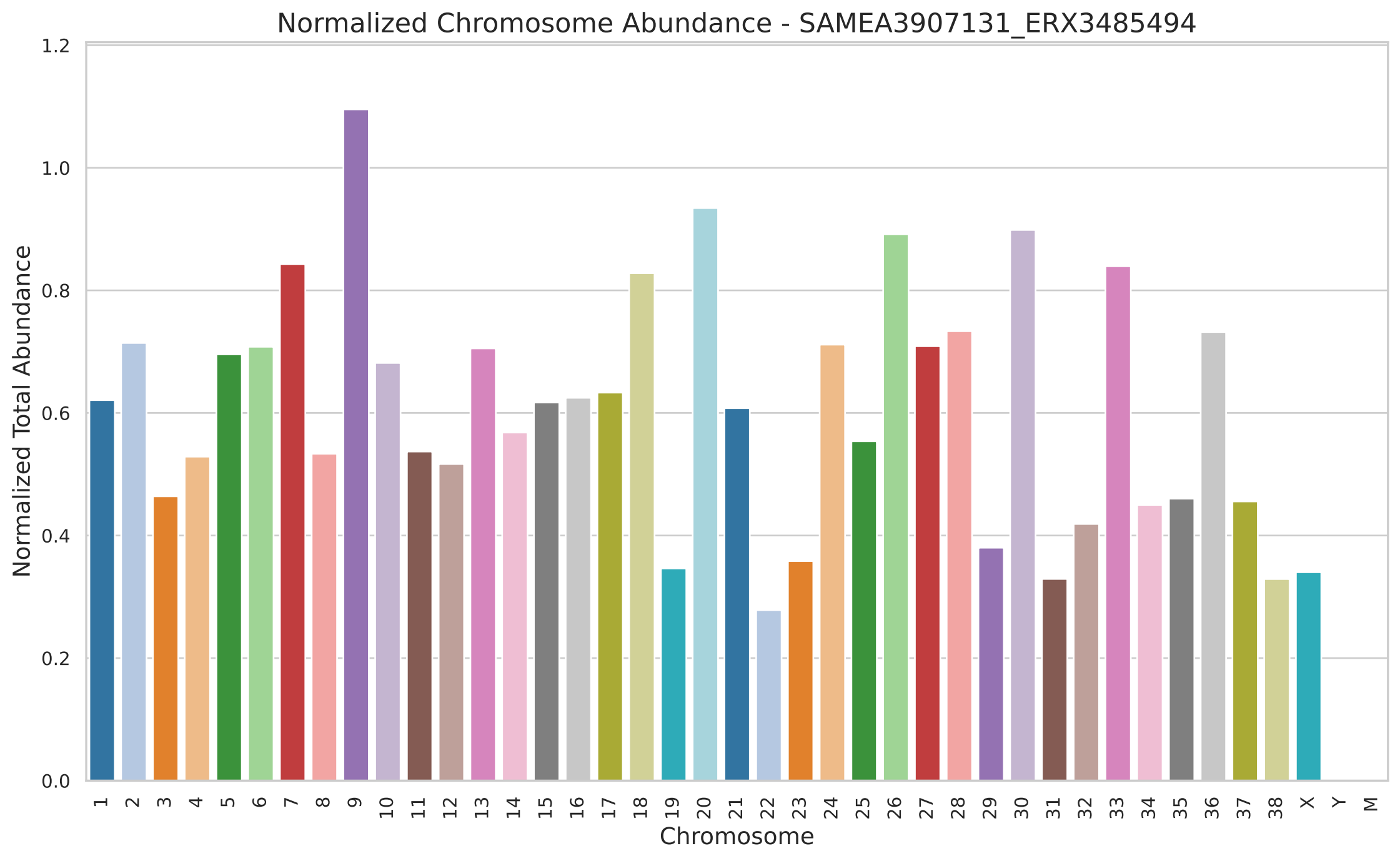

Normalized Chromosome Abundance - SAMEA3907091_ERX3485522
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

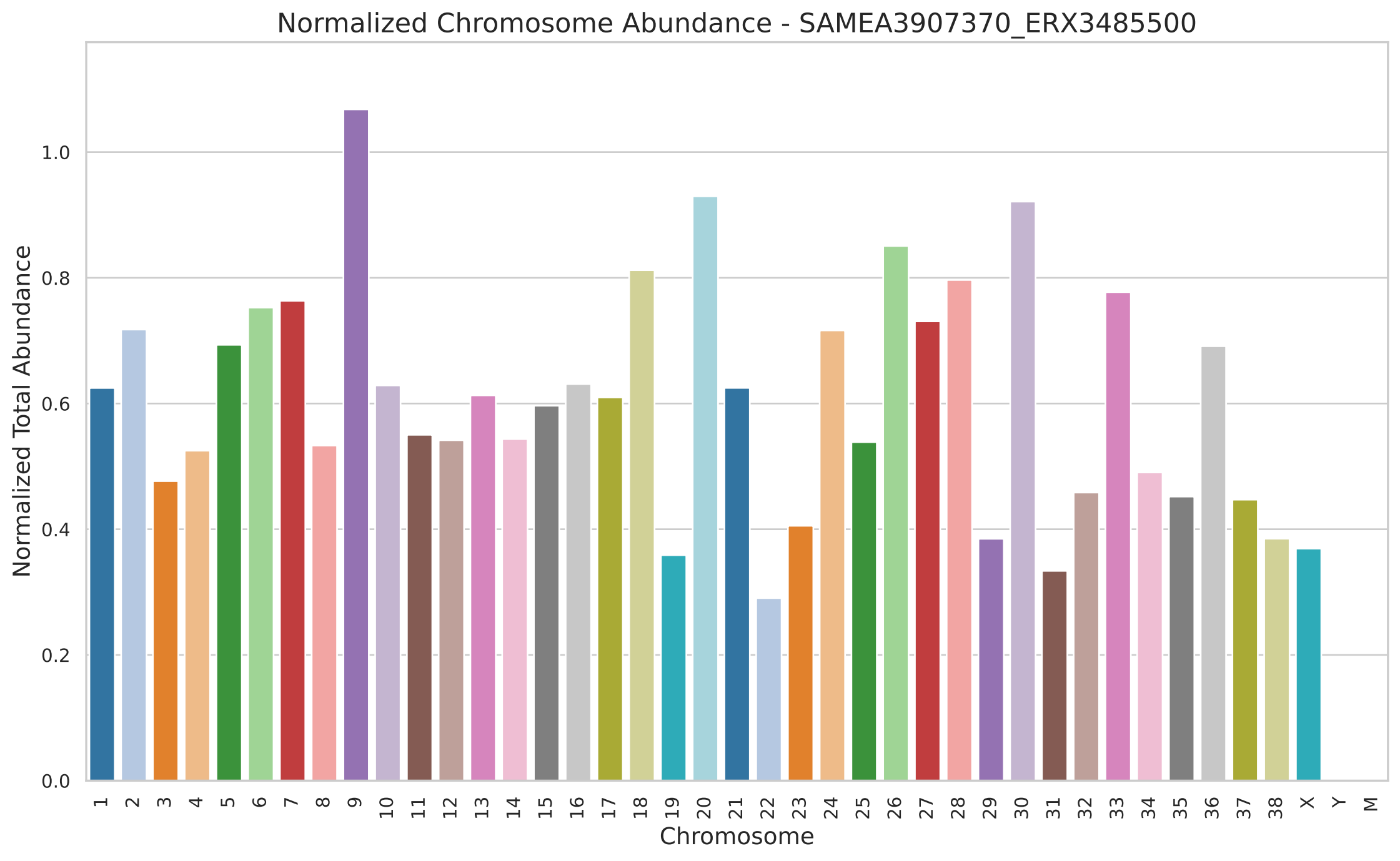

Normalized Chromosome Abundance - SAMEA3907098_ERX3485554
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

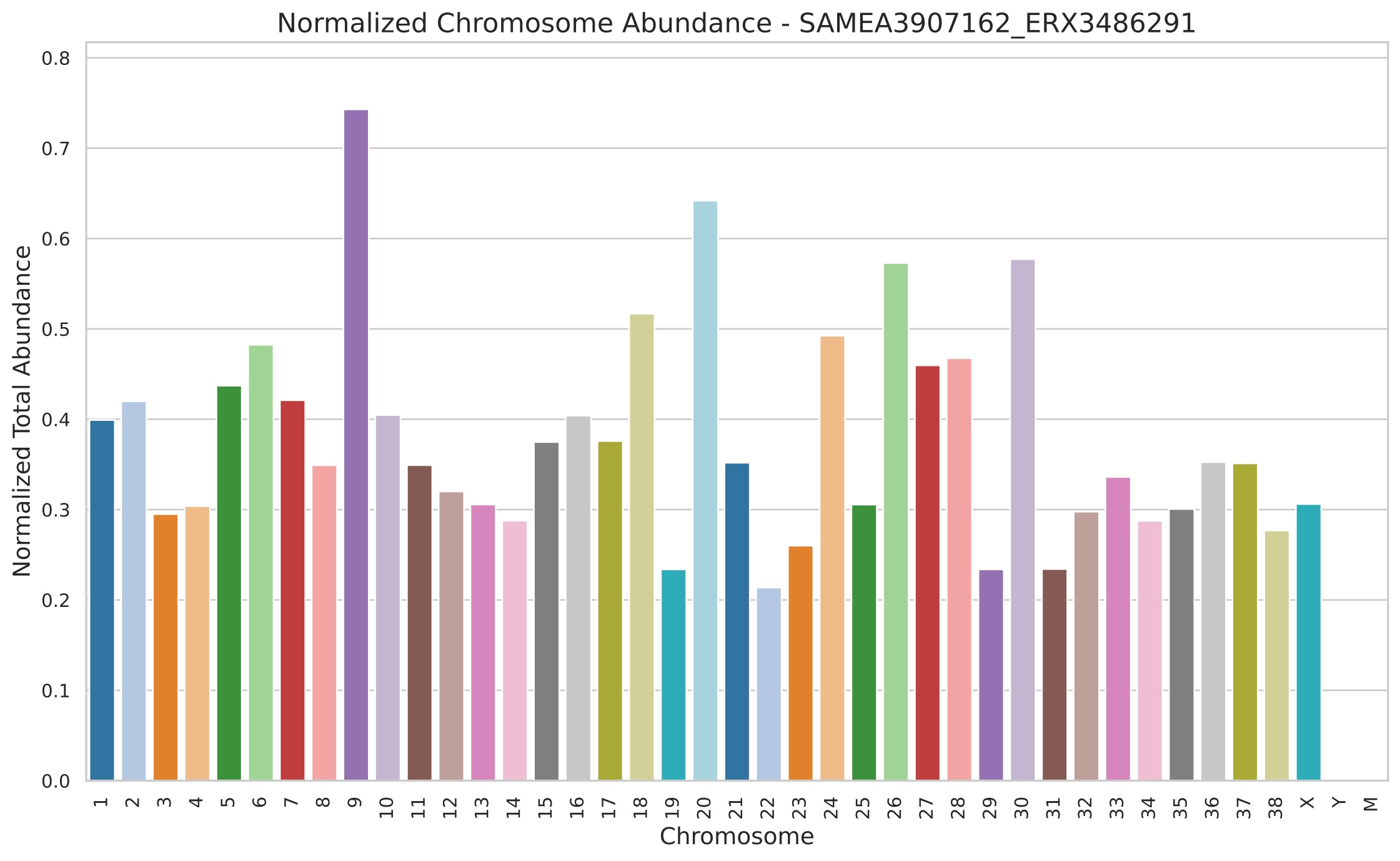

Normalized Chromosome Abundance - SAMEA3907314_ERX3485542
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

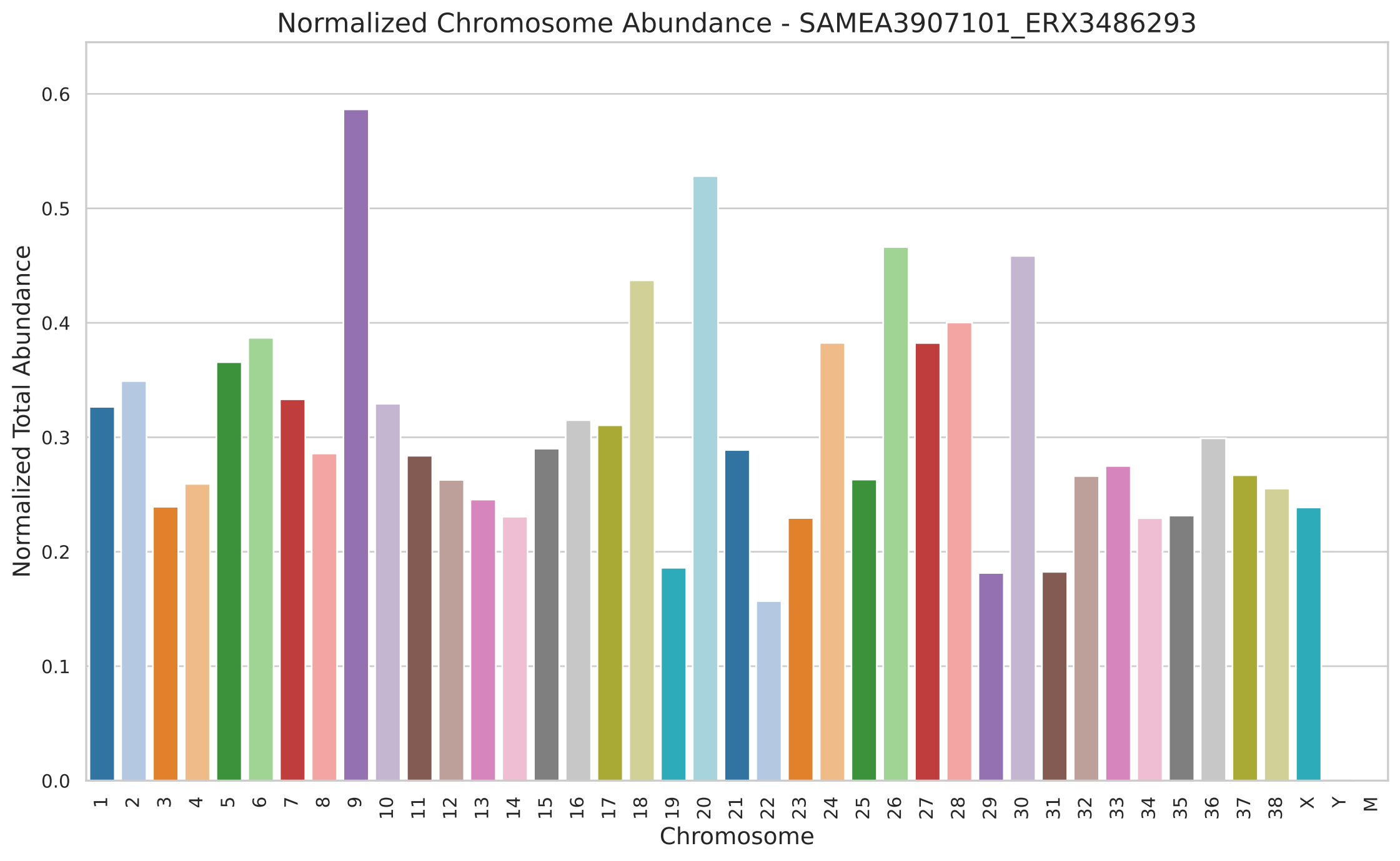

Normalized Chromosome Abundance - SAMEA3907111_ERX3485541
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

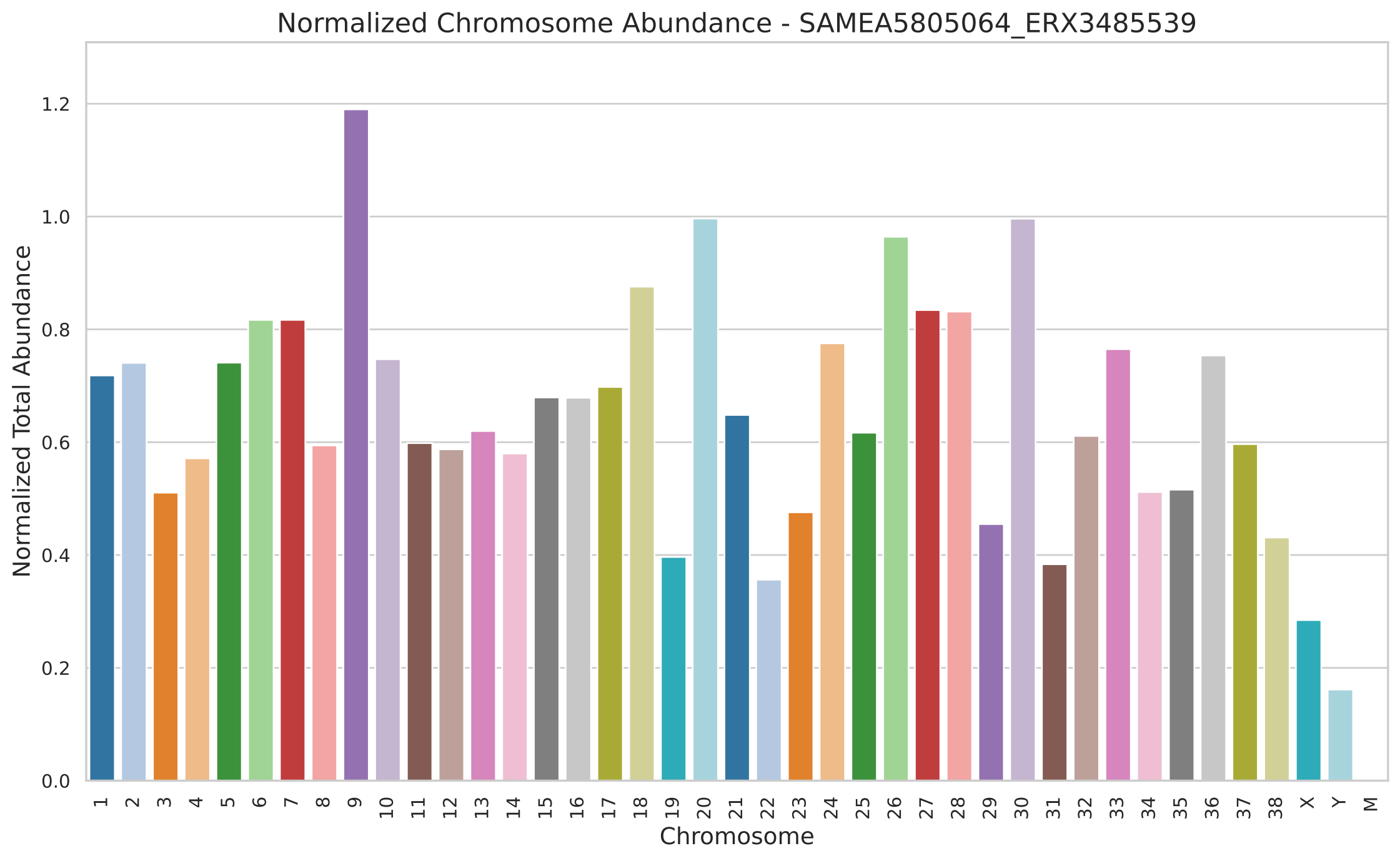

Normalized Chromosome Abundance - SAMEA3907152_ERX3486292
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

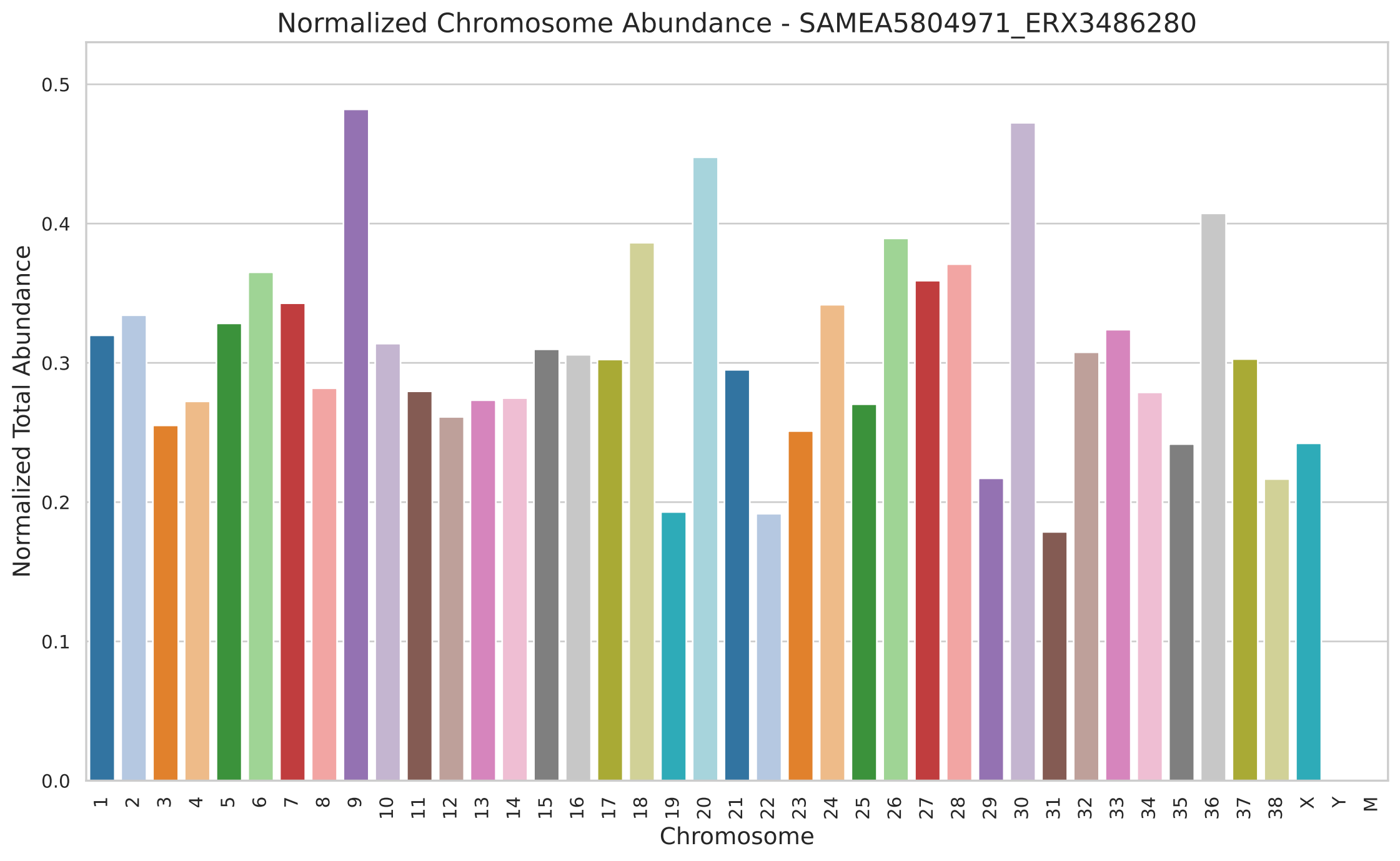

Normalized Chromosome Abundance - SAMEA3907131_ERX3485494
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

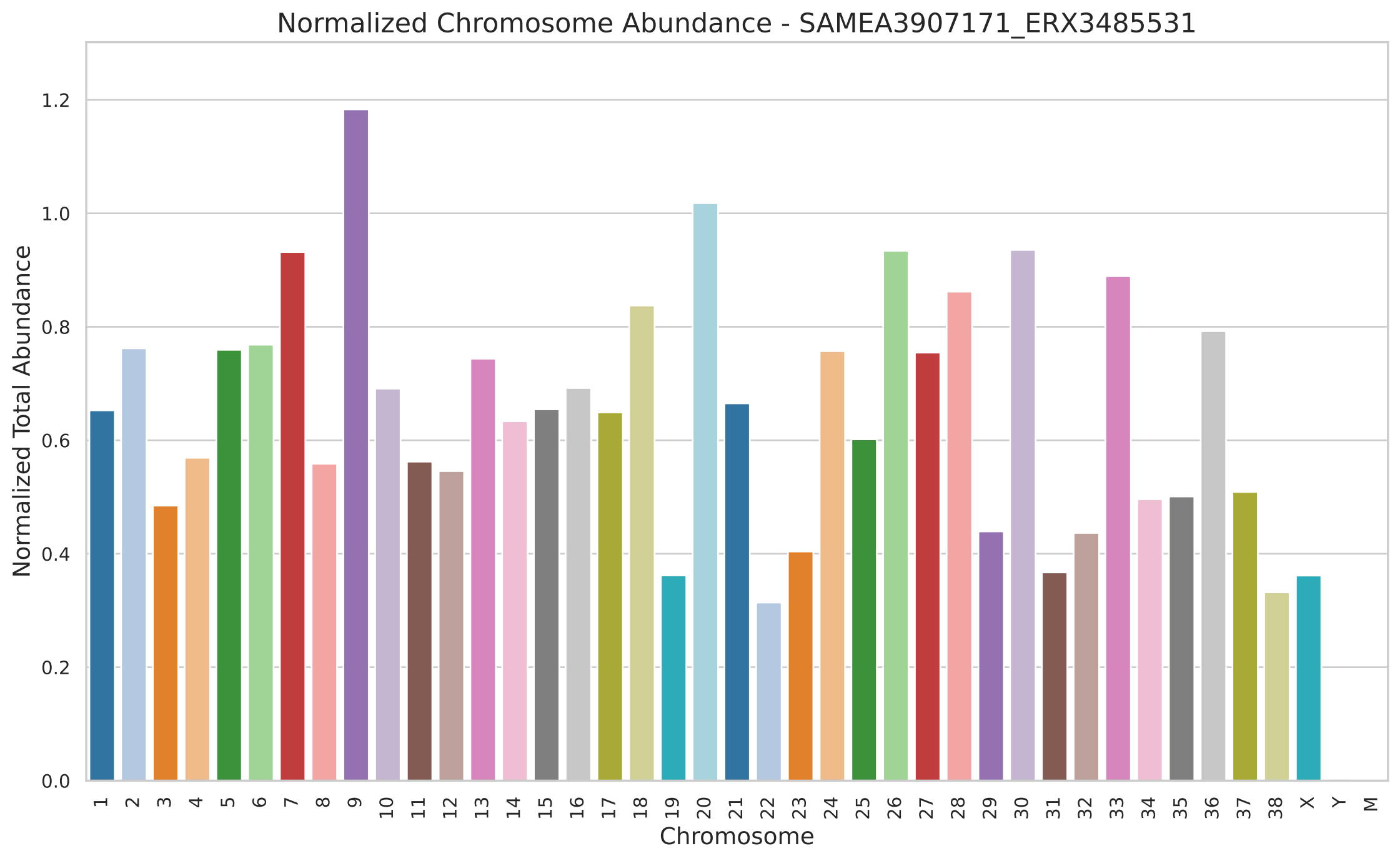

Normalized Chromosome Abundance - SAMEA3907370_ERX3485500
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

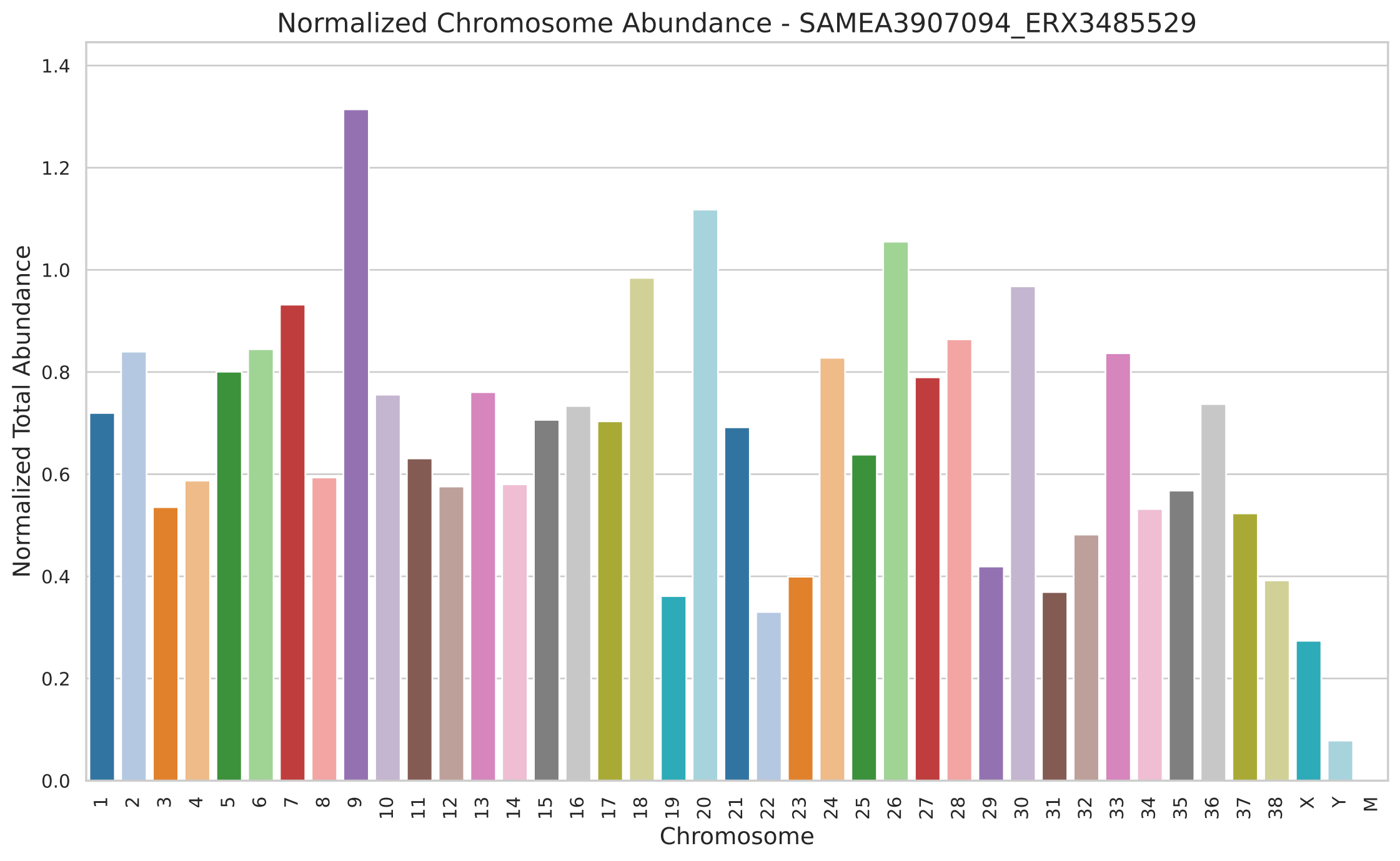

Normalized Chromosome Abundance - SAMEA3907162_ERX3486291
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

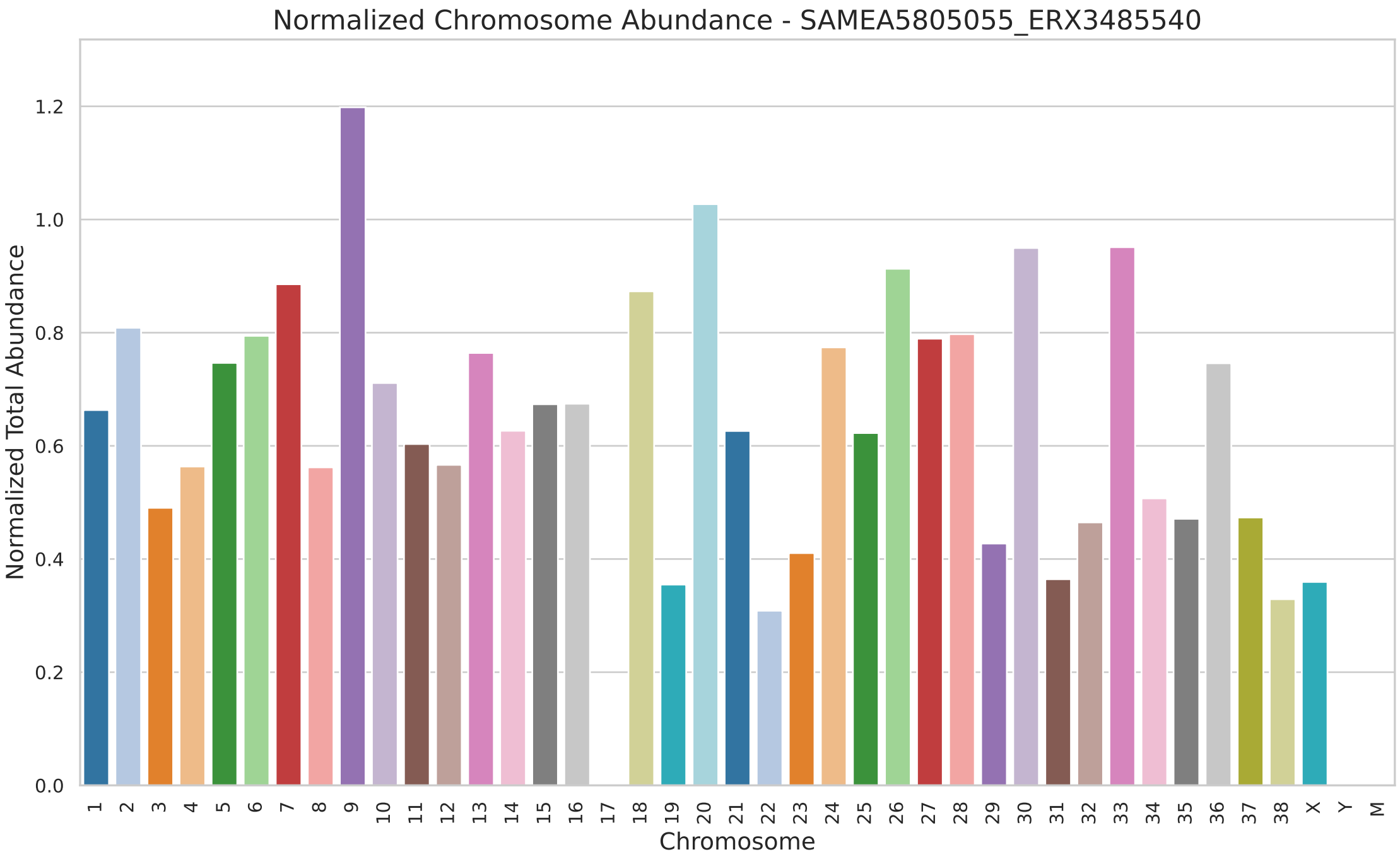

Normalized Chromosome Abundance - SAMEA3907101_ERX3486293
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

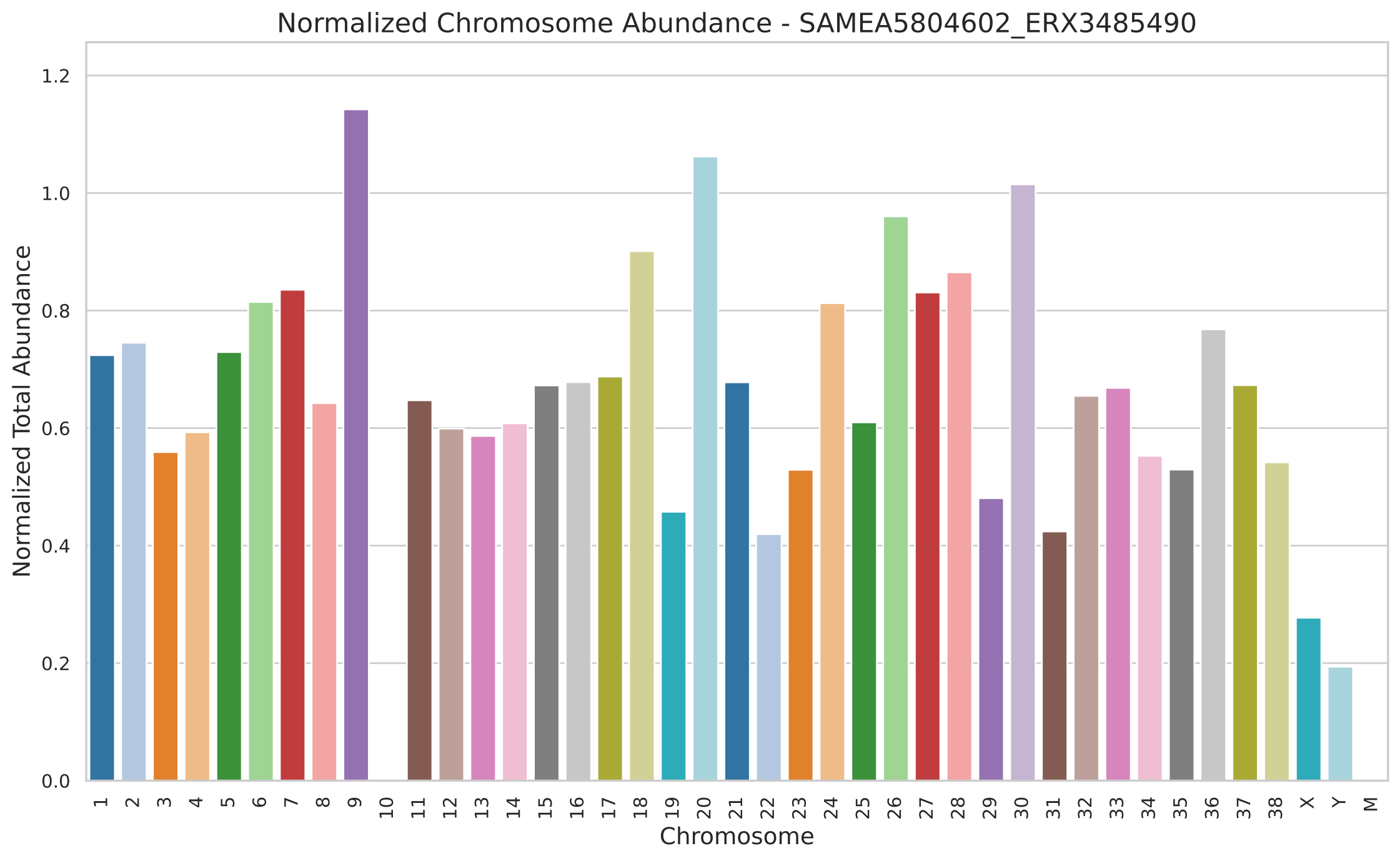

Normalized Chromosome Abundance - SAMEA5805064_ERX3485539
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

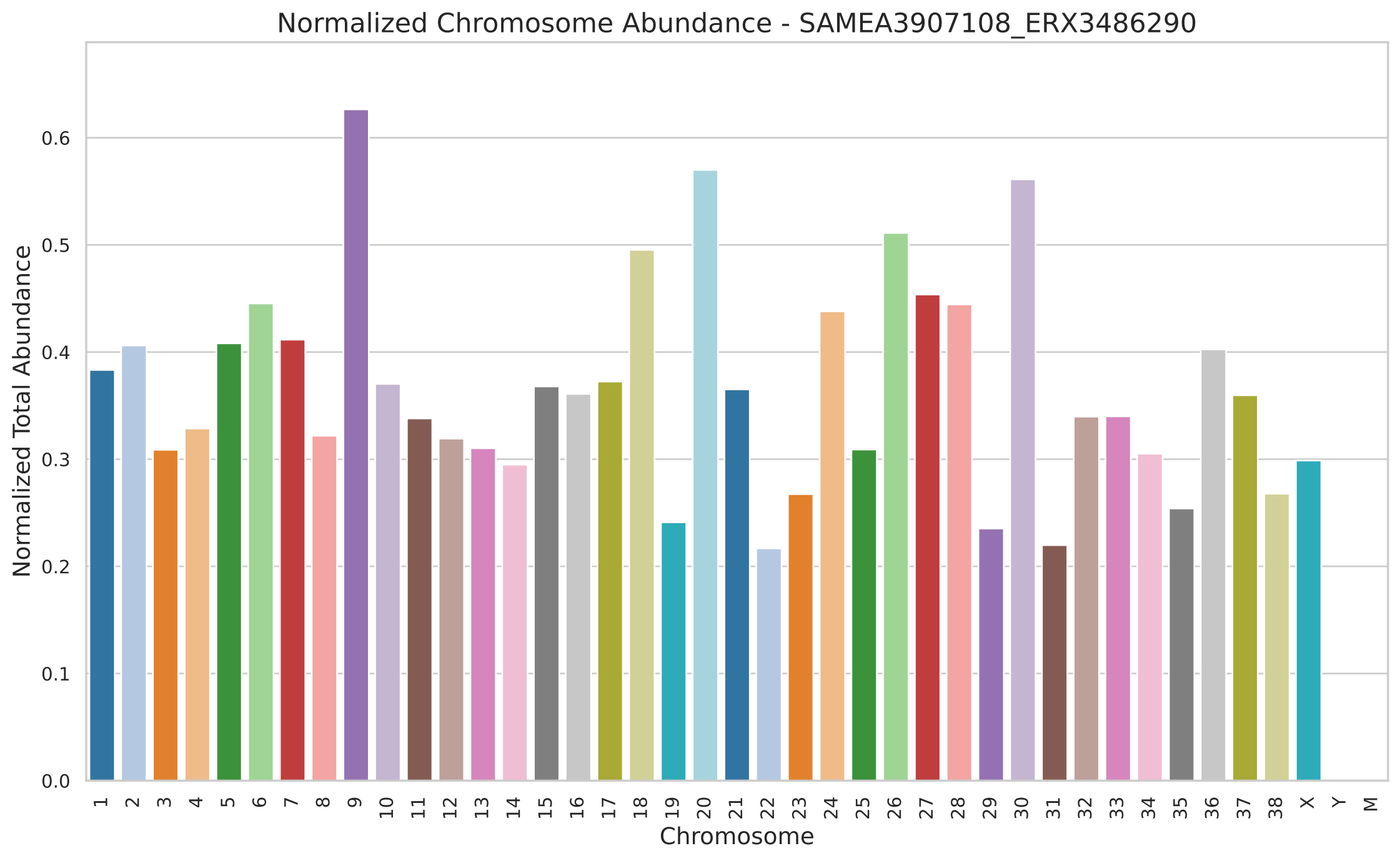

Normalized Chromosome Abundance - SAMEA5804971_ERX3486280
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

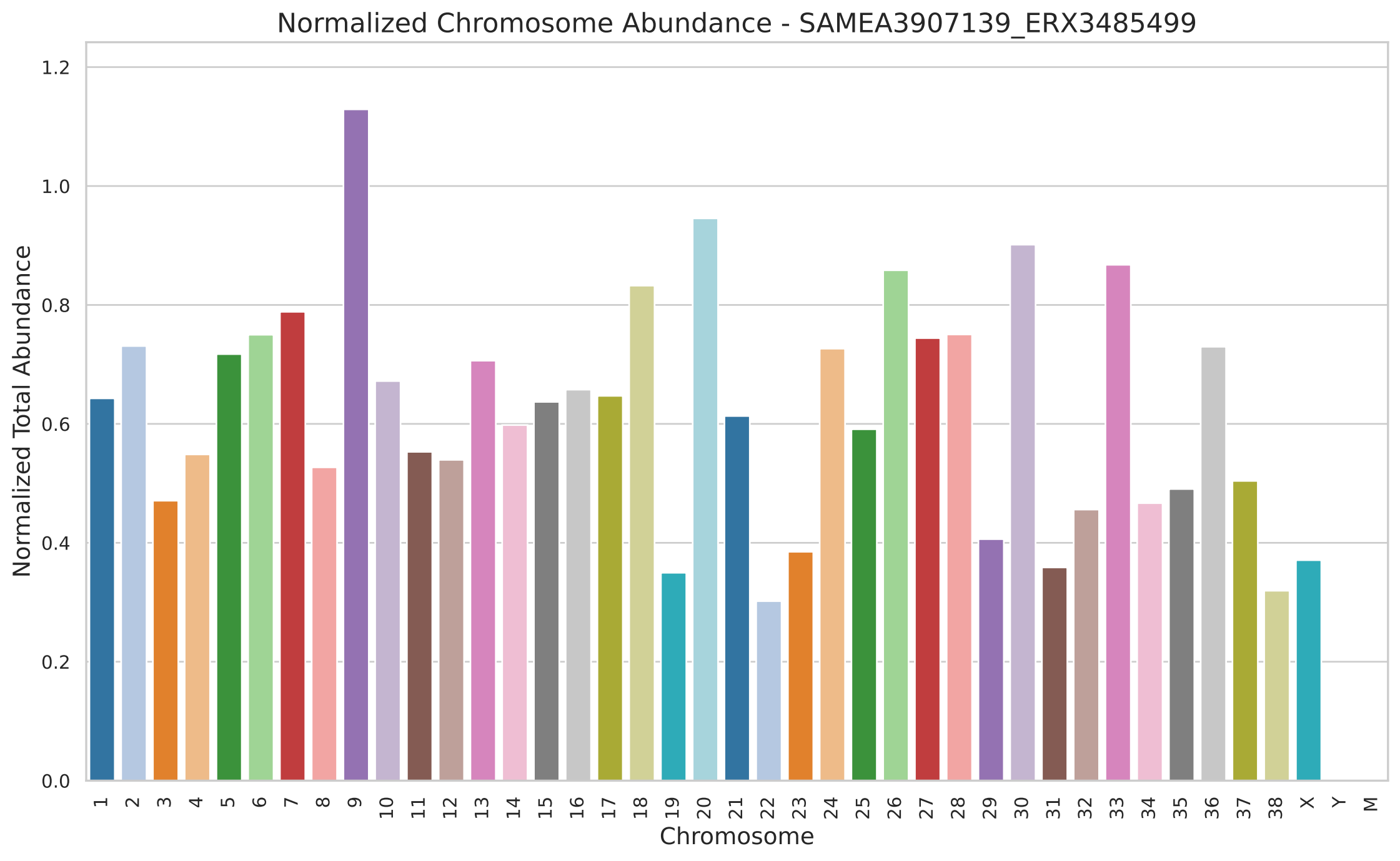

Normalized Chromosome Abundance - SAMEA3907171_ERX3485531
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

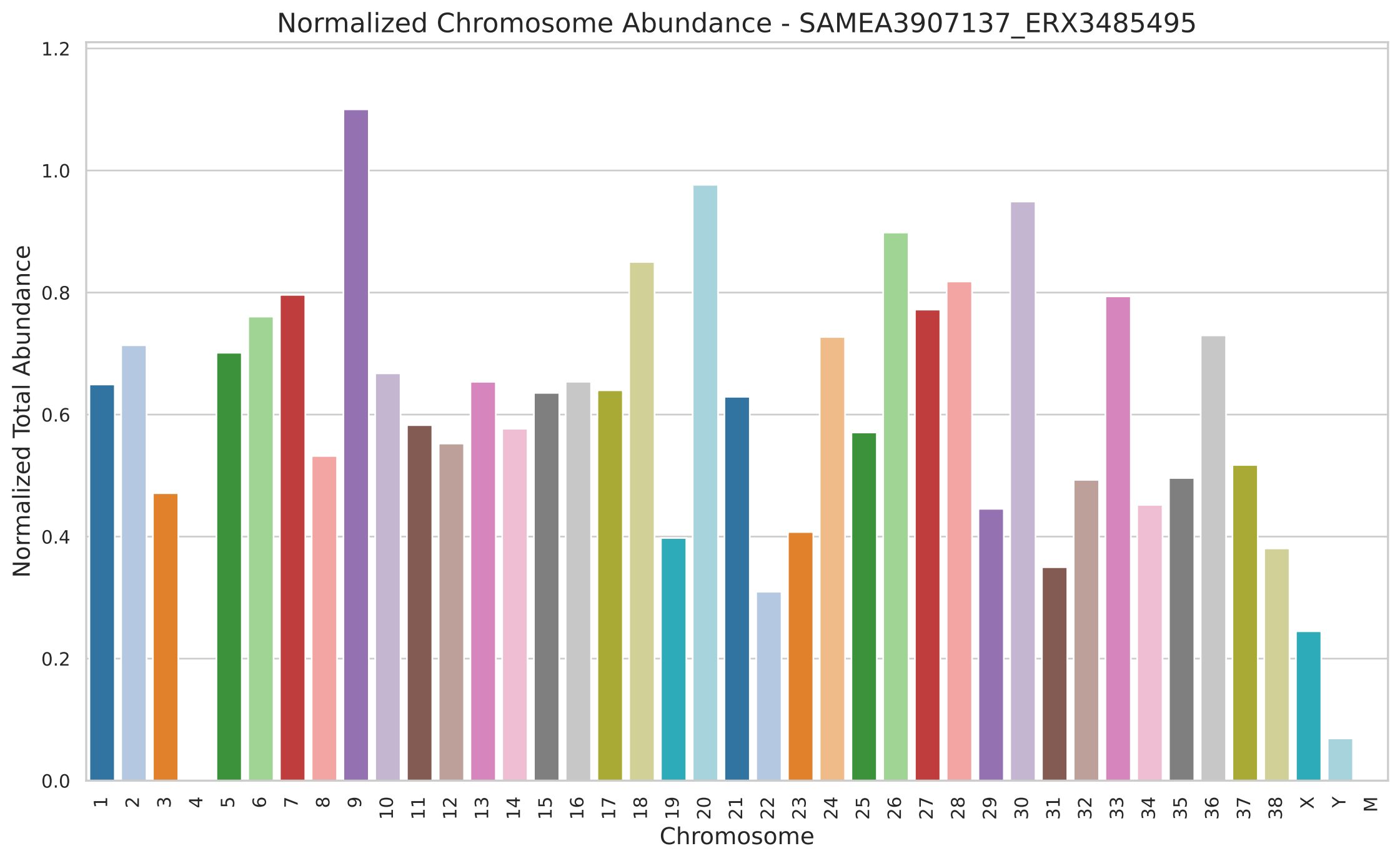

Normalized Chromosome Abundance - SAMEA3907094_ERX3485529
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

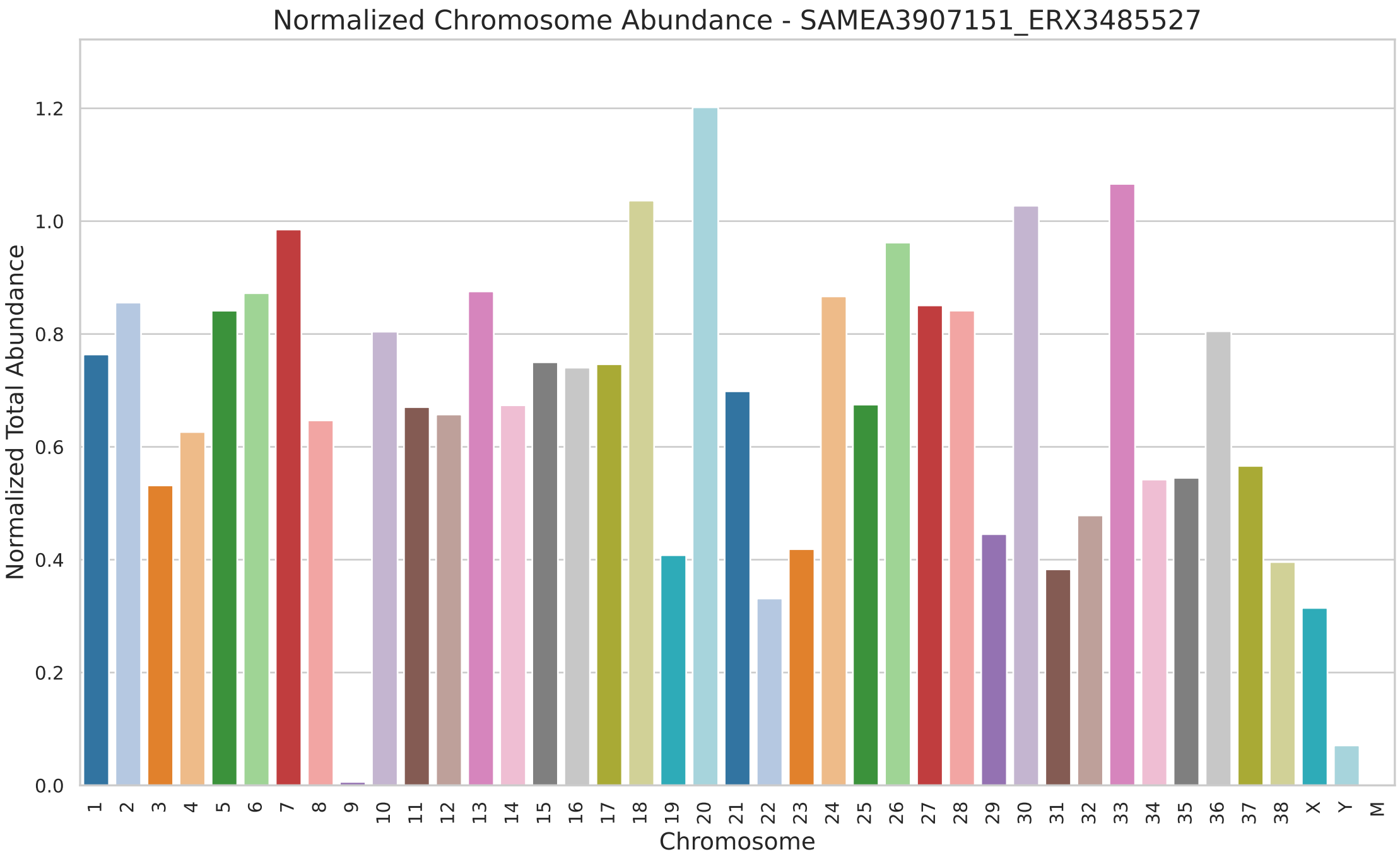

Normalized Chromosome Abundance - SAMEA5805055_ERX3485540
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

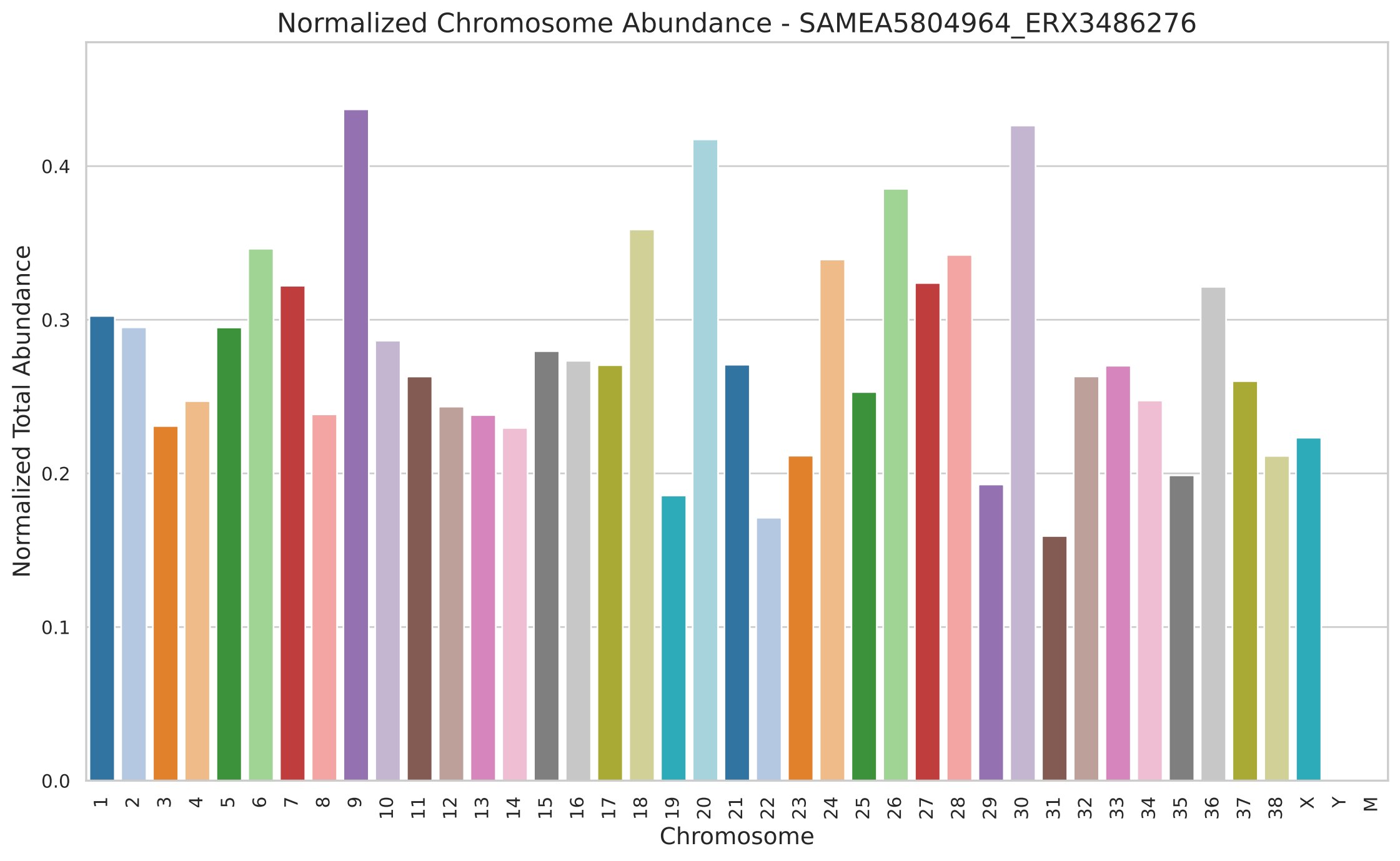

Normalized Chromosome Abundance - SAMEA5804602_ERX3485490
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

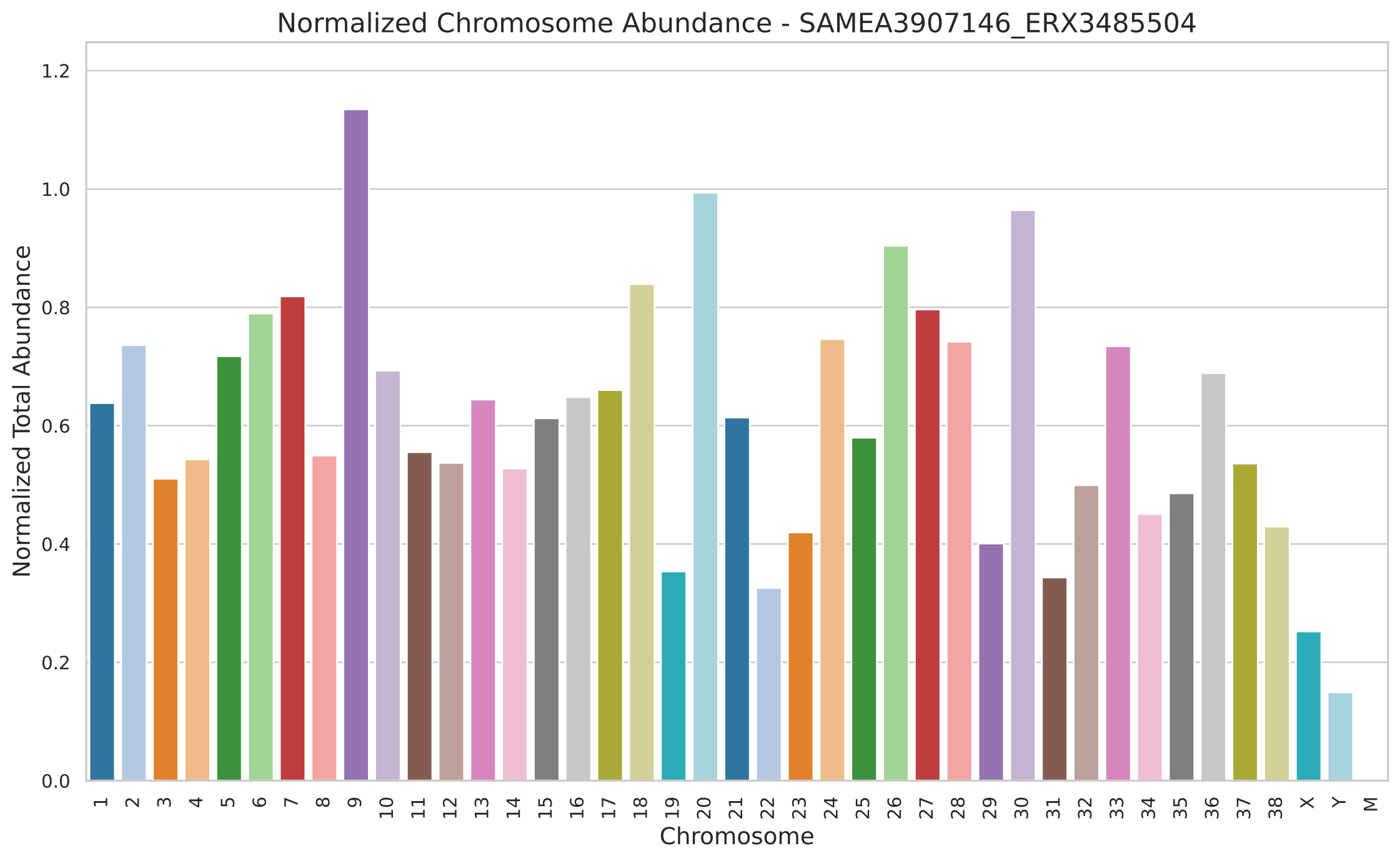

Normalized Chromosome Abundance - SAMEA3907108_ERX3486290
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

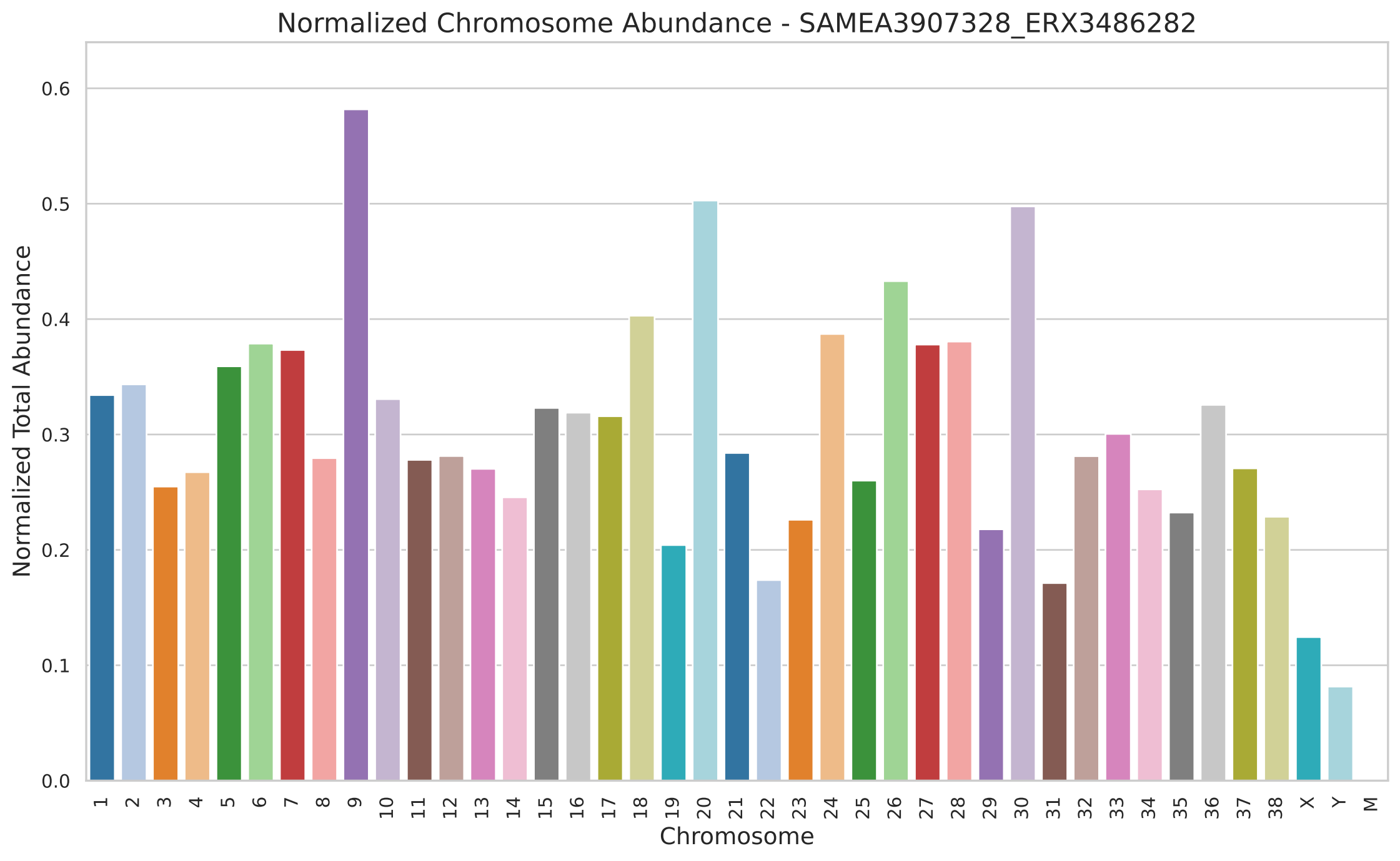

Normalized Chromosome Abundance - SAMEA3907139_ERX3485499
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

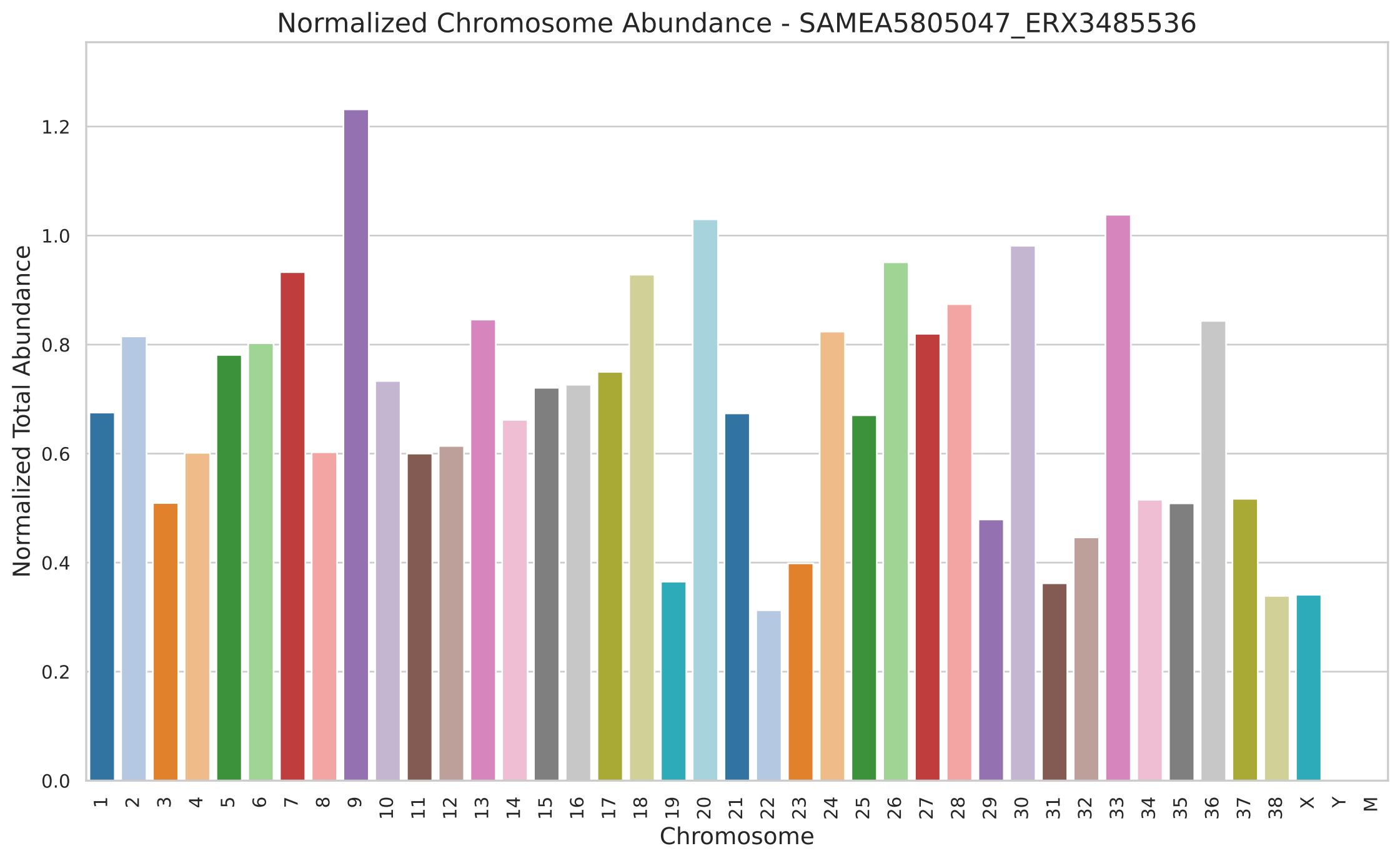

Normalized Chromosome Abundance - SAMEA3907137_ERX3485495
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

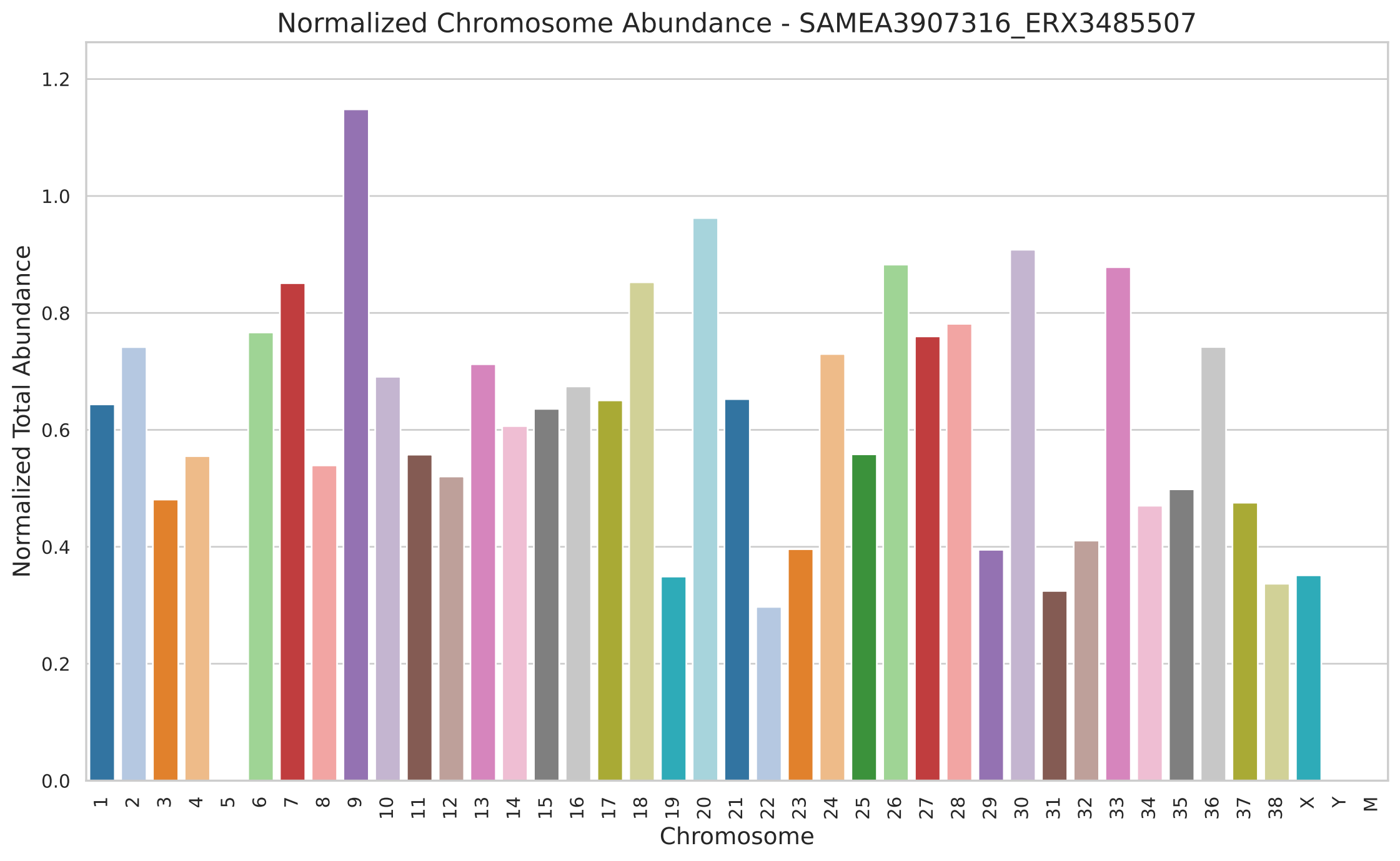

Normalized Chromosome Abundance - SAMEA3907151_ERX3485527
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

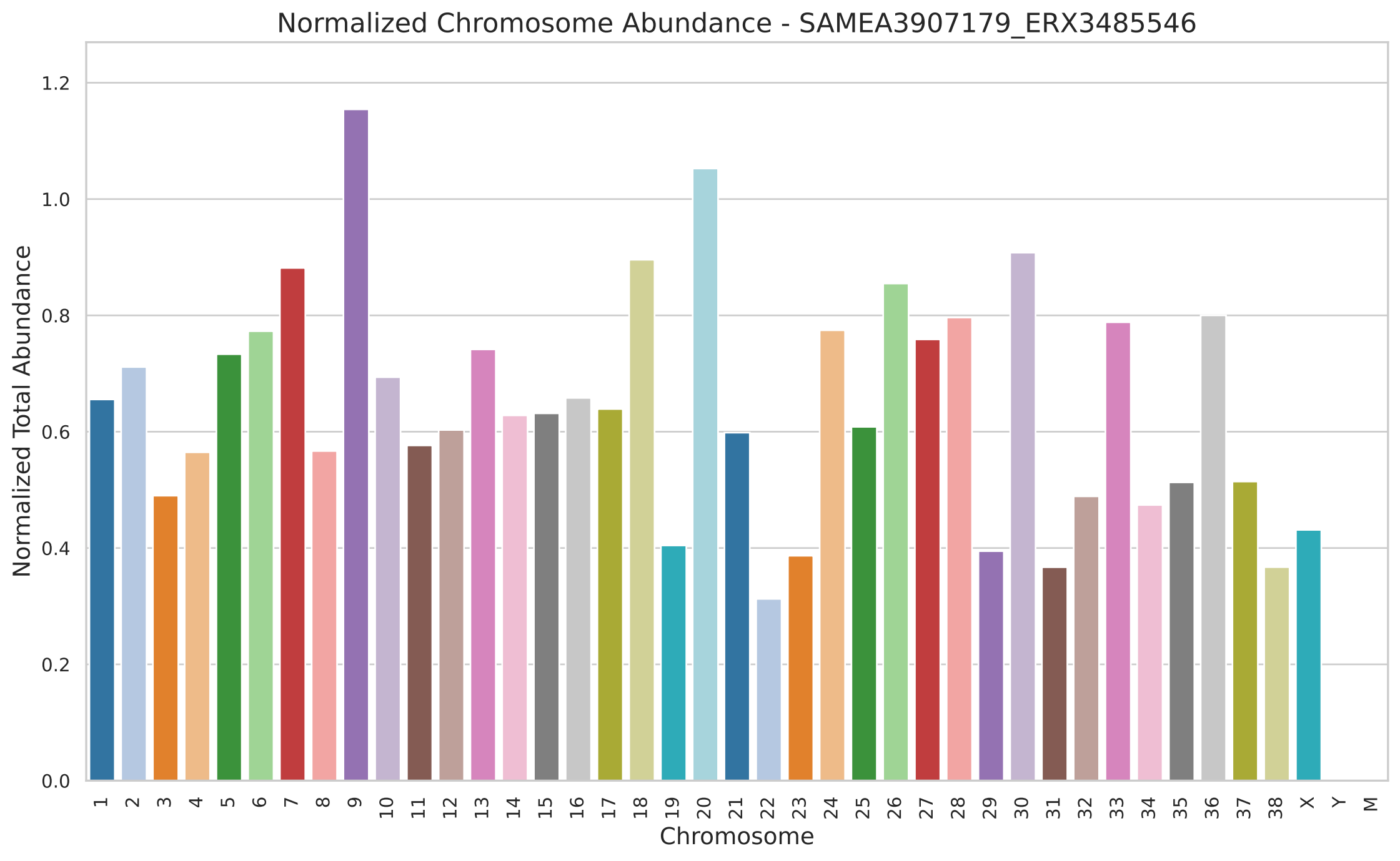

Normalized Chromosome Abundance - SAMEA5804964_ERX3486276
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

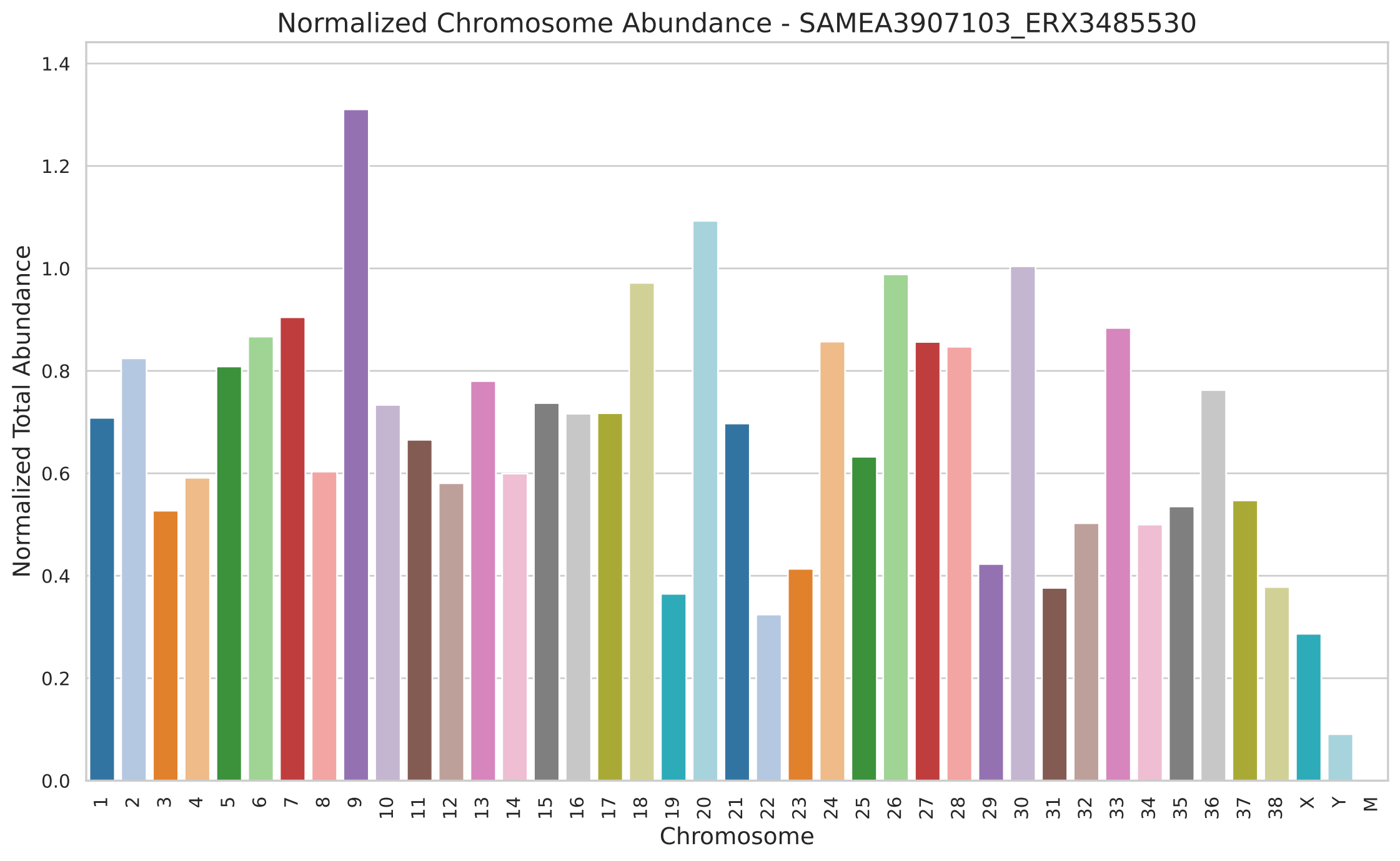

Normalized Chromosome Abundance - SAMEA3907146_ERX3485504
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

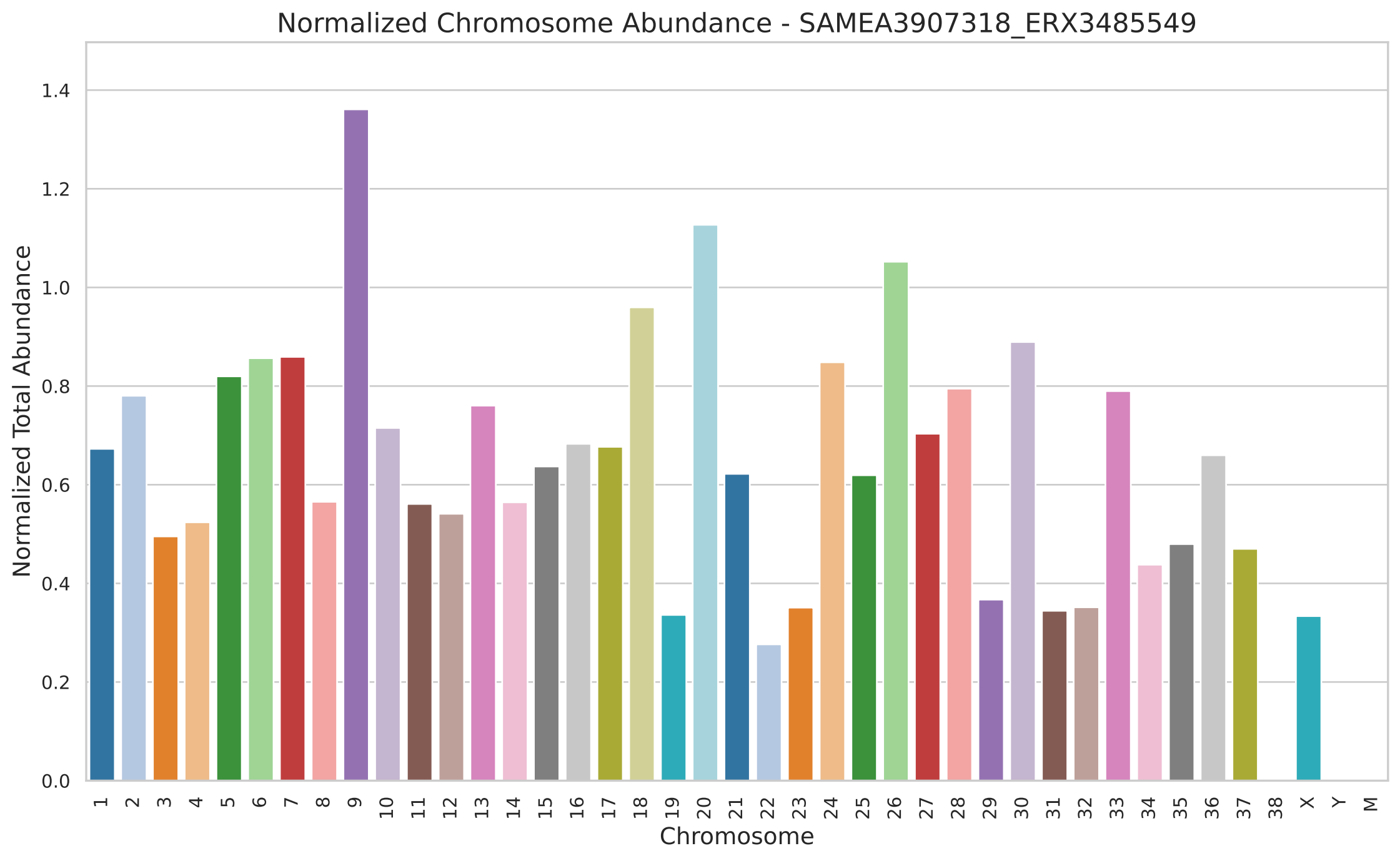

Normalized Chromosome Abundance - SAMEA3907328_ERX3486282
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

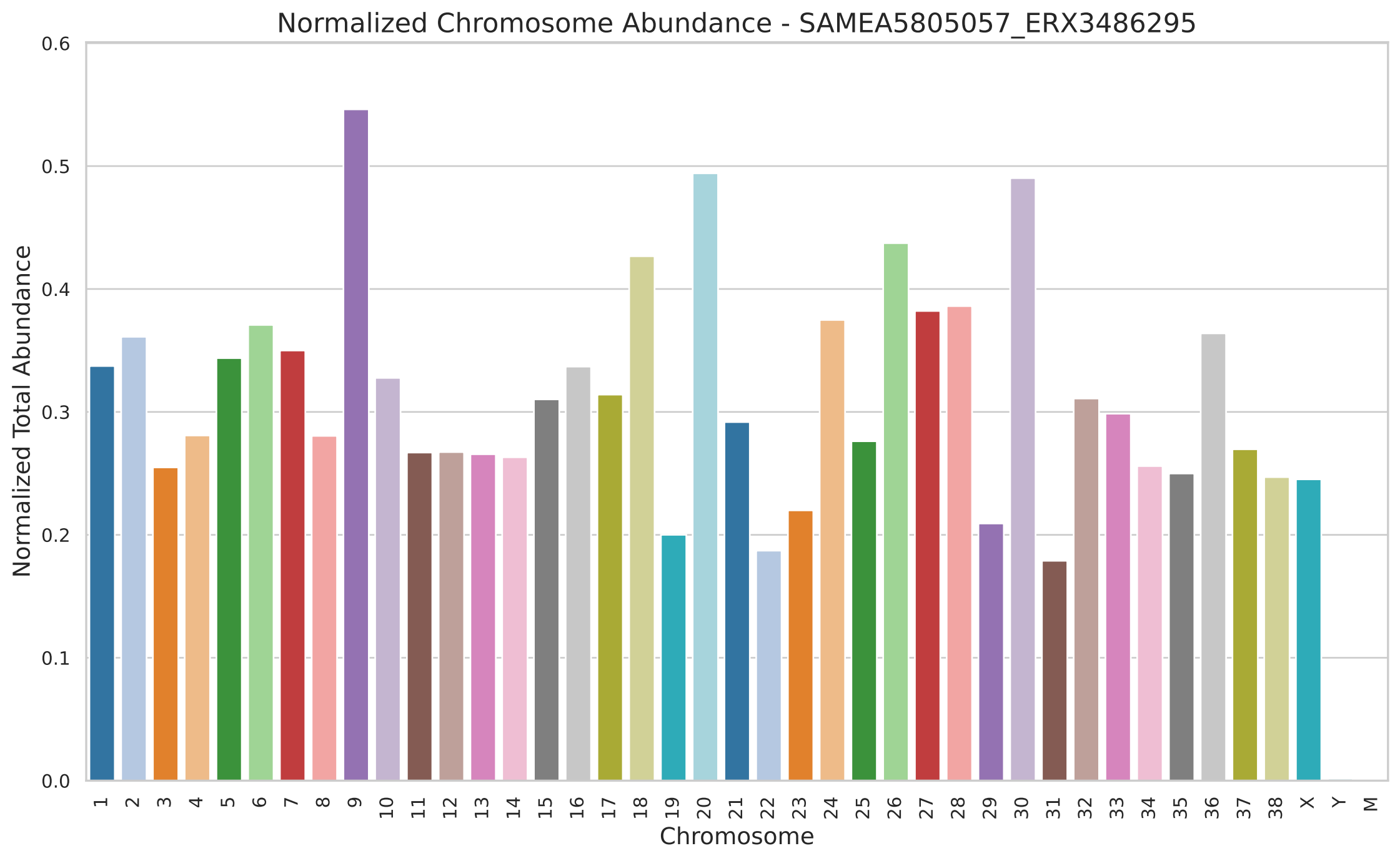

Normalized Chromosome Abundance - SAMEA5805047_ERX3485536
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

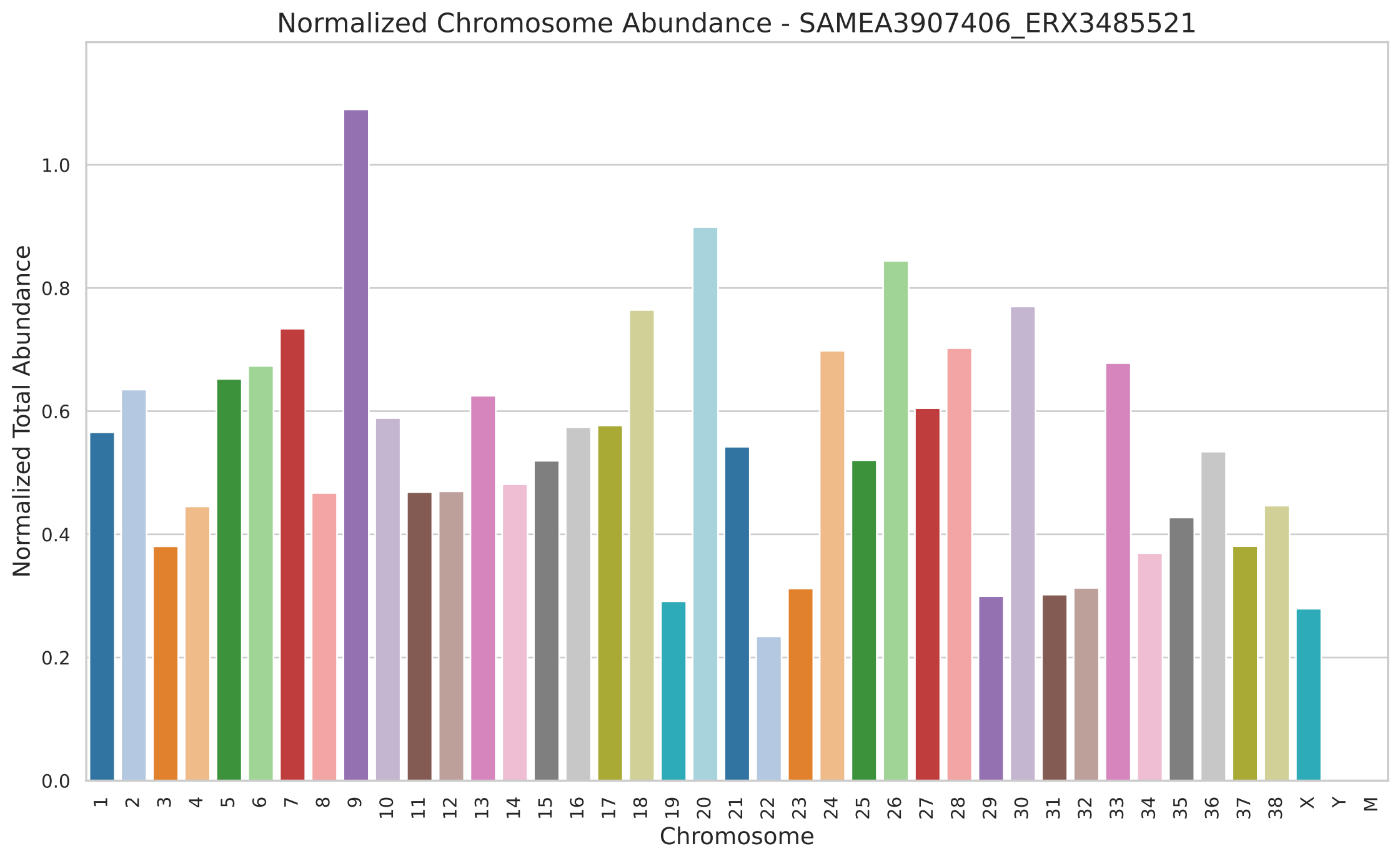

Normalized Chromosome Abundance - SAMEA3907316_ERX3485507
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

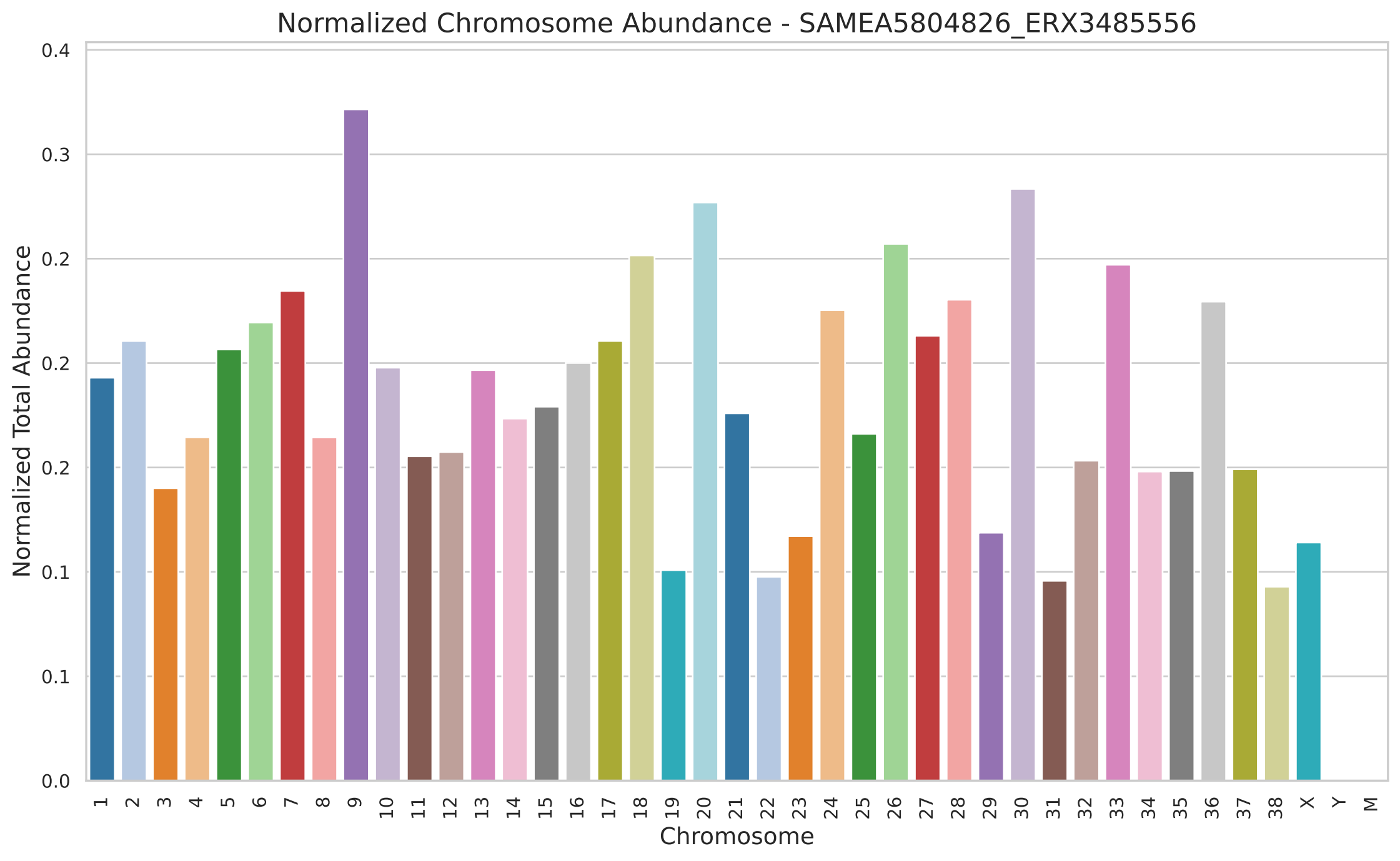

Normalized Chromosome Abundance - SAMEA3907179_ERX3485546
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

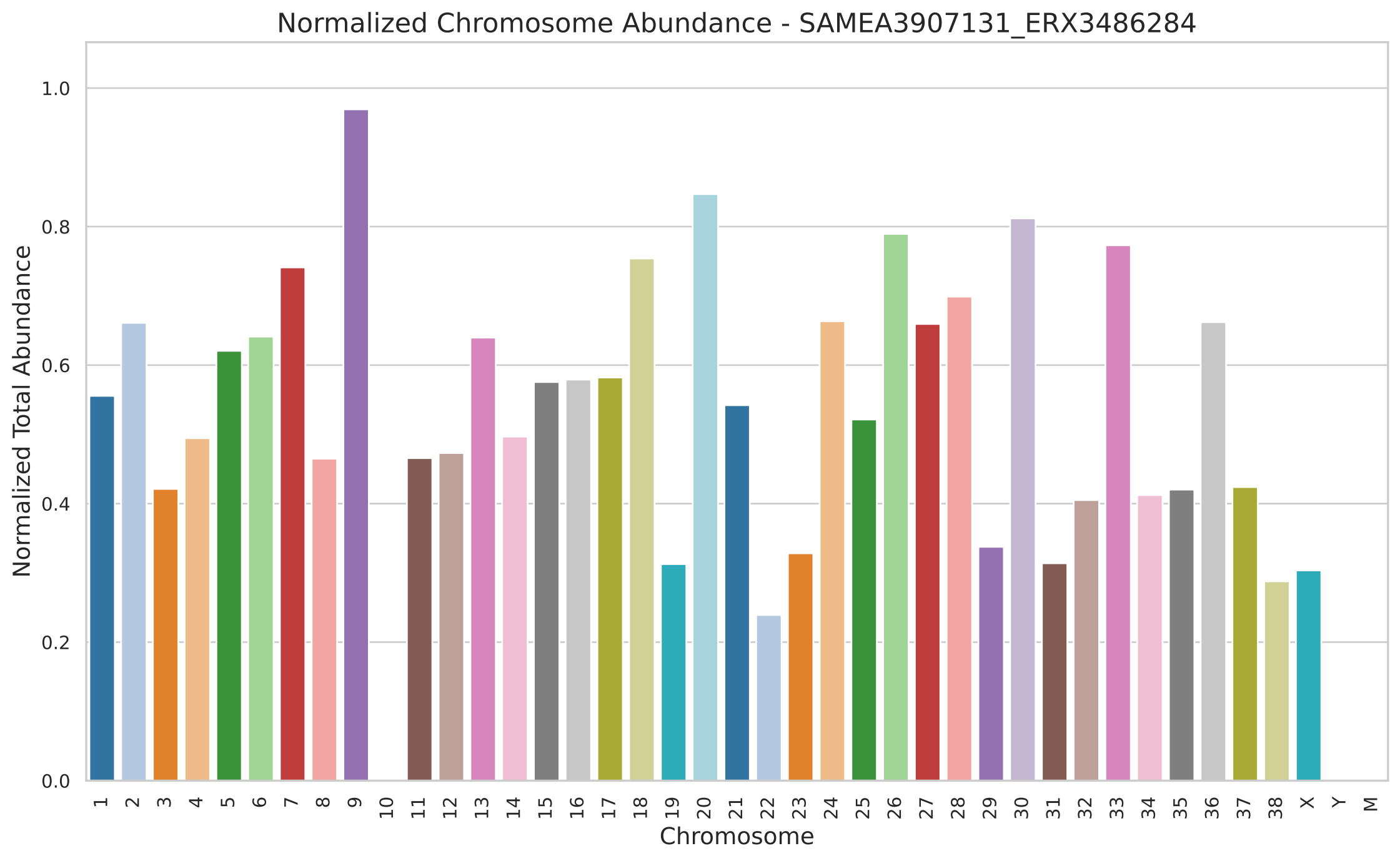

Normalized Chromosome Abundance - SAMEA3907103_ERX3485530
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

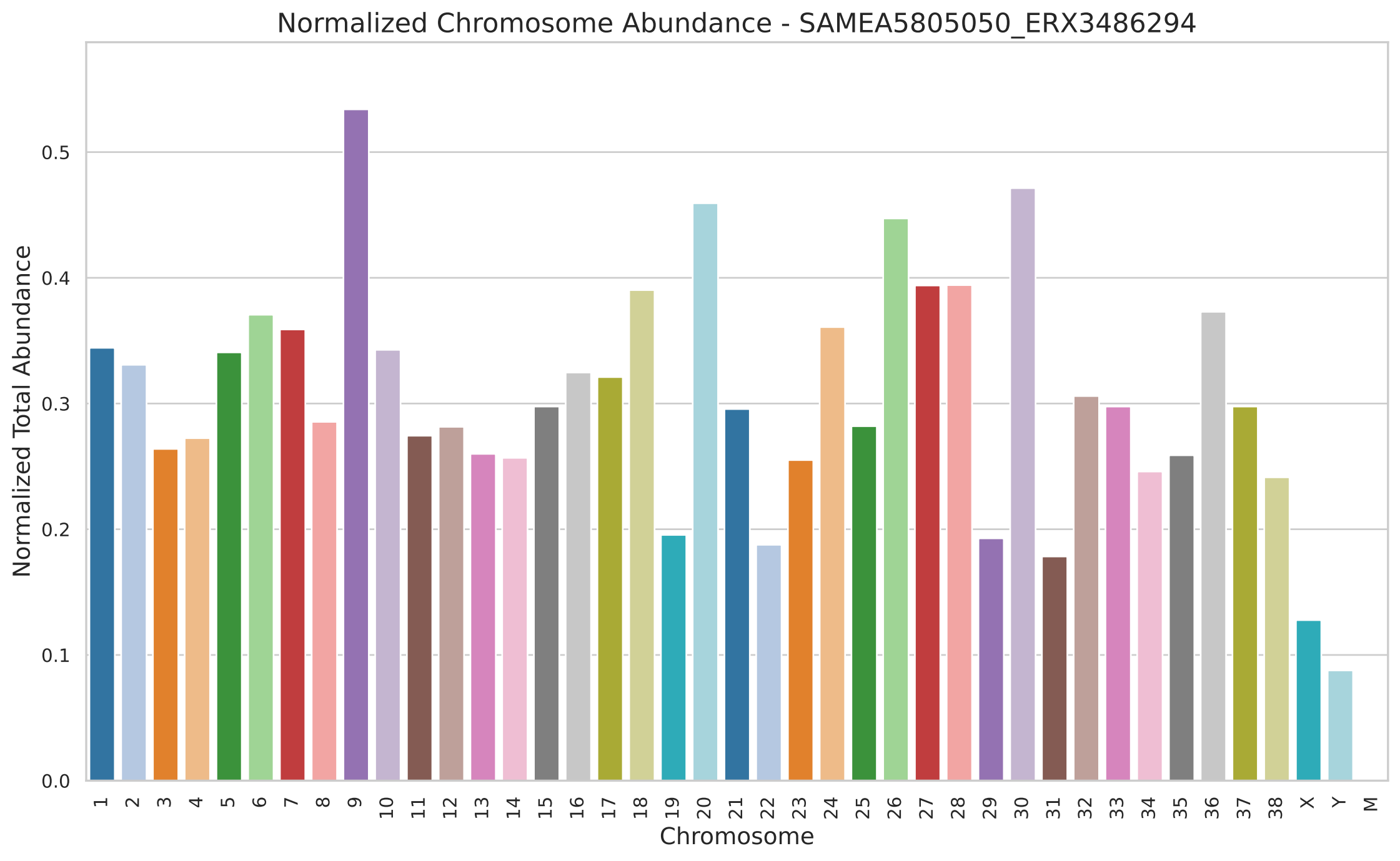

Normalized Chromosome Abundance - SAMEA3907318_ERX3485549
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

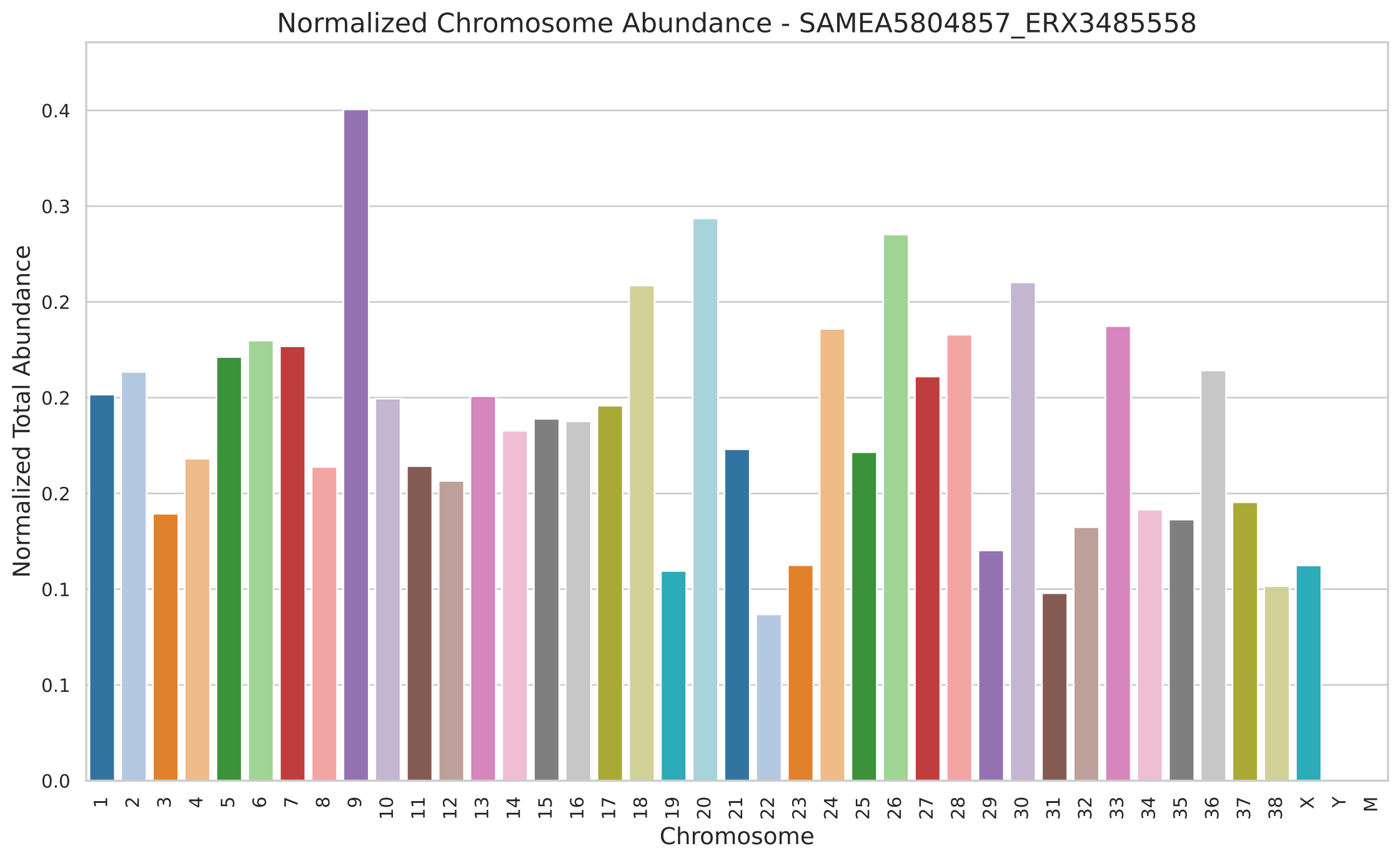

Normalized Chromosome Abundance - SAMEA5805057_ERX3486295
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

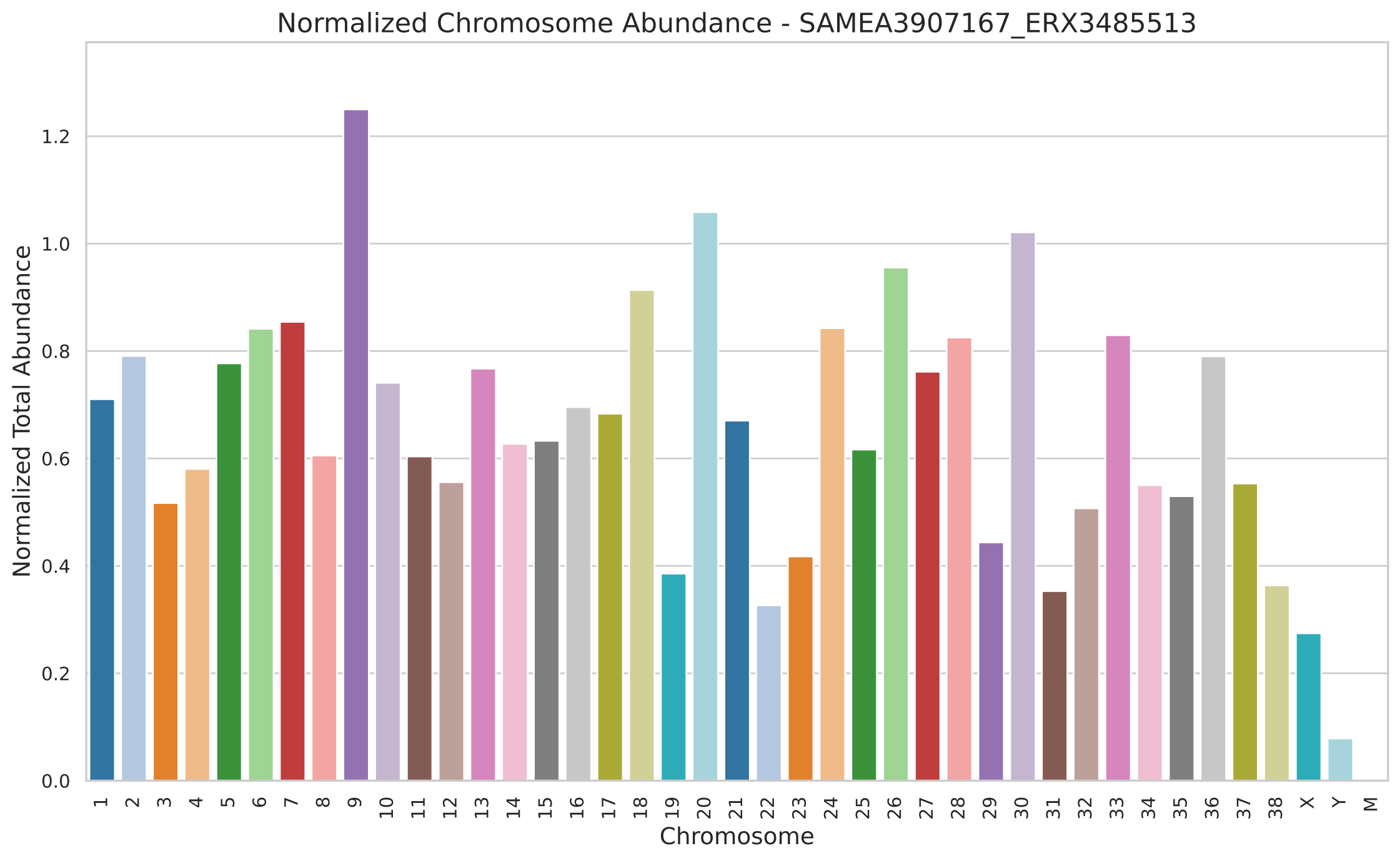

Normalized Chromosome Abundance - SAMEA3907406_ERX3485521
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

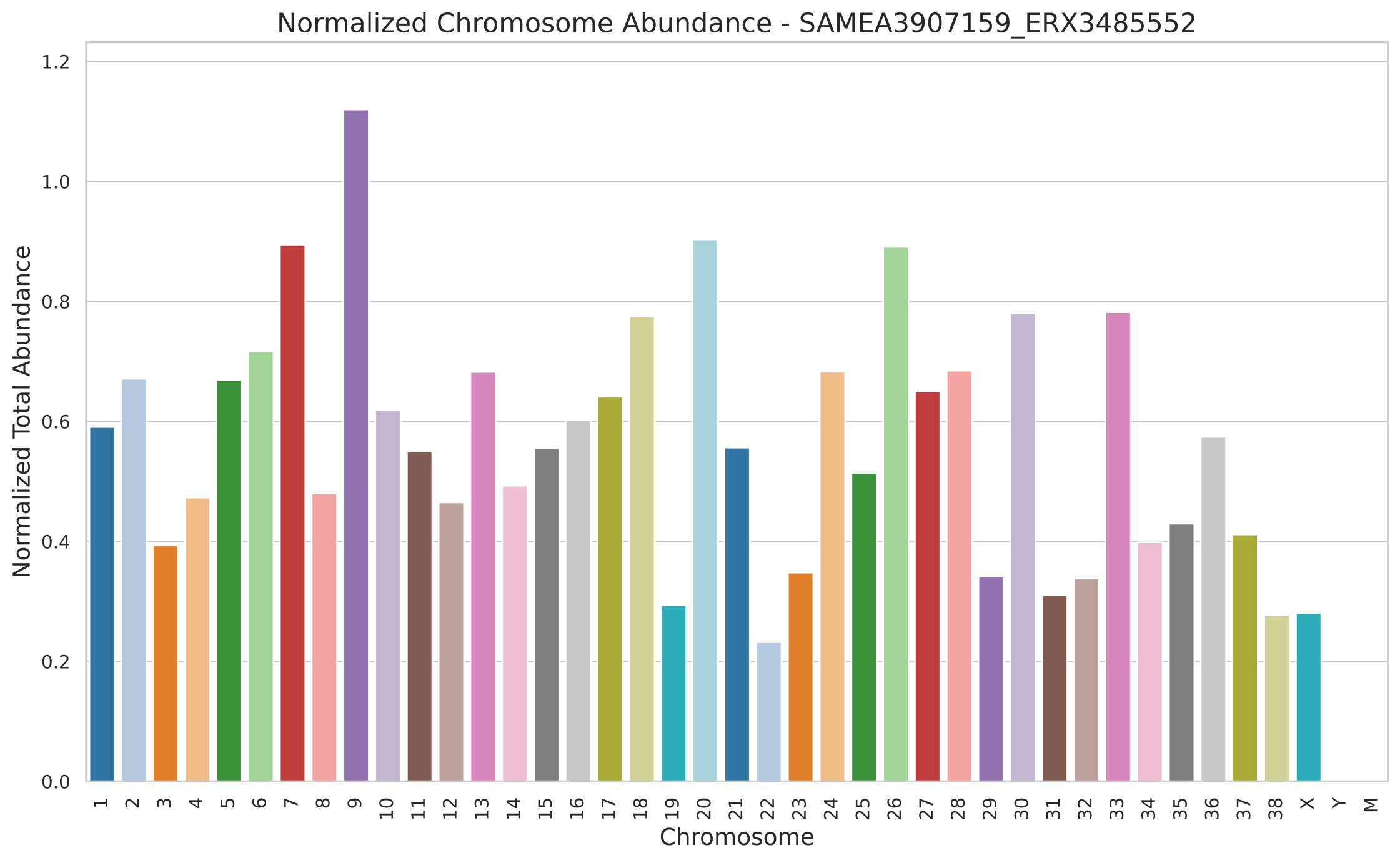

Normalized Chromosome Abundance - SAMEA5804826_ERX3485556
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

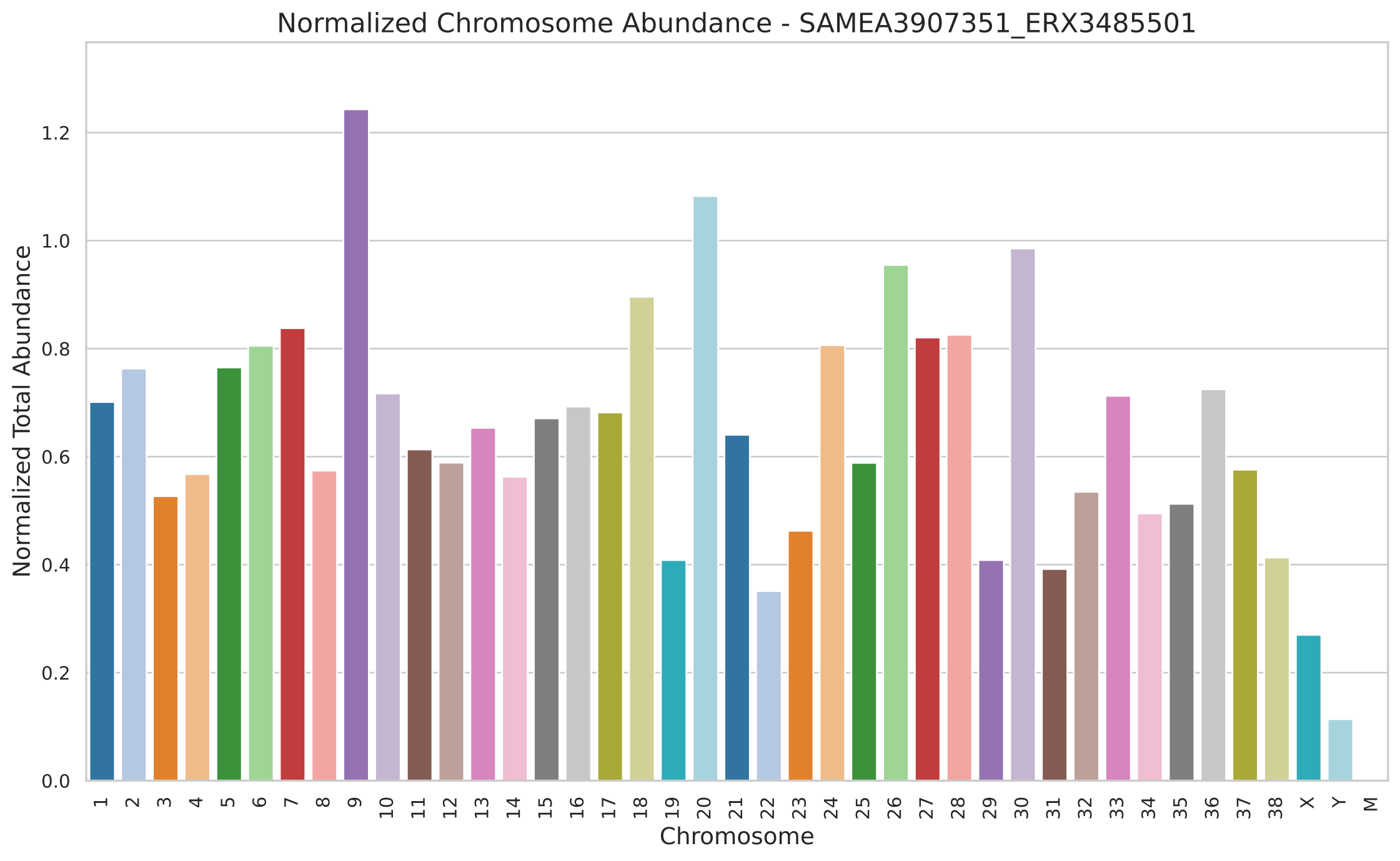

Normalized Chromosome Abundance - SAMEA3907131_ERX3486284
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

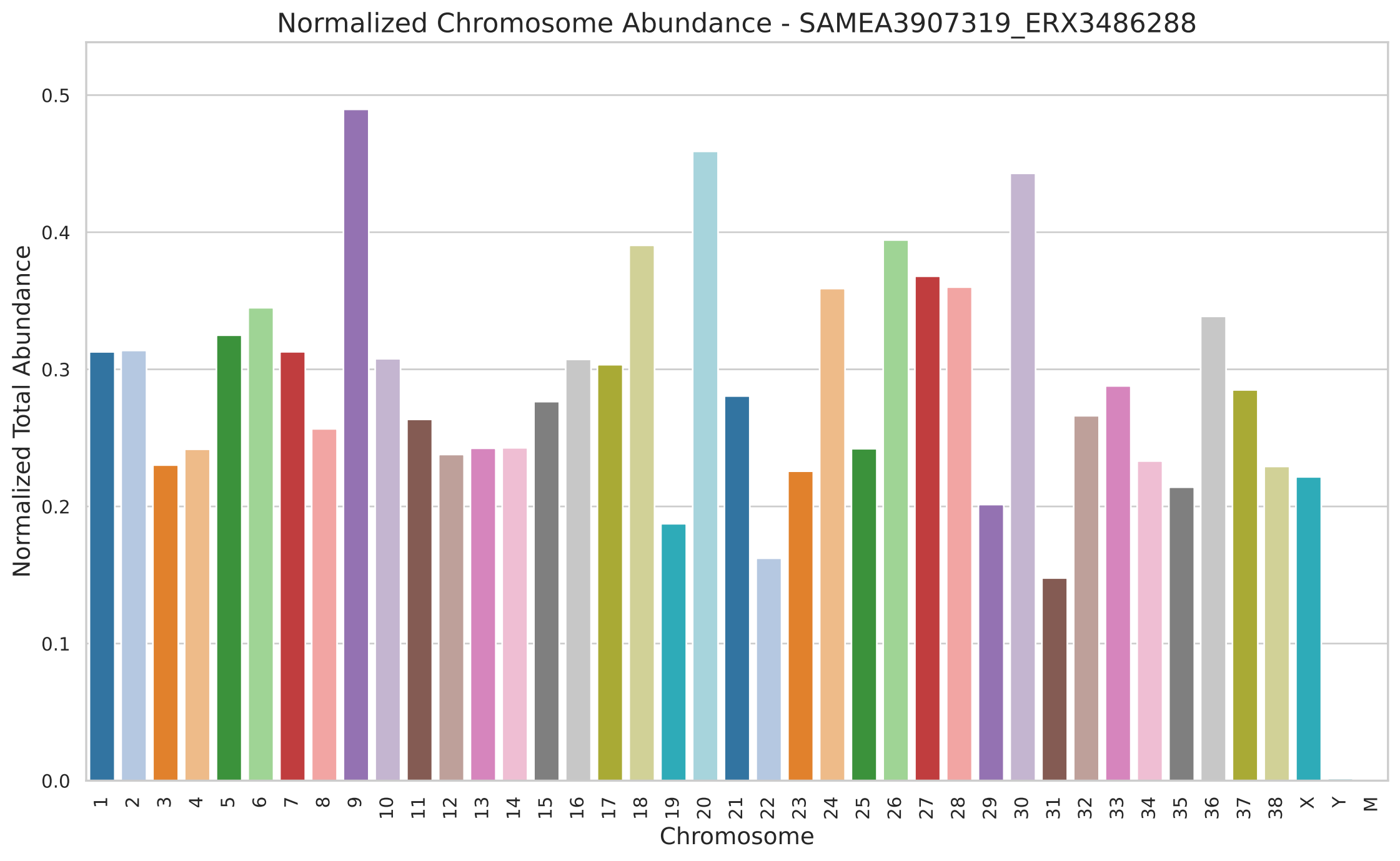

Normalized Chromosome Abundance - SAMEA5805050_ERX3486294
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

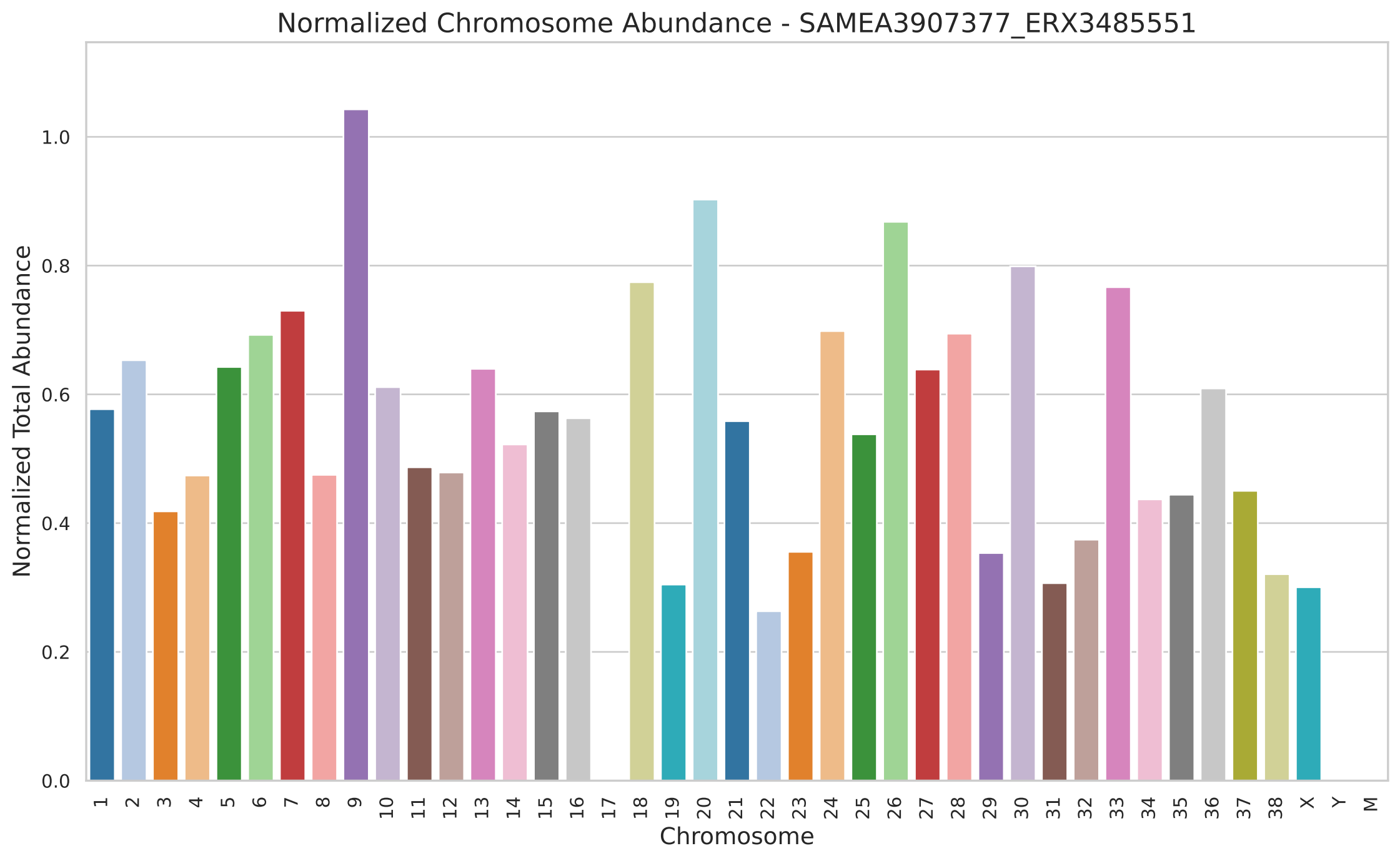

Normalized Chromosome Abundance - SAMEA5804857_ERX3485558
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

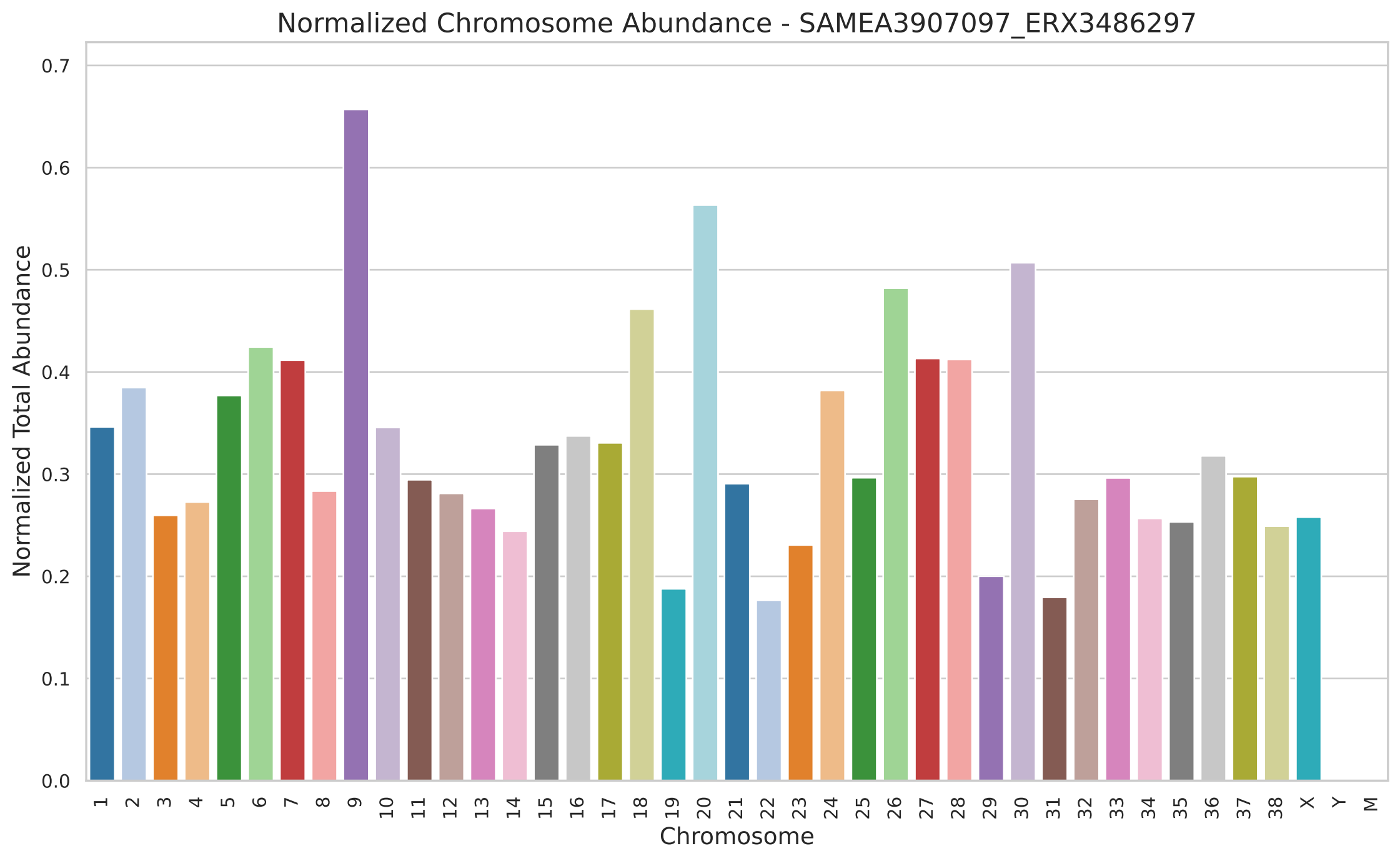

Normalized Chromosome Abundance - SAMEA3907167_ERX3485513
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

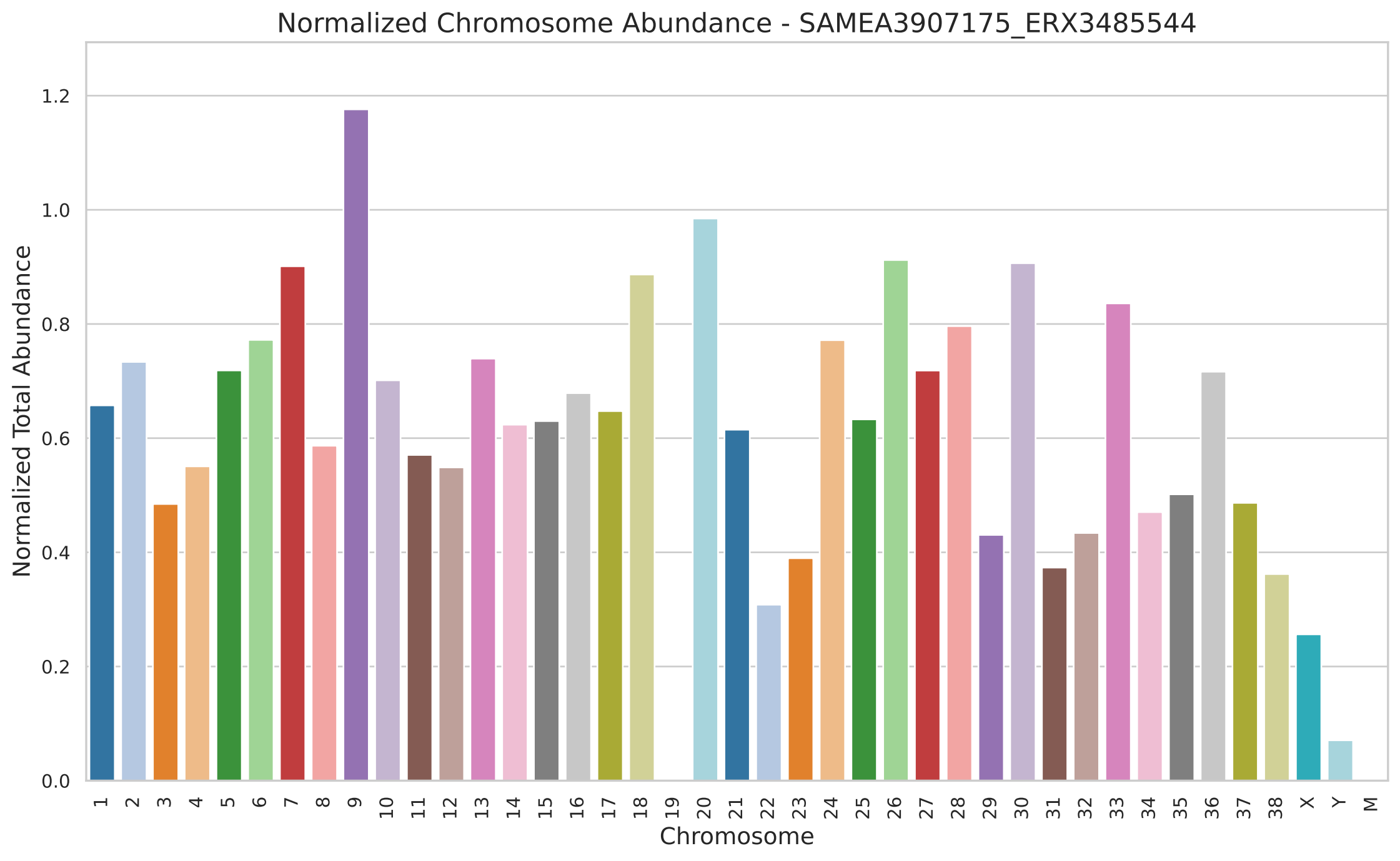

Normalized Chromosome Abundance - SAMEA3907159_ERX3485552
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

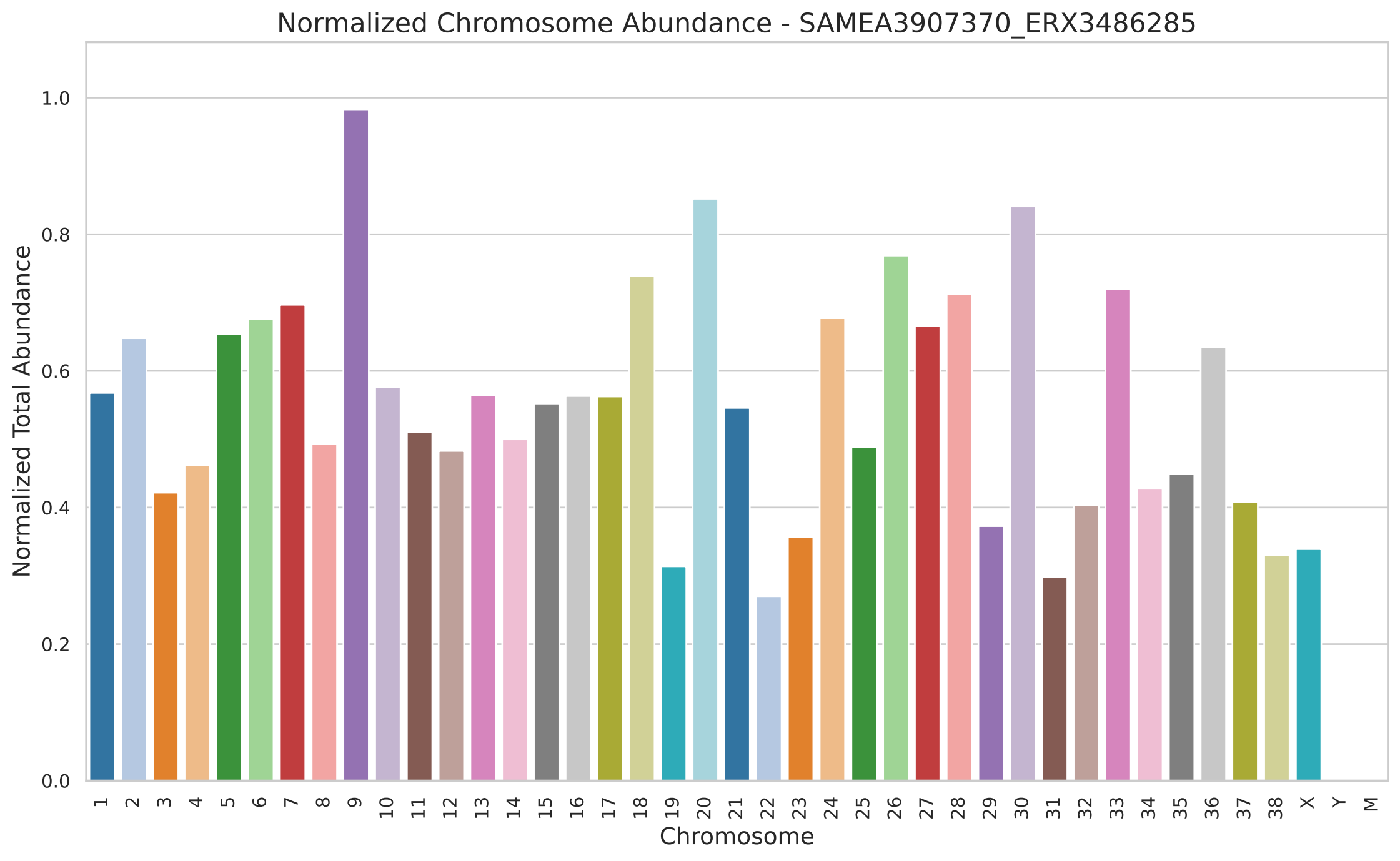

Normalized Chromosome Abundance - SAMEA3907351_ERX3485501
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

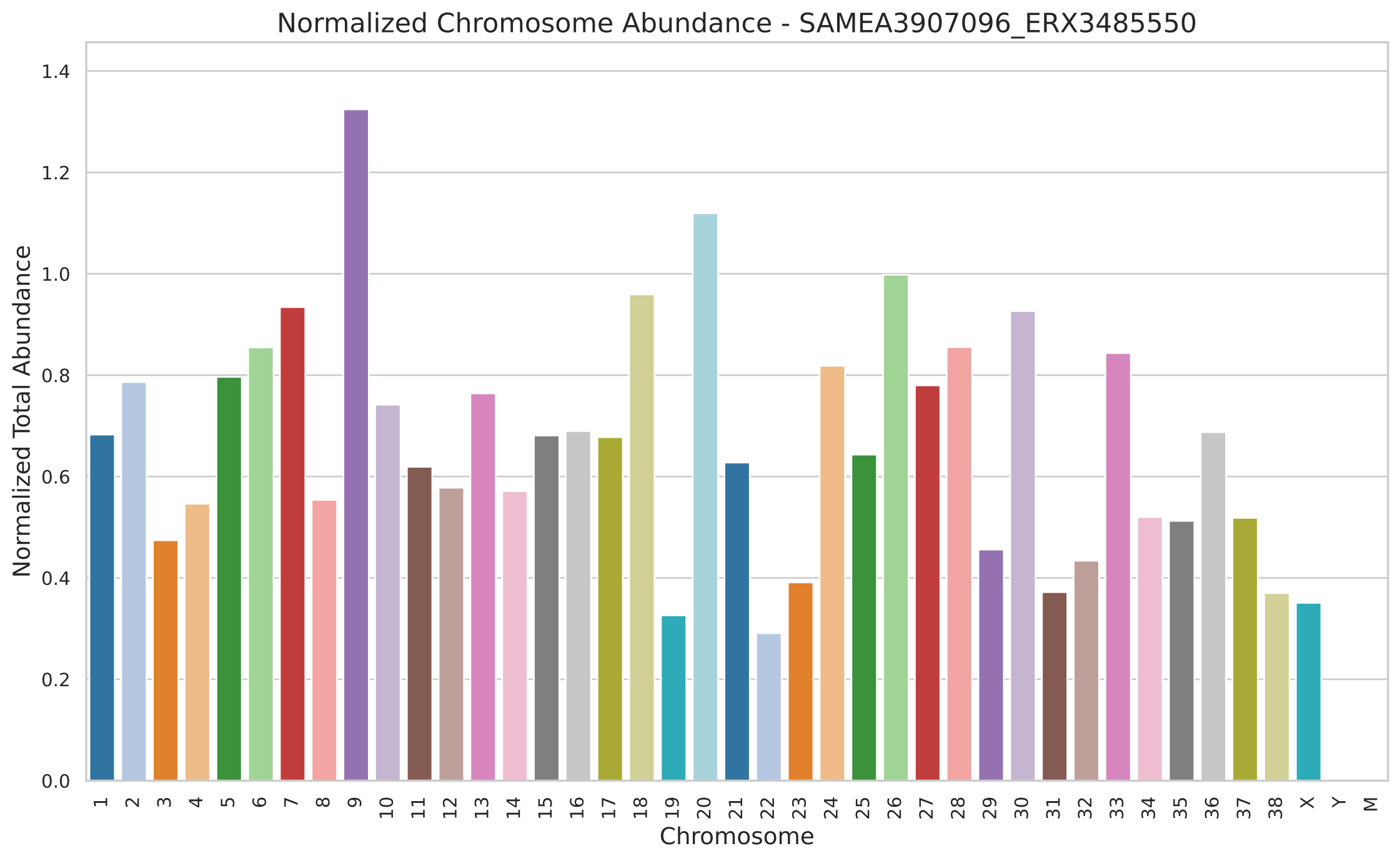

Normalized Chromosome Abundance - SAMEA3907319_ERX3486288
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

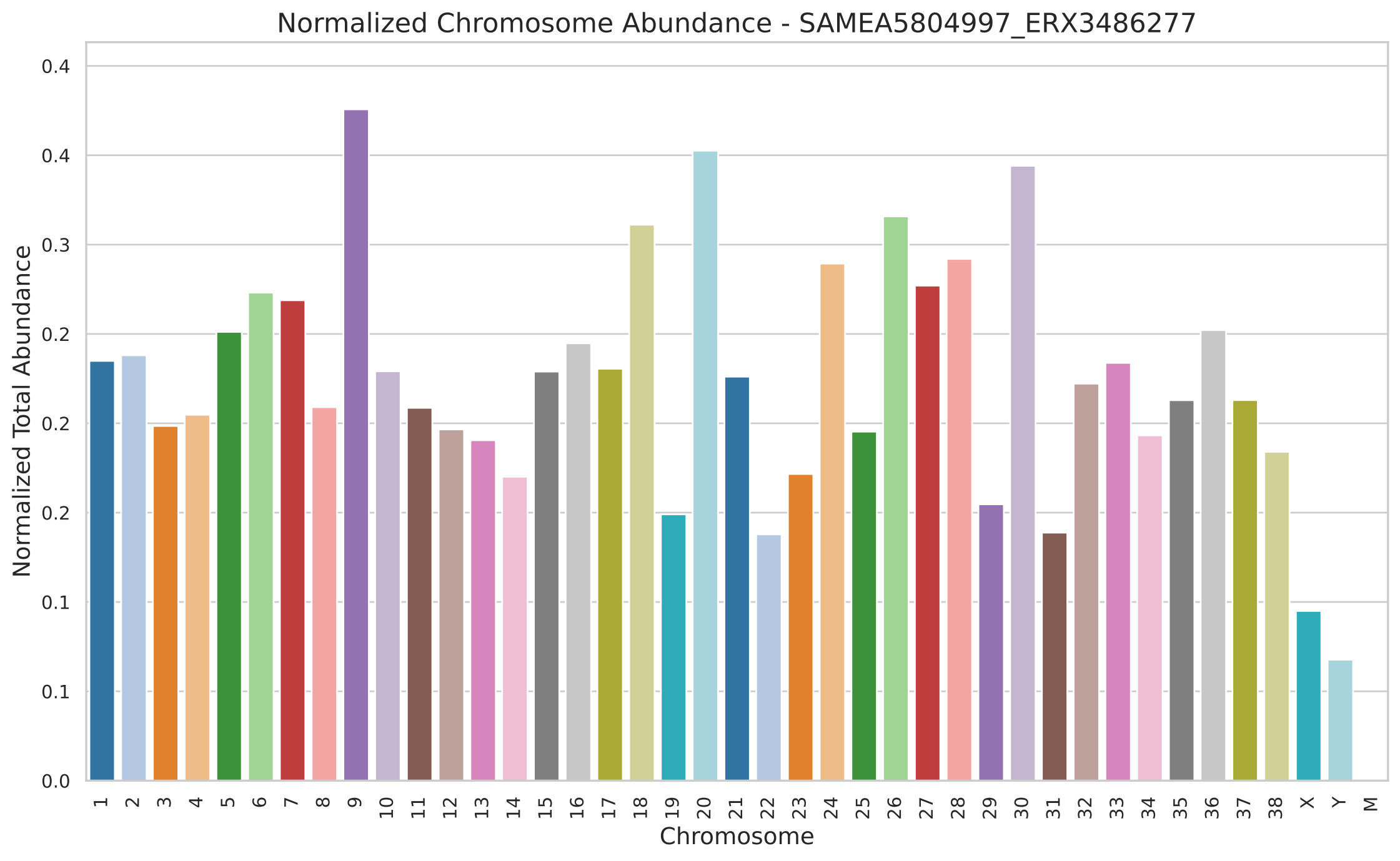

Normalized Chromosome Abundance - SAMEA3907377_ERX3485551
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

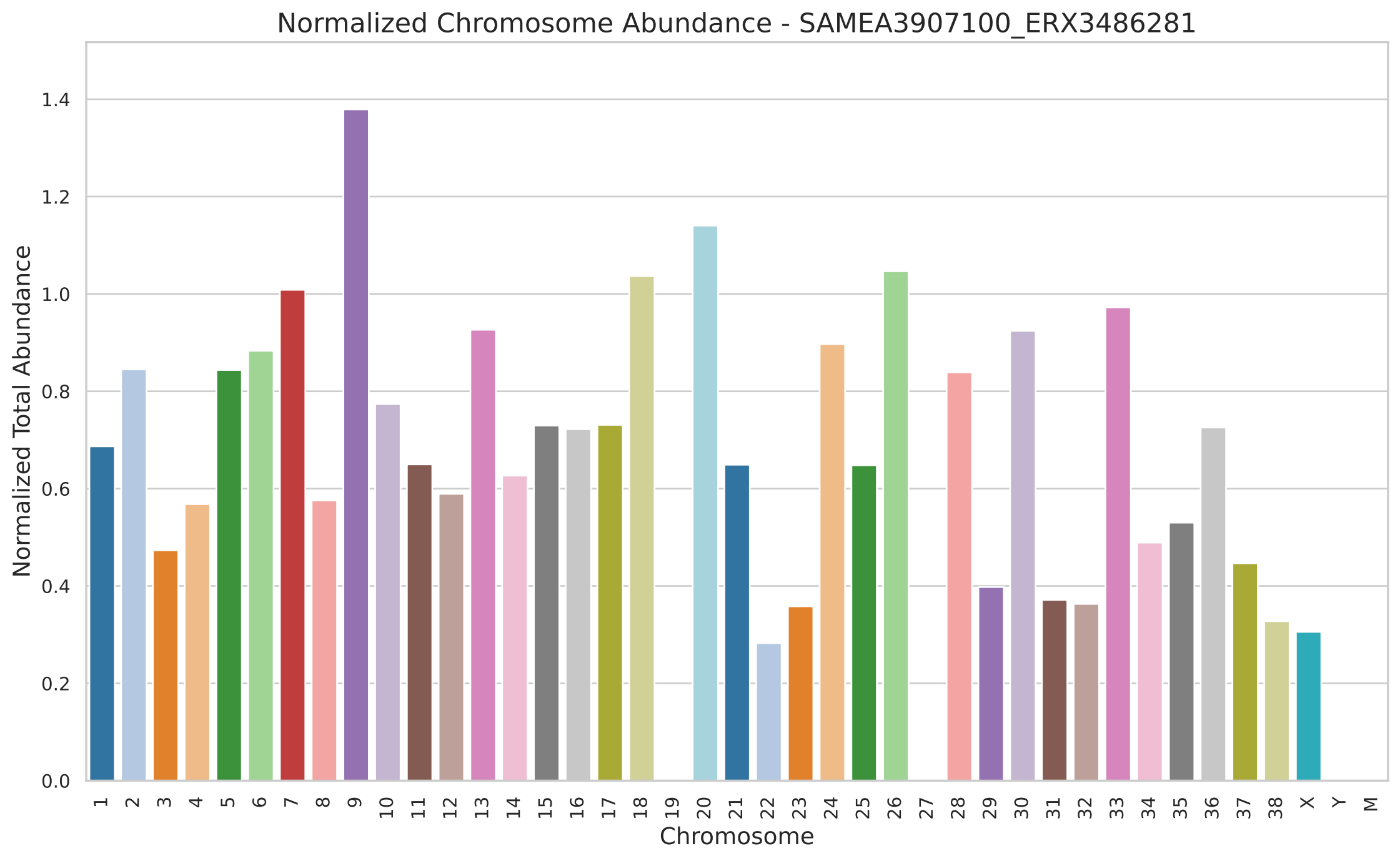

Normalized Chromosome Abundance - SAMEA3907097_ERX3486297
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

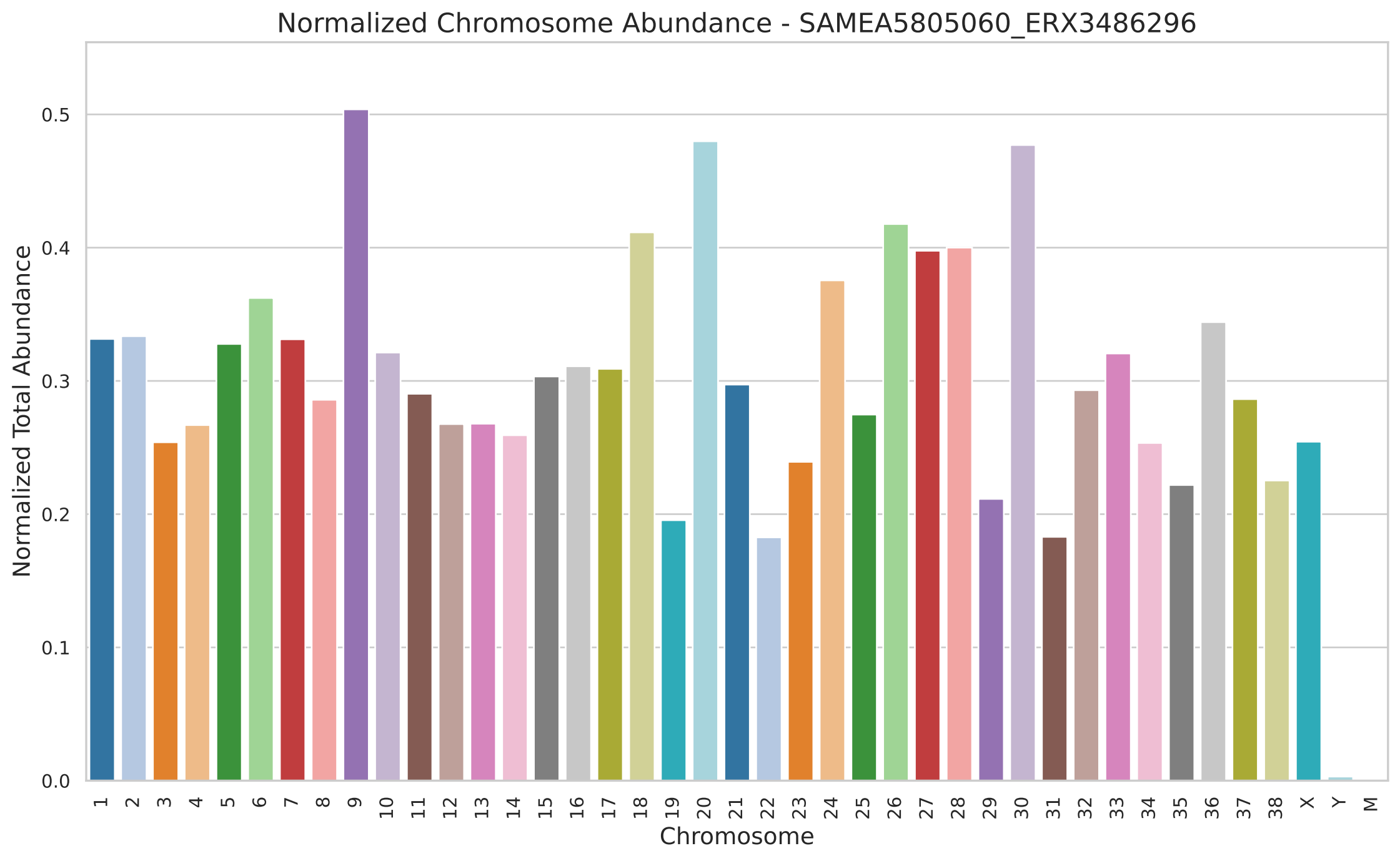

Normalized Chromosome Abundance - SAMEA3907175_ERX3485544
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

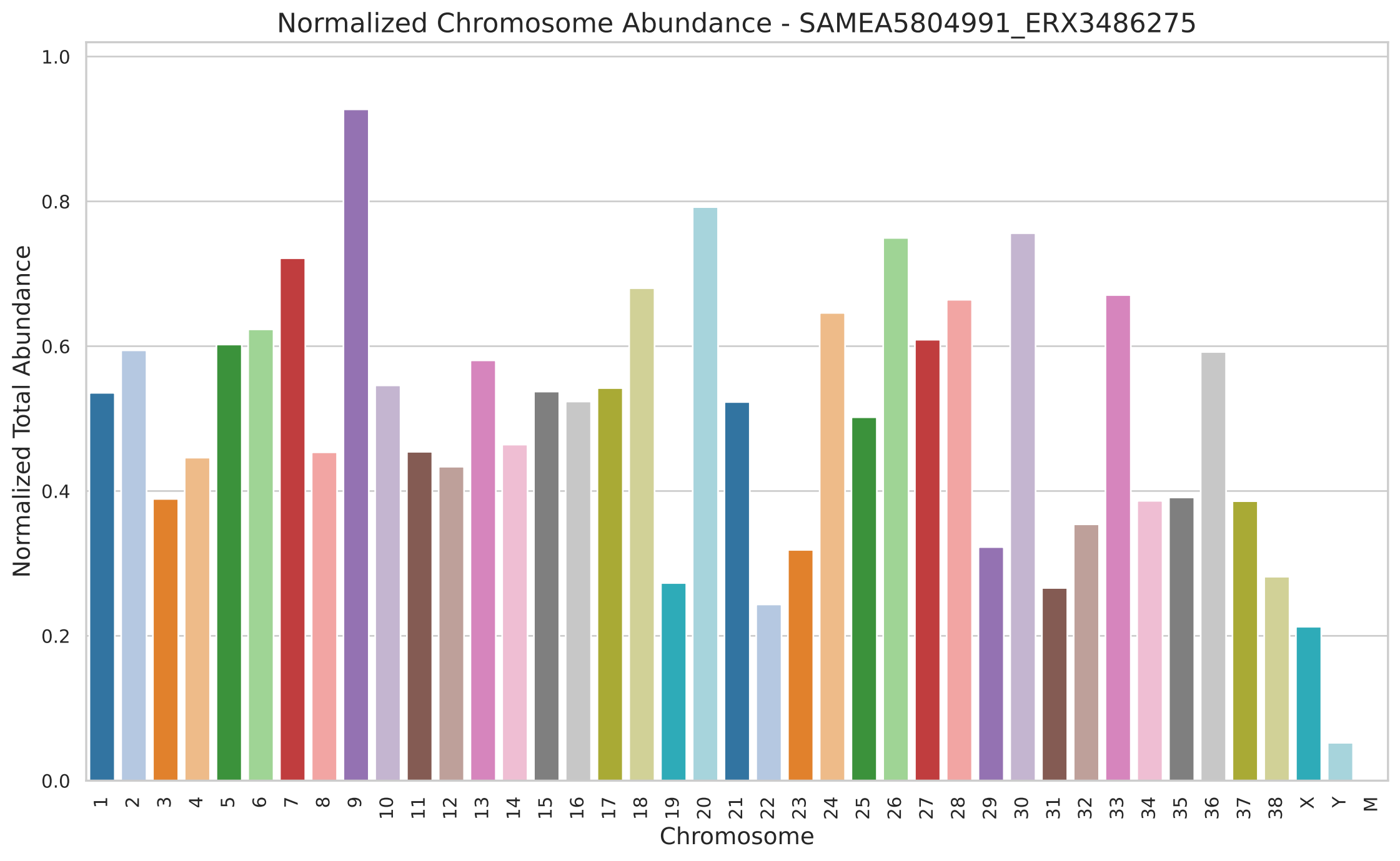

Normalized Chromosome Abundance - SAMEA3907370_ERX3486285
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

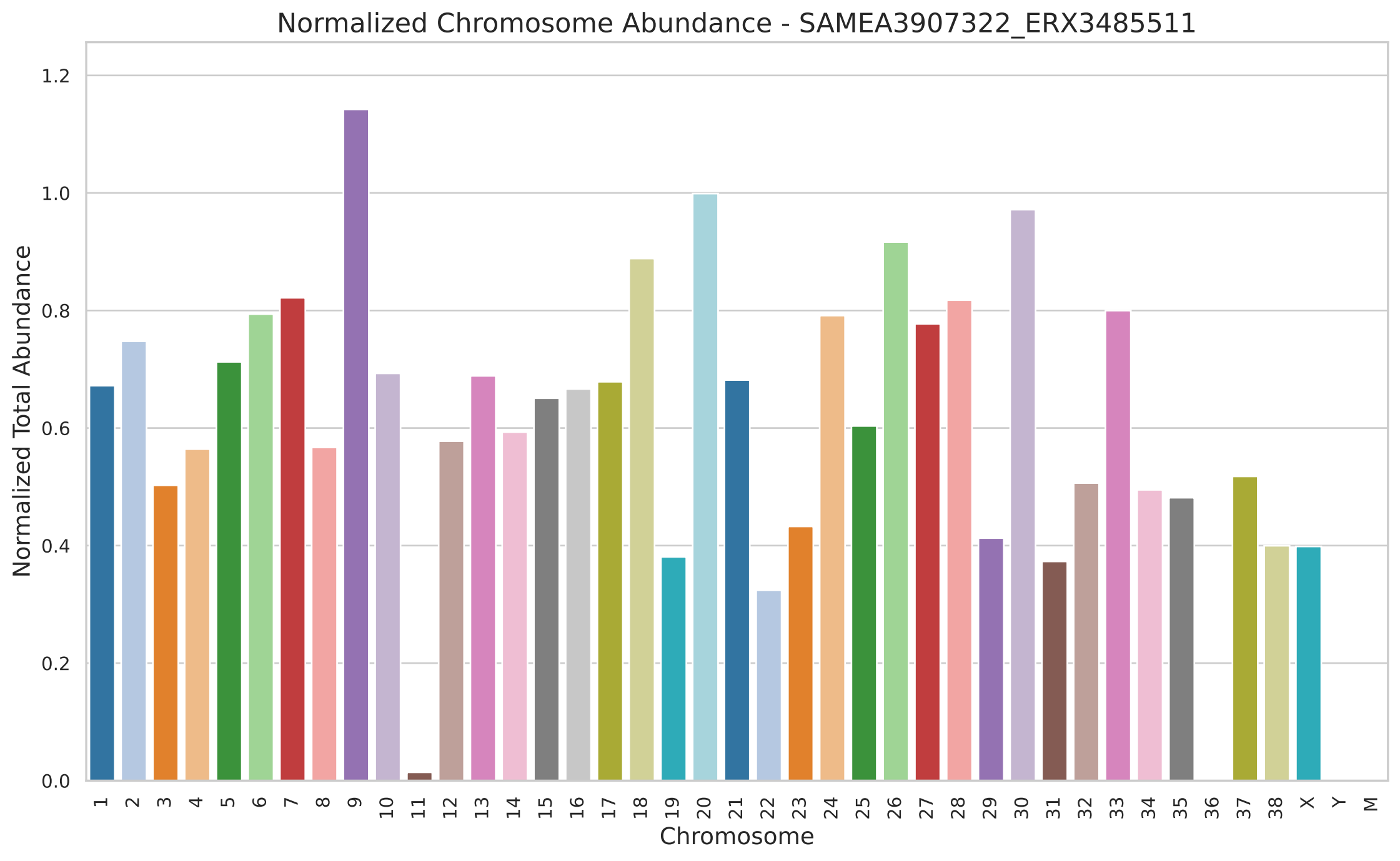

Normalized Chromosome Abundance - SAMEA3907096_ERX3485550
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

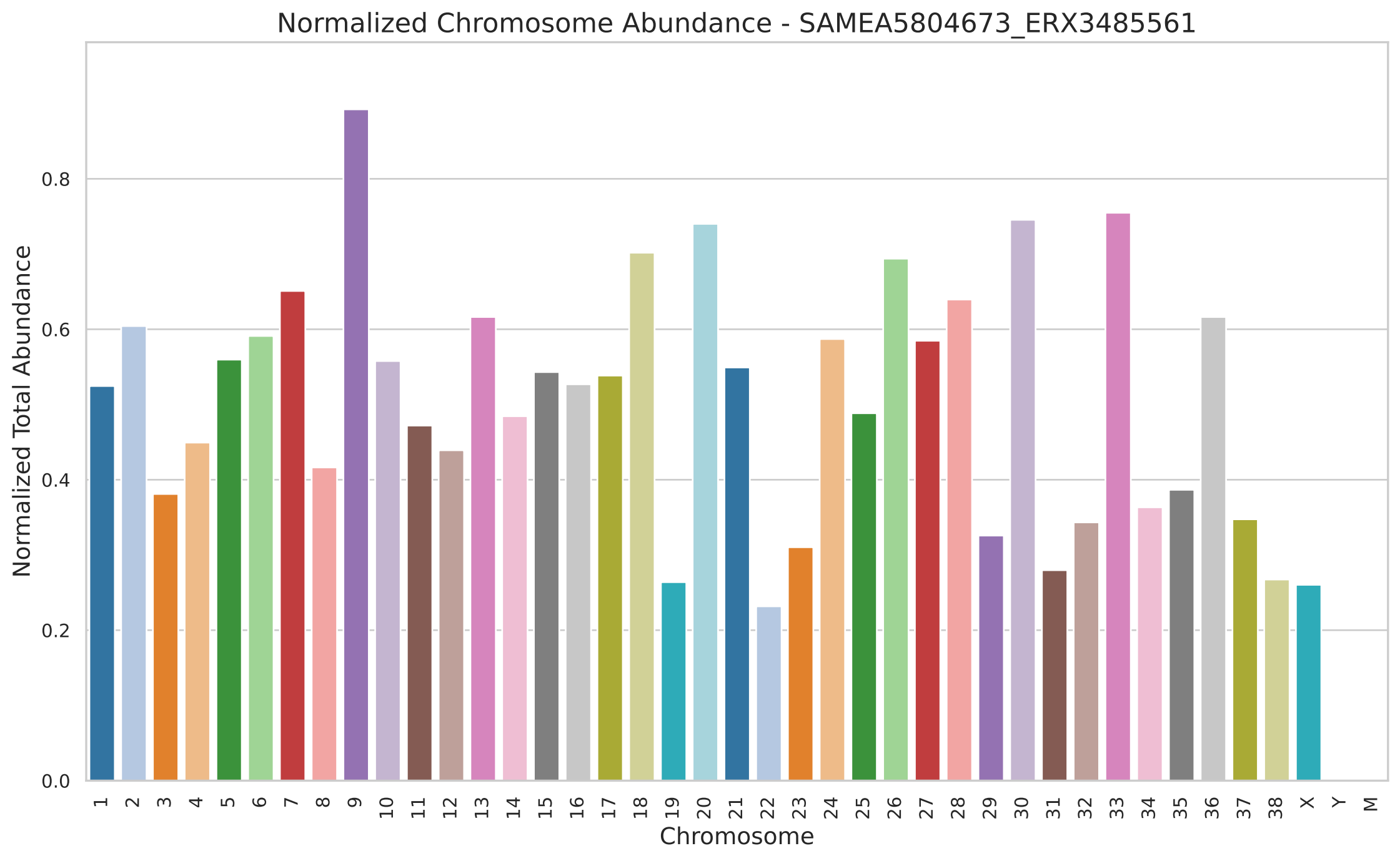

Normalized Chromosome Abundance - SAMEA5804997_ERX3486277
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

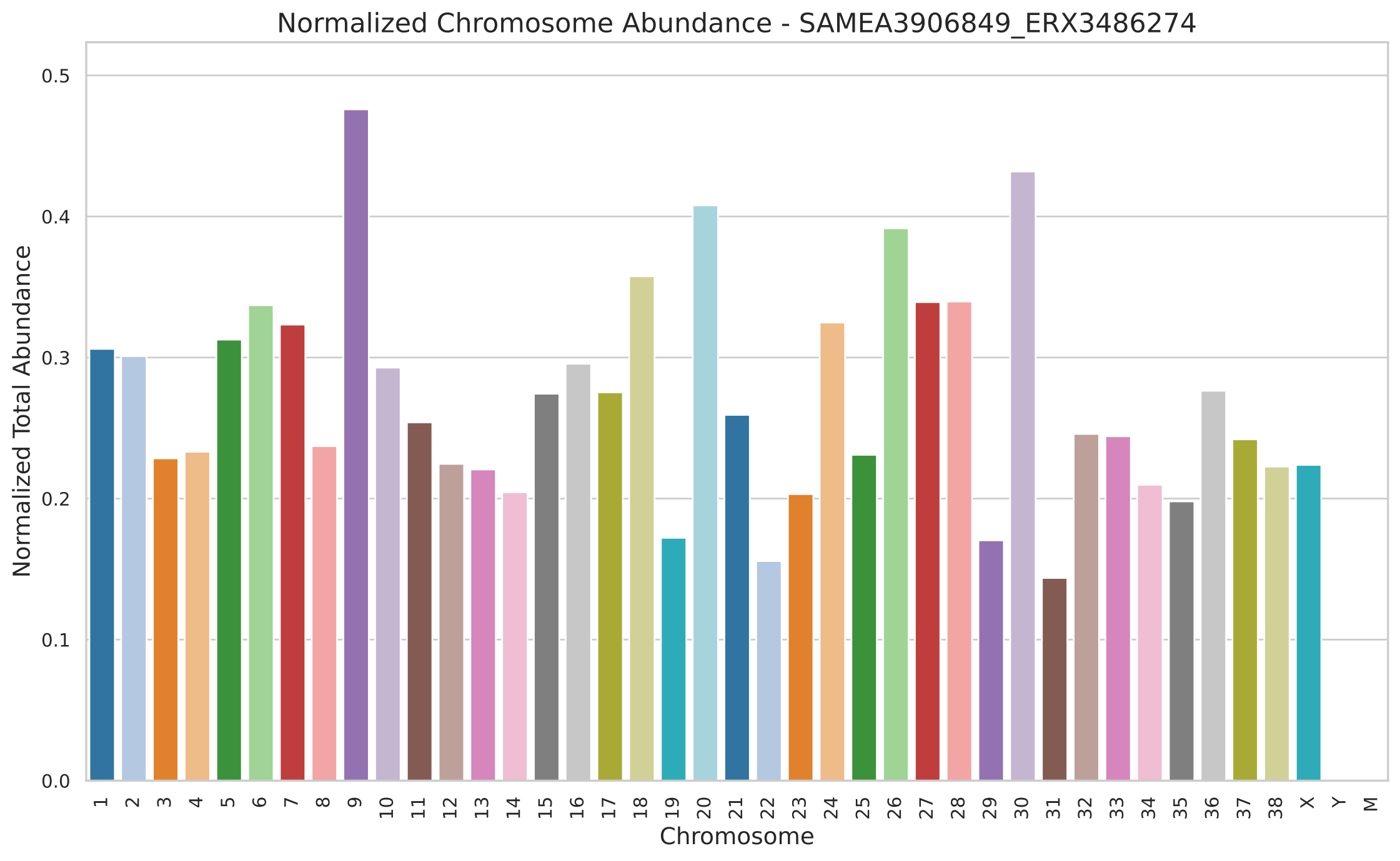

Normalized Chromosome Abundance - SAMEA3907100_ERX3486281
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

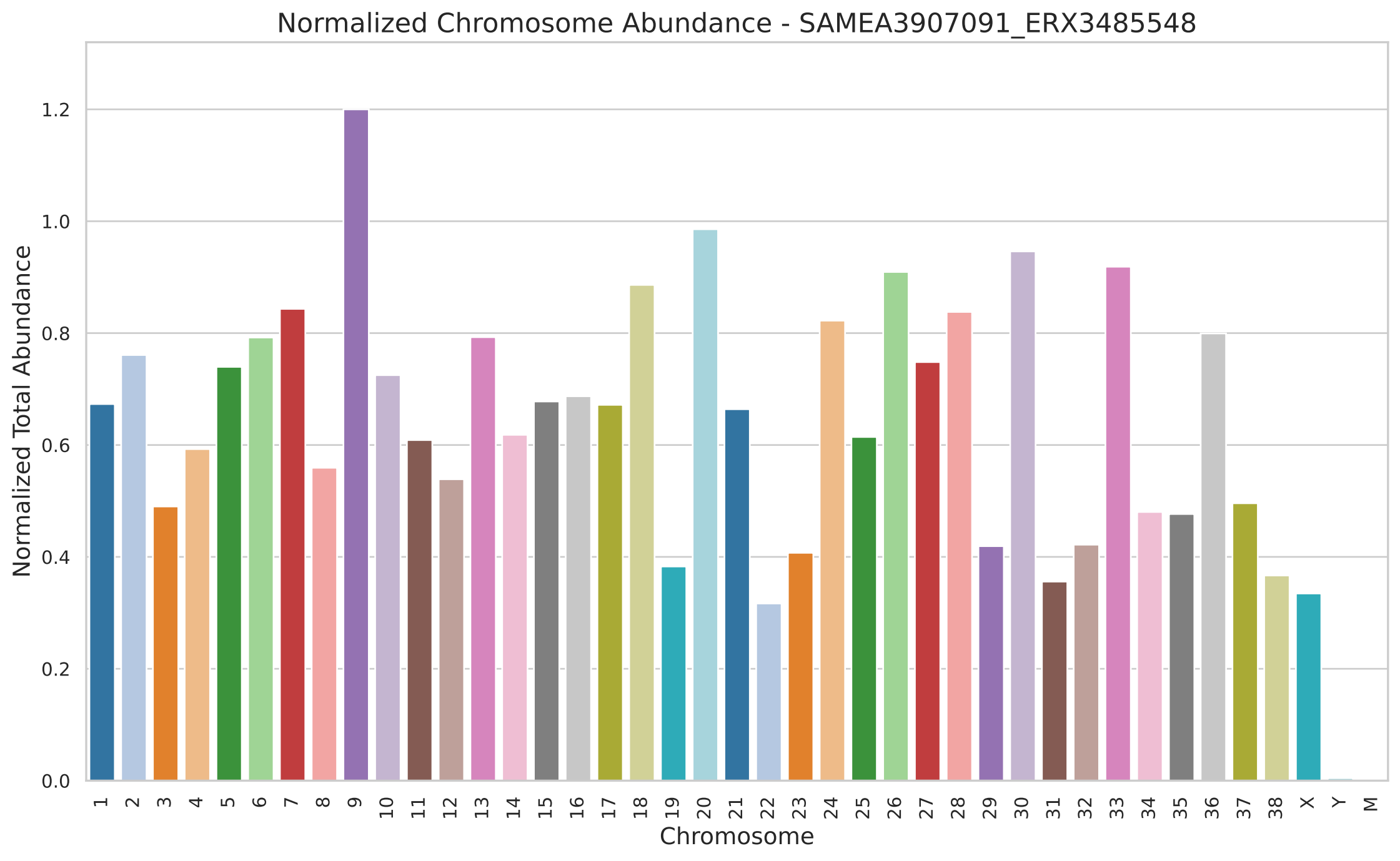

Normalized Chromosome Abundance - SAMEA5805060_ERX3486296
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

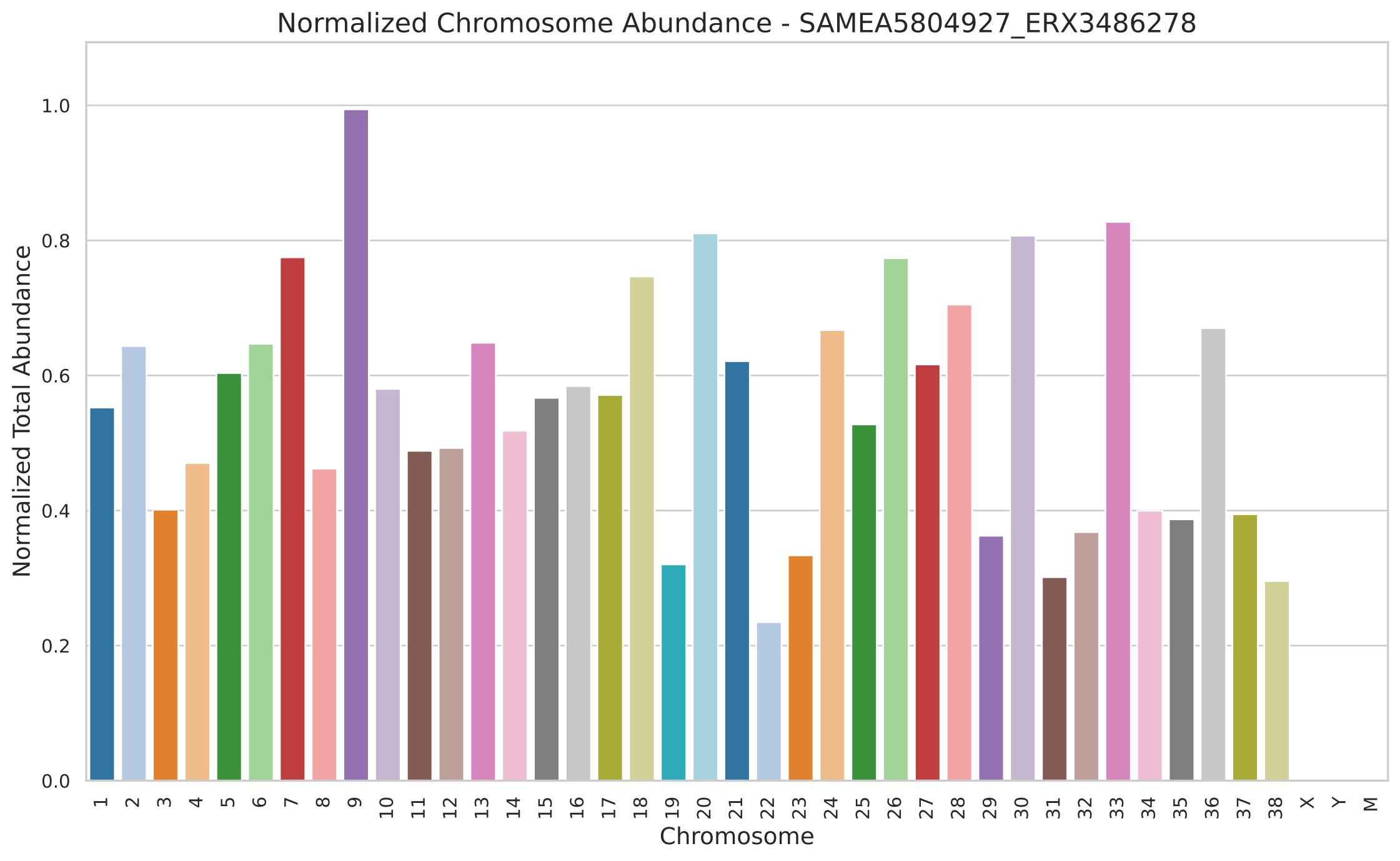

Normalized Chromosome Abundance - SAMEA5804991_ERX3486275
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

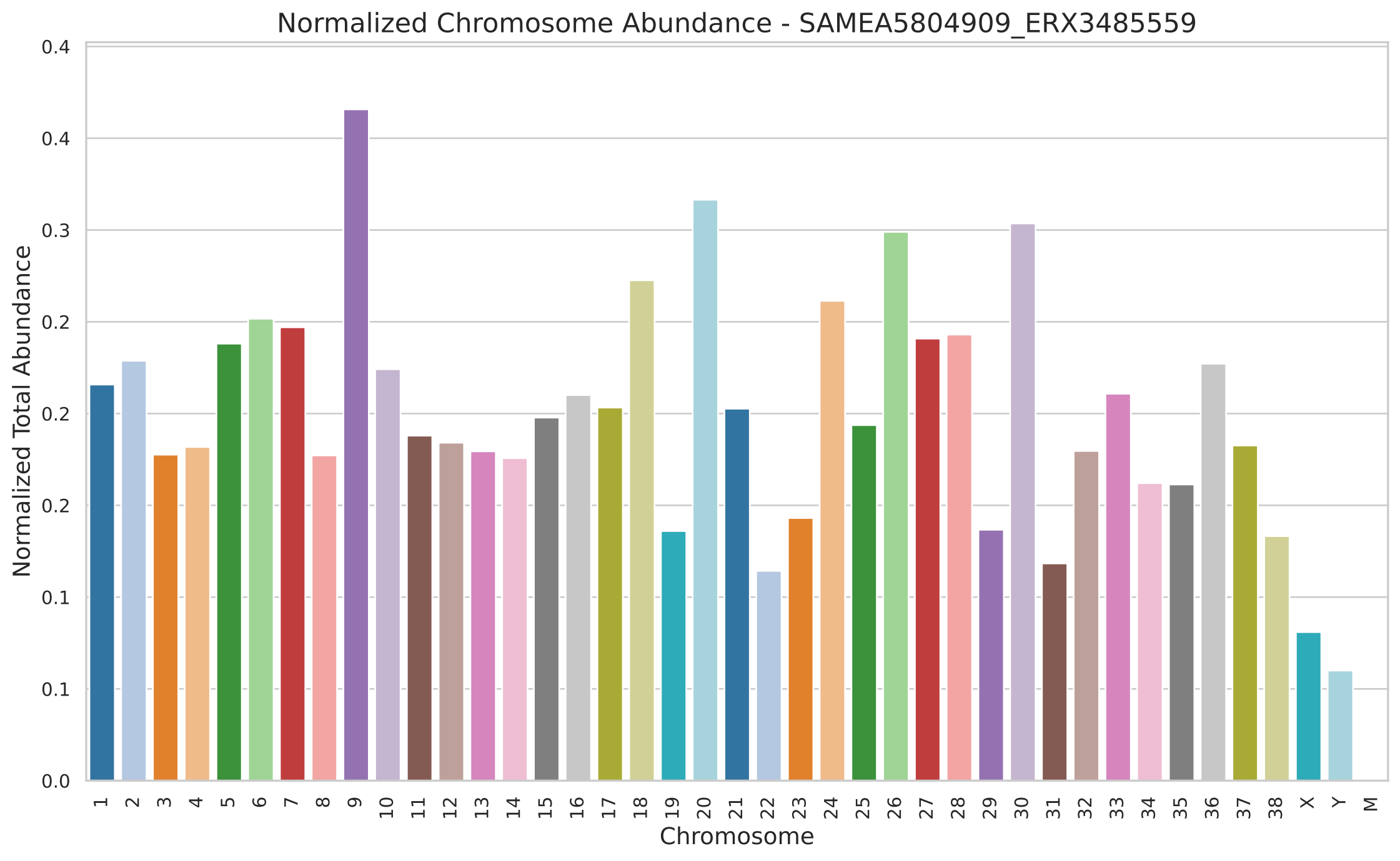

Normalized Chromosome Abundance - SAMEA3907322_ERX3485511
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

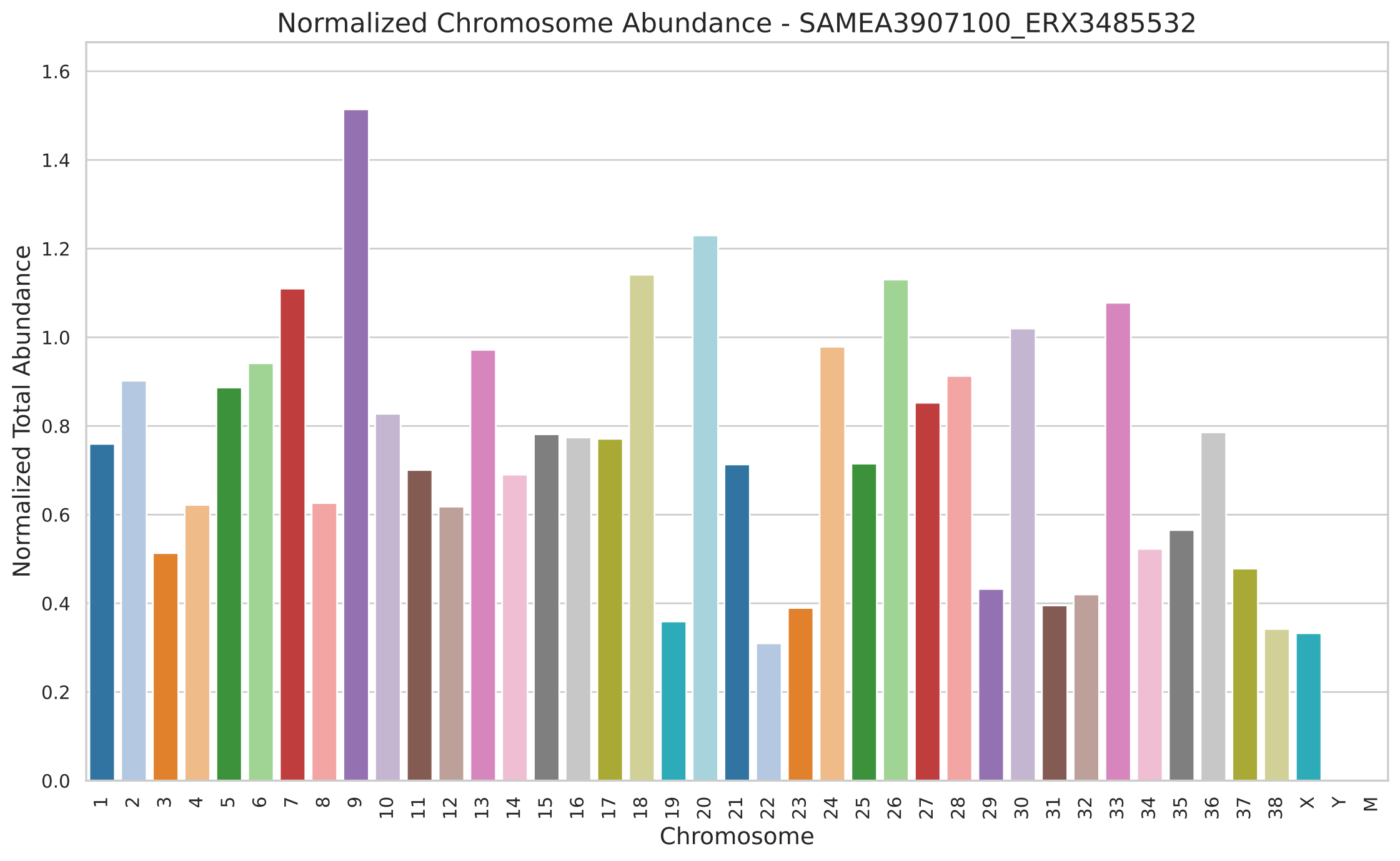

Normalized Chromosome Abundance - SAMEA5804673_ERX3485561
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

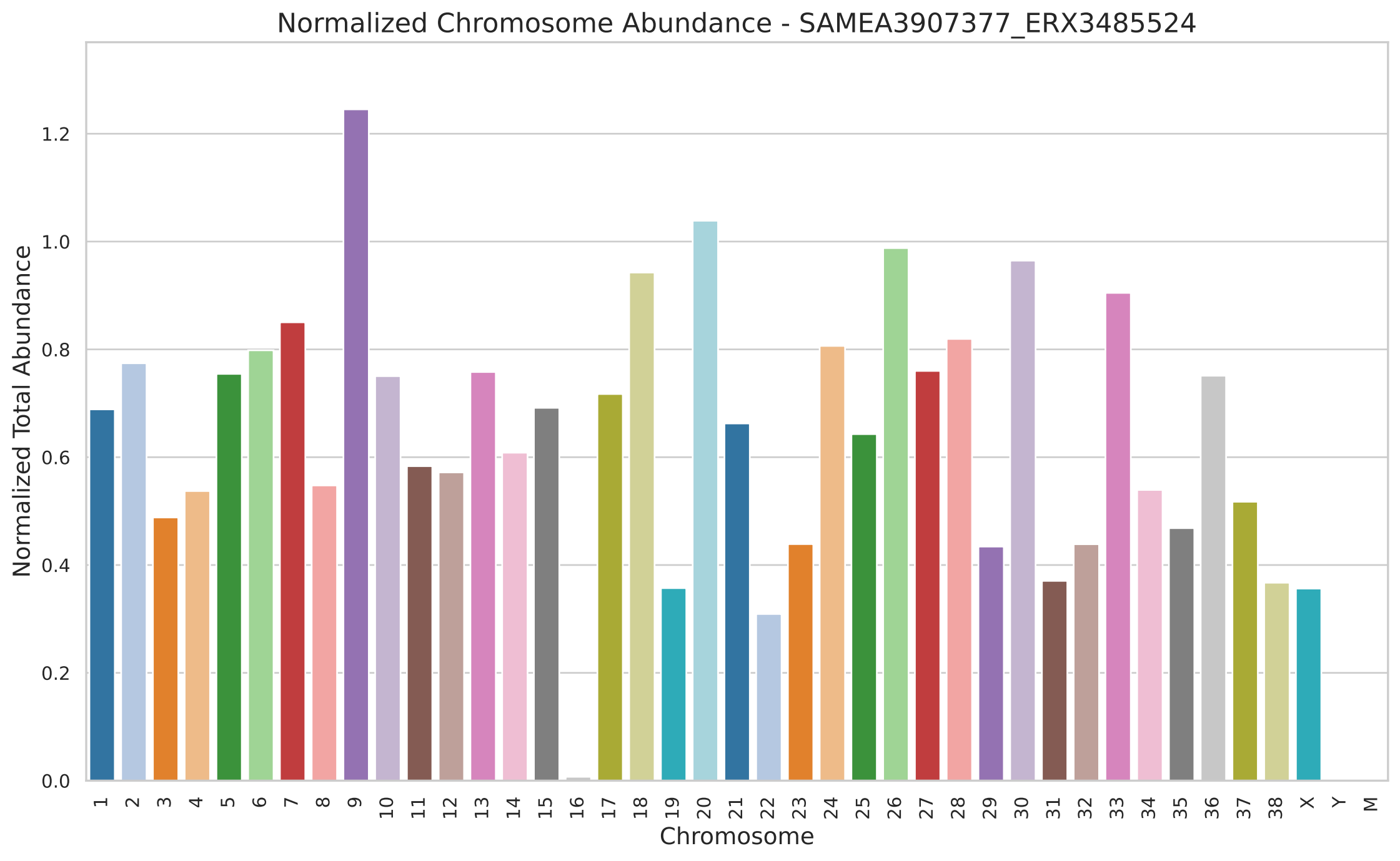

Normalized Chromosome Abundance - SAMEA3906849_ERX3486274
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

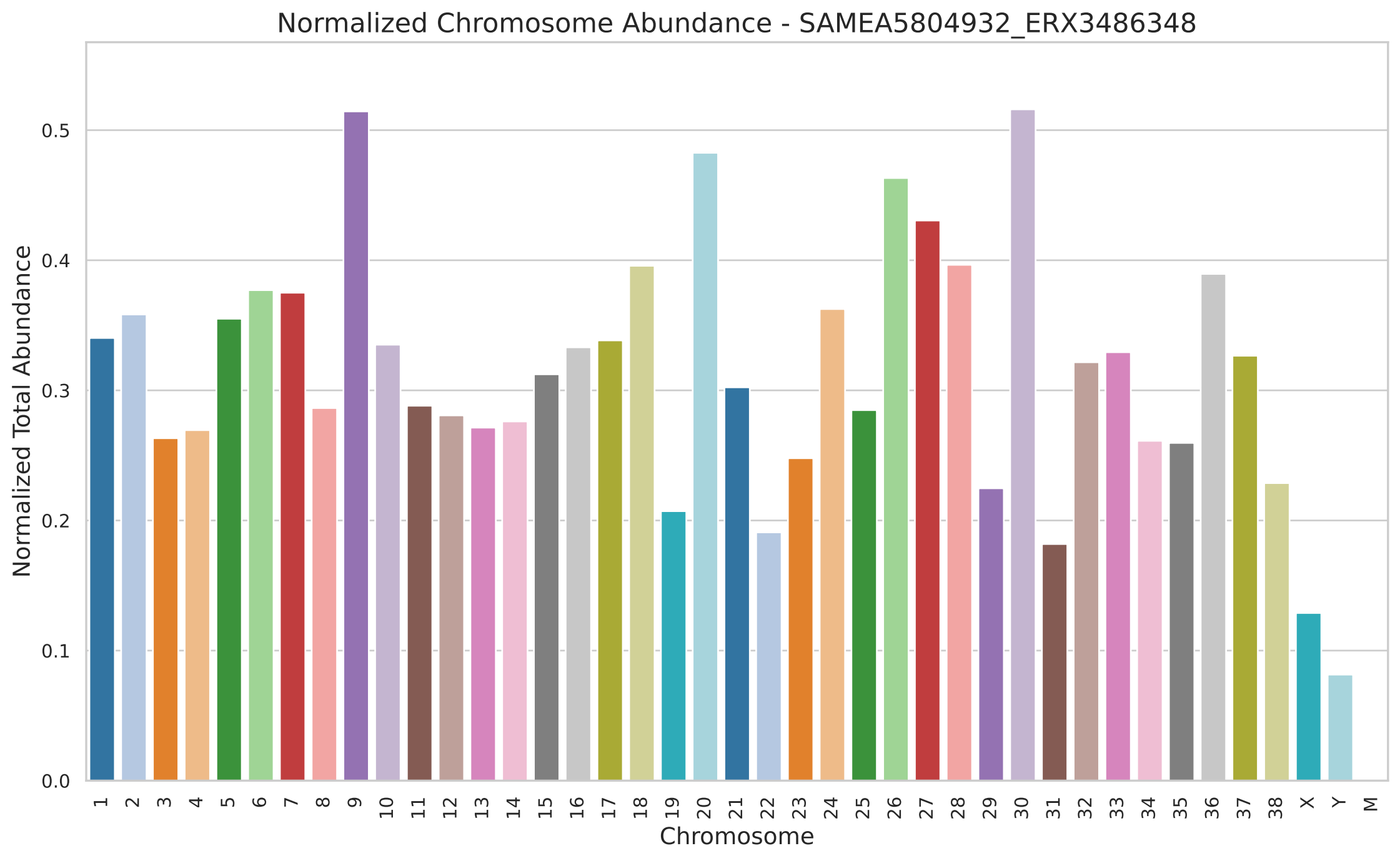

Normalized Chromosome Abundance - SAMEA3907091_ERX3485548
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

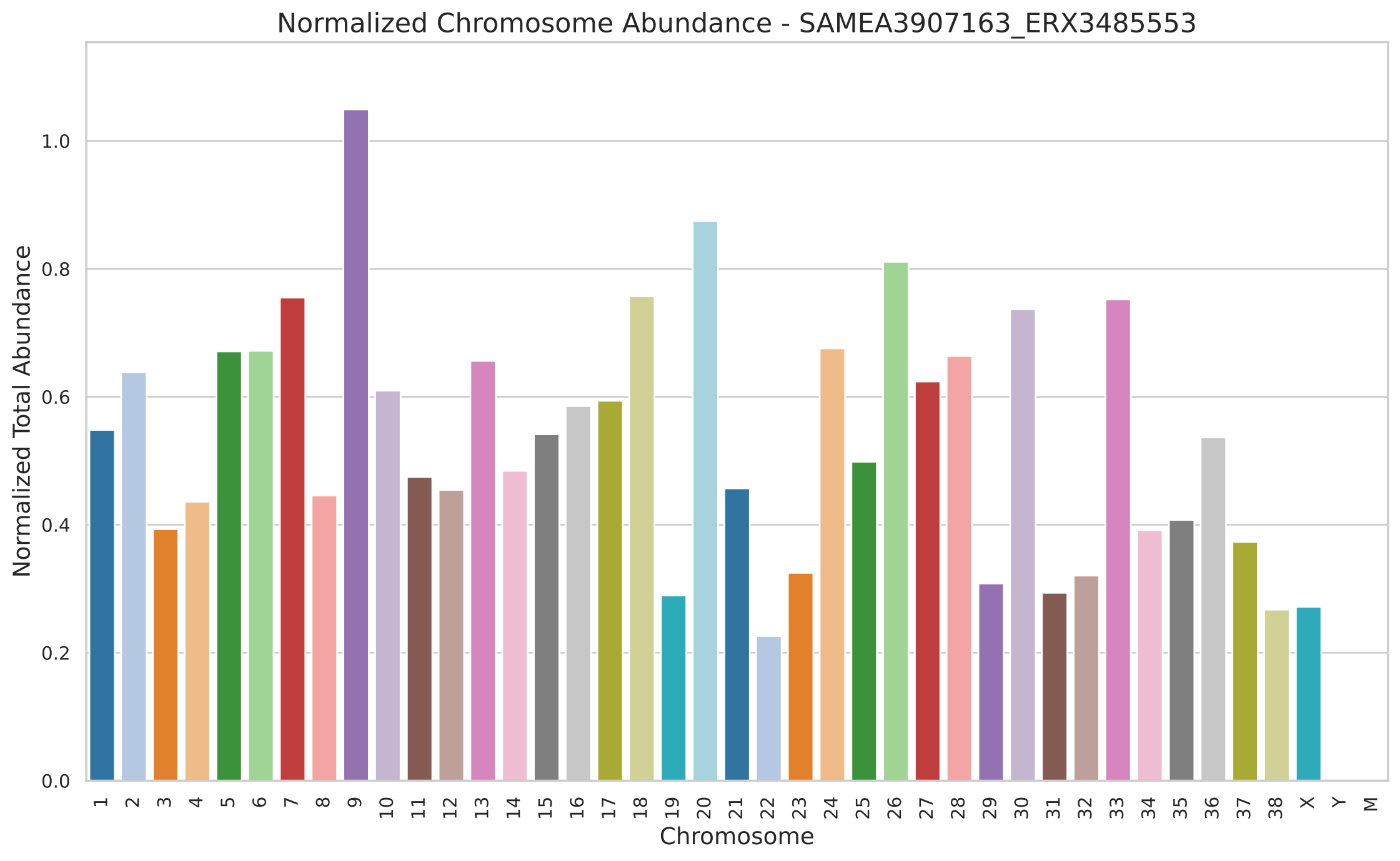

Normalized Chromosome Abundance - SAMEA5804927_ERX3486278
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

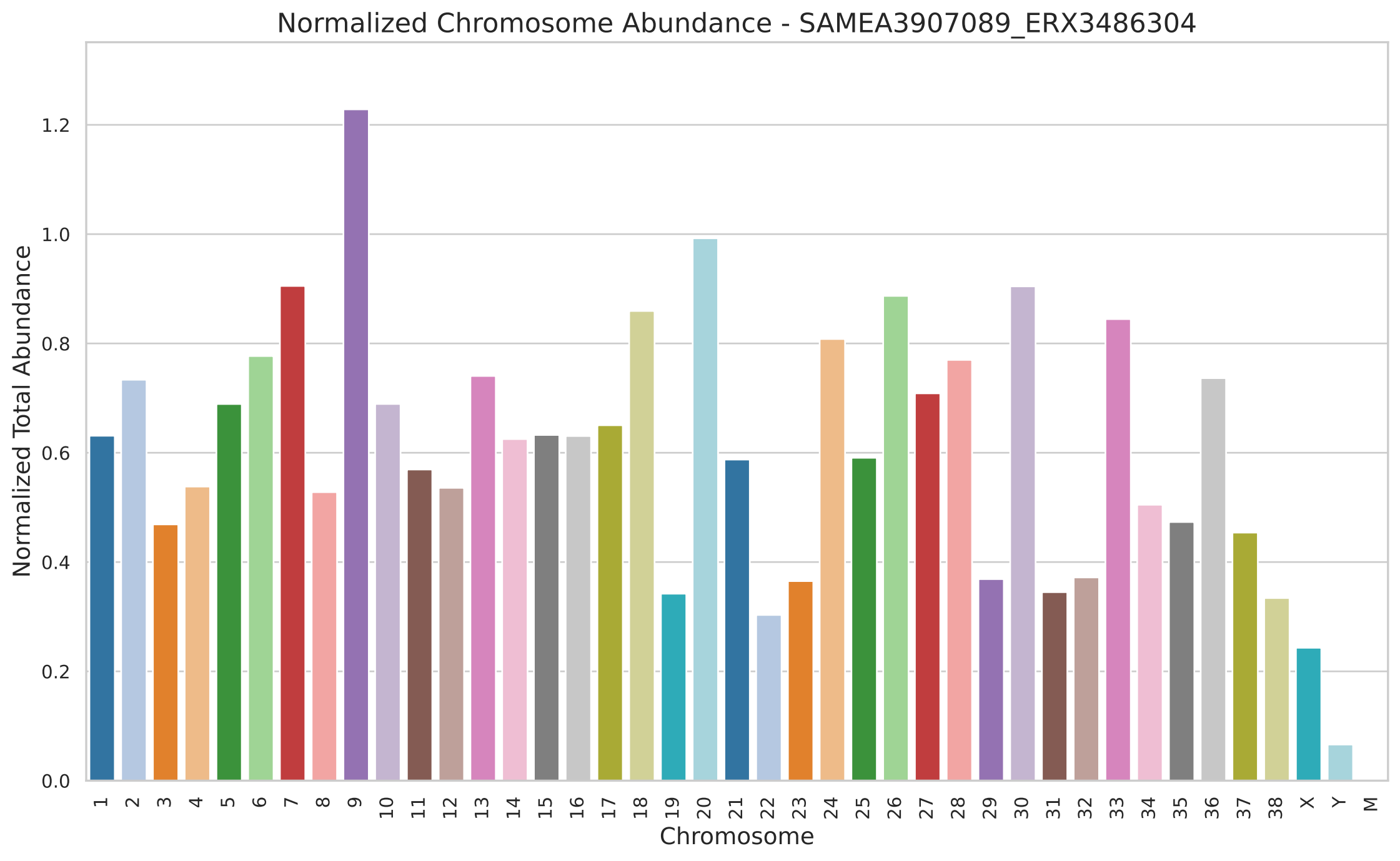

Normalized Chromosome Abundance - SAMEA5804909_ERX3485559
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
0.4
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

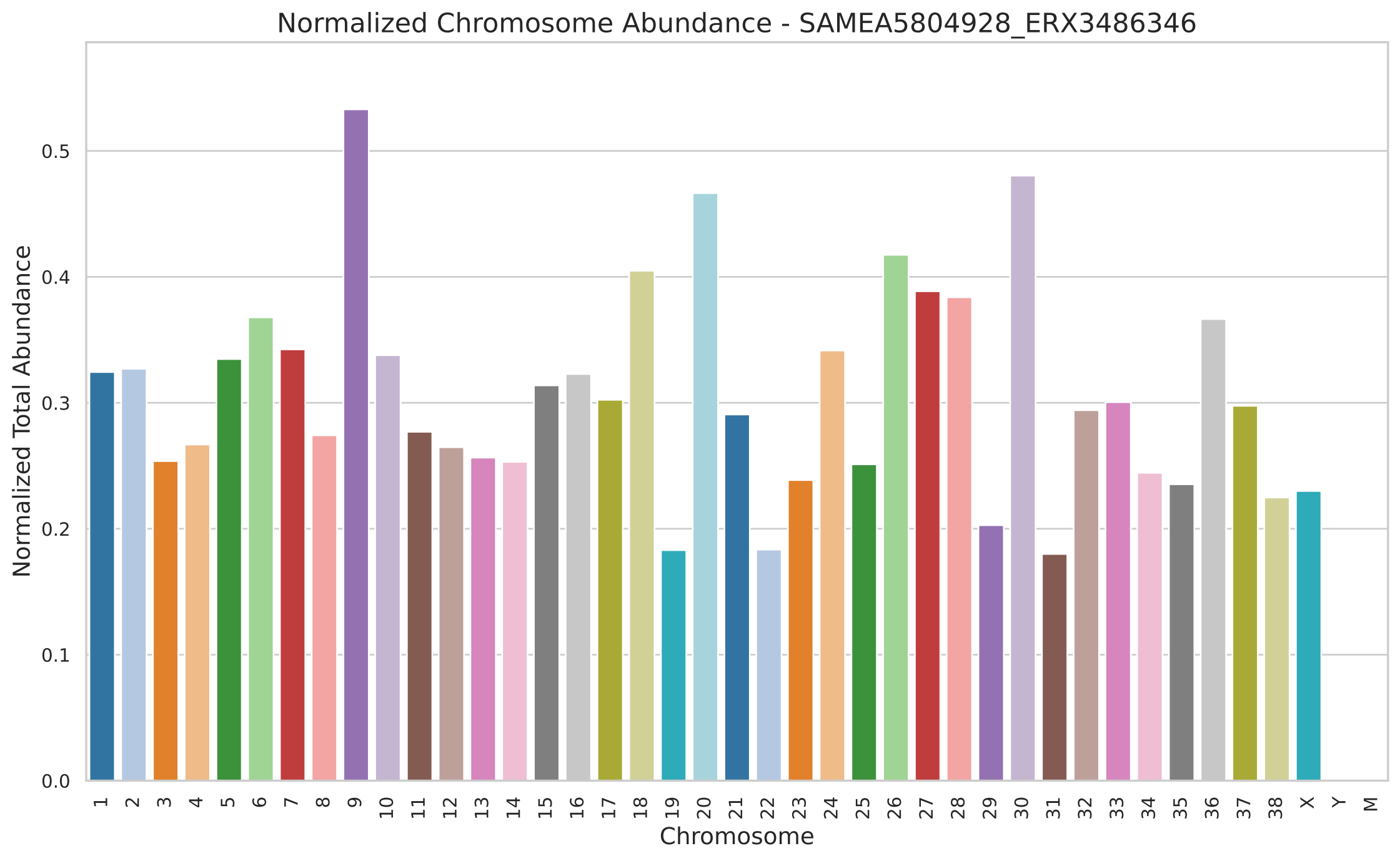

Normalized Chromosome Abundance - SAMEA3907100_ERX3485532
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

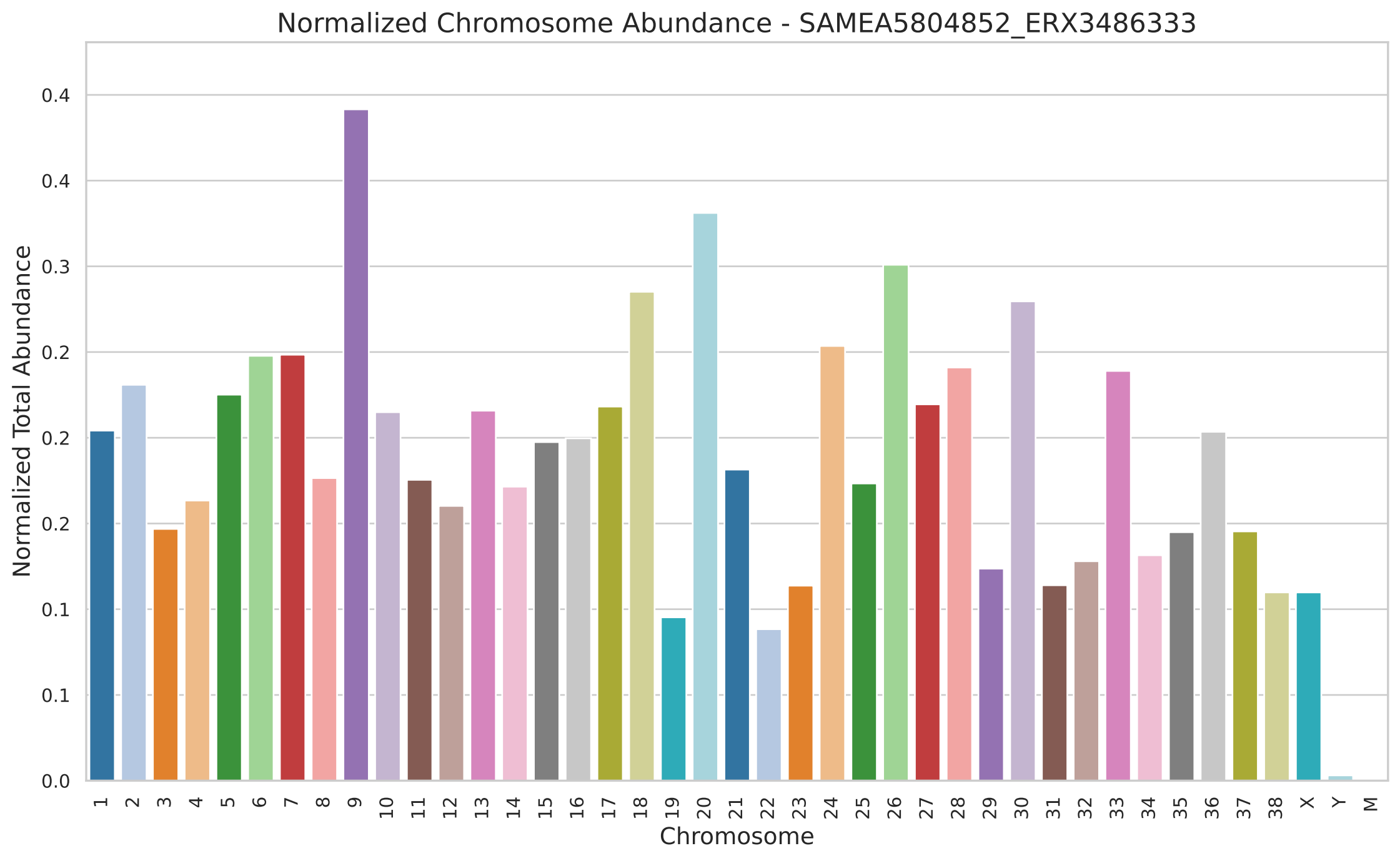

Normalized Chromosome Abundance - SAMEA3907377_ERX3485524
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

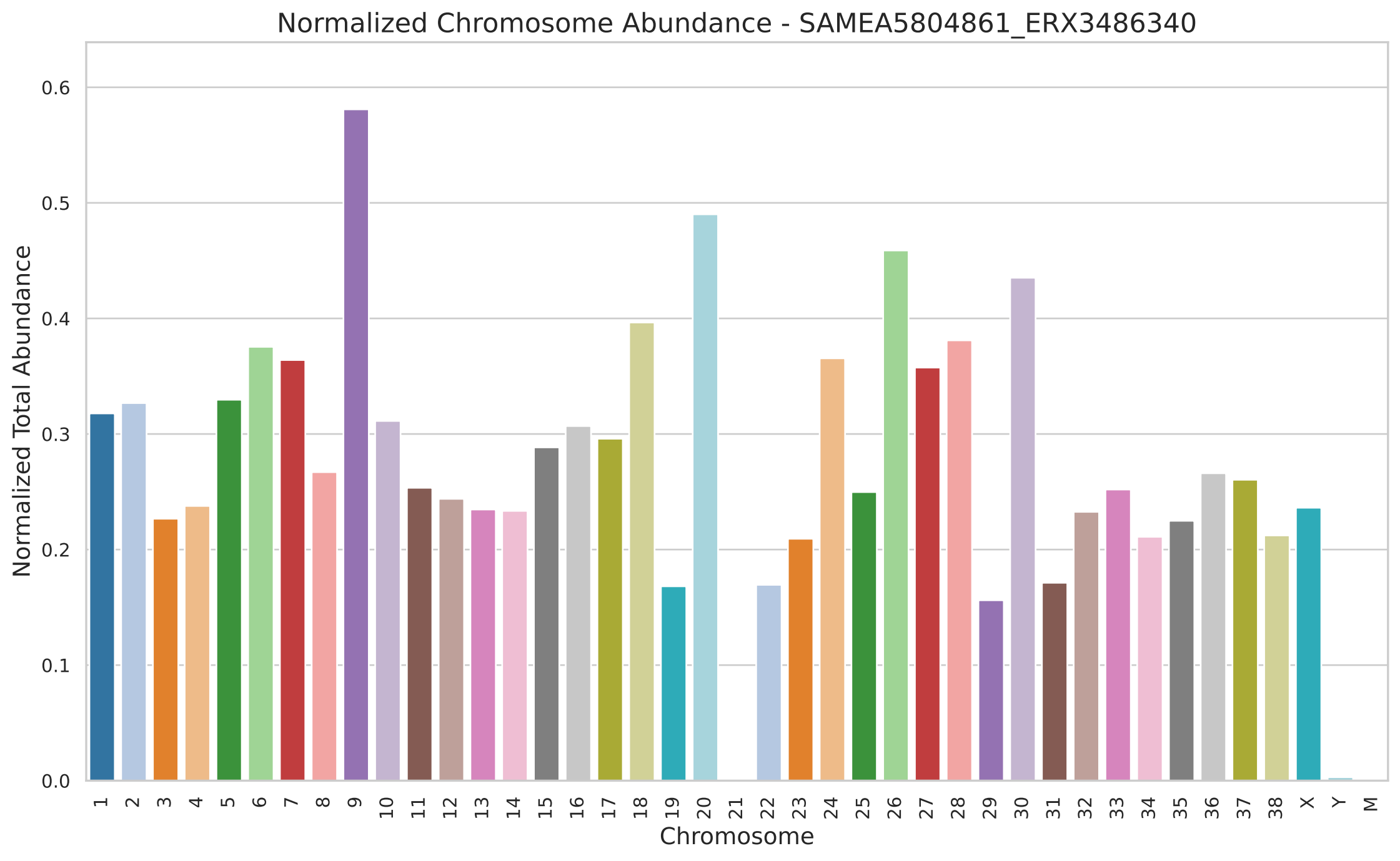

Normalized Chromosome Abundance - SAMEA5804932_ERX3486348
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

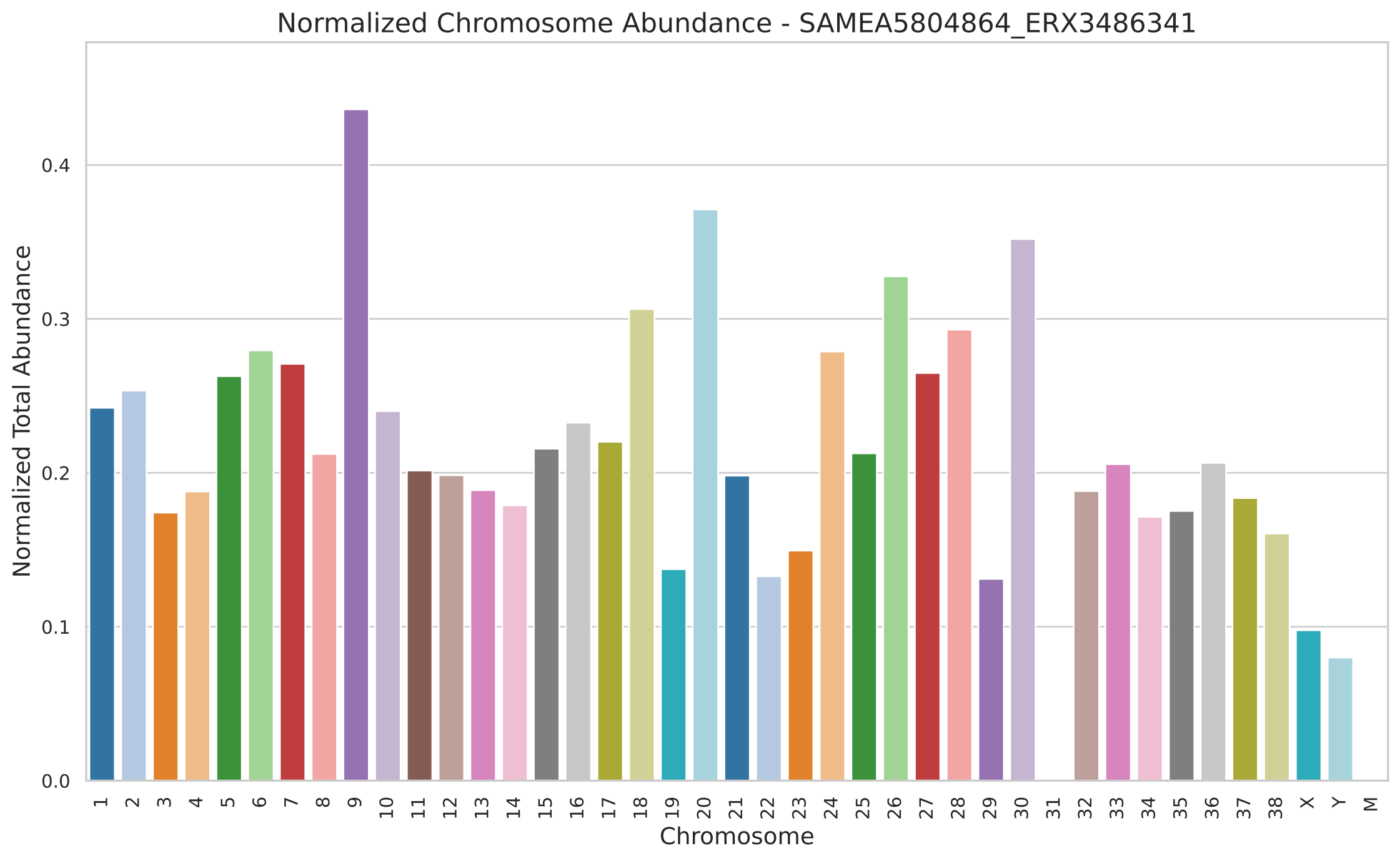

Normalized Chromosome Abundance - SAMEA3907163_ERX3485553
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

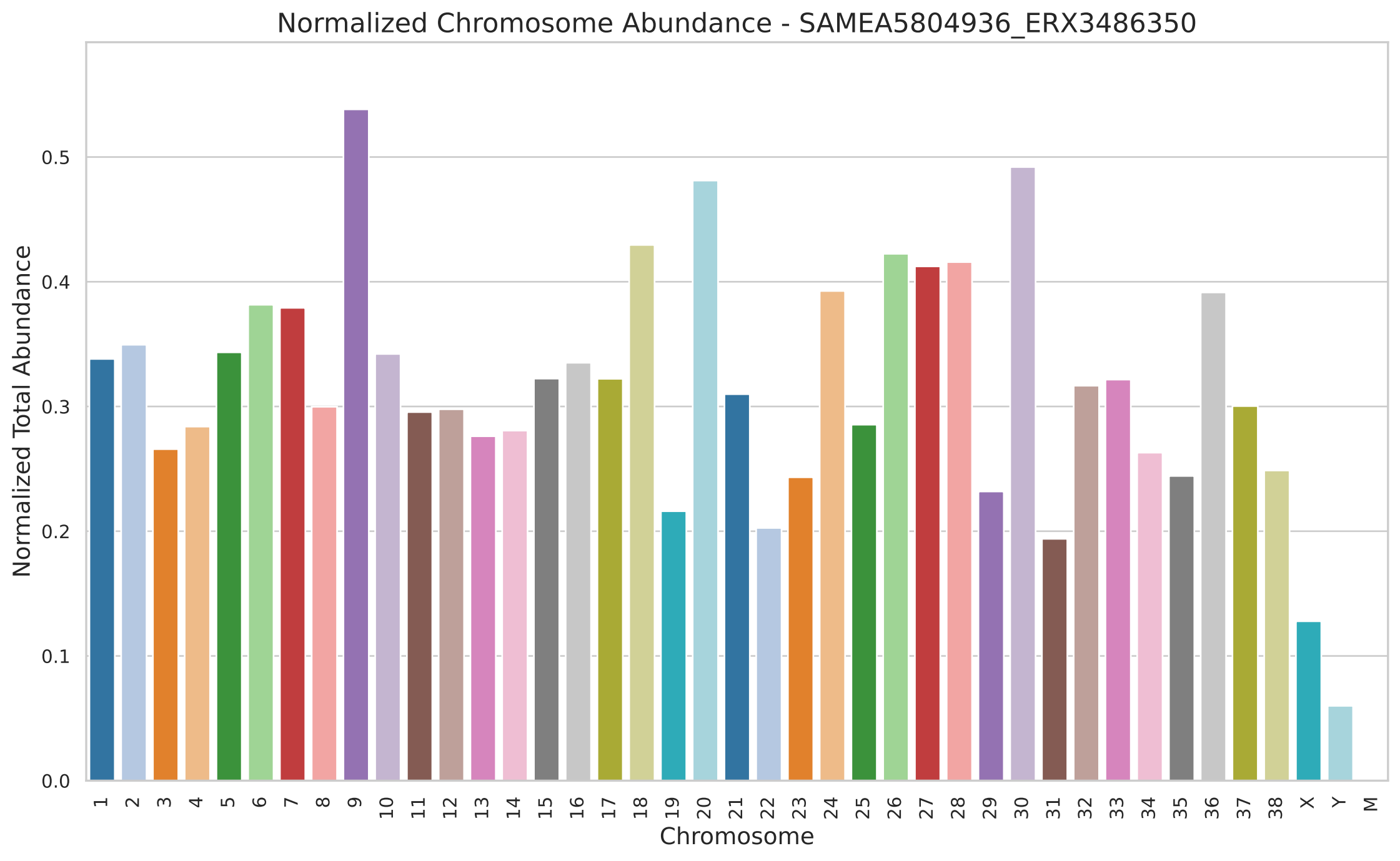

Normalized Chromosome Abundance - SAMEA3907089_ERX3486304
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

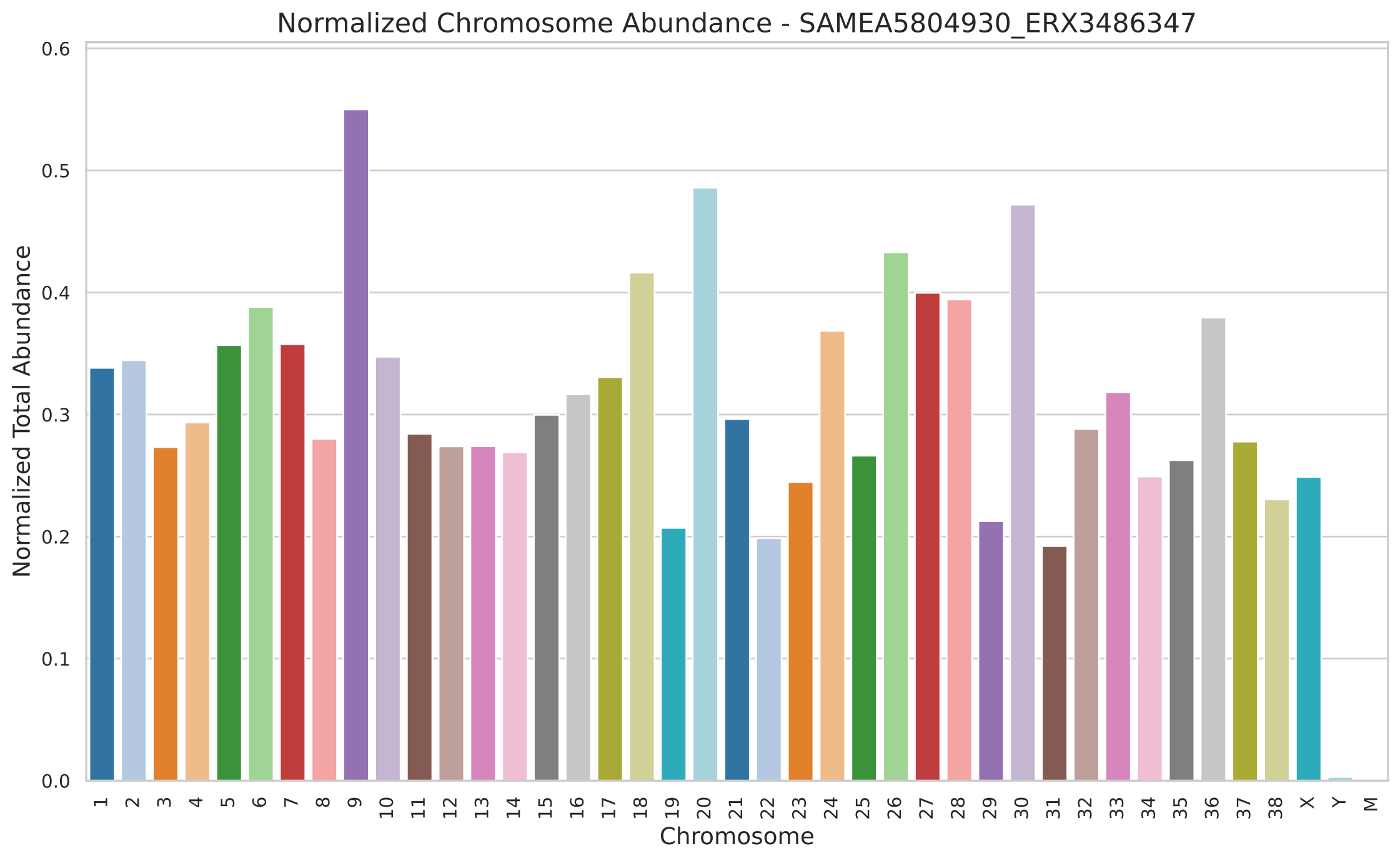

Normalized Chromosome Abundance - SAMEA5804928_ERX3486346
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

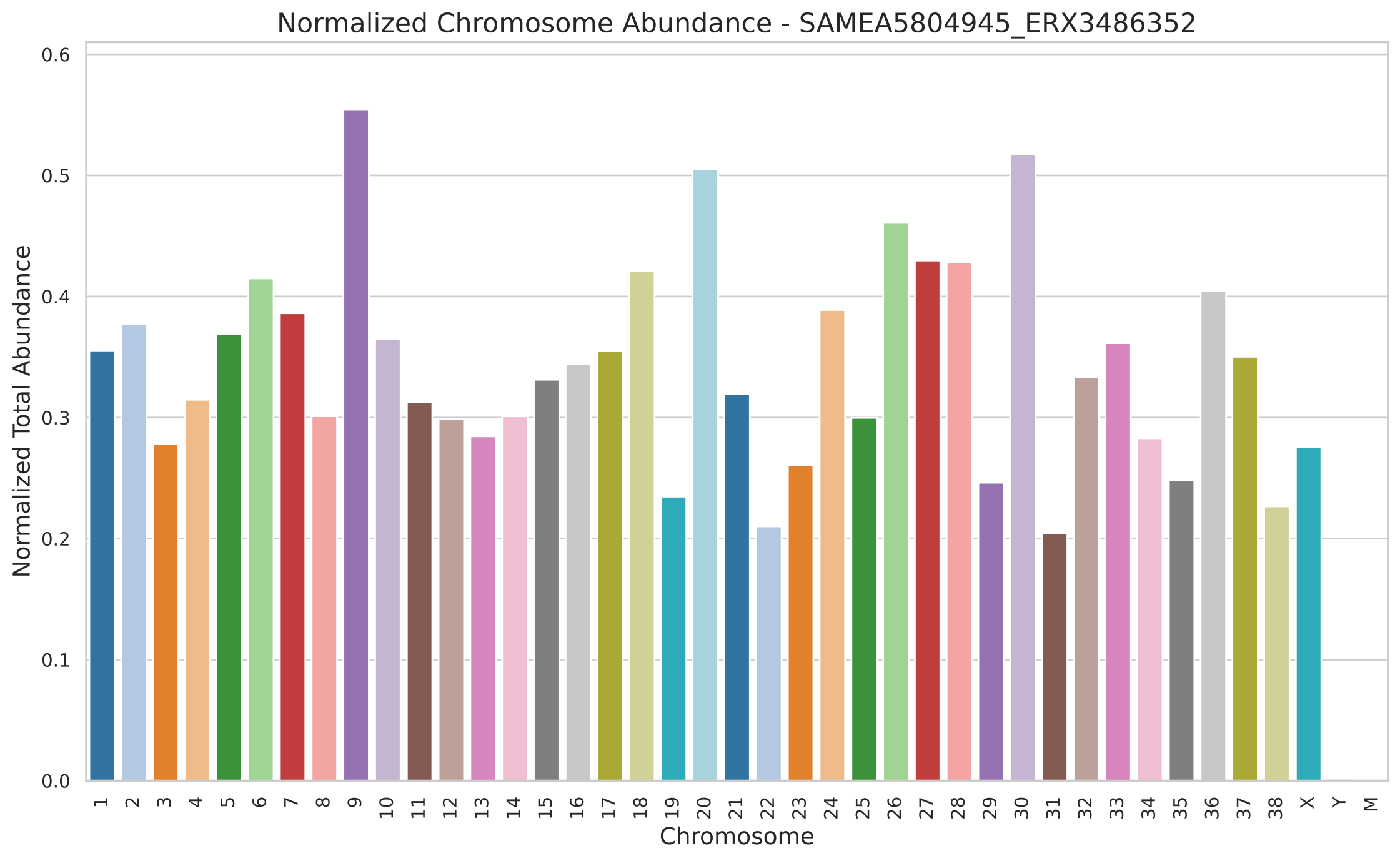

Normalized Chromosome Abundance - SAMEA5804852_ERX3486333
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

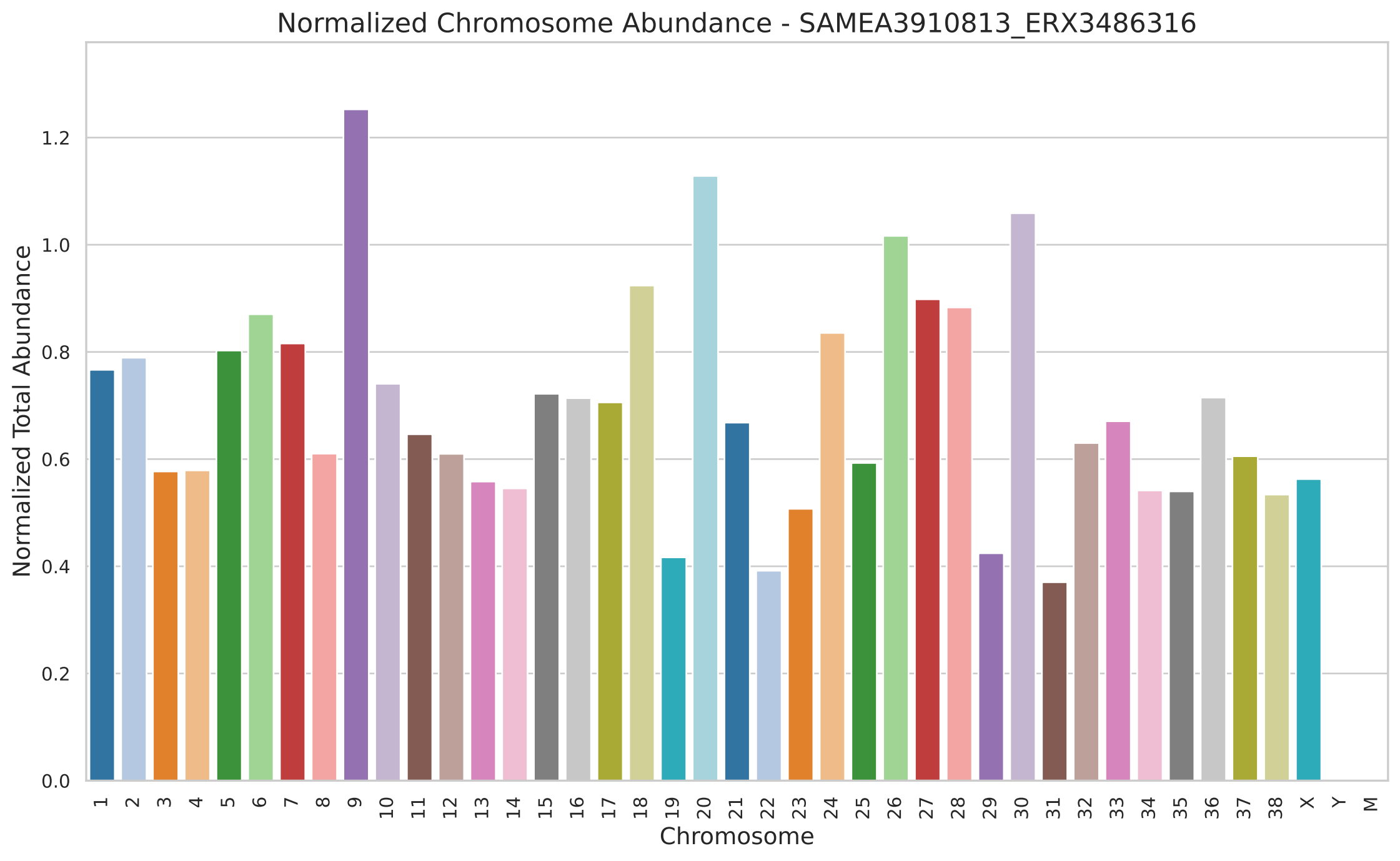

Normalized Chromosome Abundance - SAMEA5804861_ERX3486340
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

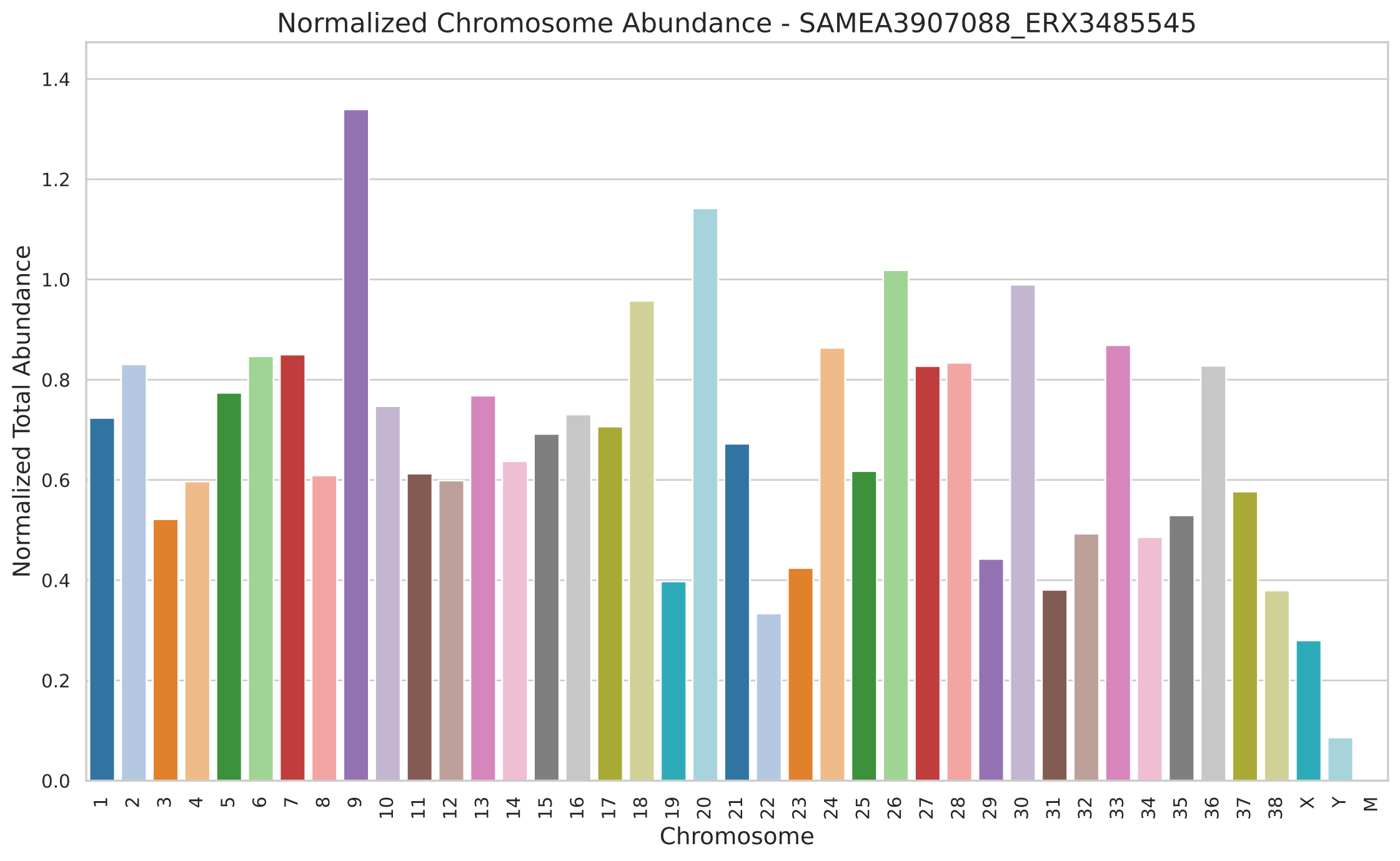

Normalized Chromosome Abundance - SAMEA5804864_ERX3486341
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

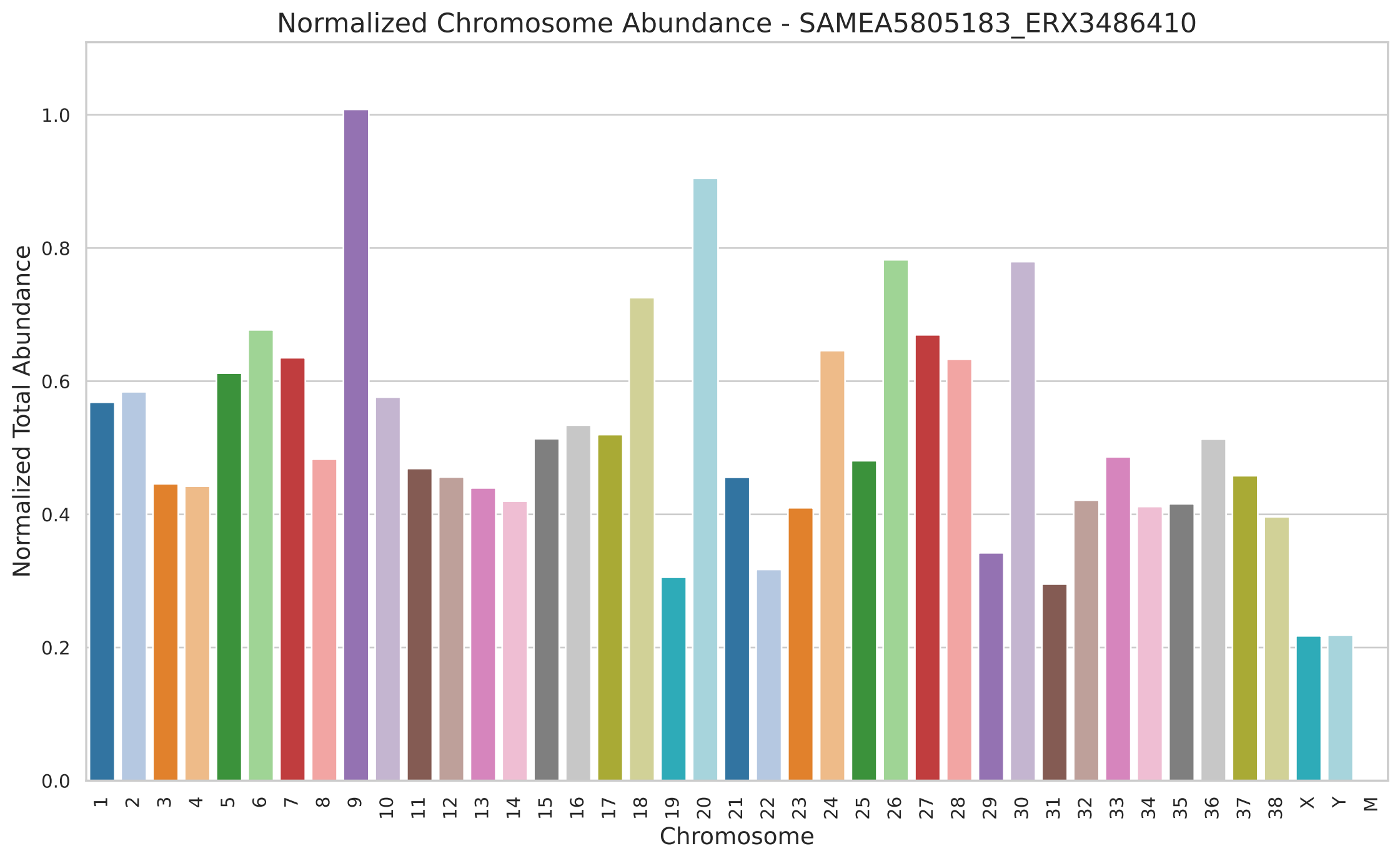

Normalized Chromosome Abundance - SAMEA5804936_ERX3486350
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

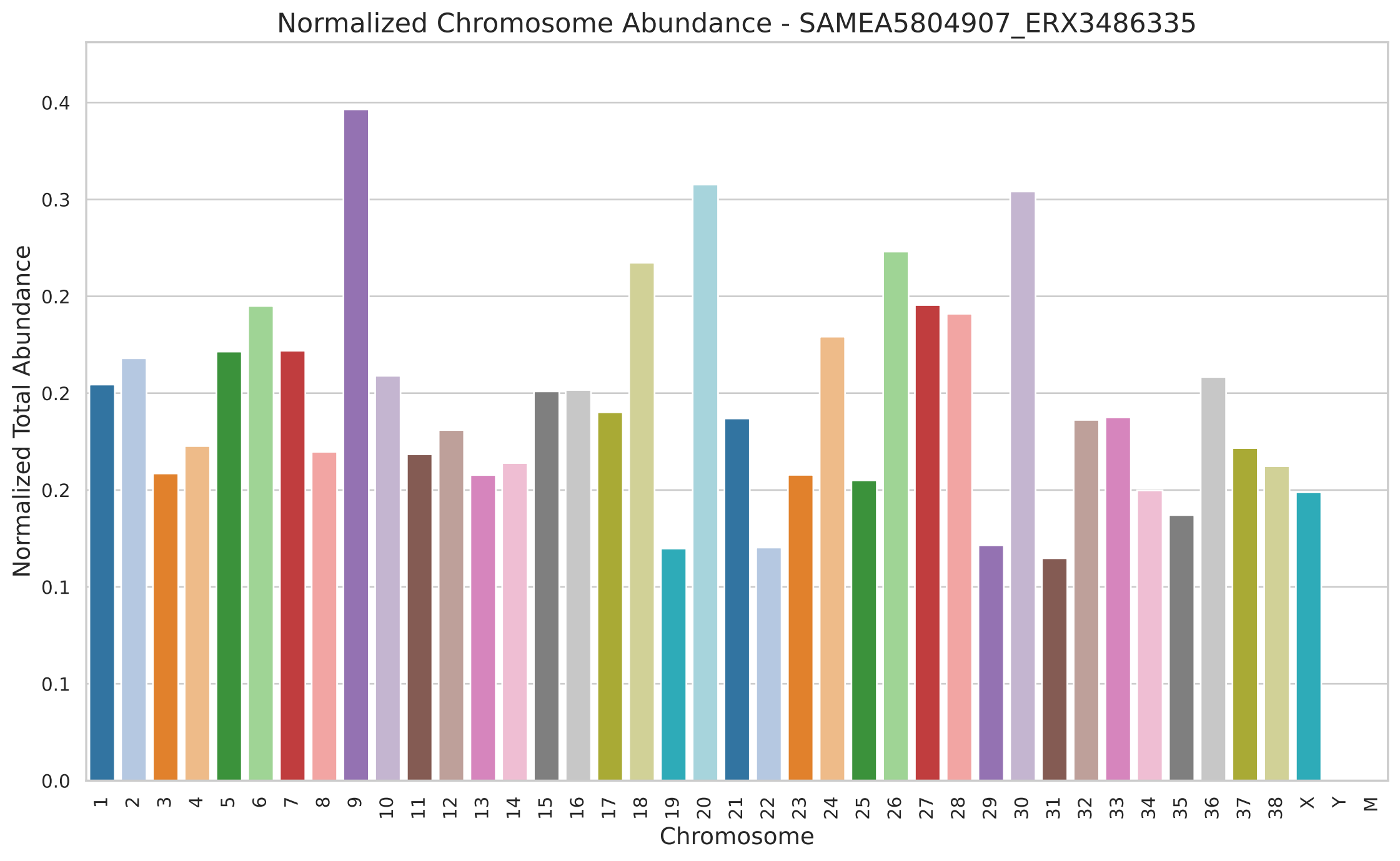

Normalized Chromosome Abundance - SAMEA5804930_ERX3486347
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

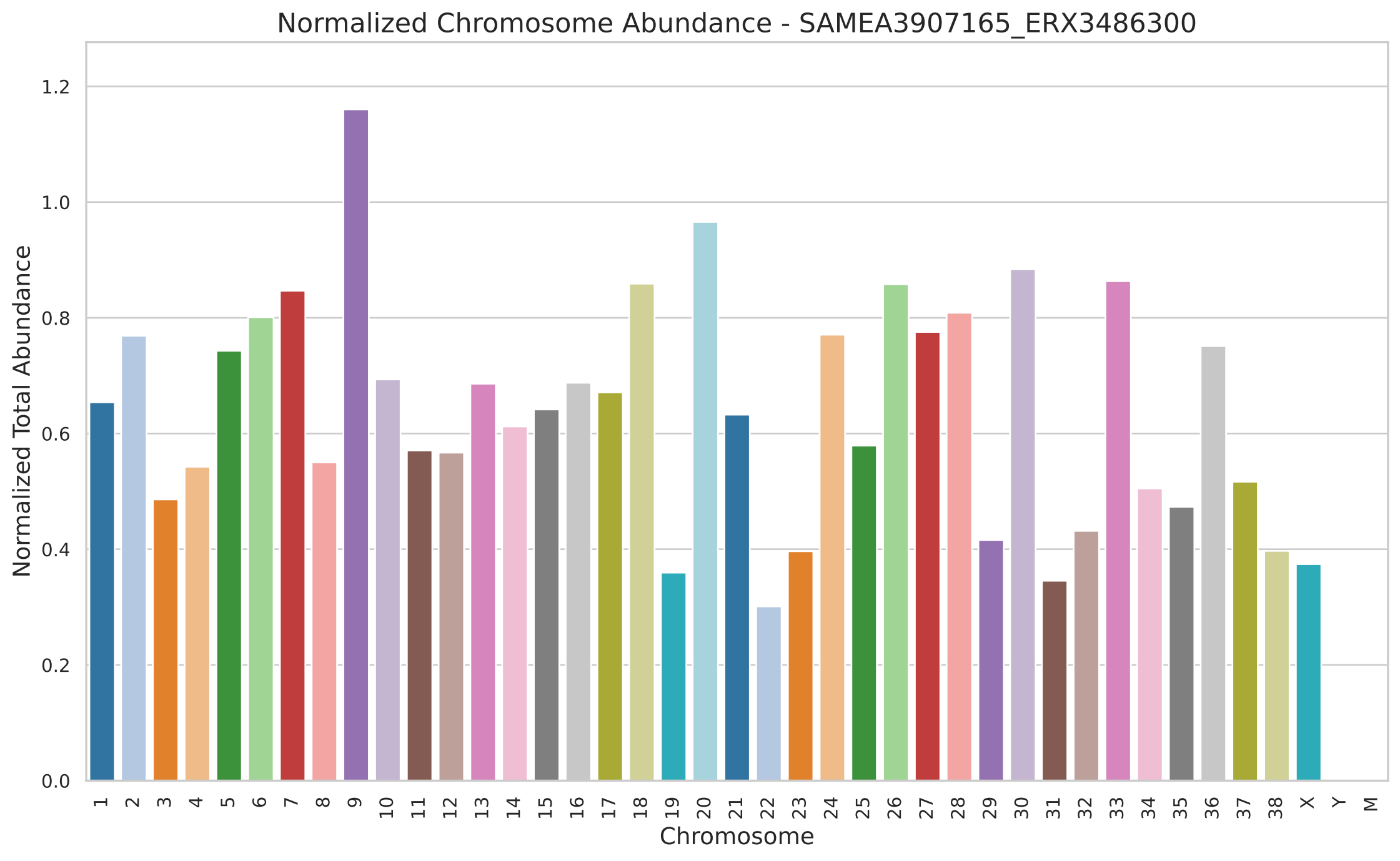

Normalized Chromosome Abundance - SAMEA5804945_ERX3486352
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

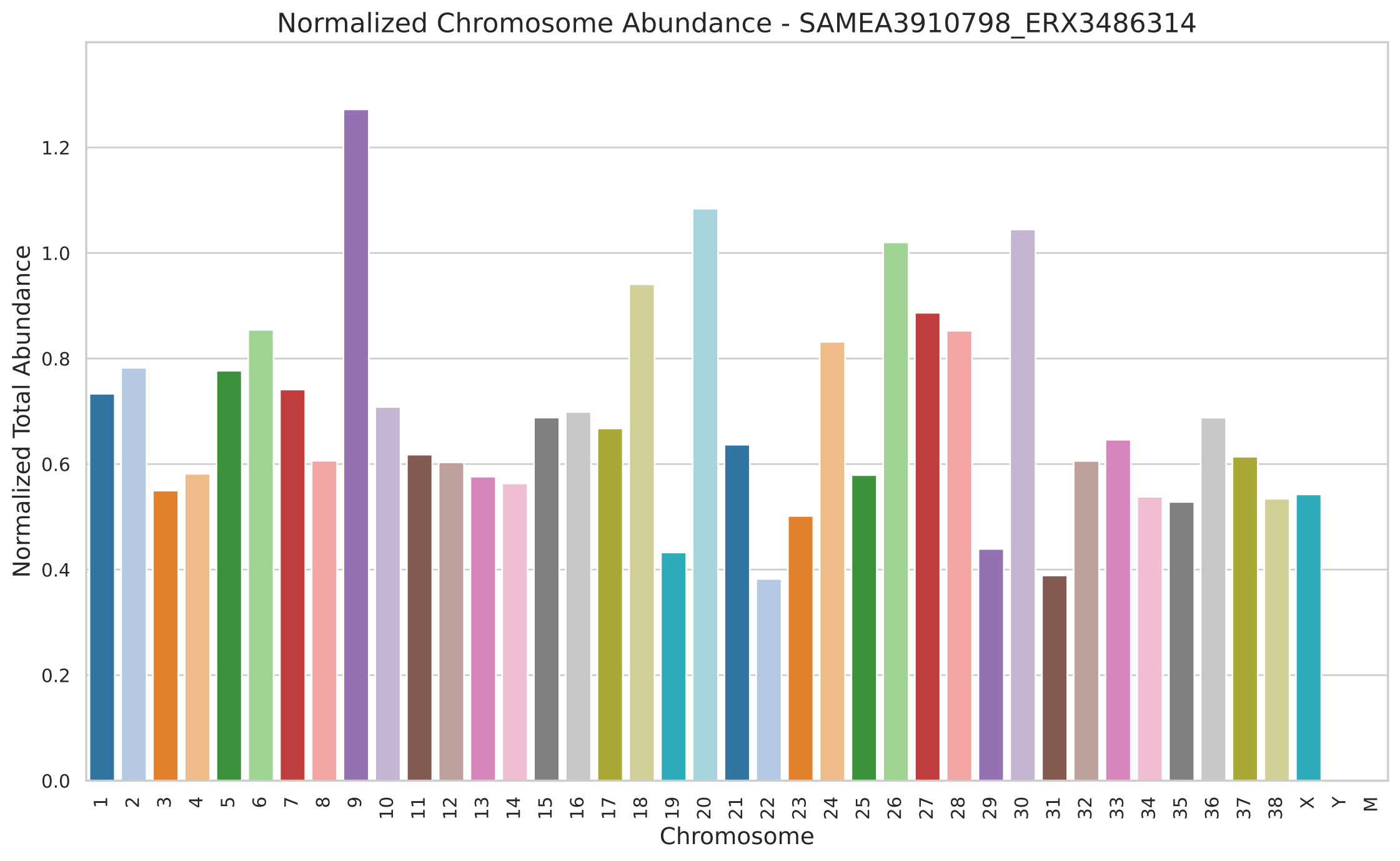

Normalized Chromosome Abundance - SAMEA3910813_ERX3486316
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

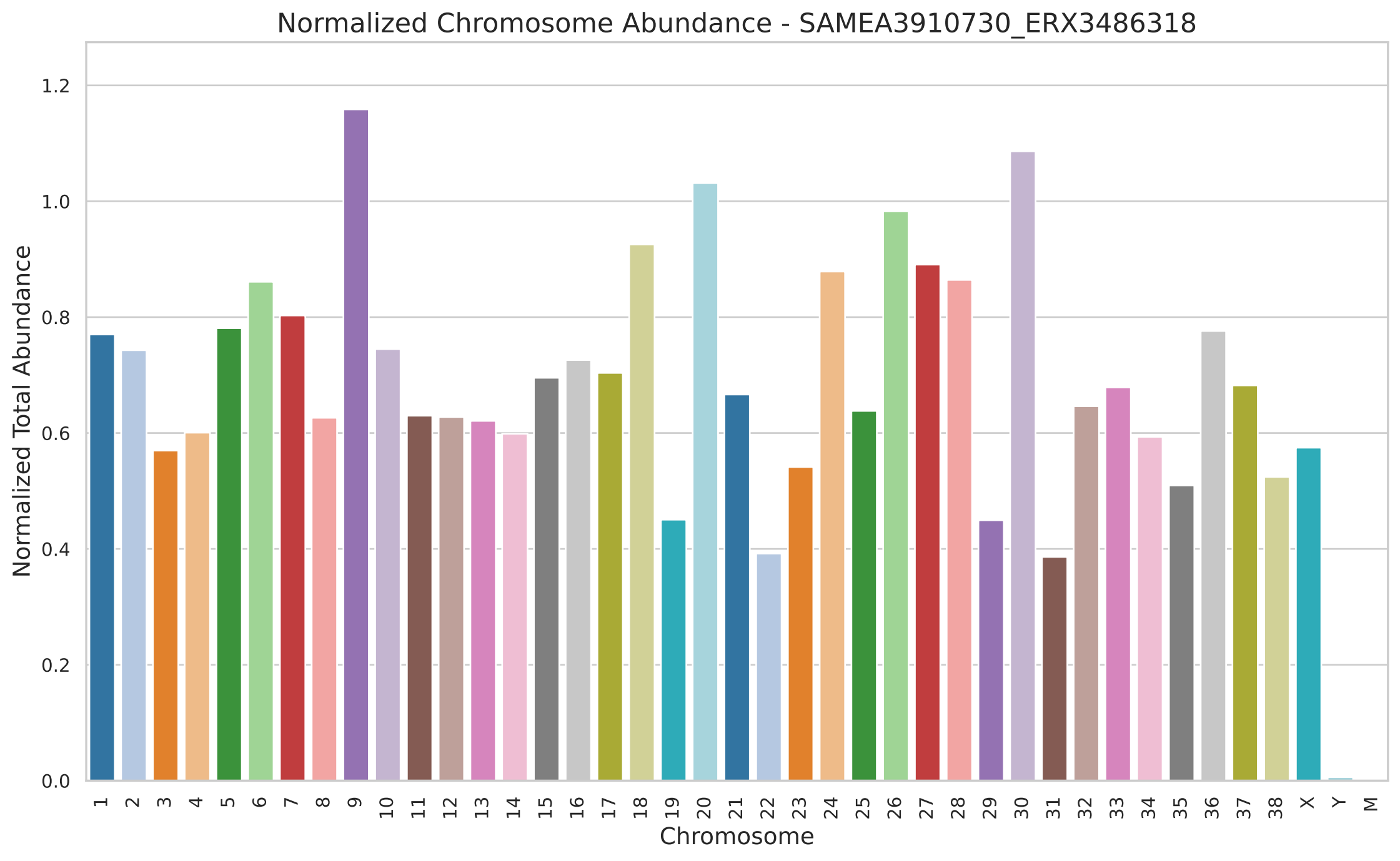

Normalized Chromosome Abundance - SAMEA3907088_ERX3485545
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

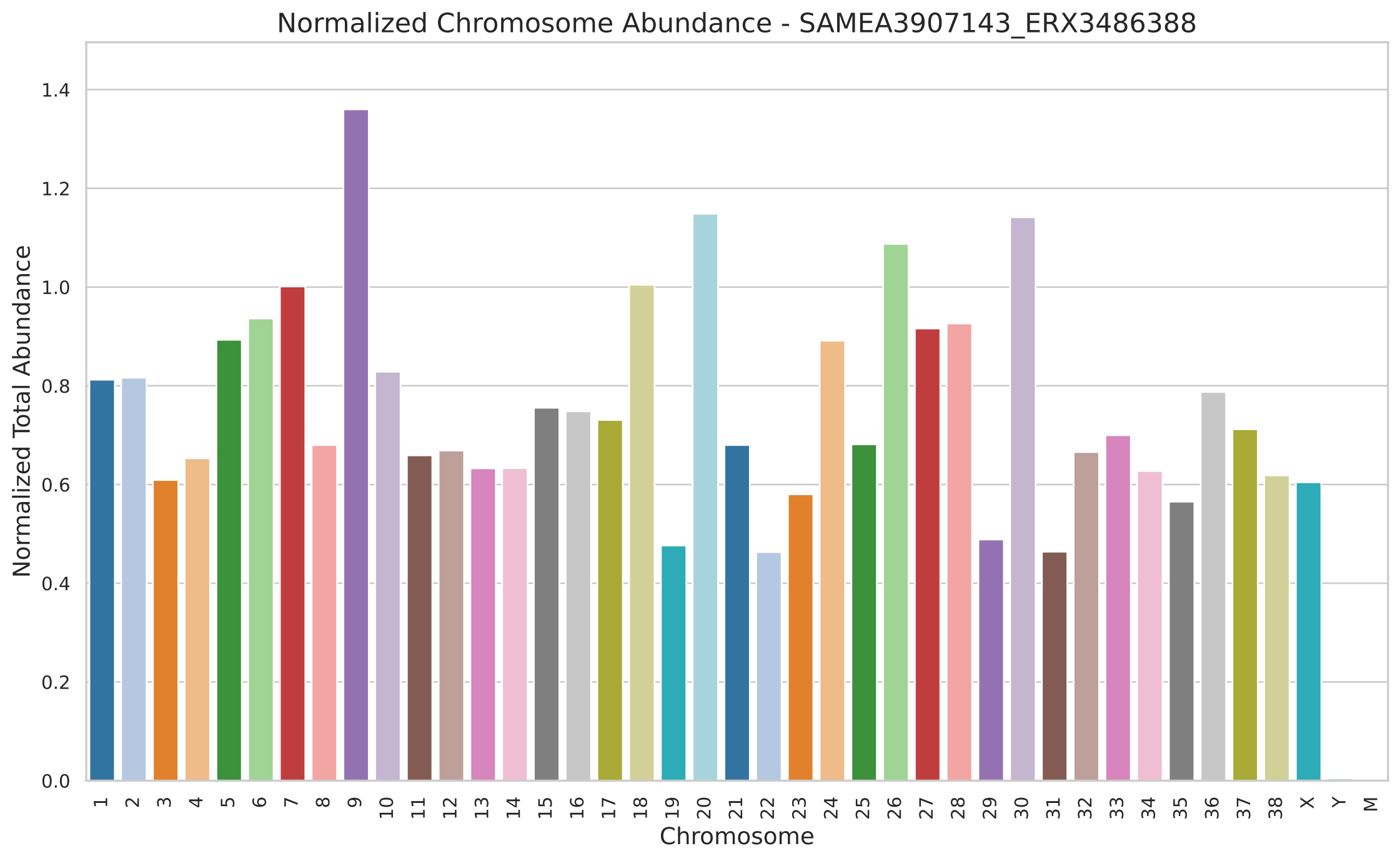

Normalized Chromosome Abundance - SAMEA5805183_ERX3486410
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

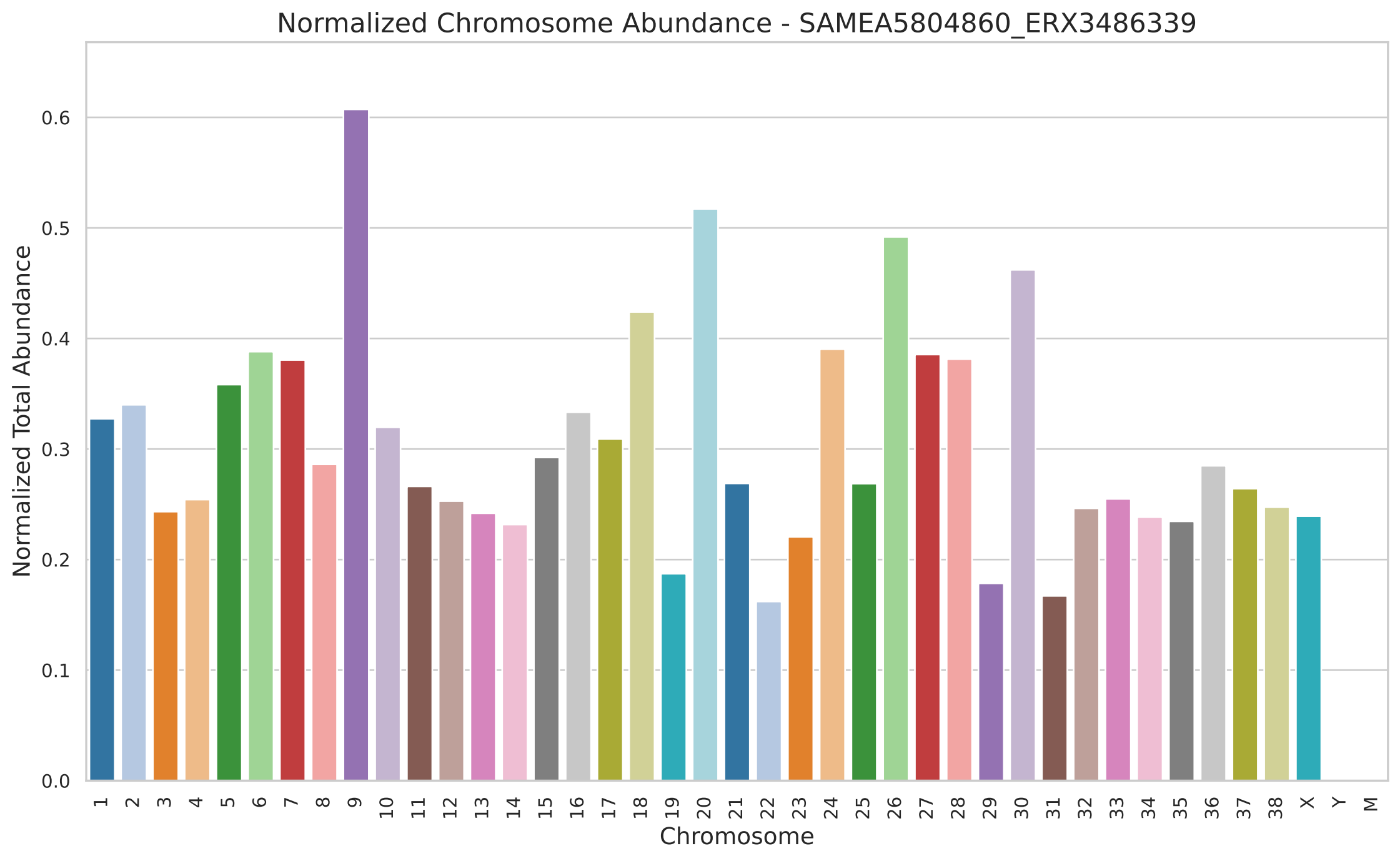

Normalized Chromosome Abundance - SAMEA5804907_ERX3486335
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

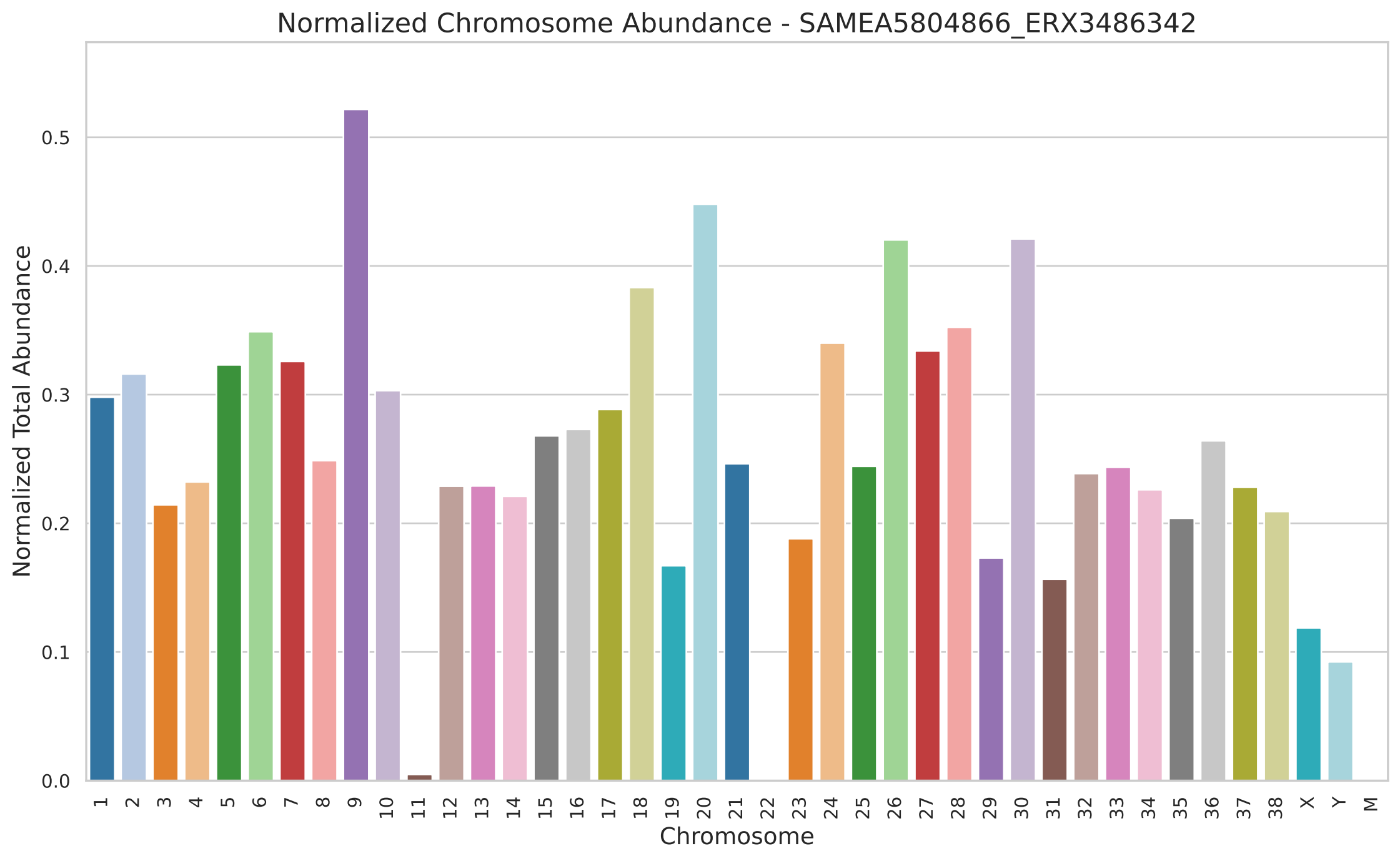

Normalized Chromosome Abundance - SAMEA3907165_ERX3486300
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

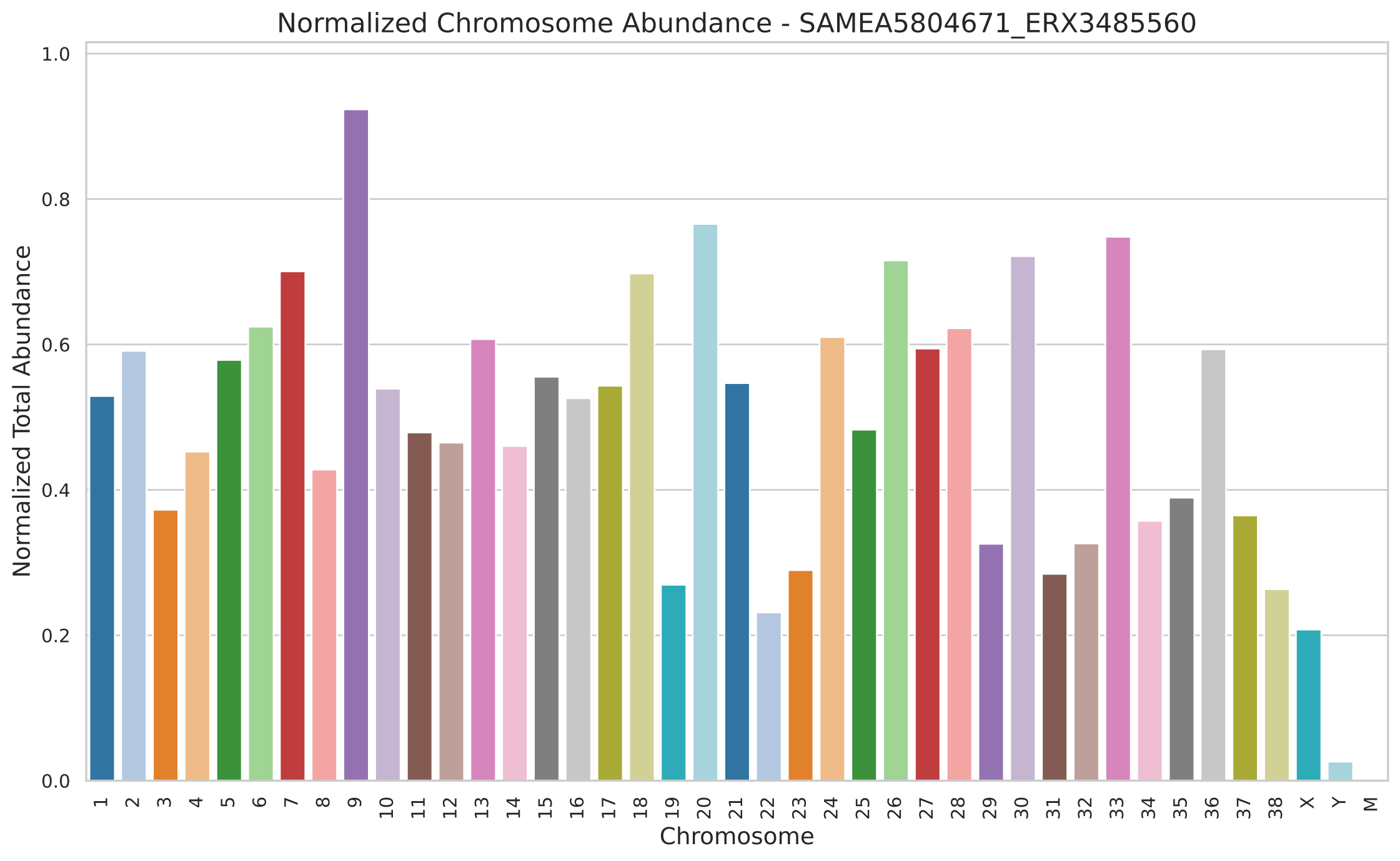

Normalized Chromosome Abundance - SAMEA3910798_ERX3486314
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

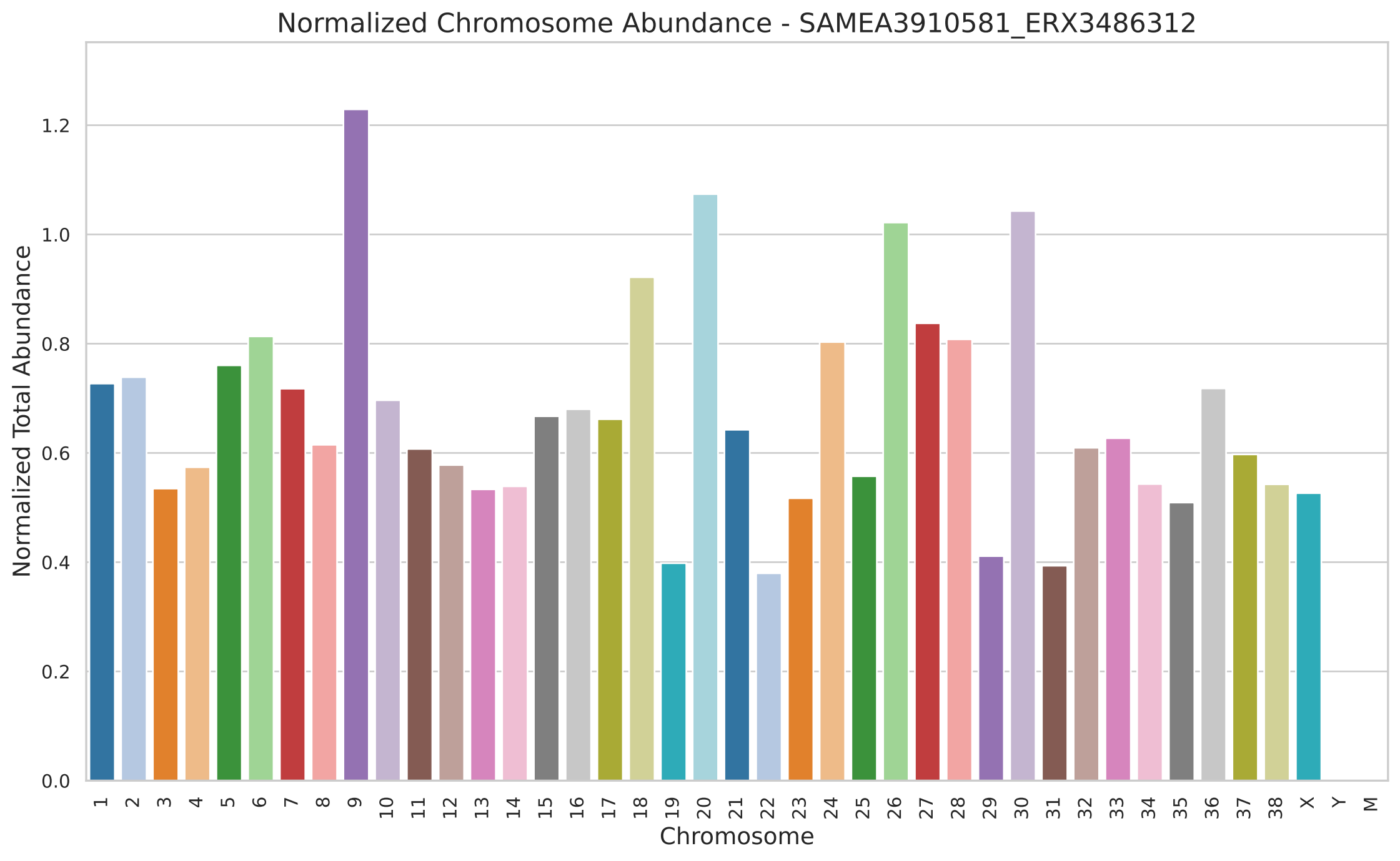

Normalized Chromosome Abundance - SAMEA3910730_ERX3486318
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

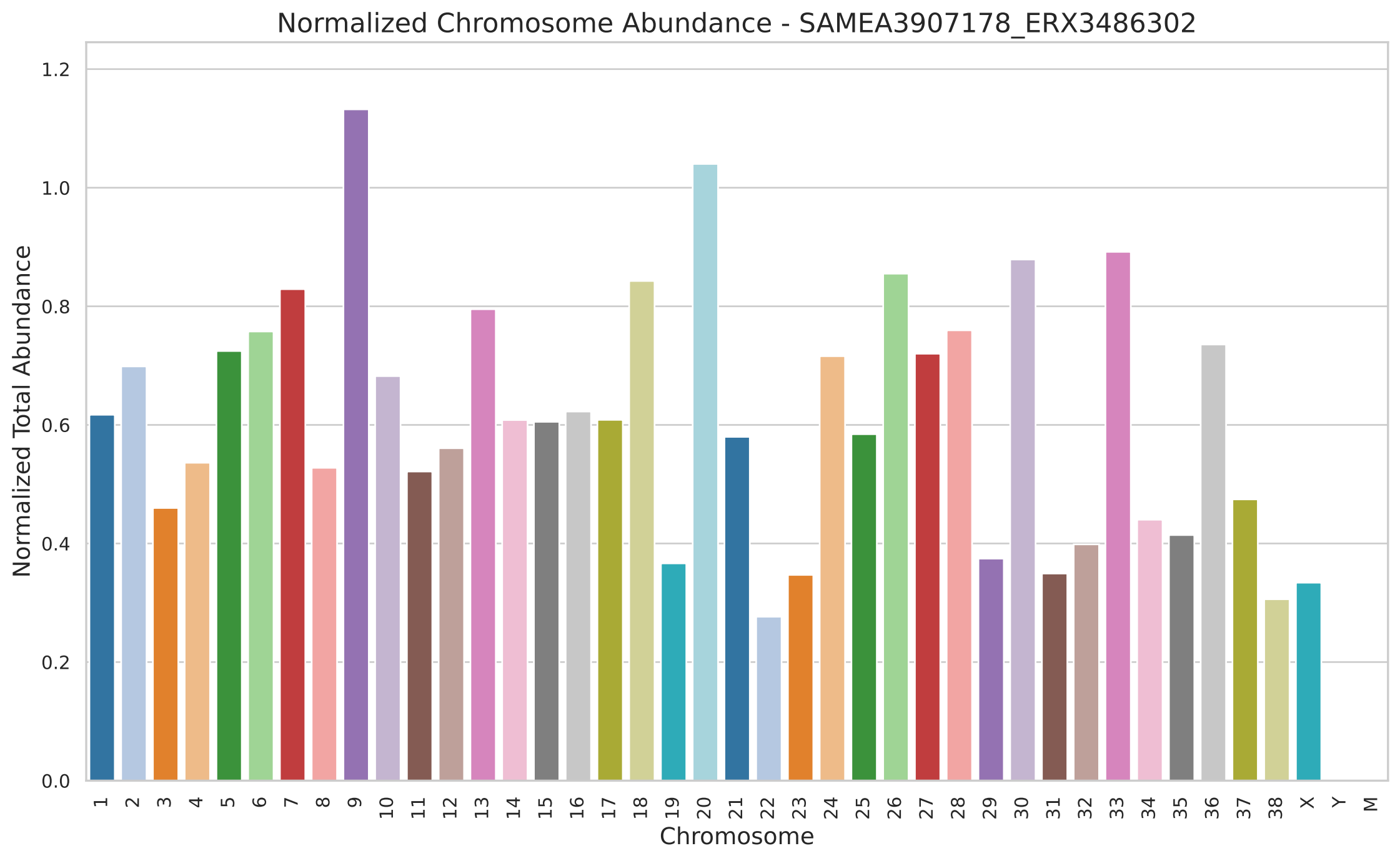

Normalized Chromosome Abundance - SAMEA3907143_ERX3486388
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

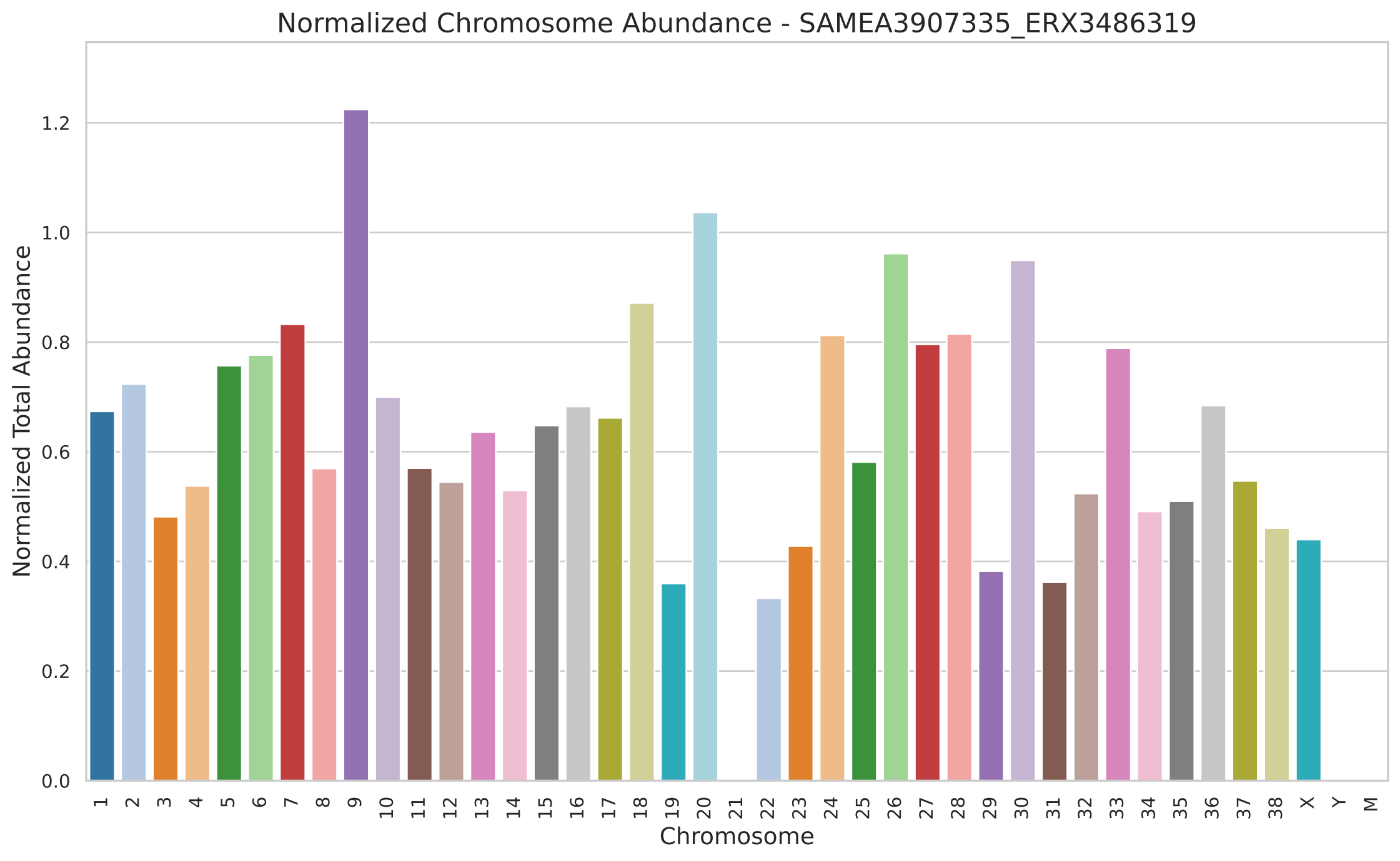

Normalized Chromosome Abundance - SAMEA5804860_ERX3486339
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

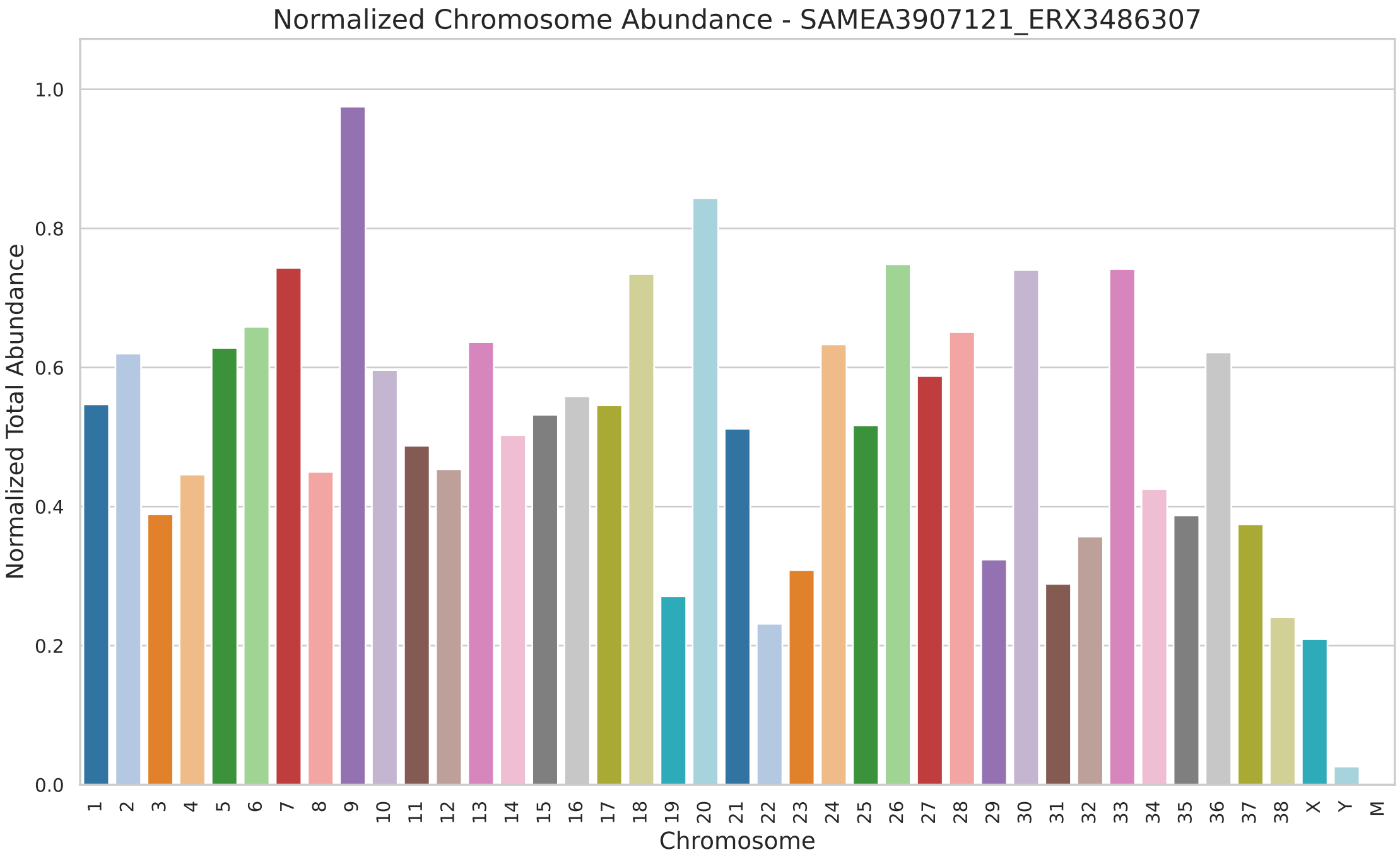

Normalized Chromosome Abundance - SAMEA5804866_ERX3486342
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

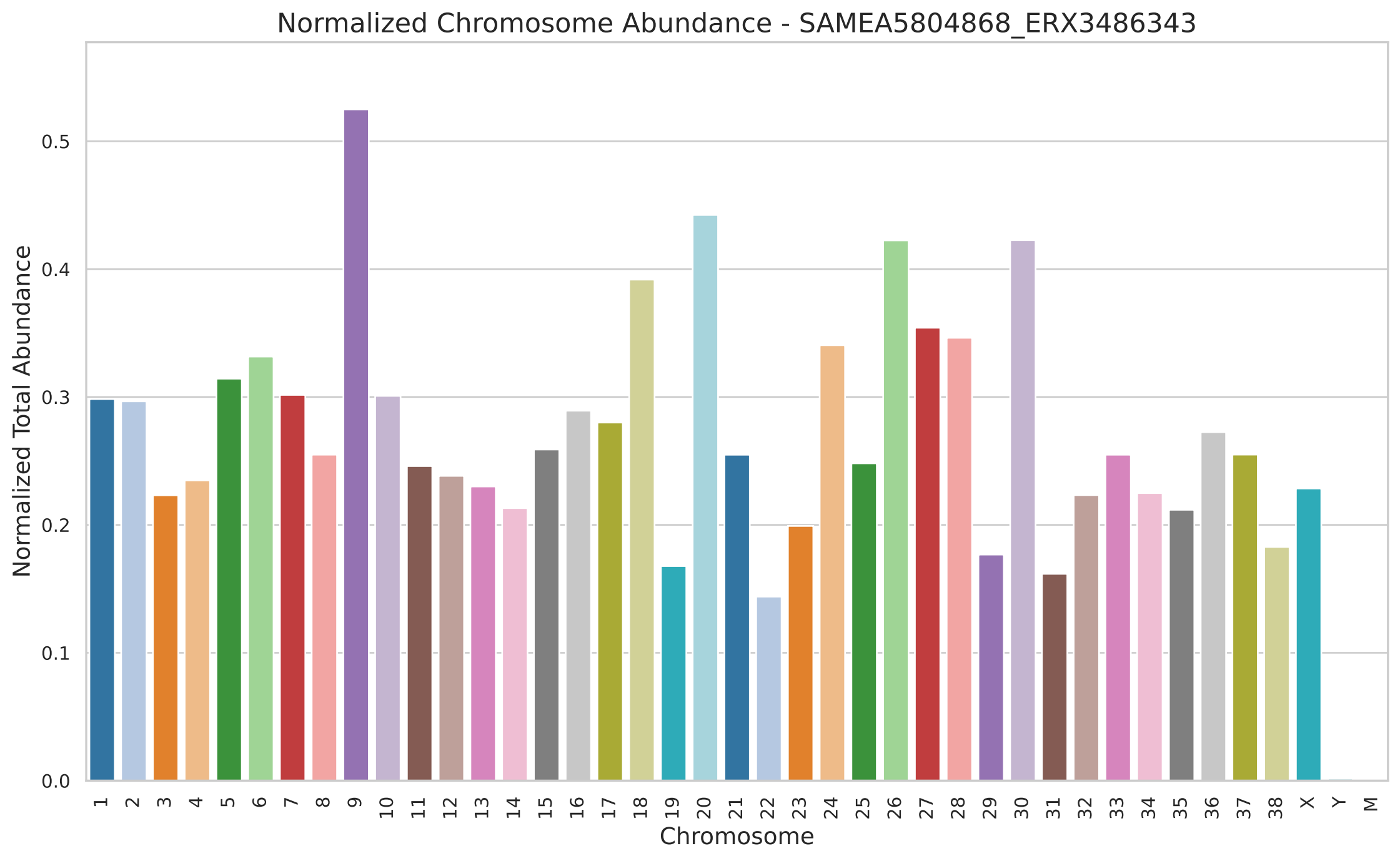

Normalized Chromosome Abundance - SAMEA5804671_ERX3485560
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

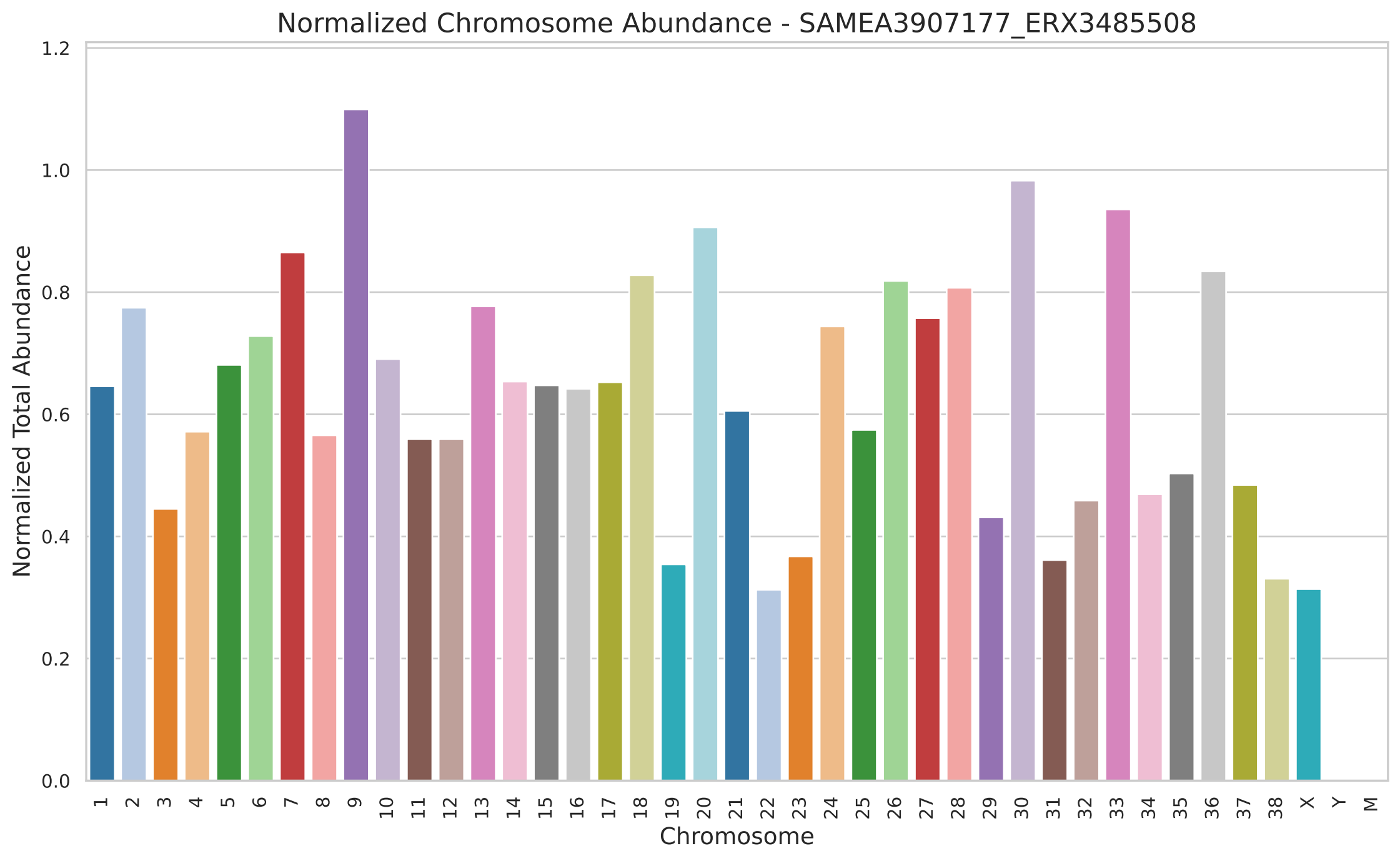

Normalized Chromosome Abundance - SAMEA3910581_ERX3486312
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

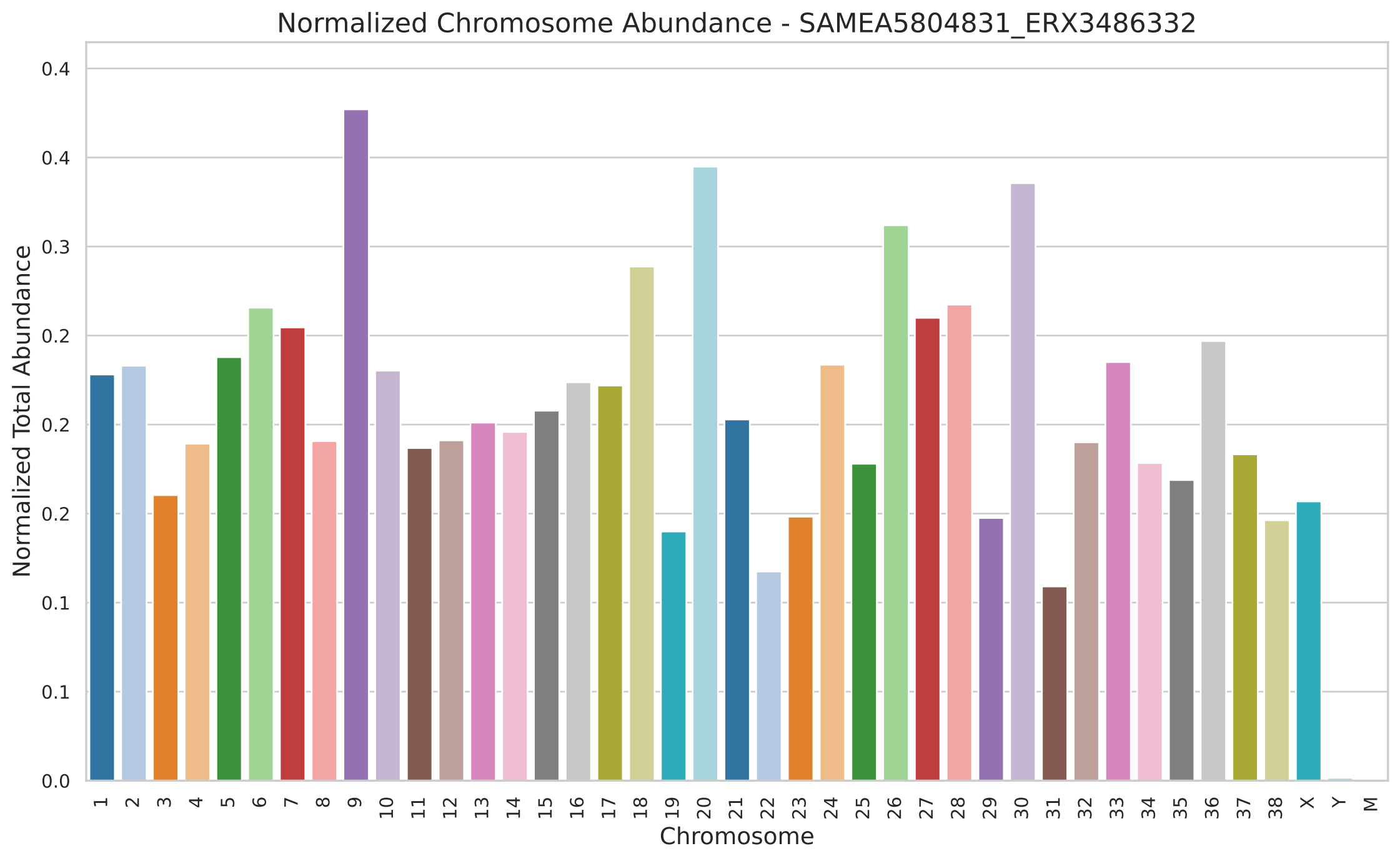

Normalized Chromosome Abundance - SAMEA3907178_ERX3486302
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

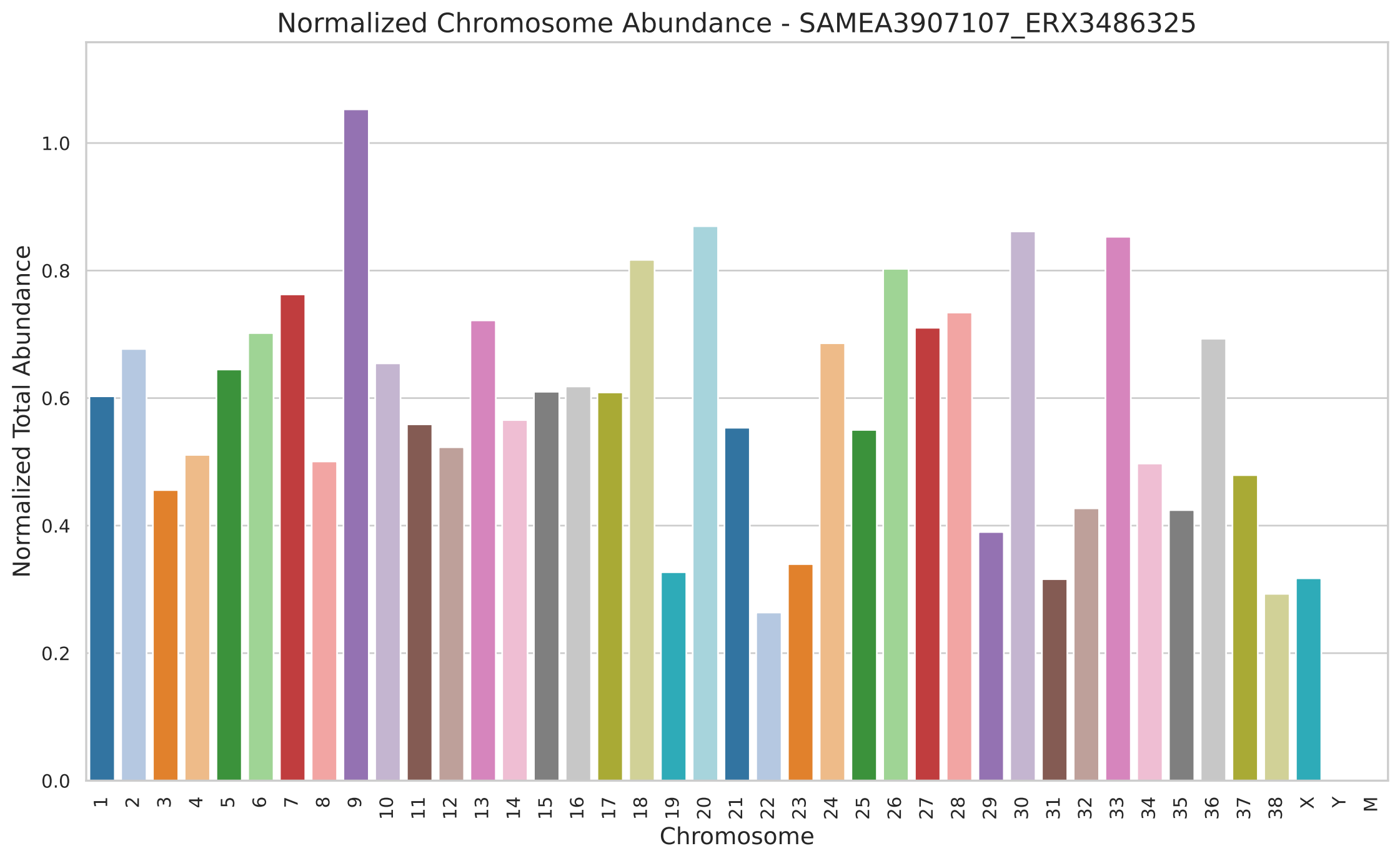

Normalized Chromosome Abundance - SAMEA3907335_ERX3486319
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

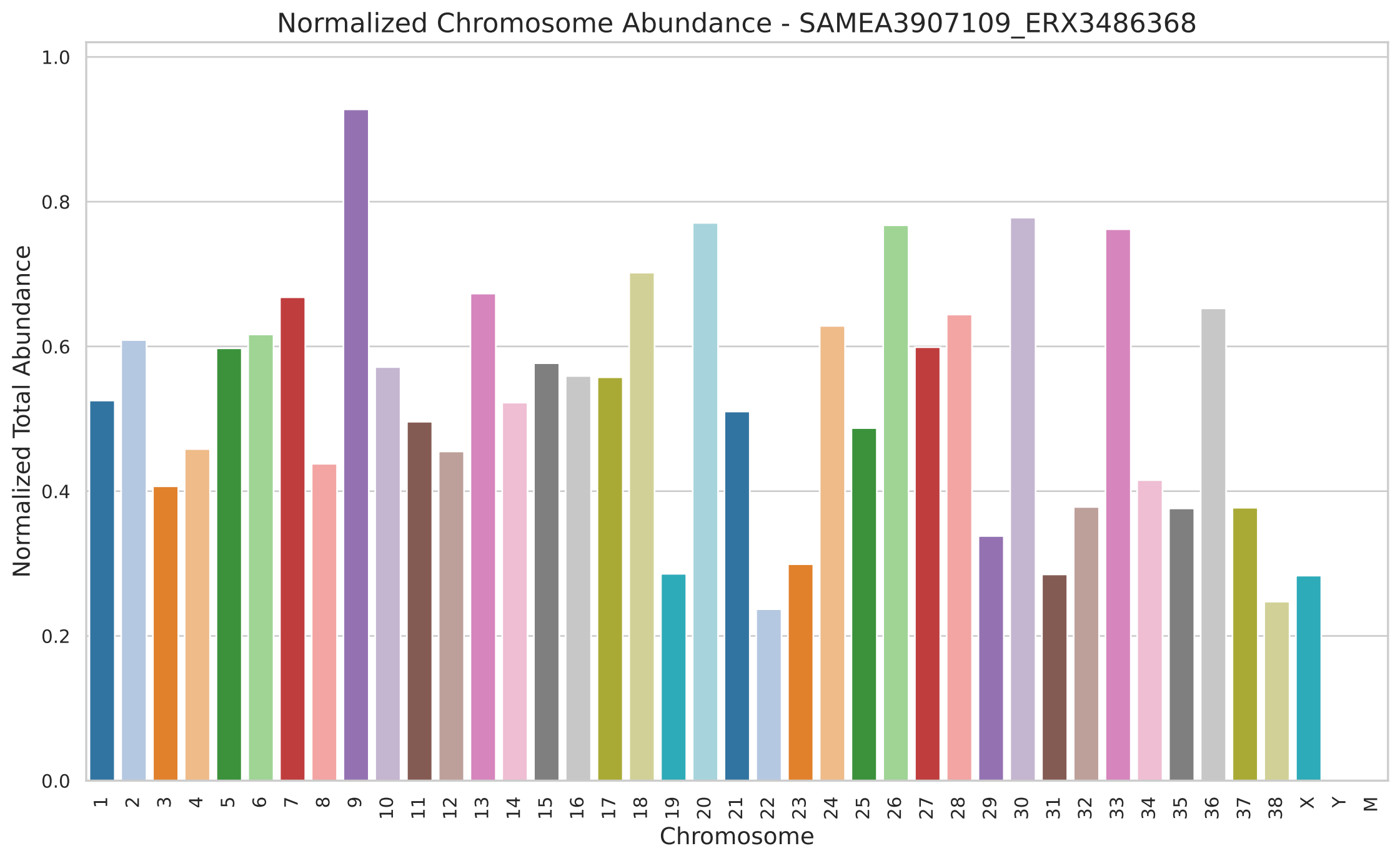

Normalized Chromosome Abundance - SAMEA3907121_ERX3486307
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

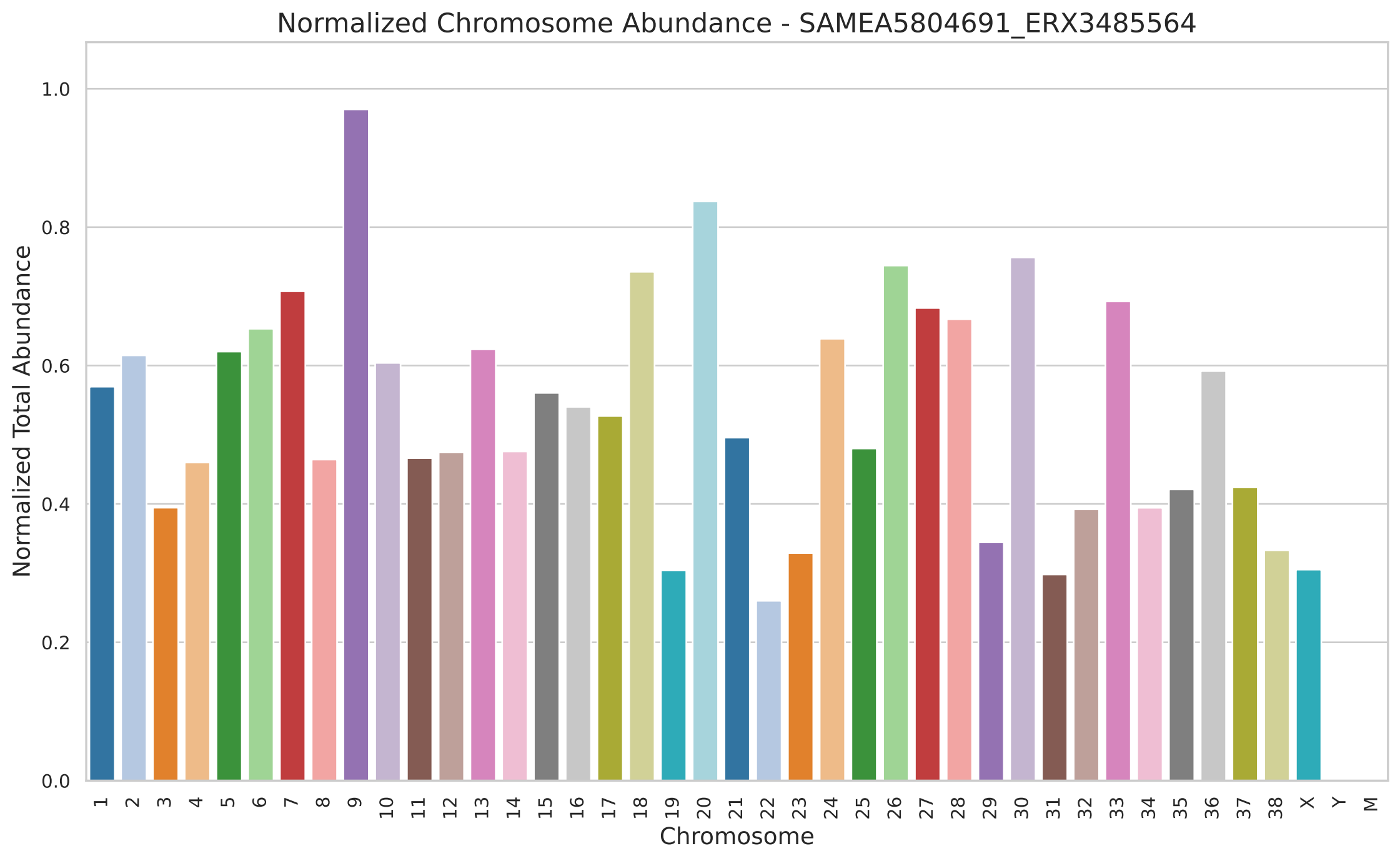

Normalized Chromosome Abundance - SAMEA5804868_ERX3486343
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

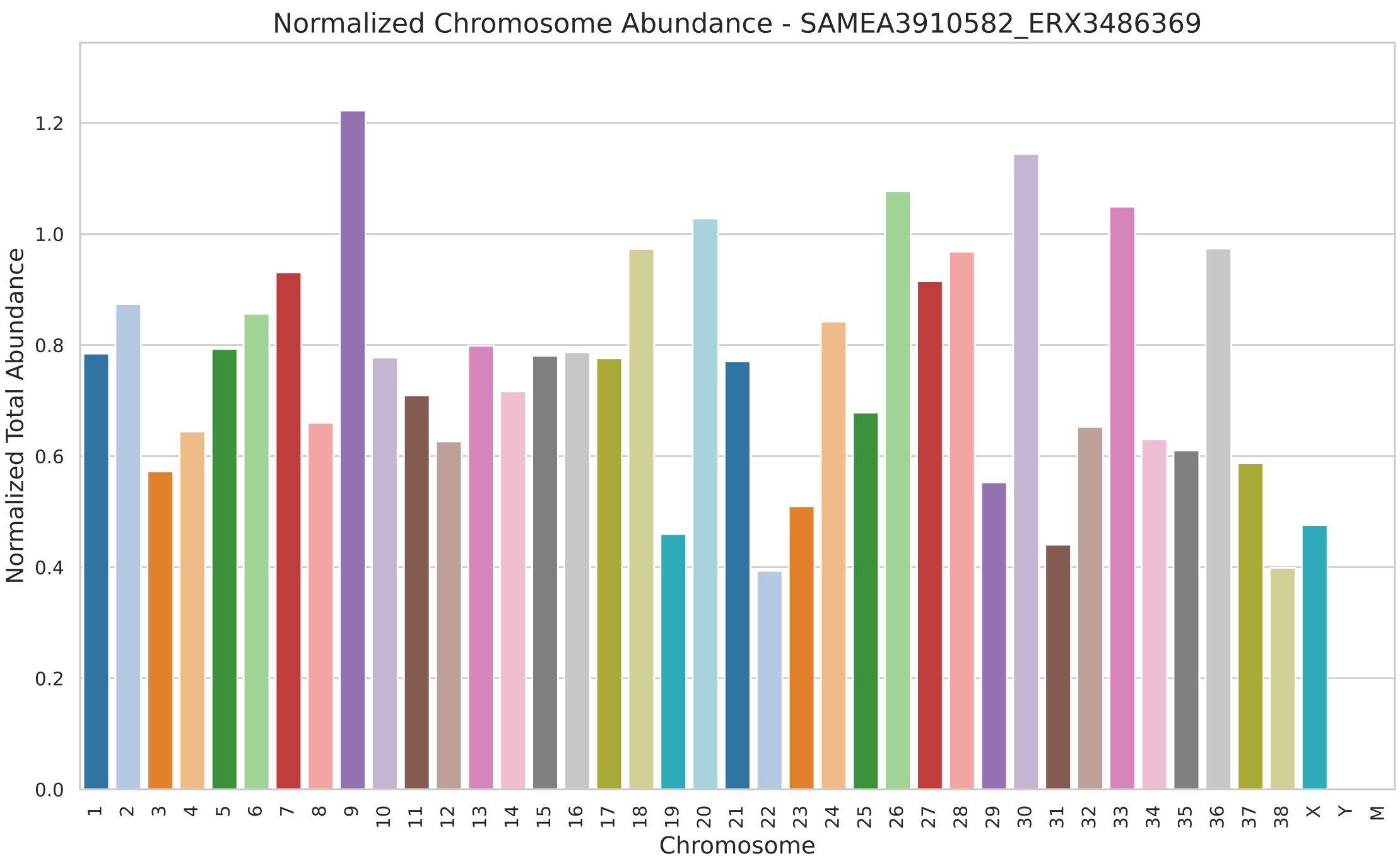

Normalized Chromosome Abundance - SAMEA3907177_ERX3485508
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

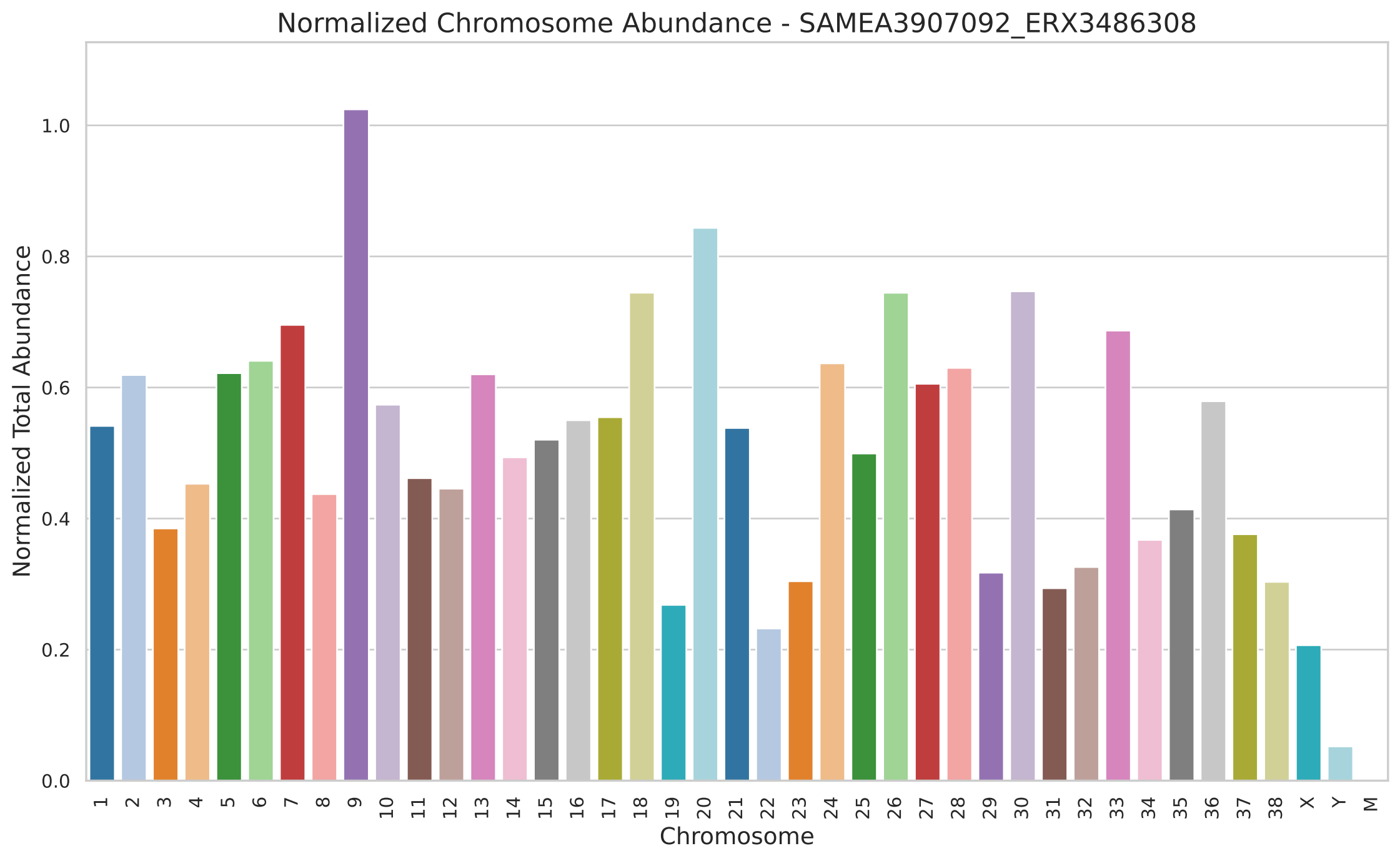

Normalized Chromosome Abundance - SAMEA5804831_ERX3486332
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

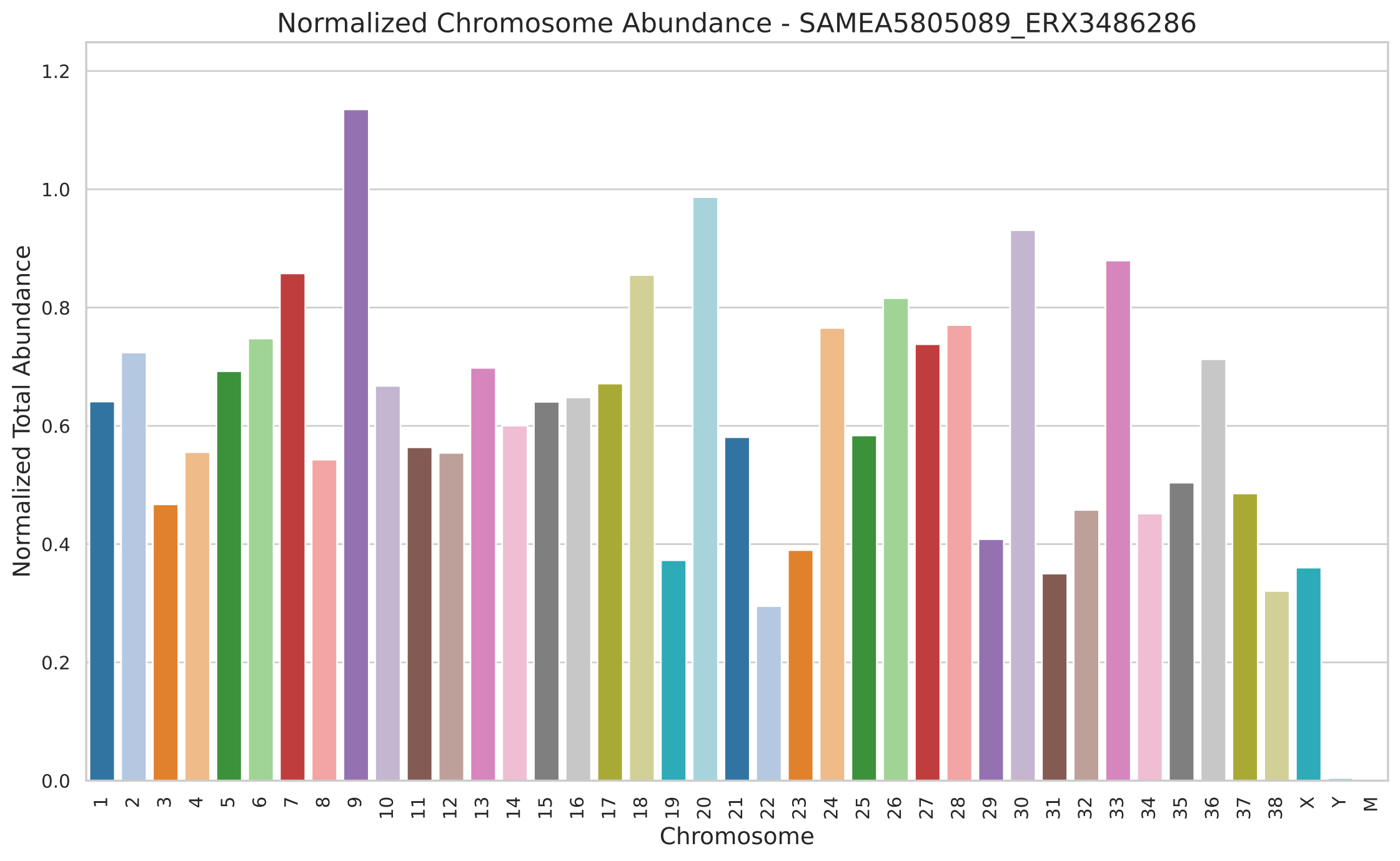

Normalized Chromosome Abundance - SAMEA3907107_ERX3486325
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

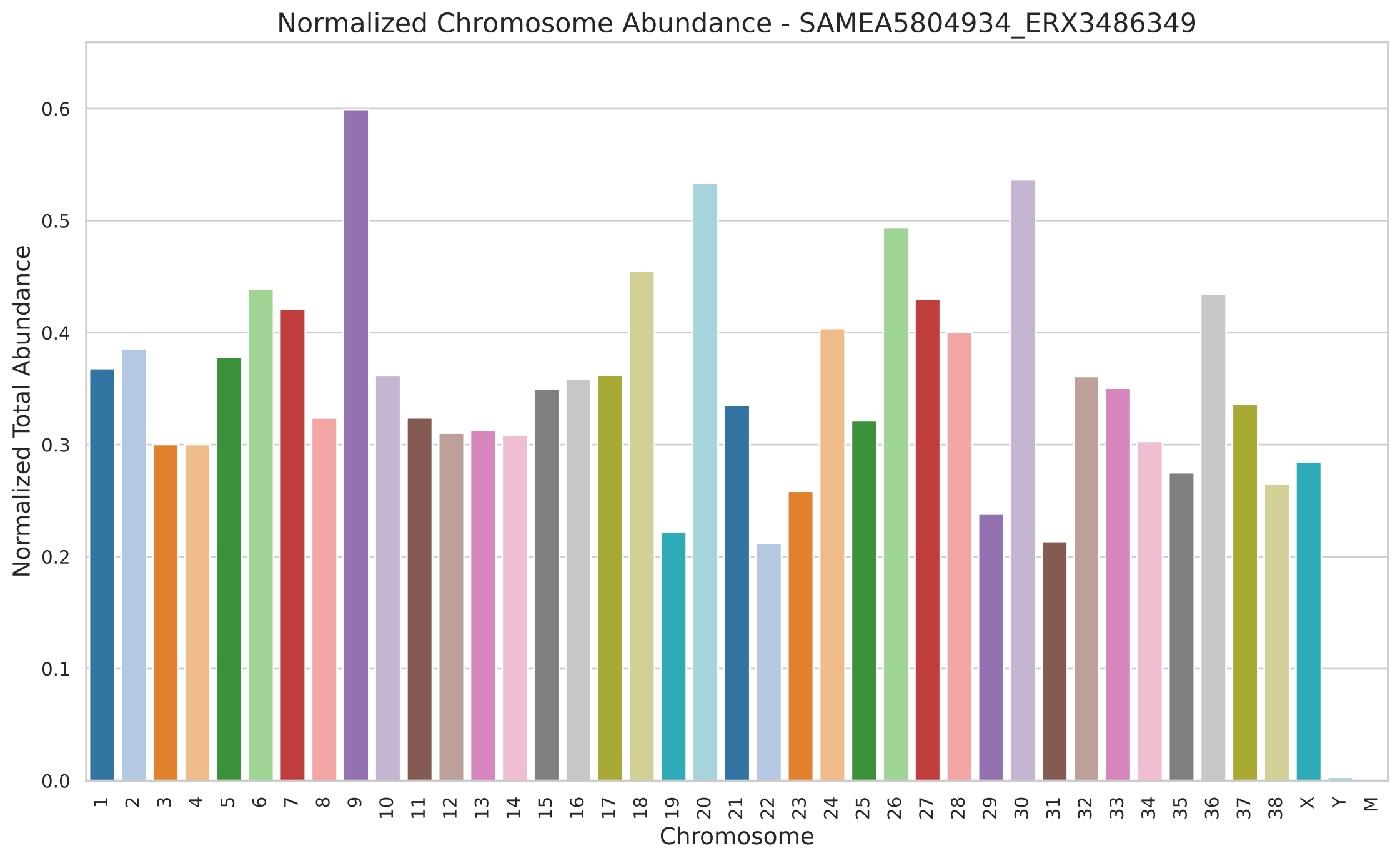

Normalized Chromosome Abundance - SAMEA3907109_ERX3486368
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

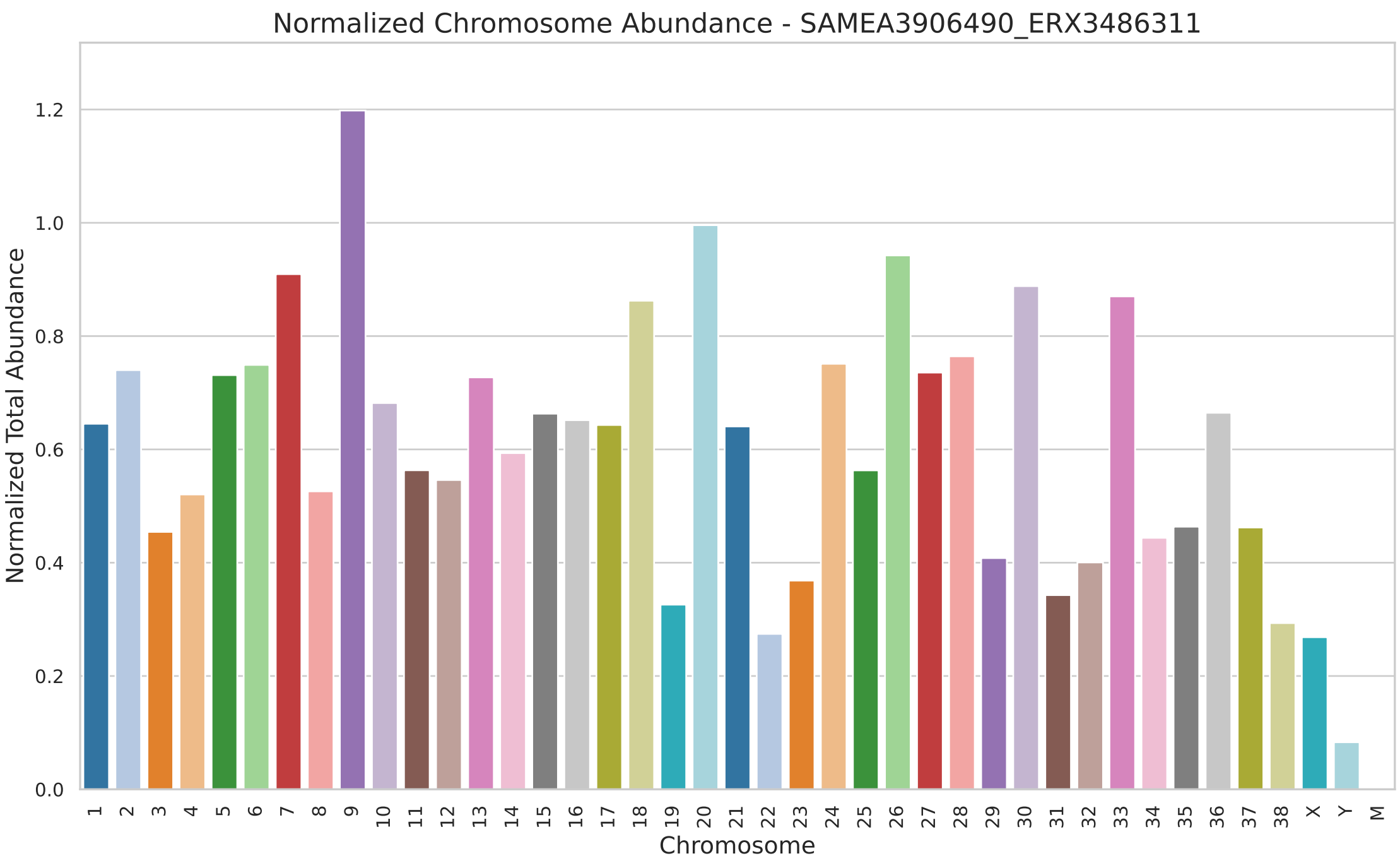

Normalized Chromosome Abundance - SAMEA5804691_ERX3485564
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

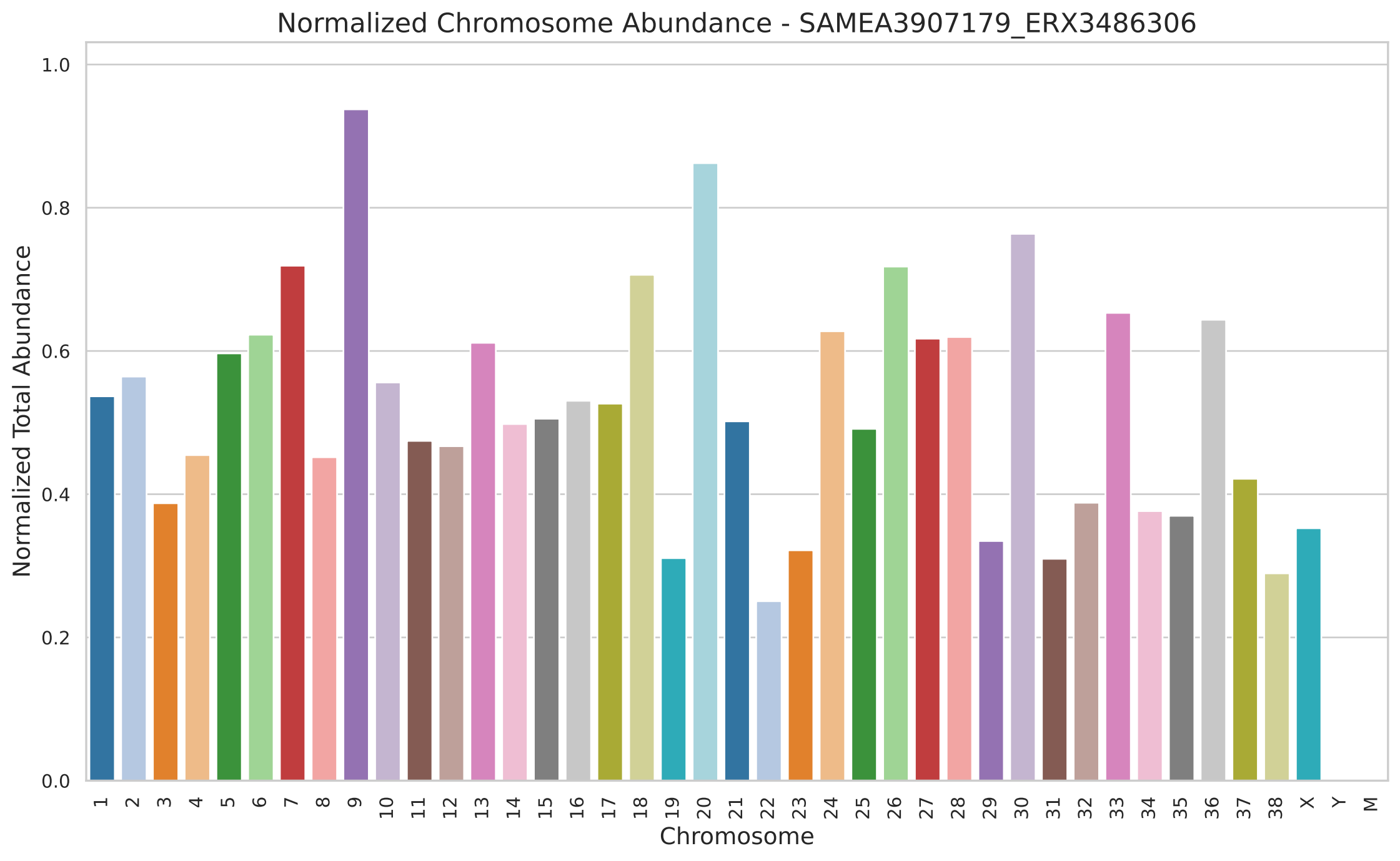

Normalized Chromosome Abundance - SAMEA3910582_ERX3486369
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

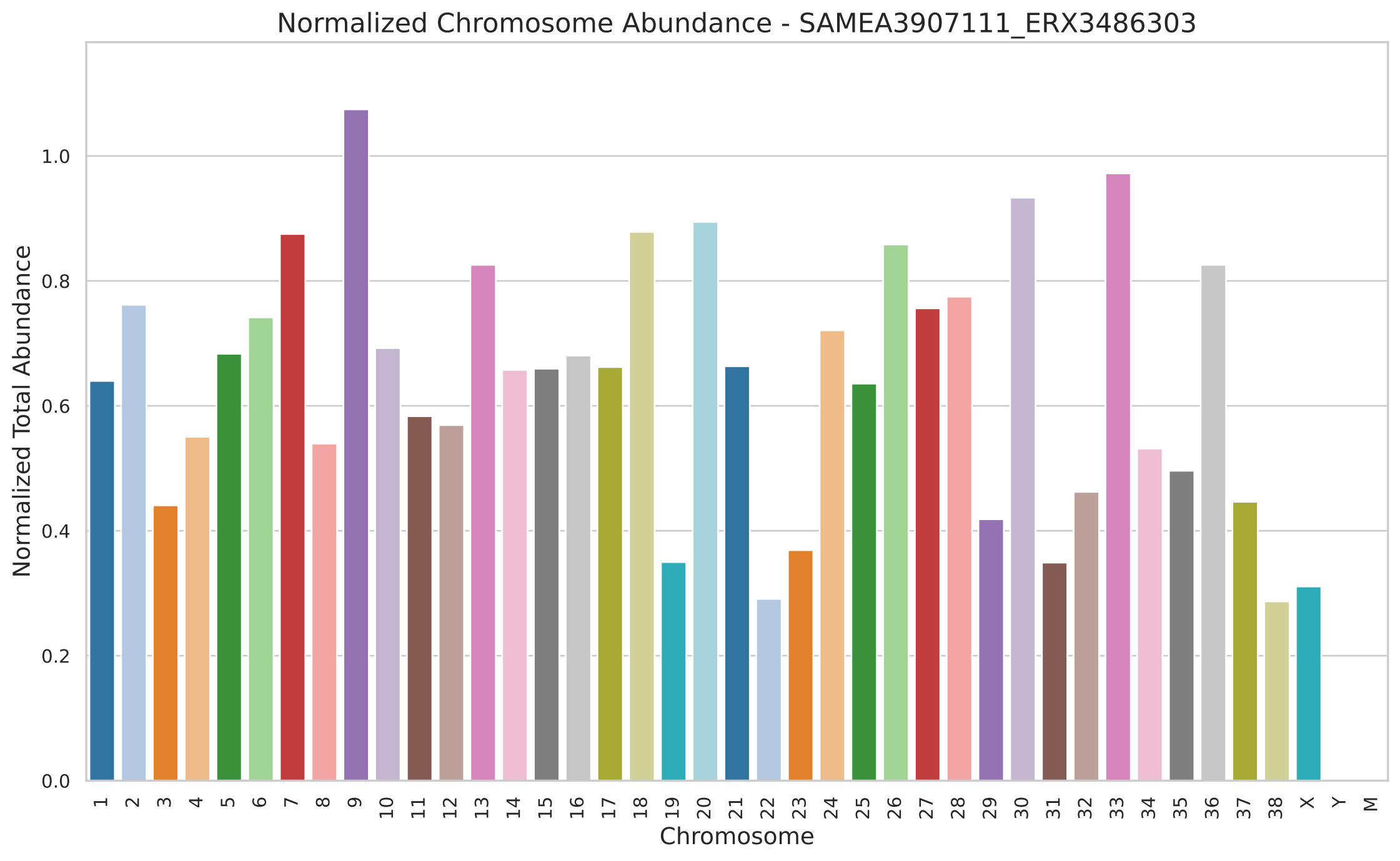

Normalized Chromosome Abundance - SAMEA3907092_ERX3486308
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

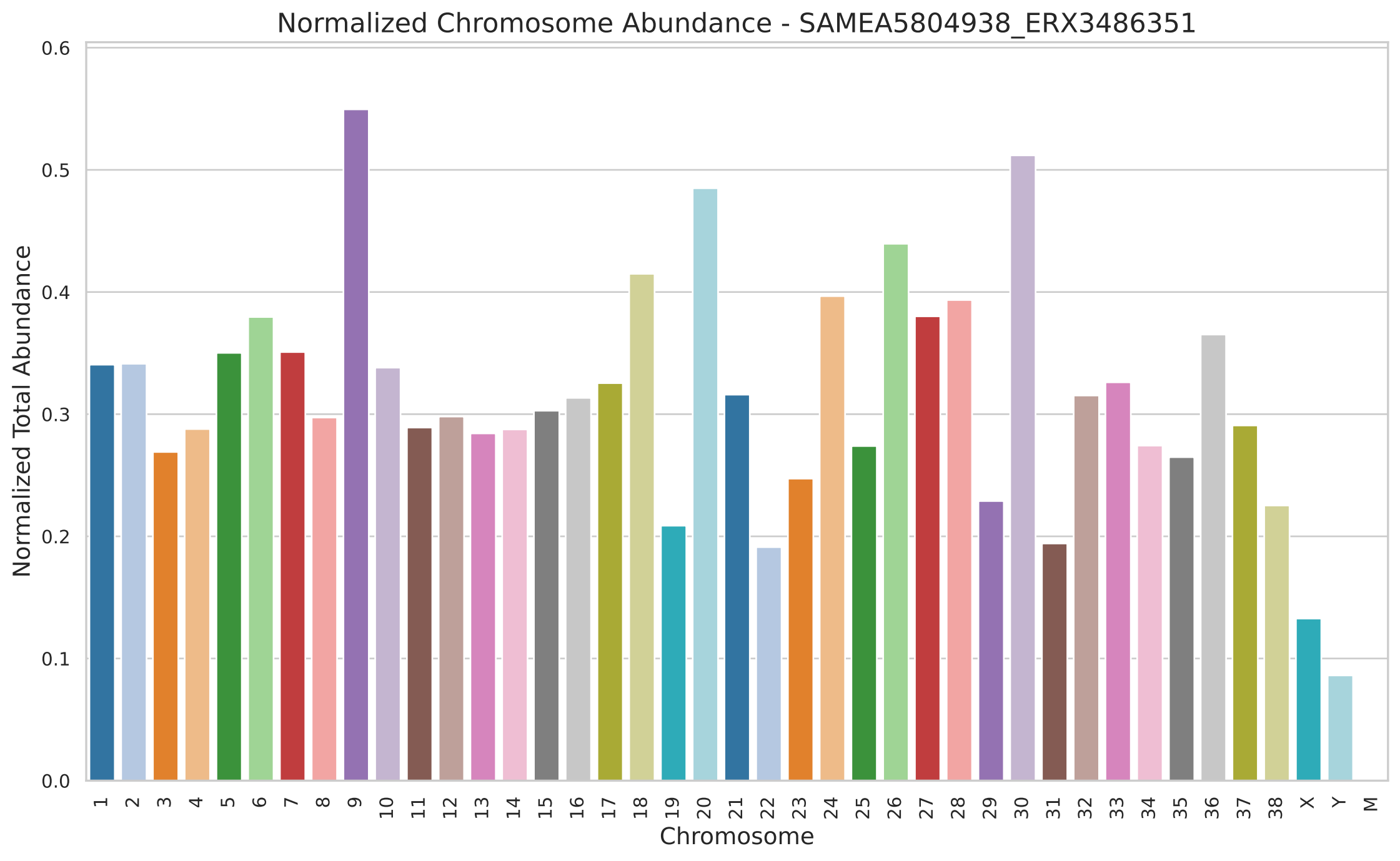

Normalized Chromosome Abundance - SAMEA5805089_ERX3486286
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

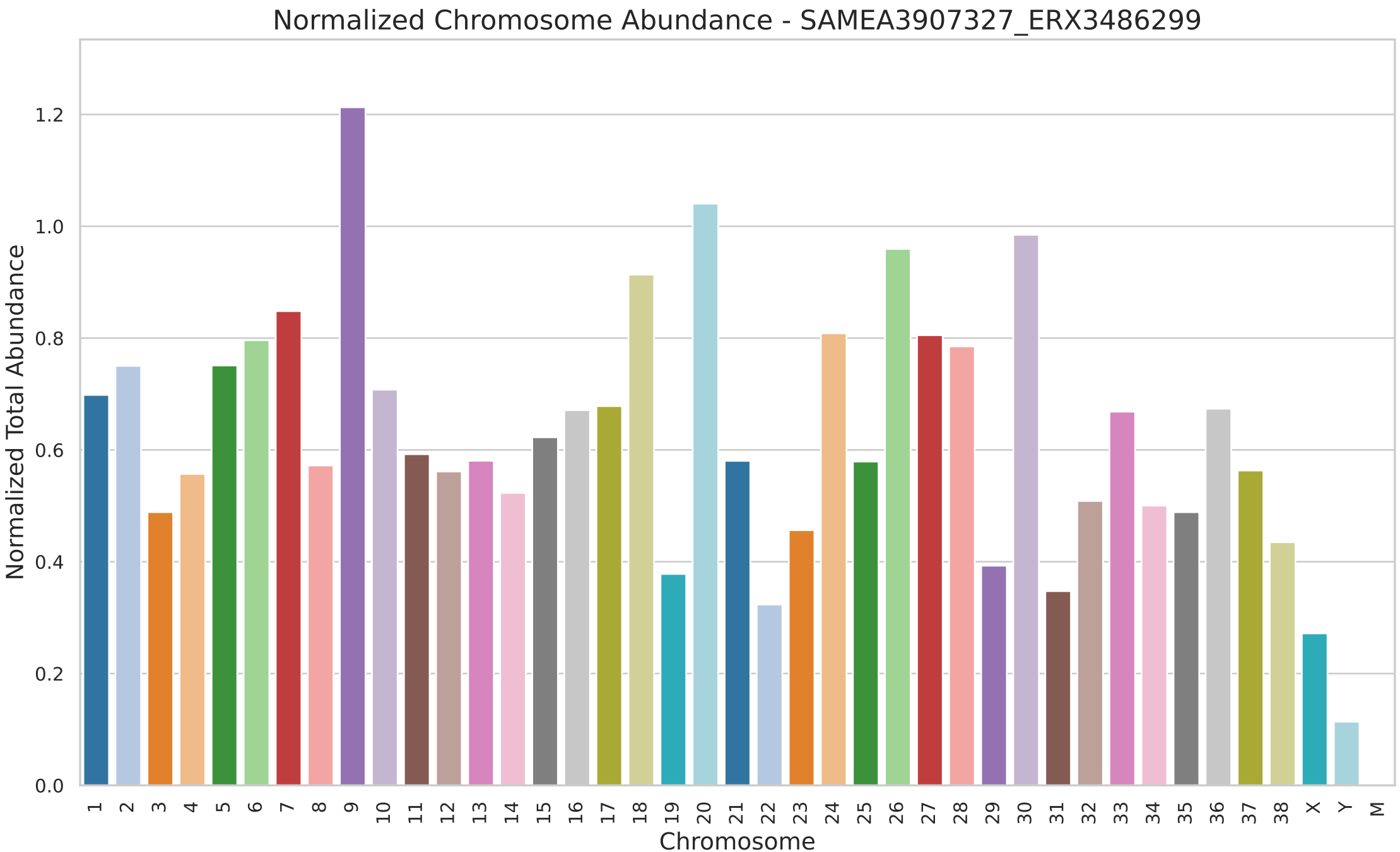

Normalized Chromosome Abundance - SAMEA5804934_ERX3486349
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

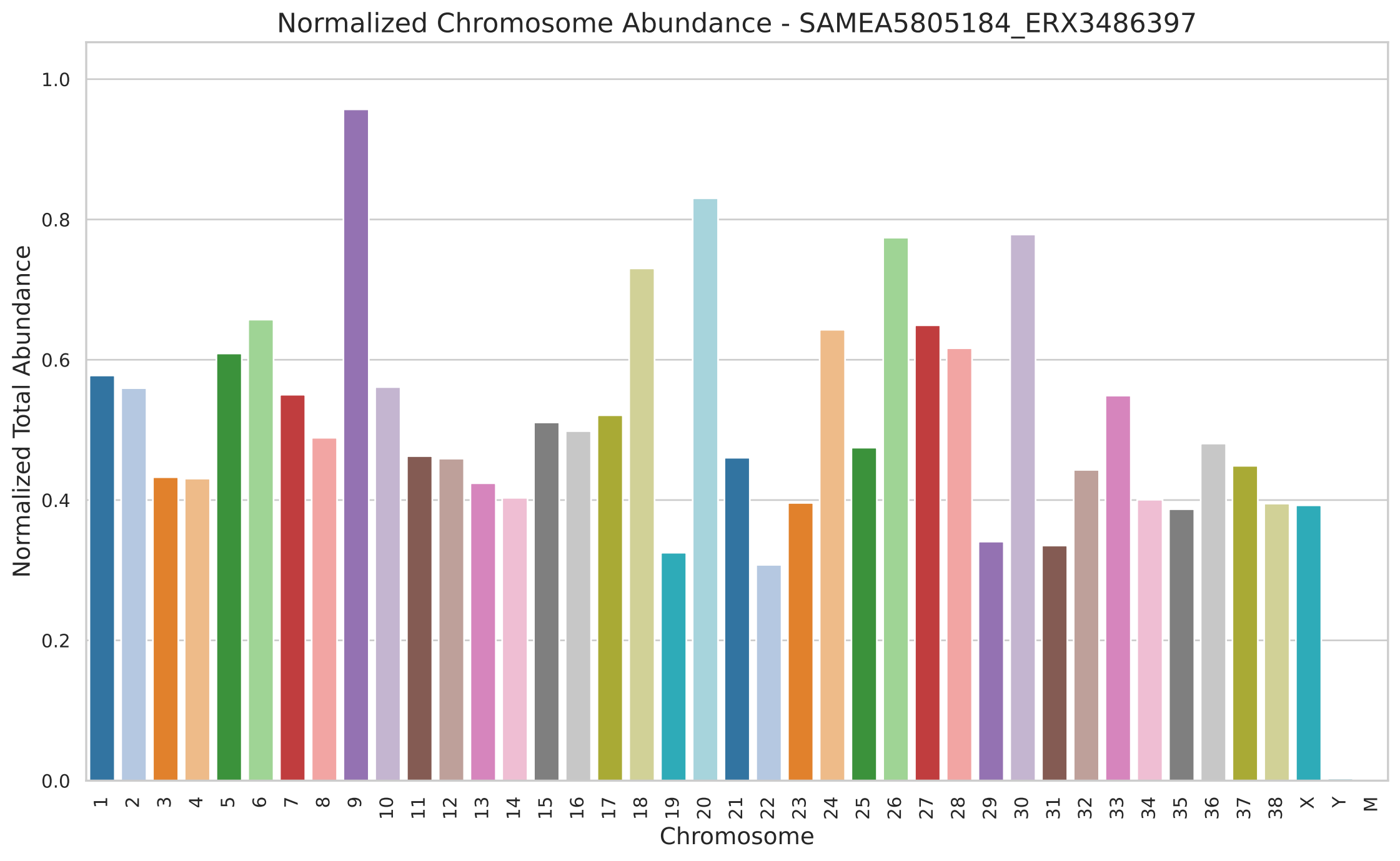

Normalized Chromosome Abundance - SAMEA3906490_ERX3486311
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

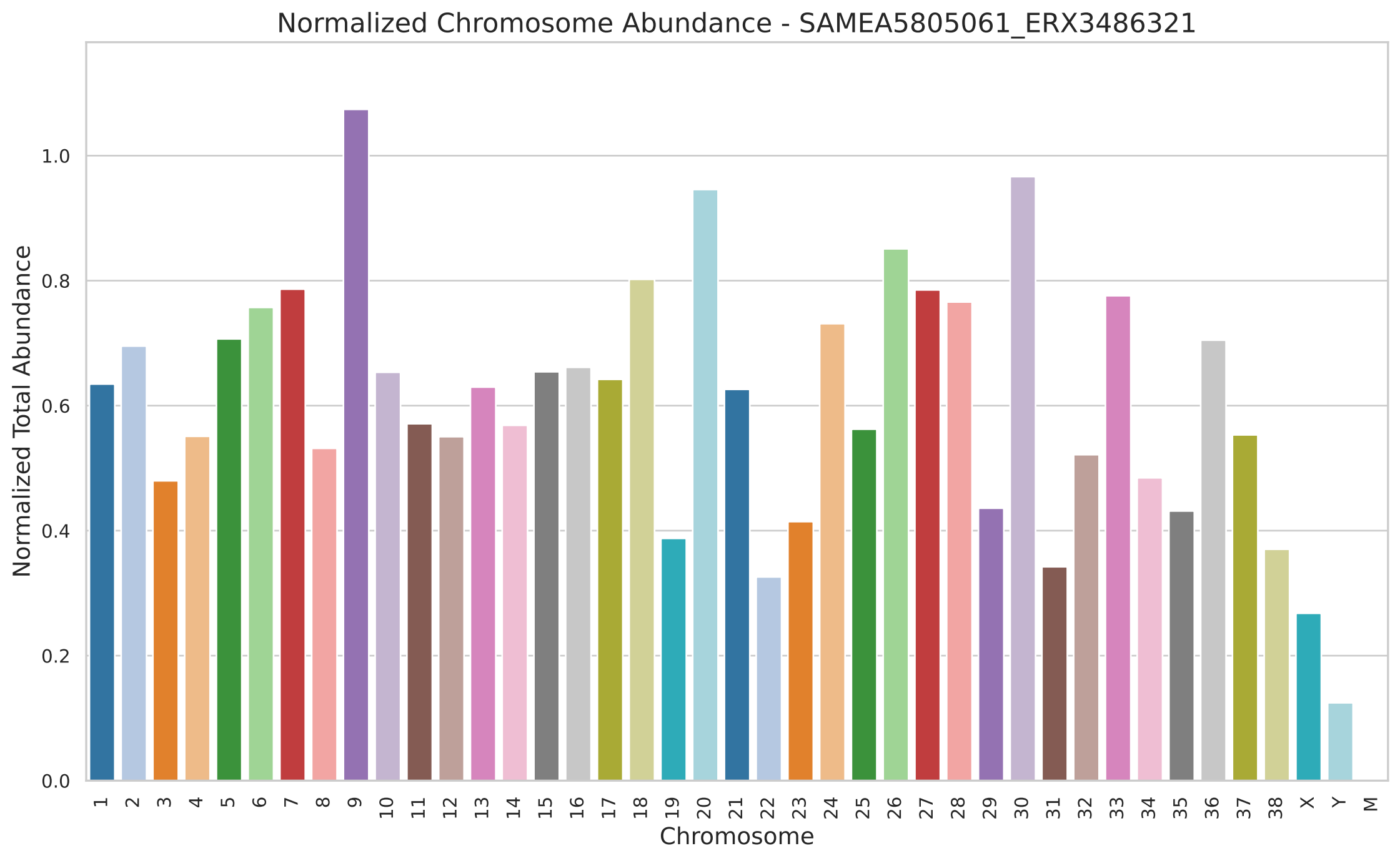

Normalized Chromosome Abundance - SAMEA3907179_ERX3486306
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

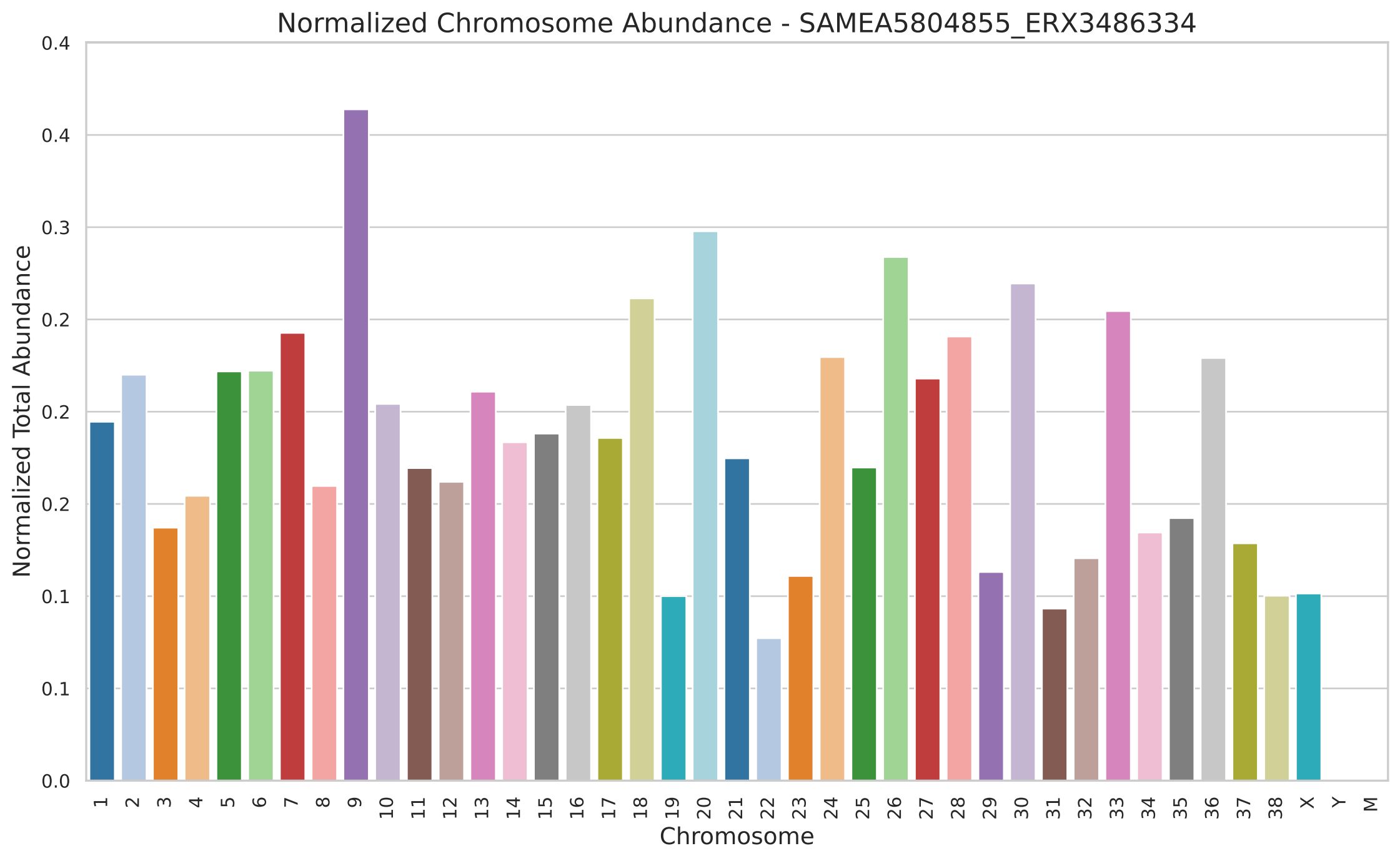

Normalized Chromosome Abundance - SAMEA3907111_ERX3486303
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

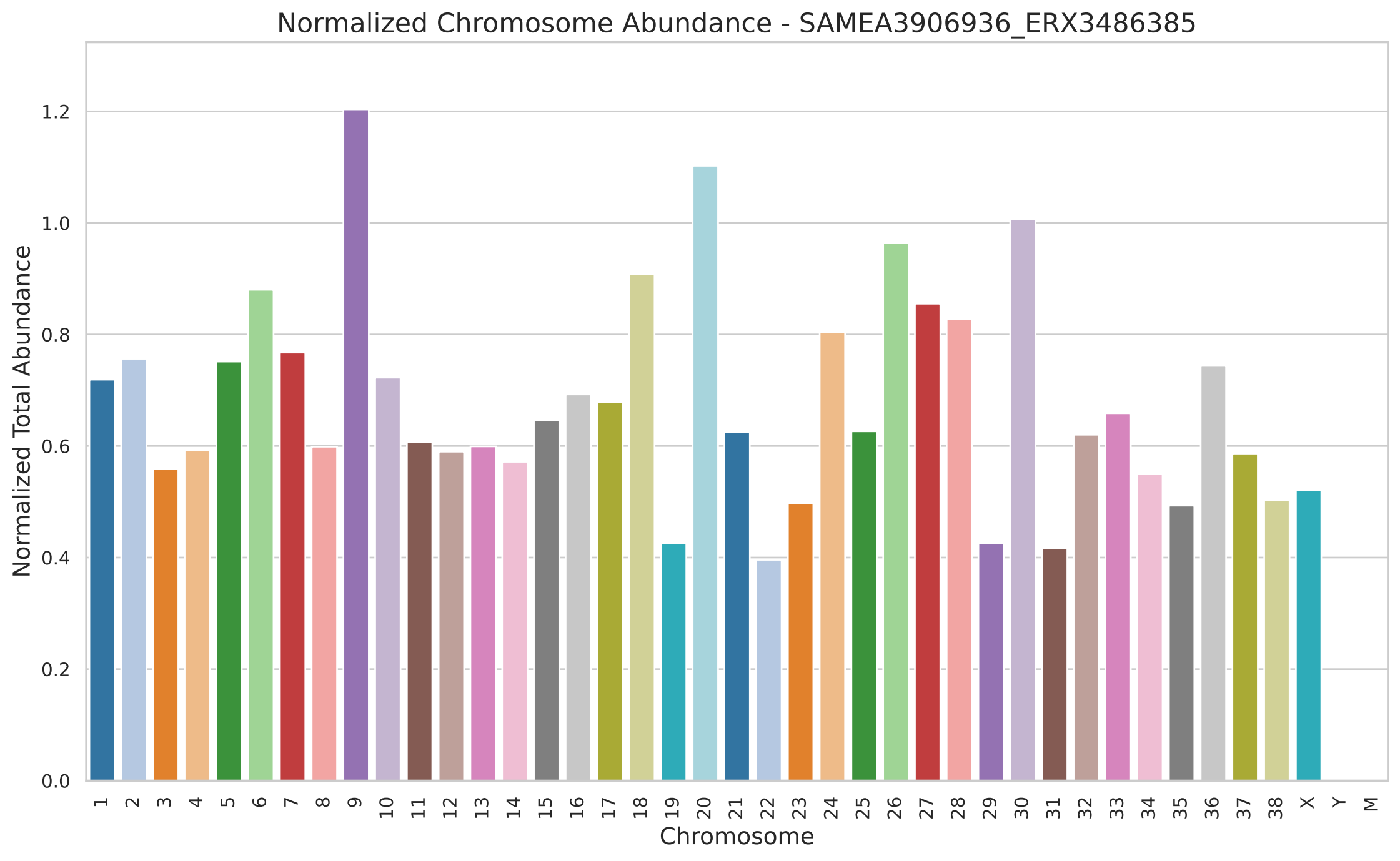

Normalized Chromosome Abundance - SAMEA5804938_ERX3486351
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

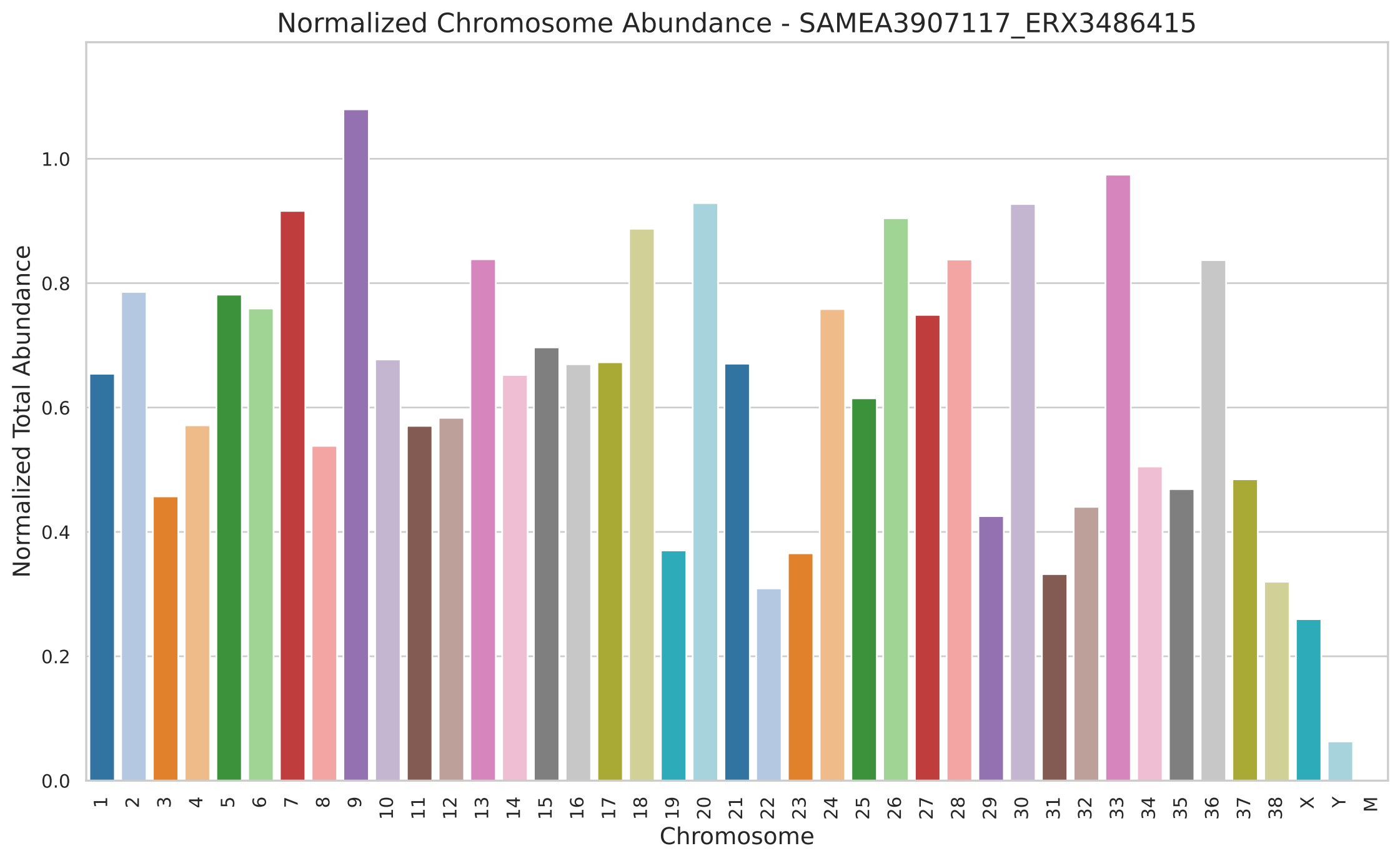

Normalized Chromosome Abundance - SAMEA3907327_ERX3486299
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

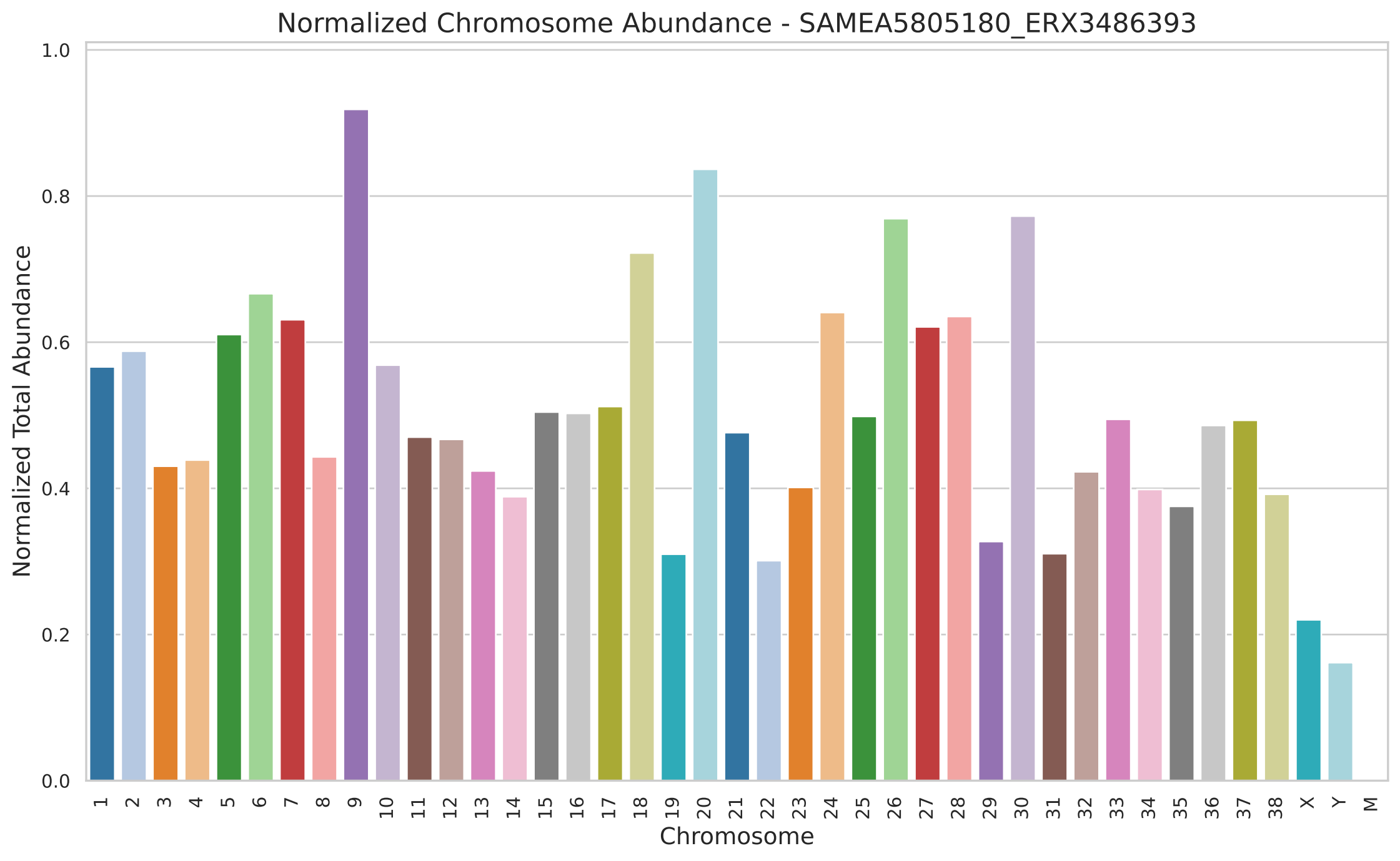

Normalized Chromosome Abundance - SAMEA5805184_ERX3486397
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

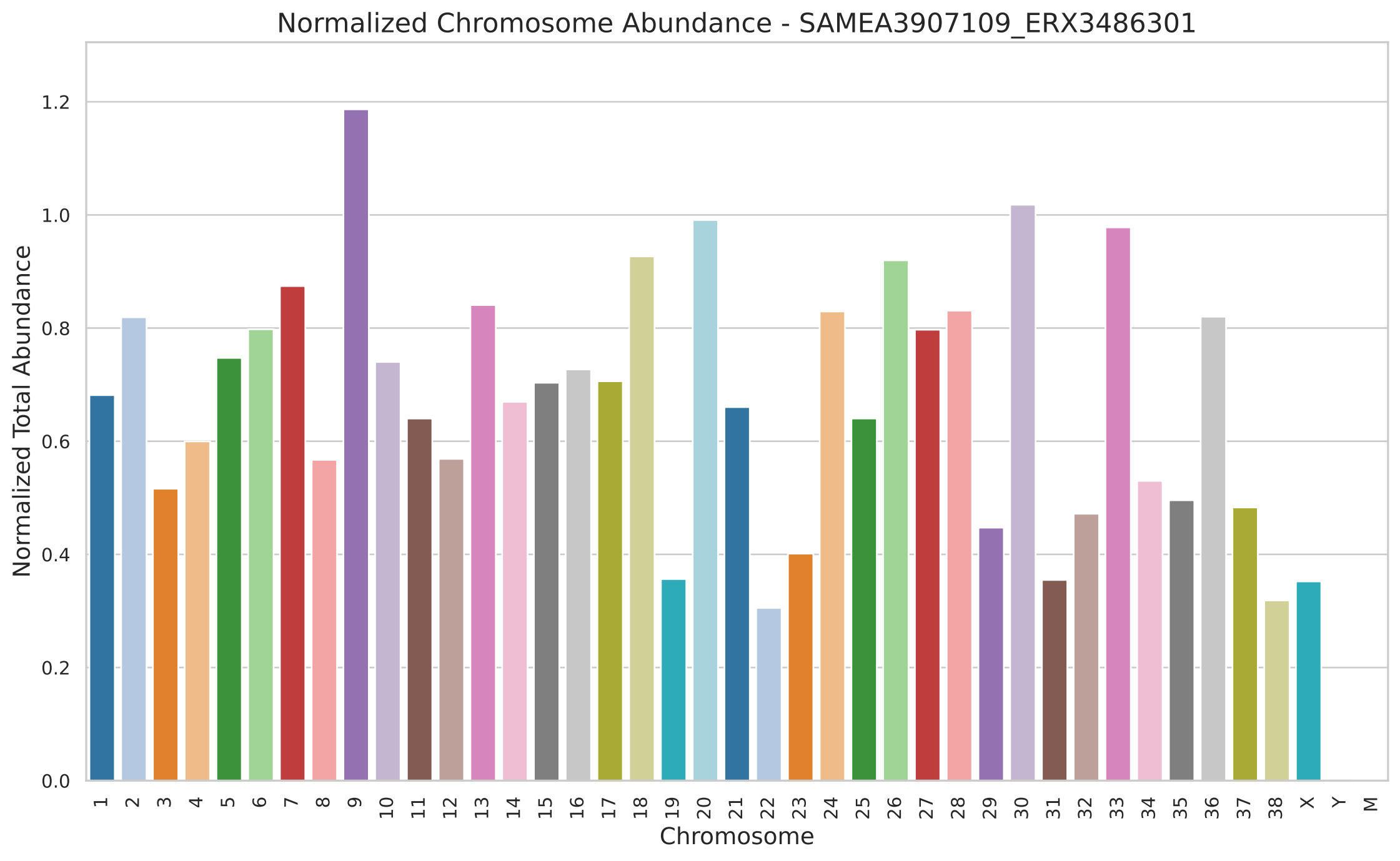

Normalized Chromosome Abundance - SAMEA5805061_ERX3486321
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

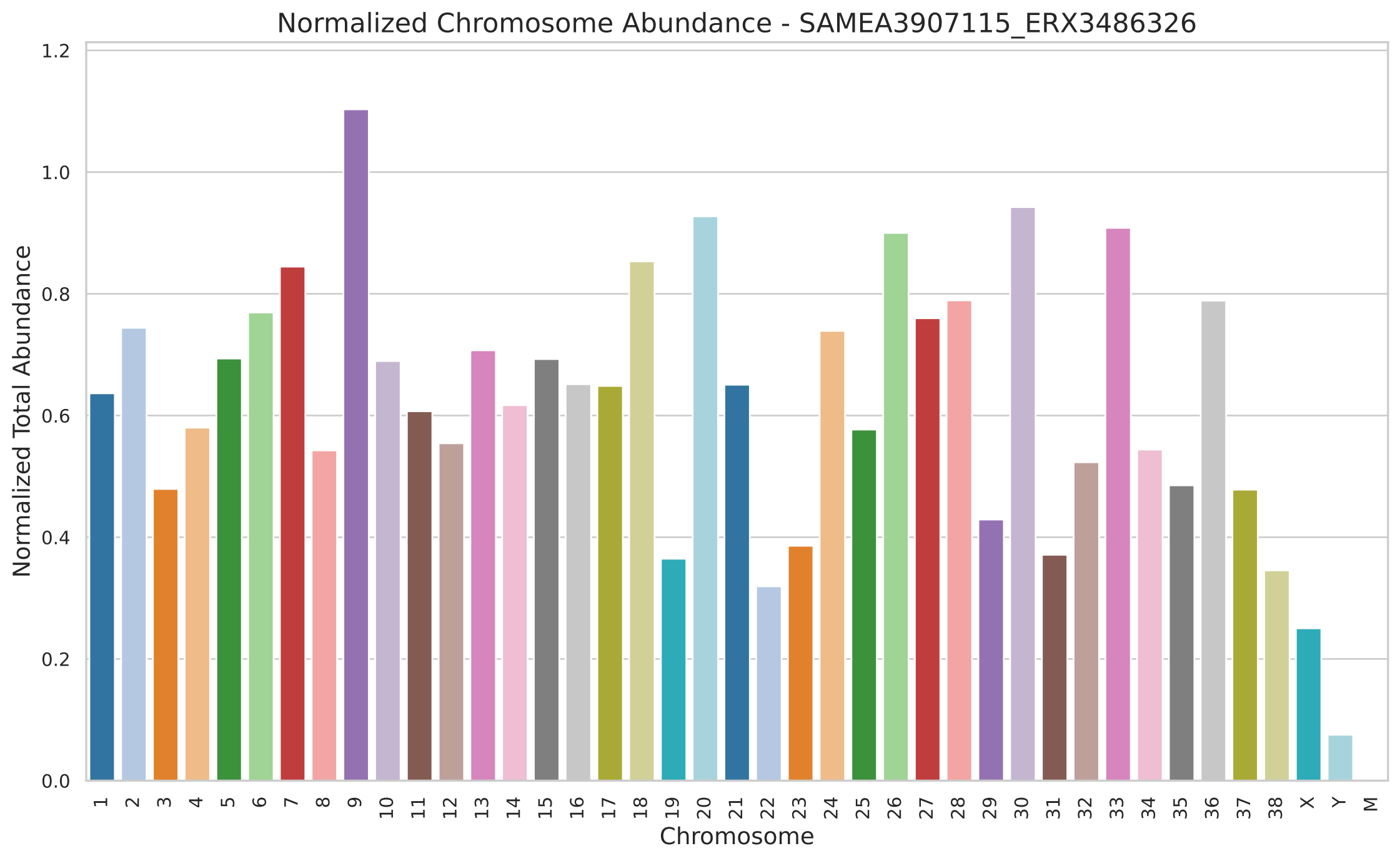

Normalized Chromosome Abundance - SAMEA5804855_ERX3486334
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
0.4
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

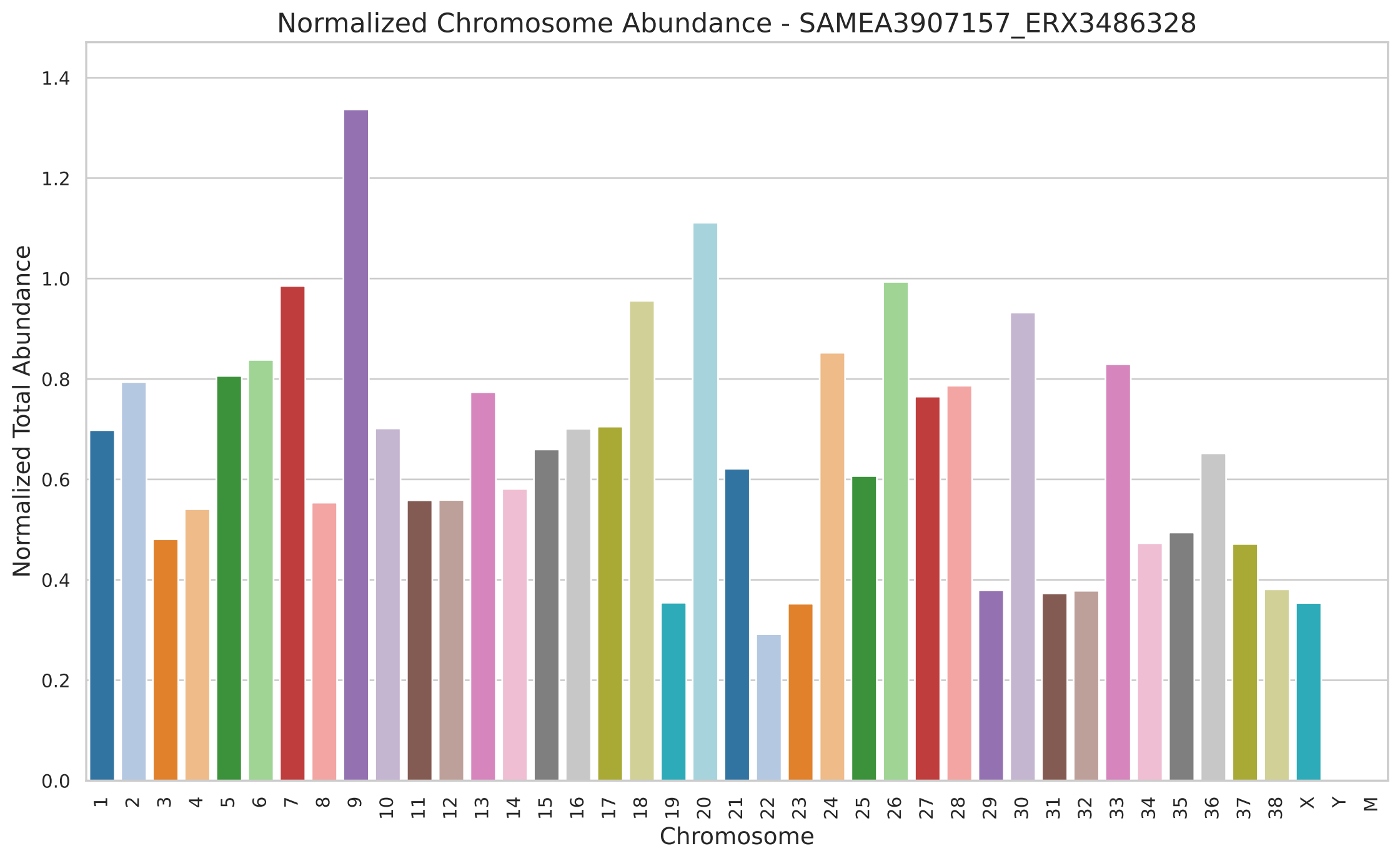

Normalized Chromosome Abundance - SAMEA3906936_ERX3486385
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

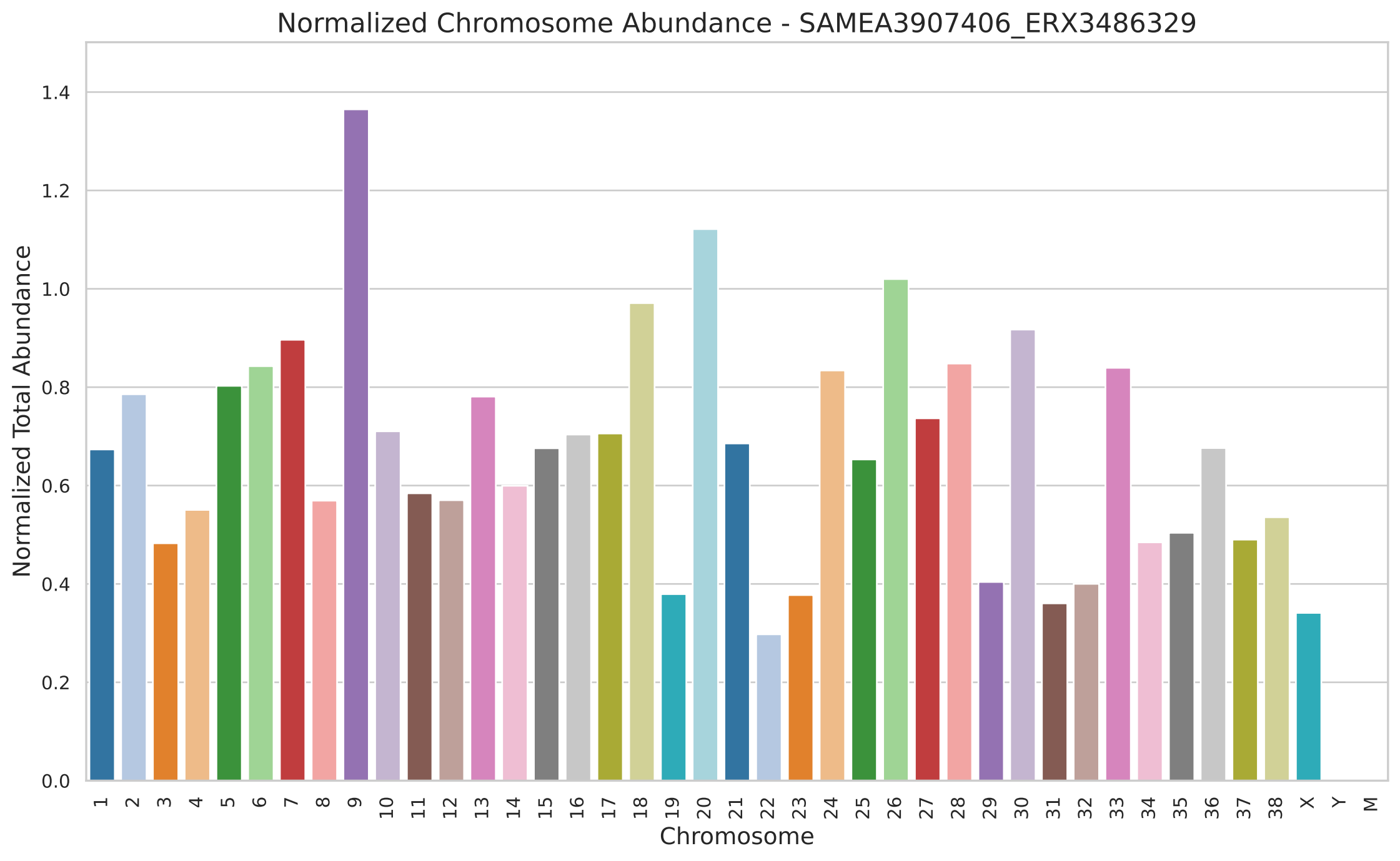

Normalized Chromosome Abundance - SAMEA3907117_ERX3486415
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

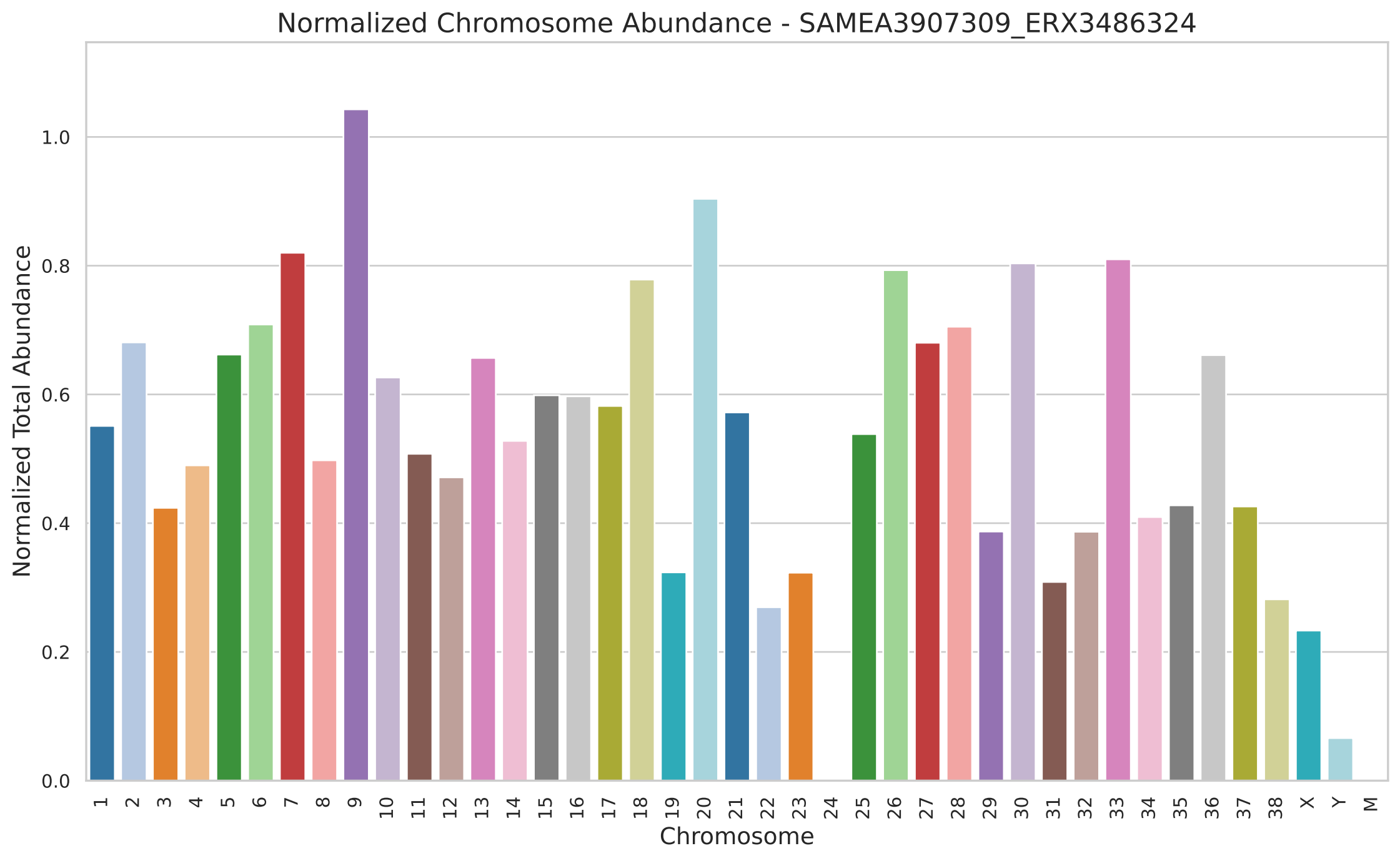

Normalized Chromosome Abundance - SAMEA5805180_ERX3486393
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

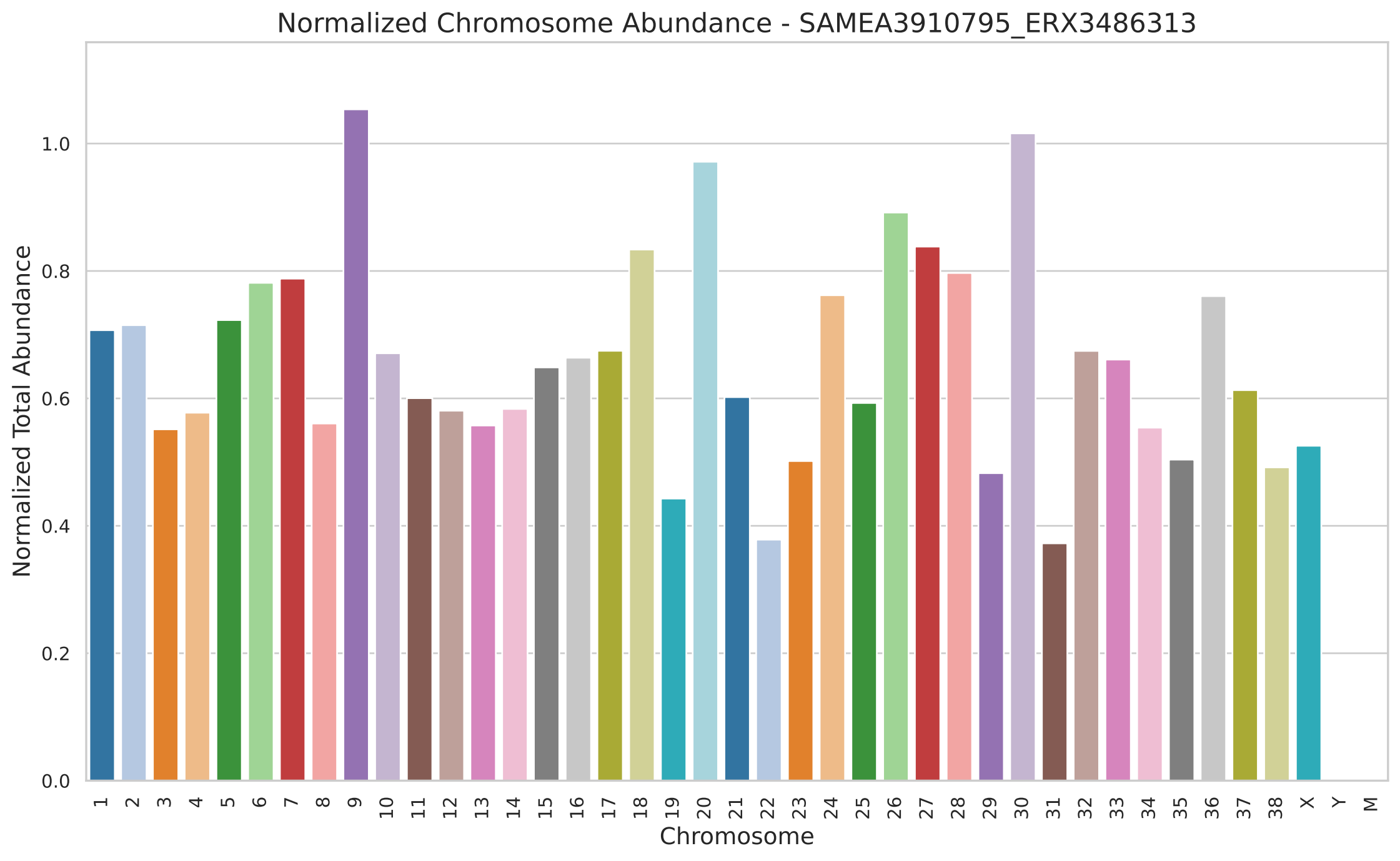

Normalized Chromosome Abundance - SAMEA3907109_ERX3486301
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

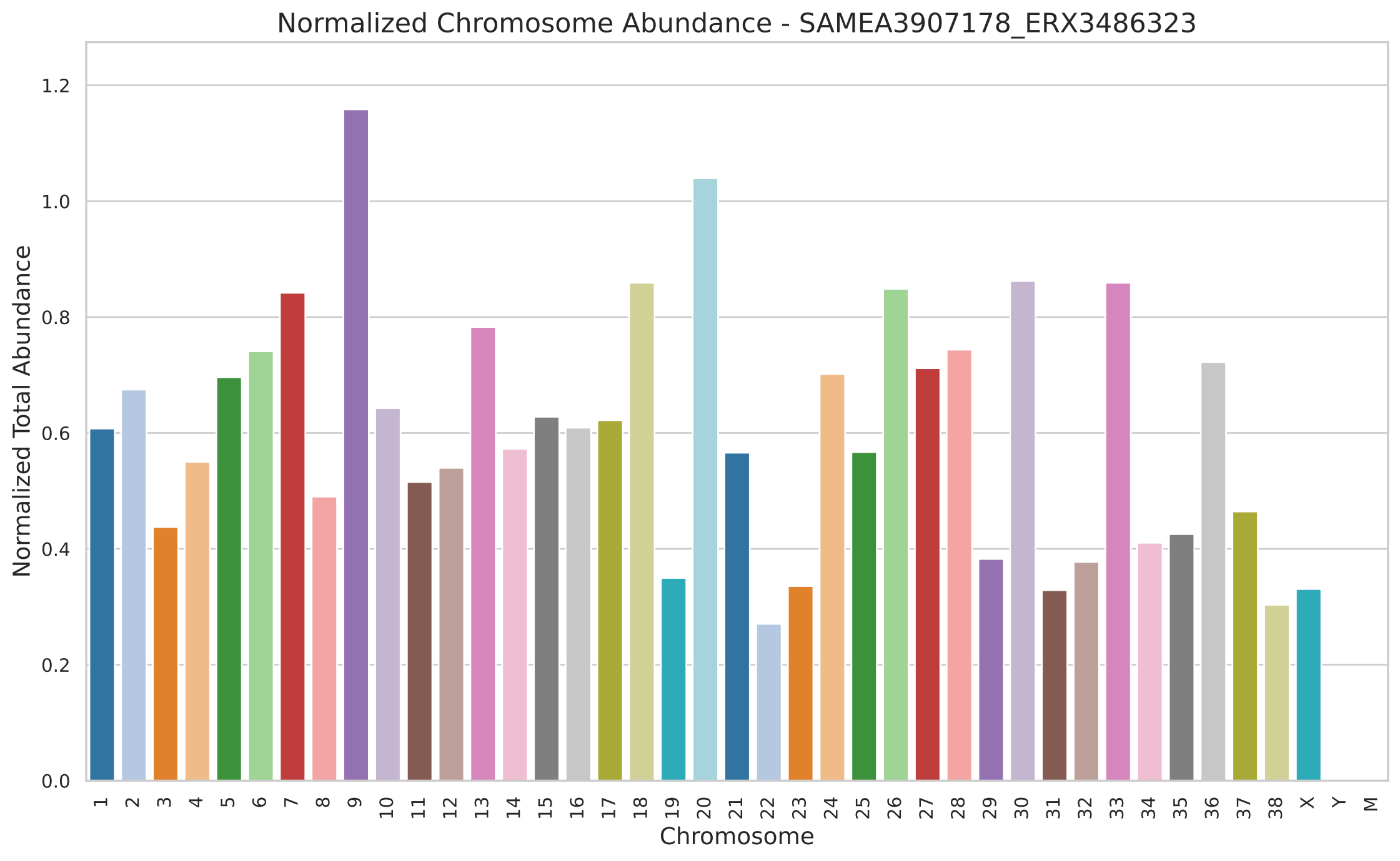

Normalized Chromosome Abundance - SAMEA3907115_ERX3486326
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

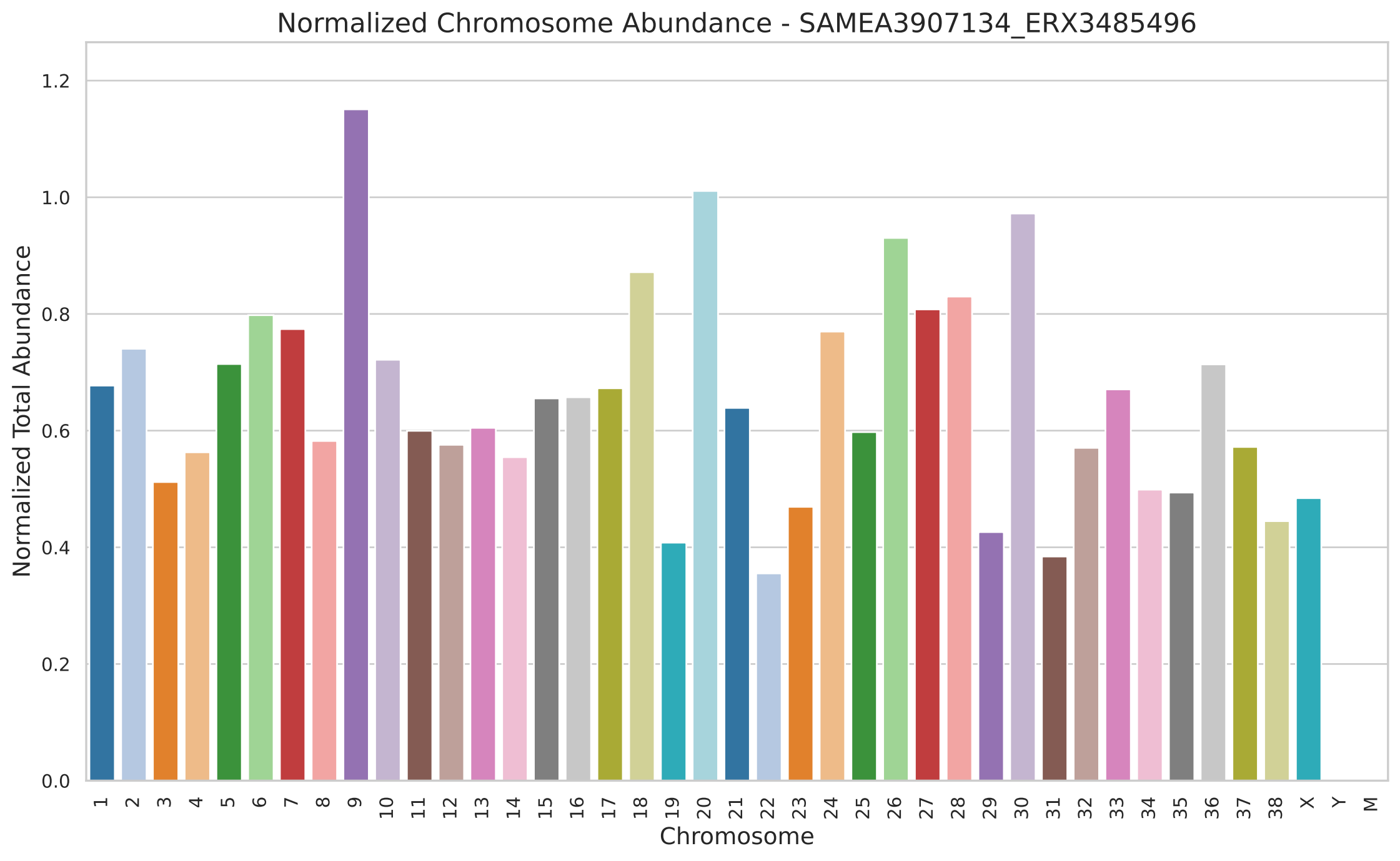

Normalized Chromosome Abundance - SAMEA3907157_ERX3486328
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

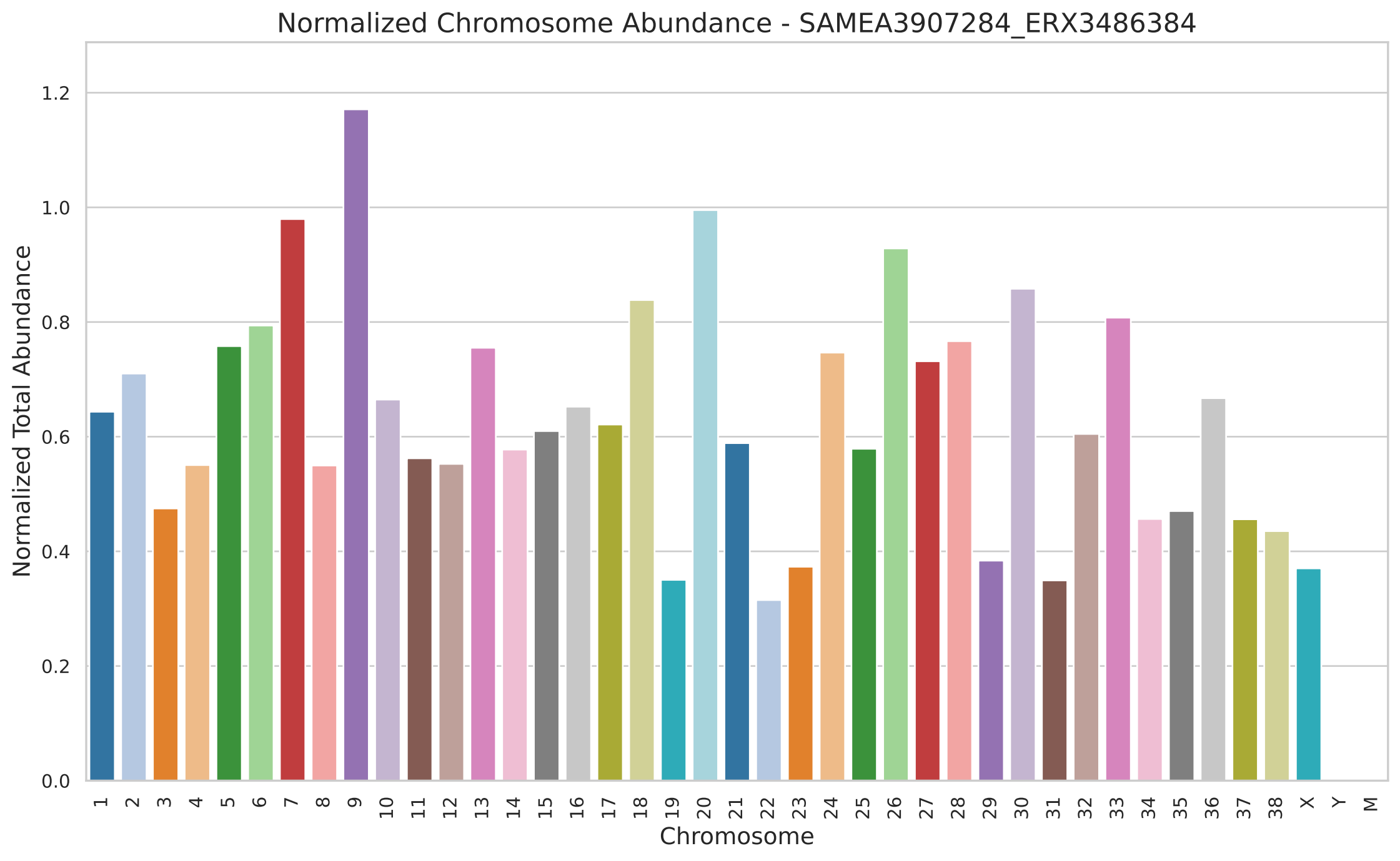

Normalized Chromosome Abundance - SAMEA3907406_ERX3486329
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

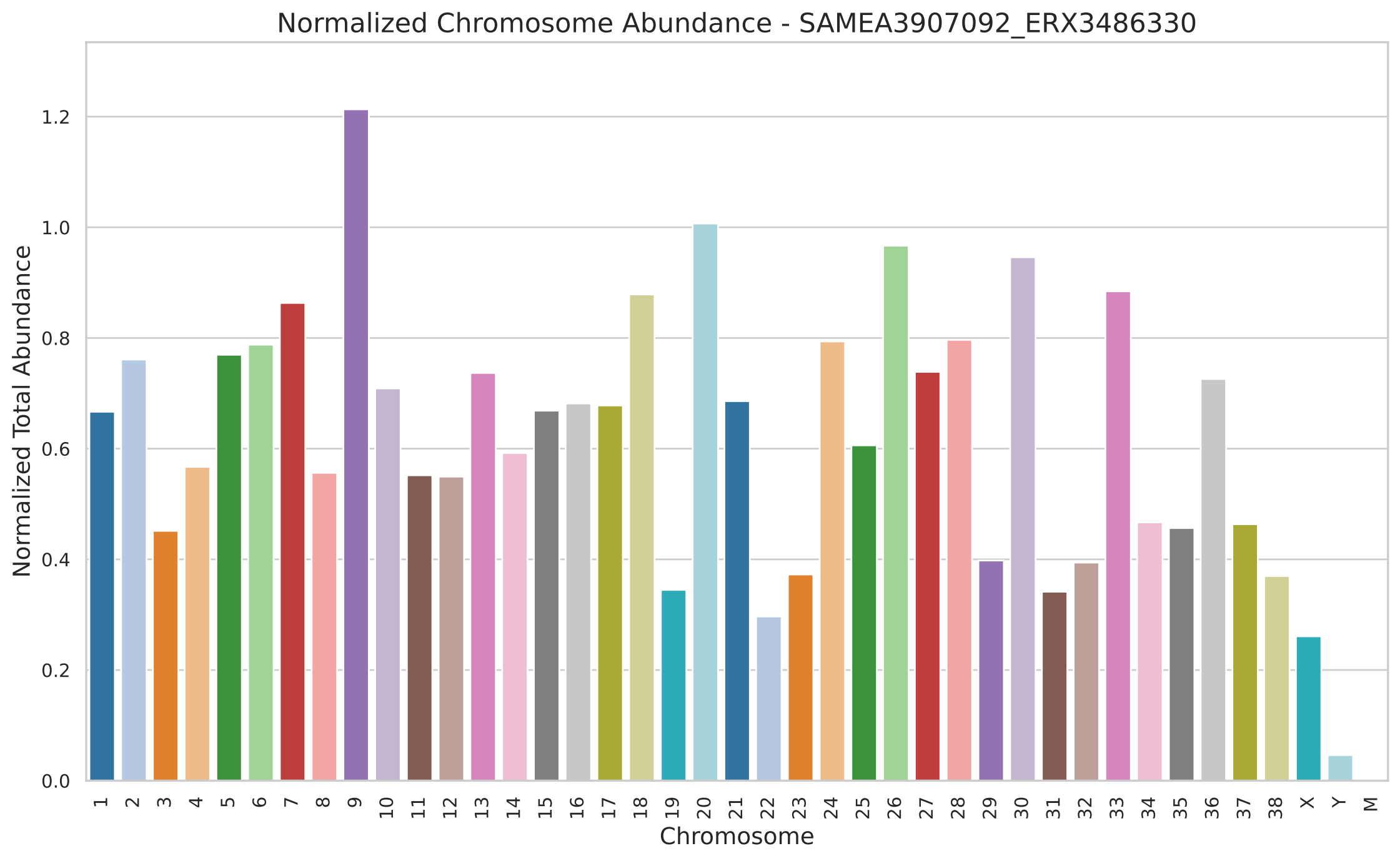

Normalized Chromosome Abundance - SAMEA3907309_ERX3486324
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

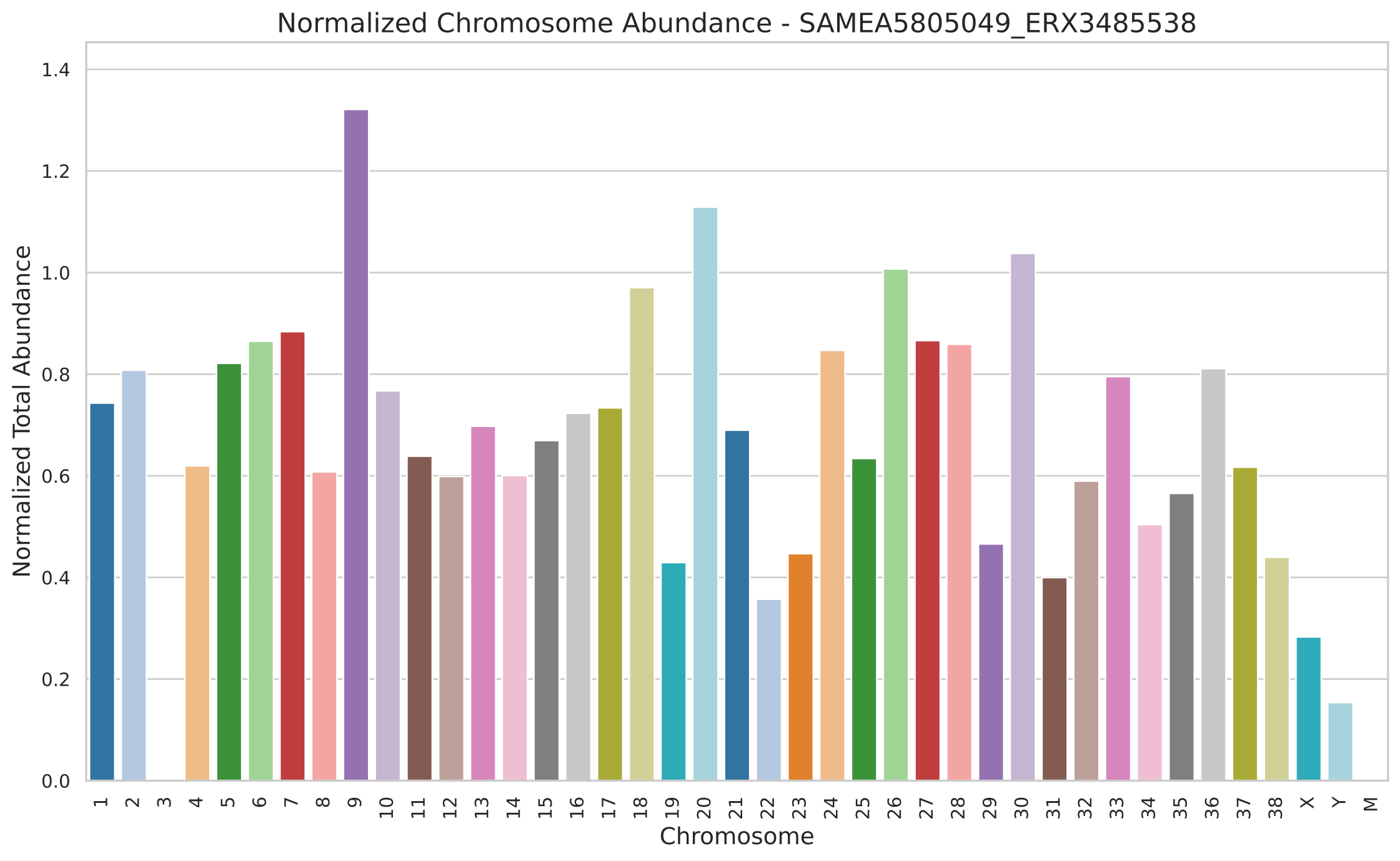

Normalized Chromosome Abundance - SAMEA3910795_ERX3486313
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

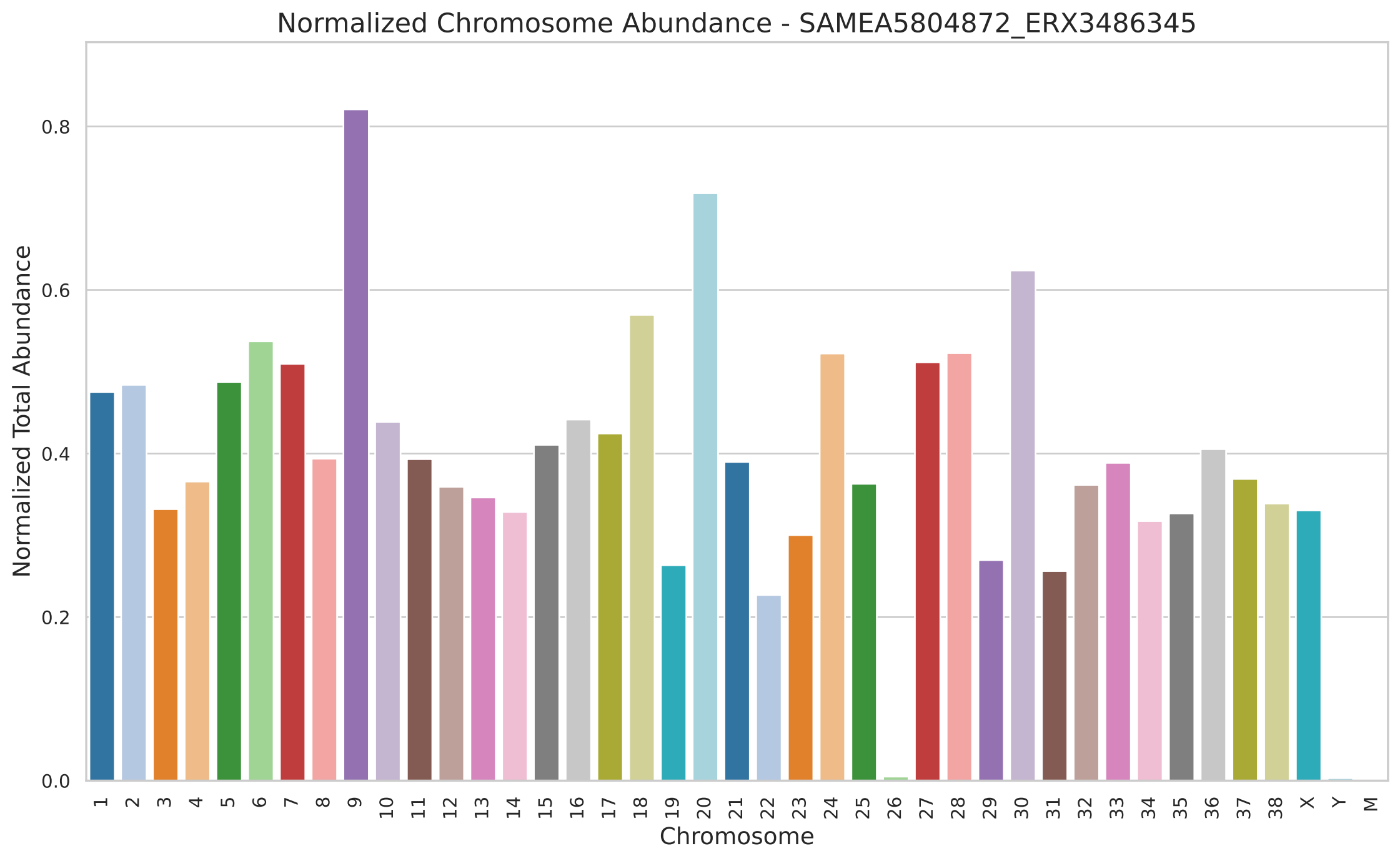

Normalized Chromosome Abundance - SAMEA3907178_ERX3486323
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

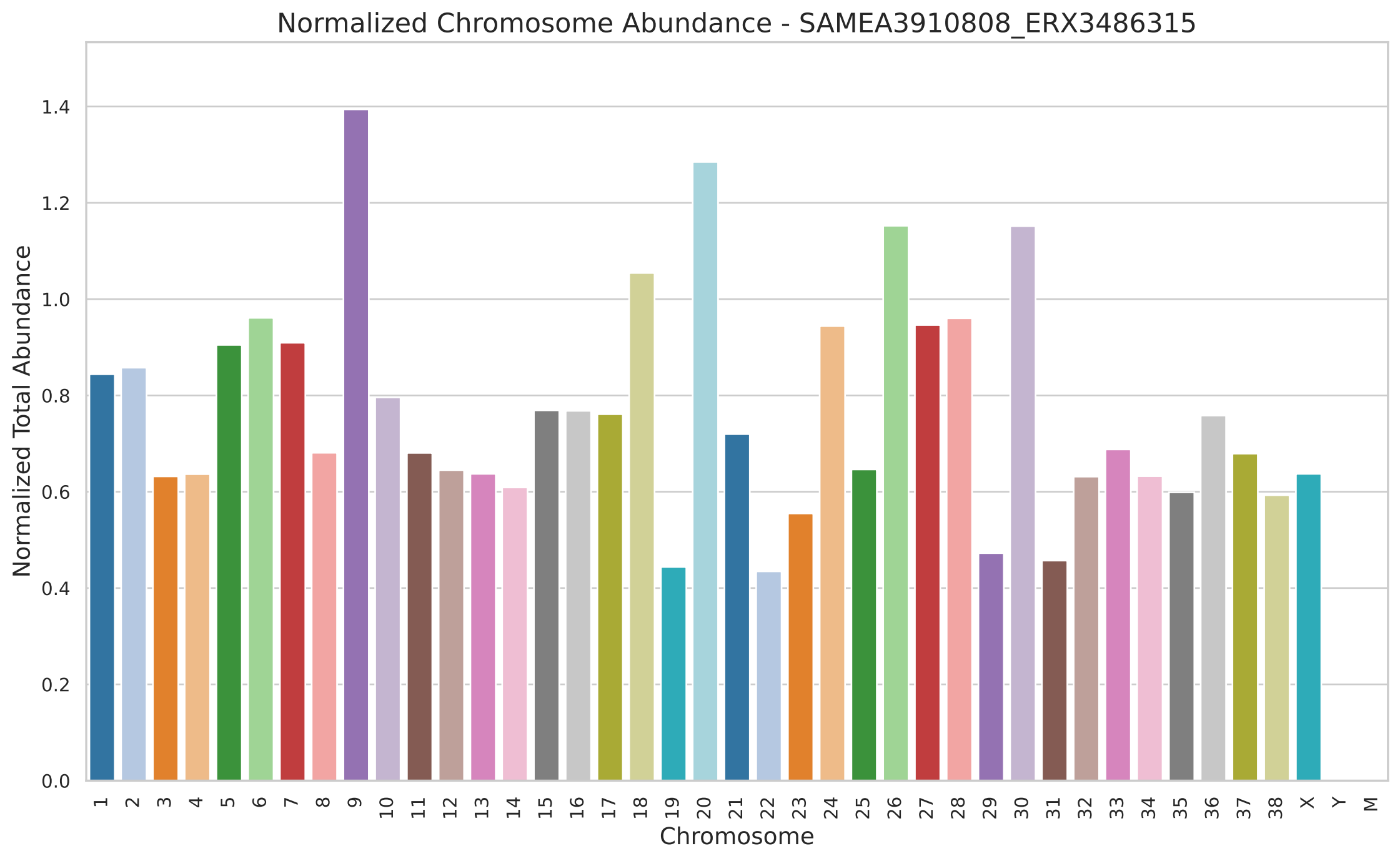

Normalized Chromosome Abundance - SAMEA3907134_ERX3485496
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

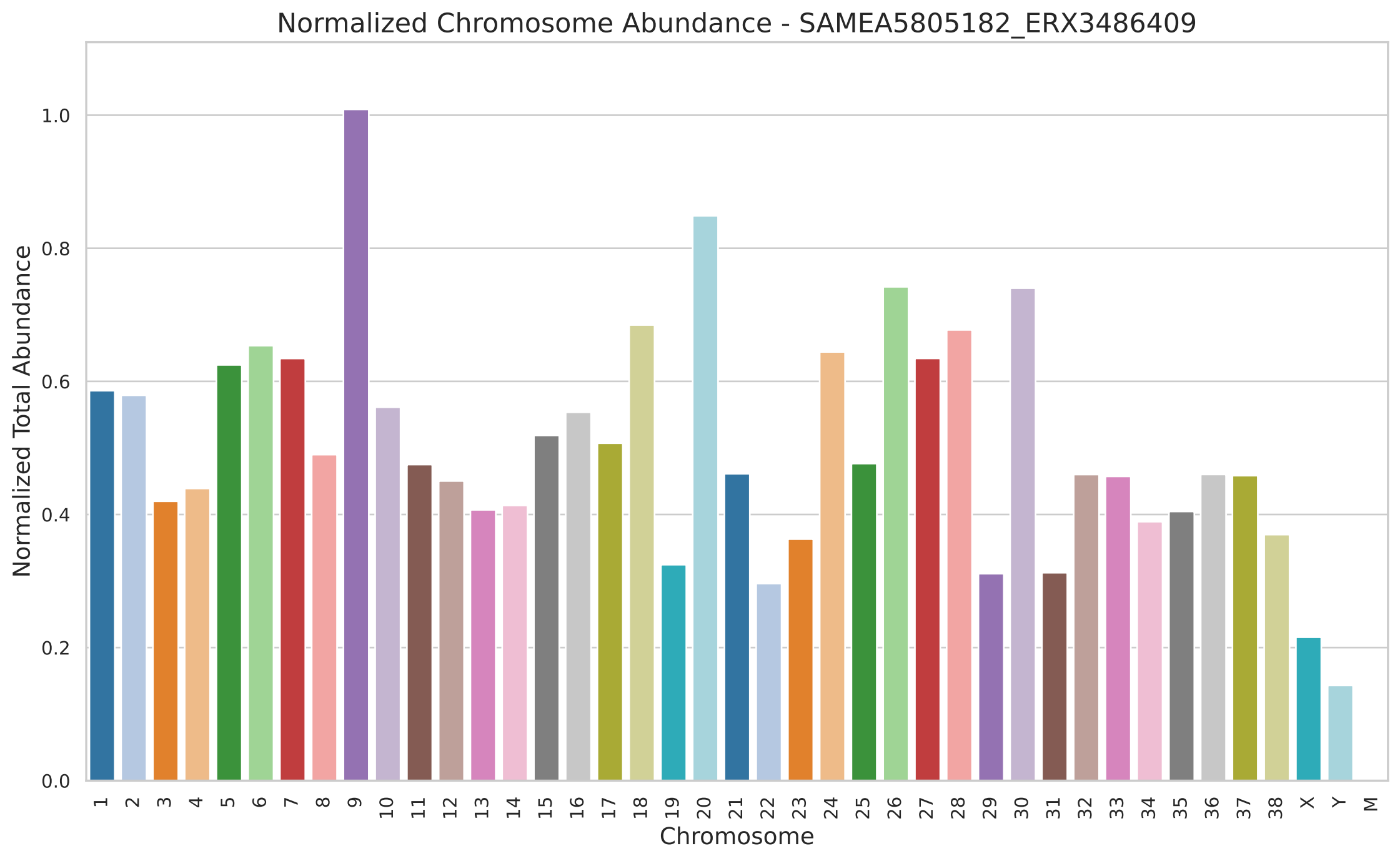

Normalized Chromosome Abundance - SAMEA3907284_ERX3486384
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

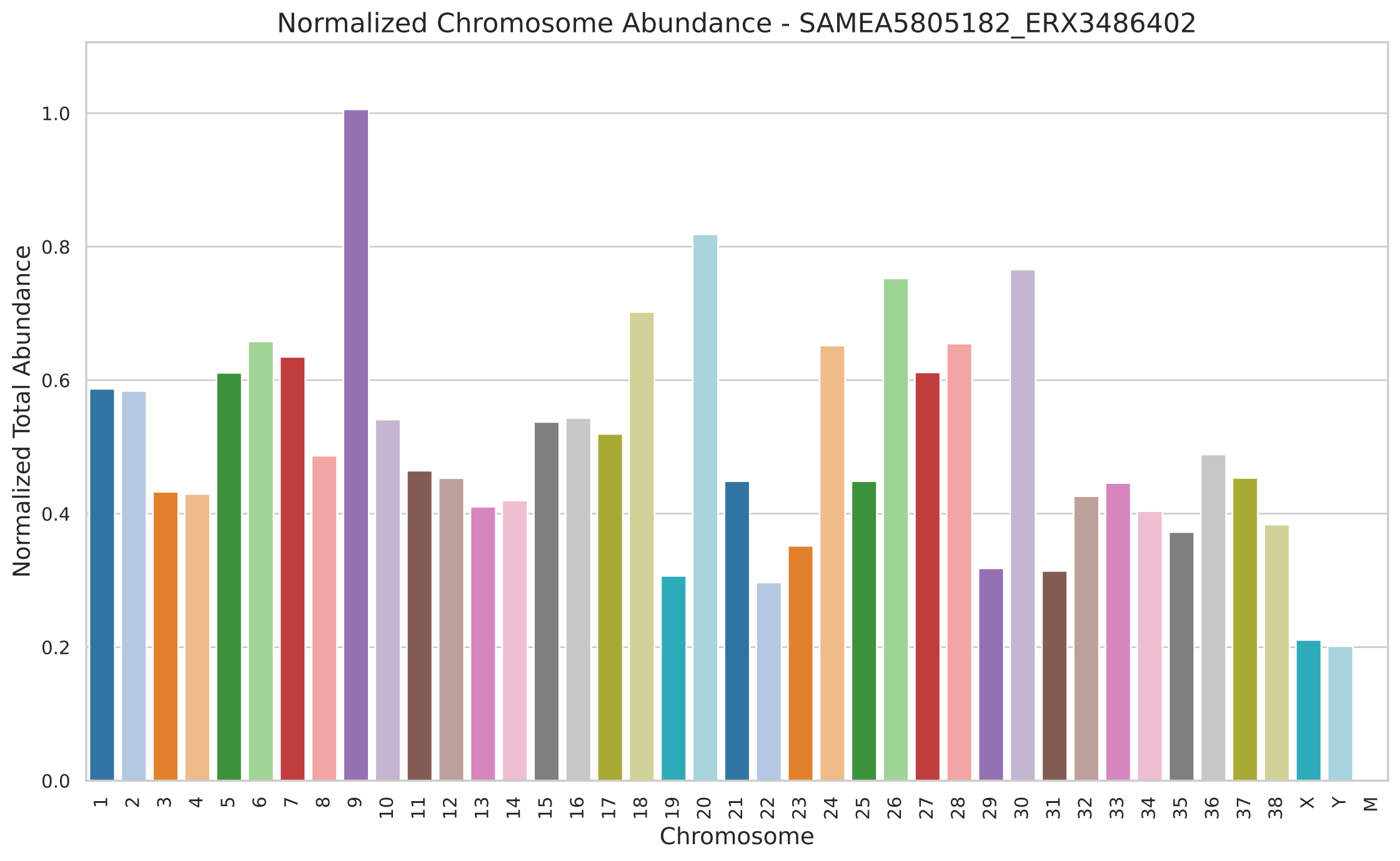

Normalized Chromosome Abundance - SAMEA3907092_ERX3486330
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

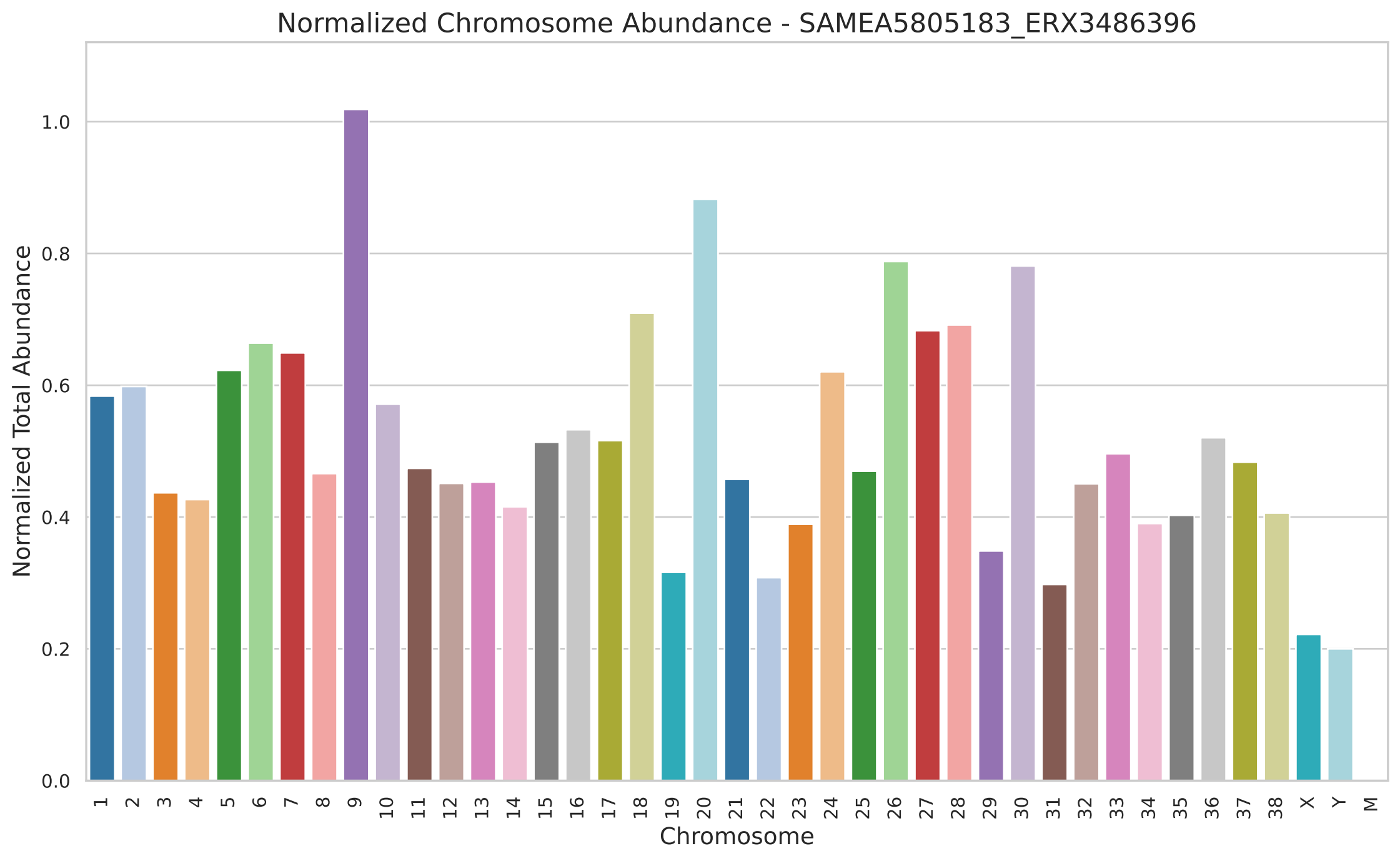

Normalized Chromosome Abundance - SAMEA5805049_ERX3485538
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

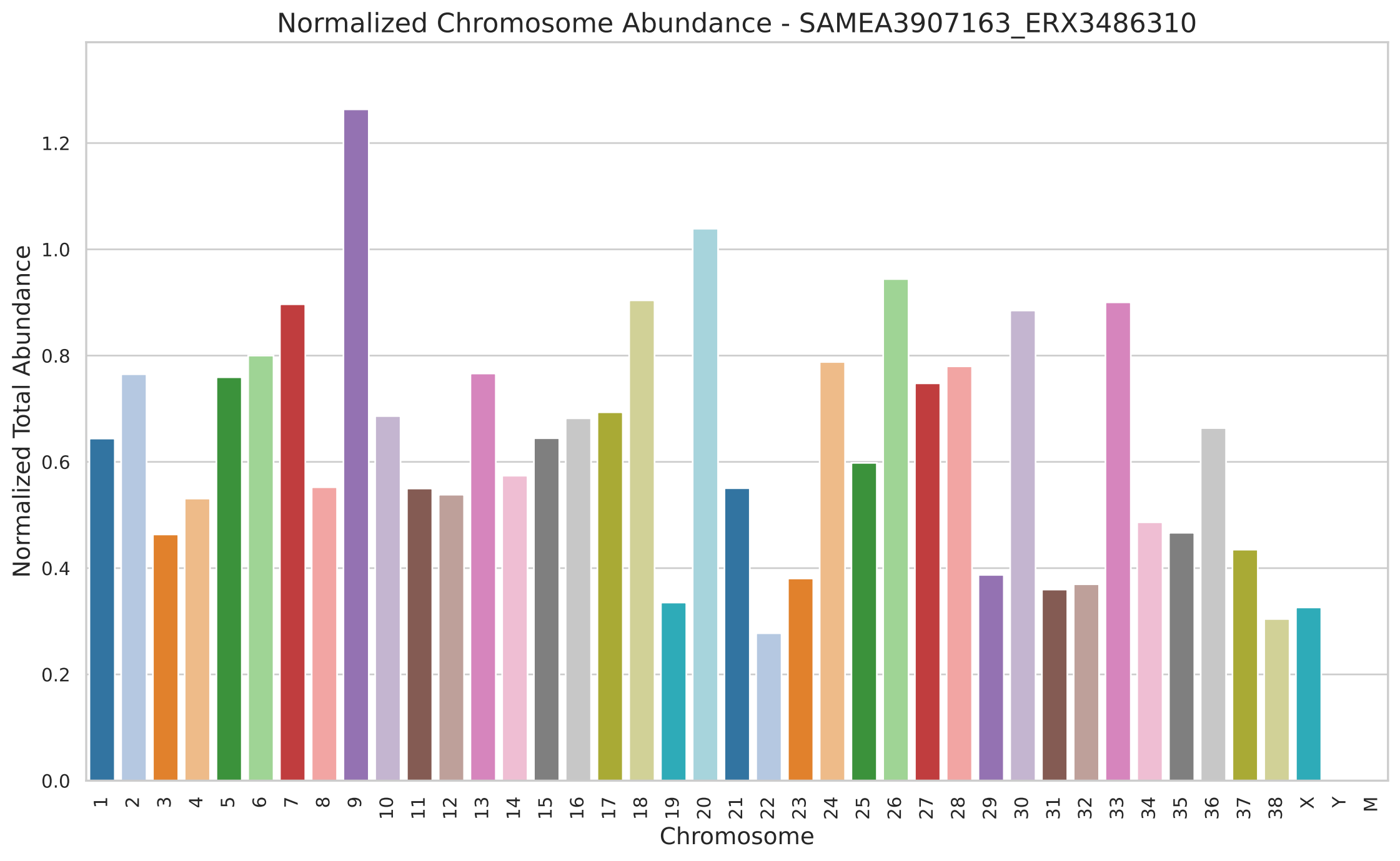

Normalized Chromosome Abundance - SAMEA5804872_ERX3486345
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

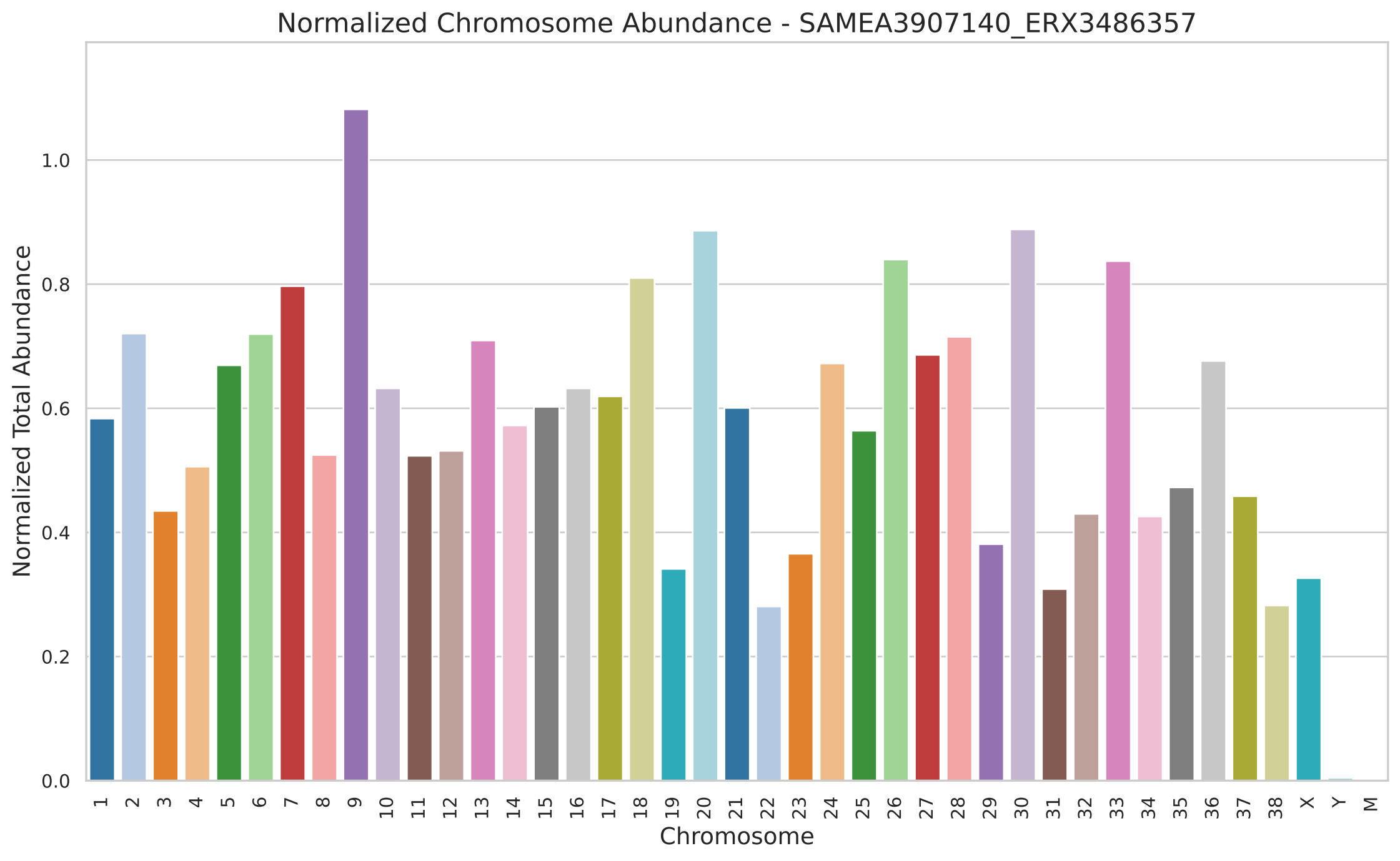

Normalized Chromosome Abundance - SAMEA3910808_ERX3486315
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

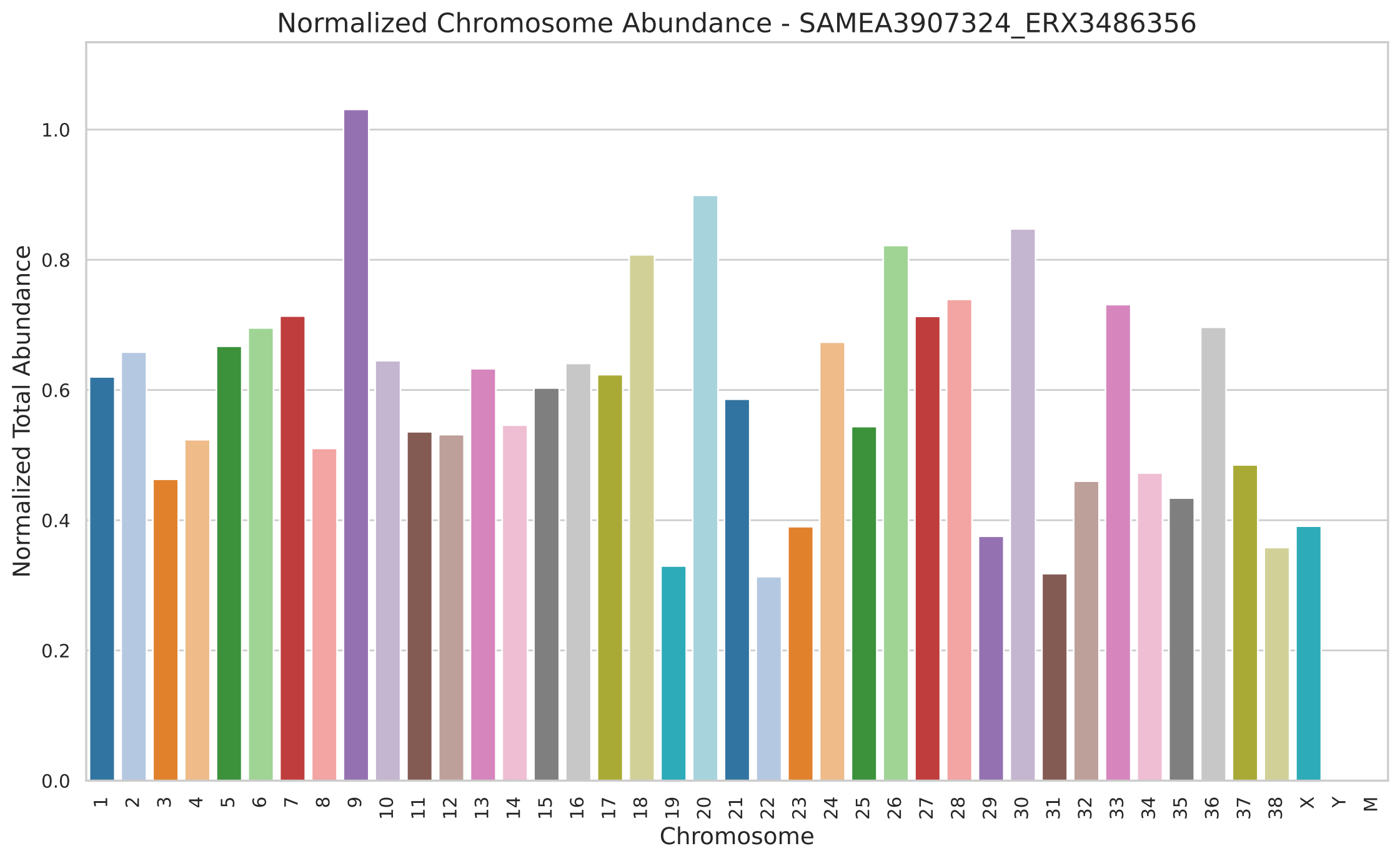

Normalized Chromosome Abundance - SAMEA5805182_ERX3486409
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

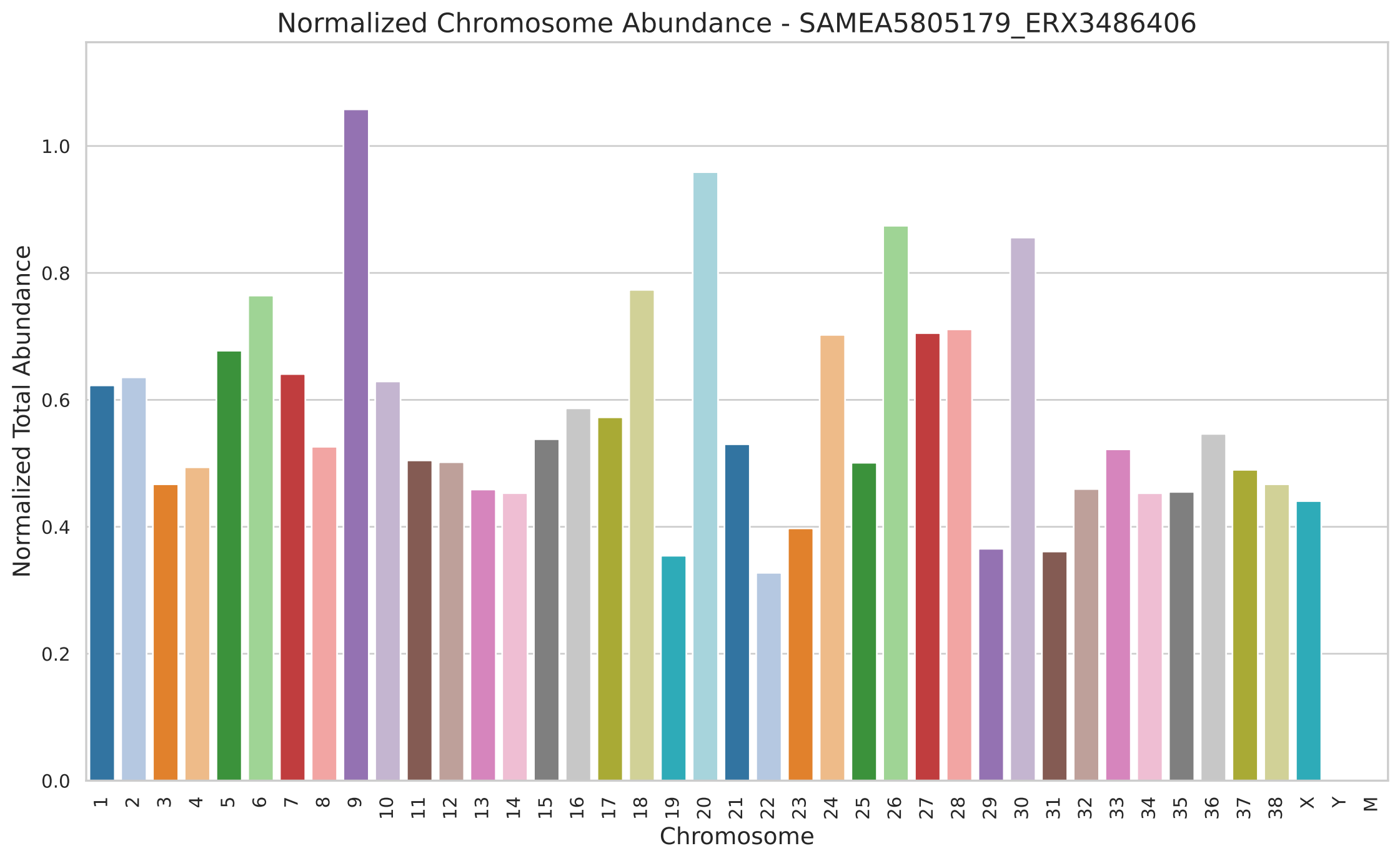

Normalized Chromosome Abundance - SAMEA5805182_ERX3486402
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

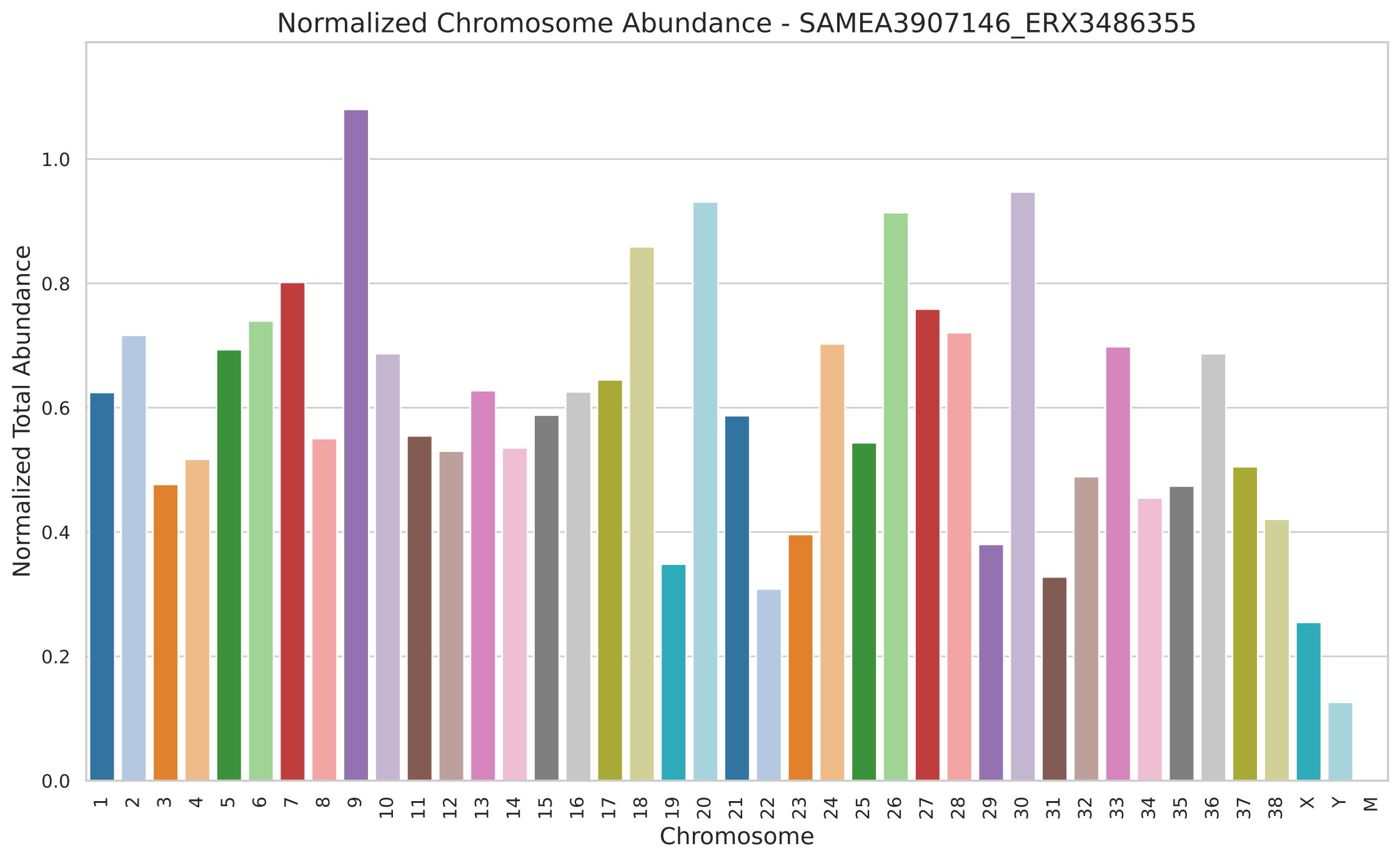

Normalized Chromosome Abundance - SAMEA5805183_ERX3486396
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

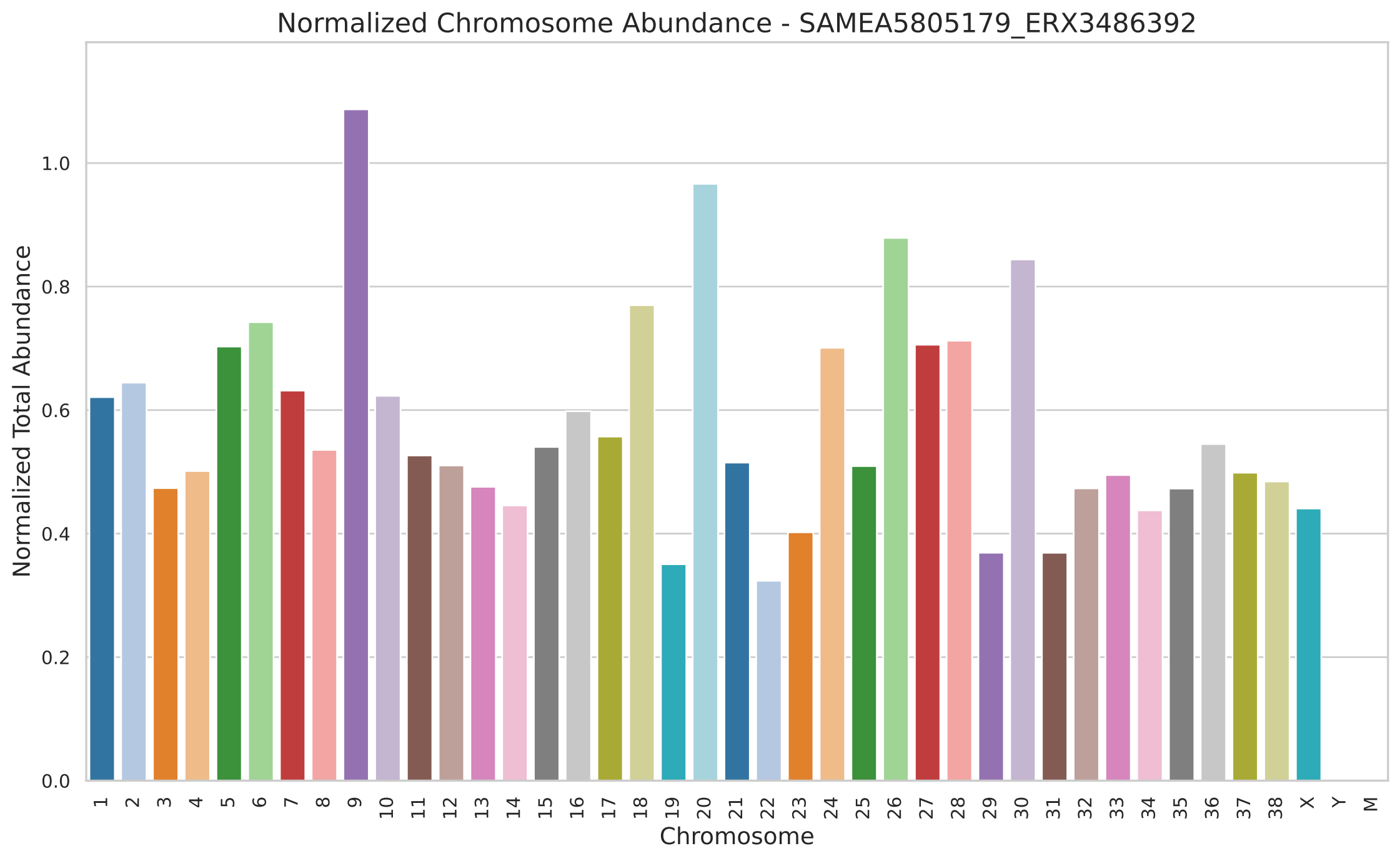

Normalized Chromosome Abundance - SAMEA3907163_ERX3486310
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

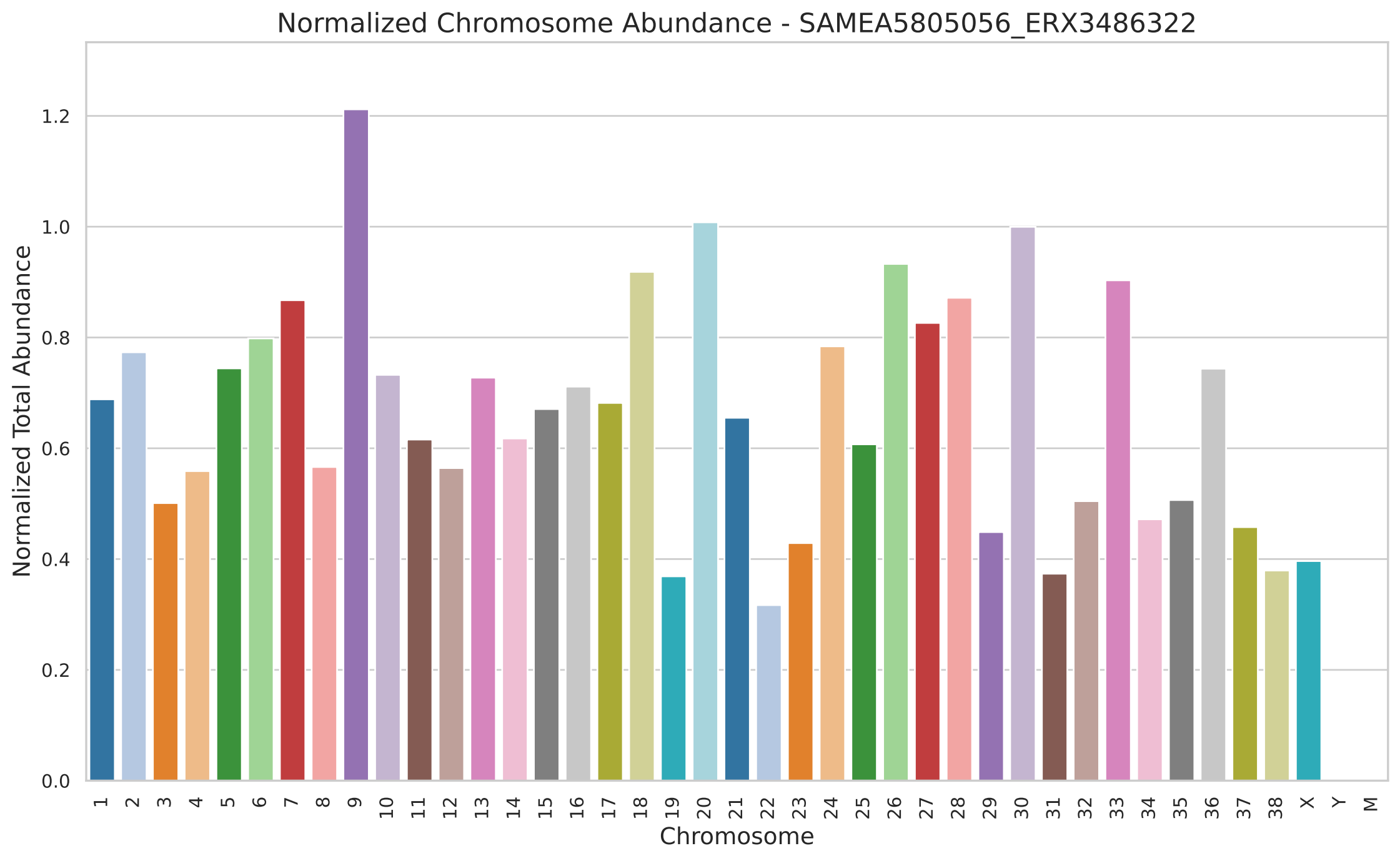

Normalized Chromosome Abundance - SAMEA3907140_ERX3486357
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

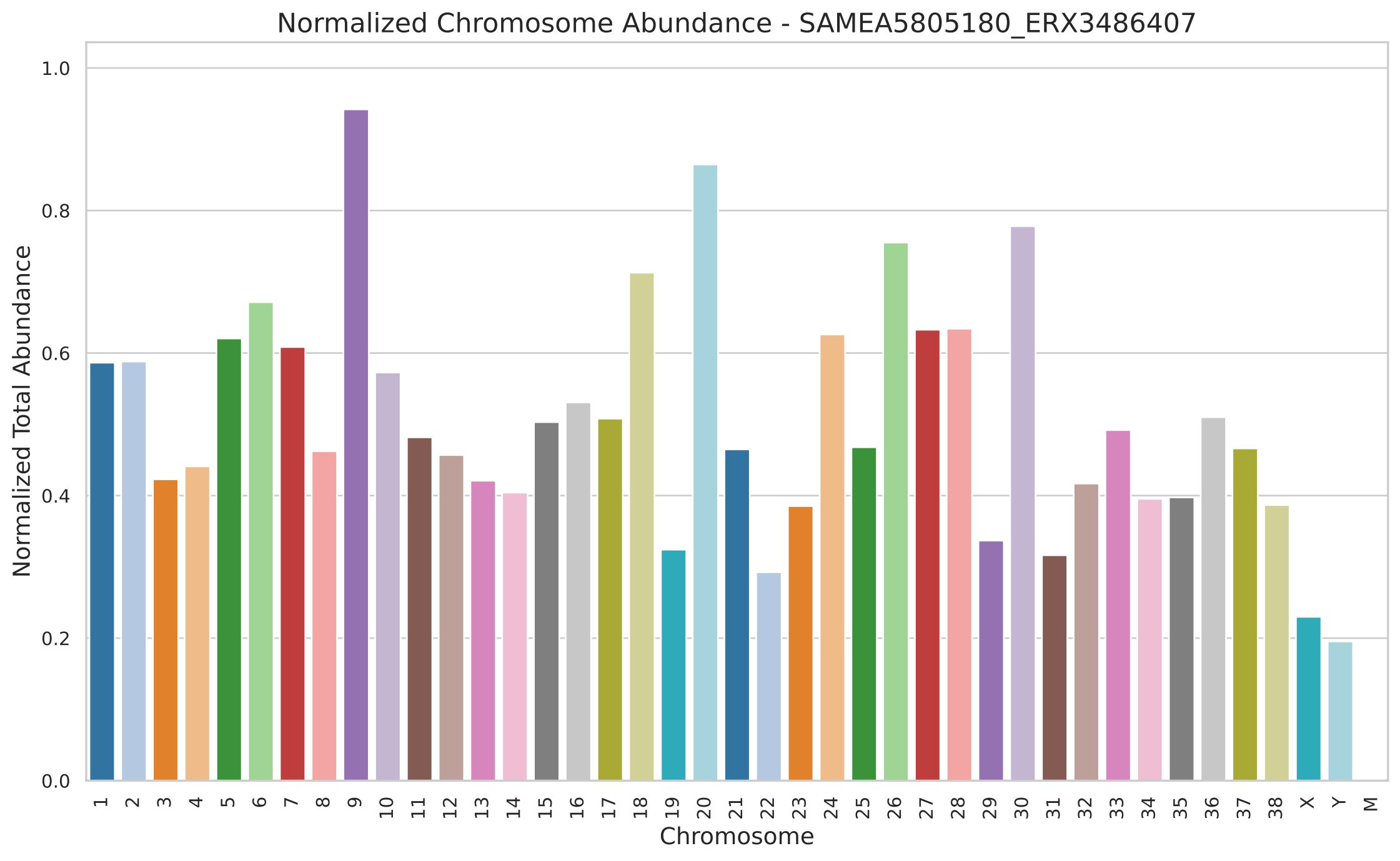

Normalized Chromosome Abundance - SAMEA3907324_ERX3486356
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

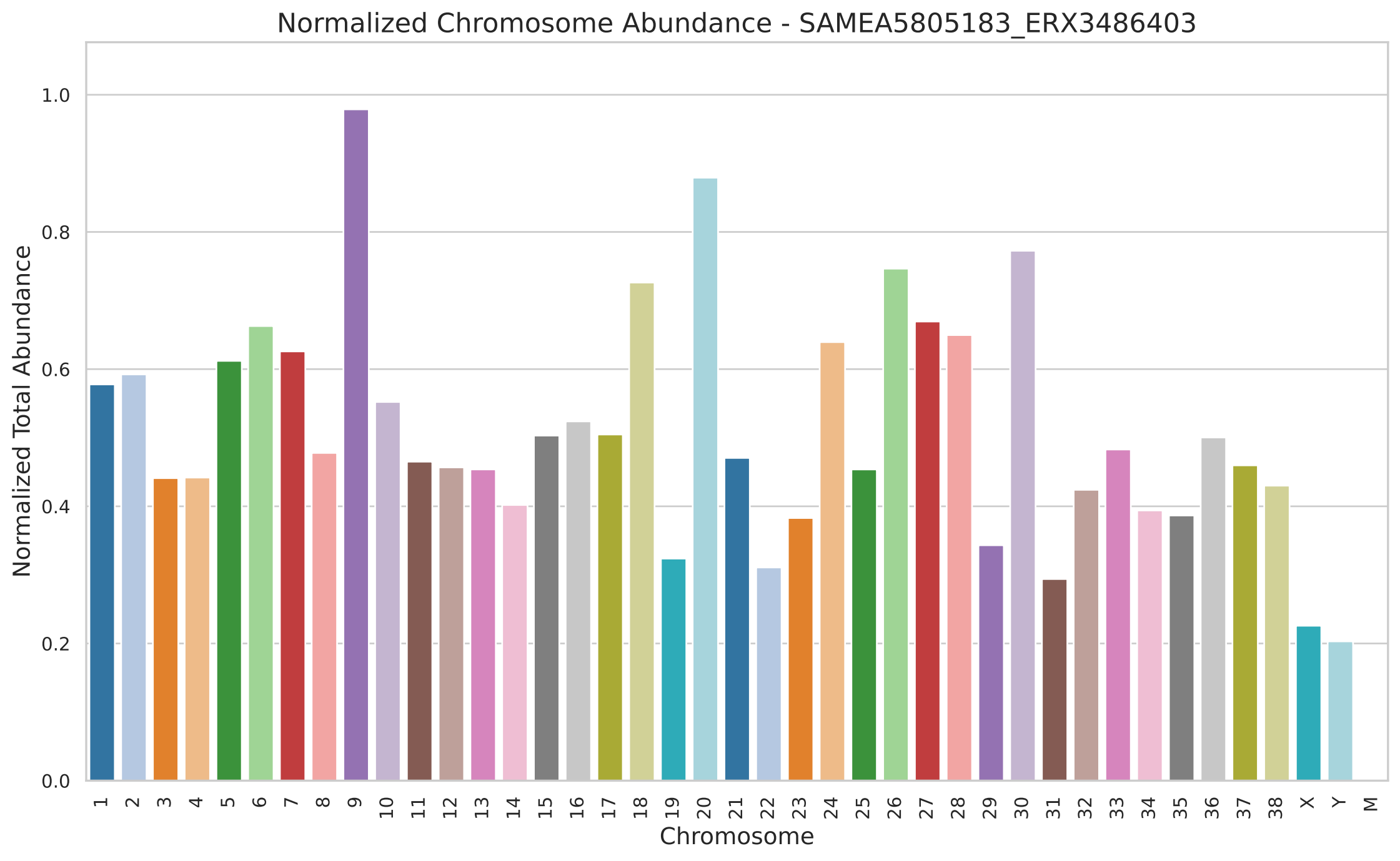

Normalized Chromosome Abundance - SAMEA5805179_ERX3486406
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

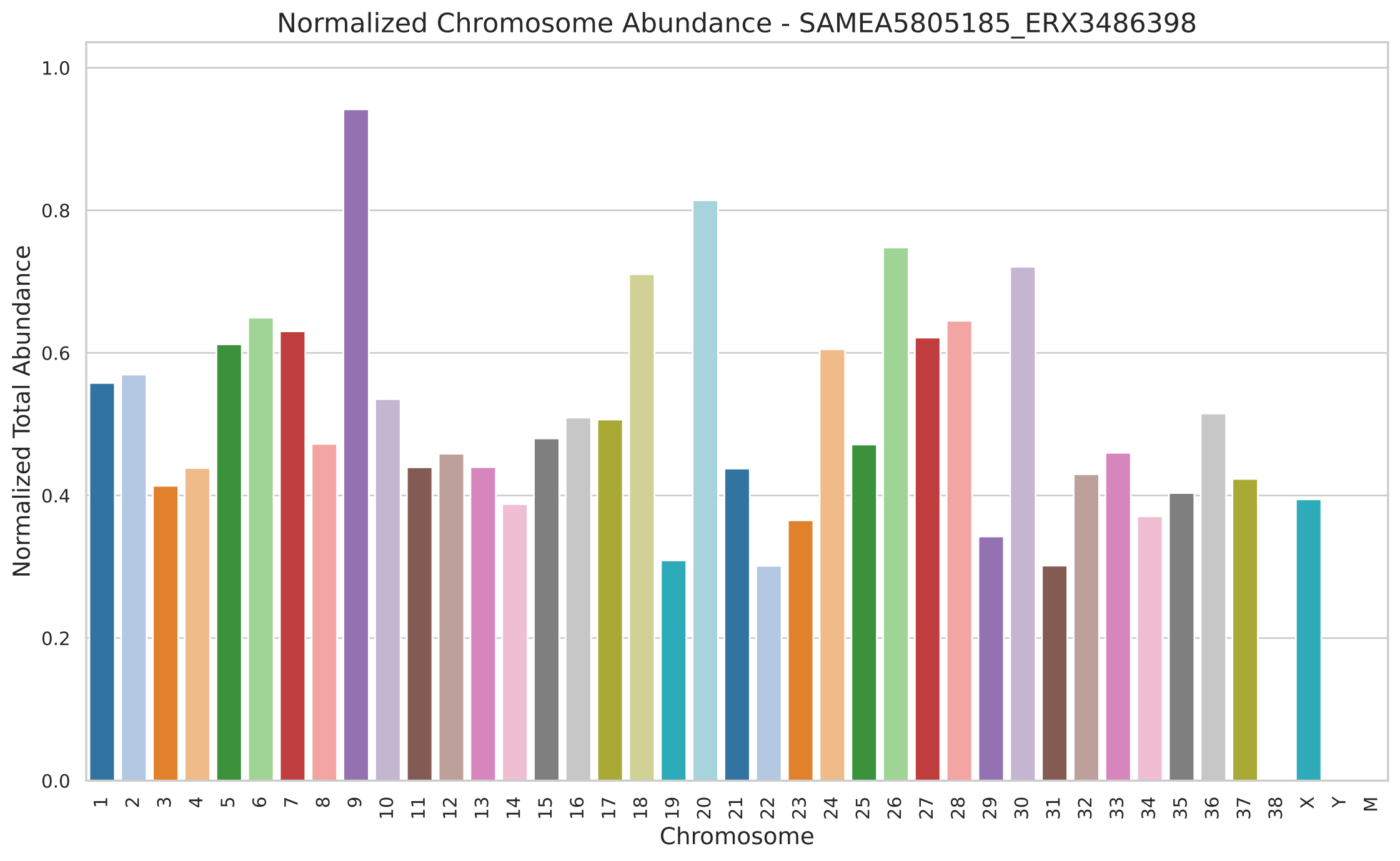

Normalized Chromosome Abundance - SAMEA3907146_ERX3486355
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

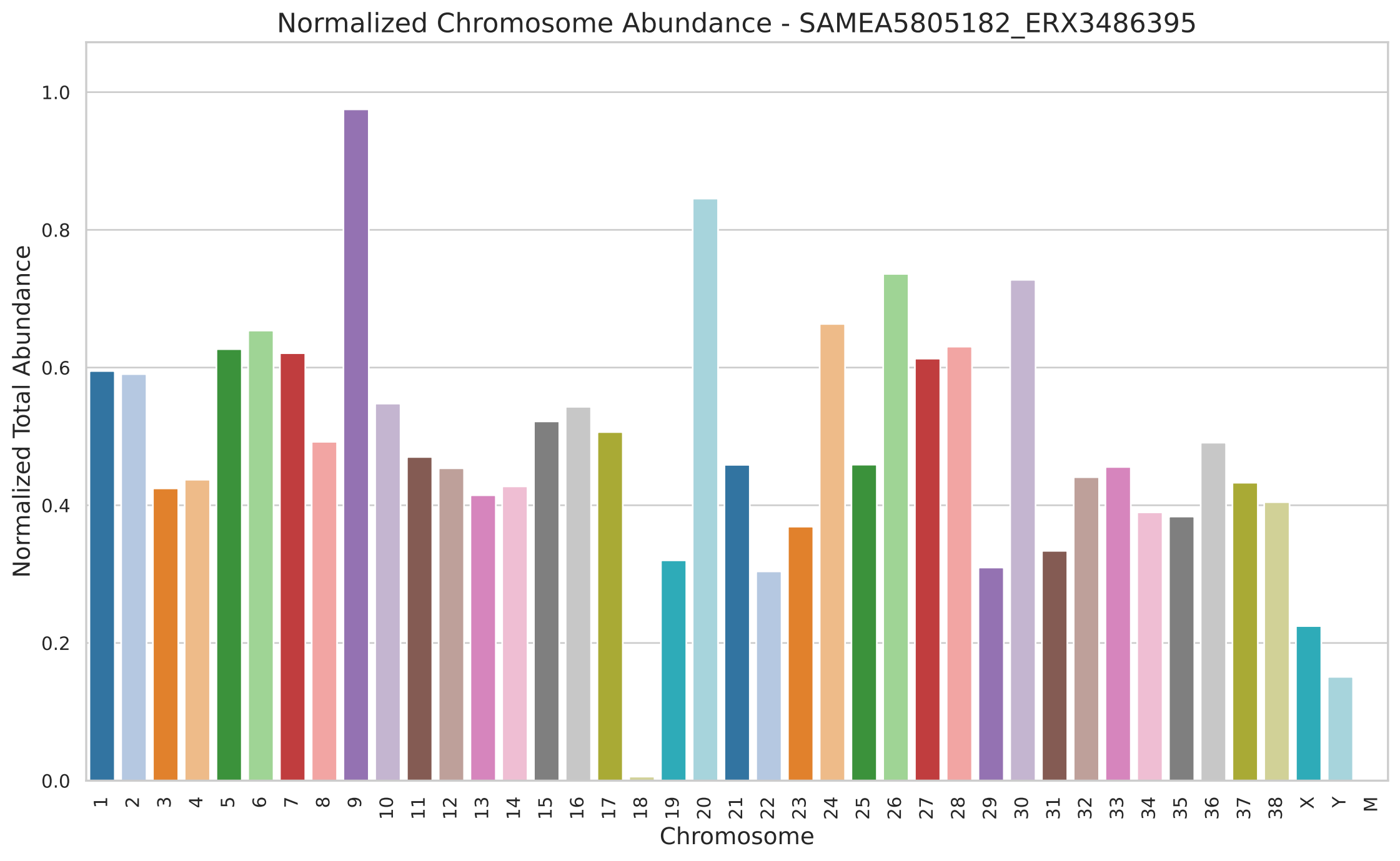

Normalized Chromosome Abundance - SAMEA5805179_ERX3486392
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

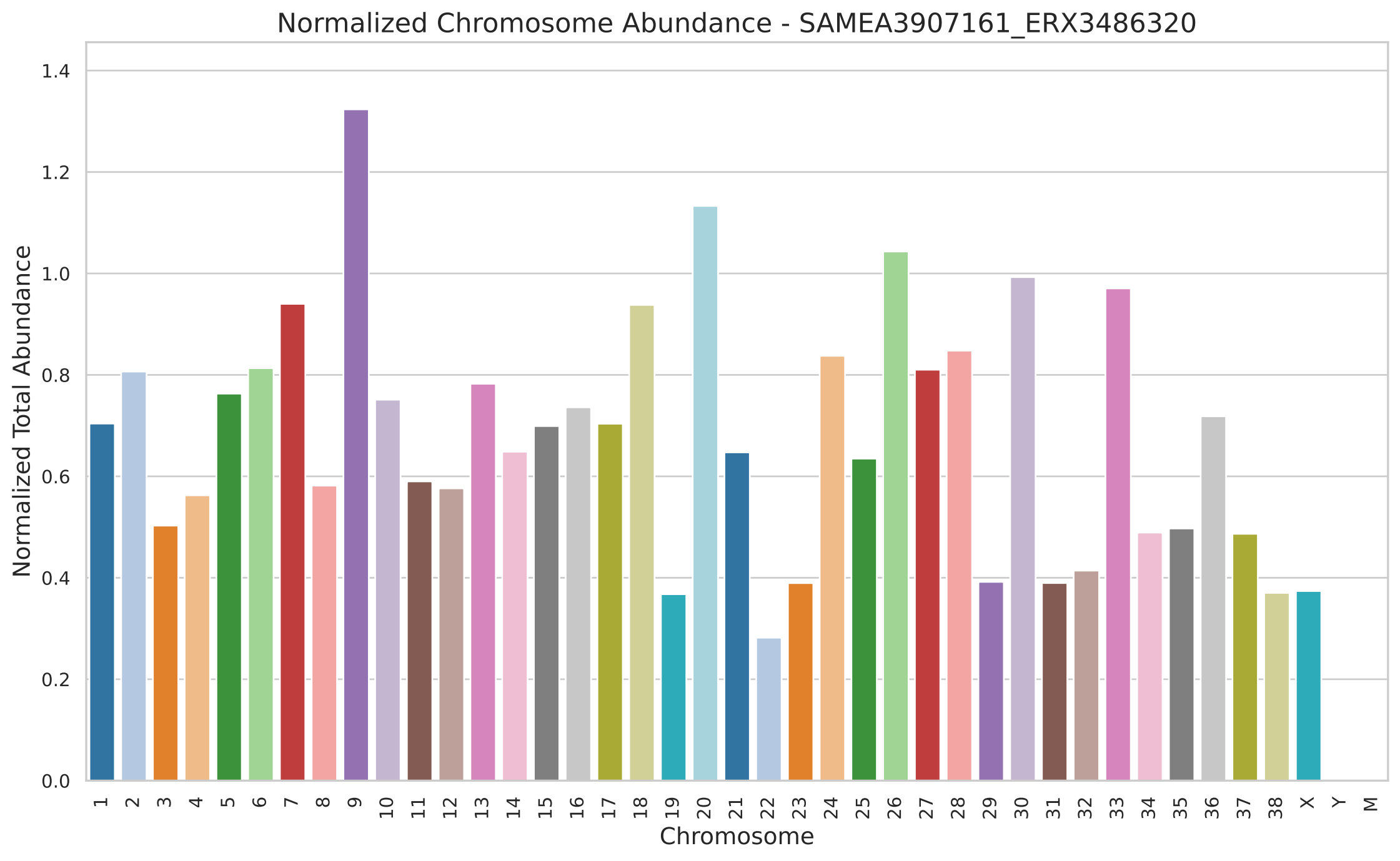

Normalized Chromosome Abundance - SAMEA5805056_ERX3486322
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

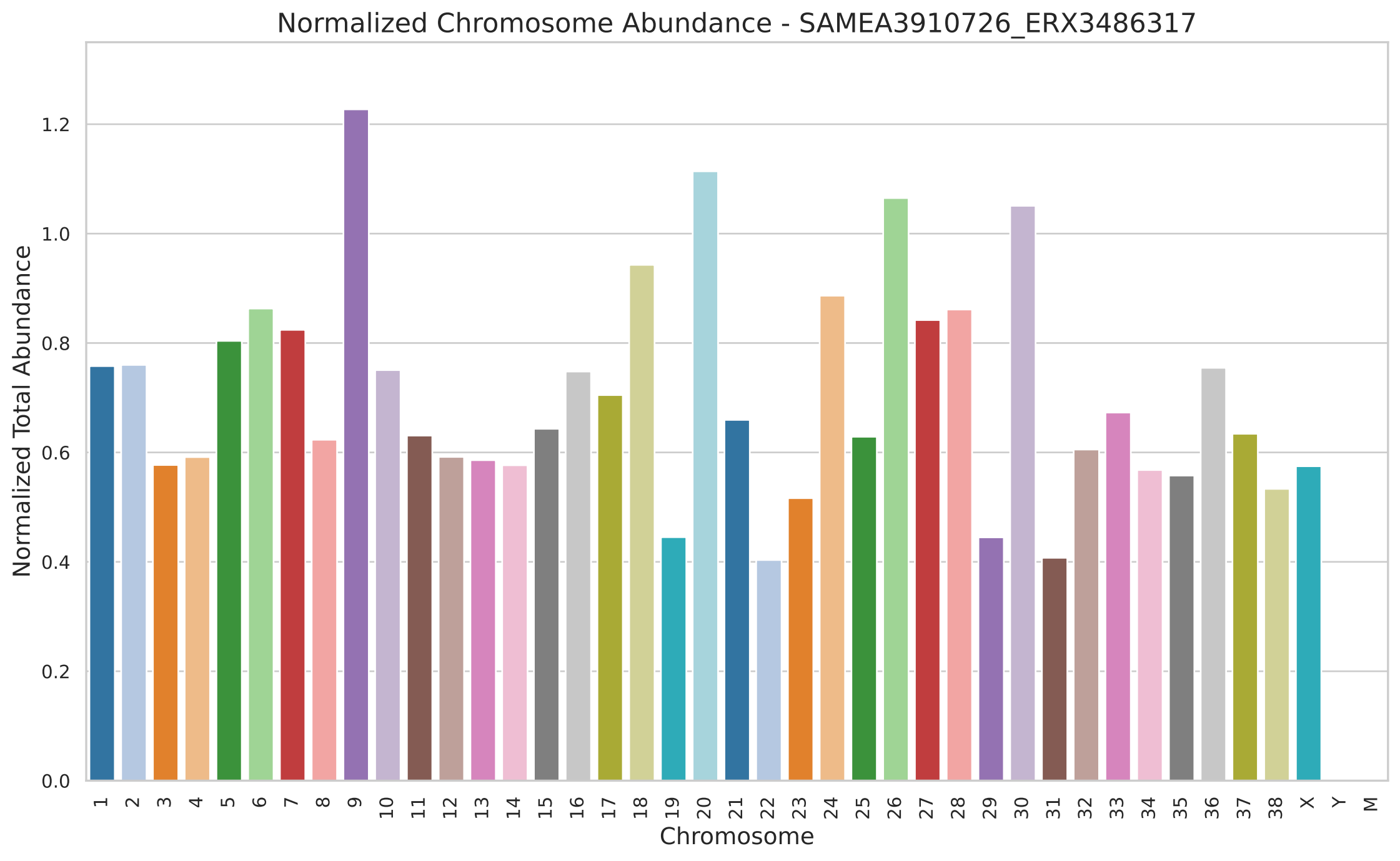

Normalized Chromosome Abundance - SAMEA5805180_ERX3486407
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

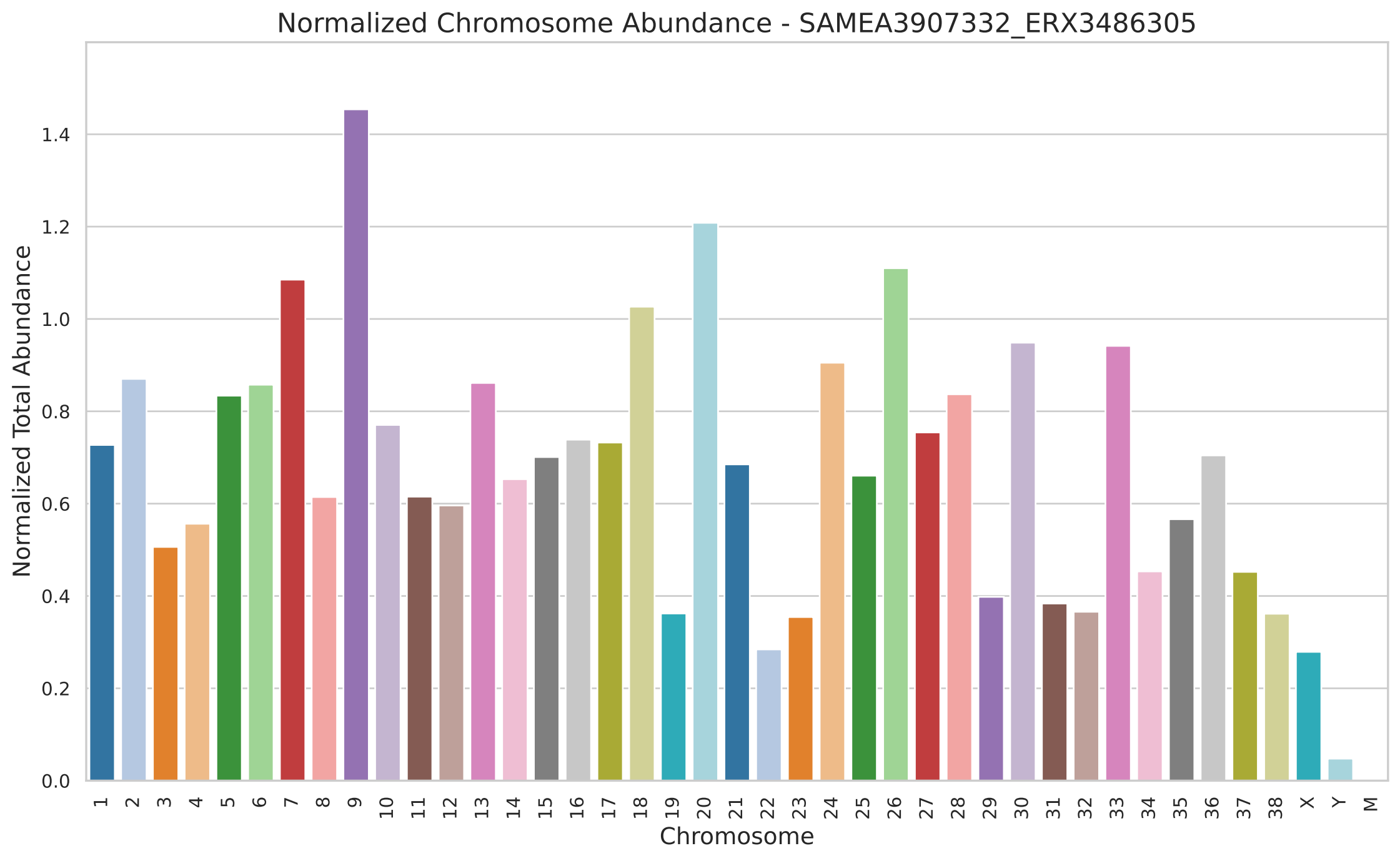

Normalized Chromosome Abundance - SAMEA5805183_ERX3486403
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

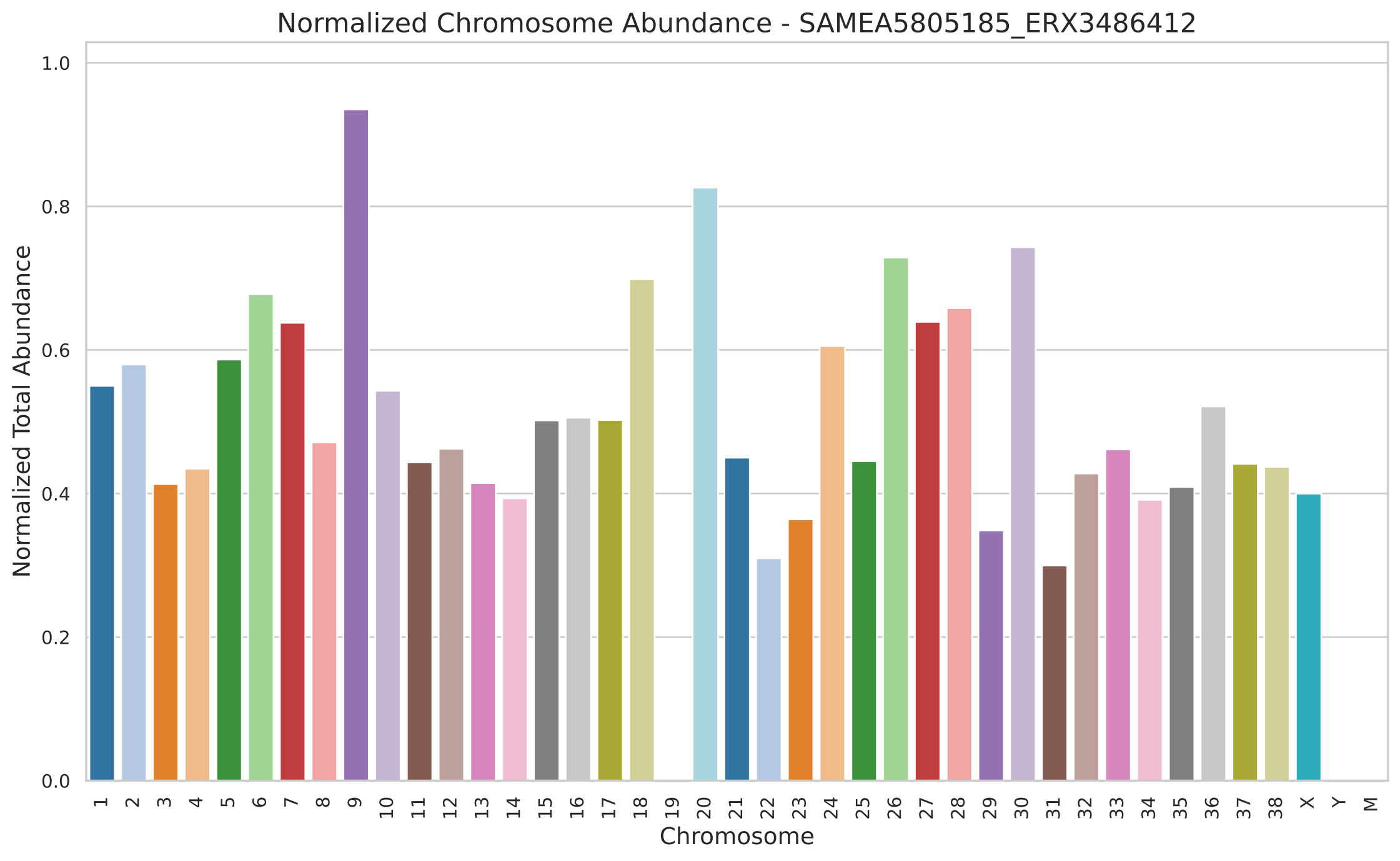

Normalized Chromosome Abundance - SAMEA5805185_ERX3486398
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

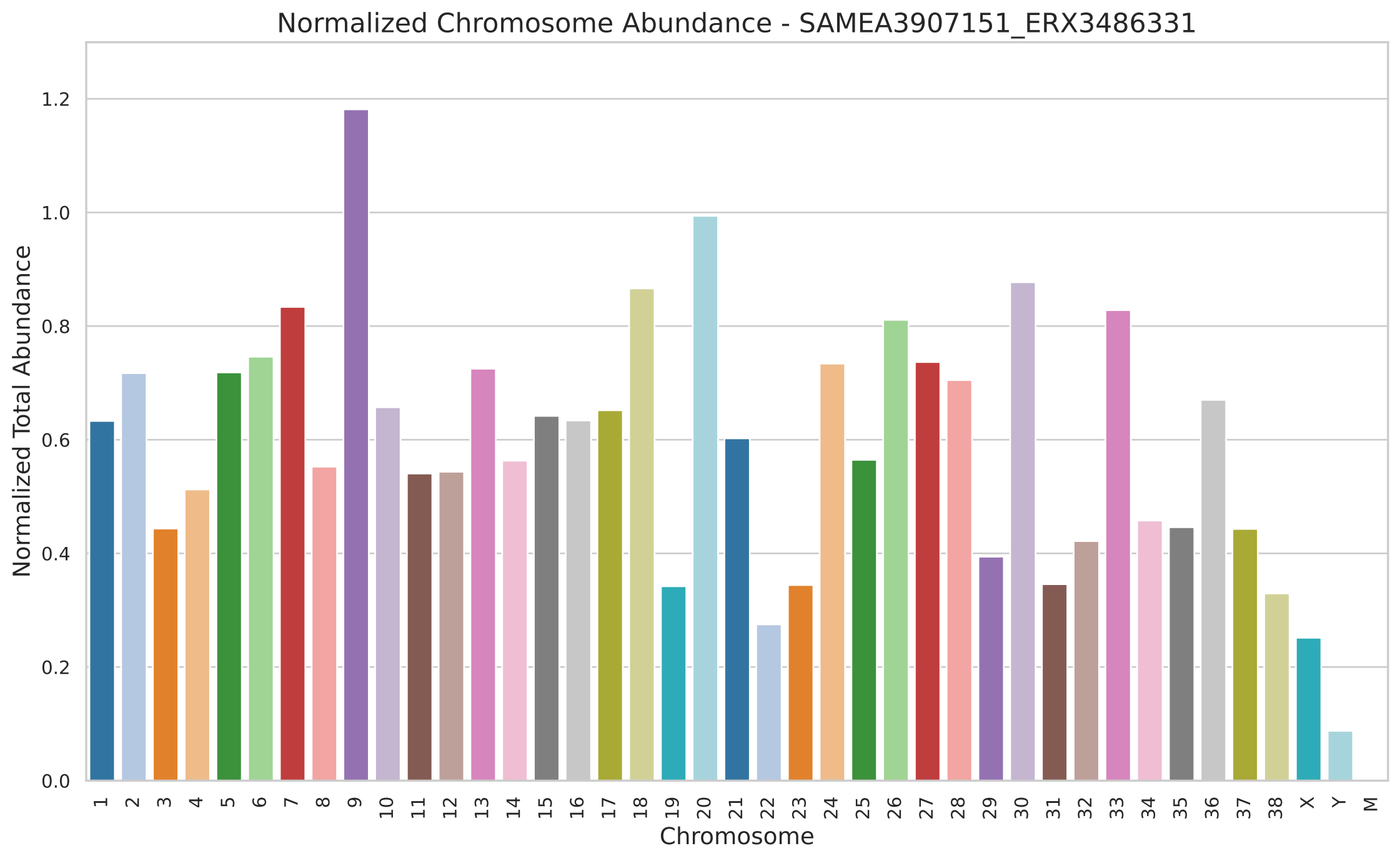

Normalized Chromosome Abundance - SAMEA5805182_ERX3486395
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

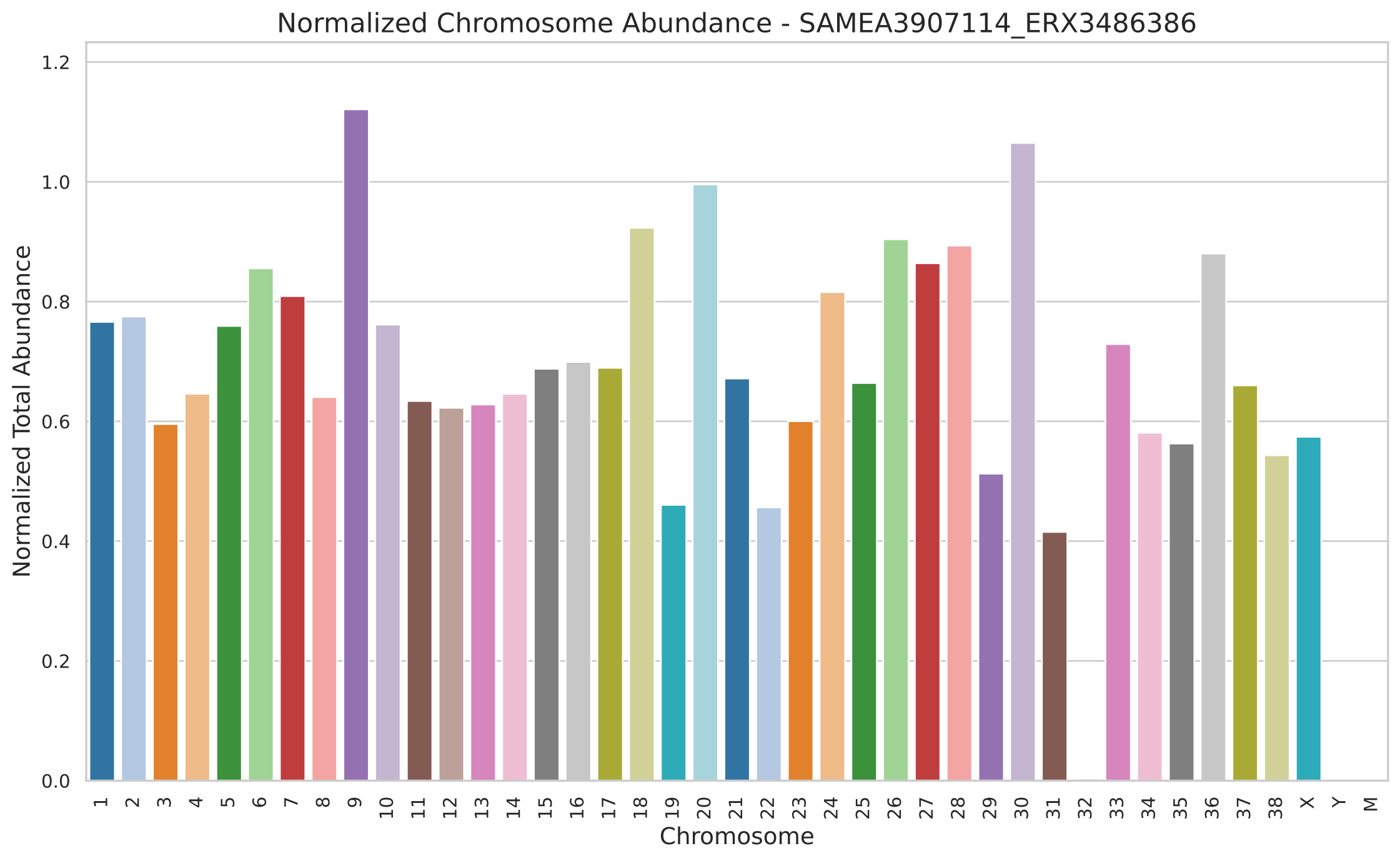

Normalized Chromosome Abundance - SAMEA3907161_ERX3486320
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

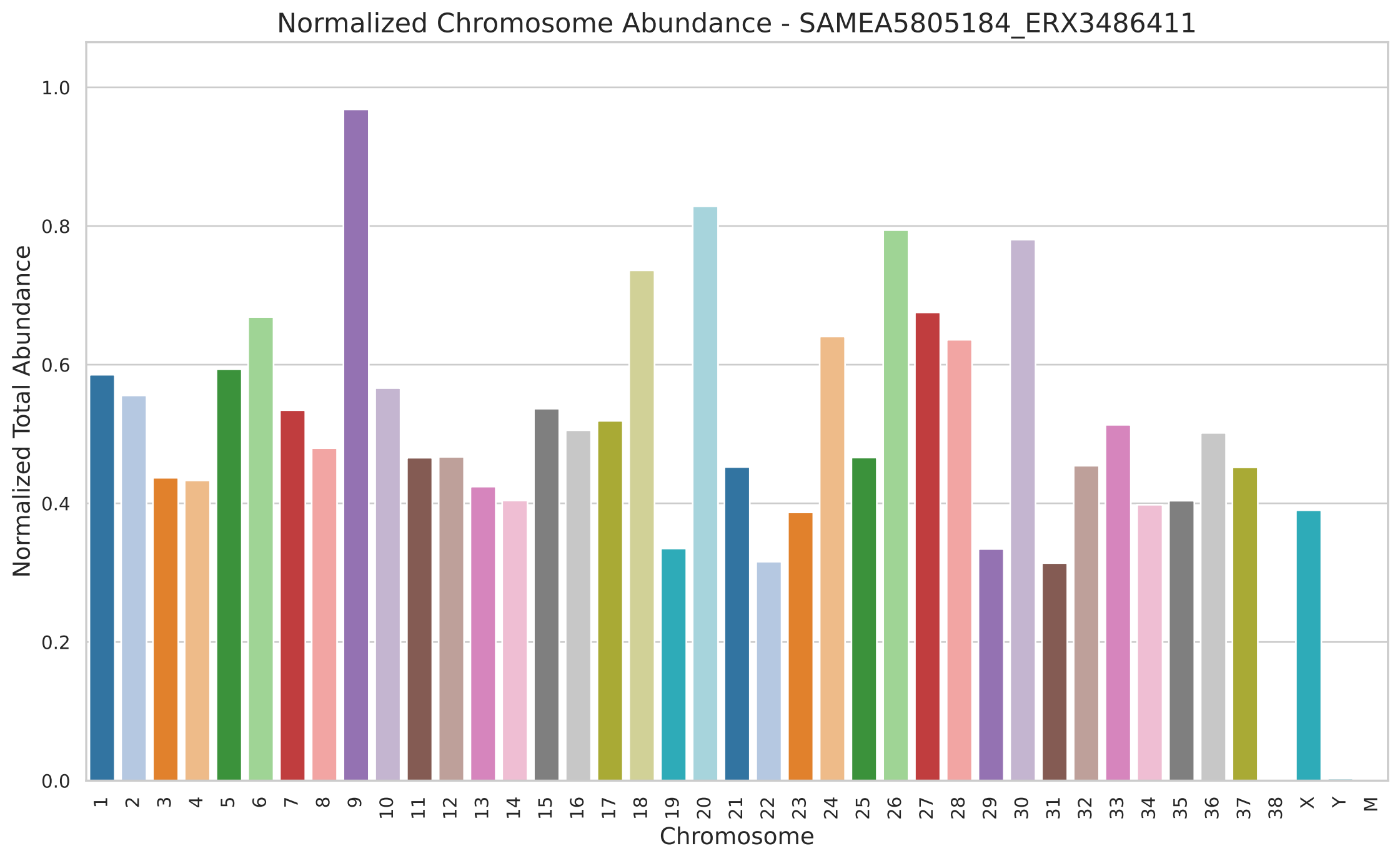

Normalized Chromosome Abundance - SAMEA3910726_ERX3486317
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

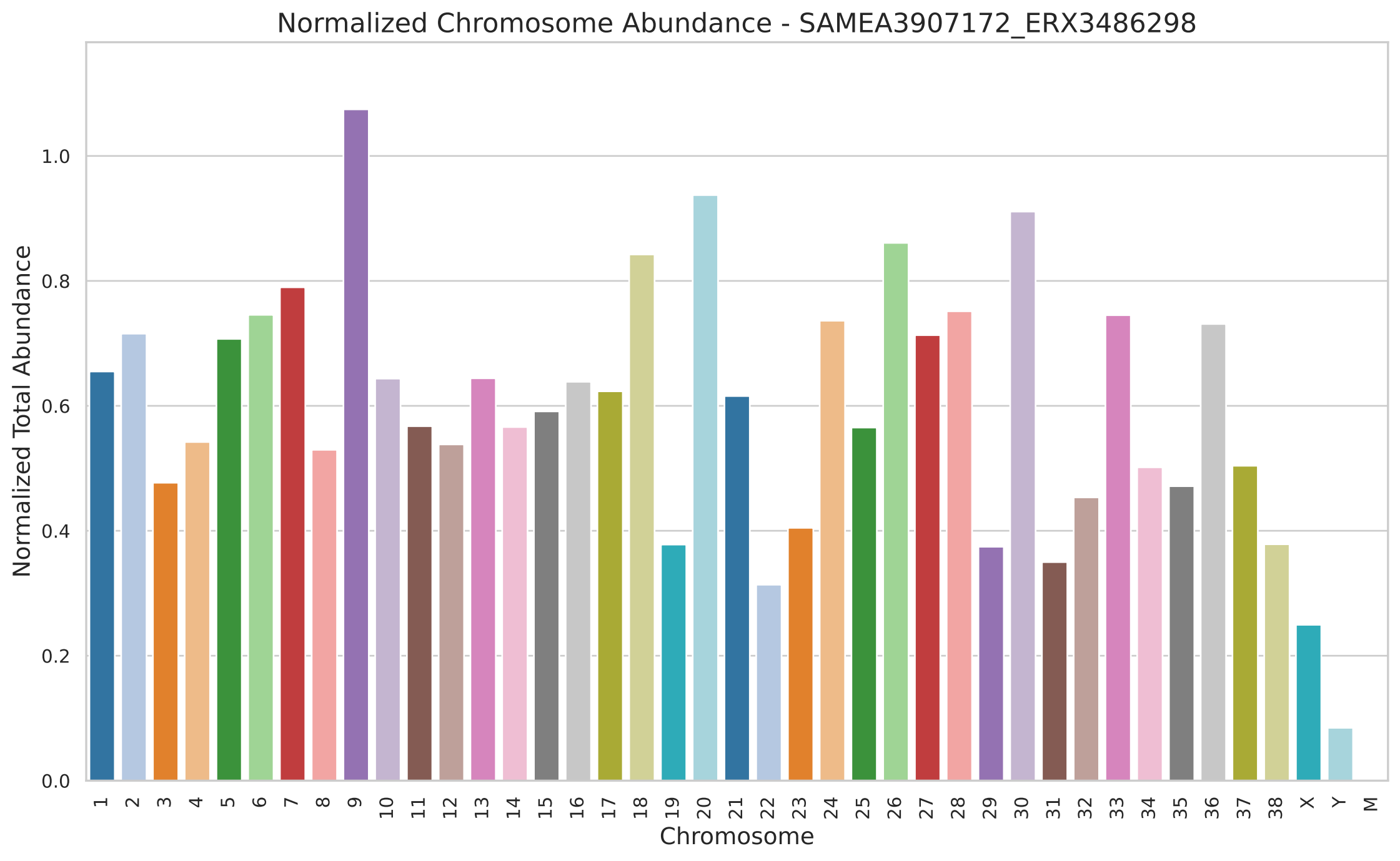

Normalized Chromosome Abundance - SAMEA3907332_ERX3486305
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

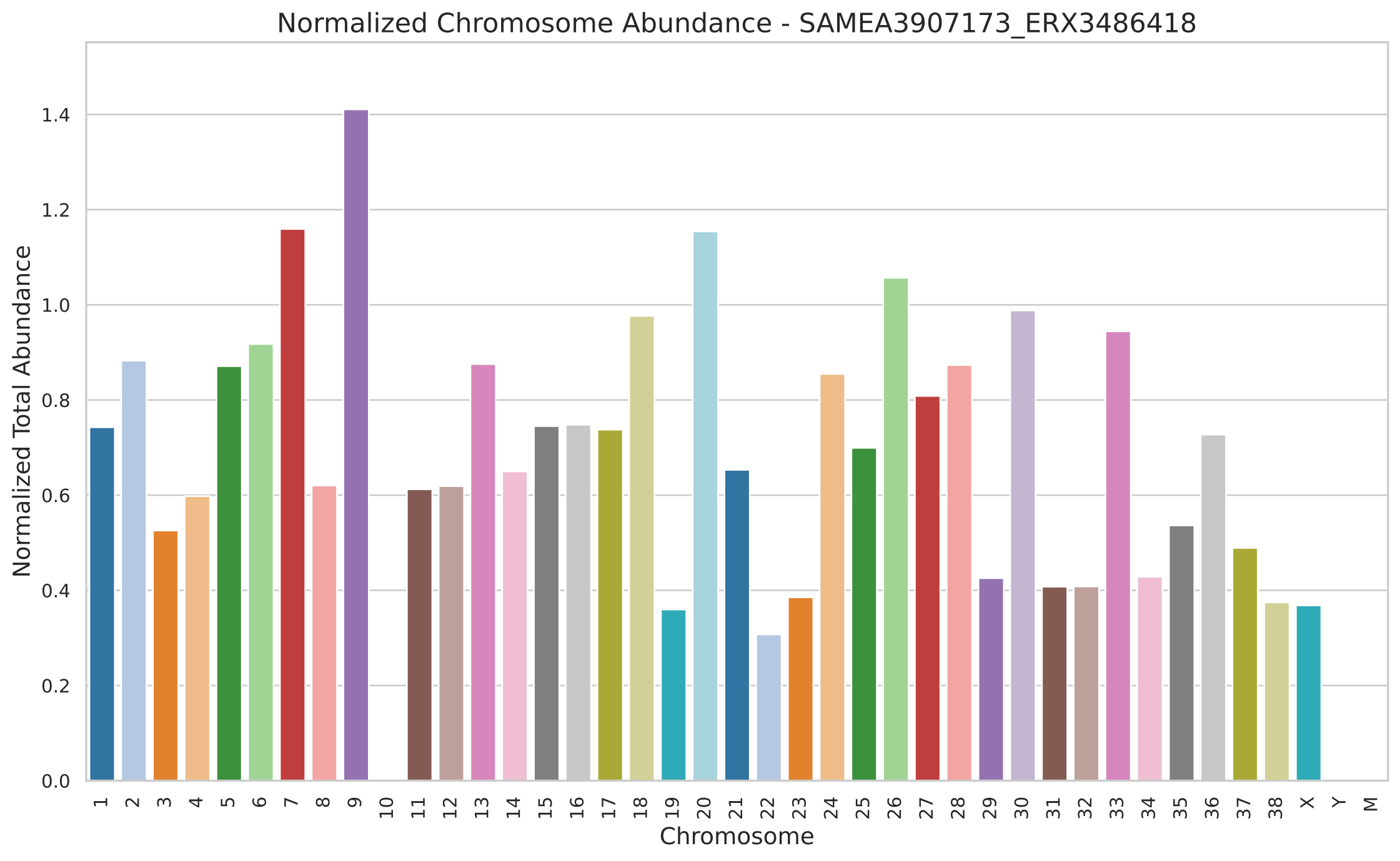

Normalized Chromosome Abundance - SAMEA5805185_ERX3486412
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

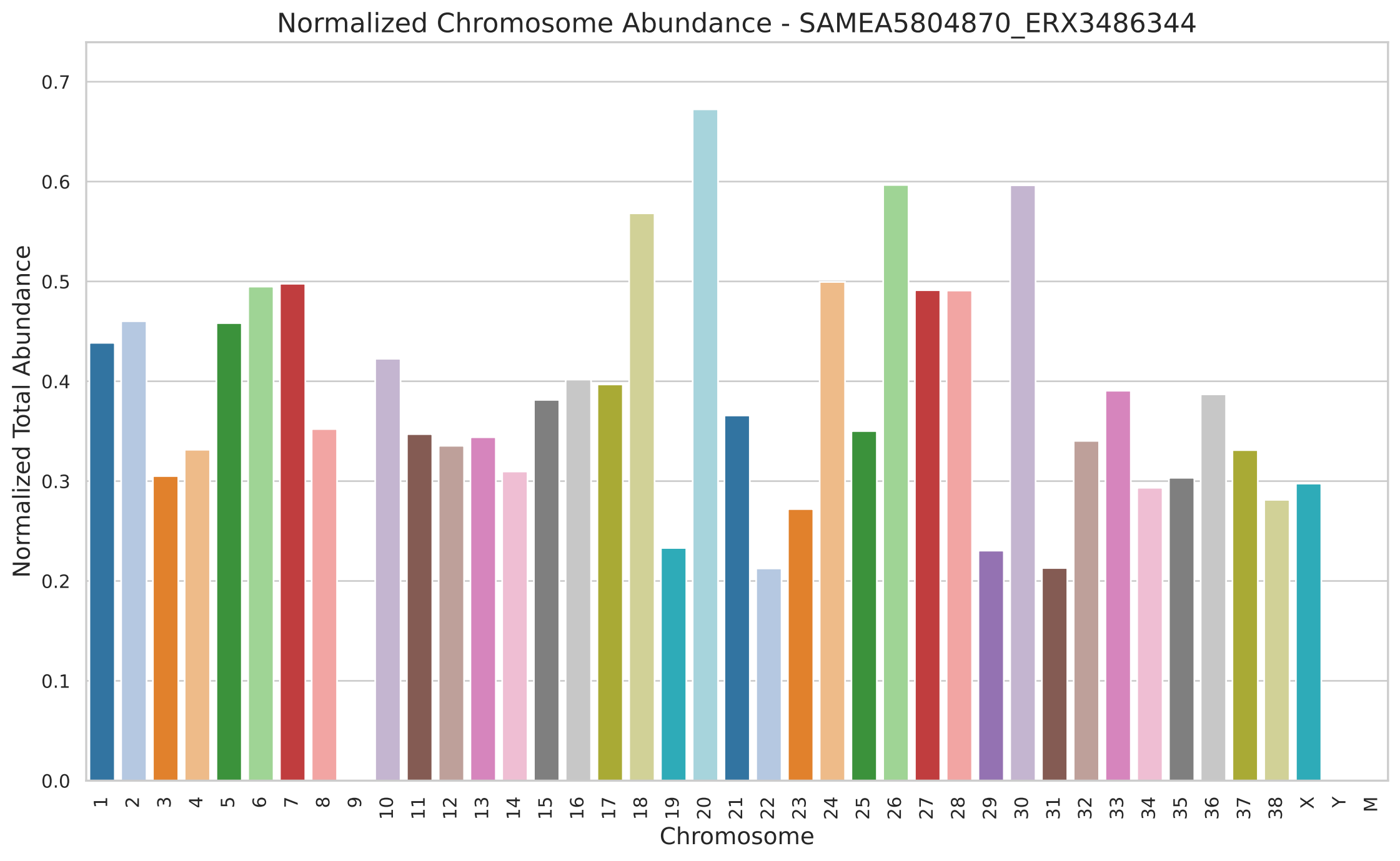

Normalized Chromosome Abundance - SAMEA3907151_ERX3486331
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

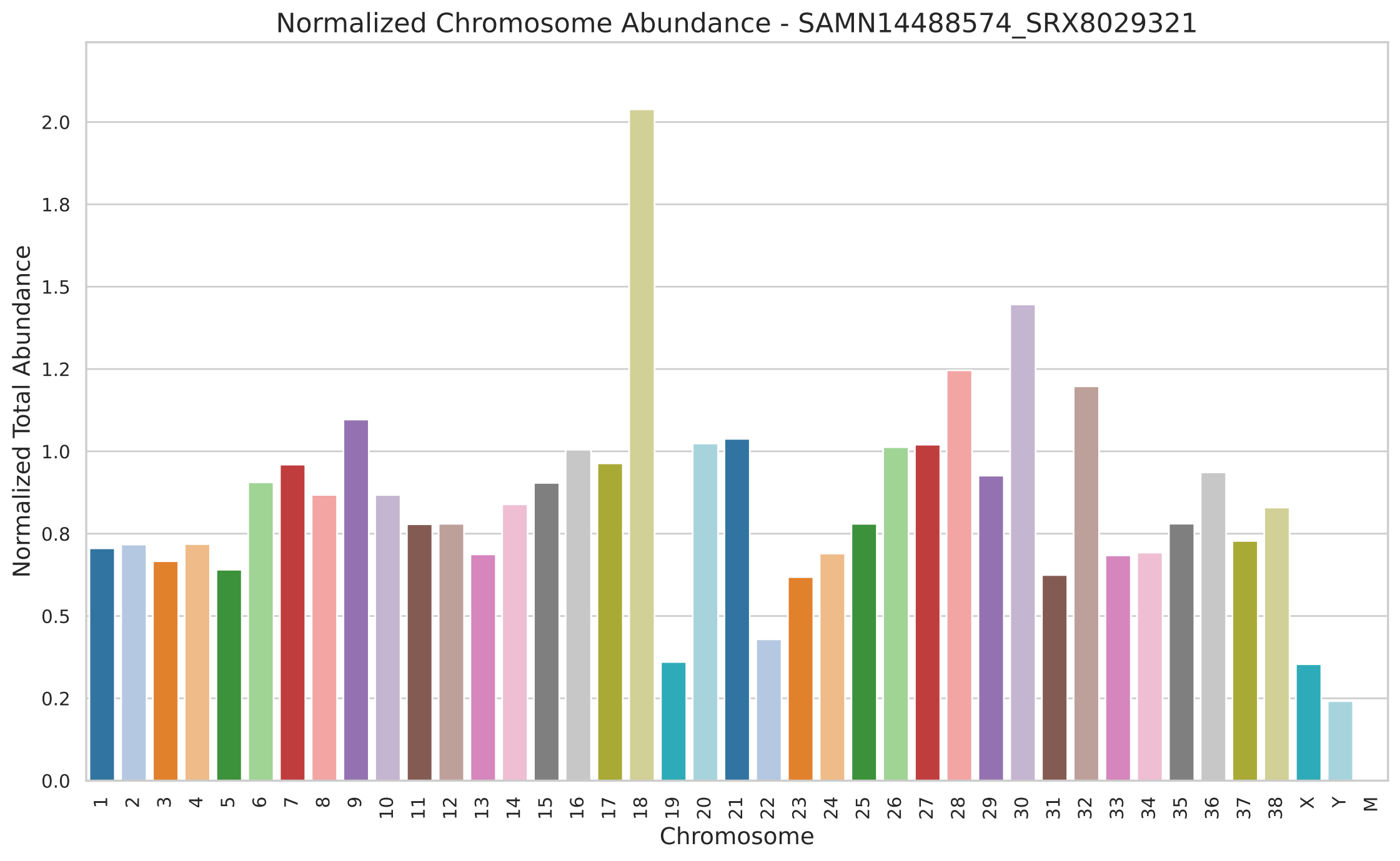

Normalized Chromosome Abundance - SAMEA3907114_ERX3486386
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

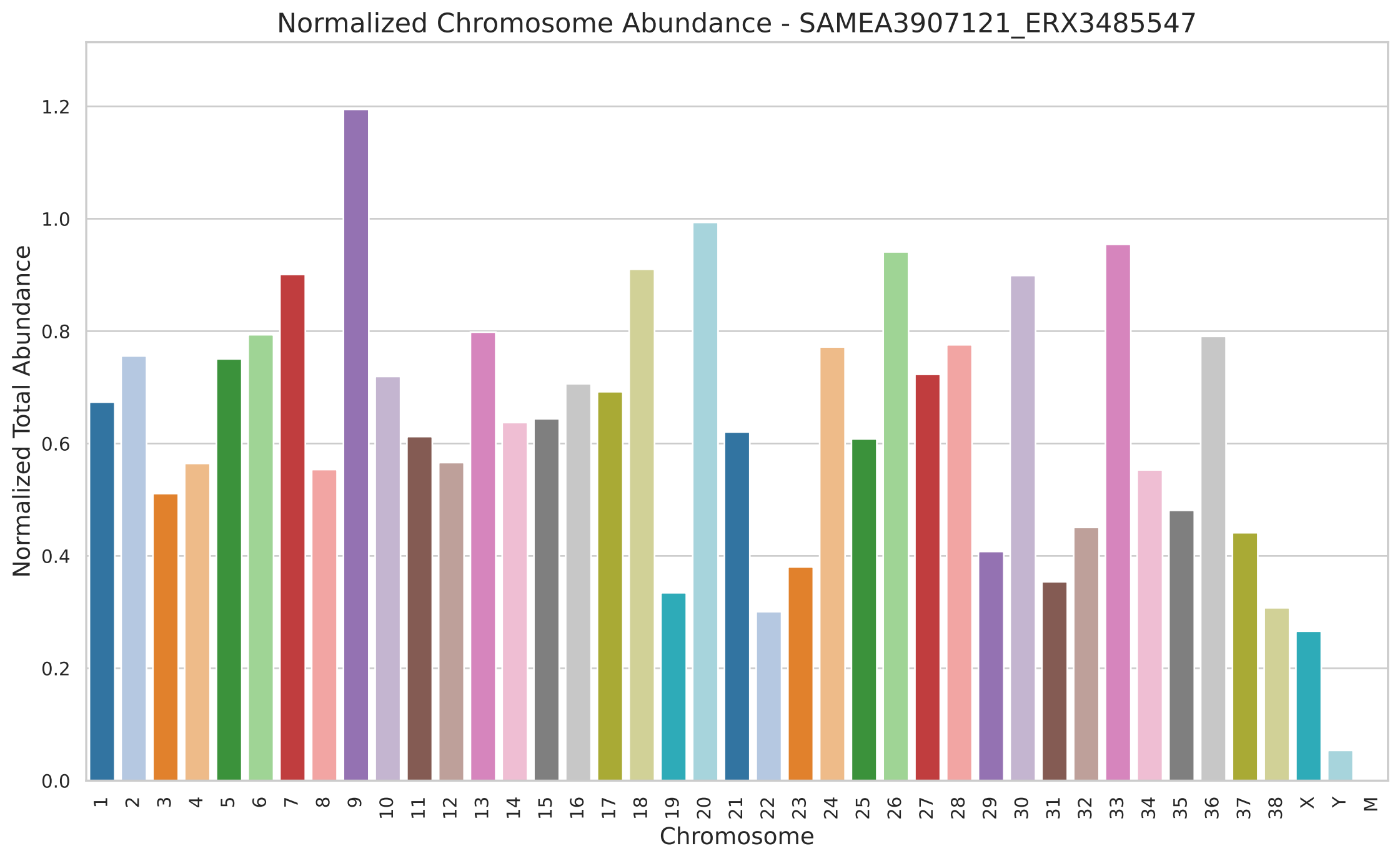

Normalized Chromosome Abundance - SAMEA5805184_ERX3486411
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

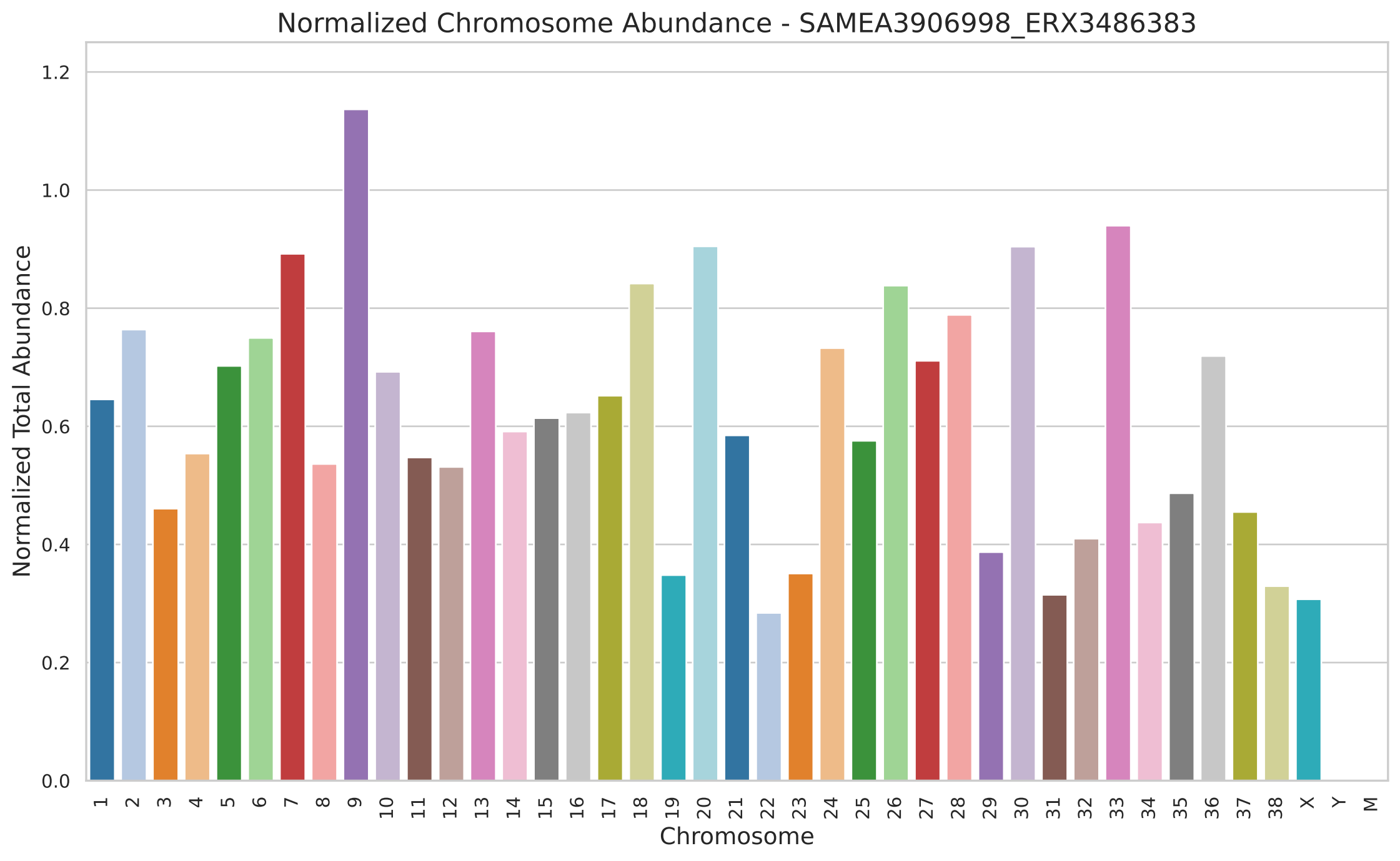

Normalized Chromosome Abundance - SAMEA3907172_ERX3486298
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

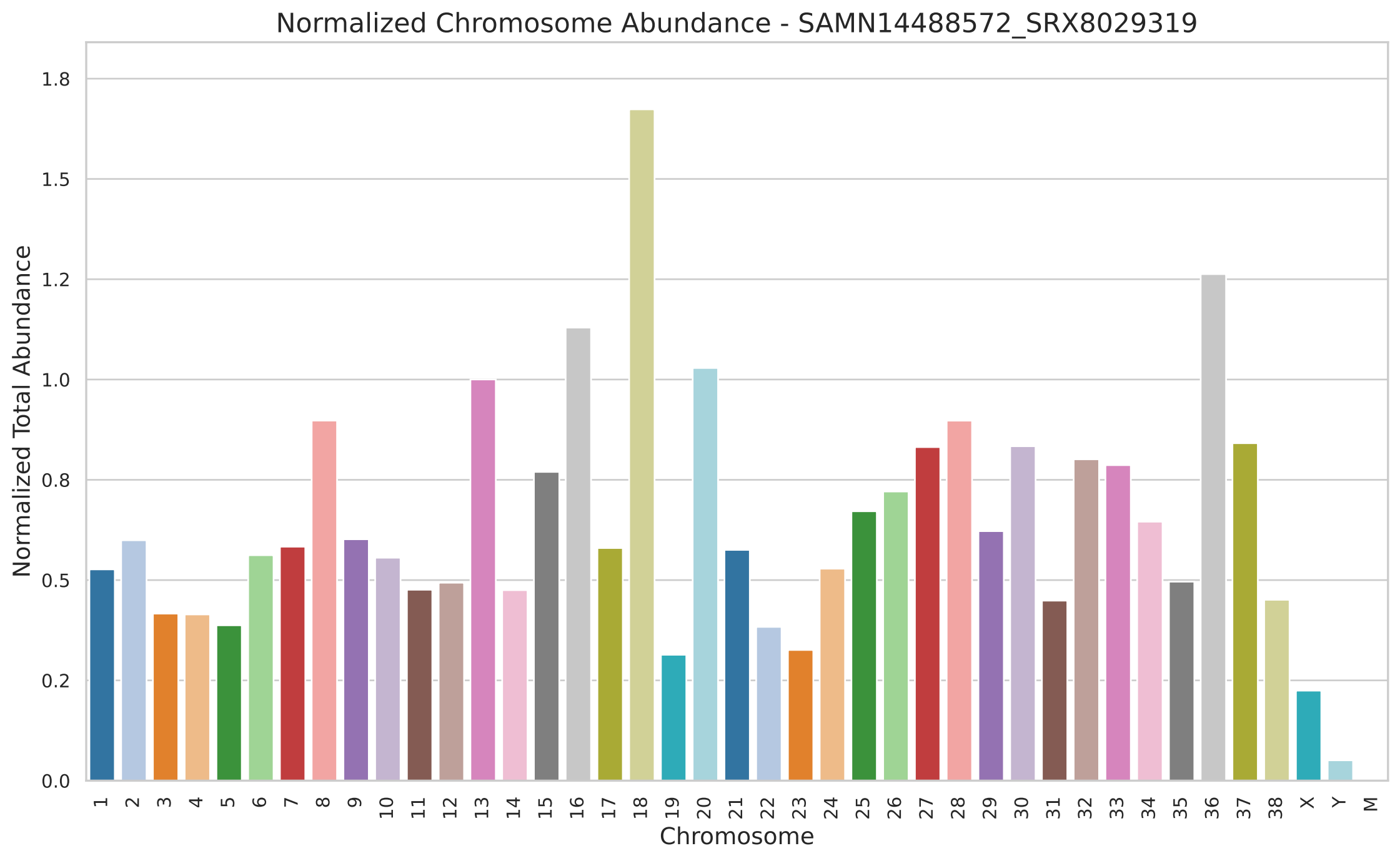

Normalized Chromosome Abundance - SAMEA3907173_ERX3486418
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

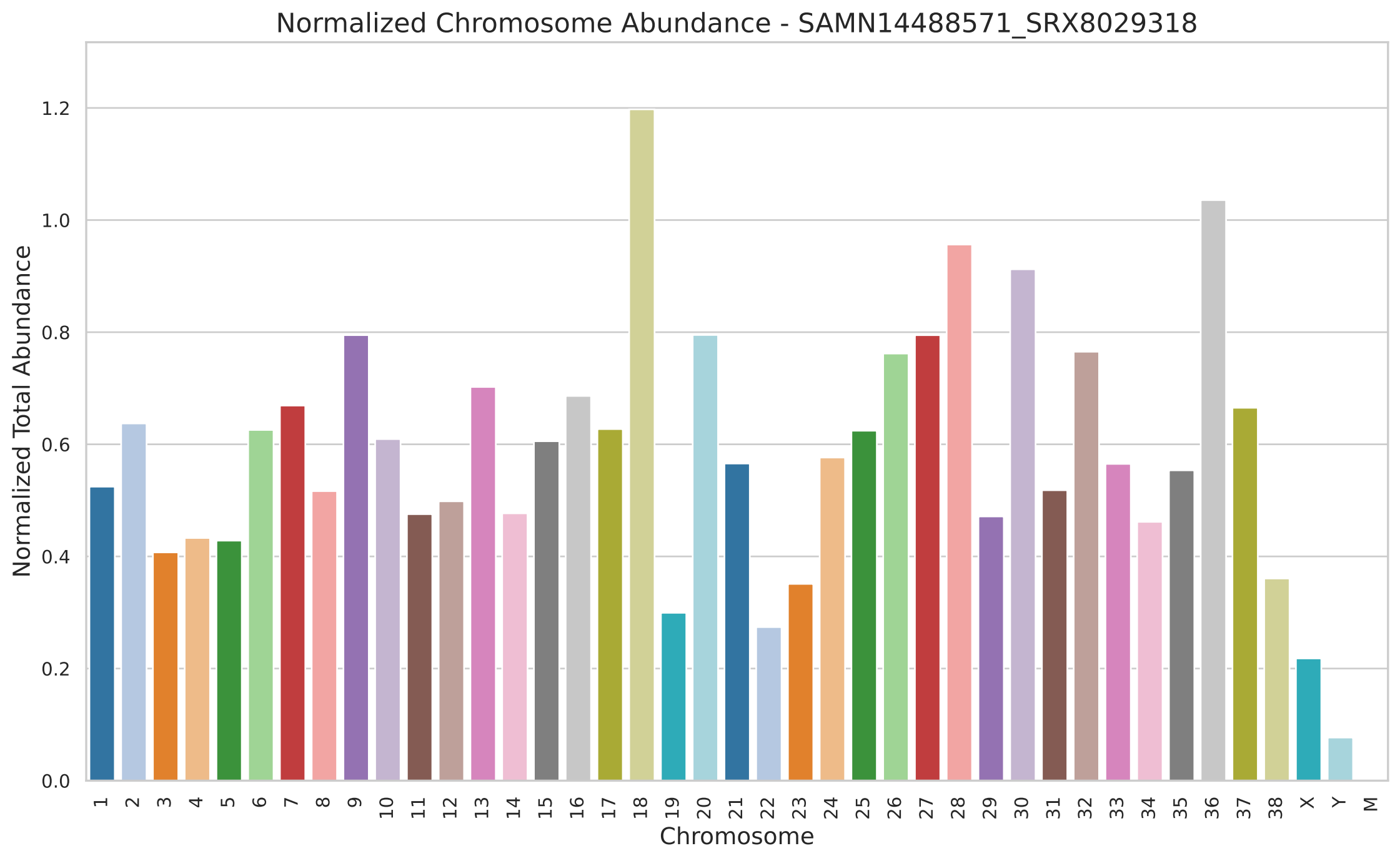

Normalized Chromosome Abundance - SAMEA5804870_ERX3486344
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

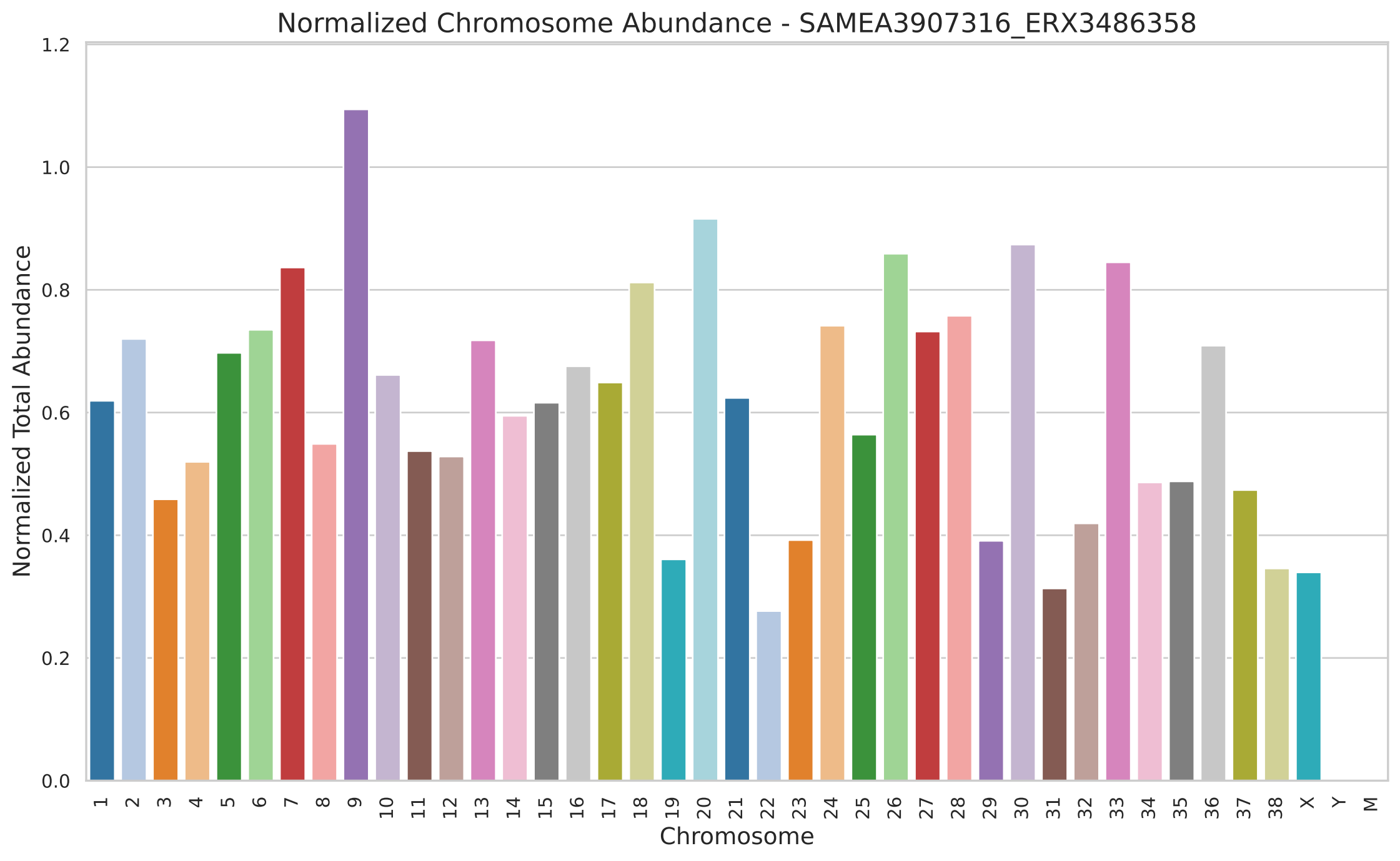

Normalized Chromosome Abundance - SAMN14488574_SRX8029321
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

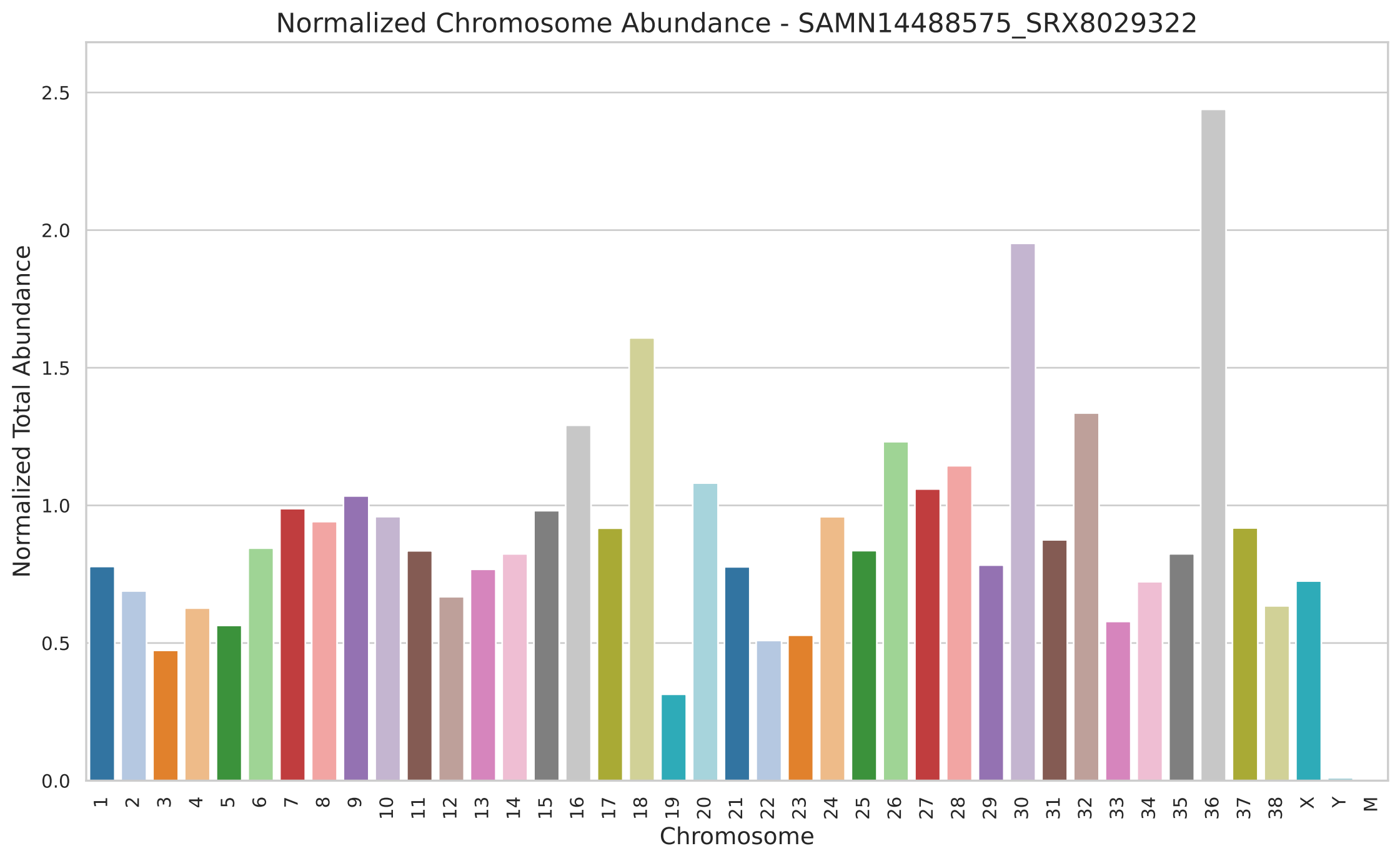

Normalized Chromosome Abundance - SAMEA3907121_ERX3485547
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

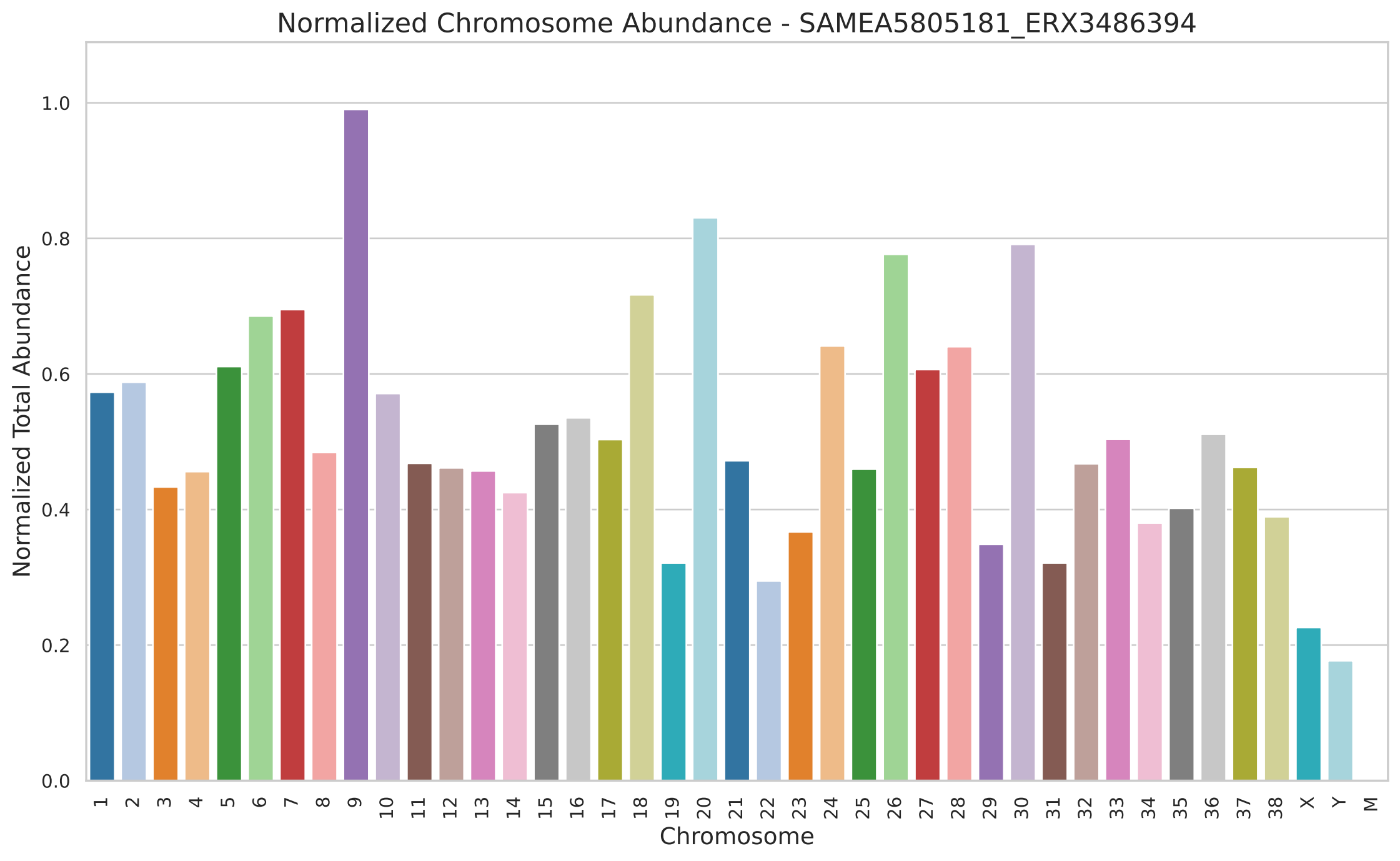

Normalized Chromosome Abundance - SAMEA3906998_ERX3486383
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

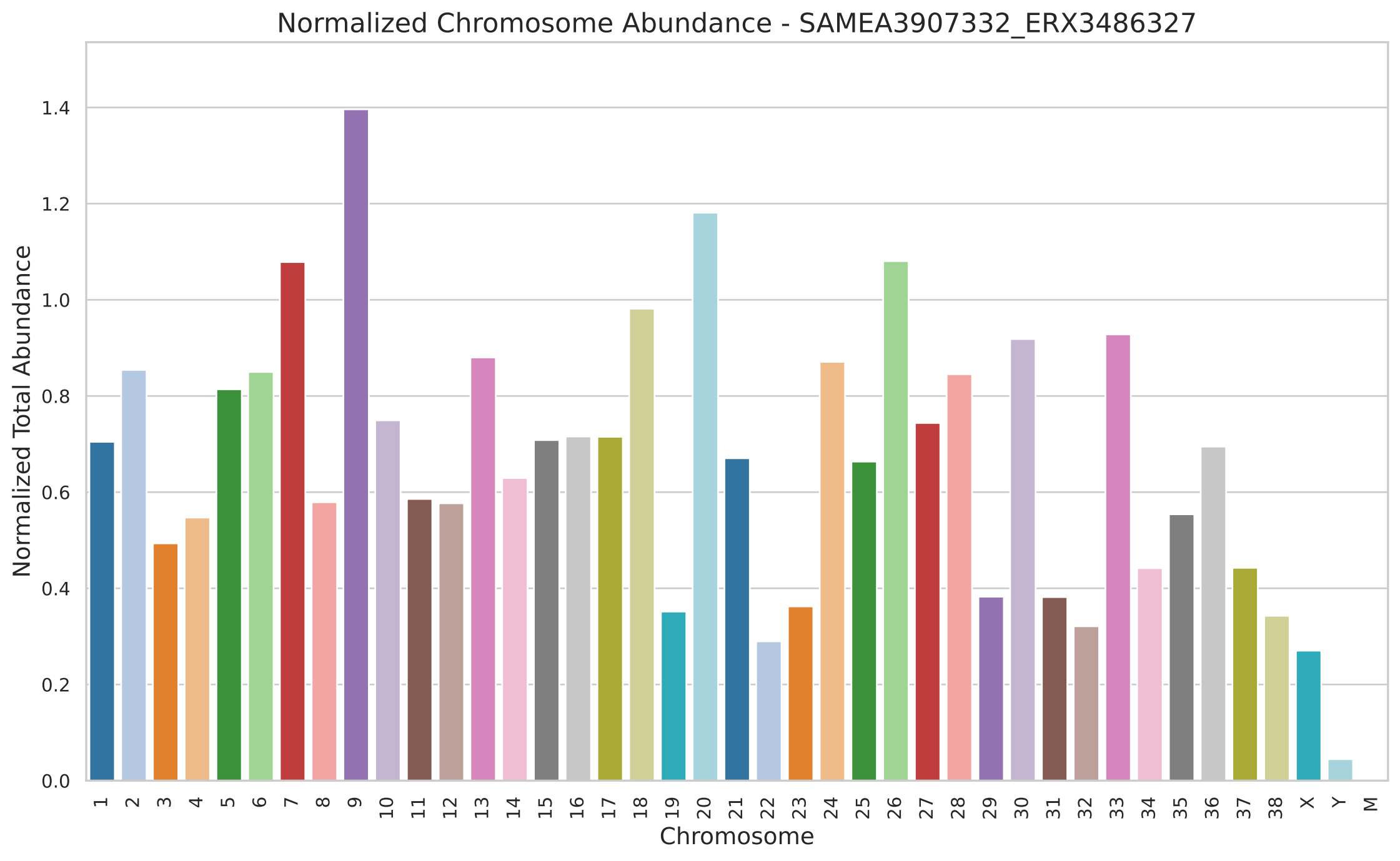

Normalized Chromosome Abundance - SAMN14488572_SRX8029319
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

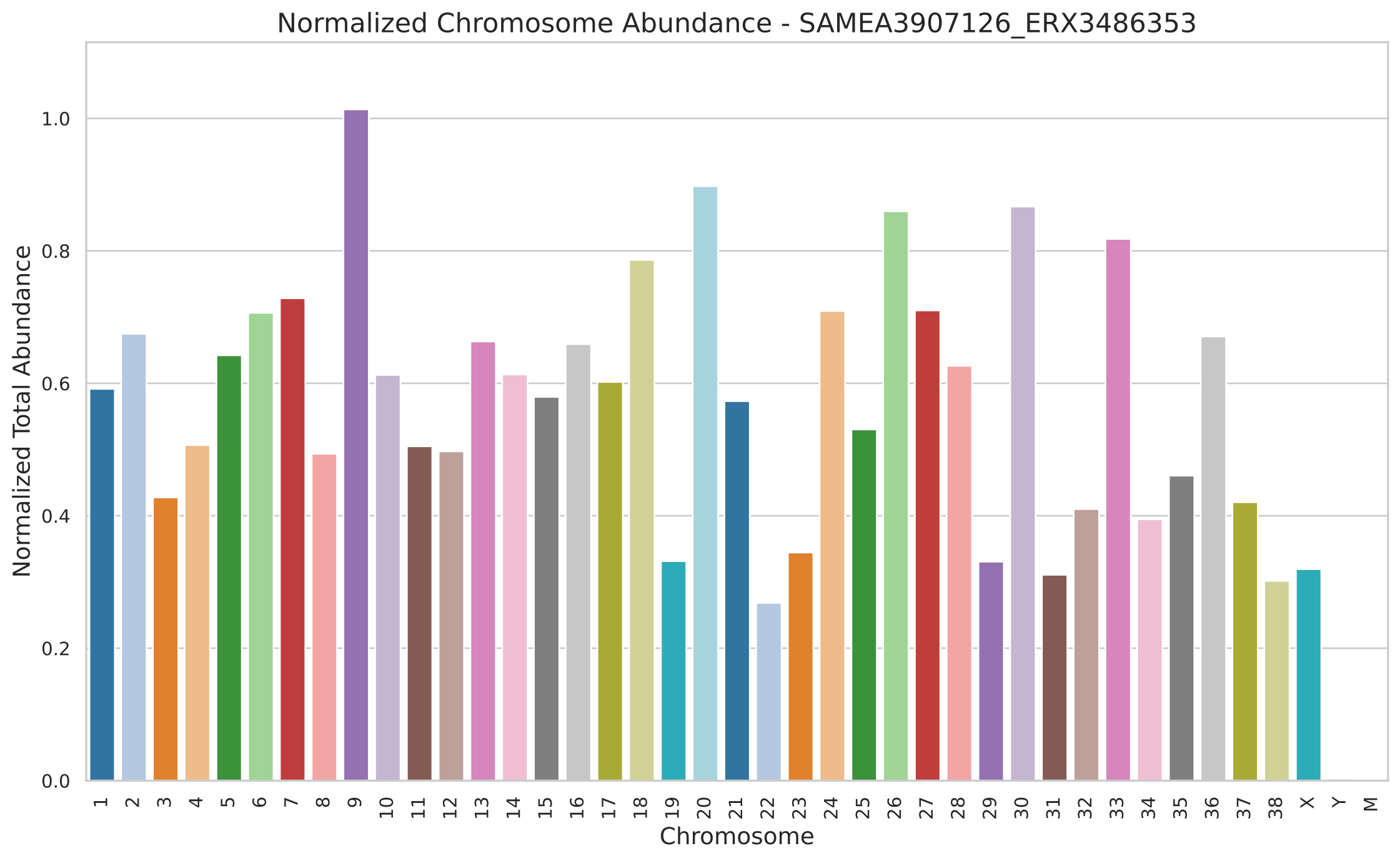

Normalized Chromosome Abundance - SAMN14488571_SRX8029318
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

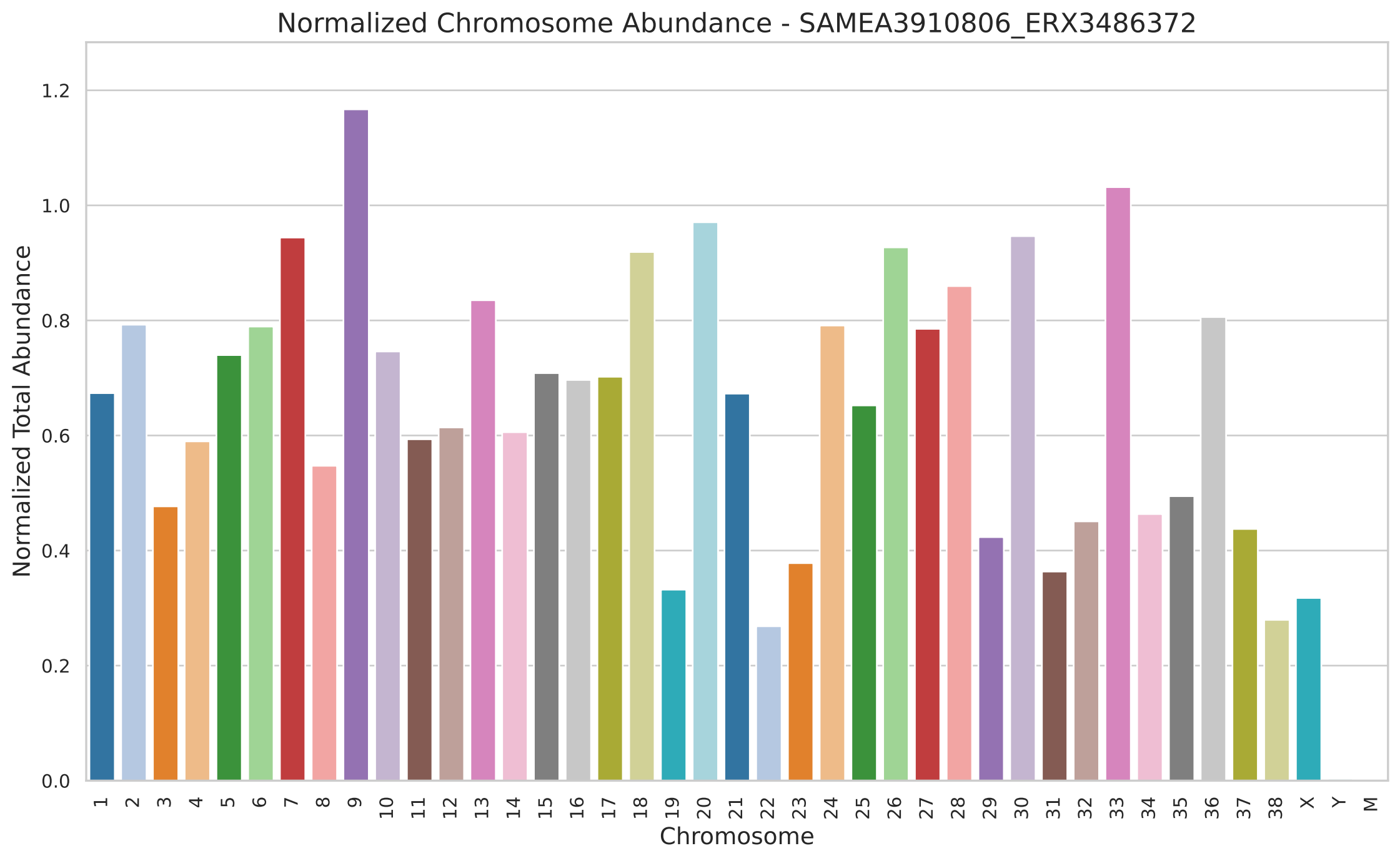

Normalized Chromosome Abundance - SAMEA3907316_ERX3486358
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

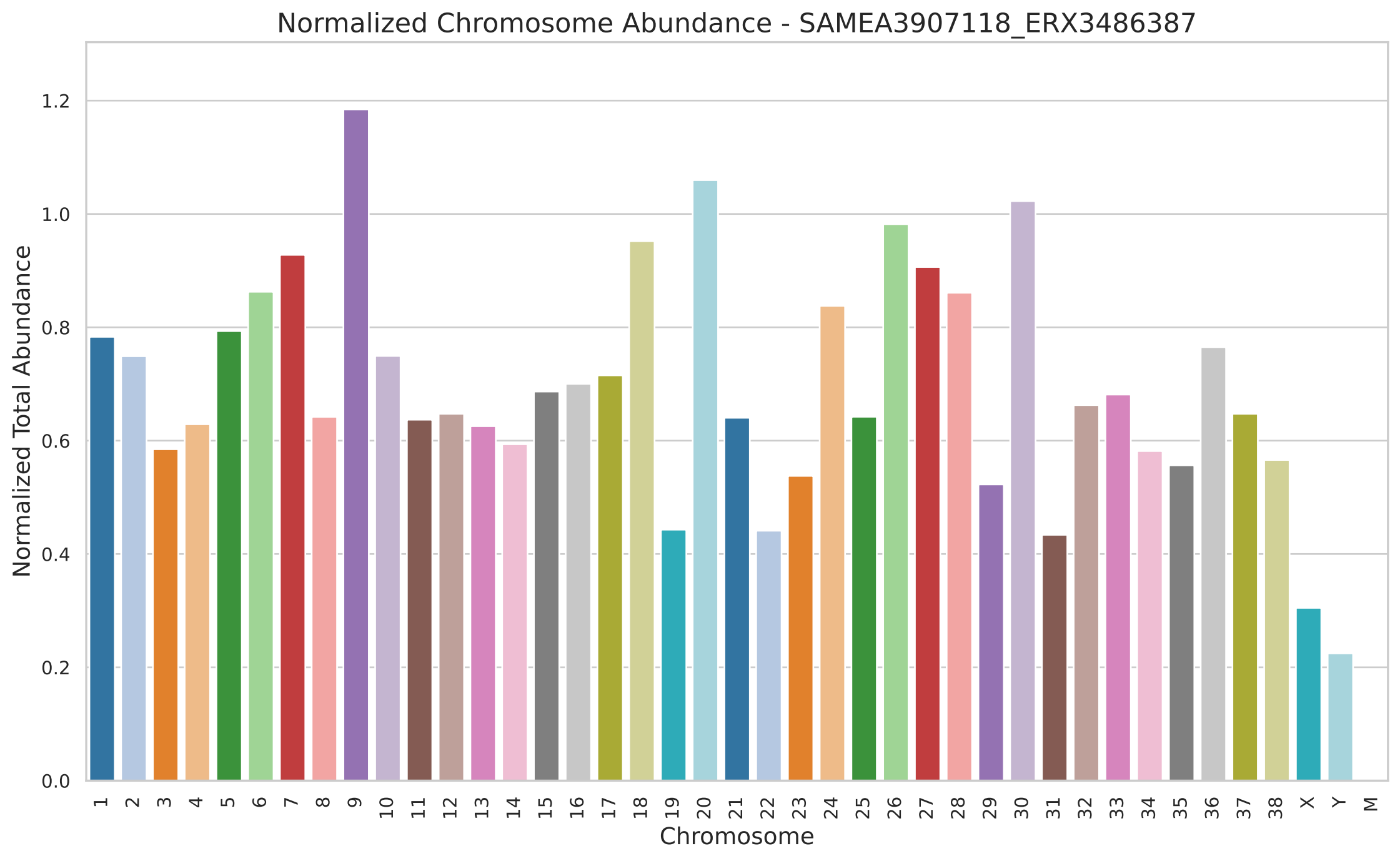

Normalized Chromosome Abundance - SAMN14488575_SRX8029322
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

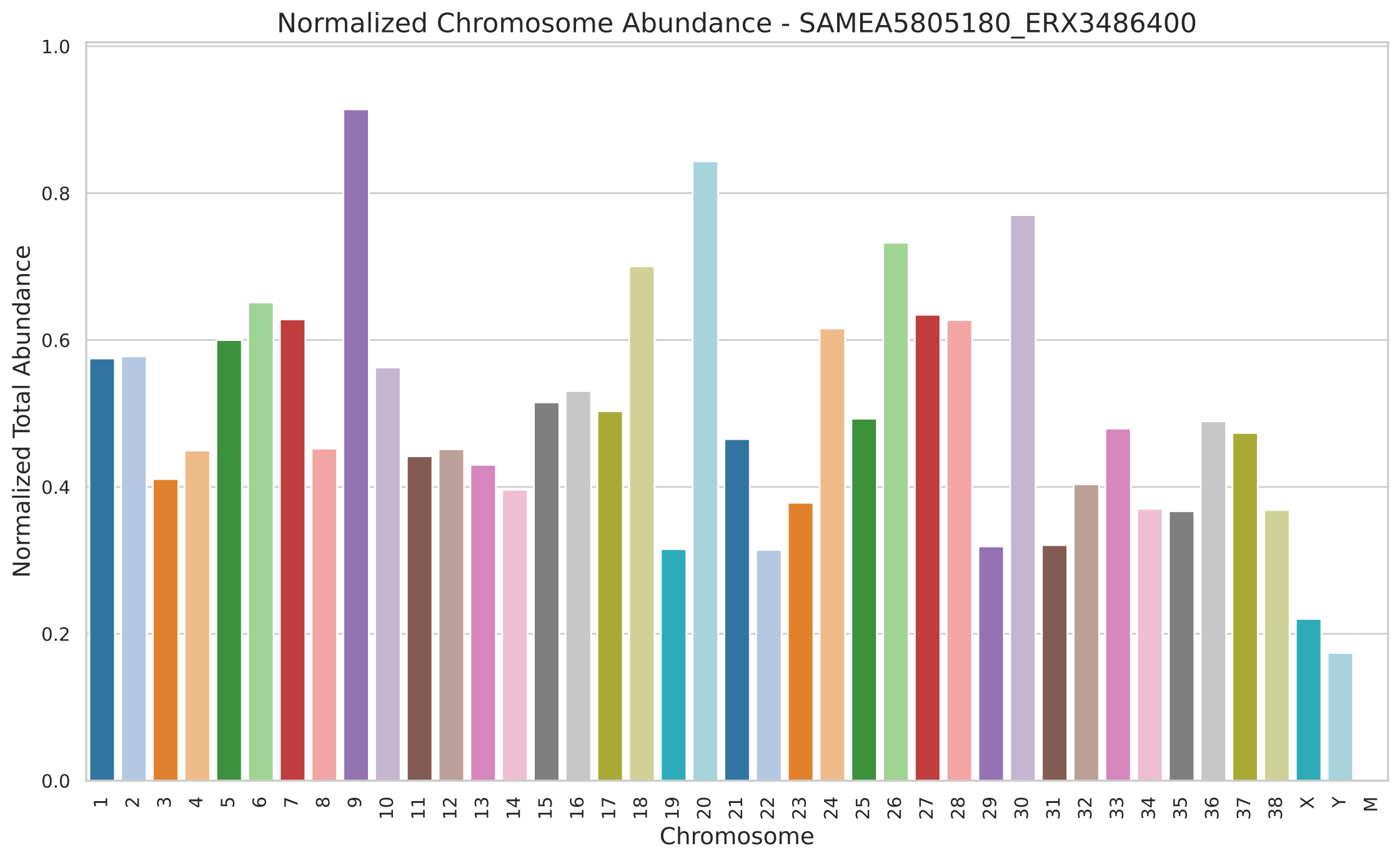

Normalized Chromosome Abundance - SAMEA5805181_ERX3486394
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

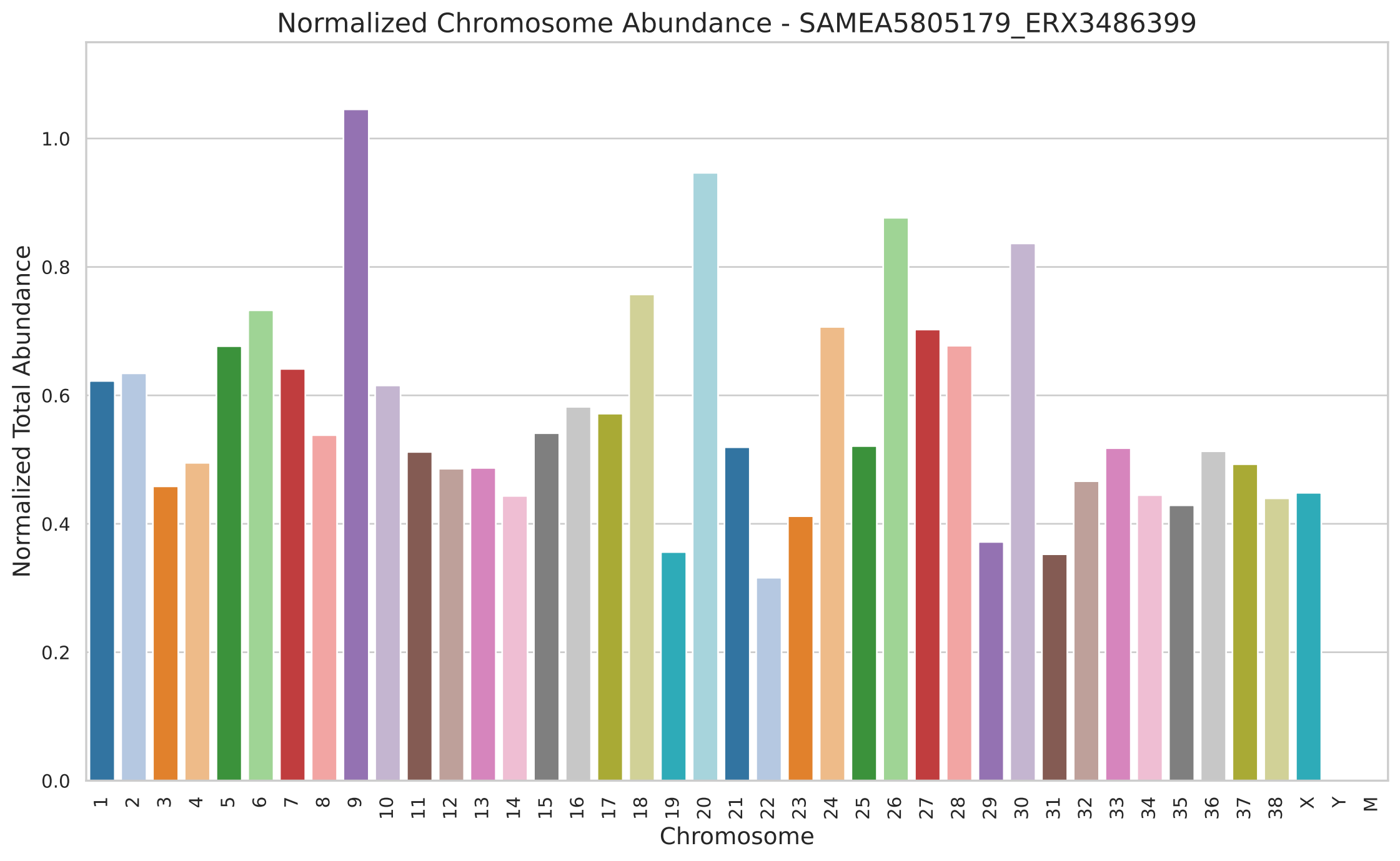

Normalized Chromosome Abundance - SAMEA3907332_ERX3486327
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

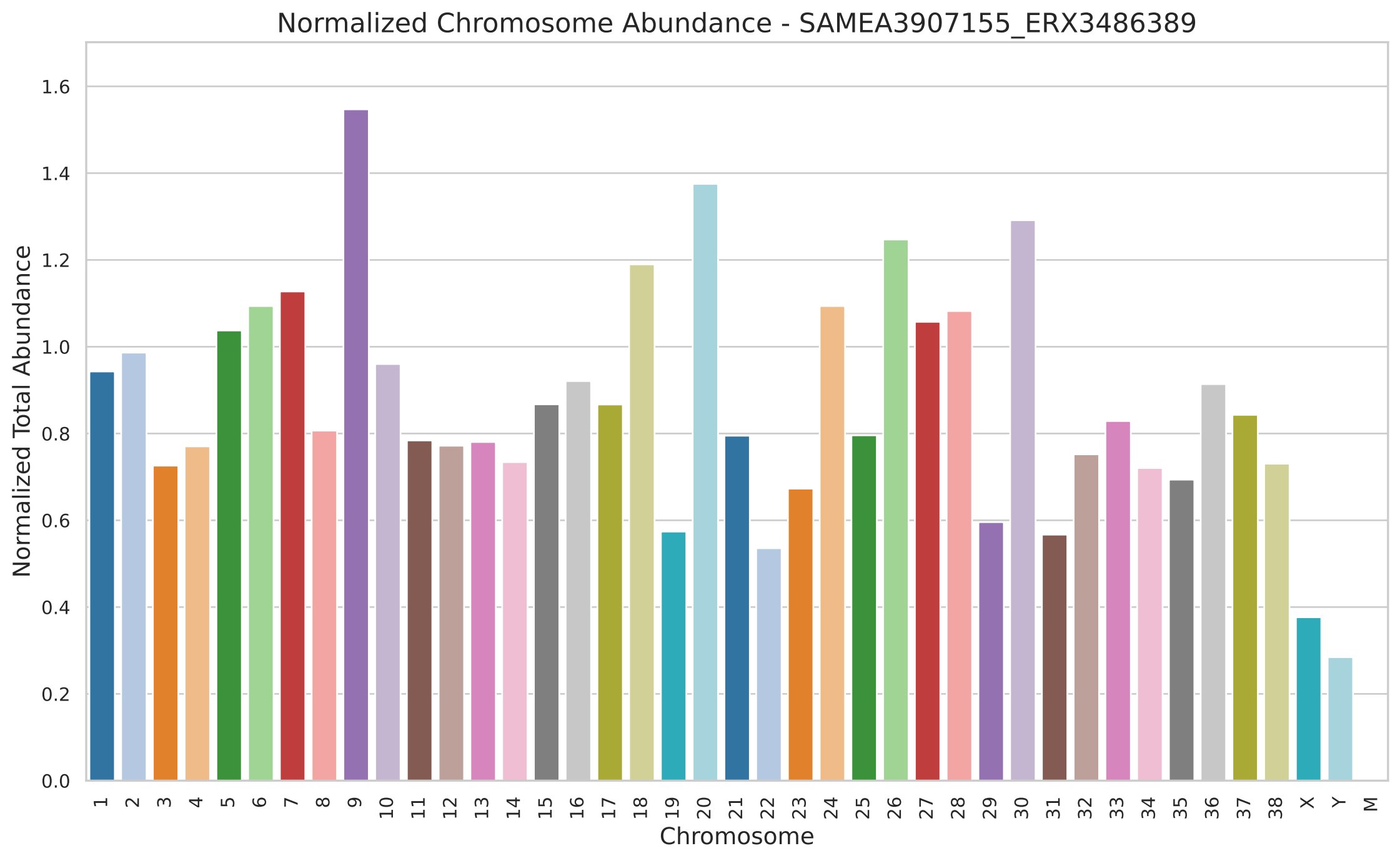

Normalized Chromosome Abundance - SAMEA3907126_ERX3486353
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

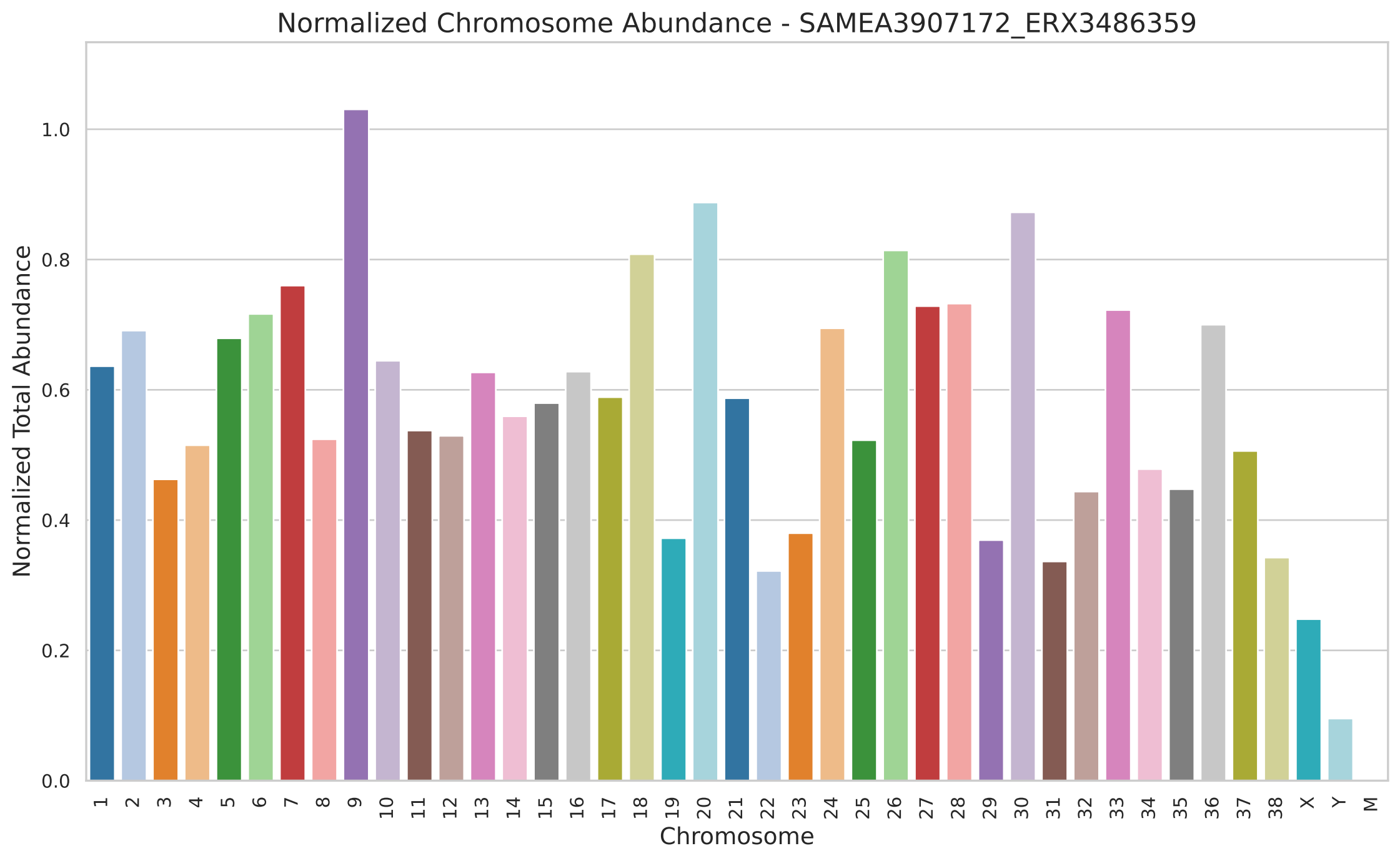

Normalized Chromosome Abundance - SAMEA3910806_ERX3486372
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

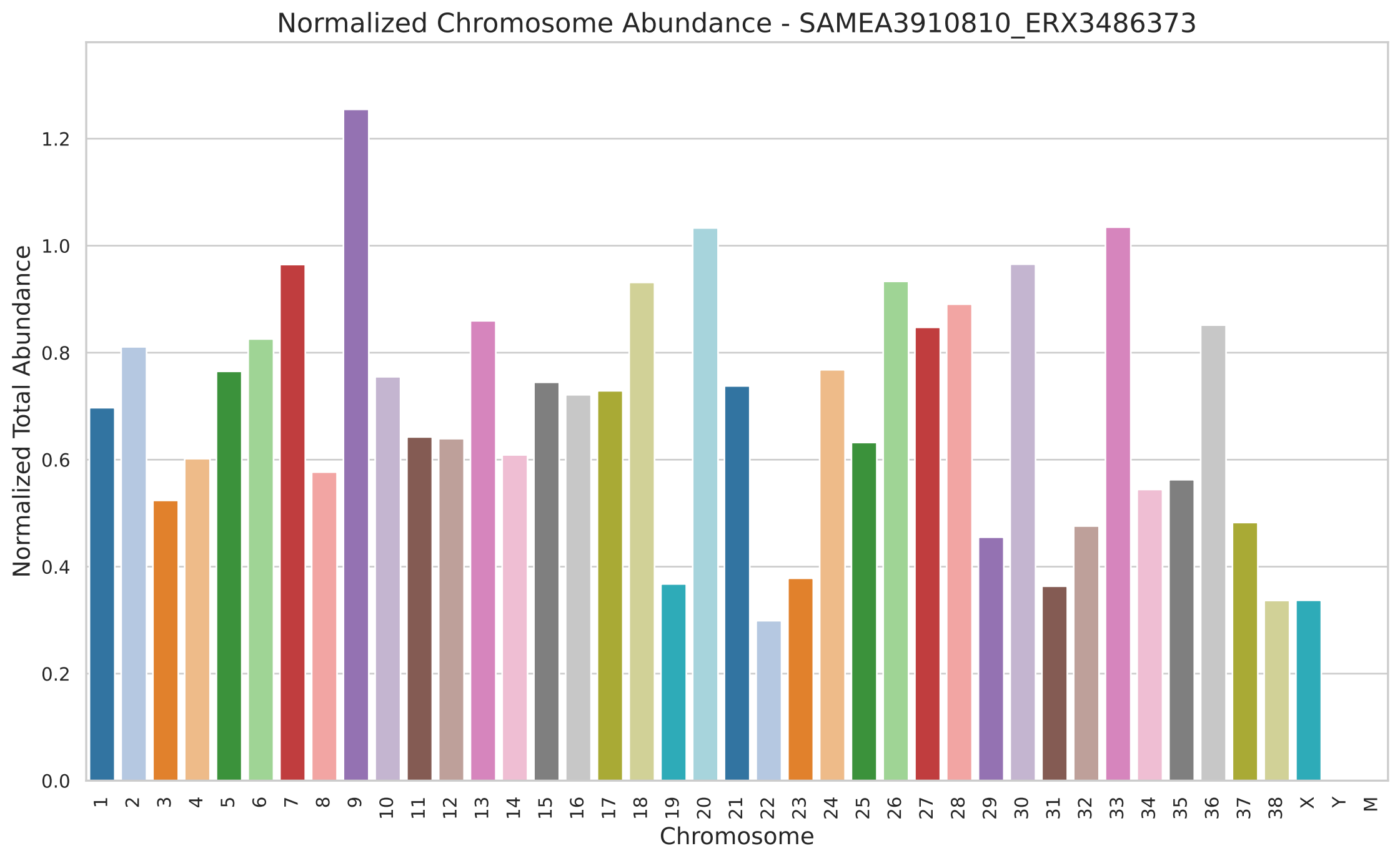

Normalized Chromosome Abundance - SAMEA3907118_ERX3486387
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

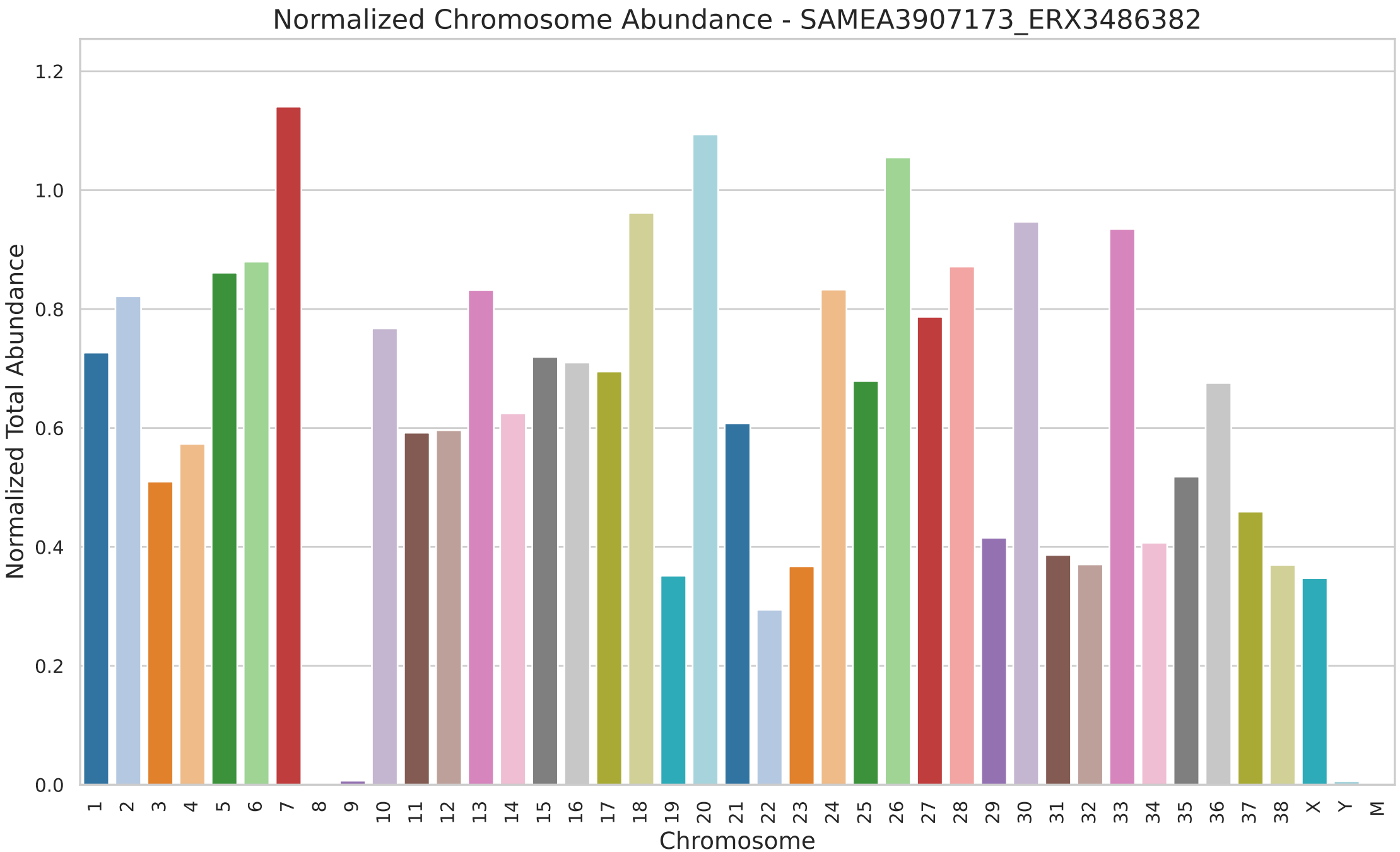

Normalized Chromosome Abundance - SAMEA5805180_ERX3486400
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

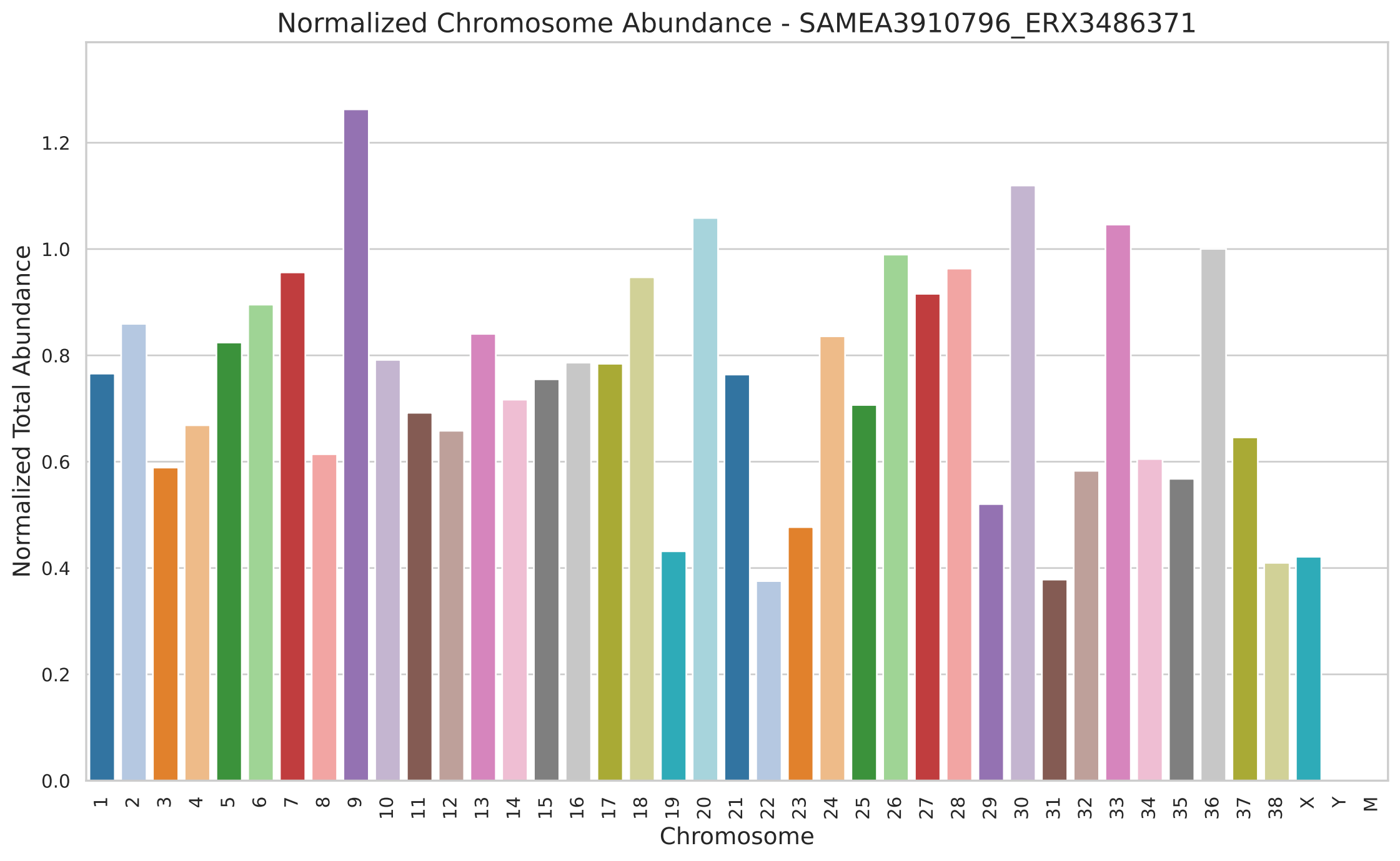

Normalized Chromosome Abundance - SAMEA5805179_ERX3486399
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

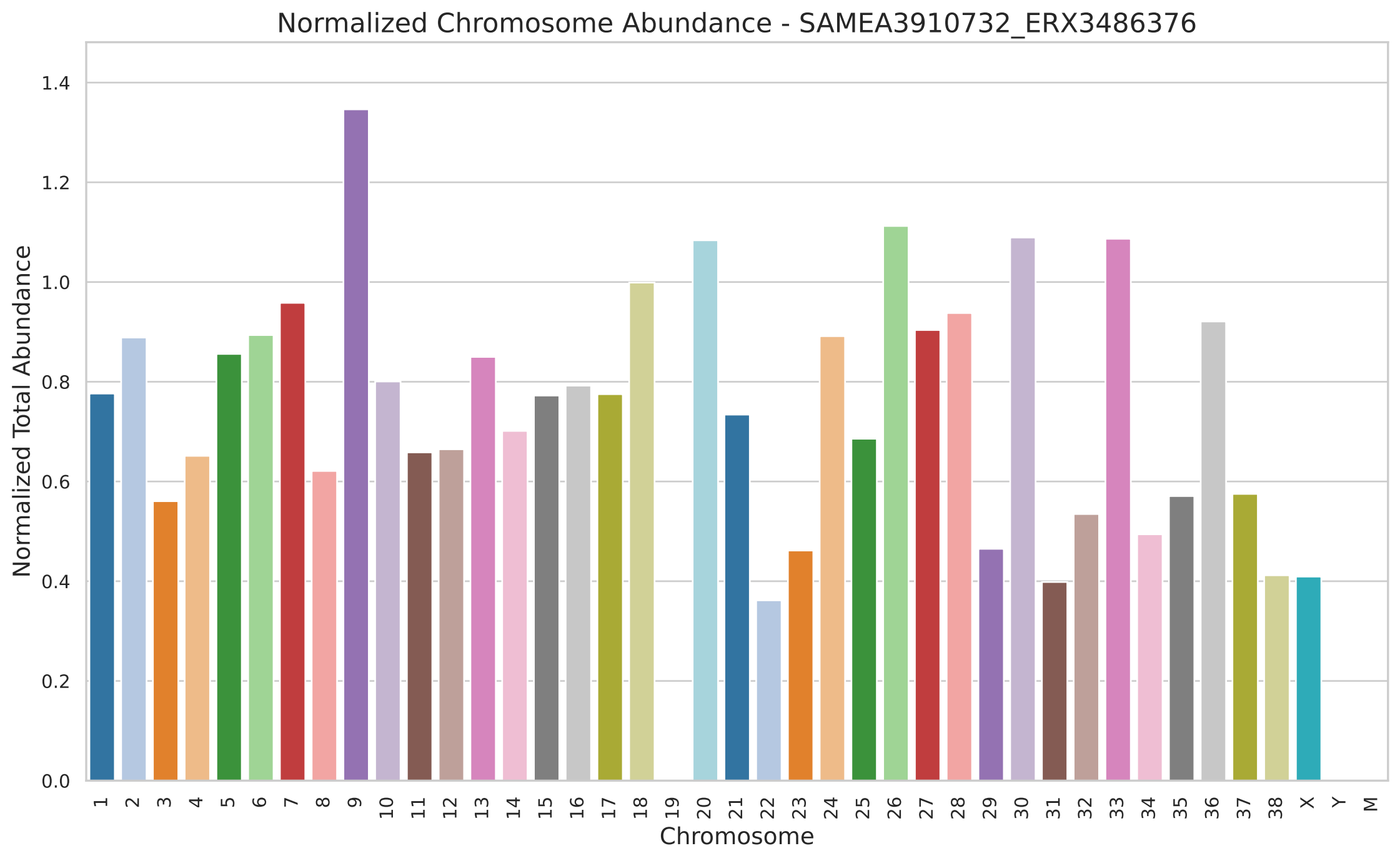

Normalized Chromosome Abundance - SAMEA3907155_ERX3486389
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

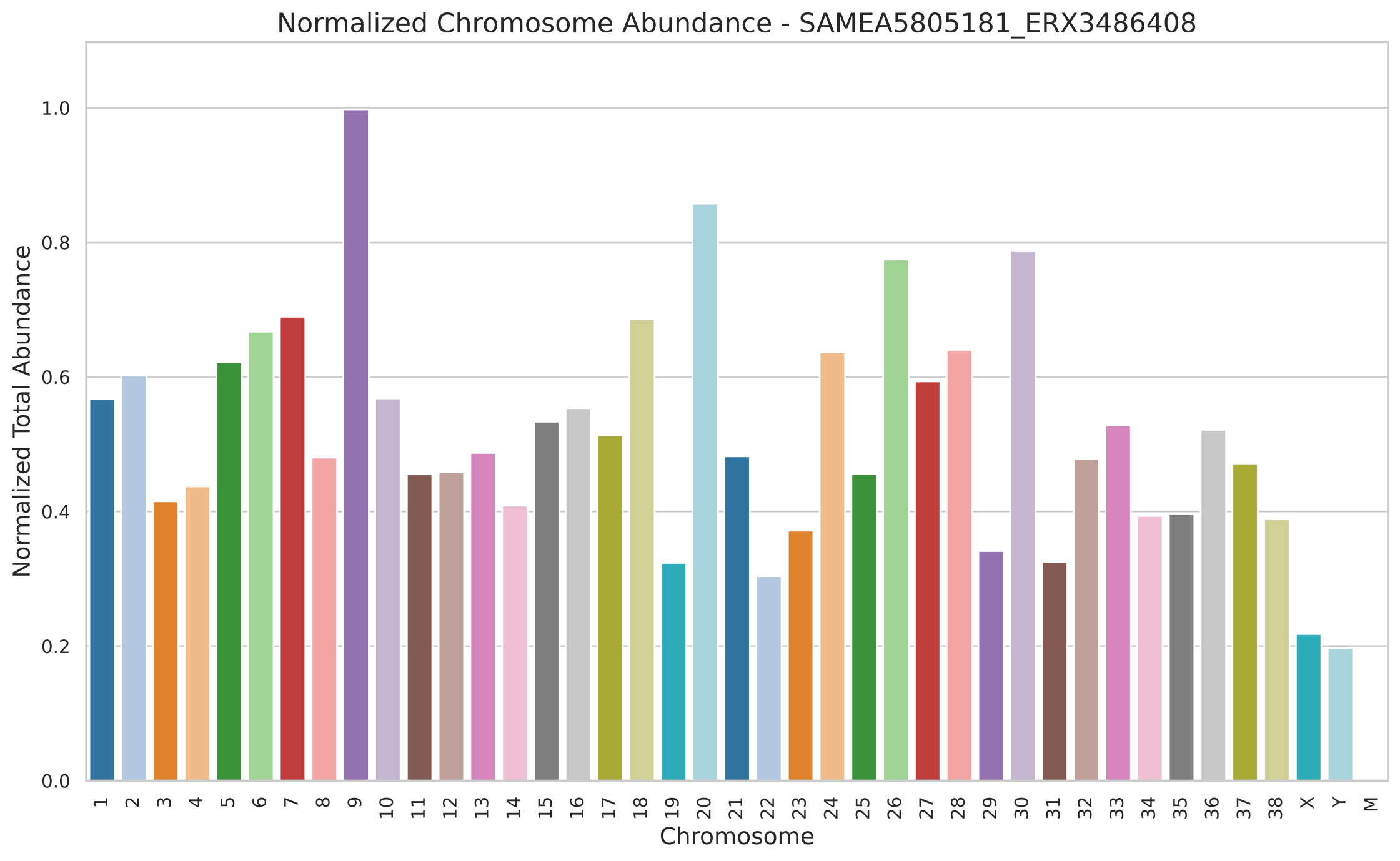

Normalized Chromosome Abundance - SAMEA3907172_ERX3486359
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

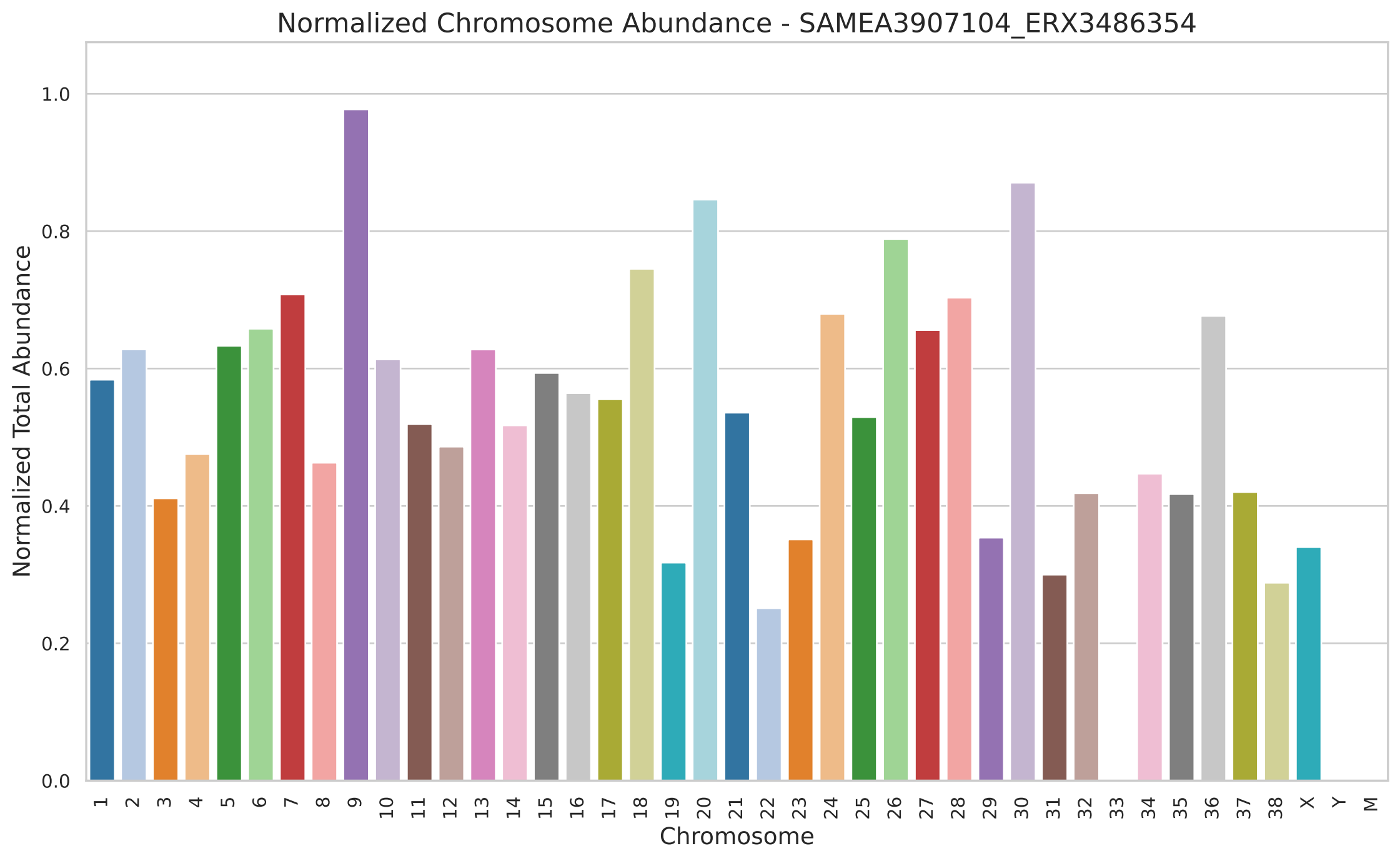

Normalized Chromosome Abundance - SAMEA3910810_ERX3486373
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

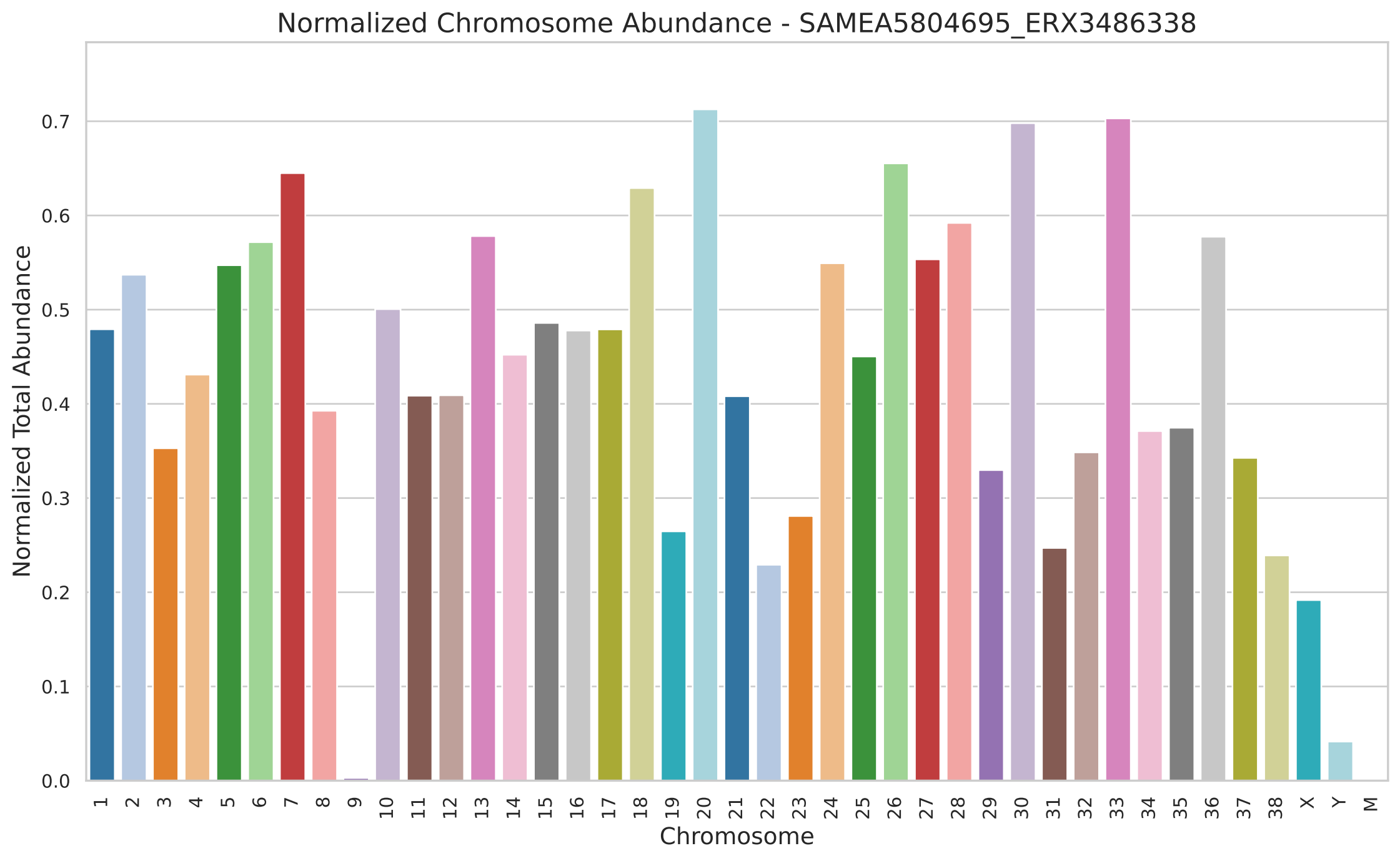

Normalized Chromosome Abundance - SAMEA3907173_ERX3486382
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

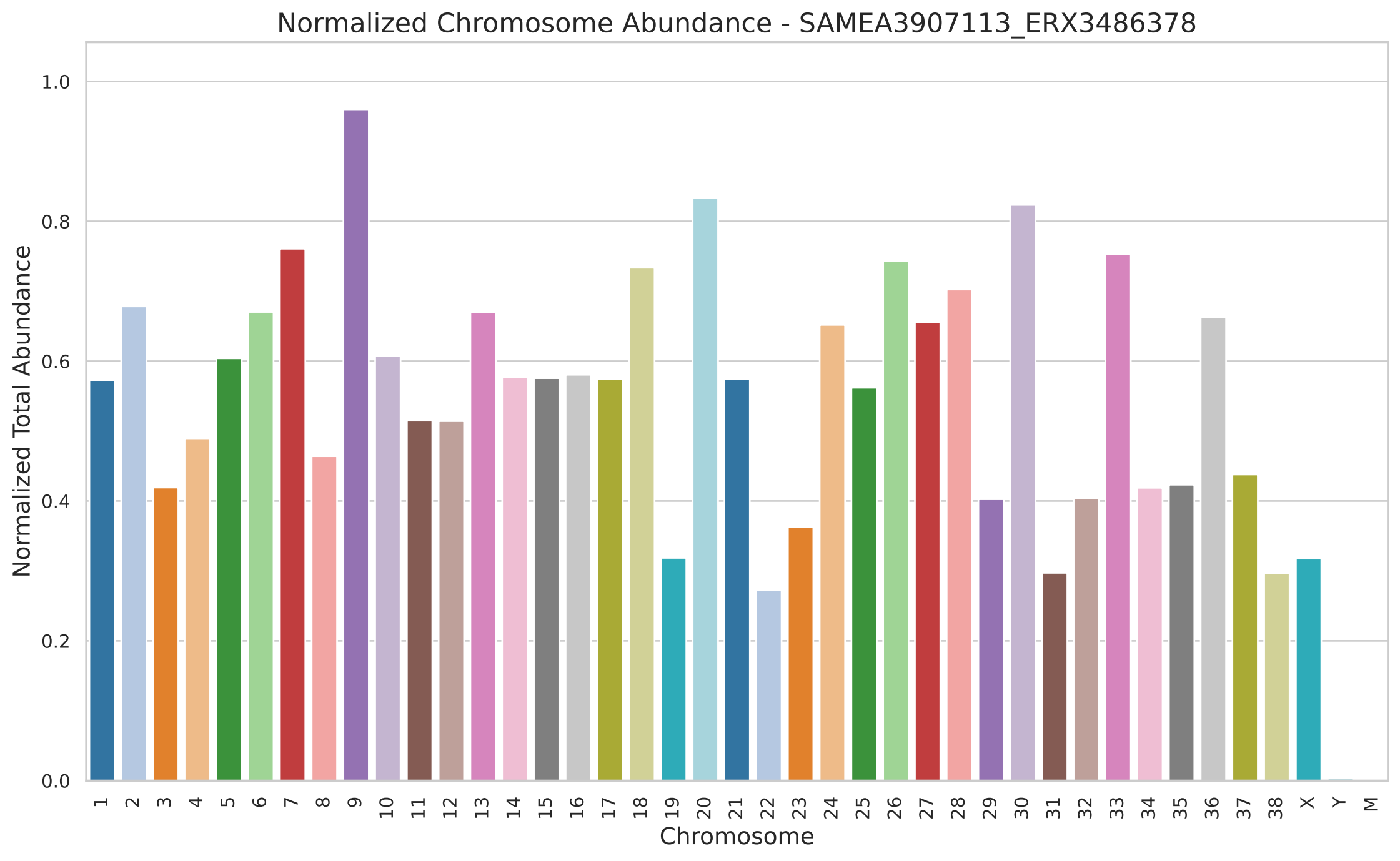

Normalized Chromosome Abundance - SAMEA3910796_ERX3486371
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

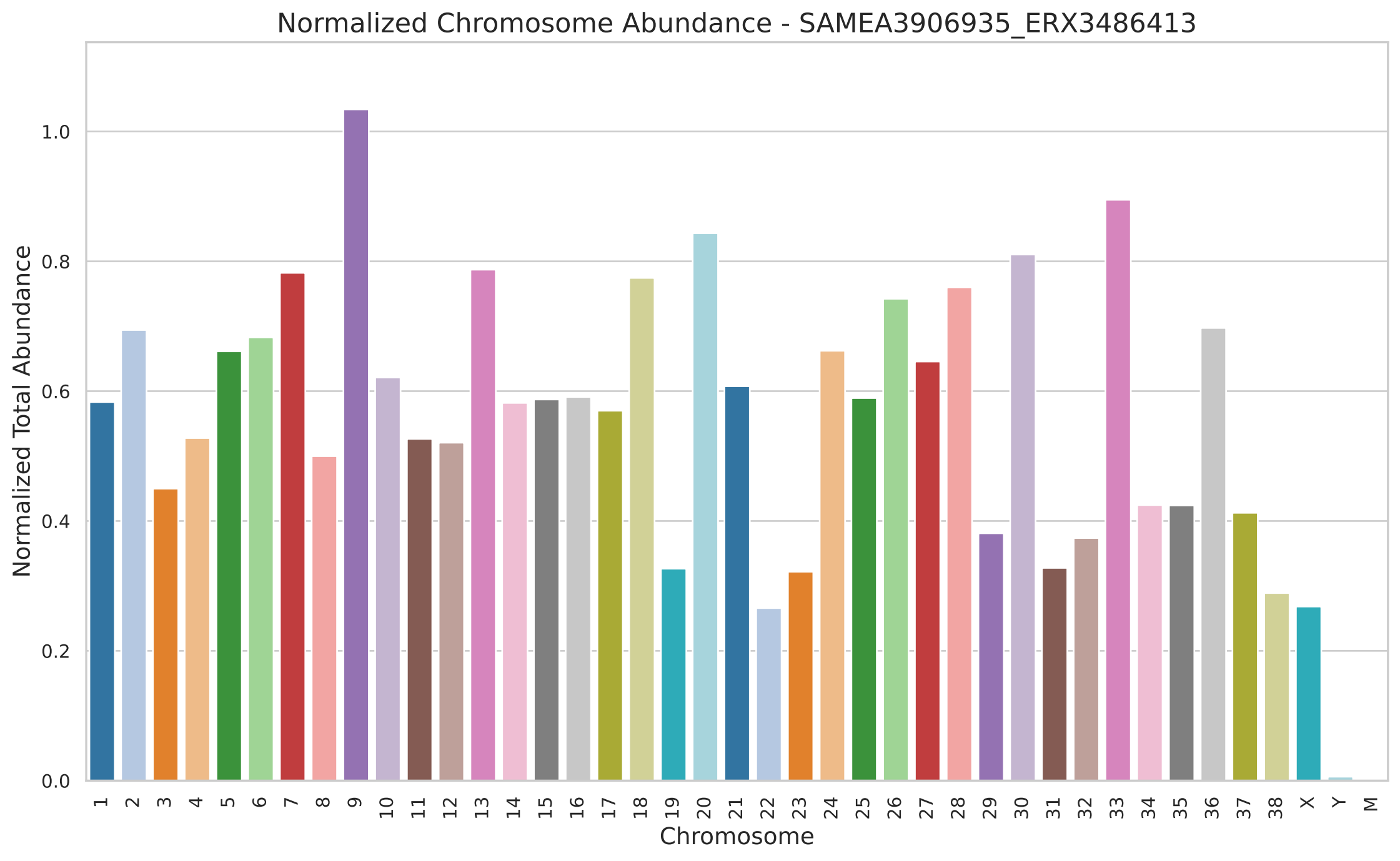

Normalized Chromosome Abundance - SAMEA3910732_ERX3486376
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

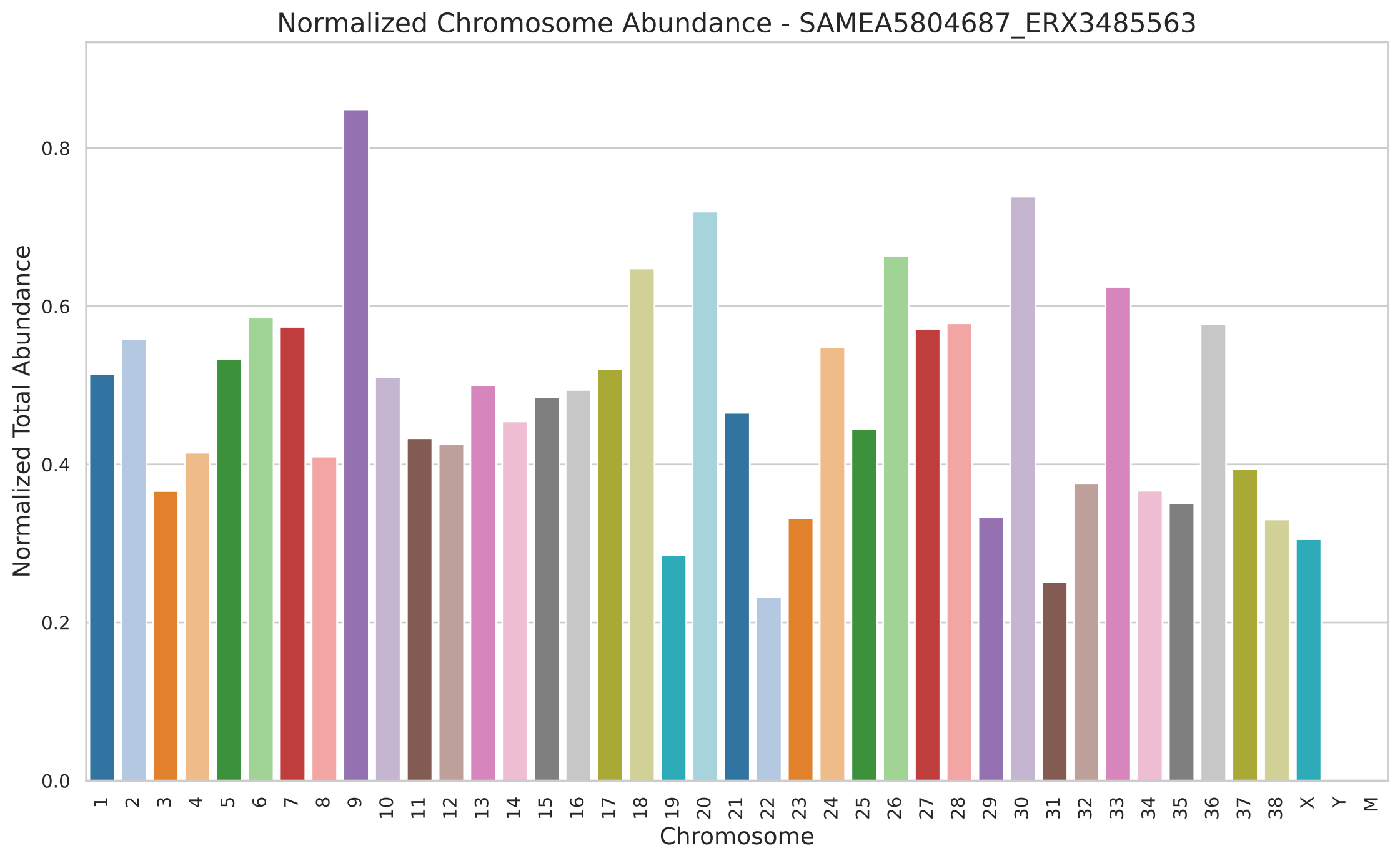

Normalized Chromosome Abundance - SAMEA5805181_ERX3486408
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

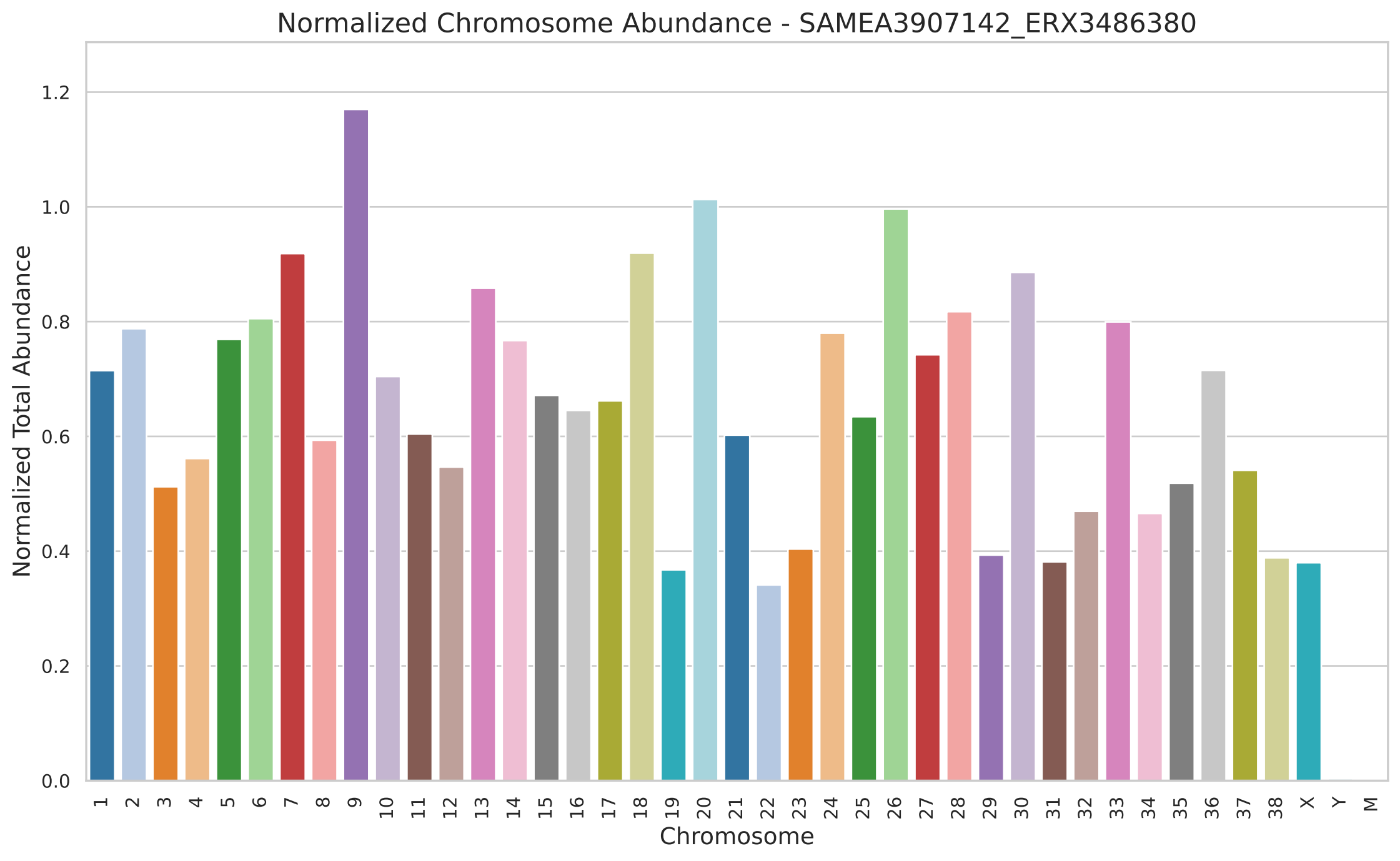

Normalized Chromosome Abundance - SAMEA3907104_ERX3486354
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

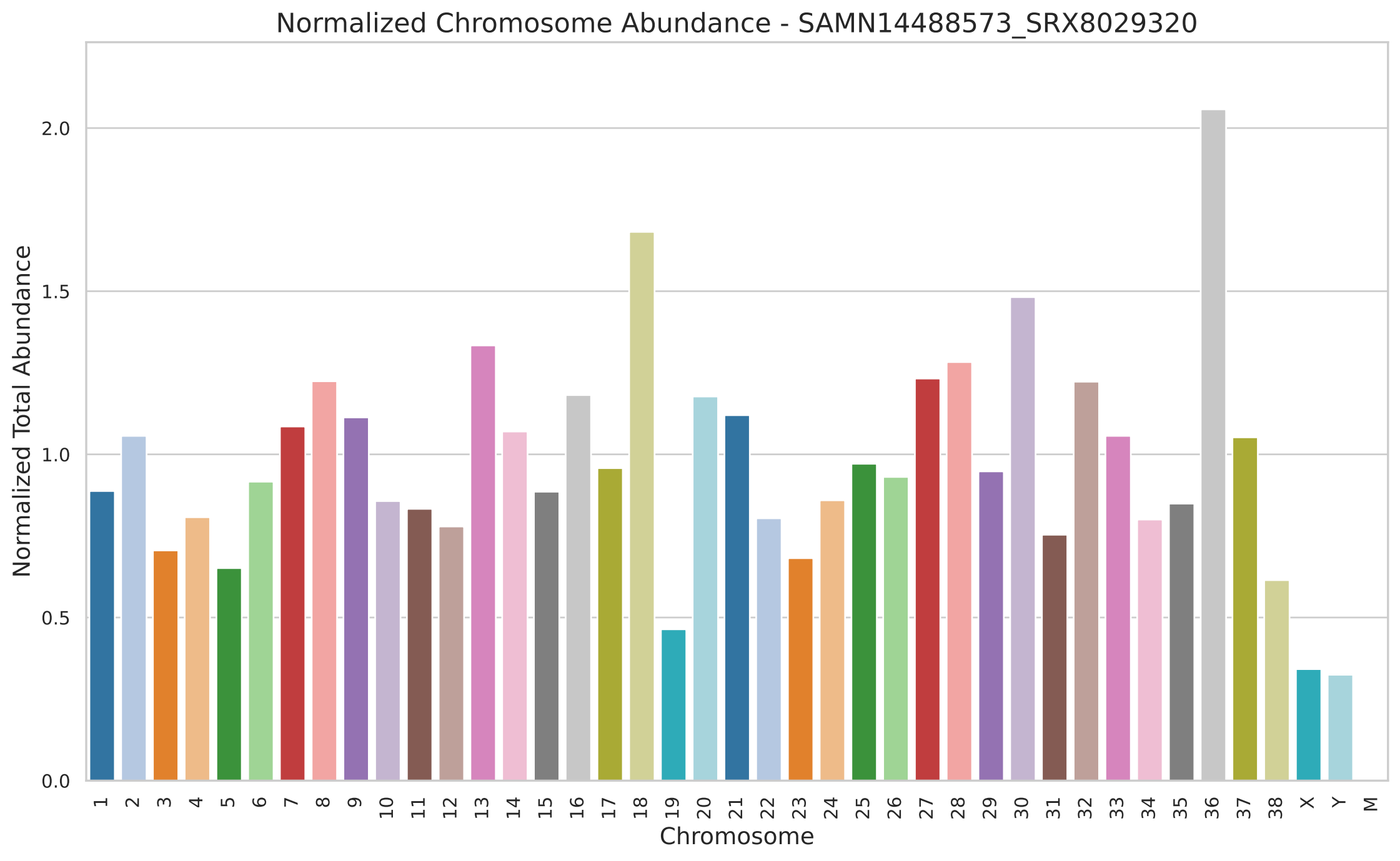

Normalized Chromosome Abundance - SAMEA5804695_ERX3486338
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

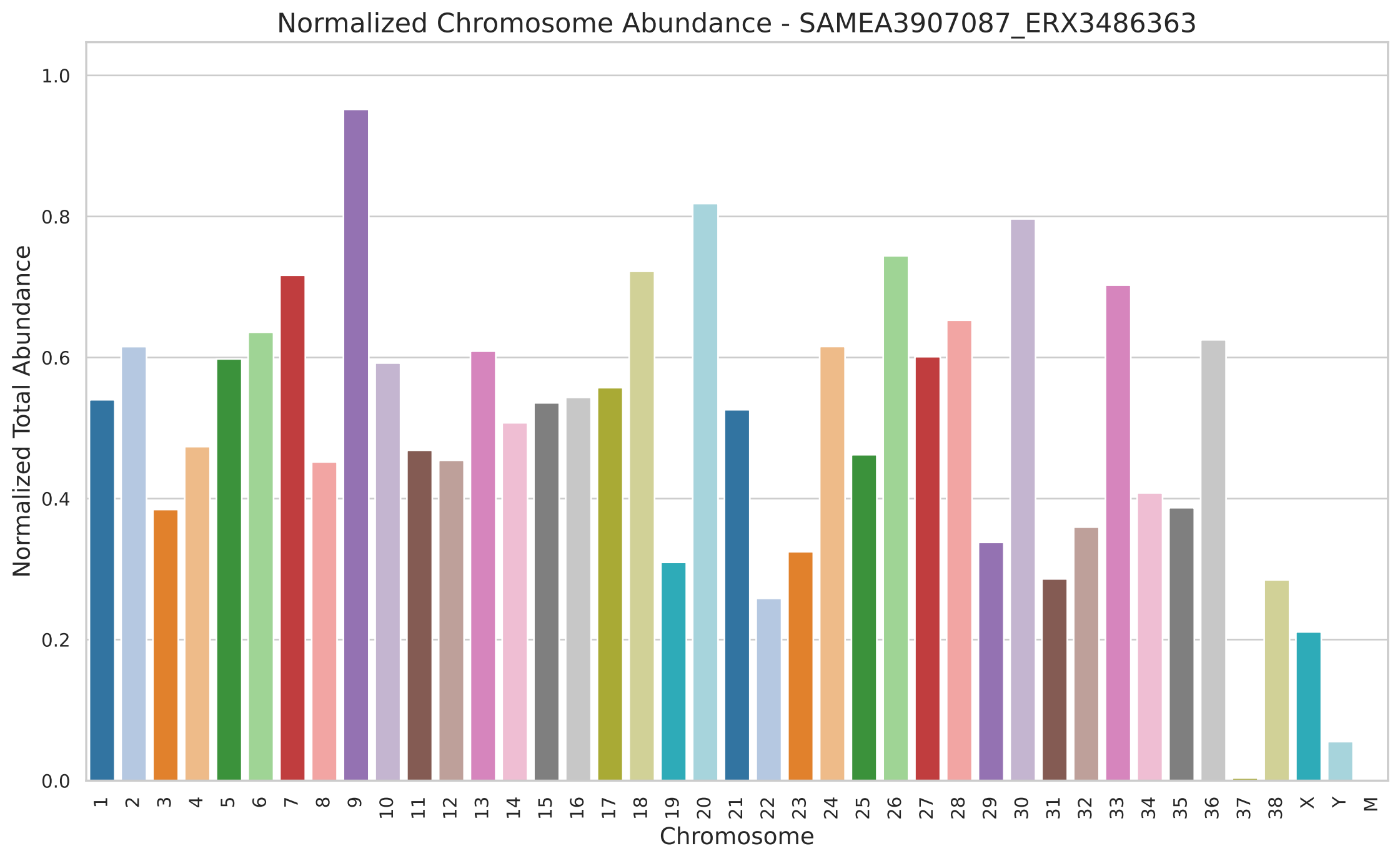

Normalized Chromosome Abundance - SAMEA3907113_ERX3486378
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

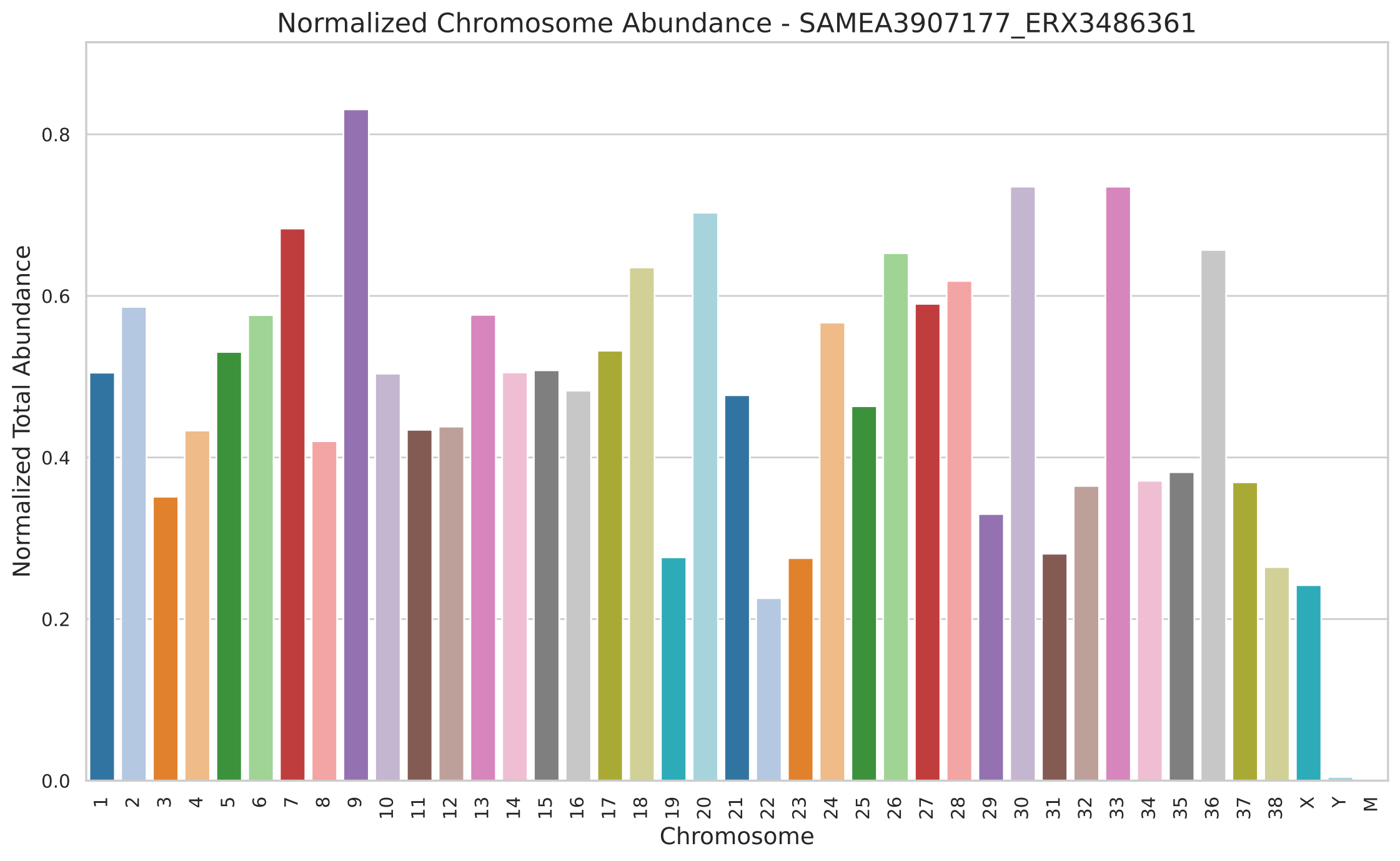

Normalized Chromosome Abundance - SAMEA3906935_ERX3486413
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

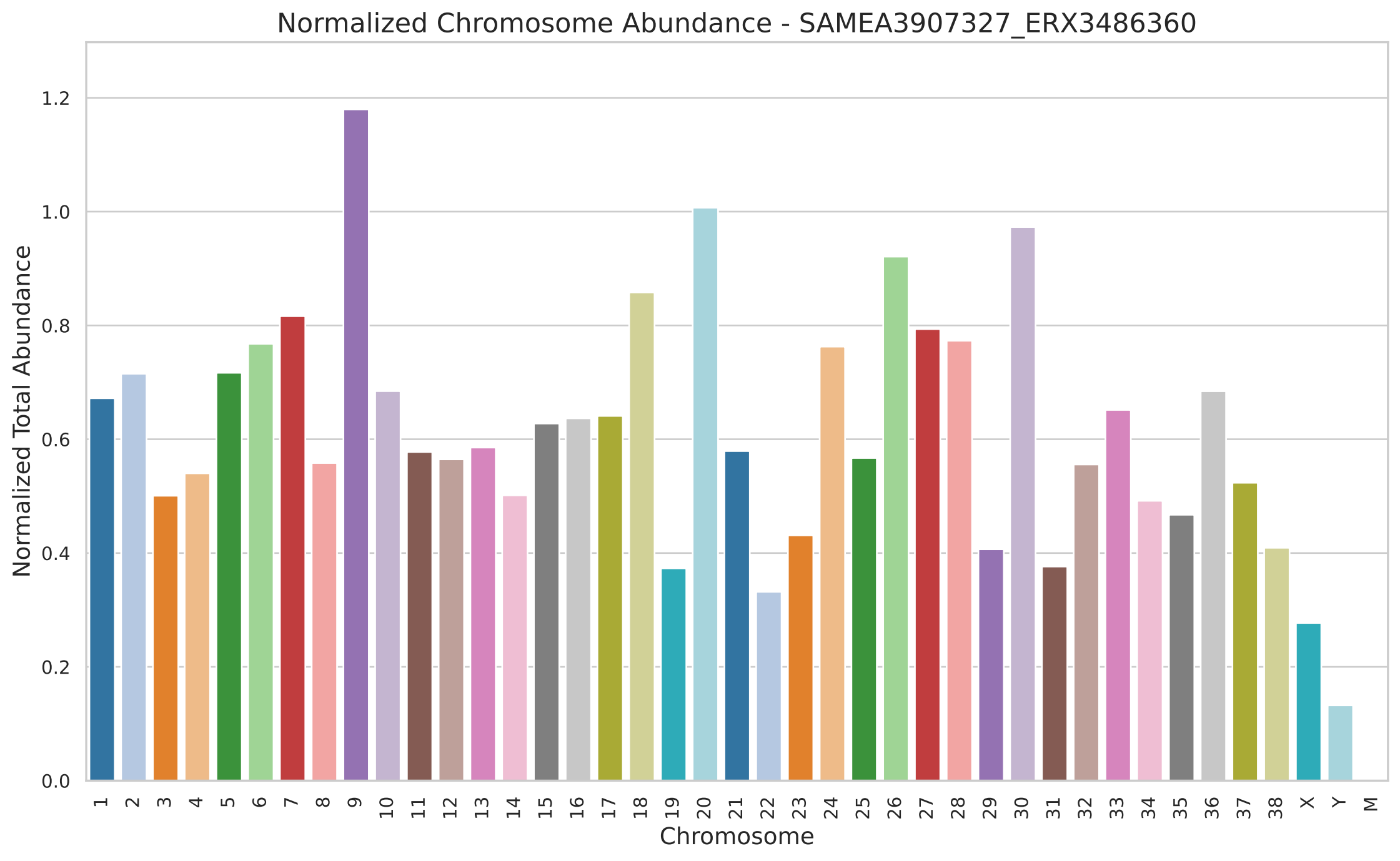

Normalized Chromosome Abundance - SAMEA5804687_ERX3485563
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

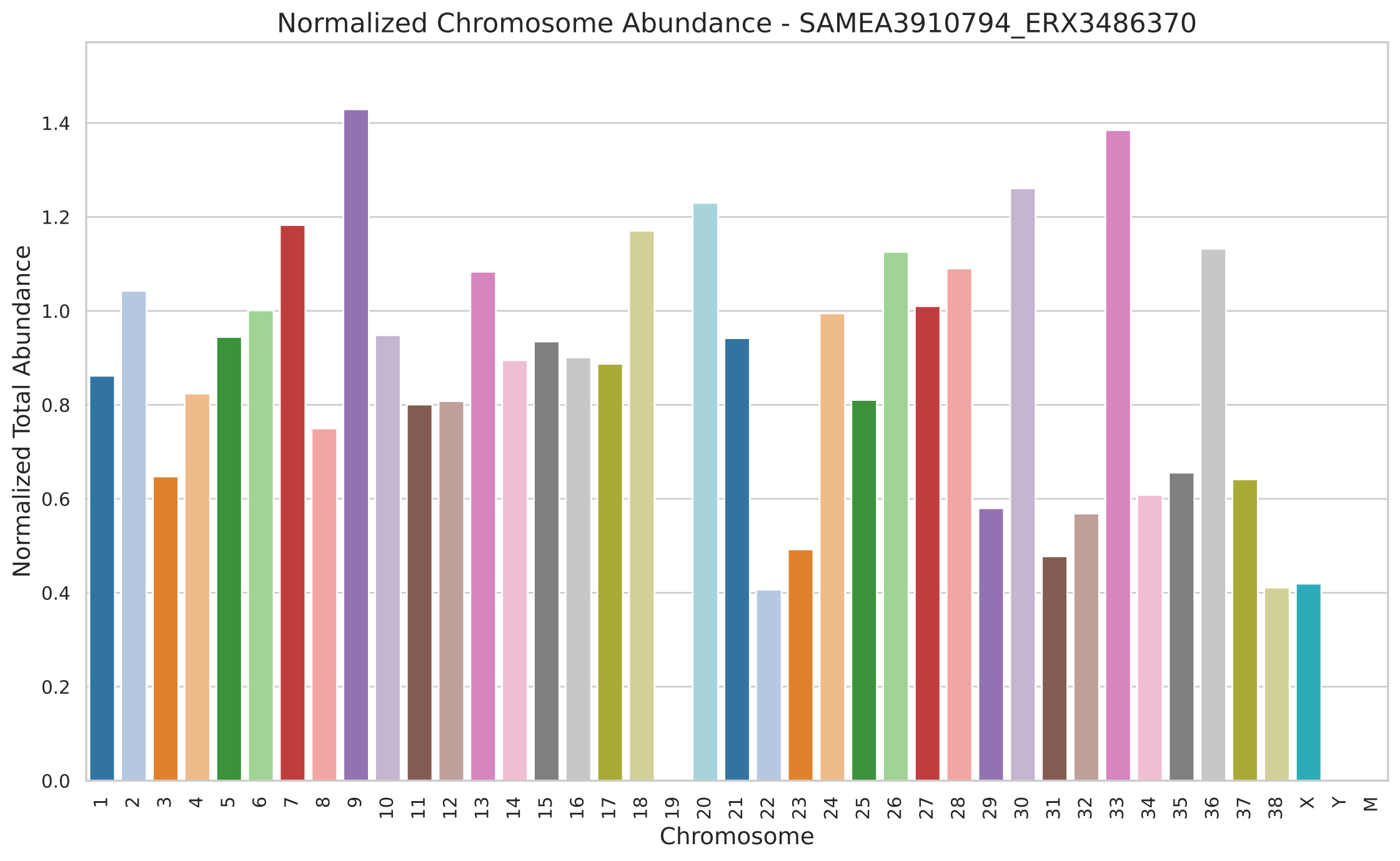

Normalized Chromosome Abundance - SAMEA3907142_ERX3486380
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

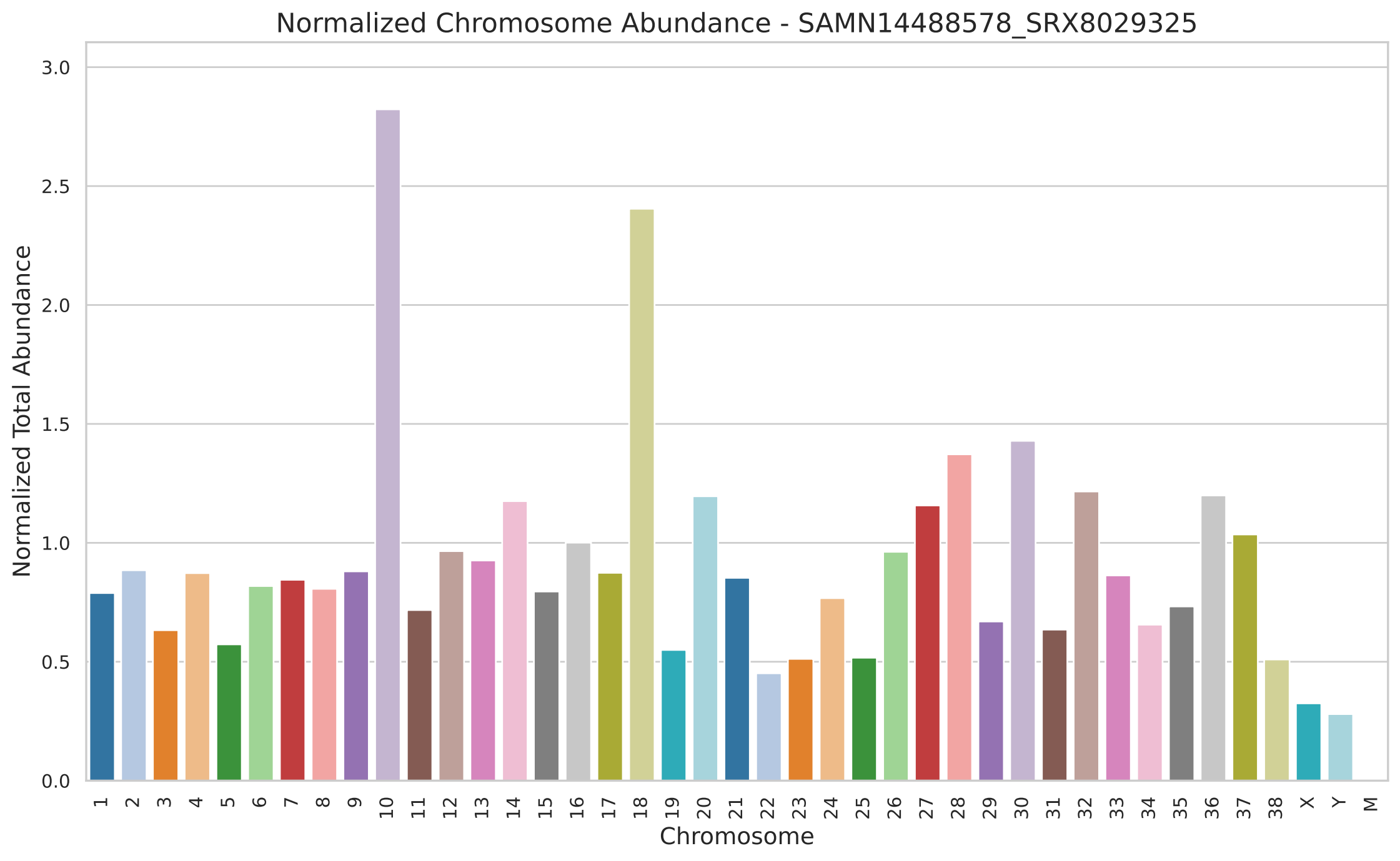

Normalized Chromosome Abundance - SAMN14488573_SRX8029320
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

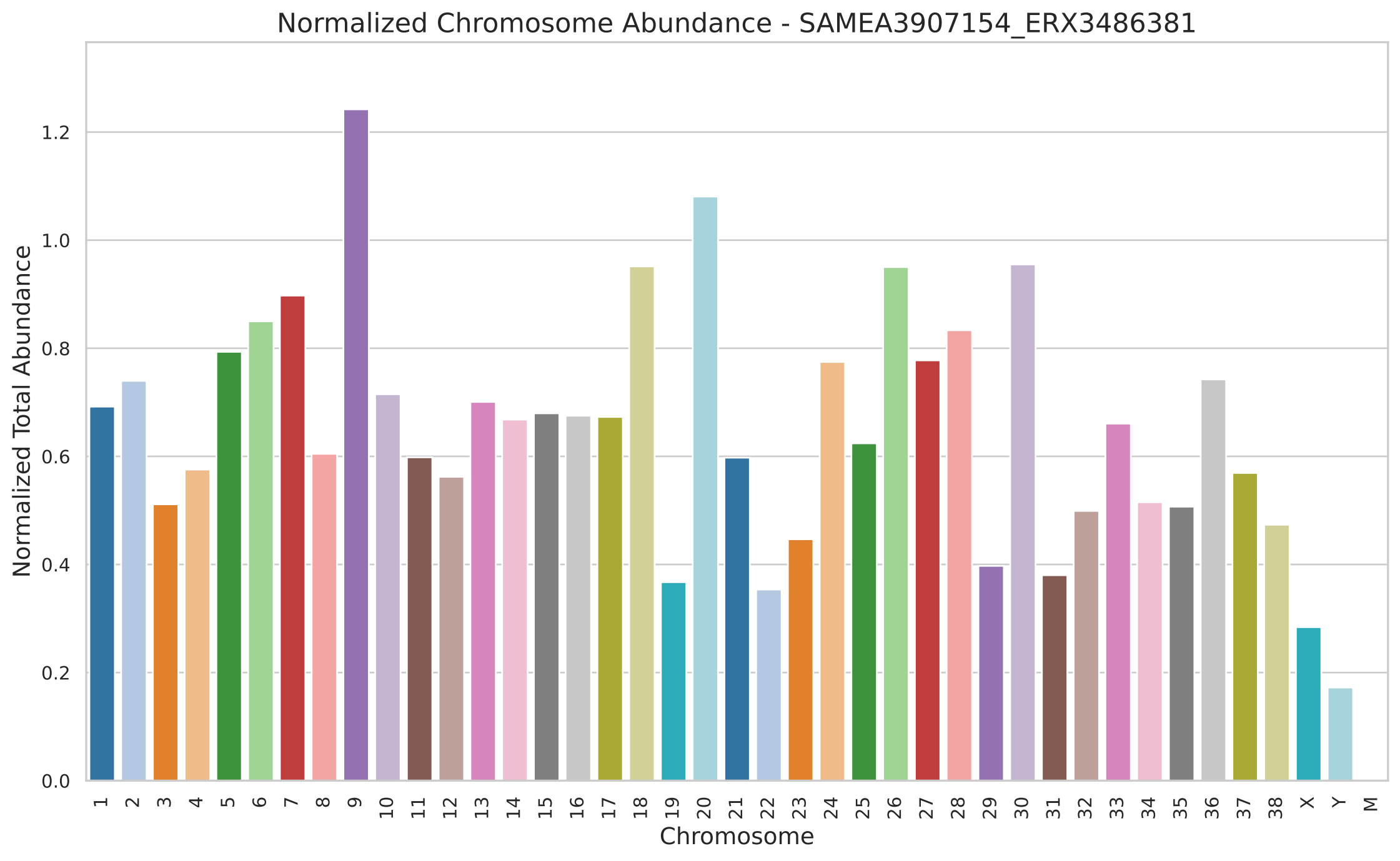

Normalized Chromosome Abundance - SAMEA3907087_ERX3486363
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

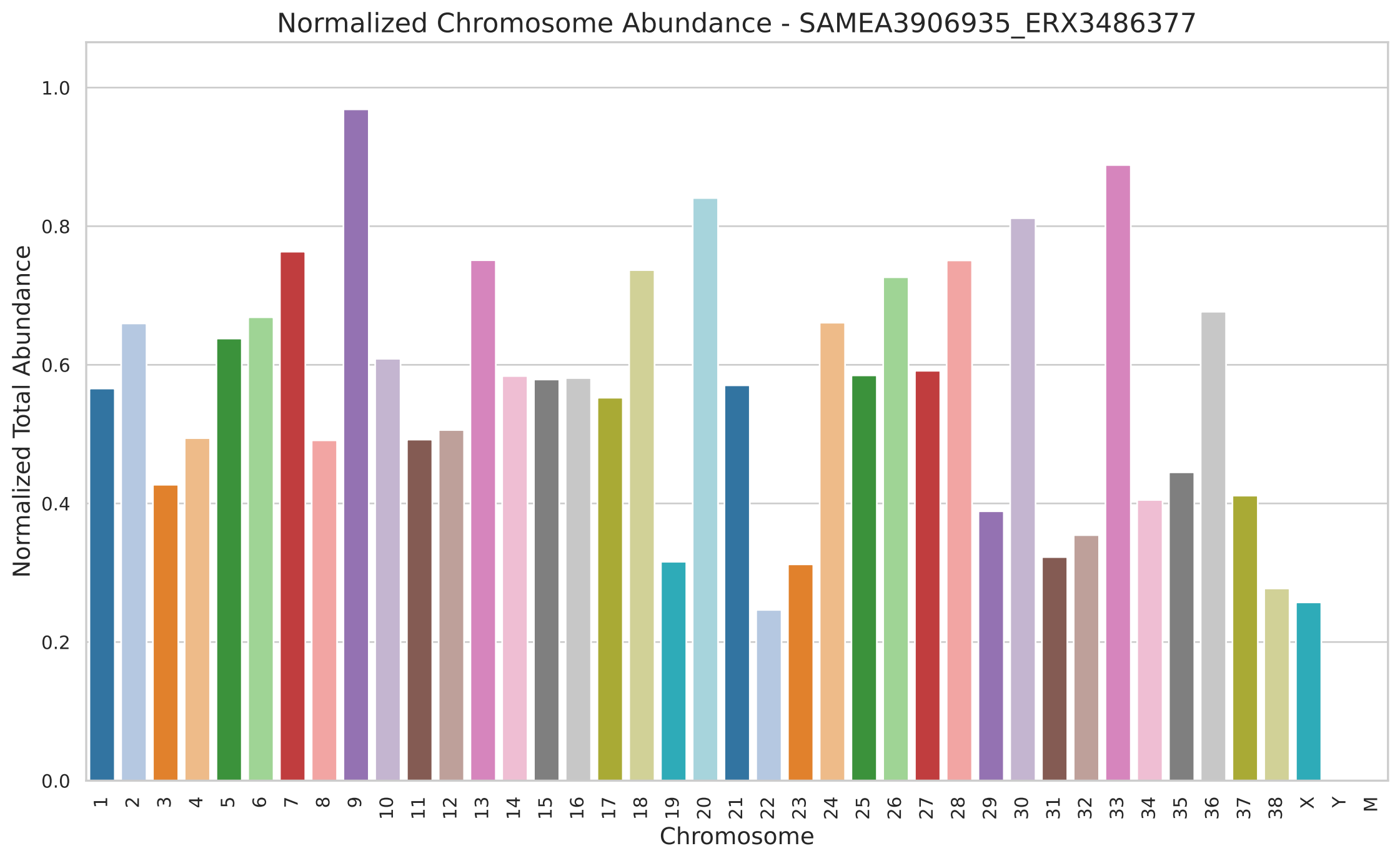

Normalized Chromosome Abundance - SAMEA3907177_ERX3486361
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

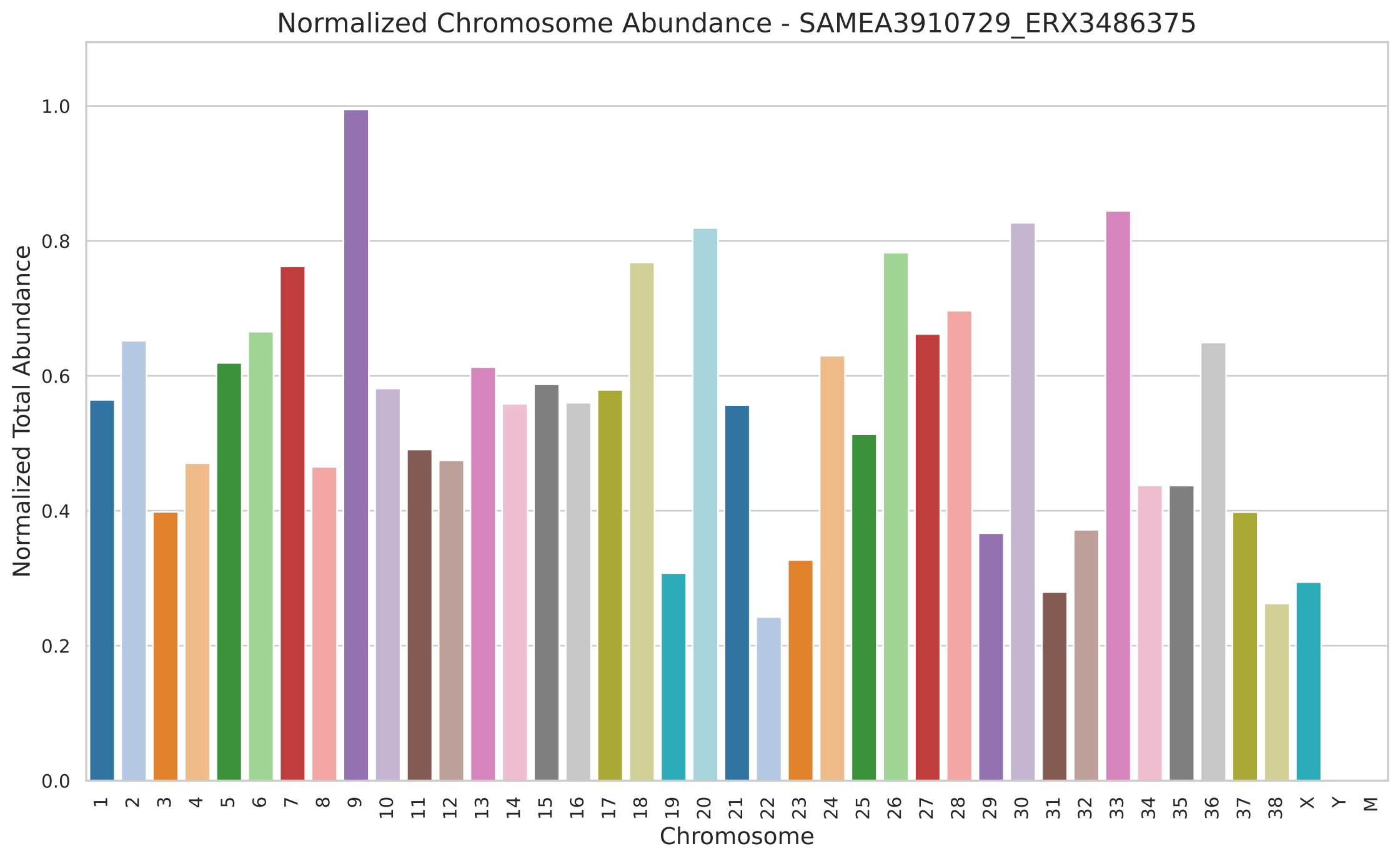

Normalized Chromosome Abundance - SAMEA3907327_ERX3486360
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

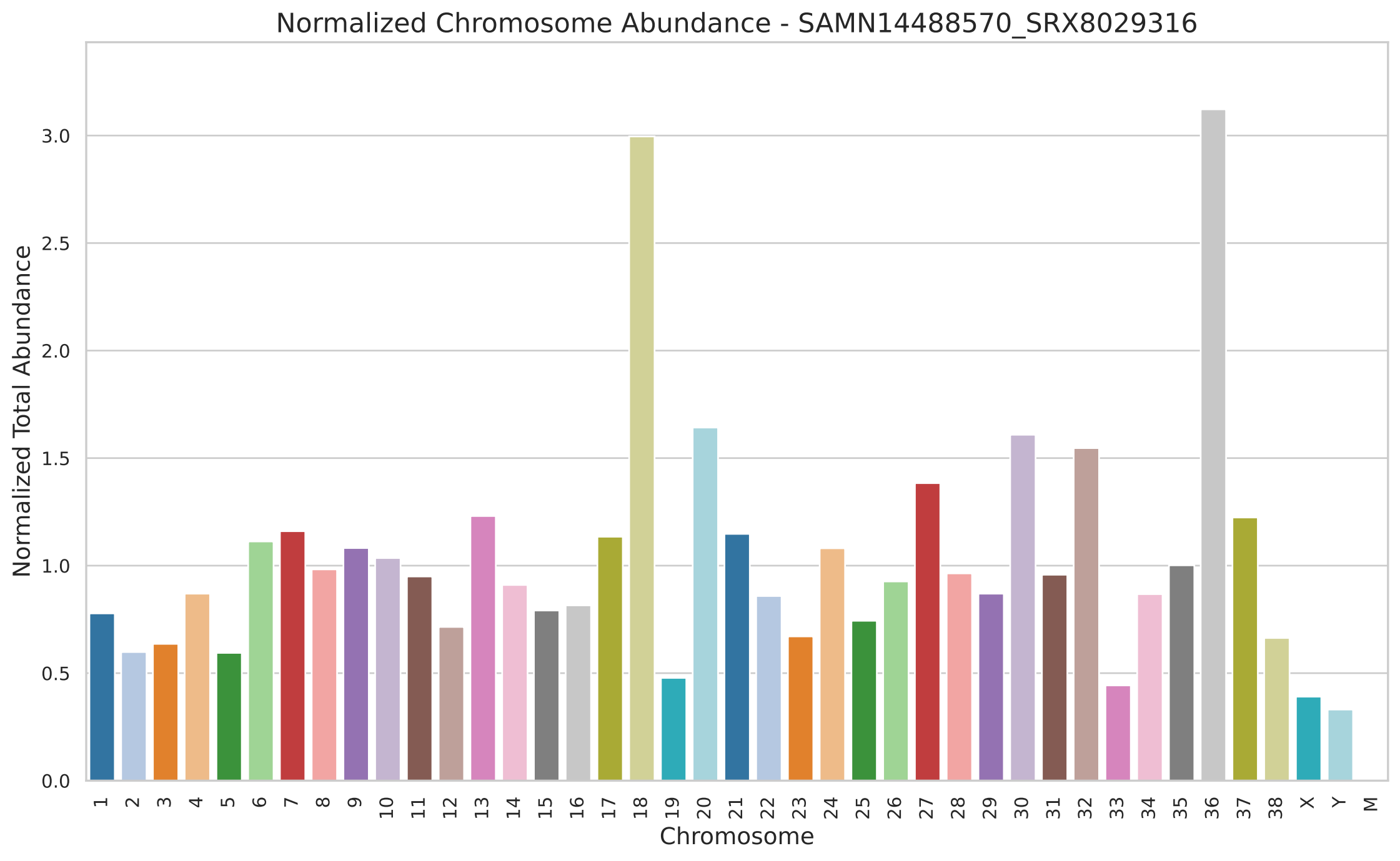

Normalized Chromosome Abundance - SAMEA3910794_ERX3486370
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

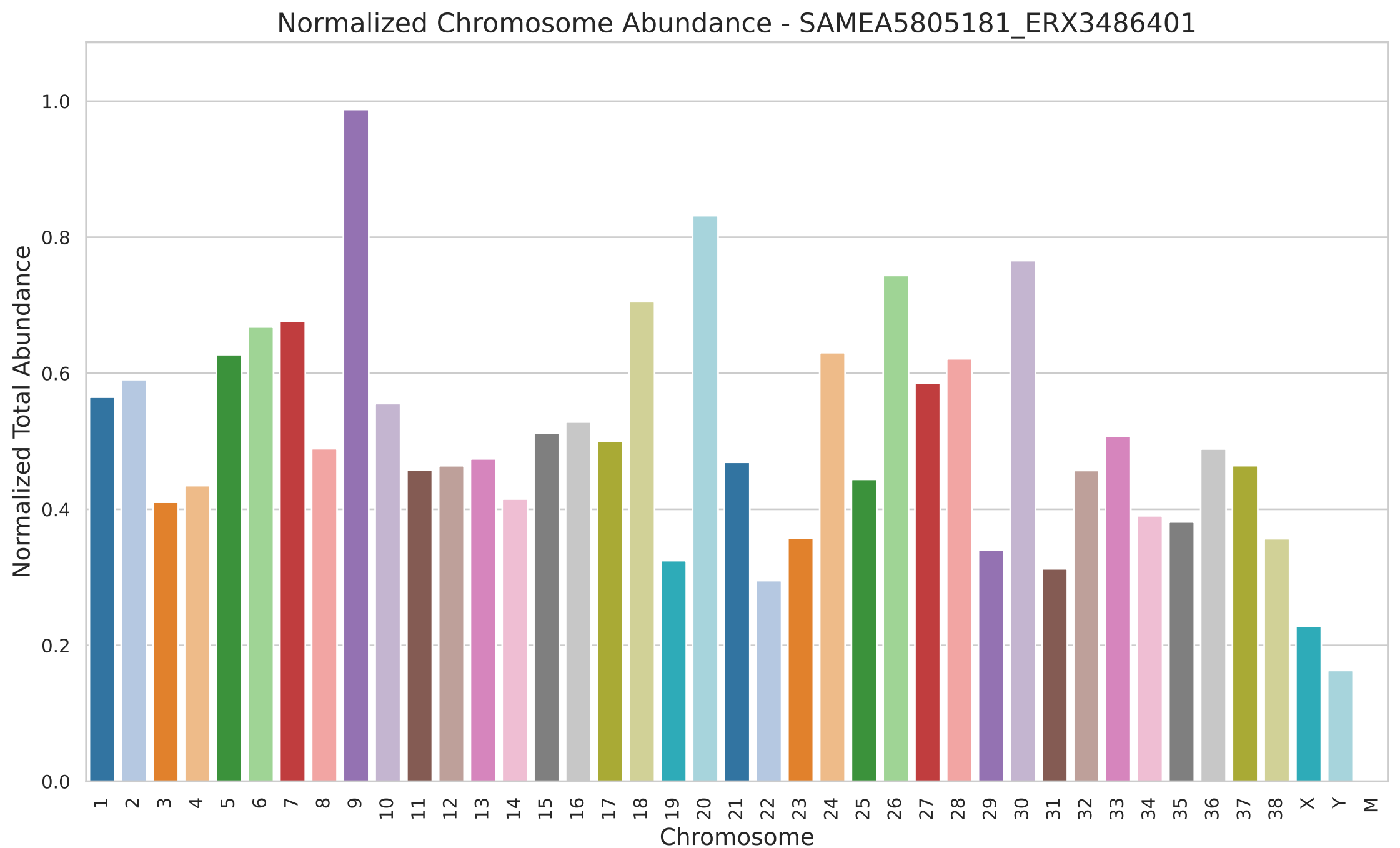

Normalized Chromosome Abundance - SAMN14488578_SRX8029325
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

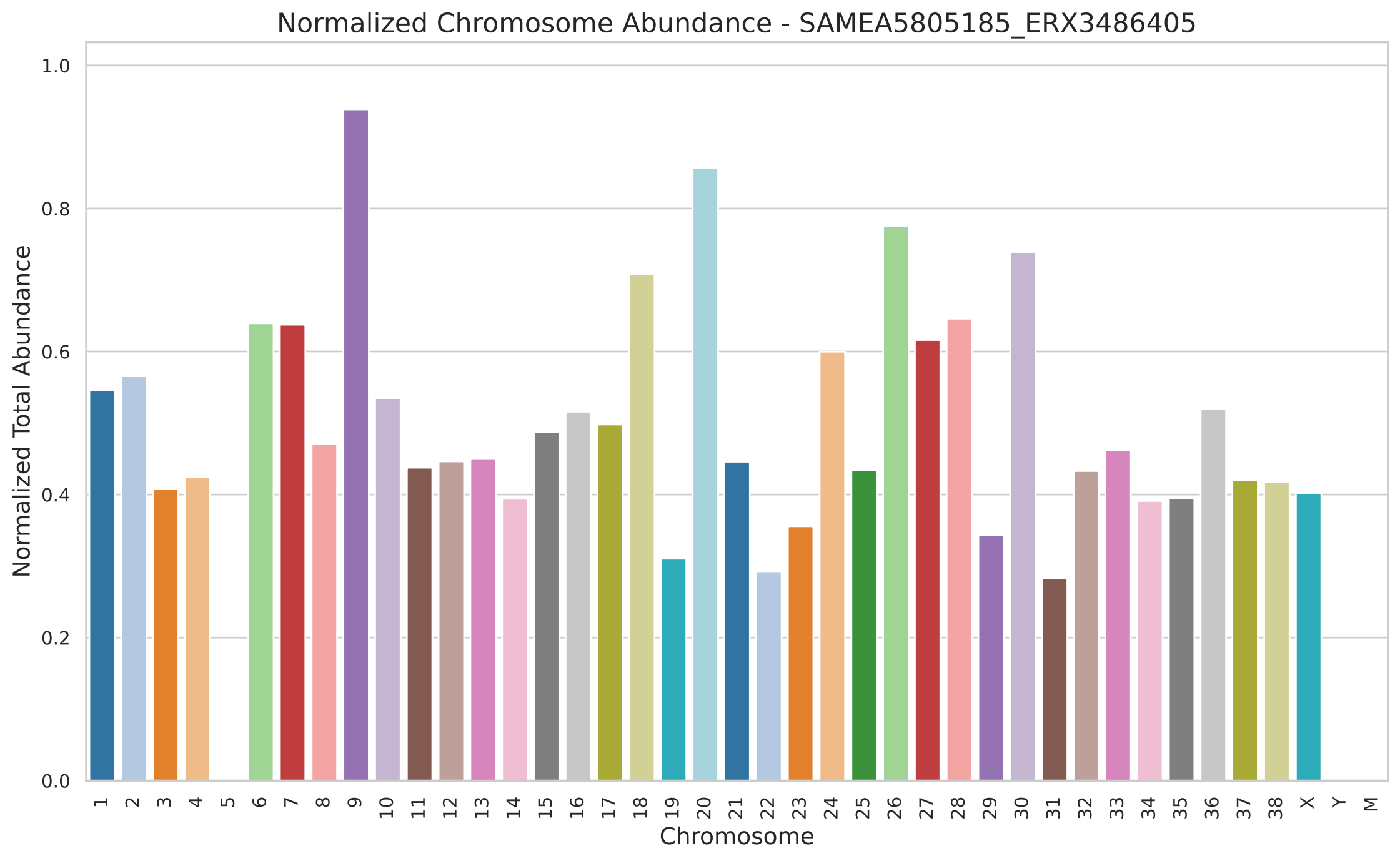

Normalized Chromosome Abundance - SAMEA3907154_ERX3486381
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

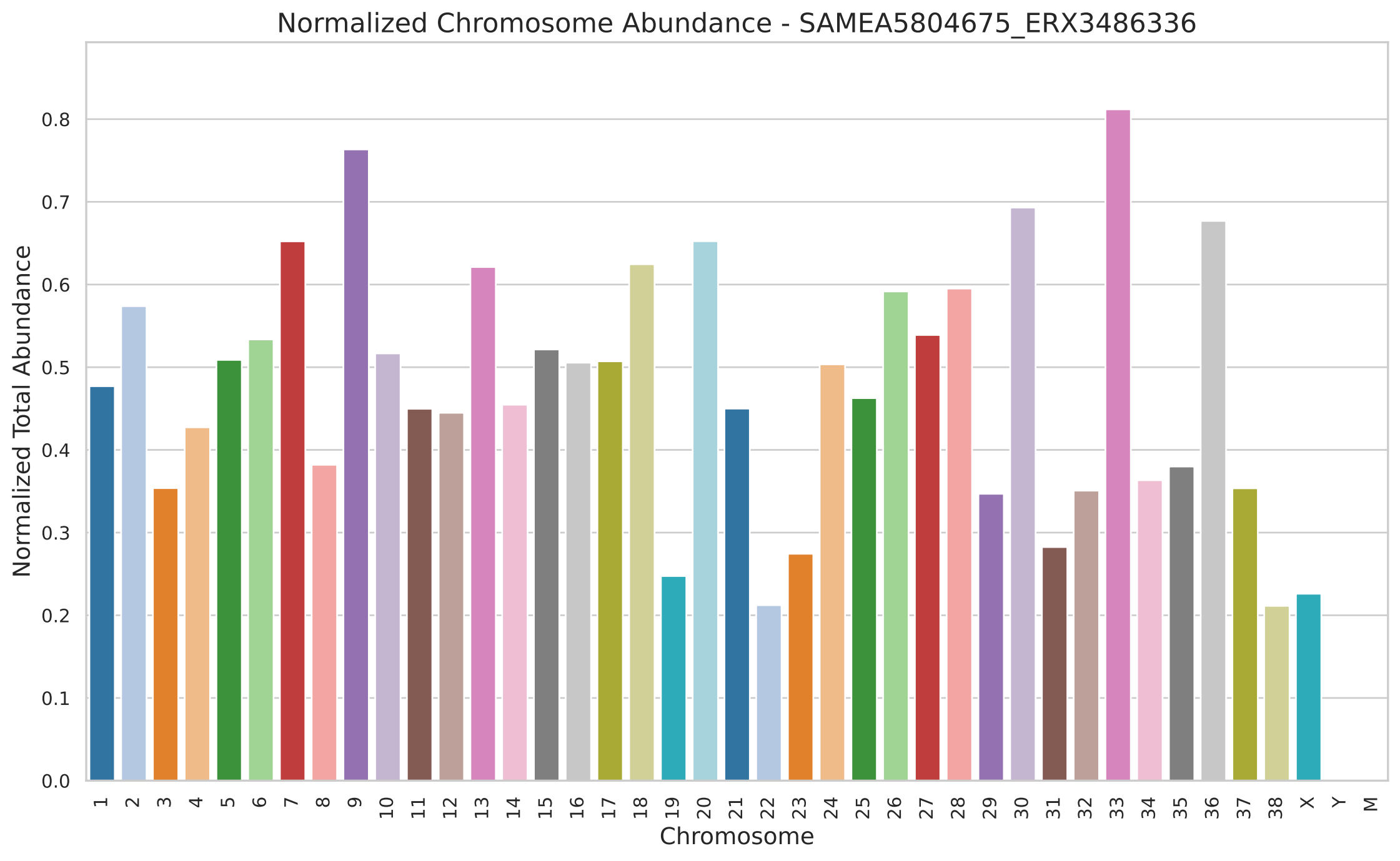

Normalized Chromosome Abundance - SAMEA3906935_ERX3486377
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

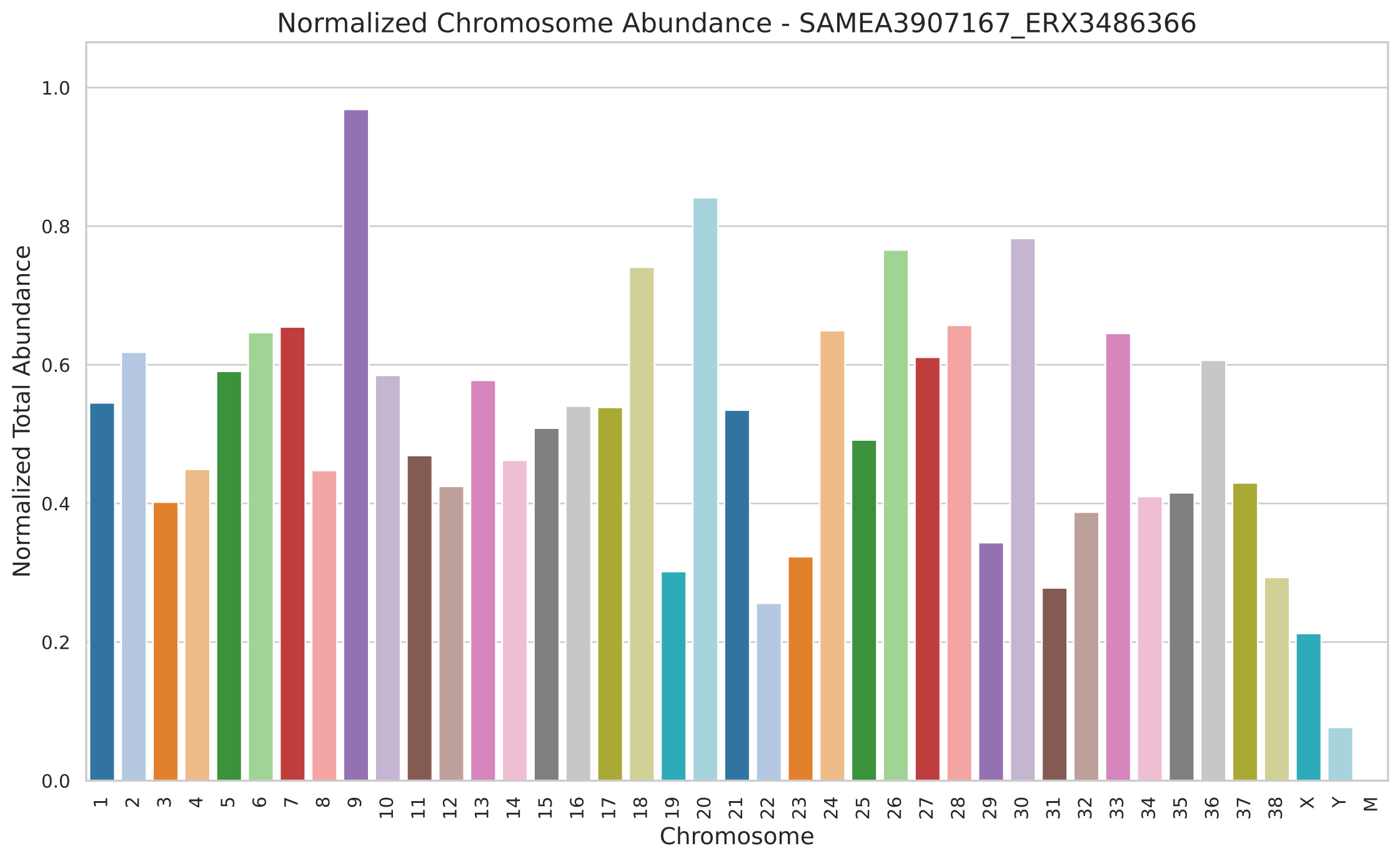

Normalized Chromosome Abundance - SAMEA3910729_ERX3486375
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

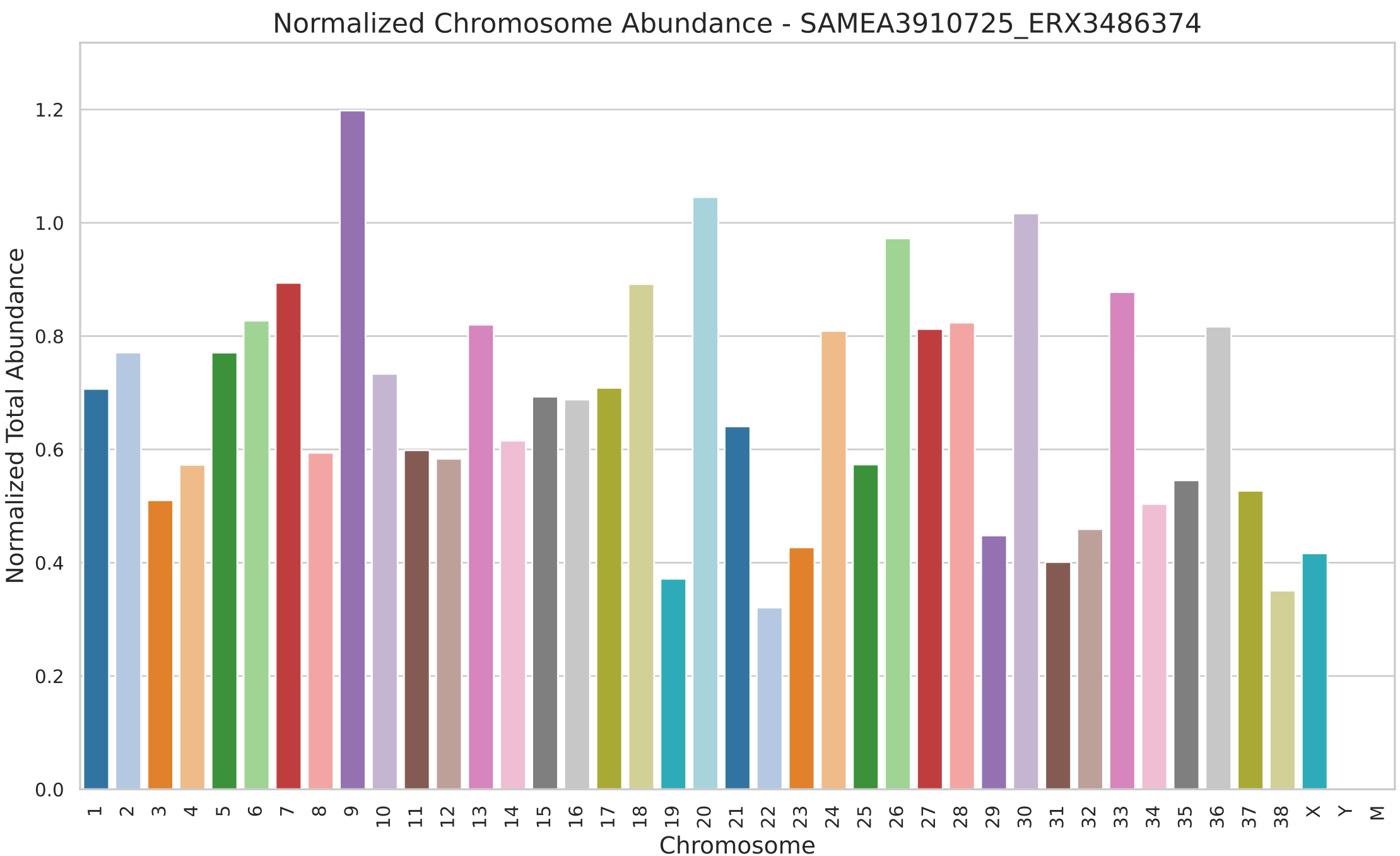

Normalized Chromosome Abundance - SAMN14488570_SRX8029316
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

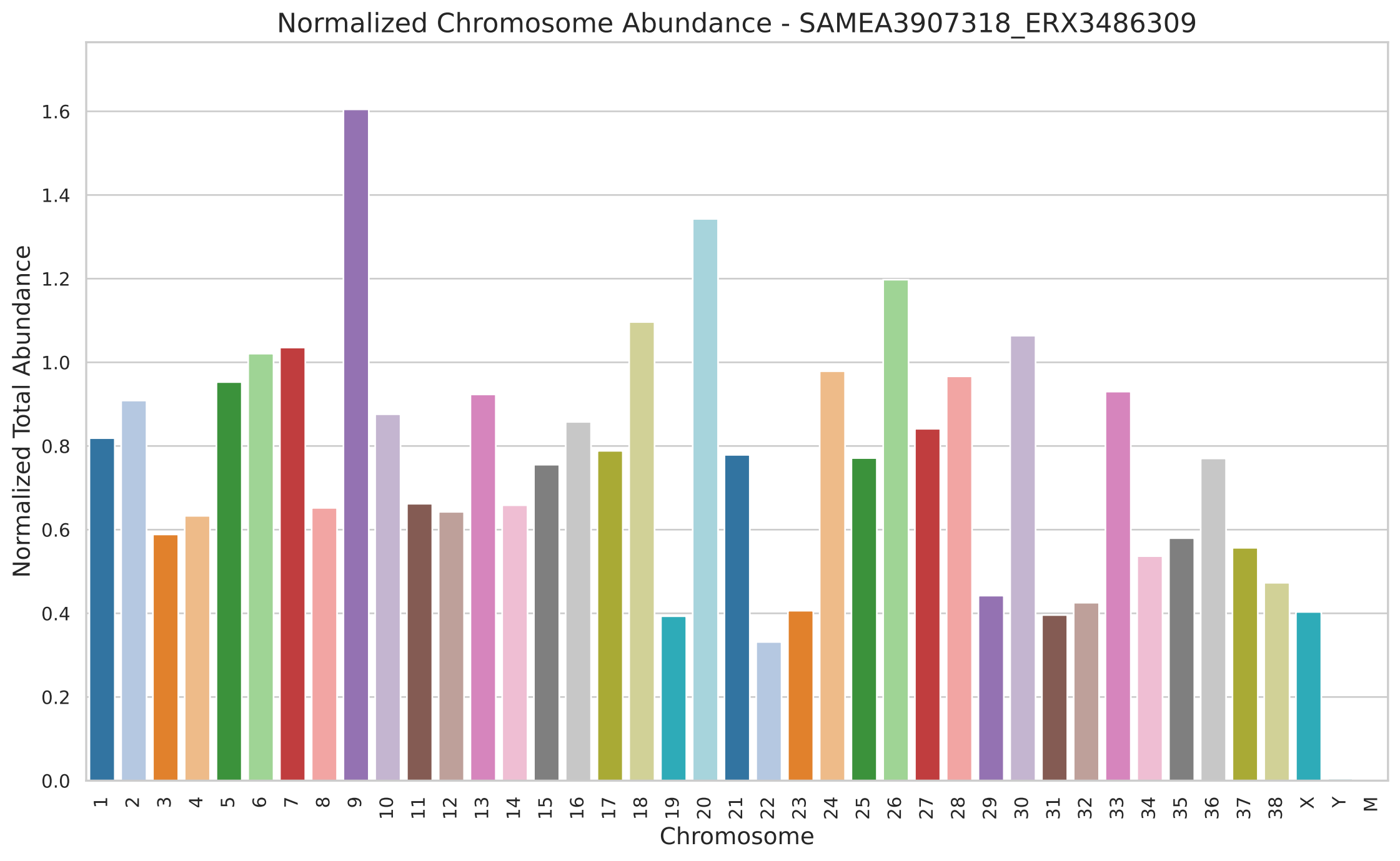

Normalized Chromosome Abundance - SAMEA5805181_ERX3486401
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

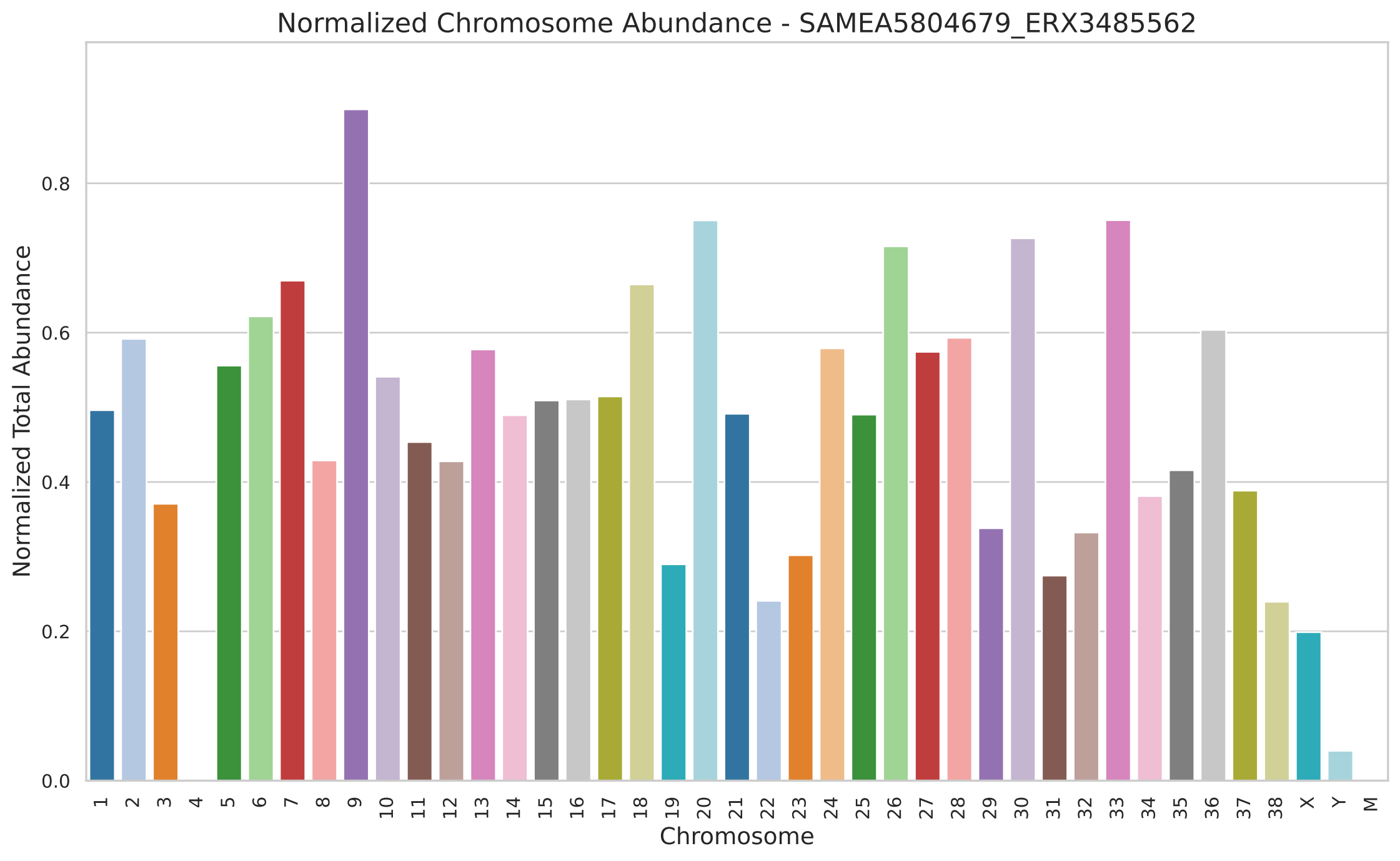

Normalized Chromosome Abundance - SAMEA5805185_ERX3486405
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

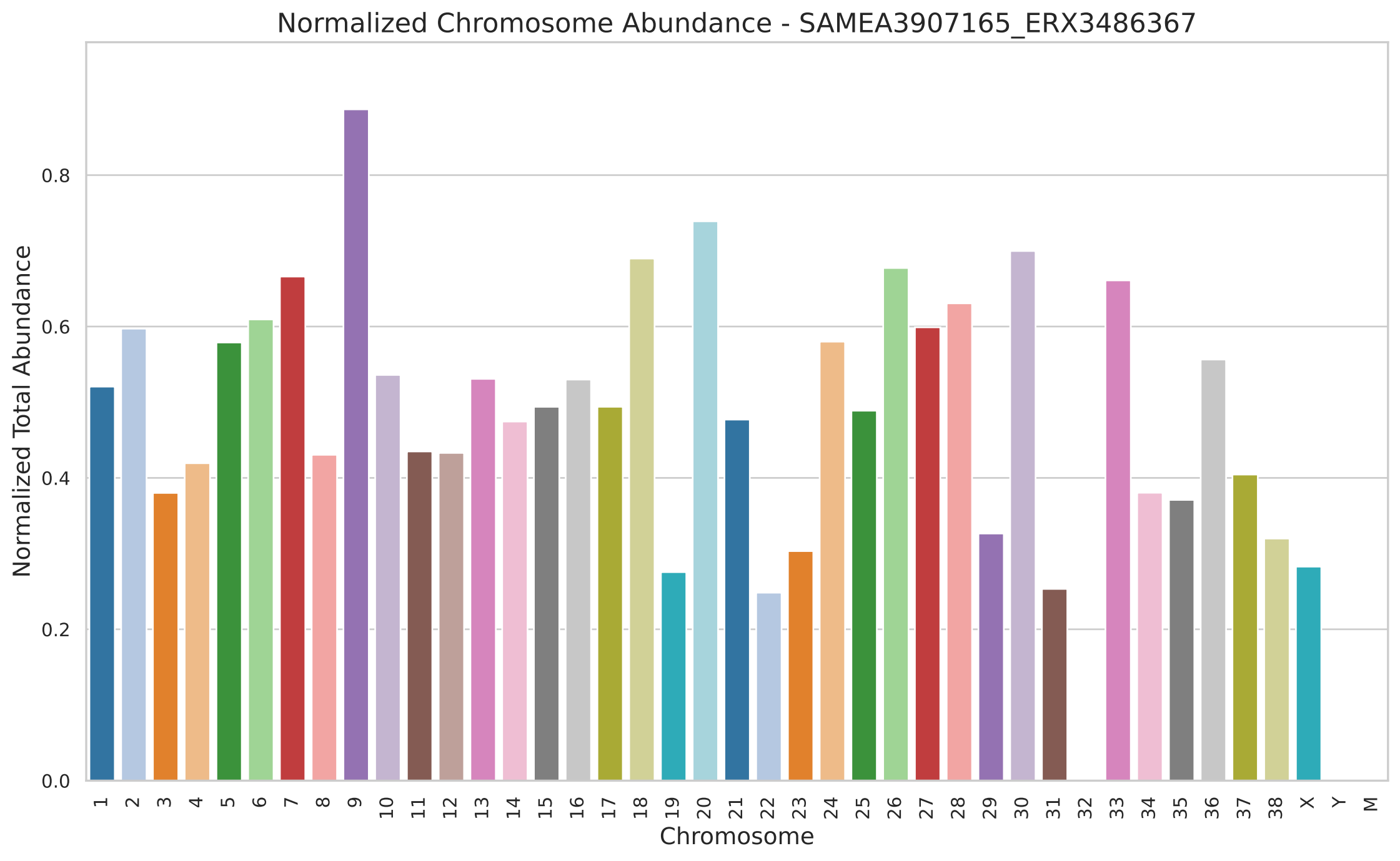

Normalized Chromosome Abundance - SAMEA5804675_ERX3486336
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

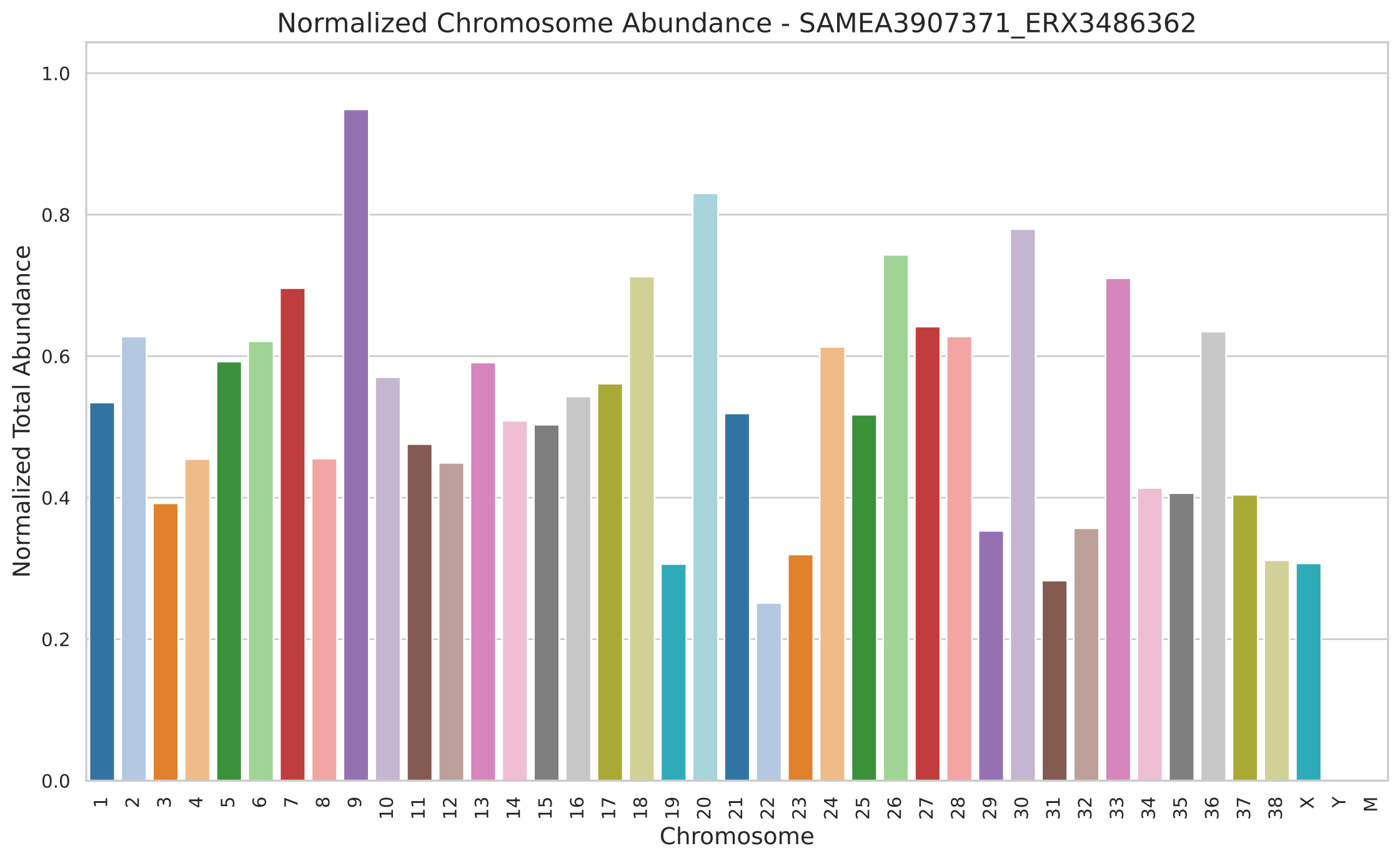

Normalized Chromosome Abundance - SAMEA3907167_ERX3486366
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

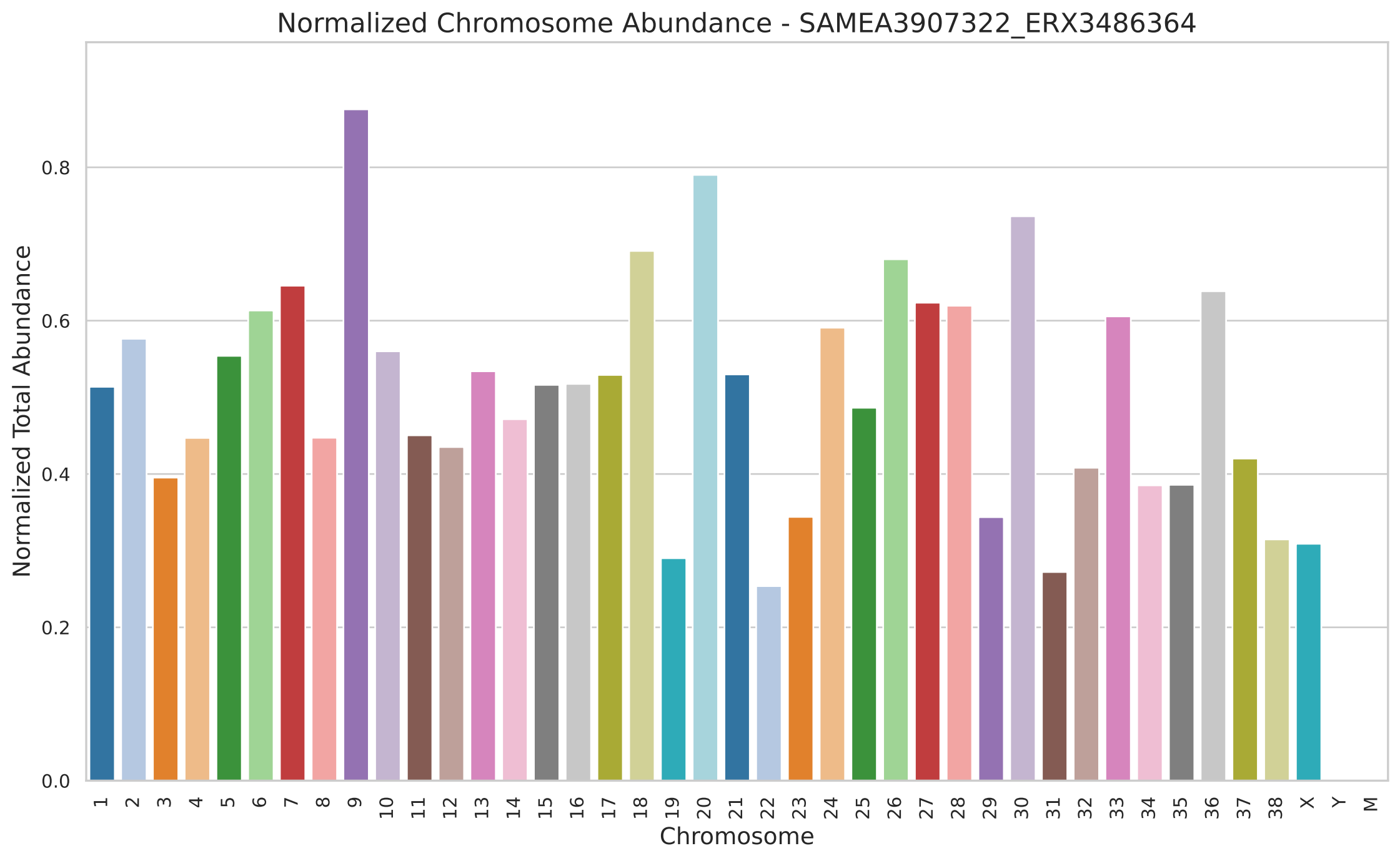

Normalized Chromosome Abundance - SAMEA3910725_ERX3486374
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

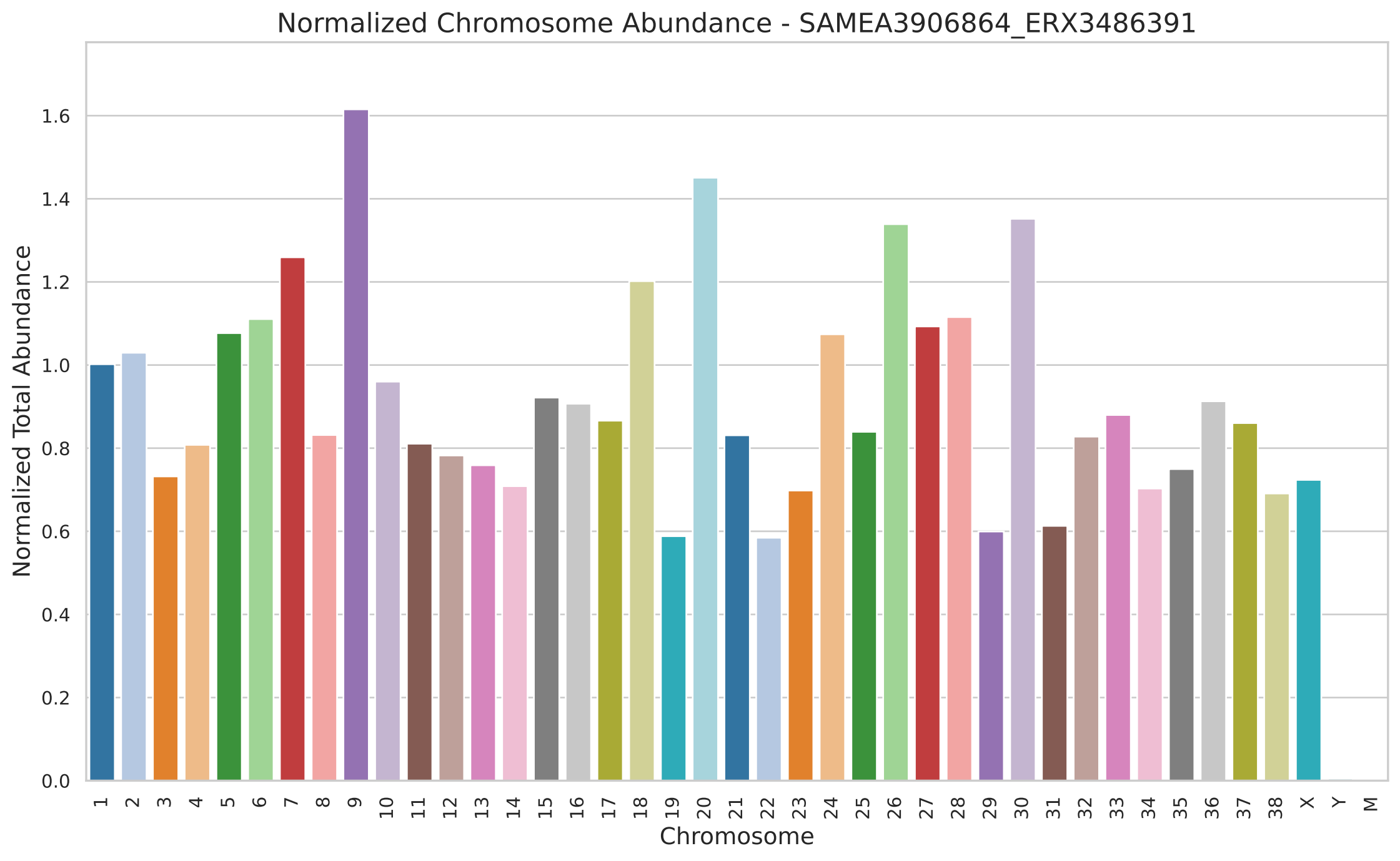

Normalized Chromosome Abundance - SAMEA3907318_ERX3486309
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

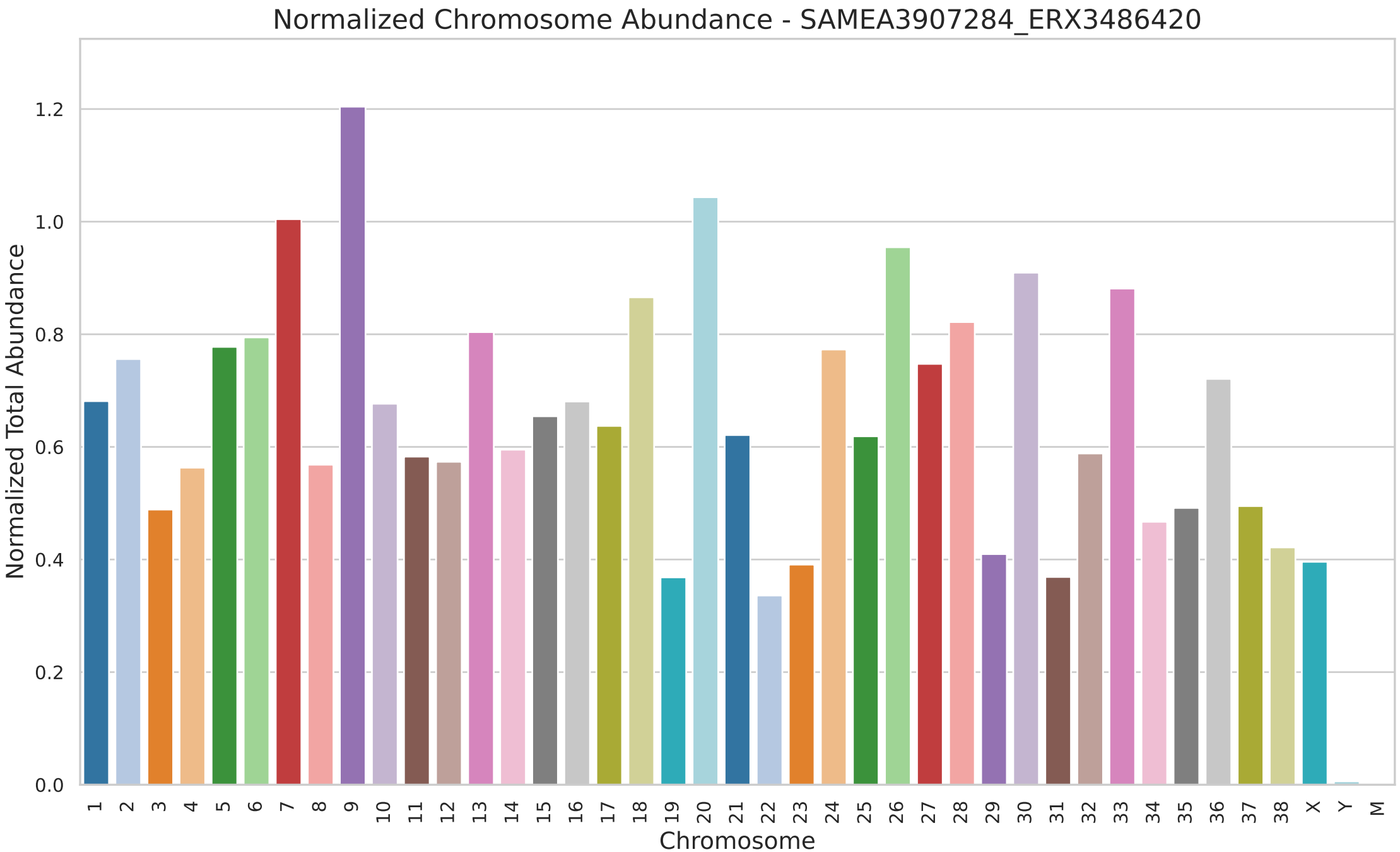

Normalized Chromosome Abundance - SAMEA5804679_ERX3485562
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

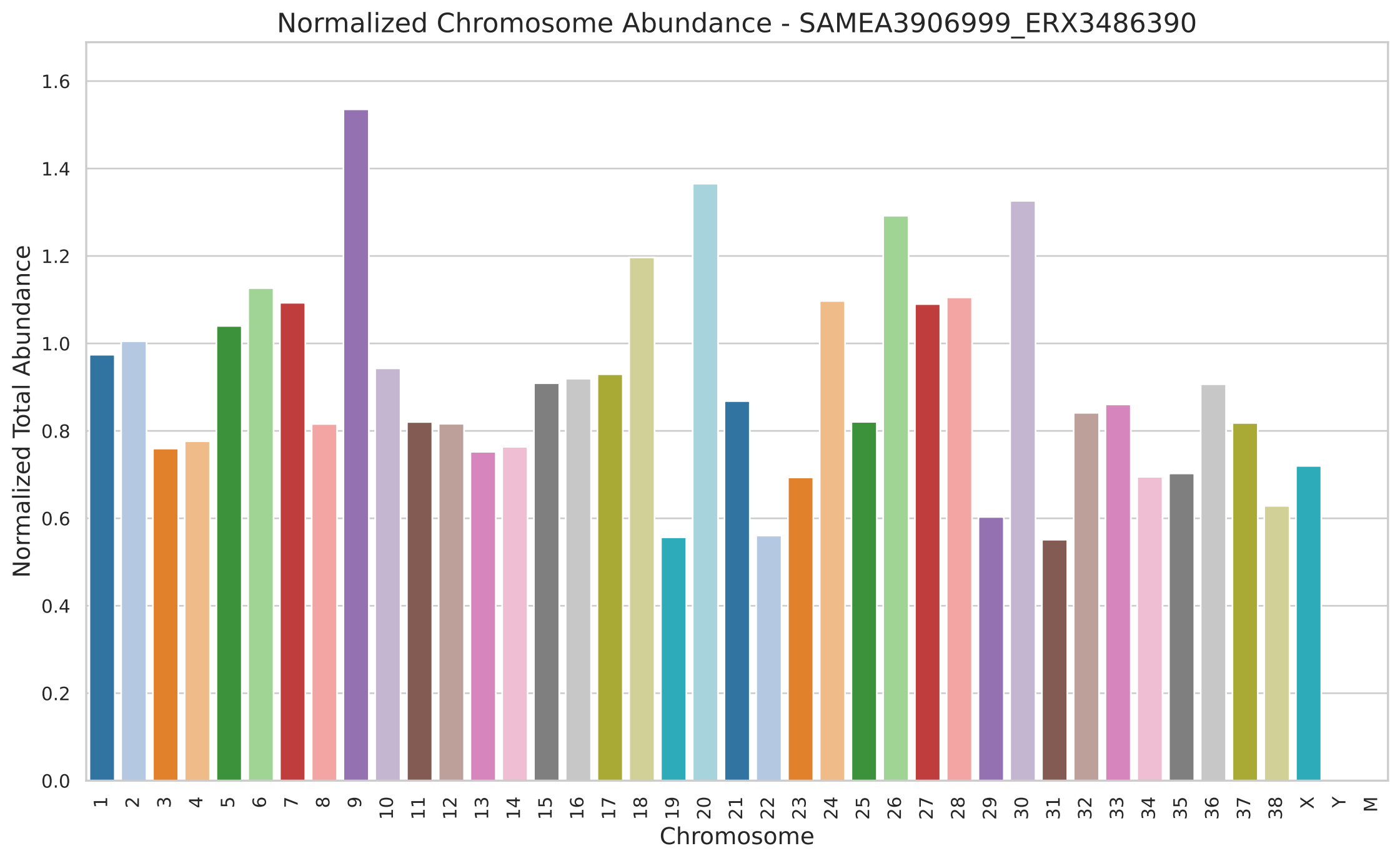

Normalized Chromosome Abundance - SAMEA3907165_ERX3486367
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

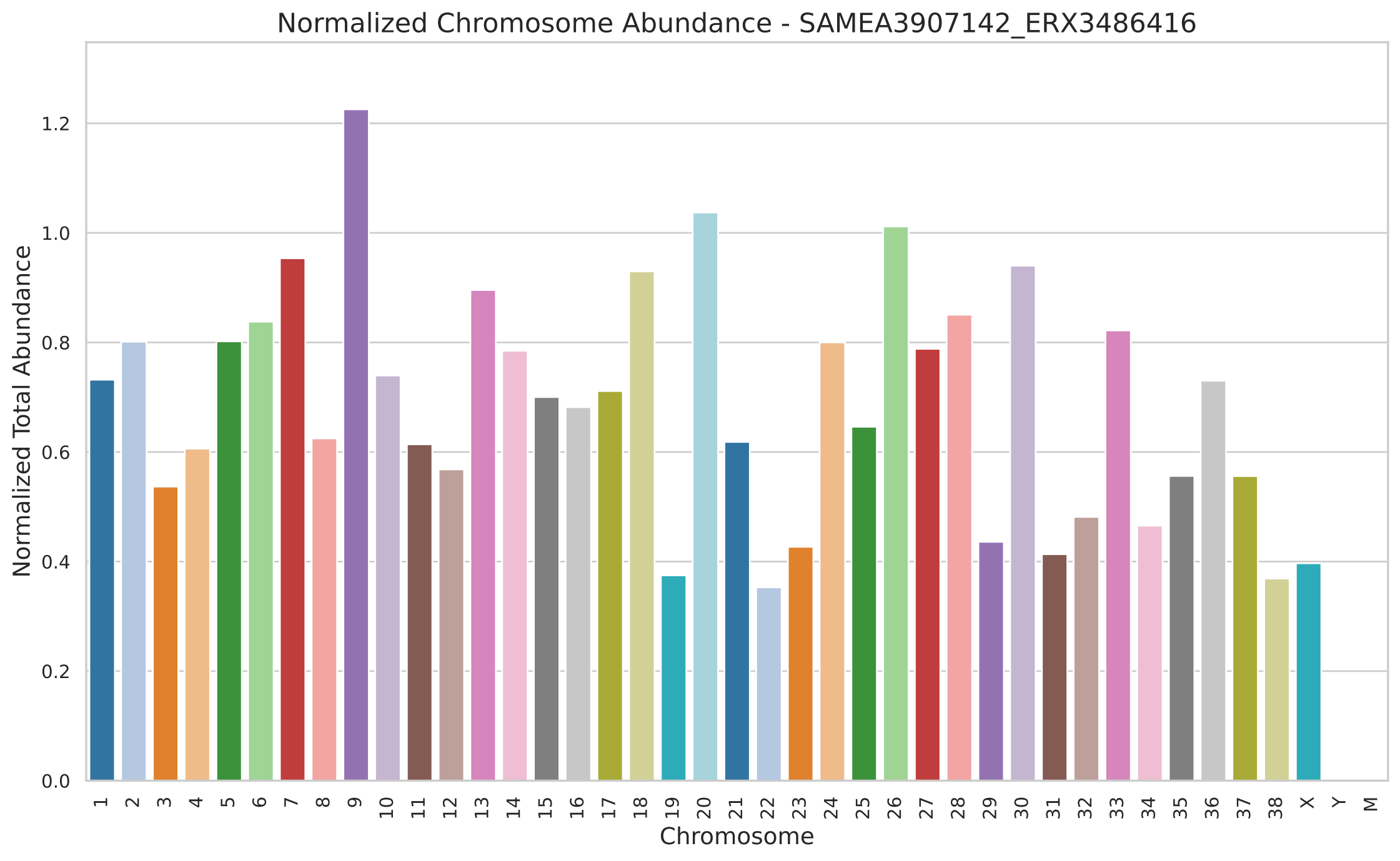

Normalized Chromosome Abundance - SAMEA3907371_ERX3486362
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

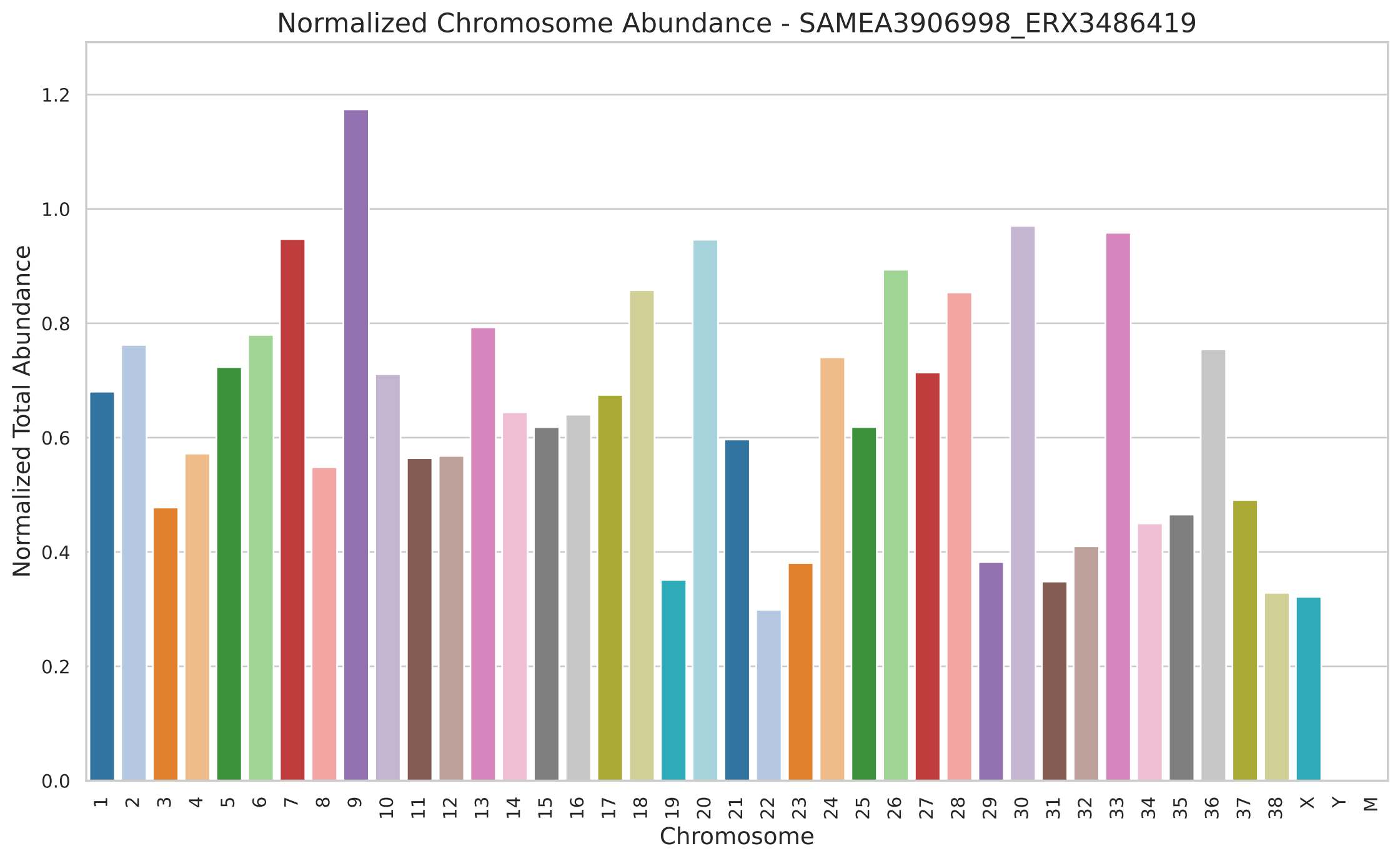

Normalized Chromosome Abundance - SAMEA3907322_ERX3486364
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

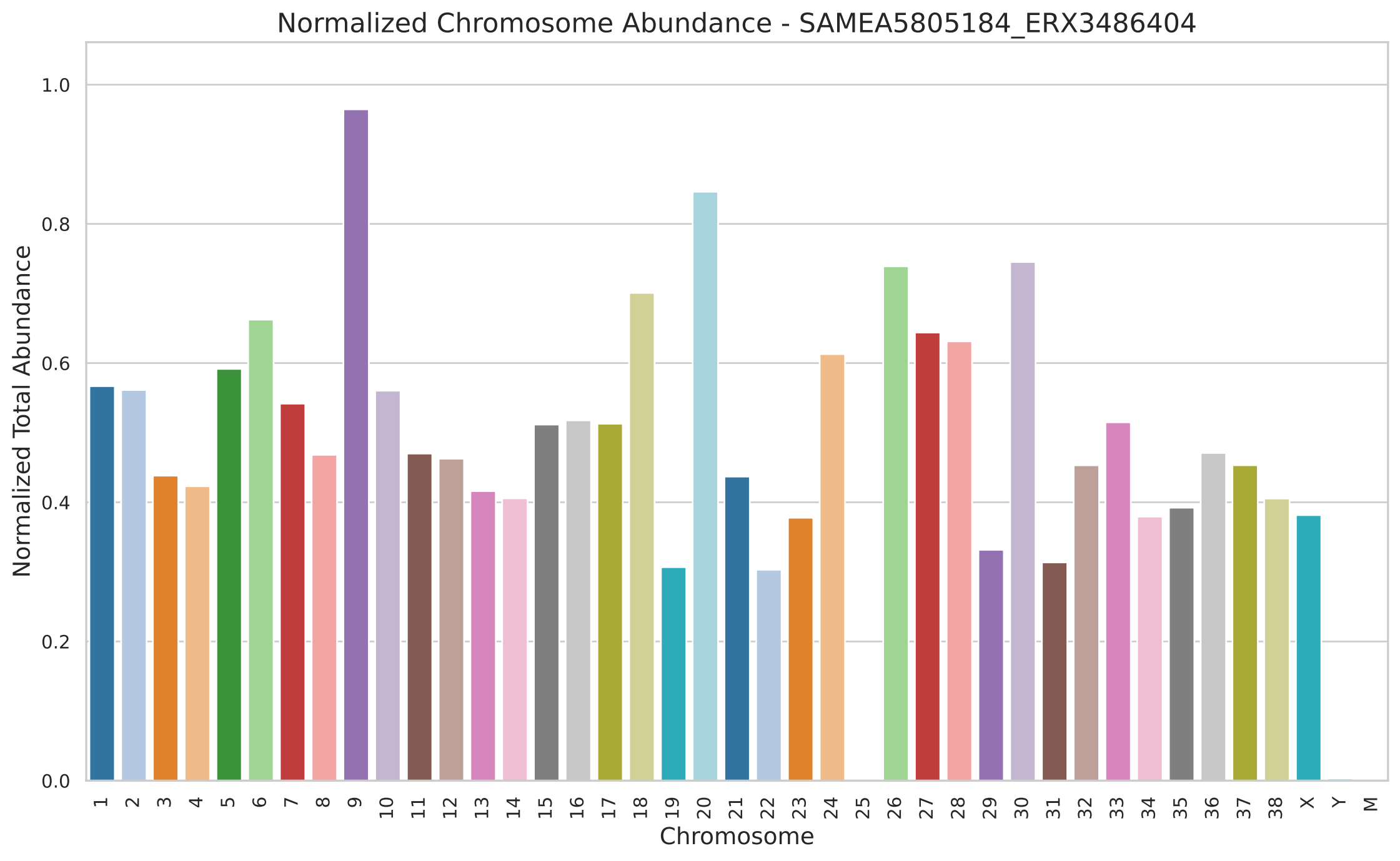

Normalized Chromosome Abundance - SAMEA3906864_ERX3486391
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

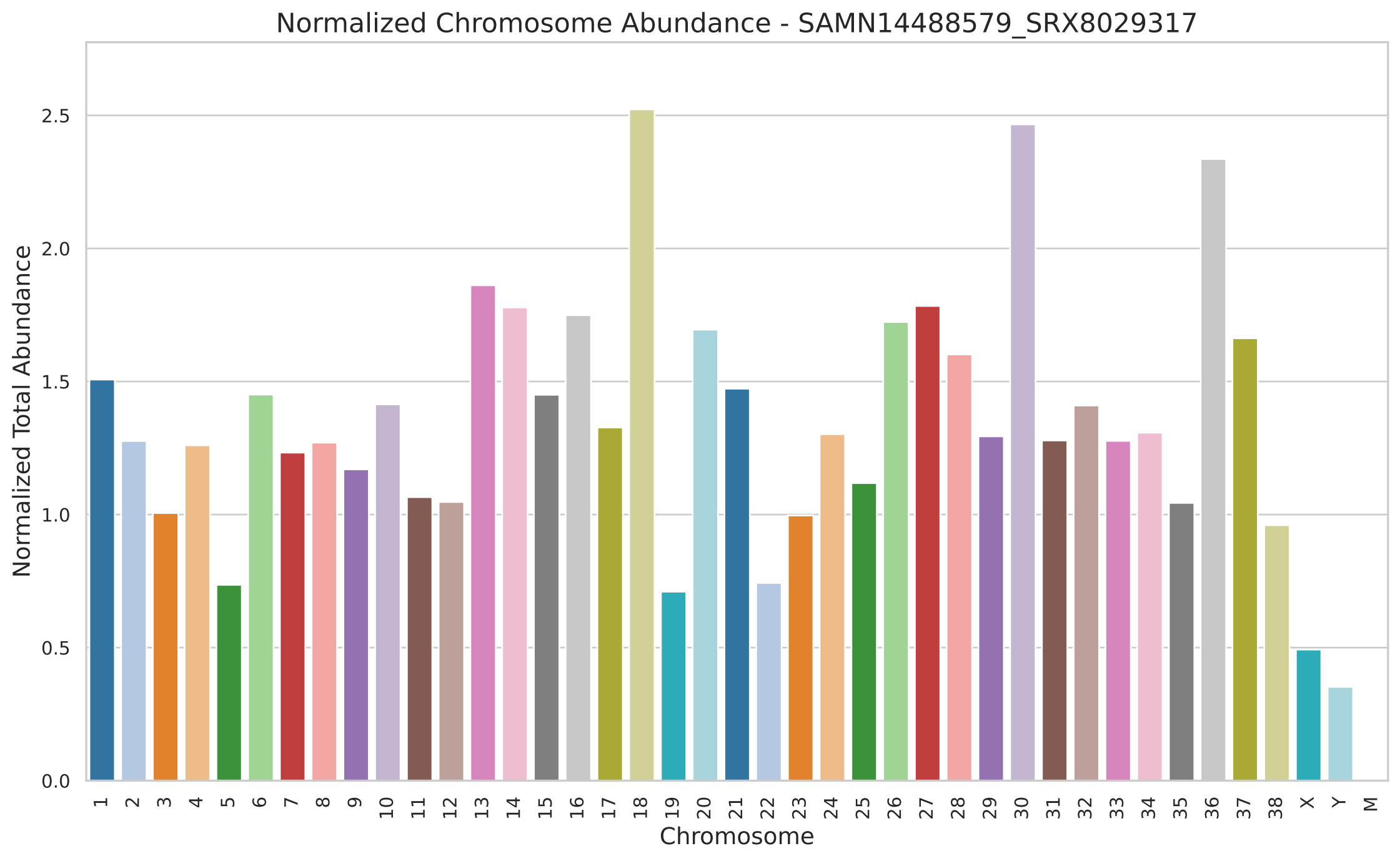

Normalized Chromosome Abundance - SAMEA3907284_ERX3486420
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

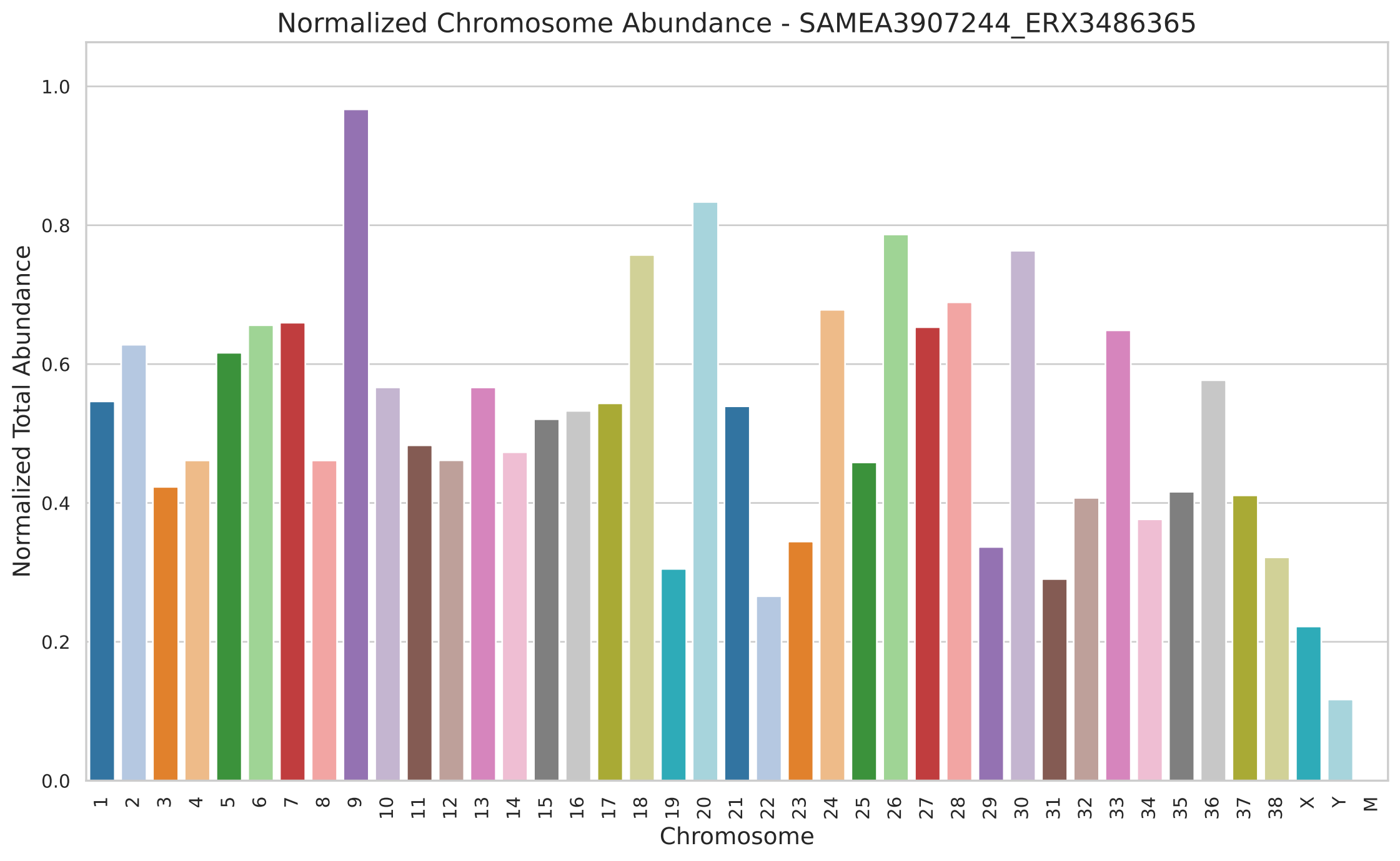

Normalized Chromosome Abundance - SAMEA3906999_ERX3486390
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

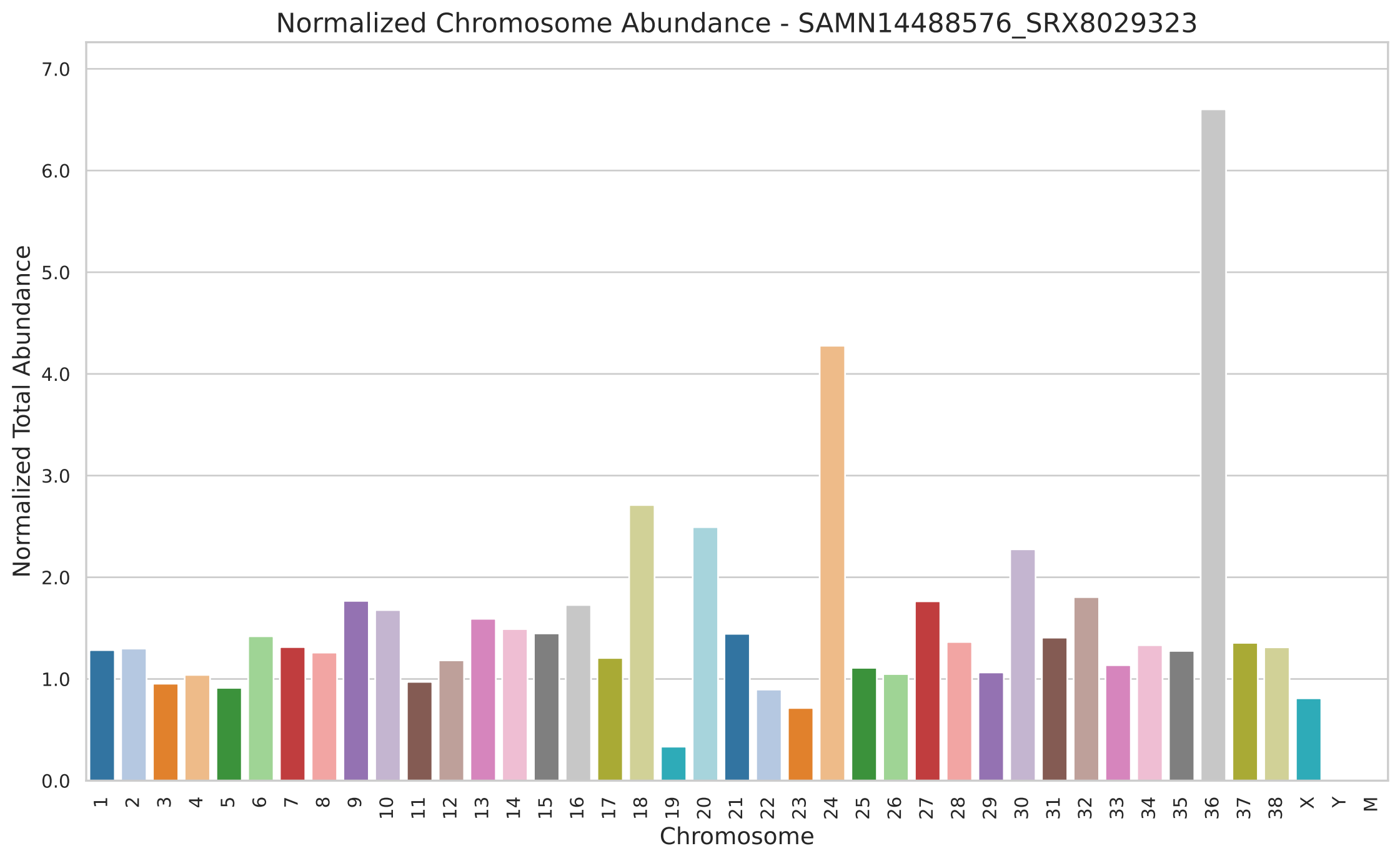

Normalized Chromosome Abundance - SAMEA3907142_ERX3486416
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

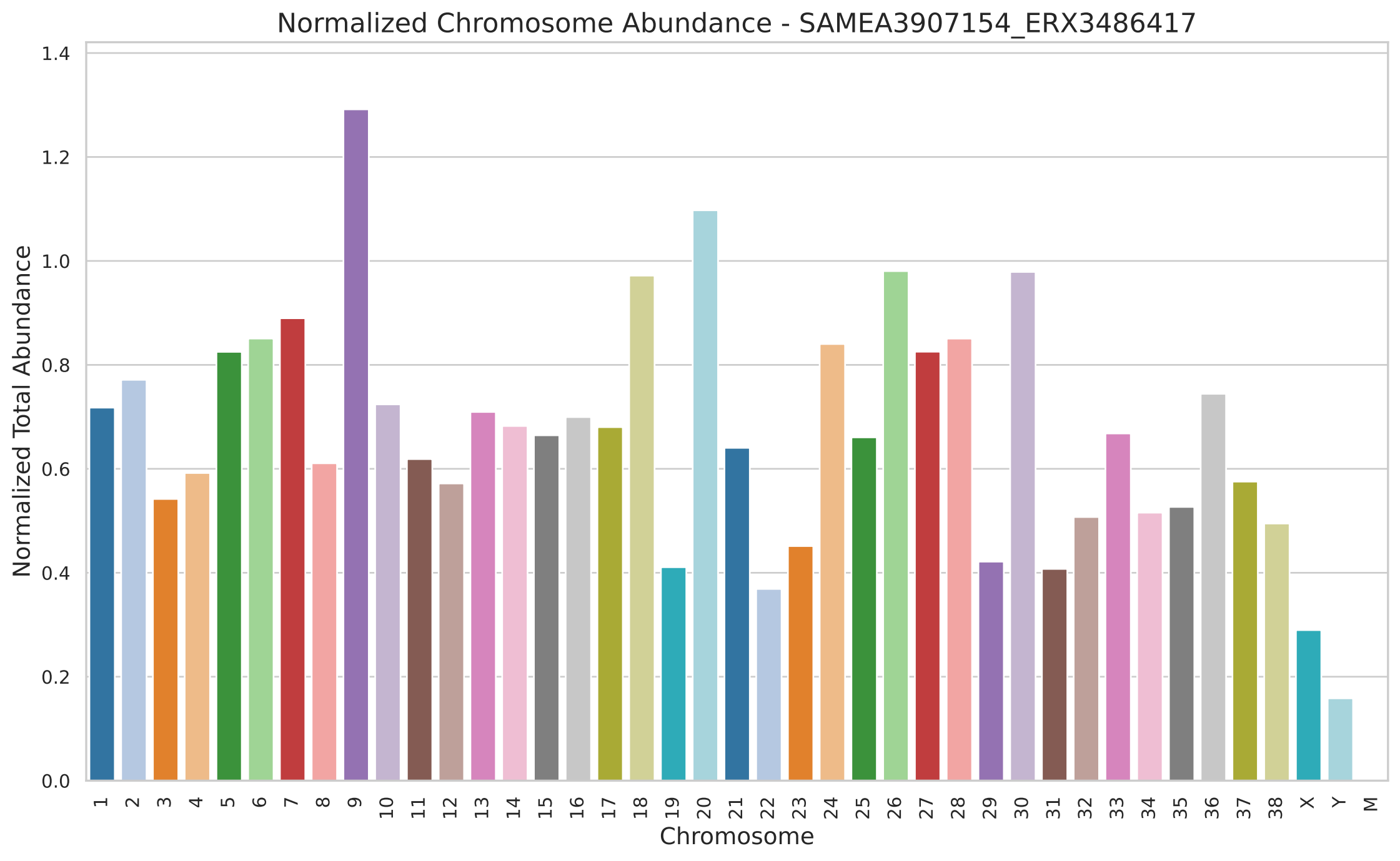

Normalized Chromosome Abundance - SAMEA3906998_ERX3486419
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

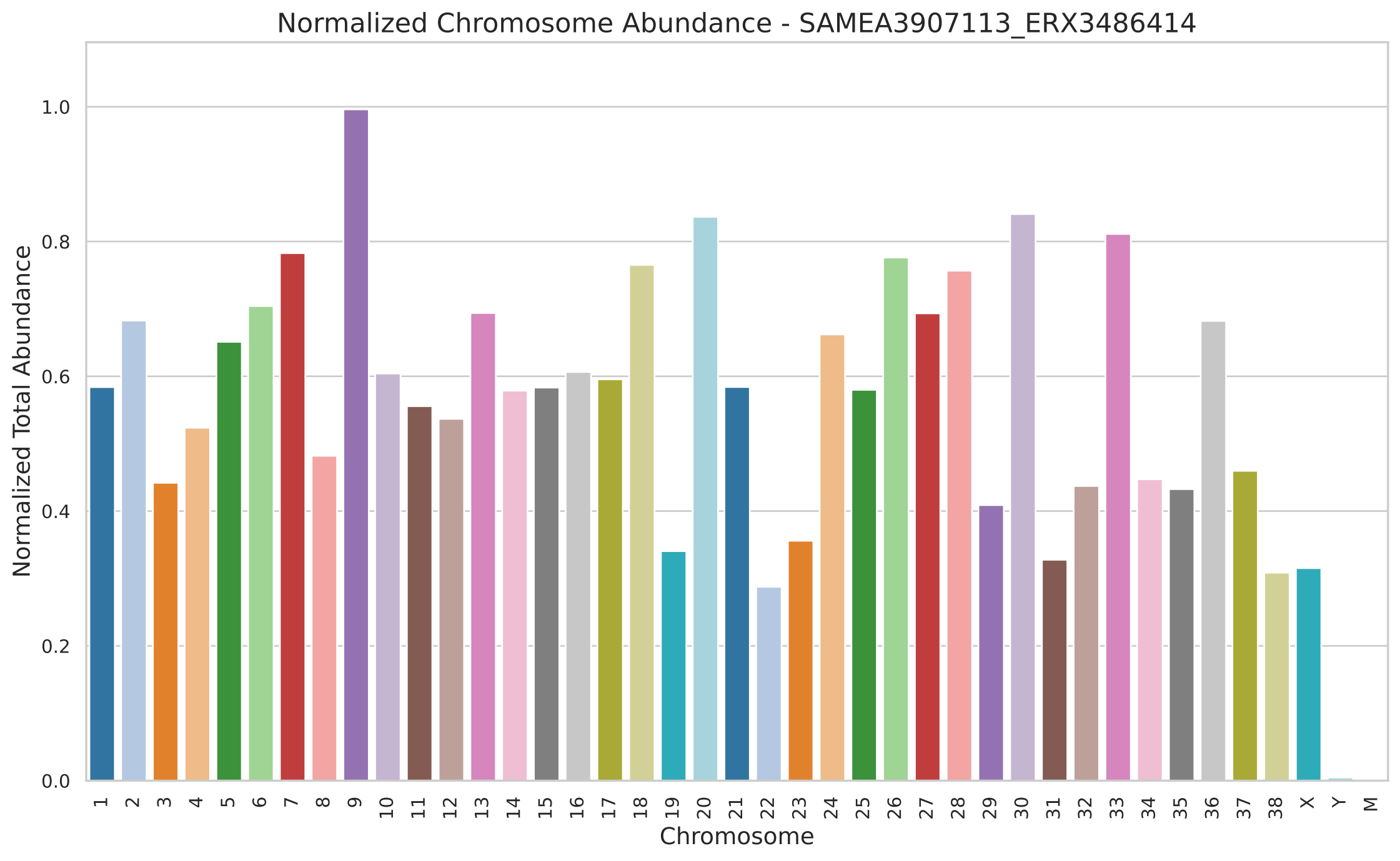

Normalized Chromosome Abundance - SAMEA5805184_ERX3486404
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

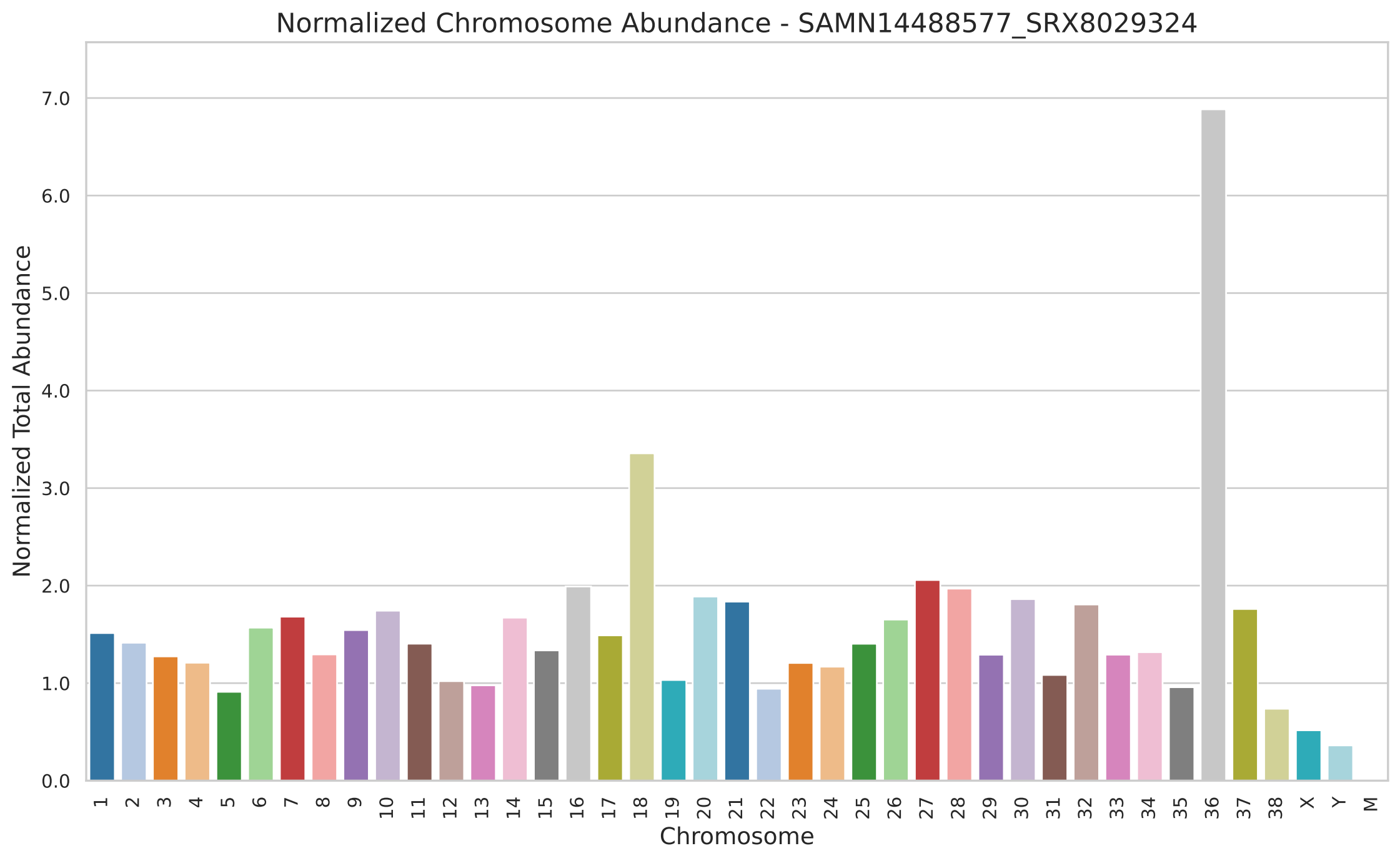

Normalized Chromosome Abundance - SAMN14488579_SRX8029317
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

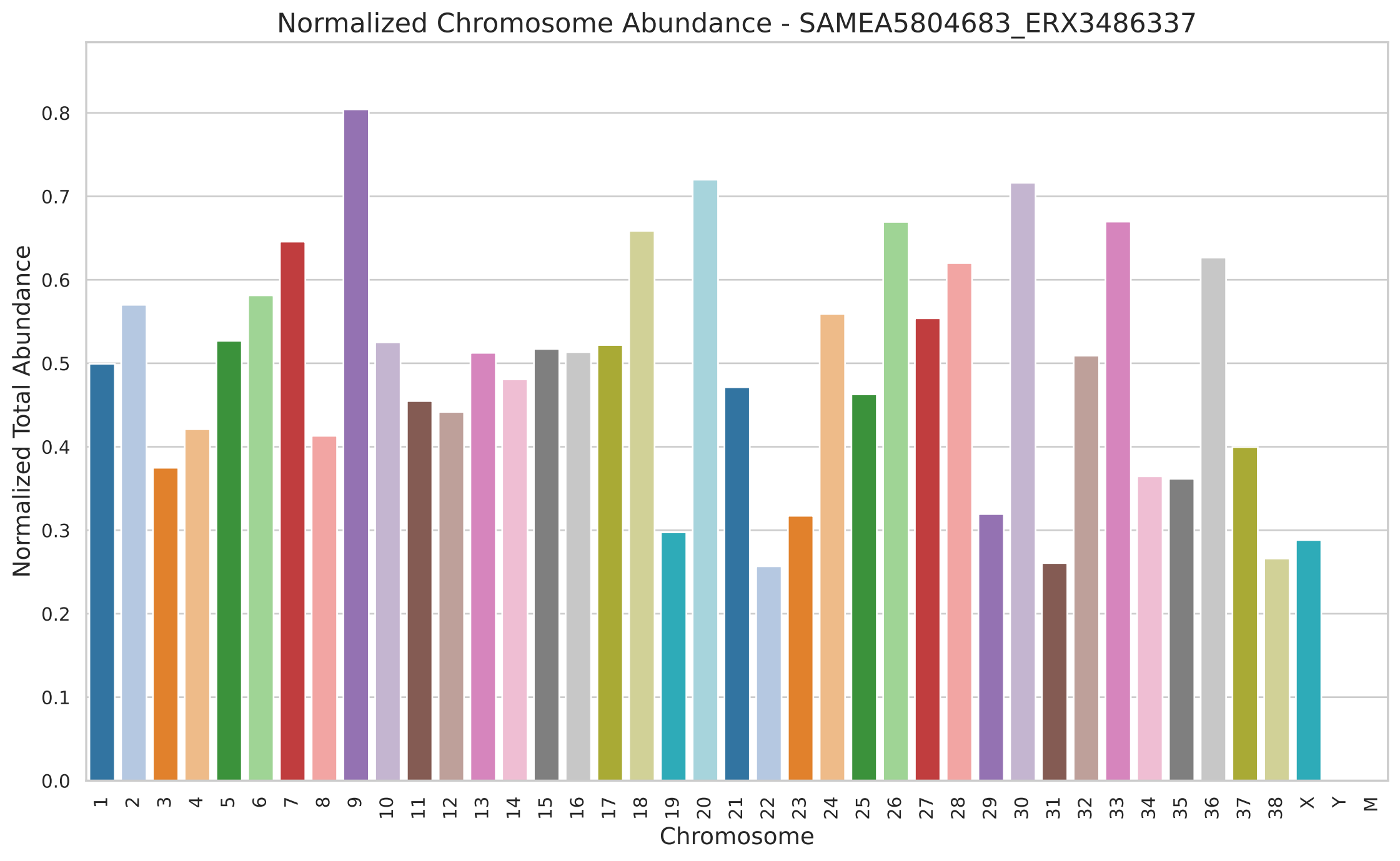

Normalized Chromosome Abundance - SAMEA3907244_ERX3486365
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

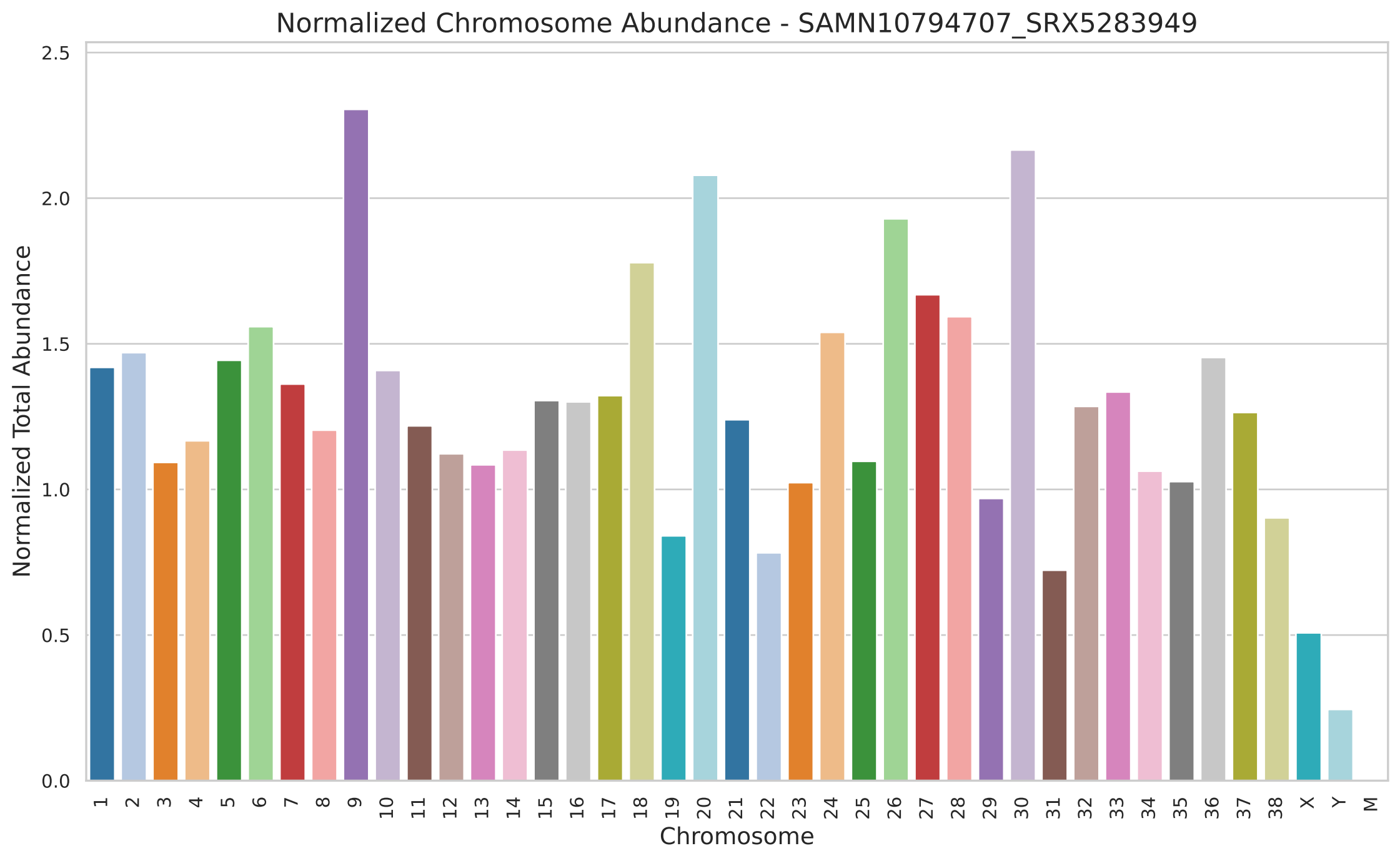

Normalized Chromosome Abundance - SAMN14488576_SRX8029323
Normalized Total Abundance
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

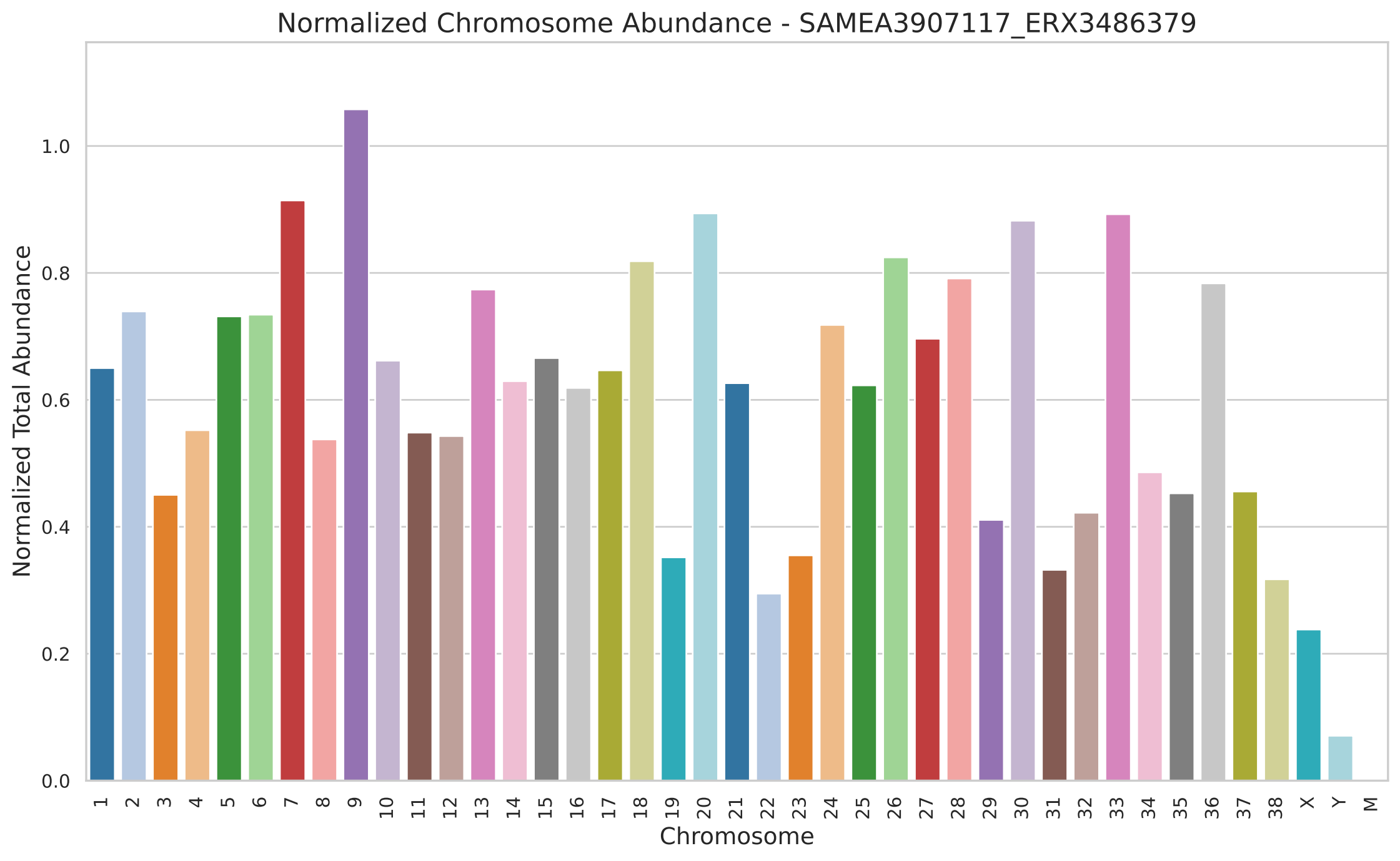

Normalized Chromosome Abundance - SAMEA3907154_ERX3486417
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

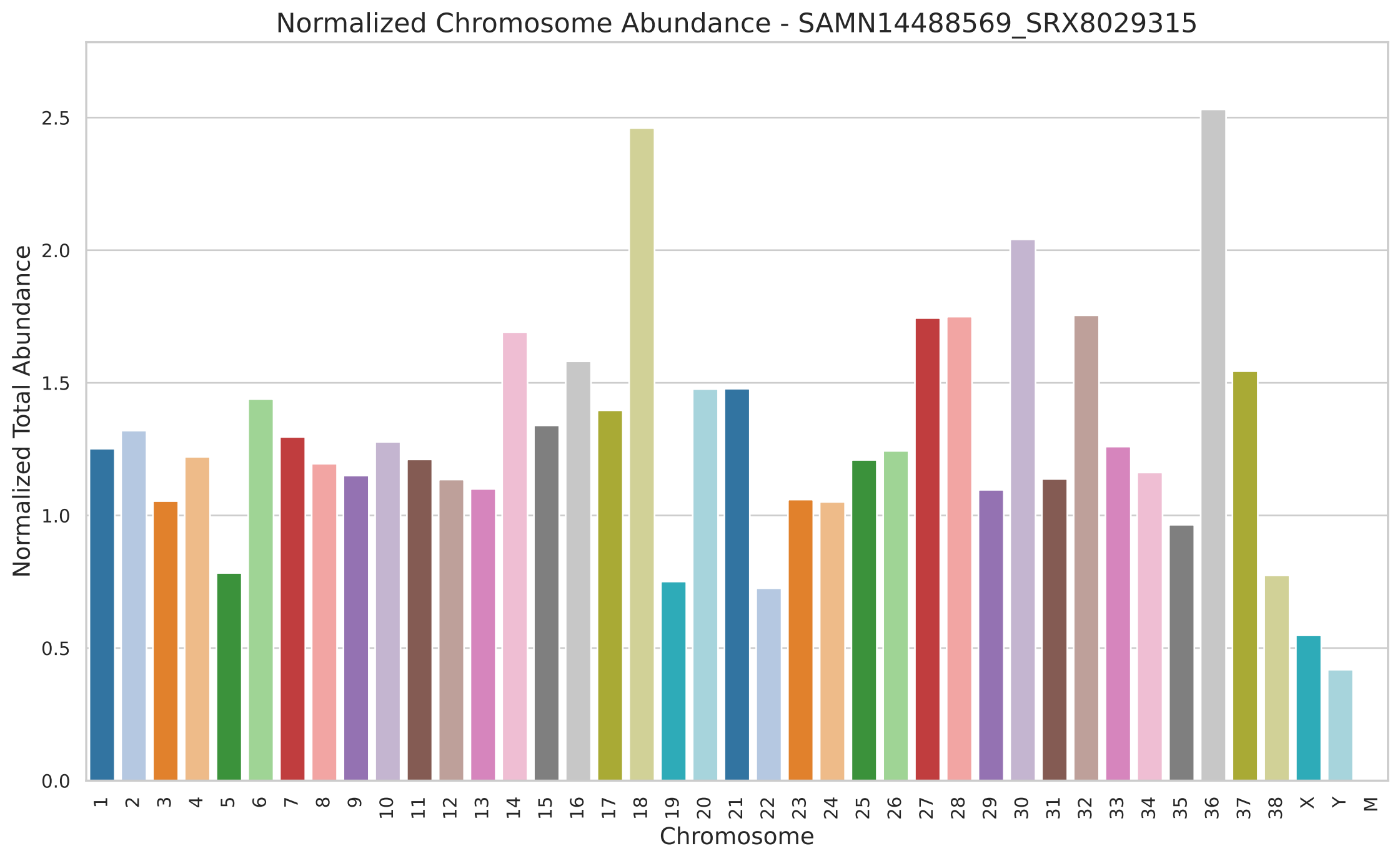

Normalized Chromosome Abundance - SAMEA3907113_ERX3486414
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

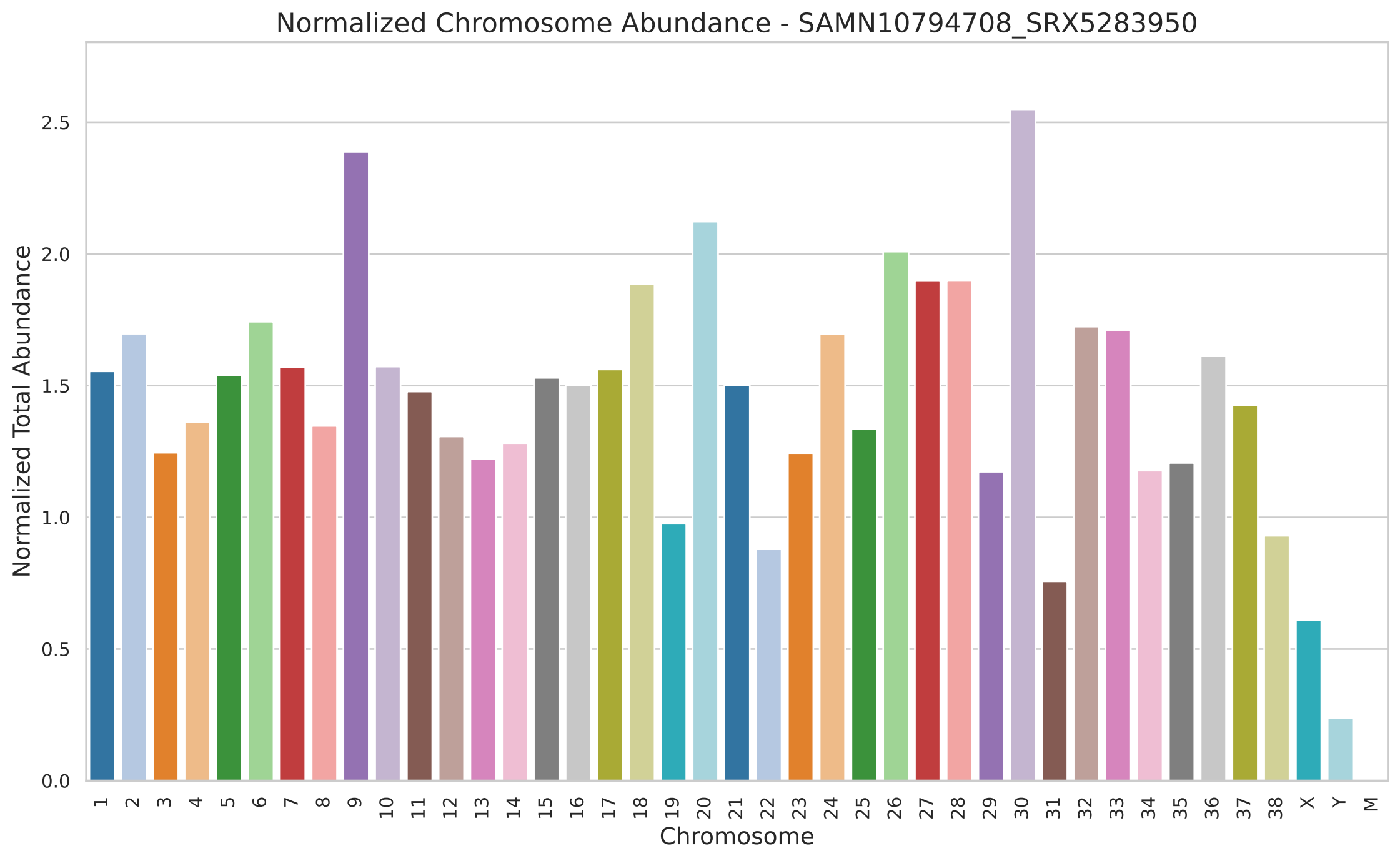

Normalized Chromosome Abundance - SAMN14488577_SRX8029324
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

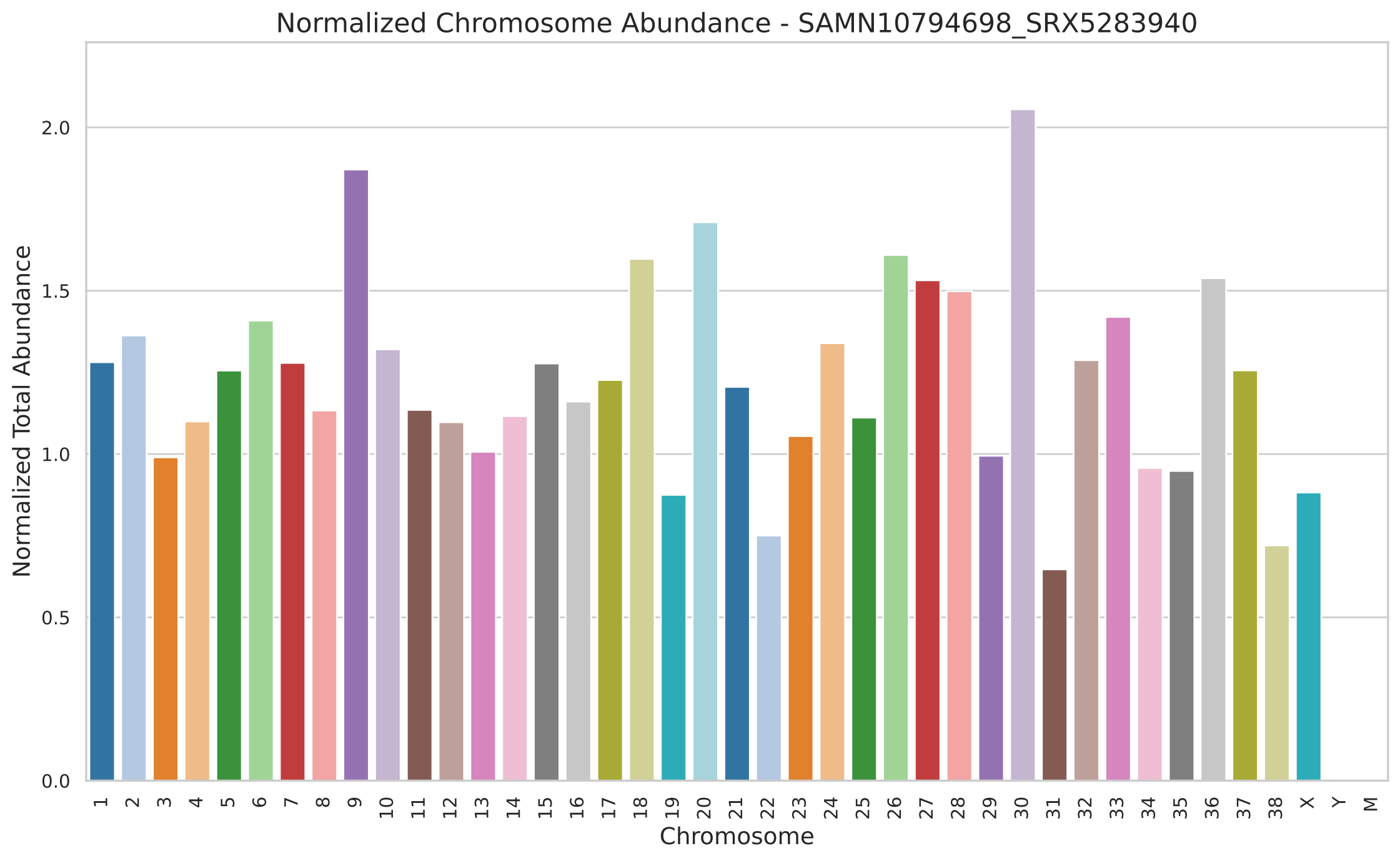

Normalized Chromosome Abundance - SAMEA5804683_ERX3486337
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

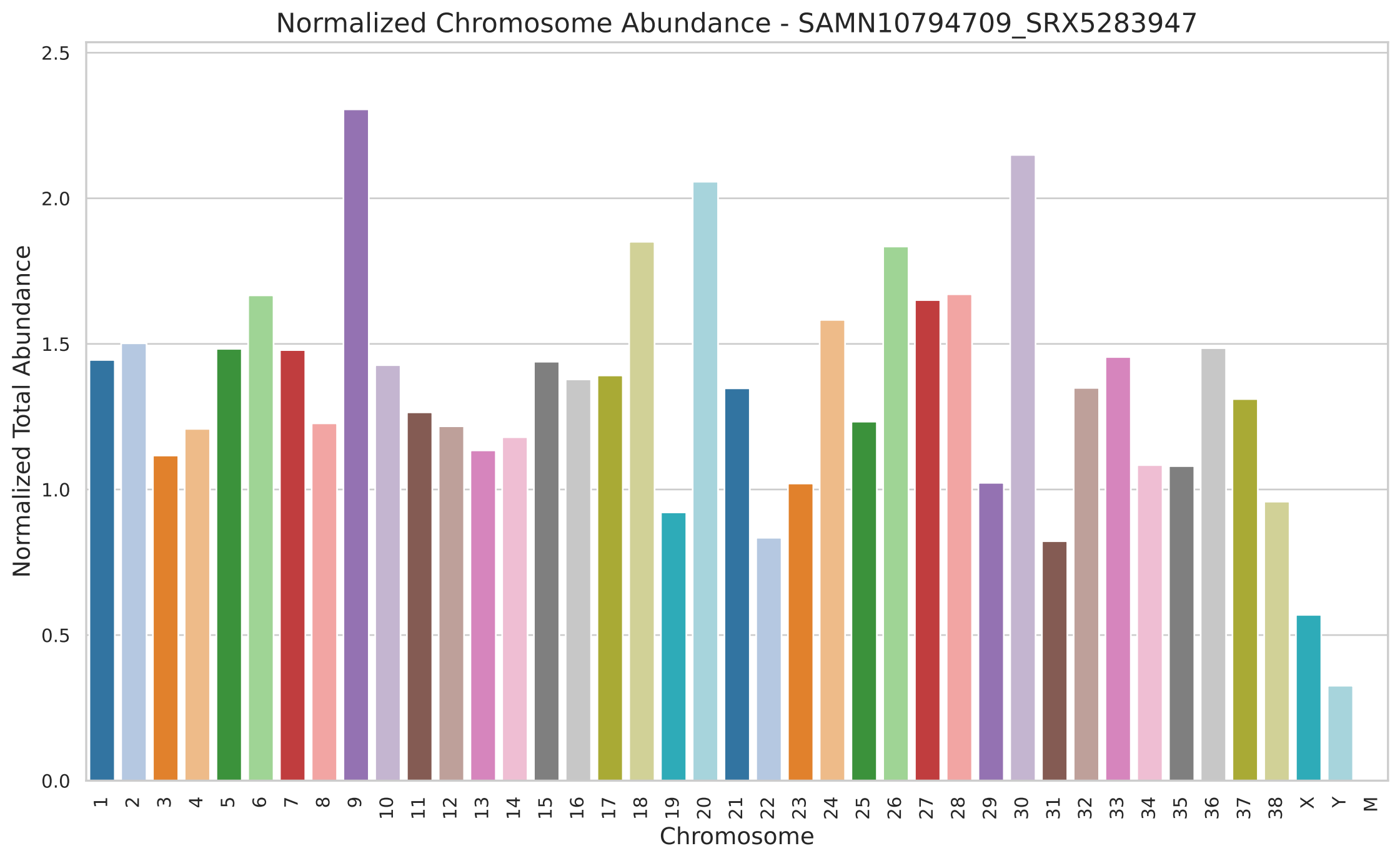

Normalized Chromosome Abundance - SAMN10794707_SRX5283949
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

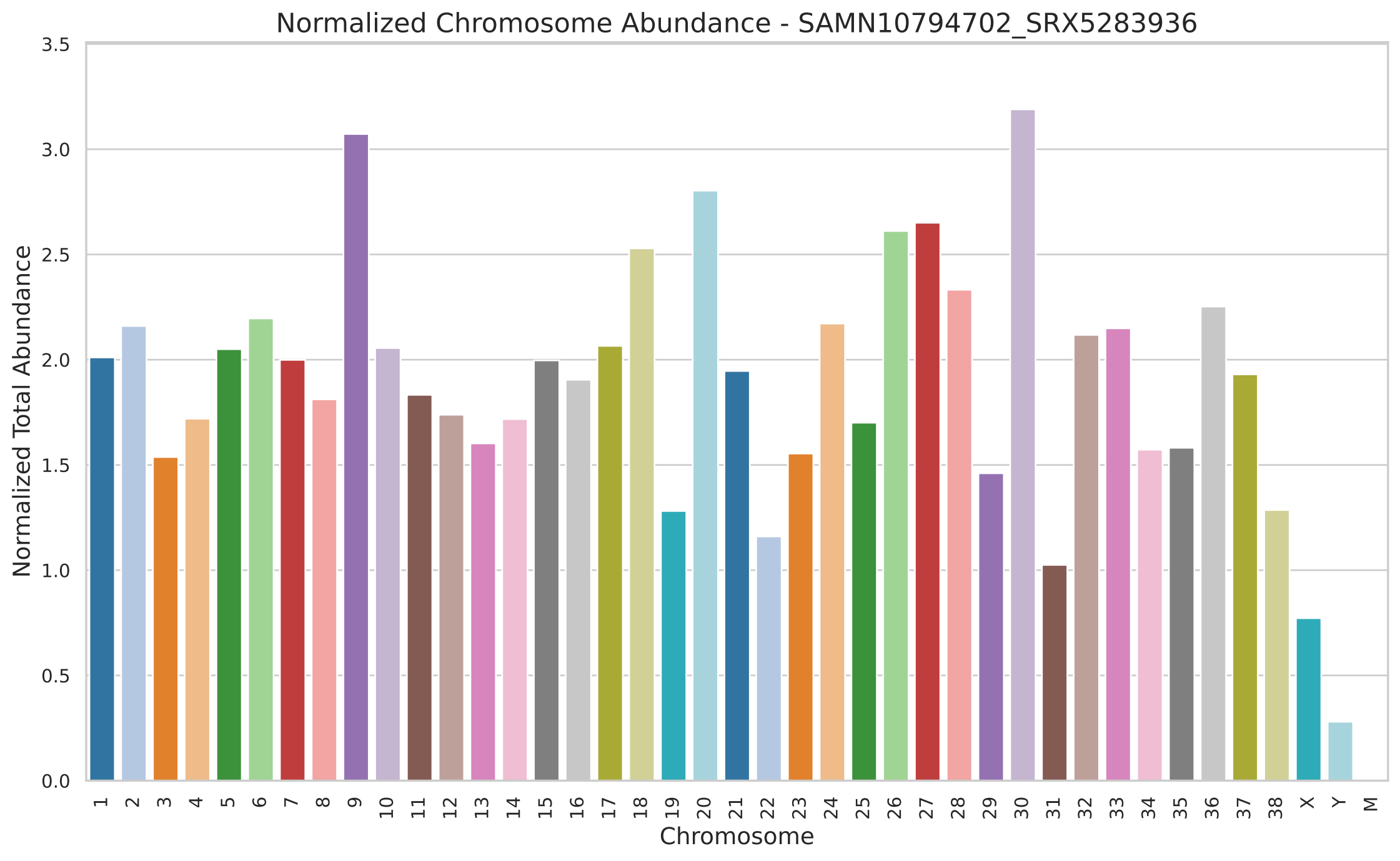

Normalized Chromosome Abundance - SAMEA3907117_ERX3486379
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

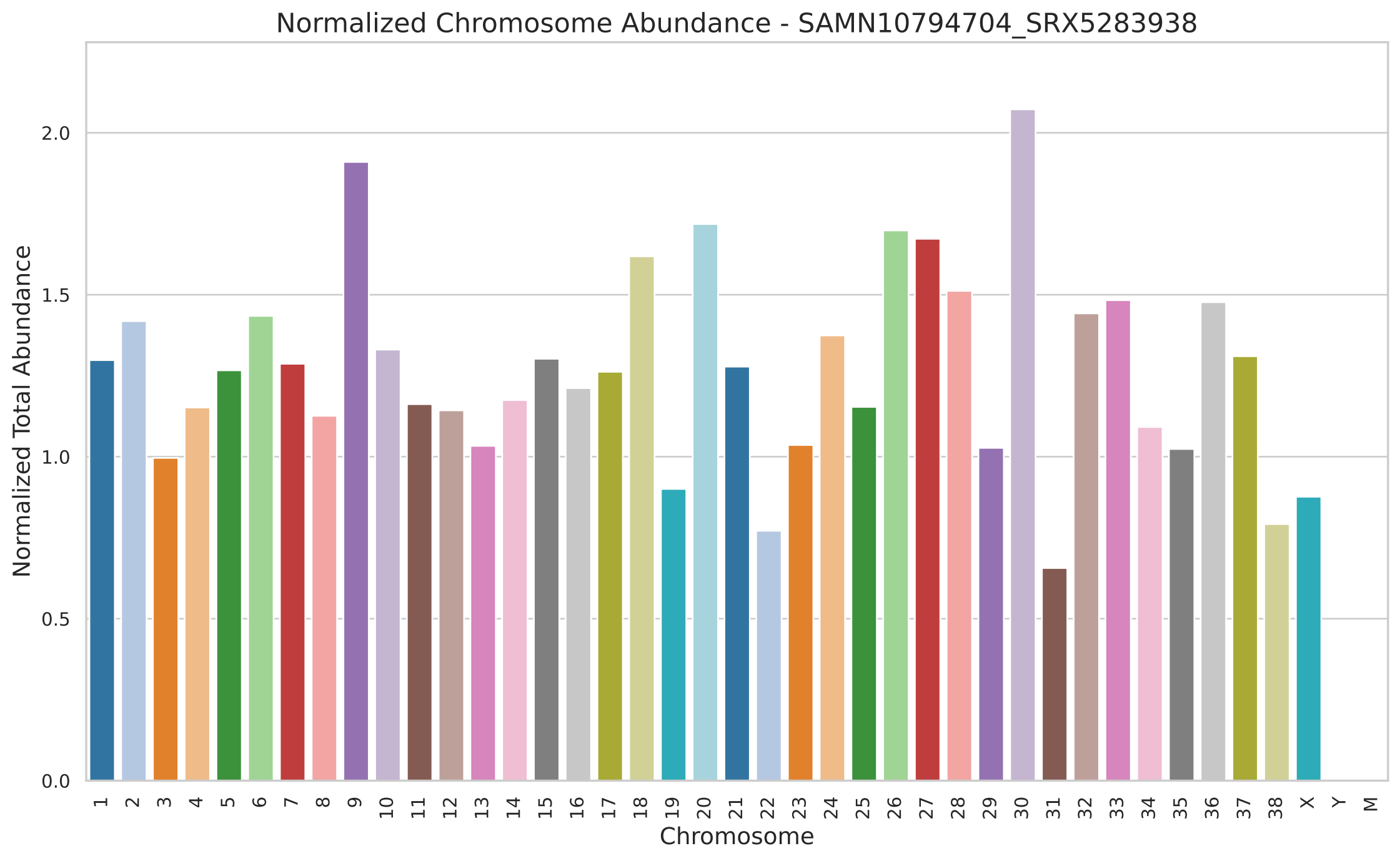

Normalized Chromosome Abundance - SAMN14488569_SRX8029315
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

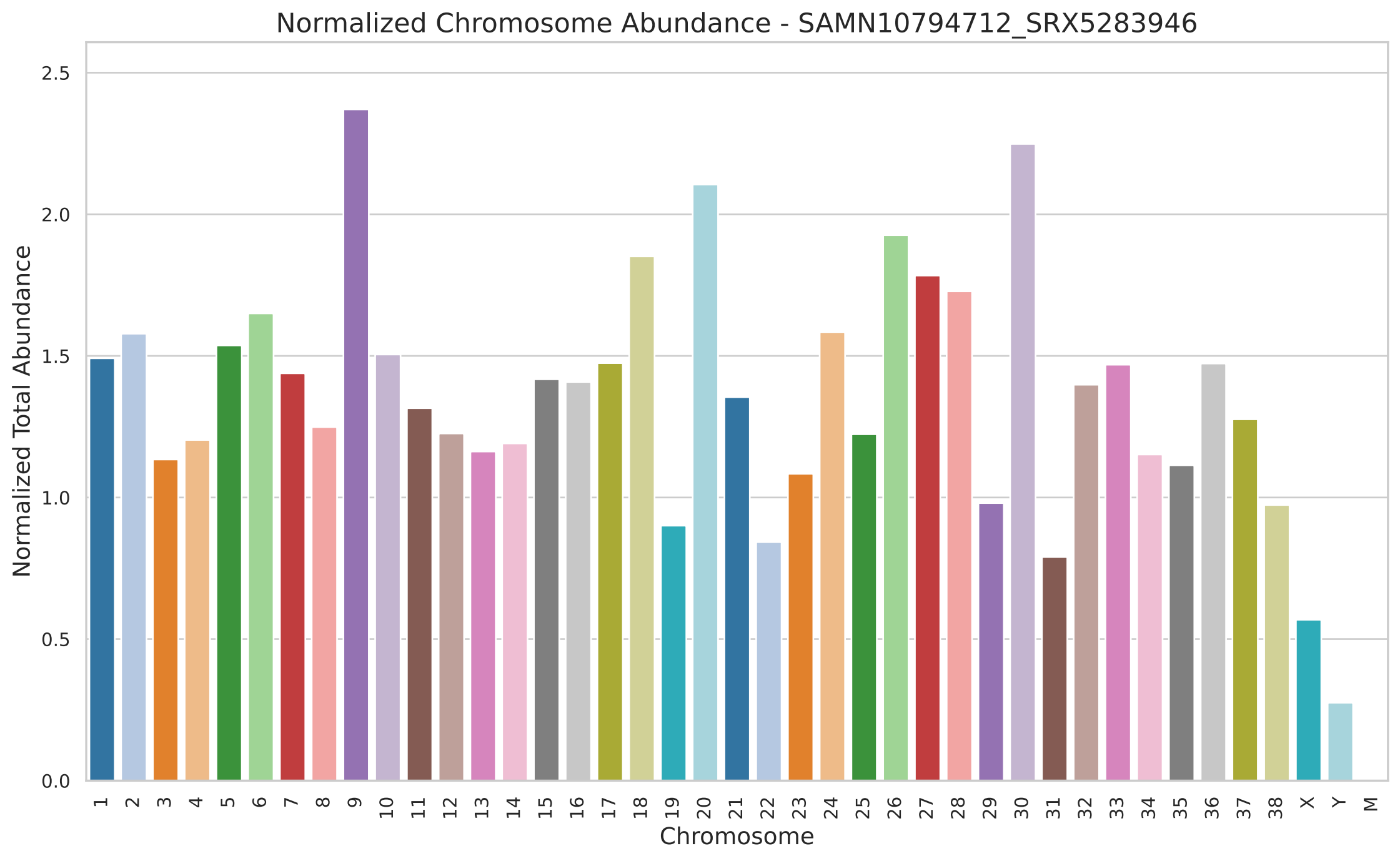

Normalized Chromosome Abundance - SAMN10794708_SRX5283950
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

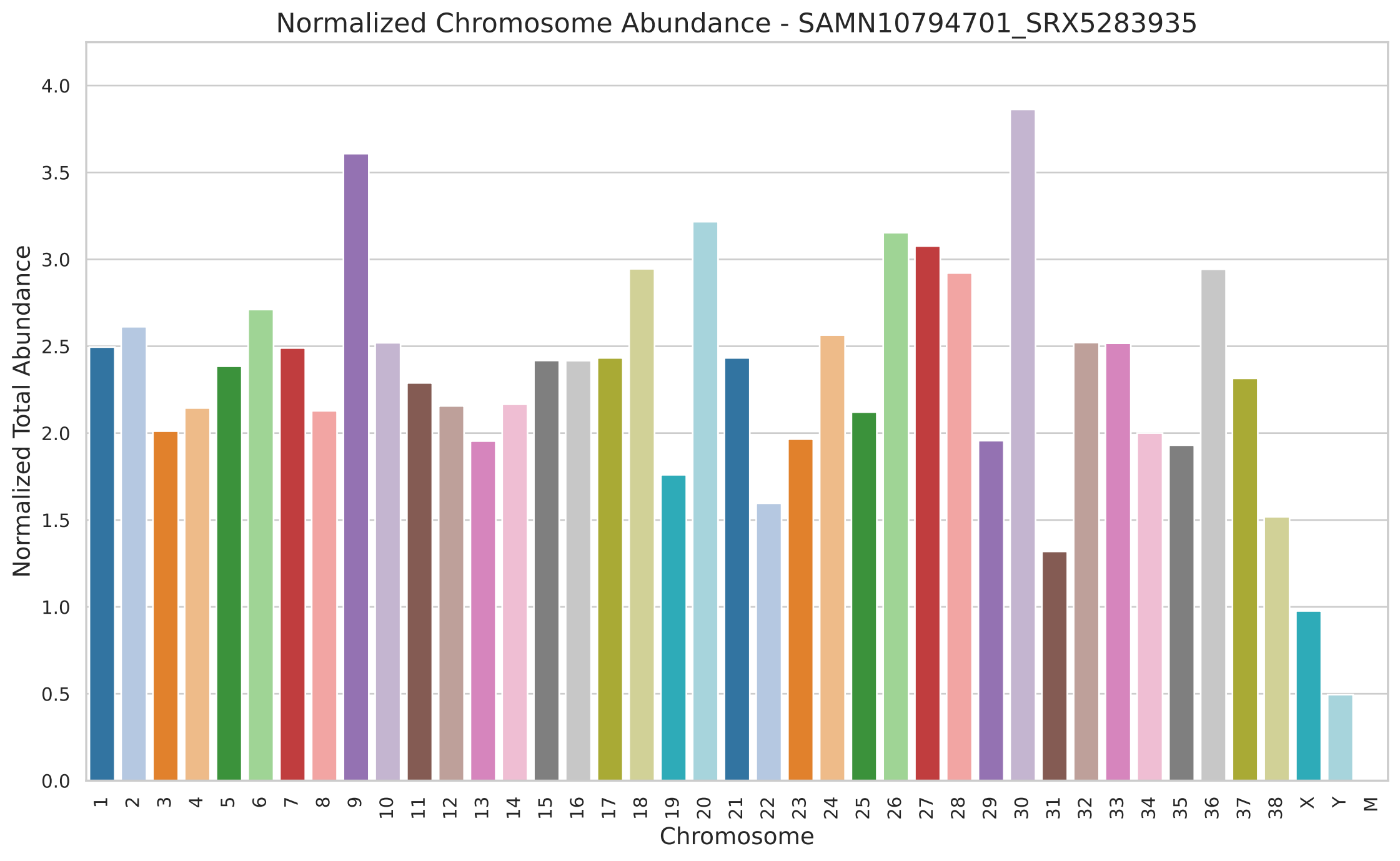

Normalized Chromosome Abundance - SAMN10794698_SRX5283940
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

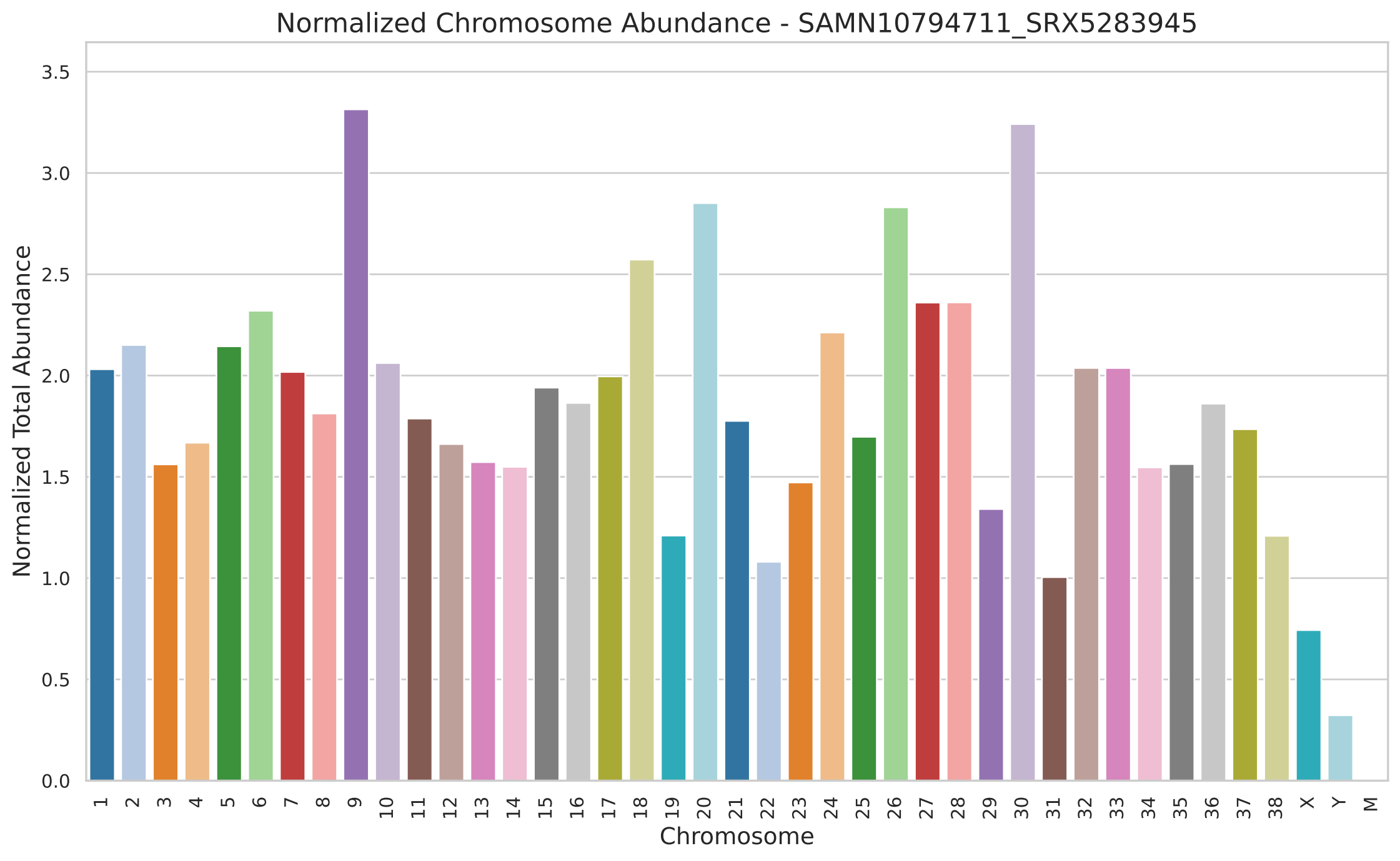

Normalized Chromosome Abundance - SAMN10794709_SRX5283947
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

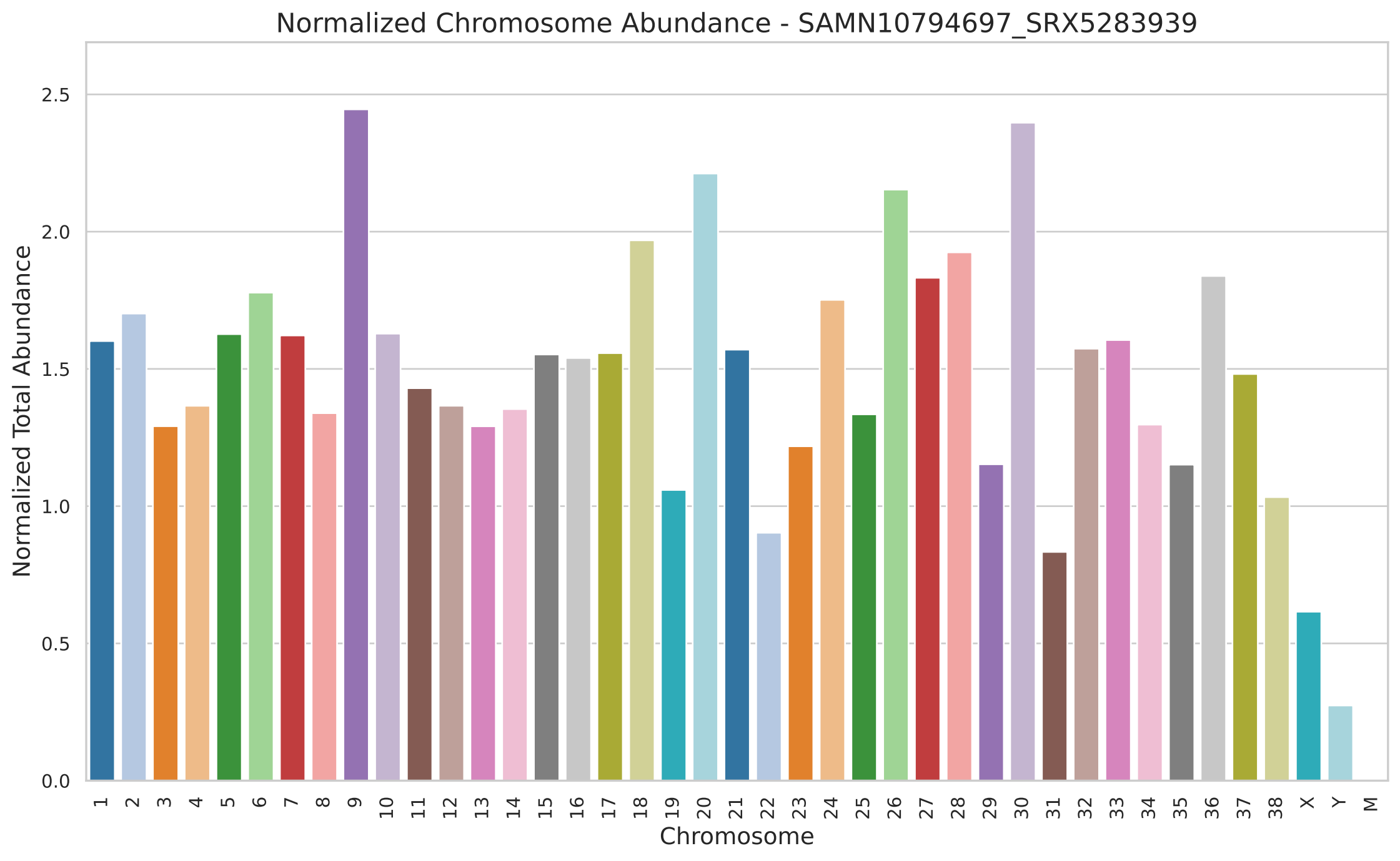

Normalized Chromosome Abundance - SAMN10794702_SRX5283936
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

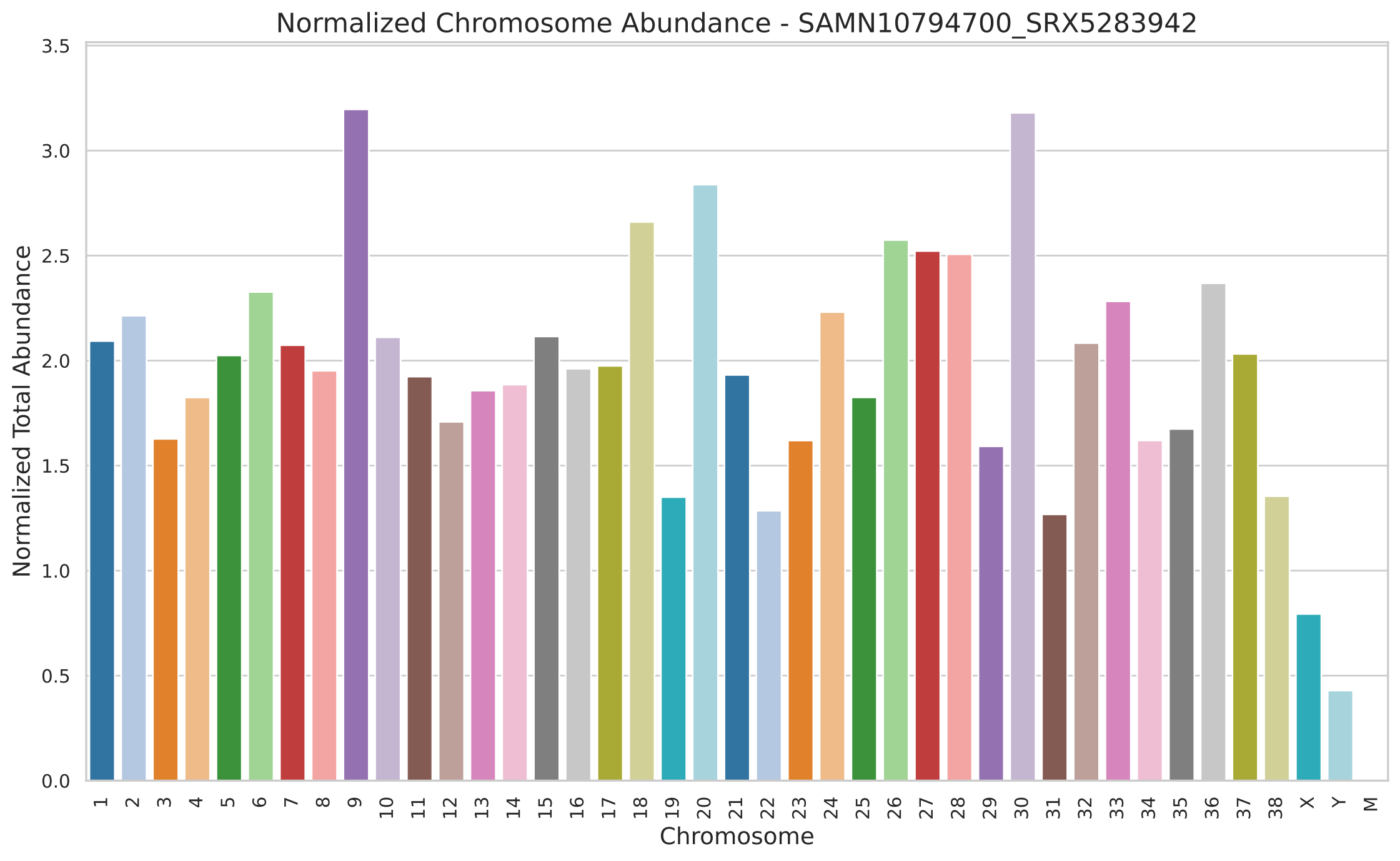

Normalized Chromosome Abundance - SAMN10794704_SRX5283938
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

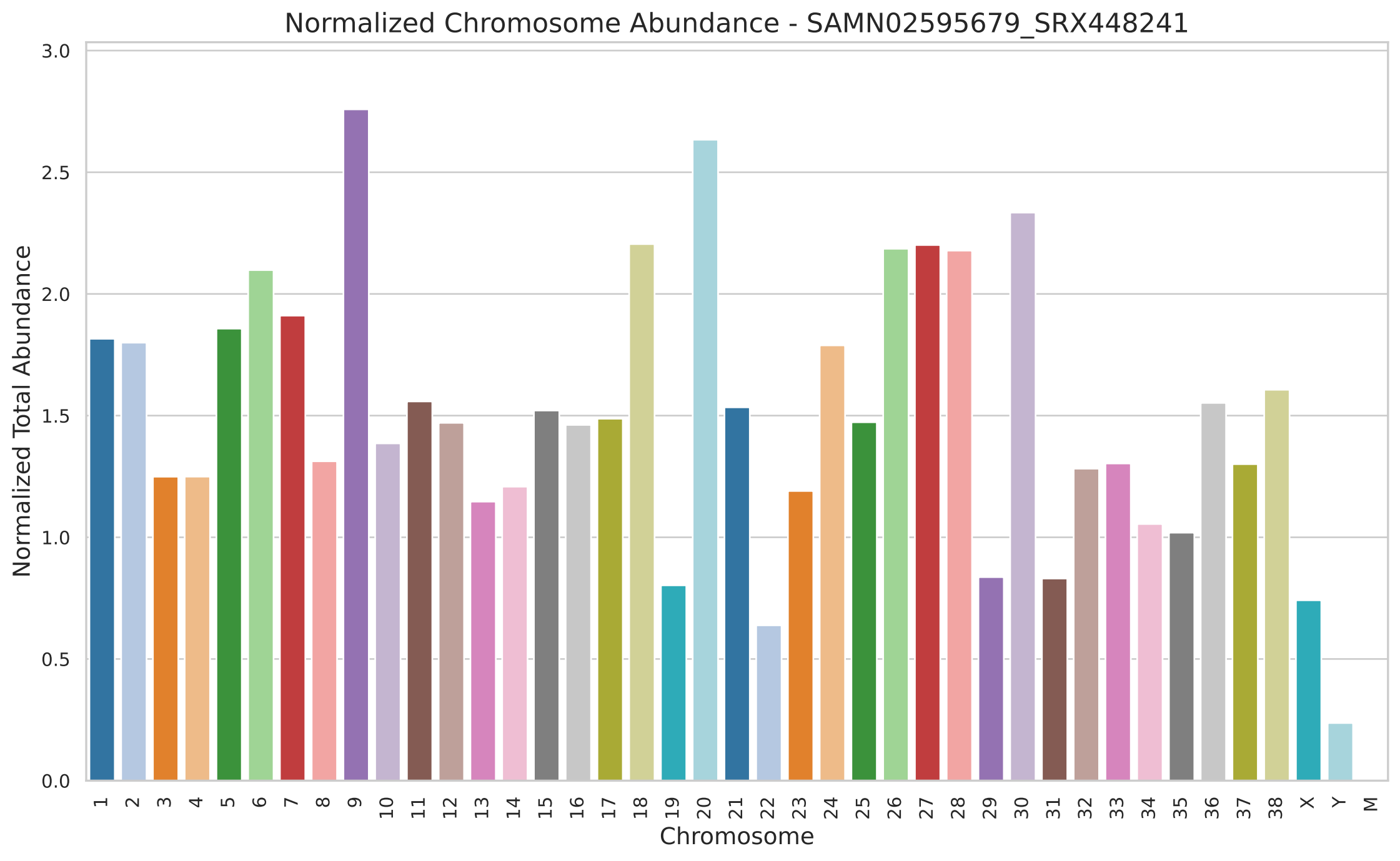

Normalized Chromosome Abundance - SAMN10794712_SRX5283946
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

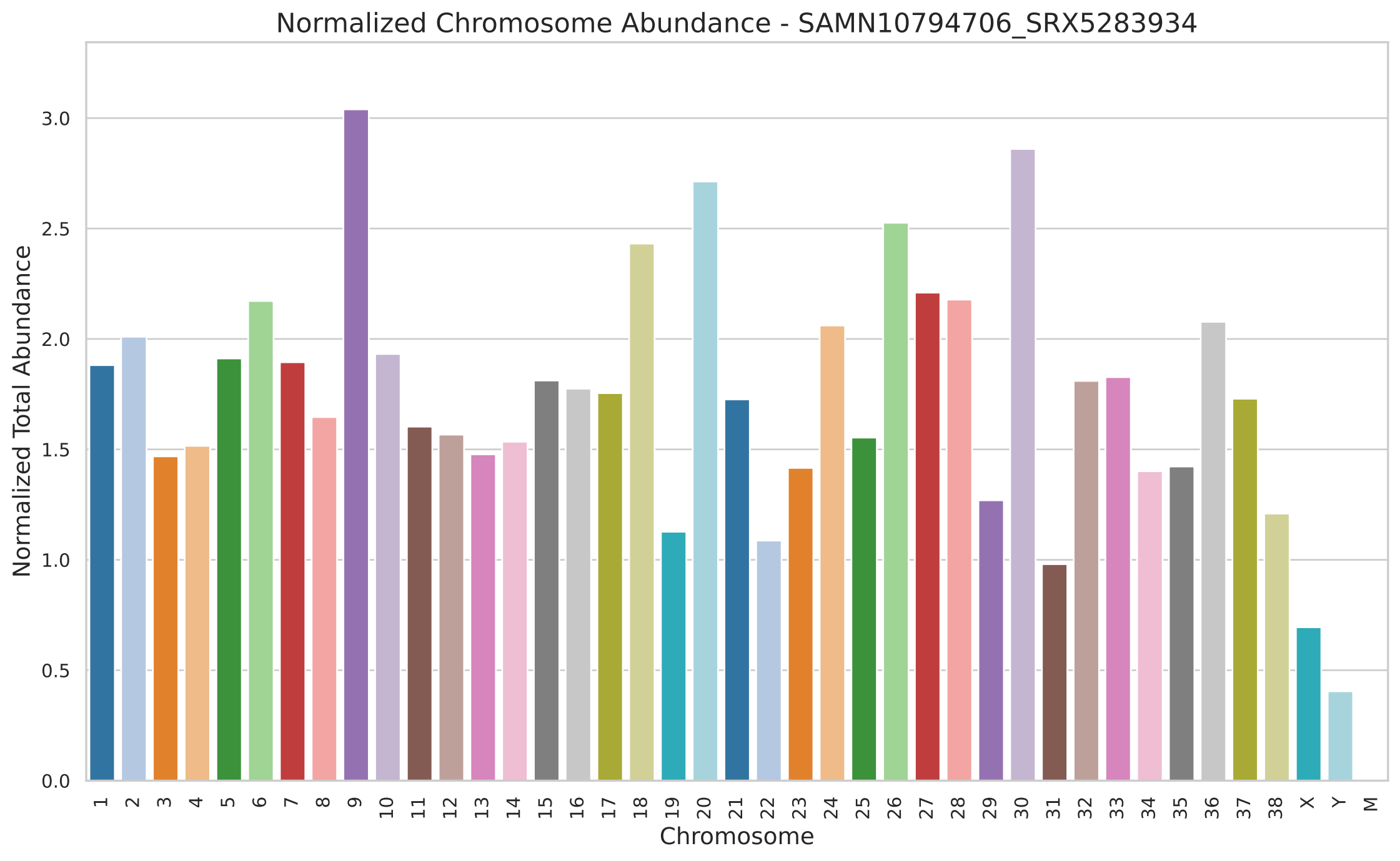

Normalized Chromosome Abundance - SAMN10794701_SRX5283935
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

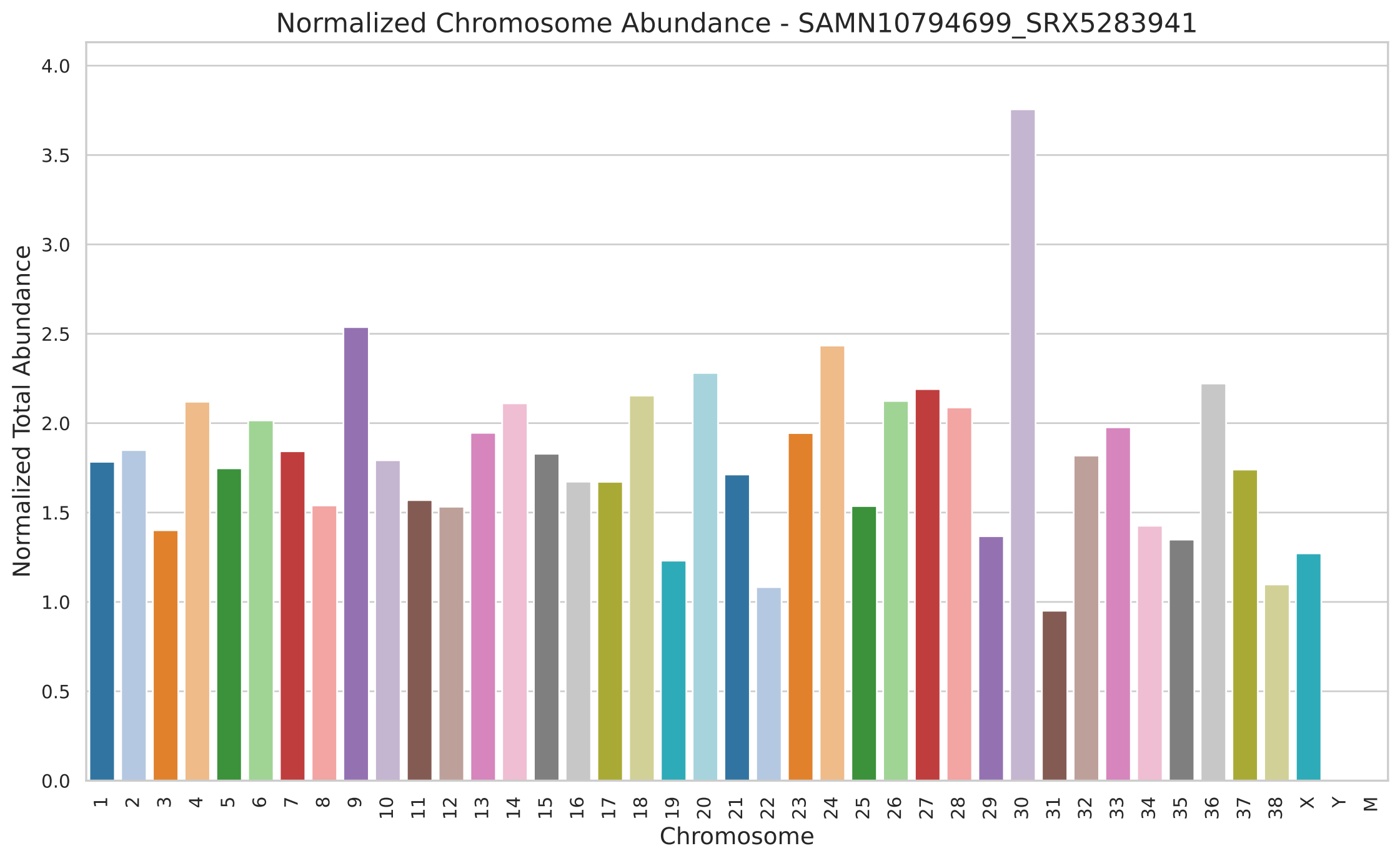

Normalized Chromosome Abundance - SAMN10794711_SRX5283945
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

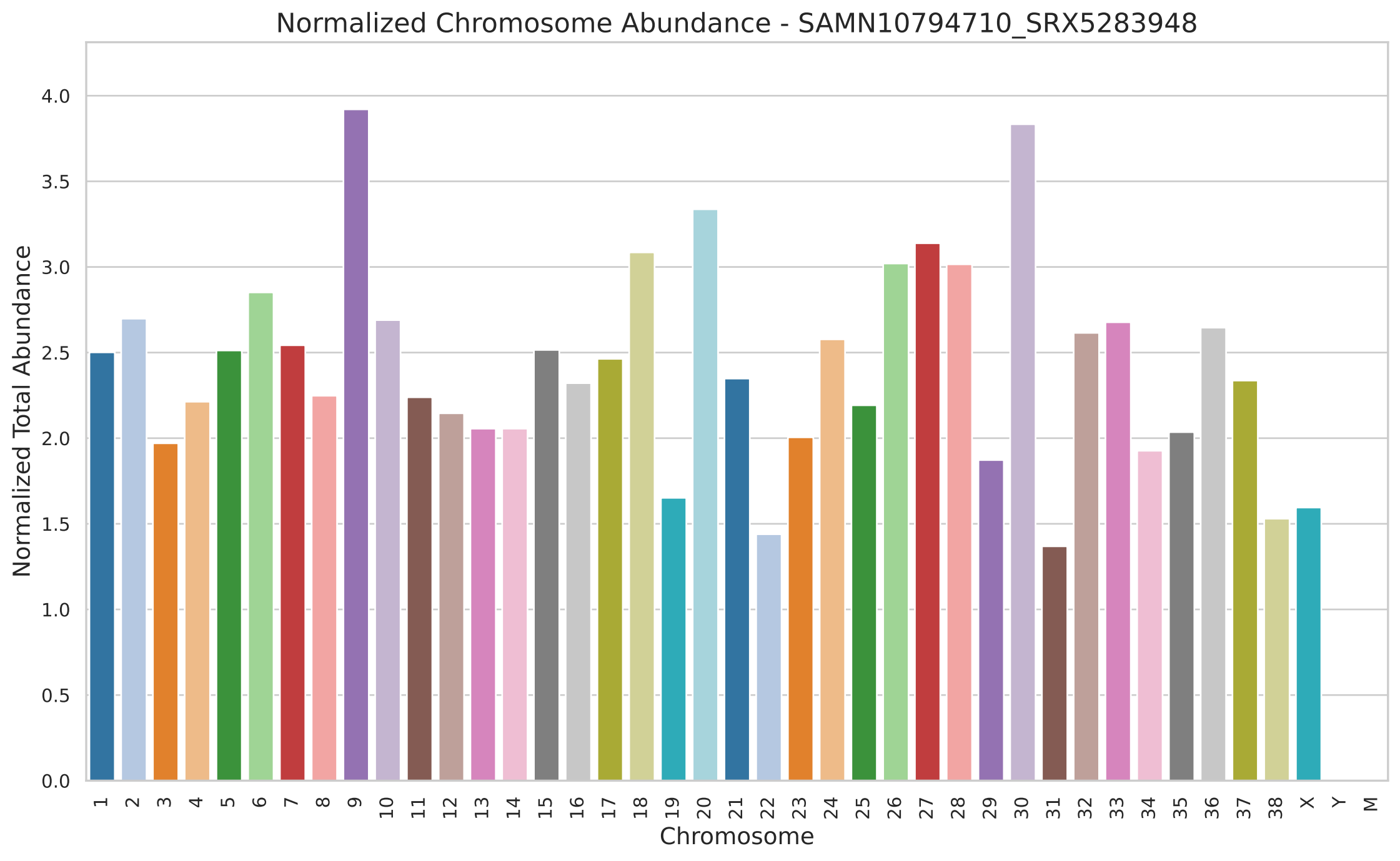

Normalized Chromosome Abundance - SAMN10794697_SRX5283939
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

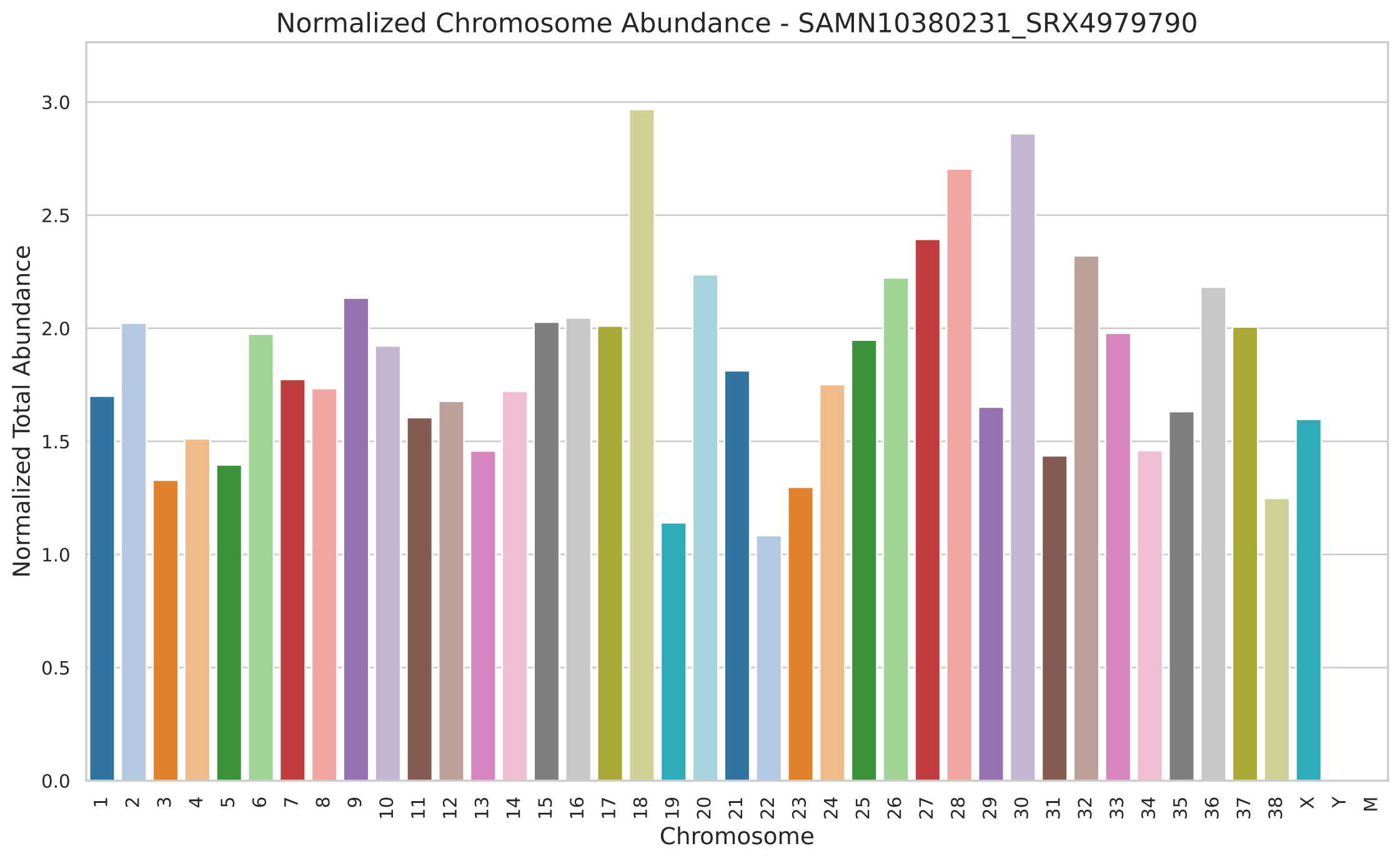

Normalized Chromosome Abundance - SAMN10794700_SRX5283942
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

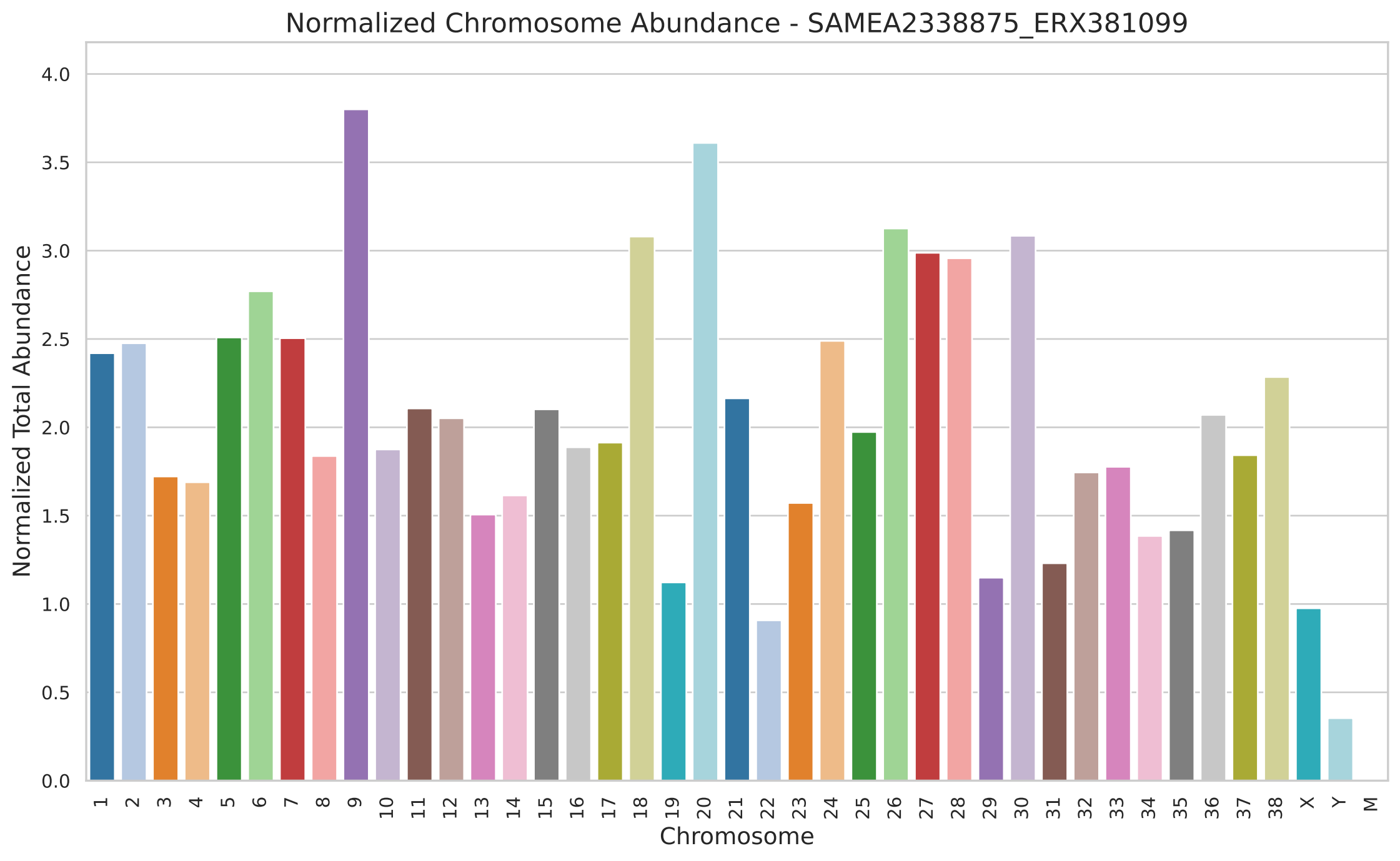

Normalized Chromosome Abundance - SAMN02595679_SRX448241
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

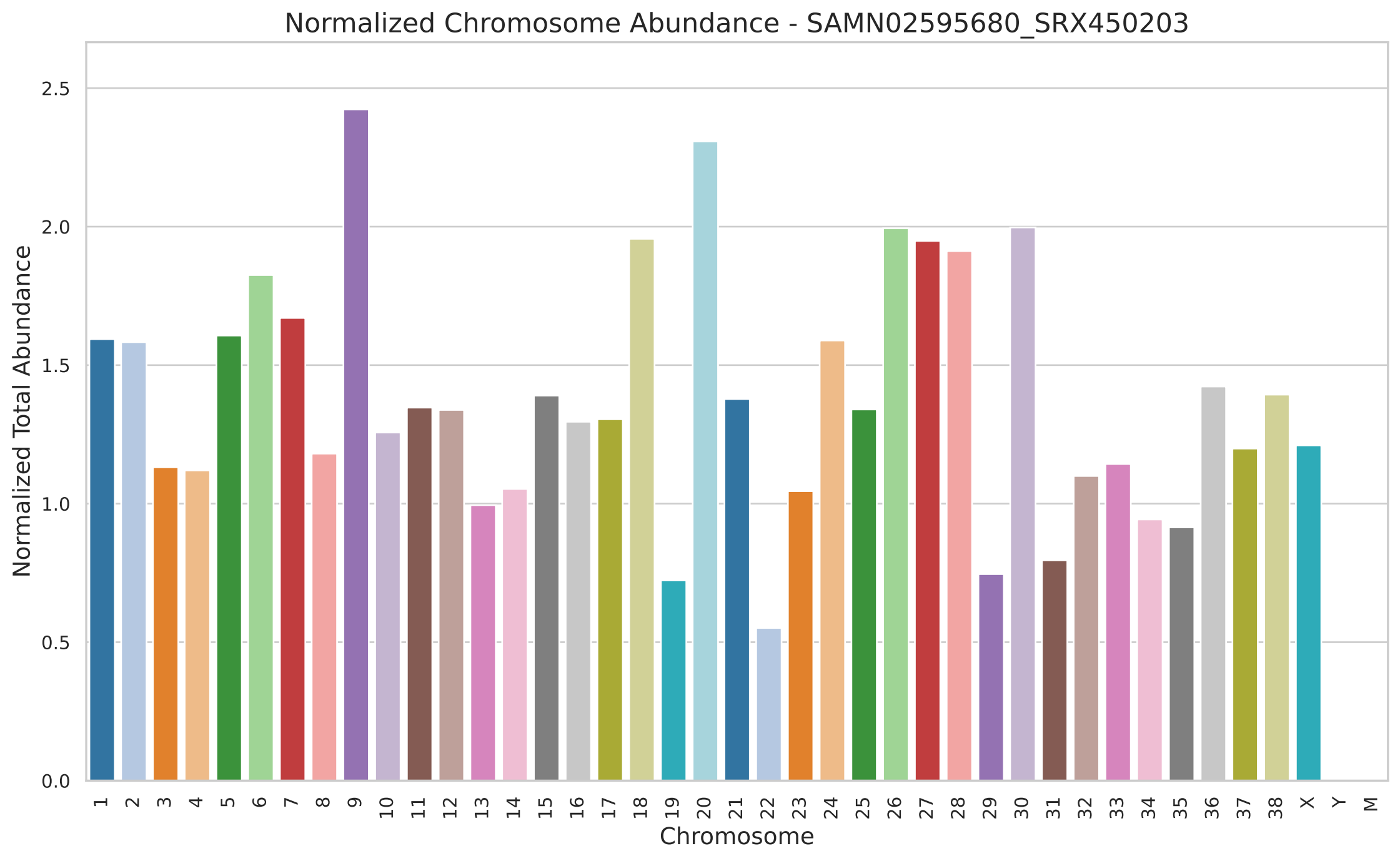

Normalized Chromosome Abundance - SAMN10794706_SRX5283934
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

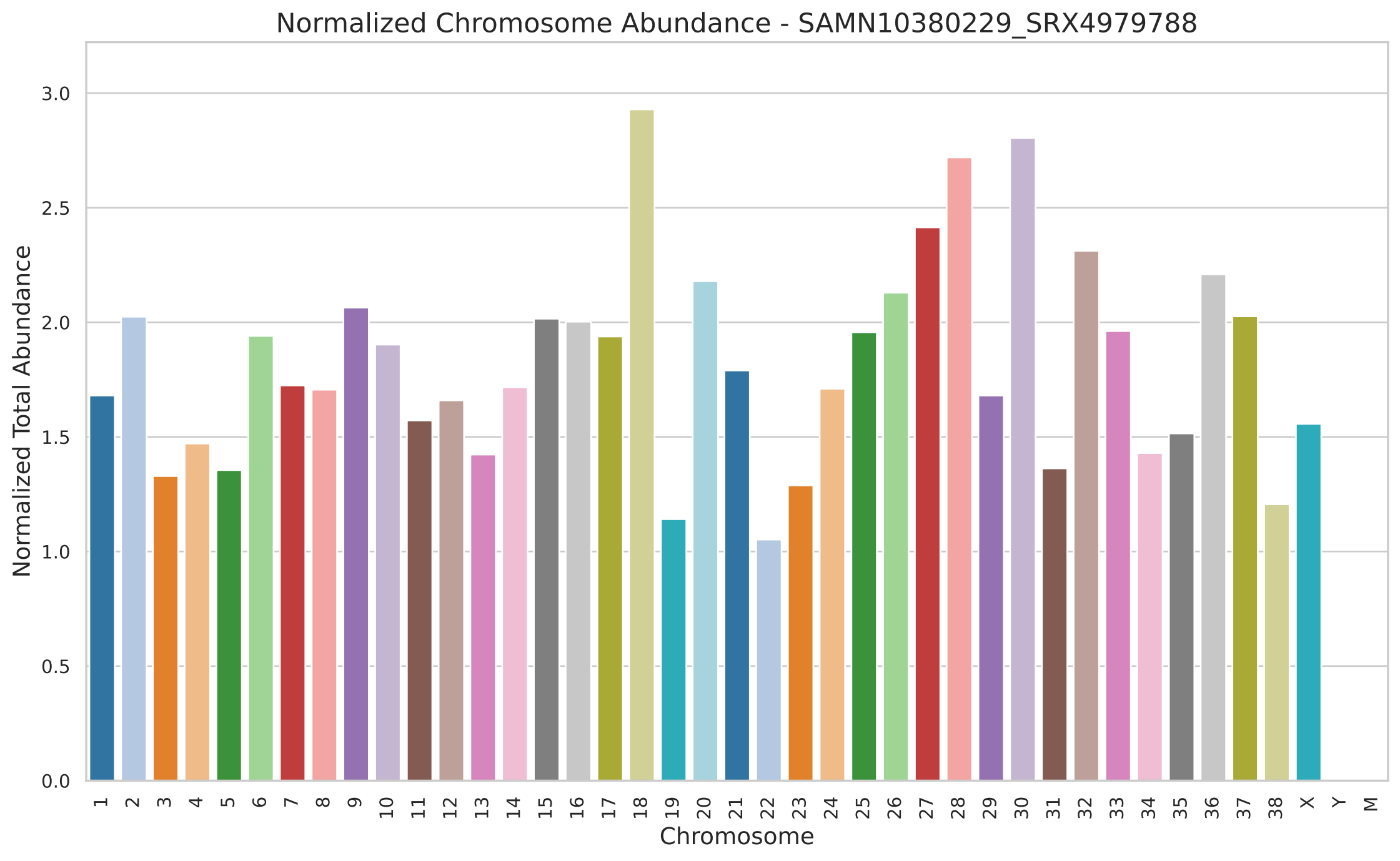

Normalized Chromosome Abundance - SAMN10794699_SRX5283941
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

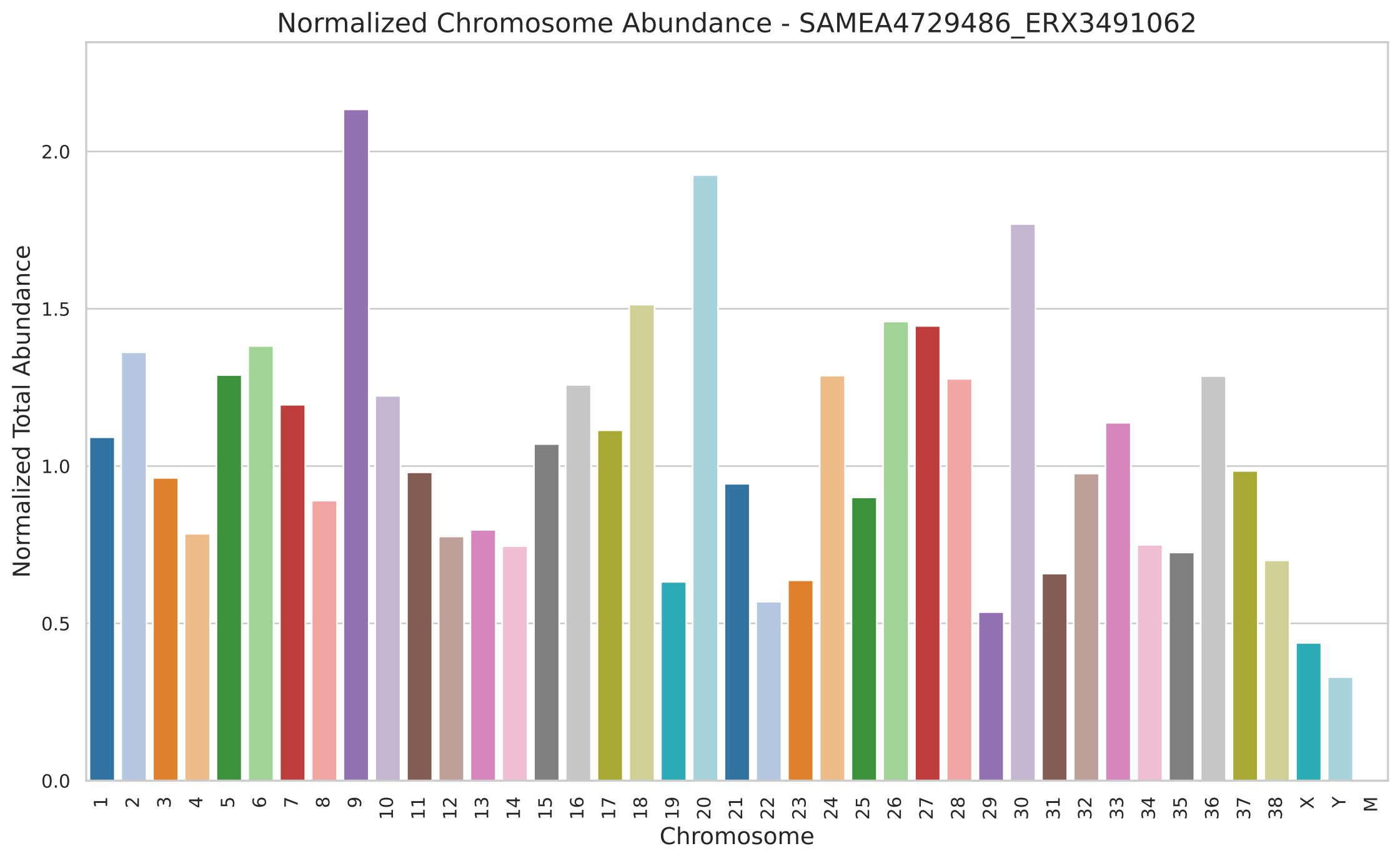

Normalized Chromosome Abundance - SAMN10794710_SRX5283948
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

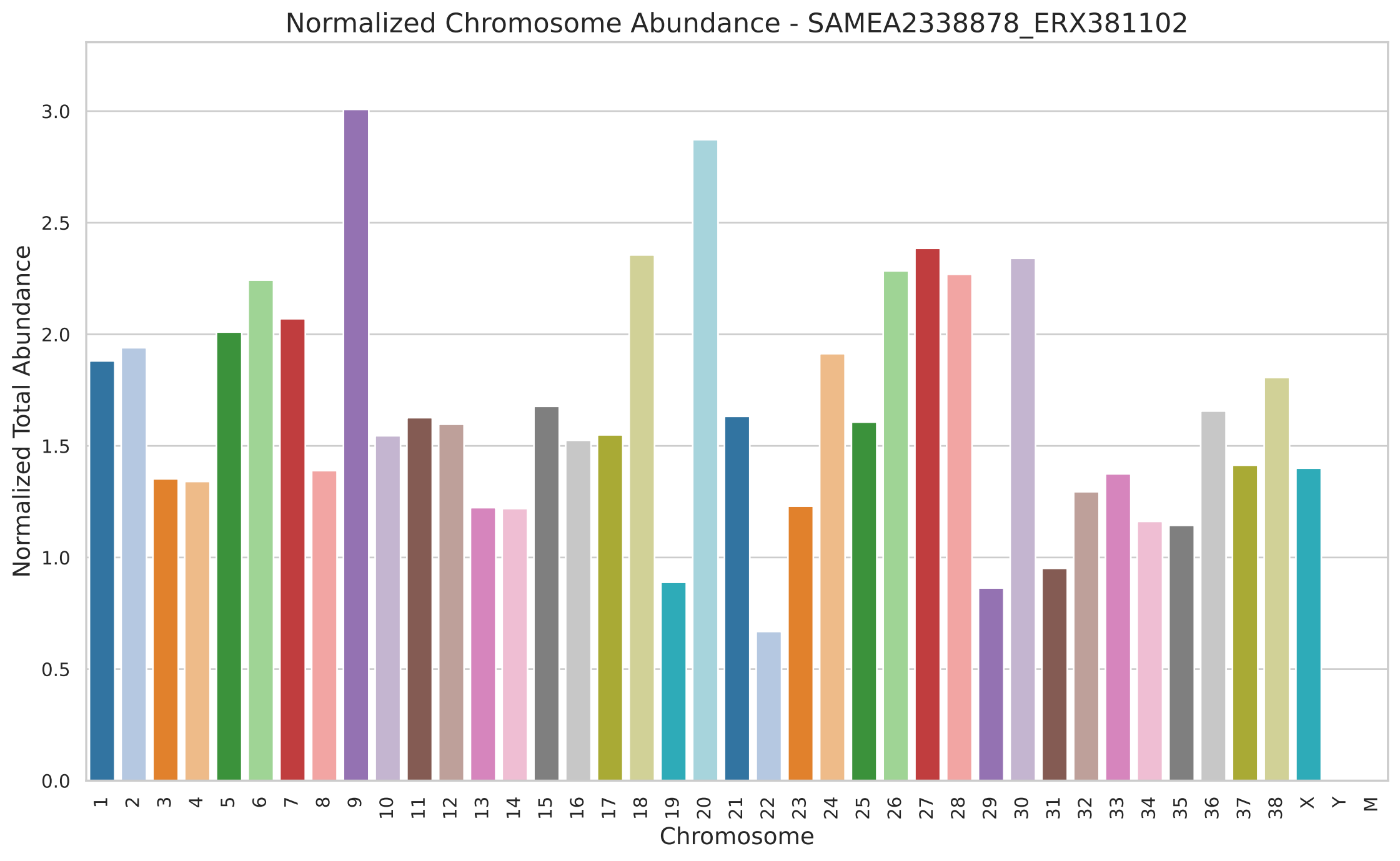

Normalized Chromosome Abundance - SAMN10380231_SRX4979790
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

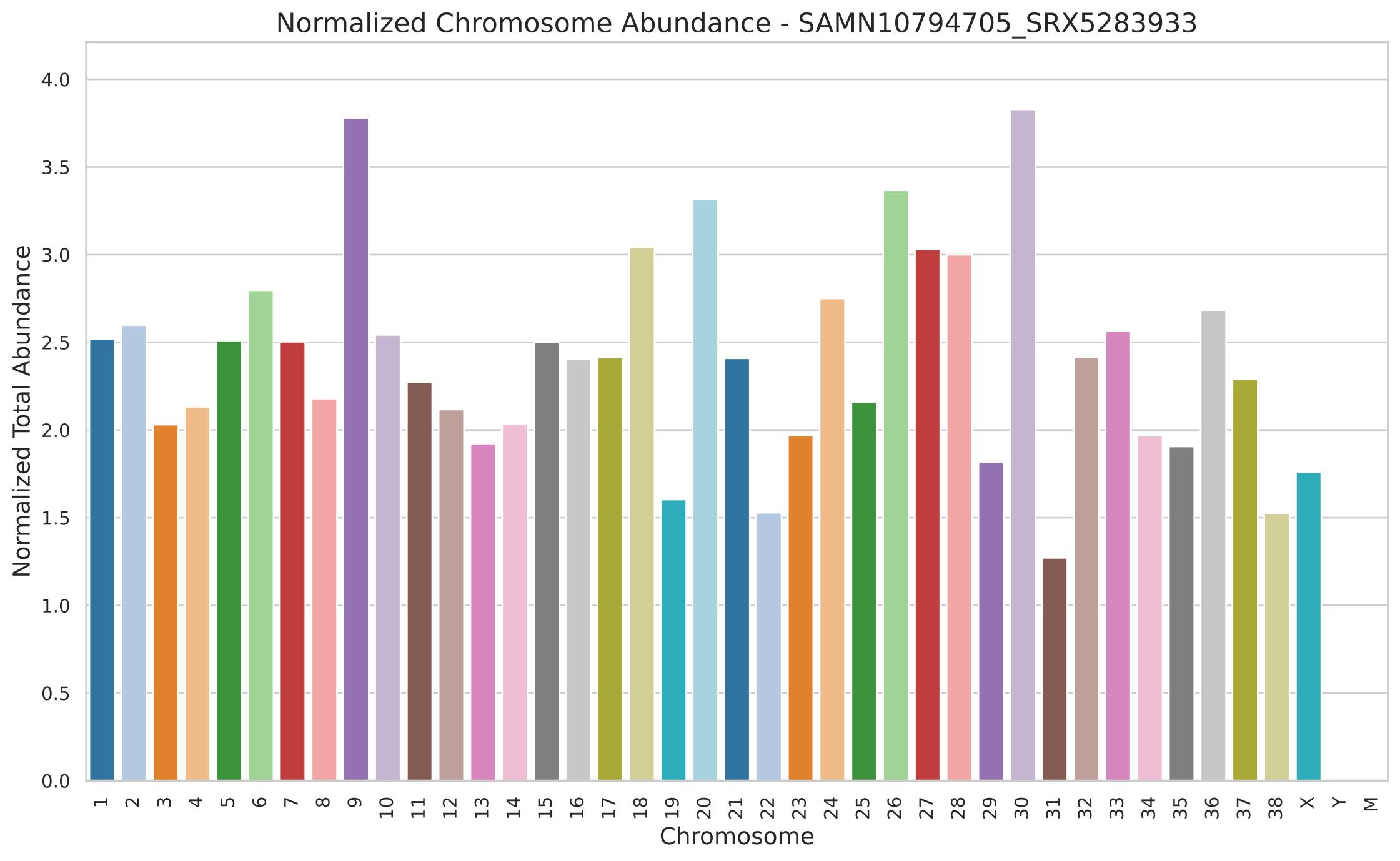

Normalized Chromosome Abundance - SAMEA2338875_ERX381099
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

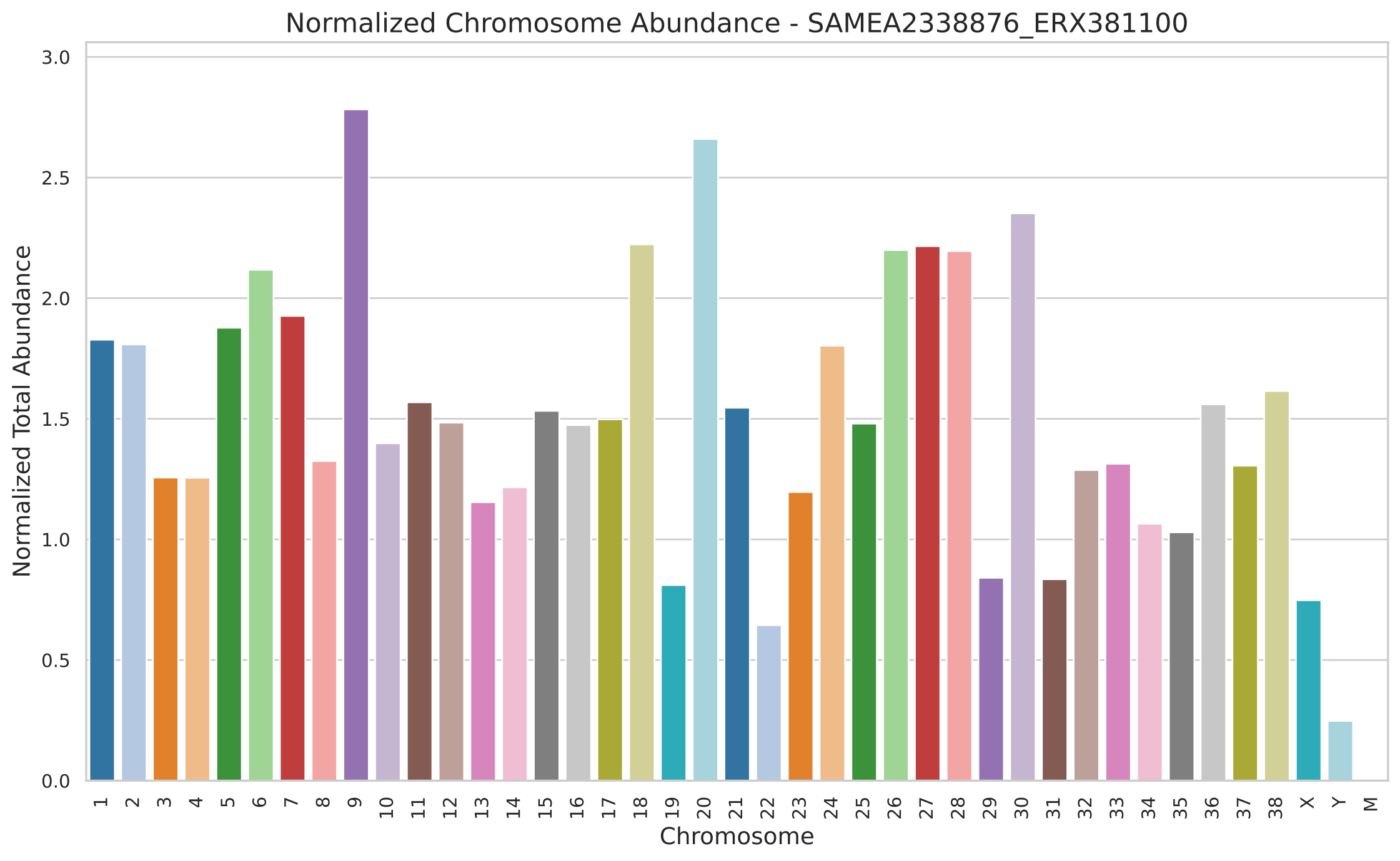

Normalized Chromosome Abundance - SAMN02595680_SRX450203
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

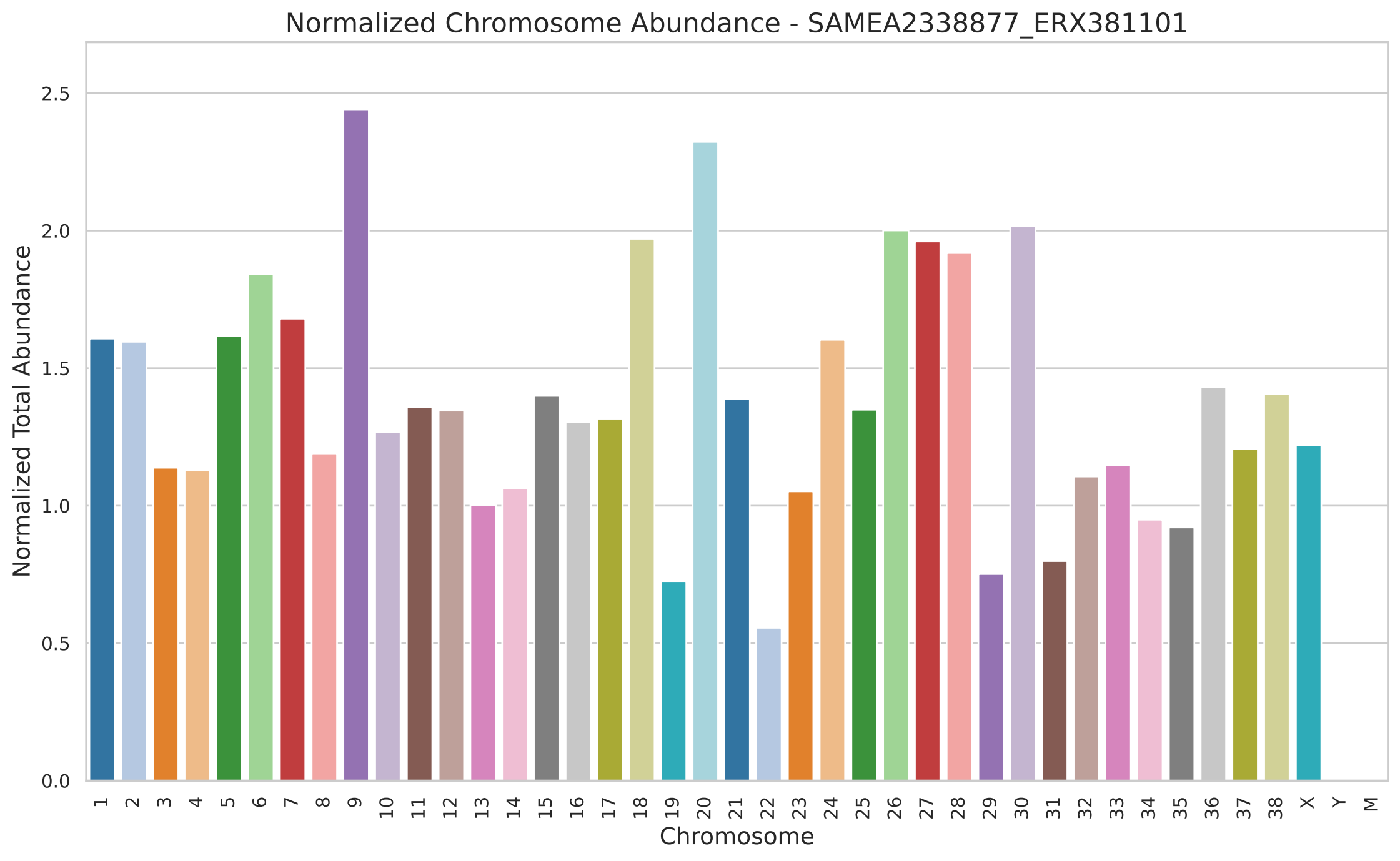

Normalized Chromosome Abundance - SAMN10380229_SRX4979788
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

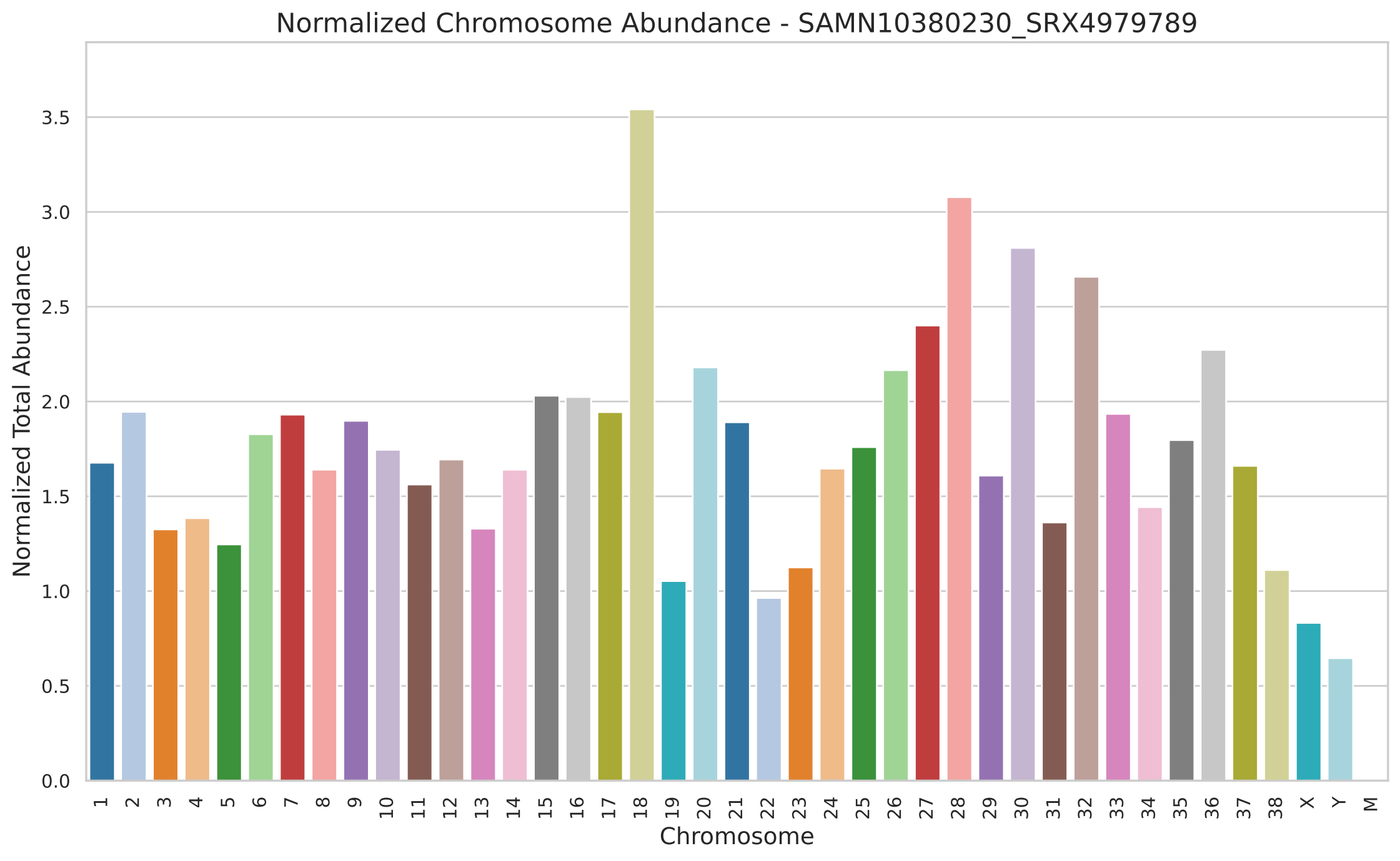

Normalized Chromosome Abundance - SAMEA4729486_ERX3491062
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

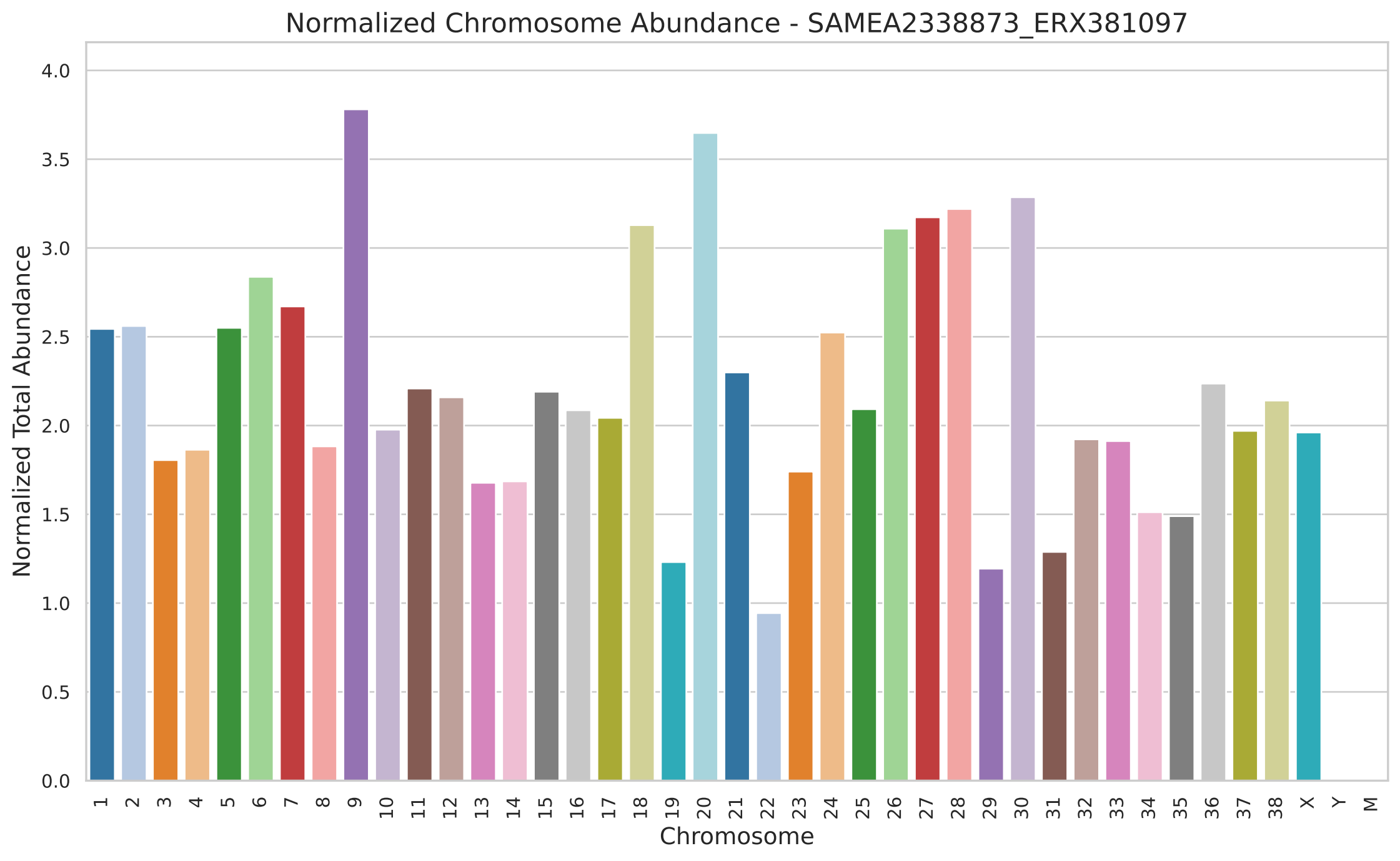

Normalized Chromosome Abundance - SAMEA2338878_ERX381102
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

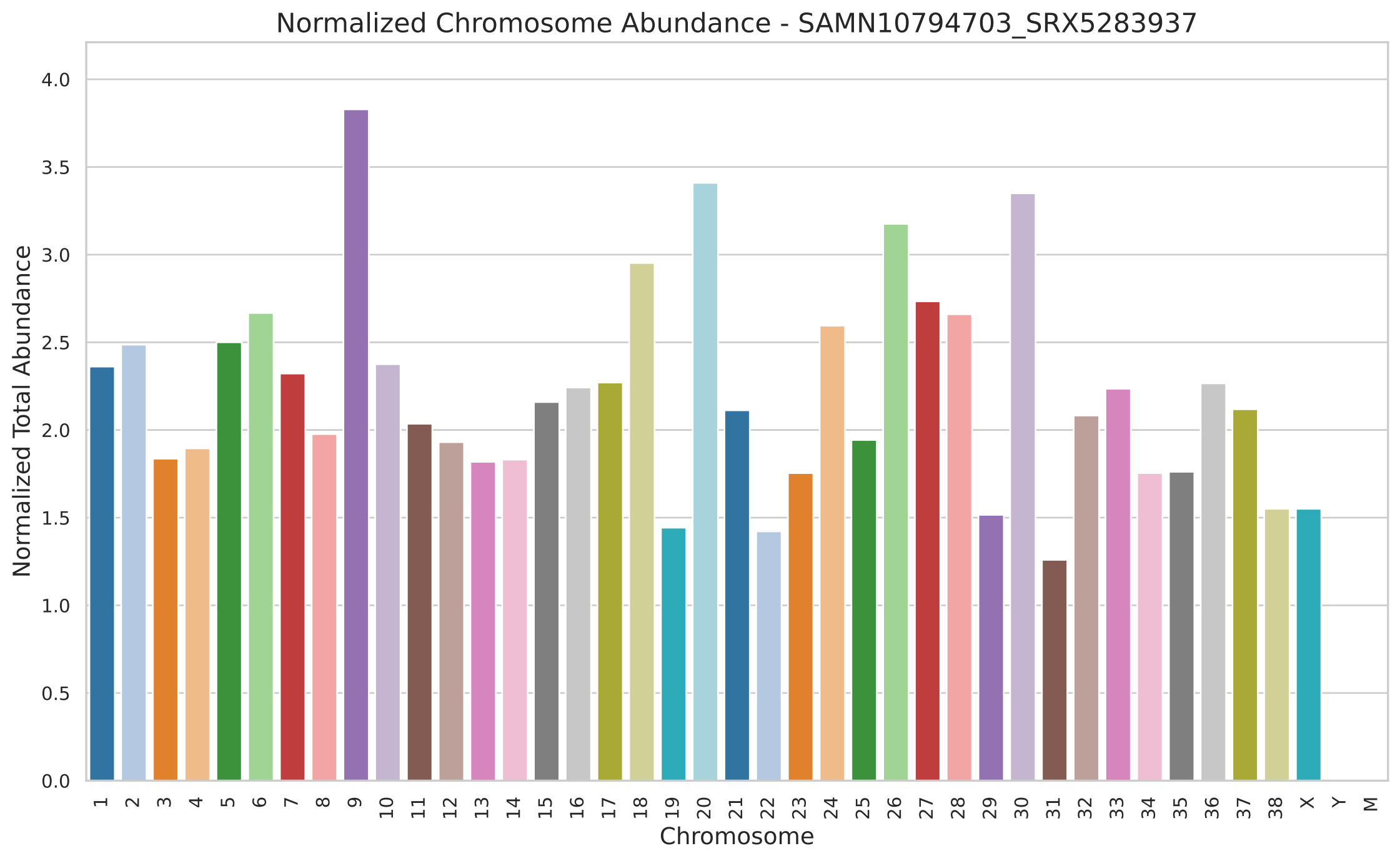

Normalized Chromosome Abundance - SAMN10794705_SRX5283933
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

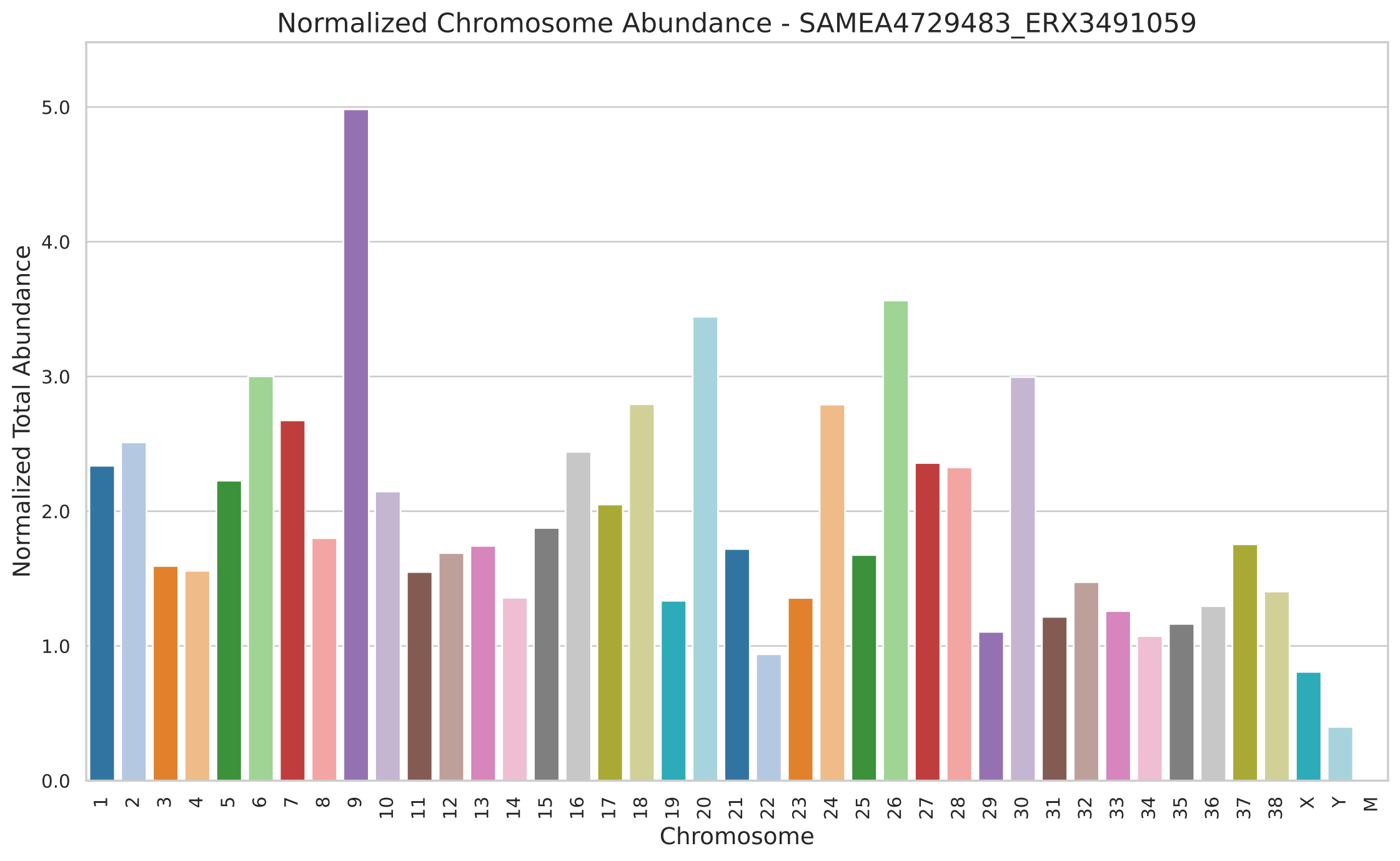

Normalized Chromosome Abundance - SAMEA2338876_ERX381100
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

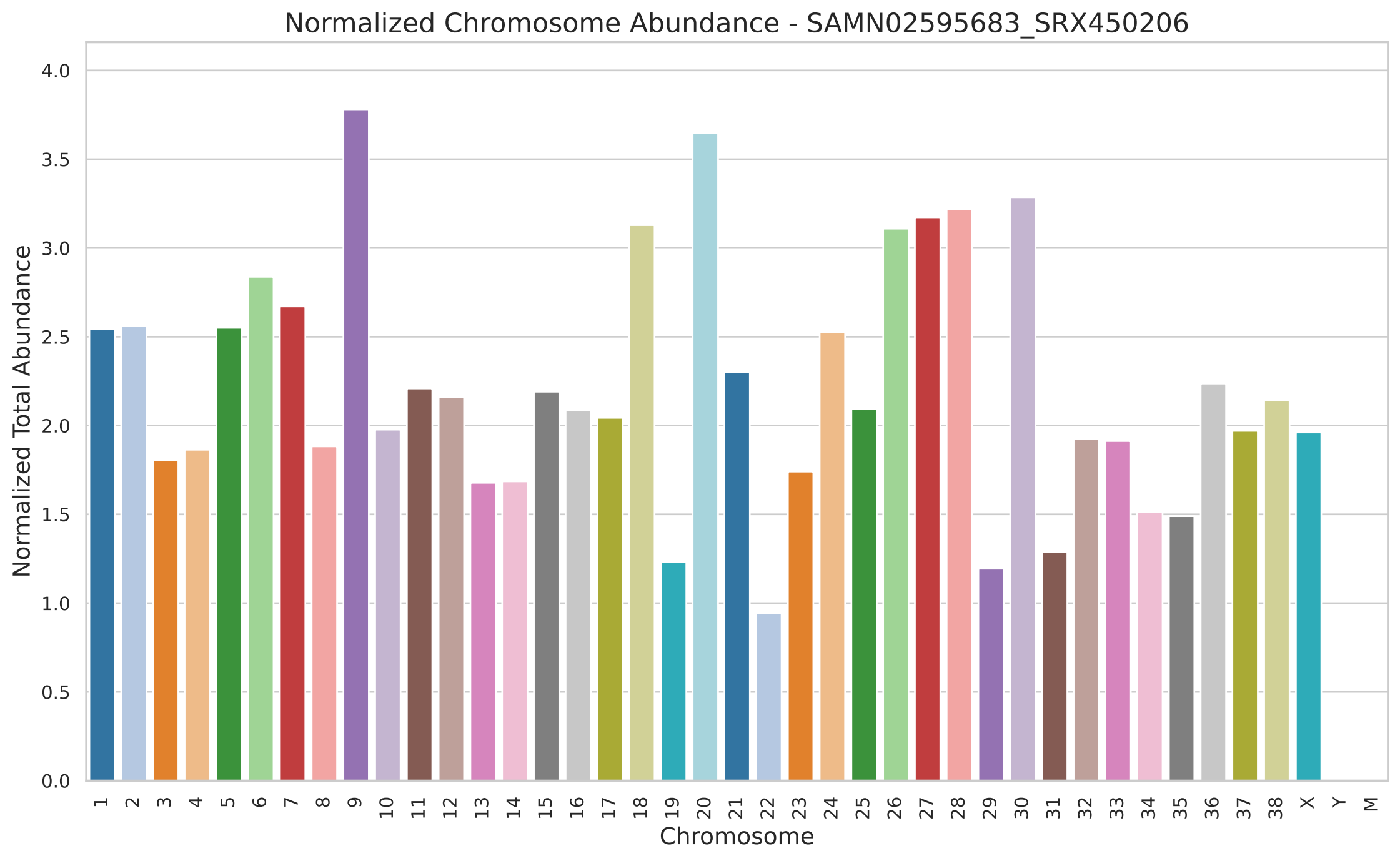

Normalized Chromosome Abundance - SAMEA2338877_ERX381101
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

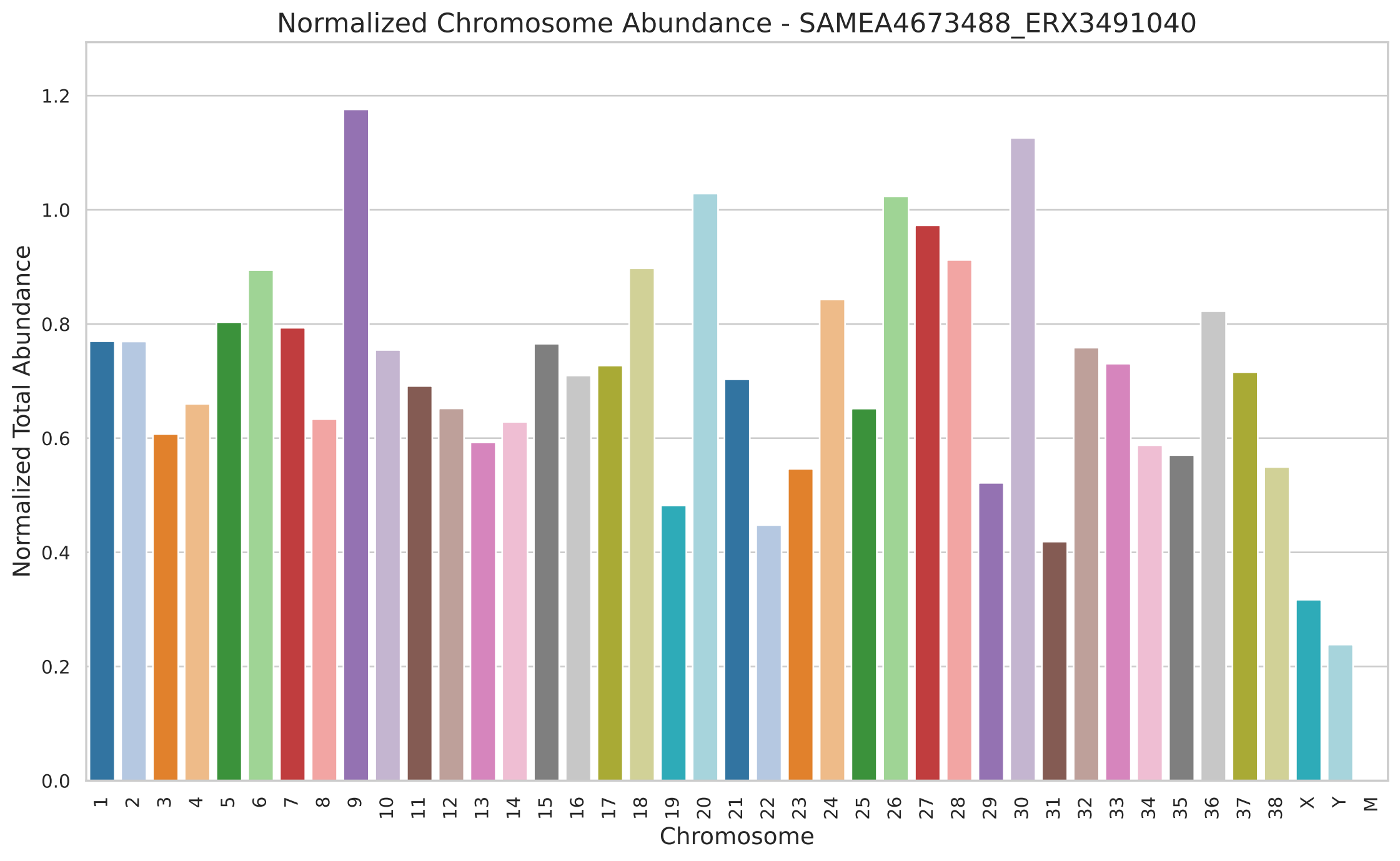

Normalized Chromosome Abundance - SAMN10380230_SRX4979789
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

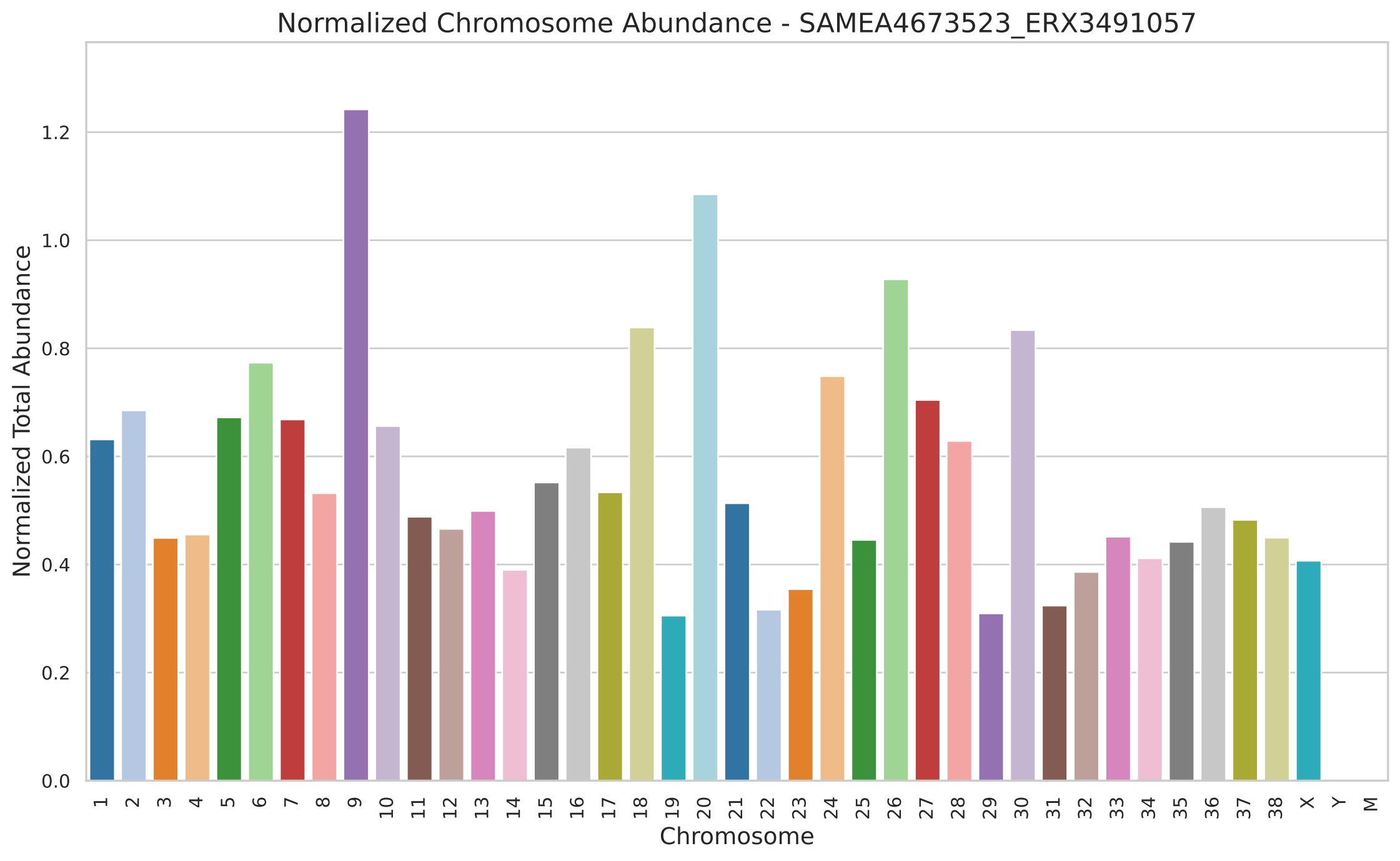

Normalized Chromosome Abundance - SAMEA2338873_ERX381097
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

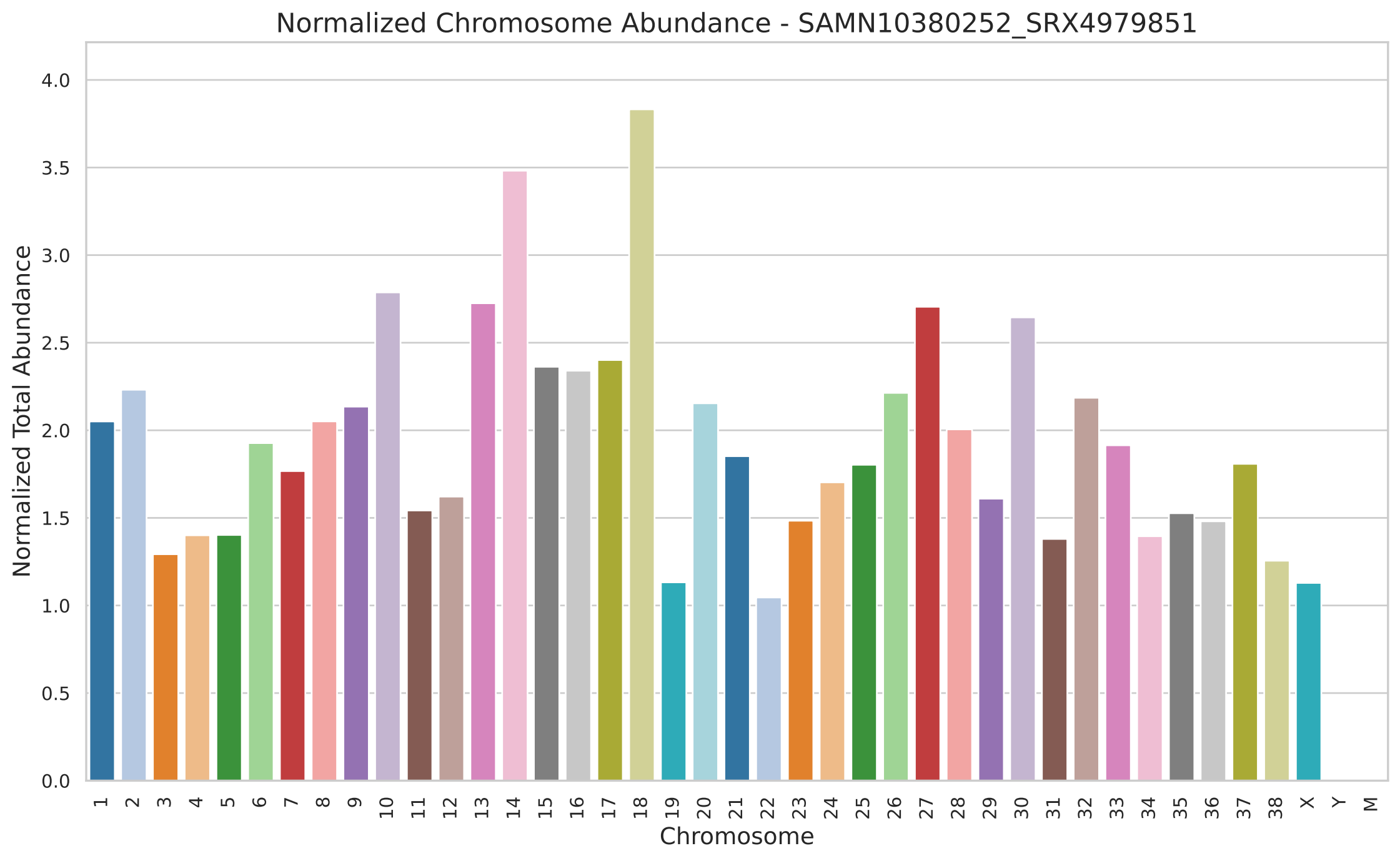

Normalized Chromosome Abundance - SAMN10794703_SRX5283937
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

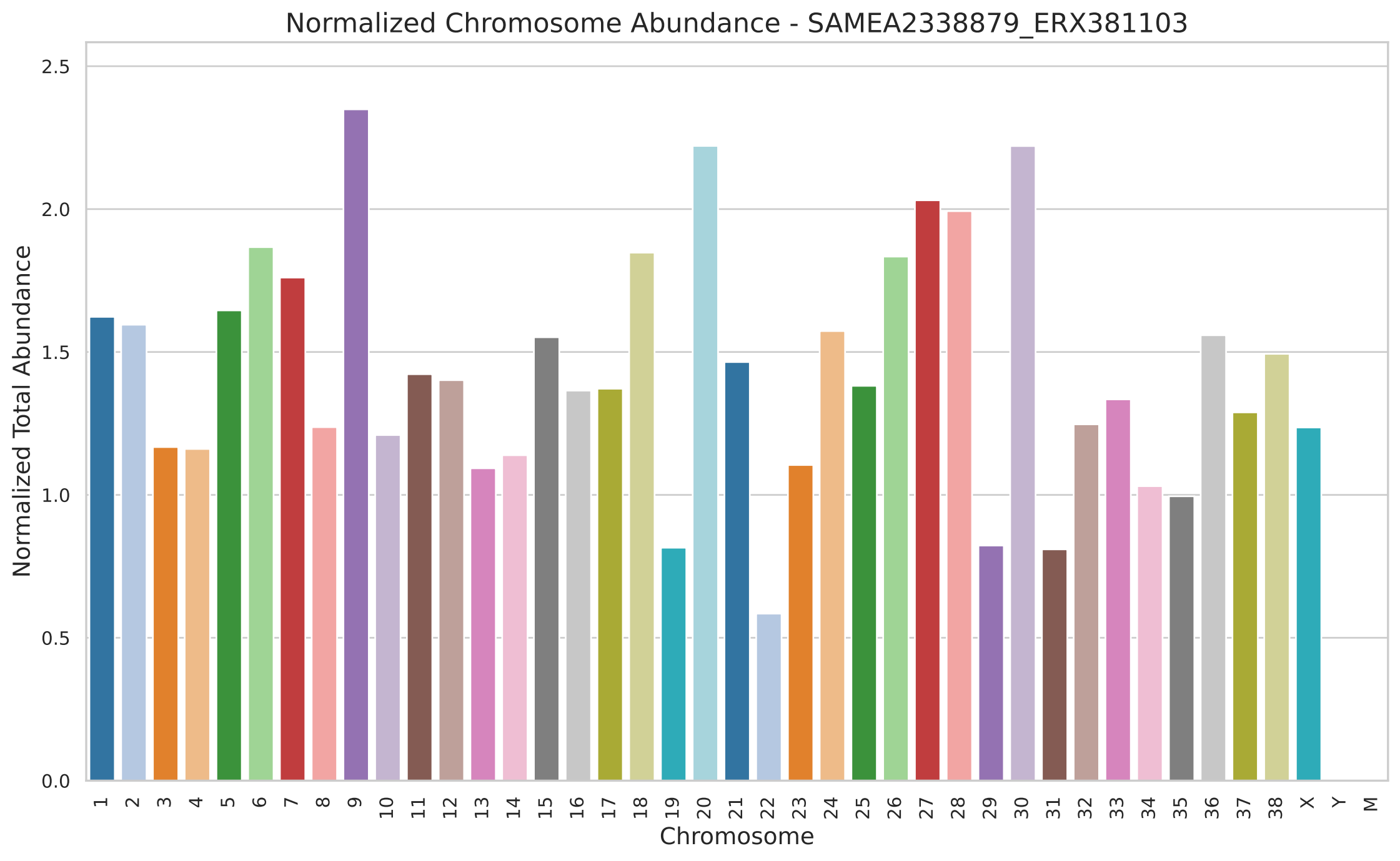

Normalized Chromosome Abundance - SAMEA4729483_ERX3491059
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

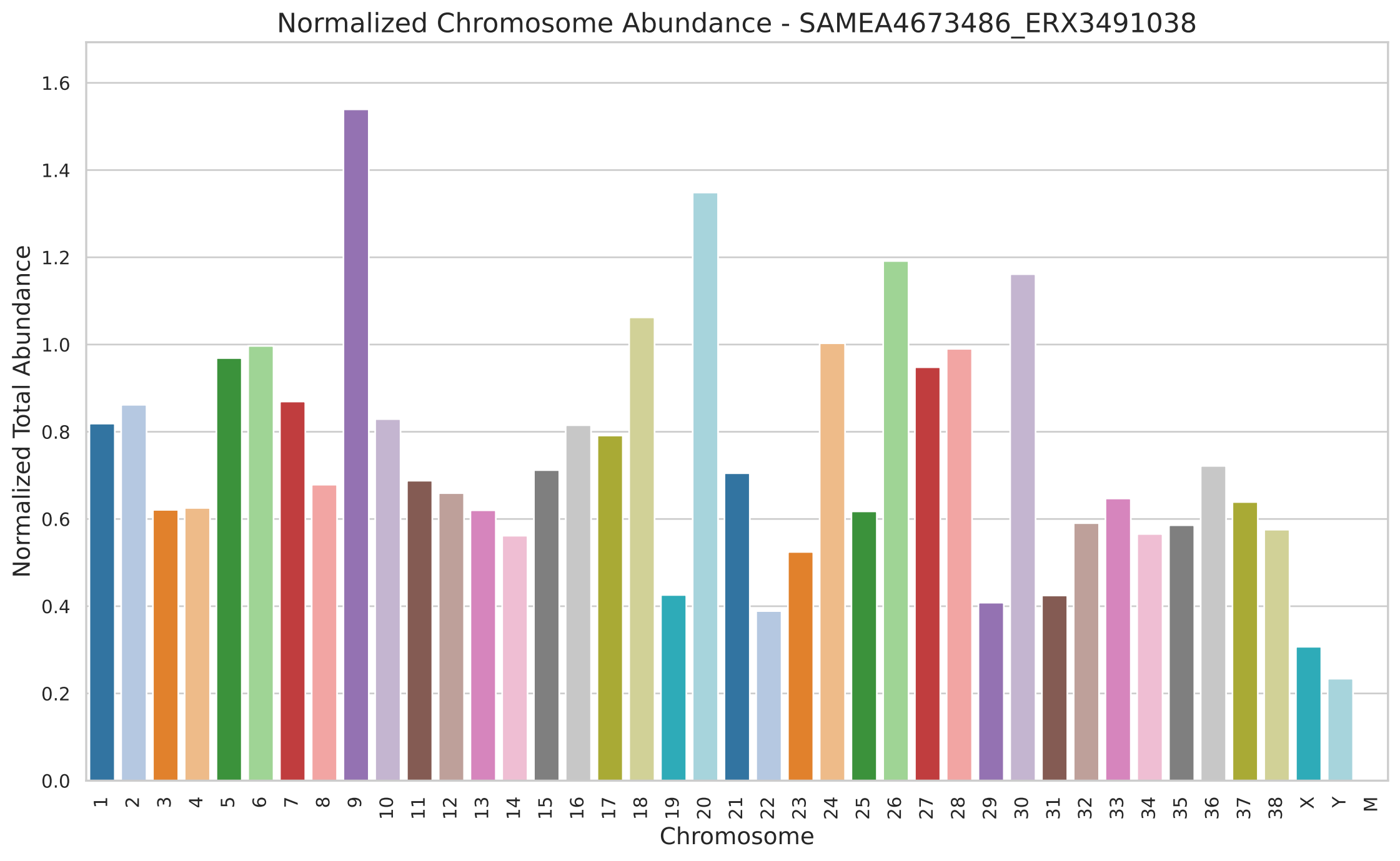

Normalized Chromosome Abundance - SAMN02595683_SRX450206
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

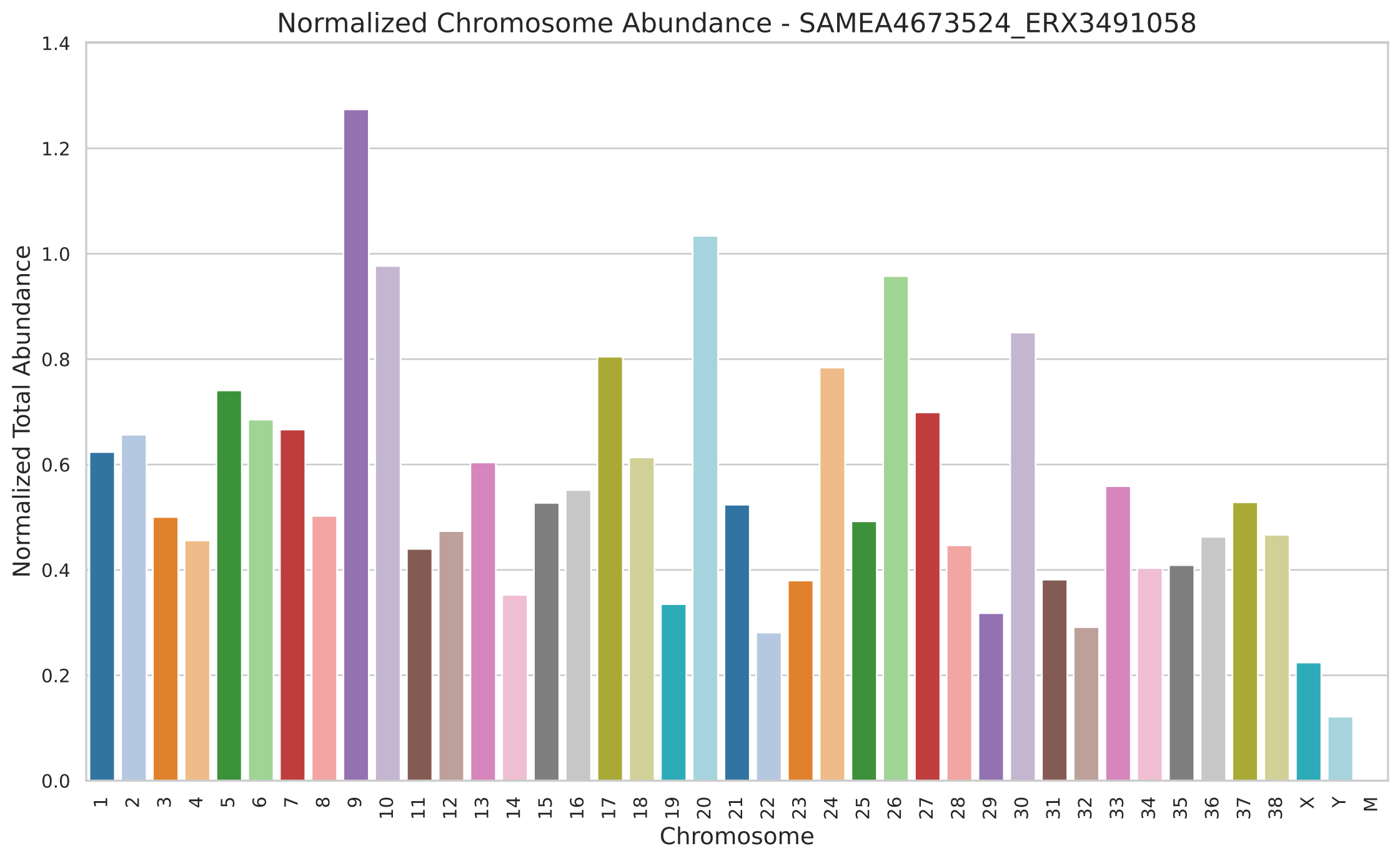

Normalized Chromosome Abundance - SAMEA4673488_ERX3491040
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

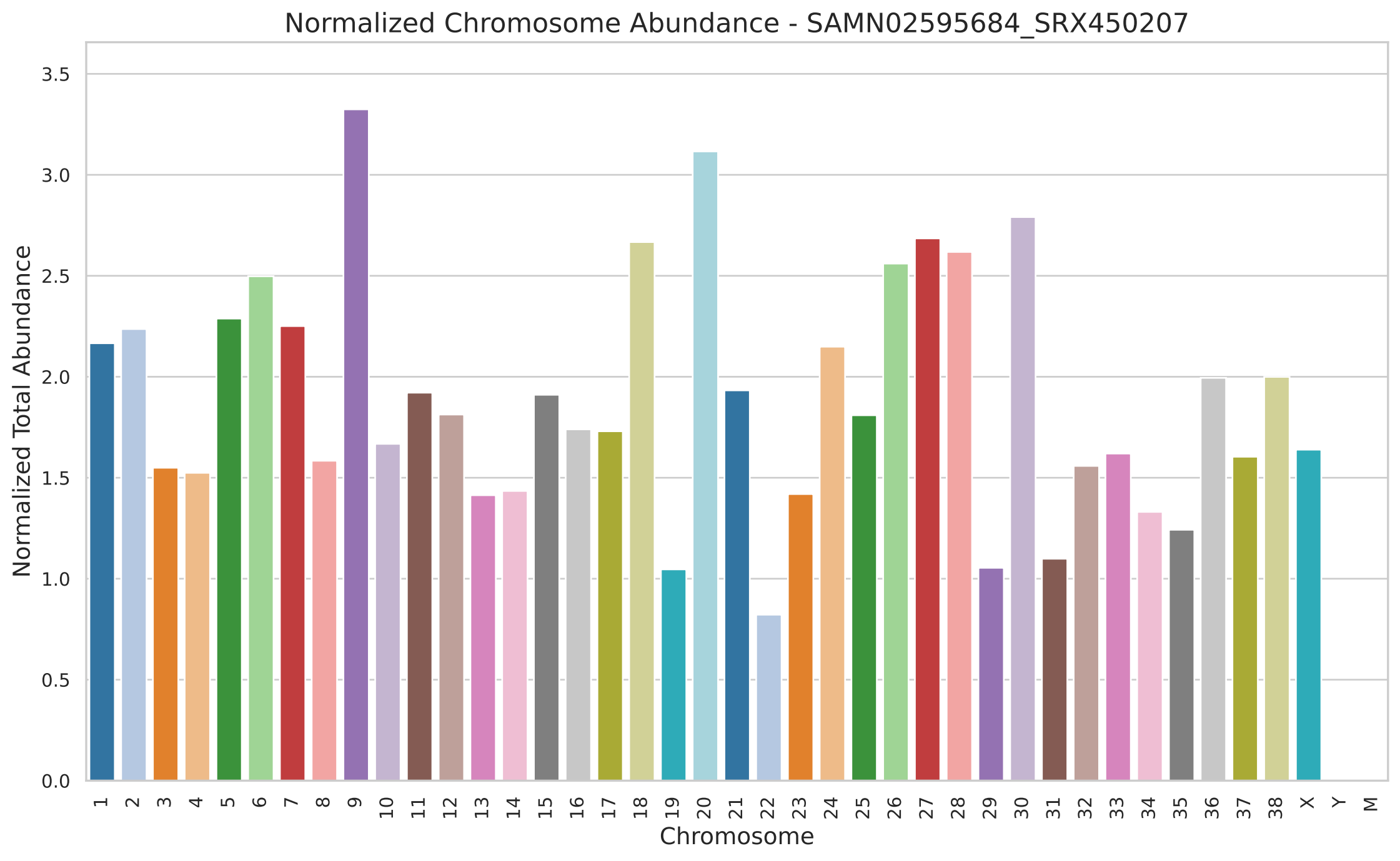

Normalized Chromosome Abundance - SAMEA4673523_ERX3491057
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

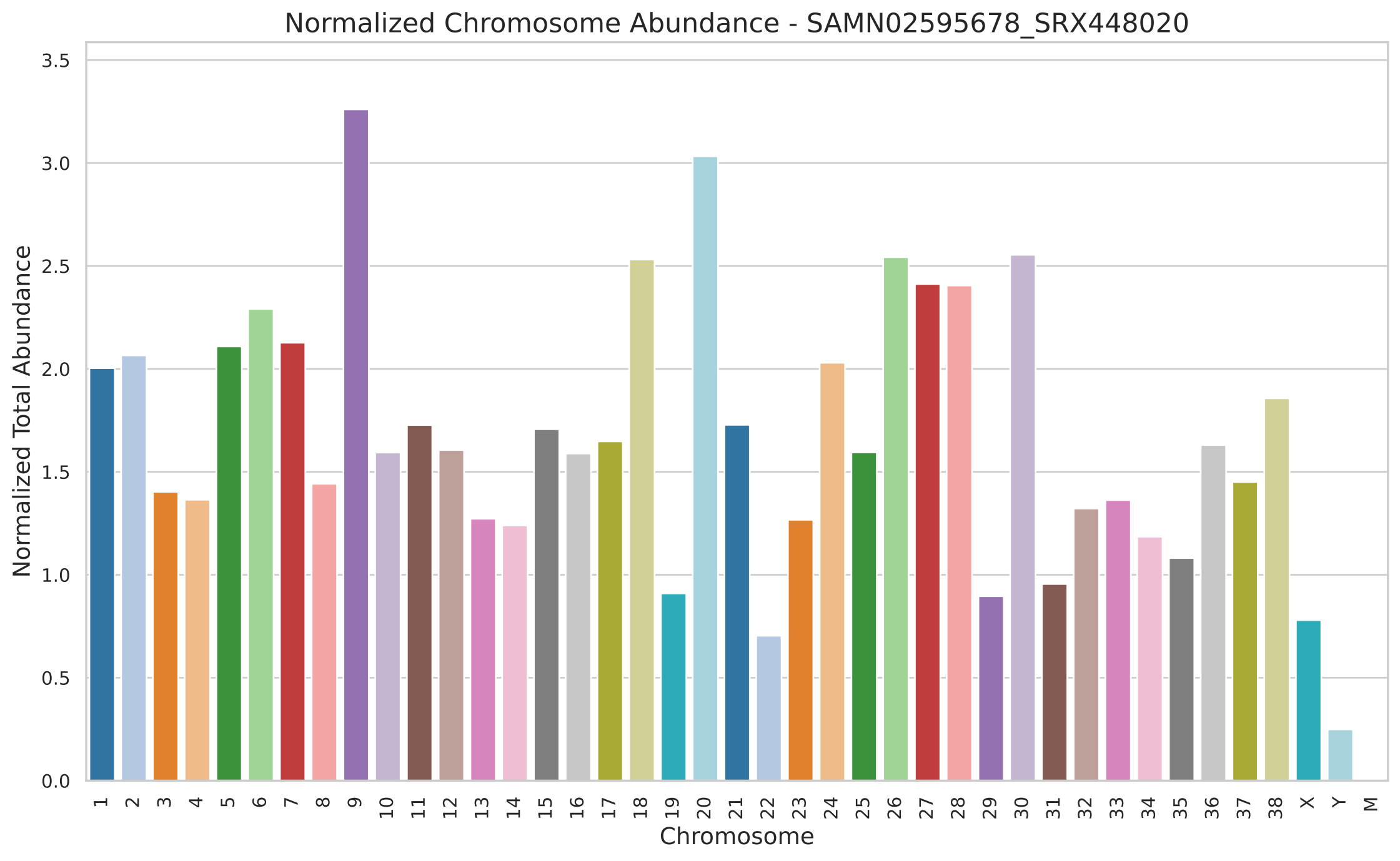

Normalized Chromosome Abundance - SAMN10380252_SRX4979851
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

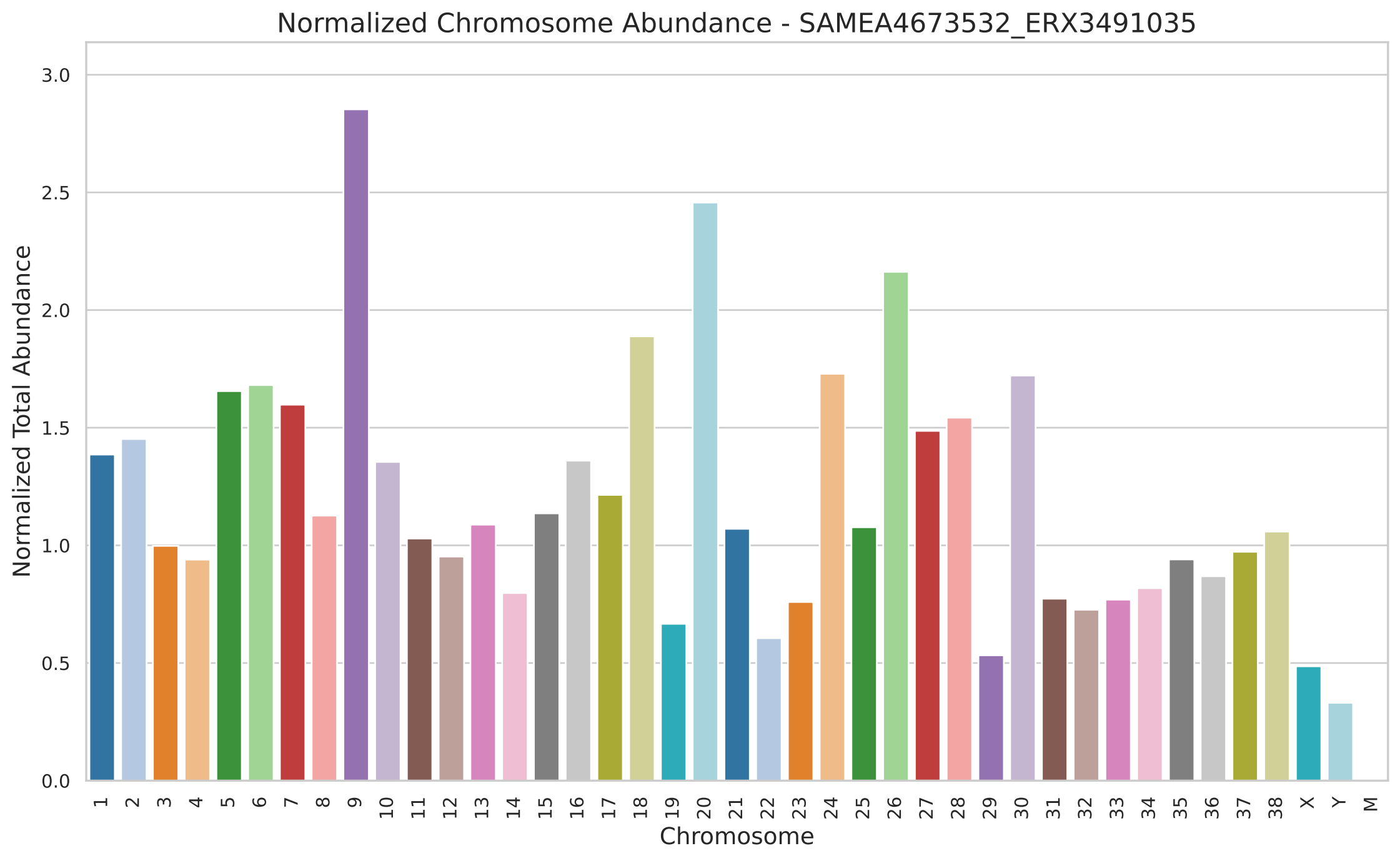

Normalized Chromosome Abundance - SAMEA2338879_ERX381103
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

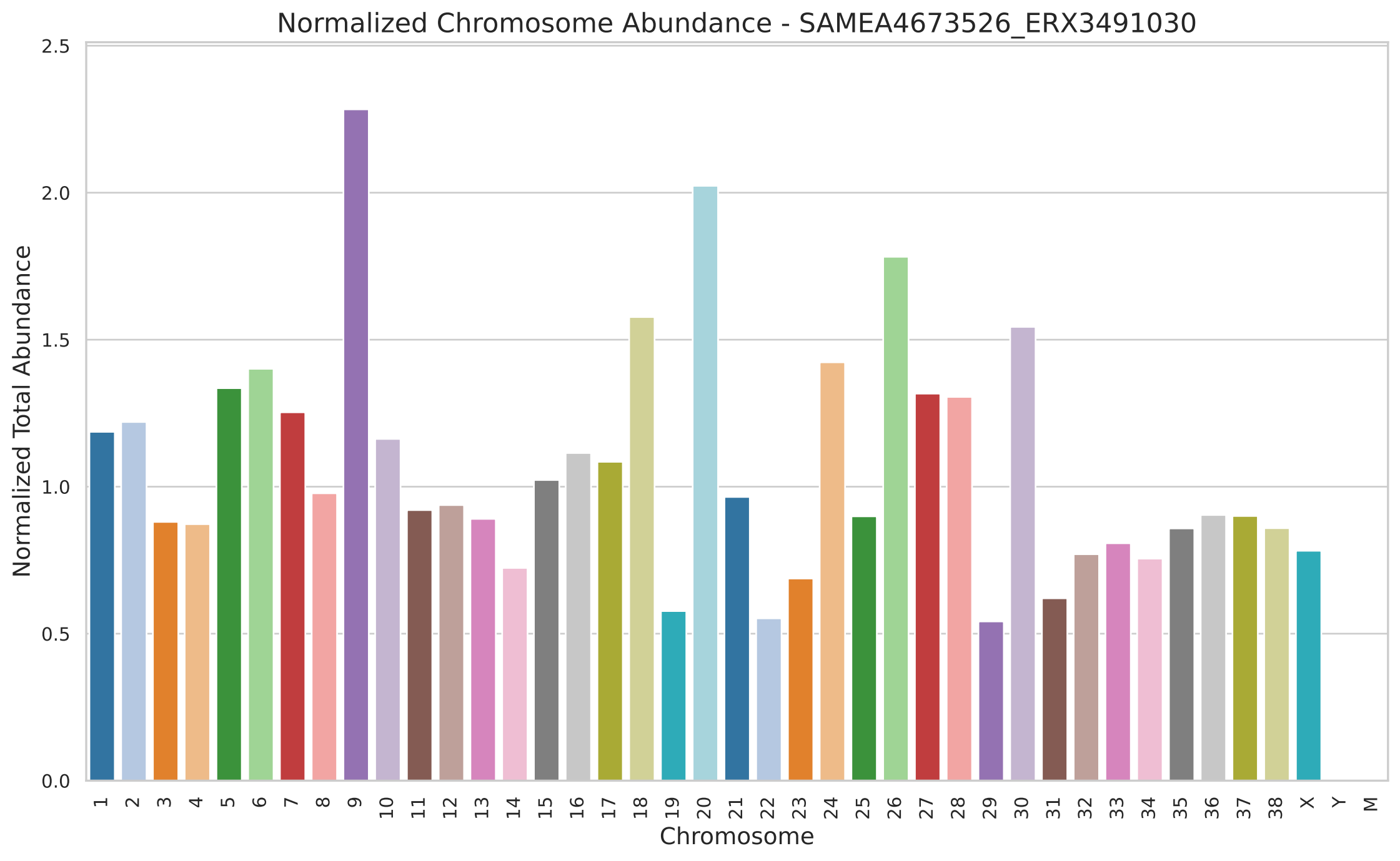

Normalized Chromosome Abundance - SAMEA4673486_ERX3491038
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

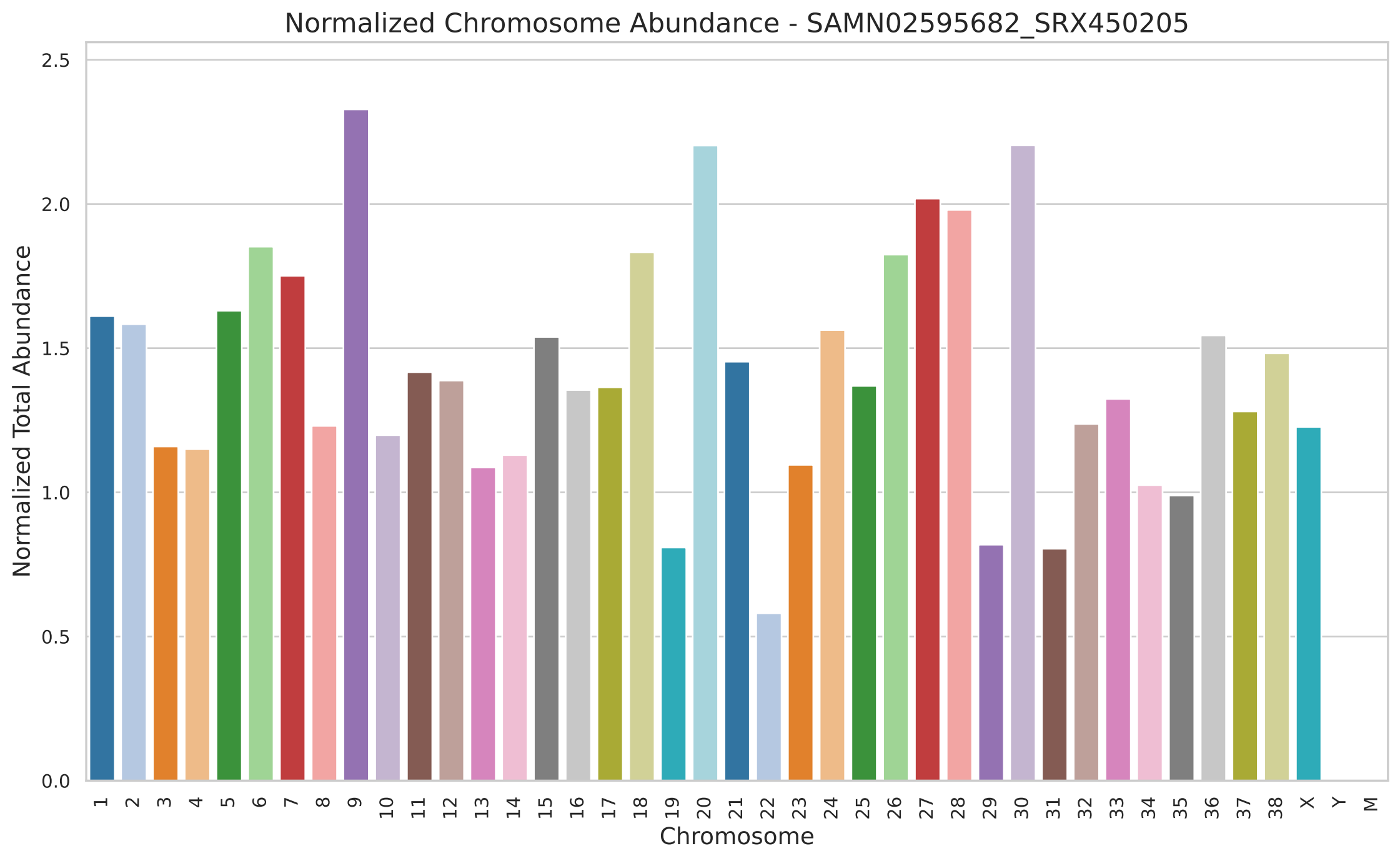

Normalized Chromosome Abundance - SAMEA4673524_ERX3491058
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

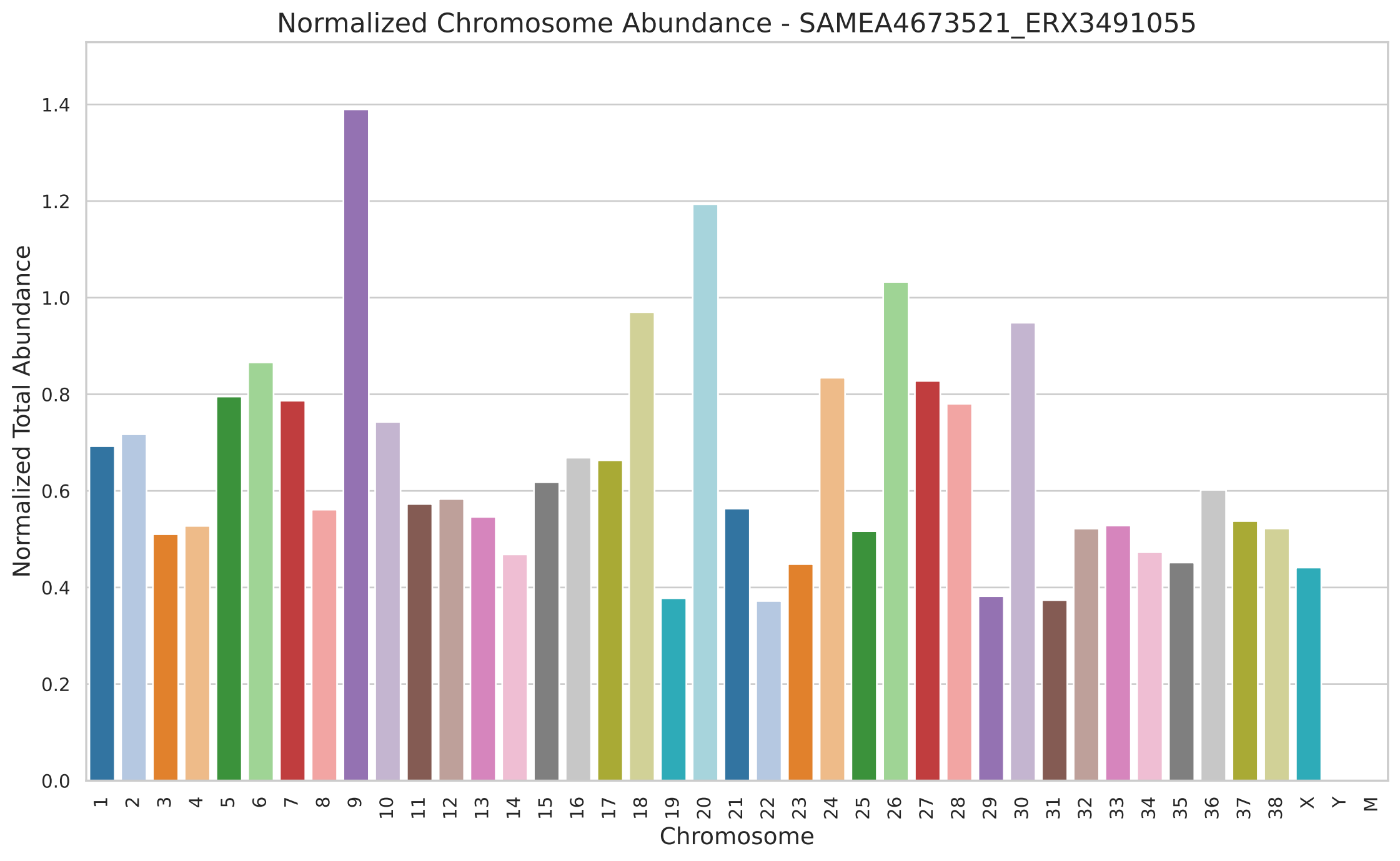

Normalized Chromosome Abundance - SAMN02595684_SRX450207
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

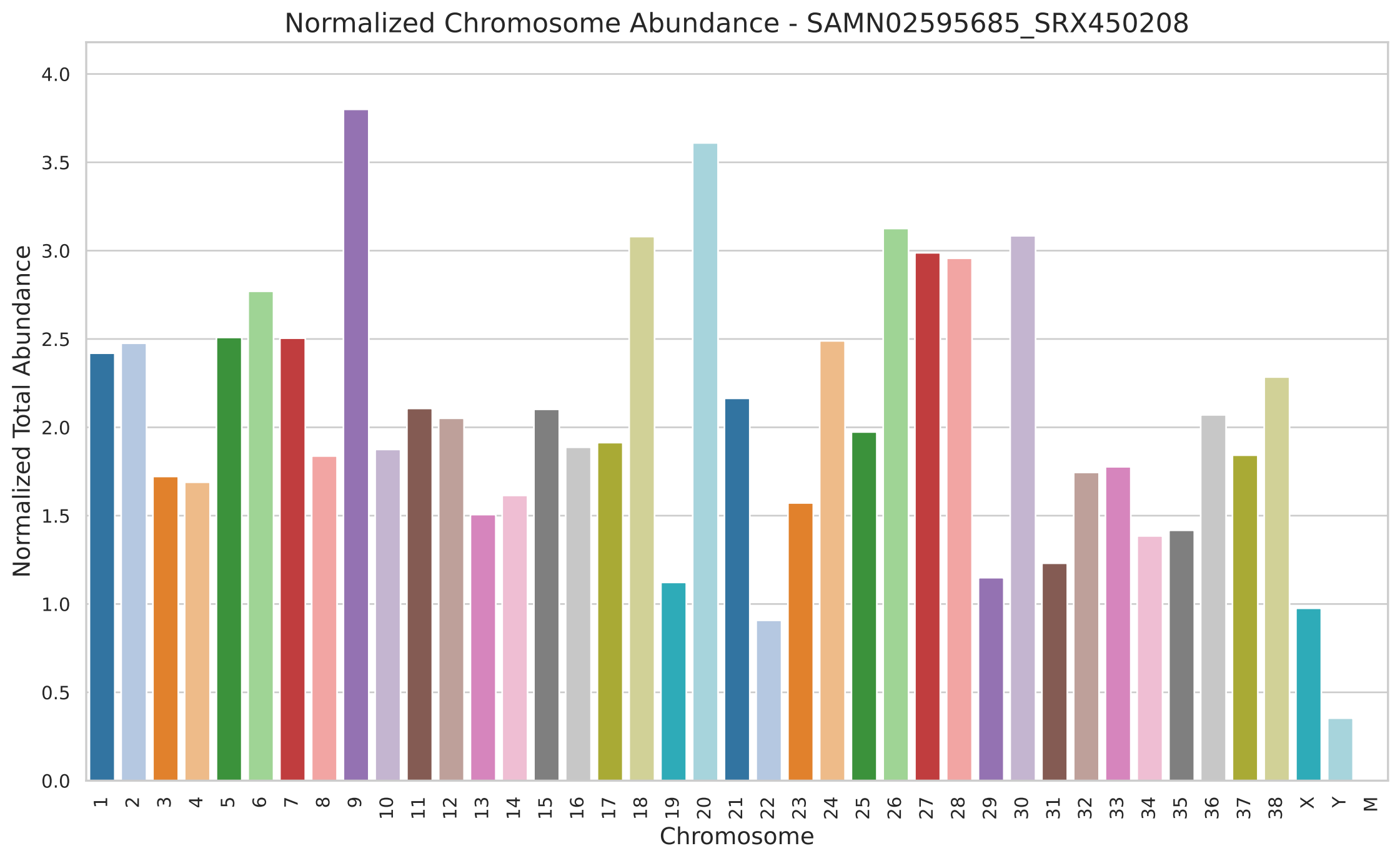

Normalized Chromosome Abundance - SAMN02595678_SRX448020
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

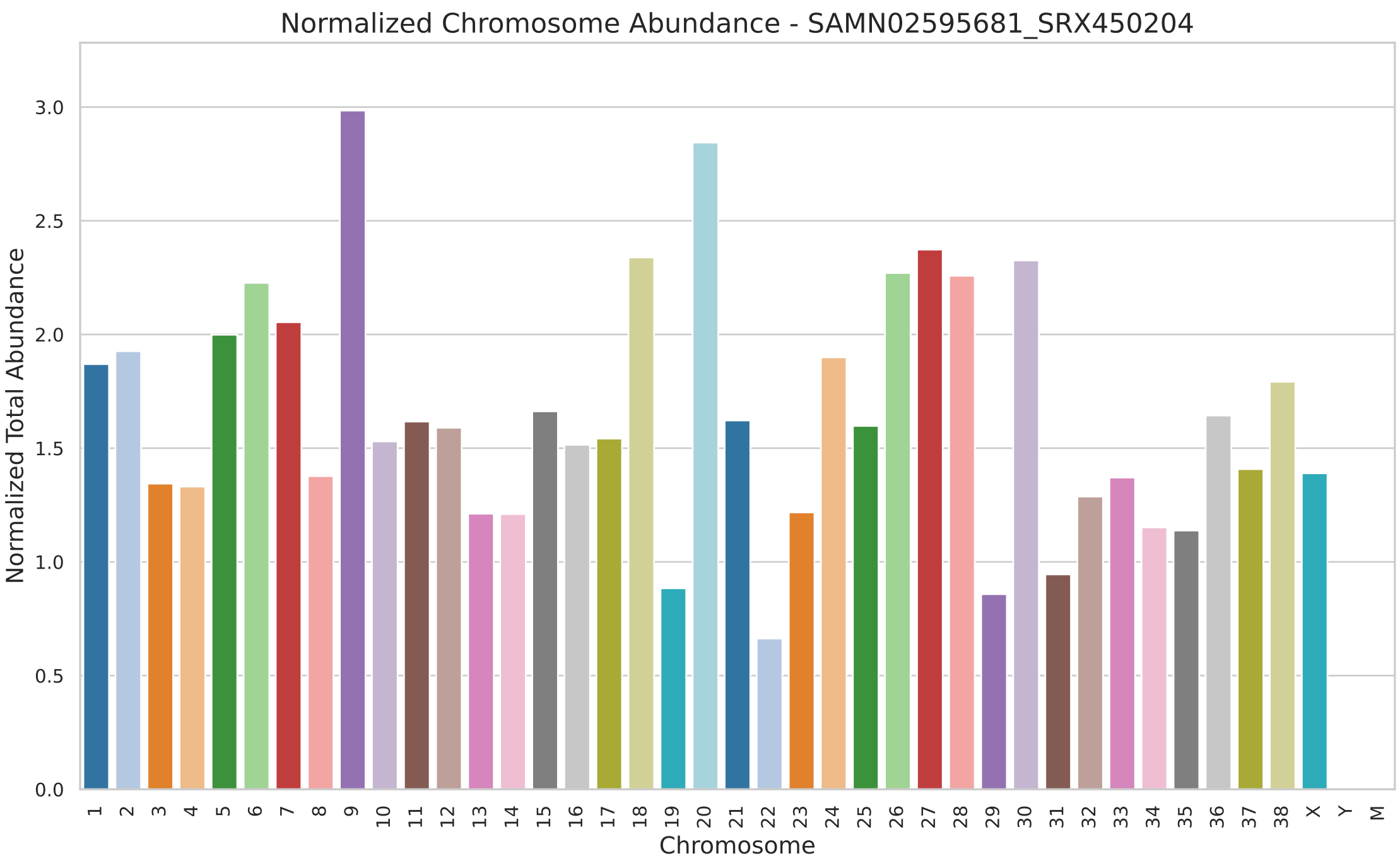

Normalized Chromosome Abundance - SAMEA4673532_ERX3491035
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

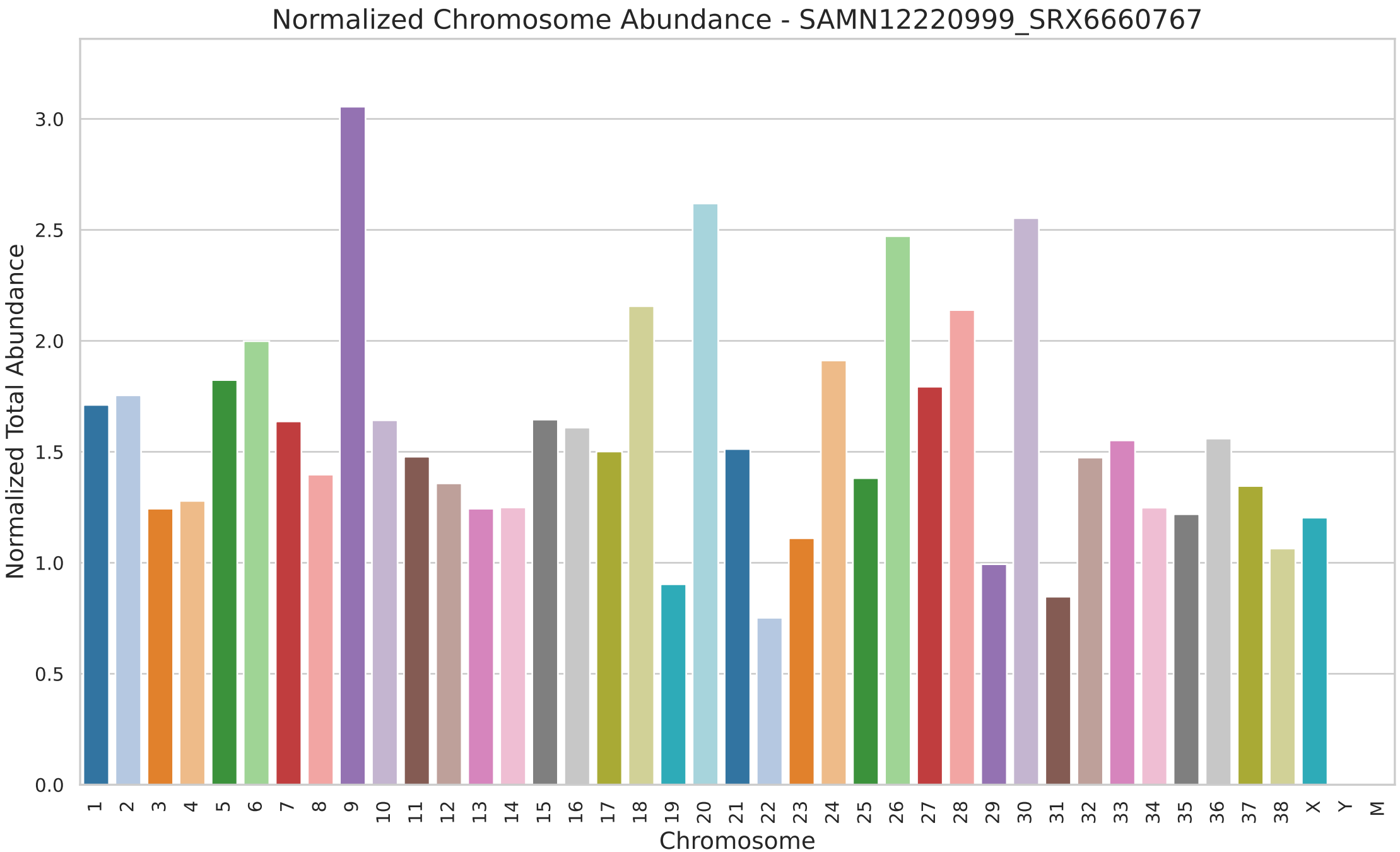

Normalized Chromosome Abundance - SAMEA4673526_ERX3491030
Normalized Total Abundance
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

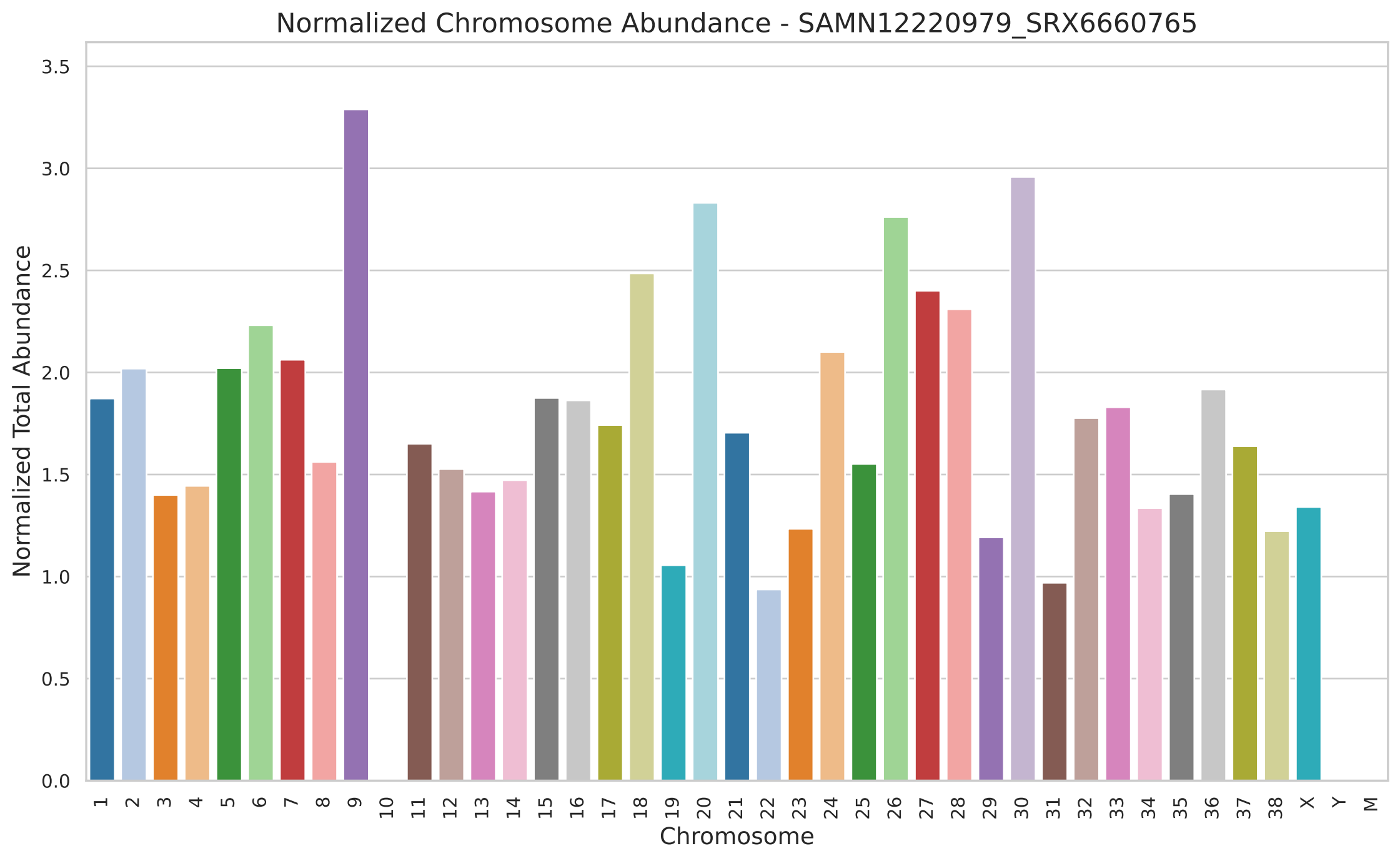

Normalized Chromosome Abundance - SAMN02595682_SRX450205
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

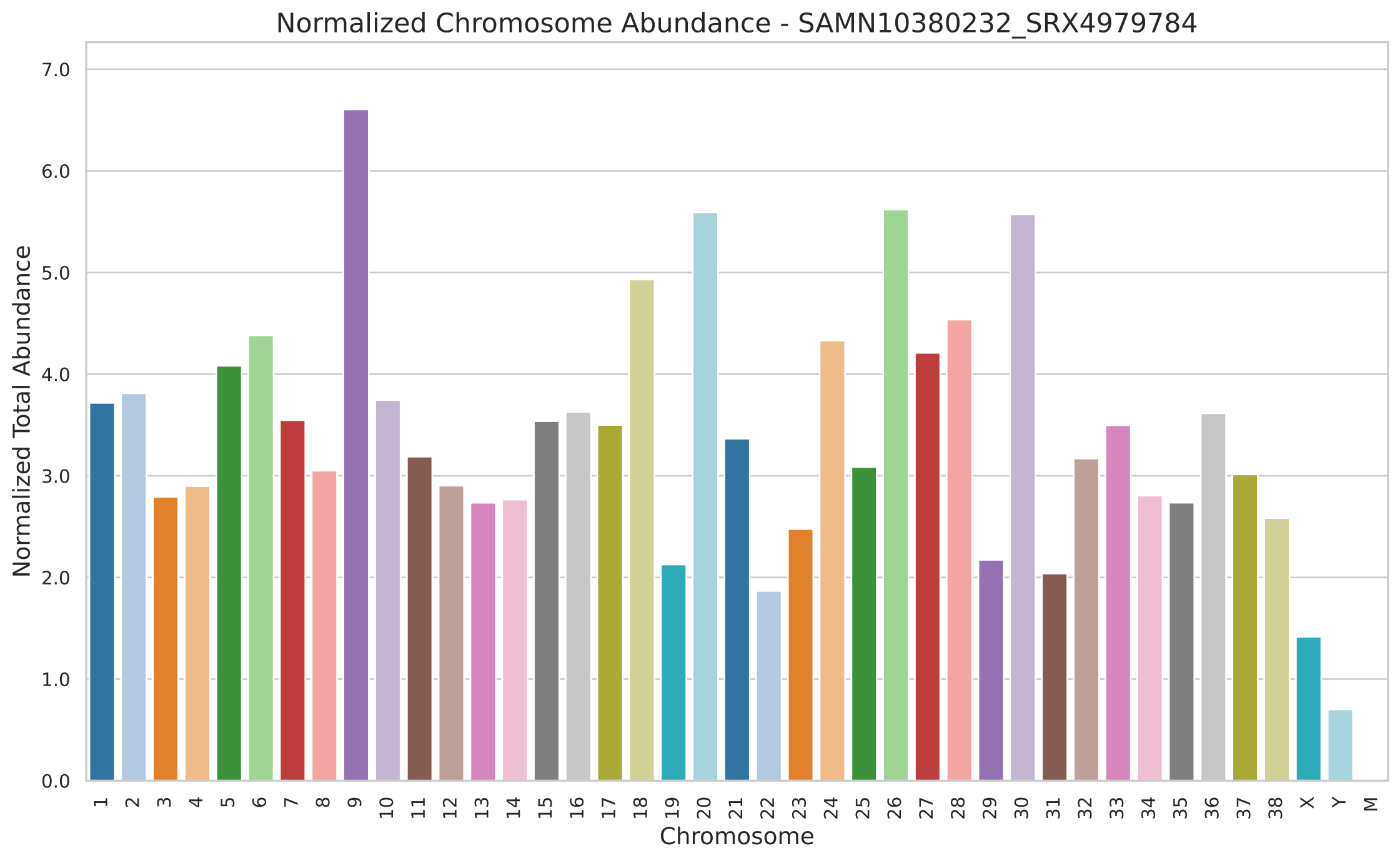

Normalized Chromosome Abundance - SAMEA4673521_ERX3491055
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

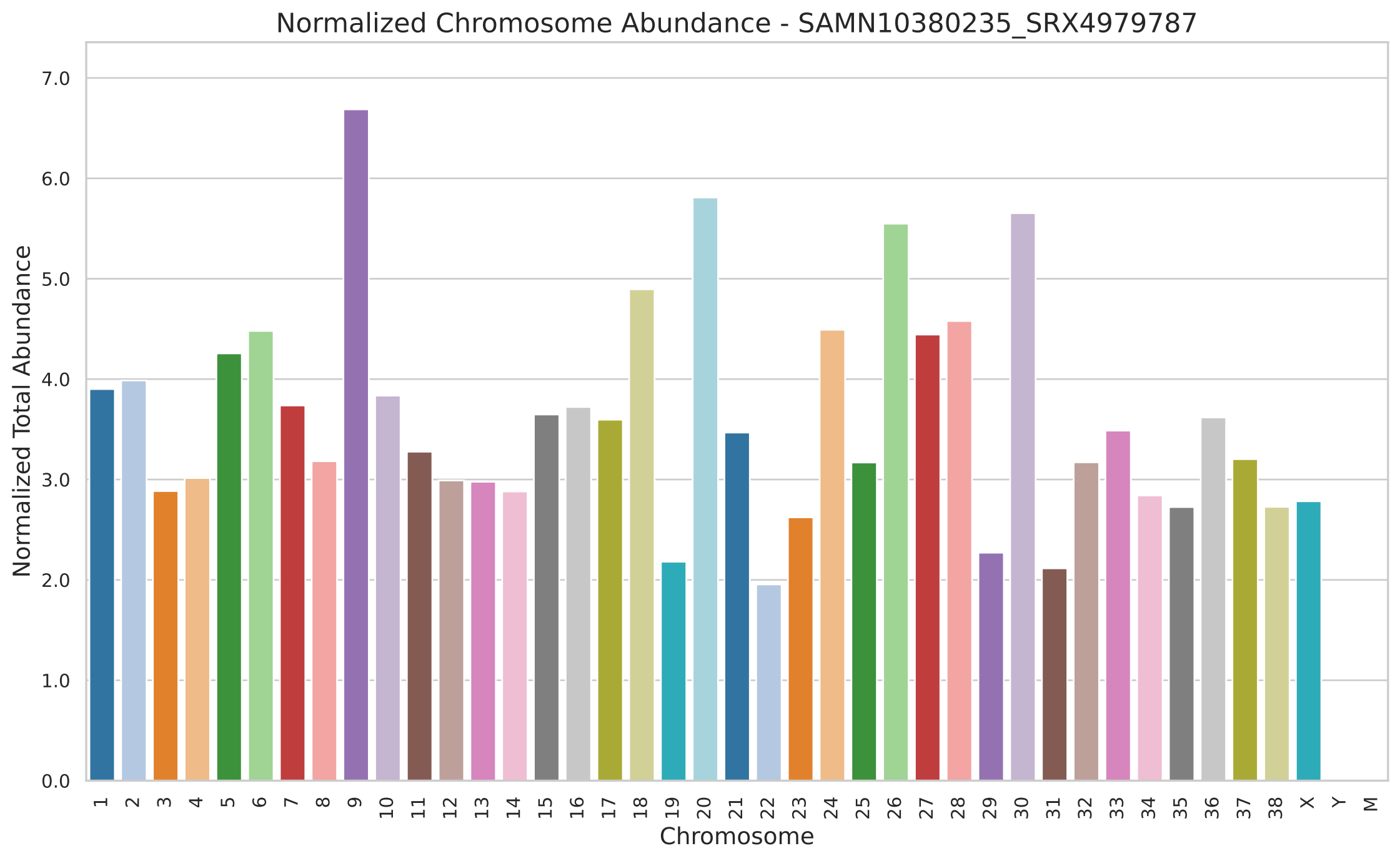

Normalized Chromosome Abundance - SAMN02595685_SRX450208
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

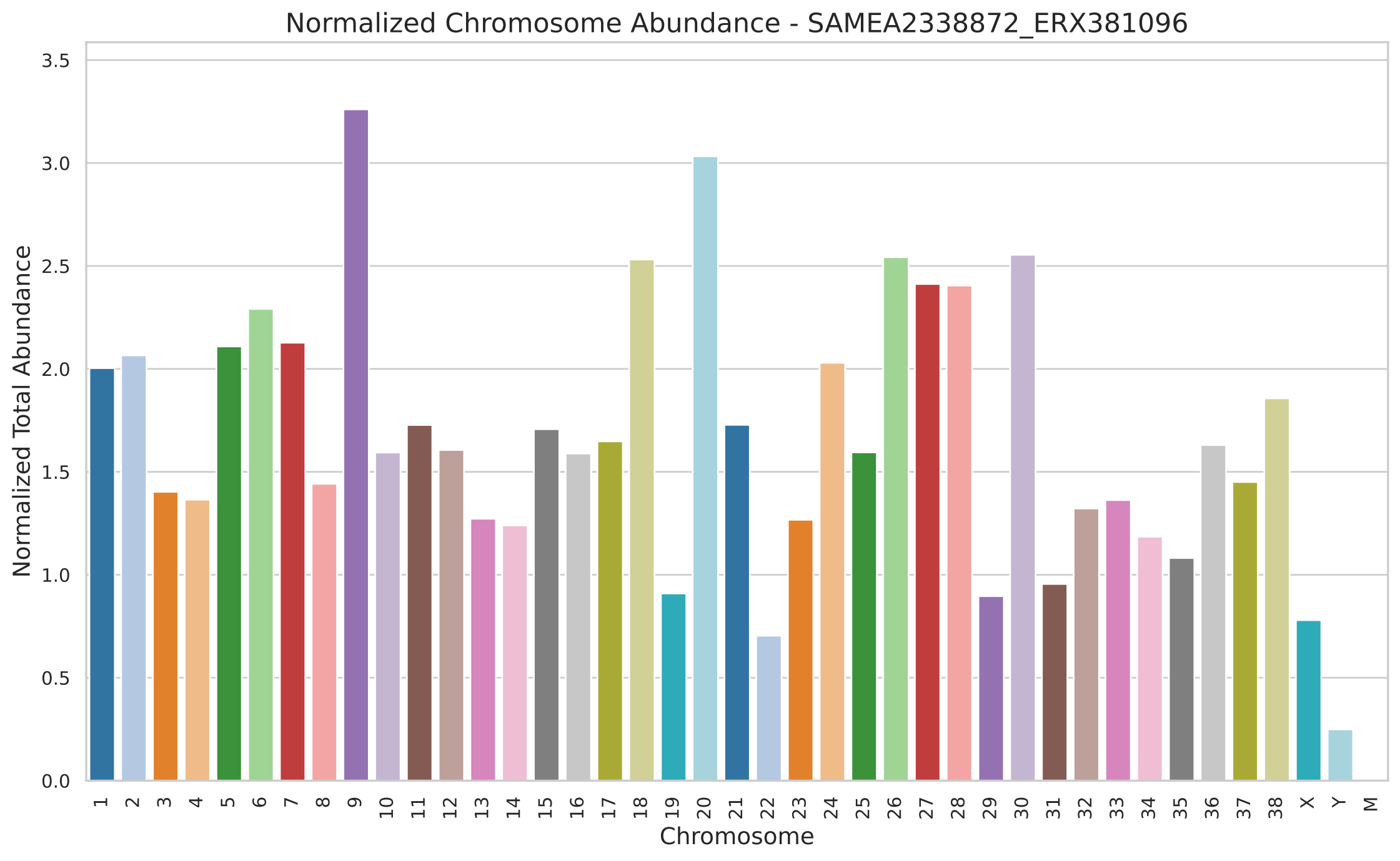

Normalized Chromosome Abundance - SAMN02595681_SRX450204
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

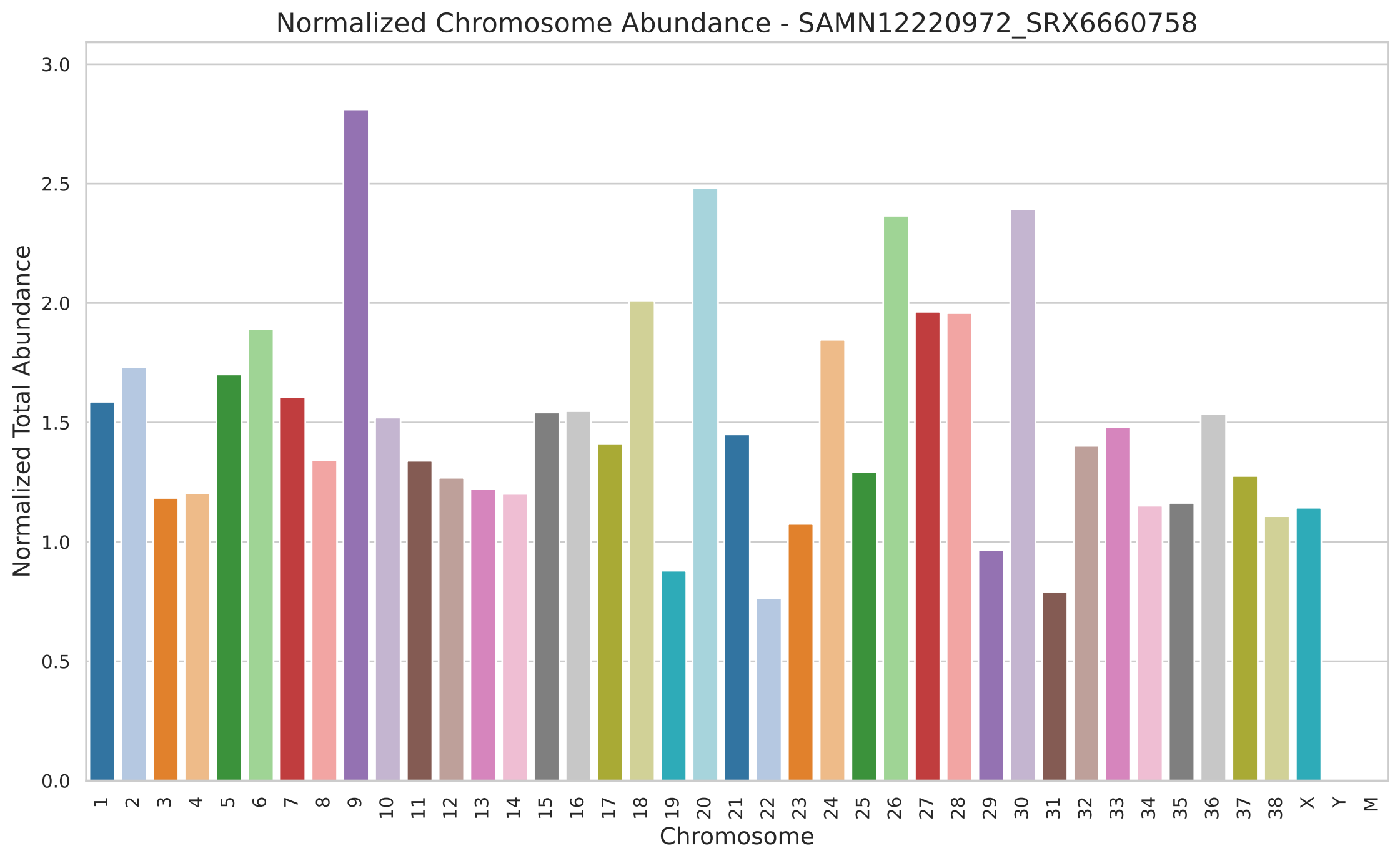

Normalized Chromosome Abundance - SAMN12220999_SRX6660767
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

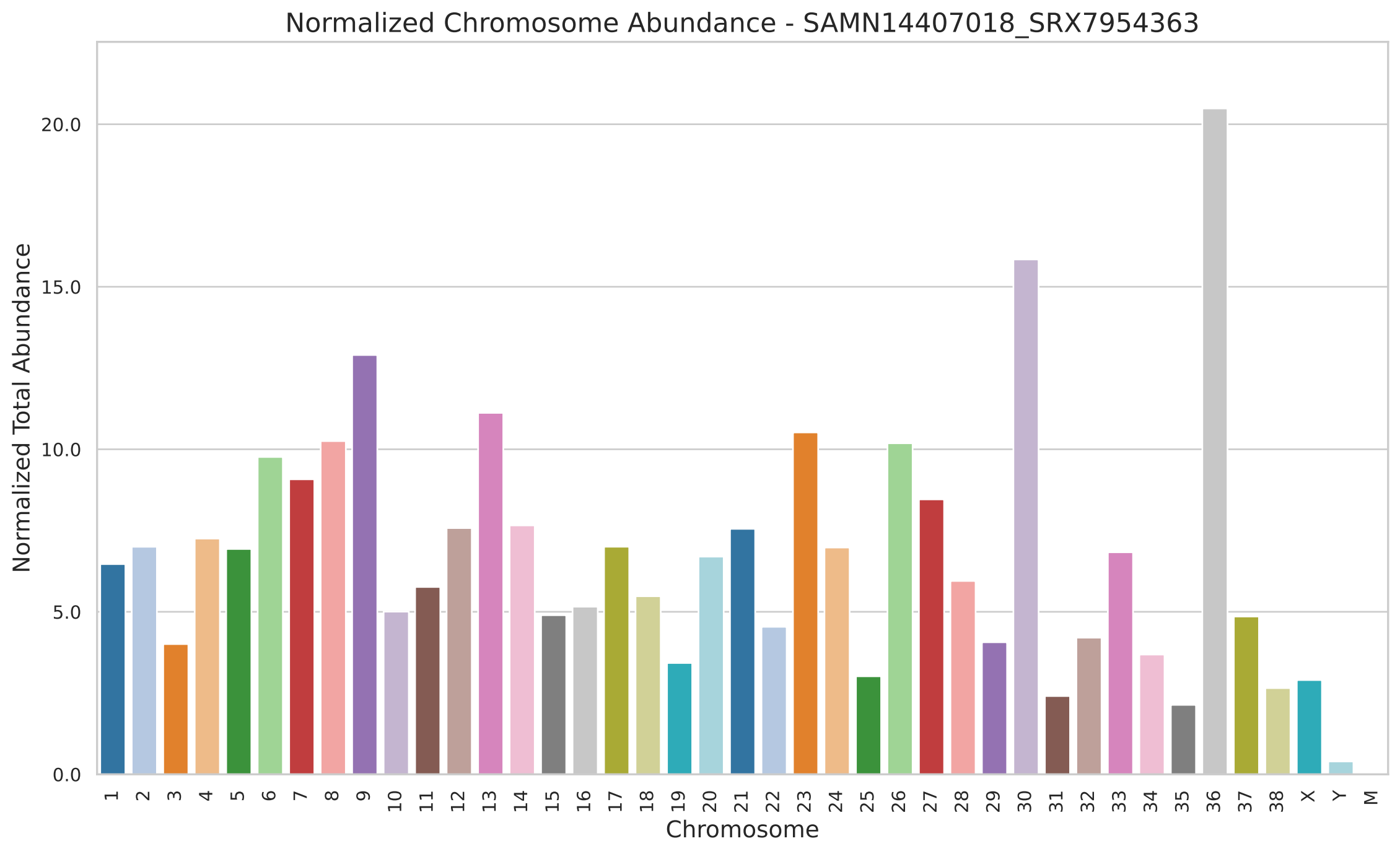

Normalized Chromosome Abundance - SAMN12220979_SRX6660765
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

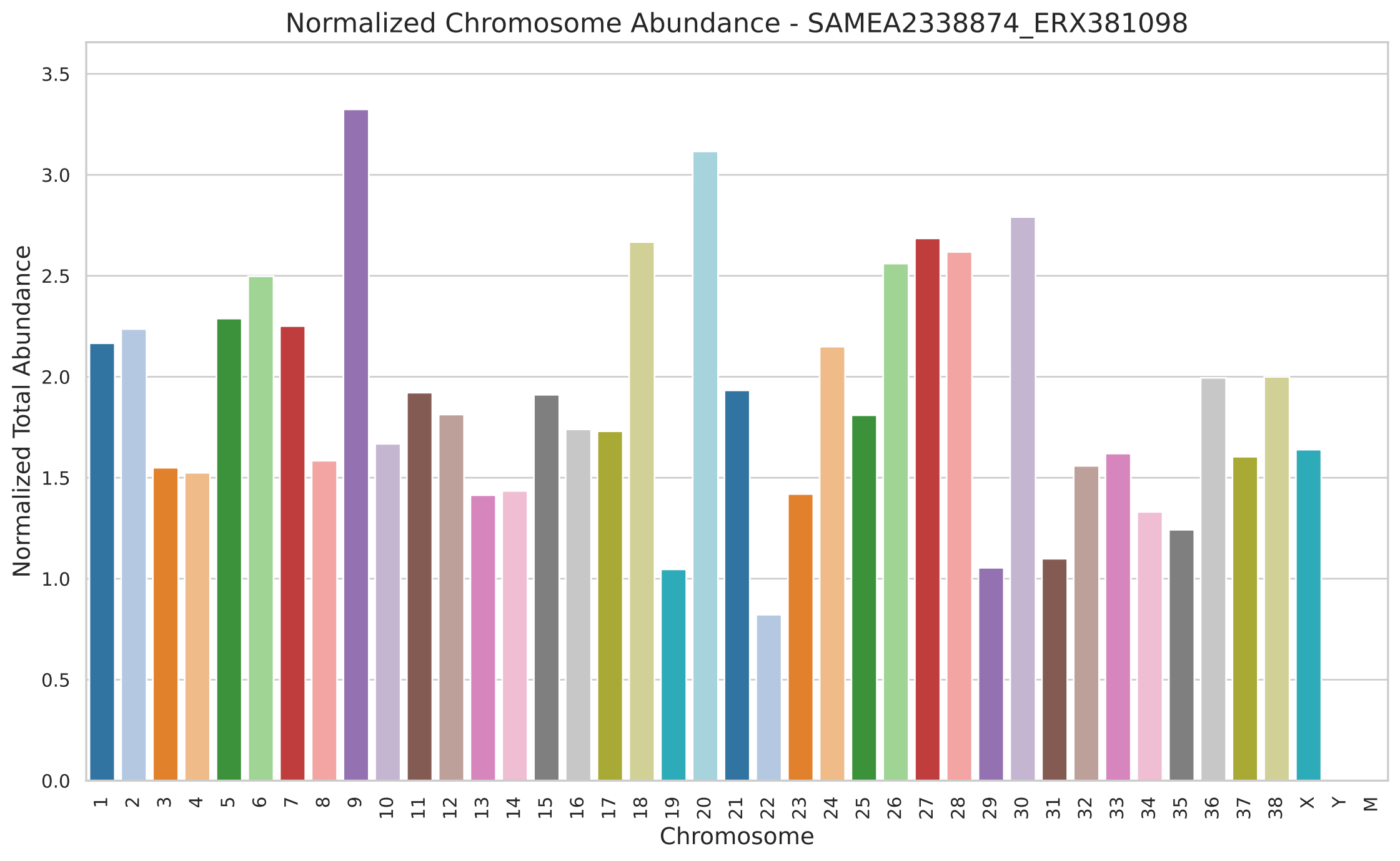

Normalized Chromosome Abundance - SAMN10380232_SRX4979784
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

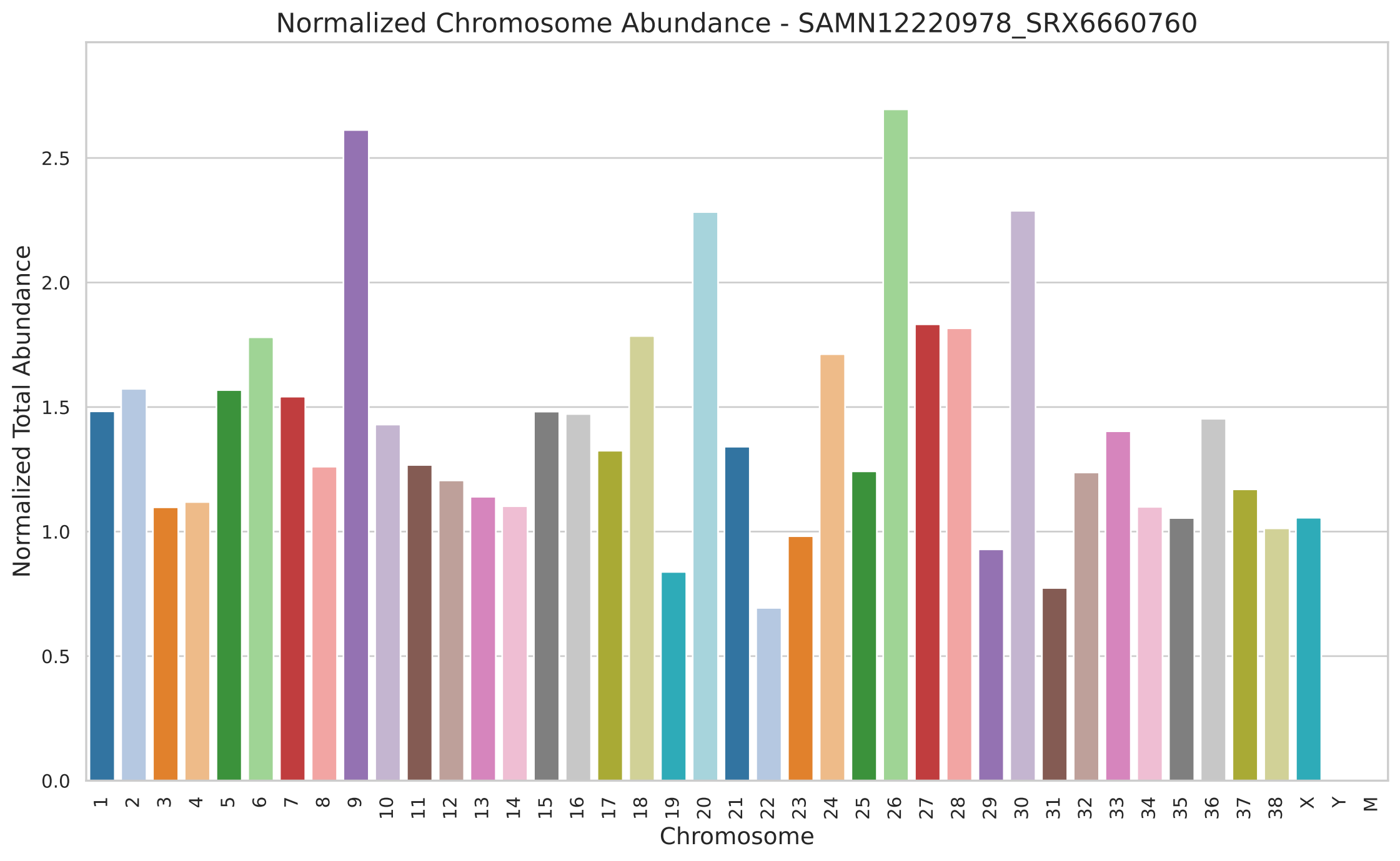

Normalized Chromosome Abundance - SAMN10380235_SRX4979787
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

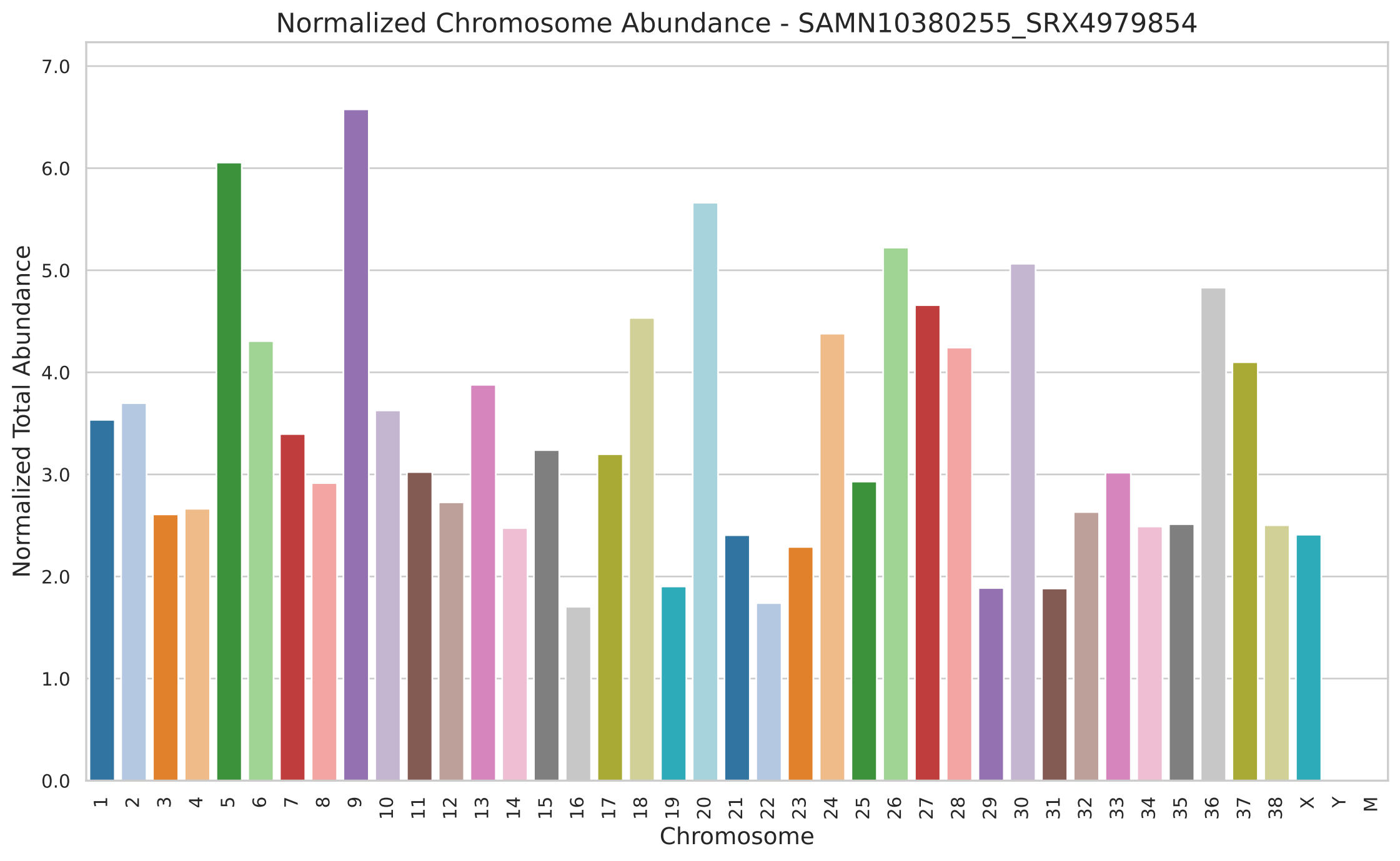

Normalized Chromosome Abundance - SAMEA2338872_ERX381096
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

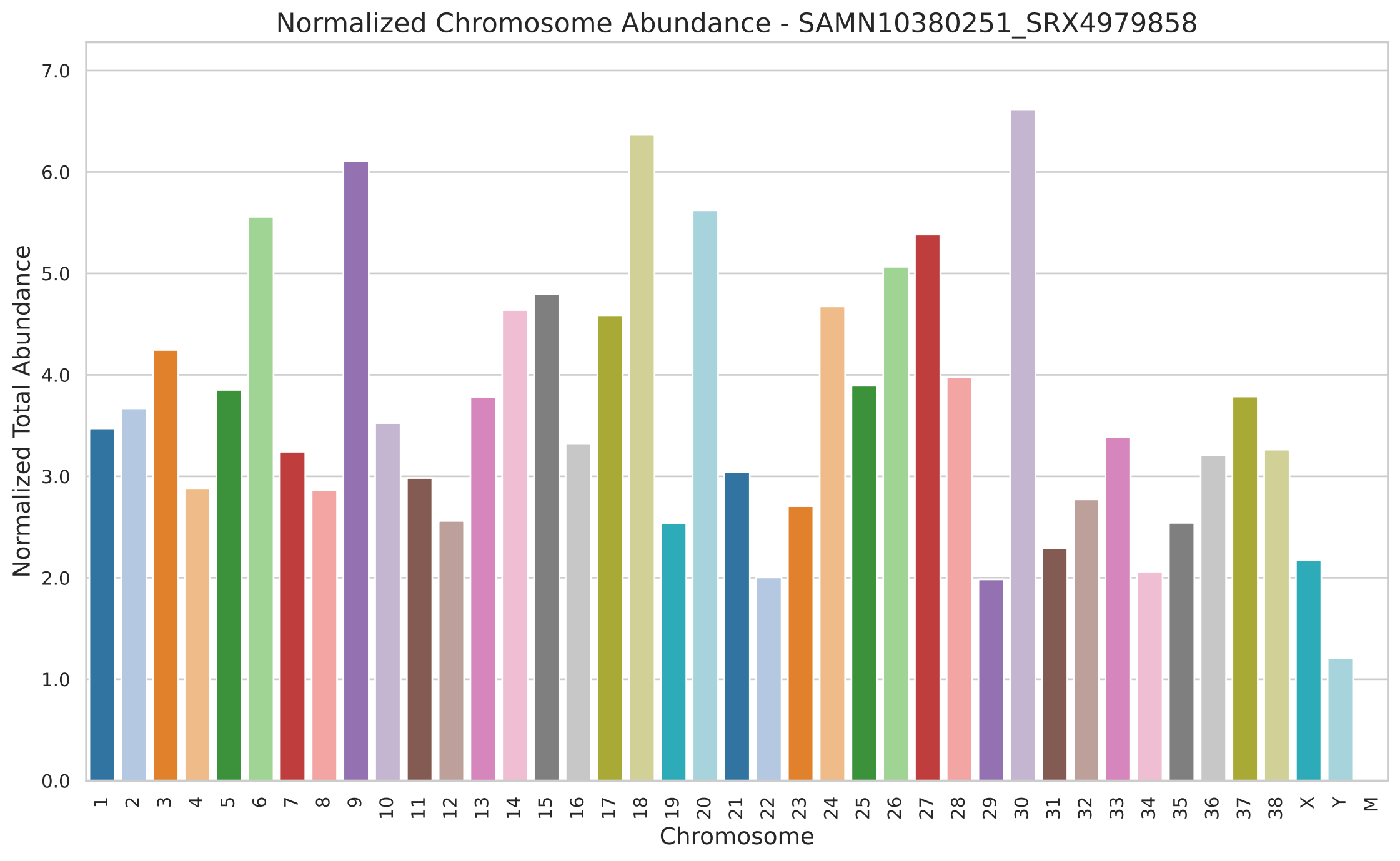

Normalized Chromosome Abundance - SAMN12220972_SRX6660758
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

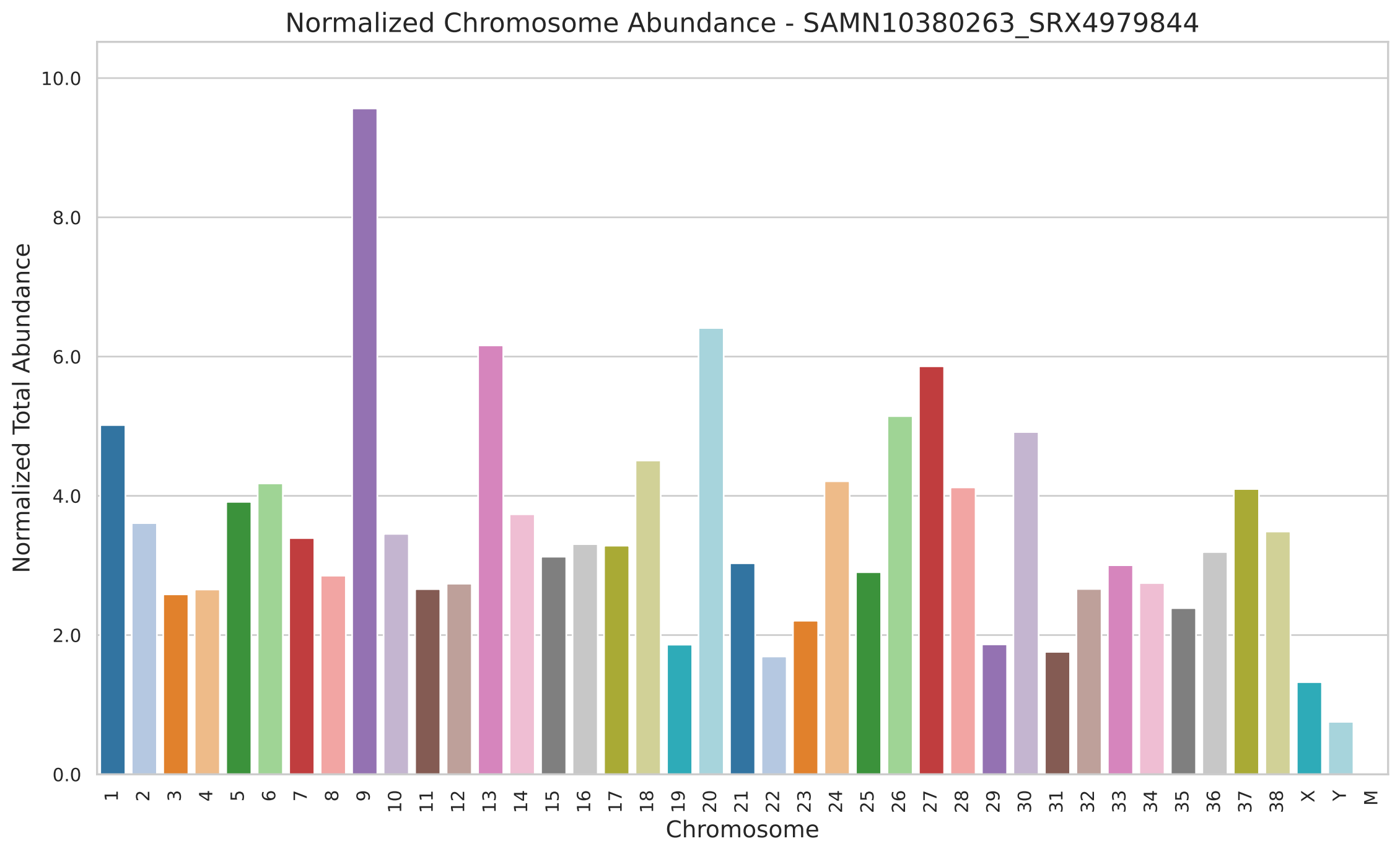

Normalized Chromosome Abundance - SAMN14407018_SRX7954363
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

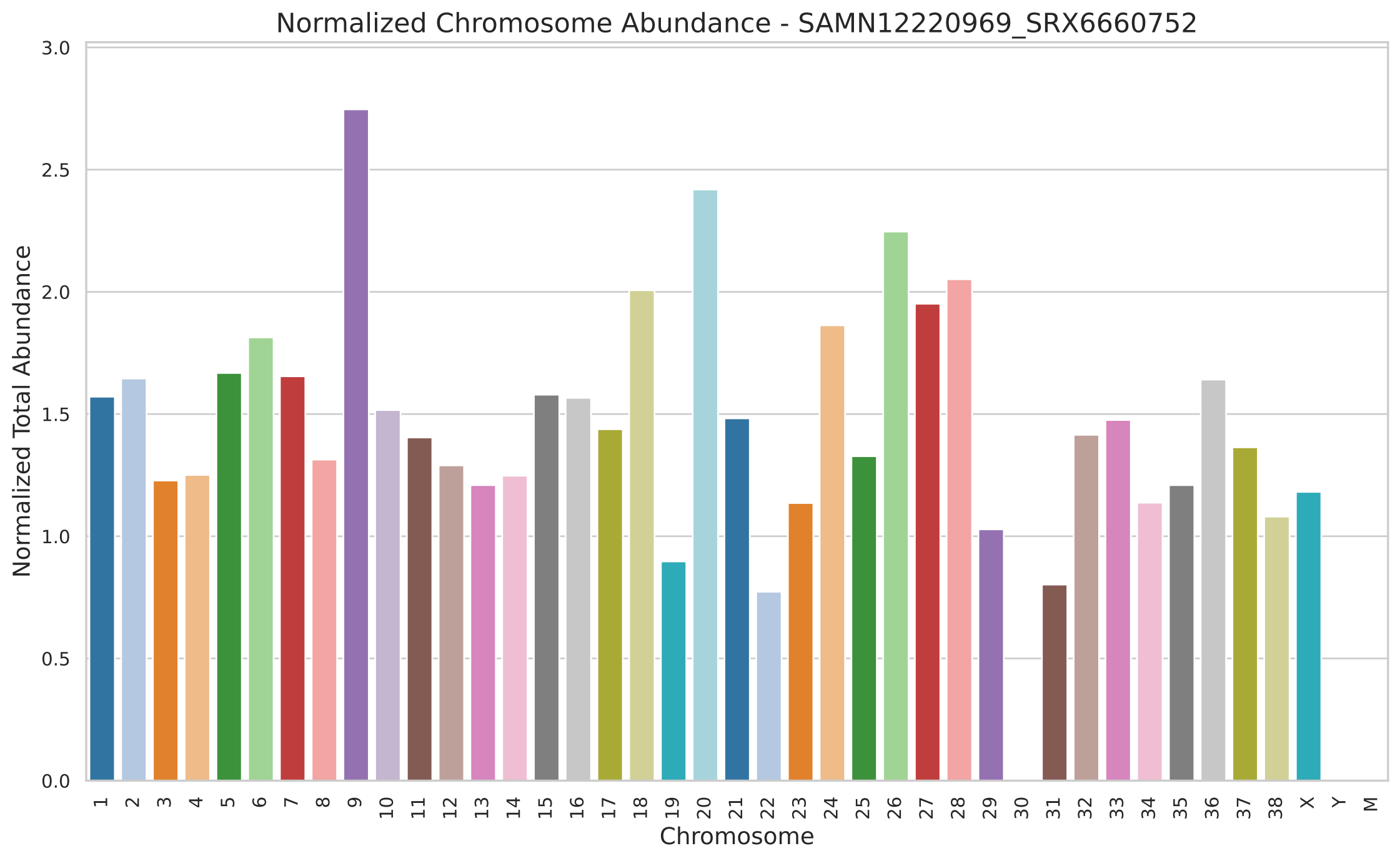

Normalized Chromosome Abundance - SAMEA2338874_ERX381098
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

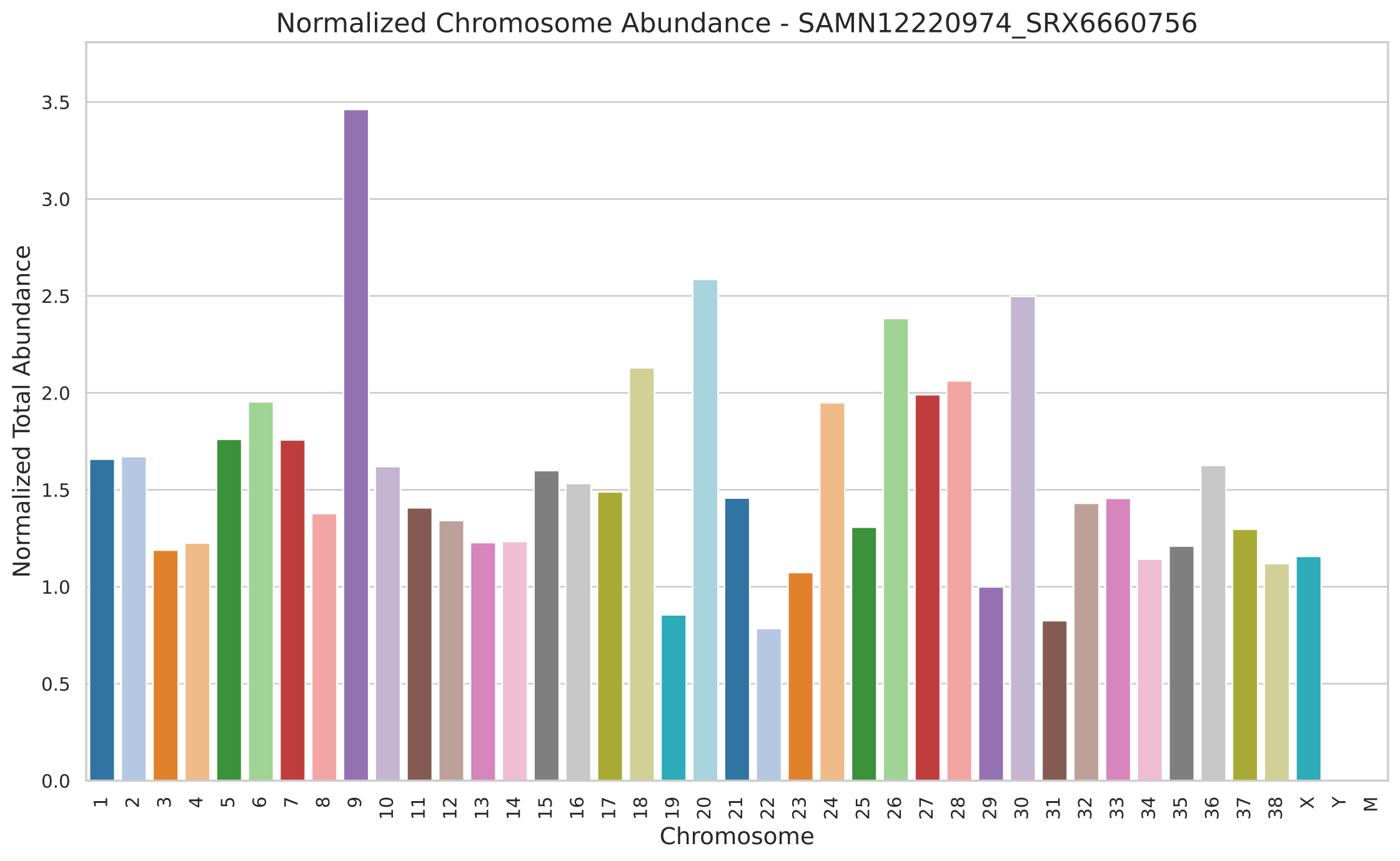

Normalized Chromosome Abundance - SAMN12220978_SRX6660760
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

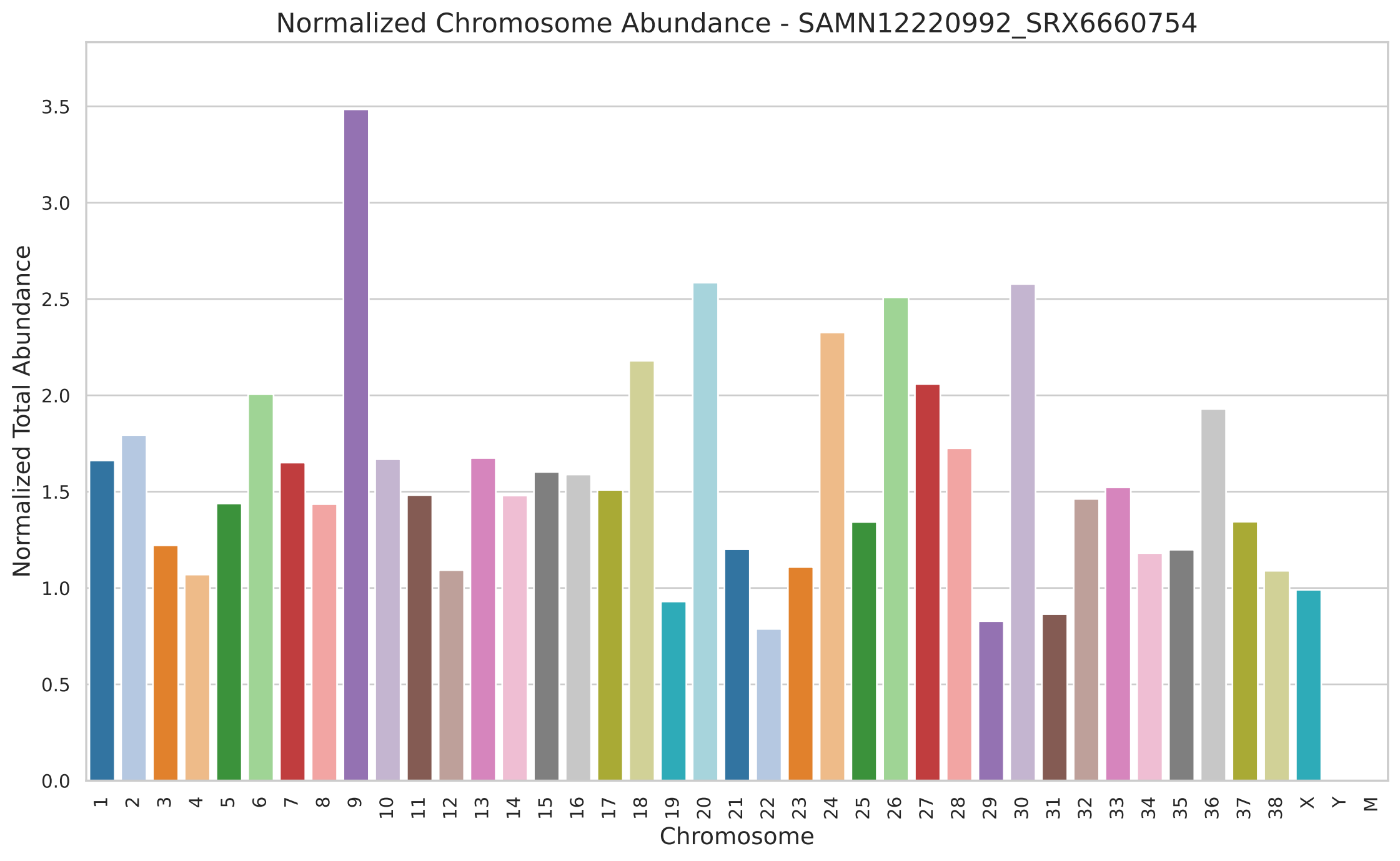

Normalized Chromosome Abundance - SAMN10380255_SRX4979854
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

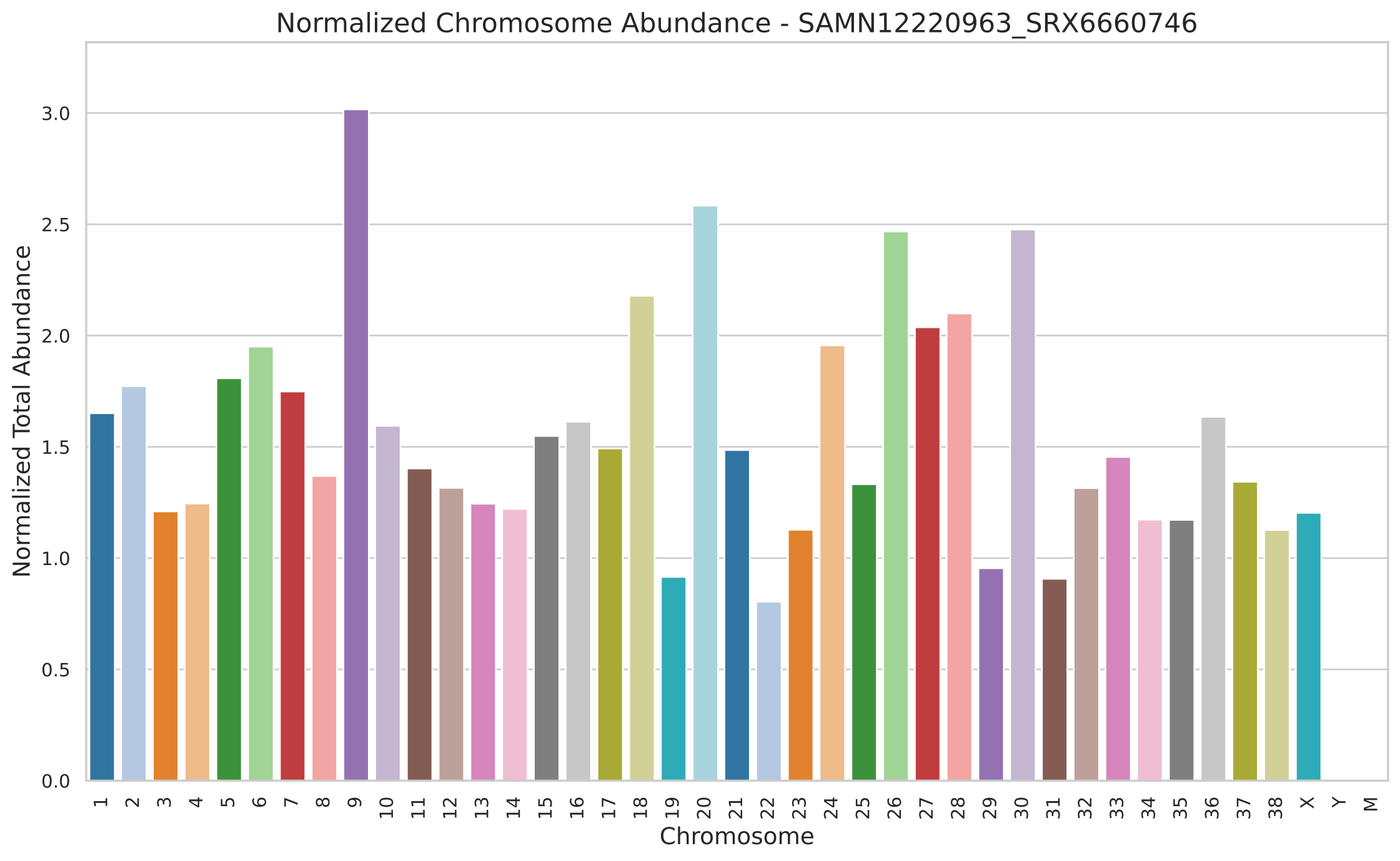

Normalized Chromosome Abundance - SAMN10380251_SRX4979858
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

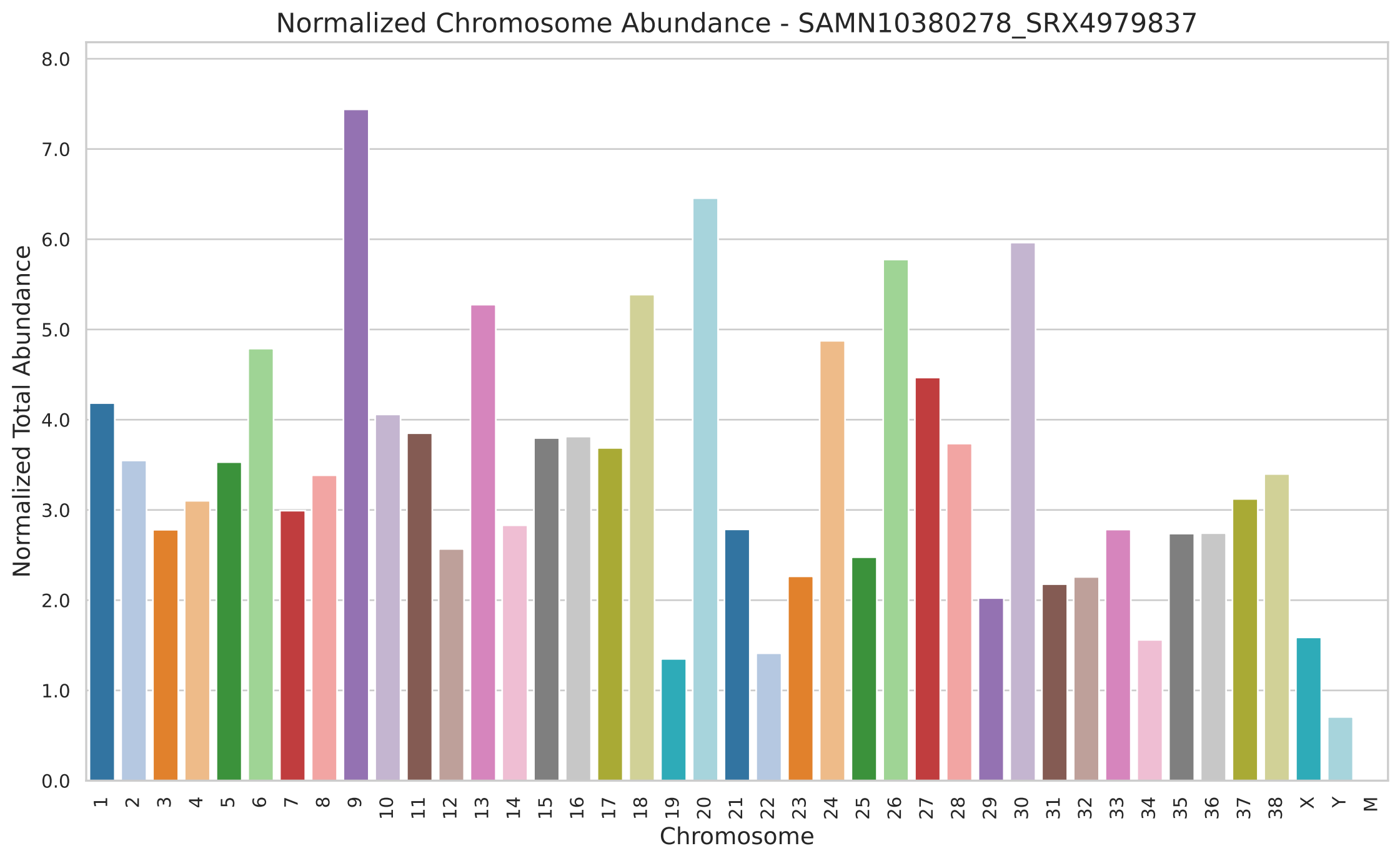

Normalized Chromosome Abundance - SAMN10380263_SRX4979844
Normalized Total Abundance
10.0
8.0
6.0
4.0
2.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

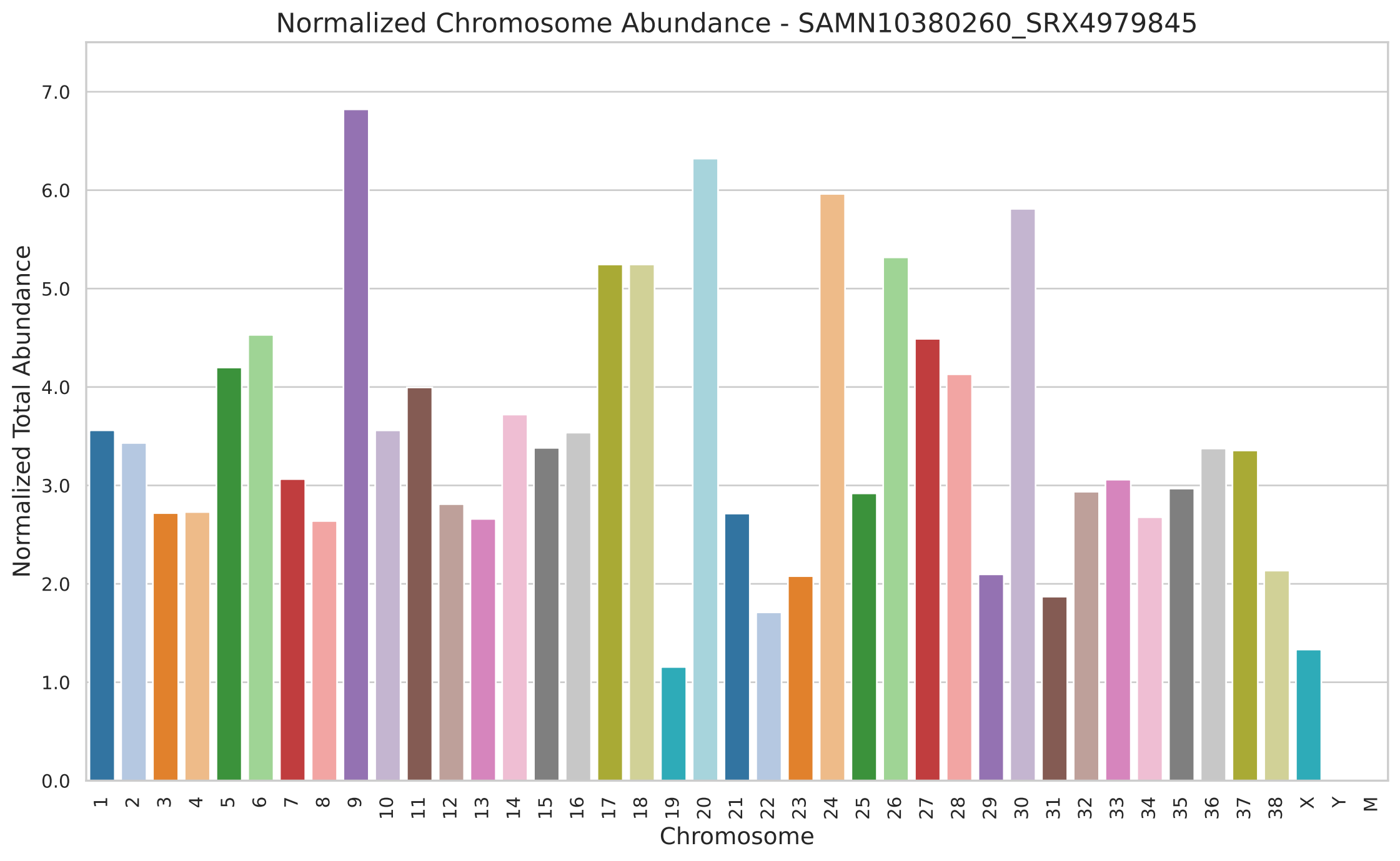

Normalized Chromosome Abundance - SAMN12220969_SRX6660752
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

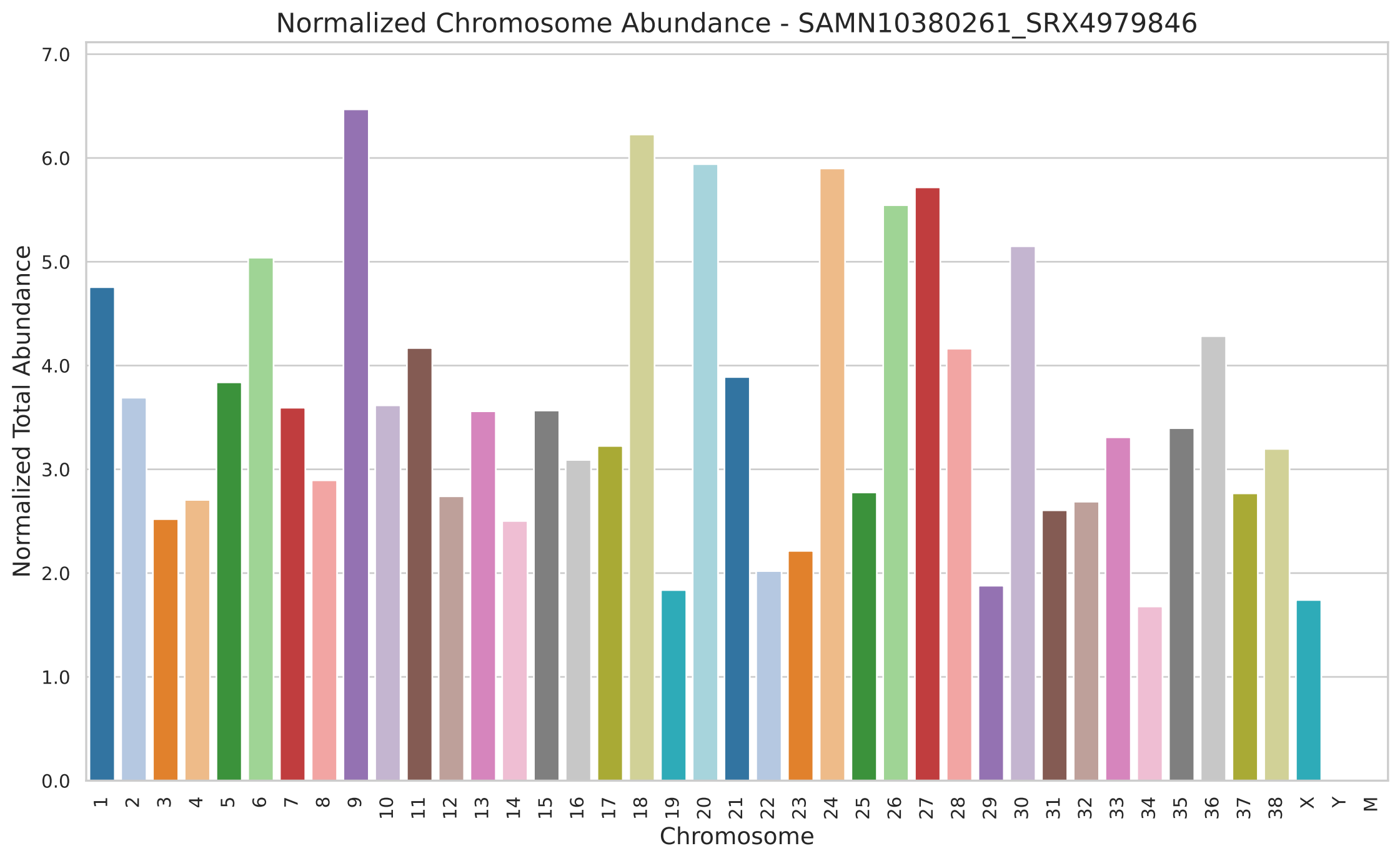

Normalized Chromosome Abundance - SAMN12220974_SRX6660756
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

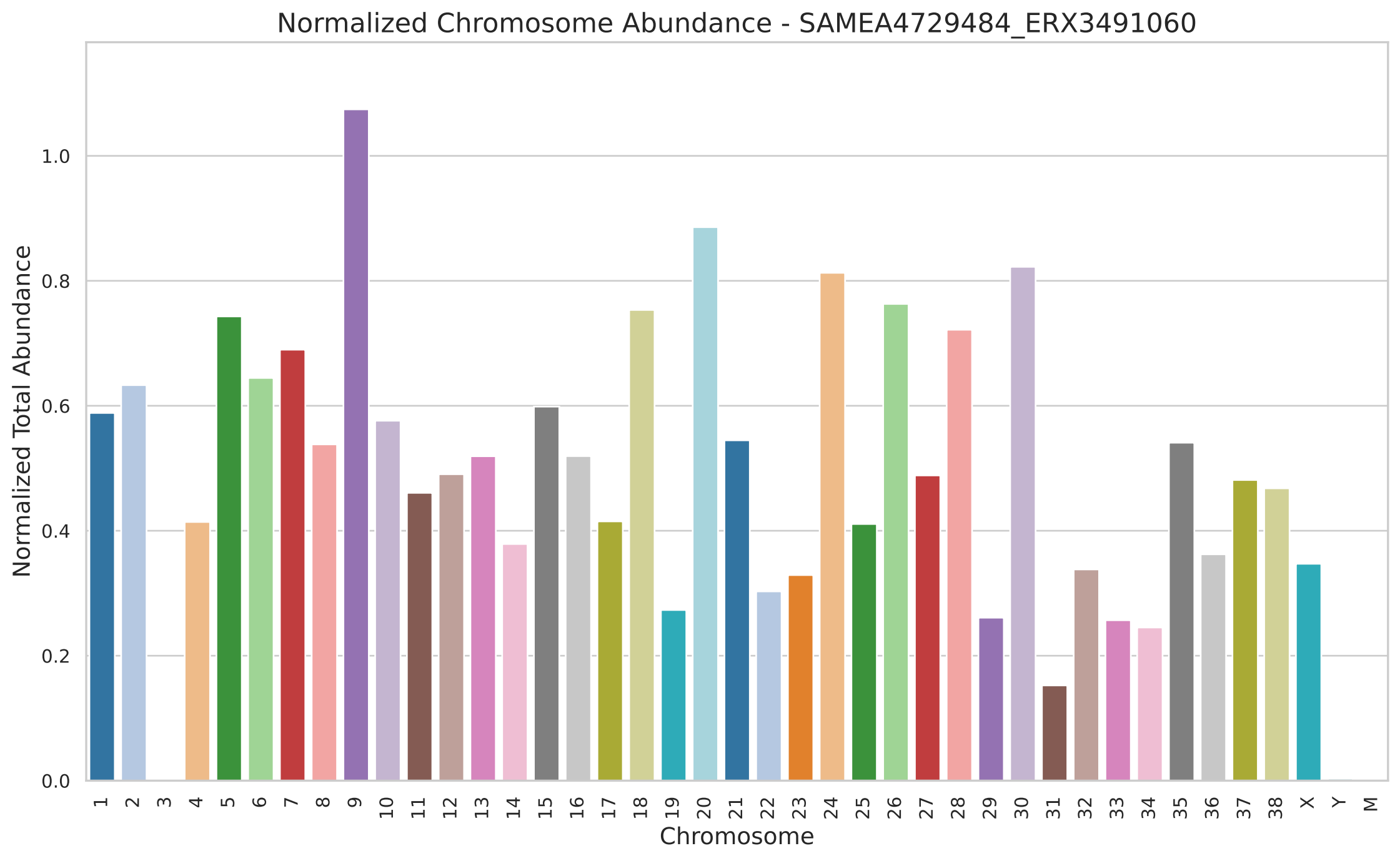

Normalized Chromosome Abundance - SAMN12220992_SRX6660754
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

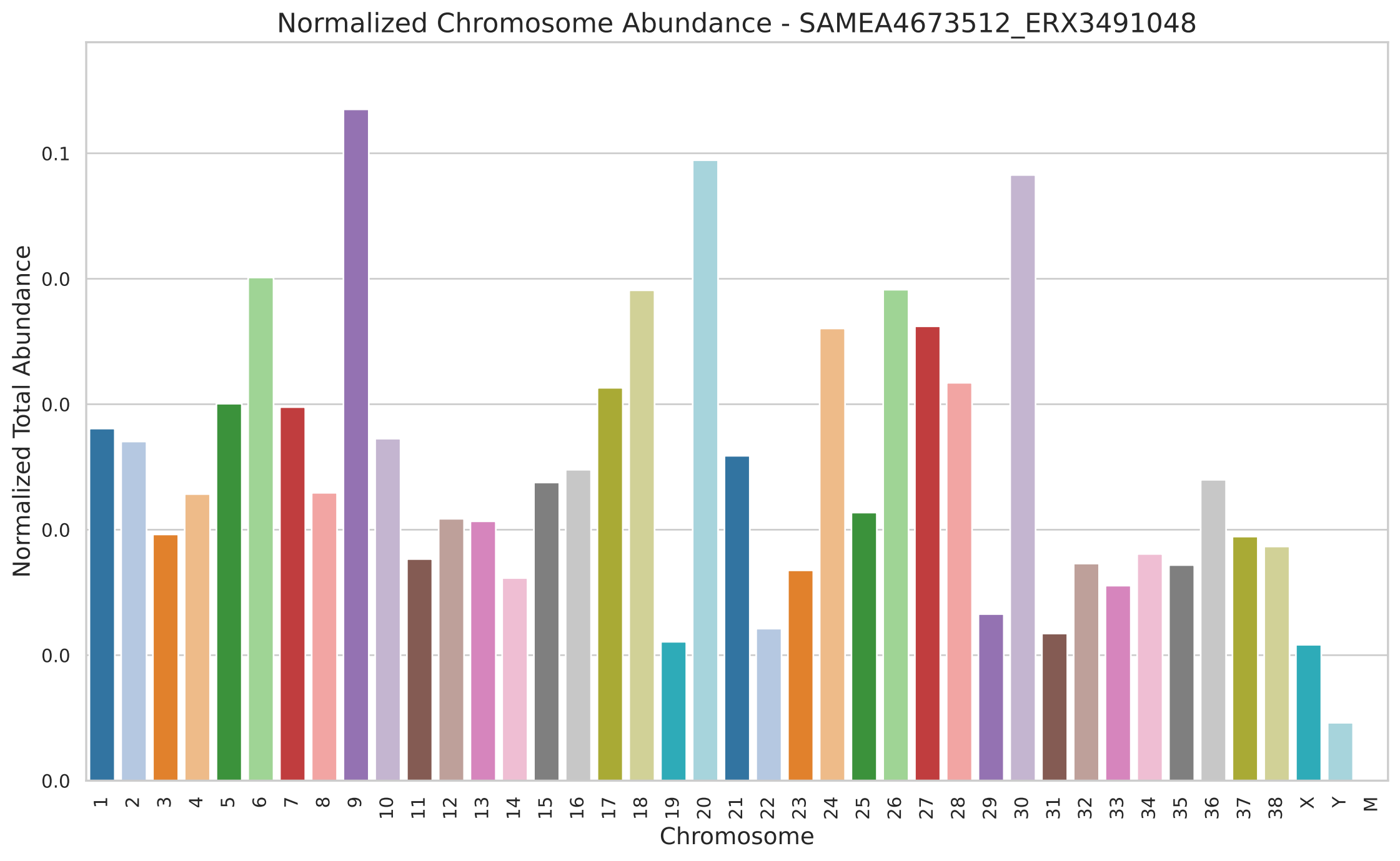

Normalized Chromosome Abundance - SAMN12220963_SRX6660746
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

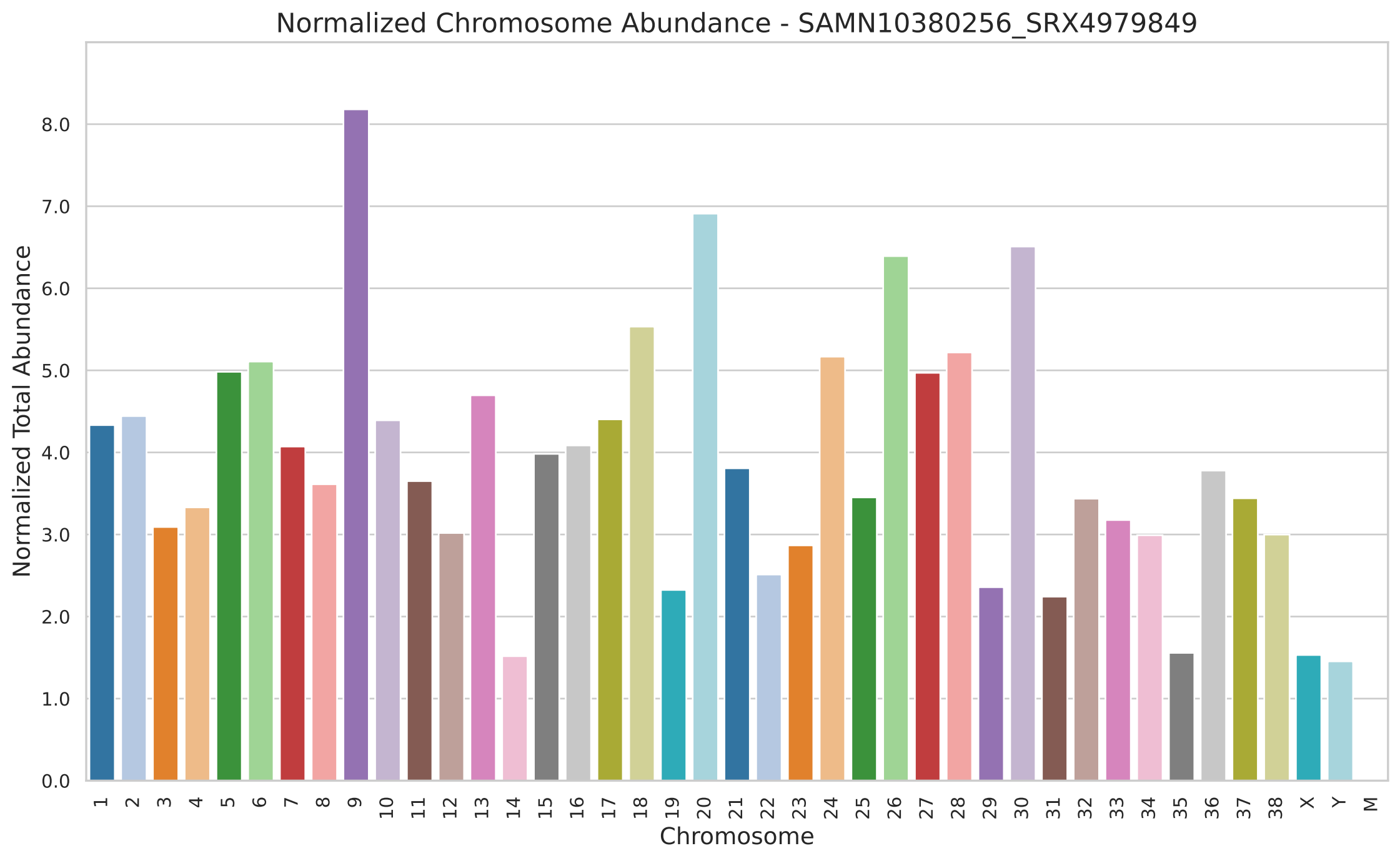

Normalized Chromosome Abundance - SAMN10380278_SRX4979837
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

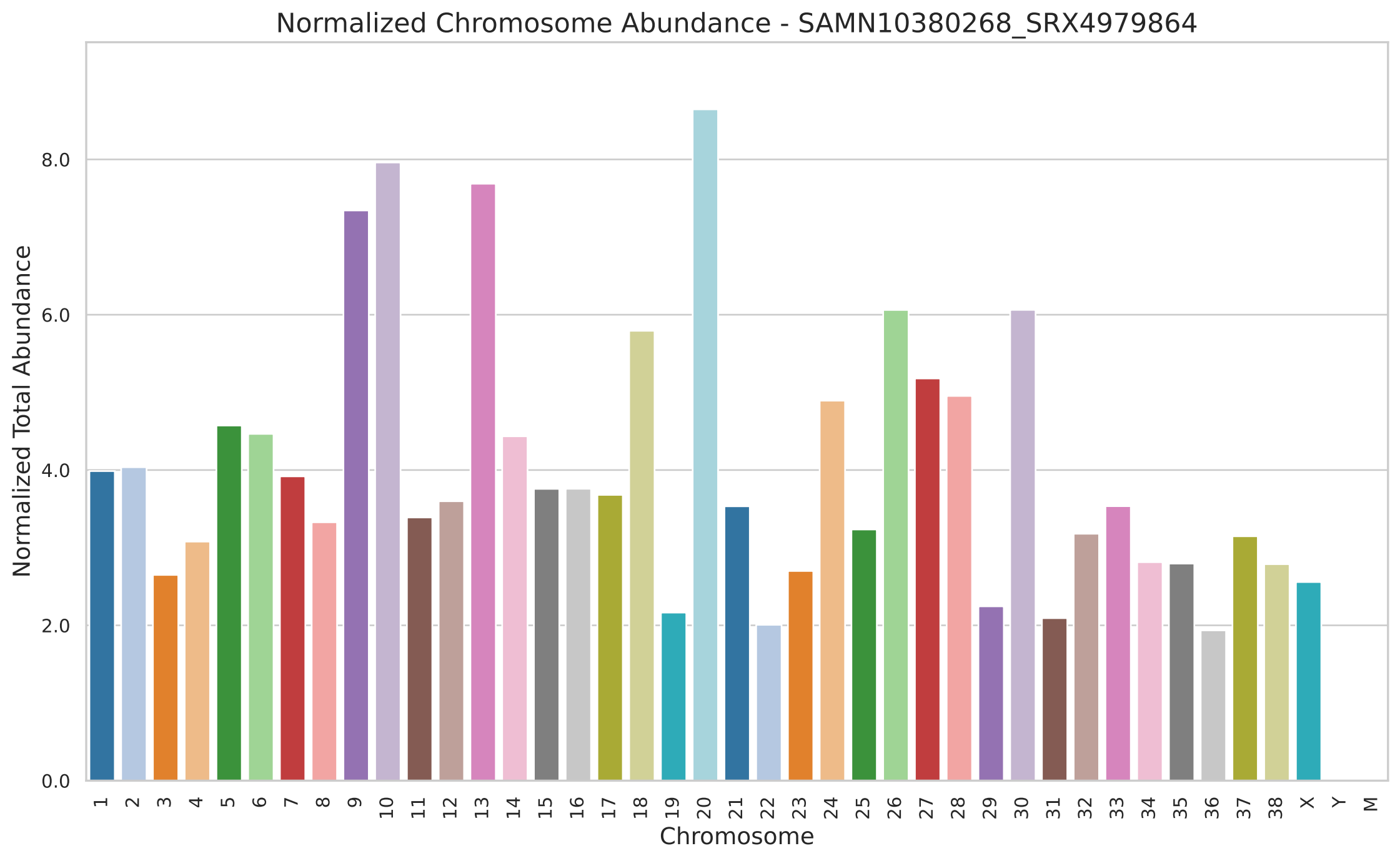

Normalized Chromosome Abundance - SAMN10380260_SRX4979845
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

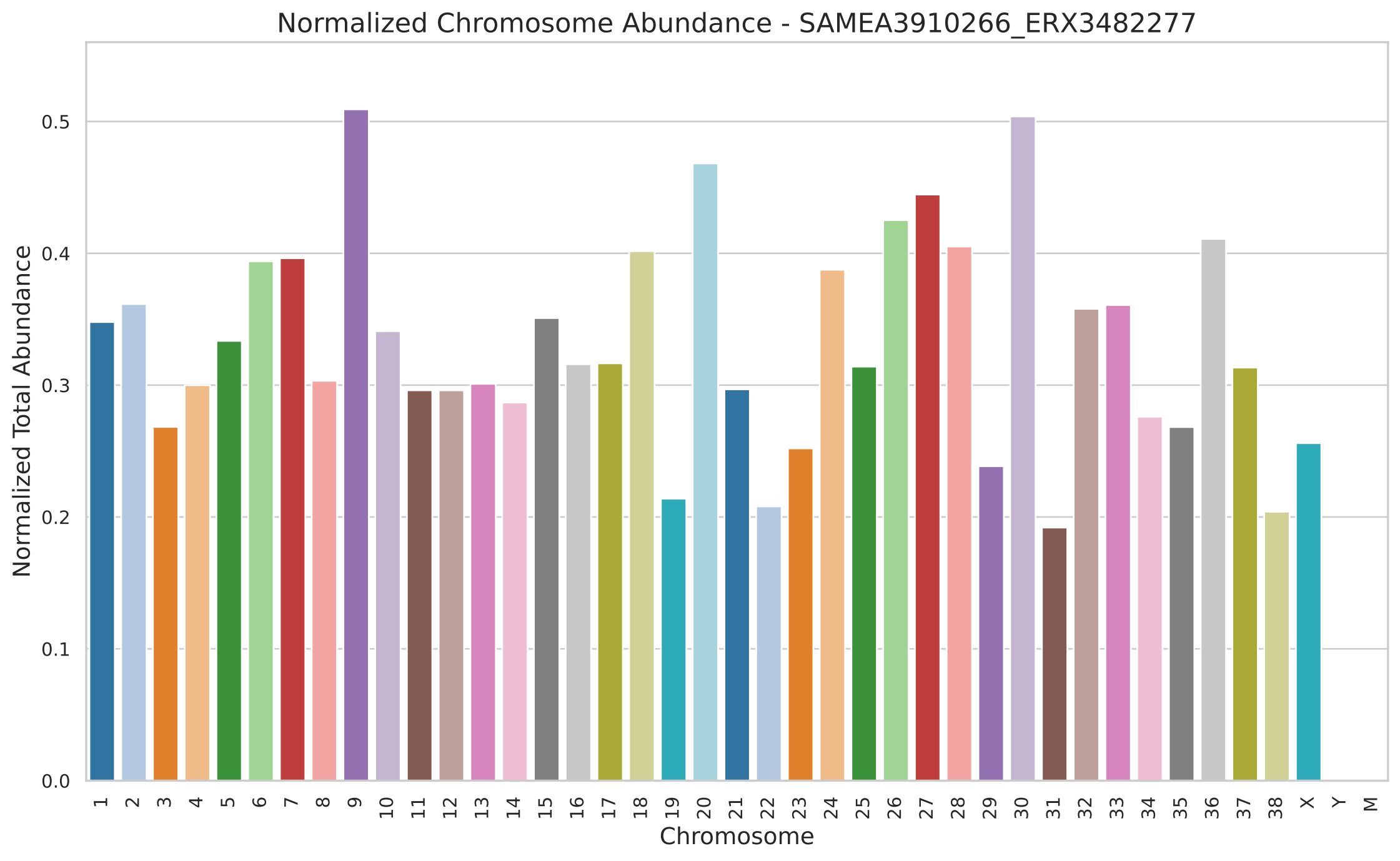

Normalized Chromosome Abundance - SAMN10380261_SRX4979846
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

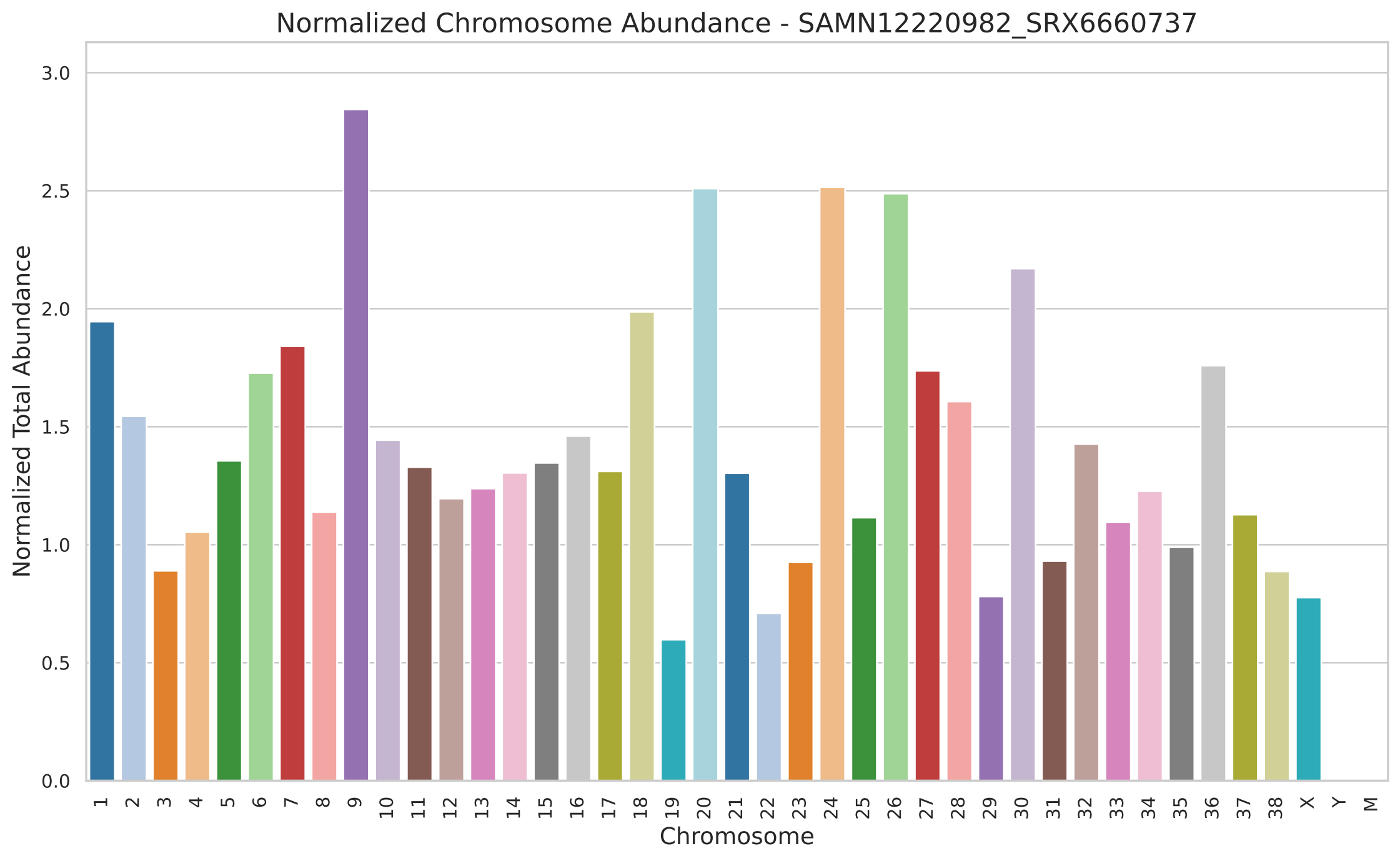

Normalized Chromosome Abundance - SAMEA4729484_ERX3491060
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

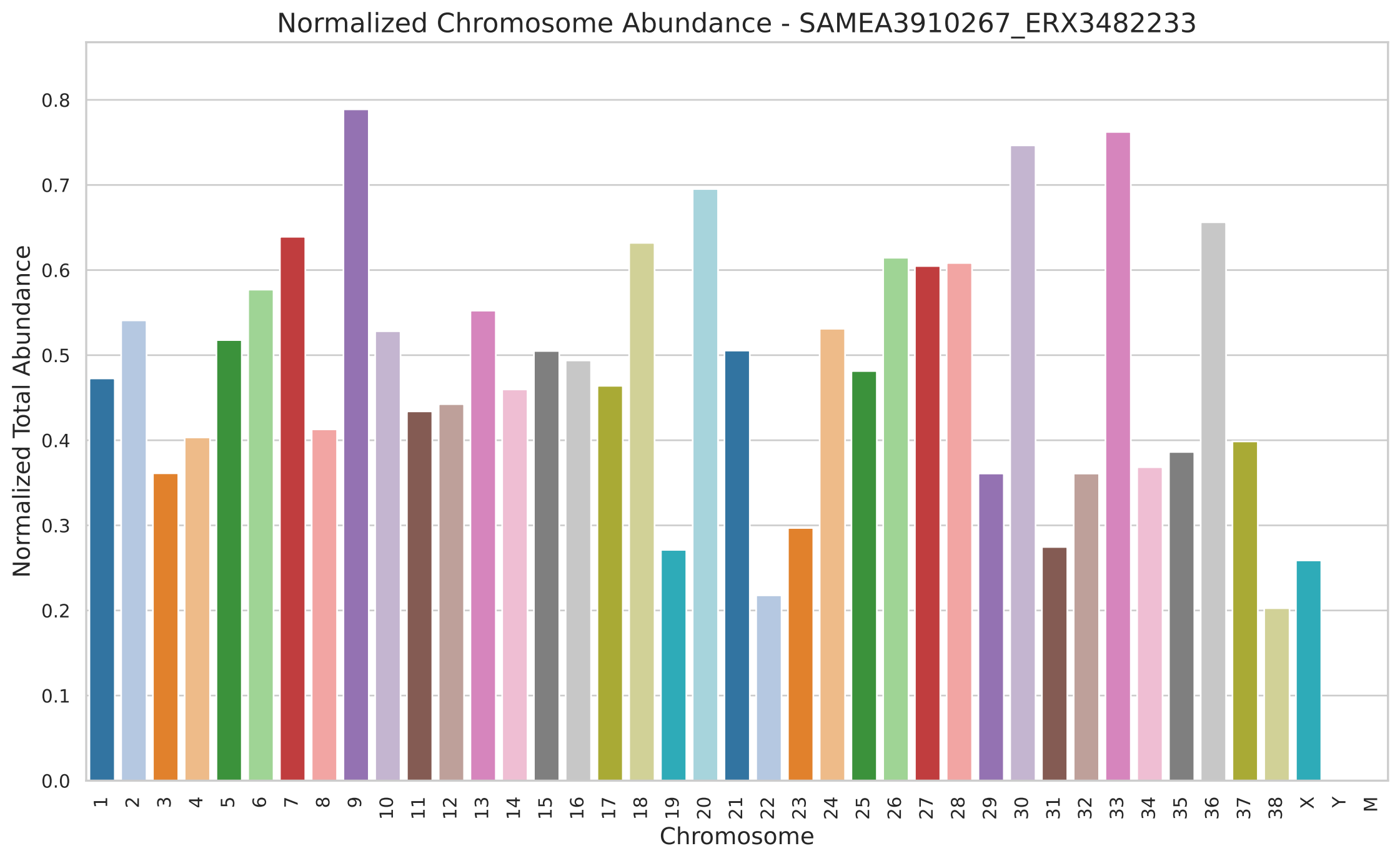

Normalized Chromosome Abundance - SAMEA4673512_ERX3491048
Normalized Total Abundance
0.1
0.0
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

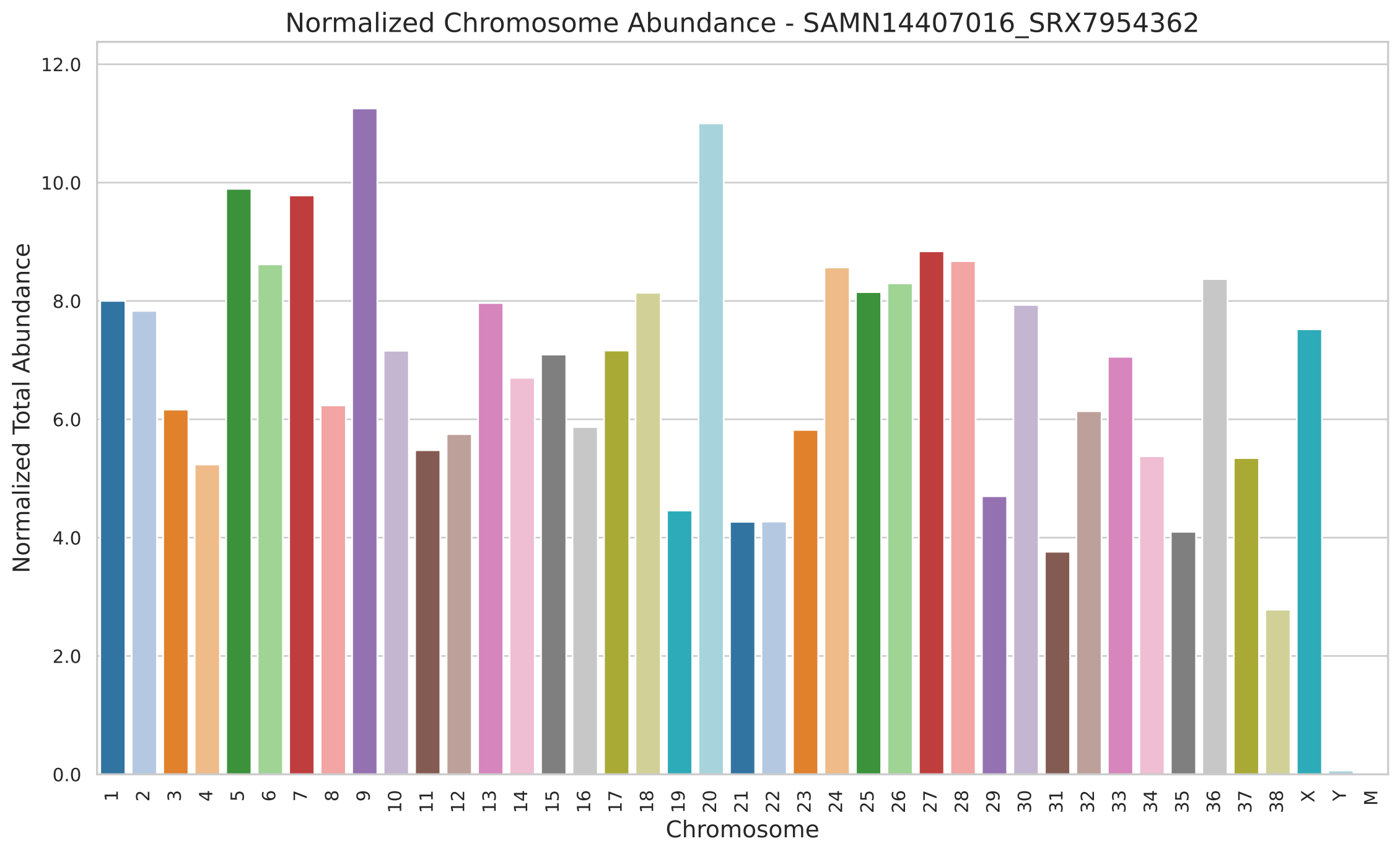

Normalized Chromosome Abundance - SAMN10380256_SRX4979849
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

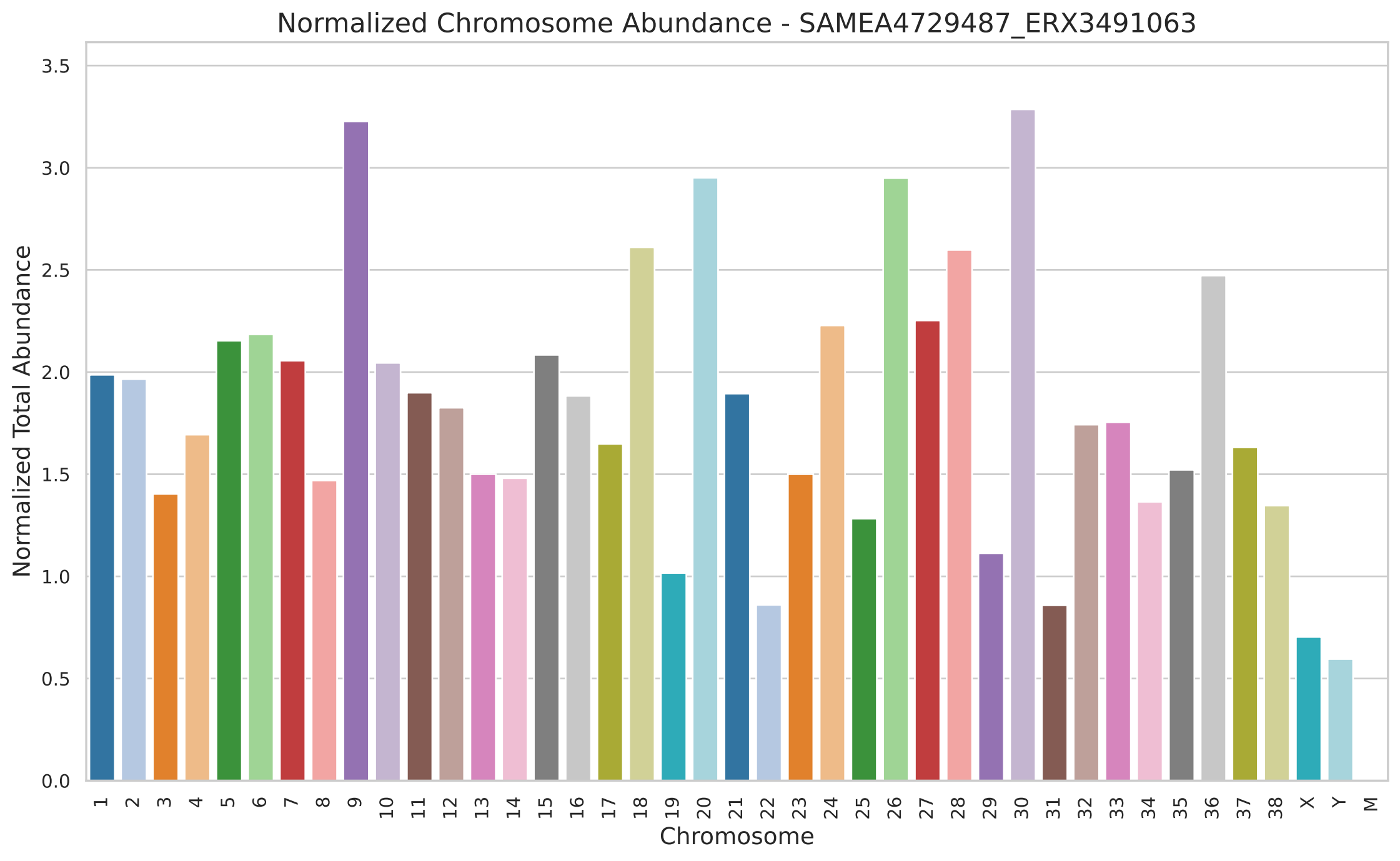

Normalized Chromosome Abundance - SAMN10380268_SRX4979864
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

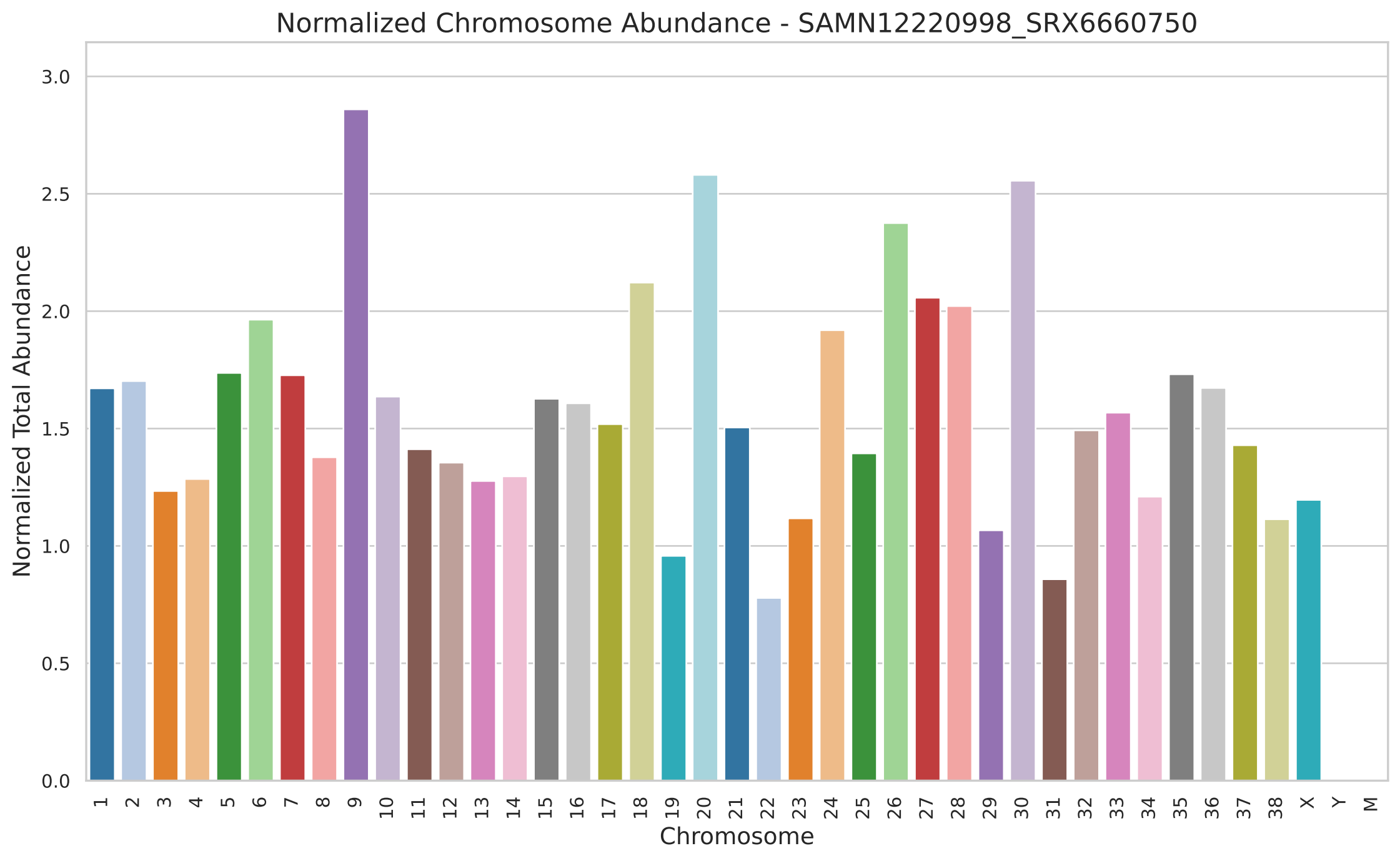

Normalized Chromosome Abundance - SAMEA3910266_ERX3482277
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

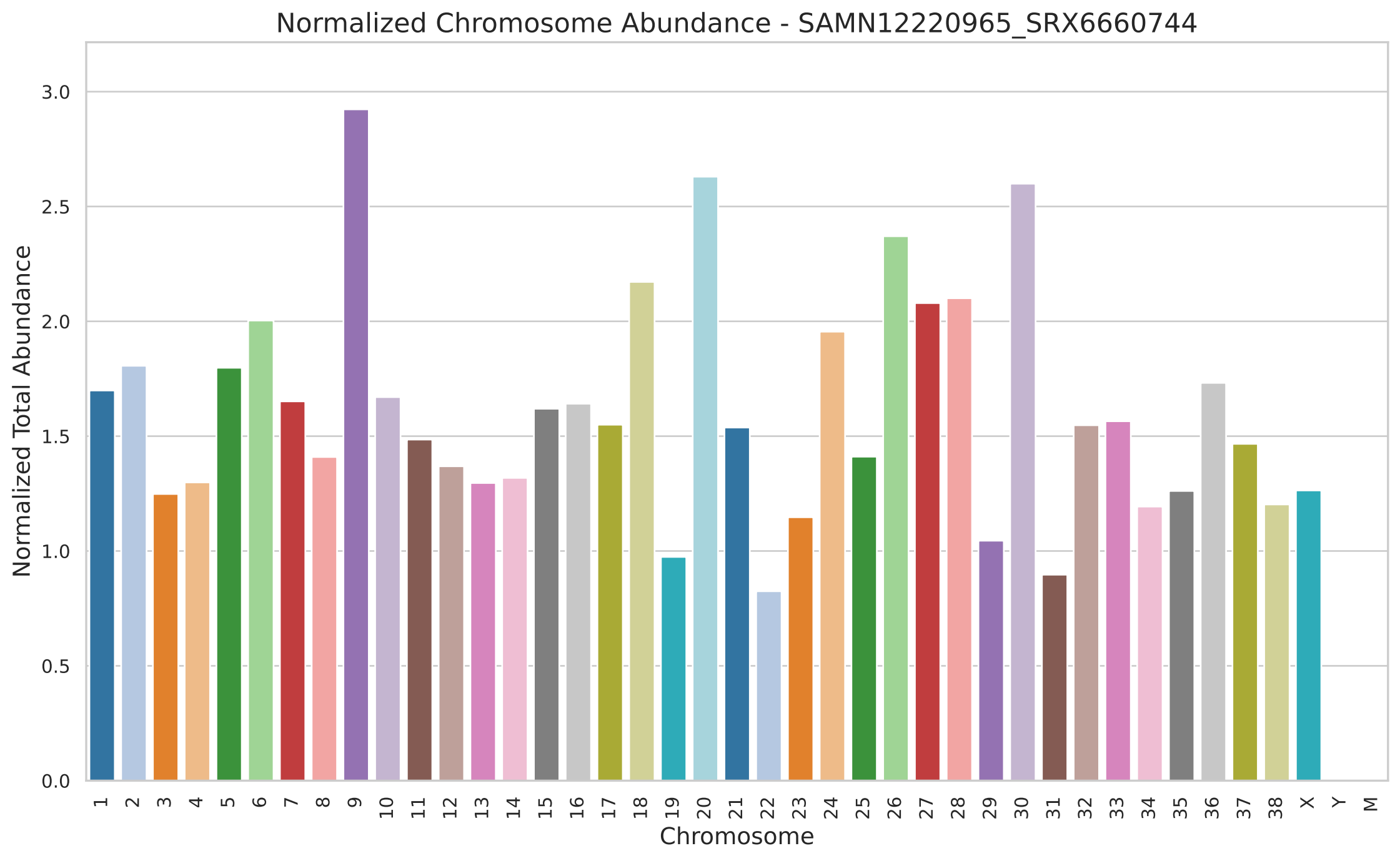

Normalized Chromosome Abundance - SAMN12220982_SRX6660737
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

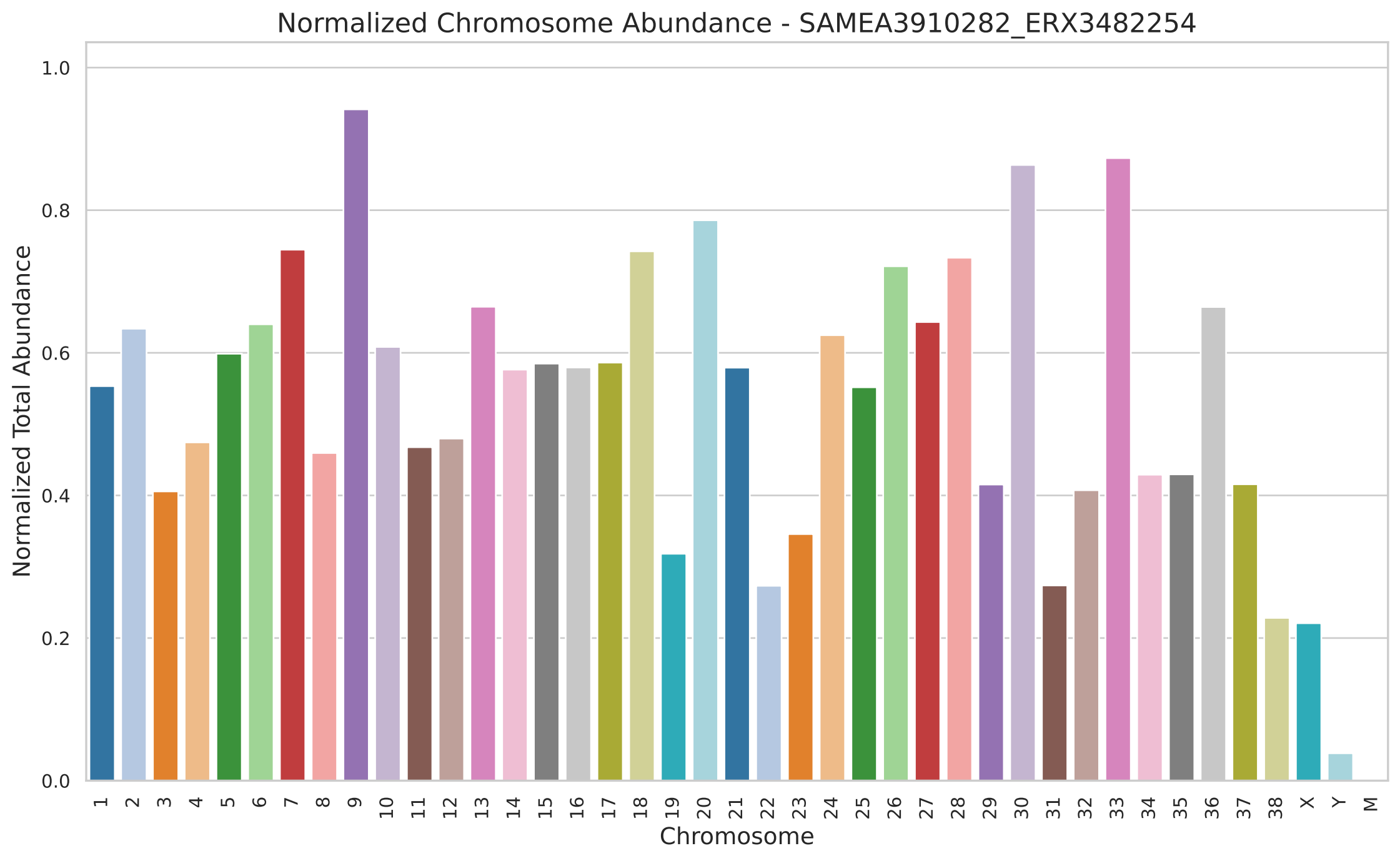

Normalized Chromosome Abundance - SAMEA3910267_ERX3482233
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

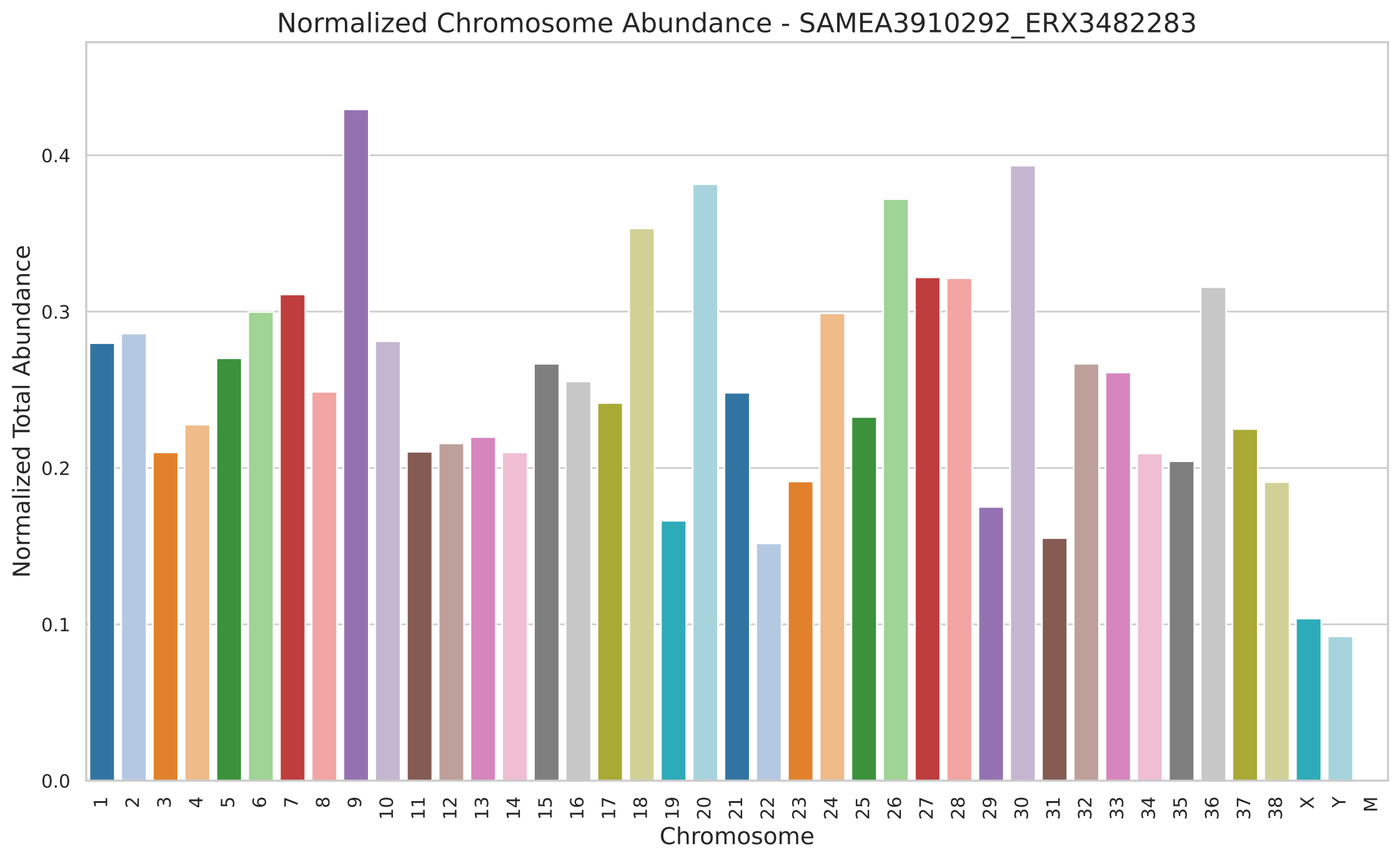

Normalized Chromosome Abundance - SAMN14407016_SRX7954362
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
12.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

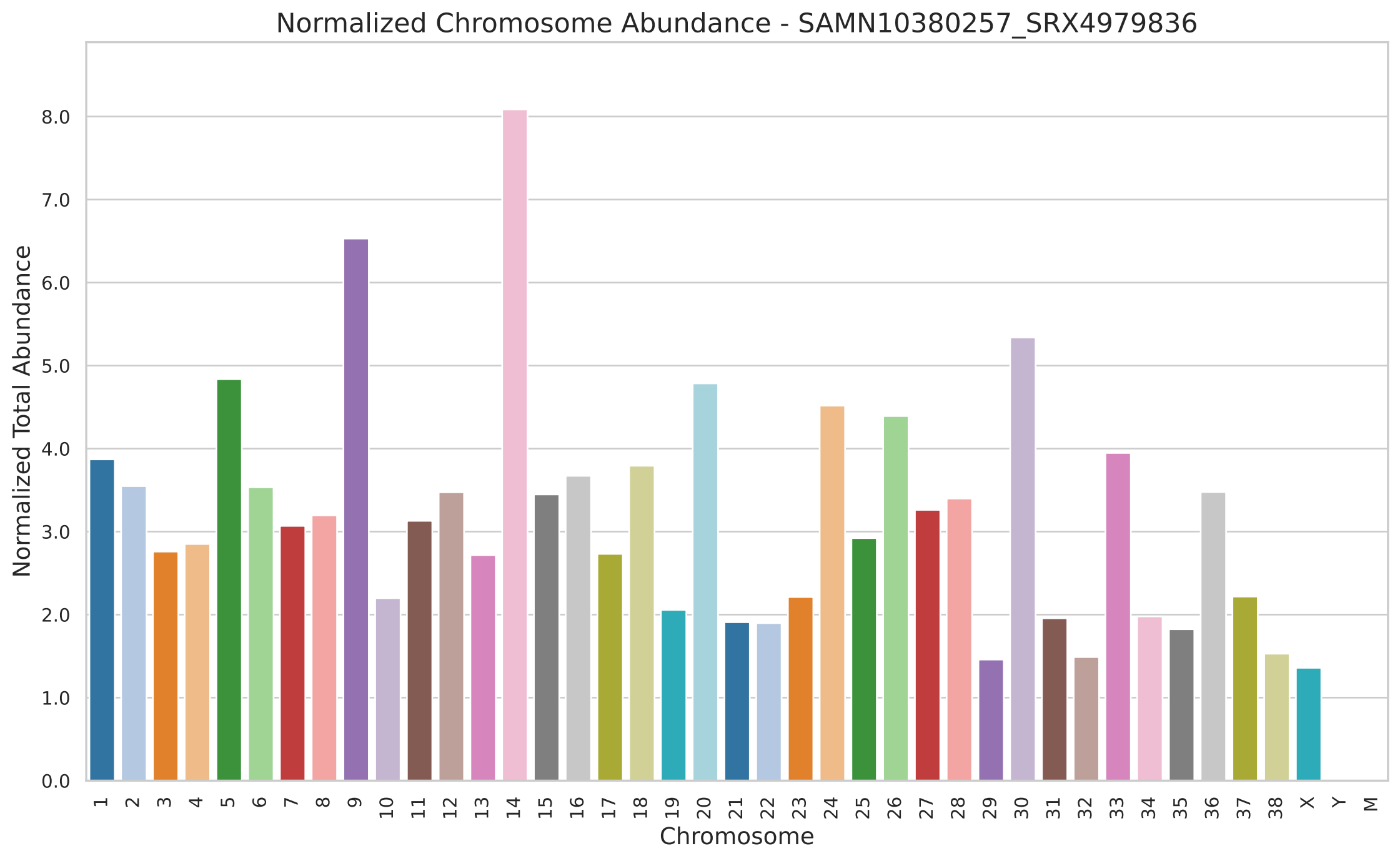

Normalized Chromosome Abundance - SAMEA4729487_ERX3491063
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

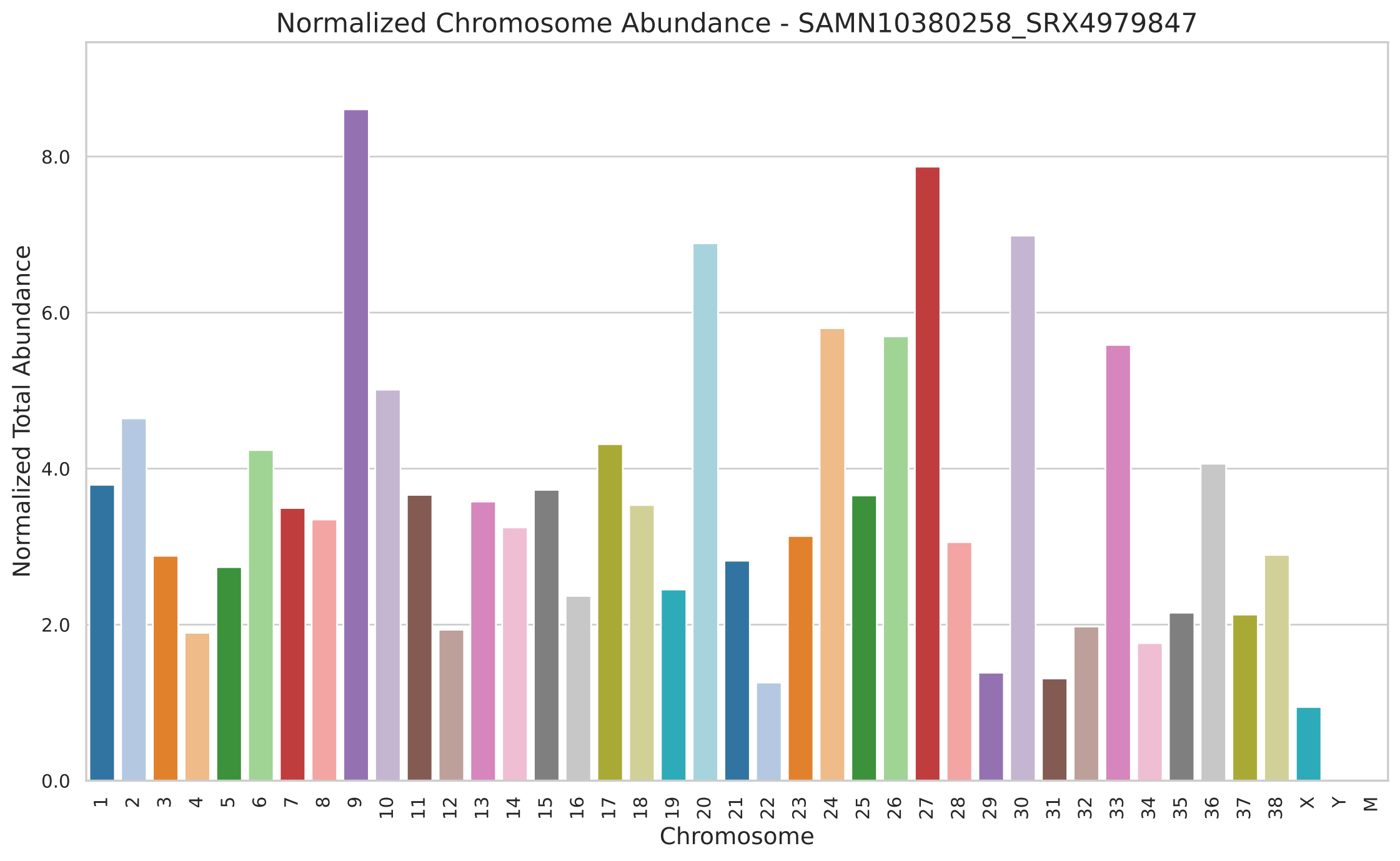

Normalized Chromosome Abundance - SAMN12220998_SRX6660750
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

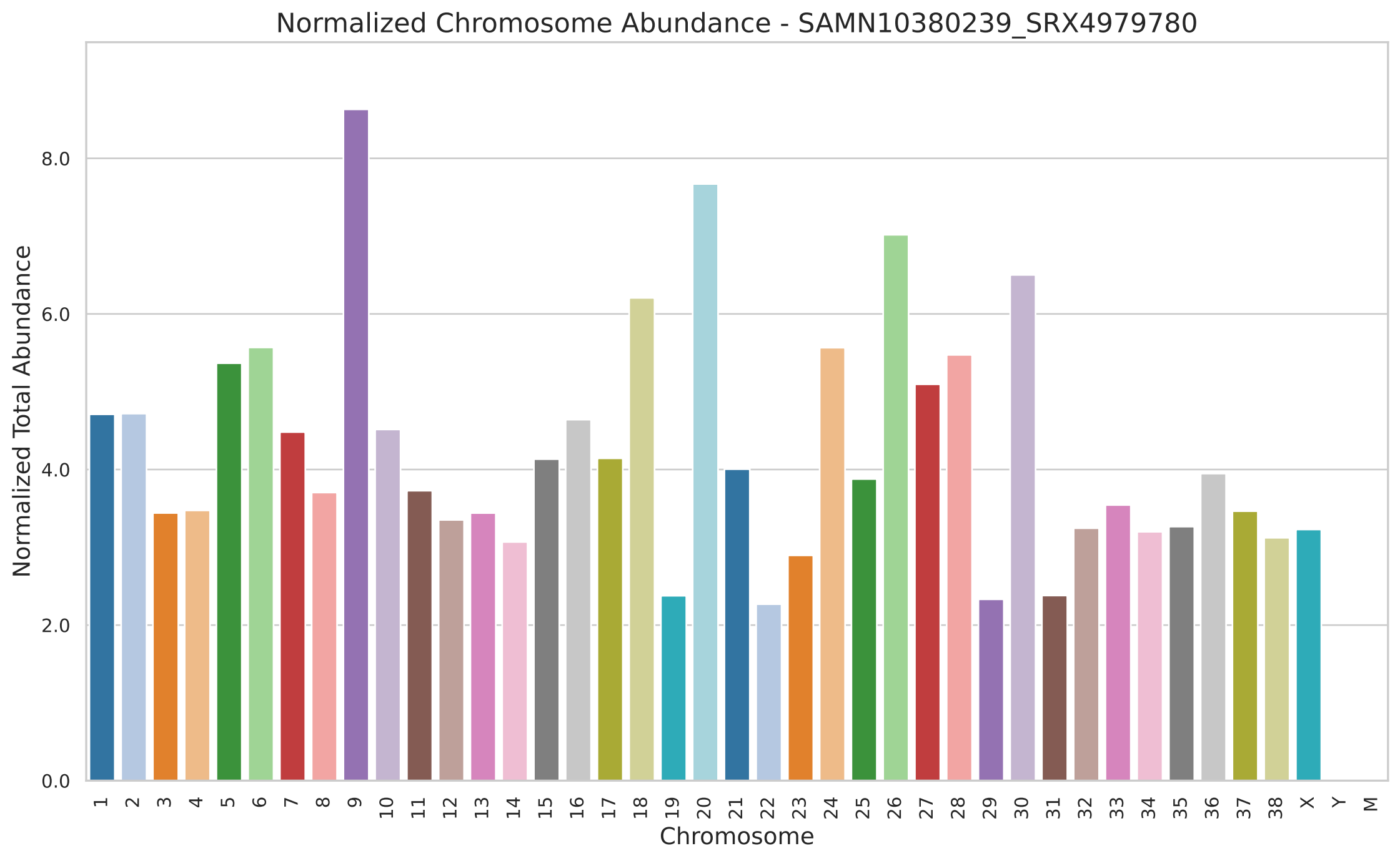

Normalized Chromosome Abundance - SAMN12220965_SRX6660744
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

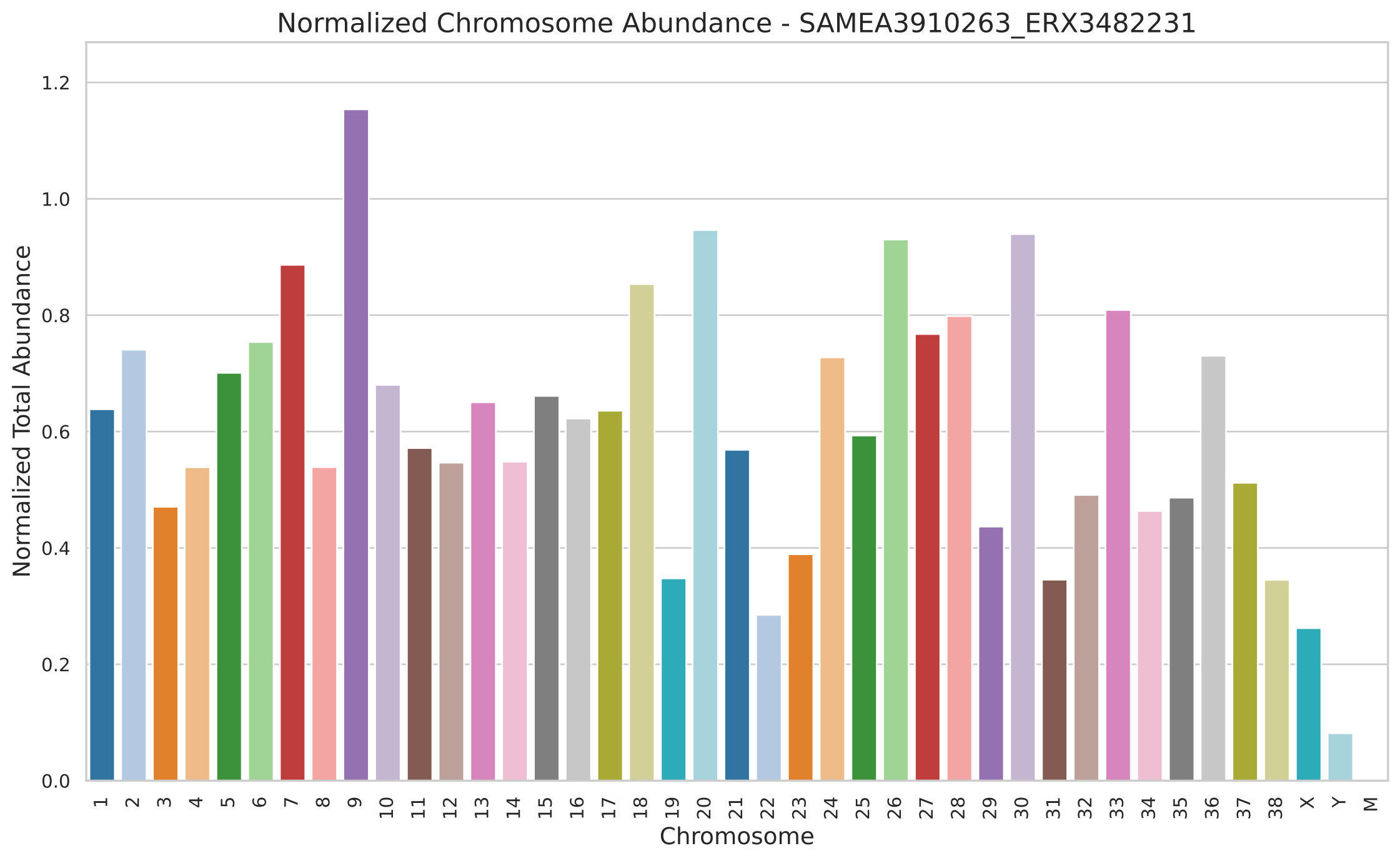

Normalized Chromosome Abundance - SAMEA3910282_ERX3482254
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

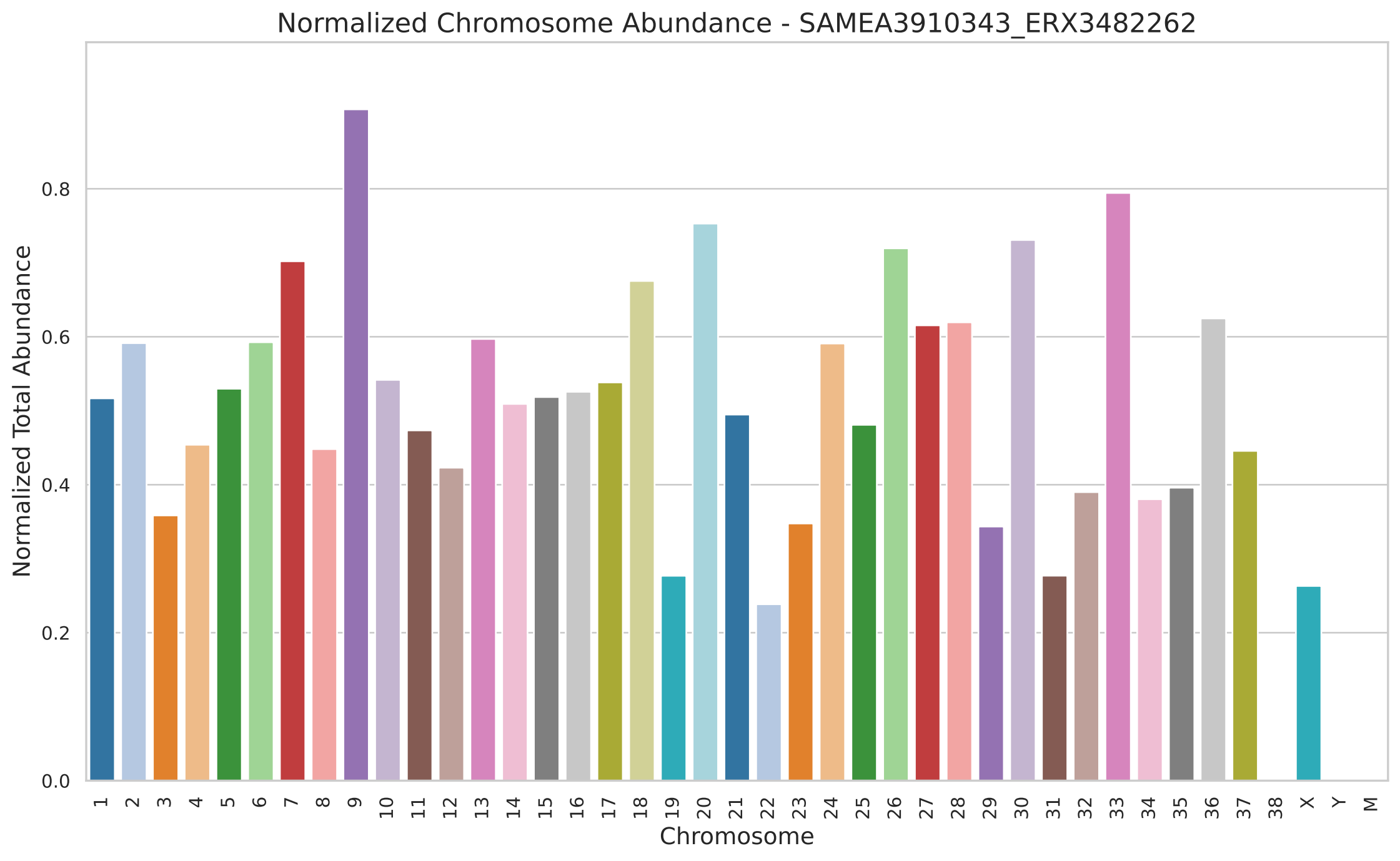

Normalized Chromosome Abundance - SAMEA3910292_ERX3482283
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

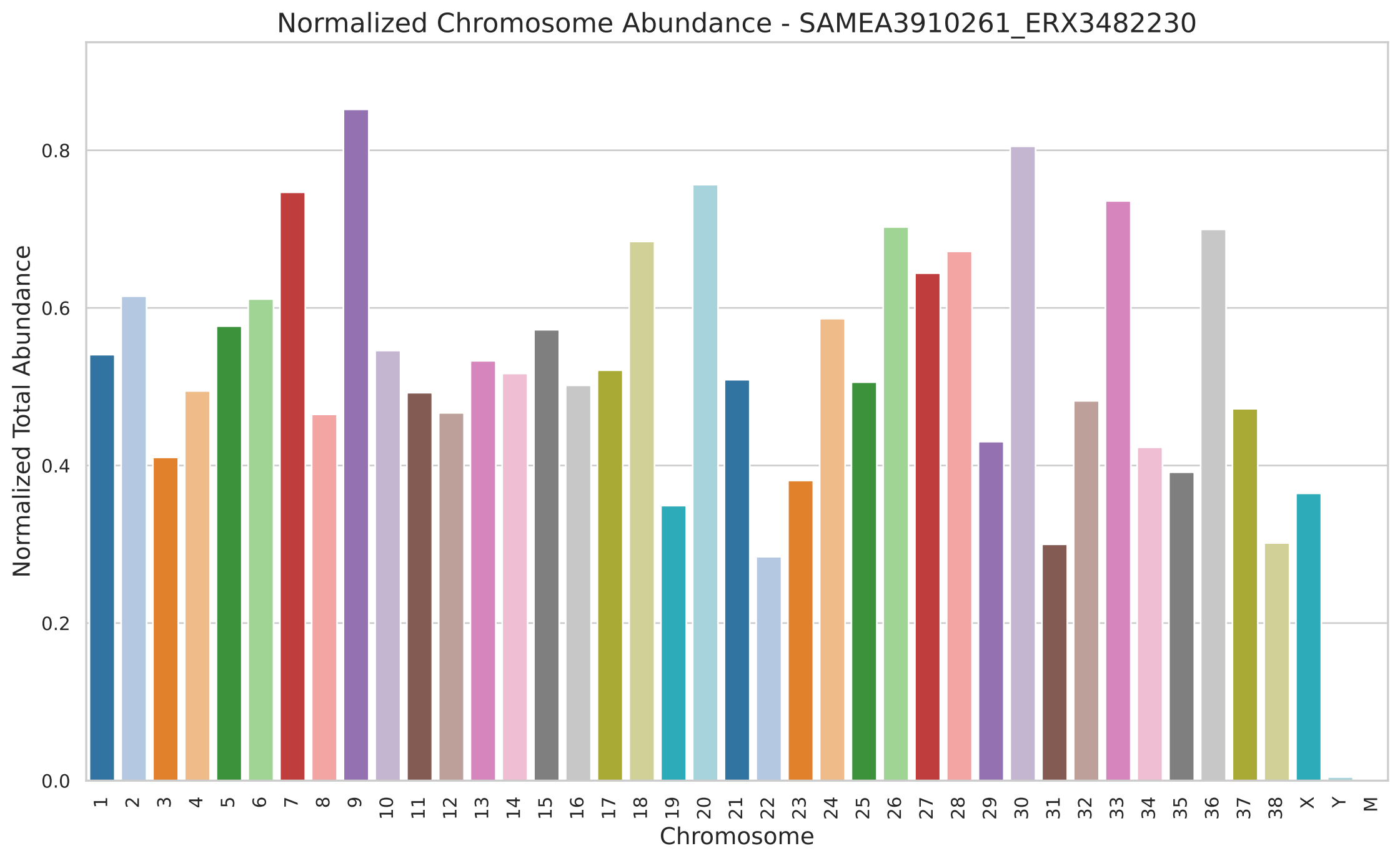

Normalized Chromosome Abundance - SAMN10380257_SRX4979836
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

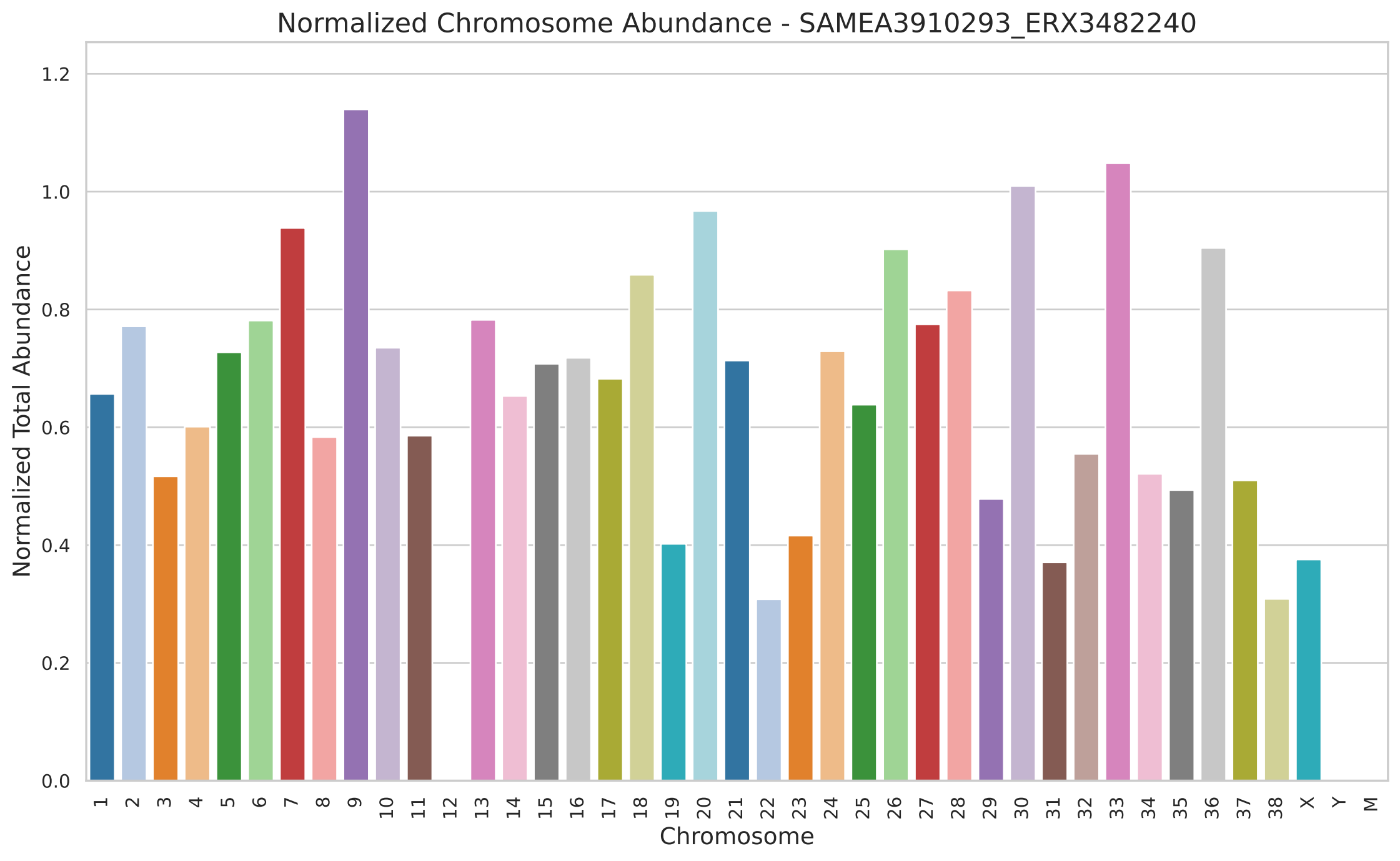

Normalized Chromosome Abundance - SAMN10380258_SRX4979847
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

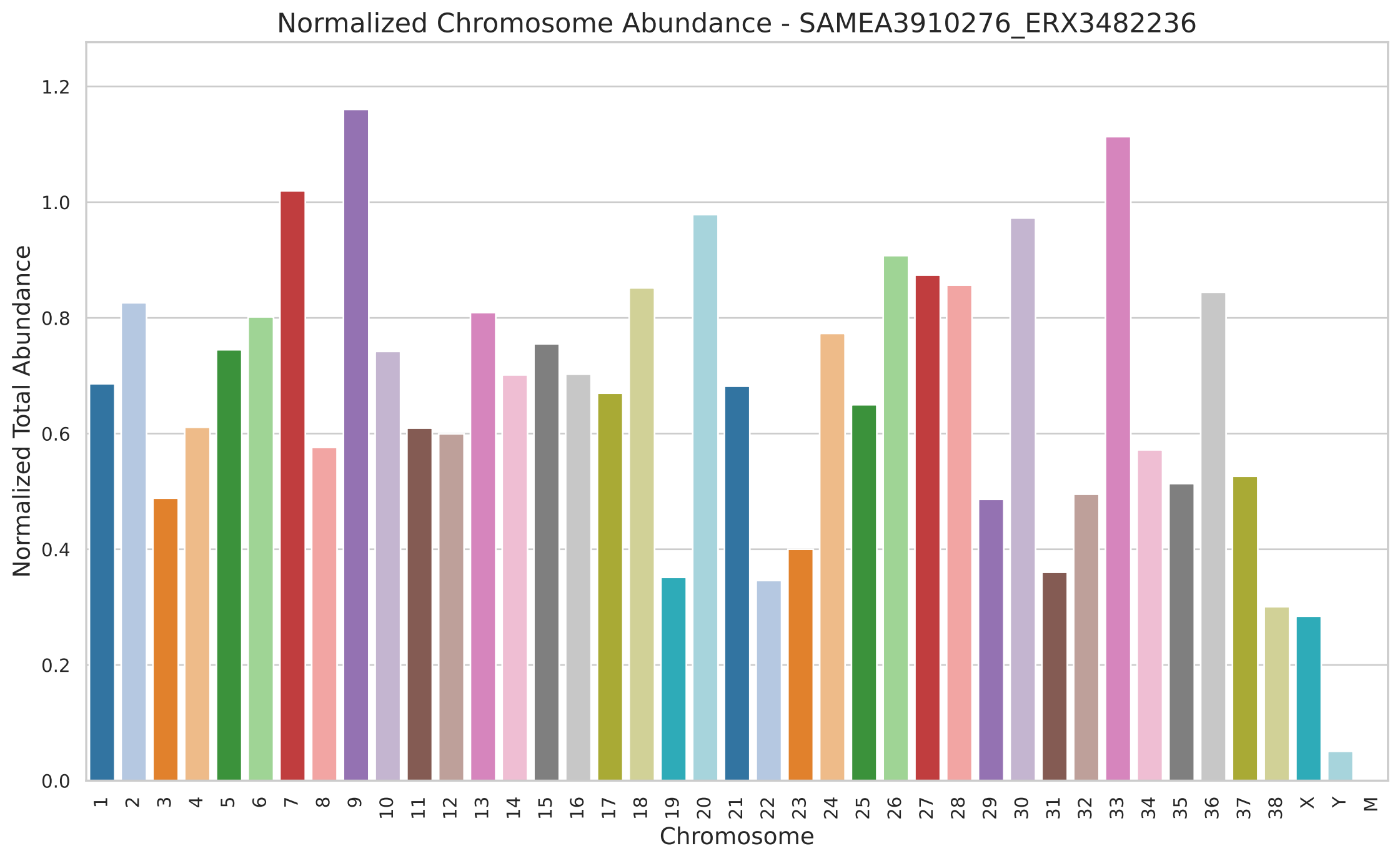

Normalized Chromosome Abundance - SAMN10380239_SRX4979780
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

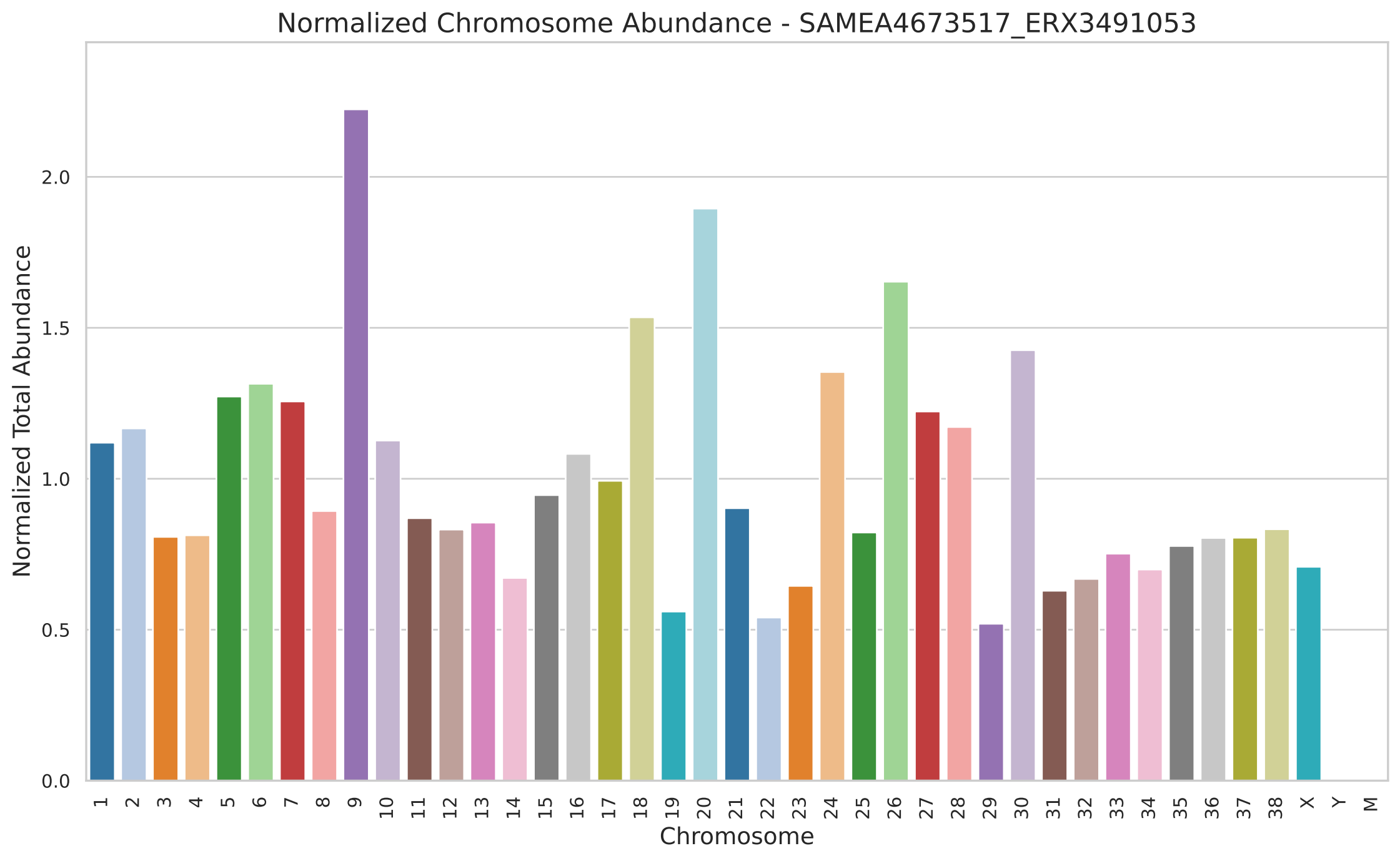

Normalized Chromosome Abundance - SAMEA3910263_ERX3482231
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

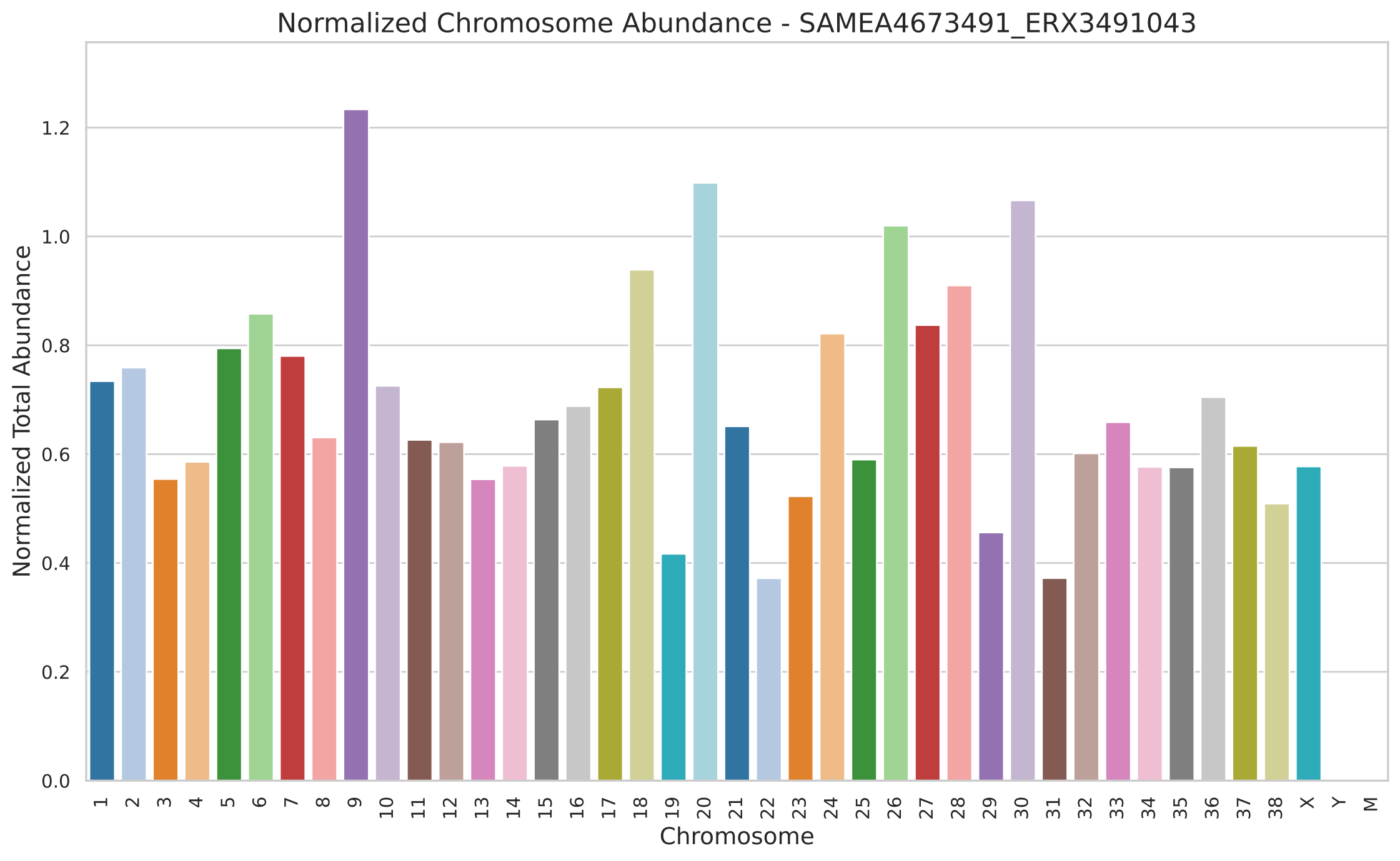

Normalized Chromosome Abundance - SAMEA3910343_ERX3482262
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

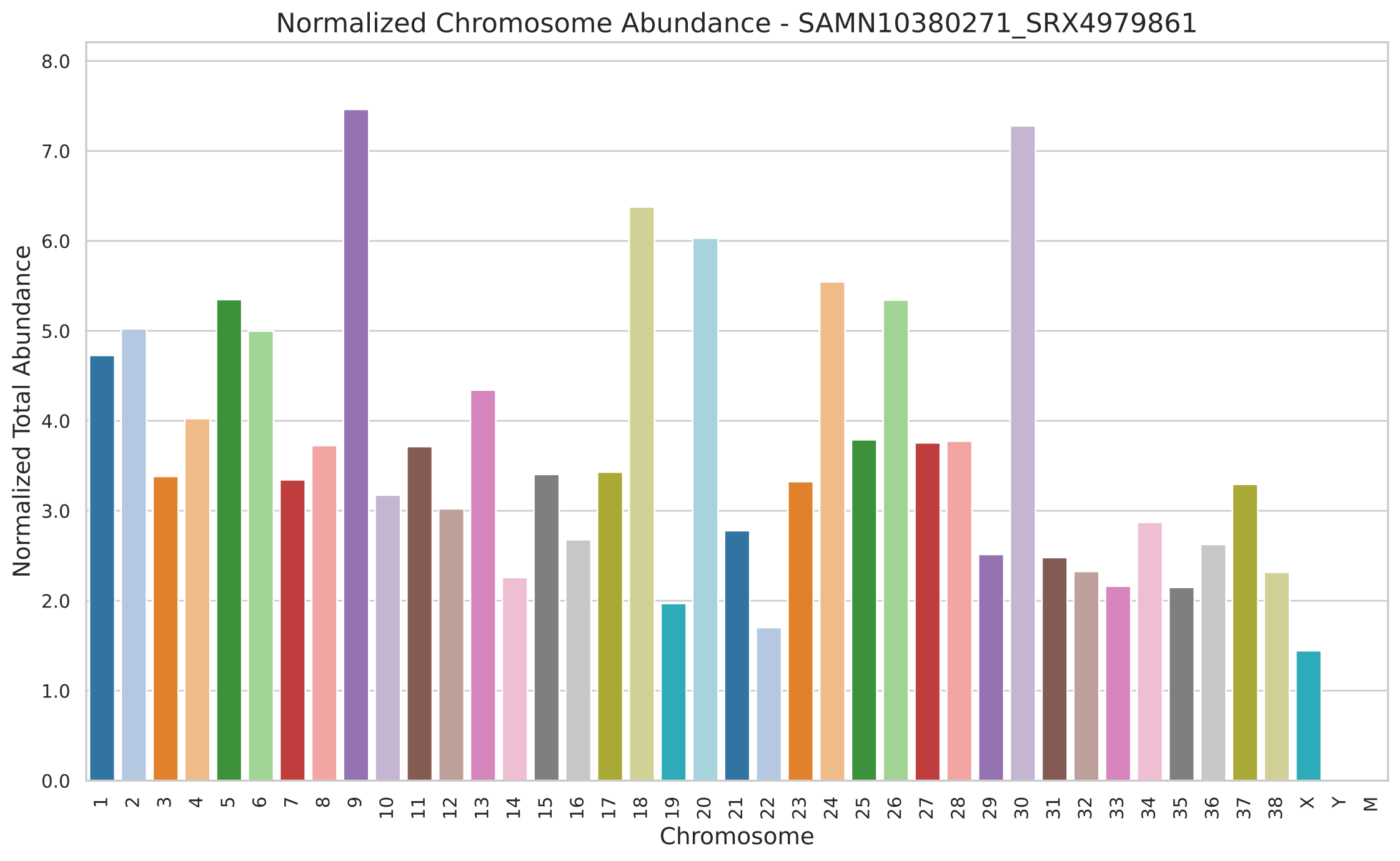

Normalized Chromosome Abundance - SAMEA3910261_ERX3482230
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

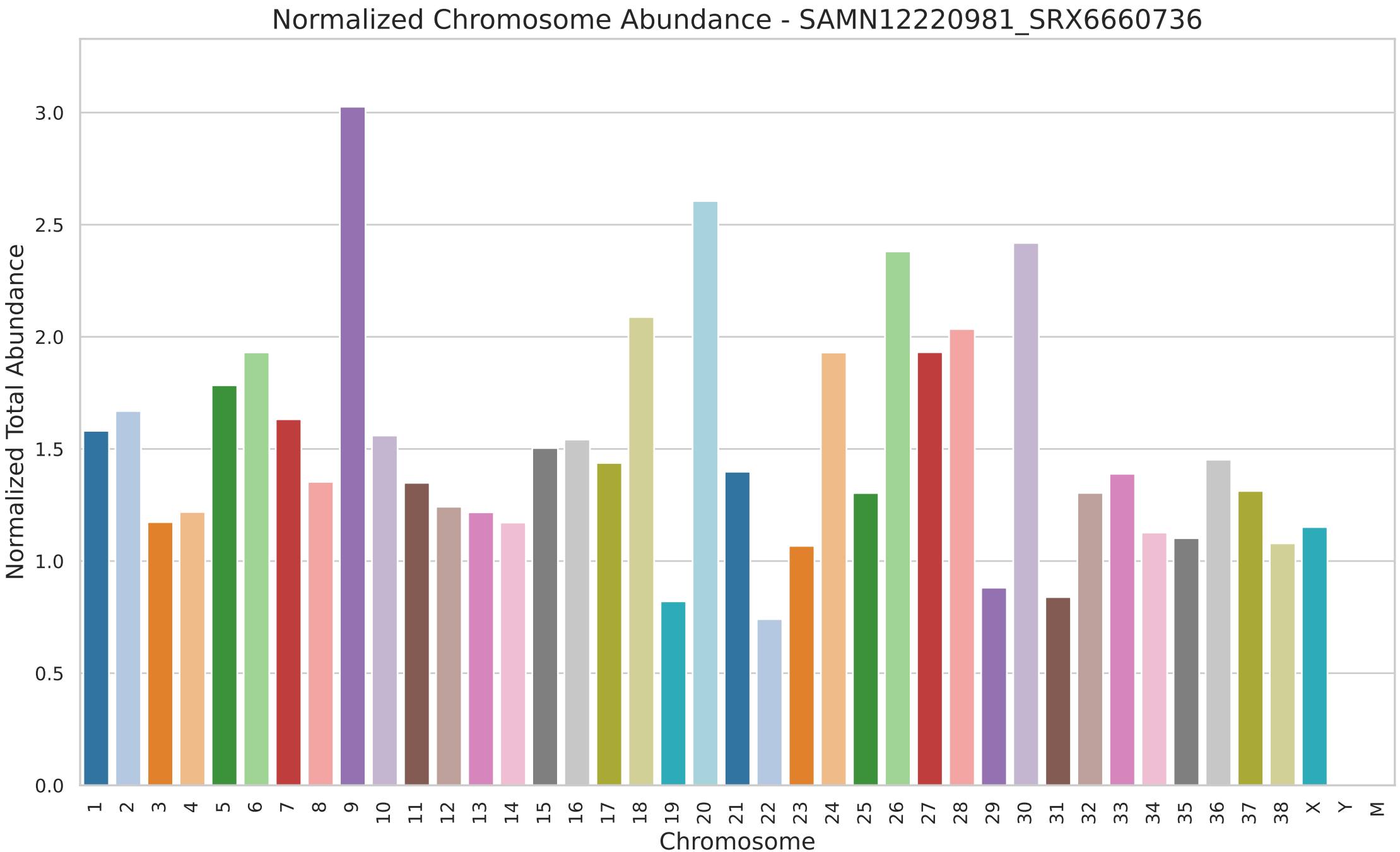

Normalized Chromosome Abundance - SAMEA3910293_ERX3482240
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

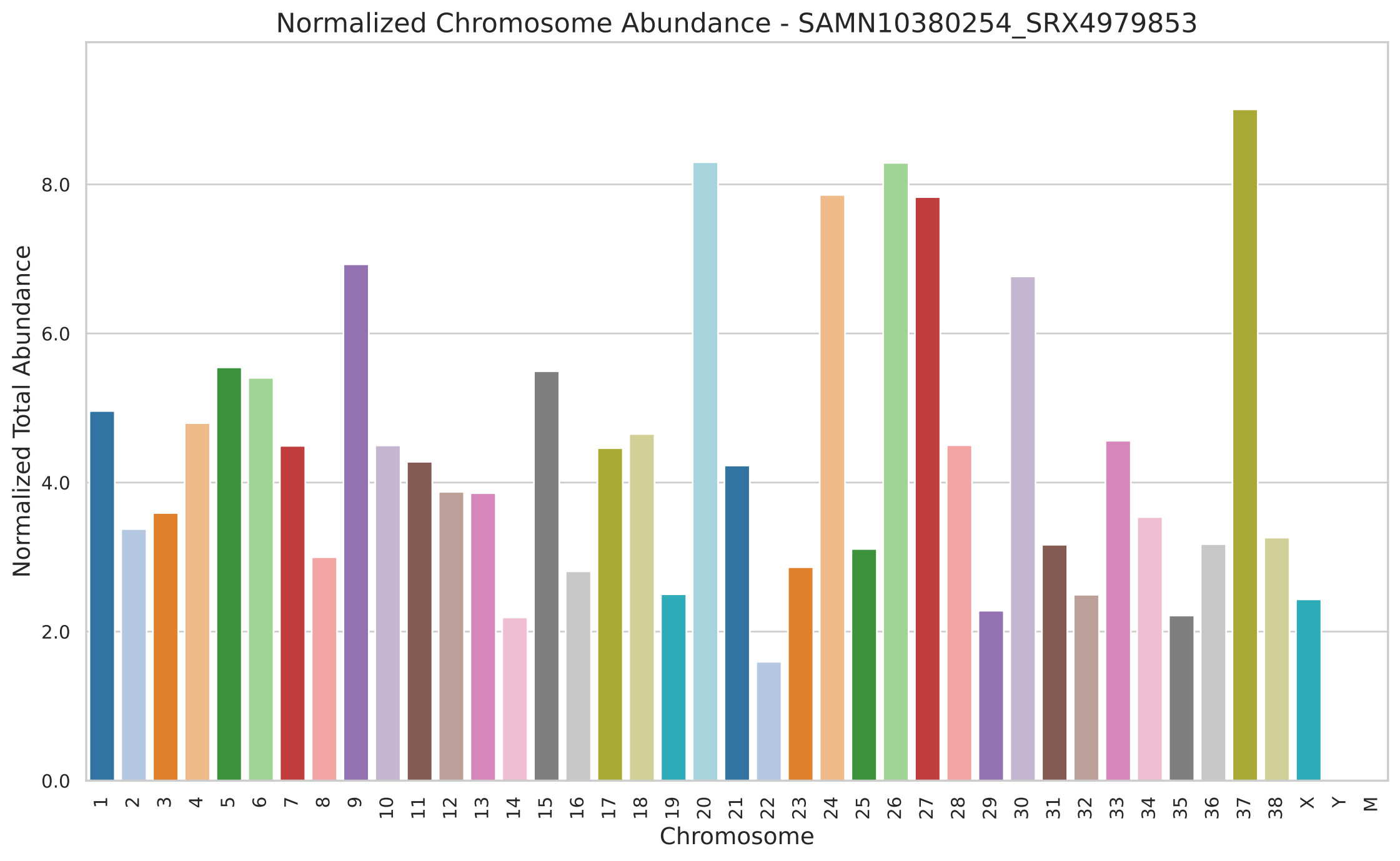

Normalized Chromosome Abundance - SAMEA3910276_ERX3482236
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

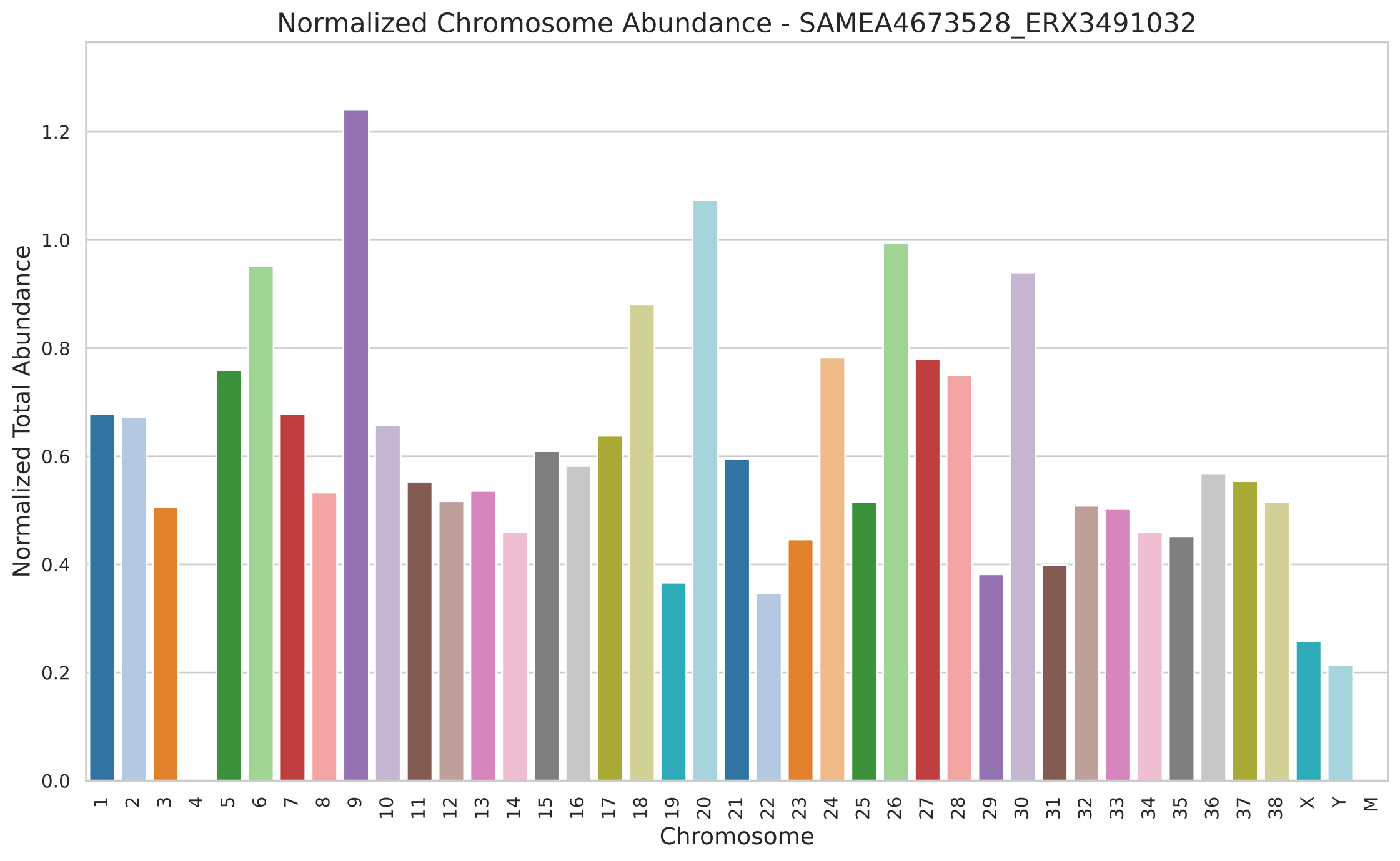

Normalized Chromosome Abundance - SAMEA4673517_ERX3491053
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

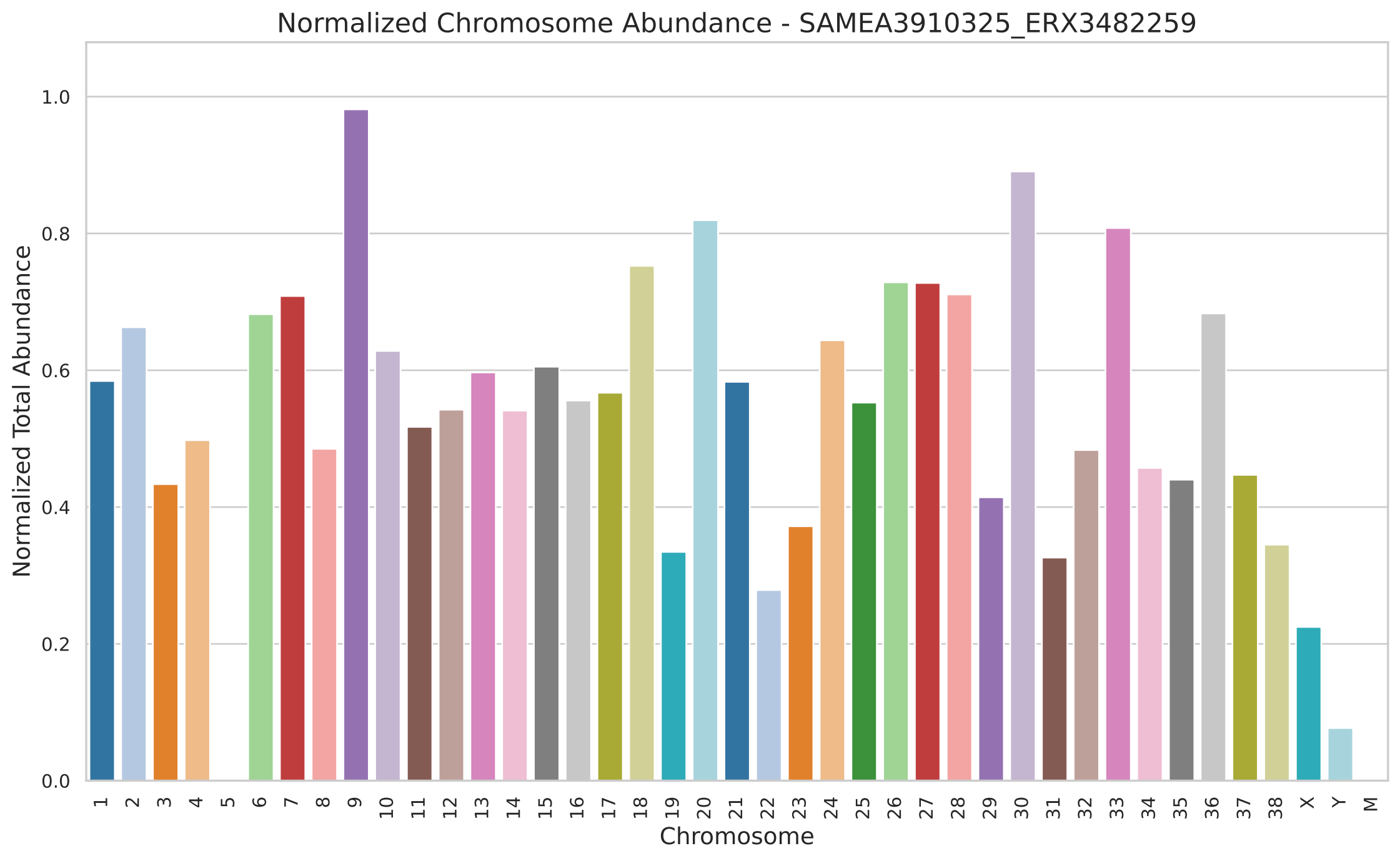

Normalized Chromosome Abundance - SAMEA4673491_ERX3491043
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

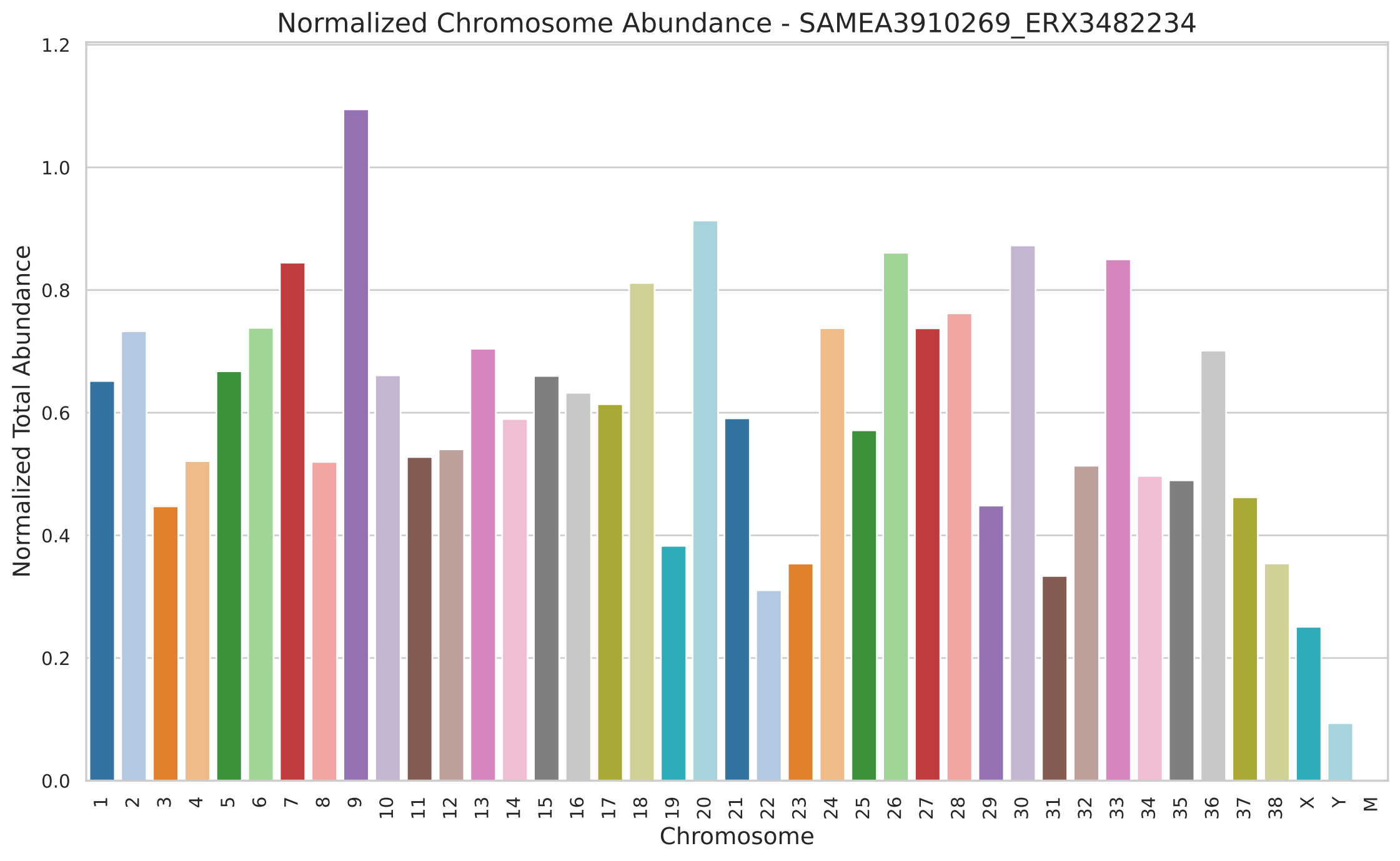

Normalized Chromosome Abundance - SAMN10380271_SRX4979861
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

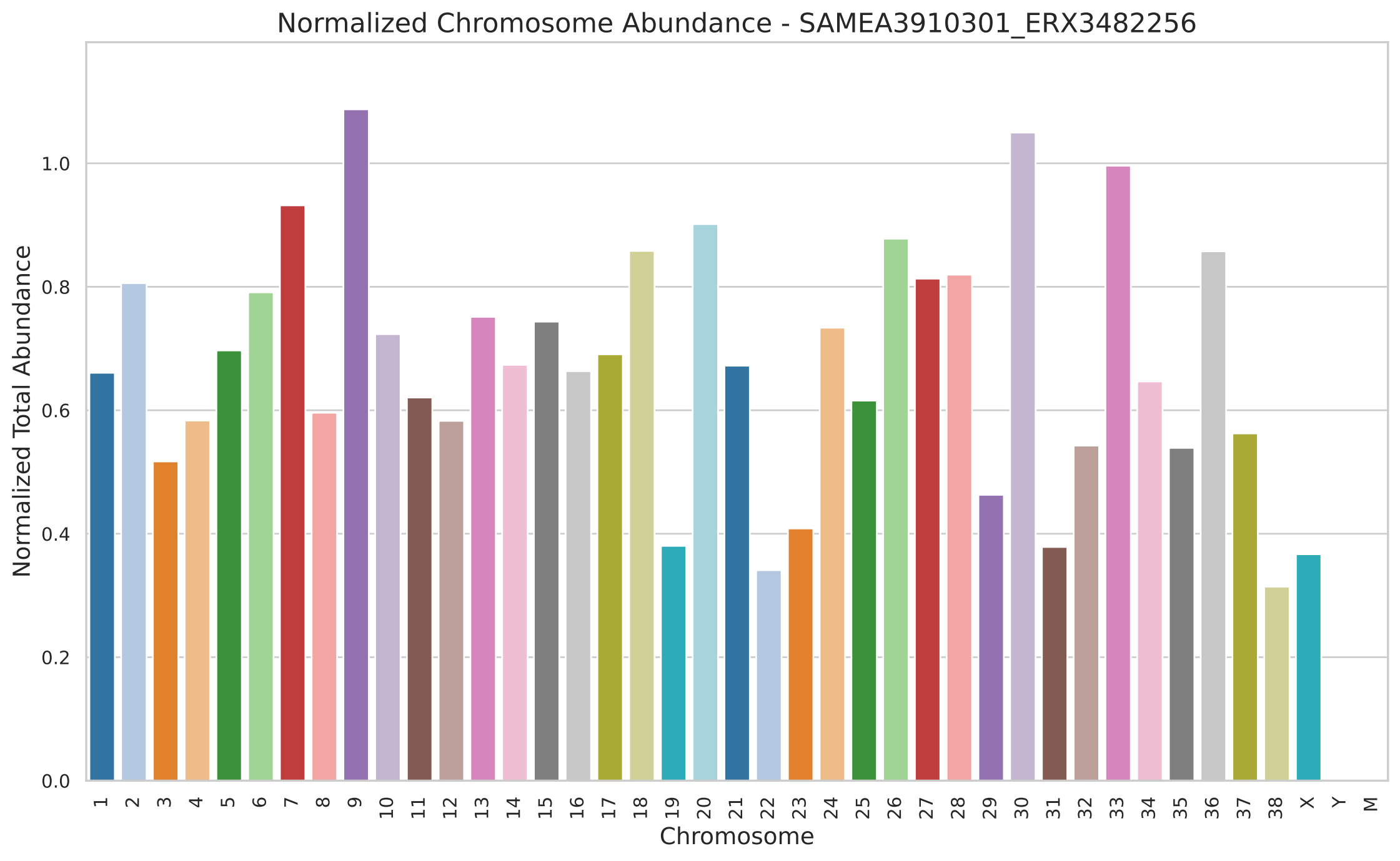

Normalized Chromosome Abundance - SAMN12220981_SRX6660736
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

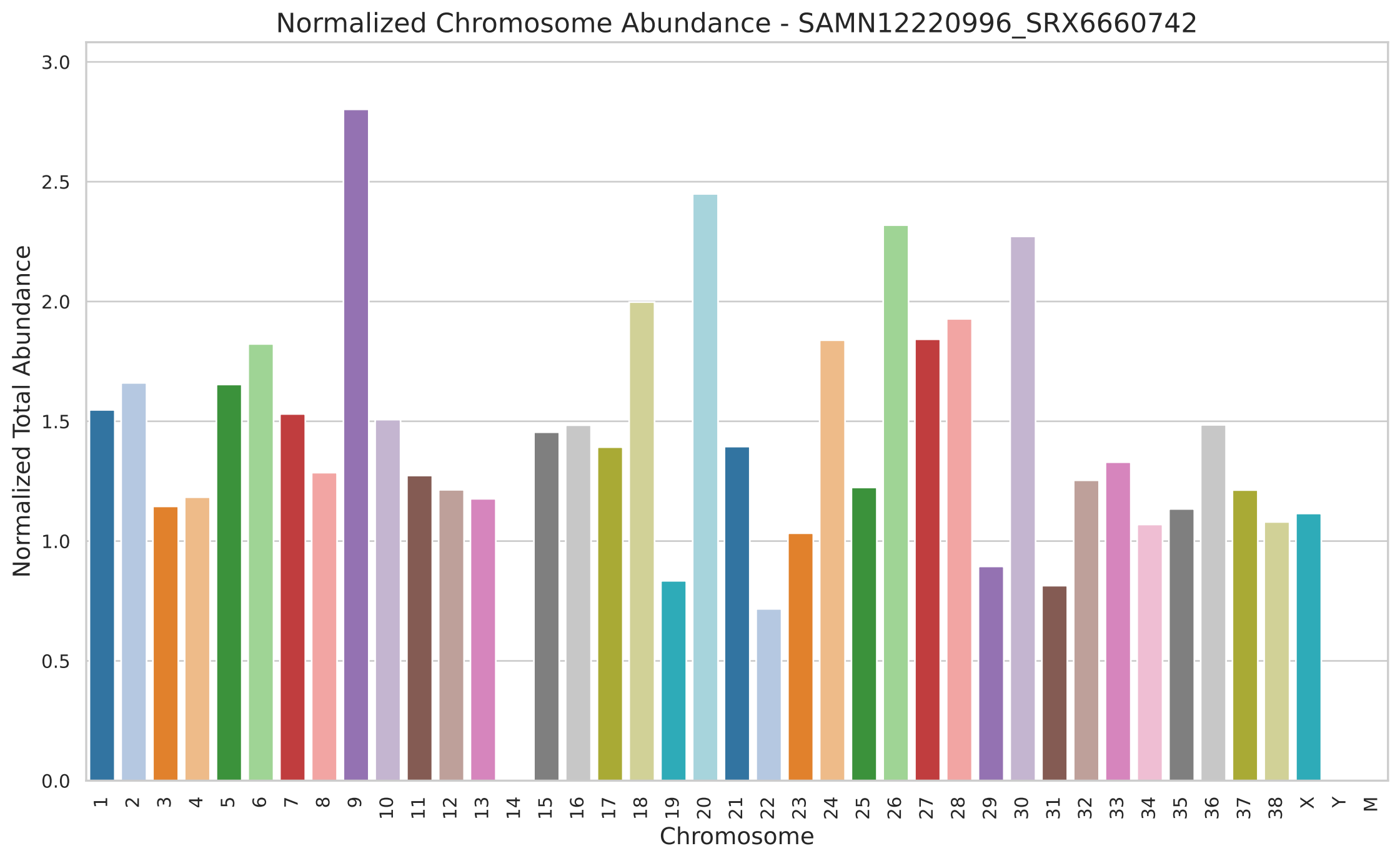

Normalized Chromosome Abundance - SAMN10380254_SRX4979853
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

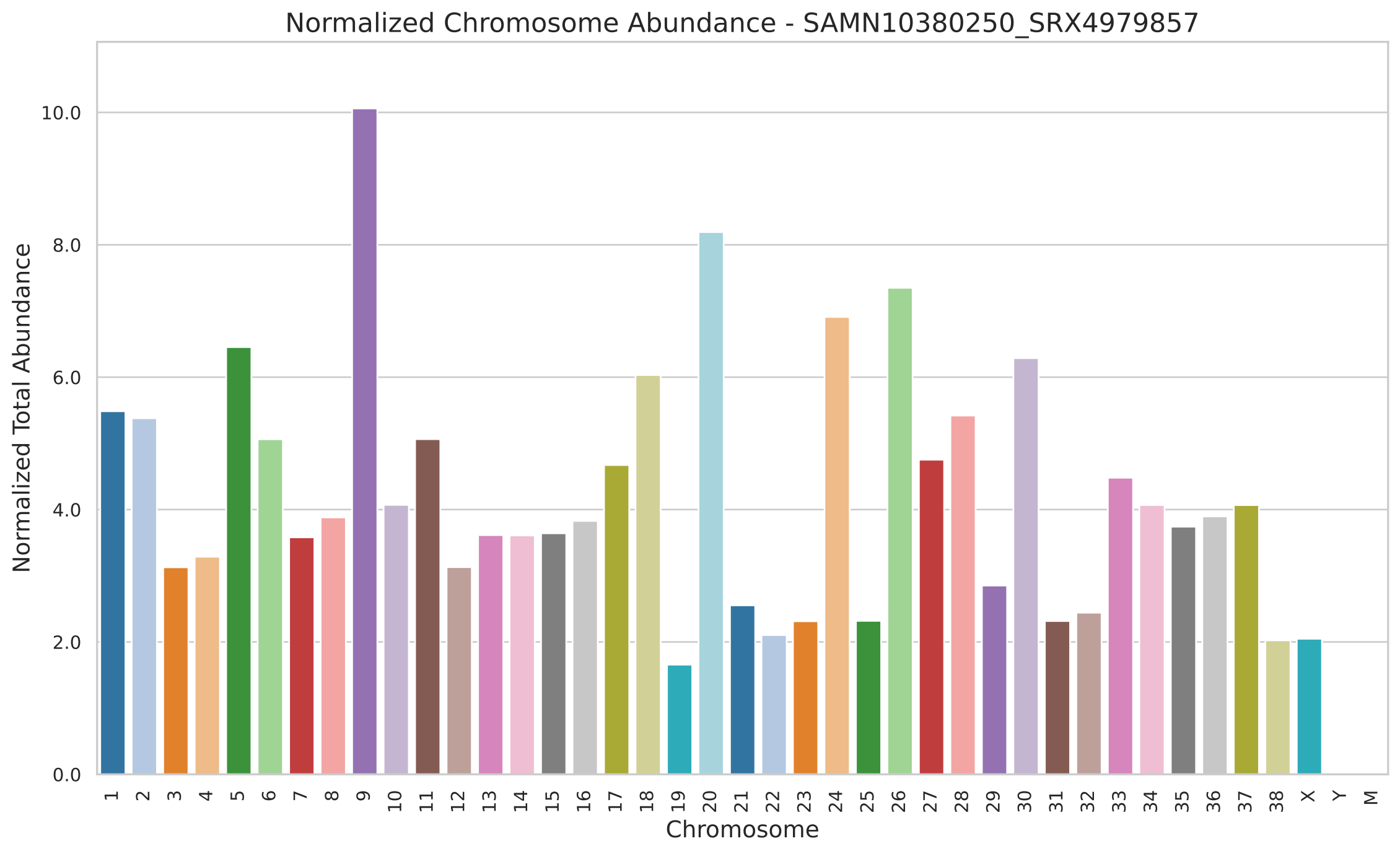

Normalized Chromosome Abundance - SAMEA4673528_ERX3491032
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

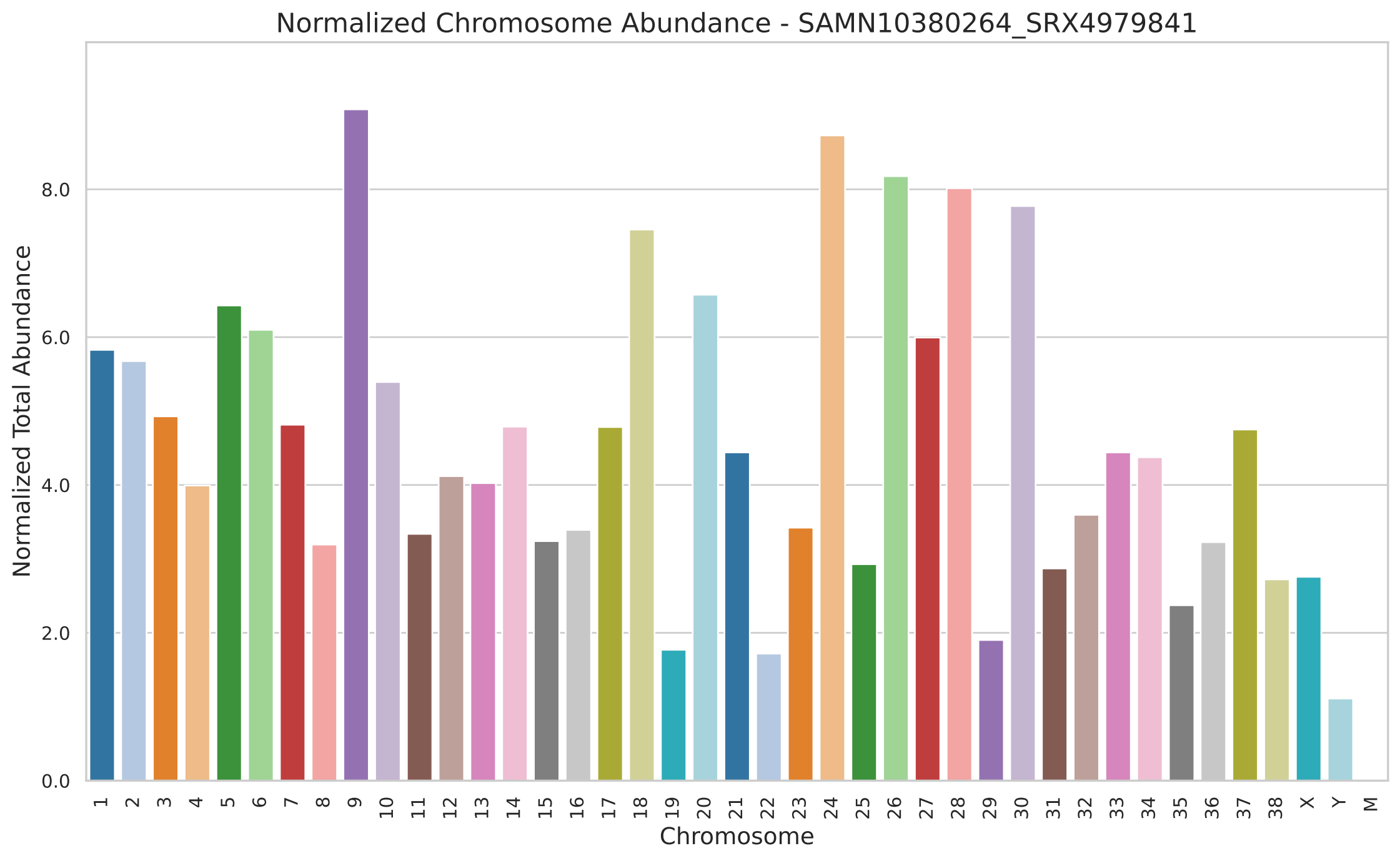

Normalized Chromosome Abundance - SAMEA3910325_ERX3482259
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

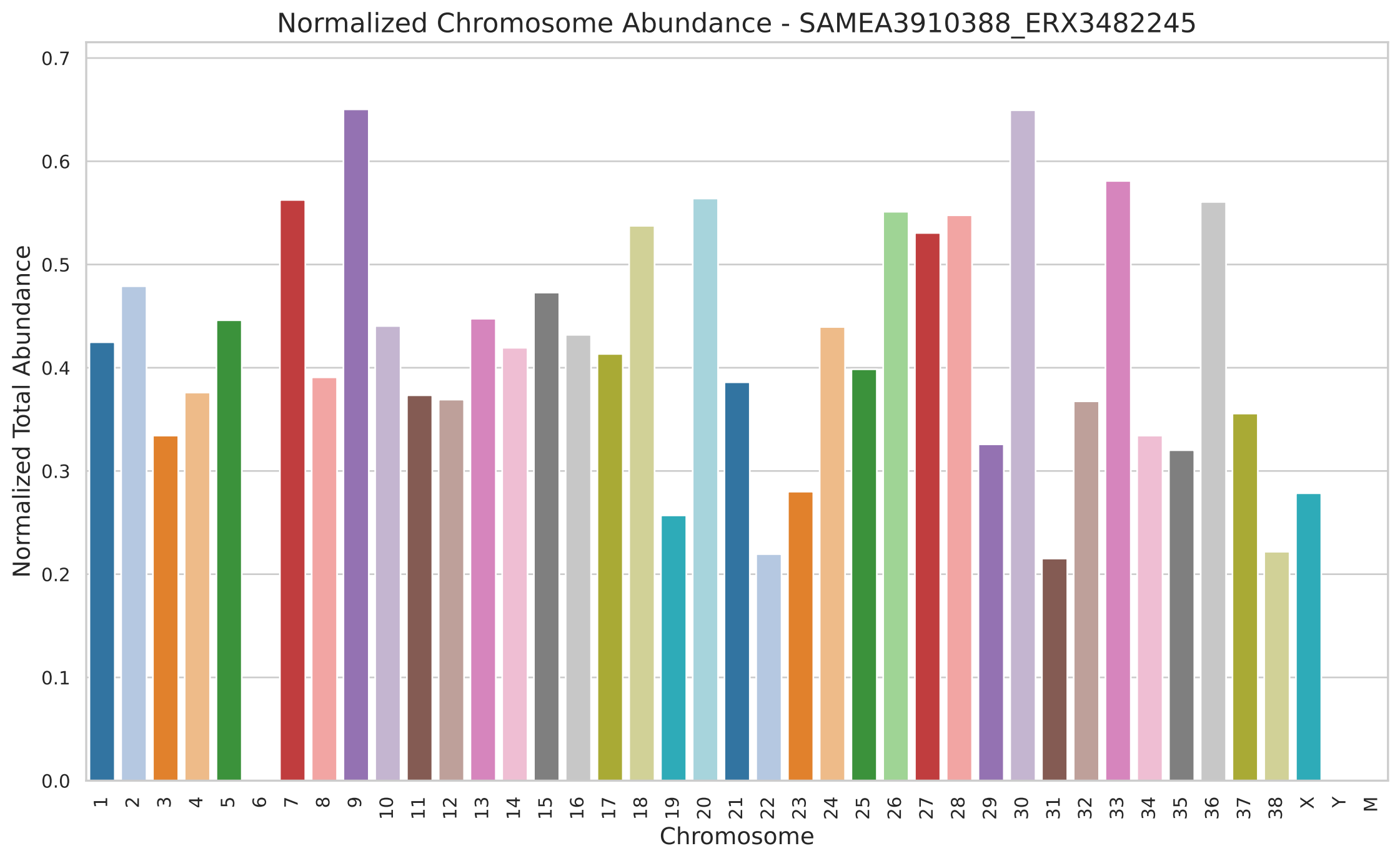

Normalized Chromosome Abundance - SAMEA3910269_ERX3482234
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

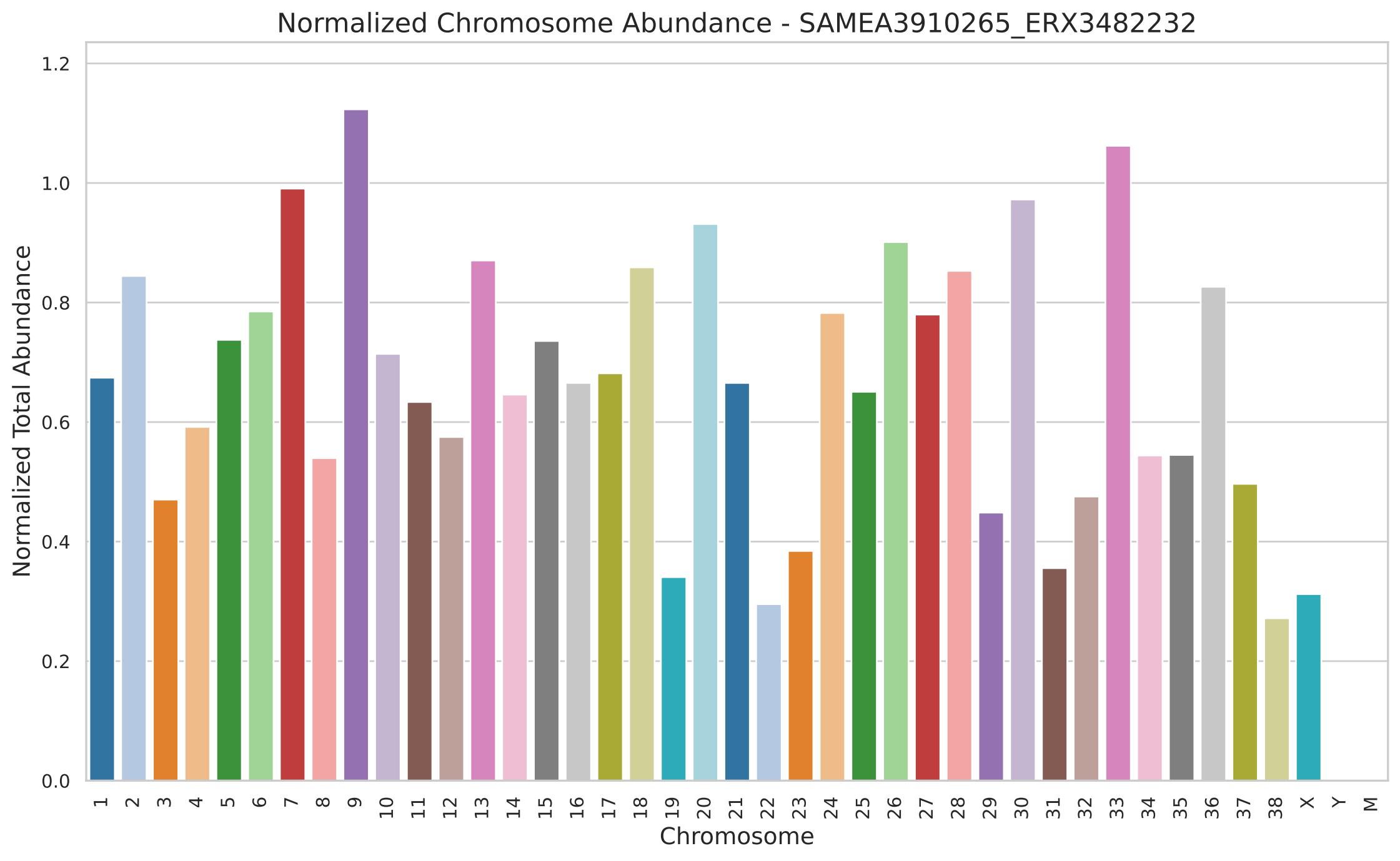

Normalized Chromosome Abundance - SAMEA3910301_ERX3482256
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

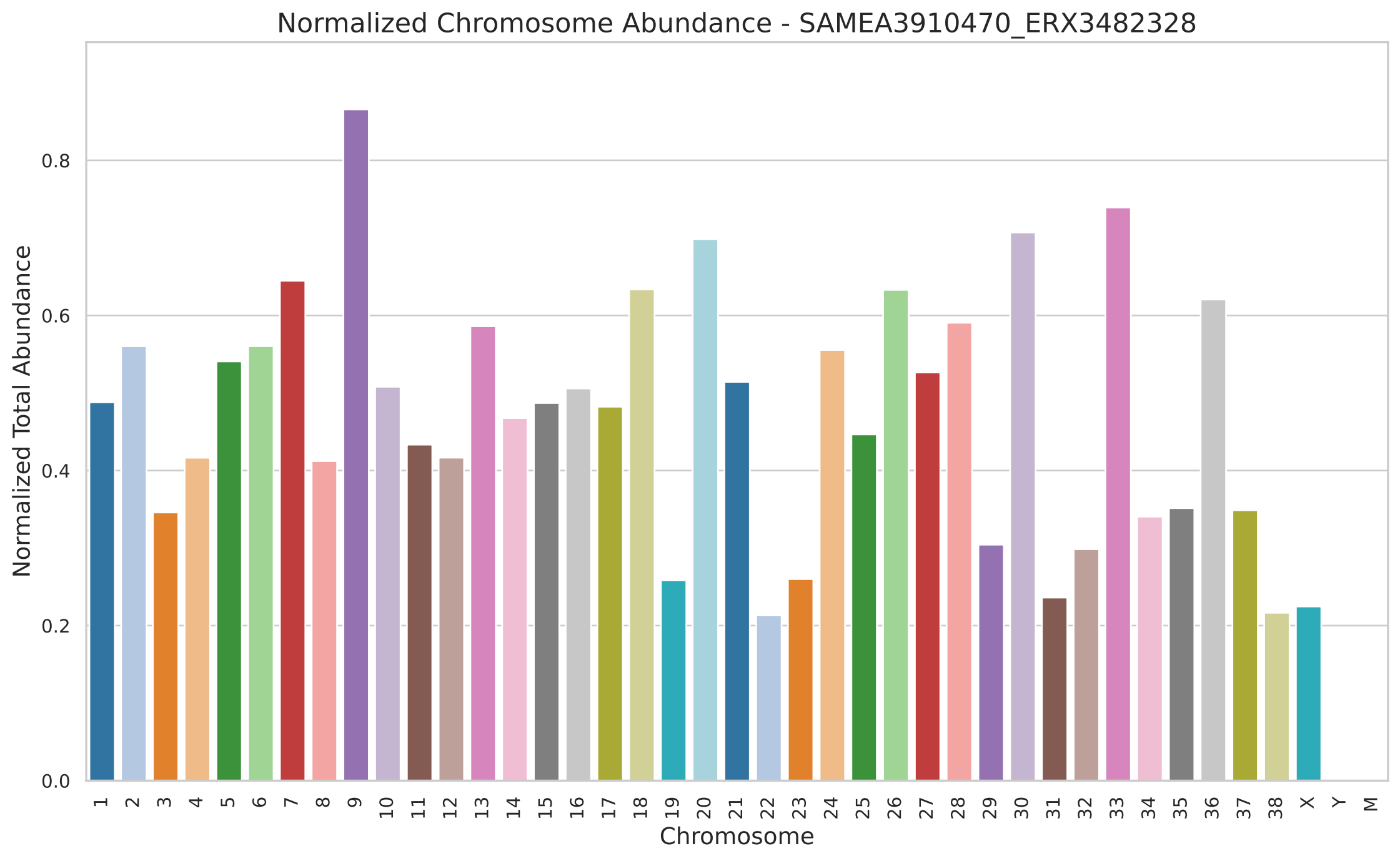

Normalized Chromosome Abundance - SAMN12220996_SRX6660742
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

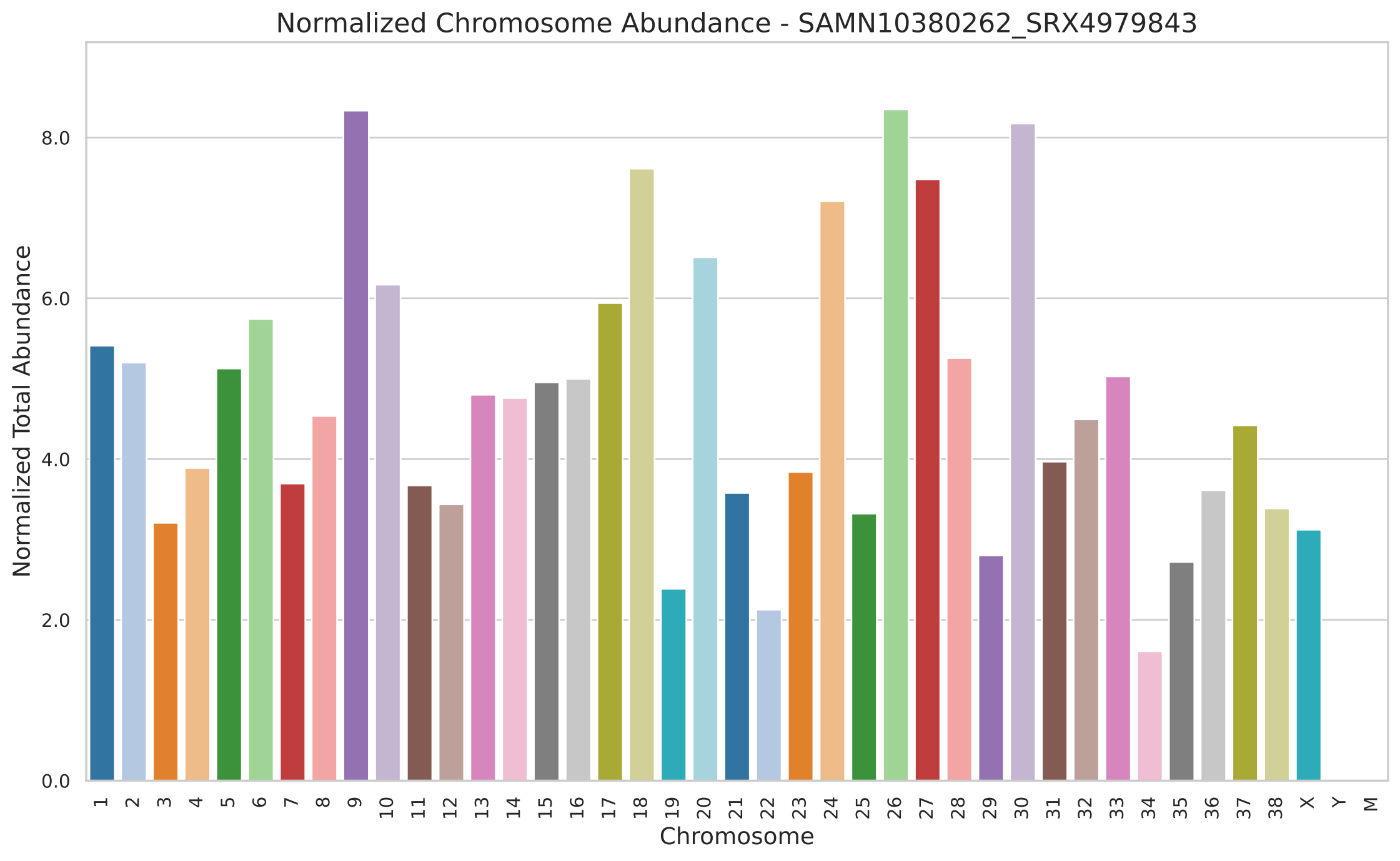

Normalized Chromosome Abundance - SAMN10380250_SRX4979857
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

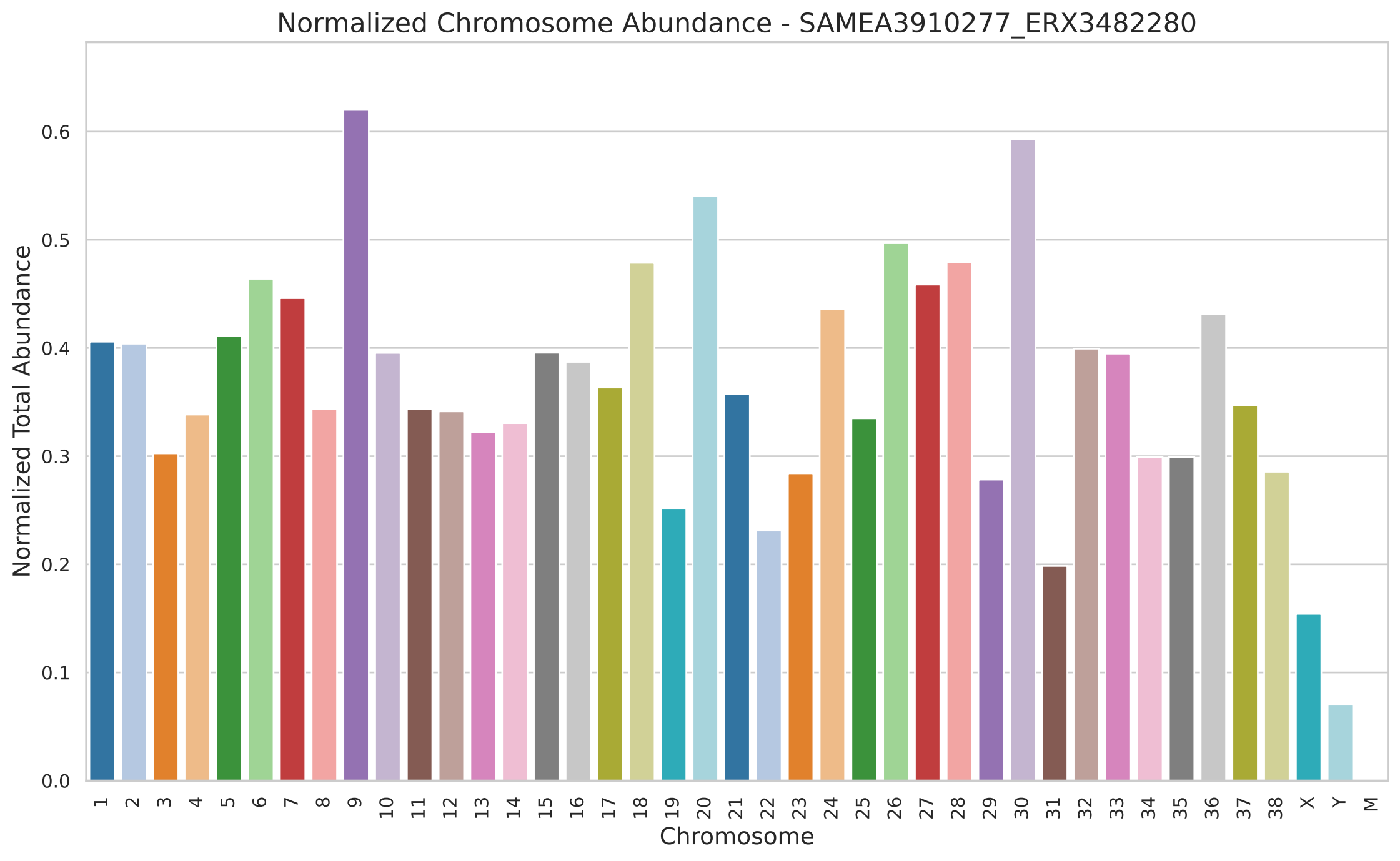

Normalized Chromosome Abundance - SAMN10380264_SRX4979841
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

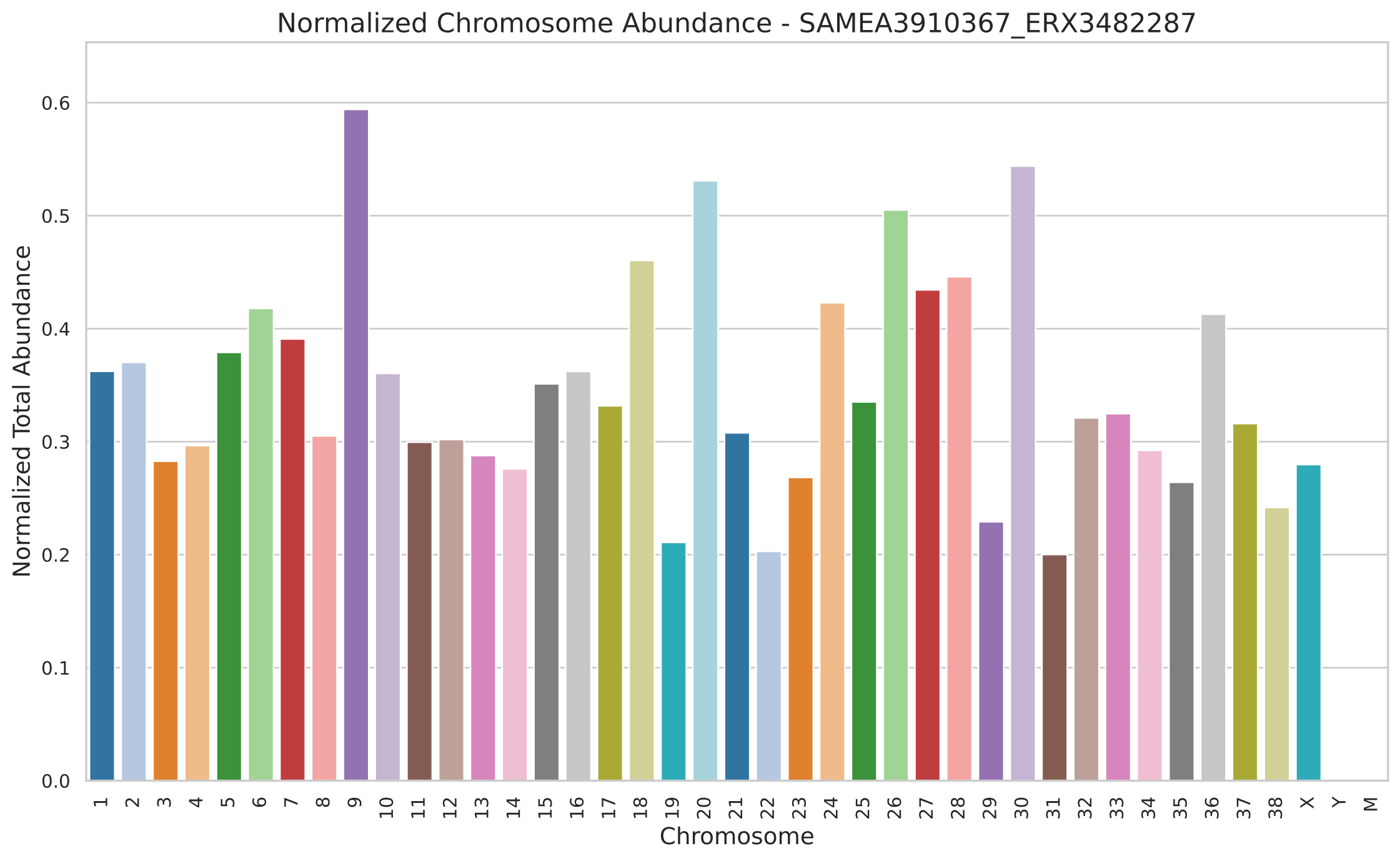

Normalized Chromosome Abundance - SAMEA3910388_ERX3482245
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

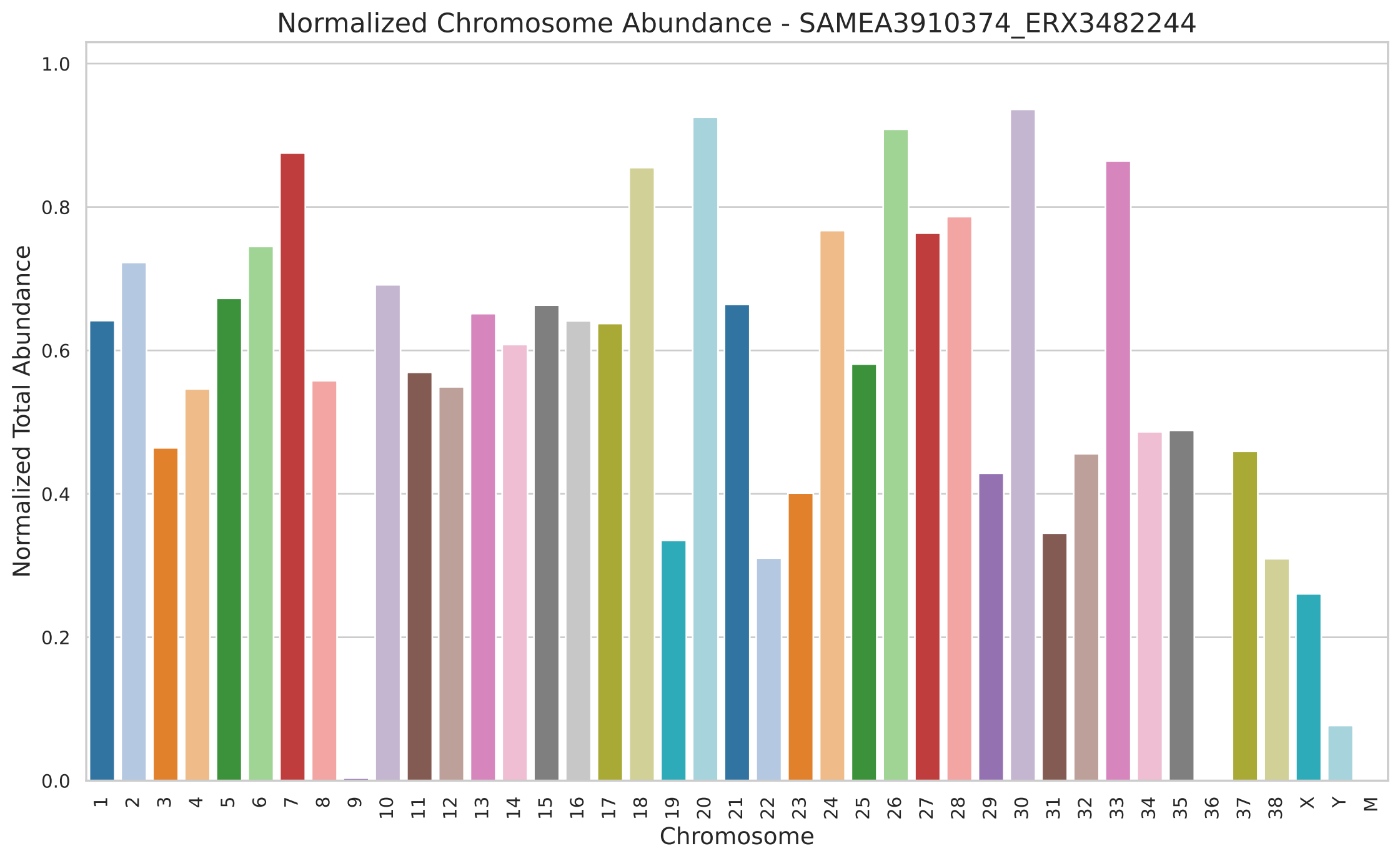

Normalized Chromosome Abundance - SAMEA3910265_ERX3482232
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

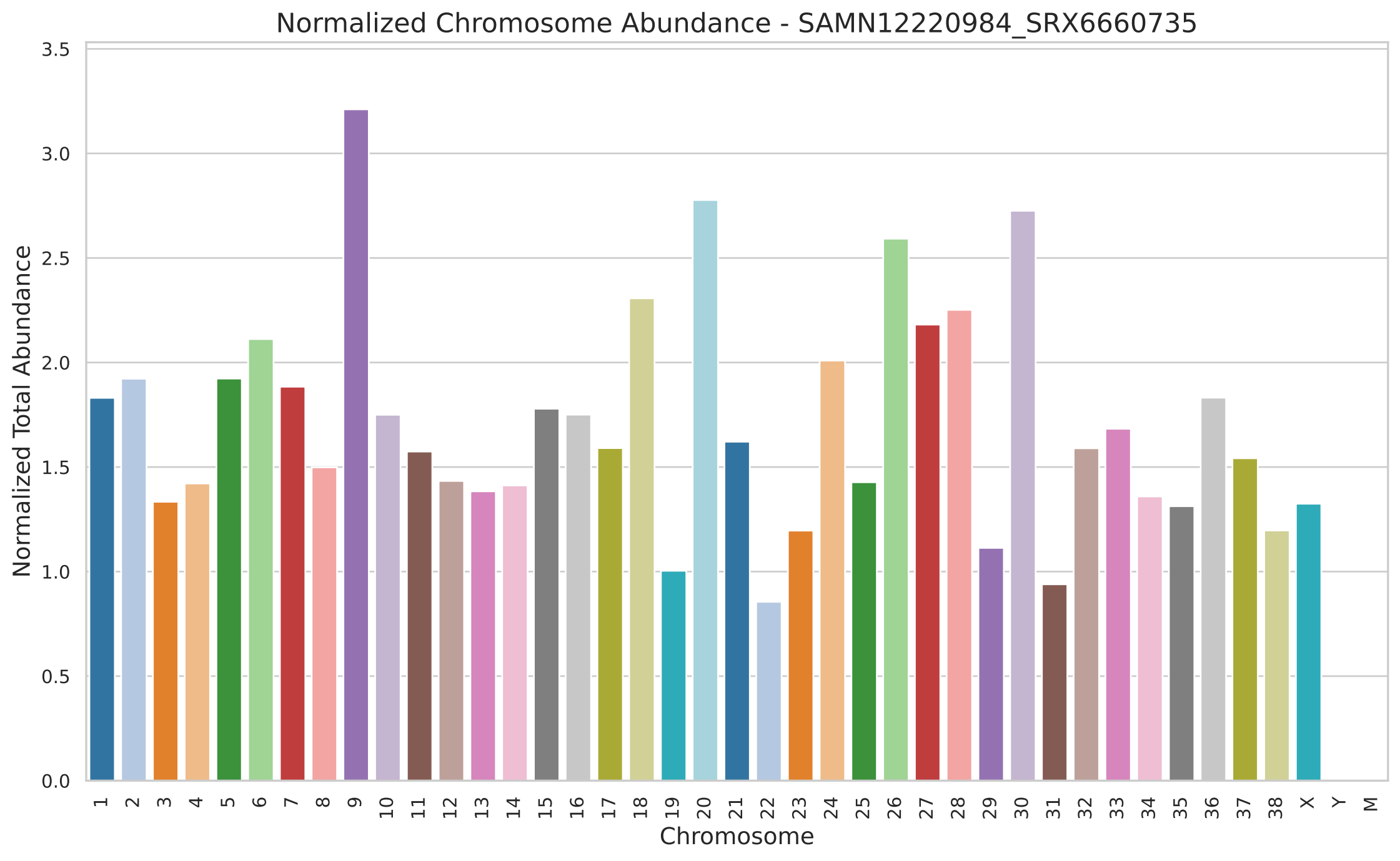

Normalized Chromosome Abundance - SAMEA3910470_ERX3482328
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

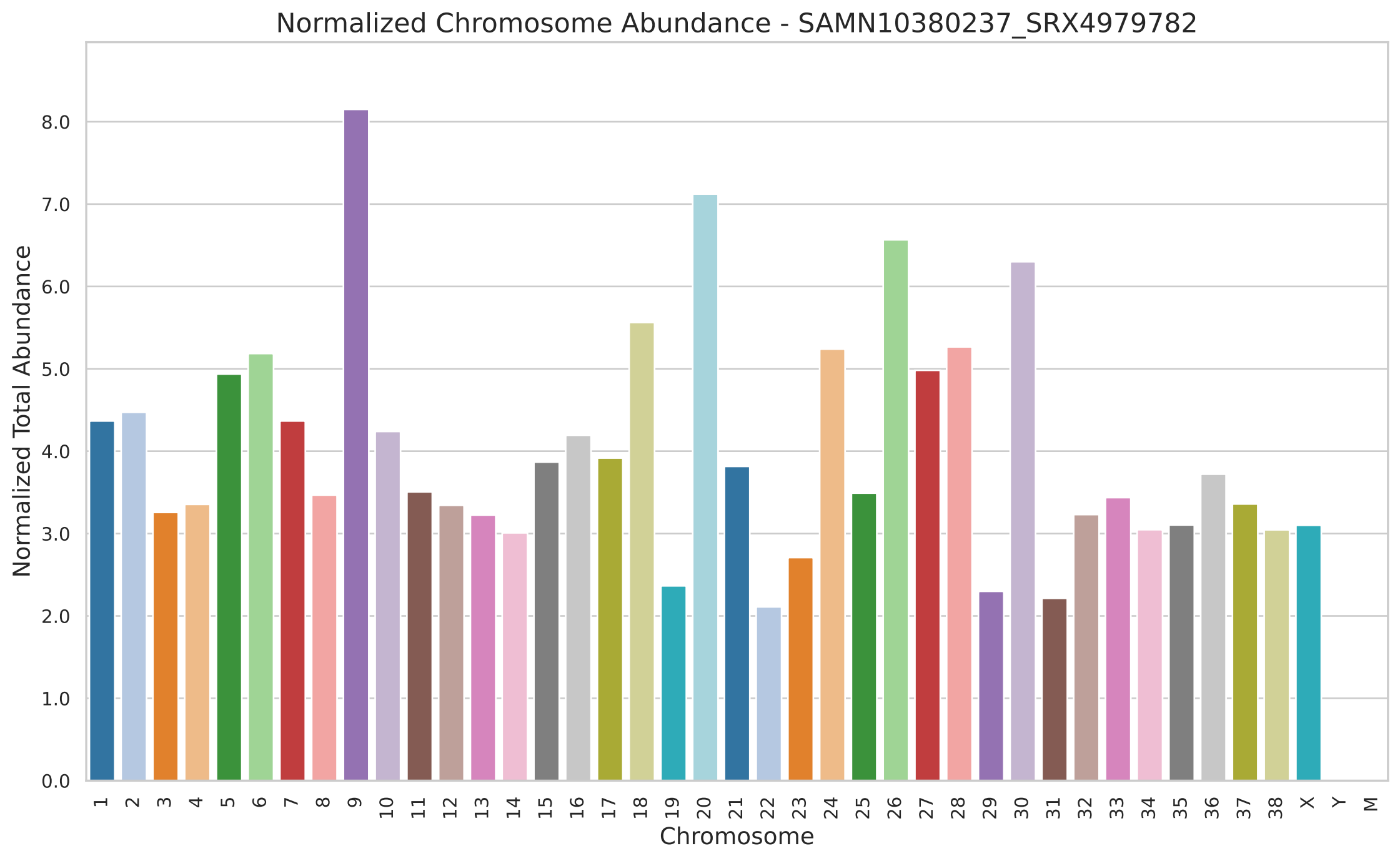

Normalized Chromosome Abundance - SAMN10380262_SRX4979843
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

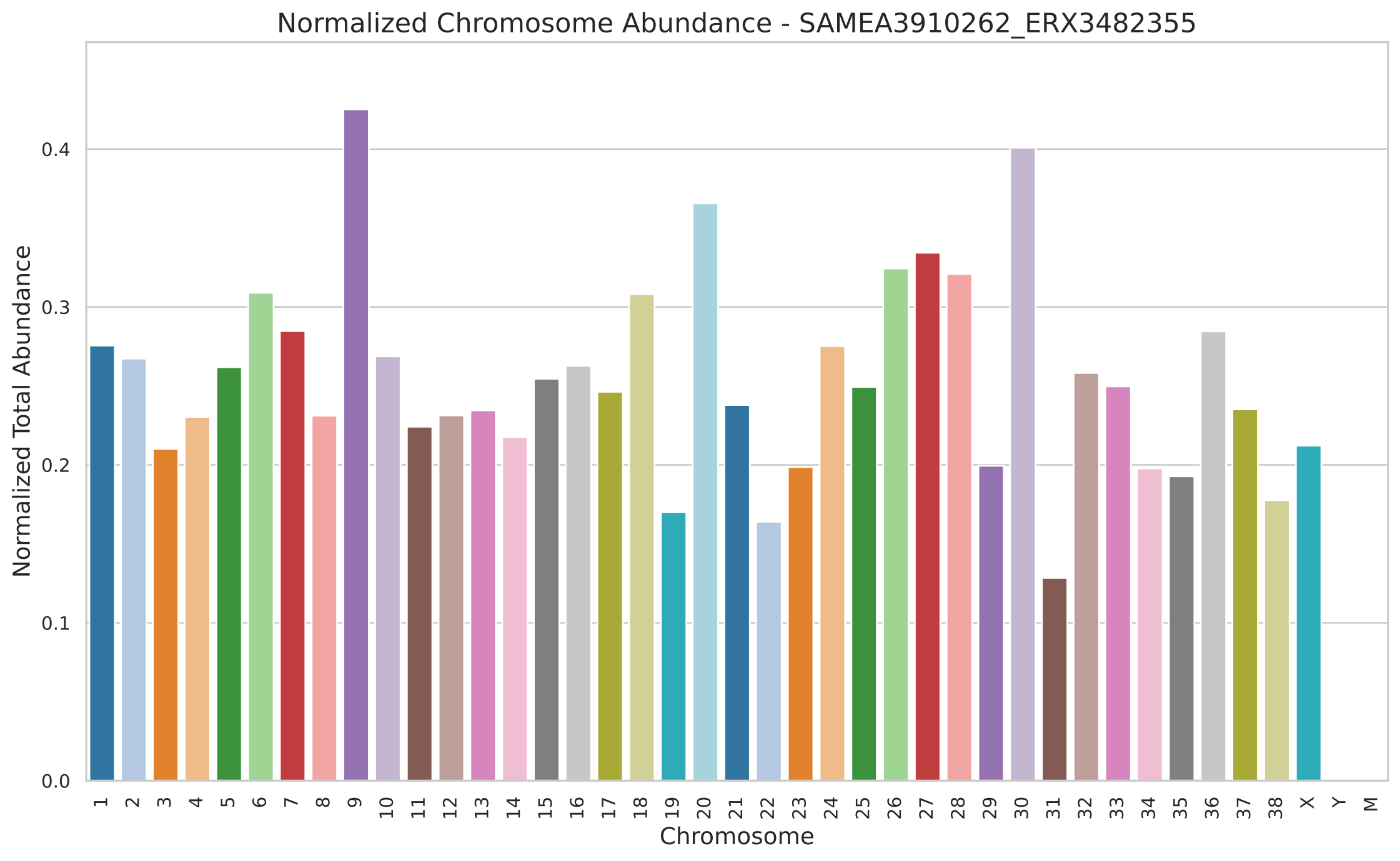

Normalized Chromosome Abundance - SAMEA3910277_ERX3482280
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

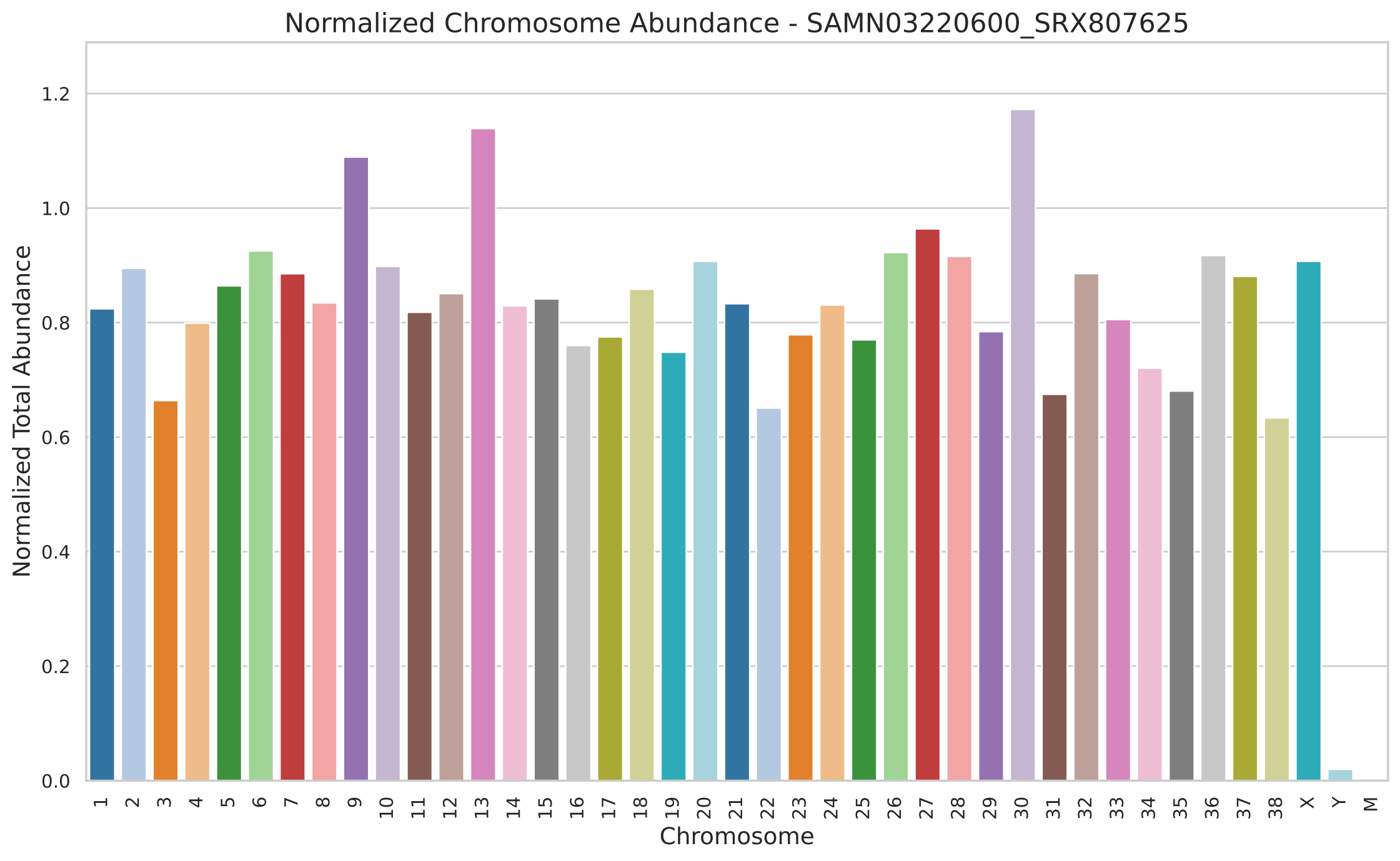

Normalized Chromosome Abundance - SAMEA3910367_ERX3482287
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

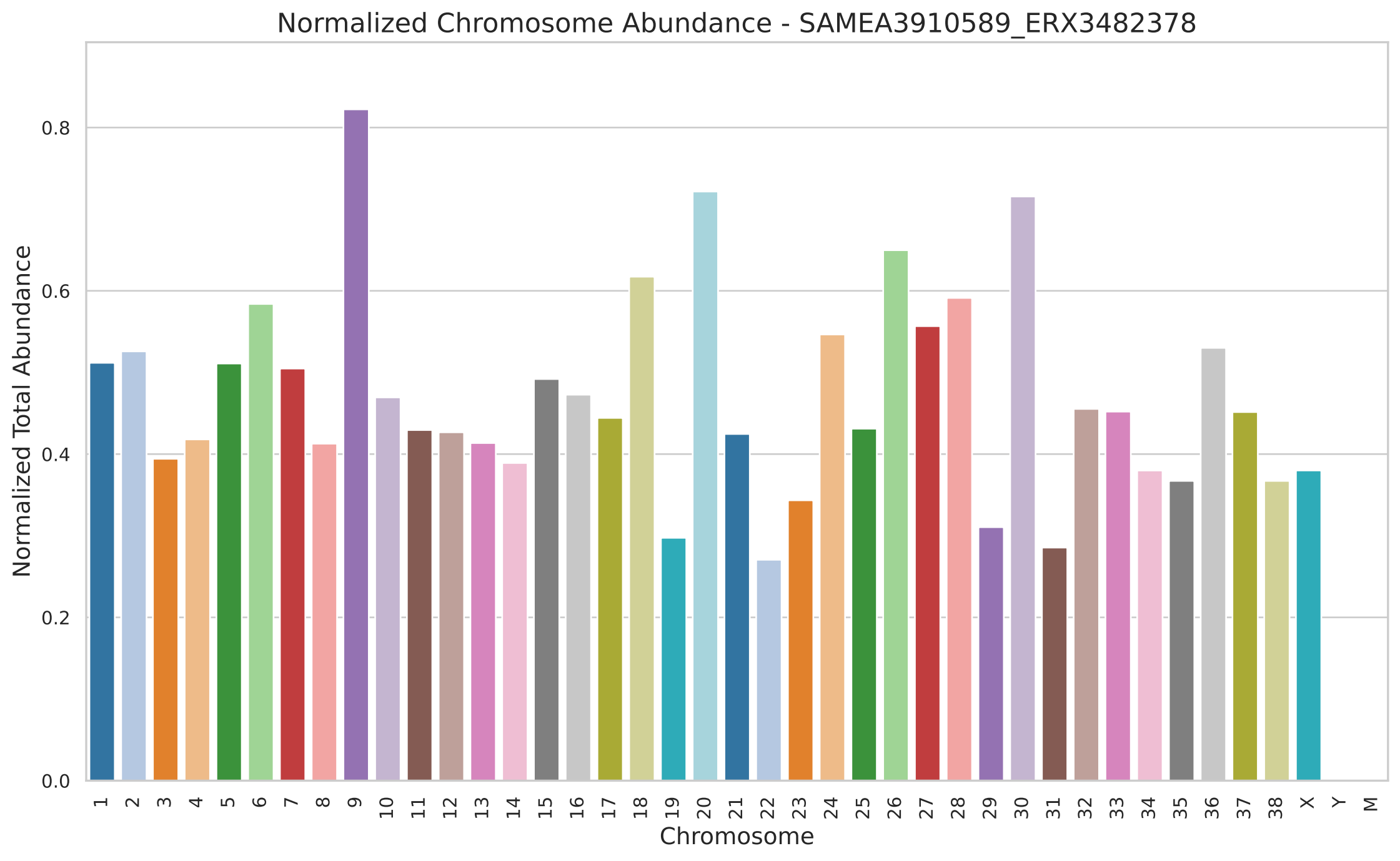

Normalized Chromosome Abundance - SAMEA3910374_ERX3482244
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

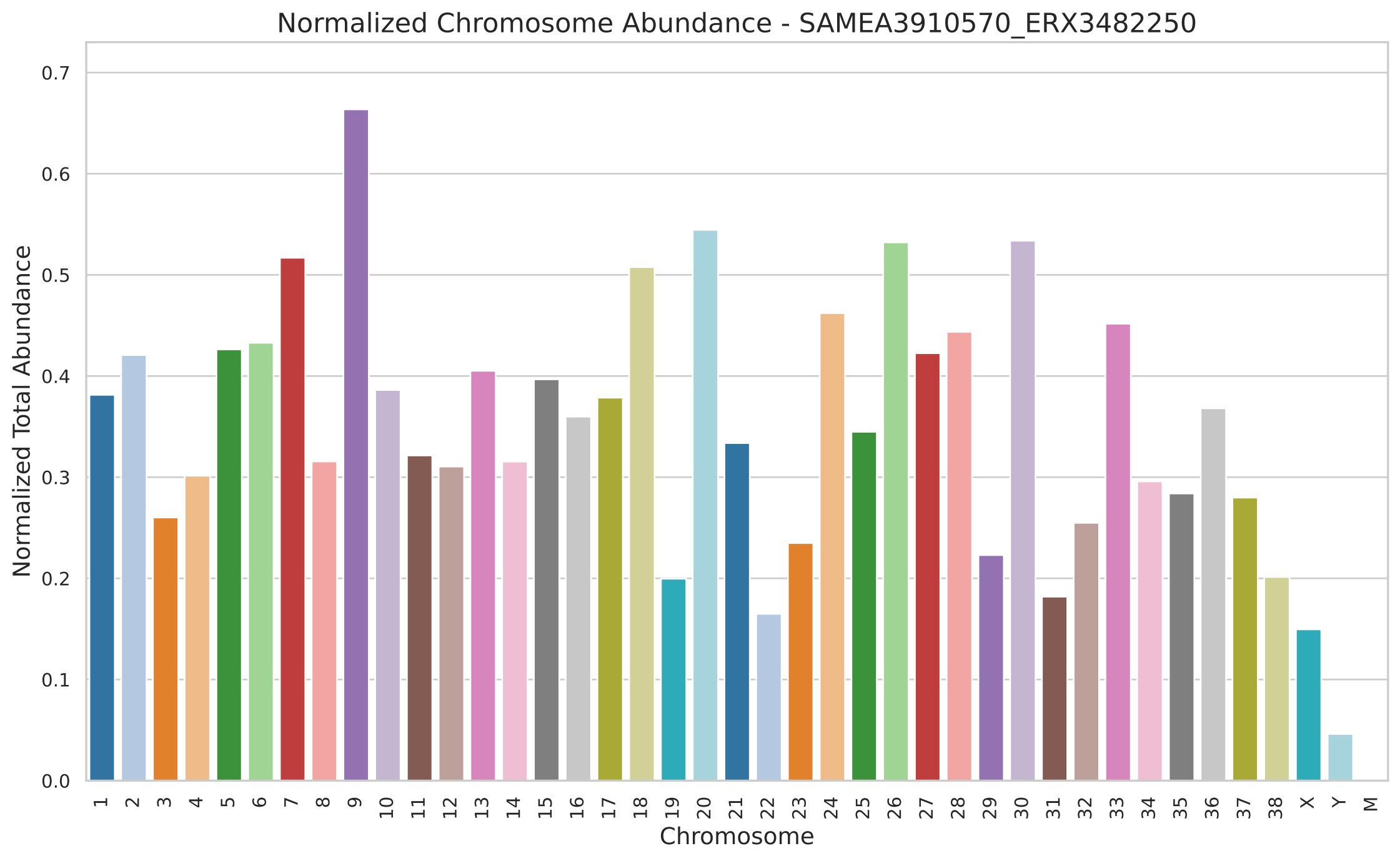

Normalized Chromosome Abundance - SAMN12220984_SRX6660735
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

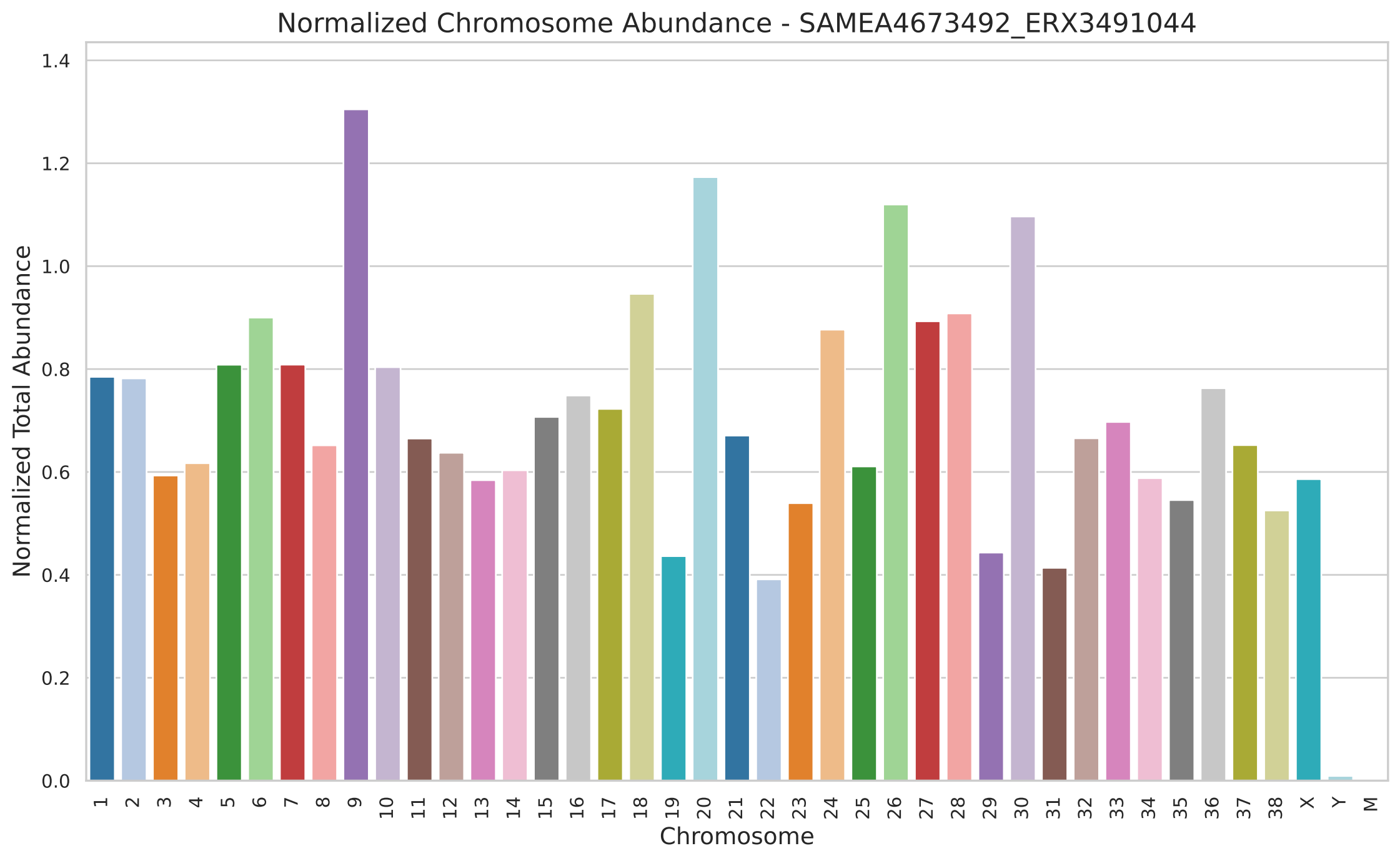

Normalized Chromosome Abundance - SAMN10380237_SRX4979782
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

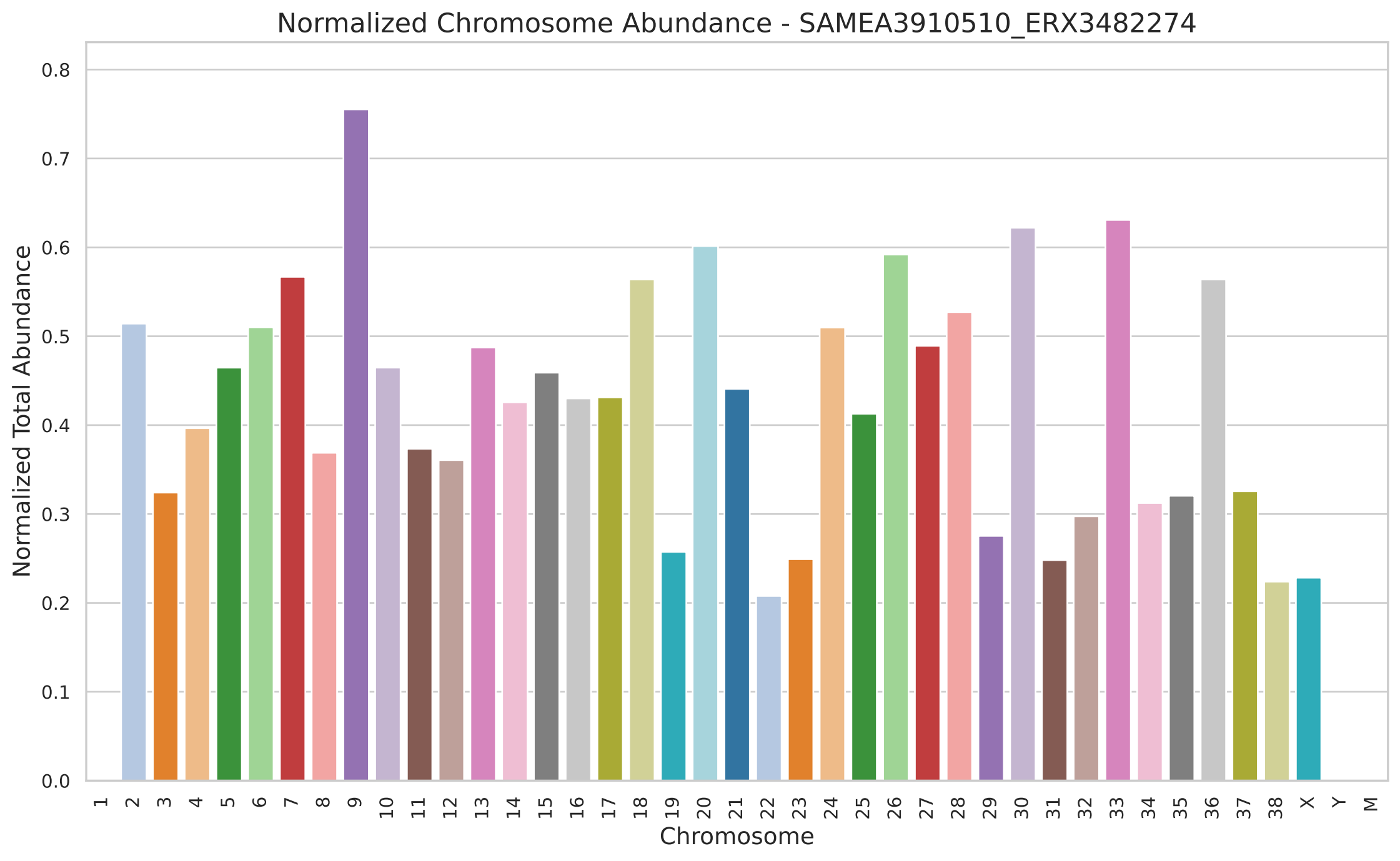

Normalized Chromosome Abundance - SAMEA3910262_ERX3482355
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

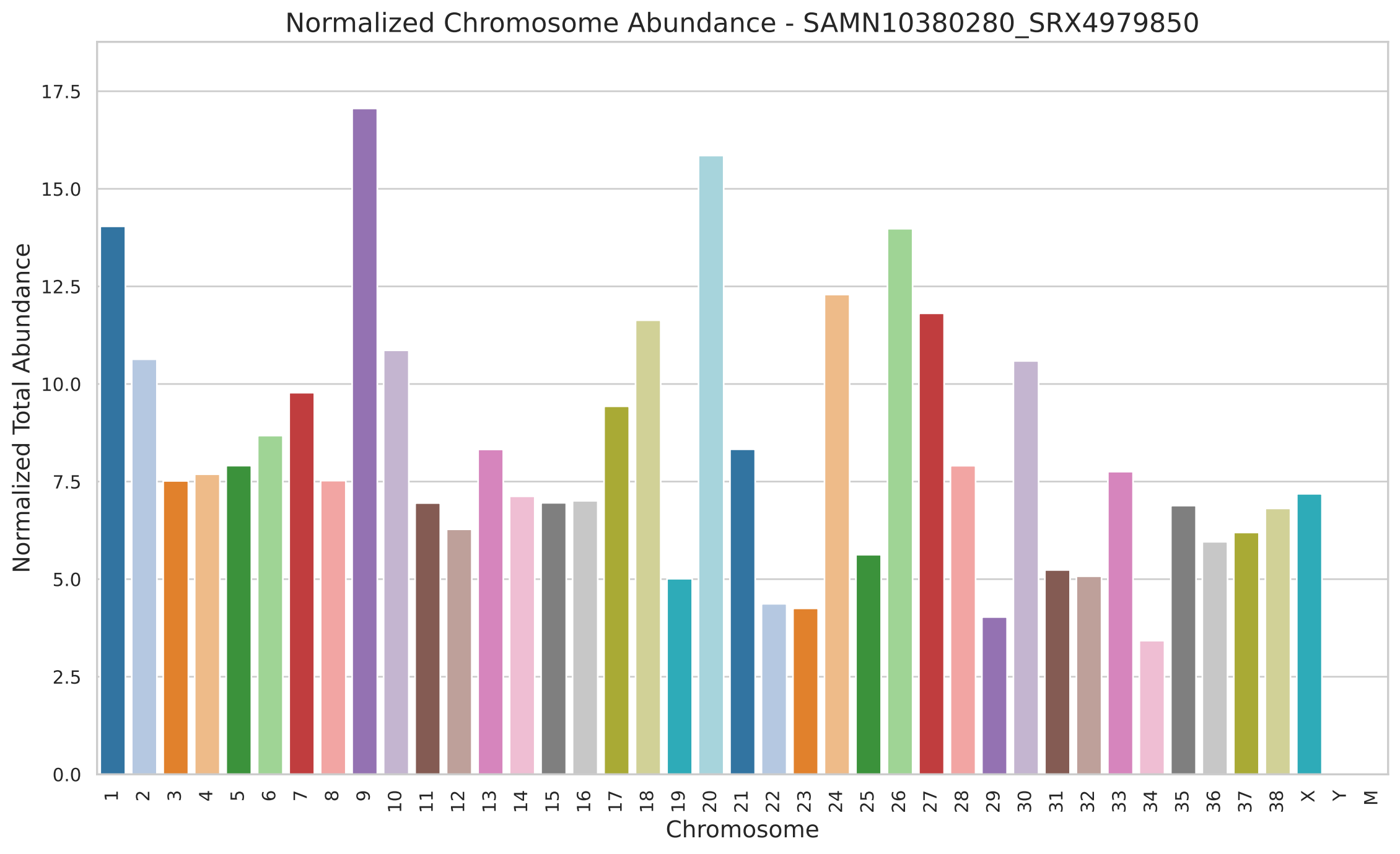

Normalized Chromosome Abundance - SAMN03220600_SRX807625
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

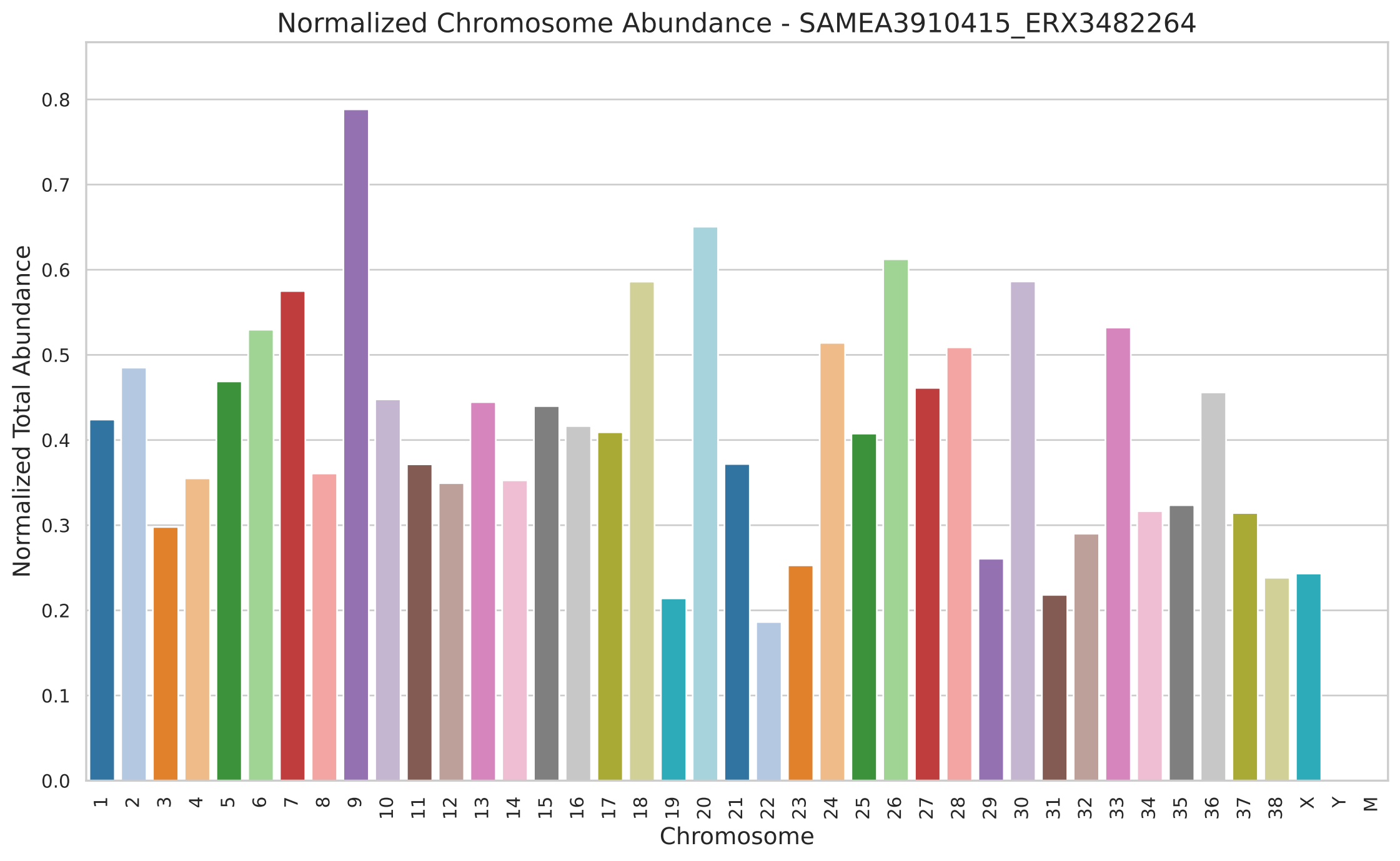

Normalized Chromosome Abundance - SAMEA3910589_ERX3482378
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

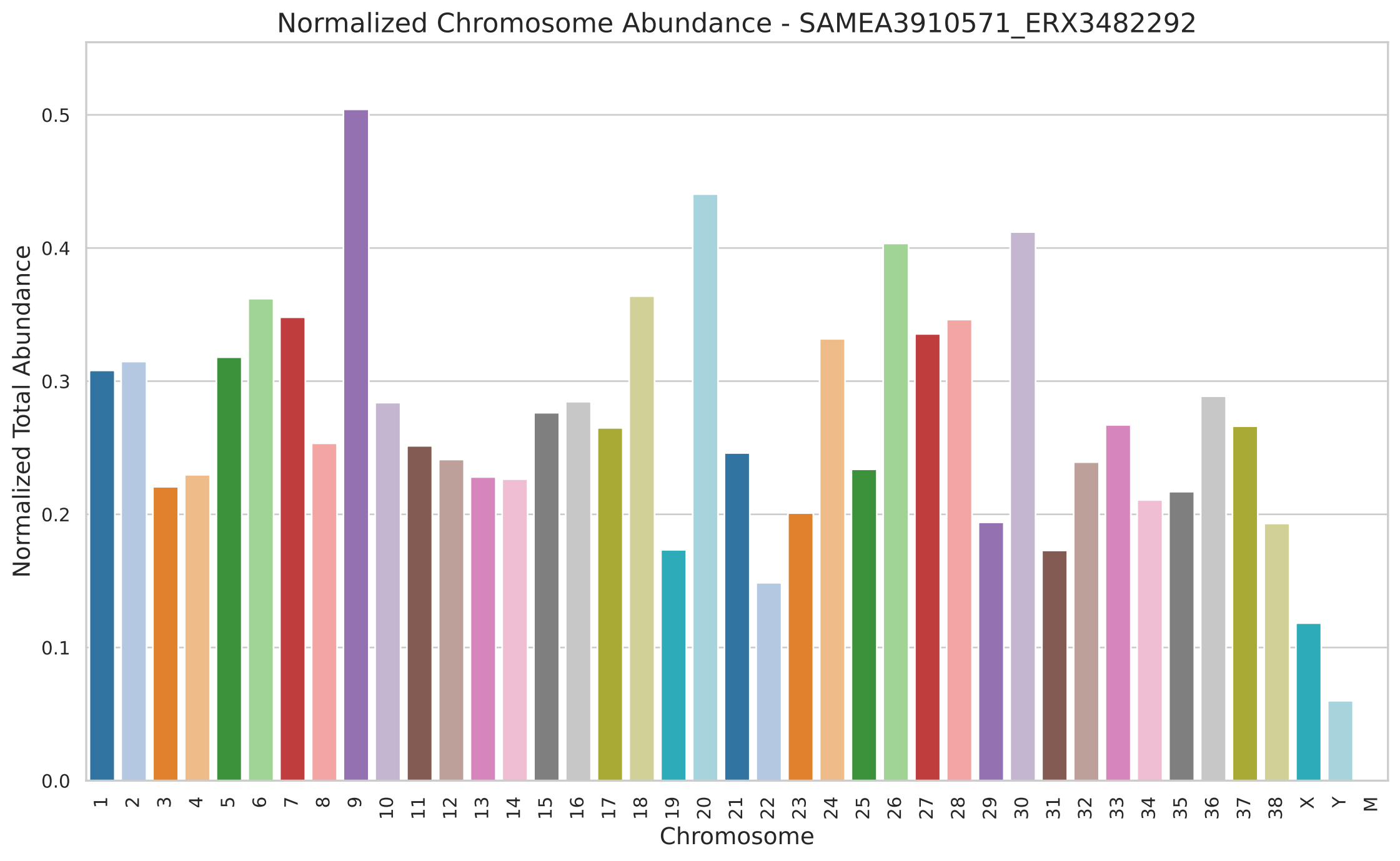

Normalized Chromosome Abundance - SAMEA3910570_ERX3482250
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

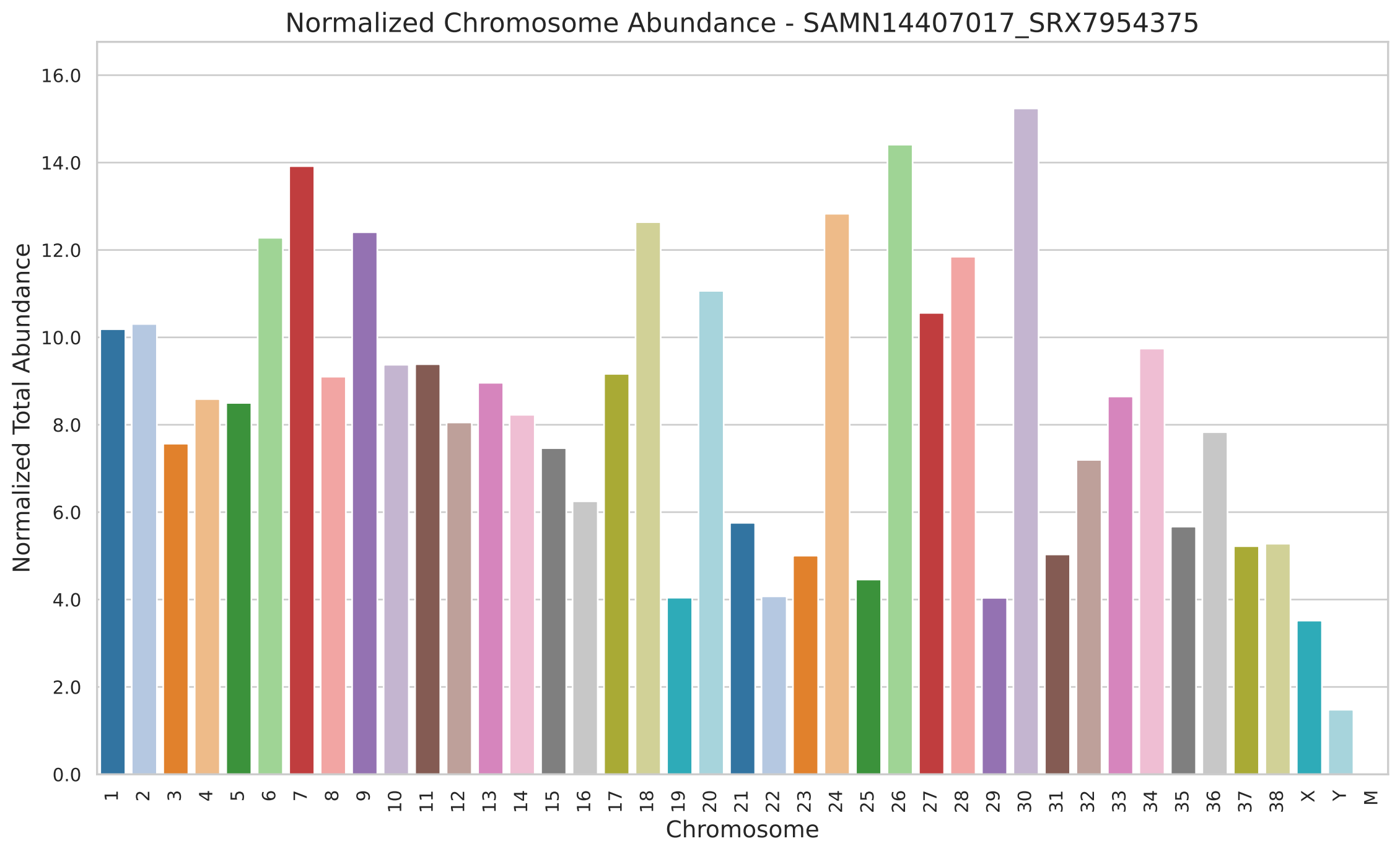

Normalized Chromosome Abundance - SAMEA4673492_ERX3491044
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

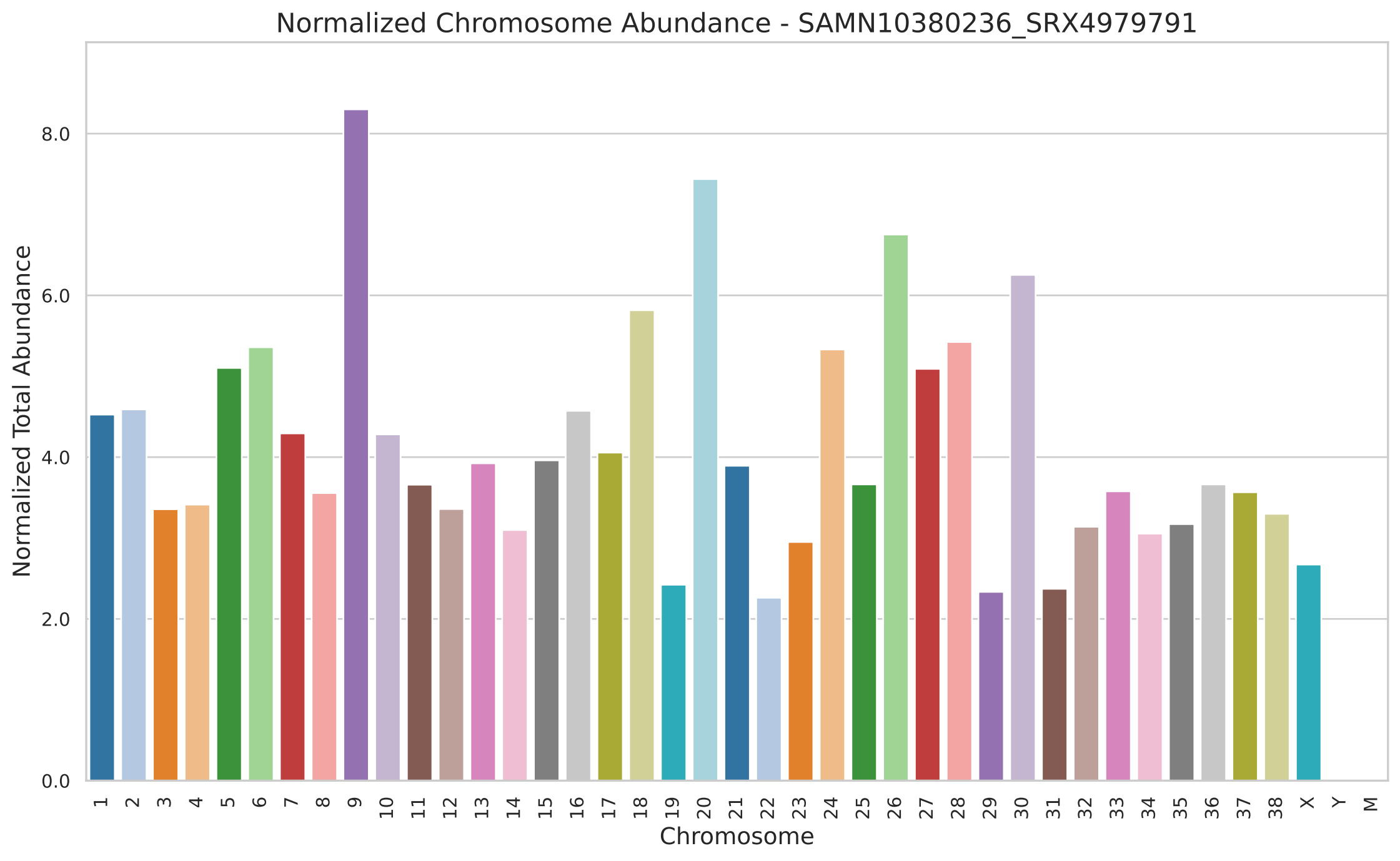

Normalized Chromosome Abundance - SAMEA3910510_ERX3482274
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

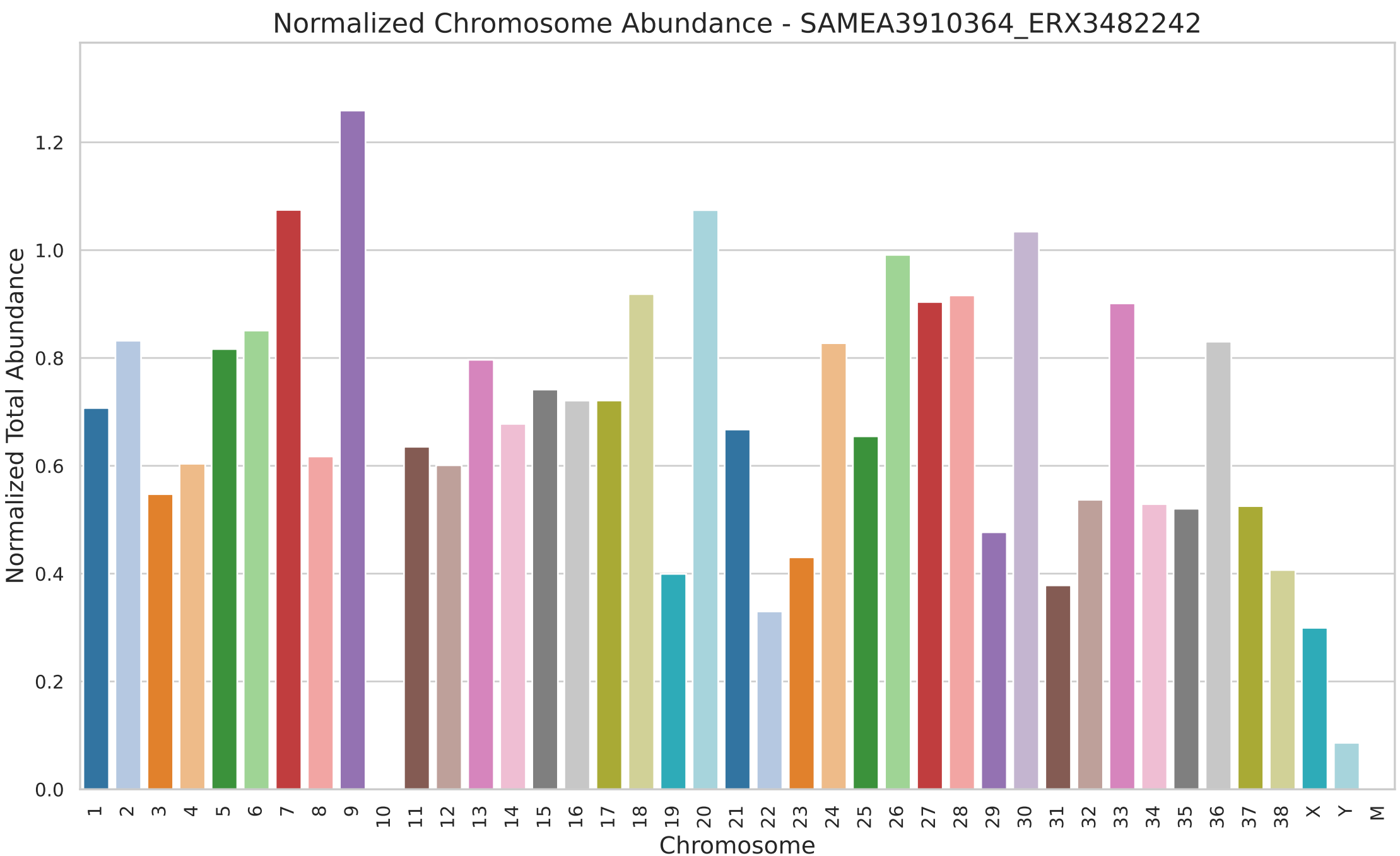

Normalized Chromosome Abundance - SAMN10380280_SRX4979850
Normalized Total Abundance
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

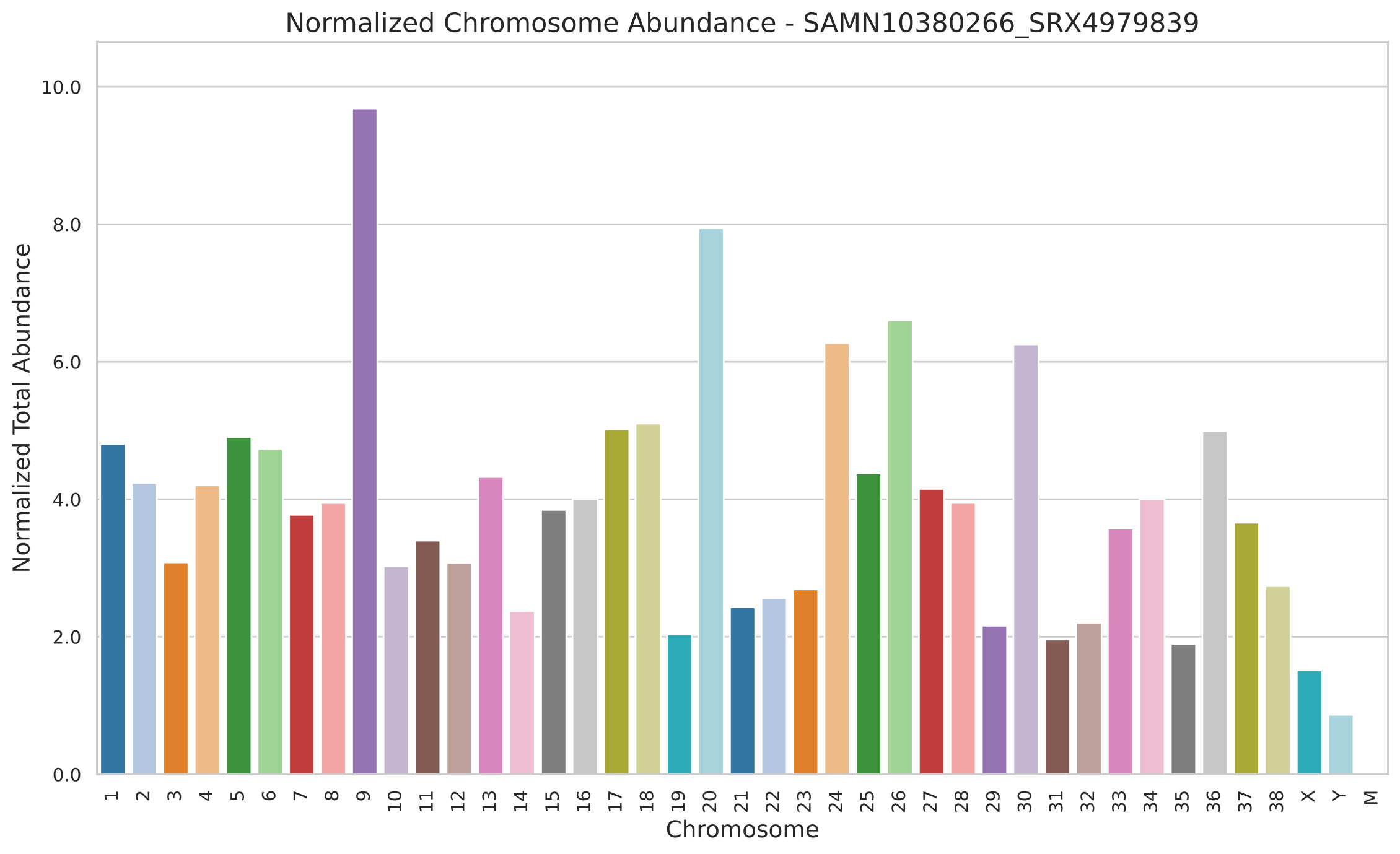

Normalized Chromosome Abundance - SAMEA3910415_ERX3482264
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

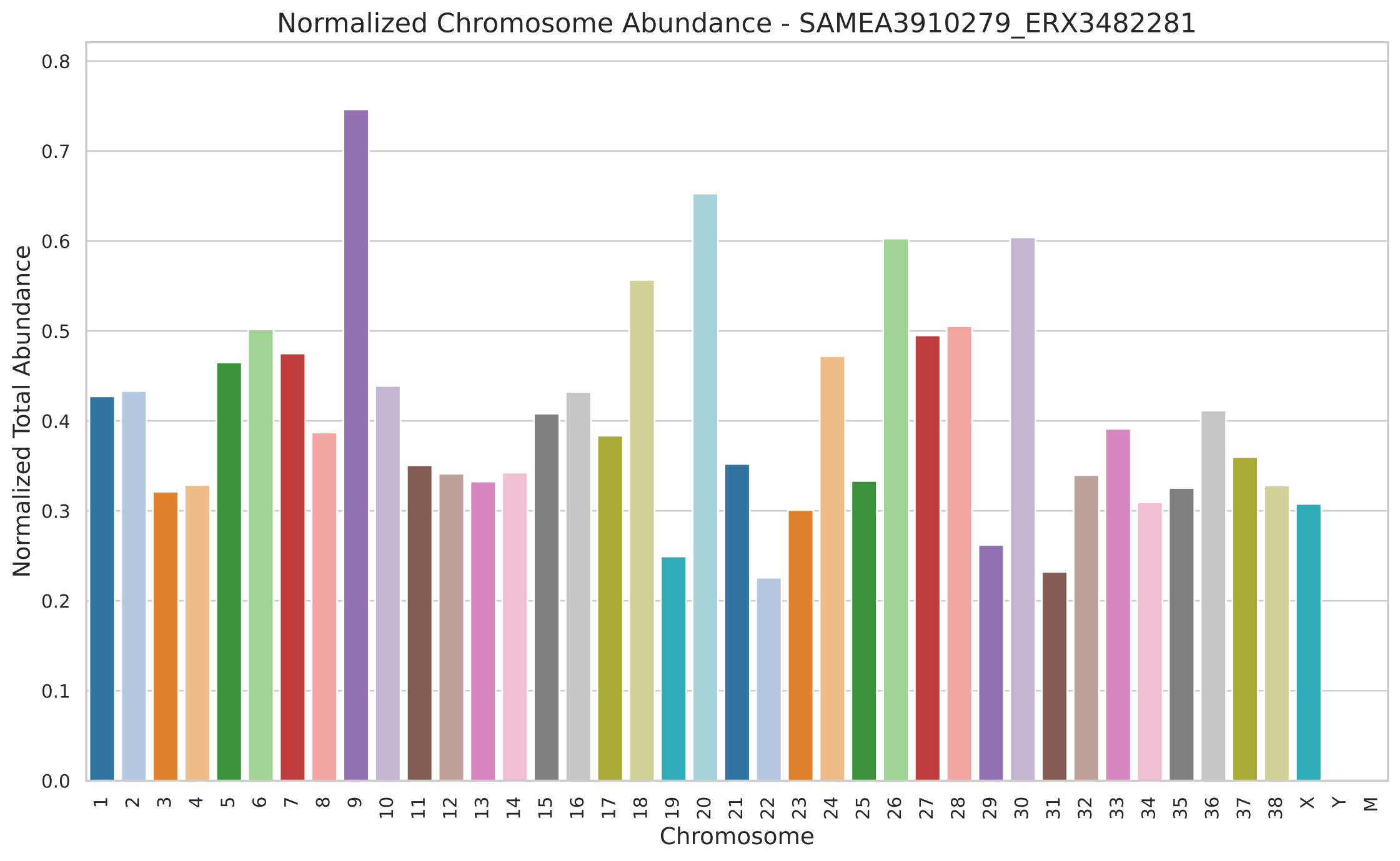

Normalized Chromosome Abundance - SAMEA3910571_ERX3482292
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

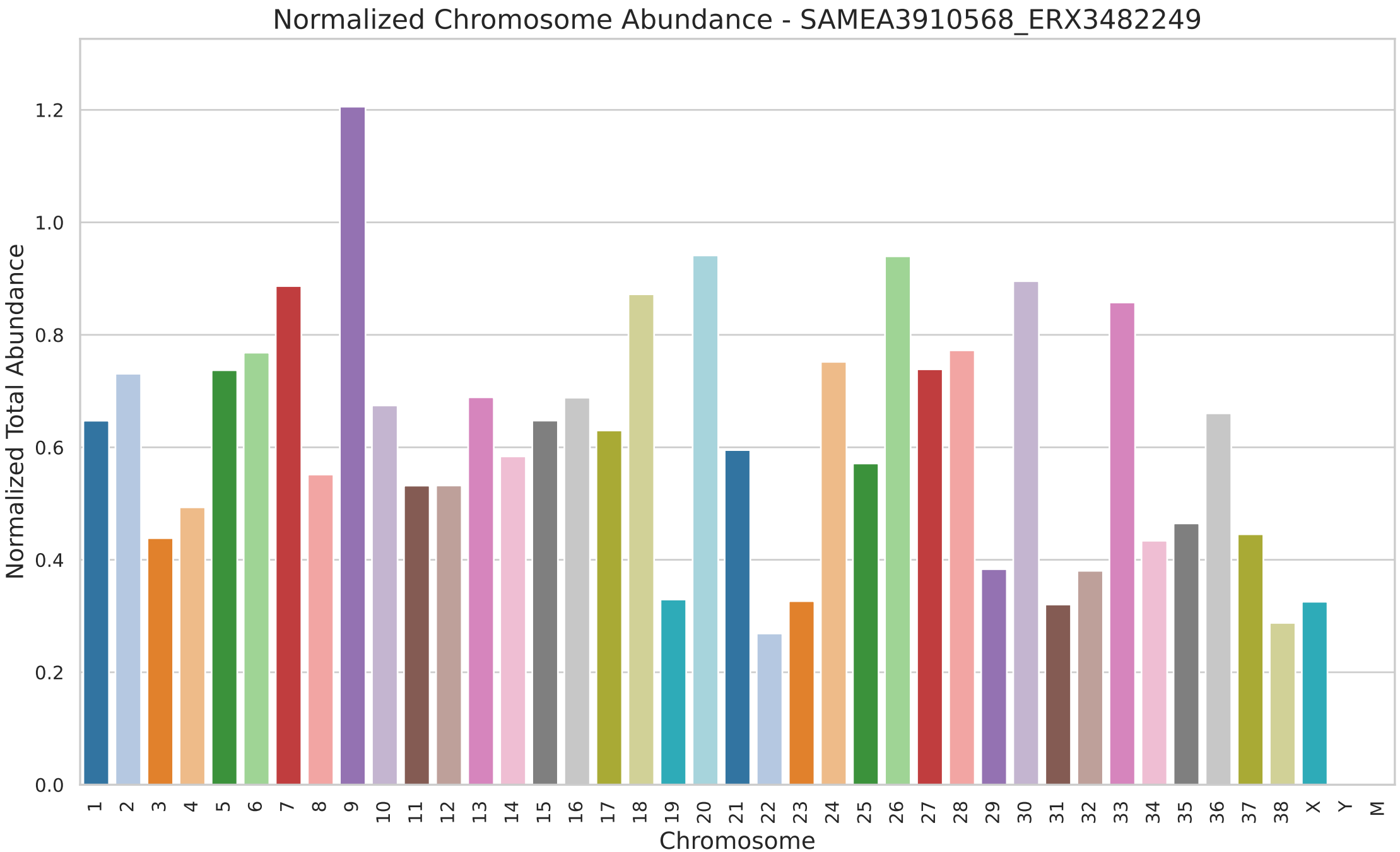

Normalized Chromosome Abundance - SAMN14407017_SRX7954375
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
12.0
14.0
16.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

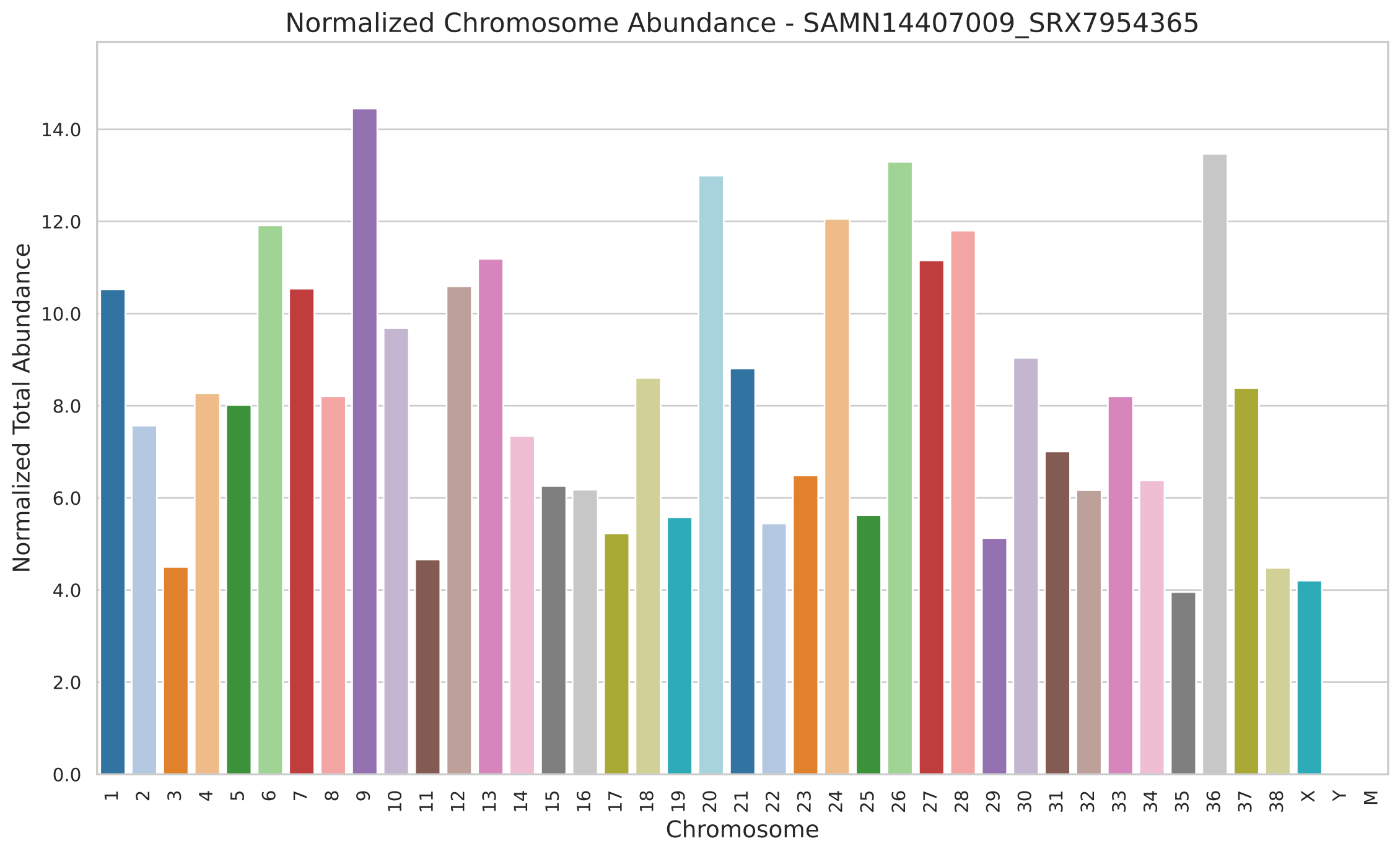

Normalized Chromosome Abundance - SAMN10380236_SRX4979791
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

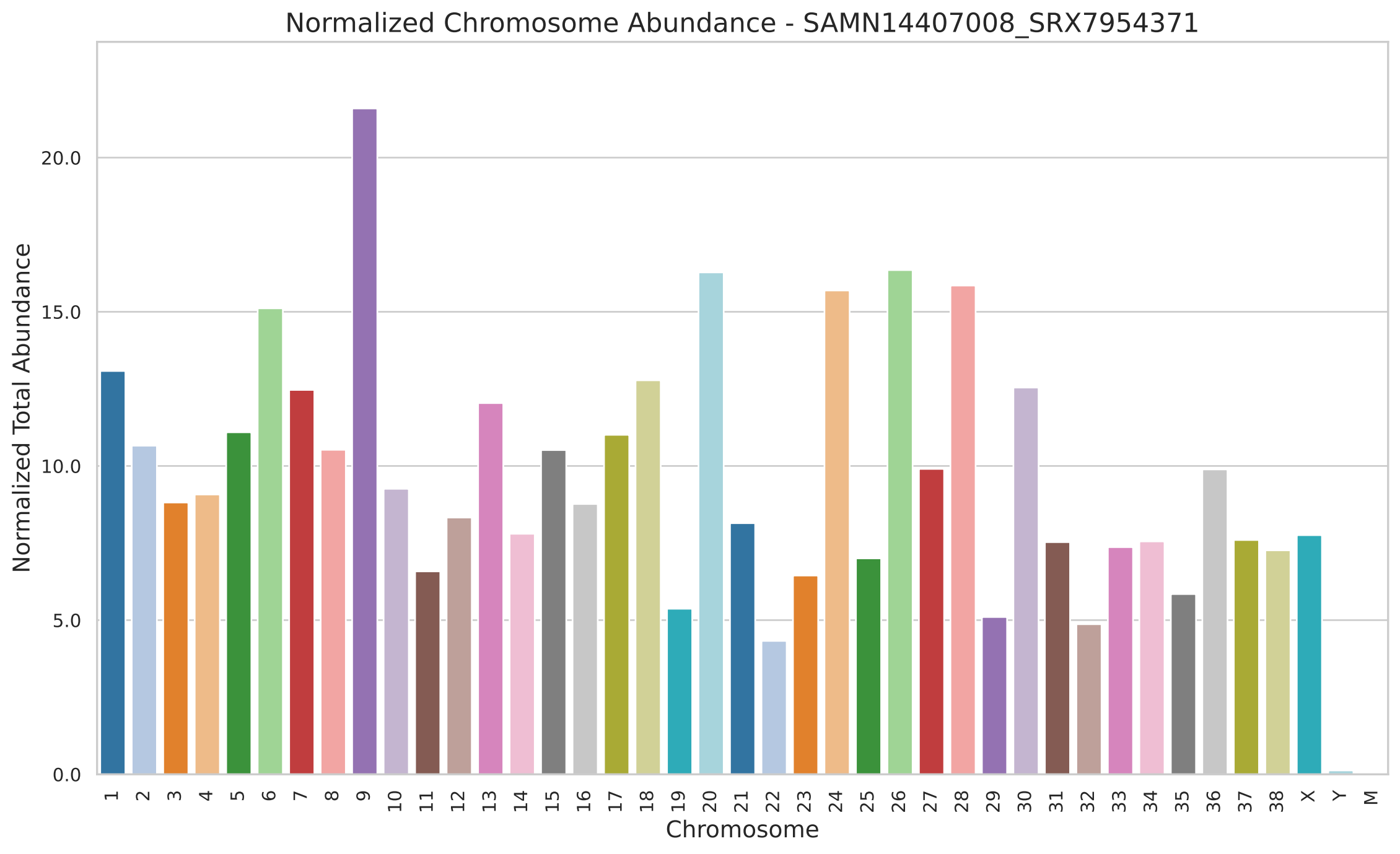

Normalized Chromosome Abundance - SAMEA3910364_ERX3482242
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 X Y M
Chromosome

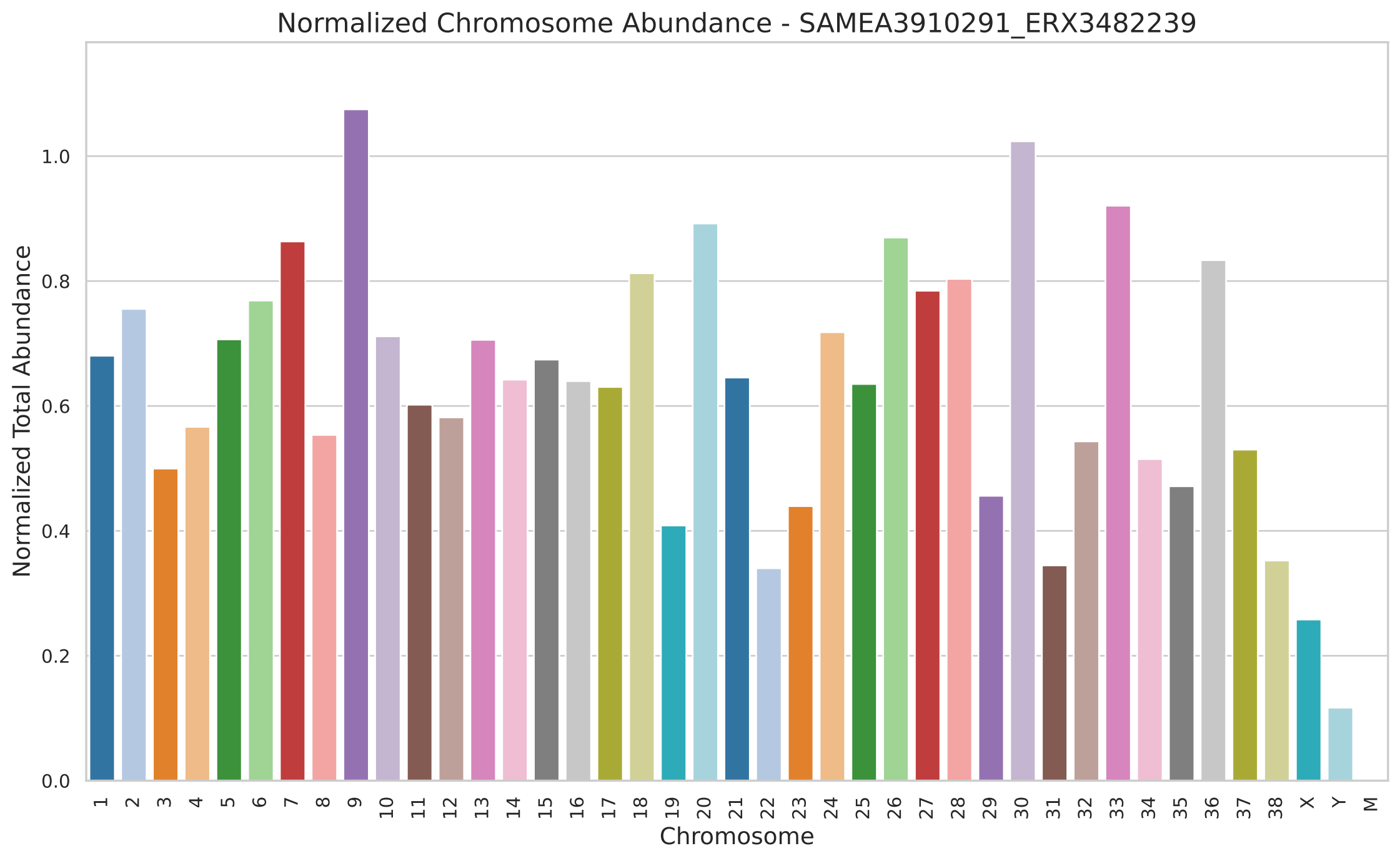

Normalized Chromosome Abundance - SAMN10380266_SRX4979839
Normalized Total Abundance
10.0
8.0
6.0
4.0
2.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

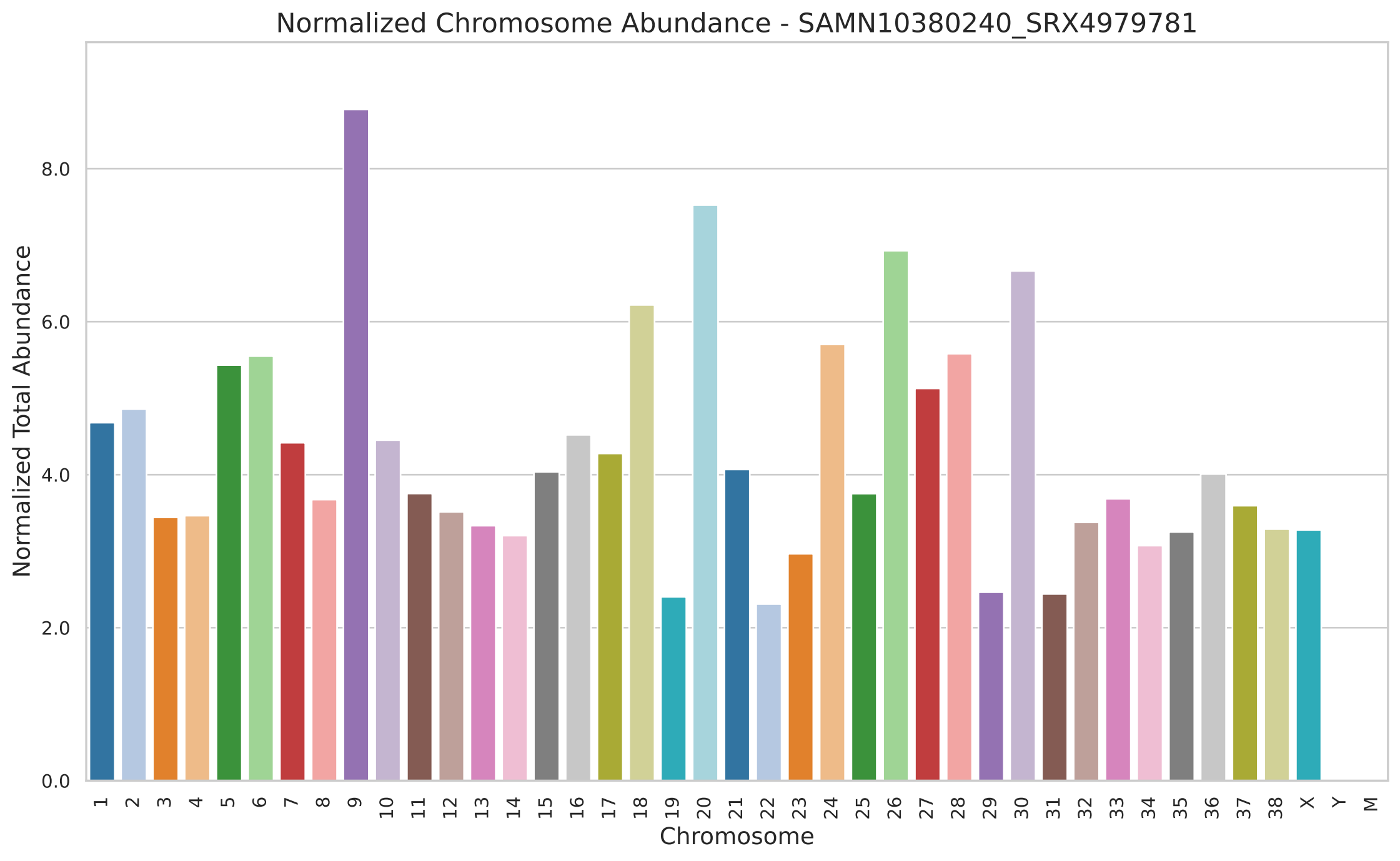

Normalized Chromosome Abundance - SAMEA3910279_ERX3482281
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

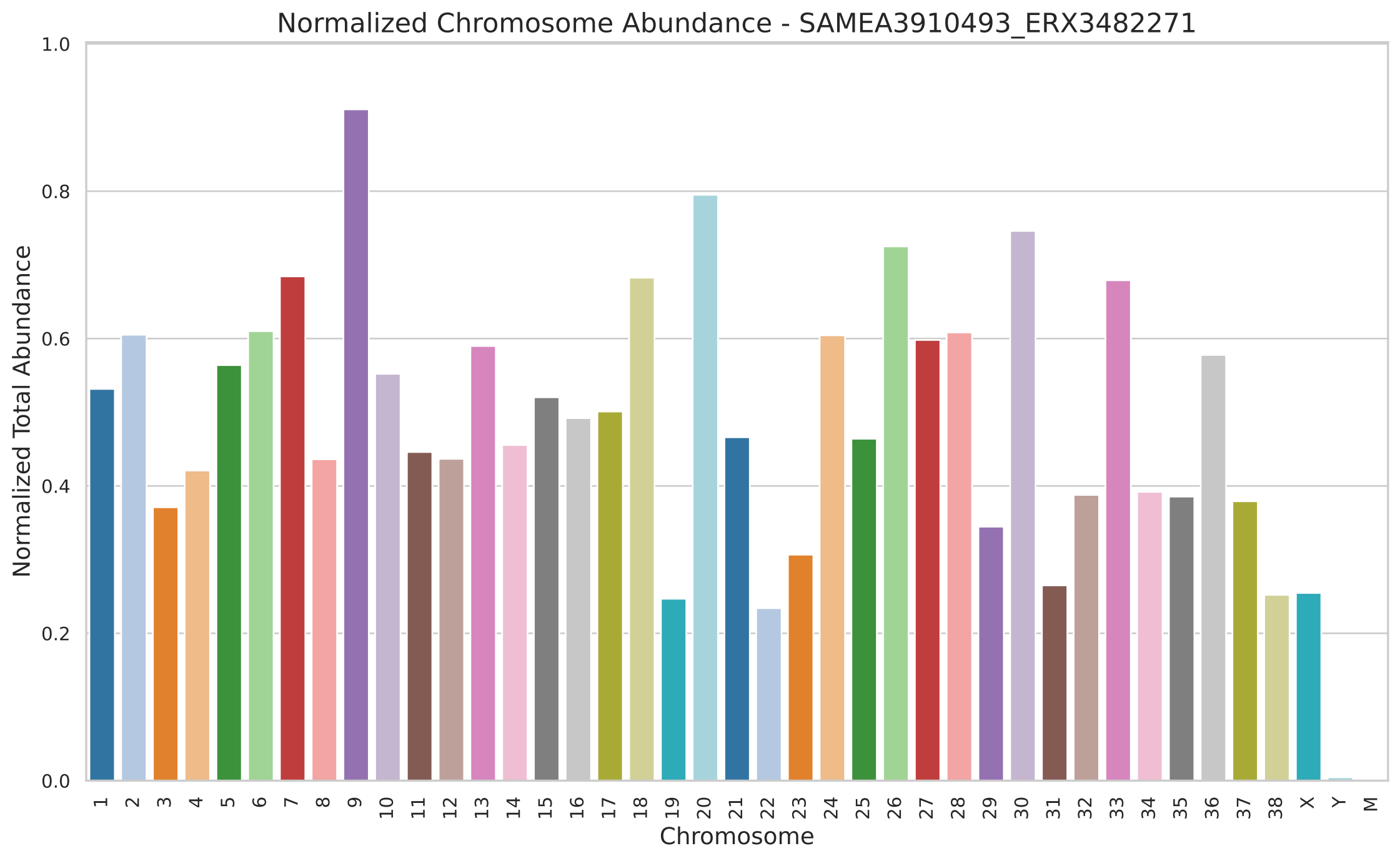

Normalized Chromosome Abundance - SAMEA3910568_ERX3482249
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

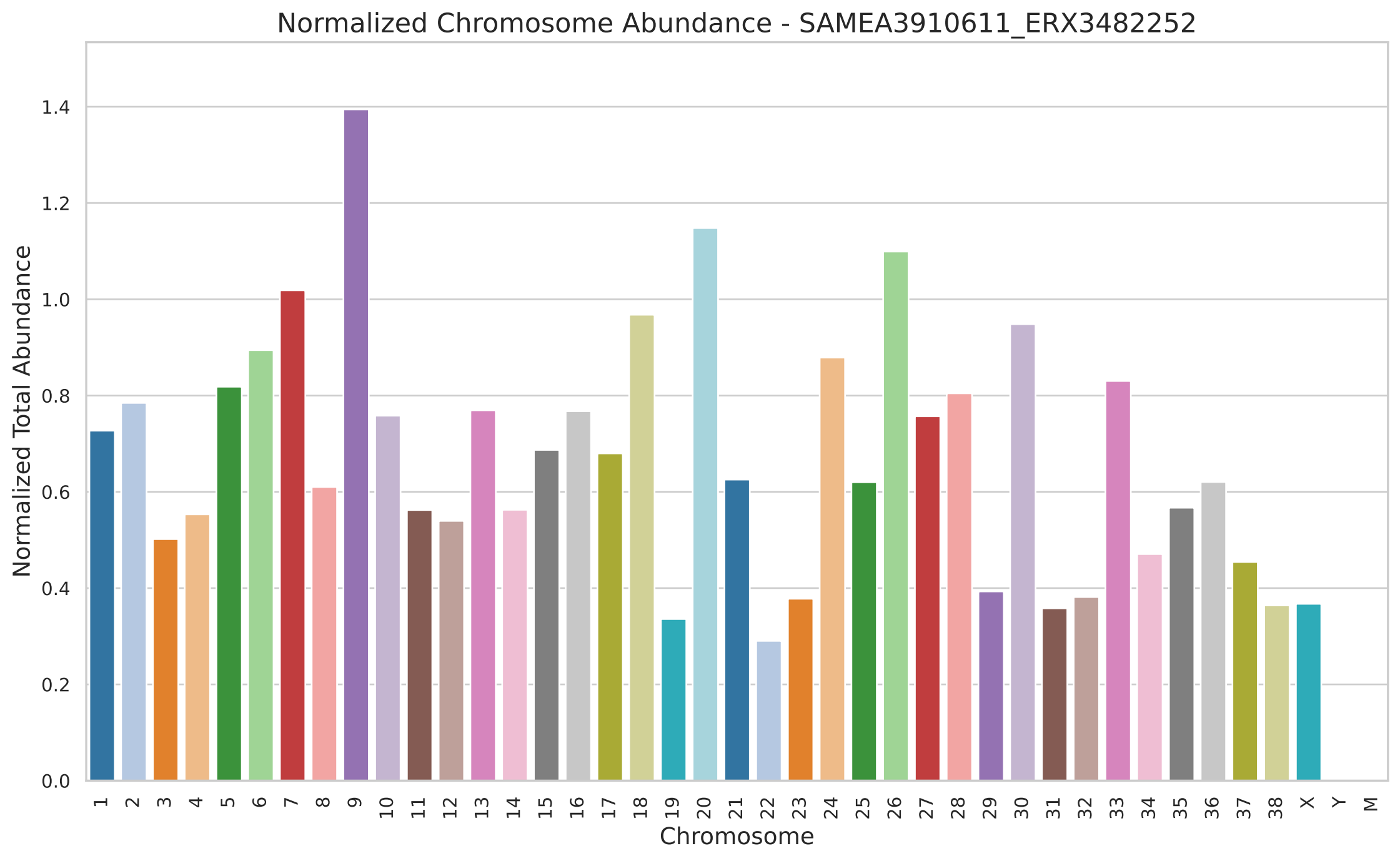

Normalized Chromosome Abundance - SAMN14407009_SRX7954365
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
12.0
14.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

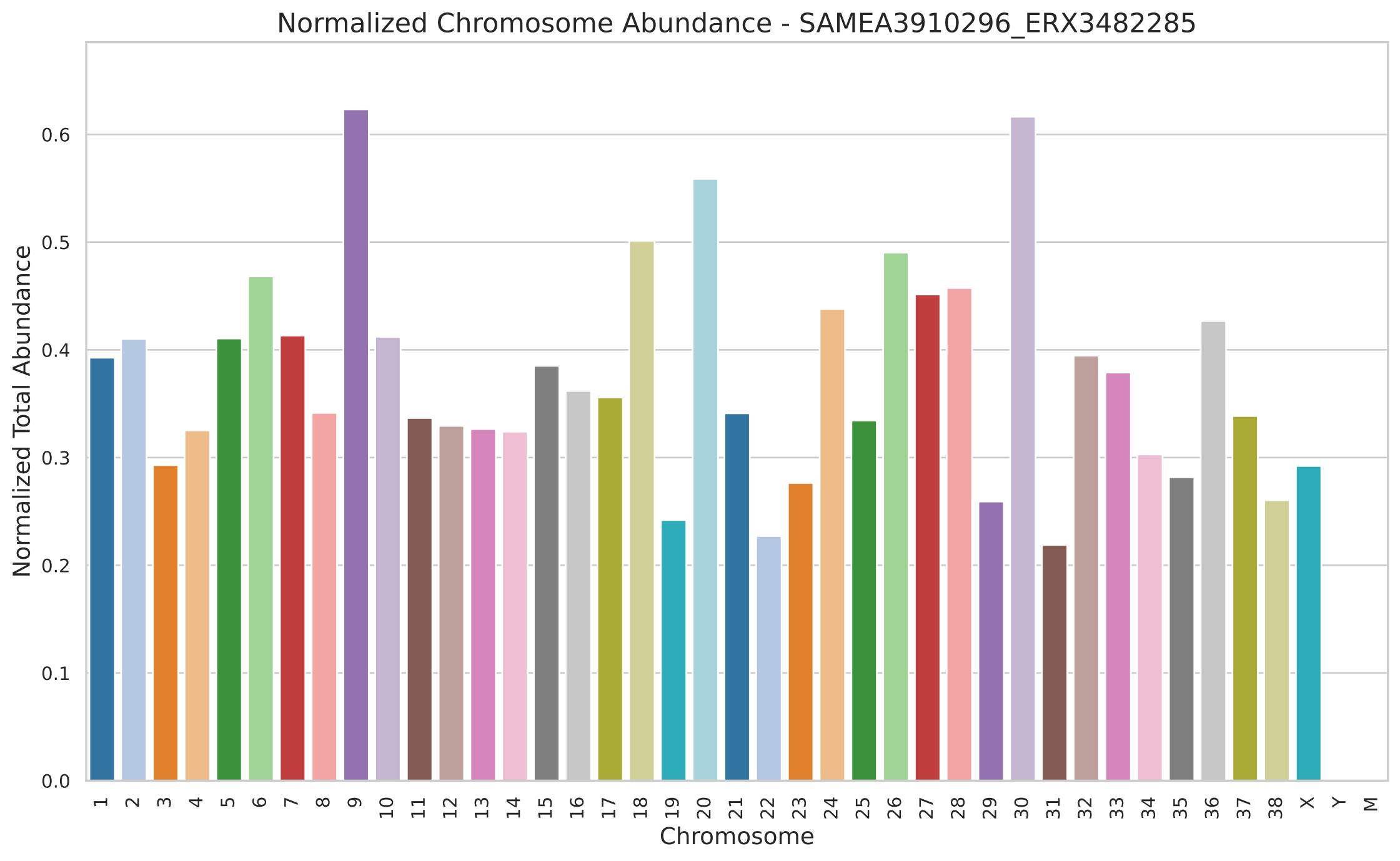

Normalized Chromosome Abundance - SAMN14407008_SRX7954371
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

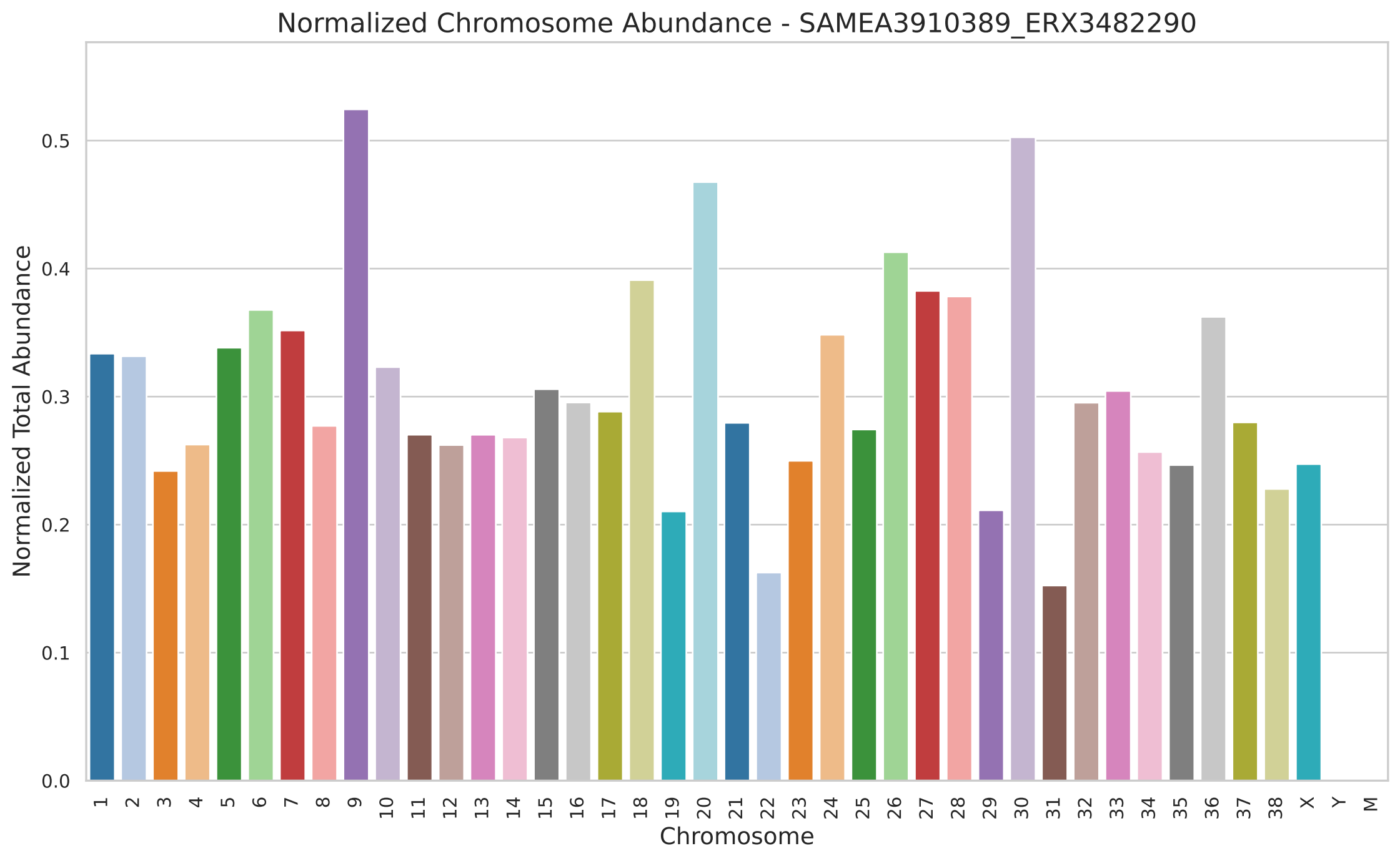

Normalized Chromosome Abundance - SAMEA3910291_ERX3482239
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

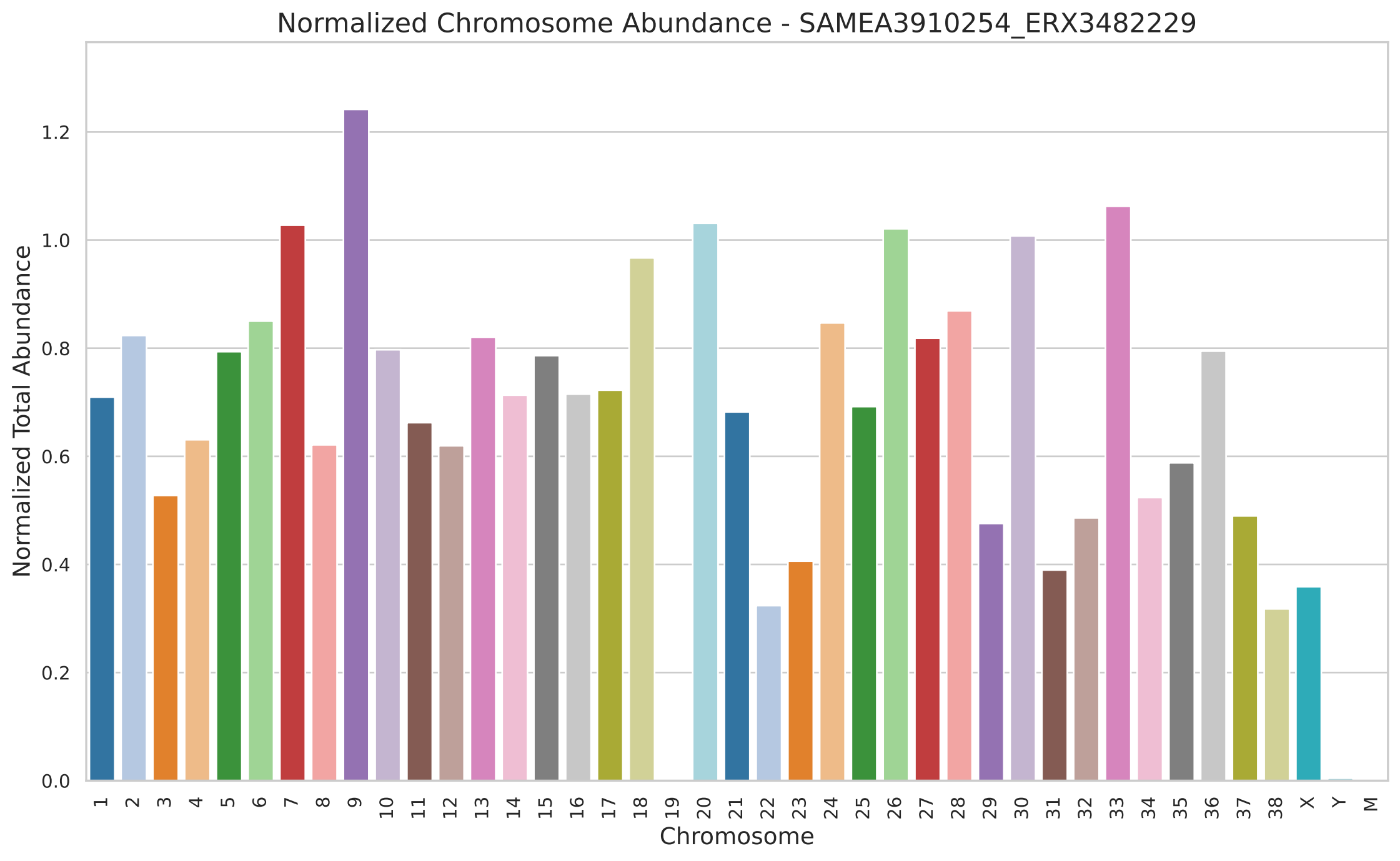

Normalized Chromosome Abundance - SAMN10380240_SRX4979781
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

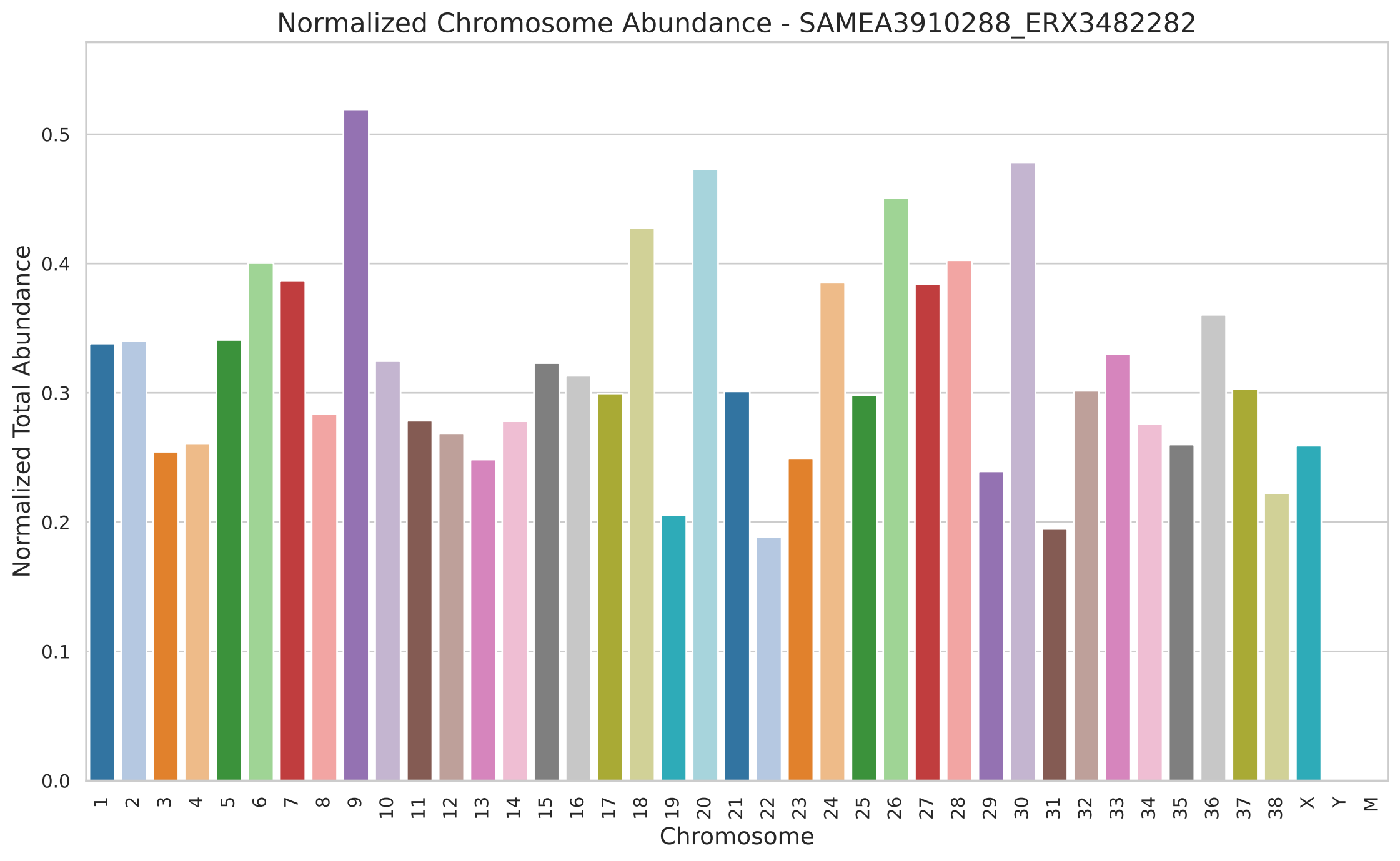

Normalized Chromosome Abundance - SAMEA3910493_ERX3482271
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

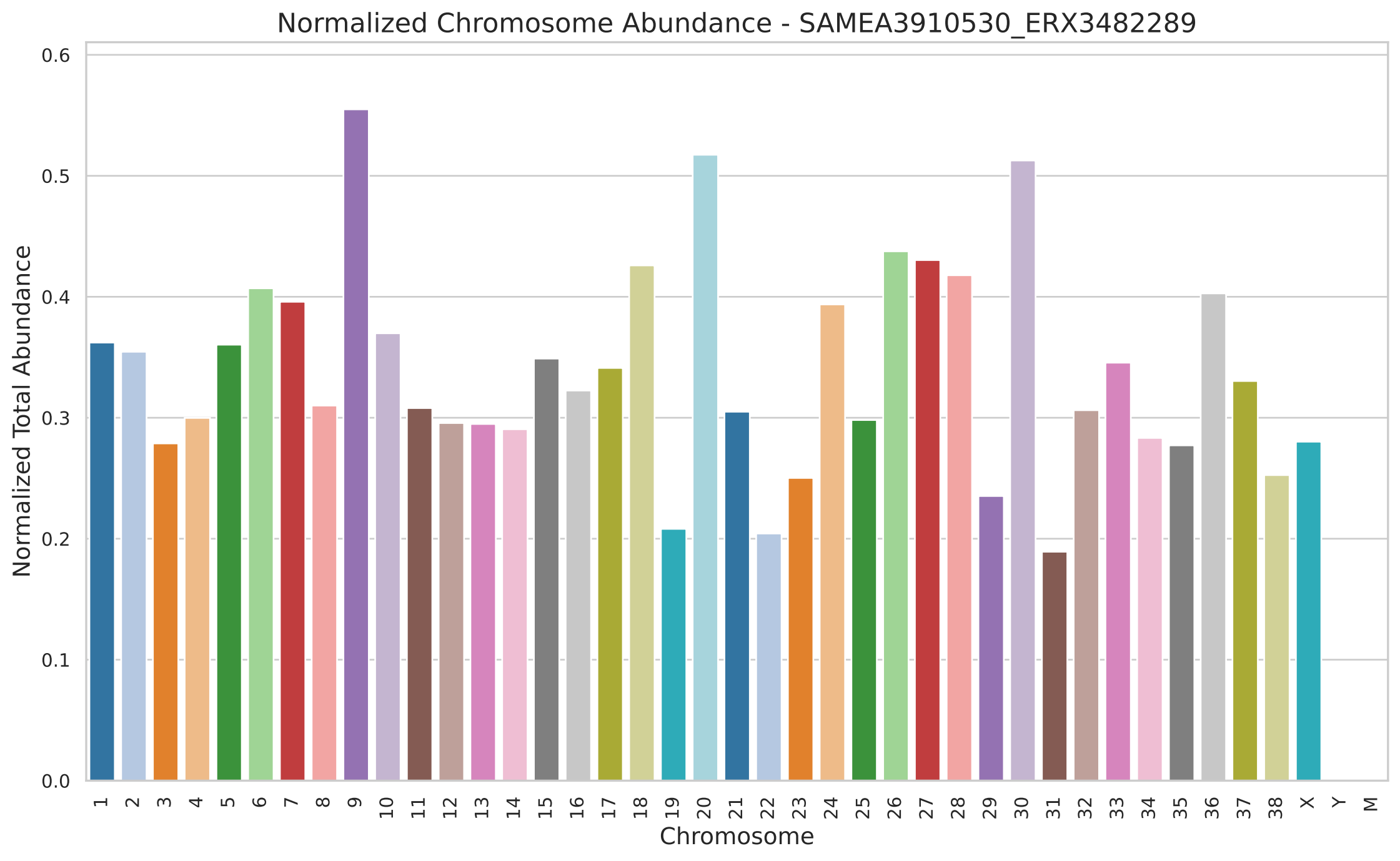

Normalized Chromosome Abundance - SAMEA3910611_ERX3482252
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

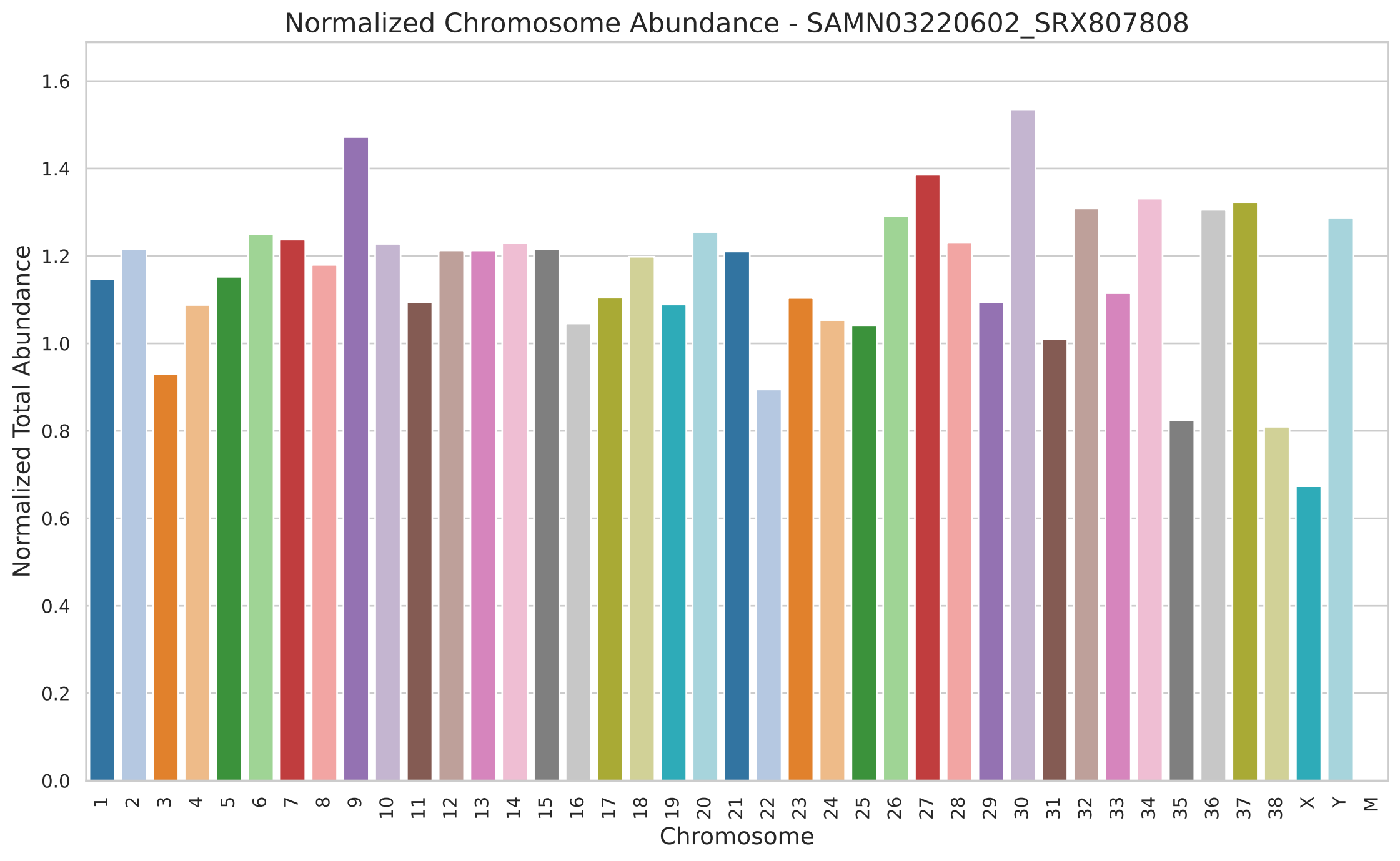

Normalized Chromosome Abundance - SAMEA3910296_ERX3482285
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

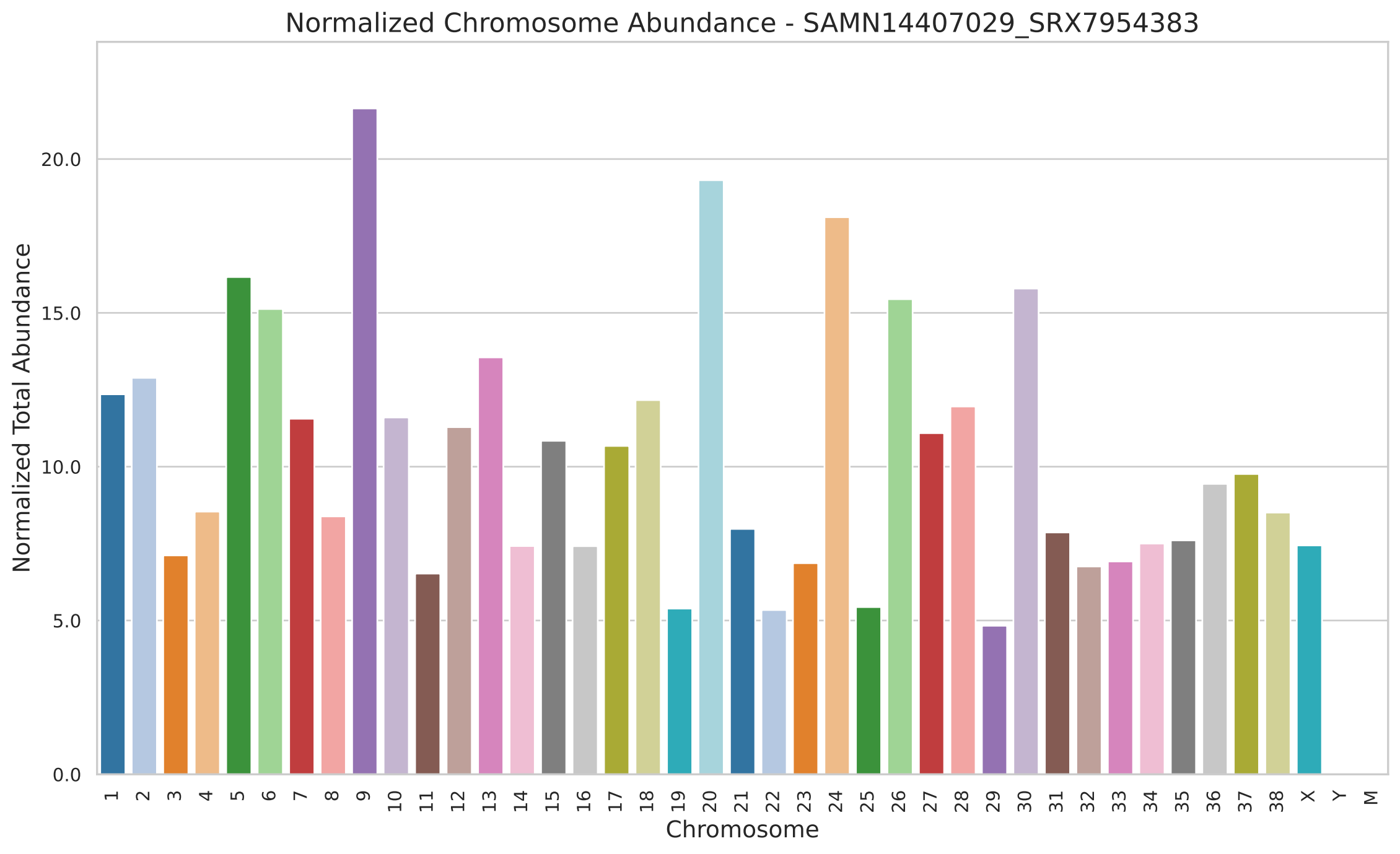

Normalized Chromosome Abundance - SAMEA3910389_ERX3482290
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

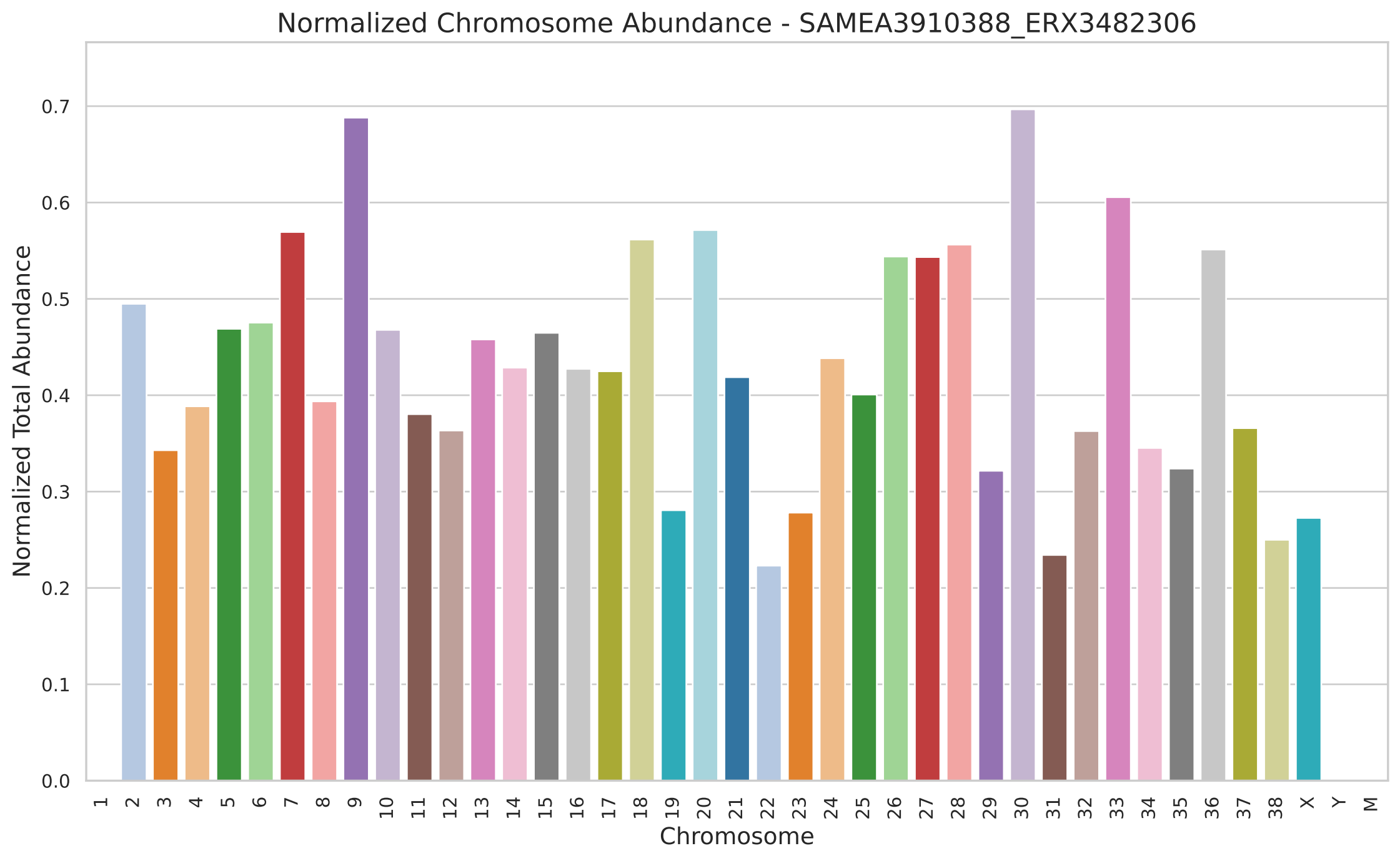

Normalized Chromosome Abundance - SAMEA3910254_ERX3482229
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

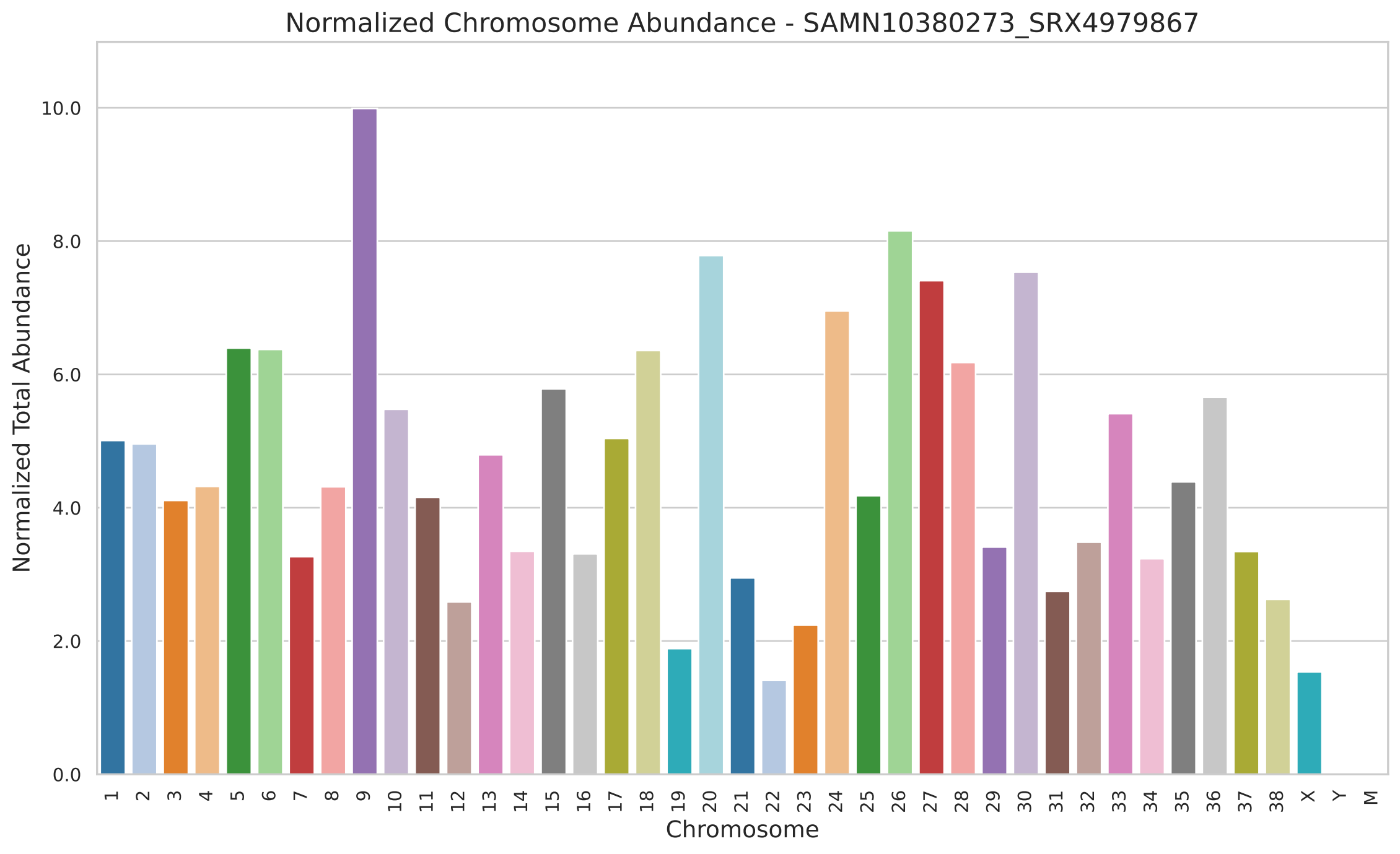

Normalized Chromosome Abundance - SAMEA3910288_ERX3482282
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

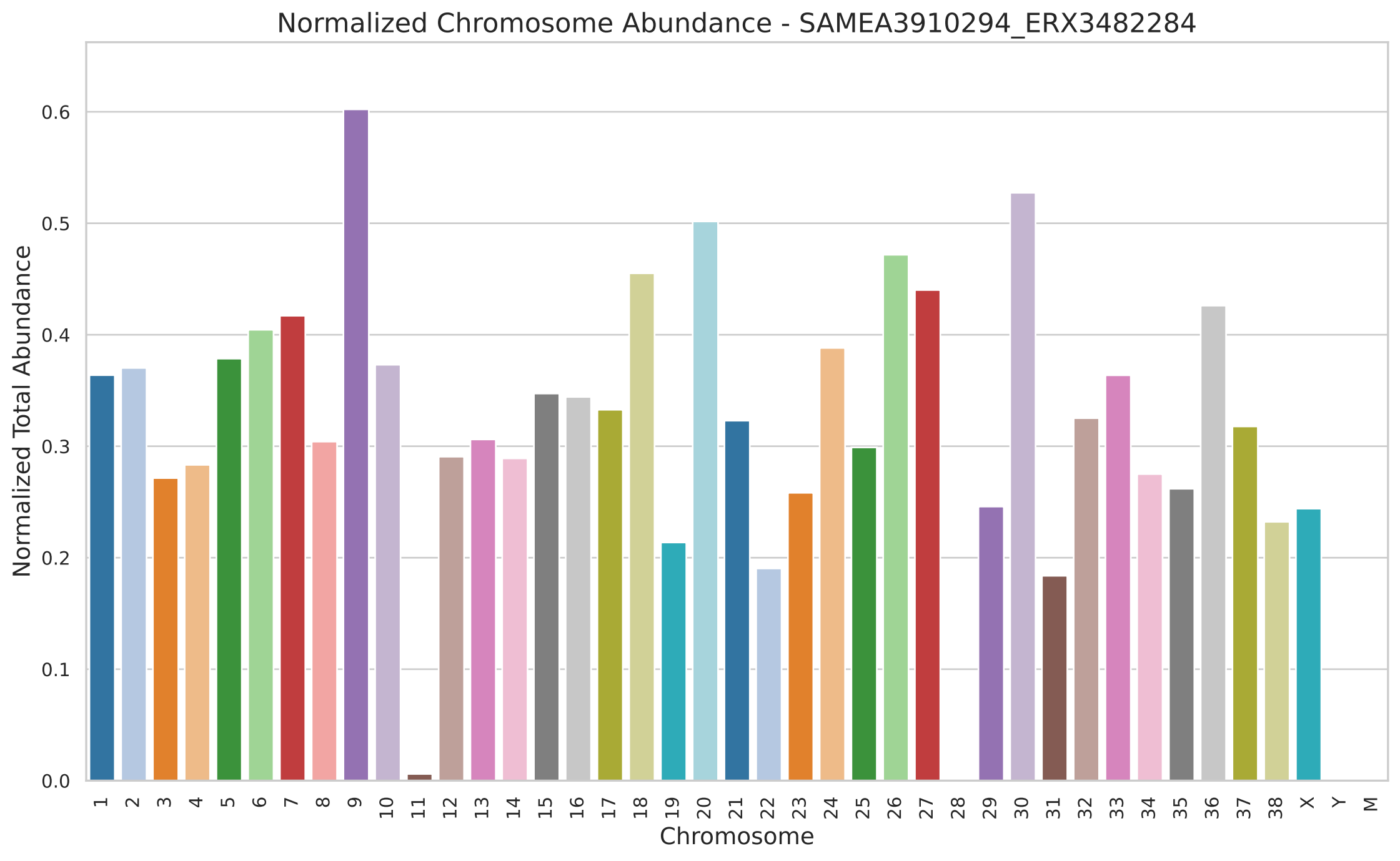

Normalized Chromosome Abundance - SAMEA3910530_ERX3482289
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

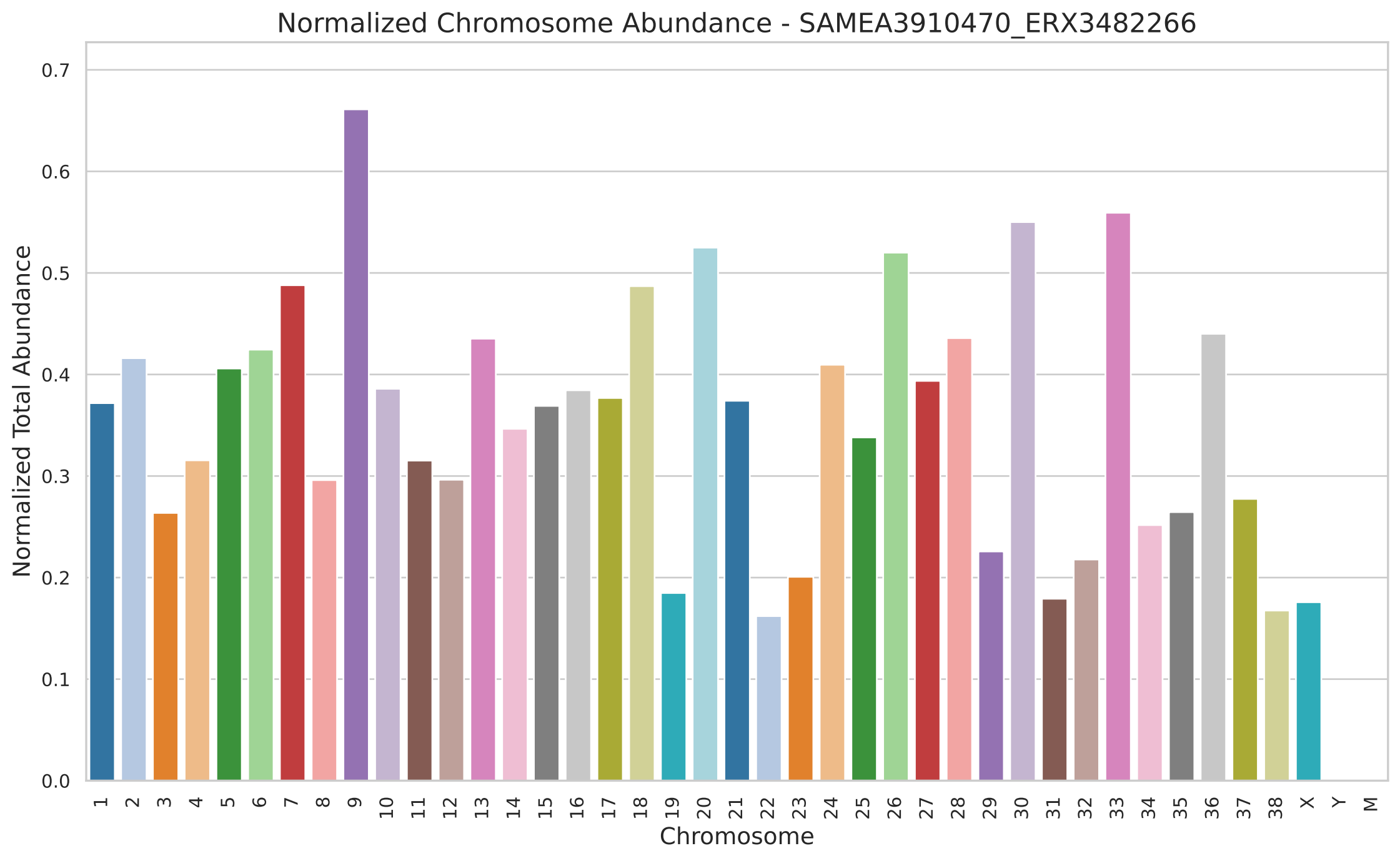

Normalized Chromosome Abundance - SAMN03220602_SRX807808
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

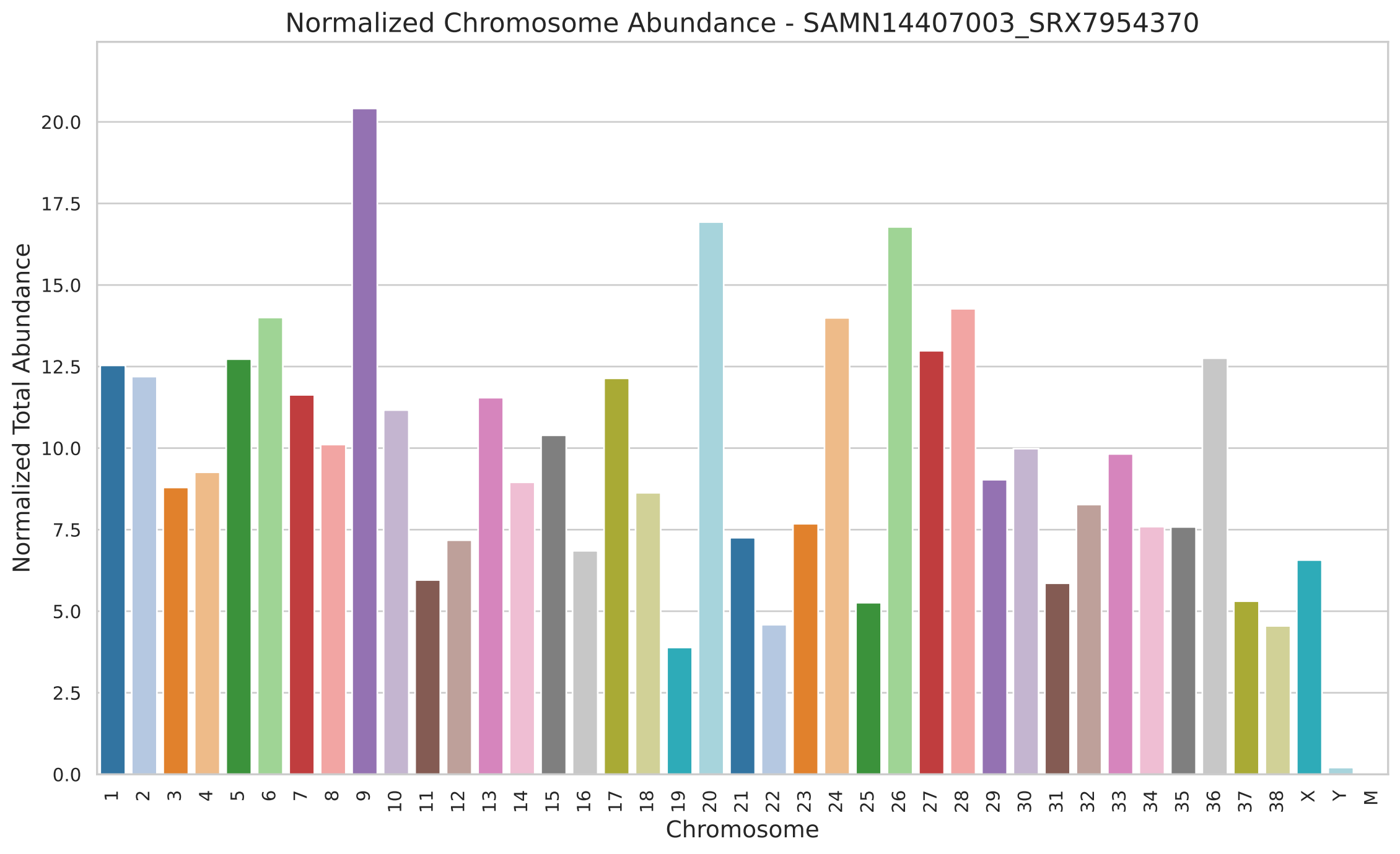

Normalized Chromosome Abundance - SAMN14407029_SRX7954383
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

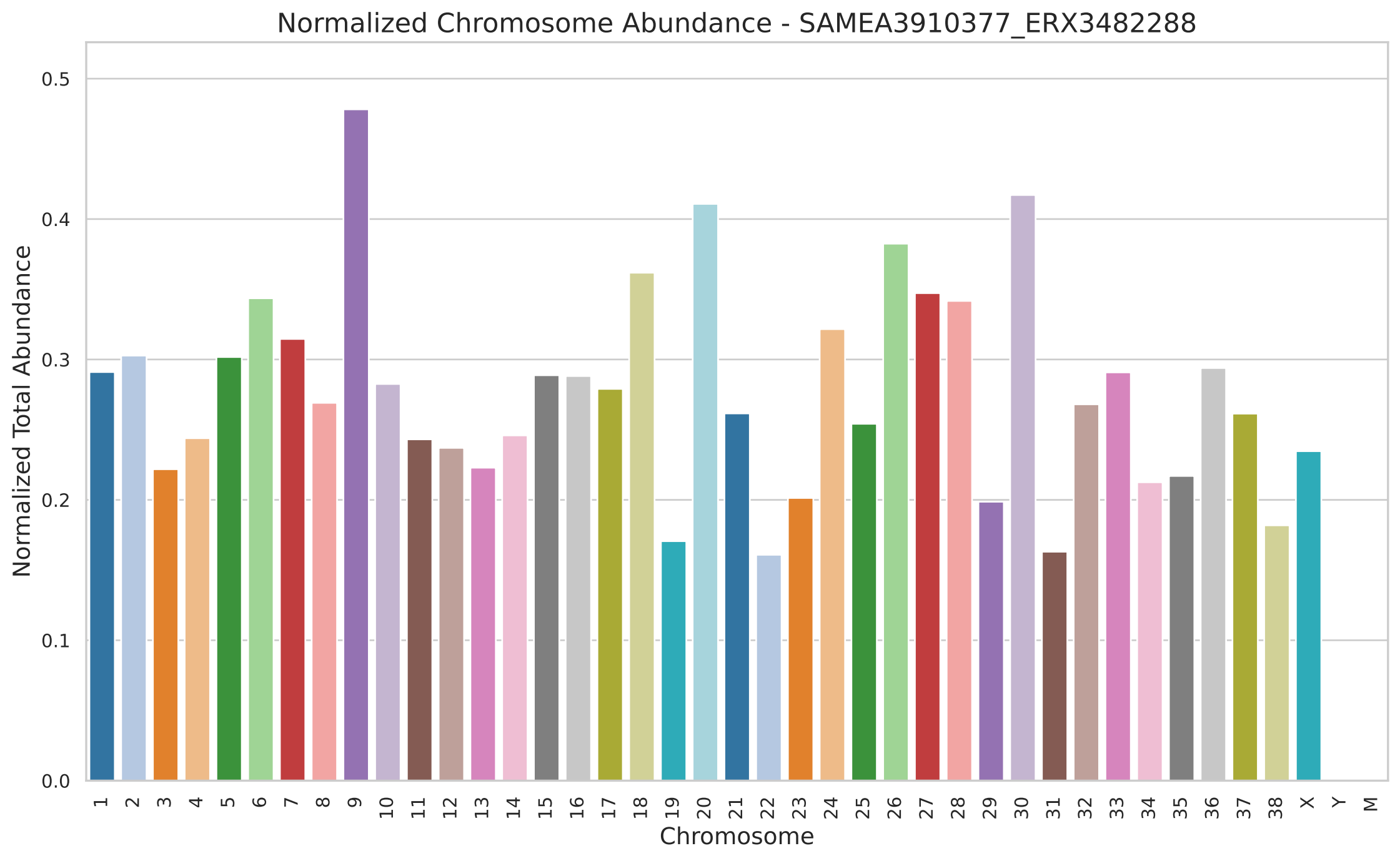

Normalized Chromosome Abundance - SAMEA3910388_ERX3482306
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

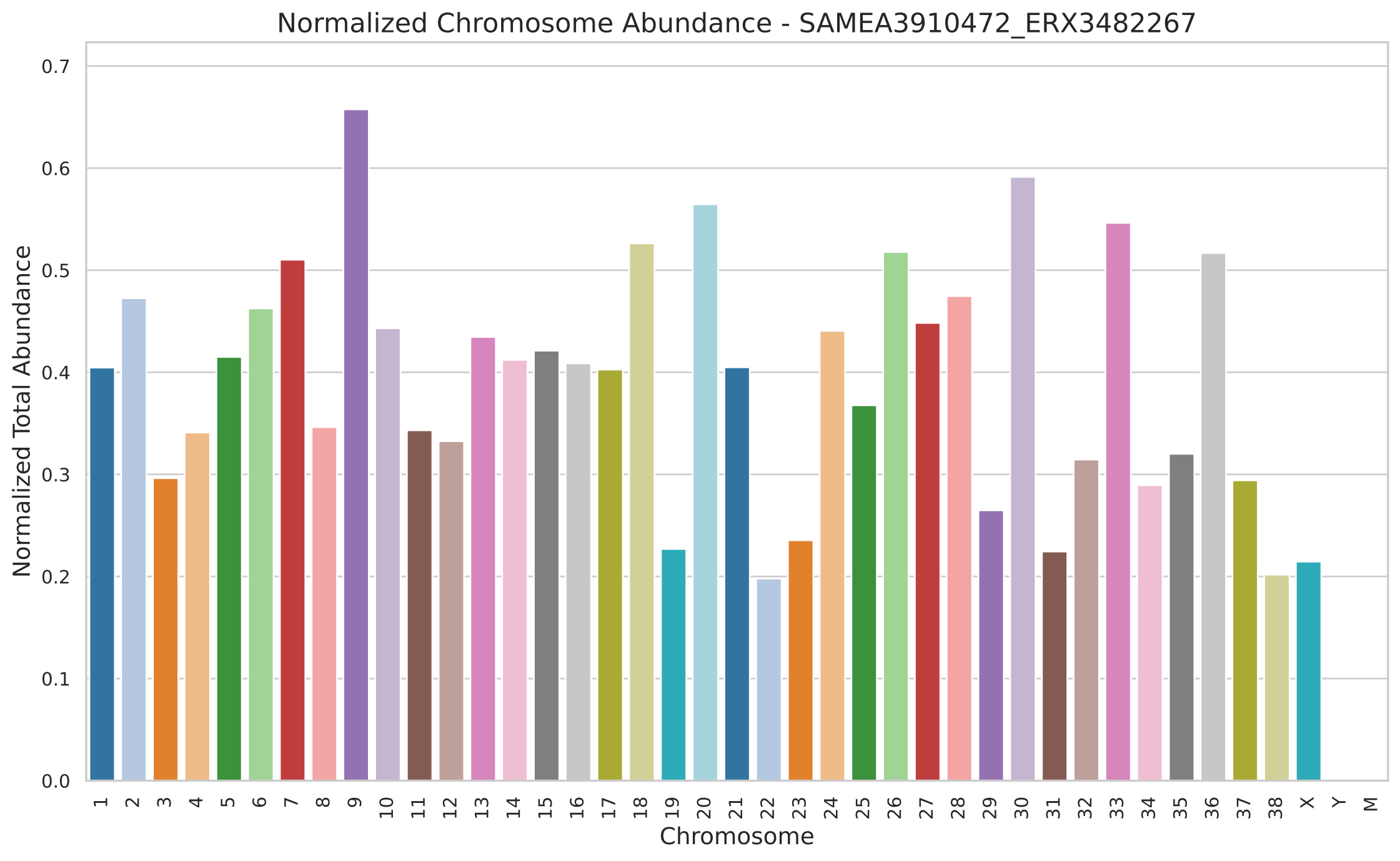

Normalized Chromosome Abundance - SAMN10380273_SRX4979867
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

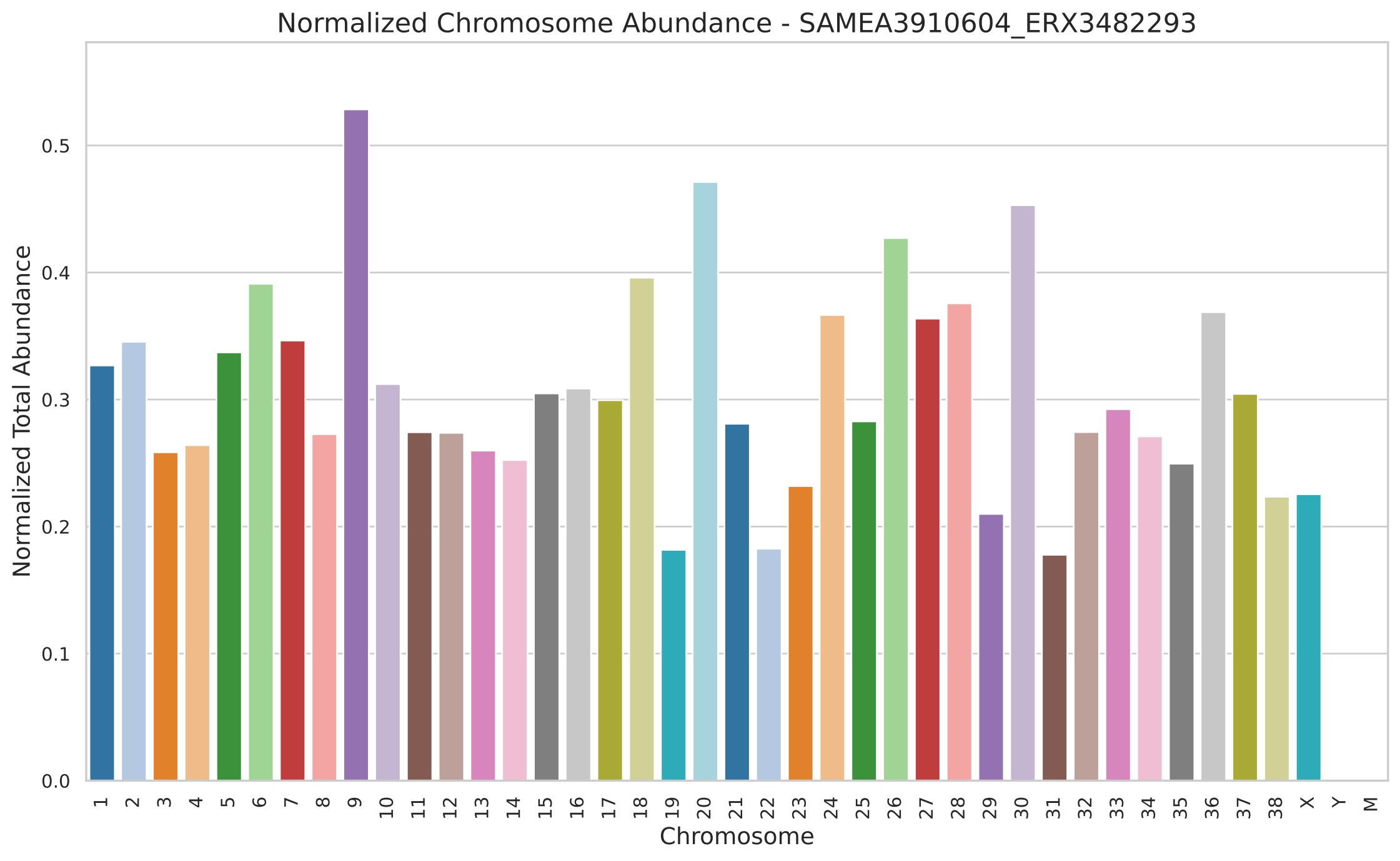

Normalized Chromosome Abundance - SAMEA3910294_ERX3482284
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

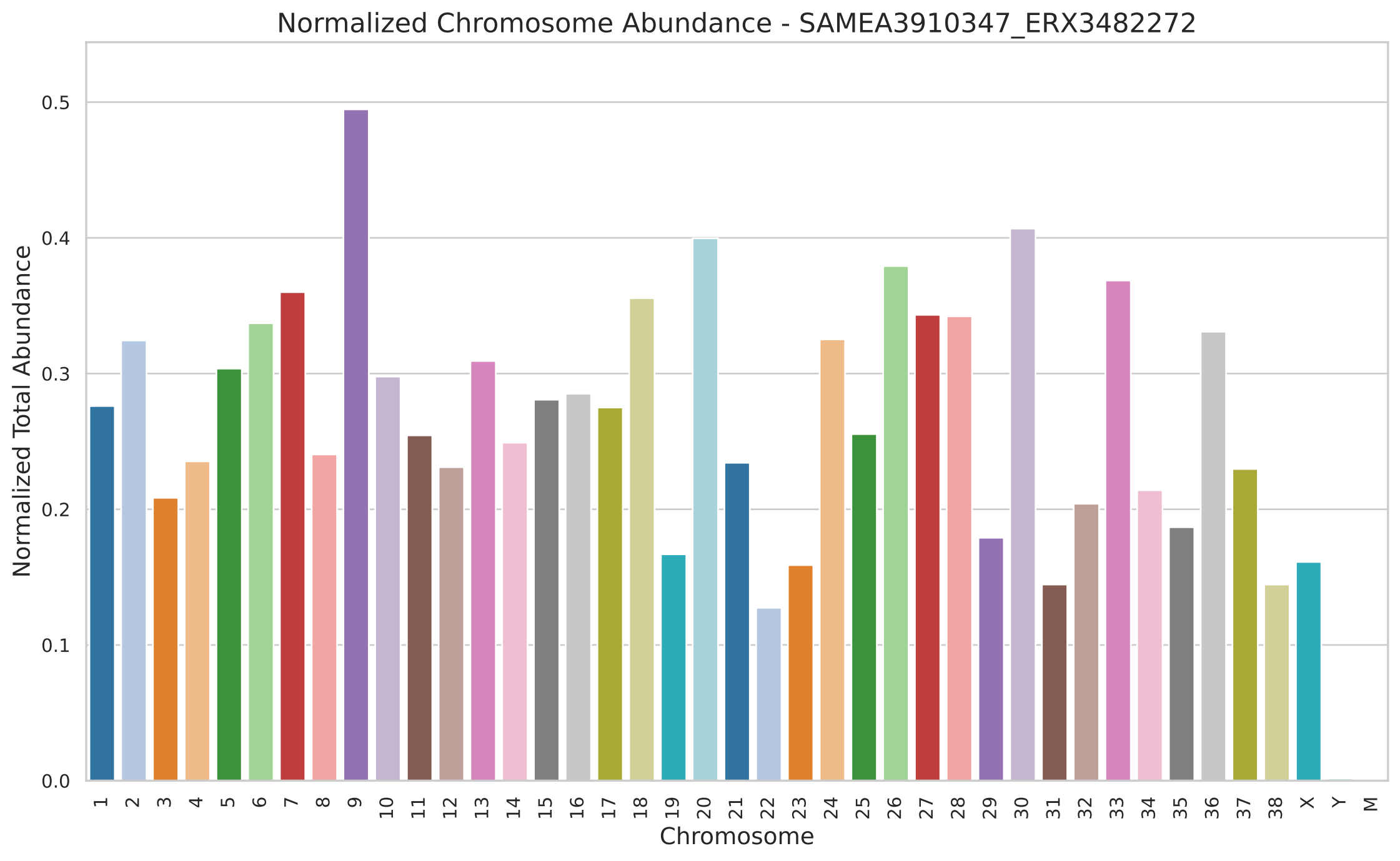

Normalized Chromosome Abundance - SAMEA3910470_ERX3482266
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

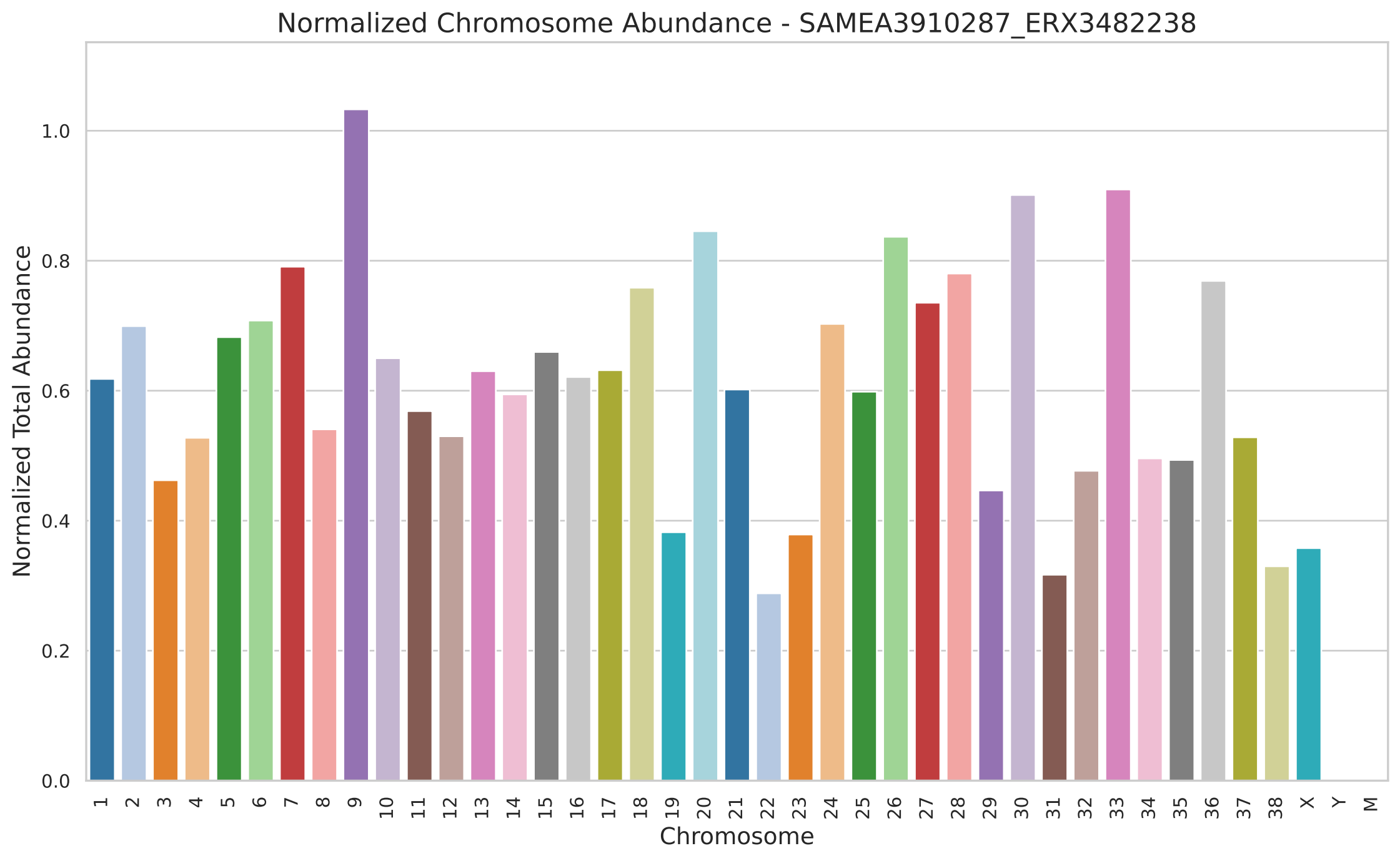

Normalized Chromosome Abundance - SAMN14407003_SRX7954370
Normalized Total Abundance
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5
20.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

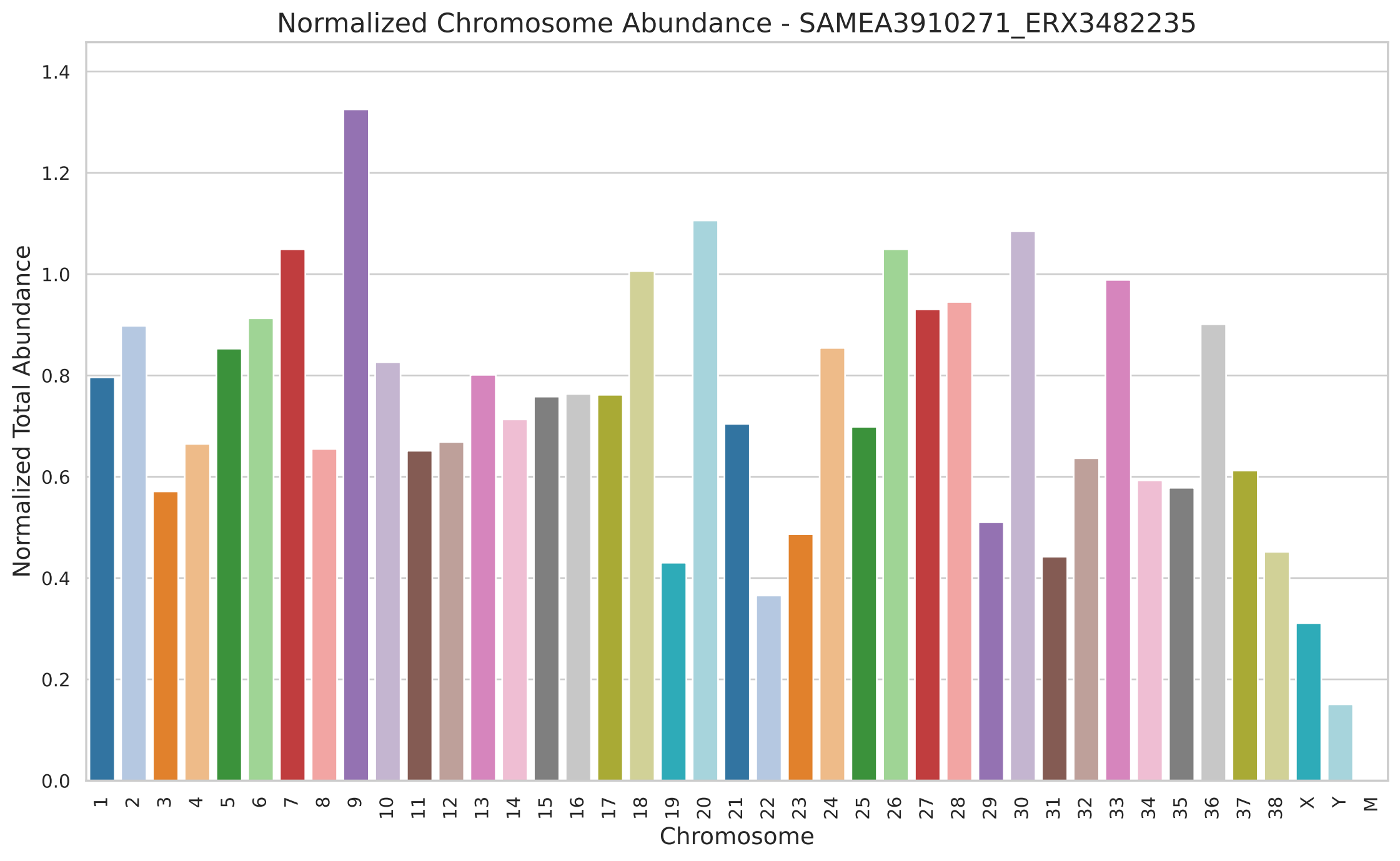

Normalized Chromosome Abundance - SAMEA3910377_ERX3482288
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

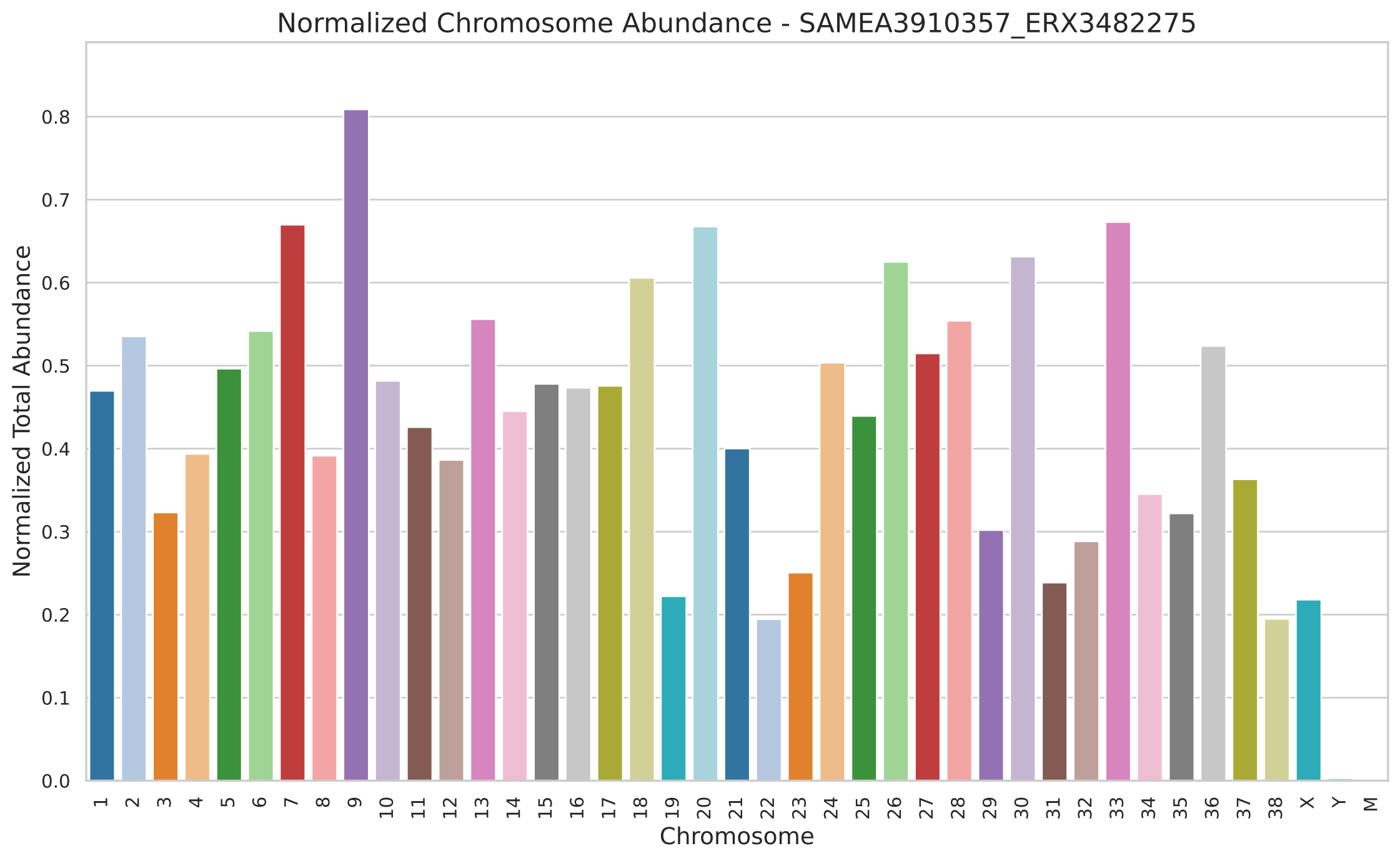

Normalized Chromosome Abundance - SAMEA3910472_ERX3482267
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

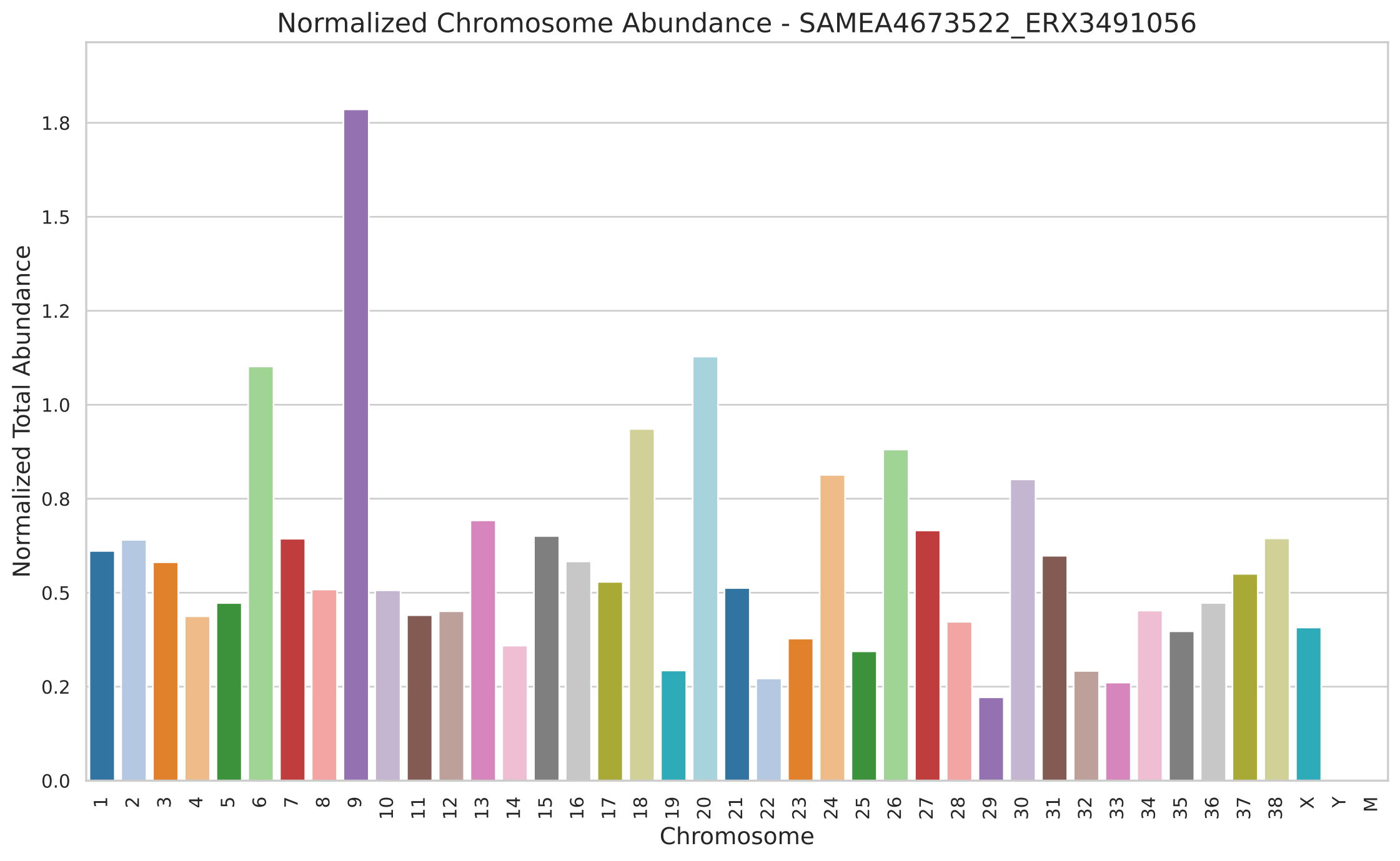

Normalized Chromosome Abundance - SAMEA3910604_ERX3482293
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

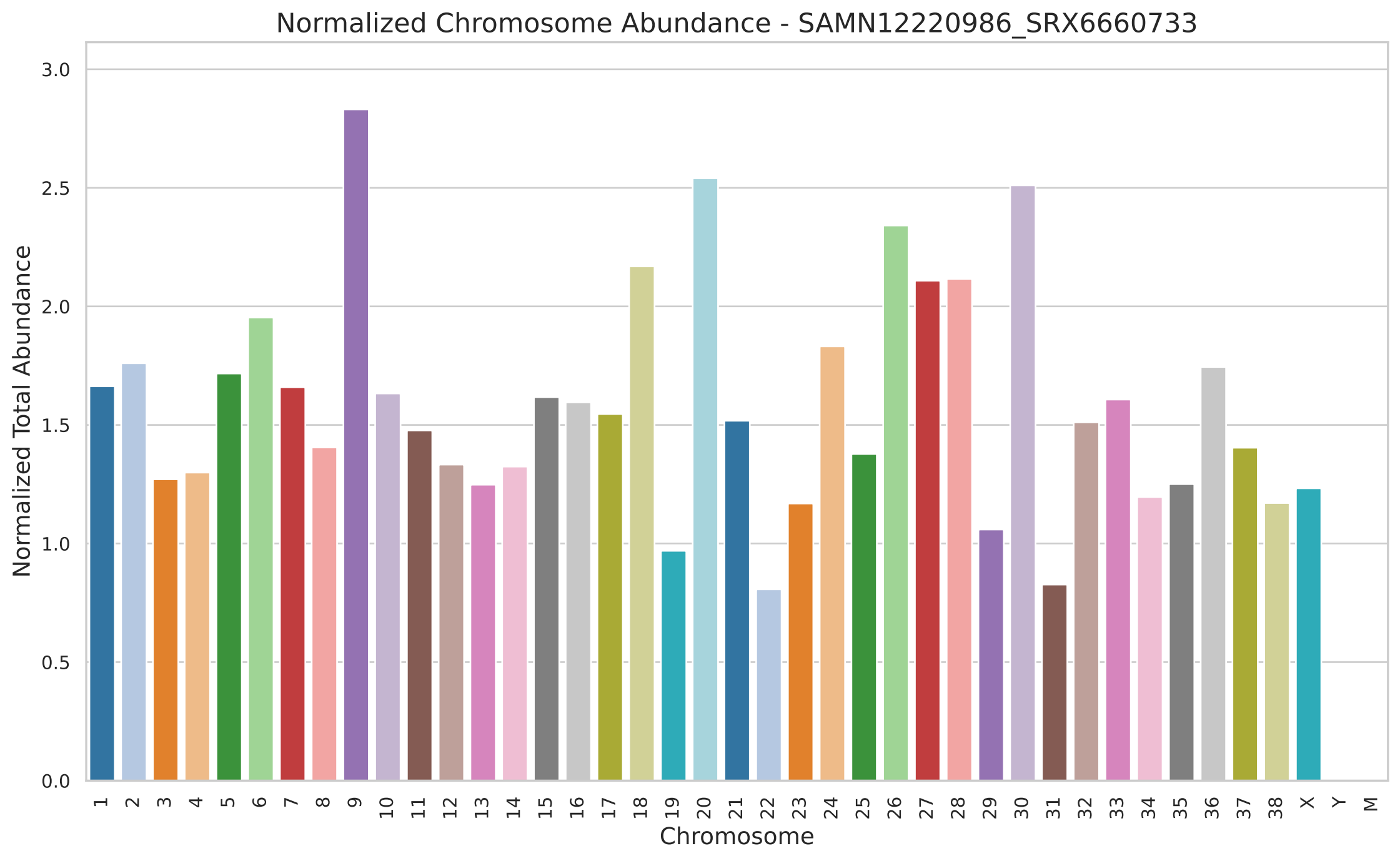

Normalized Chromosome Abundance - SAMEA3910347_ERX3482272
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

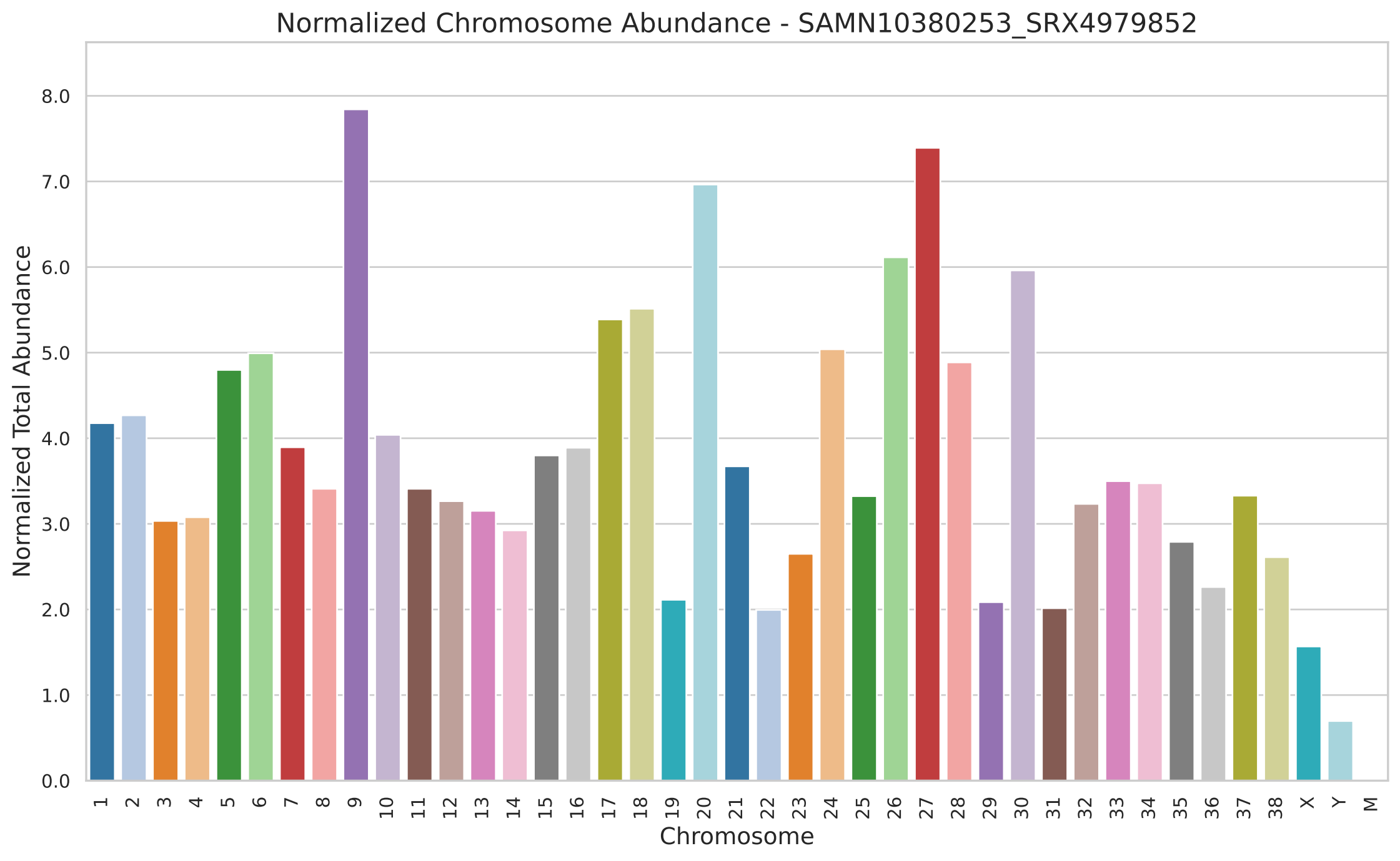

Normalized Chromosome Abundance - SAMEA3910287_ERX3482238
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

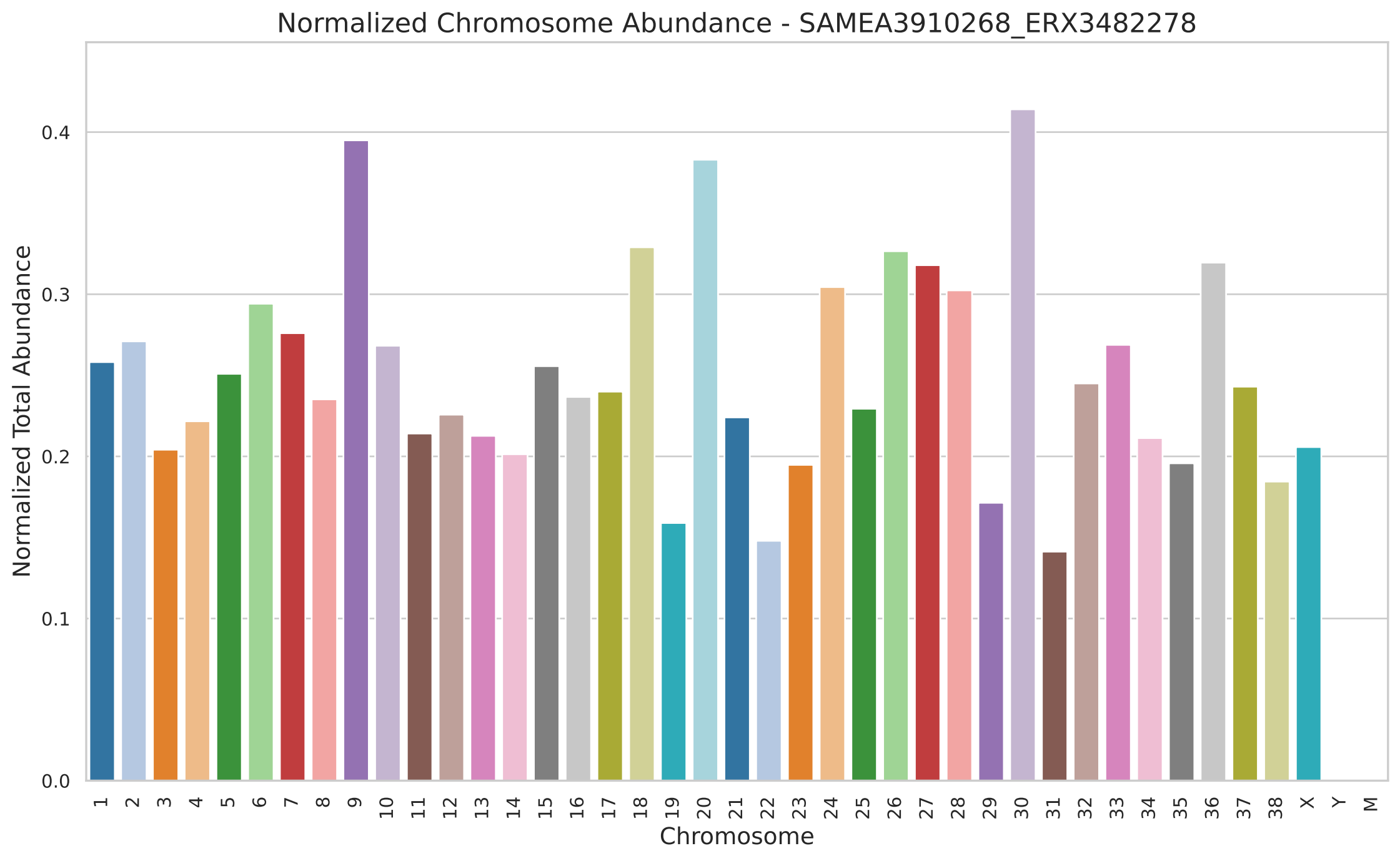

Normalized Chromosome Abundance - SAMEA3910271_ERX3482235
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

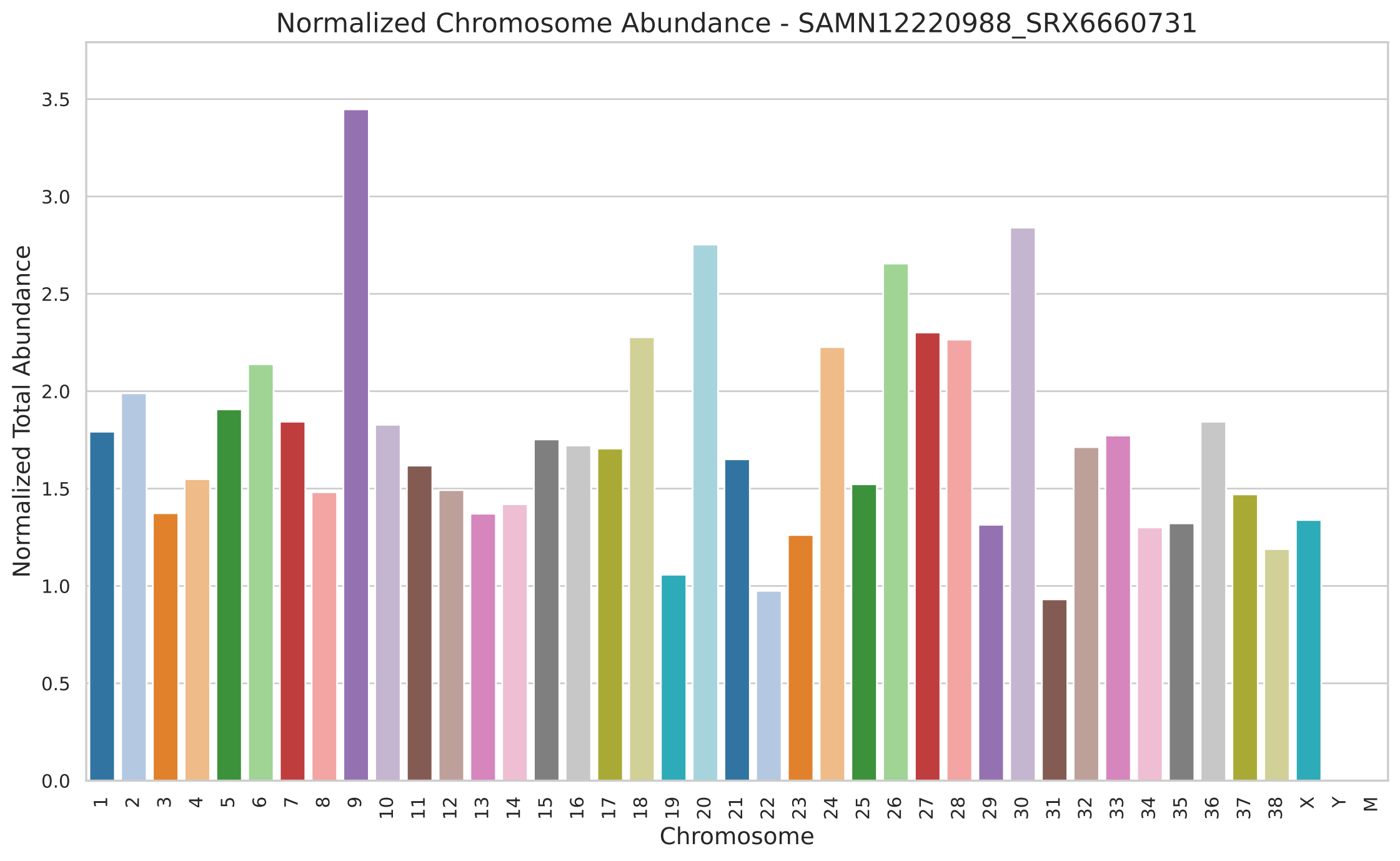

Normalized Chromosome Abundance - SAMEA3910357_ERX3482275
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

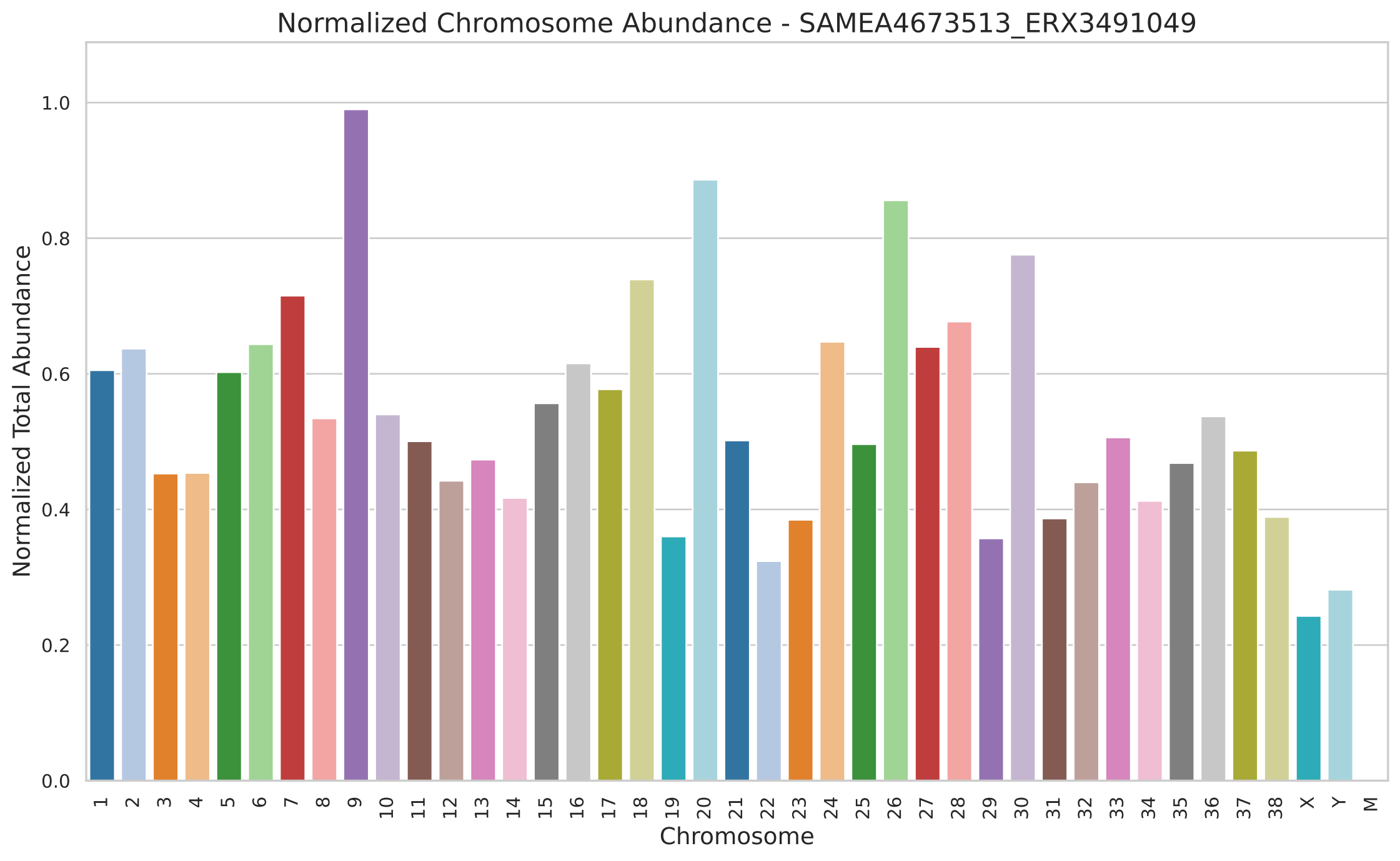

Normalized Chromosome Abundance - SAMEA4673522_ERX3491056
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

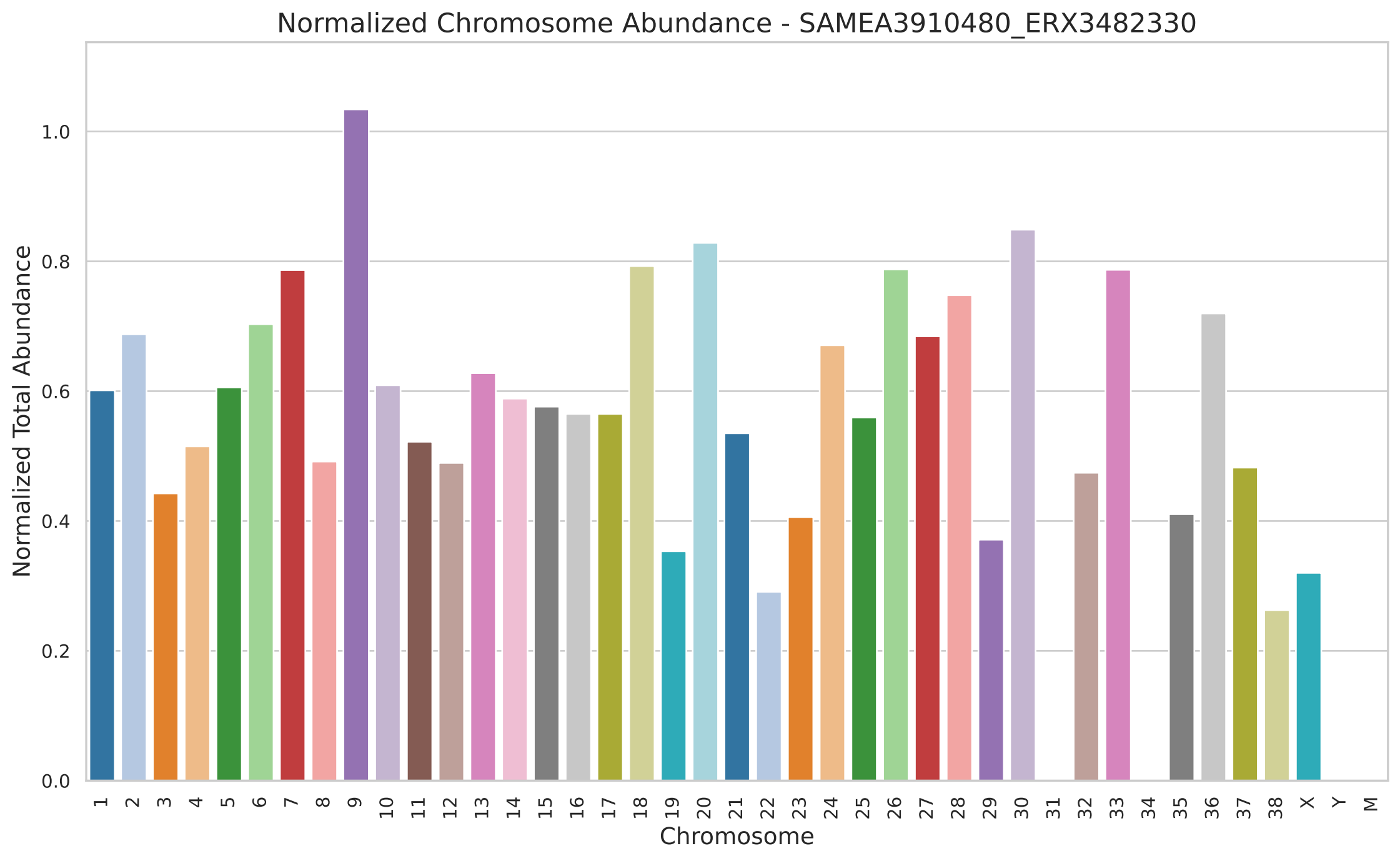

Normalized Chromosome Abundance - SAMN12220986_SRX6660733
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

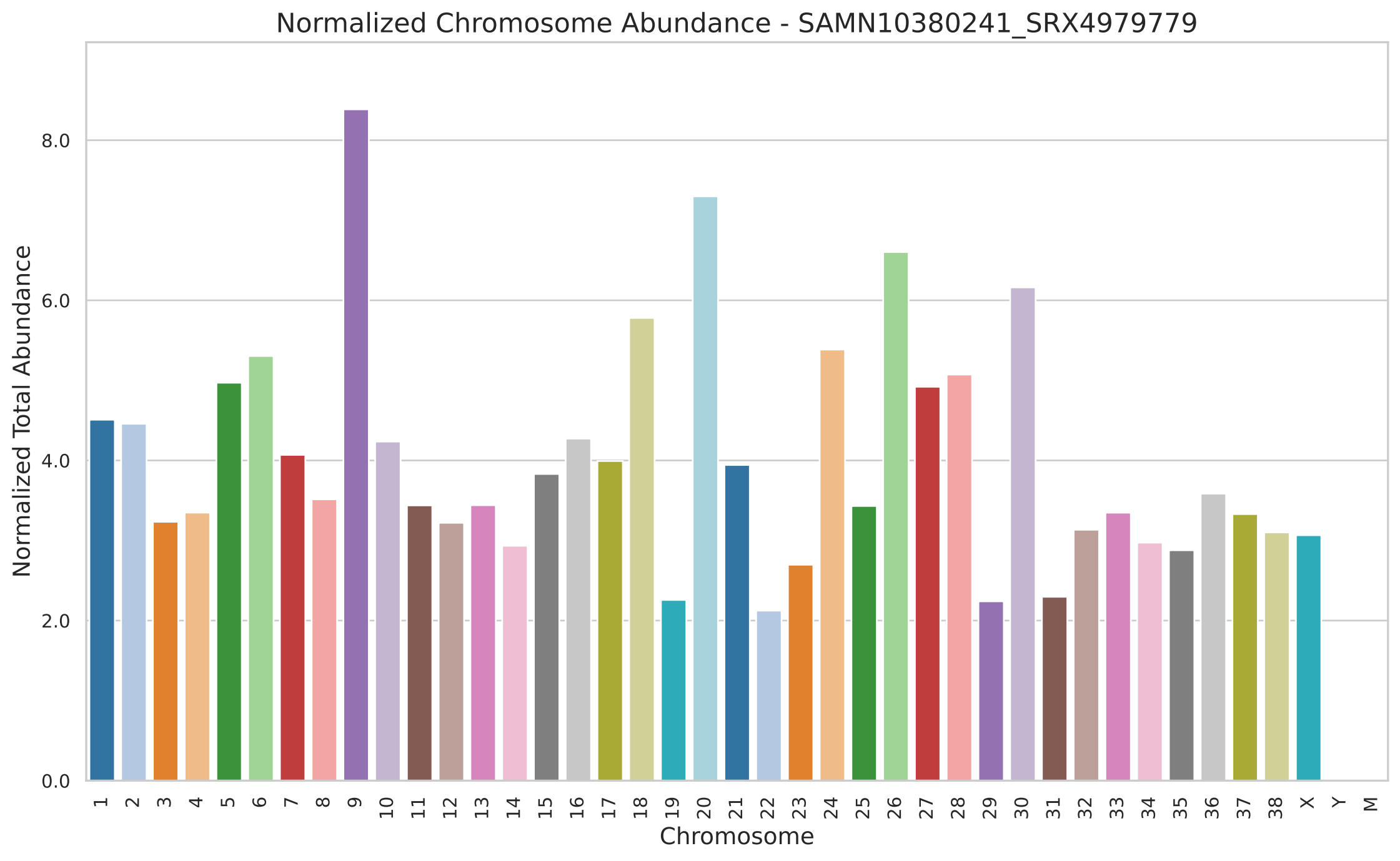

Normalized Chromosome Abundance - SAMN10380253_SRX4979852
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

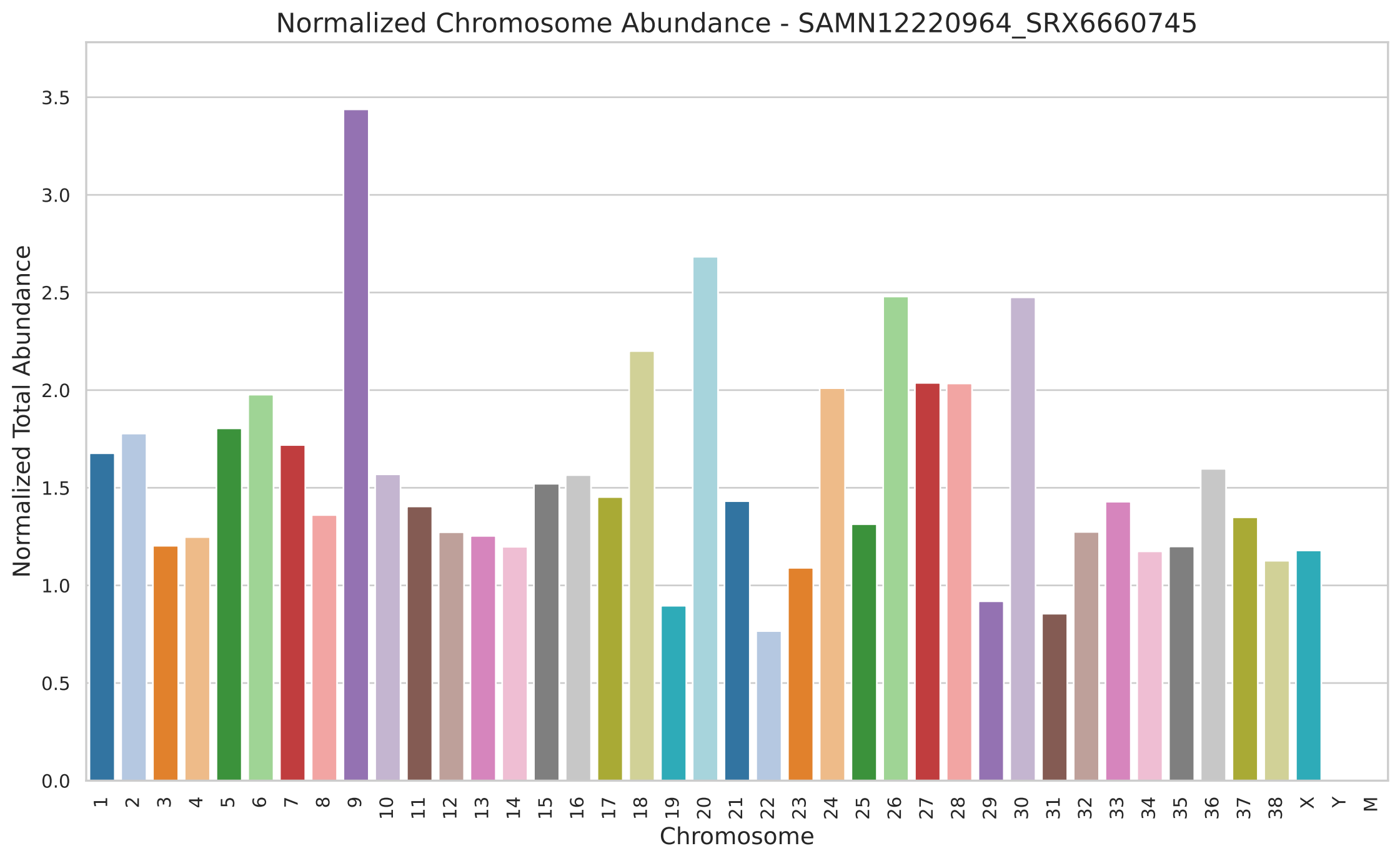

Normalized Chromosome Abundance - SAMEA3910268_ERX3482278
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

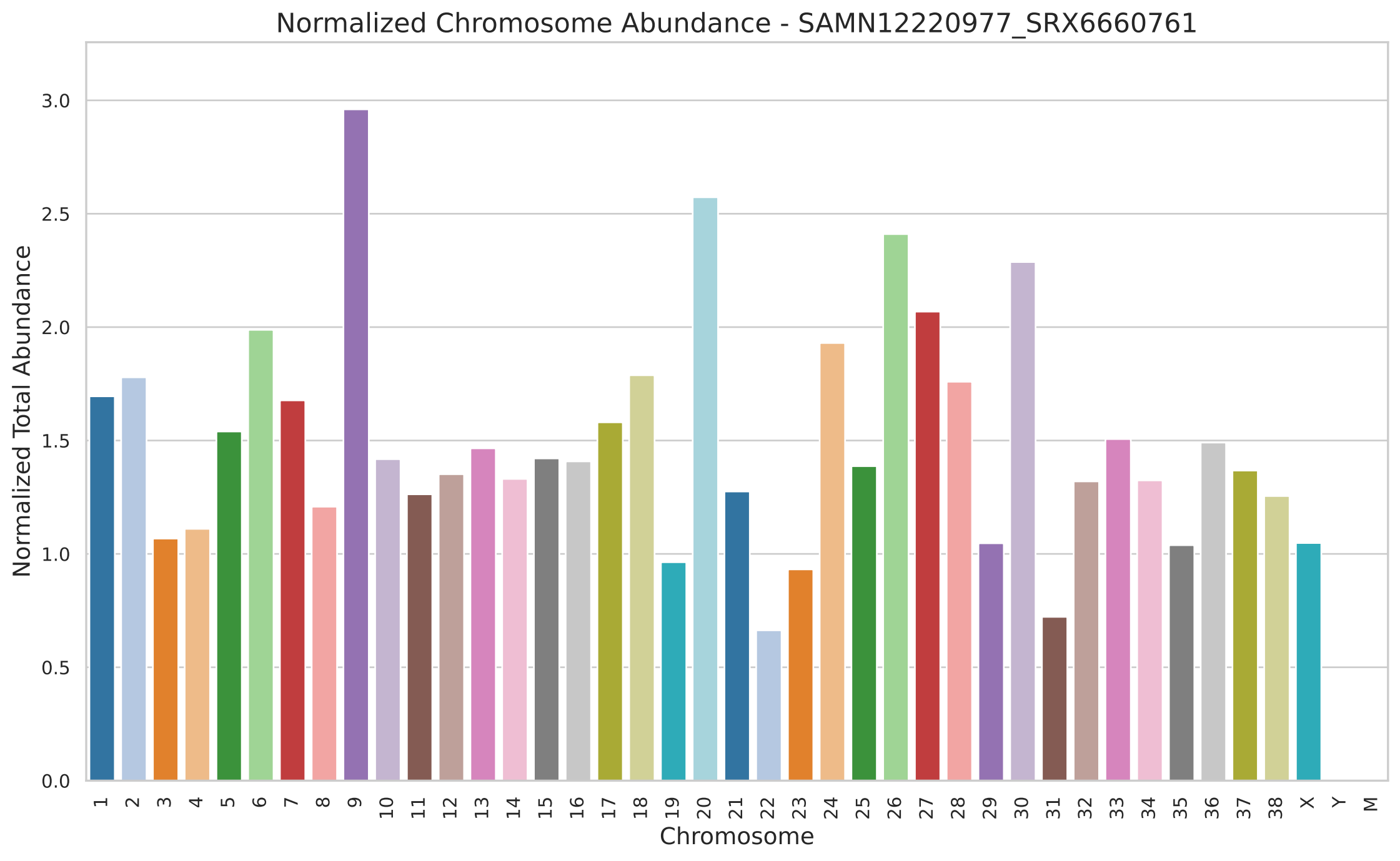

Normalized Chromosome Abundance - SAMN12220988_SRX6660731
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

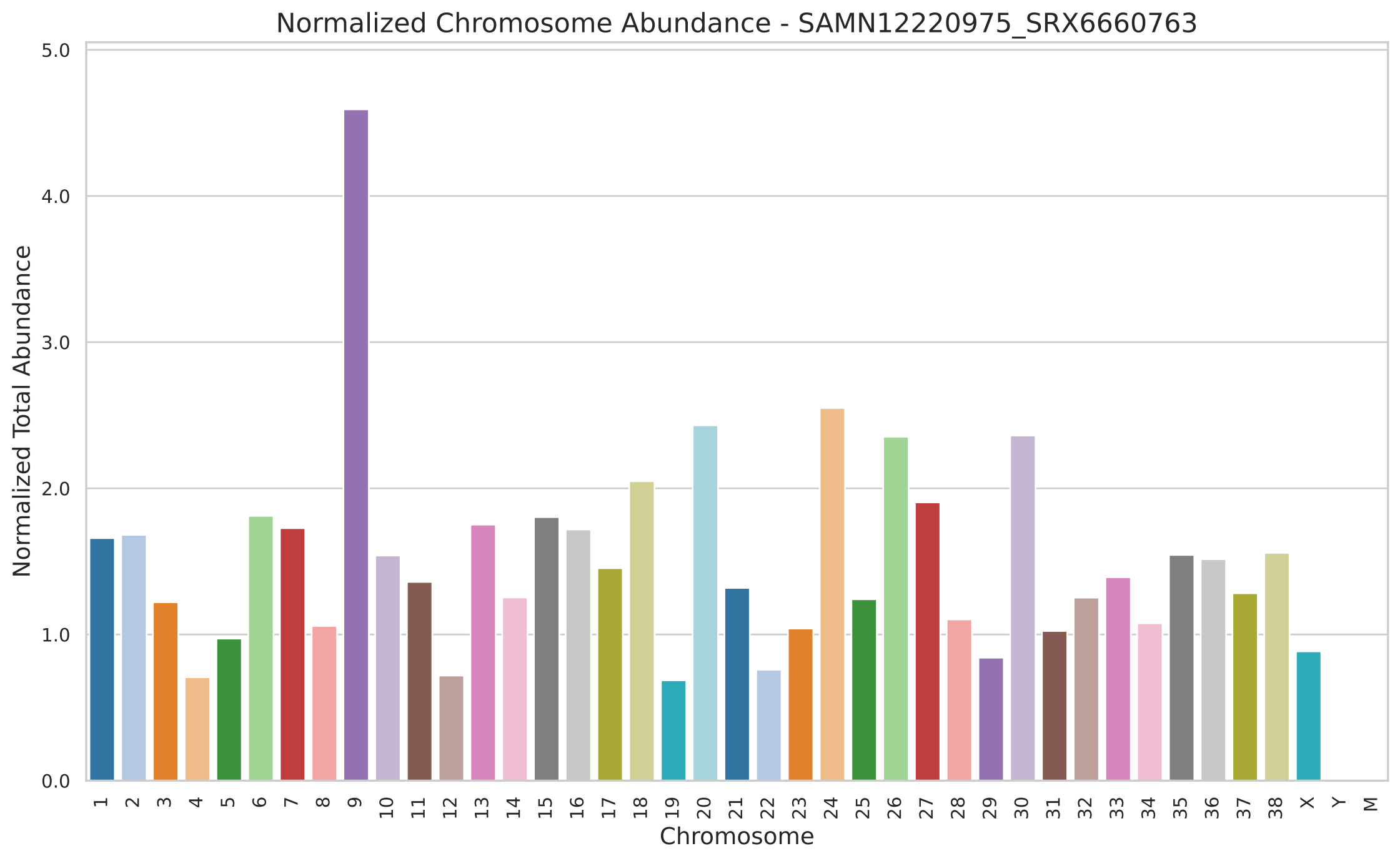

Normalized Chromosome Abundance - SAMEA4673513_ERX3491049
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

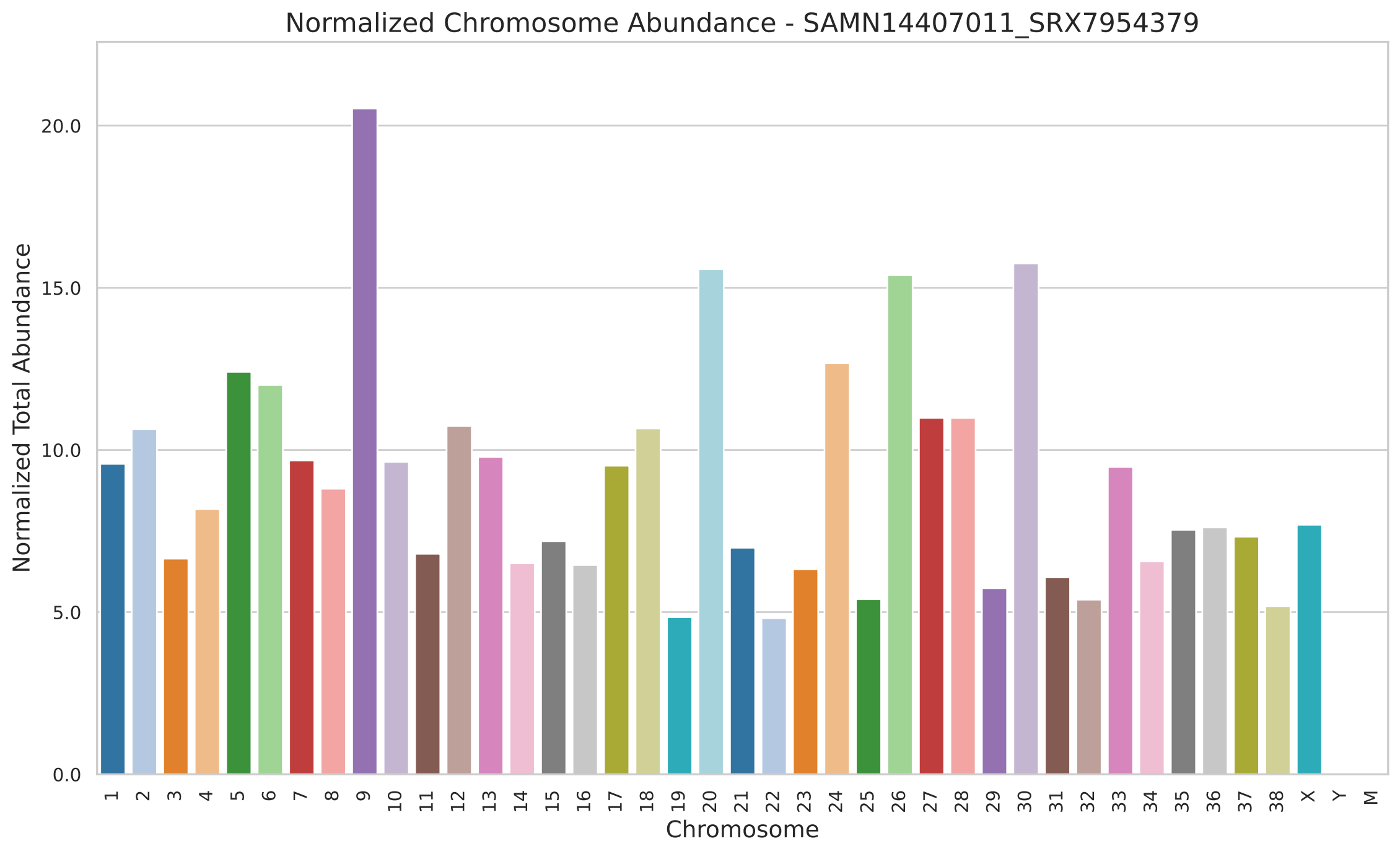

Normalized Chromosome Abundance - SAMEA3910480_ERX3482330
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

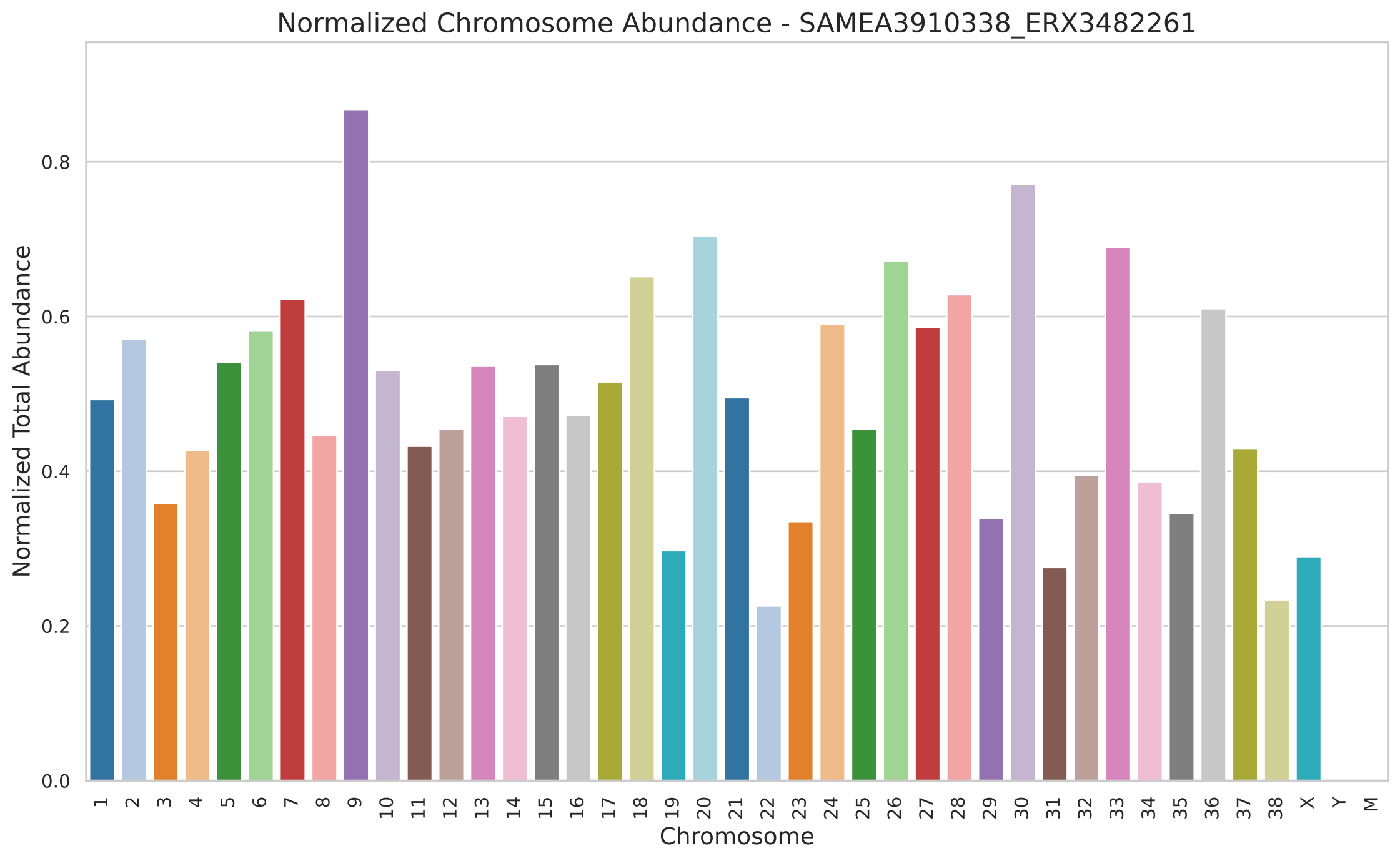

Normalized Chromosome Abundance - SAMN10380241_SRX4979779
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

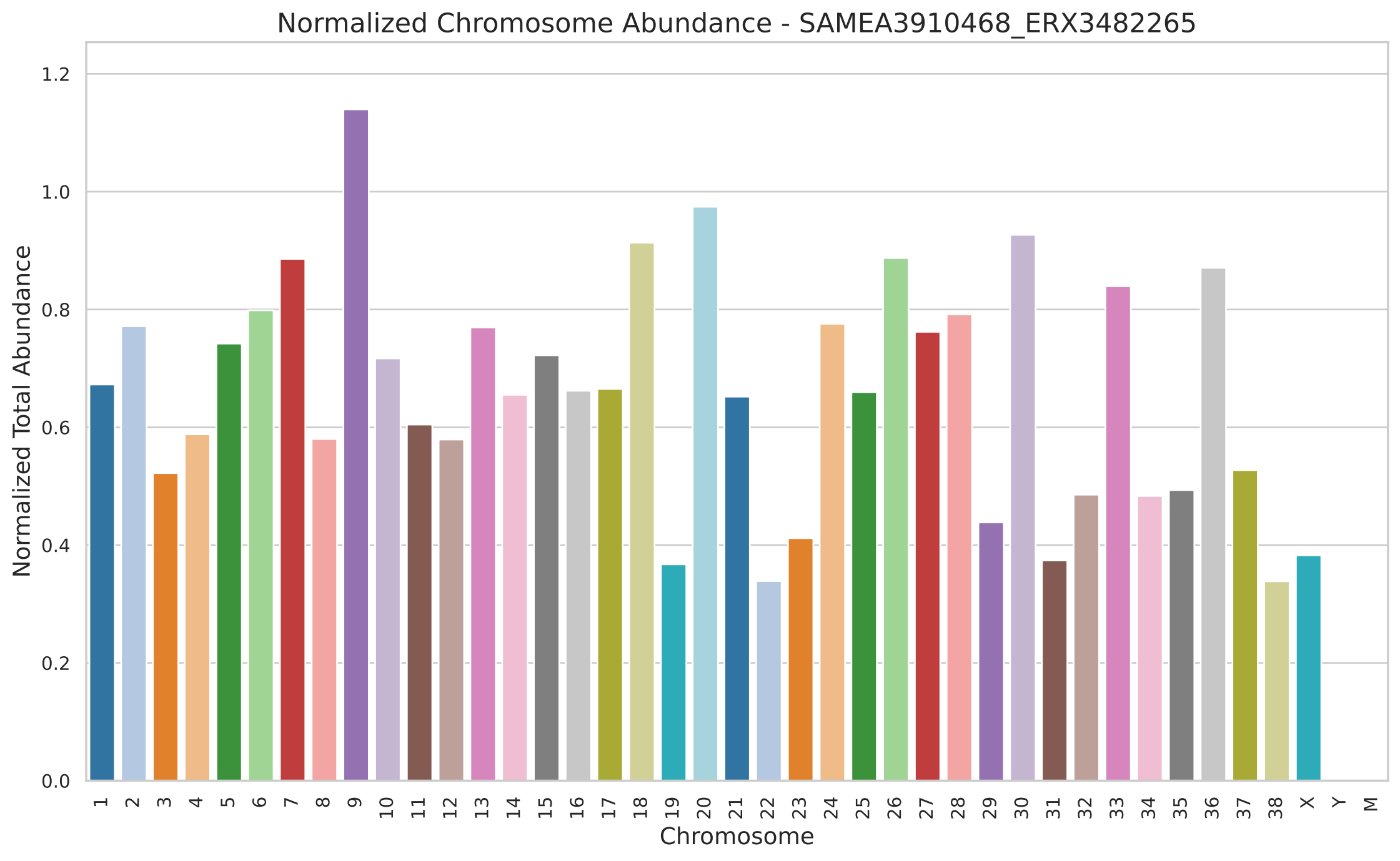

Normalized Chromosome Abundance - SAMN12220964_SRX6660745
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

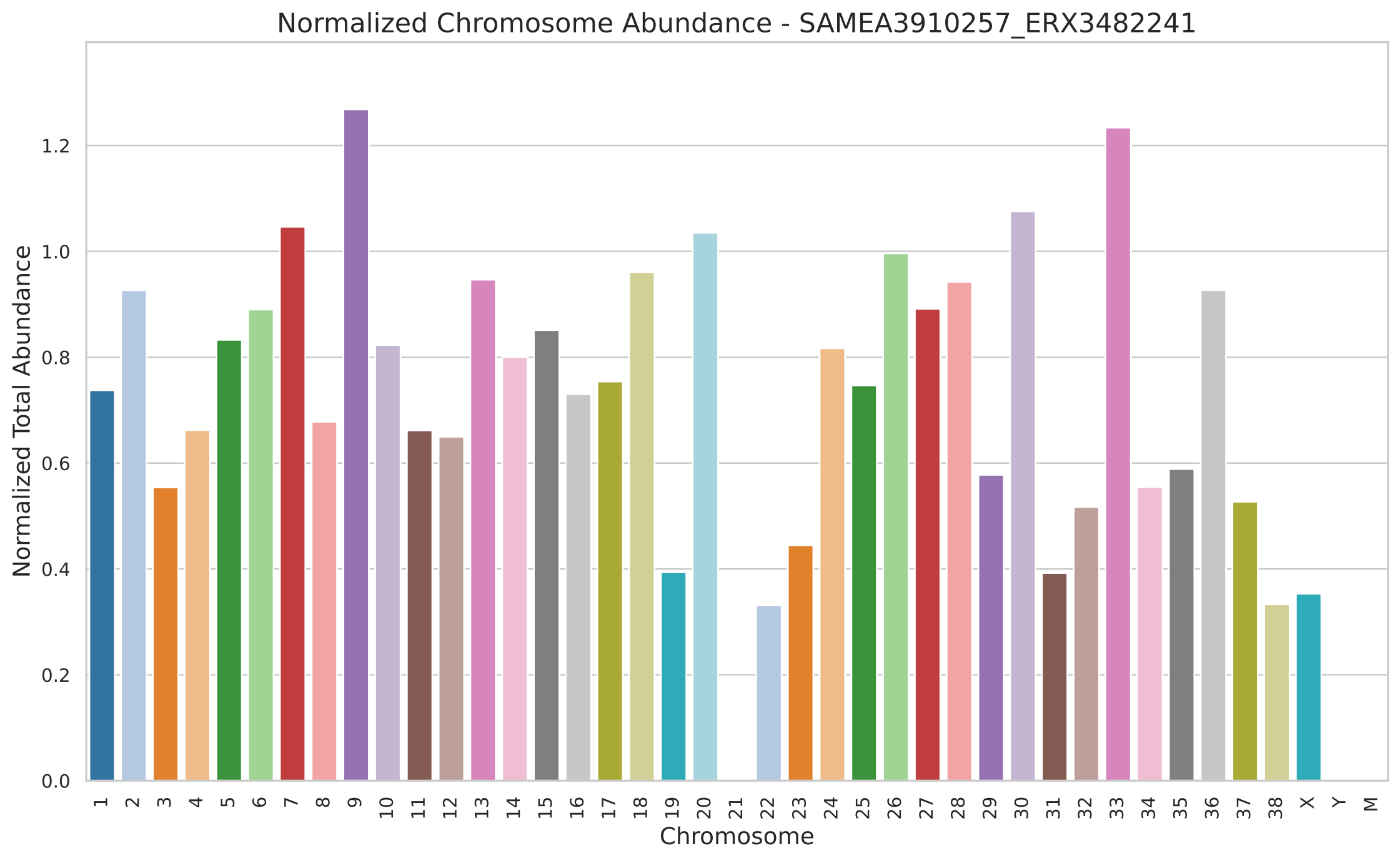

Normalized Chromosome Abundance - SAMN12220977_SRX6660761
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

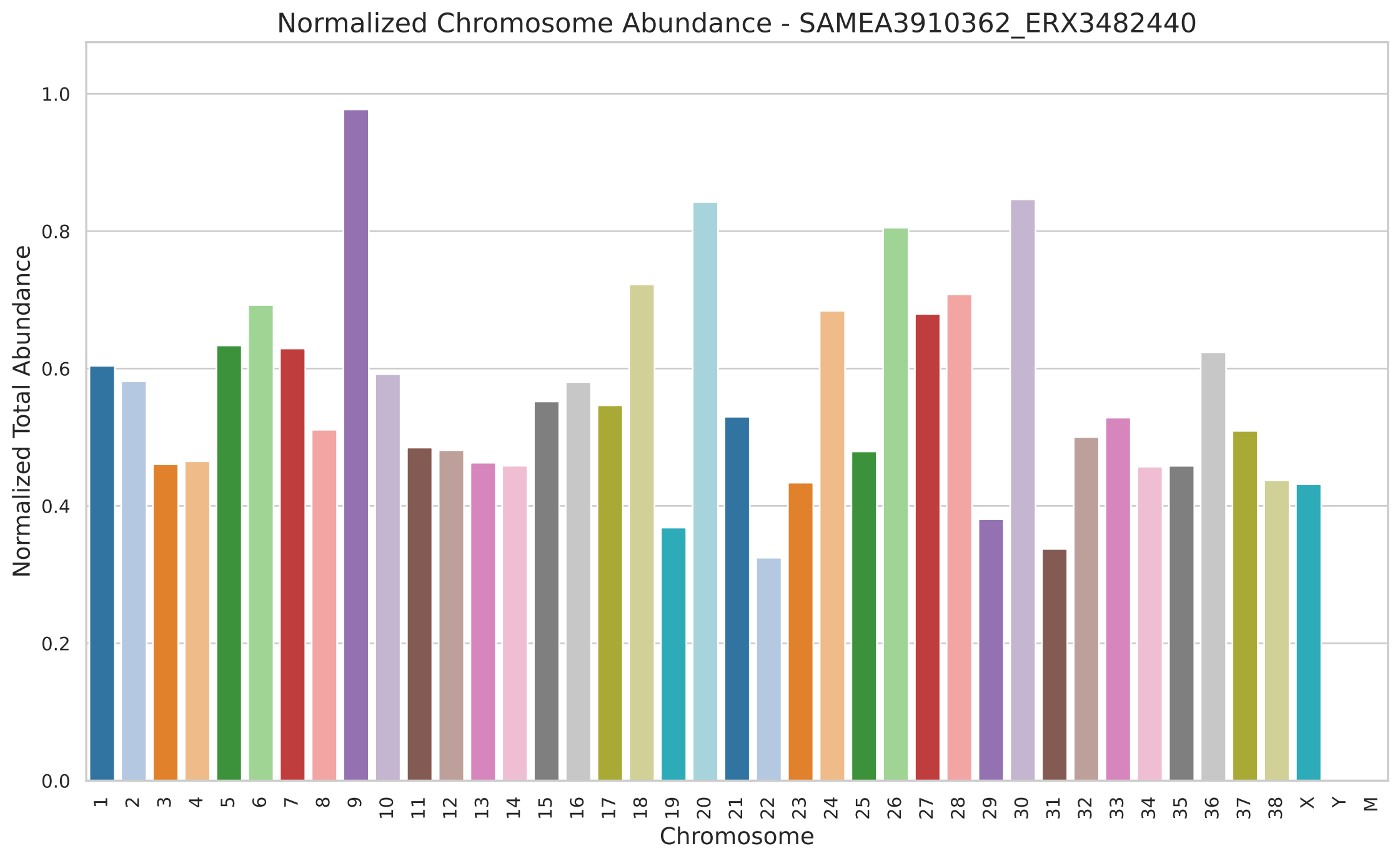

Normalized Chromosome Abundance - SAMN12220975_SRX6660763
Normalized Total Abundance
5.0
4.0
3.0
2.0
1.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

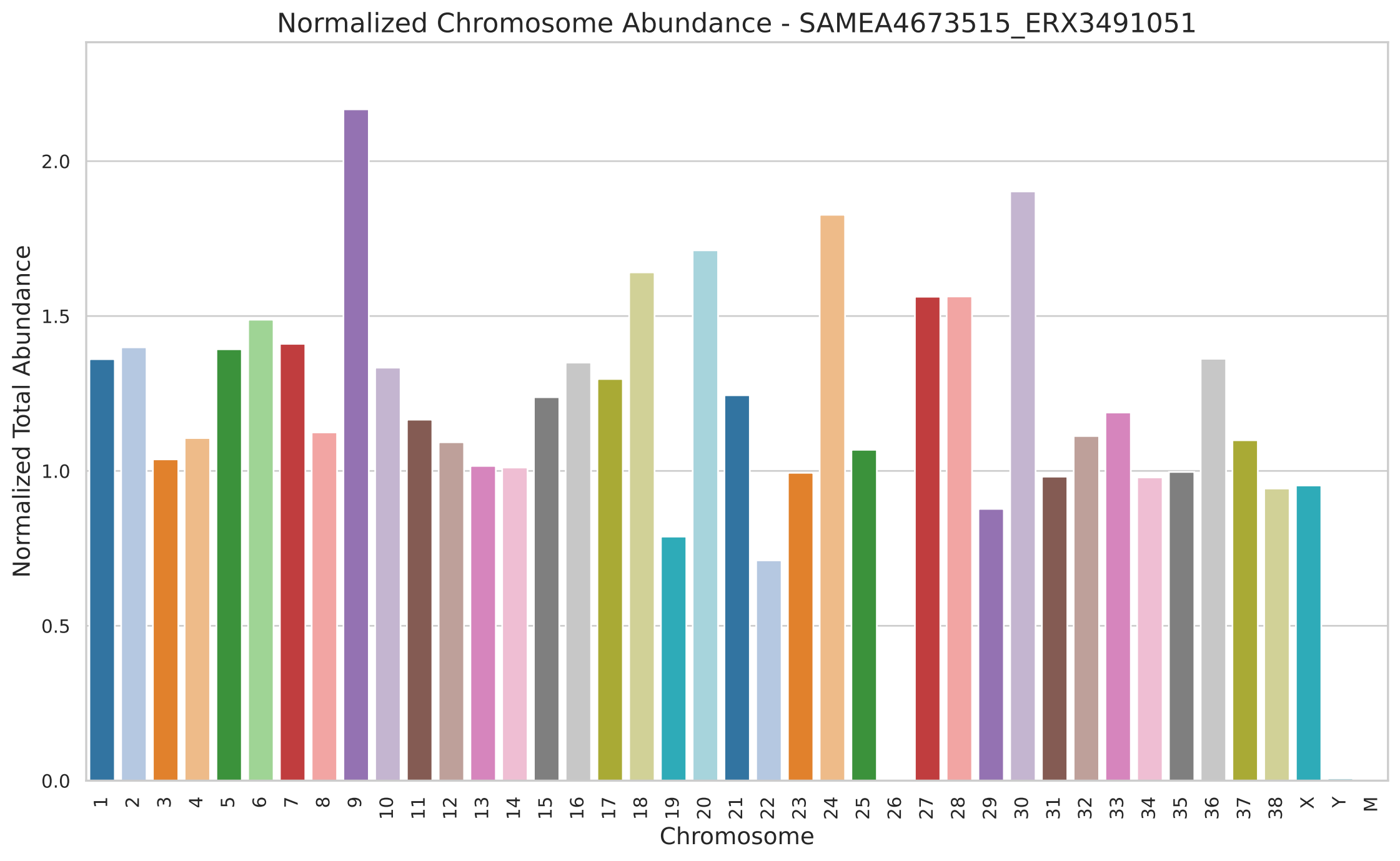

Normalized Chromosome Abundance - SAMN14407011_SRX7954379
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

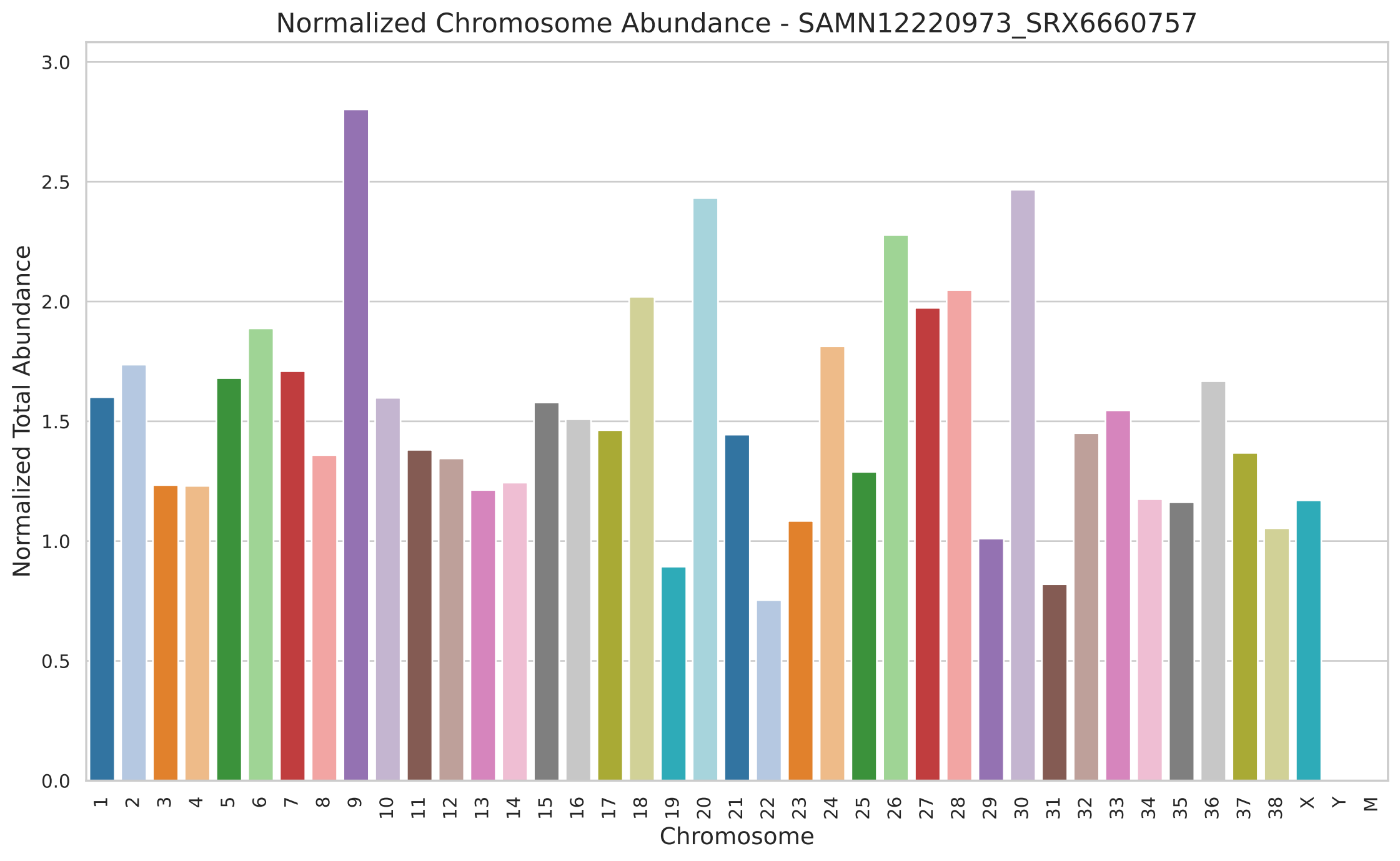

Normalized Chromosome Abundance - SAMEA3910338_ERX3482261
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

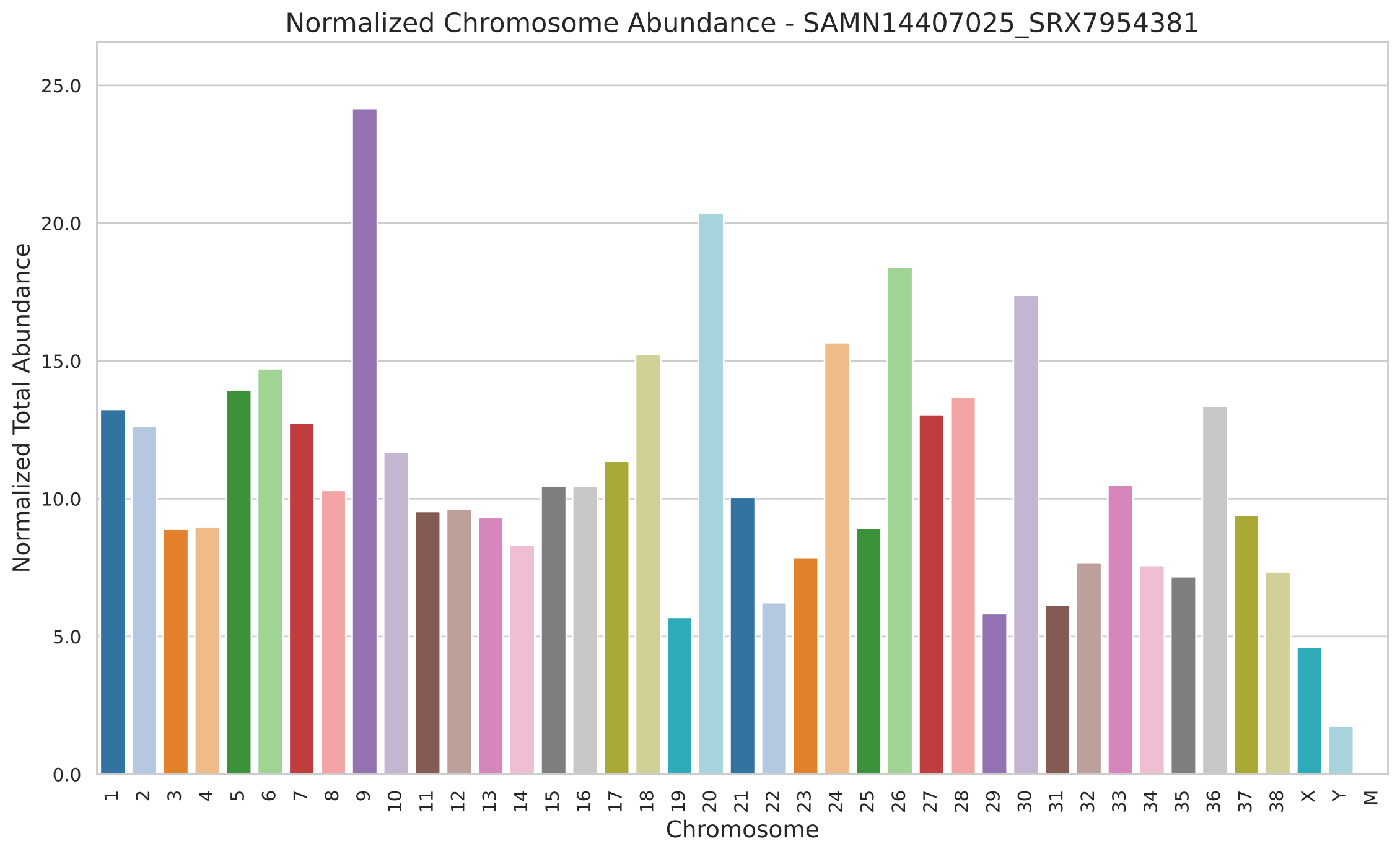

Normalized Chromosome Abundance - SAMEA3910468_ERX3482265
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

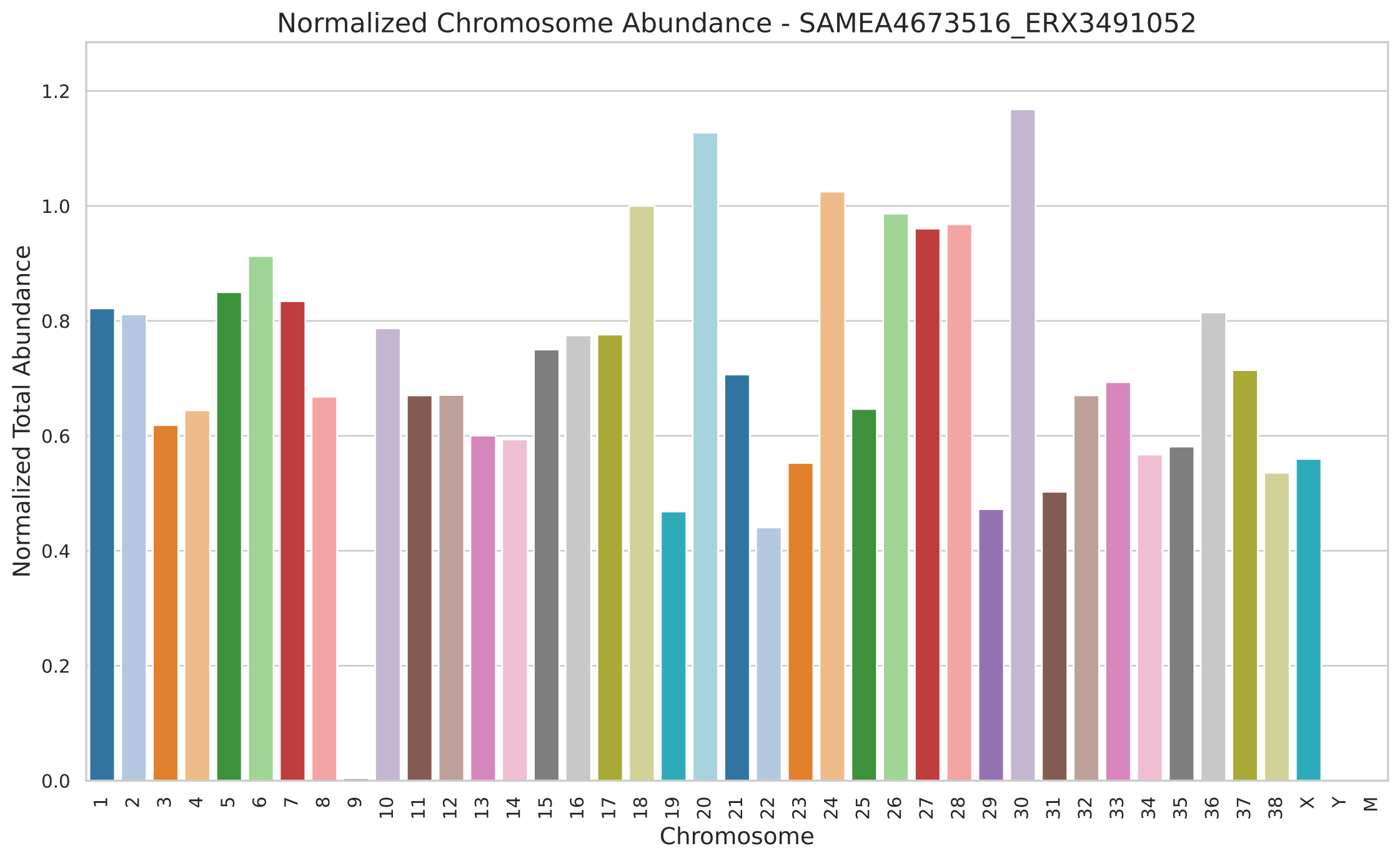

Normalized Chromosome Abundance - SAMEA3910257_ERX3482241
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

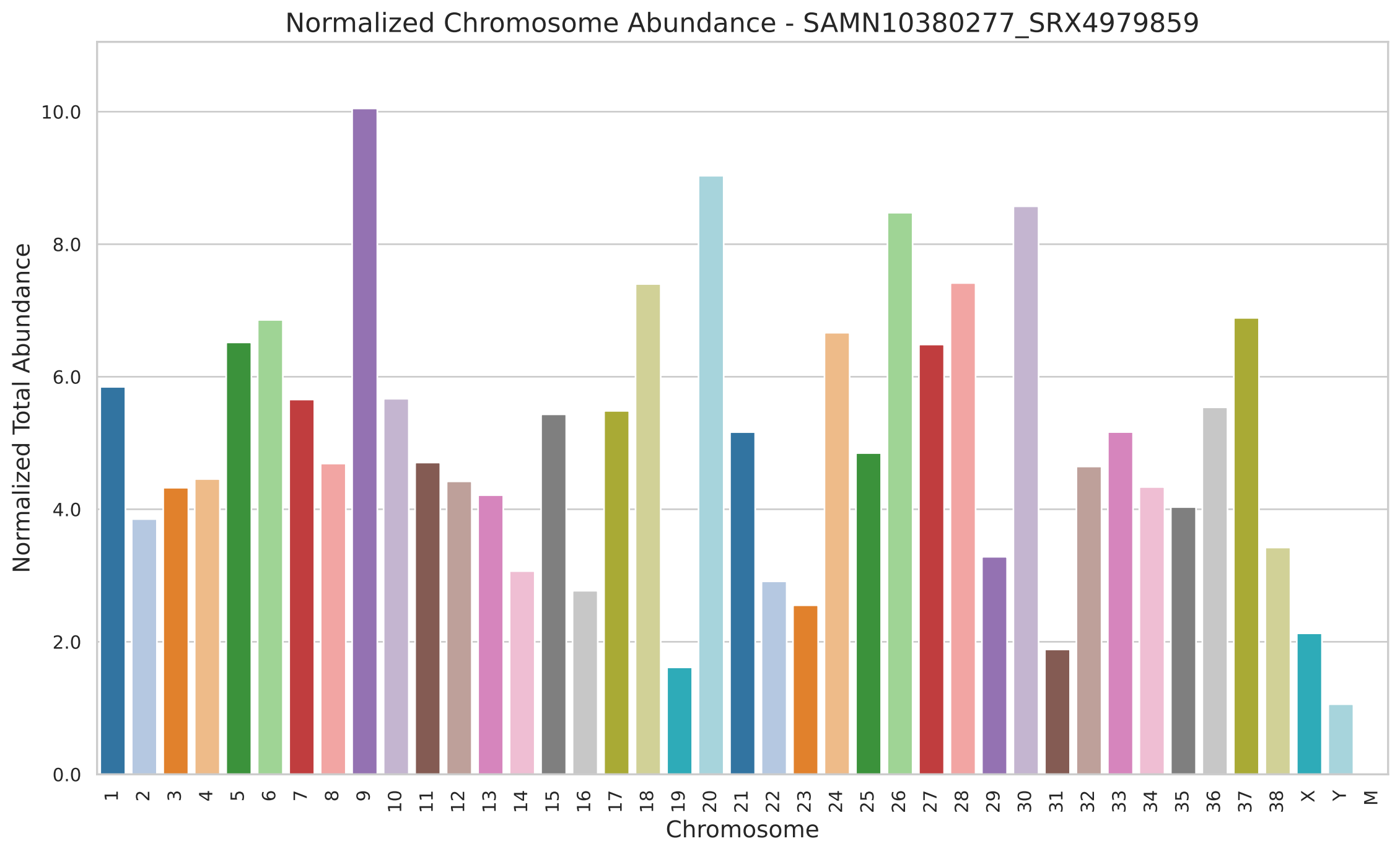

Normalized Chromosome Abundance - SAMEA3910362_ERX3482440
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

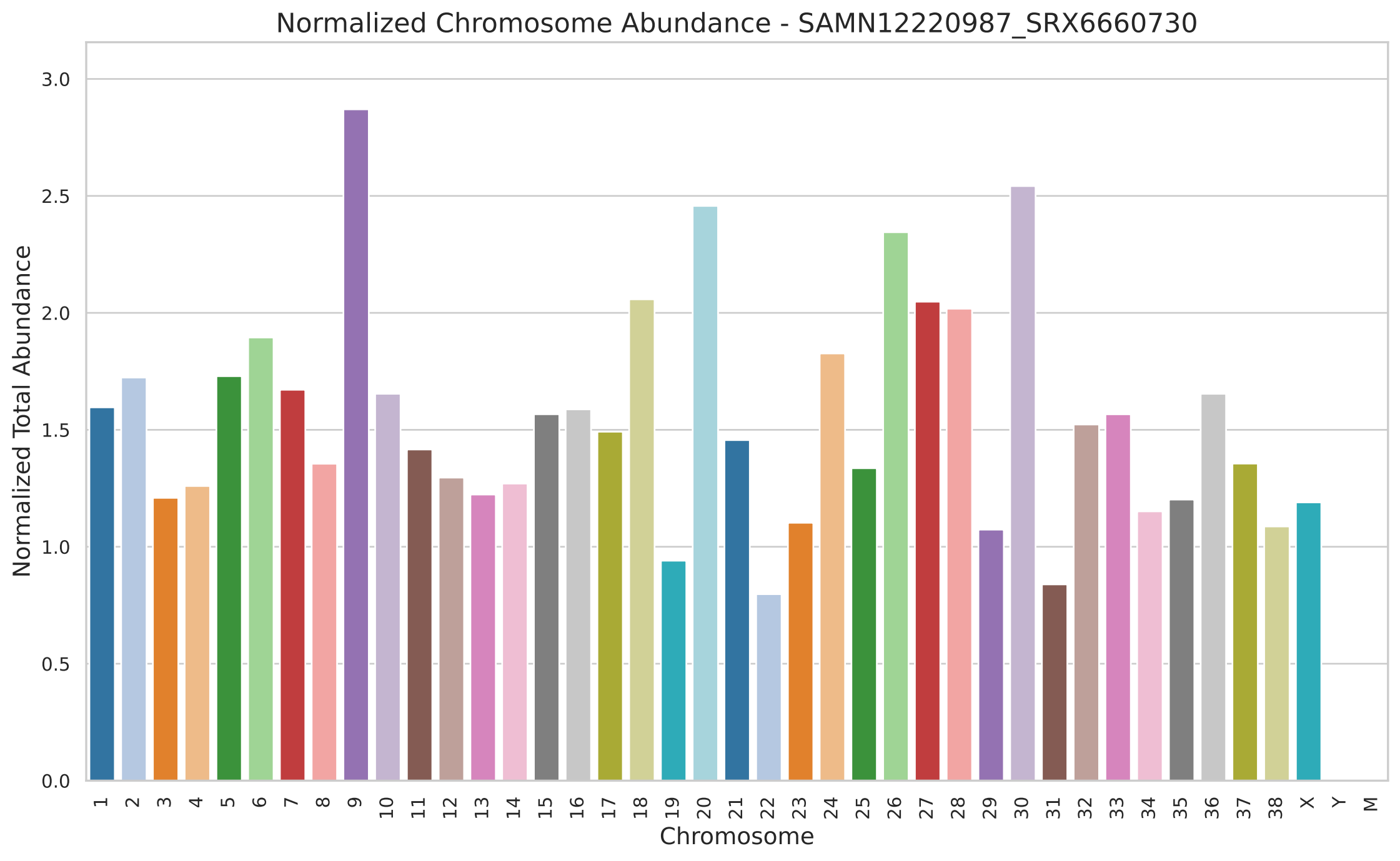

Normalized Chromosome Abundance - SAMEA4673515_ERX3491051
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

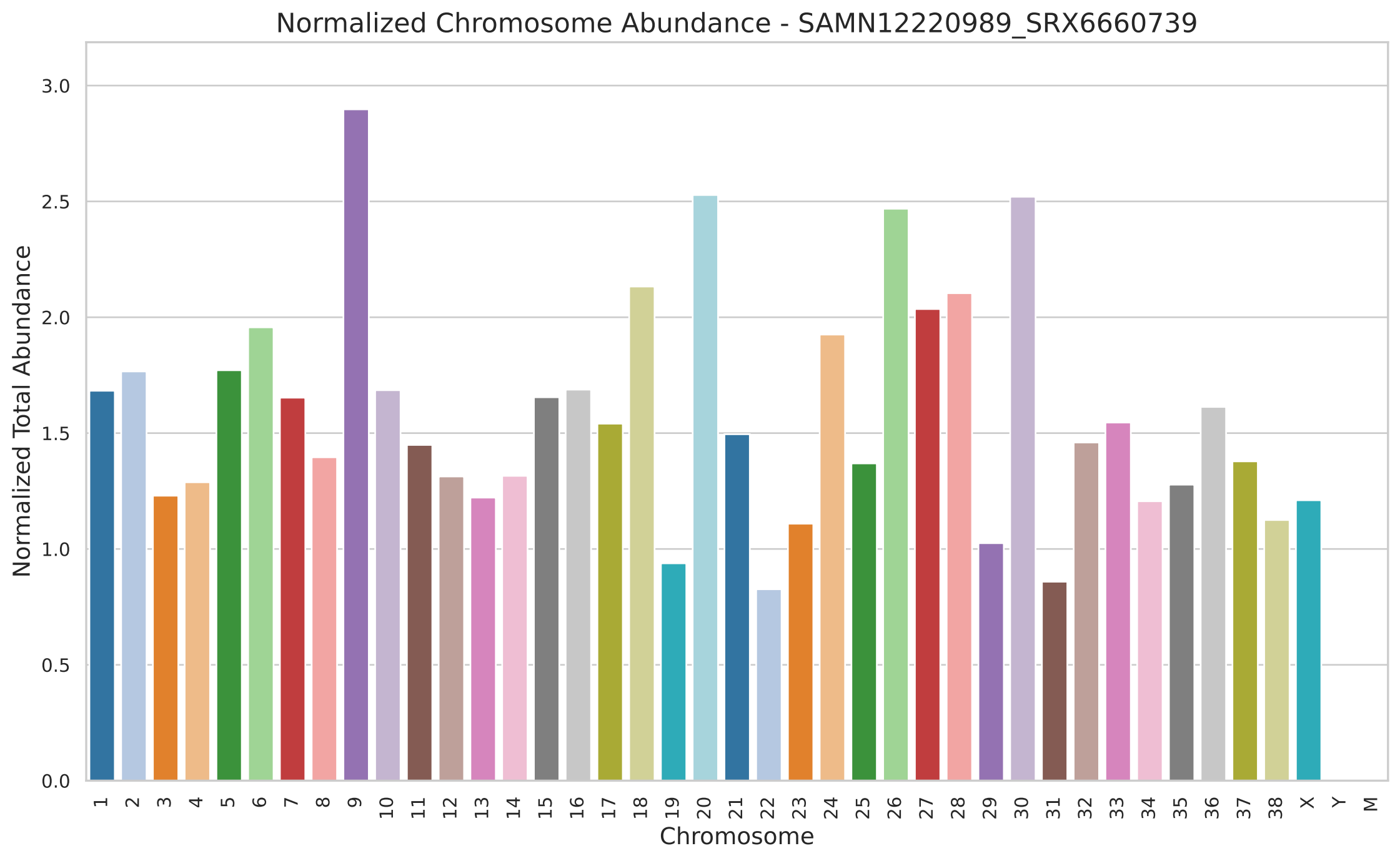

Normalized Chromosome Abundance - SAMN12220973_SRX6660757
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

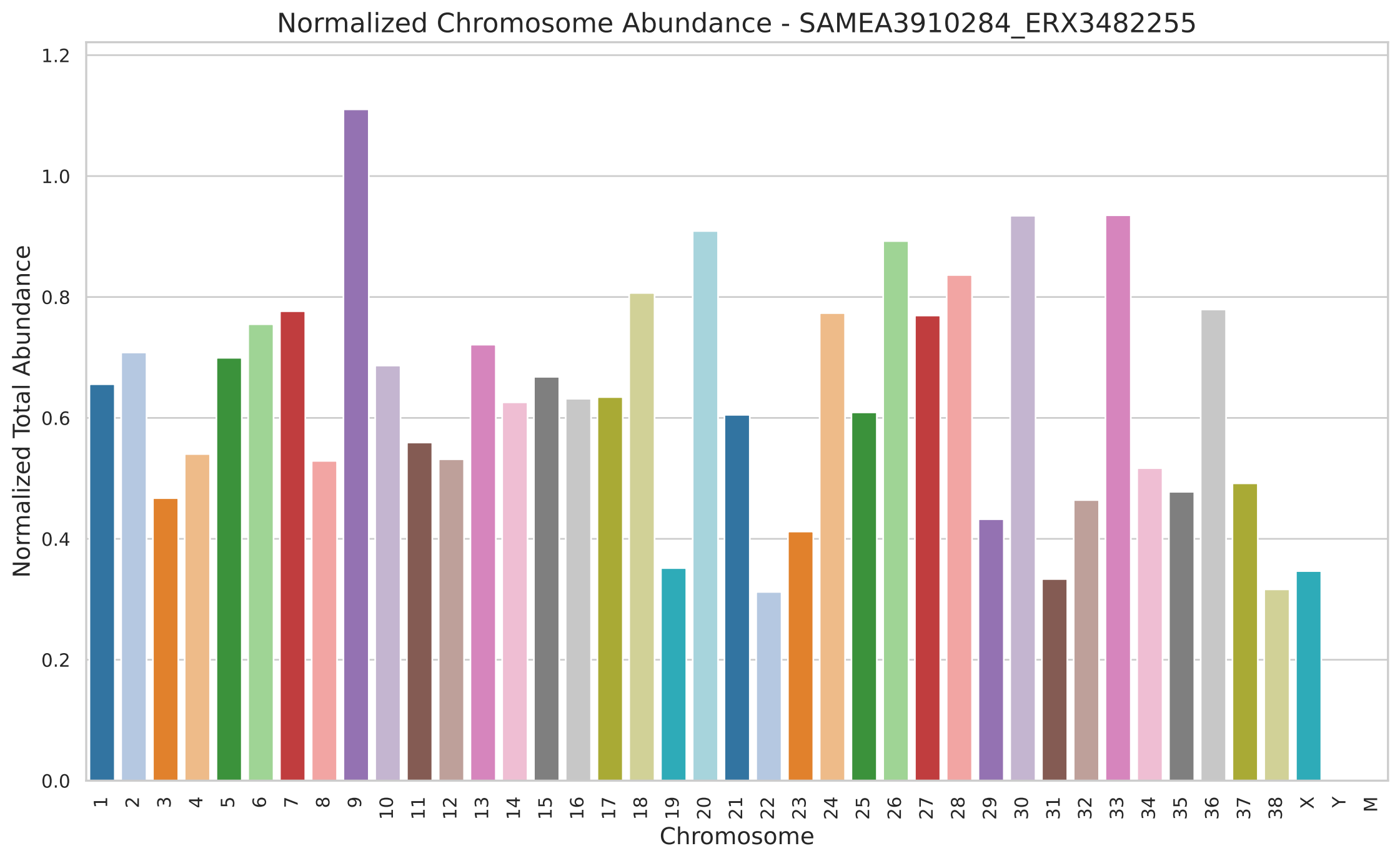

Normalized Chromosome Abundance - SAMN14407025_SRX7954381
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

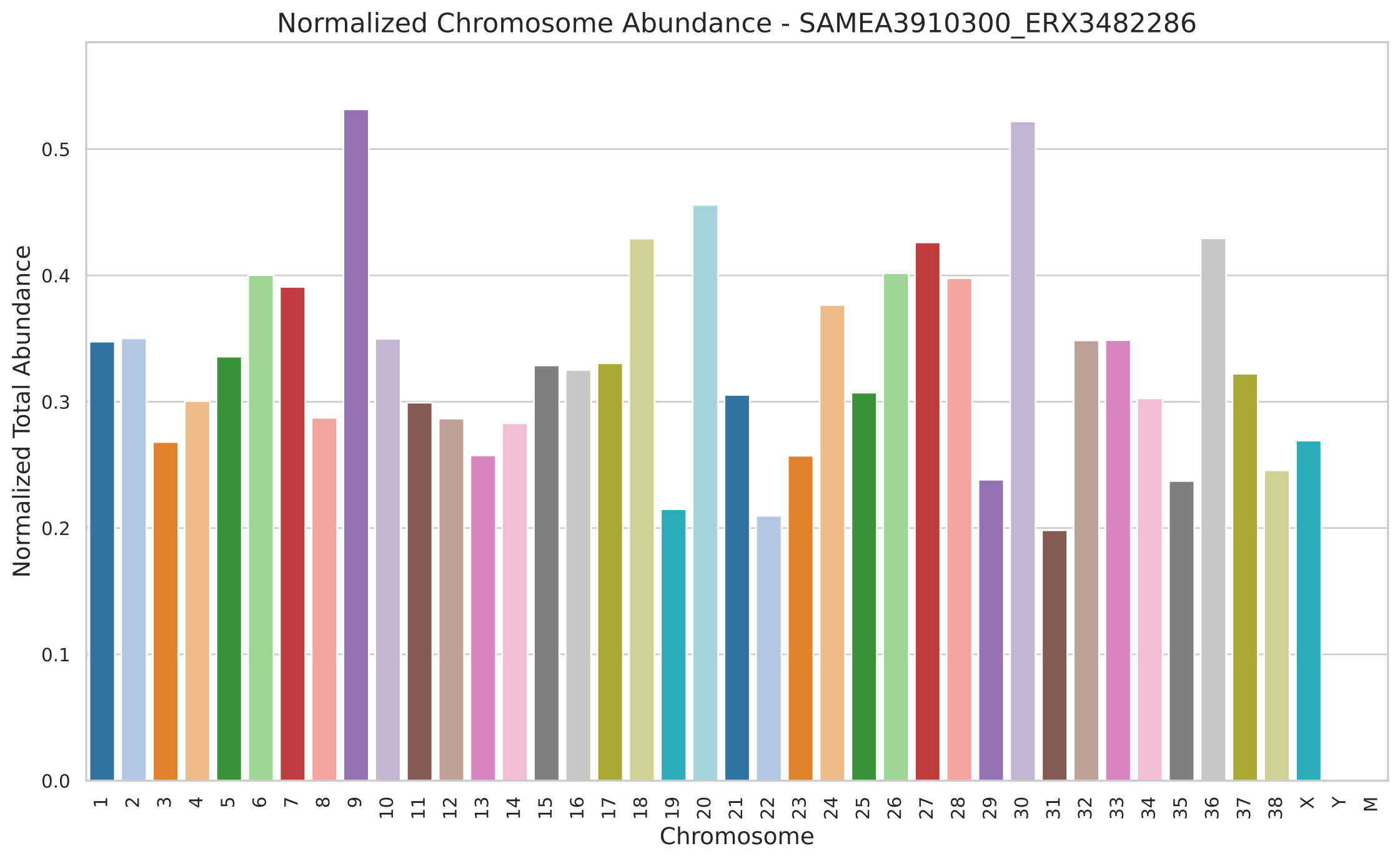

Normalized Chromosome Abundance - SAMEA4673516_ERX3491052
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

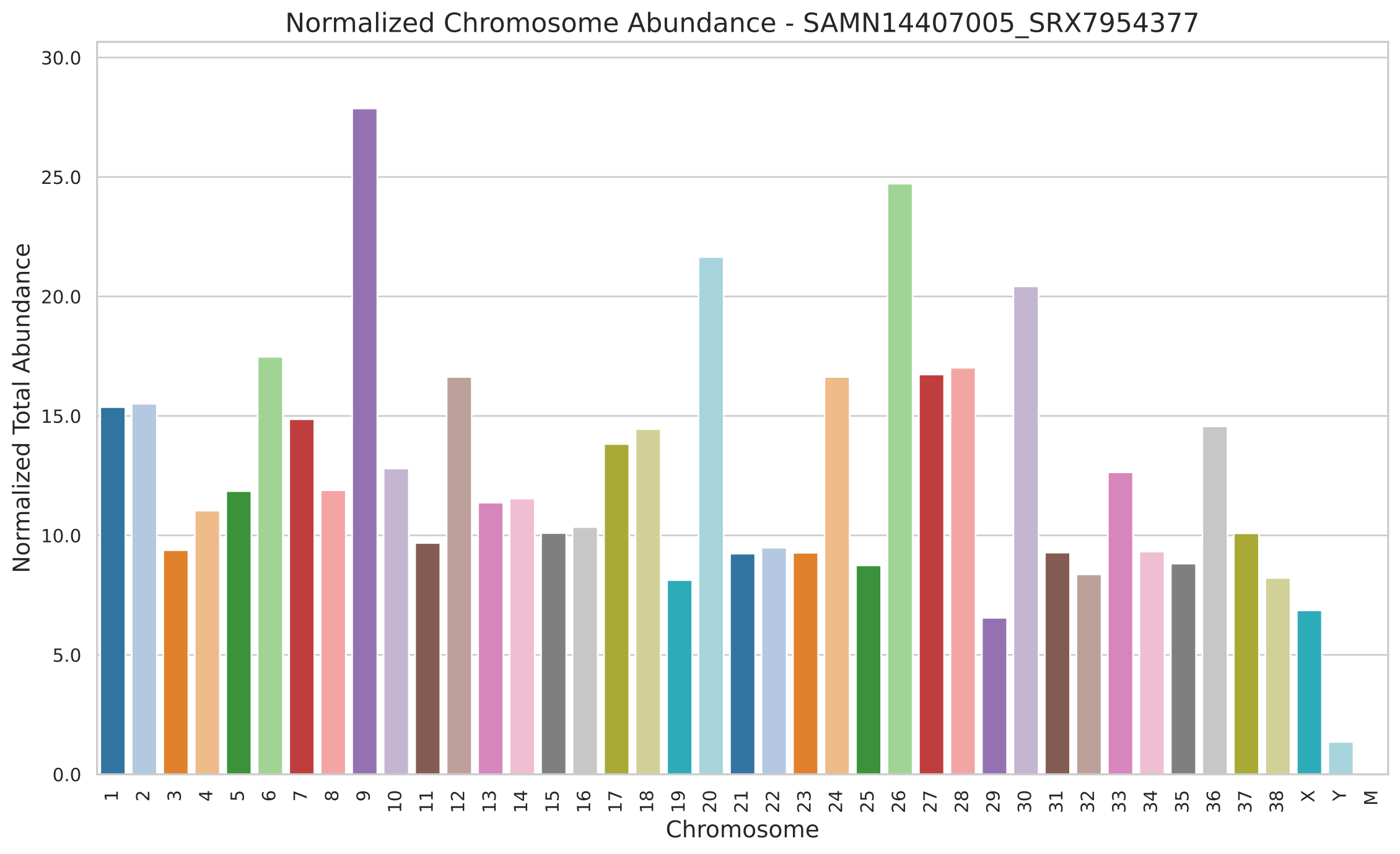

Normalized Chromosome Abundance - SAMN10380277_SRX4979859
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

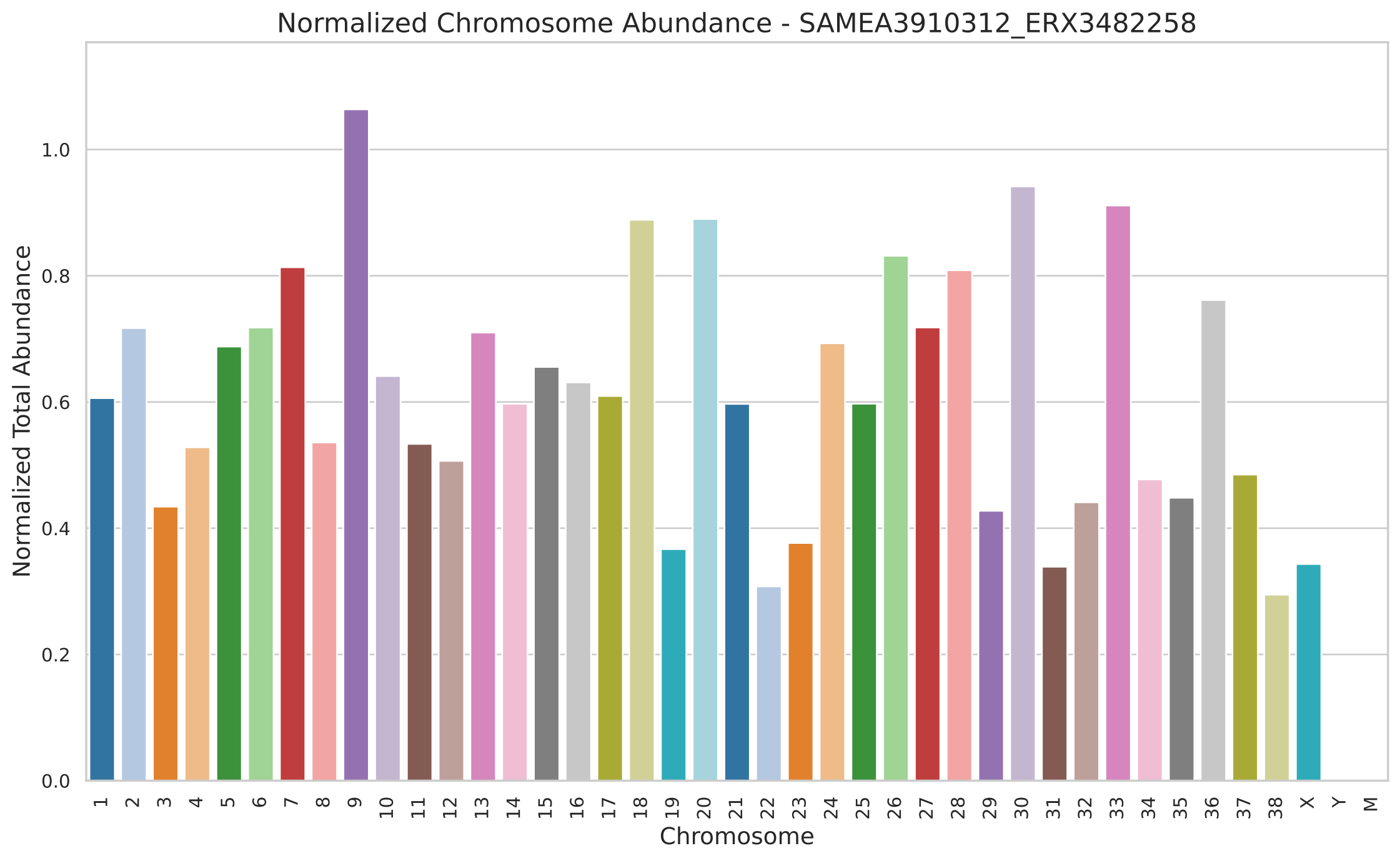

Normalized Chromosome Abundance - SAMN12220987_SRX6660730
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

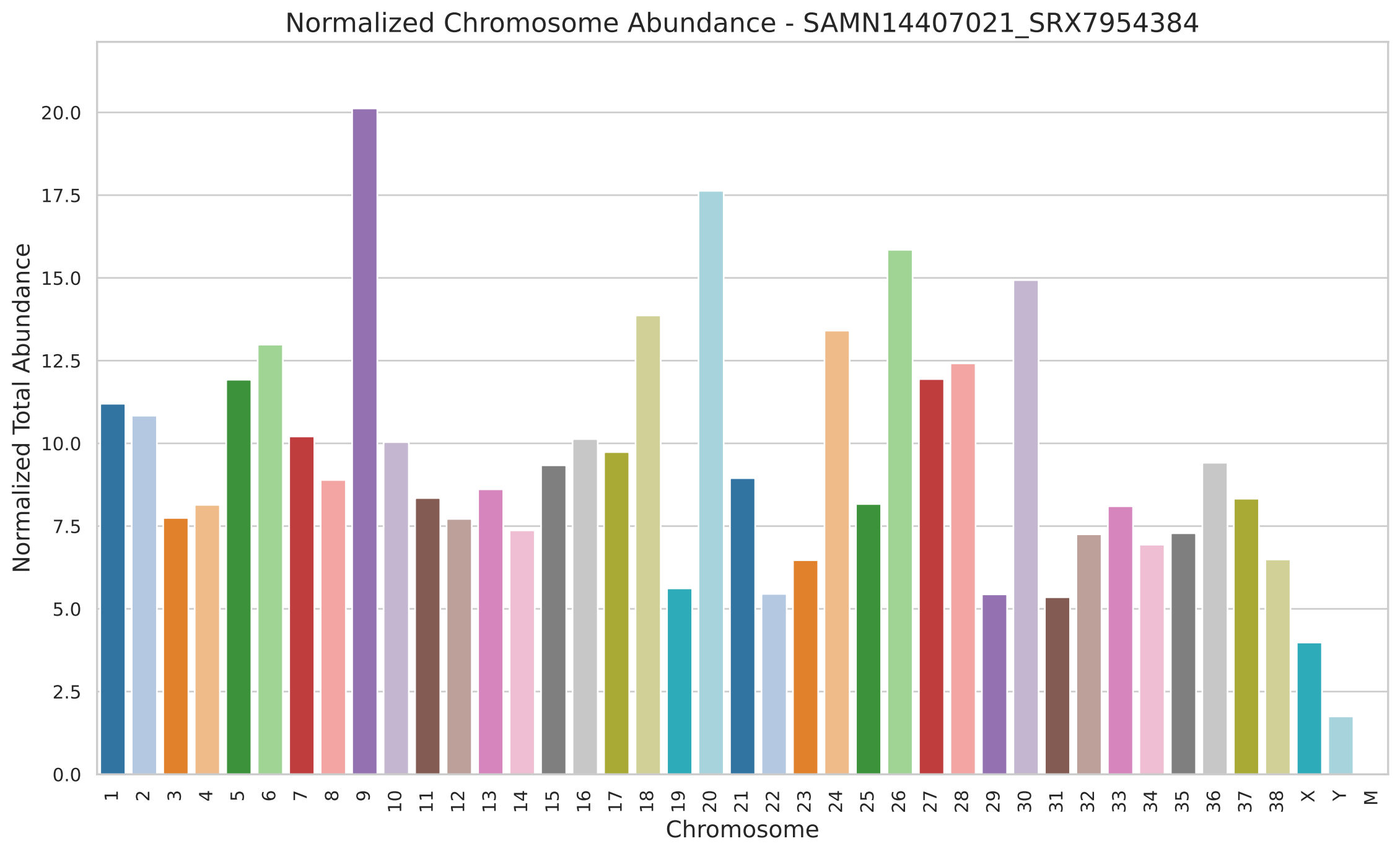

Normalized Chromosome Abundance - SAMN12220989_SRX6660739
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

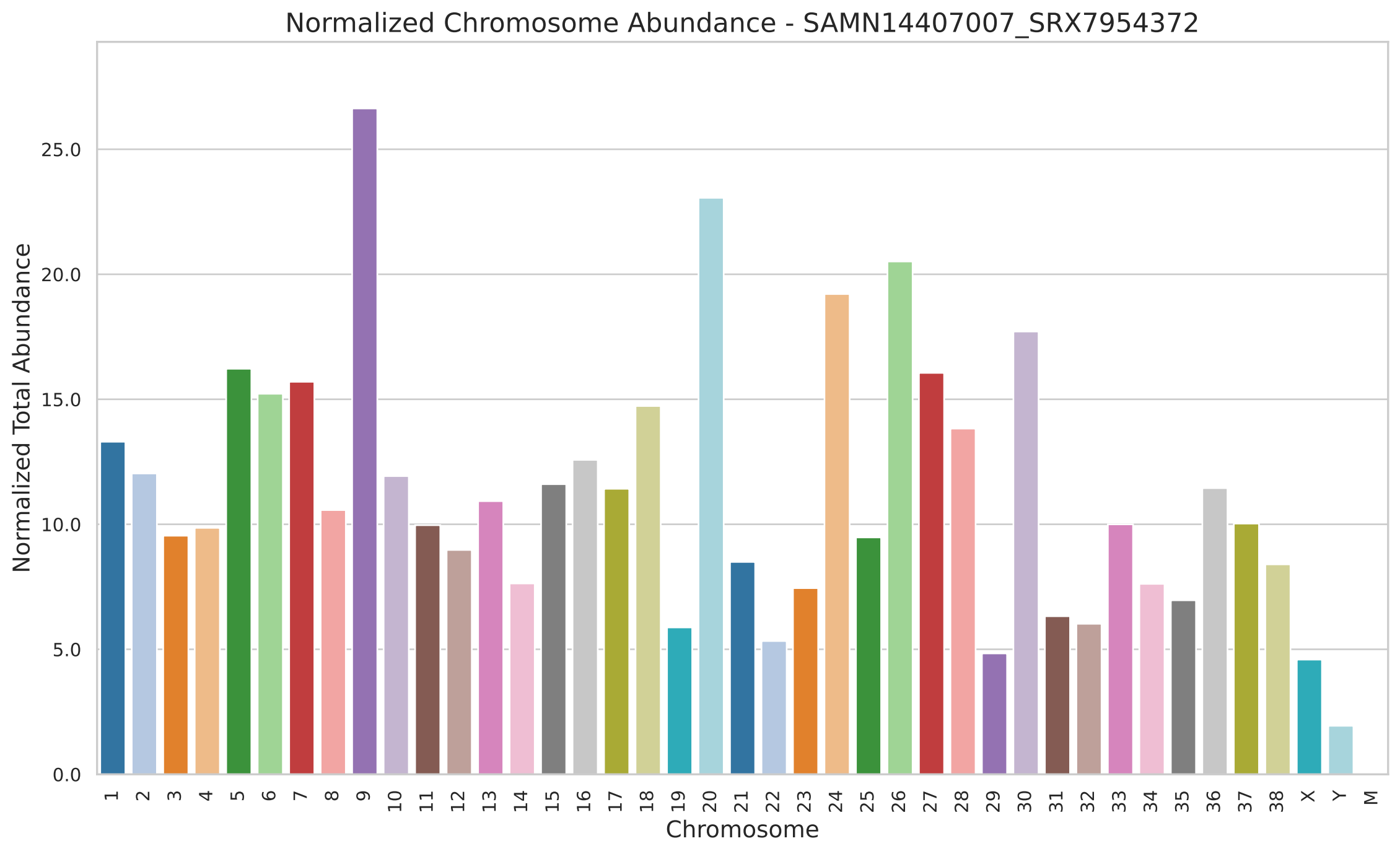

Normalized Chromosome Abundance - SAMEA3910284_ERX3482255
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

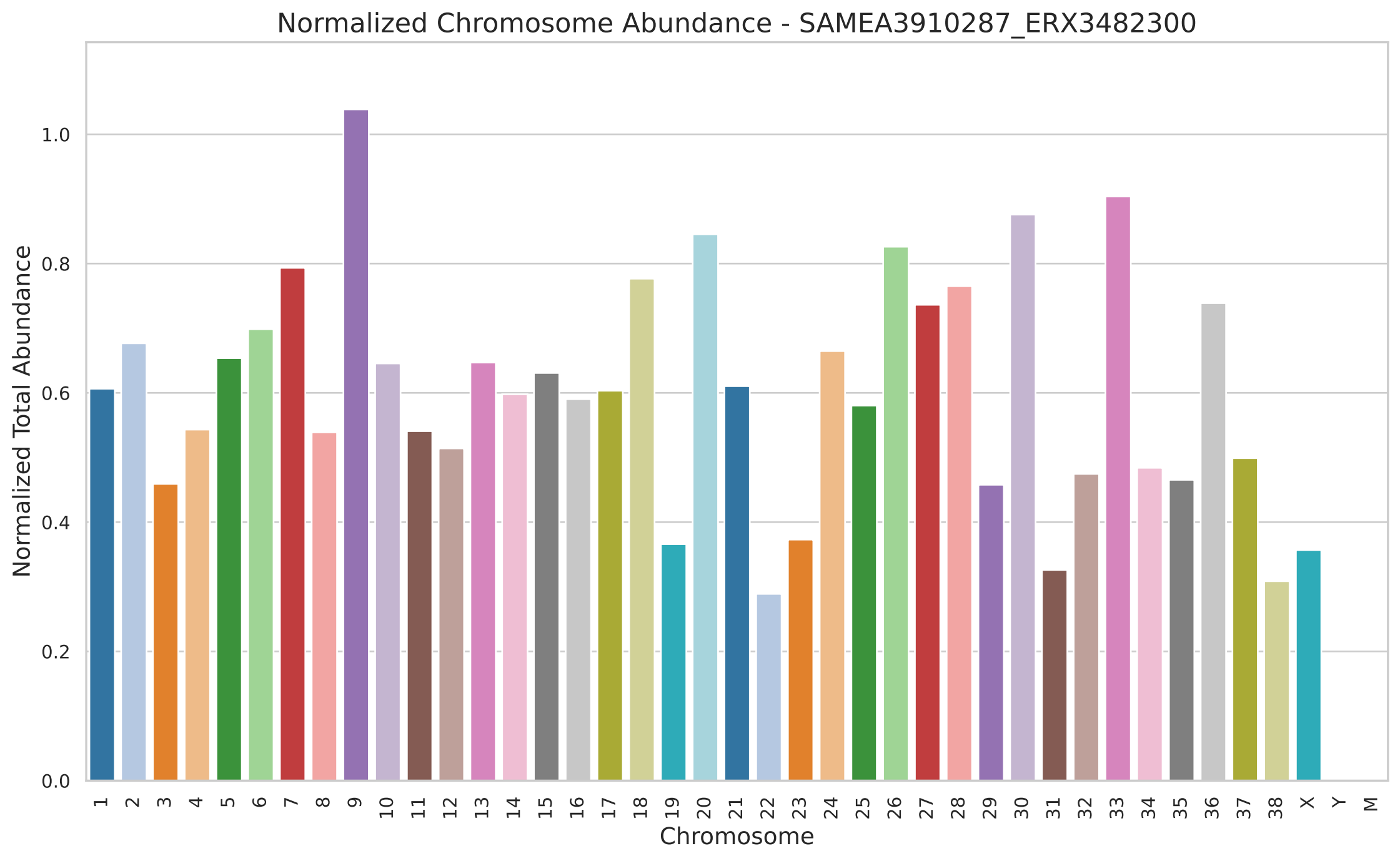

Normalized Chromosome Abundance - SAMEA3910300_ERX3482286
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

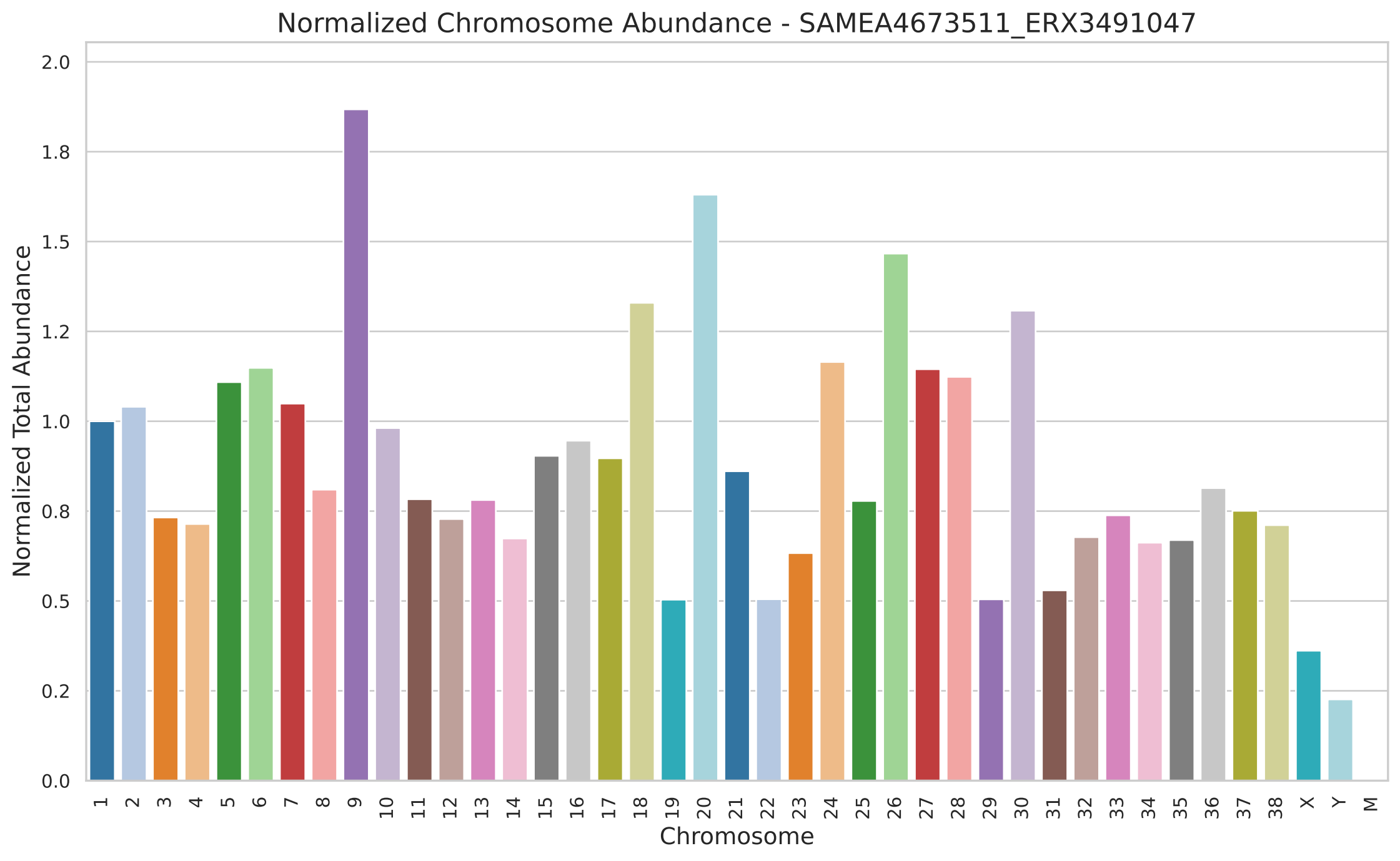

Normalized Chromosome Abundance - SAMN14407005_SRX7954377
Normalized Total Abundance
30.0
25.0
20.0
15.0
10.0
5.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

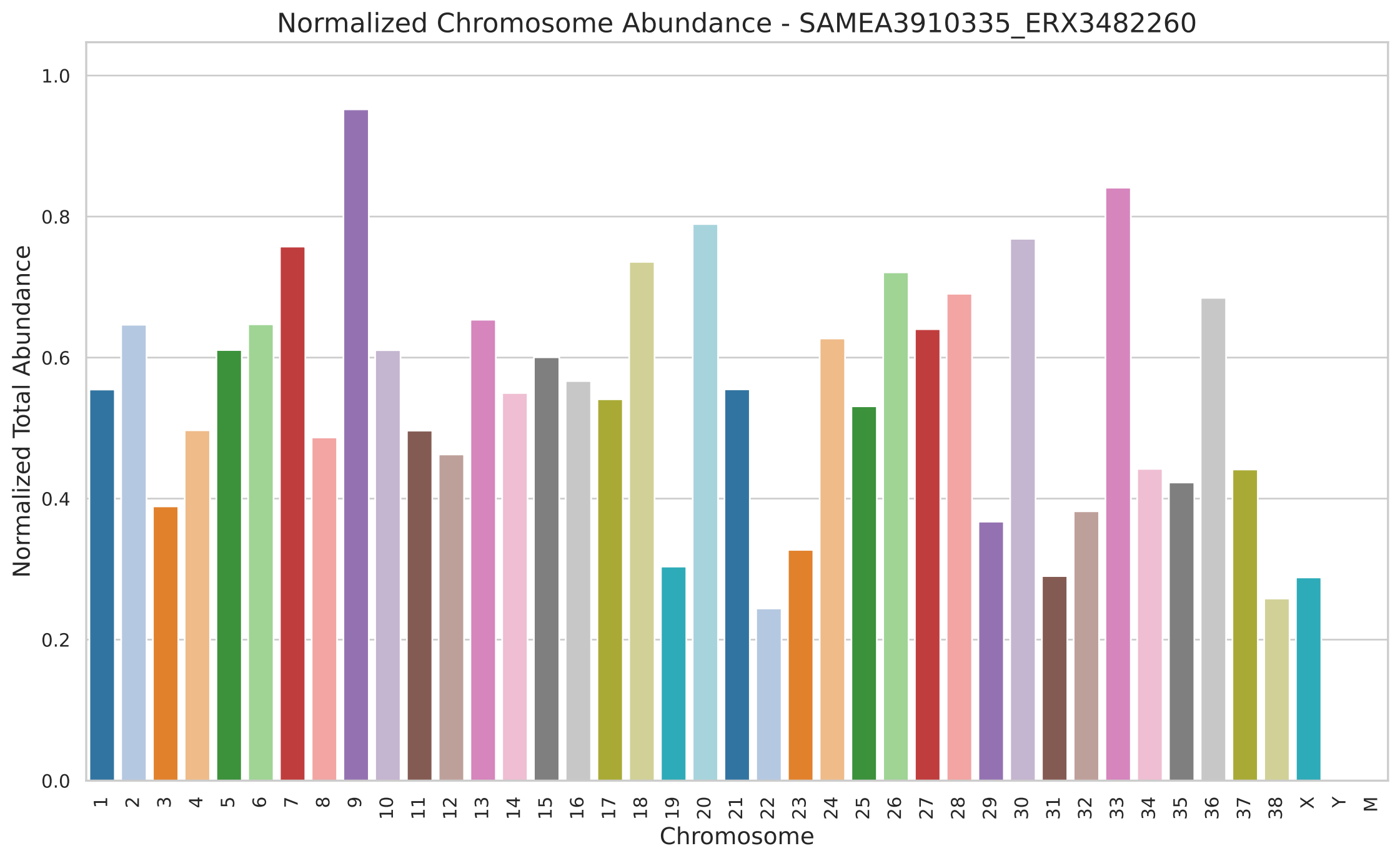

Normalized Chromosome Abundance - SAMEA3910312_ERX3482258
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

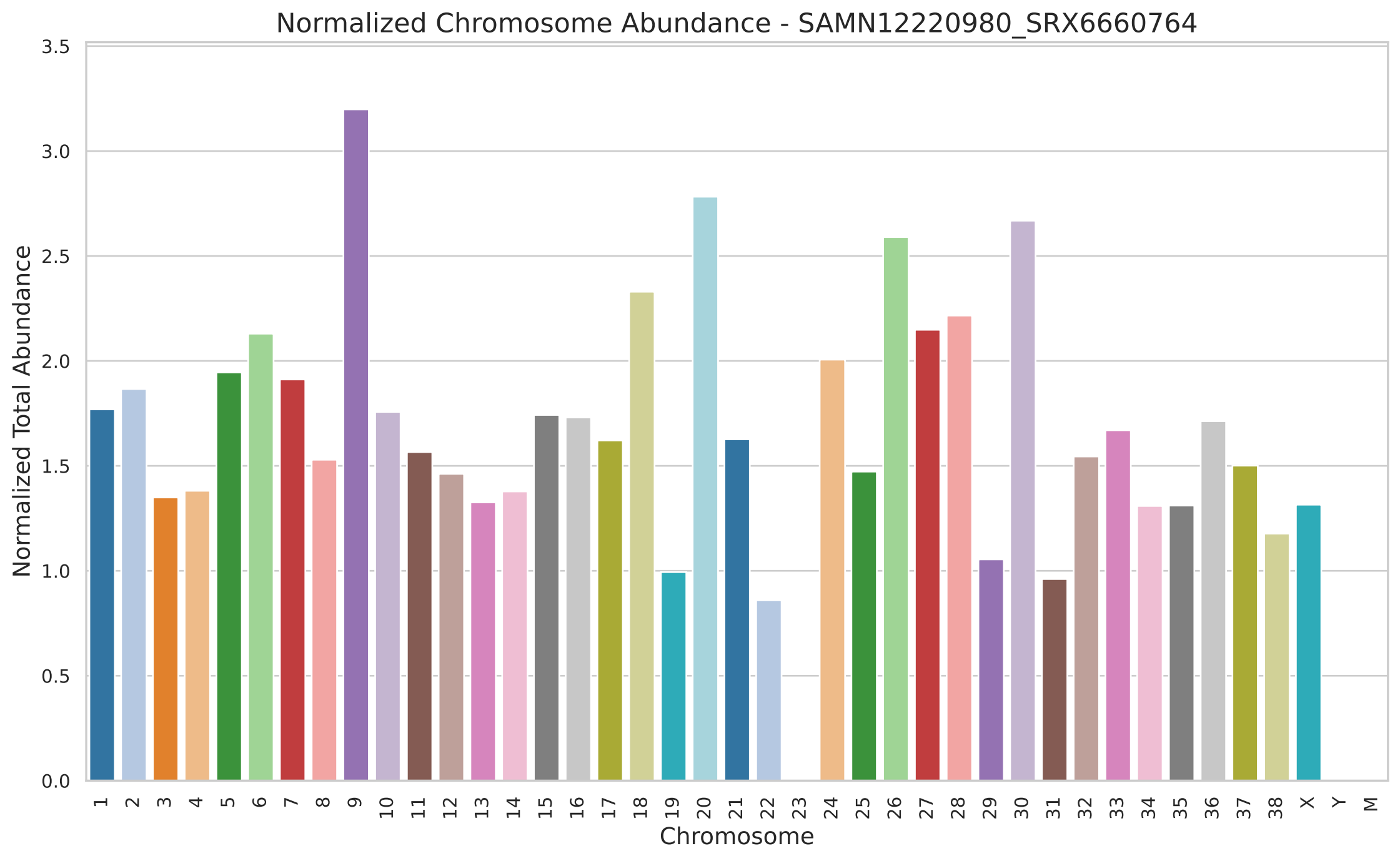

Normalized Chromosome Abundance - SAMN14407021_SRX7954384
Normalized Total Abundance
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5
20.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

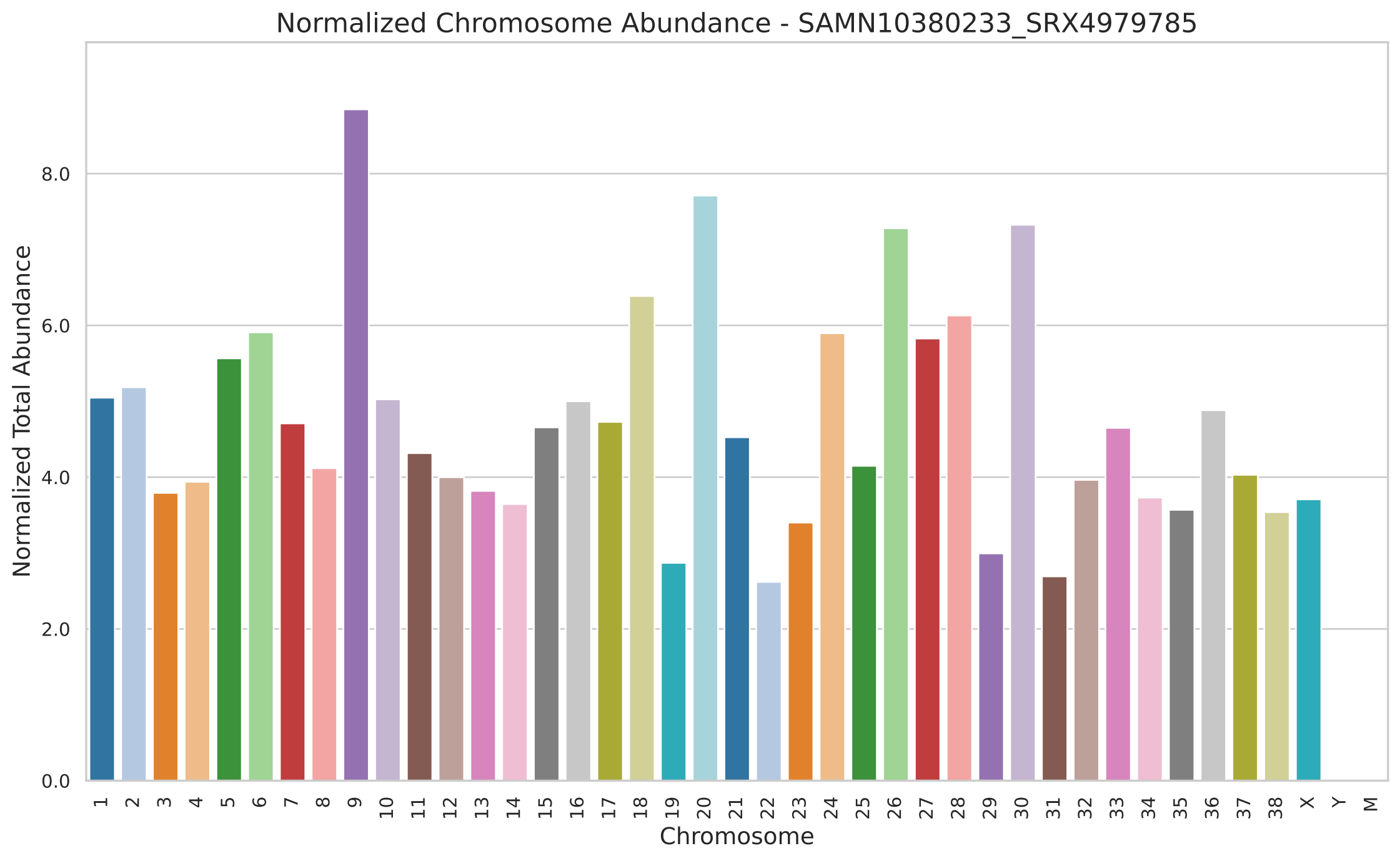

Normalized Chromosome Abundance - SAMN14407007_SRX7954372
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

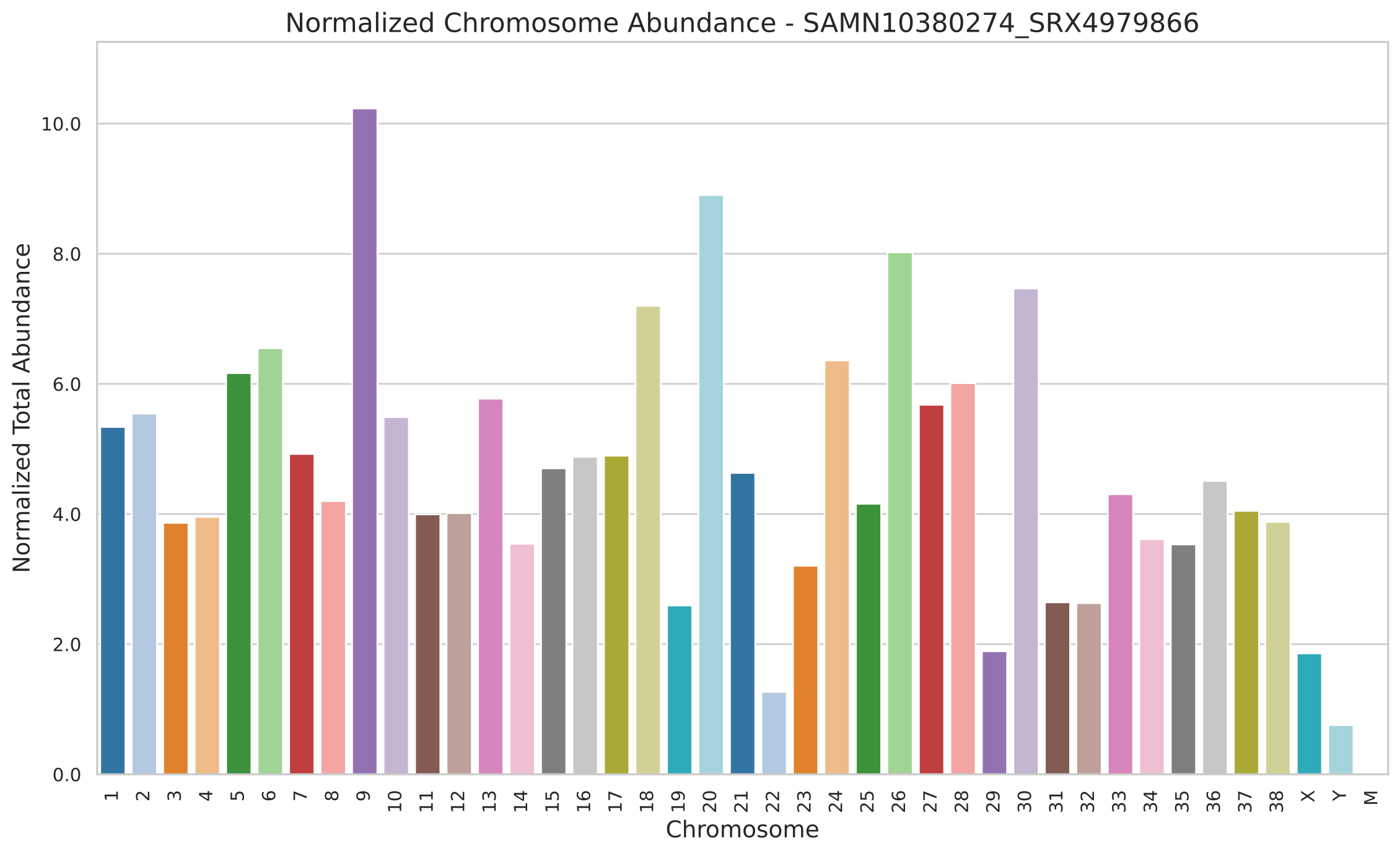

Normalized Chromosome Abundance - SAMEA3910287_ERX3482300
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

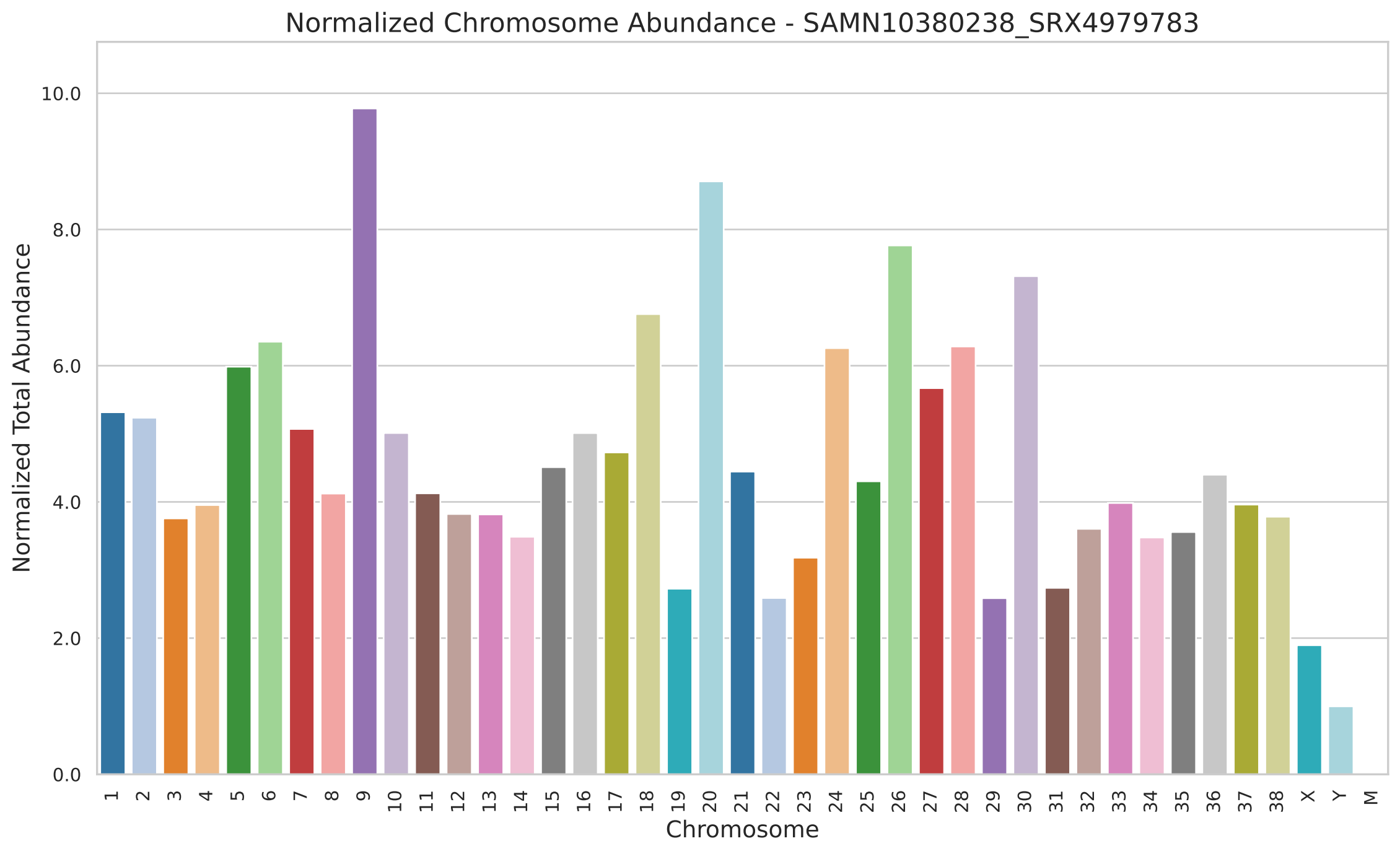

Normalized Chromosome Abundance - SAMEA4673511_ERX3491047
Normalized Total Abundance
2.0
1.8
1.5
1.2
1.0
0.8
0.5
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

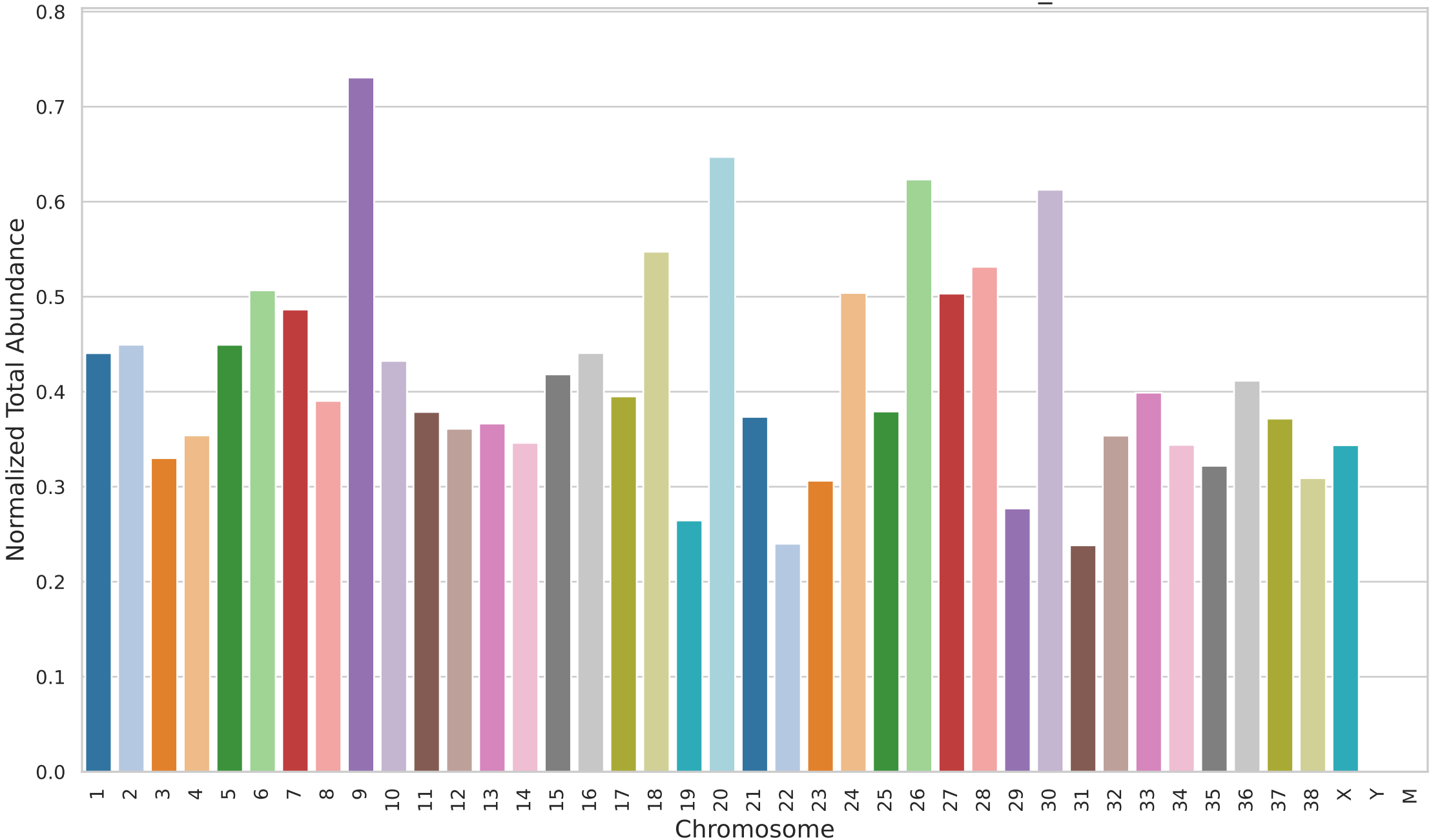

Normalized Chromosome Abundance - SAMEA3910335_ERX3482260
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

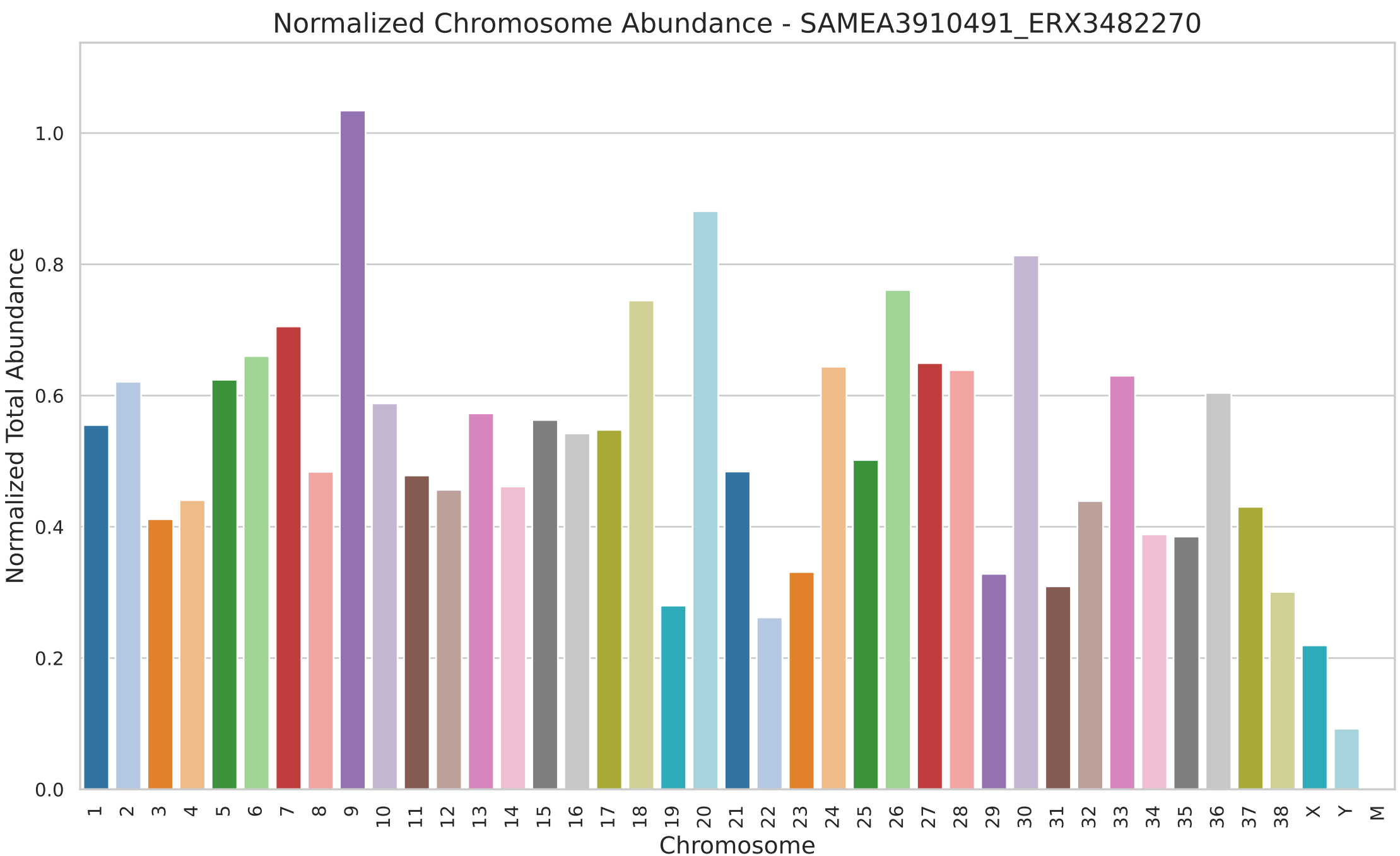

Normalized Chromosome Abundance - SAMN12220980_SRX6660764
Normalized Total Abundance
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

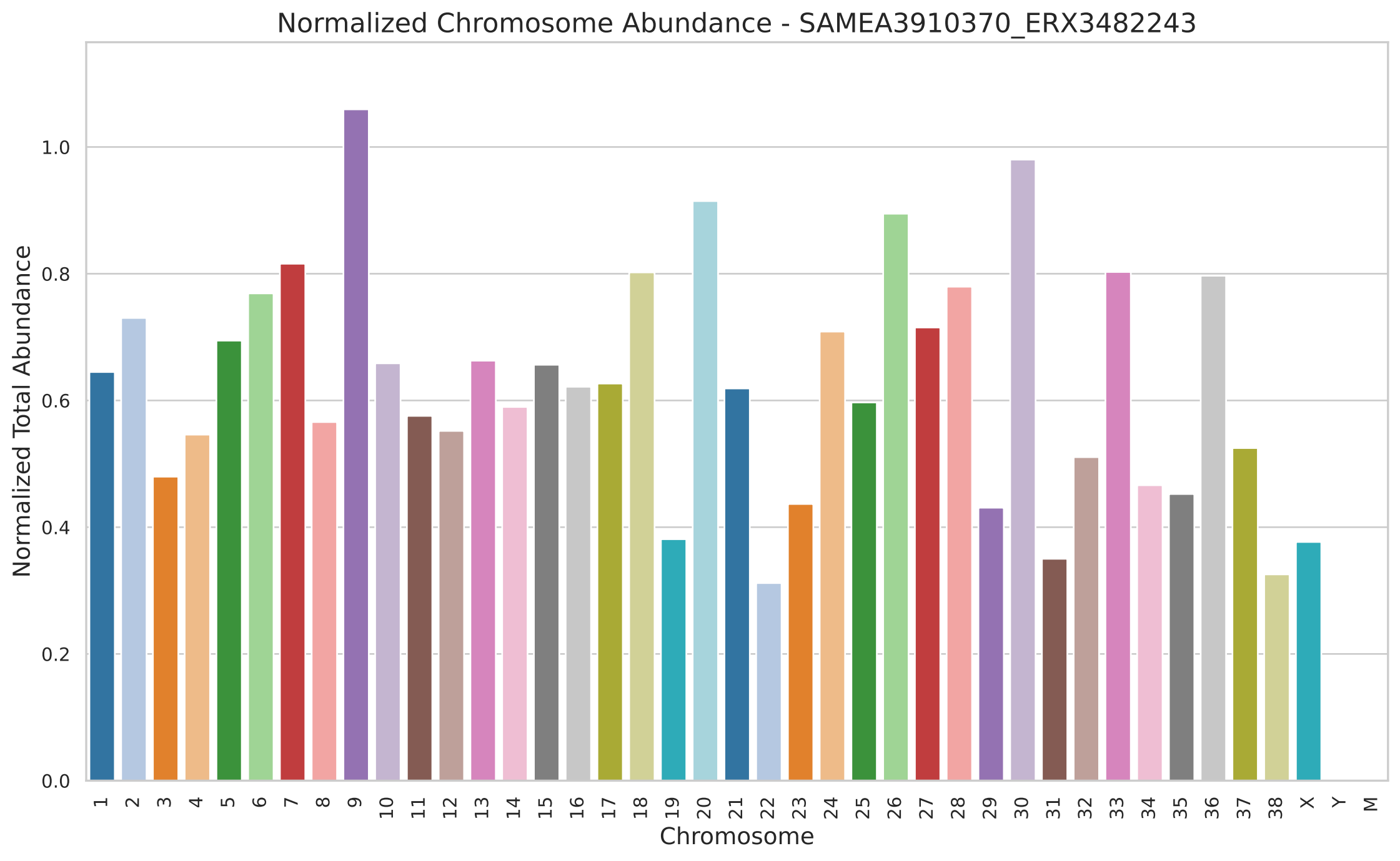

Normalized Chromosome Abundance - SAMN10380233_SRX4979785
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

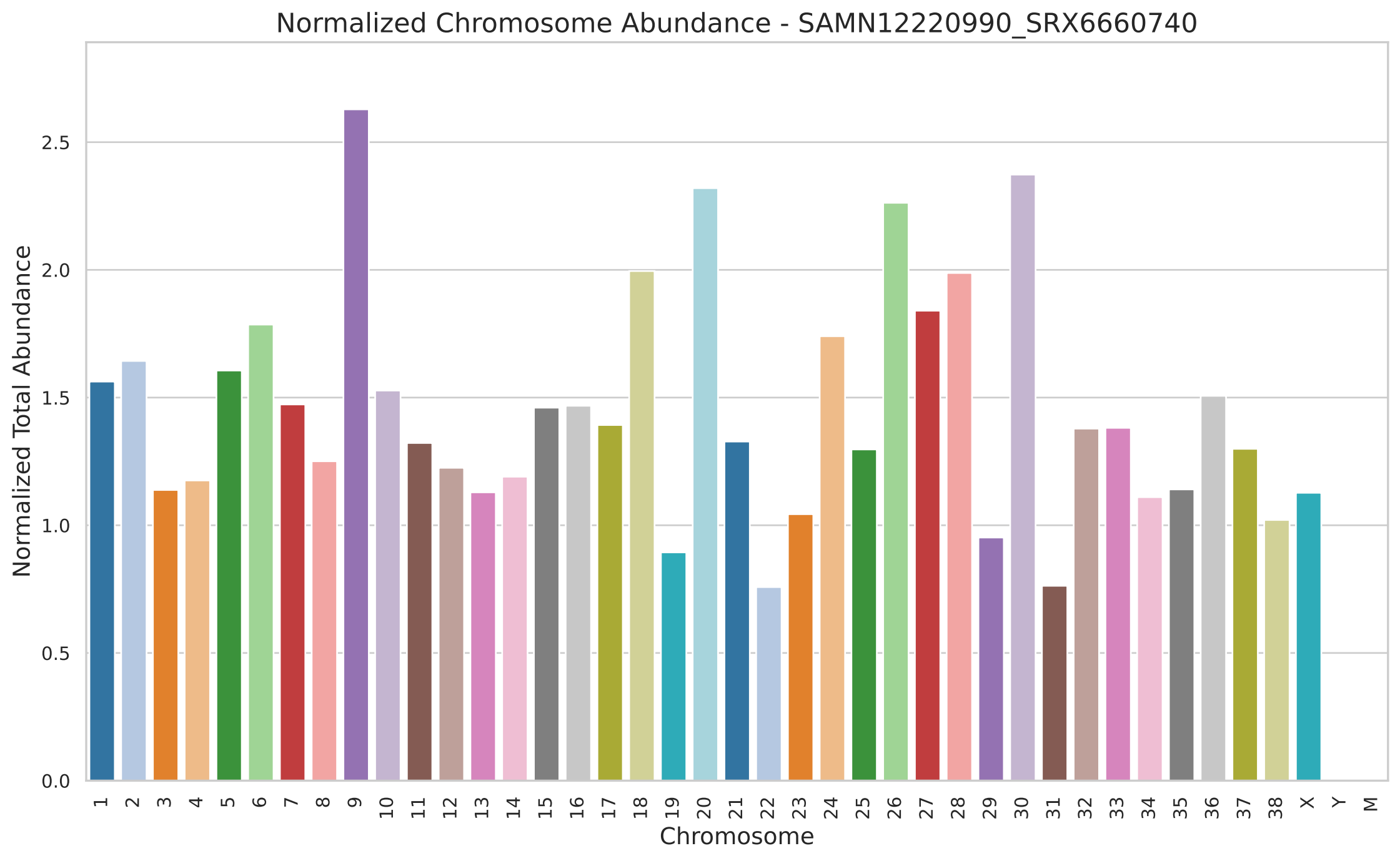

Normalized Chromosome Abundance - SAMN10380274_SRX4979866
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

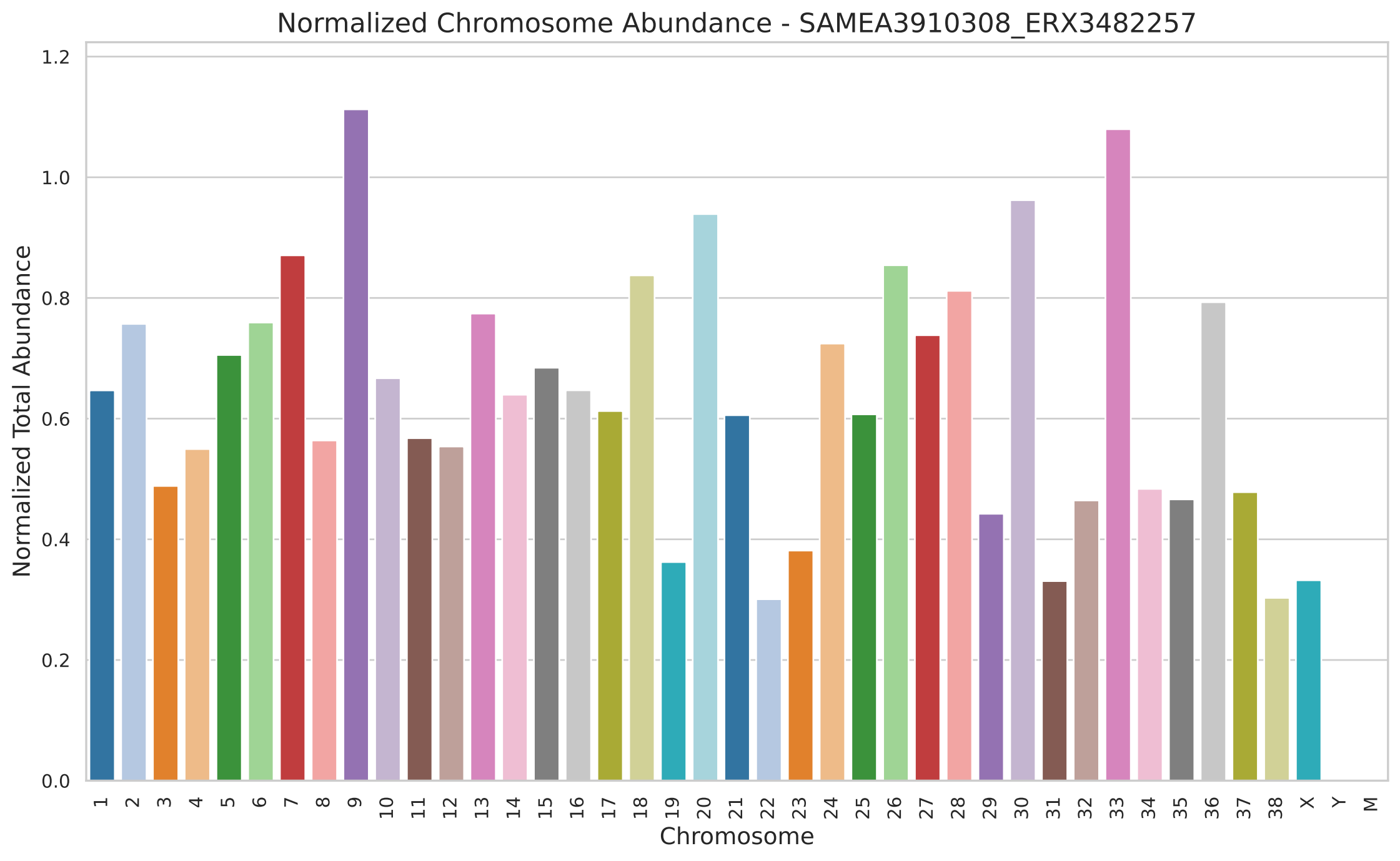

Normalized Chromosome Abundance - SAMN10380238_SRX4979783
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

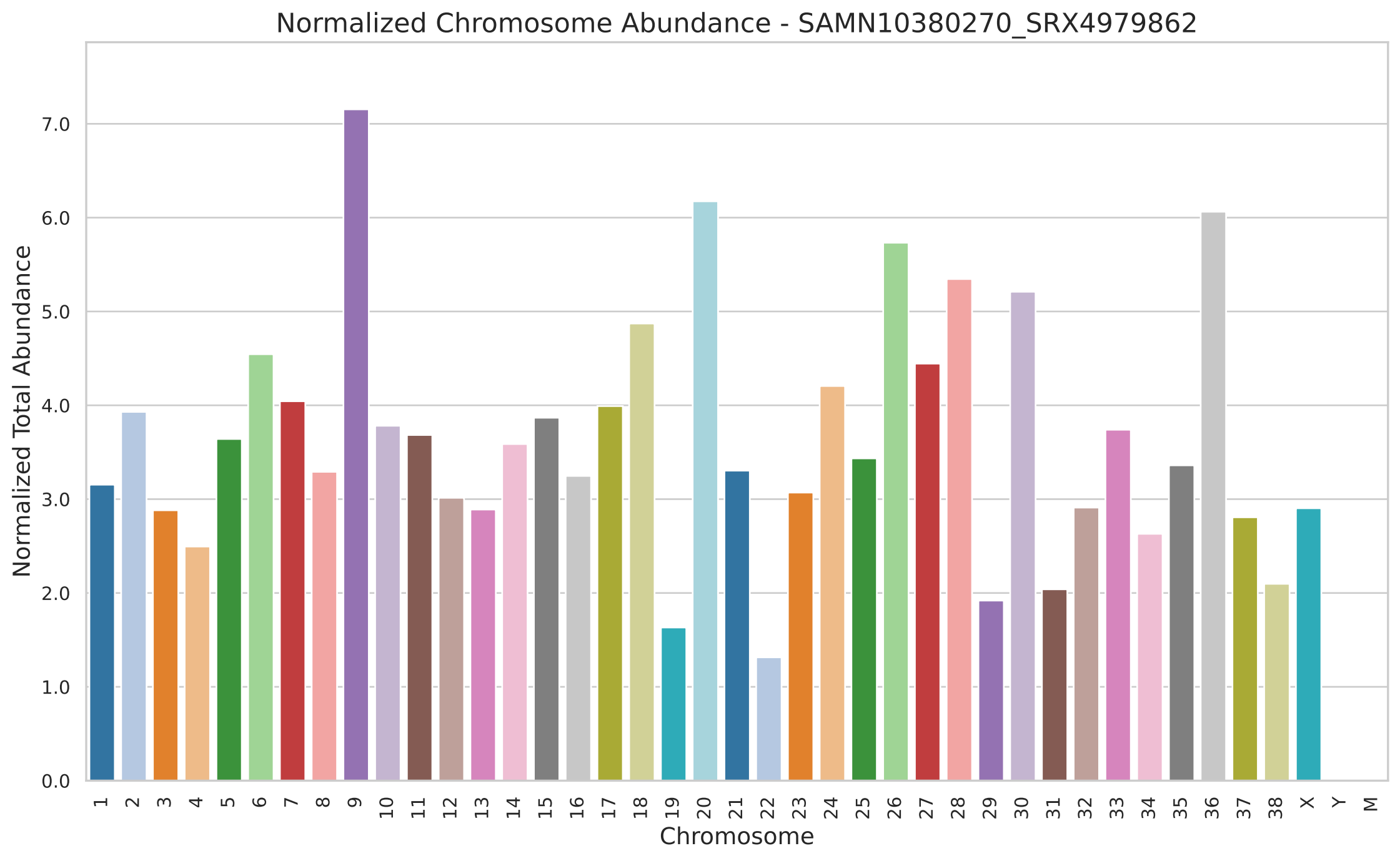

Normalized Chromosome Abundance - SAMEA3910569_ERX3482291
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

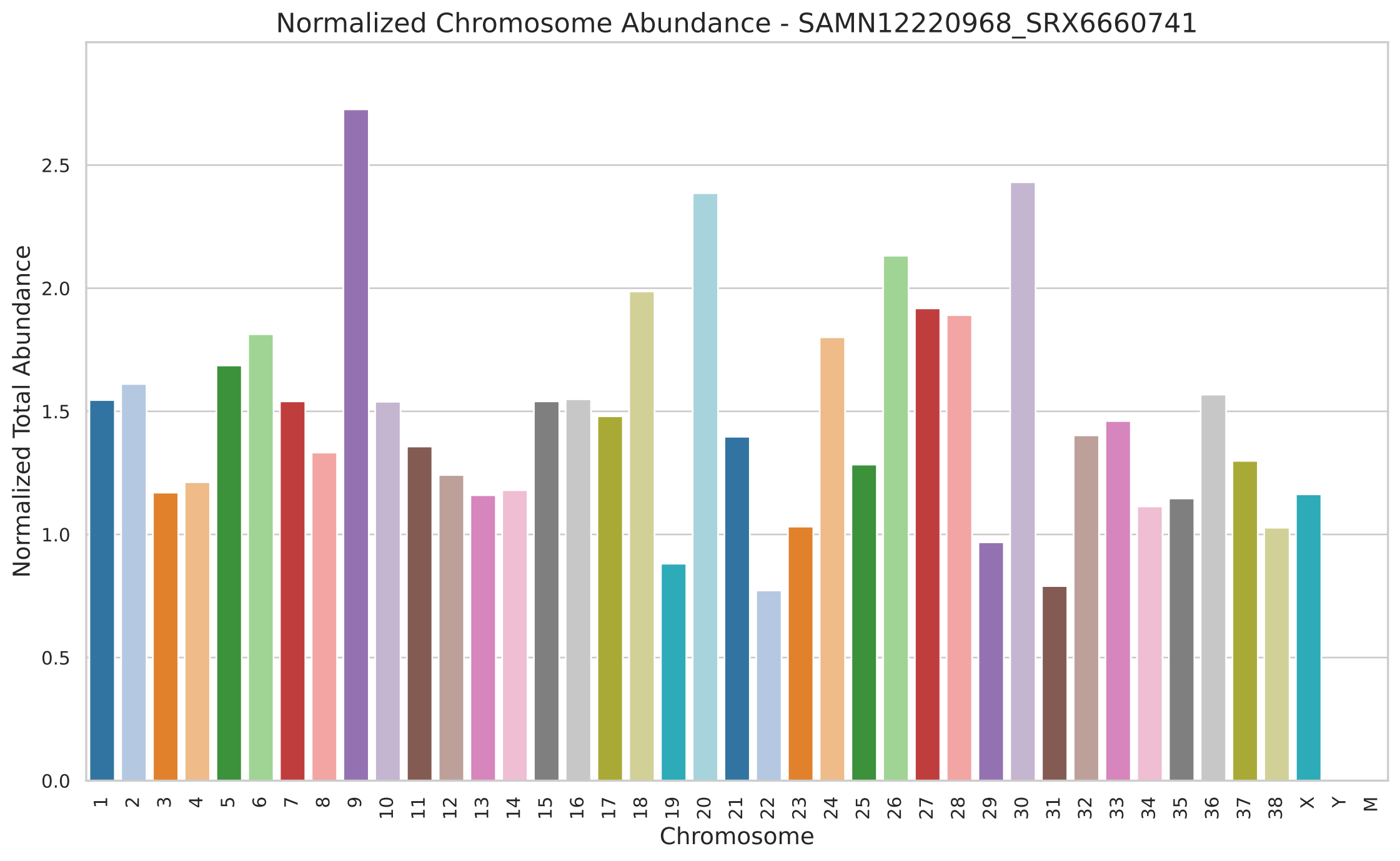

Normalized Chromosome Abundance - SAMEA3910491_ERX3482270
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

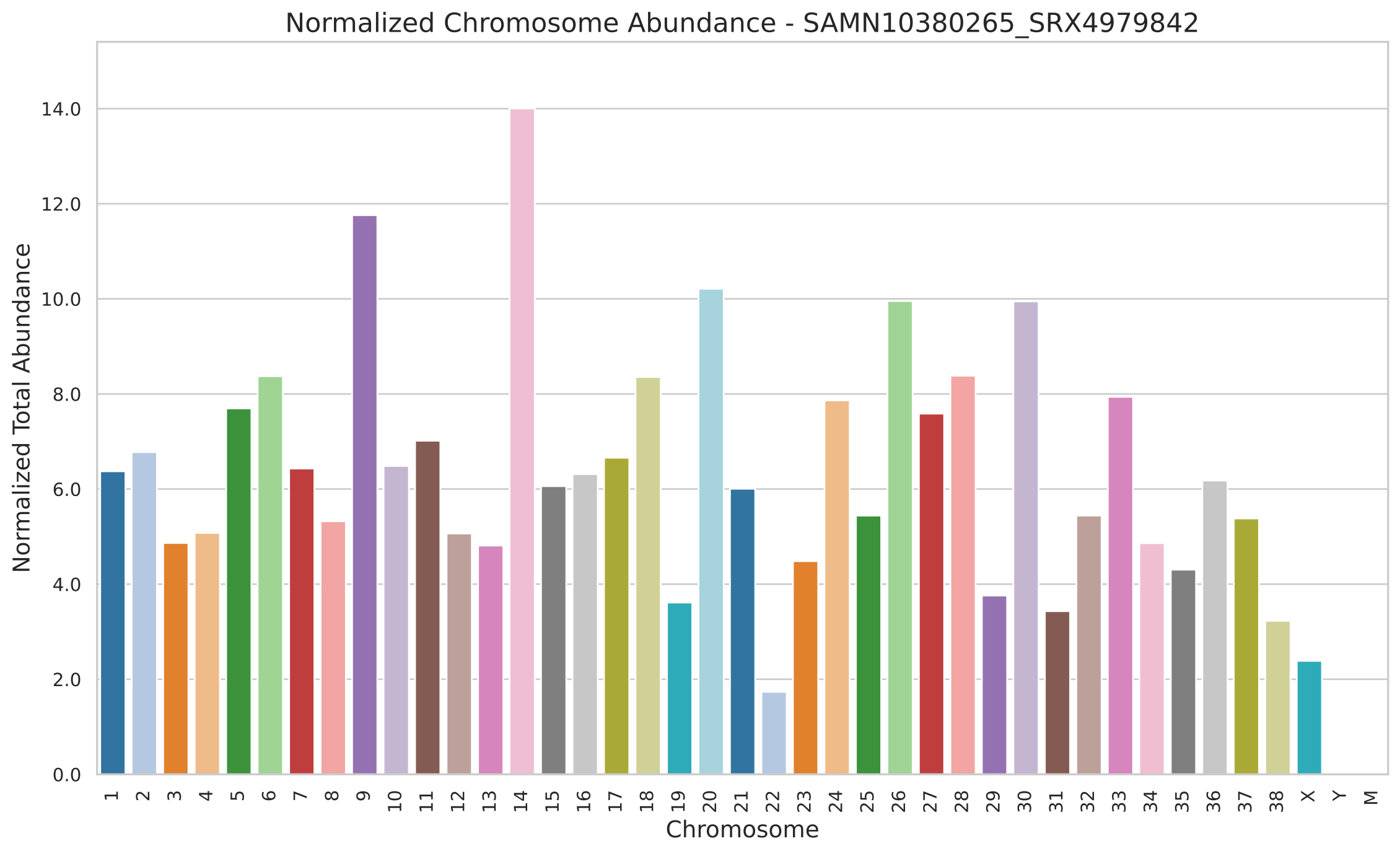

Normalized Chromosome Abundance - SAMEA3910370_ERX3482243
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

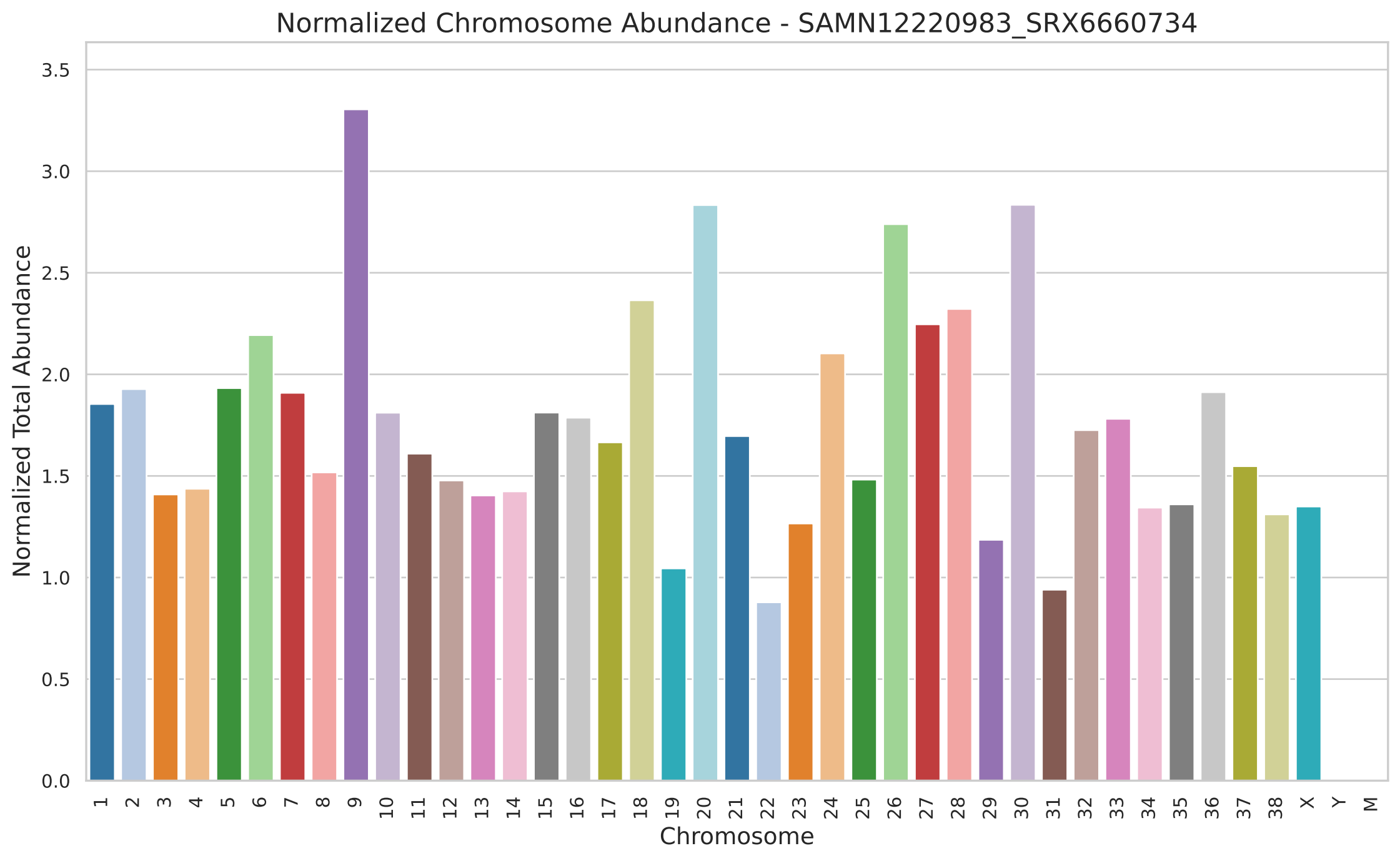

Normalized Chromosome Abundance - SAMN12220990_SRX6660740
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

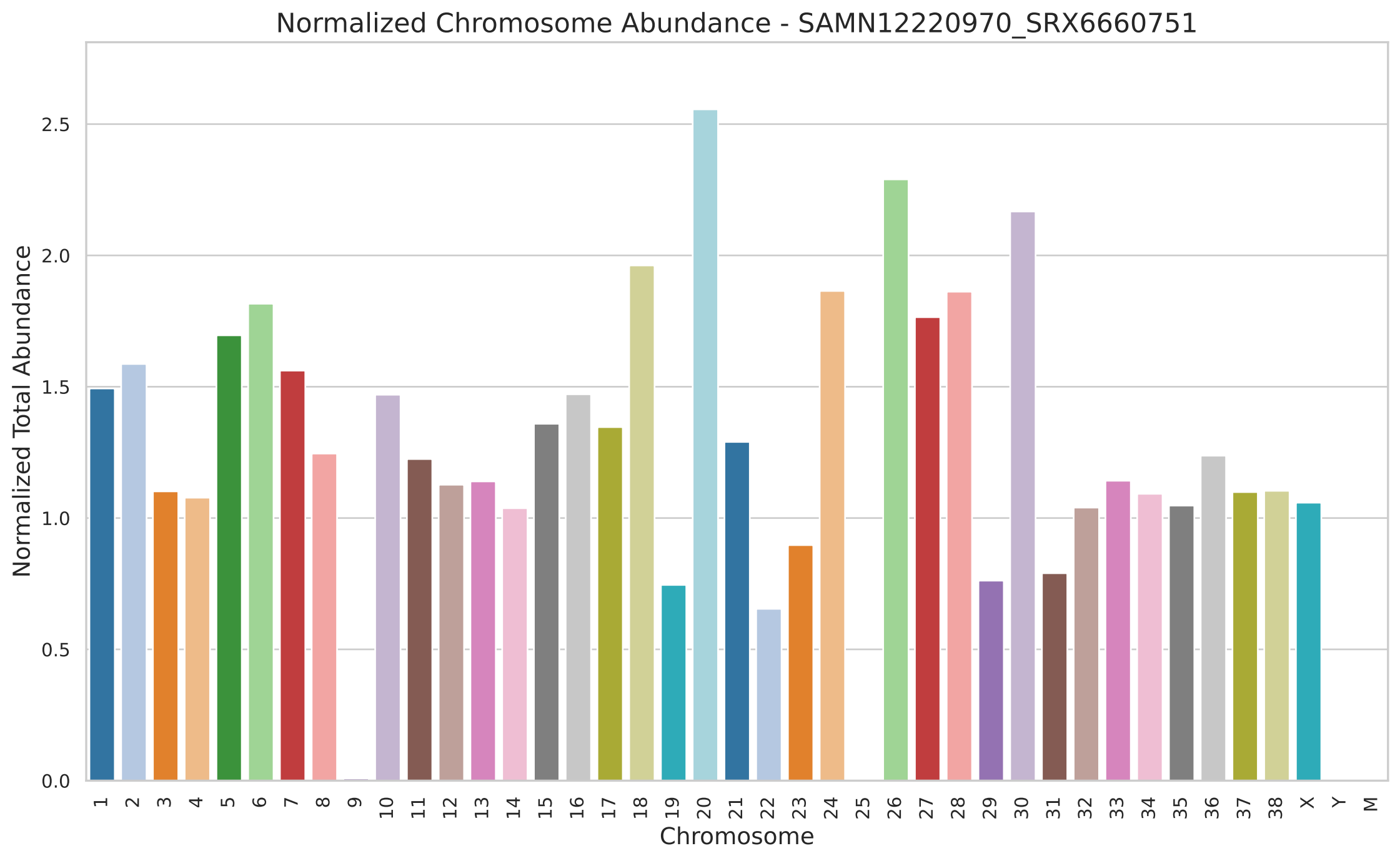

Normalized Chromosome Abundance - SAMEA3910308_ERX3482257
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

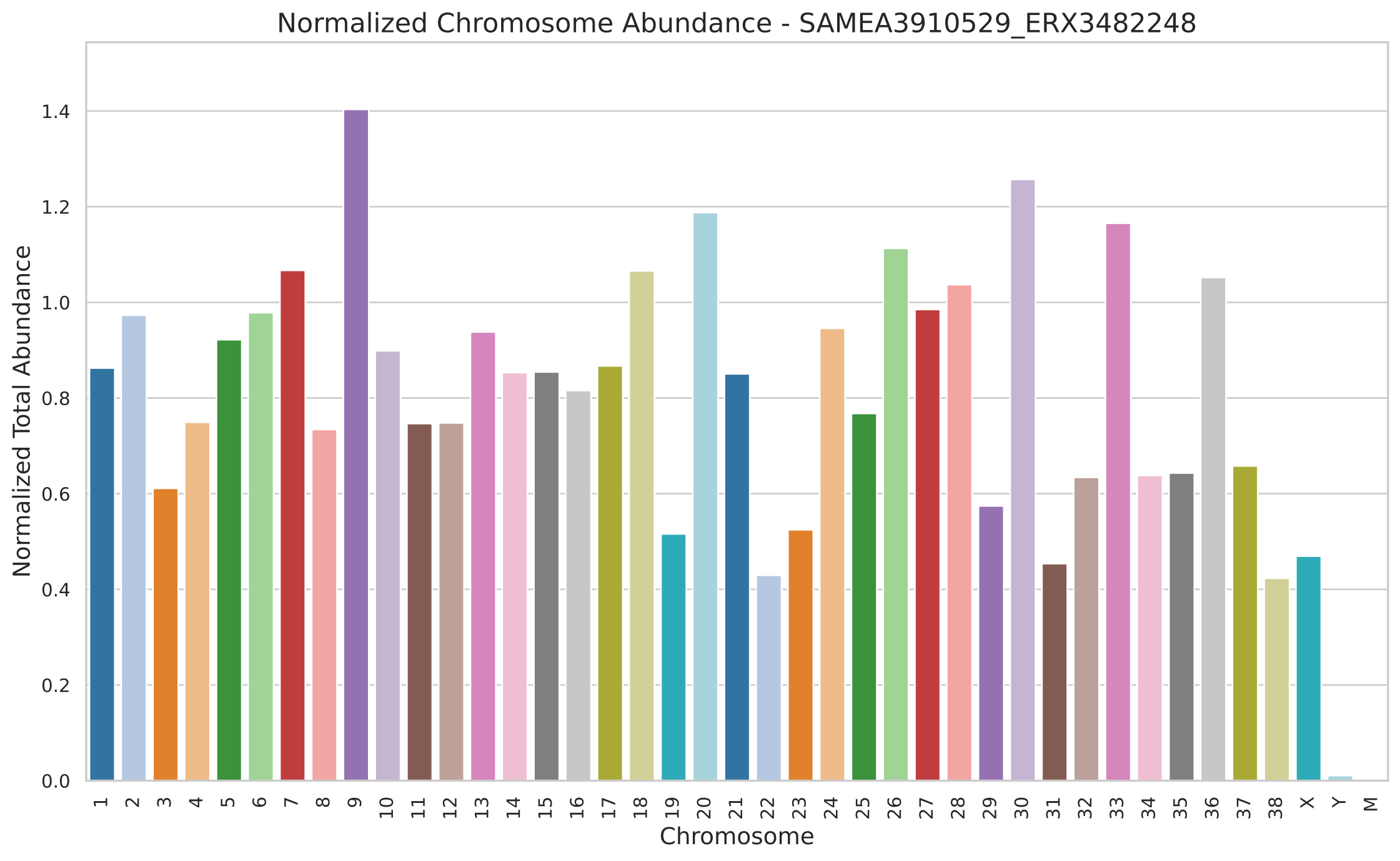

Normalized Chromosome Abundance - SAMN10380270_SRX4979862
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

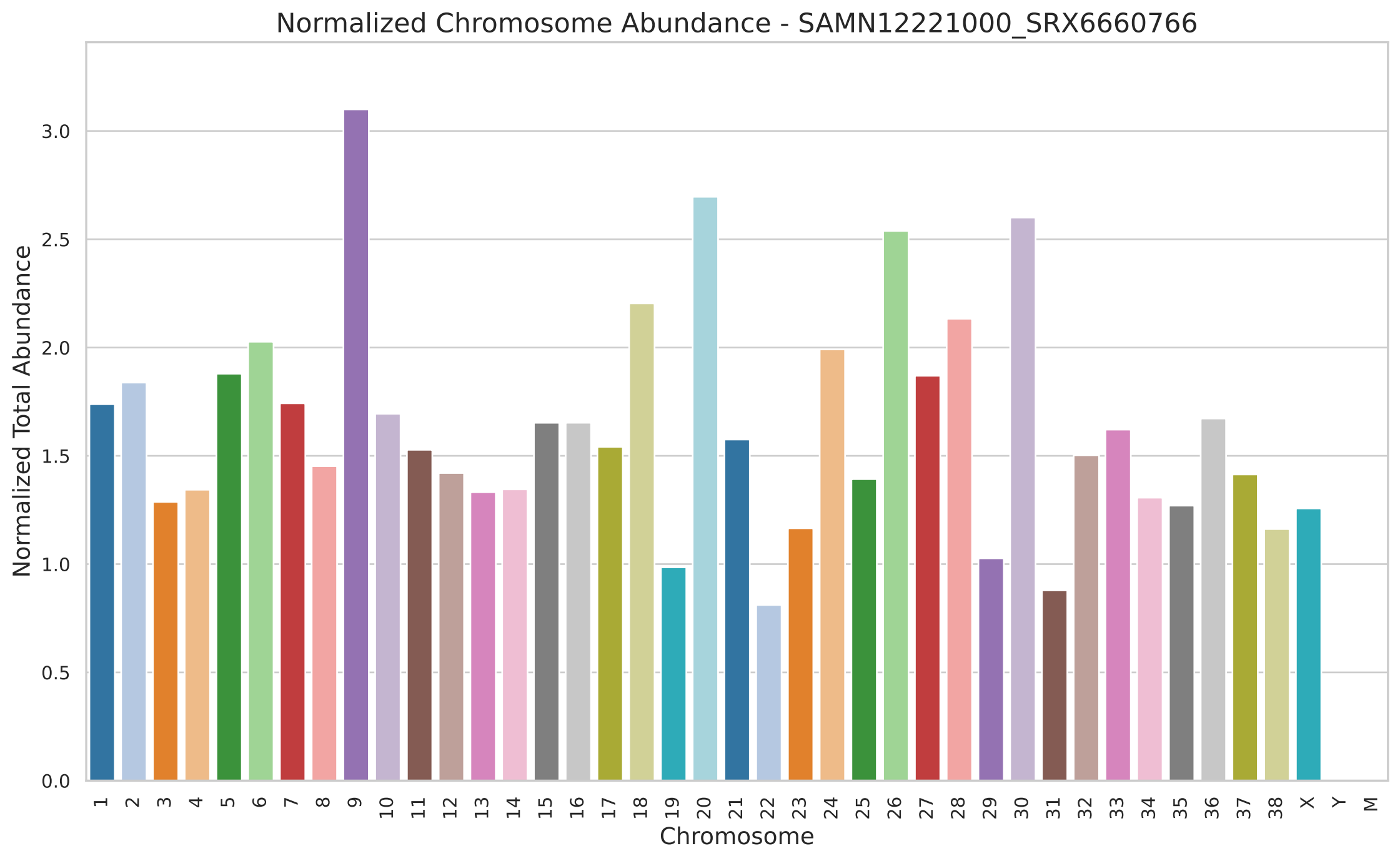

Normalized Chromosome Abundance - SAMN12220968_SRX6660741
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

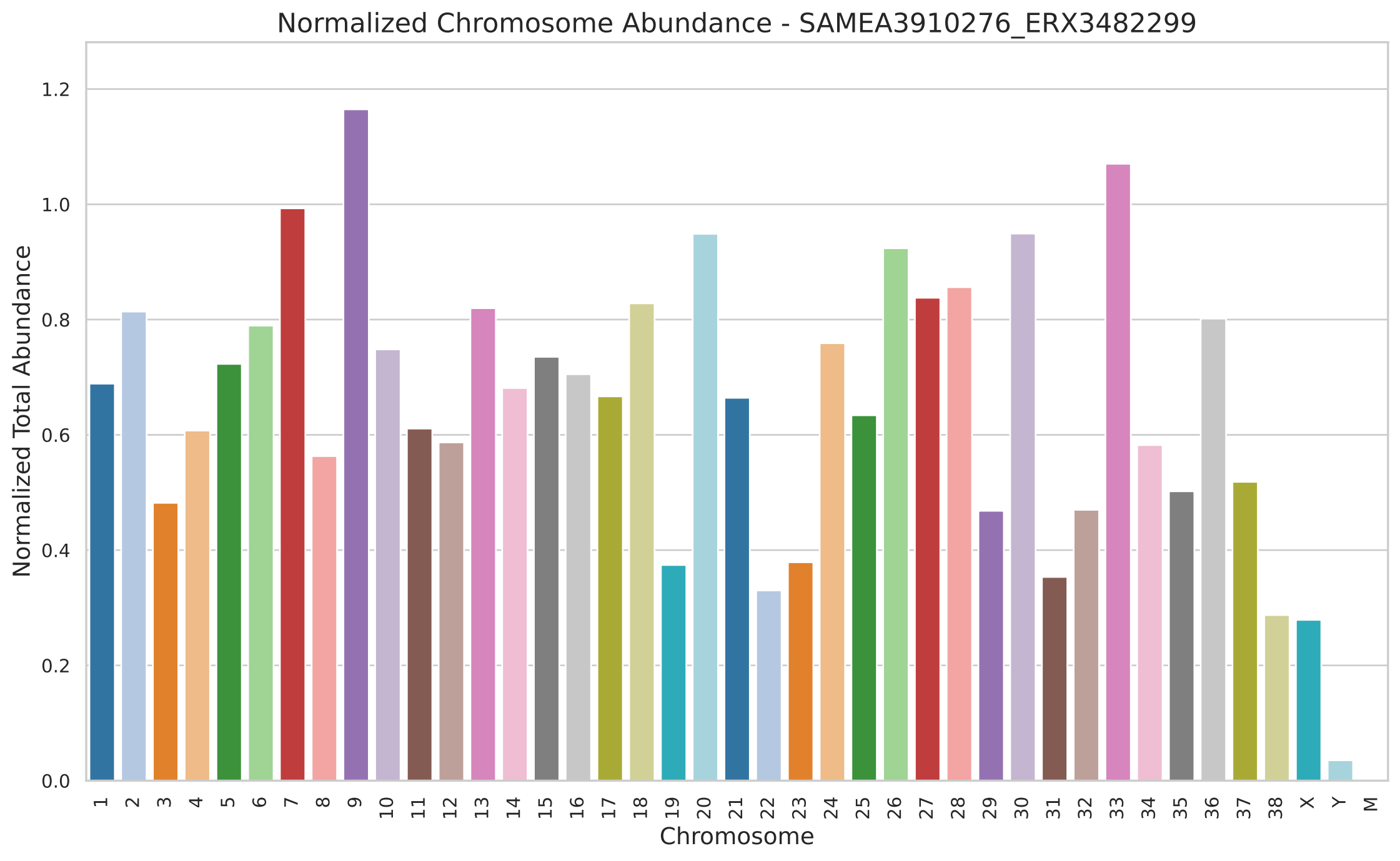

Normalized Chromosome Abundance - SAMN10380265_SRX4979842
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
12.0
14.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

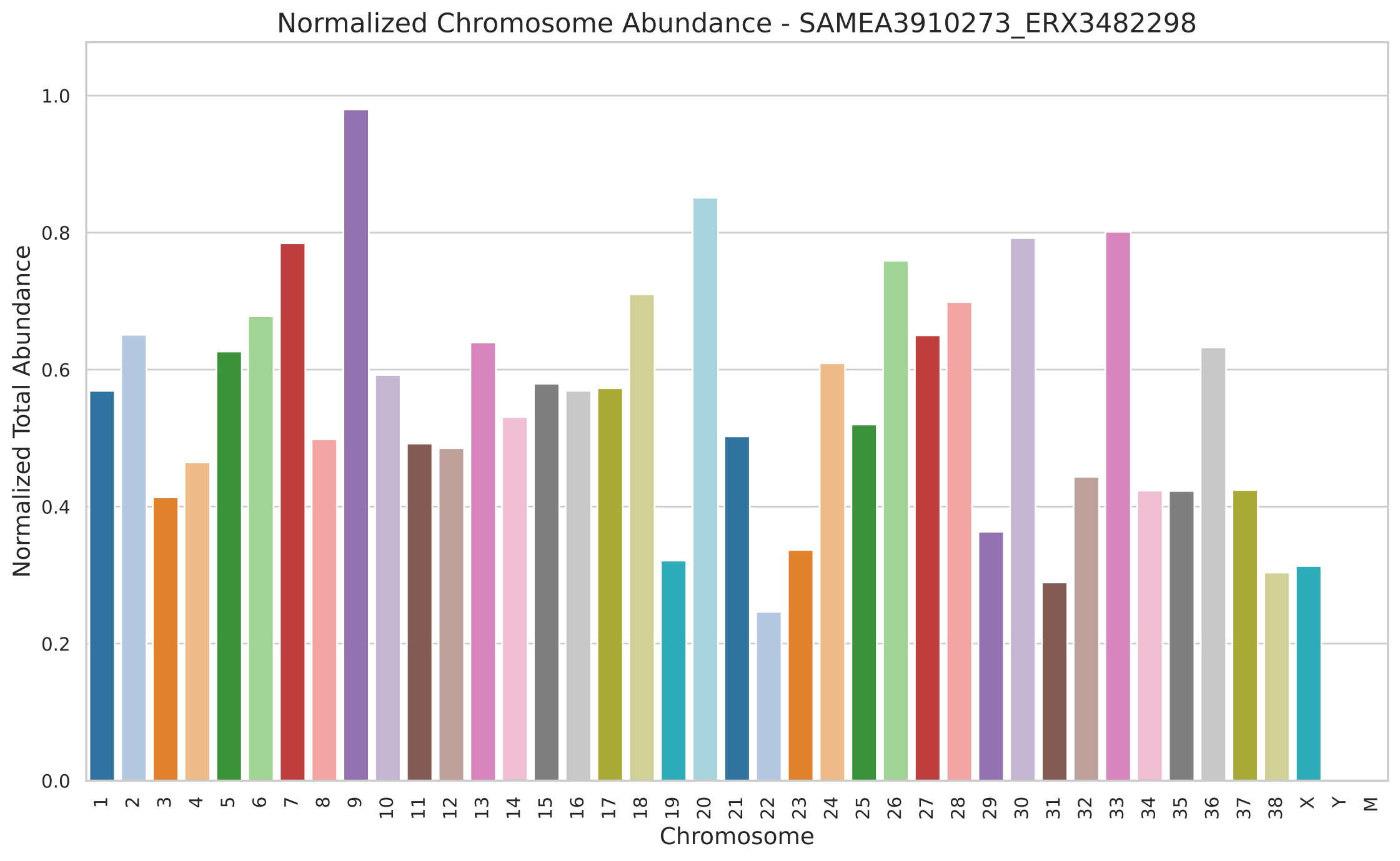

Normalized Chromosome Abundance - SAMN12220983_SRX6660734
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

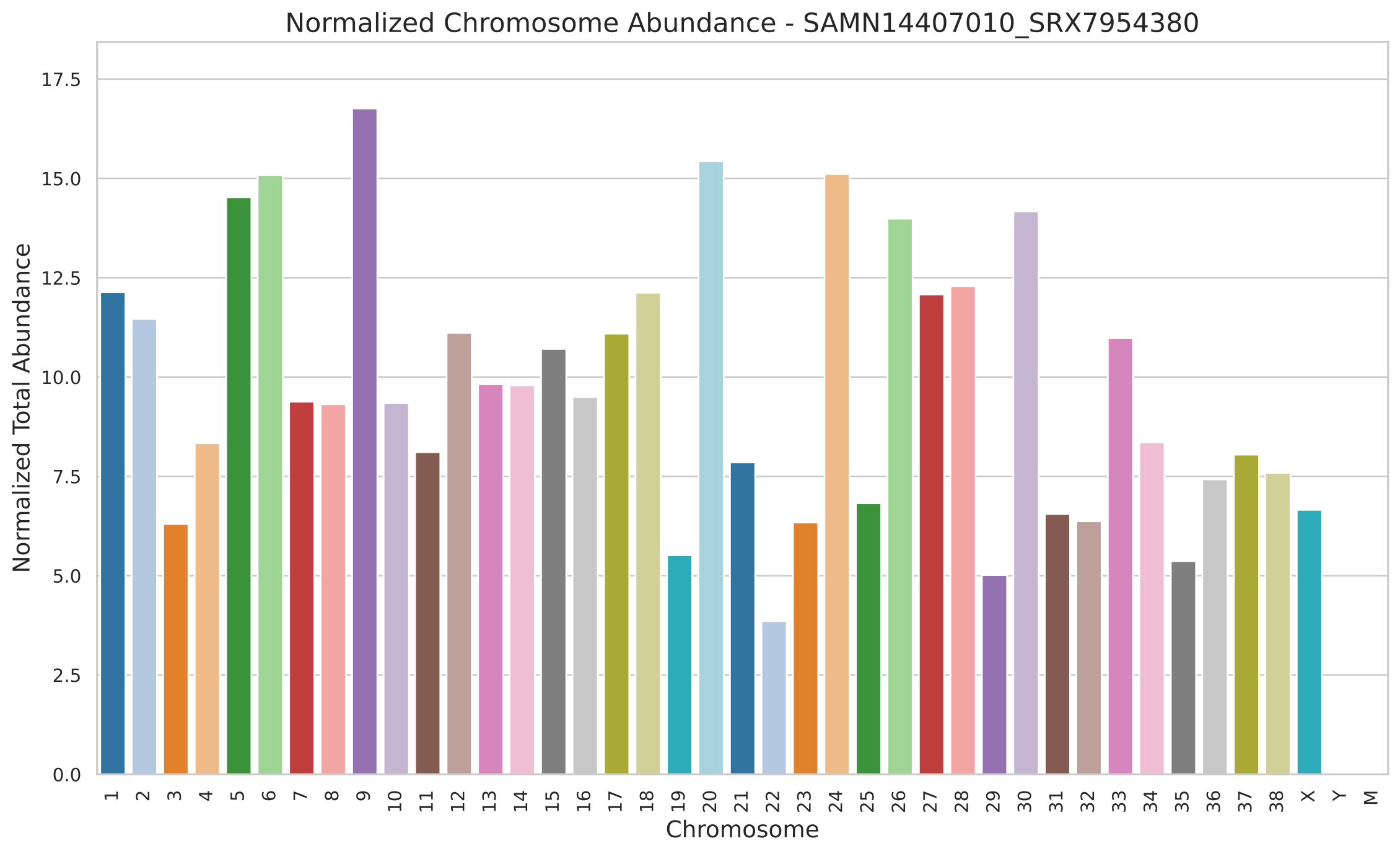

Normalized Chromosome Abundance - SAMN12220970_SRX6660751
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

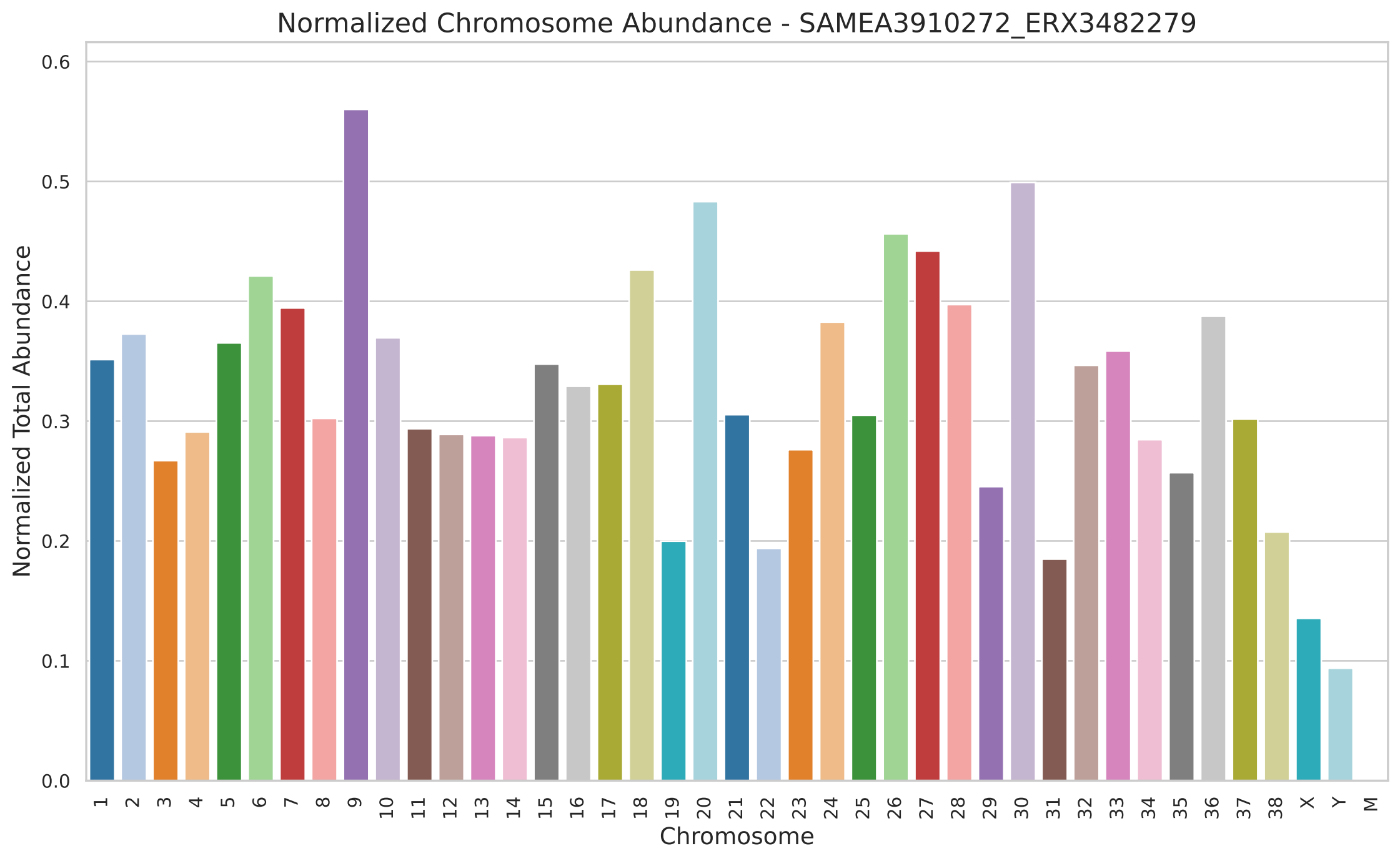

Normalized Chromosome Abundance - SAMEA3910529_ERX3482248
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

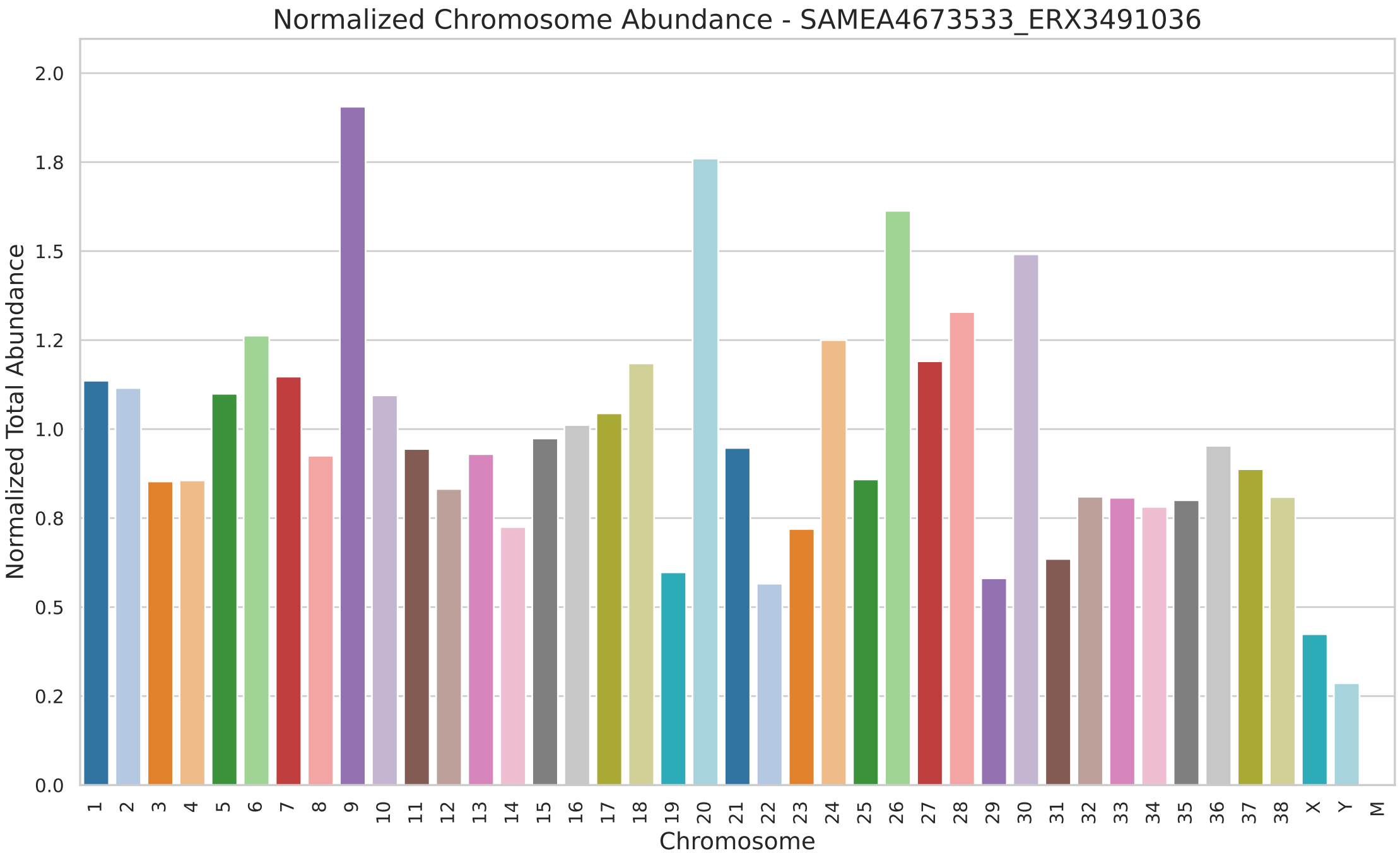

Normalized Chromosome Abundance - SAMN12221000_SRX6660766
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

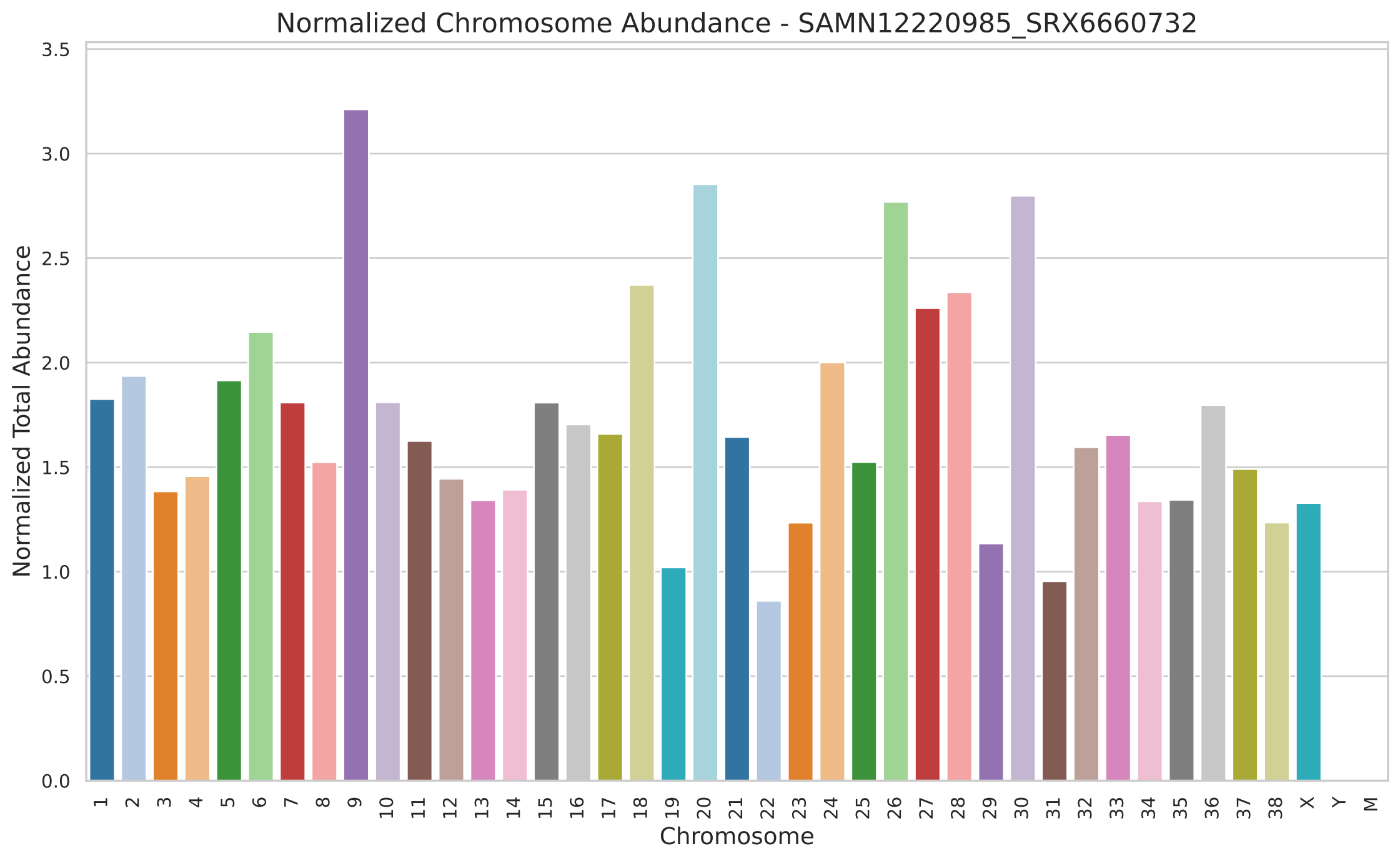

Normalized Chromosome Abundance - SAMEA3910276_ERX3482299
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

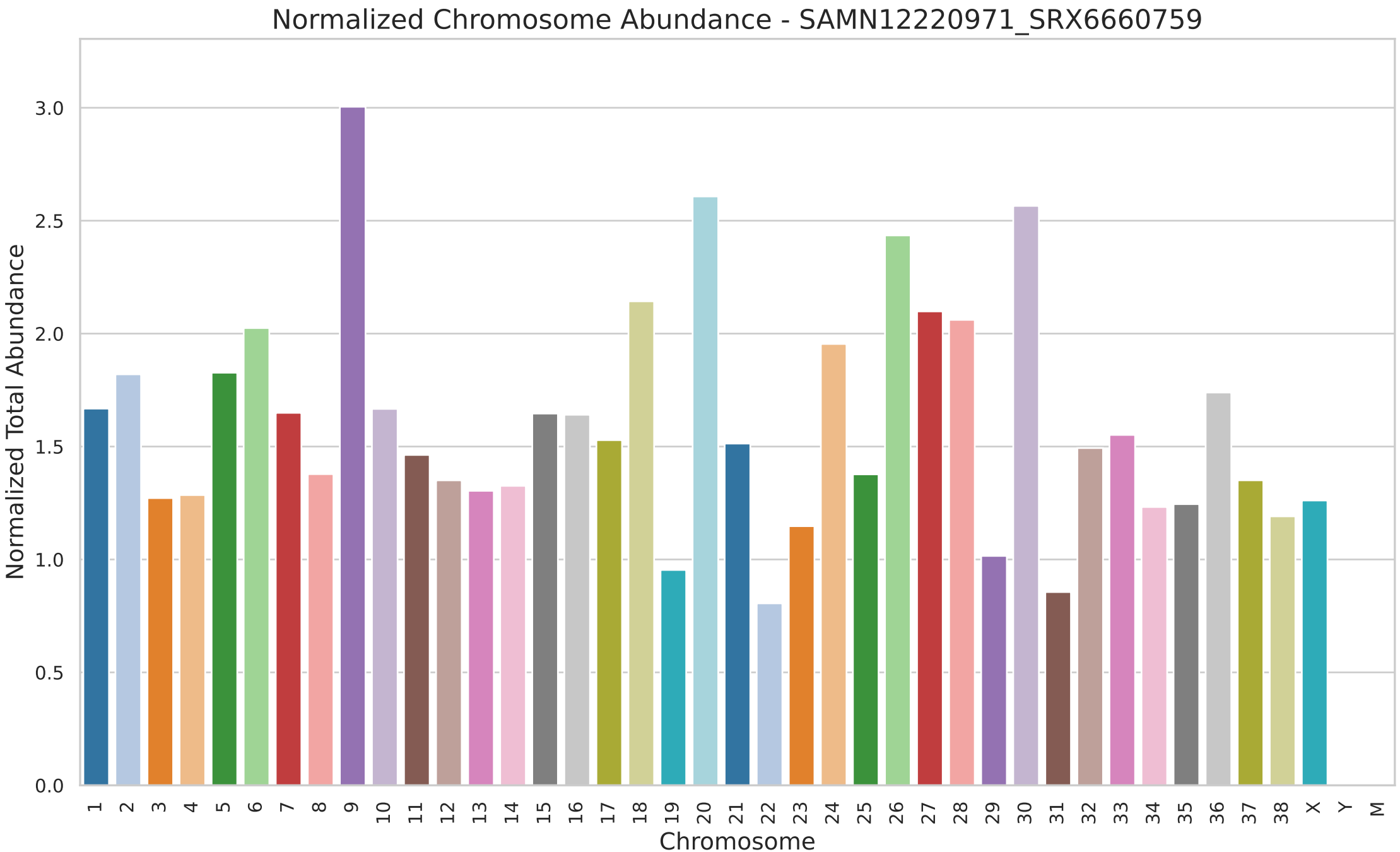

Normalized Chromosome Abundance - SAMEA3910273_ERX3482298
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

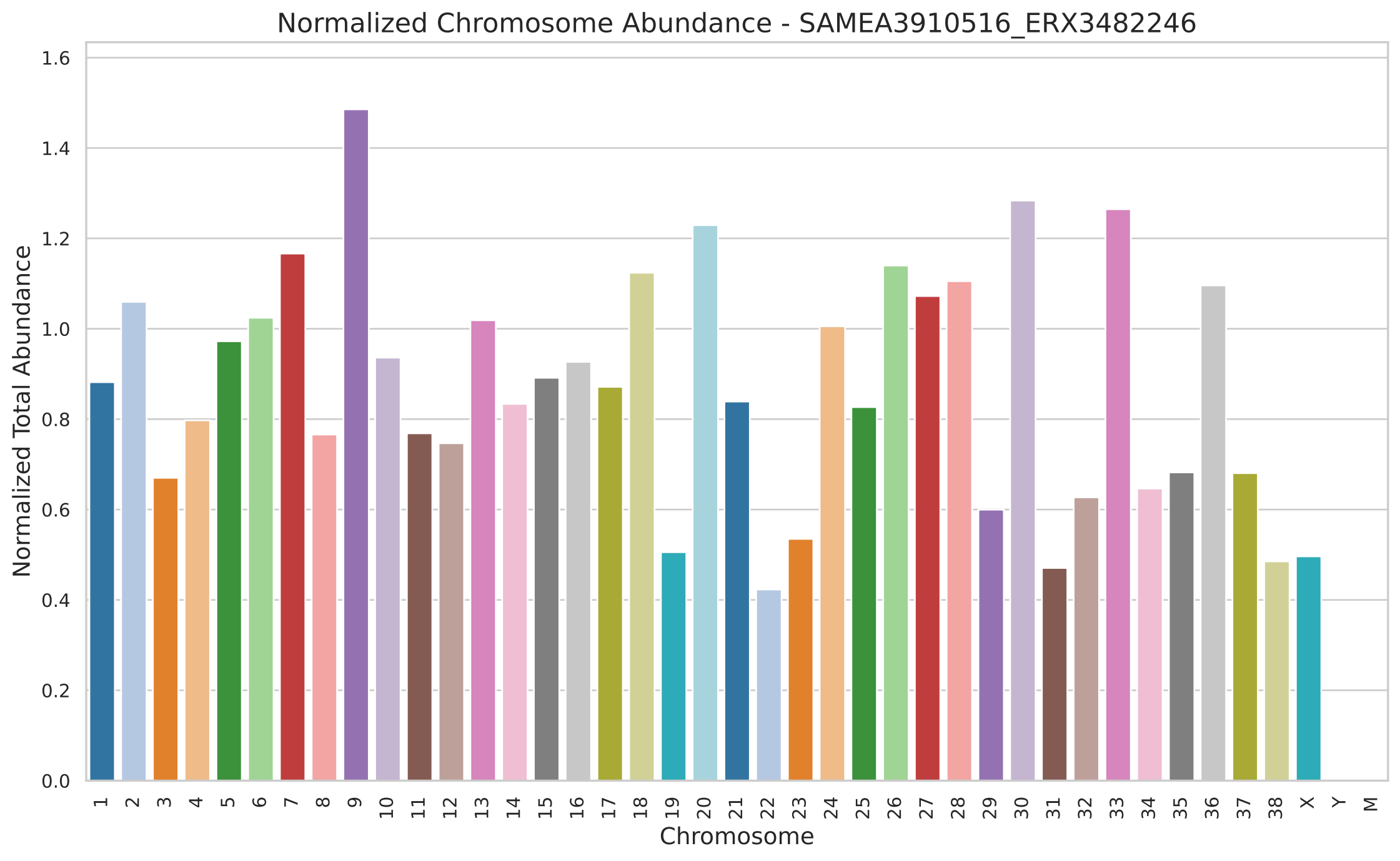

Normalized Chromosome Abundance - SAMN14407010_SRX7954380
Normalized Total Abundance
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

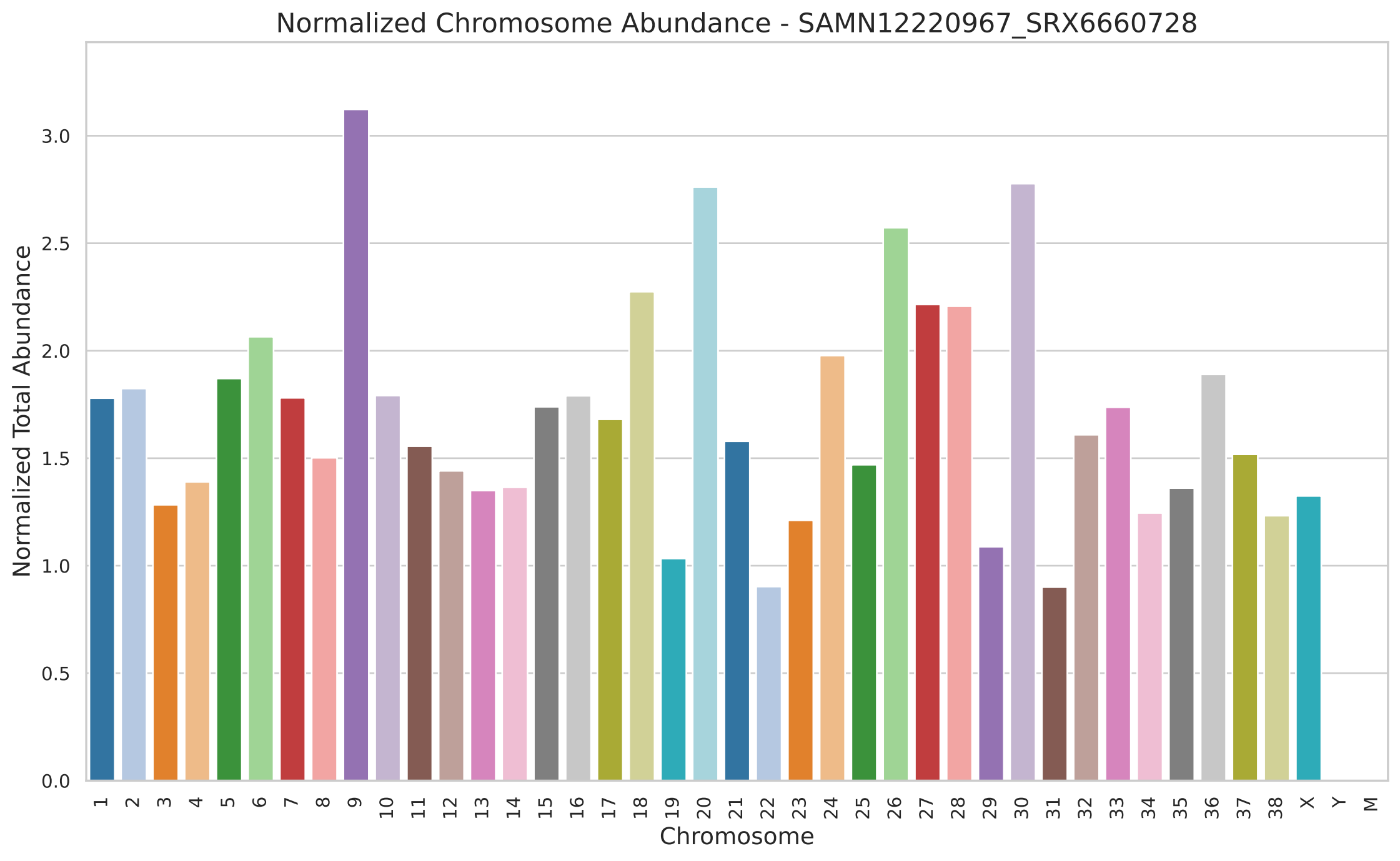

Normalized Chromosome Abundance - SAMEA3910272_ERX3482279
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

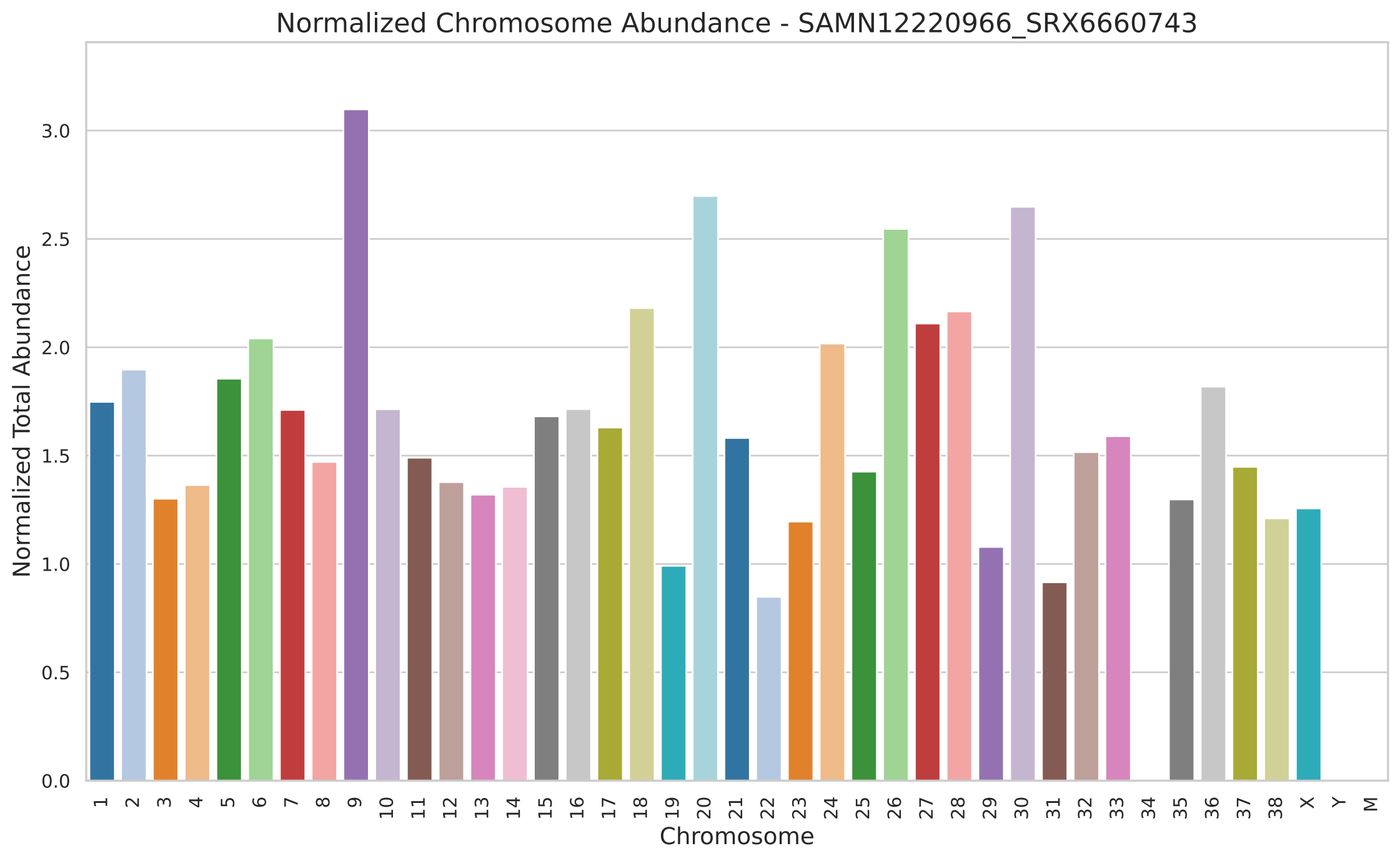

Normalized Chromosome Abundance - SAMEA4673533_ERX3491036
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

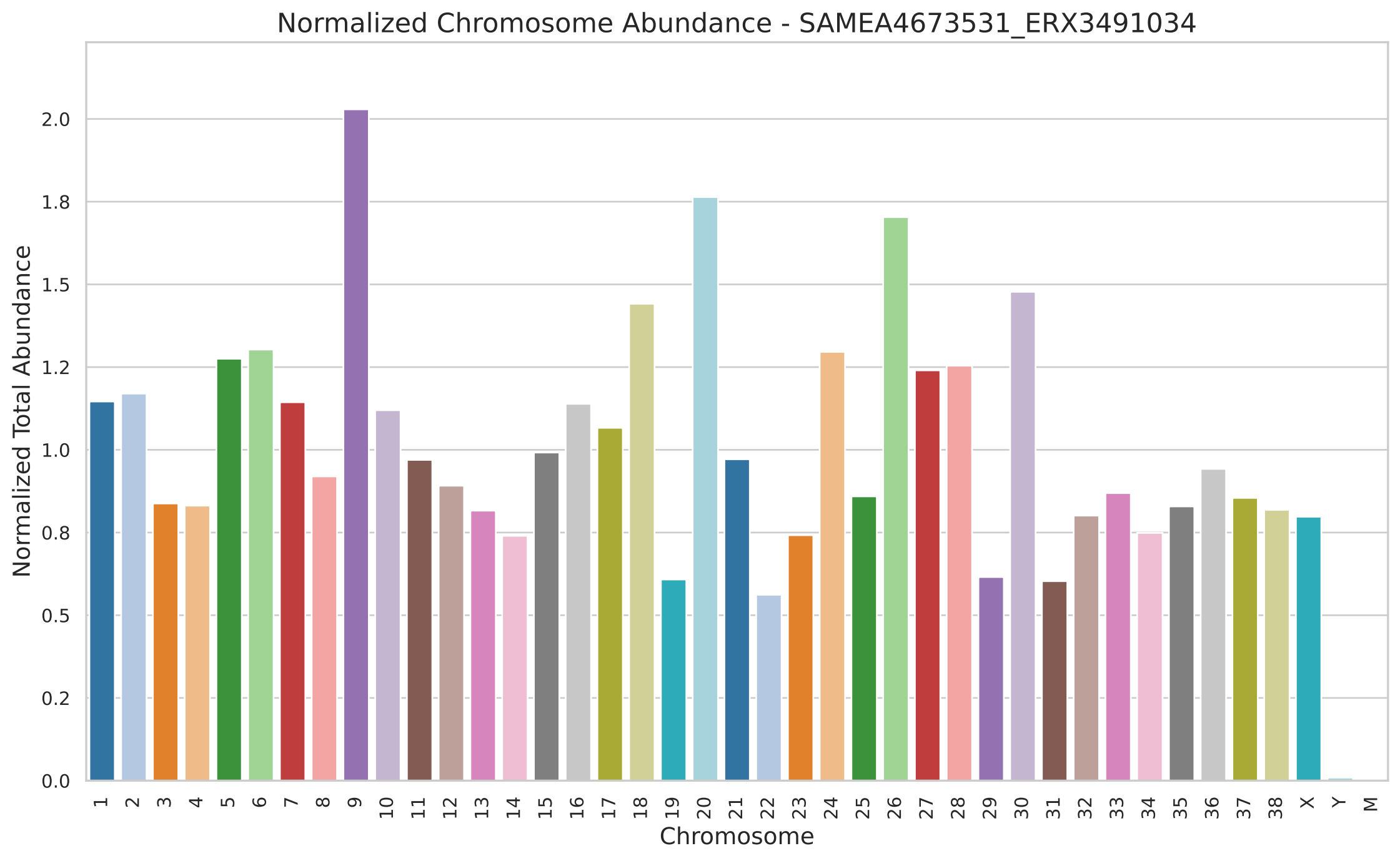

Normalized Chromosome Abundance - SAMN12220985_SRX6660732
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

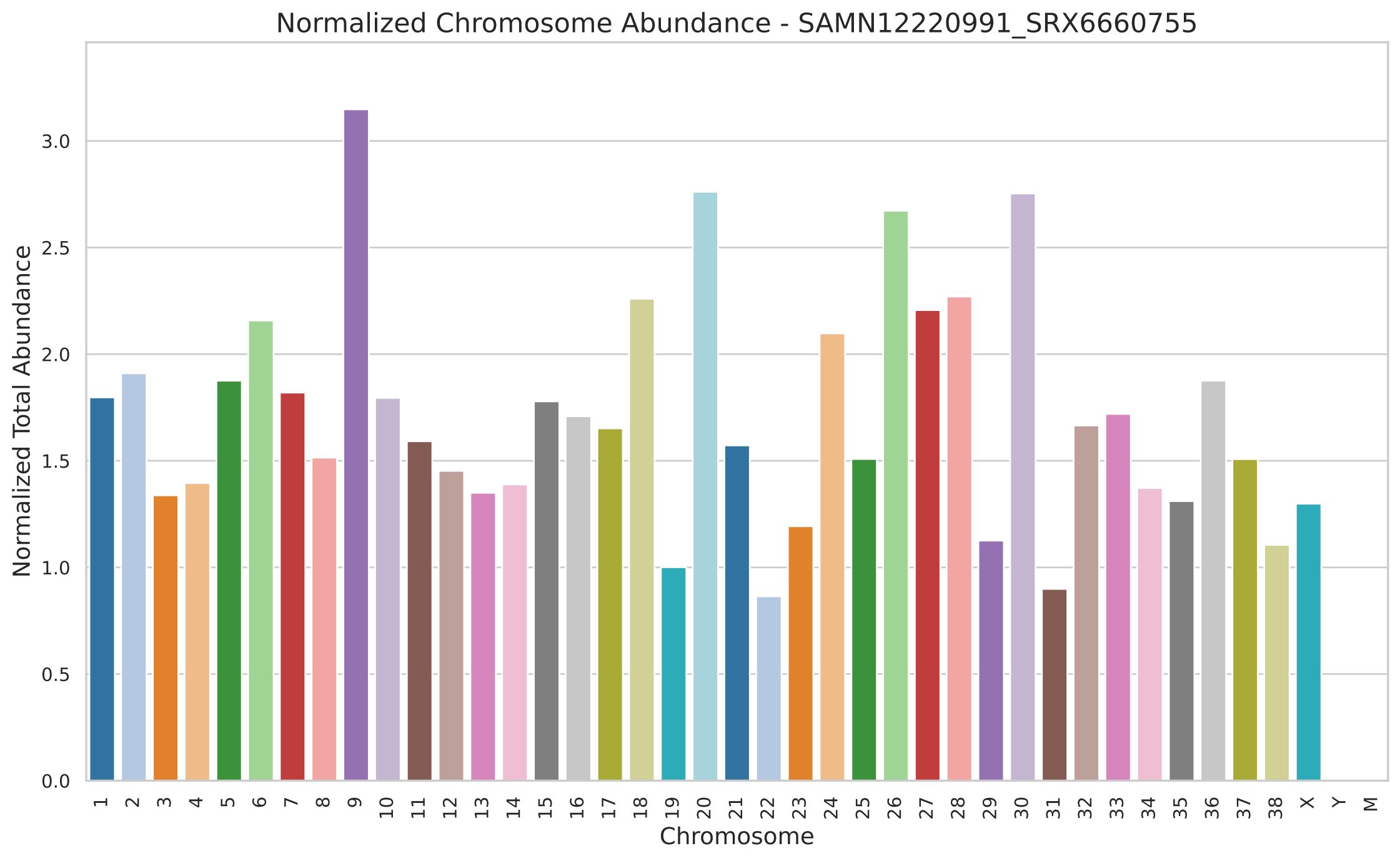

Normalized Chromosome Abundance - SAMN12220971_SRX6660759
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

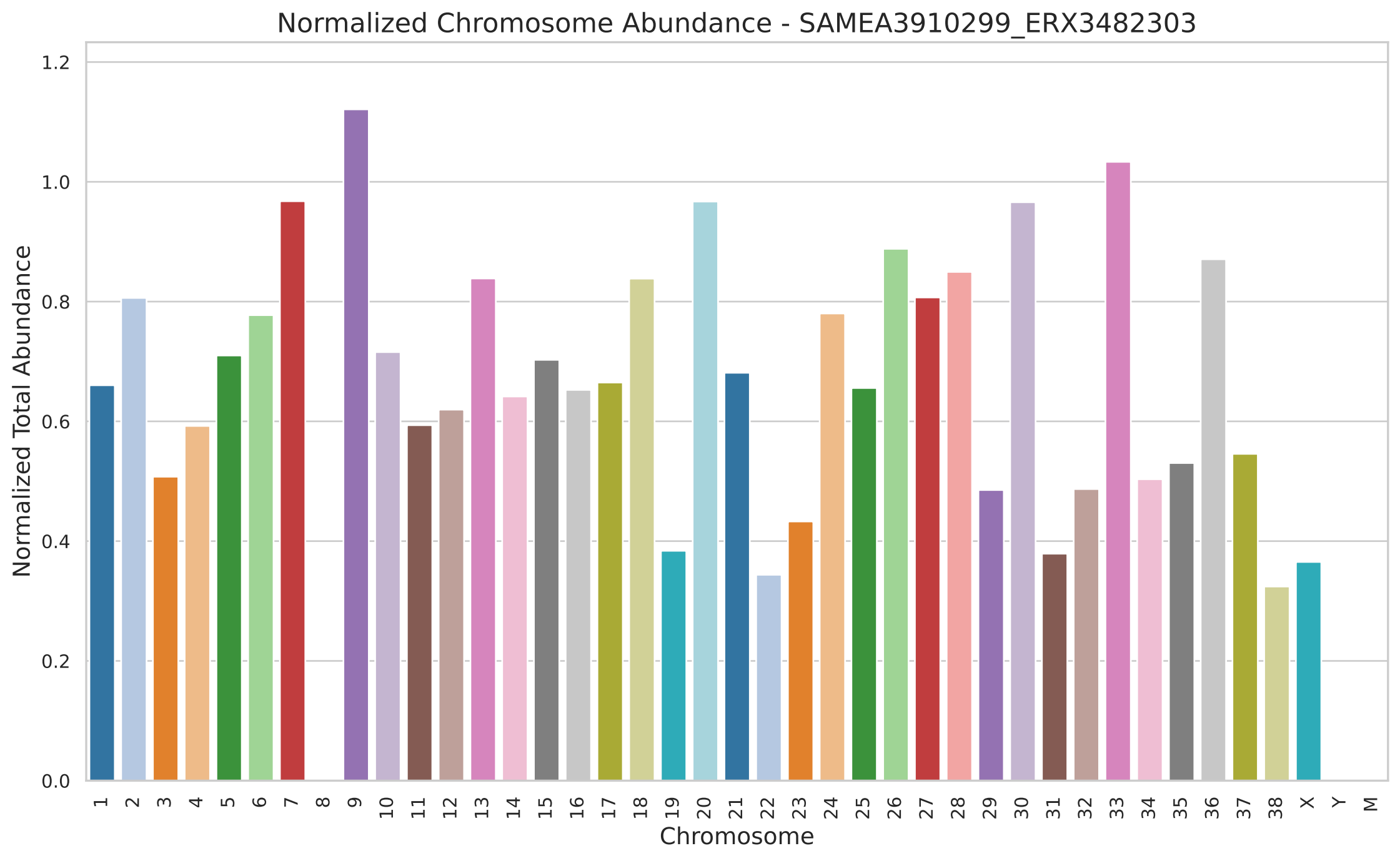

Normalized Chromosome Abundance - SAMEA3910516_ERX3482246
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

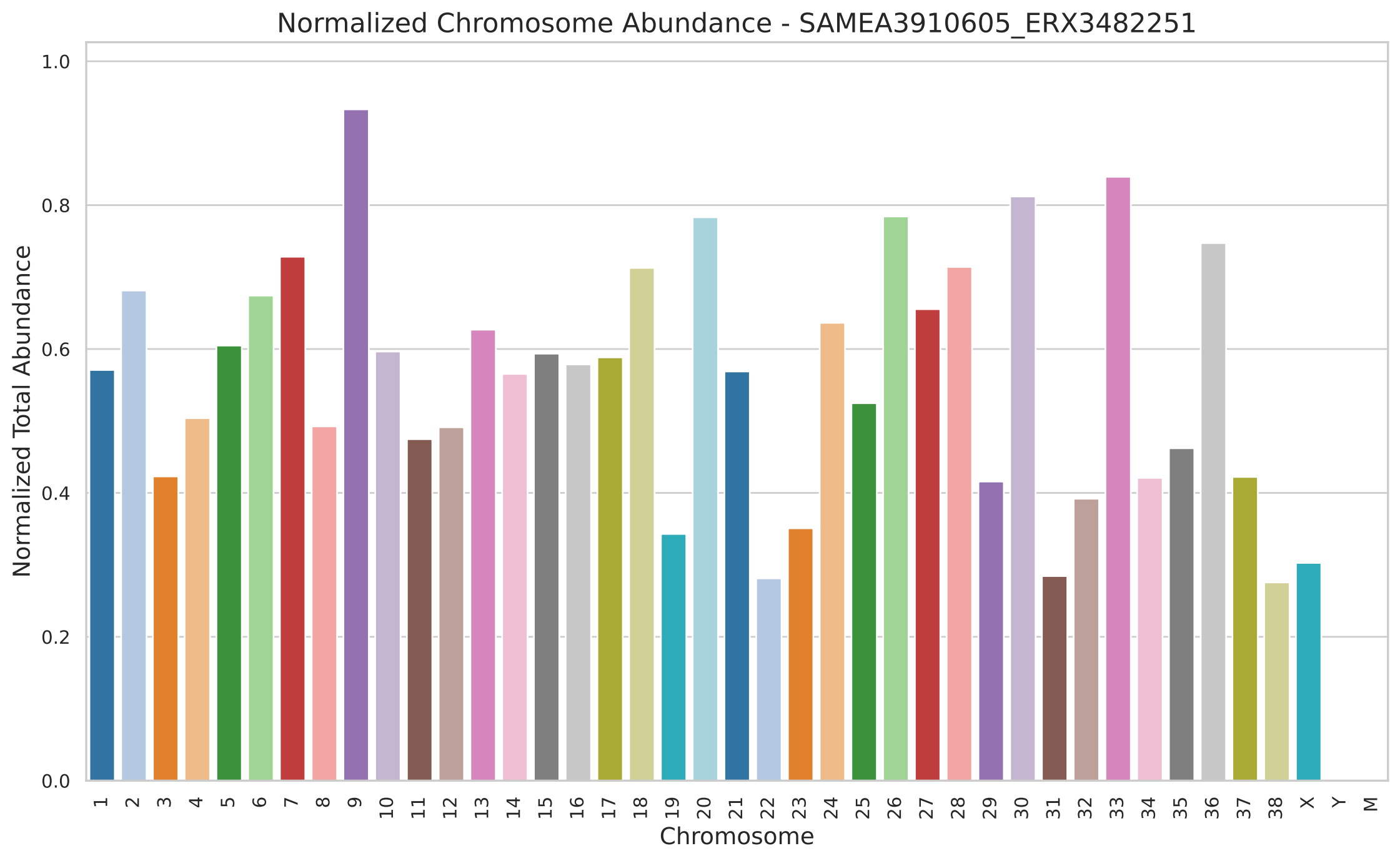

Normalized Chromosome Abundance - SAMN12220967_SRX6660728
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

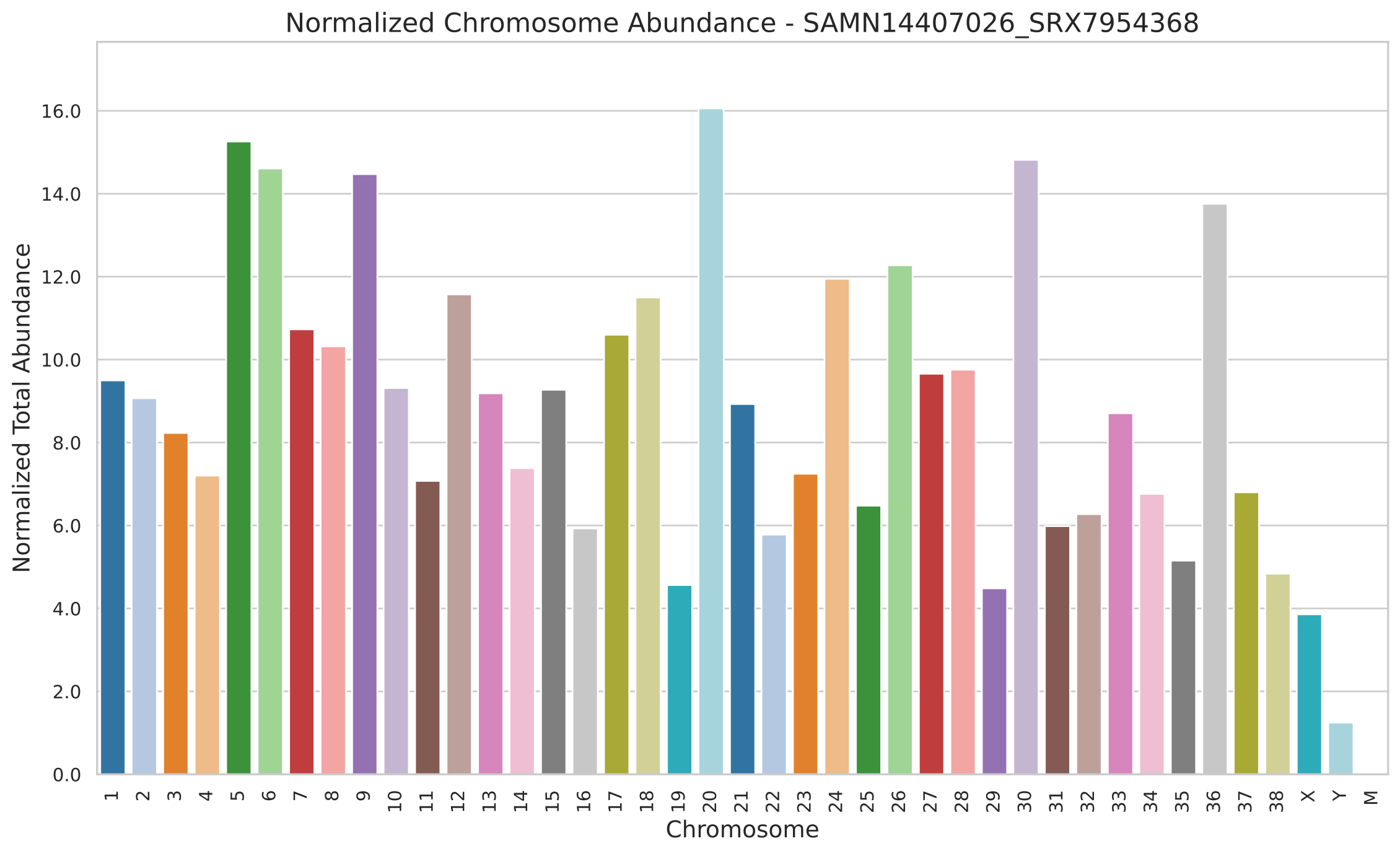

Normalized Chromosome Abundance - SAMN12220966_SRX6660743
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

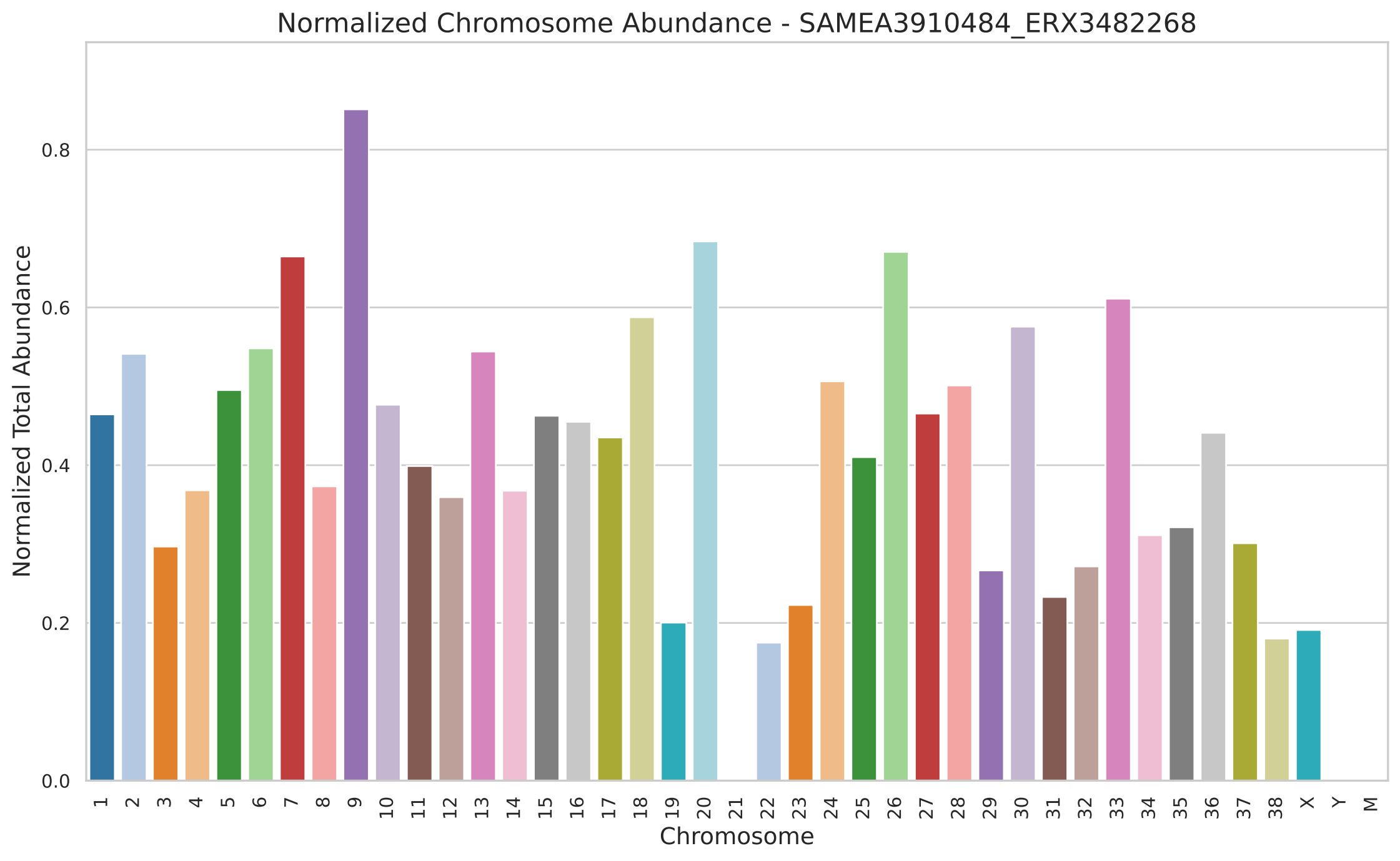

Normalized Chromosome Abundance - SAMEA4673531_ERX3491034
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

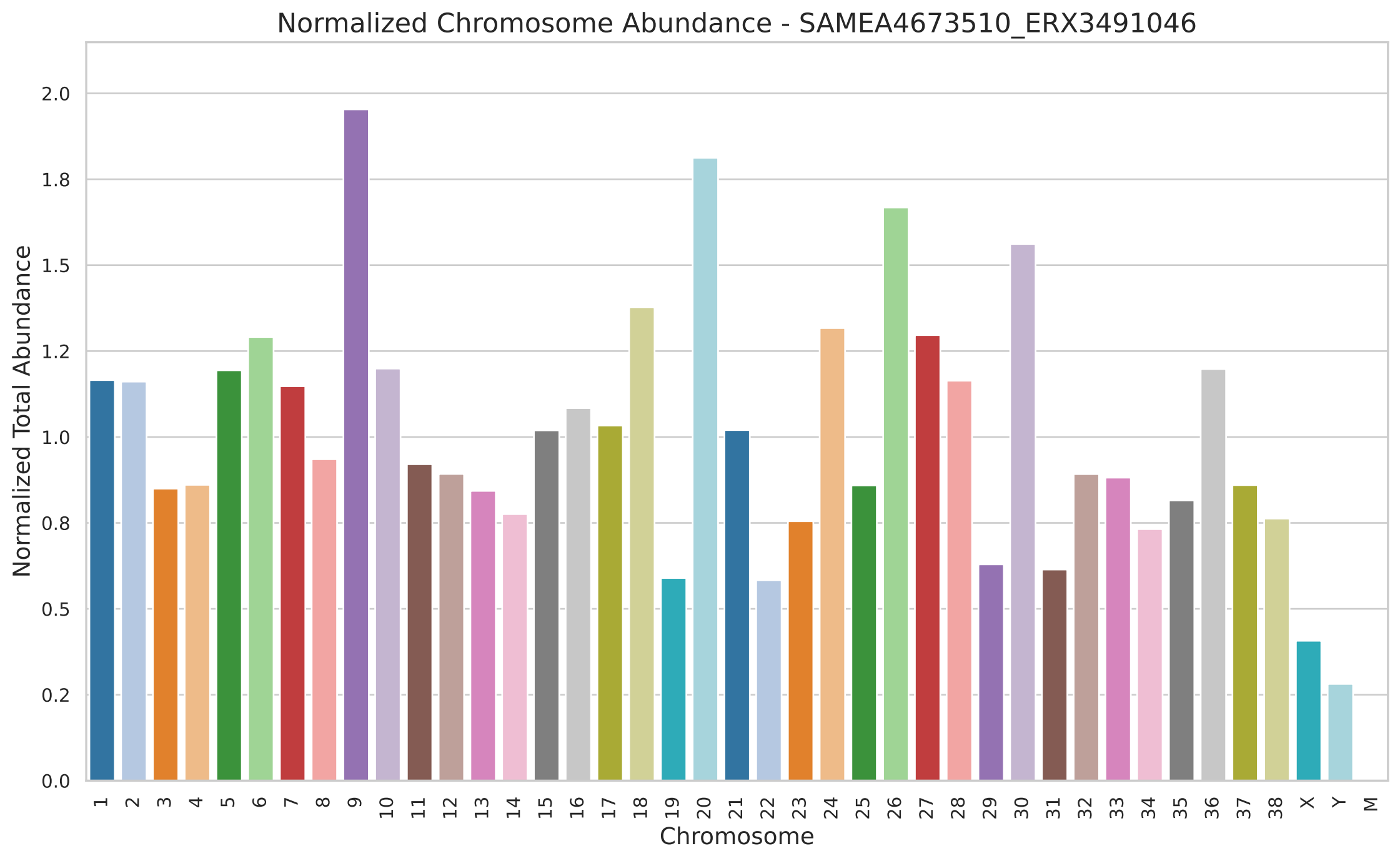

Normalized Chromosome Abundance - SAMN12220991_SRX6660755
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

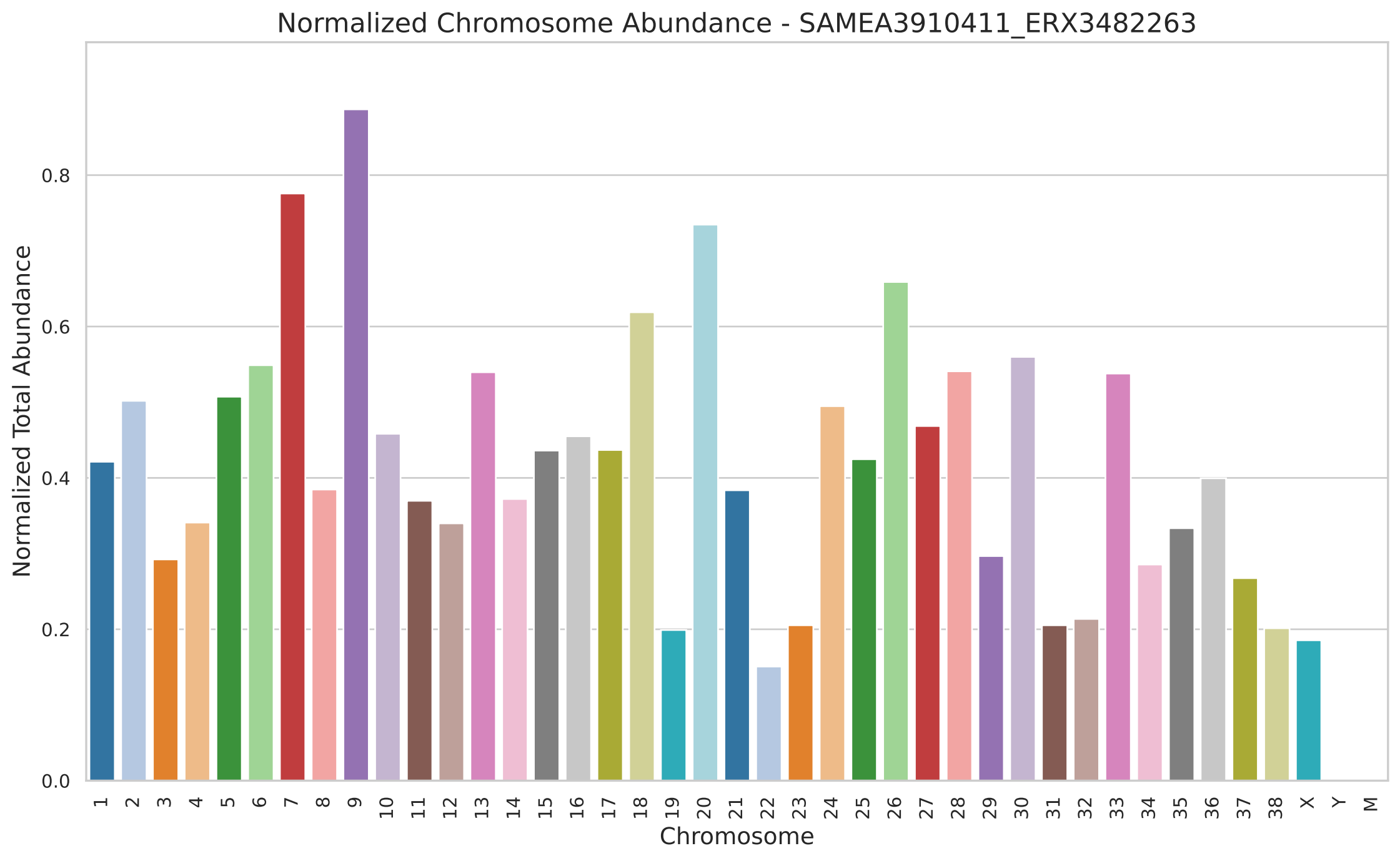

Normalized Chromosome Abundance - SAMEA3910299_ERX3482303
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

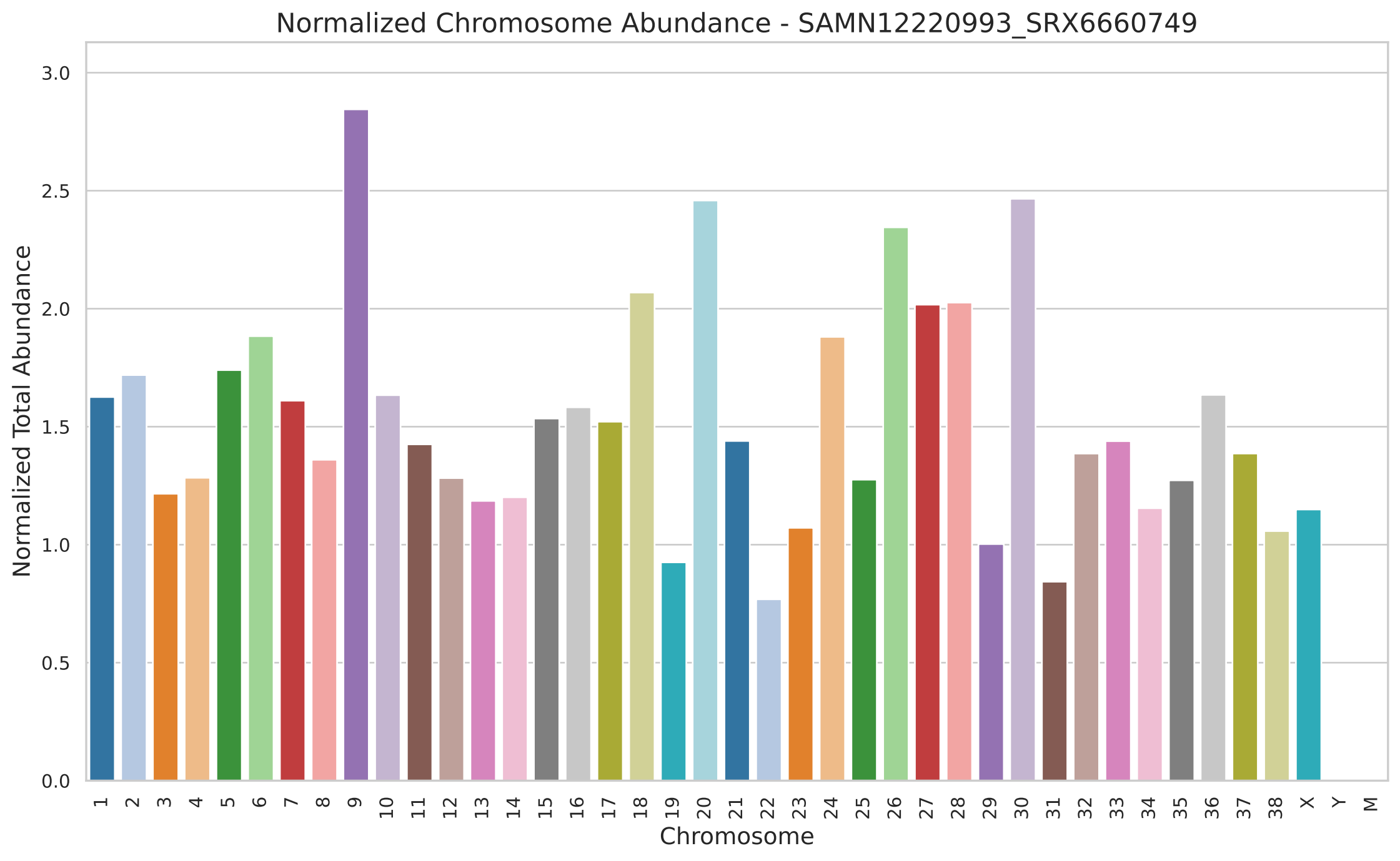

Normalized Chromosome Abundance - SAMEA3910605_ERX3482251
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

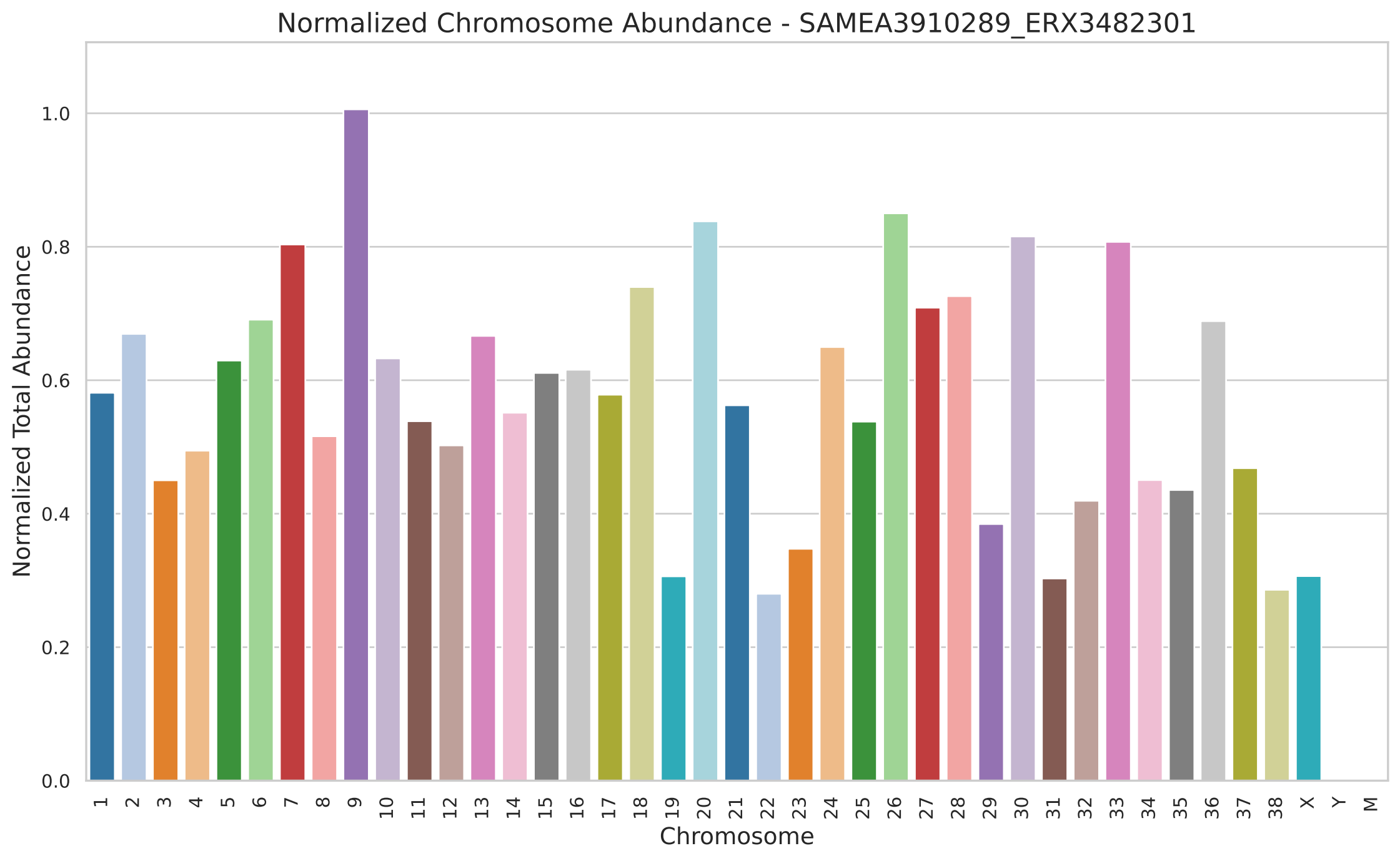

Normalized Chromosome Abundance - SAMN14407026_SRX7954368
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
12.0
14.0
16.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

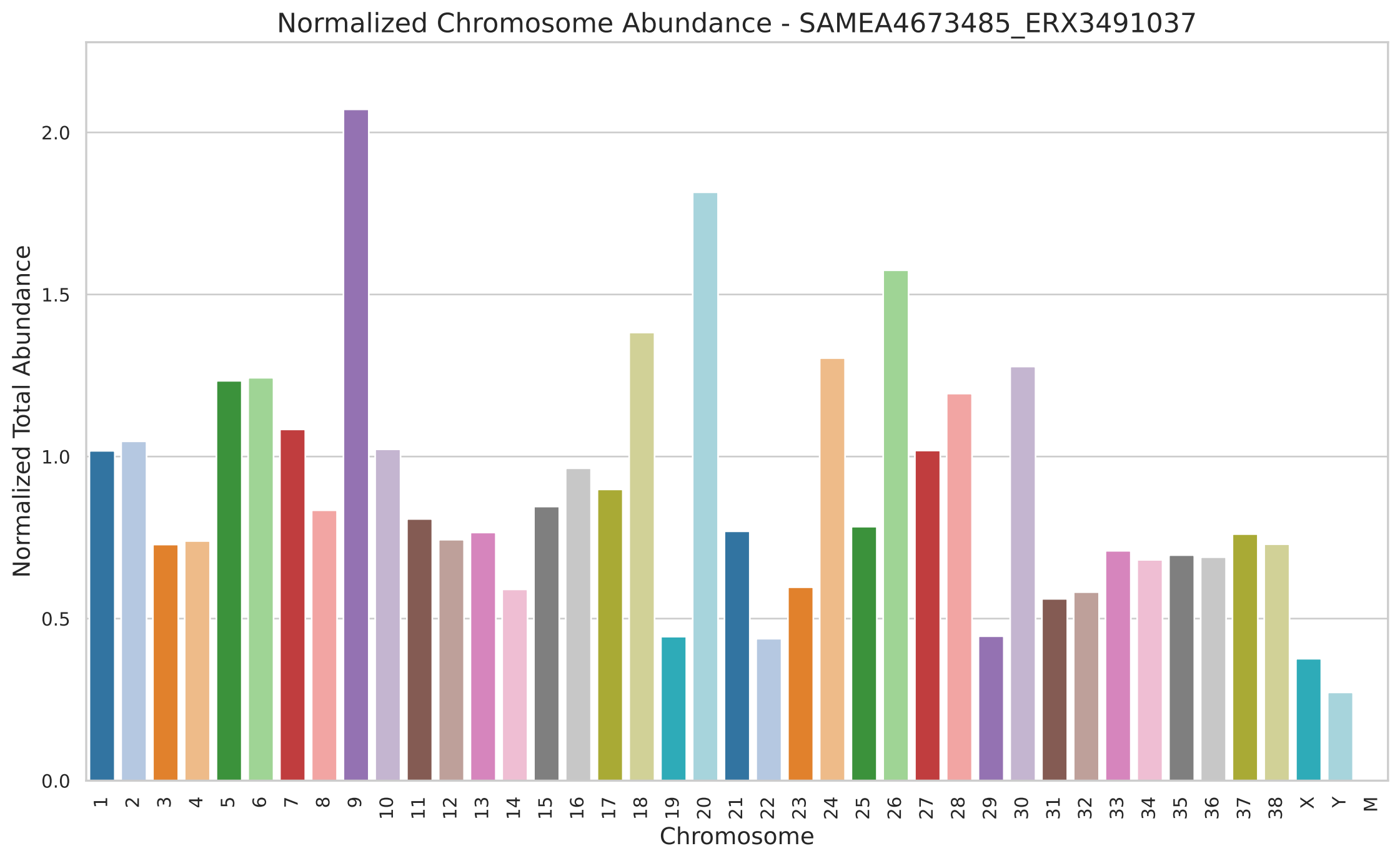

Normalized Chromosome Abundance - SAMEA3910484_ERX3482268
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

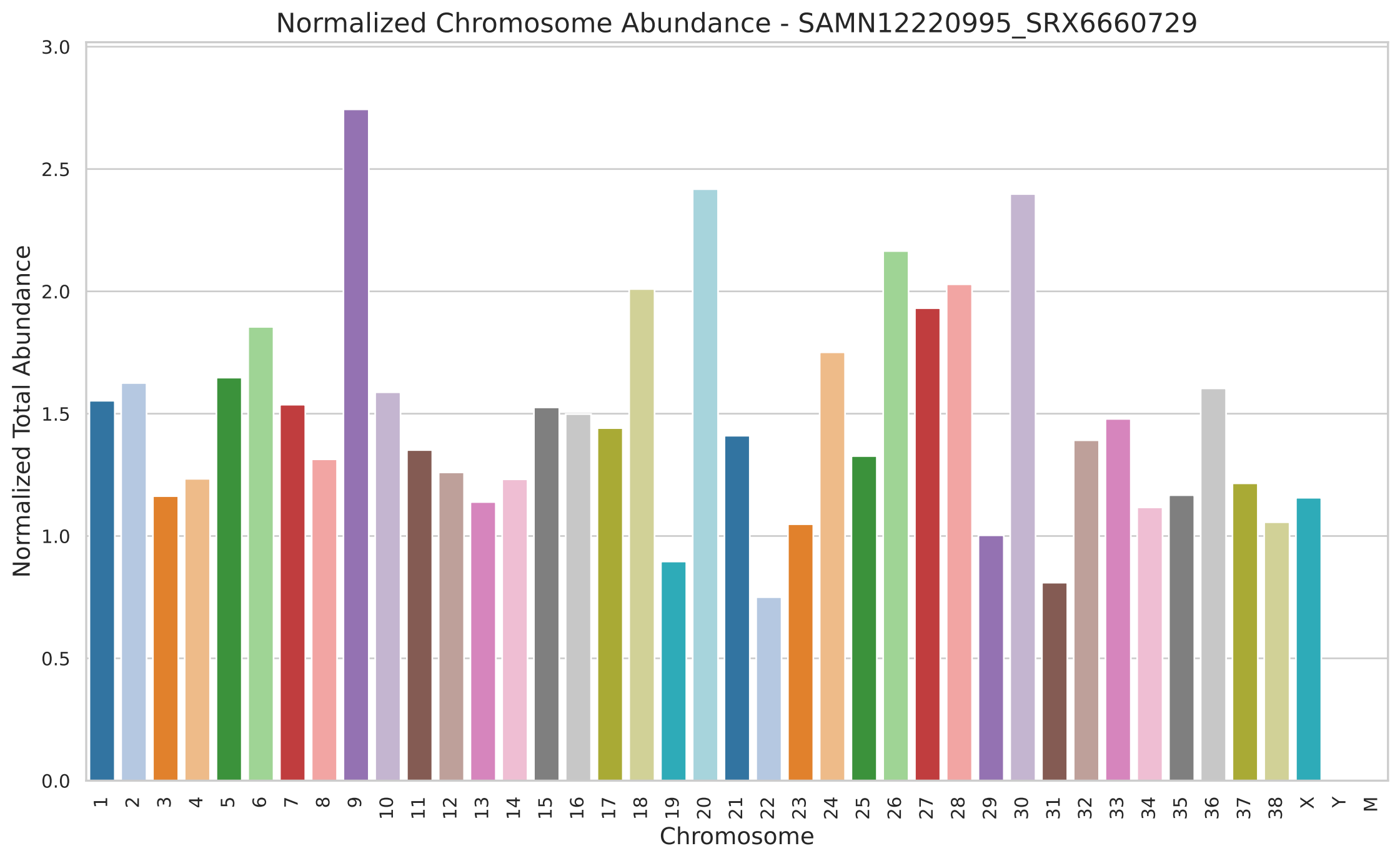

Normalized Chromosome Abundance - SAMEA4673510_ERX3491046
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

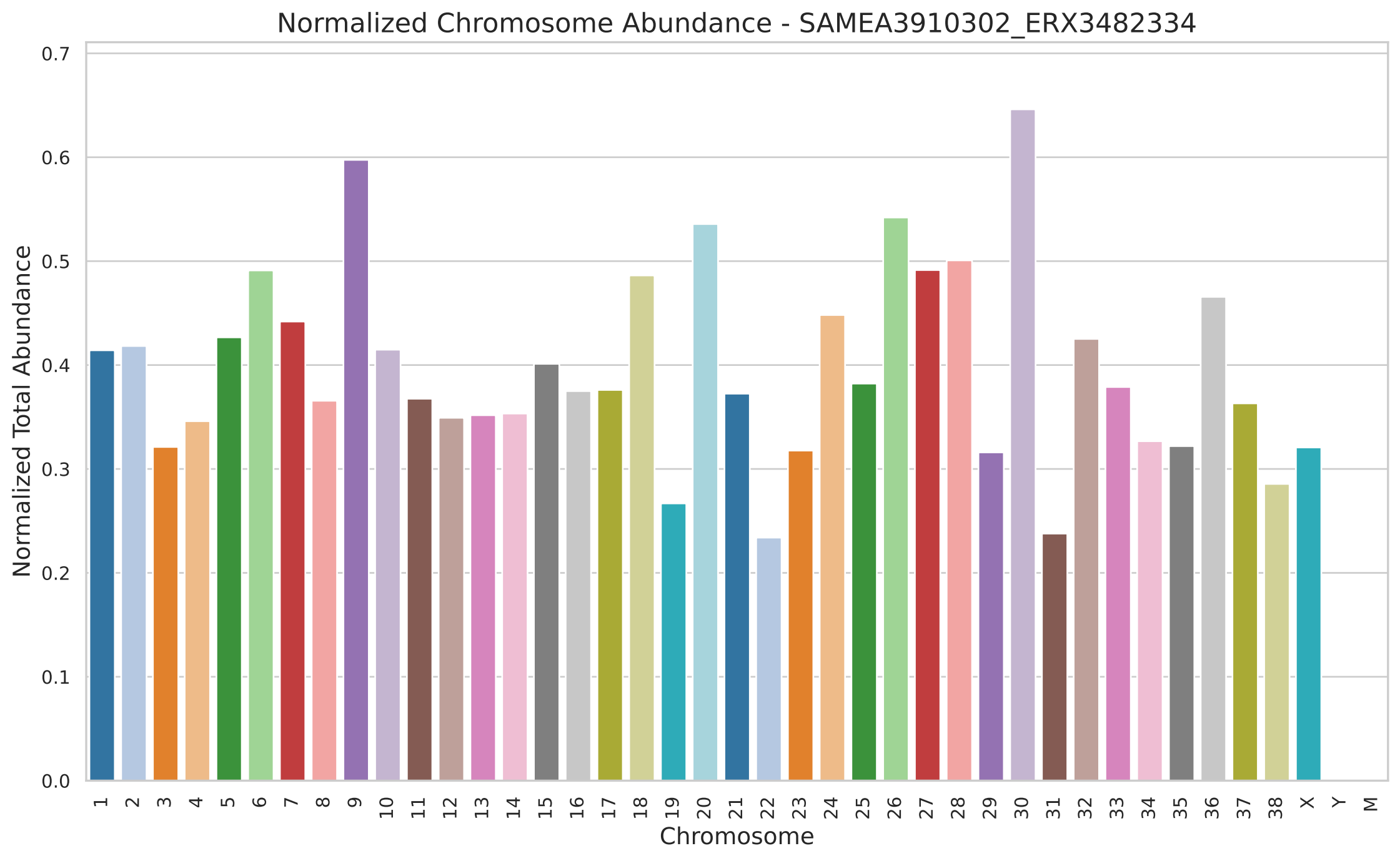

Normalized Chromosome Abundance - SAMEA3910411_ERX3482263
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

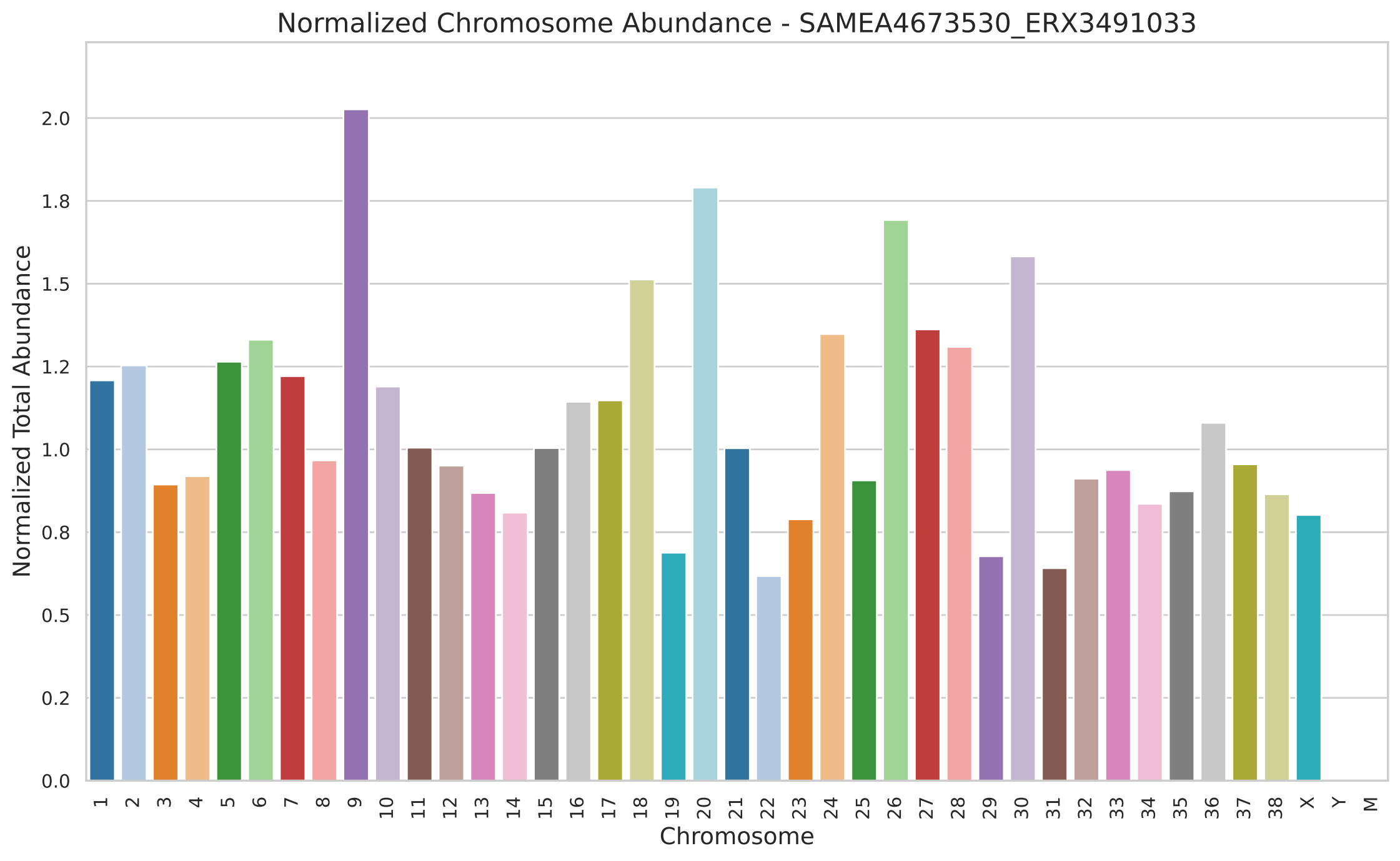

Normalized Chromosome Abundance - SAMN12220993_SRX6660749
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

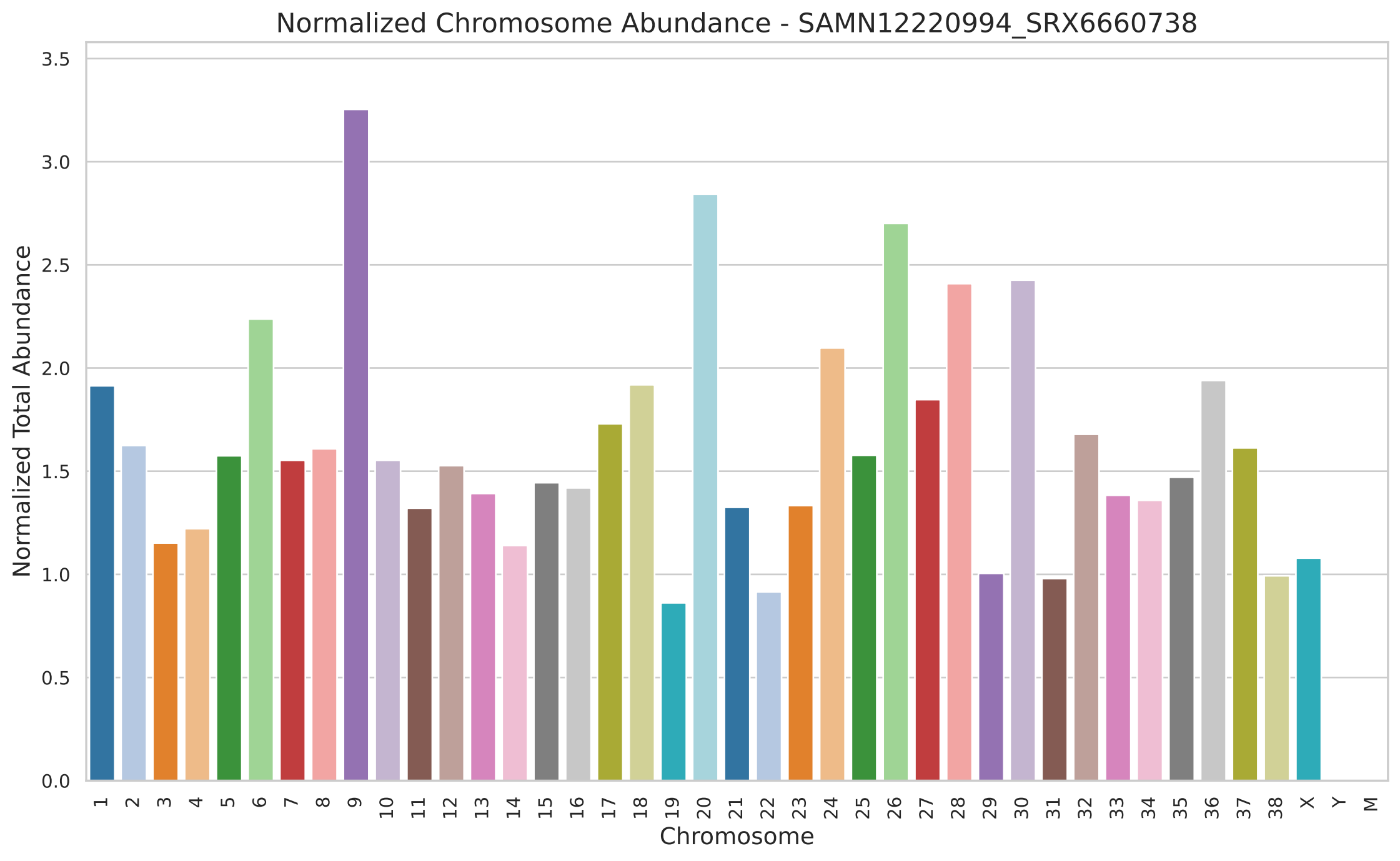

Normalized Chromosome Abundance - SAMEA3910289_ERX3482301
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

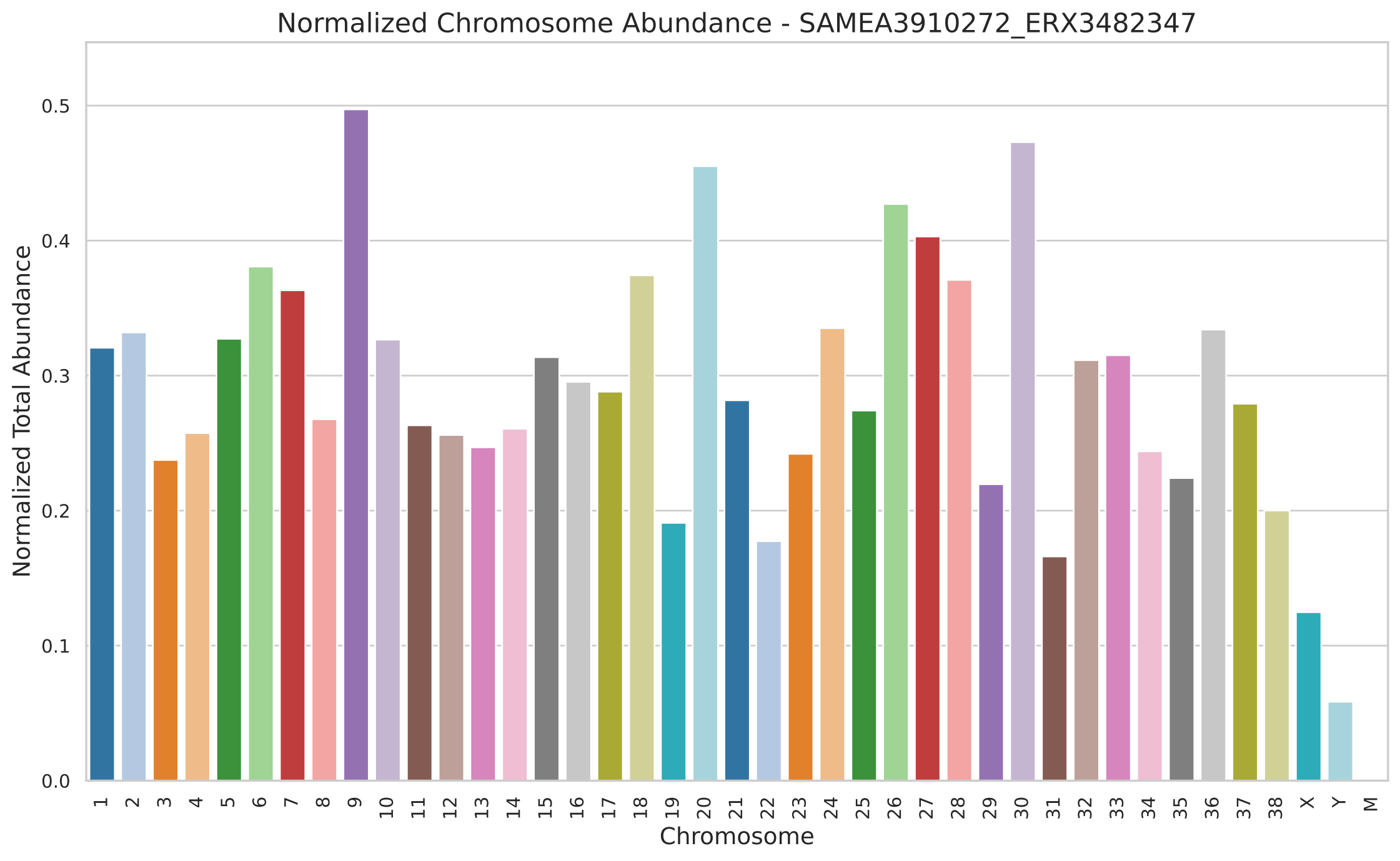

Normalized Chromosome Abundance - SAMEA4673485_ERX3491037
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

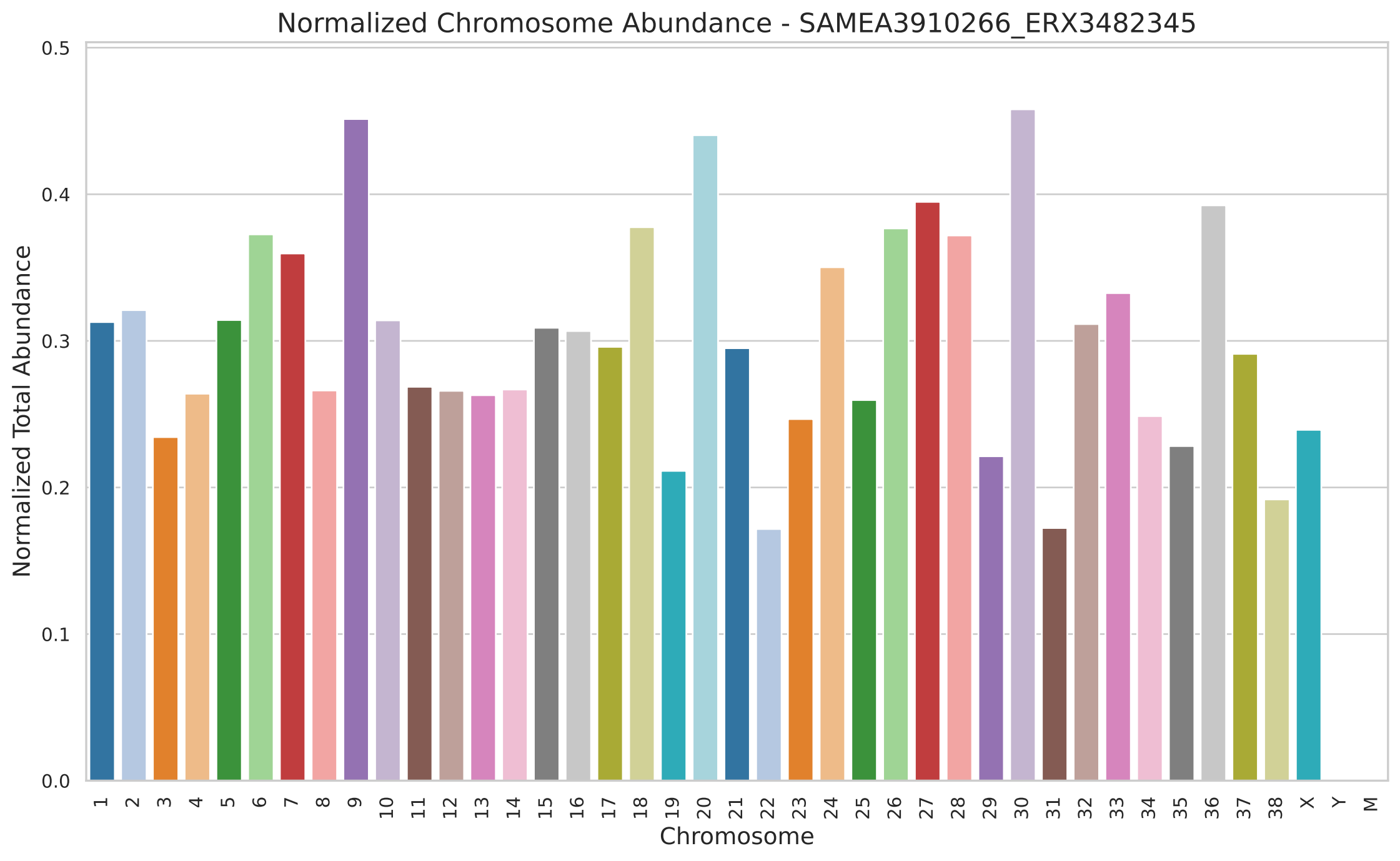

Normalized Chromosome Abundance - SAMN12220995_SRX6660729
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

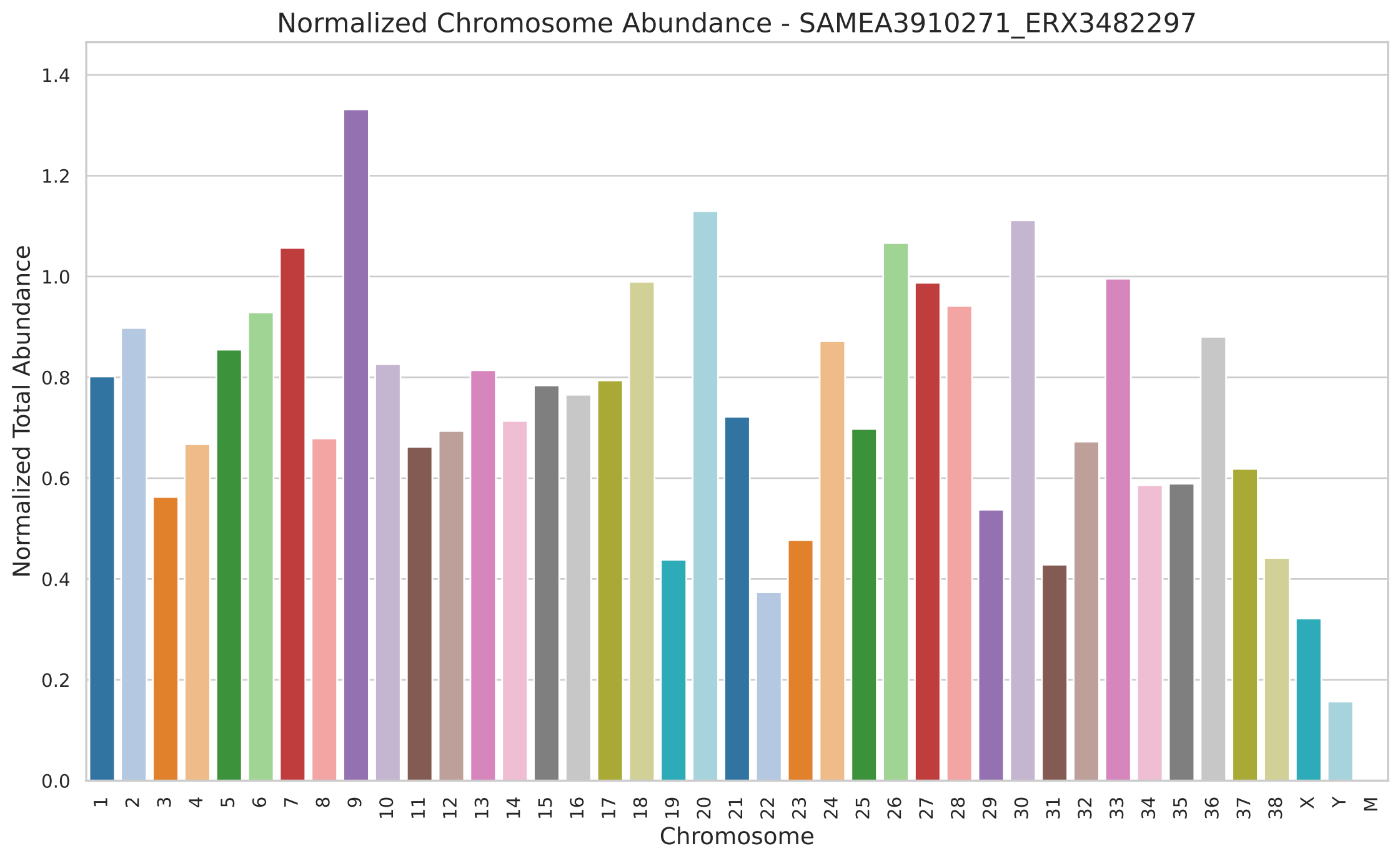

Normalized Chromosome Abundance - SAMEA3910302_ERX3482334
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

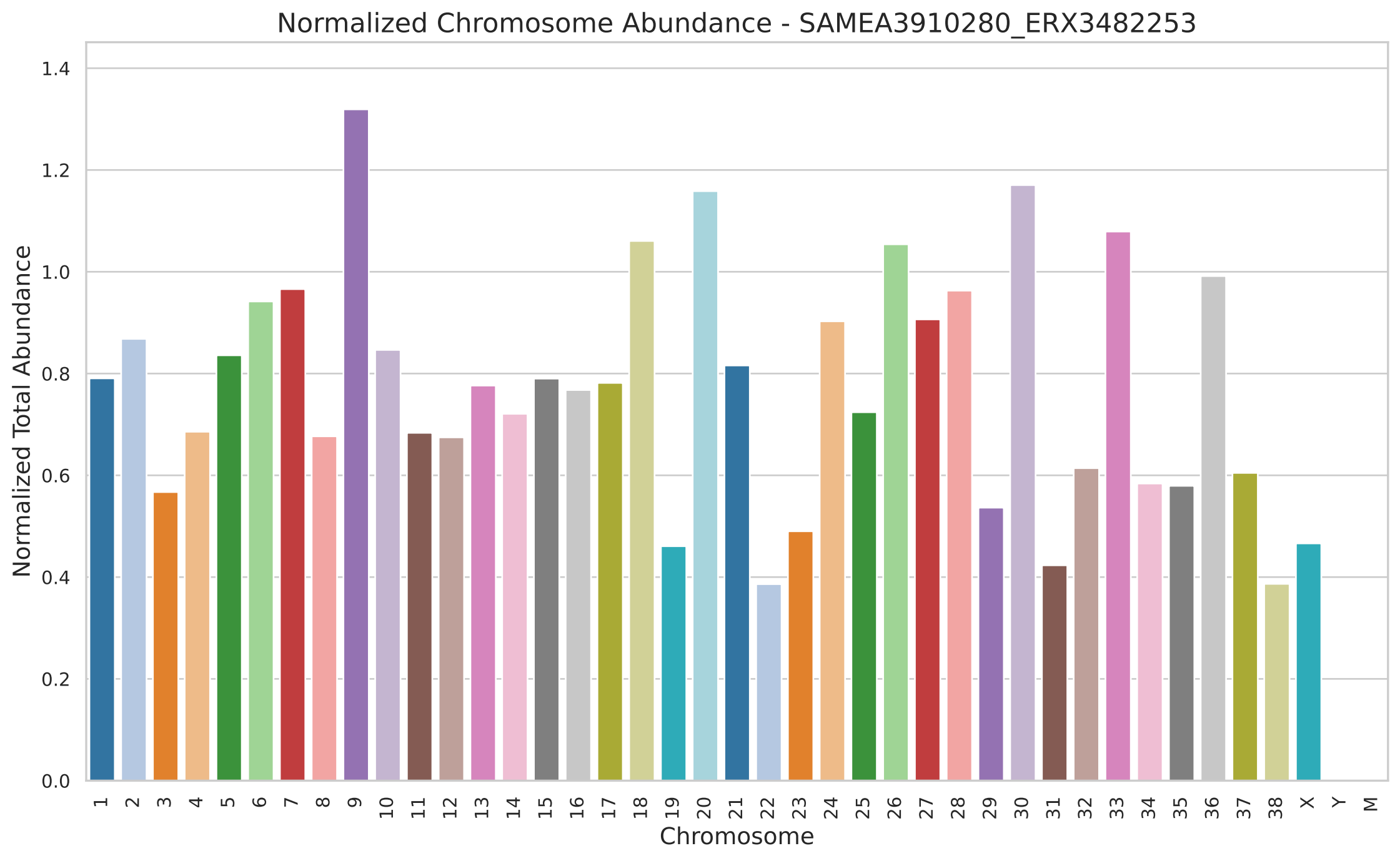

Normalized Chromosome Abundance - SAMEA4673530_ERX3491033
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

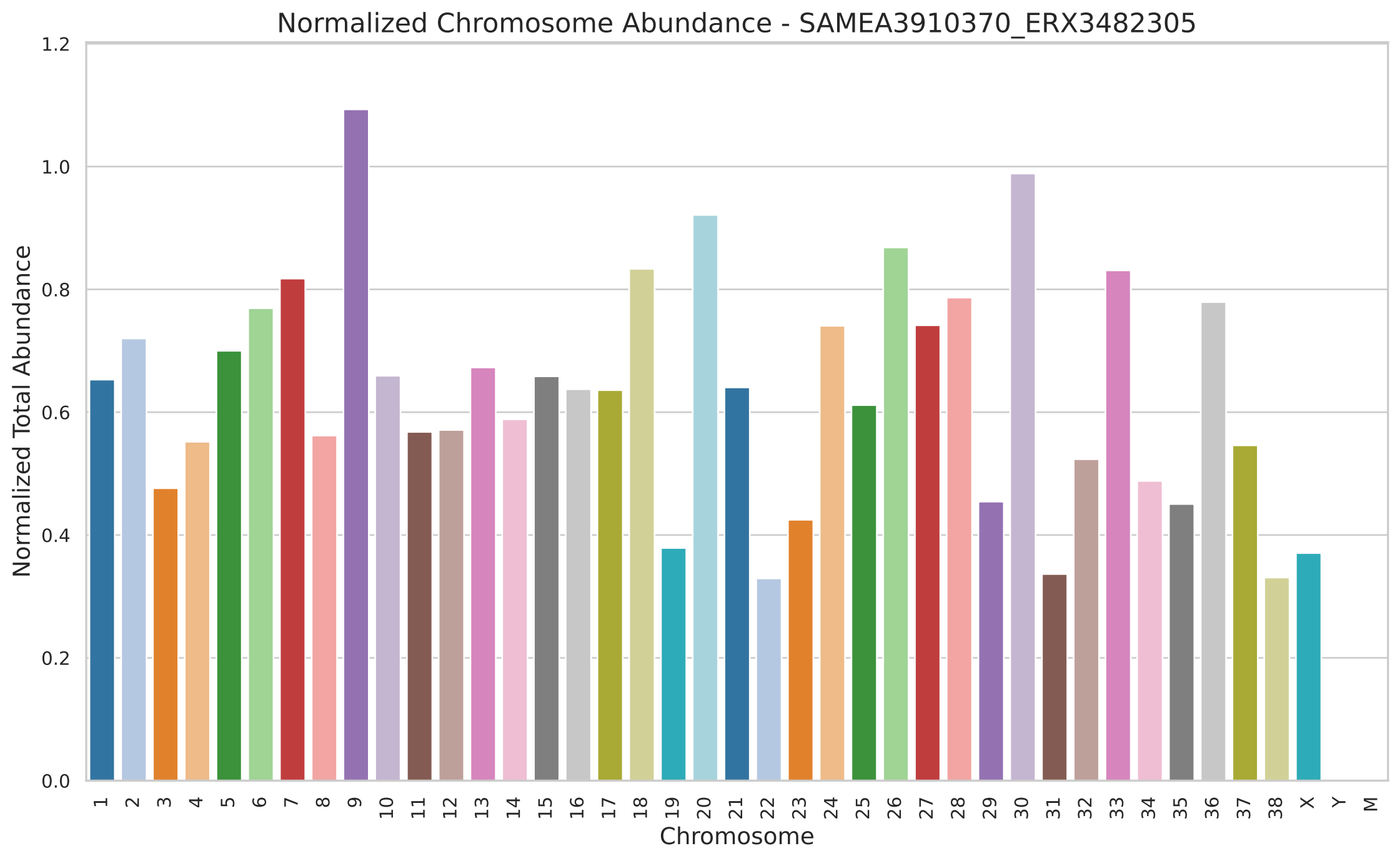

Normalized Chromosome Abundance - SAMN12220994_SRX6660738
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

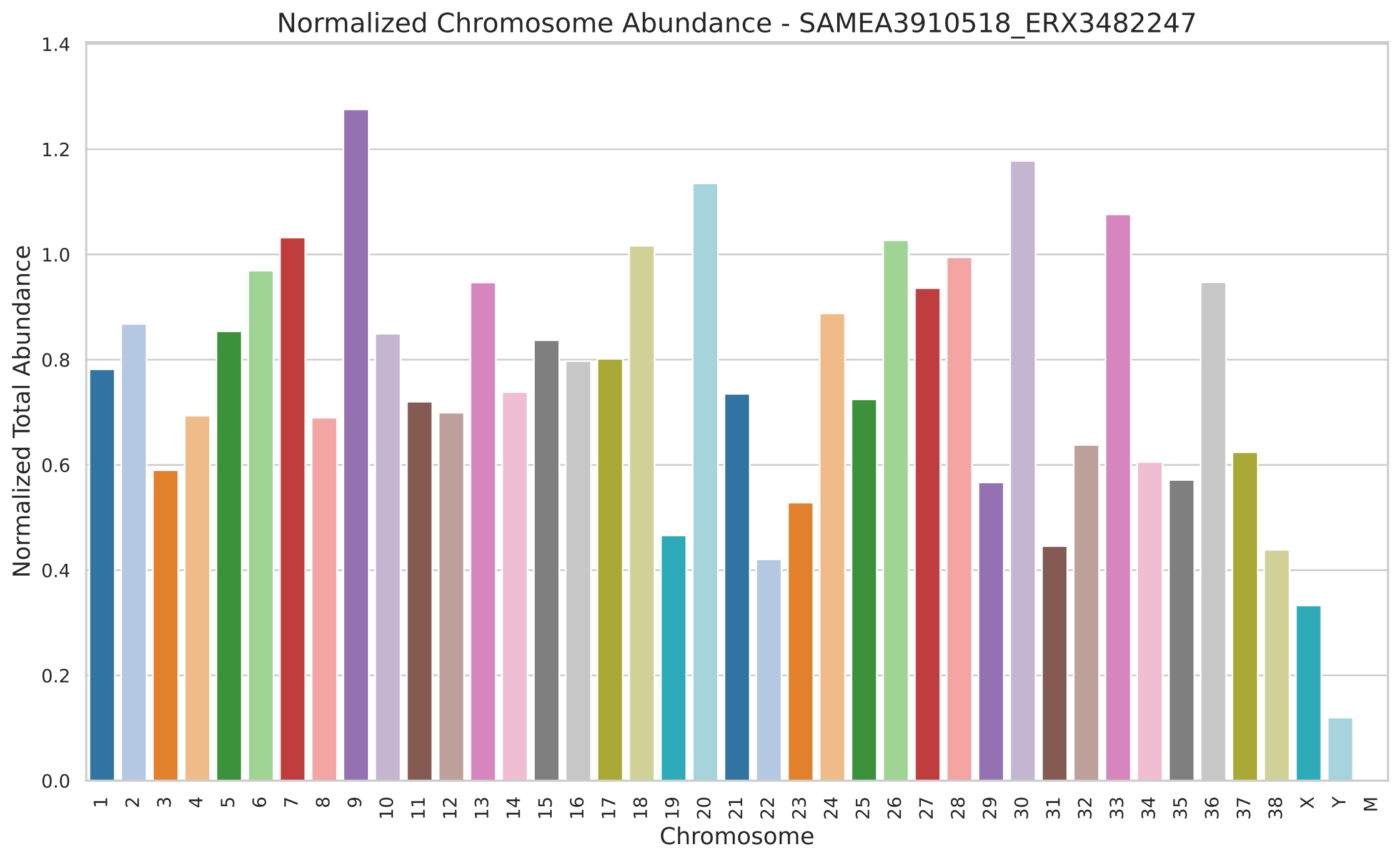

Normalized Chromosome Abundance - SAMEA3910272_ERX3482347
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

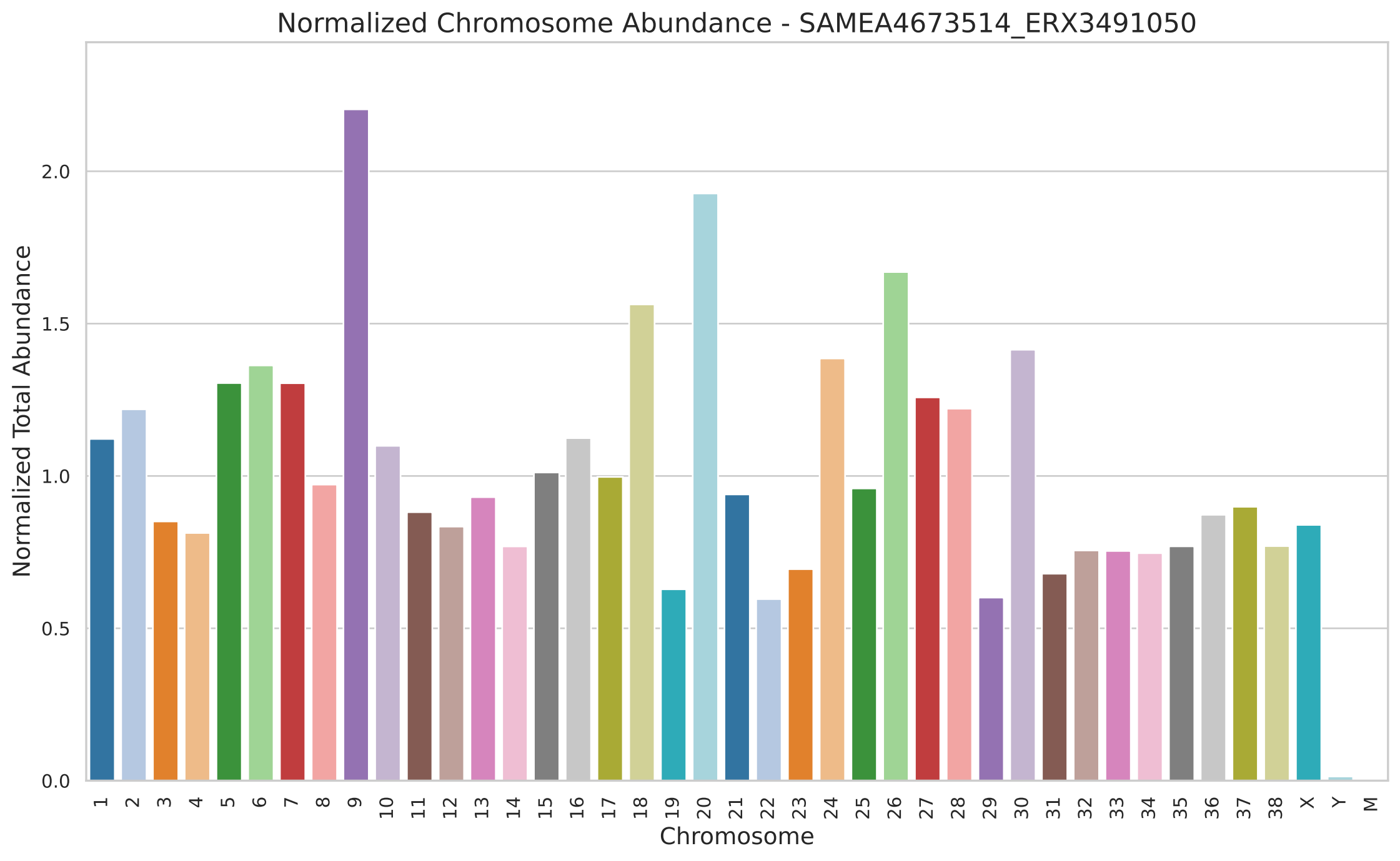

Normalized Chromosome Abundance - SAMEA3910266_ERX3482345
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

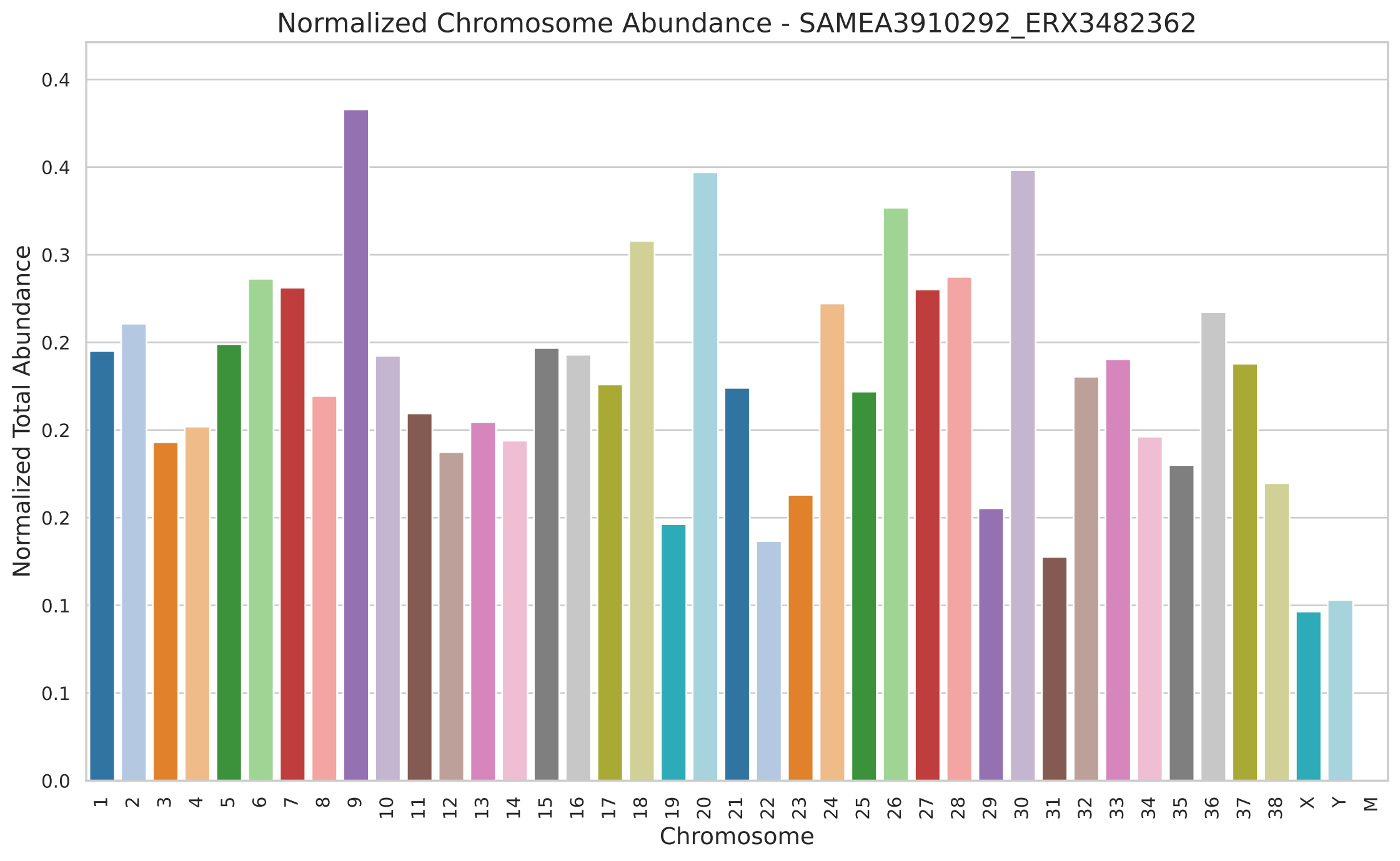

Normalized Chromosome Abundance - SAMEA3910271_ERX3482297
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

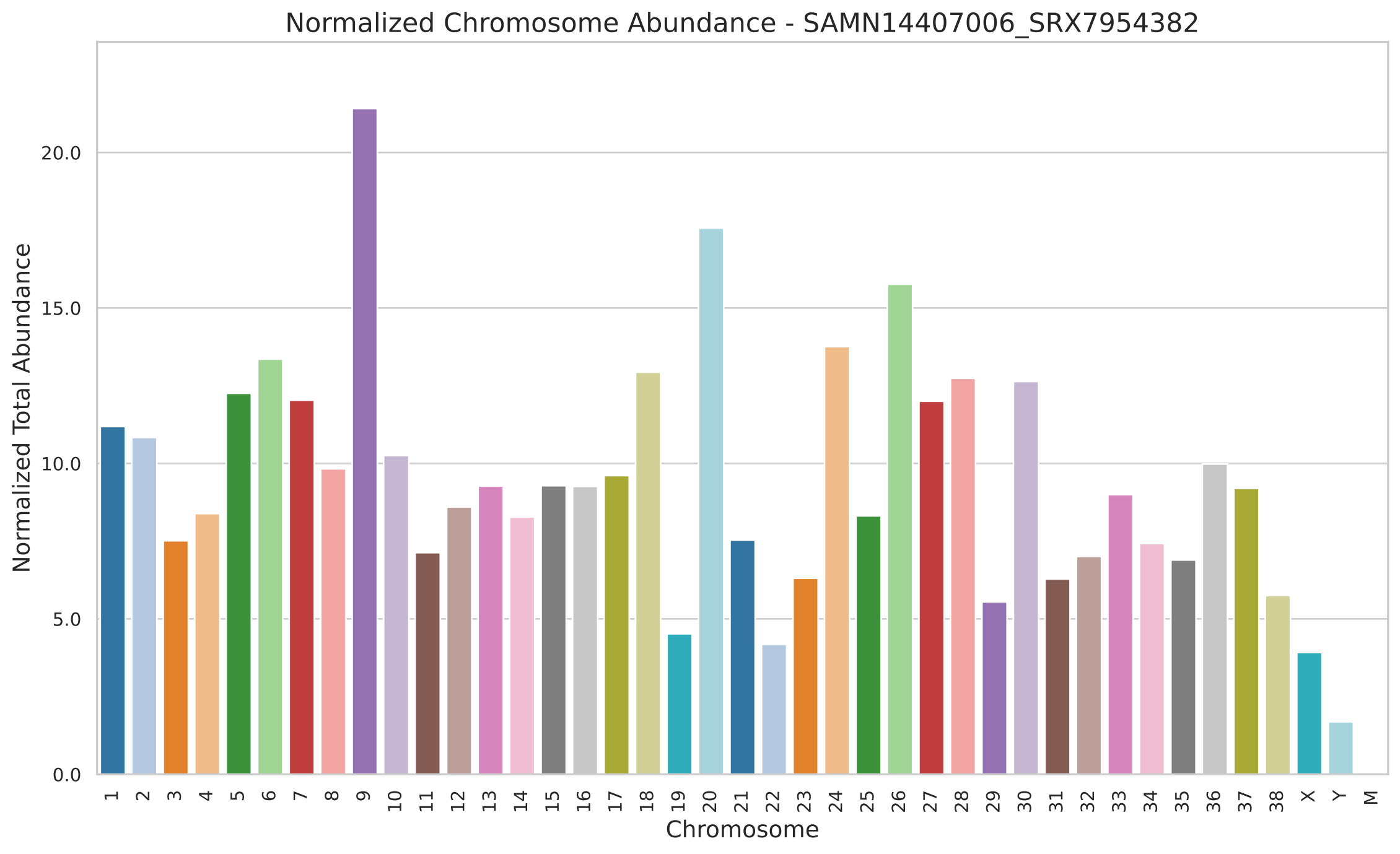

Normalized Chromosome Abundance - SAMEA3910280_ERX3482253
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 X Y M
Chromosome

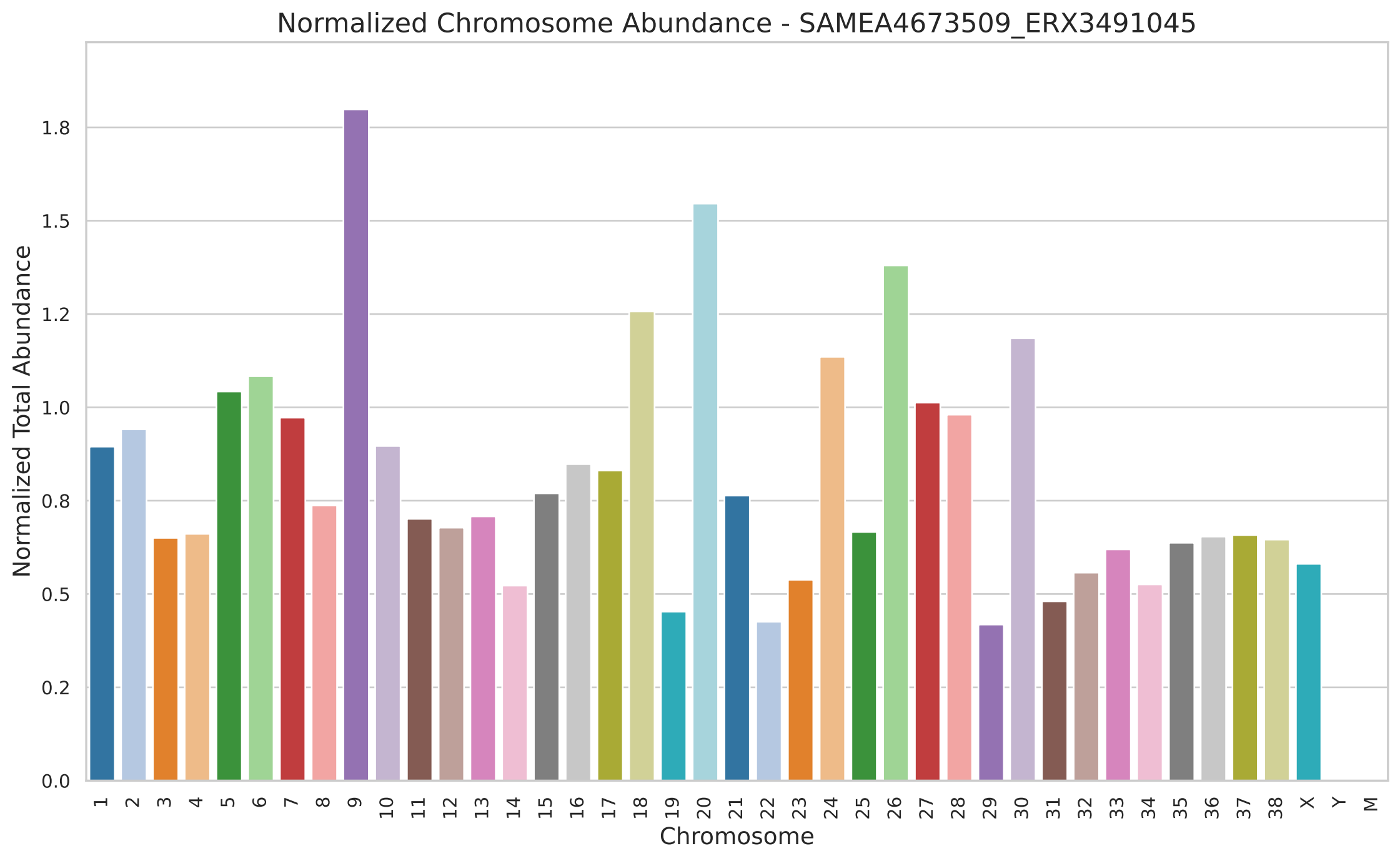

Normalized Chromosome Abundance - SAMEA3910370_ERX3482305
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

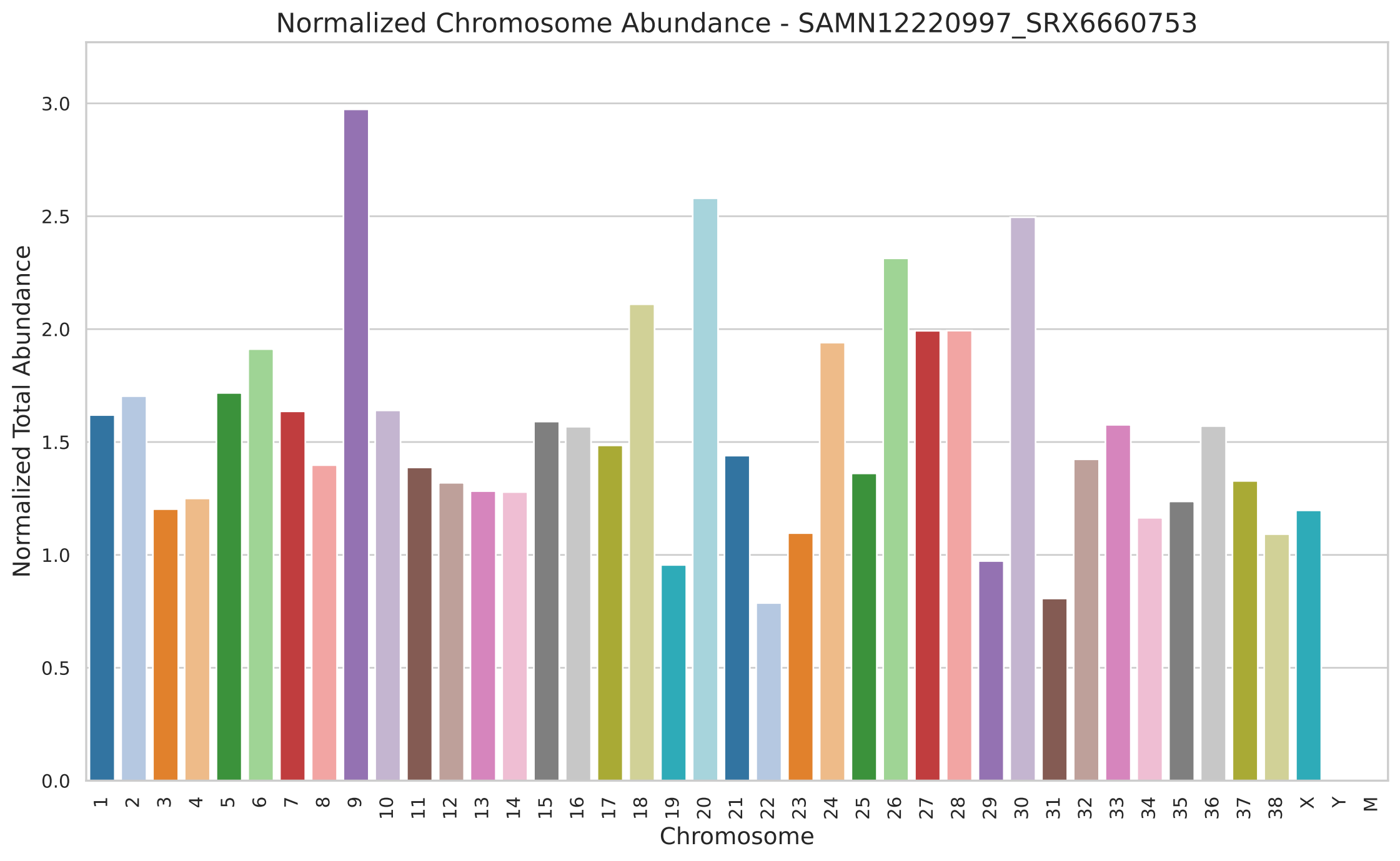

Normalized Chromosome Abundance - SAMEA3910518_ERX3482247
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

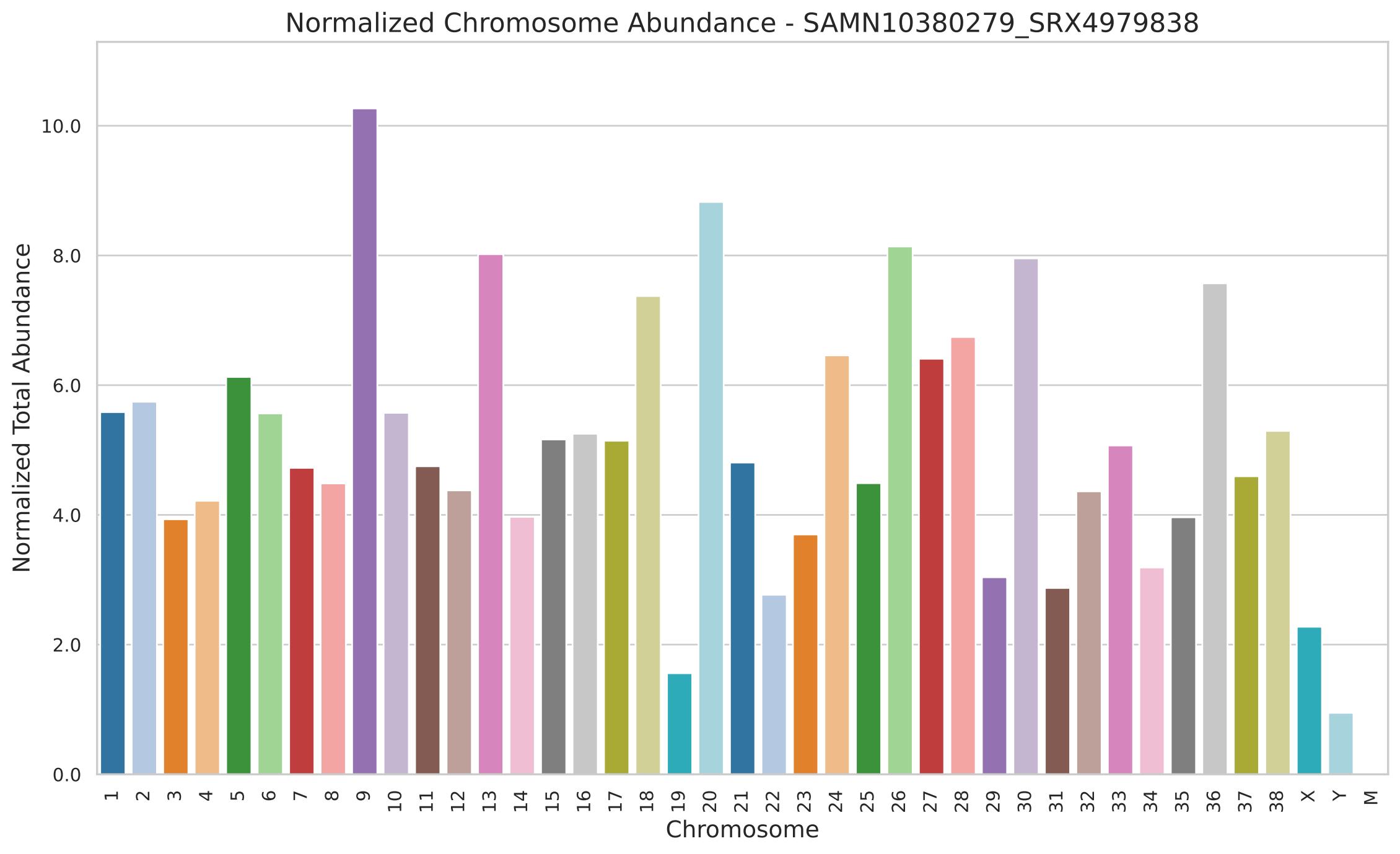

Normalized Chromosome Abundance - SAMEA4673514_ERX3491050
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

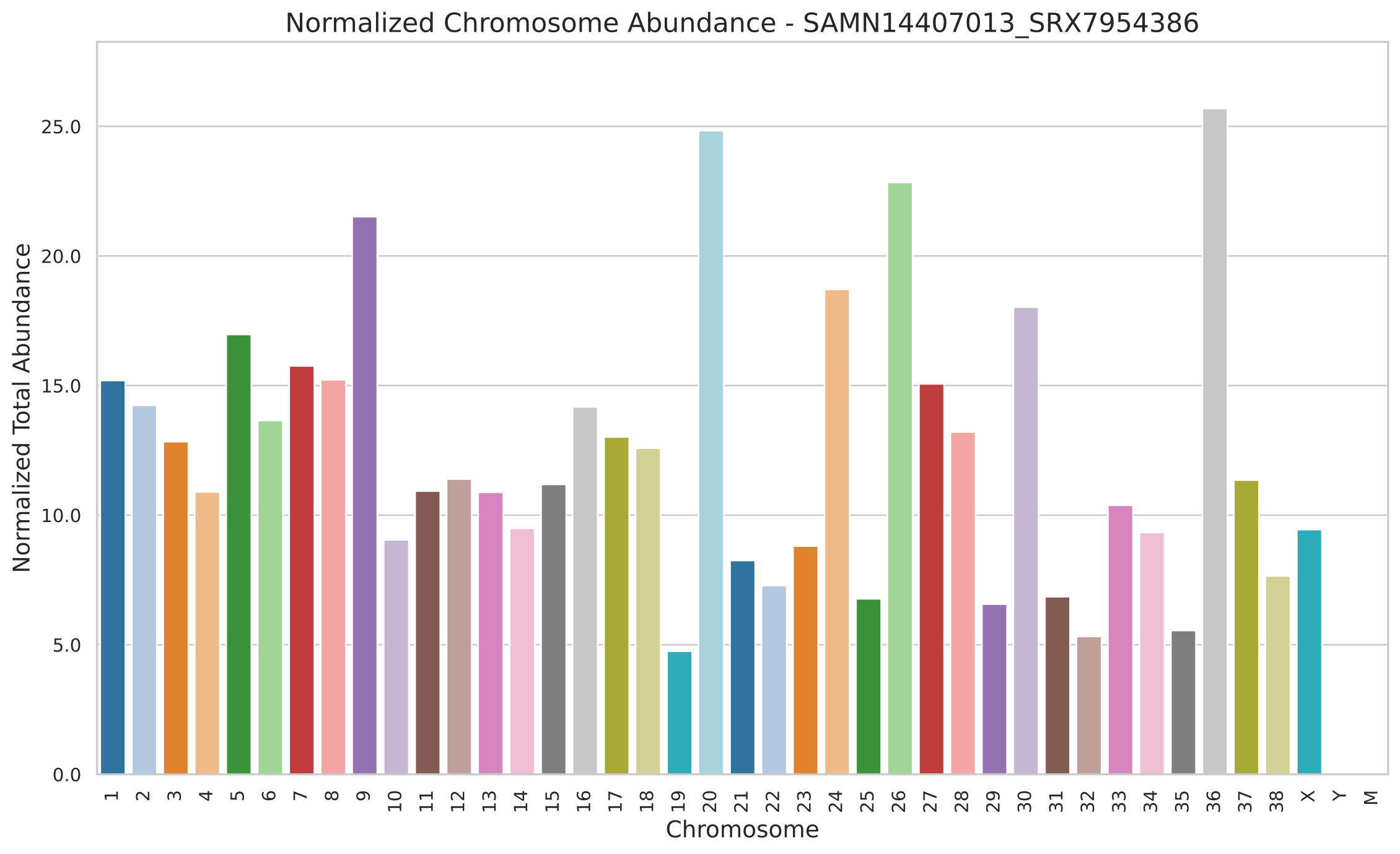

Normalized Chromosome Abundance - SAMEA3910292_ERX3482362
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

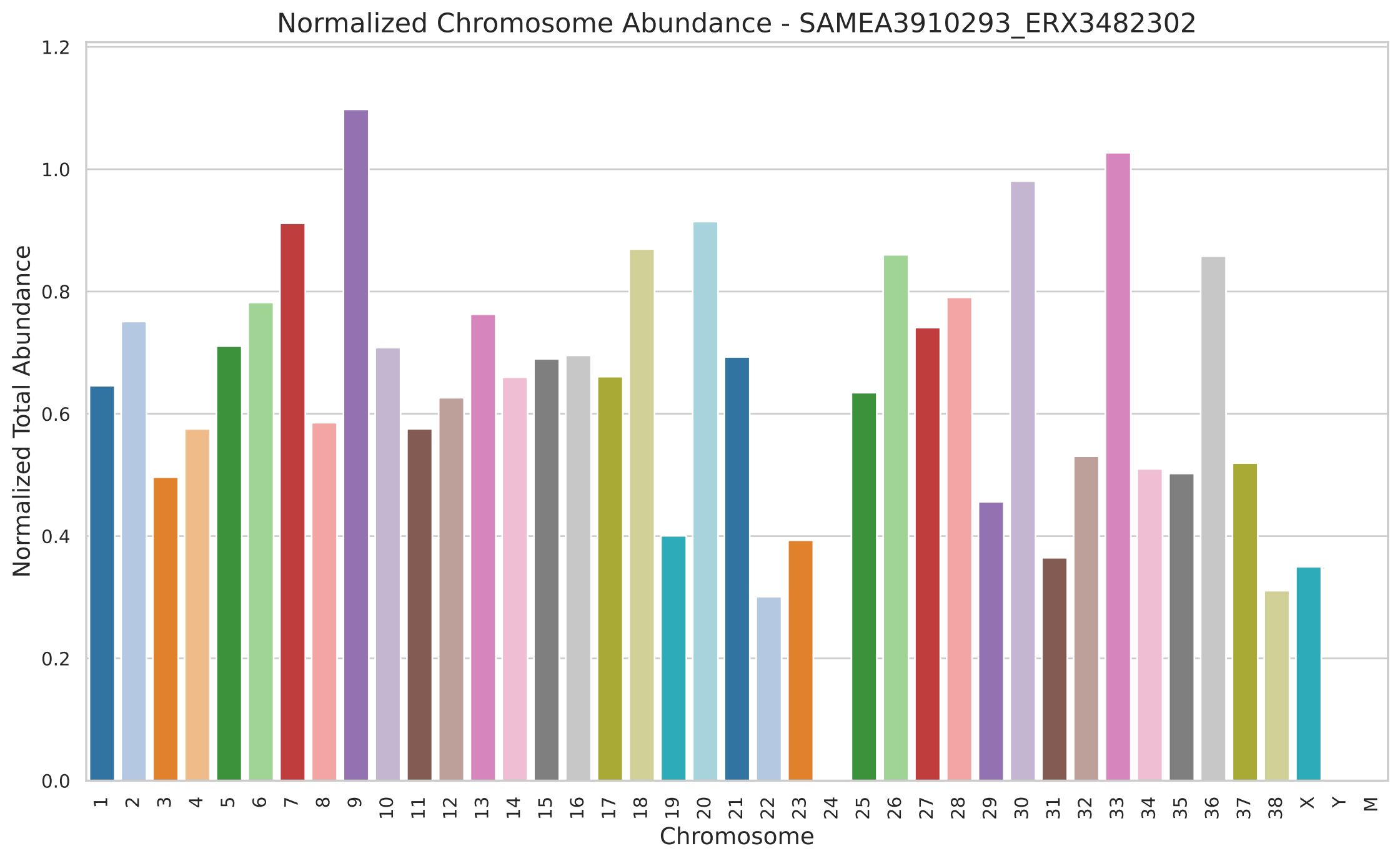

Normalized Chromosome Abundance - SAMN14407006_SRX7954382
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

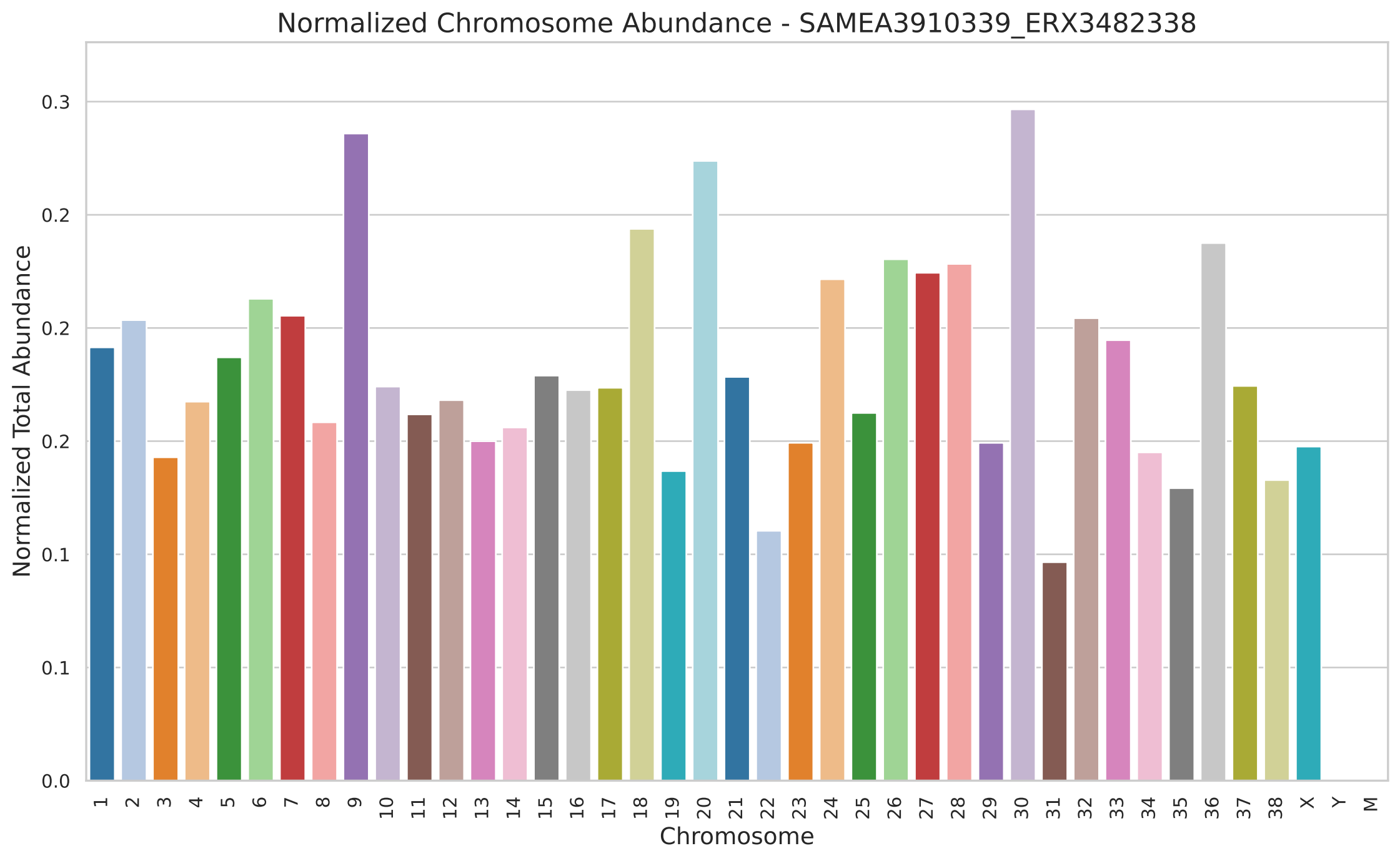

Normalized Chromosome Abundance - SAMEA4673509_ERX3491045
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

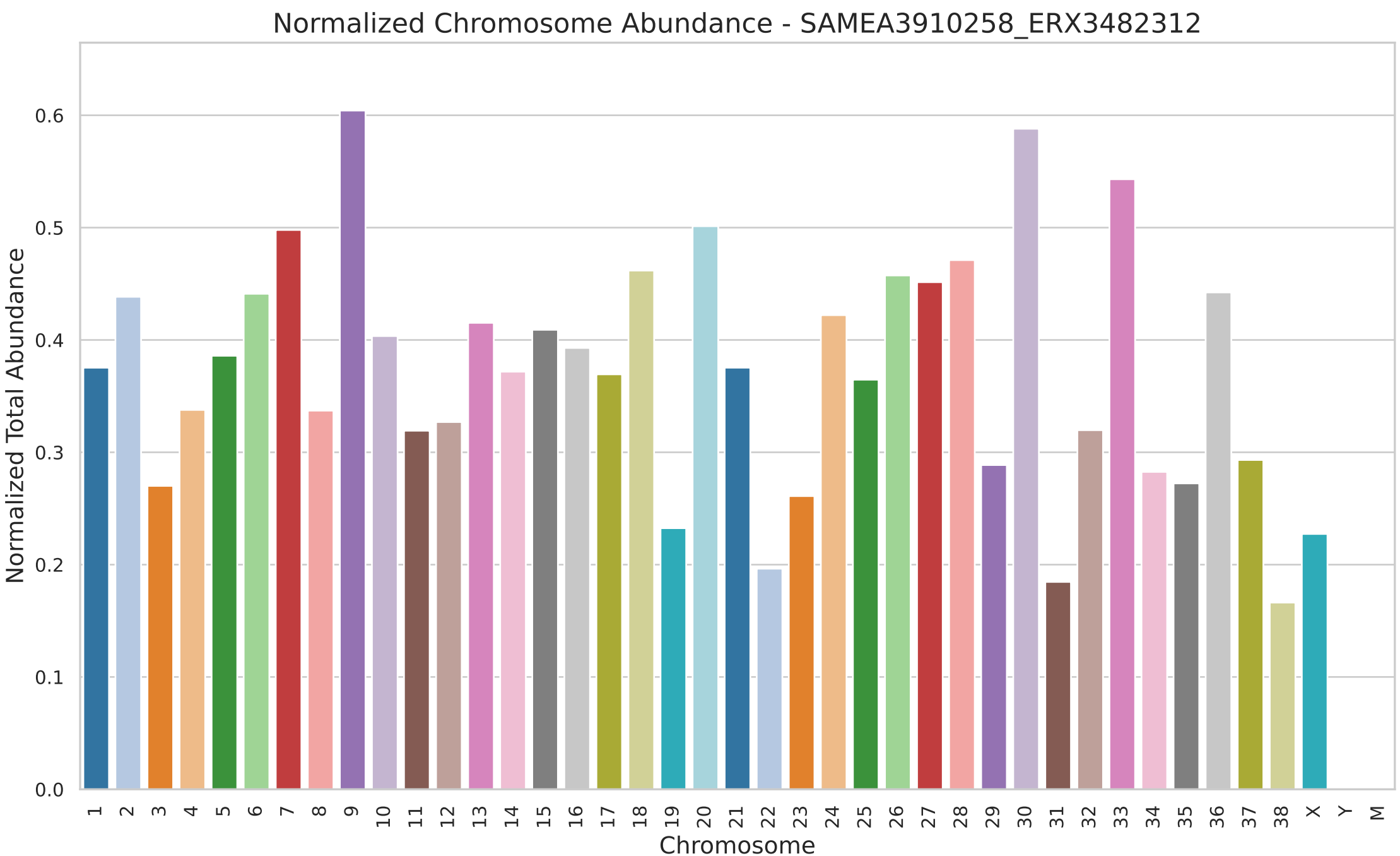

Normalized Chromosome Abundance - SAMN12220997_SRX6660753
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

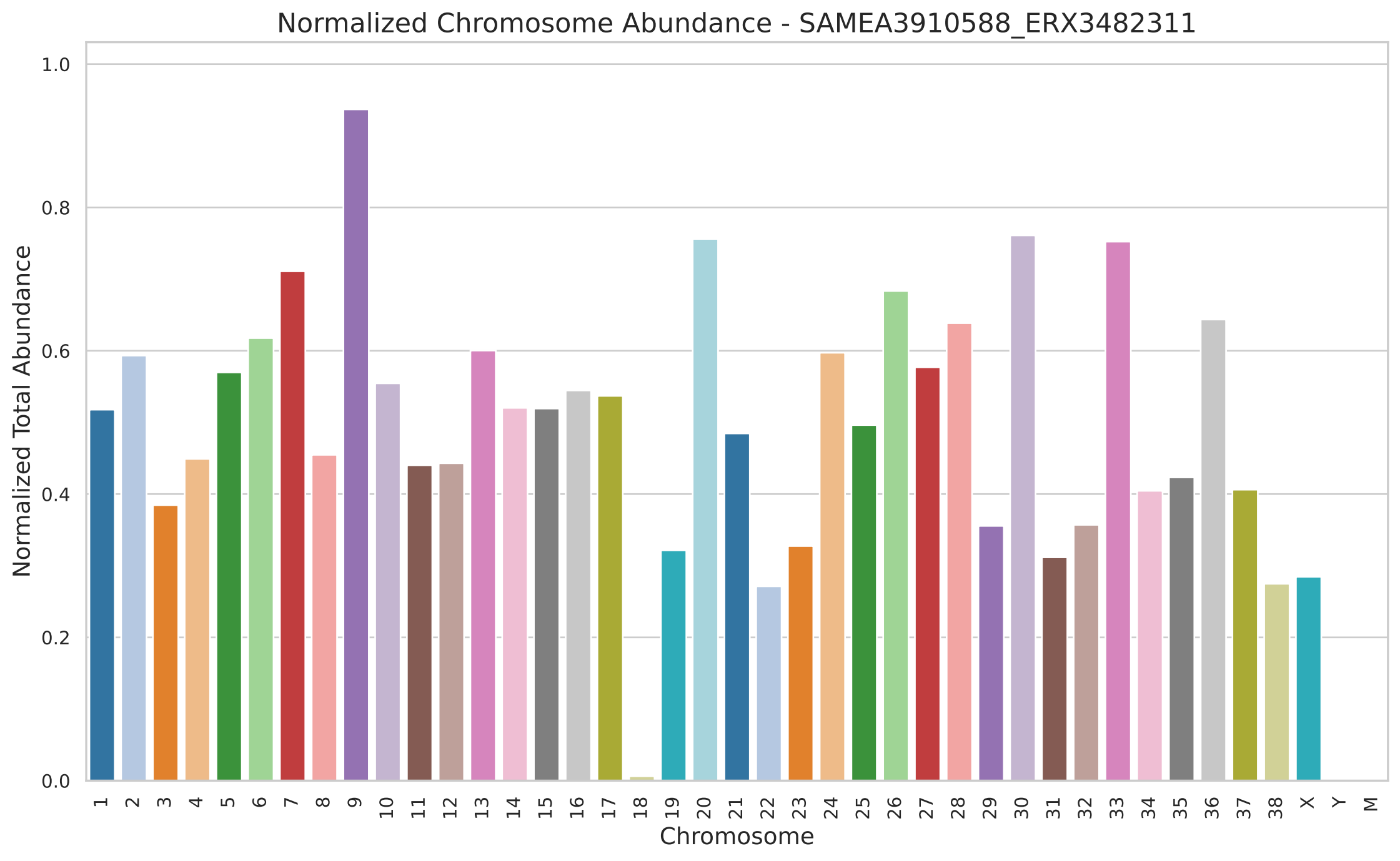

Normalized Chromosome Abundance - SAMN10380279_SRX4979838
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

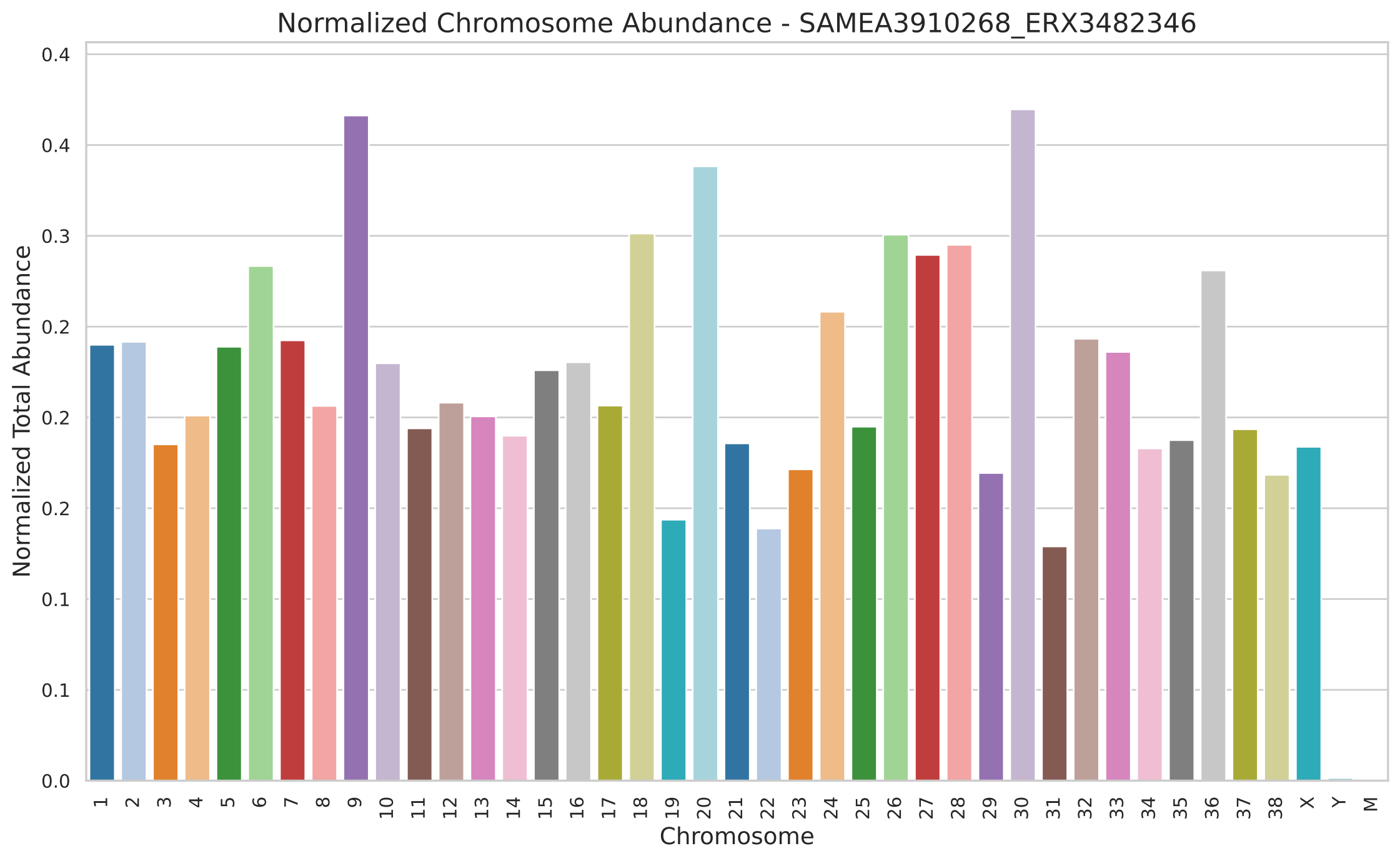

Normalized Chromosome Abundance - SAMN14407013_SRX7954386
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

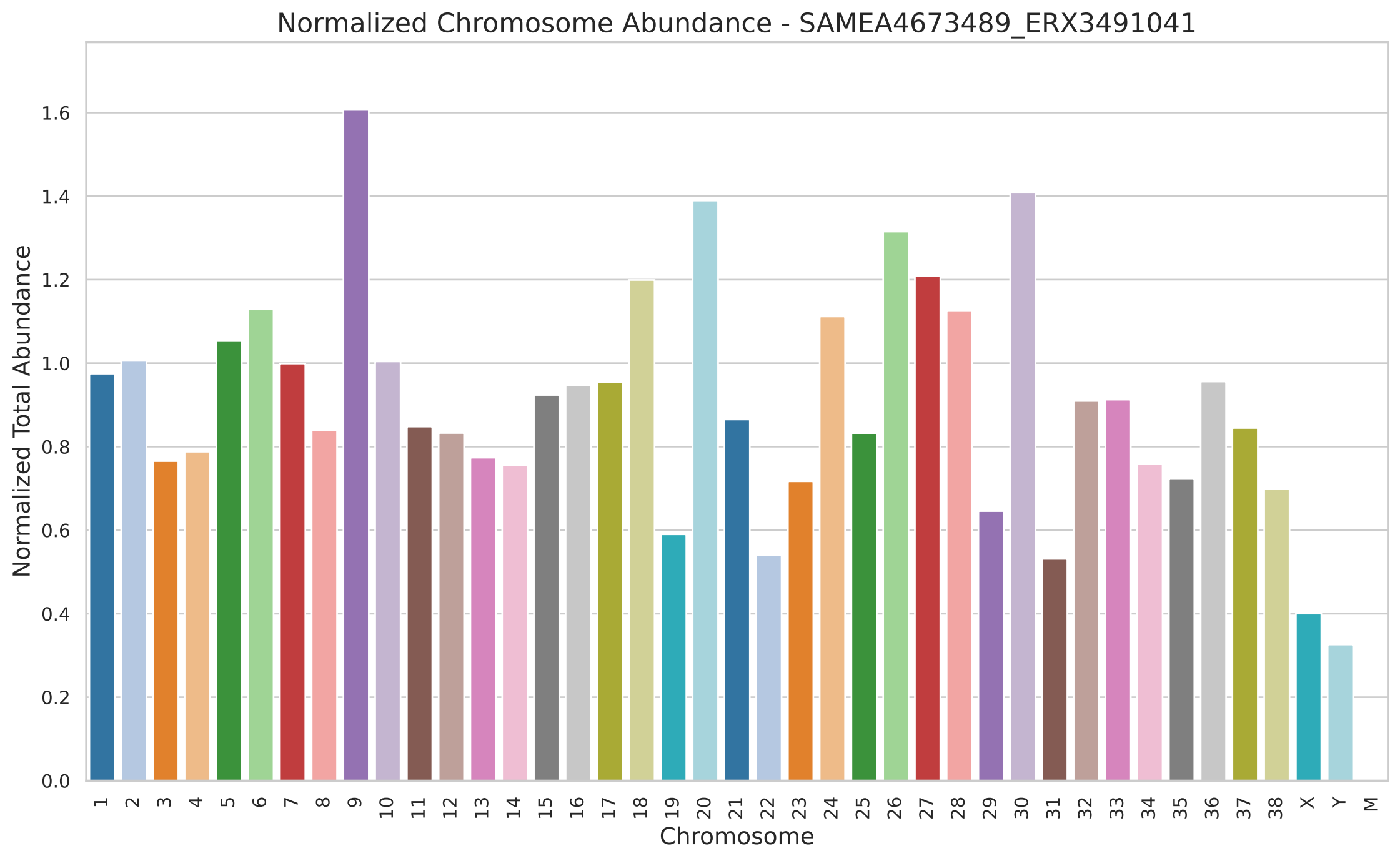

Normalized Chromosome Abundance - SAMEA3910293_ERX3482302
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

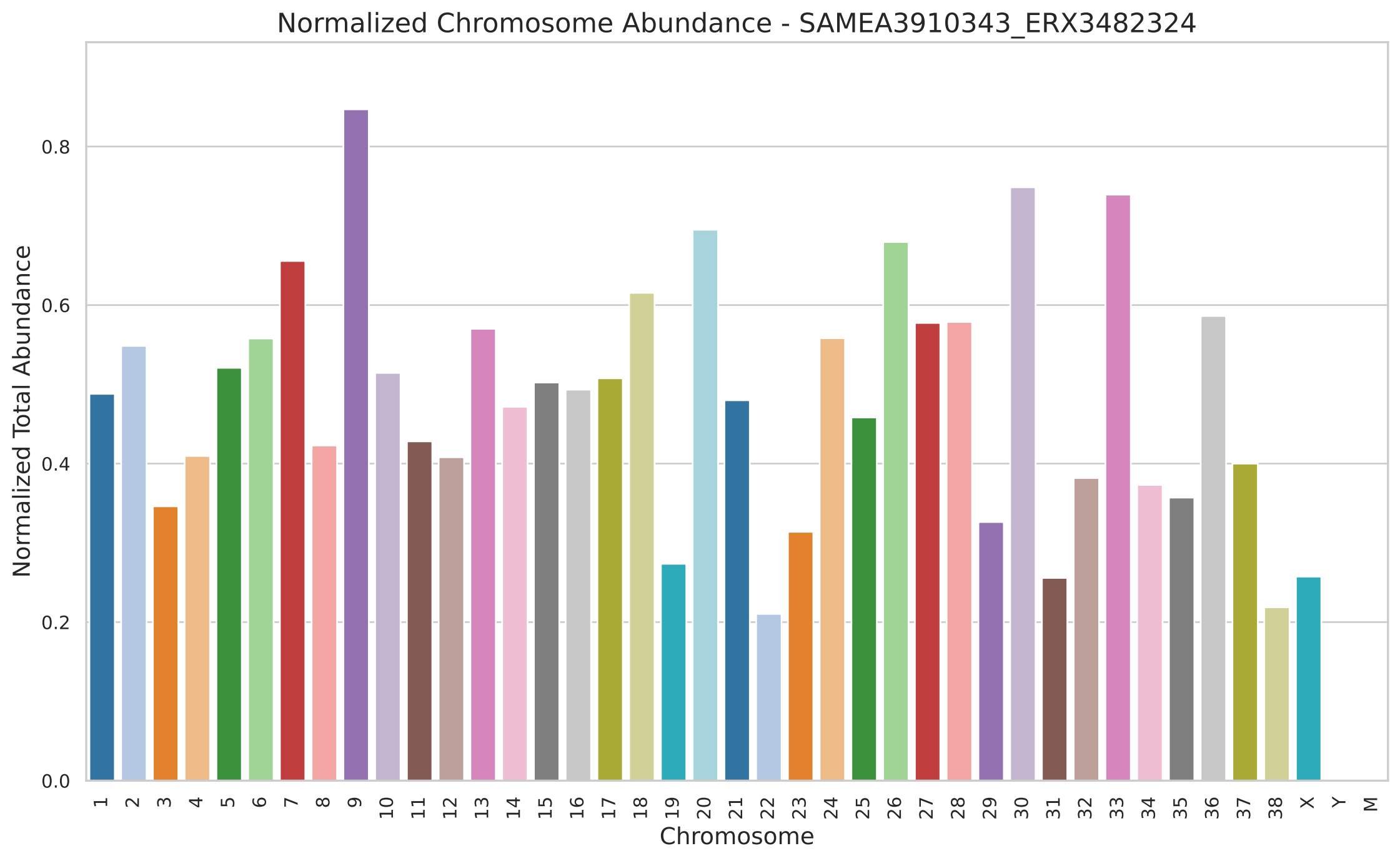

Normalized Chromosome Abundance - SAMEA3910339_ERX3482338
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

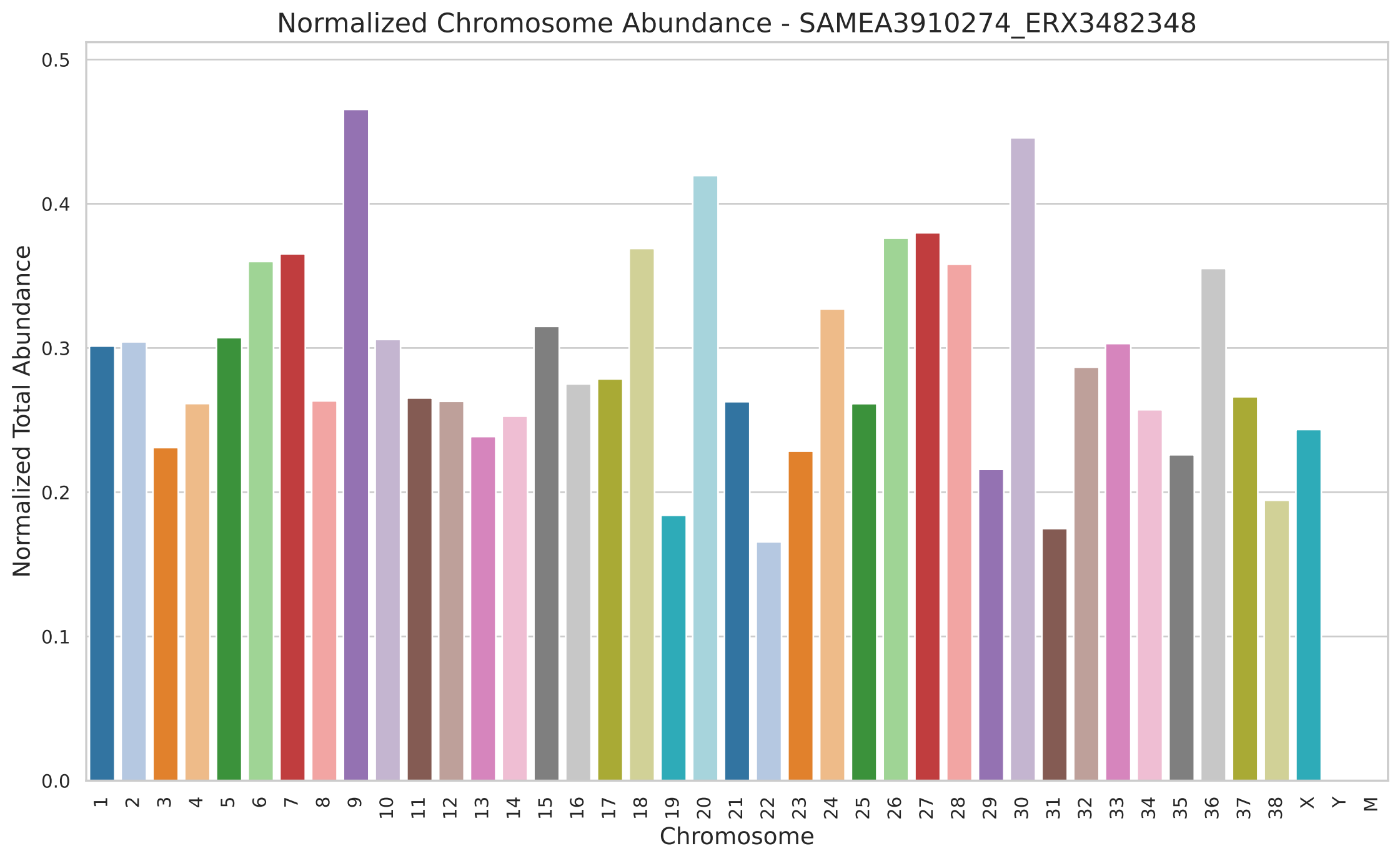

Normalized Chromosome Abundance - SAMEA3910258_ERX3482312
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

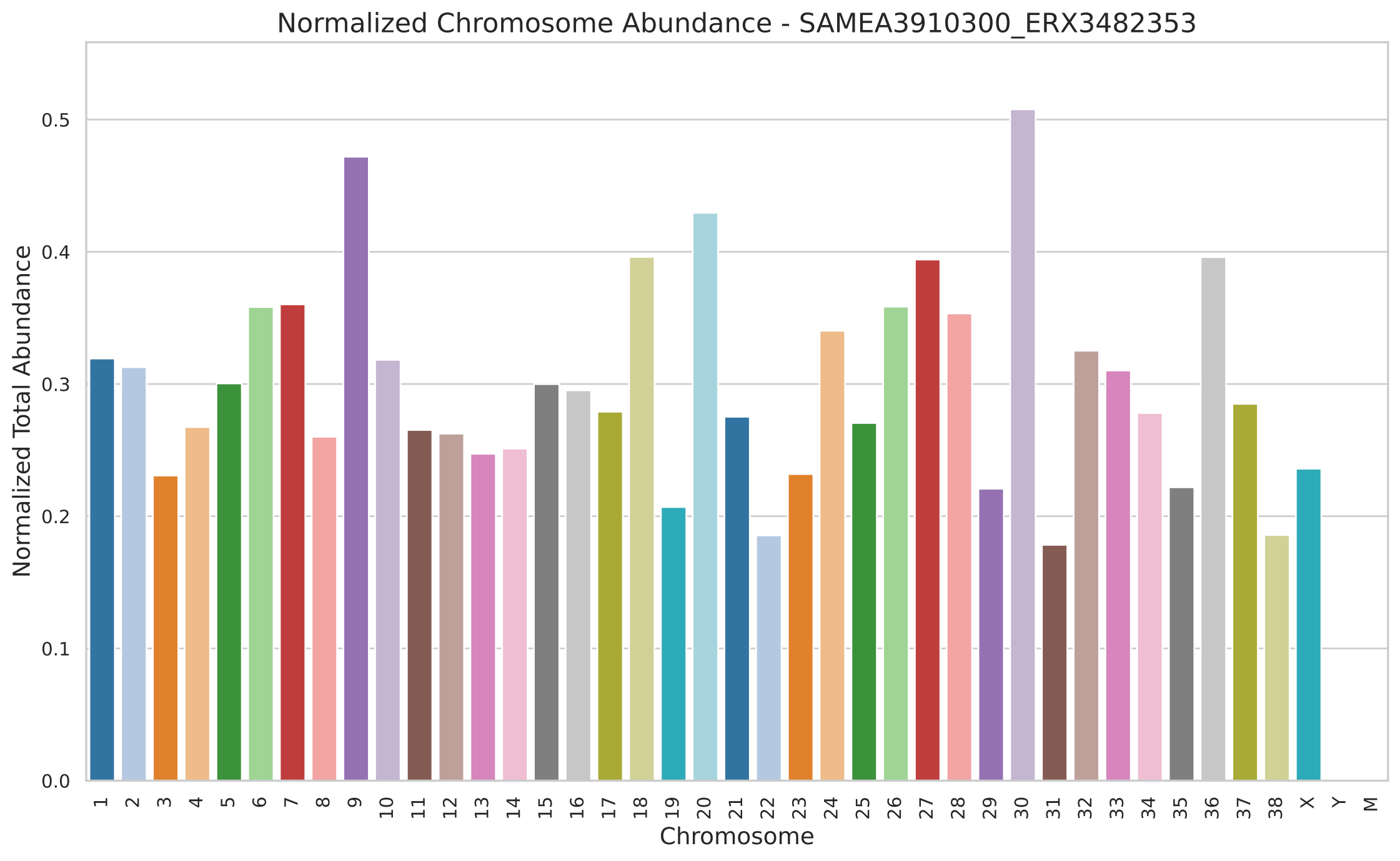

Normalized Chromosome Abundance - SAMEA3910588_ERX3482311
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

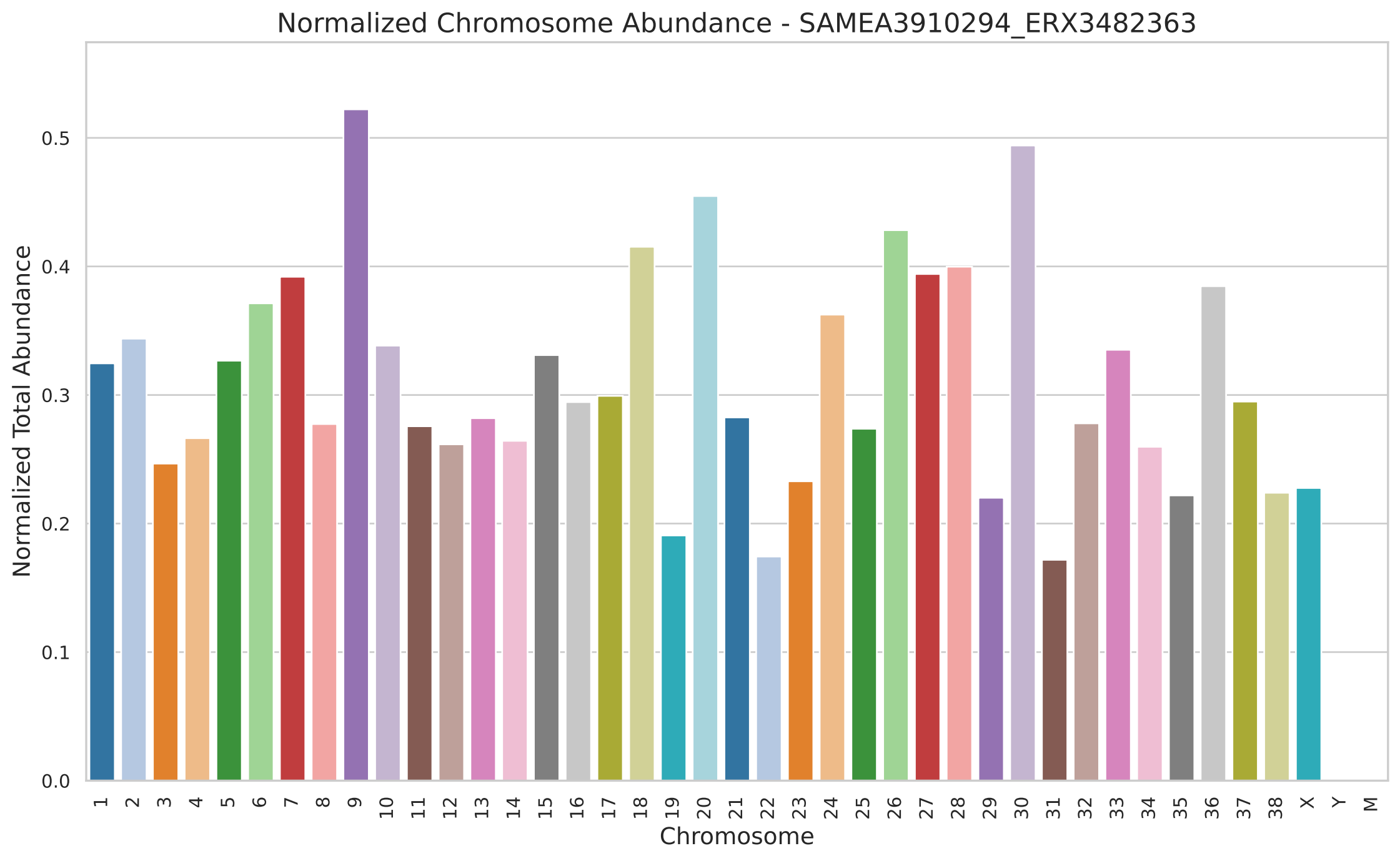

Normalized Chromosome Abundance - SAMEA3910268_ERX3482346
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

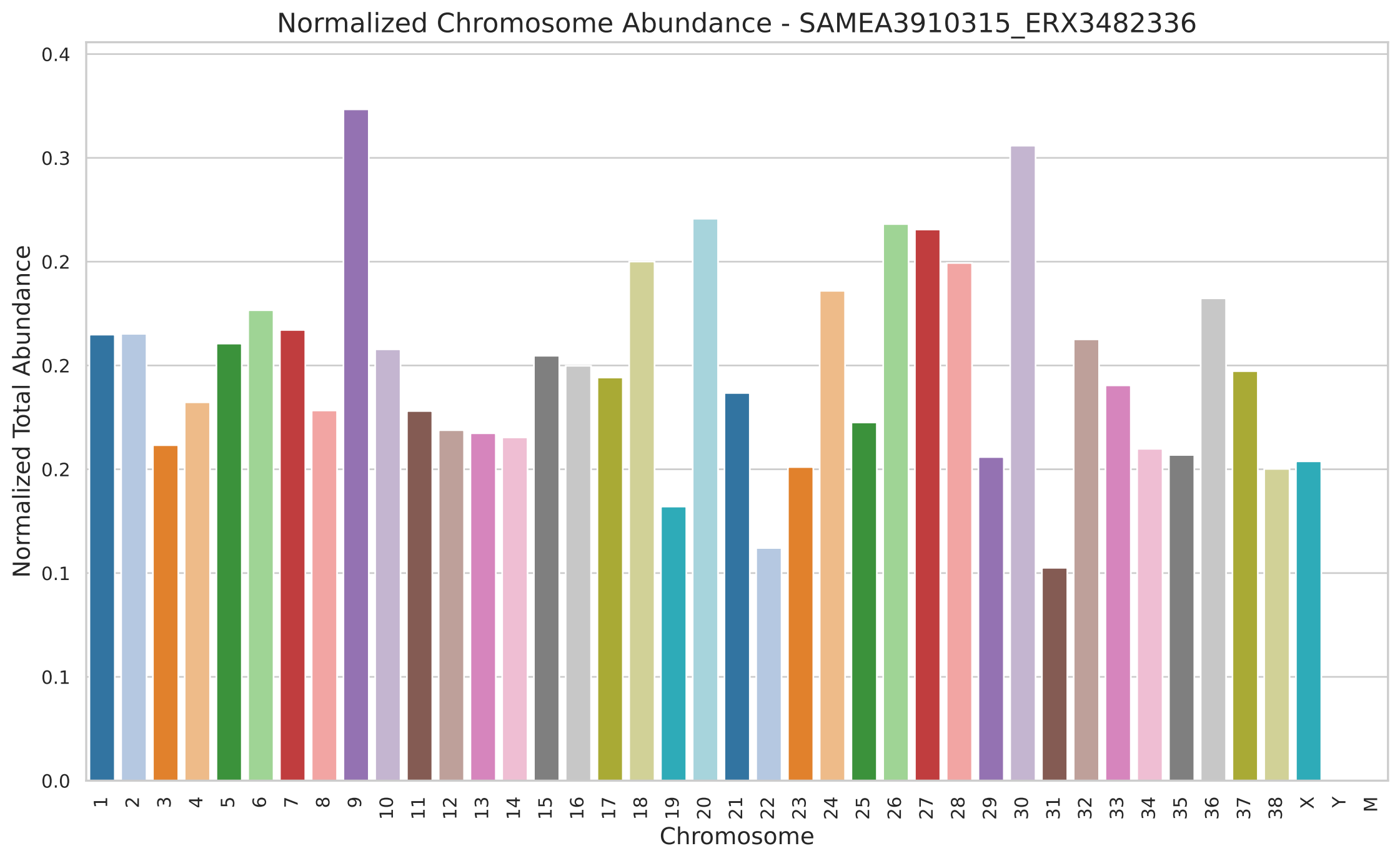

Normalized Chromosome Abundance - SAMEA4673489_ERX3491041
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

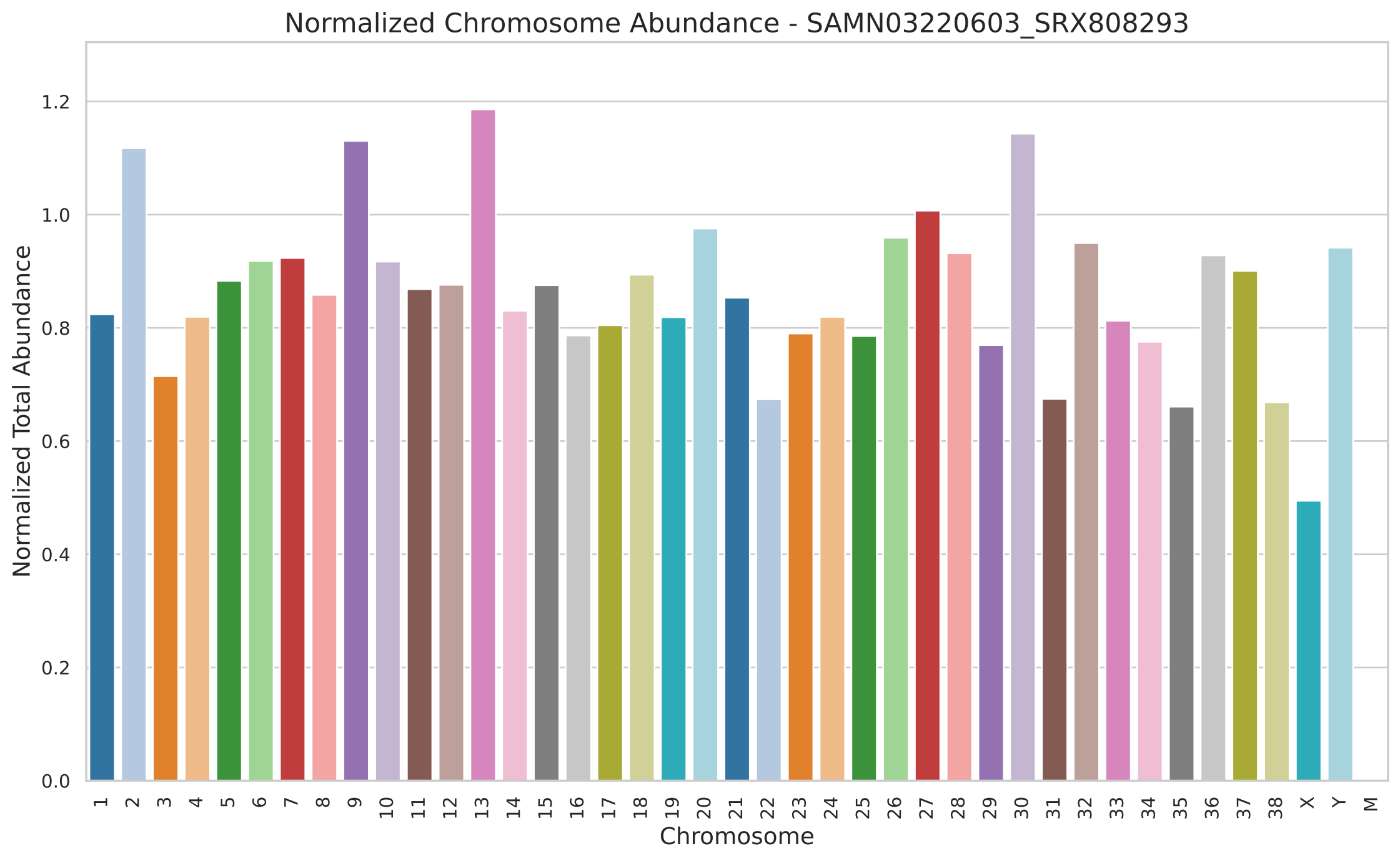

Normalized Chromosome Abundance - SAMEA3910343_ERX3482324
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

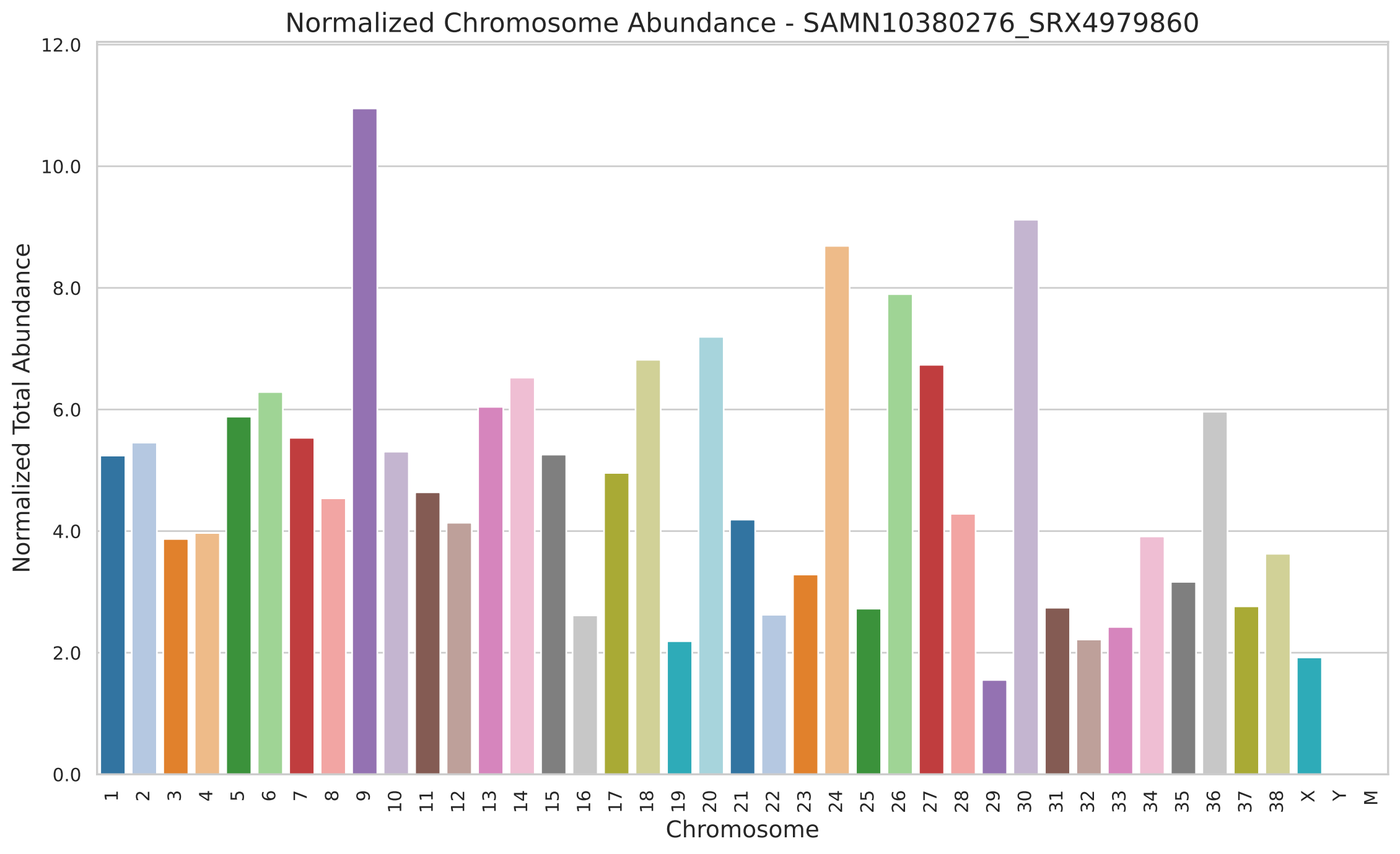

Normalized Chromosome Abundance - SAMEA3910274_ERX3482348
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

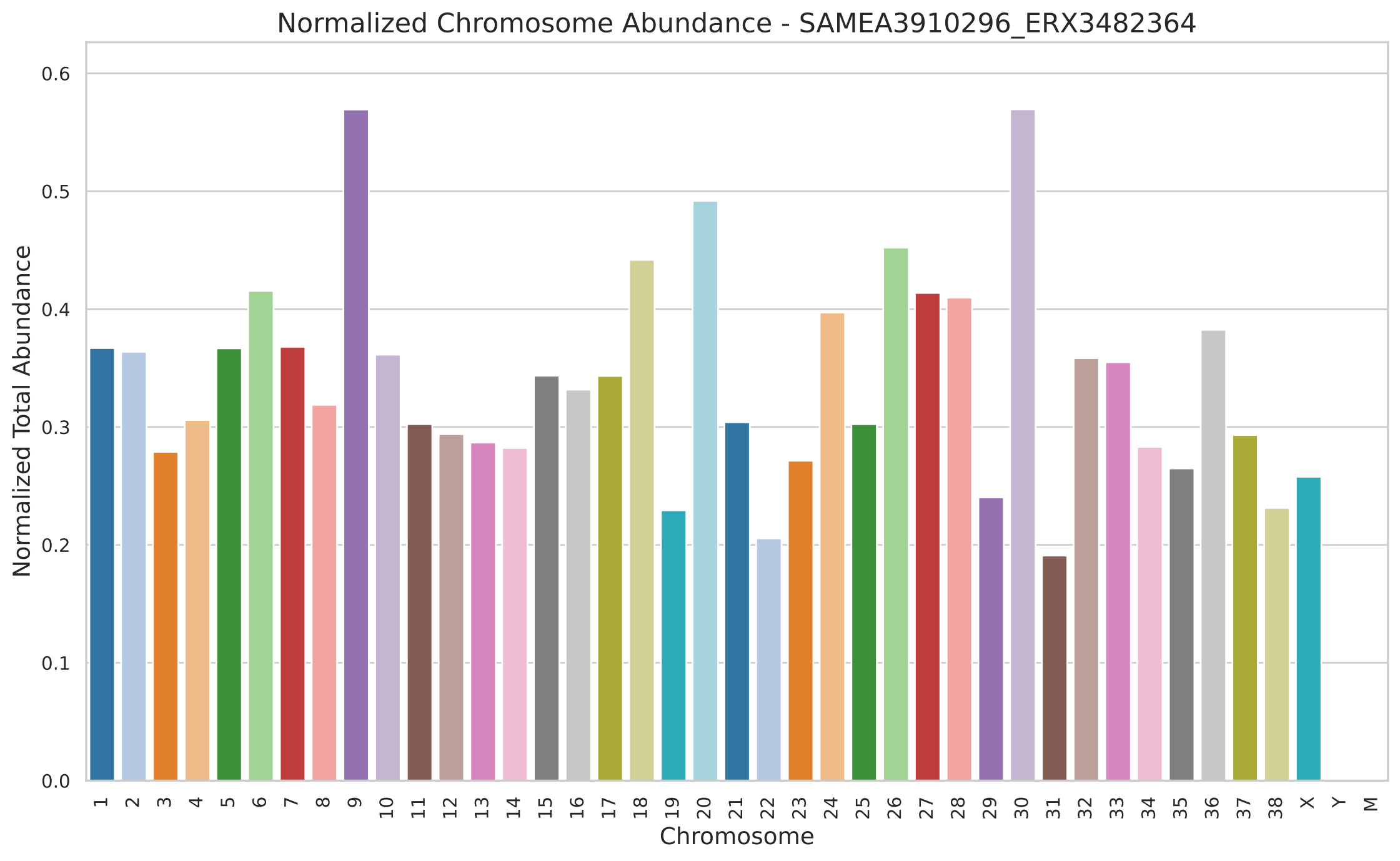

Normalized Chromosome Abundance - SAMEA3910300_ERX3482353
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

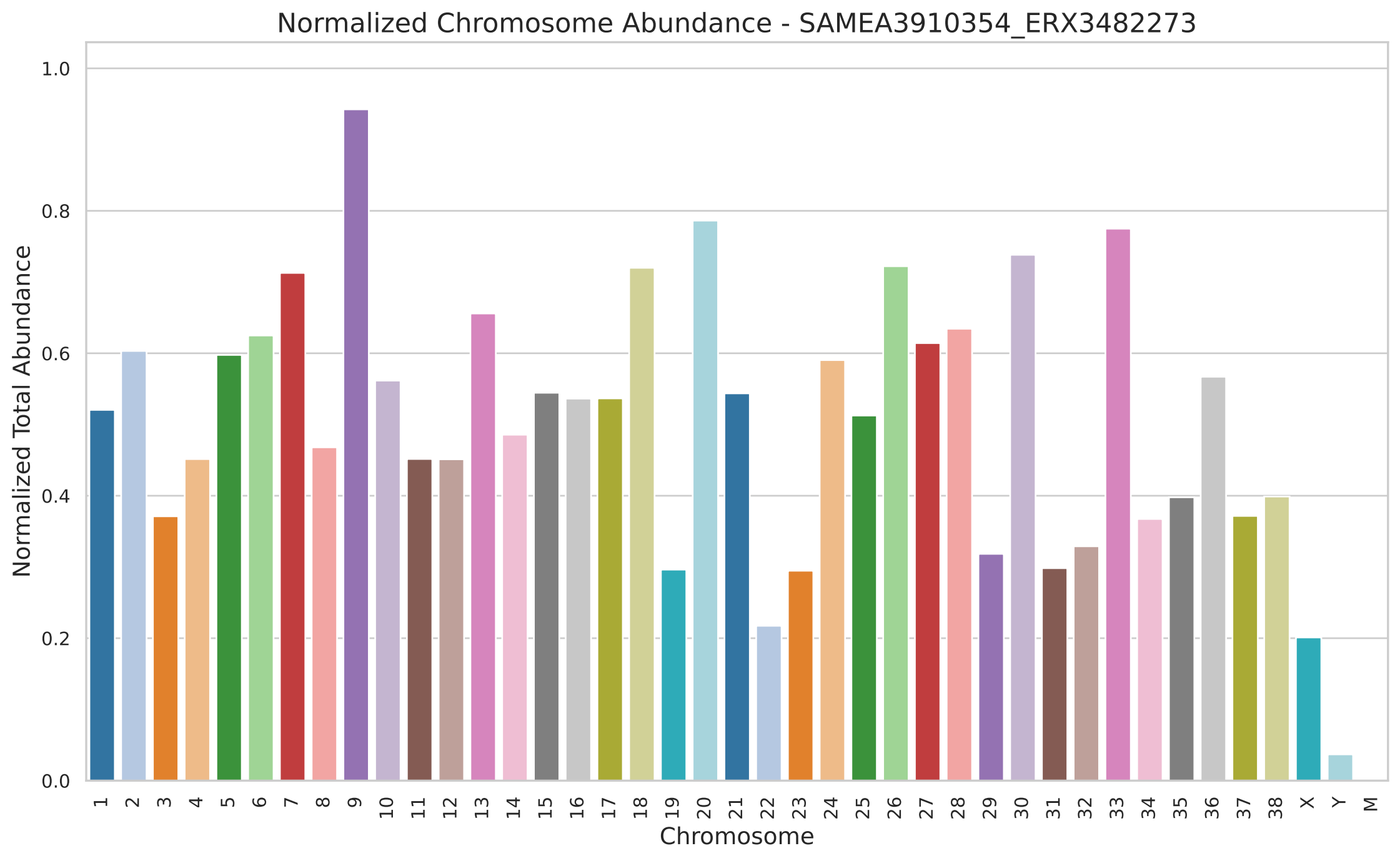

Normalized Chromosome Abundance - SAMEA3910294_ERX3482363
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

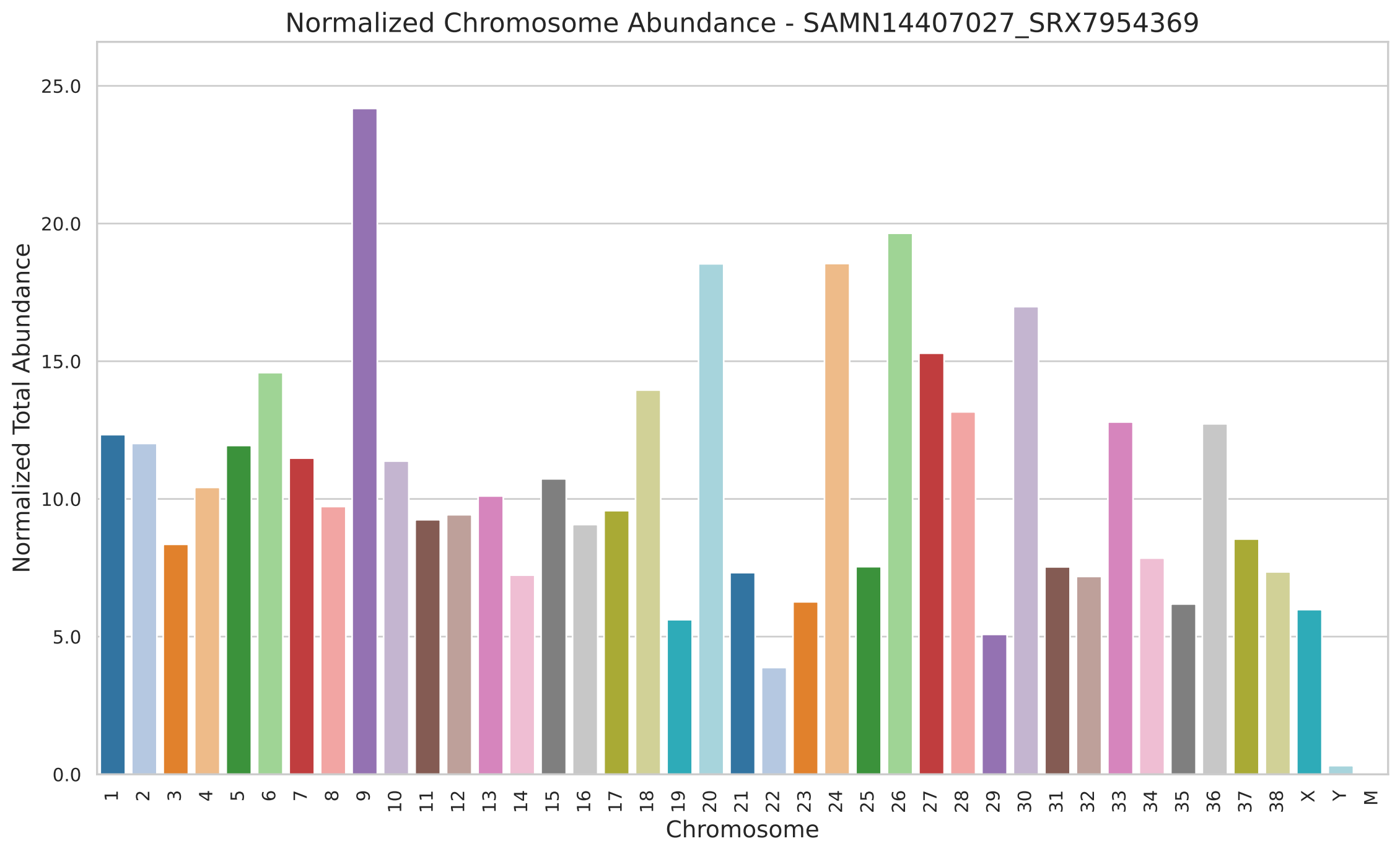

Normalized Chromosome Abundance - SAMEA3910315_ERX3482336
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

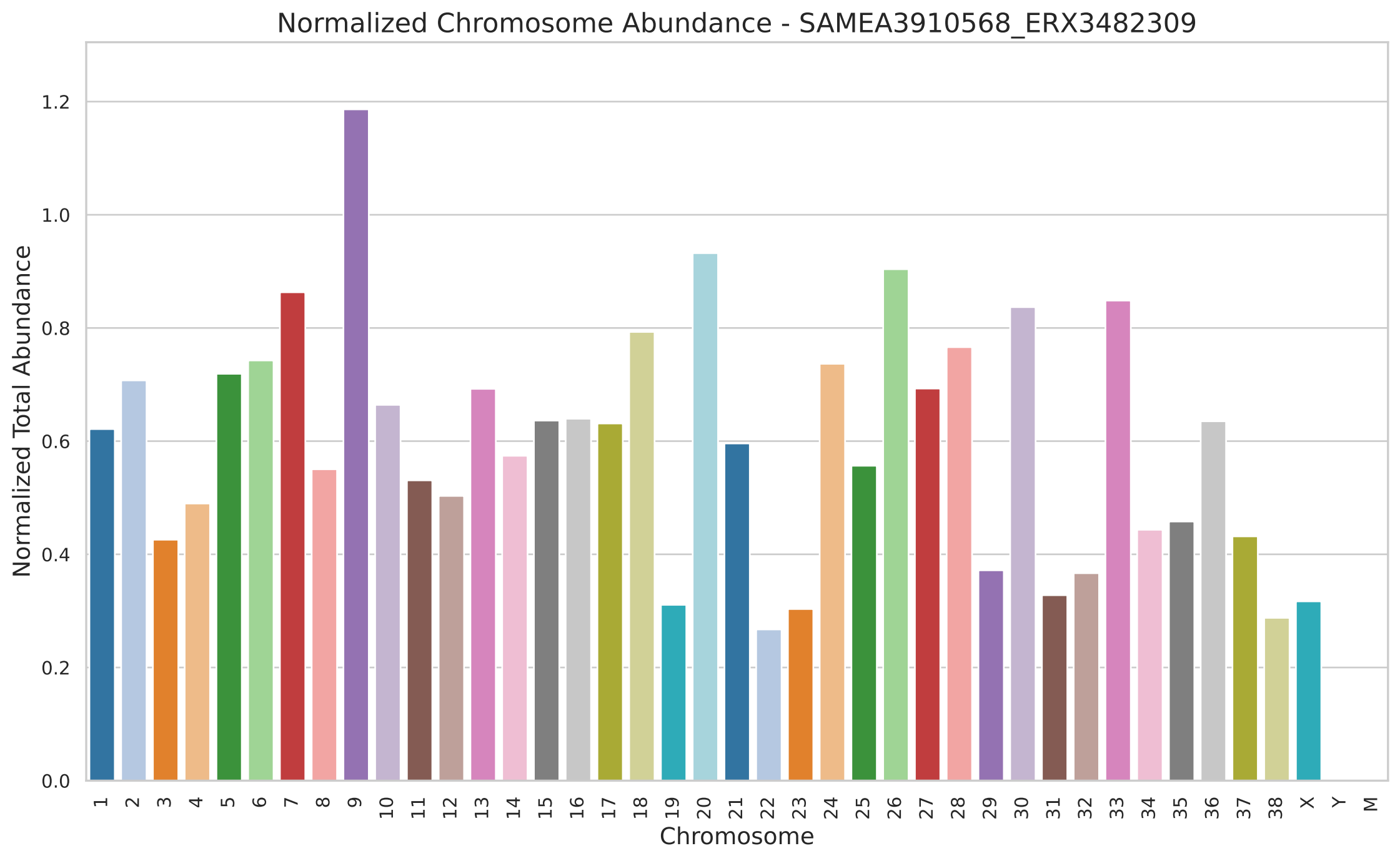

Normalized Chromosome Abundance - SAMN03220603_SRX808293
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

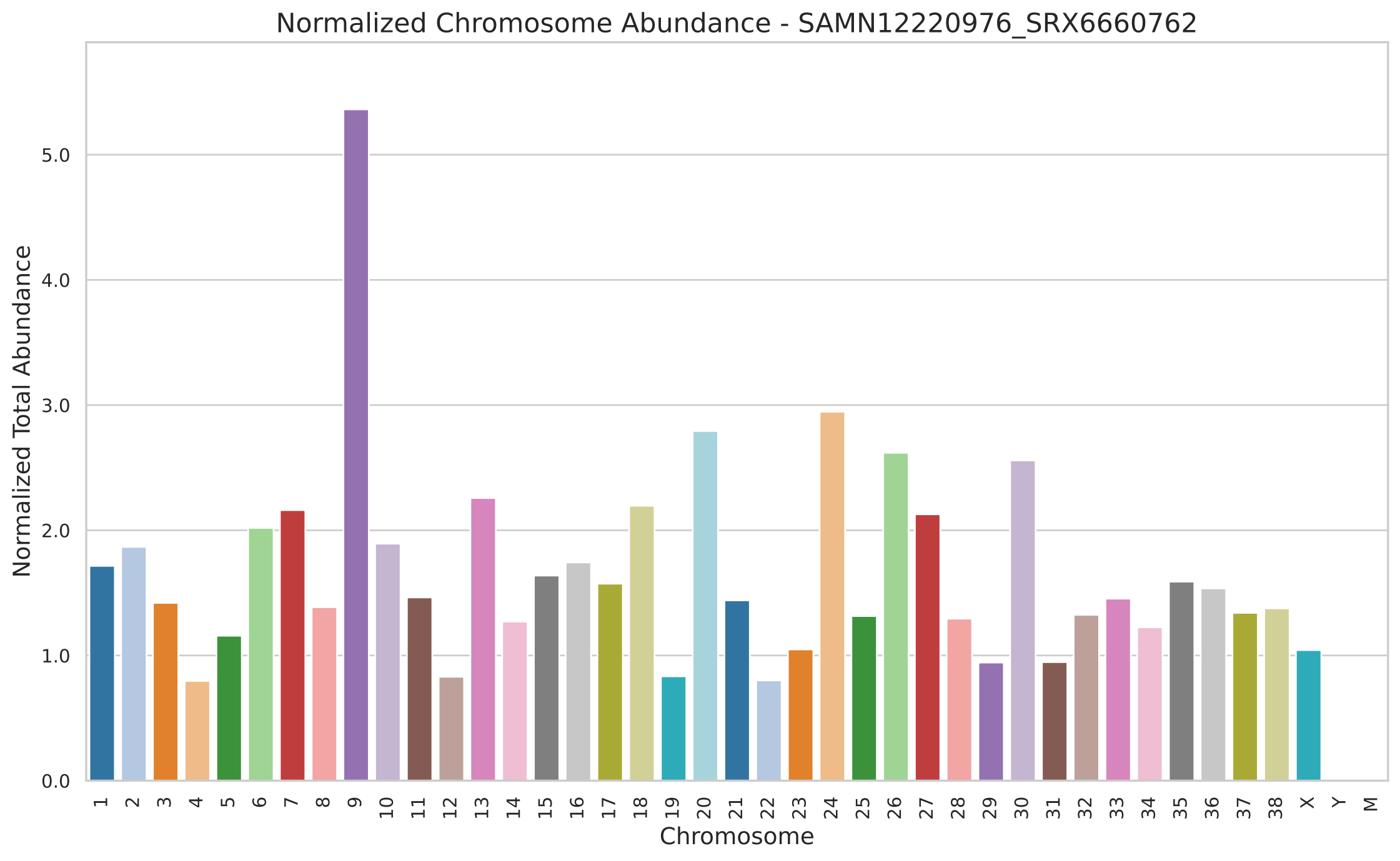

Normalized Chromosome Abundance - SAMN10380276_SRX4979860
Normalized Total Abundance
12.0
10.0
8.0
6.0
4.0
2.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

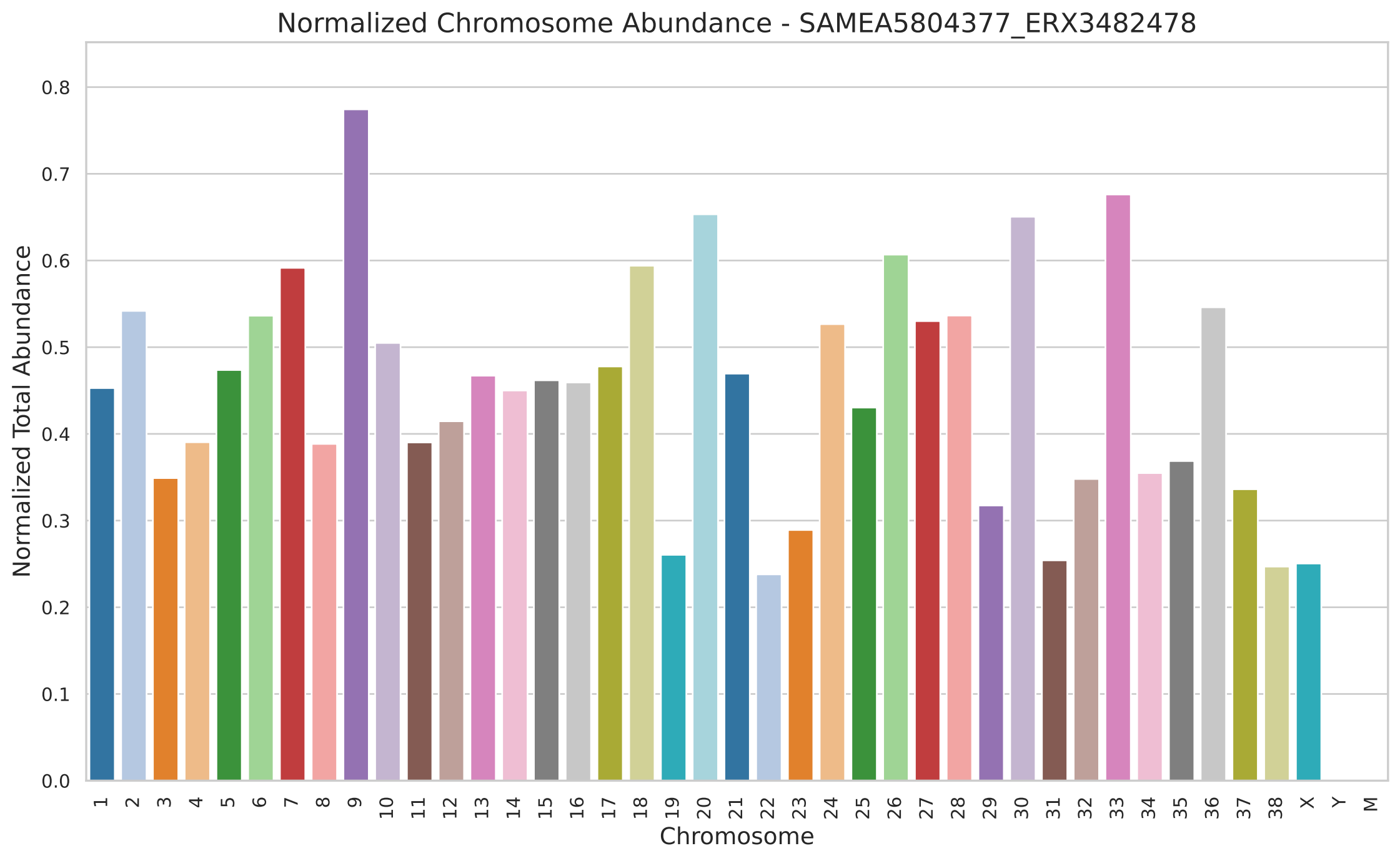

Normalized Chromosome Abundance - SAMEA3910296_ERX3482364
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

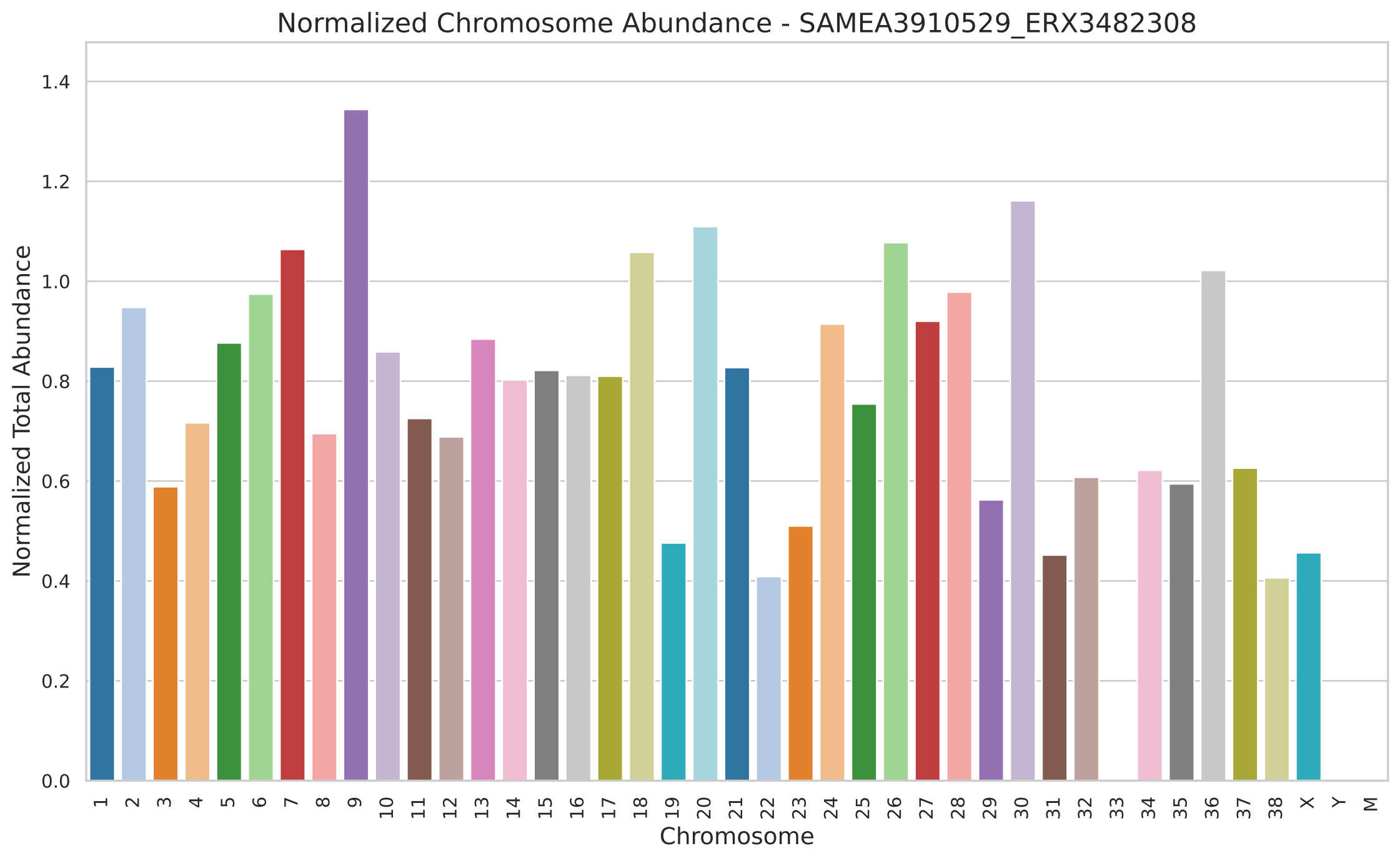

Normalized Chromosome Abundance - SAMEA3910354_ERX3482273
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

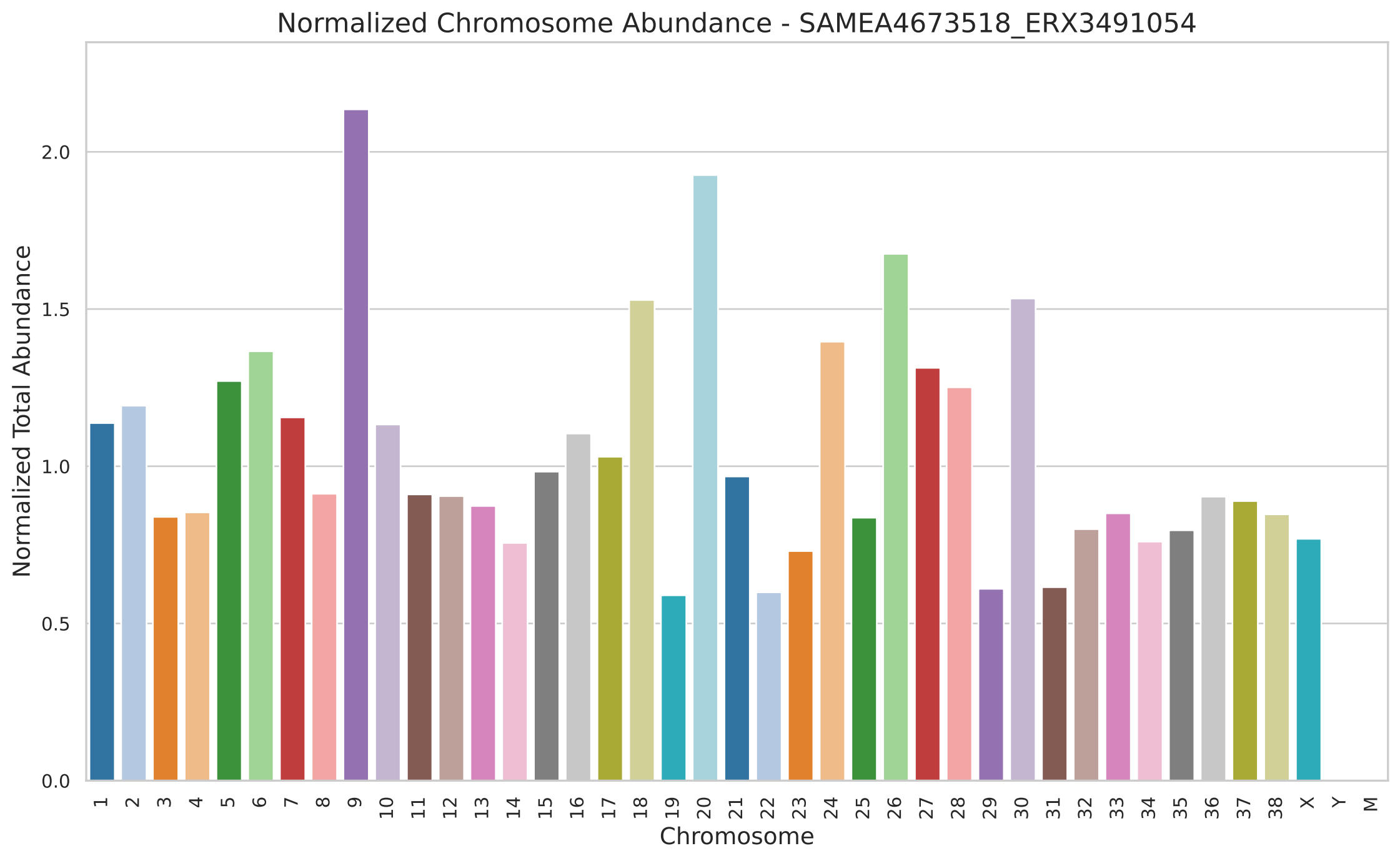

Normalized Chromosome Abundance - SAMN14407027_SRX7954369
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

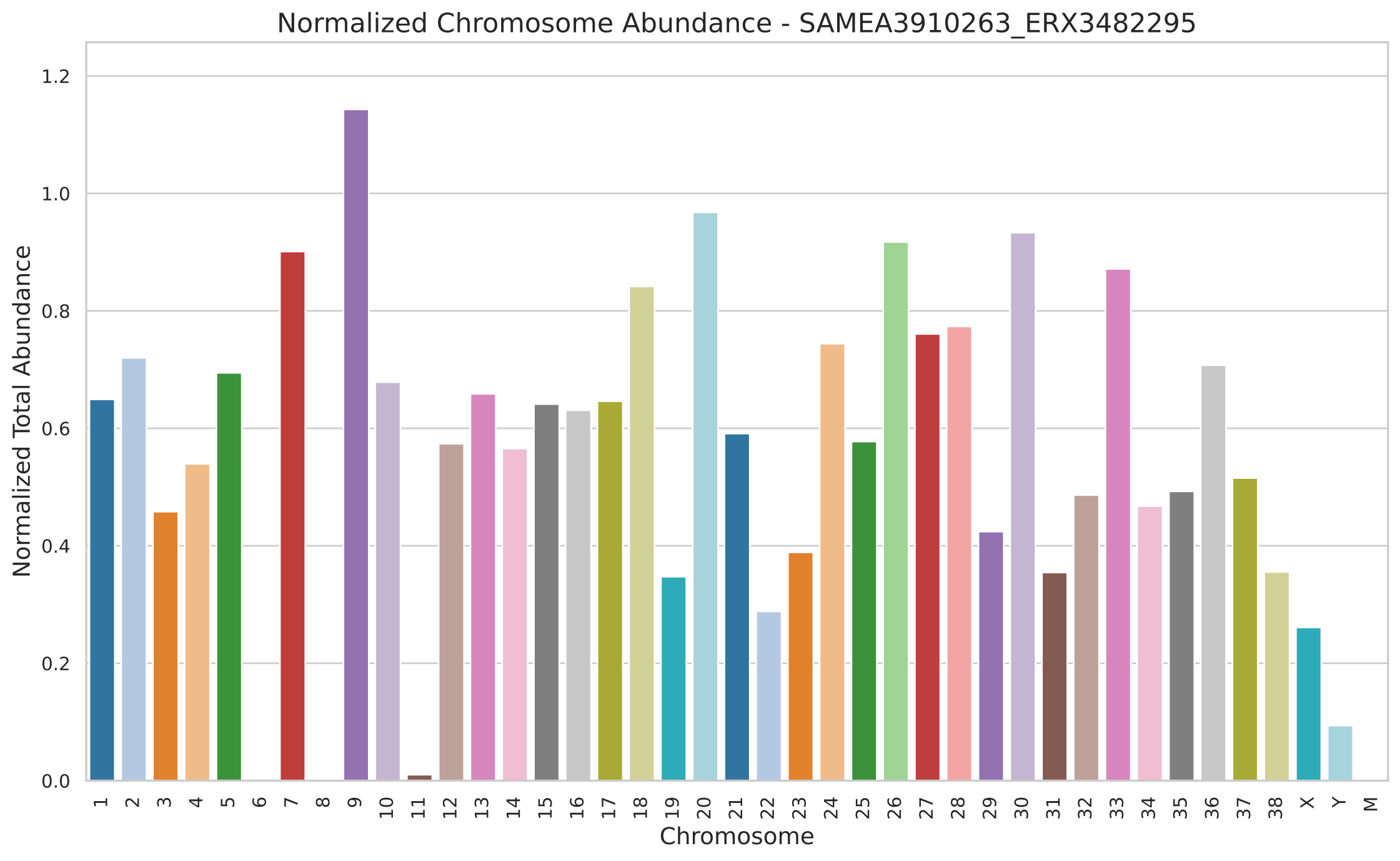

Normalized Chromosome Abundance - SAMEA3910568_ERX3482309
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

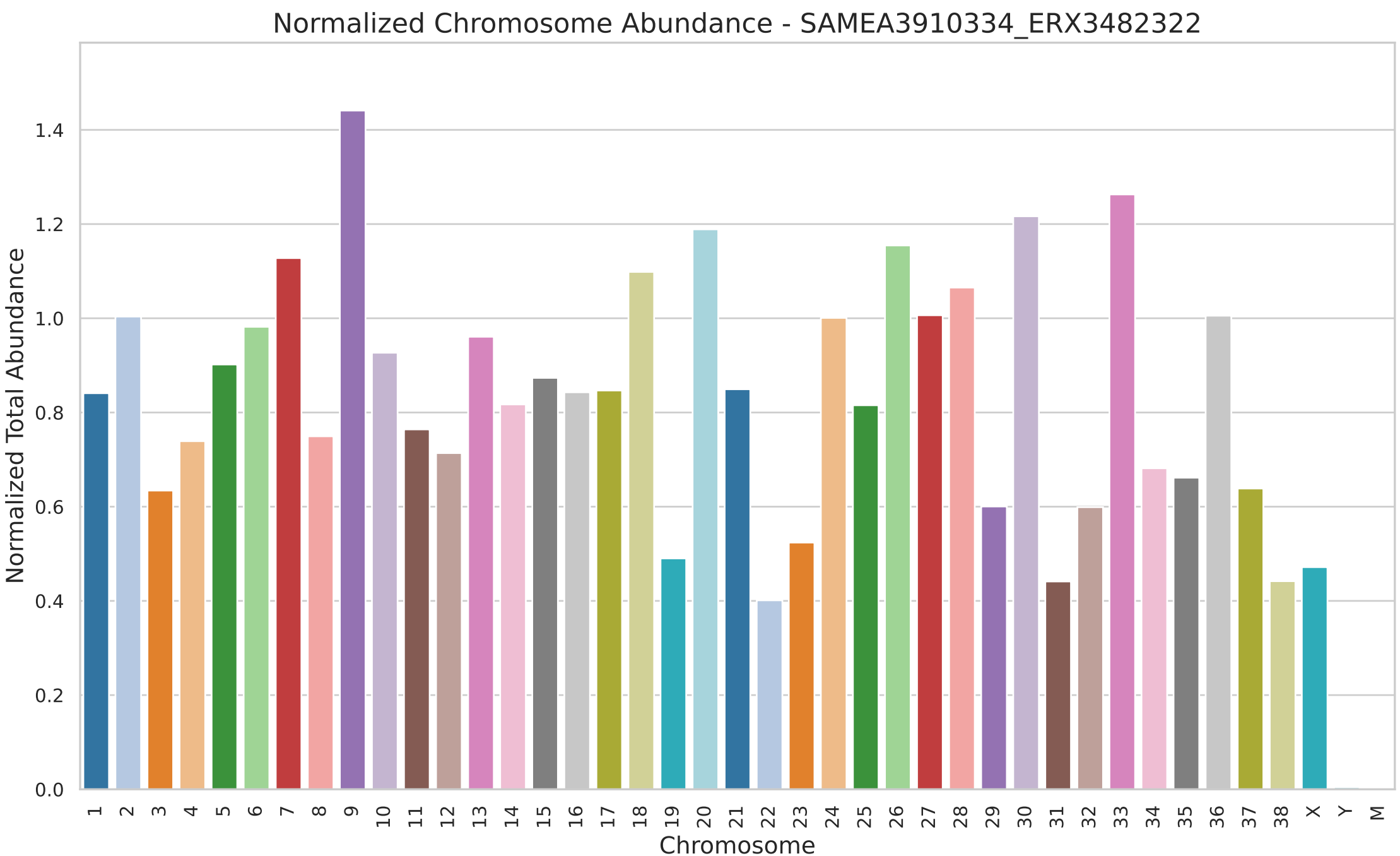

Normalized Chromosome Abundance - SAMN12220976_SRX6660762
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

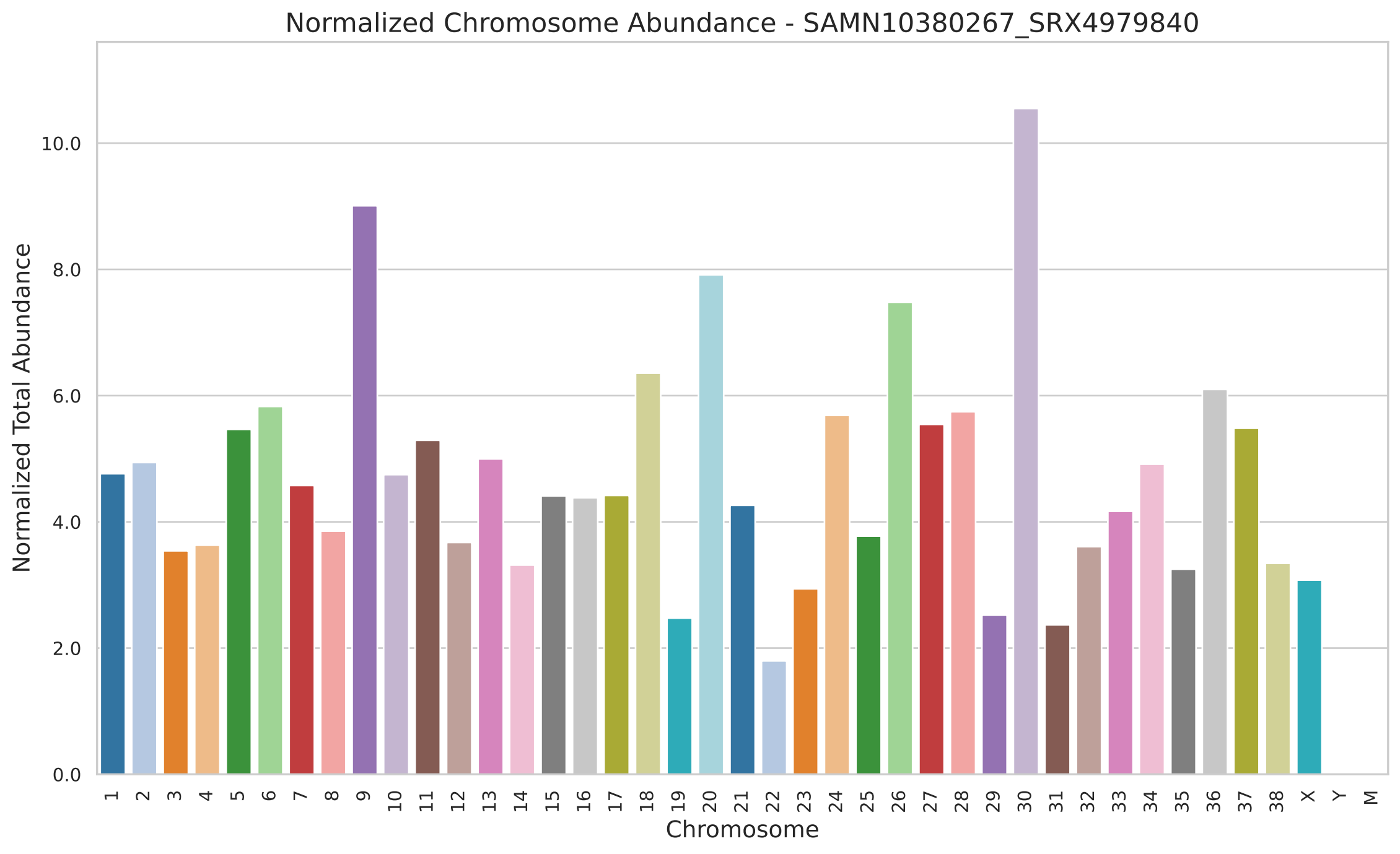

Normalized Chromosome Abundance - SAMEA5804377_ERX3482478
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

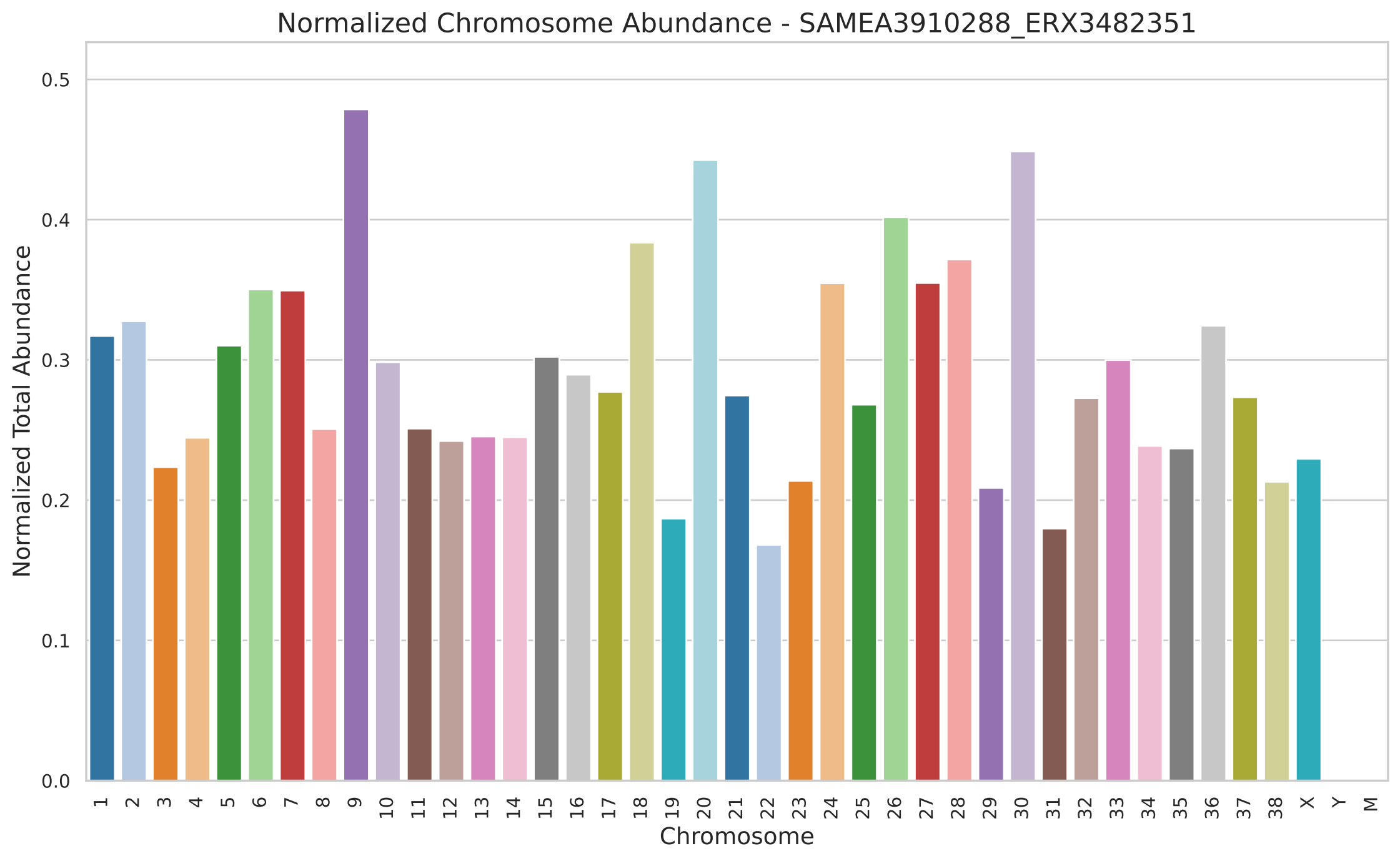

Normalized Chromosome Abundance - SAMEA3910529_ERX3482308
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

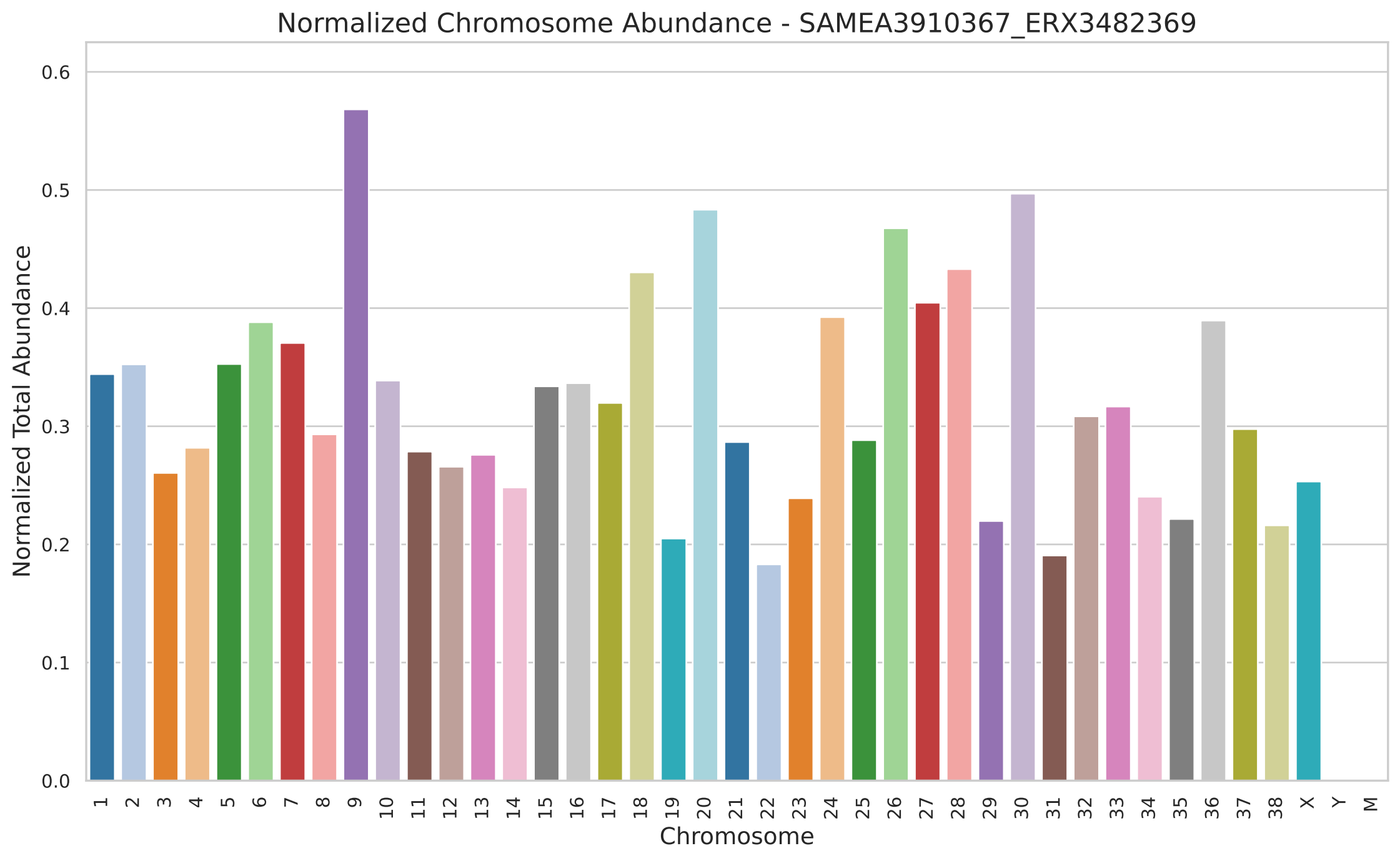

Normalized Chromosome Abundance - SAMEA4673518_ERX3491054
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

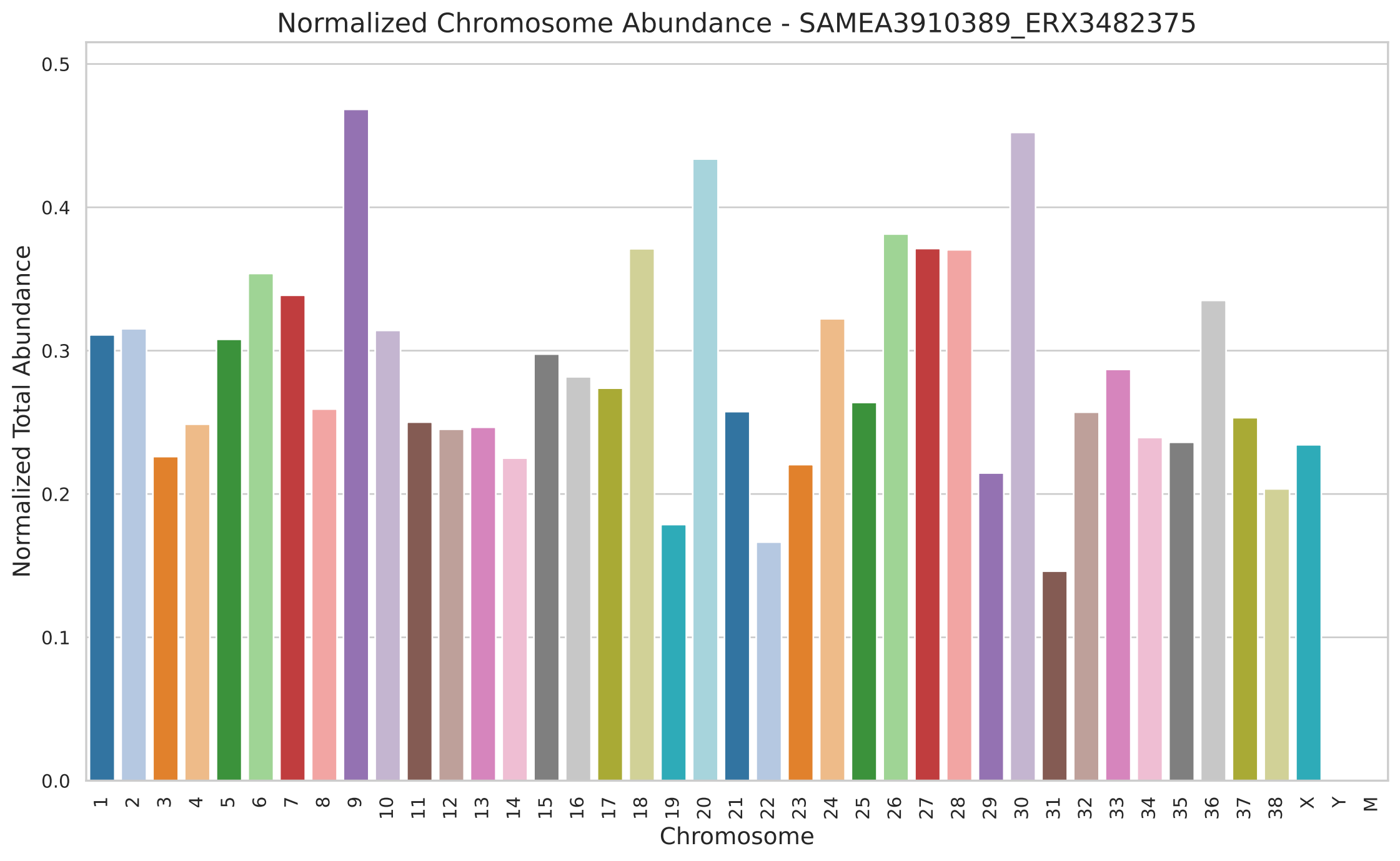

Normalized Chromosome Abundance - SAMEA3910263_ERX3482295
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

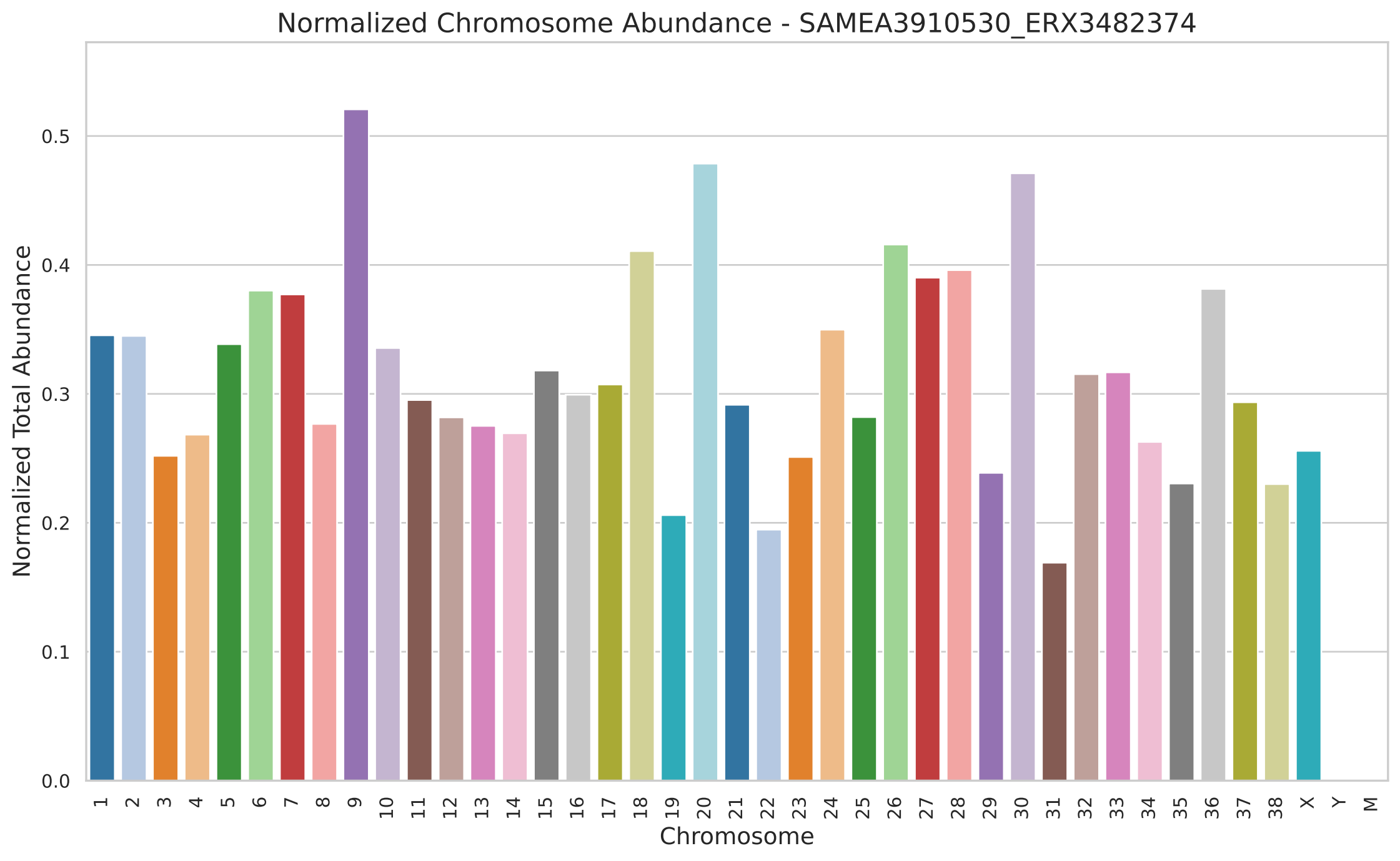

Normalized Chromosome Abundance - SAMEA3910334_ERX3482322
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

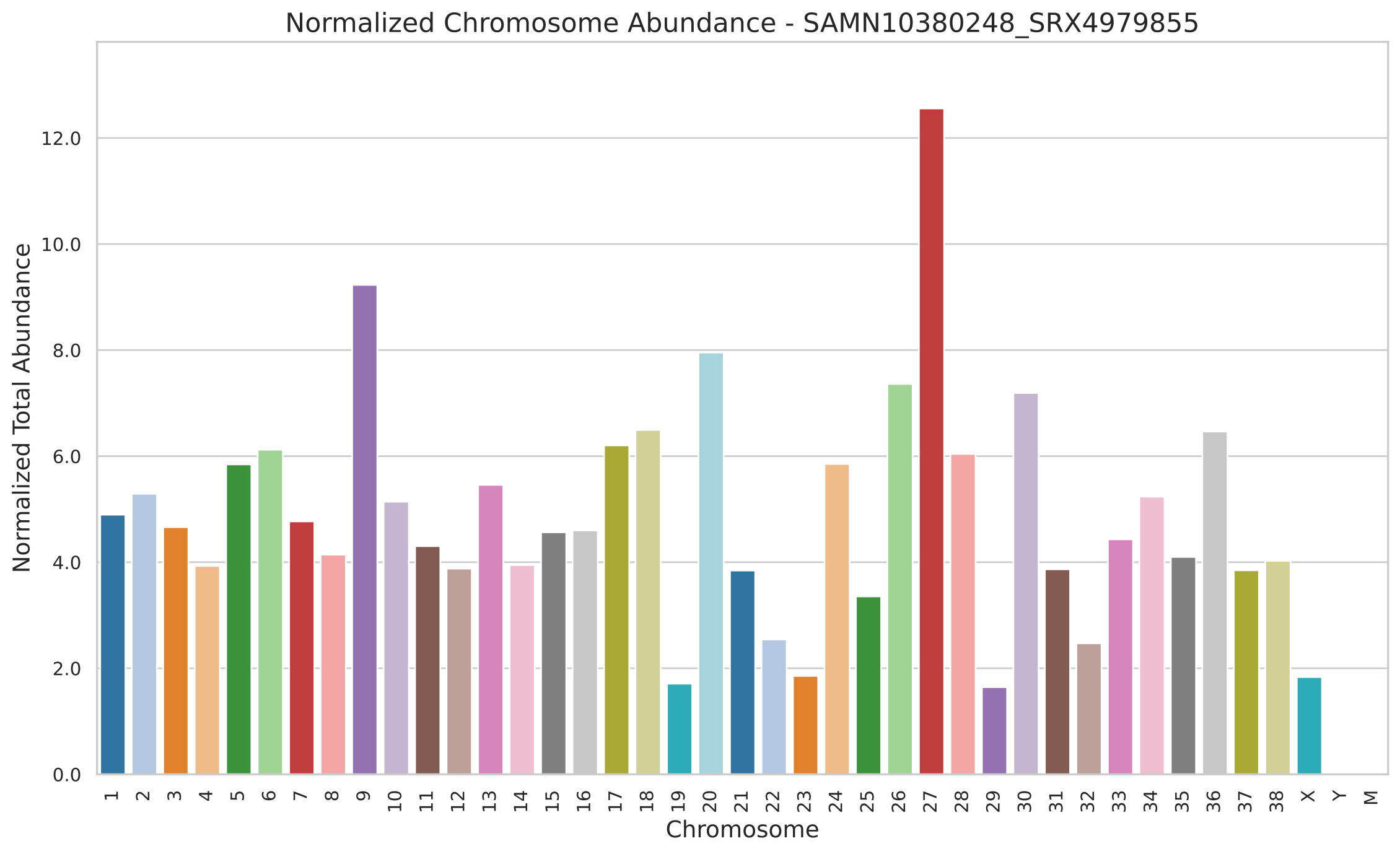

Normalized Chromosome Abundance - SAMN10380267_SRX4979840
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

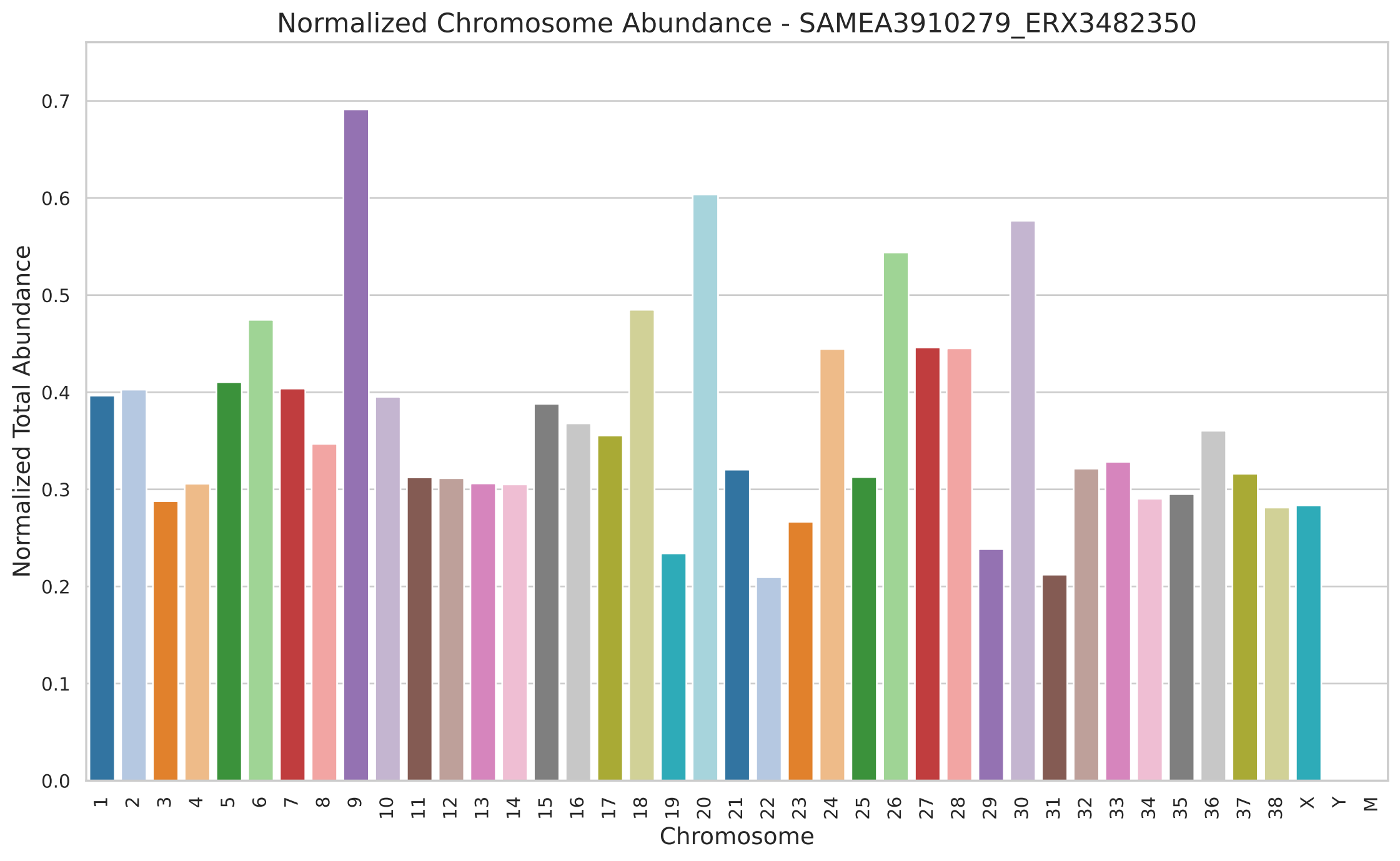

Normalized Chromosome Abundance - SAMEA3910288_ERX3482351
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

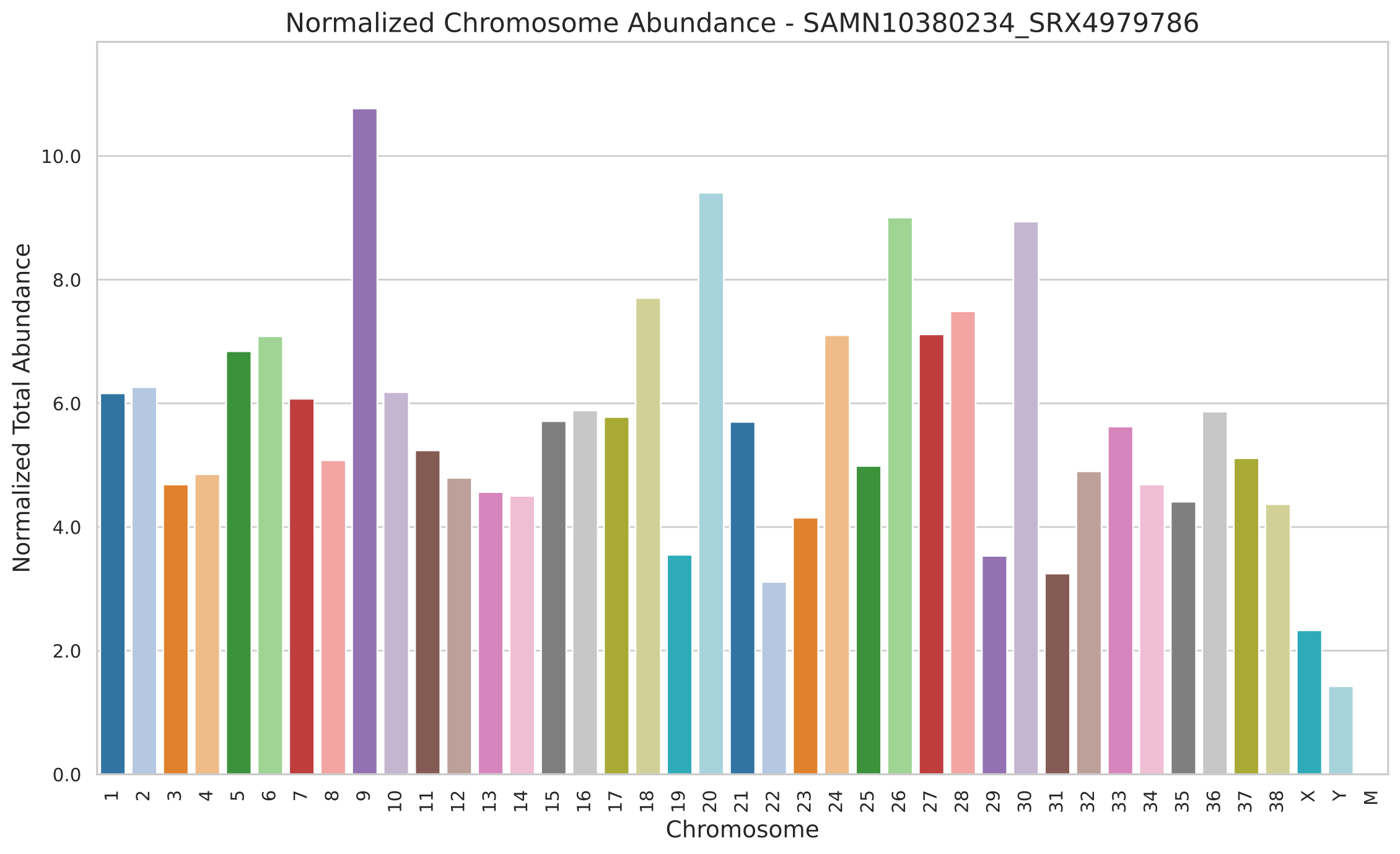

Normalized Chromosome Abundance - SAMEA3910367_ERX3482369
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

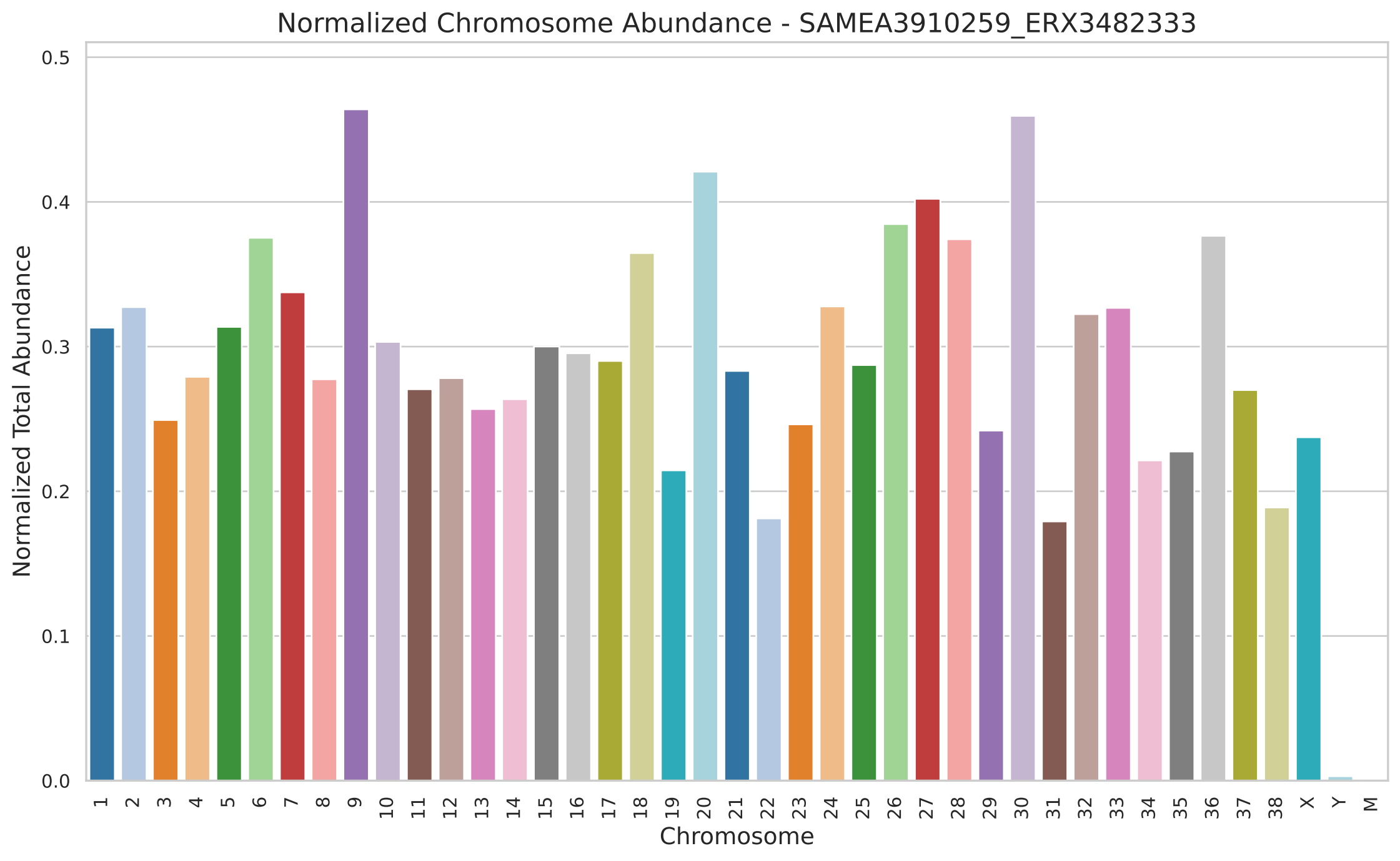

Normalized Chromosome Abundance - SAMEA3910389_ERX3482375
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

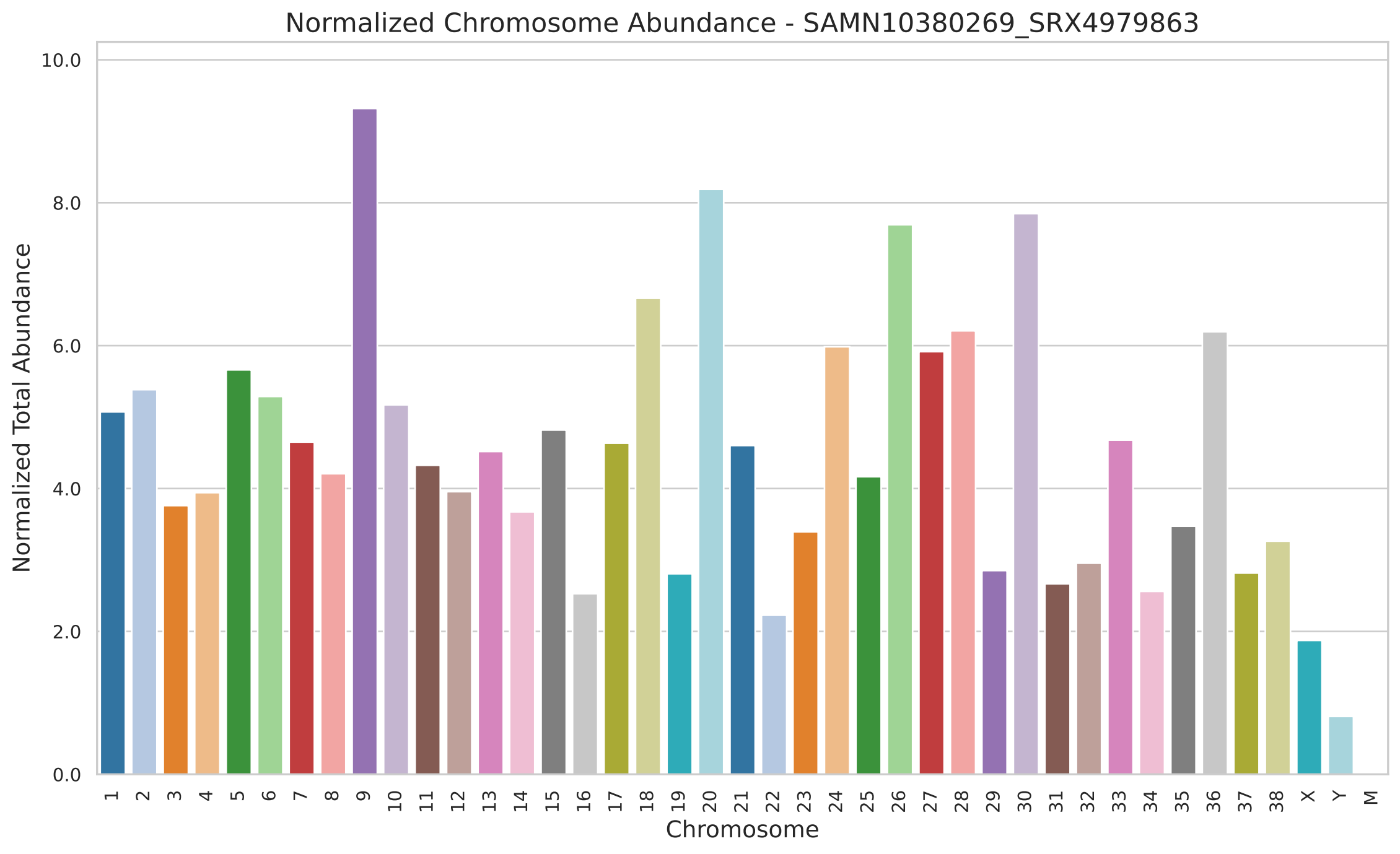

Normalized Chromosome Abundance - SAMEA3910530_ERX3482374
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

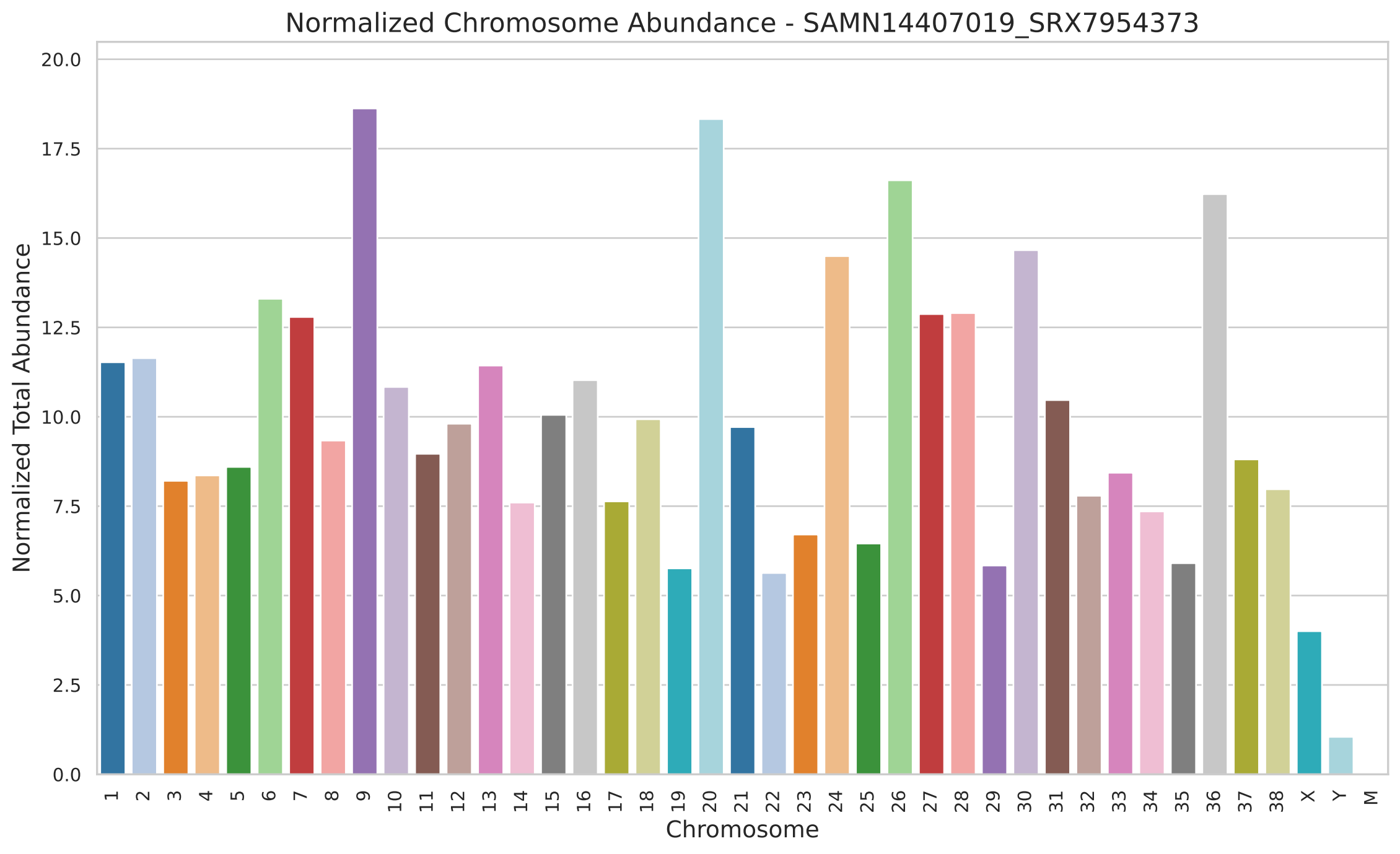

Normalized Chromosome Abundance - SAMN10380248_SRX4979855
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
12.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

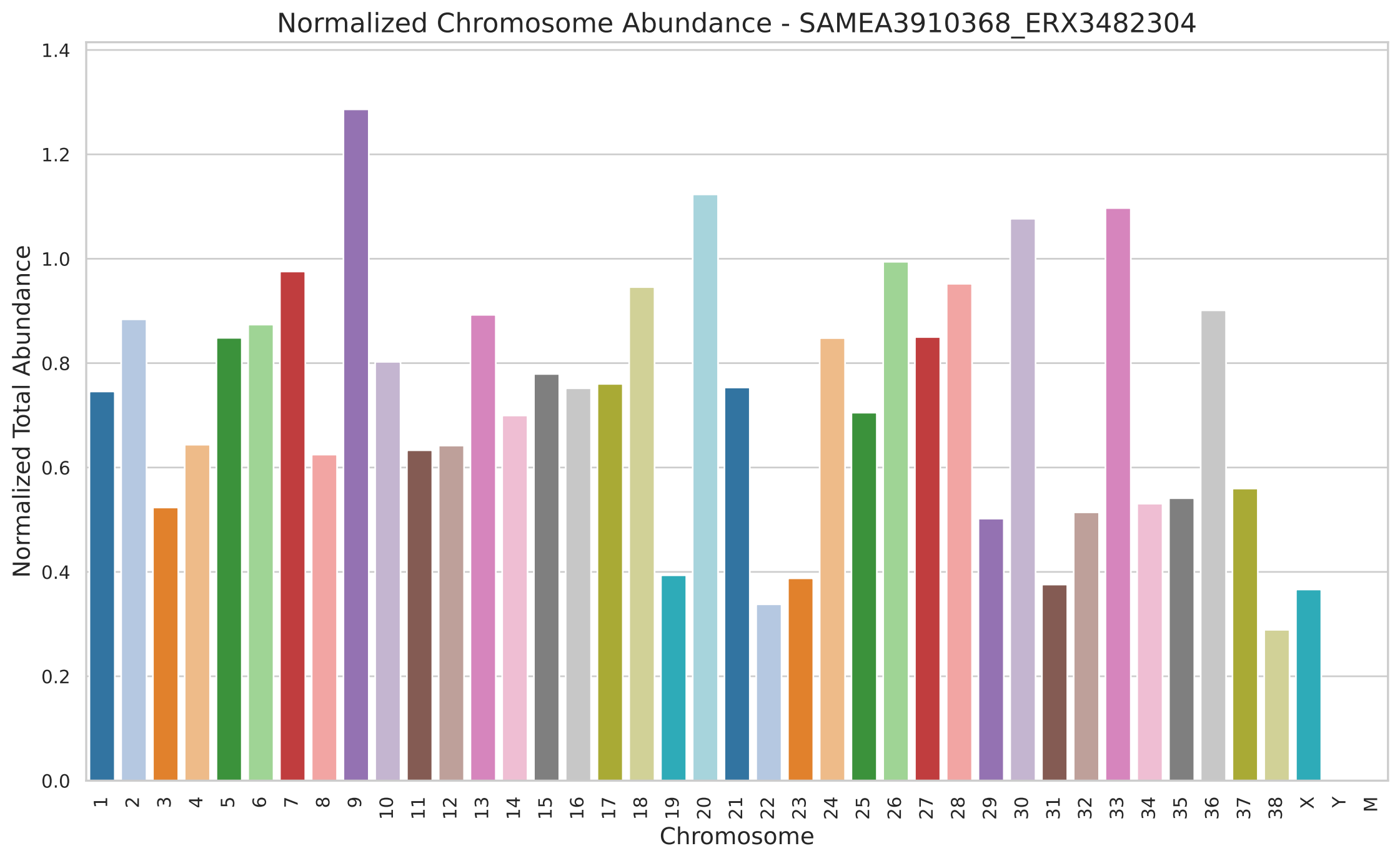

Normalized Chromosome Abundance - SAMEA3910279_ERX3482350
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

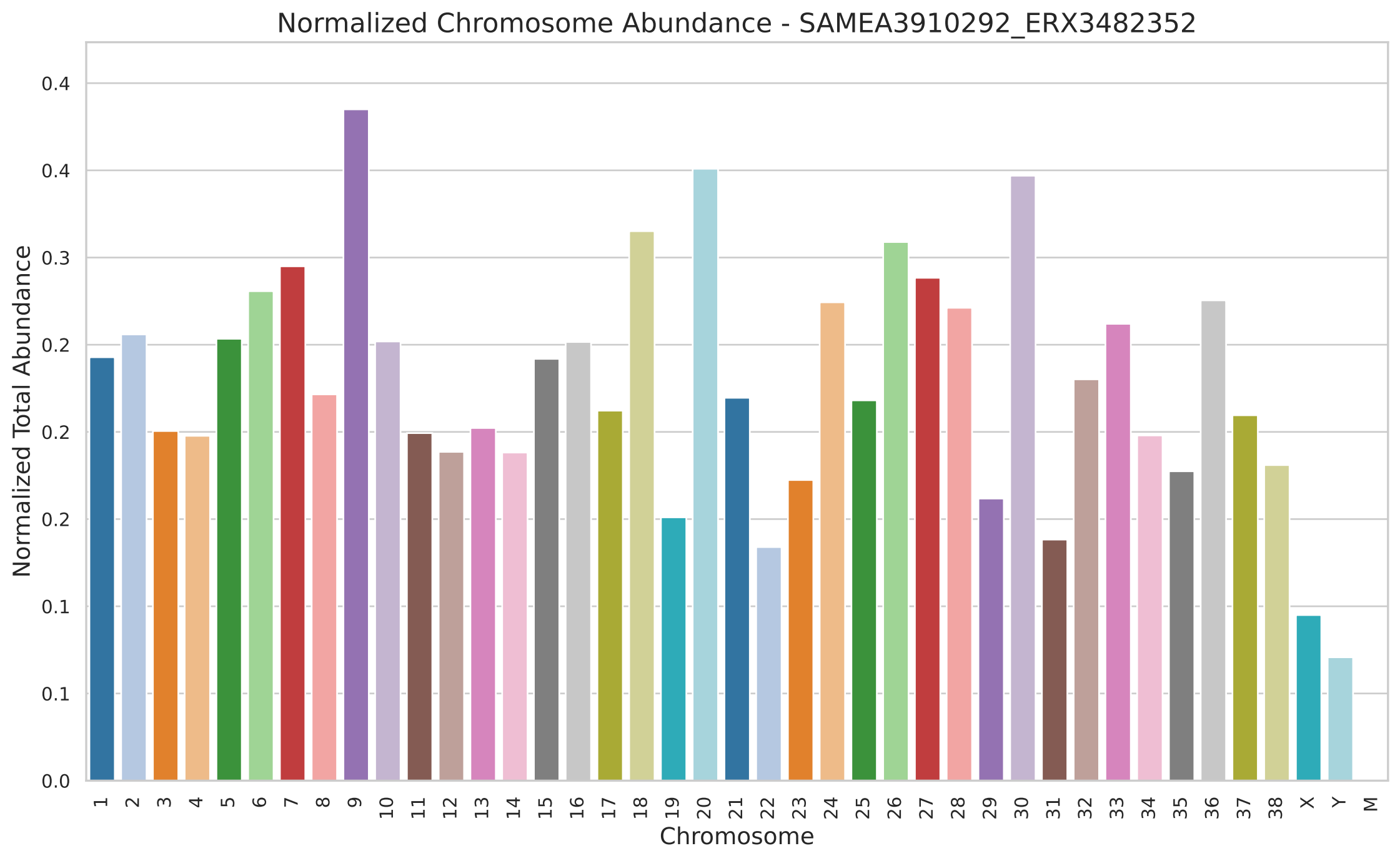

Normalized Chromosome Abundance - SAMN10380234_SRX4979786
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

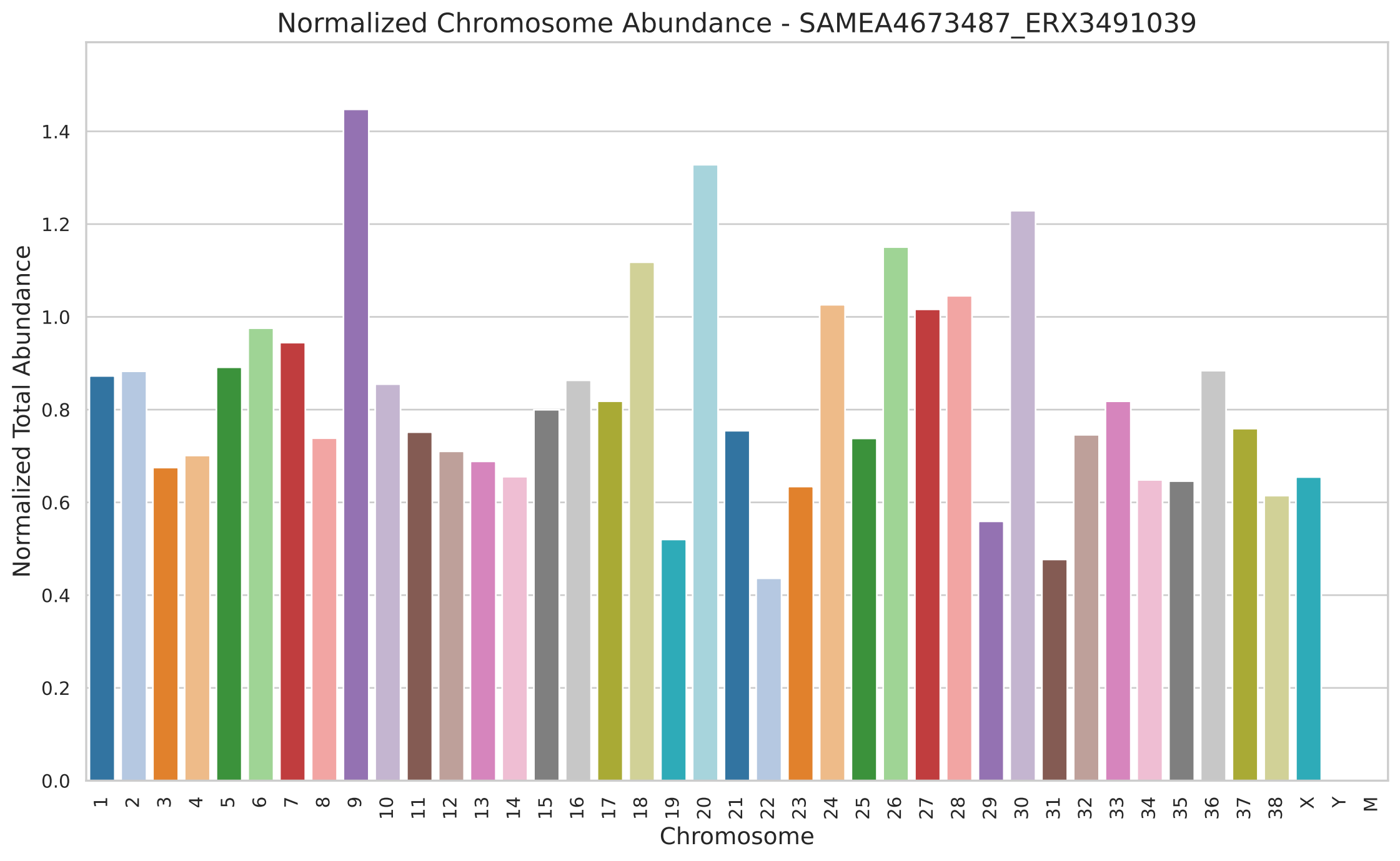

Normalized Chromosome Abundance - SAMEA3910259_ERX3482333
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

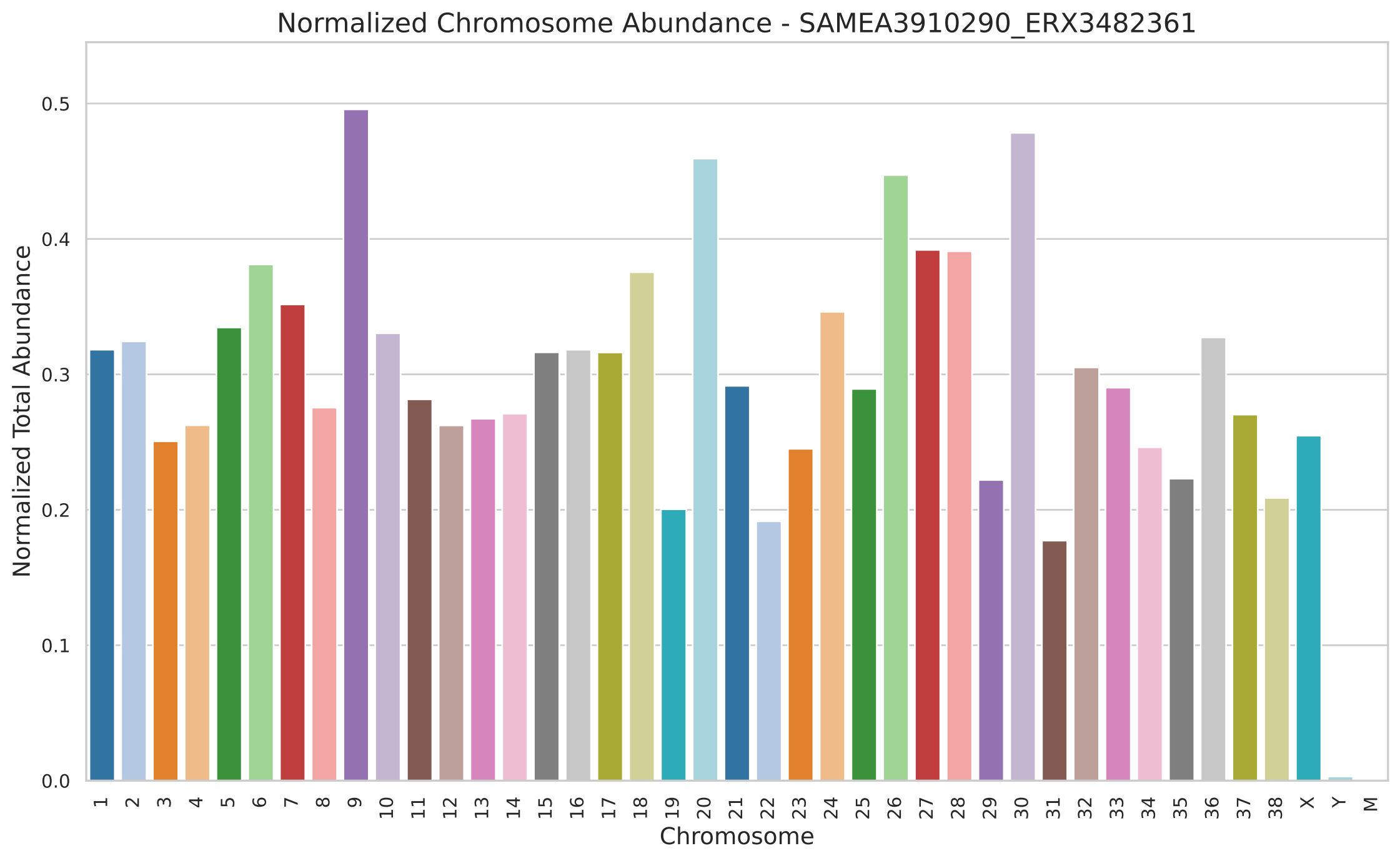

Normalized Chromosome Abundance - SAMN10380269_SRX4979863
Normalized Total Abundance
10.0
8.0
6.0
4.0
2.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

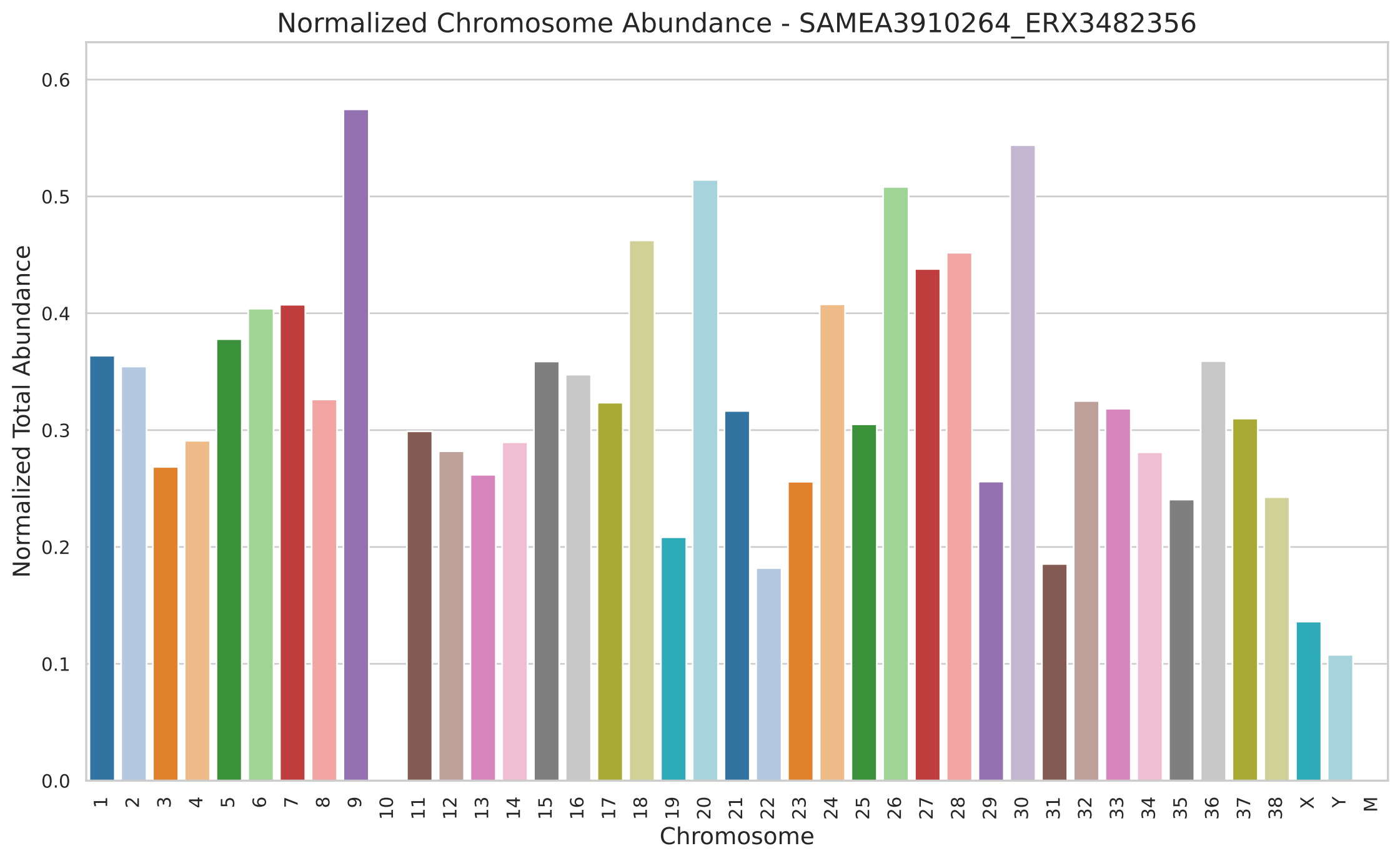

Normalized Chromosome Abundance - SAMN14407019_SRX7954373
Normalized Total Abundance
20.0
17.5
15.0
12.5
10.0
7.5
5.0
2.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

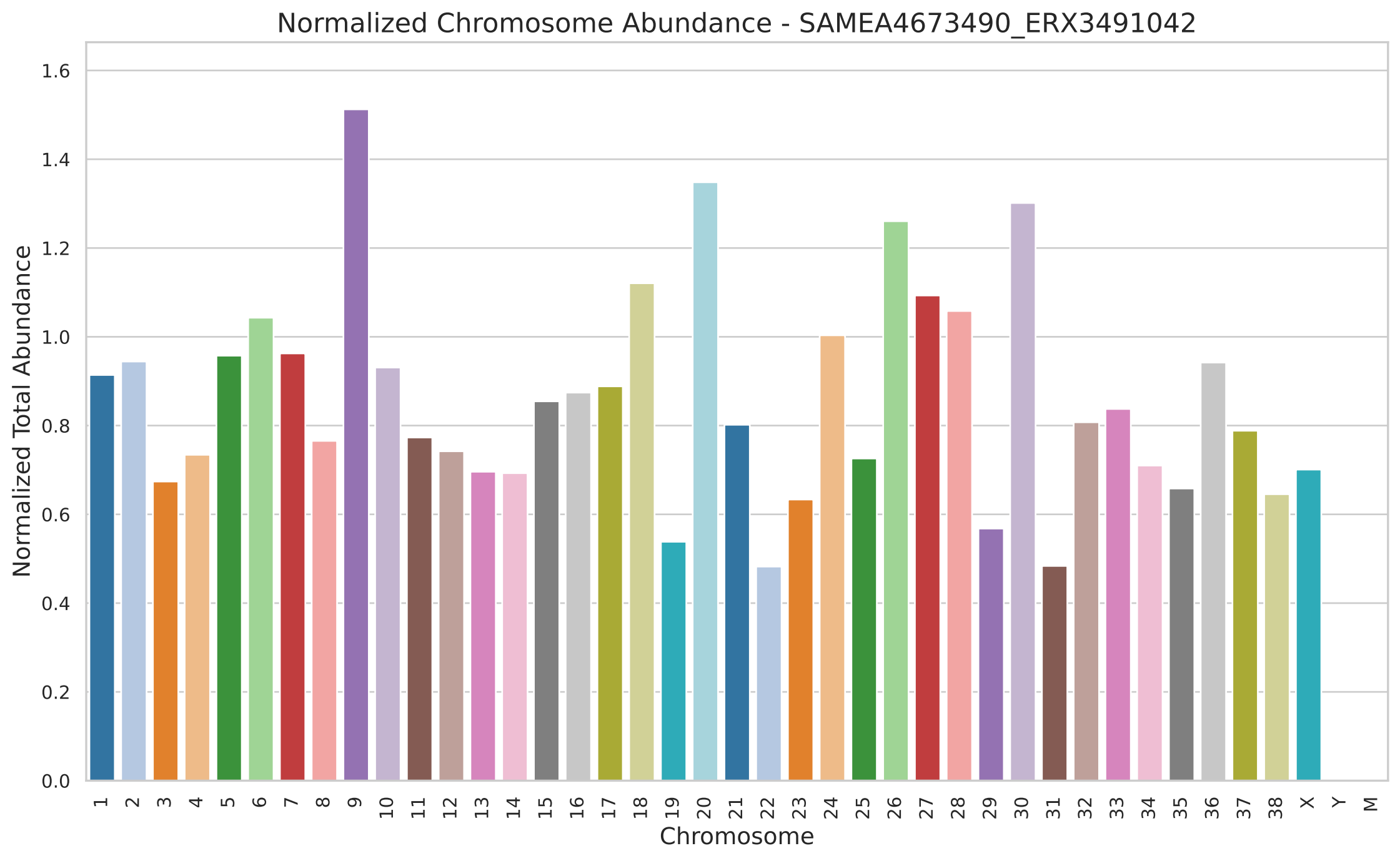

Normalized Chromosome Abundance - SAMEA3910368_ERX3482304
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

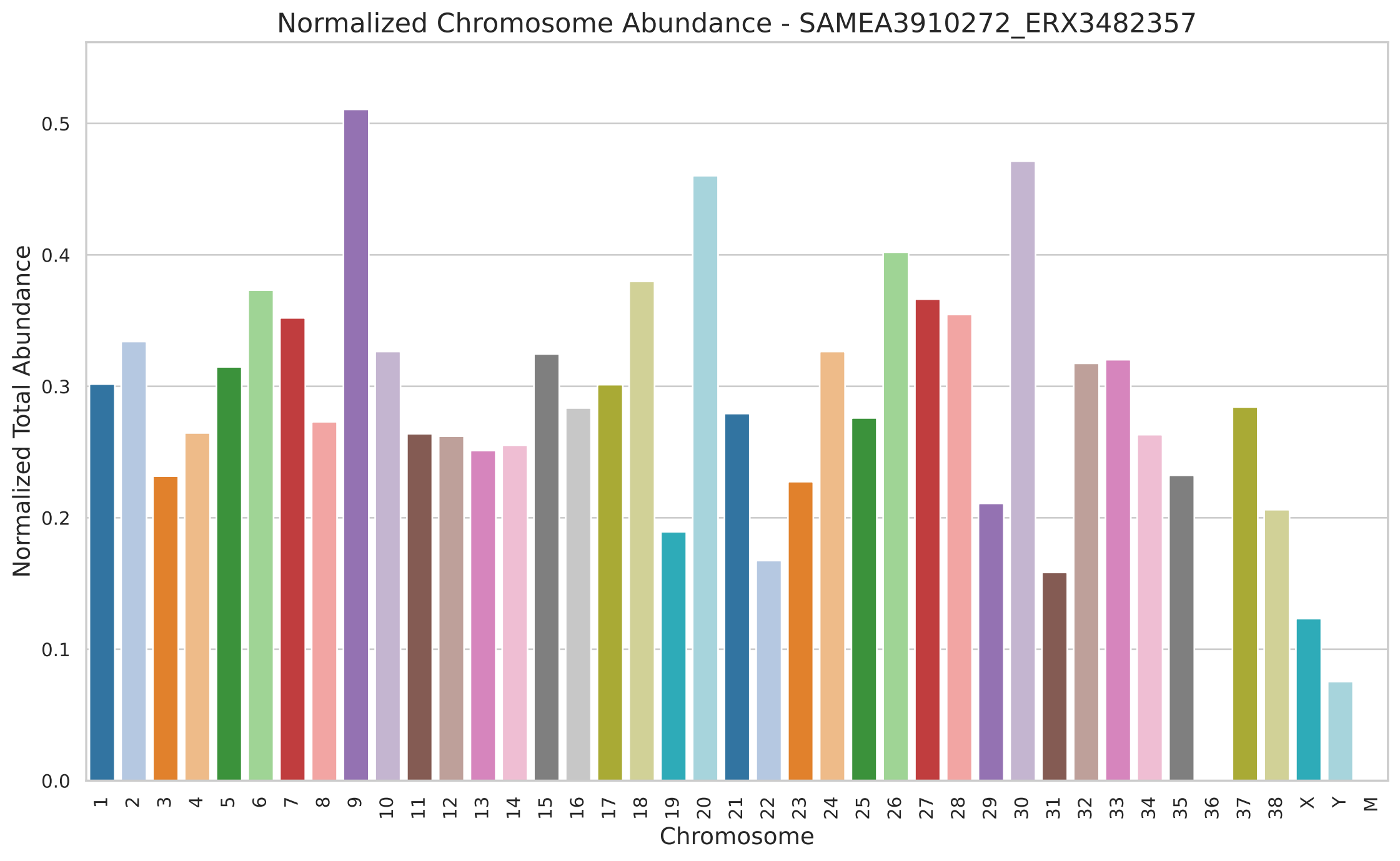

Normalized Chromosome Abundance - SAMEA3910292_ERX3482352
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

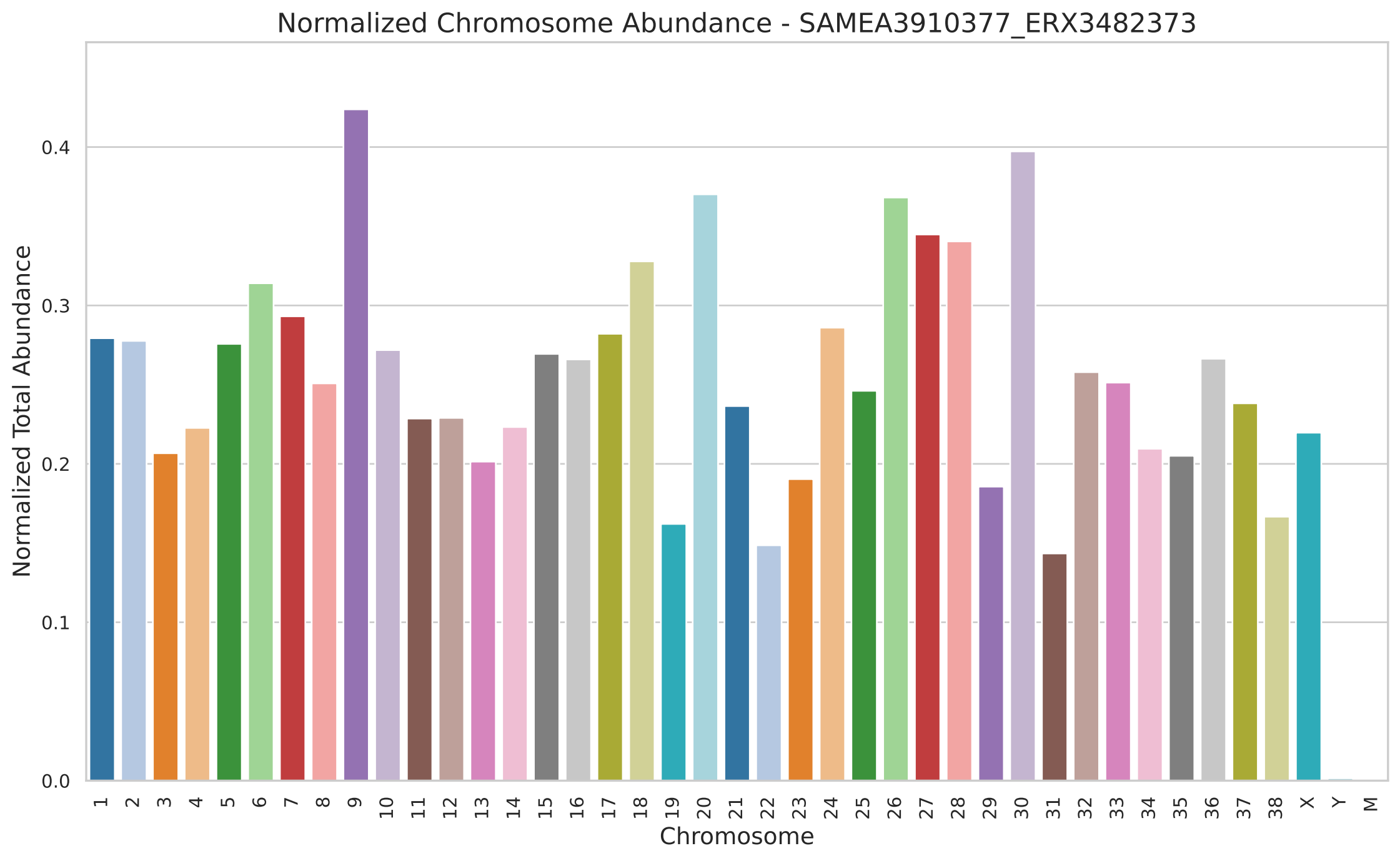

Normalized Chromosome Abundance - SAMEA4673487_ERX3491039
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

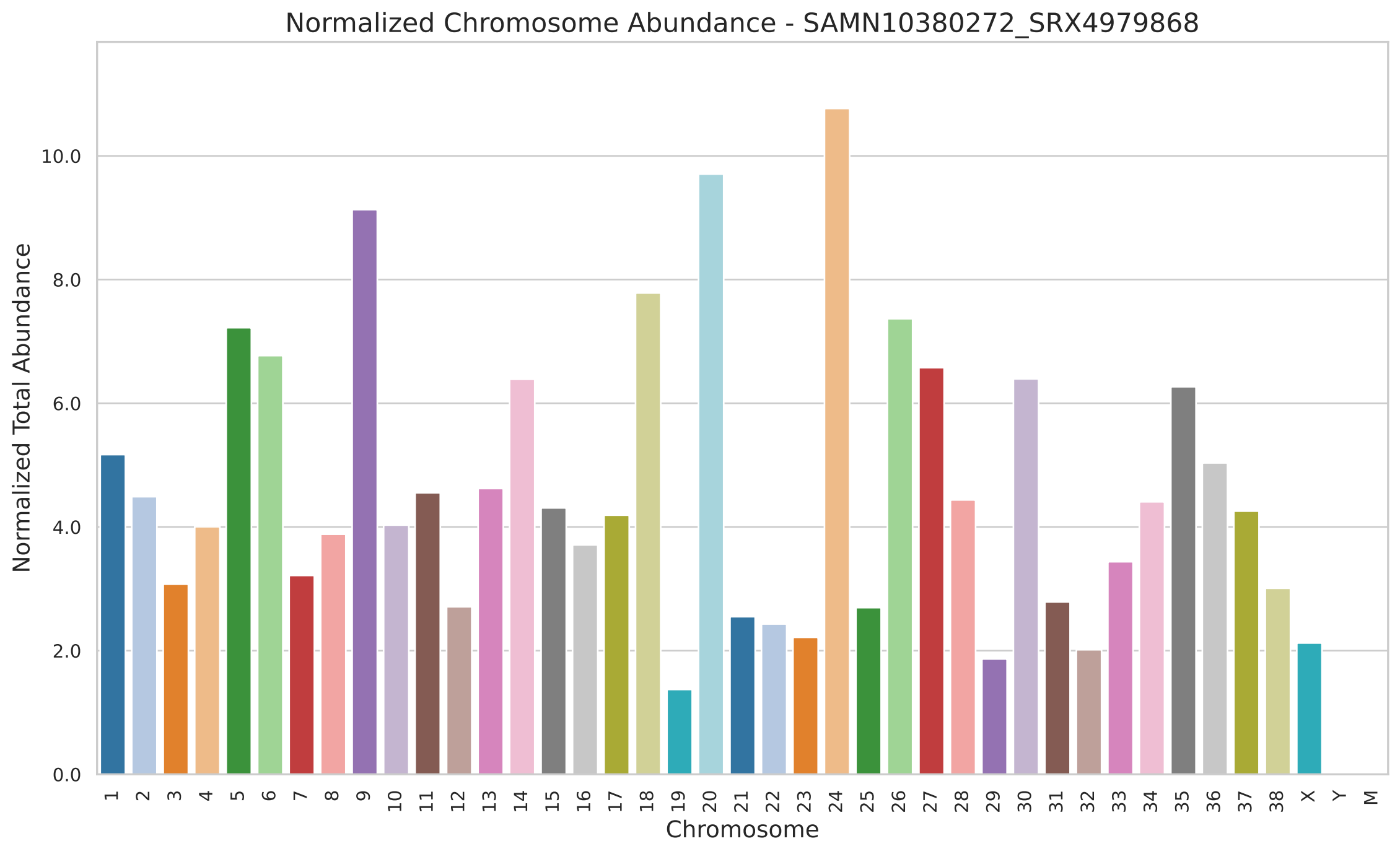

Normalized Chromosome Abundance - SAMEA3910290_ERX3482361
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

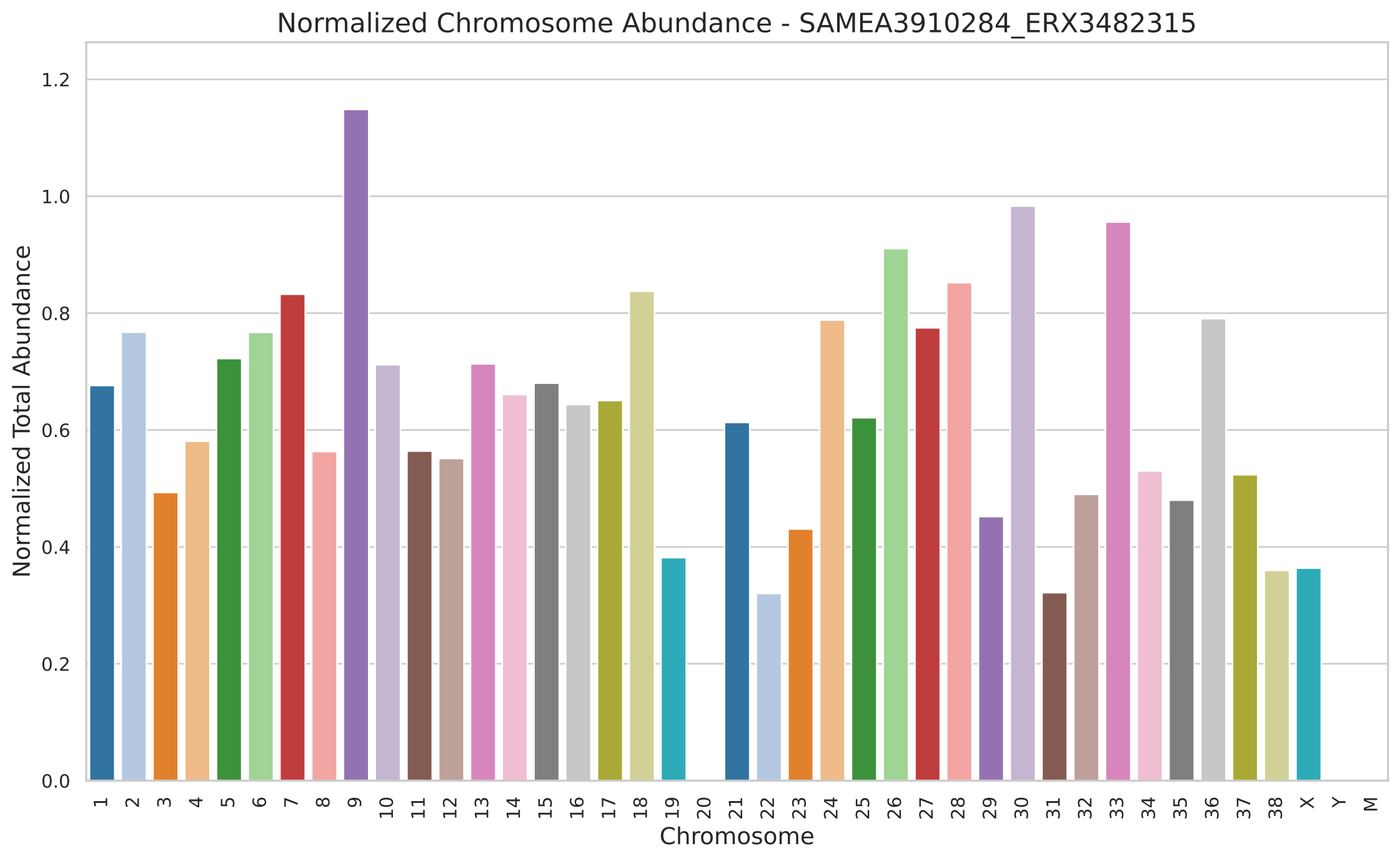

Normalized Chromosome Abundance - SAMEA3910264_ERX3482356
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

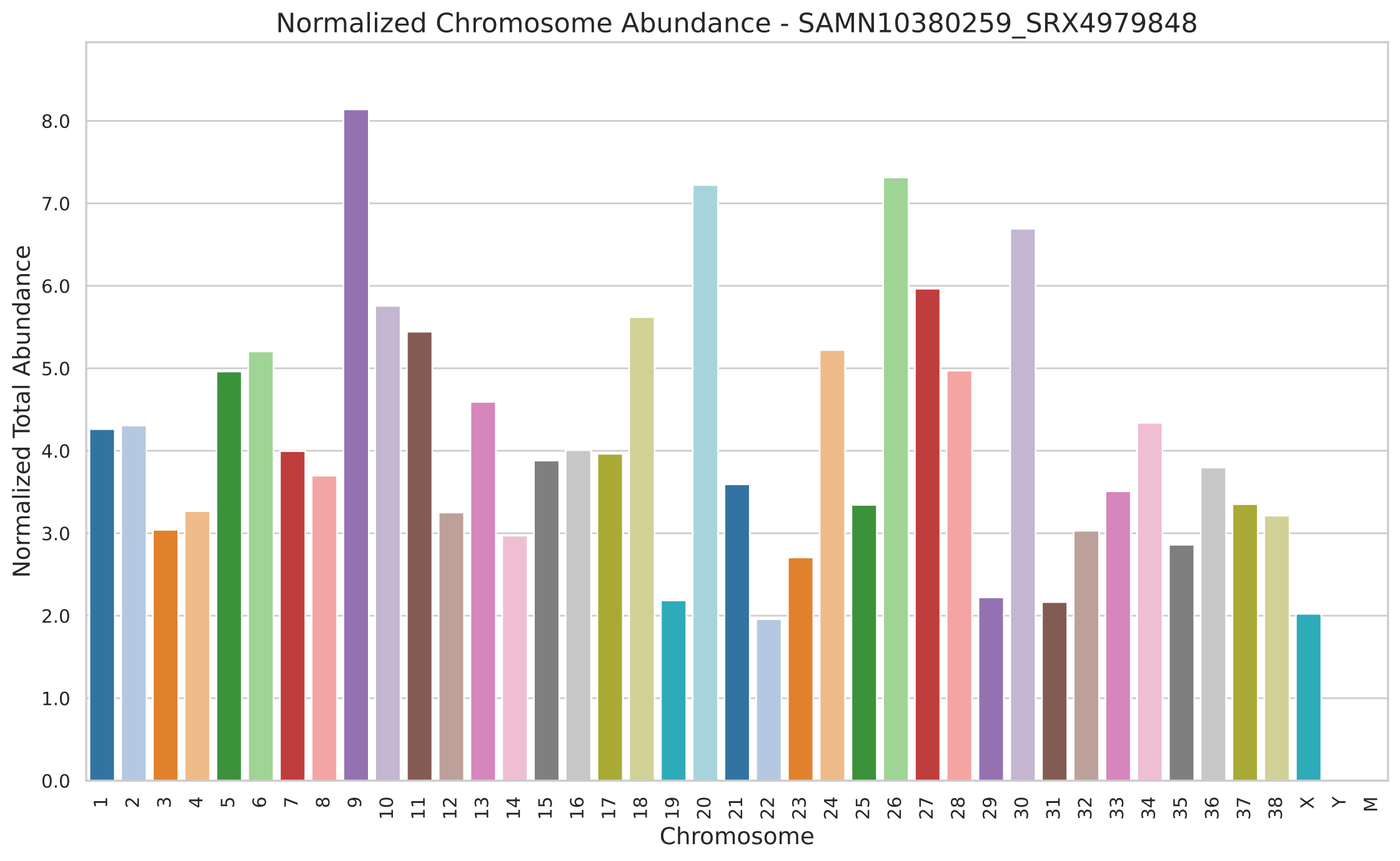

Normalized Chromosome Abundance - SAMEA4673490_ERX3491042
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

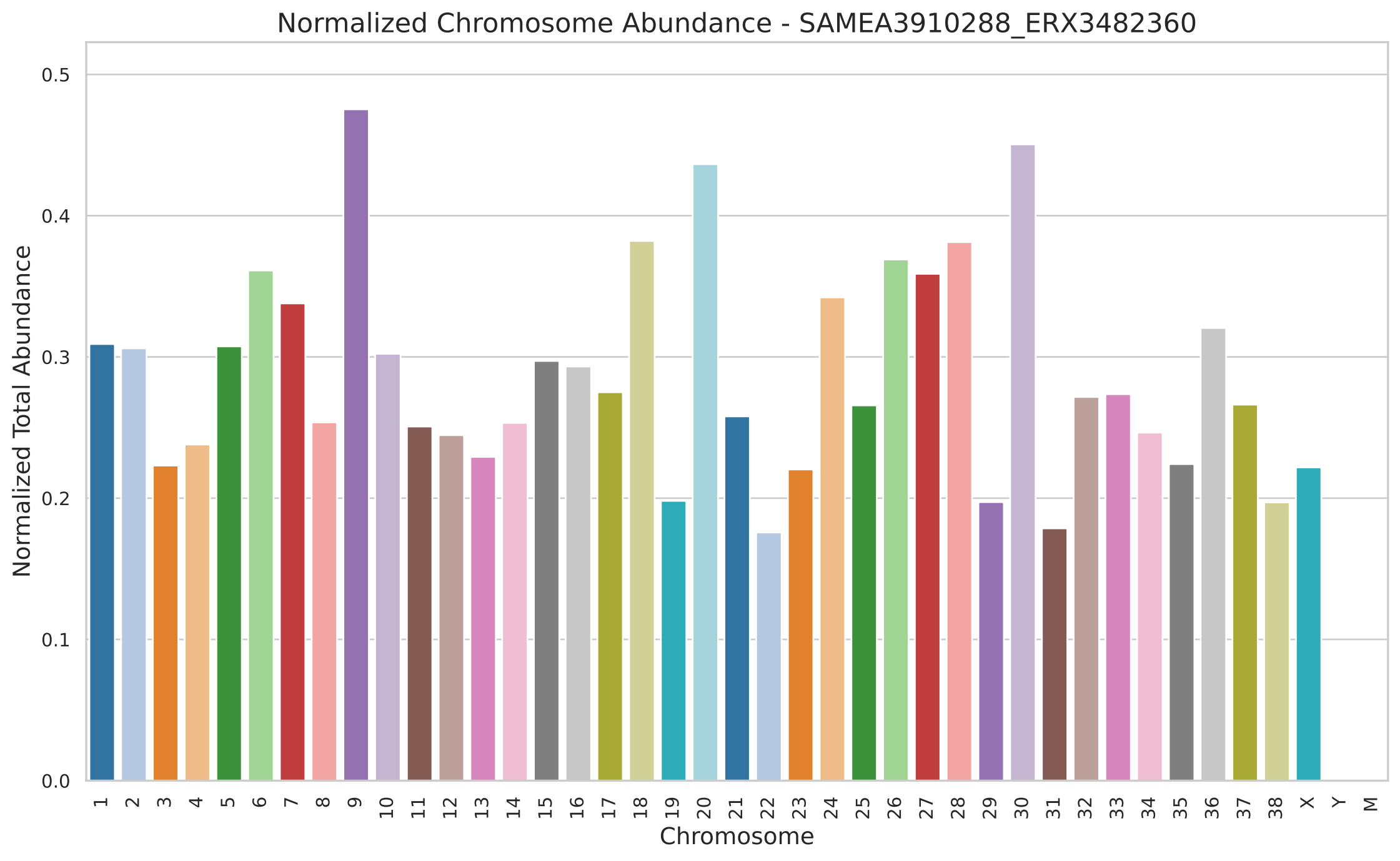

Normalized Chromosome Abundance - SAMEA3910272_ERX3482357
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

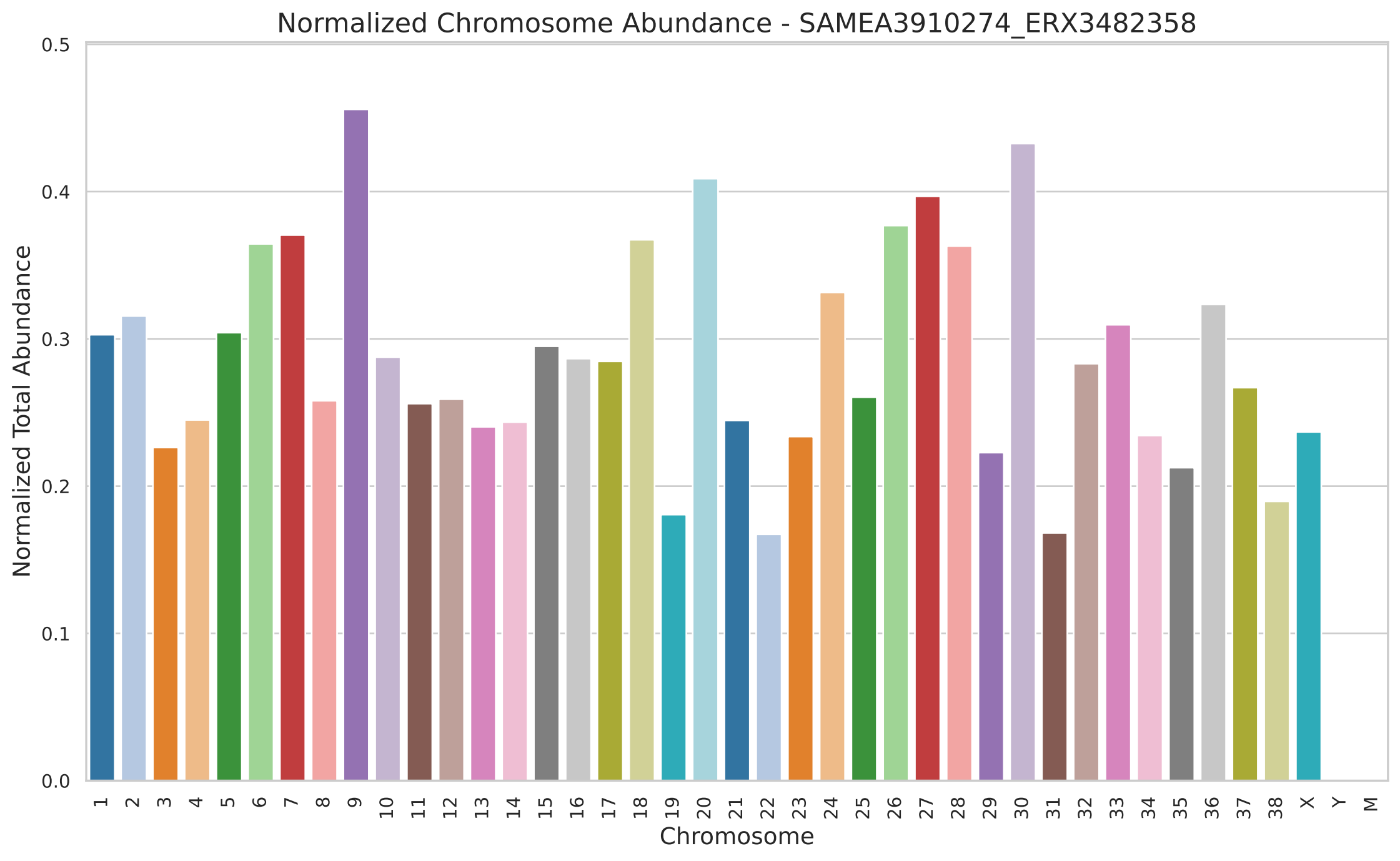

Normalized Chromosome Abundance - SAMEA3910377_ERX3482373
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

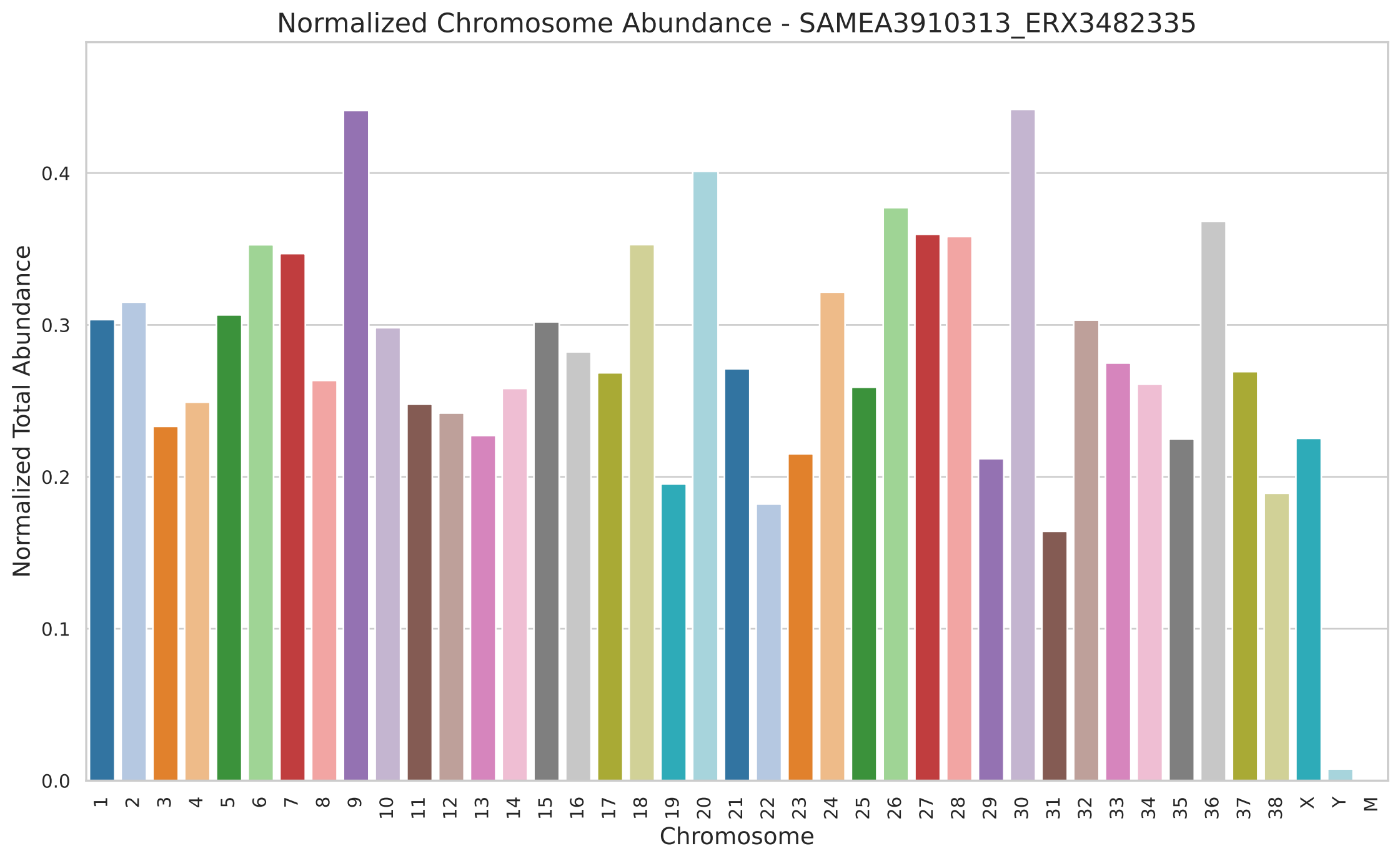

Normalized Chromosome Abundance - SAMN10380272_SRX4979868
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

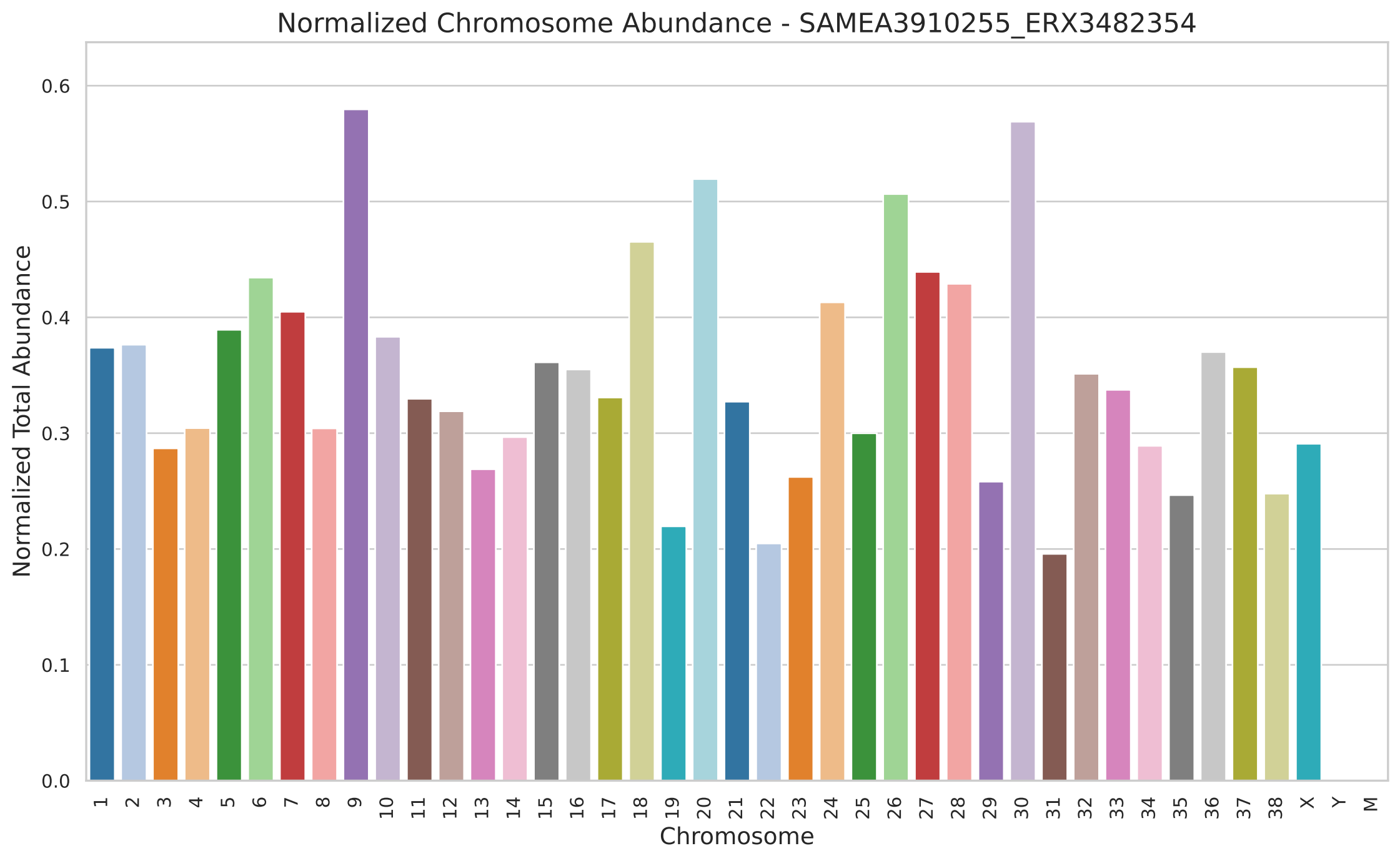

Normalized Chromosome Abundance - SAMEA3910284_ERX3482315
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

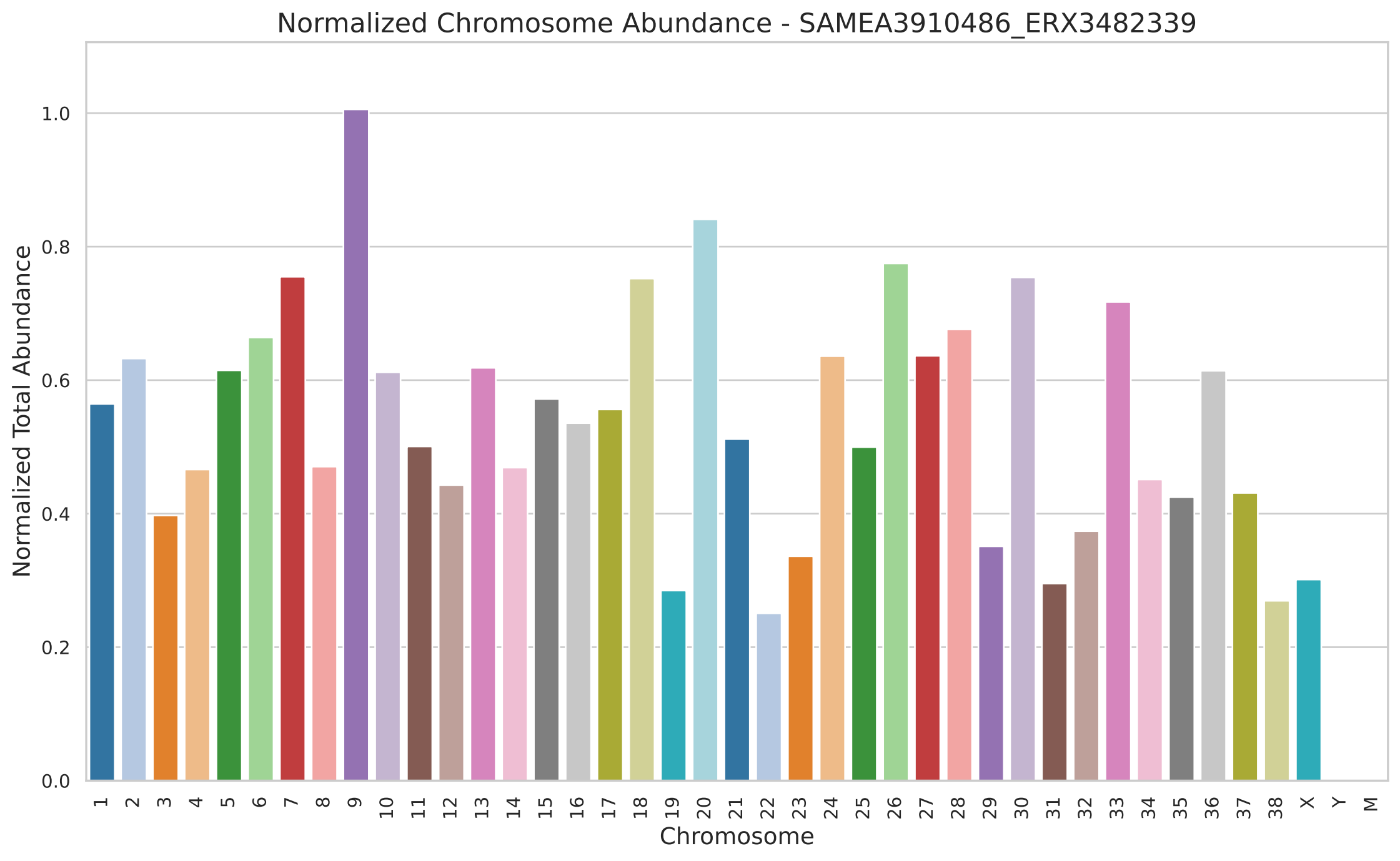

Normalized Chromosome Abundance - SAMN10380259_SRX4979848
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

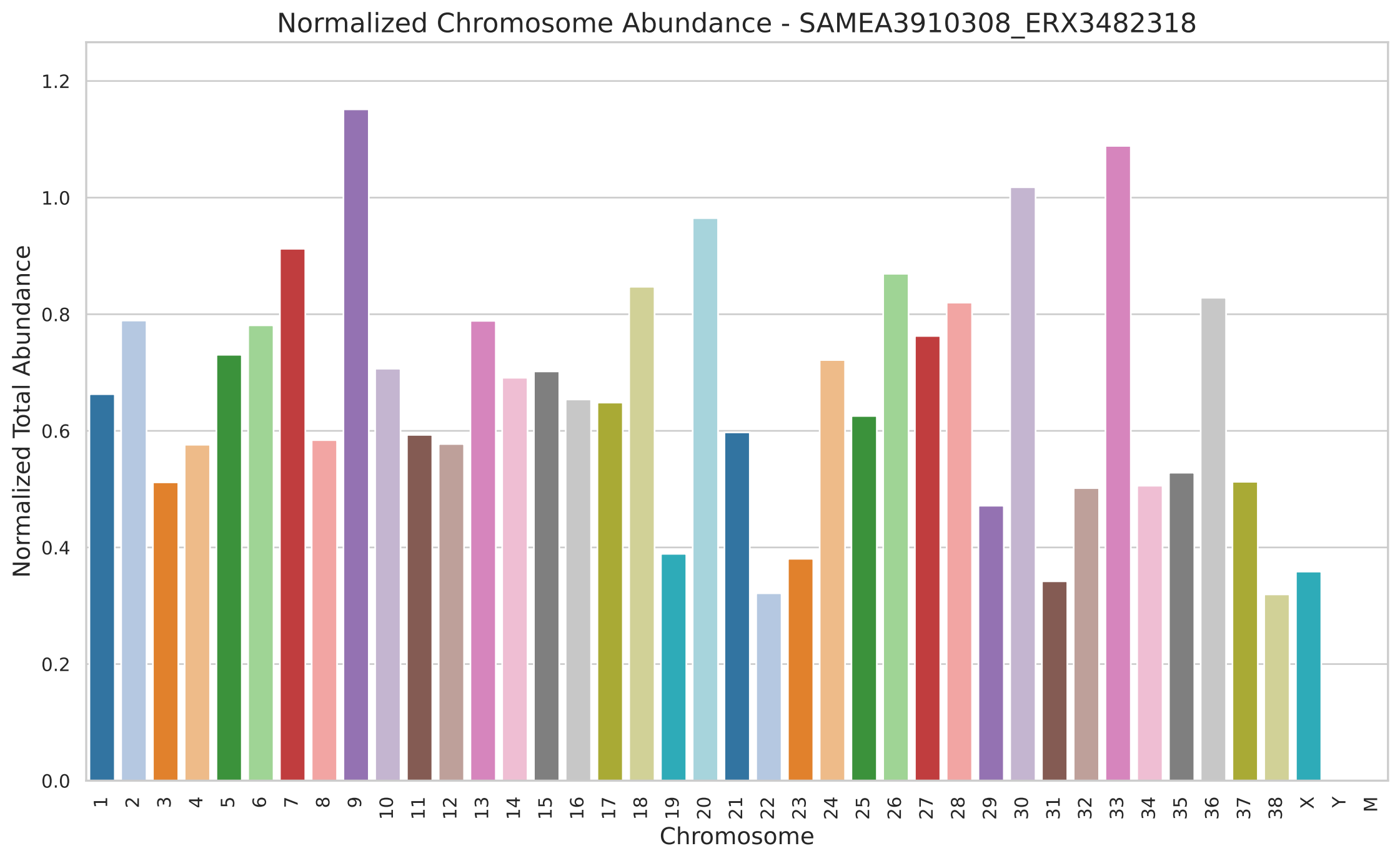

Normalized Chromosome Abundance - SAMEA3910288_ERX3482360
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

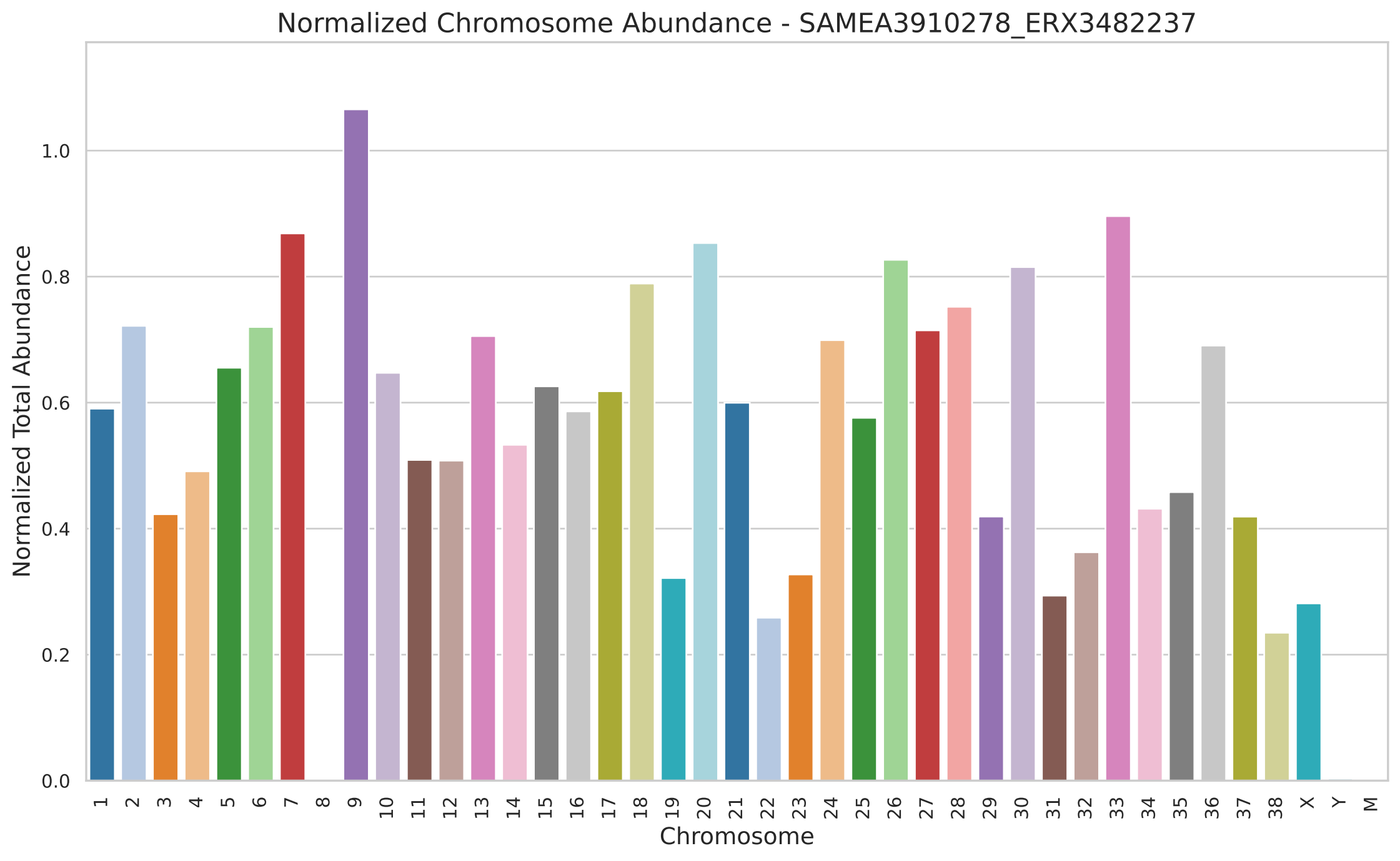

Normalized Chromosome Abundance - SAMEA3910274_ERX3482358
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

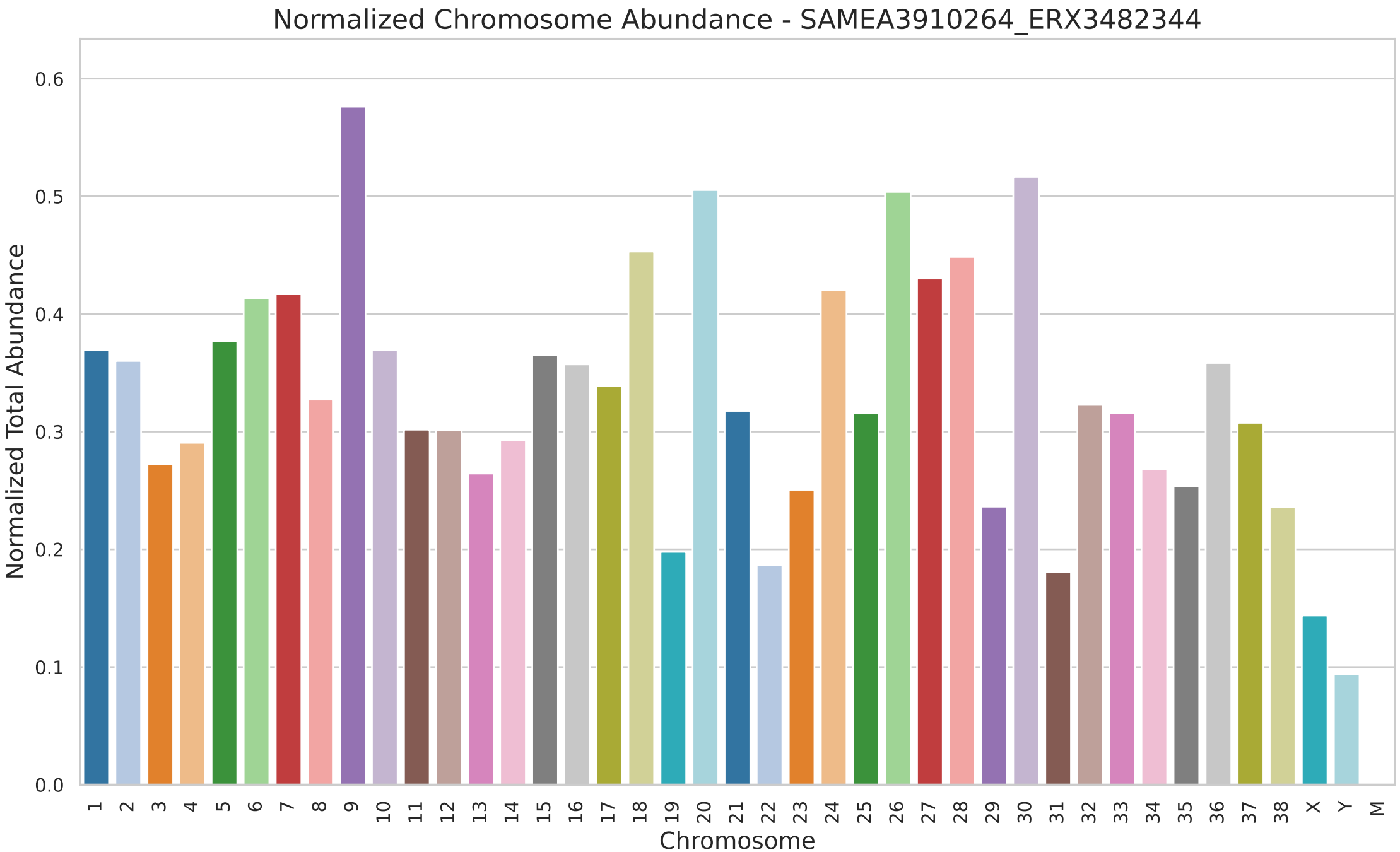

Normalized Chromosome Abundance - SAMEA3910313_ERX3482335
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

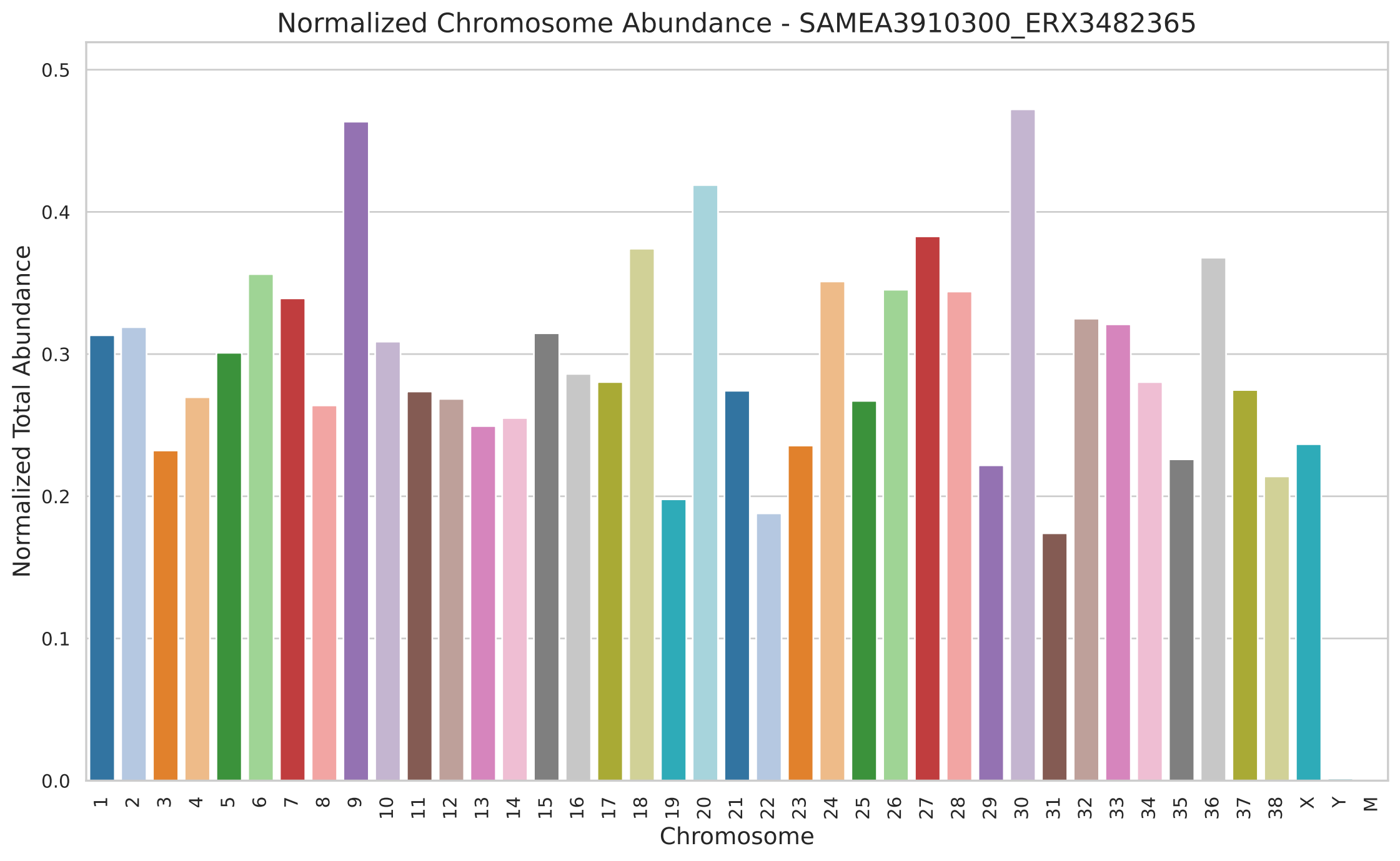

Normalized Chromosome Abundance - SAMEA3910255_ERX3482354
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

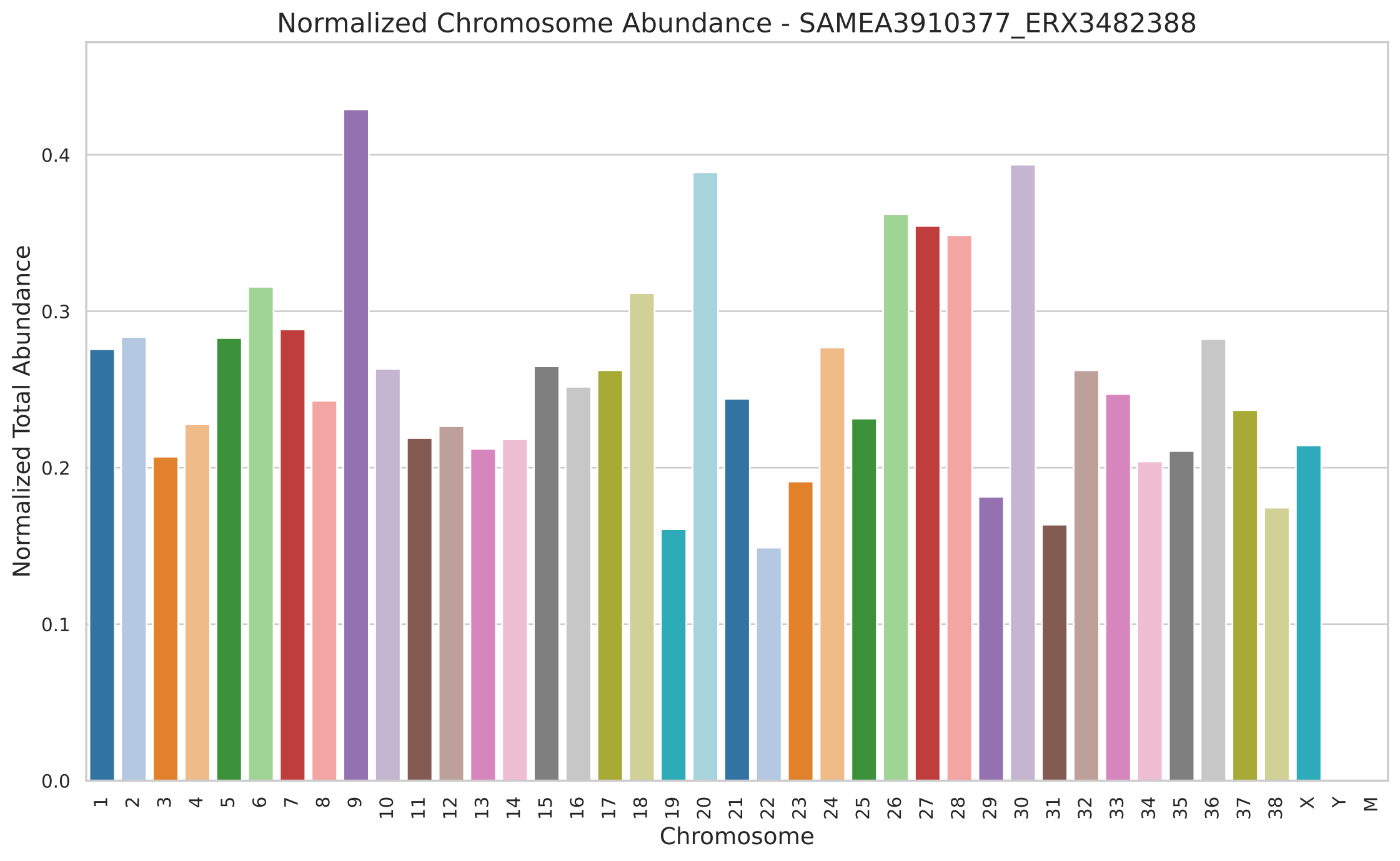

Normalized Chromosome Abundance - SAMEA3910486_ERX3482339
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

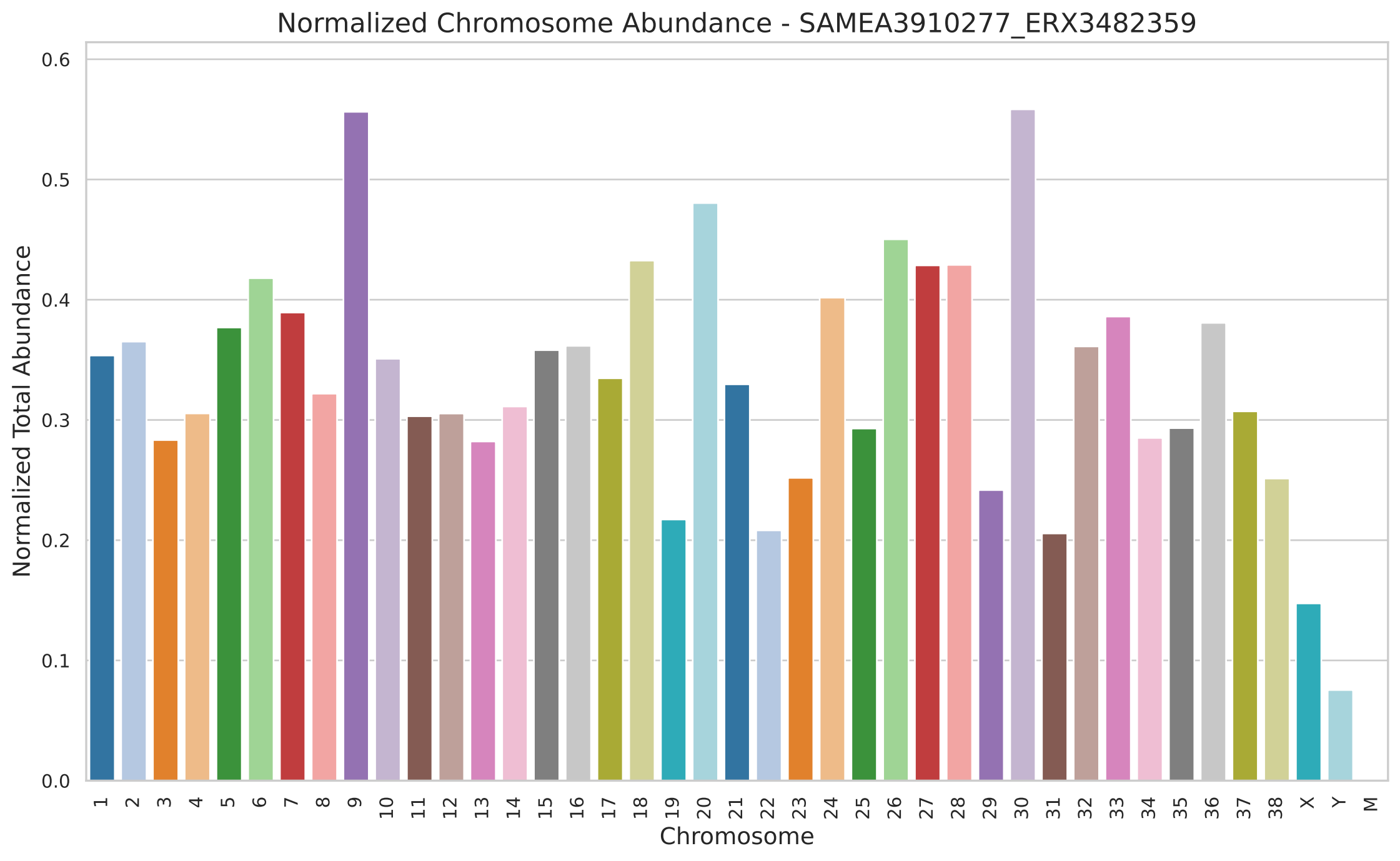

Normalized Chromosome Abundance - SAMEA3910308_ERX3482318
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

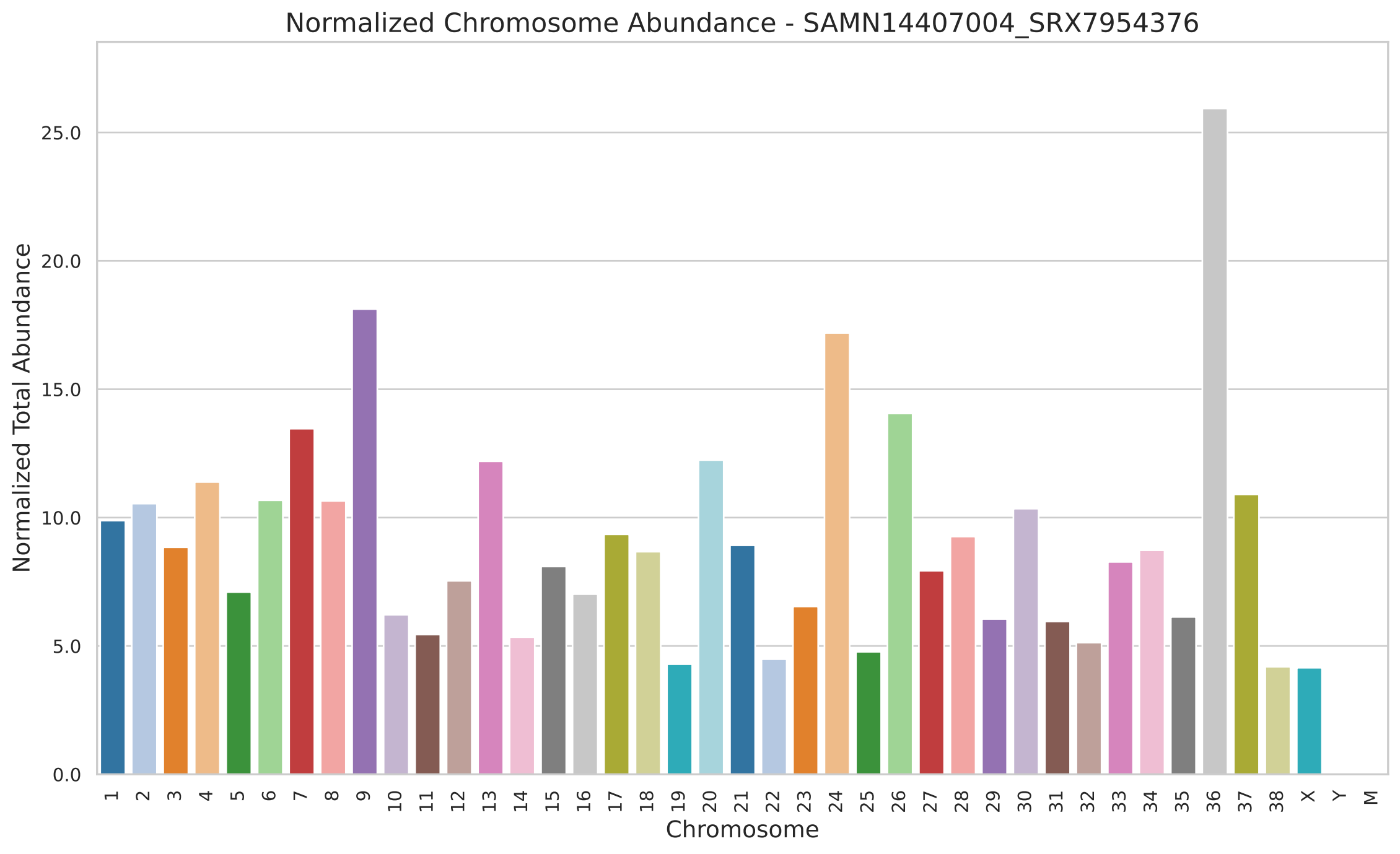

Normalized Chromosome Abundance - SAMEA3910278_ERX3482237
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

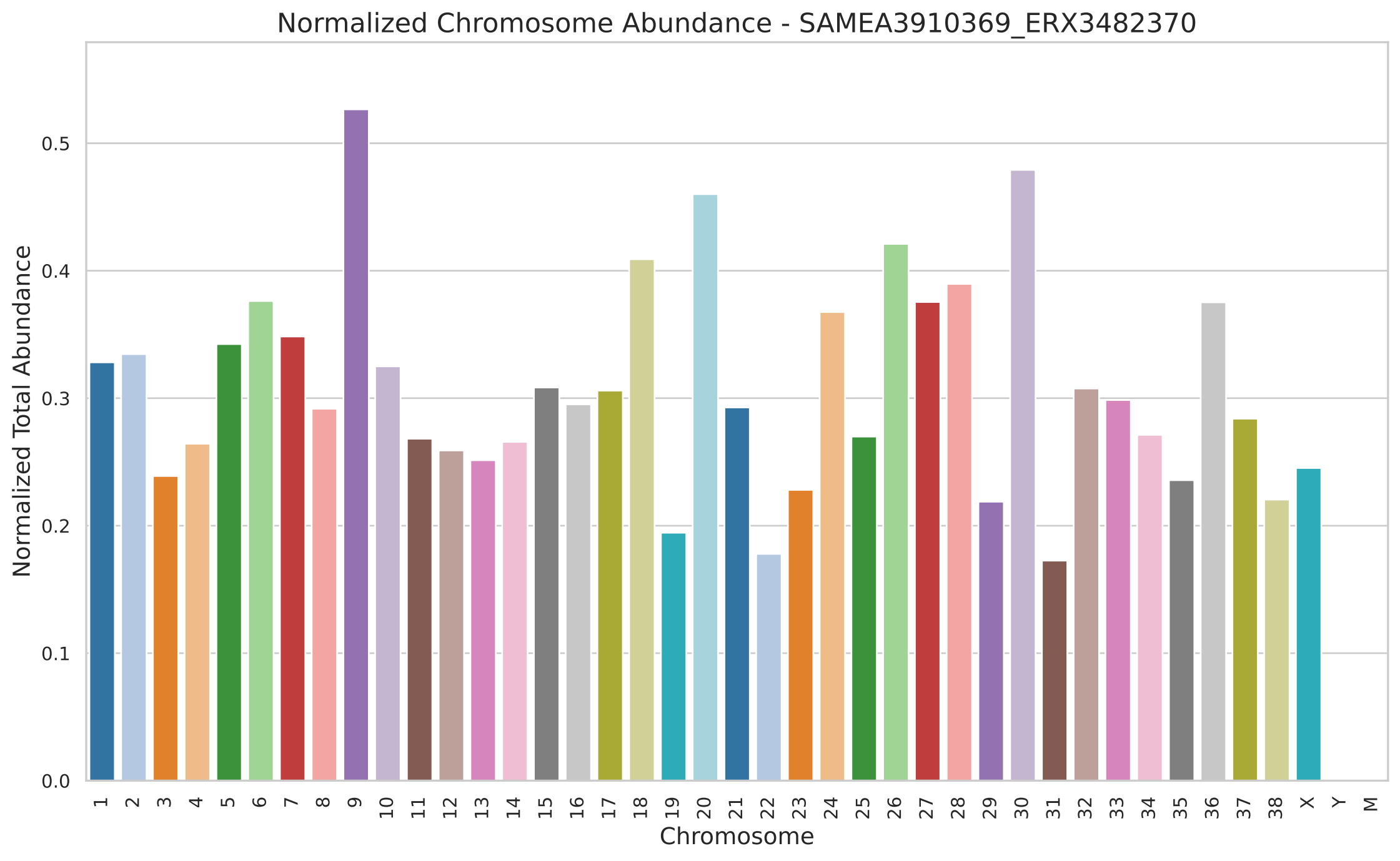

Normalized Chromosome Abundance - SAMEA3910264_ERX3482344
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

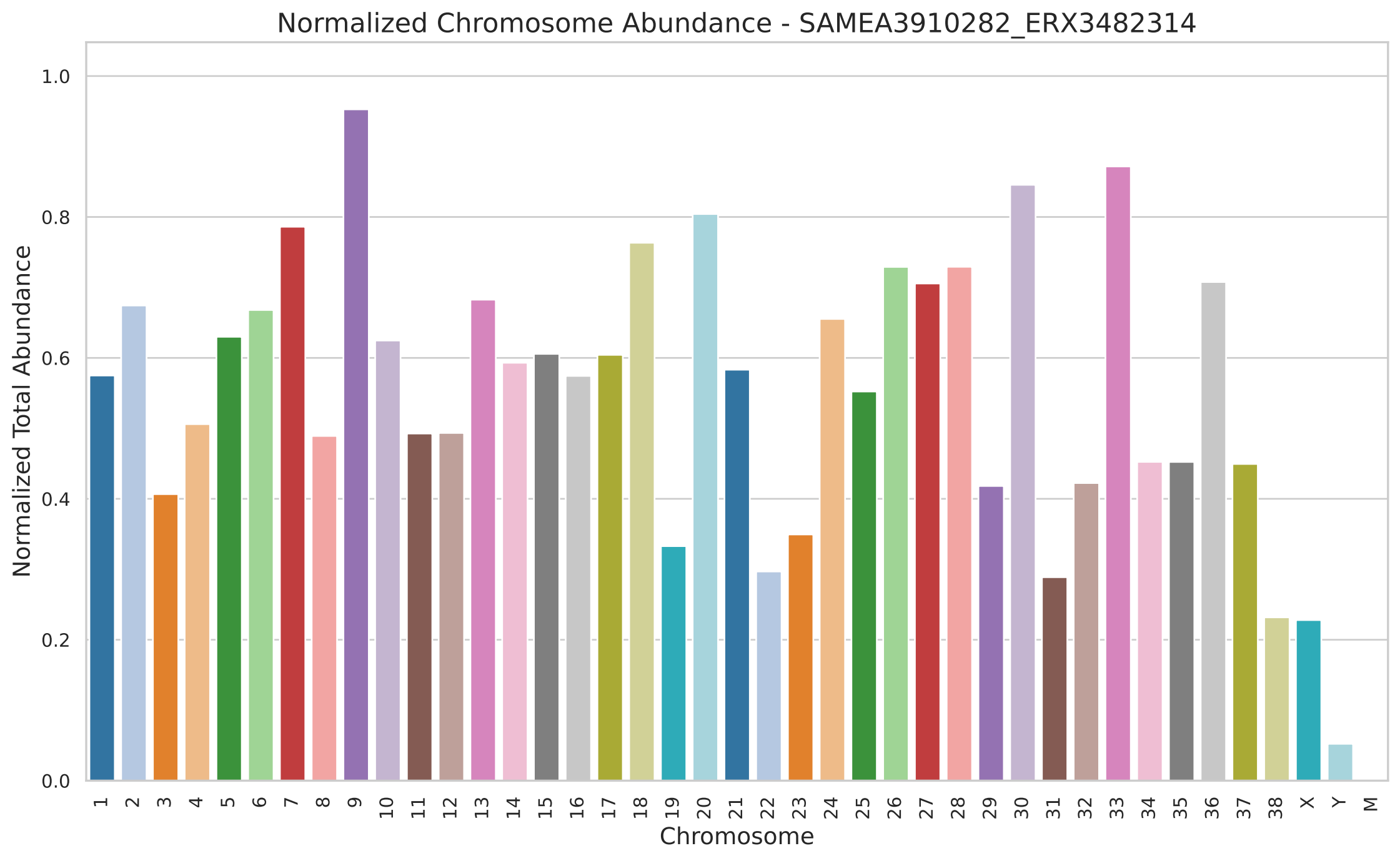

Normalized Chromosome Abundance - SAMEA3910300_ERX3482365
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

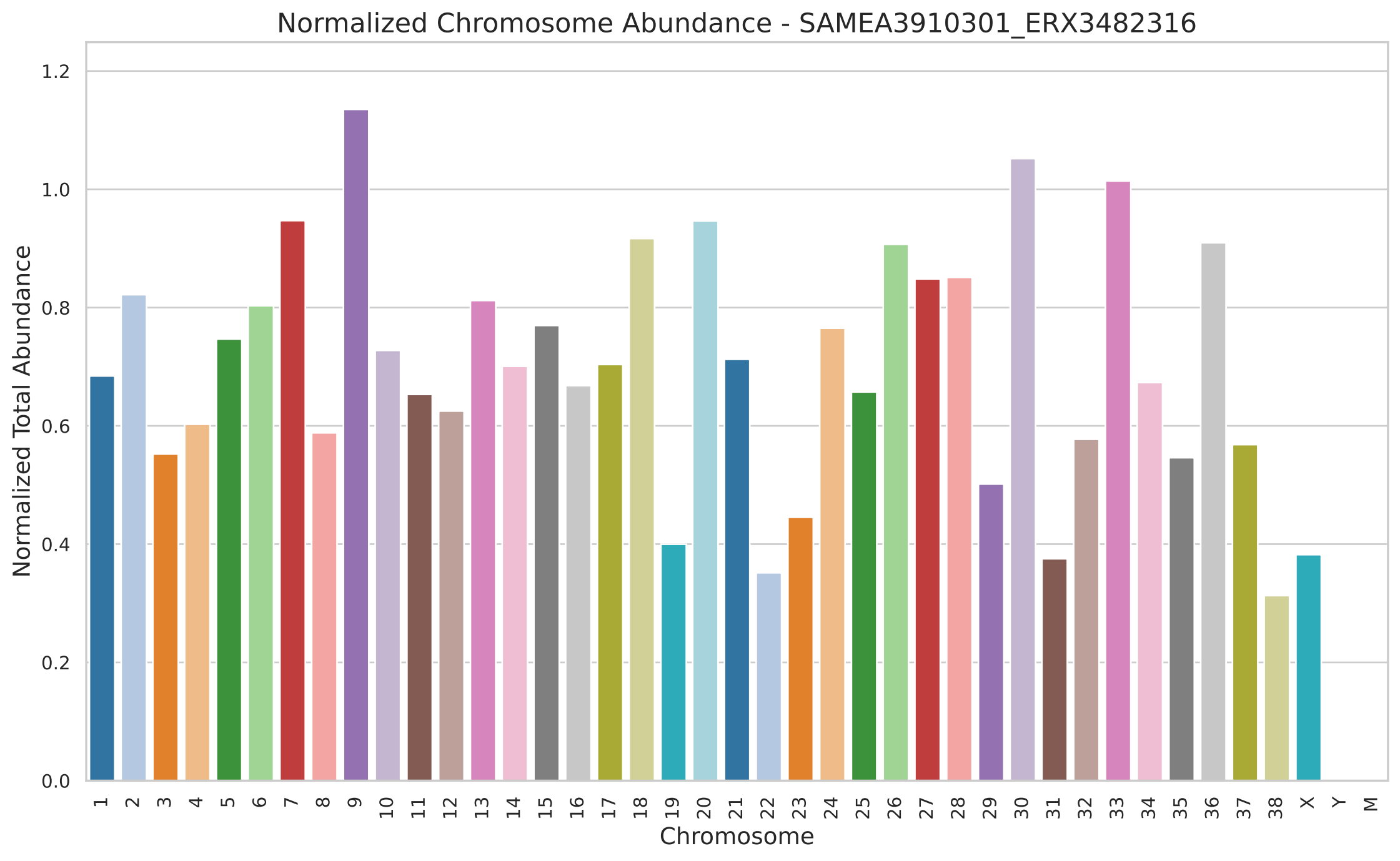

Normalized Chromosome Abundance - SAMEA3910377_ERX3482388
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

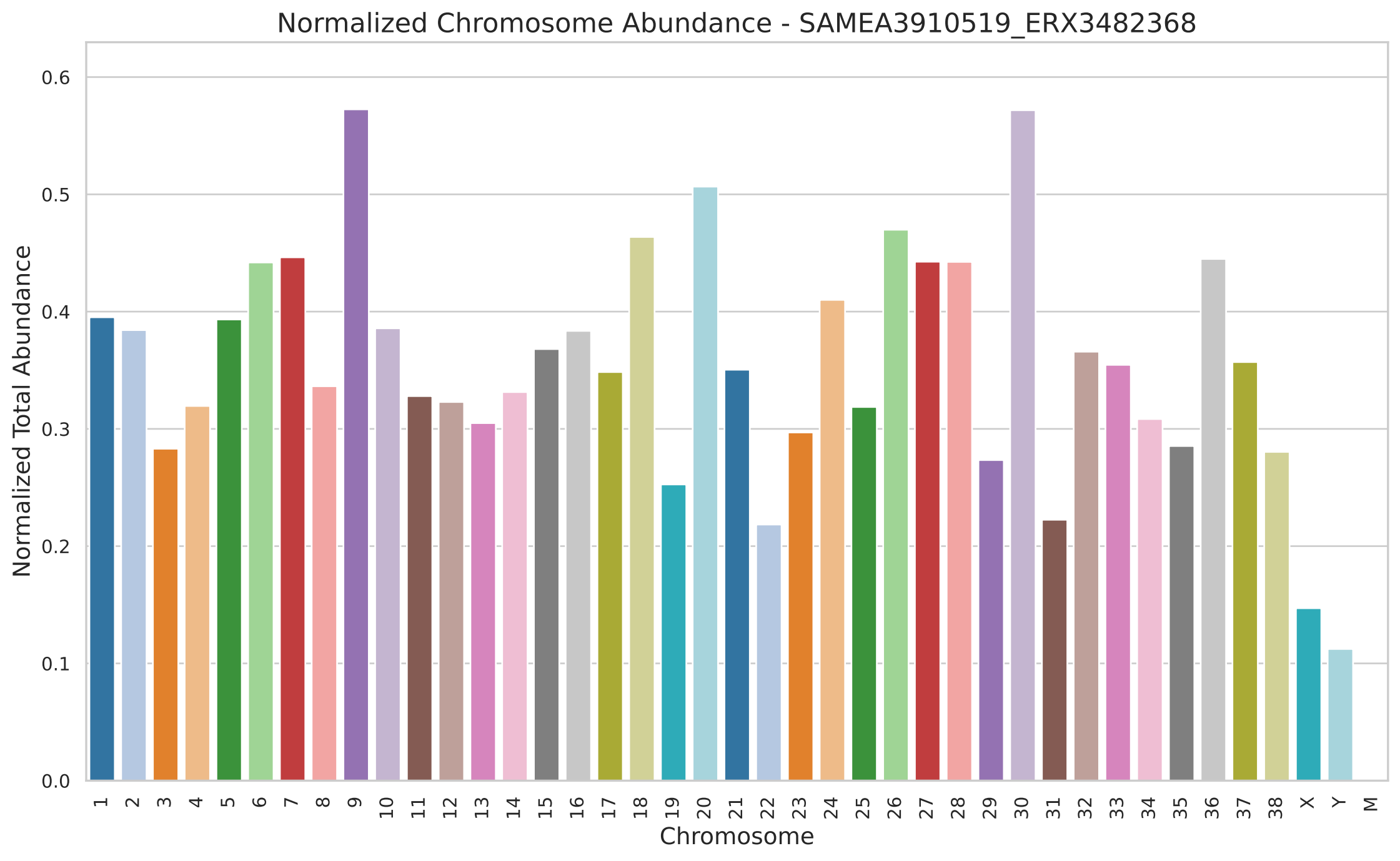

Normalized Chromosome Abundance - SAMEA3910277_ERX3482359
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

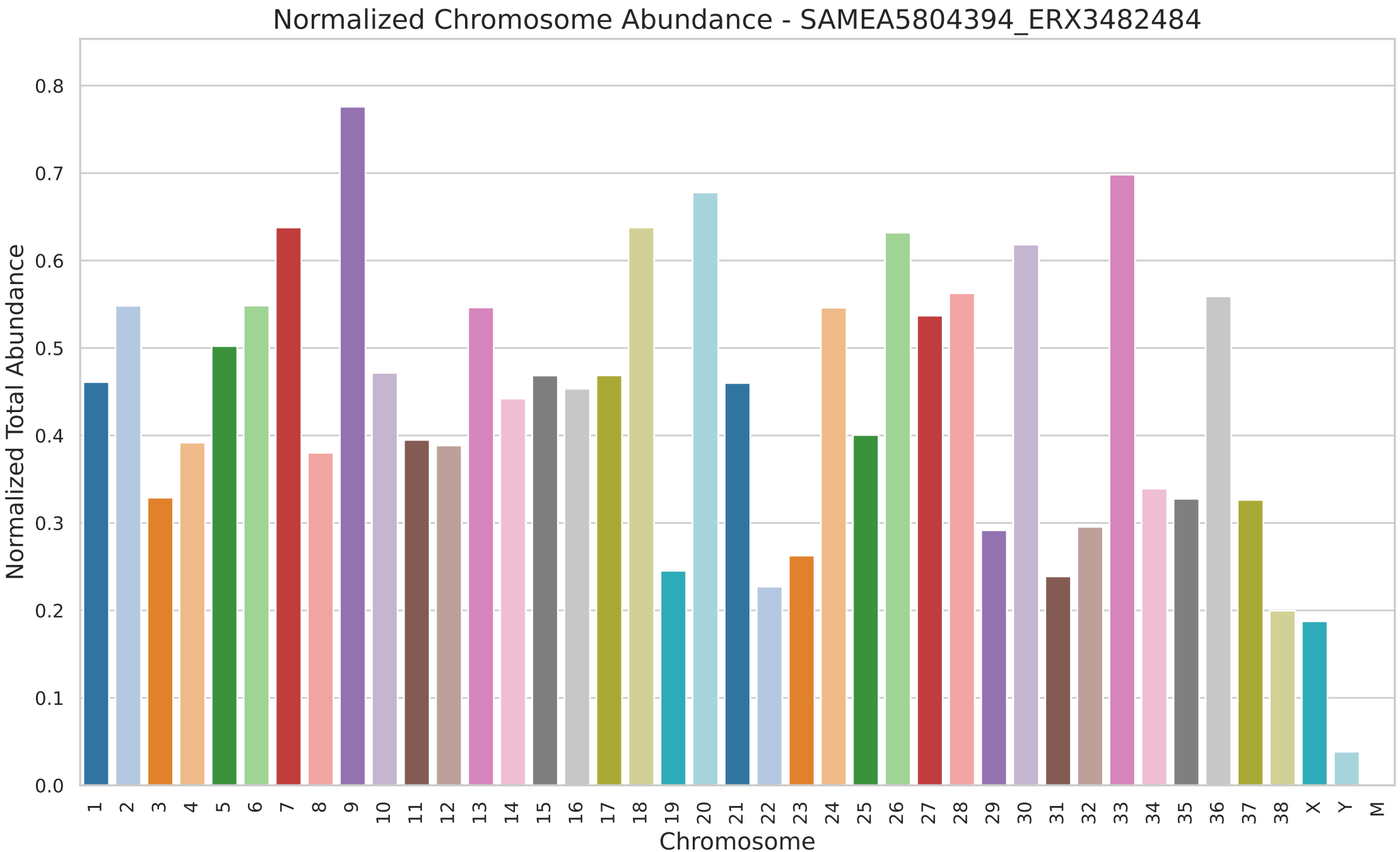

Normalized Chromosome Abundance - SAMN14407004_SRX7954376
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

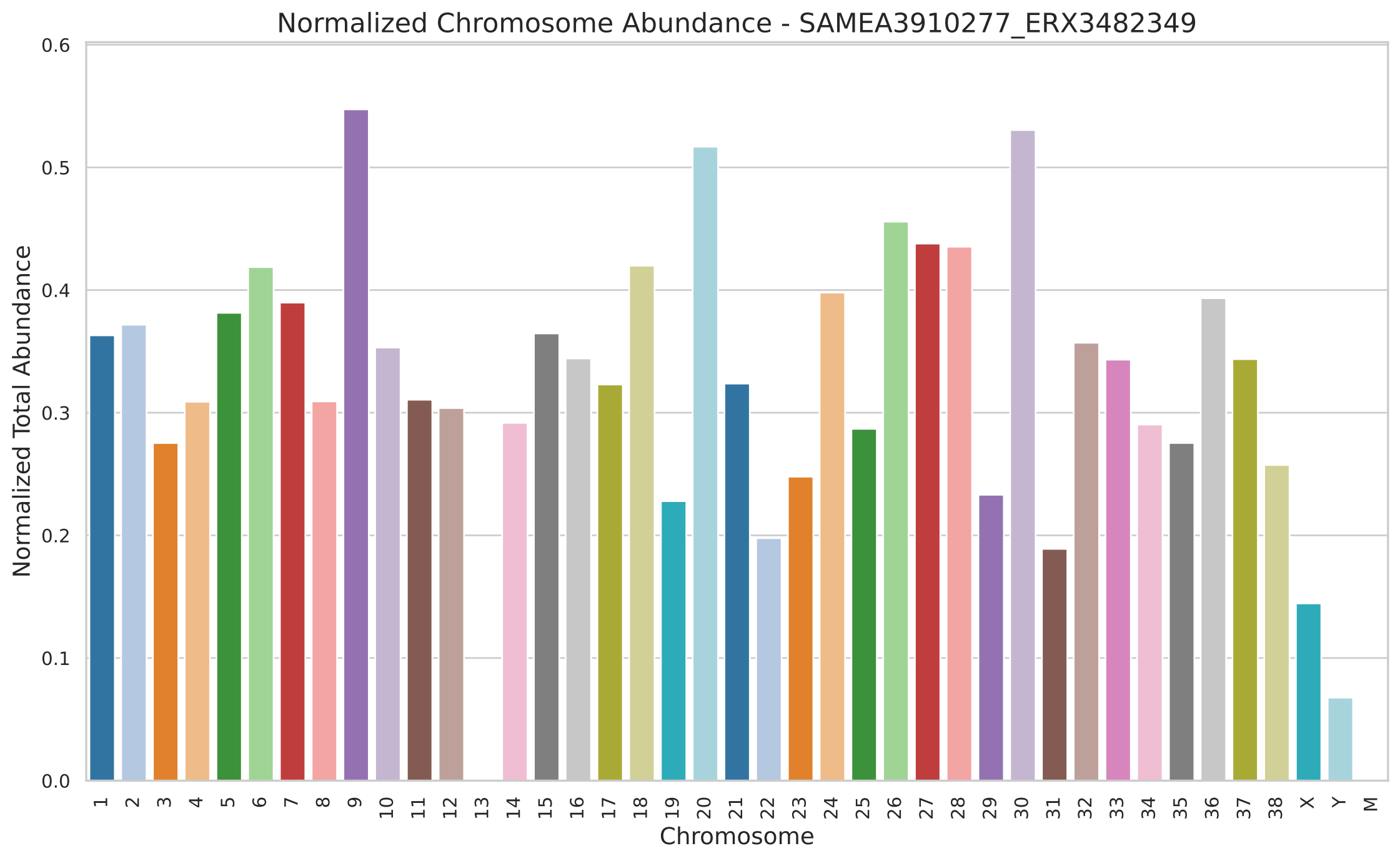

Normalized Chromosome Abundance - SAMEA3910369_ERX3482370
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

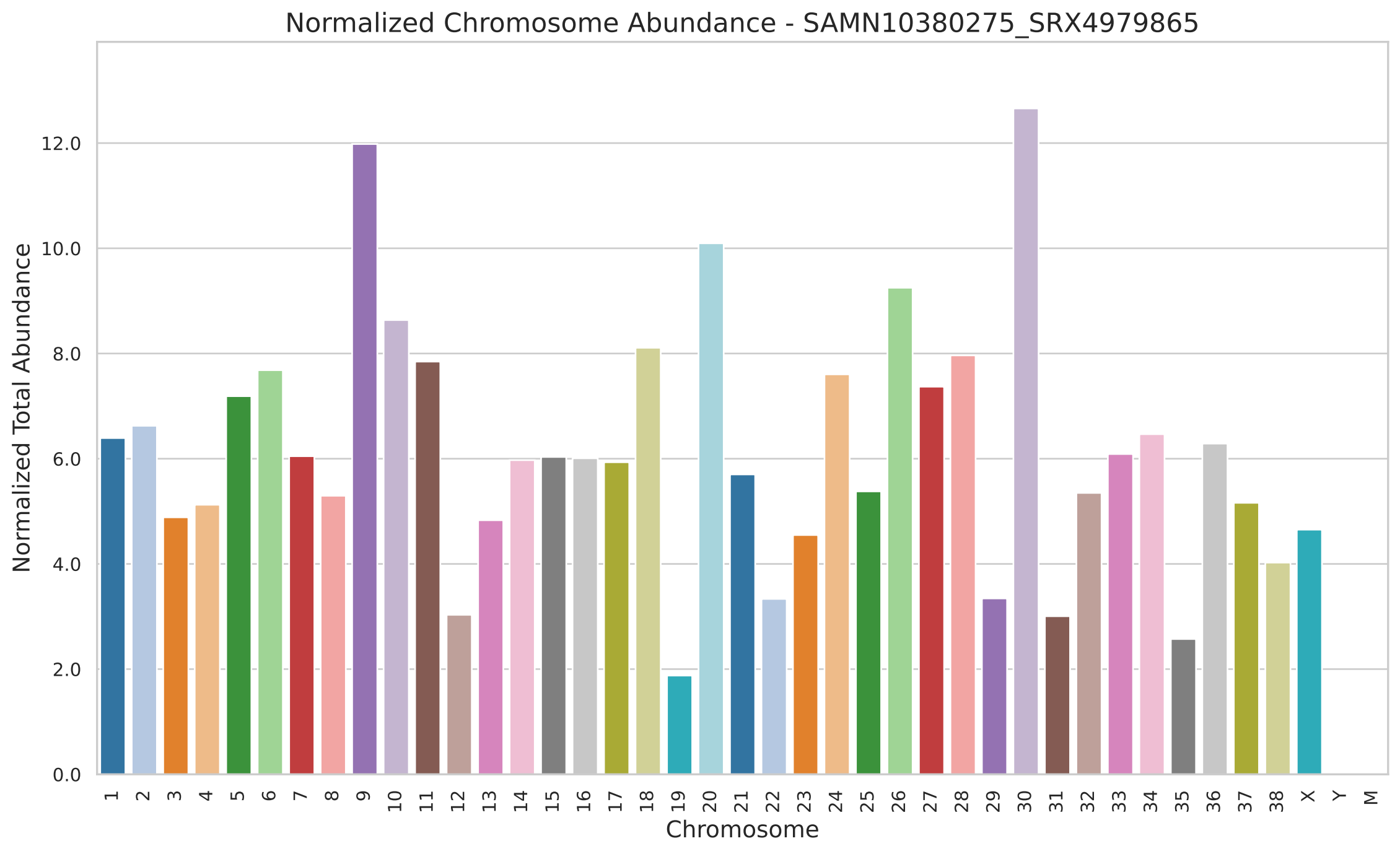

Normalized Chromosome Abundance - SAMEA3910282_ERX3482314
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

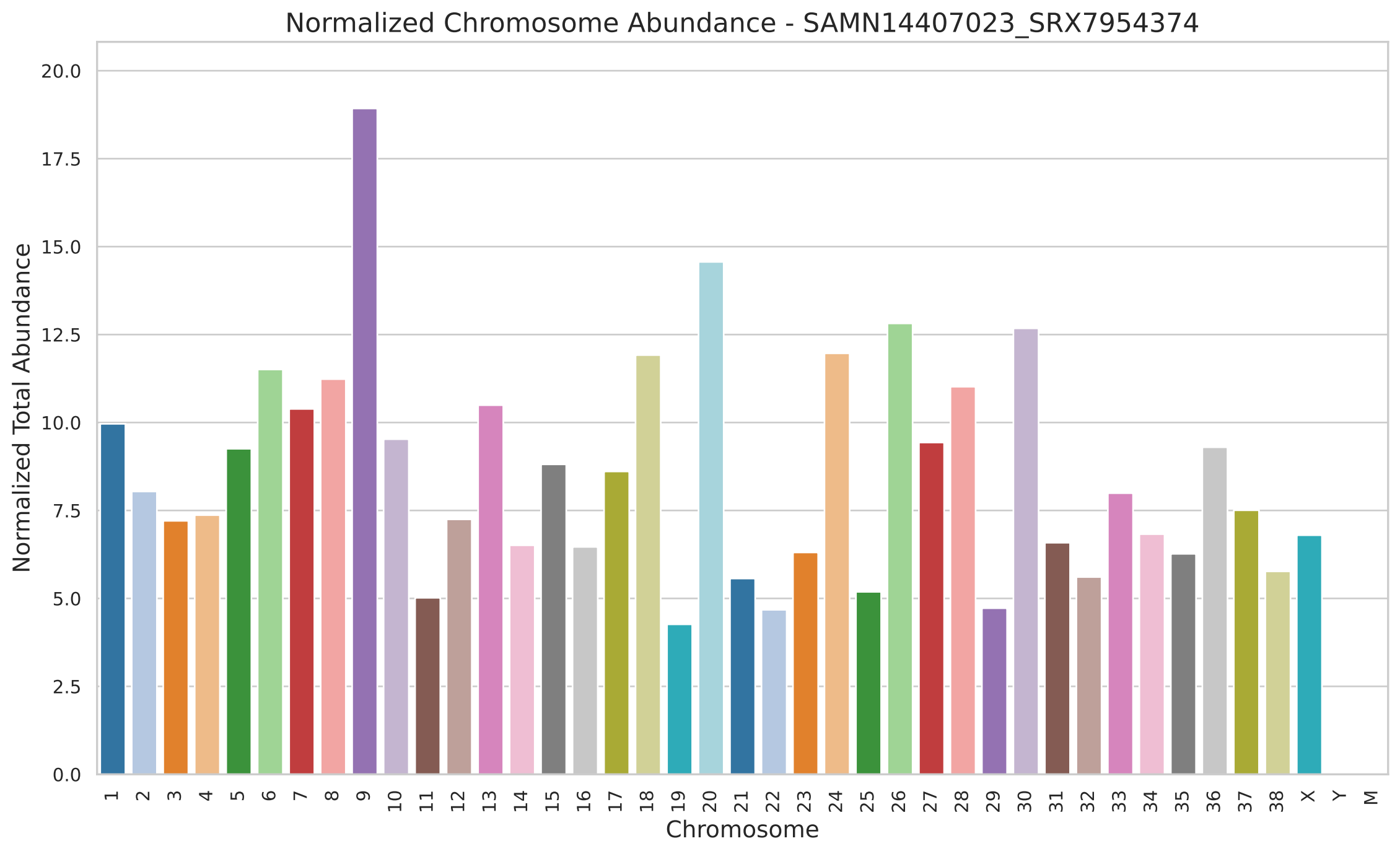

Normalized Chromosome Abundance - SAMEA3910301_ERX3482316
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

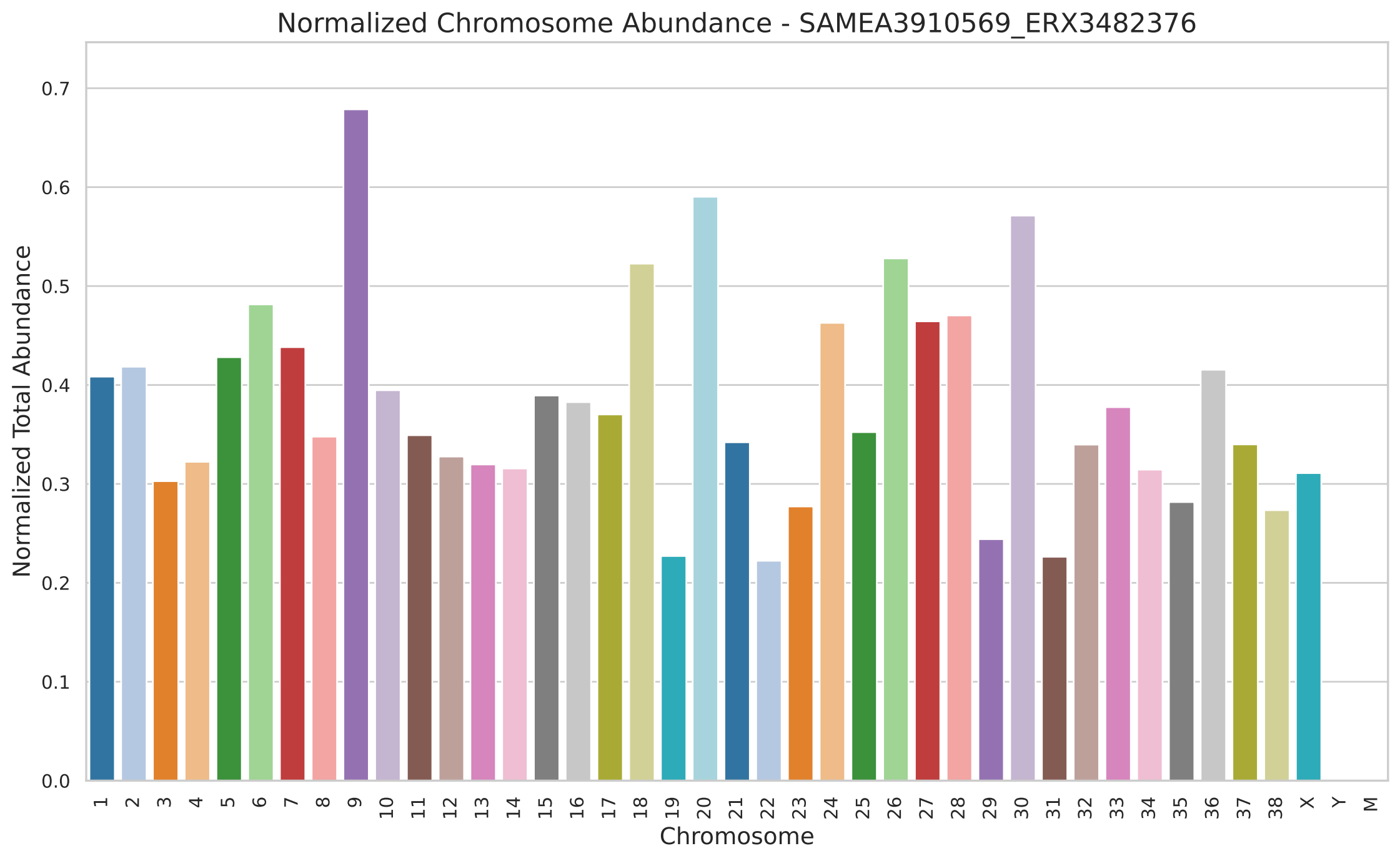

Normalized Chromosome Abundance - SAMEA3910519_ERX3482368
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

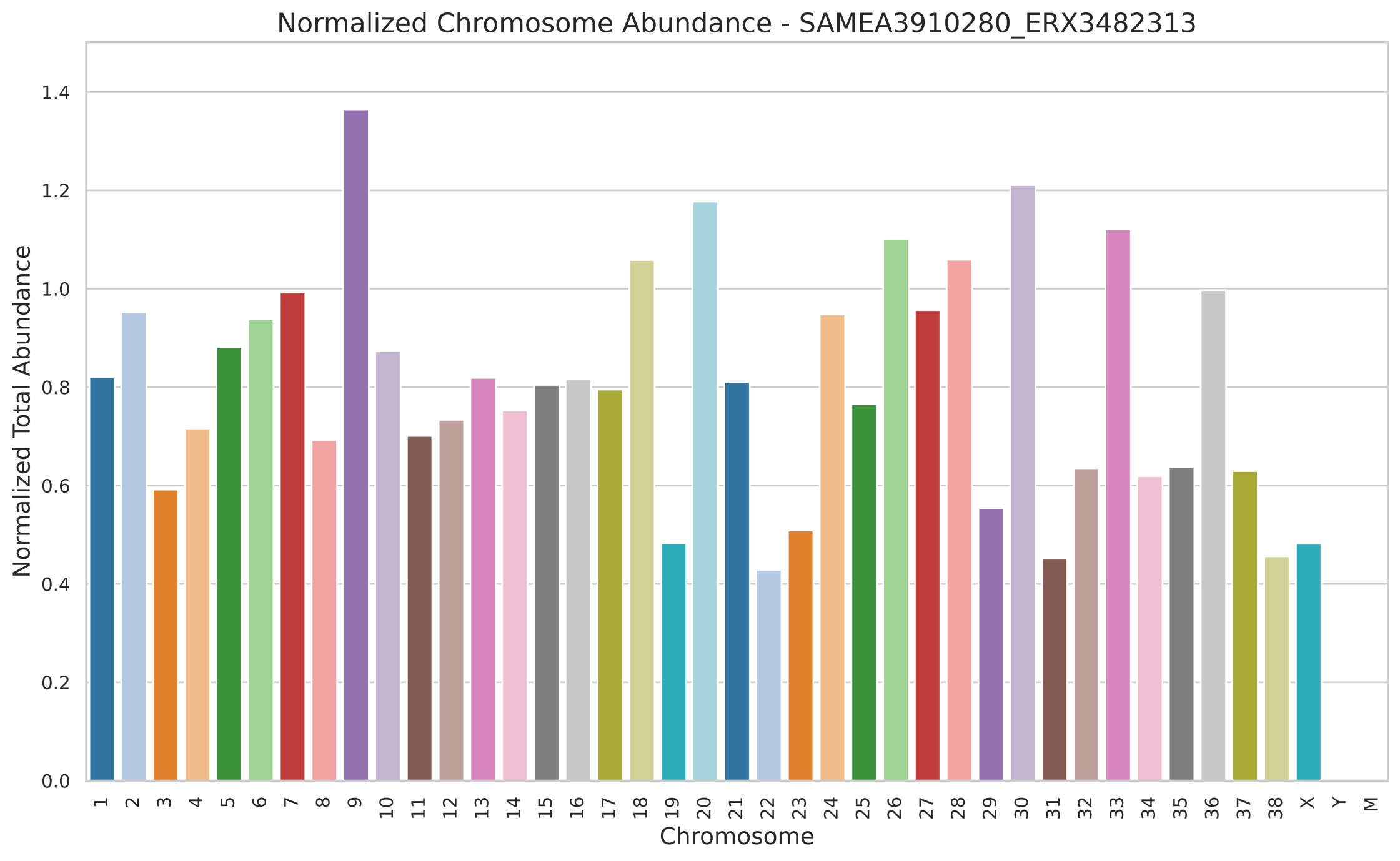

Normalized Chromosome Abundance - SAMEA5804394_ERX3482484
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

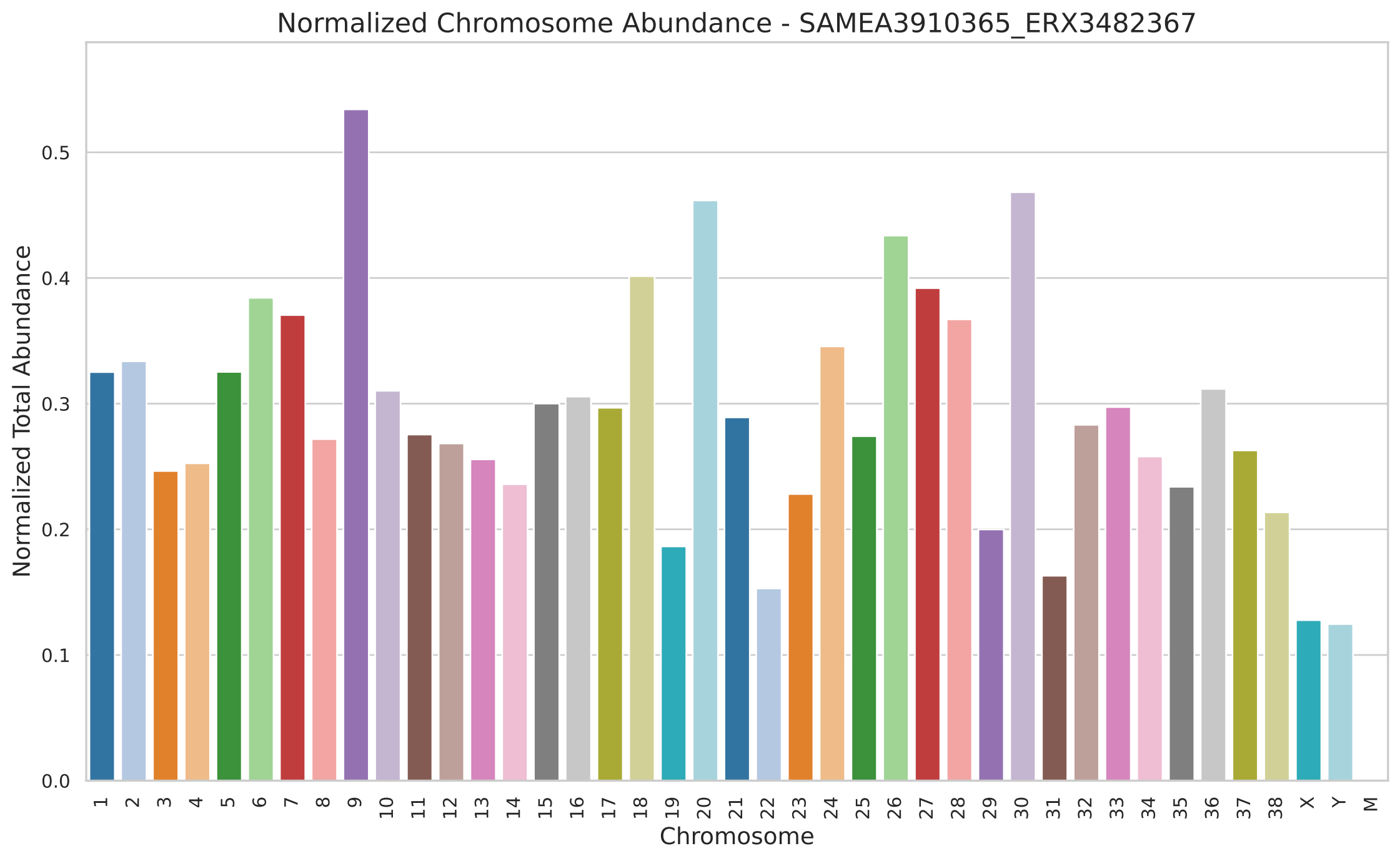

Normalized Chromosome Abundance - SAMEA3910277_ERX3482349
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

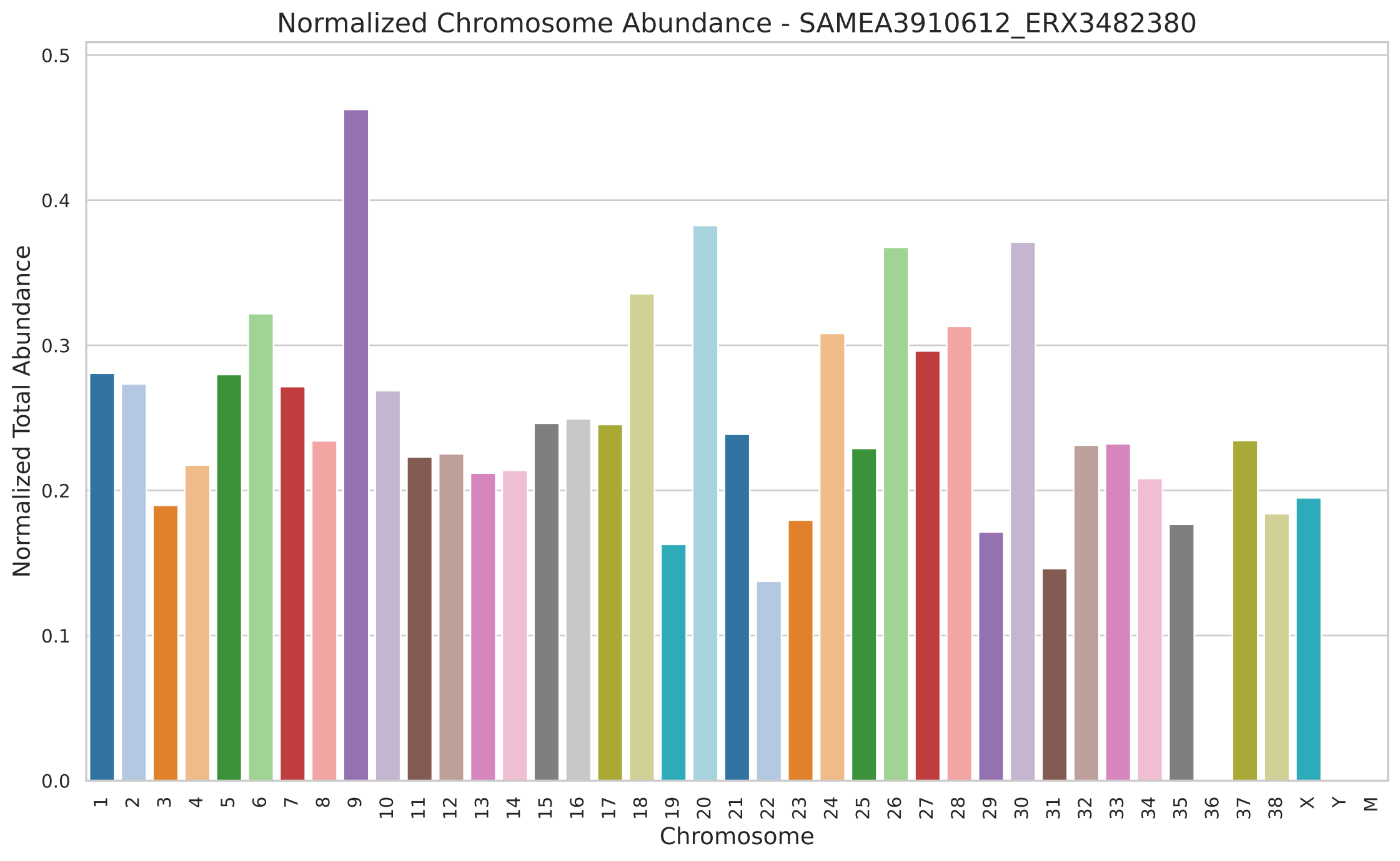

Normalized Chromosome Abundance - SAMN10380275_SRX4979865
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
12.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

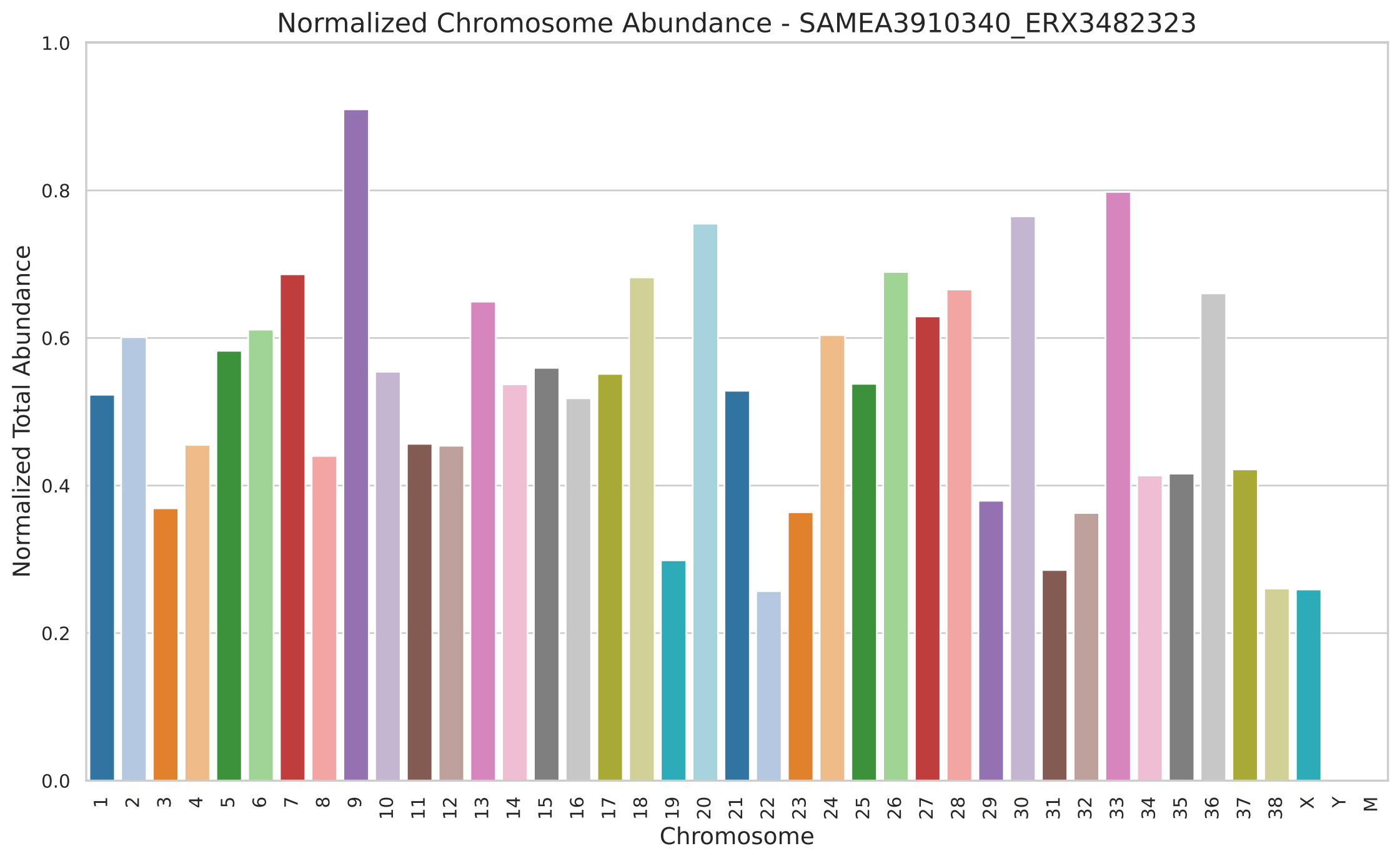

Normalized Chromosome Abundance - SAMN14407023_SRX7954374
Normalized Total Abundance
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5
20.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

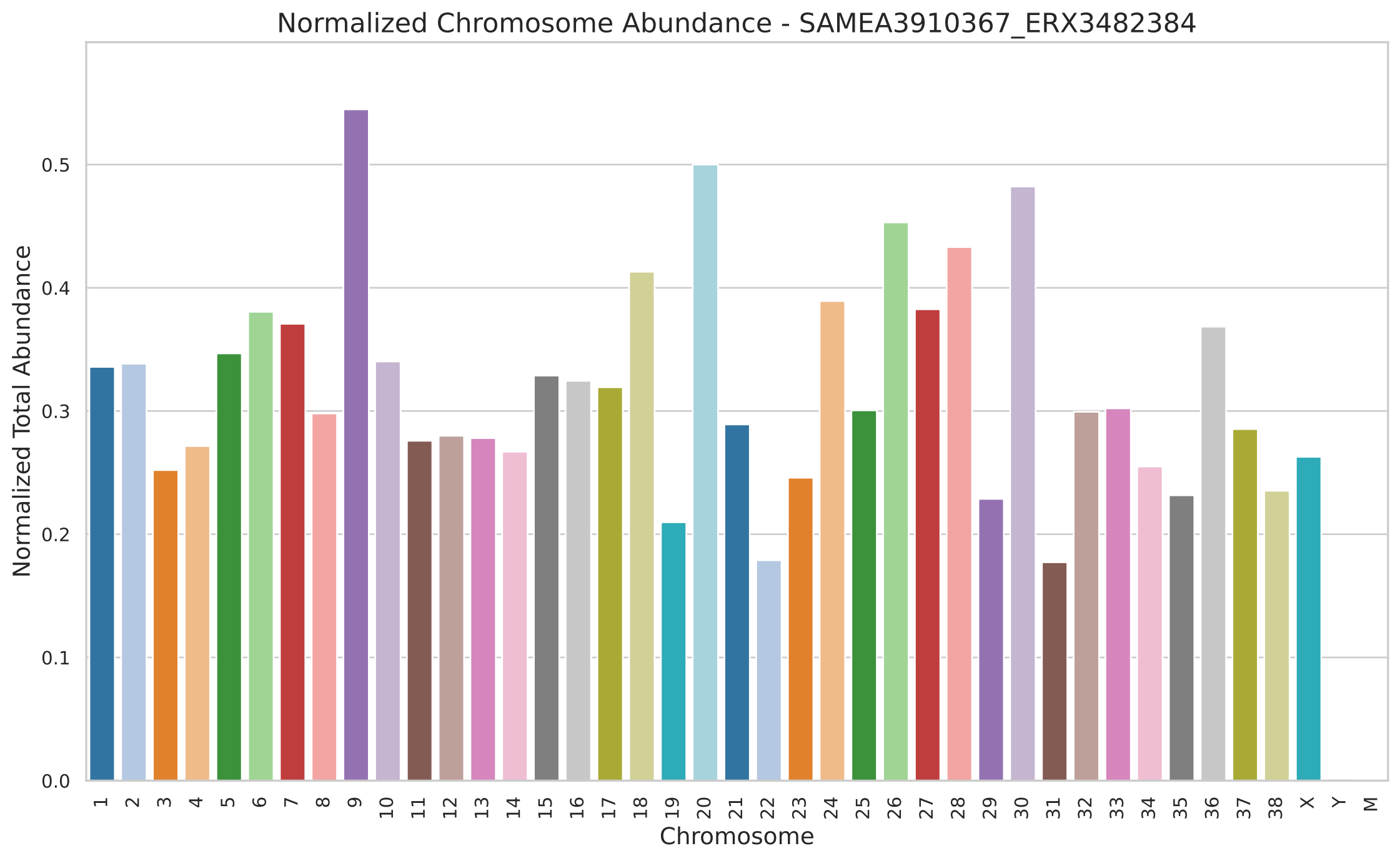

Normalized Chromosome Abundance - SAMEA3910569_ERX3482376
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

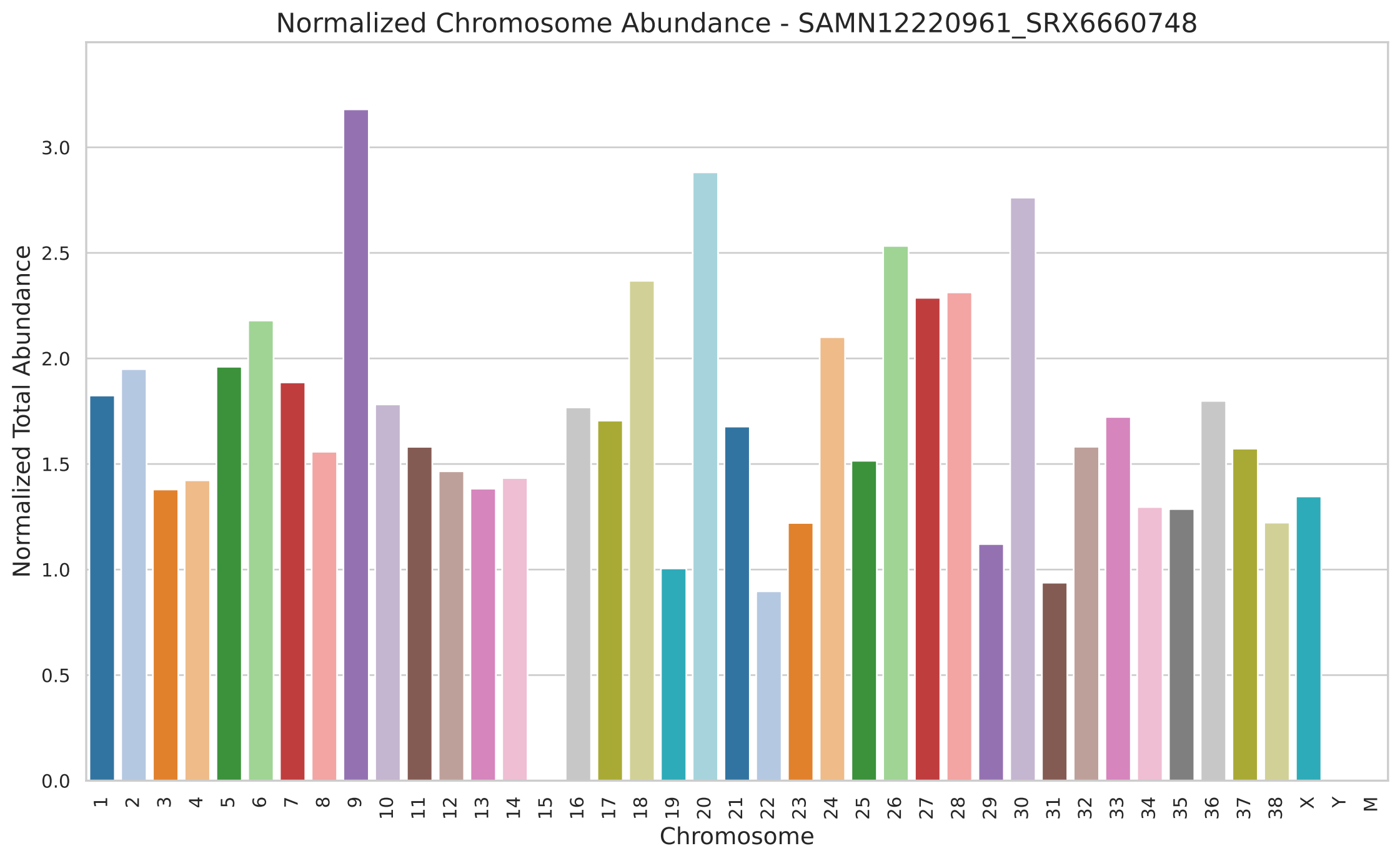

Normalized Chromosome Abundance - SAMEA3910280_ERX3482313
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

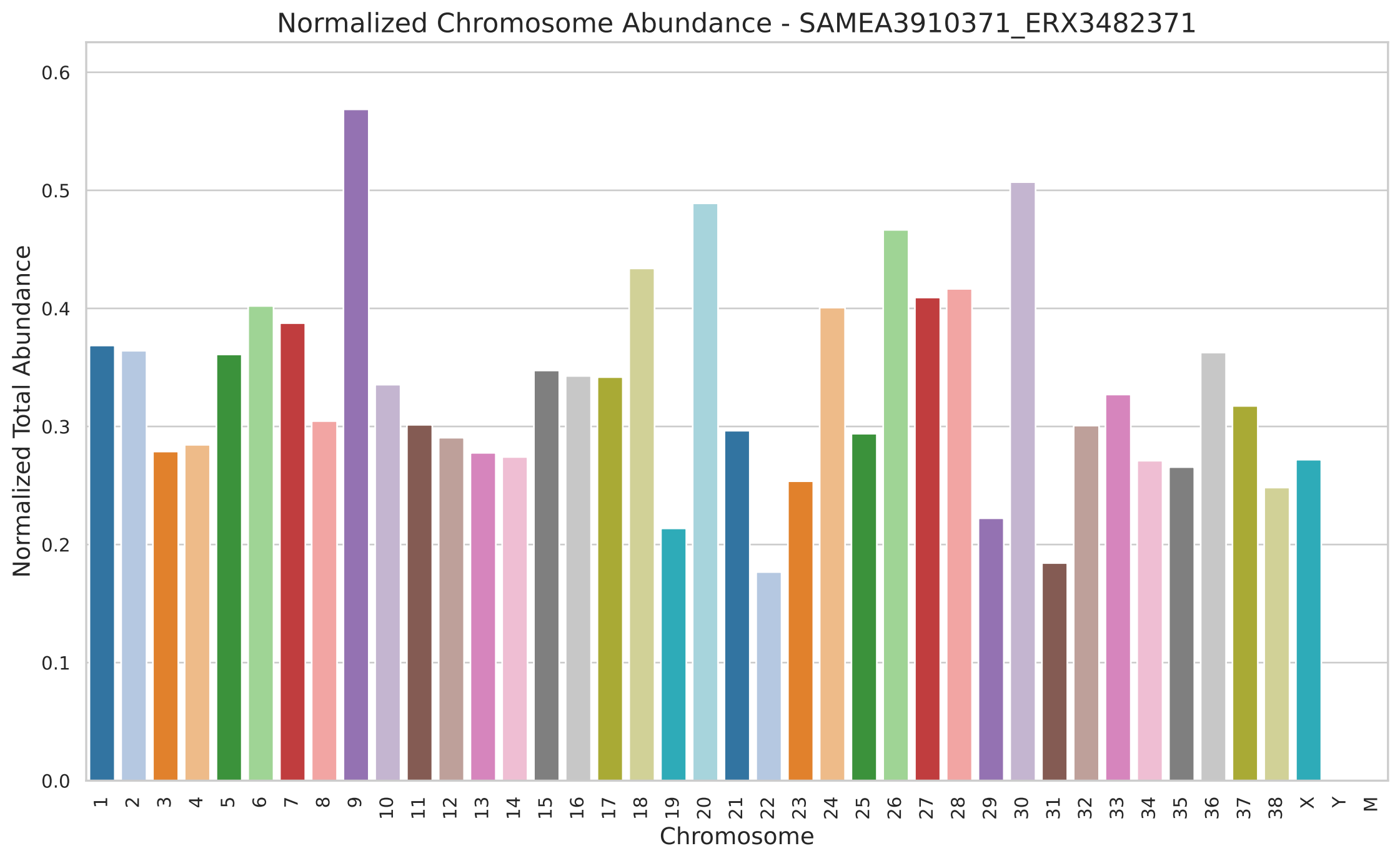

Normalized Chromosome Abundance - SAMEA3910365_ERX3482367
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

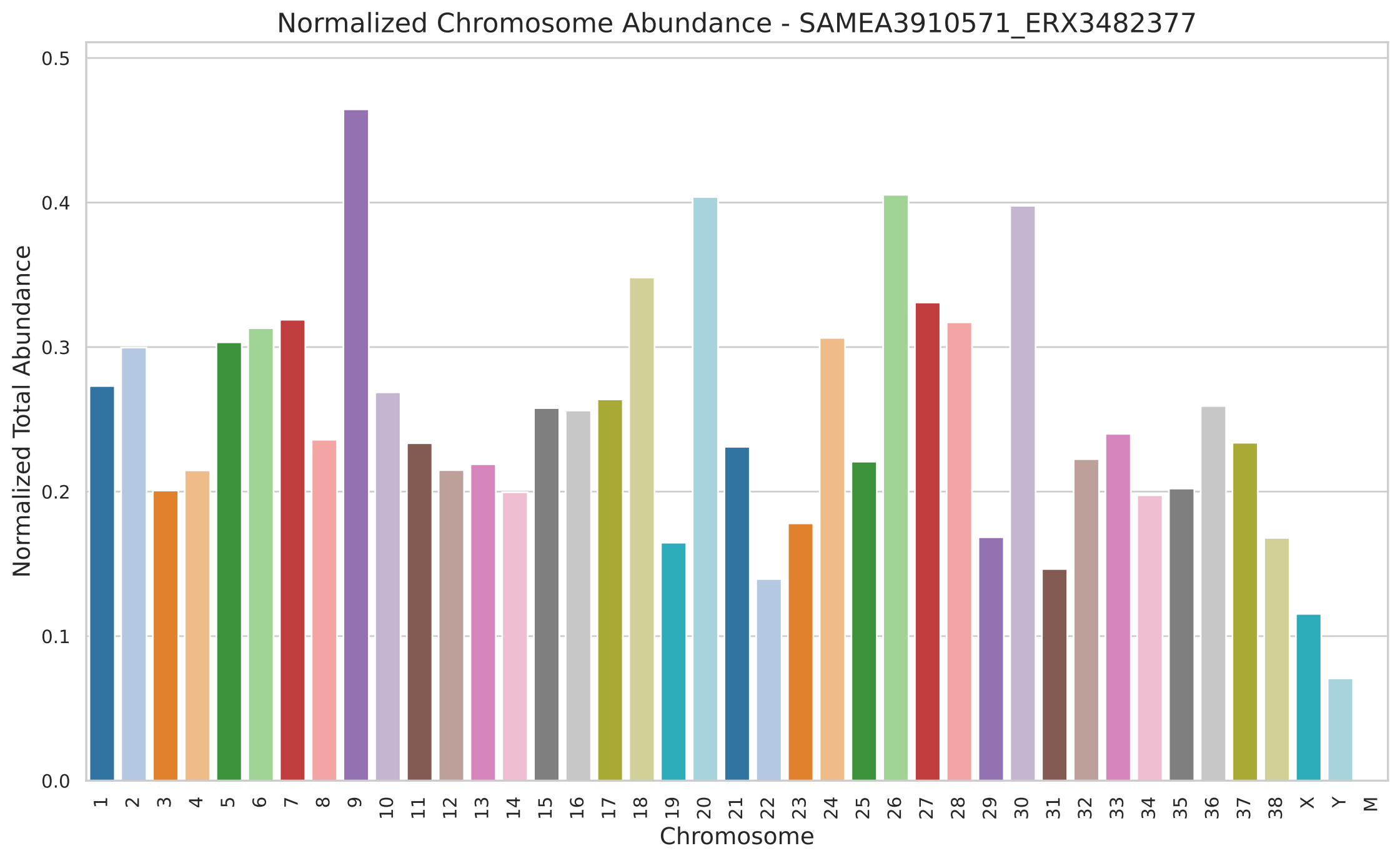

Normalized Chromosome Abundance - SAMEA3910612_ERX3482380
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

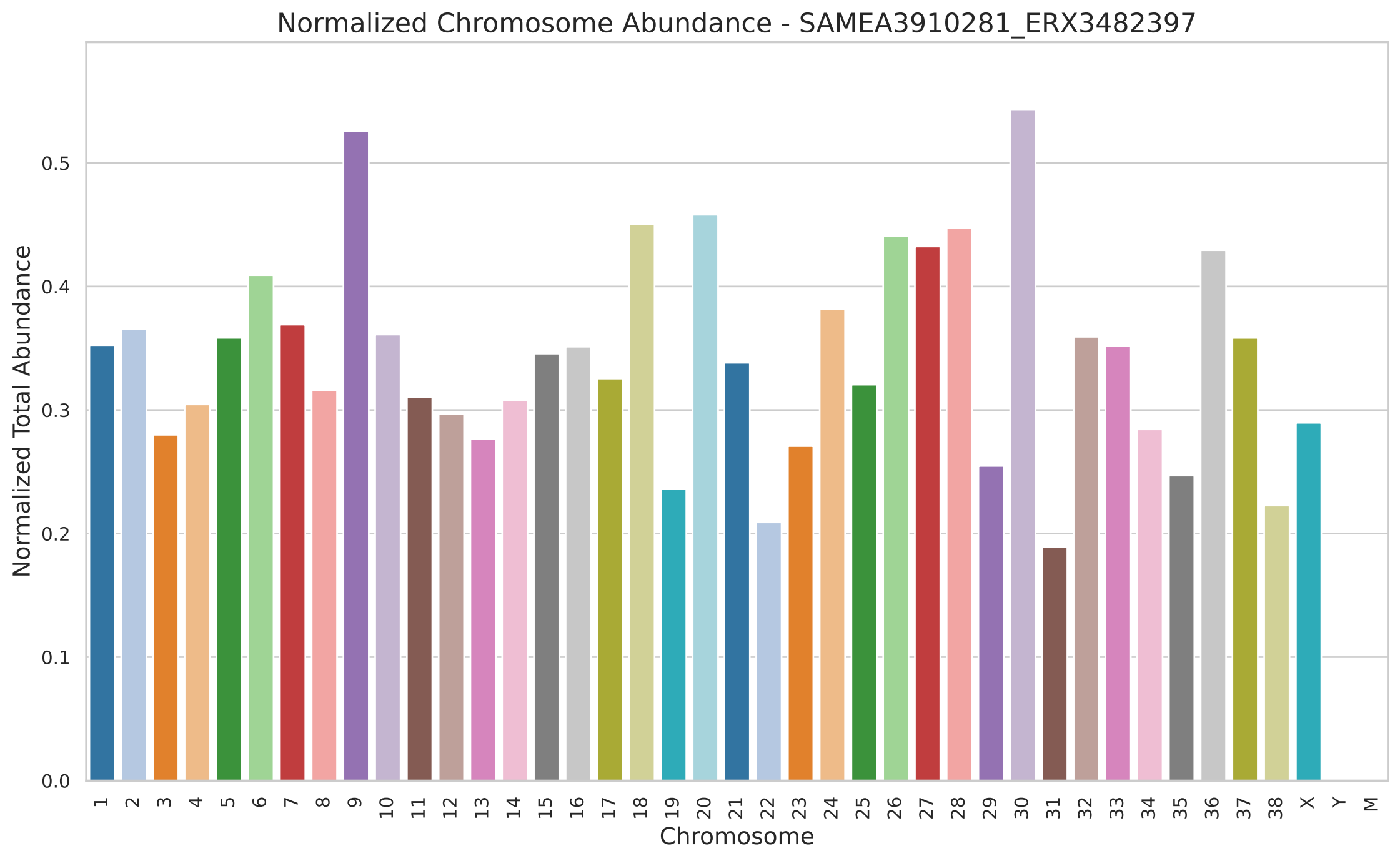

Normalized Chromosome Abundance - SAMEA3910340_ERX3482323
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

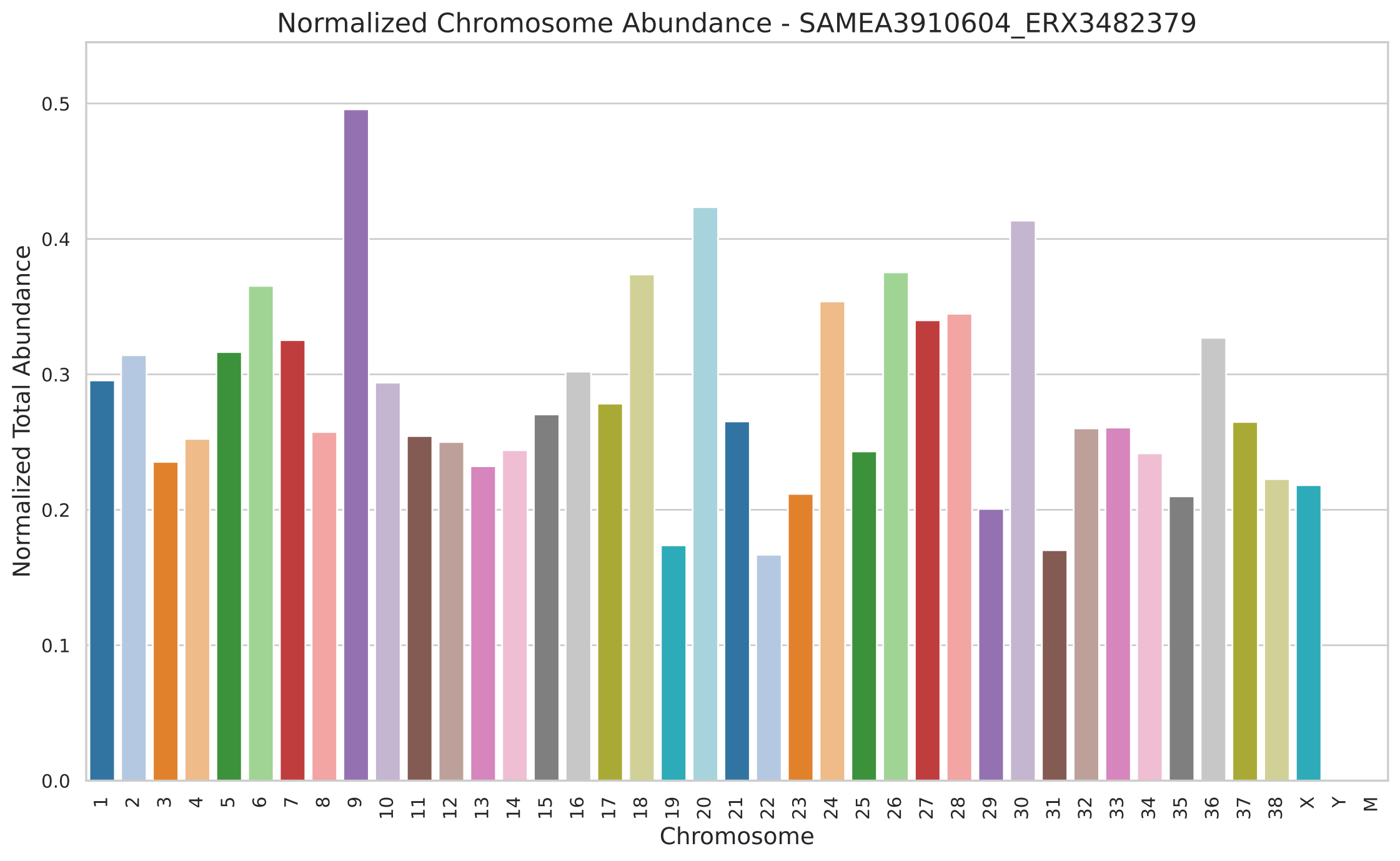

Normalized Chromosome Abundance - SAMEA3910367_ERX3482384
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

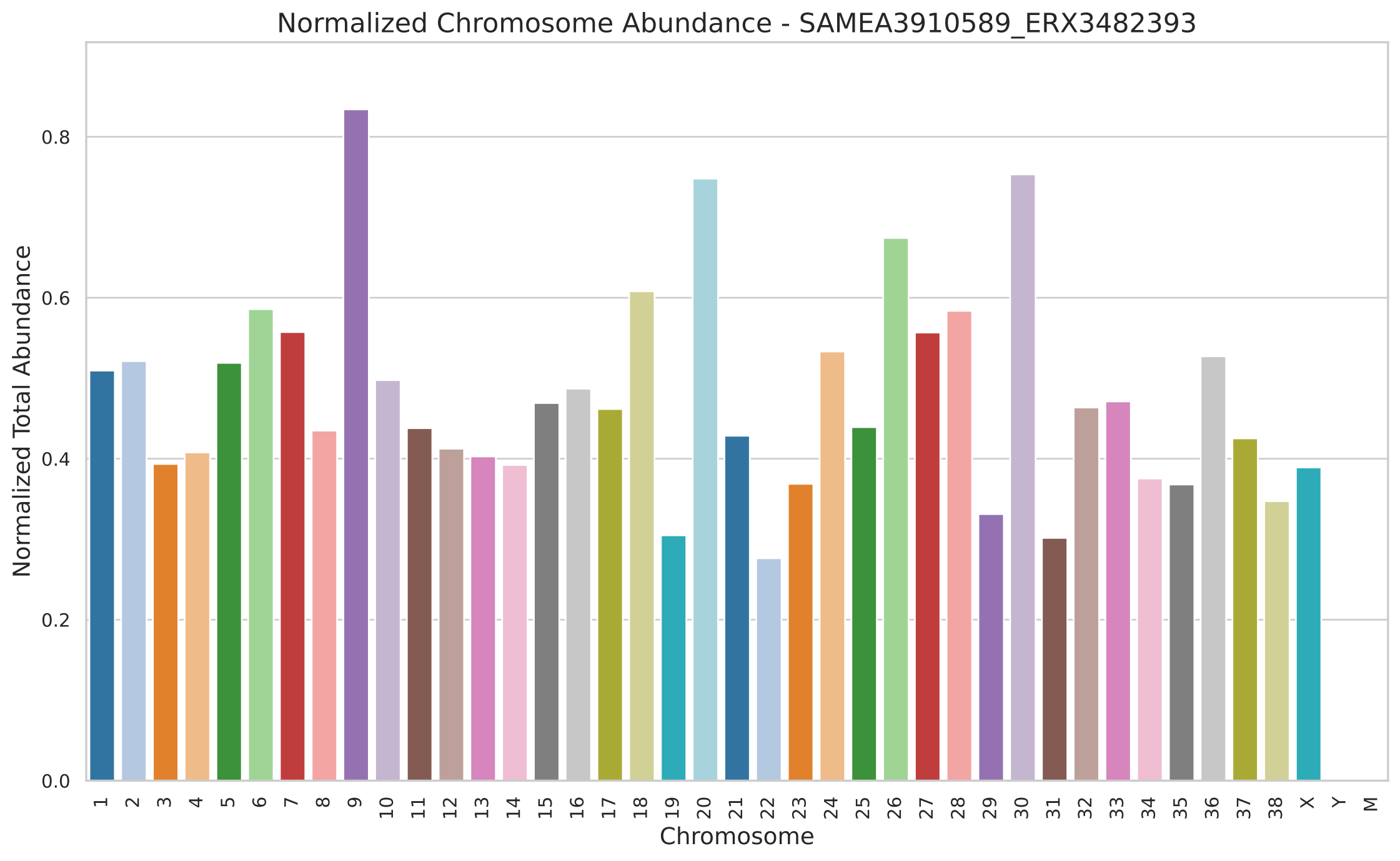

Normalized Chromosome Abundance - SAMN12220961_SRX6660748
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

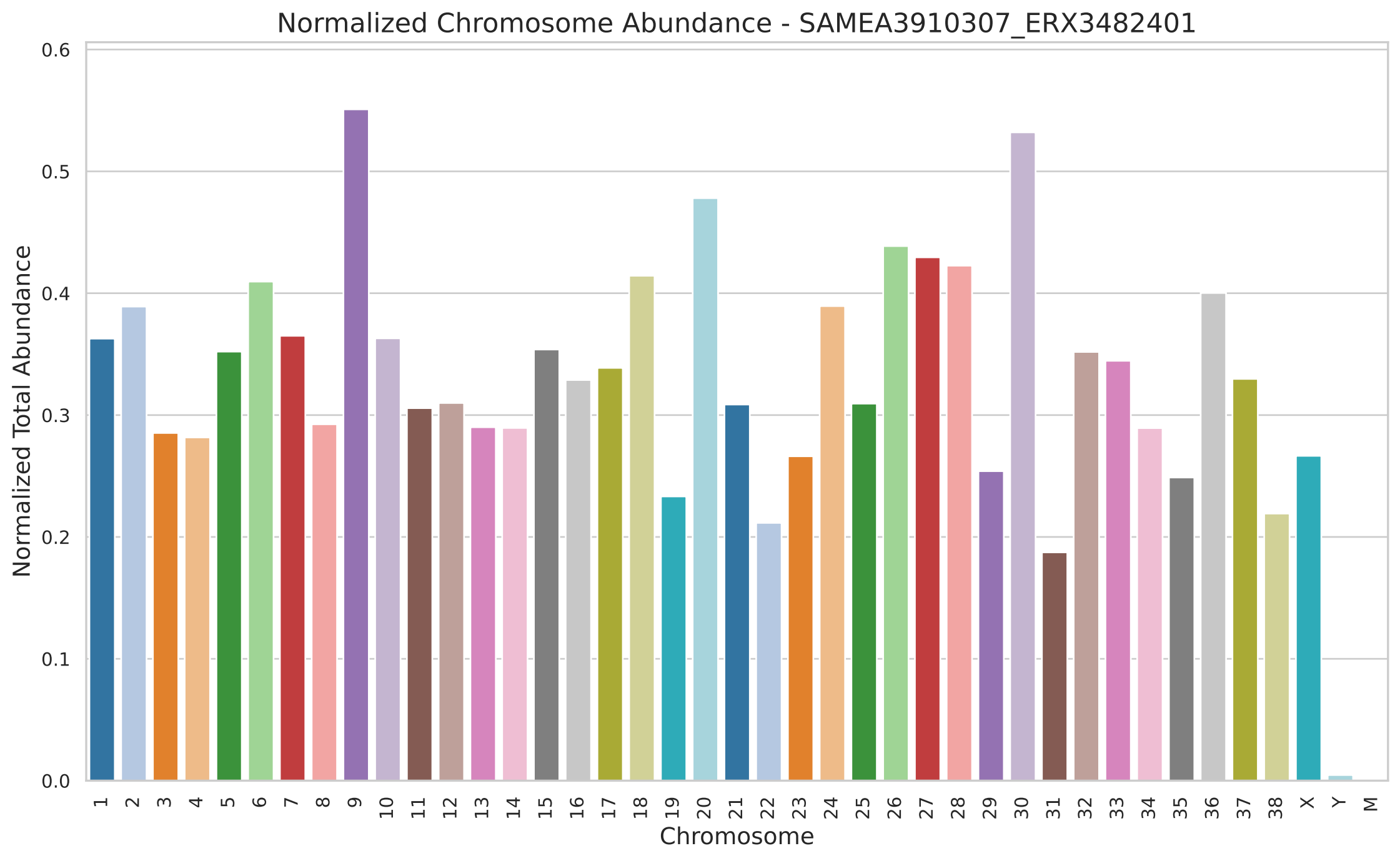

Normalized Chromosome Abundance - SAMEA3910371_ERX3482371
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

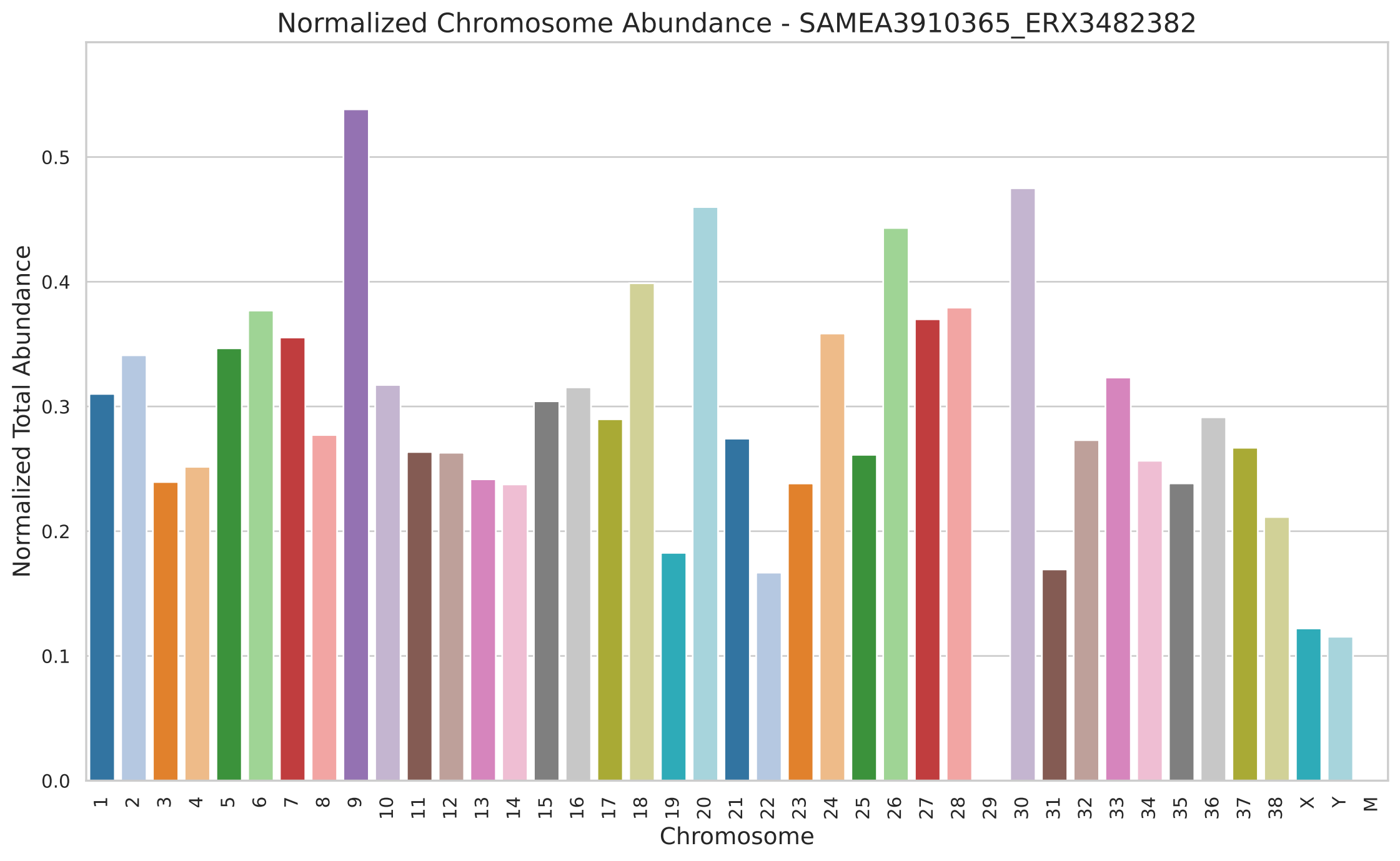

Normalized Chromosome Abundance - SAMEA3910571_ERX3482377
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

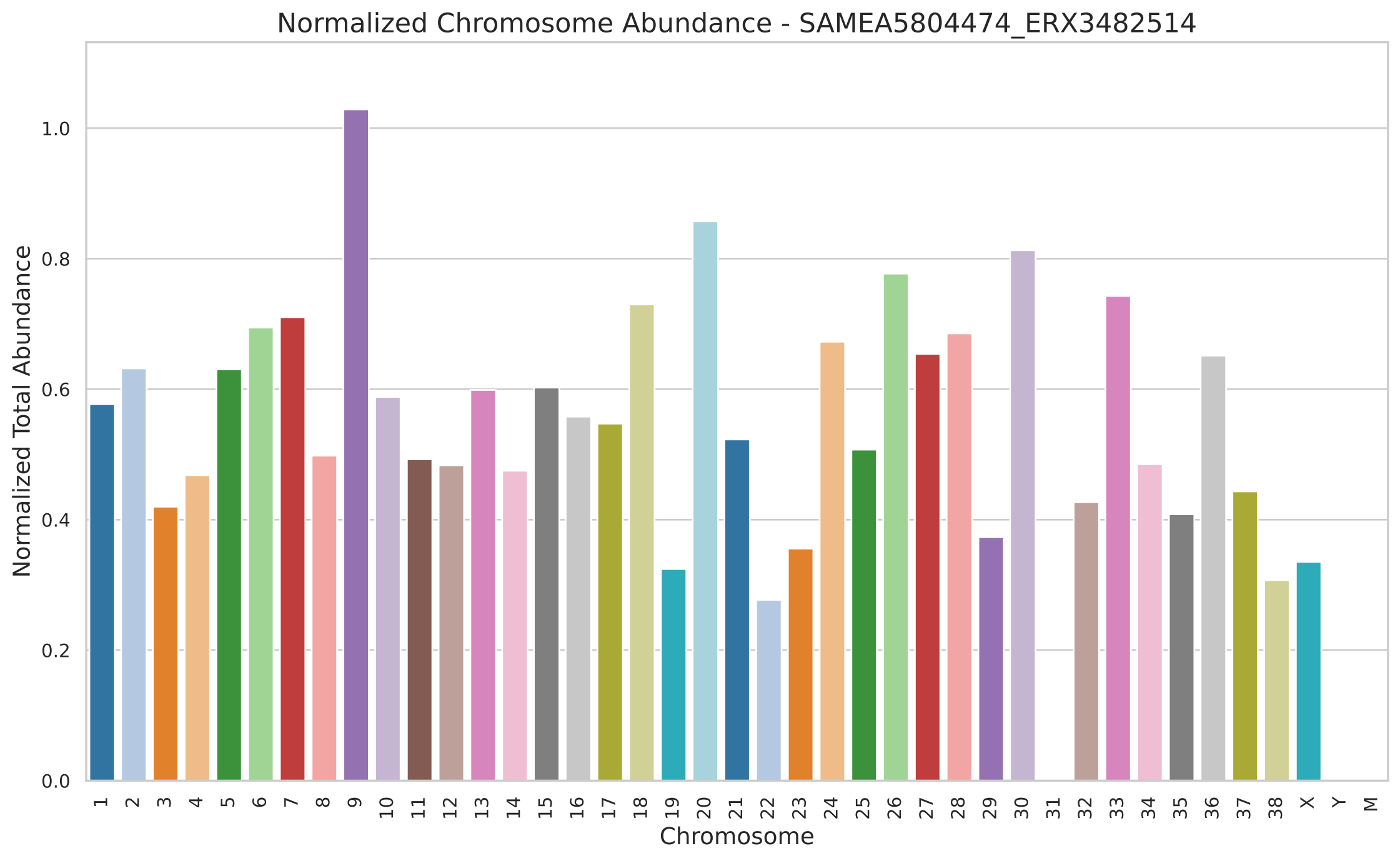

Normalized Chromosome Abundance - SAMEA3910281_ERX3482397
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

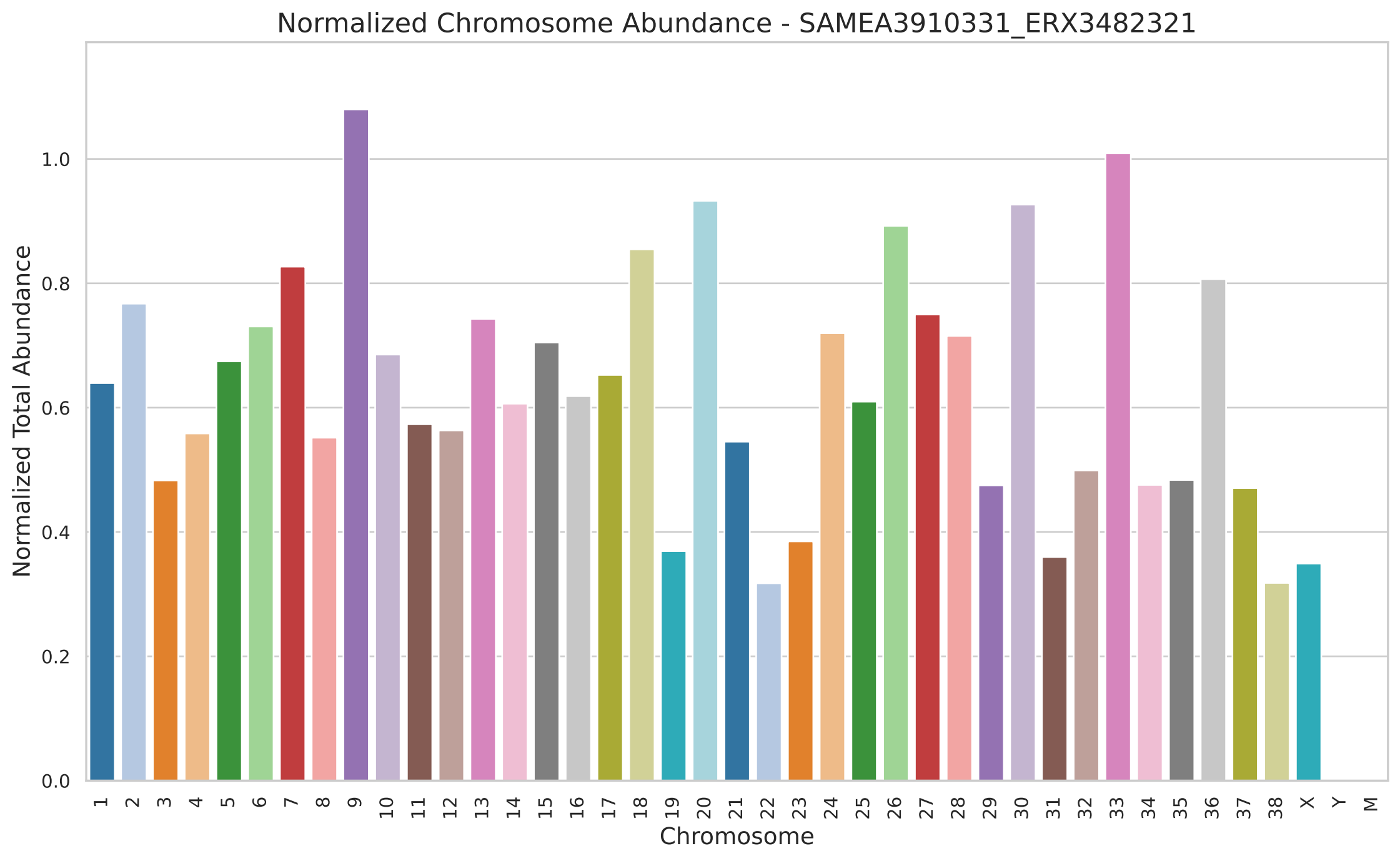

Normalized Chromosome Abundance - SAMEA3910604_ERX3482379
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

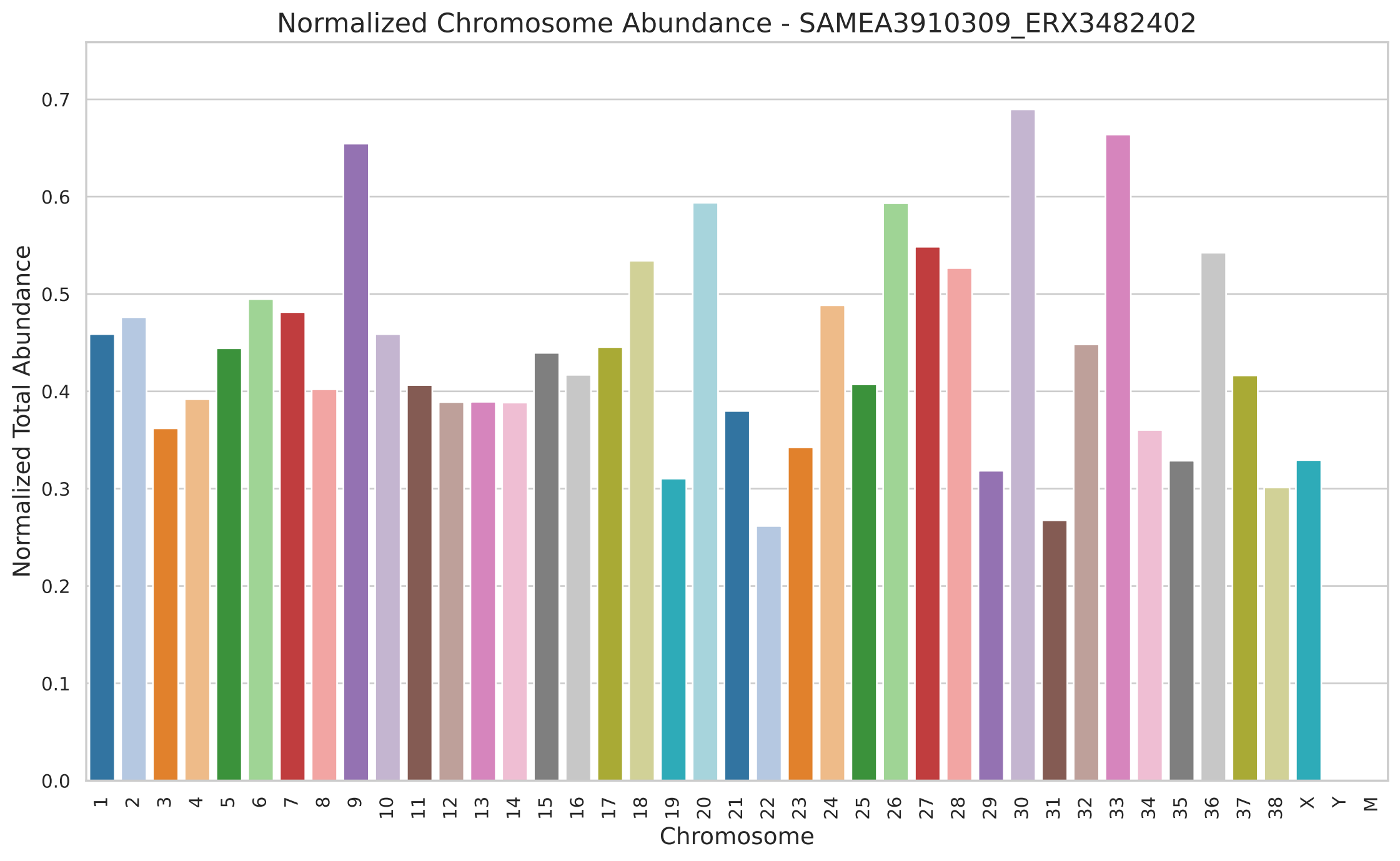

Normalized Chromosome Abundance - SAMEA3910589_ERX3482393
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

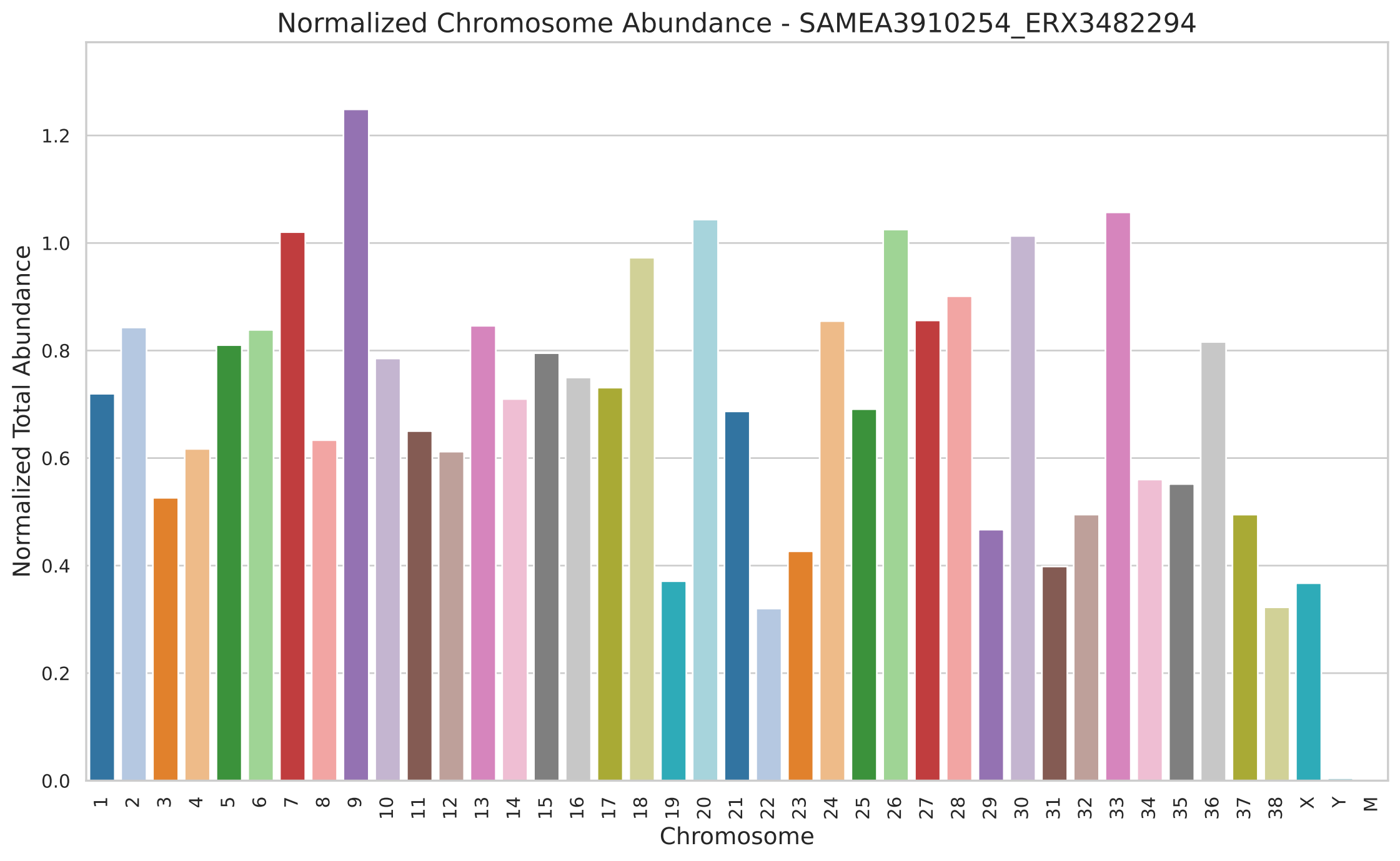

Normalized Chromosome Abundance - SAMEA3910307_ERX3482401
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

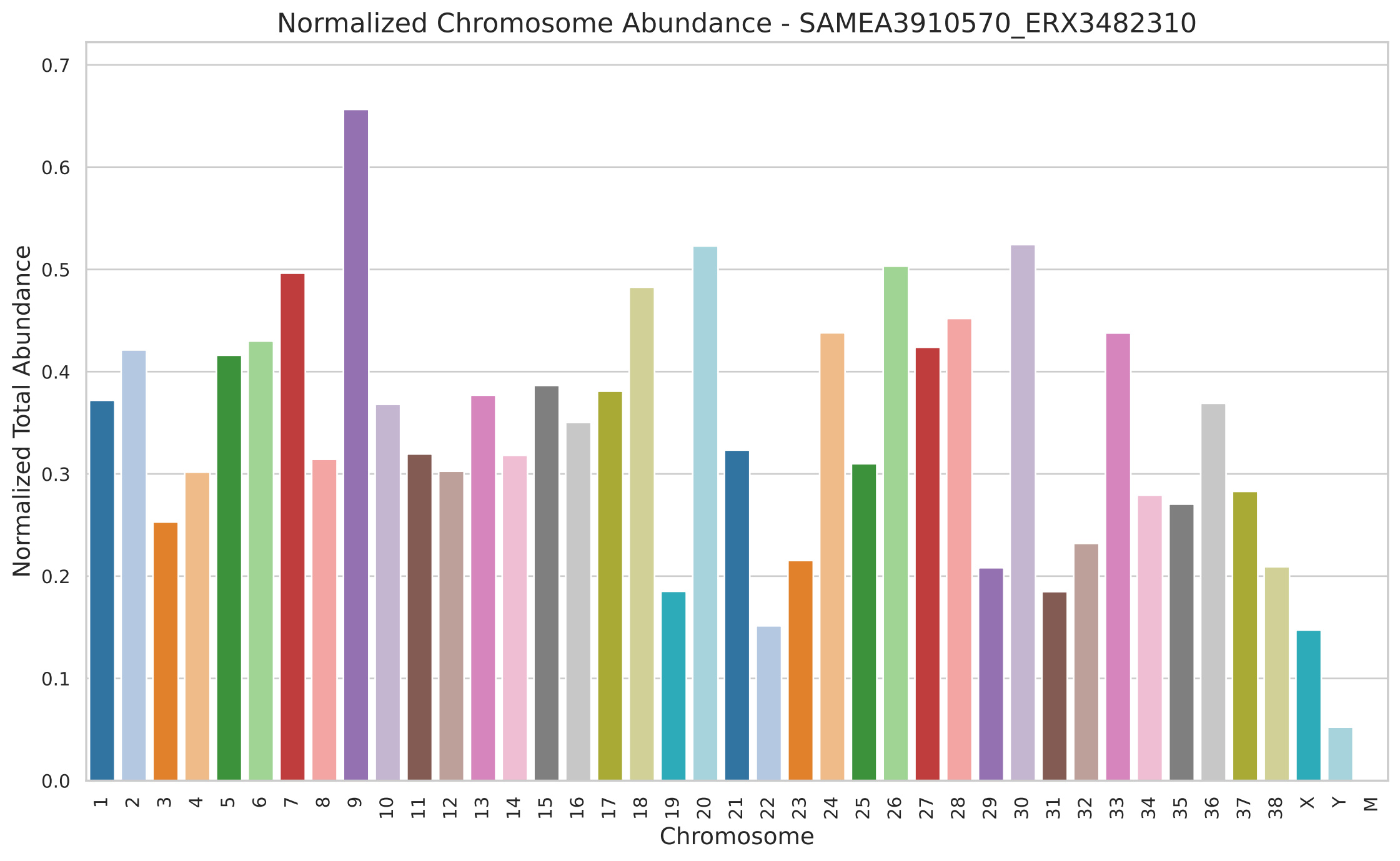

Normalized Chromosome Abundance - SAMEA3910365_ERX3482382
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

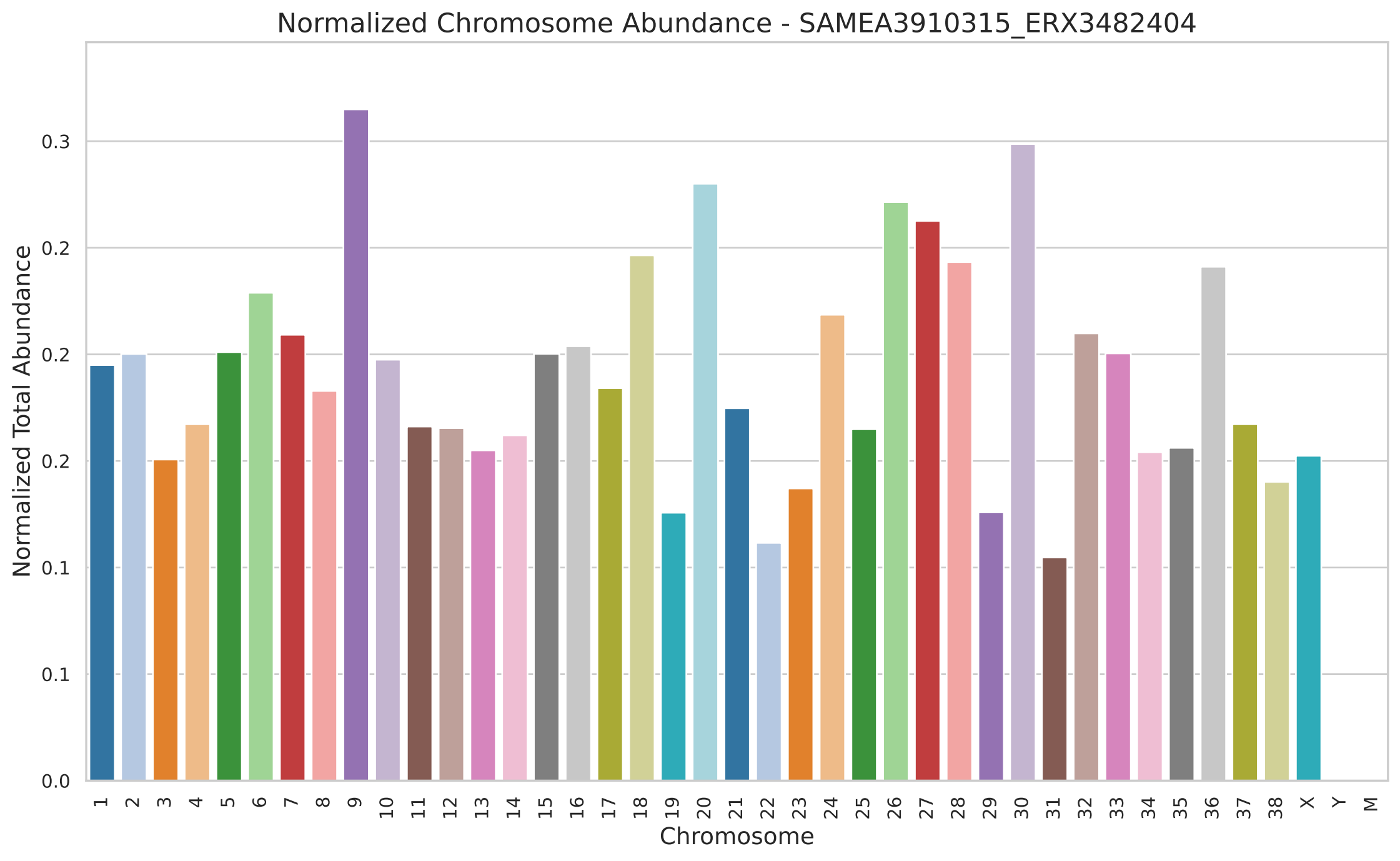

Normalized Chromosome Abundance - SAMEA5804474_ERX3482514
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

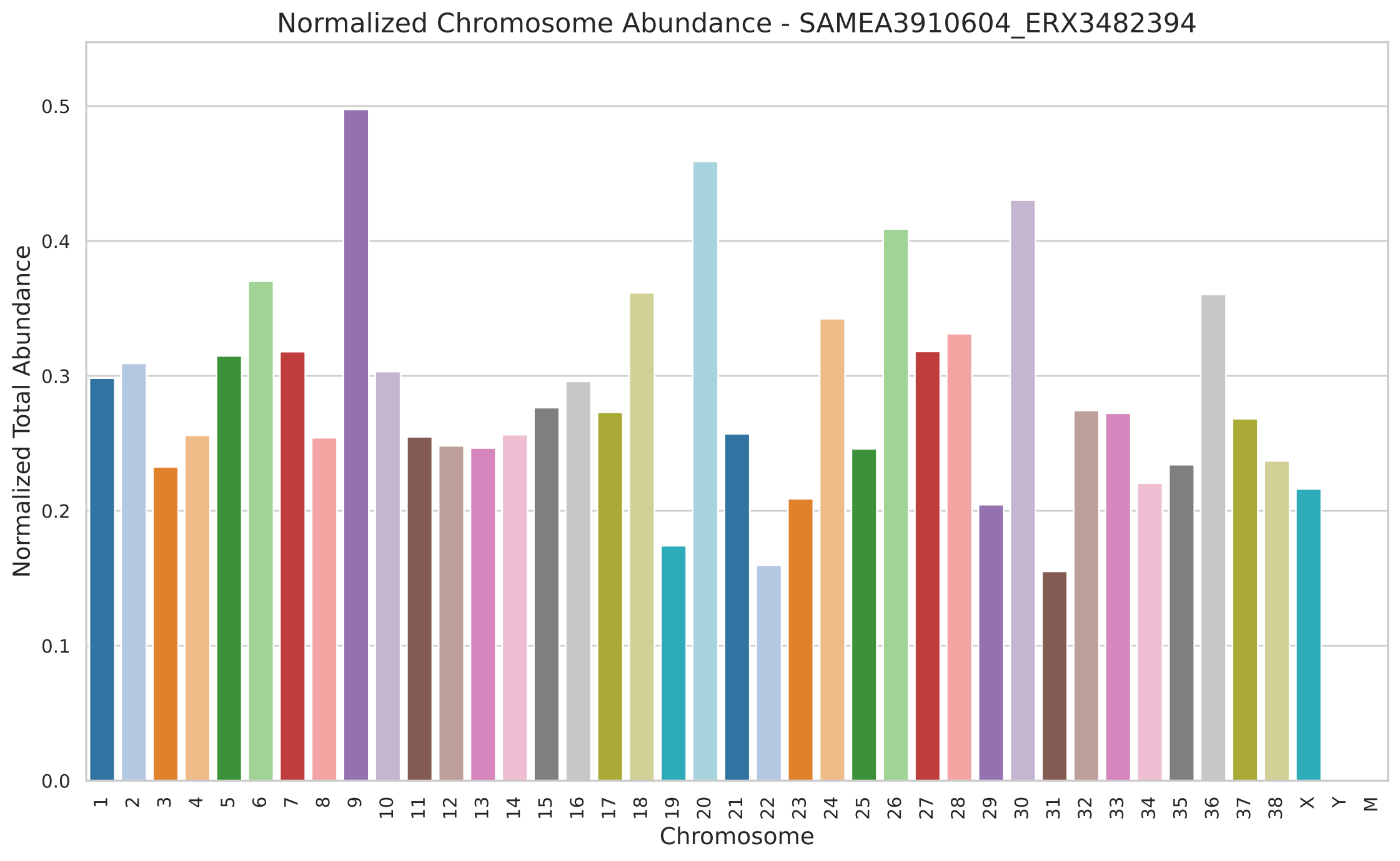

Normalized Chromosome Abundance - SAMEA3910331_ERX3482321
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

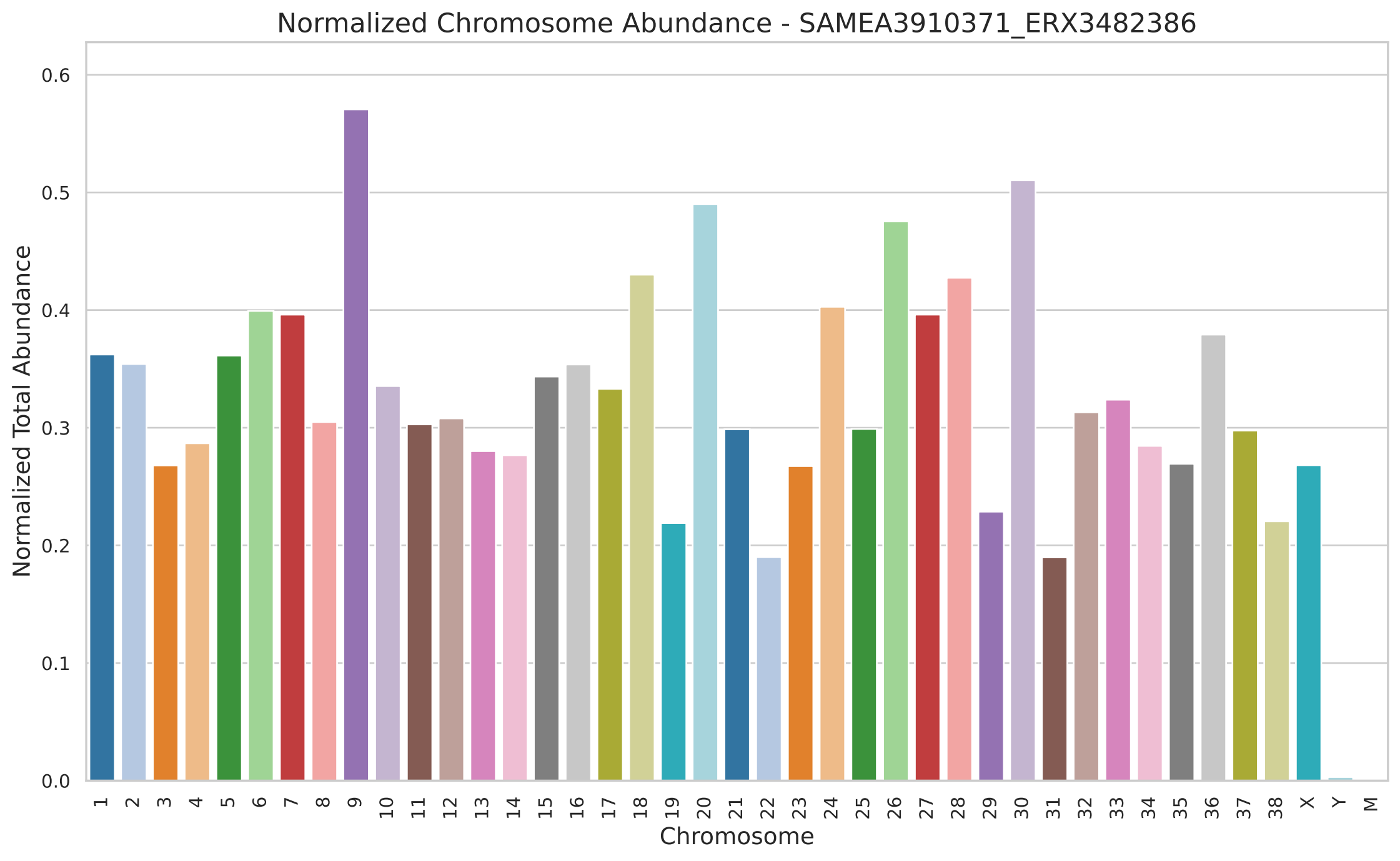

Normalized Chromosome Abundance - SAMEA3910309_ERX3482402
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

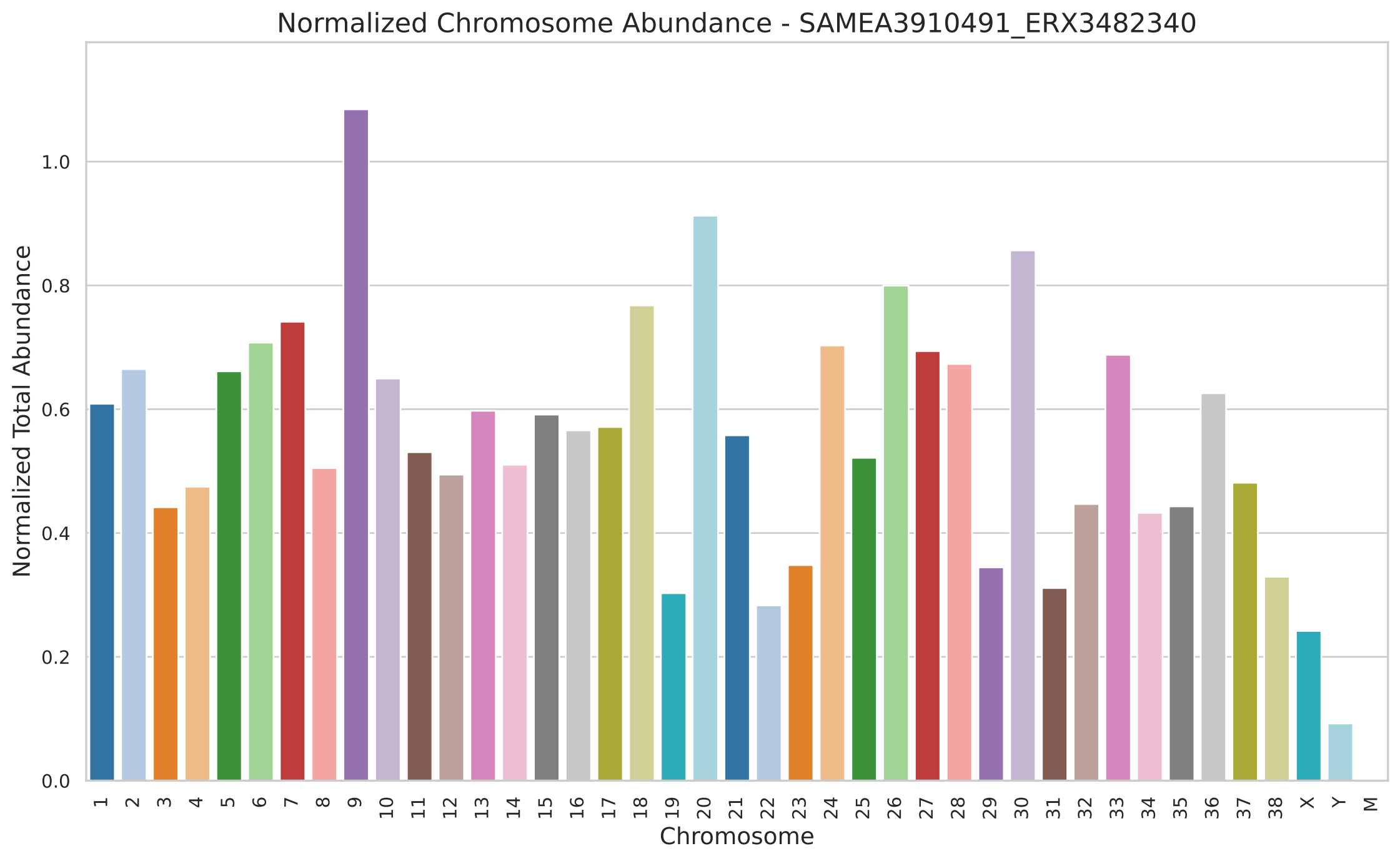

Normalized Chromosome Abundance - SAMEA3910254_ERX3482294
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

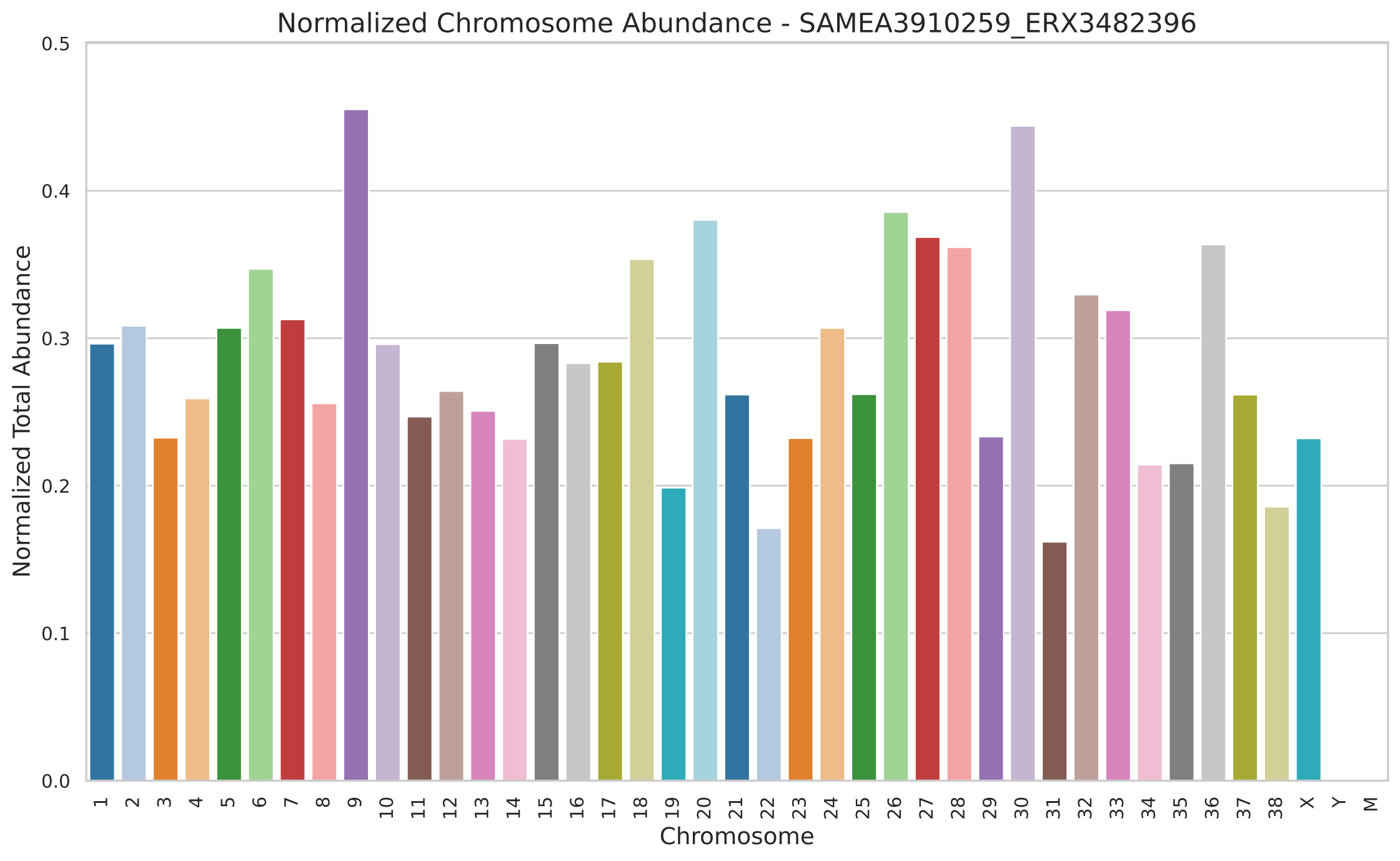

Normalized Chromosome Abundance - SAMEA3910570_ERX3482310
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

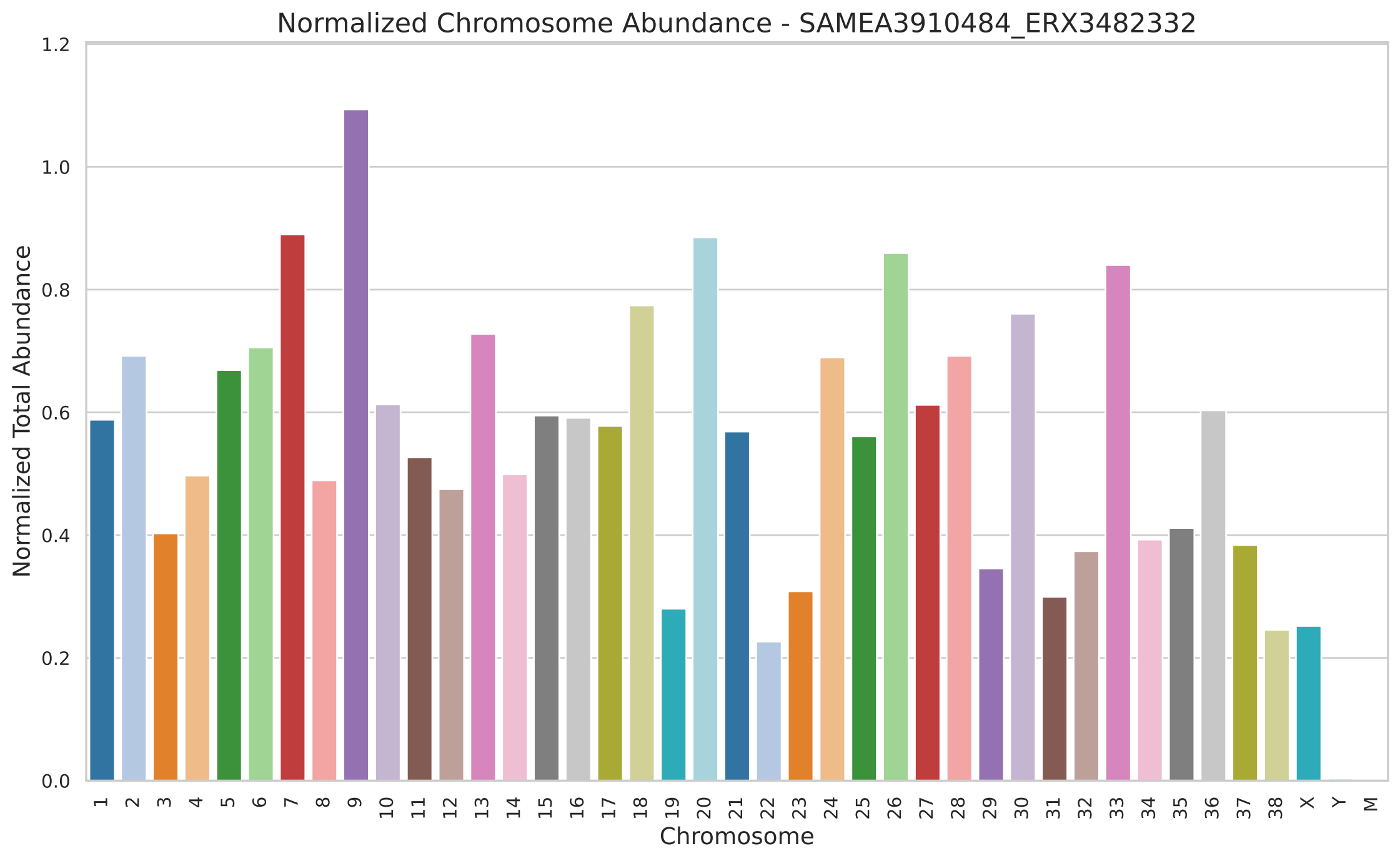

Normalized Chromosome Abundance - SAMEA3910315_ERX3482404
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

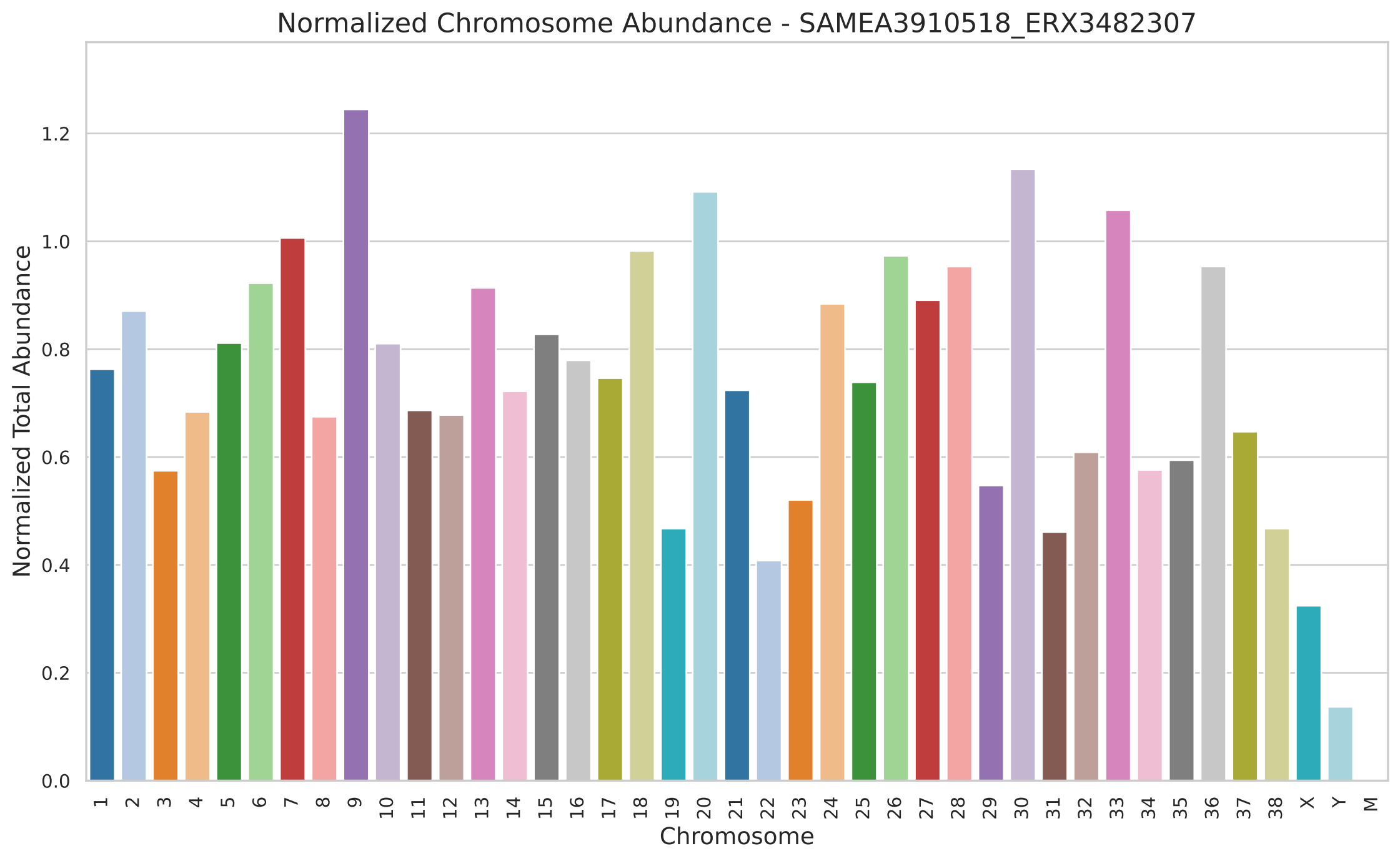

Normalized Chromosome Abundance - SAMEA3910604_ERX3482394
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

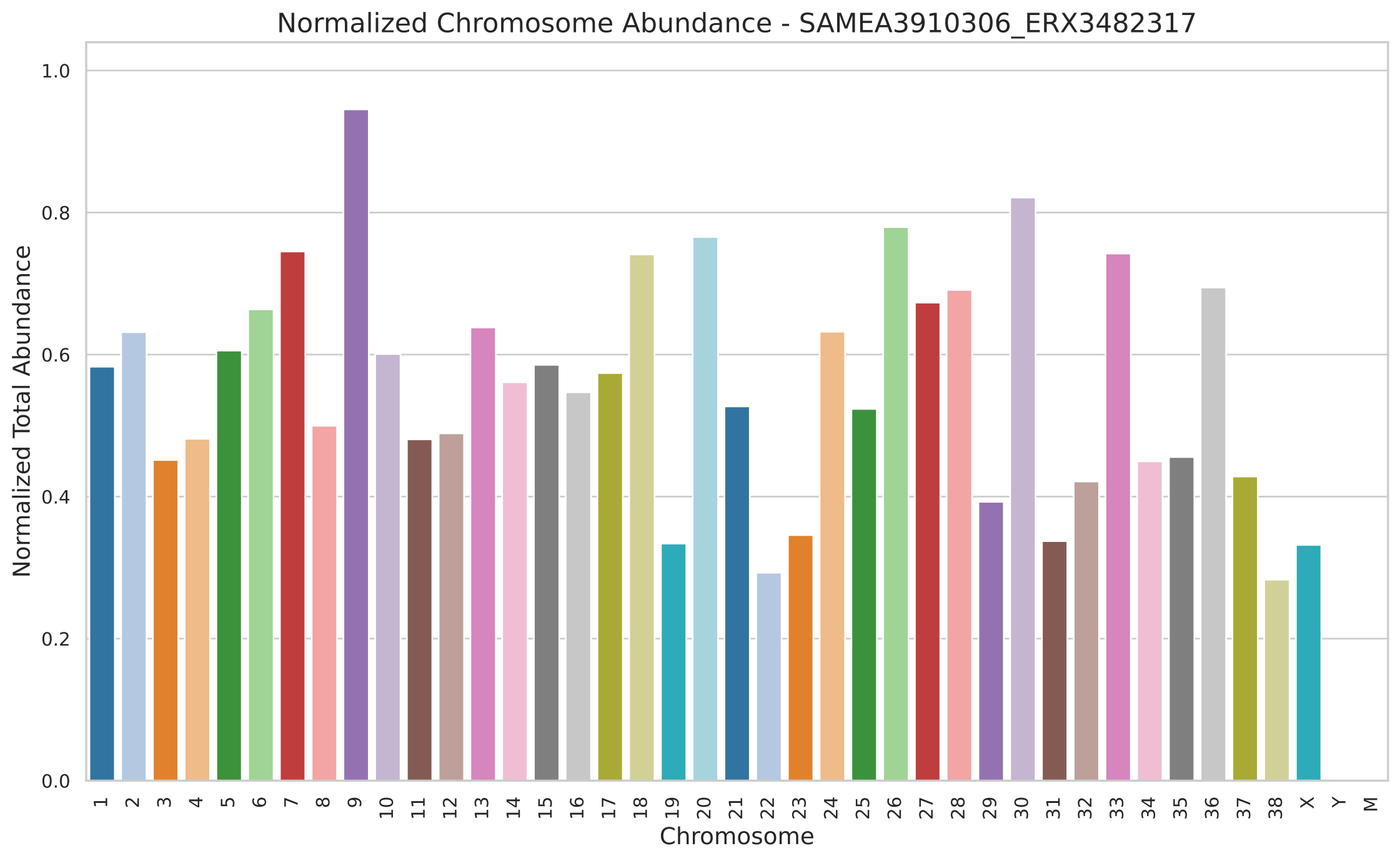

Normalized Chromosome Abundance - SAMEA3910371_ERX3482386
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

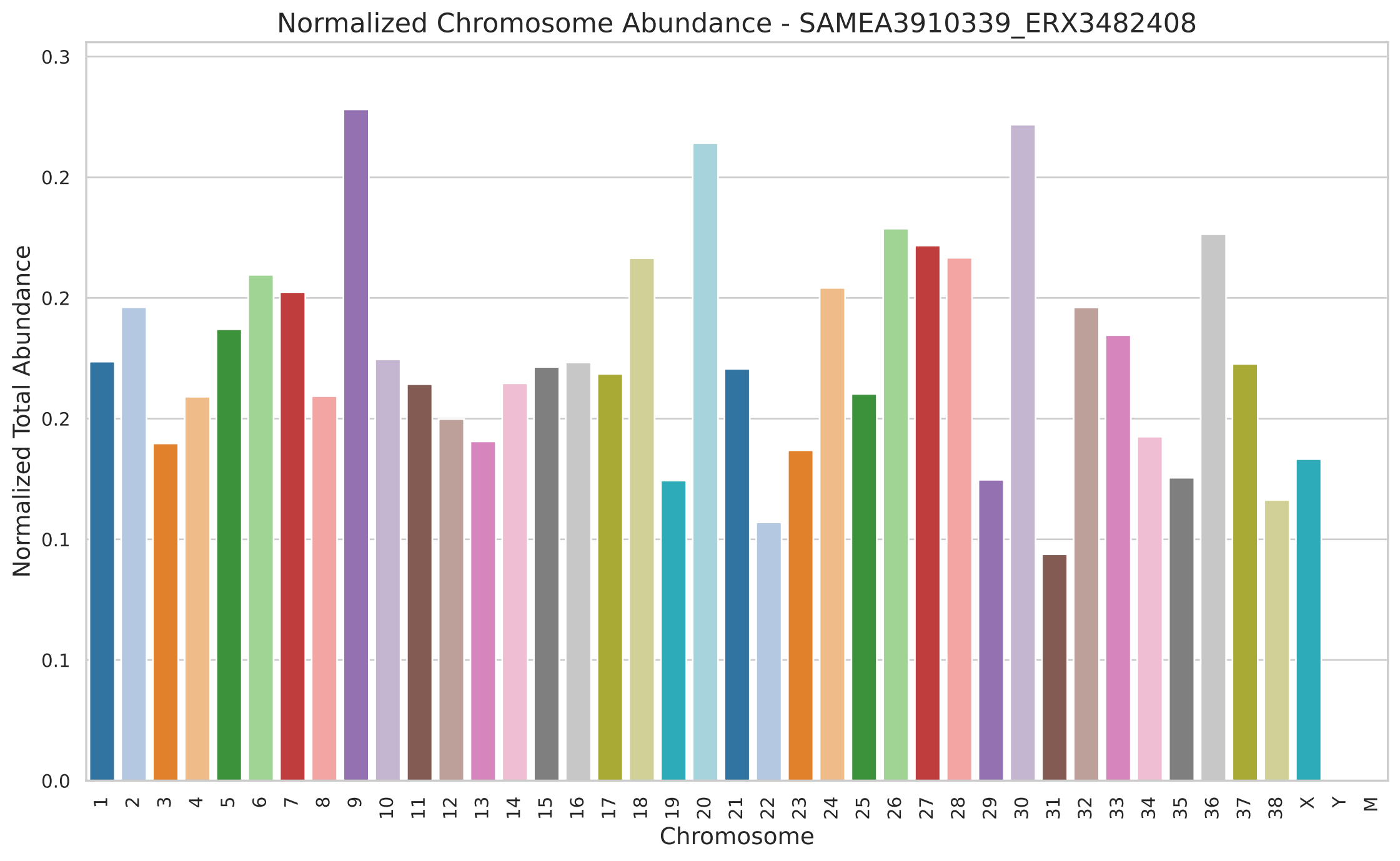

Normalized Chromosome Abundance - SAMEA3910491_ERX3482340
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

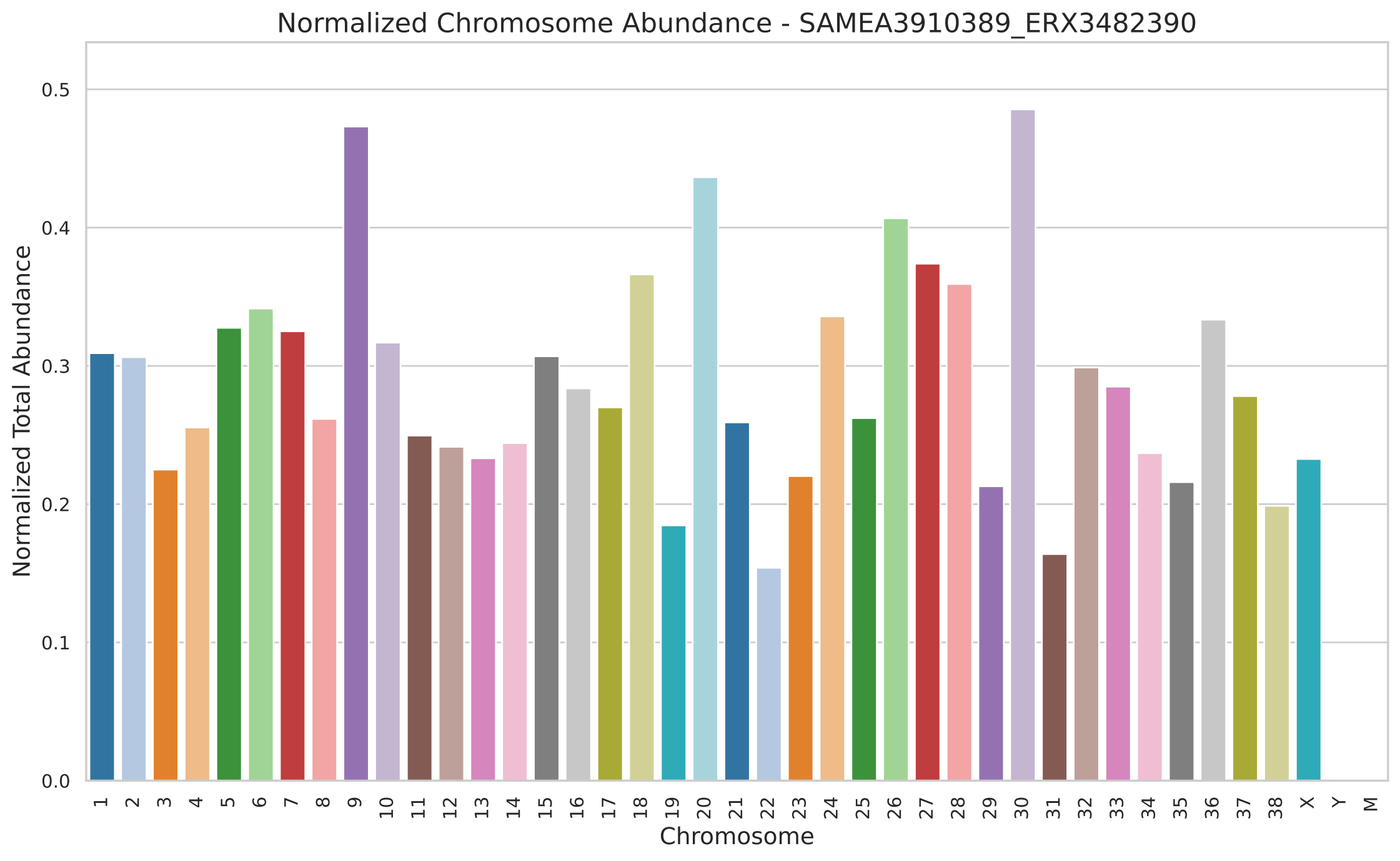

Normalized Chromosome Abundance - SAMEA3910259_ERX3482396
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

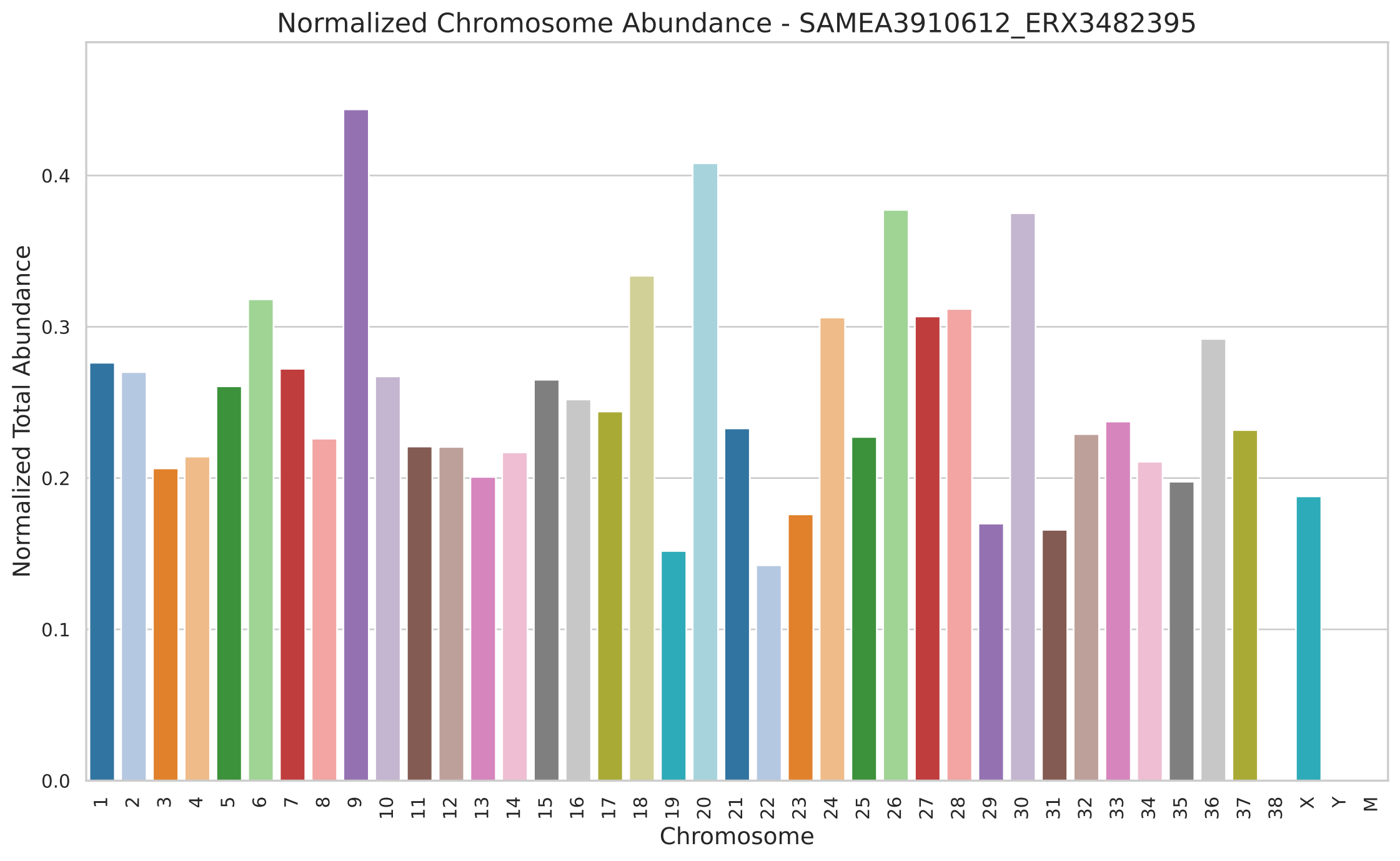

Normalized Chromosome Abundance - SAMEA3910484_ERX3482332
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

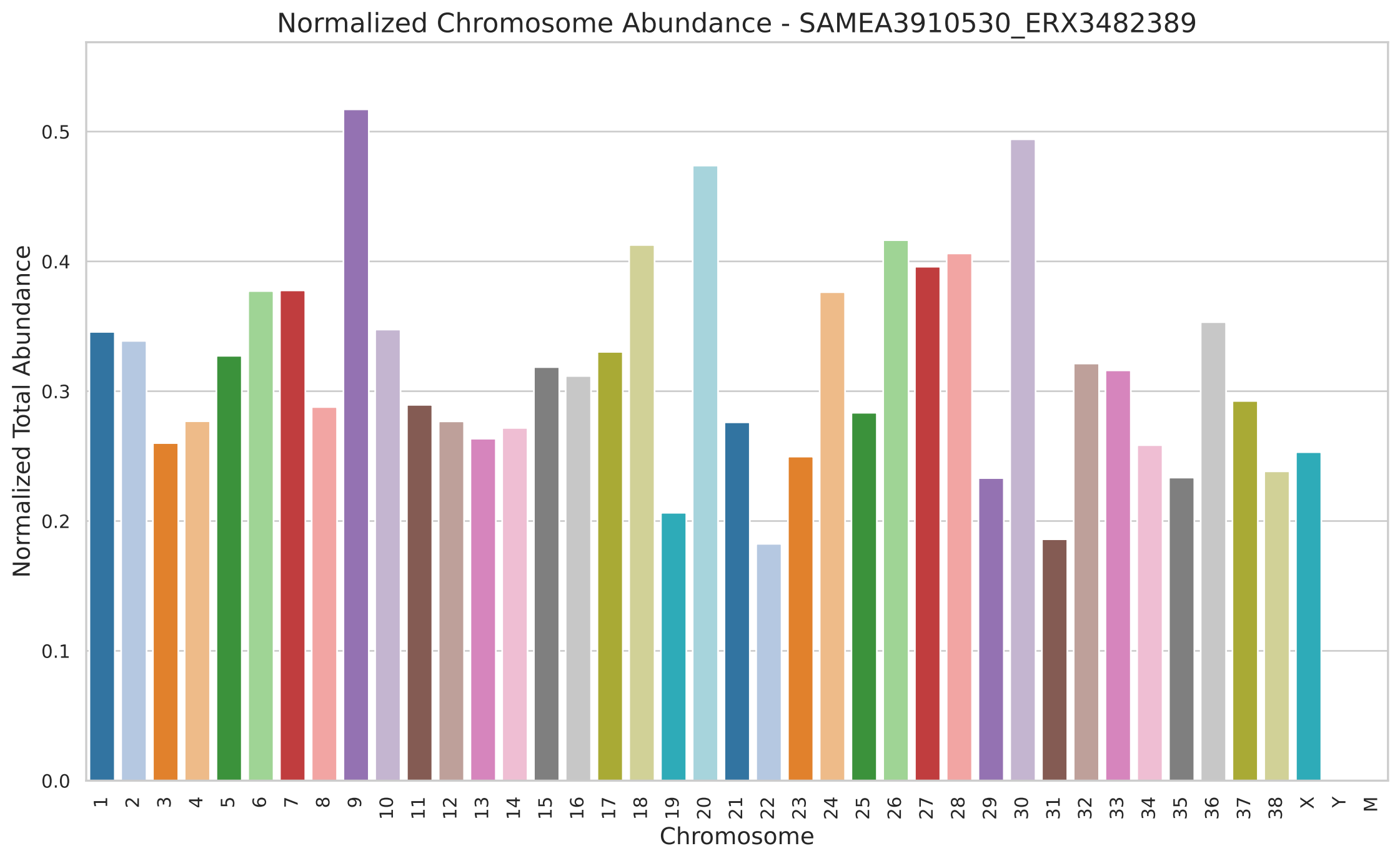

Normalized Chromosome Abundance - SAMEA3910518_ERX3482307
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

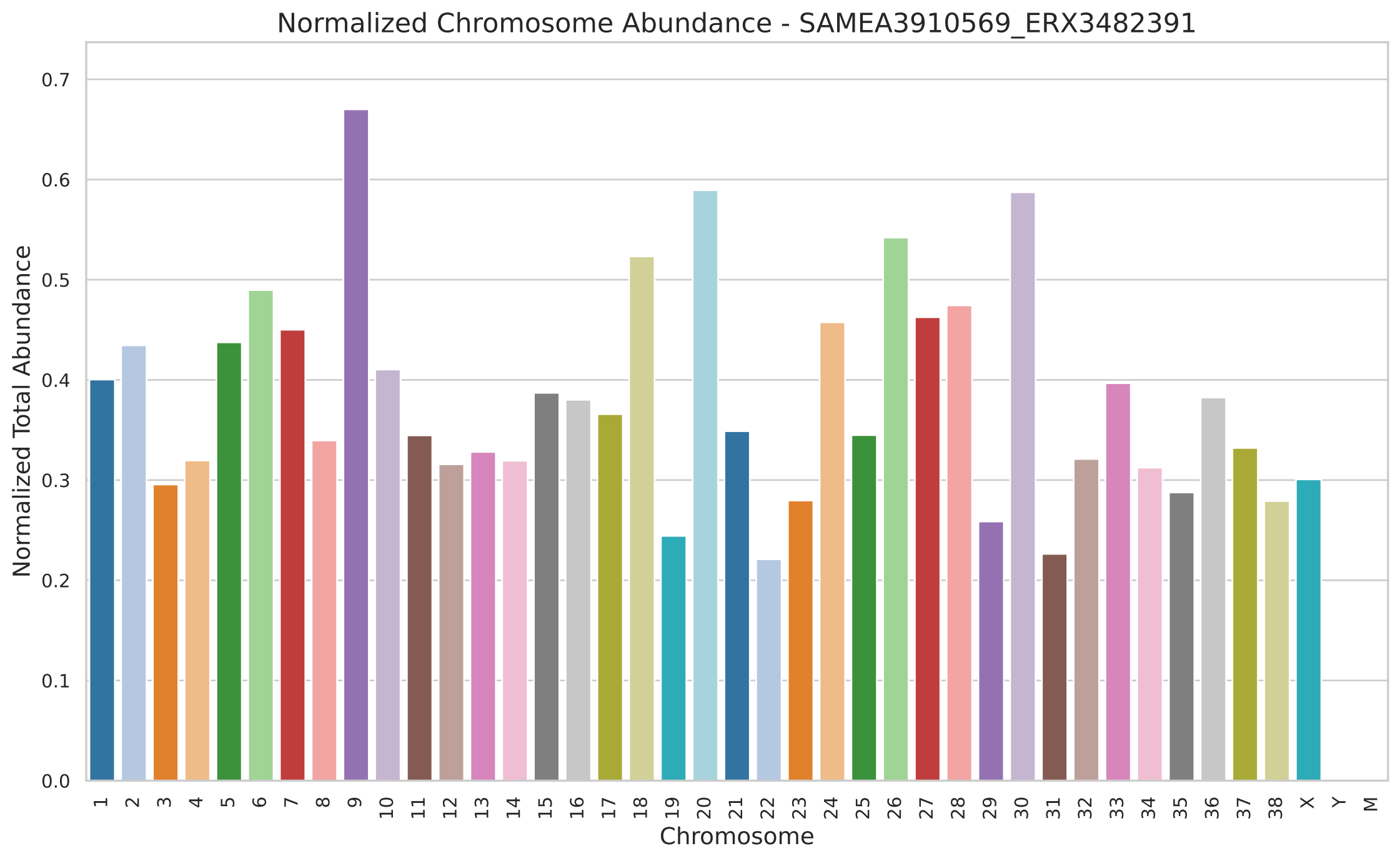

Normalized Chromosome Abundance - SAMEA3910306_ERX3482317
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

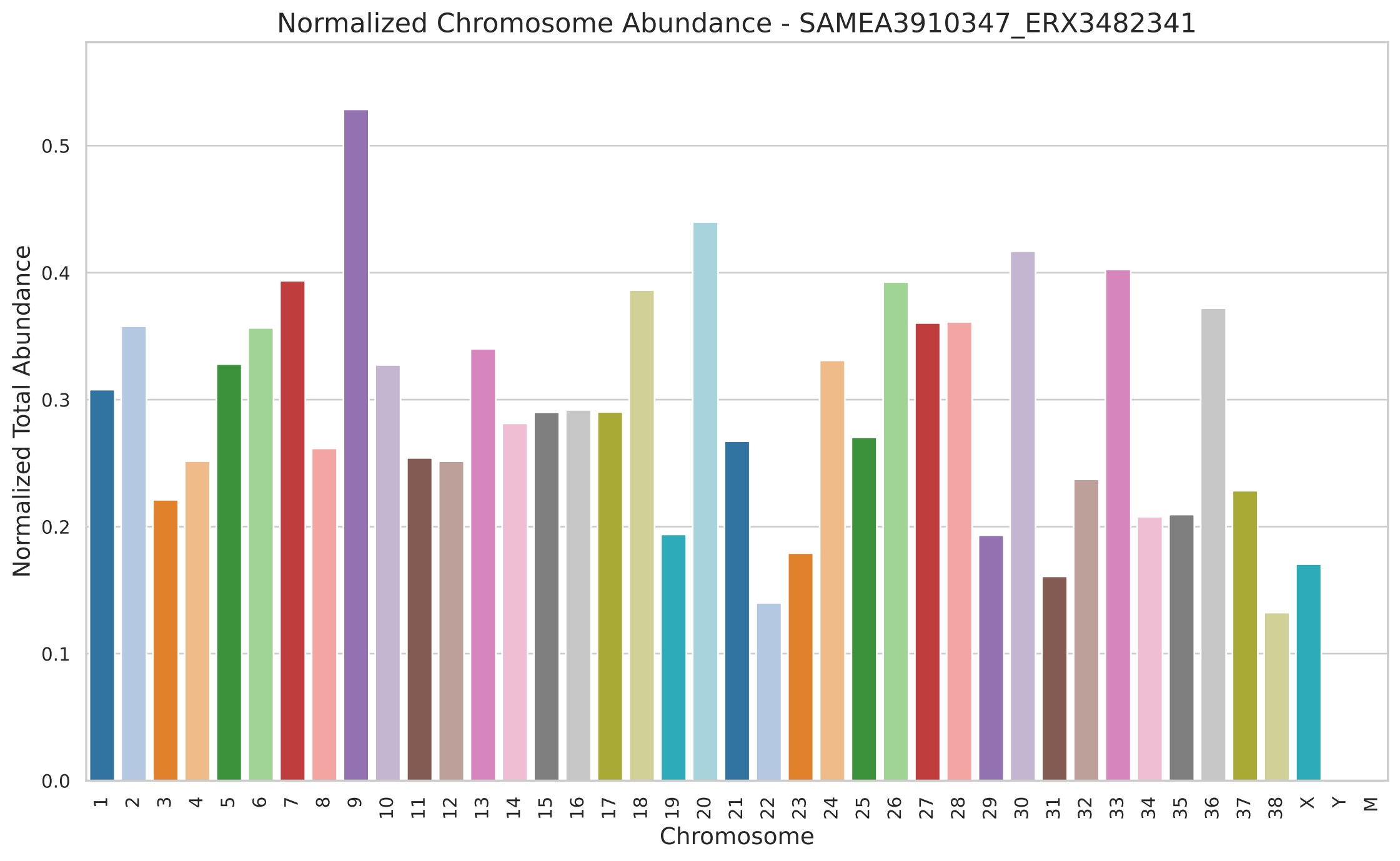

Normalized Chromosome Abundance - SAMEA3910339_ERX3482408
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

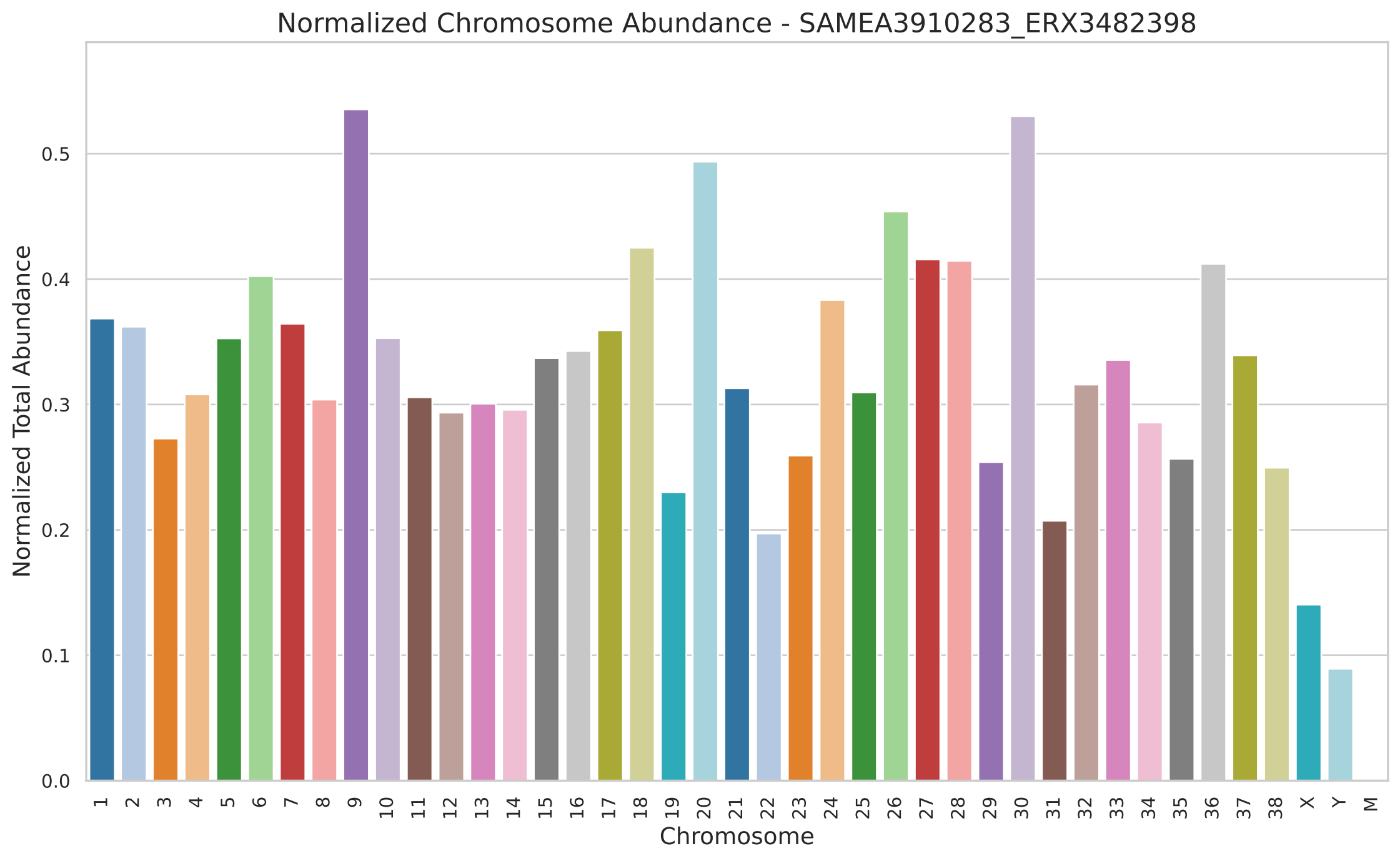

Normalized Chromosome Abundance - SAMEA3910389_ERX3482390
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

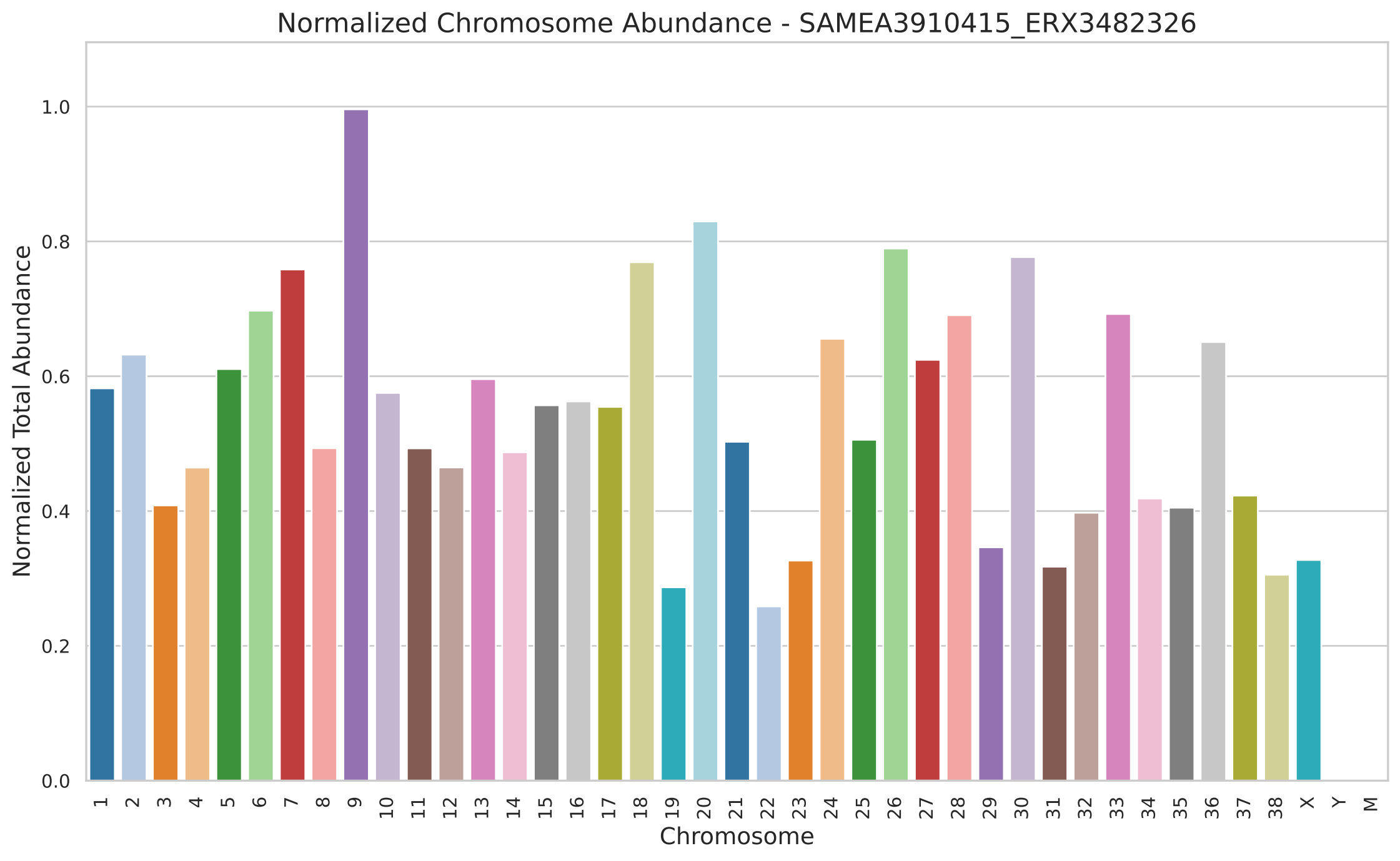

Normalized Chromosome Abundance - SAMEA3910612_ERX3482395
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

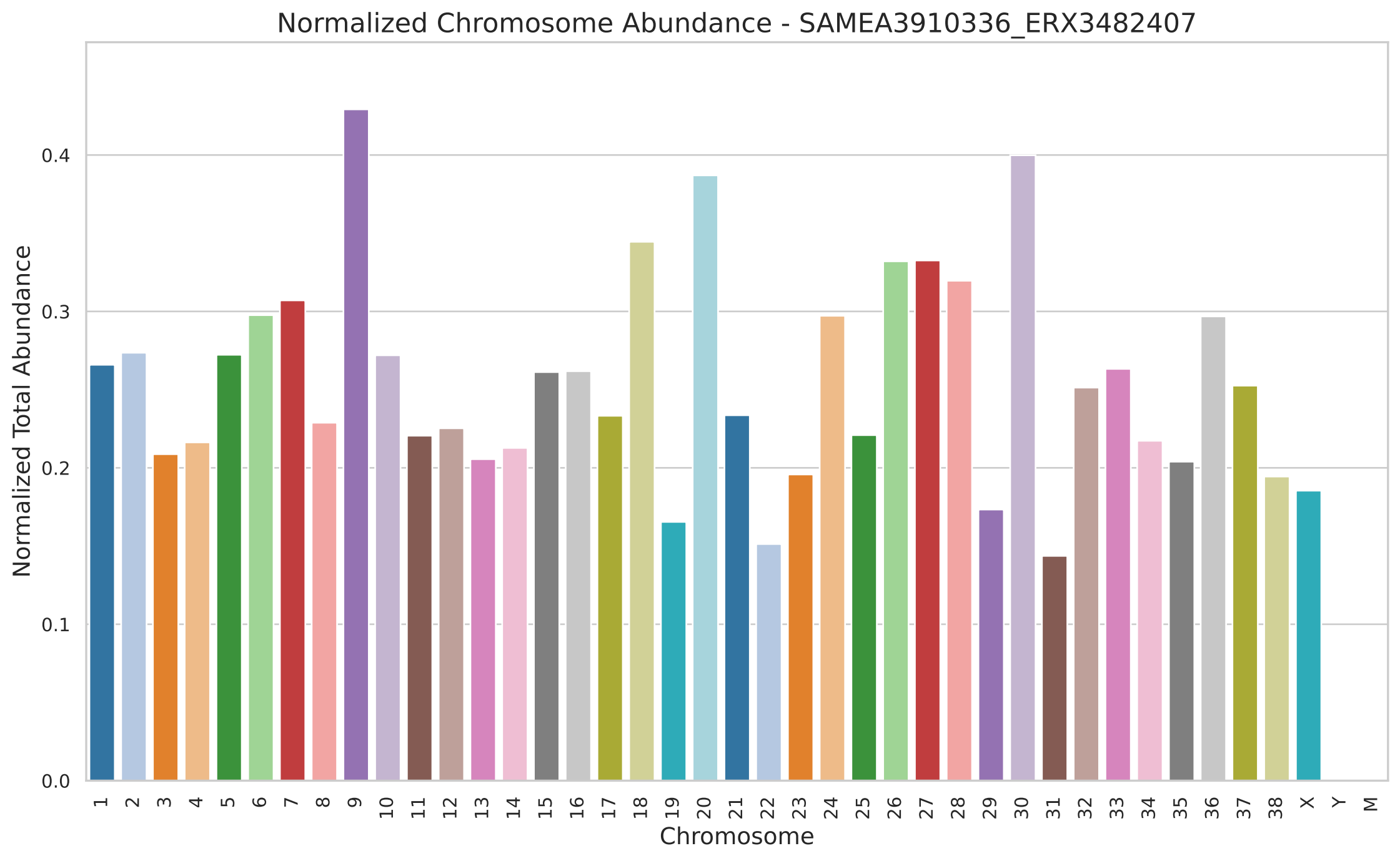

Normalized Chromosome Abundance - SAMEA3910530_ERX3482389
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

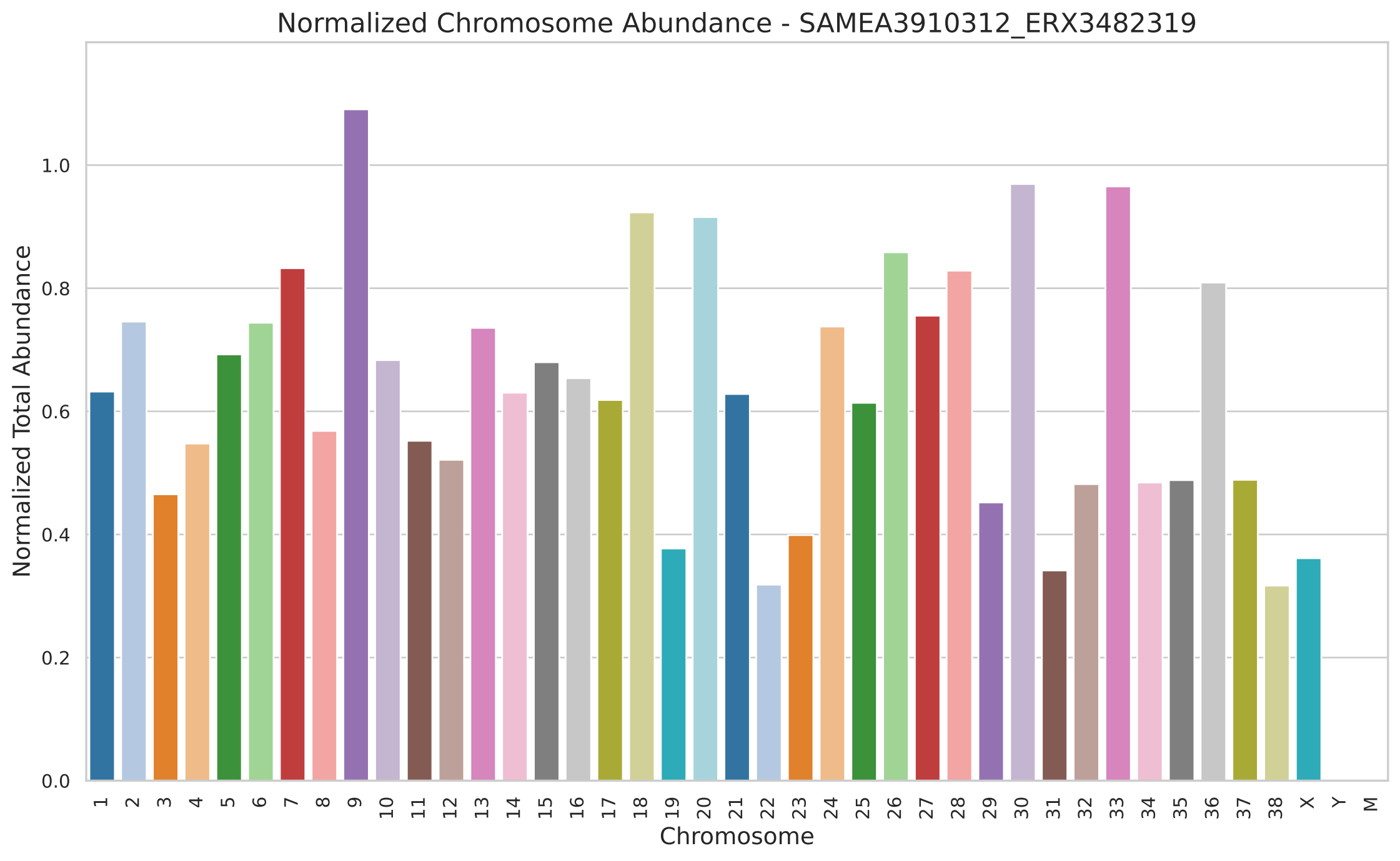

Normalized Chromosome Abundance - SAMEA3910569_ERX3482391
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

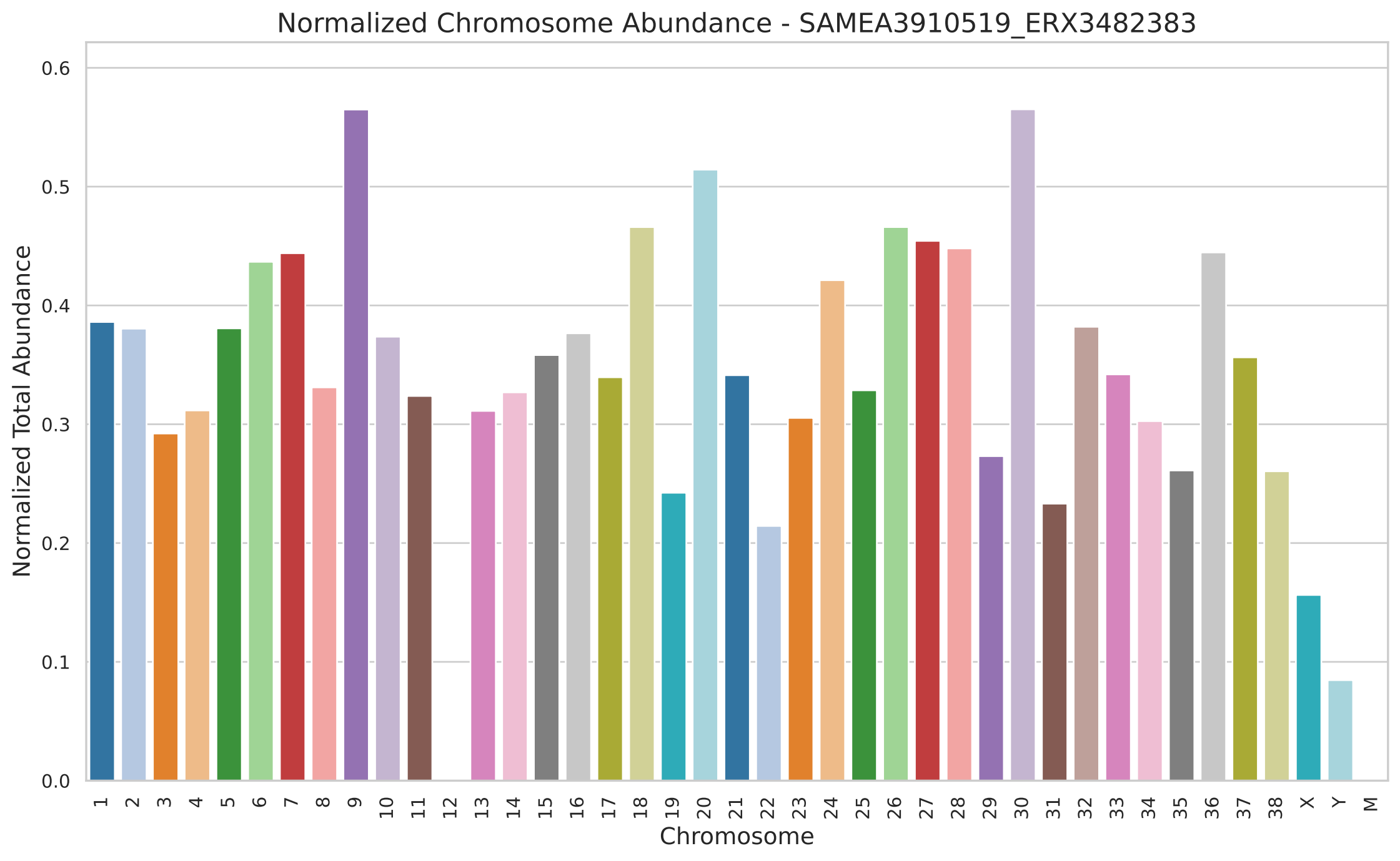

Normalized Chromosome Abundance - SAMEA3910347_ERX3482341
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

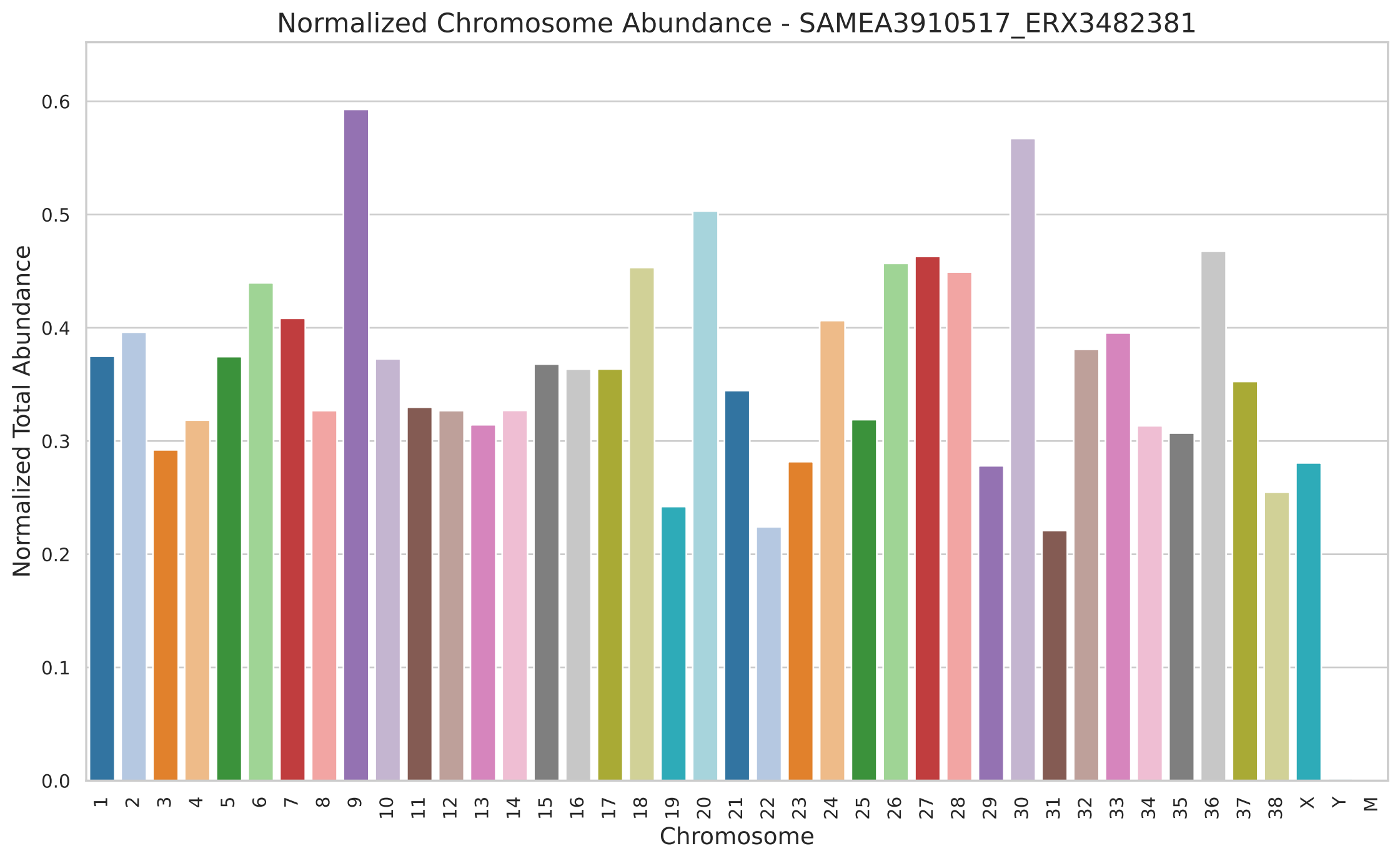

Normalized Chromosome Abundance - SAMEA3910283_ERX3482398
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

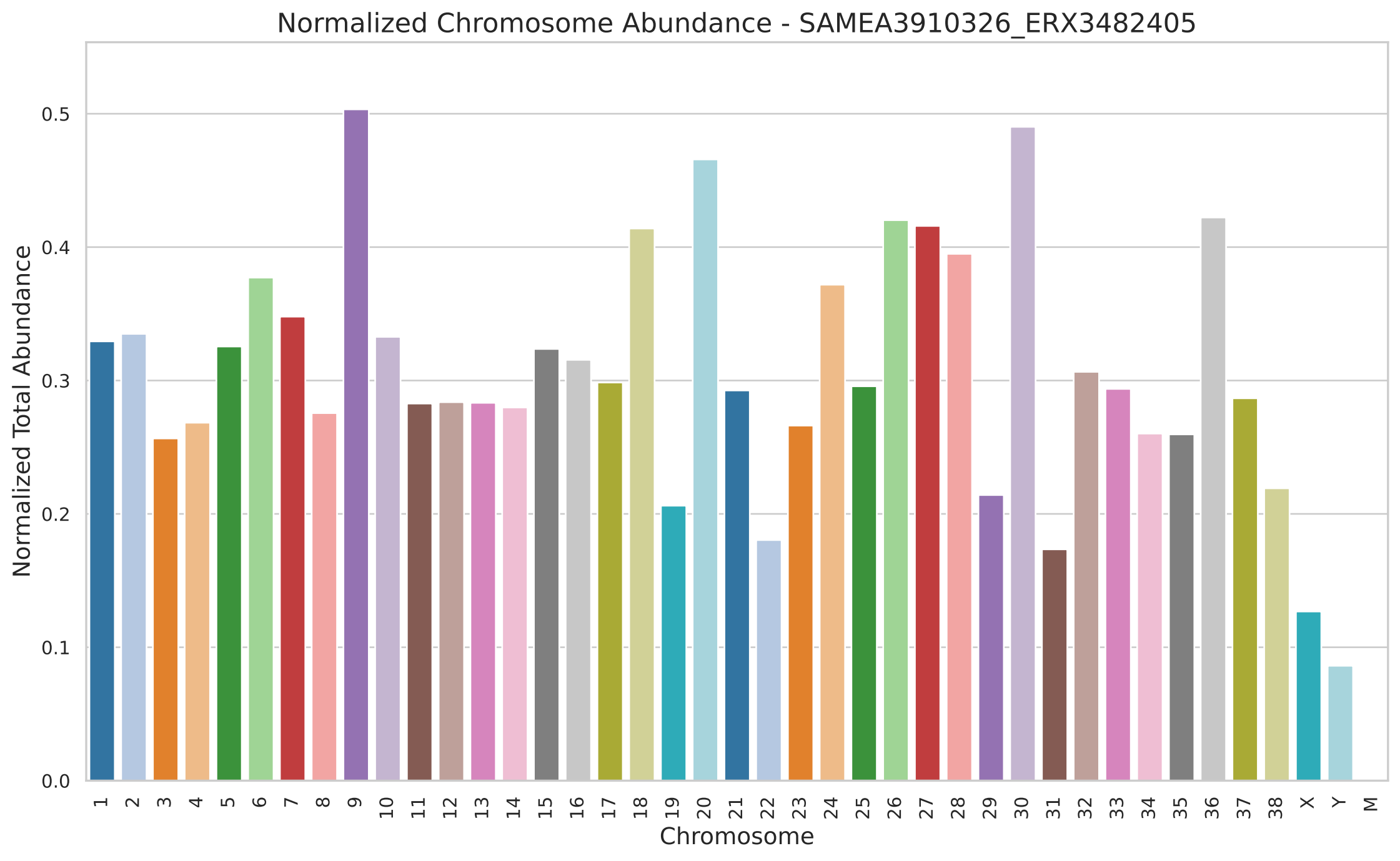

Normalized Chromosome Abundance - SAMEA3910415_ERX3482326
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

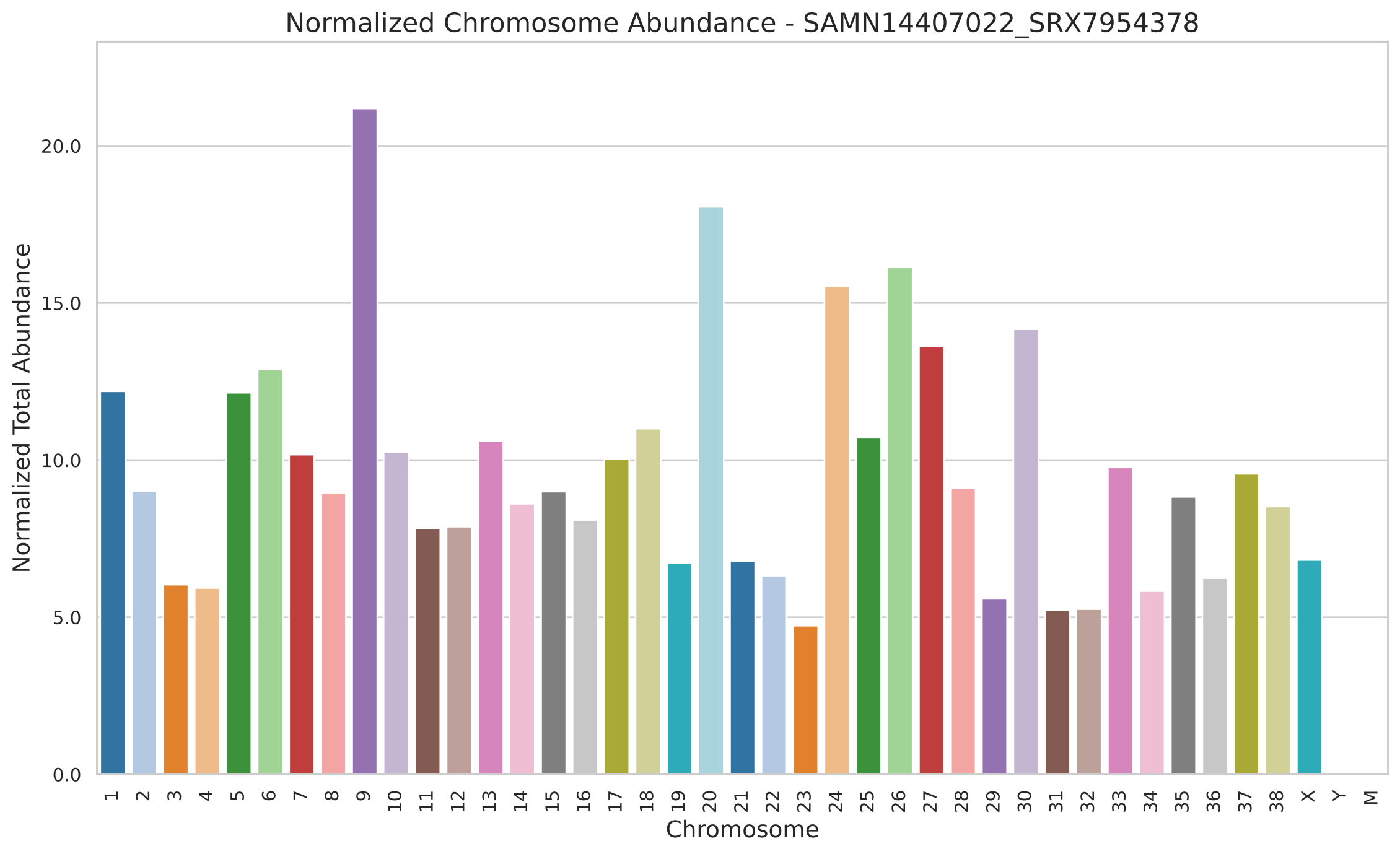

Normalized Chromosome Abundance - SAMEA3910336_ERX3482407
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

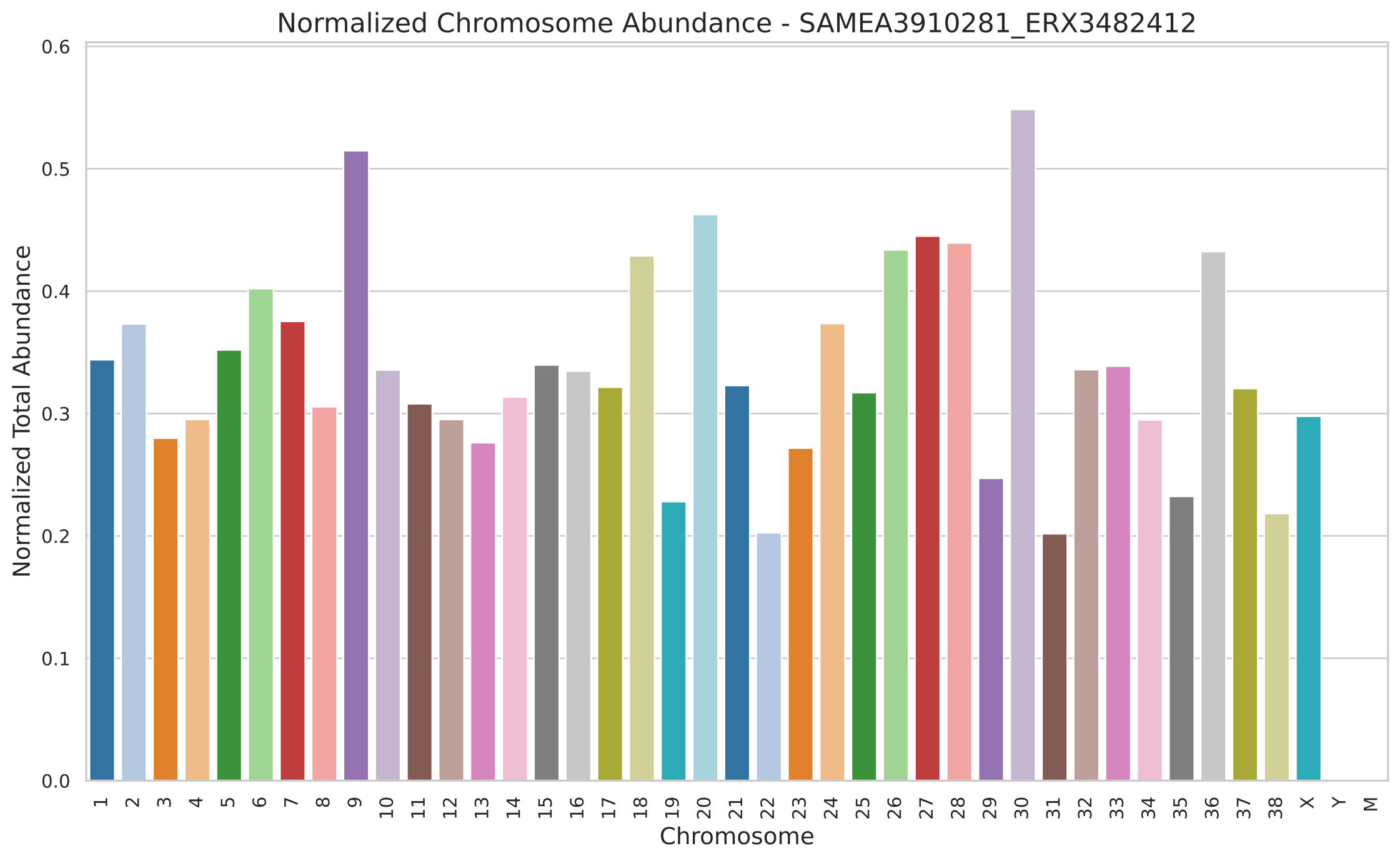

Normalized Chromosome Abundance - SAMEA3910312_ERX3482319
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

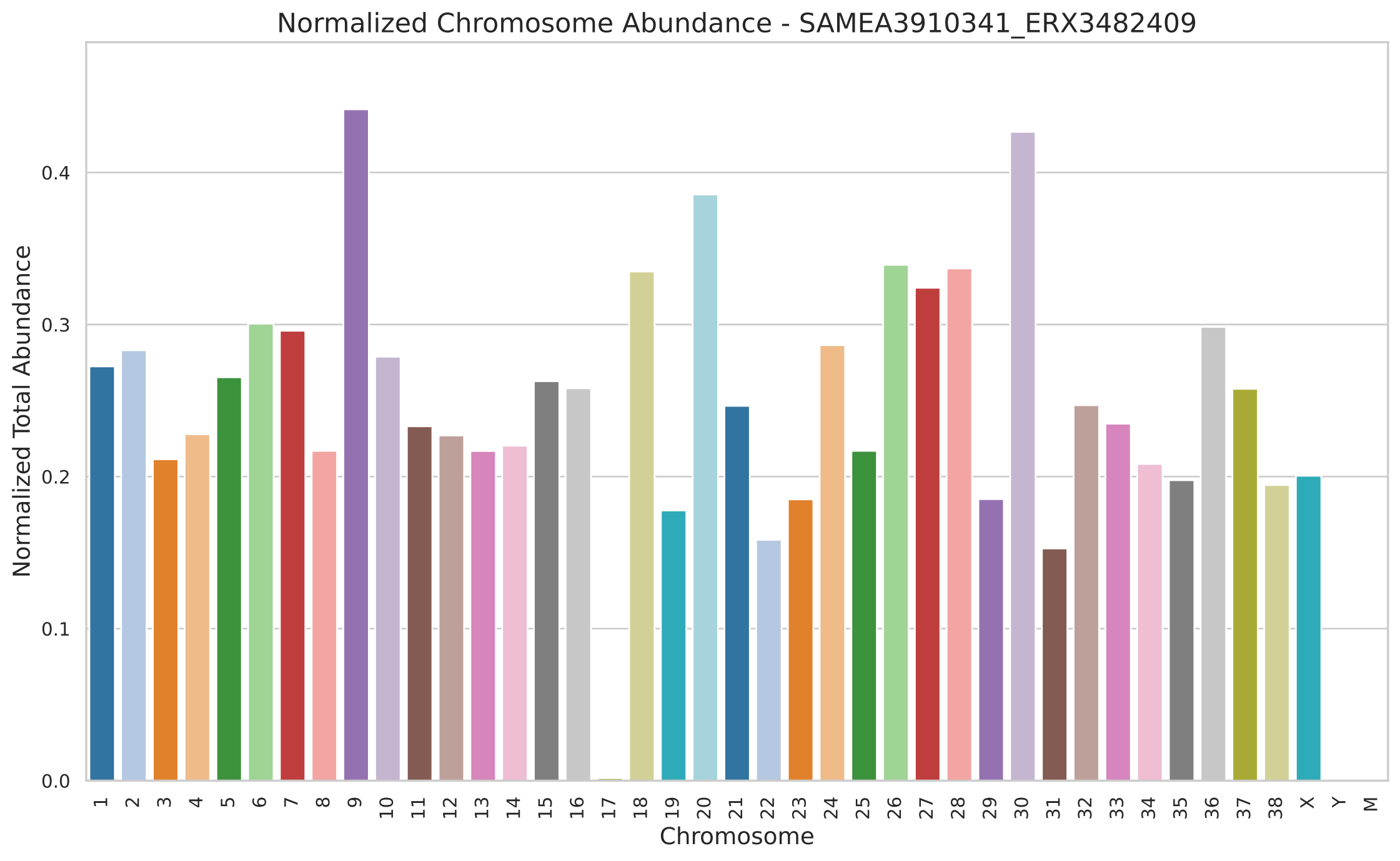

Normalized Chromosome Abundance - SAMEA3910519_ERX3482383
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

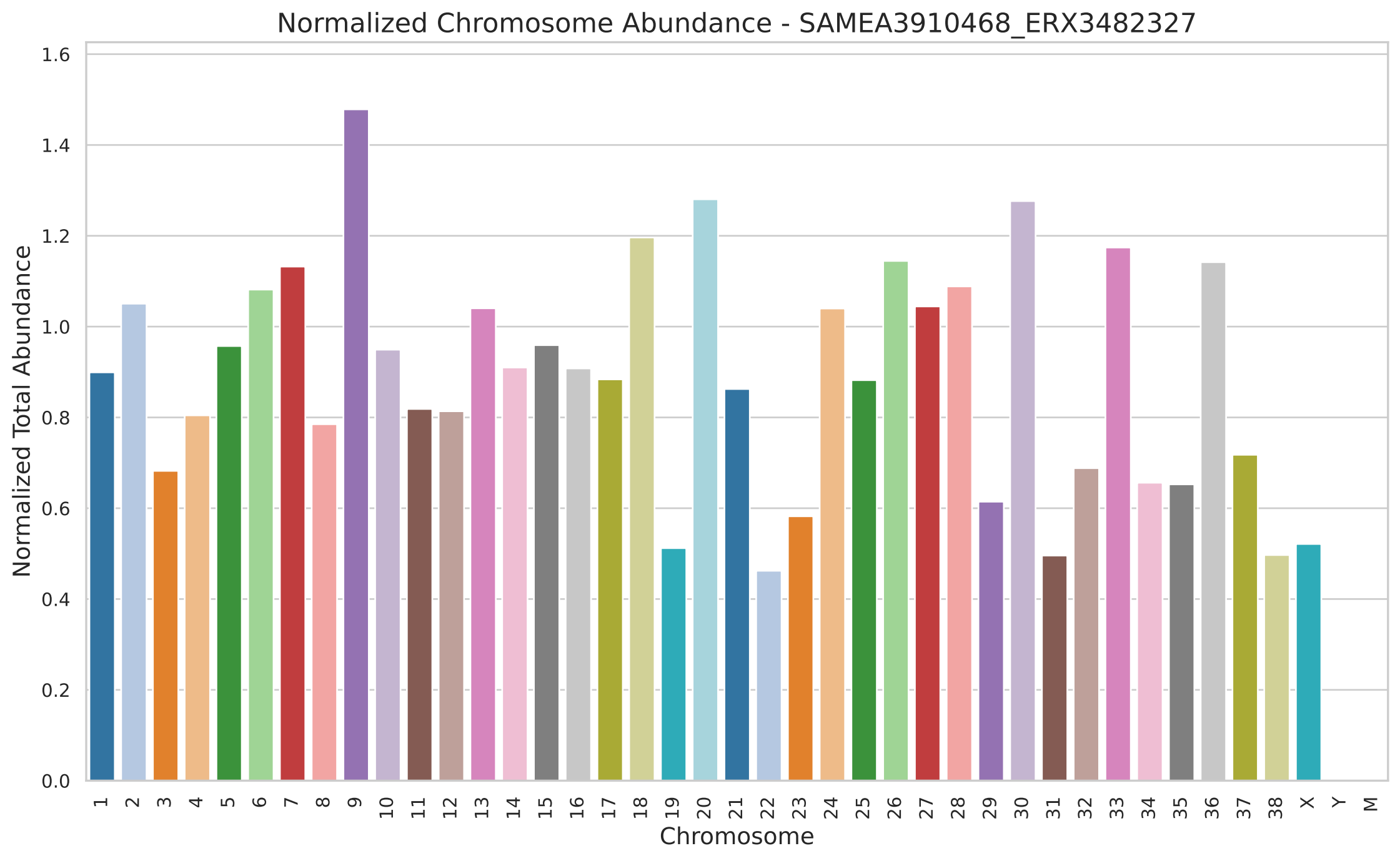

Normalized Chromosome Abundance - SAMEA3910517_ERX3482381
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

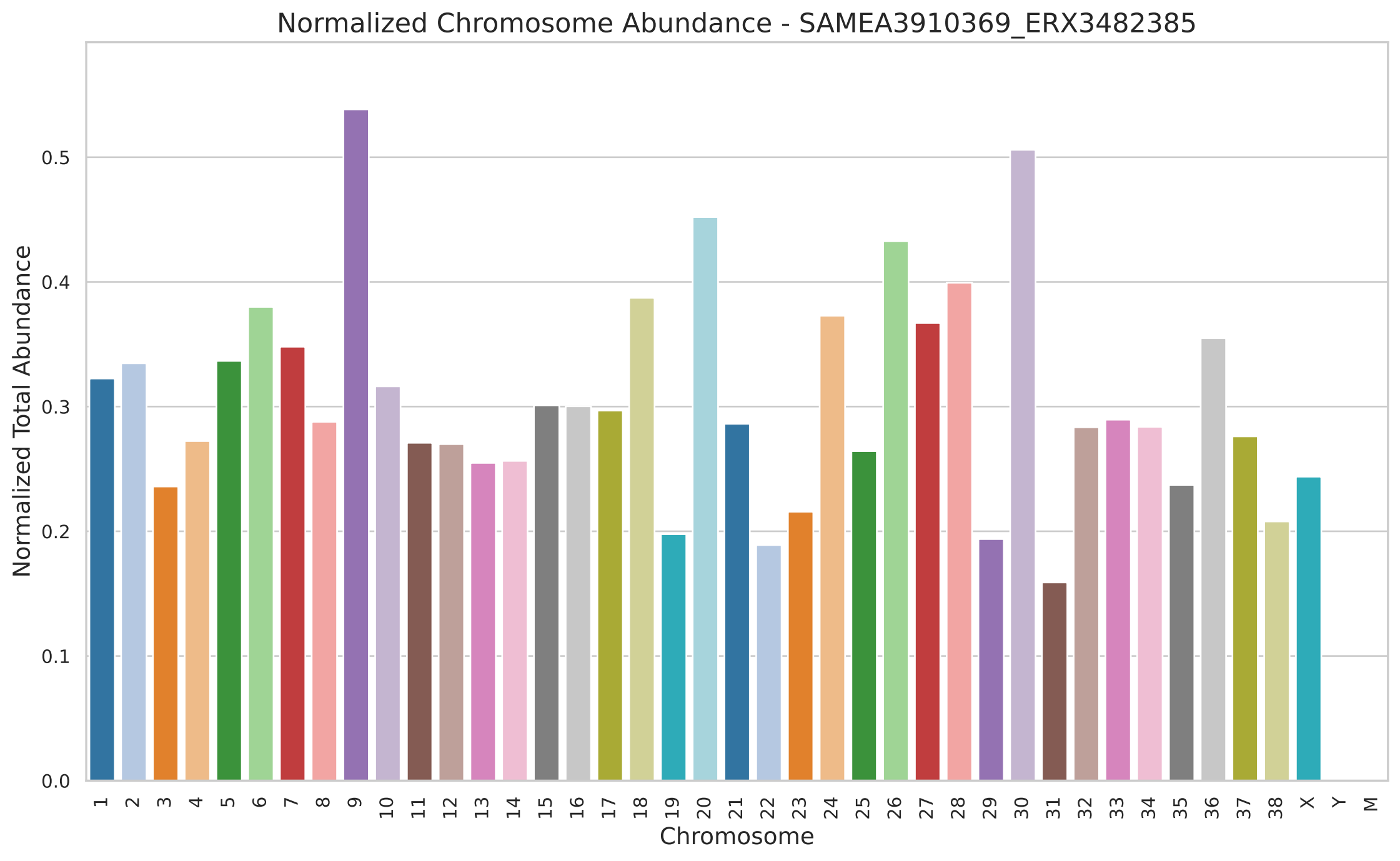

Normalized Chromosome Abundance - SAMEA3910326_ERX3482405
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

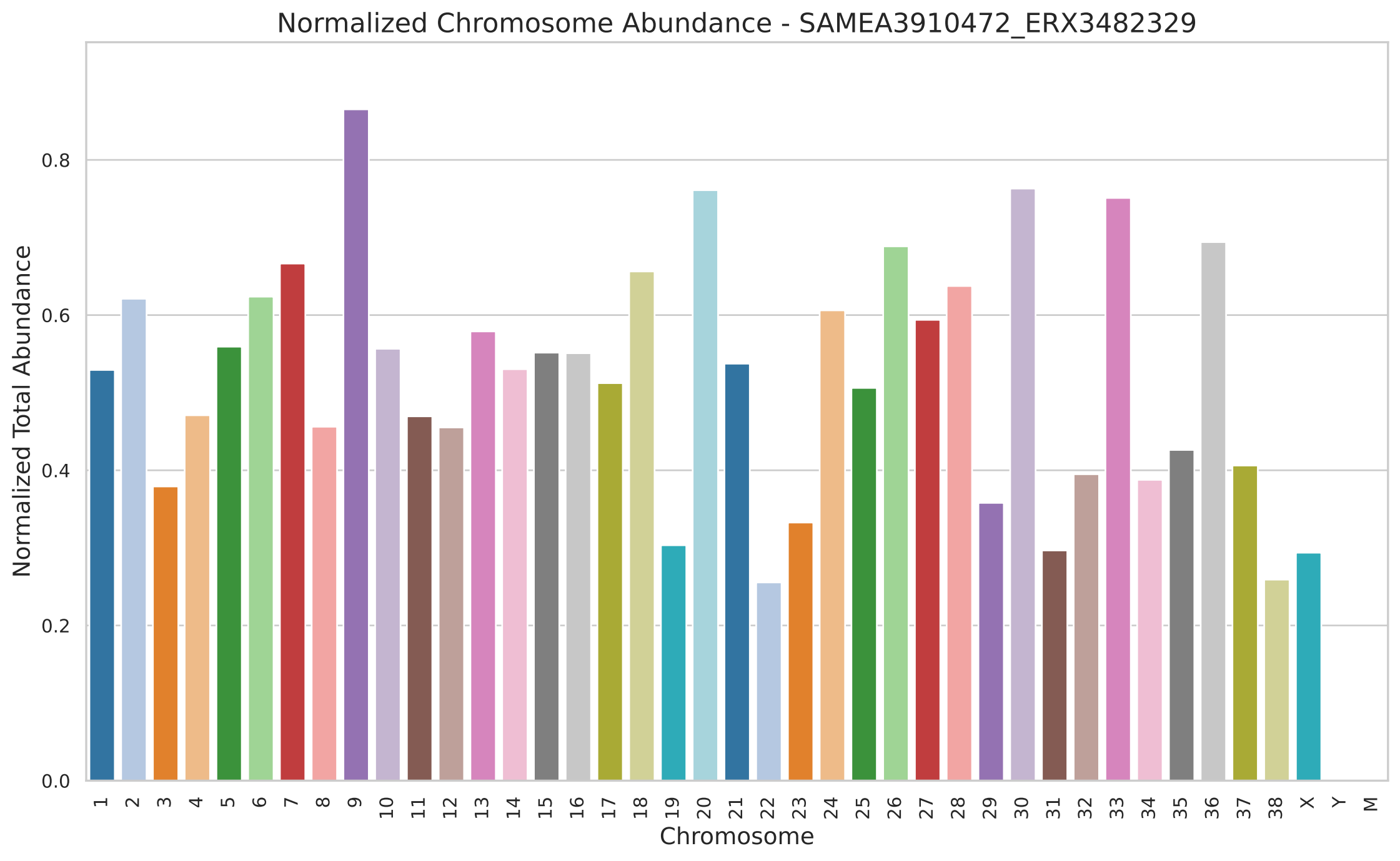

Normalized Chromosome Abundance - SAMN14407022_SRX7954378
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

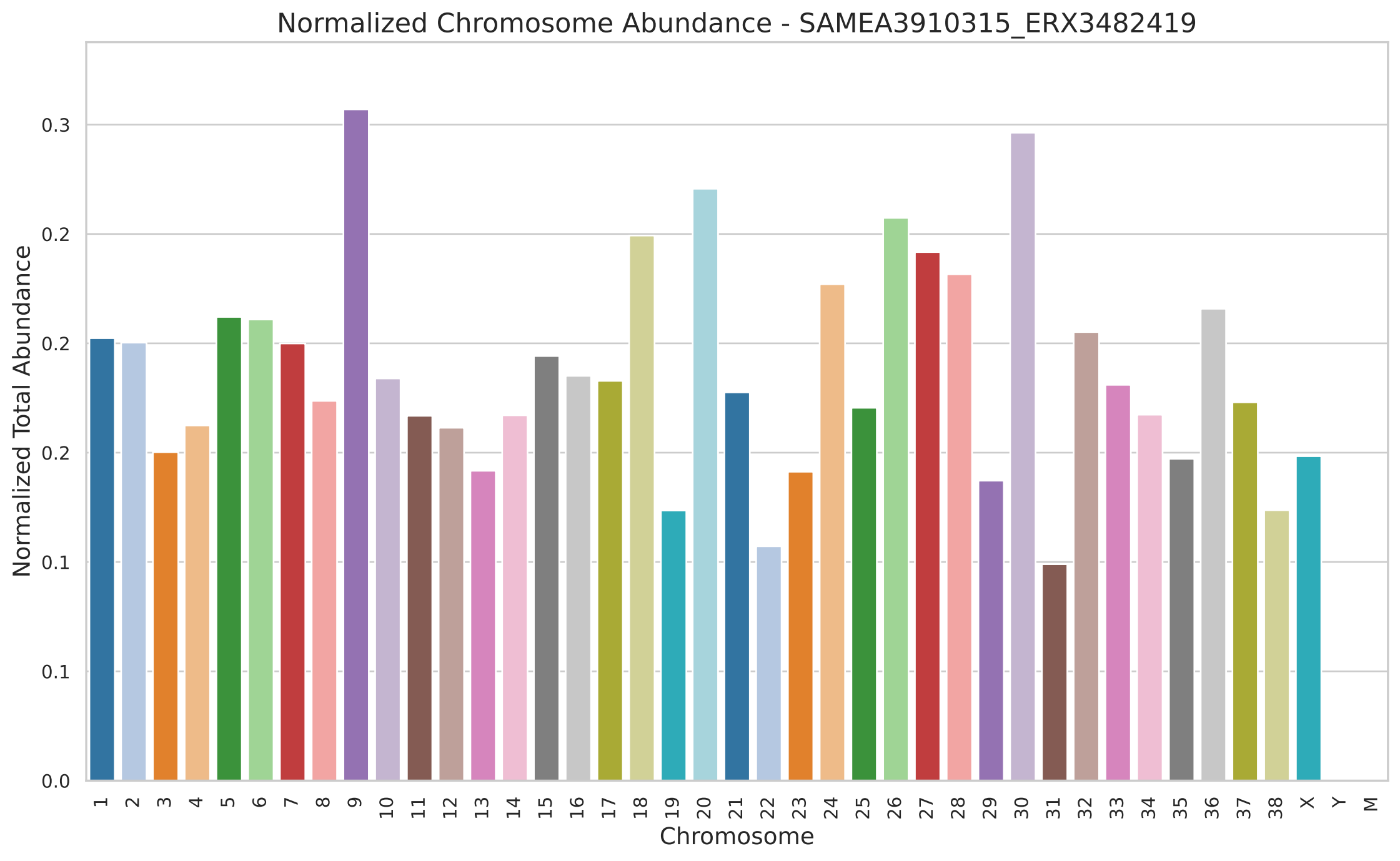

Normalized Chromosome Abundance - SAMEA3910281_ERX3482412
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

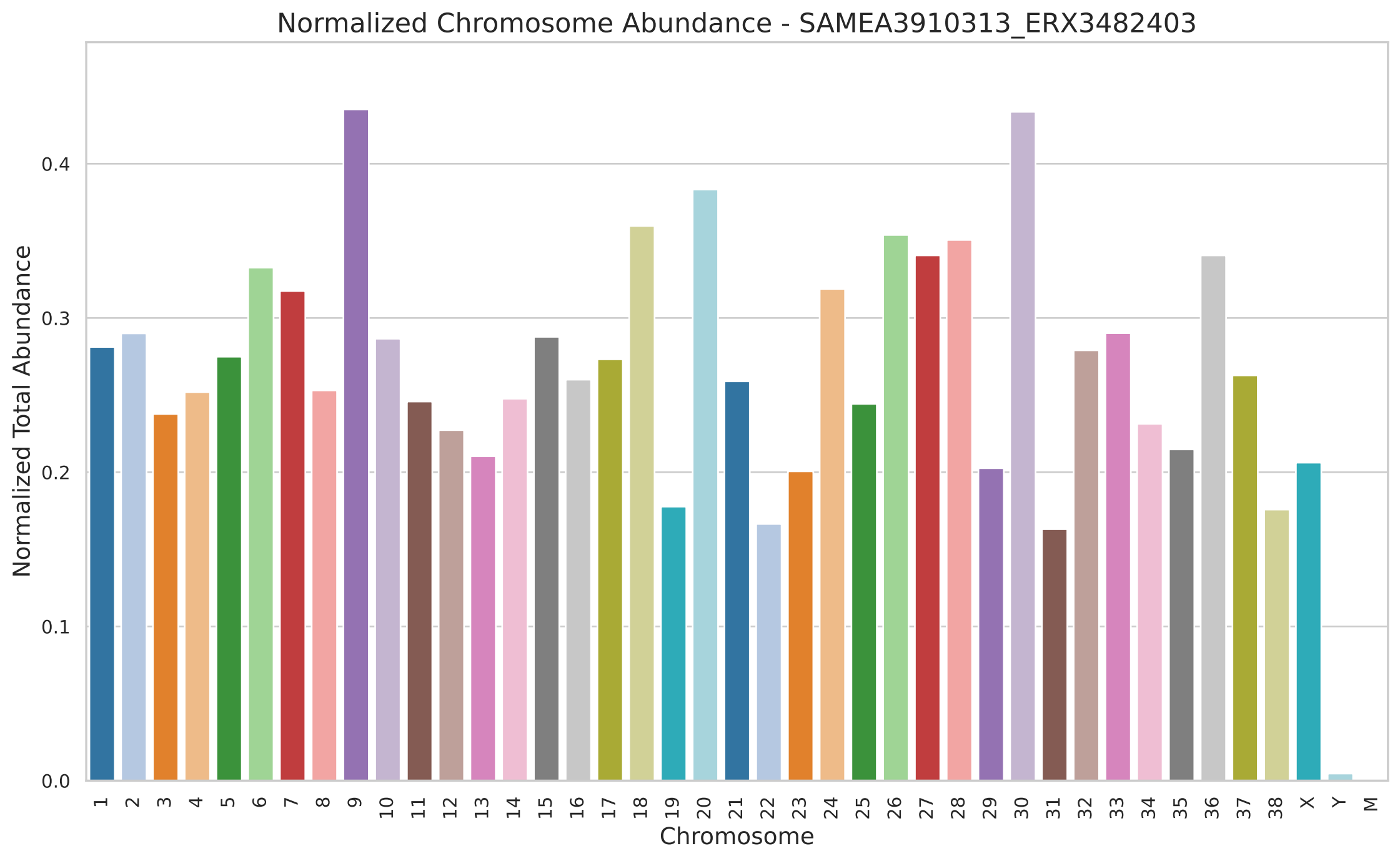

Normalized Chromosome Abundance - SAMEA3910341_ERX3482409
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

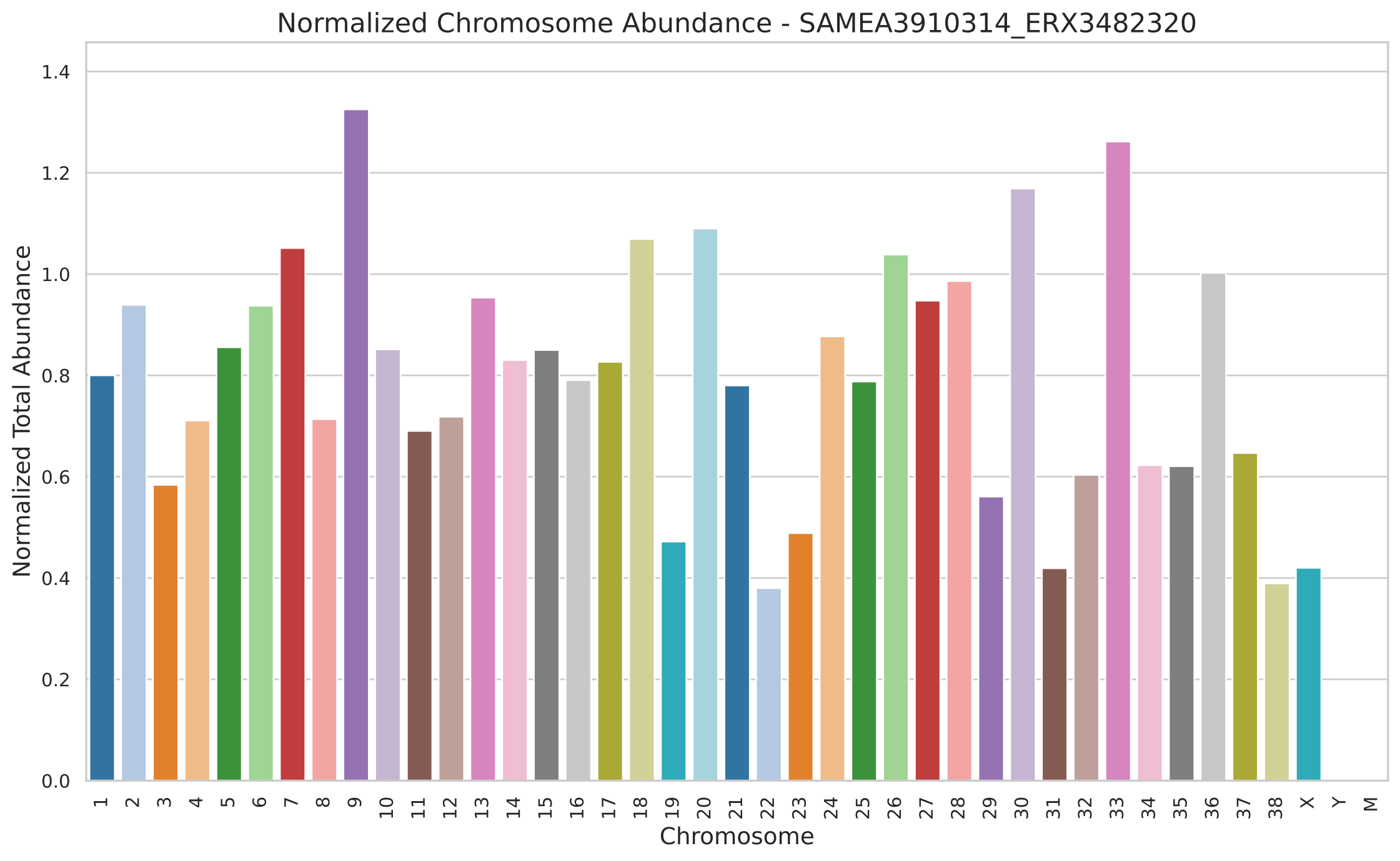

Normalized Chromosome Abundance - SAMEA3910468_ERX3482327
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

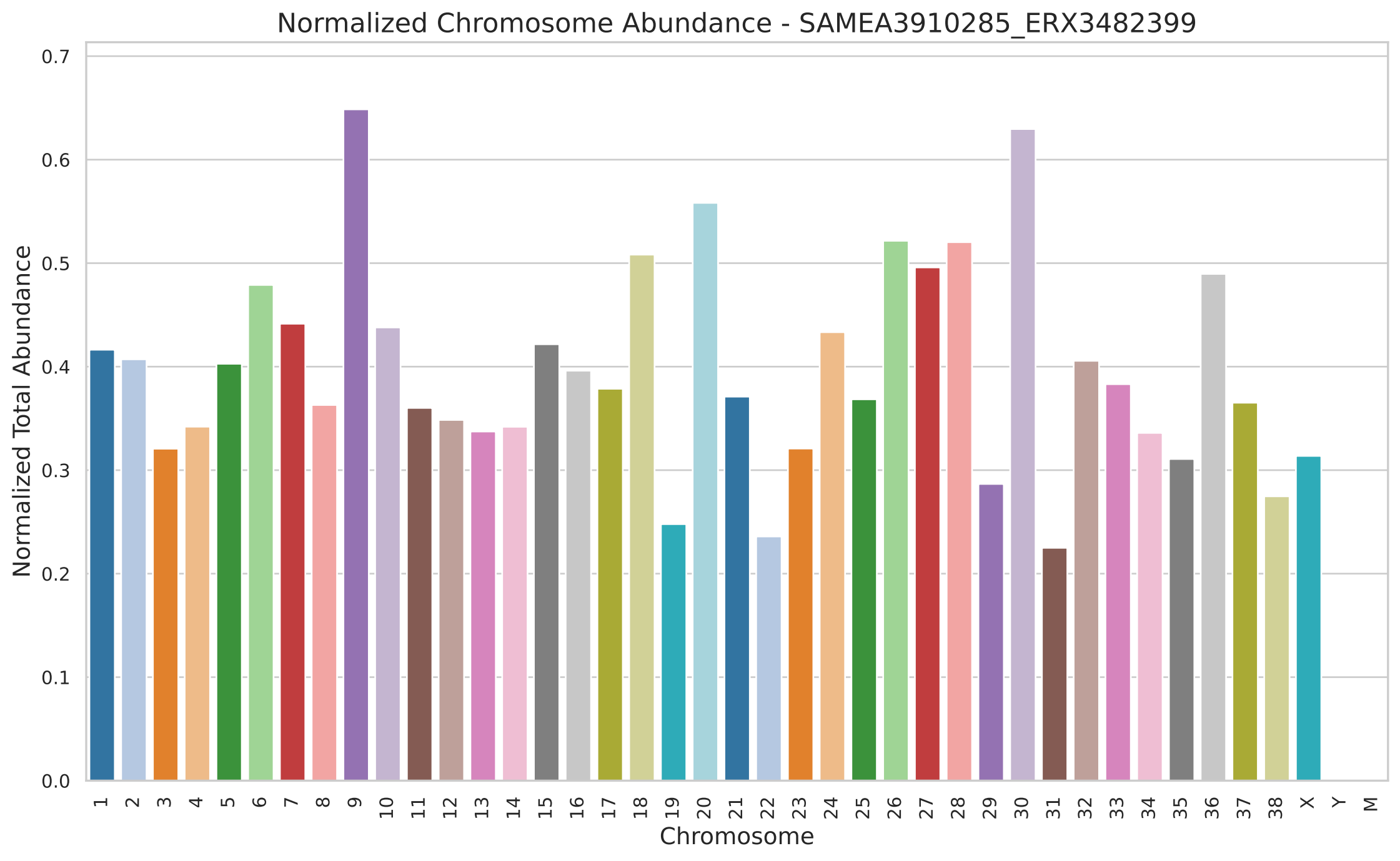

Normalized Chromosome Abundance - SAMEA3910369_ERX3482385
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

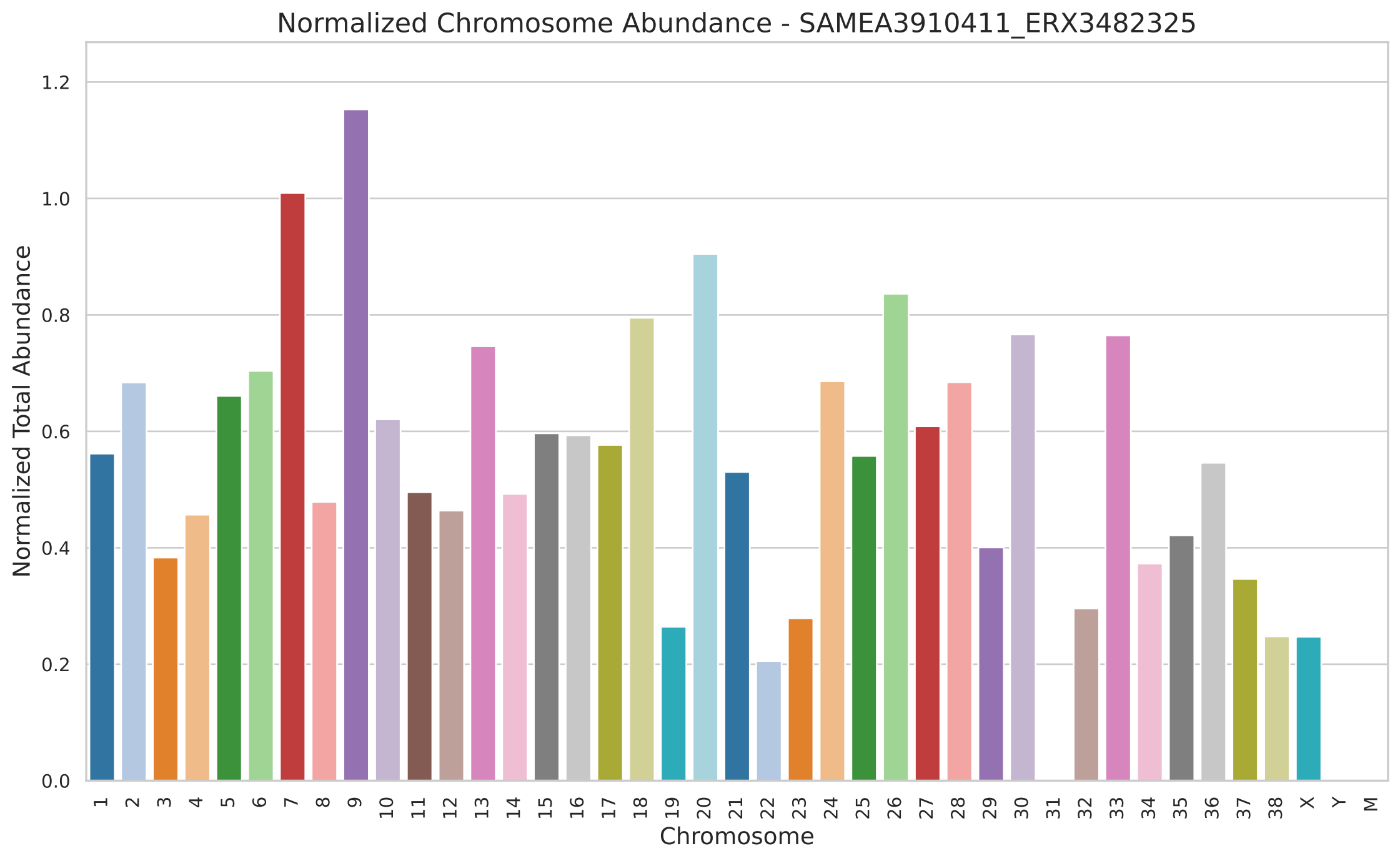

Normalized Chromosome Abundance - SAMEA3910472_ERX3482329
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

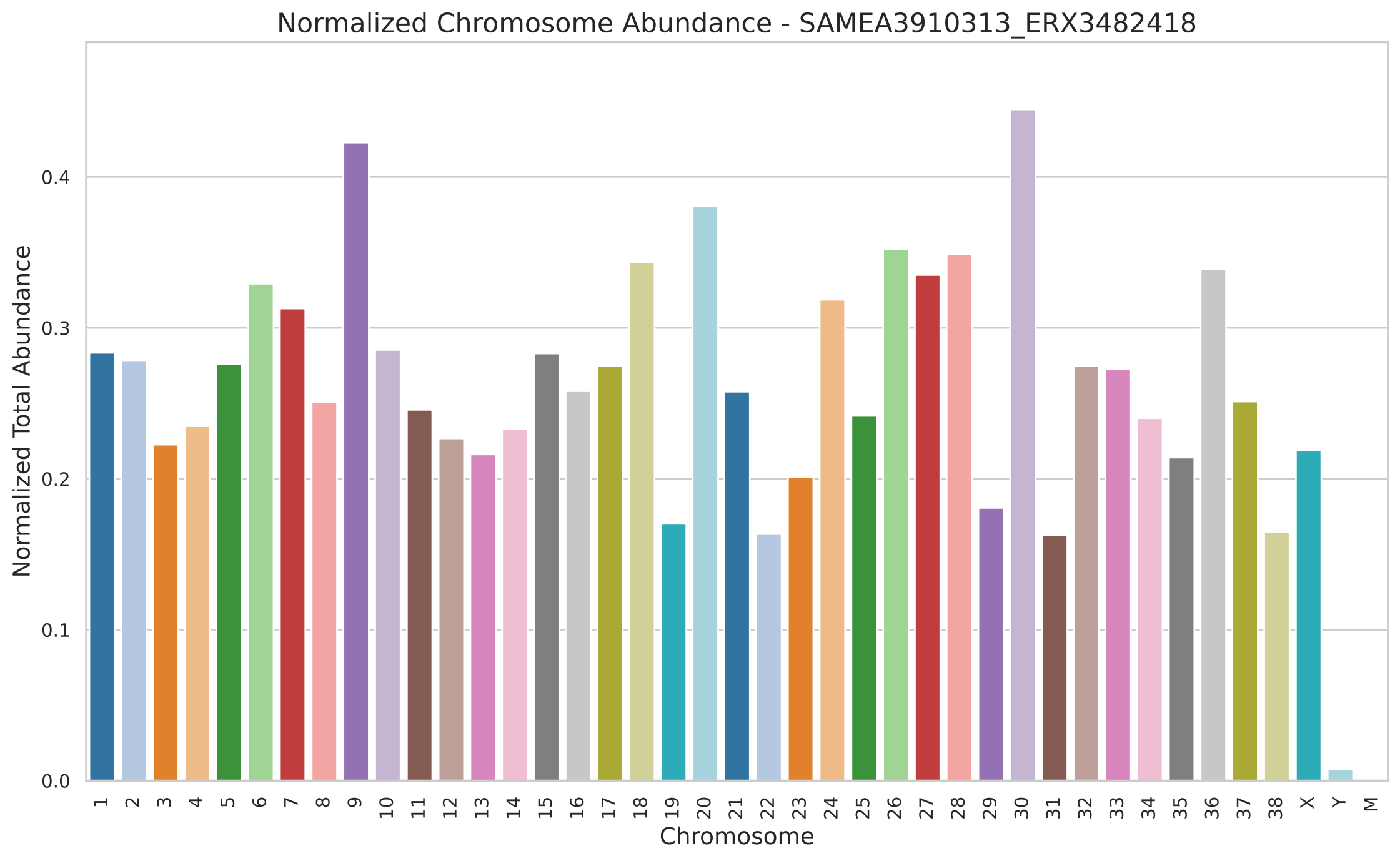

Normalized Chromosome Abundance - SAMEA3910315_ERX3482419
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

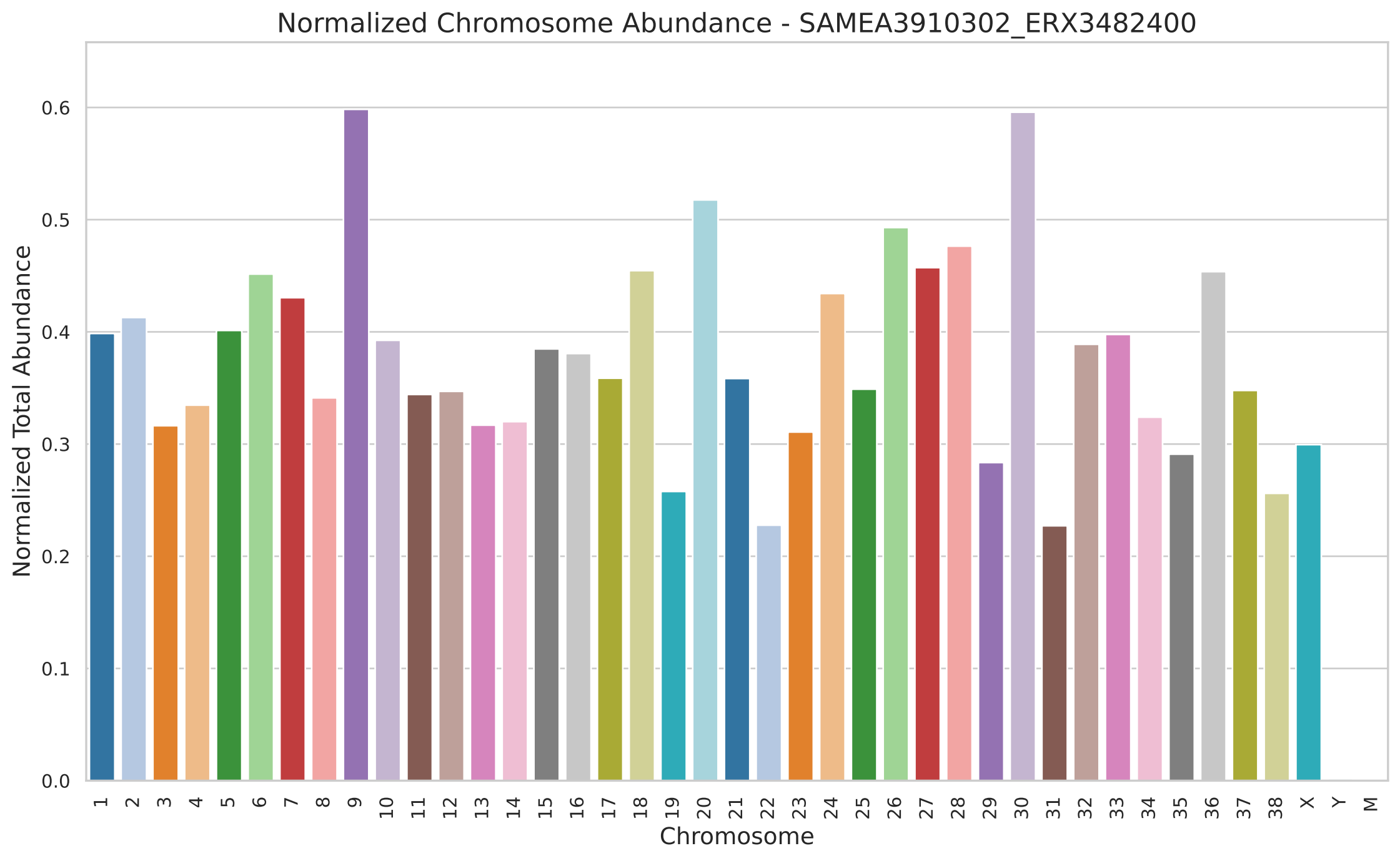

Normalized Chromosome Abundance - SAMEA3910313_ERX3482403
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

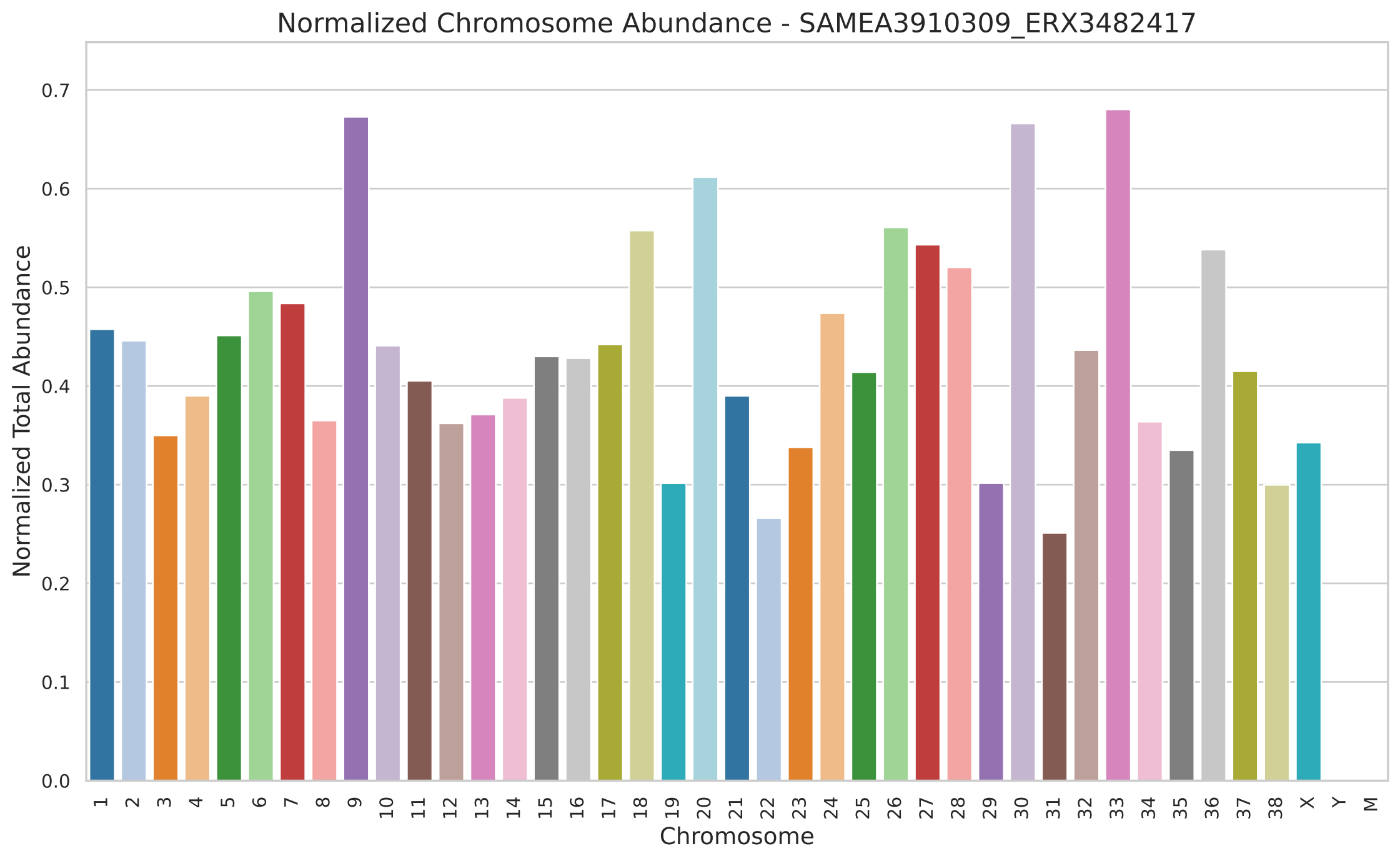

Normalized Chromosome Abundance - SAMEA3910314_ERX3482320
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

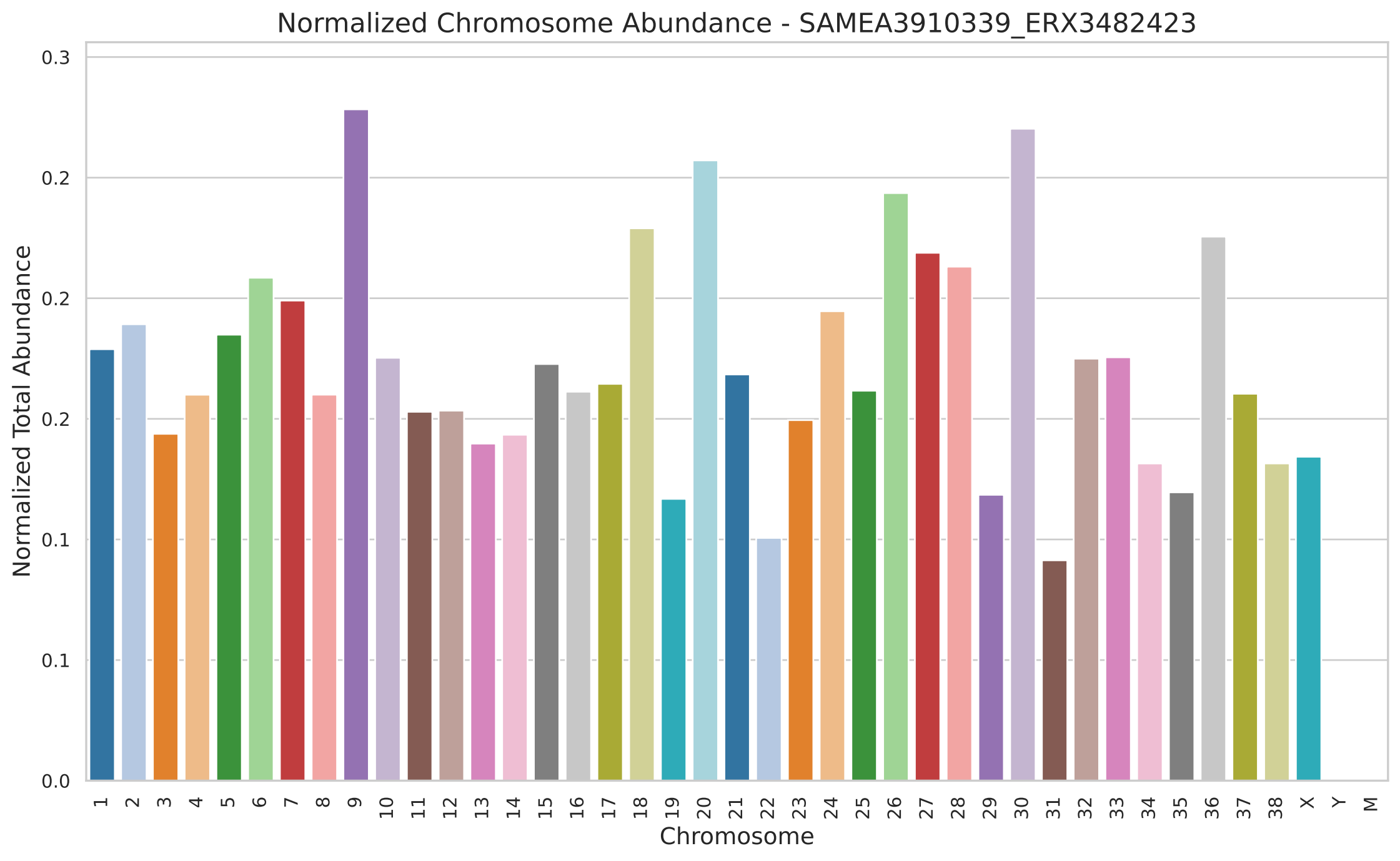

Normalized Chromosome Abundance - SAMEA3910285_ERX3482399
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

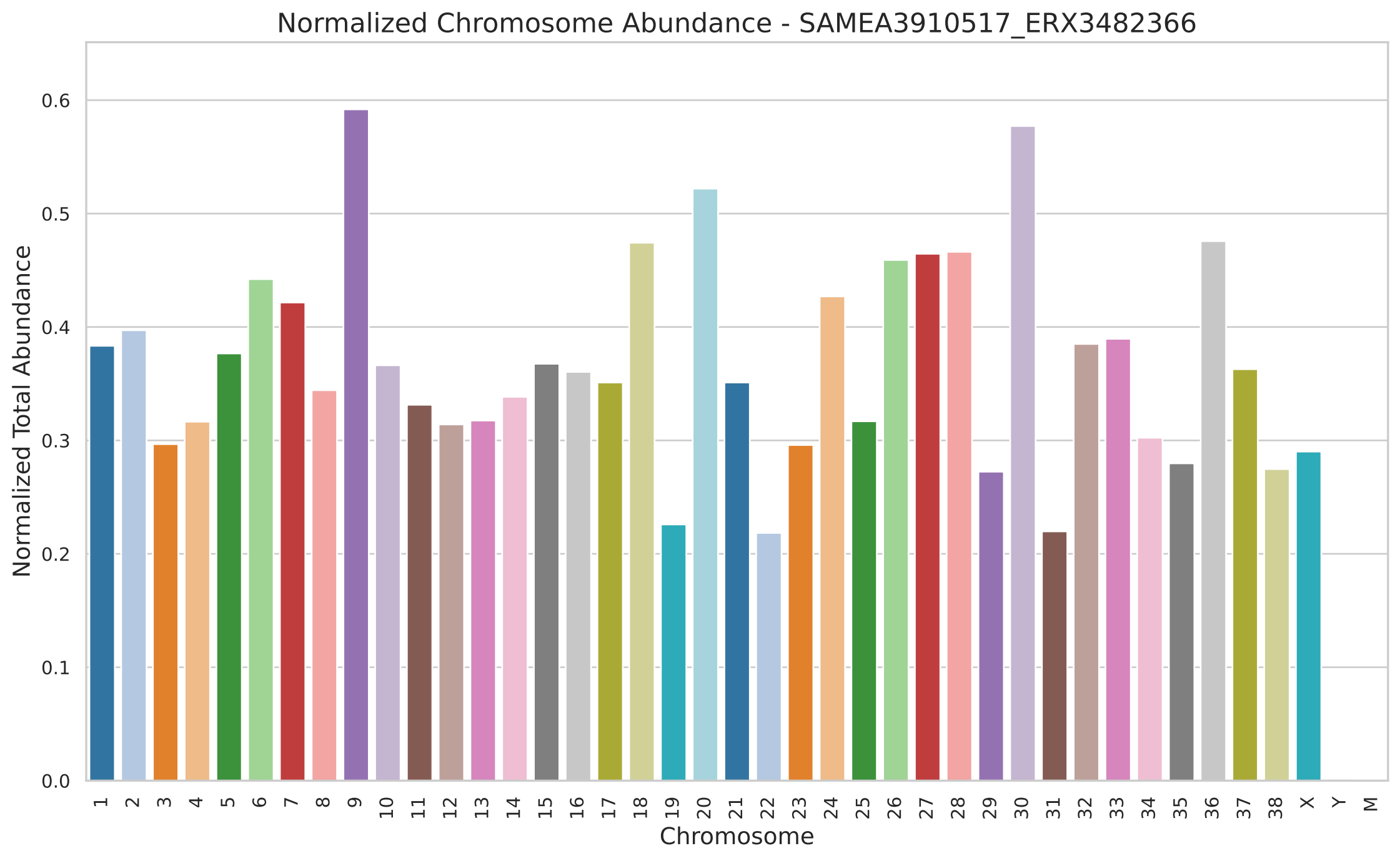

Normalized Chromosome Abundance - SAMEA3910411_ERX3482325
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

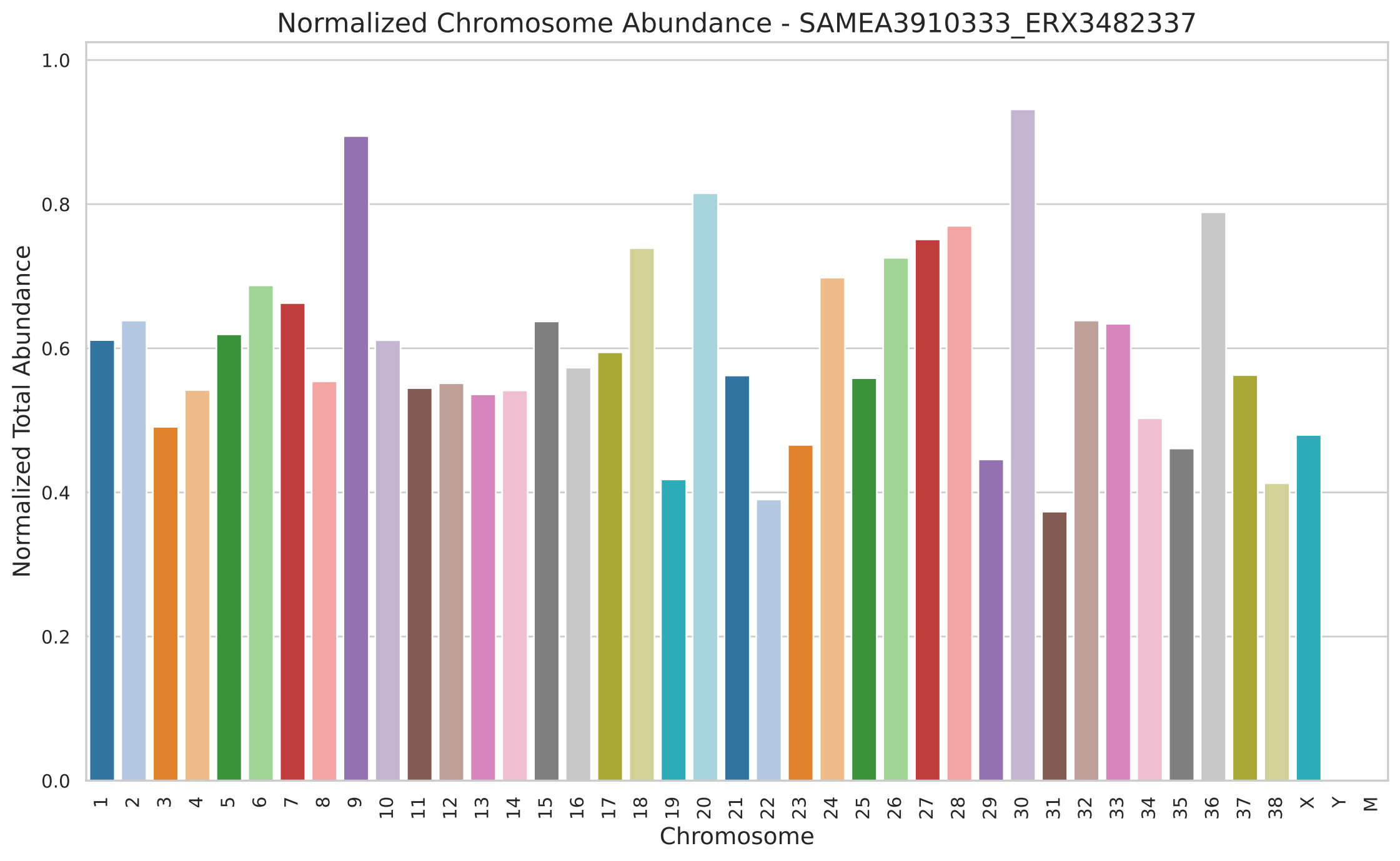

Normalized Chromosome Abundance - SAMEA3910313_ERX3482418
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

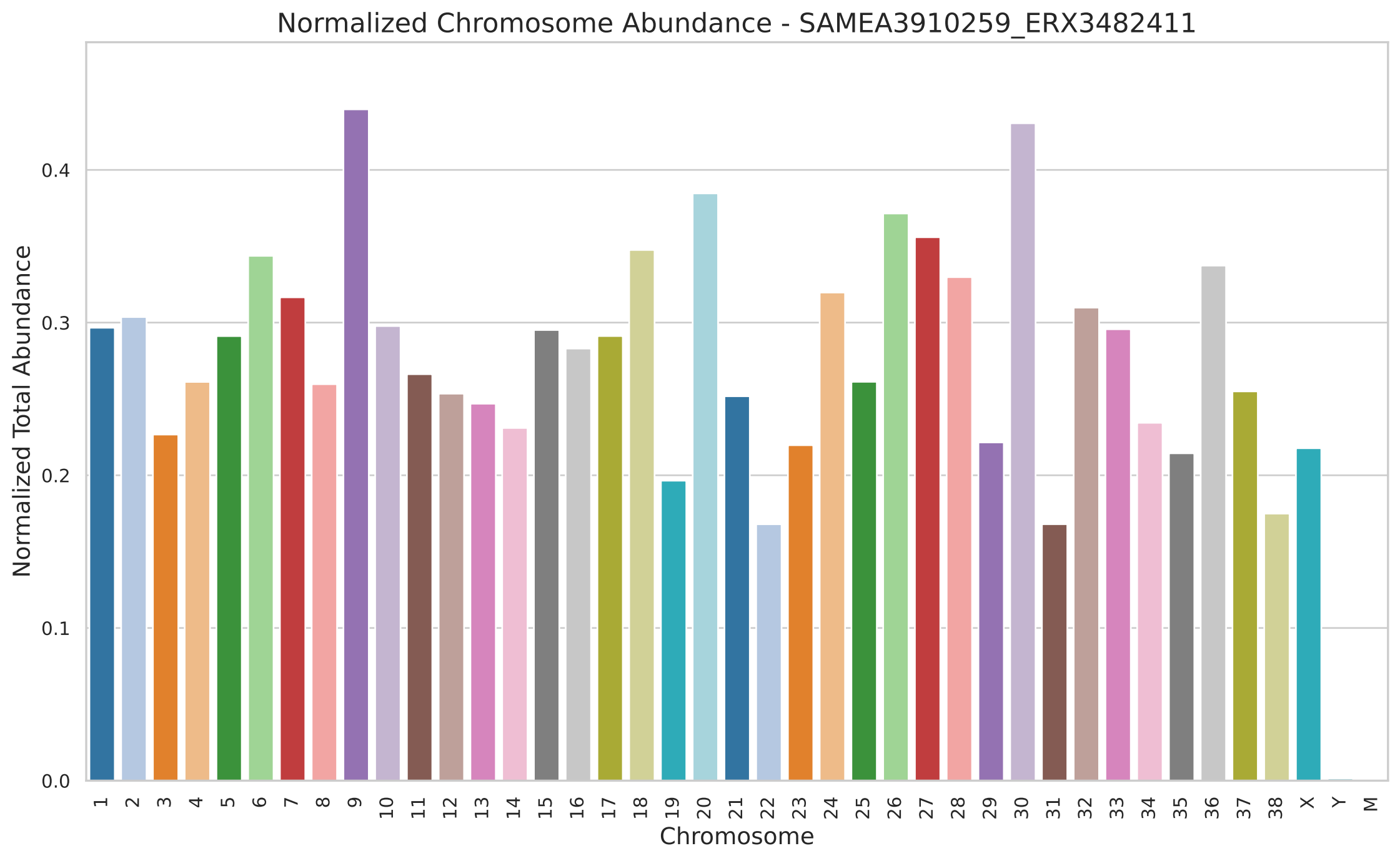

Normalized Chromosome Abundance - SAMEA3910302_ERX3482400
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

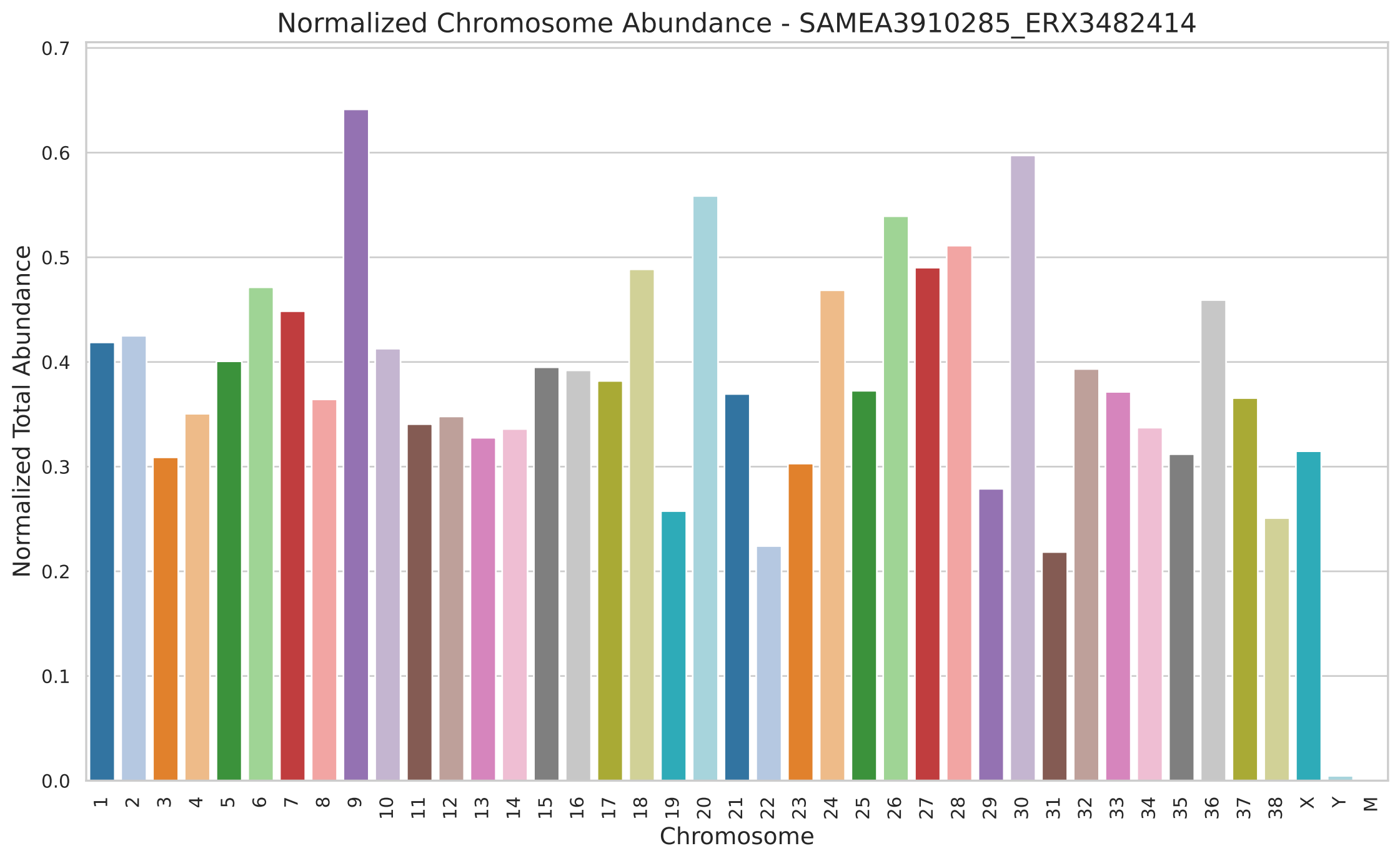

Normalized Chromosome Abundance - SAMEA3910309_ERX3482417
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

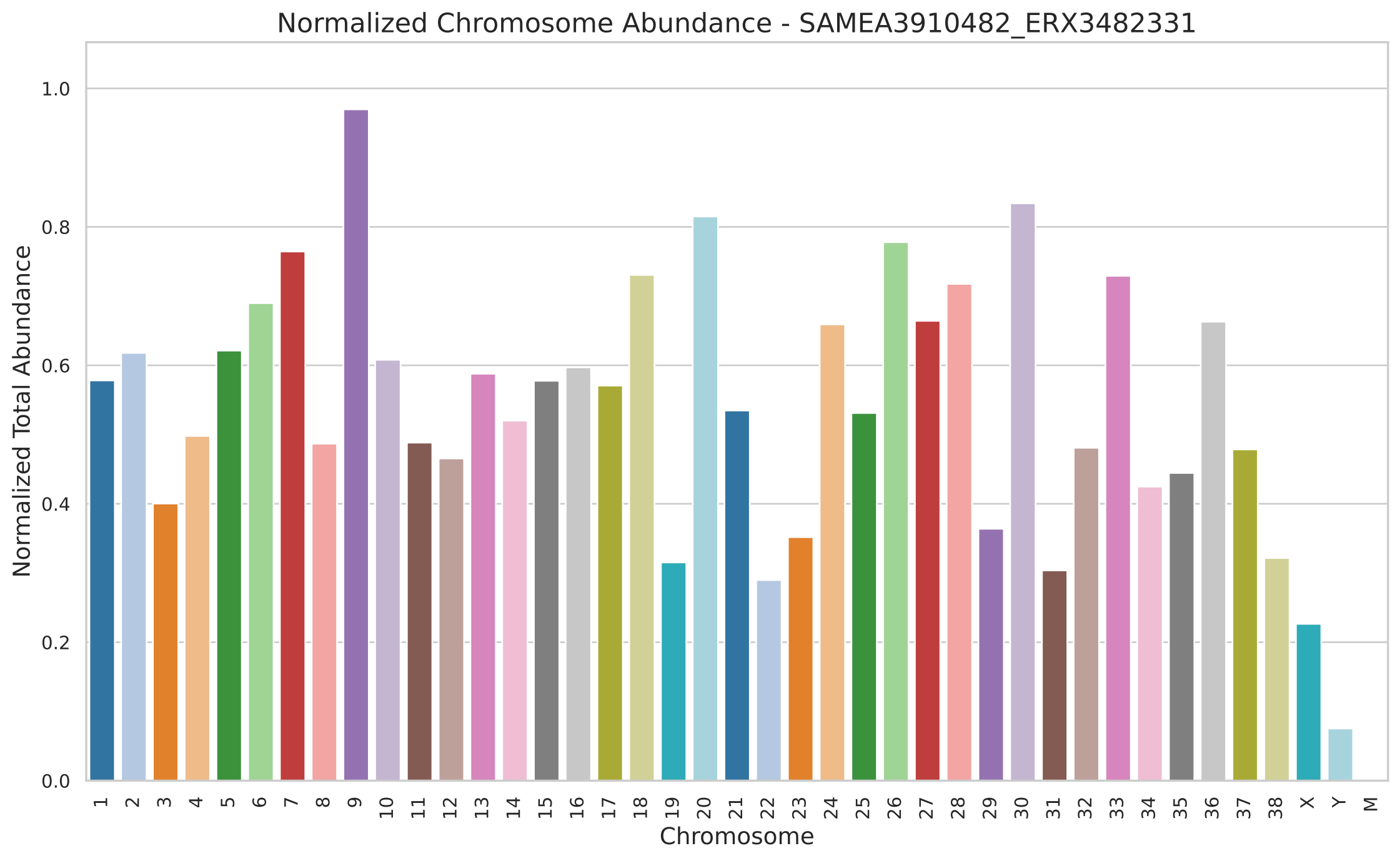

Normalized Chromosome Abundance - SAMEA3910339_ERX3482423
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

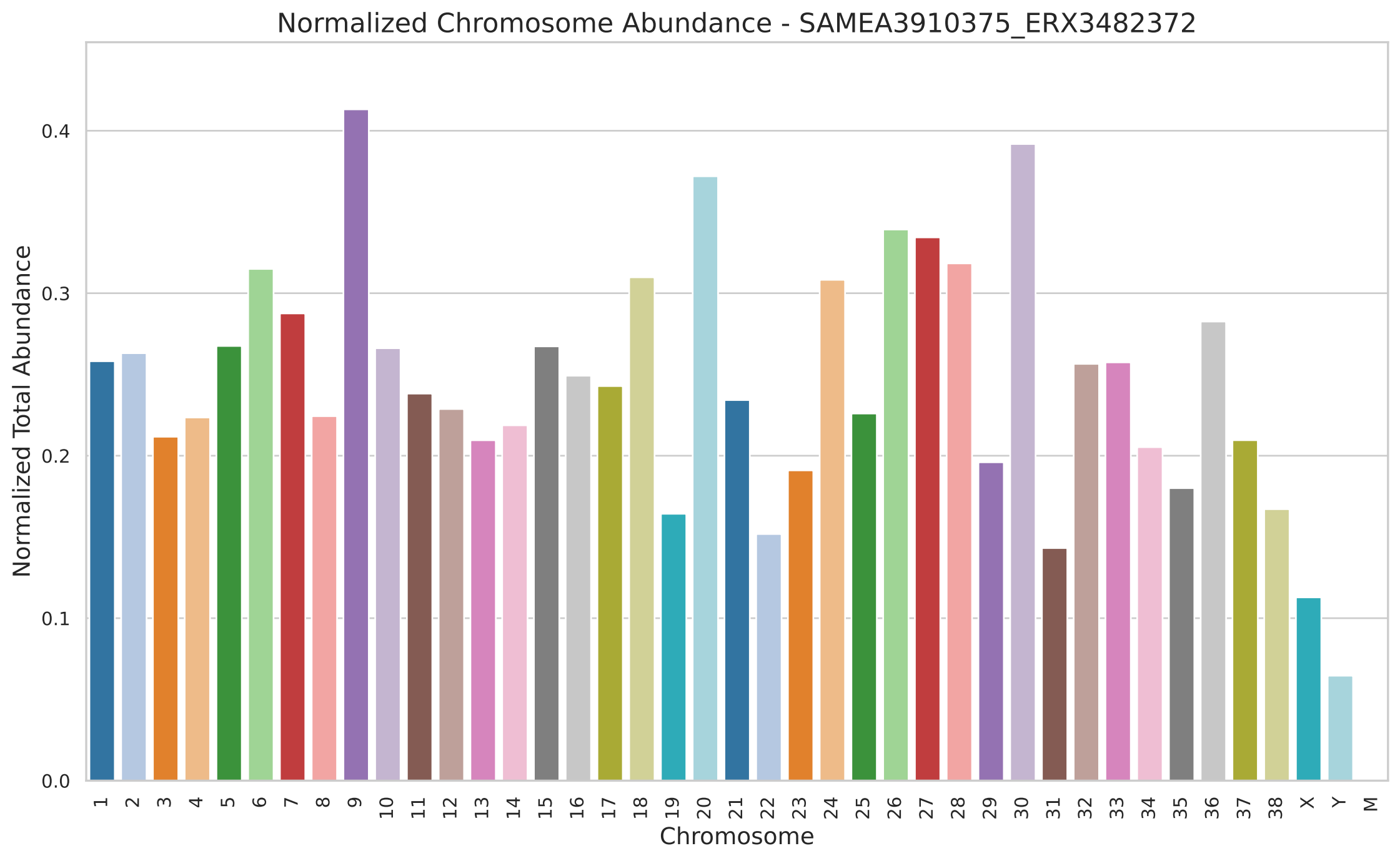

Normalized Chromosome Abundance - SAMEA3910517_ERX3482366
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

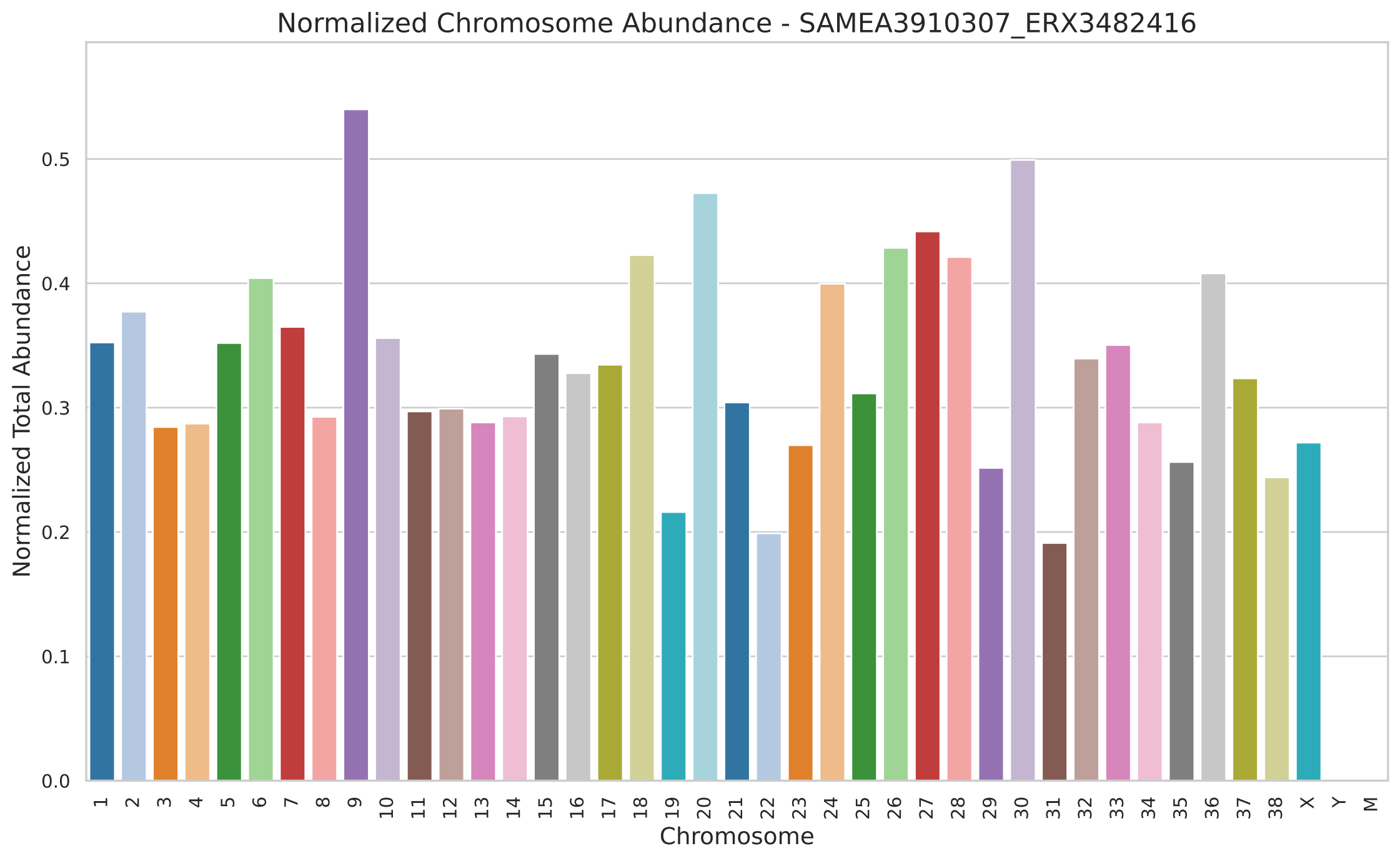

Normalized Chromosome Abundance - SAMEA3910333_ERX3482337
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

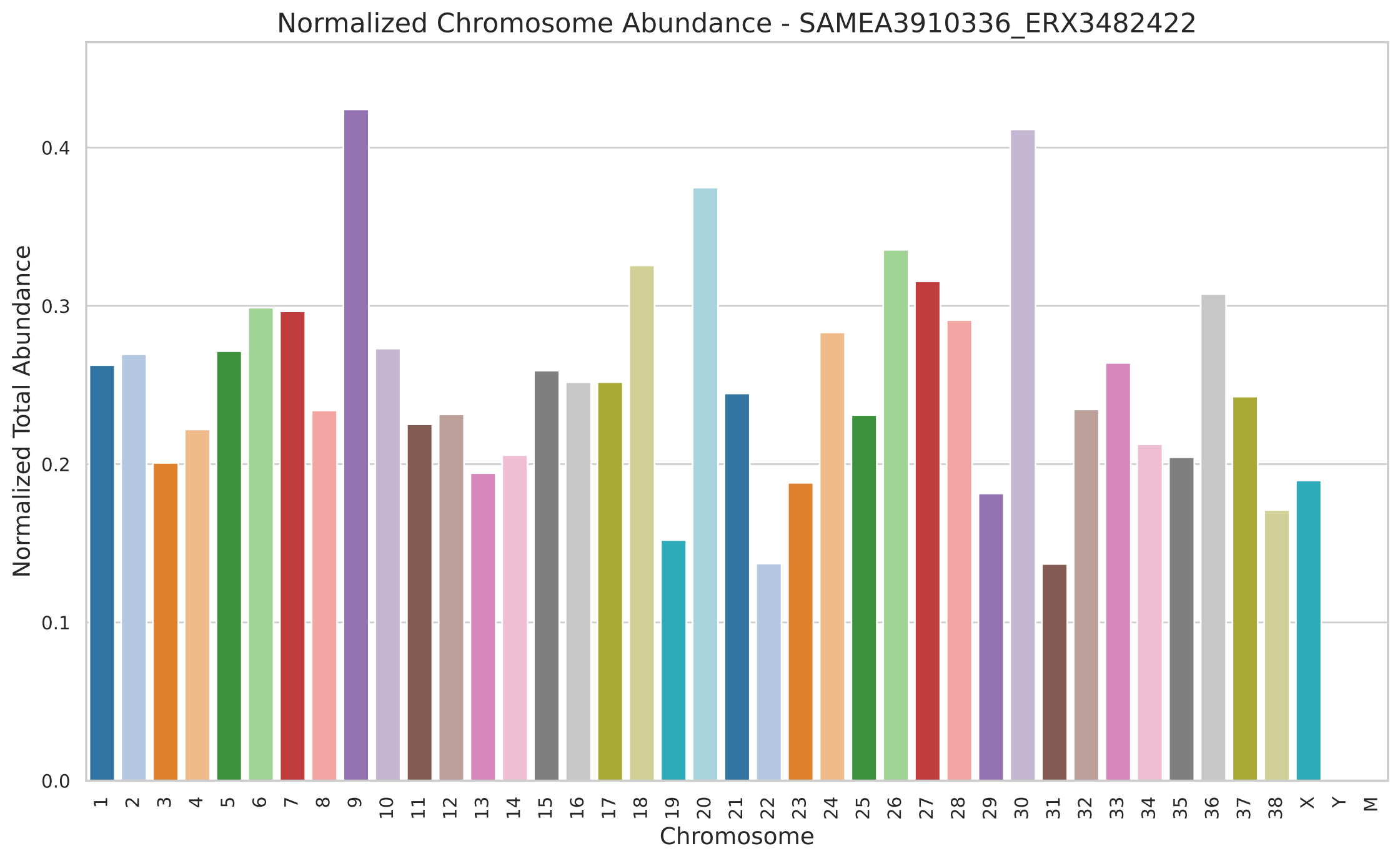

Normalized Chromosome Abundance - SAMEA3910259_ERX3482411
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

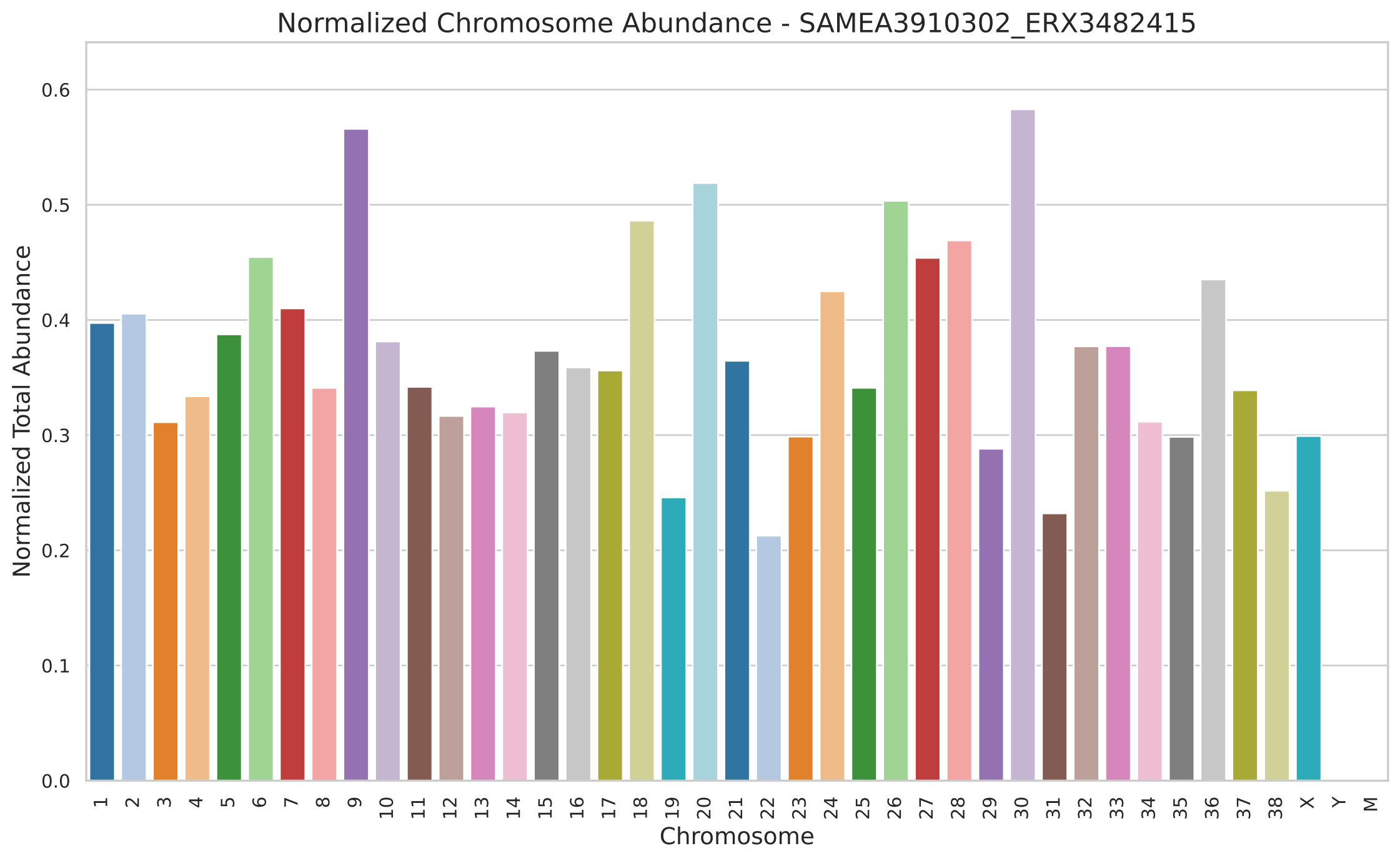

Normalized Chromosome Abundance - SAMEA3910285_ERX3482414
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

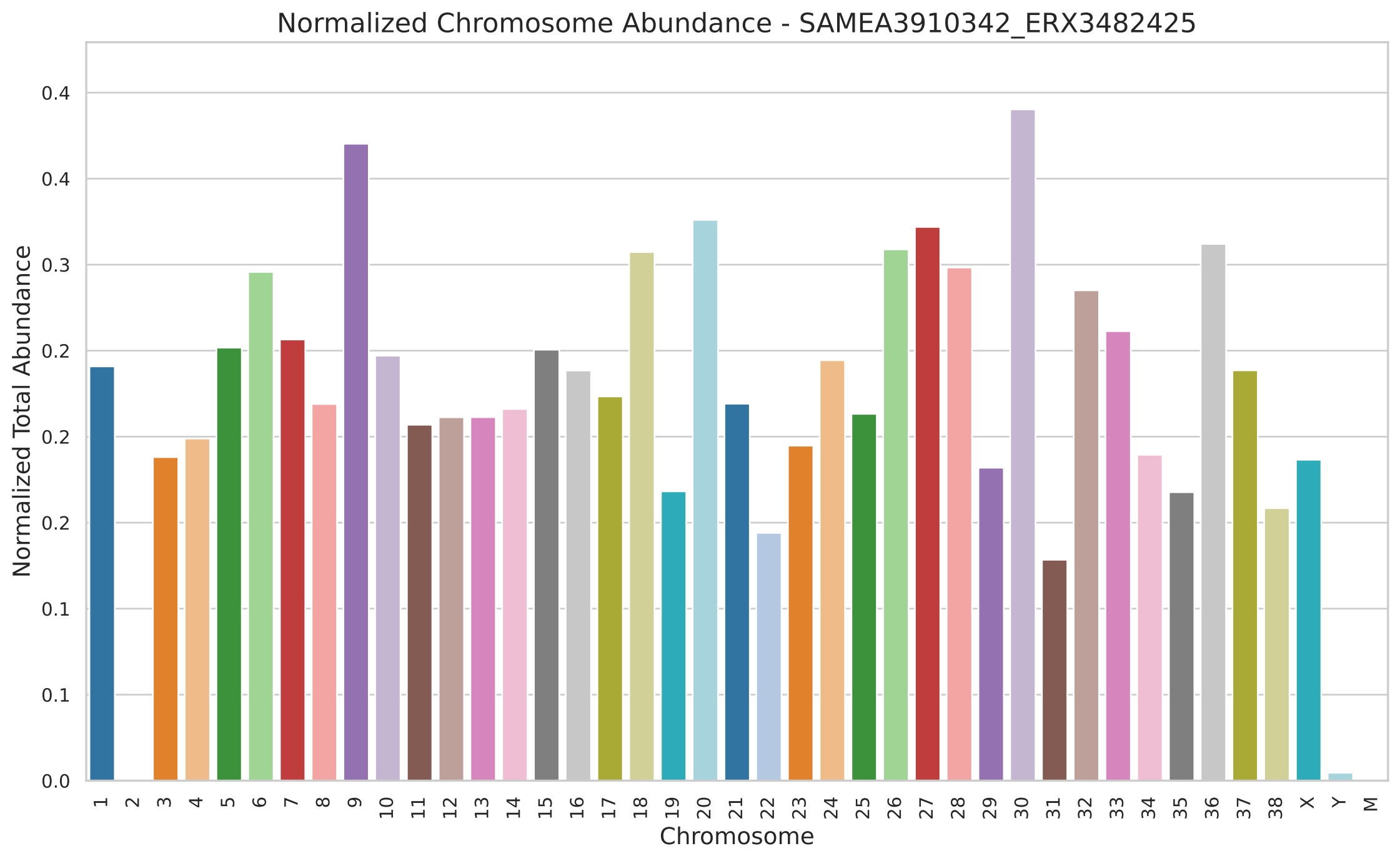

Normalized Chromosome Abundance - SAMEA3910482_ERX3482331
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

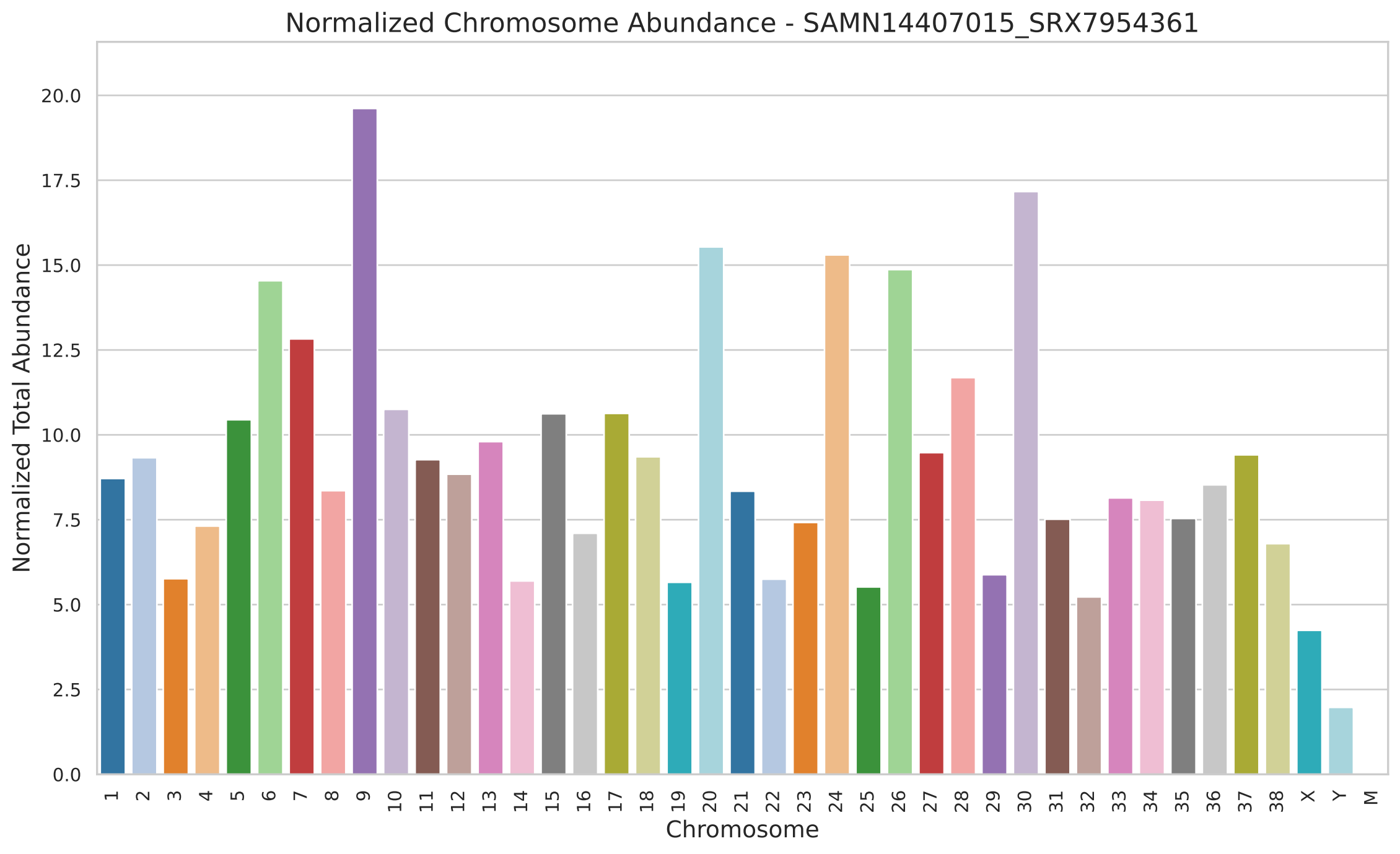

Normalized Chromosome Abundance - SAMEA3910375_ERX3482372
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

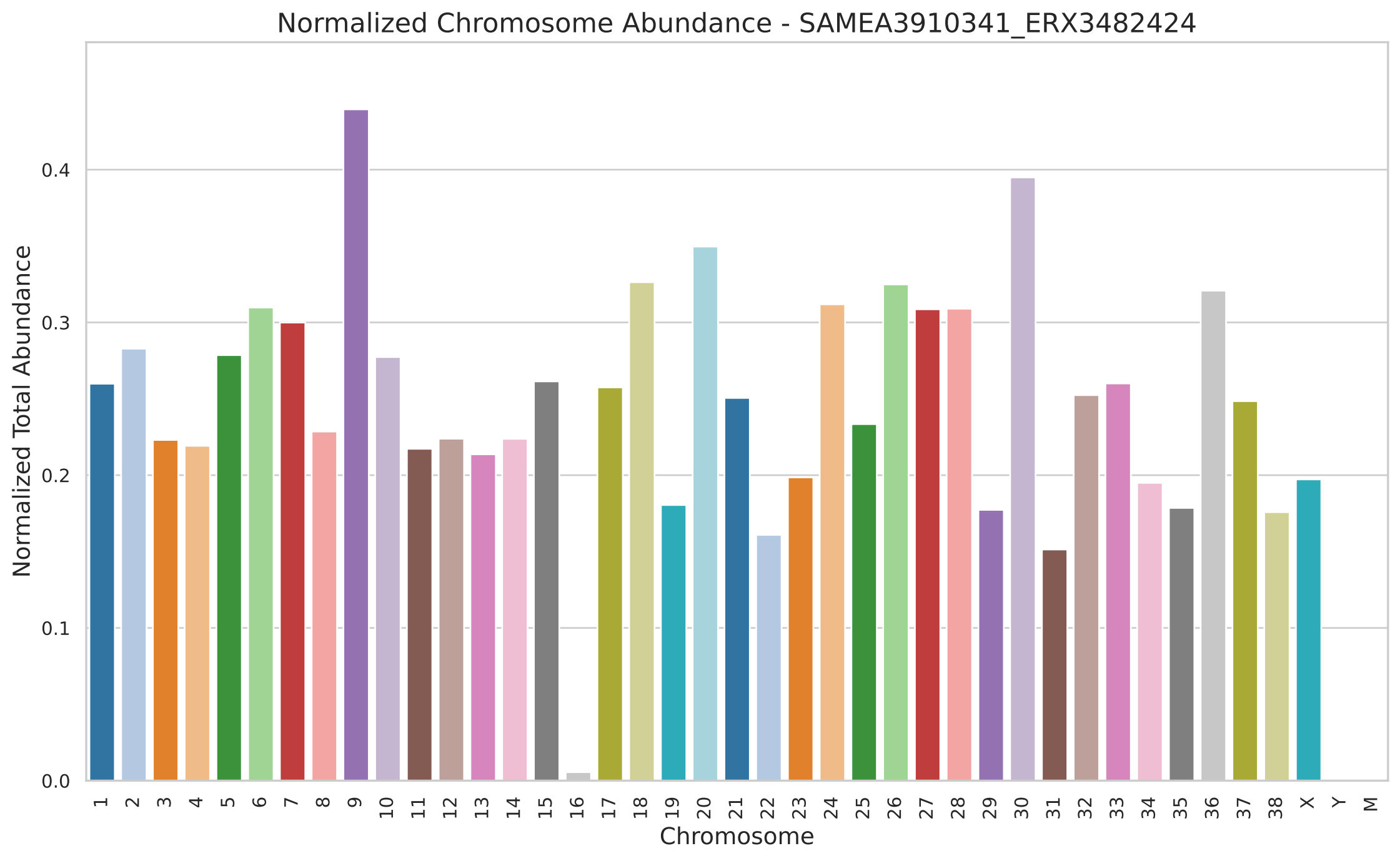

Normalized Chromosome Abundance - SAMEA3910307_ERX3482416
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

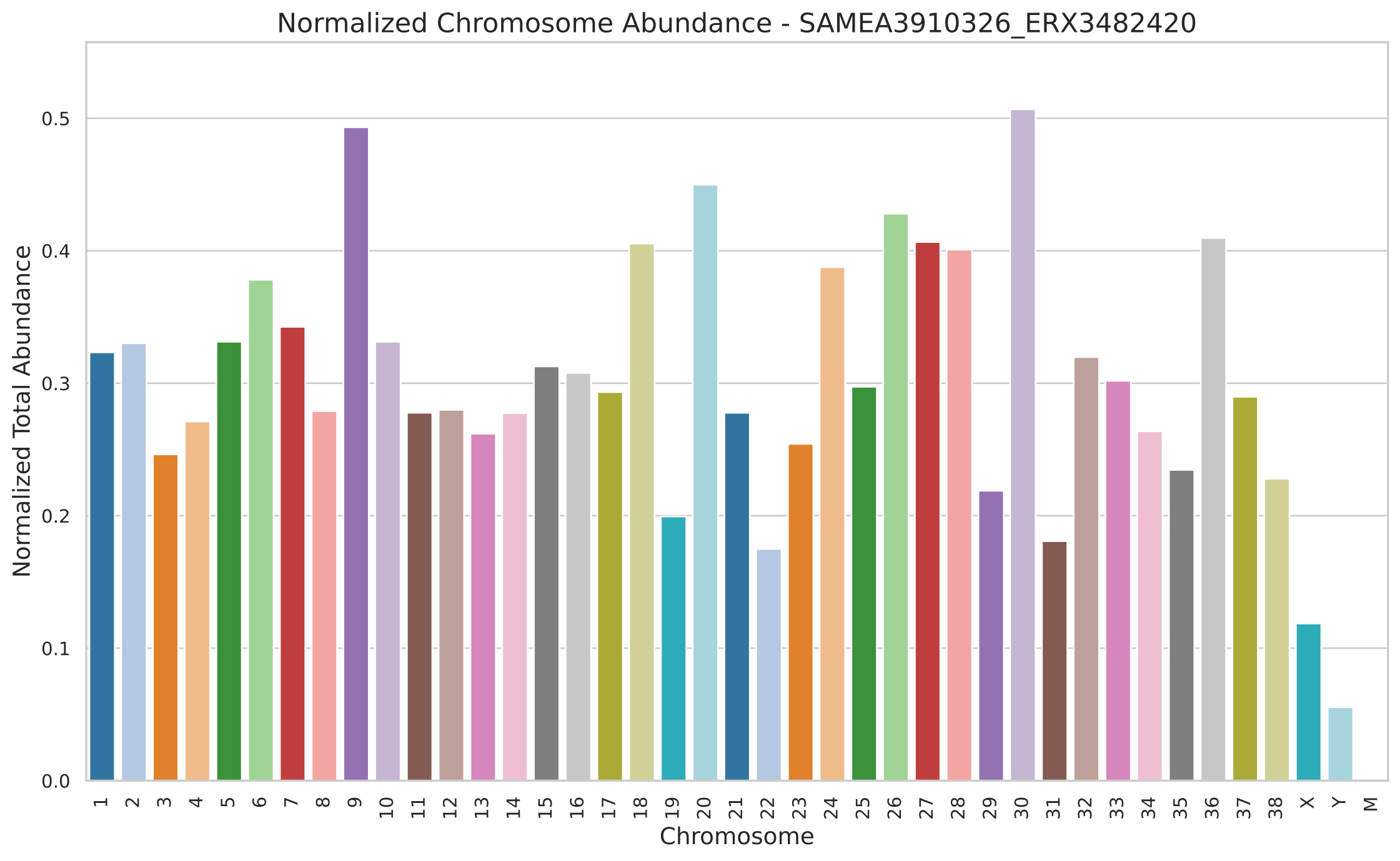

Normalized Chromosome Abundance - SAMEA3910336_ERX3482422
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

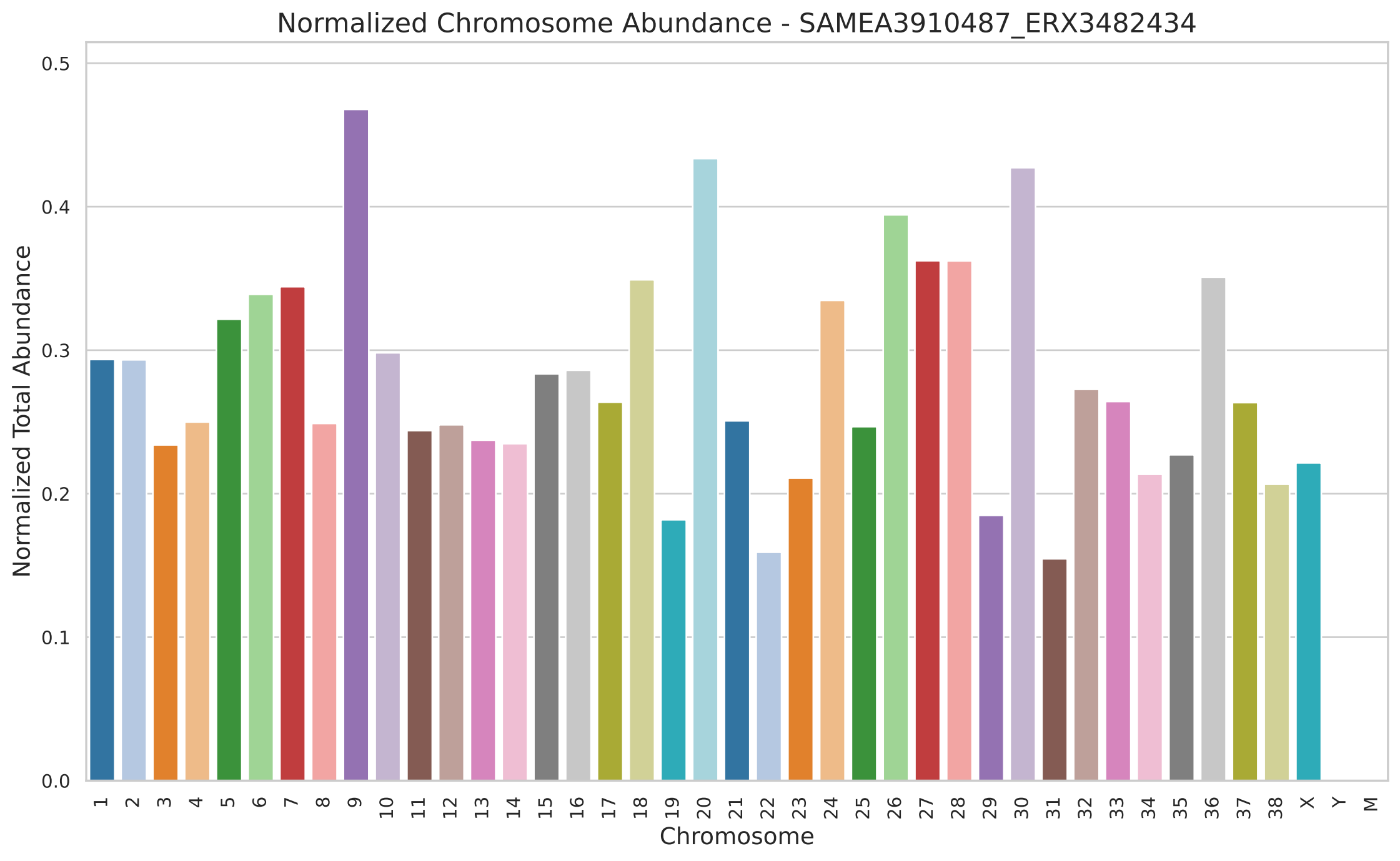

Normalized Chromosome Abundance - SAMEA3910302_ERX3482415
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

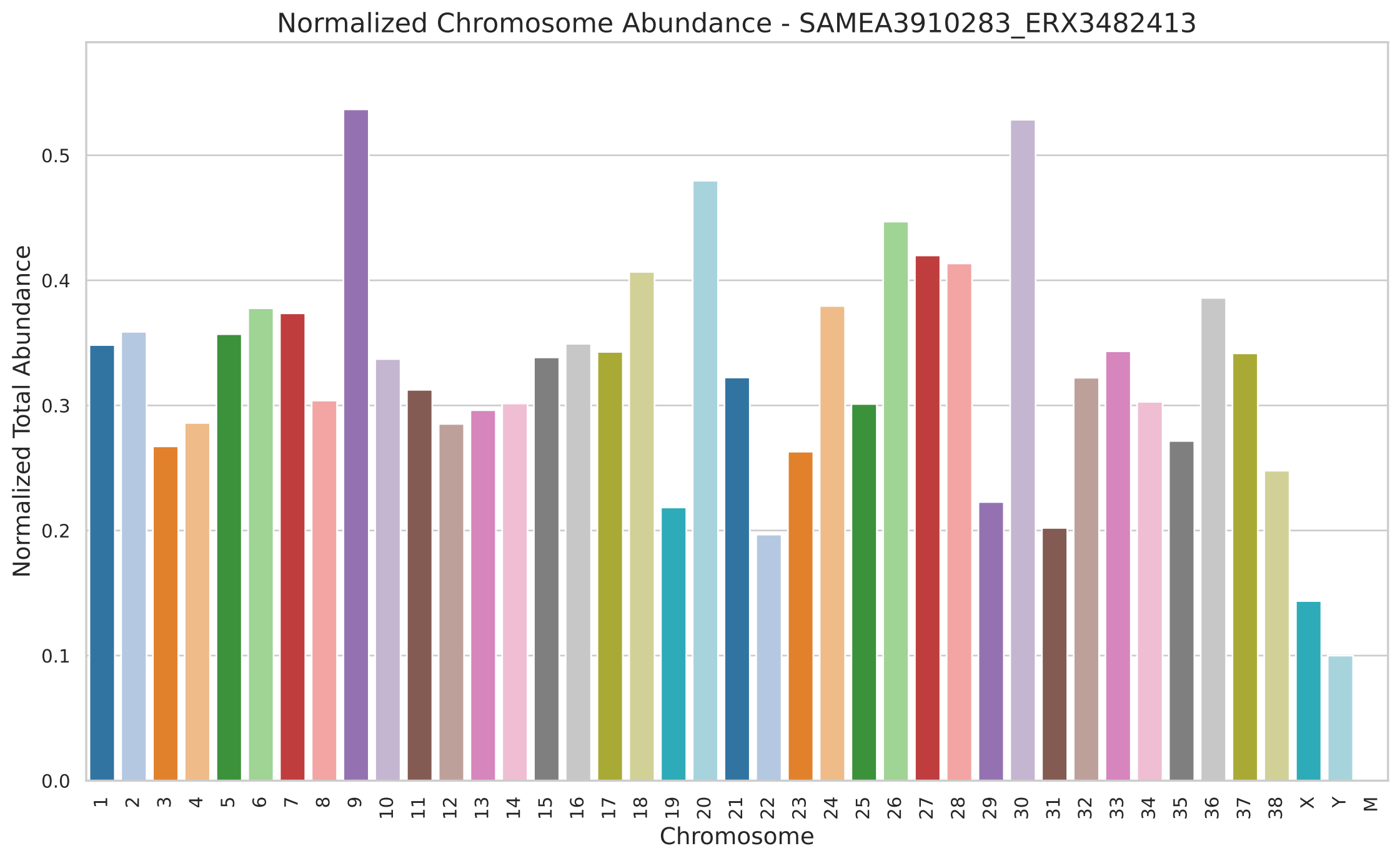

Normalized Chromosome Abundance - SAMEA3910342_ERX3482425
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

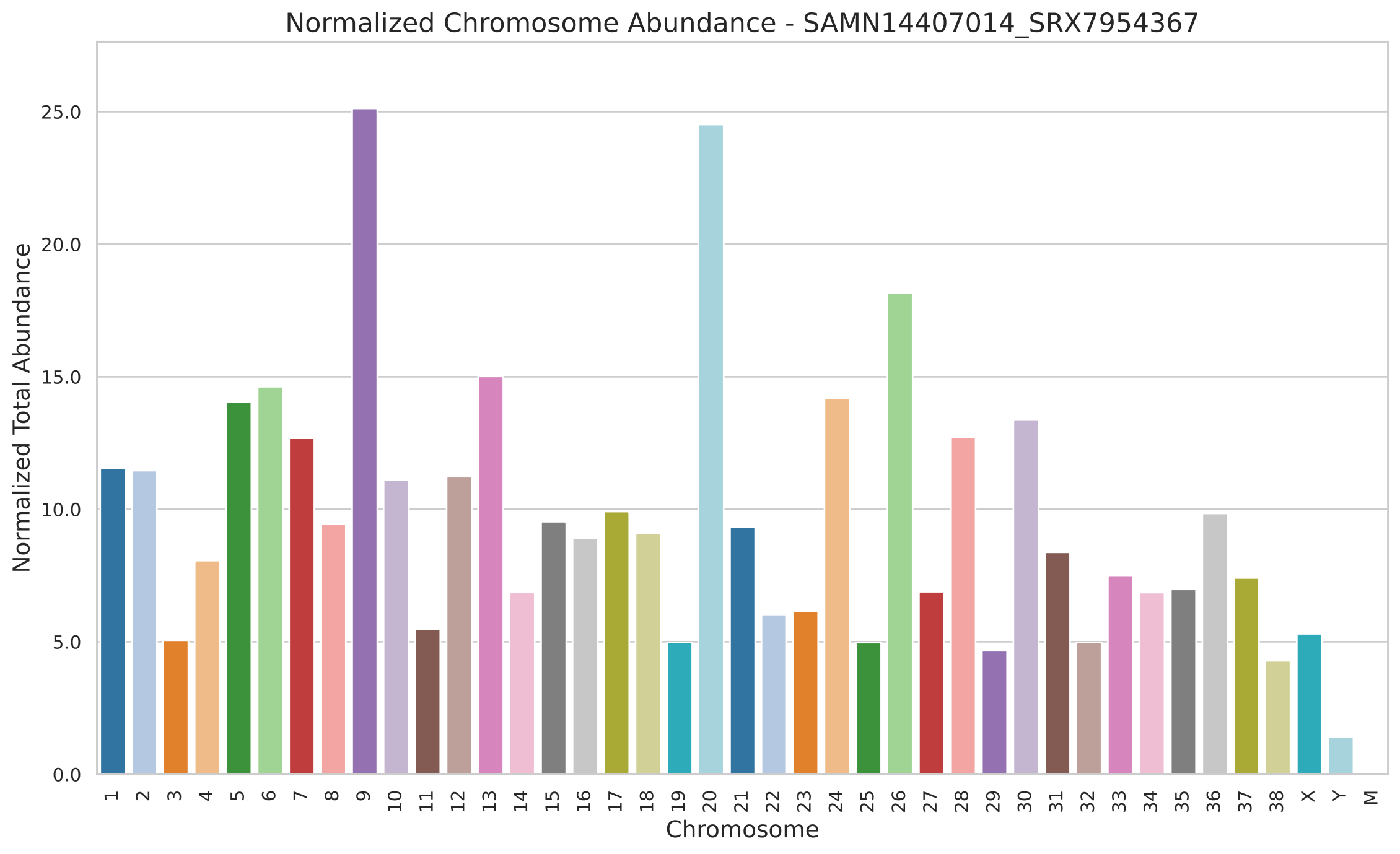

Normalized Chromosome Abundance - SAMN14407015_SRX7954361
Normalized Total Abundance
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5
20.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

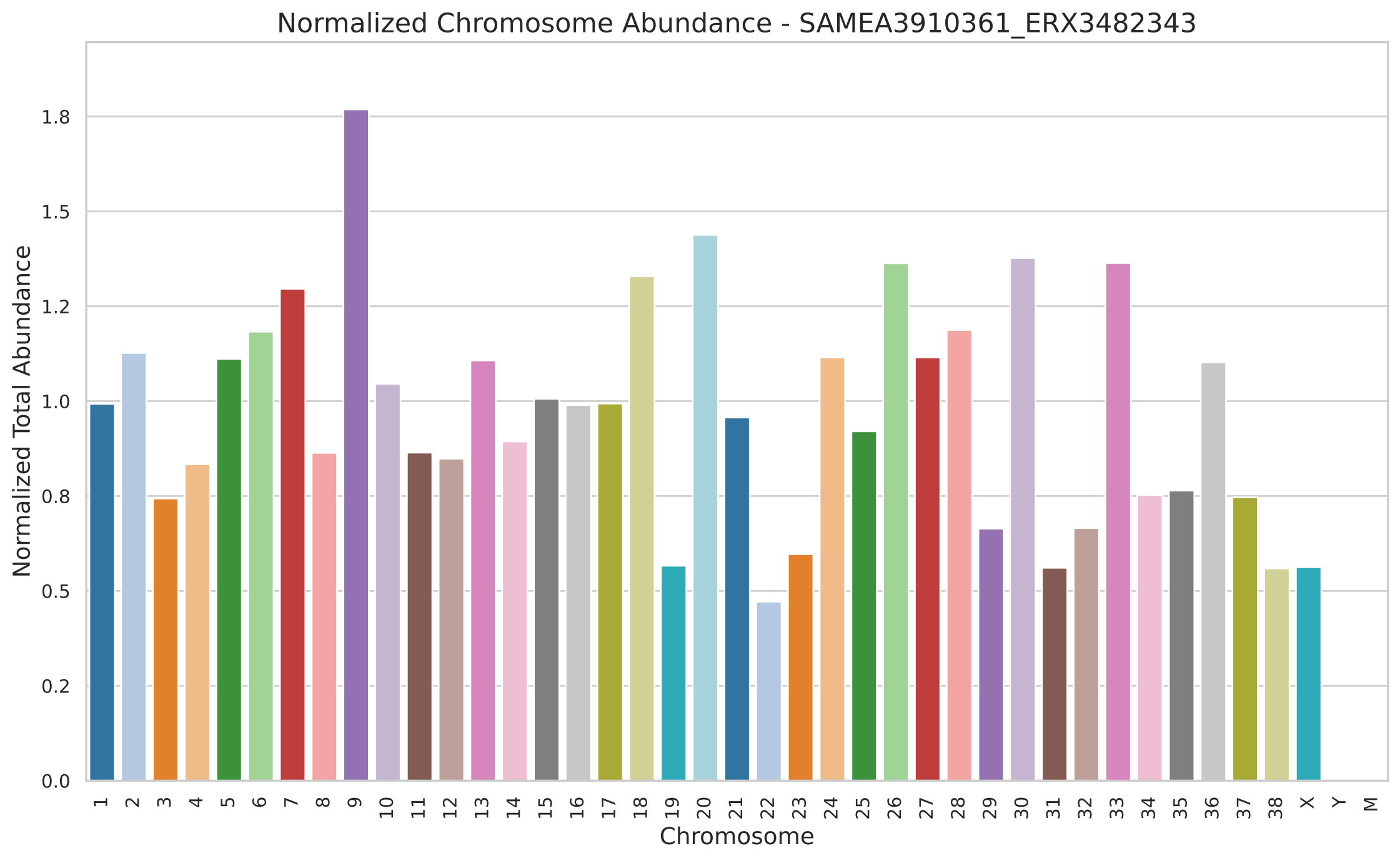

Normalized Chromosome Abundance - SAMEA3910341_ERX3482424
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

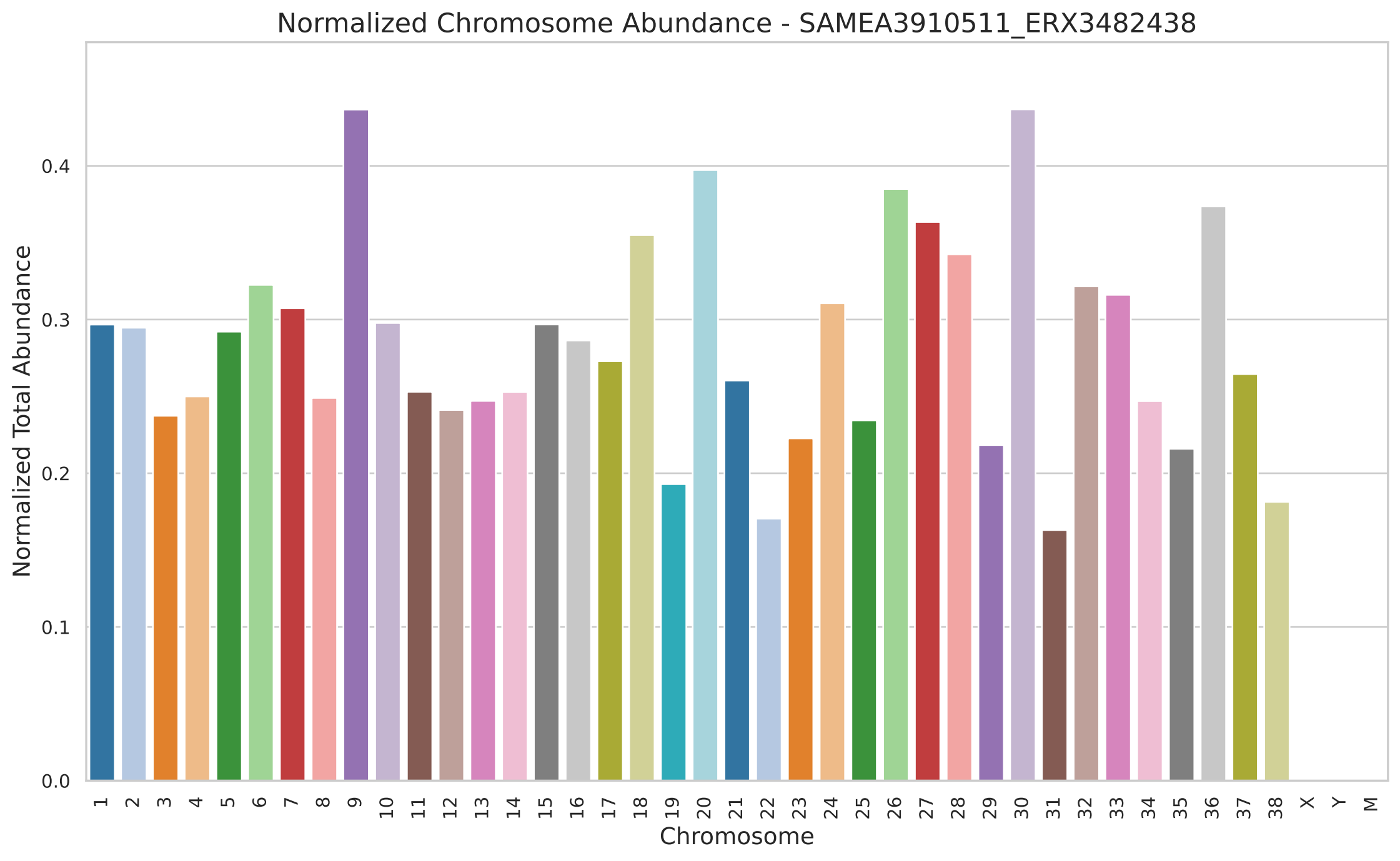

Normalized Chromosome Abundance - SAMEA3910326_ERX3482420
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

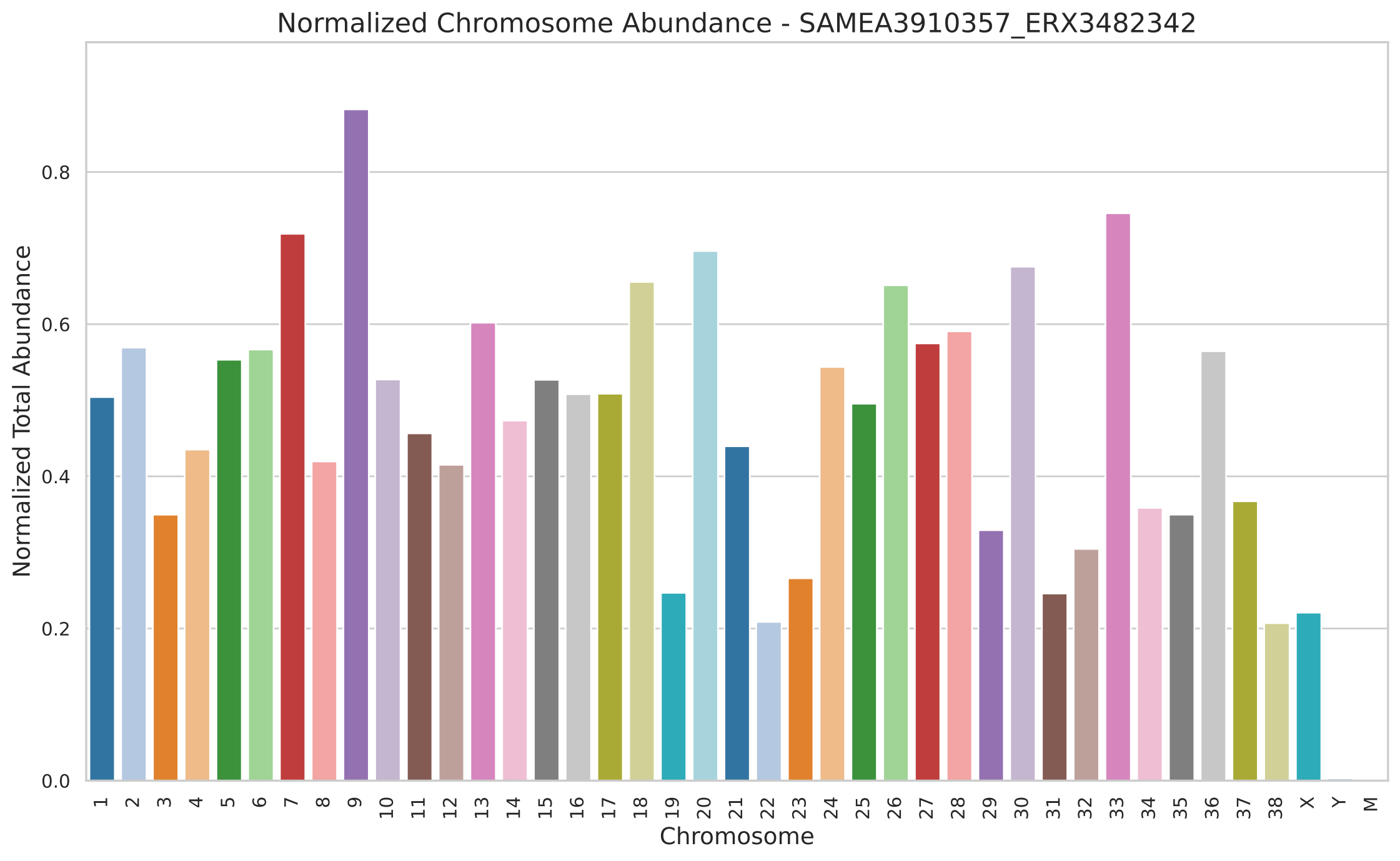

Normalized Chromosome Abundance - SAMEA3910487_ERX3482434
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

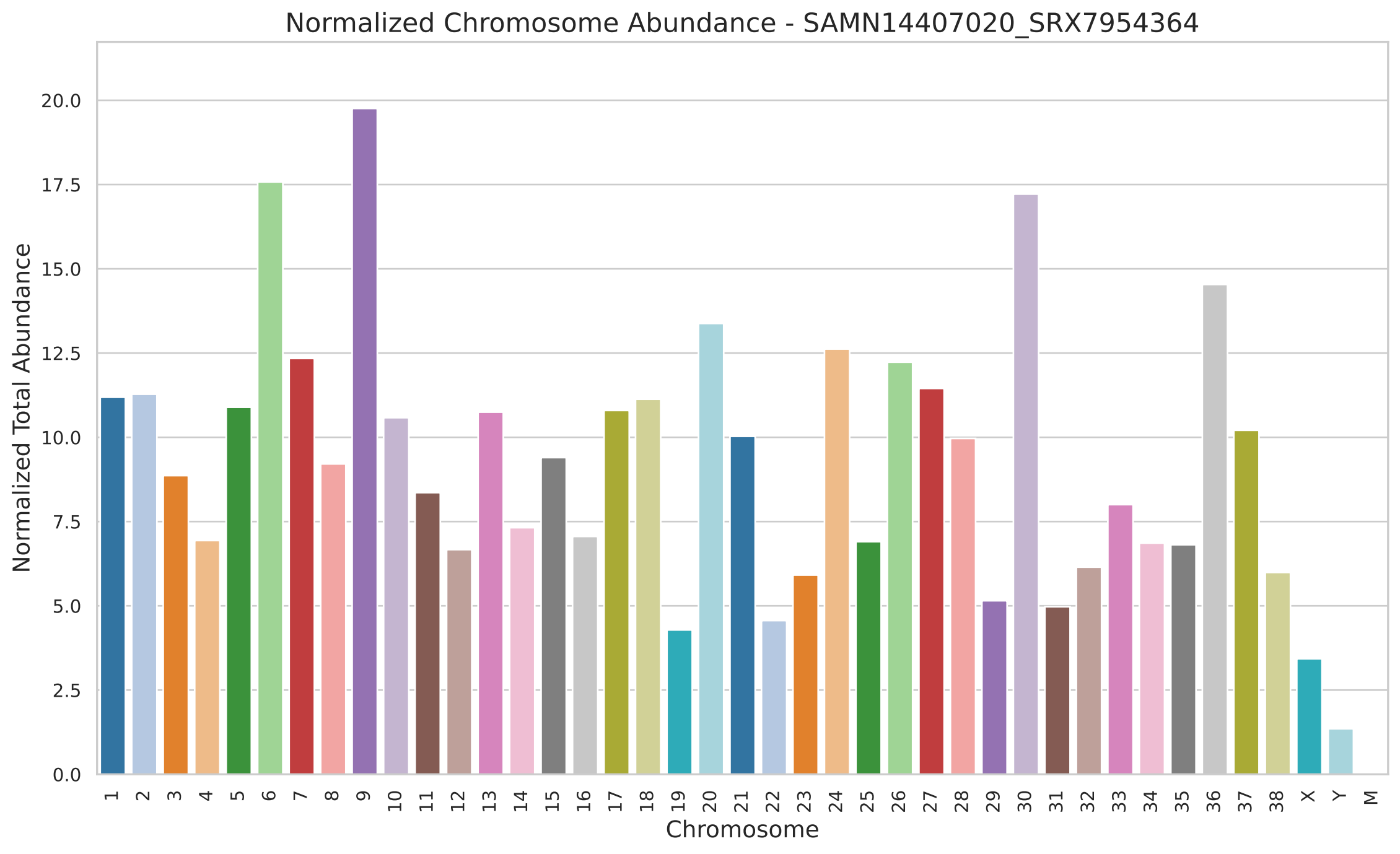

Normalized Chromosome Abundance - SAMEA3910283_ERX3482413
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

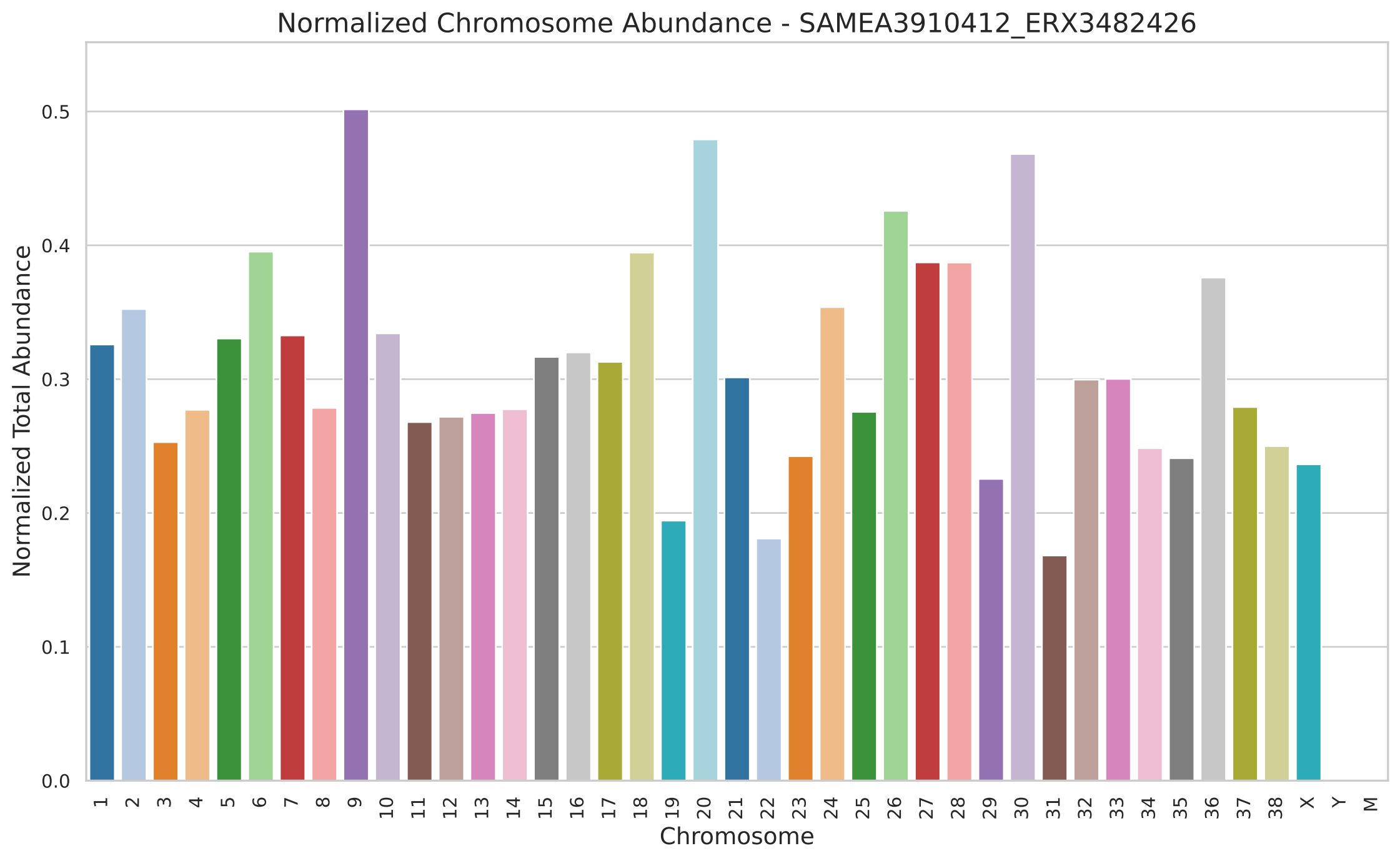

Normalized Chromosome Abundance - SAMN14407014_SRX7954367
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

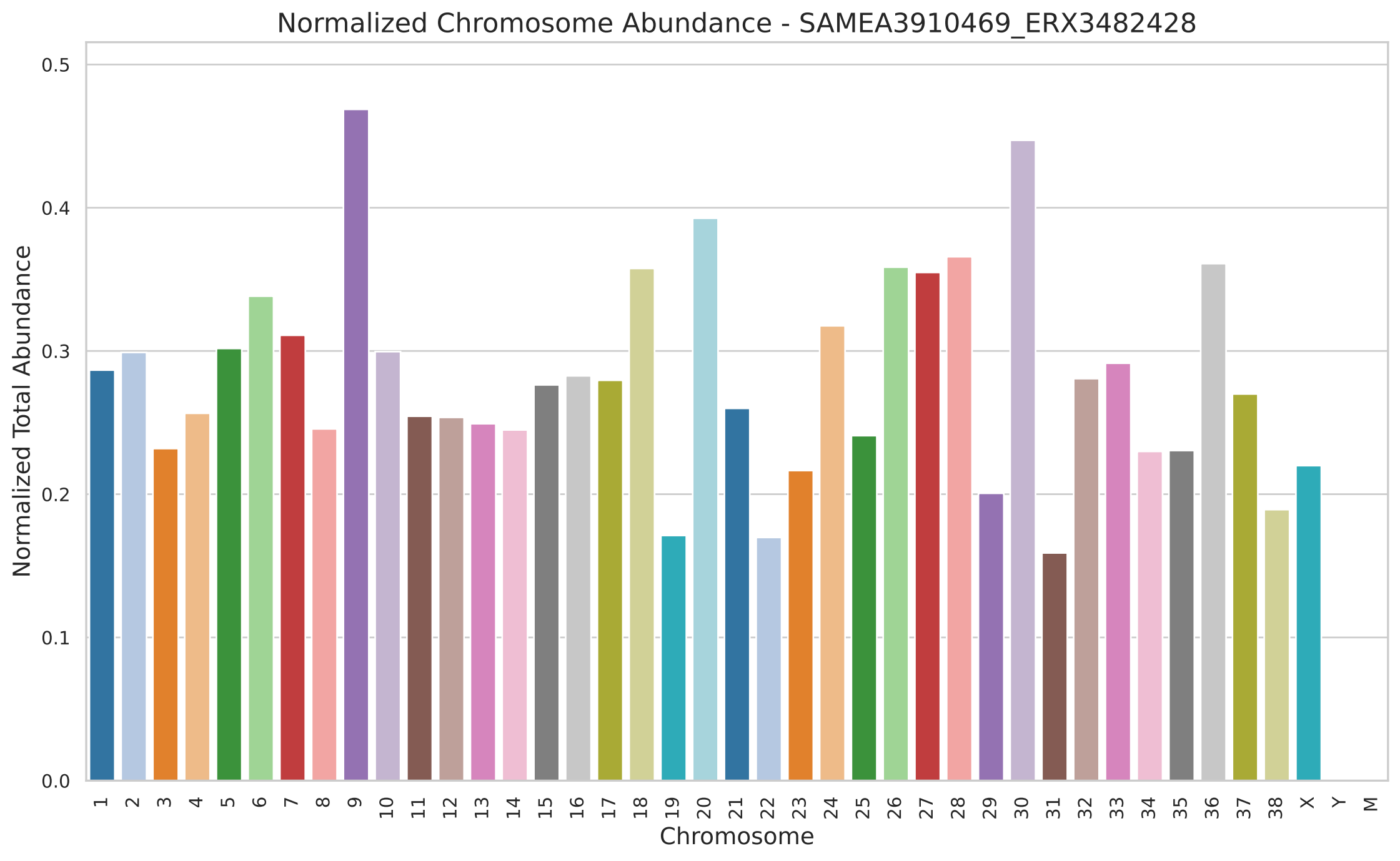

Normalized Chromosome Abundance - SAMEA3910361_ERX3482343
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

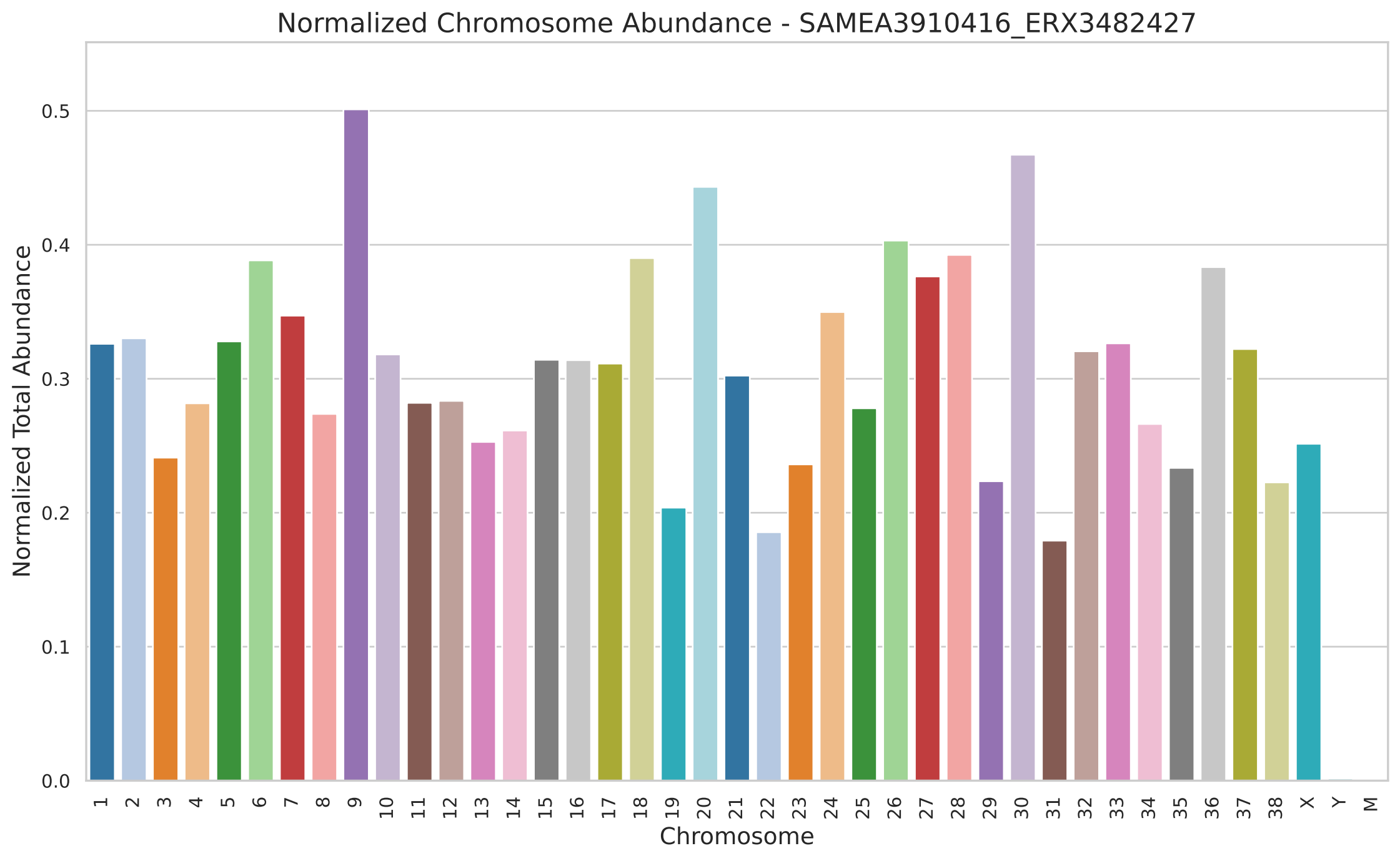

Normalized Chromosome Abundance - SAMEA3910511_ERX3482438
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

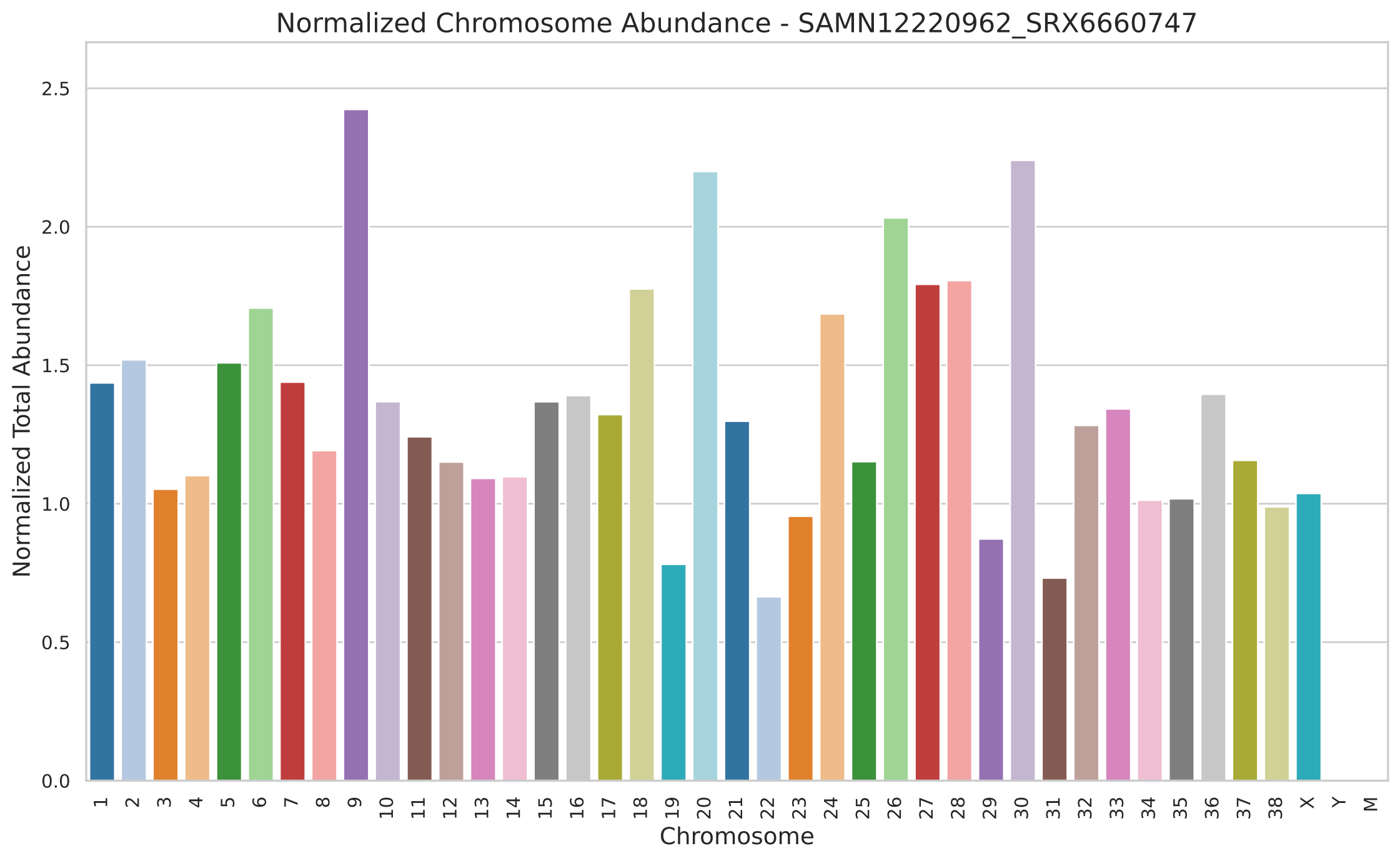

Normalized Chromosome Abundance - SAMEA3910357_ERX3482342
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

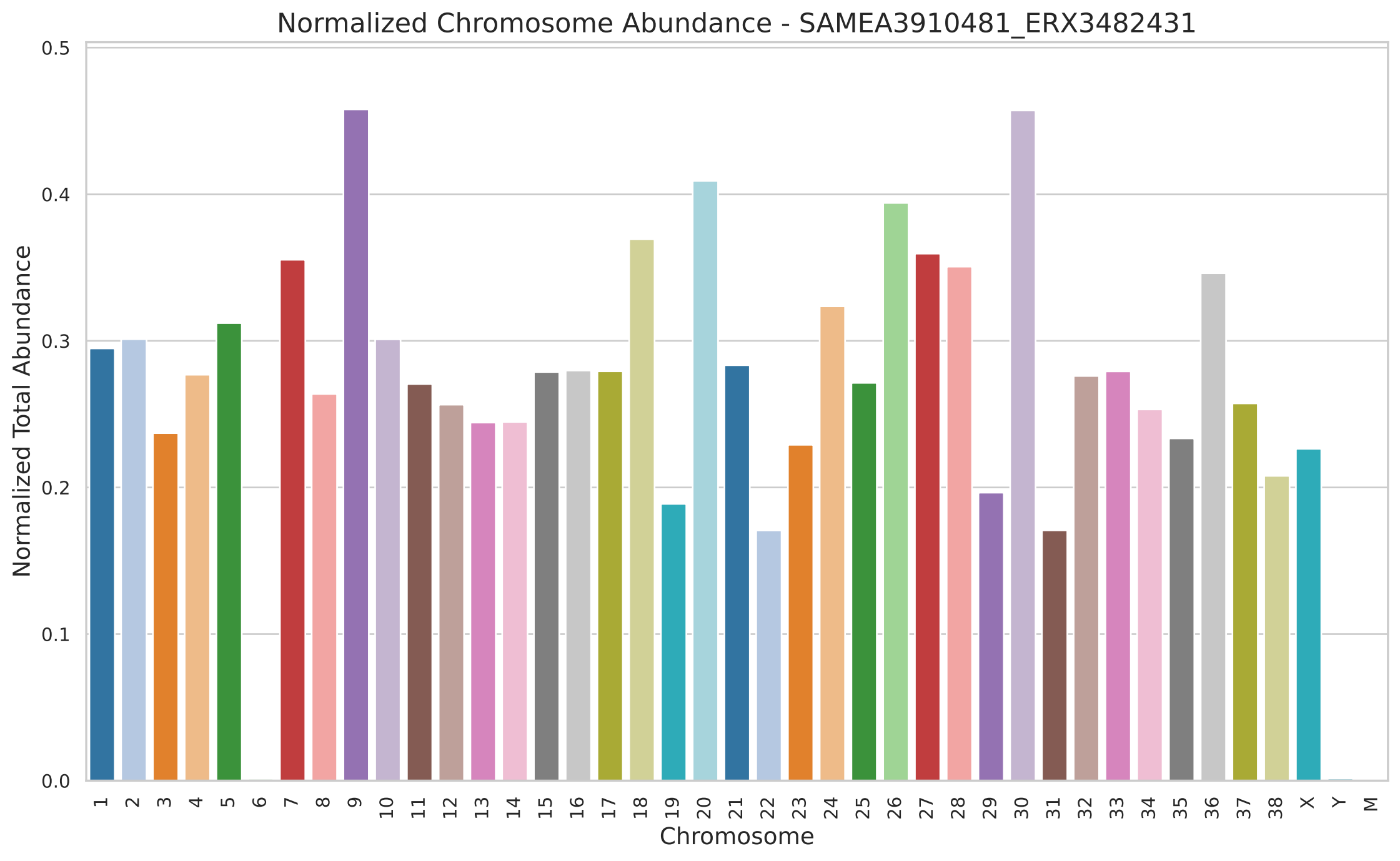

Normalized Chromosome Abundance - SAMN14407020_SRX7954364
Normalized Total Abundance
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5
20.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

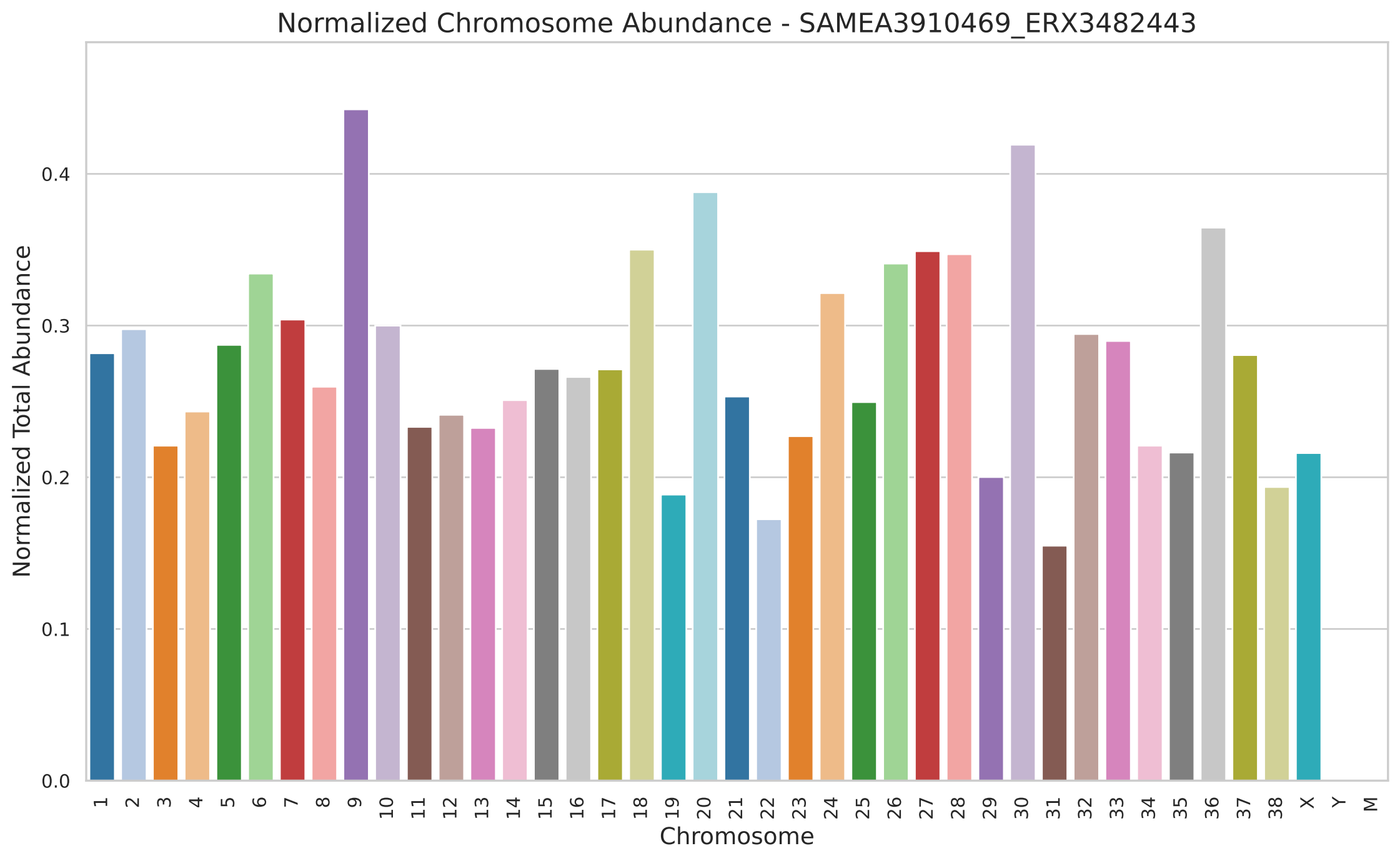

Normalized Chromosome Abundance - SAMEA3910412_ERX3482426
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

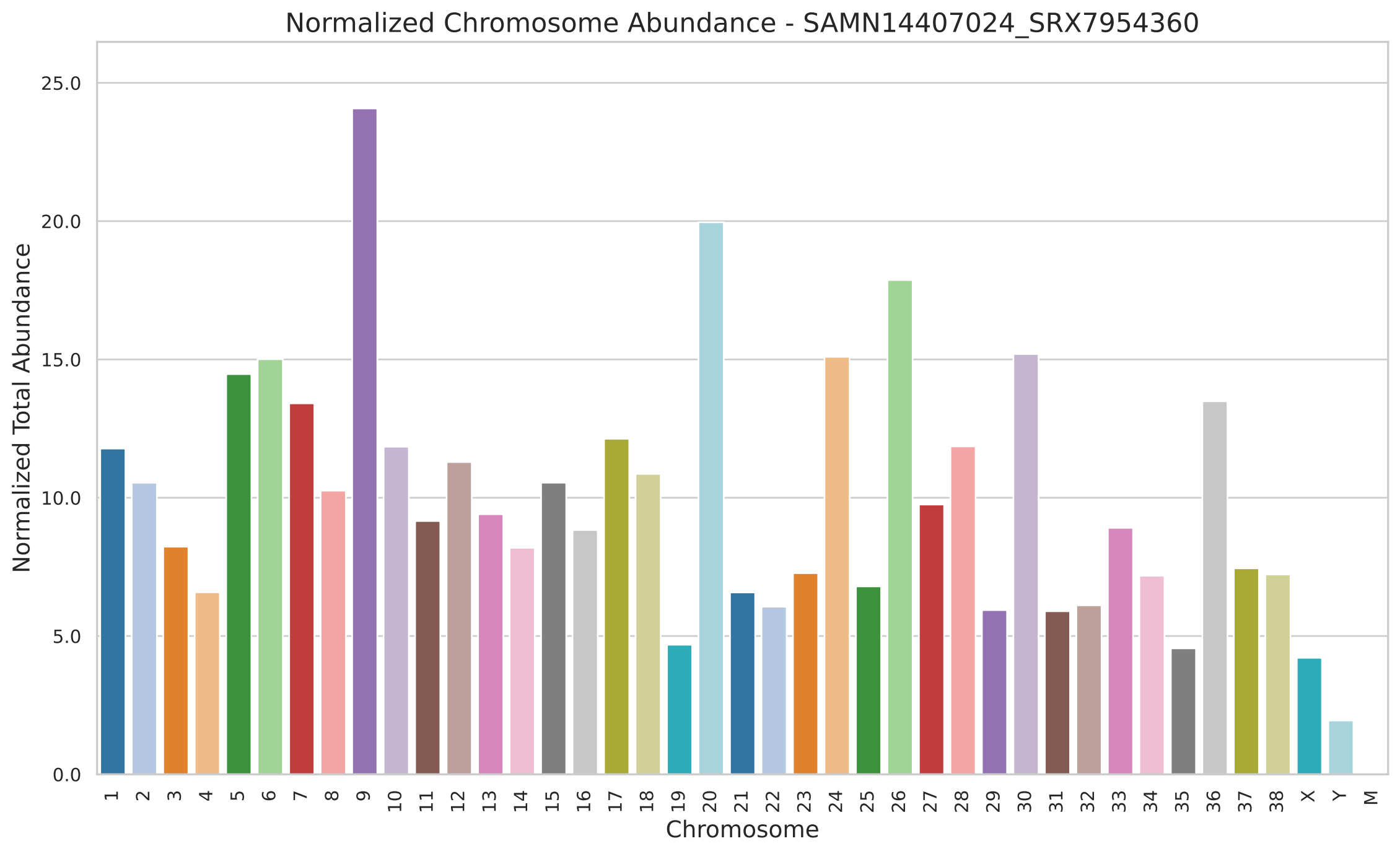

Normalized Chromosome Abundance - SAMEA3910469_ERX3482428
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

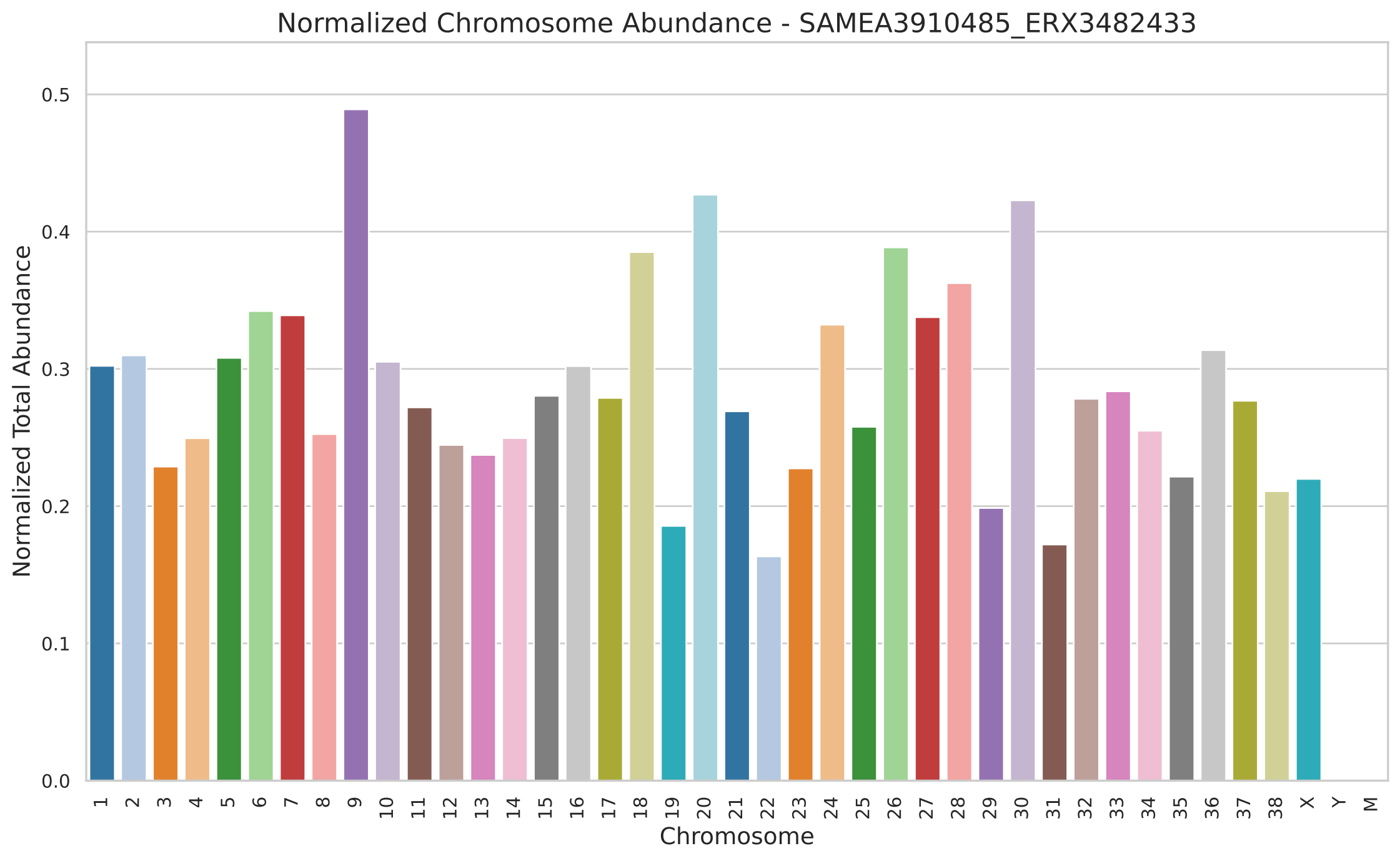

Normalized Chromosome Abundance - SAMEA3910416_ERX3482427
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

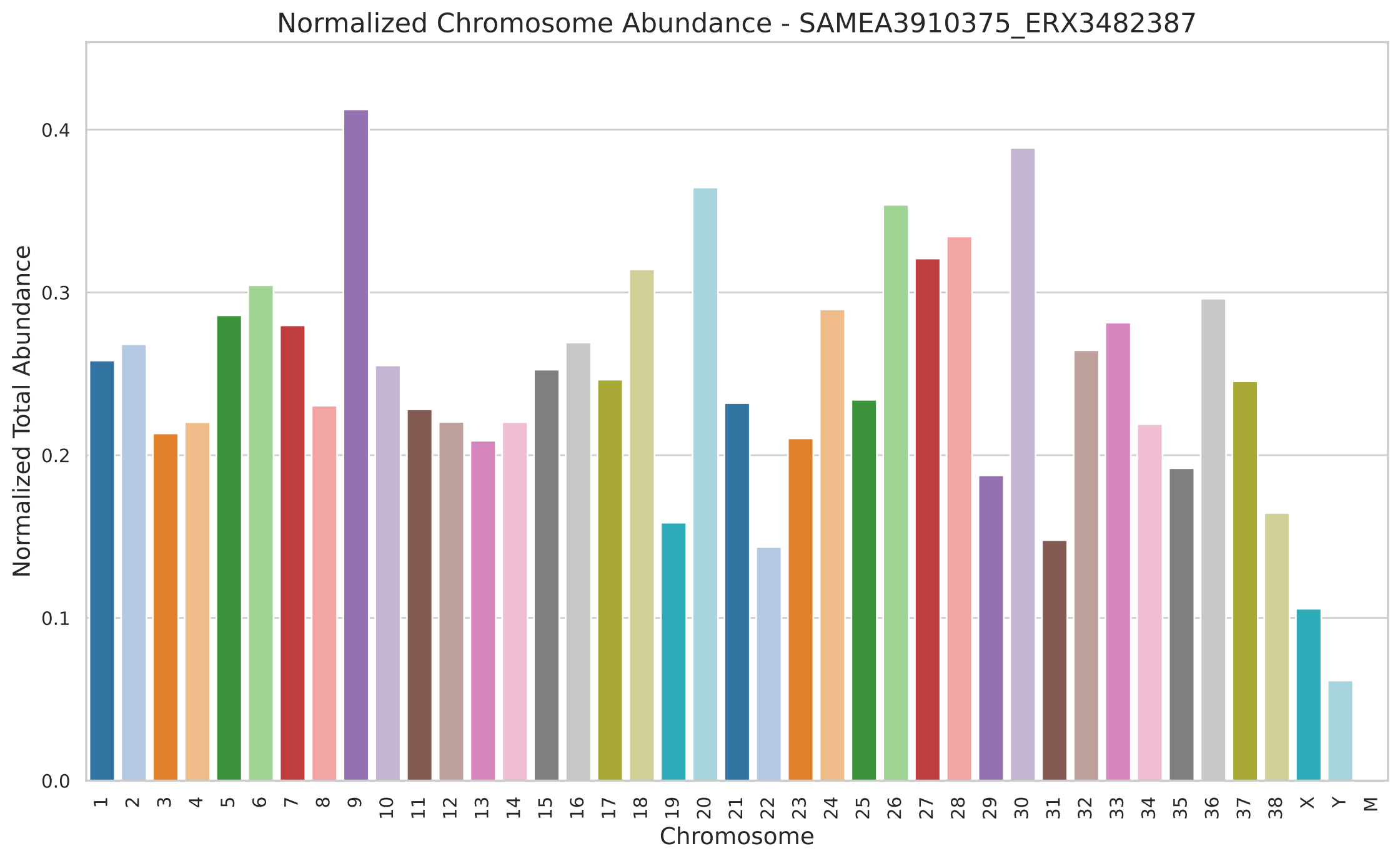

Normalized Chromosome Abundance - SAMN12220962_SRX6660747
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

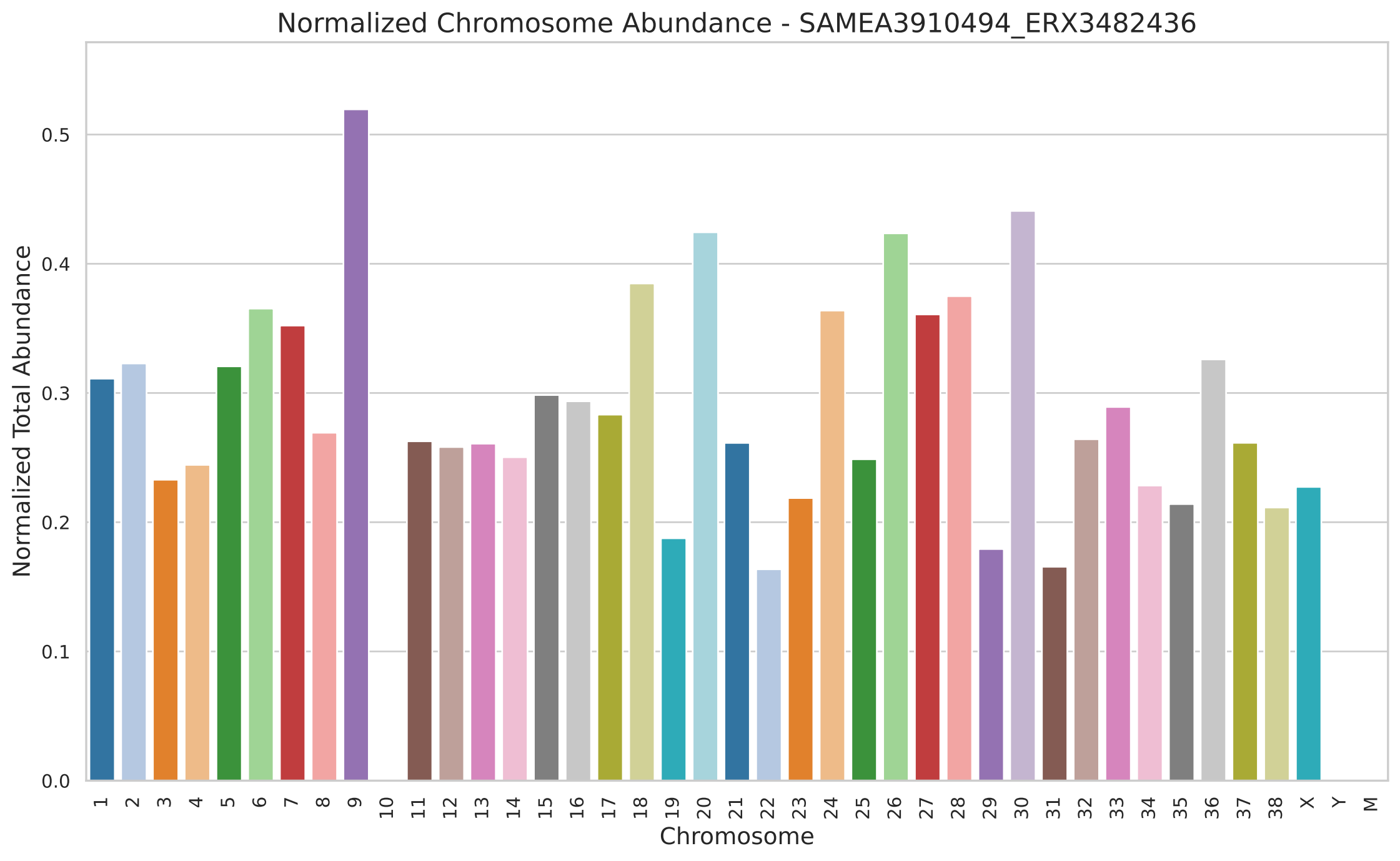

Normalized Chromosome Abundance - SAMEA3910481_ERX3482431
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

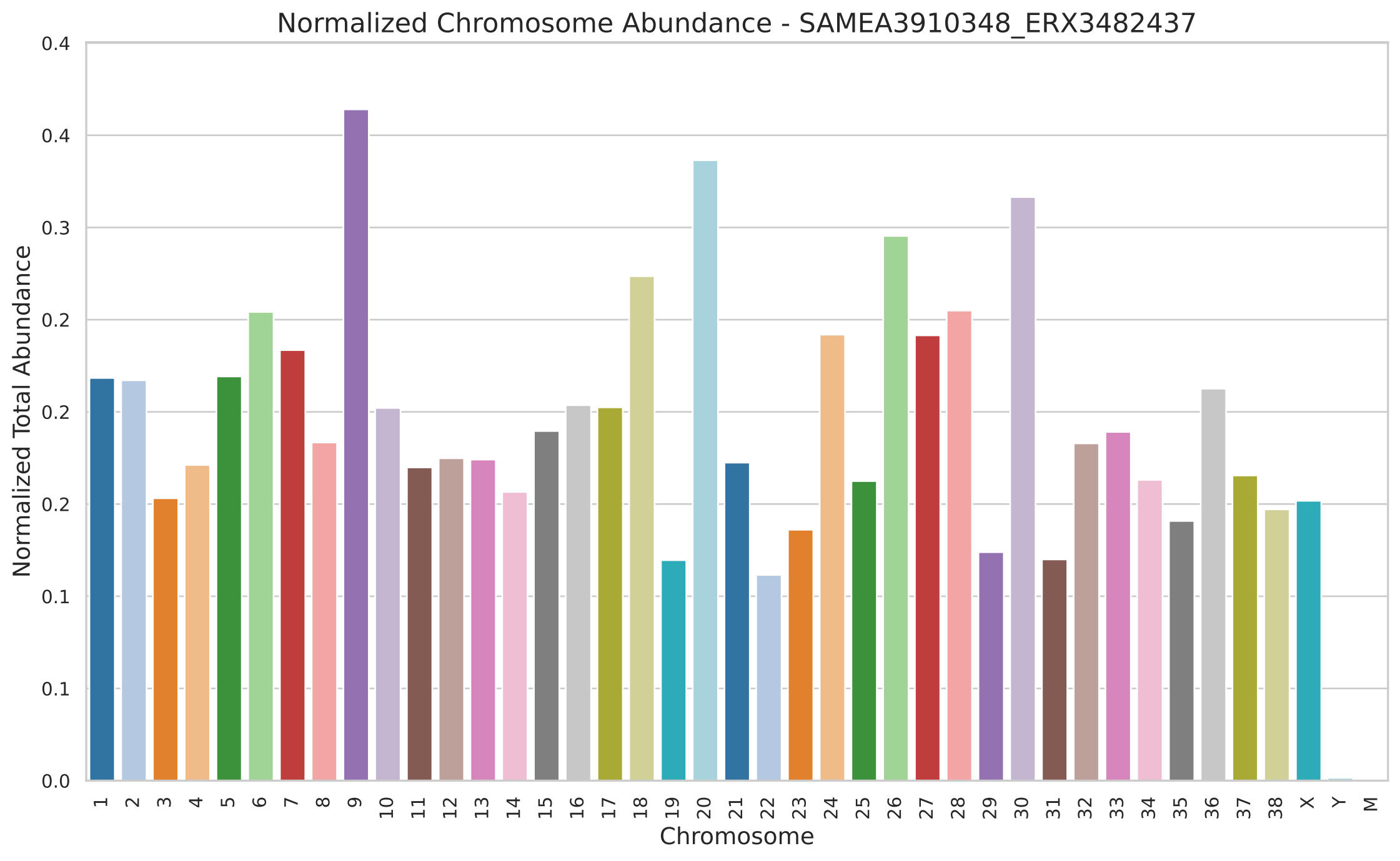

Normalized Chromosome Abundance - SAMEA3910469_ERX3482443
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

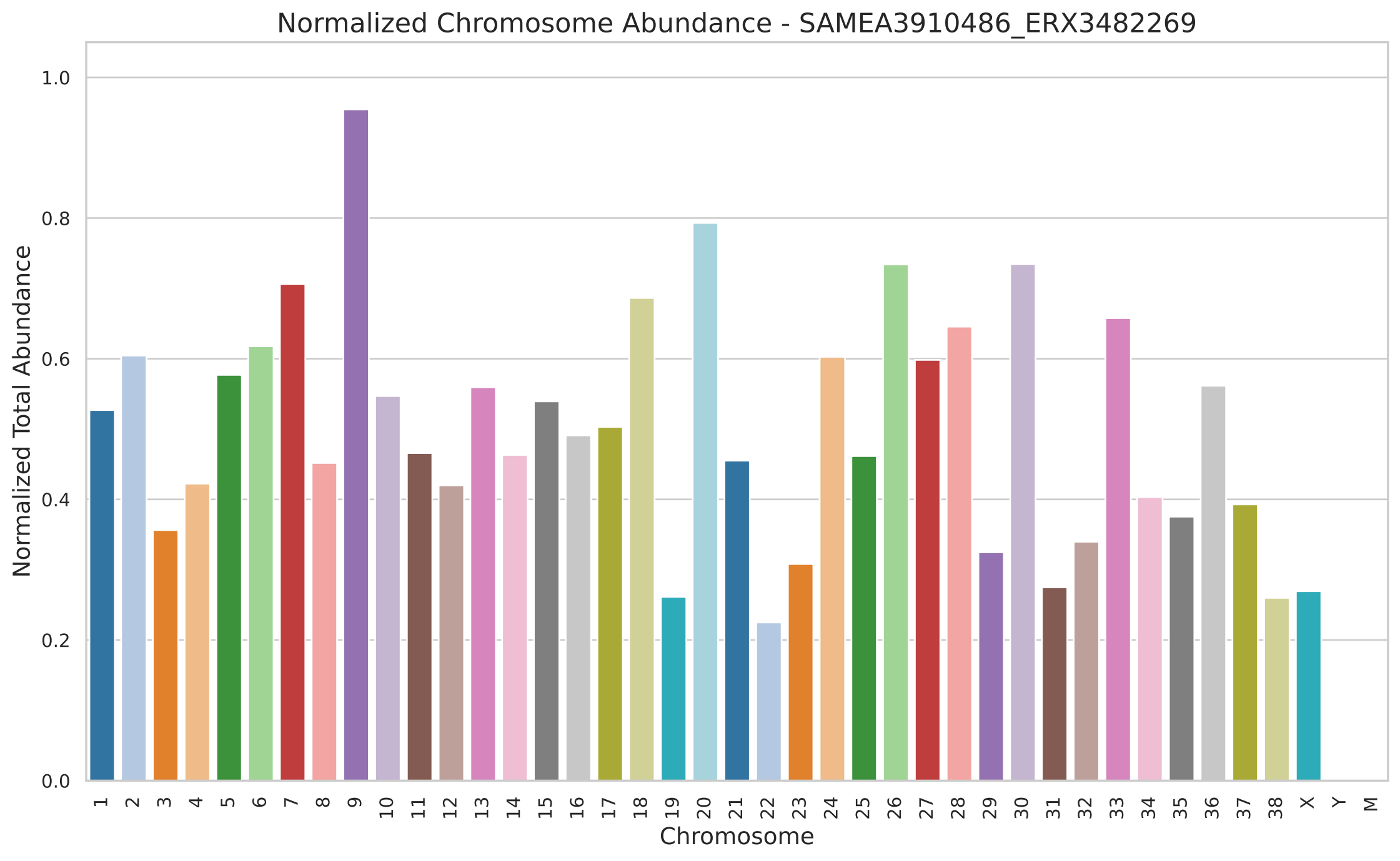

Normalized Chromosome Abundance - SAMN14407024_SRX7954360
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

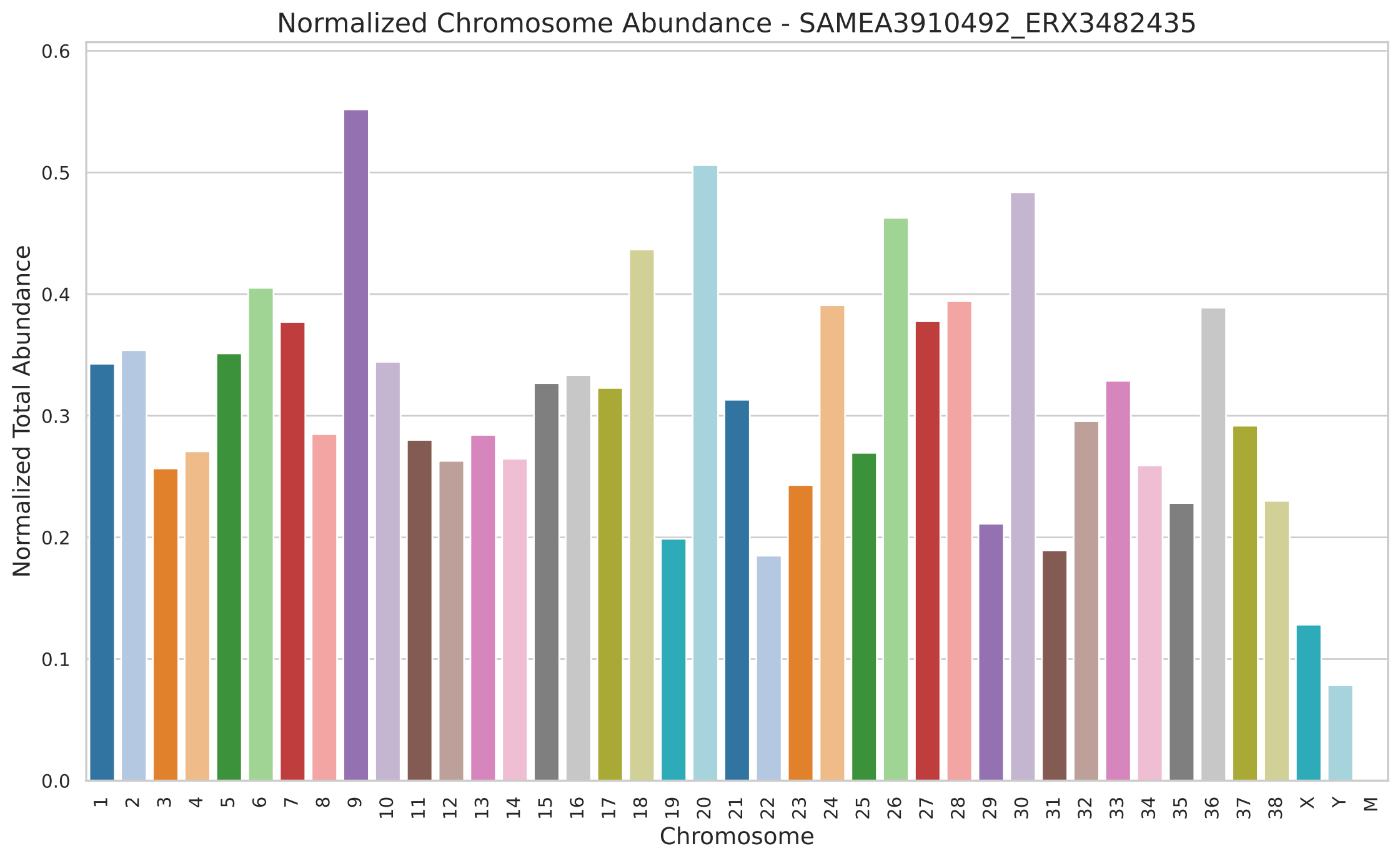

Normalized Chromosome Abundance - SAMEA3910485_ERX3482433
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

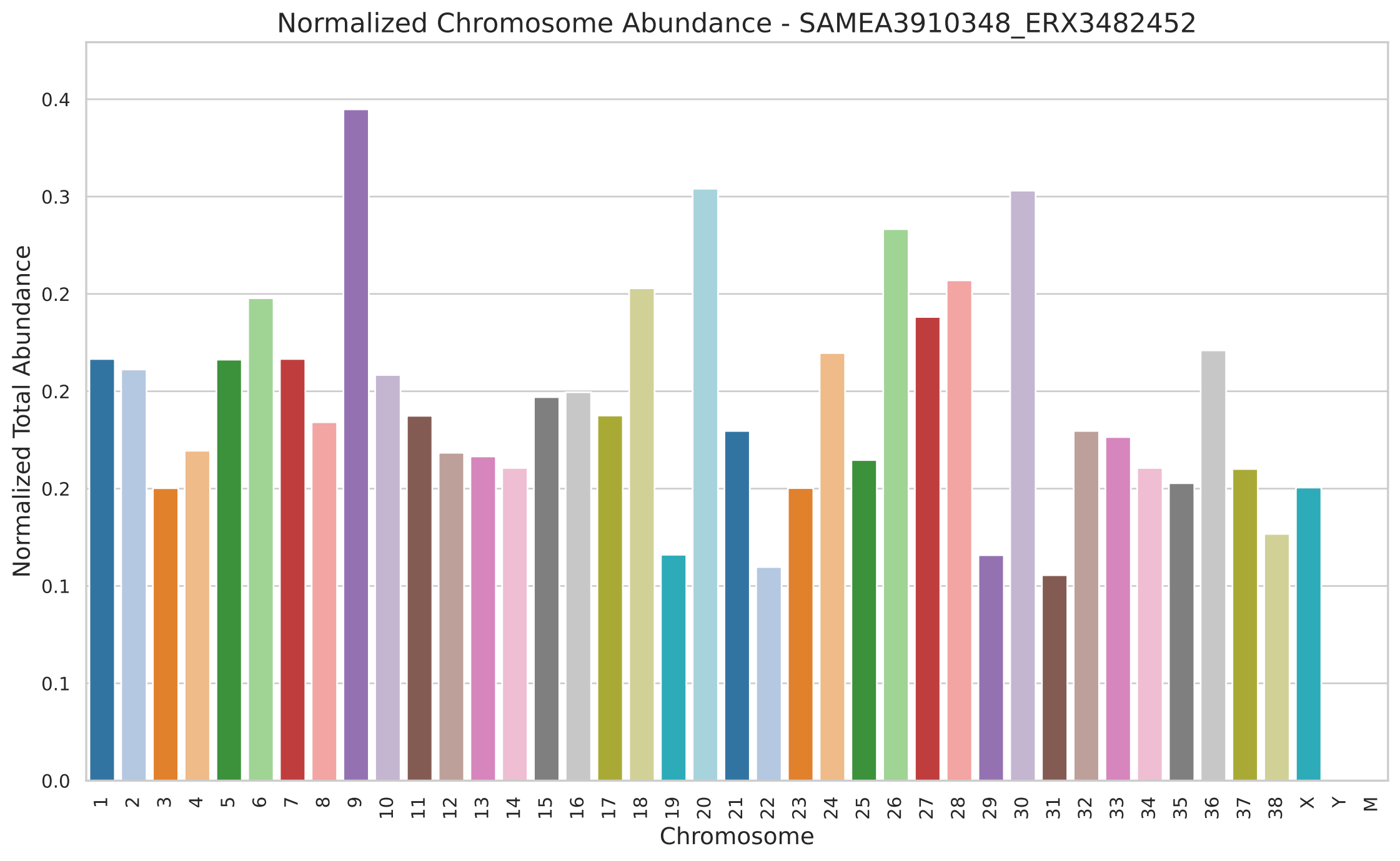

Normalized Chromosome Abundance - SAMEA3910375_ERX3482387
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

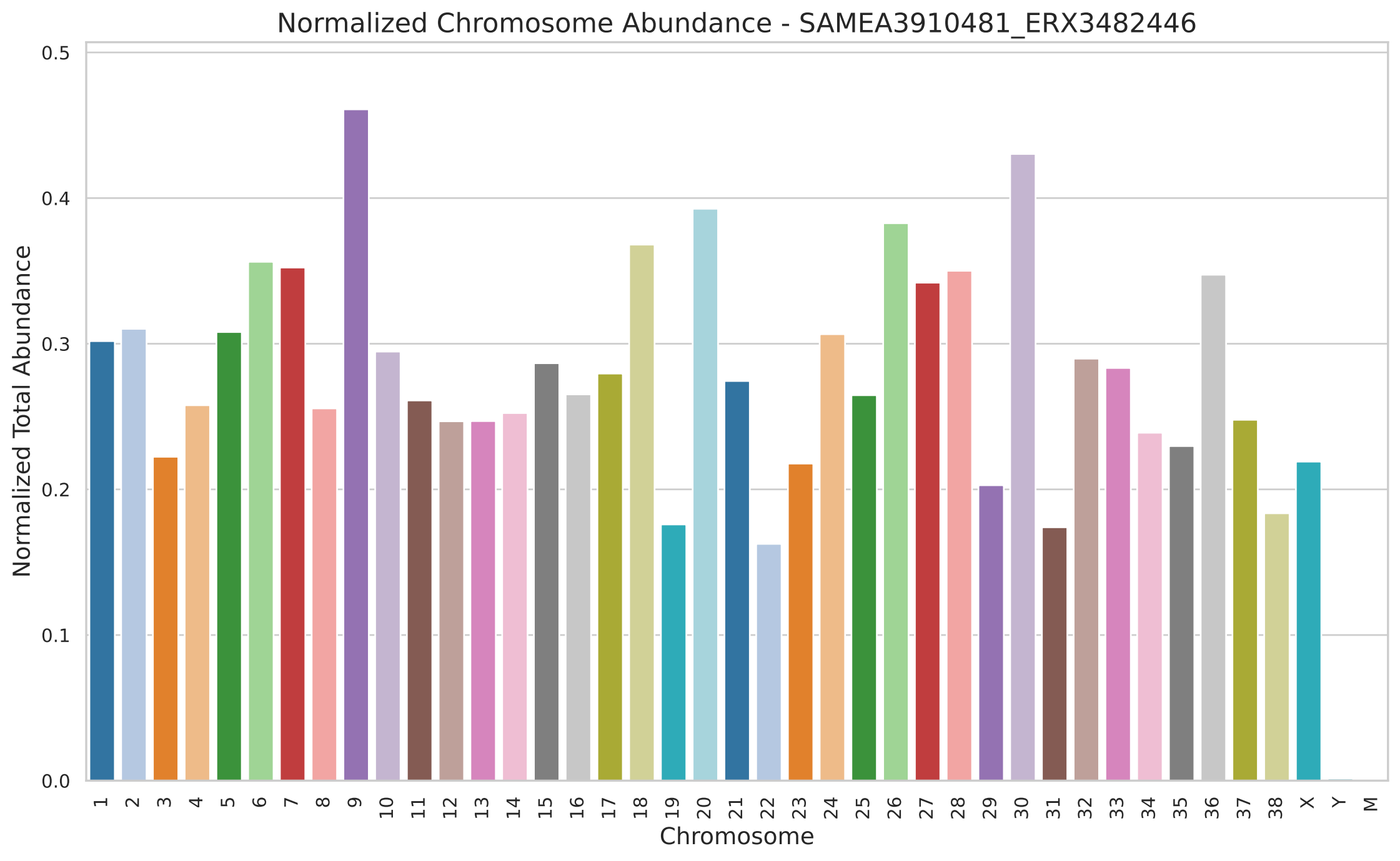

Normalized Chromosome Abundance - SAMEA3910494_ERX3482436
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

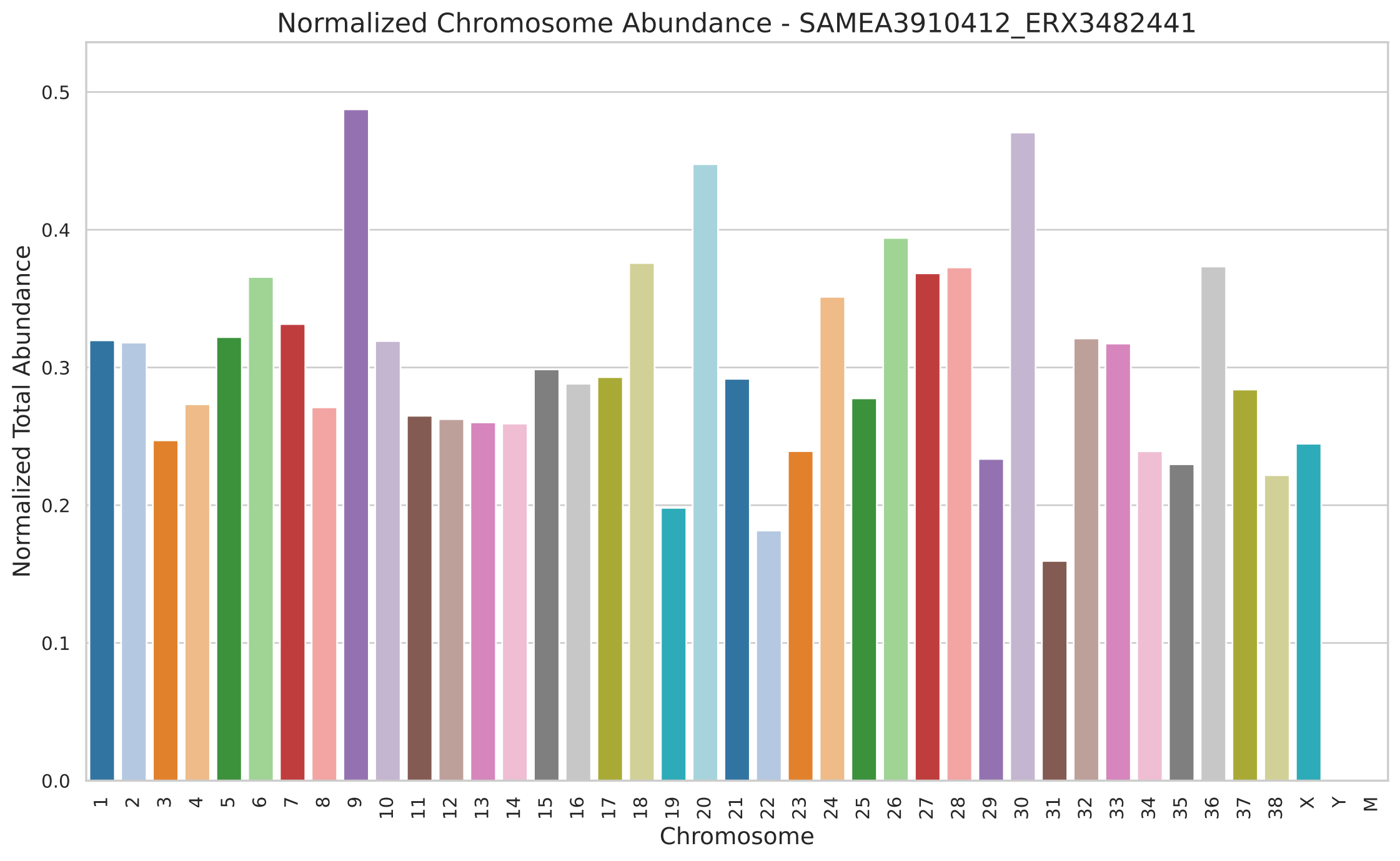

Normalized Chromosome Abundance - SAMEA3910348_ERX3482437
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
0.4
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

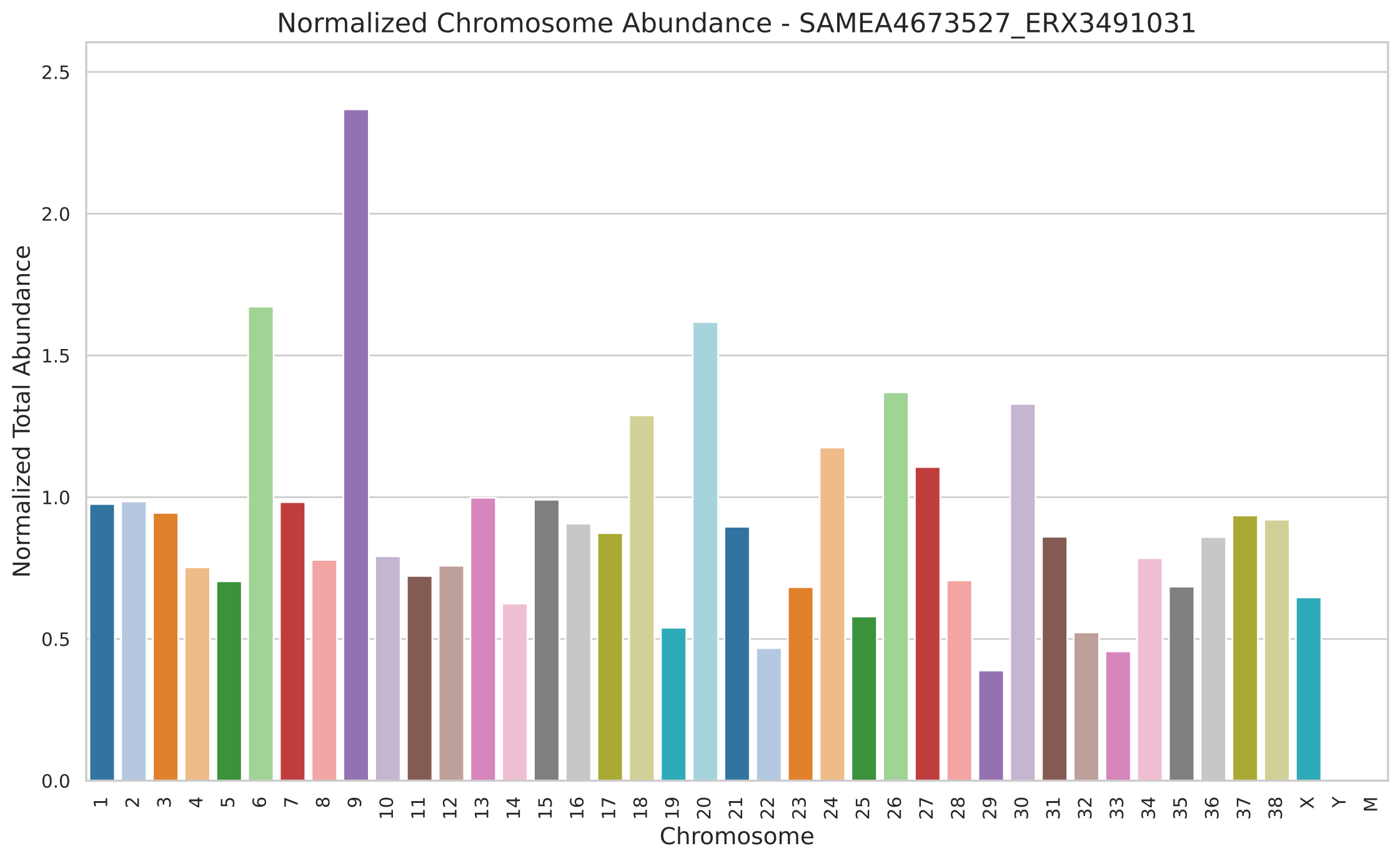

Normalized Chromosome Abundance - SAMEA3910486_ERX3482269
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

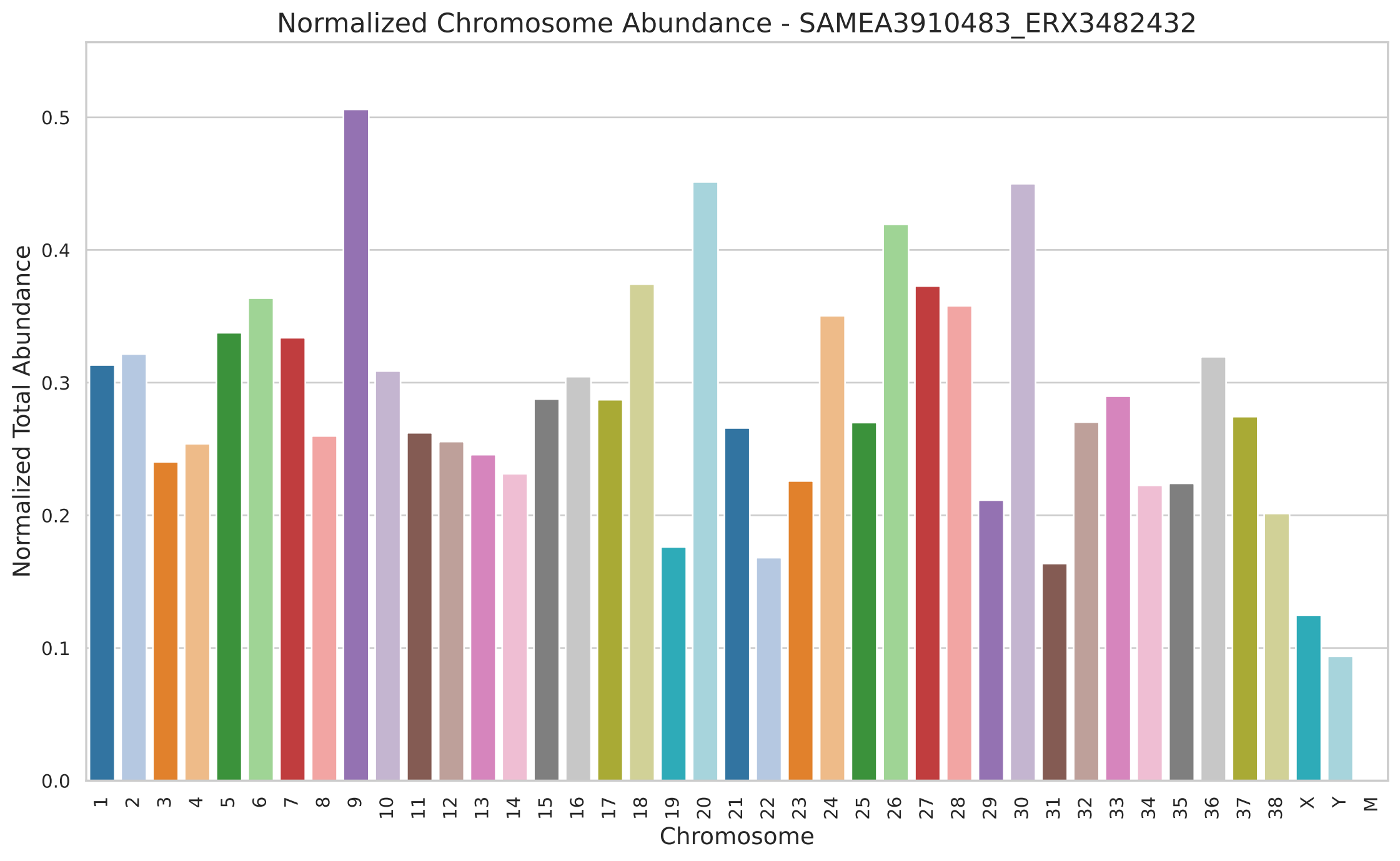

Normalized Chromosome Abundance - SAMEA3910492_ERX3482435
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

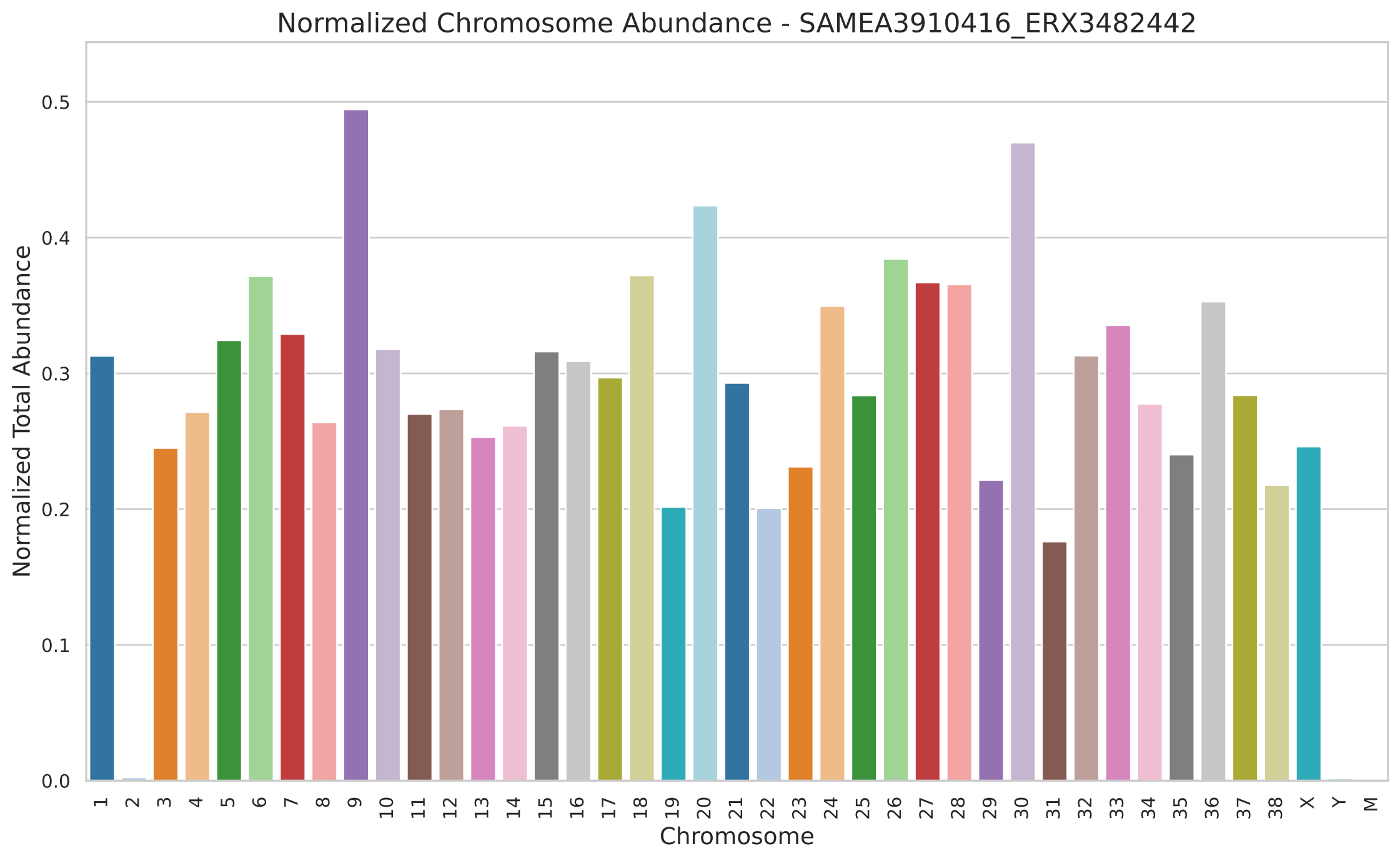

Normalized Chromosome Abundance - SAMEA3910348_ERX3482452
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

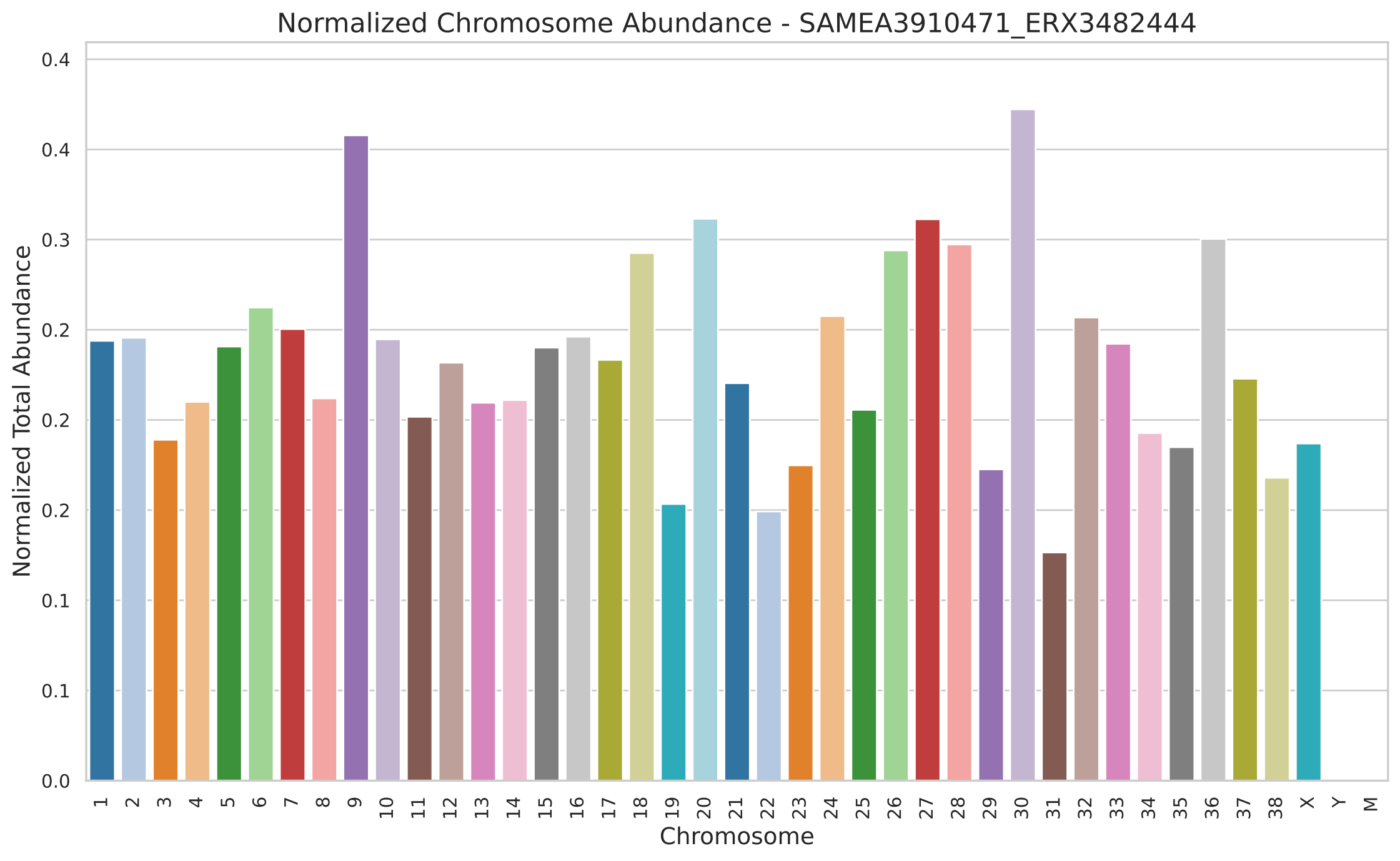

Normalized Chromosome Abundance - SAMEA3910481_ERX3482446
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

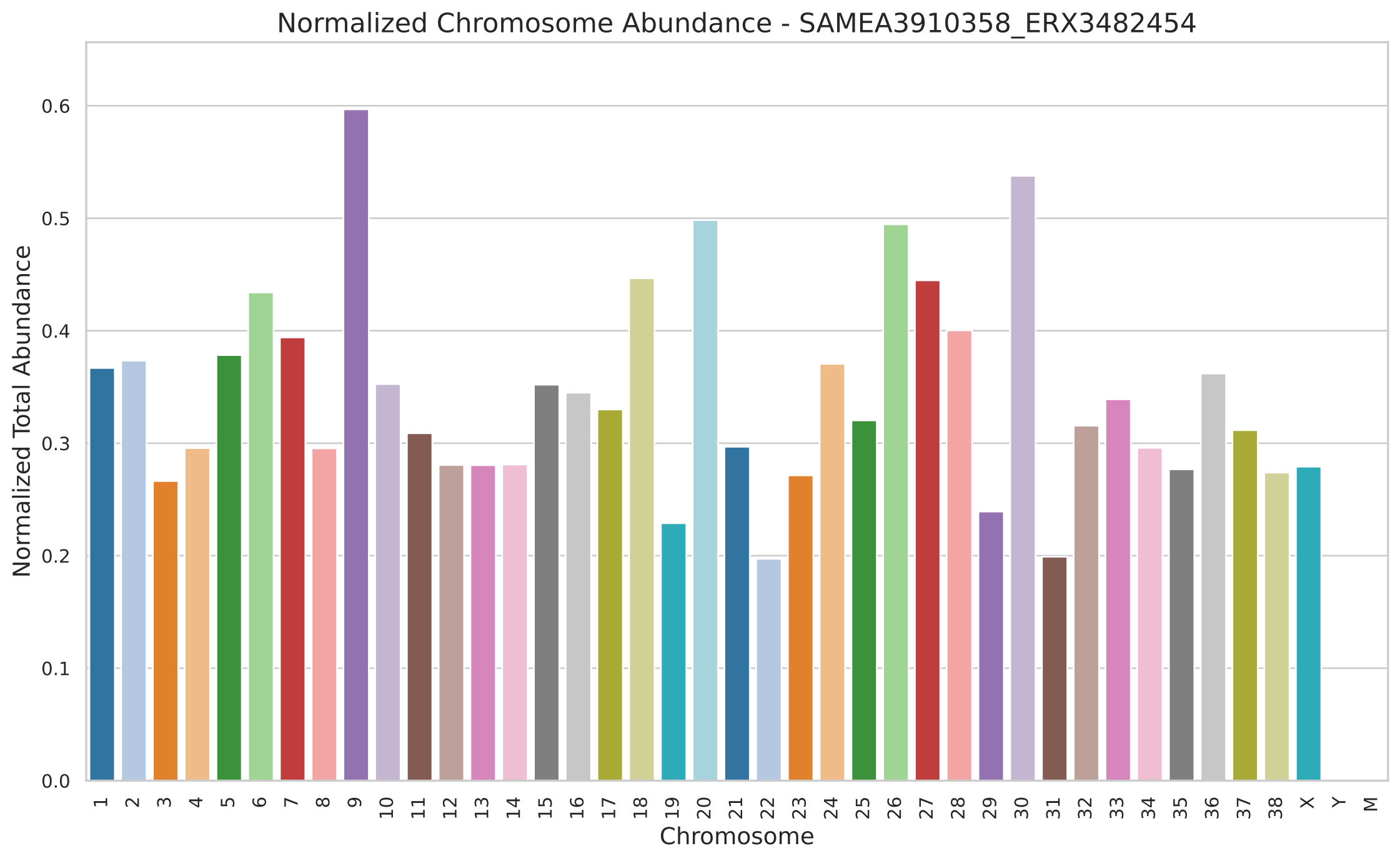

Normalized Chromosome Abundance - SAMEA3910412_ERX3482441
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

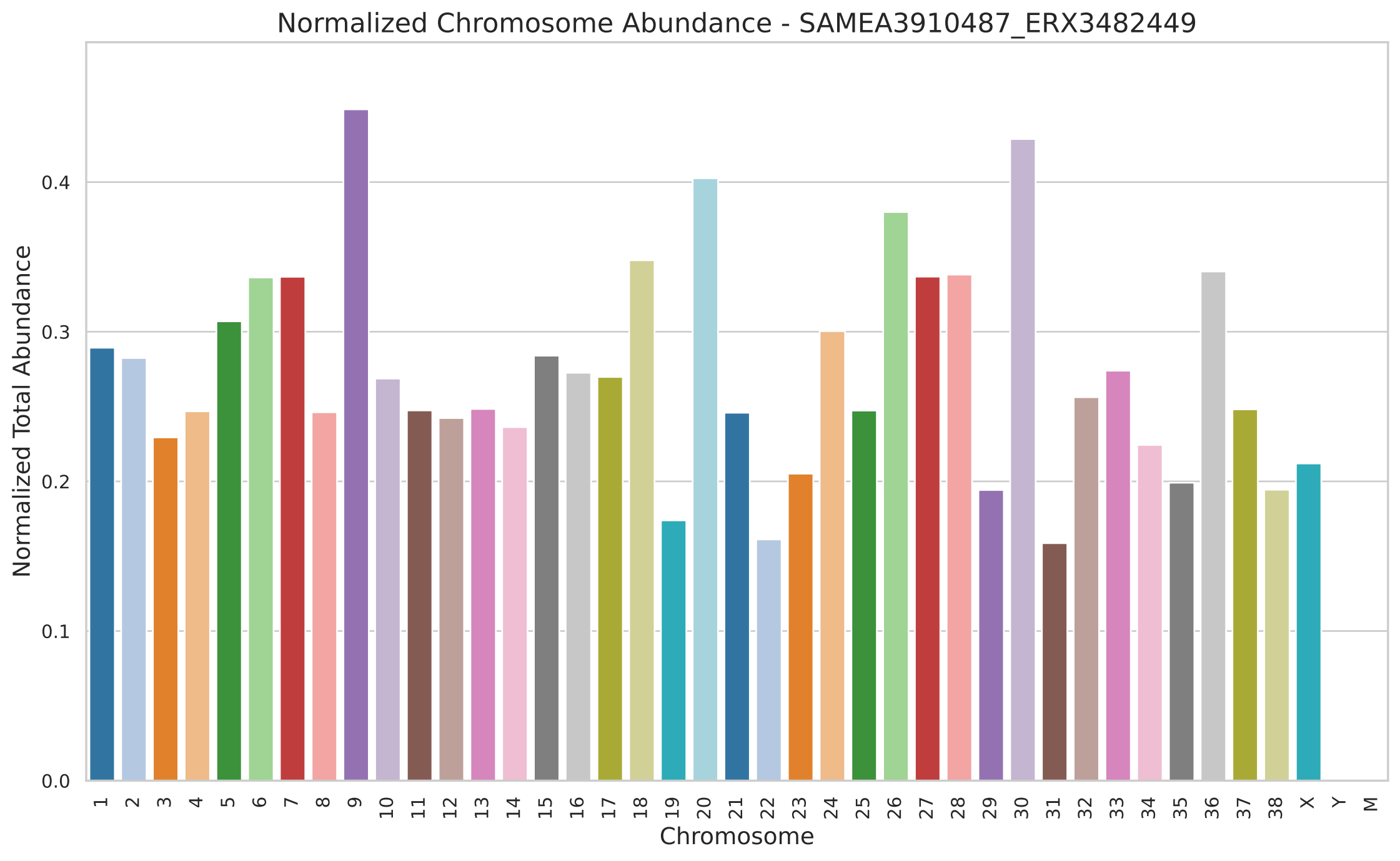

Normalized Chromosome Abundance - SAMEA4673527_ERX3491031
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

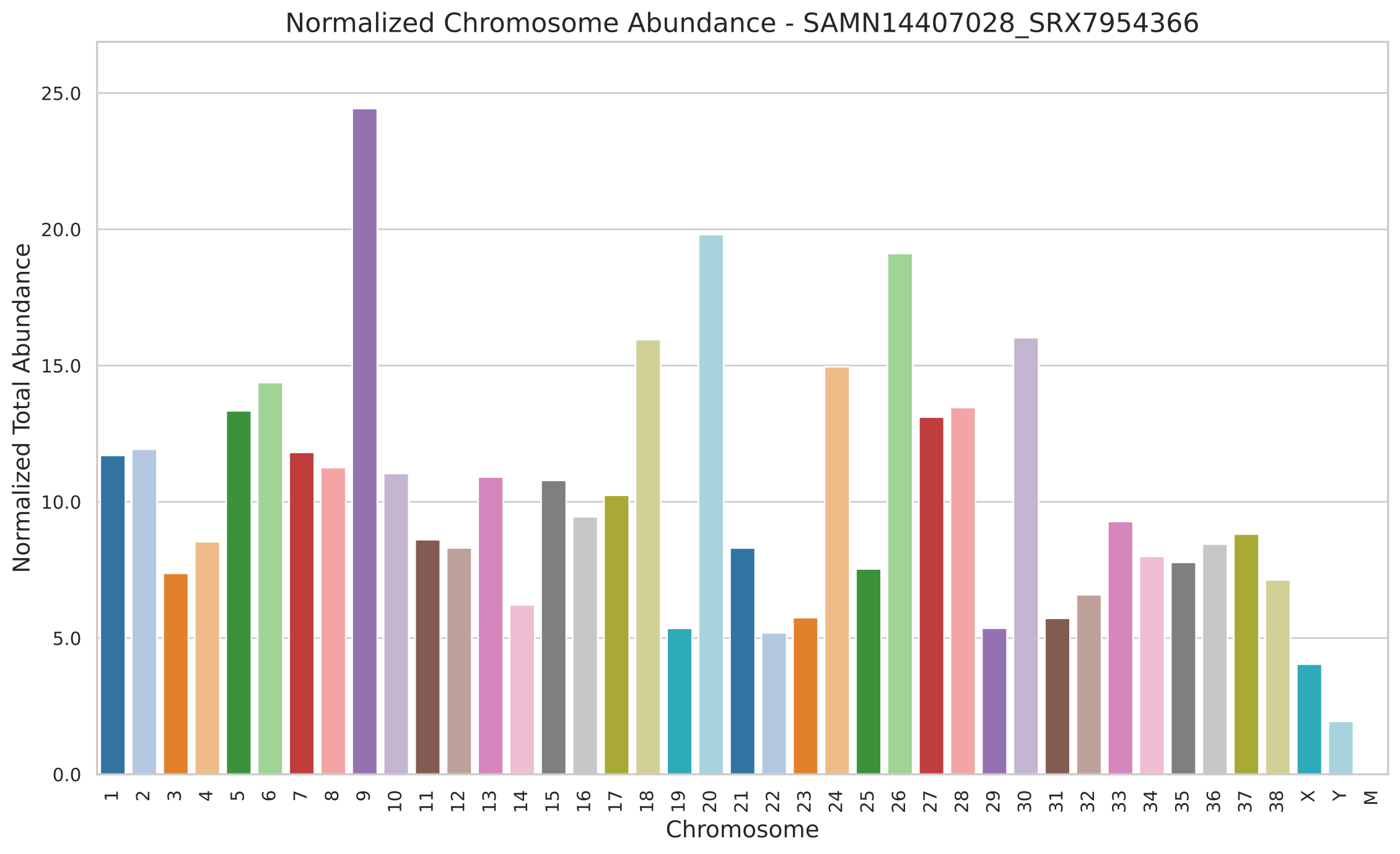

Normalized Chromosome Abundance - SAMEA3910483_ERX3482432
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

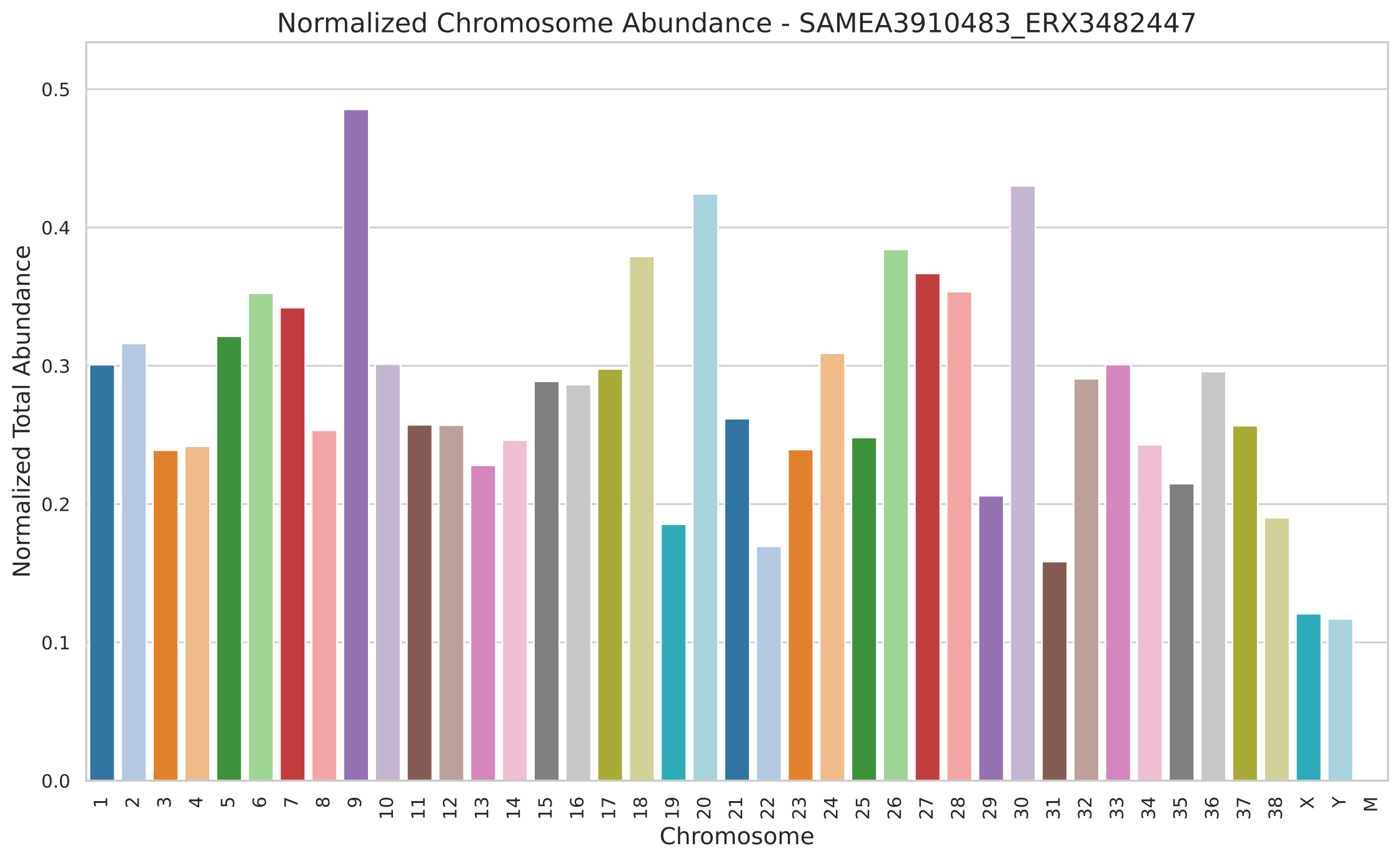

Normalized Chromosome Abundance - SAMEA3910416_ERX3482442
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

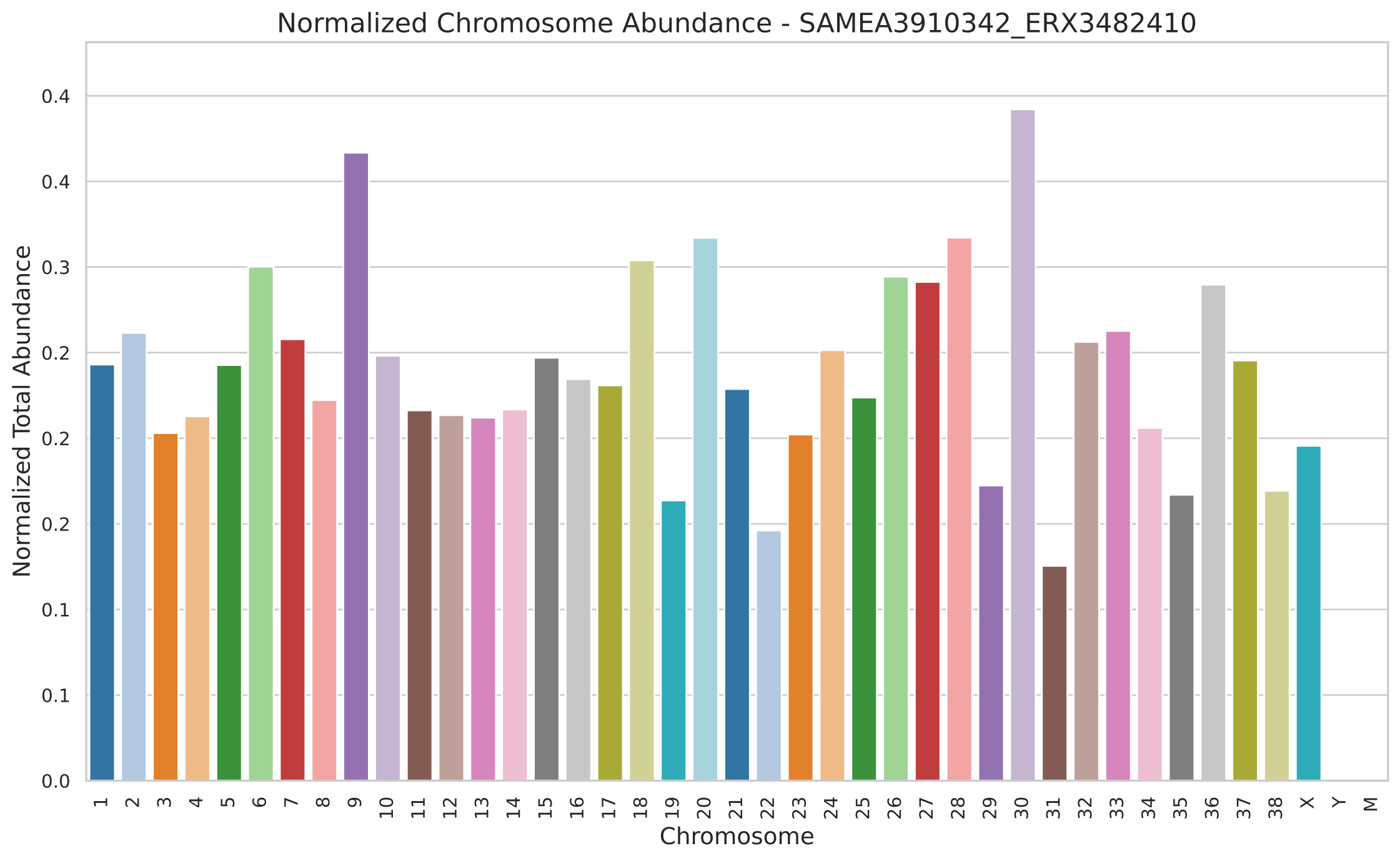

Normalized Chromosome Abundance - SAMEA3910471_ERX3482444
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

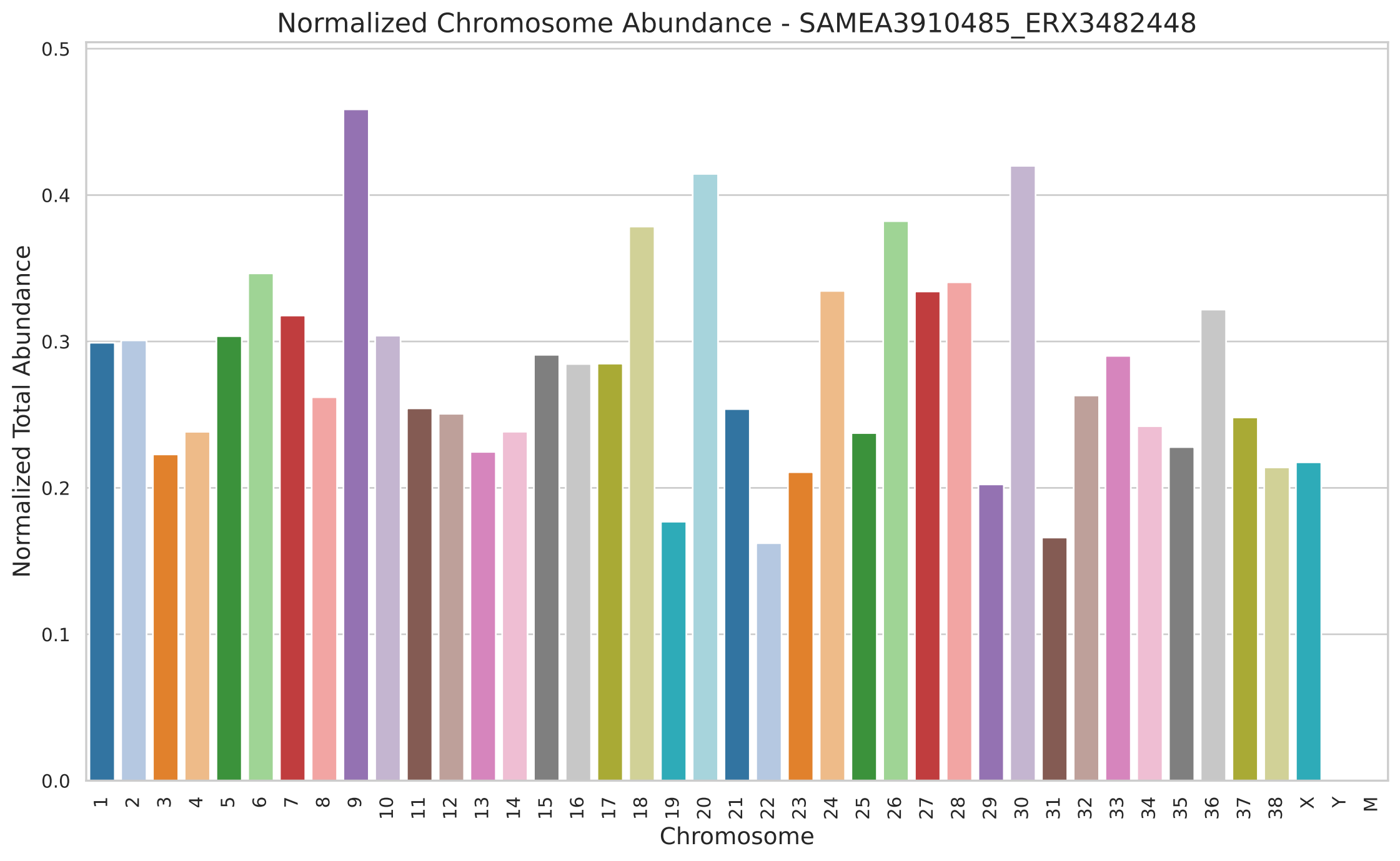

Normalized Chromosome Abundance - SAMEA3910358_ERX3482454
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

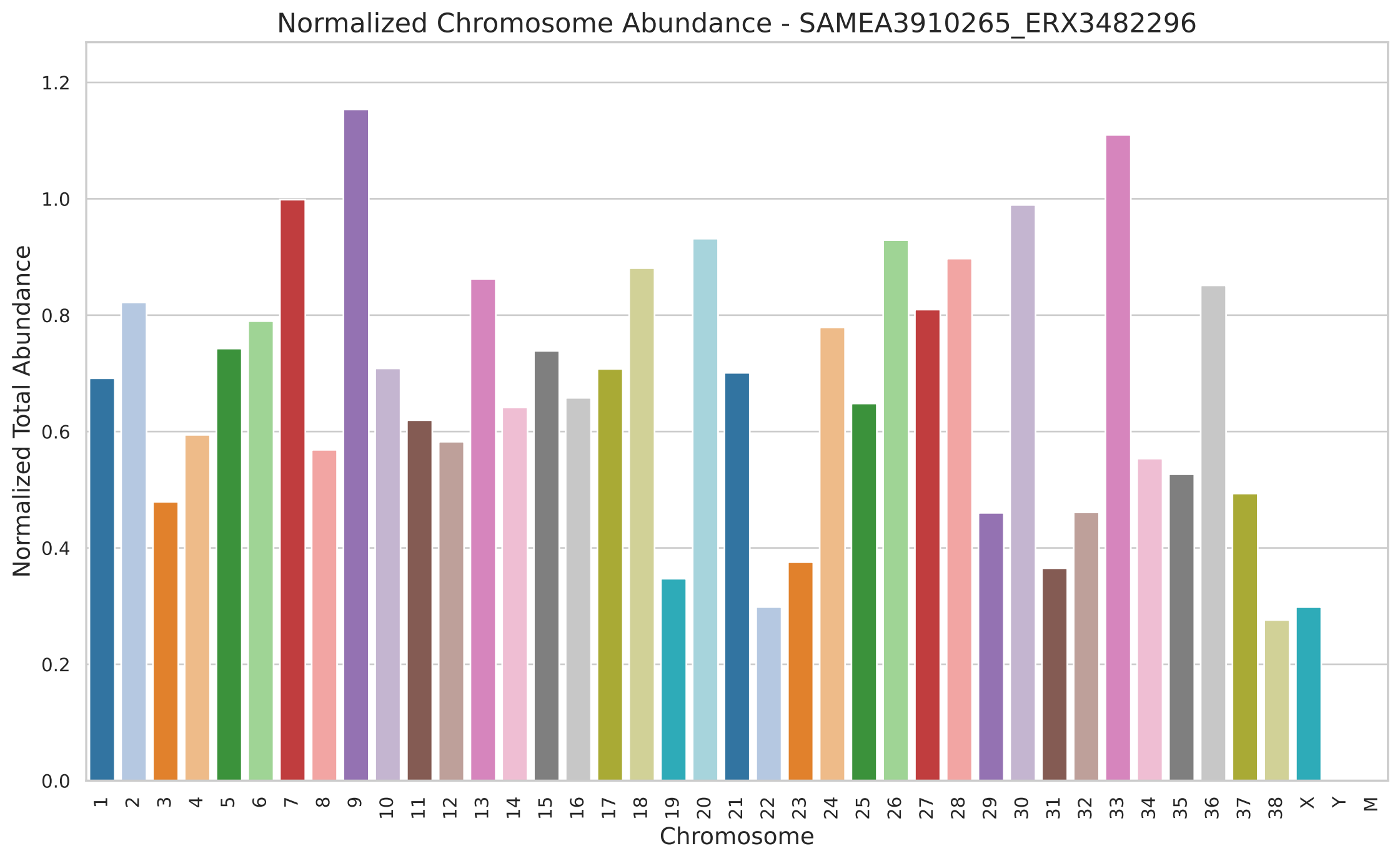

Normalized Chromosome Abundance - SAMEA3910487_ERX3482449
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

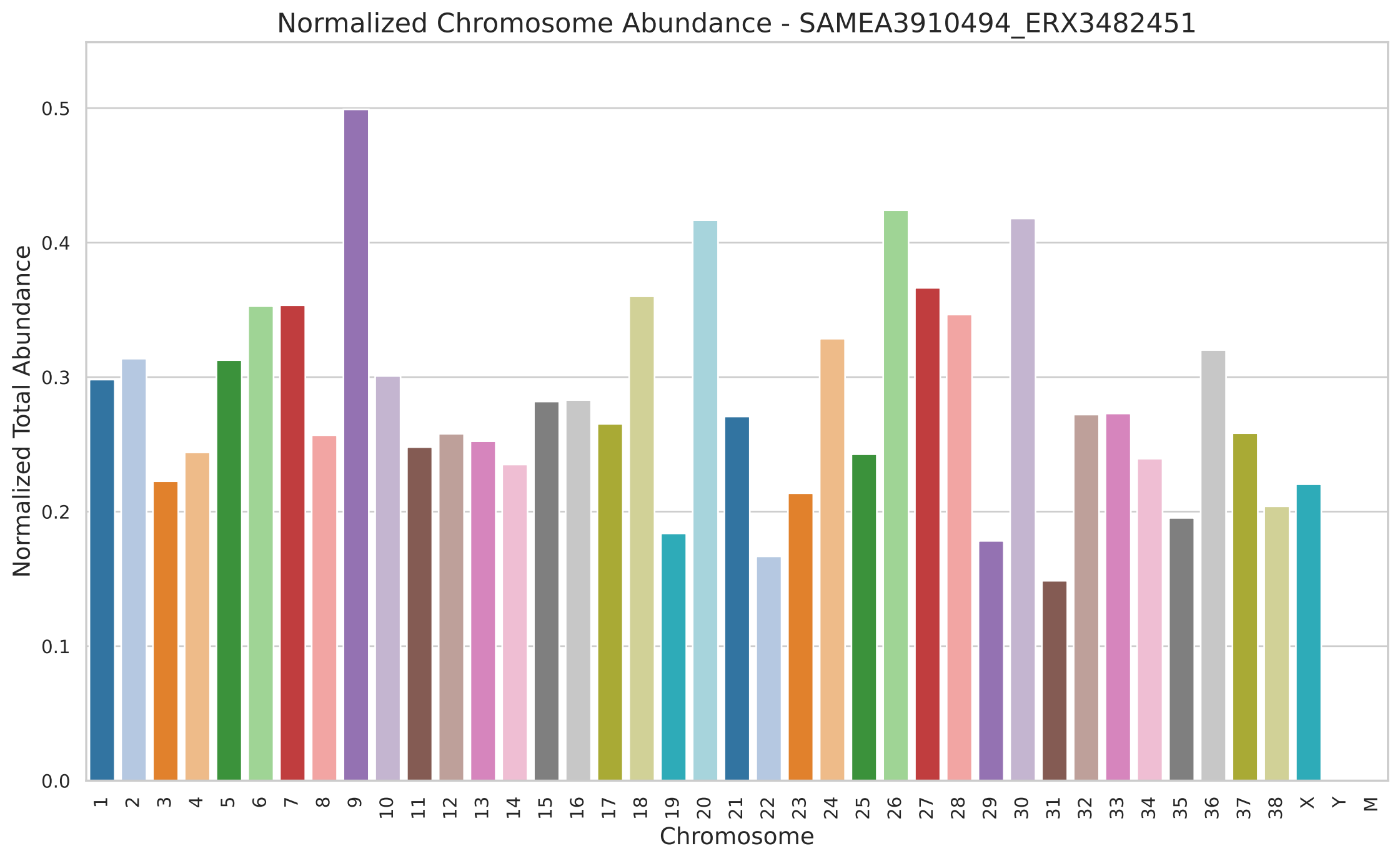

Normalized Chromosome Abundance - SAMN14407028_SRX7954366
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

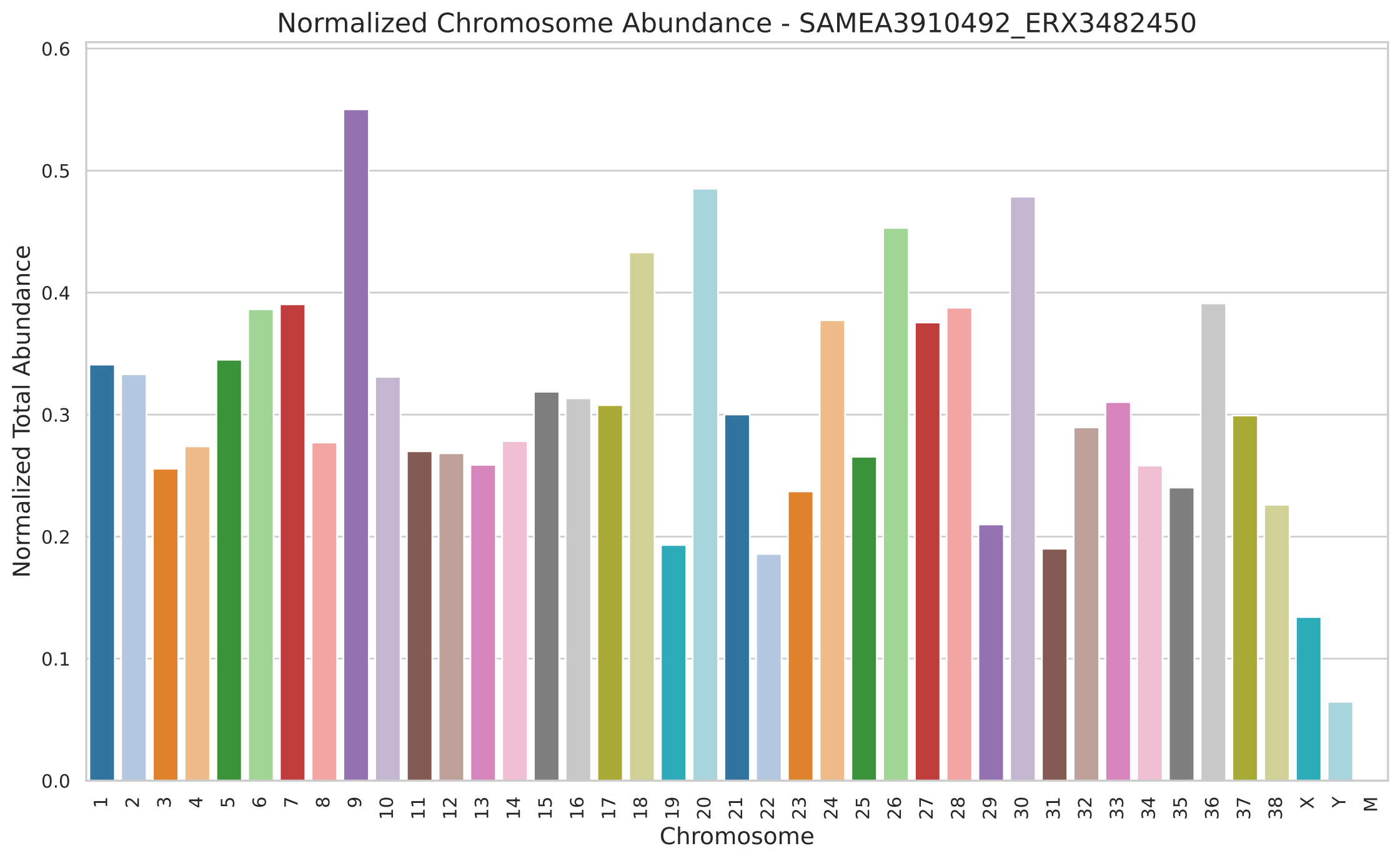

Normalized Chromosome Abundance - SAMEA3910483_ERX3482447
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

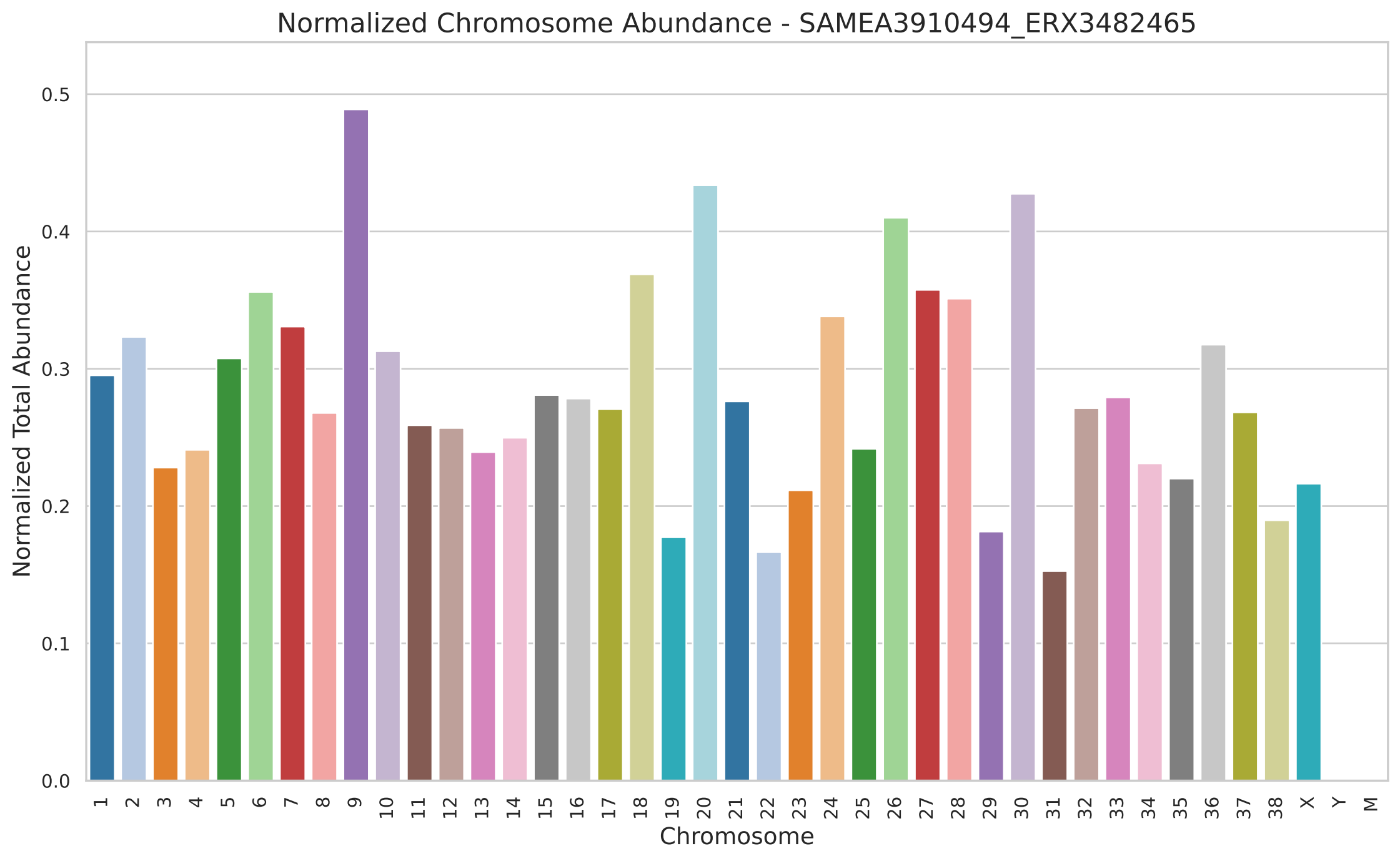

Normalized Chromosome Abundance - SAMEA3910342_ERX3482410
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

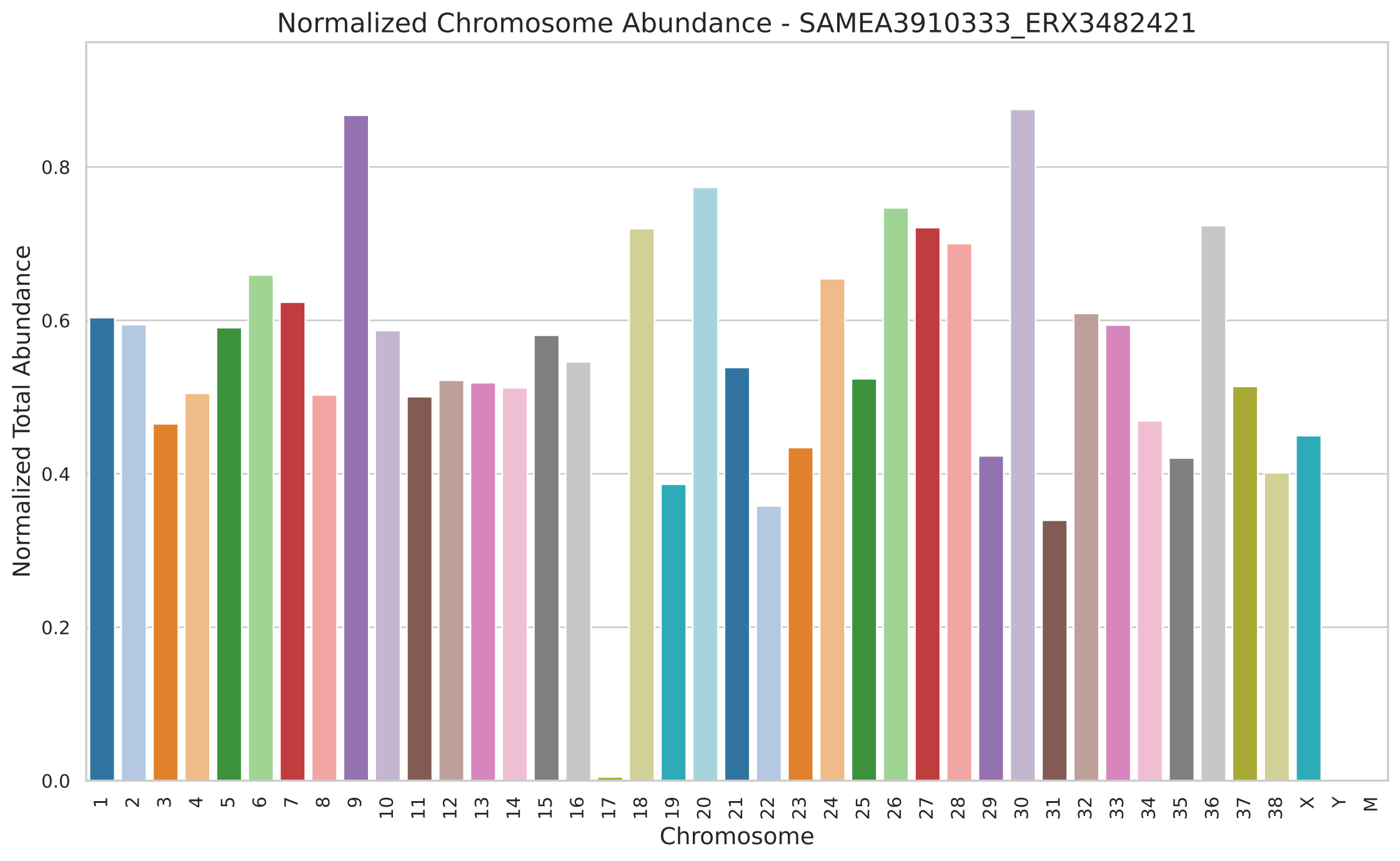

Normalized Chromosome Abundance - SAMEA3910485_ERX3482448
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

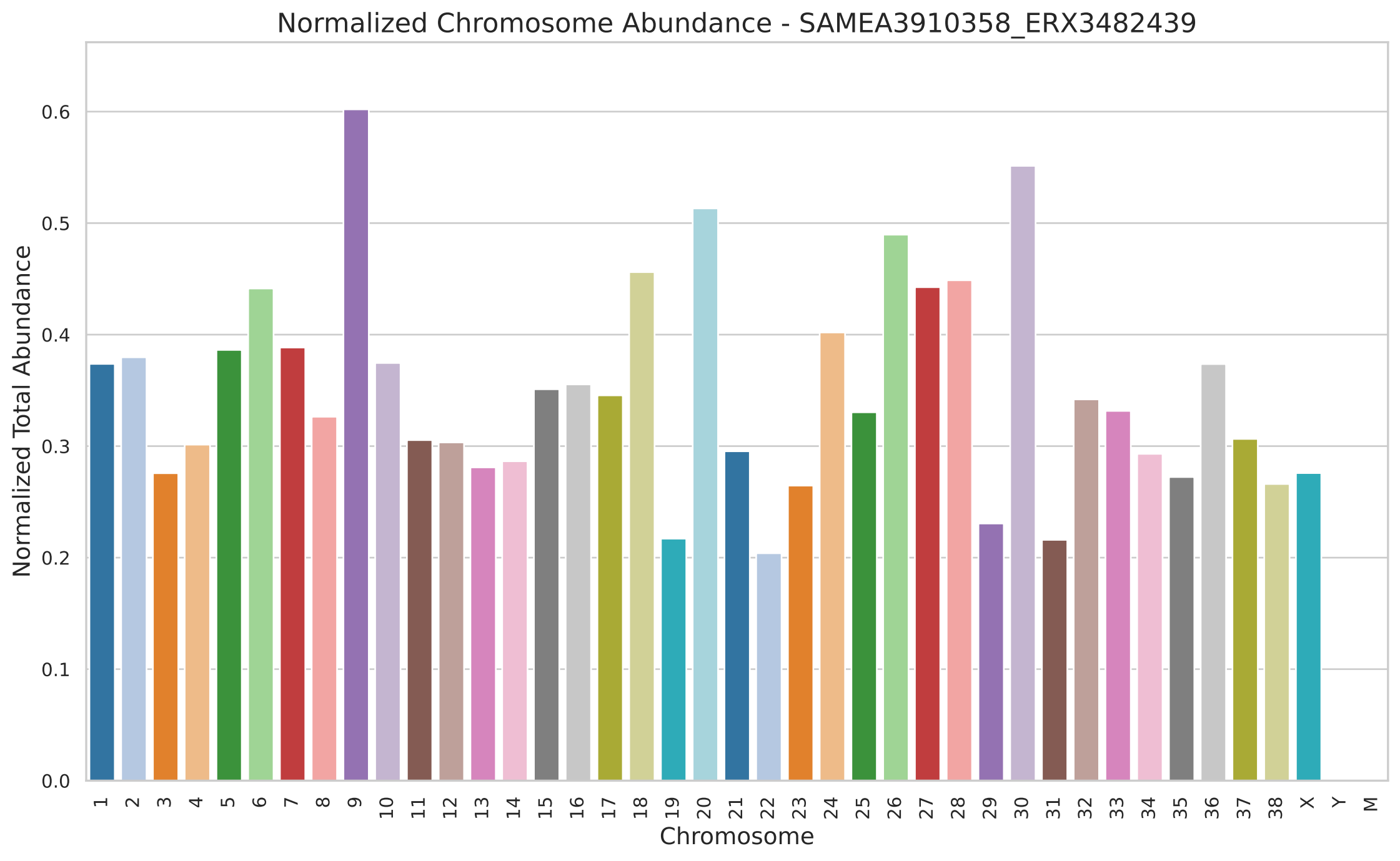

Normalized Chromosome Abundance - SAMEA3910265_ERX3482296
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

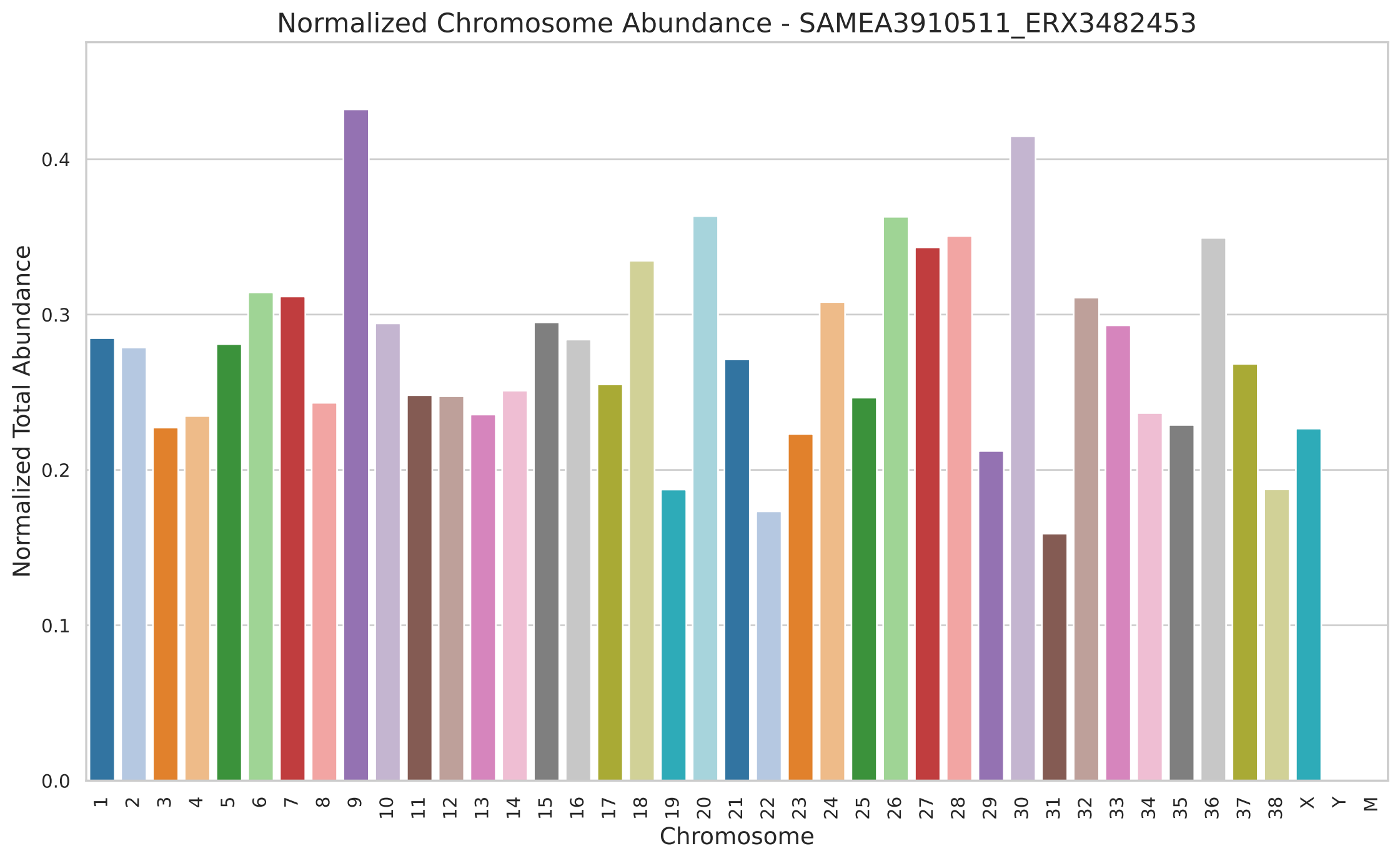

Normalized Chromosome Abundance - SAMEA3910494_ERX3482451
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

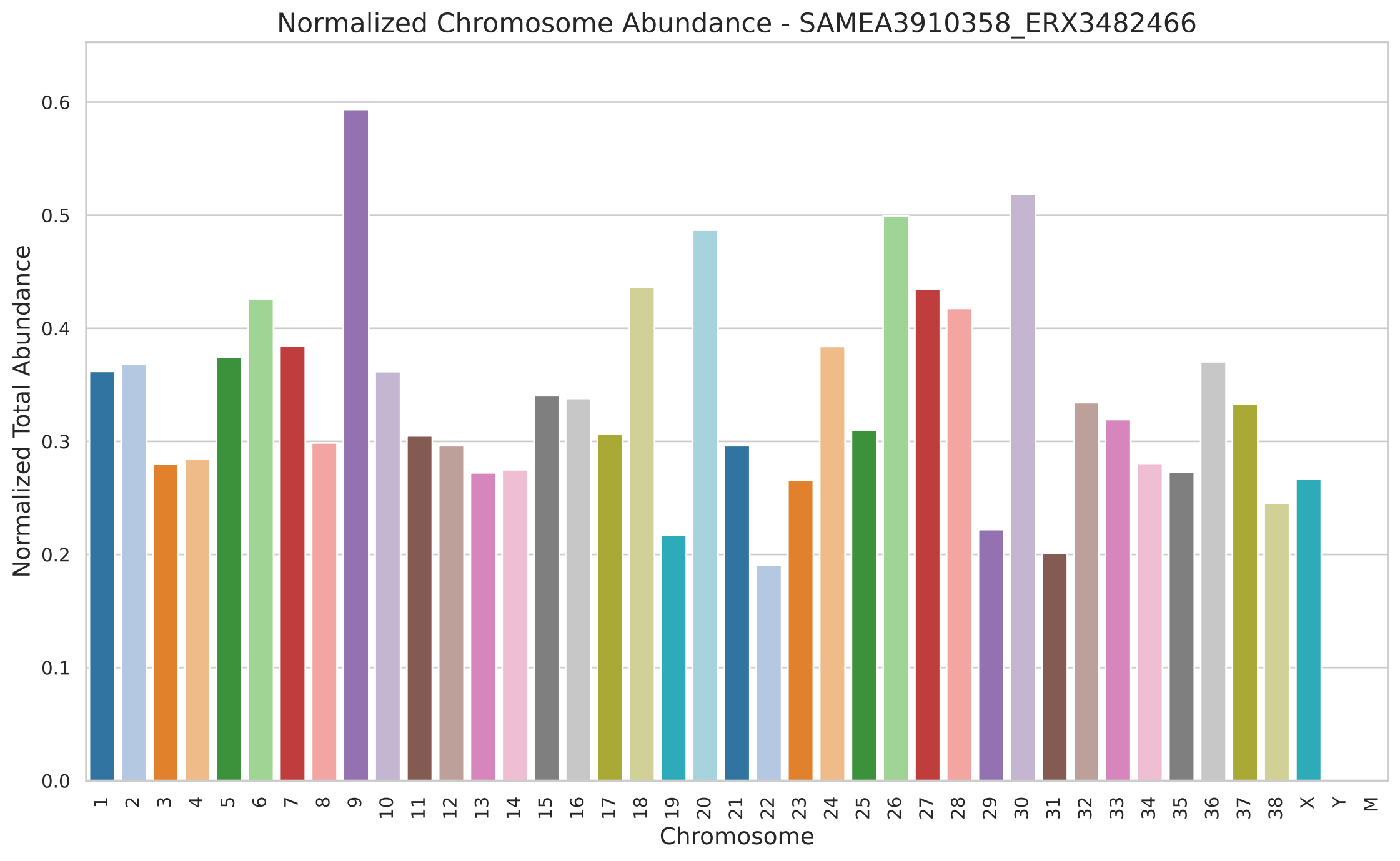

Normalized Chromosome Abundance - SAMEA3910492_ERX3482450
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

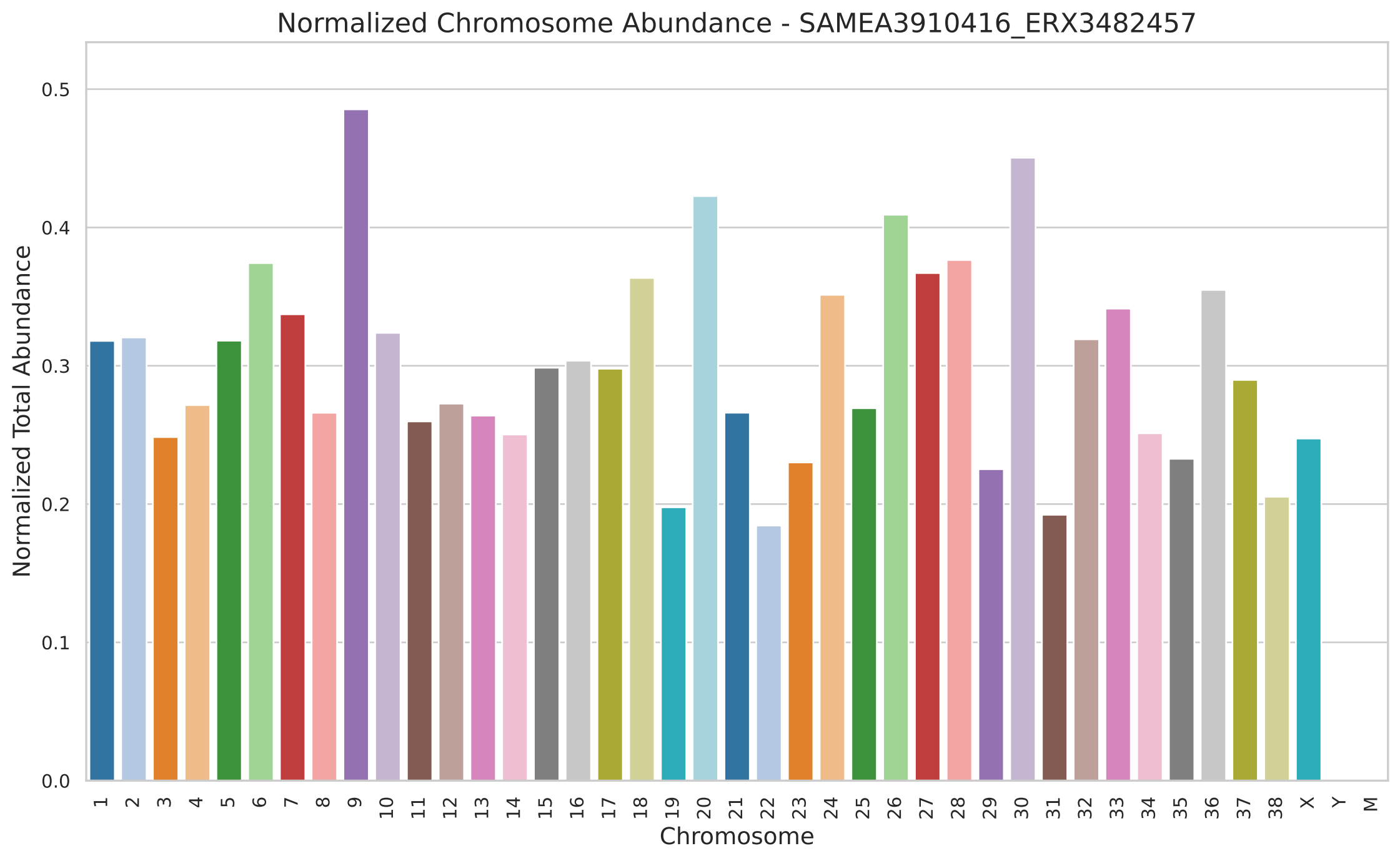

Normalized Chromosome Abundance - SAMEA3910494_ERX3482465
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

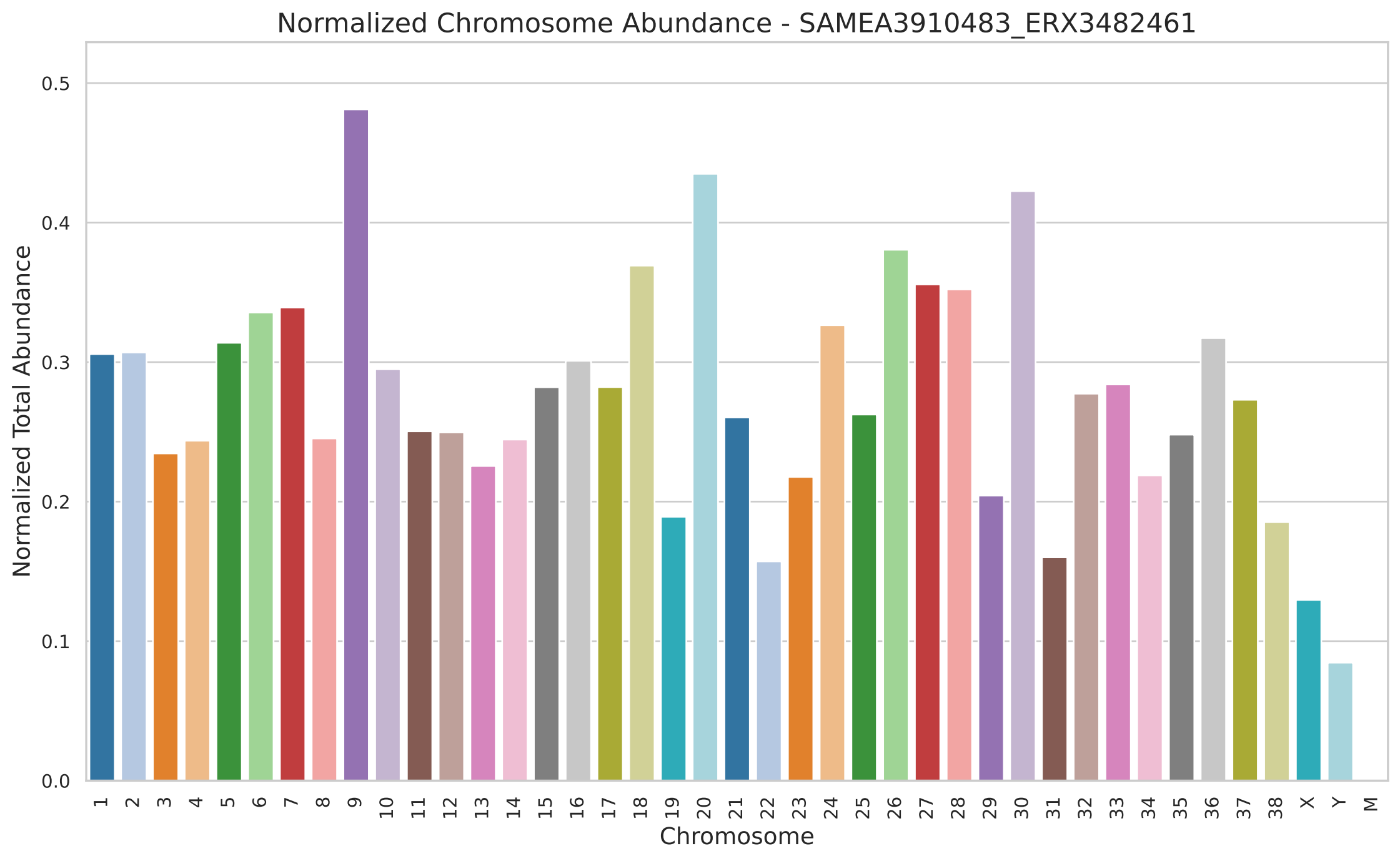

Normalized Chromosome Abundance - SAMEA3910333_ERX3482421
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

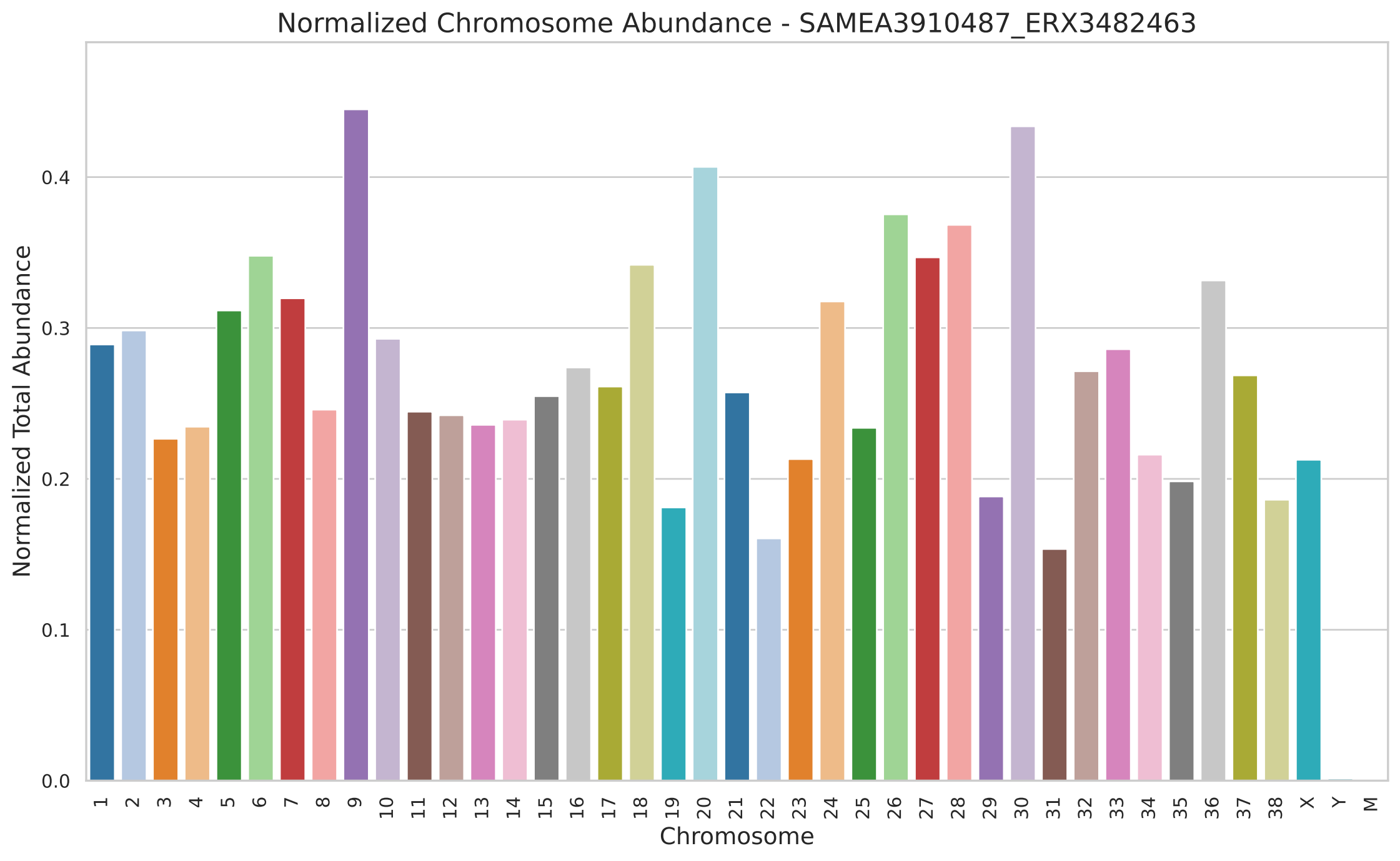

Normalized Chromosome Abundance - SAMEA3910358_ERX3482439
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

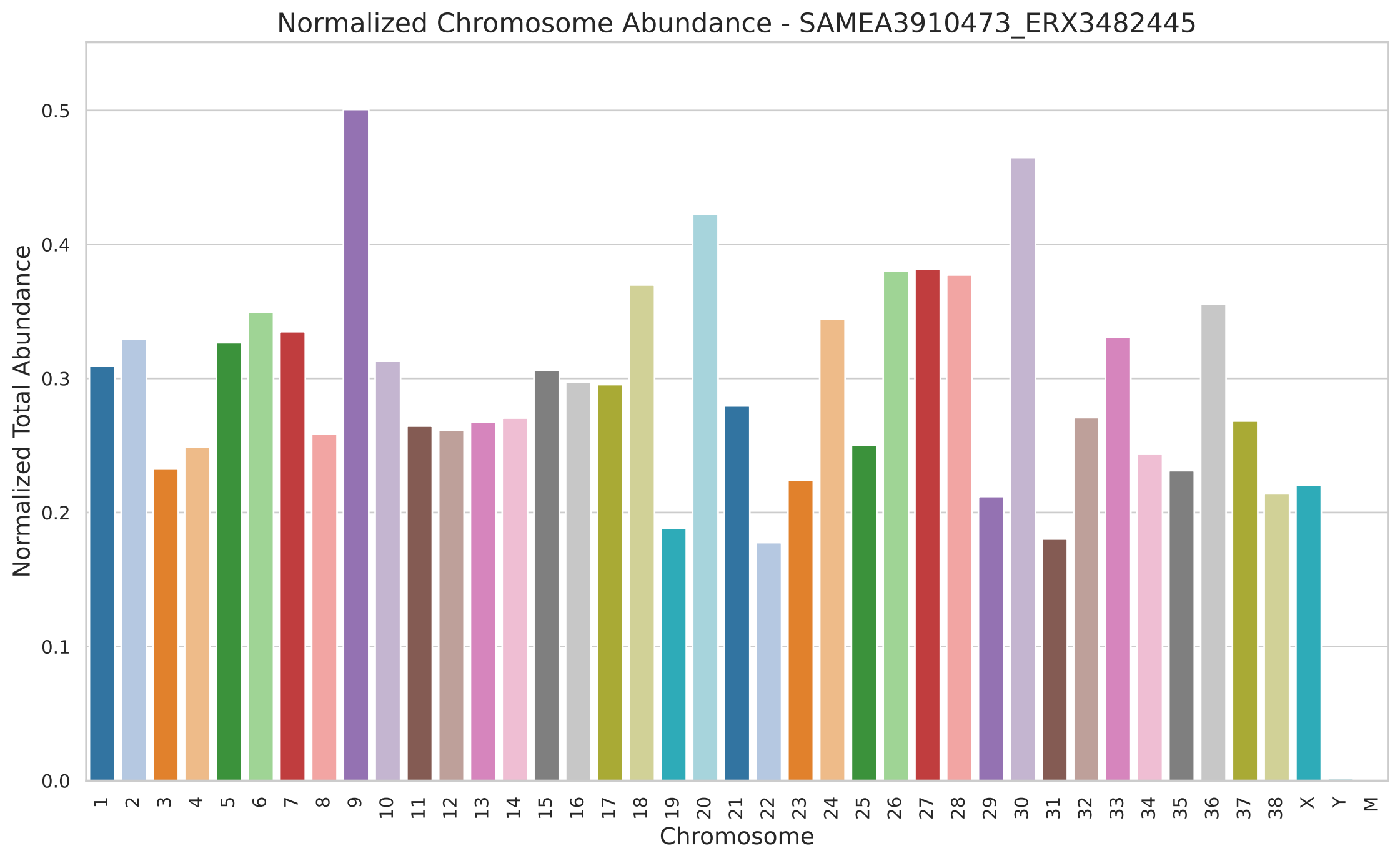

Normalized Chromosome Abundance - SAMEA3910511_ERX3482453
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

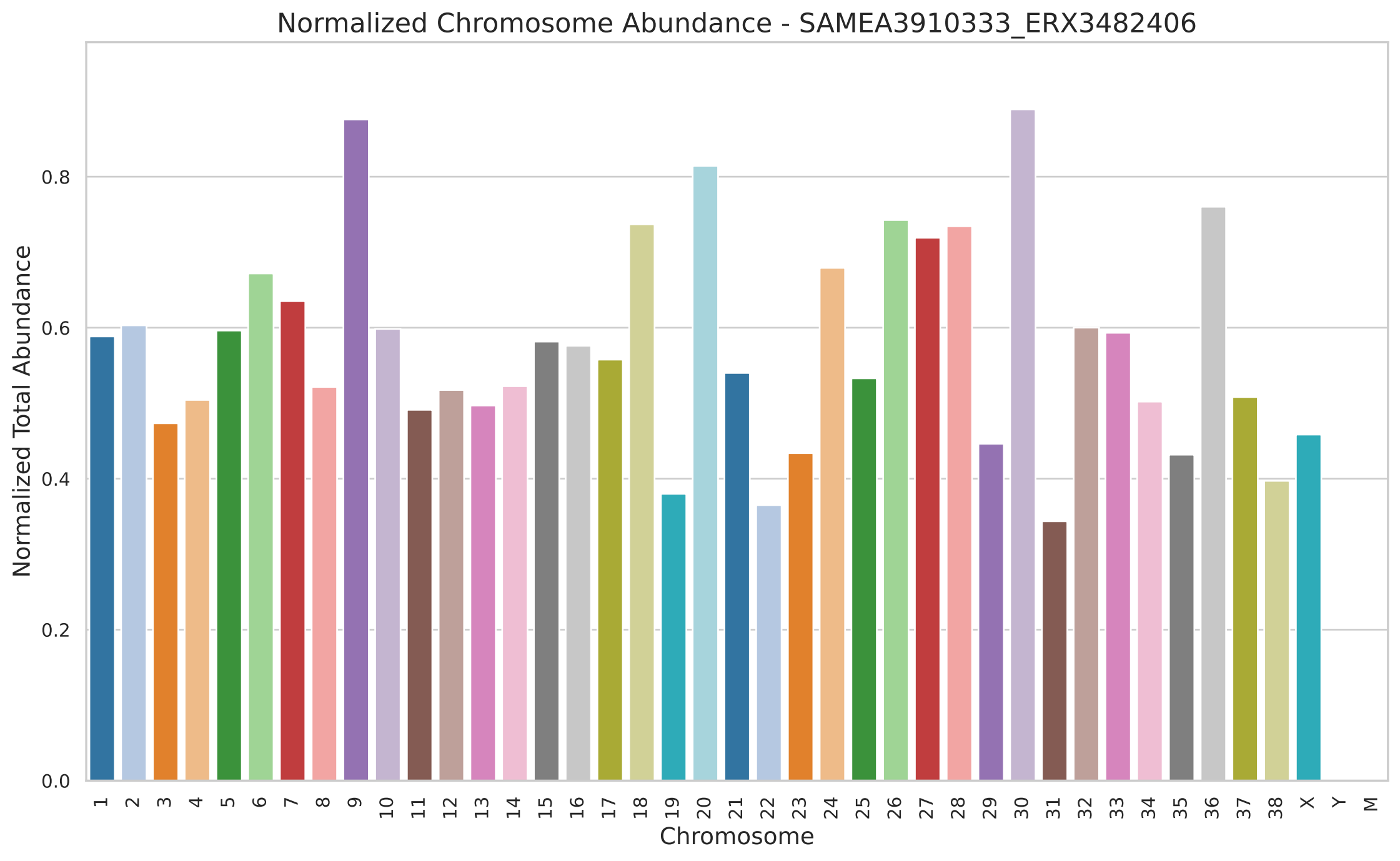

Normalized Chromosome Abundance - SAMEA3910358_ERX3482466
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

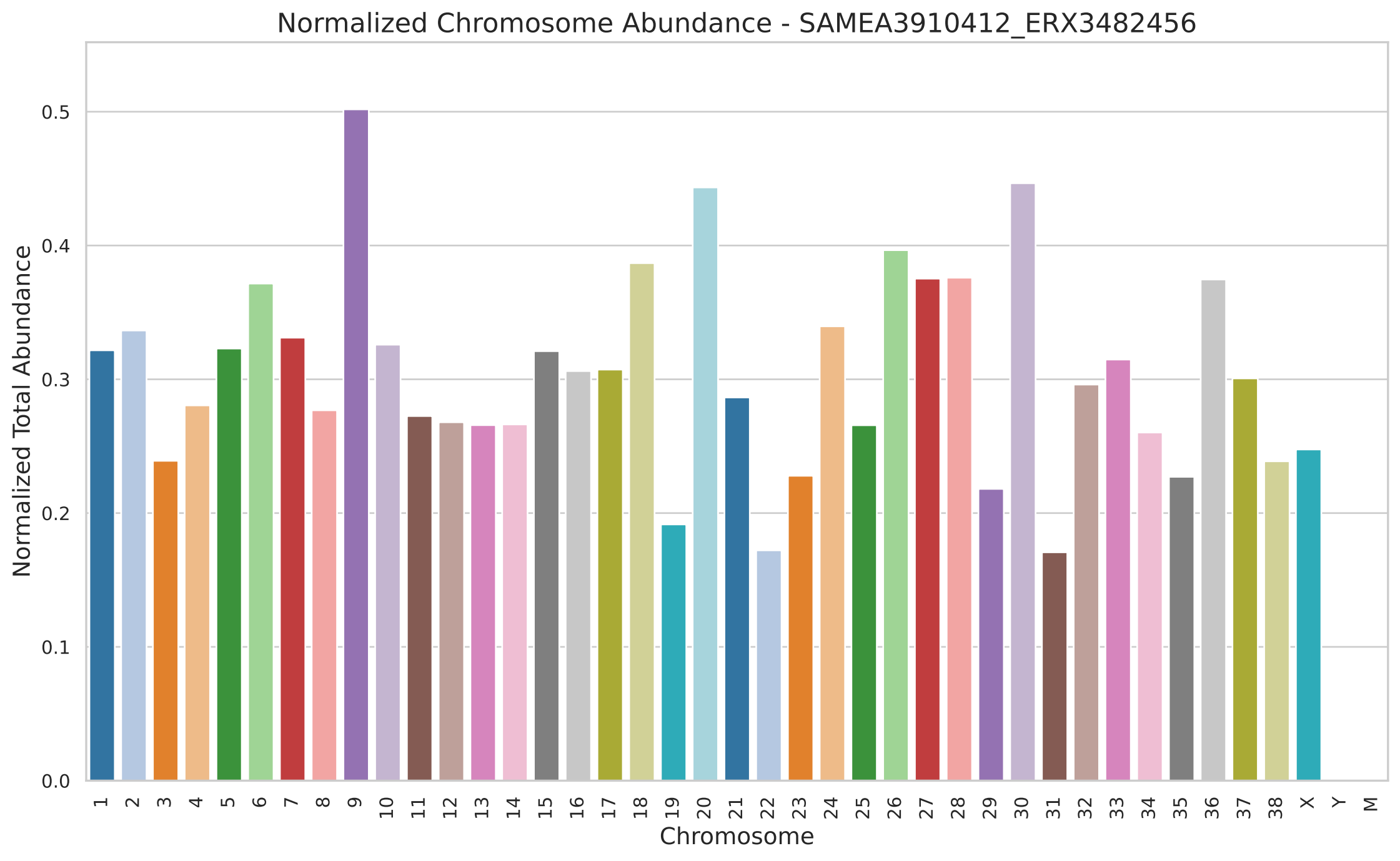

Normalized Chromosome Abundance - SAMEA3910416_ERX3482457
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

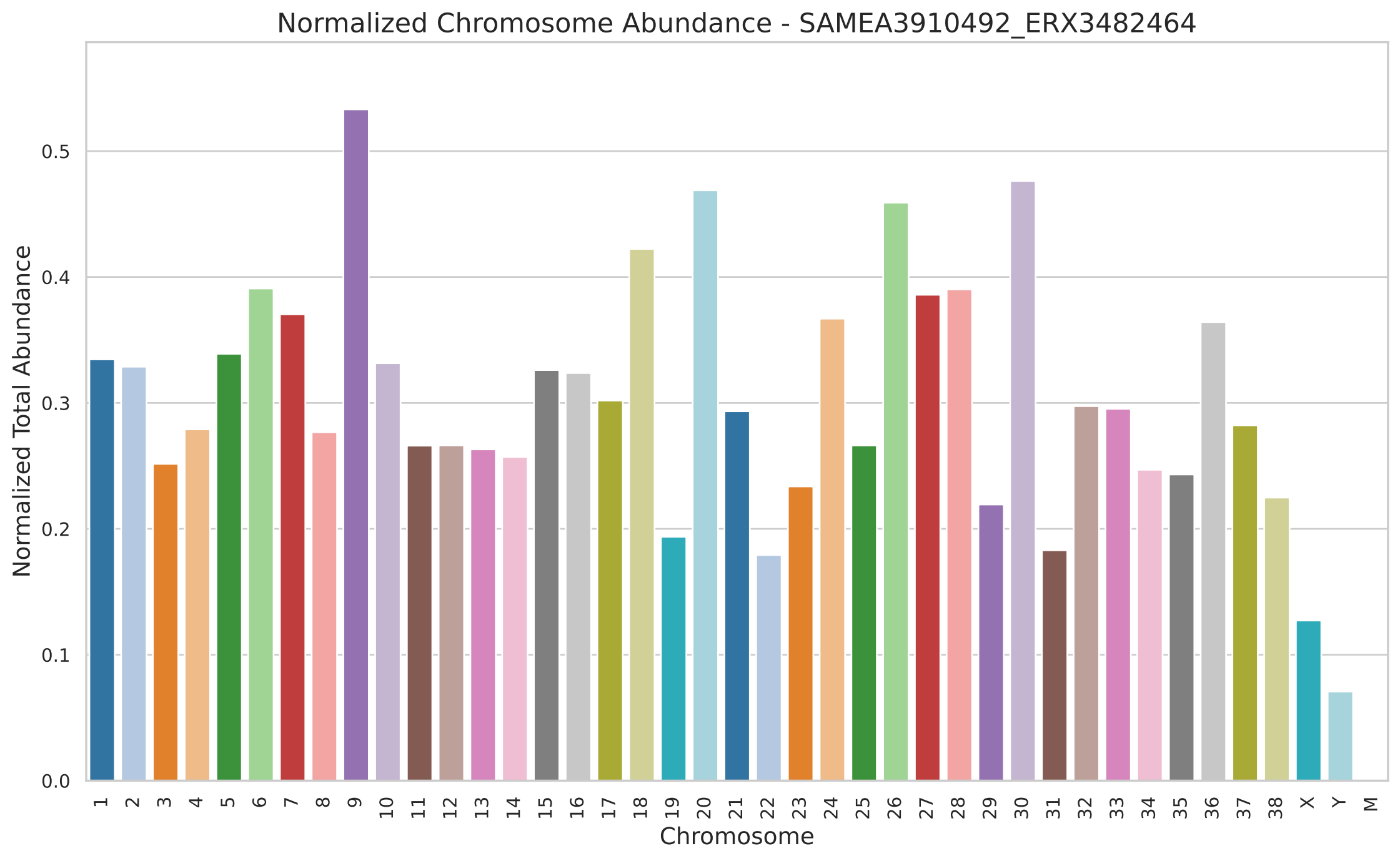

Normalized Chromosome Abundance - SAMEA3910483_ERX3482461
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

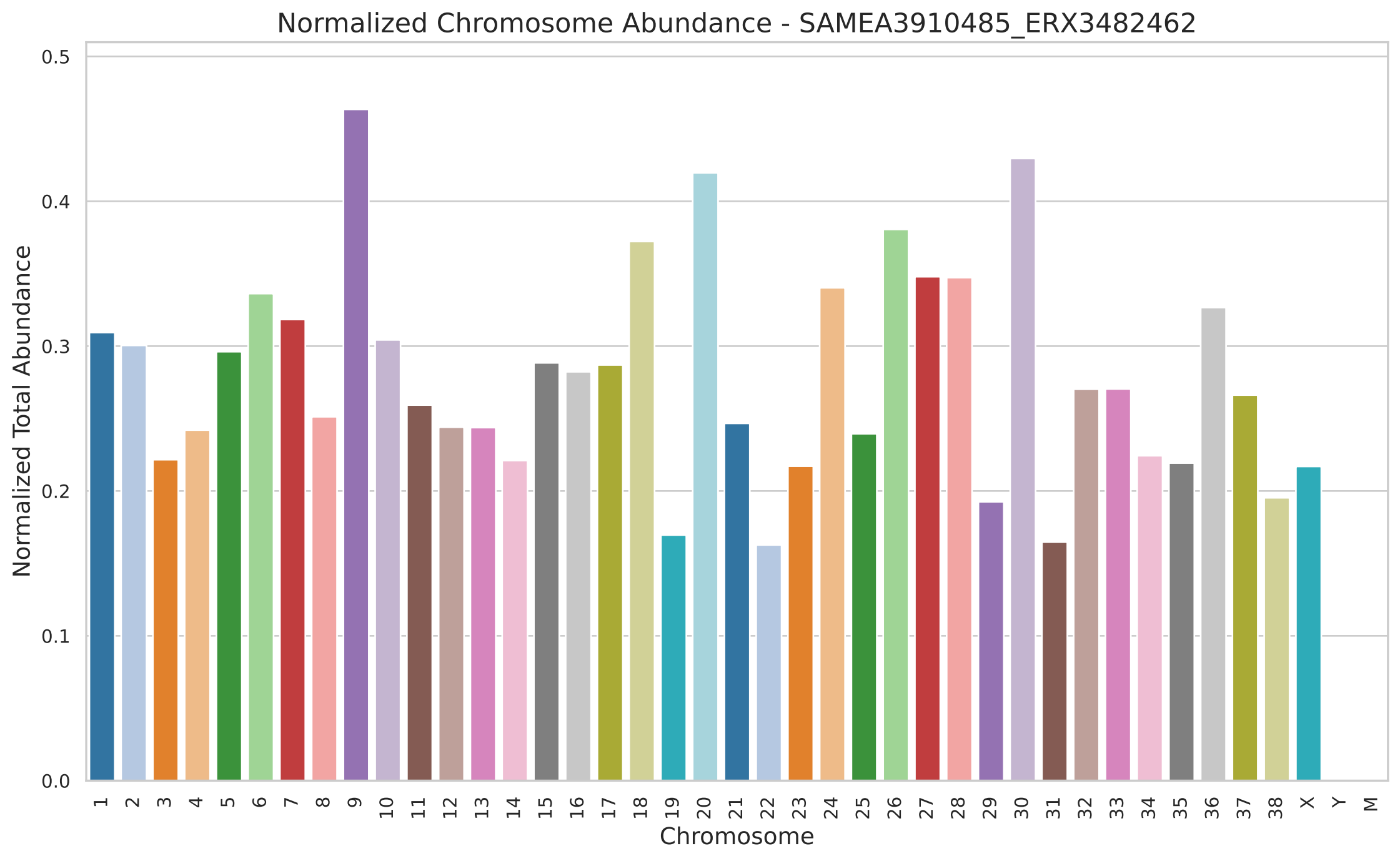

Normalized Chromosome Abundance - SAMEA3910487_ERX3482463
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

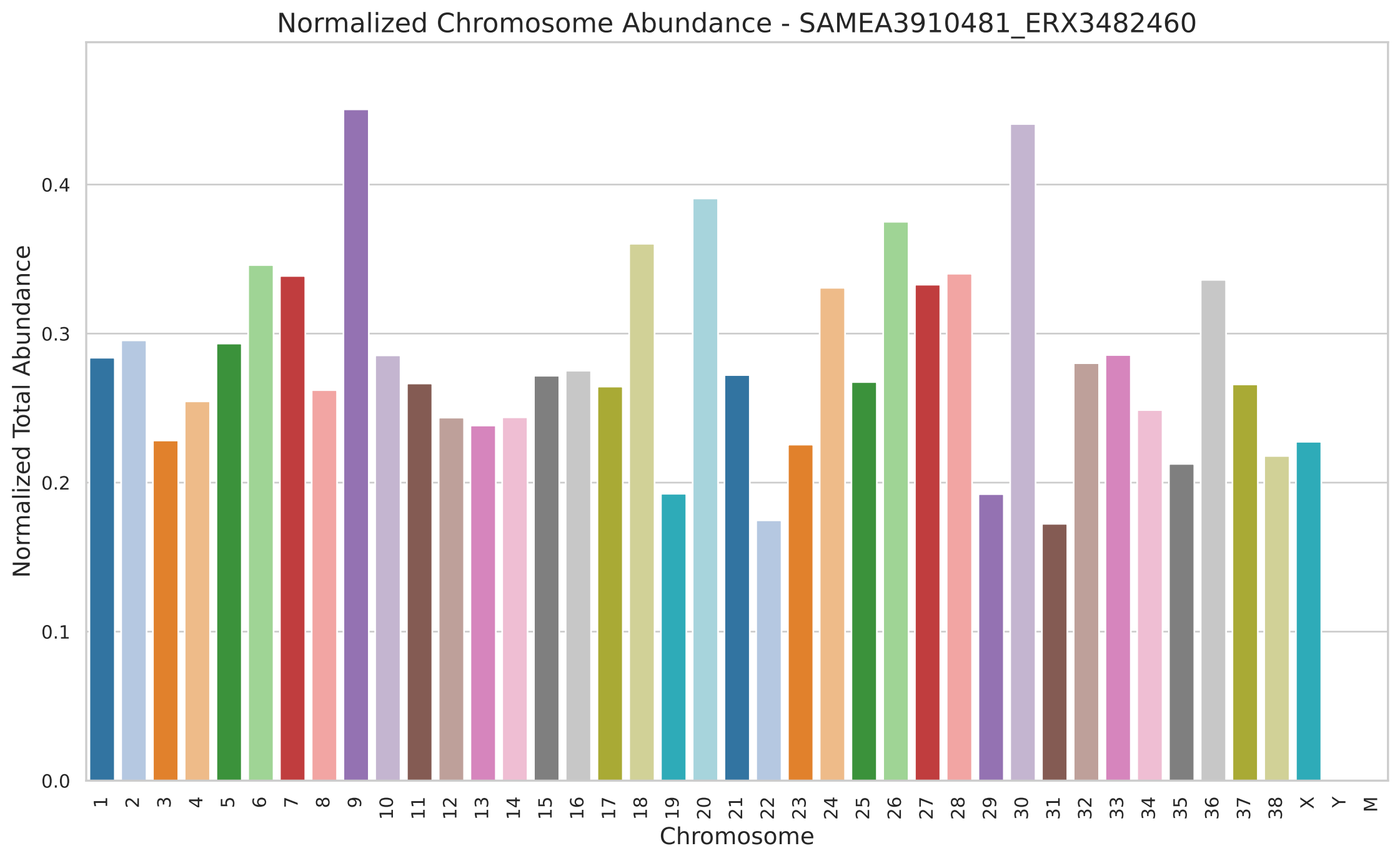

Normalized Chromosome Abundance - SAMEA3910473_ERX3482445
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

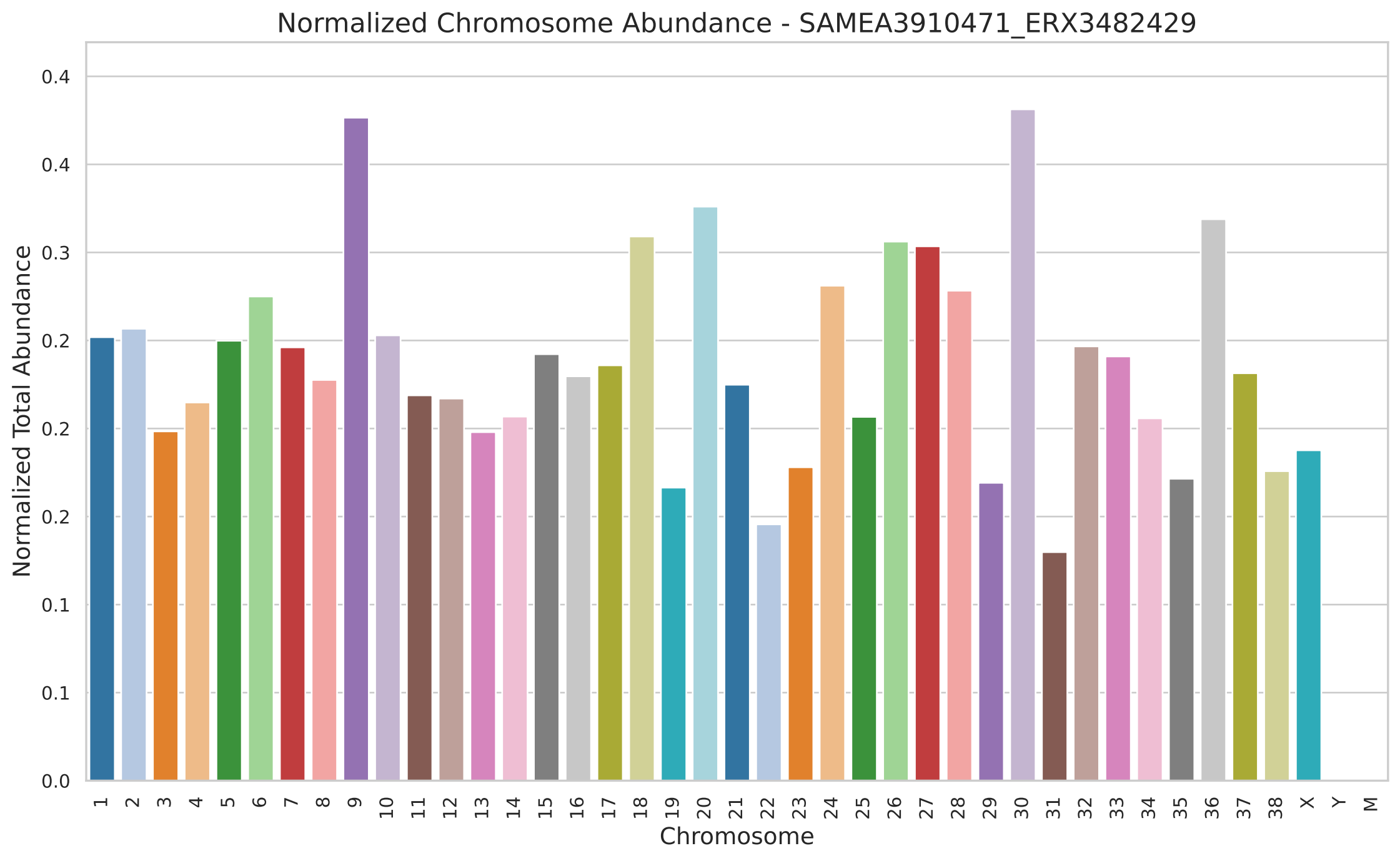

Normalized Chromosome Abundance - SAMEA3910333_ERX3482406
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

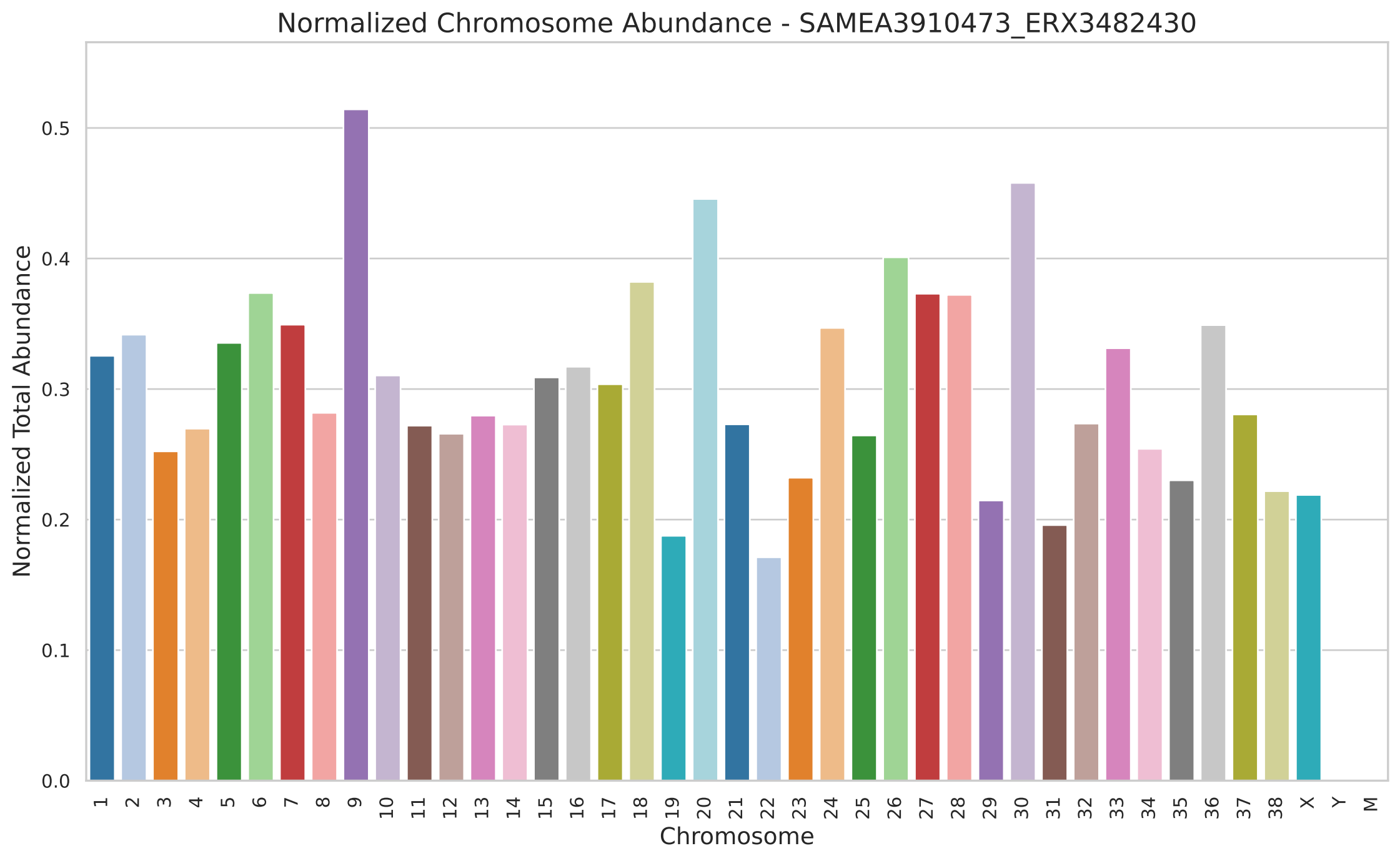

Normalized Chromosome Abundance - SAMEA3910412_ERX3482456
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

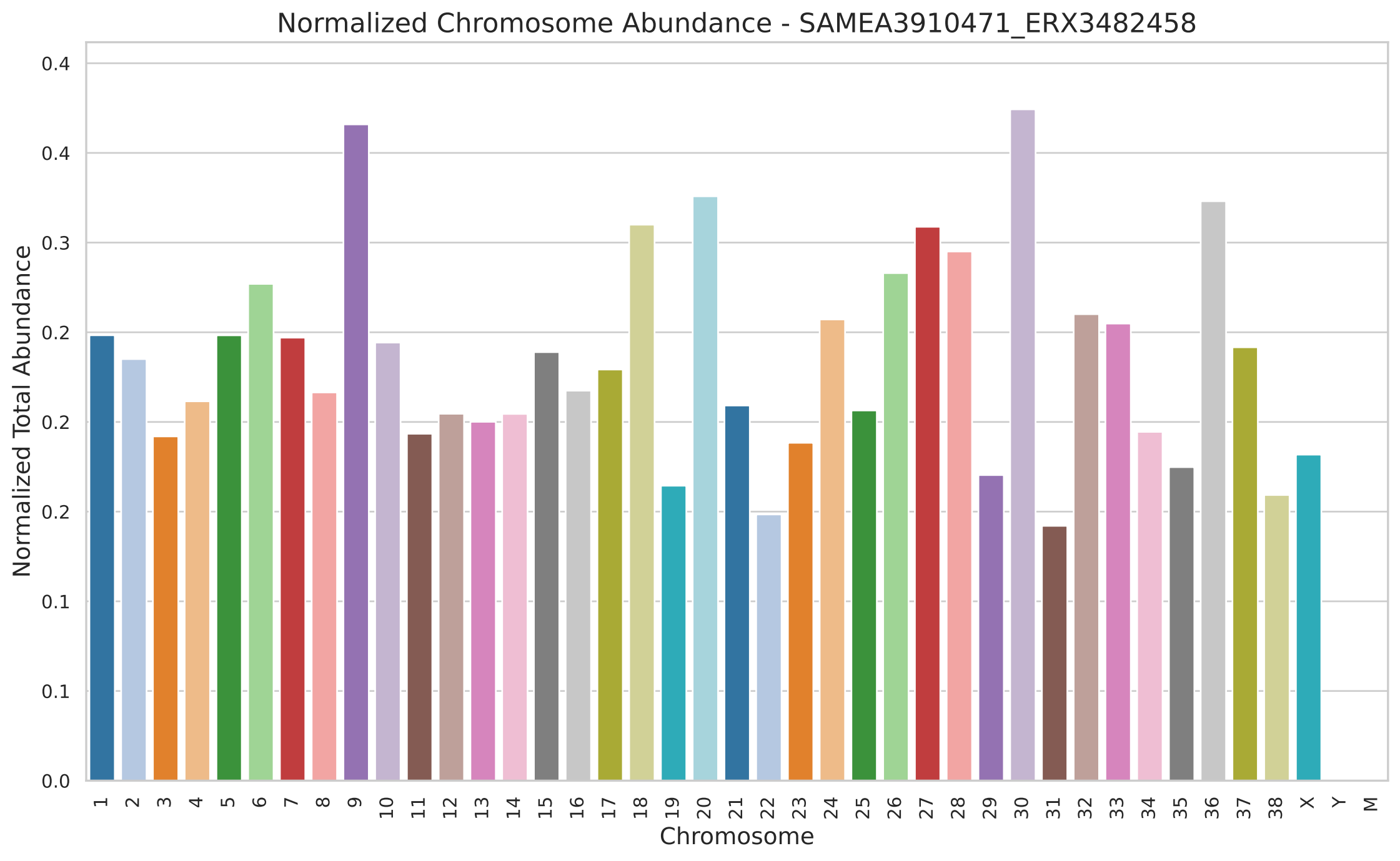

Normalized Chromosome Abundance - SAMEA3910492_ERX3482464
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

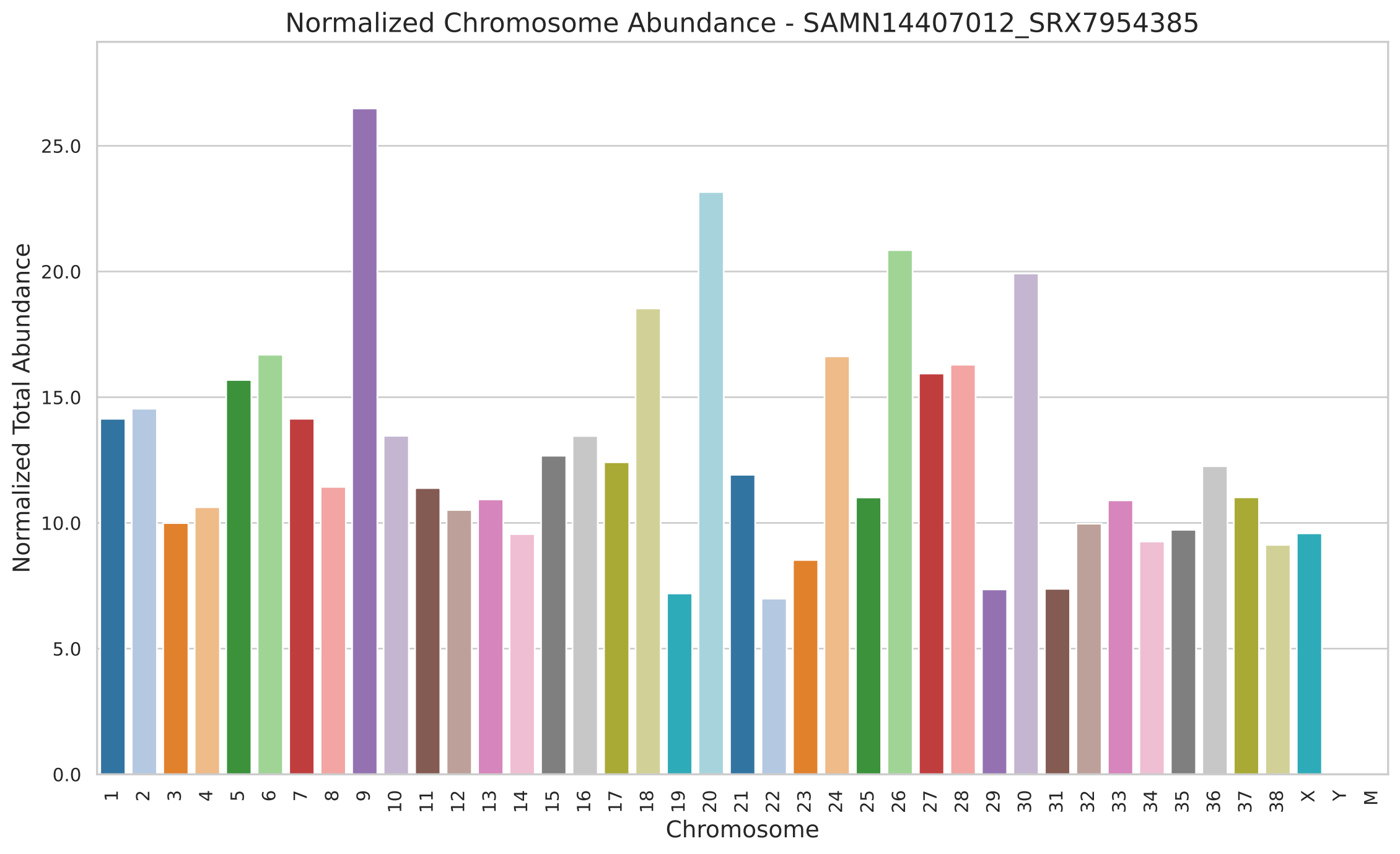

Normalized Chromosome Abundance - SAMEA3910485_ERX3482462
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

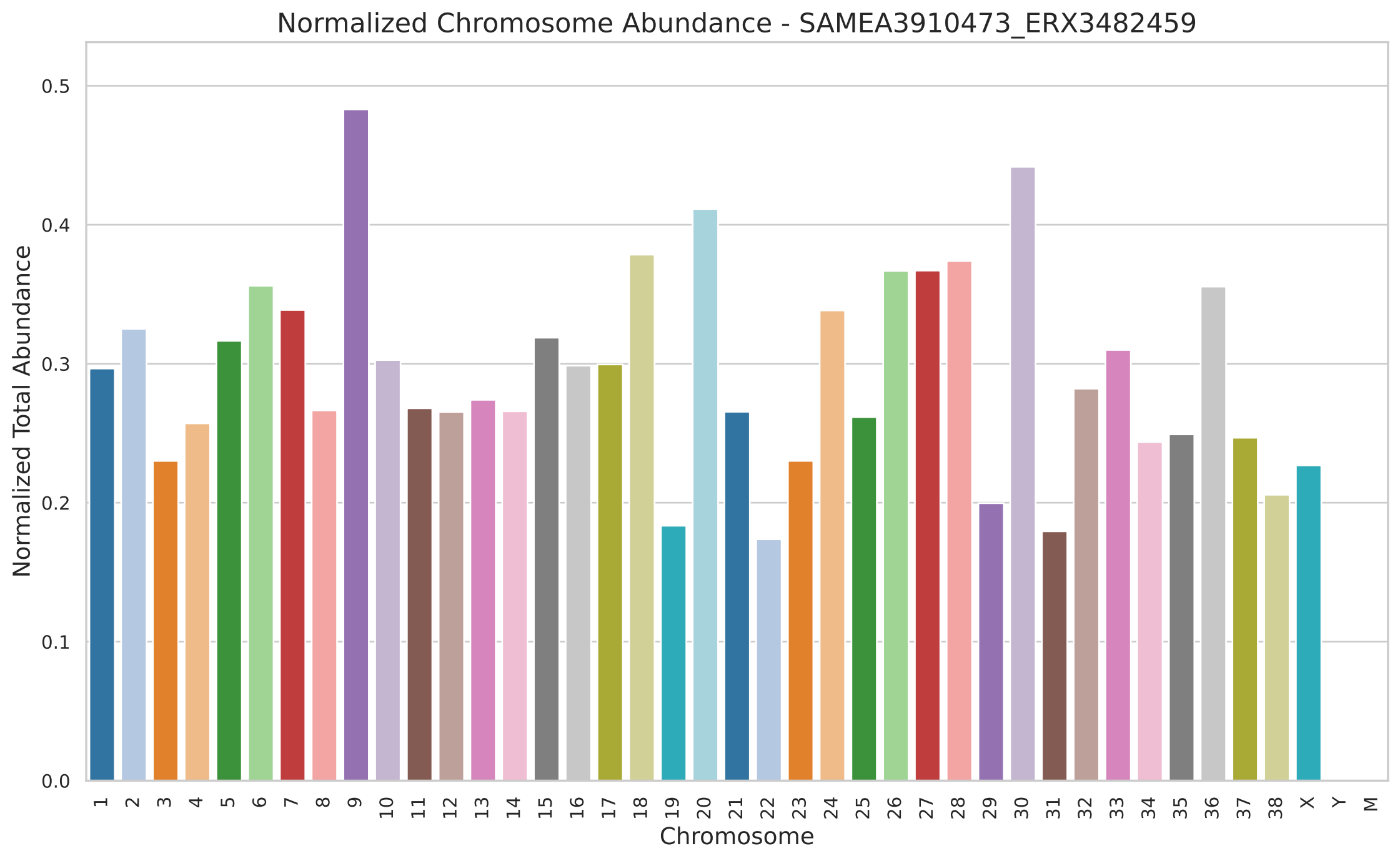

Normalized Chromosome Abundance - SAMEA3910481_ERX3482460
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

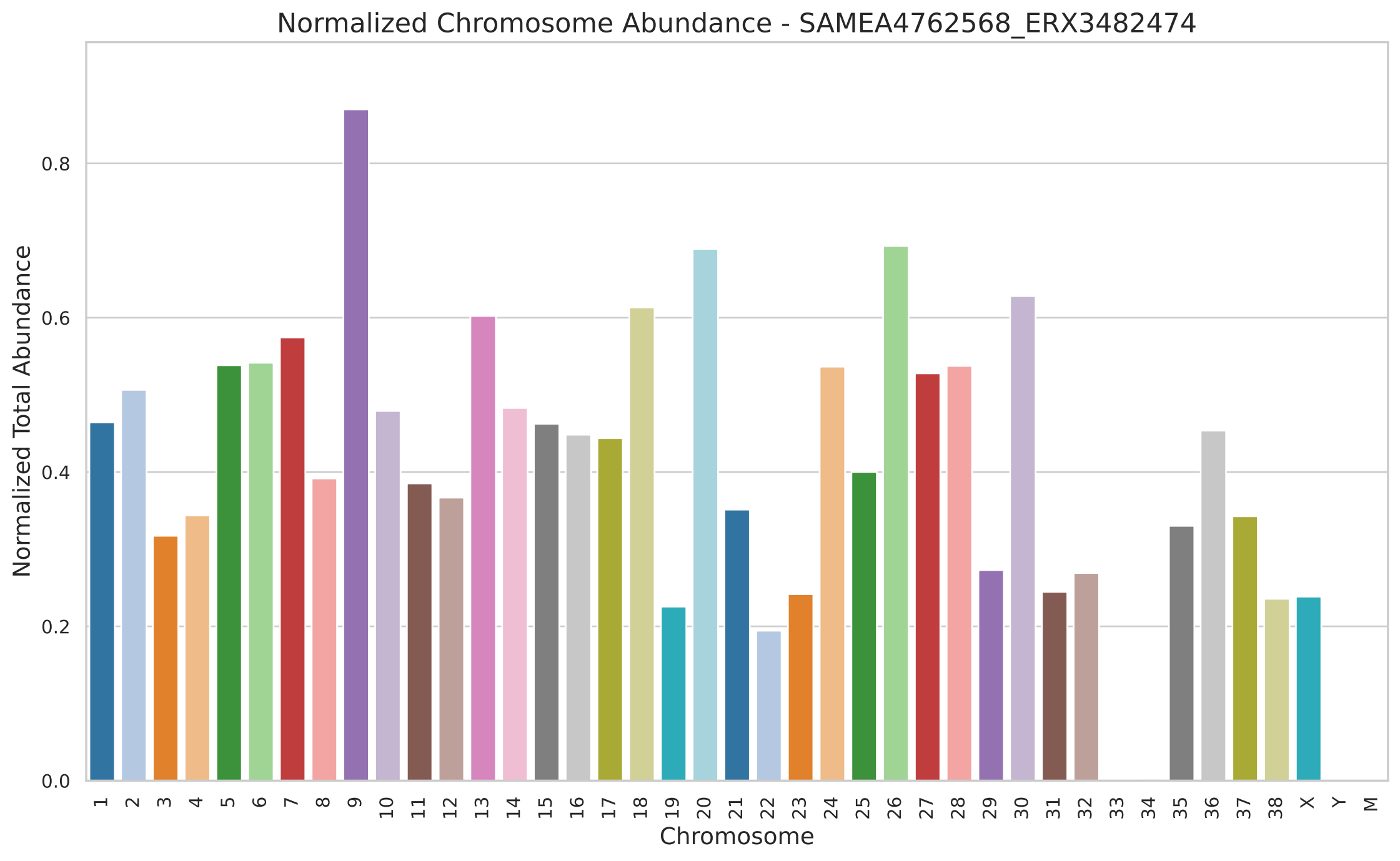

Normalized Chromosome Abundance - SAMEA3910471_ERX3482429
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

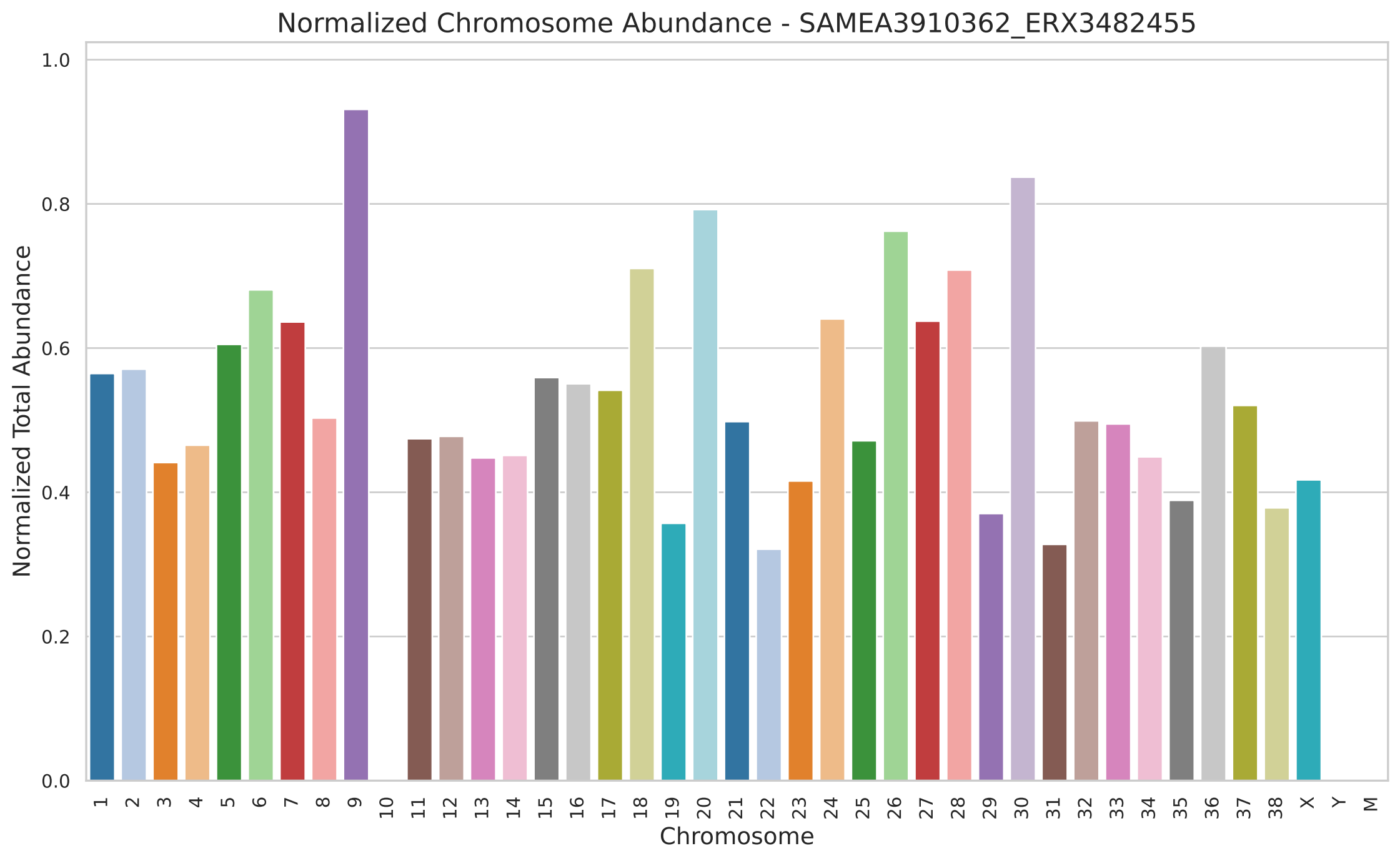

Normalized Chromosome Abundance - SAMEA3910473_ERX3482430
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

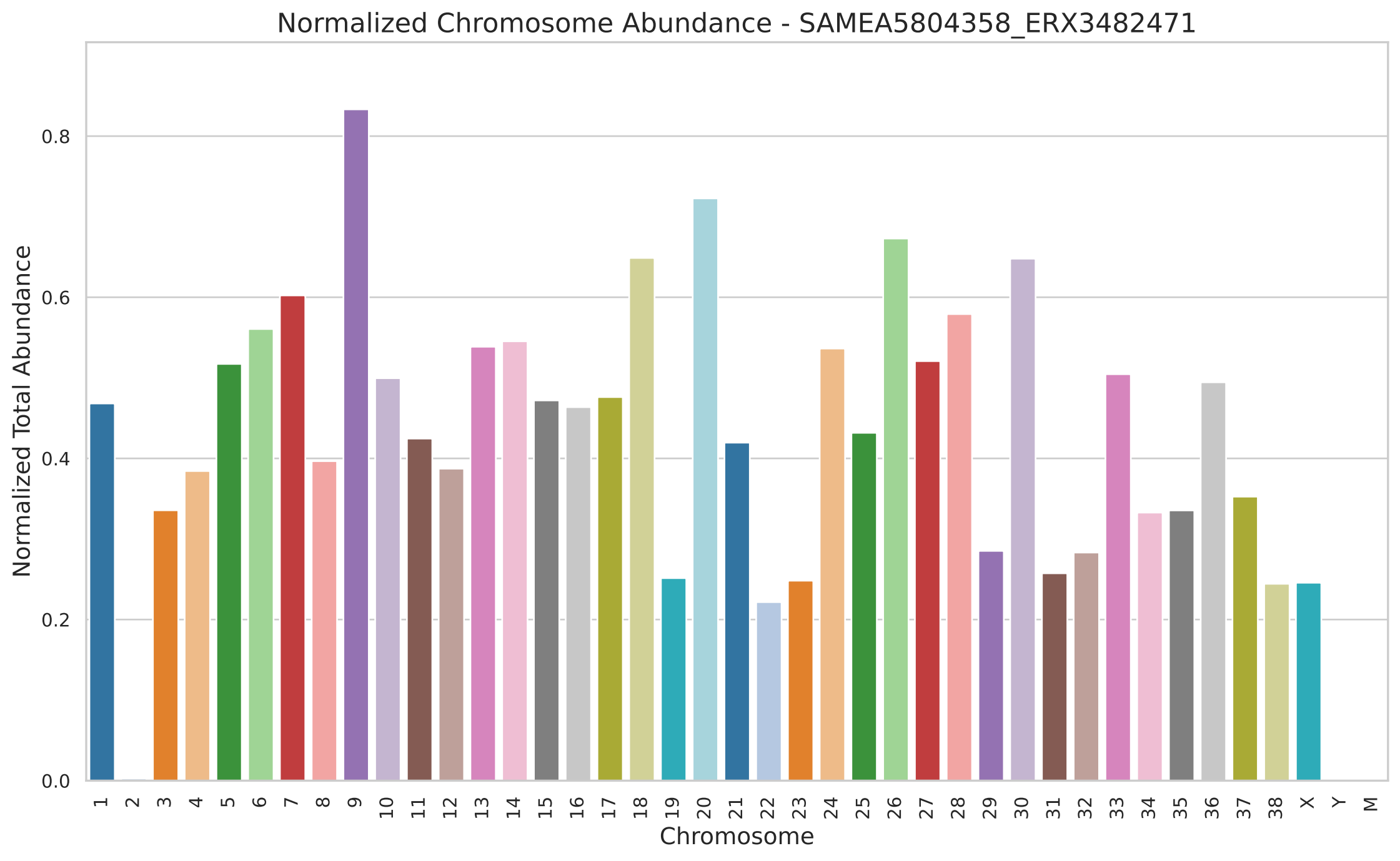

Normalized Chromosome Abundance - SAMEA3910471_ERX3482458
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

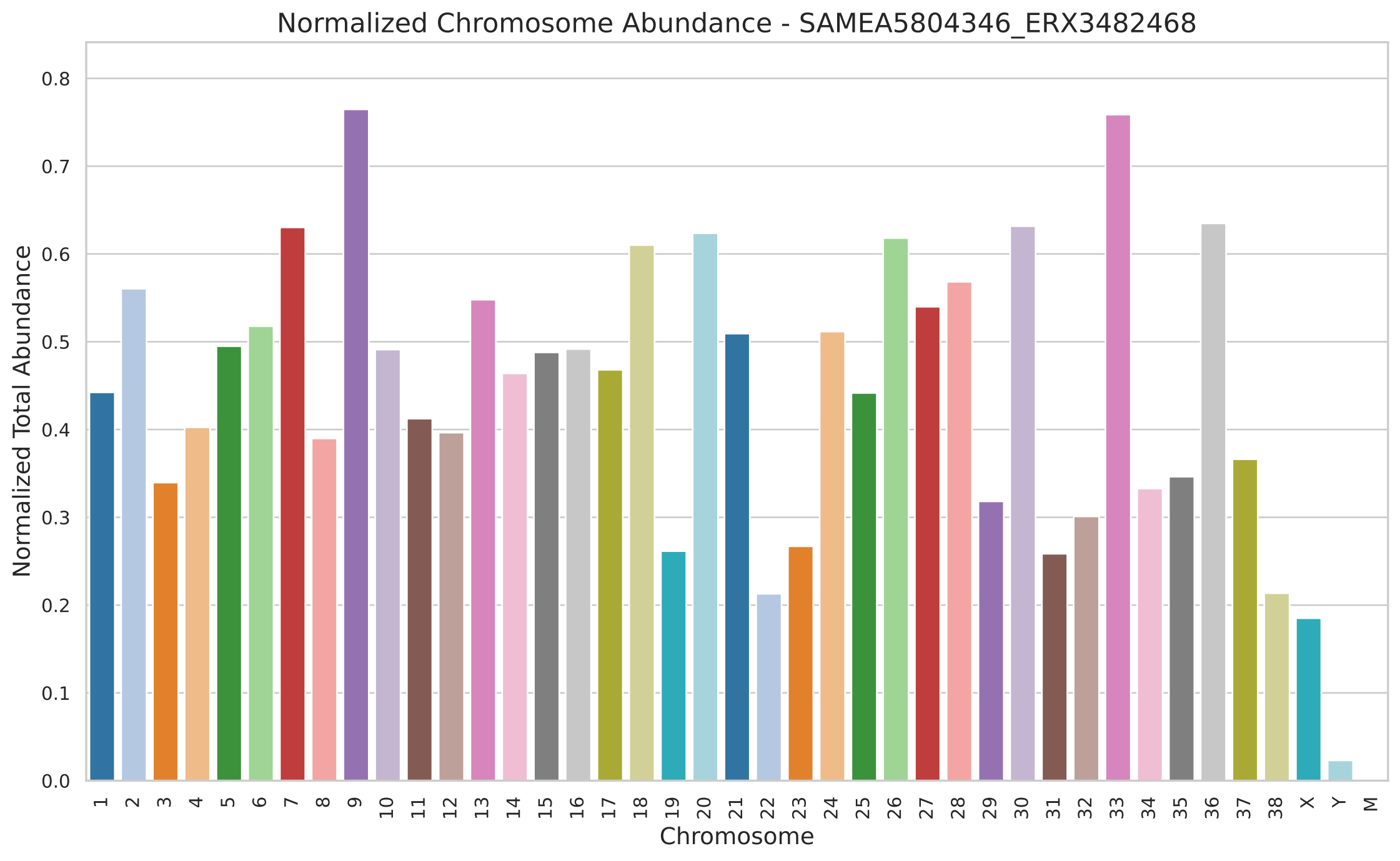

Normalized Chromosome Abundance - SAMN14407012_SRX7954385
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

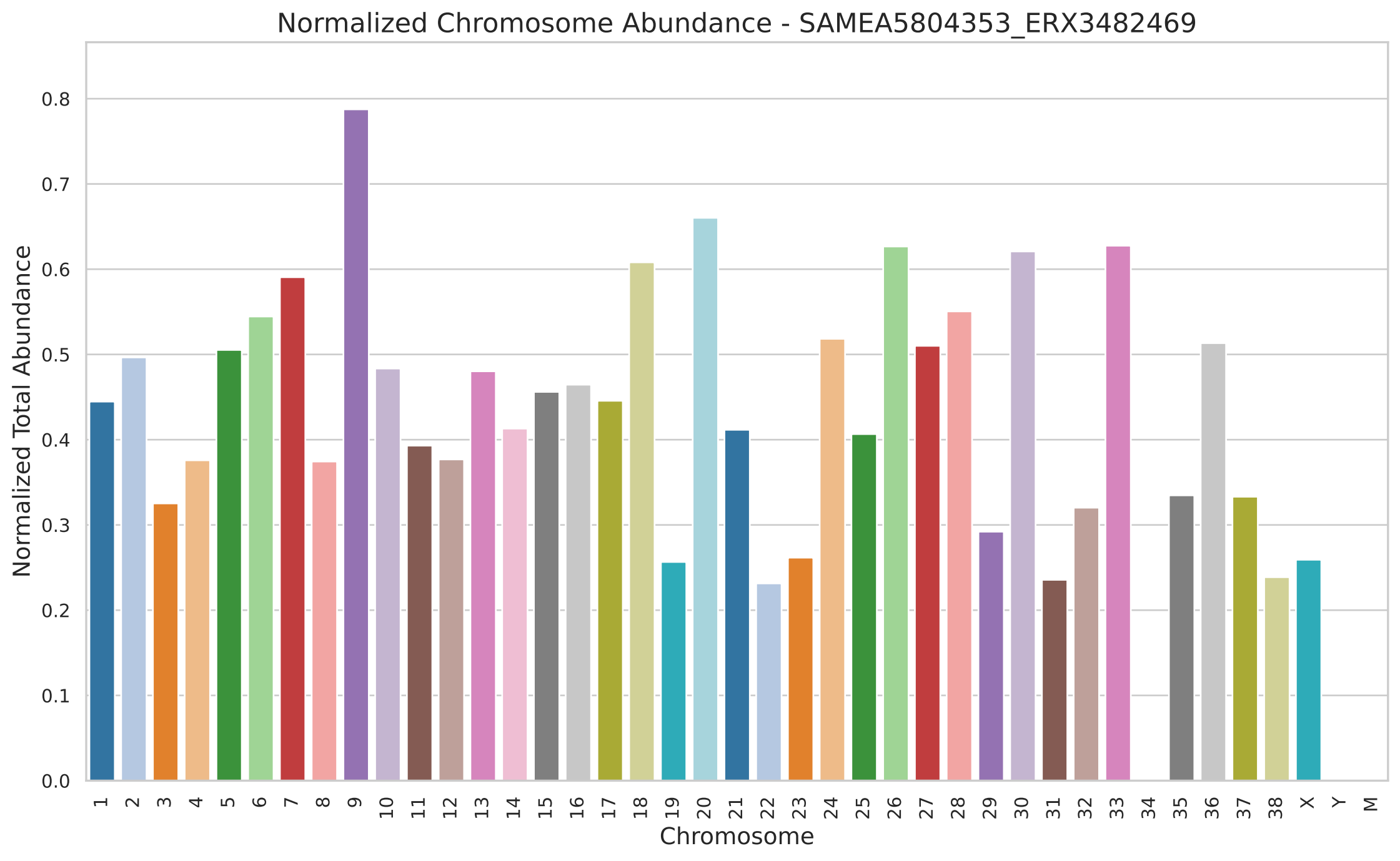

Normalized Chromosome Abundance - SAMEA3910473_ERX3482459
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

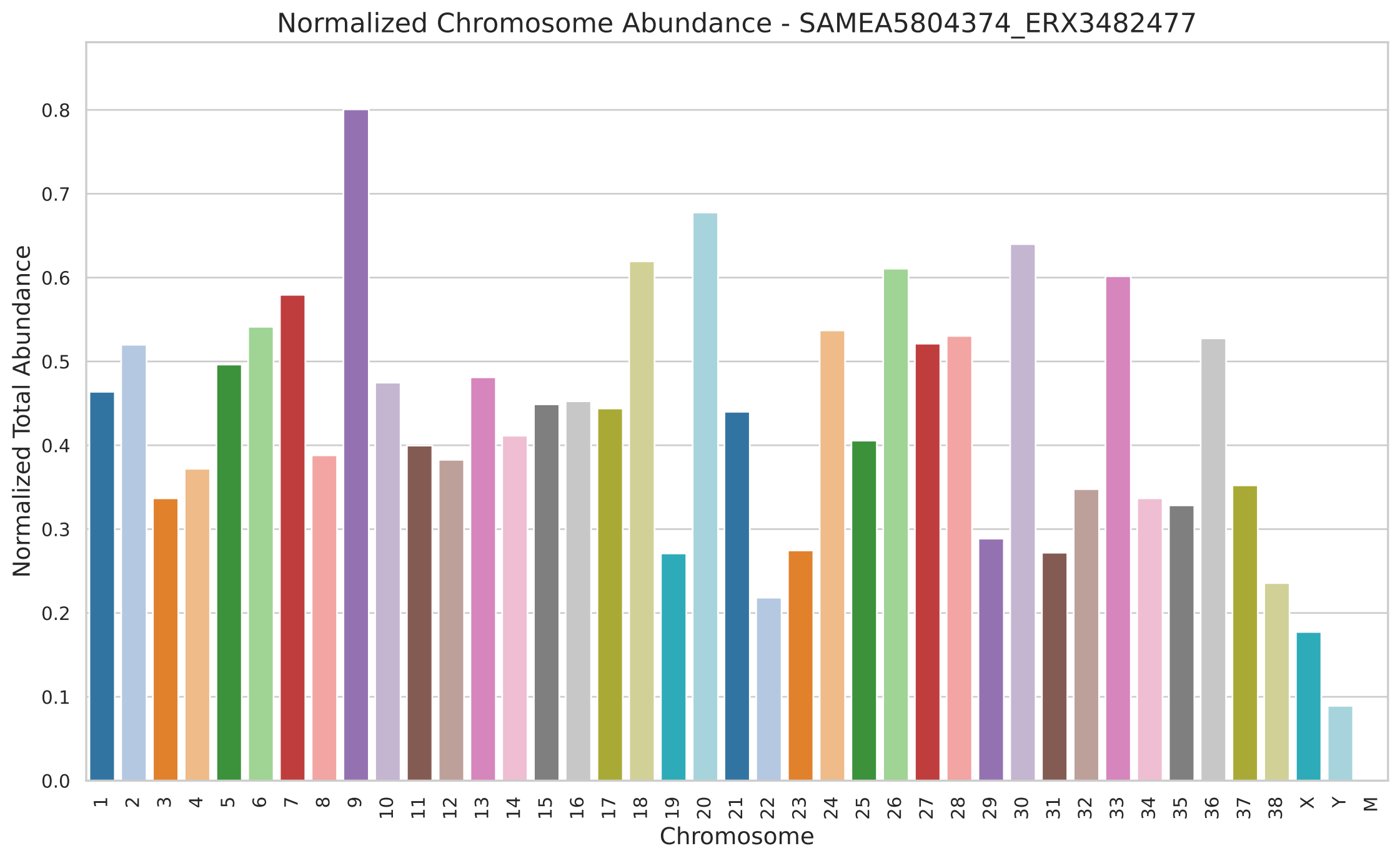

Normalized Chromosome Abundance - SAMEA4762568_ERX3482474
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

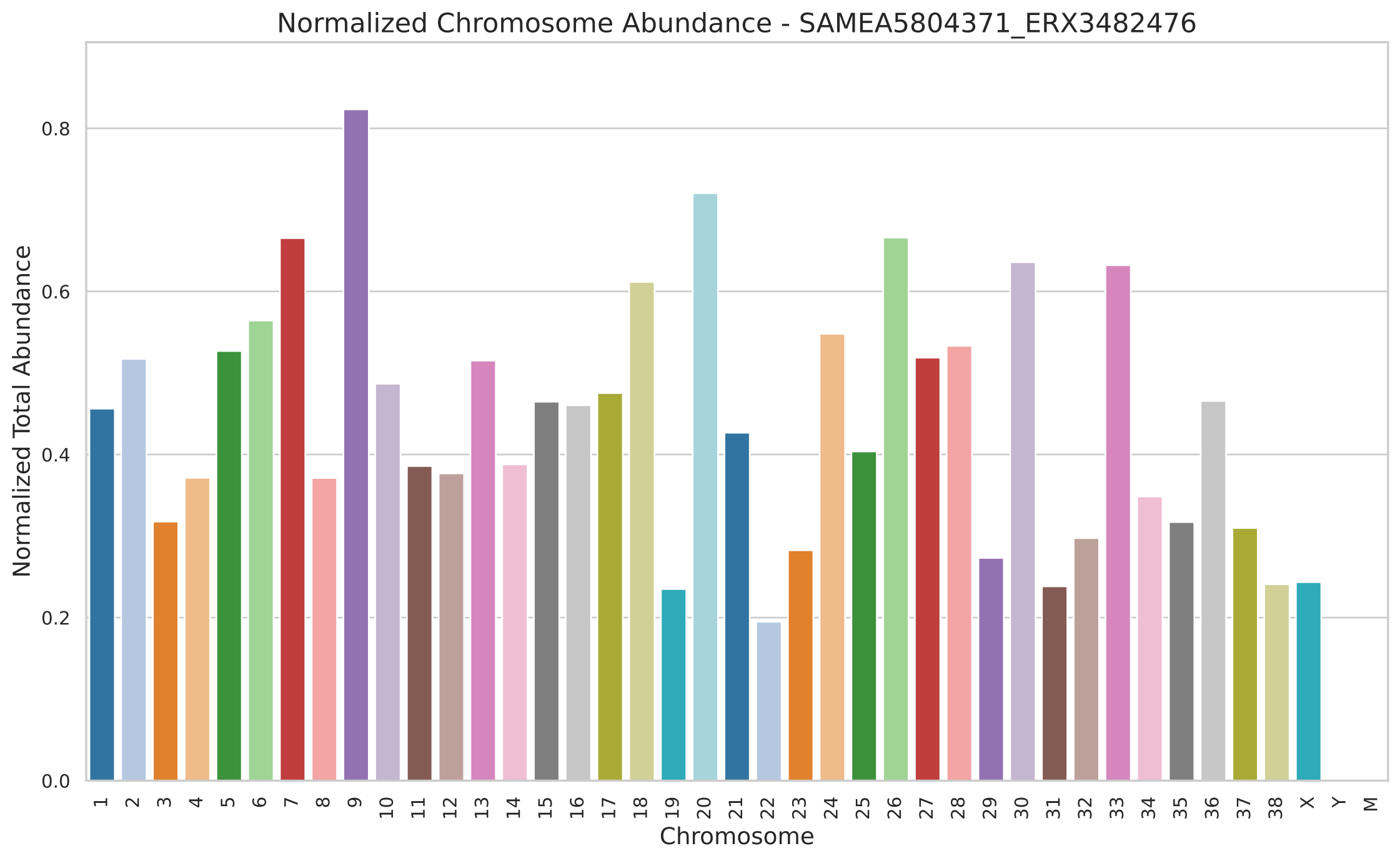

Normalized Chromosome Abundance - SAMEA3910362_ERX3482455
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

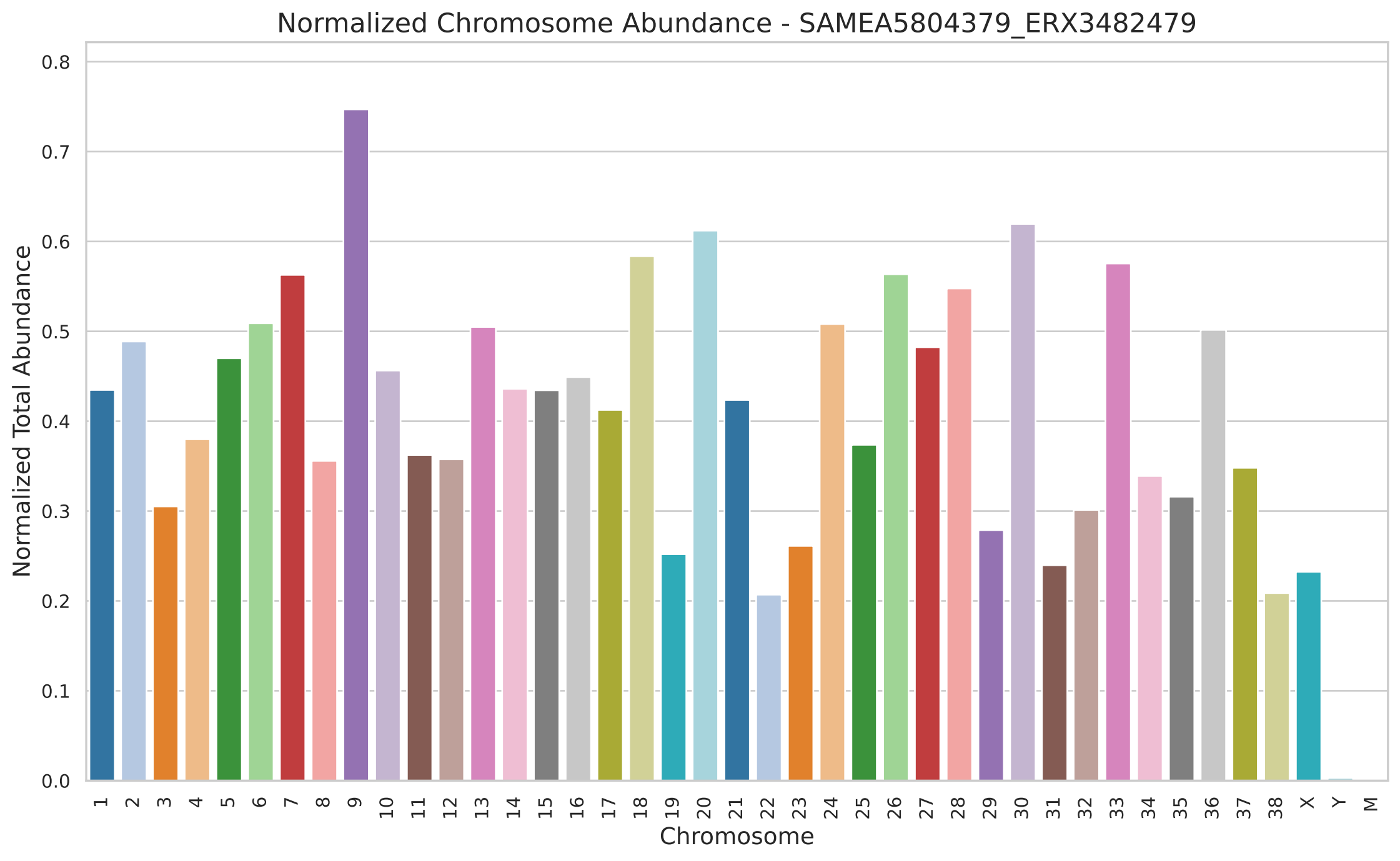

Normalized Chromosome Abundance - SAMEA5804358_ERX3482471
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

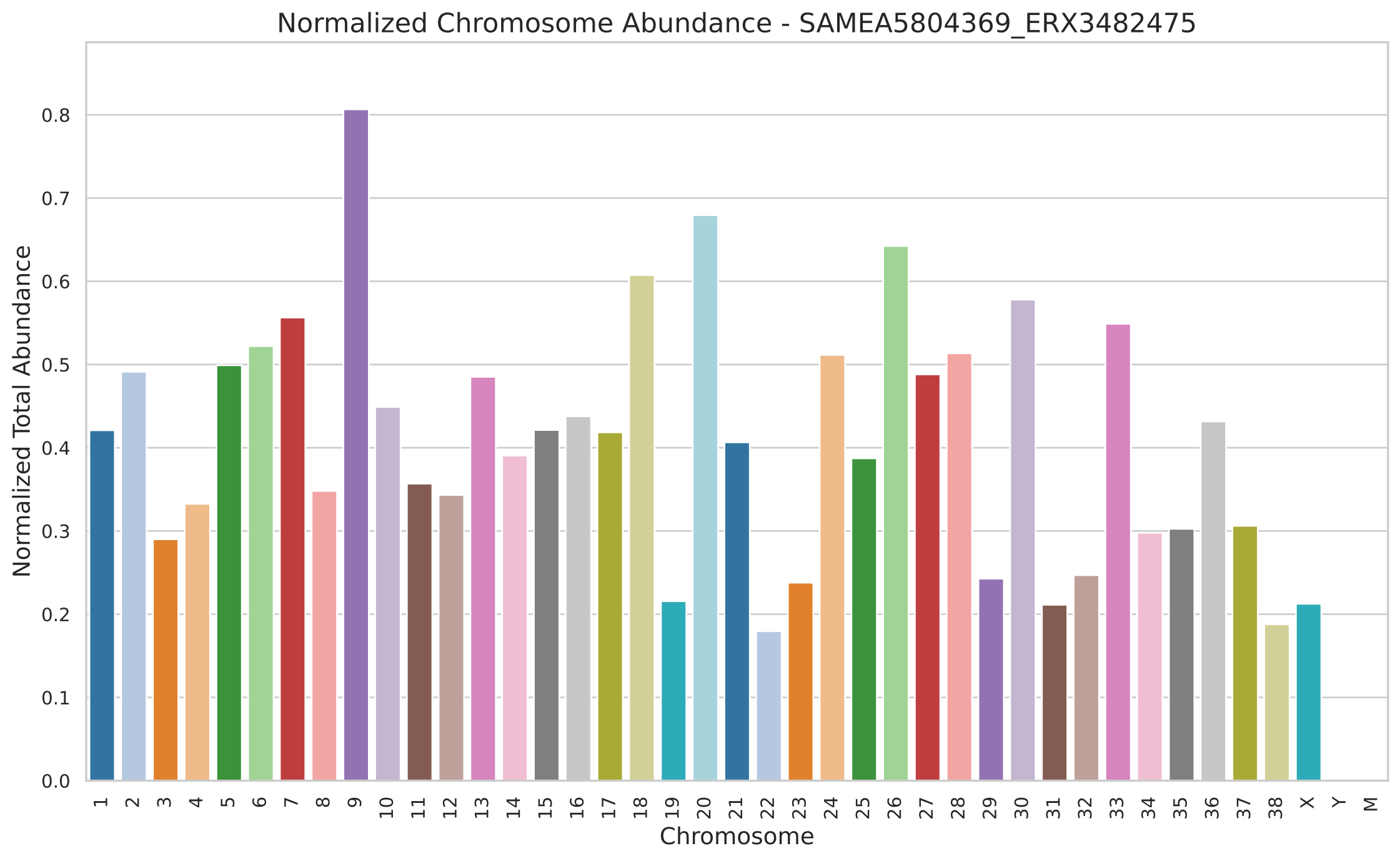

Normalized Chromosome Abundance - SAMEA5804346_ERX3482468
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

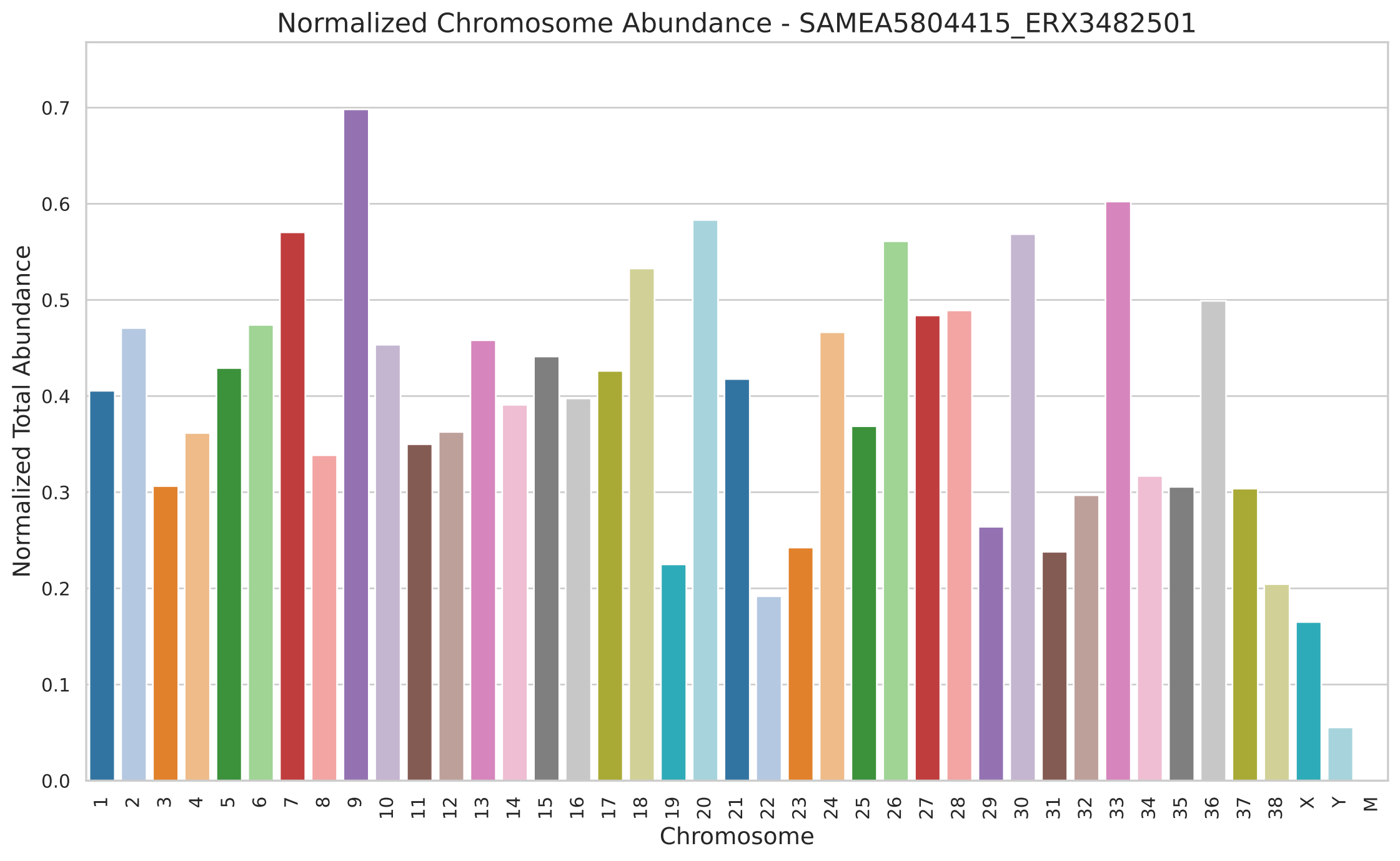

Normalized Chromosome Abundance - SAMEA5804353_ERX3482469
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

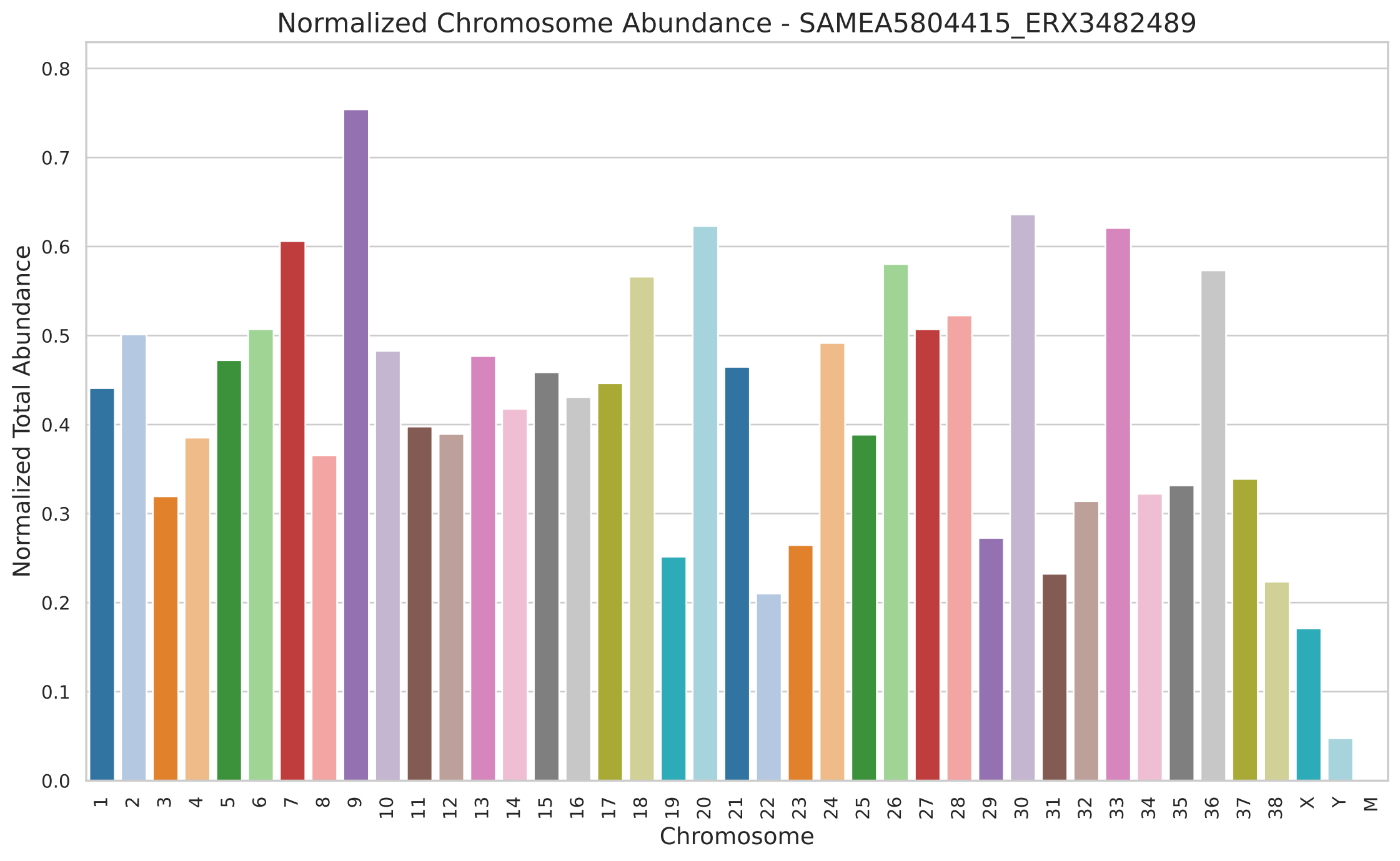

Normalized Chromosome Abundance - SAMEA5804374_ERX3482477
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

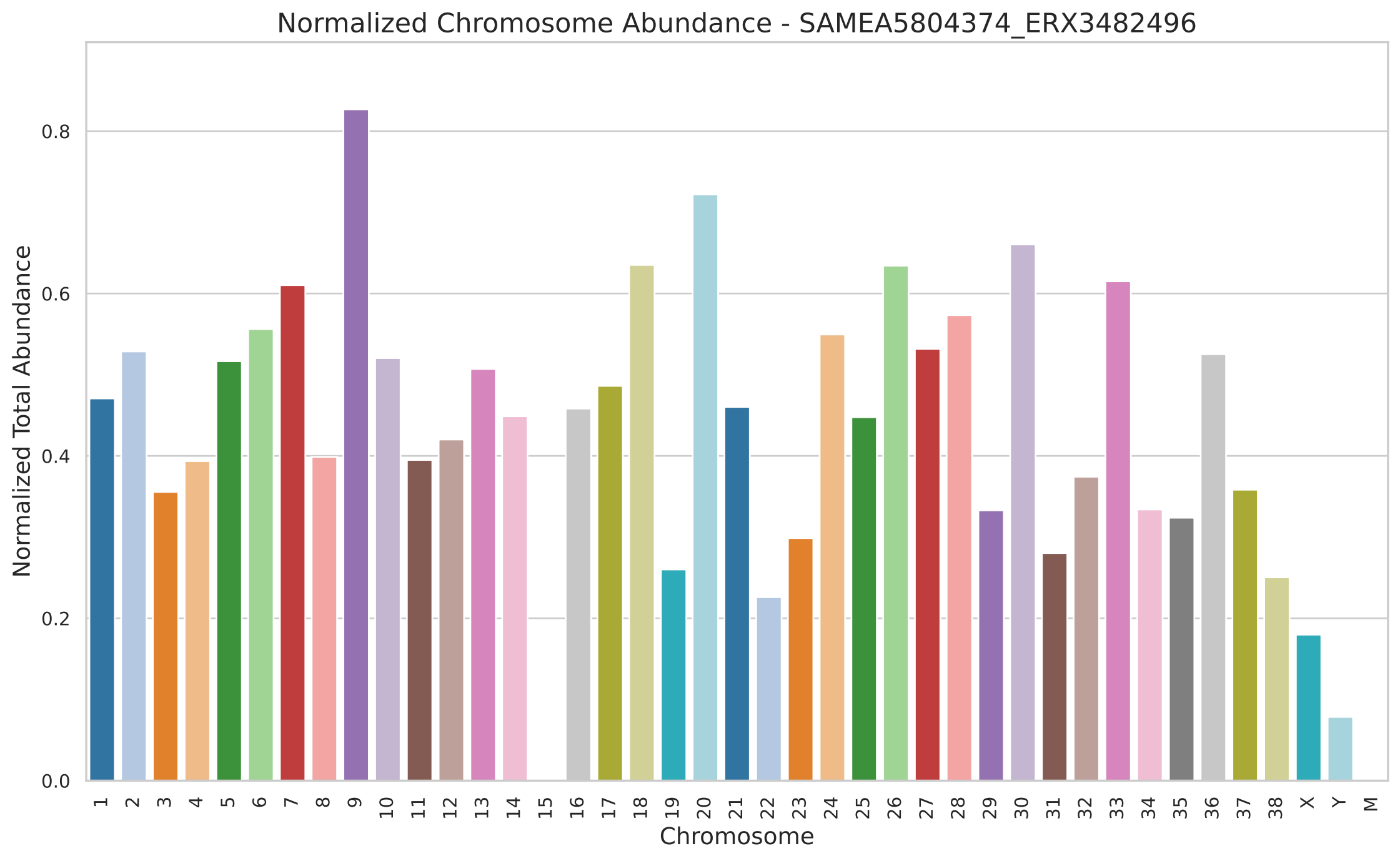

Normalized Chromosome Abundance - SAMEA5804371_ERX3482476
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

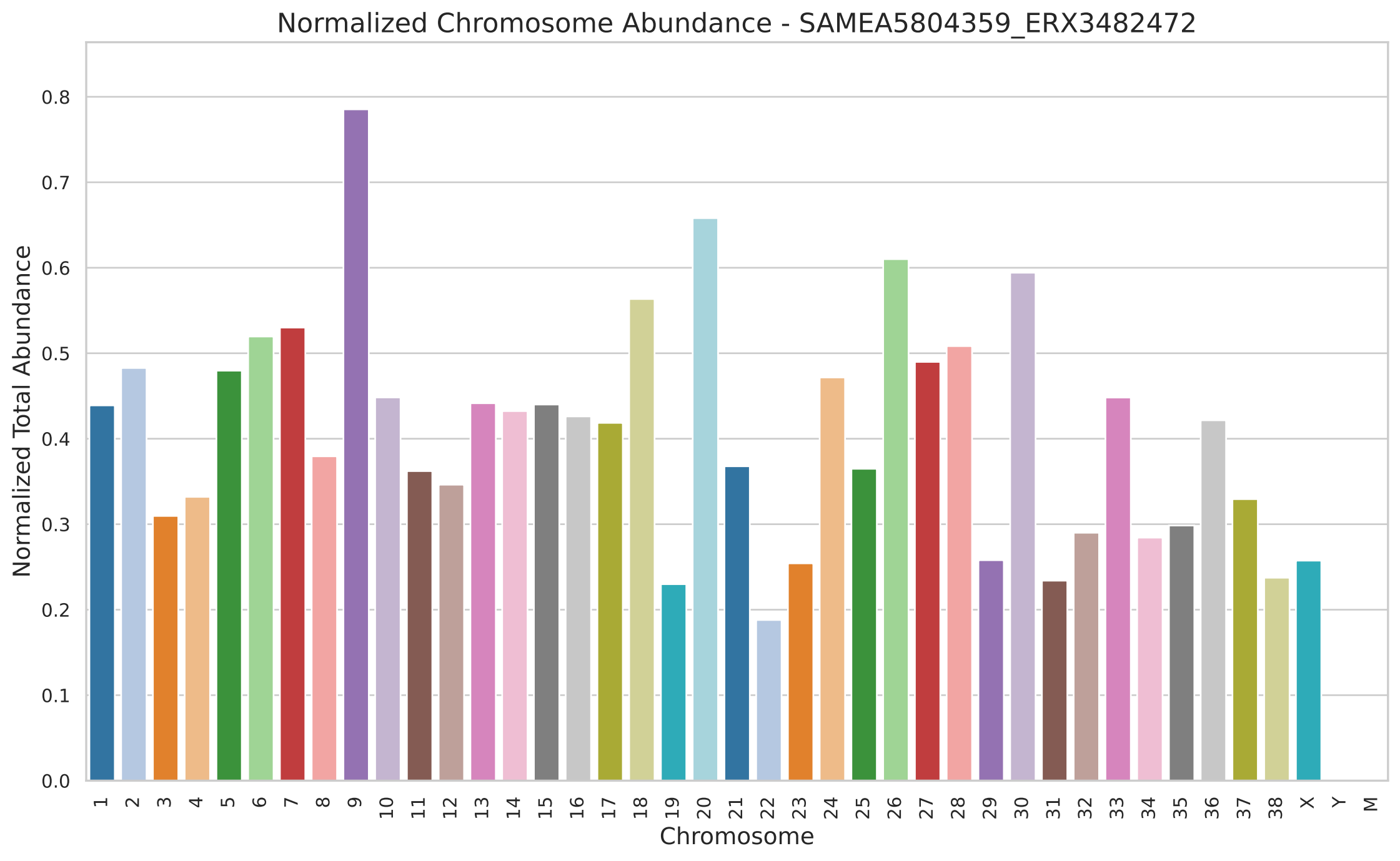

Normalized Chromosome Abundance - SAMEA5804379_ERX3482479
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

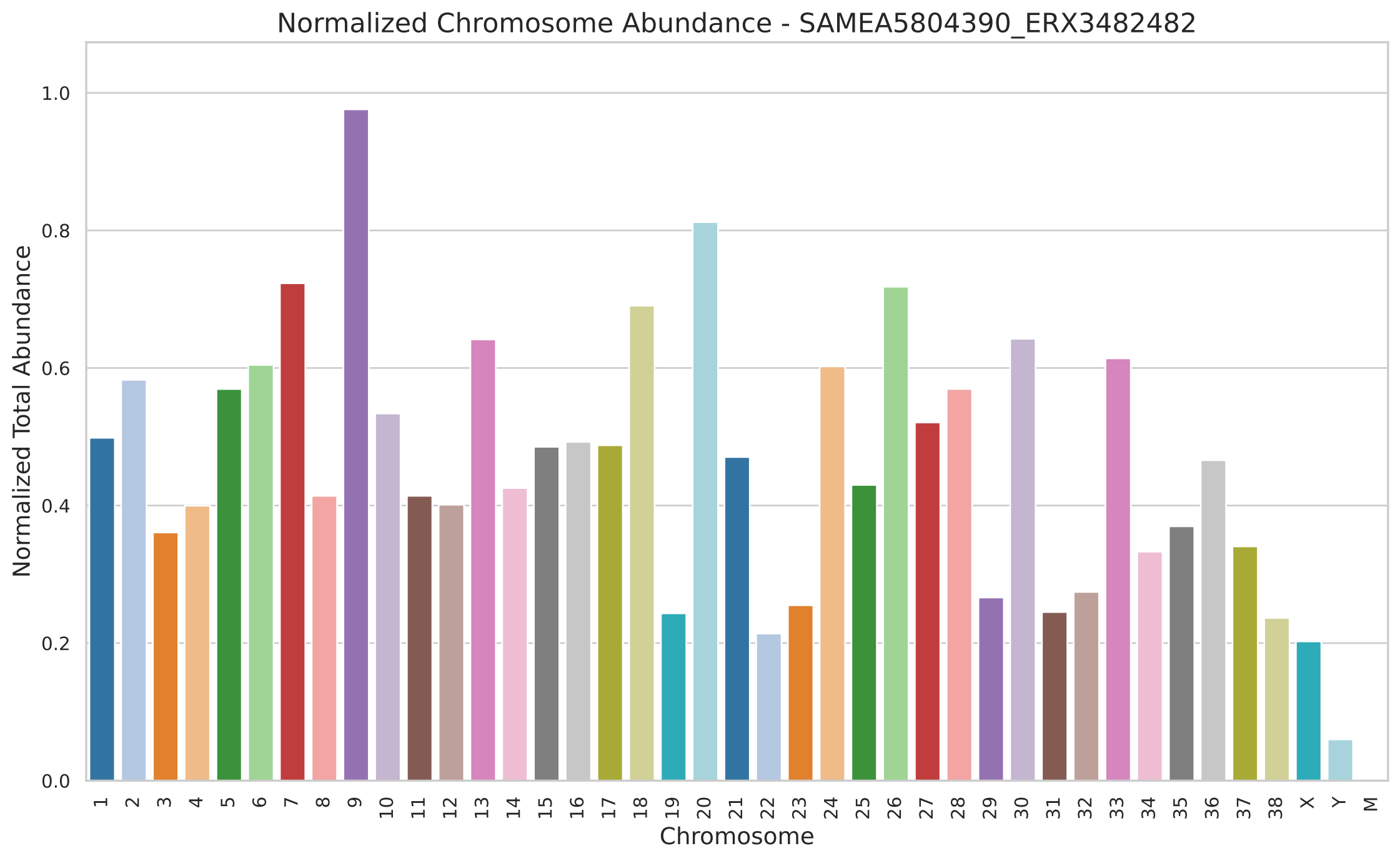

Normalized Chromosome Abundance - SAMEA5804369_ERX3482475
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

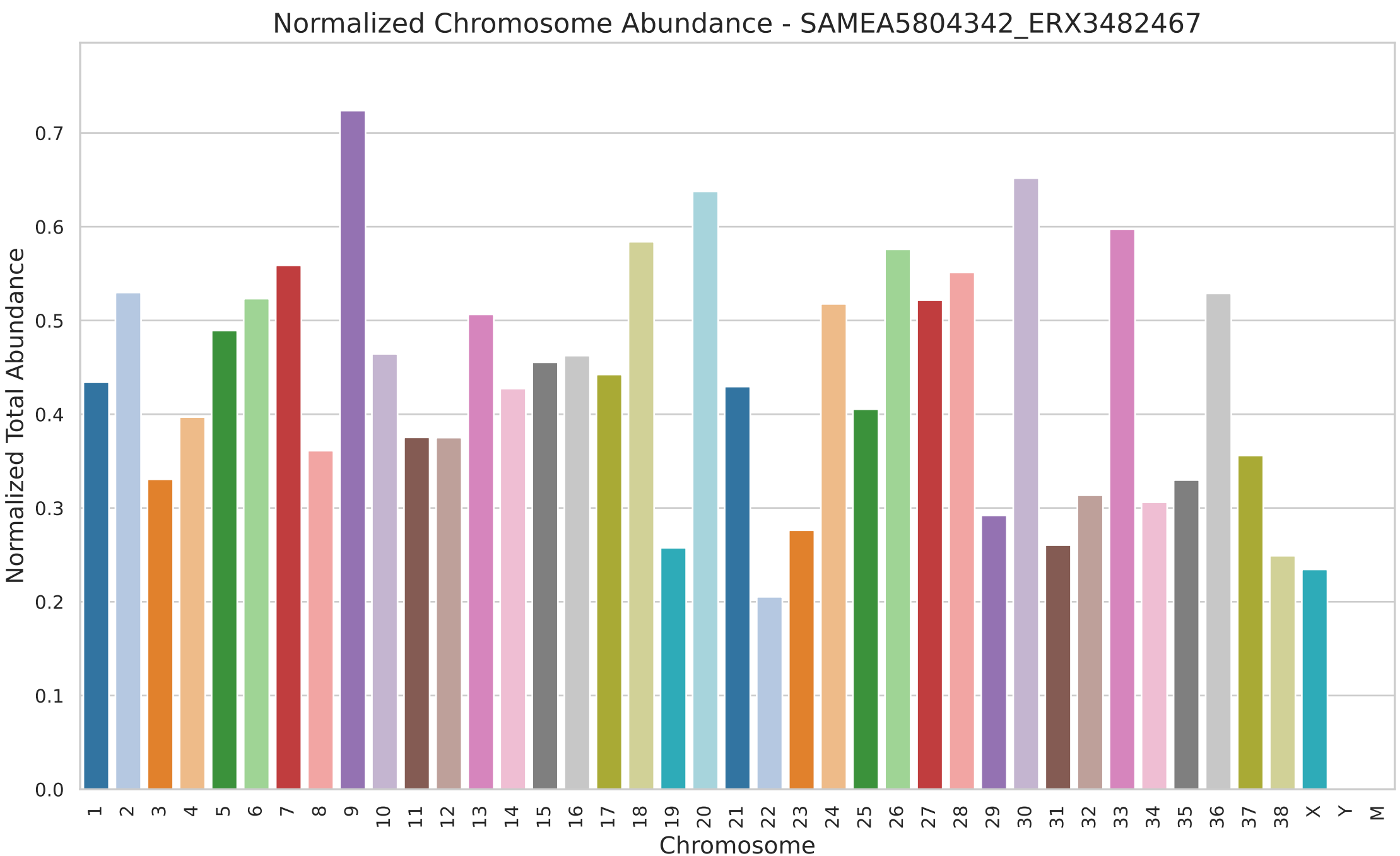

Normalized Chromosome Abundance - SAMEA5804415_ERX3482501
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

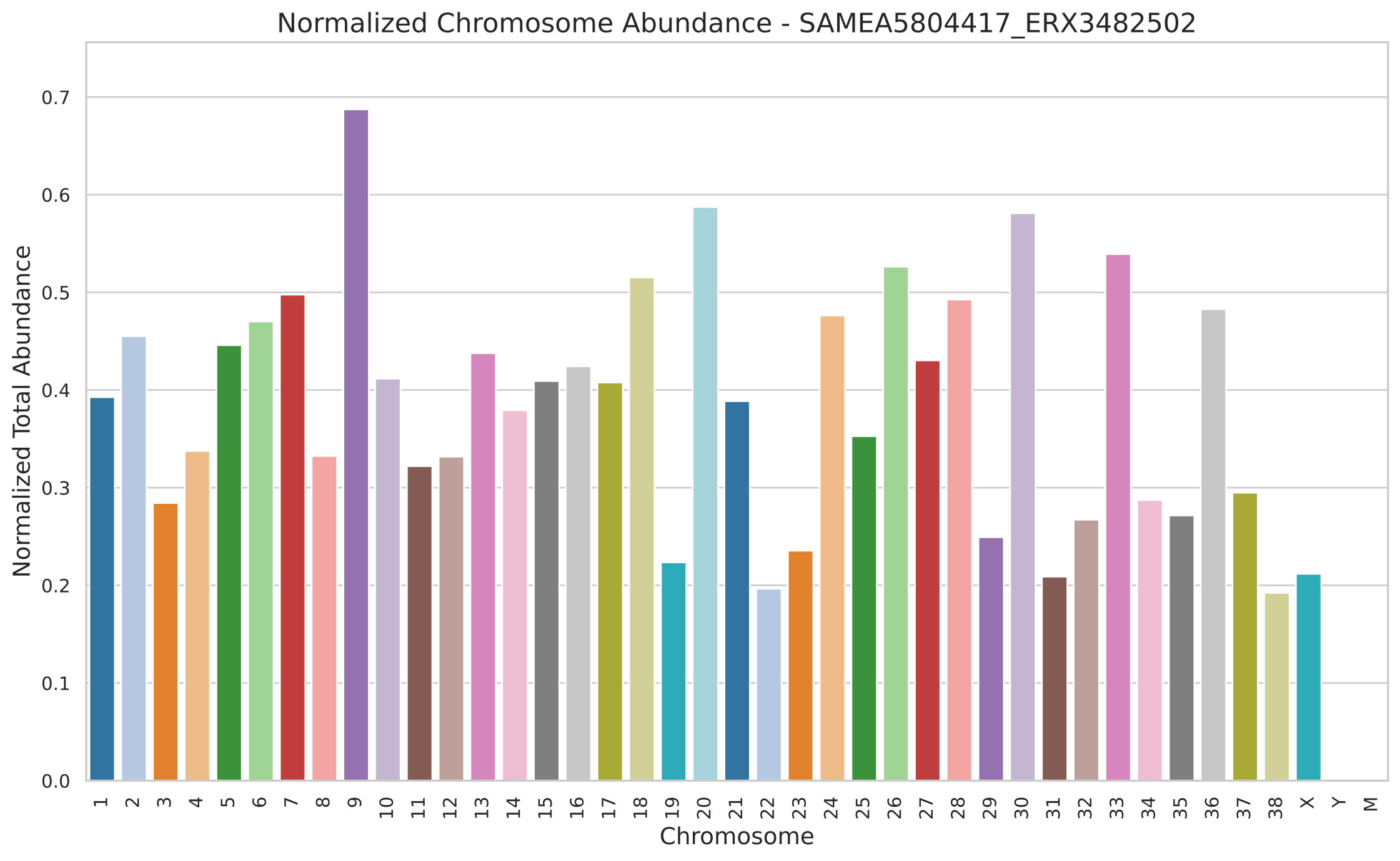

Normalized Chromosome Abundance - SAMEA5804415_ERX3482489
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

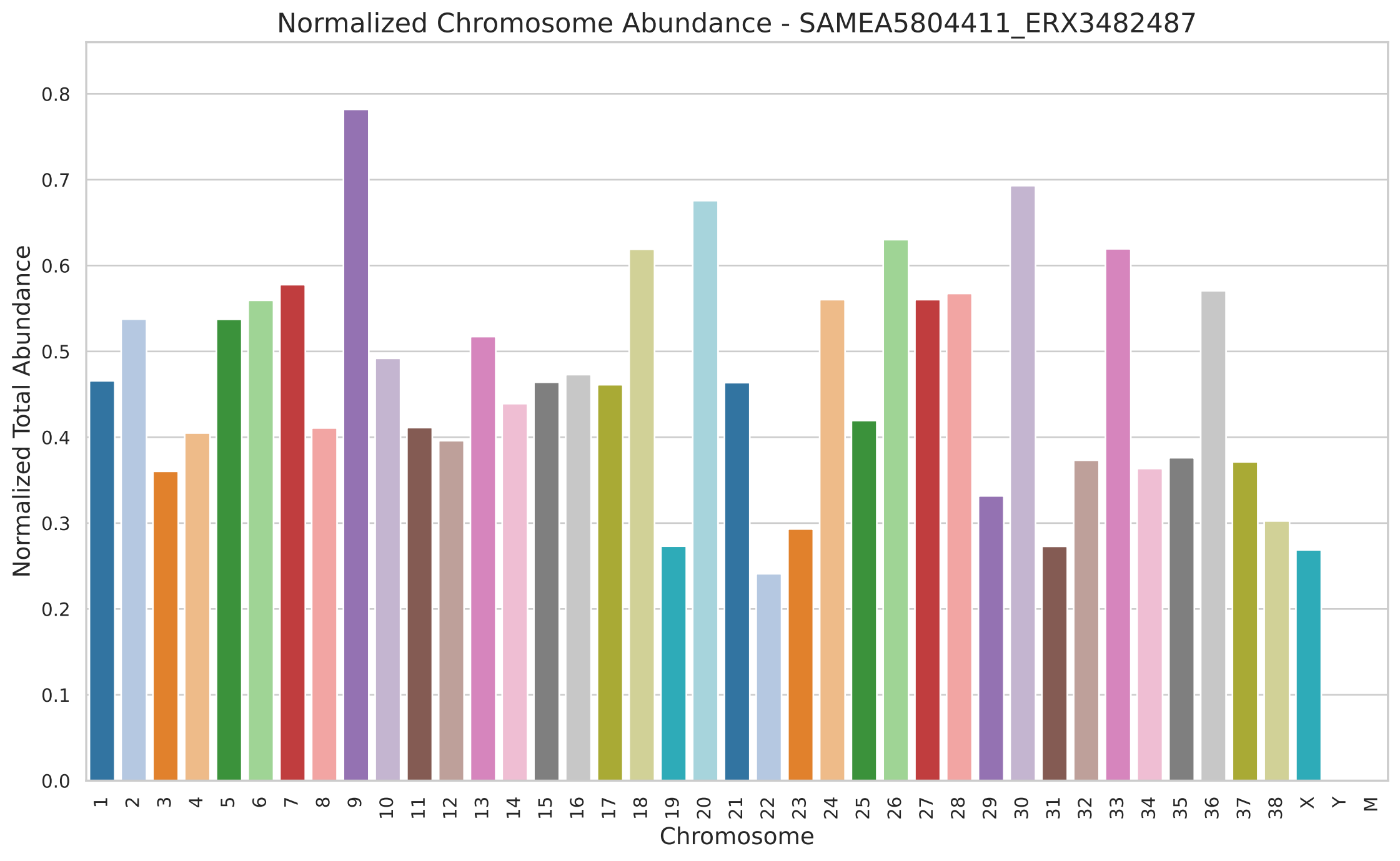

Normalized Chromosome Abundance - SAMEA5804374_ERX3482496
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

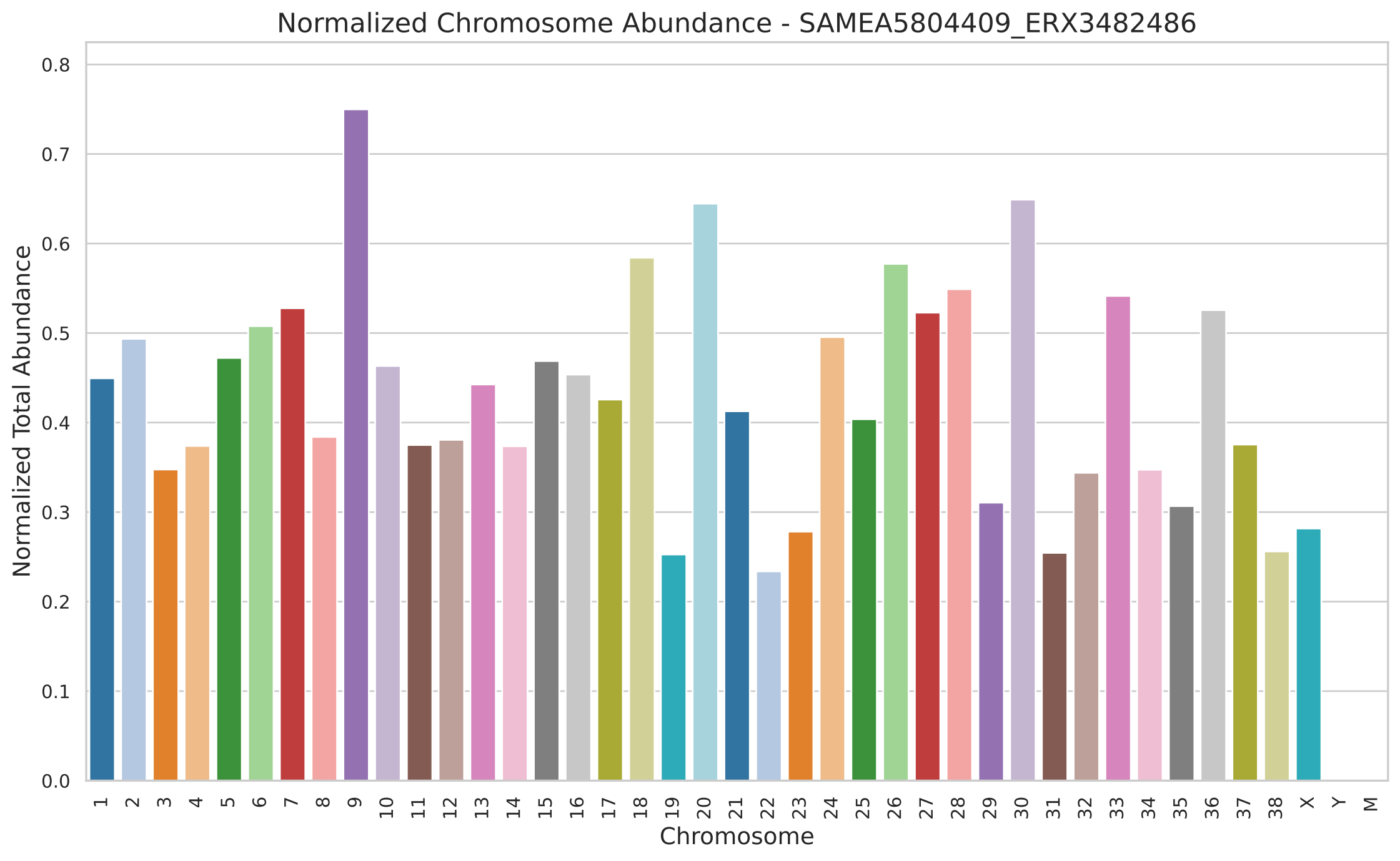

Normalized Chromosome Abundance - SAMEA5804359_ERX3482472
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

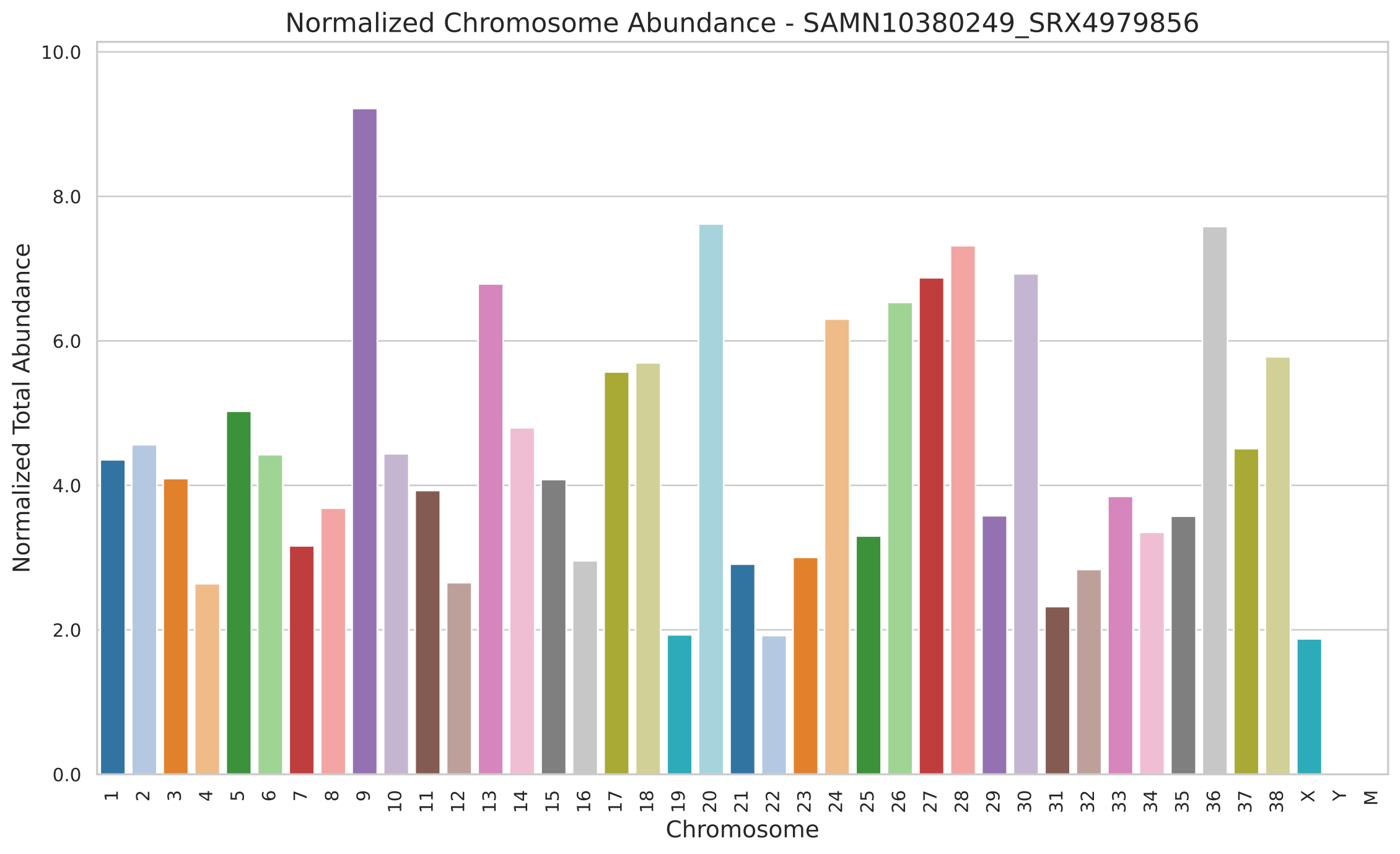

Normalized Chromosome Abundance - SAMEA5804390_ERX3482482
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

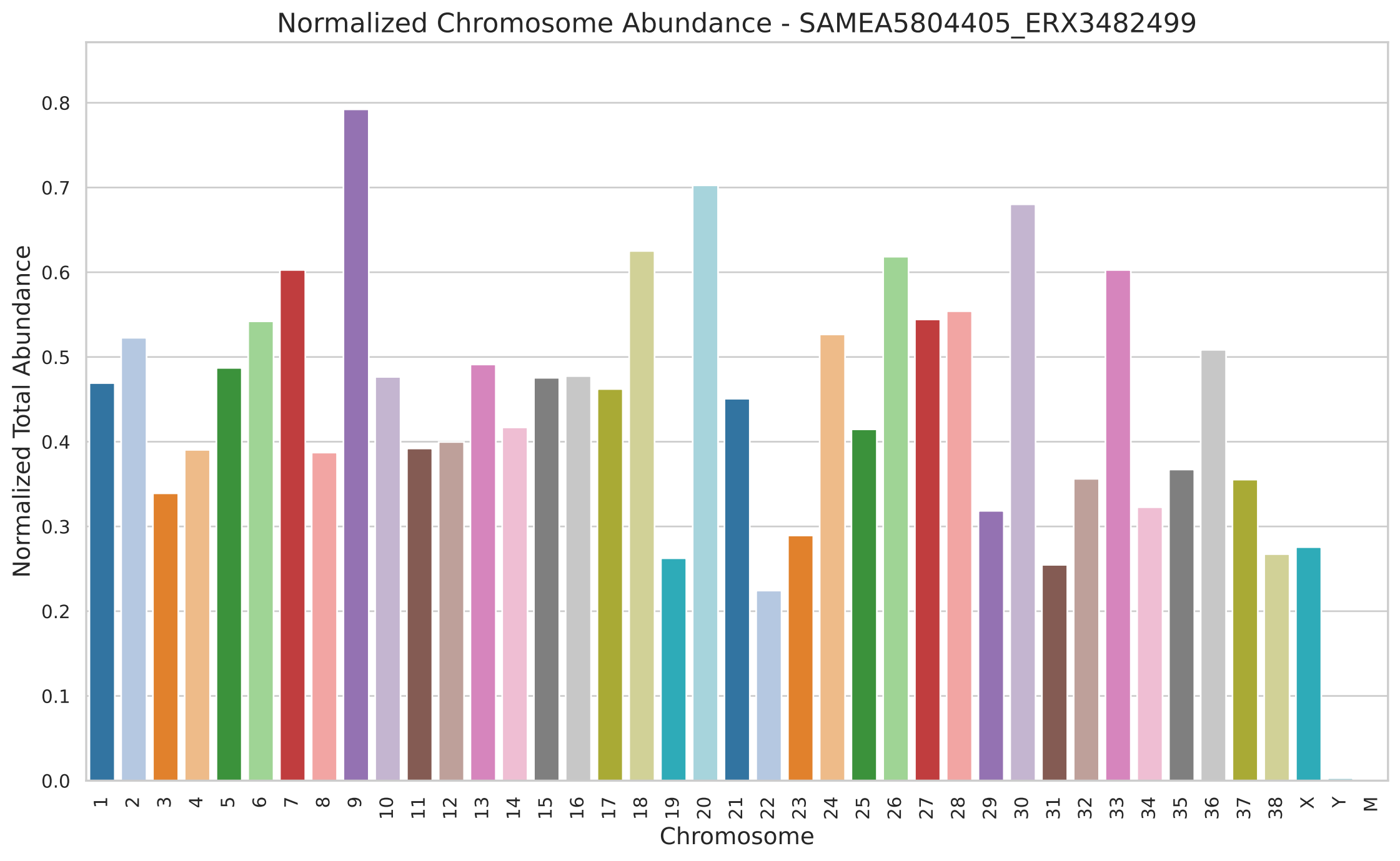

Normalized Chromosome Abundance - SAMEA5804342_ERX3482467
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

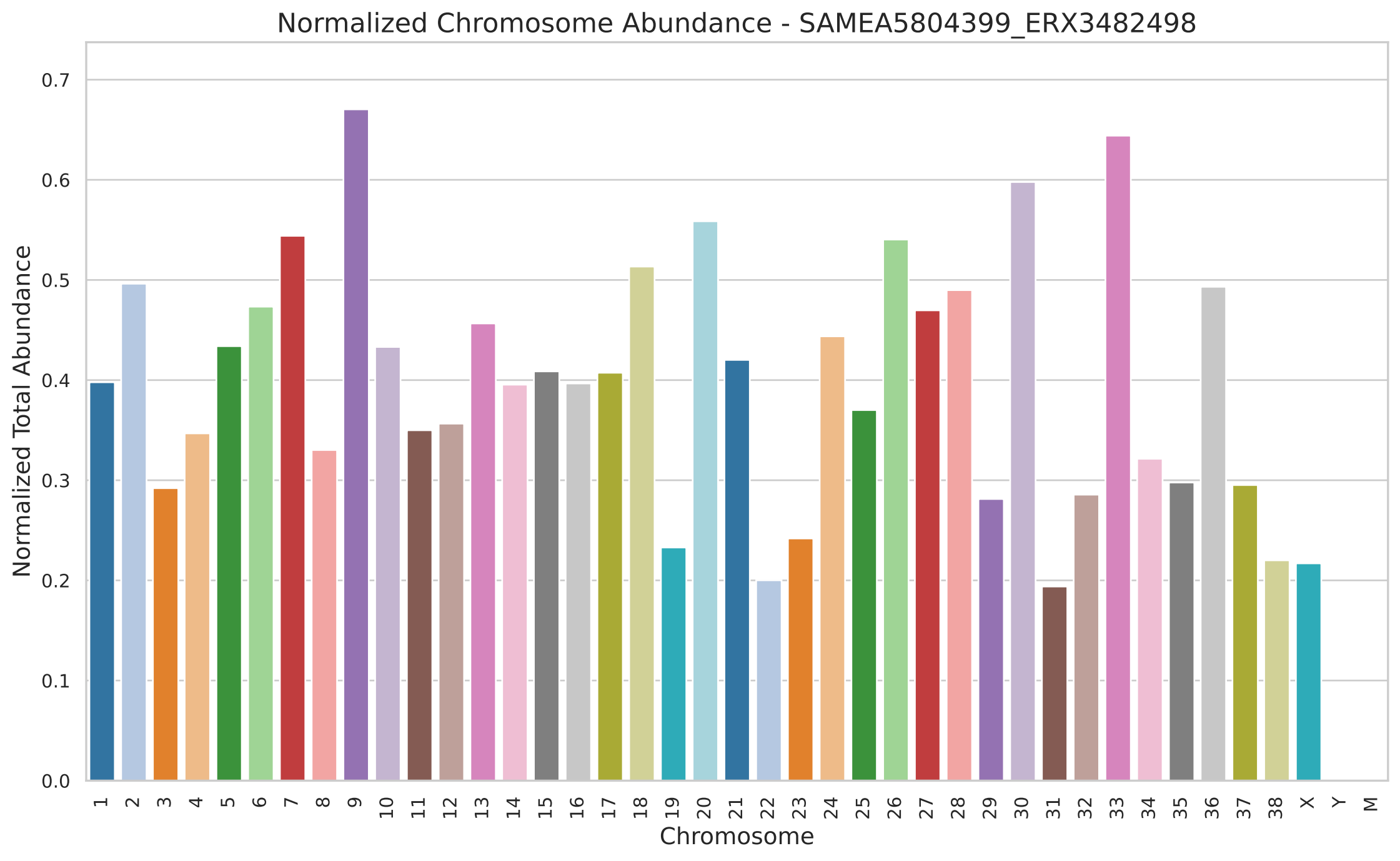

Normalized Chromosome Abundance - SAMEA5804417_ERX3482502
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

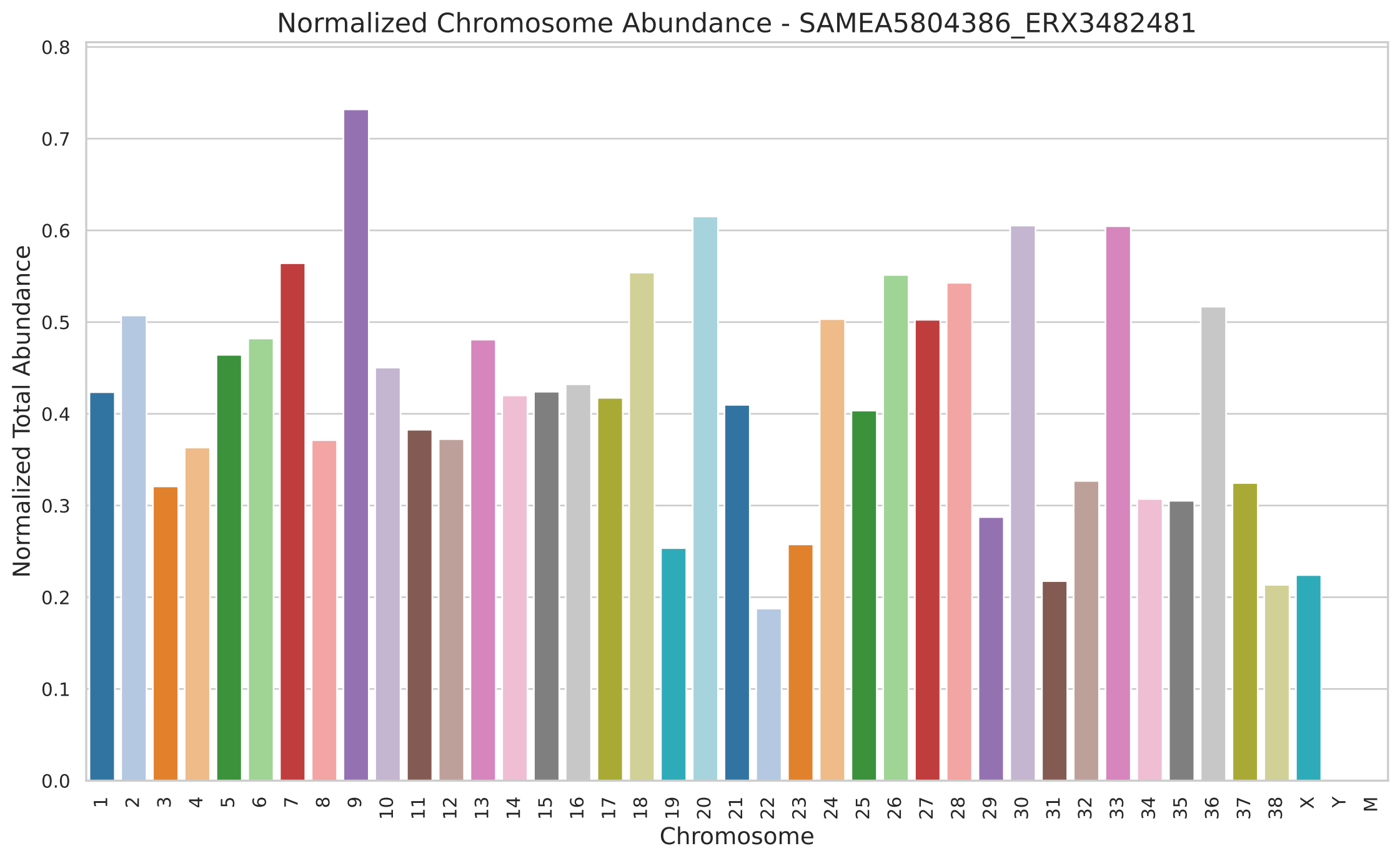

Normalized Chromosome Abundance - SAMEA5804411_ERX3482487
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

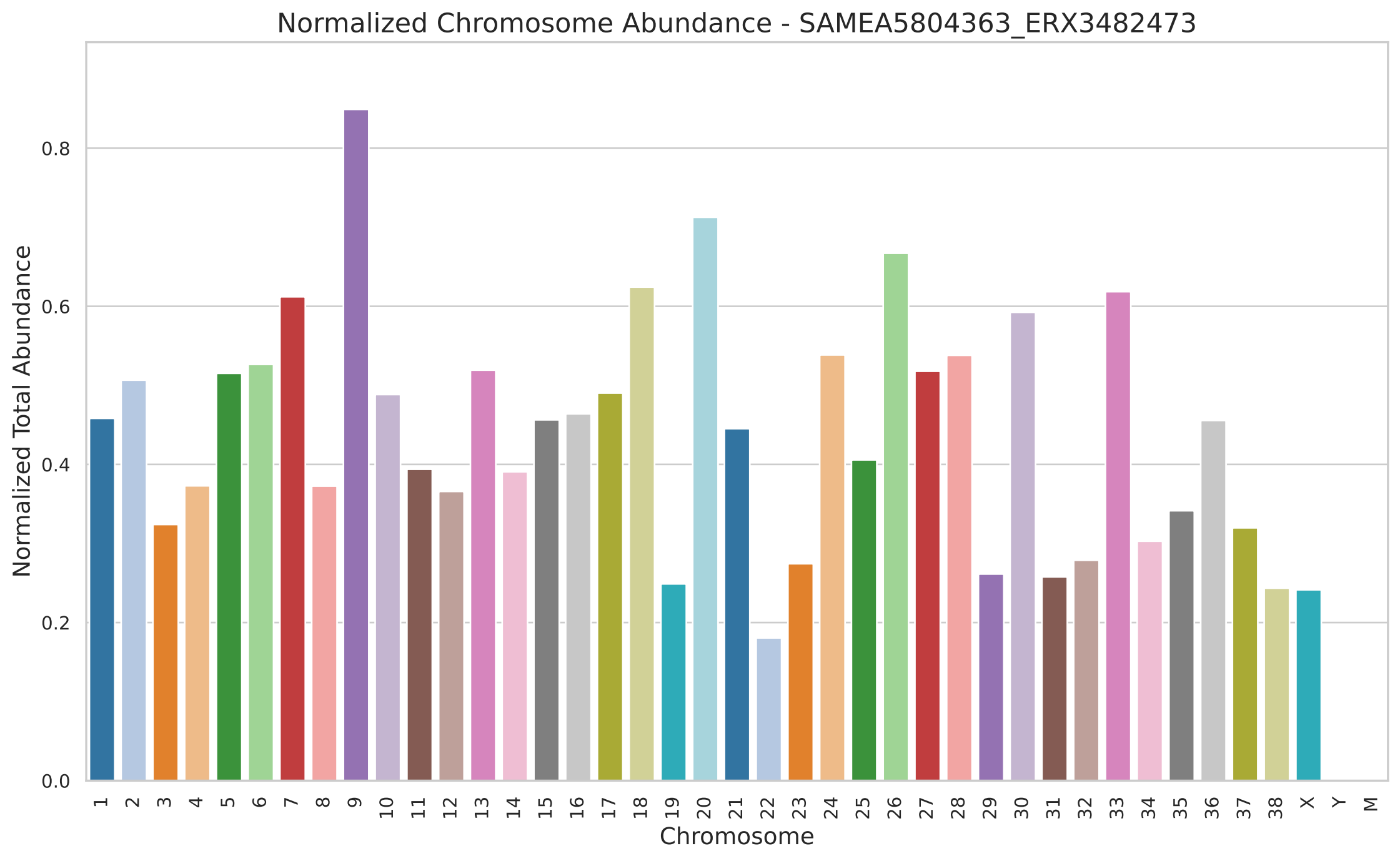

Normalized Chromosome Abundance - SAMEA5804409_ERX3482486
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

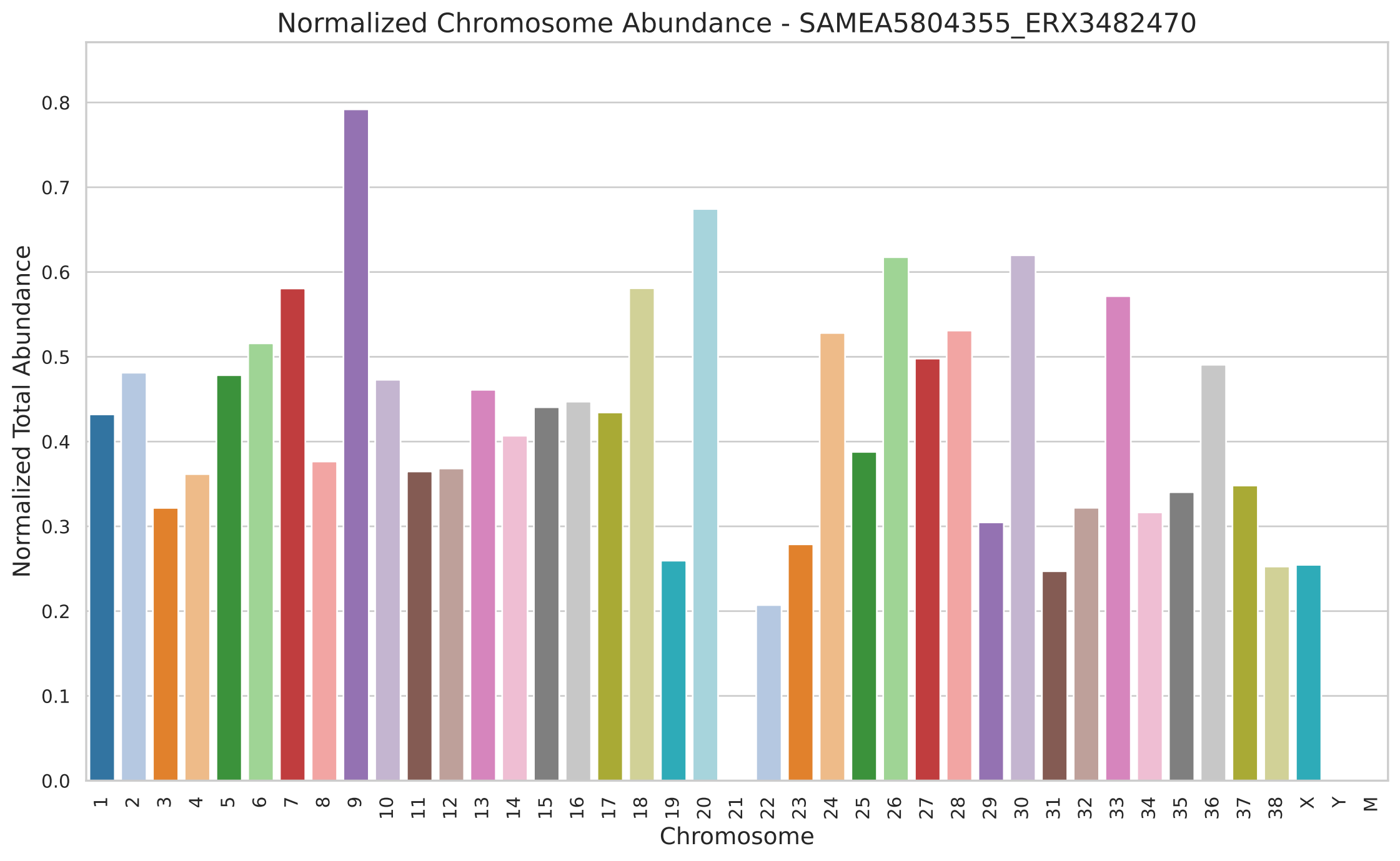

Normalized Chromosome Abundance - SAMN10380249_SRX4979856
Normalized Total Abundance
10.0
8.0
6.0
4.0
2.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

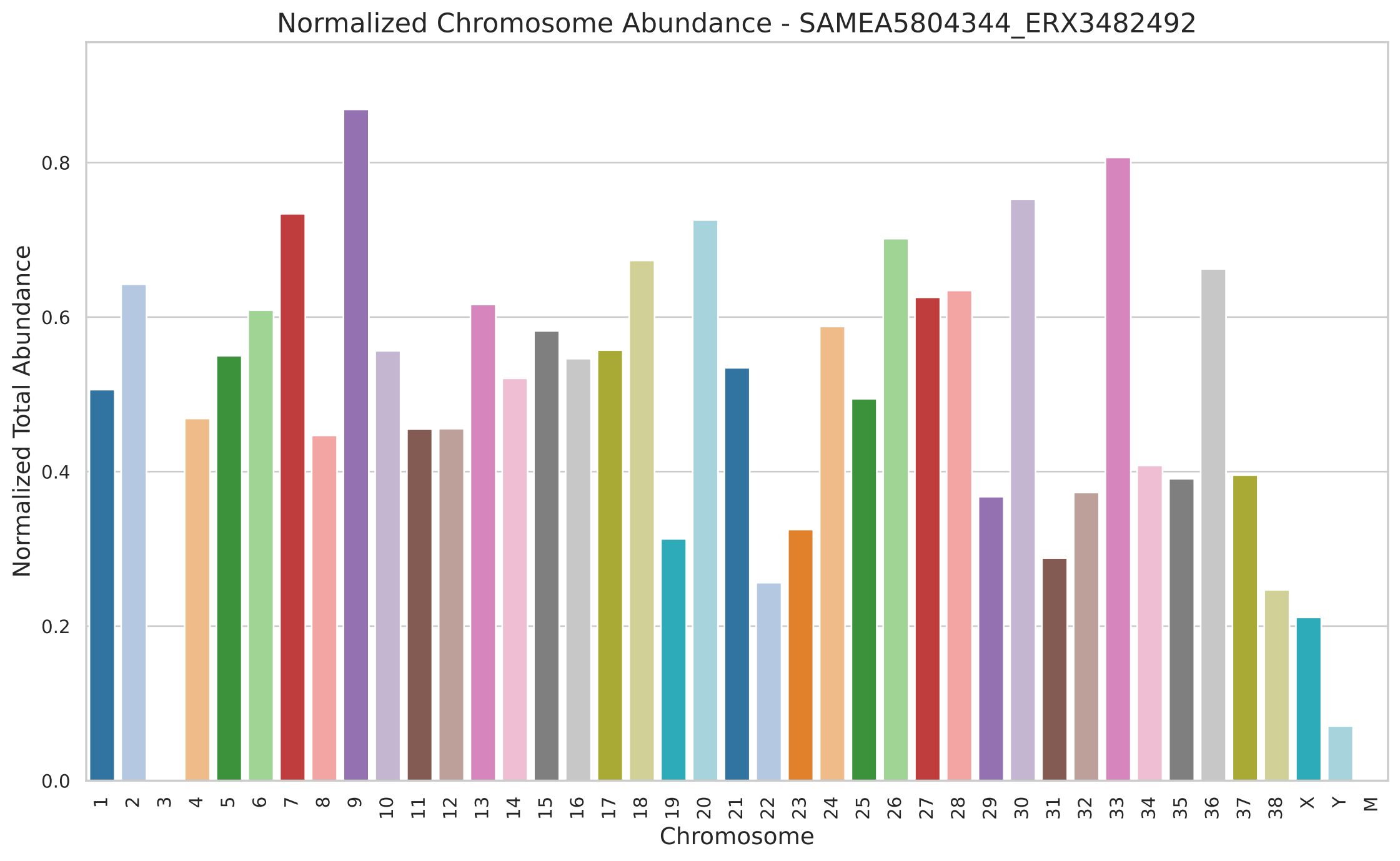

Normalized Chromosome Abundance - SAMEA5804405_ERX3482499
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

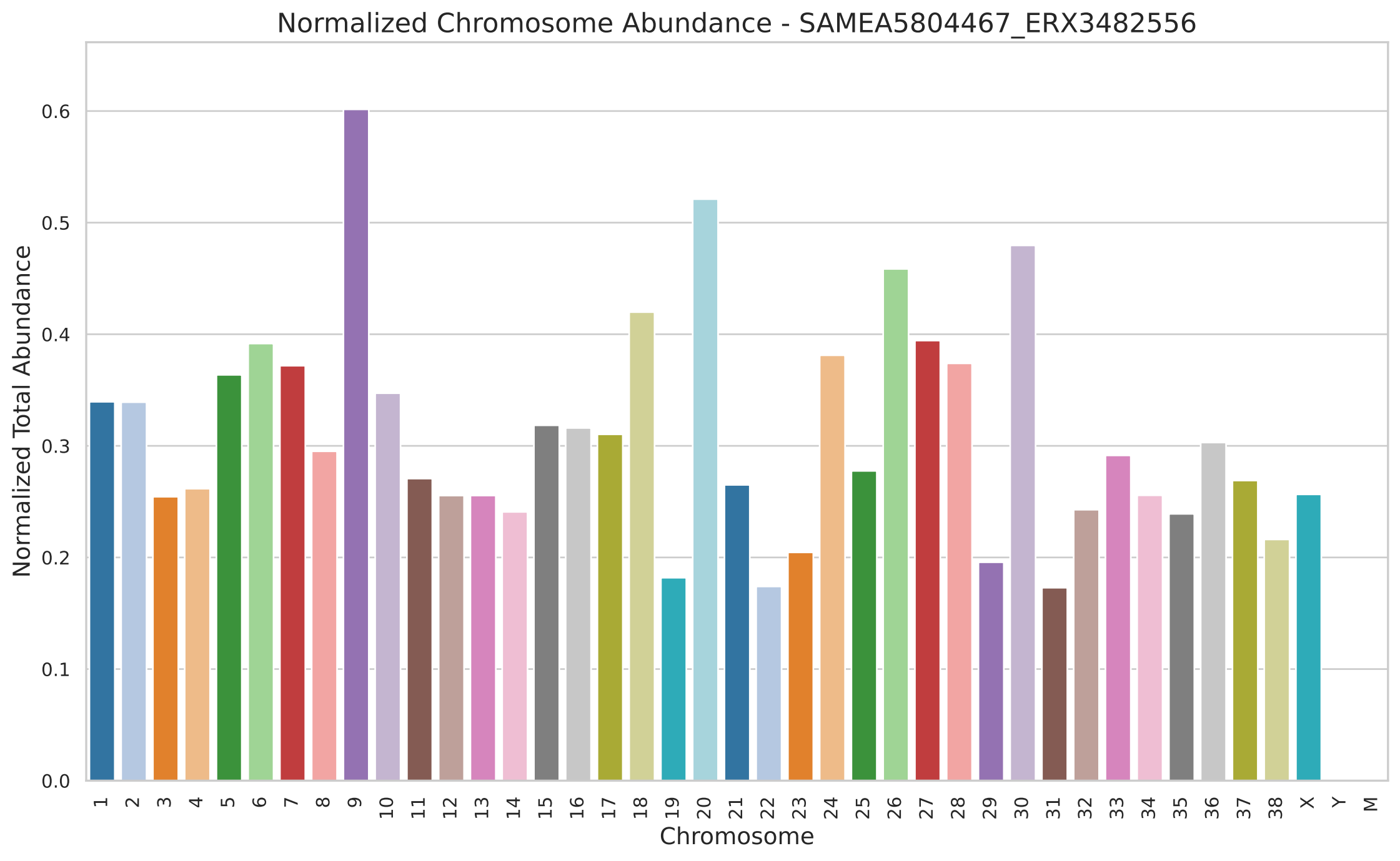

Normalized Chromosome Abundance - SAMEA5804399_ERX3482498
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

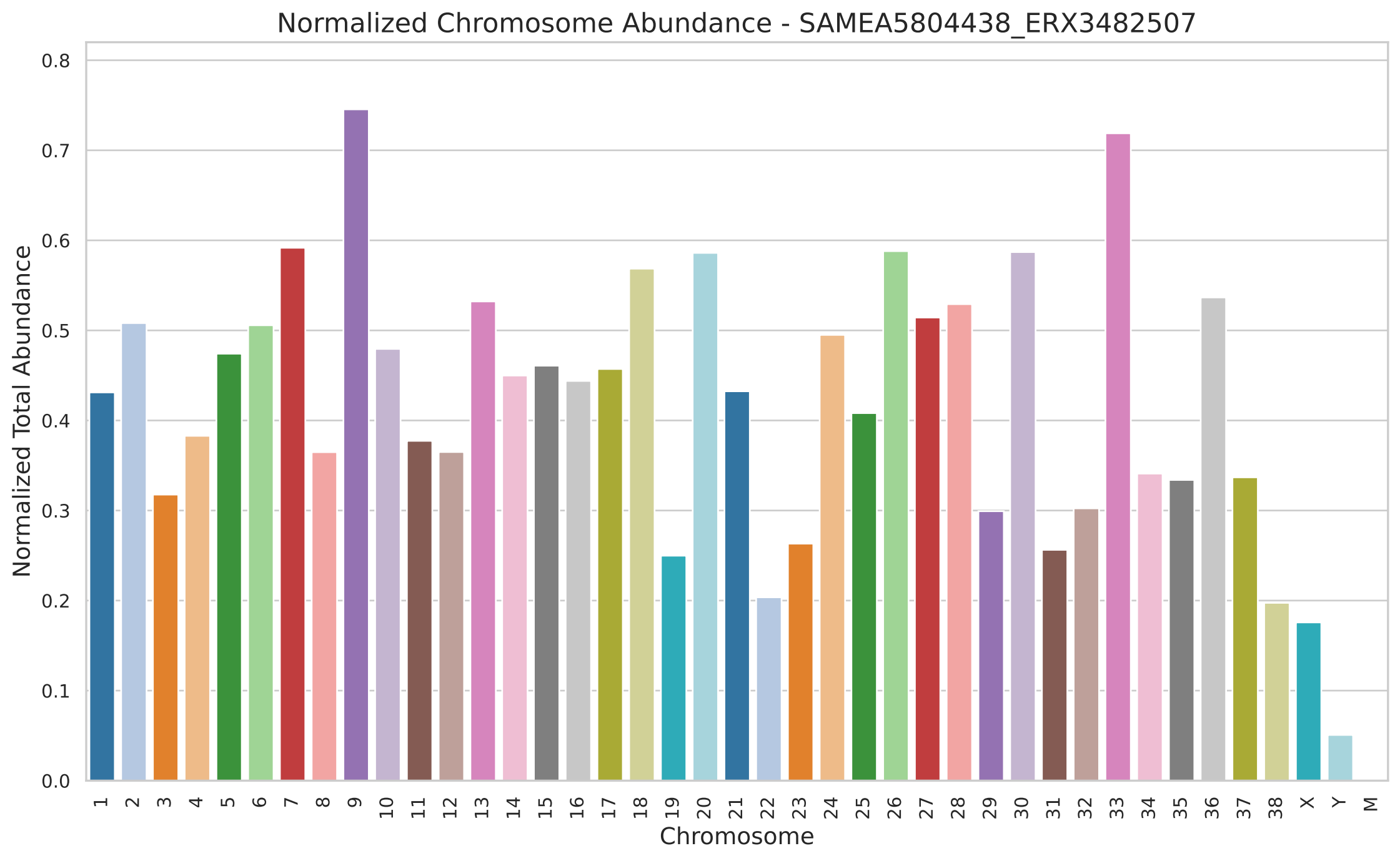

Normalized Chromosome Abundance - SAMEA5804386_ERX3482481
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

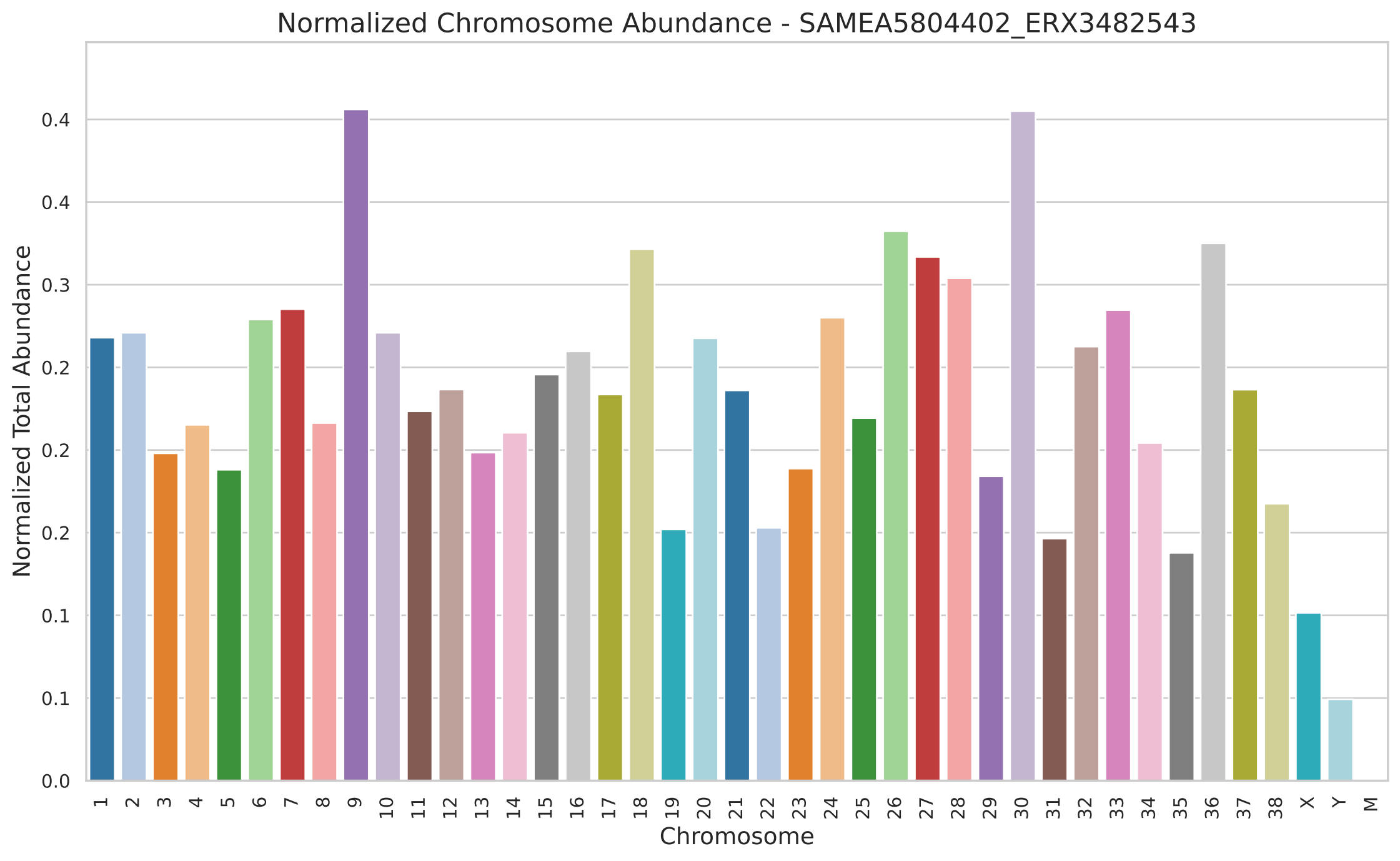

Normalized Chromosome Abundance - SAMEA5804363_ERX3482473
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

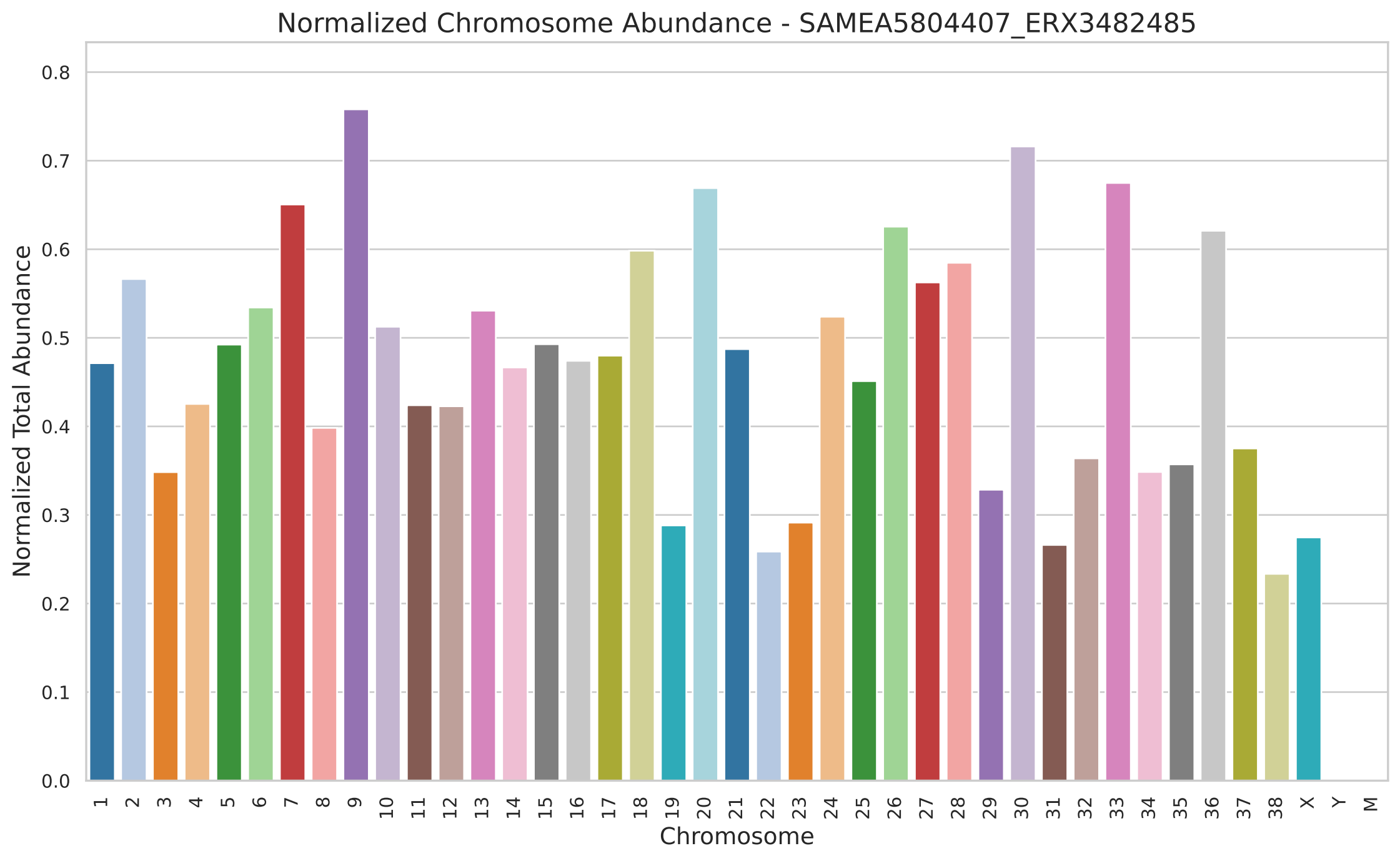

Normalized Chromosome Abundance - SAMEA5804355_ERX3482470
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

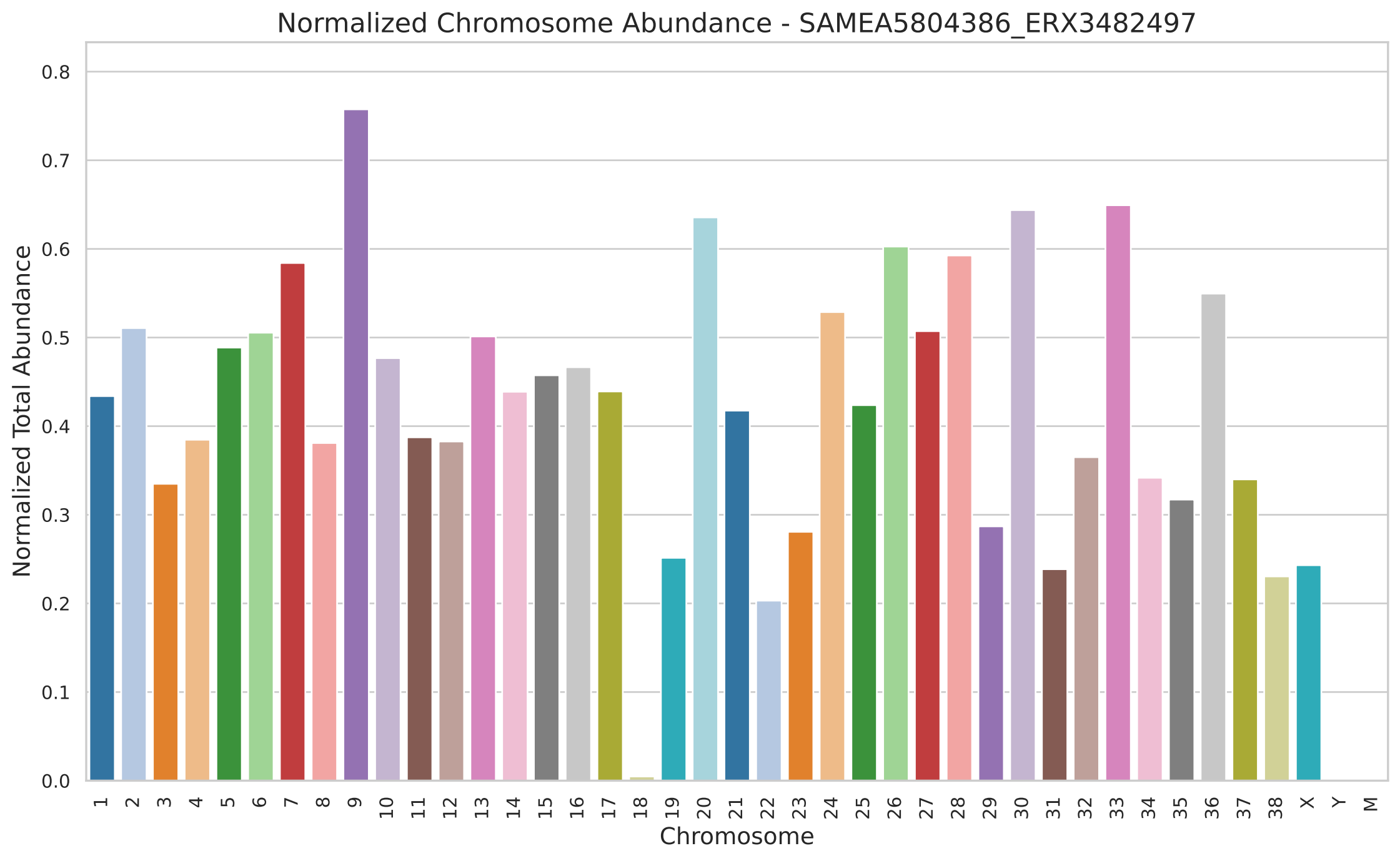

Normalized Chromosome Abundance - SAMEA5804344_ERX3482492
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

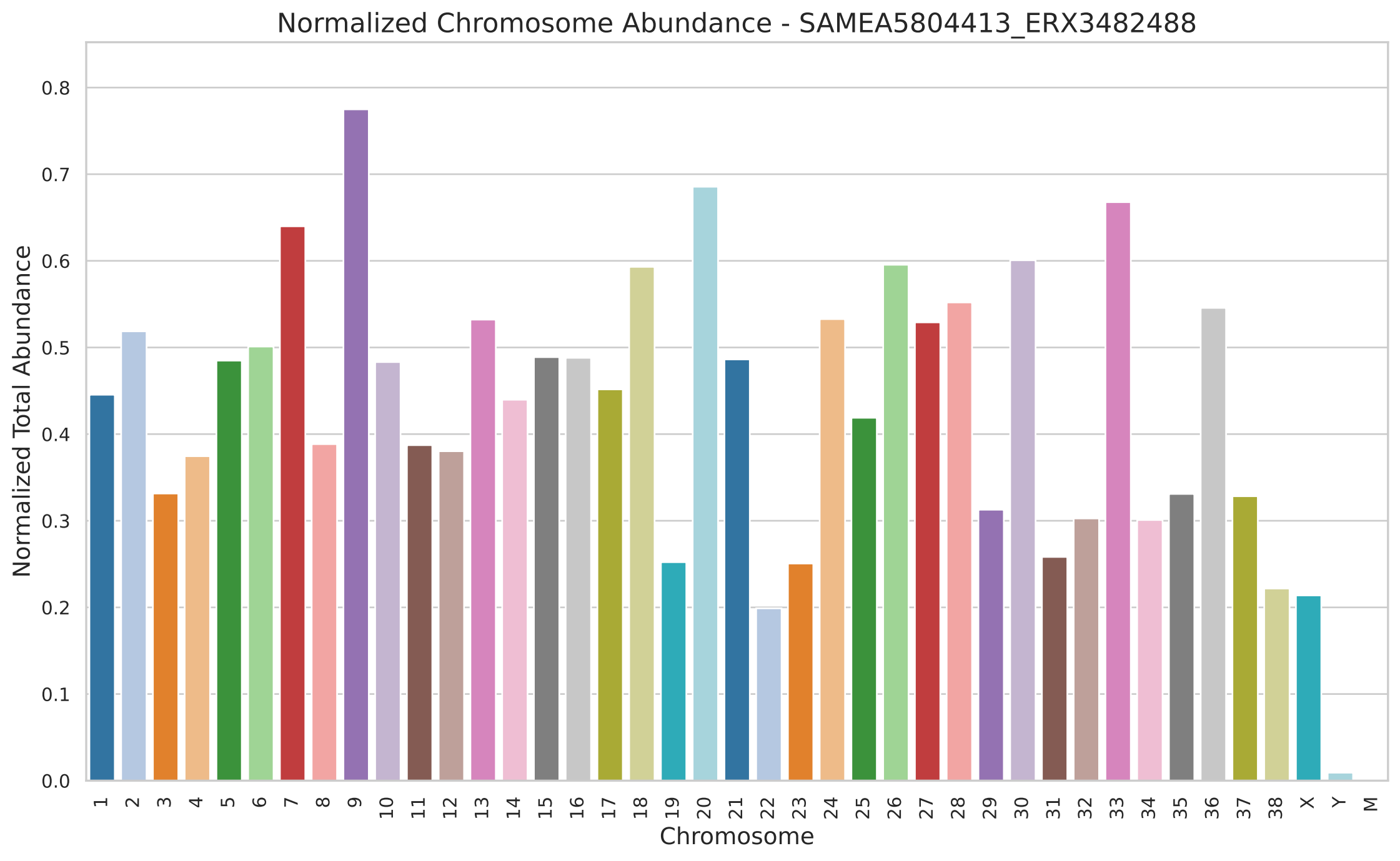

Normalized Chromosome Abundance - SAMEA5804467_ERX3482556
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

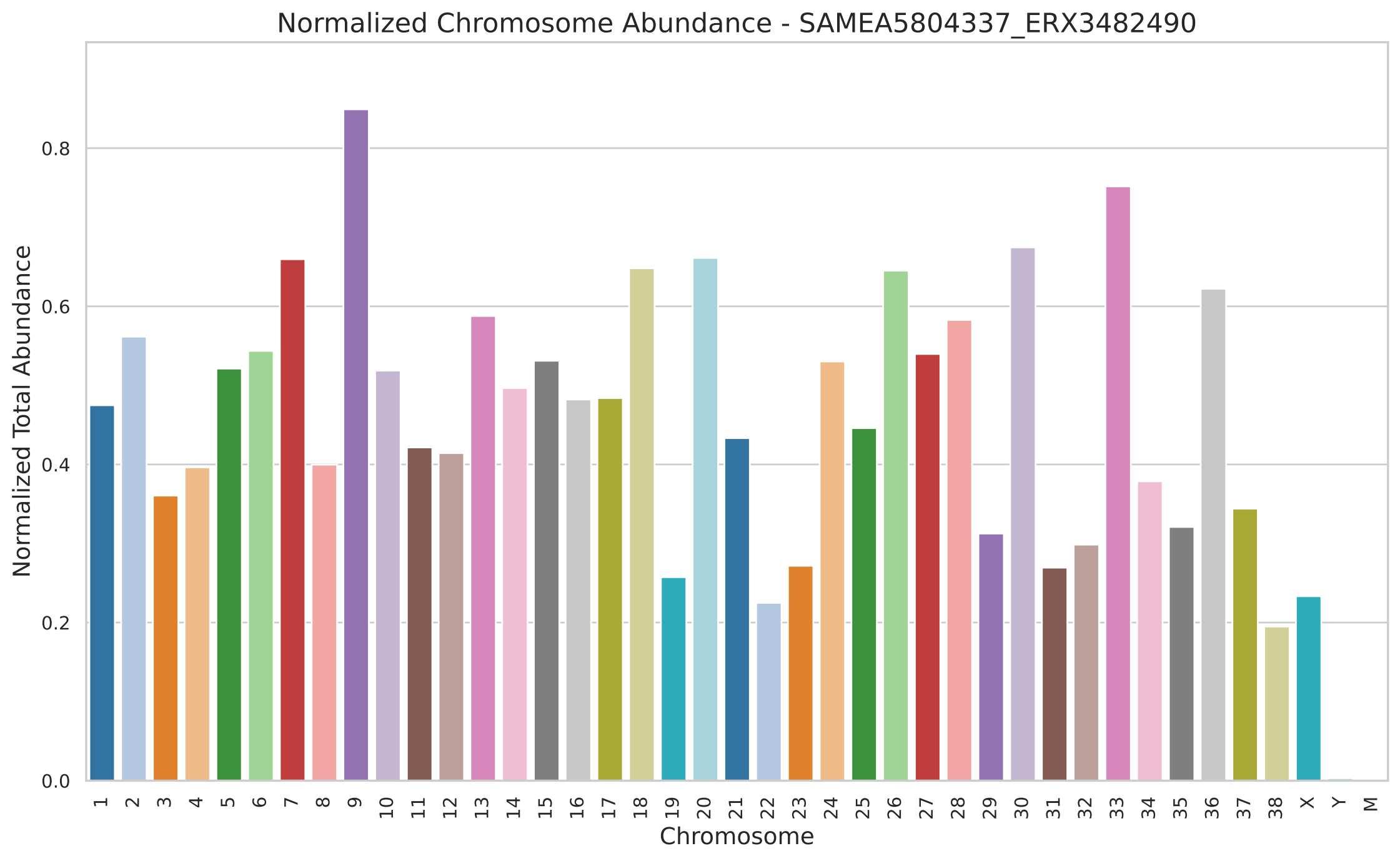

Normalized Chromosome Abundance - SAMEA5804438_ERX3482507
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

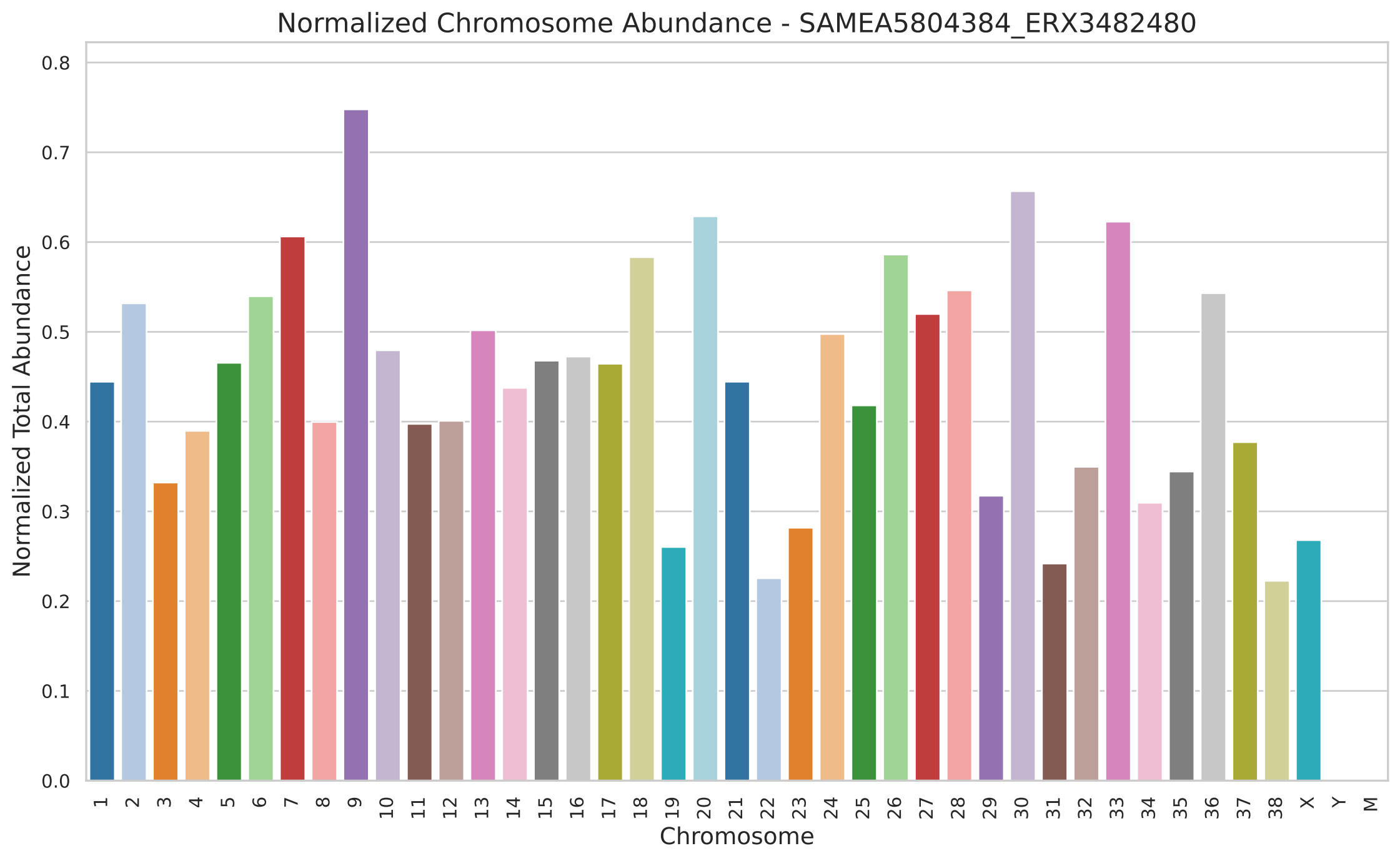

Normalized Chromosome Abundance - SAMEA5804402_ERX3482543
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

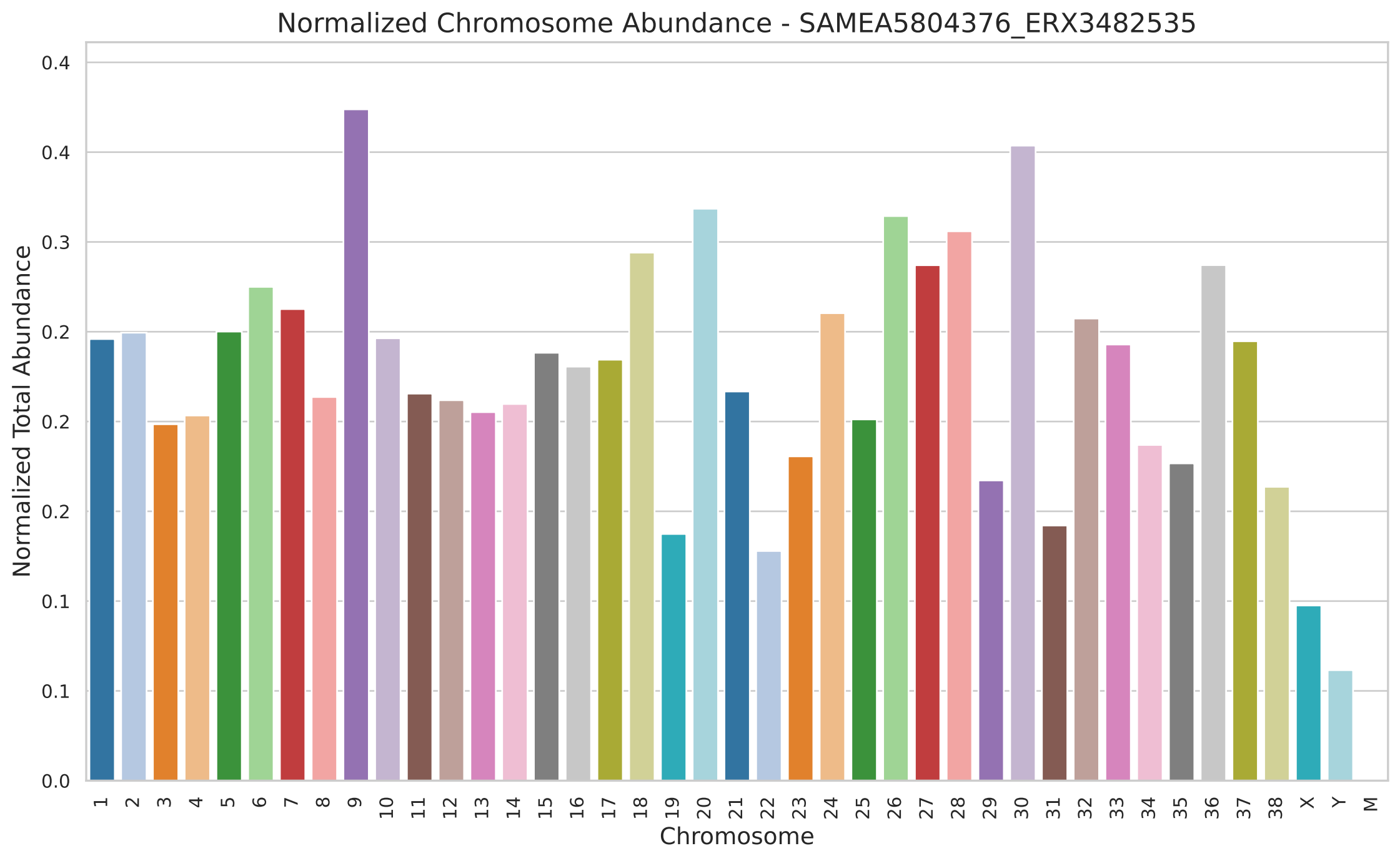

Normalized Chromosome Abundance - SAMEA5804407_ERX3482485
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

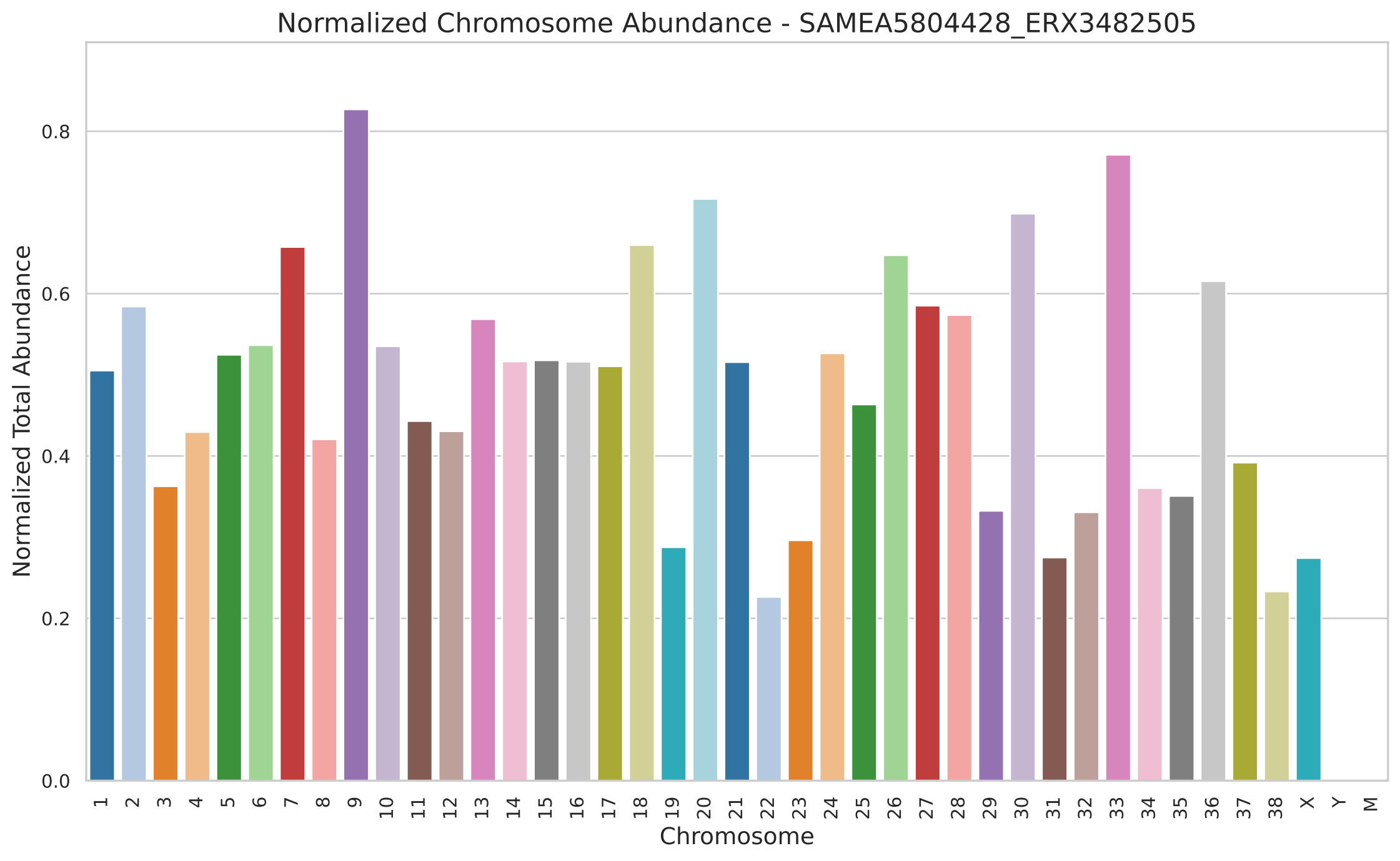

Normalized Chromosome Abundance - SAMEA5804386_ERX3482497
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

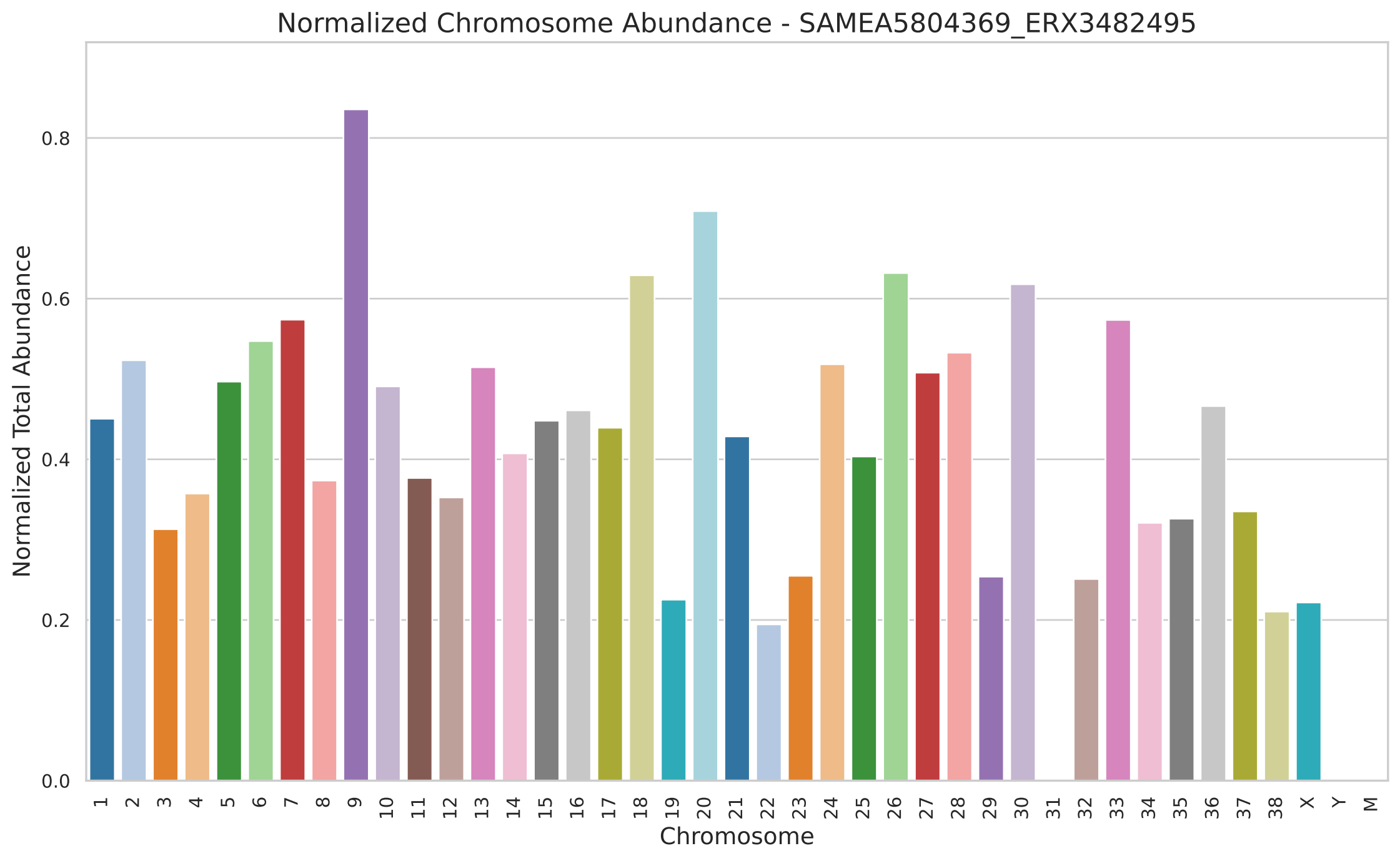

Normalized Chromosome Abundance - SAMEA5804413_ERX3482488
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

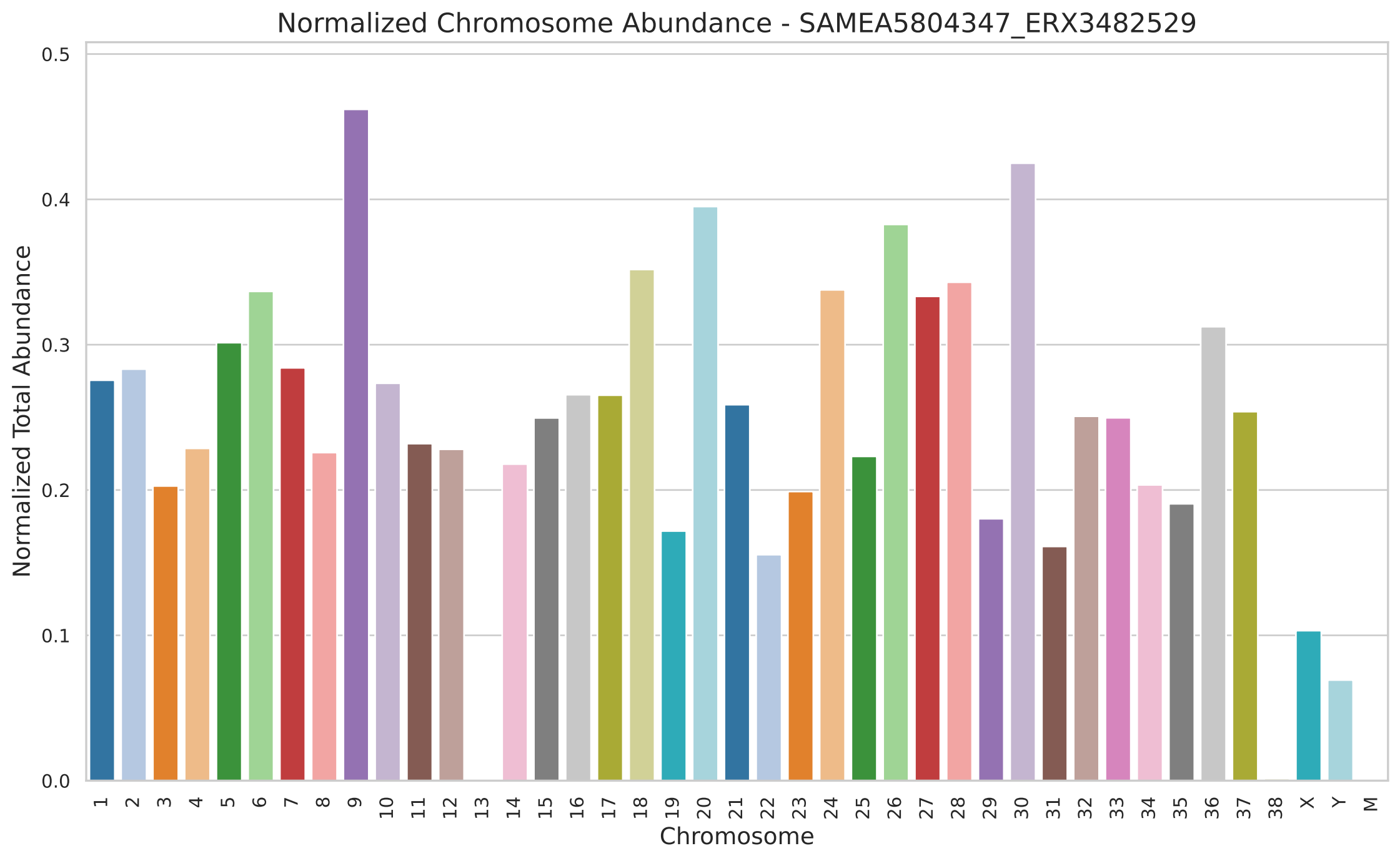

Normalized Chromosome Abundance - SAMEA5804337_ERX3482490
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

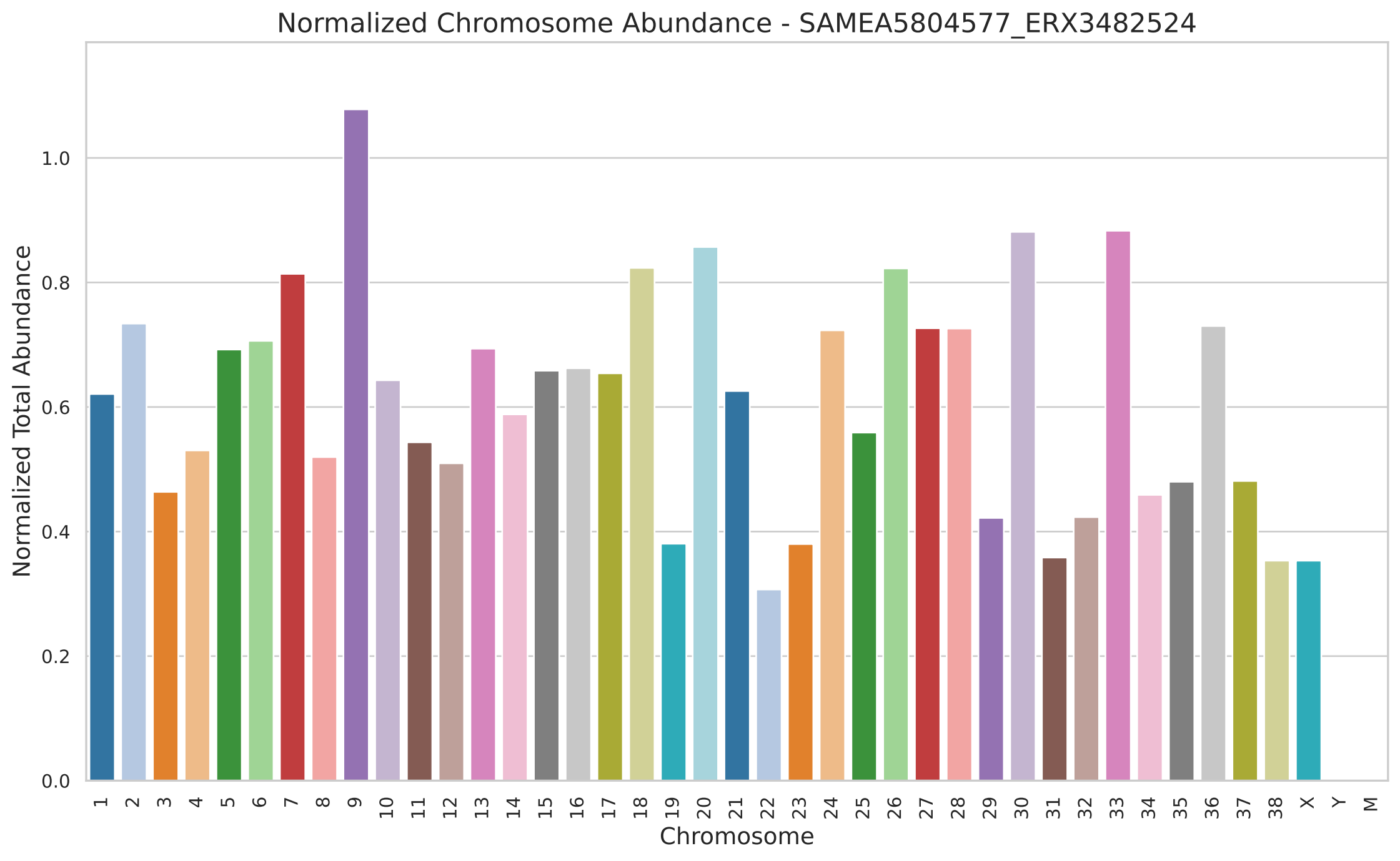

Normalized Chromosome Abundance - SAMEA5804384_ERX3482480
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

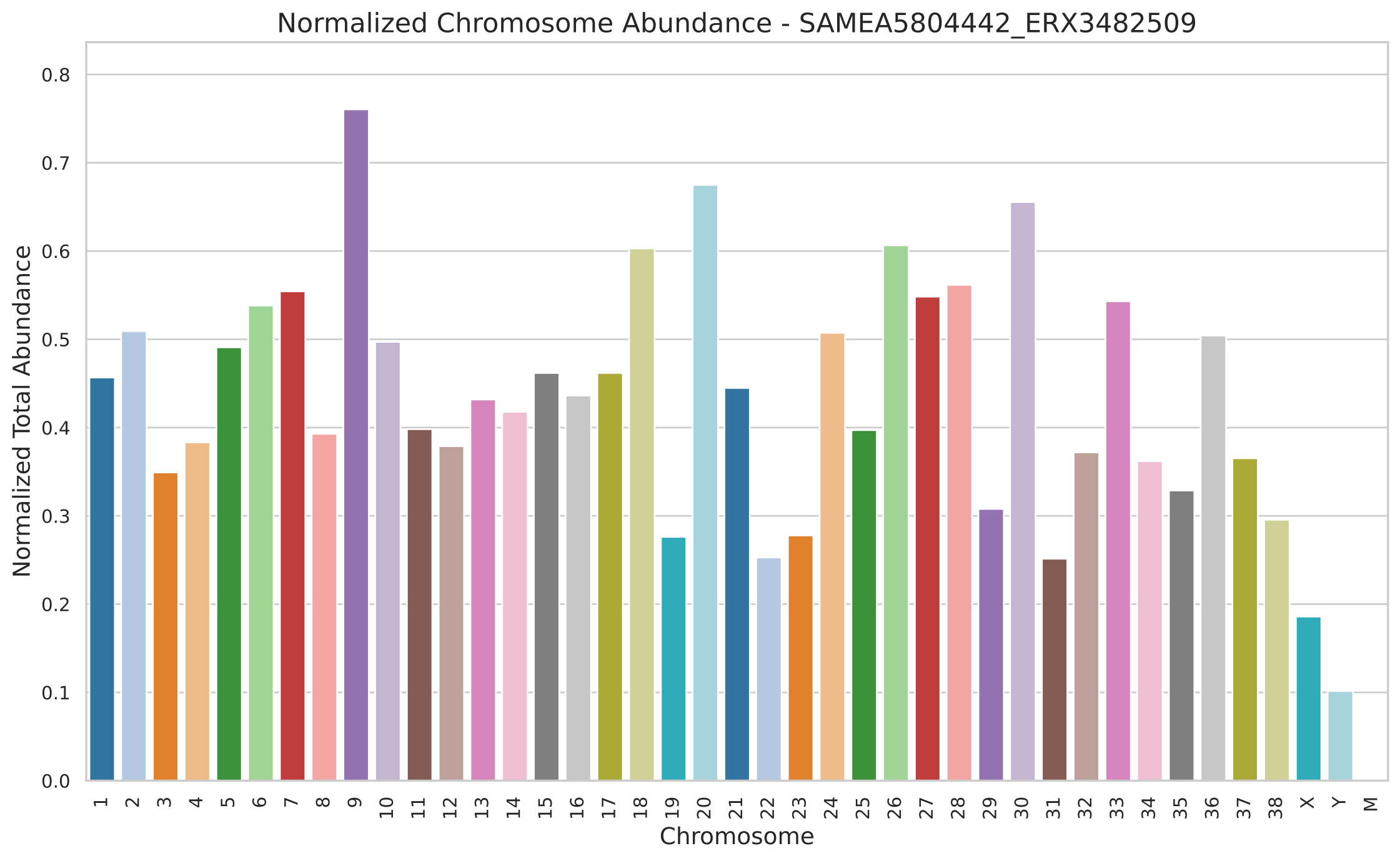

Normalized Chromosome Abundance - SAMEA5804376_ERX3482535
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

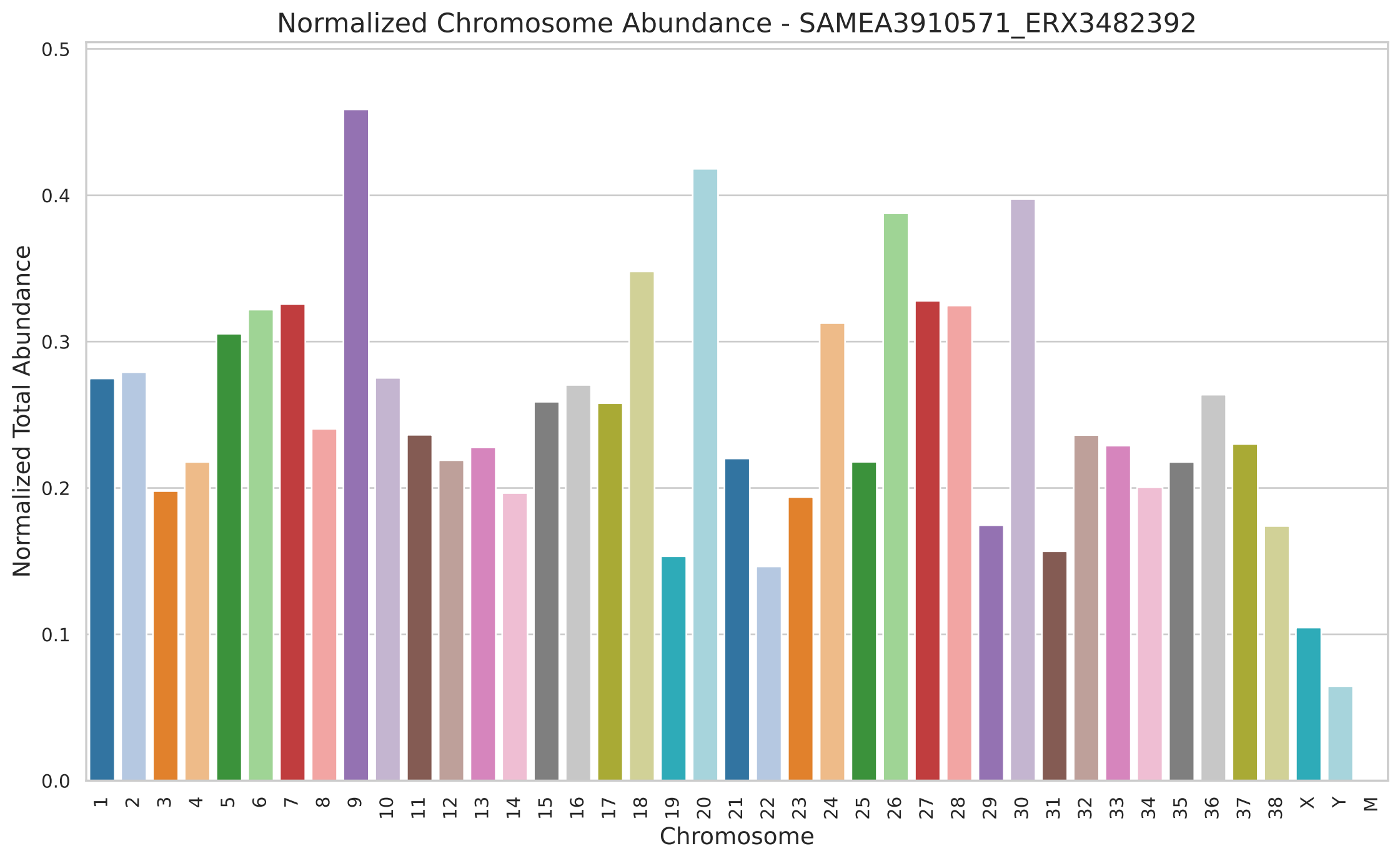

Normalized Chromosome Abundance - SAMEA5804428_ERX3482505
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

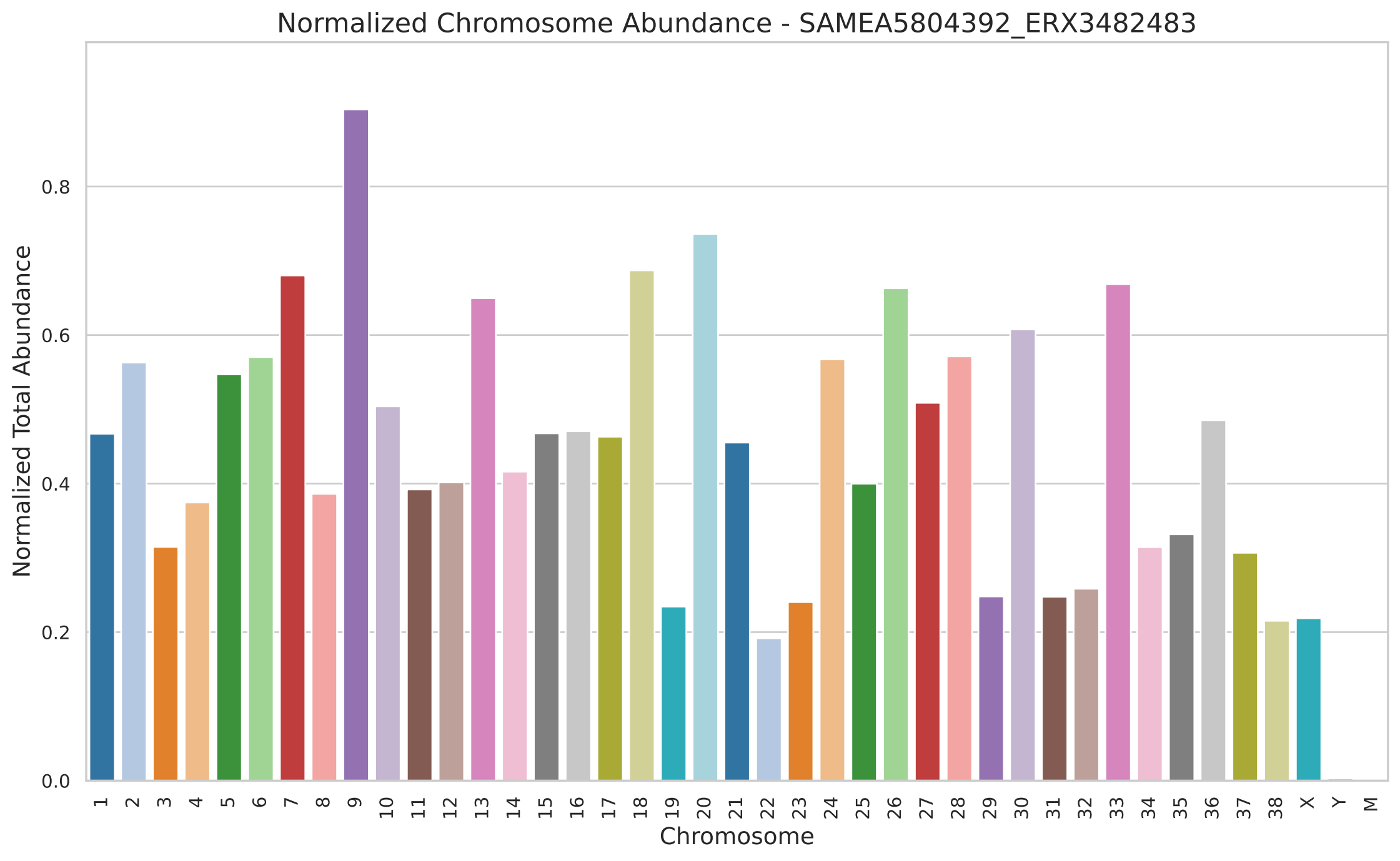

Normalized Chromosome Abundance - SAMEA5804369_ERX3482495
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

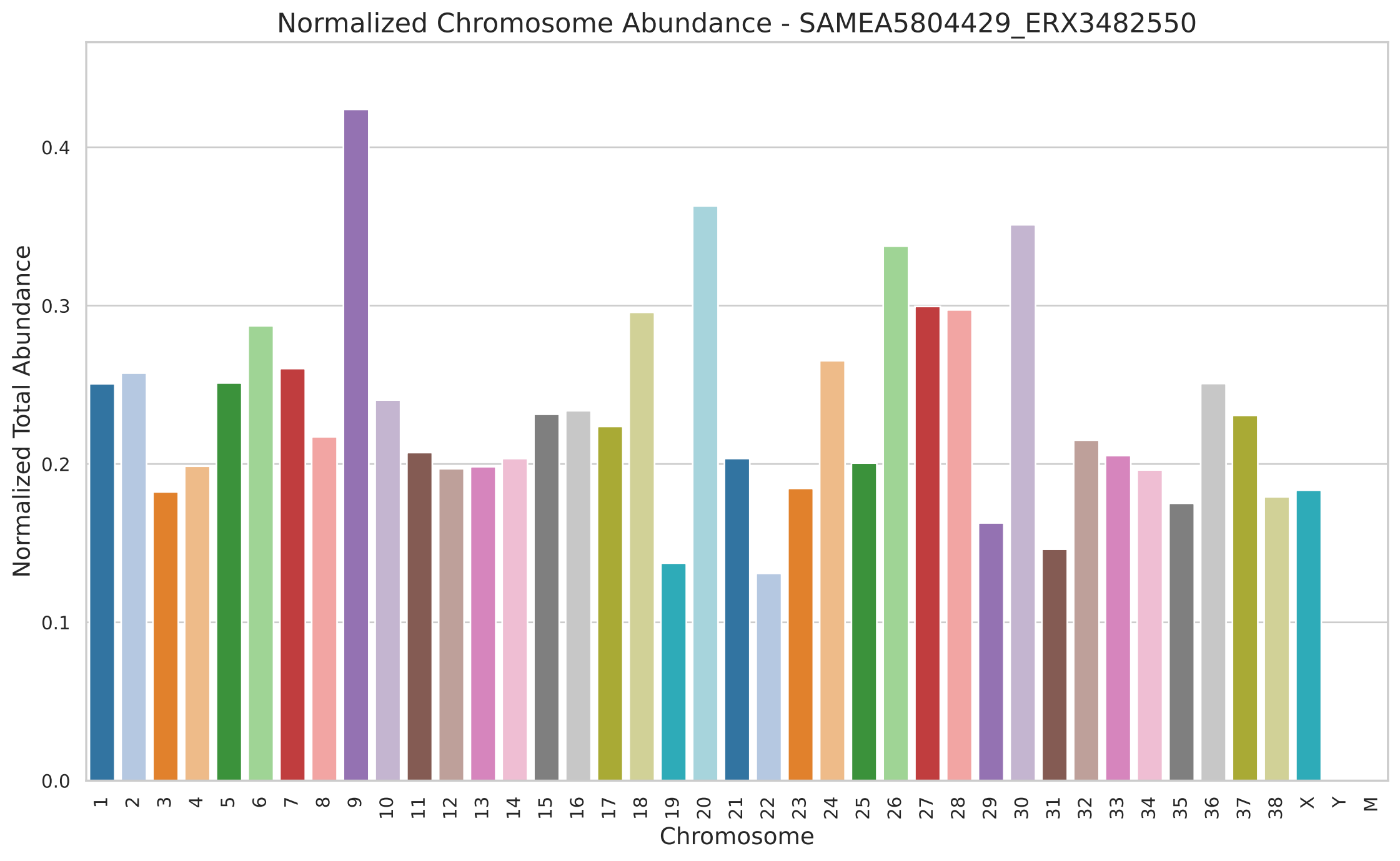

Normalized Chromosome Abundance - SAMEA5804347_ERX3482529
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

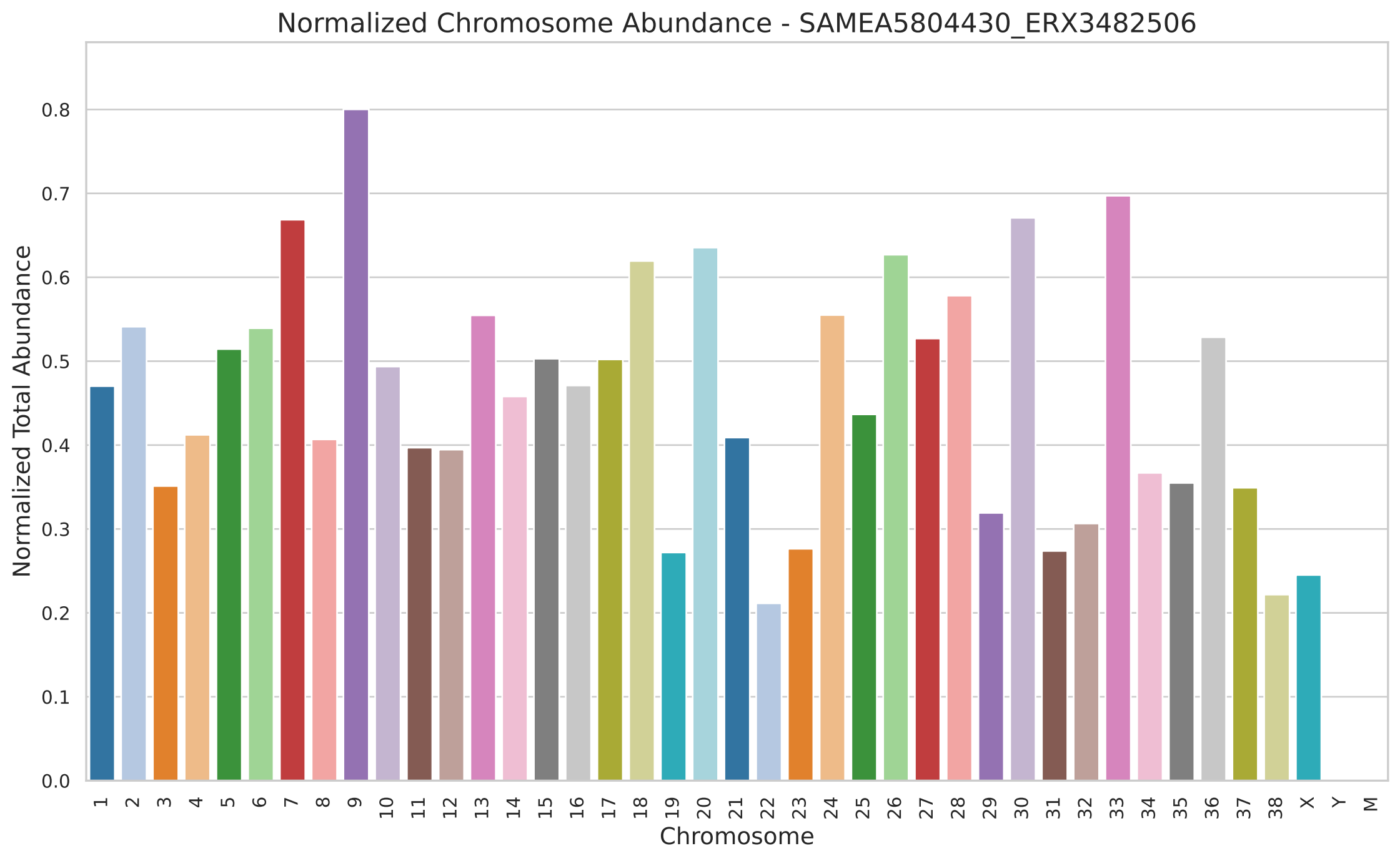

Normalized Chromosome Abundance - SAMEA5804577_ERX3482524
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

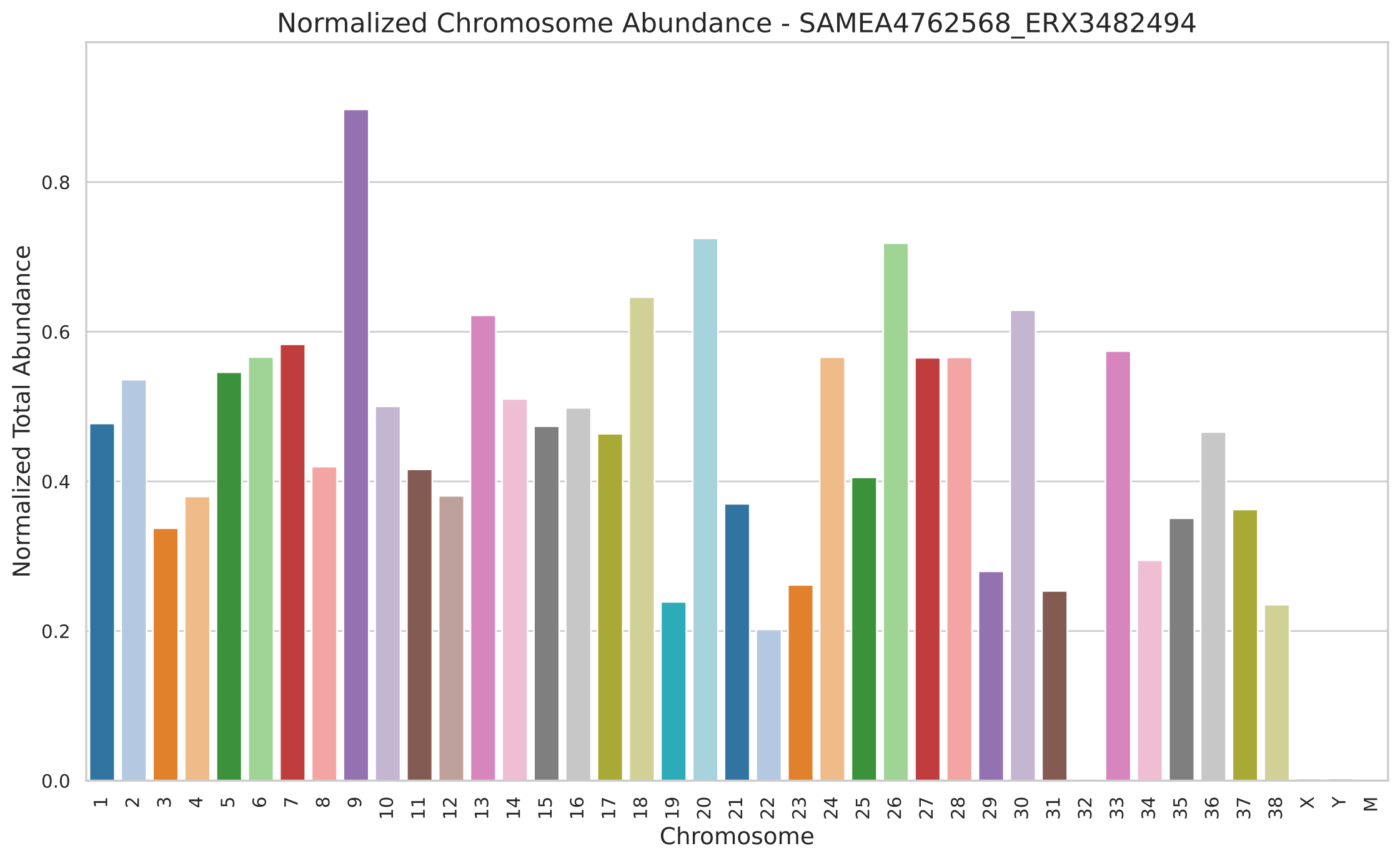

Normalized Chromosome Abundance - SAMEA5804442_ERX3482509
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

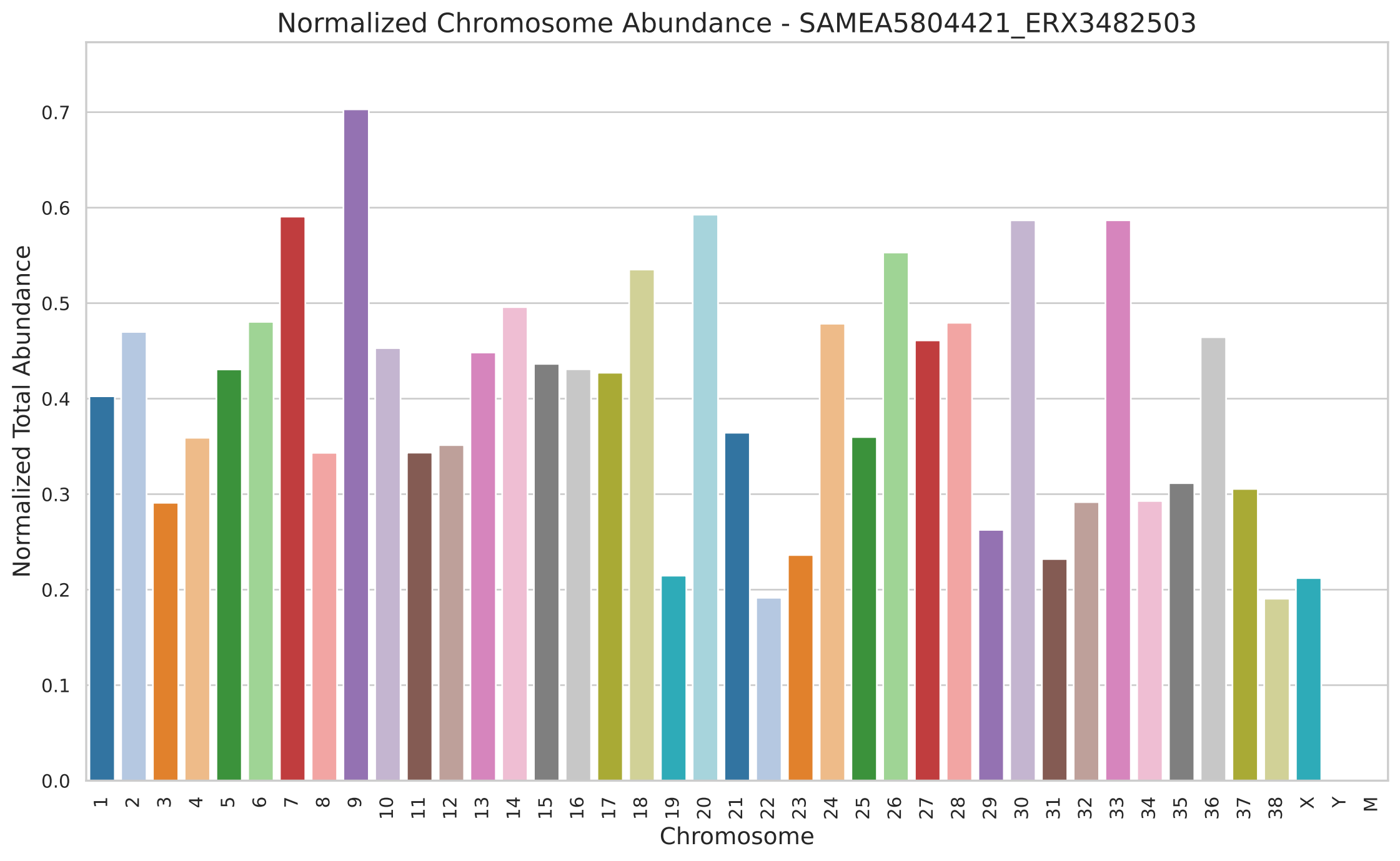

Normalized Chromosome Abundance - SAMEA3910571_ERX3482392
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

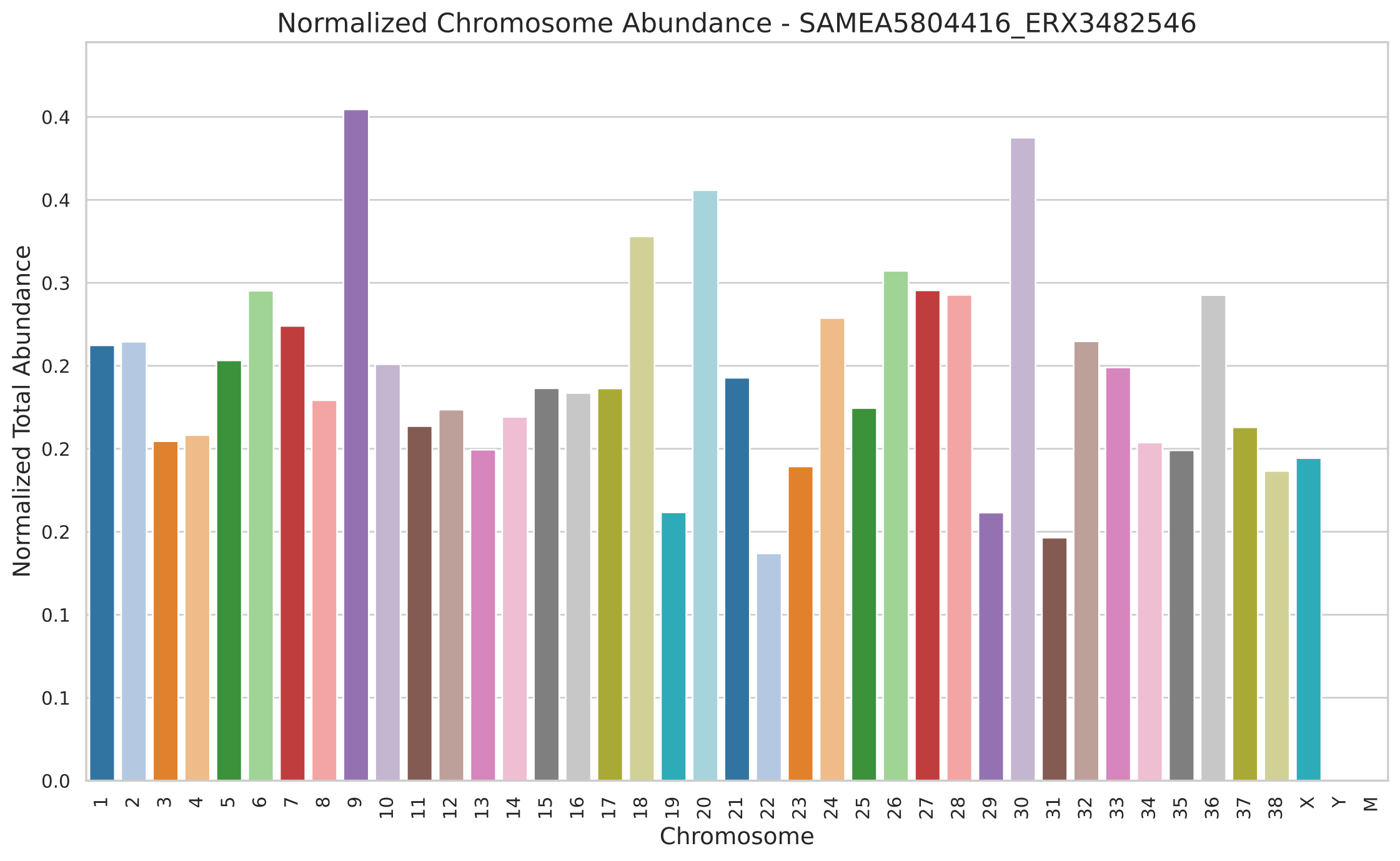

Normalized Chromosome Abundance - SAMEA5804392_ERX3482483
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

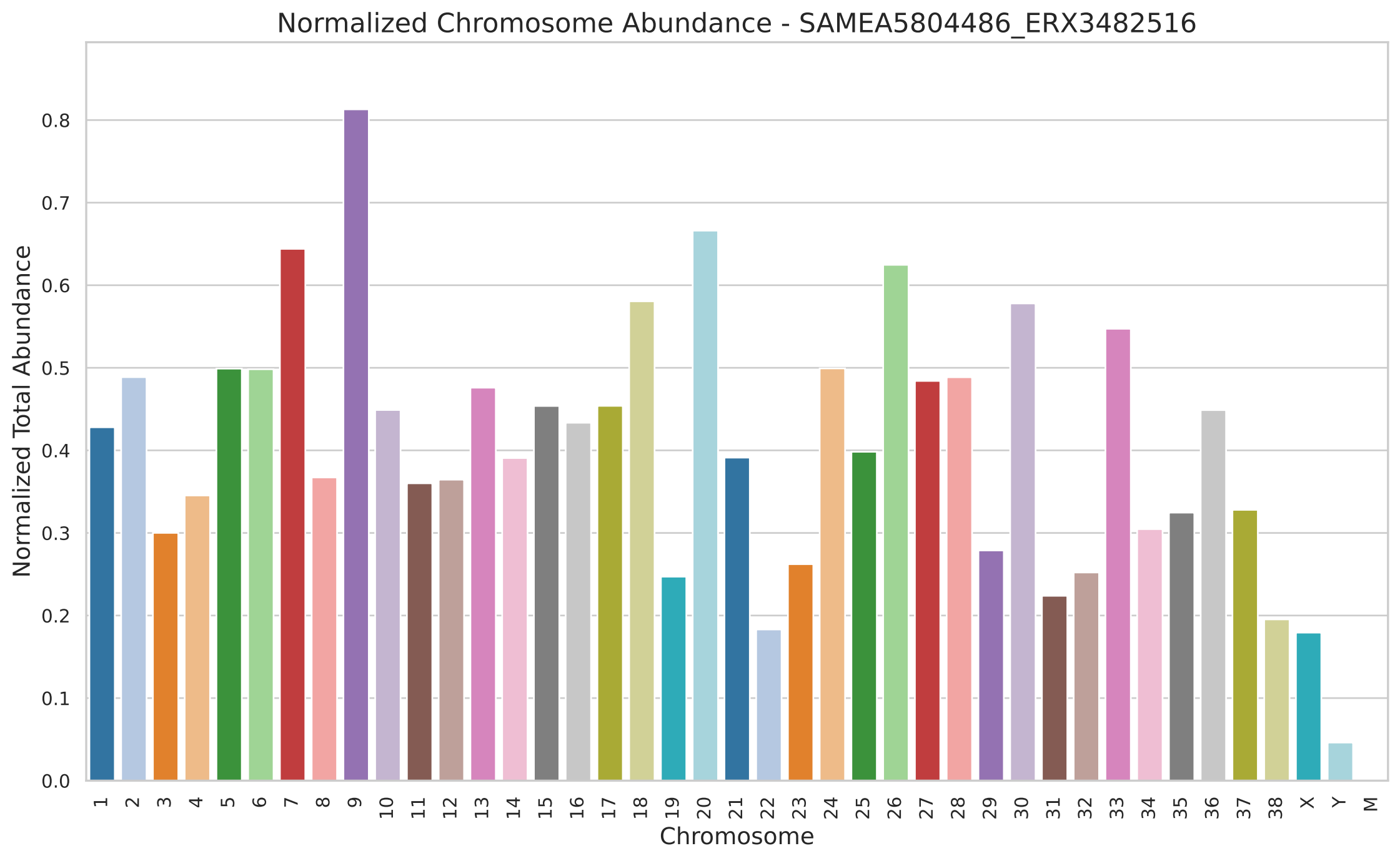

Normalized Chromosome Abundance - SAMEA5804429_ERX3482550
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

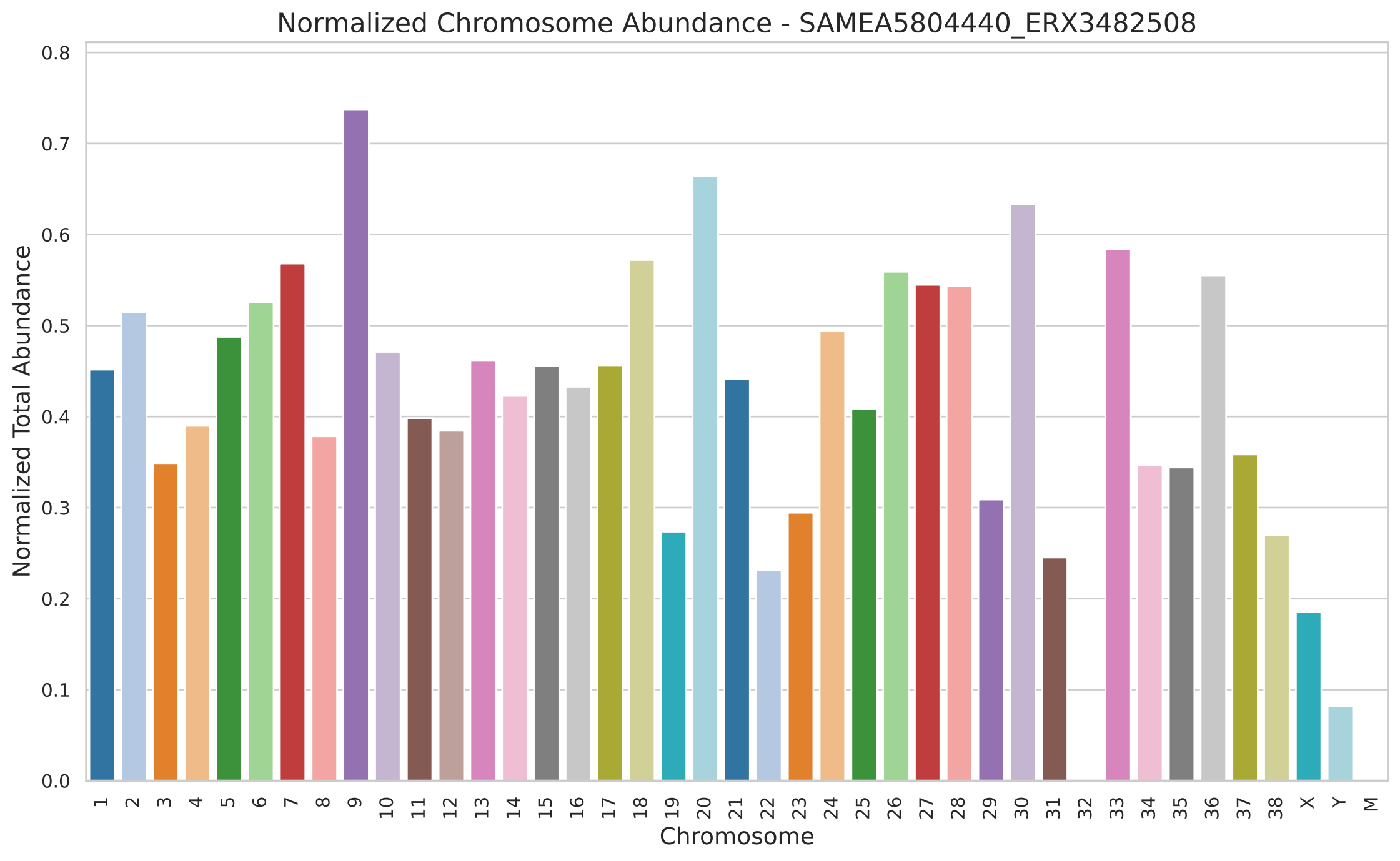

Normalized Chromosome Abundance - SAMEA5804430_ERX3482506
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

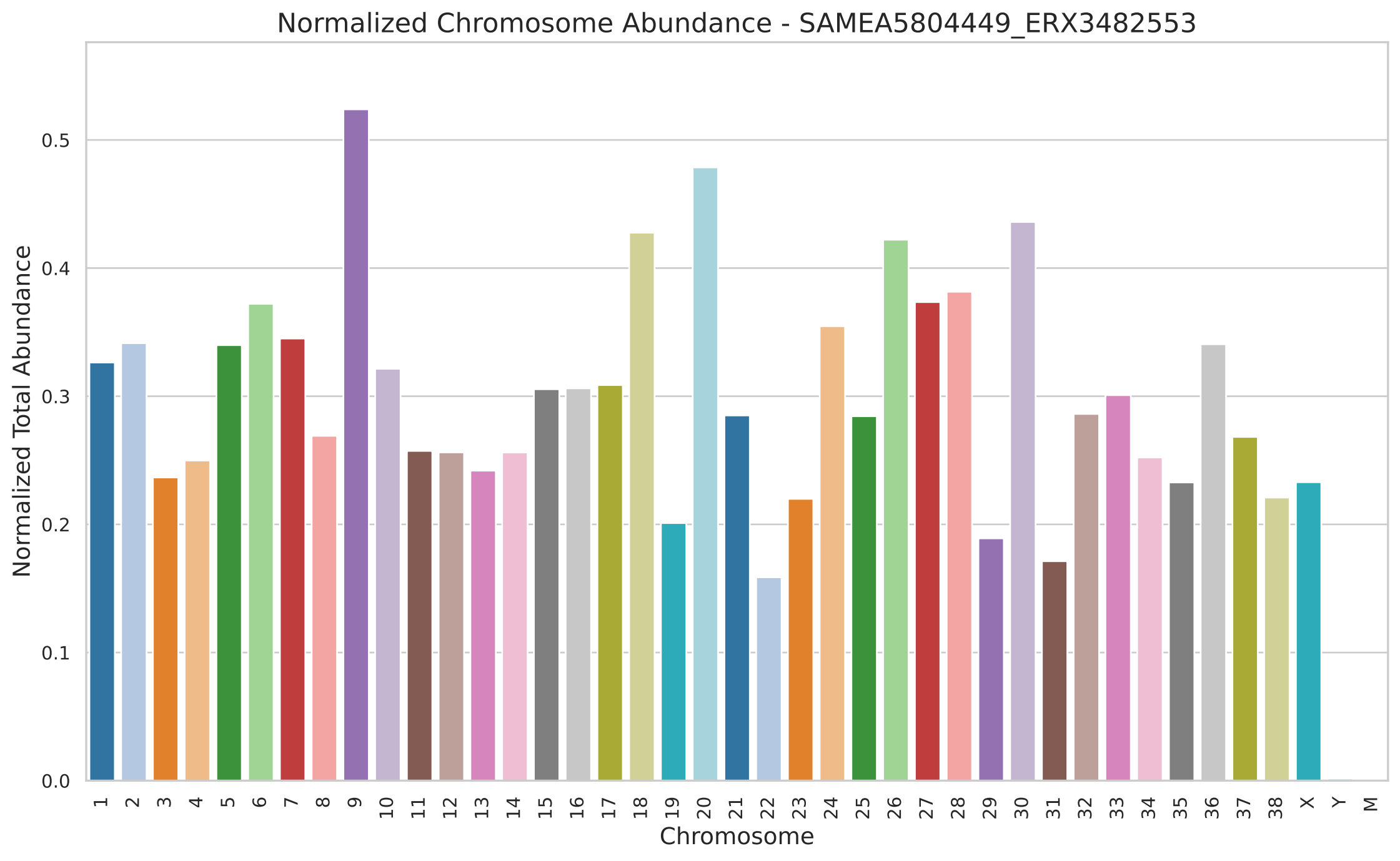

Normalized Chromosome Abundance - SAMEA4762568_ERX3482494
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

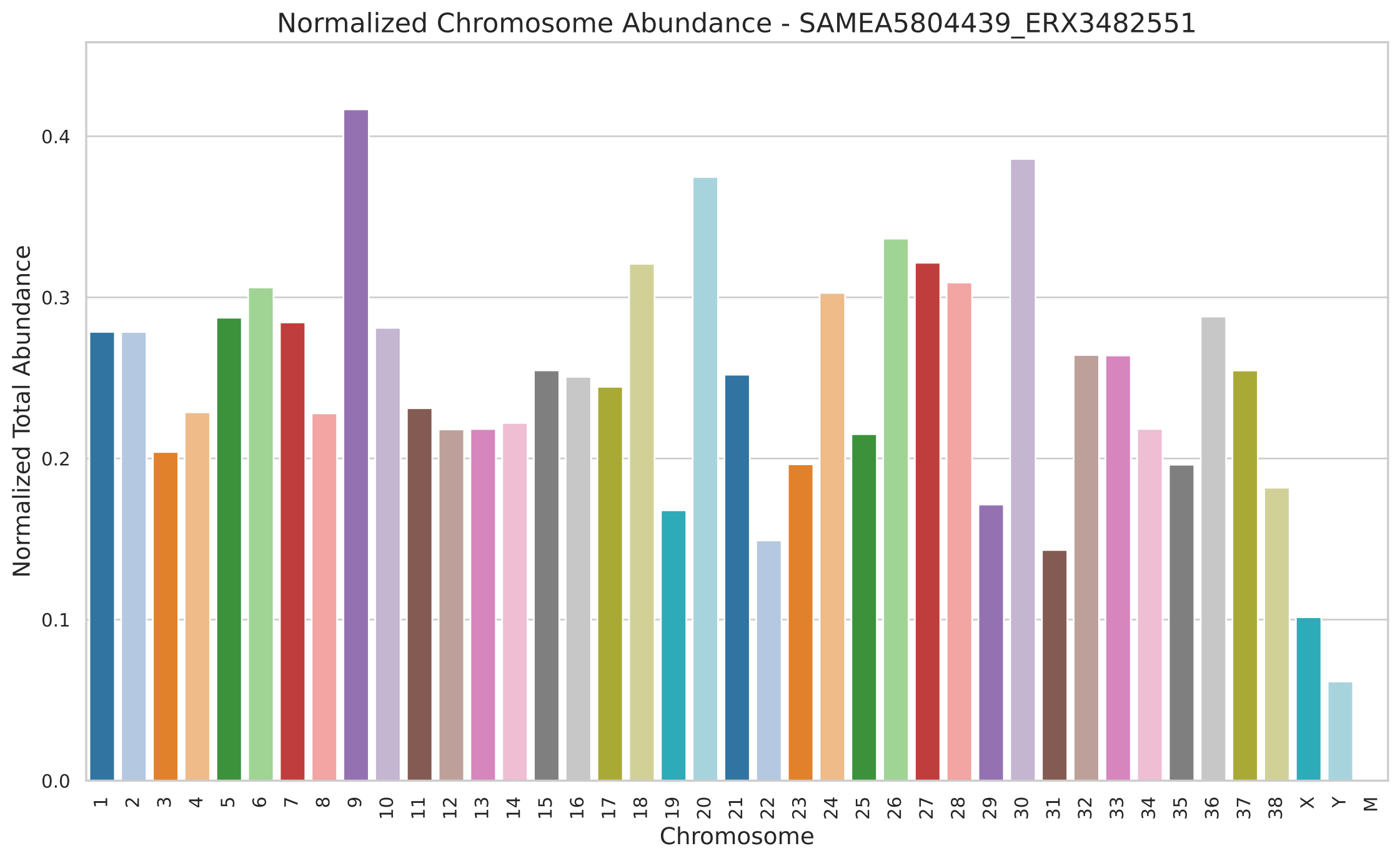

Normalized Chromosome Abundance - SAMEA5804421_ERX3482503
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

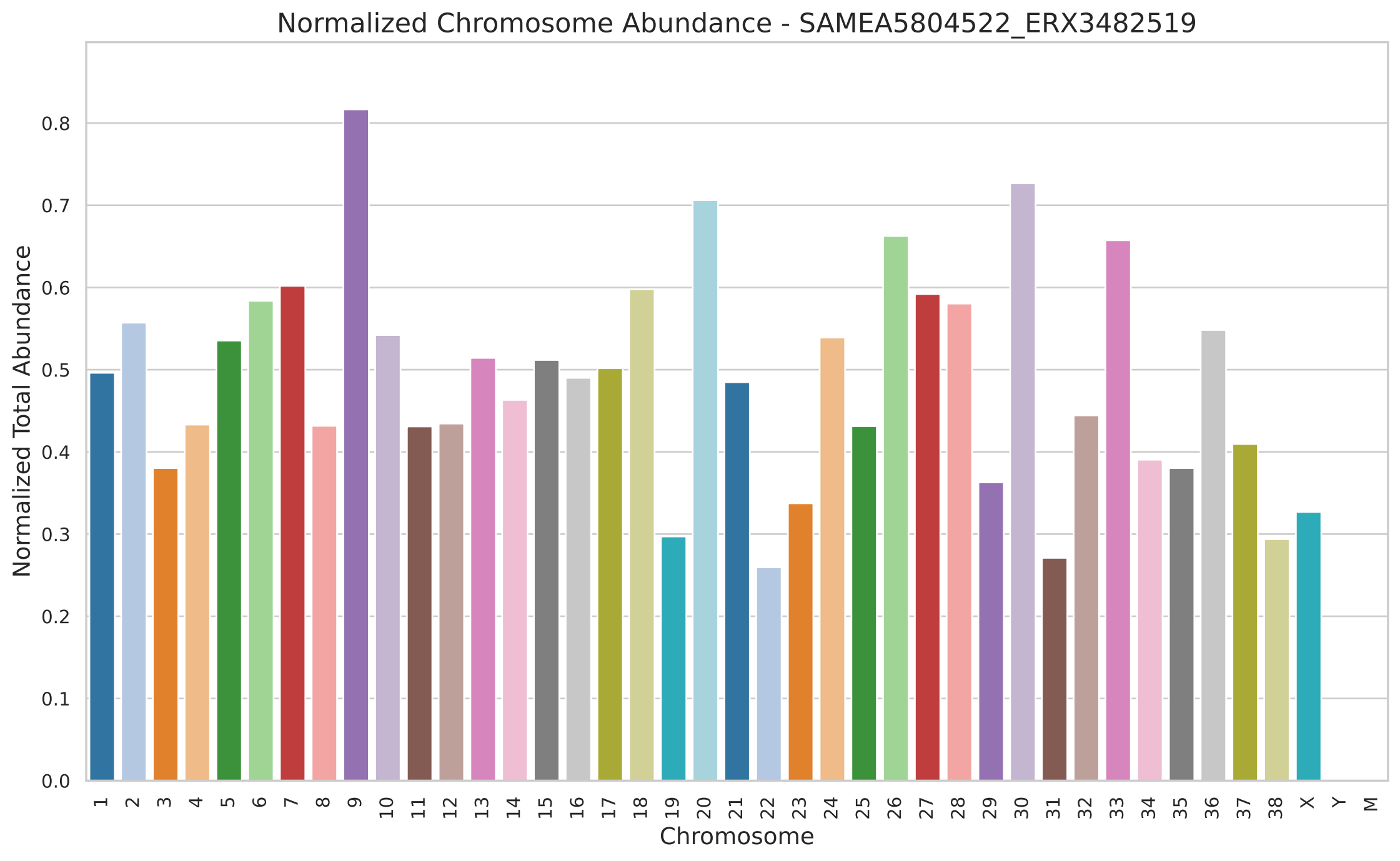

Normalized Chromosome Abundance - SAMEA5804416_ERX3482546
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

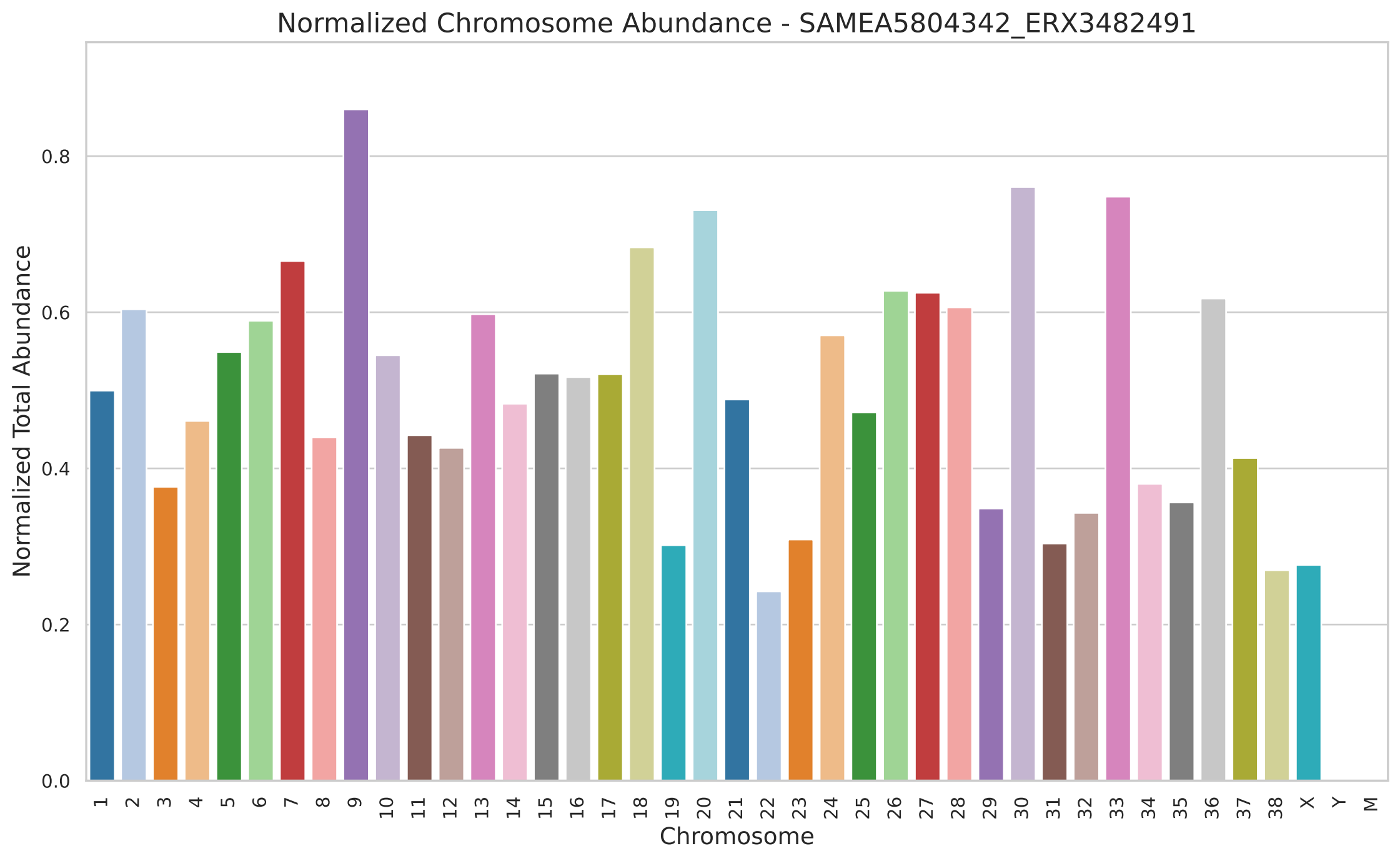

Normalized Chromosome Abundance - SAMEA5804486_ERX3482516
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

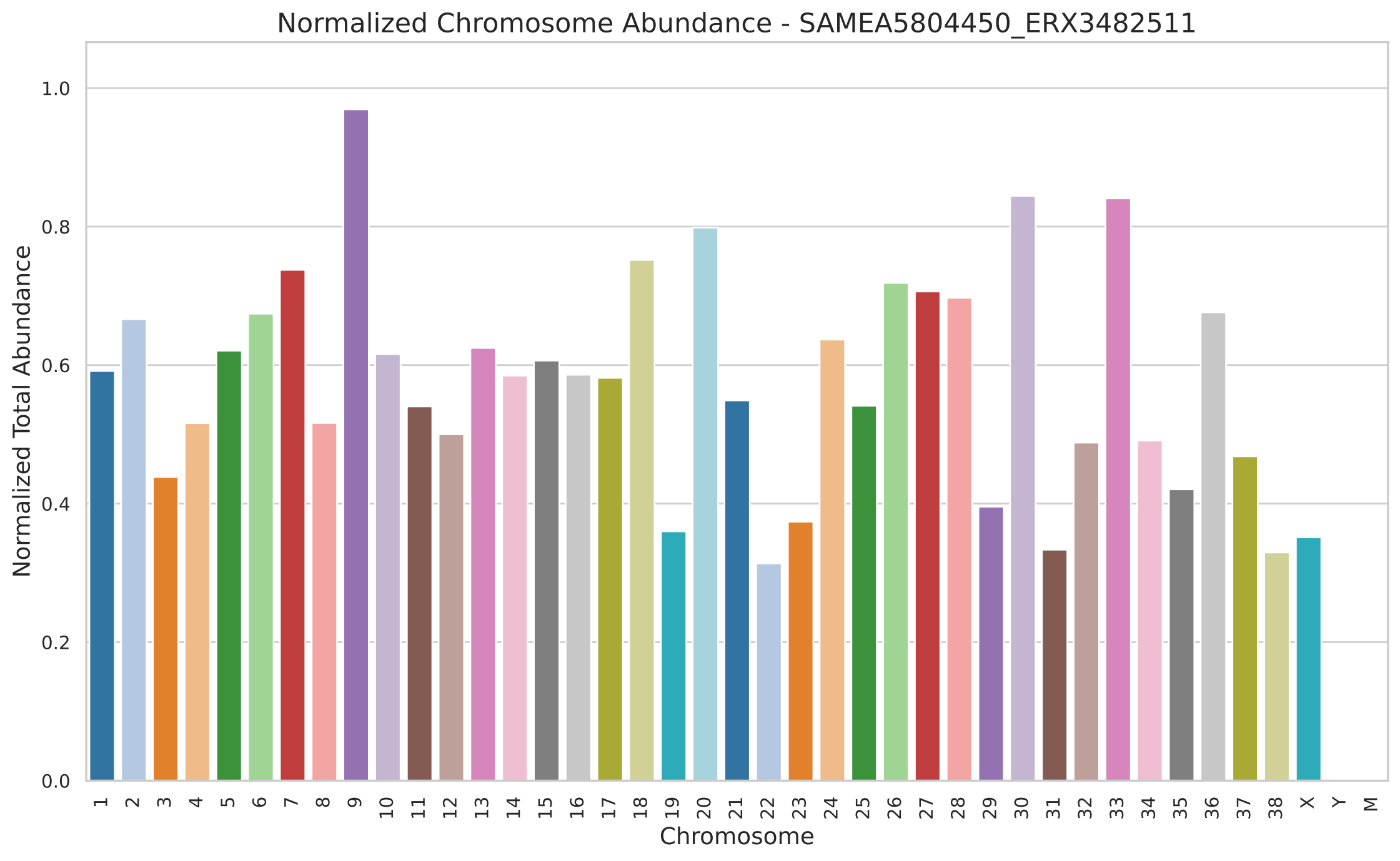

Normalized Chromosome Abundance - SAMEA5804440_ERX3482508
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

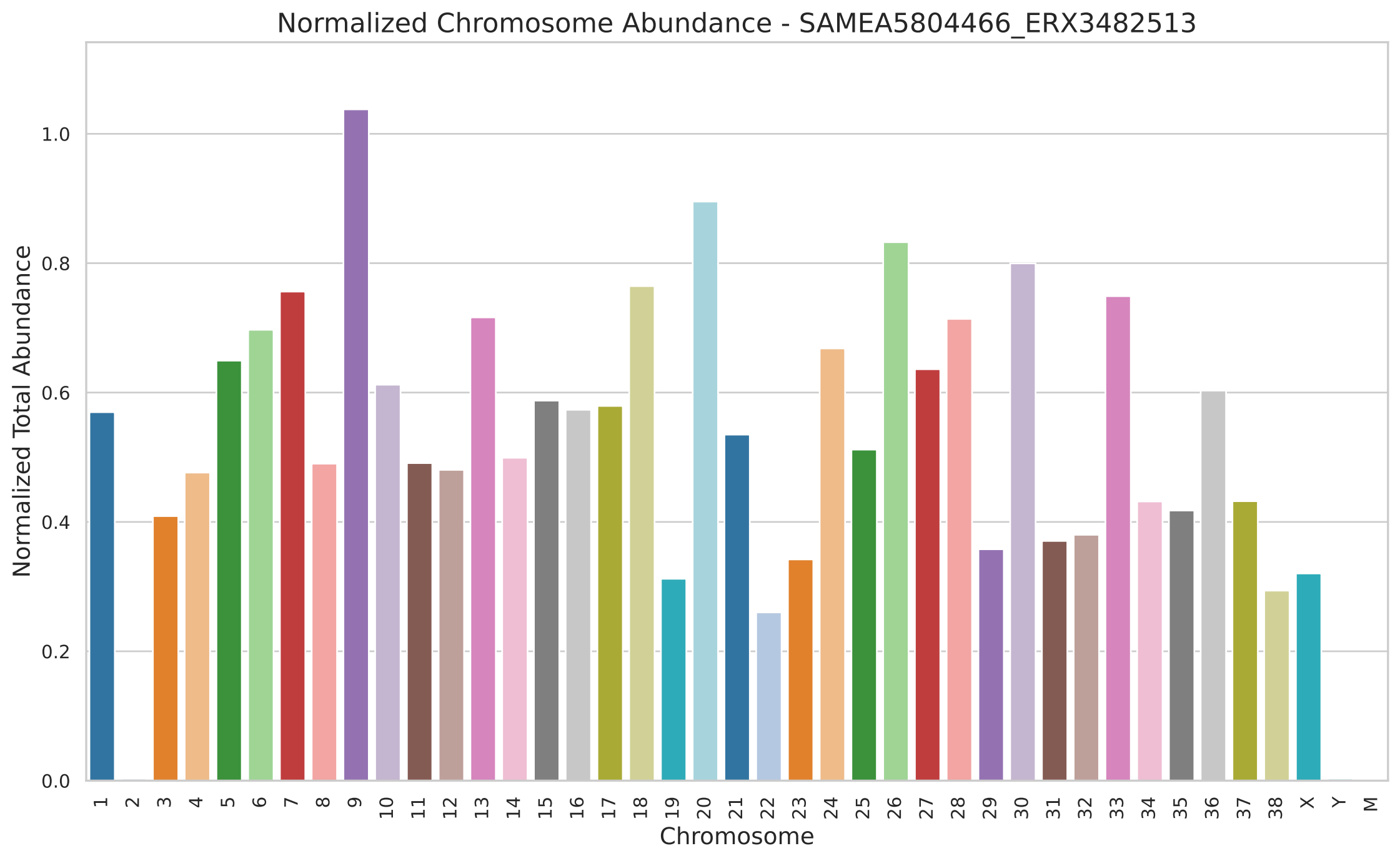

Normalized Chromosome Abundance - SAMEA5804449_ERX3482553
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

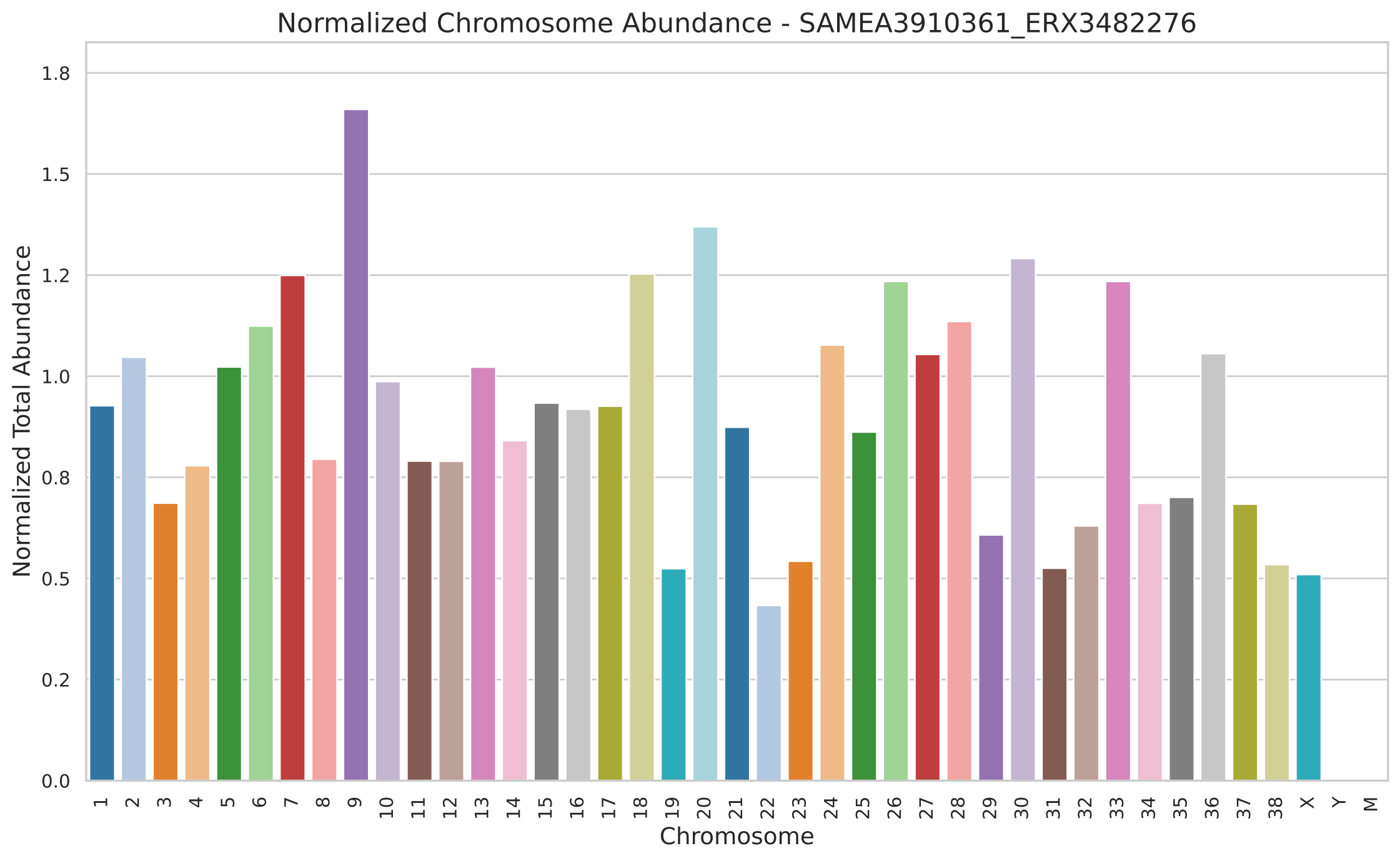

Normalized Chromosome Abundance - SAMEA5804439_ERX3482551
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

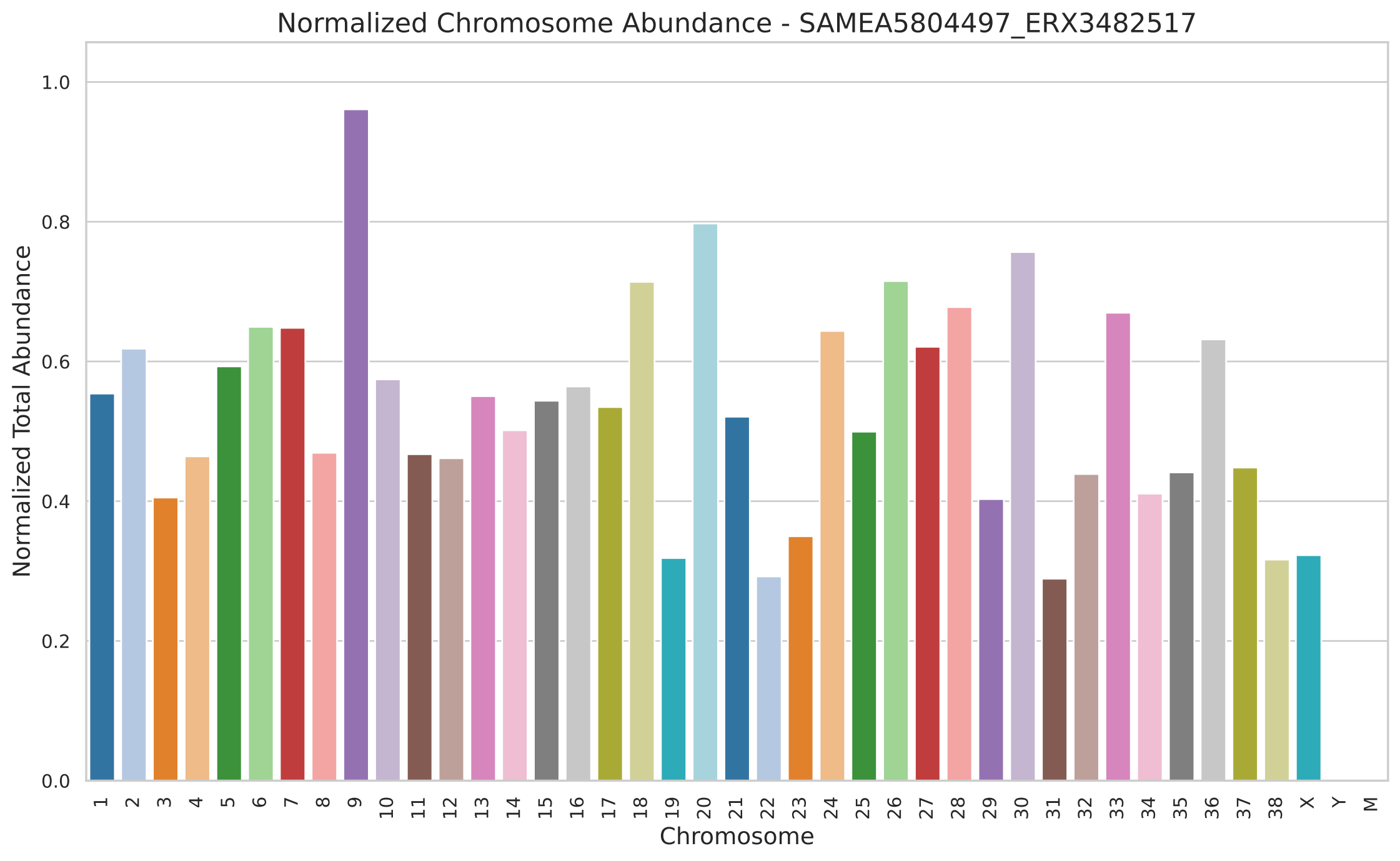

Normalized Chromosome Abundance - SAMEA5804522_ERX3482519
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

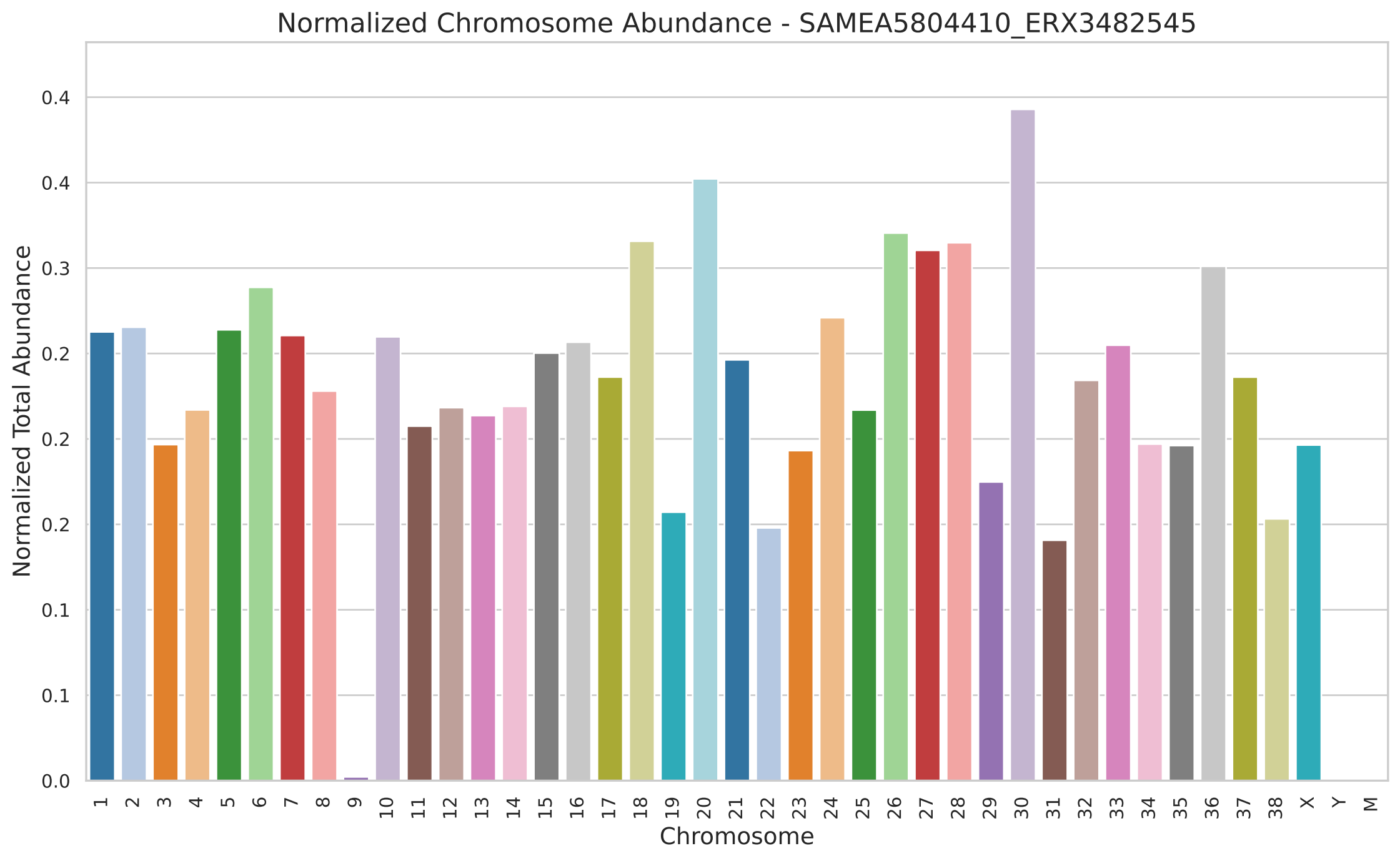

Normalized Chromosome Abundance - SAMEA5804342_ERX3482491
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

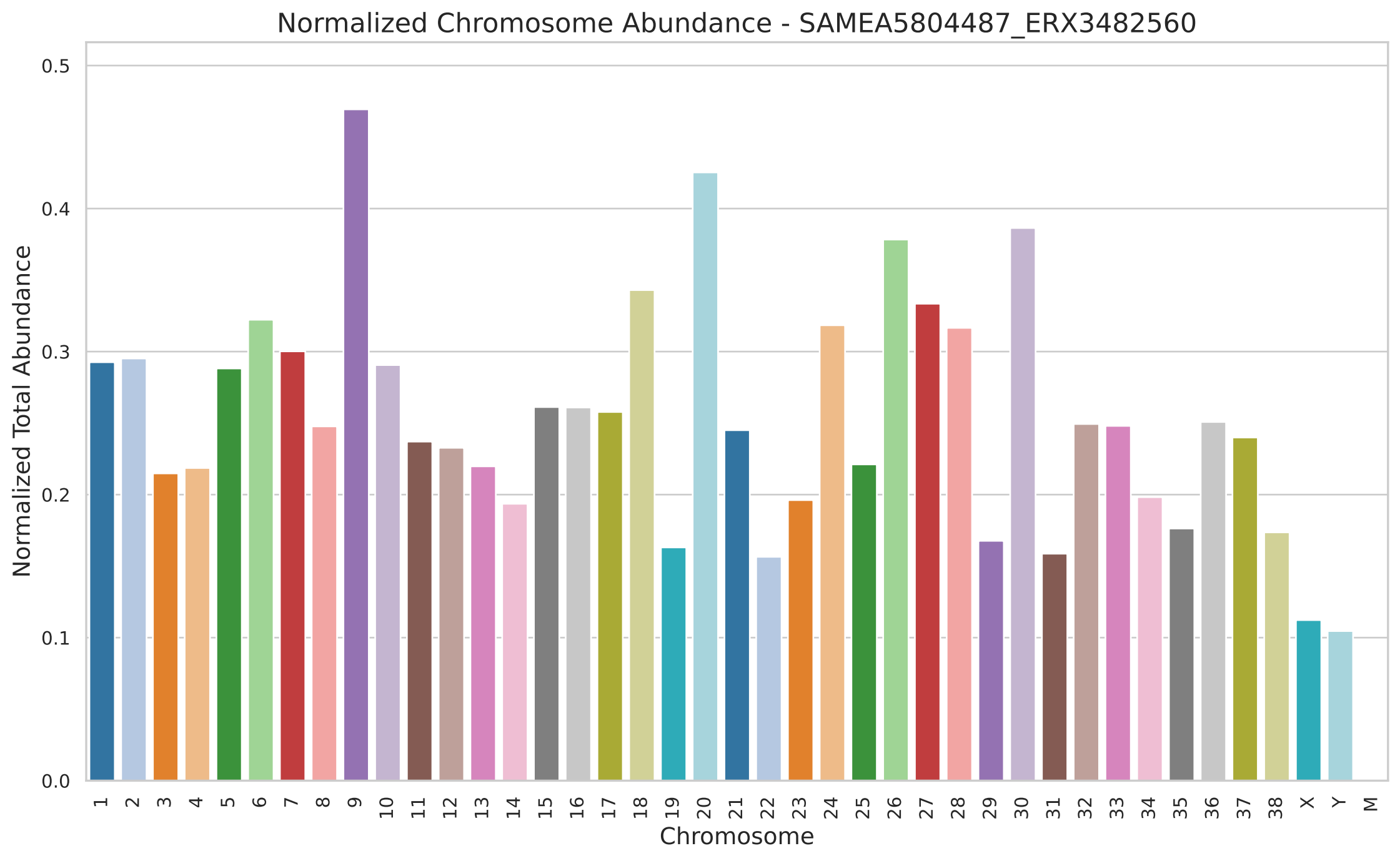

Normalized Chromosome Abundance - SAMEA5804450_ERX3482511
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

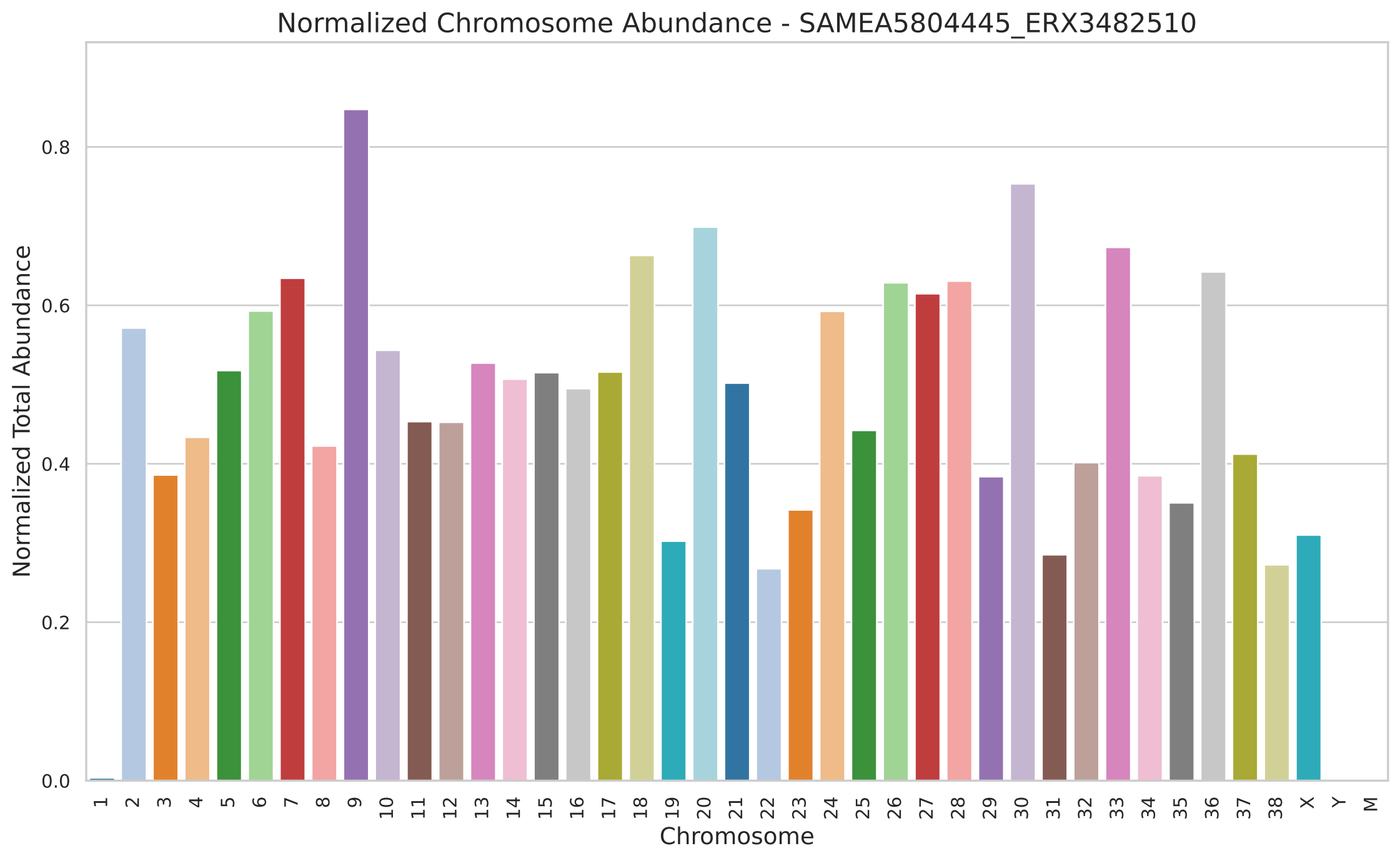

Normalized Chromosome Abundance - SAMEA5804466_ERX3482513
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

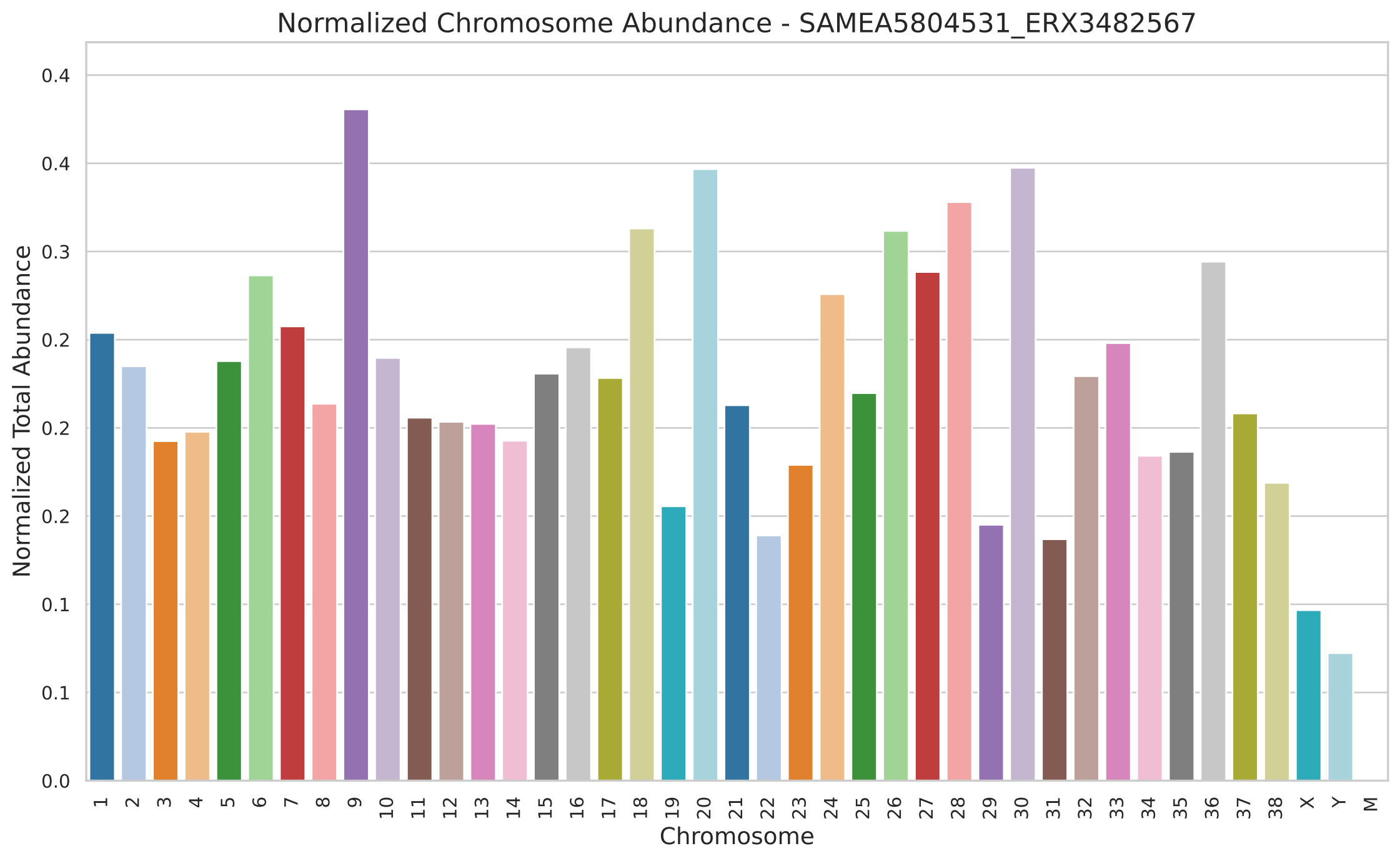

Normalized Chromosome Abundance - SAMEA3910361_ERX3482276
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

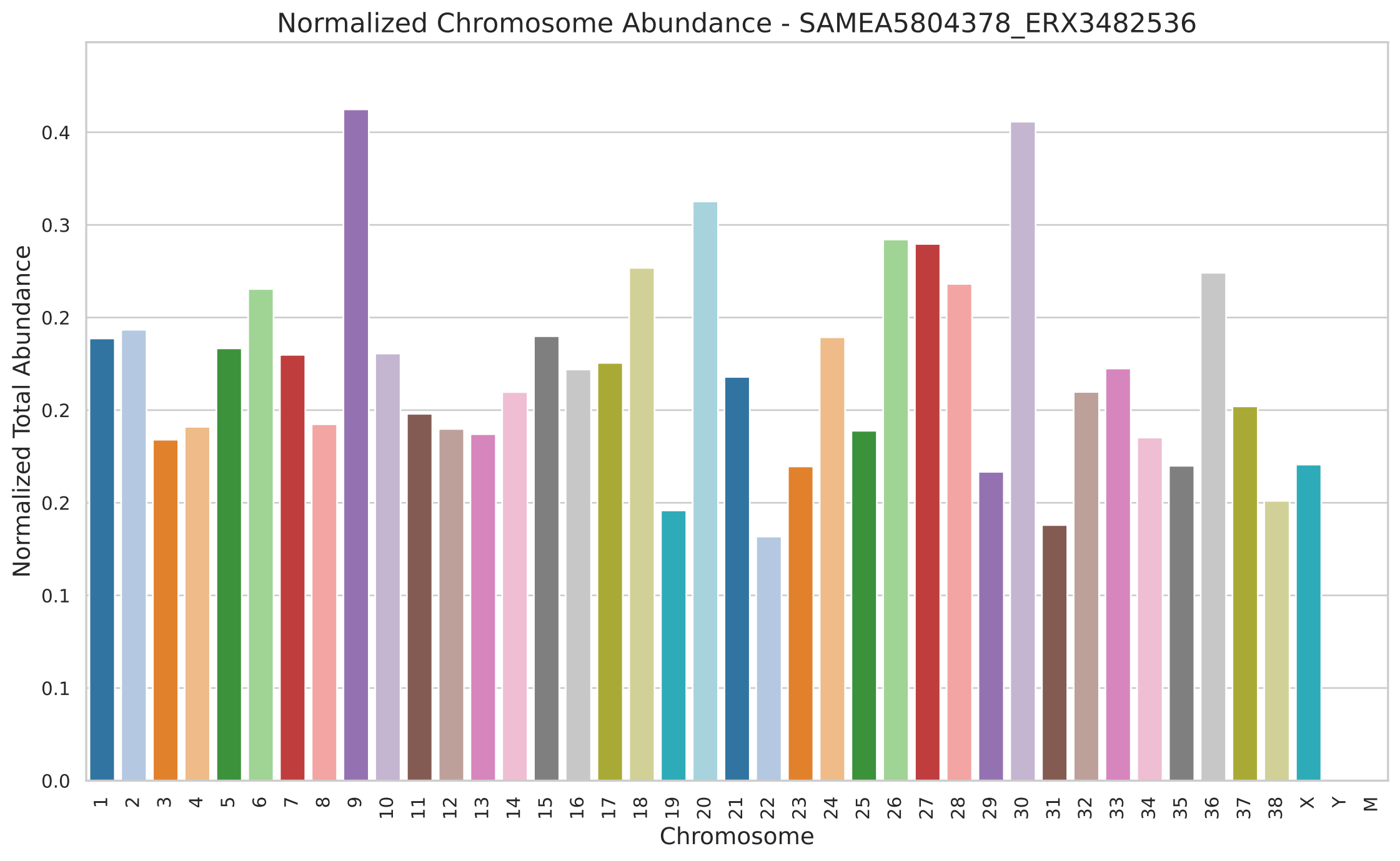

Normalized Chromosome Abundance - SAMEA5804497_ERX3482517
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

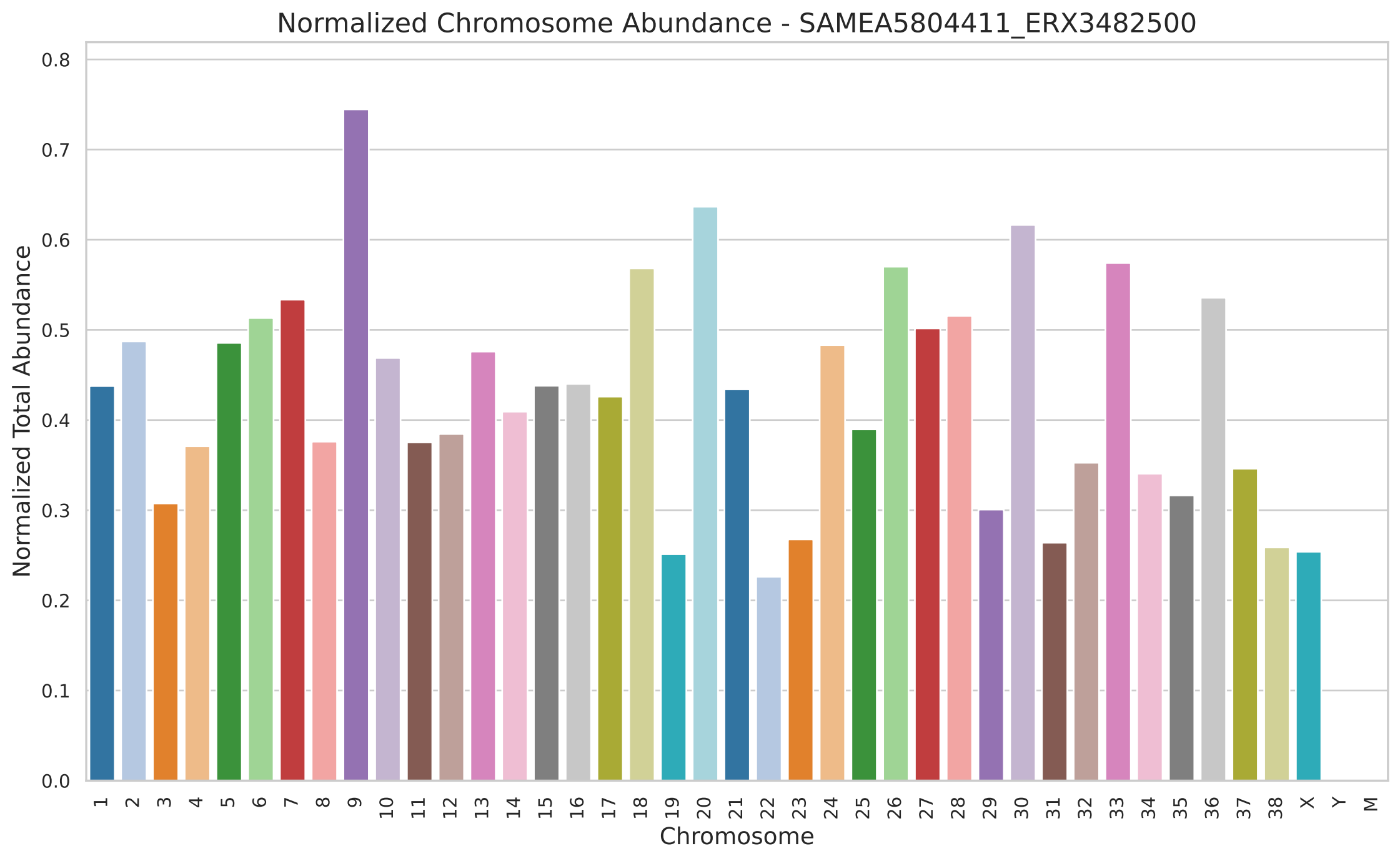

Normalized Chromosome Abundance - SAMEA5804410_ERX3482545
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

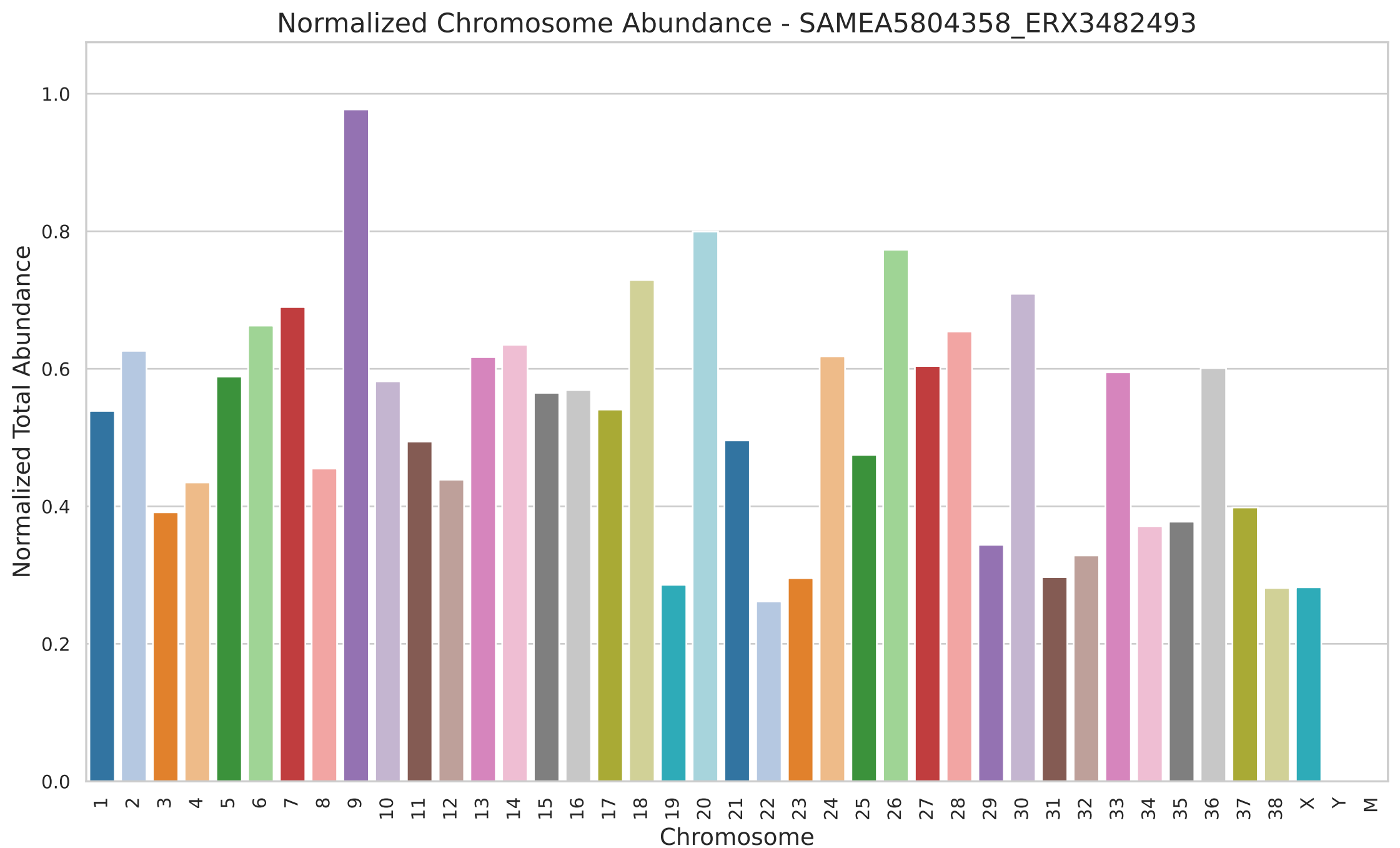

Normalized Chromosome Abundance - SAMEA5804487_ERX3482560
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

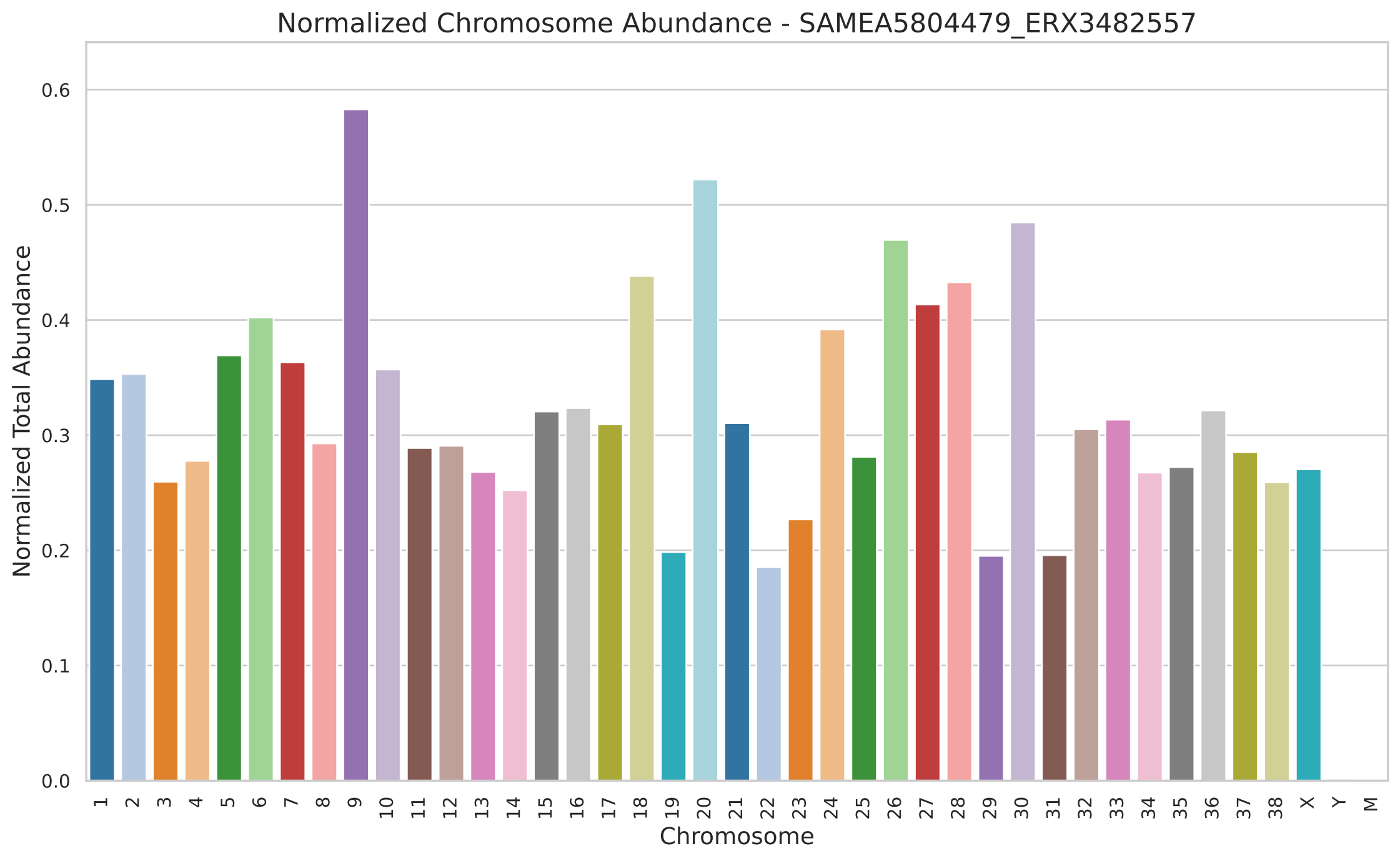

Normalized Chromosome Abundance - SAMEA5804445_ERX3482510
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

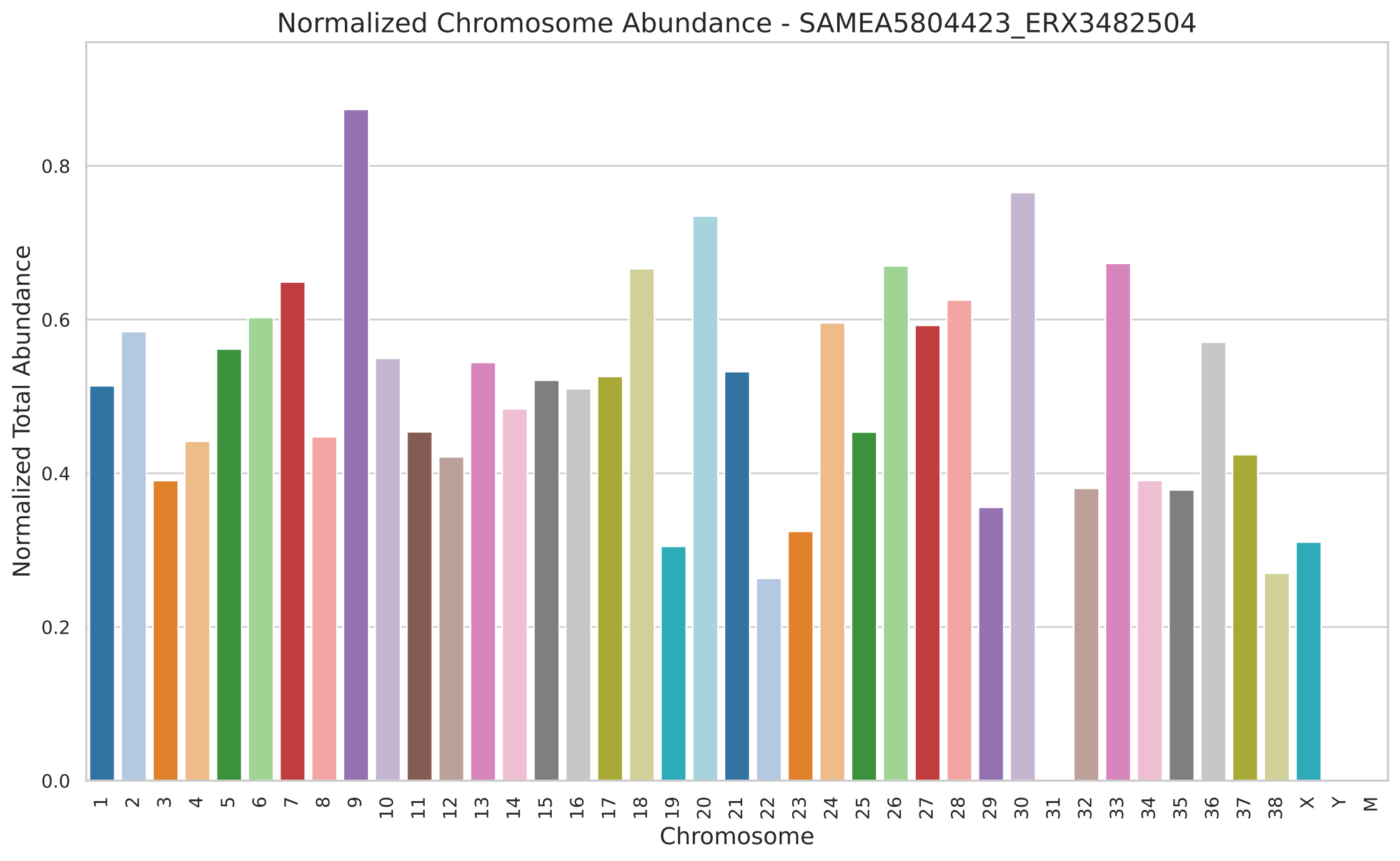

Normalized Chromosome Abundance - SAMEA5804531_ERX3482567
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

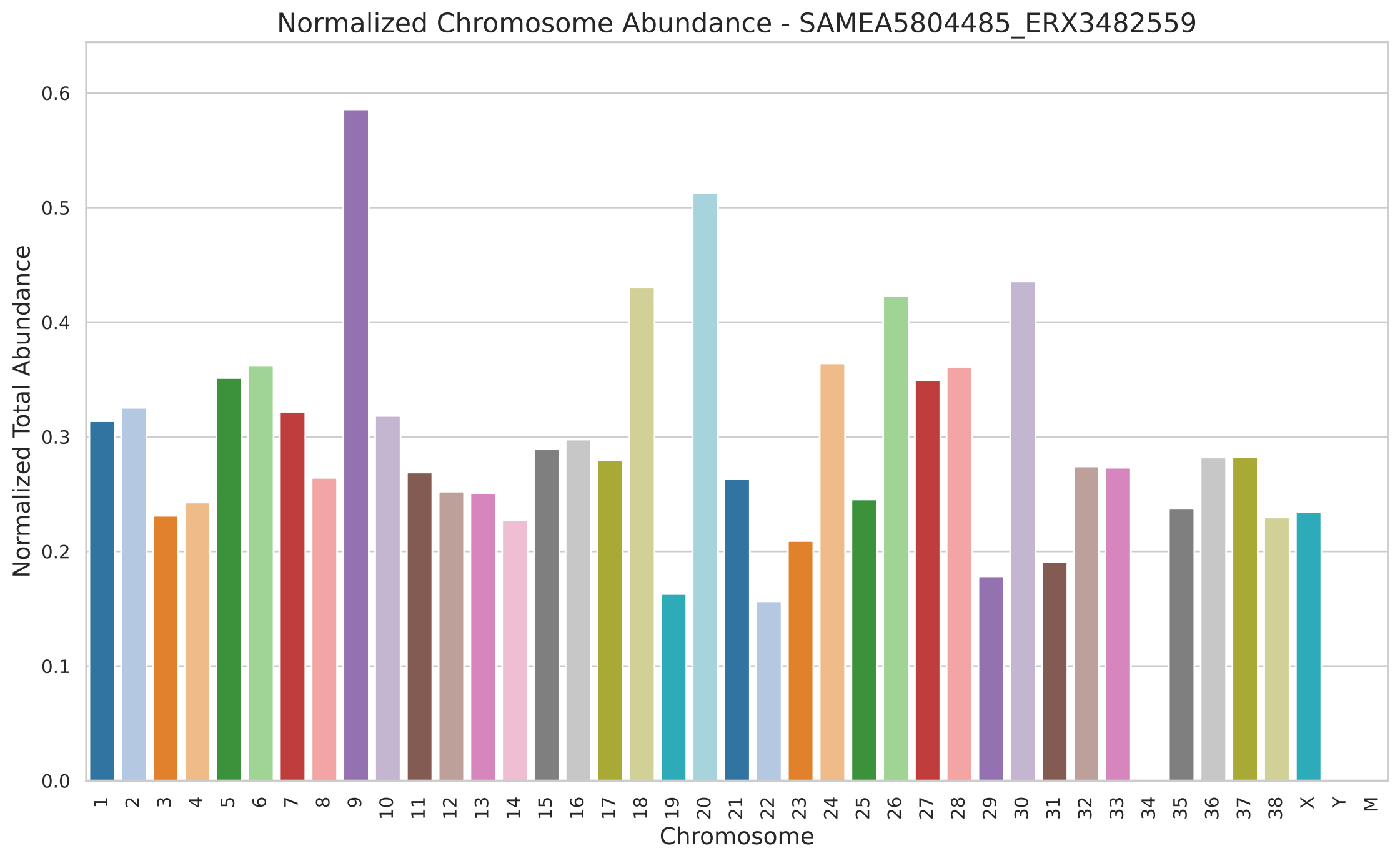

Normalized Chromosome Abundance - SAMEA5804378_ERX3482536
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

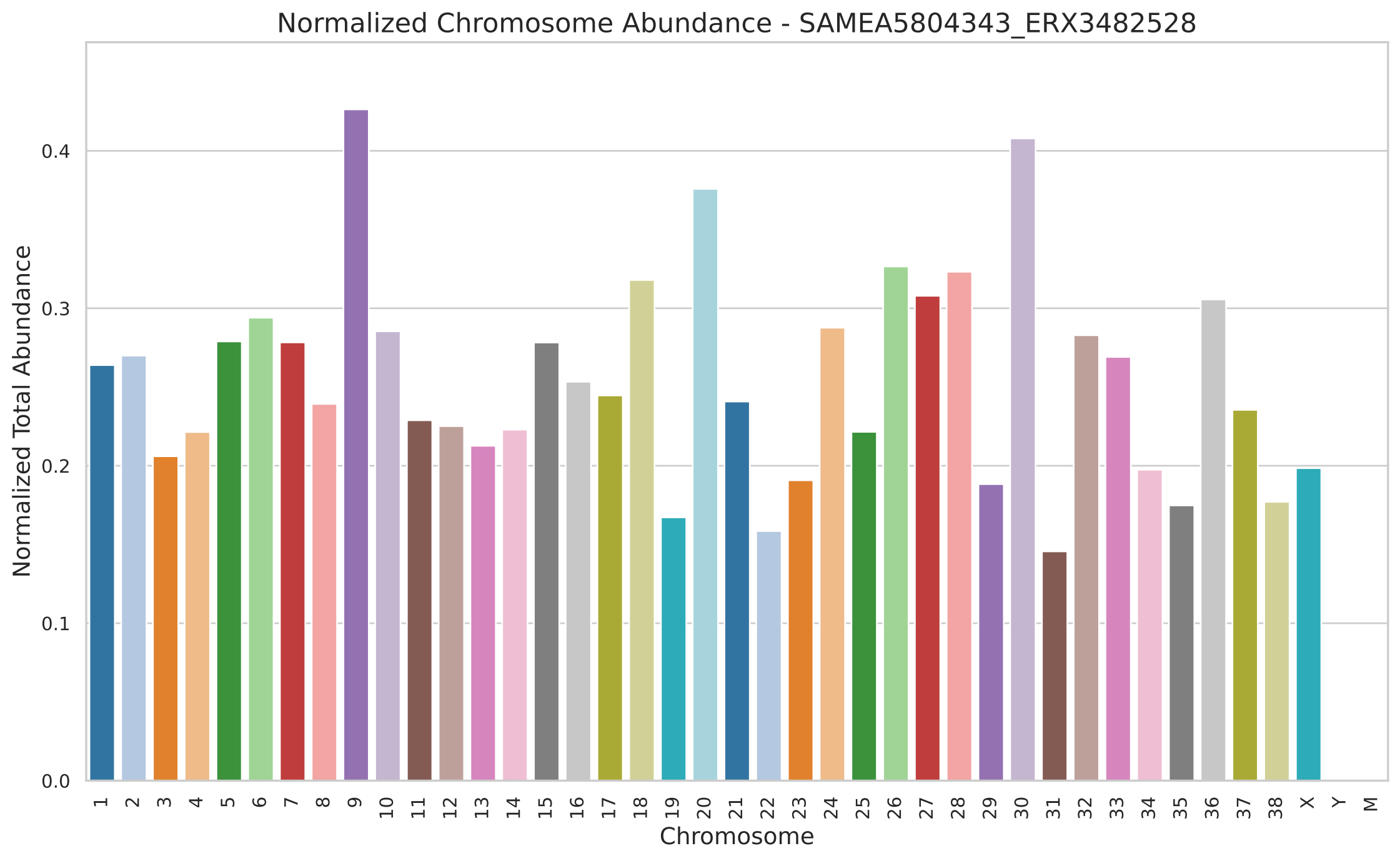

Normalized Chromosome Abundance - SAMEA5804411_ERX3482500
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

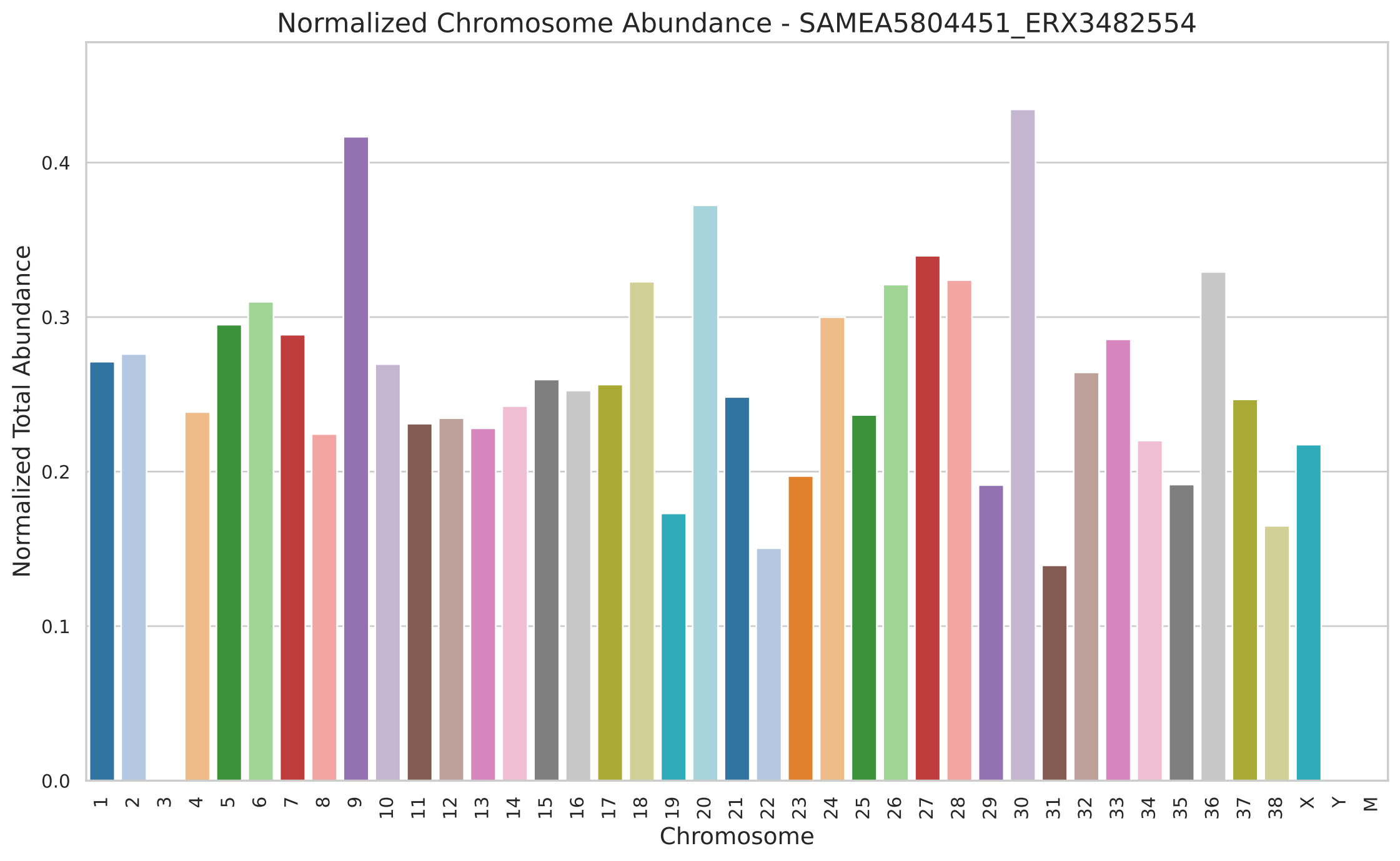

Normalized Chromosome Abundance - SAMEA5804358_ERX3482493
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

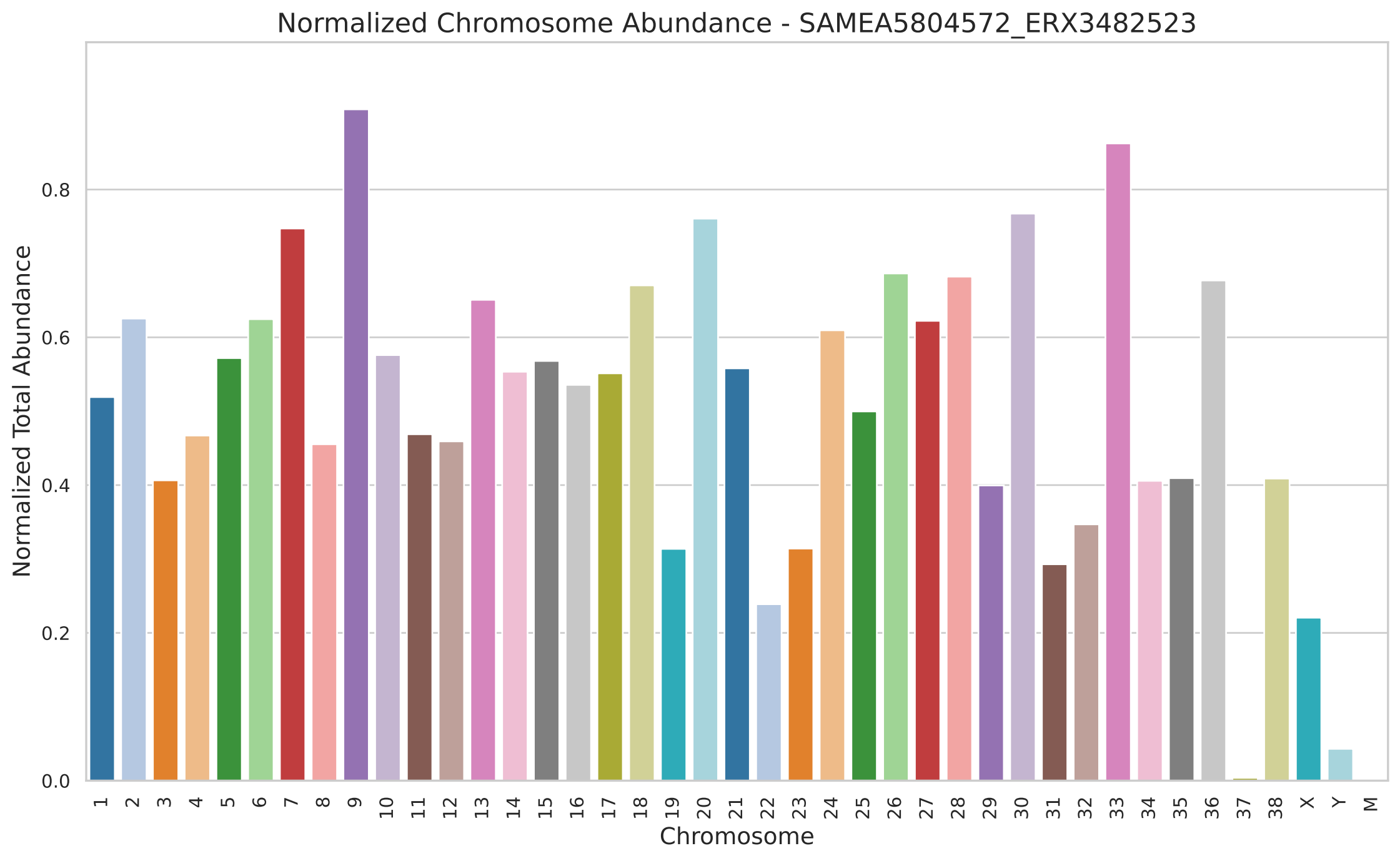

Normalized Chromosome Abundance - SAMEA5804479_ERX3482557
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

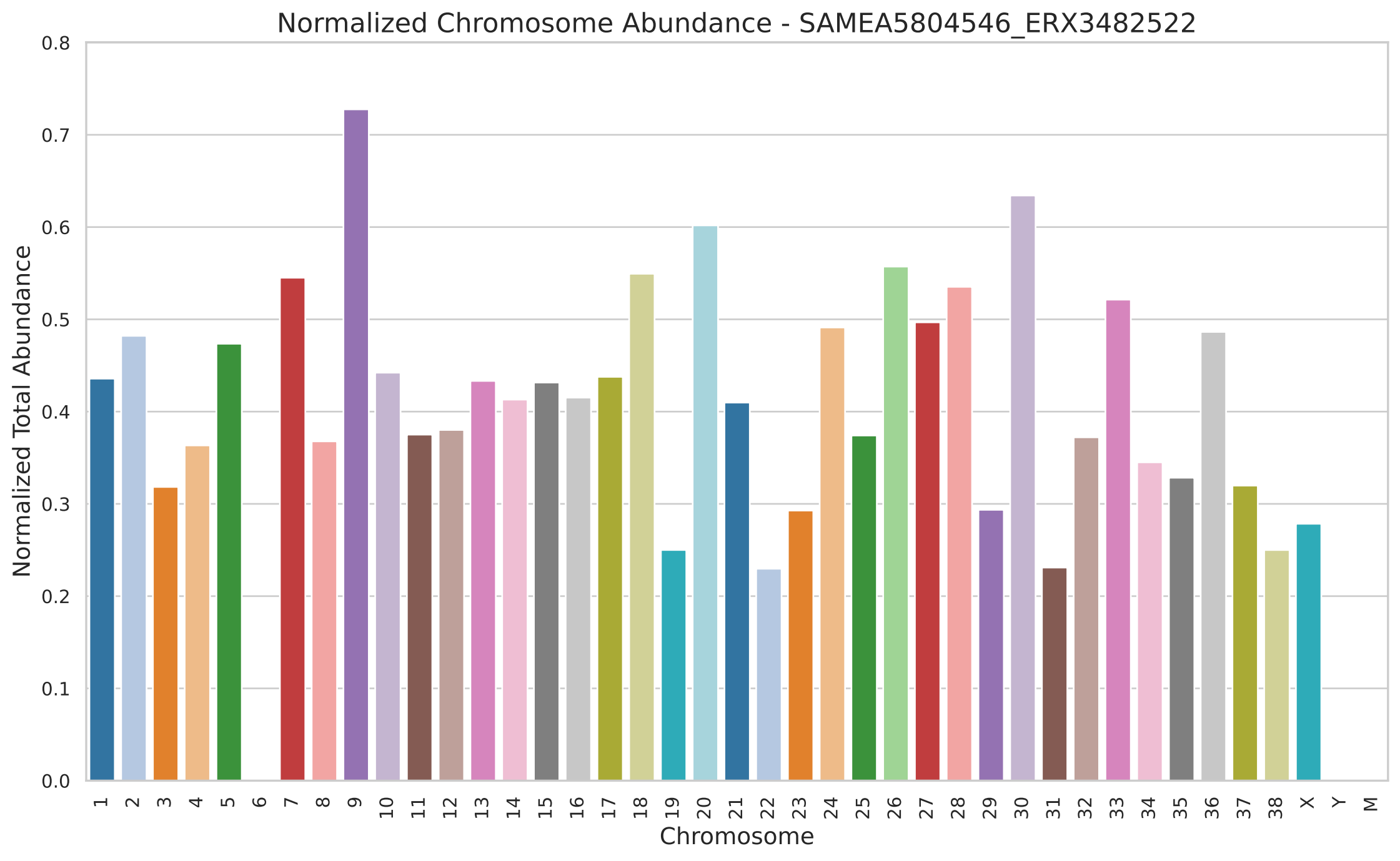

Normalized Chromosome Abundance - SAMEA5804423_ERX3482504
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

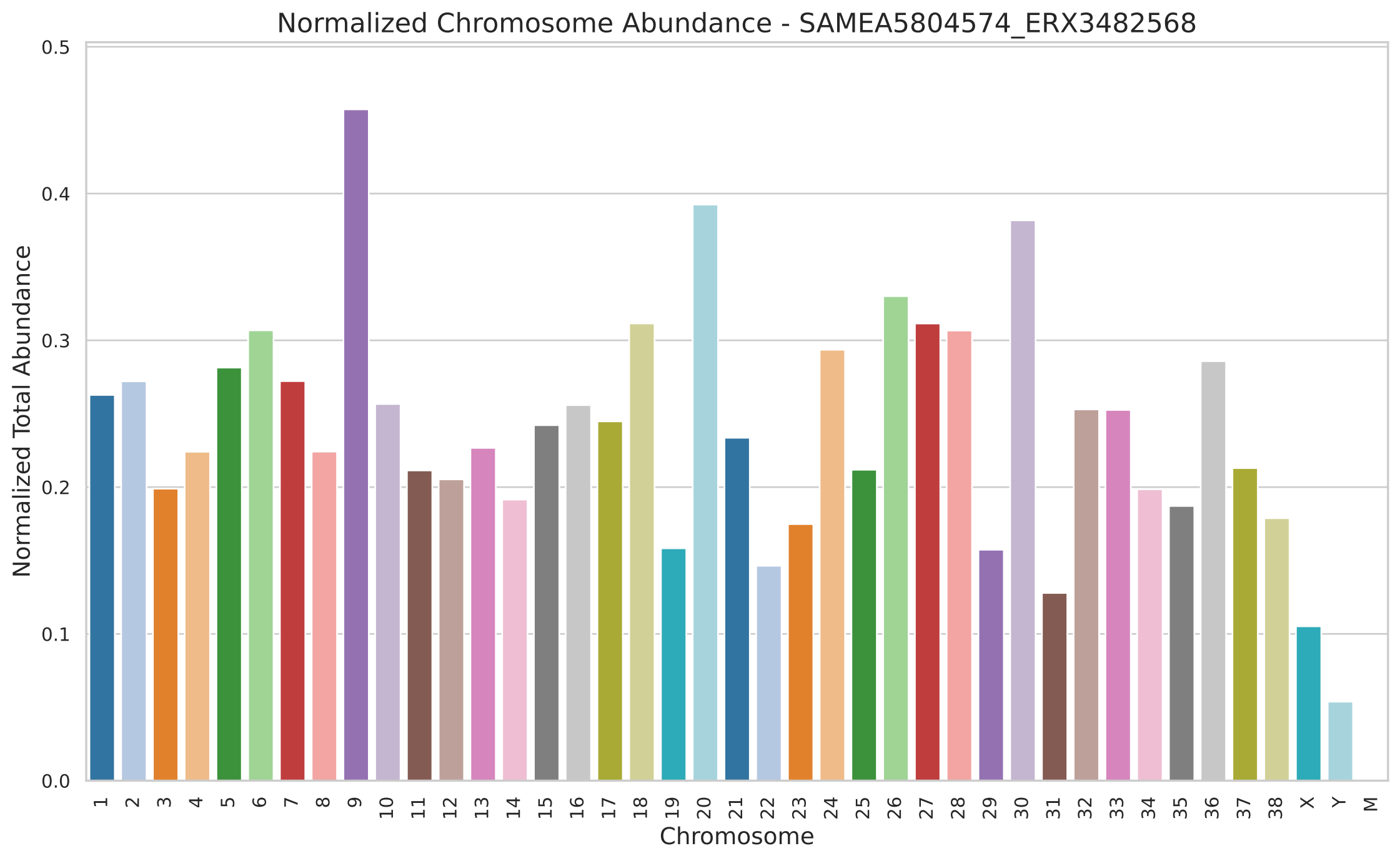

Normalized Chromosome Abundance - SAMEA5804485_ERX3482559
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

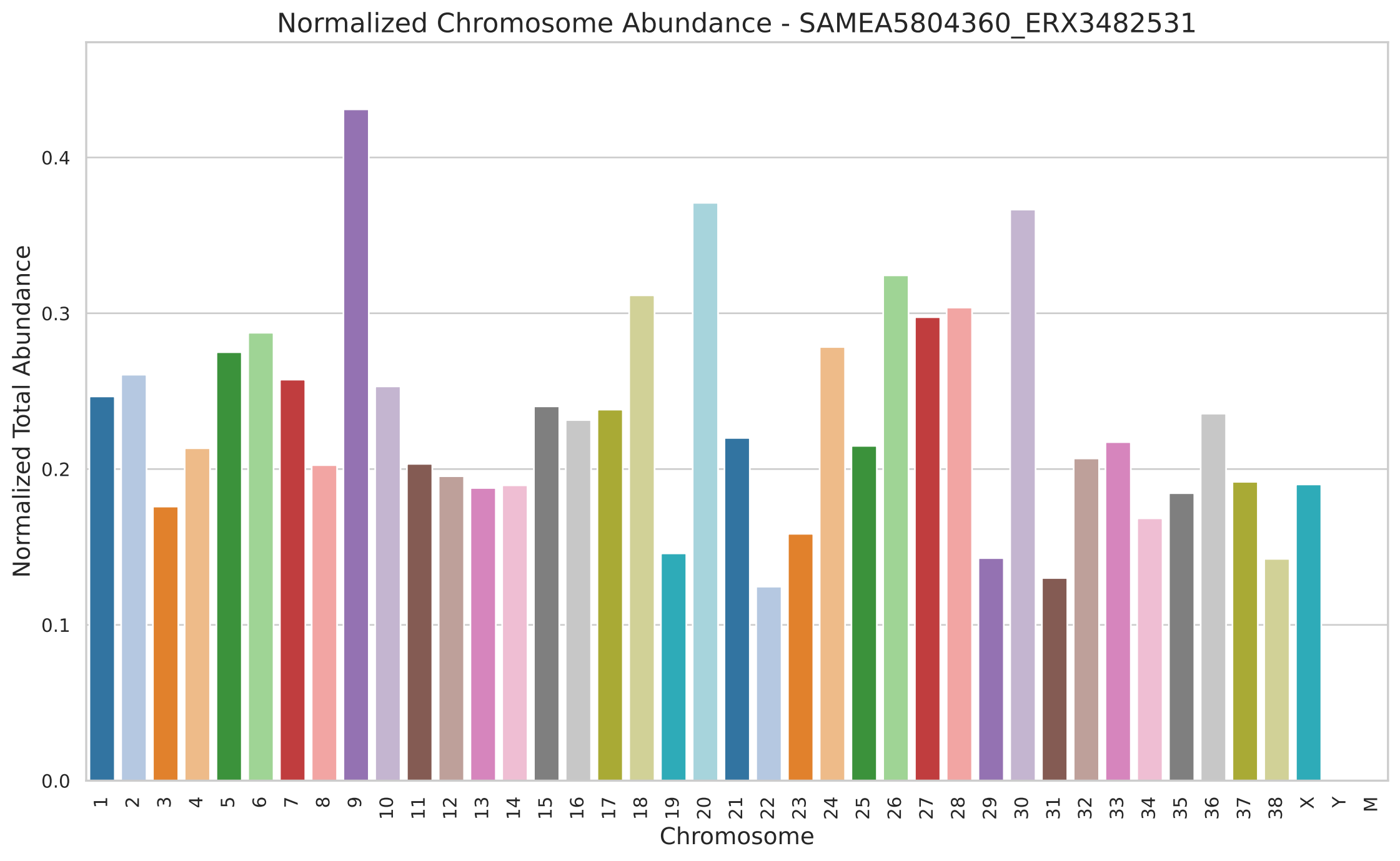

Normalized Chromosome Abundance - SAMEA5804343_ERX3482528
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

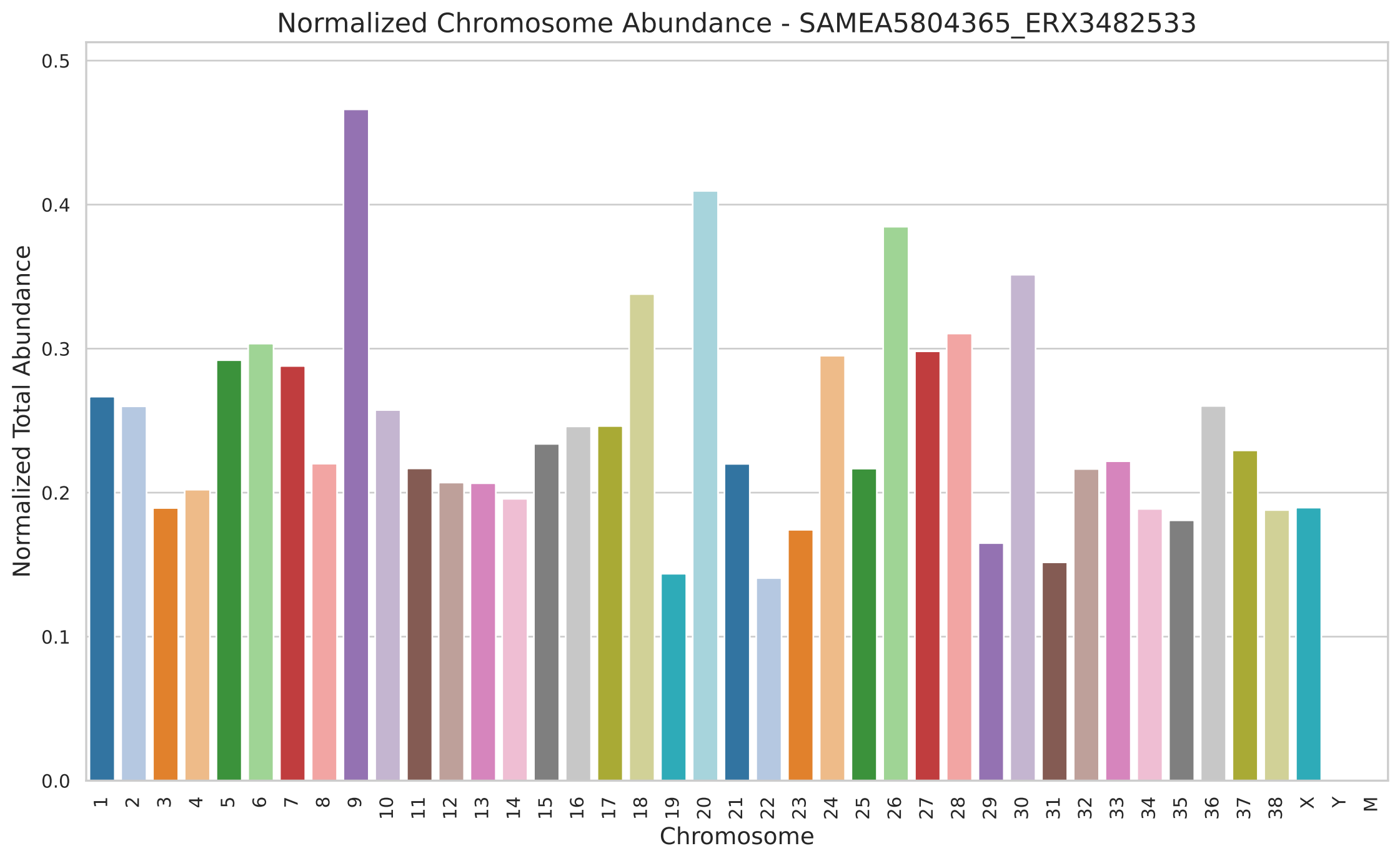

Normalized Chromosome Abundance - SAMEA5804451_ERX3482554
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

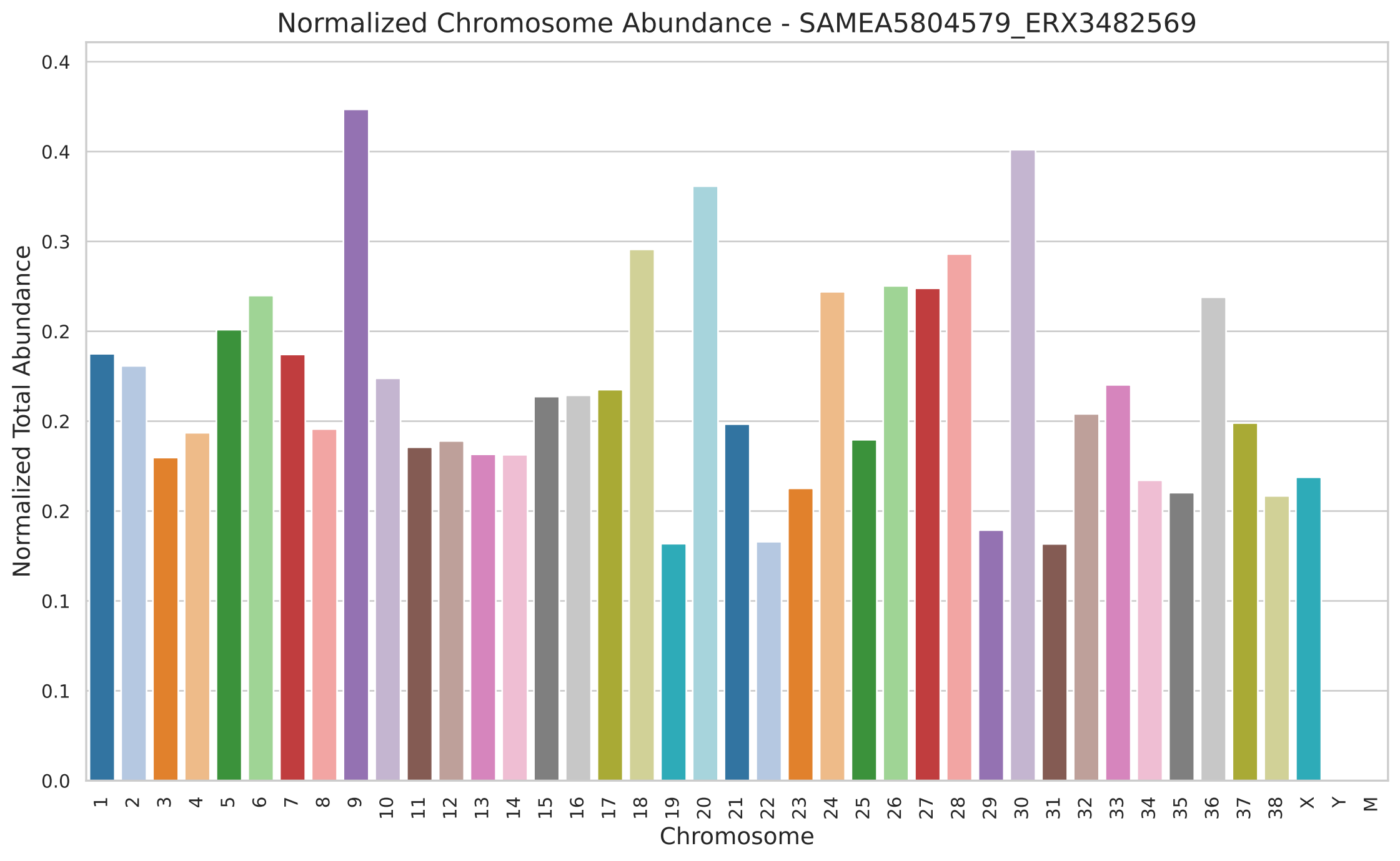

Normalized Chromosome Abundance - SAMEA5804572_ERX3482523
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

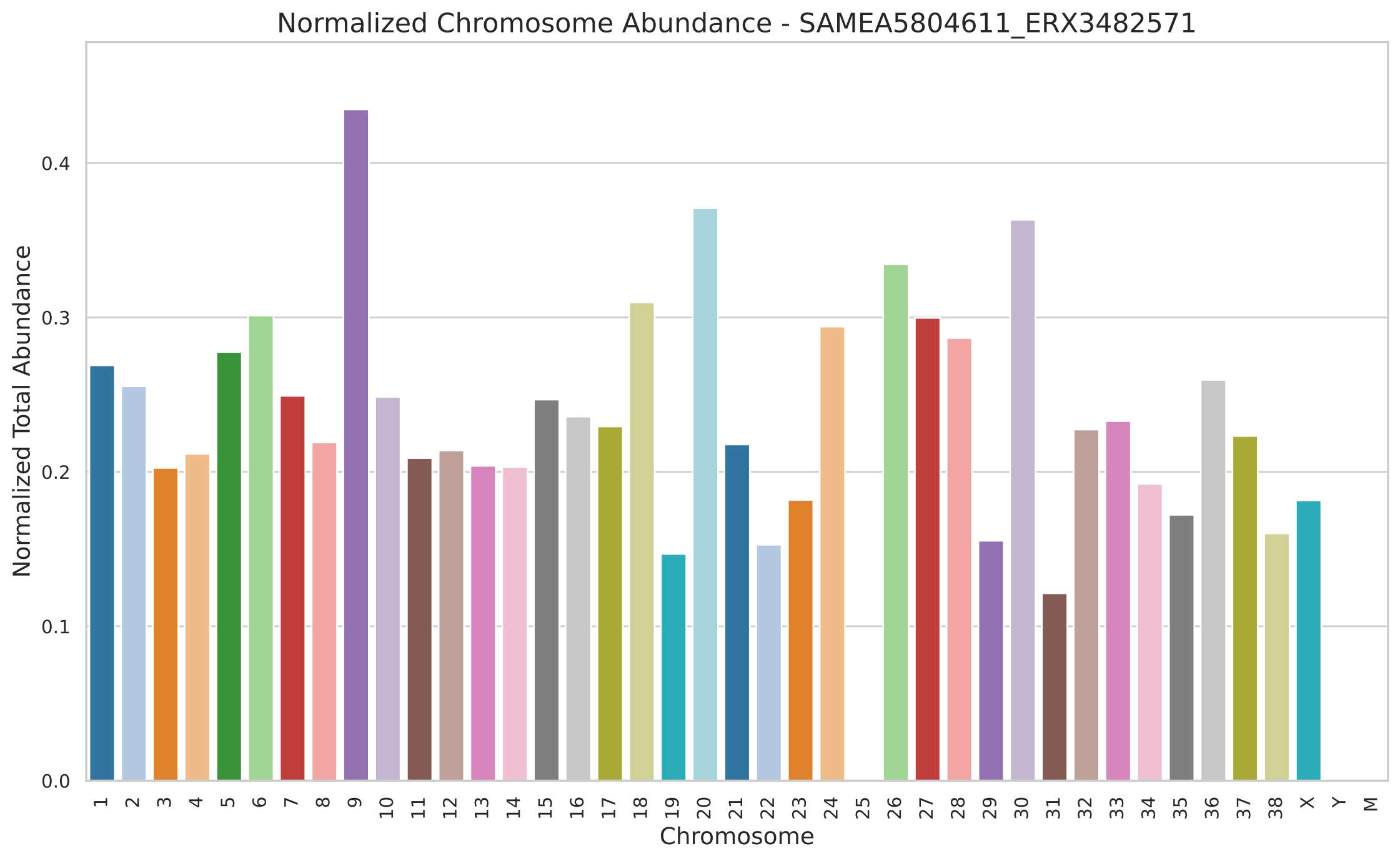

Normalized Chromosome Abundance - SAMEA5804546_ERX3482522
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

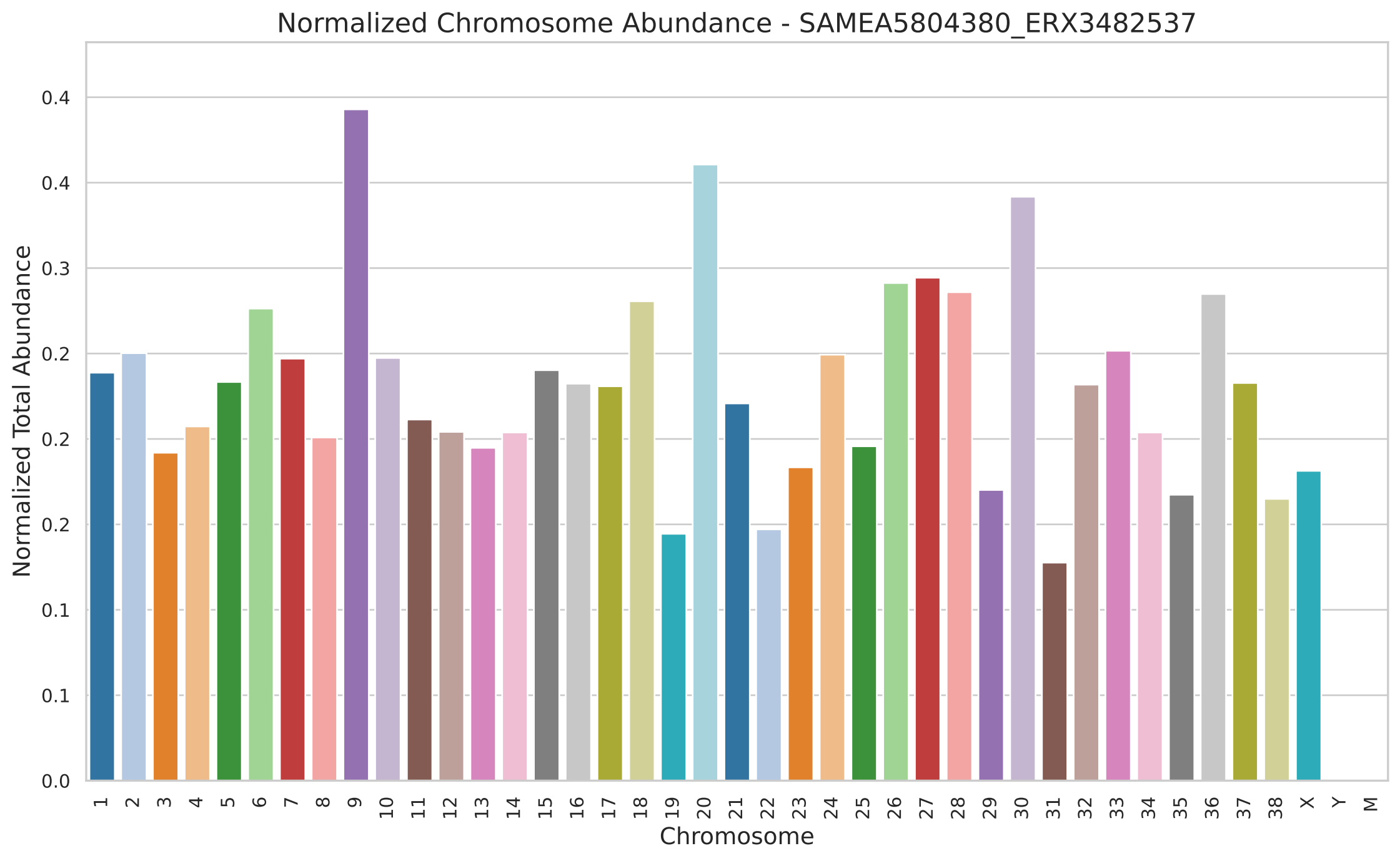

Normalized Chromosome Abundance - SAMEA5804574_ERX3482568
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

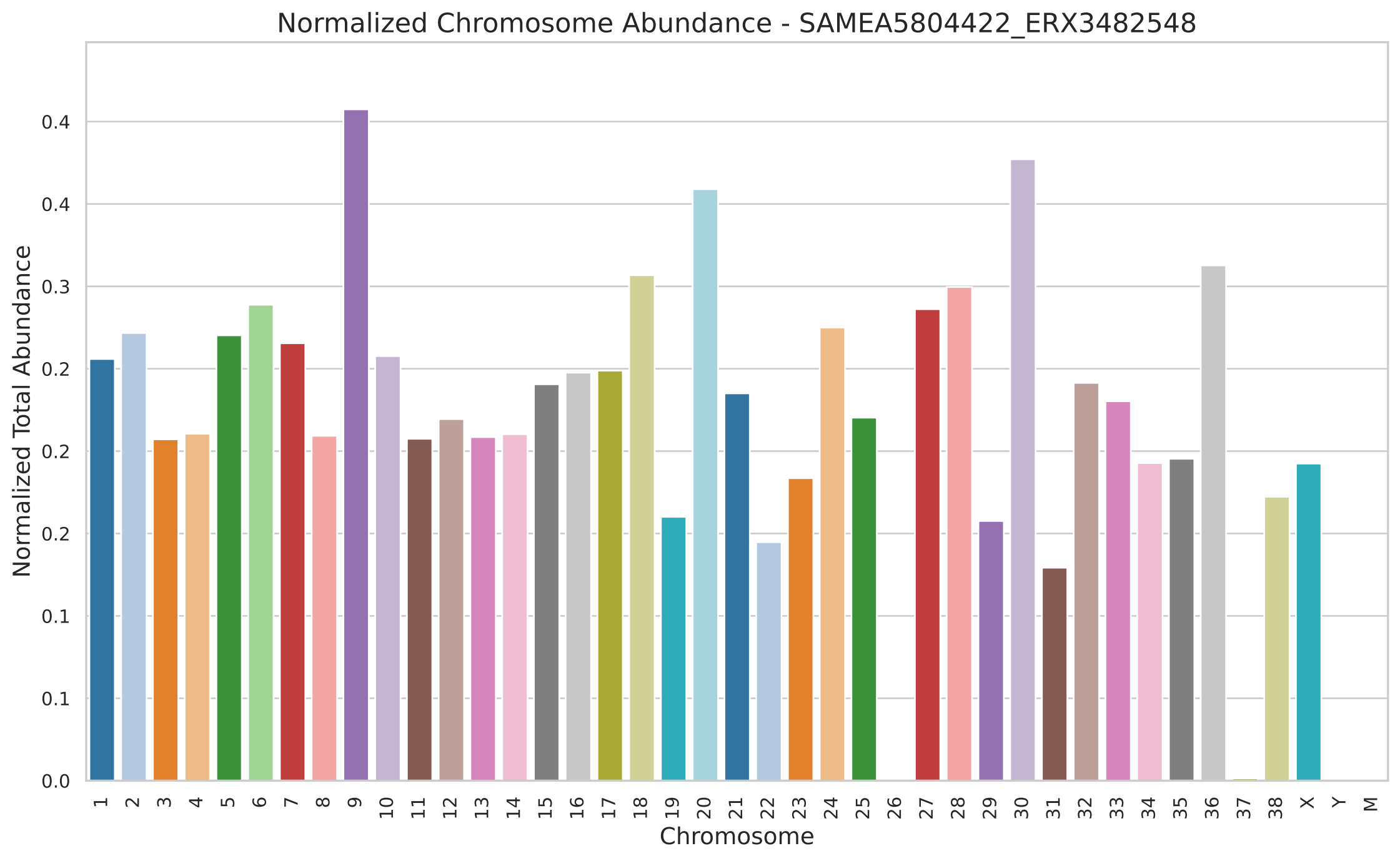

Normalized Chromosome Abundance - SAMEA5804360_ERX3482531
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

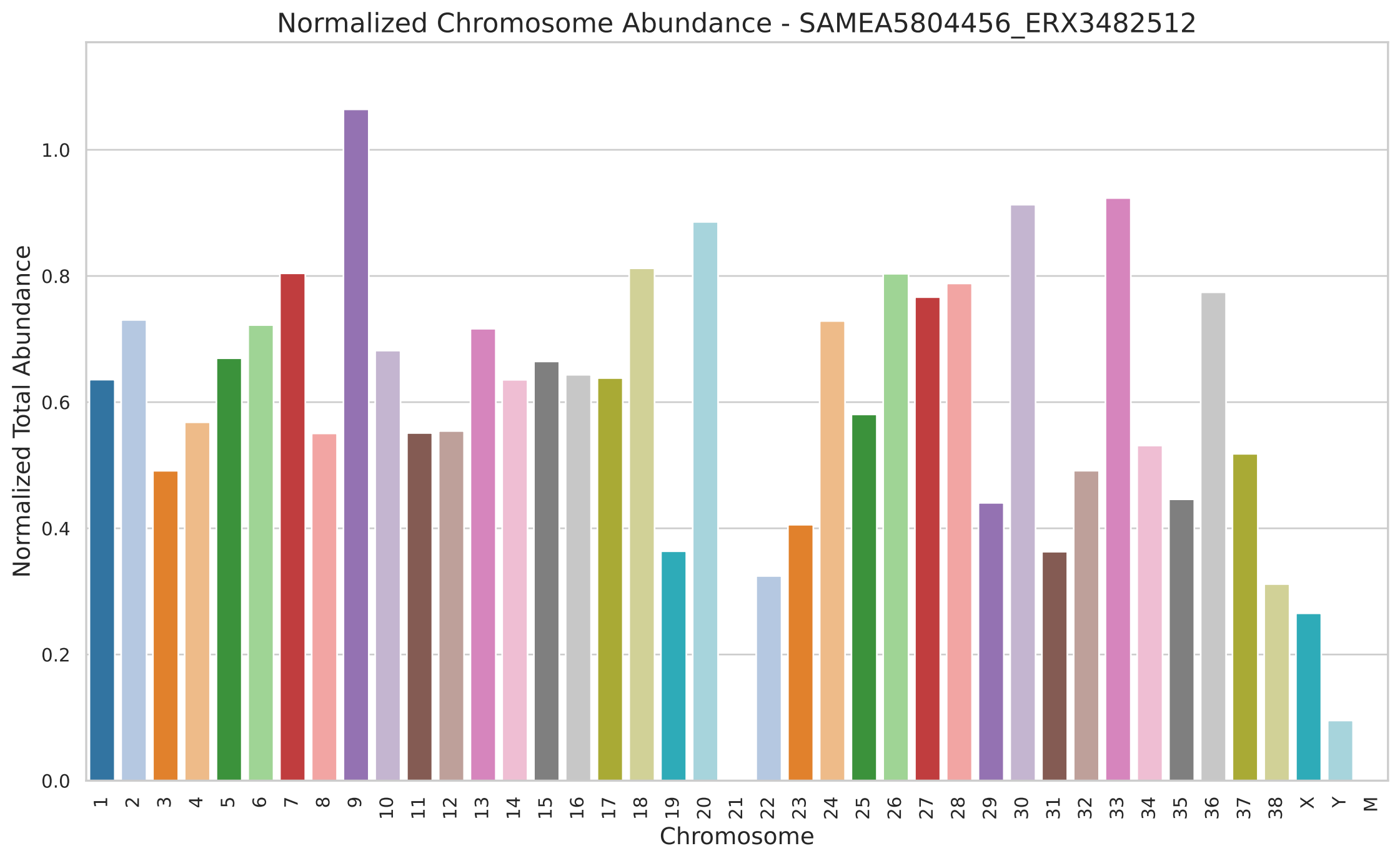

Normalized Chromosome Abundance - SAMEA5804365_ERX3482533
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

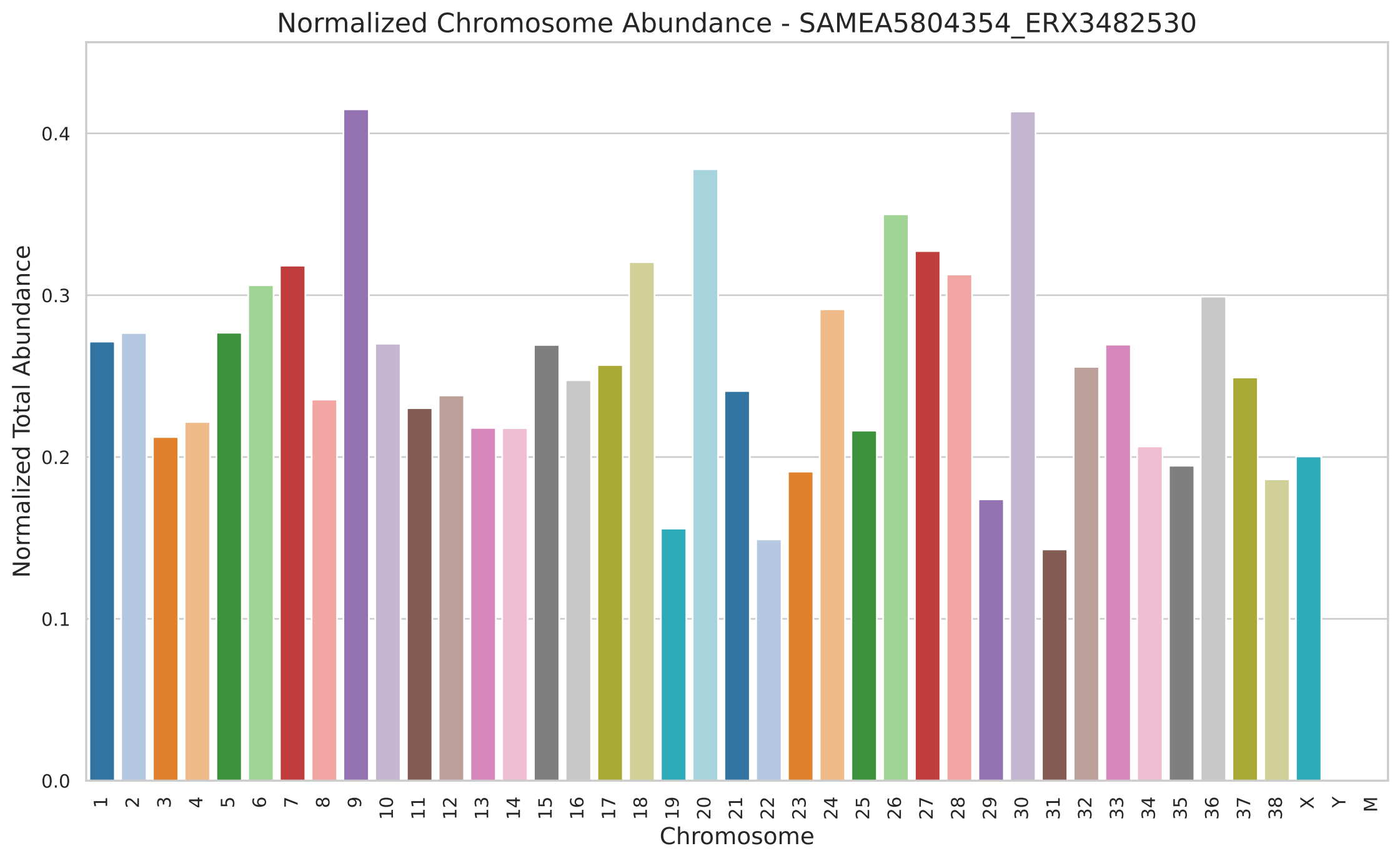

Normalized Chromosome Abundance - SAMEA5804579_ERX3482569
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

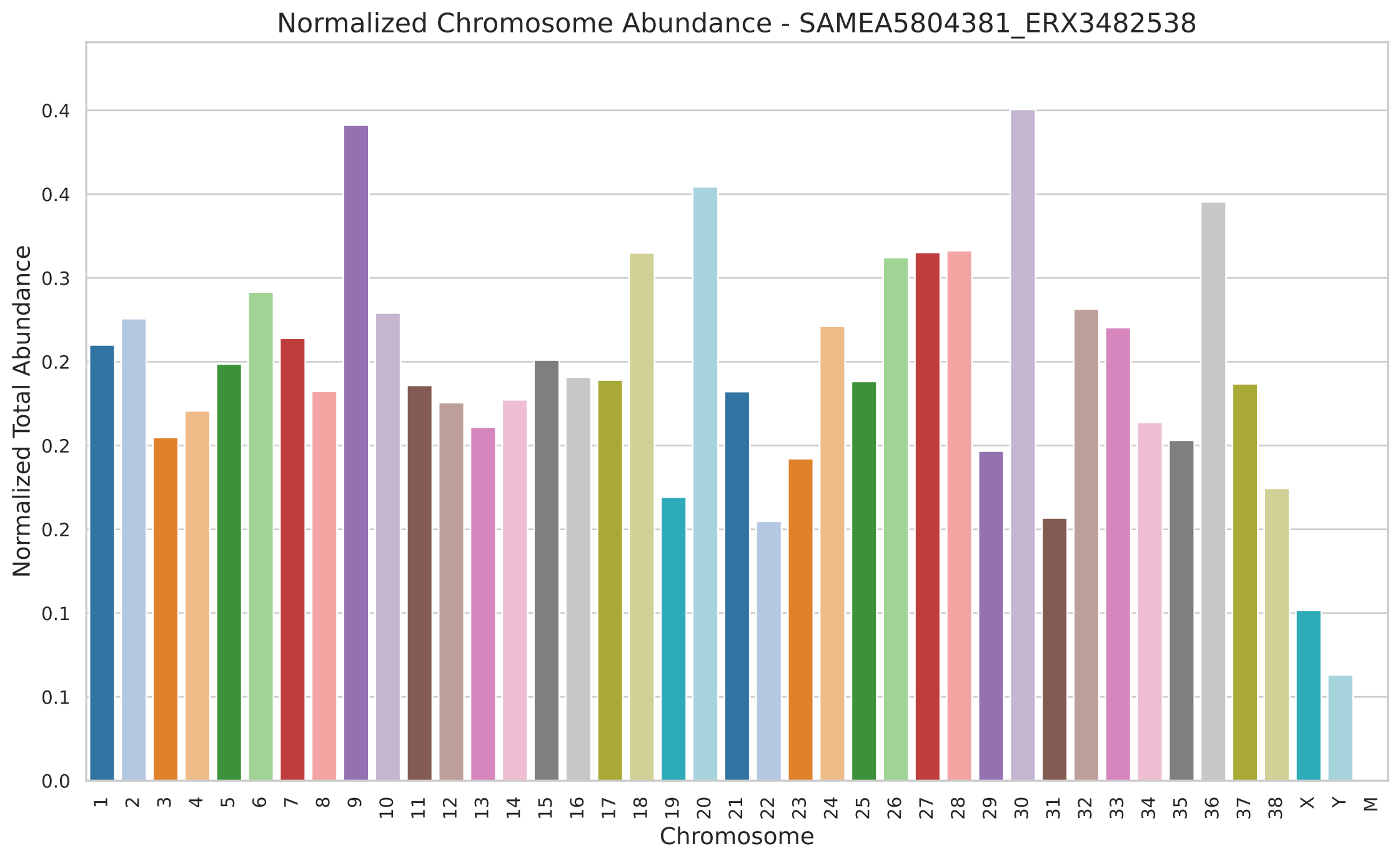

Normalized Chromosome Abundance - SAMEA5804611_ERX3482571
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

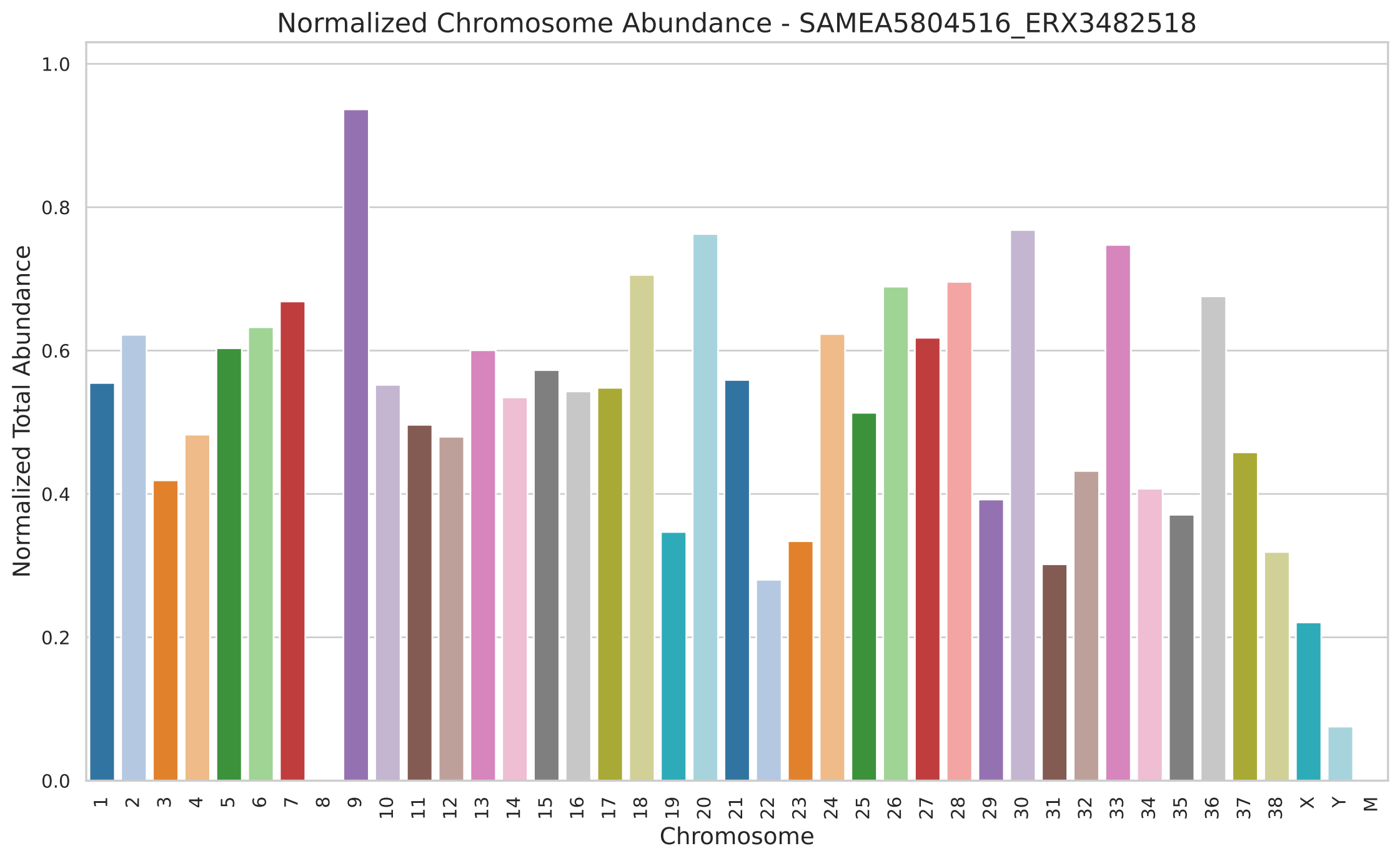

Normalized Chromosome Abundance - SAMEA5804380_ERX3482537
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

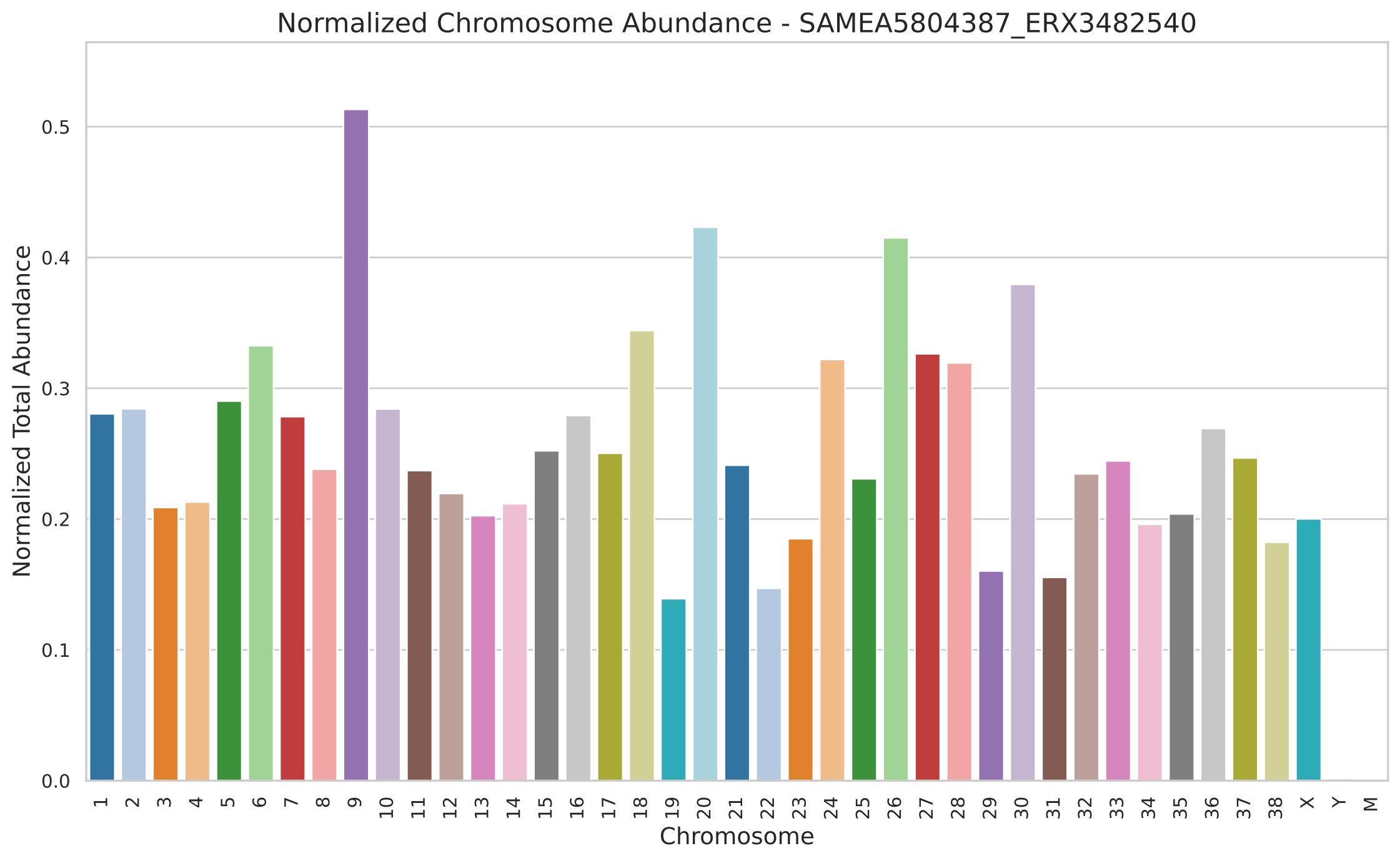

Normalized Chromosome Abundance - SAMEA5804422_ERX3482548
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

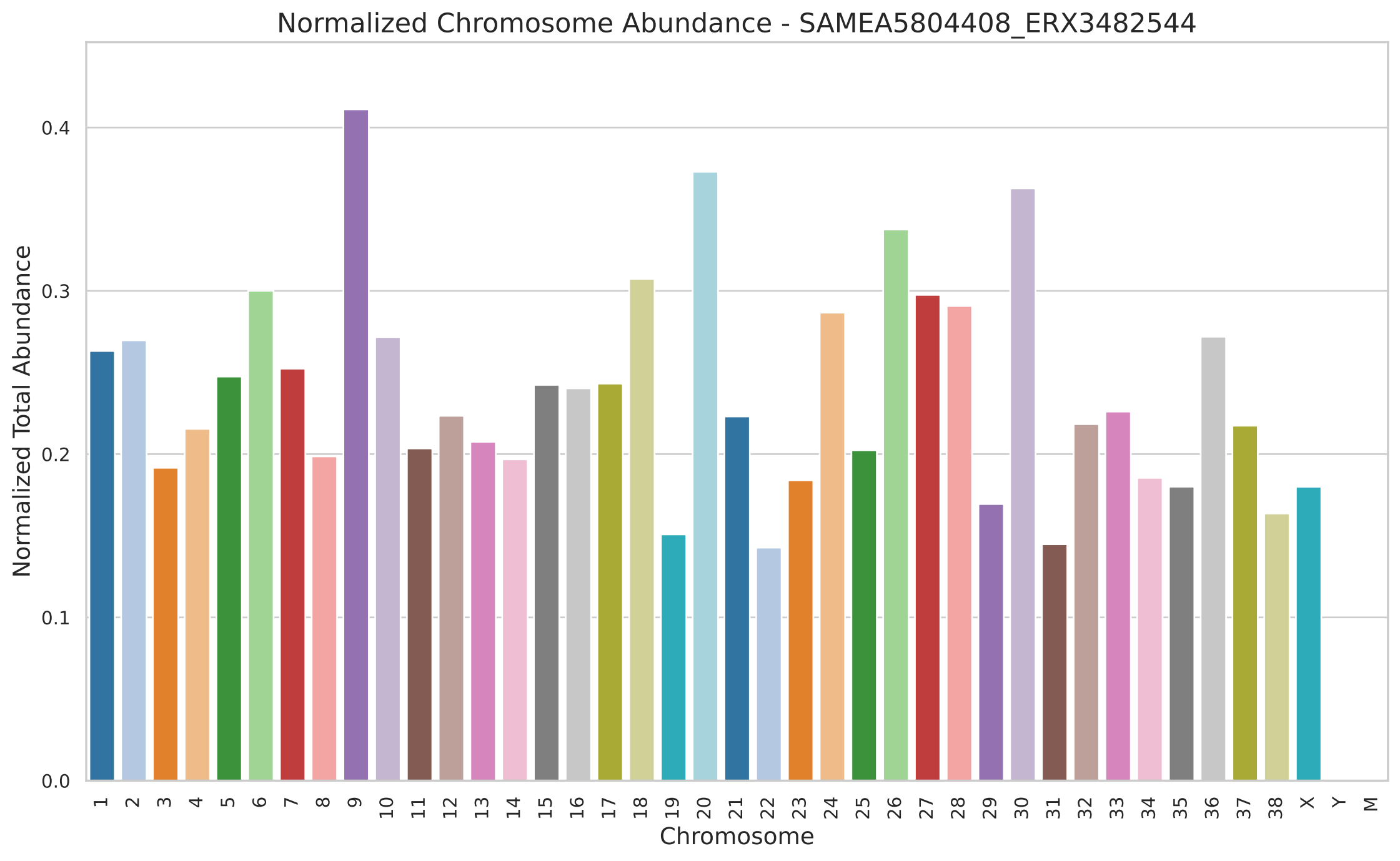

Normalized Chromosome Abundance - SAMEA5804456_ERX3482512
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

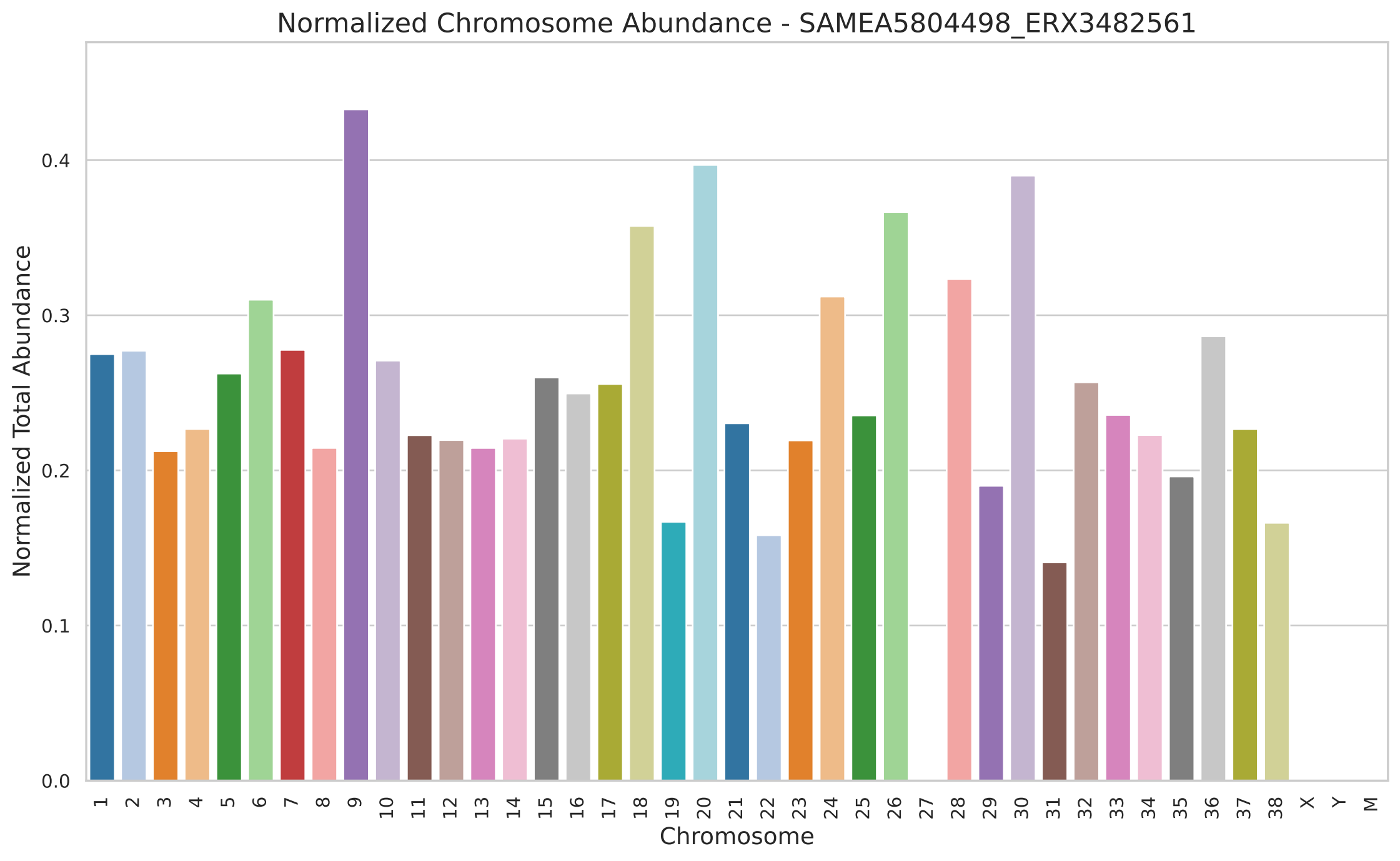

Normalized Chromosome Abundance - SAMEA5804354_ERX3482530
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

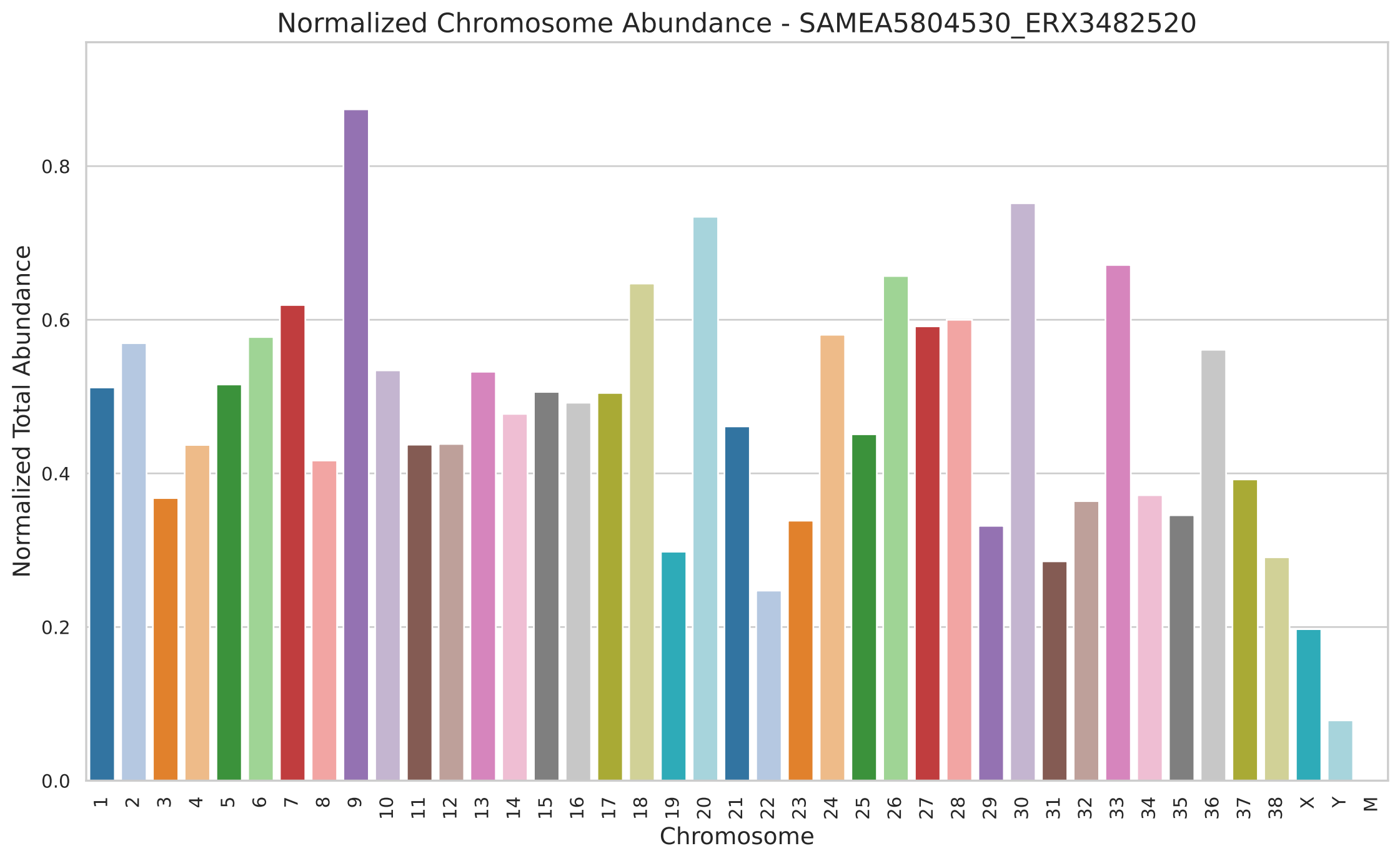

Normalized Chromosome Abundance - SAMEA5804381_ERX3482538
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

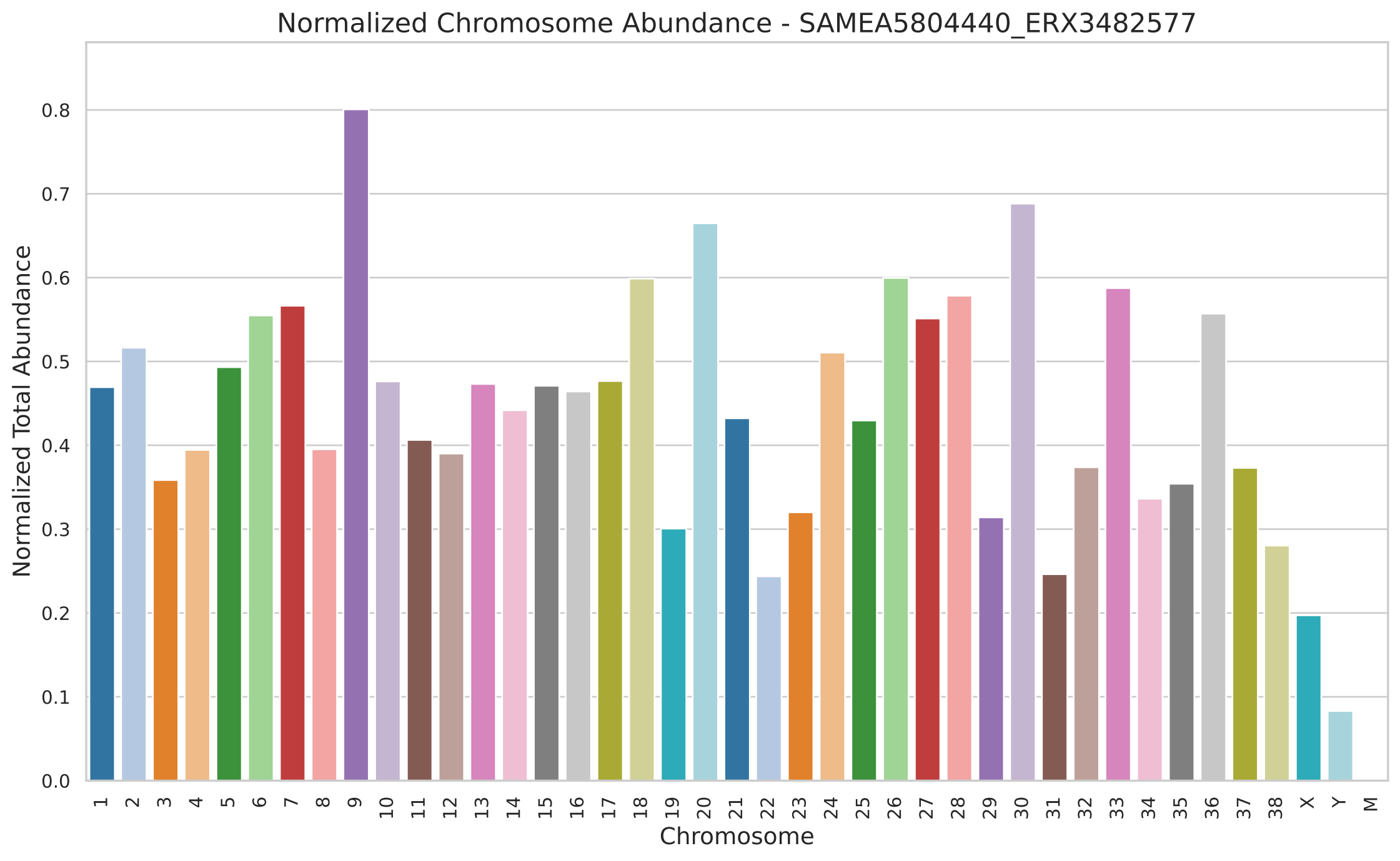

Normalized Chromosome Abundance - SAMEA5804516_ERX3482518
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

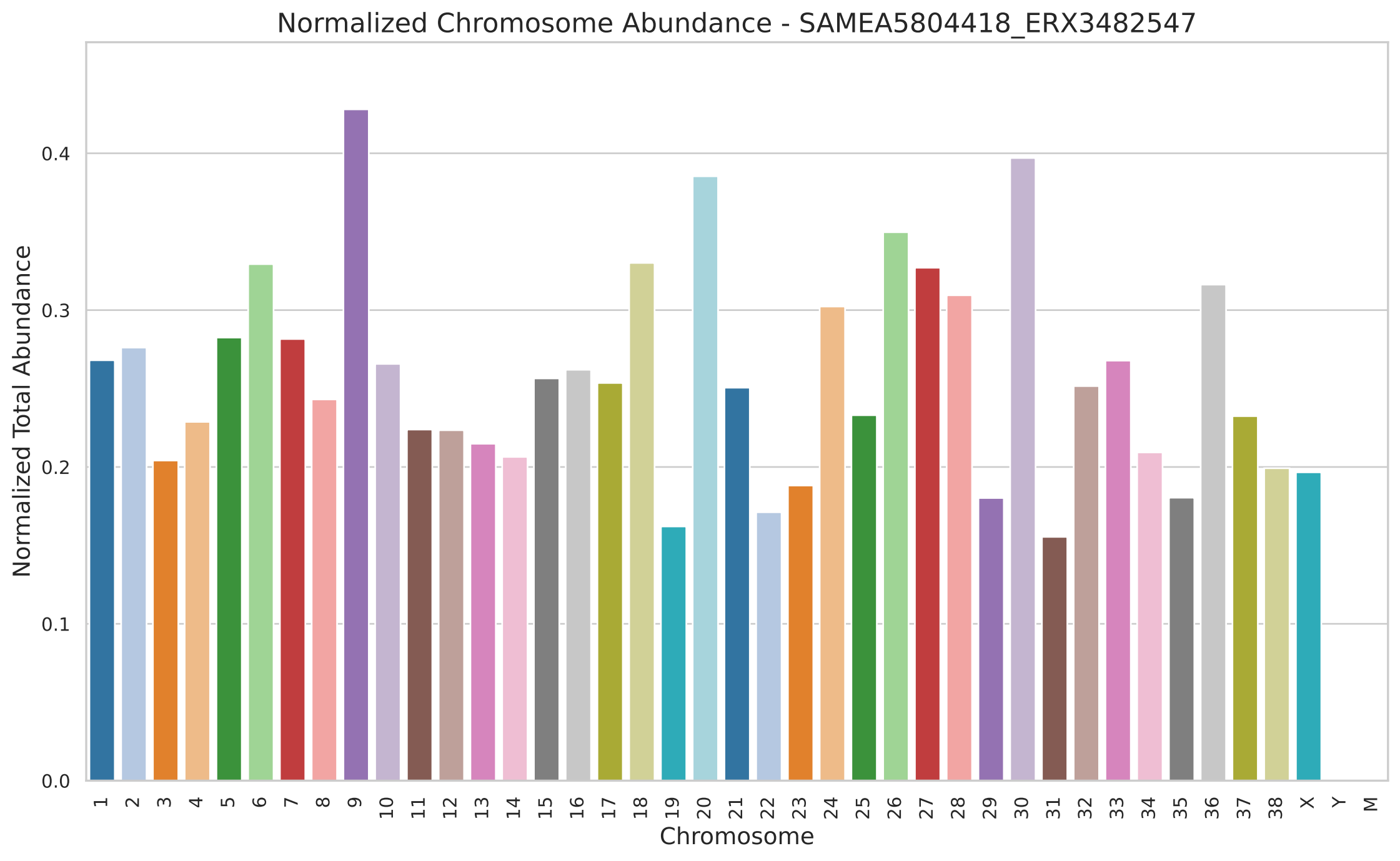

Normalized Chromosome Abundance - SAMEA5804387_ERX3482540
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

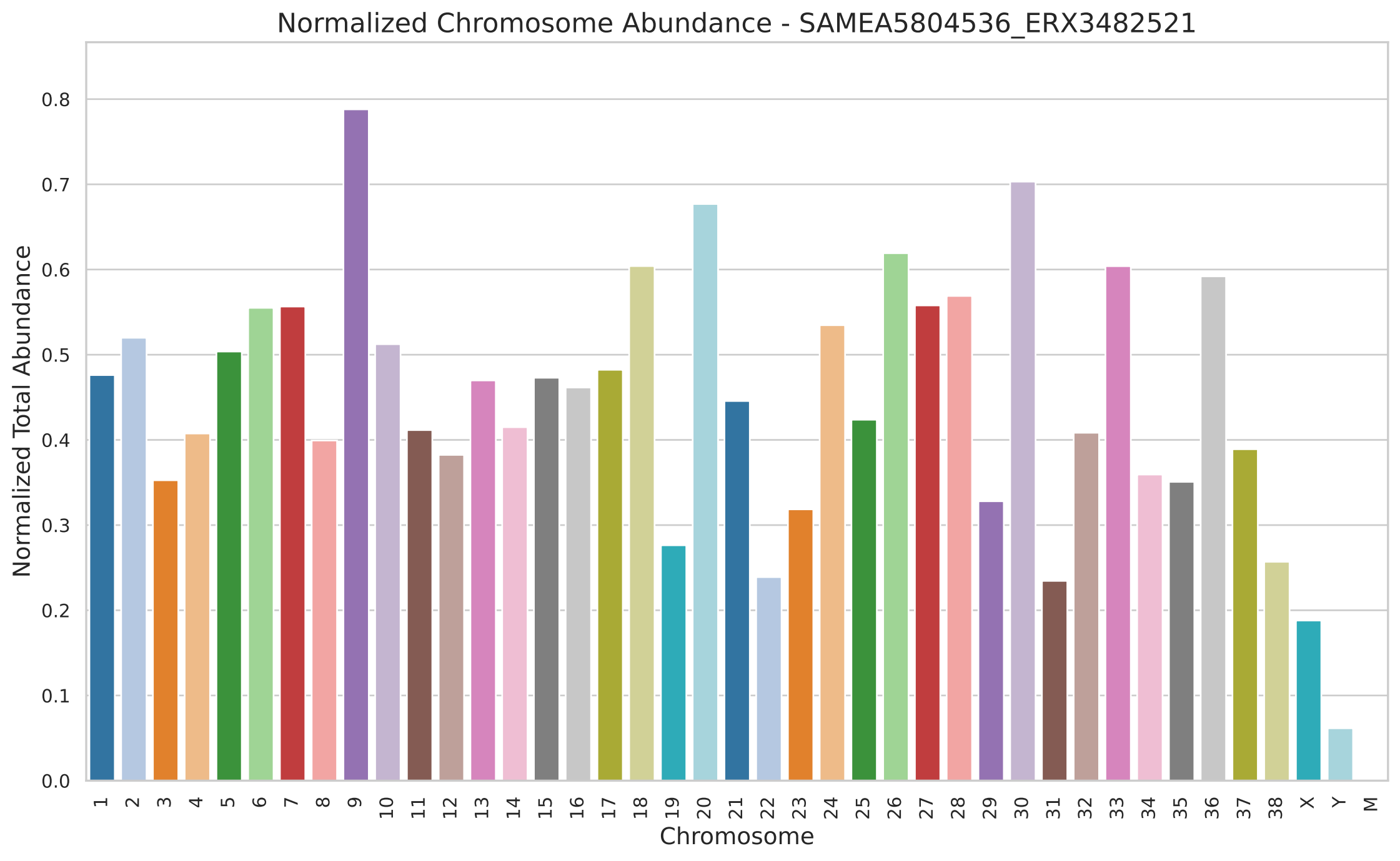

Normalized Chromosome Abundance - SAMEA5804408_ERX3482544
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

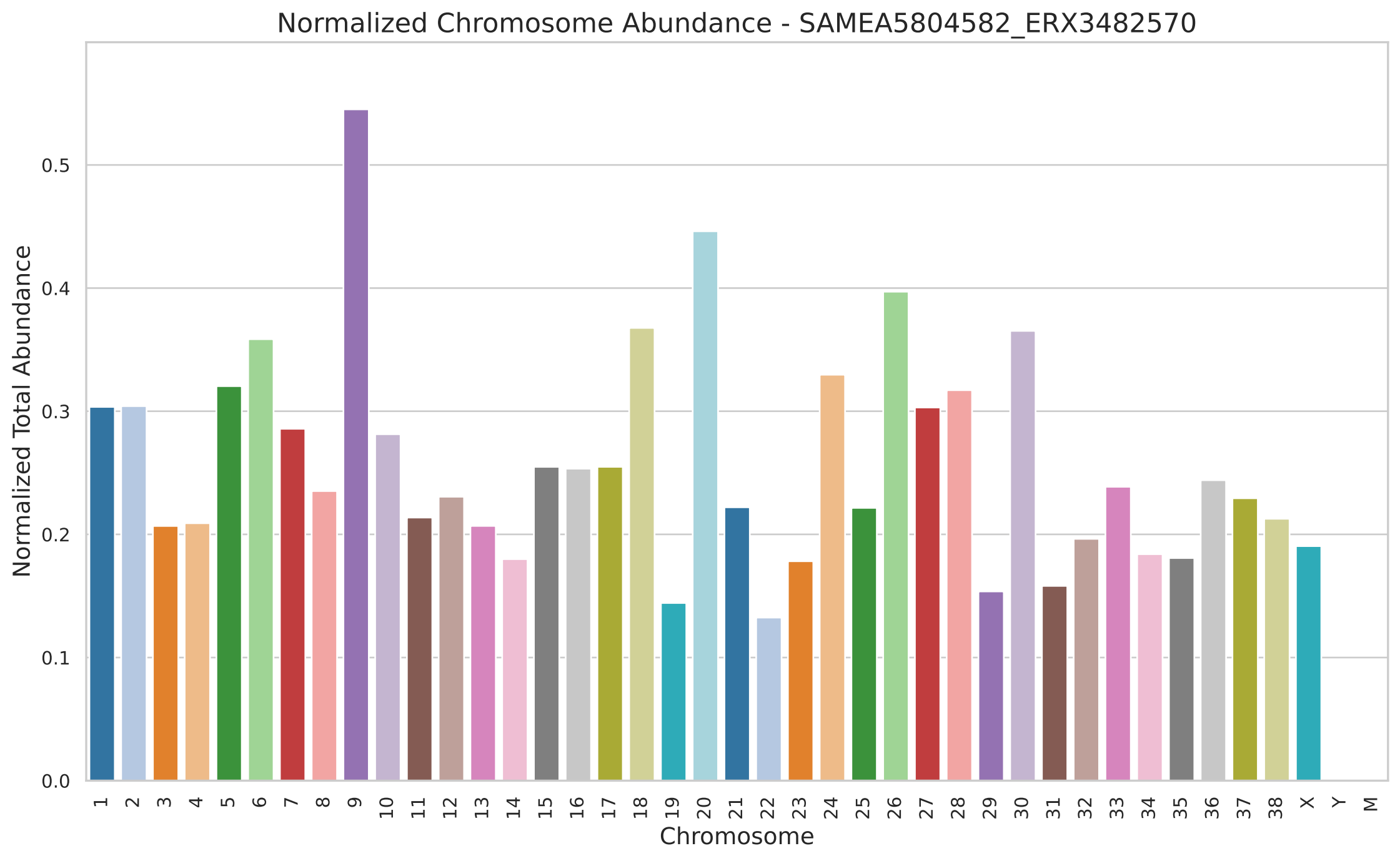

Normalized Chromosome Abundance - SAMEA5804498_ERX3482561
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

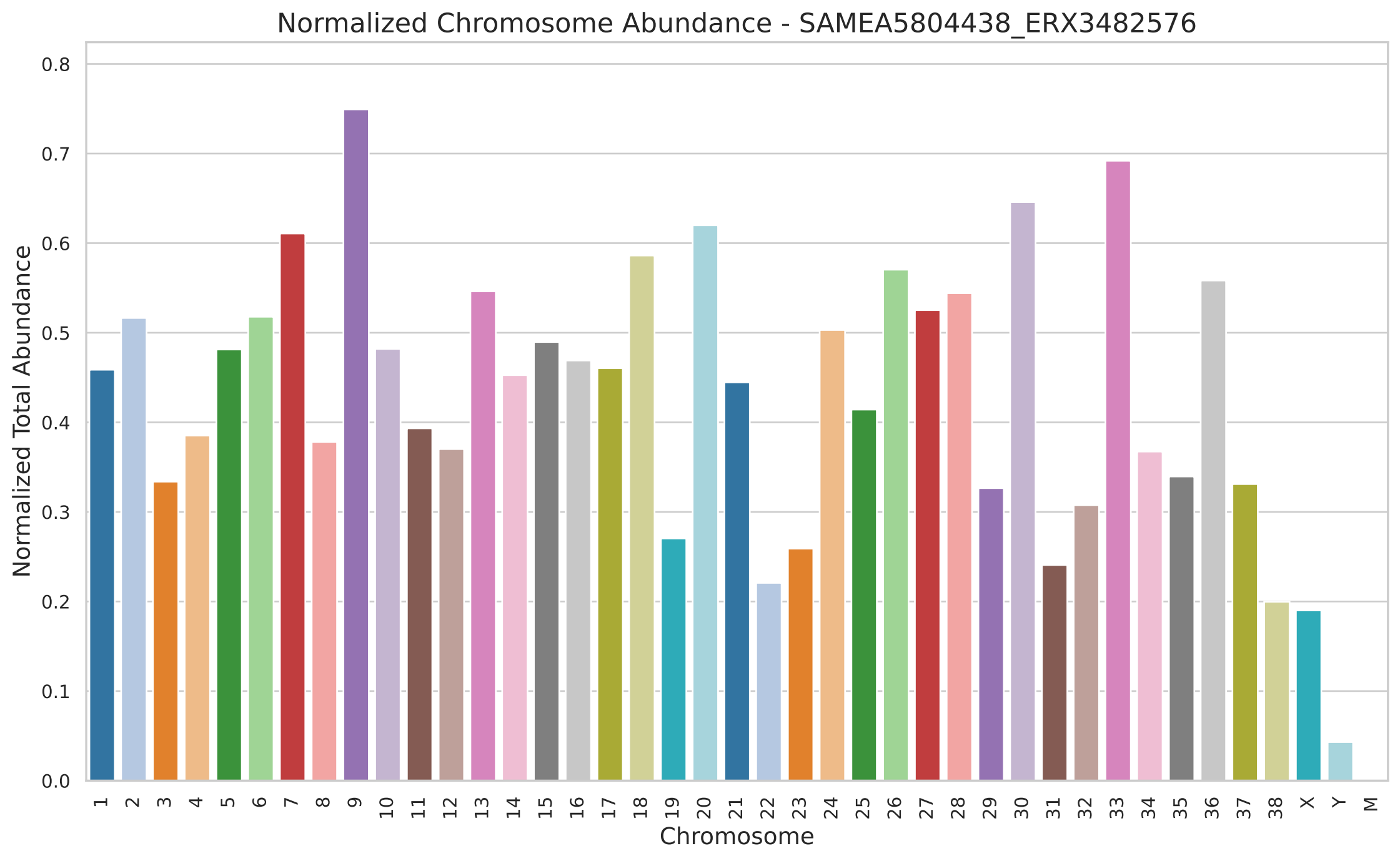

Normalized Chromosome Abundance - SAMEA5804530_ERX3482520
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

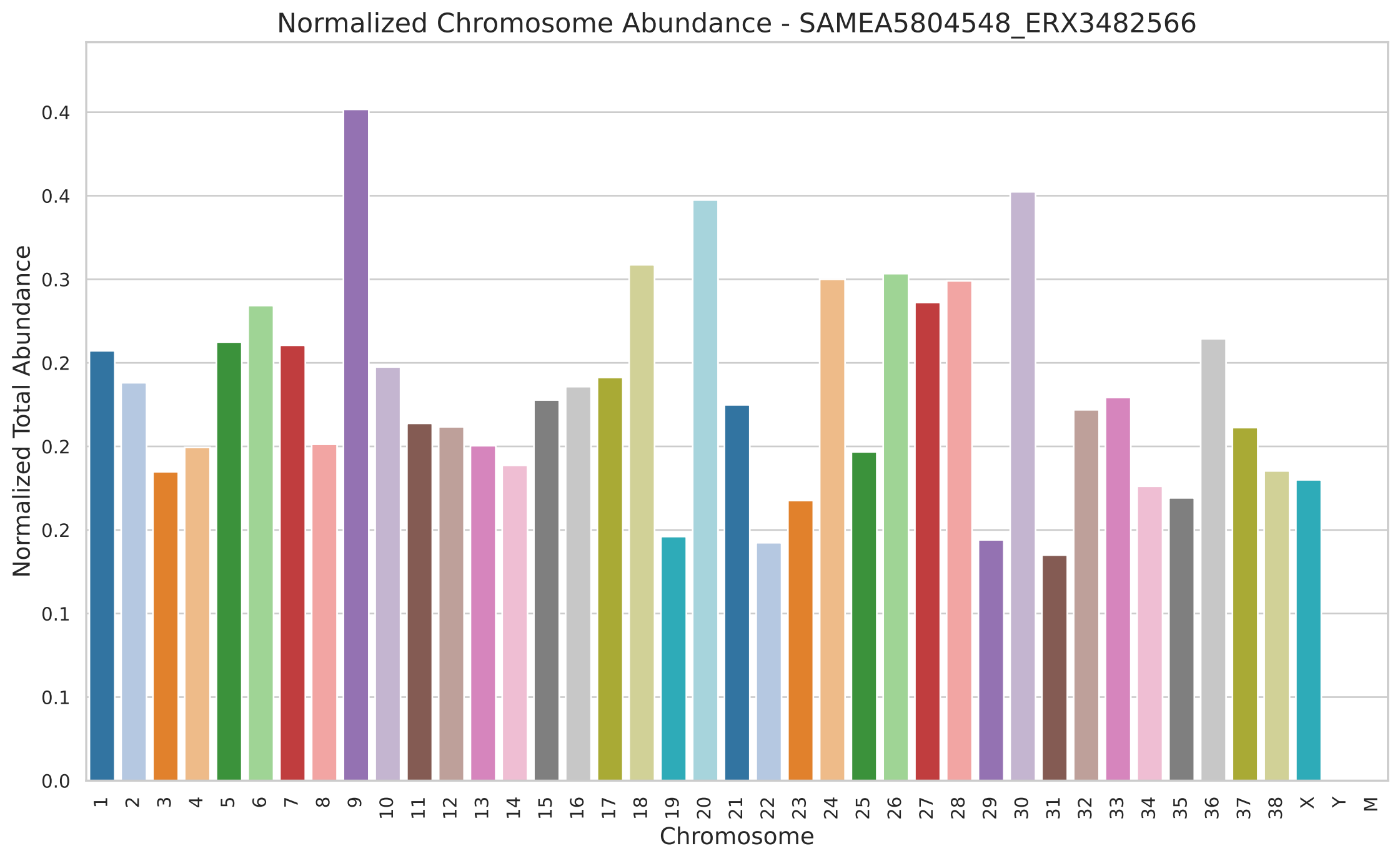

Normalized Chromosome Abundance - SAMEA5804440_ERX3482577
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

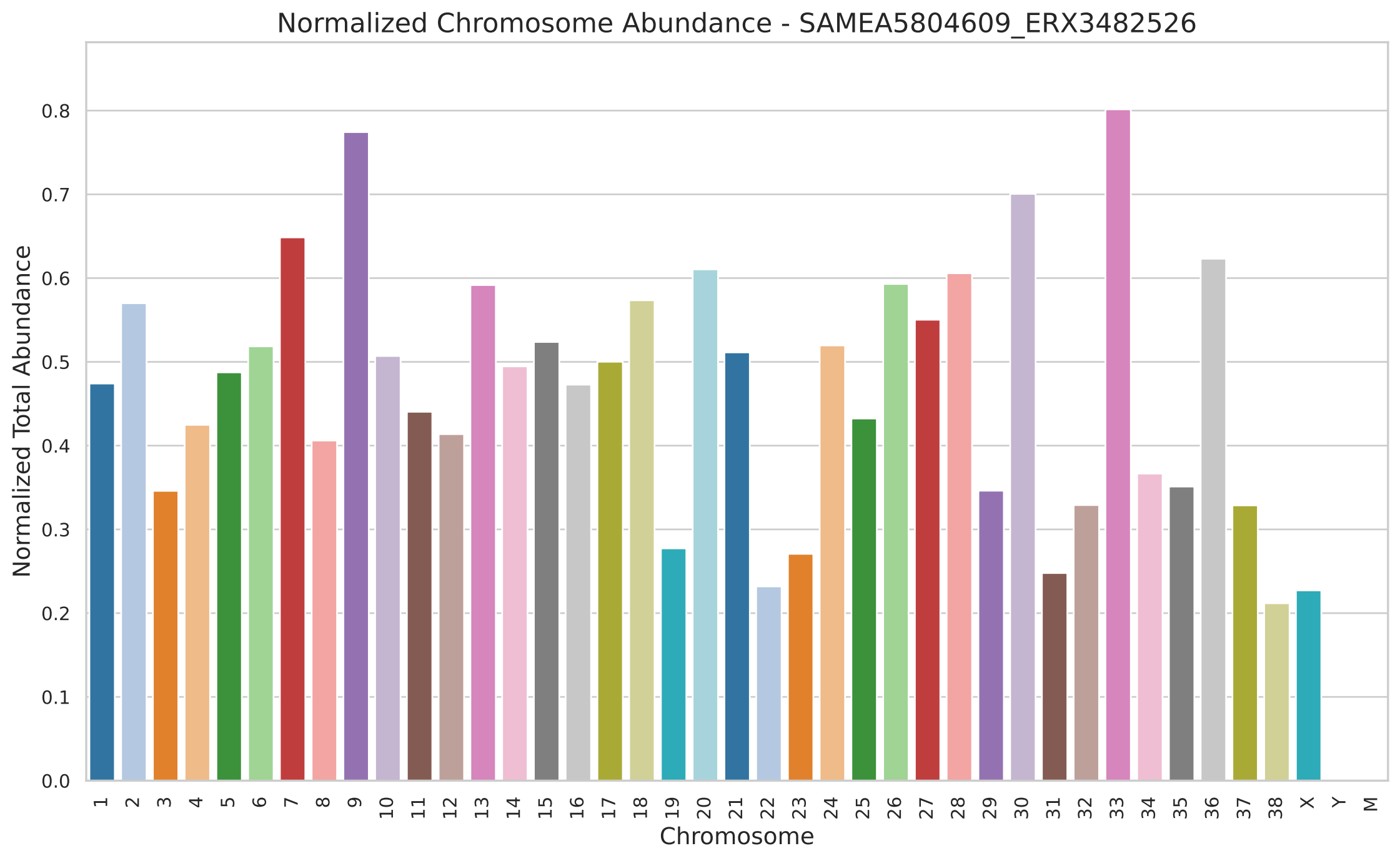

Normalized Chromosome Abundance - SAMEA5804418_ERX3482547
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

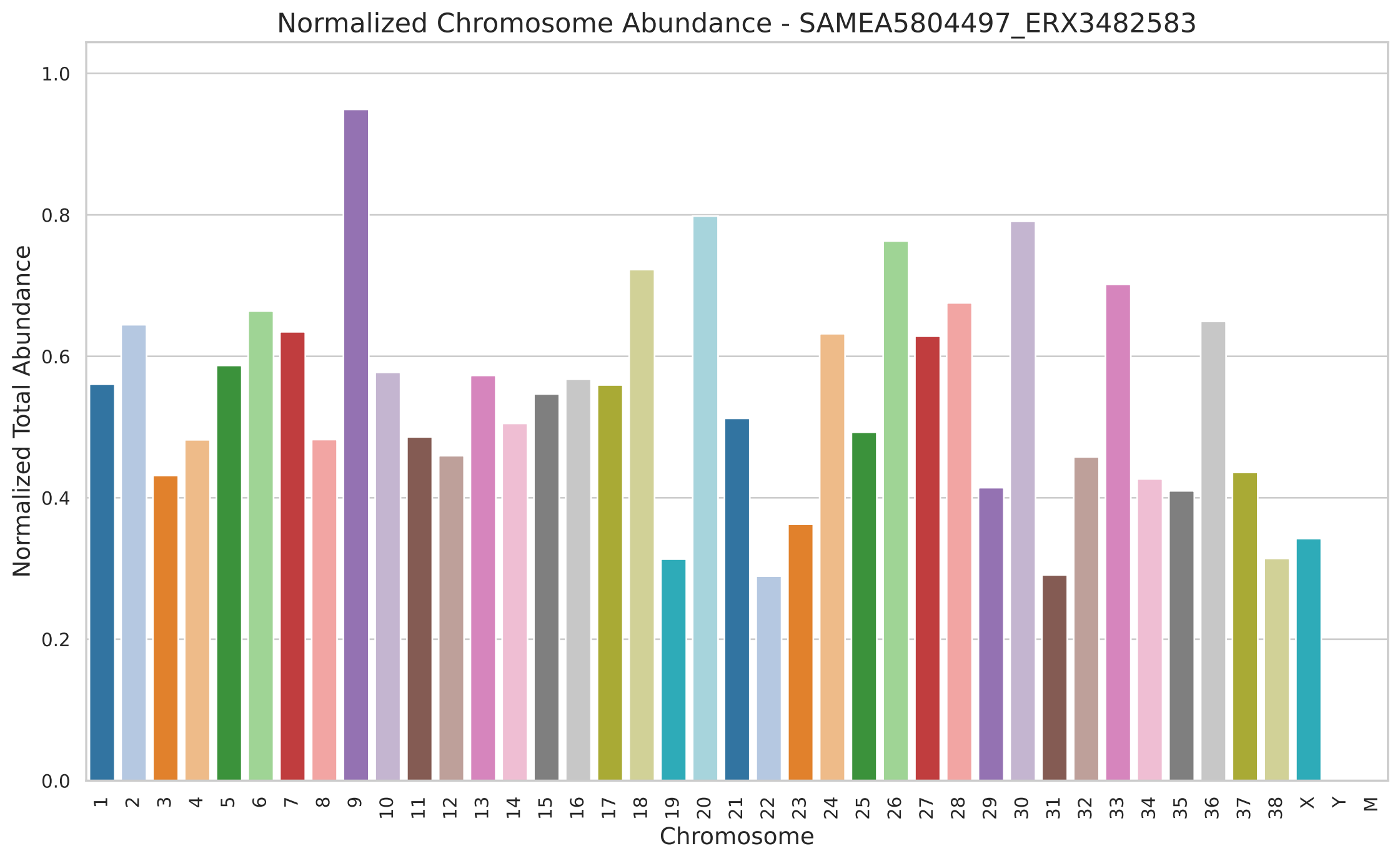

Normalized Chromosome Abundance - SAMEA5804536_ERX3482521
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

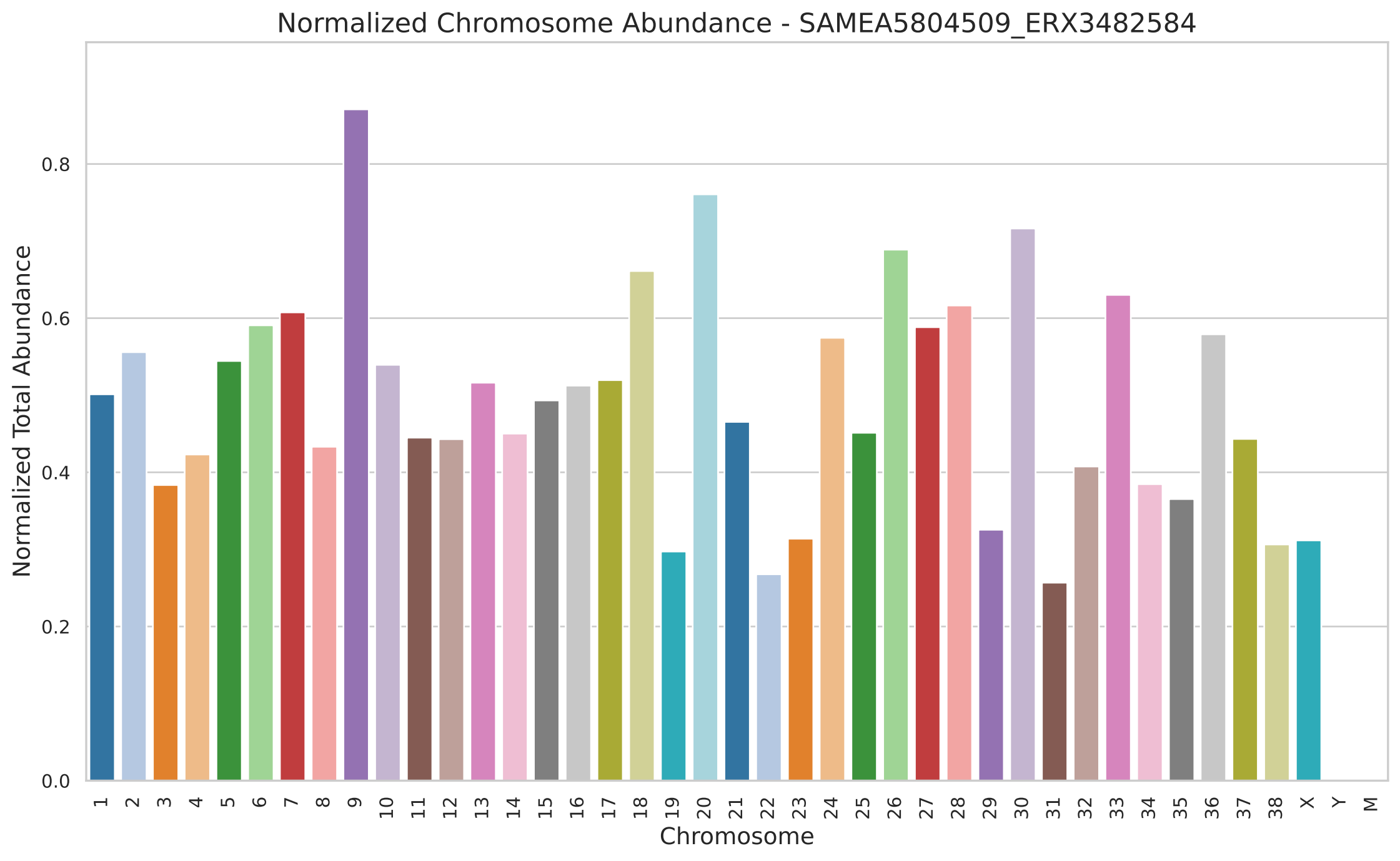

Normalized Chromosome Abundance - SAMEA5804582_ERX3482570
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

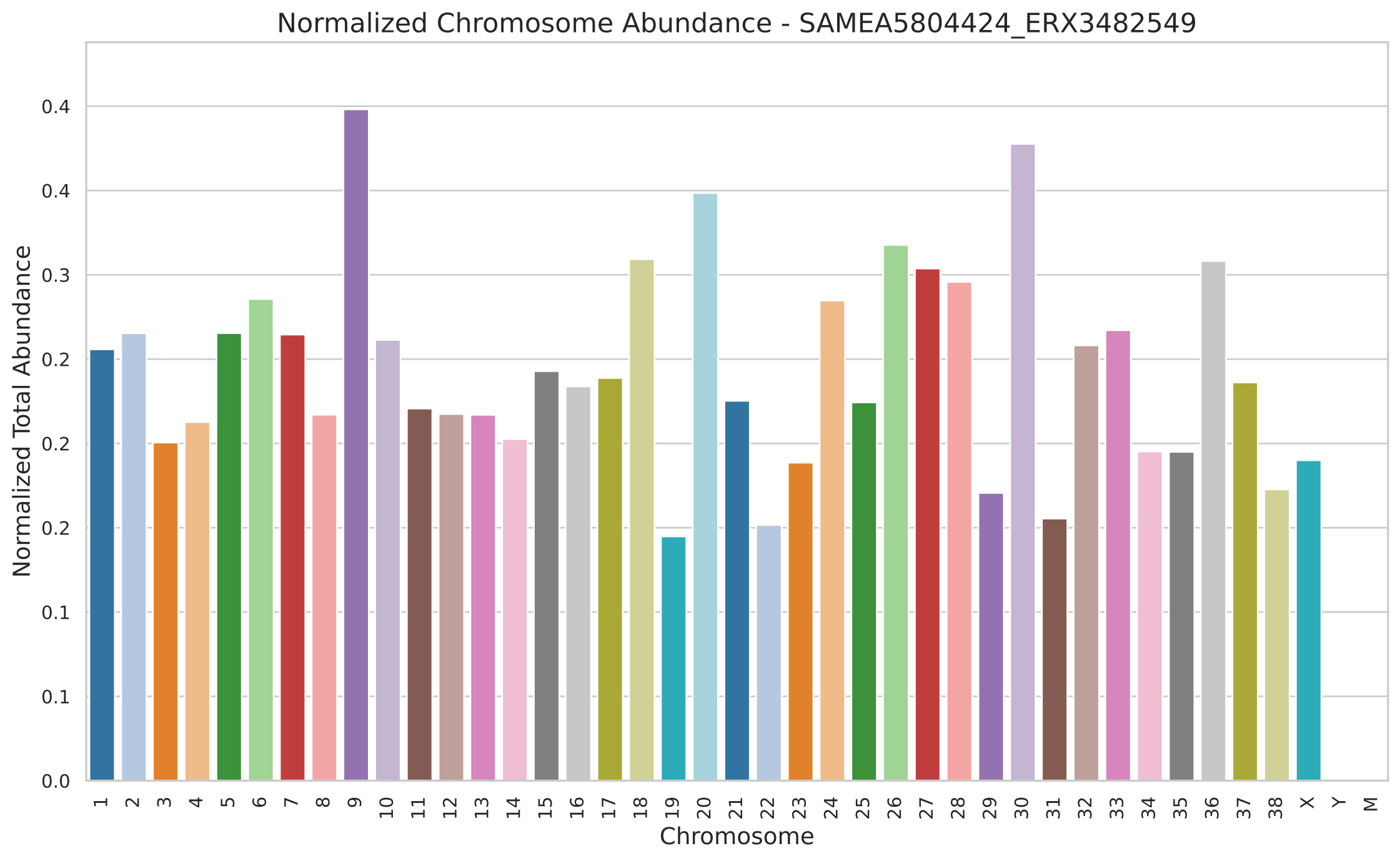

Normalized Chromosome Abundance - SAMEA5804438_ERX3482576
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

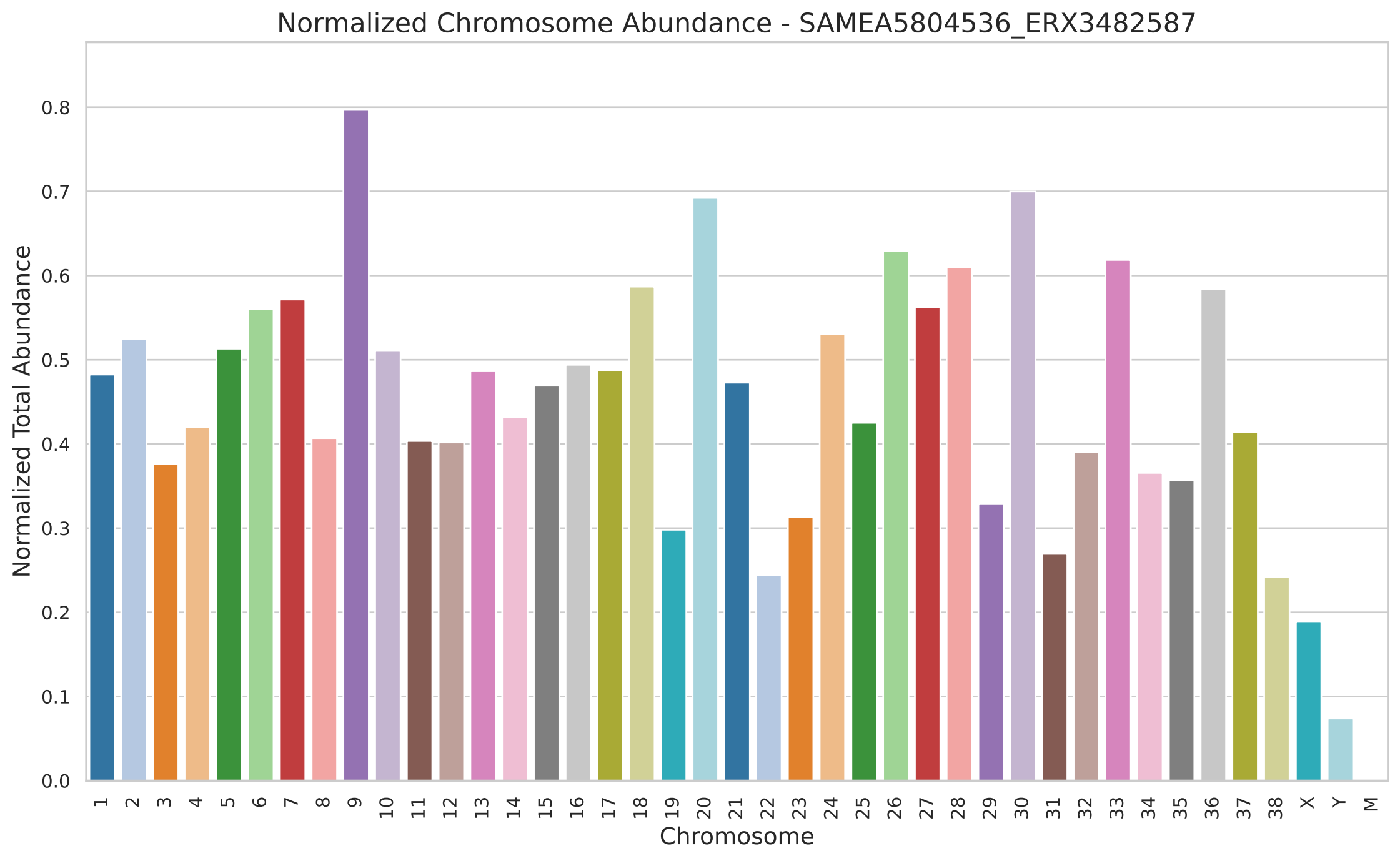

Normalized Chromosome Abundance - SAMEA5804548_ERX3482566
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

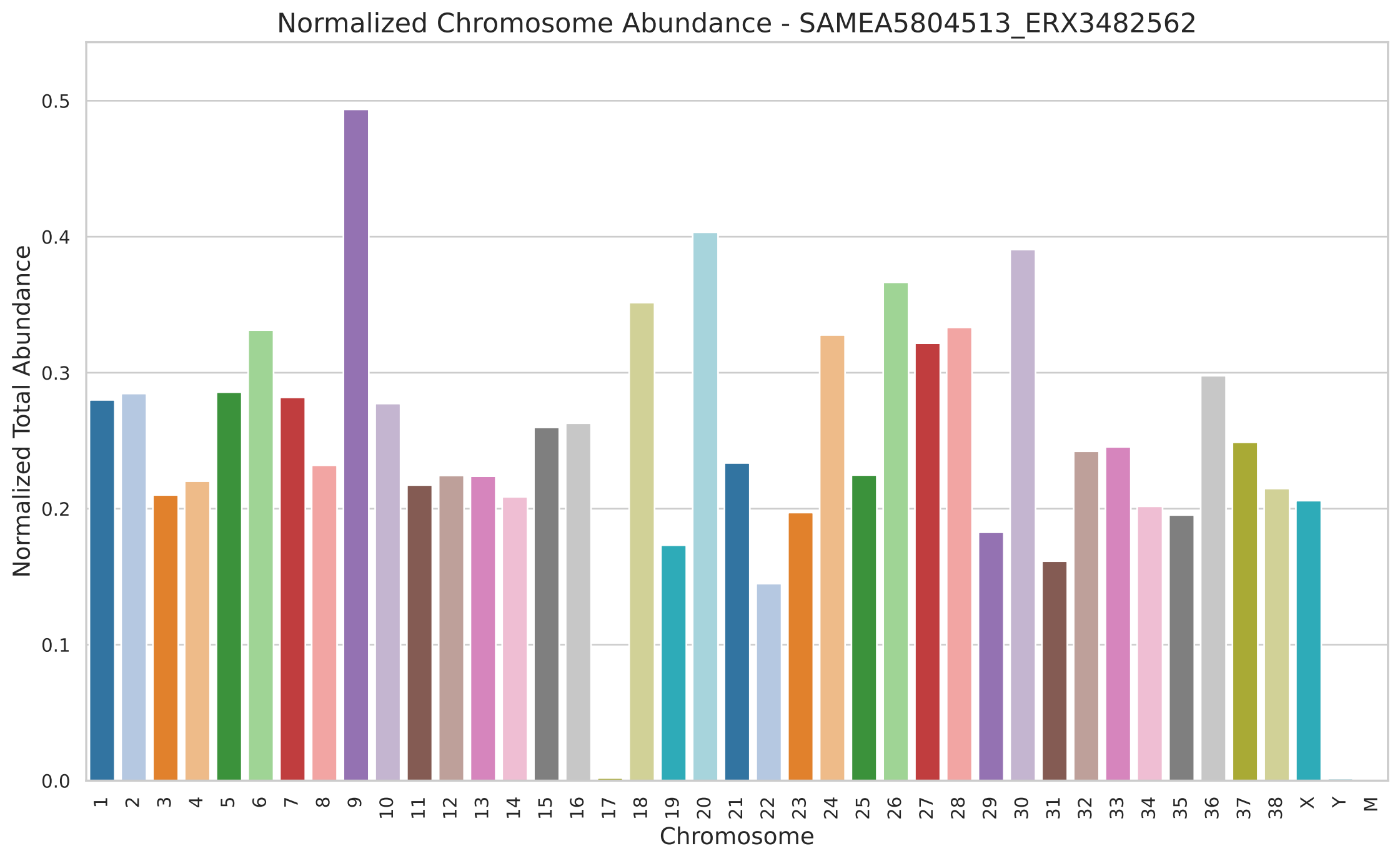

Normalized Chromosome Abundance - SAMEA5804609_ERX3482526
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

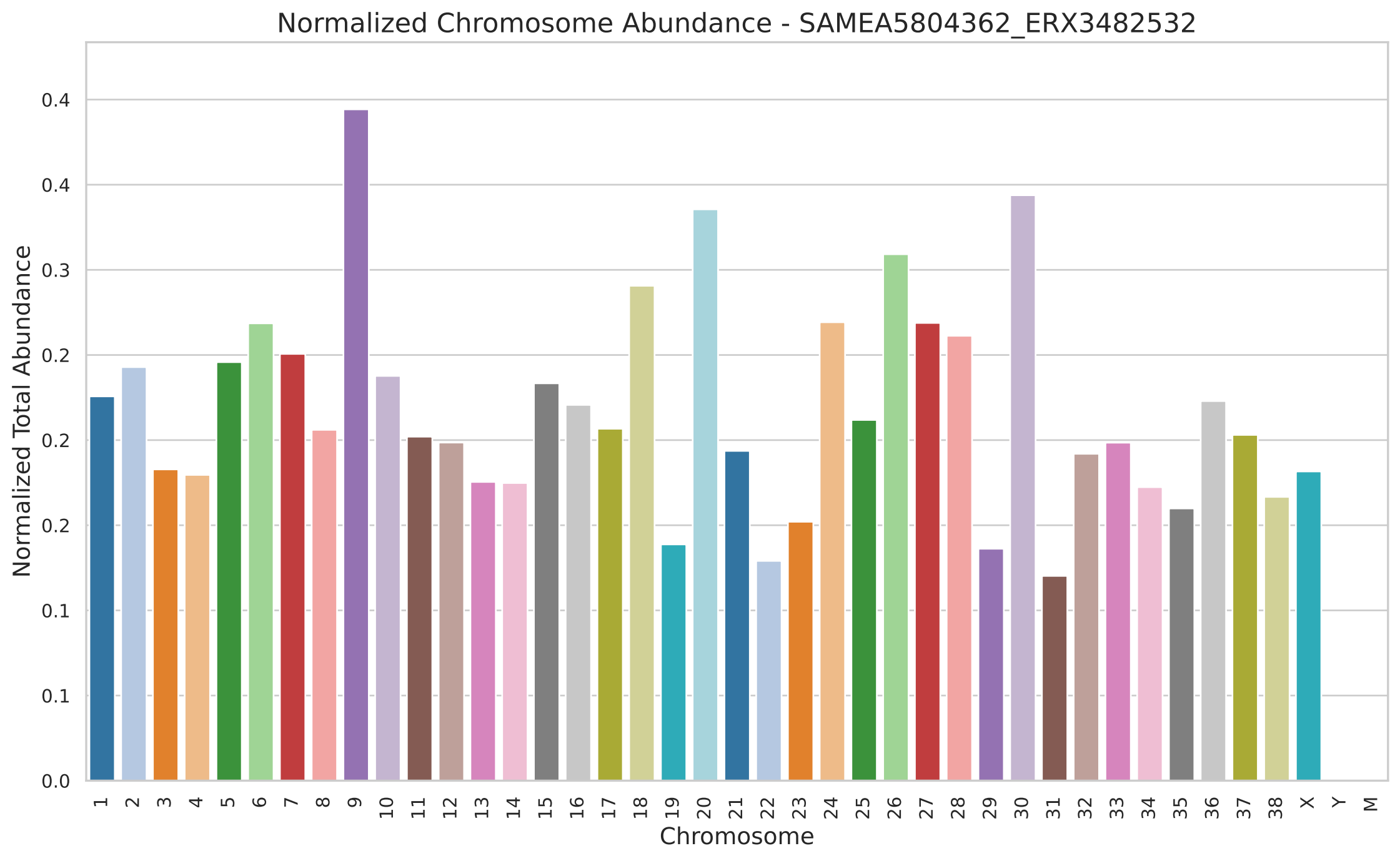

Normalized Chromosome Abundance - SAMEA5804497_ERX3482583
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

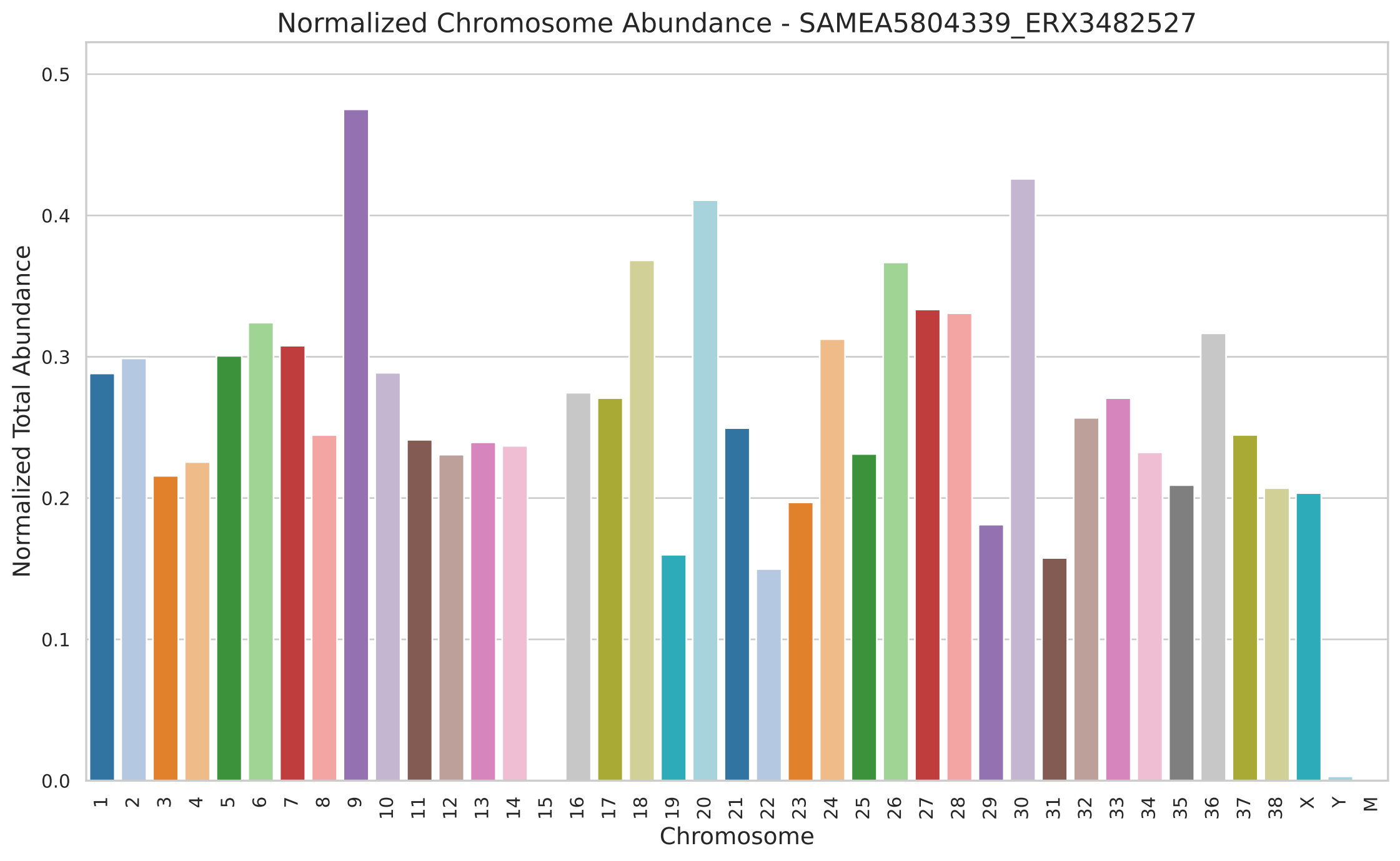

Normalized Chromosome Abundance - SAMEA5804509_ERX3482584
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

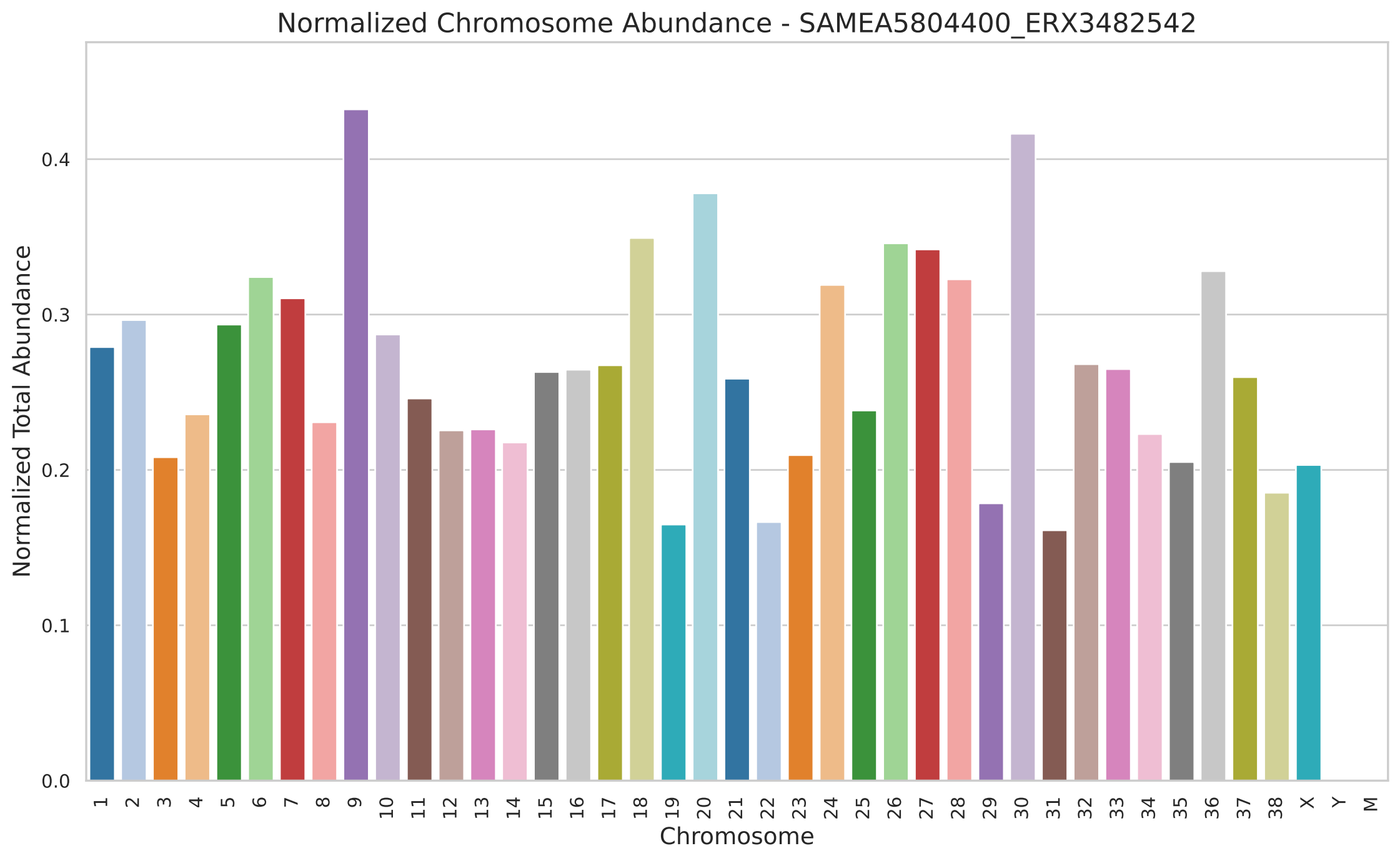

Normalized Chromosome Abundance - SAMEA5804424_ERX3482549
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

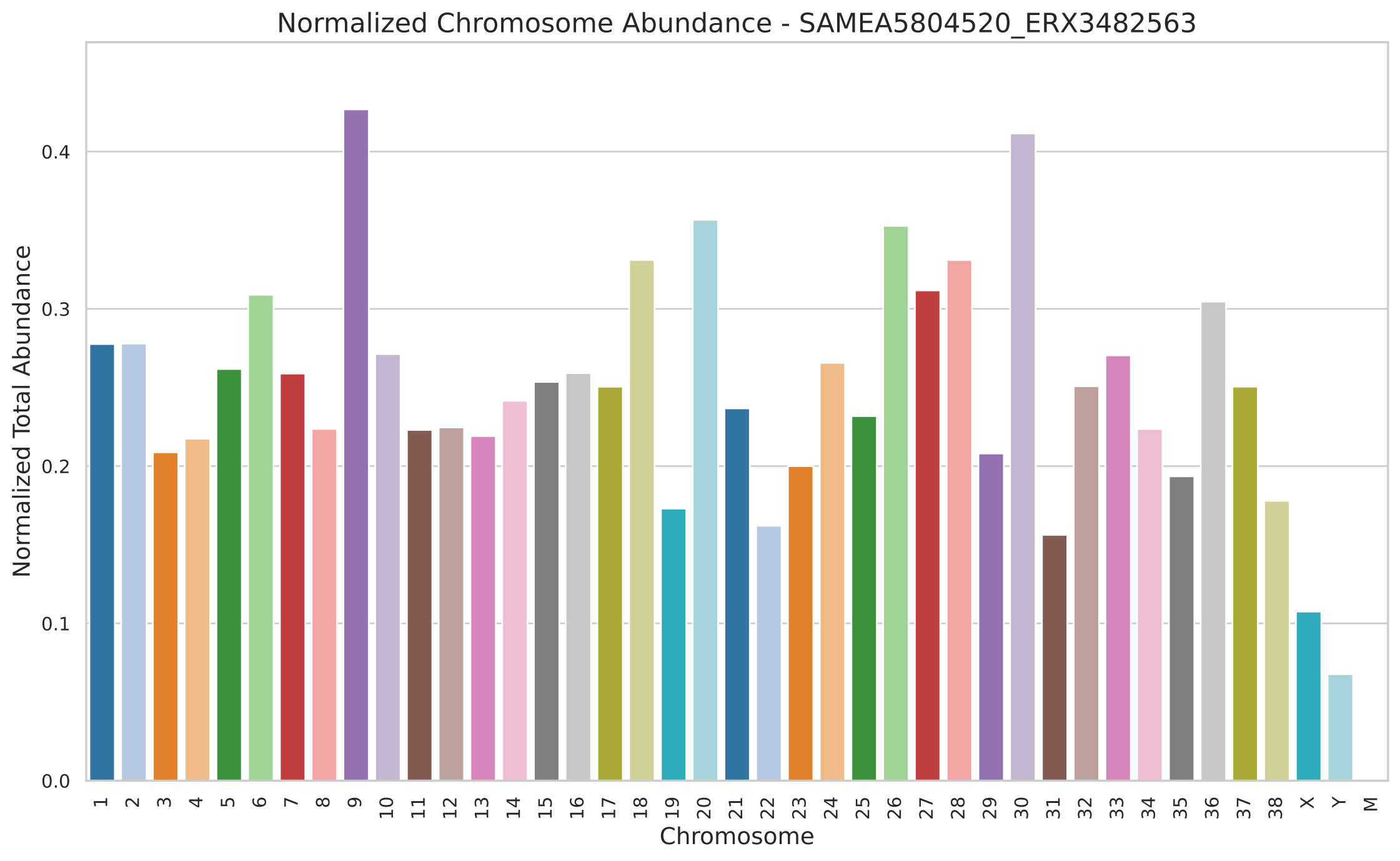

Normalized Chromosome Abundance - SAMEA5804536_ERX3482587
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

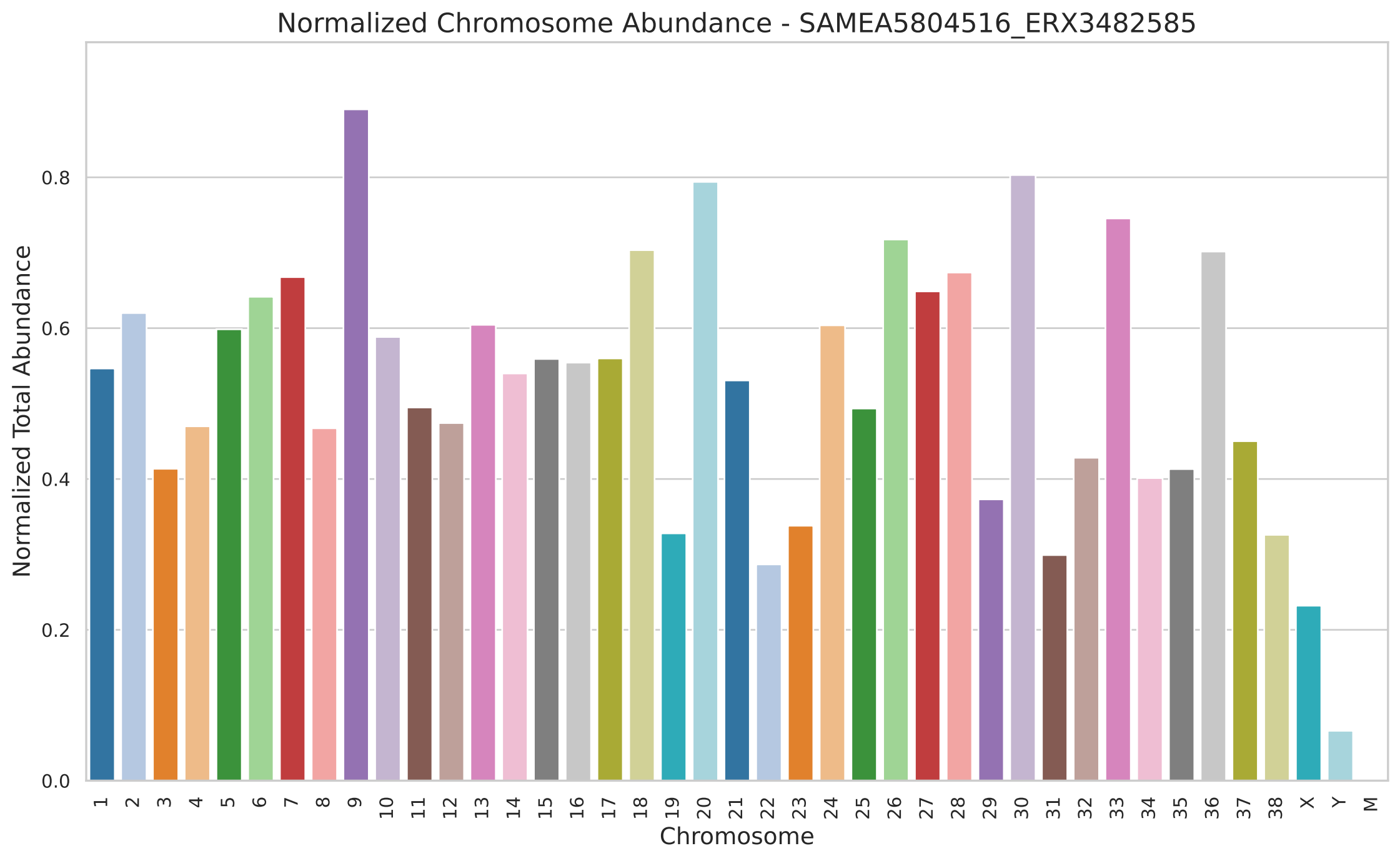

Normalized Chromosome Abundance - SAMEA5804513_ERX3482562
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

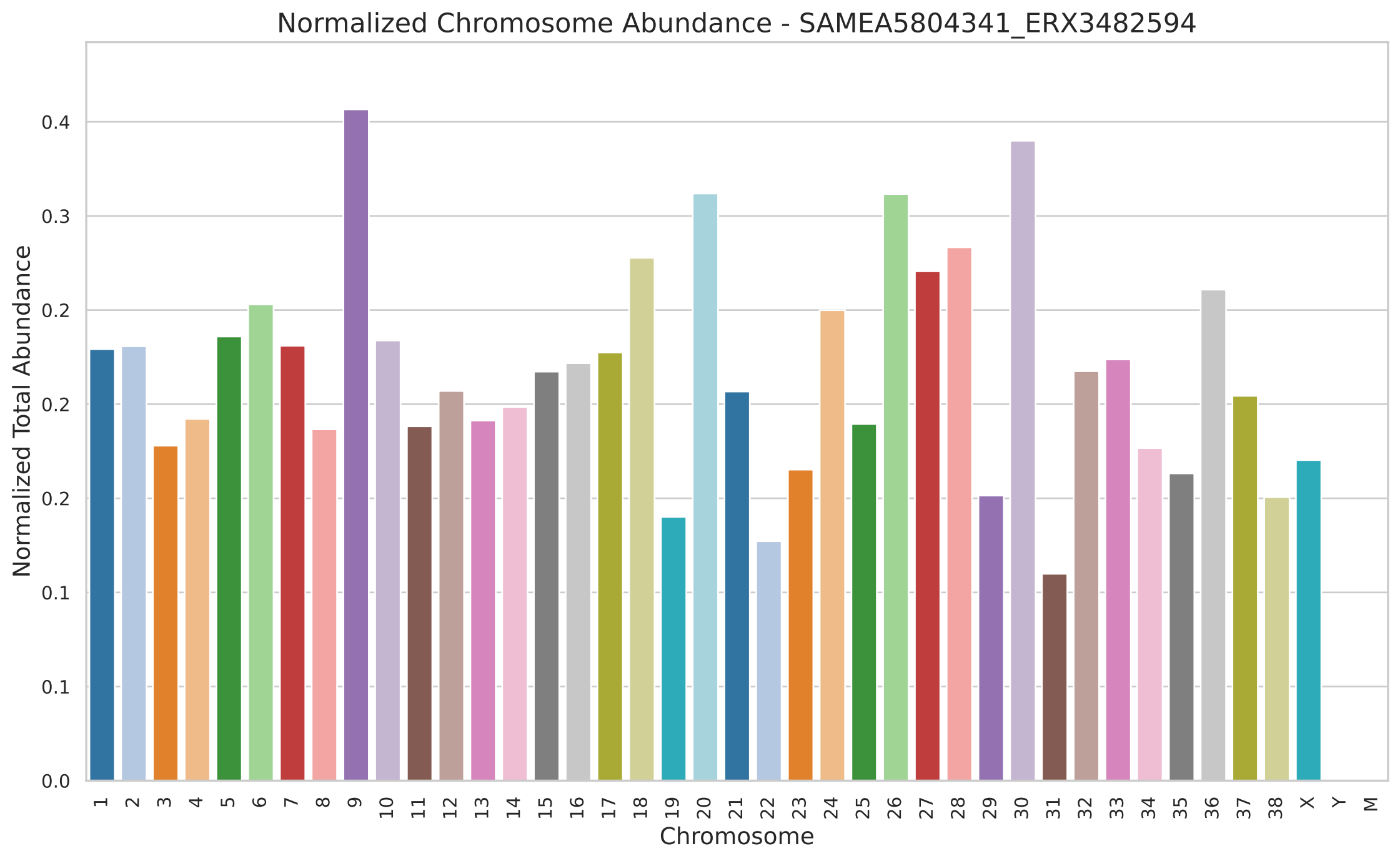

Normalized Chromosome Abundance - SAMEA5804362_ERX3482532
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

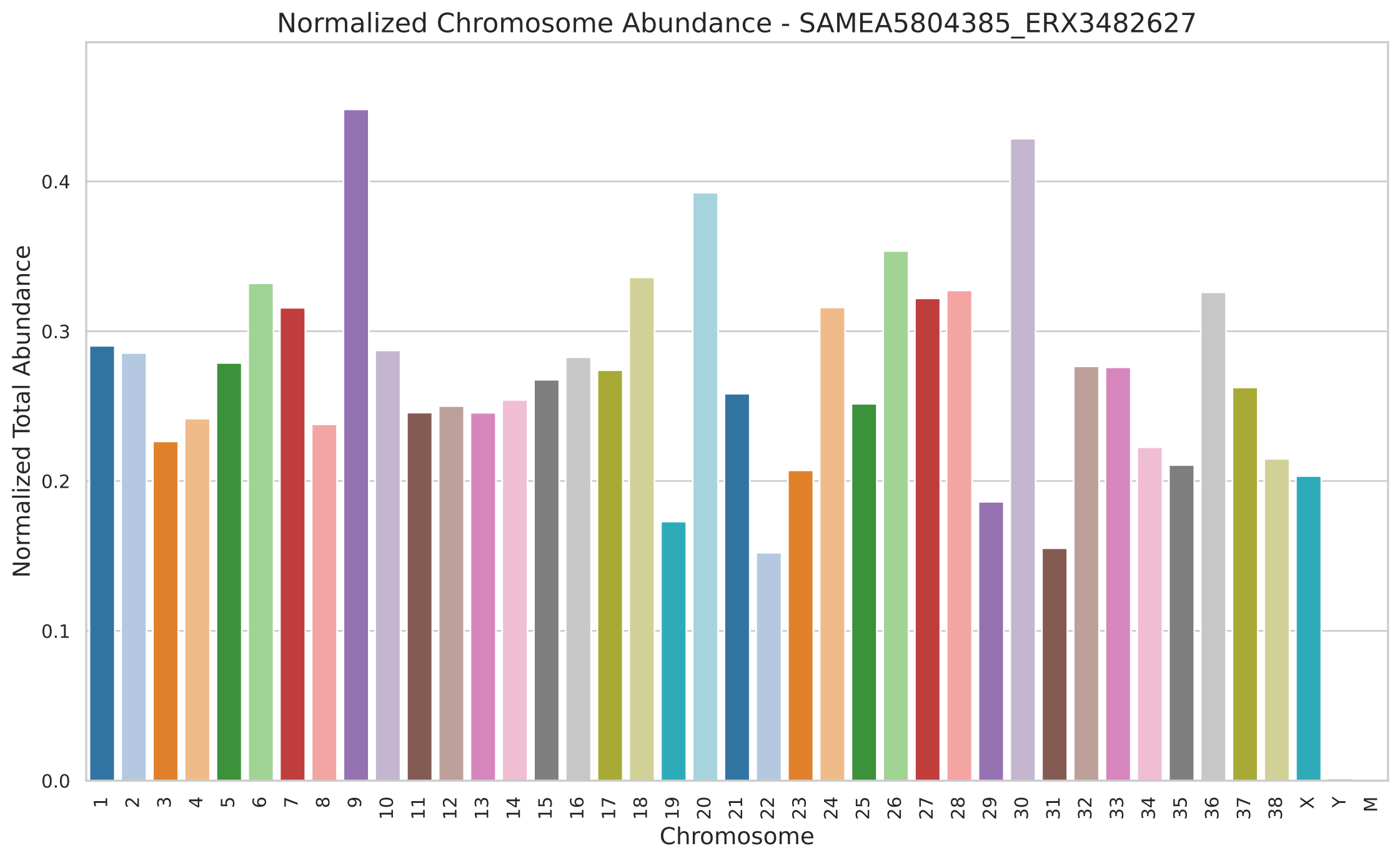

Normalized Chromosome Abundance - SAMEA5804339_ERX3482527
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

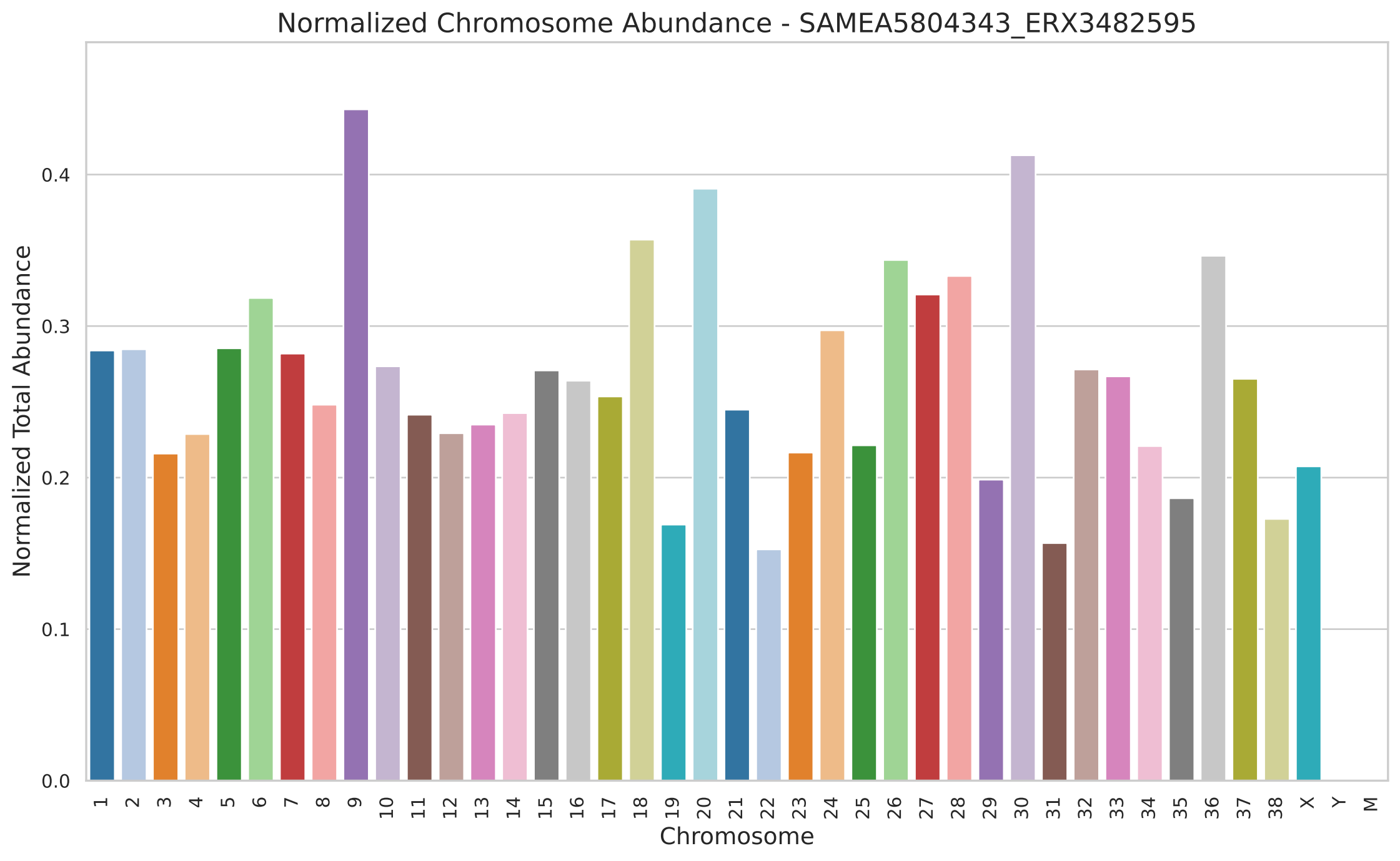

Normalized Chromosome Abundance - SAMEA5804400_ERX3482542
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

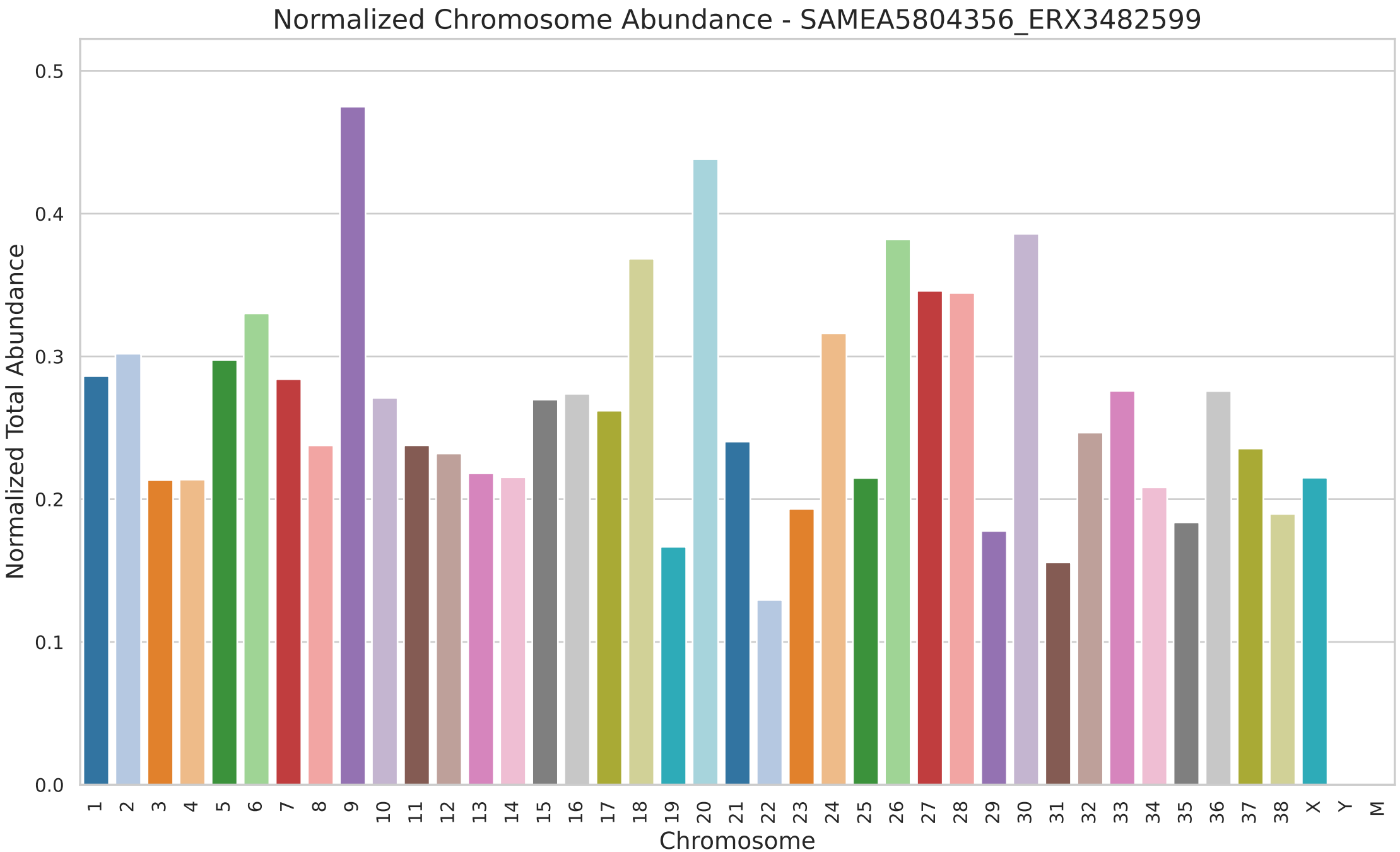

Normalized Chromosome Abundance - SAMEA5804520_ERX3482563
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

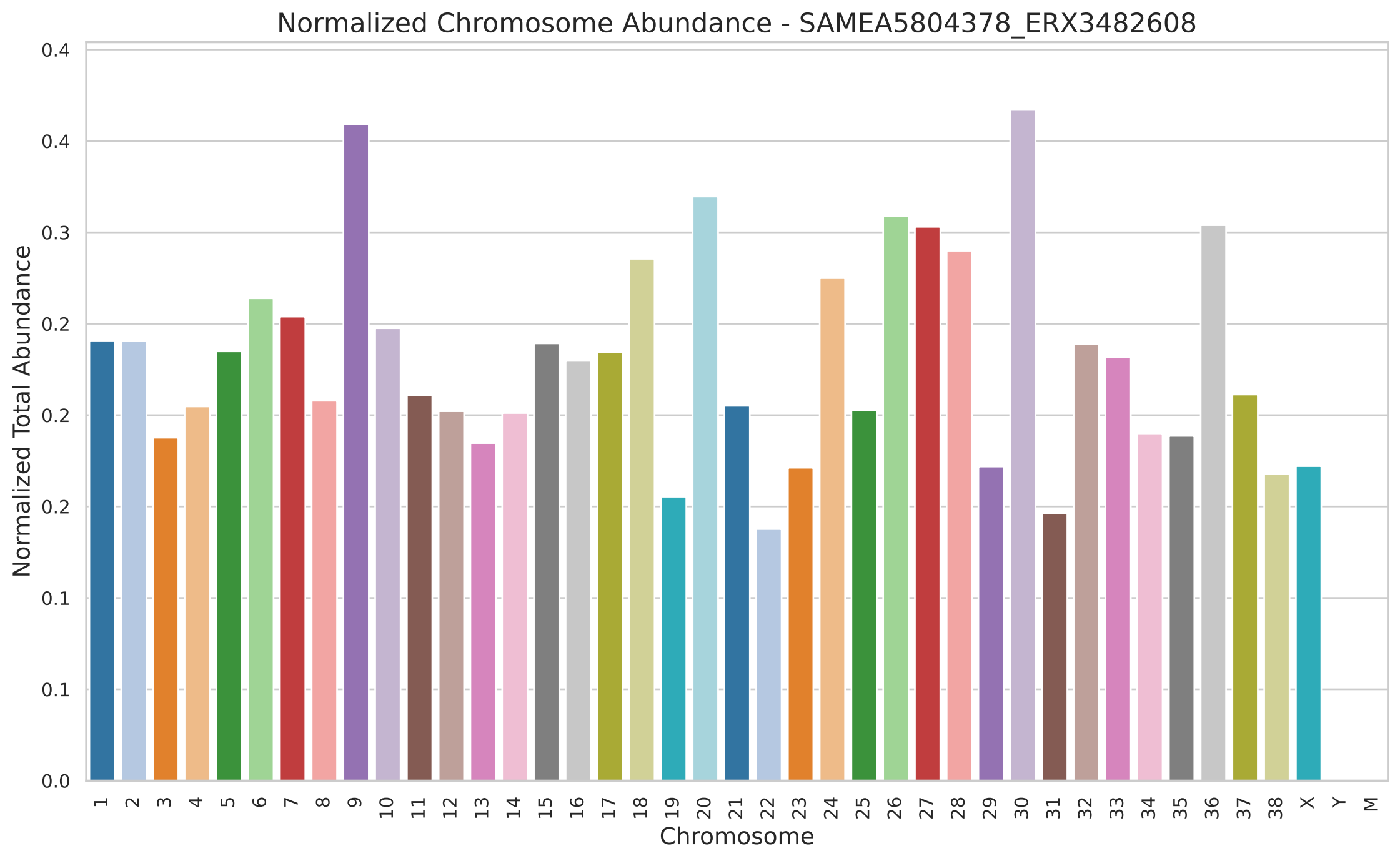

Normalized Chromosome Abundance - SAMEA5804516_ERX3482585
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

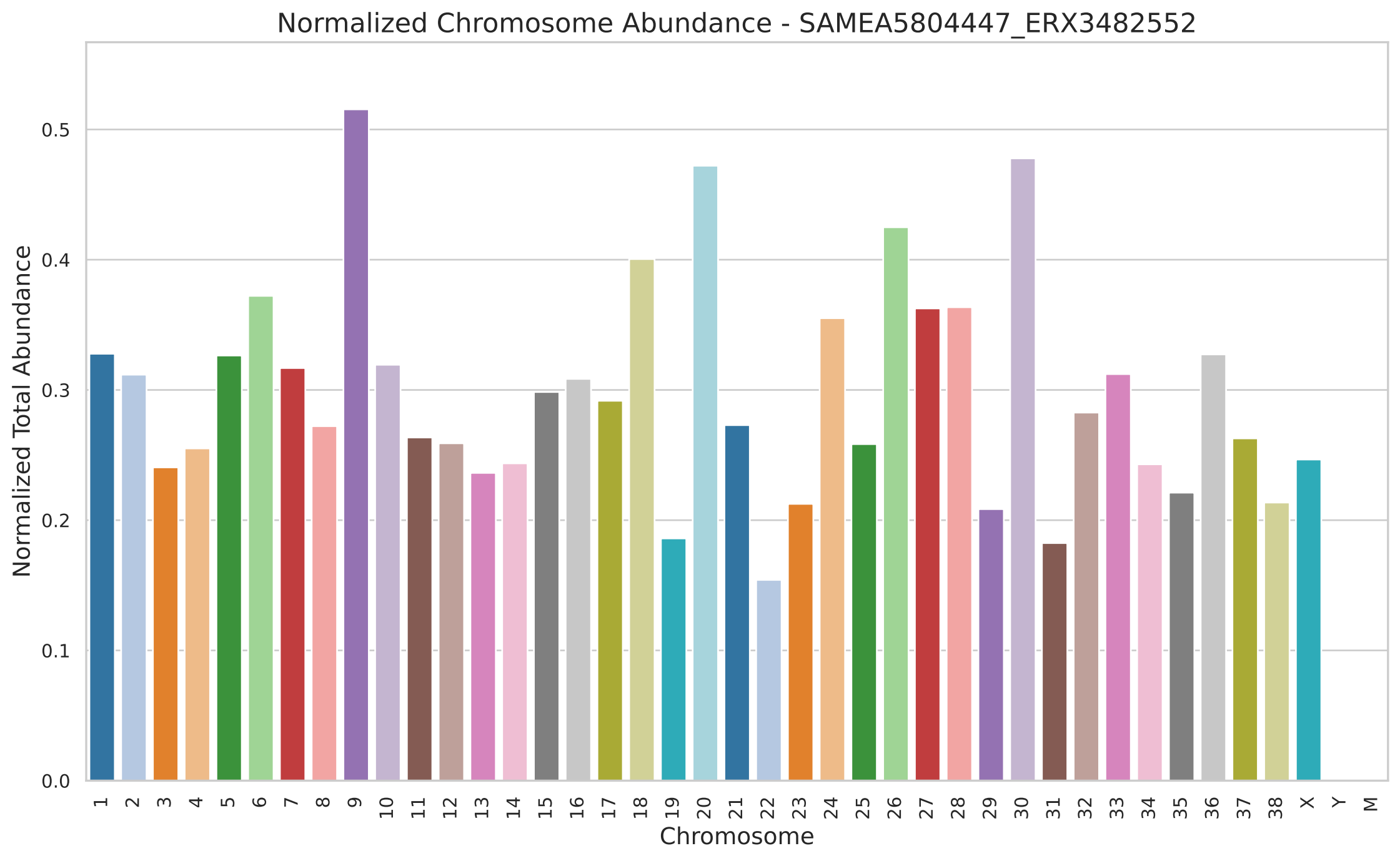

Normalized Chromosome Abundance - SAMEA5804341_ERX3482594
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

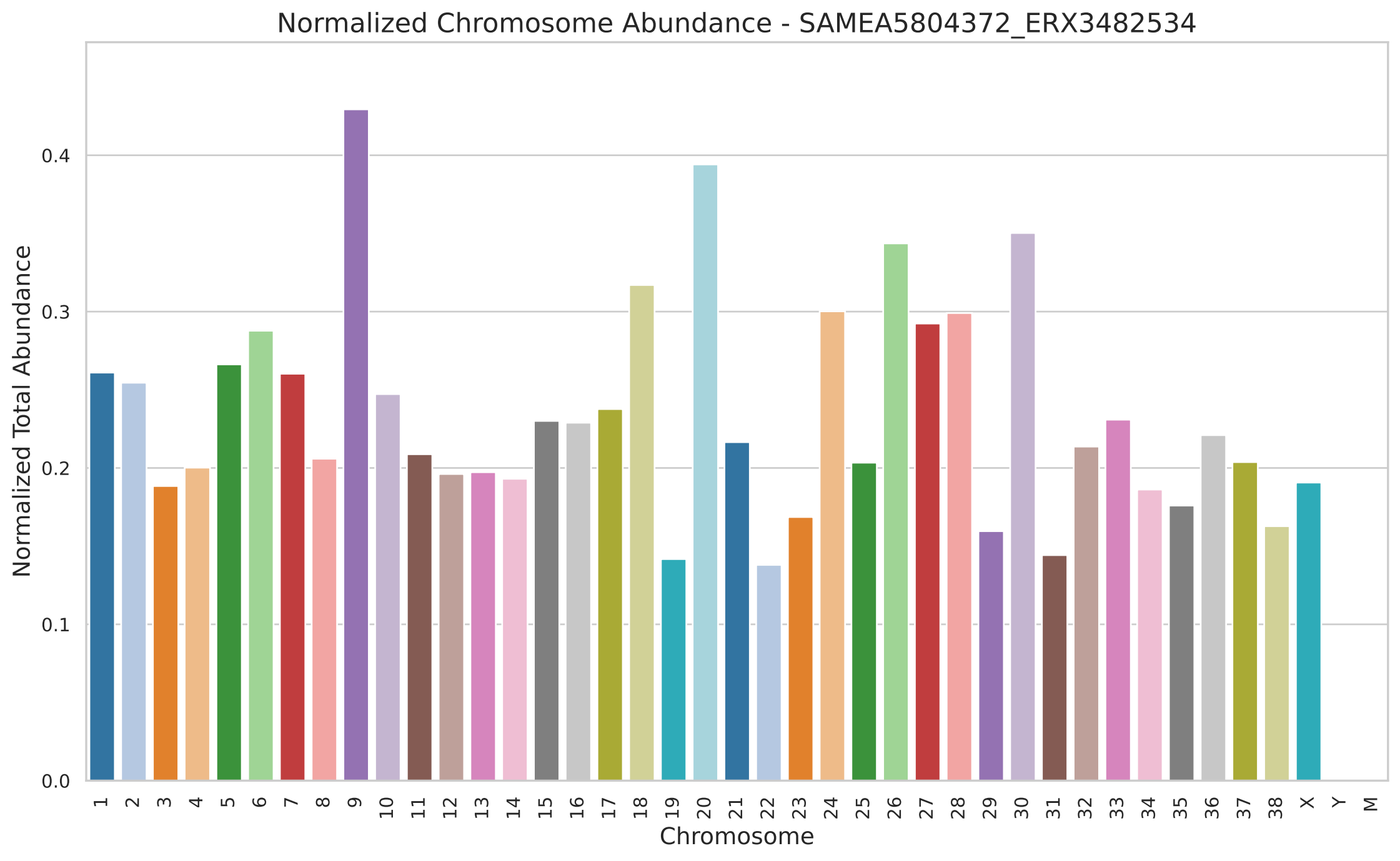

Normalized Chromosome Abundance - SAMEA5804385_ERX3482627
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

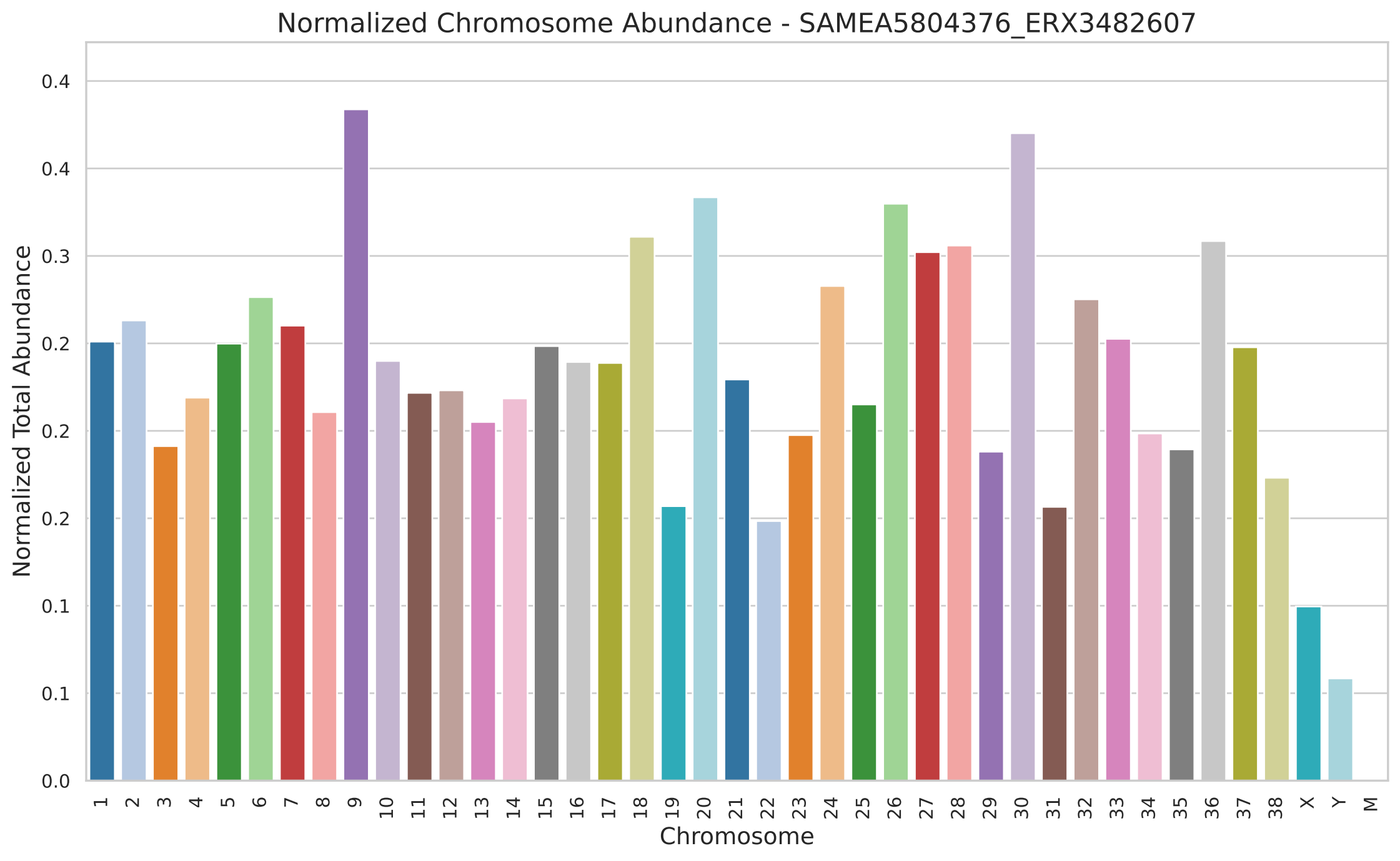

Normalized Chromosome Abundance - SAMEA5804343_ERX3482595
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

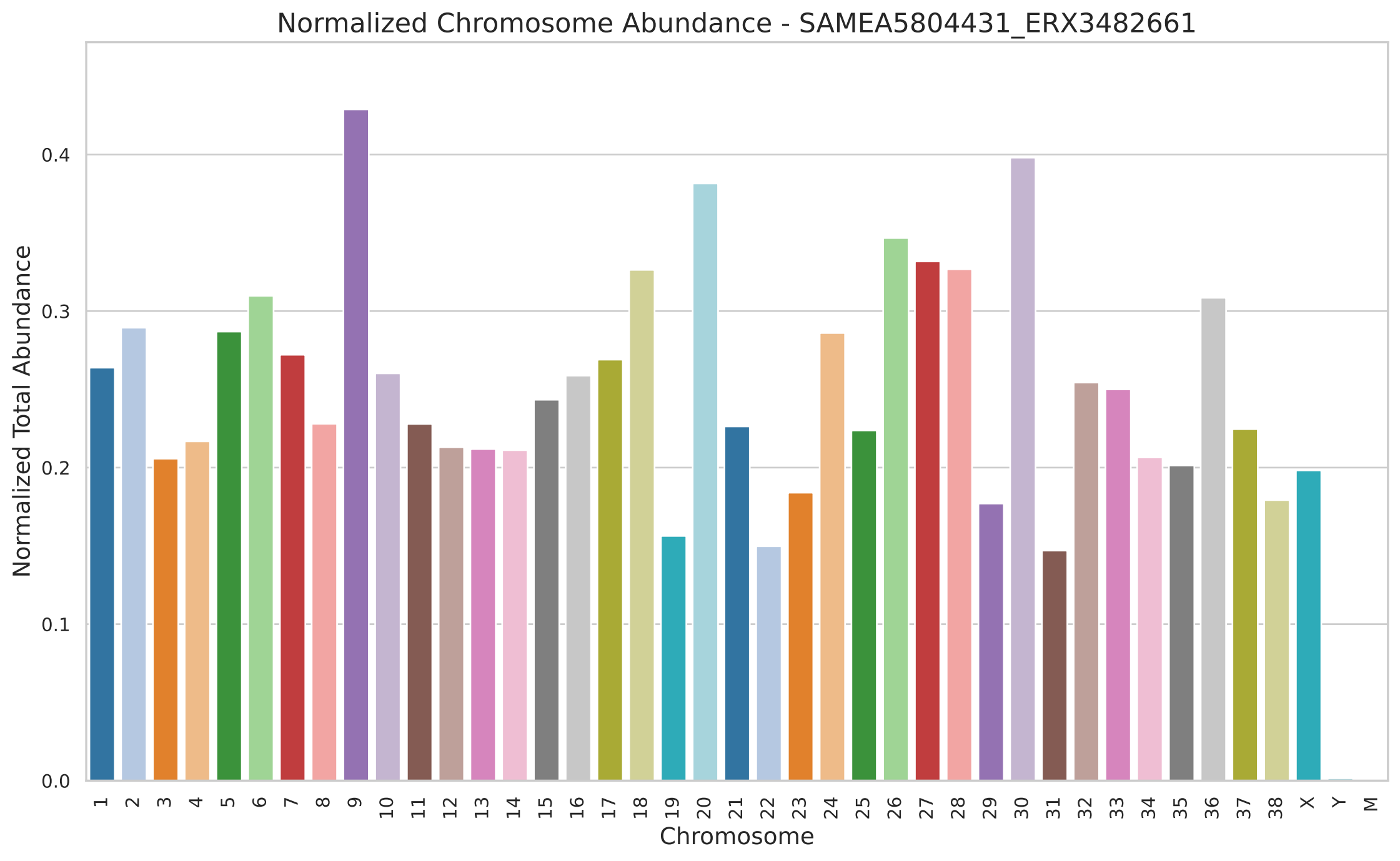

Normalized Chromosome Abundance - SAMEA5804356_ERX3482599
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

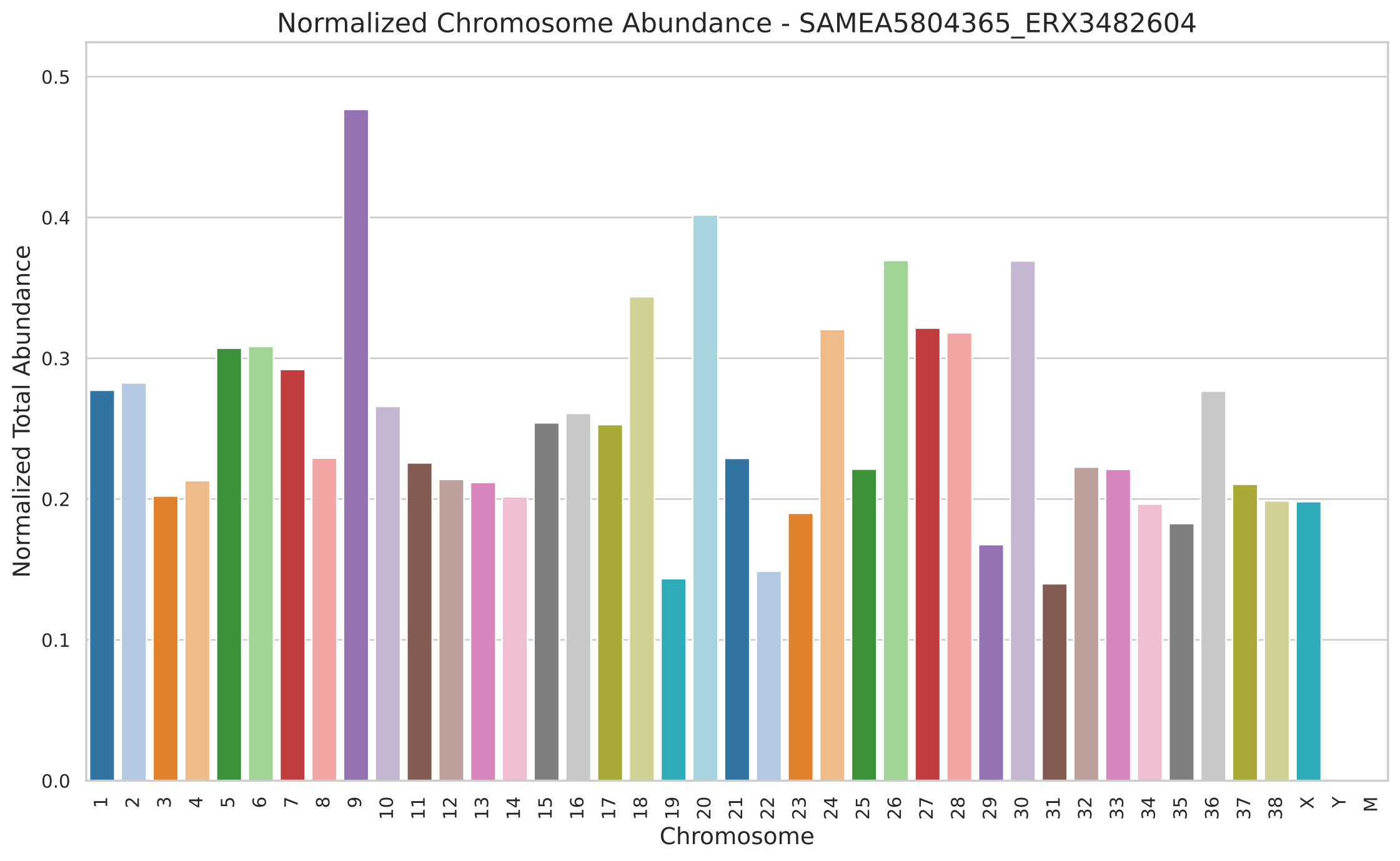

Normalized Chromosome Abundance - SAMEA5804378_ERX3482608
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

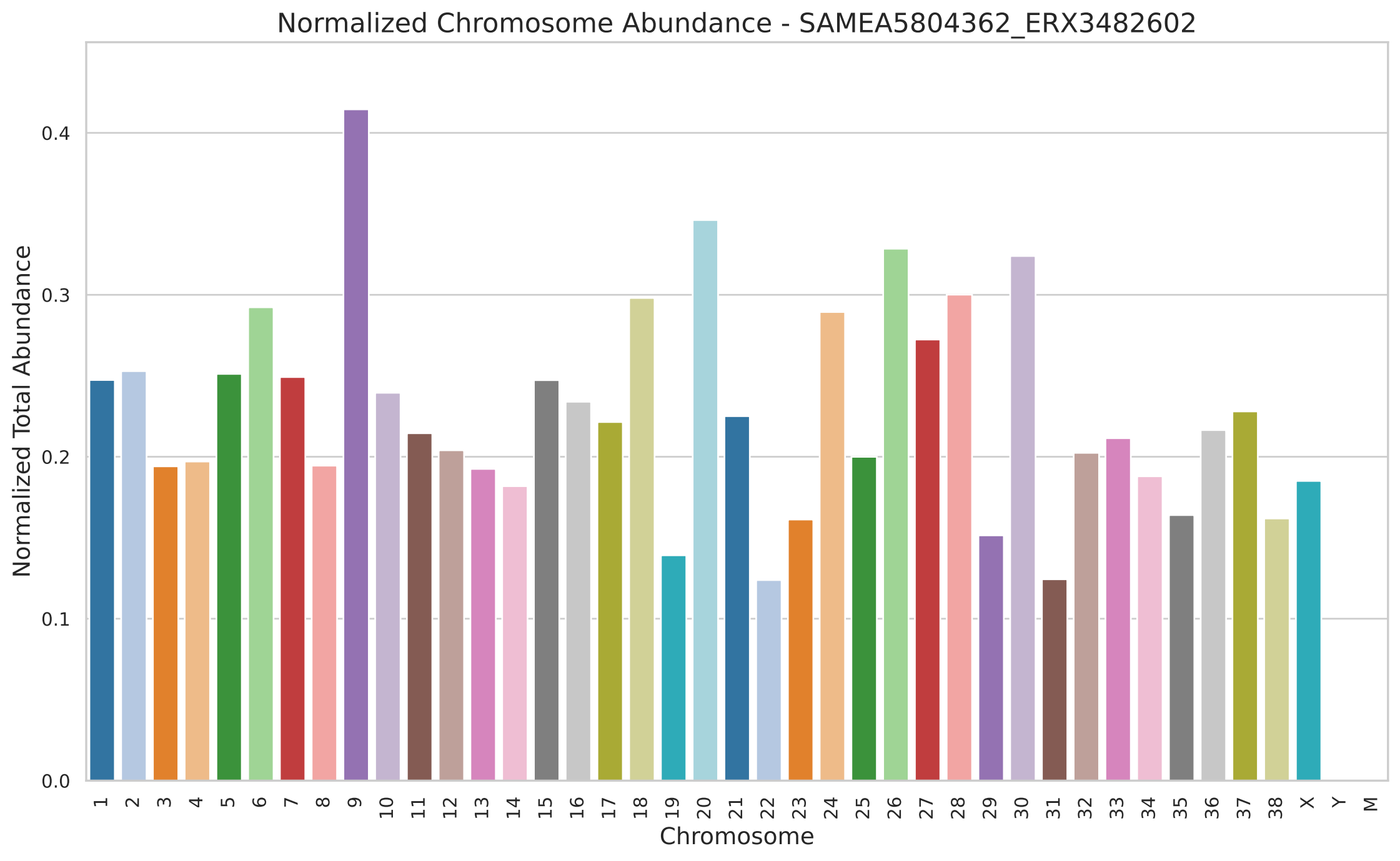

Normalized Chromosome Abundance - SAMEA5804447_ERX3482552
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

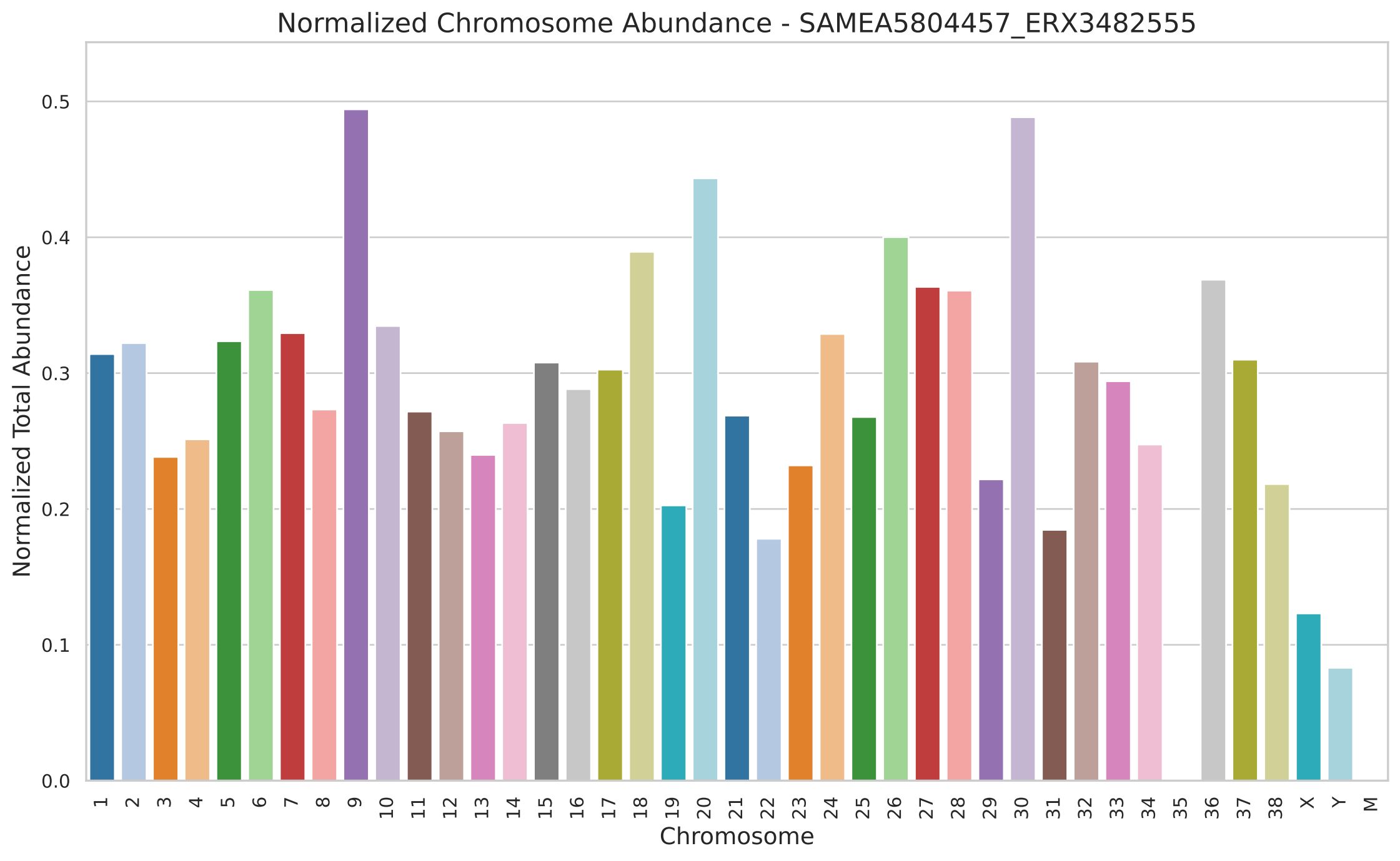

Normalized Chromosome Abundance - SAMEA5804372_ERX3482534
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

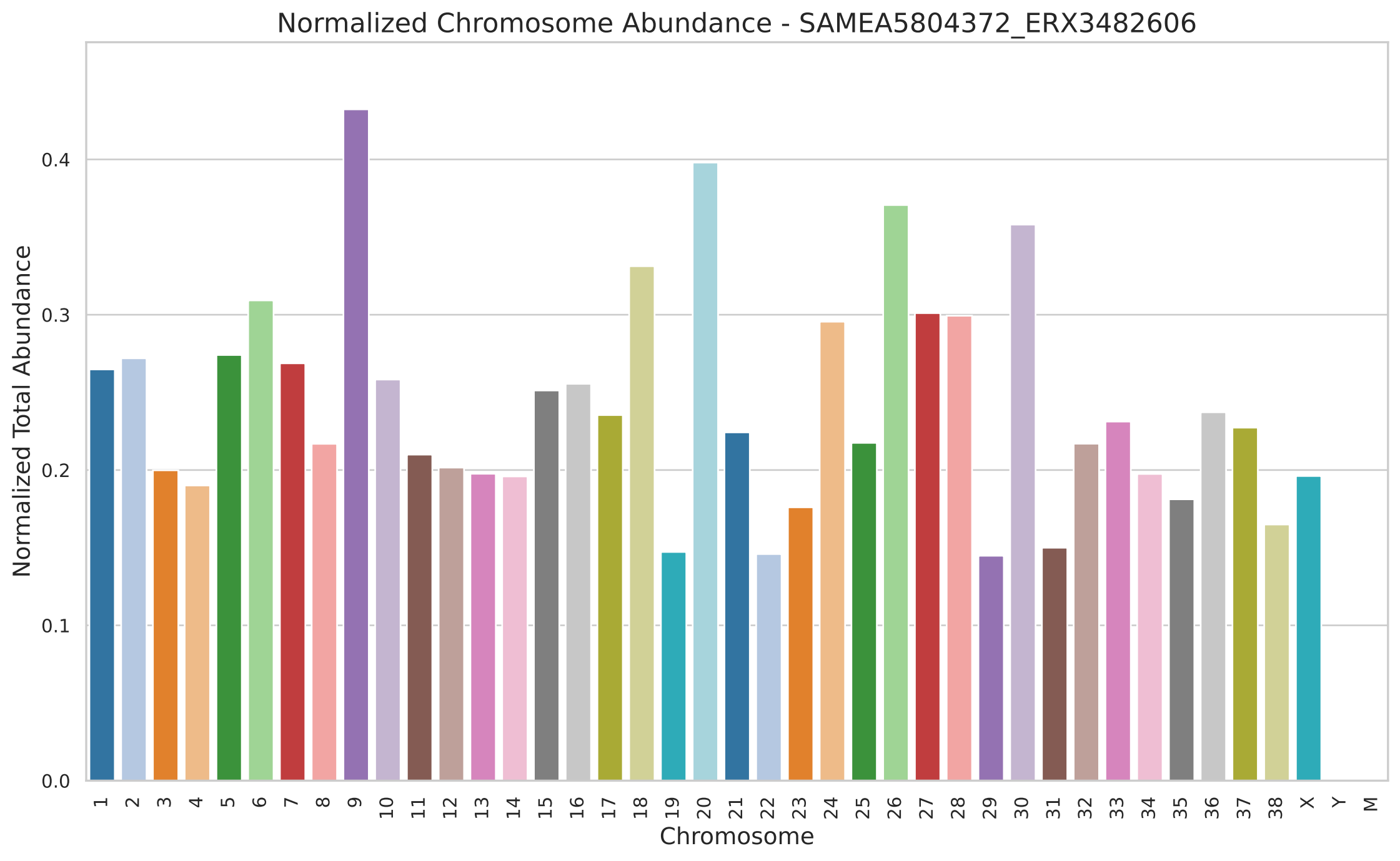

Normalized Chromosome Abundance - SAMEA5804376_ERX3482607
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

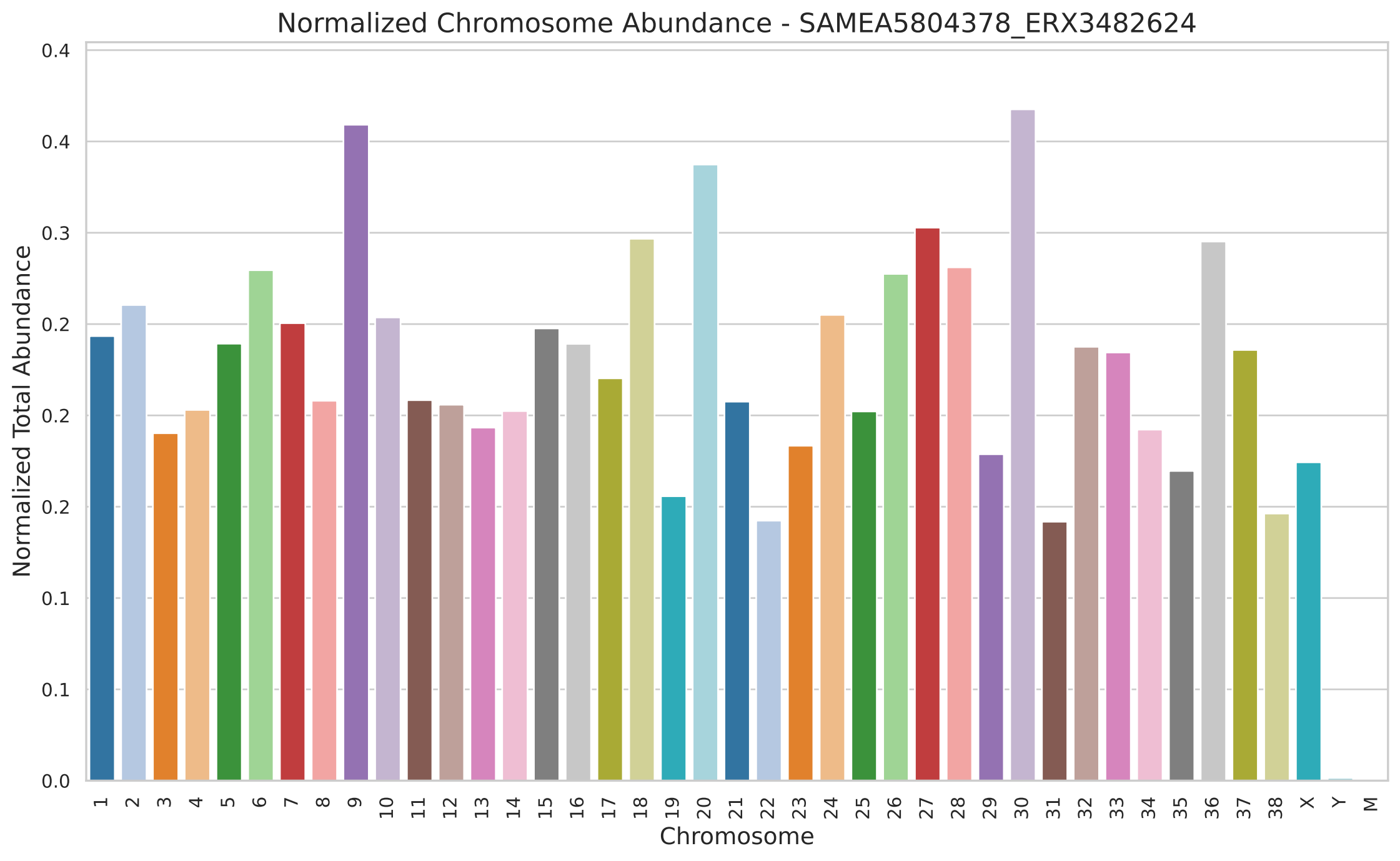

Normalized Chromosome Abundance - SAMEA5804431_ERX3482661
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

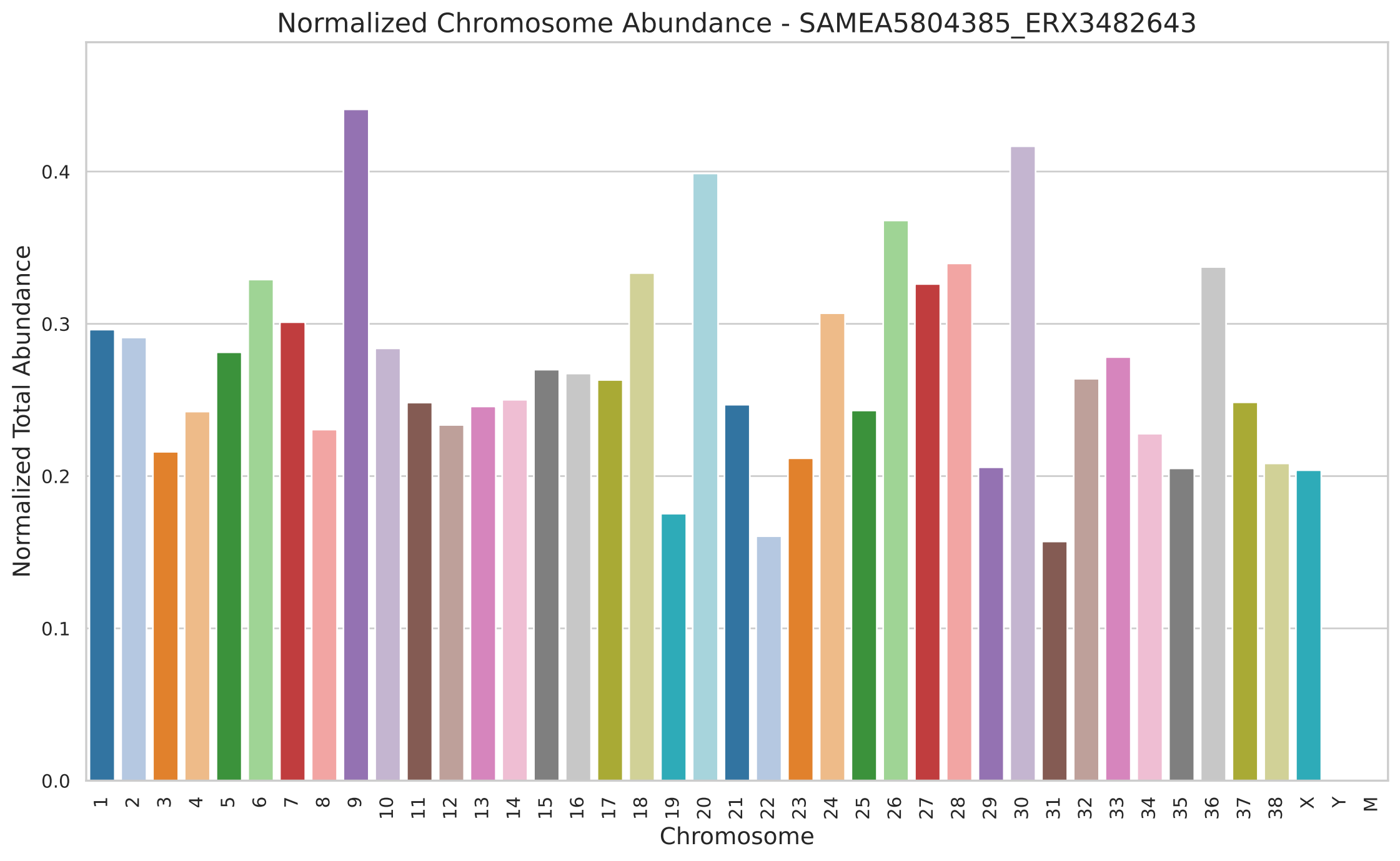

Normalized Chromosome Abundance - SAMEA5804365_ERX3482604
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

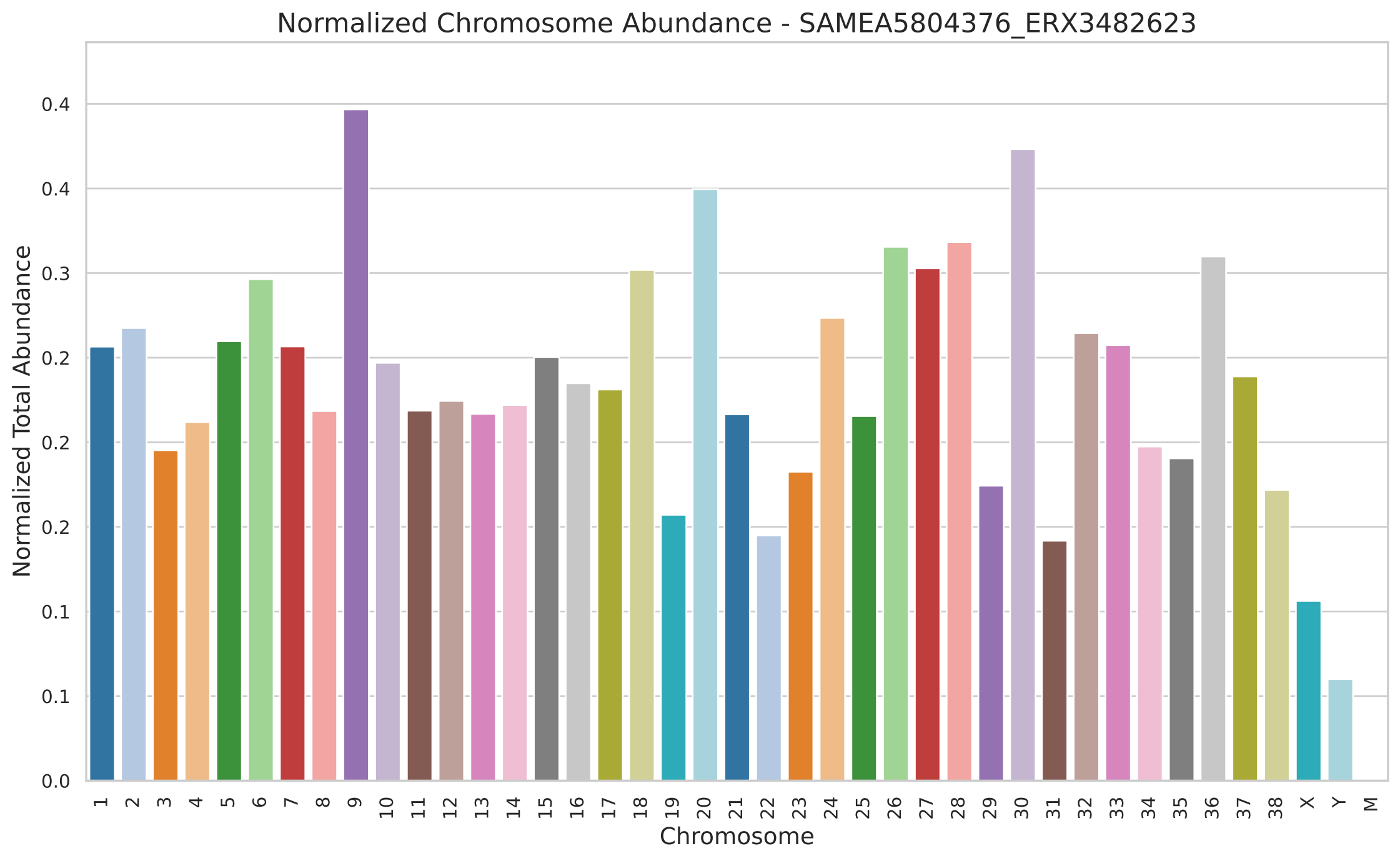

Normalized Chromosome Abundance - SAMEA5804362_ERX3482602
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

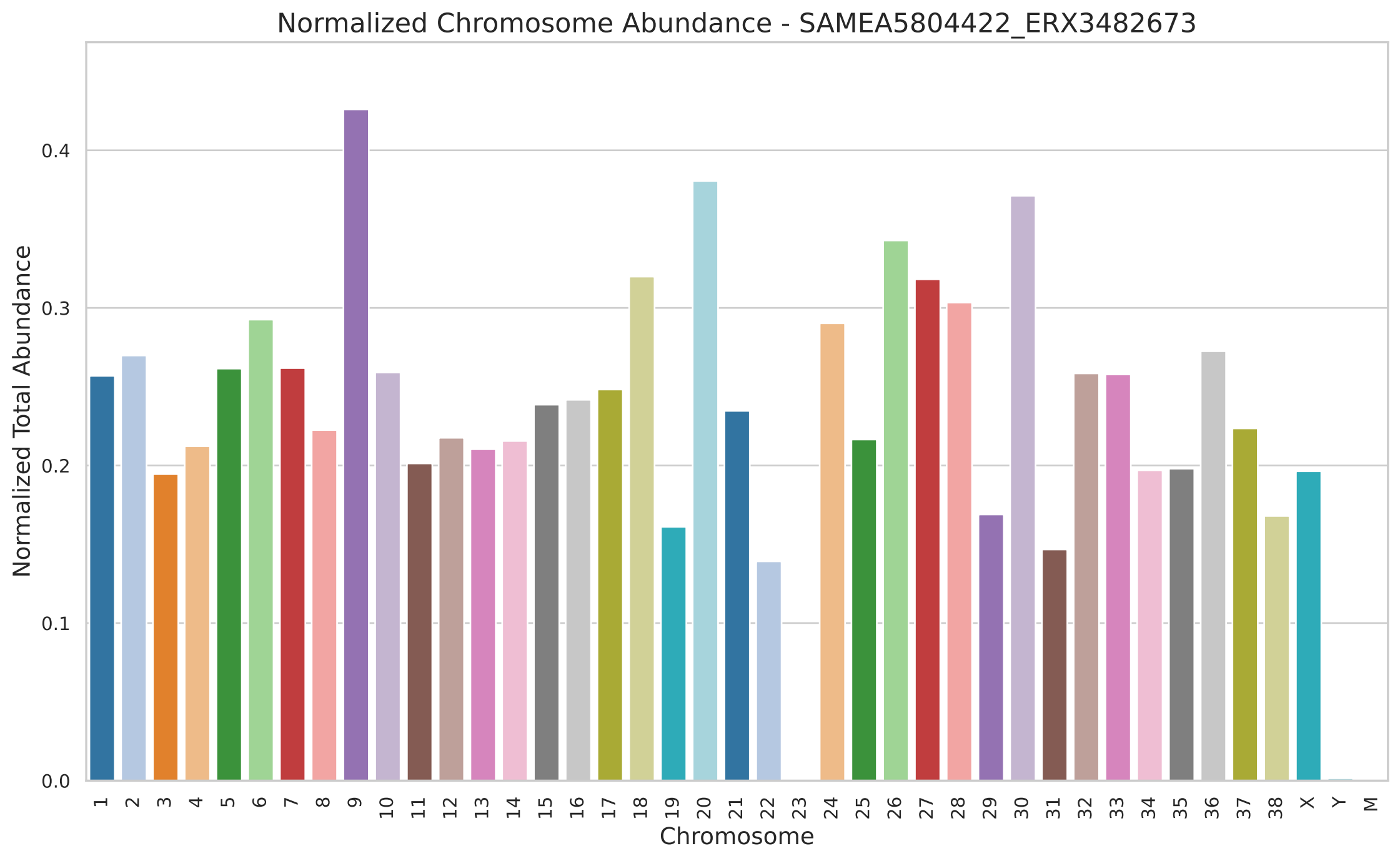

Normalized Chromosome Abundance - SAMEA5804457_ERX3482555
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

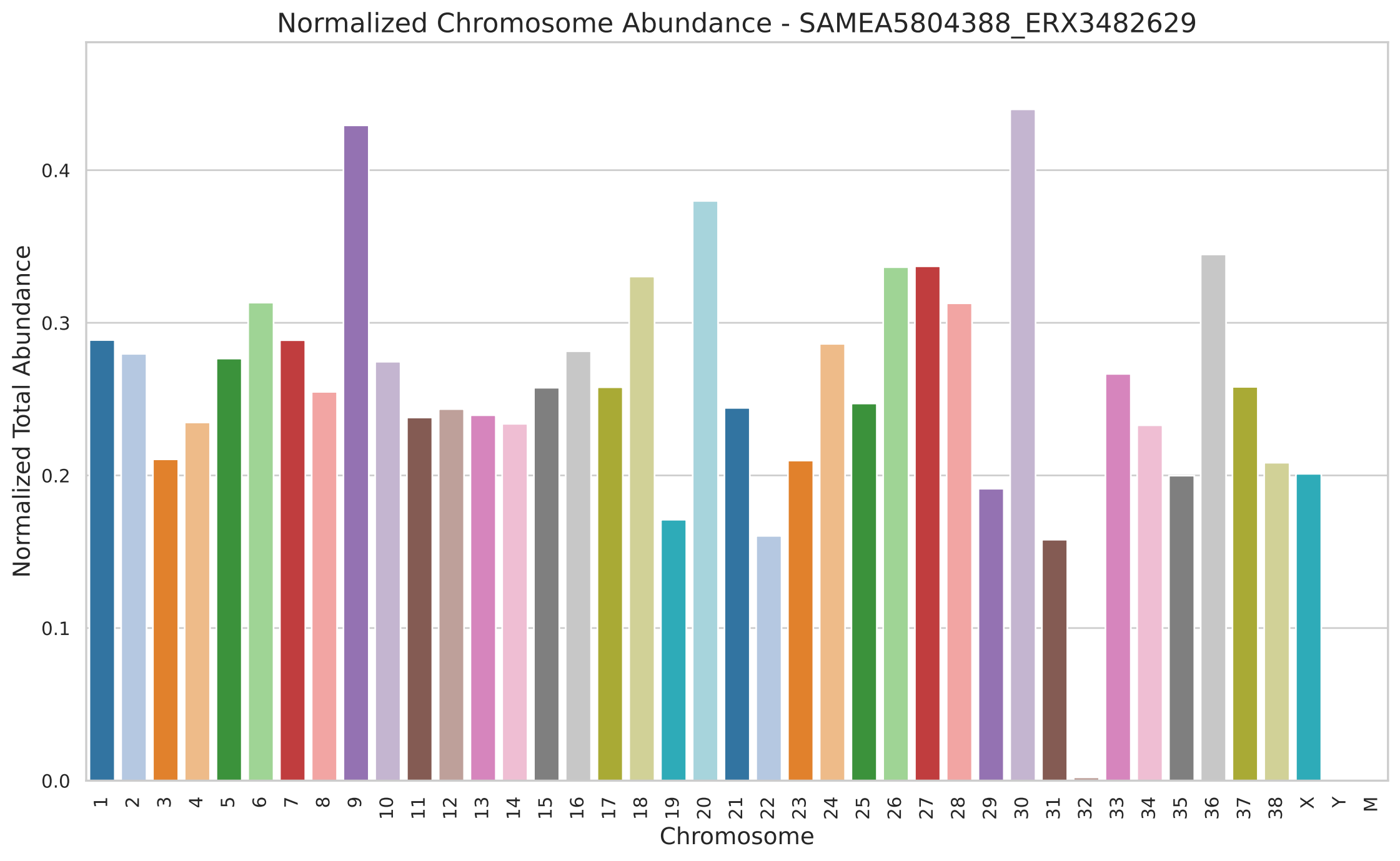

Normalized Chromosome Abundance - SAMEA5804372_ERX3482606
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

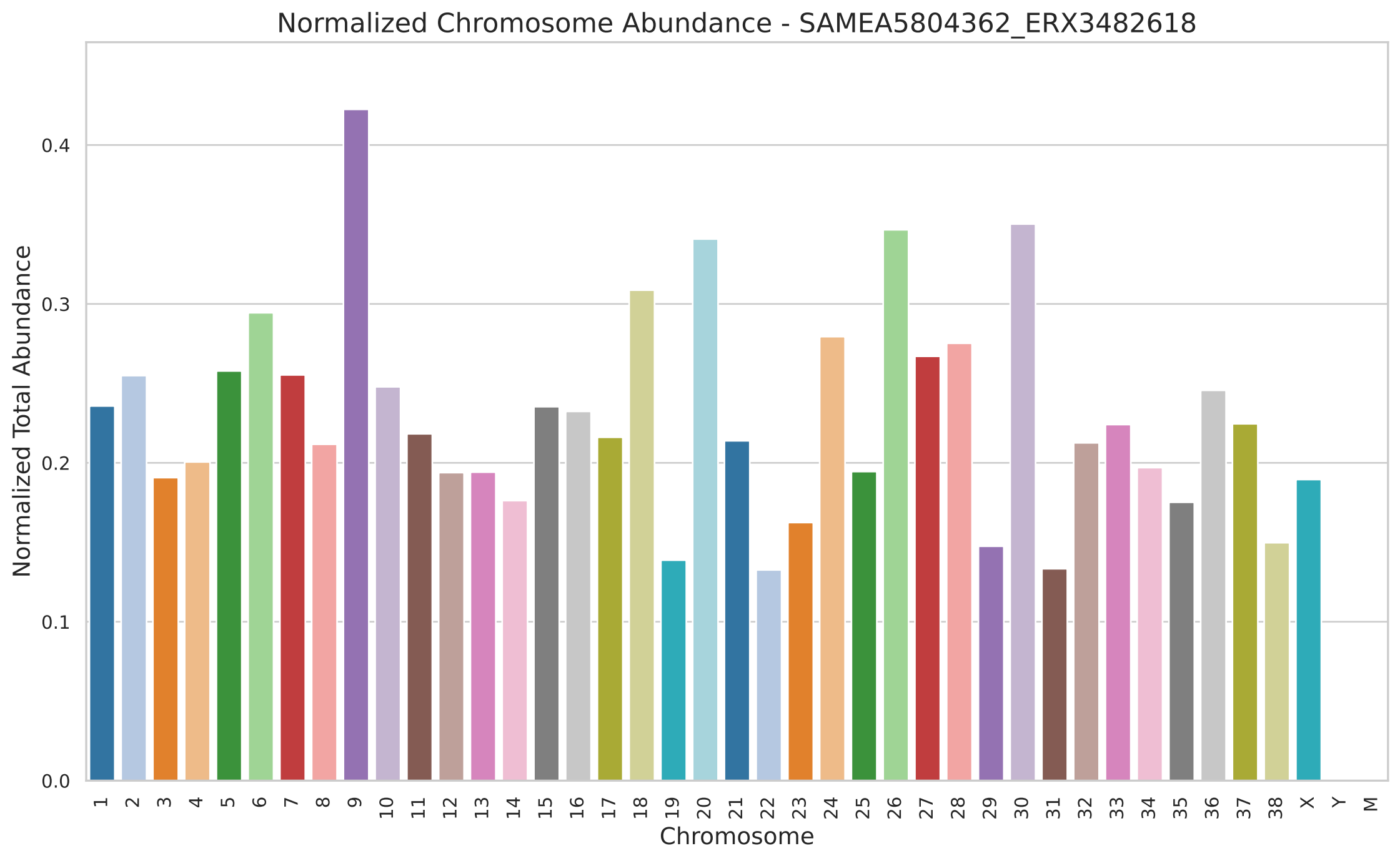

Normalized Chromosome Abundance - SAMEA5804378_ERX3482624
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

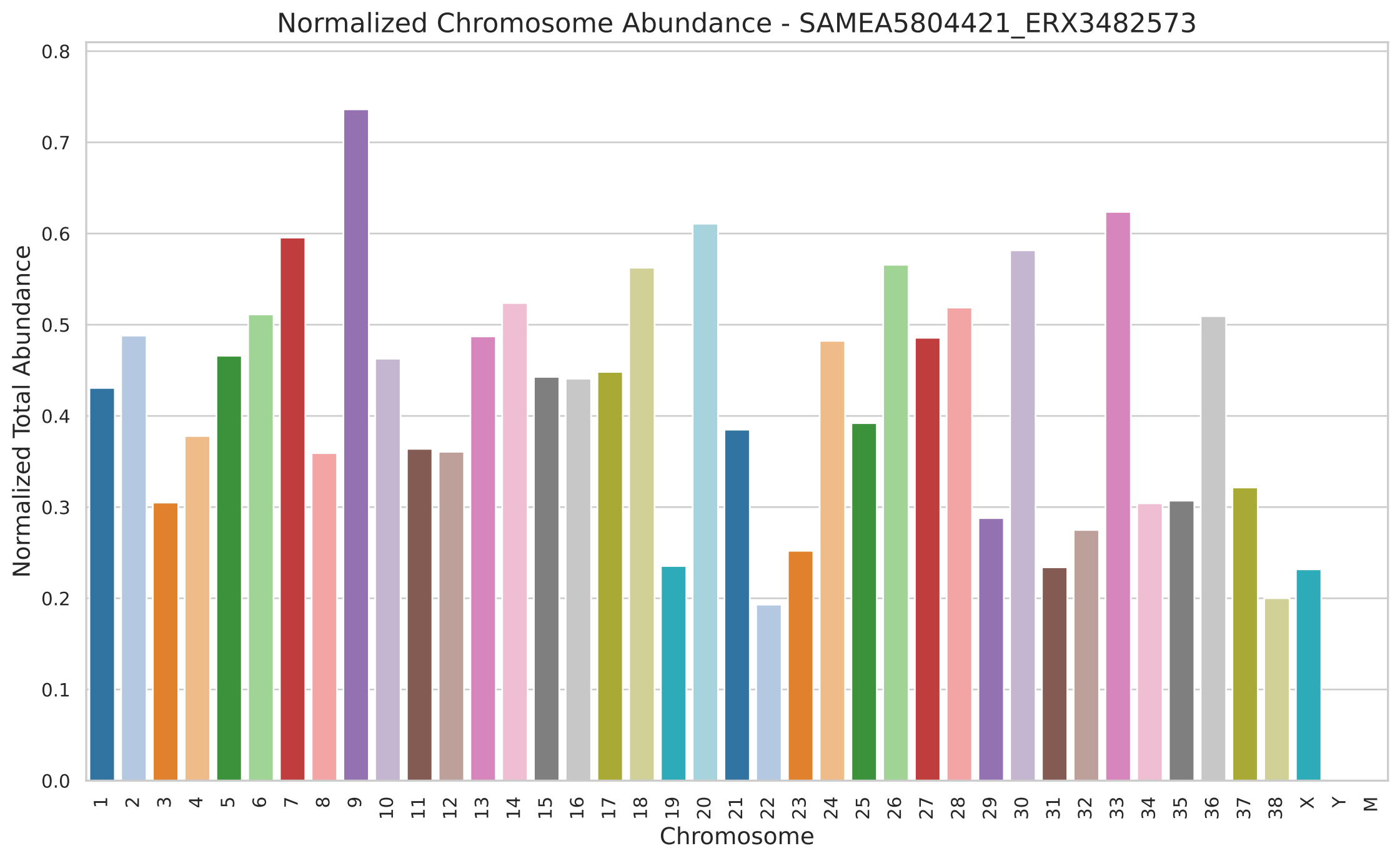

Normalized Chromosome Abundance - SAMEA5804385_ERX3482643
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

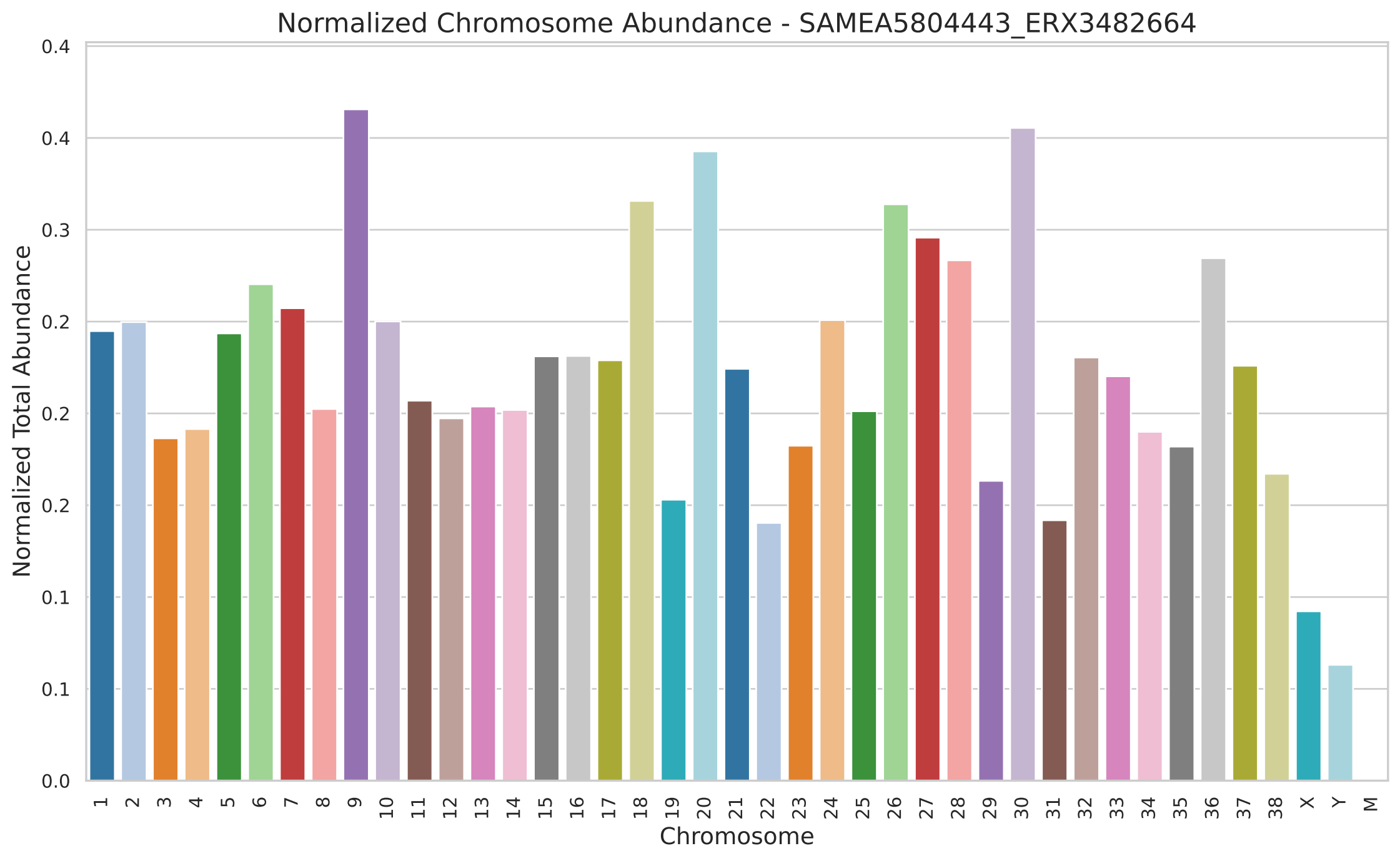

Normalized Chromosome Abundance - SAMEA5804376_ERX3482623
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

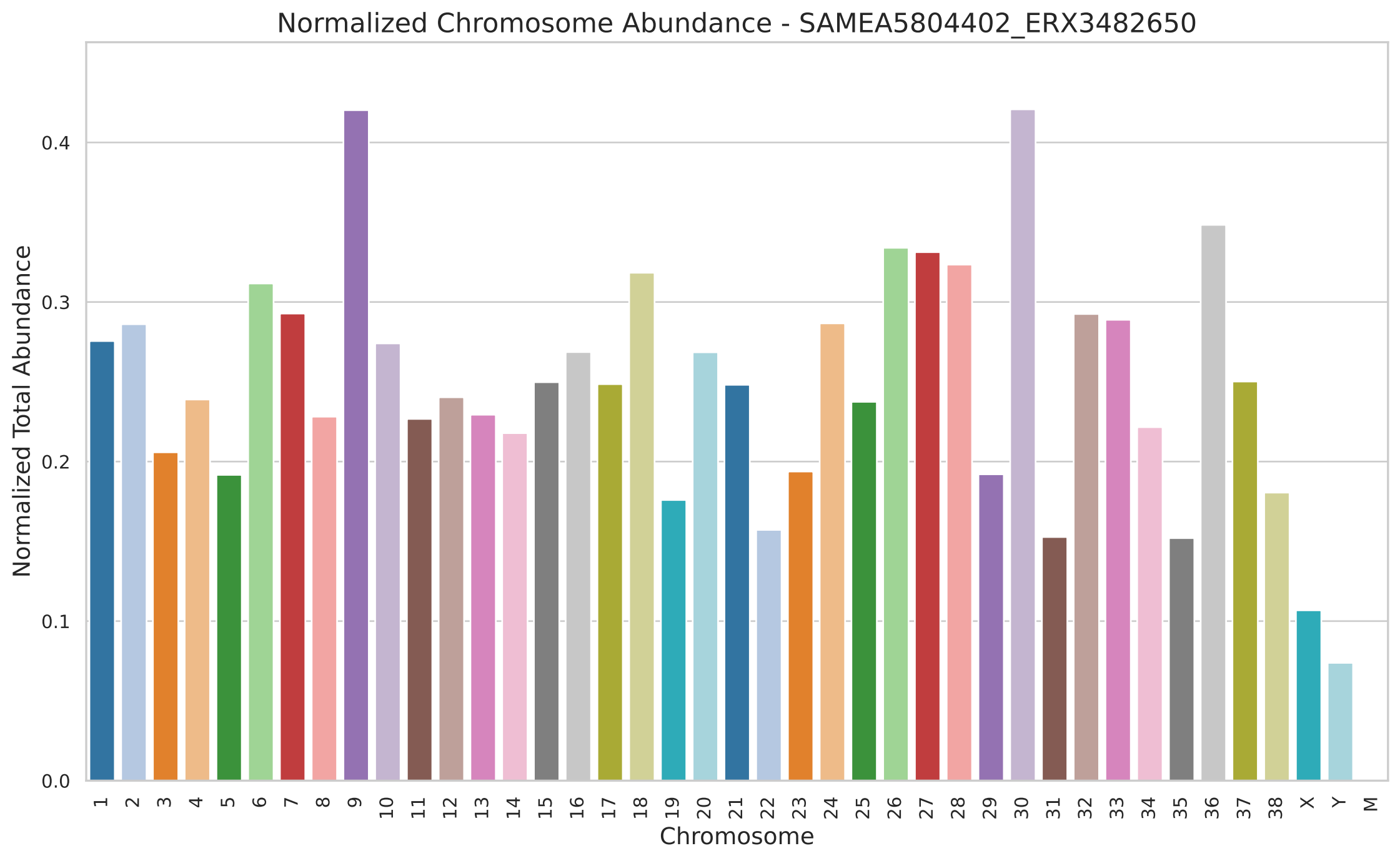

Normalized Chromosome Abundance - SAMEA5804422_ERX3482673
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

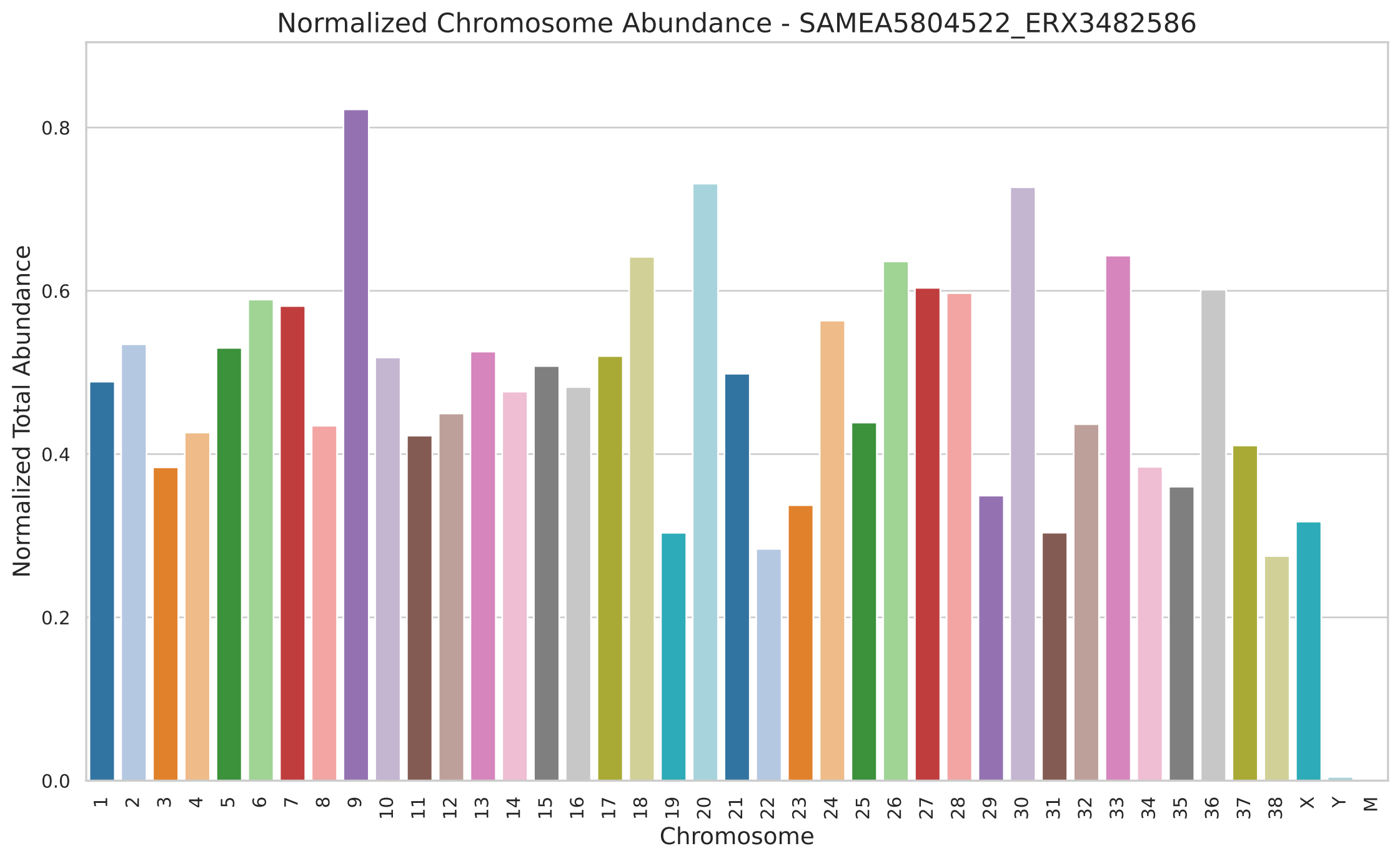

Normalized Chromosome Abundance - SAMEA5804388_ERX3482629
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

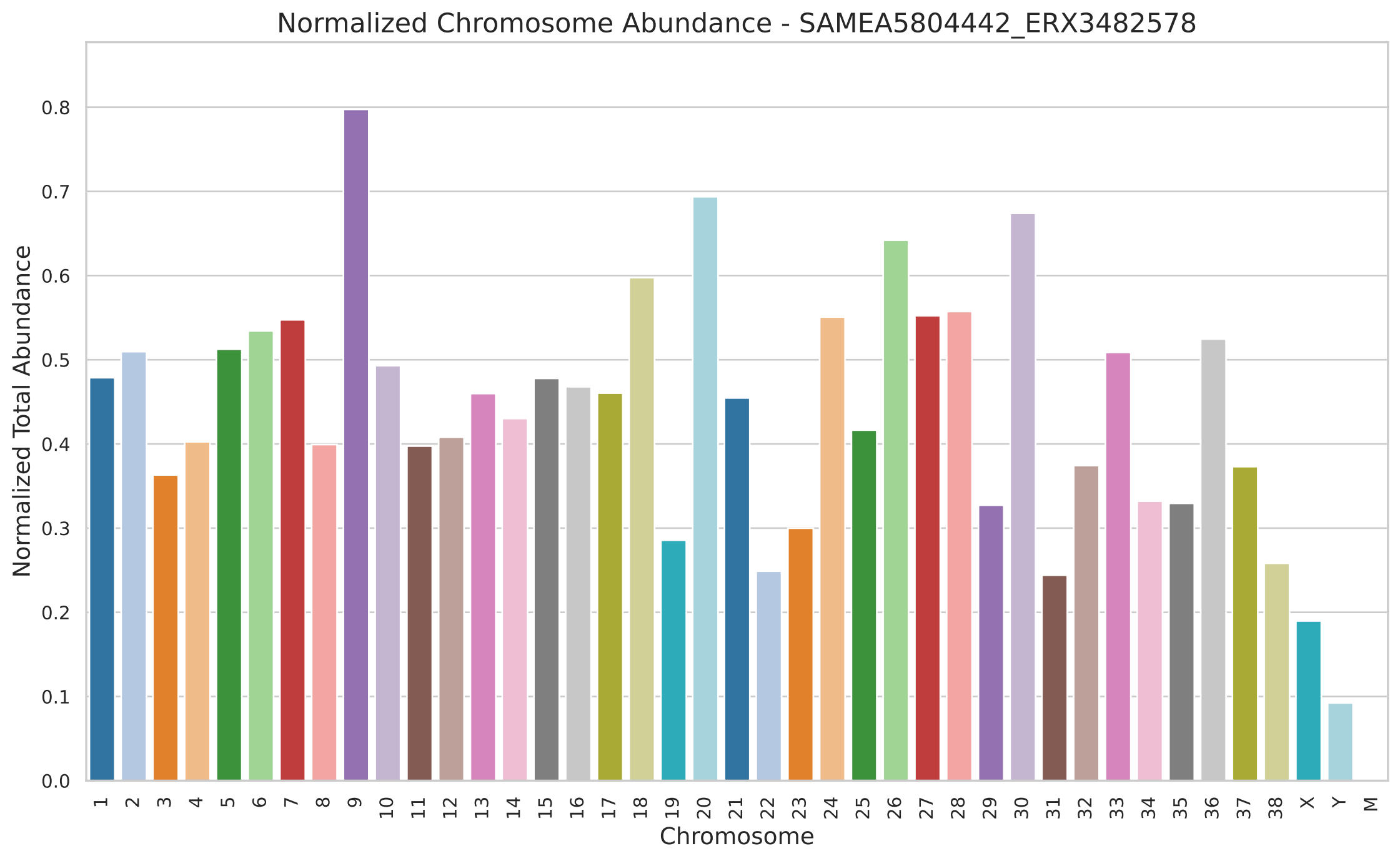

Normalized Chromosome Abundance - SAMEA5804362_ERX3482618
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

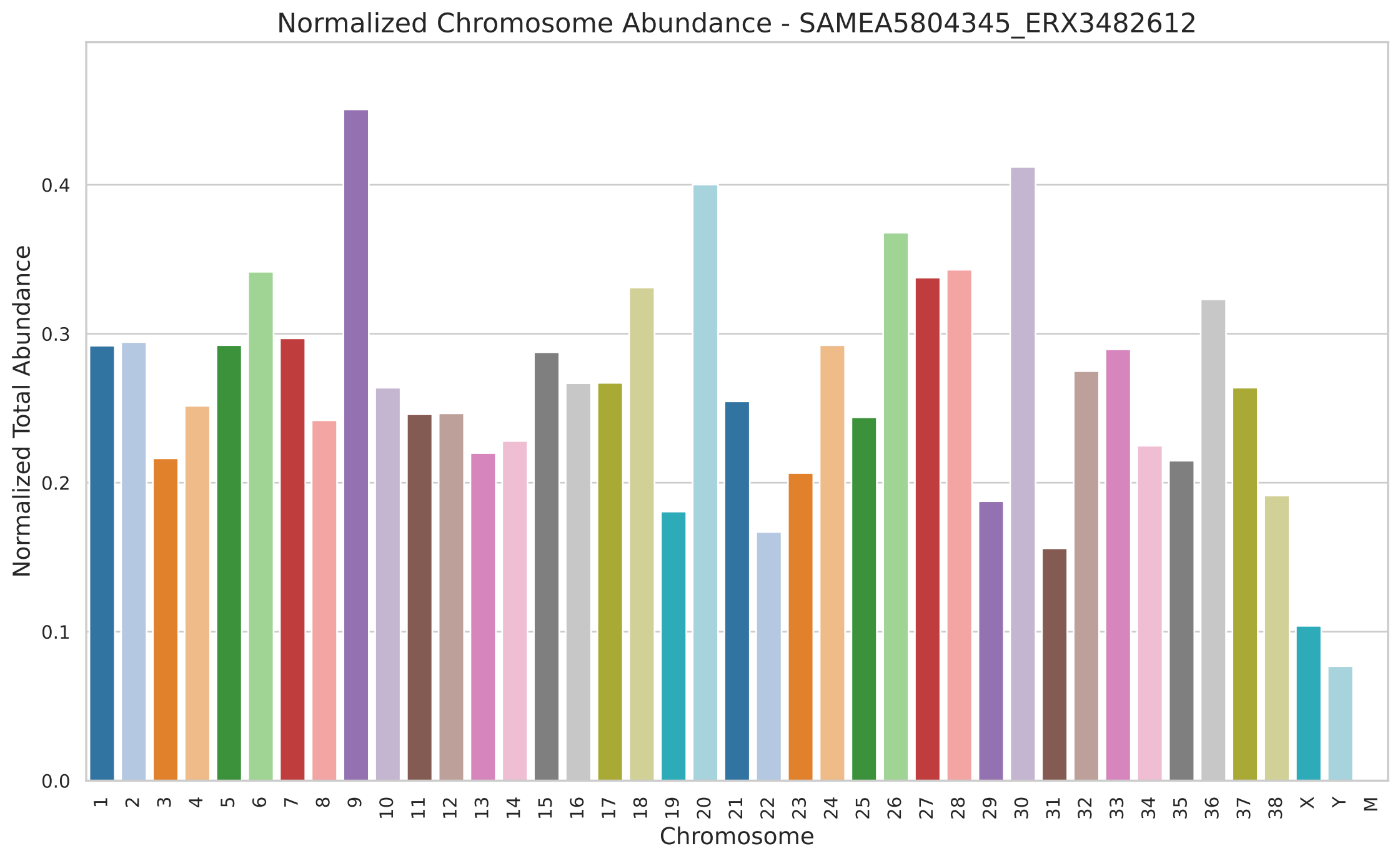

Normalized Chromosome Abundance - SAMEA5804421_ERX3482573
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

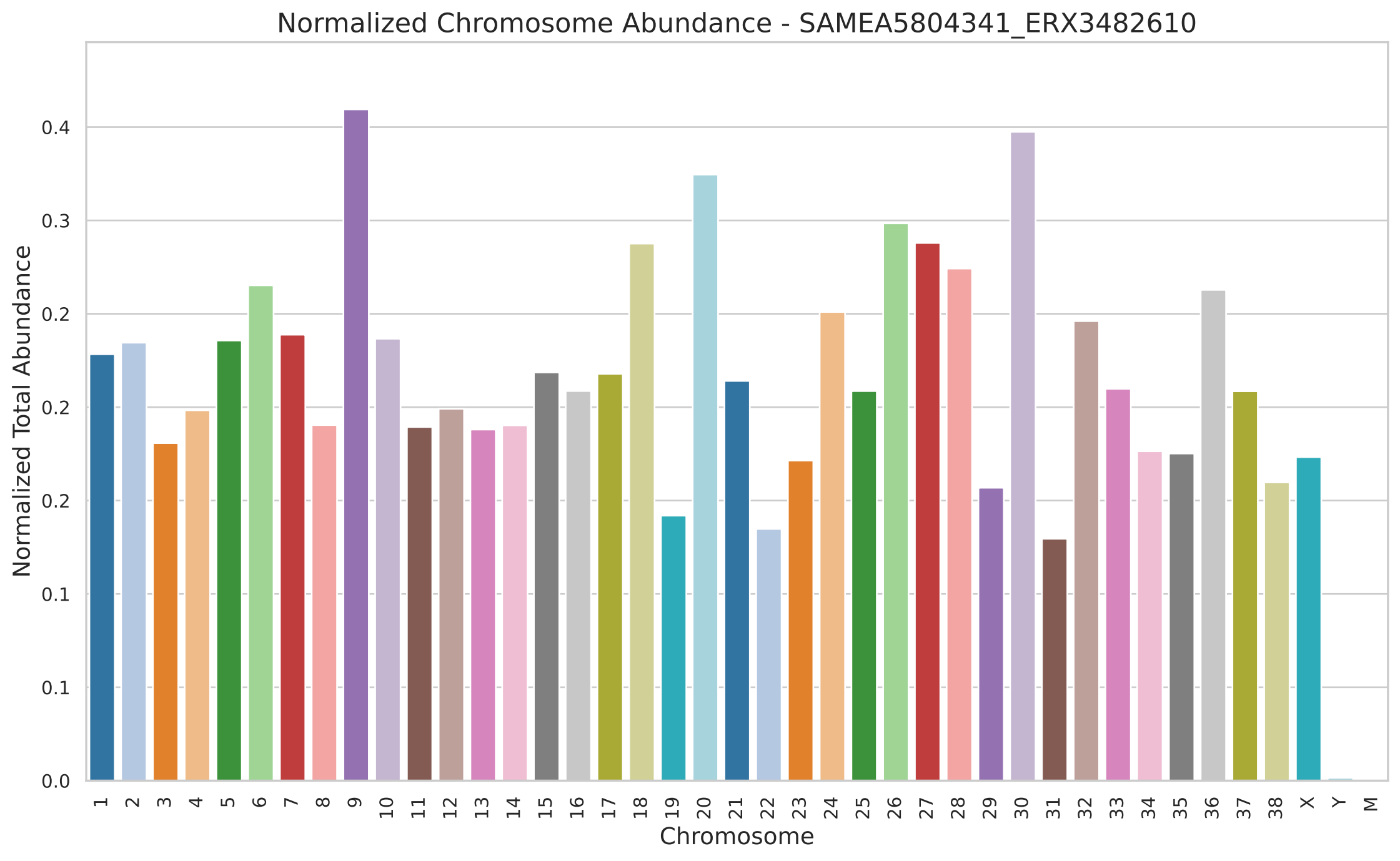

Normalized Chromosome Abundance - SAMEA5804443_ERX3482664
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
0.4
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

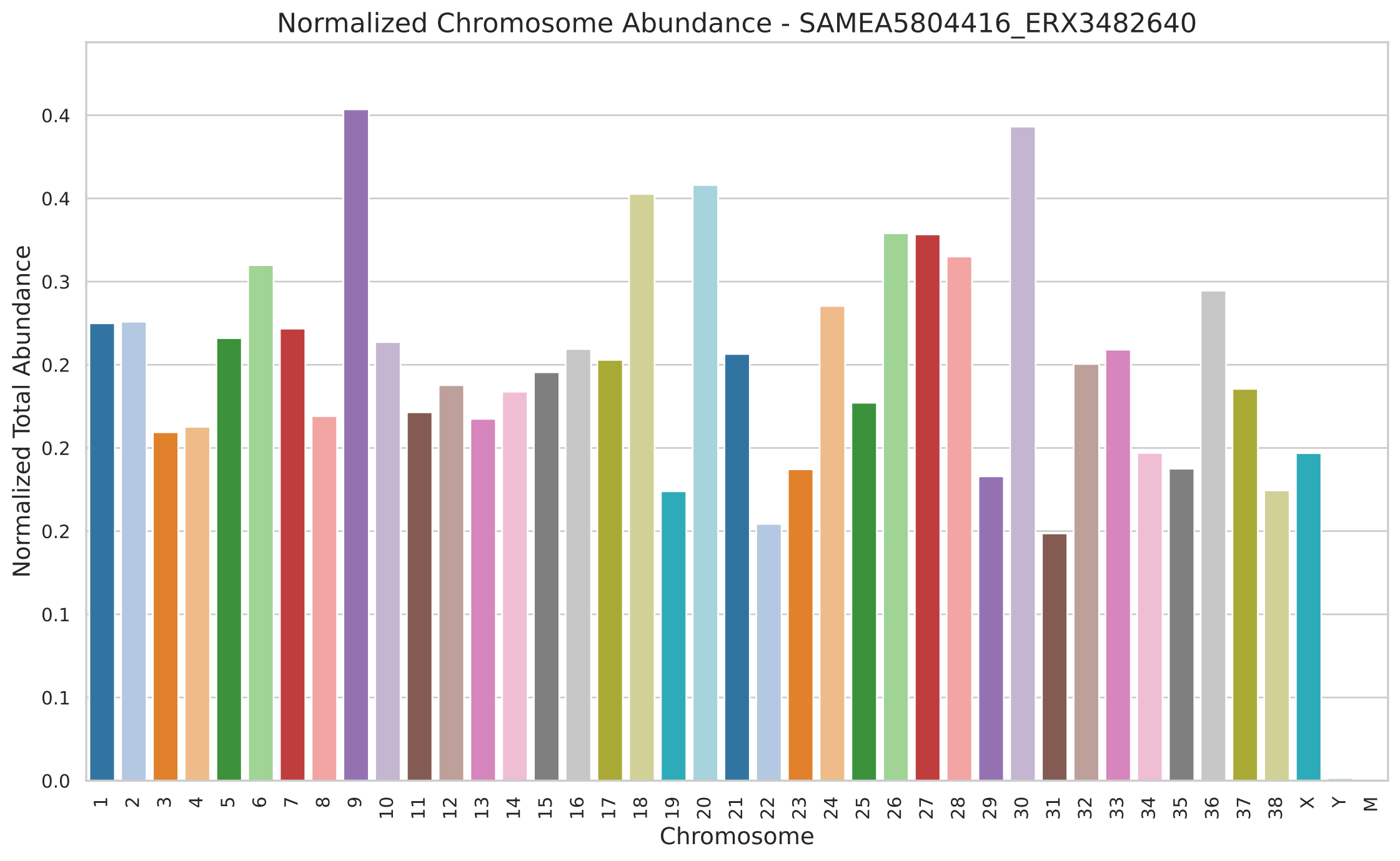

Normalized Chromosome Abundance - SAMEA5804402_ERX3482650
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

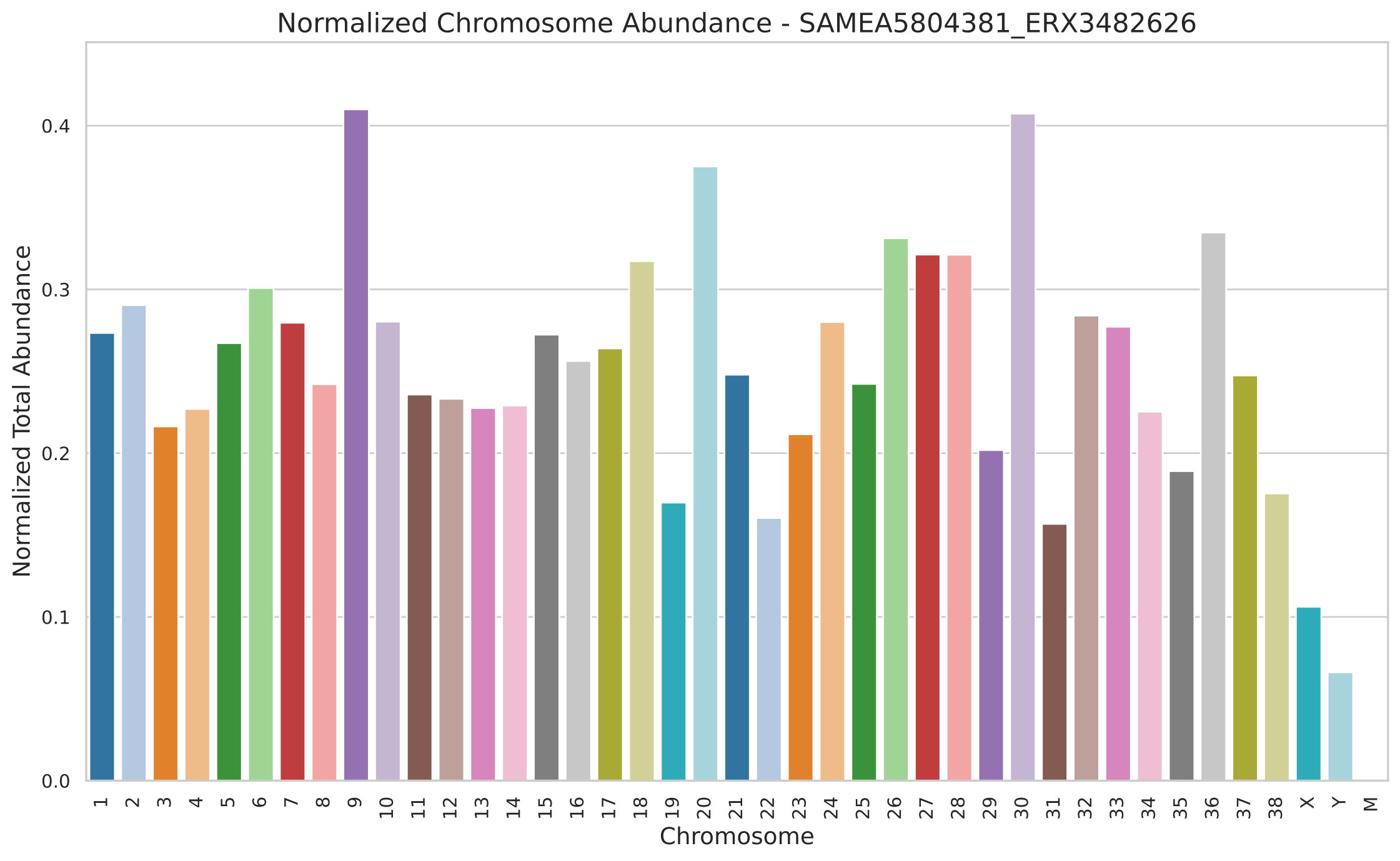

Normalized Chromosome Abundance - SAMEA5804522_ERX3482586
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

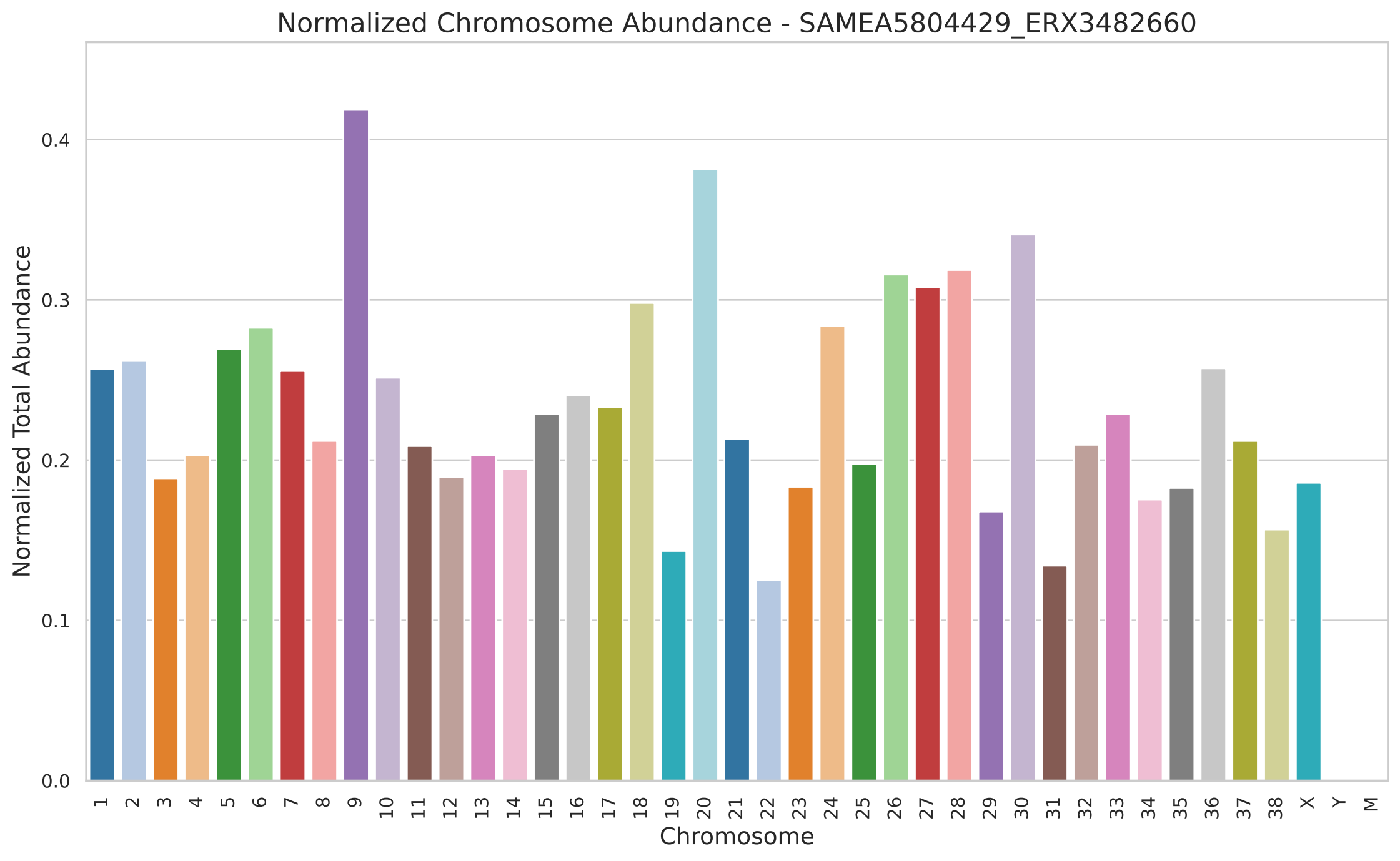

Normalized Chromosome Abundance - SAMEA5804442_ERX3482578
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

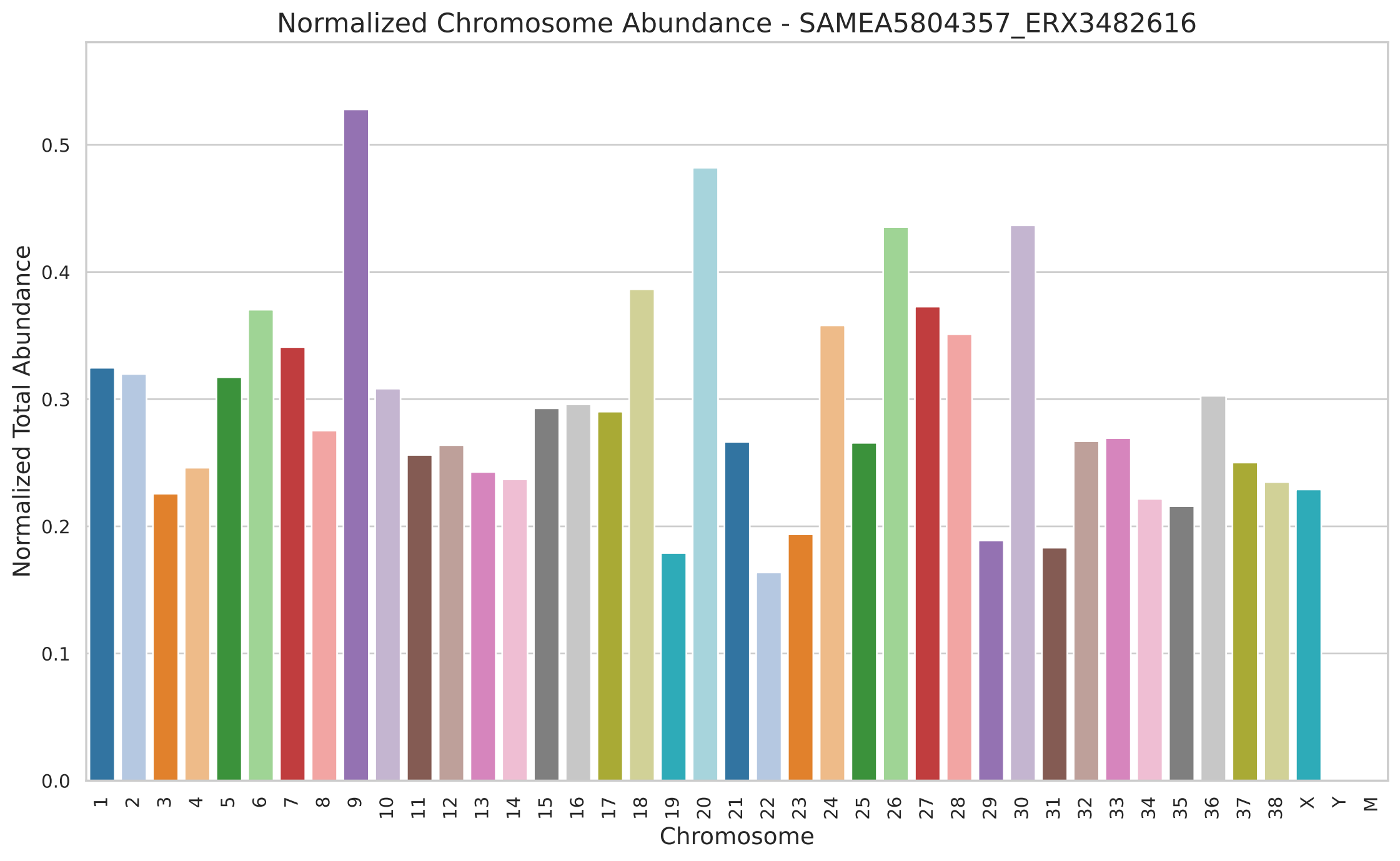

Normalized Chromosome Abundance - SAMEA5804345_ERX3482612
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

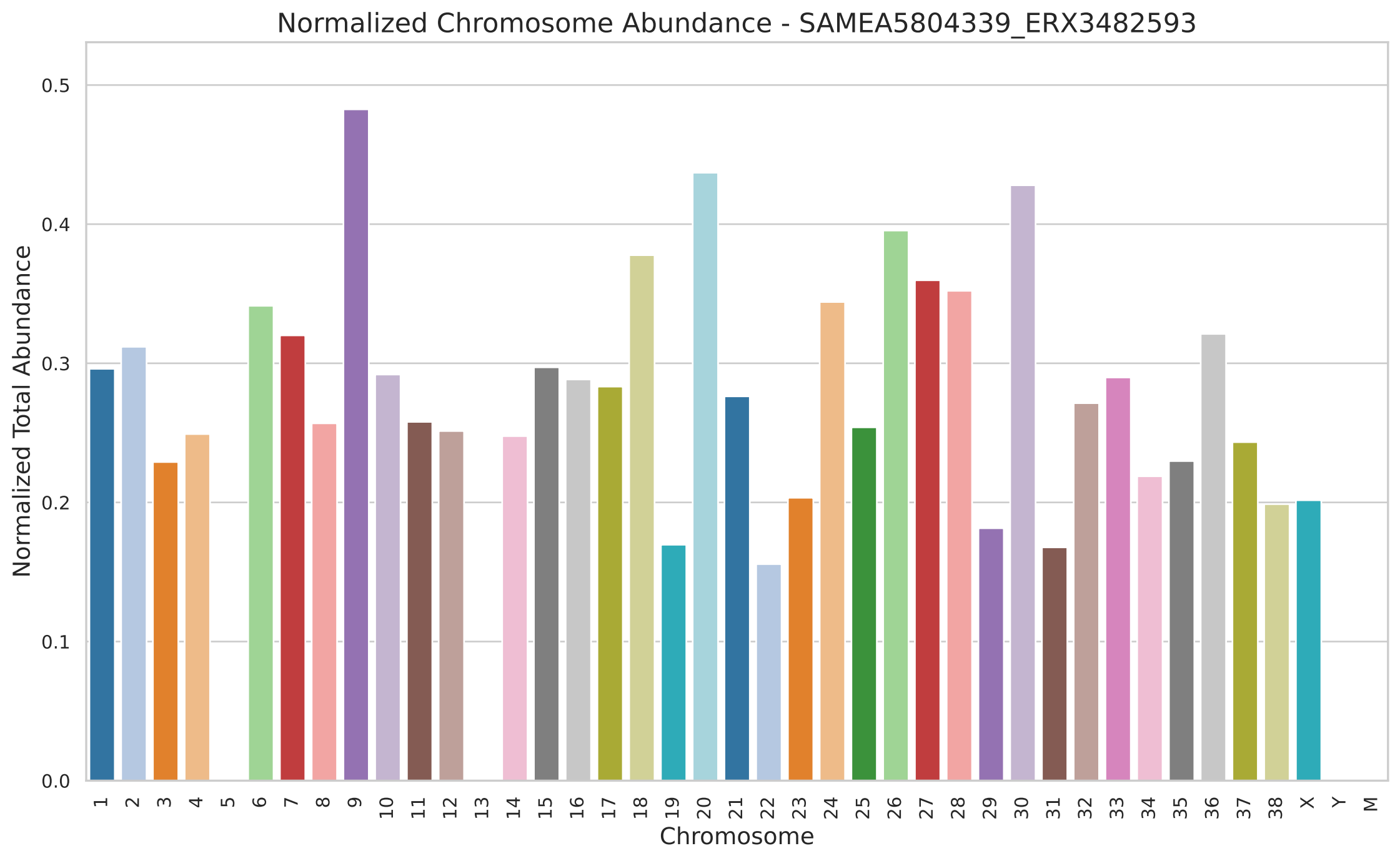

Normalized Chromosome Abundance - SAMEA5804341_ERX3482610
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

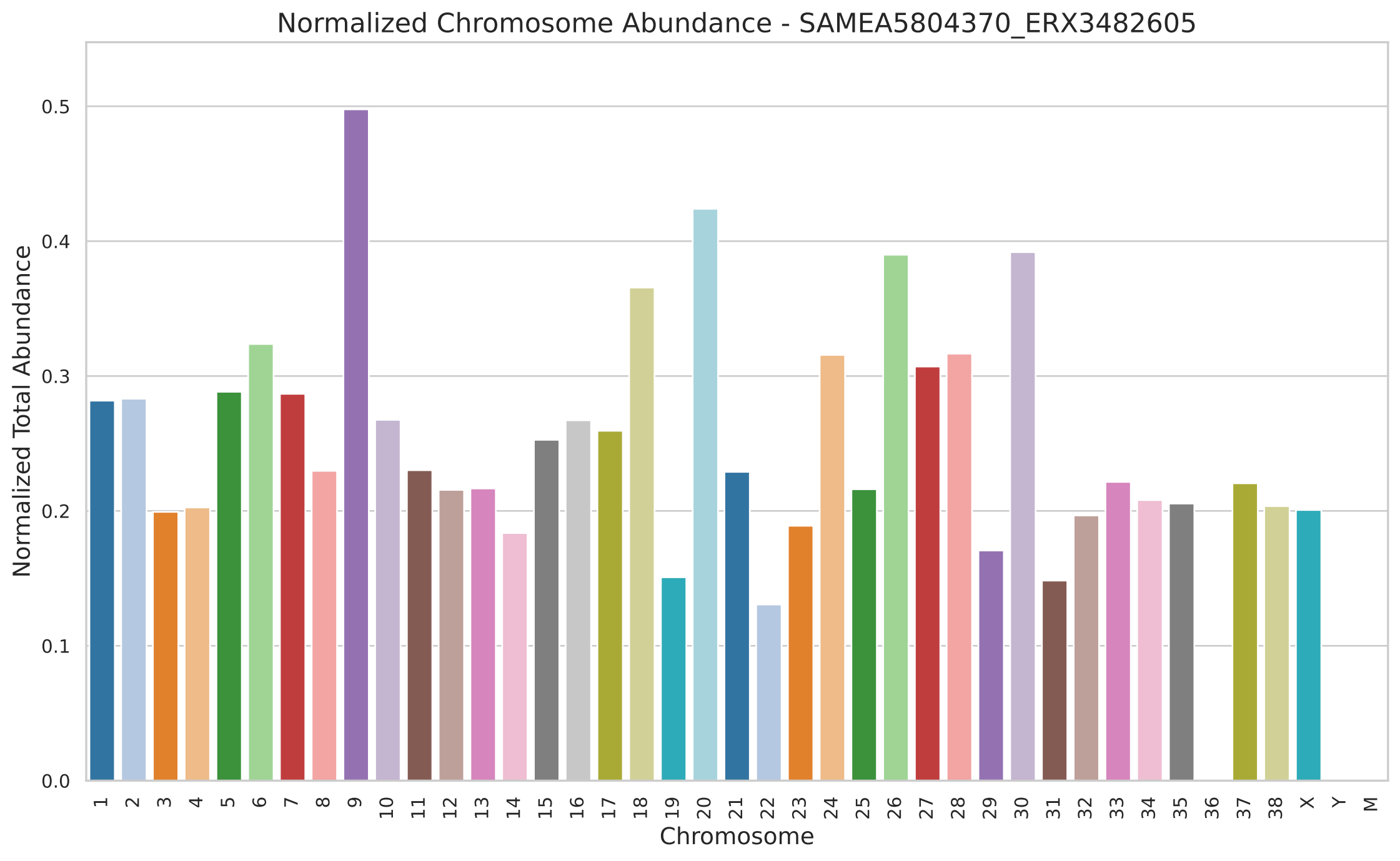

Normalized Chromosome Abundance - SAMEA5804416_ERX3482640
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

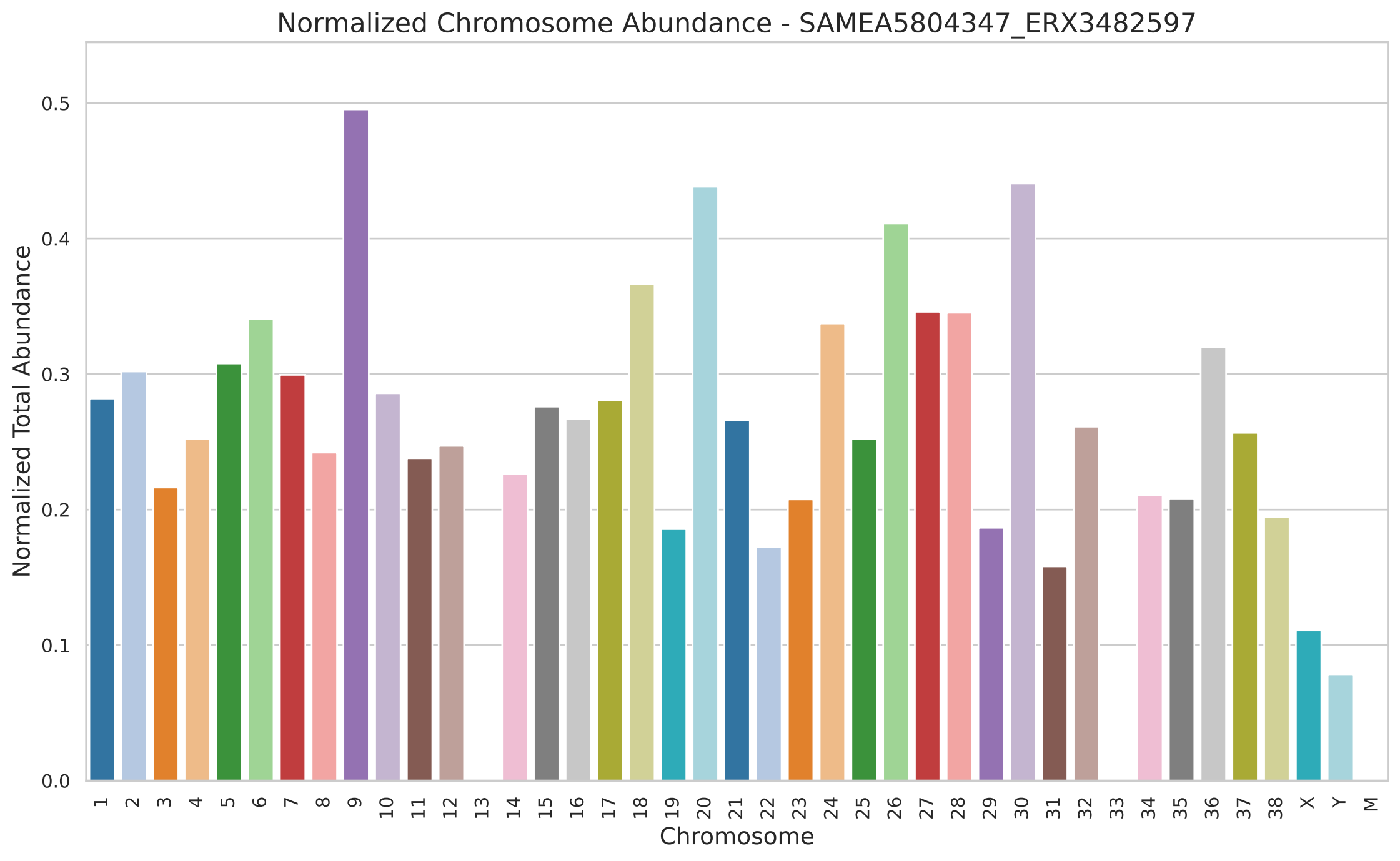

Normalized Chromosome Abundance - SAMEA5804381_ERX3482626
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

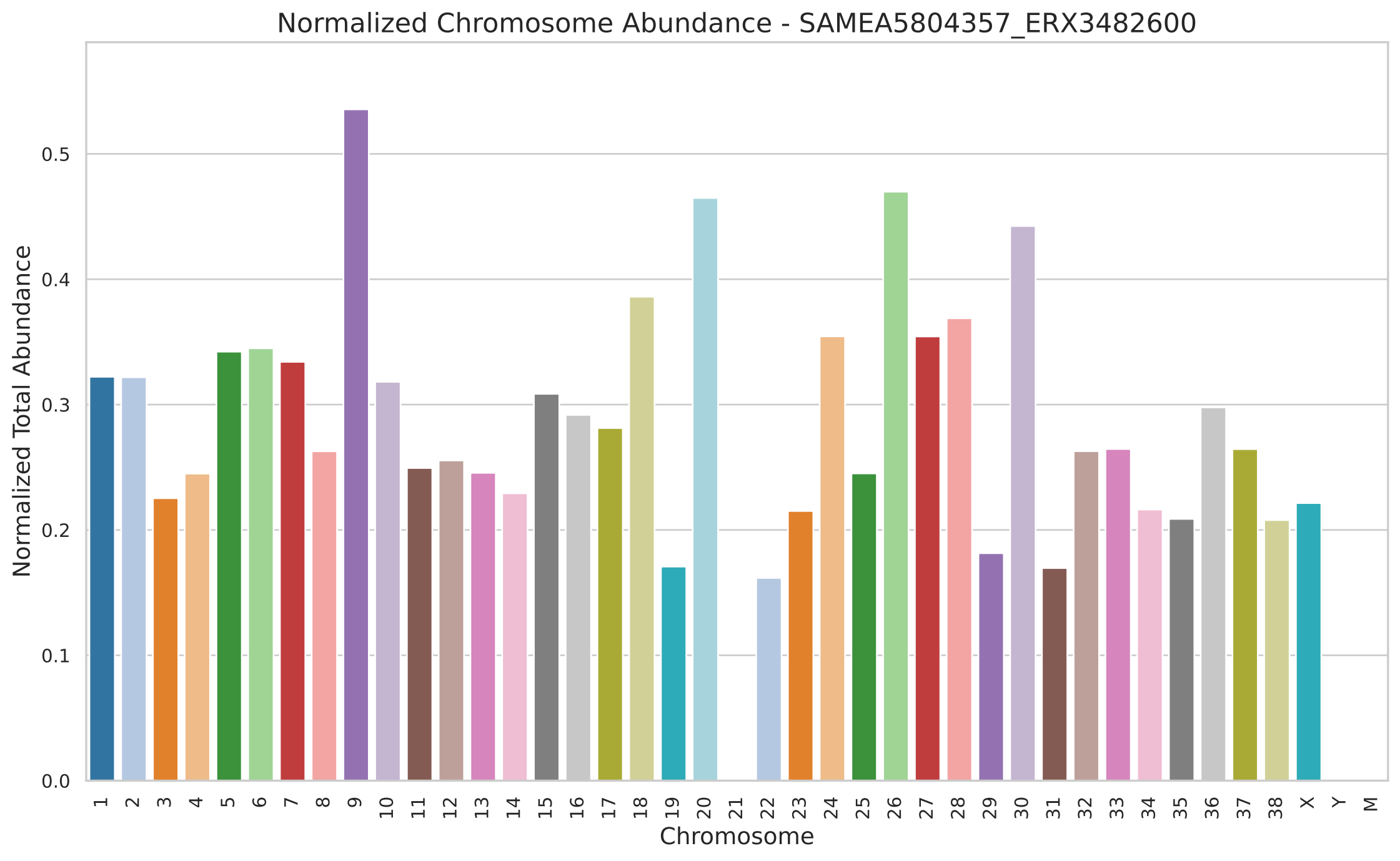

Normalized Chromosome Abundance - SAMEA5804429_ERX3482660
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

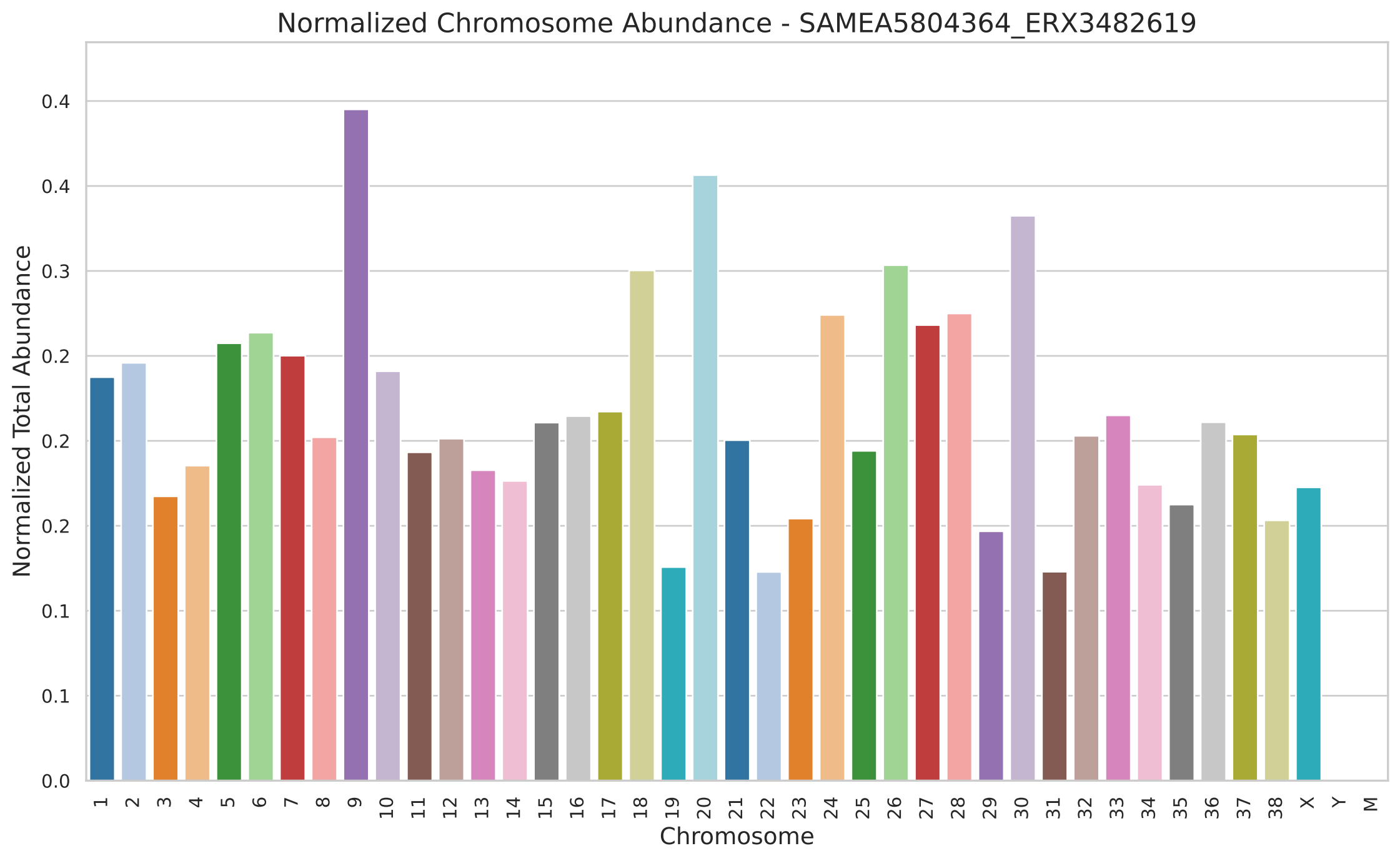

Normalized Chromosome Abundance - SAMEA5804357_ERX3482616
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

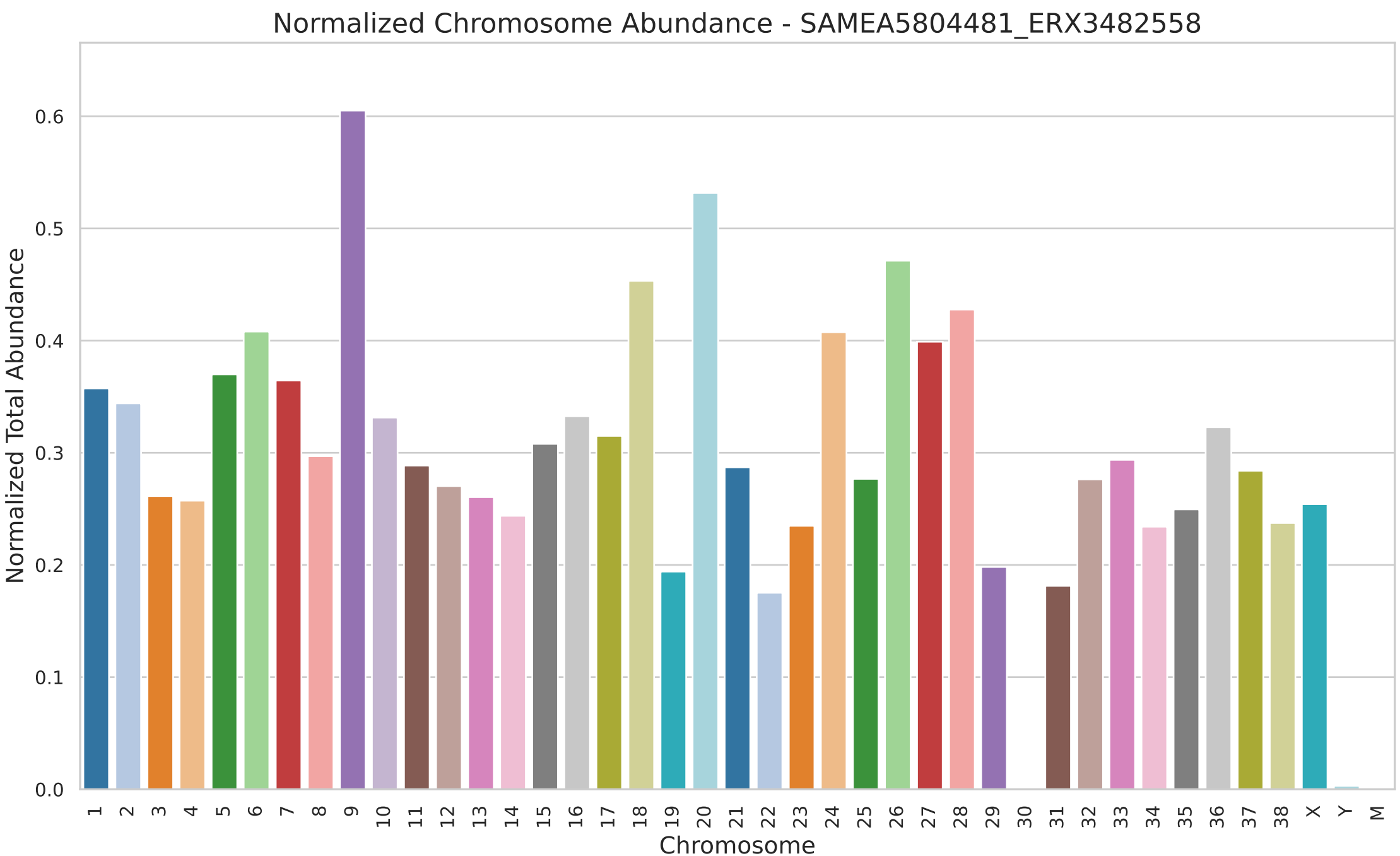

Normalized Chromosome Abundance - SAMEA5804339_ERX3482593
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

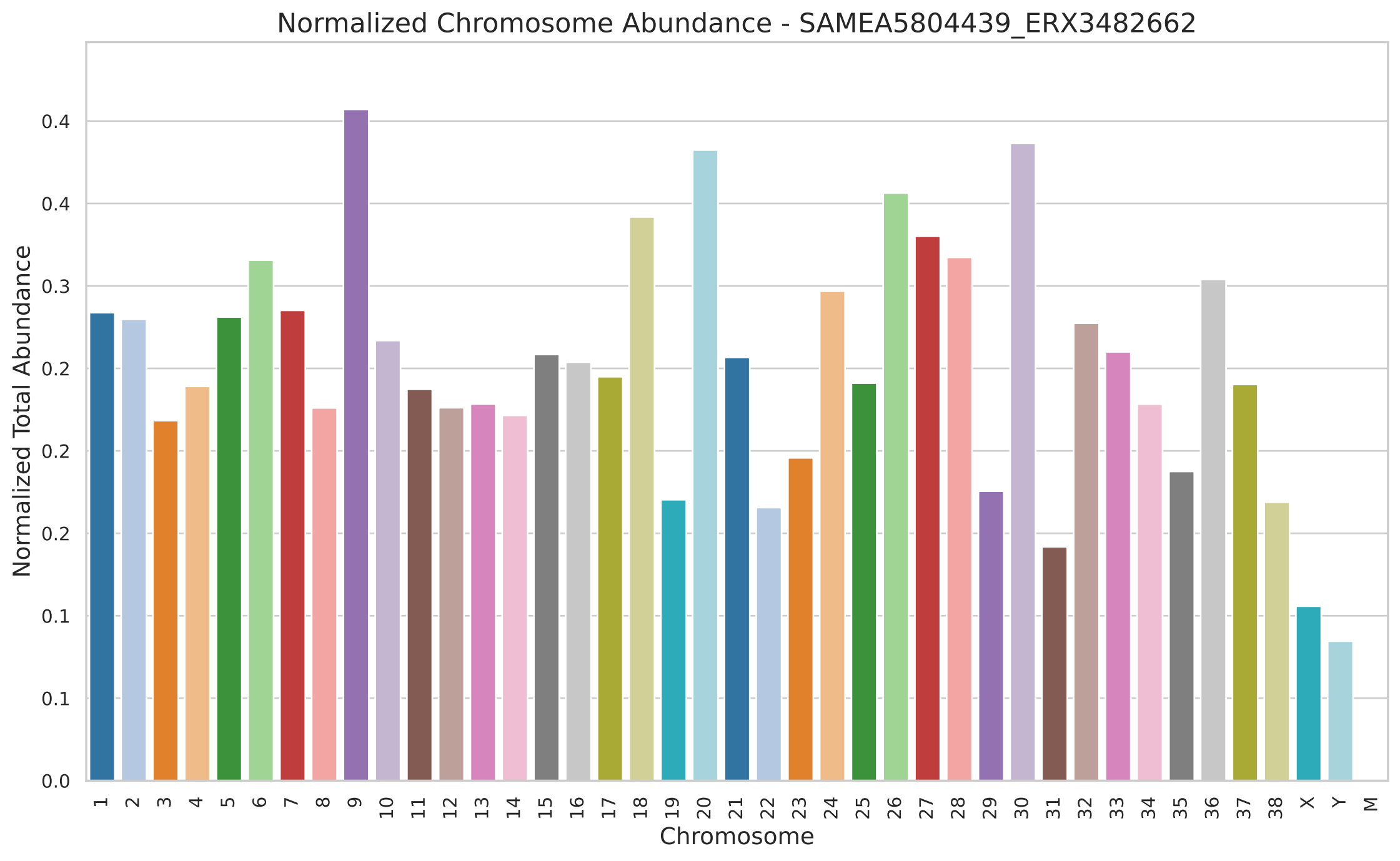

Normalized Chromosome Abundance - SAMEA5804370_ERX3482605
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

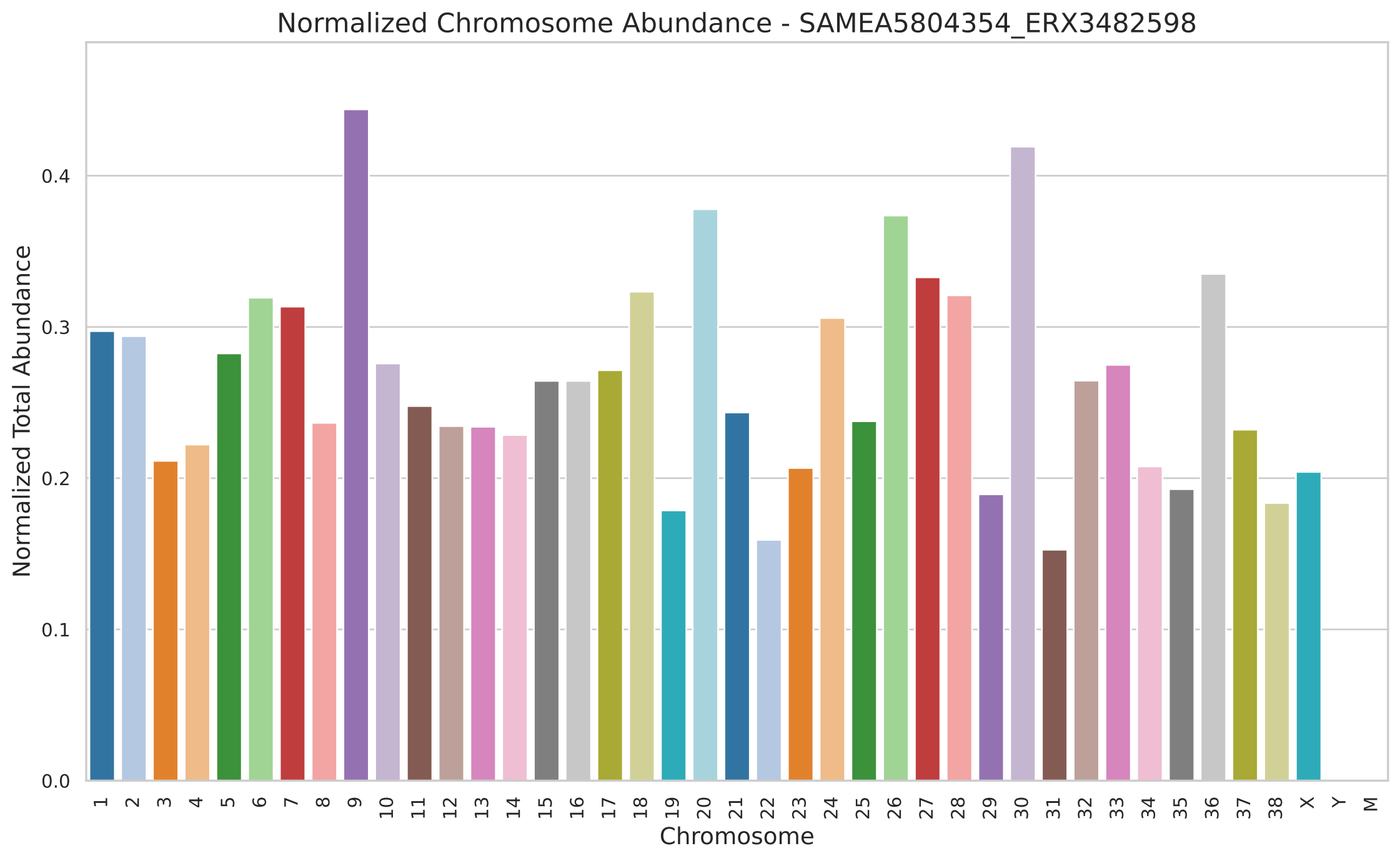

Normalized Chromosome Abundance - SAMEA5804347_ERX3482597
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

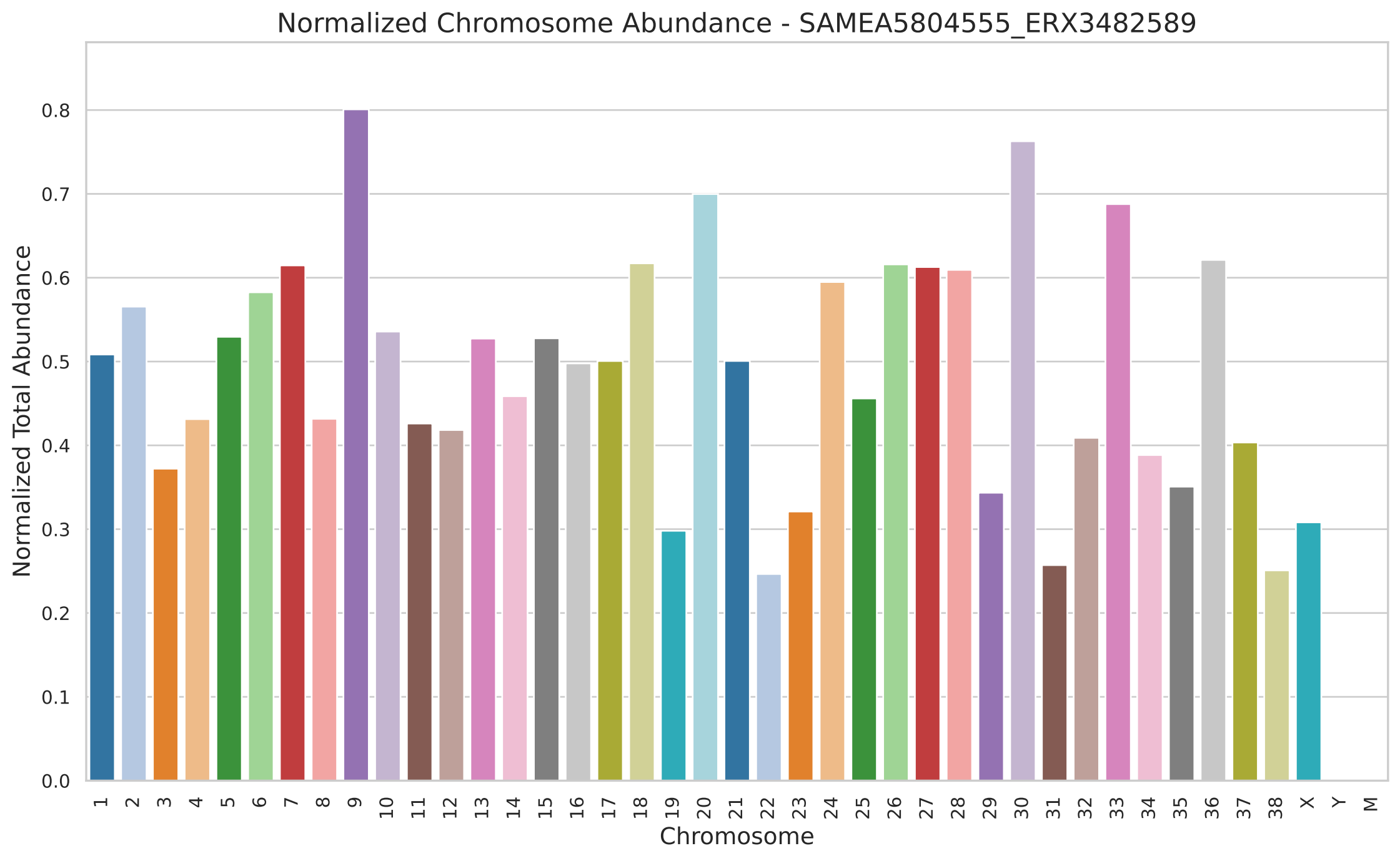

Normalized Chromosome Abundance - SAMEA5804357_ERX3482600
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

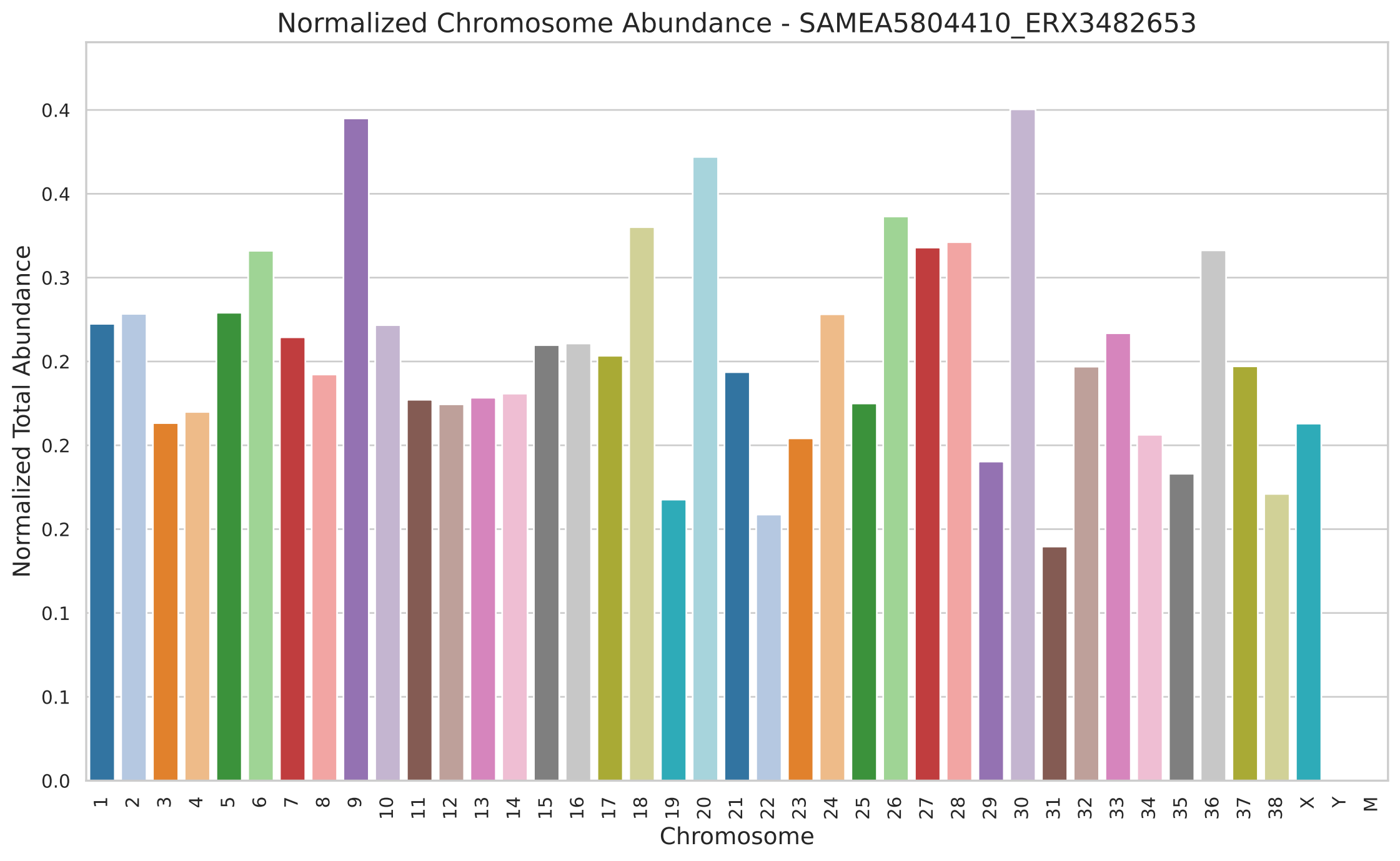

Normalized Chromosome Abundance - SAMEA5804364_ERX3482619
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
0.4
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

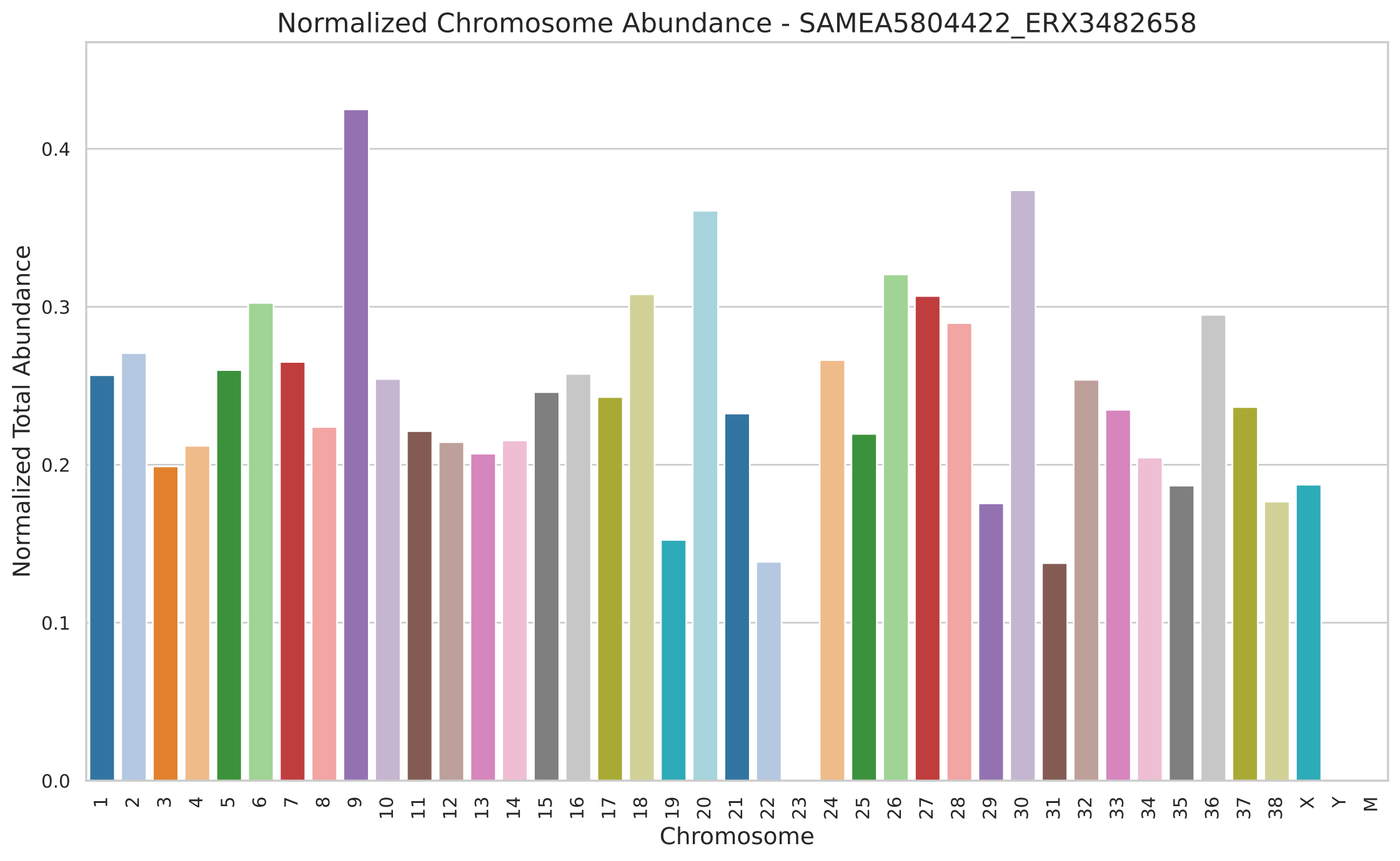

Normalized Chromosome Abundance - SAMEA5804481_ERX3482558
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

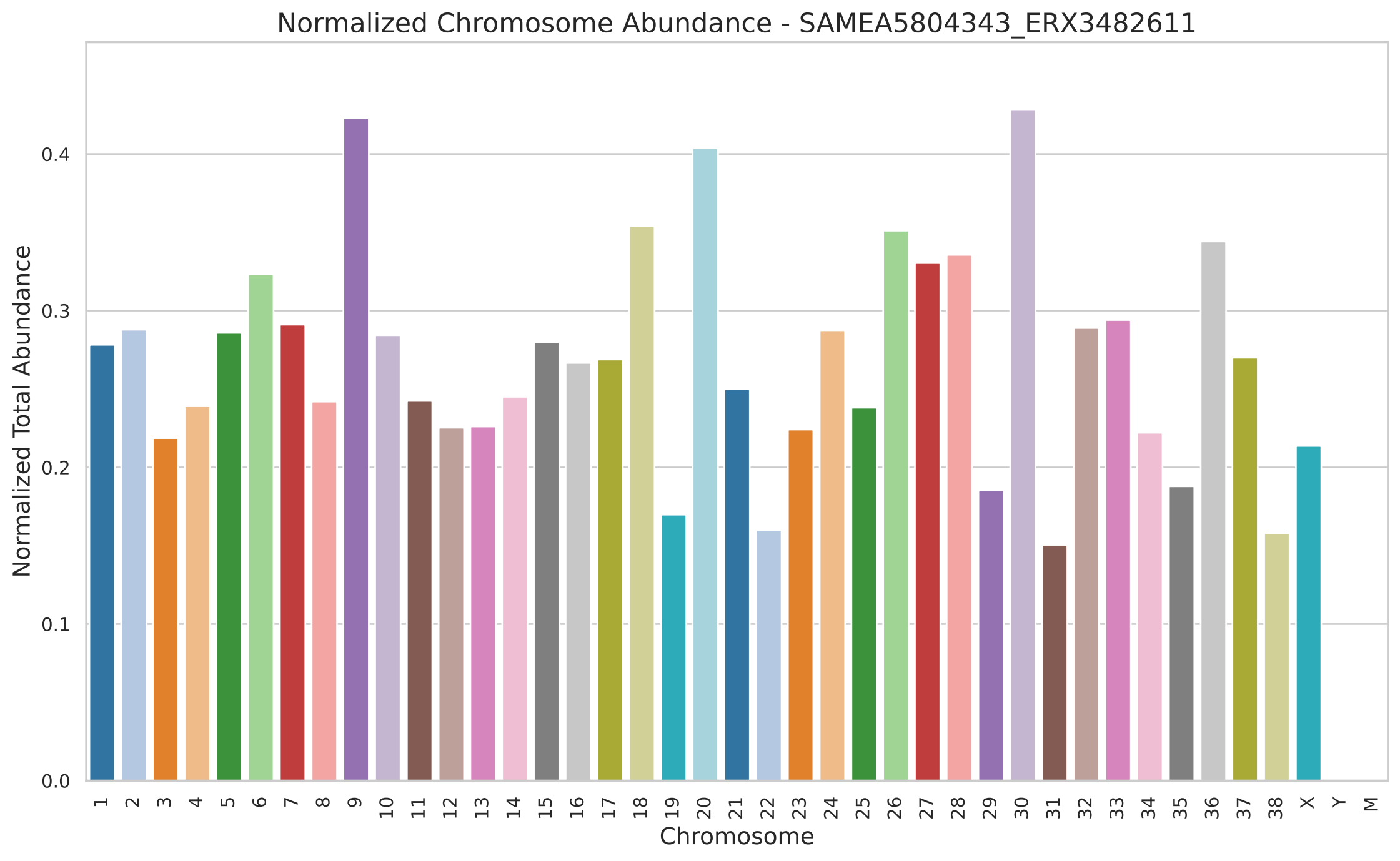

Normalized Chromosome Abundance - SAMEA5804439_ERX3482662
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

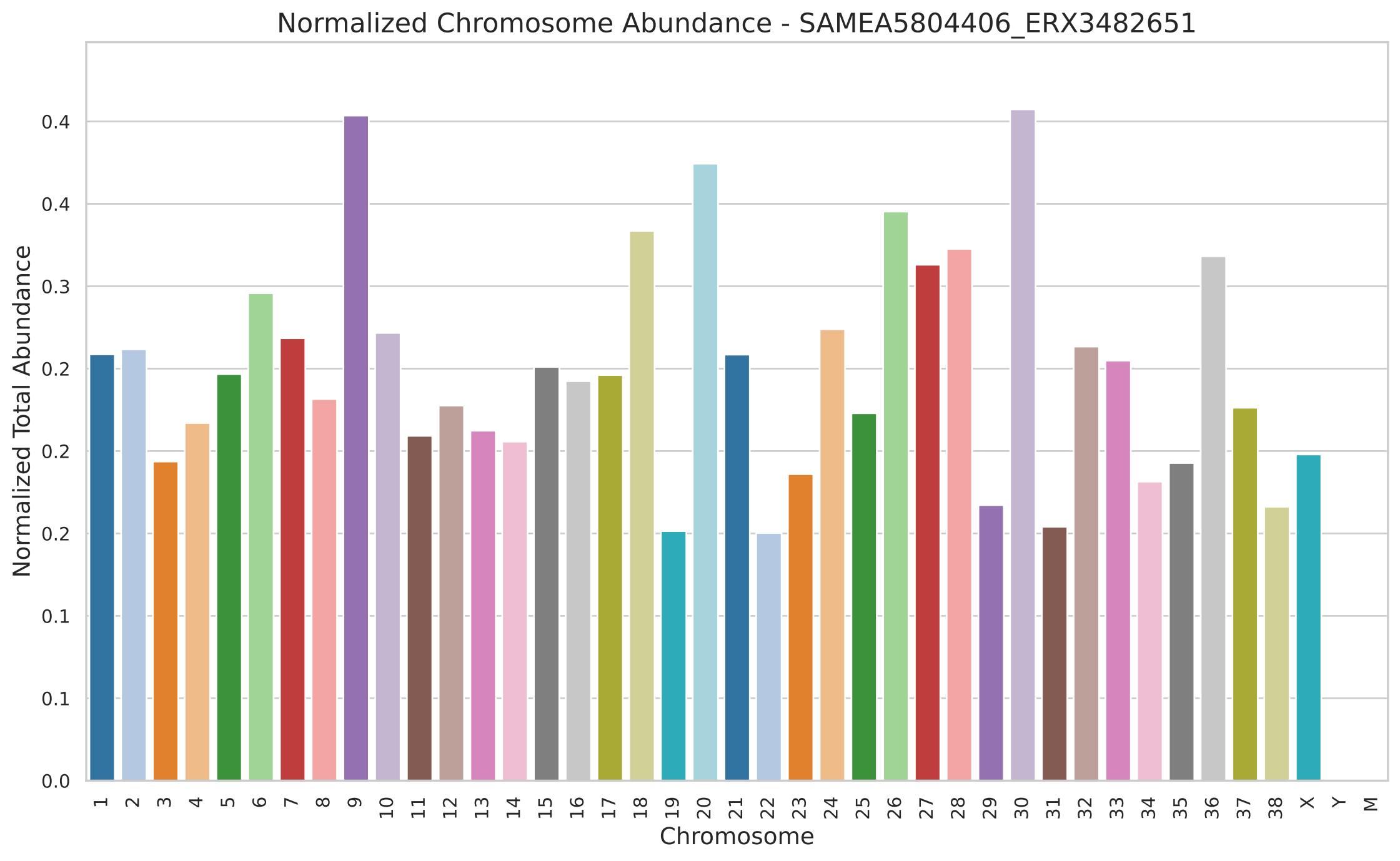

Normalized Chromosome Abundance - SAMEA5804354_ERX3482598
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

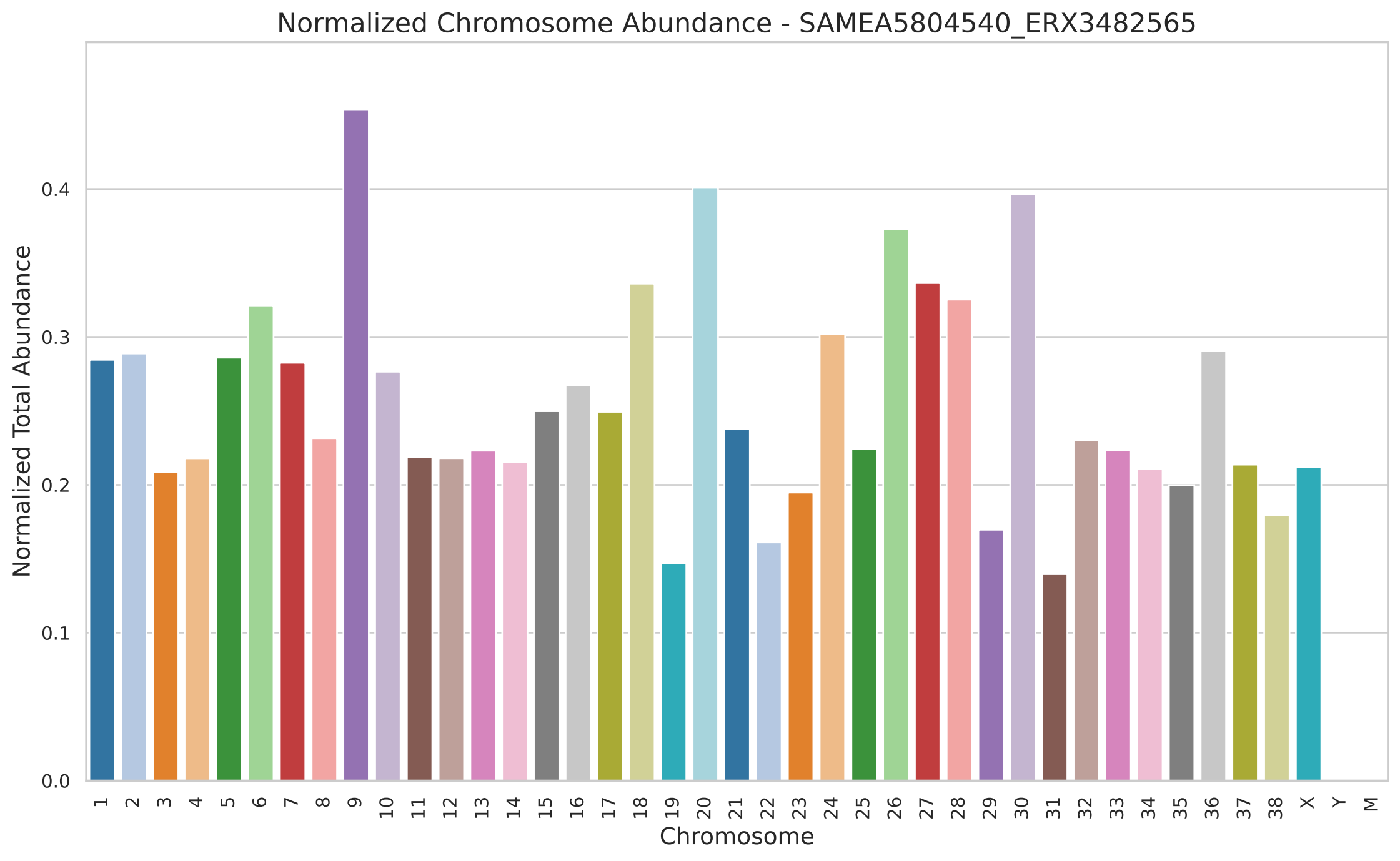

Normalized Chromosome Abundance - SAMEA5804555_ERX3482589
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

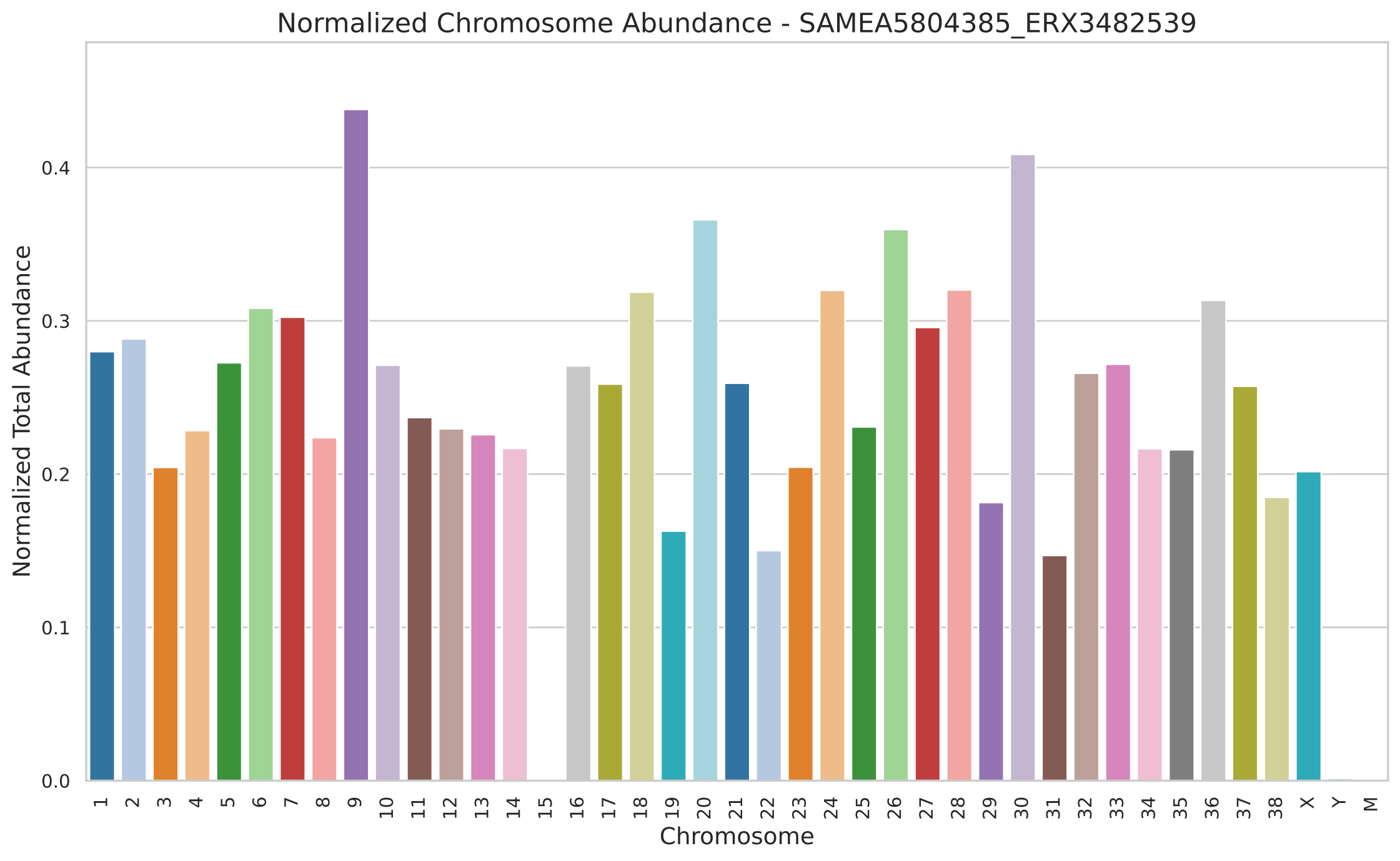

Normalized Chromosome Abundance - SAMEA5804410_ERX3482653
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

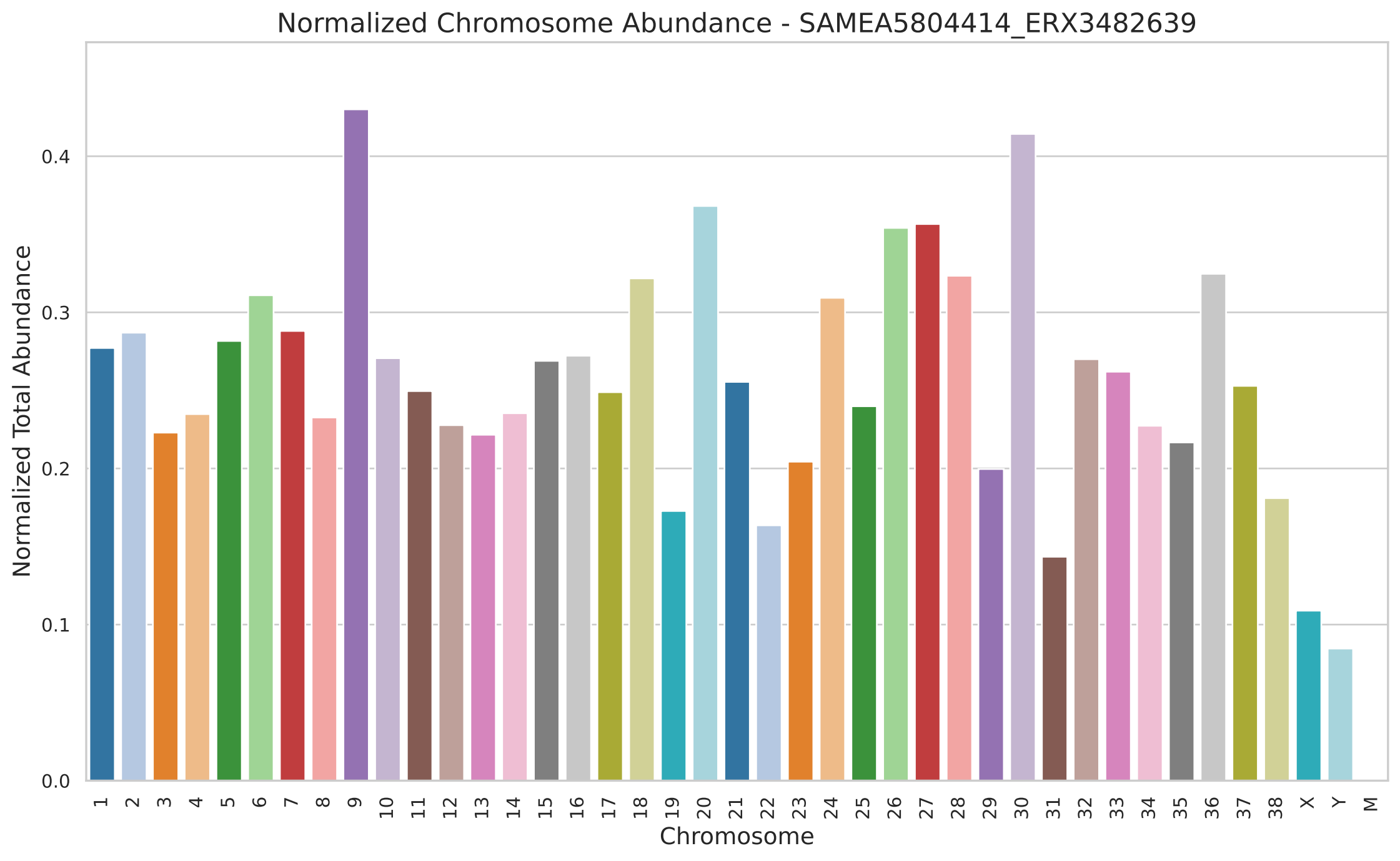

Normalized Chromosome Abundance - SAMEA5804422_ERX3482658
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

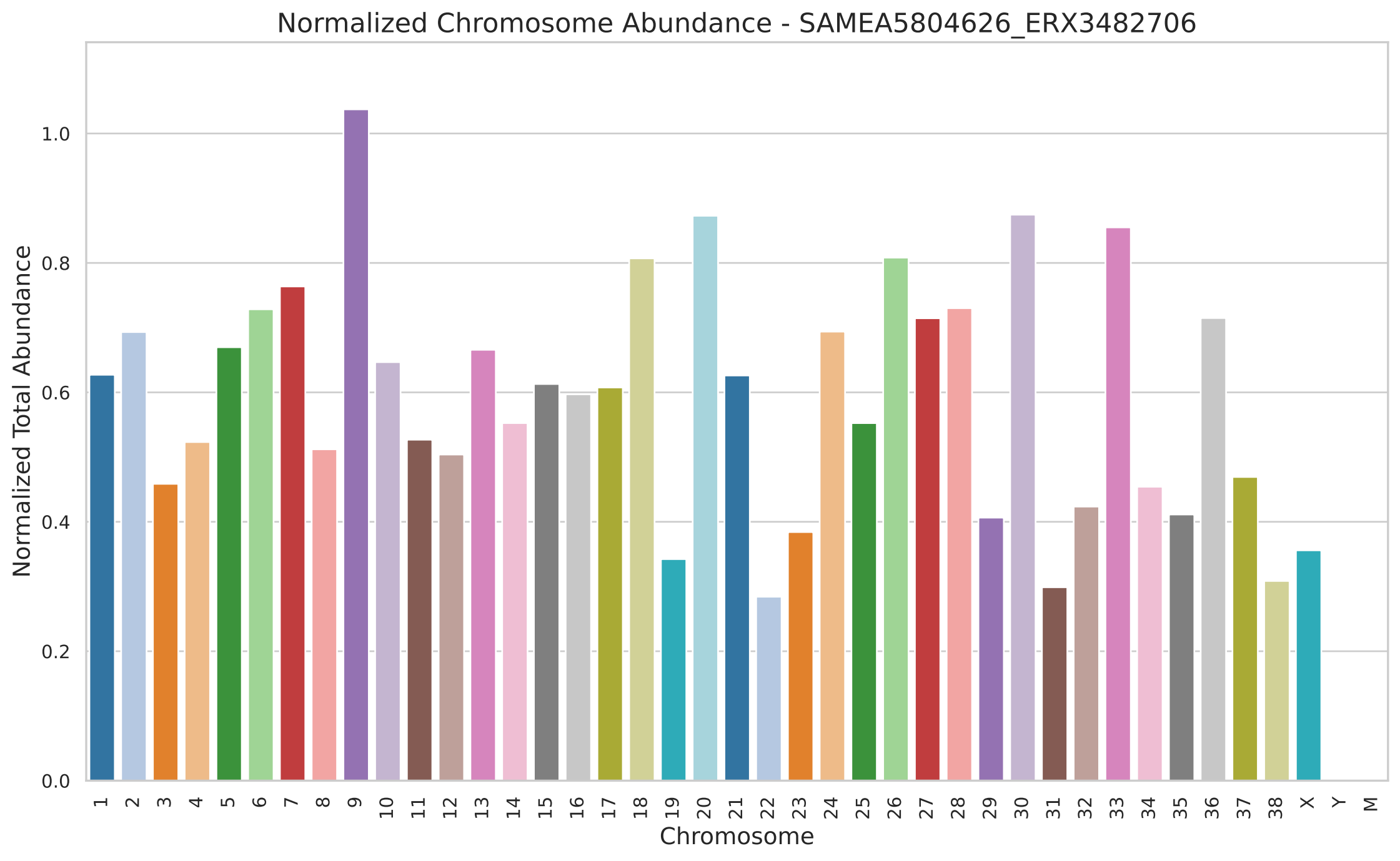

Normalized Chromosome Abundance - SAMEA5804343_ERX3482611
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

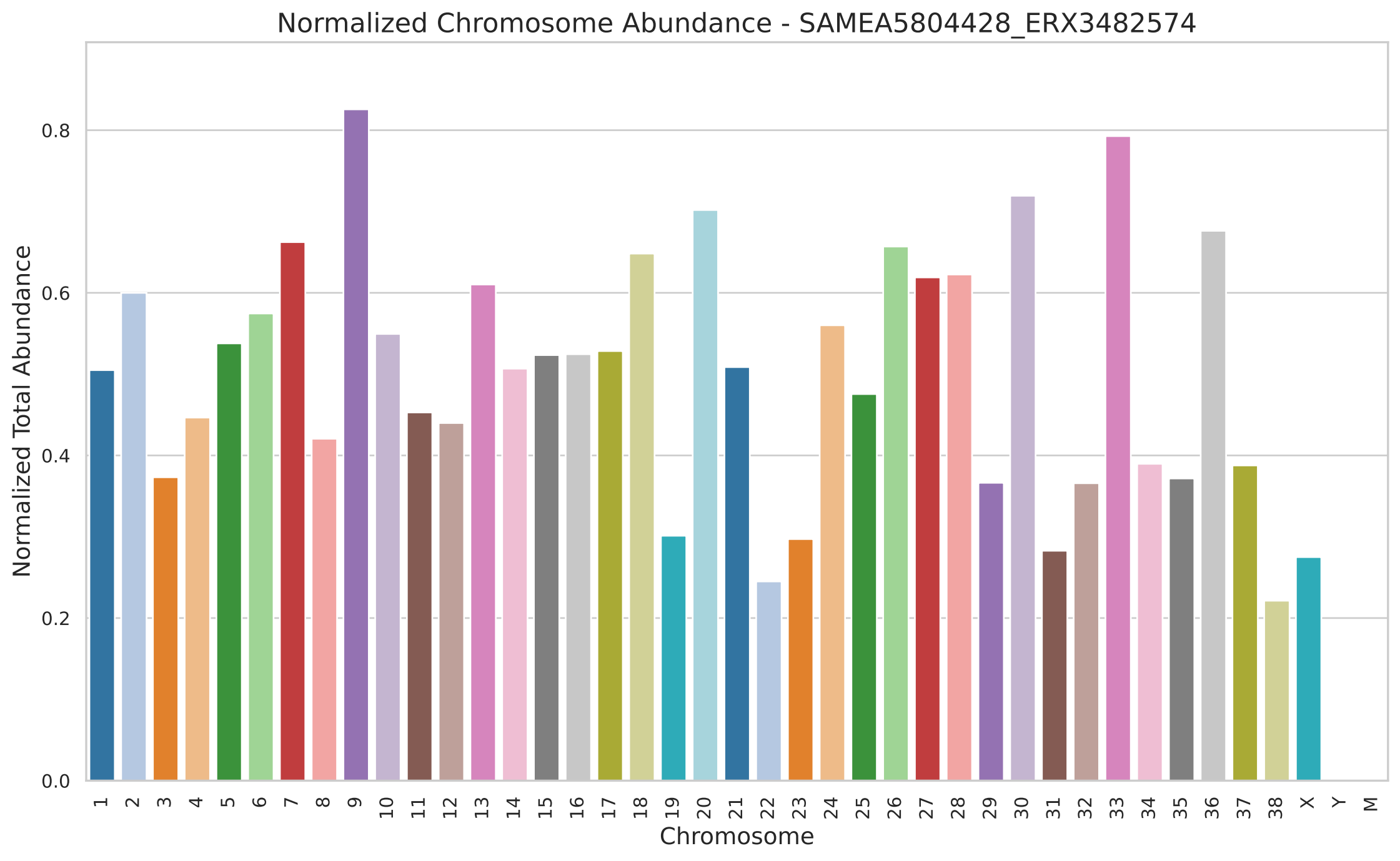

Normalized Chromosome Abundance - SAMEA5804406_ERX3482651
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

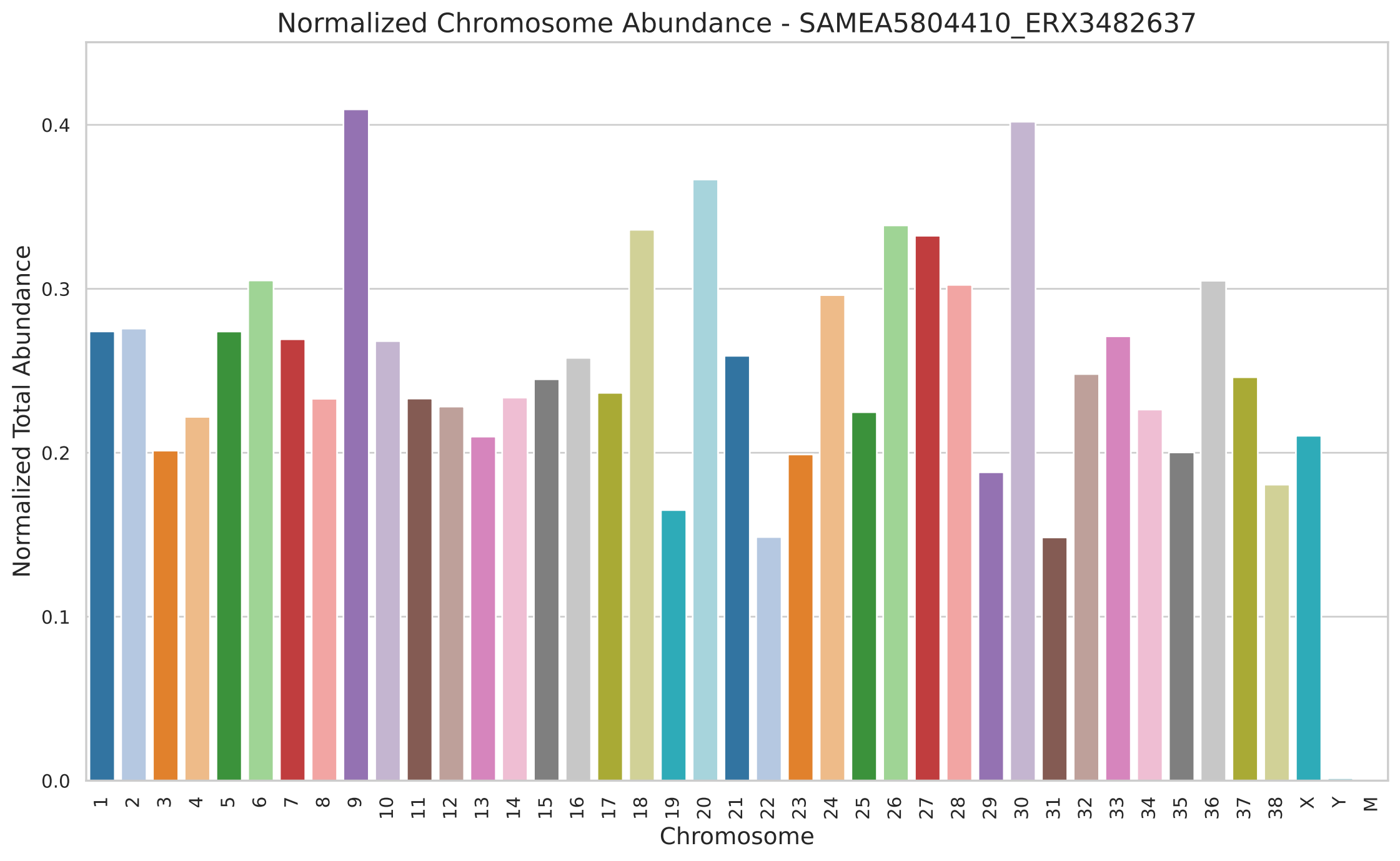

Normalized Chromosome Abundance - SAMEA5804540_ERX3482565
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

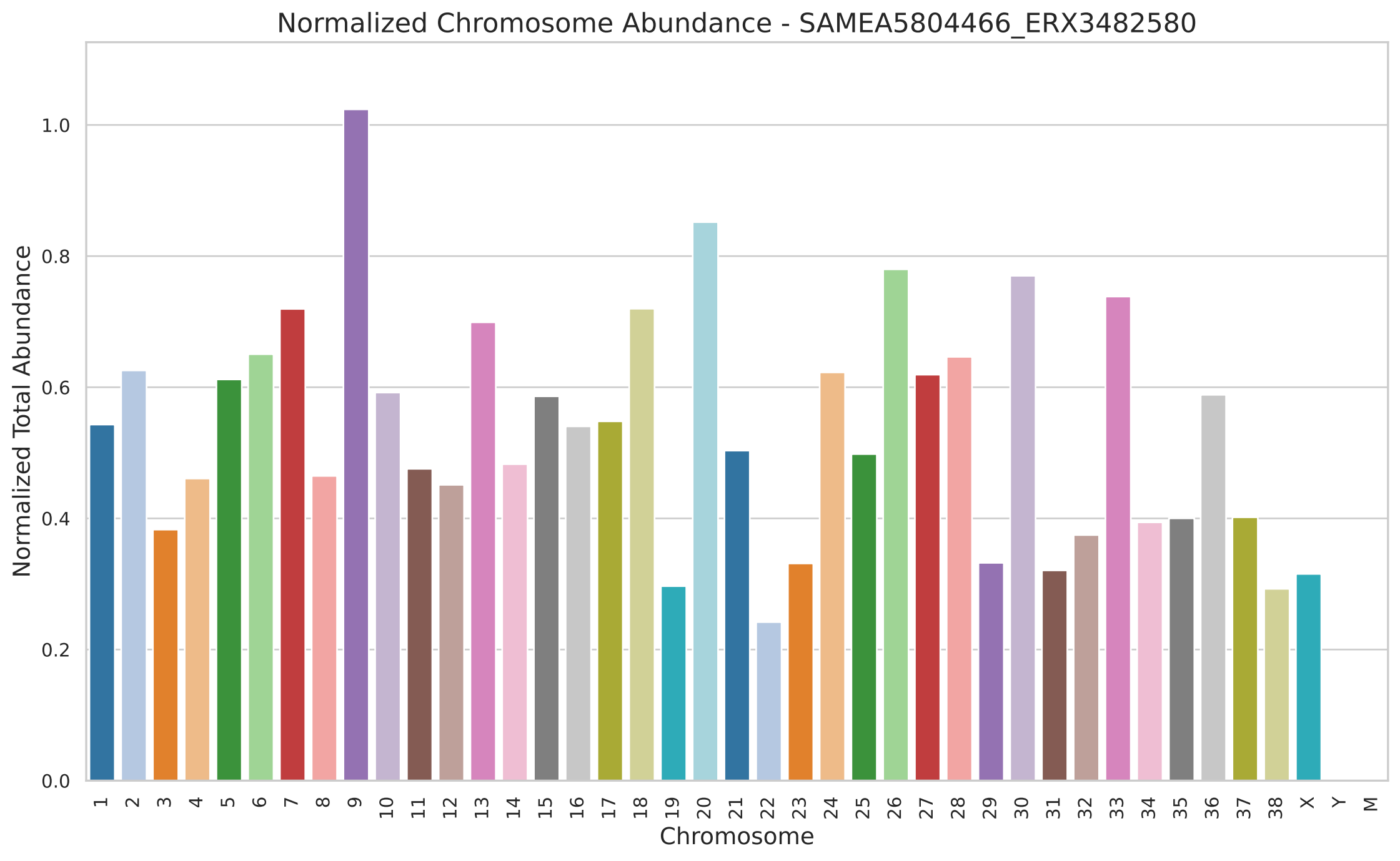

Normalized Chromosome Abundance - SAMEA5804385_ERX3482539
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

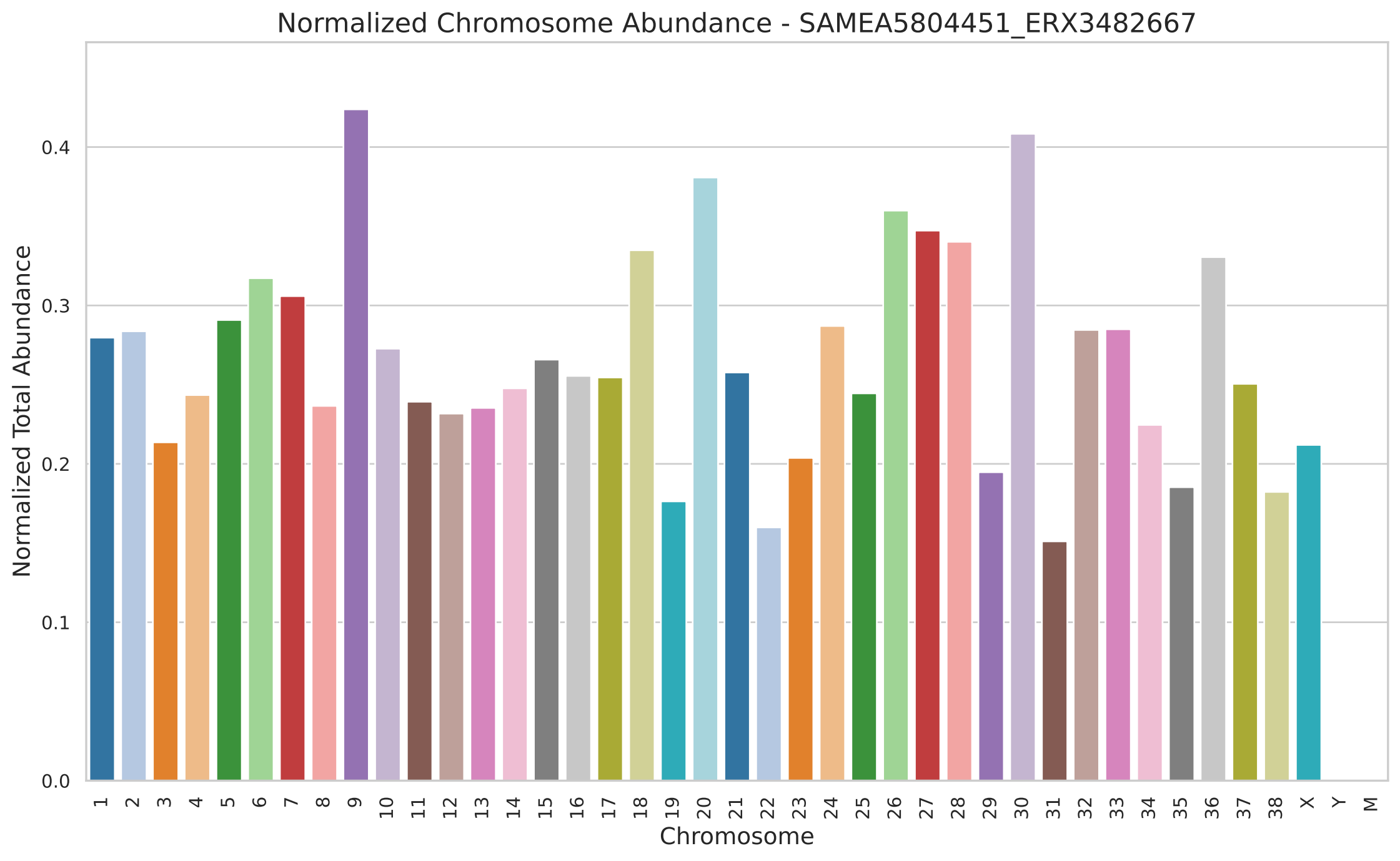

Normalized Chromosome Abundance - SAMEA5804414_ERX3482639
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

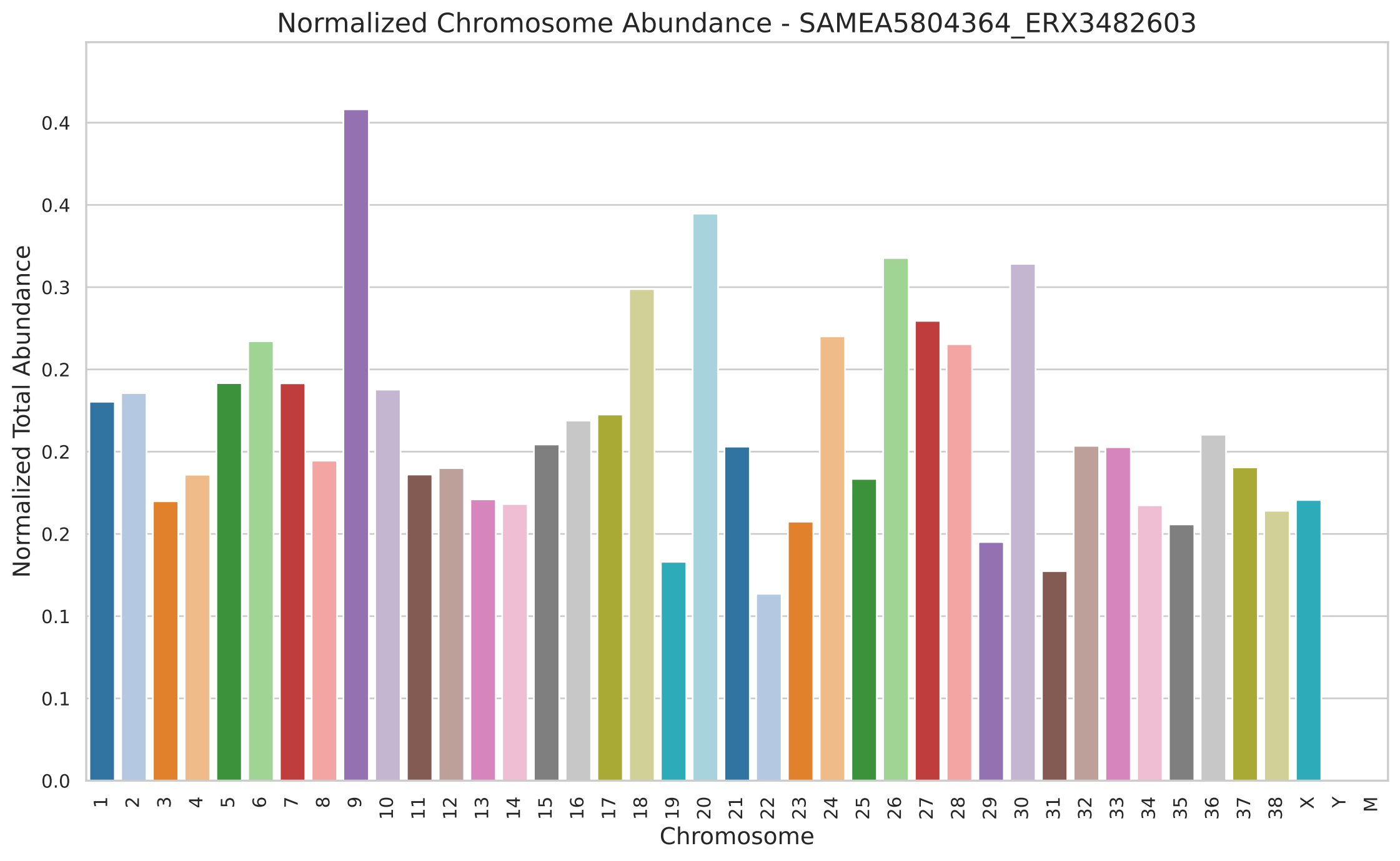

Normalized Chromosome Abundance - SAMEA5804626_ERX3482706
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

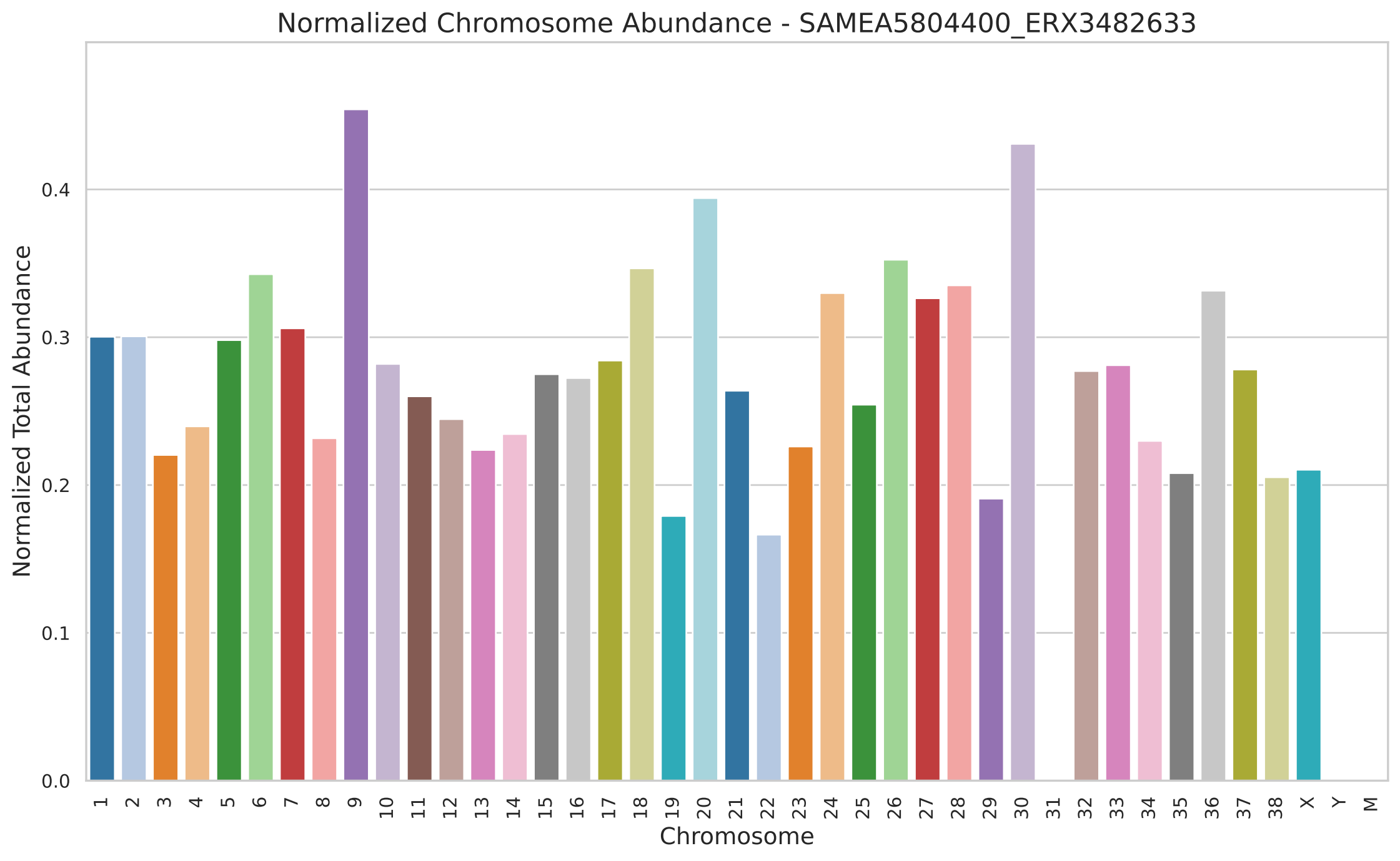

Normalized Chromosome Abundance - SAMEA5804428_ERX3482574
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

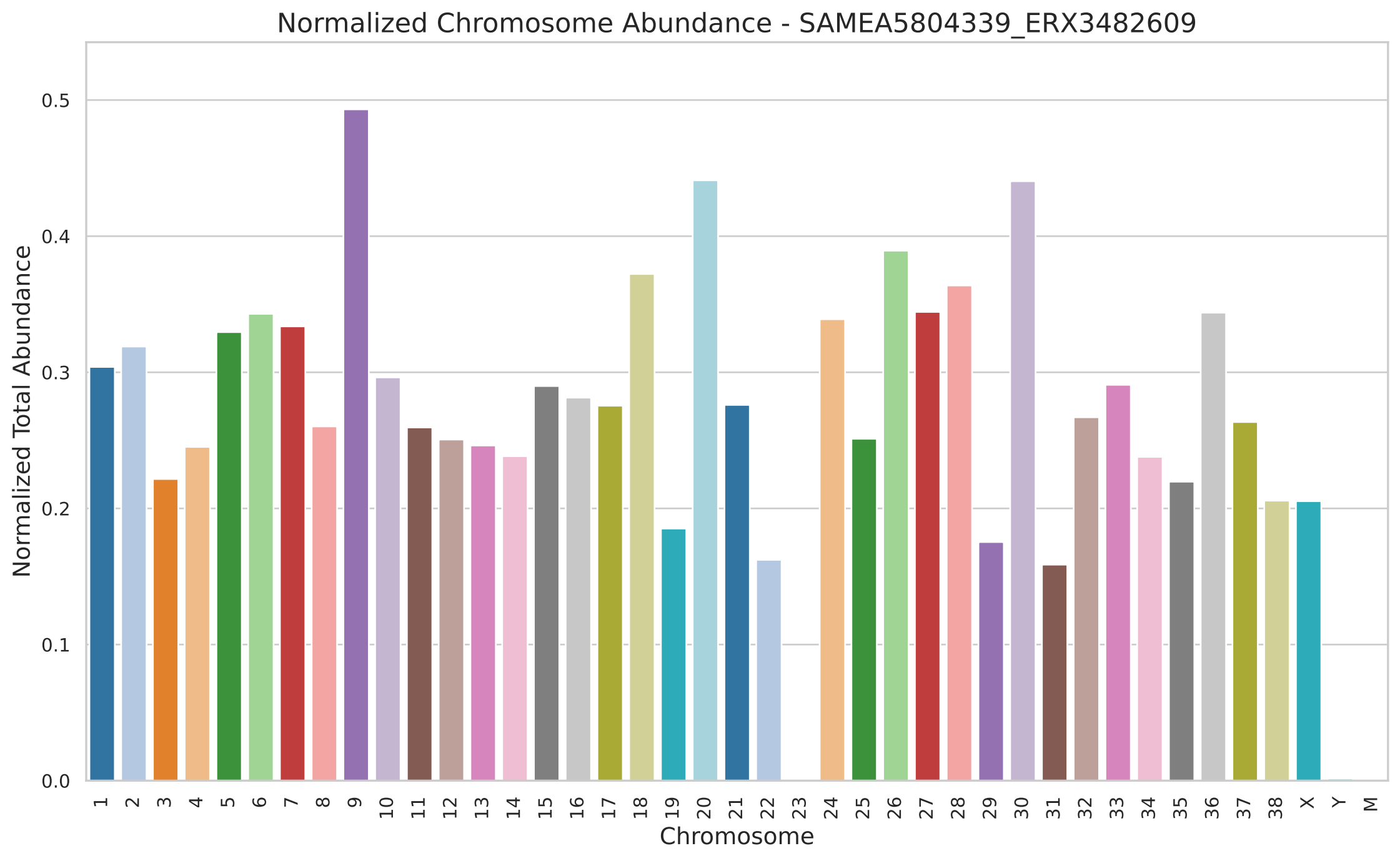

Normalized Chromosome Abundance - SAMEA5804410_ERX3482637
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

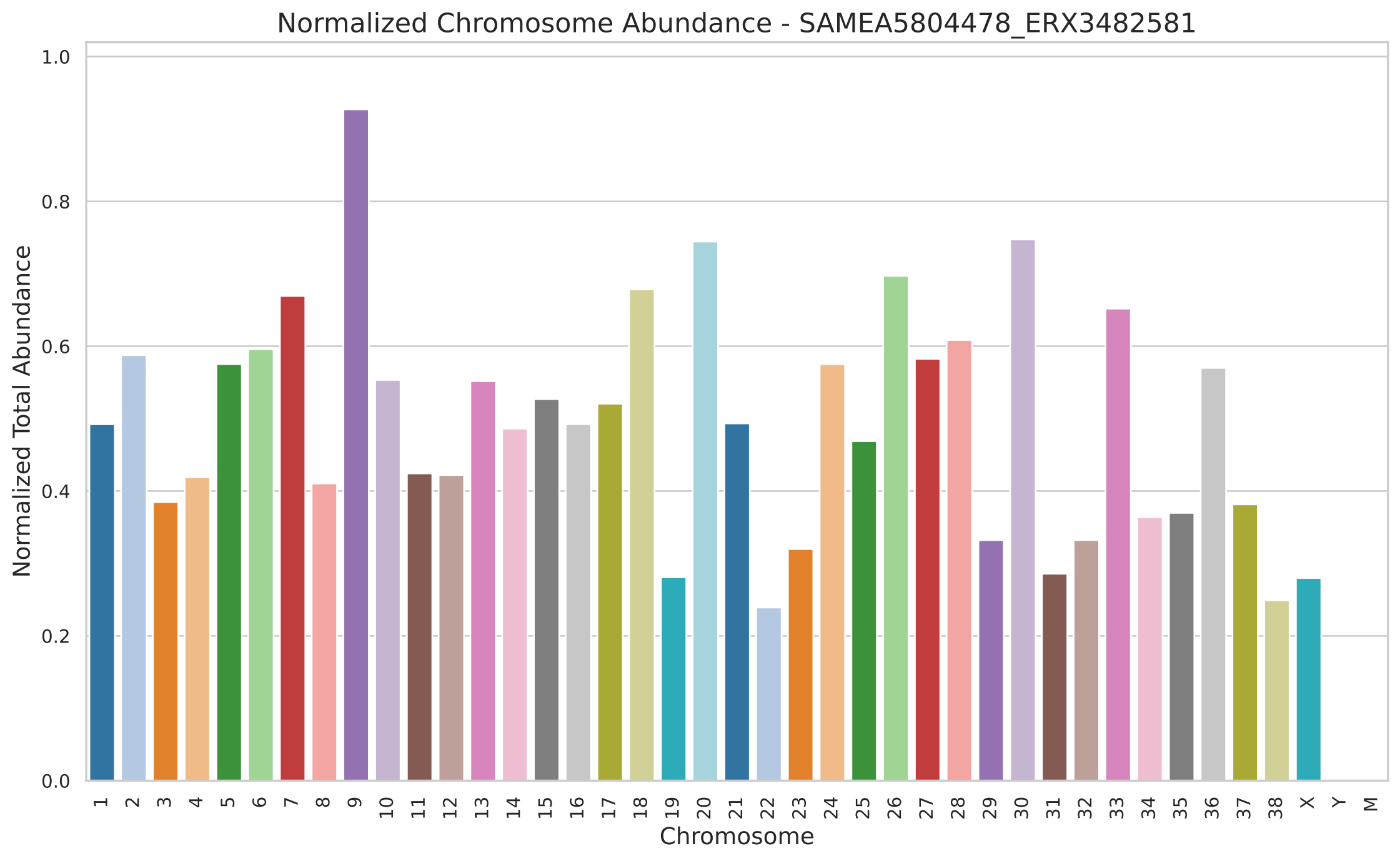

Normalized Chromosome Abundance - SAMEA5804466_ERX3482580
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

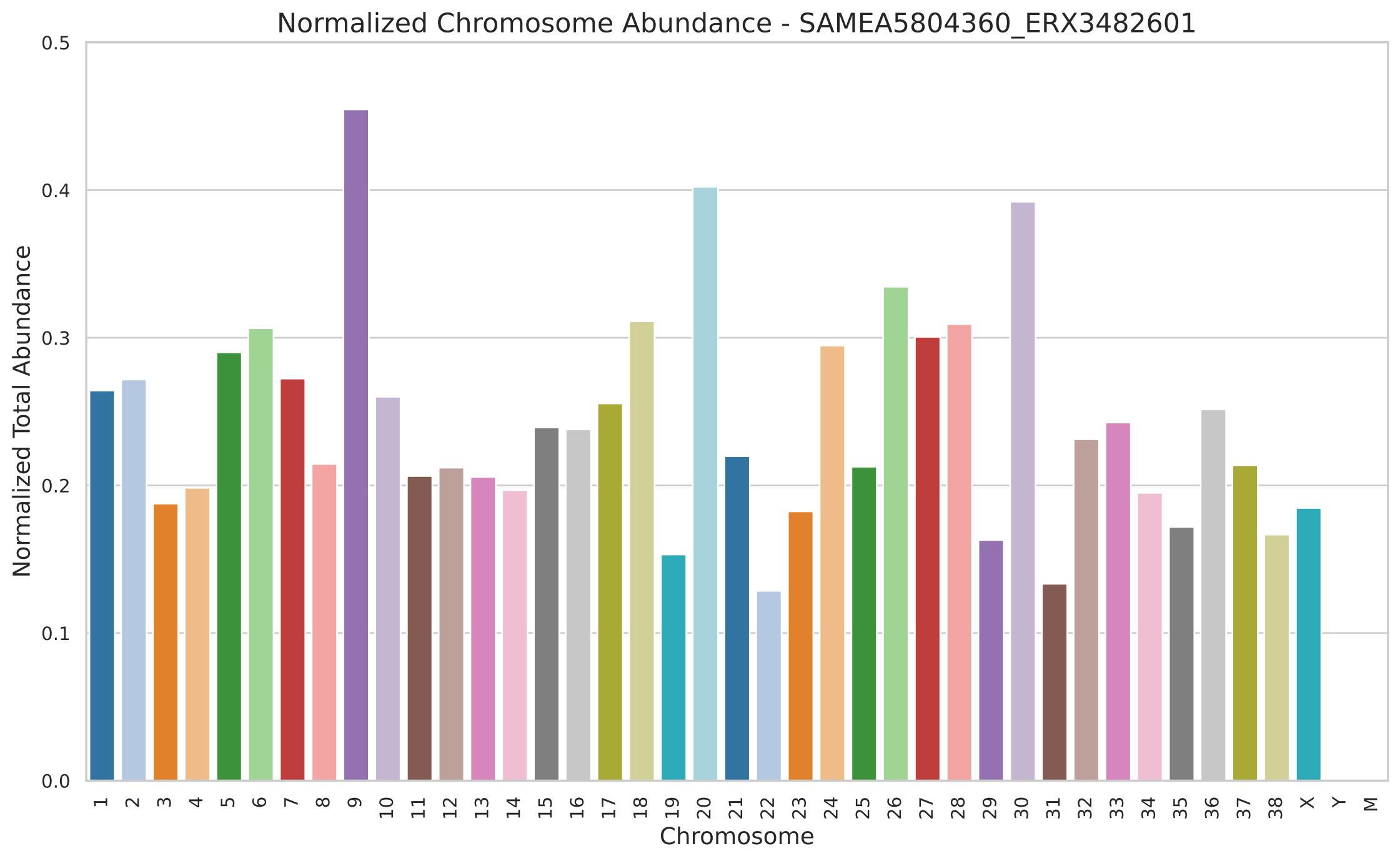

Normalized Chromosome Abundance - SAMEA5804451_ERX3482667
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

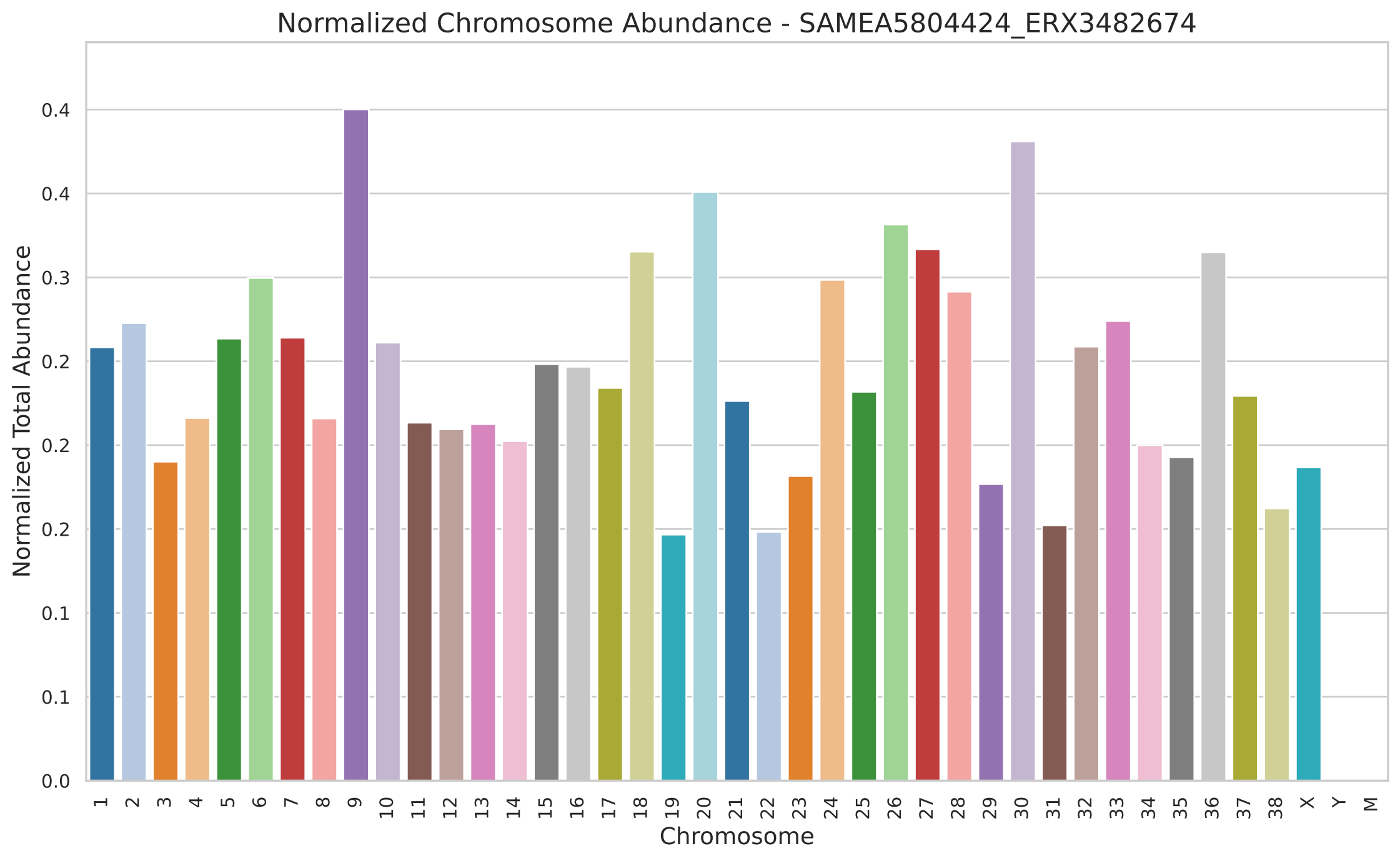

Normalized Chromosome Abundance - SAMEA5804364_ERX3482603
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

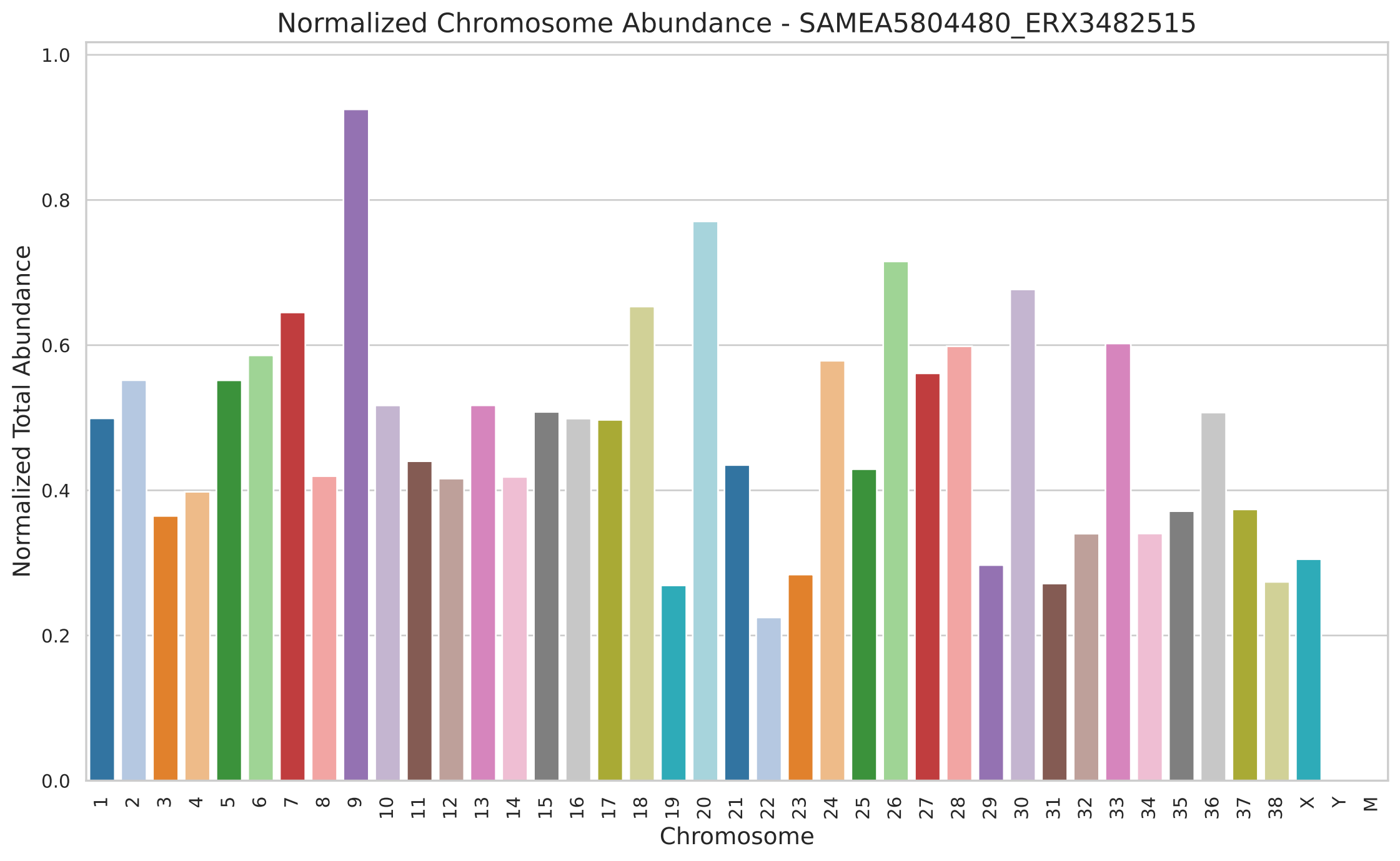

Normalized Chromosome Abundance - SAMEA5804400_ERX3482633
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

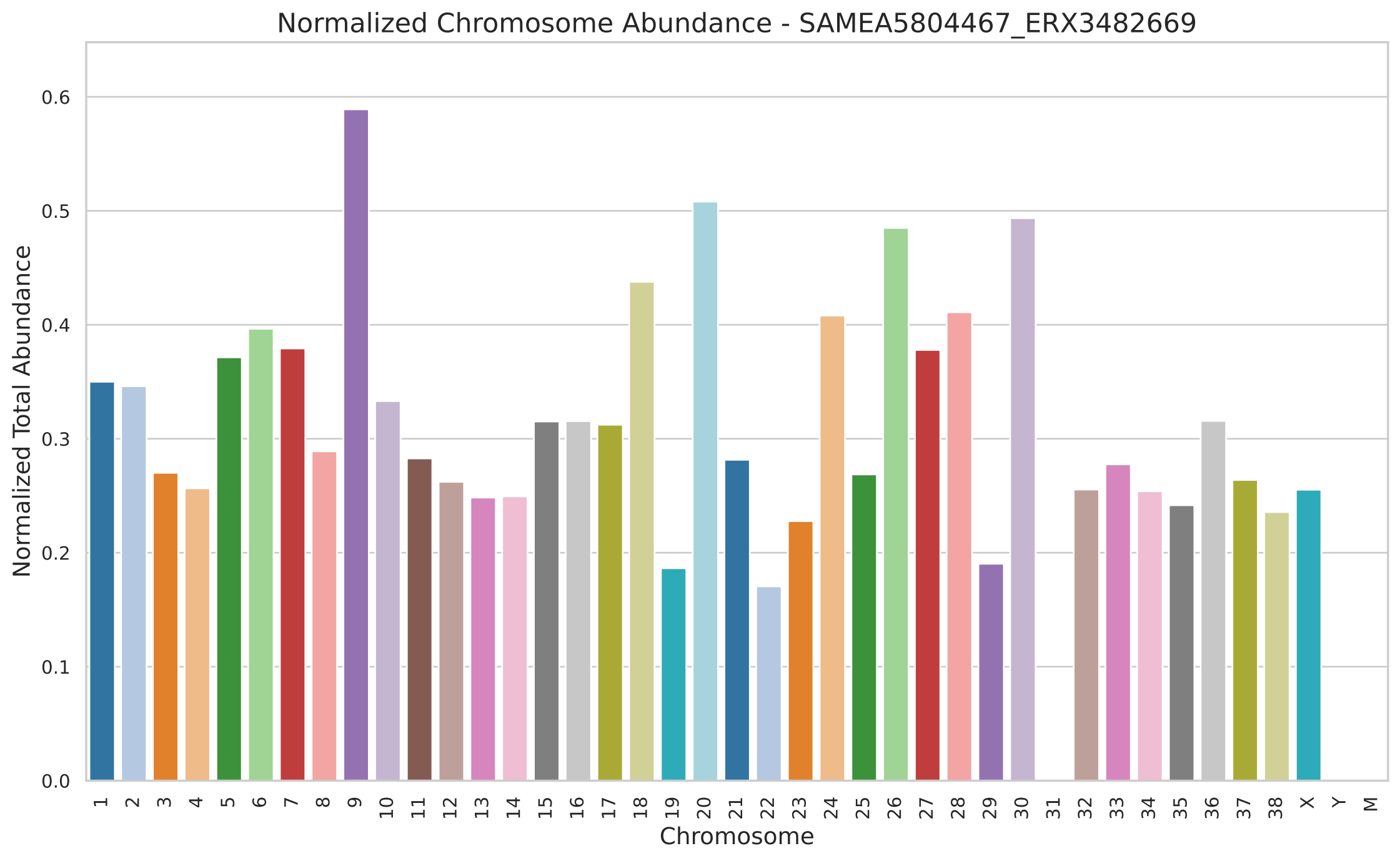

Normalized Chromosome Abundance - SAMEA5804339_ERX3482609
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

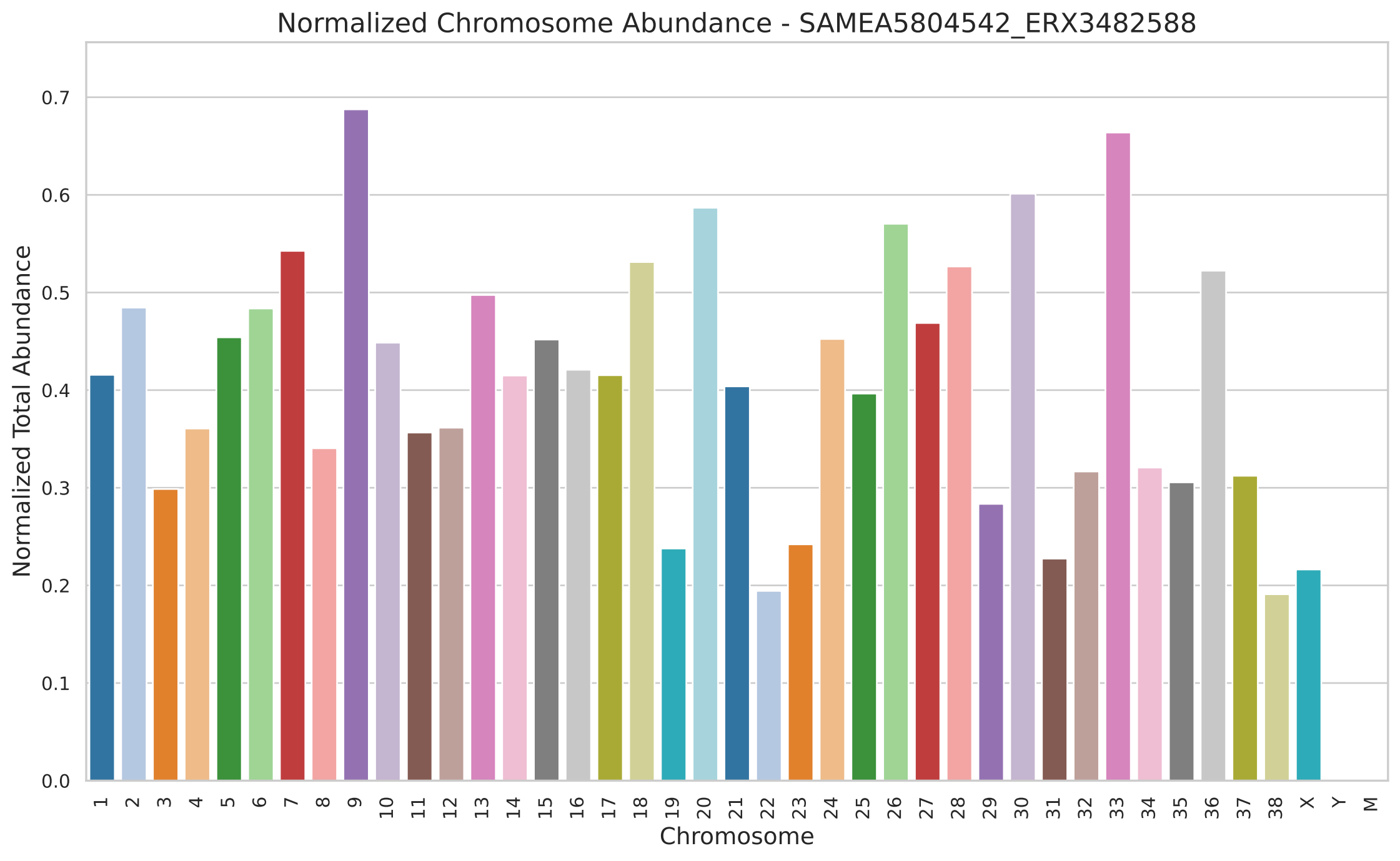

Normalized Chromosome Abundance - SAMEA5804478_ERX3482581
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

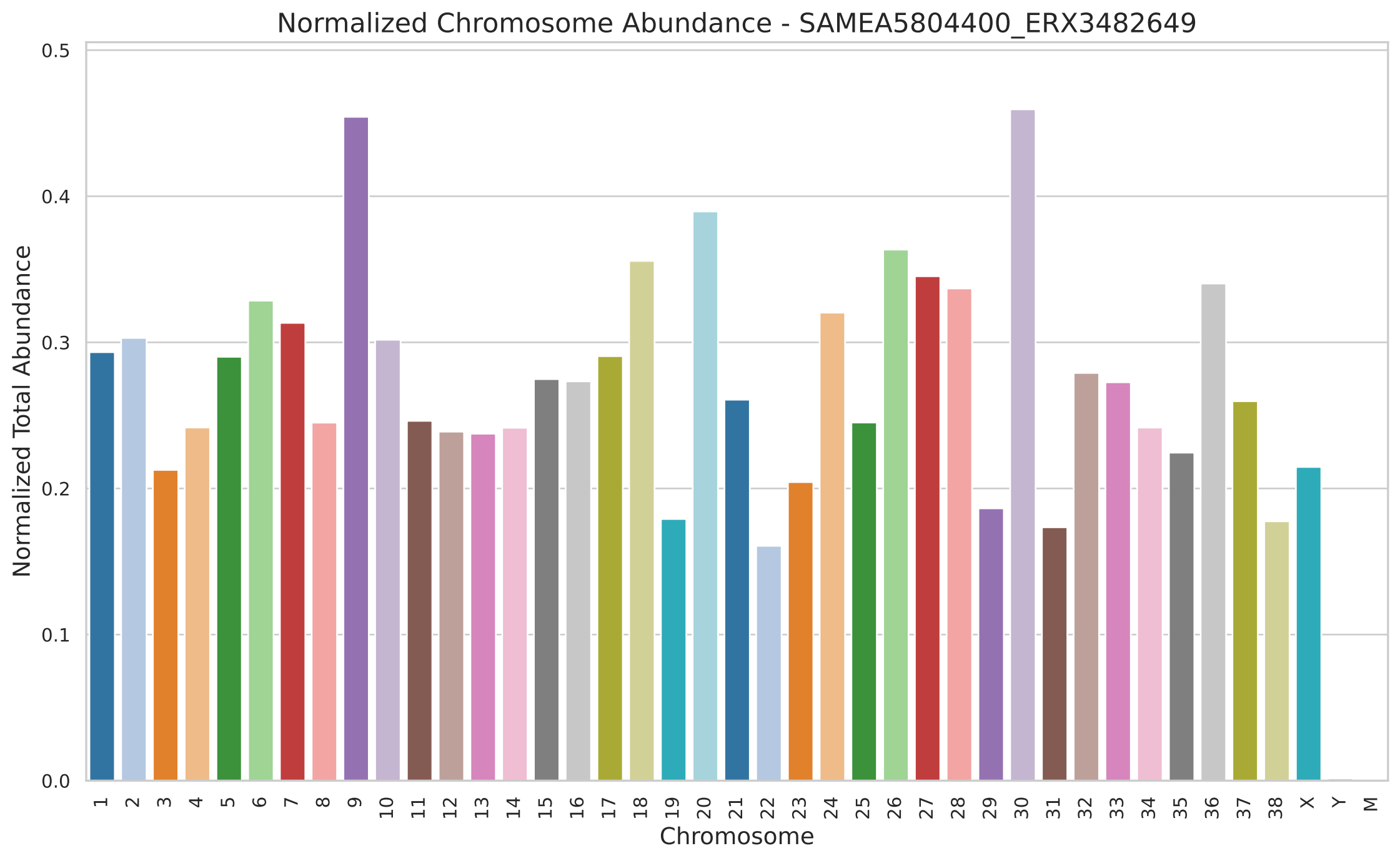

Normalized Chromosome Abundance - SAMEA5804360_ERX3482601
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

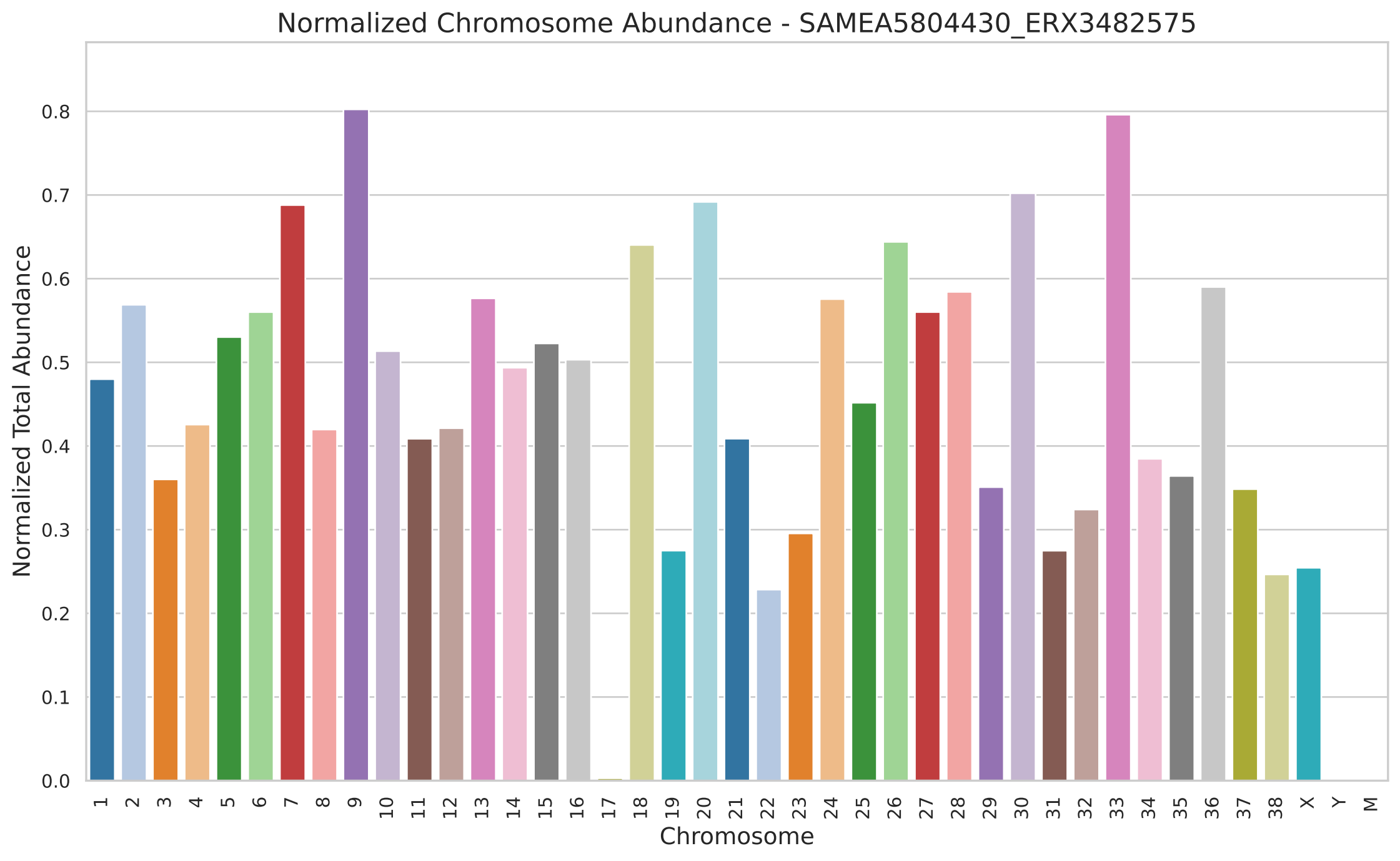

Normalized Chromosome Abundance - SAMEA5804424_ERX3482674
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

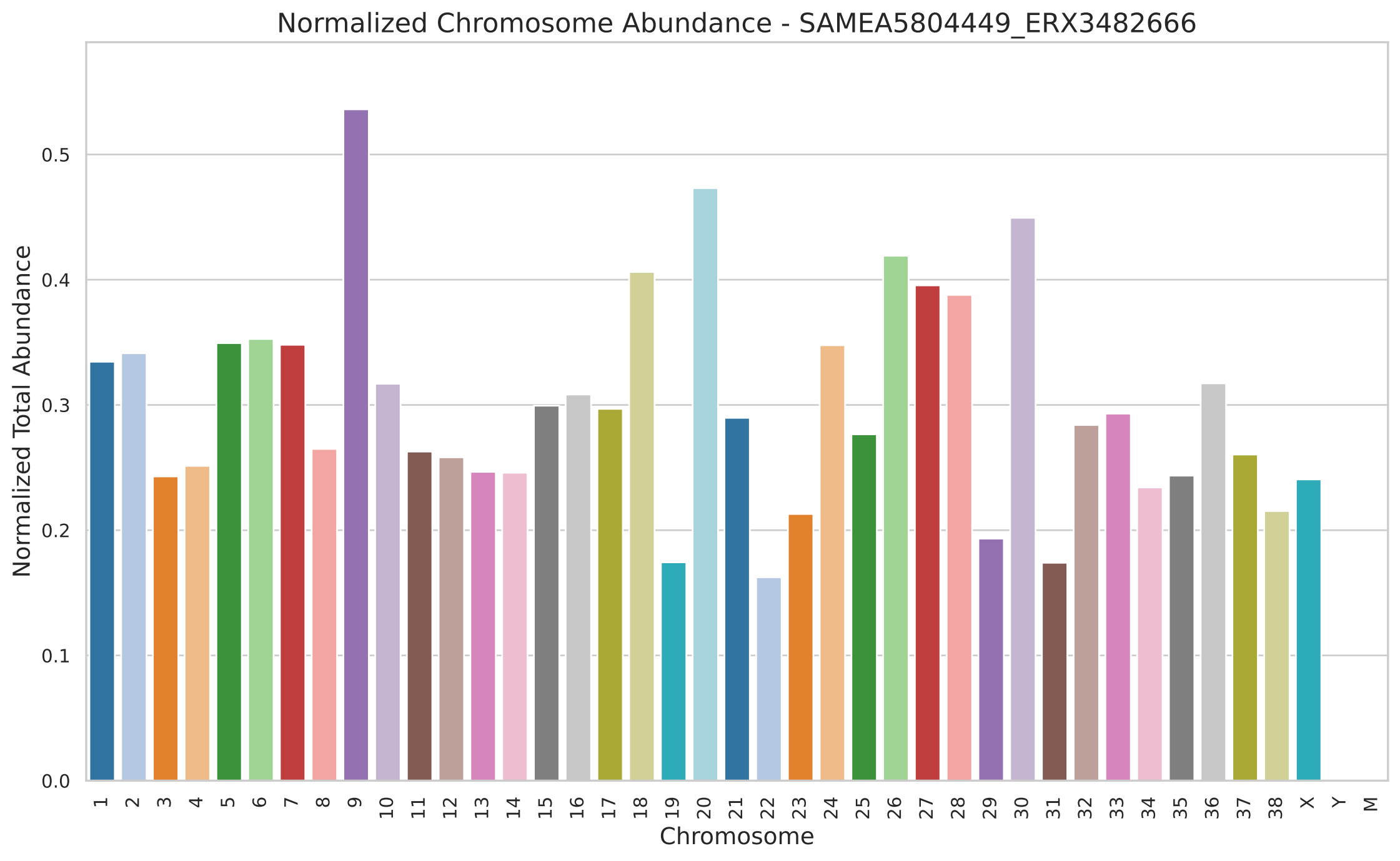

Normalized Chromosome Abundance - SAMEA5804480_ERX3482515
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

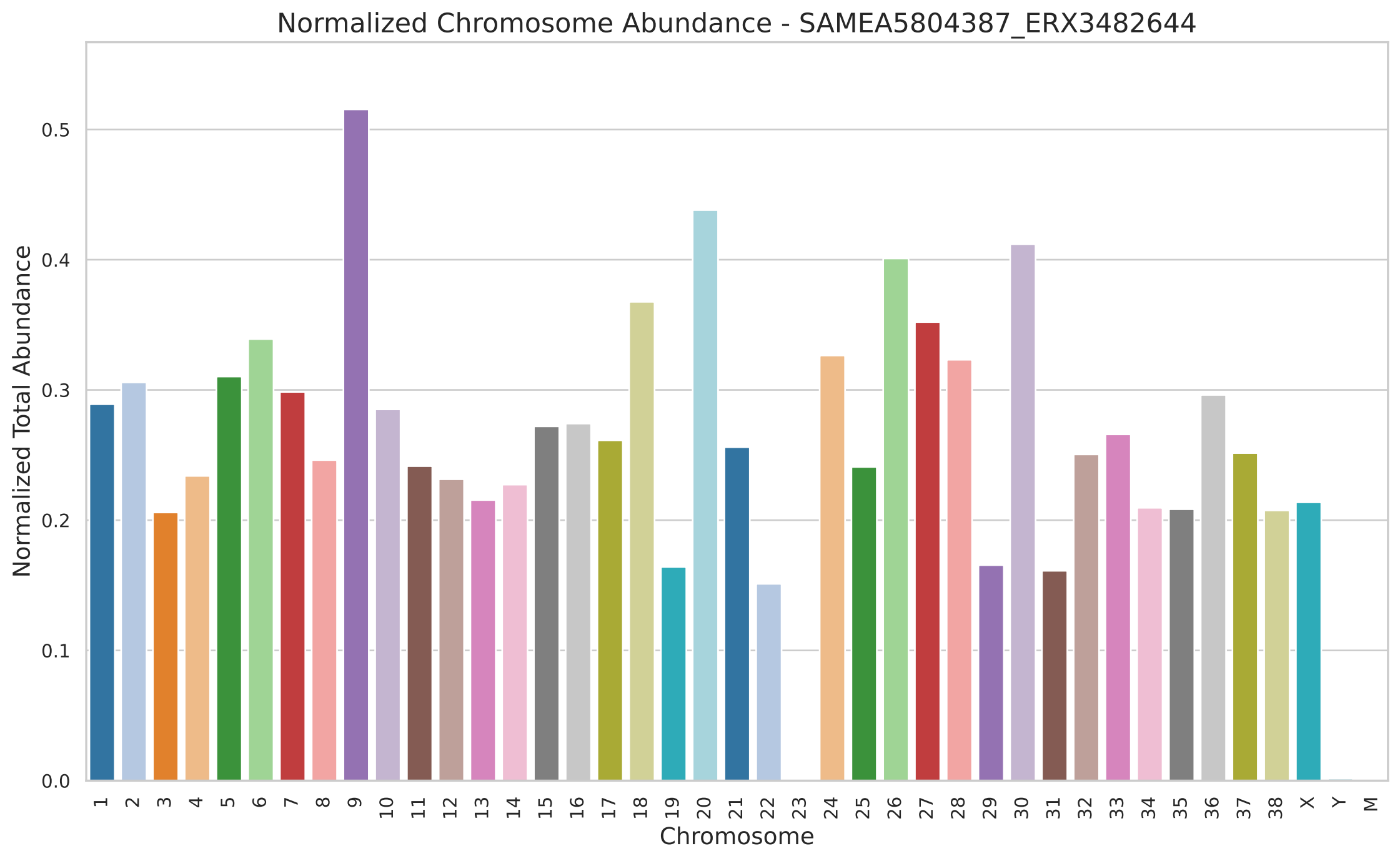

Normalized Chromosome Abundance - SAMEA5804467_ERX3482669
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

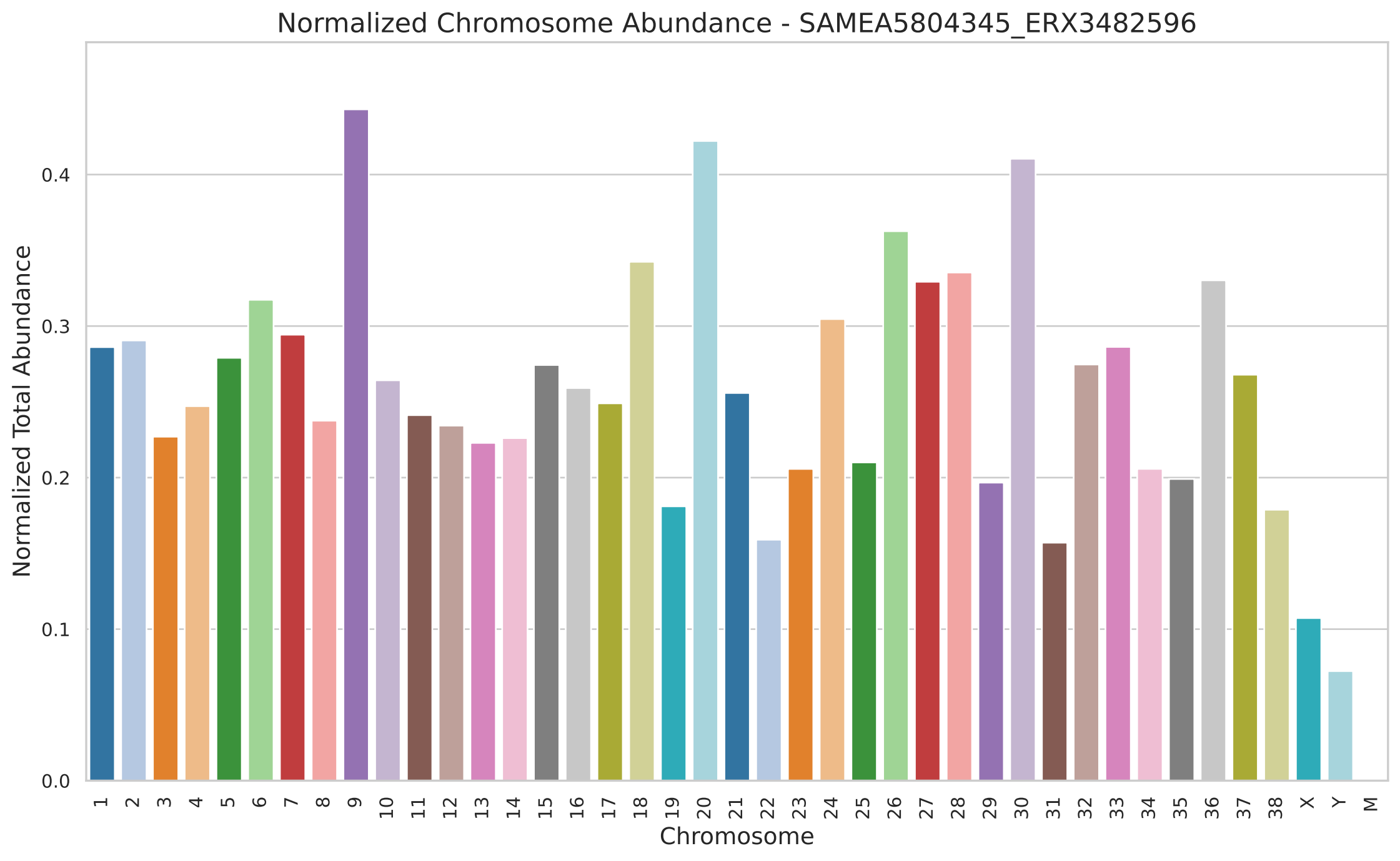

Normalized Chromosome Abundance - SAMEA5804542_ERX3482588
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

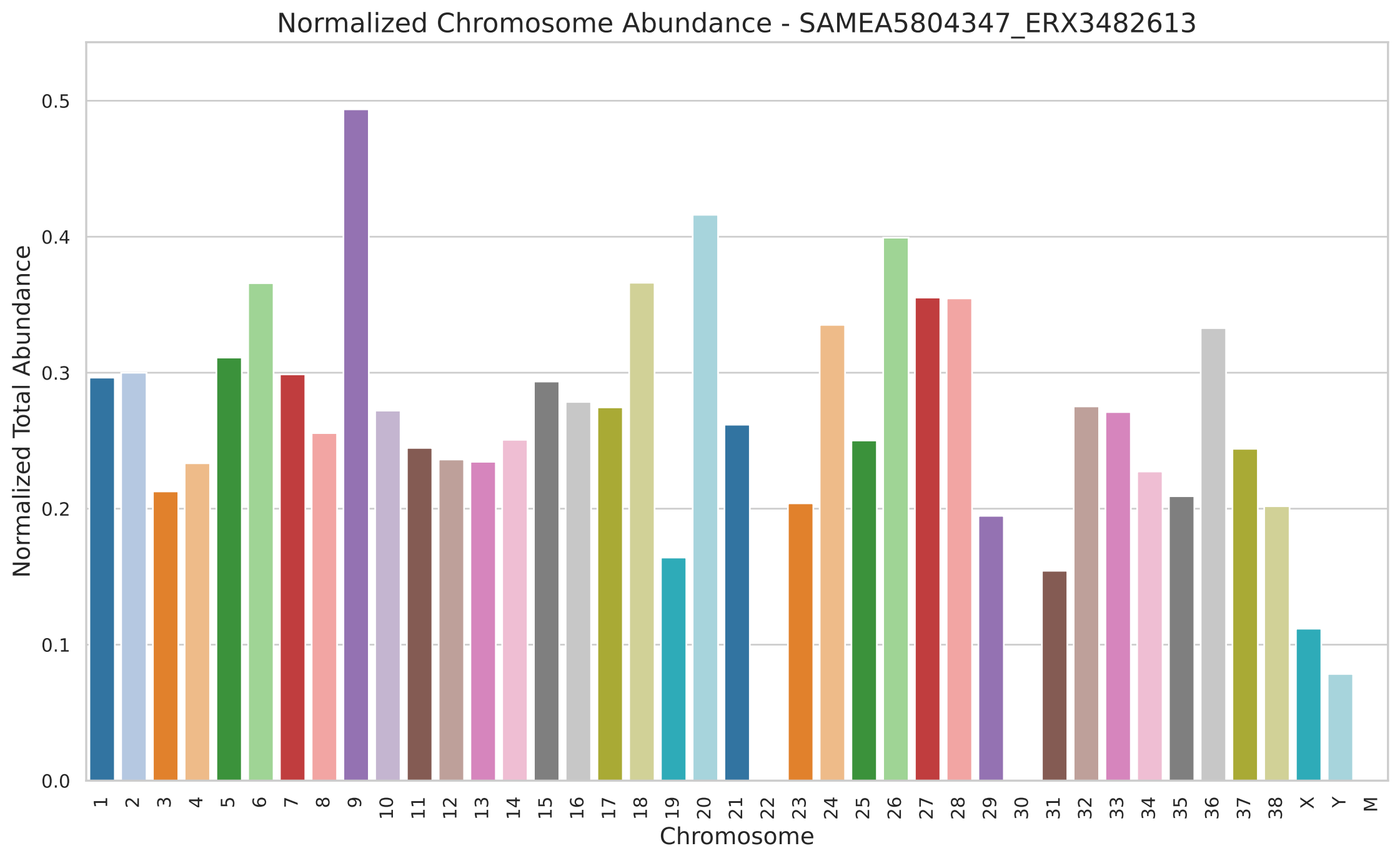

Normalized Chromosome Abundance - SAMEA5804400_ERX3482649
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

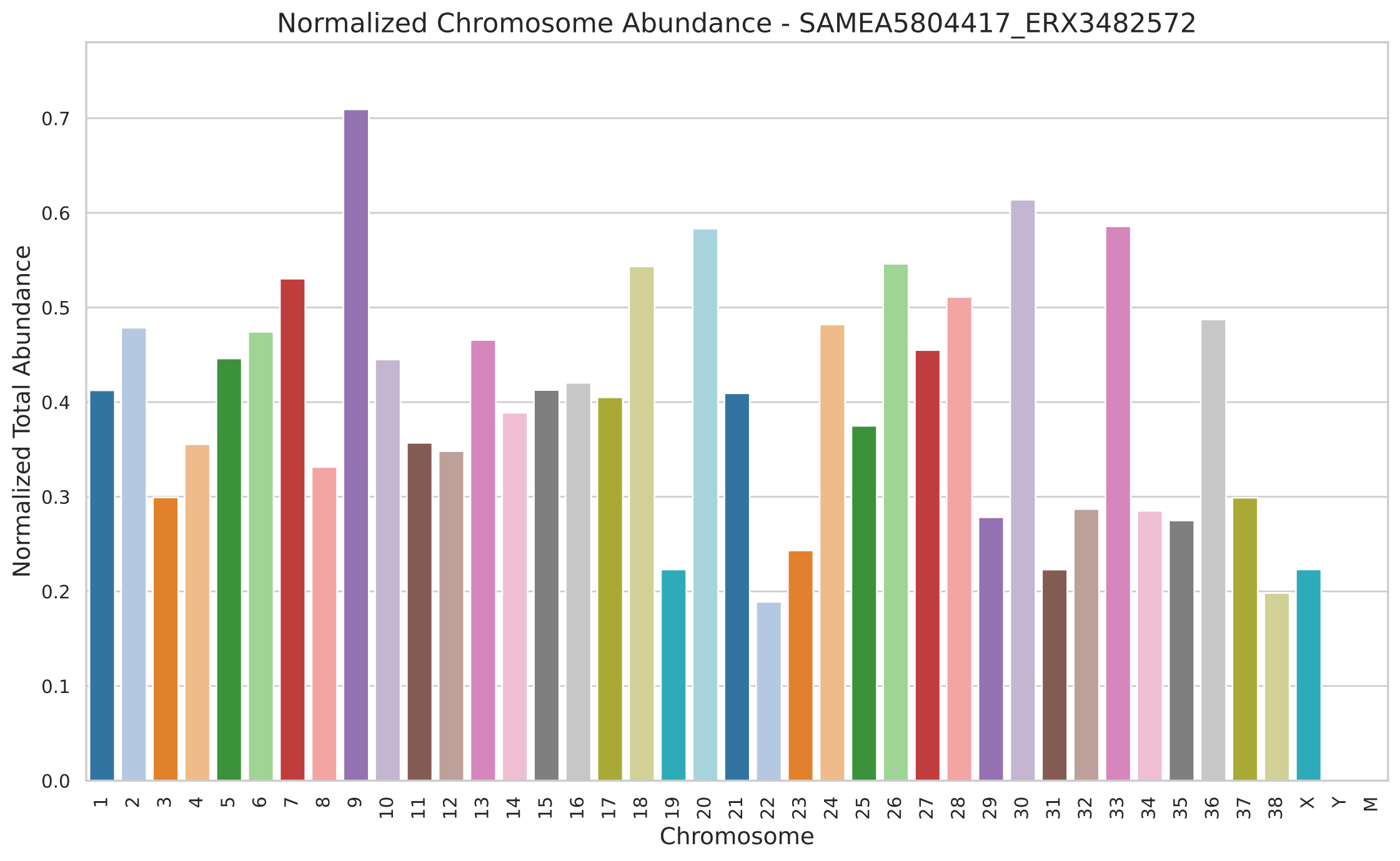

Normalized Chromosome Abundance - SAMEA5804430_ERX3482575
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

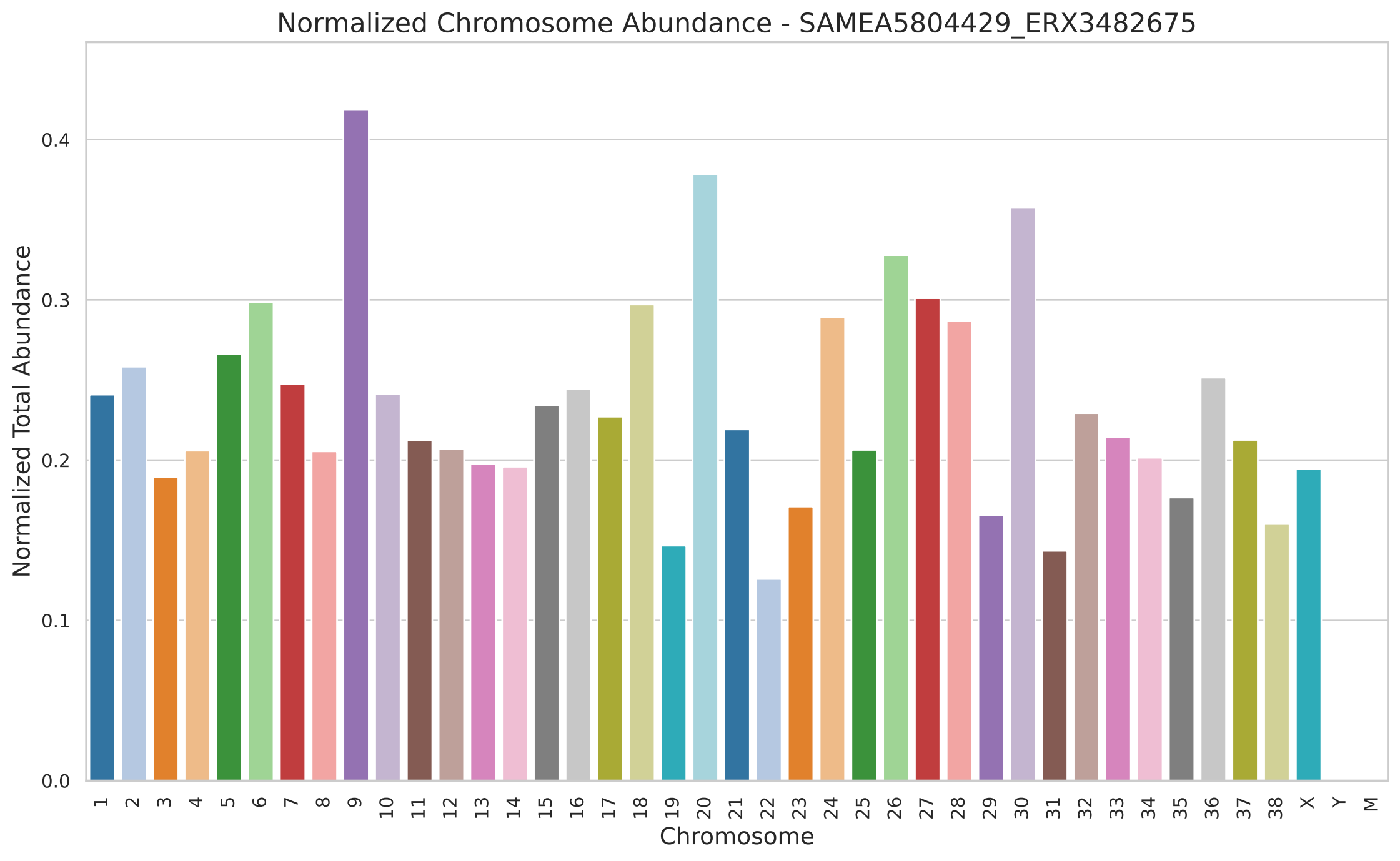

Normalized Chromosome Abundance - SAMEA5804449_ERX3482666
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

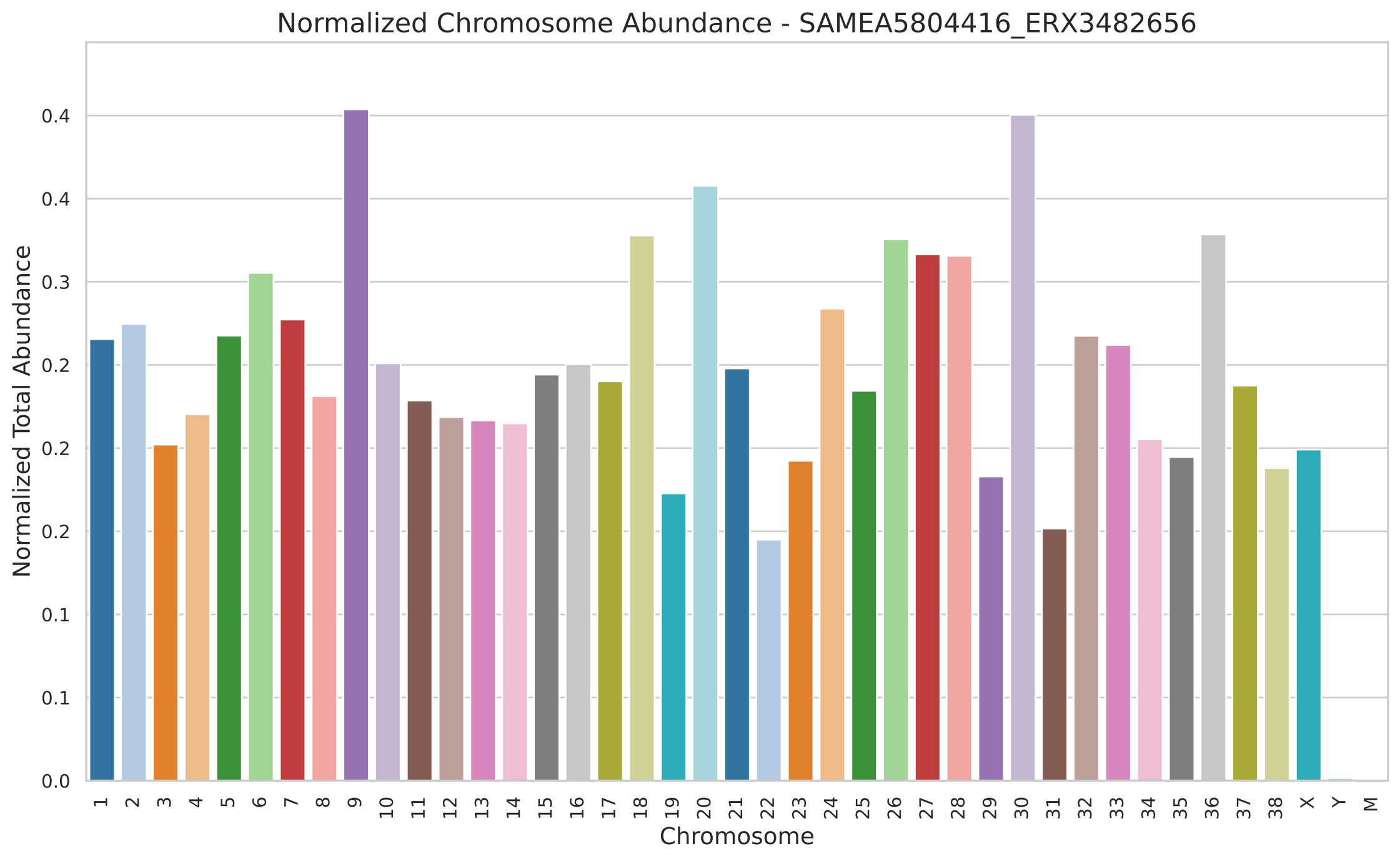

Normalized Chromosome Abundance - SAMEA5804387_ERX3482644
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

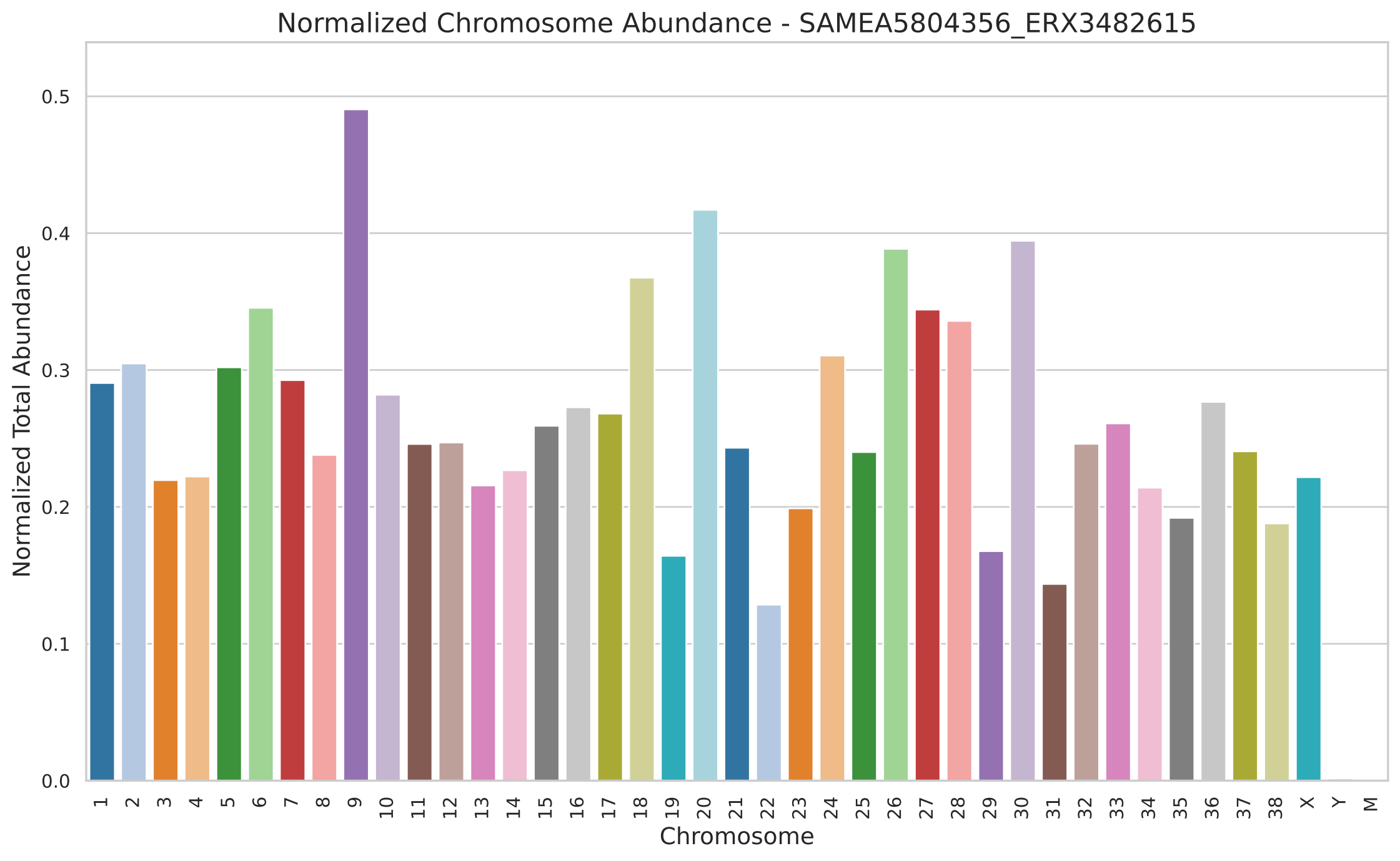

Normalized Chromosome Abundance - SAMEA5804345_ERX3482596
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

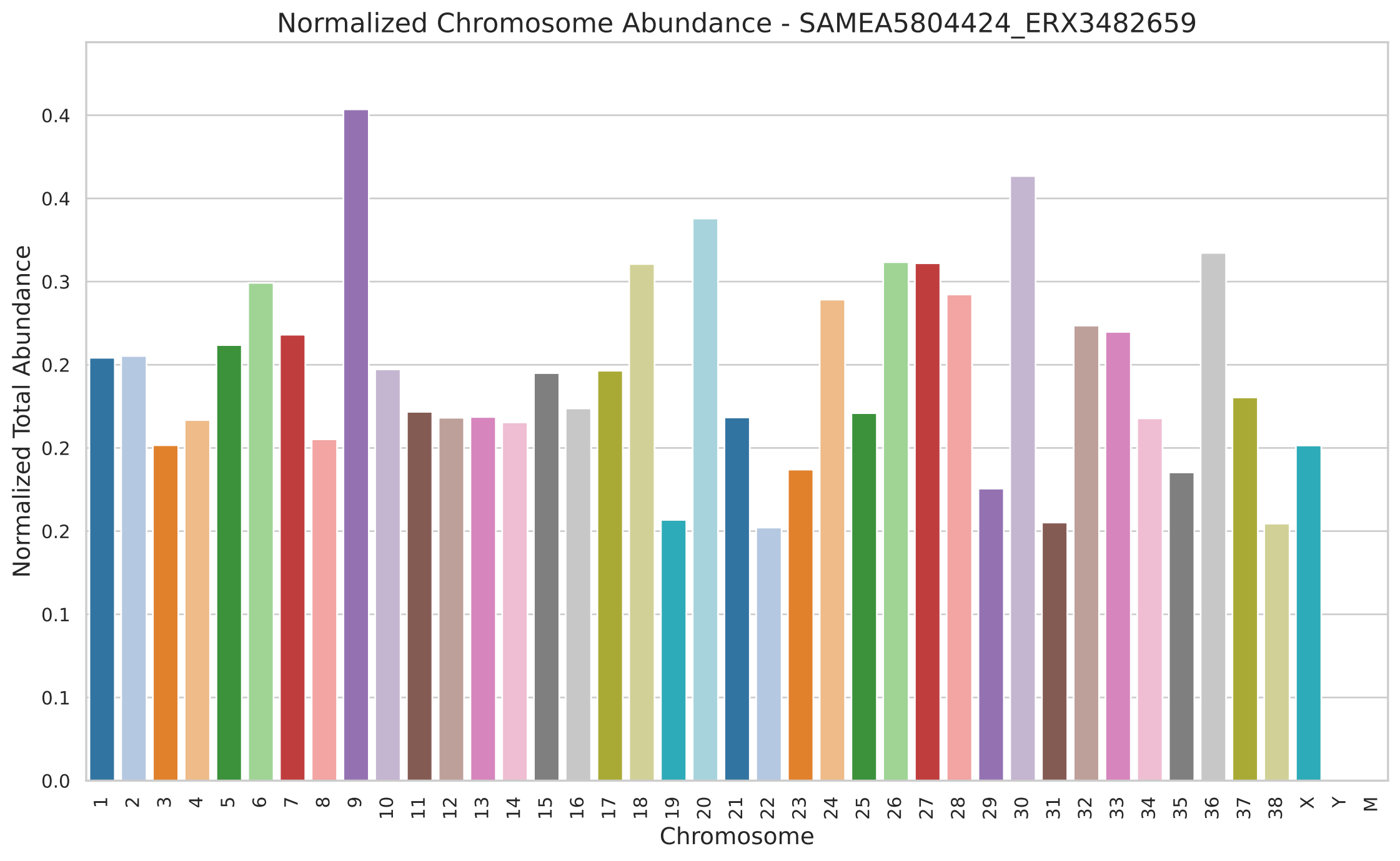

Normalized Chromosome Abundance - SAMEA5804347_ERX3482613
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

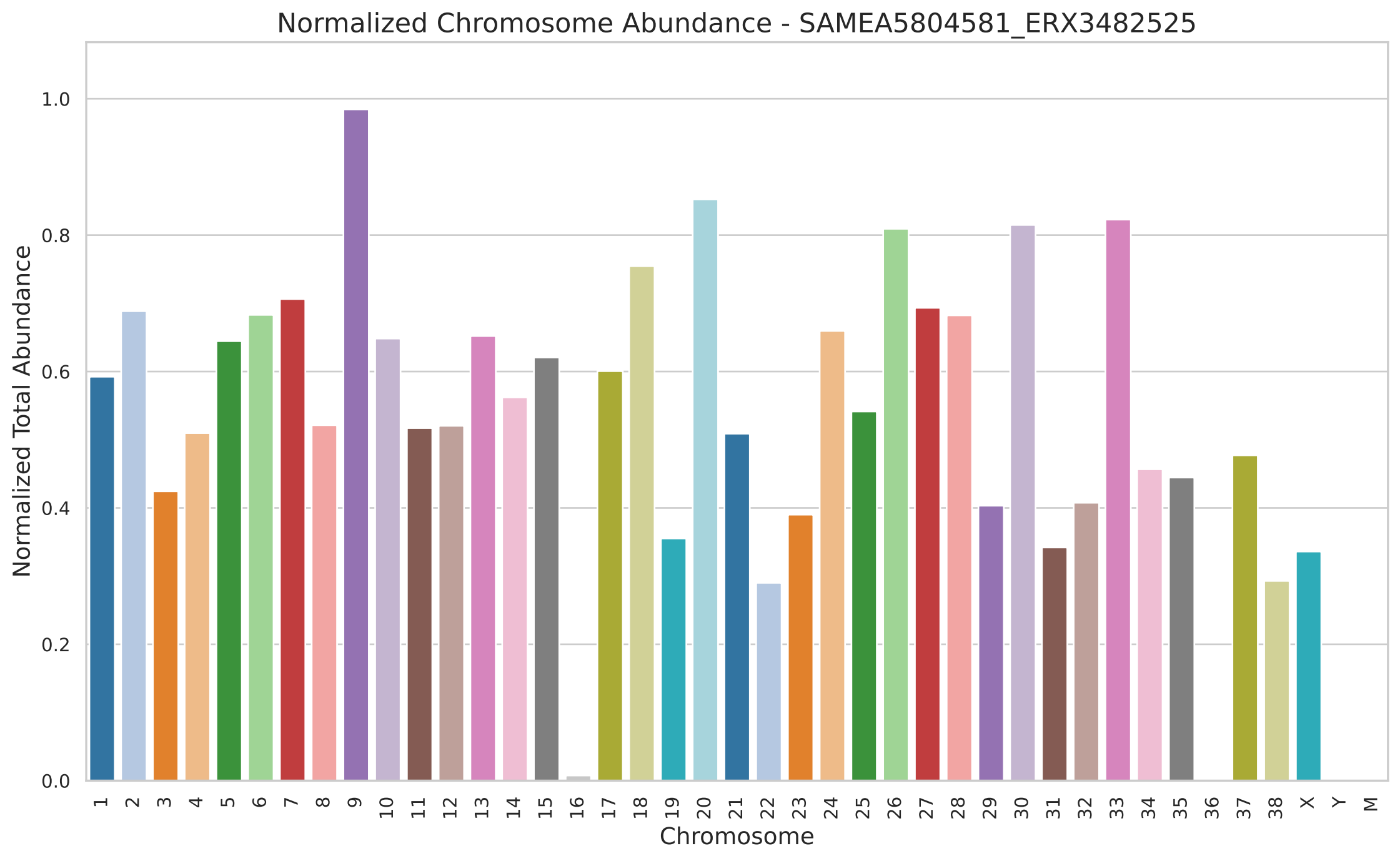

Normalized Chromosome Abundance - SAMEA5804417_ERX3482572
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

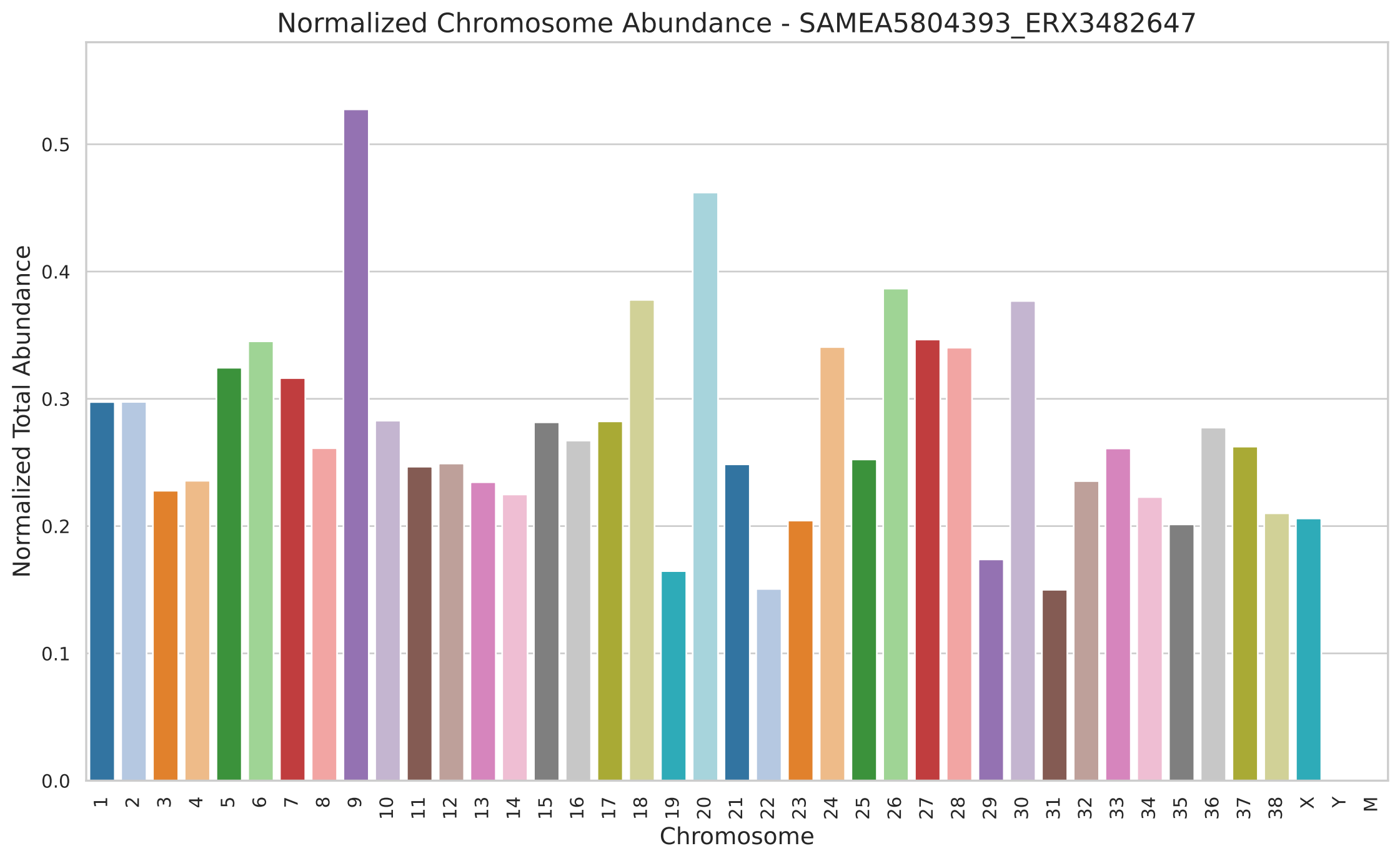

Normalized Chromosome Abundance - SAMEA5804429_ERX3482675
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

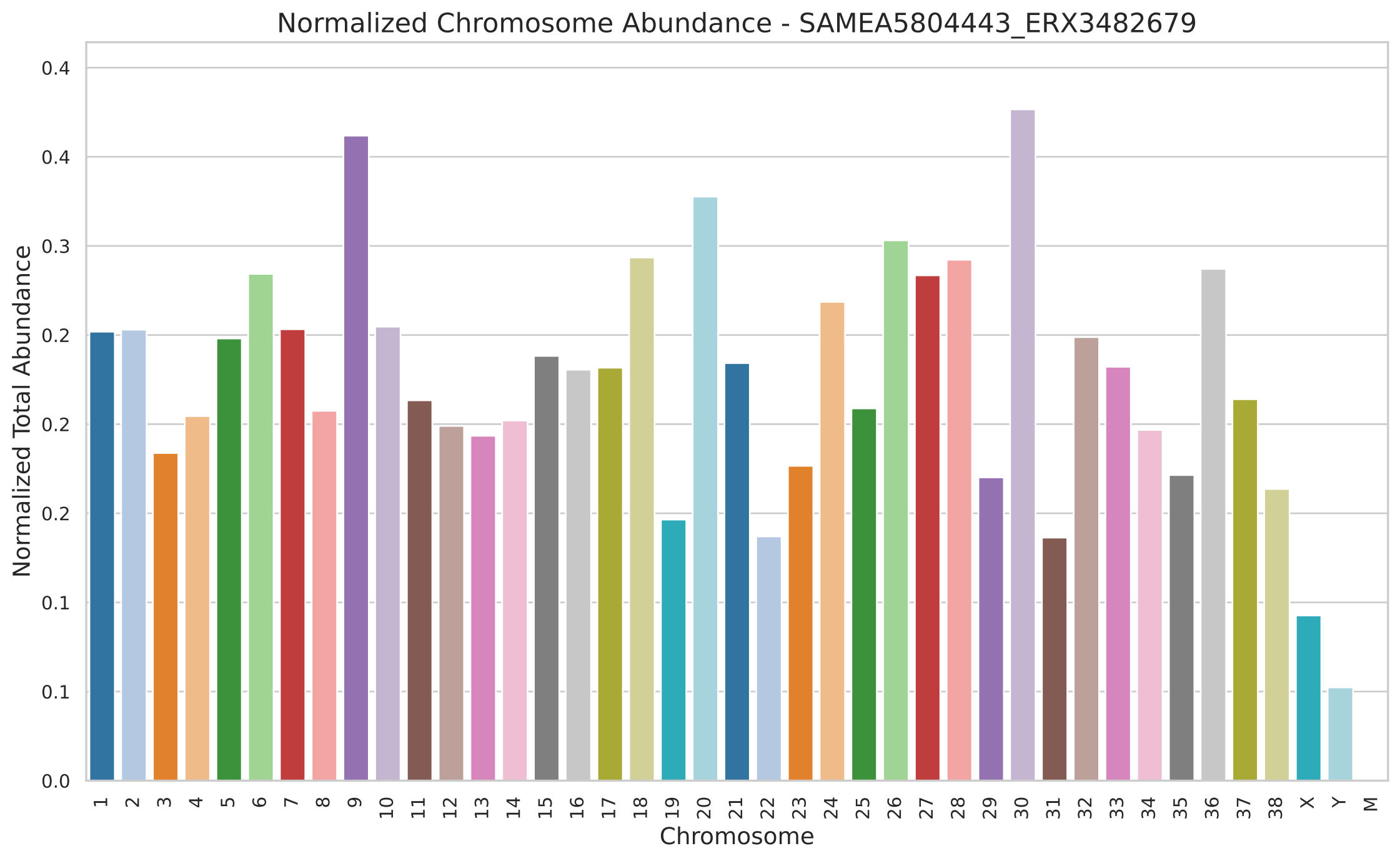

Normalized Chromosome Abundance - SAMEA5804416_ERX3482656
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

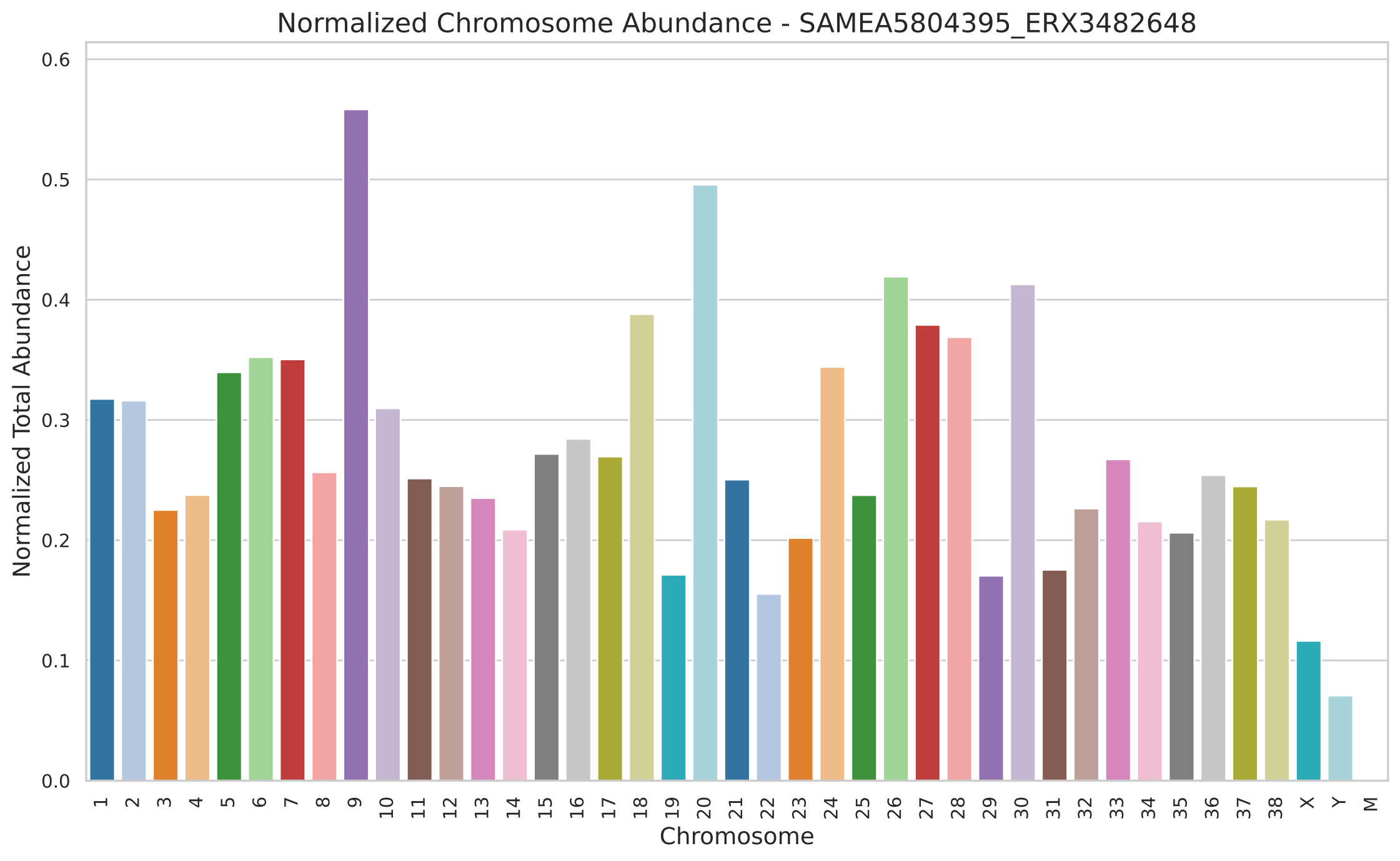

Normalized Chromosome Abundance - SAMEA5804356_ERX3482615
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

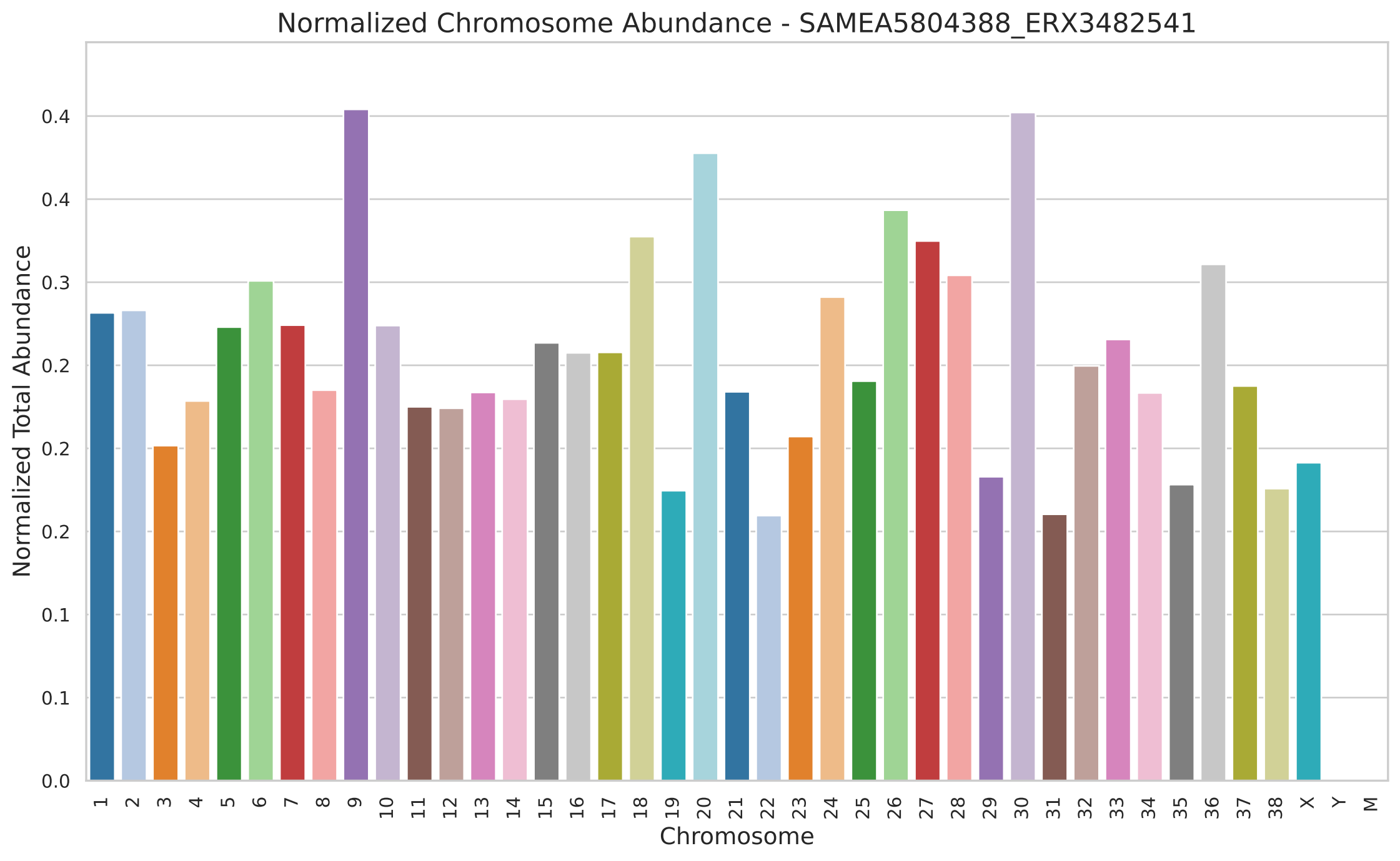

Normalized Chromosome Abundance - SAMEA5804424_ERX3482659
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

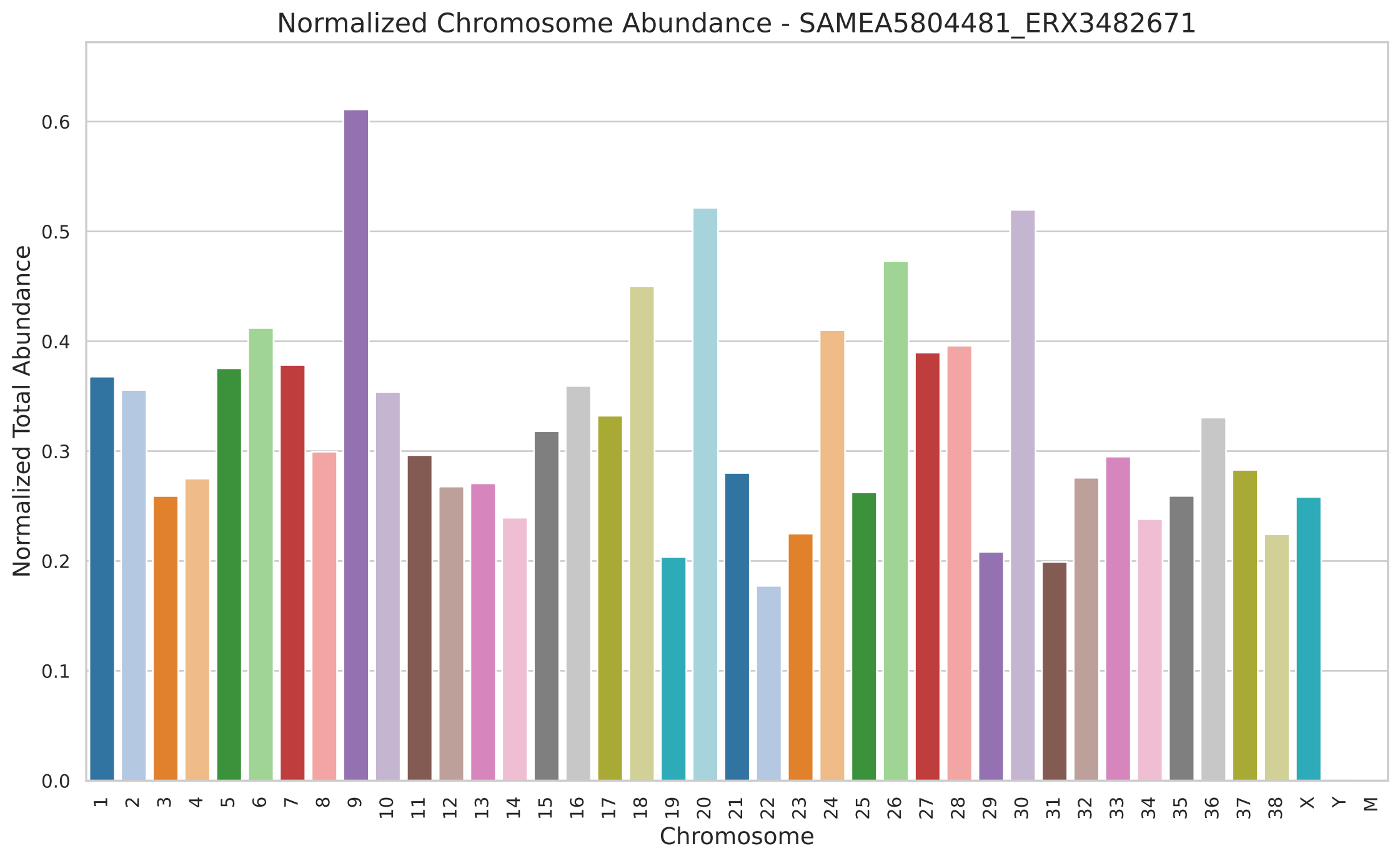

Normalized Chromosome Abundance - SAMEA5804581_ERX3482525
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

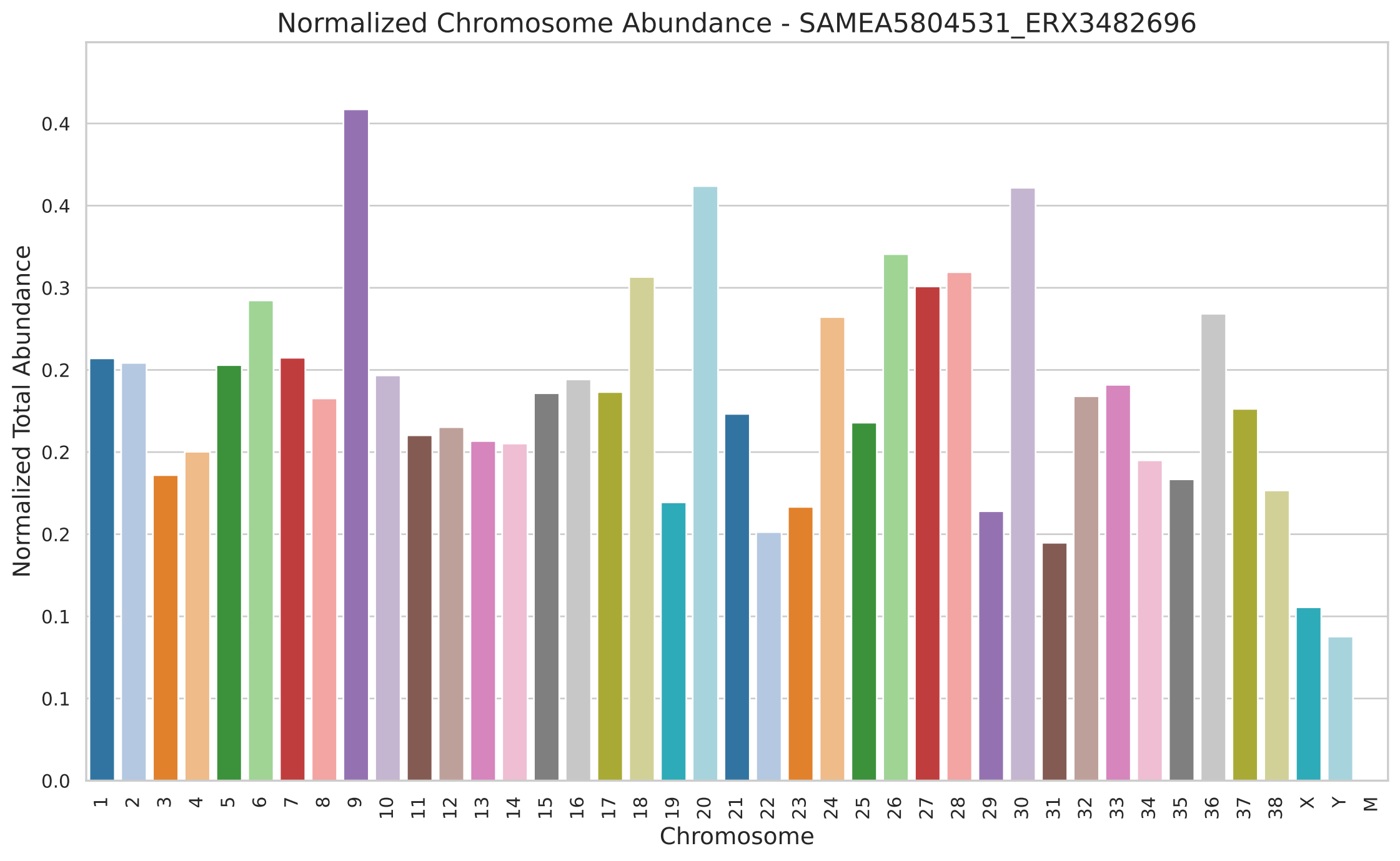

Normalized Chromosome Abundance - SAMEA5804393_ERX3482647
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

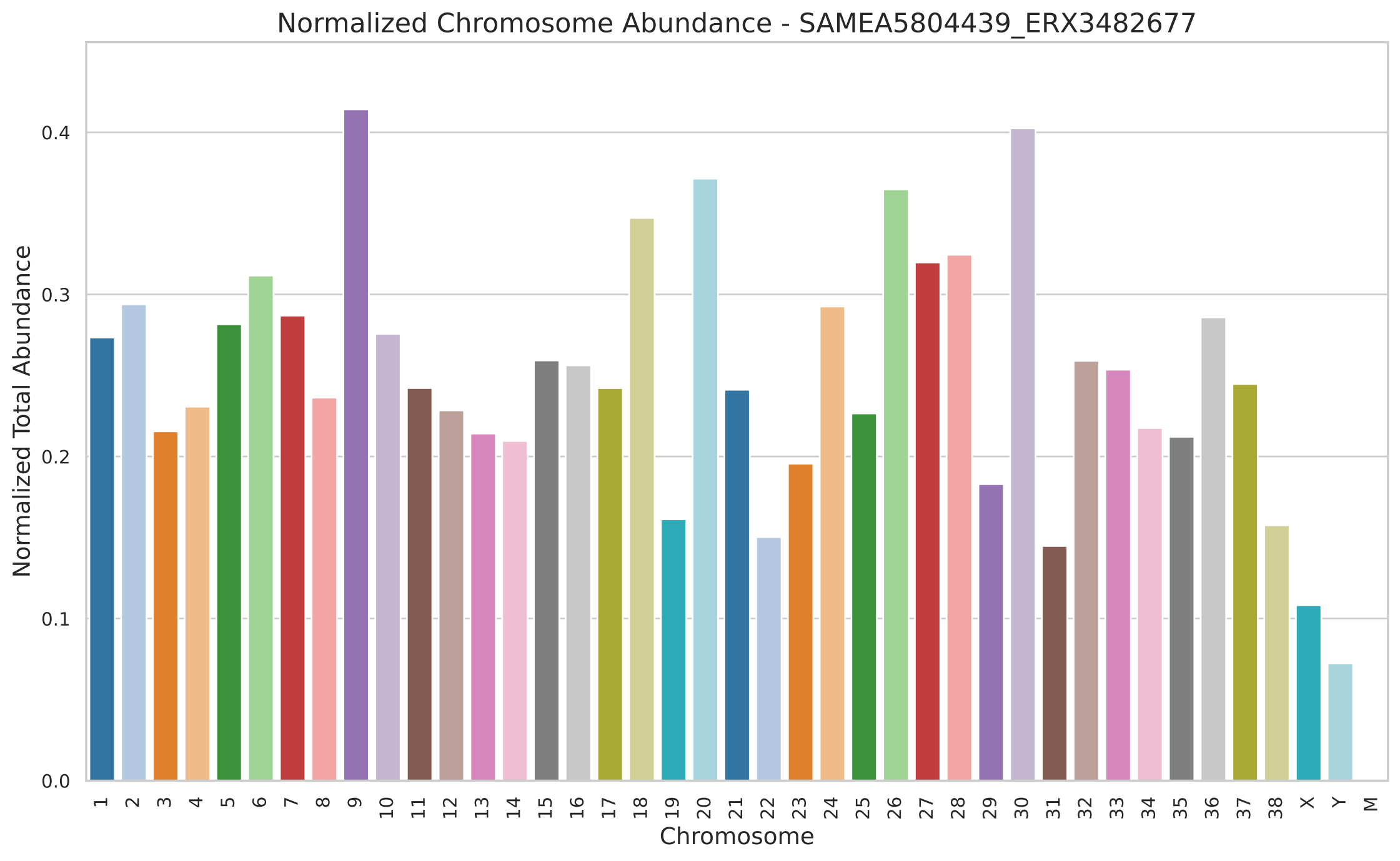

Normalized Chromosome Abundance - SAMEA5804443_ERX3482679
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

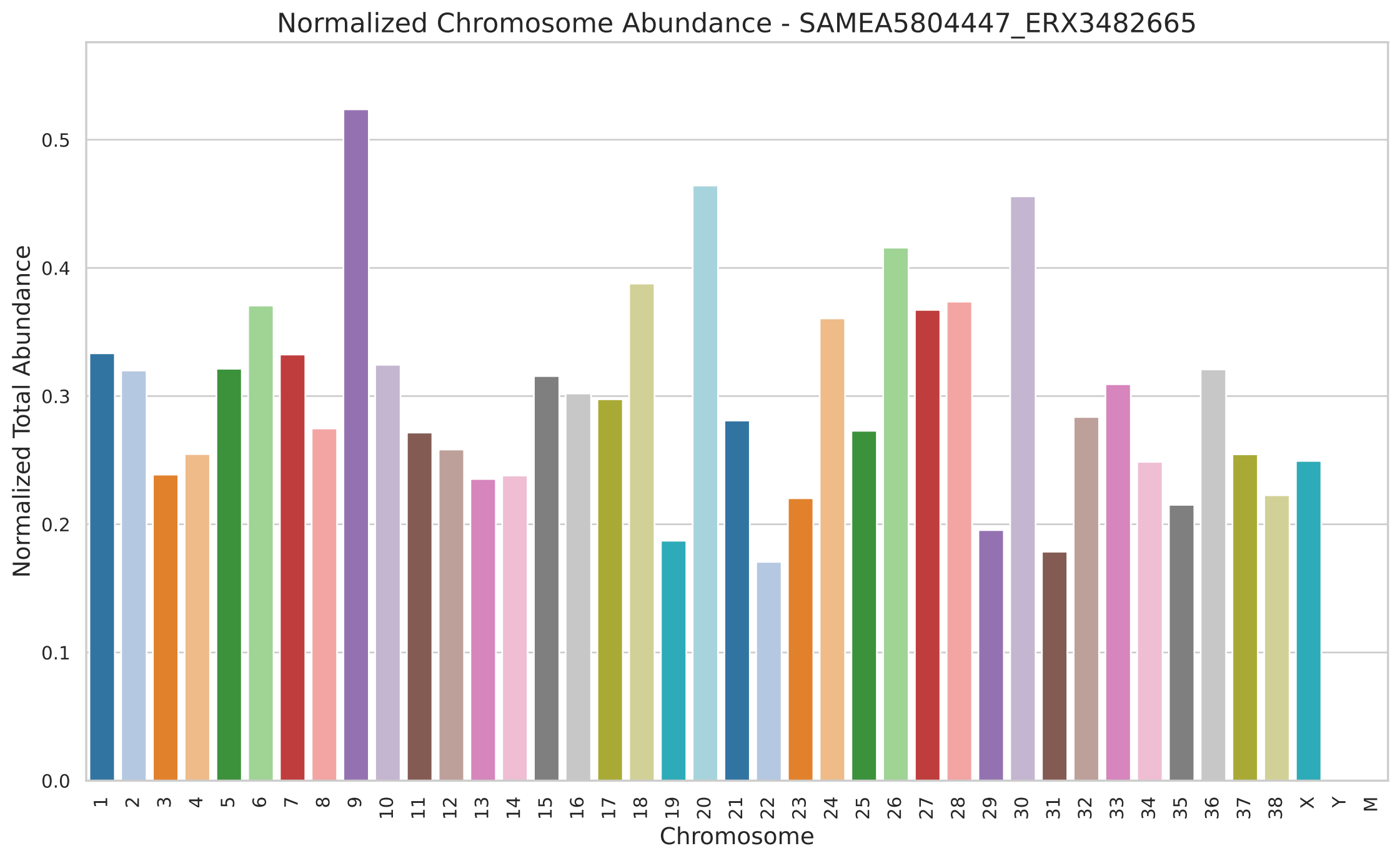

Normalized Chromosome Abundance - SAMEA5804395_ERX3482648
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

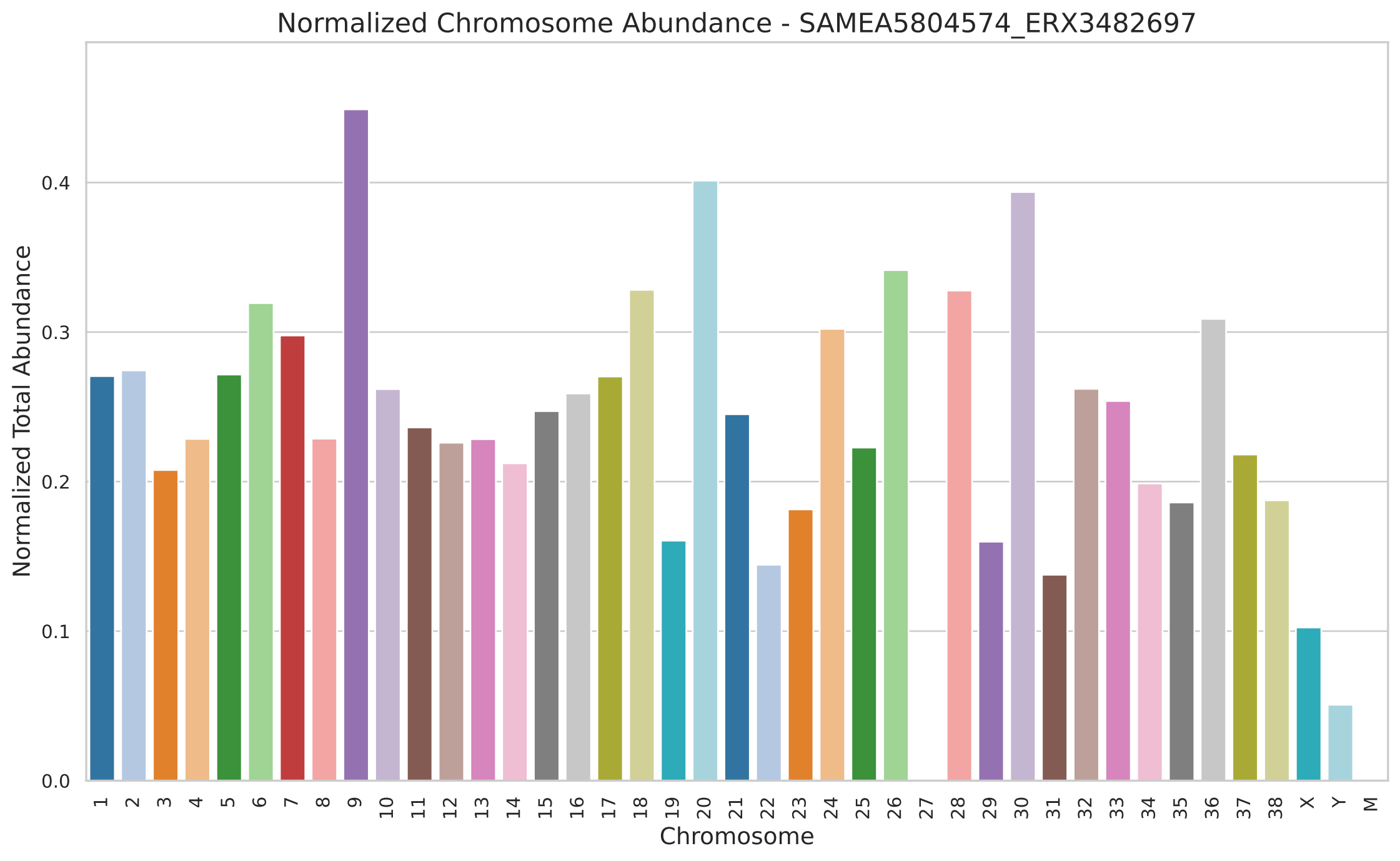

Normalized Chromosome Abundance - SAMEA5804388_ERX3482541
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

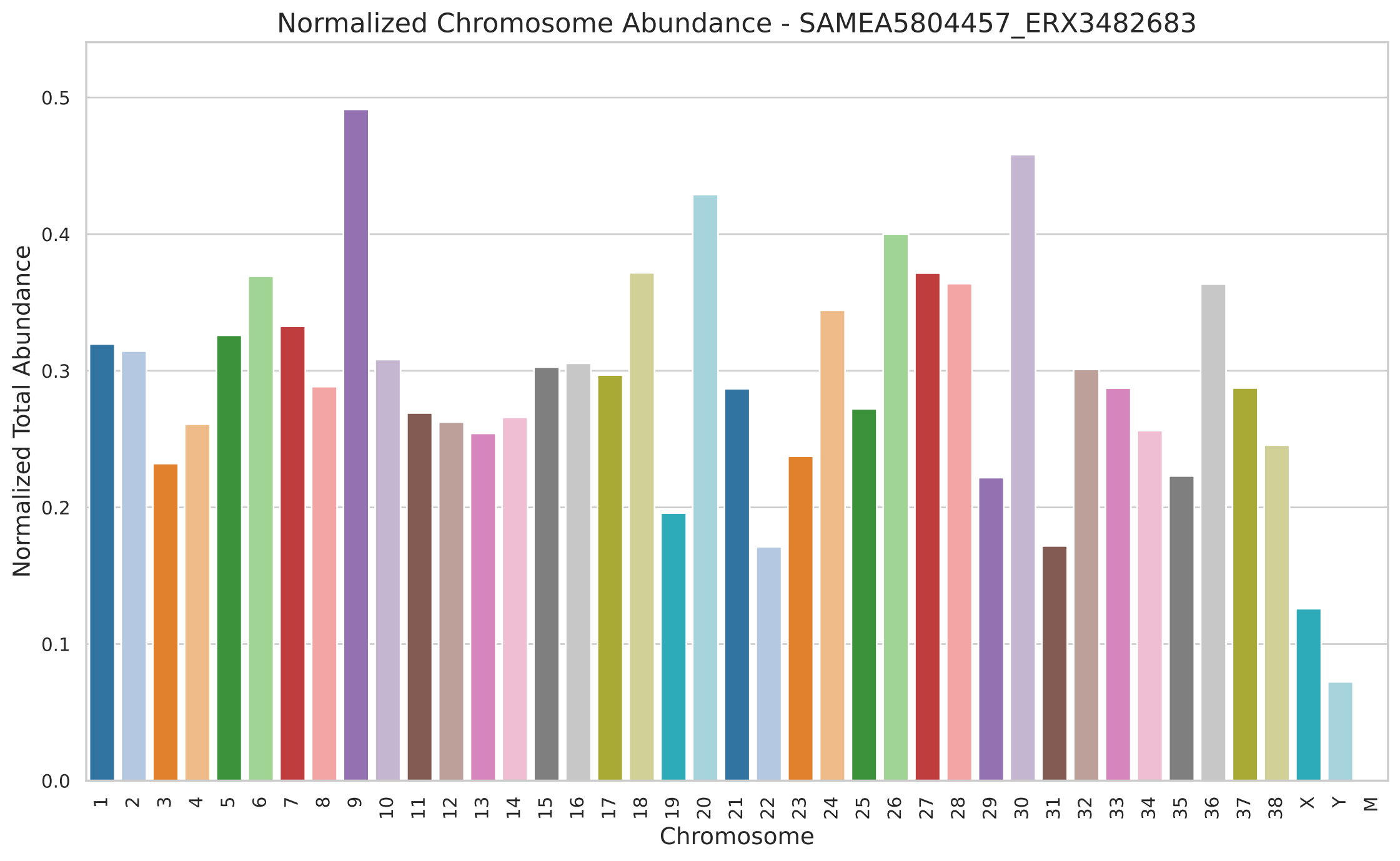

Normalized Chromosome Abundance - SAMEA5804481_ERX3482671
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

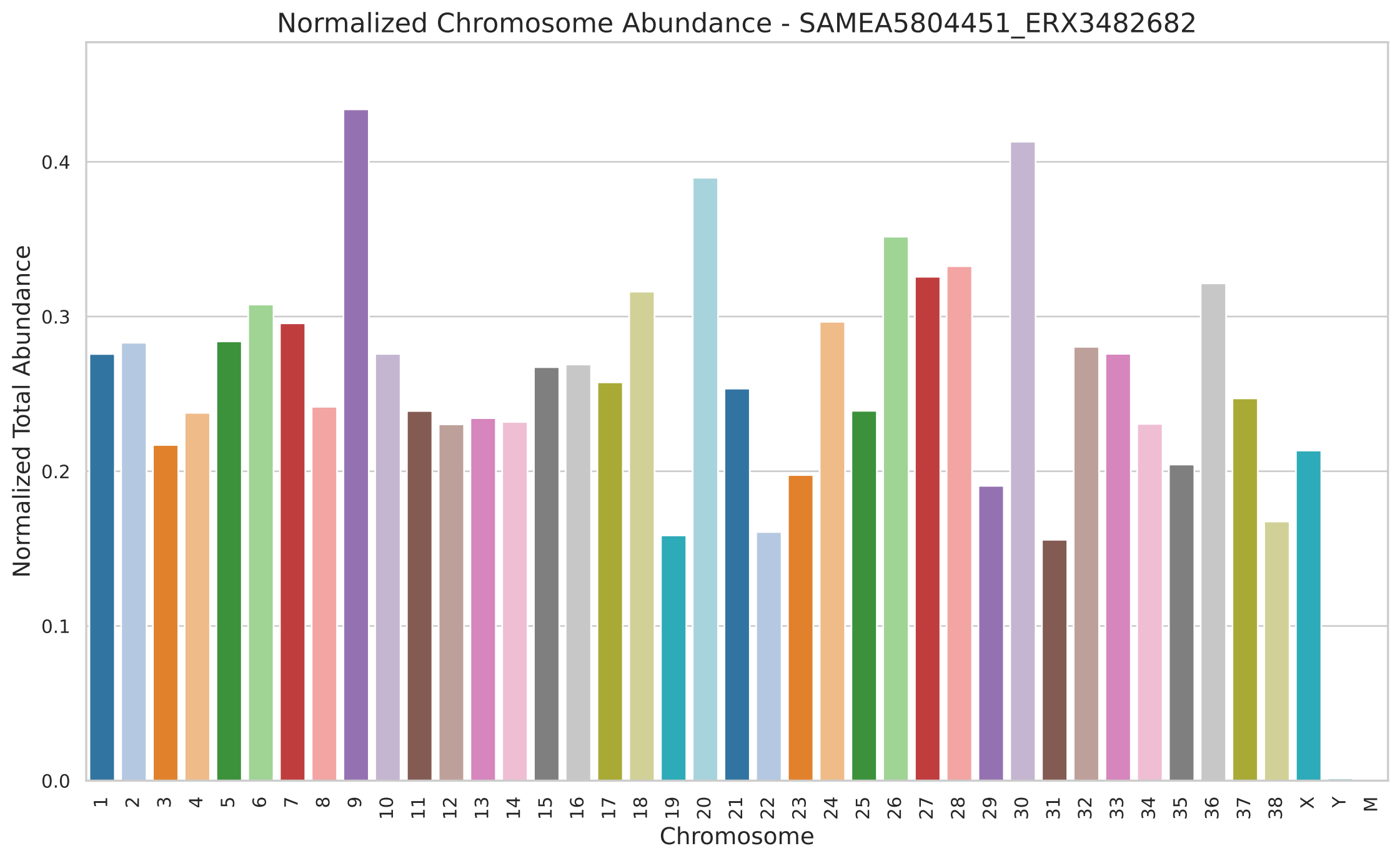

Normalized Chromosome Abundance - SAMEA5804531_ERX3482696
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

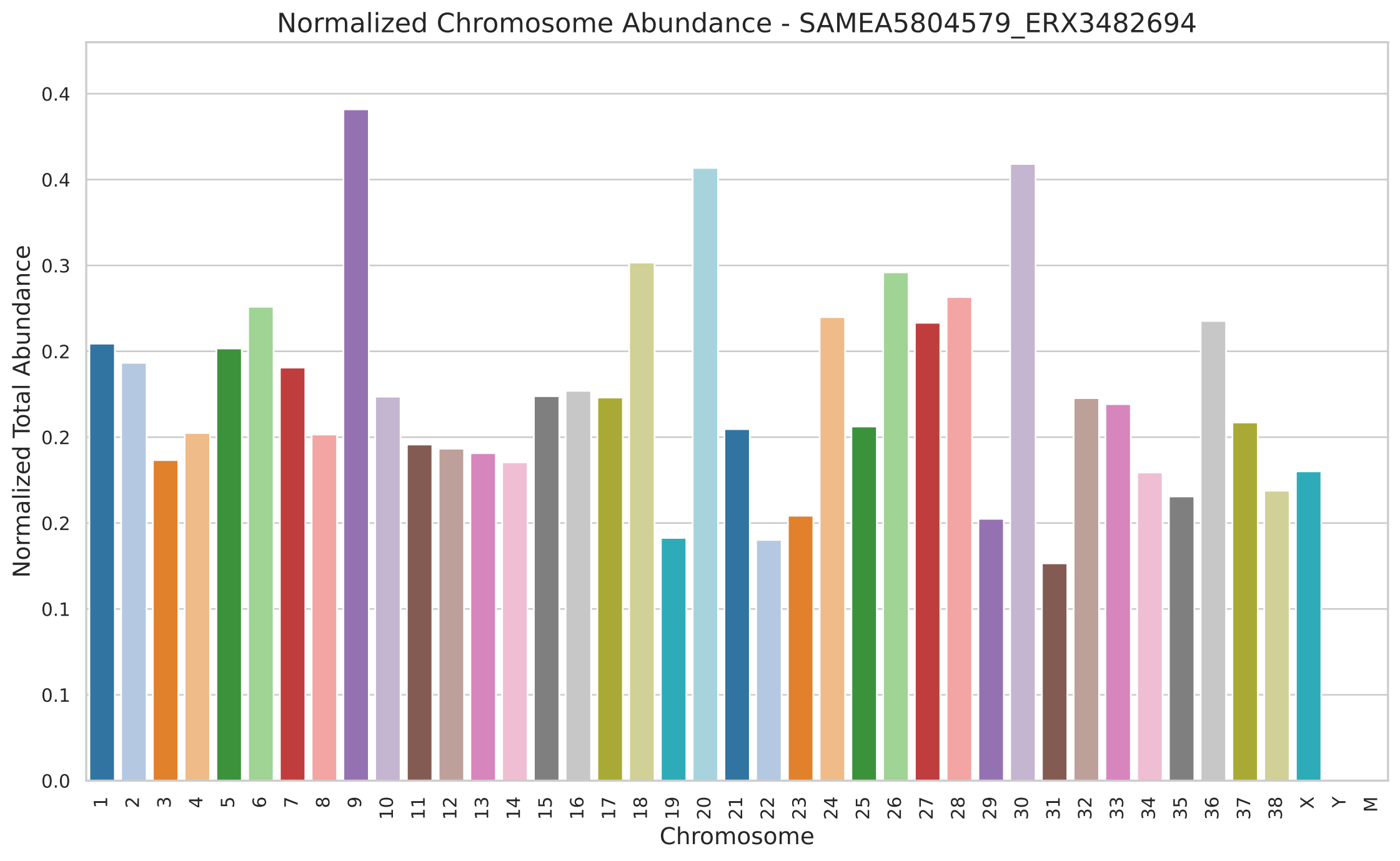

Normalized Chromosome Abundance - SAMEA5804439_ERX3482677
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

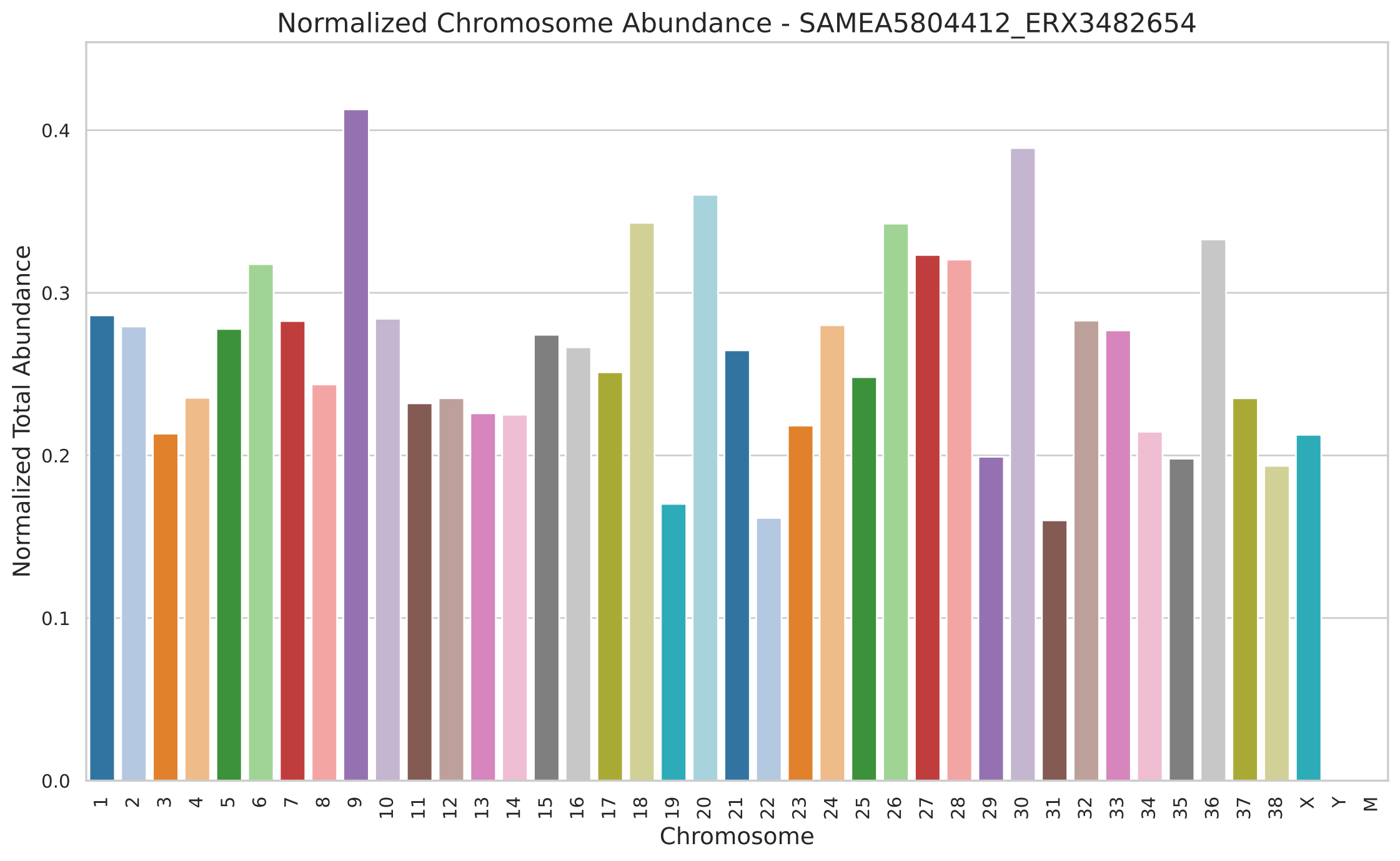

Normalized Chromosome Abundance - SAMEA5804447_ERX3482665
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

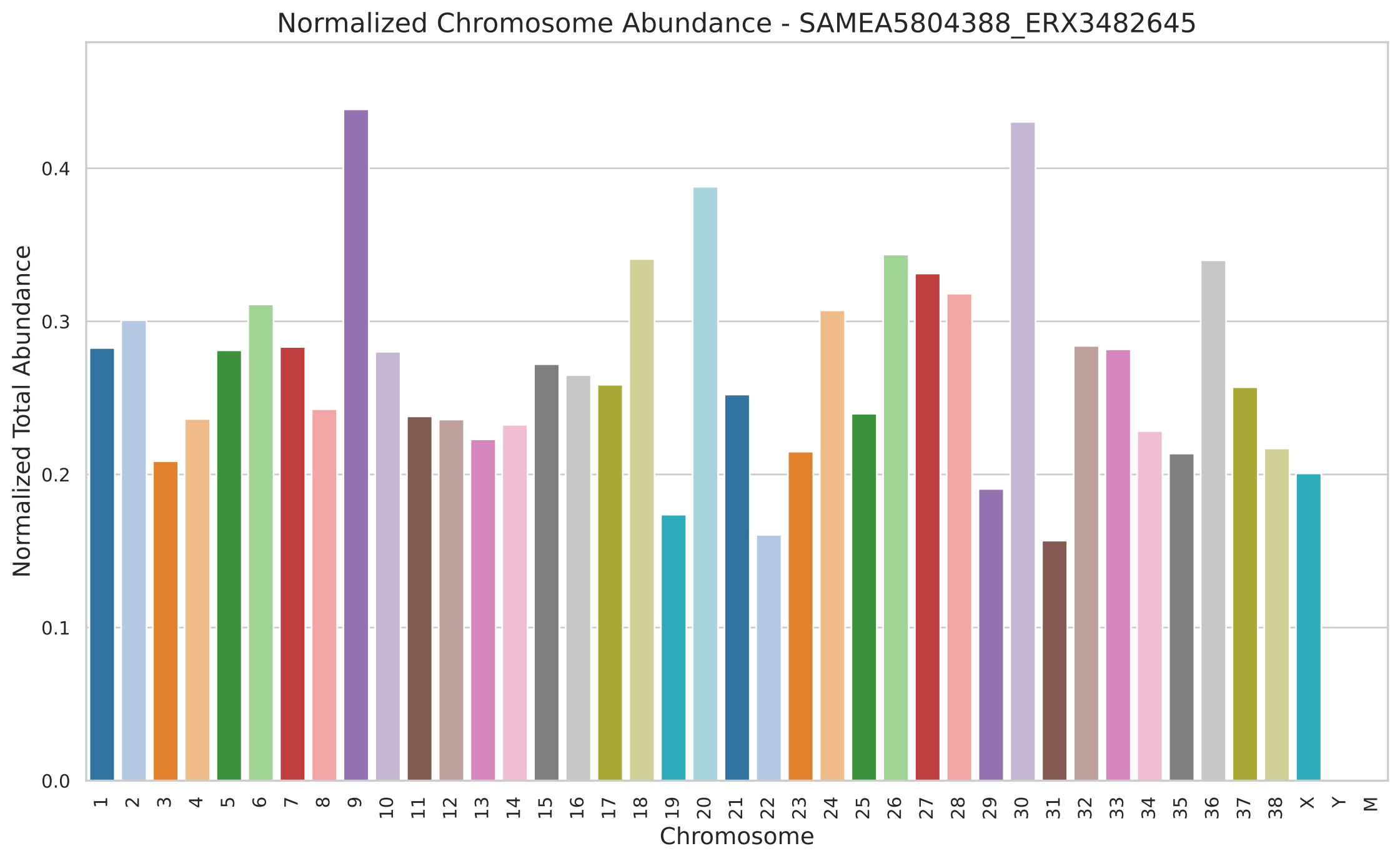

Normalized Chromosome Abundance - SAMEA5804574_ERX3482697
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

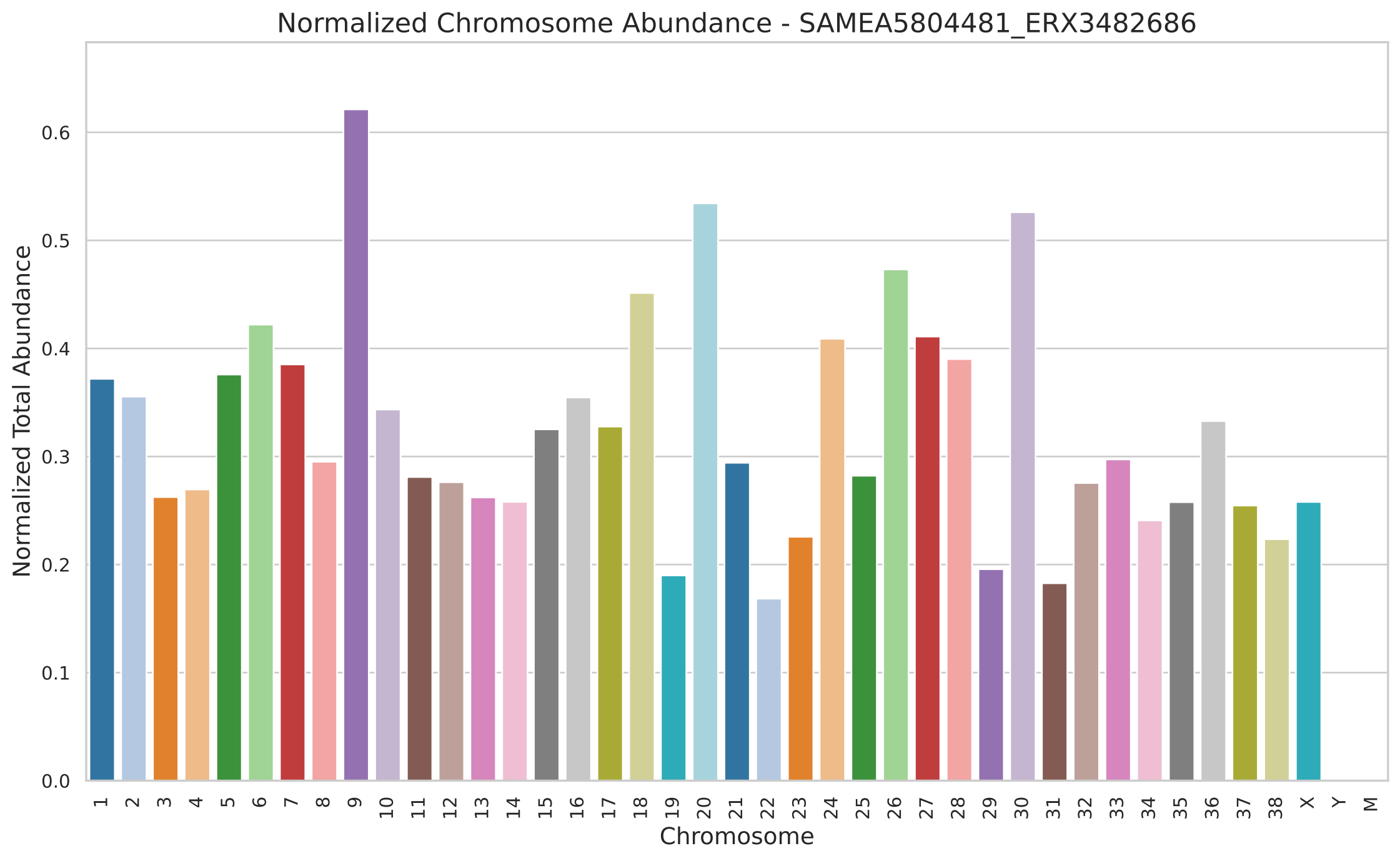

Normalized Chromosome Abundance - SAMEA5804457_ERX3482683
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

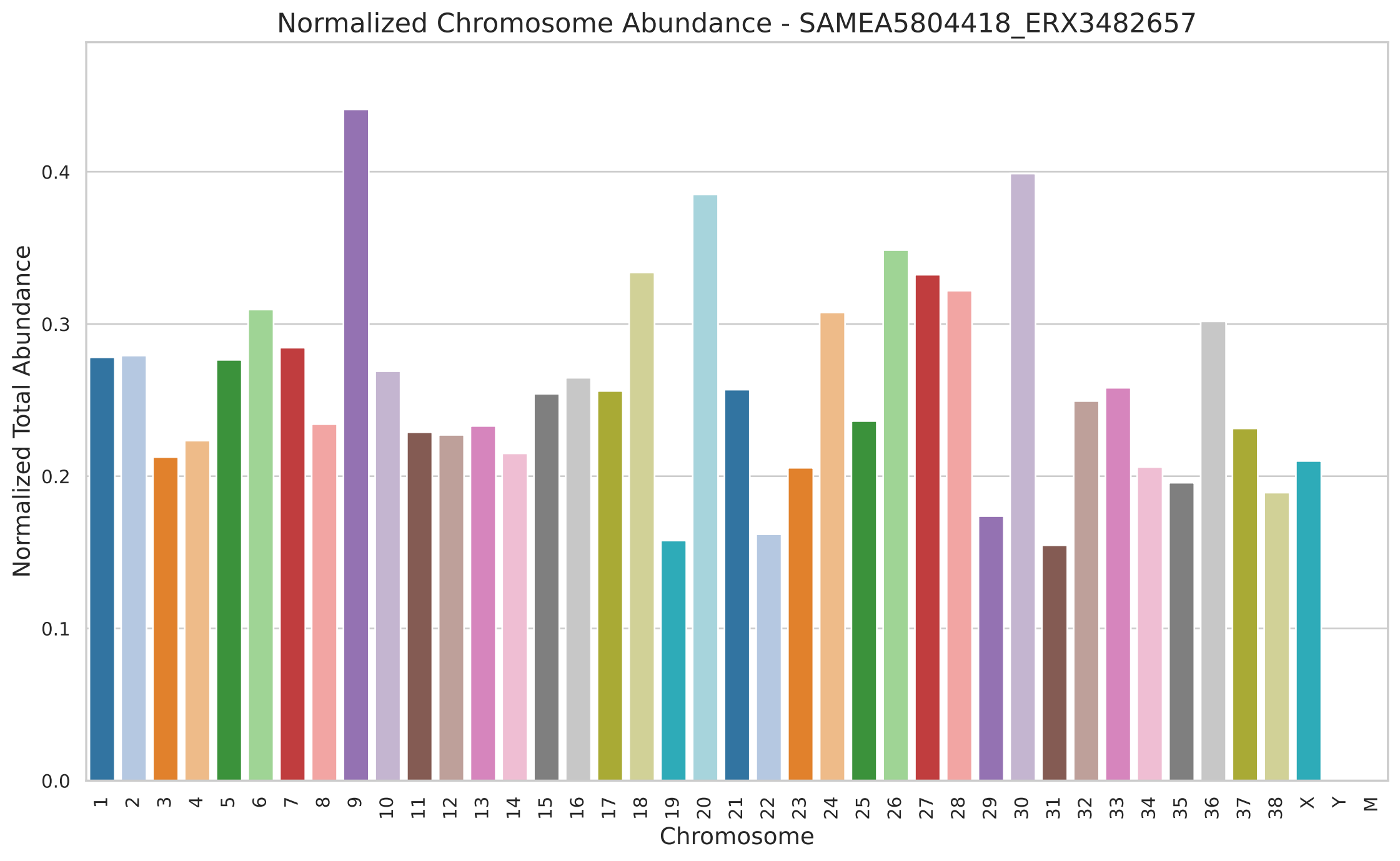

Normalized Chromosome Abundance - SAMEA5804451_ERX3482682
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

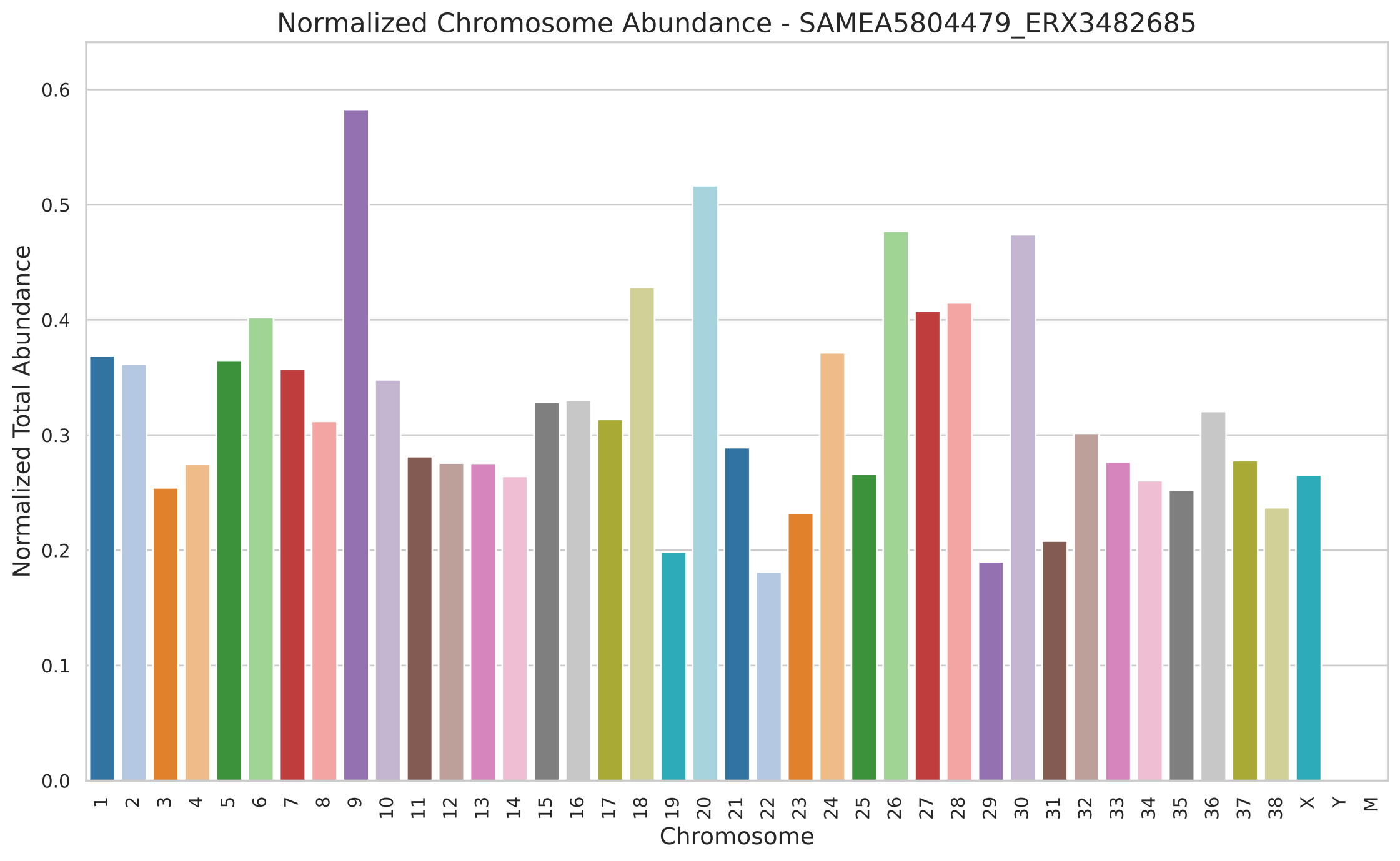

Normalized Chromosome Abundance - SAMEA5804579_ERX3482694
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

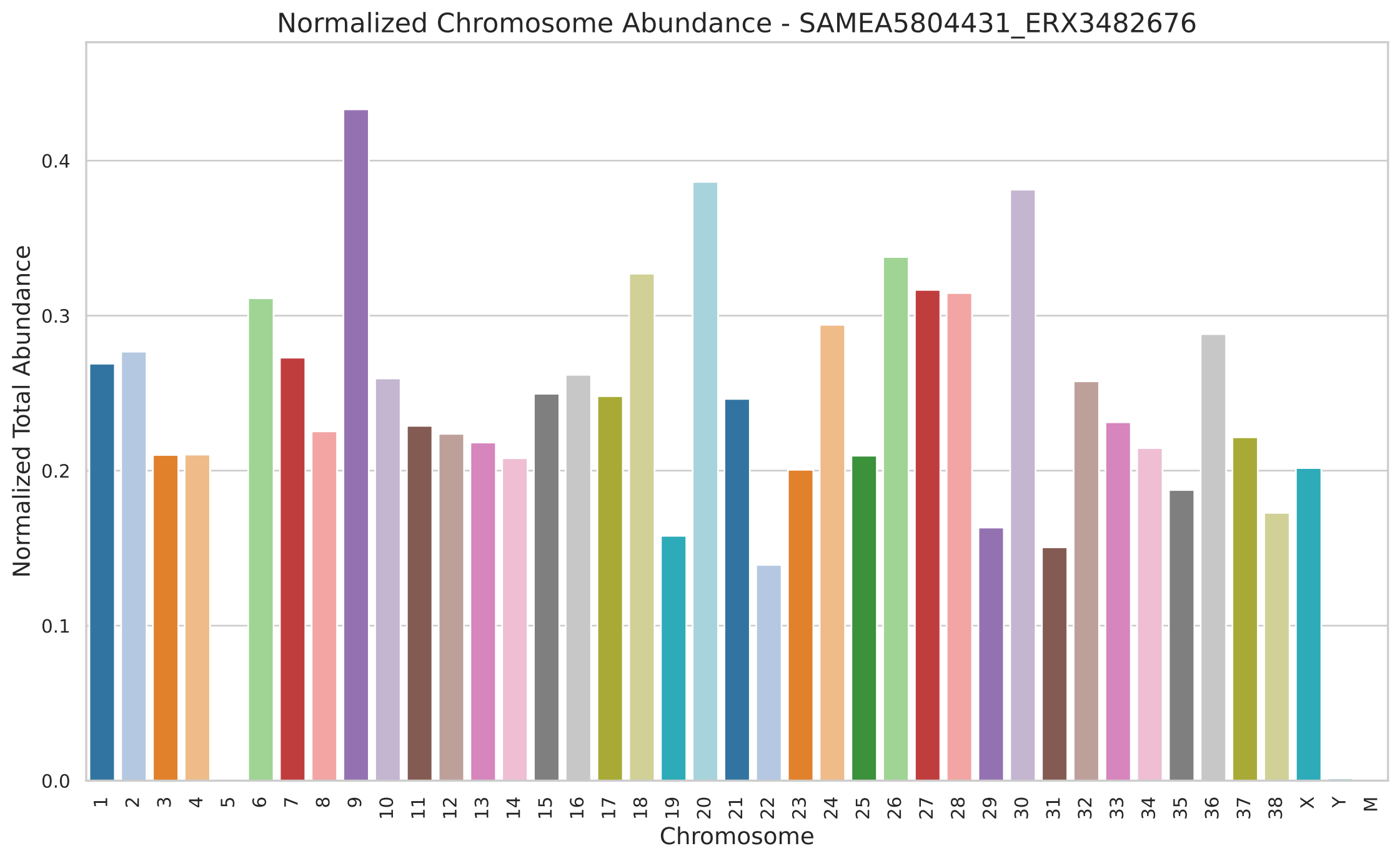

Normalized Chromosome Abundance - SAMEA5804412_ERX3482654
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

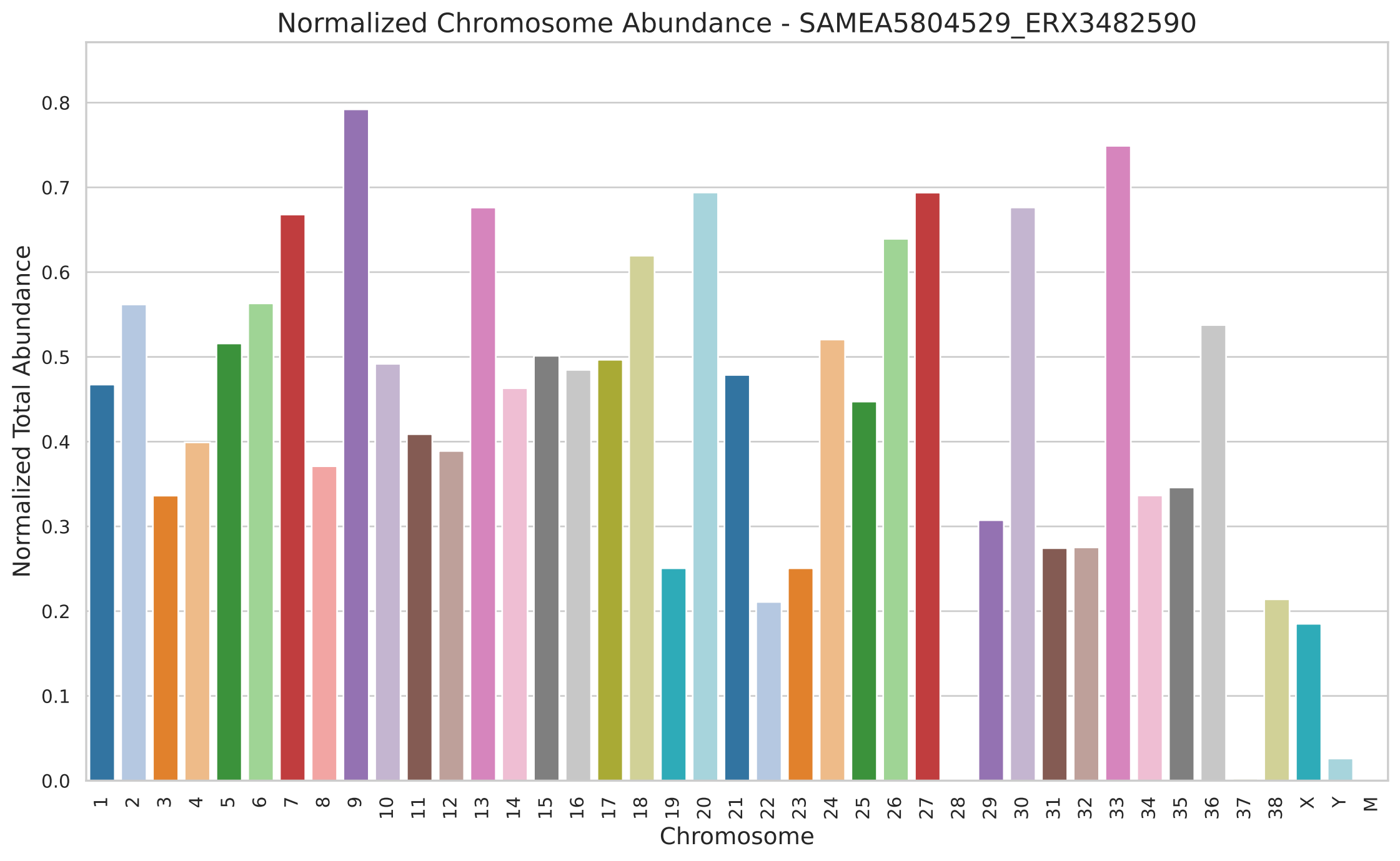

Normalized Chromosome Abundance - SAMEA5804388_ERX3482645
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

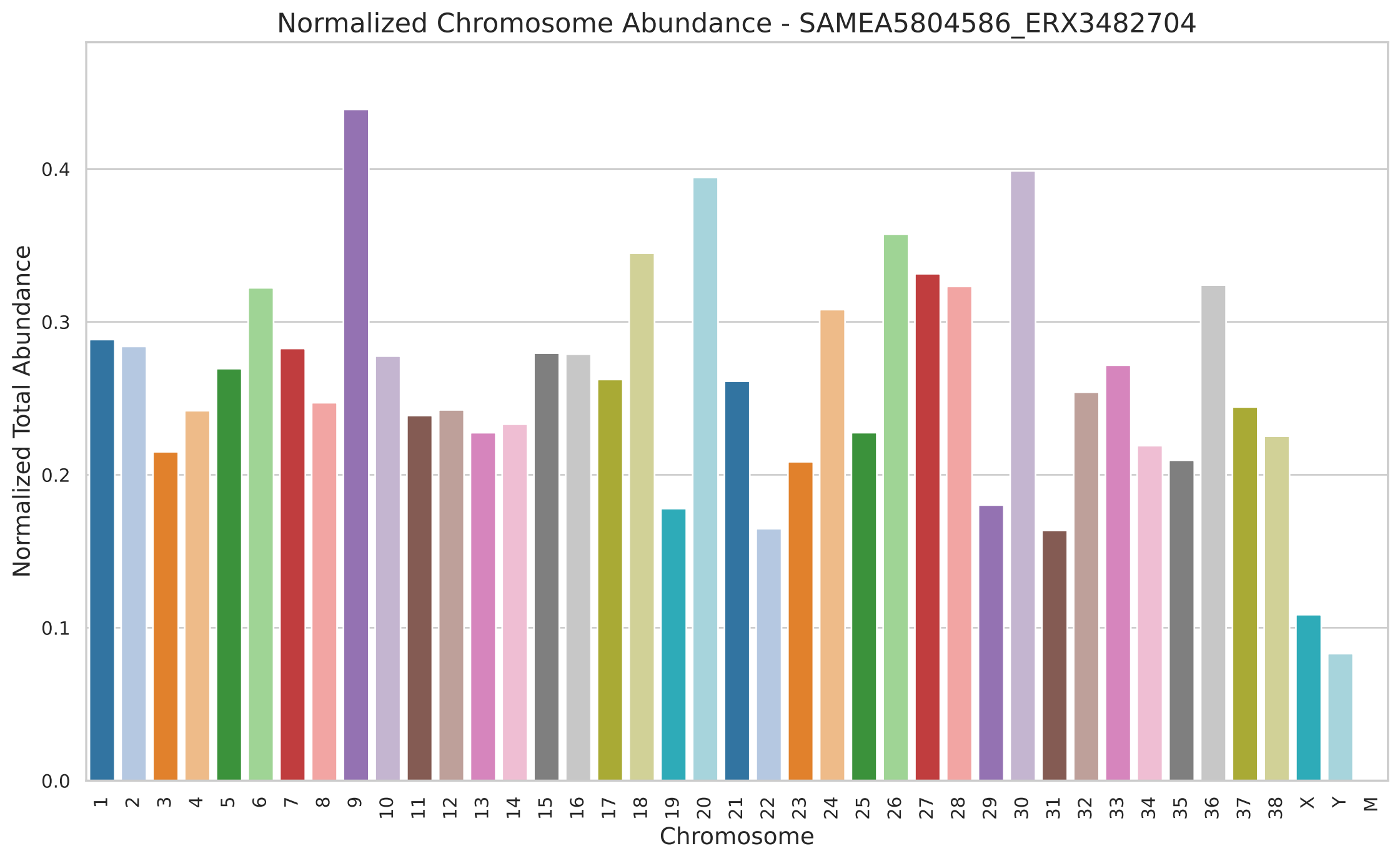

Normalized Chromosome Abundance - SAMEA5804481_ERX3482686
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

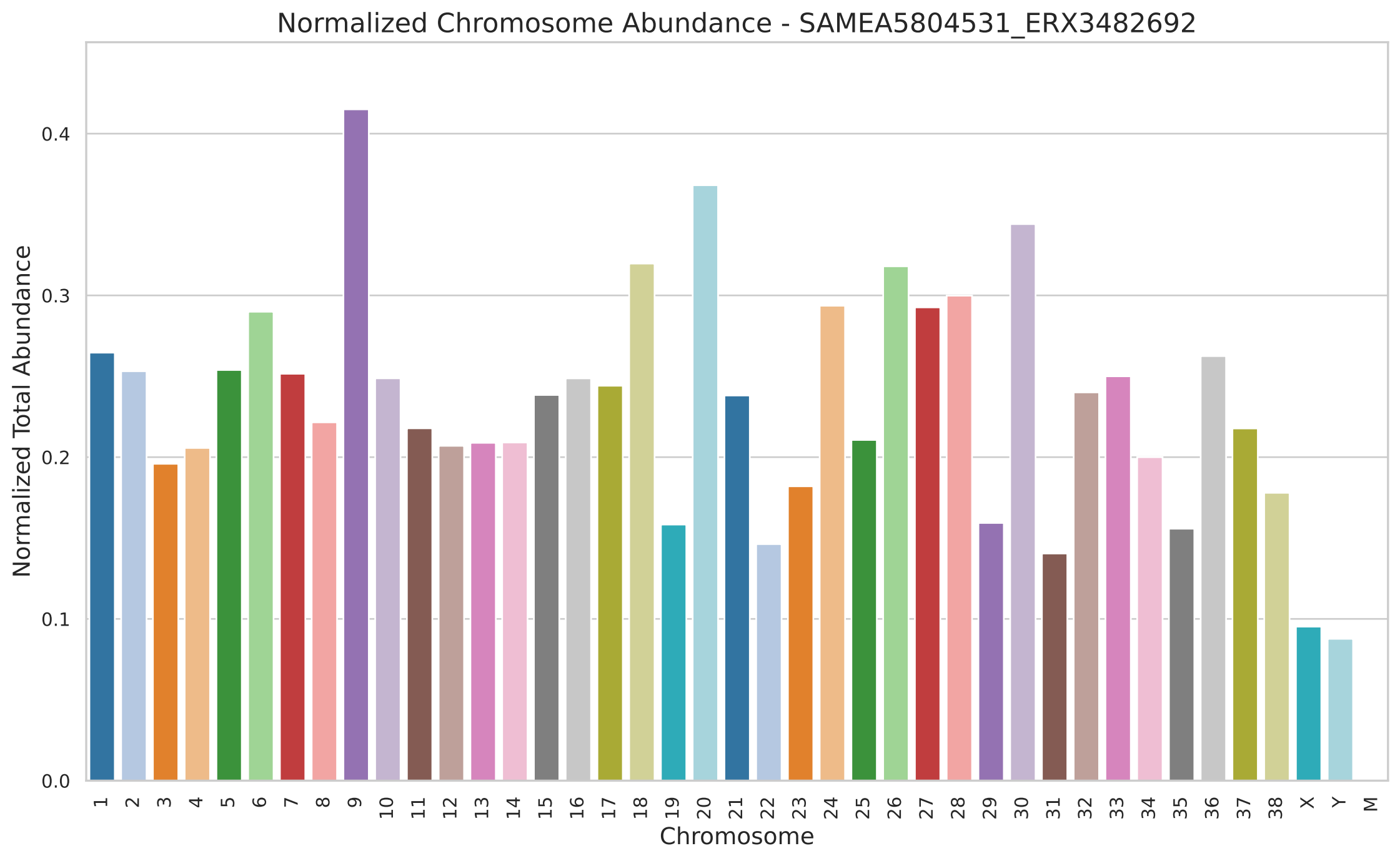

Normalized Chromosome Abundance - SAMEA5804418_ERX3482657
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

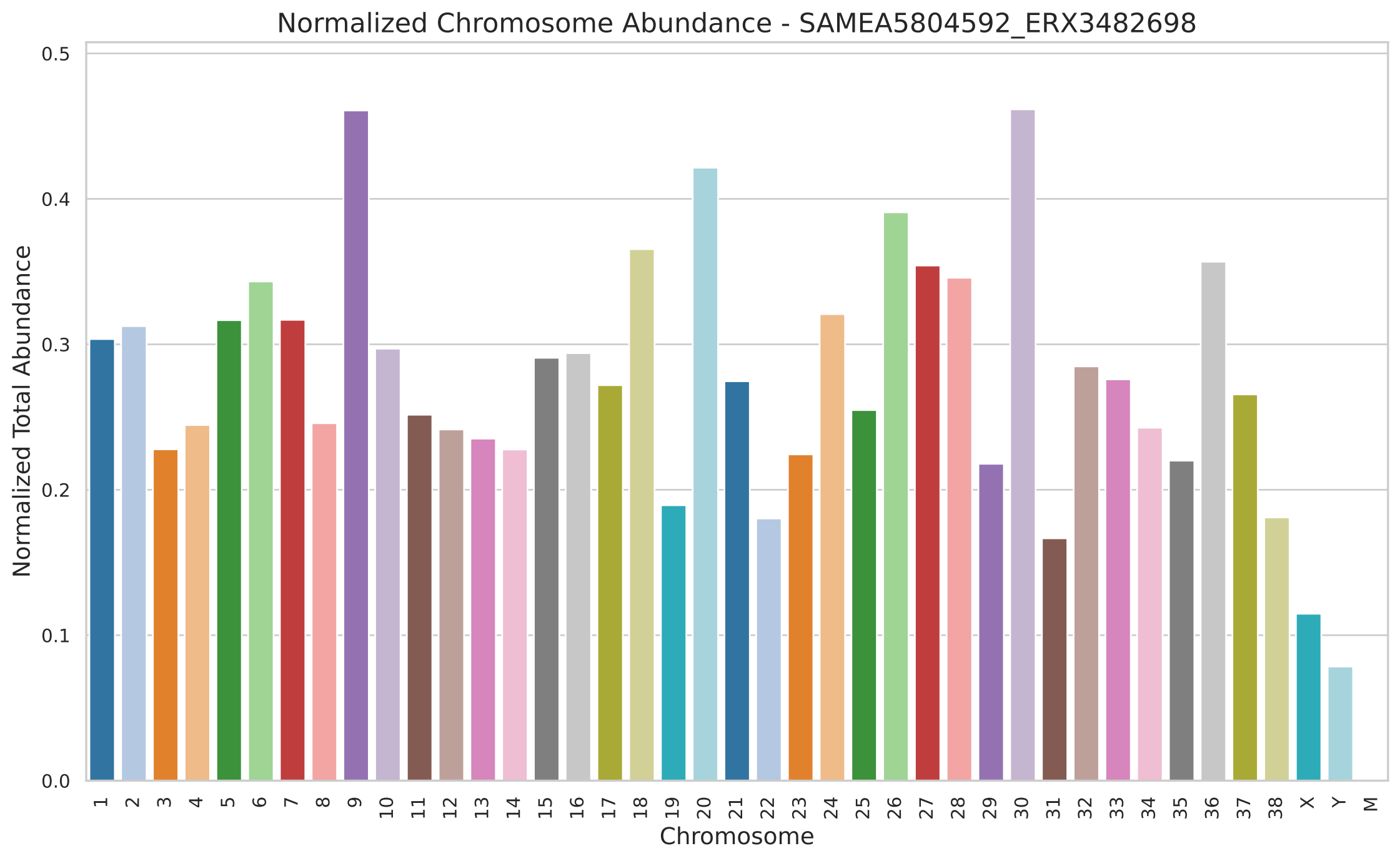

Normalized Chromosome Abundance - SAMEA5804479_ERX3482685
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

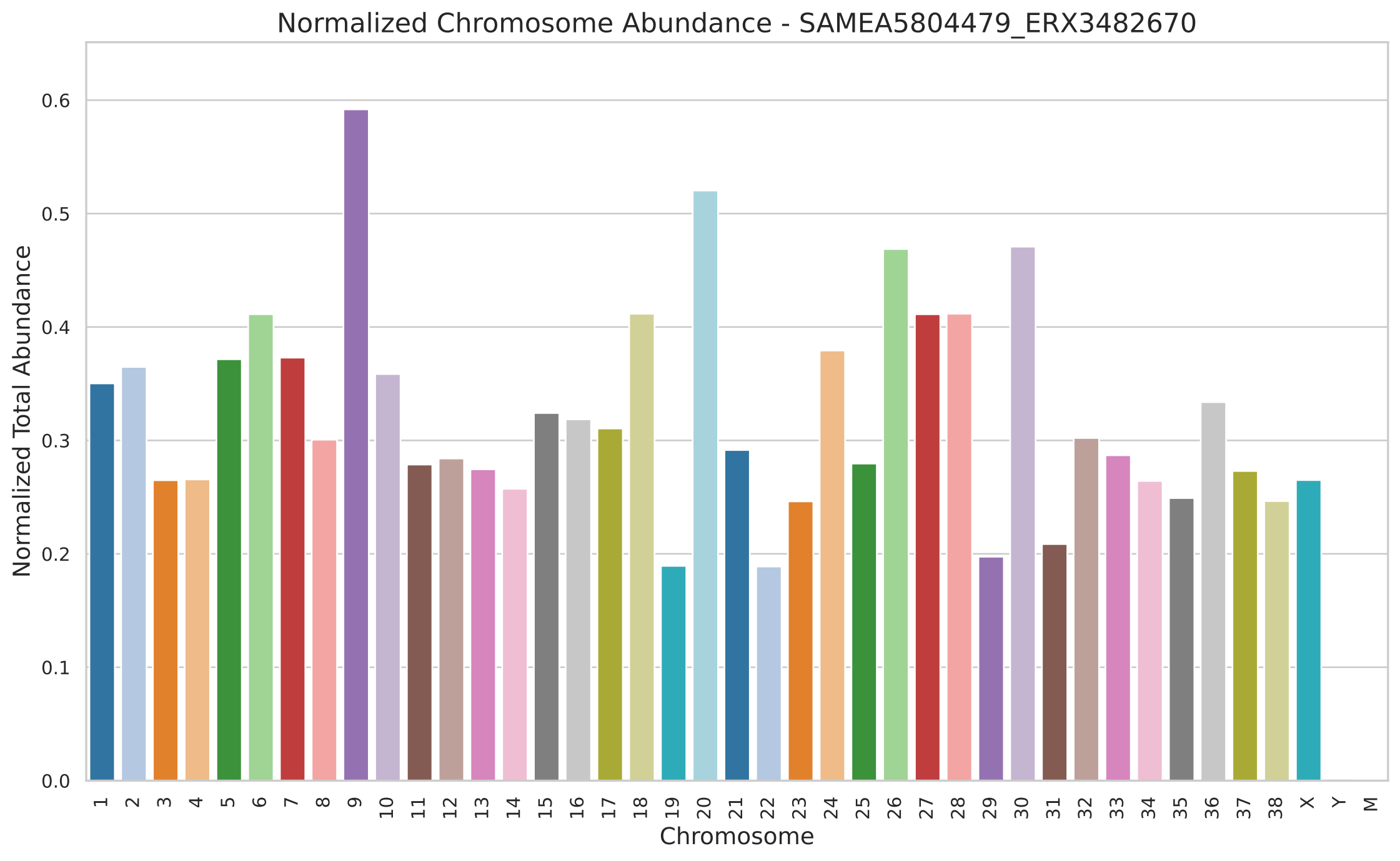

Normalized Chromosome Abundance - SAMEA5804431_ERX3482676
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

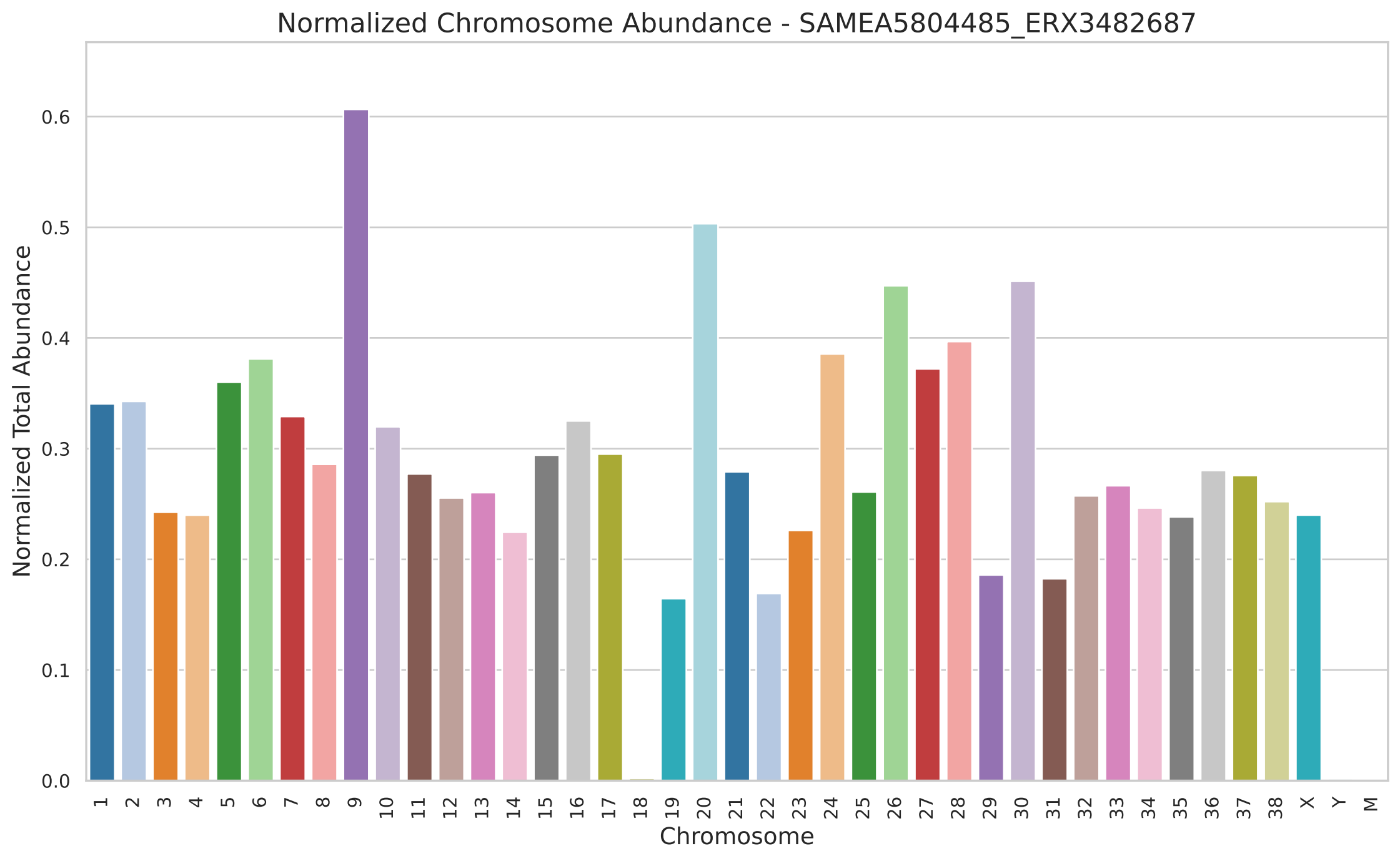

Normalized Chromosome Abundance - SAMEA5804529_ERX3482590
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

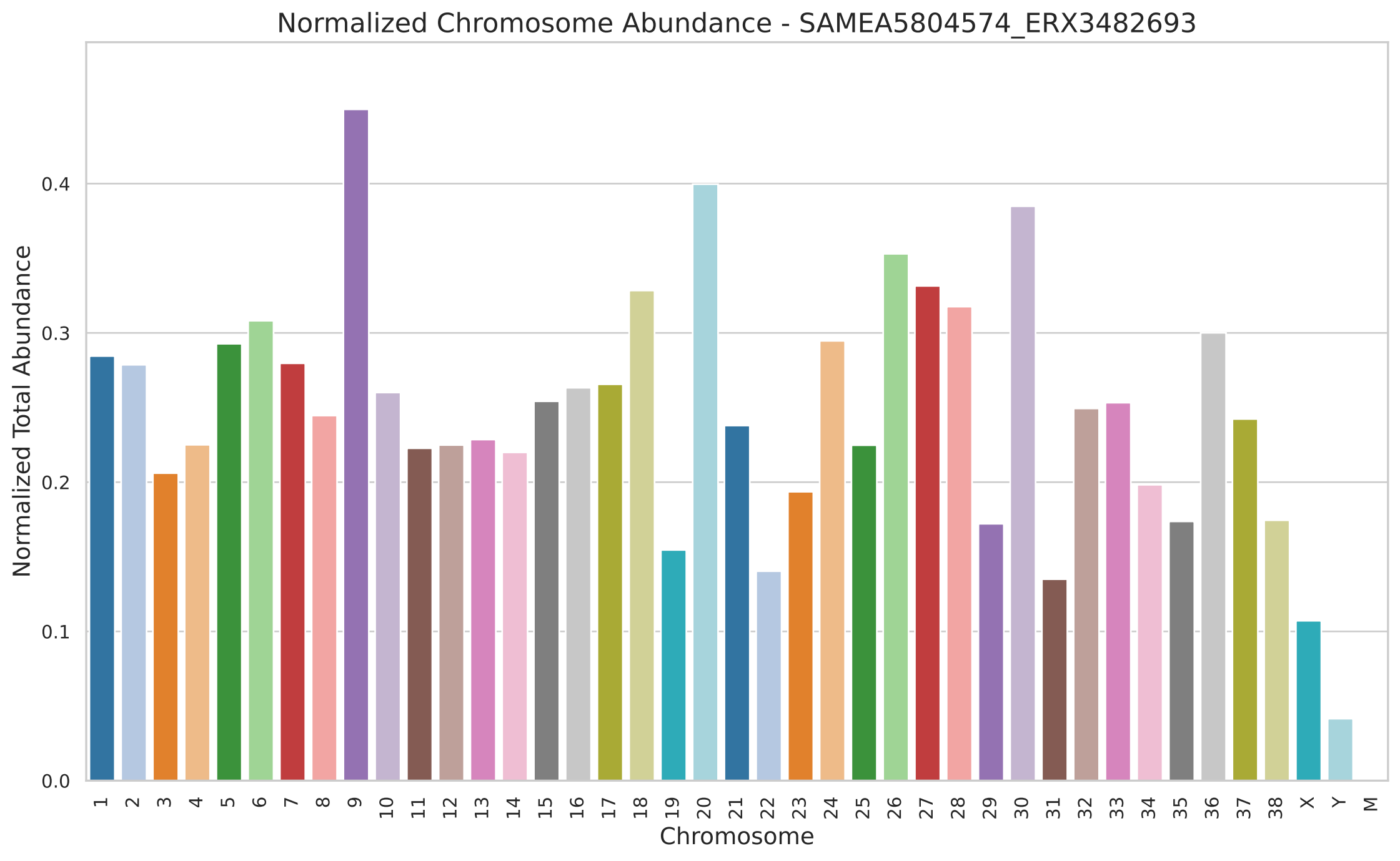

Normalized Chromosome Abundance - SAMEA5804586_ERX3482704
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

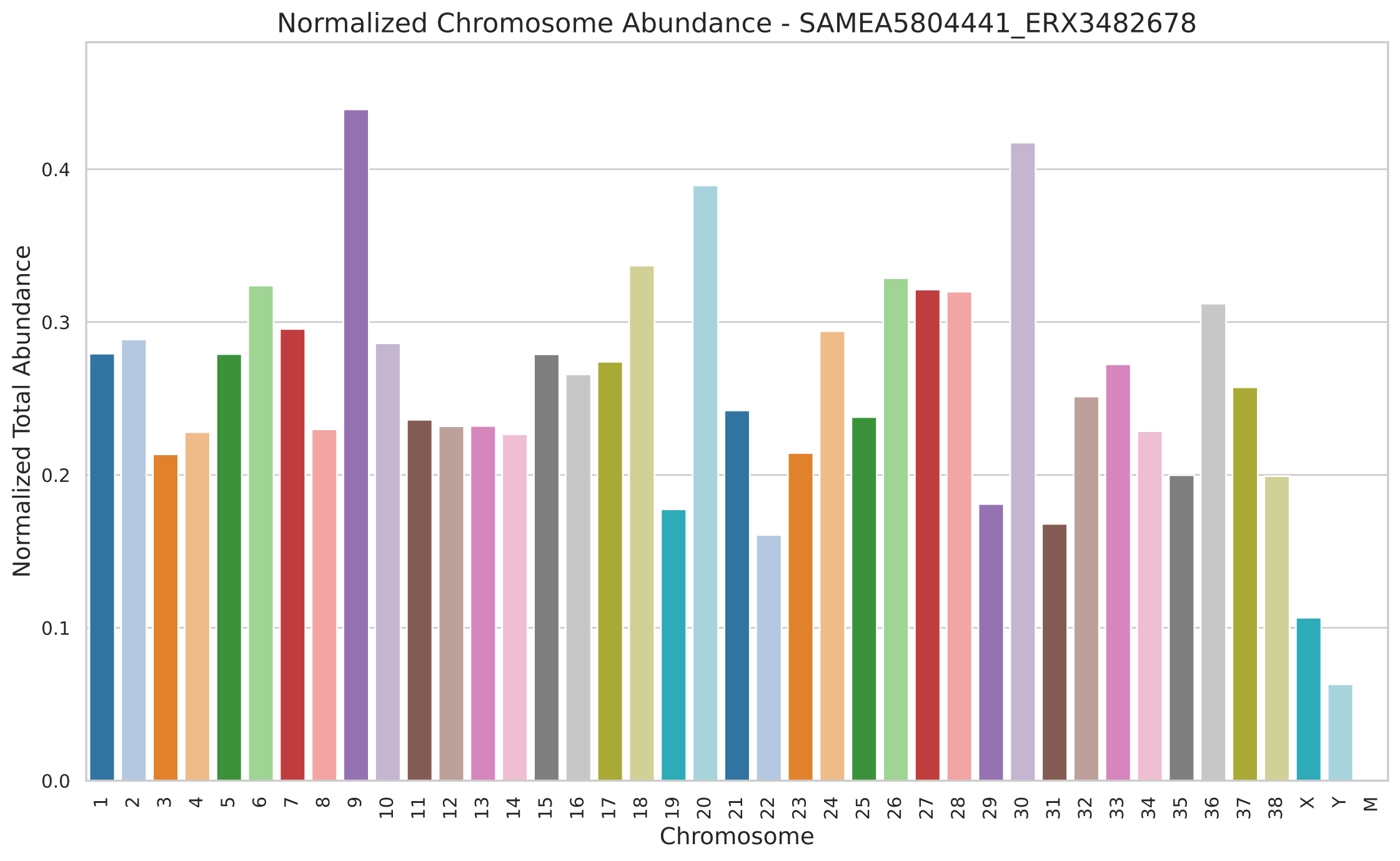

Normalized Chromosome Abundance - SAMEA5804531_ERX3482692
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

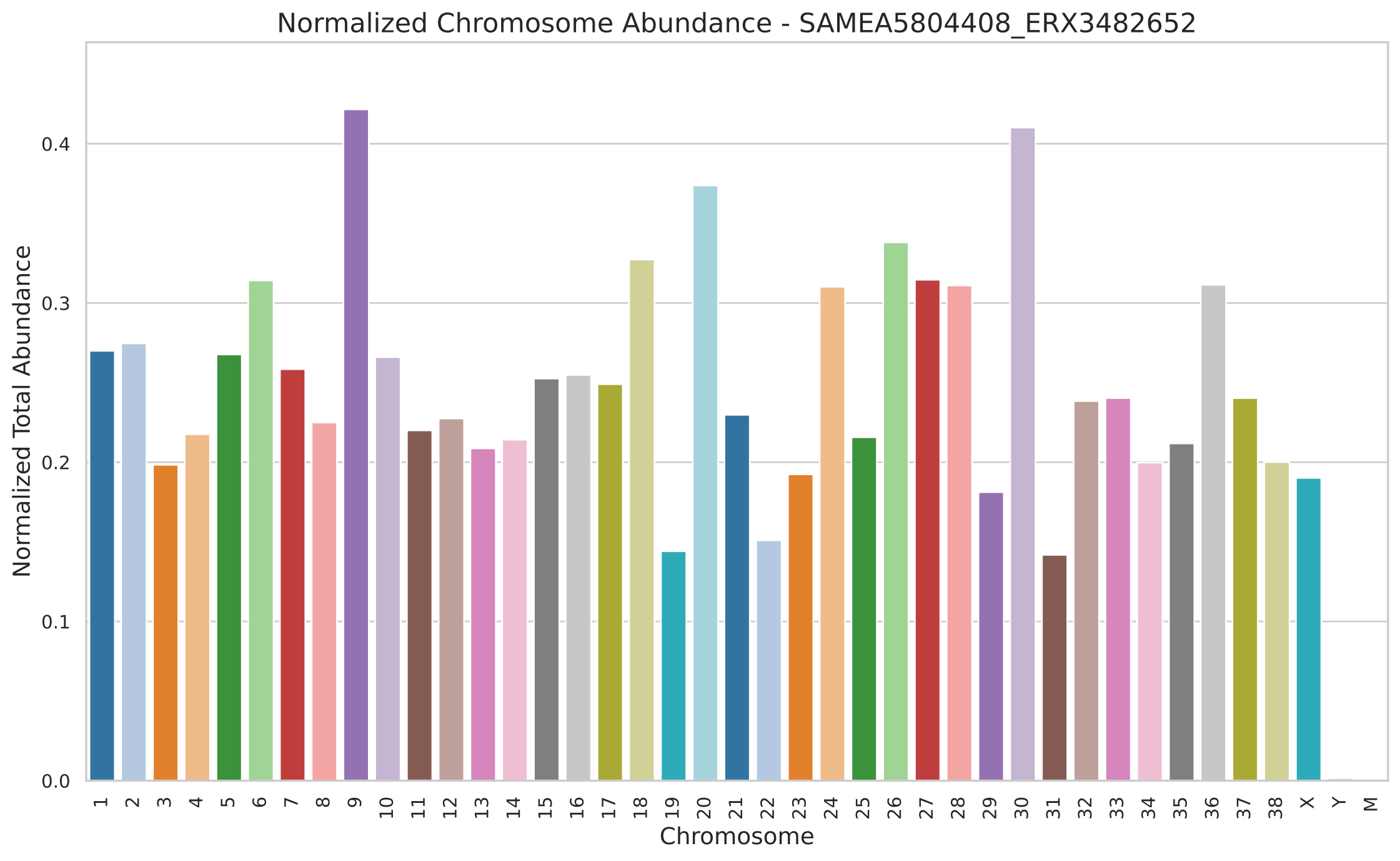

Normalized Chromosome Abundance - SAMEA5804592_ERX3482698
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

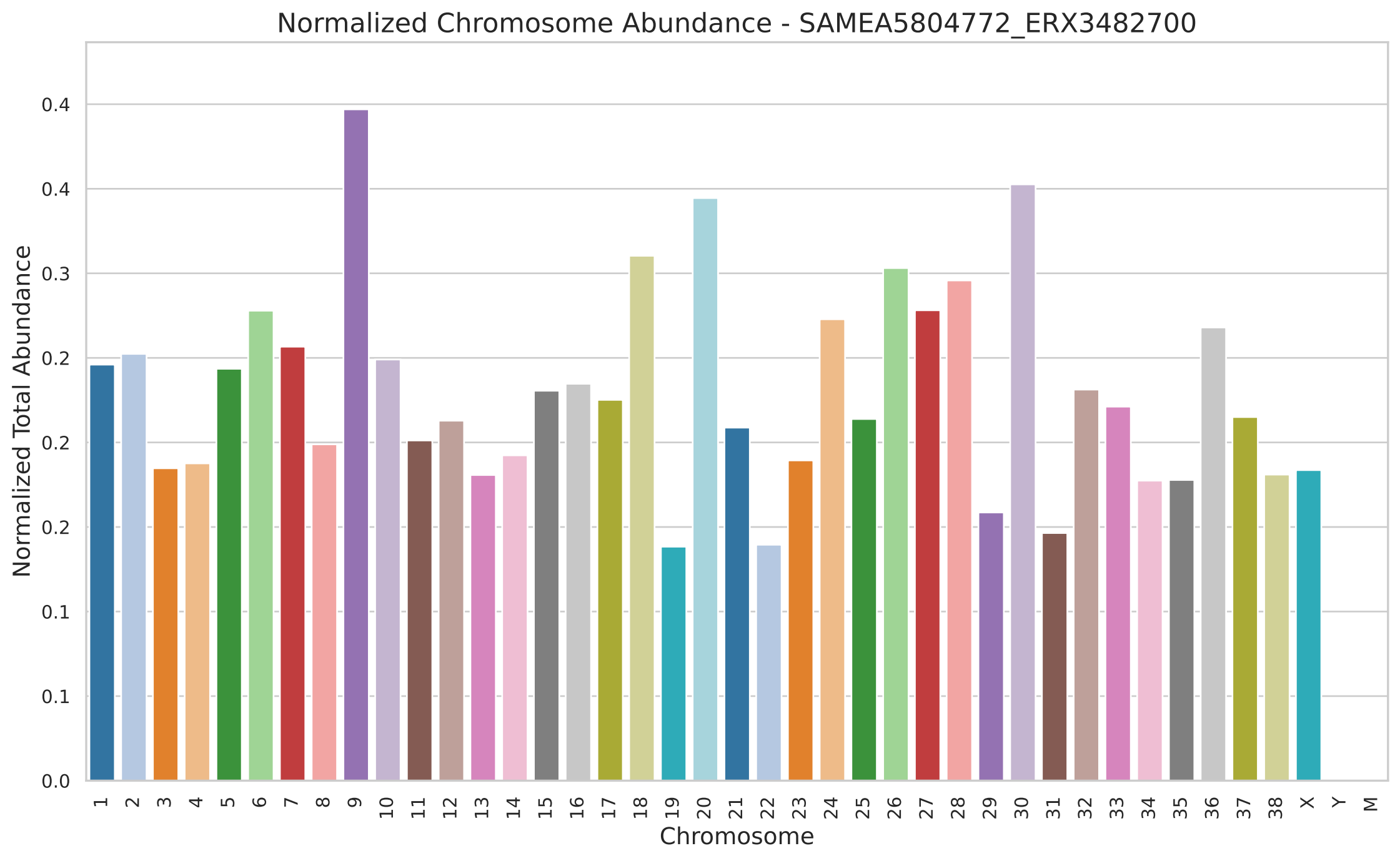

Normalized Chromosome Abundance - SAMEA5804479_ERX3482670
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

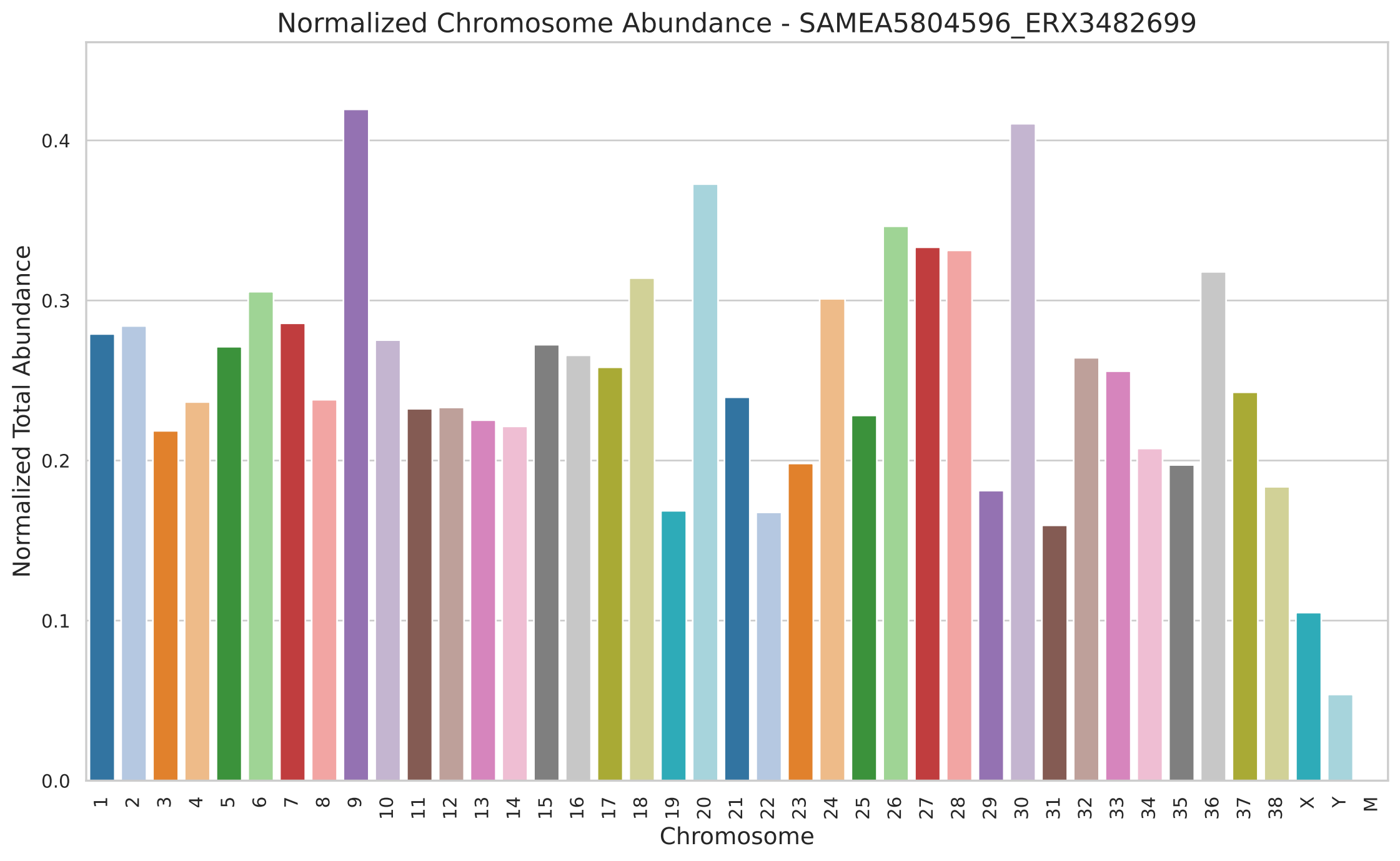

Normalized Chromosome Abundance - SAMEA5804485_ERX3482687
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

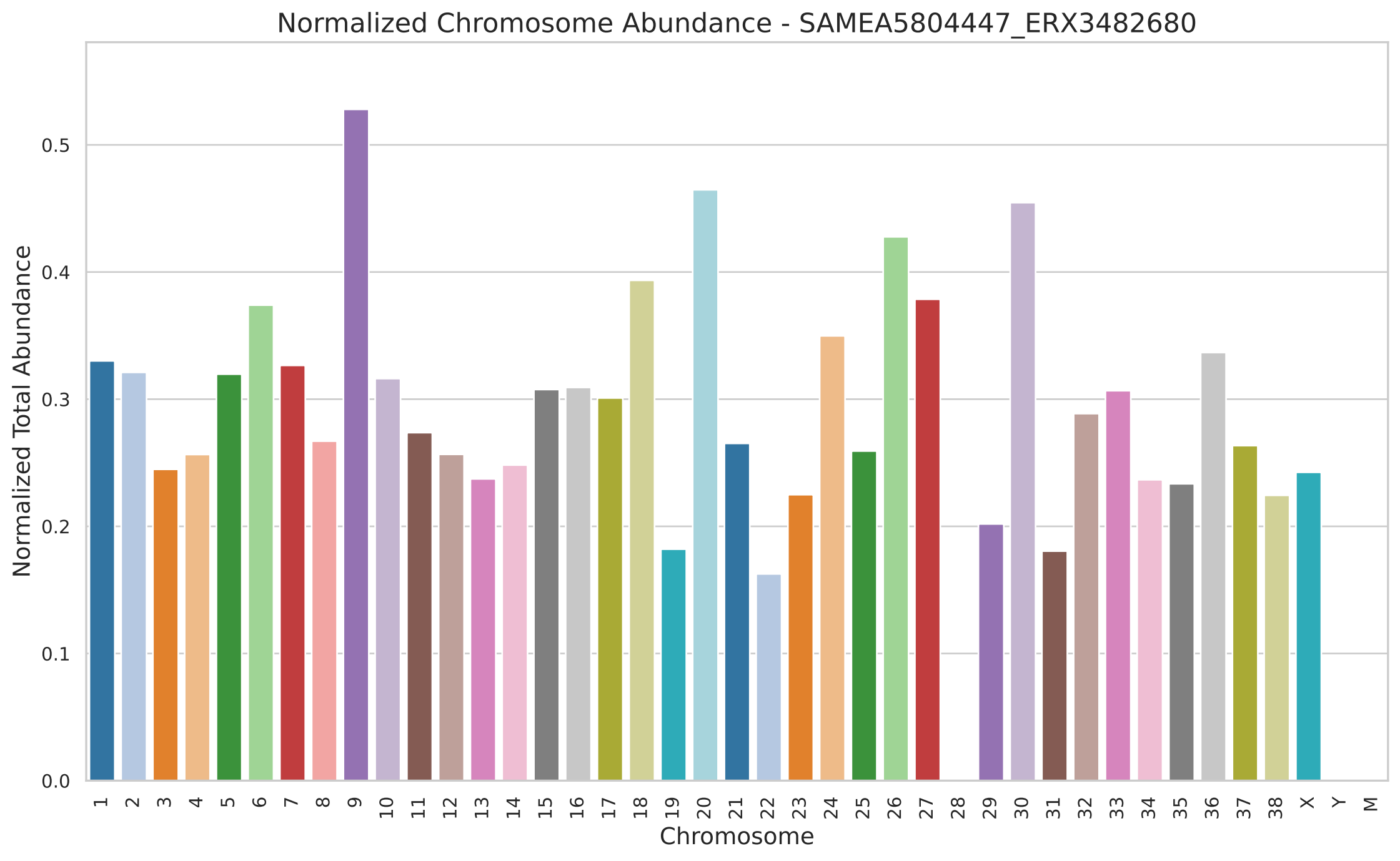

Normalized Chromosome Abundance - SAMEA5804574_ERX3482693
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

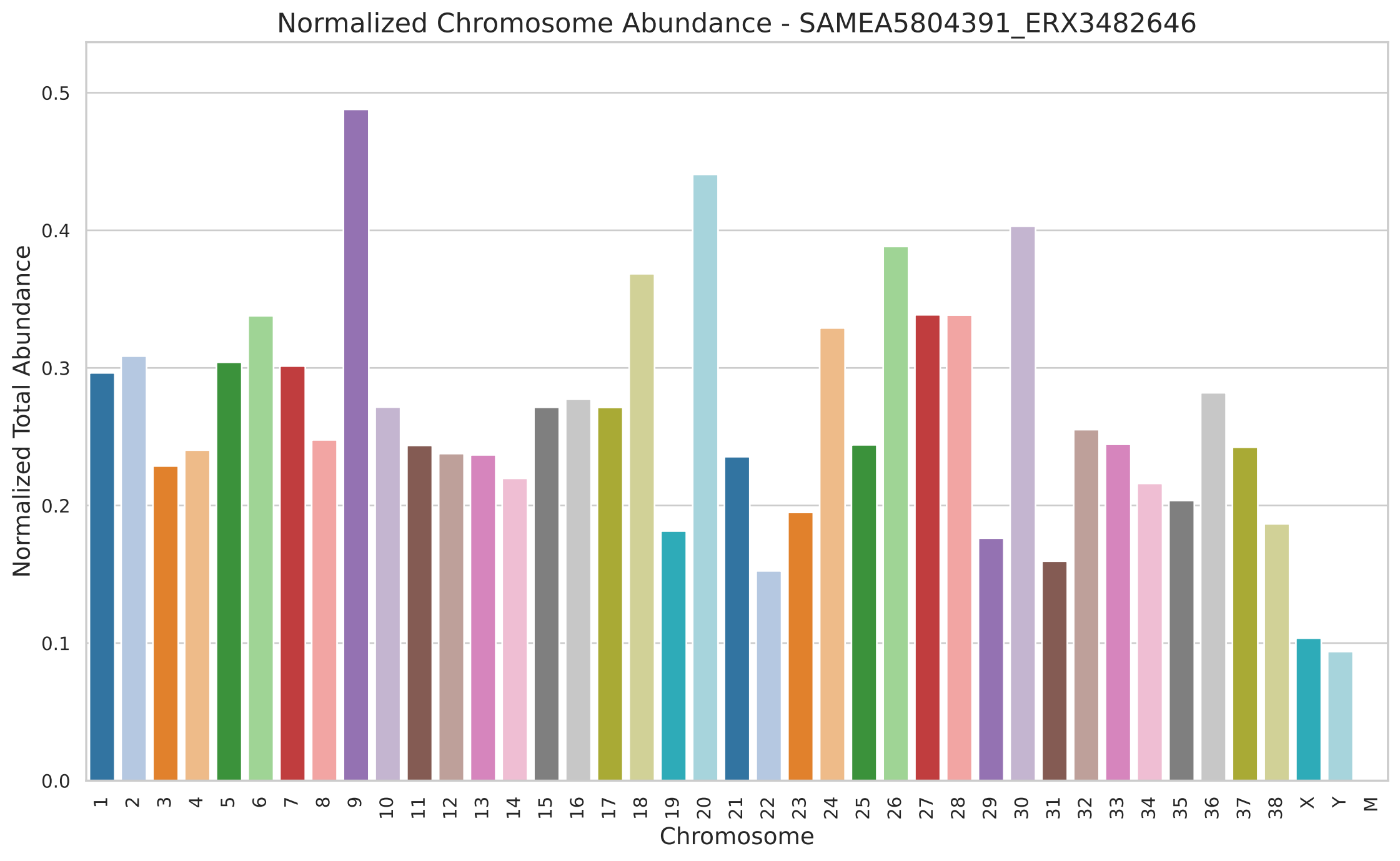

Normalized Chromosome Abundance - SAMEA5804441_ERX3482678
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

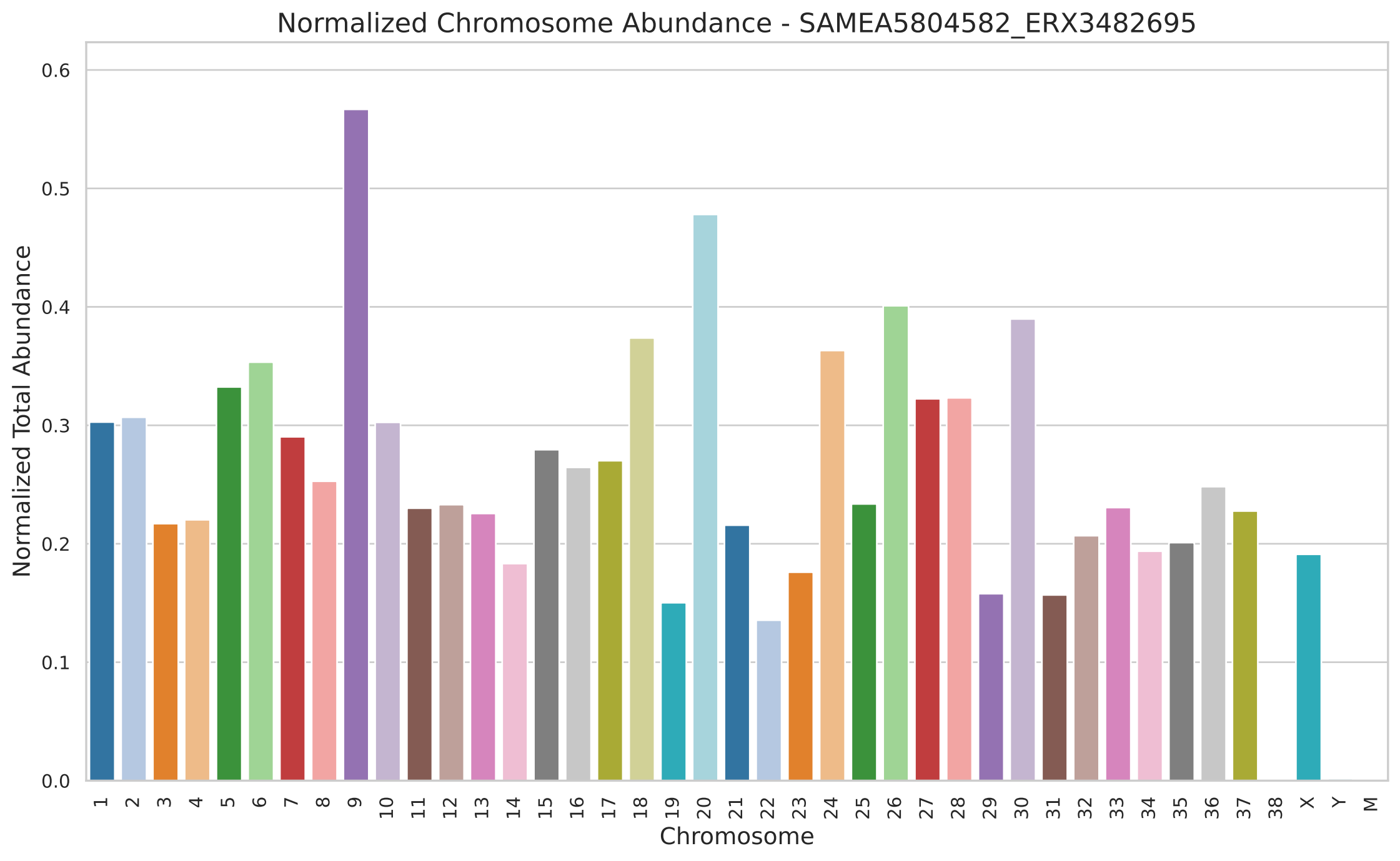

Normalized Chromosome Abundance - SAMEA5804408_ERX3482652
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

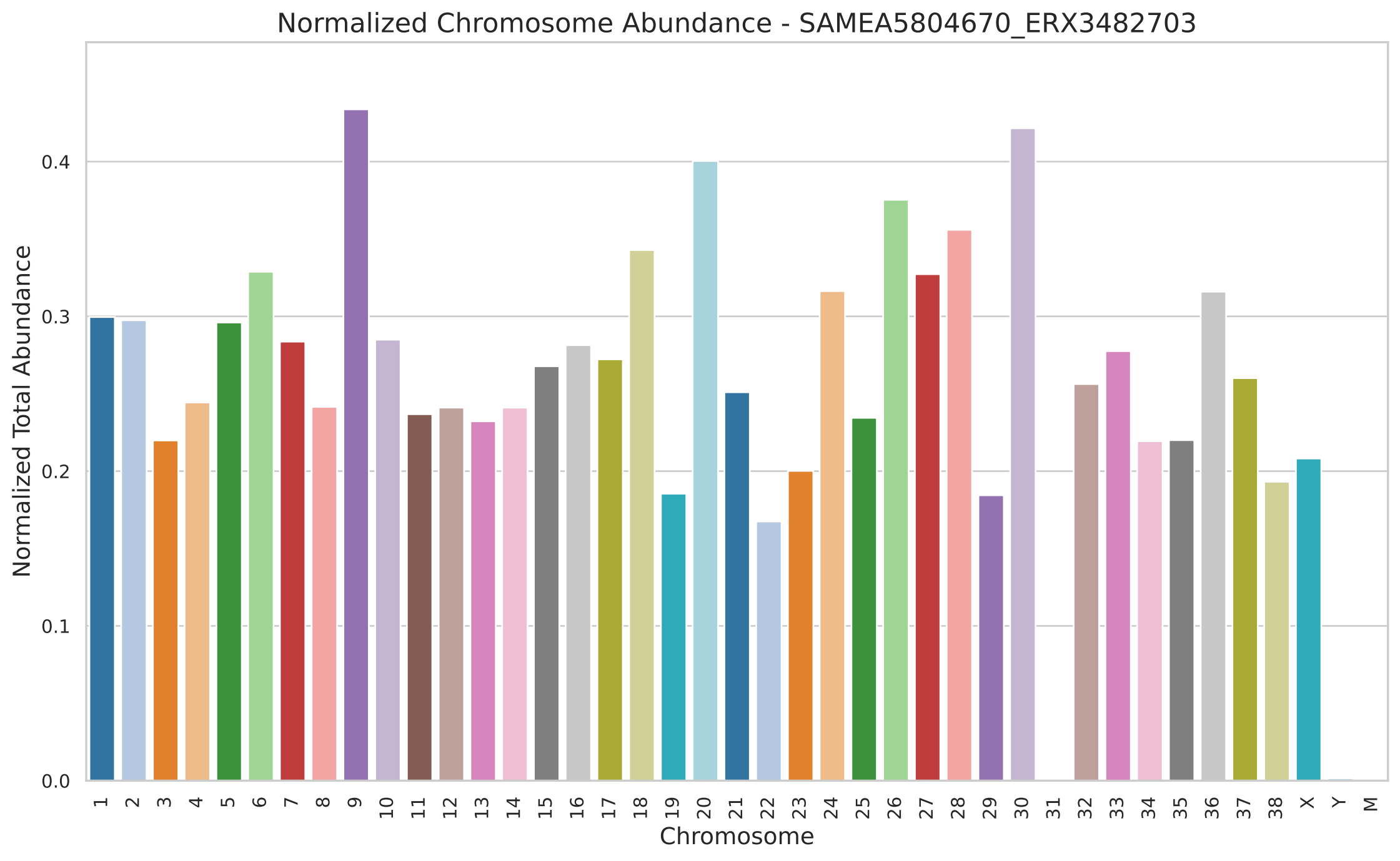

Normalized Chromosome Abundance - SAMEA5804772_ERX3482700
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

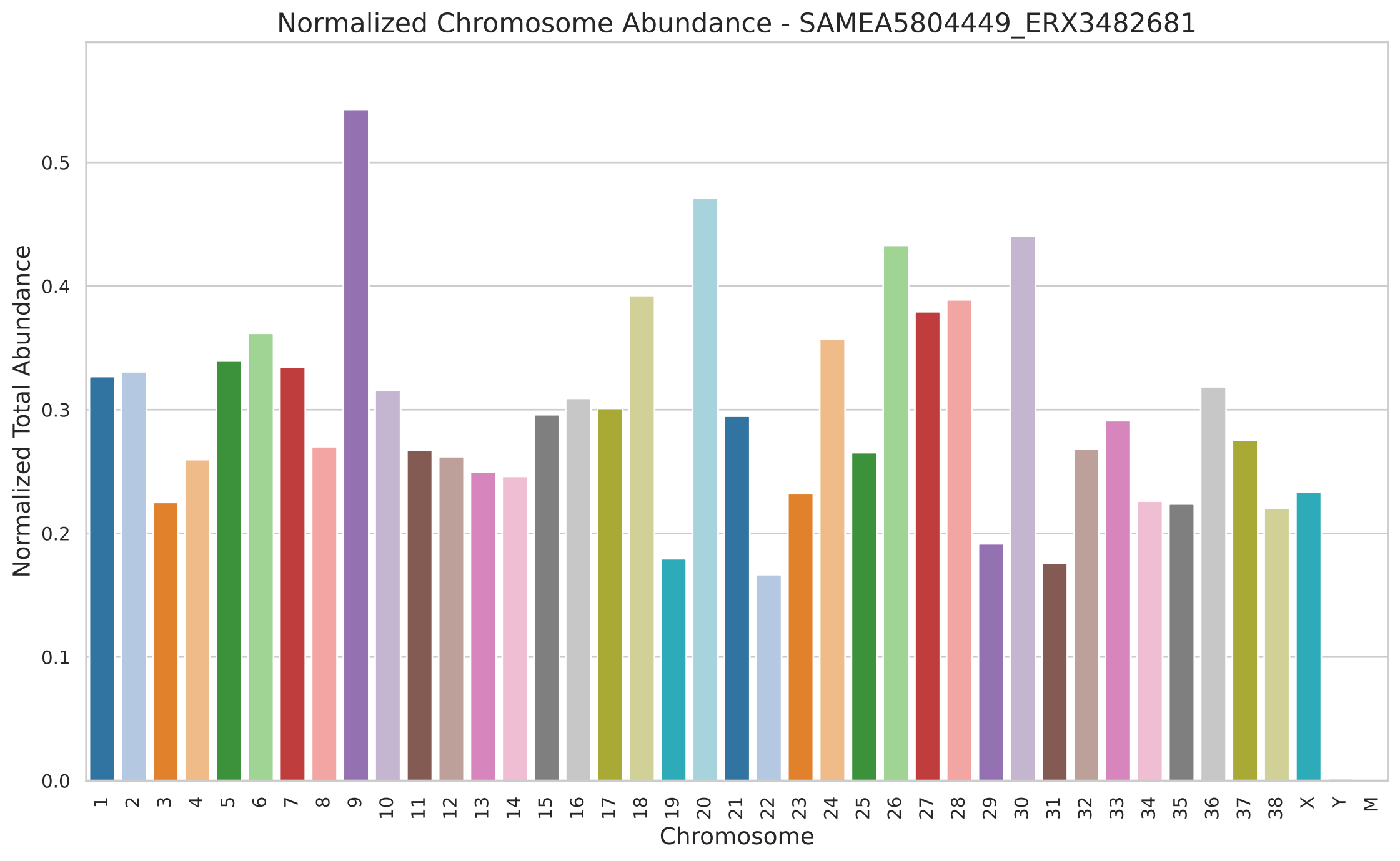

Normalized Chromosome Abundance - SAMEA5804596_ERX3482699
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

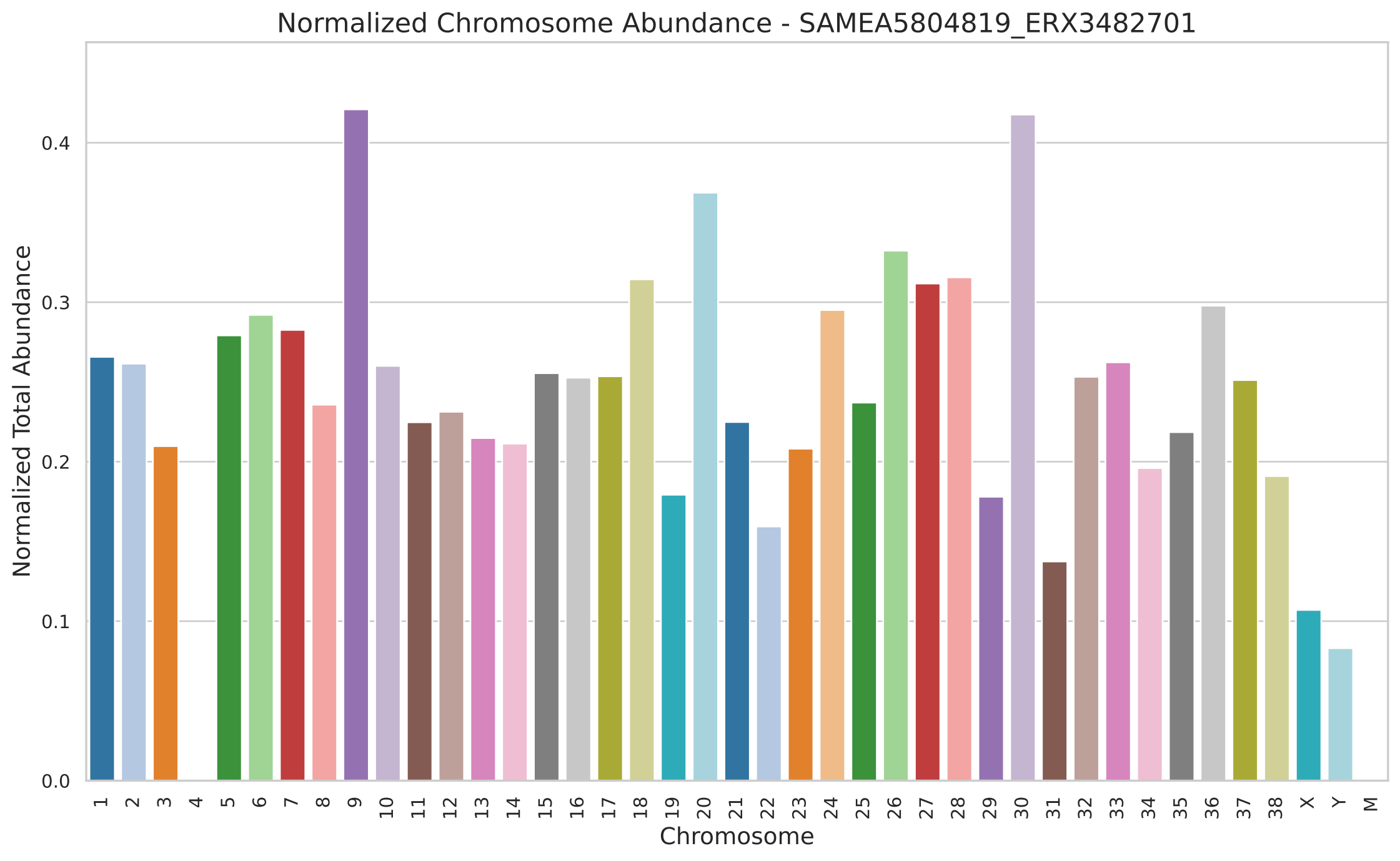

Normalized Chromosome Abundance - SAMEA5804447_ERX3482680
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

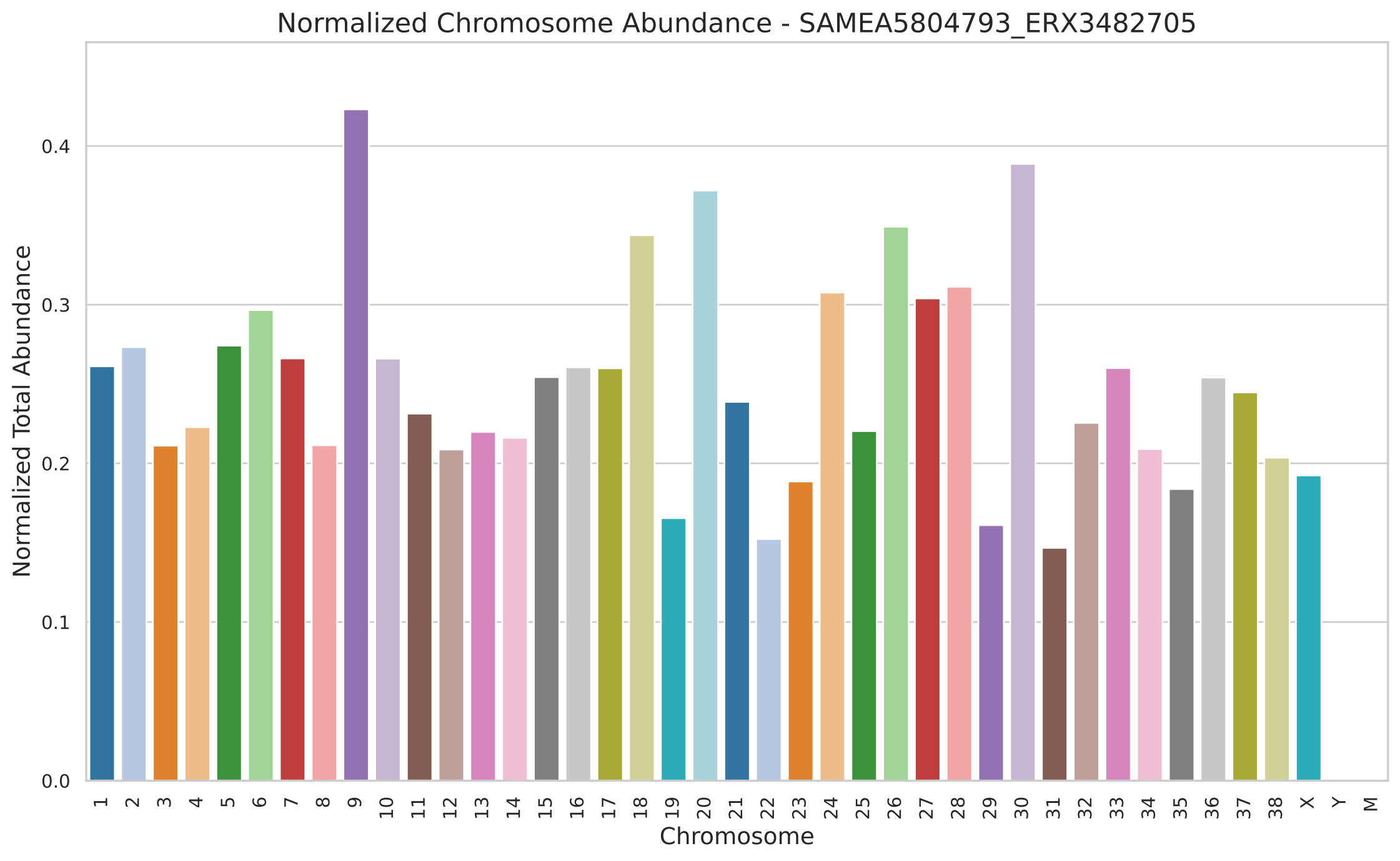

Normalized Chromosome Abundance - SAMEA5804391_ERX3482646
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

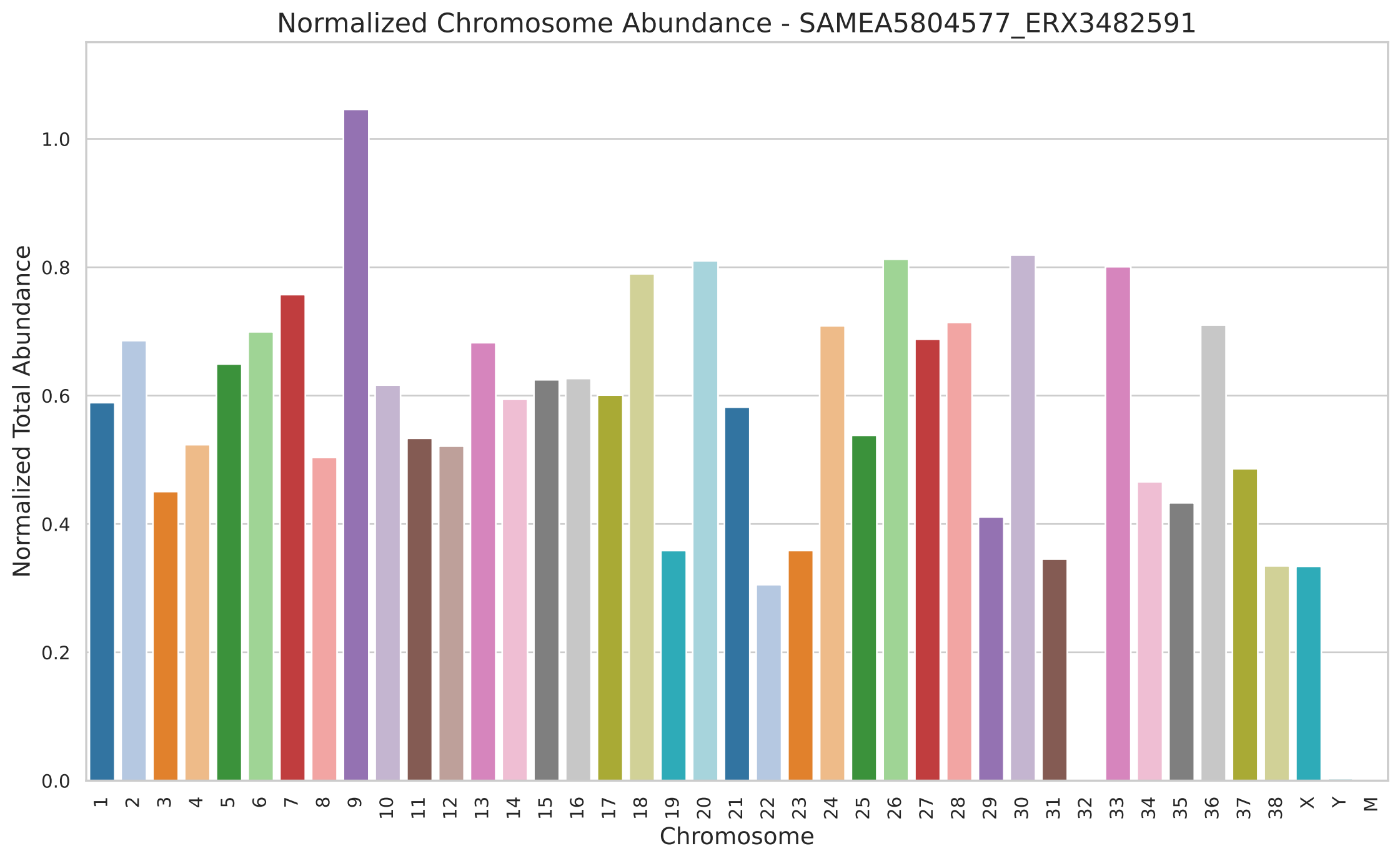

Normalized Chromosome Abundance - SAMEA5804582_ERX3482695
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

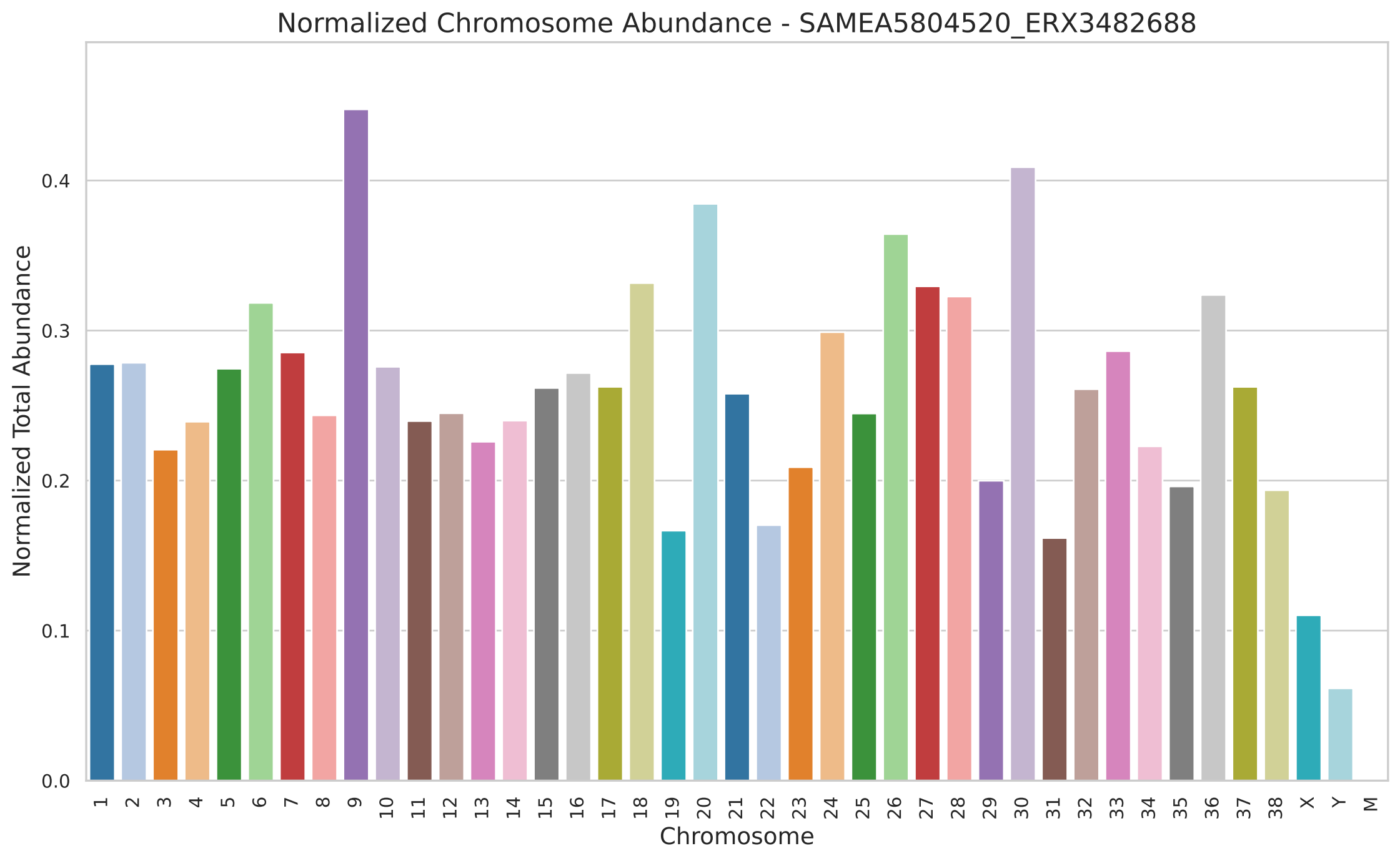

Normalized Chromosome Abundance - SAMEA5804670_ERX3482703
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

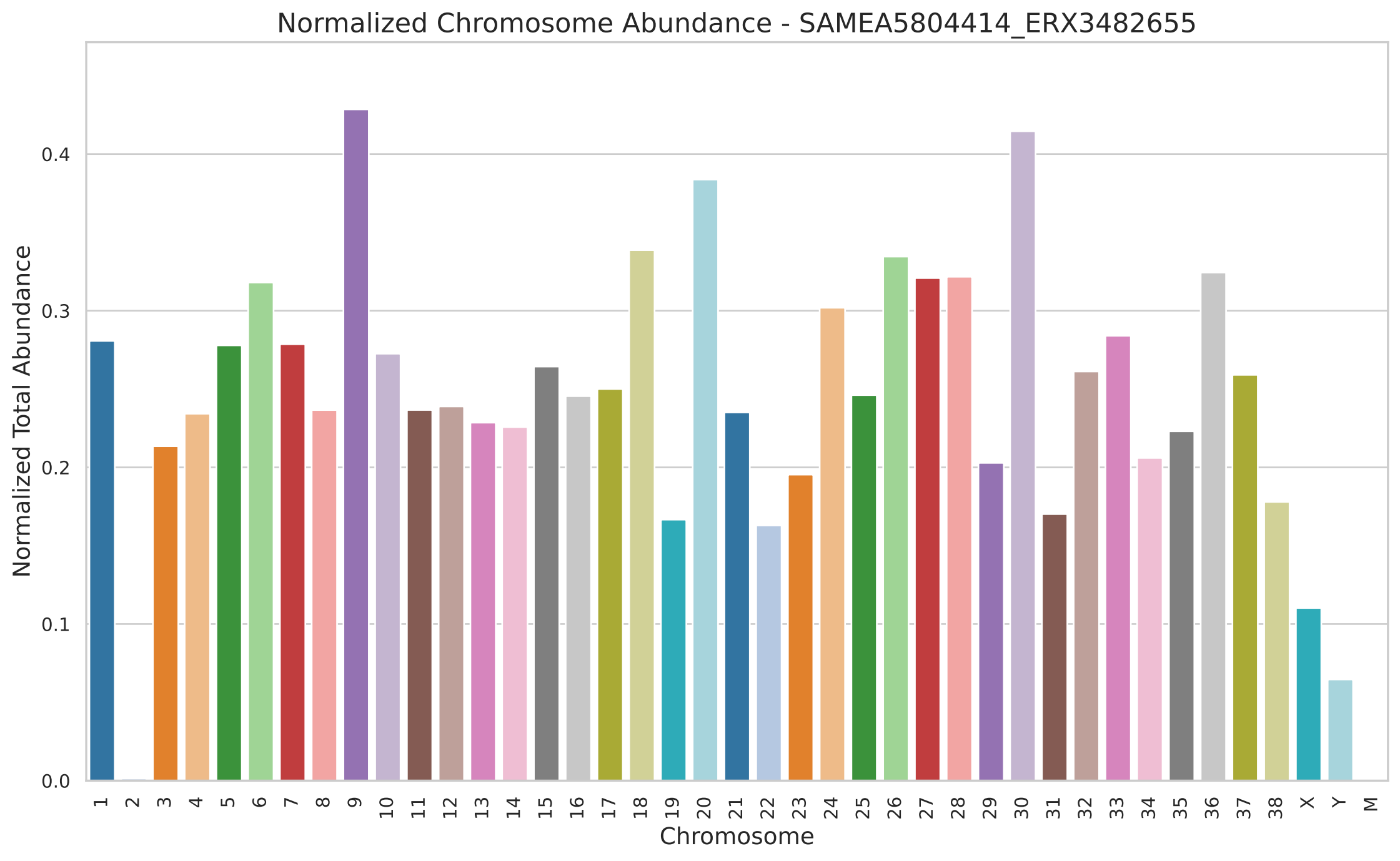

Normalized Chromosome Abundance - SAMEA5804449_ERX3482681
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

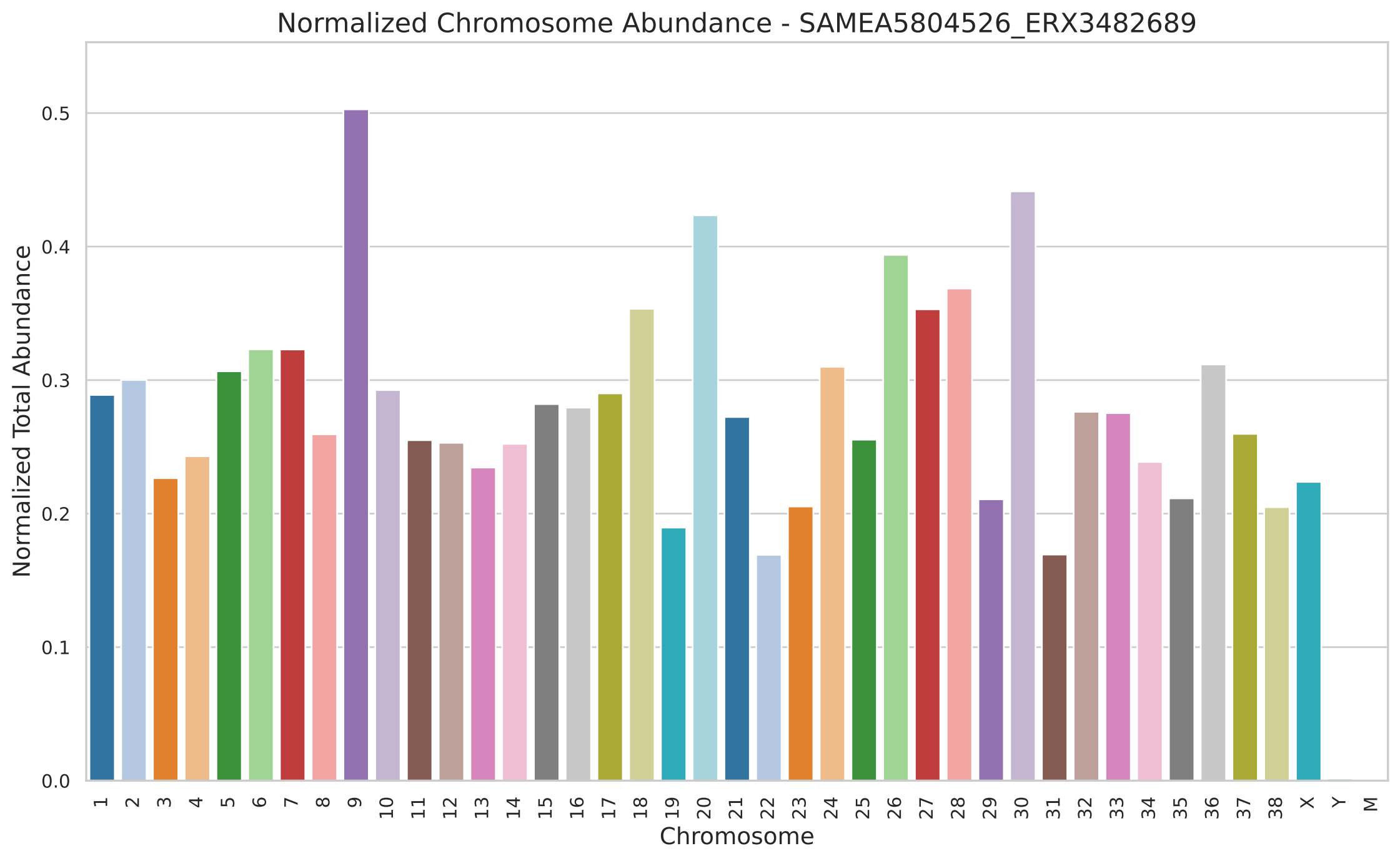

Normalized Chromosome Abundance - SAMEA5804819_ERX3482701
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

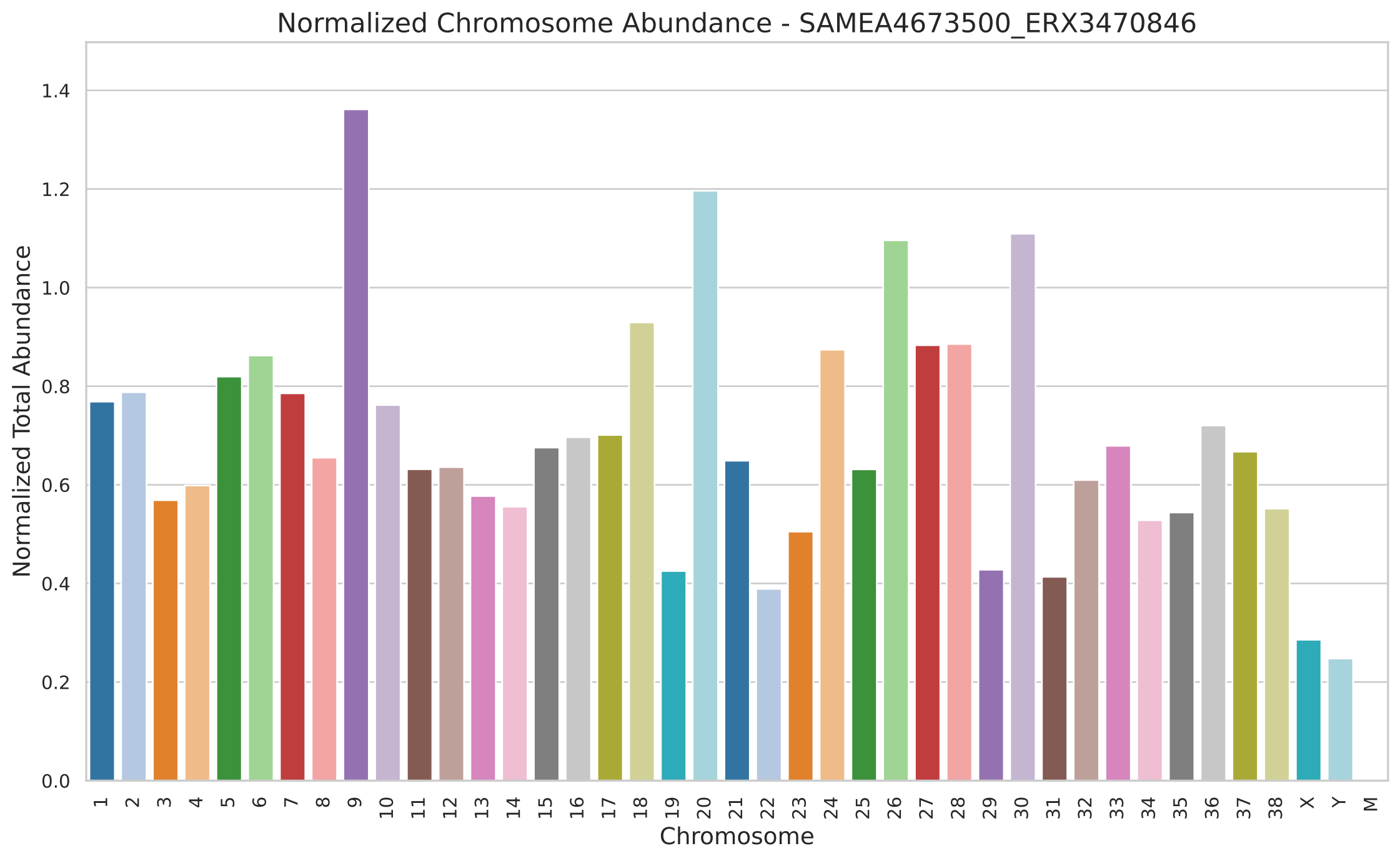

Normalized Chromosome Abundance - SAMEA5804793_ERX3482705
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

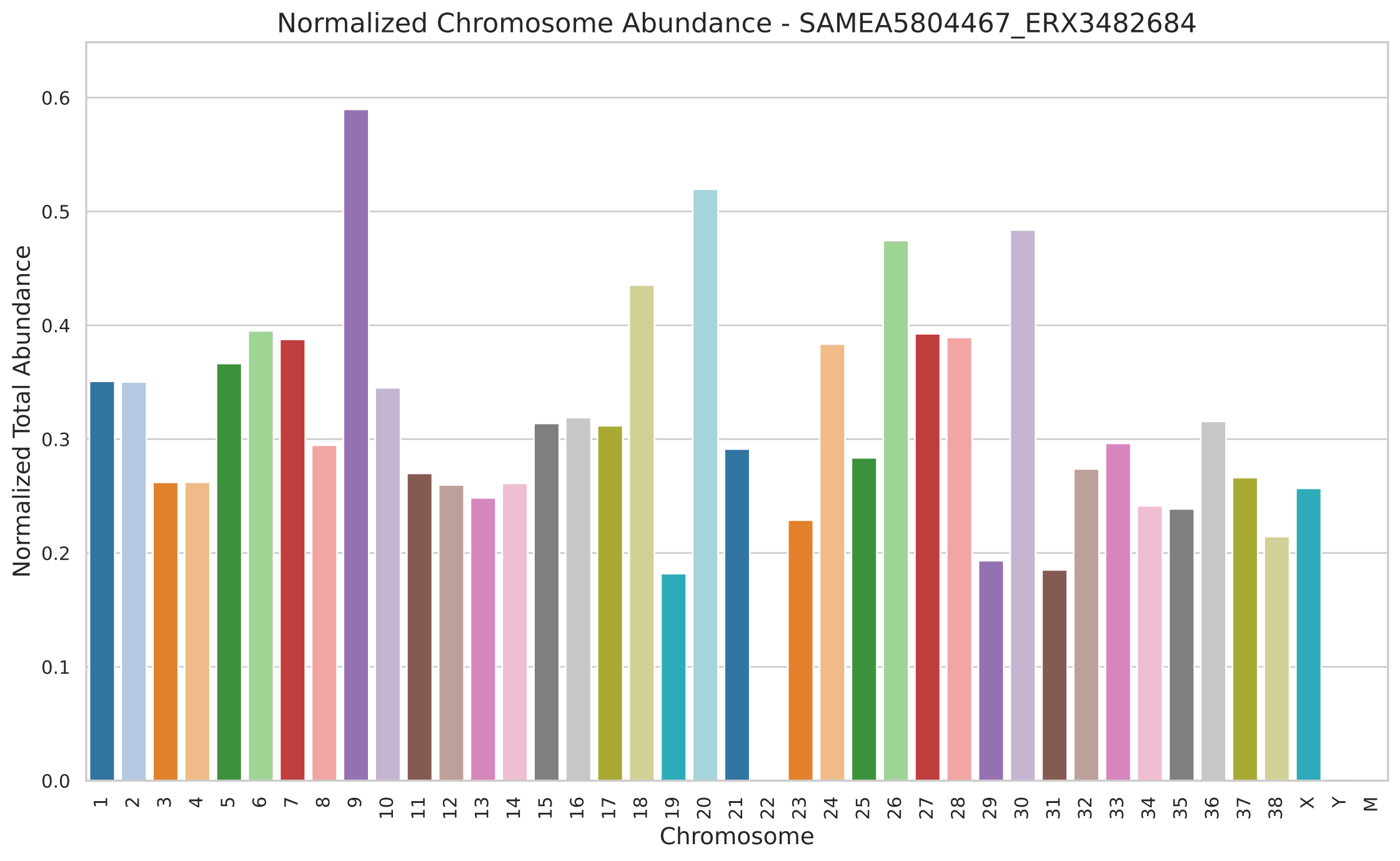

Normalized Chromosome Abundance - SAMEA5804577_ERX3482591
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

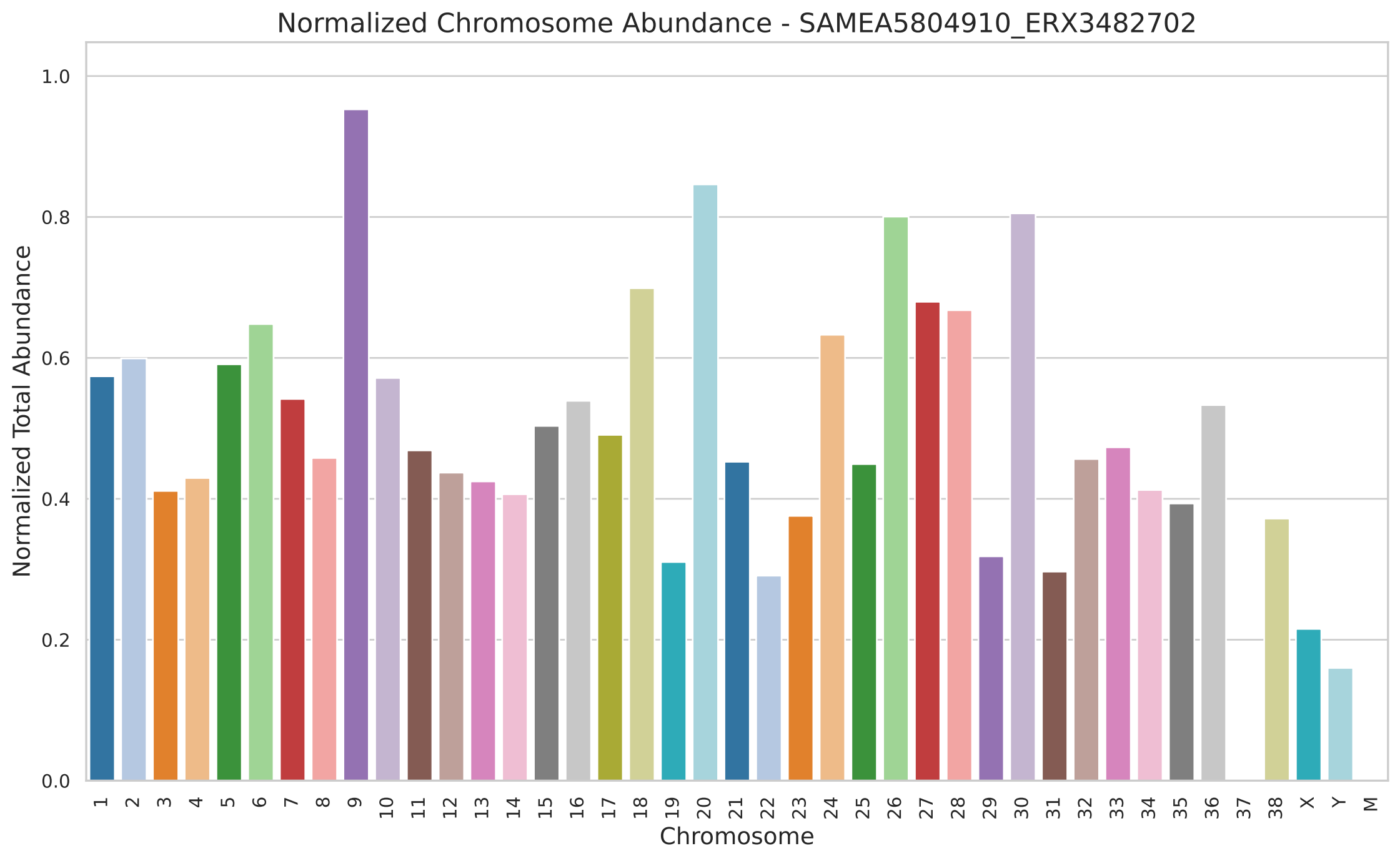

Normalized Chromosome Abundance - SAMEA5804520_ERX3482688
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

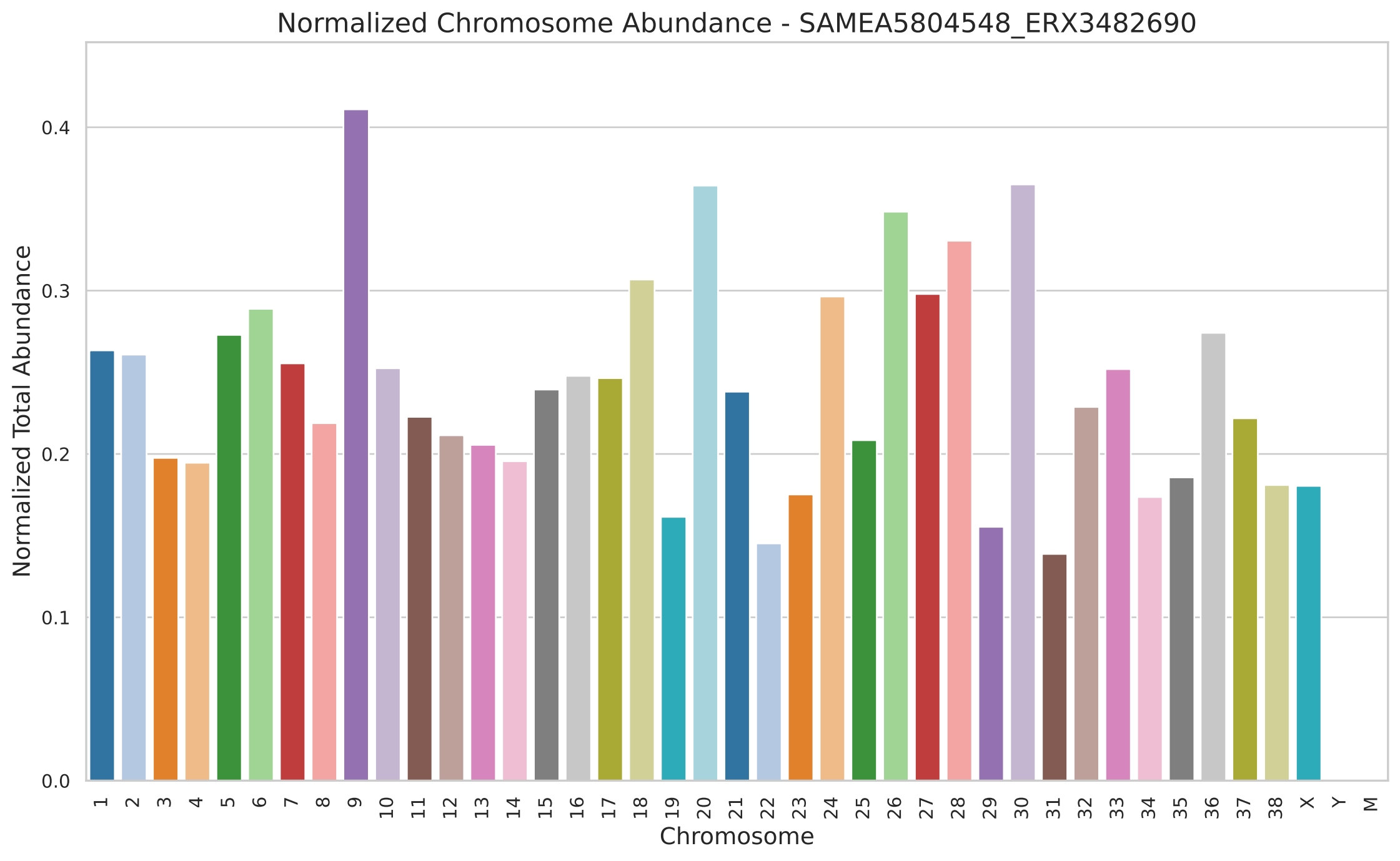

Normalized Chromosome Abundance - SAMEA5804414_ERX3482655
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

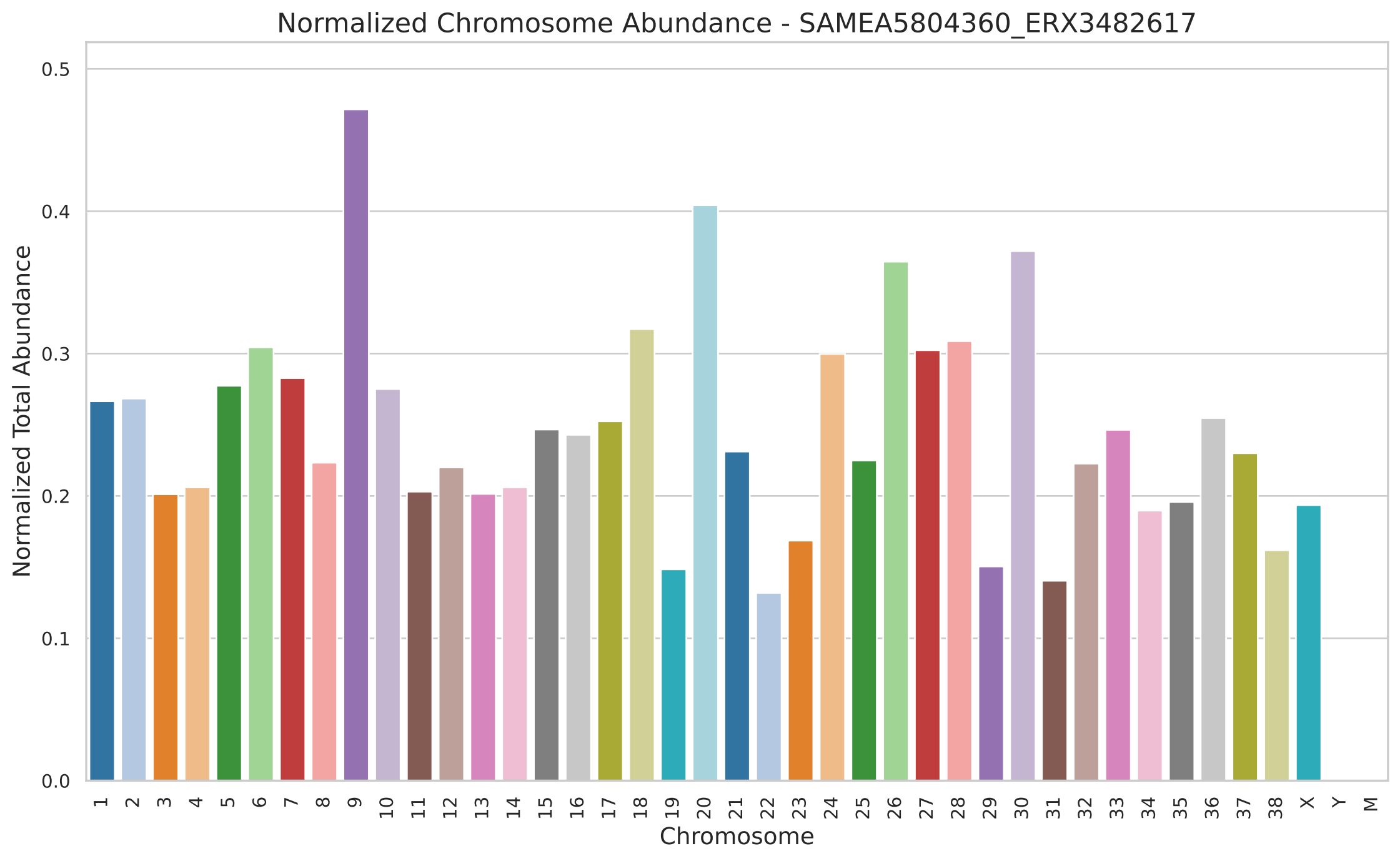

Normalized Chromosome Abundance - SAMEA5804526_ERX3482689
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

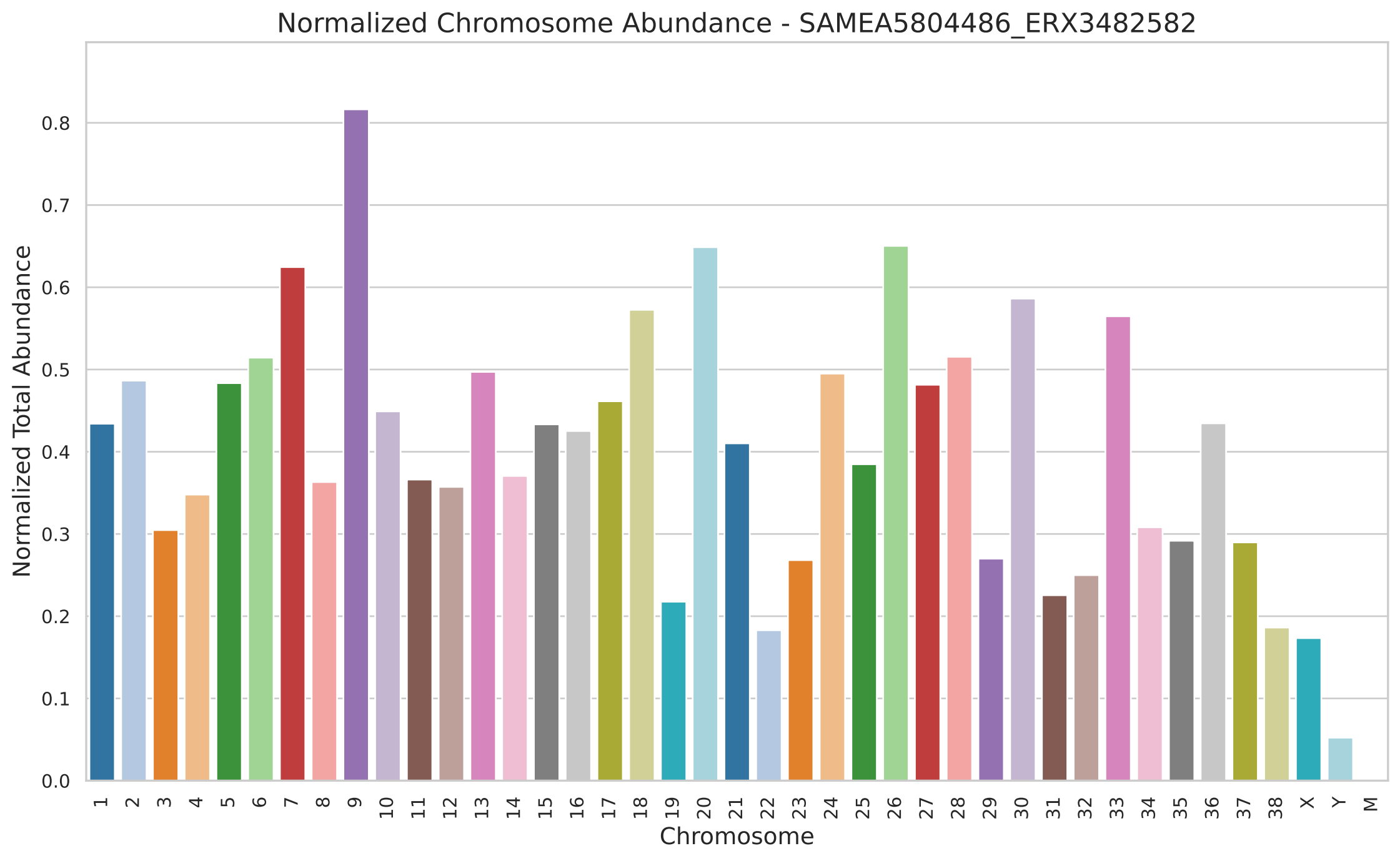

Normalized Chromosome Abundance - SAMEA4673500_ERX3470846
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

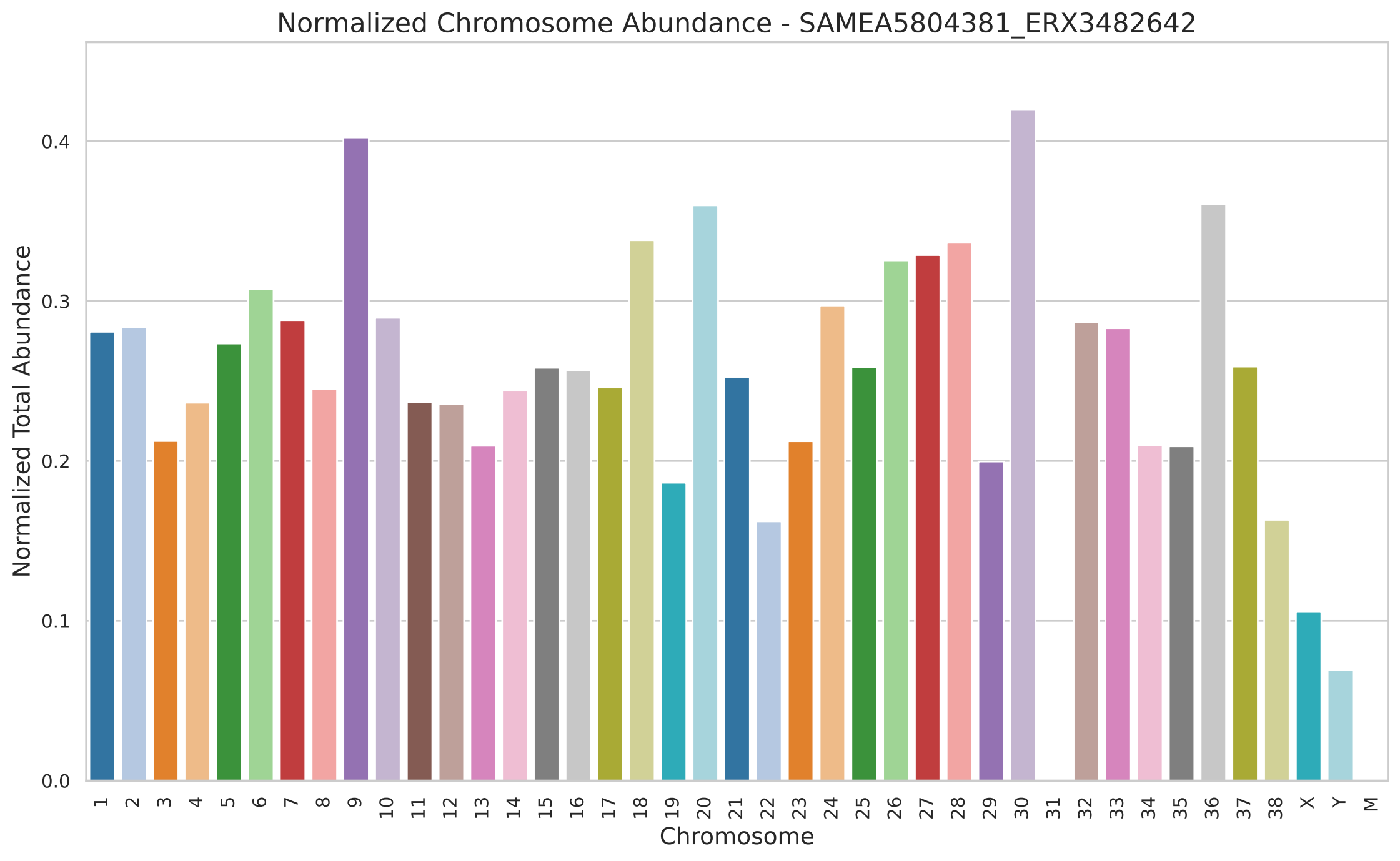

Normalized Chromosome Abundance - SAMEA5804467_ERX3482684
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

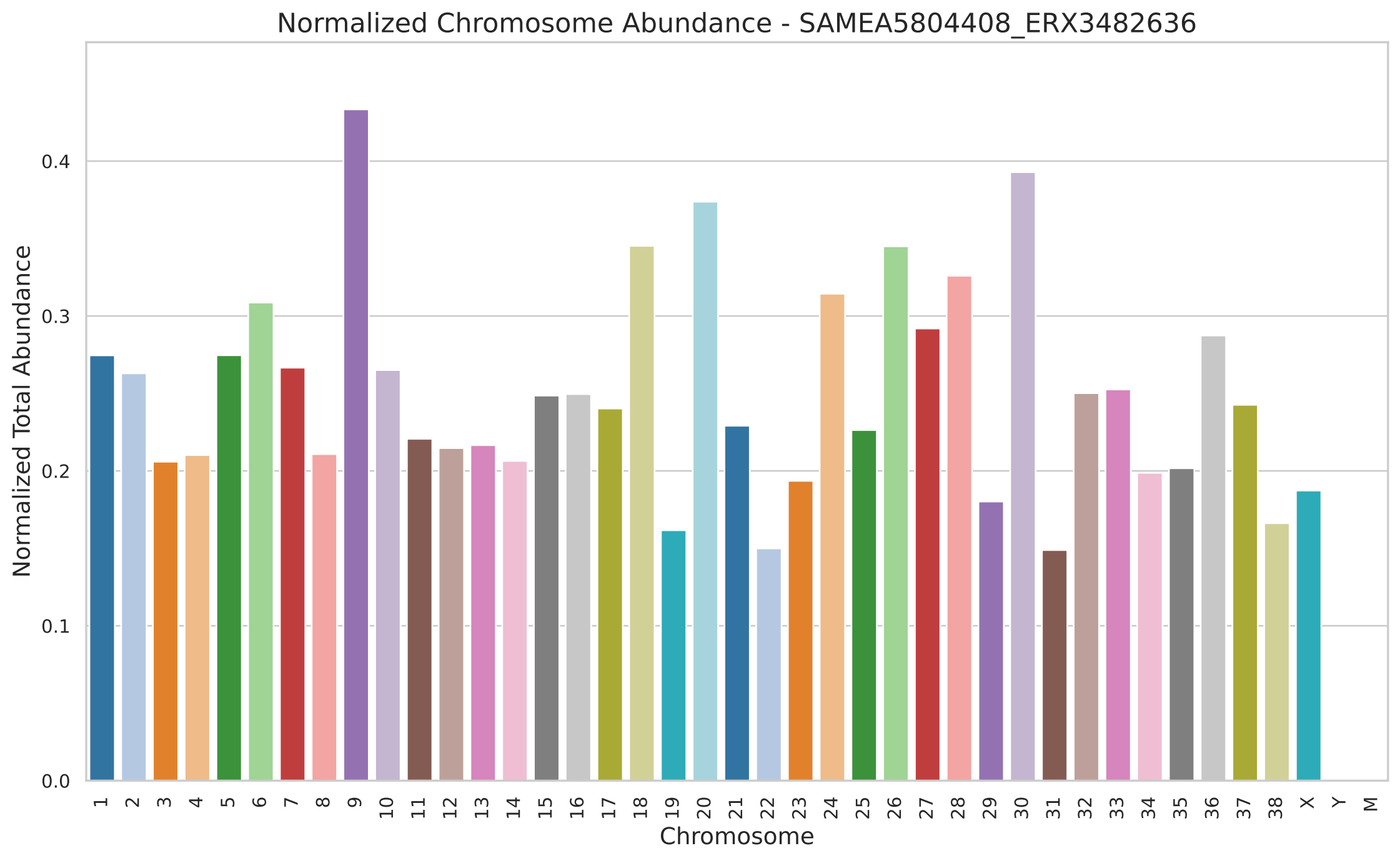

Normalized Chromosome Abundance - SAMEA5804910_ERX3482702
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

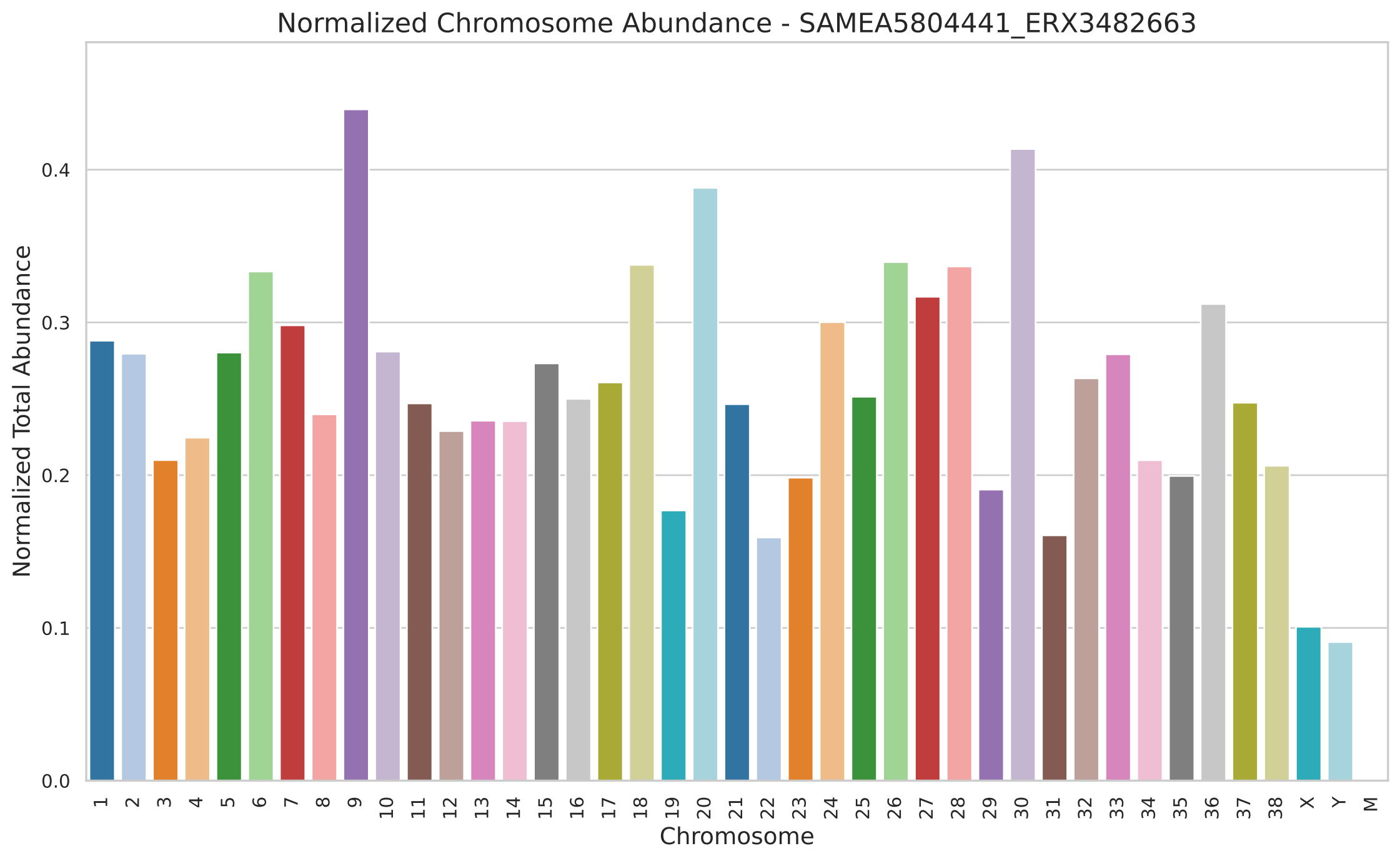

Normalized Chromosome Abundance - SAMEA5804548_ERX3482690
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

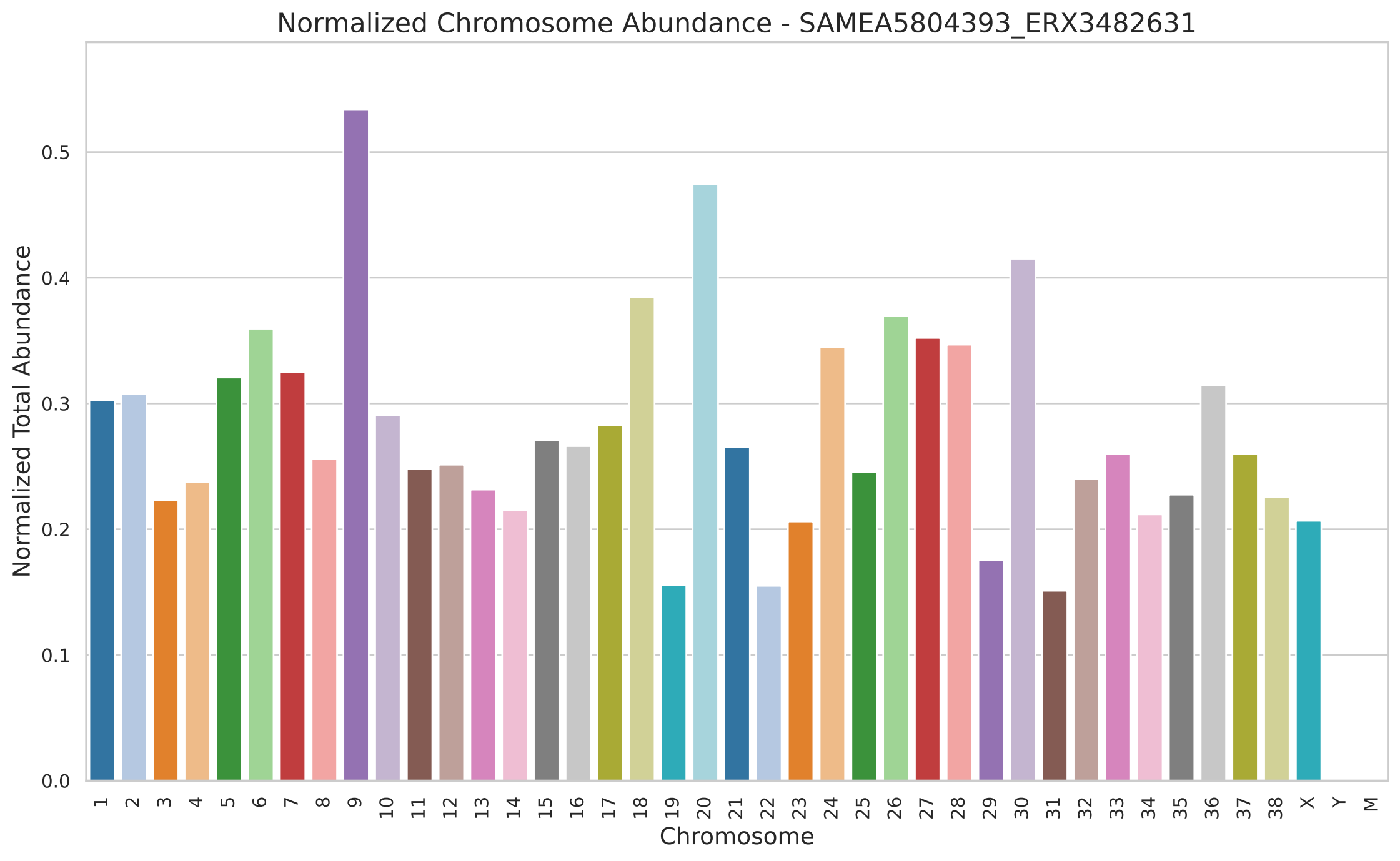

Normalized Chromosome Abundance - SAMEA5804360_ERX3482617
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

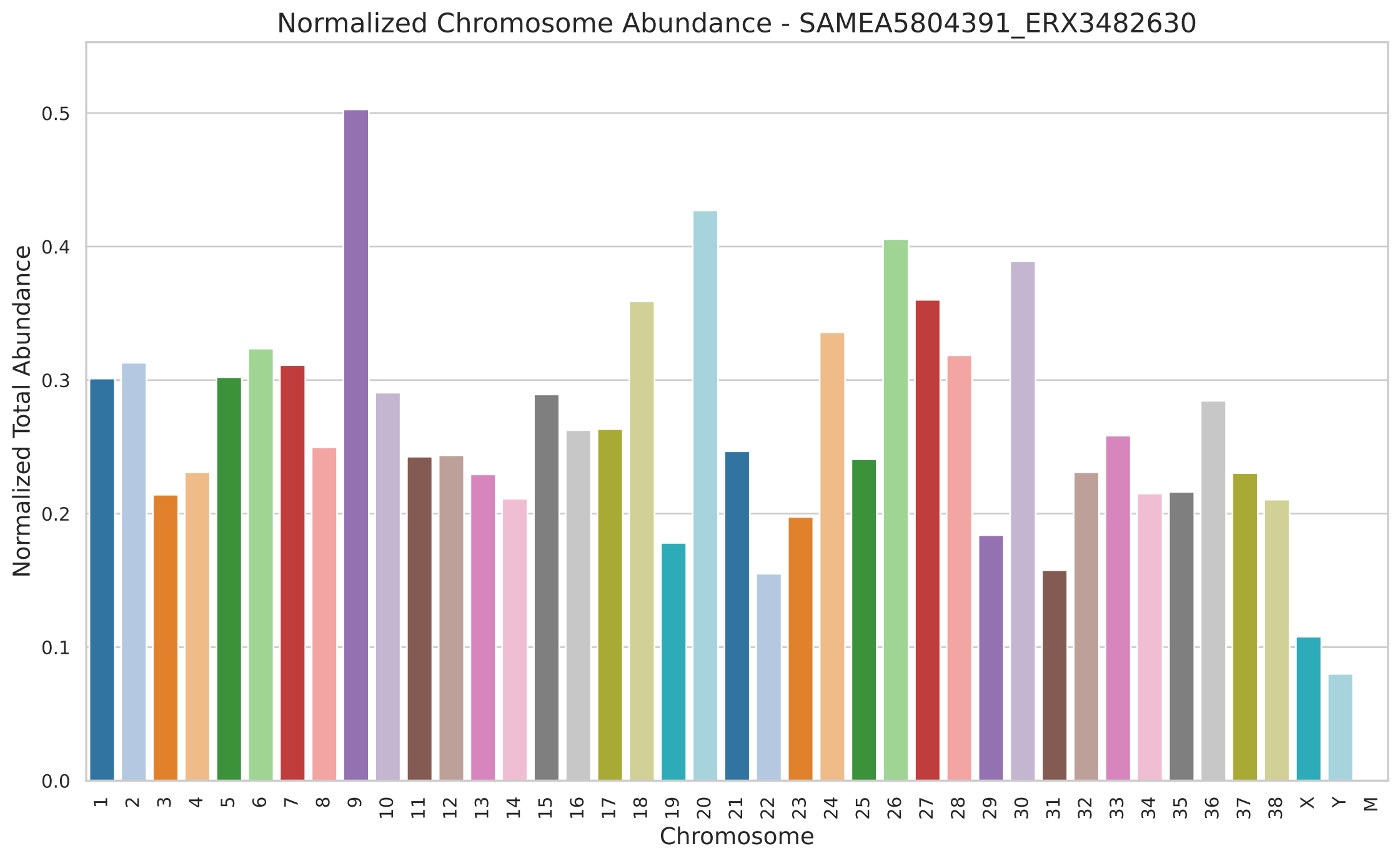

Normalized Chromosome Abundance - SAMEA5804486_ERX3482582
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

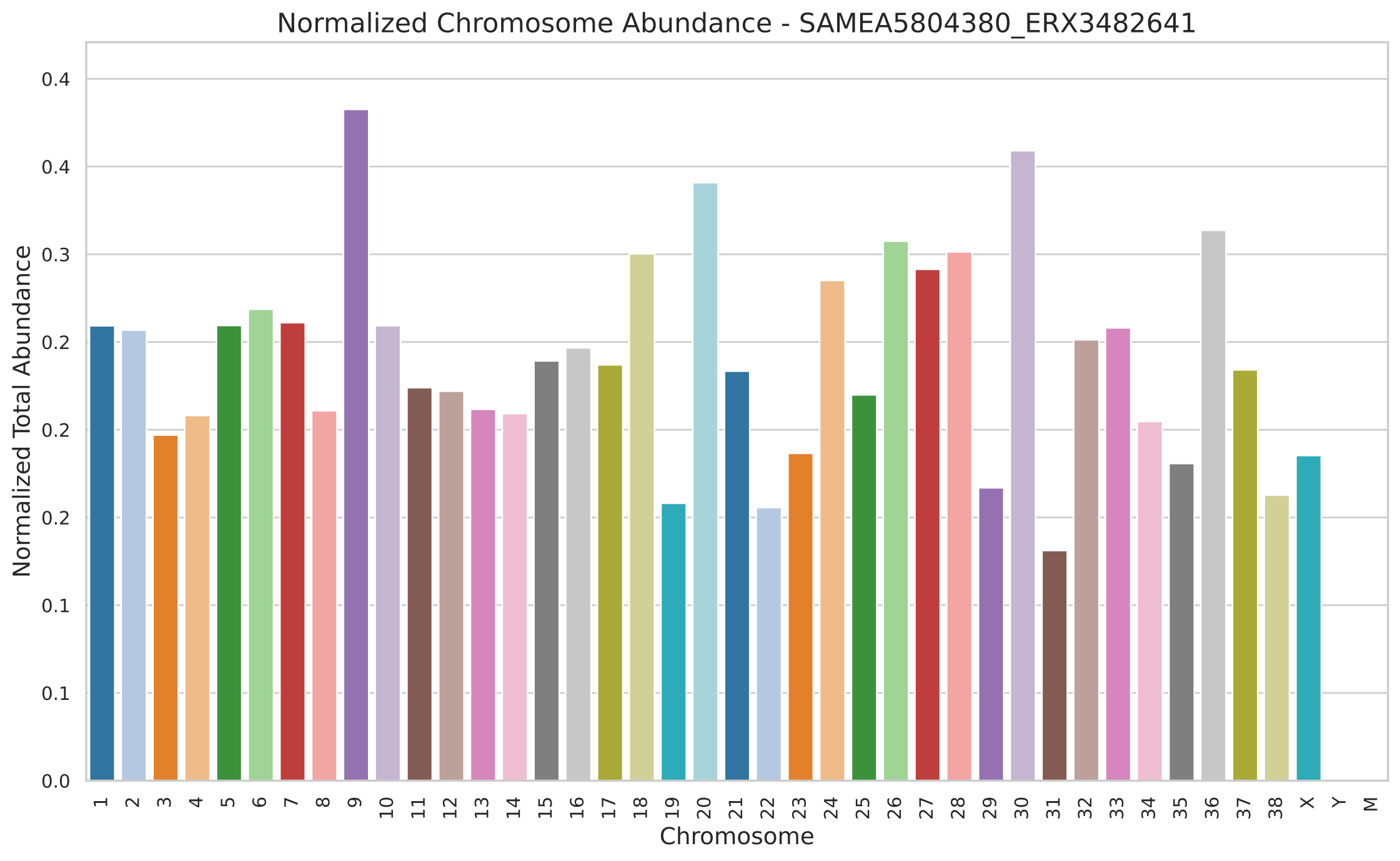

Normalized Chromosome Abundance - SAMEA5804381_ERX3482642
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

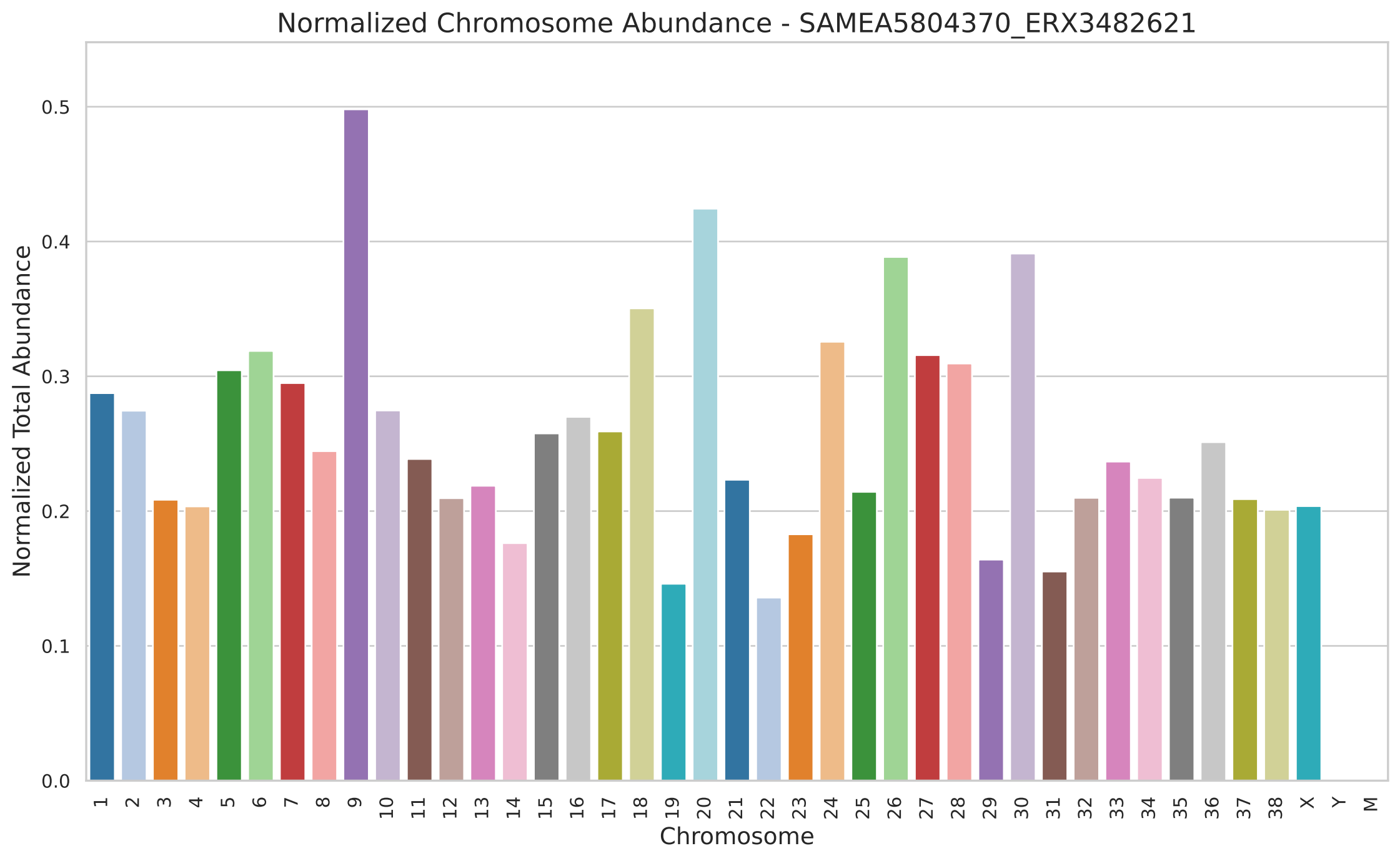

Normalized Chromosome Abundance - SAMEA5804408_ERX3482636
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

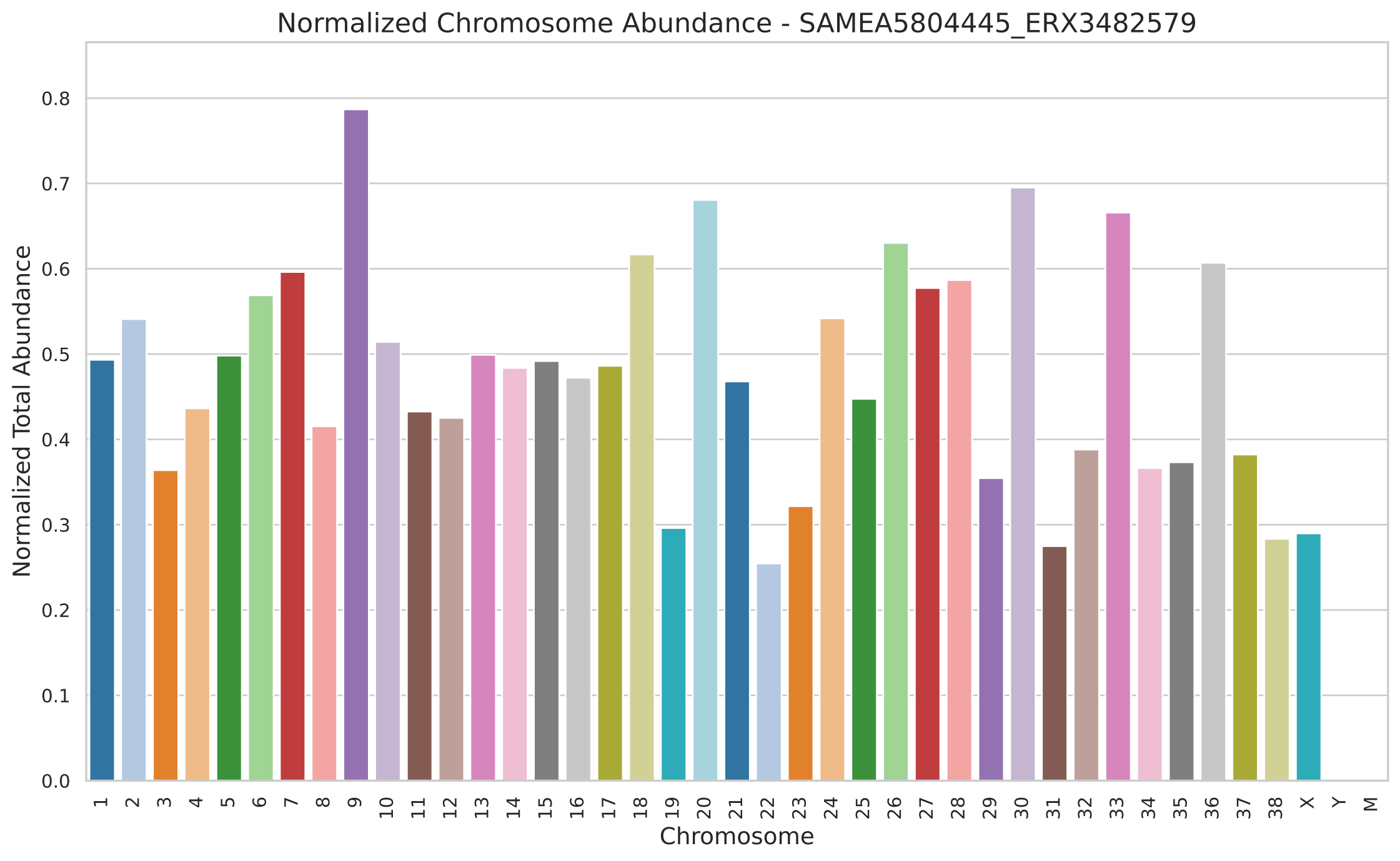

Normalized Chromosome Abundance - SAMEA5804441_ERX3482663
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

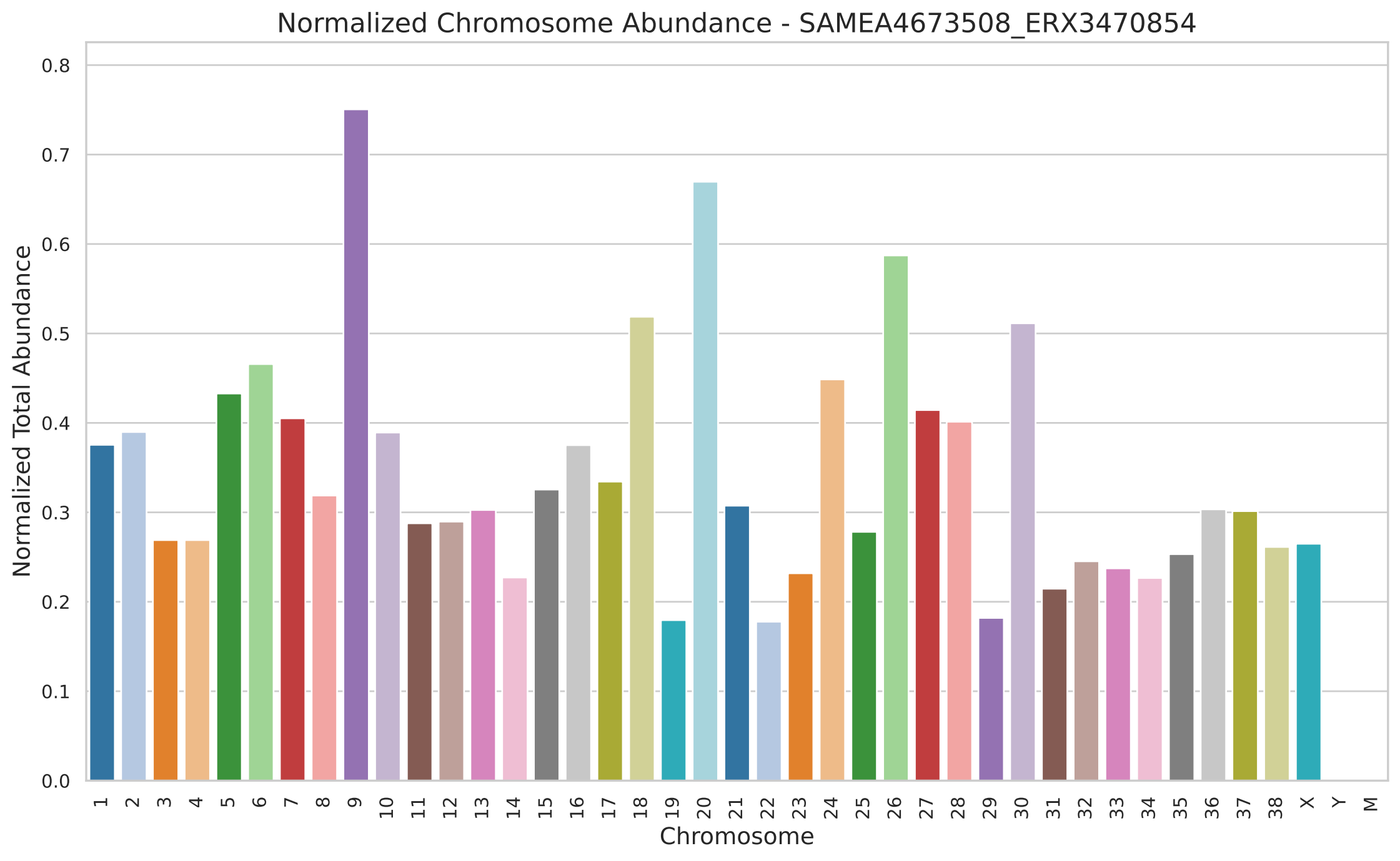

Normalized Chromosome Abundance - SAMEA5804393_ERX3482631
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

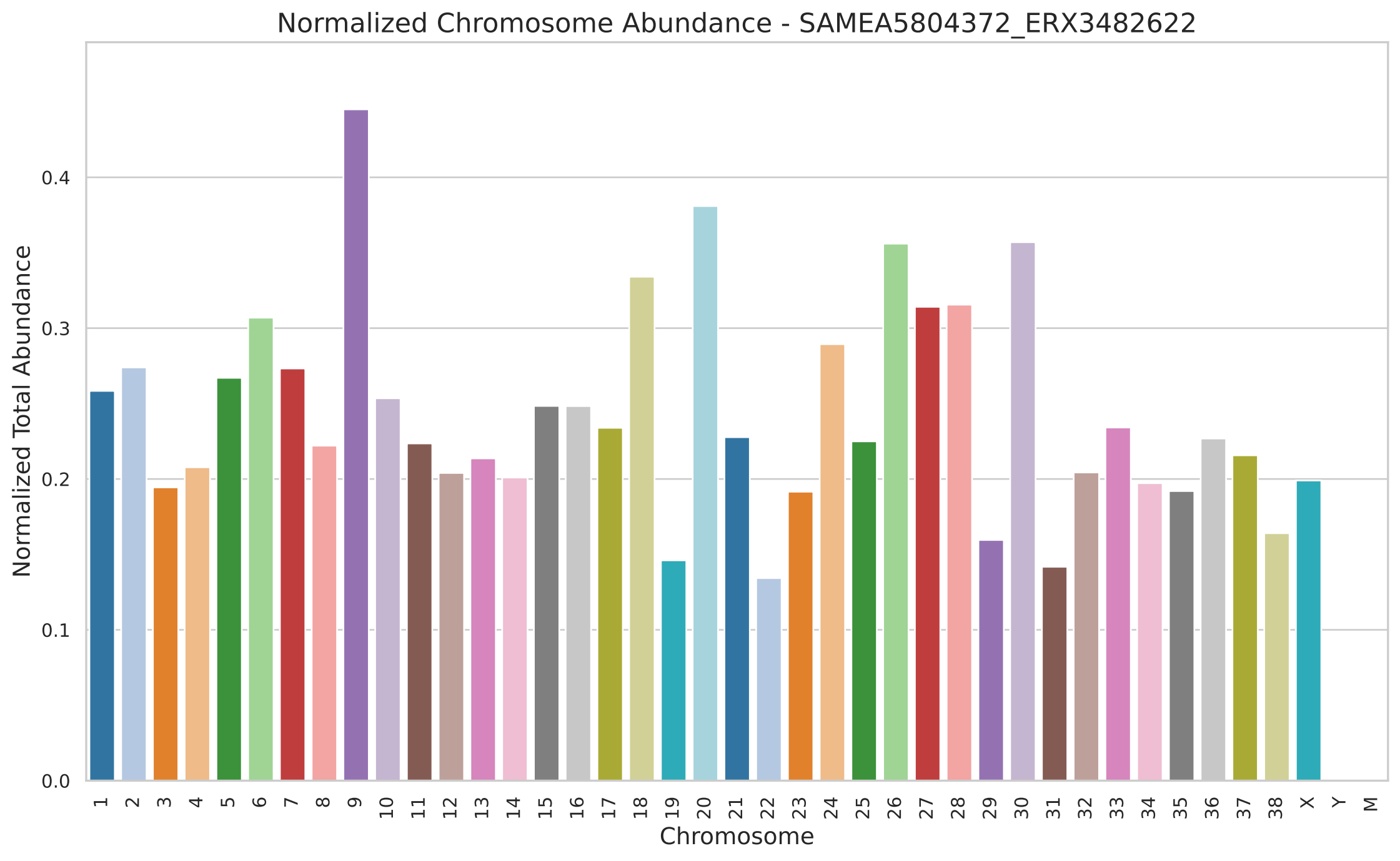

Normalized Chromosome Abundance - SAMEA5804391_ERX3482630
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

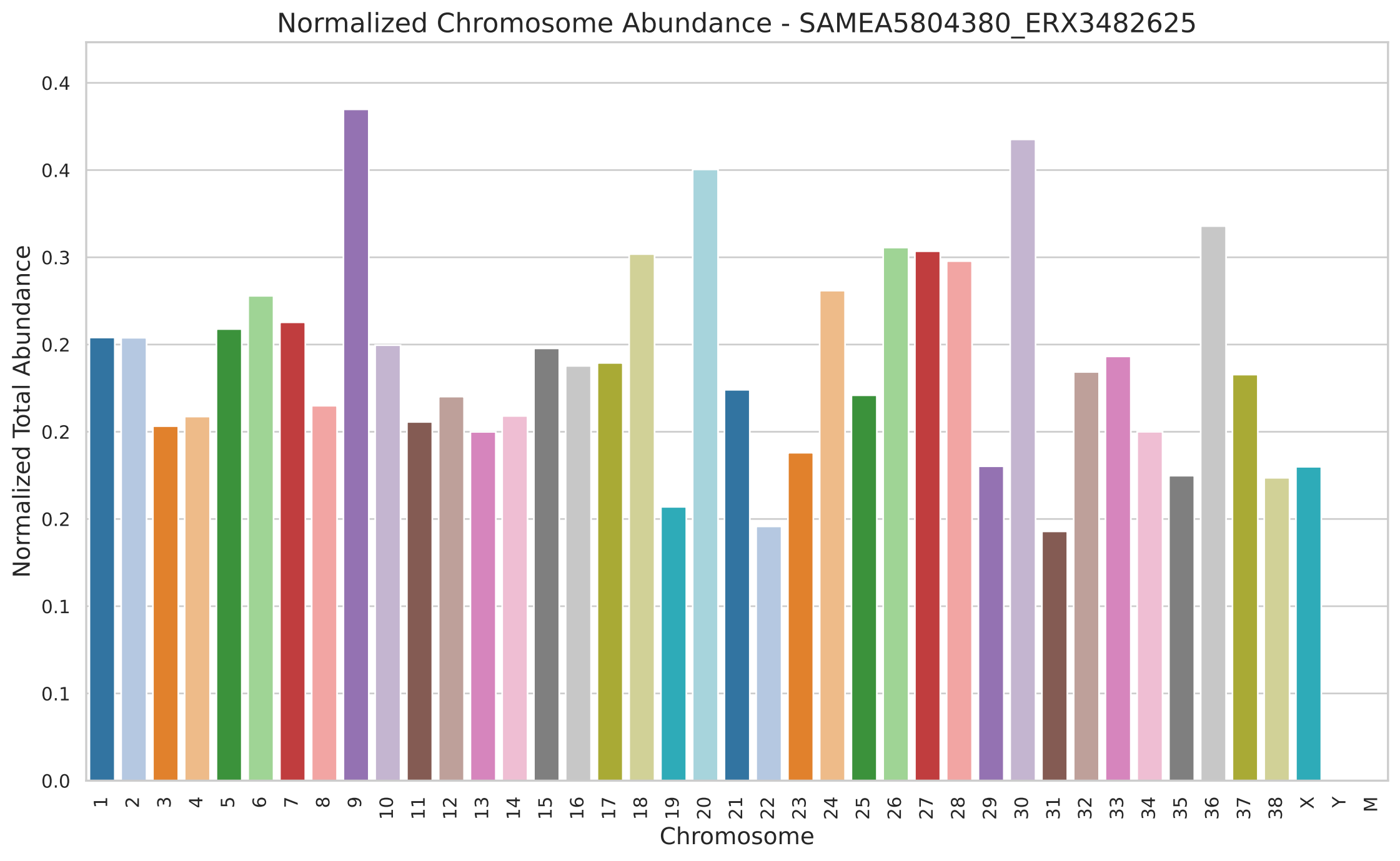

Normalized Chromosome Abundance - SAMEA5804380_ERX3482641
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

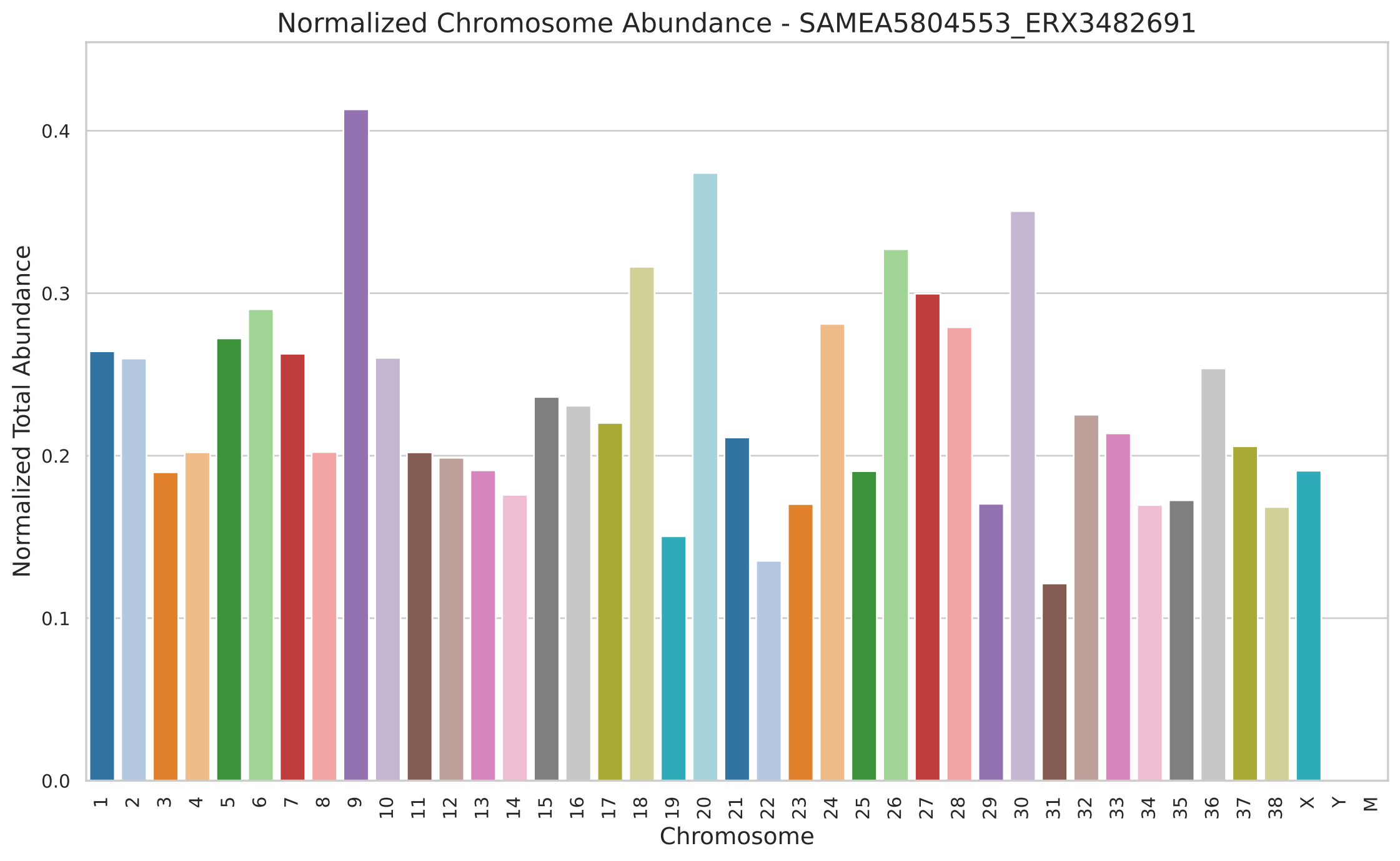

Normalized Chromosome Abundance - SAMEA5804370_ERX3482621
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

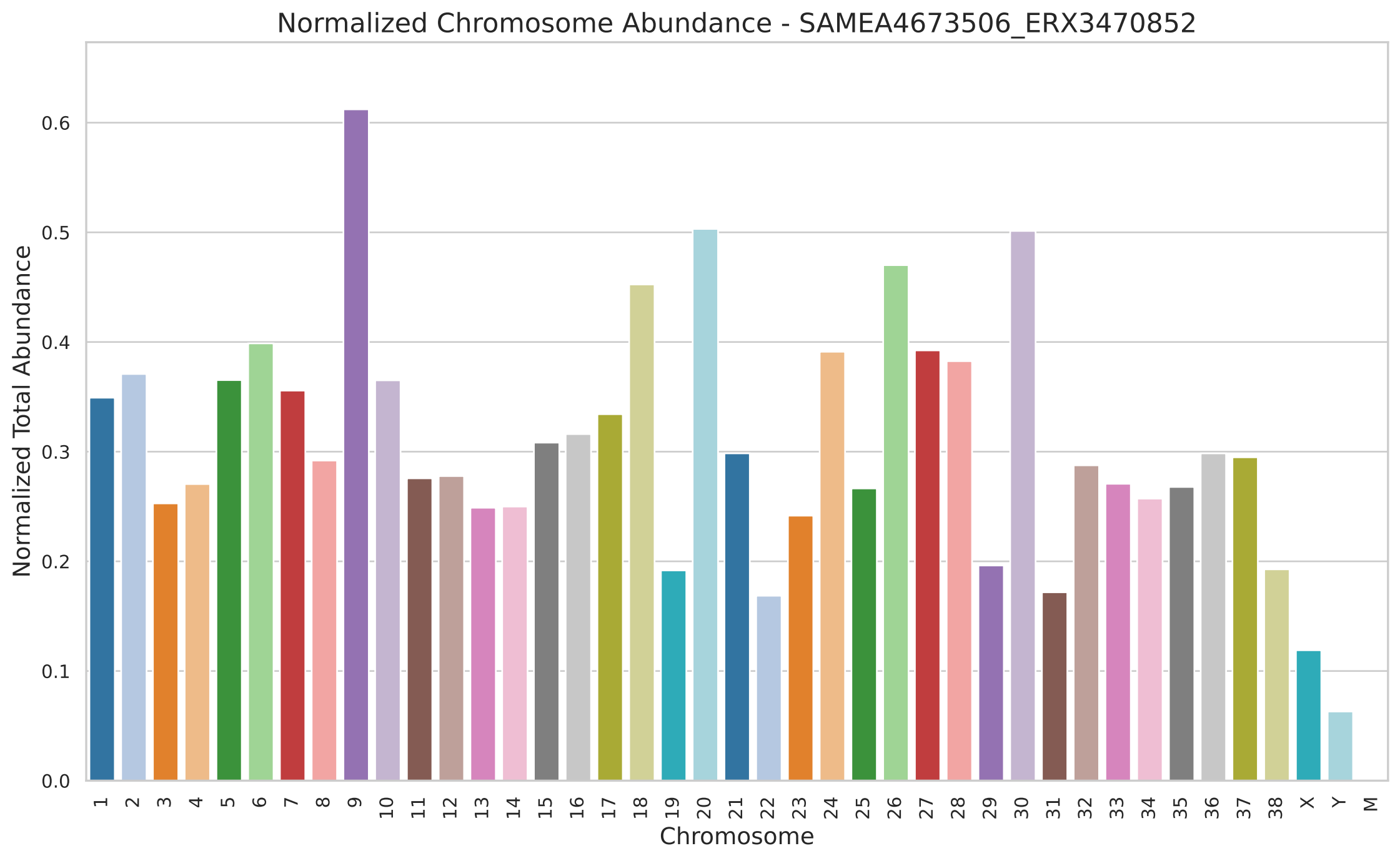

Normalized Chromosome Abundance - SAMEA5804445_ERX3482579
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

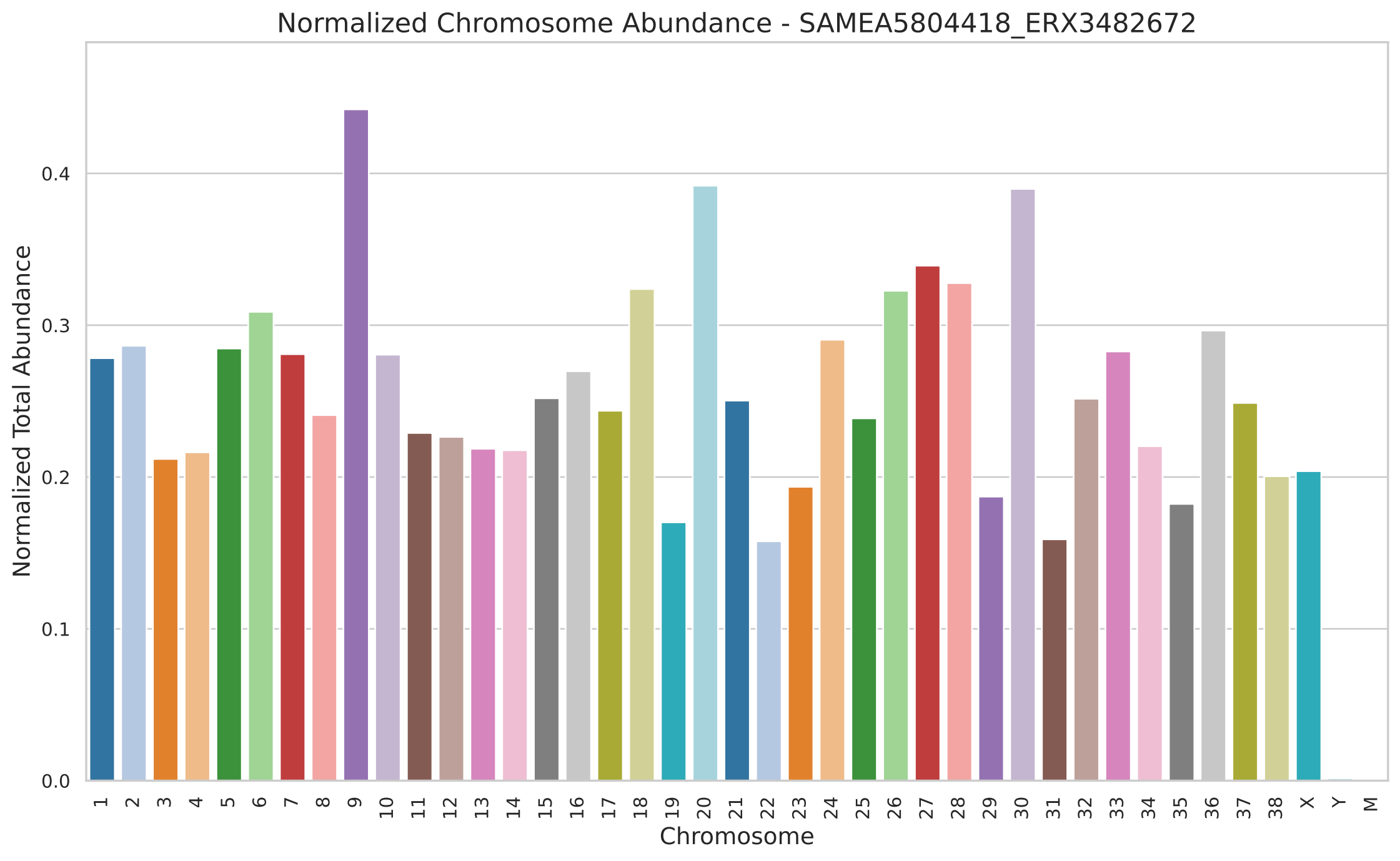

Normalized Chromosome Abundance - SAMEA4673508_ERX3470854
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

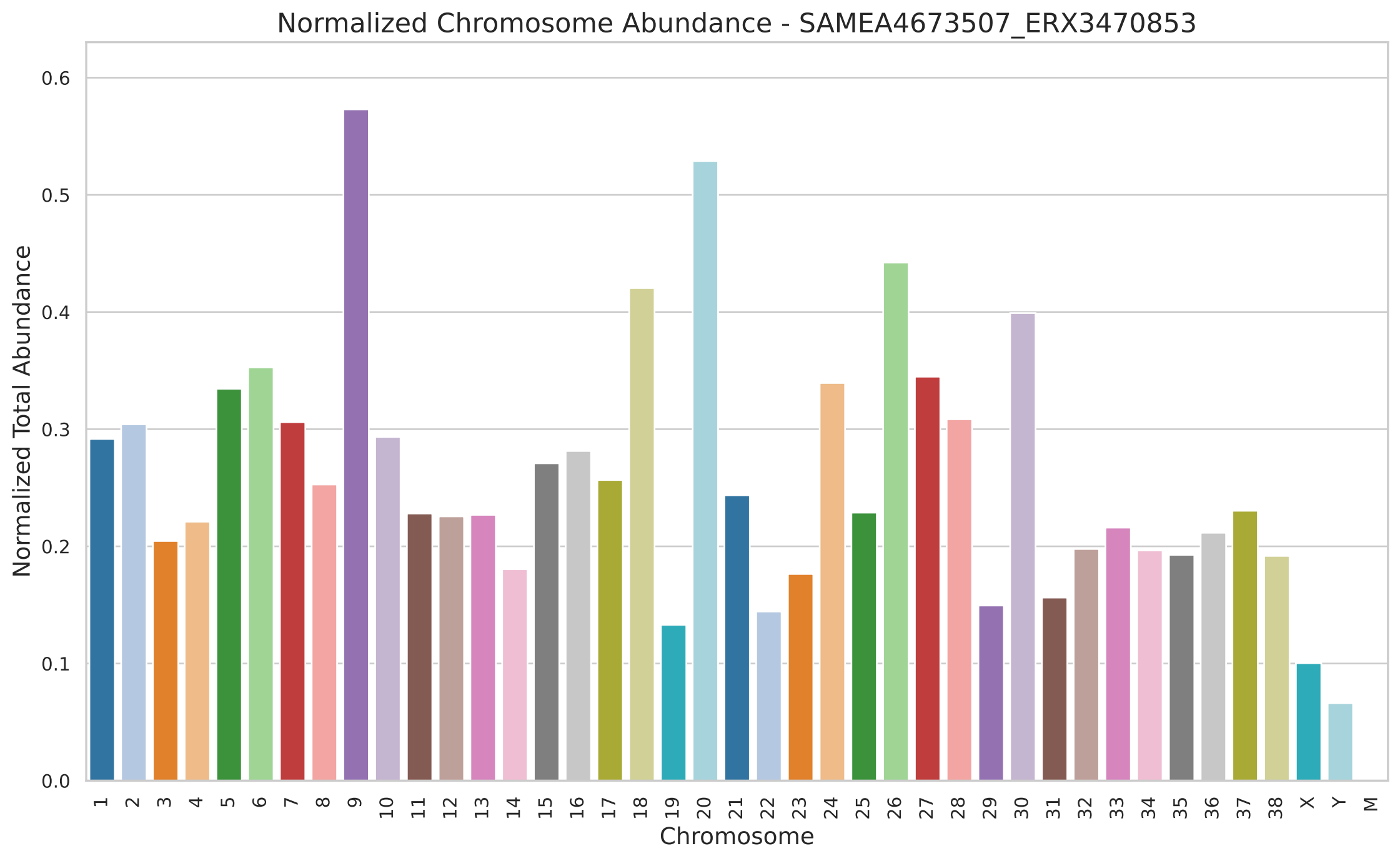

Normalized Chromosome Abundance - SAMEA5804372_ERX3482622
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

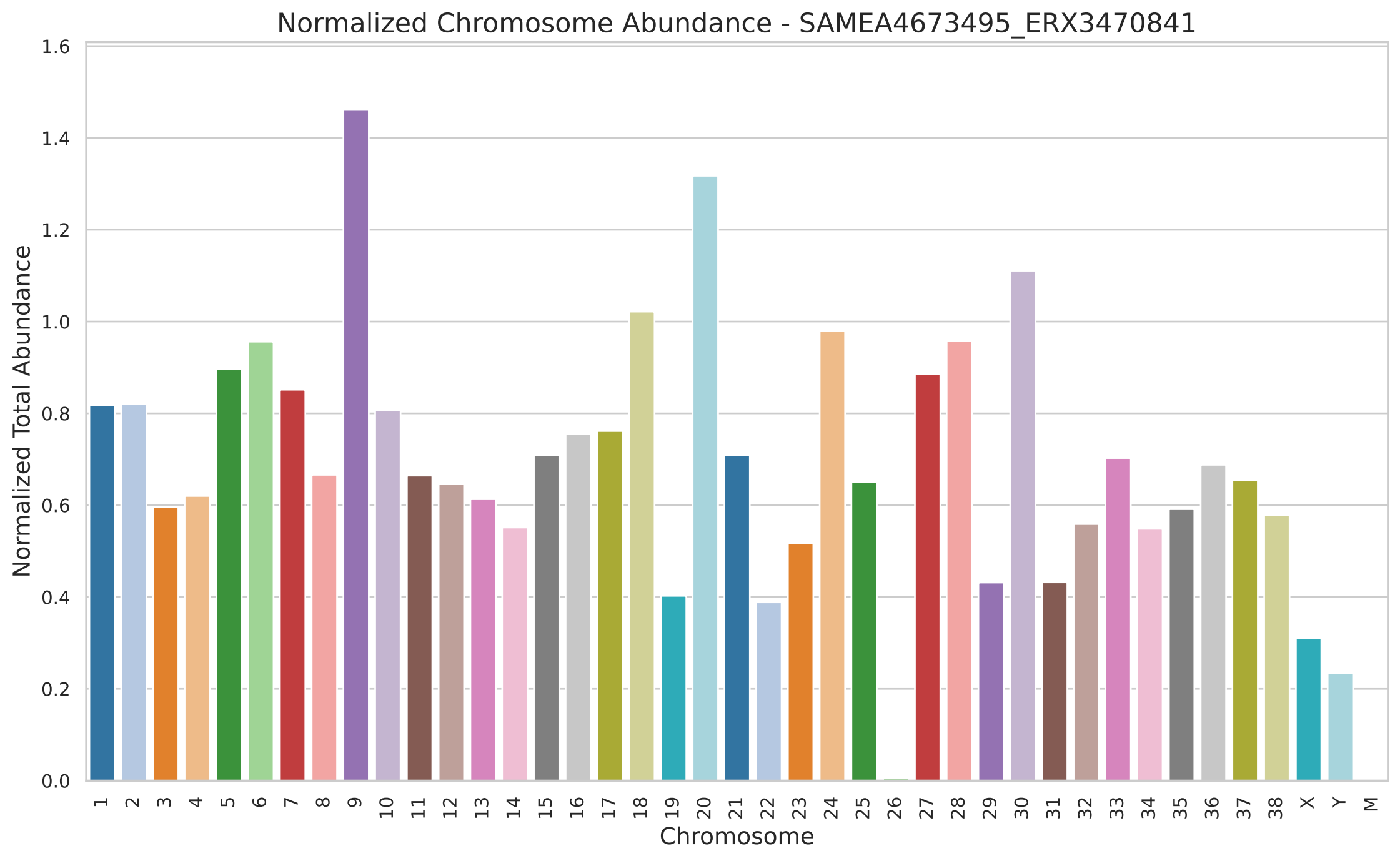

Normalized Chromosome Abundance - SAMEA5804380_ERX3482625
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

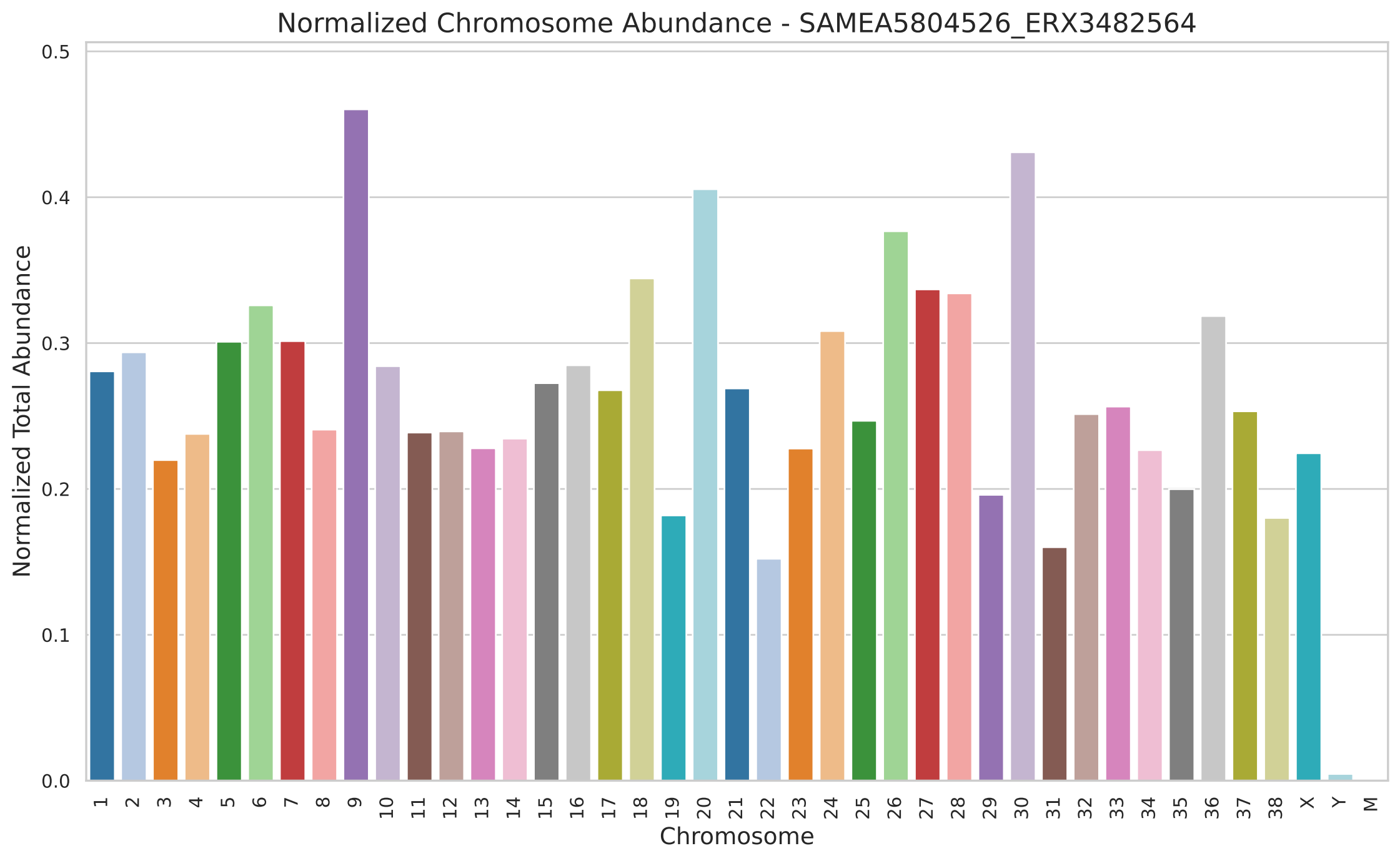

Normalized Chromosome Abundance - SAMEA5804553_ERX3482691
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

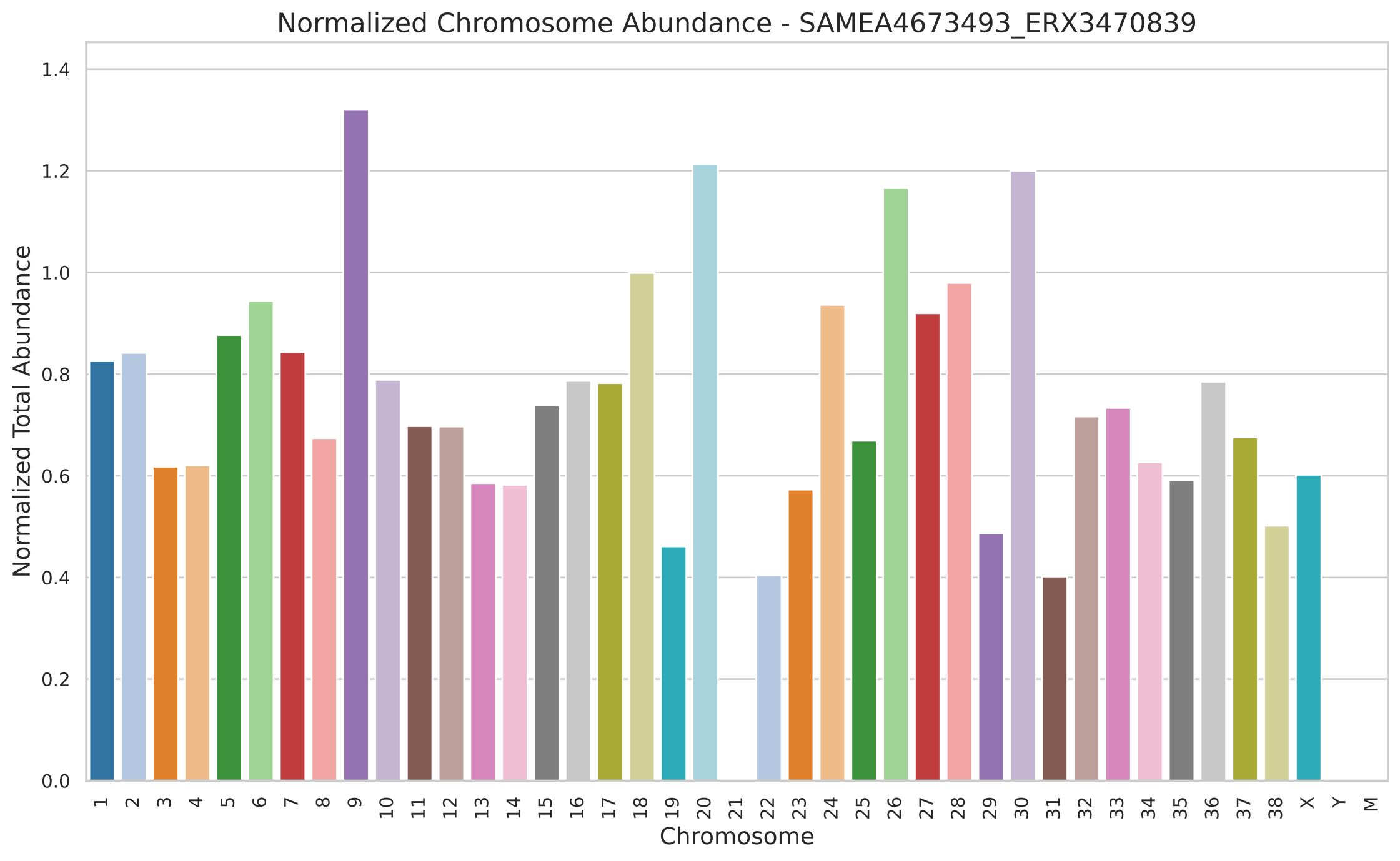

Normalized Chromosome Abundance - SAMEA4673506_ERX3470852
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

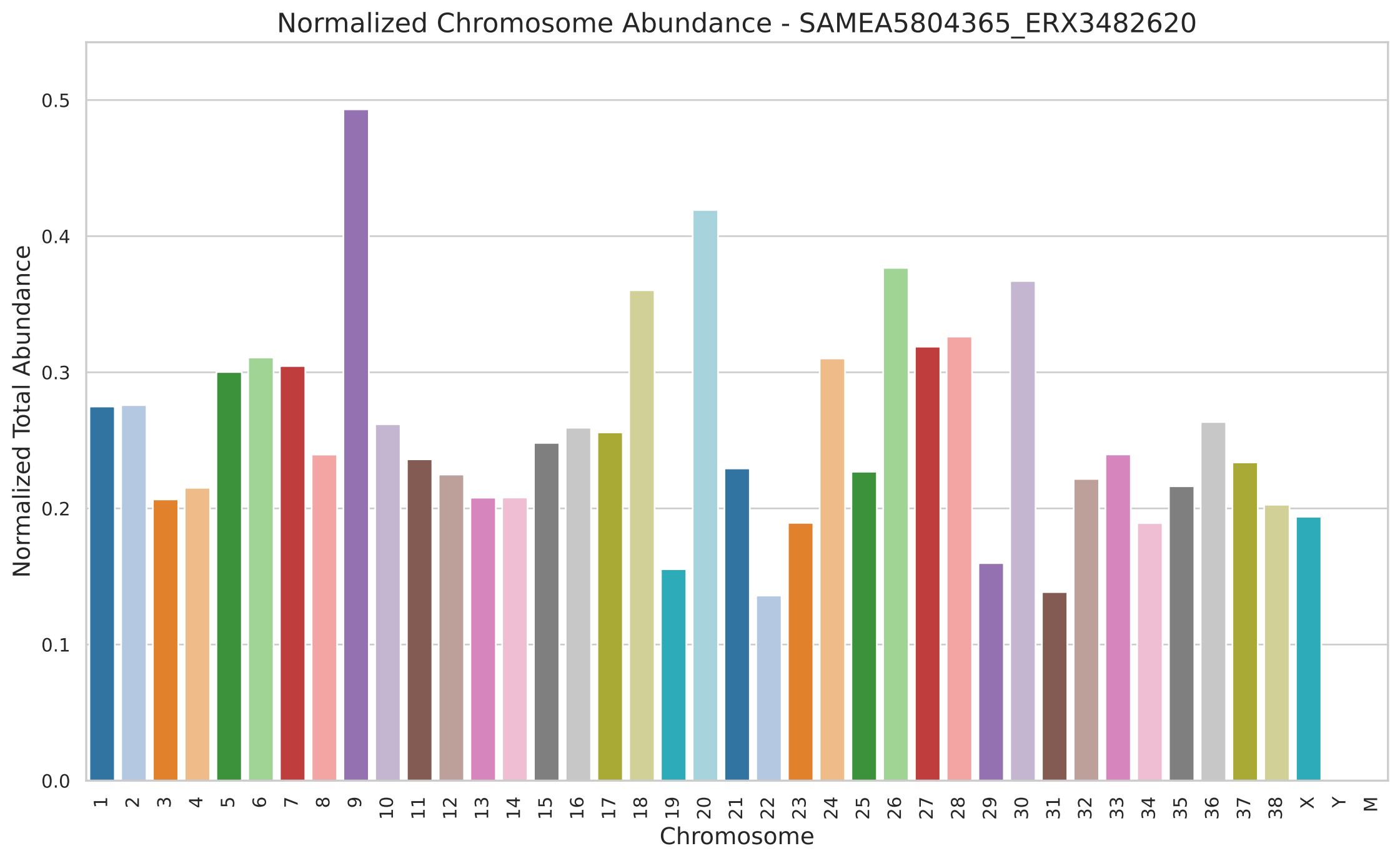

Normalized Chromosome Abundance - SAMEA5804418_ERX3482672
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

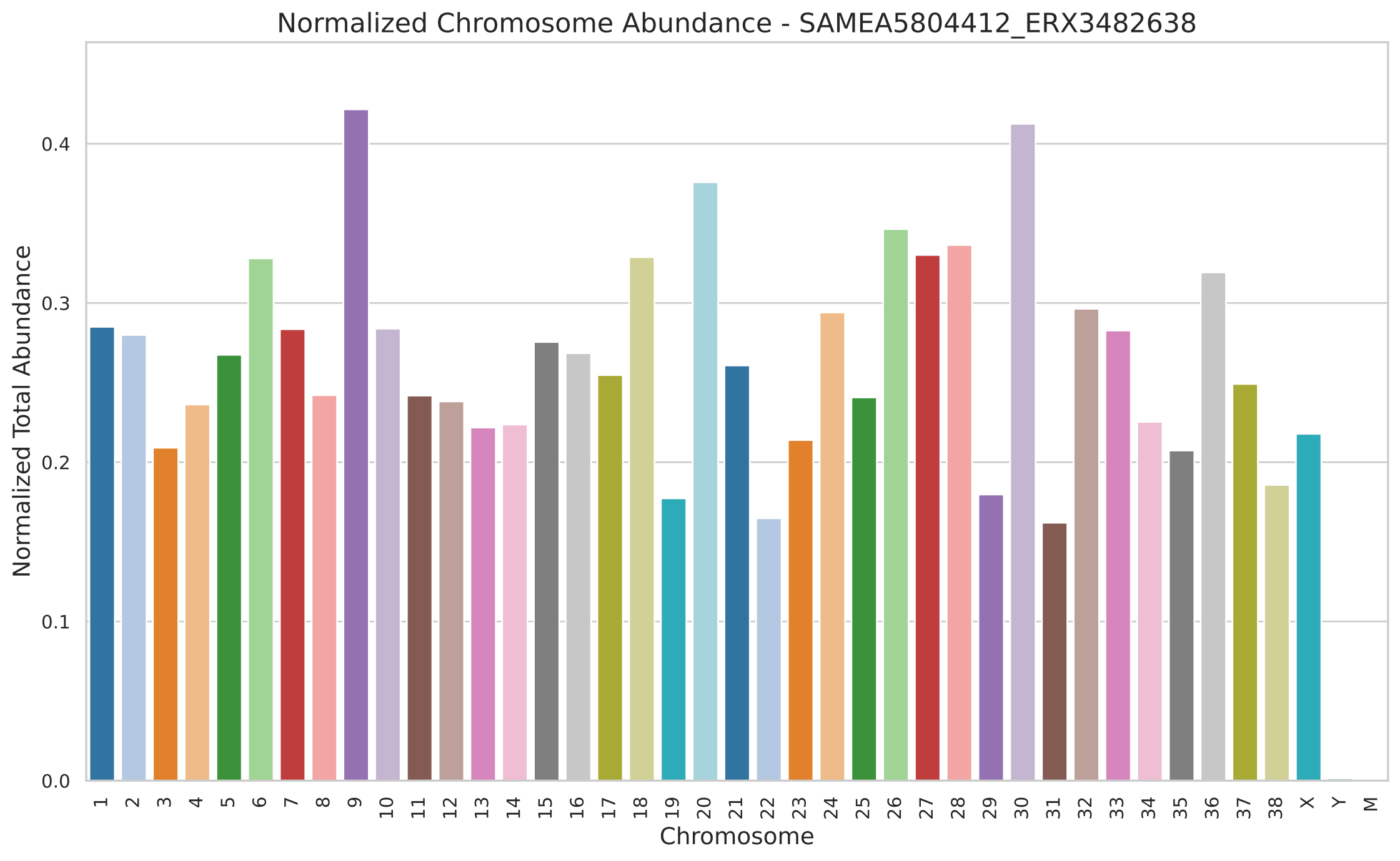

Normalized Chromosome Abundance - SAMEA4673507_ERX3470853
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

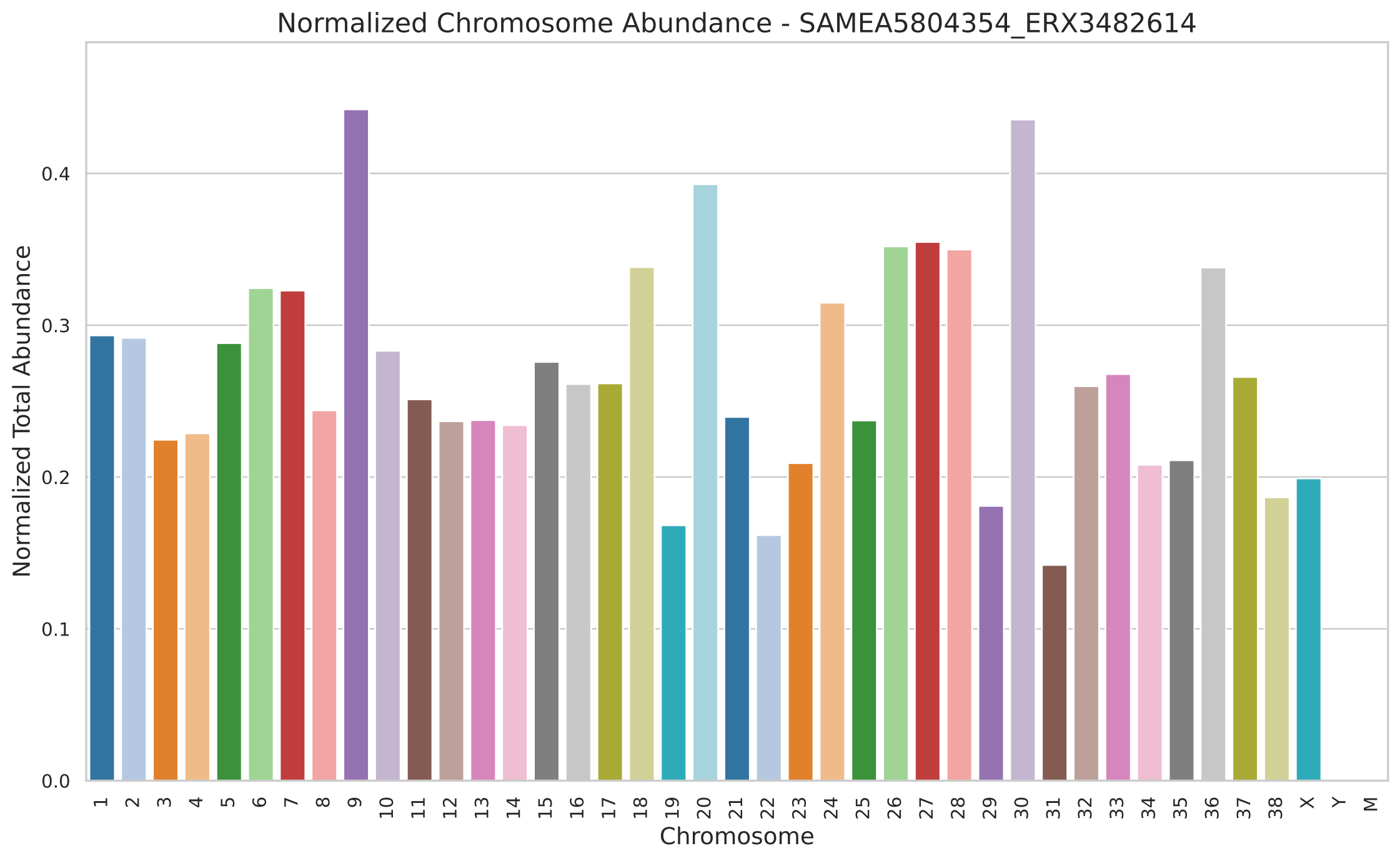

Normalized Chromosome Abundance - SAMEA4673495_ERX3470841
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

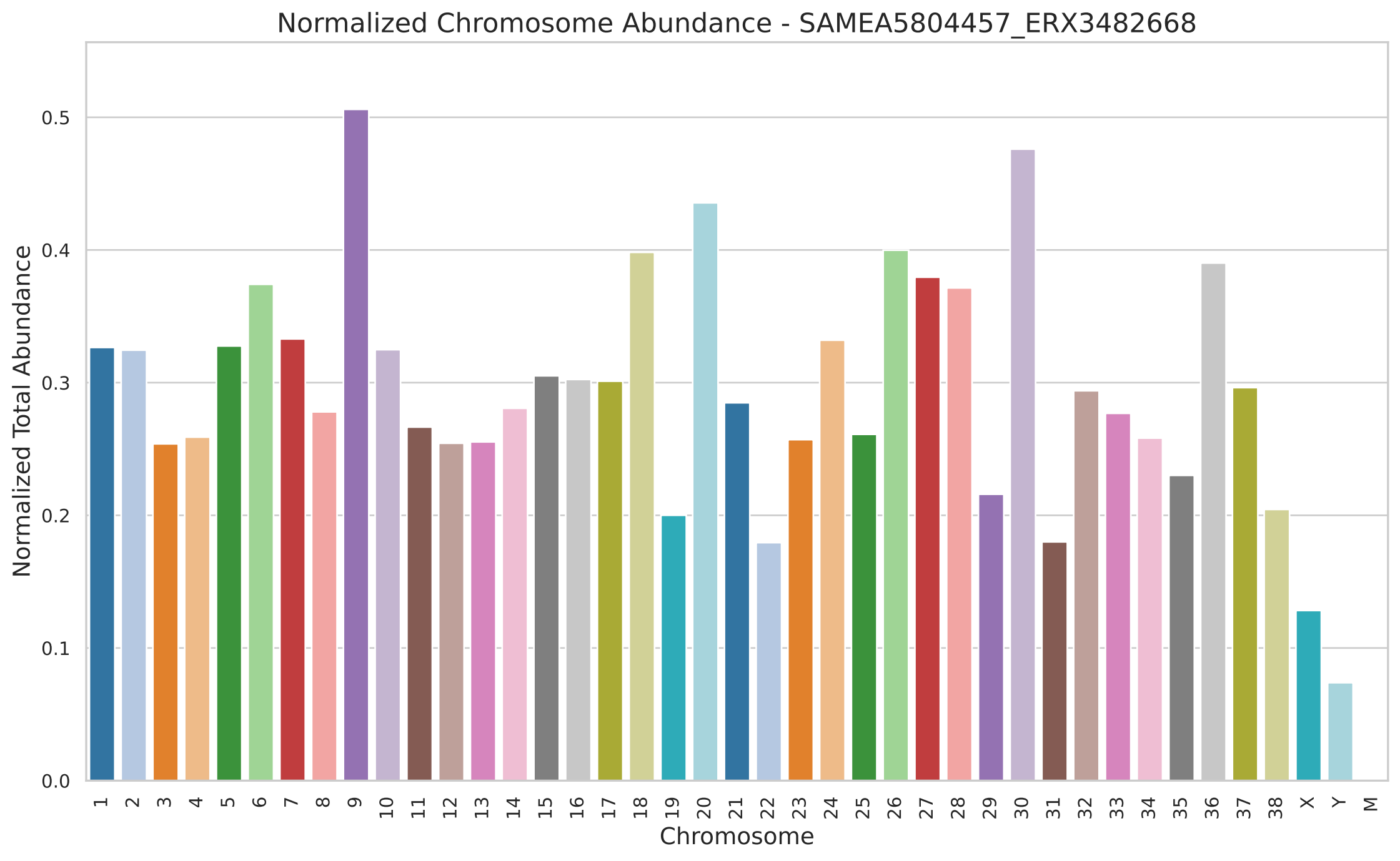

Normalized Chromosome Abundance - SAMEA5804526_ERX3482564
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

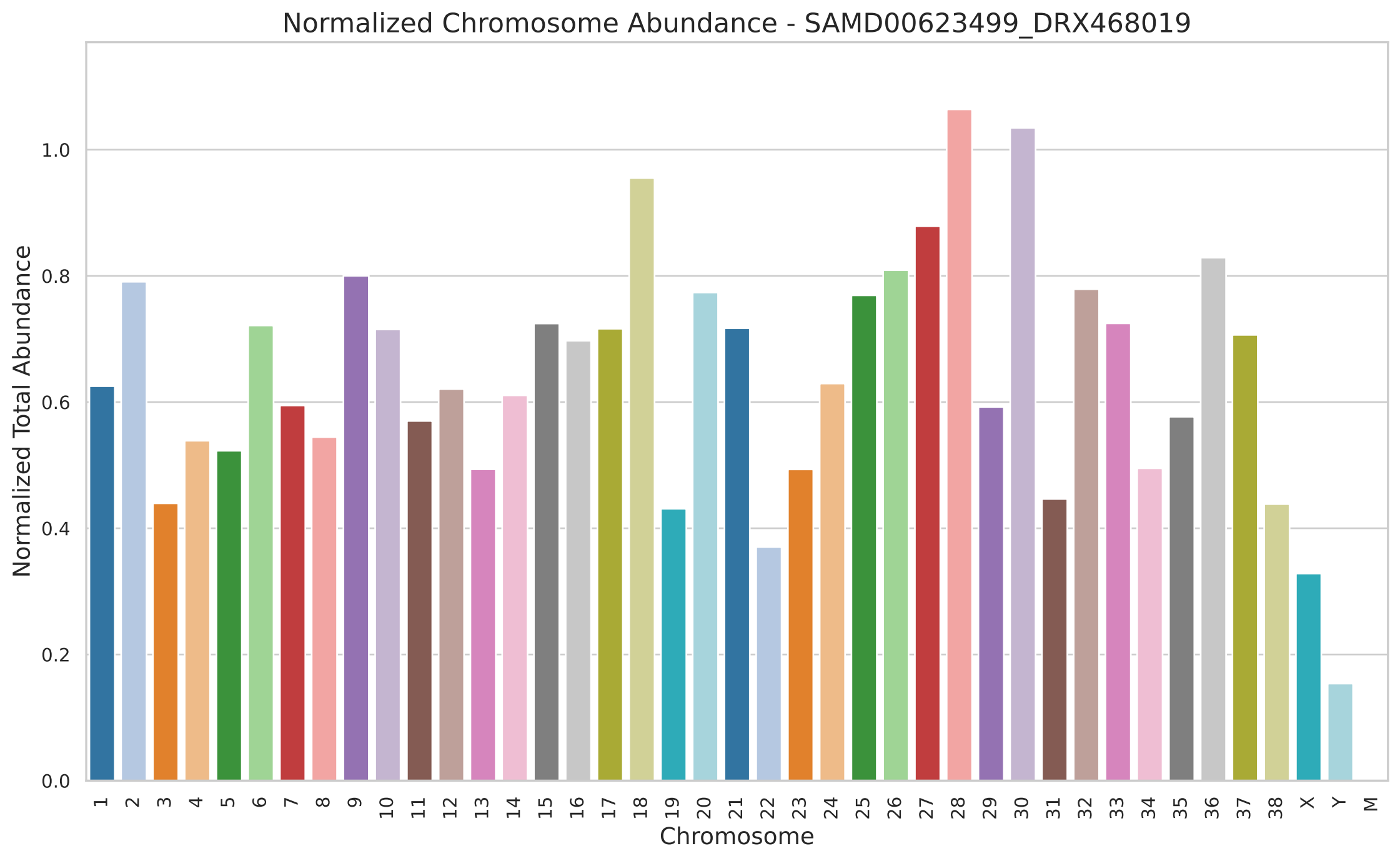

Normalized Chromosome Abundance - SAMEA4673493_ERX3470839
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

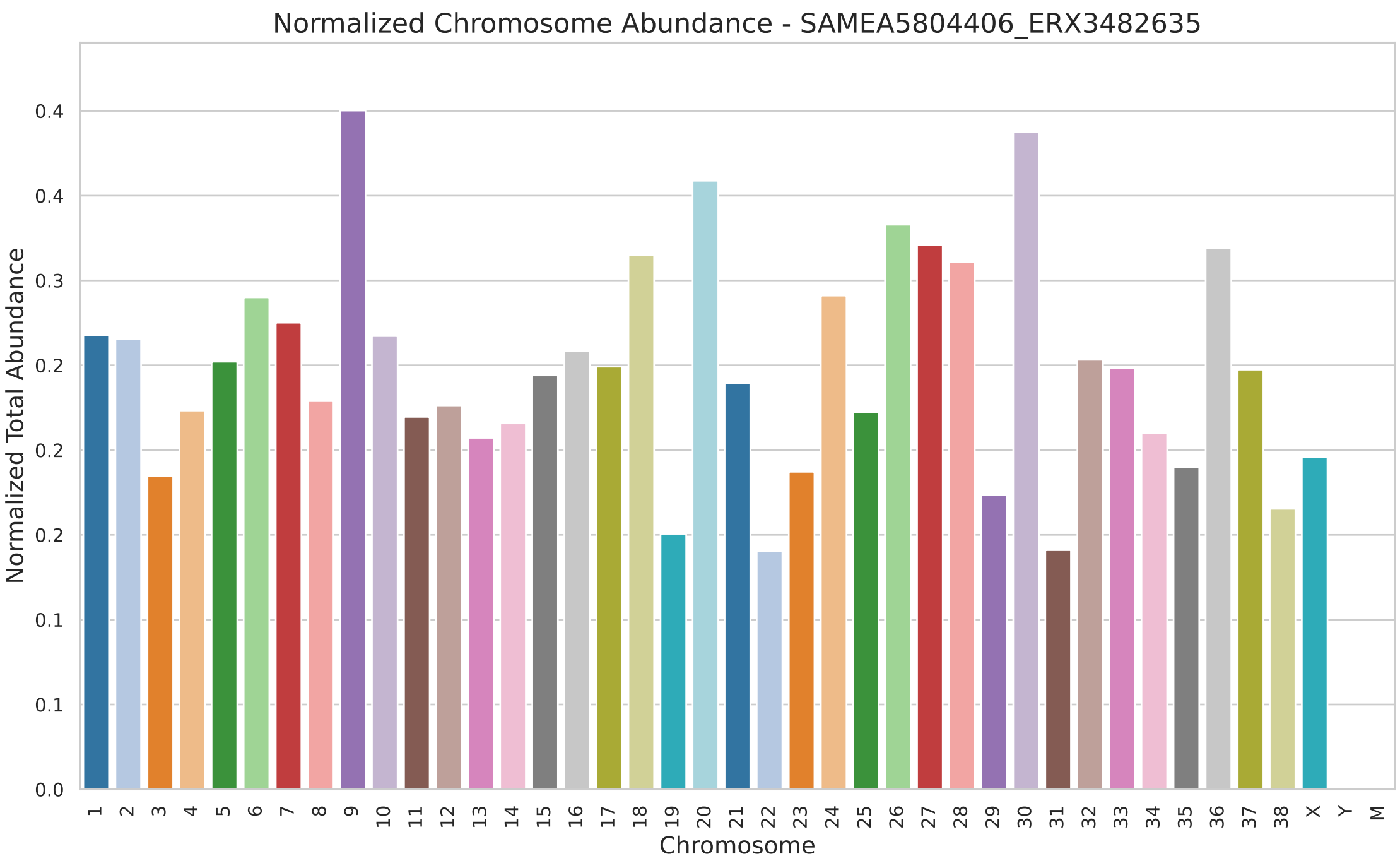

Normalized Chromosome Abundance - SAMEA5804365_ERX3482620
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

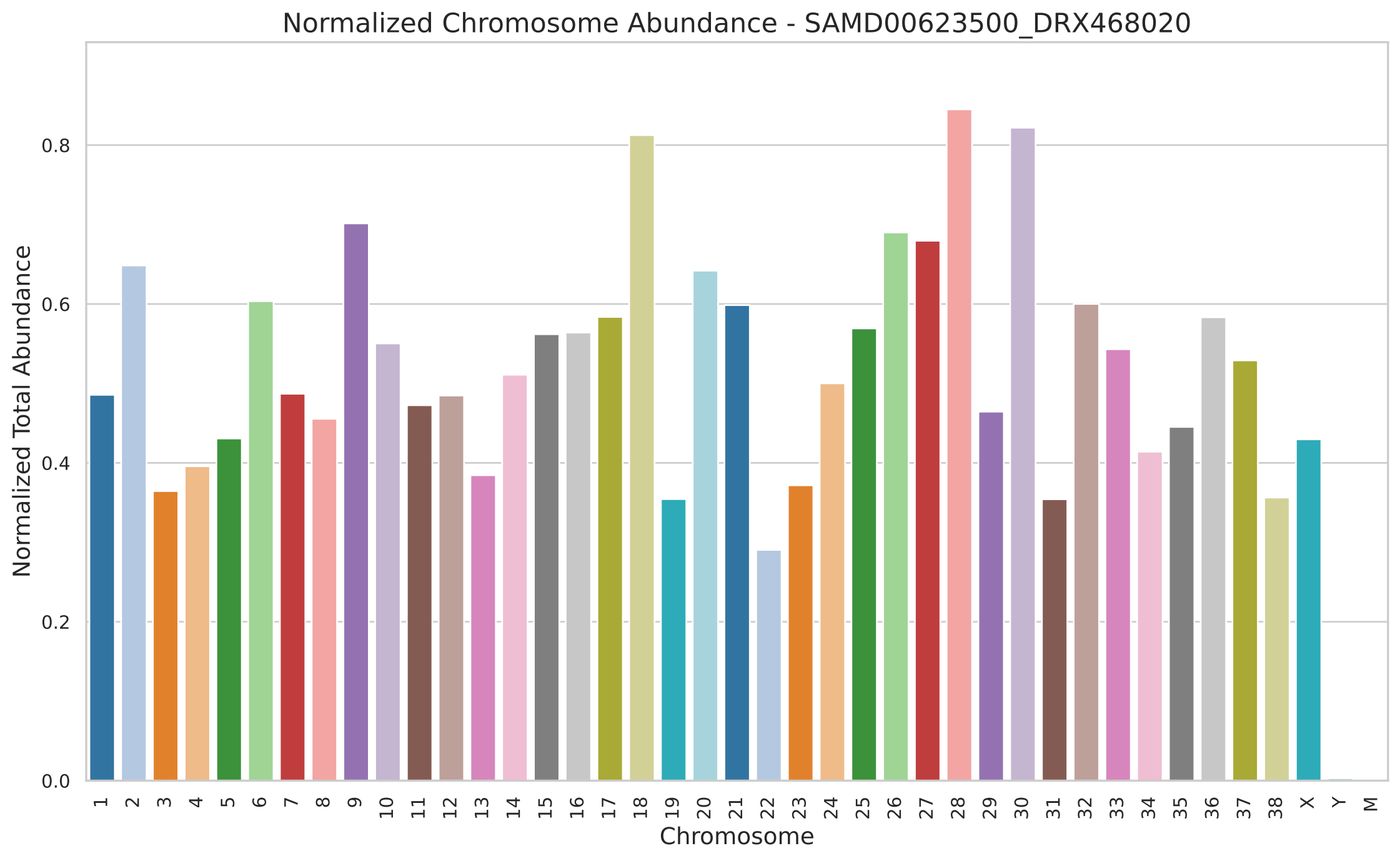

Normalized Chromosome Abundance - SAMEA5804412_ERX3482638
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

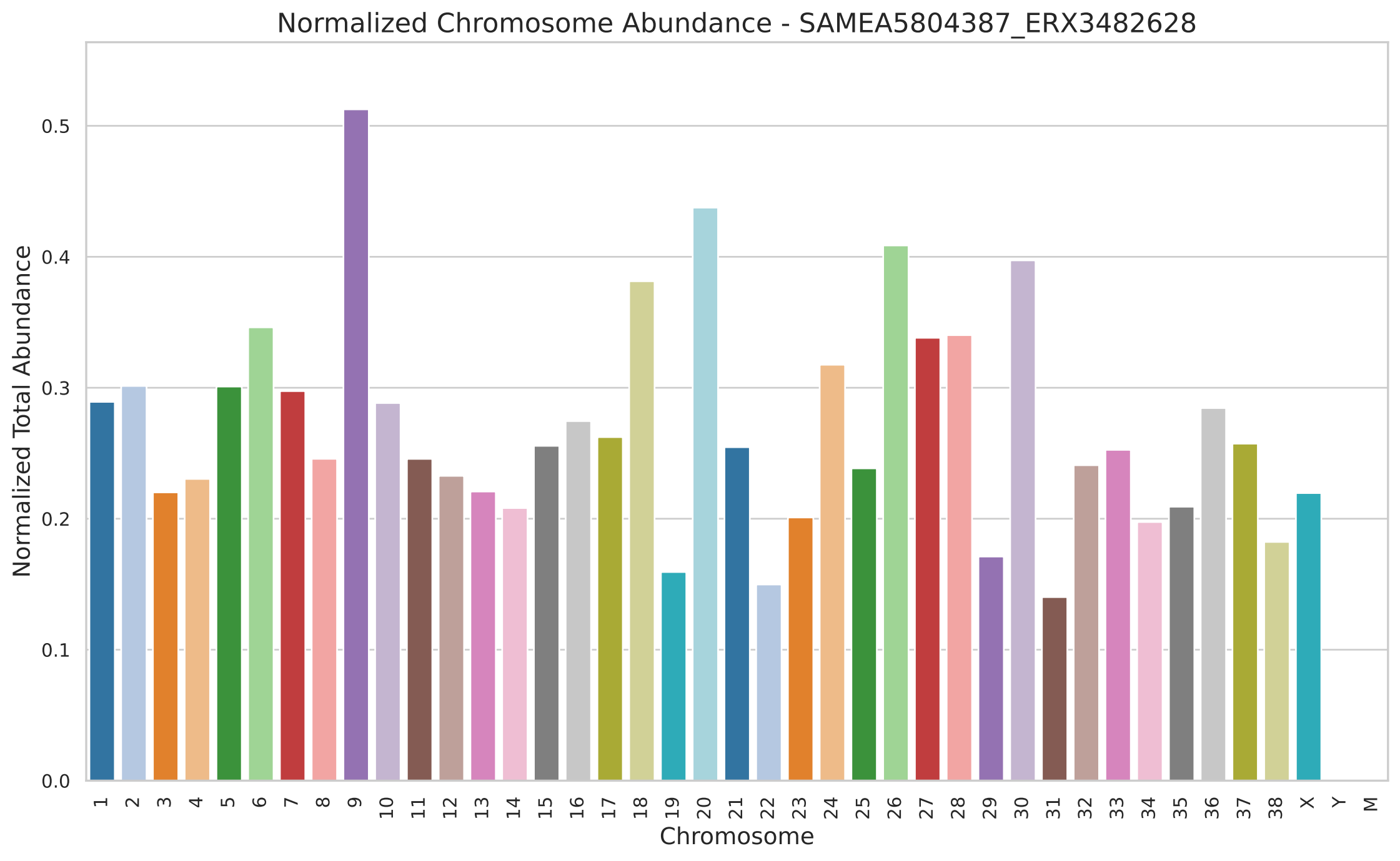

Normalized Chromosome Abundance - SAMEA5804354_ERX3482614
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

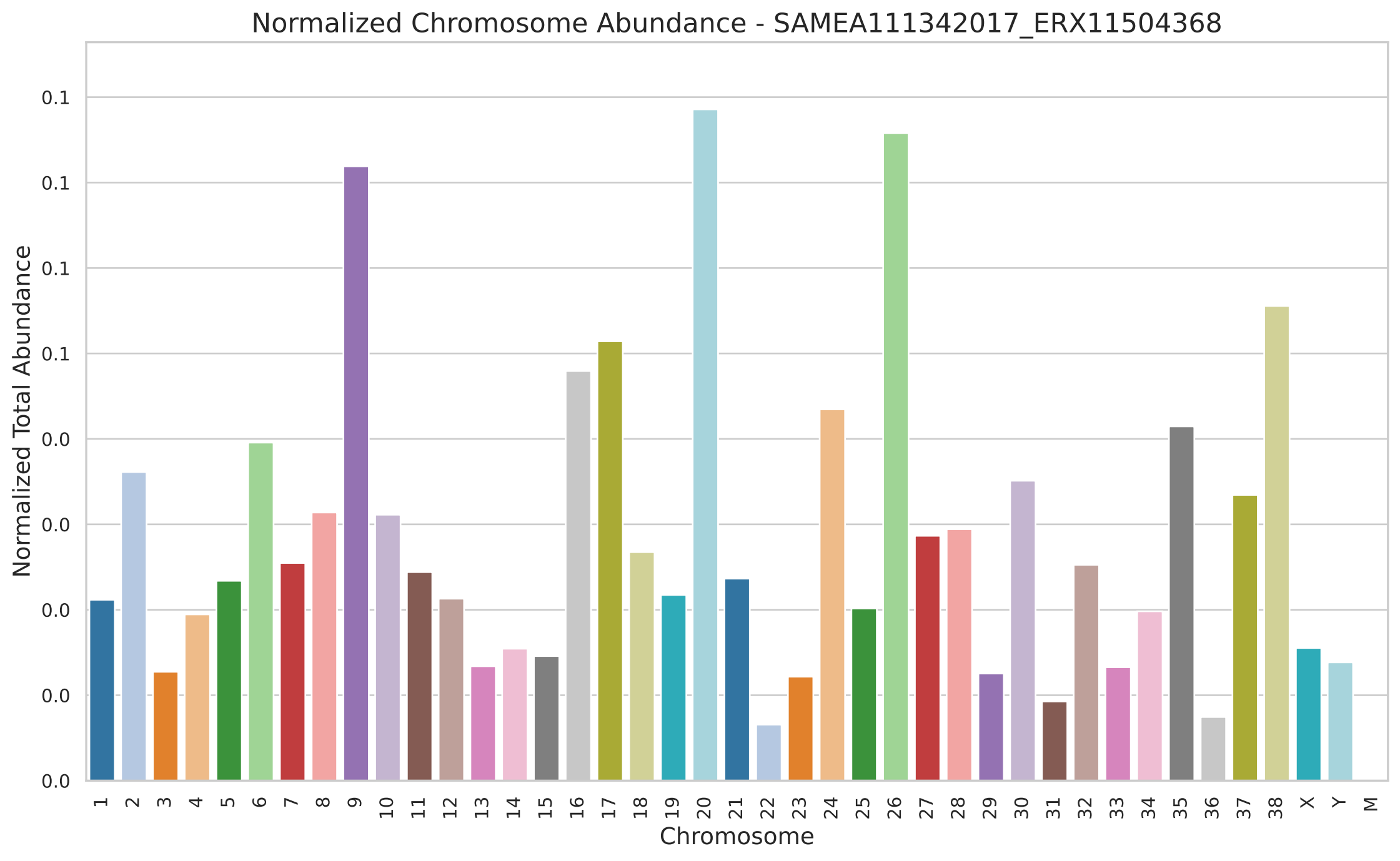

Normalized Chromosome Abundance - SAMEA5804457_ERX3482668
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

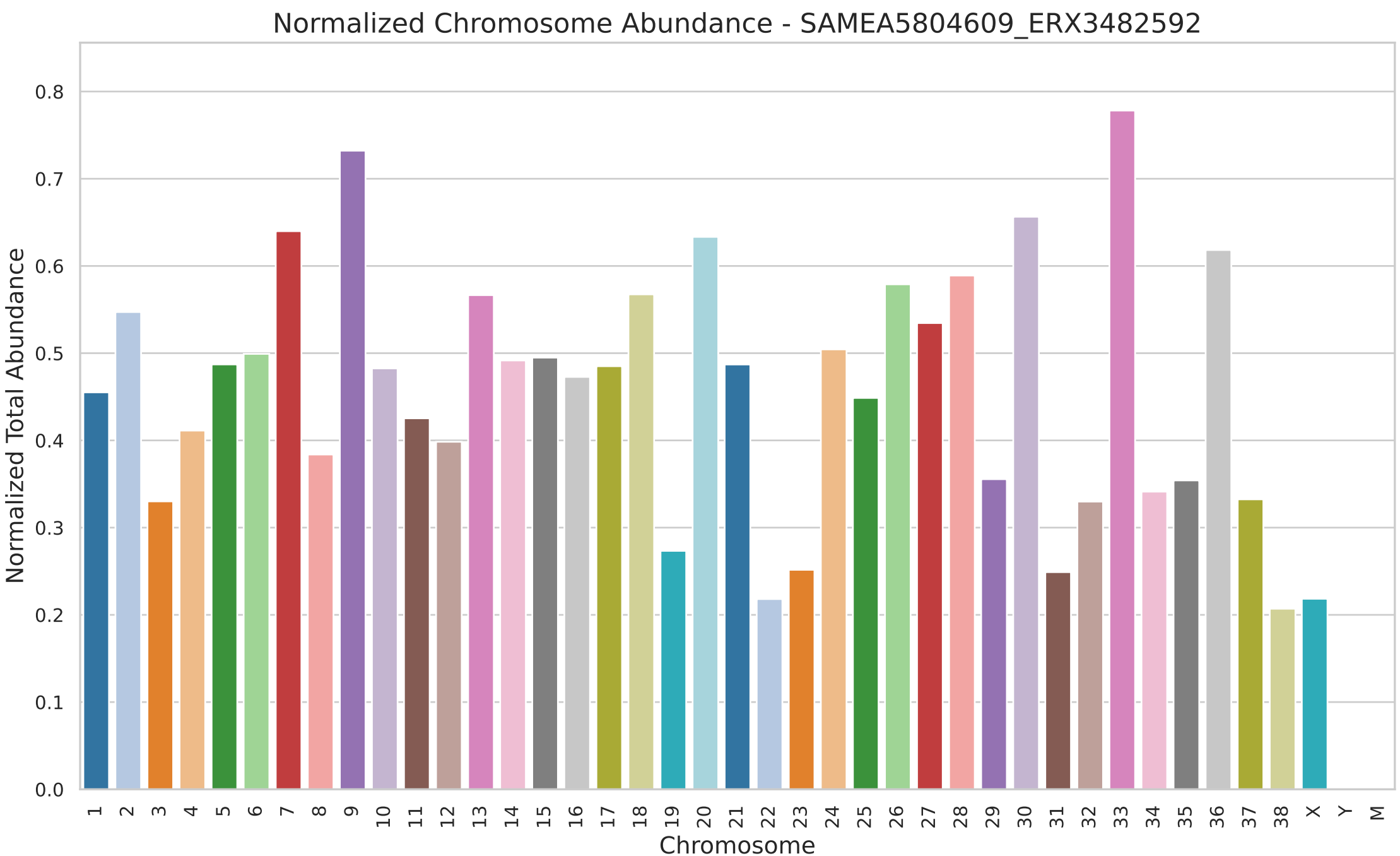

Normalized Chromosome Abundance - SAMD00623499_DRX468019
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

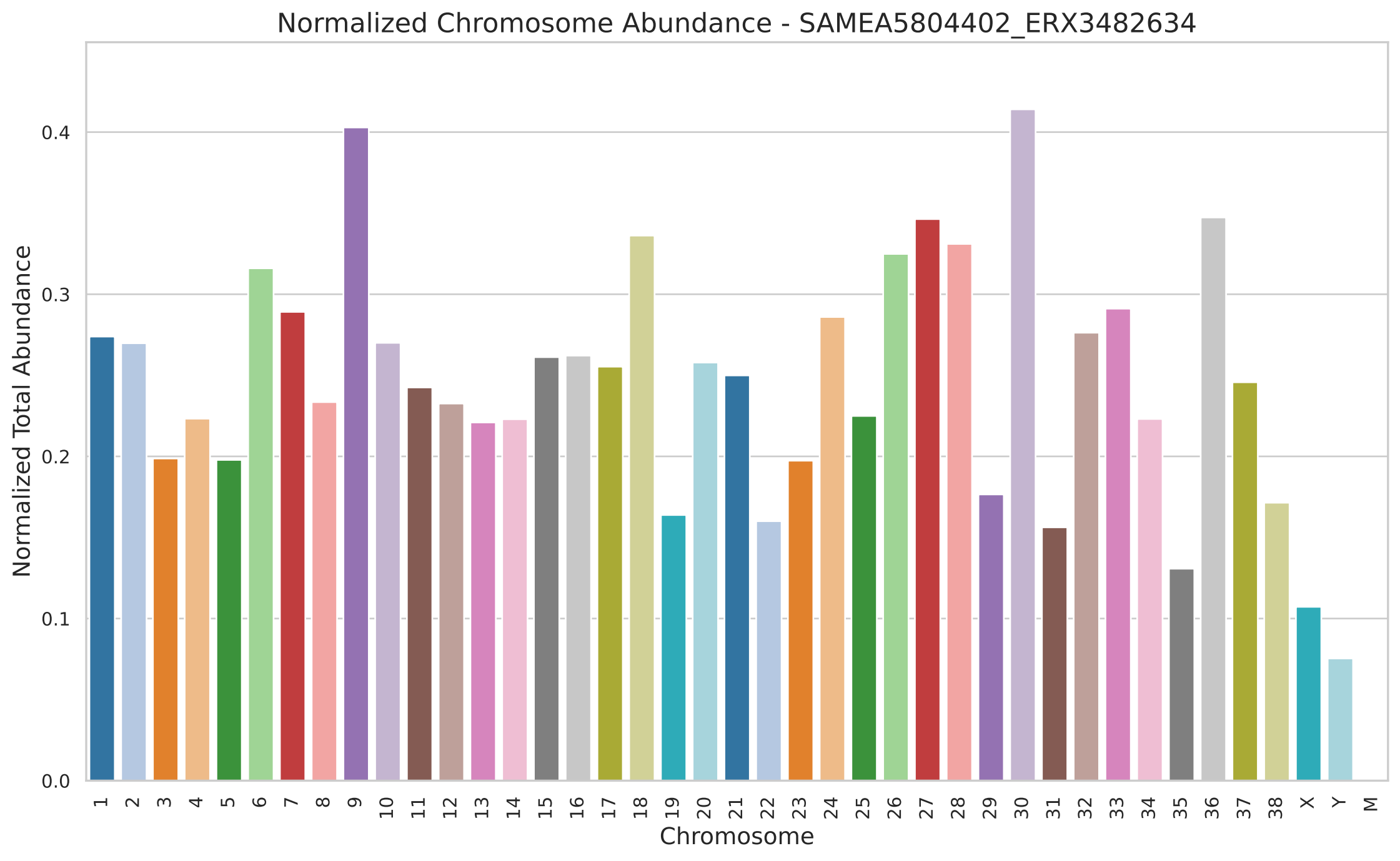

Normalized Chromosome Abundance - SAMEA5804406_ERX3482635
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

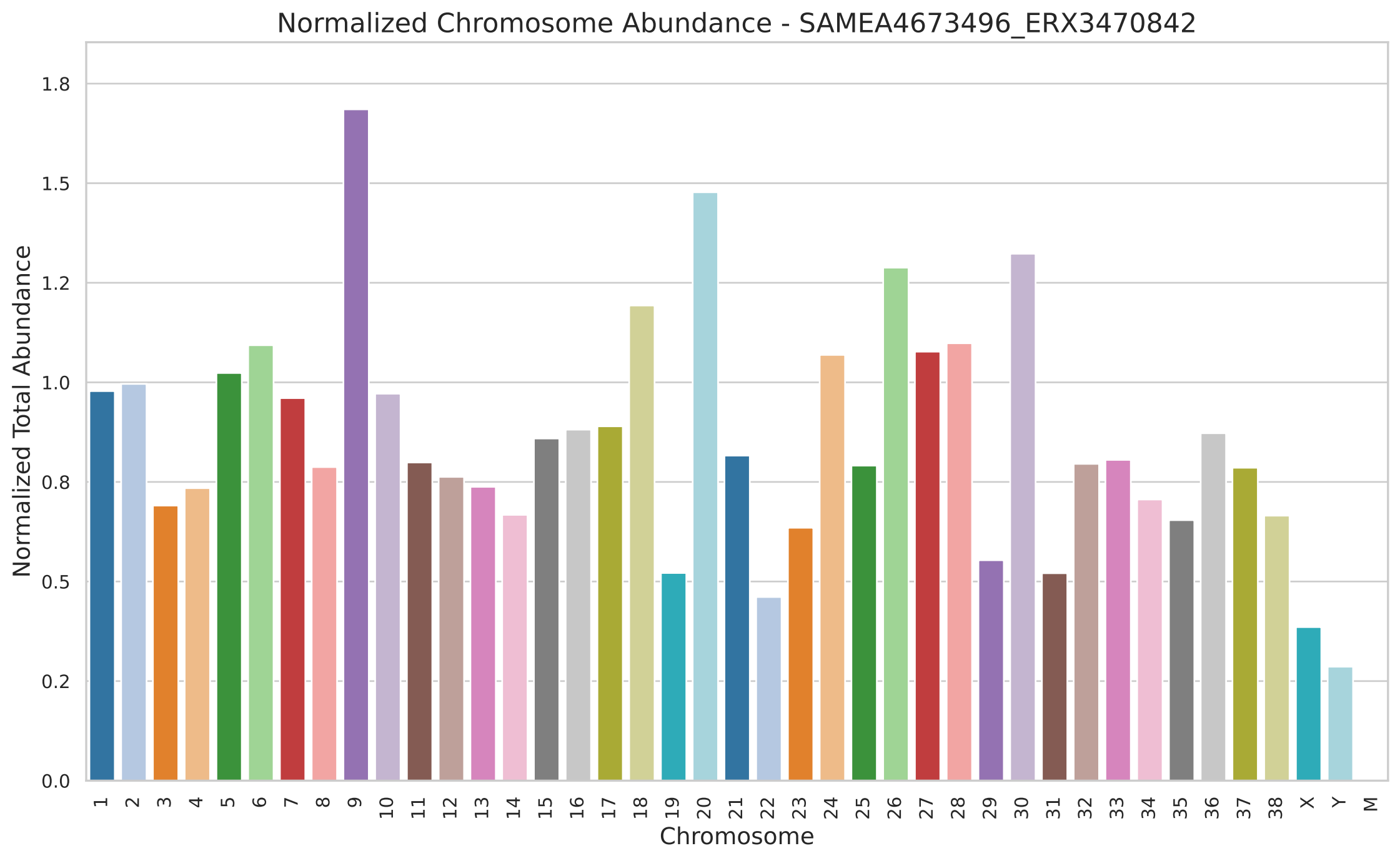

Normalized Chromosome Abundance - SAMD00623500_DRX468020
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

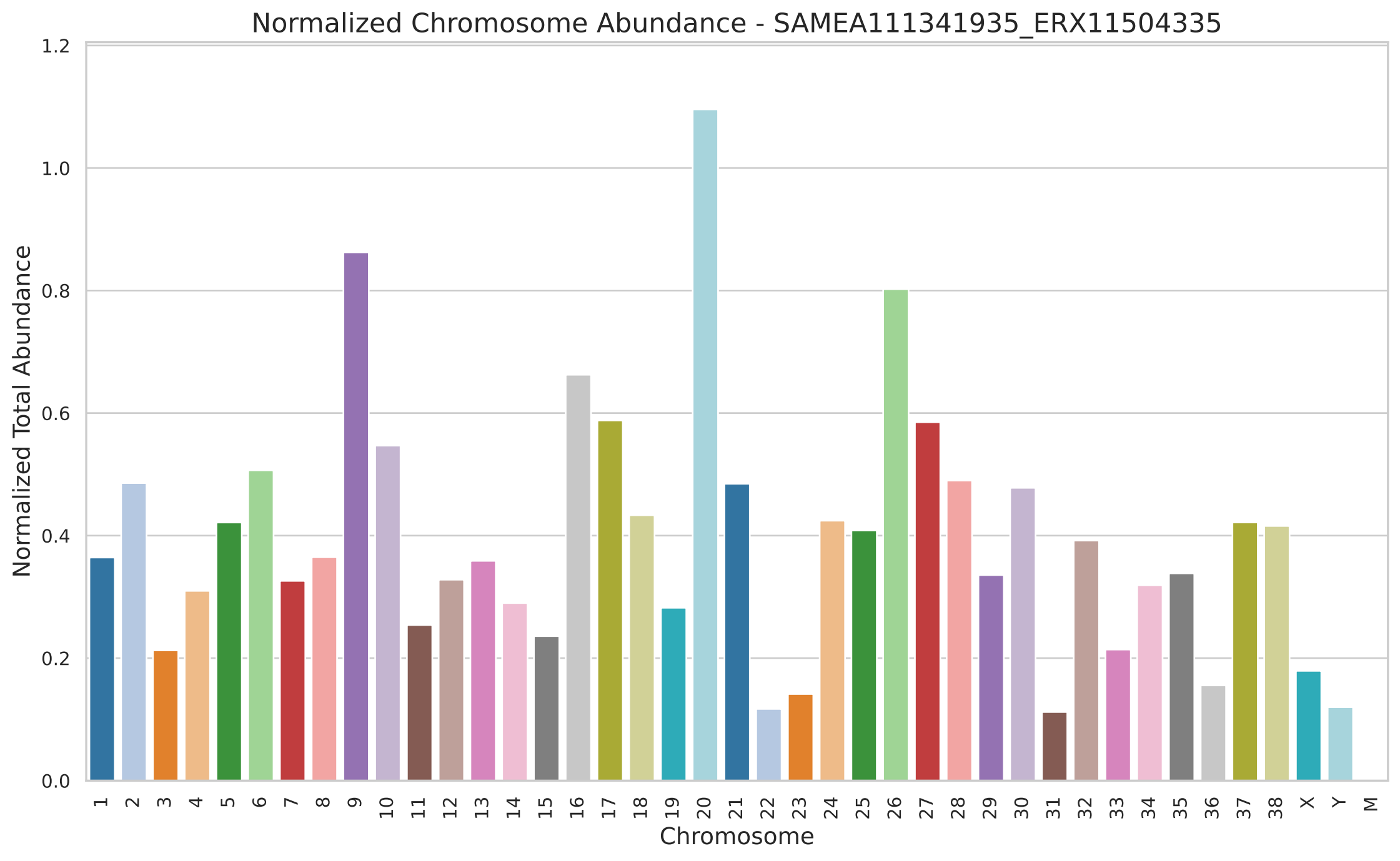

Normalized Chromosome Abundance - SAMEA5804387_ERX3482628
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

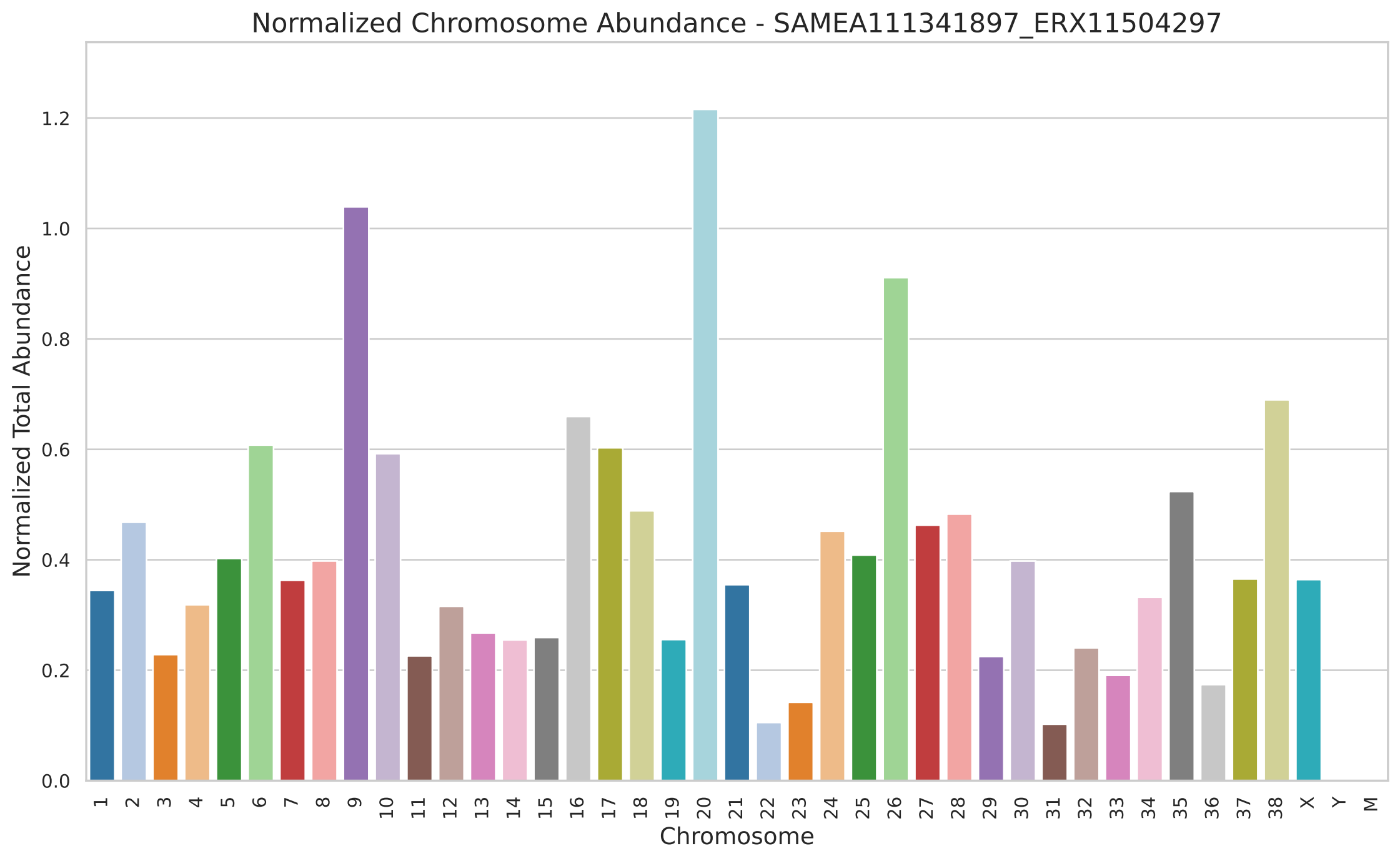

Normalized Chromosome Abundance - SAMEA111342017_ERX11504368
Normalized Total Abundance
0.1
0.1
0.1
0.1
0.0
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

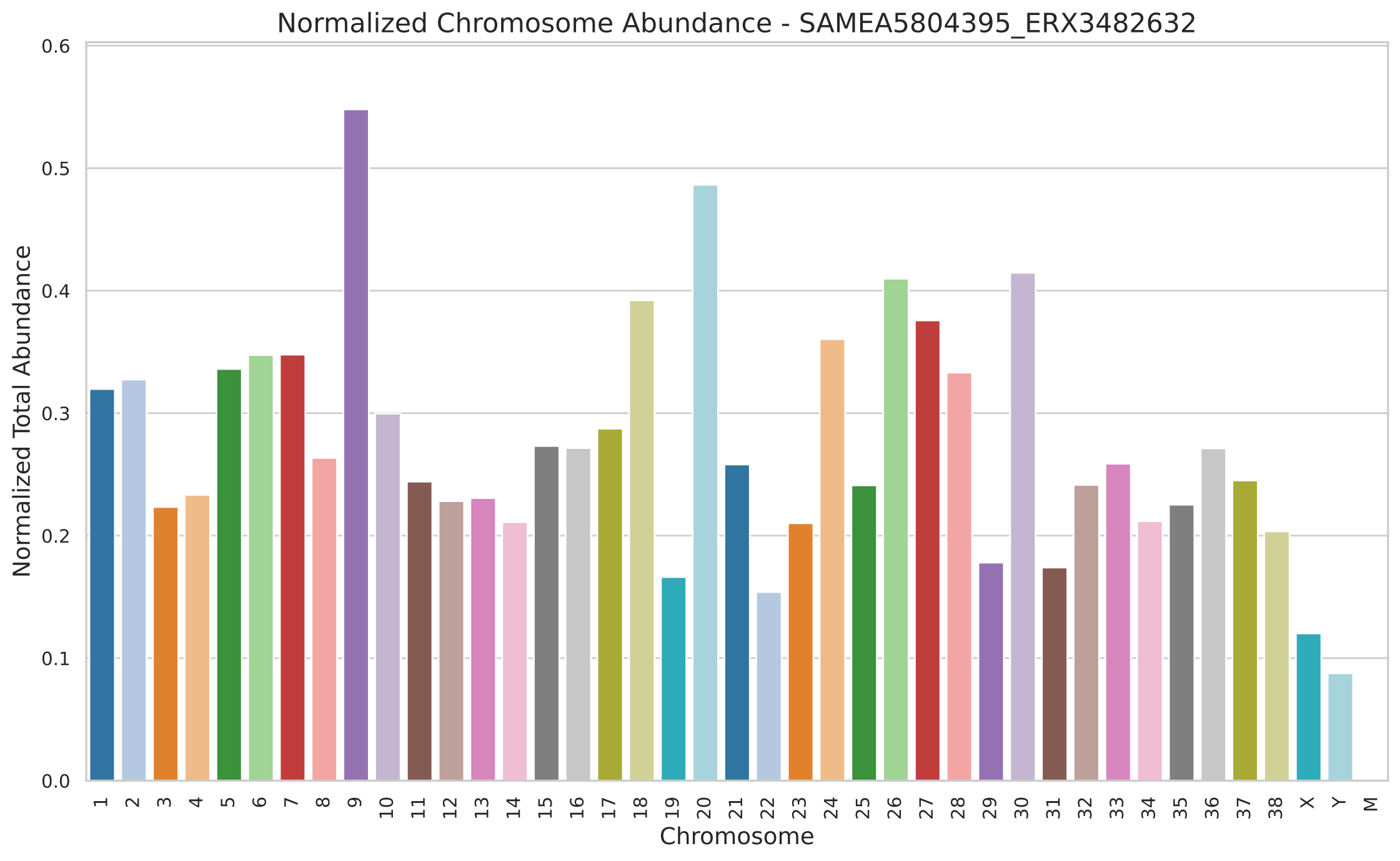

Normalized Chromosome Abundance - SAMEA5804609_ERX3482592
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

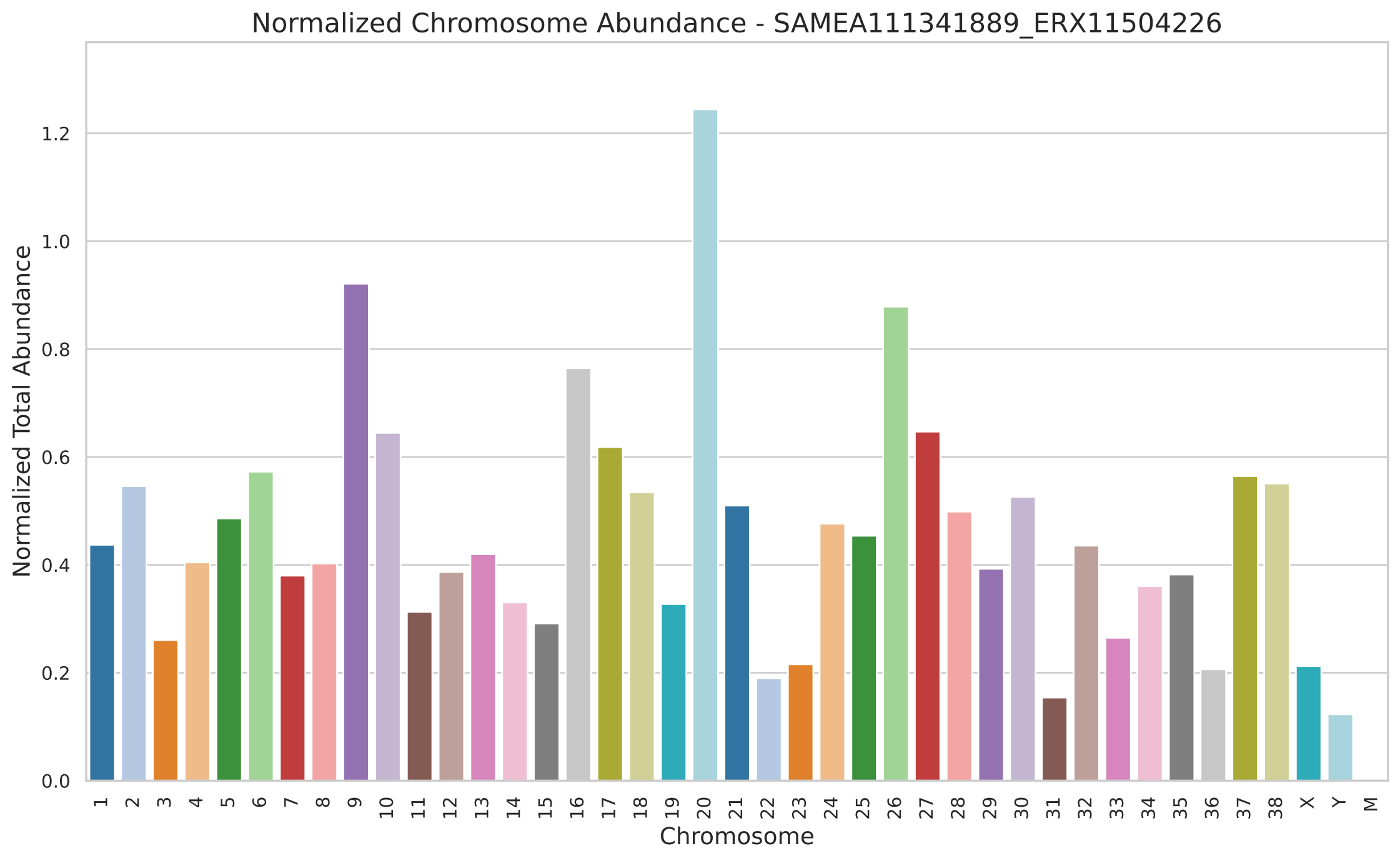

Normalized Chromosome Abundance - SAMEA5804402_ERX3482634
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

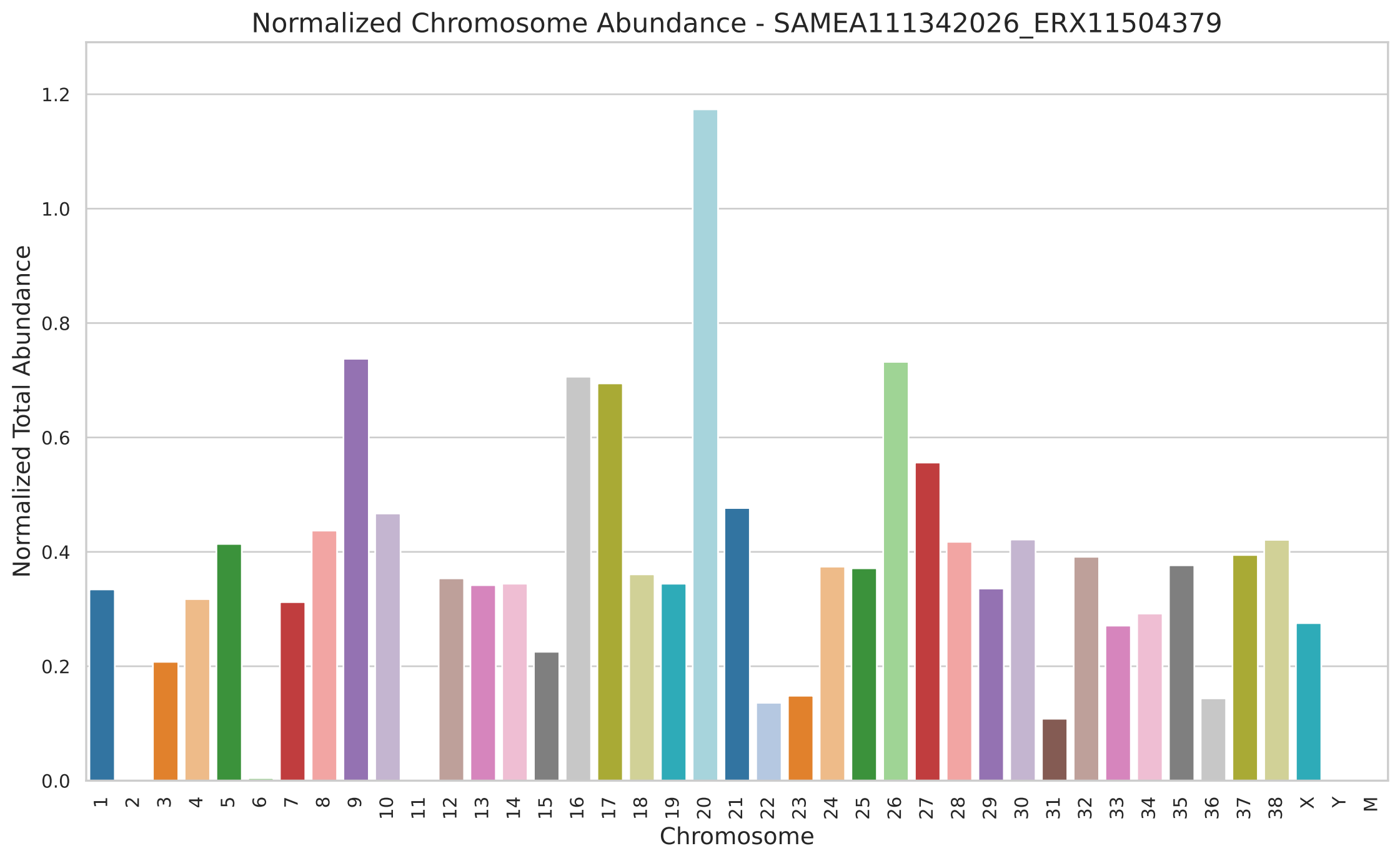

Normalized Chromosome Abundance - SAMEA4673496_ERX3470842
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

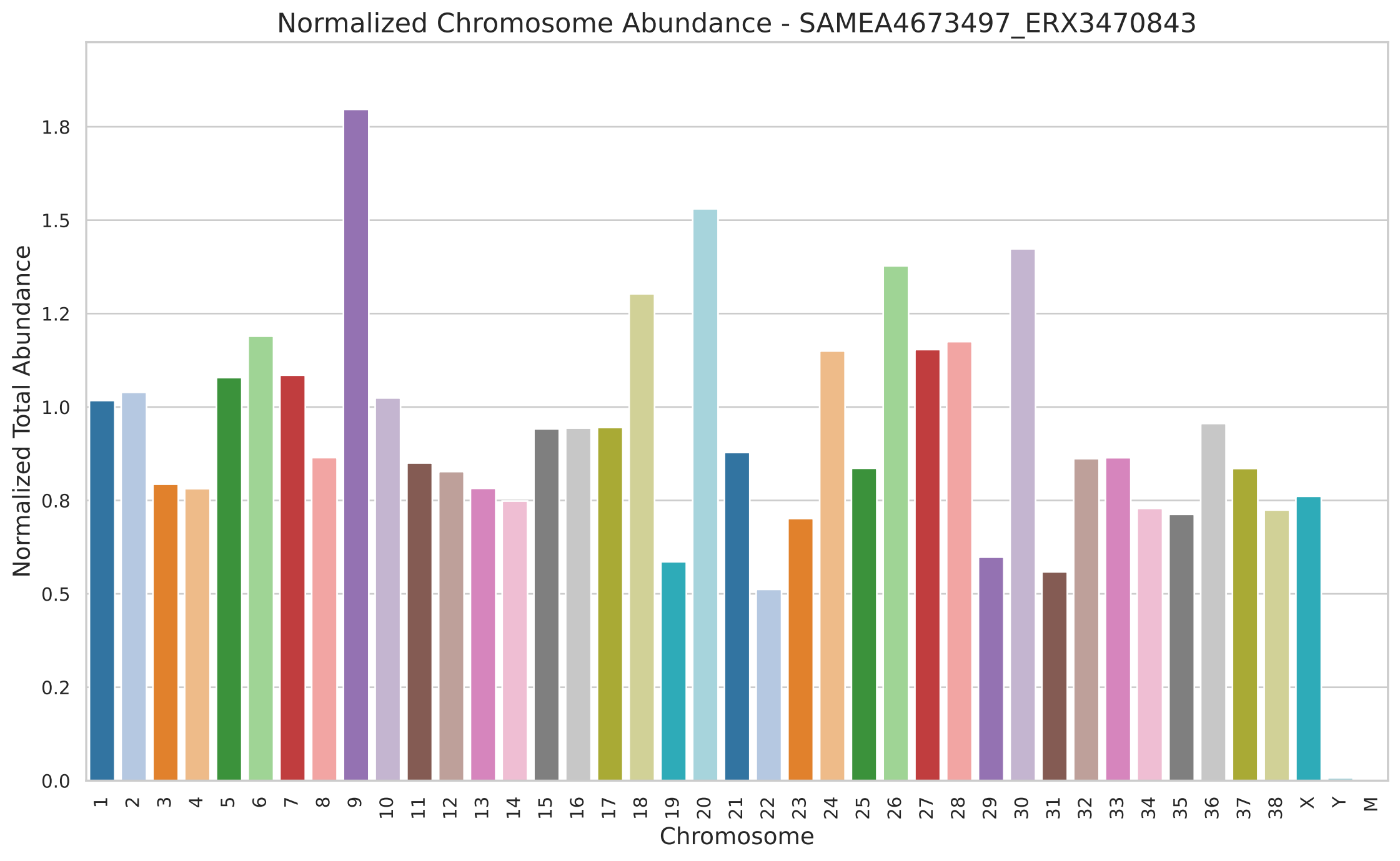

Normalized Chromosome Abundance - SAMEA111341935_ERX11504335
Normalized Total Abundance
1.2
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

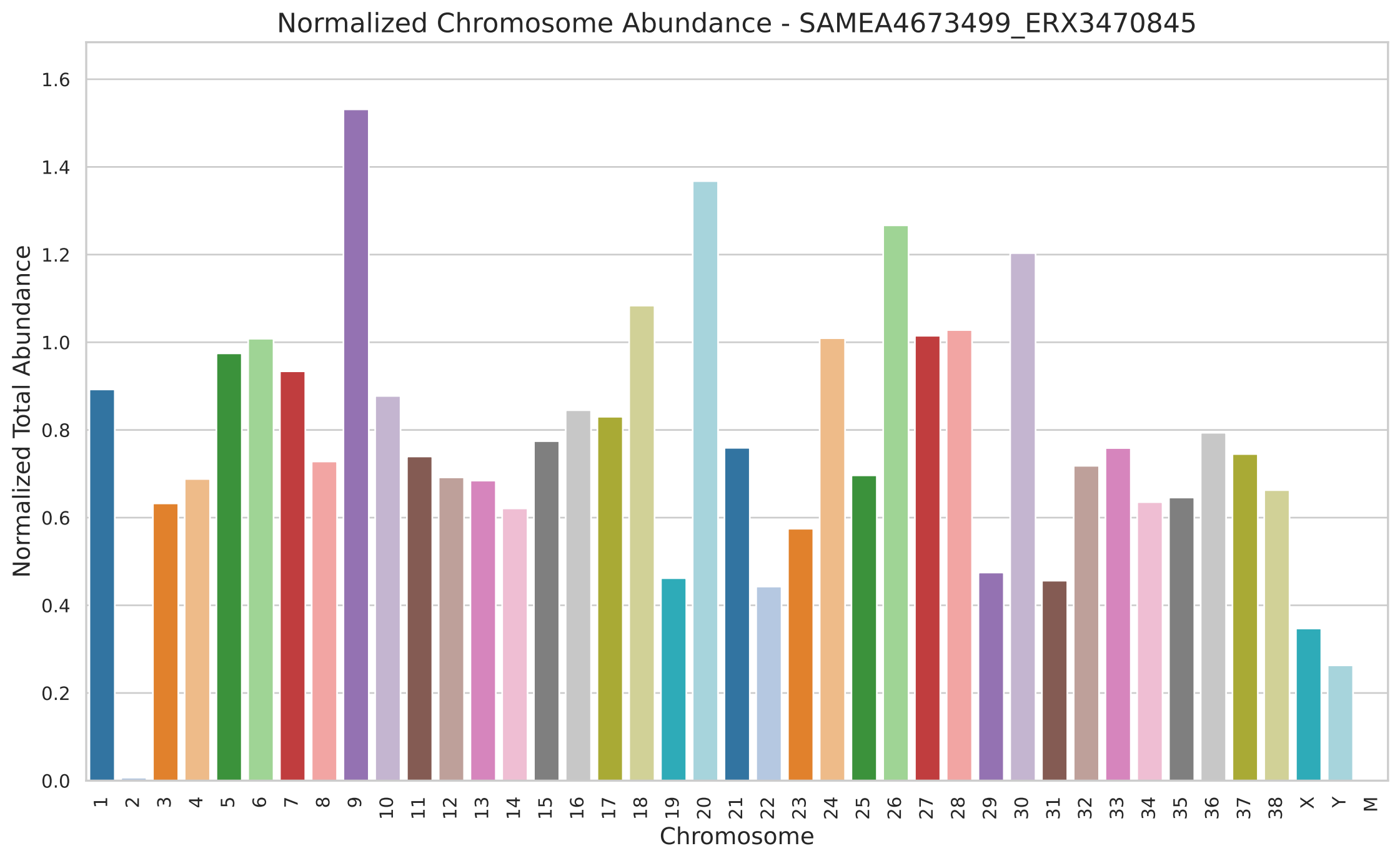

Normalized Chromosome Abundance - SAMEA111341897_ERX11504297
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

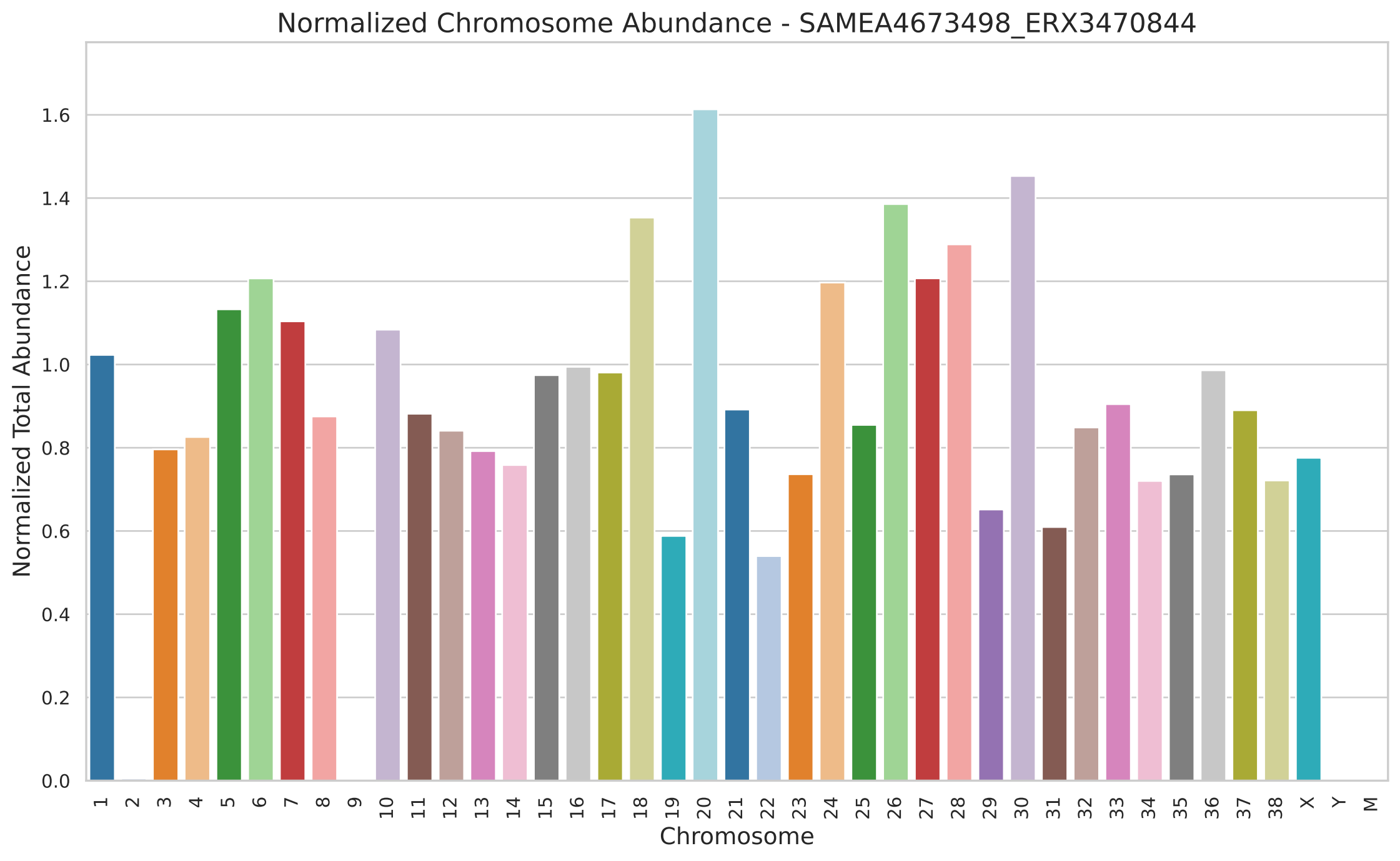

Normalized Chromosome Abundance - SAMEA5804395_ERX3482632
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

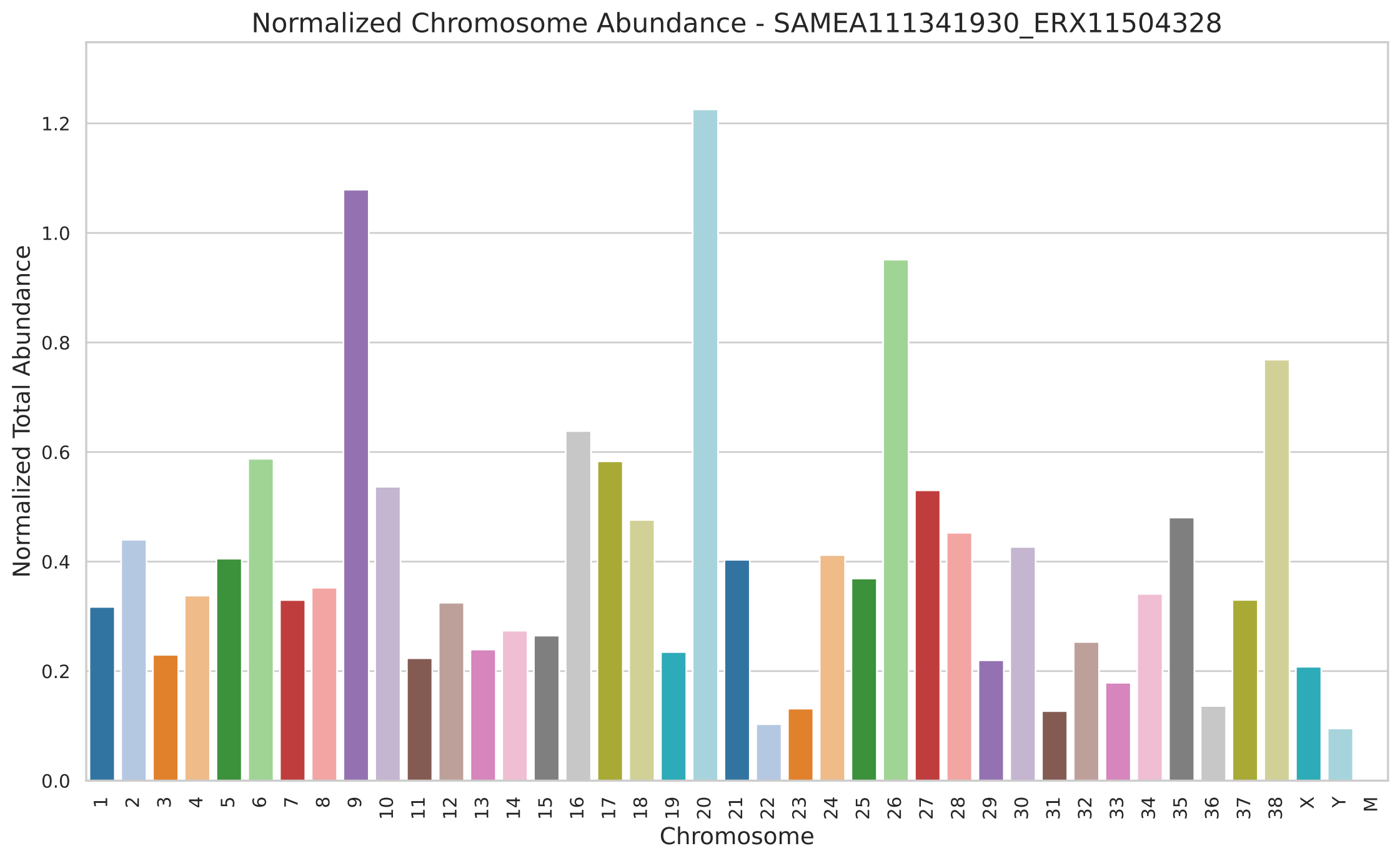

Normalized Chromosome Abundance - SAMEA111341889_ERX11504226
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

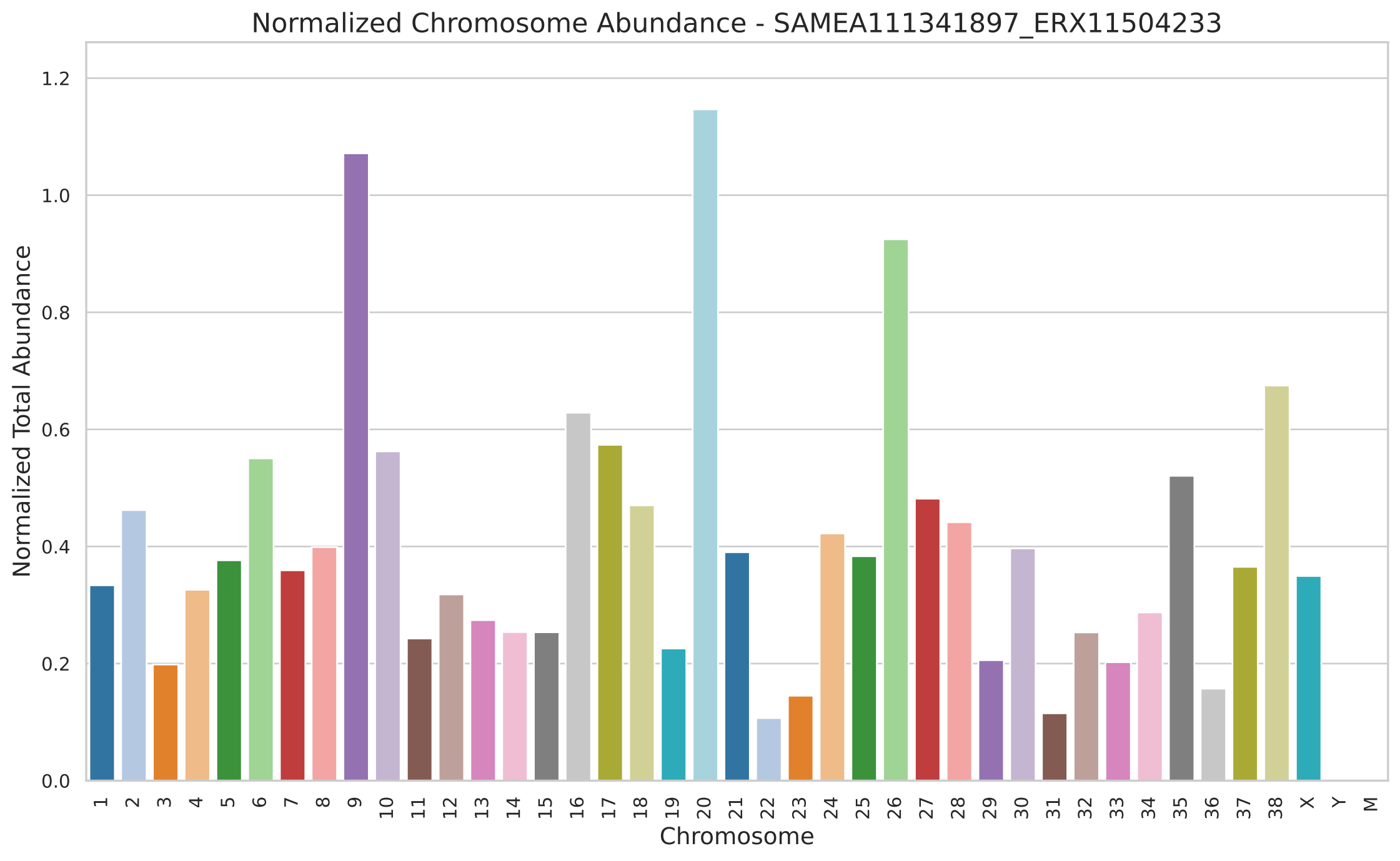

Normalized Chromosome Abundance - SAMEA111342026_ERX11504379
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

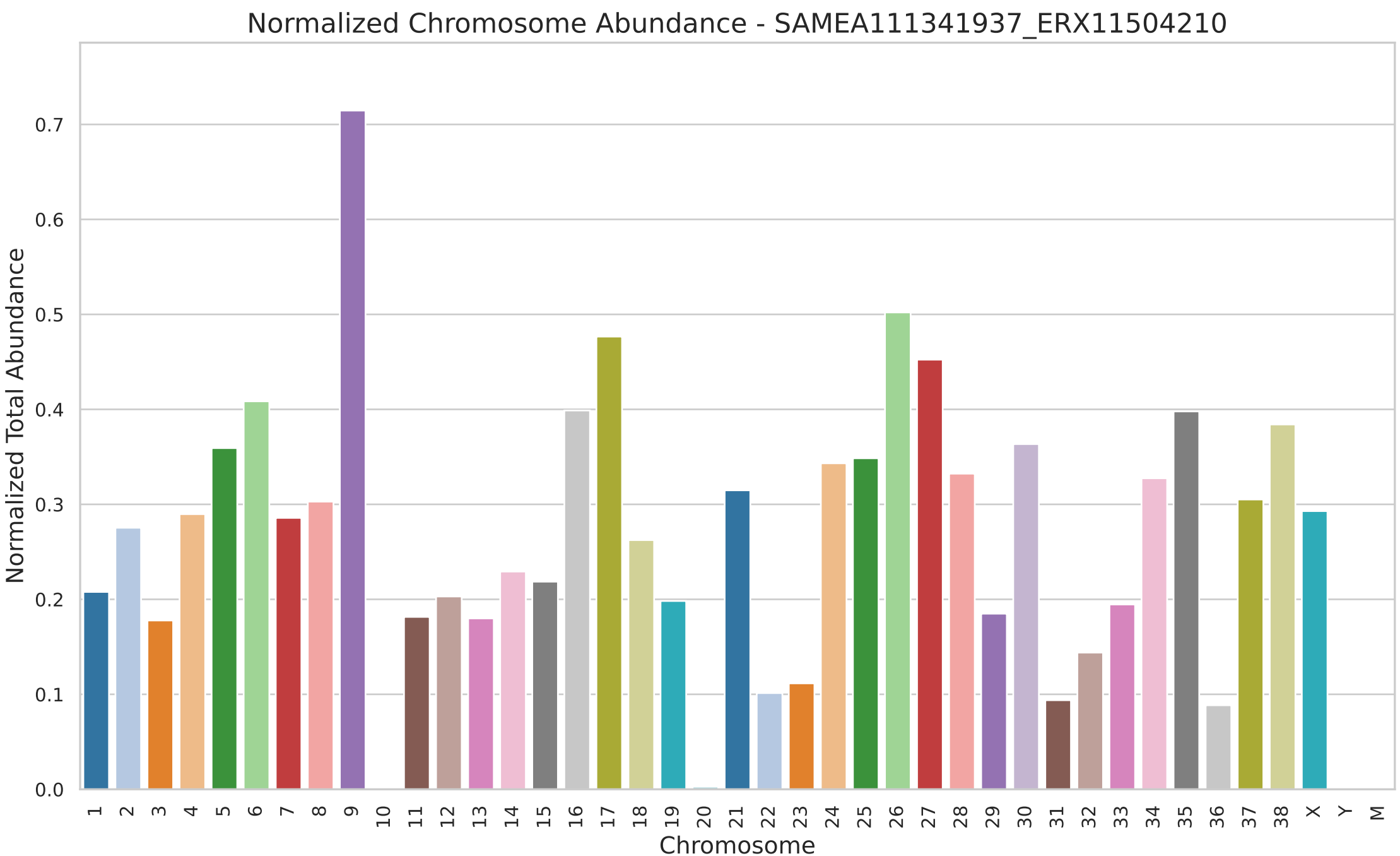

Normalized Chromosome Abundance - SAMEA4673497_ERX3470843
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

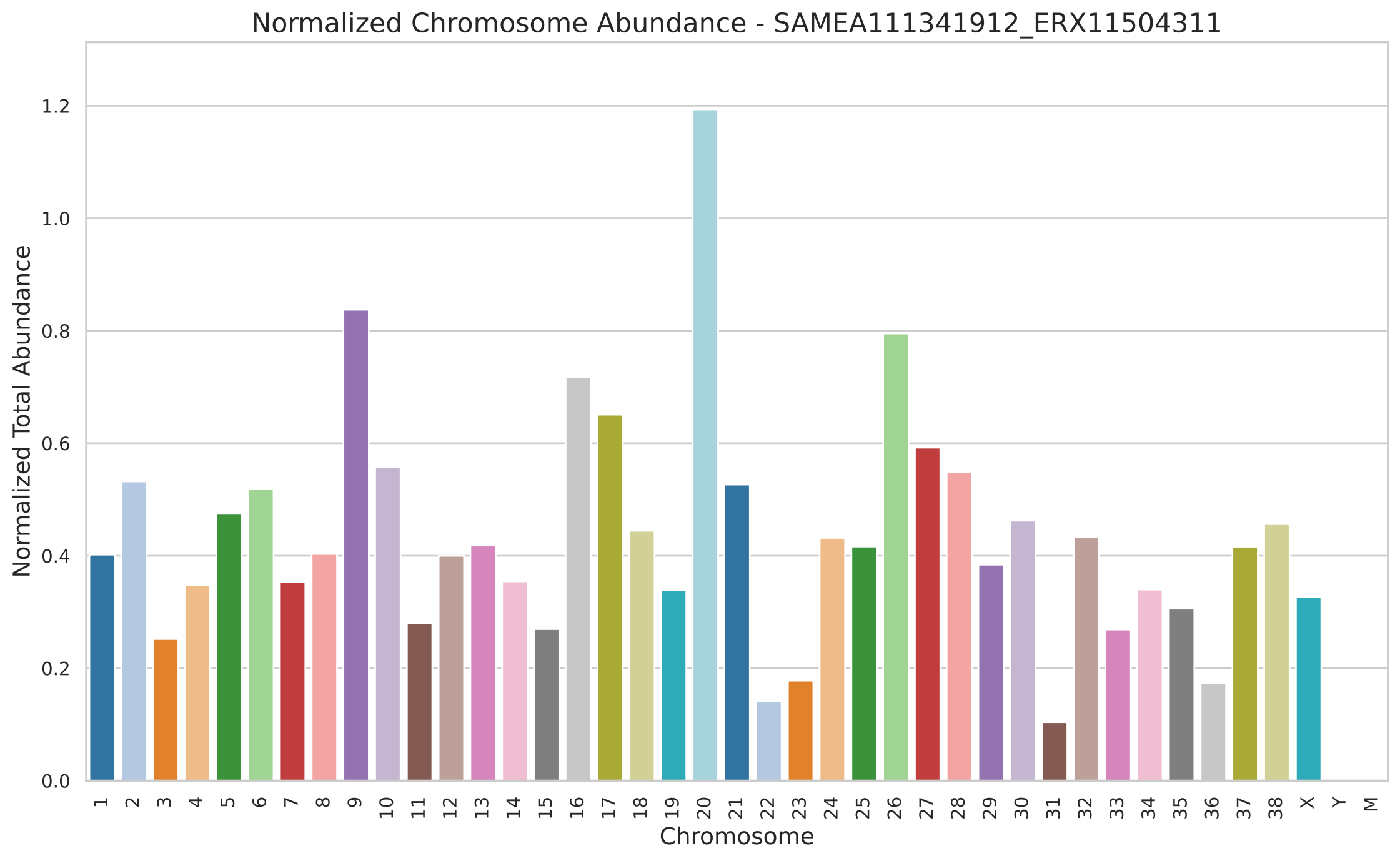

Normalized Chromosome Abundance - SAMEA4673499_ERX3470845
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

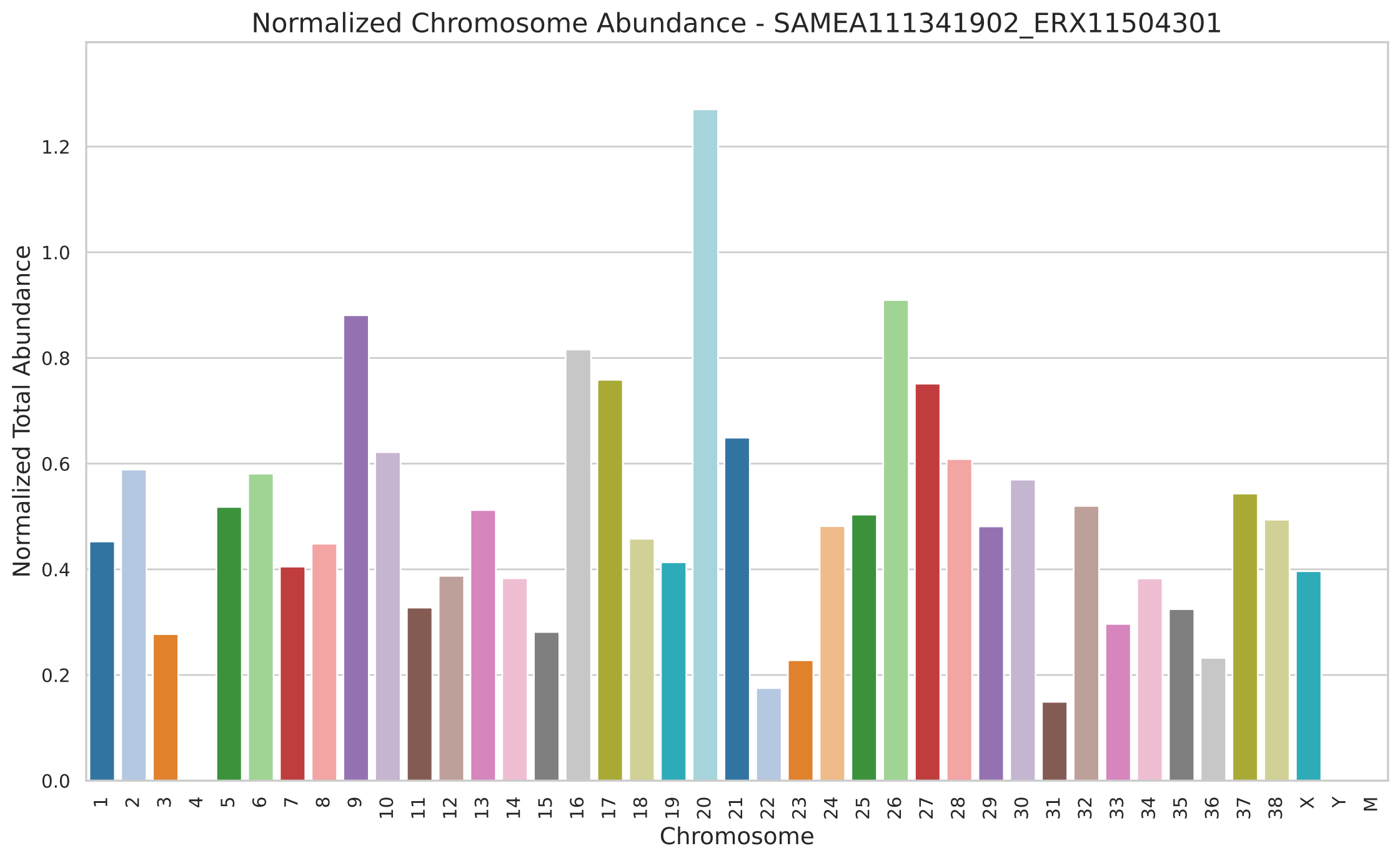

Normalized Chromosome Abundance - SAMEA4673498_ERX3470844
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

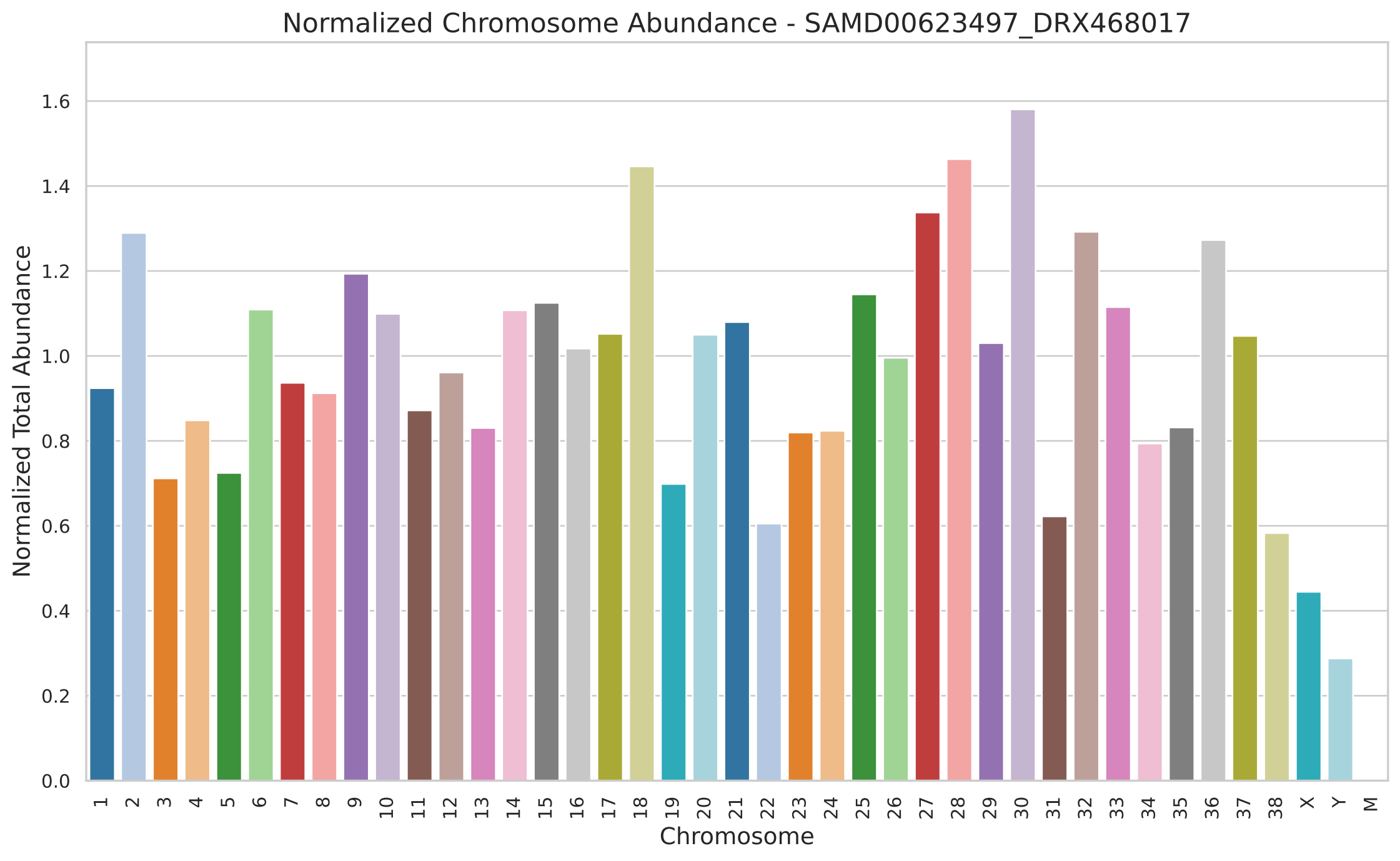

Normalized Chromosome Abundance - SAMEA111341930_ERX11504328
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

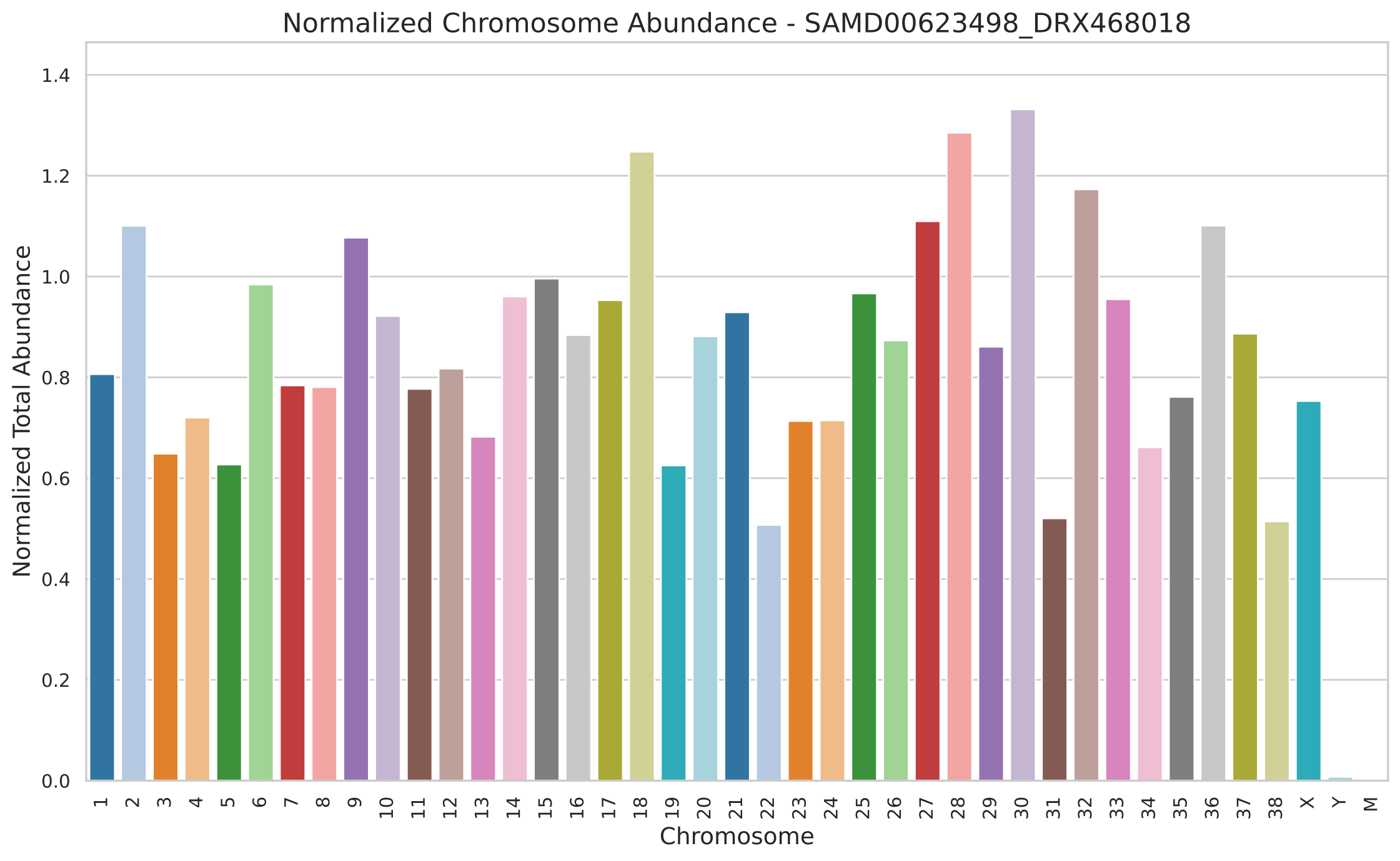

Normalized Chromosome Abundance - SAMEA111341897_ERX11504233
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

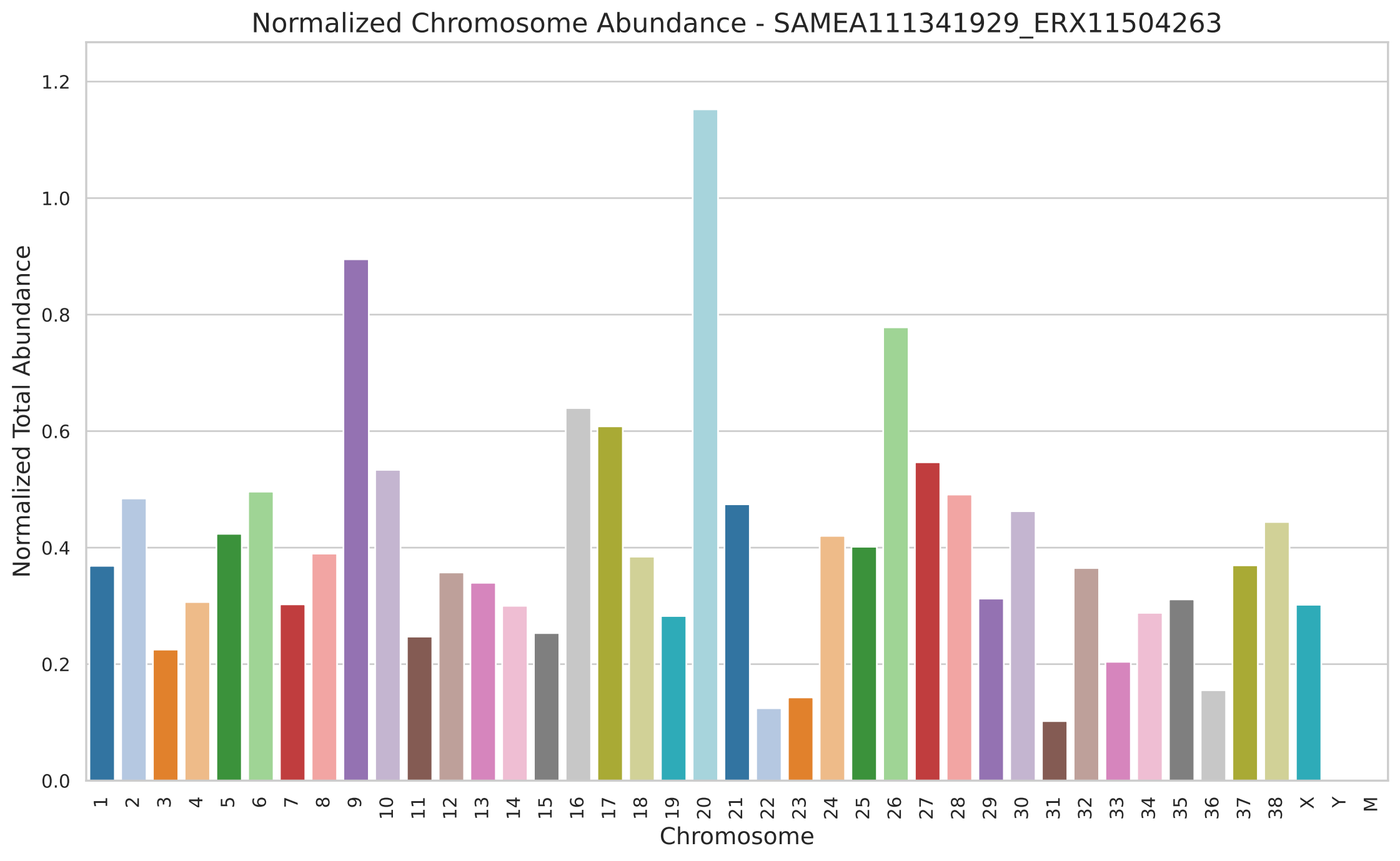

Normalized Chromosome Abundance - SAMEA111341937_ERX11504210
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

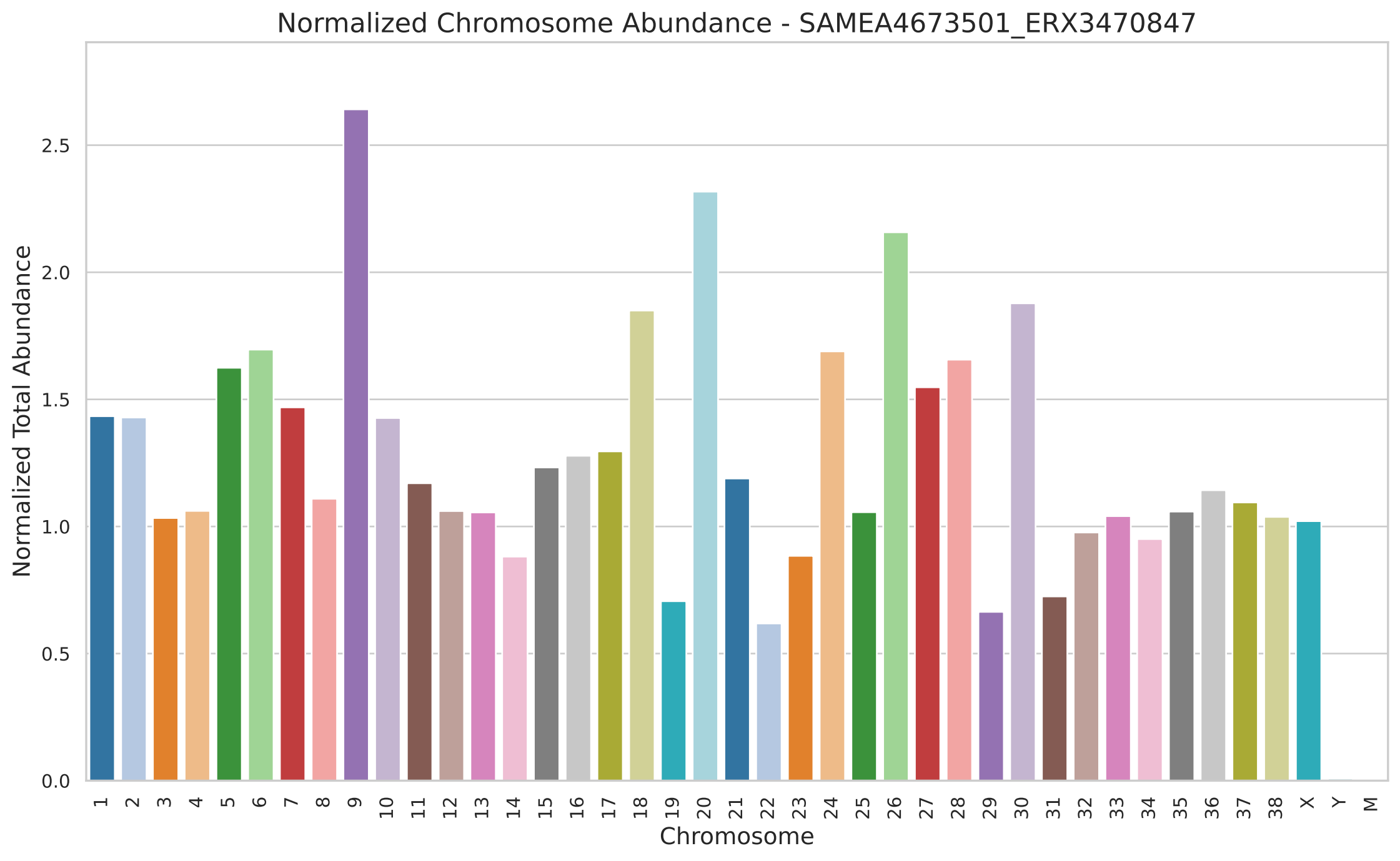

Normalized Chromosome Abundance - SAMEA111341912_ERX11504311
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

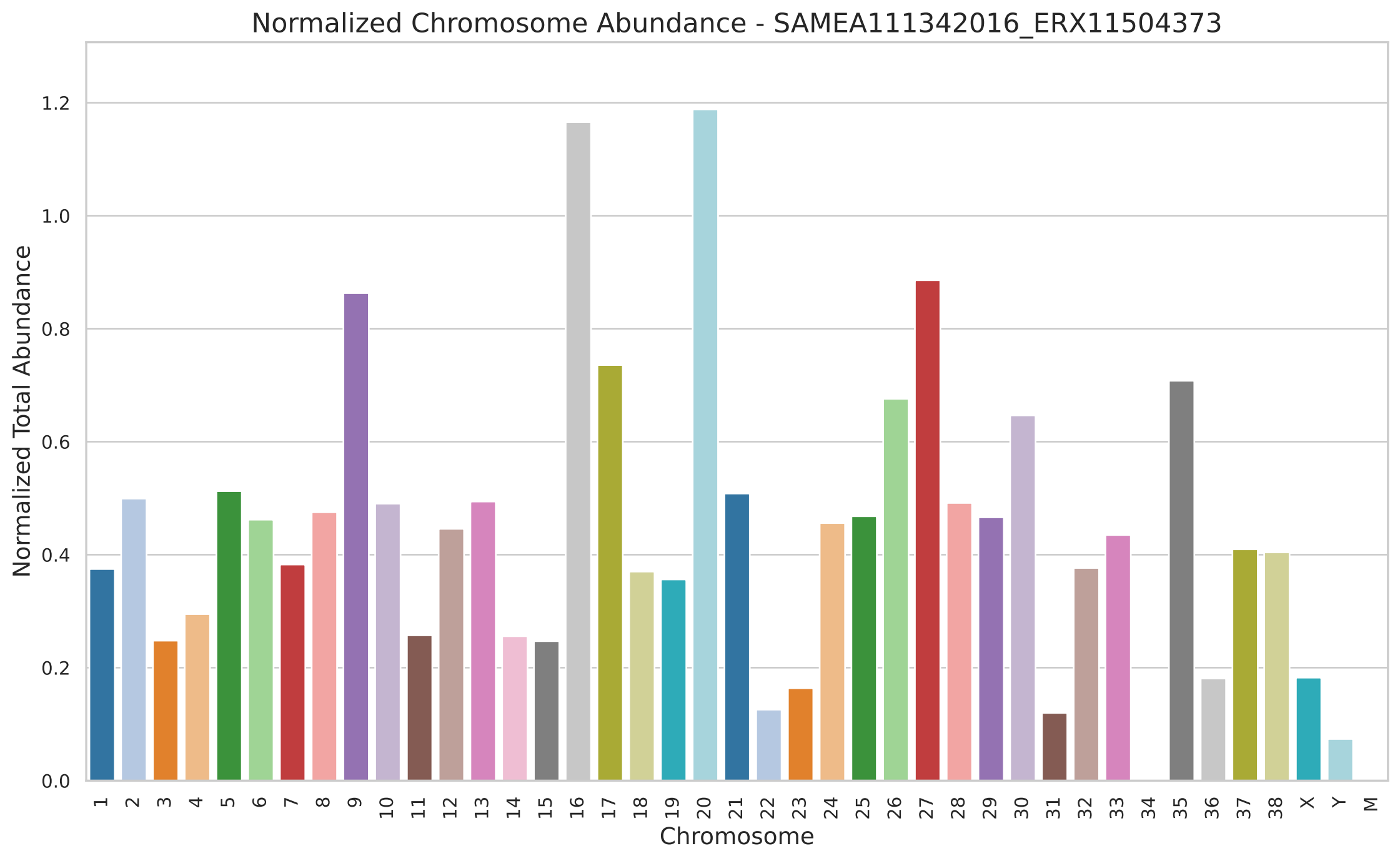

Normalized Chromosome Abundance - SAMEA111341902_ERX11504301
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

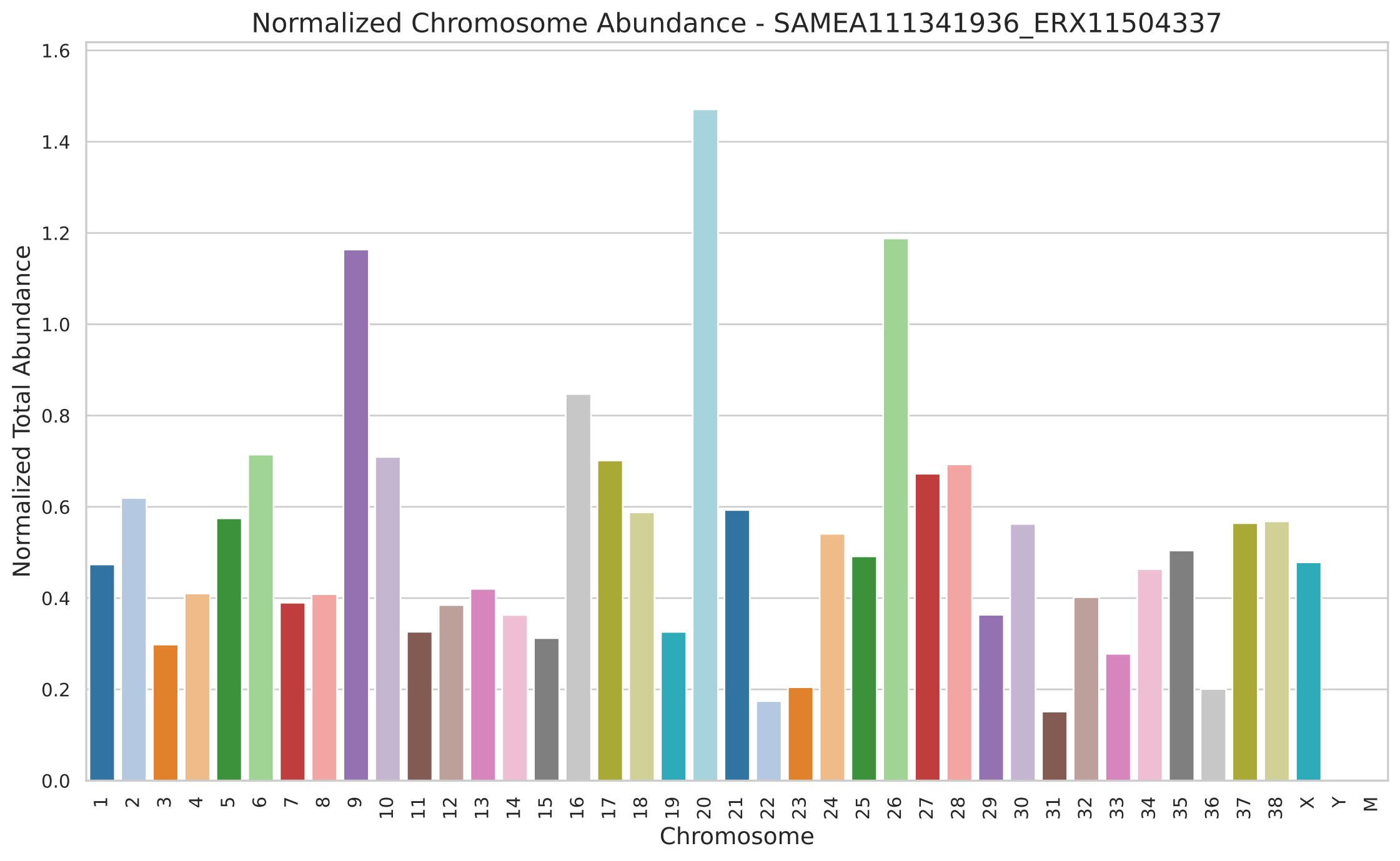

Normalized Chromosome Abundance - SAMD00623497_DRX468017
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

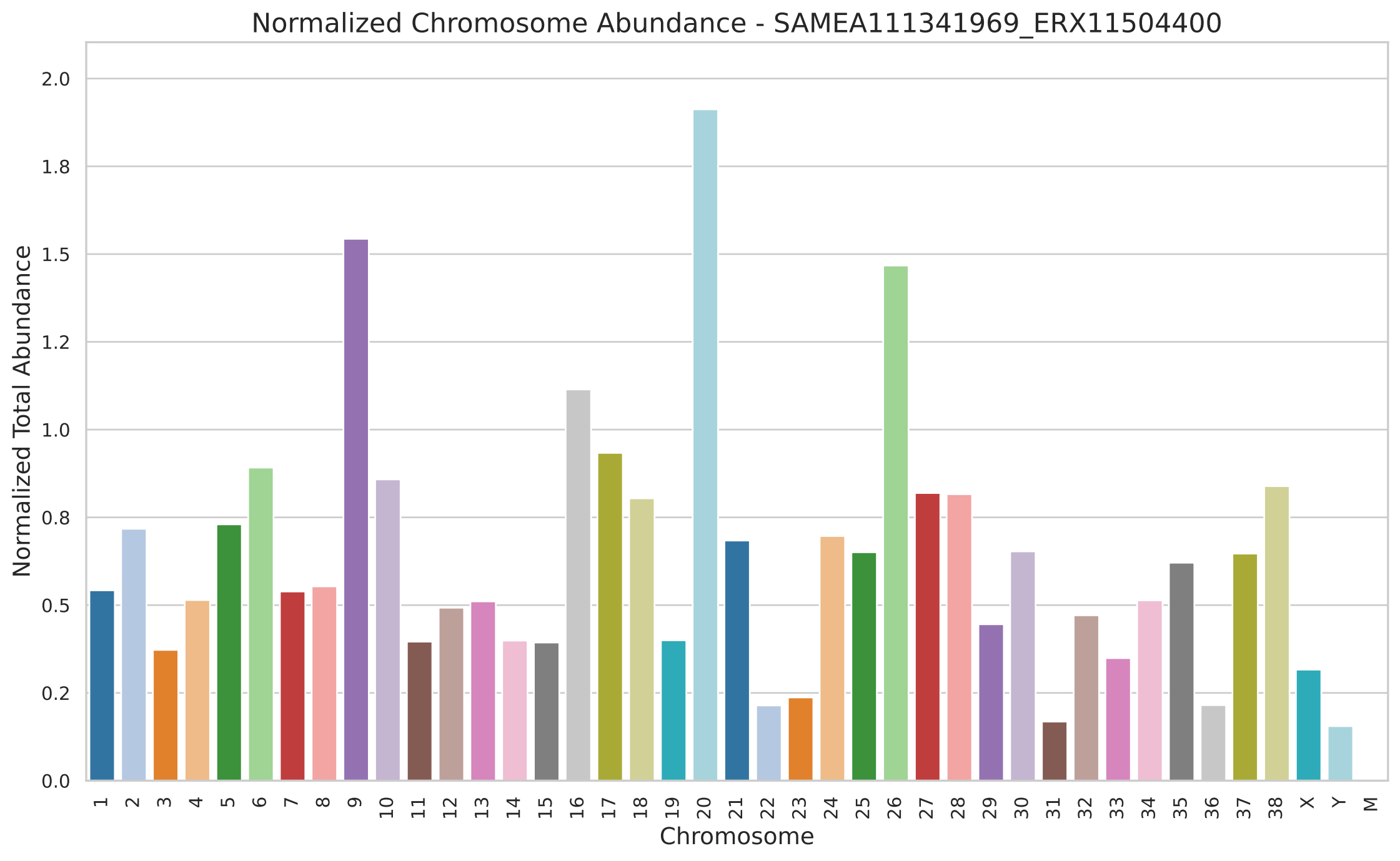

Normalized Chromosome Abundance - SAMD00623498_DRX468018
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

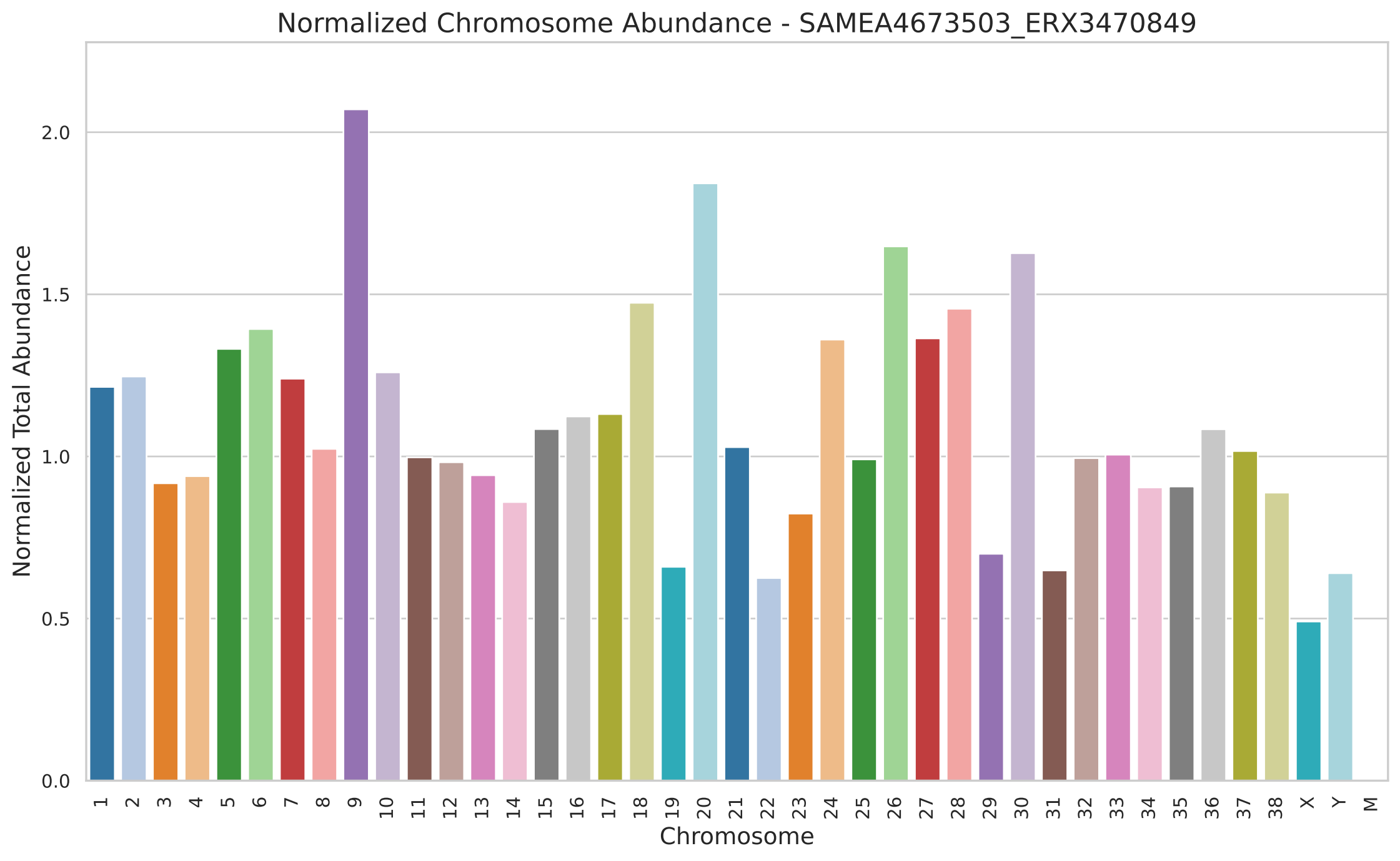

Normalized Chromosome Abundance - SAMEA111341929_ERX11504263
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

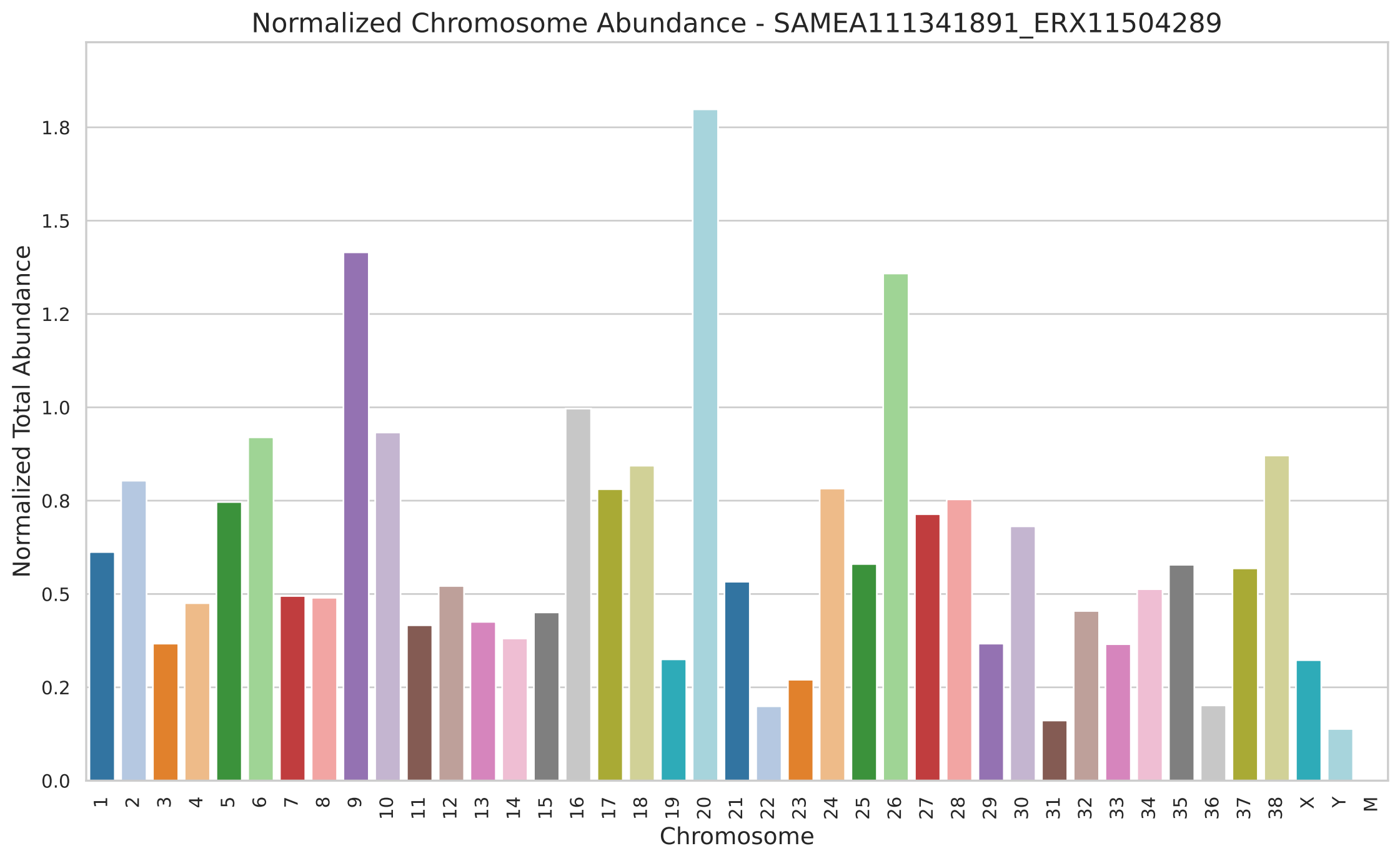

Normalized Chromosome Abundance - SAMEA4673501_ERX3470847
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

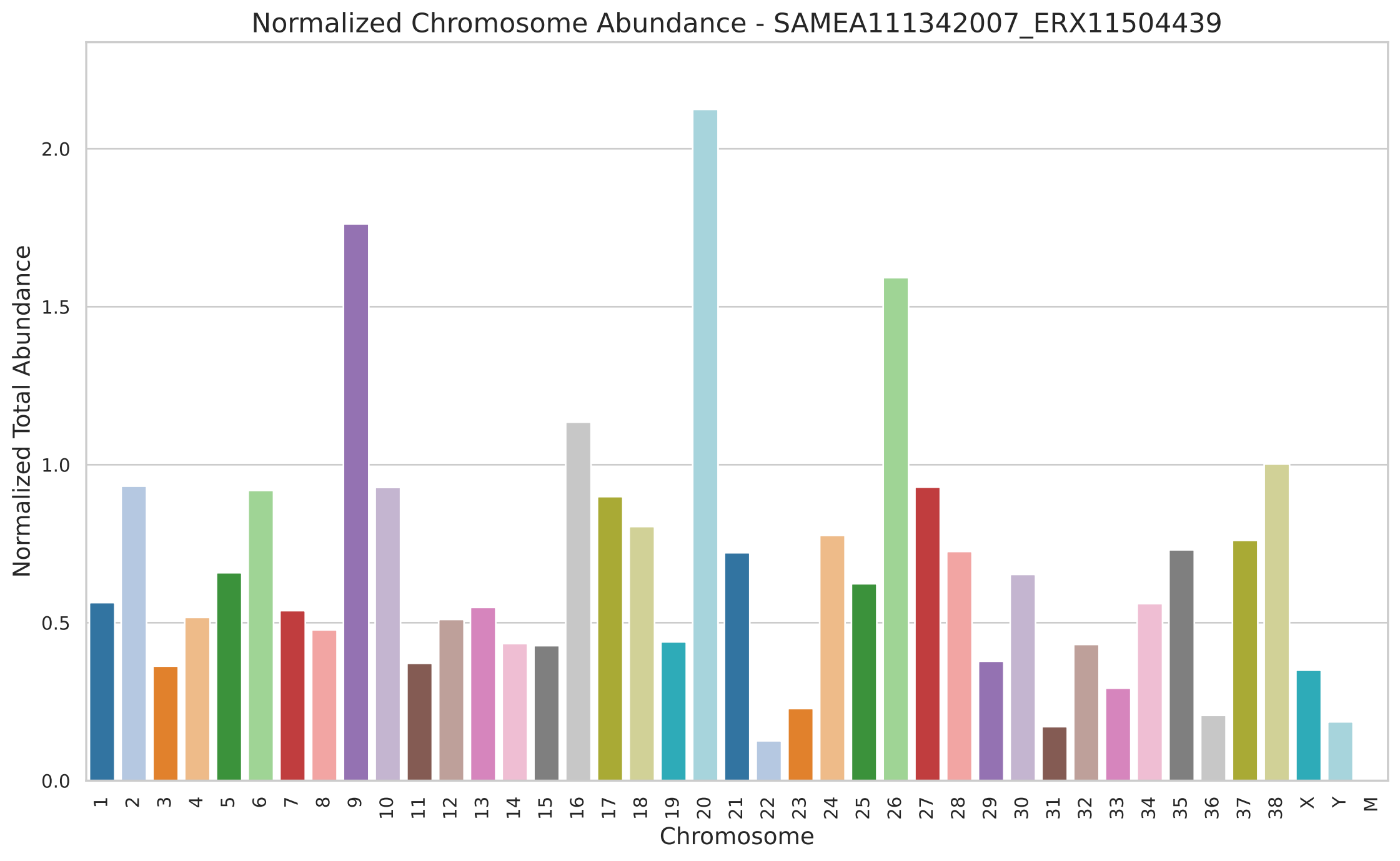

Normalized Chromosome Abundance - SAMEA111342016_ERX11504373
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

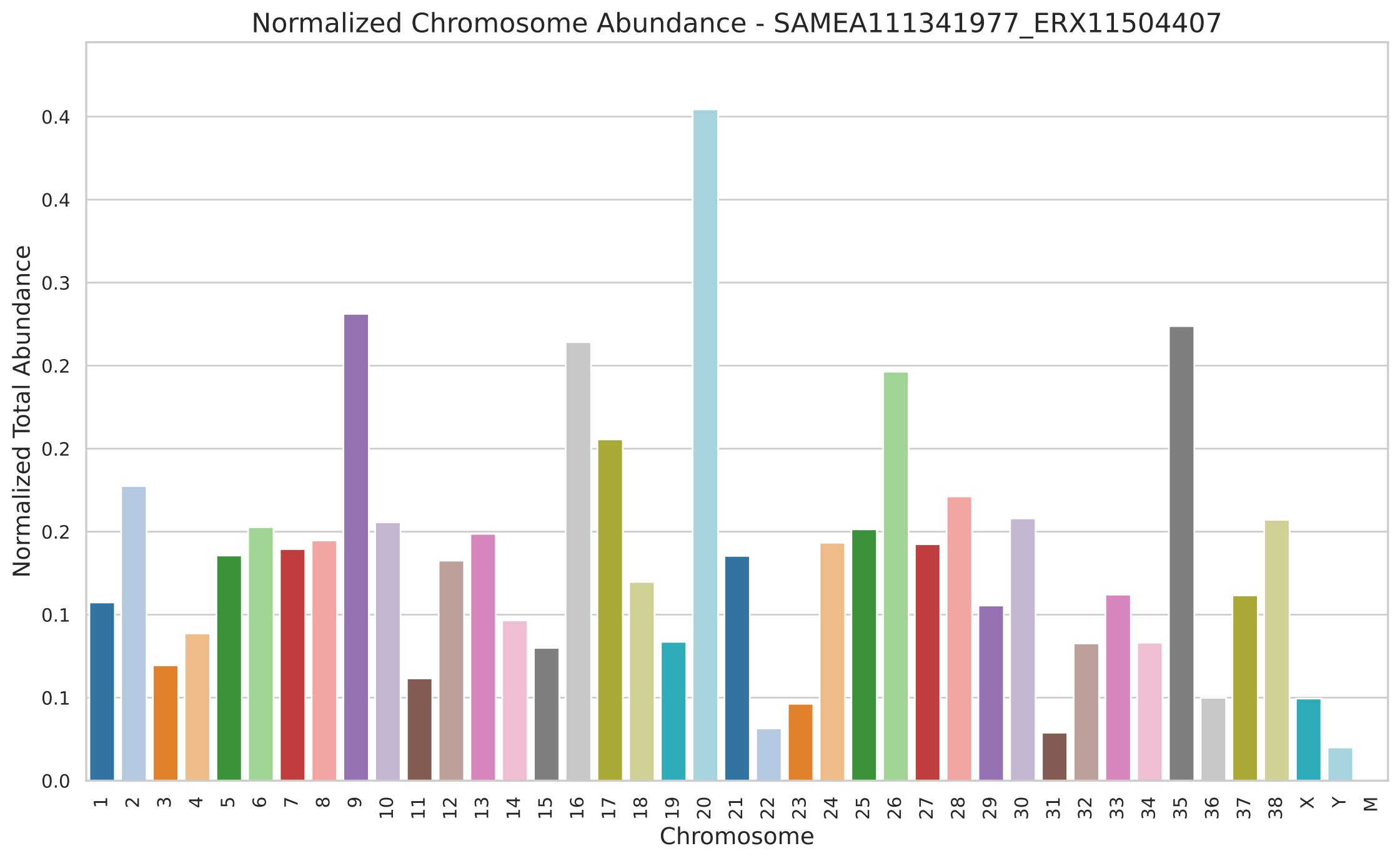

Normalized Chromosome Abundance - SAMEA111341936_ERX11504337
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

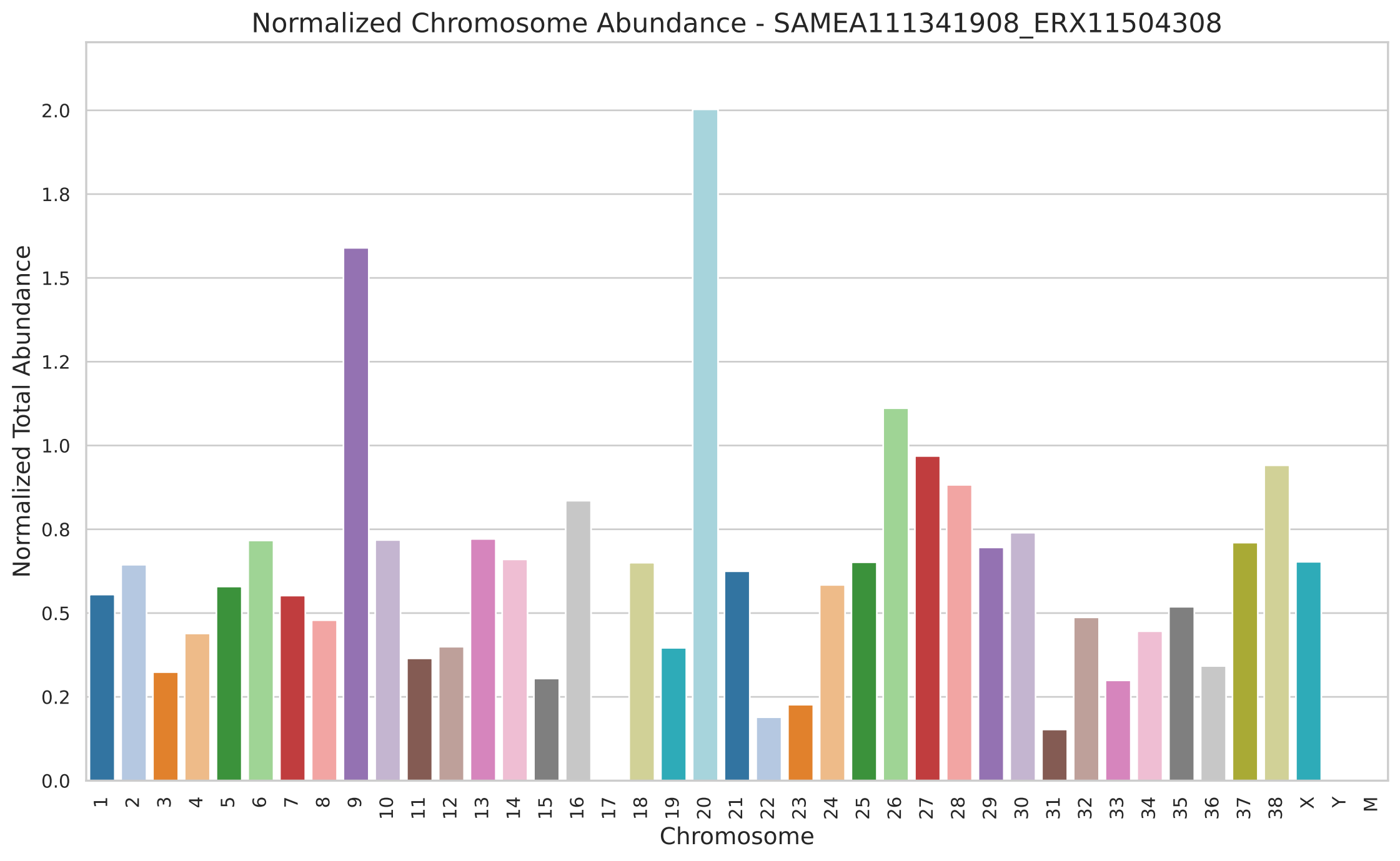

Normalized Chromosome Abundance - SAMEA111341969_ERX11504400
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

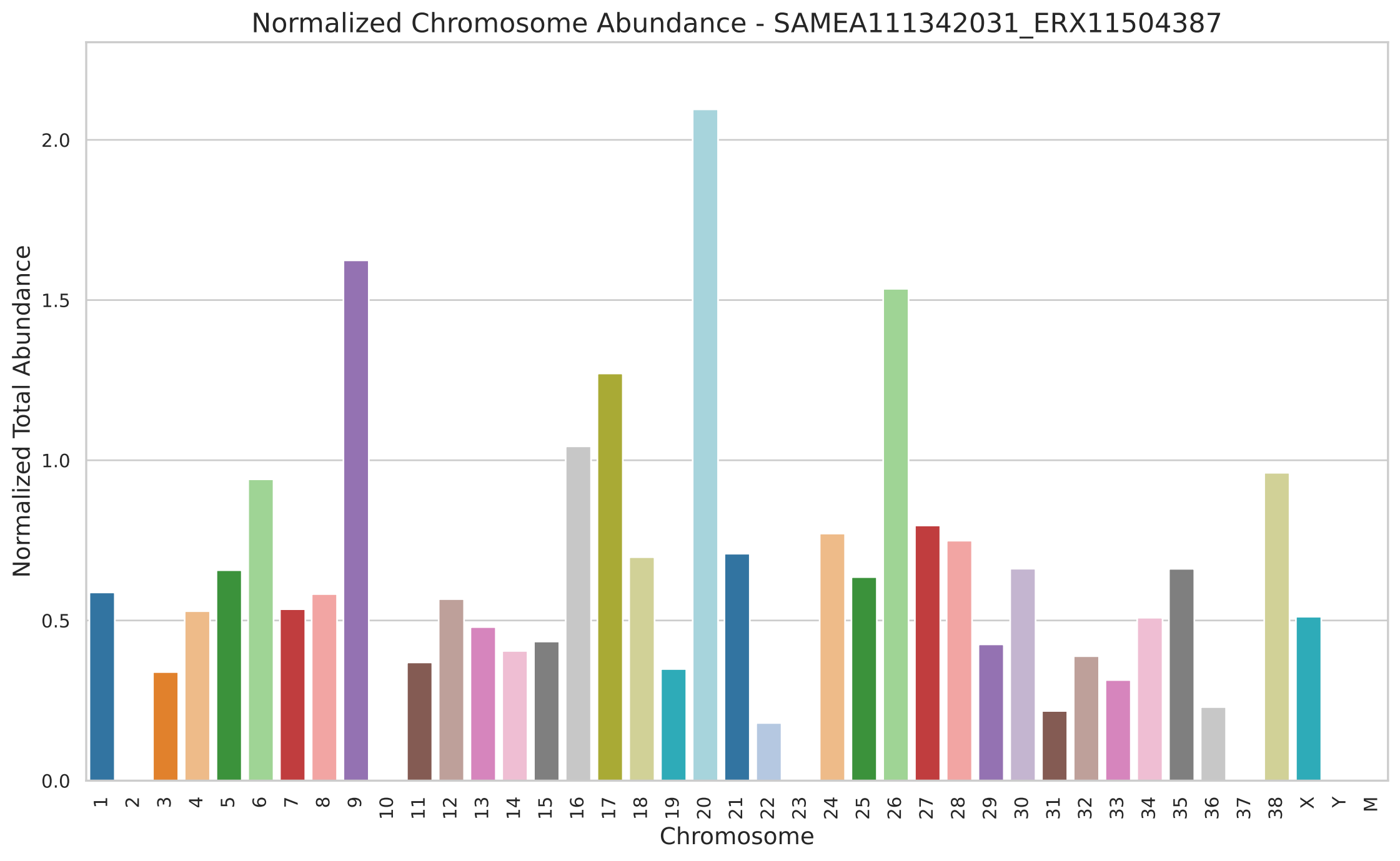

Normalized Chromosome Abundance - SAMEA4673503_ERX3470849
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

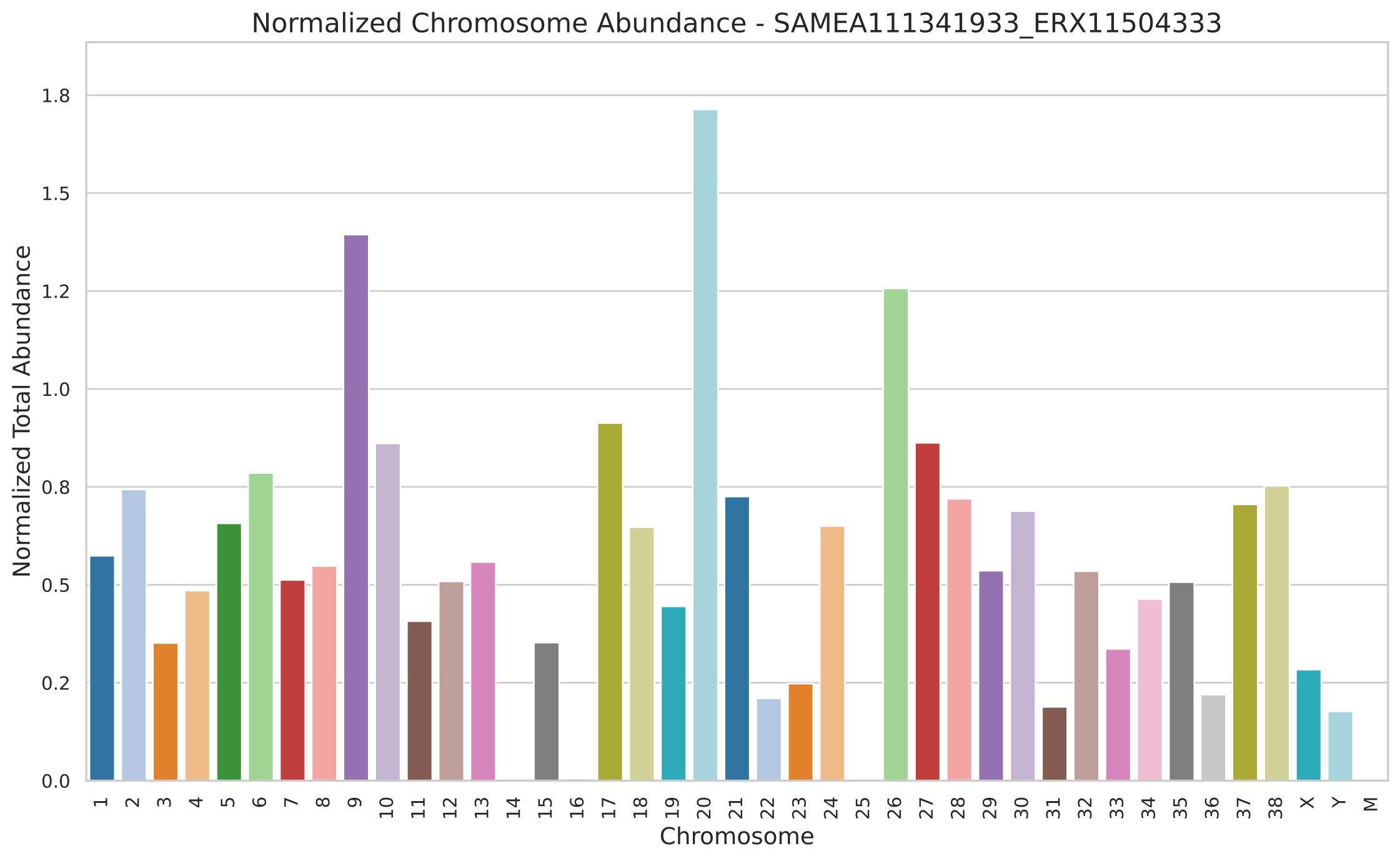

Normalized Chromosome Abundance - SAMEA111341891_ERX11504289
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

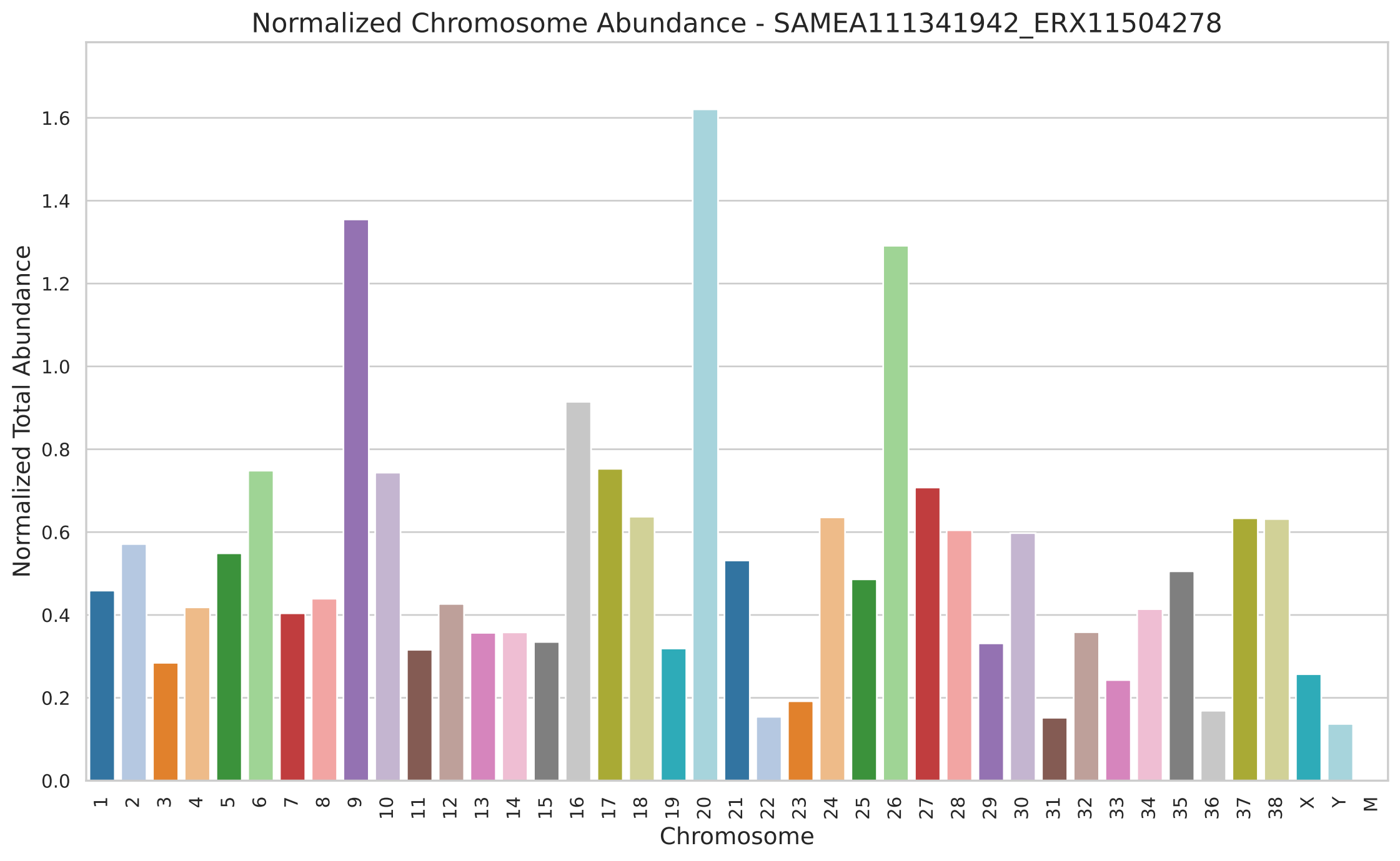

Normalized Chromosome Abundance - SAMEA111342007_ERX11504439
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

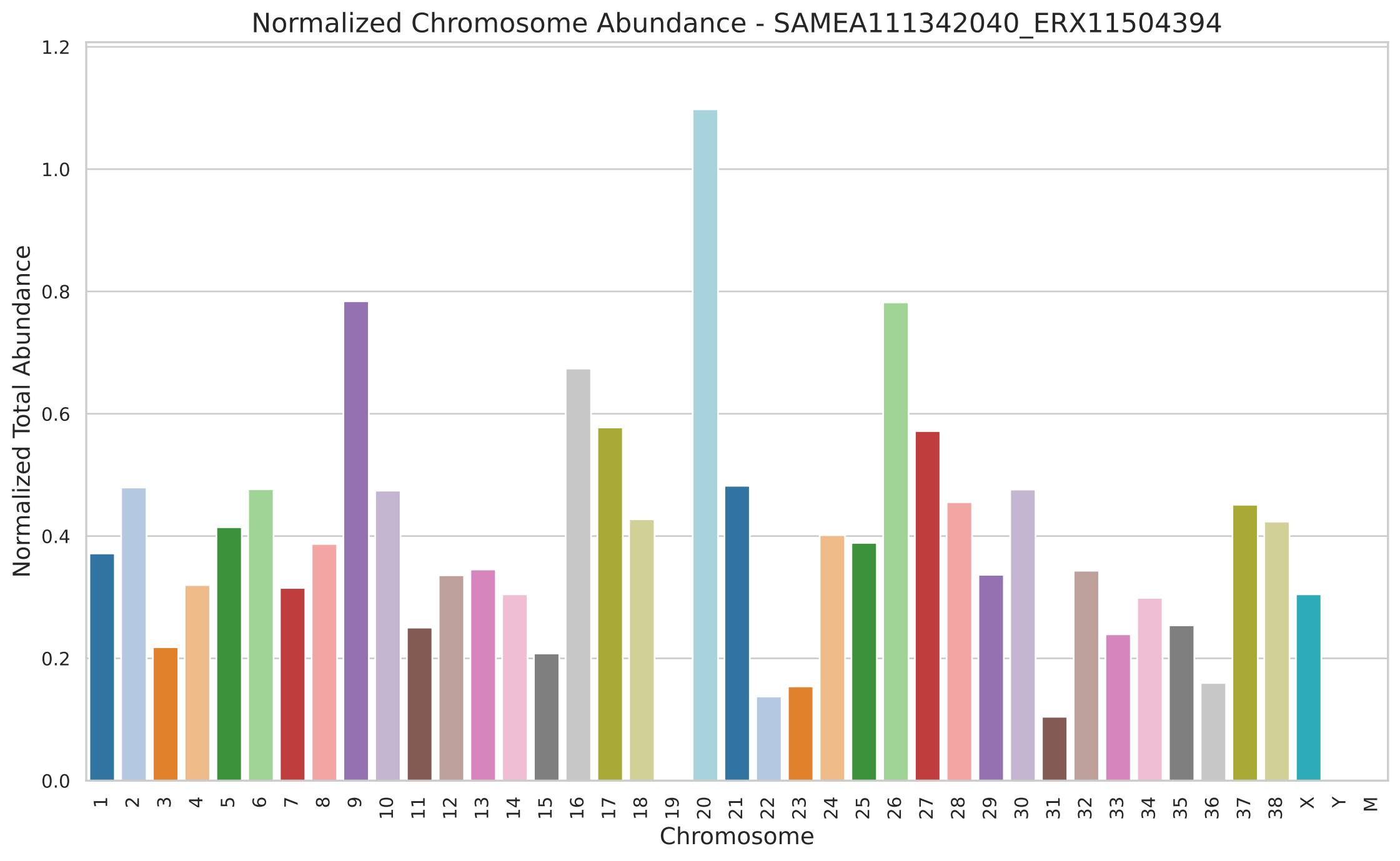

Normalized Chromosome Abundance - SAMEA111341977_ERX11504407
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
0.4
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

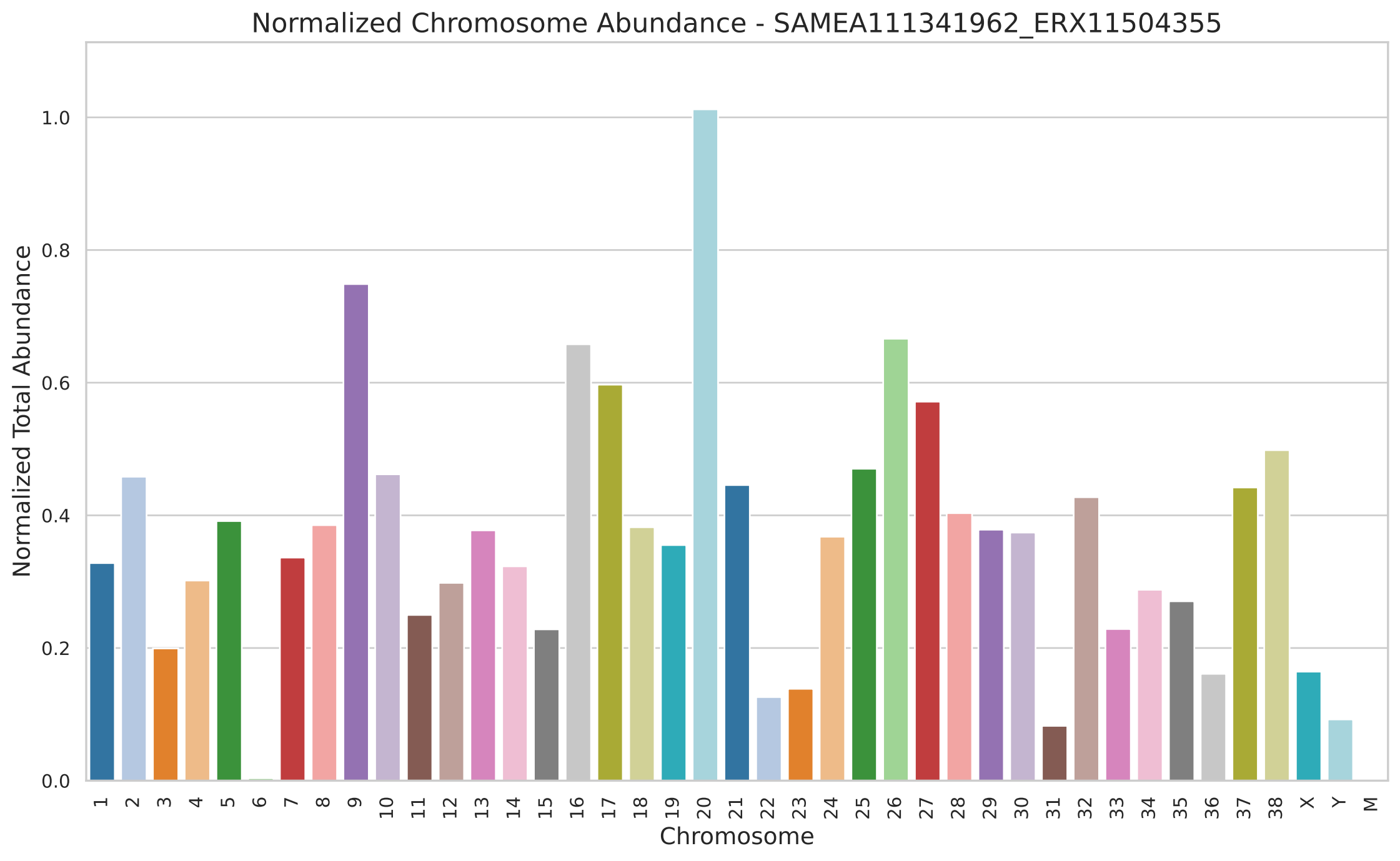

Normalized Chromosome Abundance - SAMEA111341908_ERX11504308
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

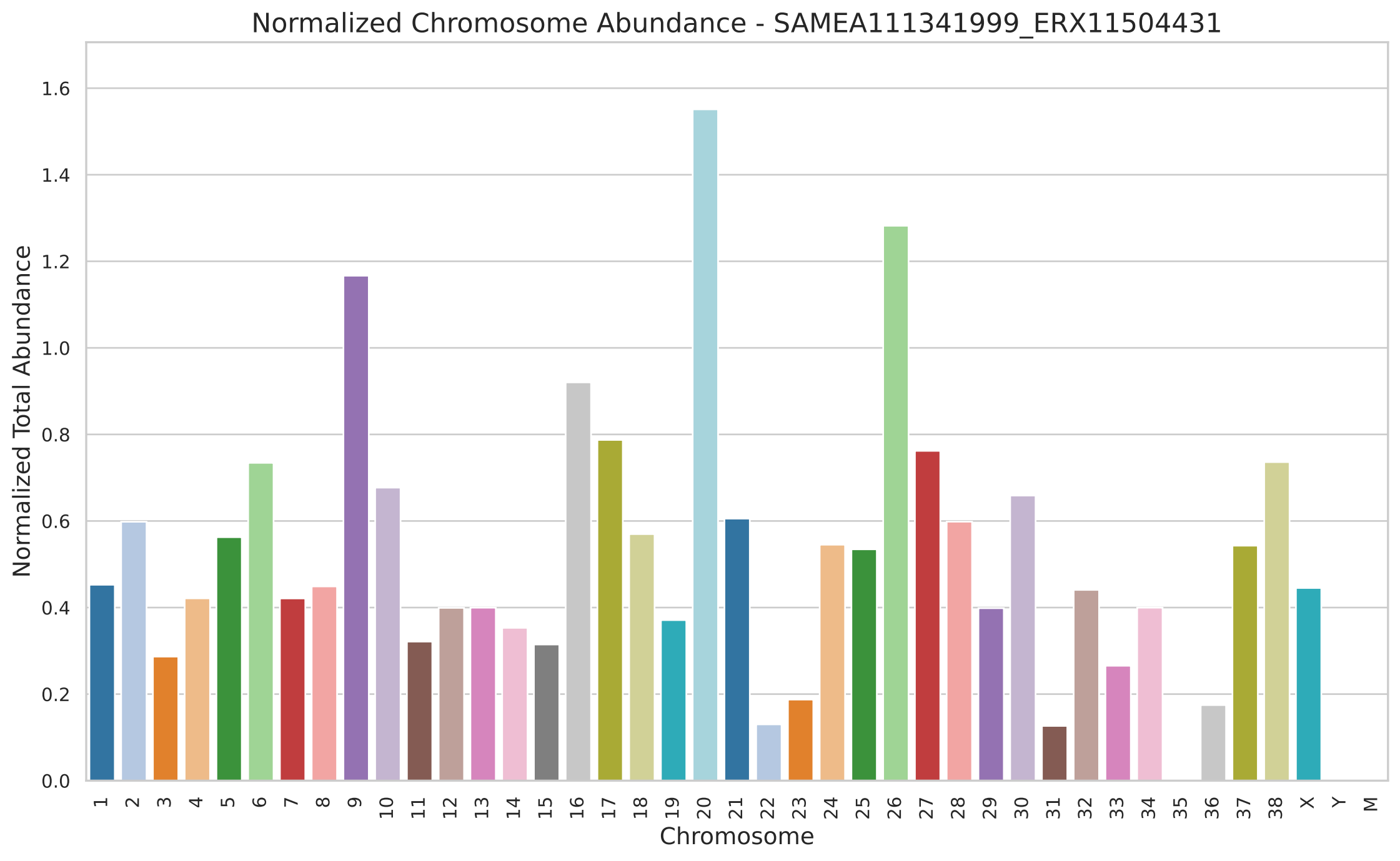

Normalized Chromosome Abundance - SAMEA111342031_ERX11504387
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

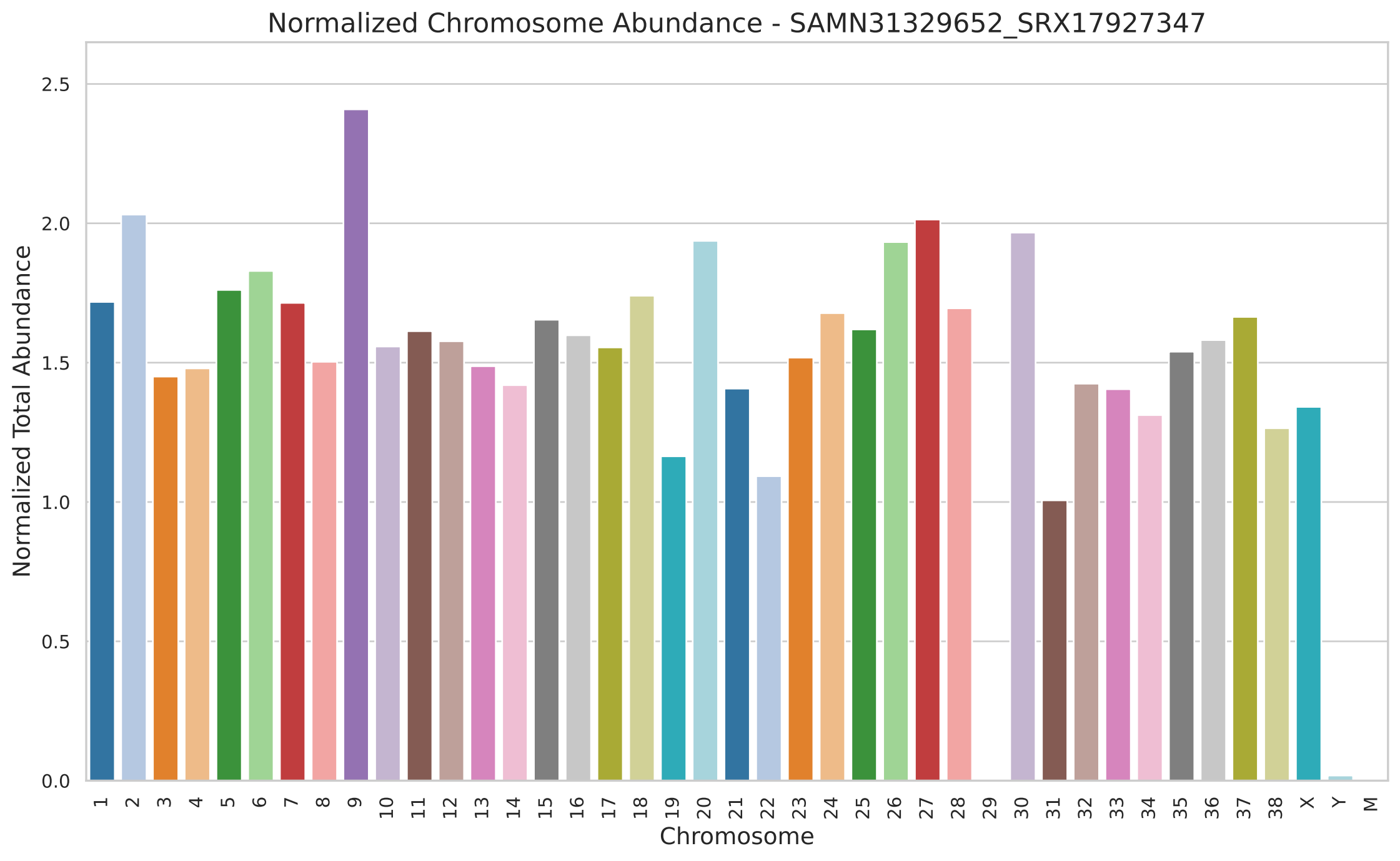

Normalized Chromosome Abundance - SAMEA111341933_ERX11504333
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

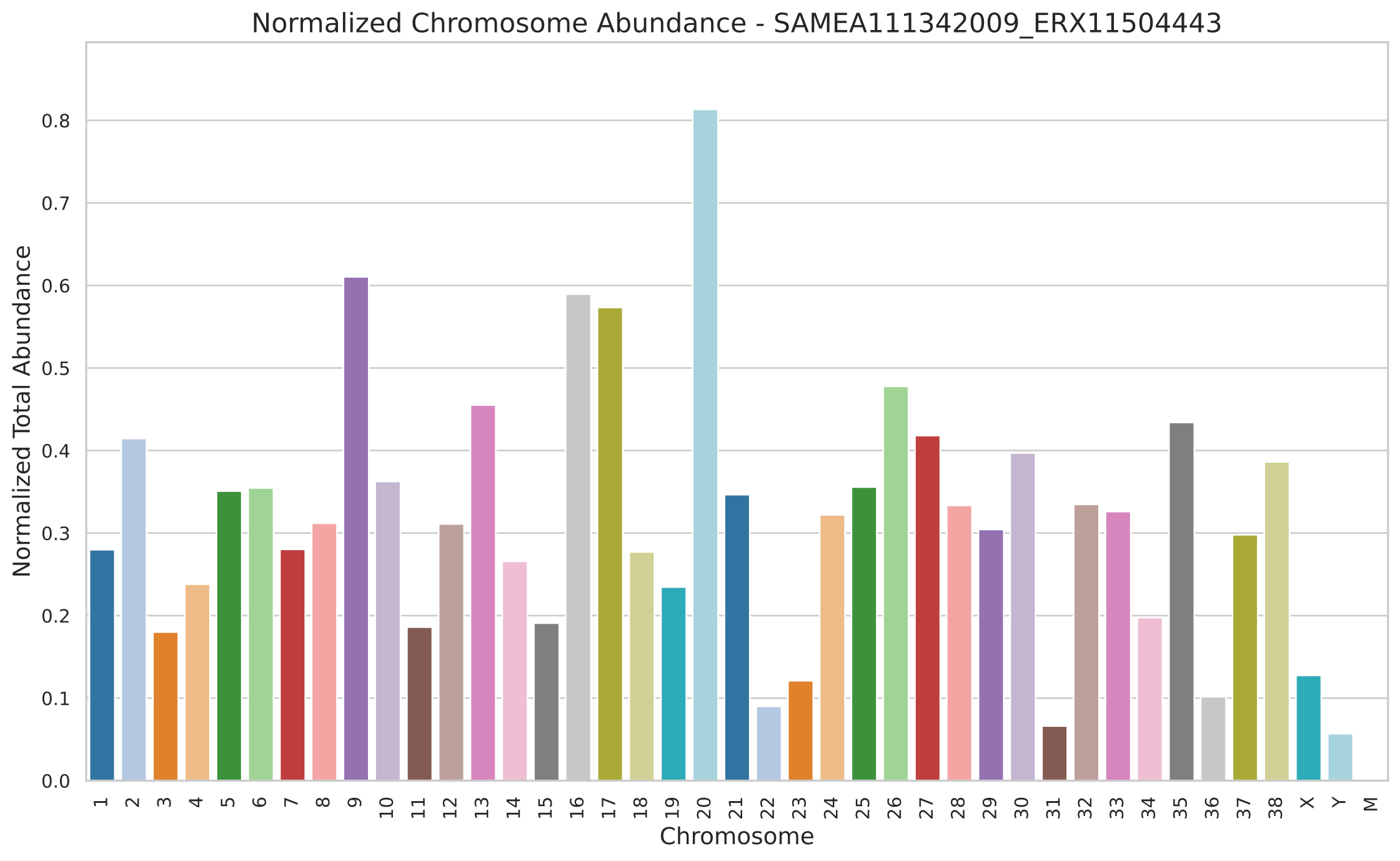

Normalized Chromosome Abundance - SAMEA111341942_ERX11504278
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

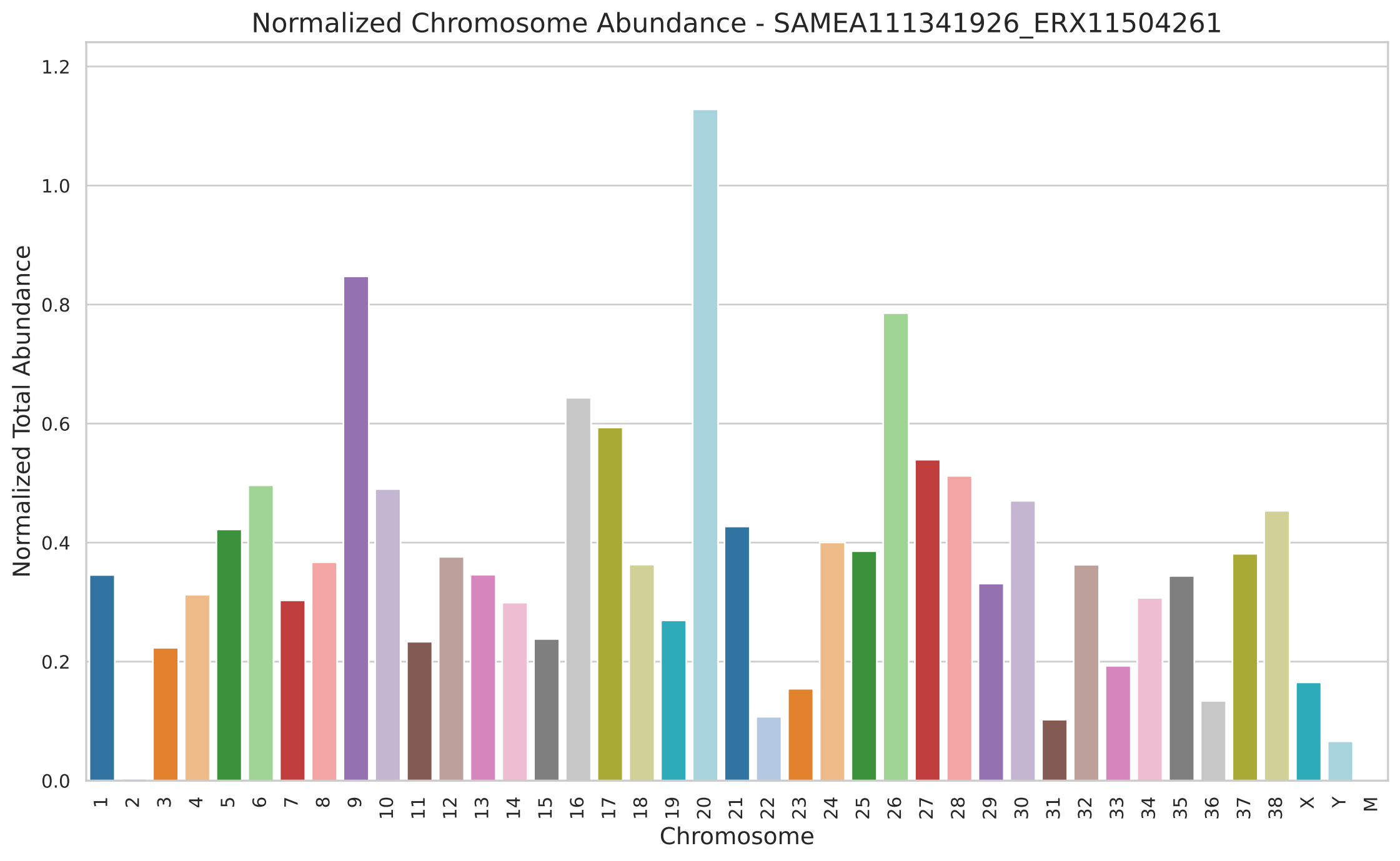

Normalized Chromosome Abundance - SAMEA111342040_ERX11504394
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

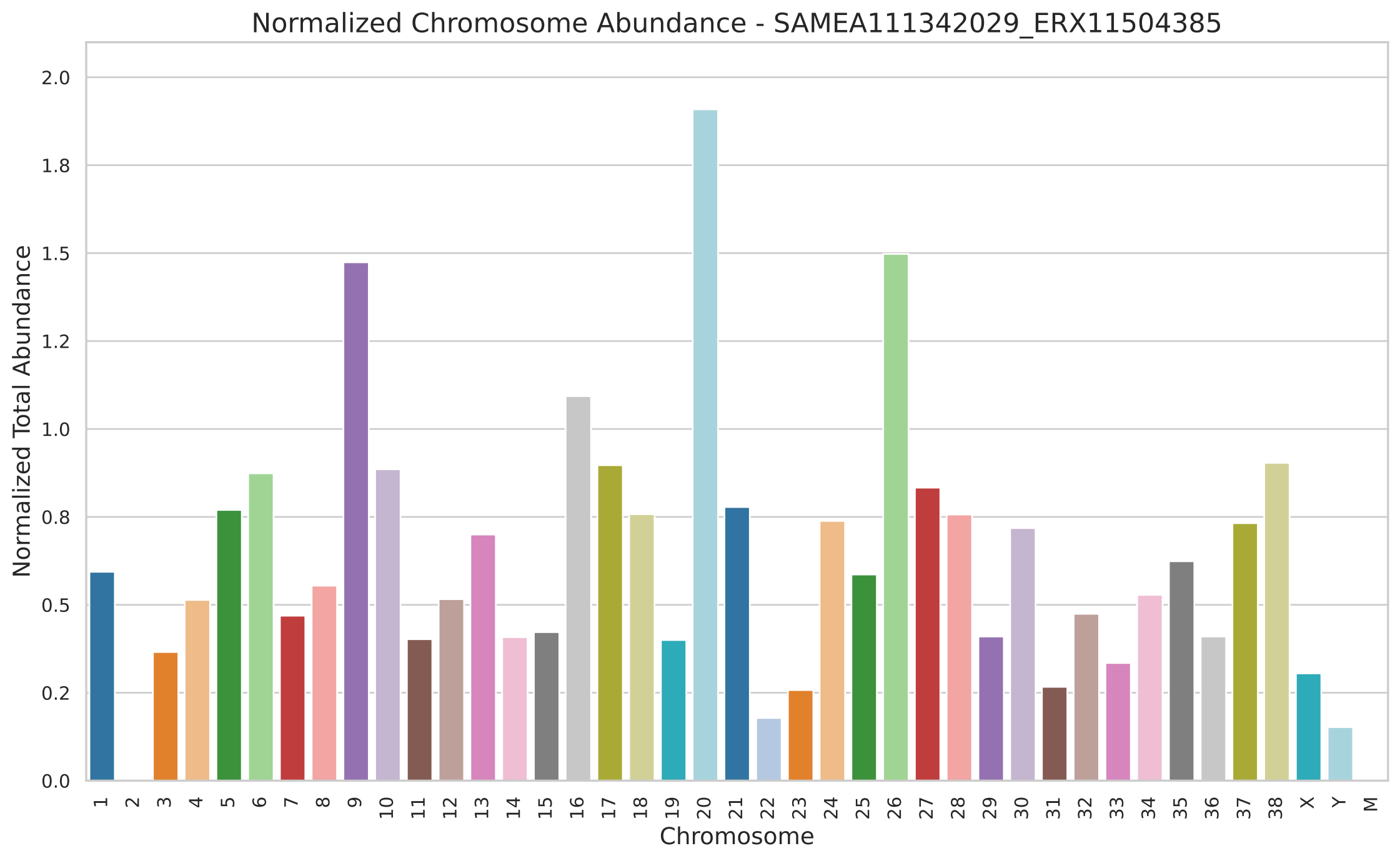

Normalized Chromosome Abundance - SAMEA111341962_ERX11504355
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

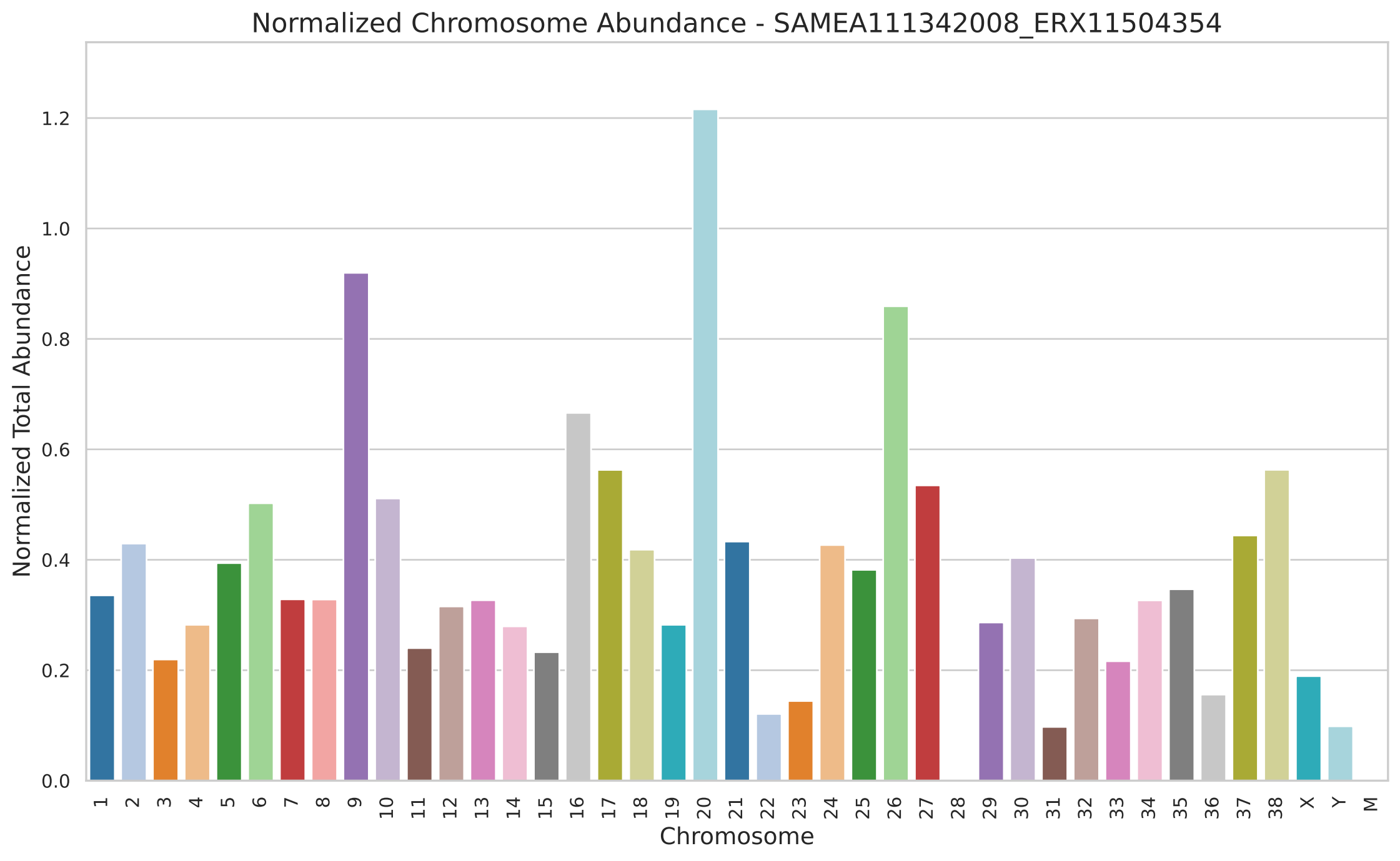

Normalized Chromosome Abundance - SAMEA111341999_ERX11504431
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

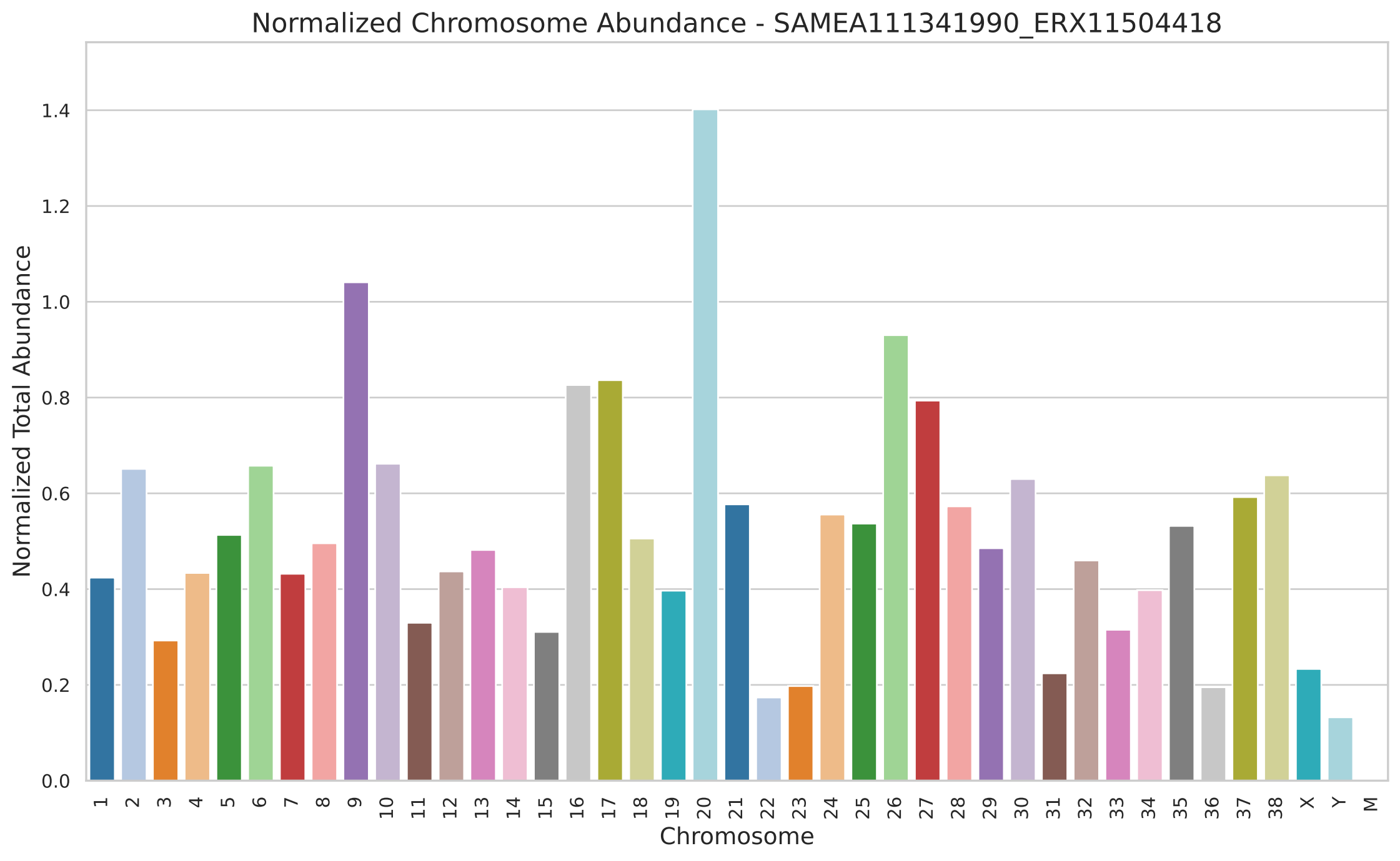

Normalized Chromosome Abundance - SAMN31329652_SRX17927347
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

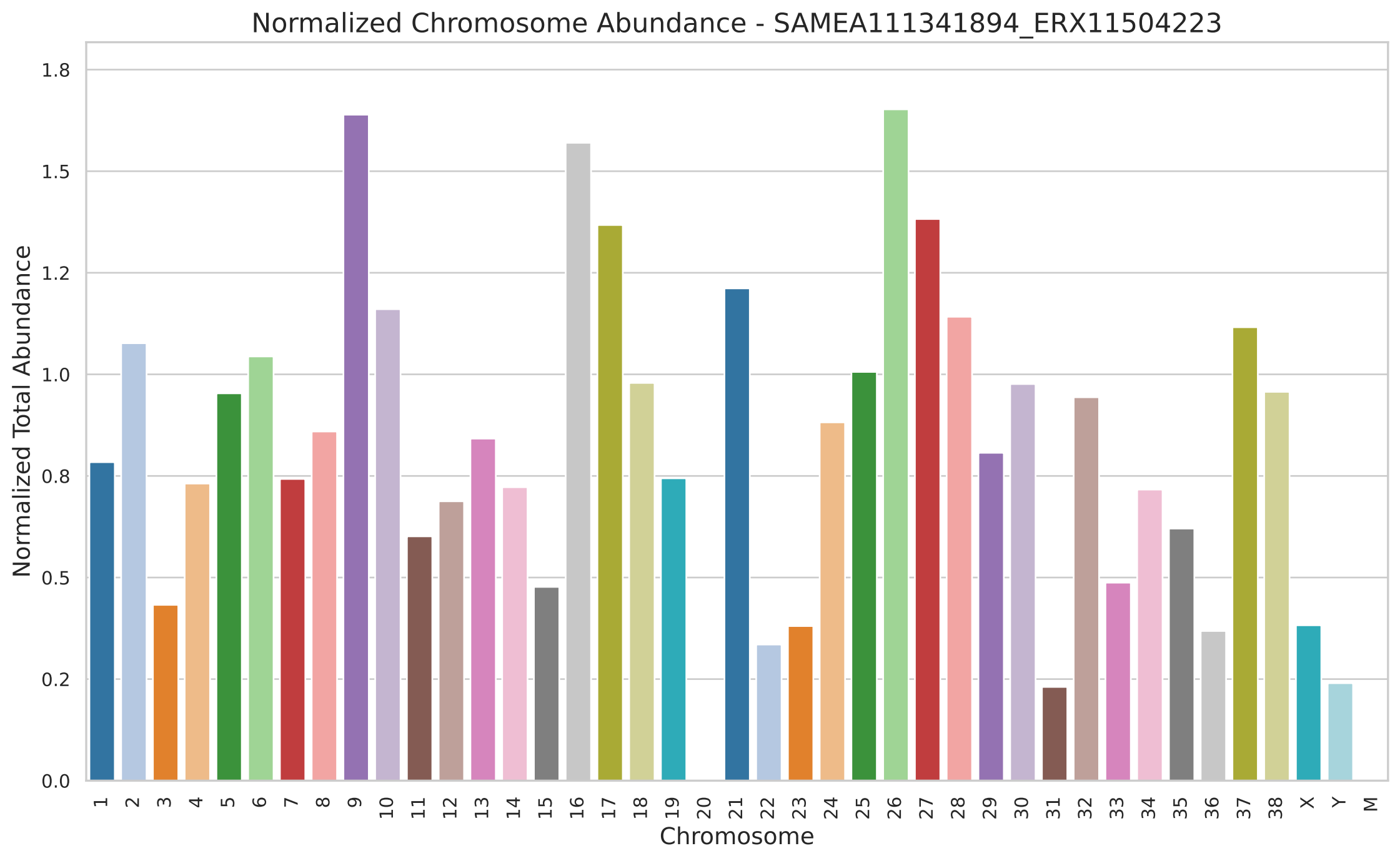

Normalized Chromosome Abundance - SAMEA111342009_ERX11504443
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

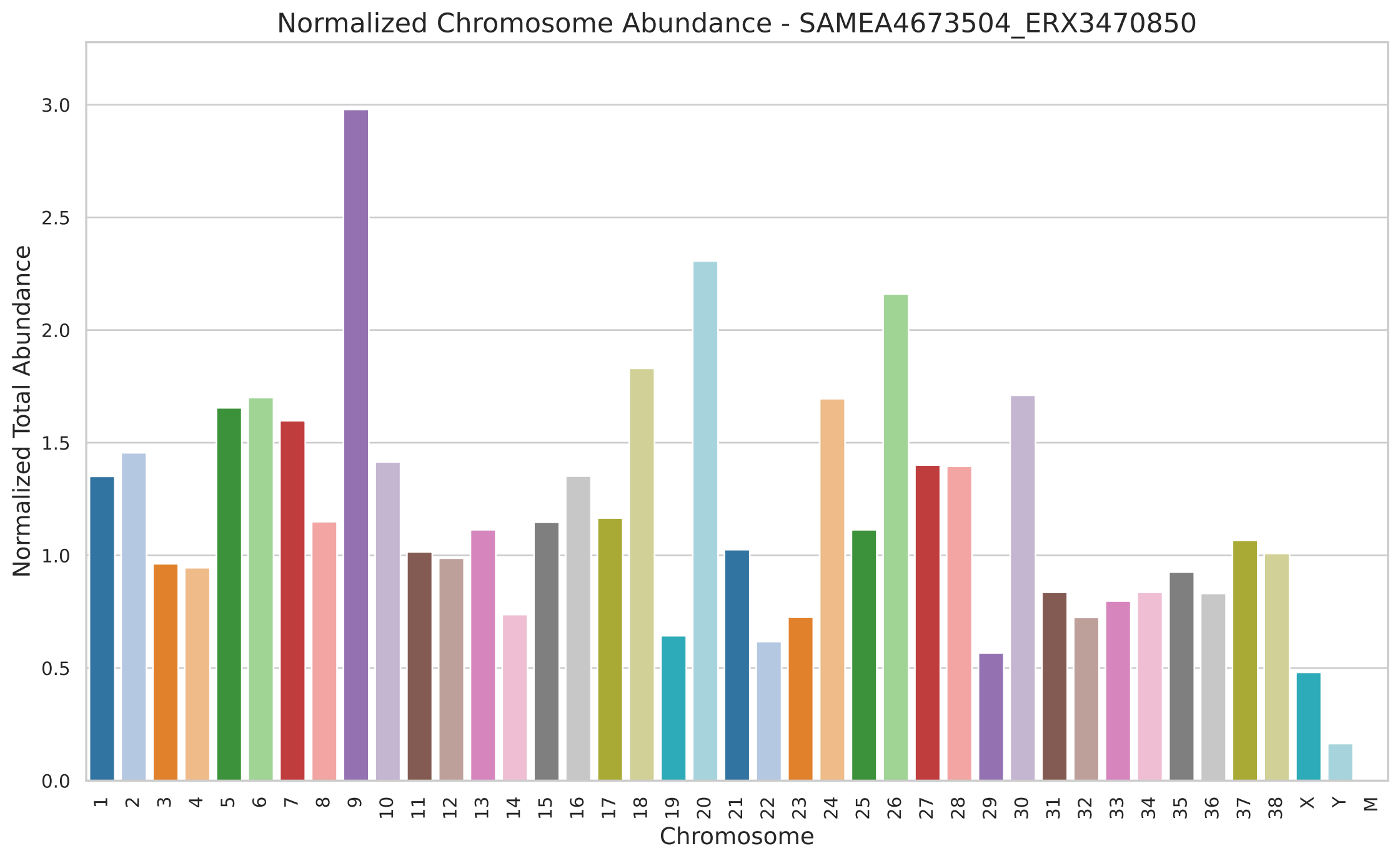

Normalized Chromosome Abundance - SAMEA111341926_ERX11504261
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

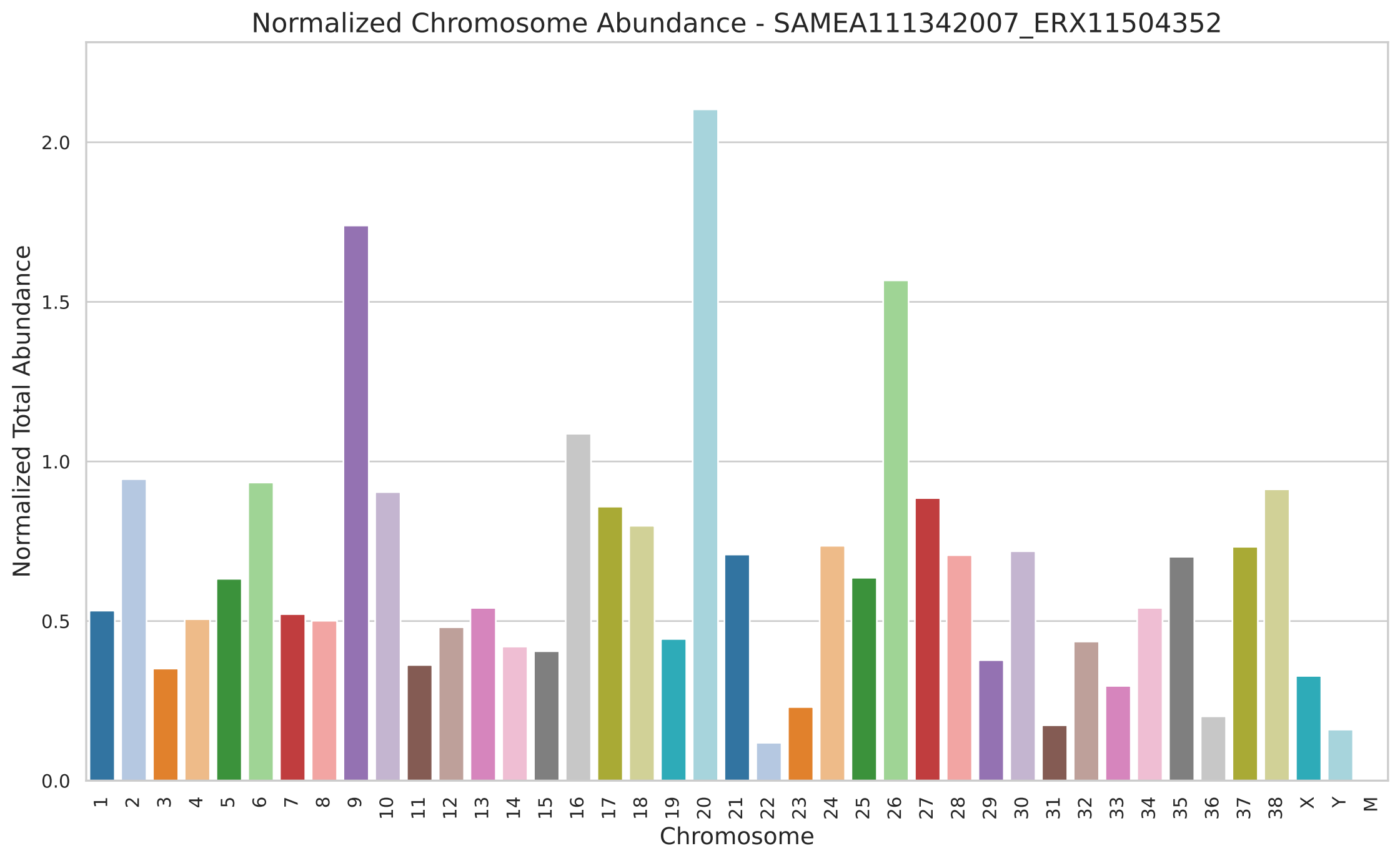

Normalized Chromosome Abundance - SAMEA111342029_ERX11504385
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

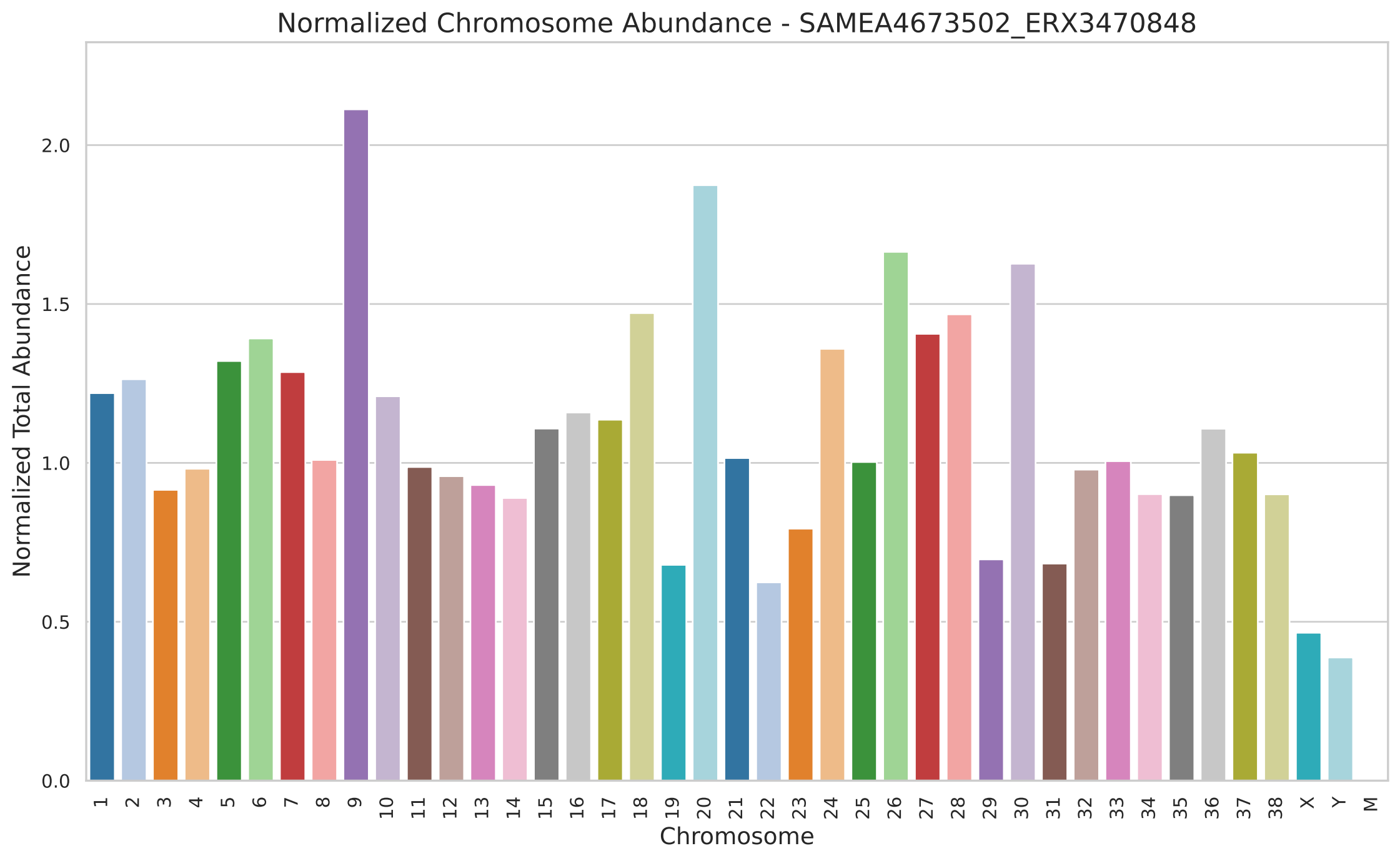

Normalized Chromosome Abundance - SAMEA111342008_ERX11504354
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

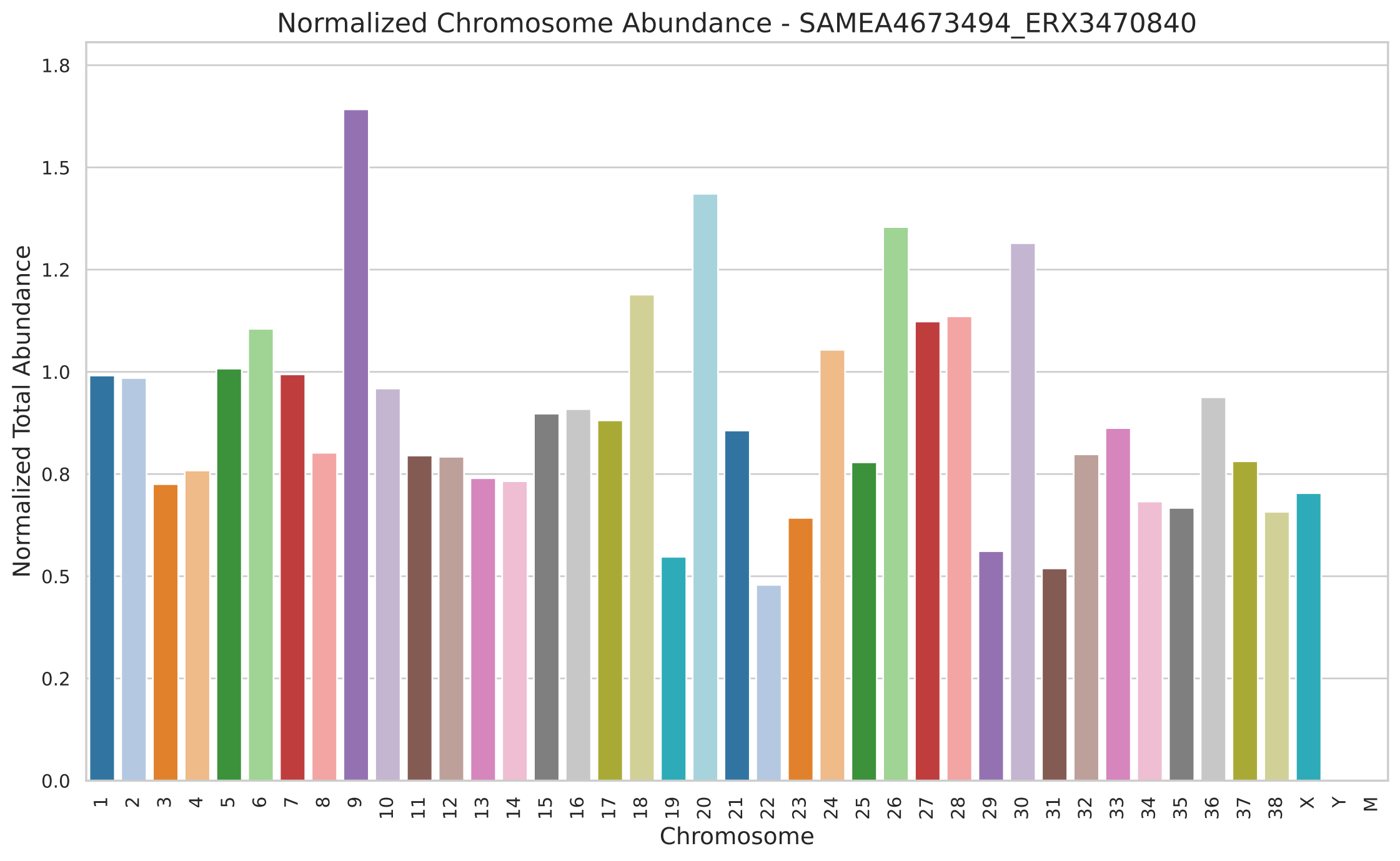

Normalized Chromosome Abundance - SAMEA111341990_ERX11504418
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

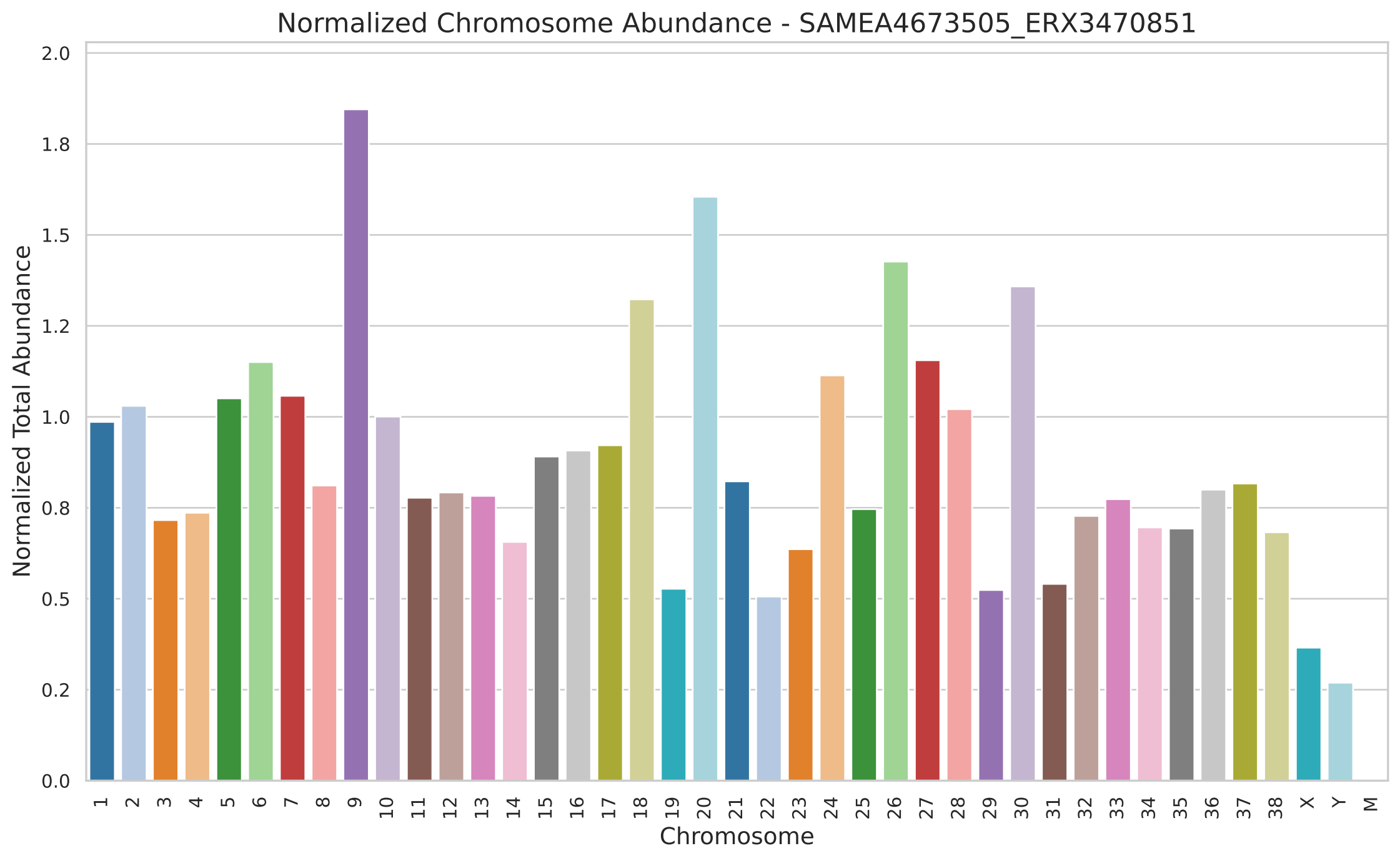

Normalized Chromosome Abundance - SAMEA111341894_ERX11504223
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

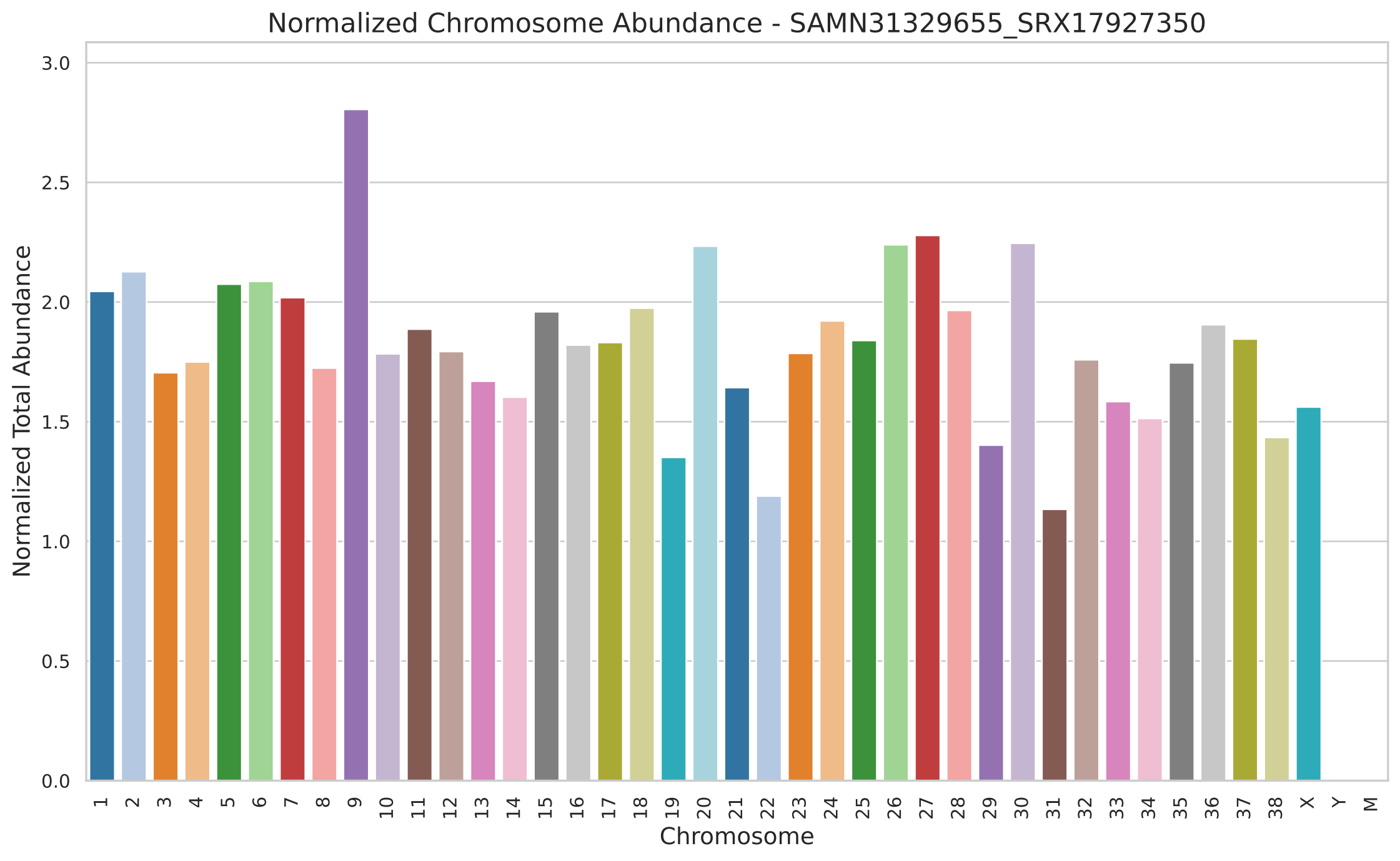

Normalized Chromosome Abundance - SAMEA4673504_ERX3470850
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

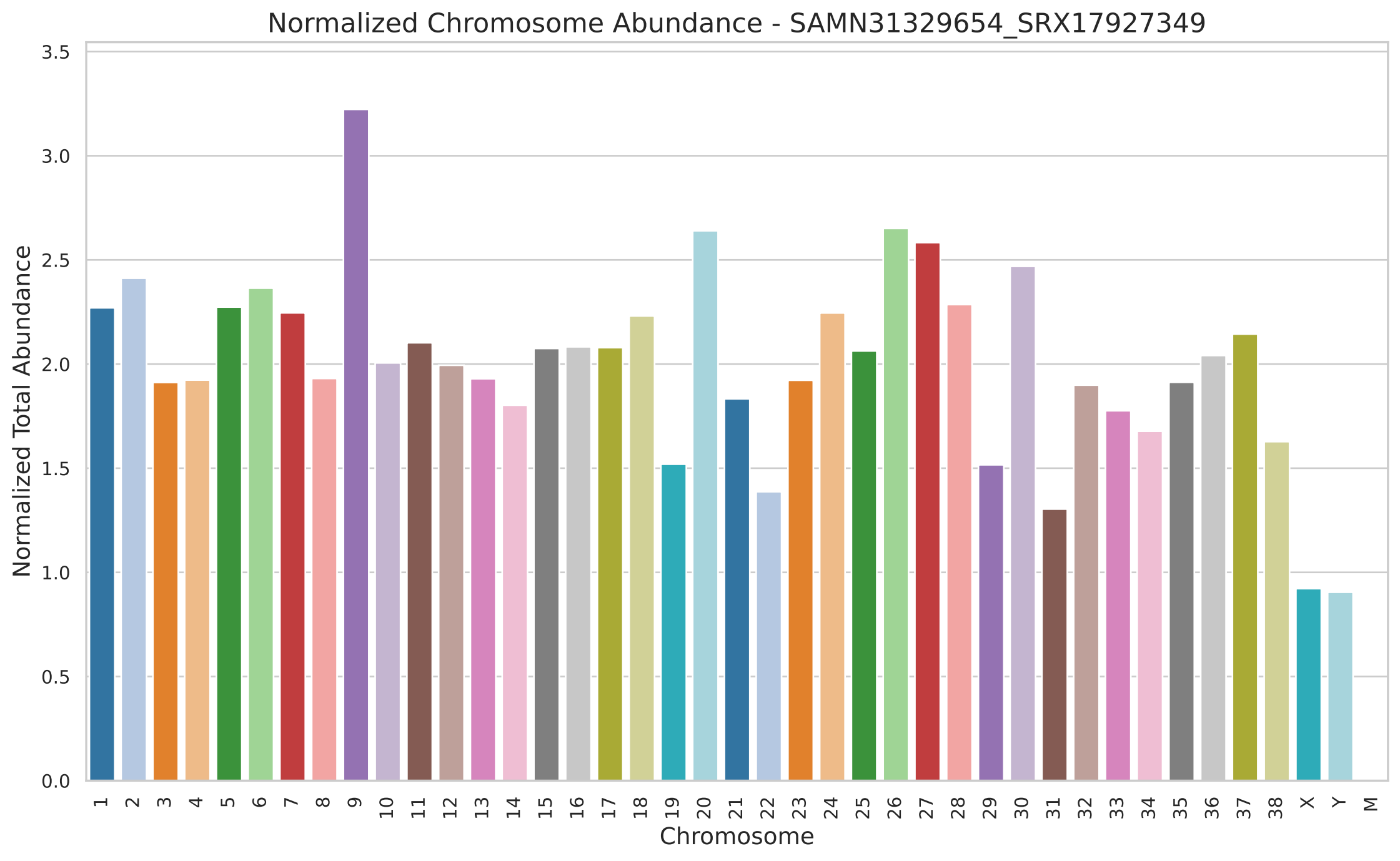

Normalized Chromosome Abundance - SAMEA111342007_ERX11504352
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

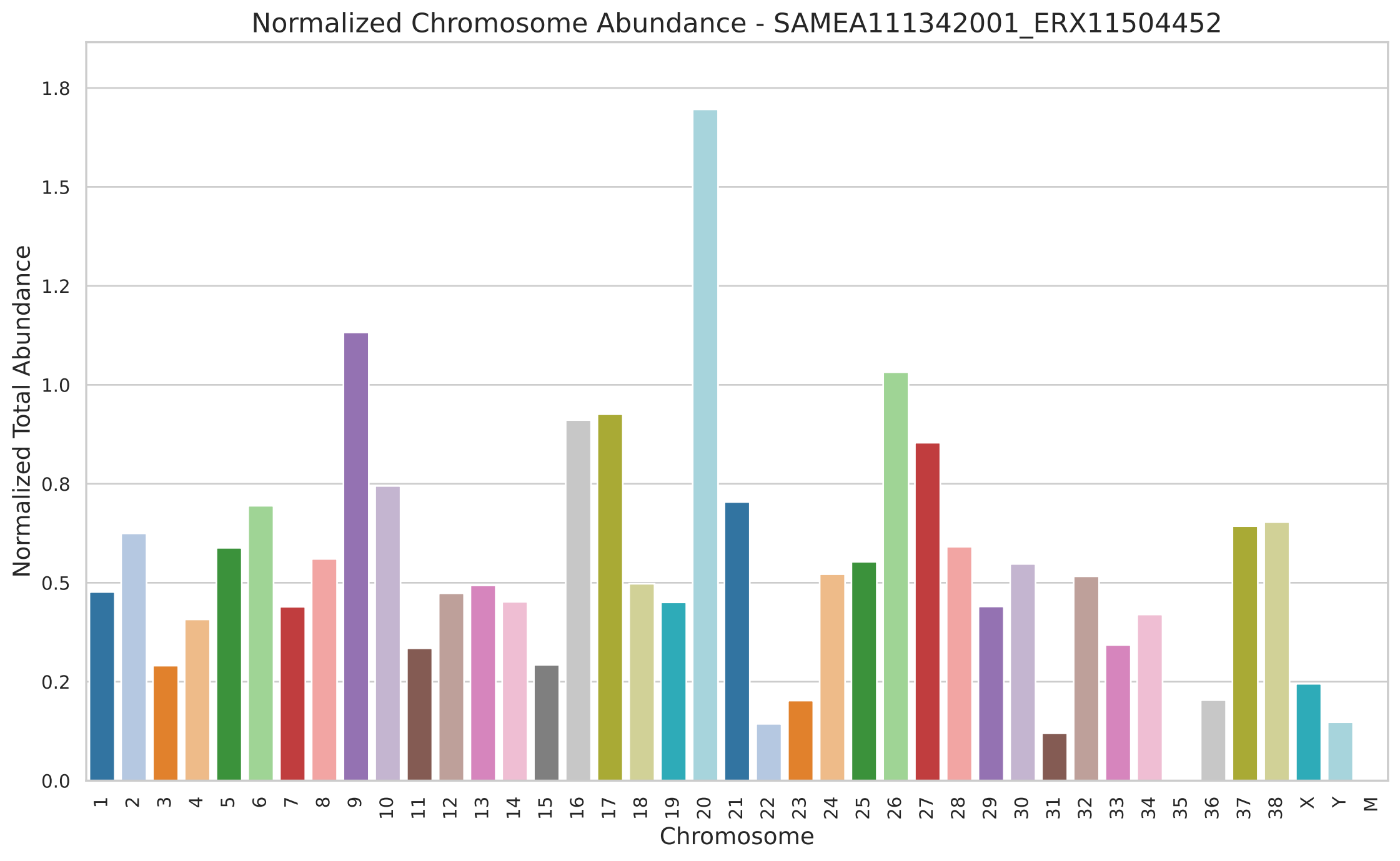

Normalized Chromosome Abundance - SAMEA4673502_ERX3470848
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

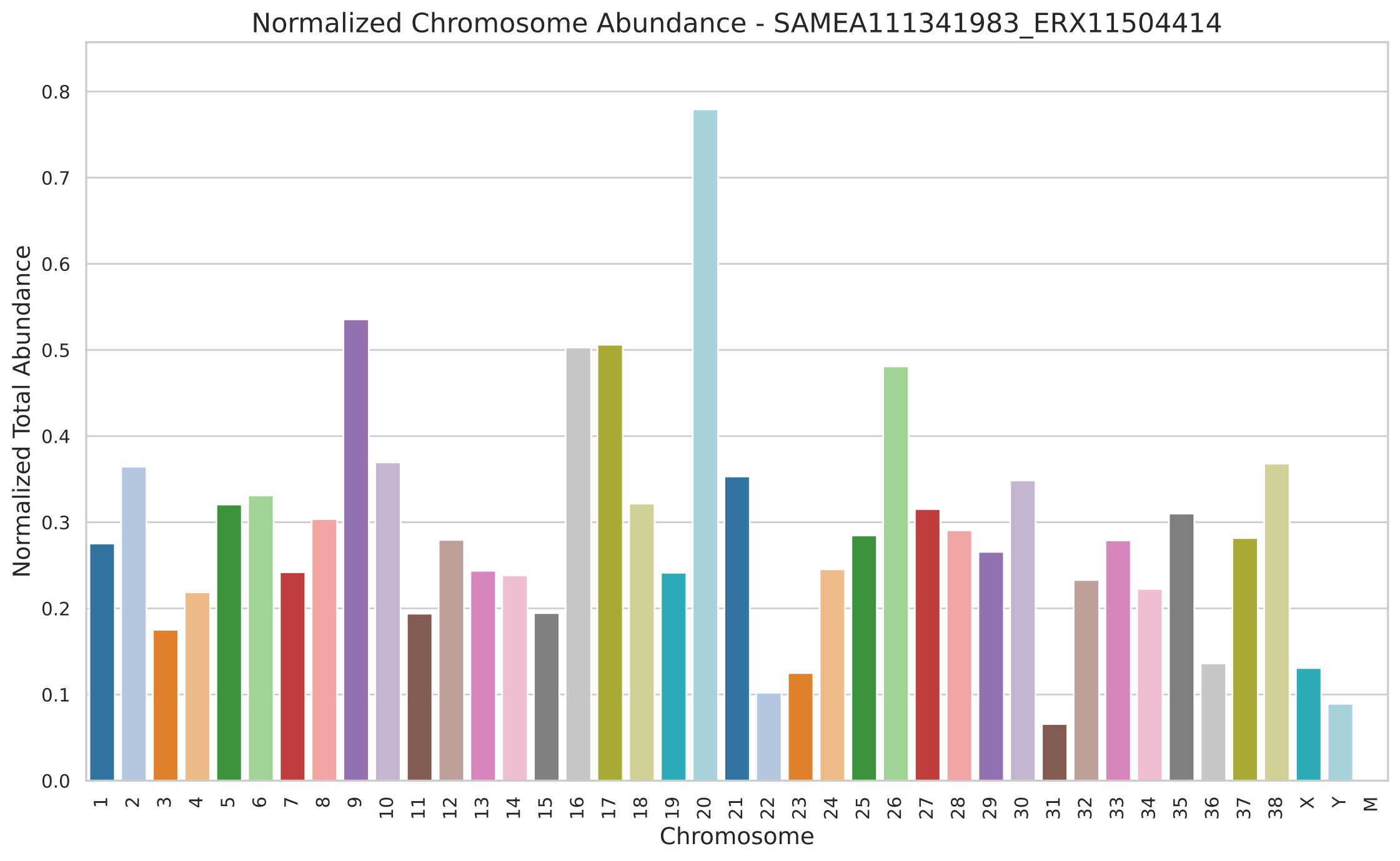

Normalized Chromosome Abundance - SAMEA4673494_ERX3470840
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

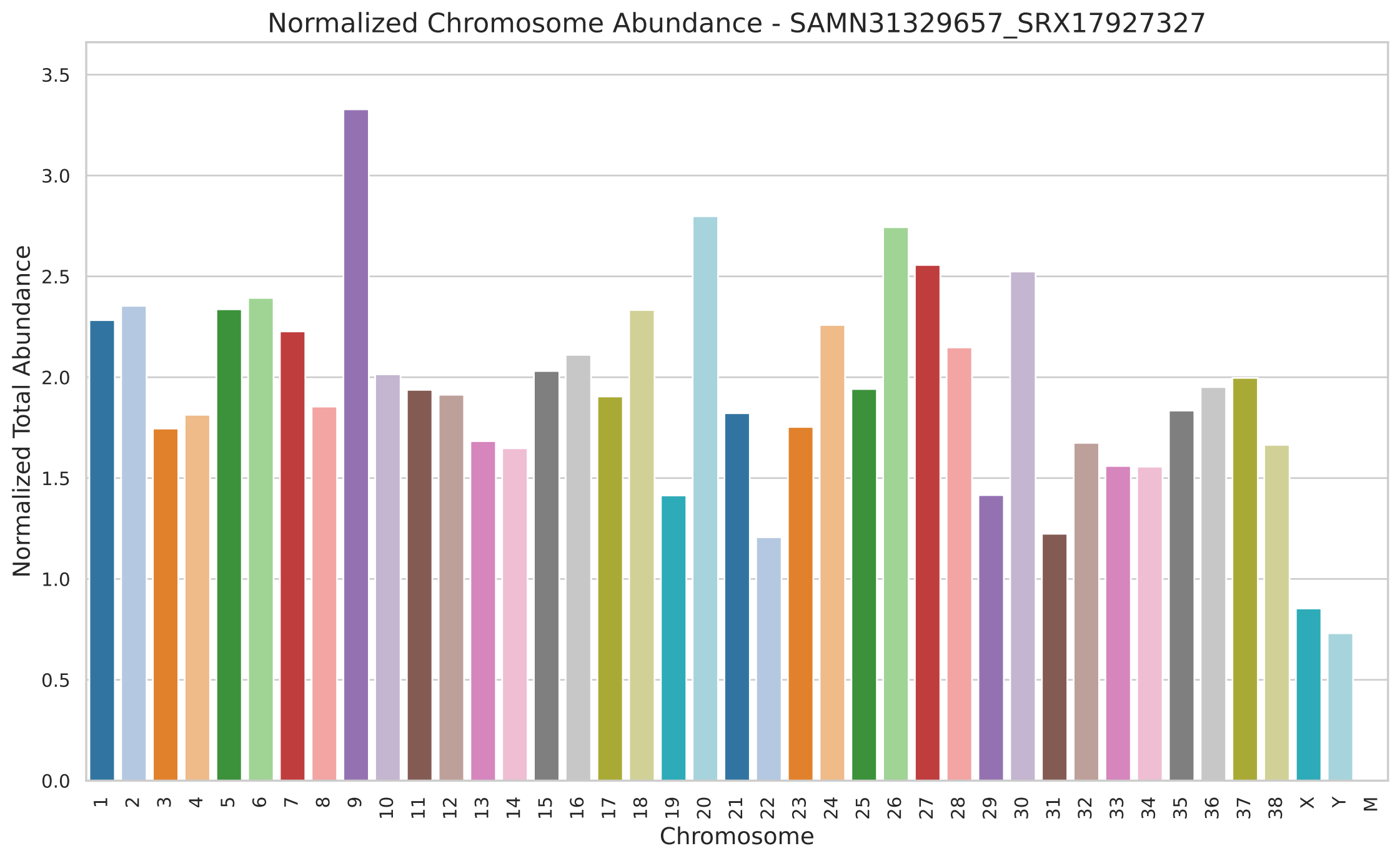

Normalized Chromosome Abundance - SAMEA4673505_ERX3470851
Normalized Total Abundance
2.0
1.8
1.5
1.2
1.0
0.8
0.5
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

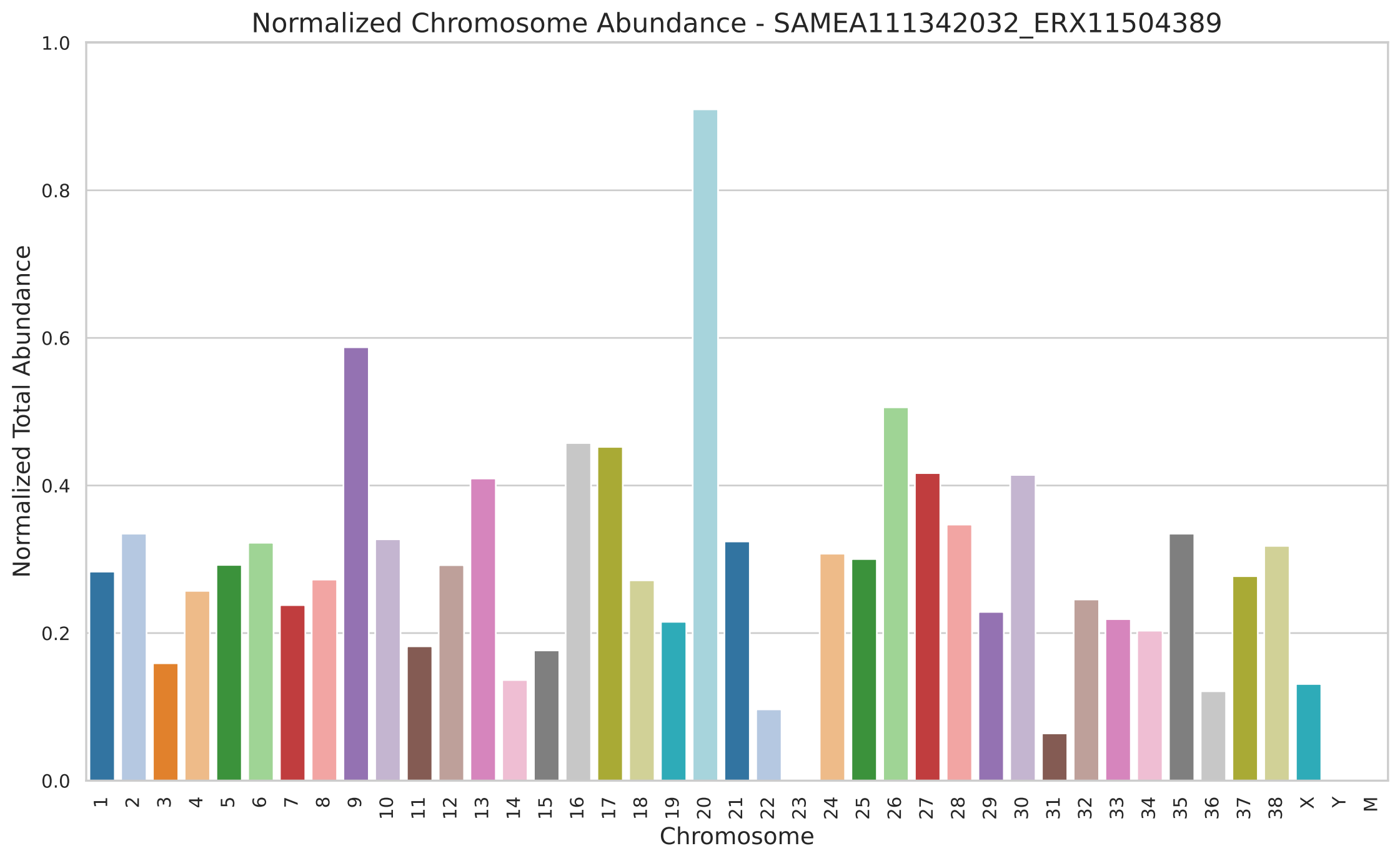

Normalized Chromosome Abundance - SAMN31329655_SRX17927350
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

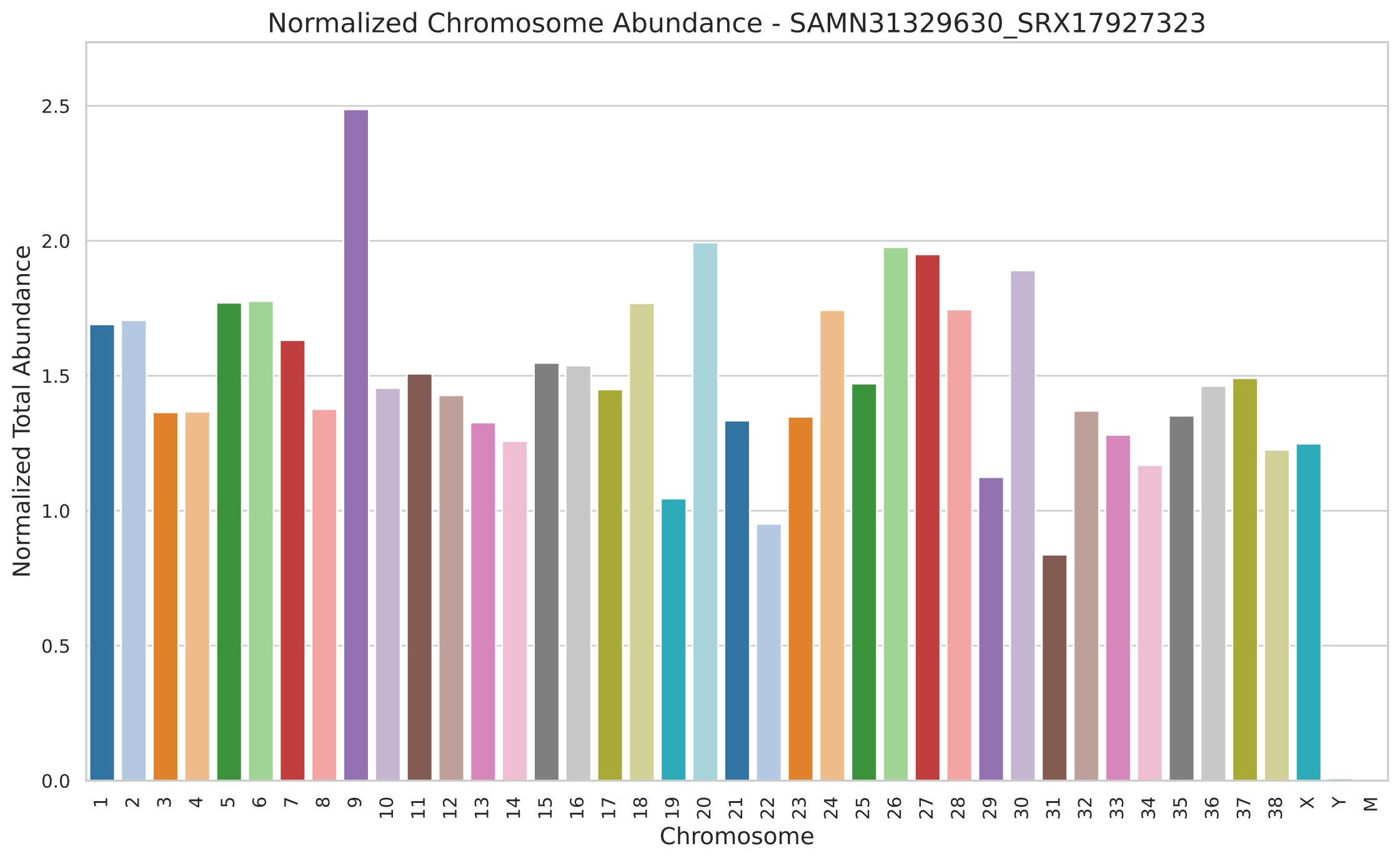

Normalized Chromosome Abundance - SAMN31329654_SRX17927349
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

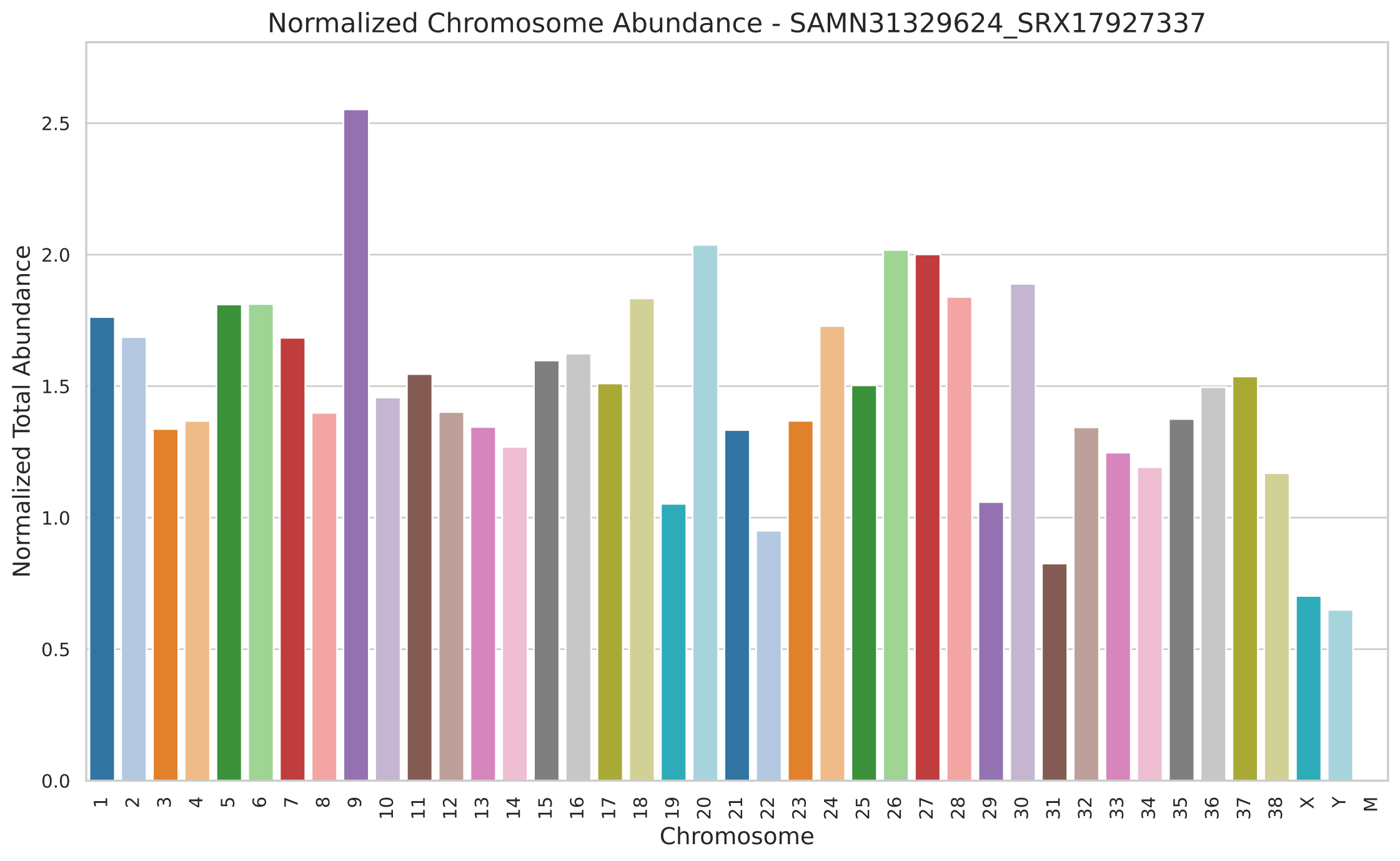

Normalized Chromosome Abundance - SAMEA111342001_ERX11504452
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

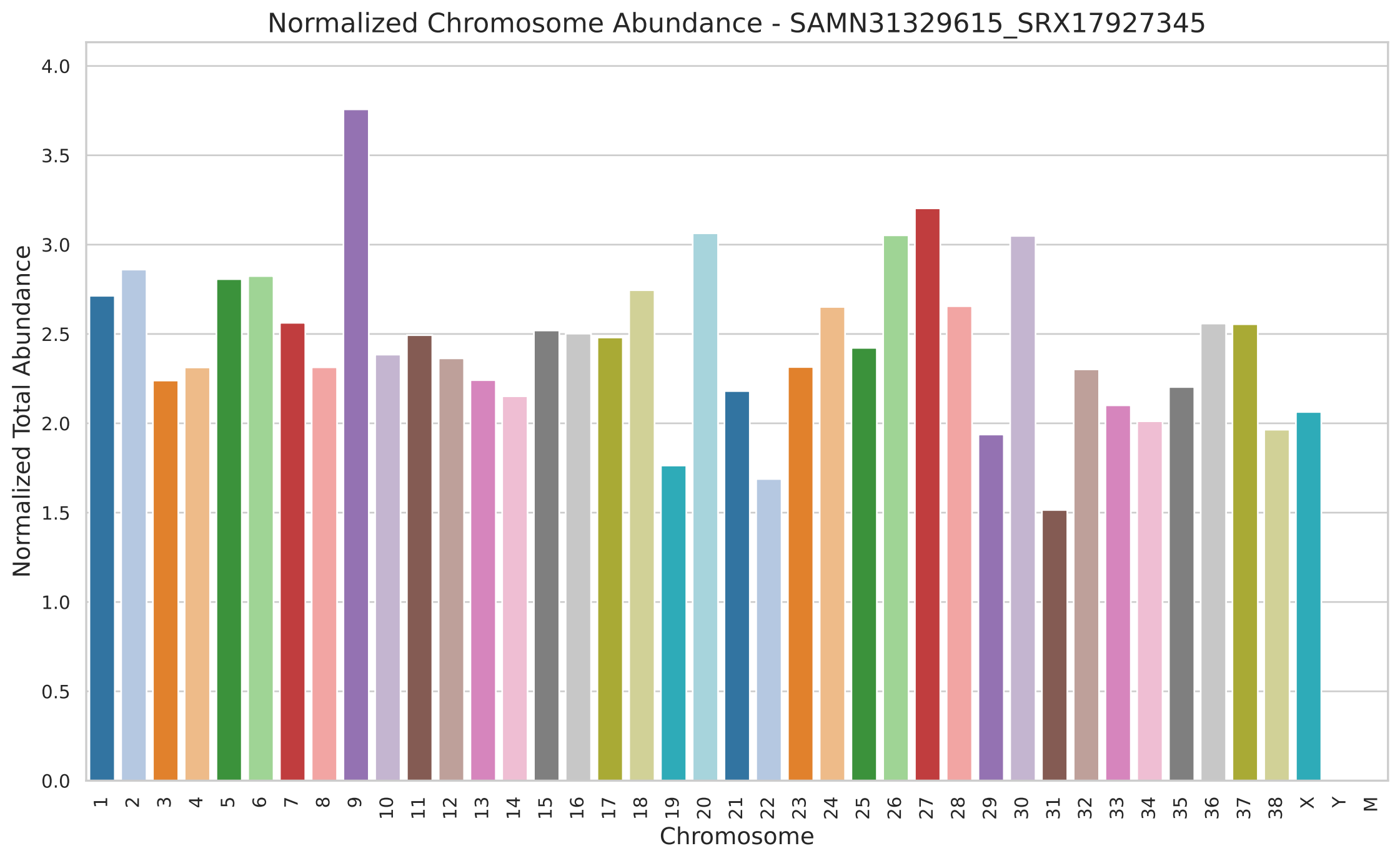

Normalized Chromosome Abundance - SAMEA111341983_ERX11504414
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

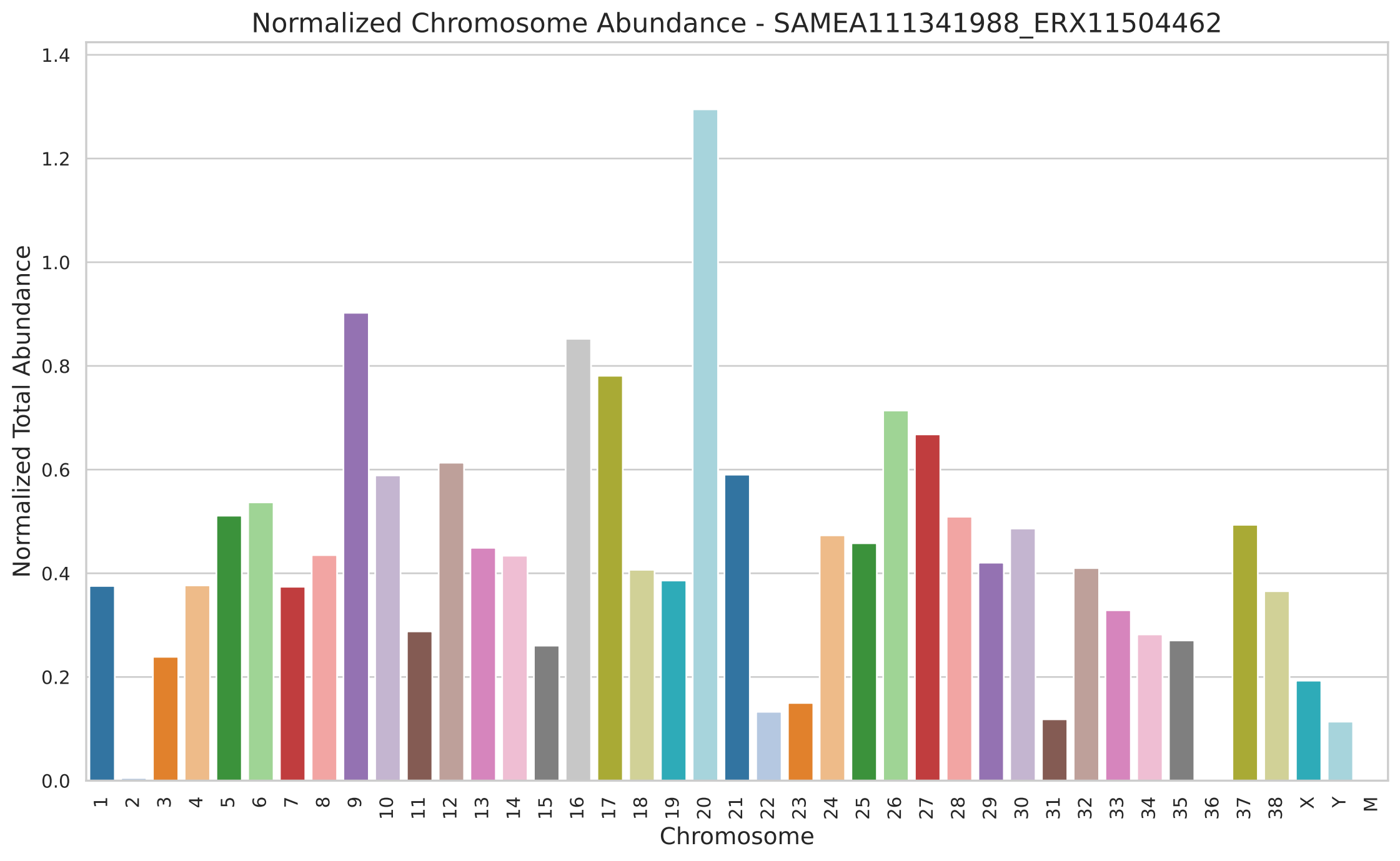

Normalized Chromosome Abundance - SAMN31329657_SRX17927327
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

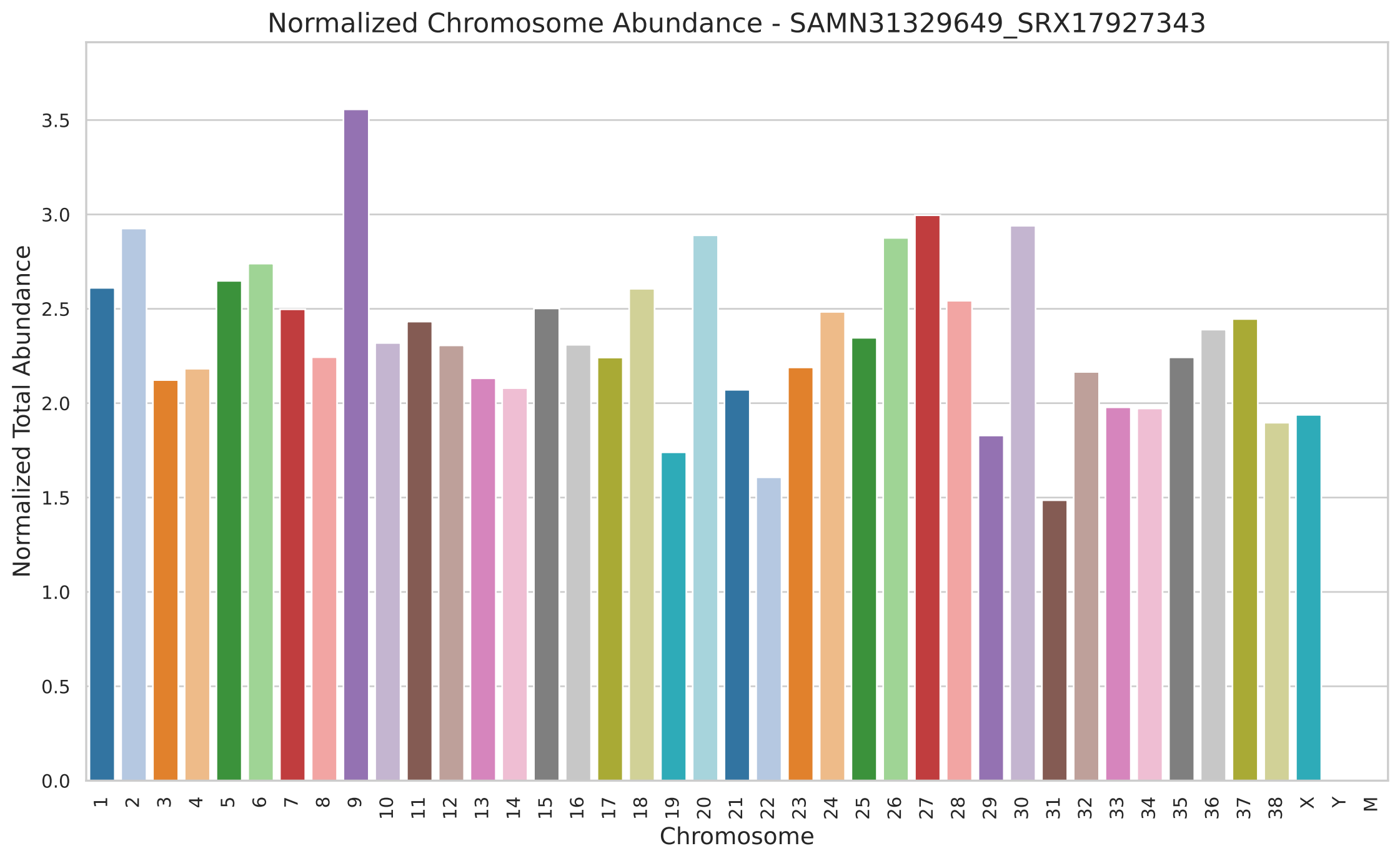

Normalized Chromosome Abundance - SAMEA111342032_ERX11504389
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

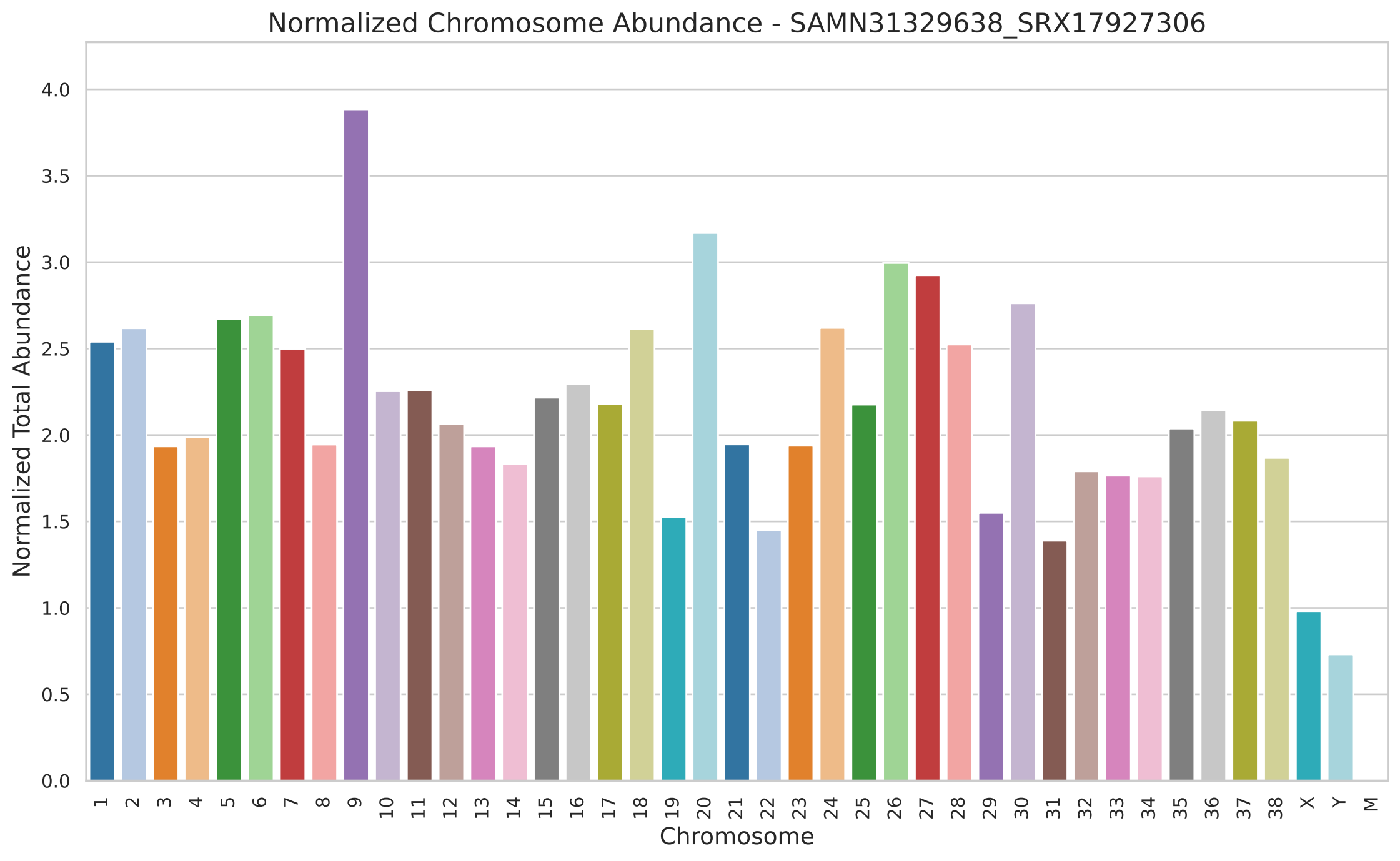

Normalized Chromosome Abundance - SAMN31329630_SRX17927323
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

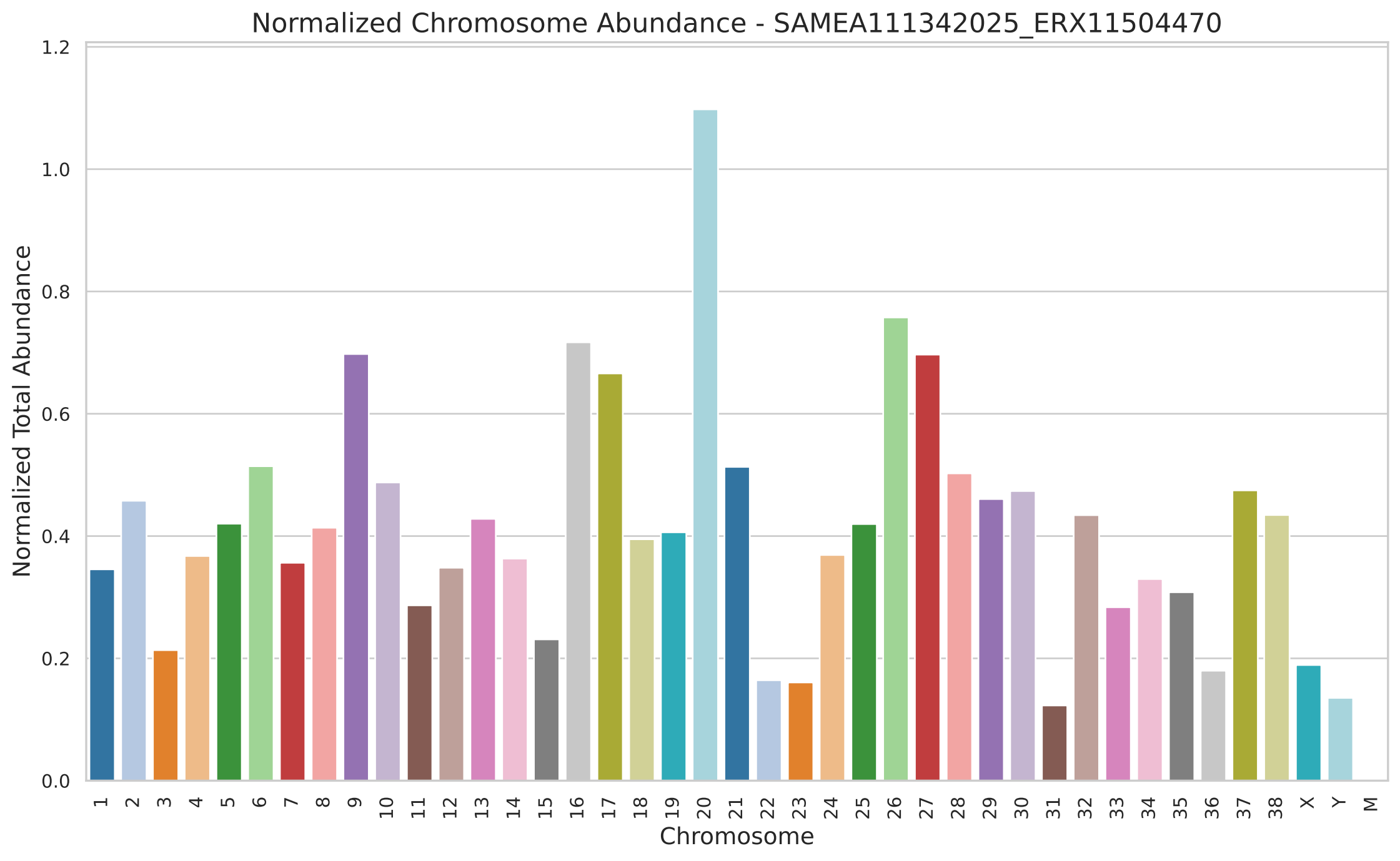

Normalized Chromosome Abundance - SAMN31329624_SRX17927337
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

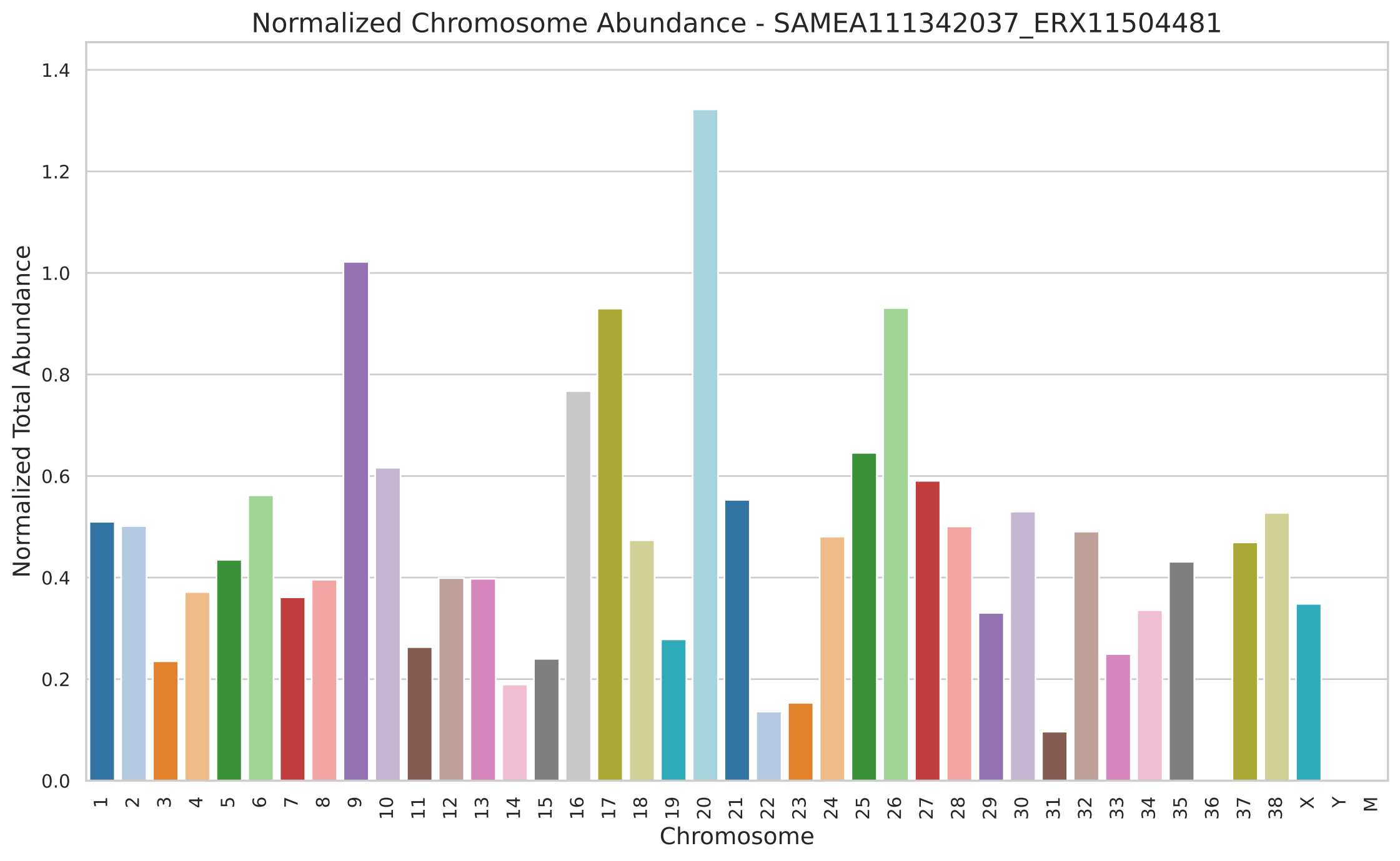

Normalized Chromosome Abundance - SAMN31329615_SRX17927345
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

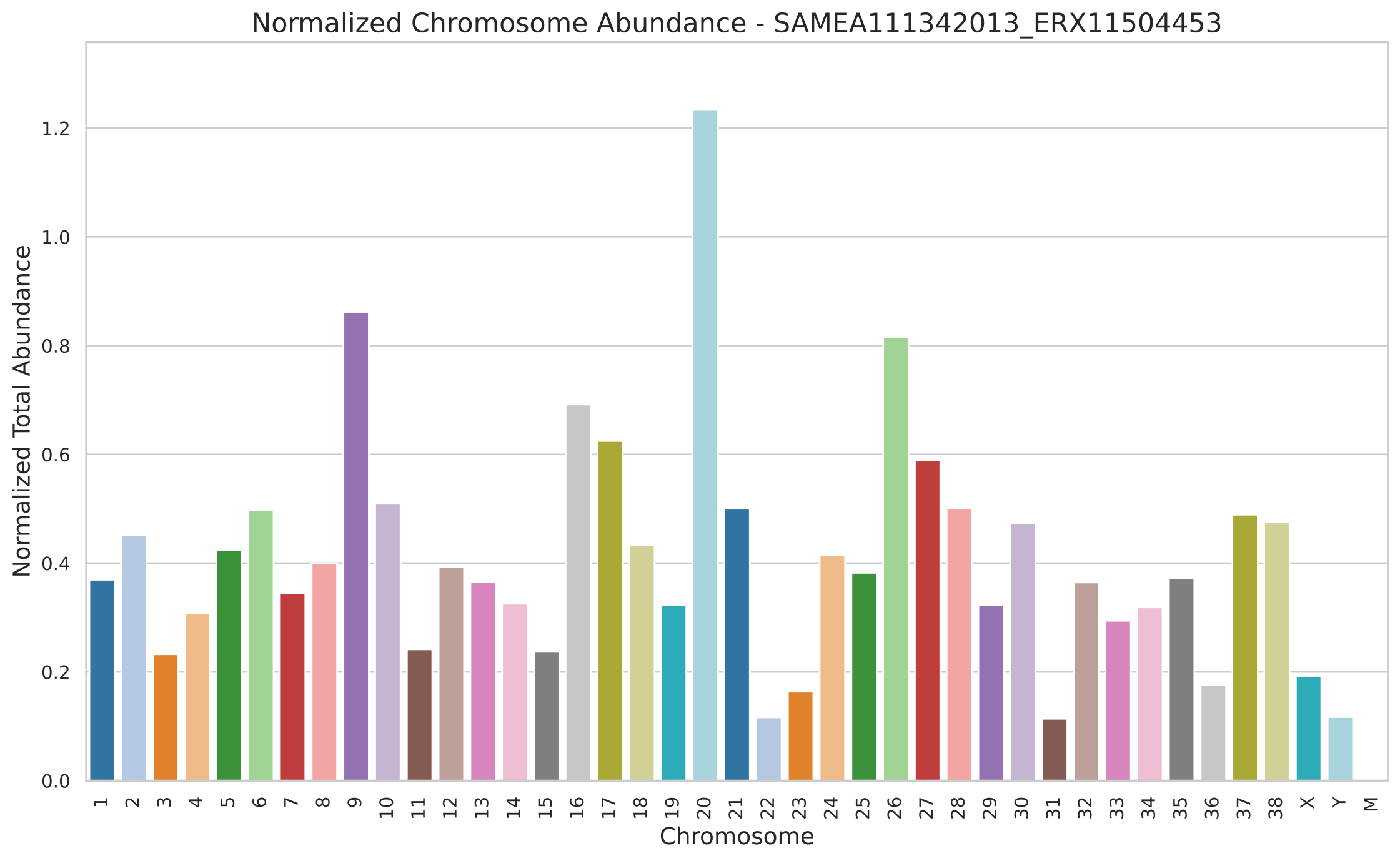

Normalized Chromosome Abundance - SAMEA111341988_ERX11504462
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

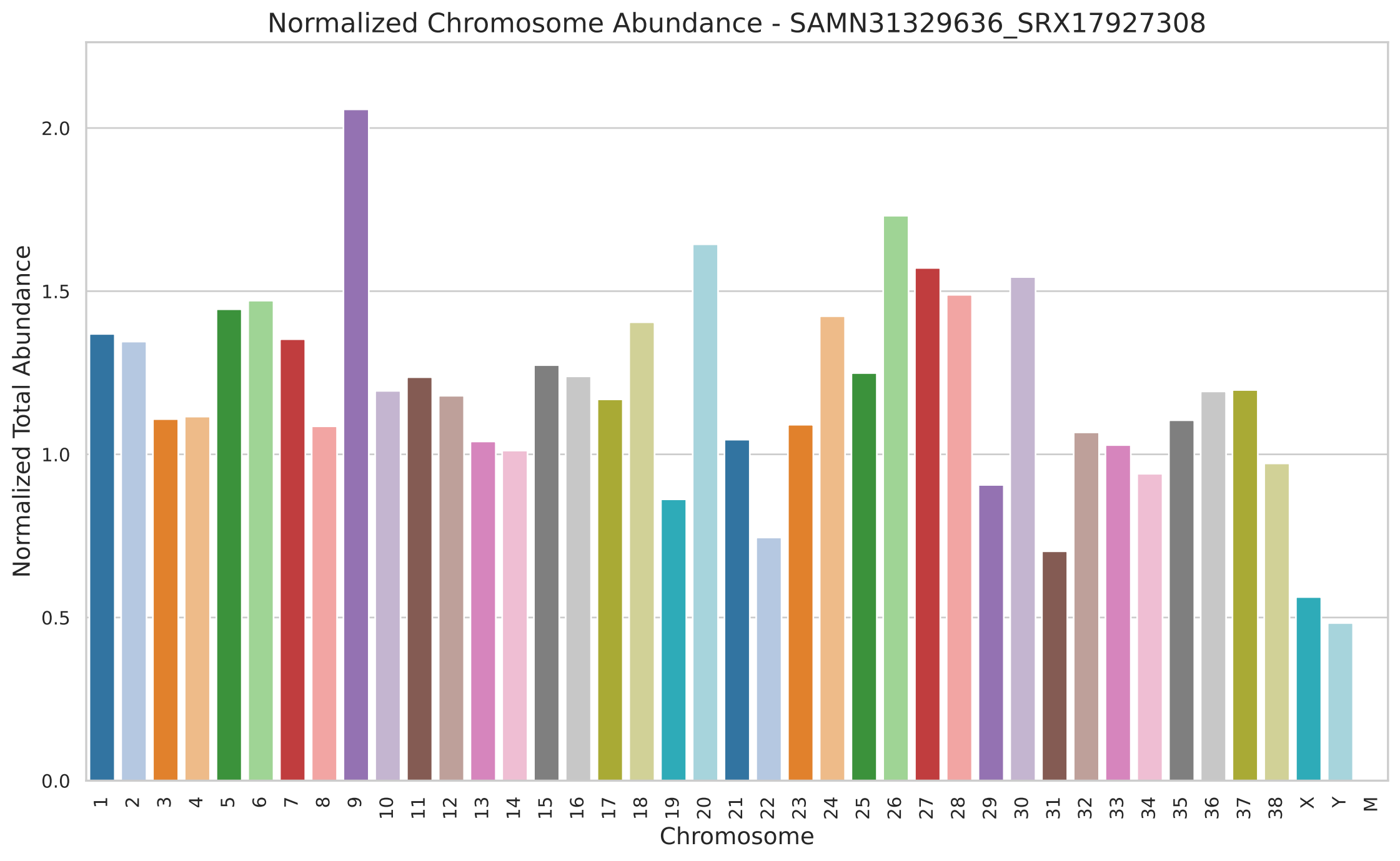

Normalized Chromosome Abundance - SAMN31329649_SRX17927343
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

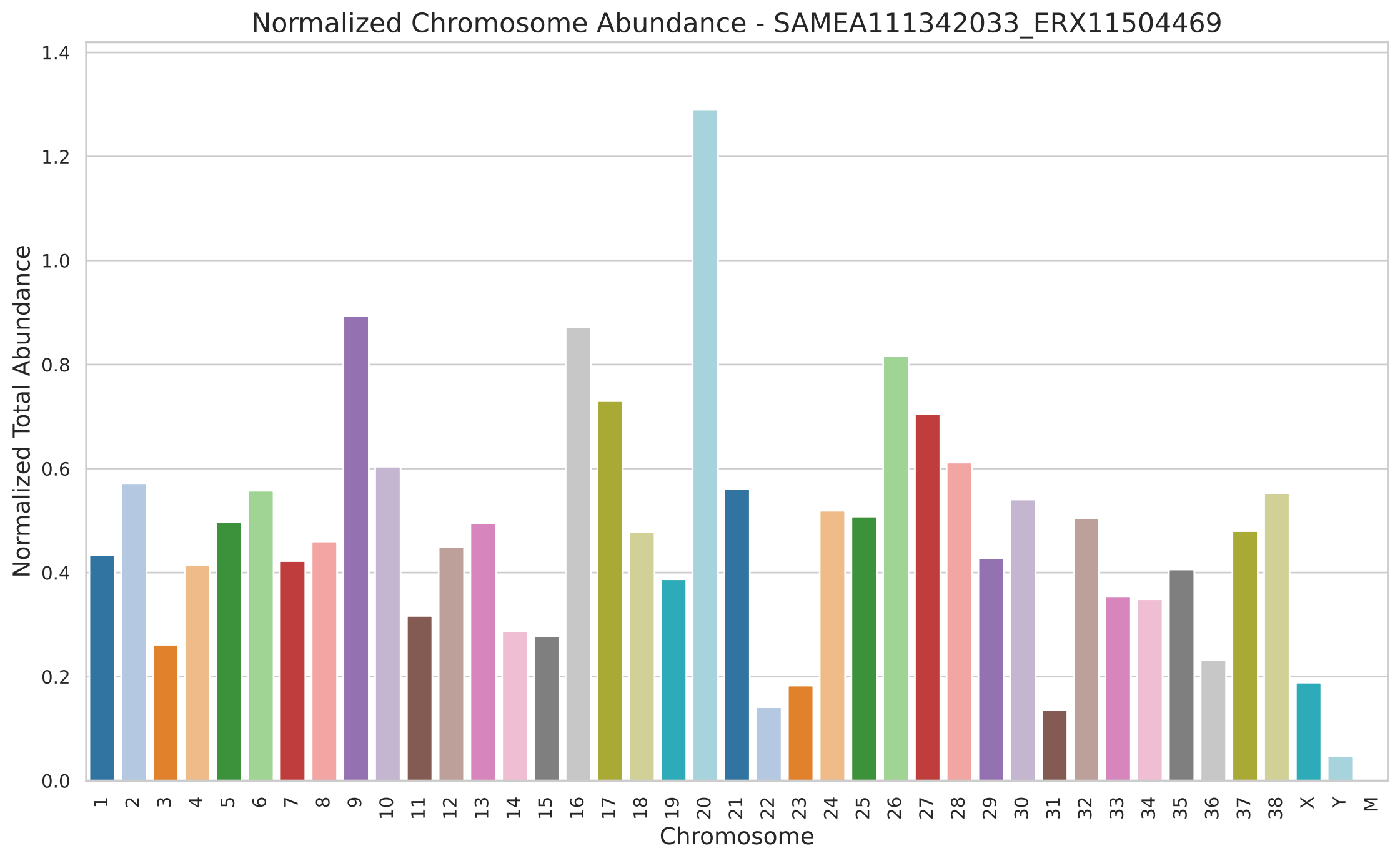

Normalized Chromosome Abundance - SAMN31329638_SRX17927306
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

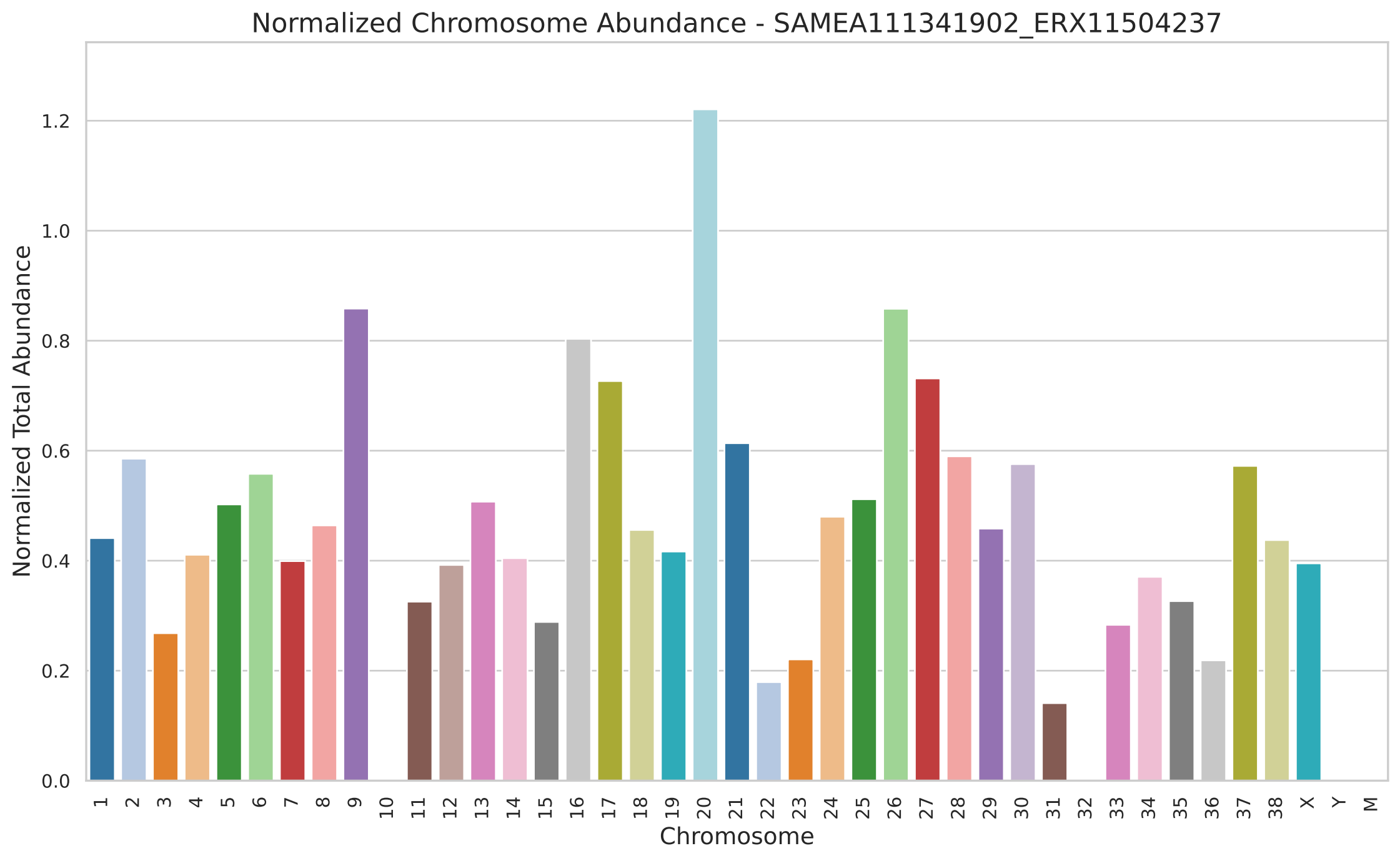

Normalized Chromosome Abundance - SAMEA111342025_ERX11504470
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

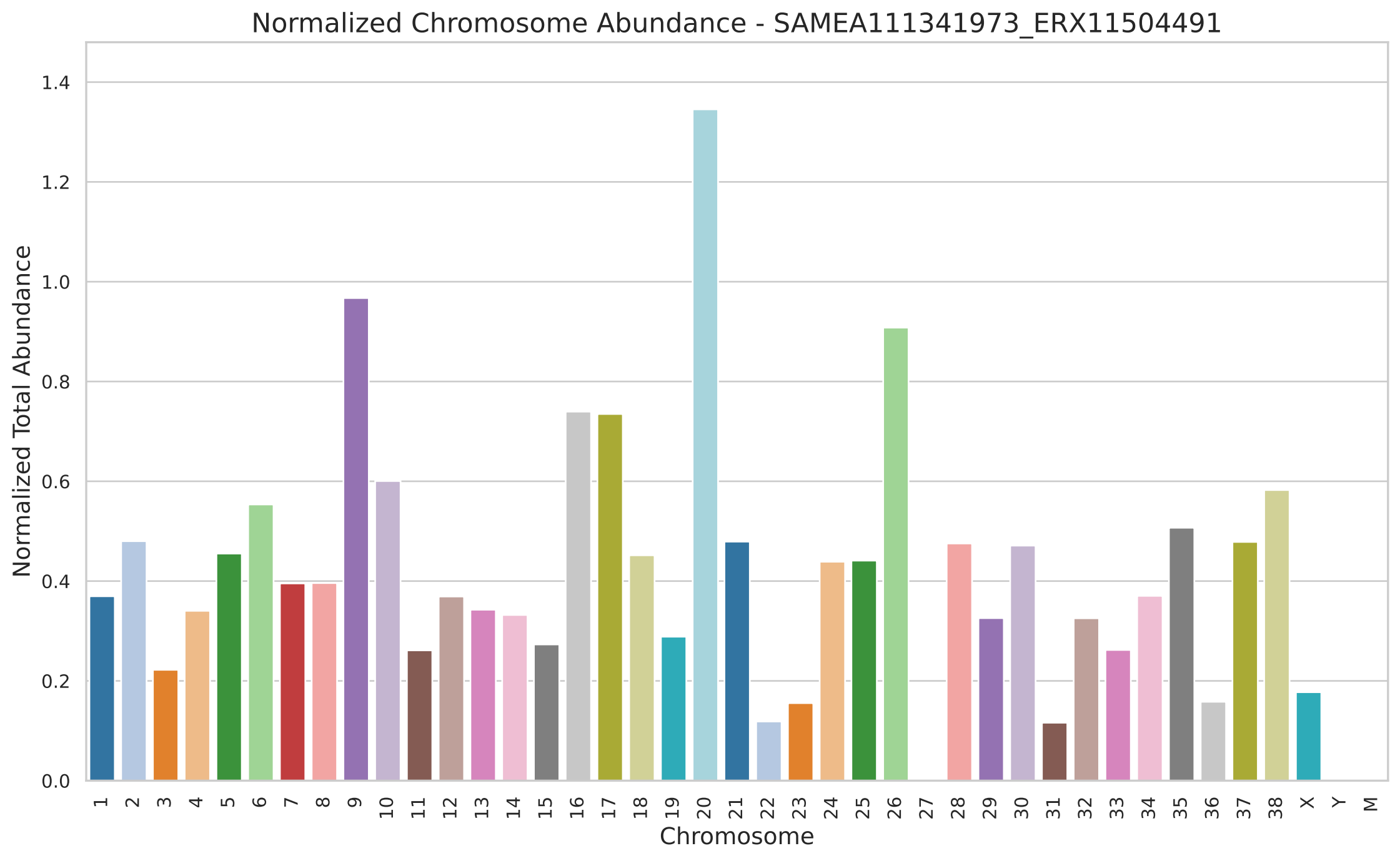

Normalized Chromosome Abundance - SAMEA111342037_ERX11504481
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

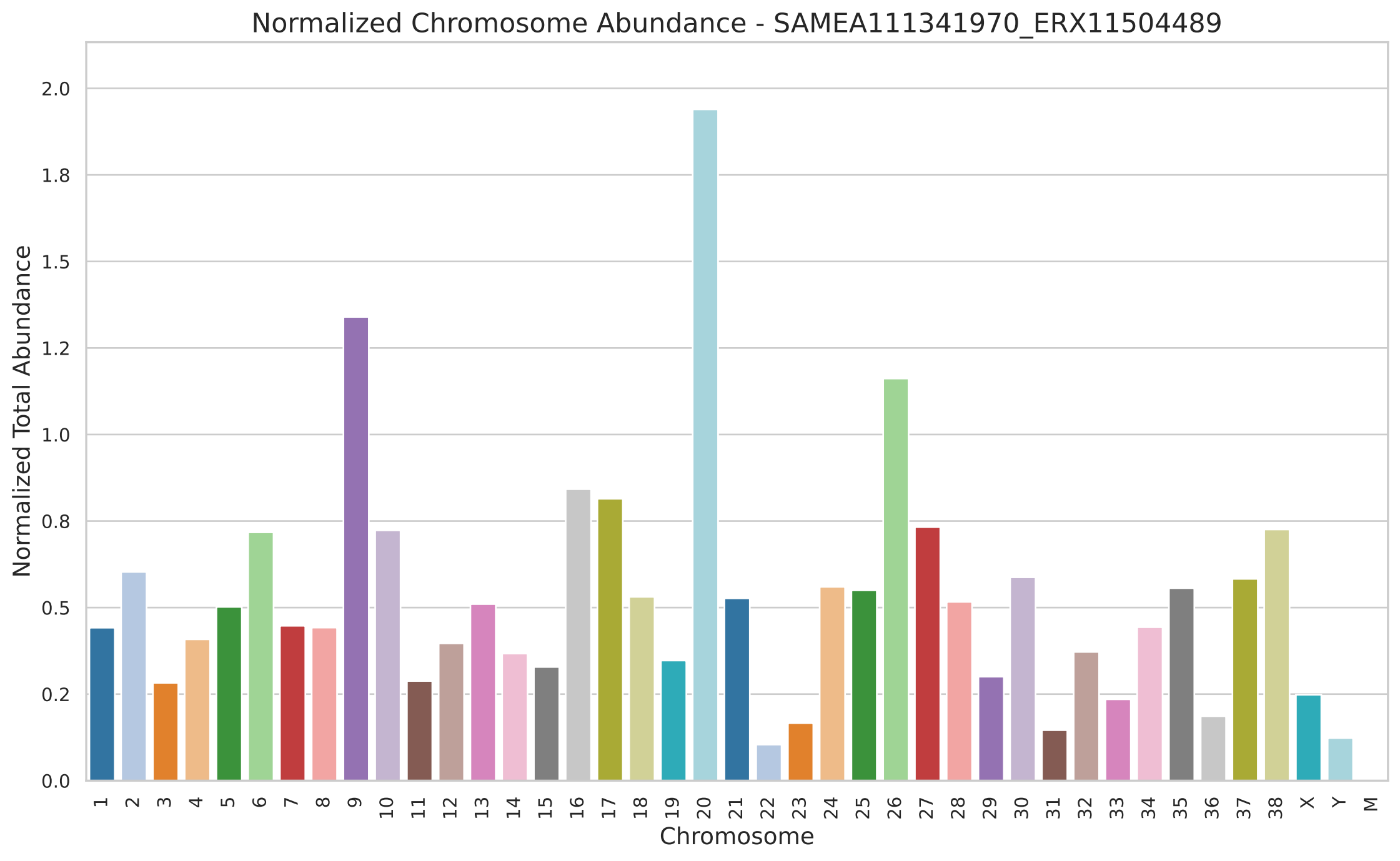

Normalized Chromosome Abundance - SAMEA111342013_ERX11504453
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

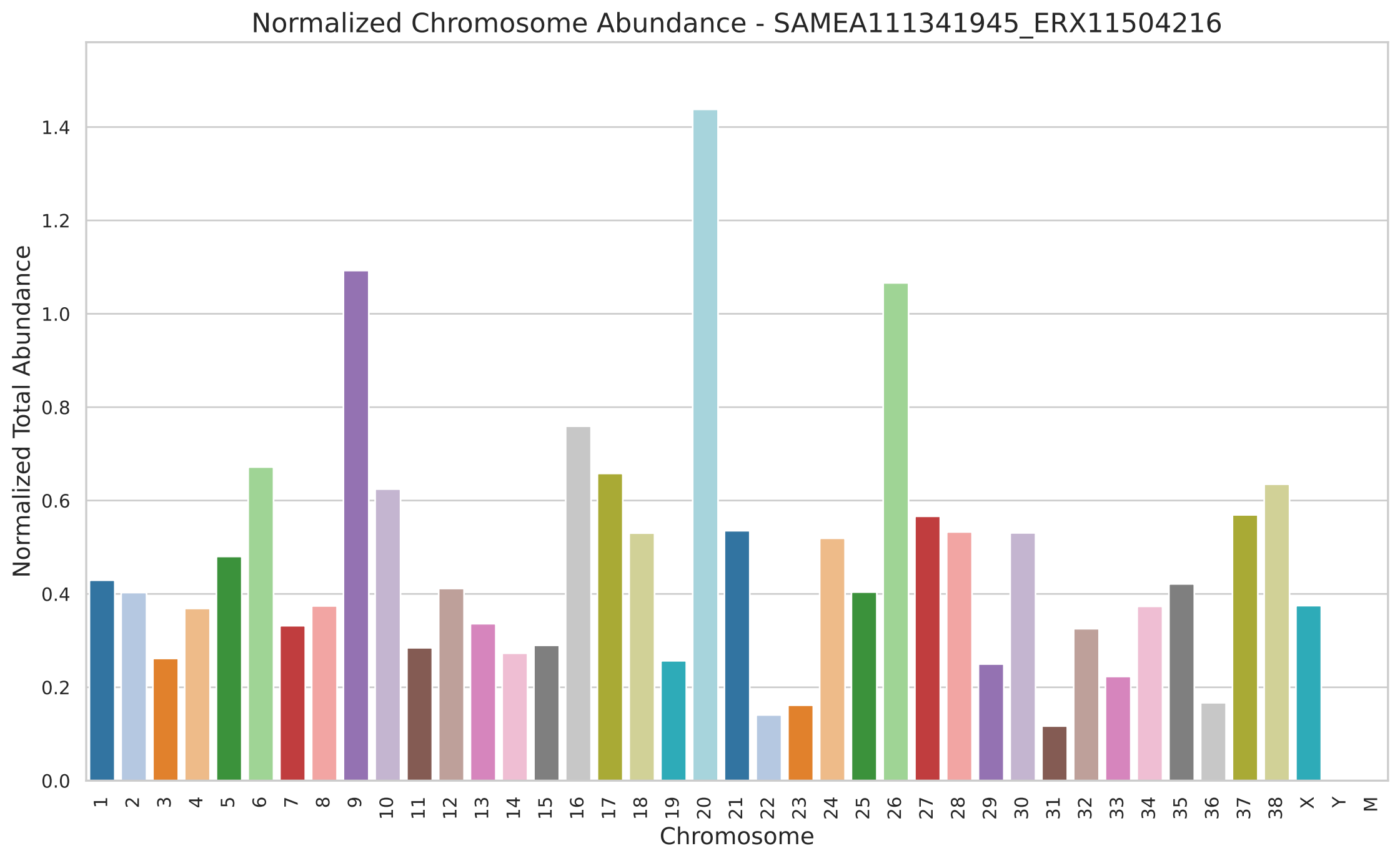

Normalized Chromosome Abundance - SAMN31329636_SRX17927308
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

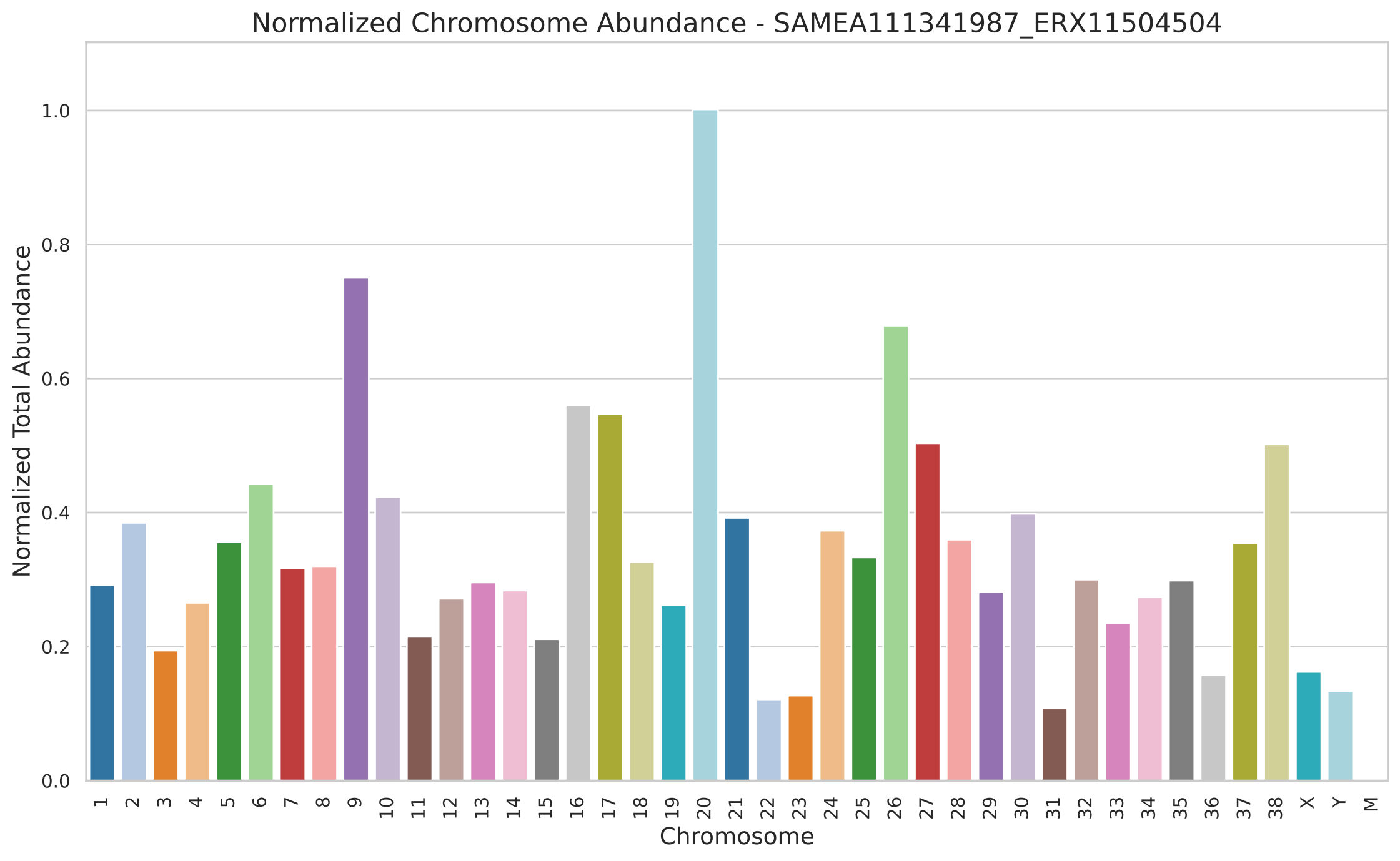

Normalized Chromosome Abundance - SAMEA111342033_ERX11504469
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

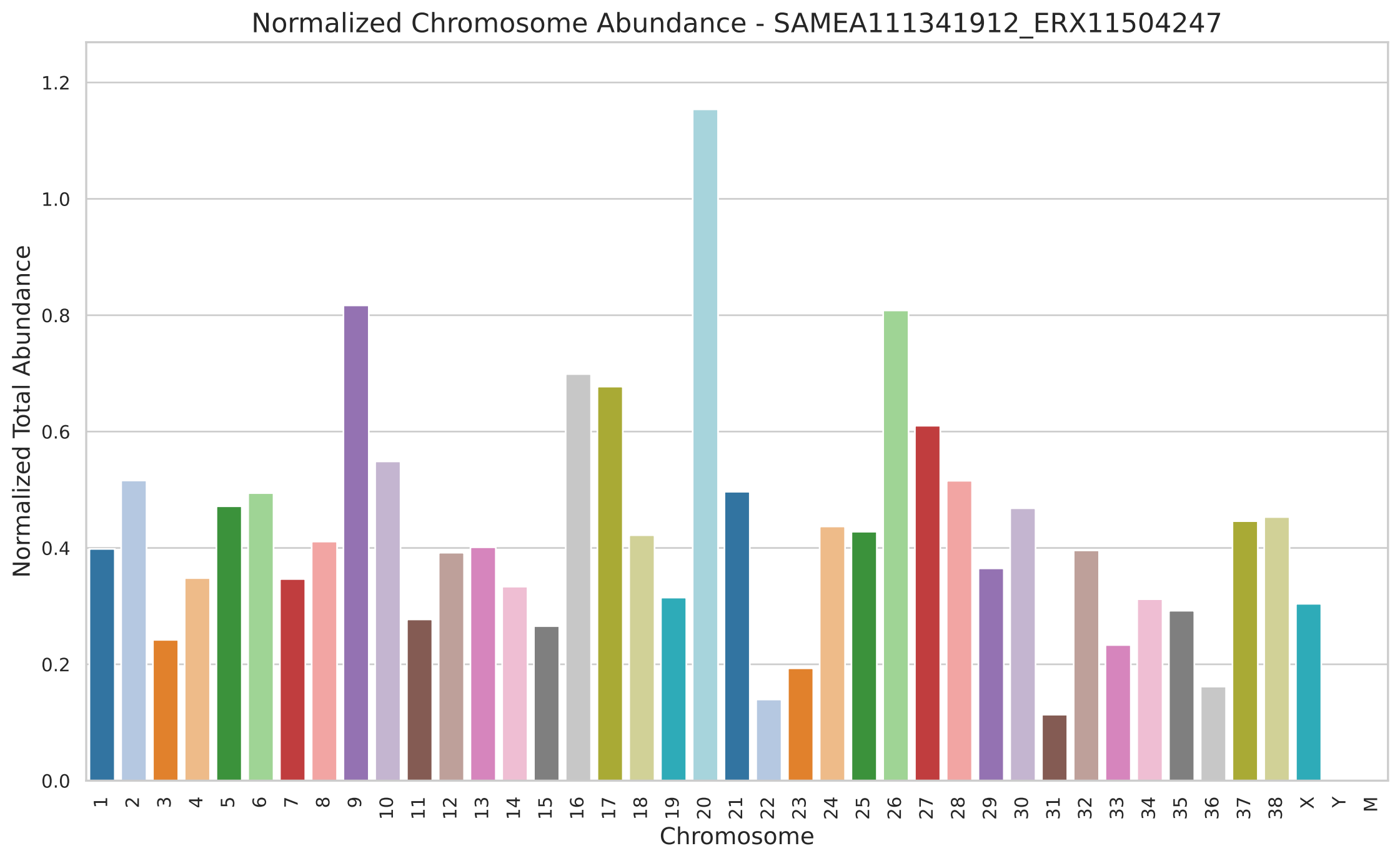

Normalized Chromosome Abundance - SAMEA111341902_ERX11504237
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

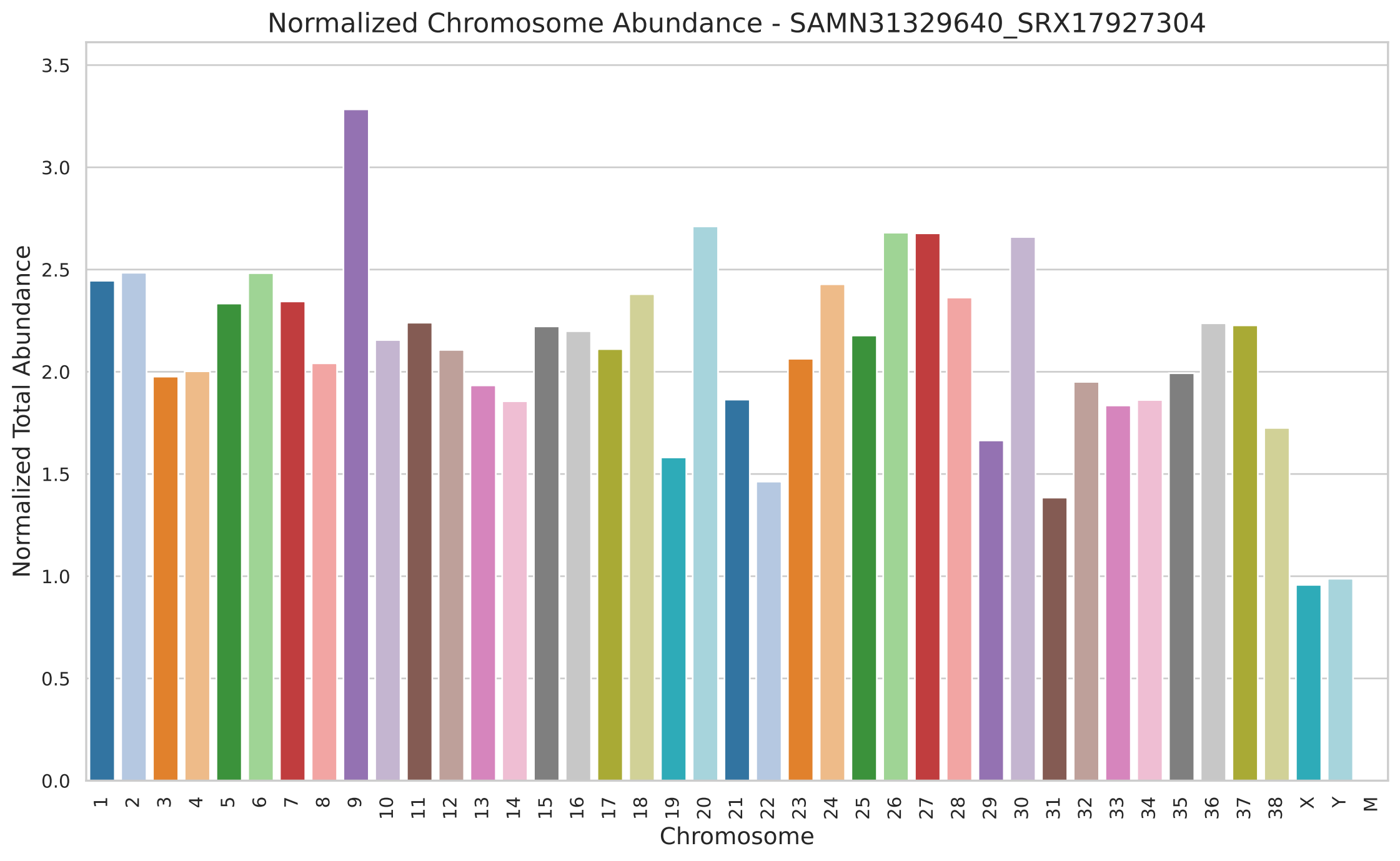

Normalized Chromosome Abundance - SAMEA111341973_ERX11504491
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

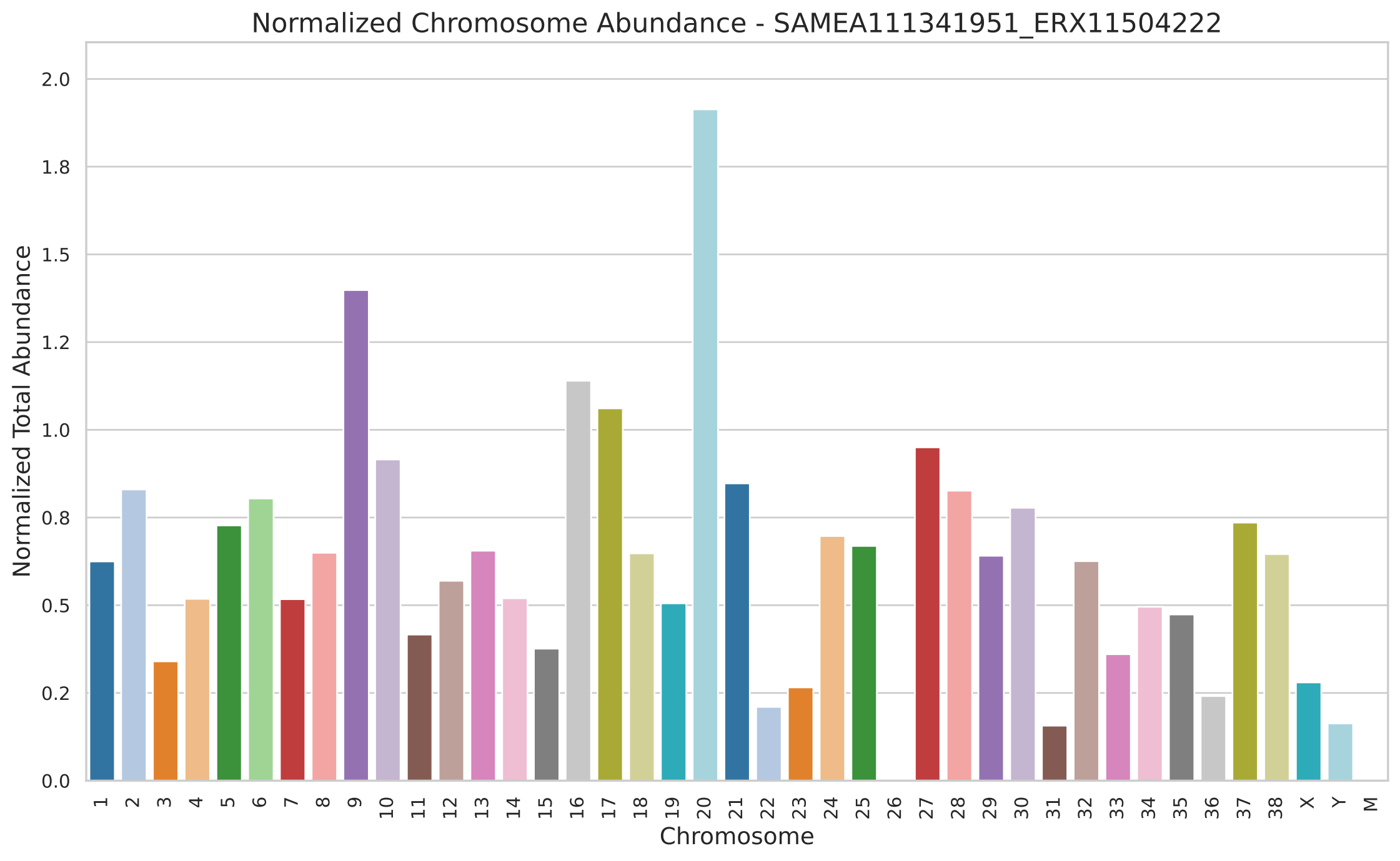

Normalized Chromosome Abundance - SAMEA111341970_ERX11504489
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

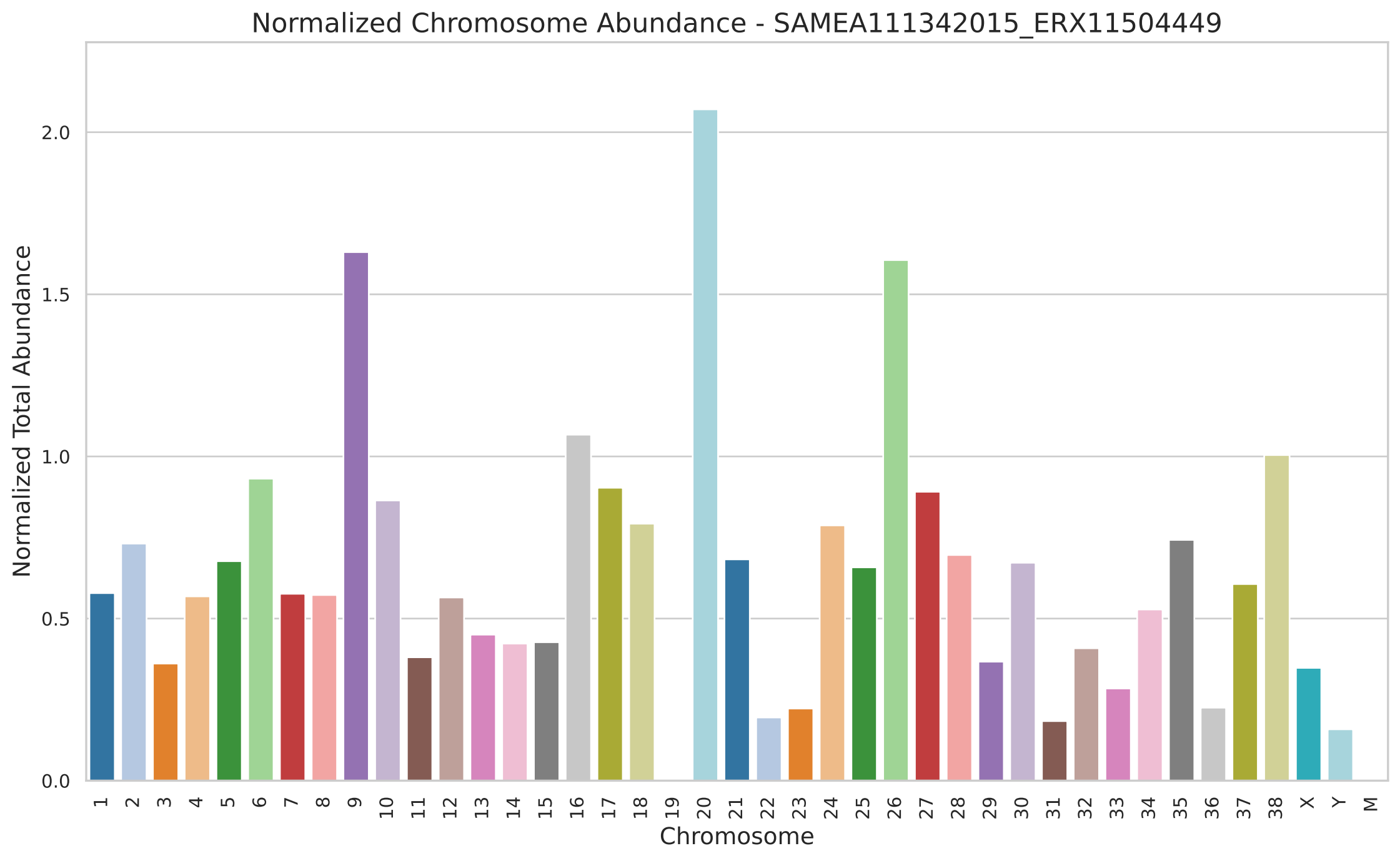

Normalized Chromosome Abundance - SAMEA111341945_ERX11504216
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

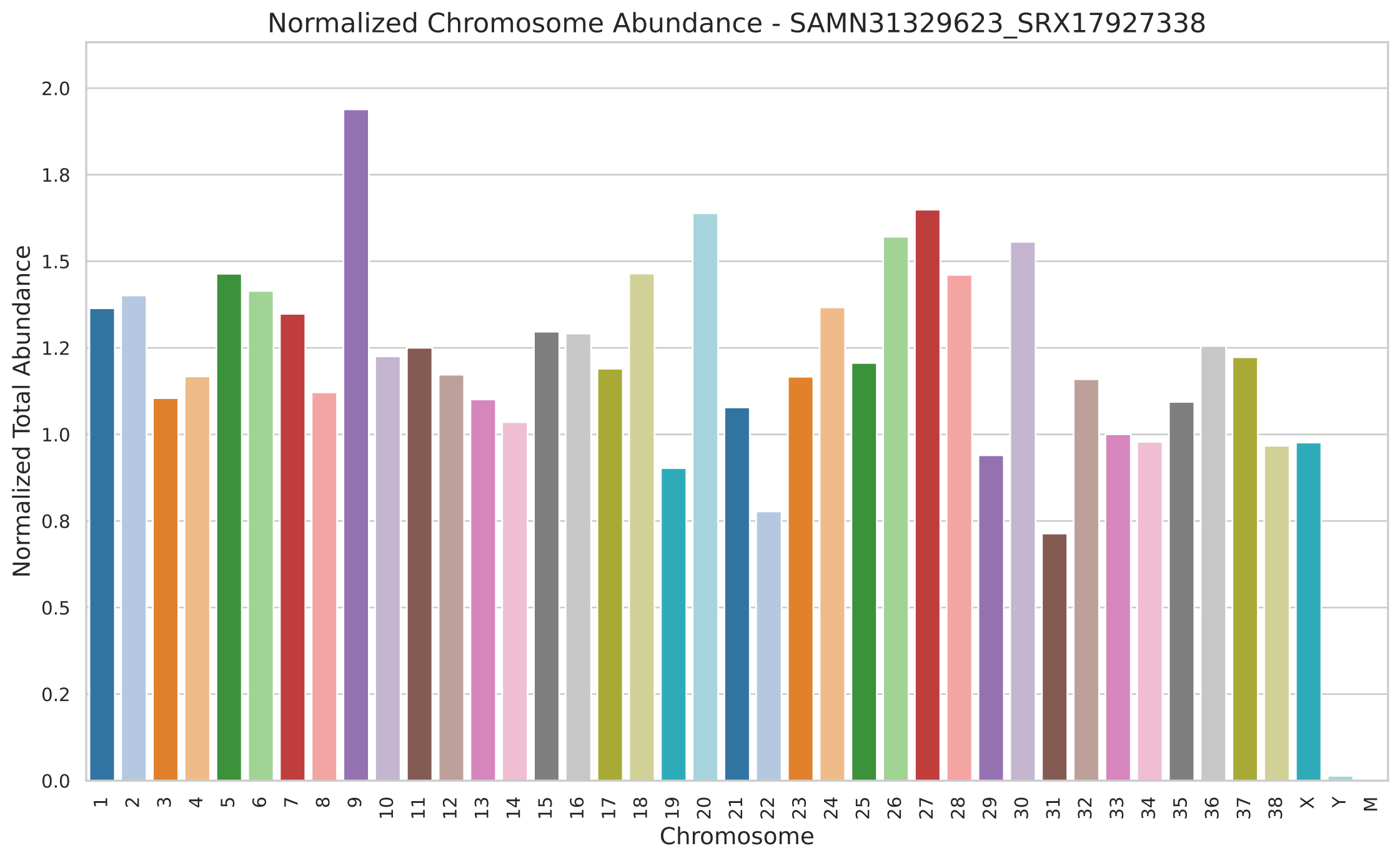

Normalized Chromosome Abundance - SAMEA111341987_ERX11504504
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

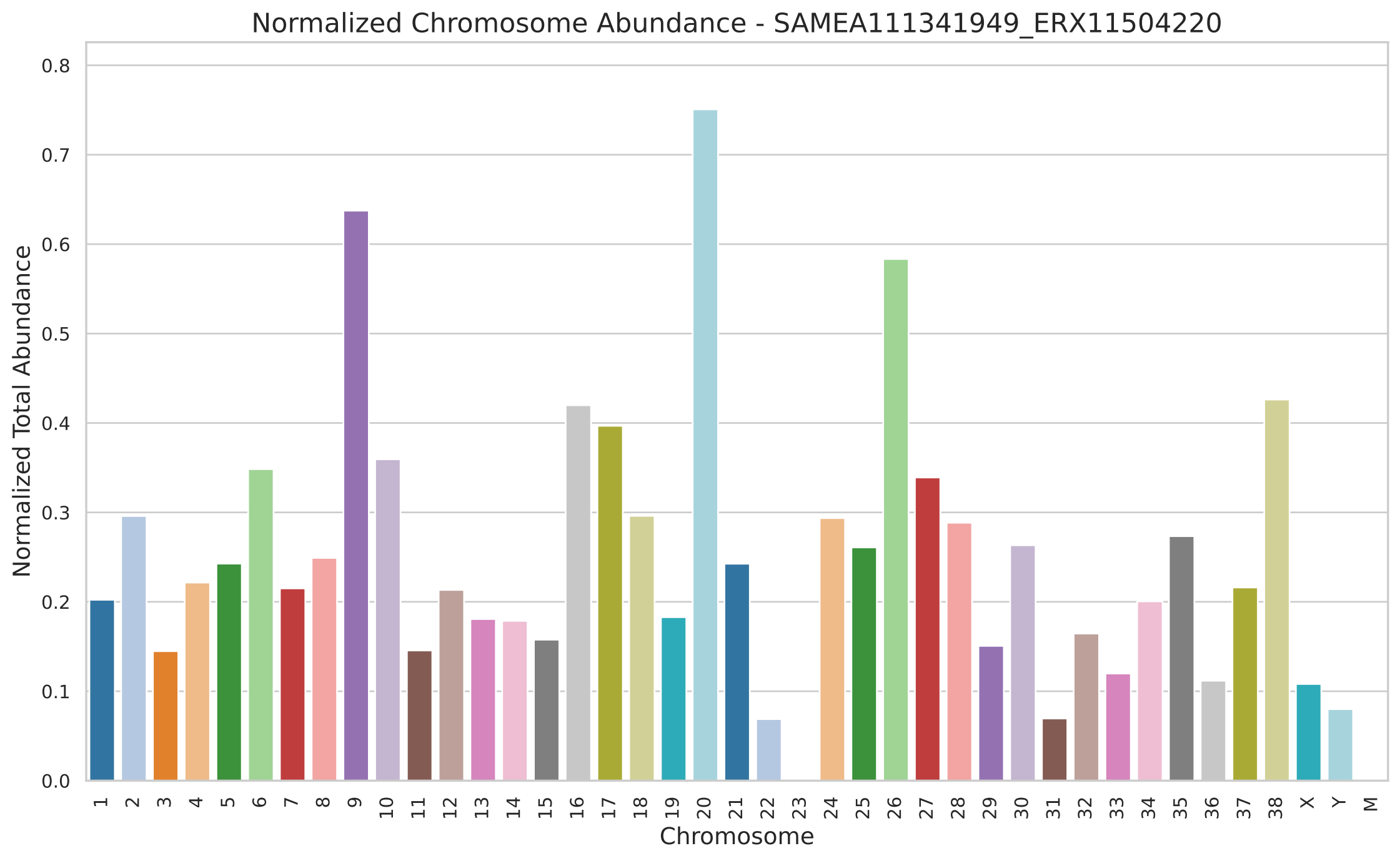

Normalized Chromosome Abundance - SAMEA111341912_ERX11504247
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

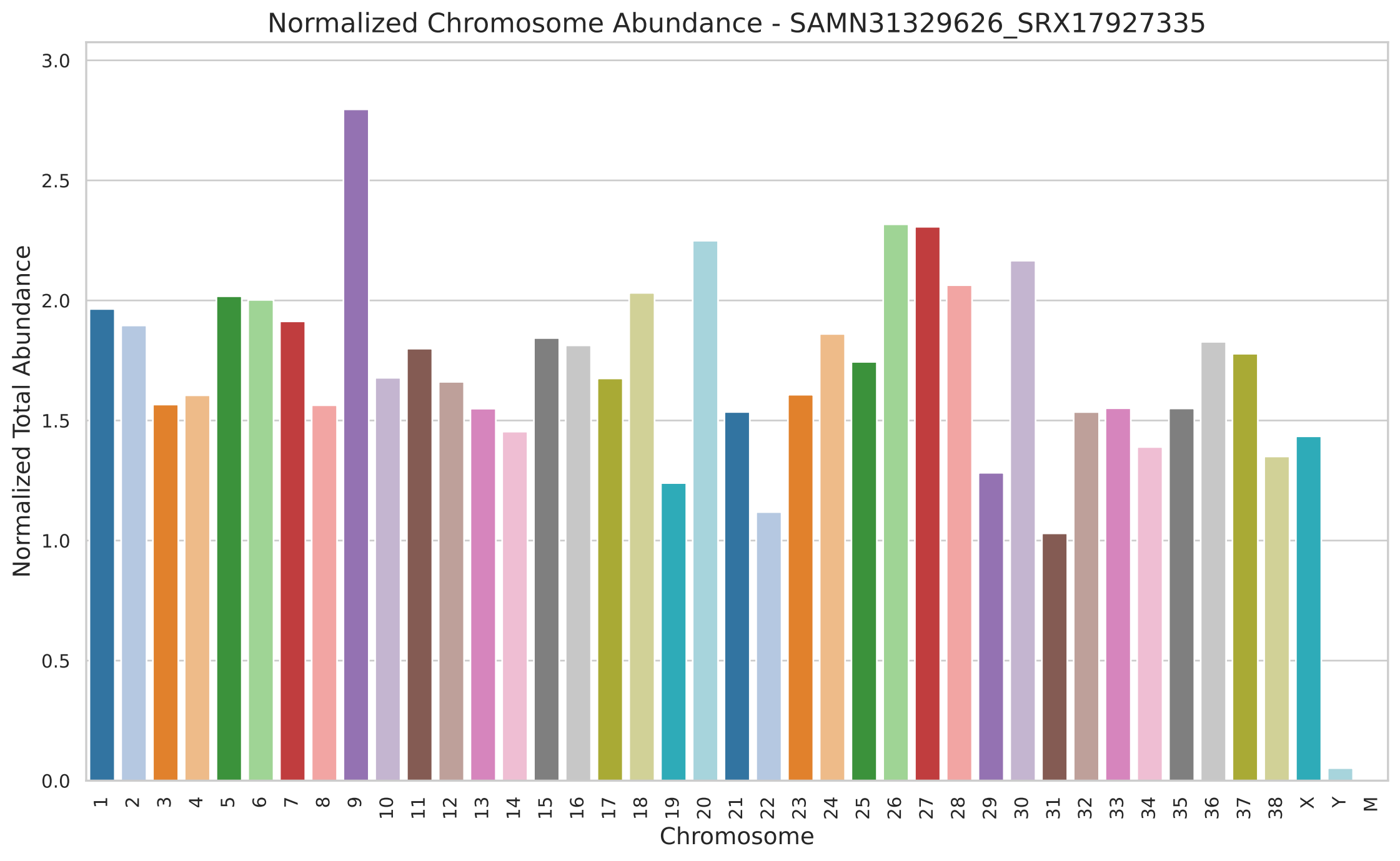

Normalized Chromosome Abundance - SAMN31329640_SRX17927304
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

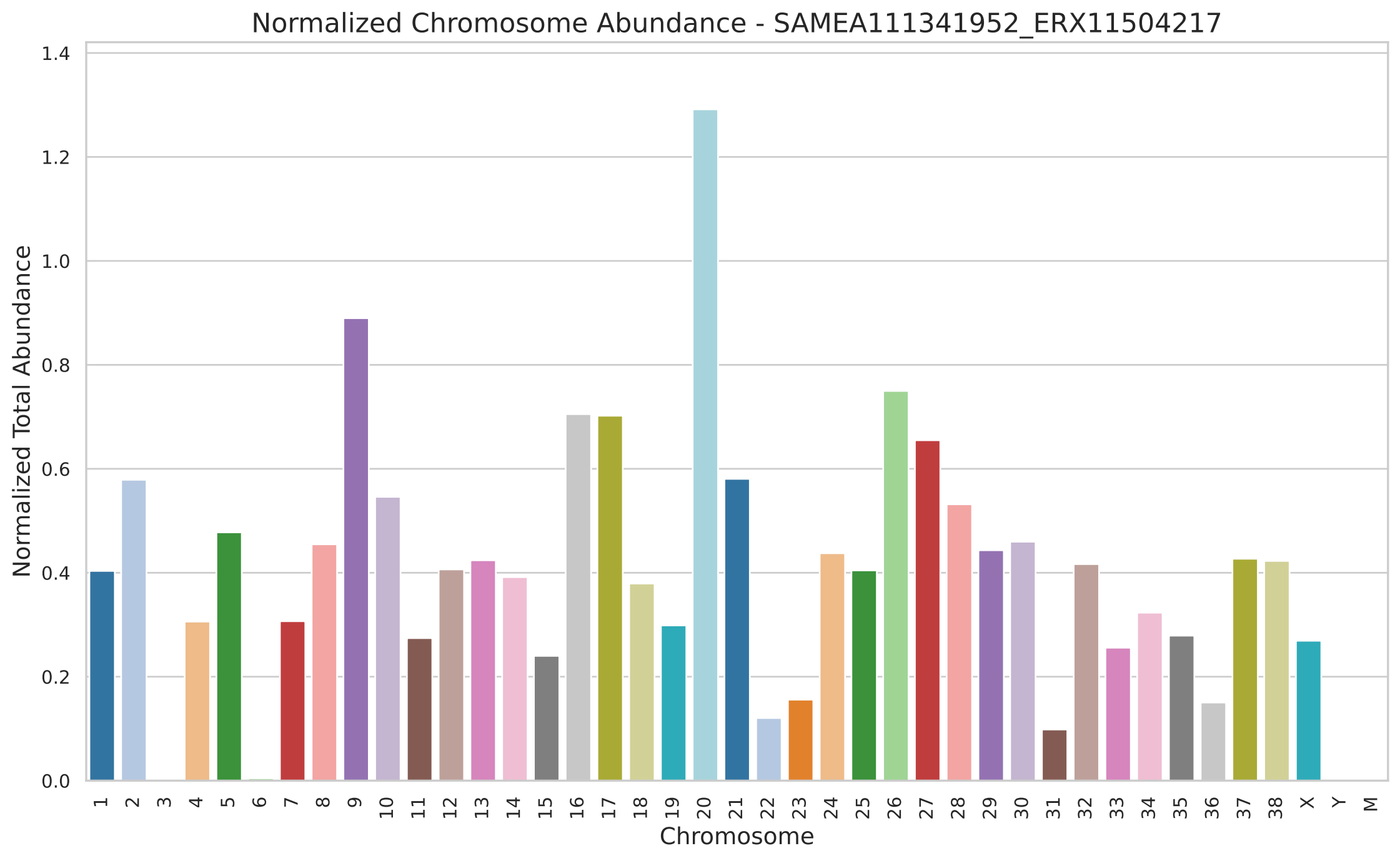

Normalized Chromosome Abundance - SAMEA111341951_ERX11504222
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

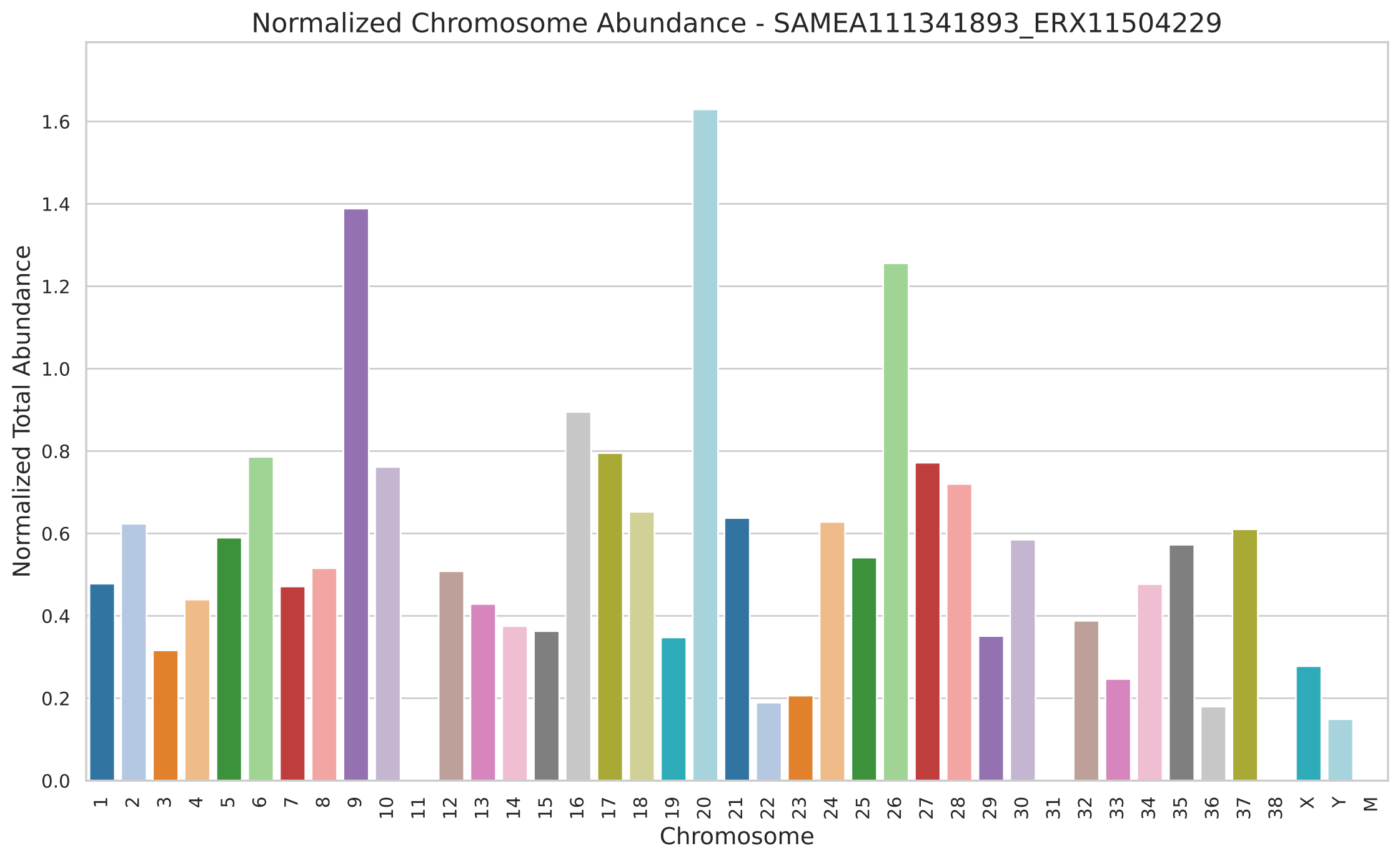

Normalized Chromosome Abundance - SAMEA111342015_ERX11504449
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

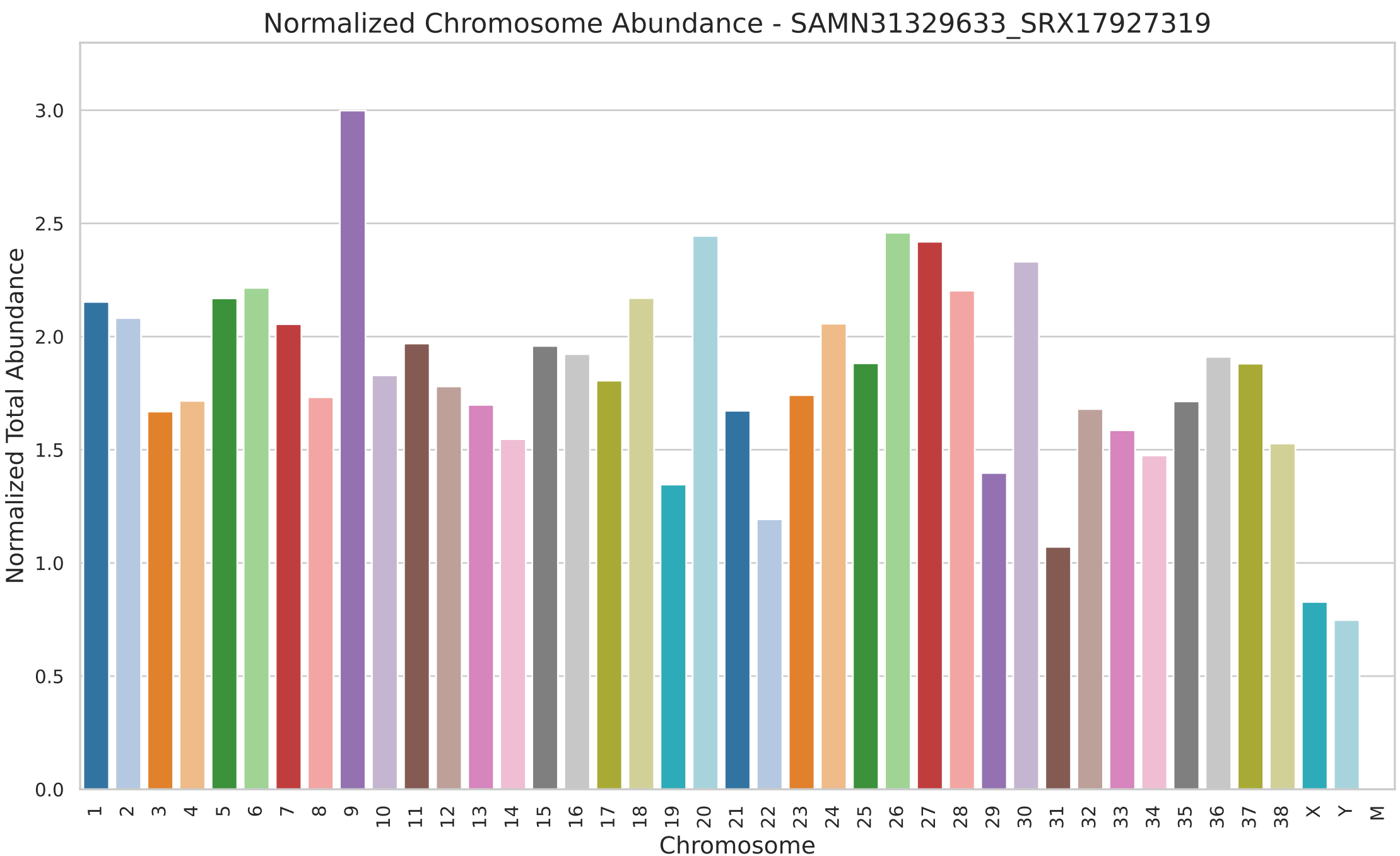

Normalized Chromosome Abundance - SAMN31329623_SRX17927338
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

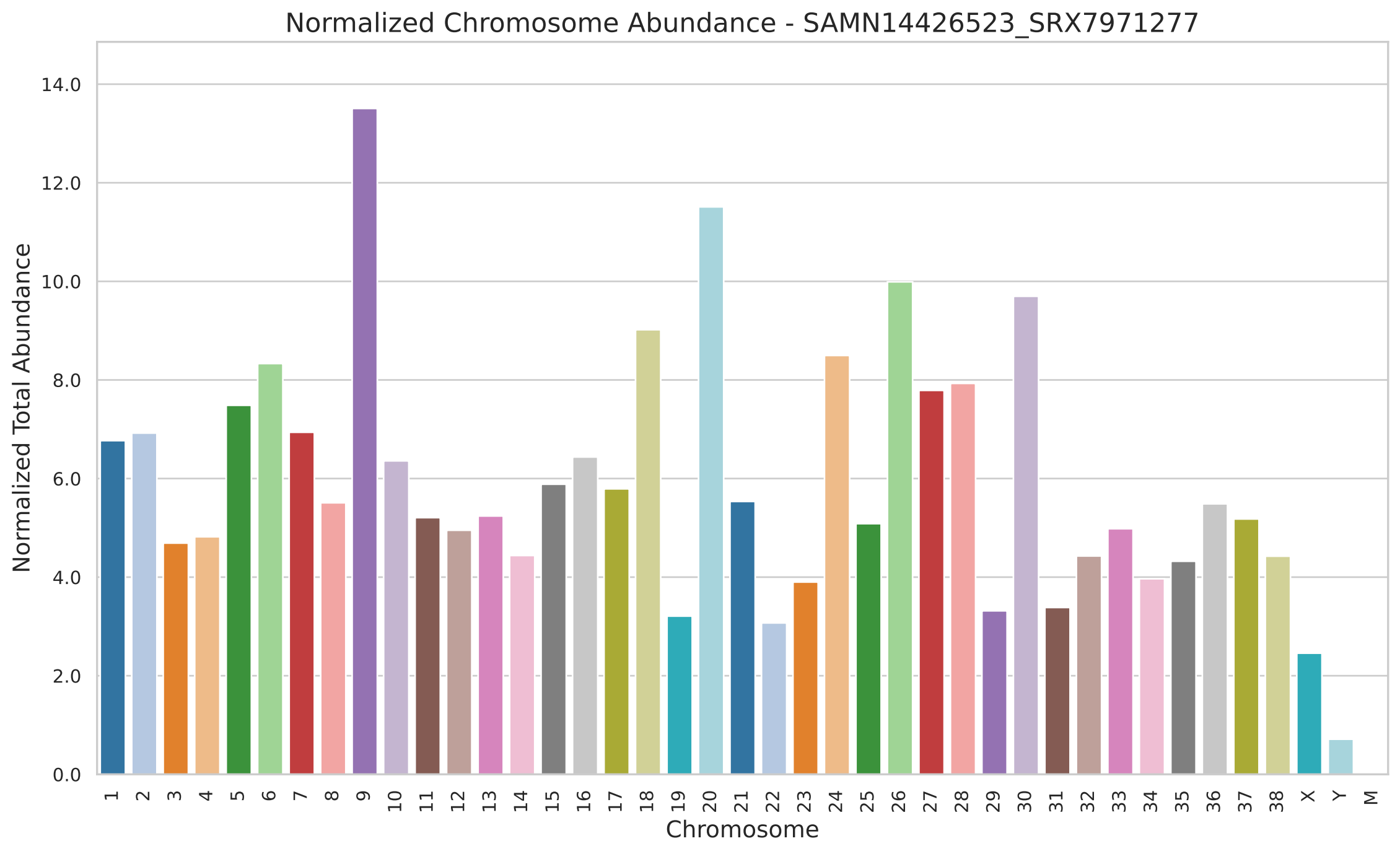

Normalized Chromosome Abundance - SAMEA111341949_ERX11504220
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

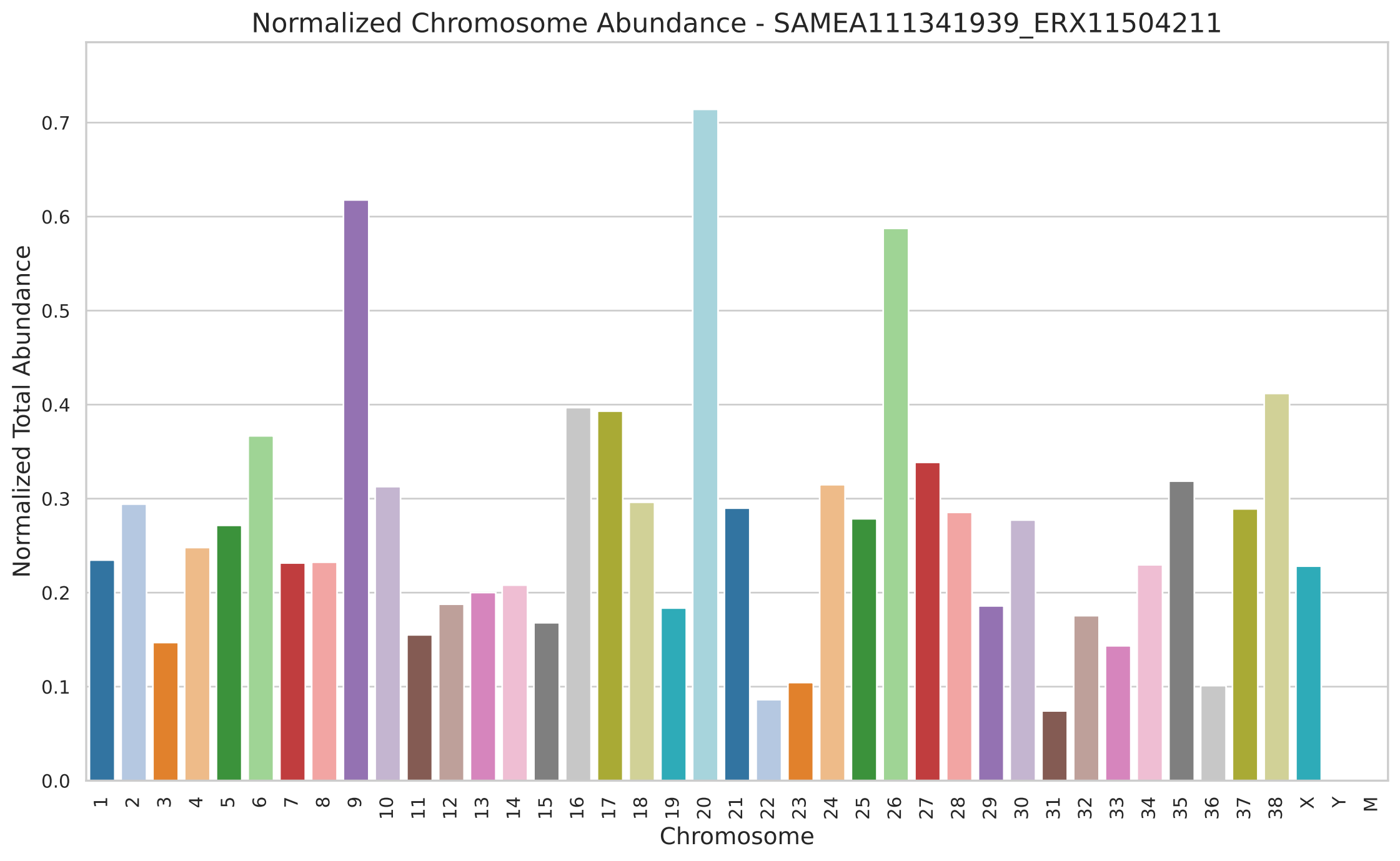

Normalized Chromosome Abundance - SAMN31329626_SRX17927335
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

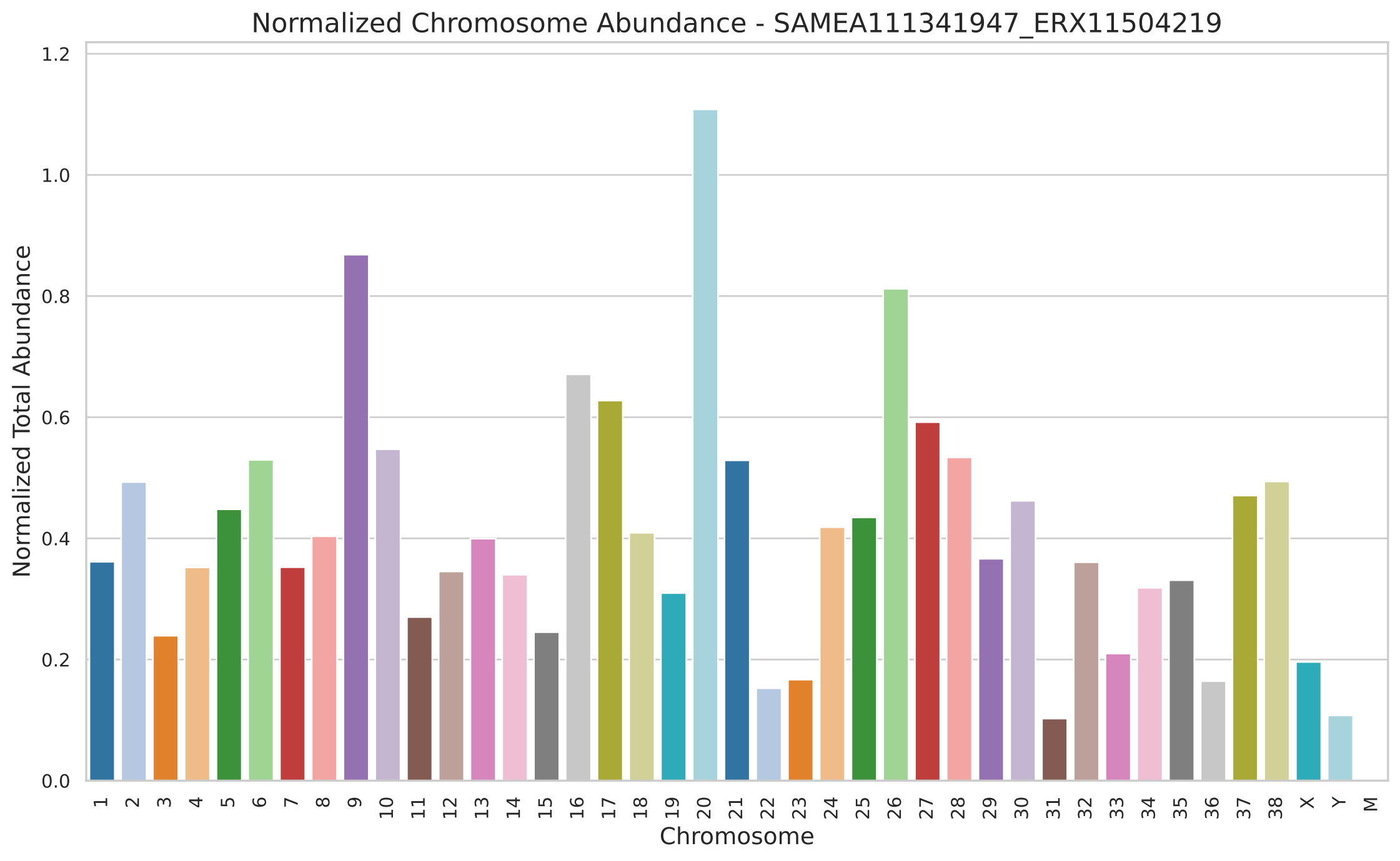

Normalized Chromosome Abundance - SAMEA111341952_ERX11504217
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

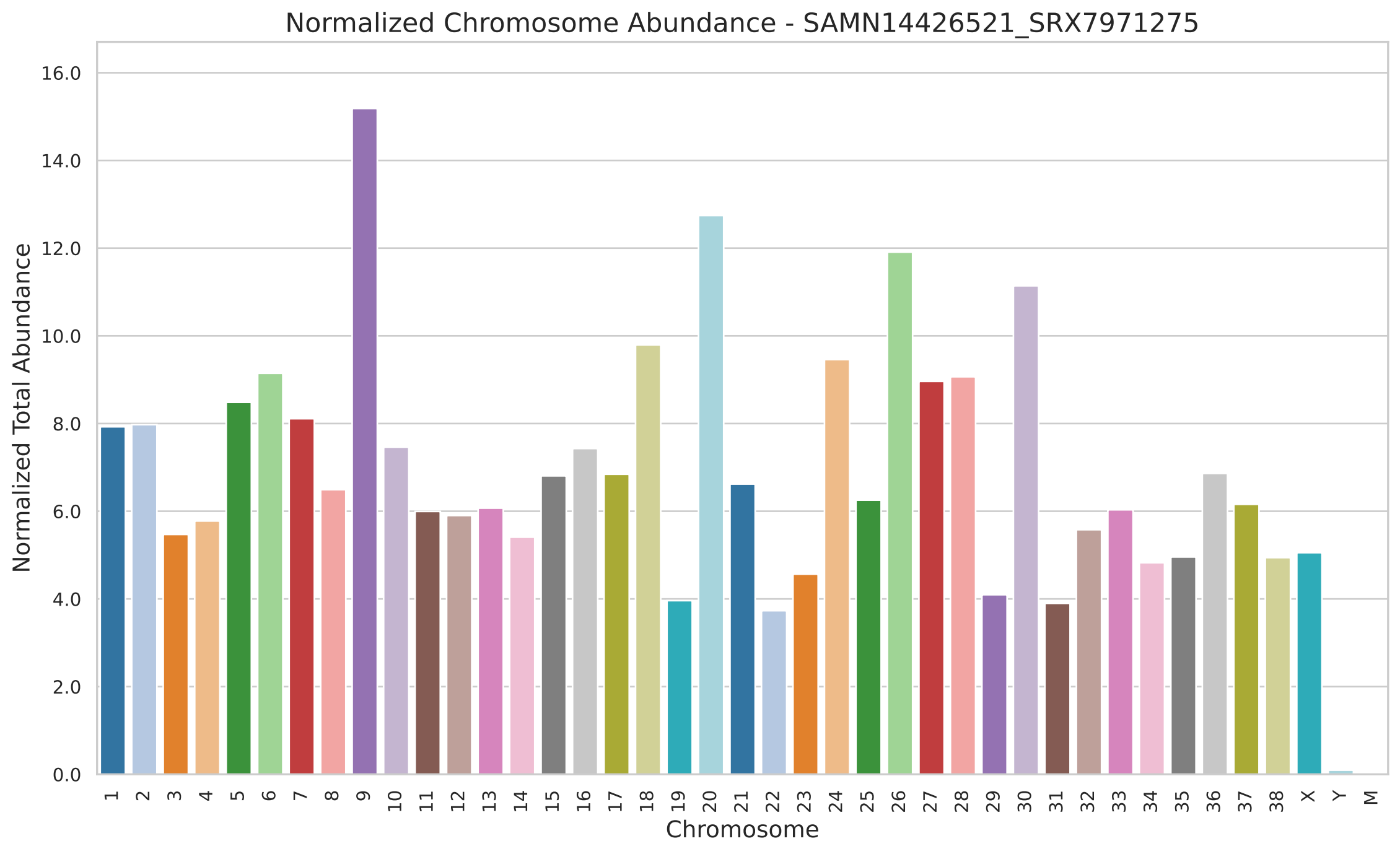

Normalized Chromosome Abundance - SAMEA111341893_ERX11504229
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

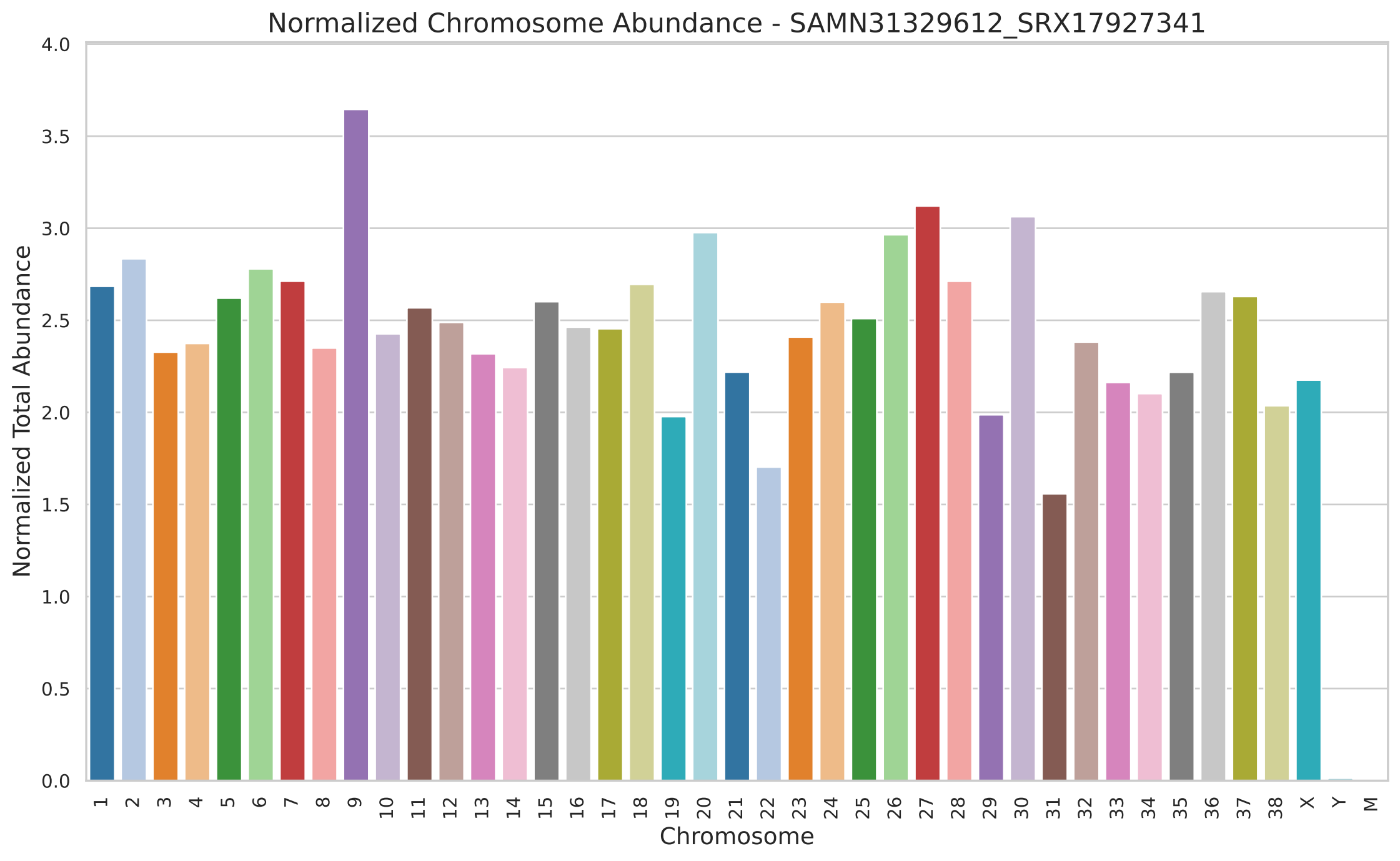

Normalized Chromosome Abundance - SAMN31329633_SRX17927319
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

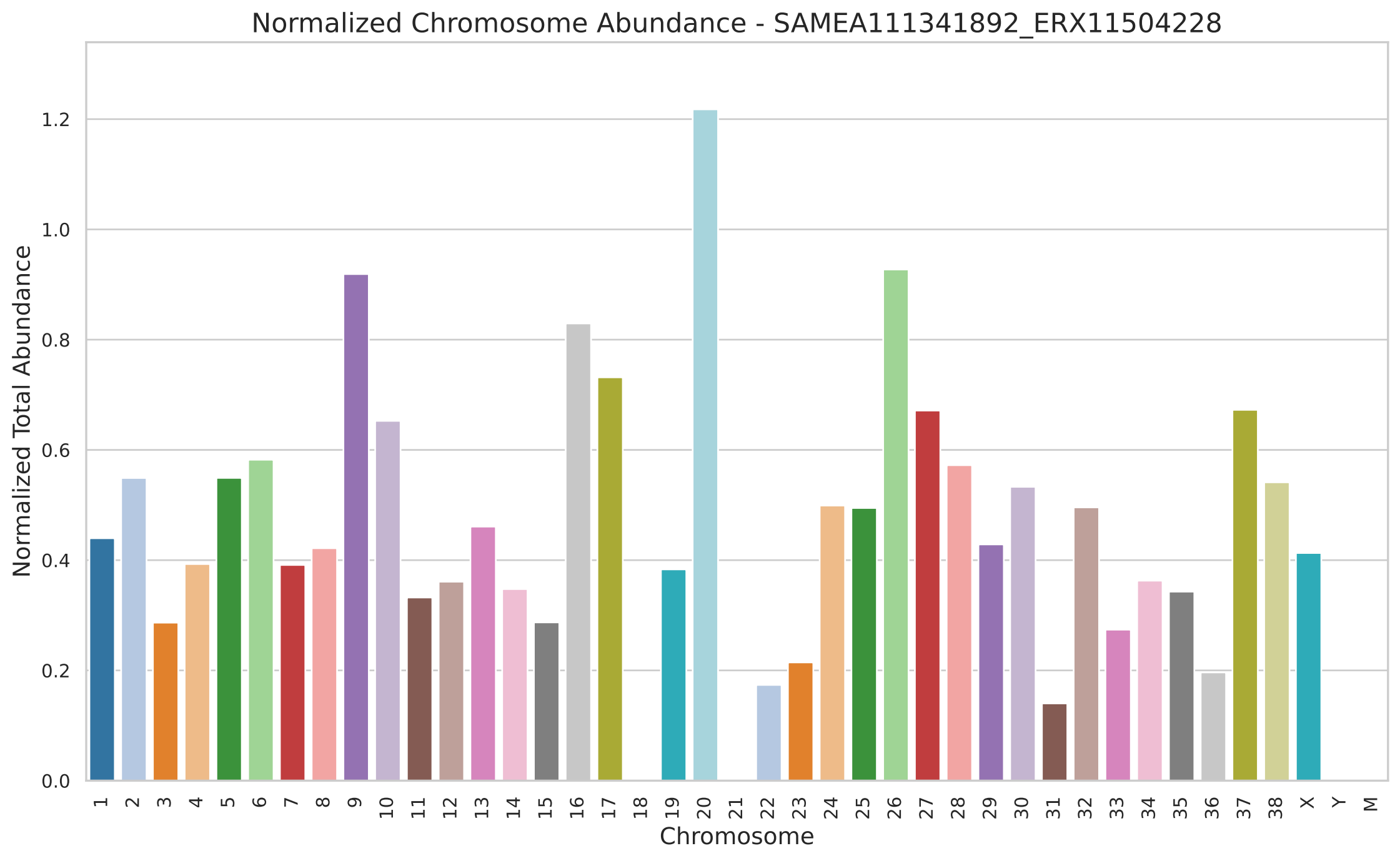

Normalized Chromosome Abundance - SAMN14426523_SRX7971277
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
12.0
14.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

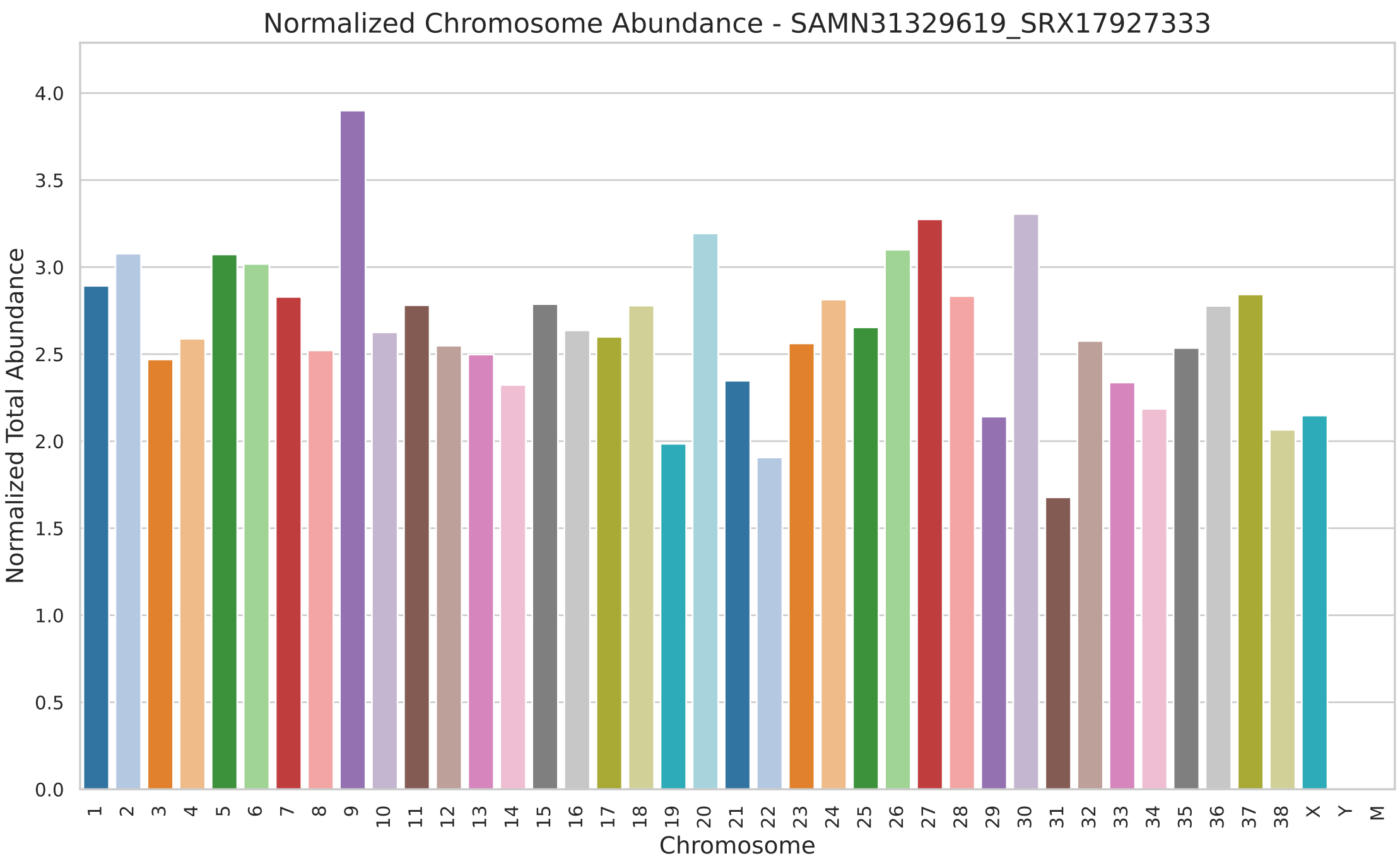

Normalized Chromosome Abundance - SAMEA111341939_ERX11504211
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

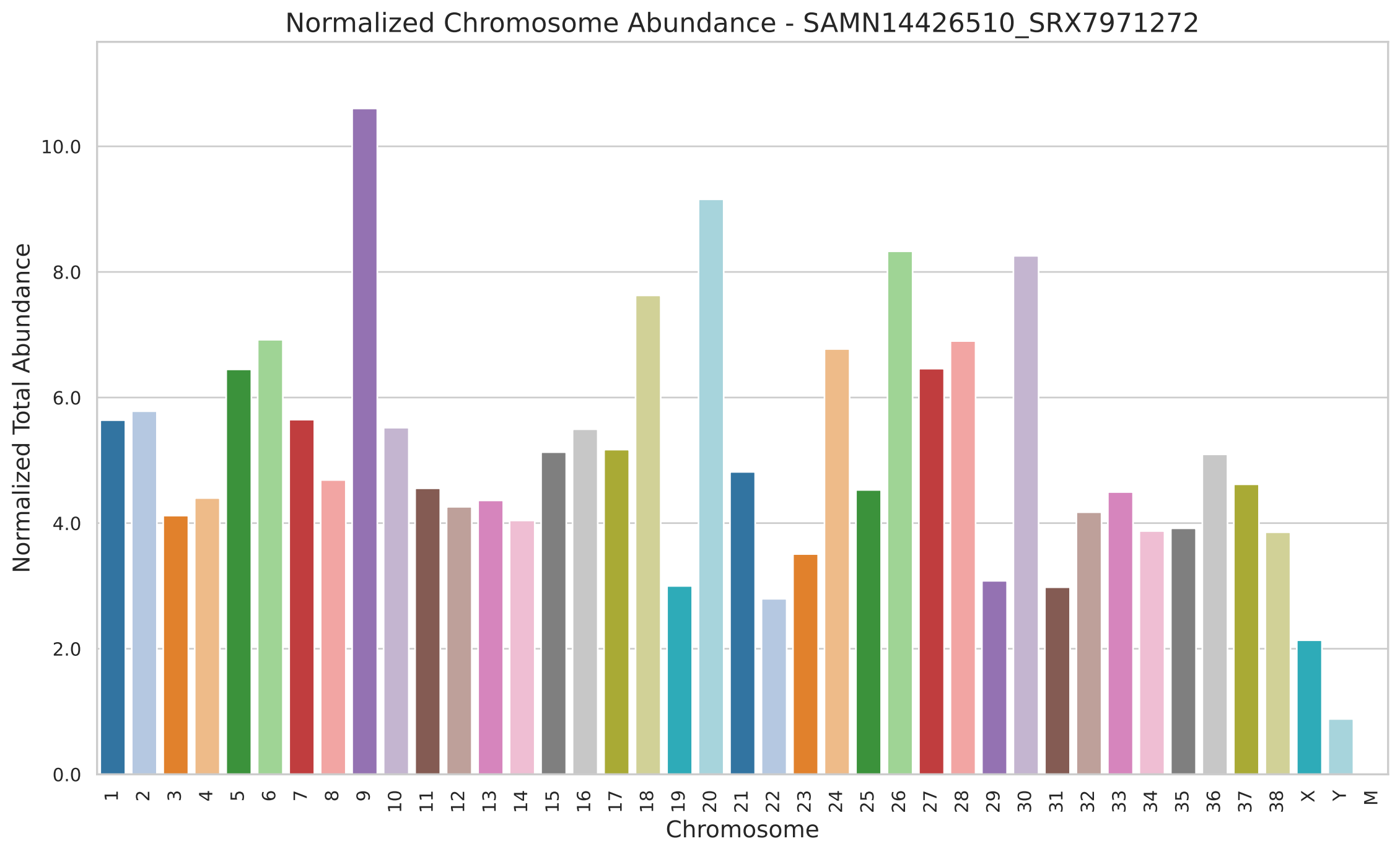

Normalized Chromosome Abundance - SAMEA111341947_ERX11504219
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

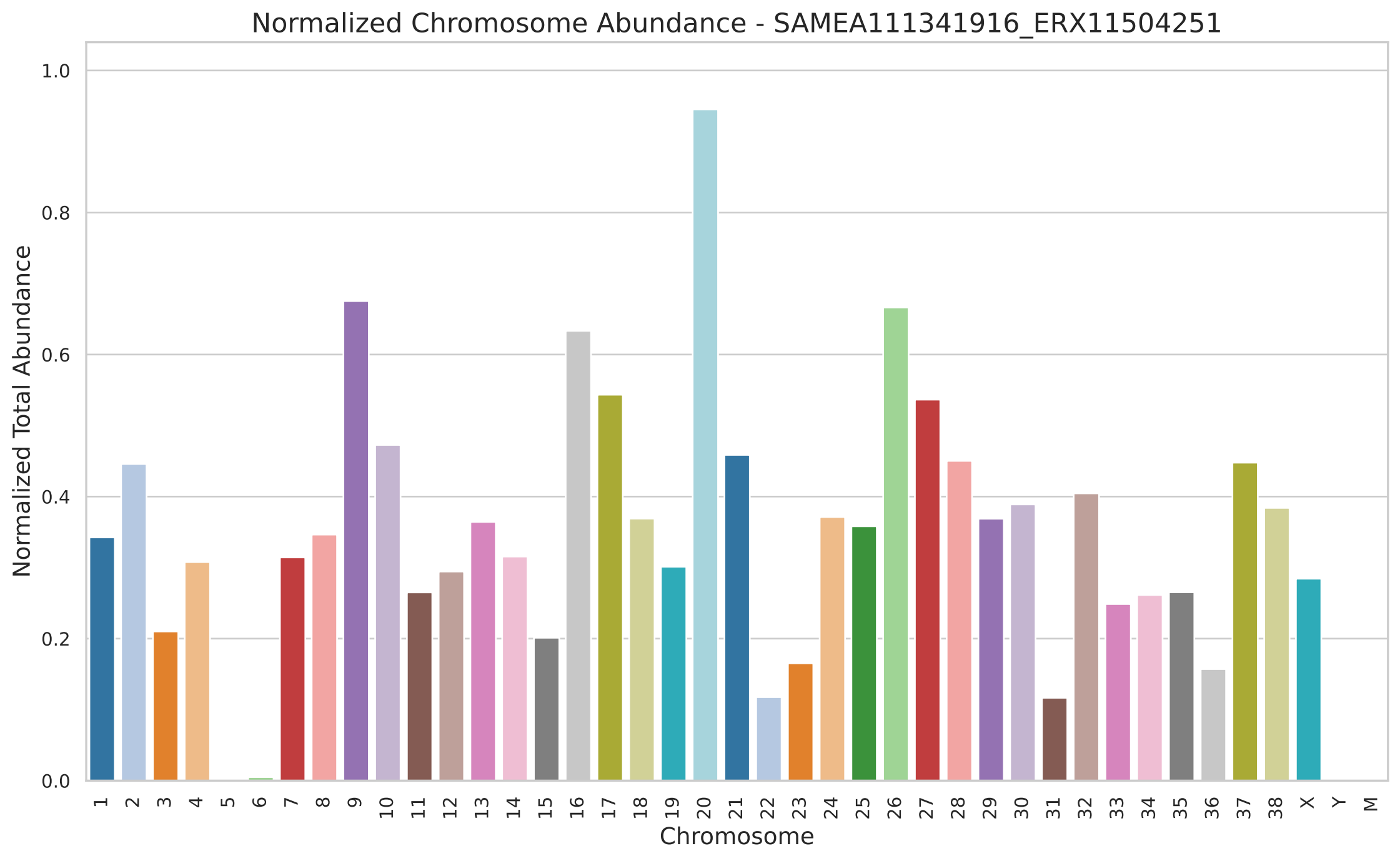

Normalized Chromosome Abundance - SAMN14426521_SRX7971275
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
12.0
14.0
16.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

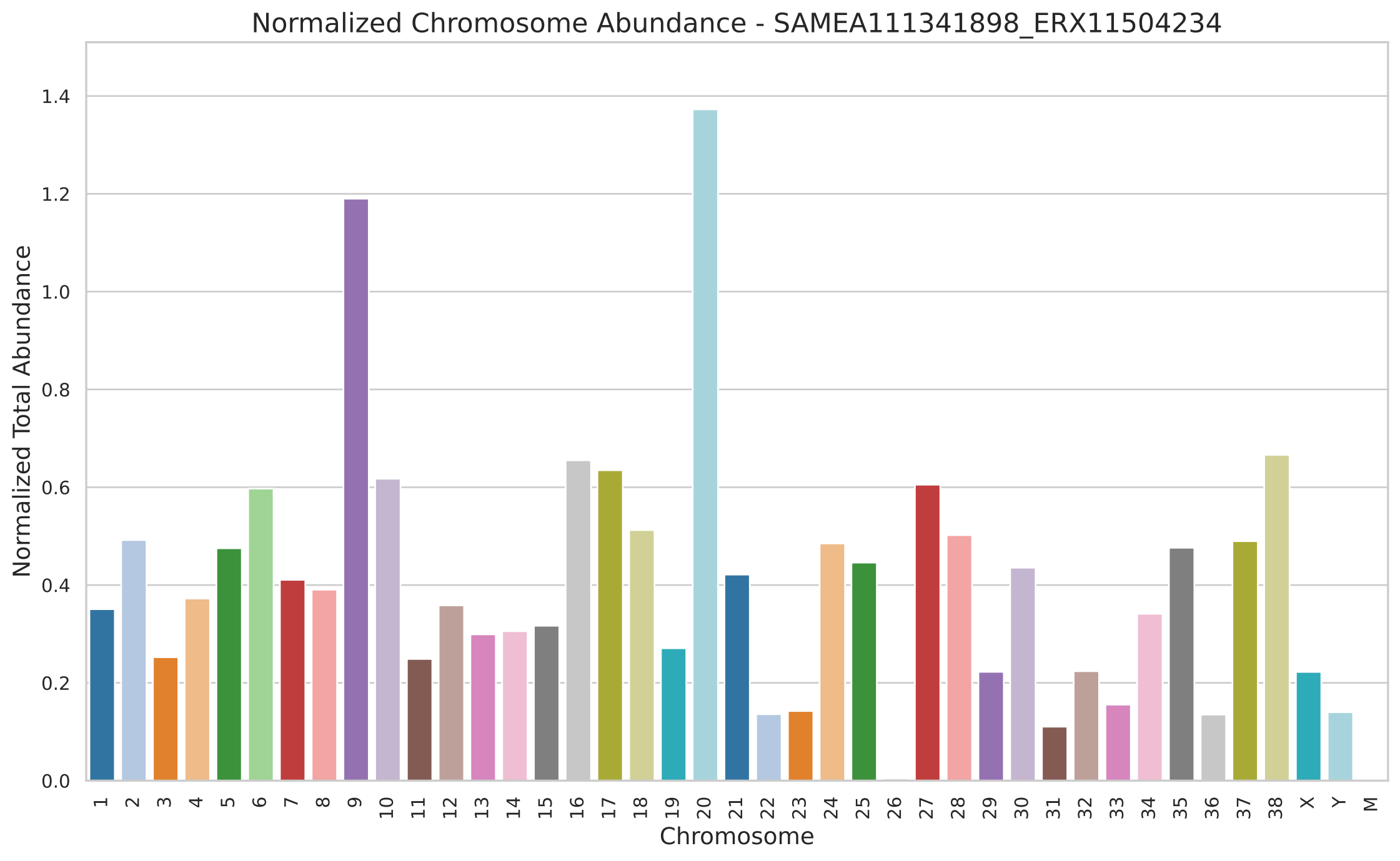

Normalized Chromosome Abundance - SAMN31329612_SRX17927341
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

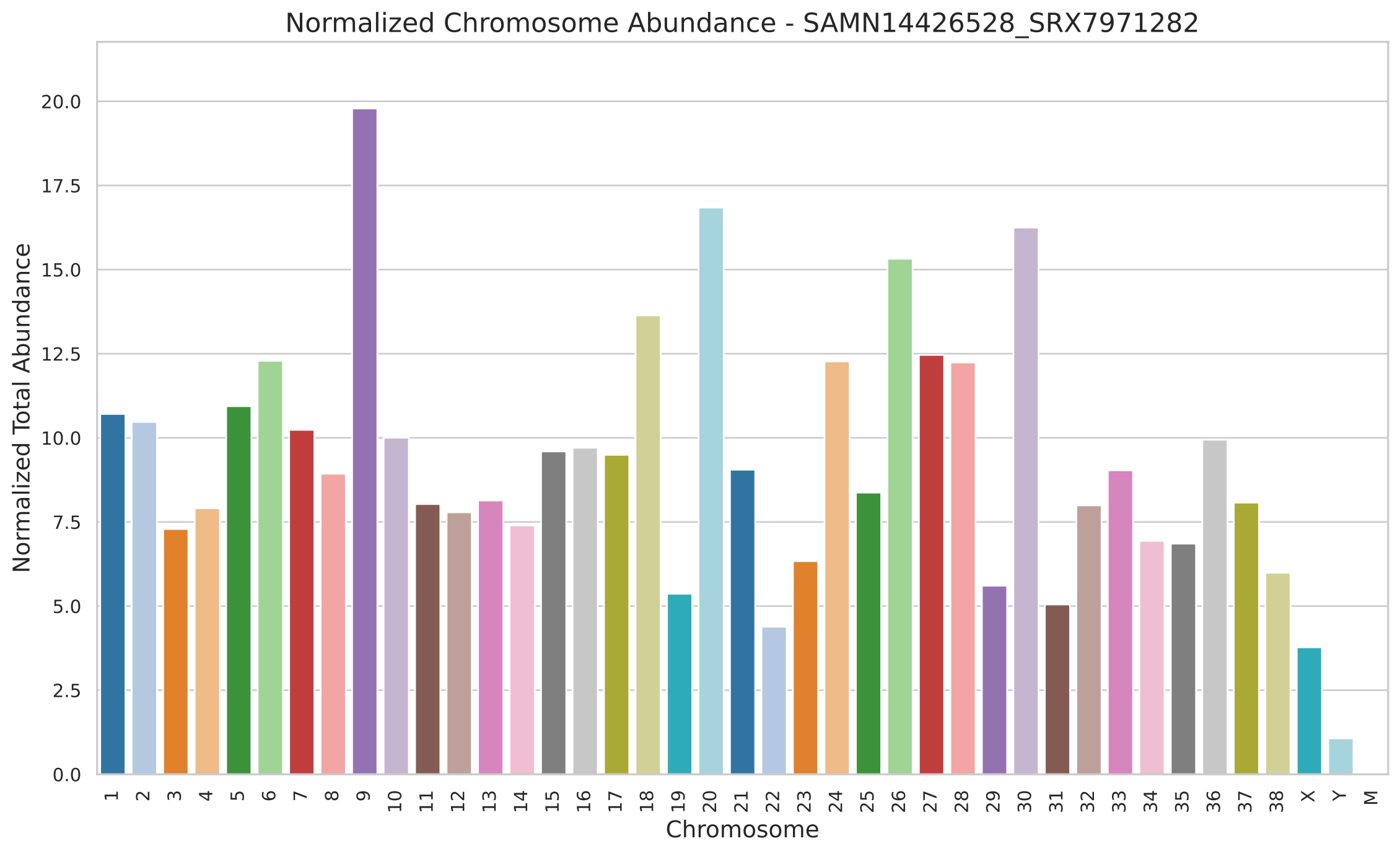

Normalized Chromosome Abundance - SAMEA111341892_ERX11504228
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

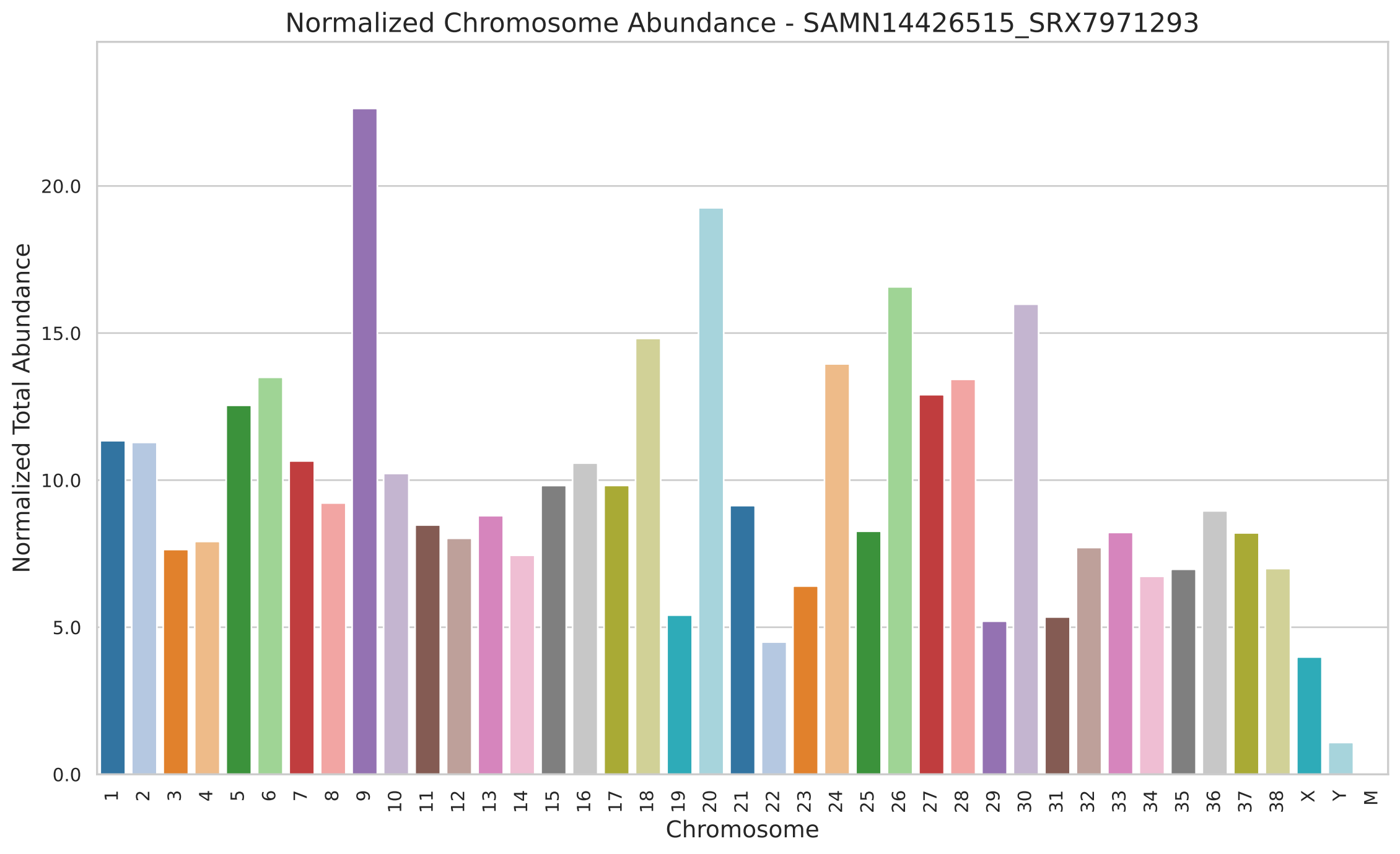

Normalized Chromosome Abundance - SAMN31329619_SRX17927333
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

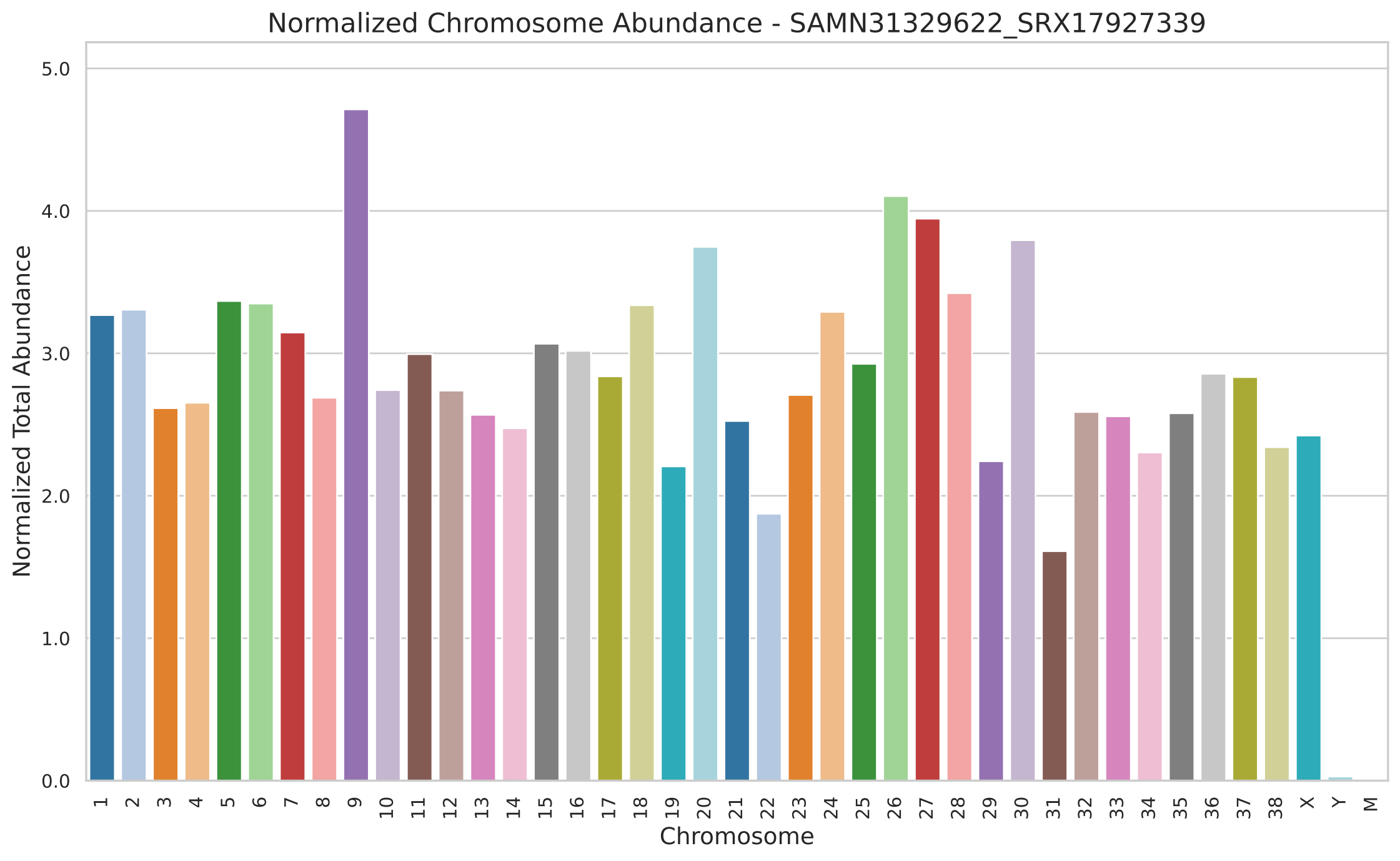

Normalized Chromosome Abundance - SAMN14426510_SRX7971272
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

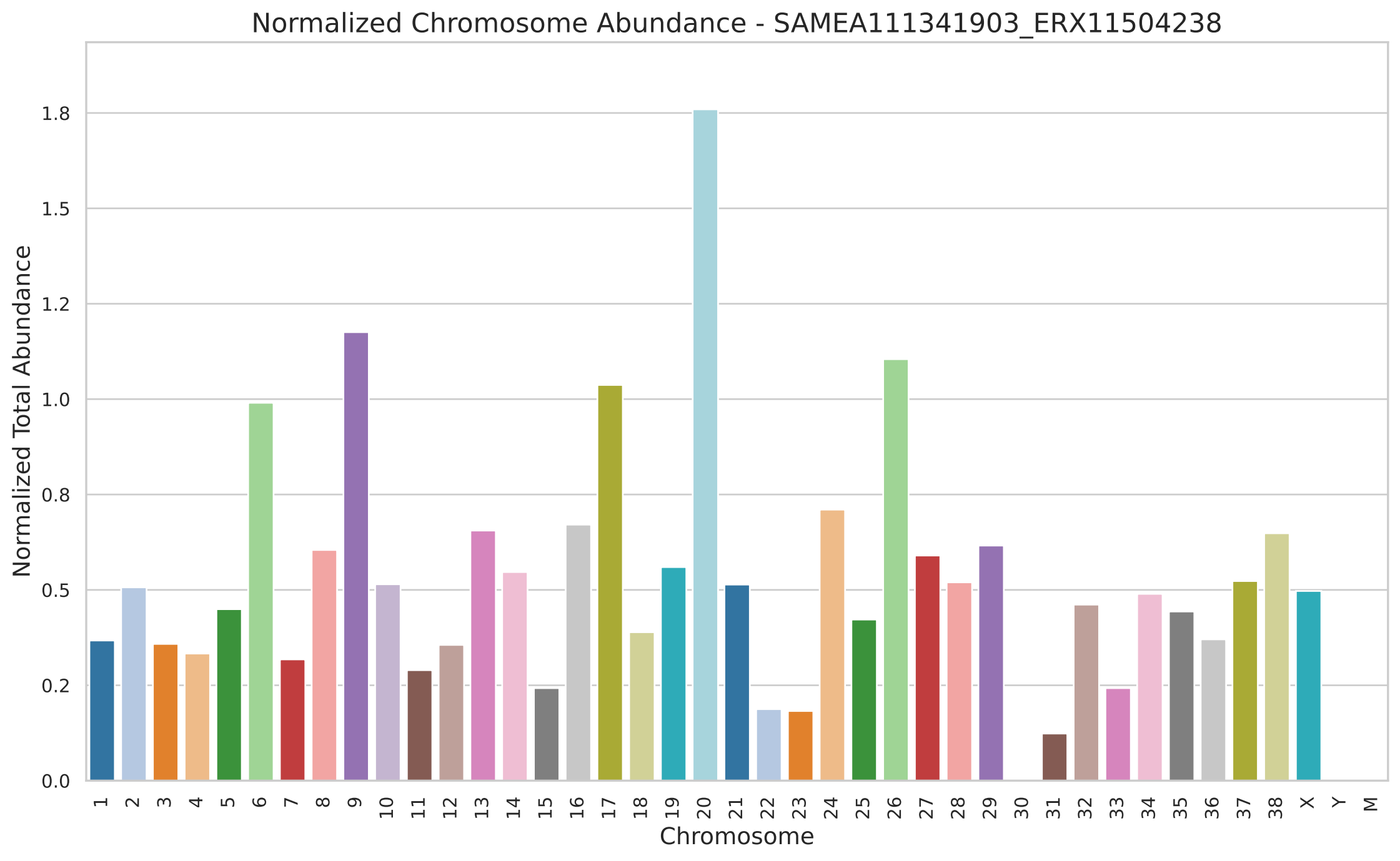

Normalized Chromosome Abundance - SAMEA111341916_ERX11504251
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

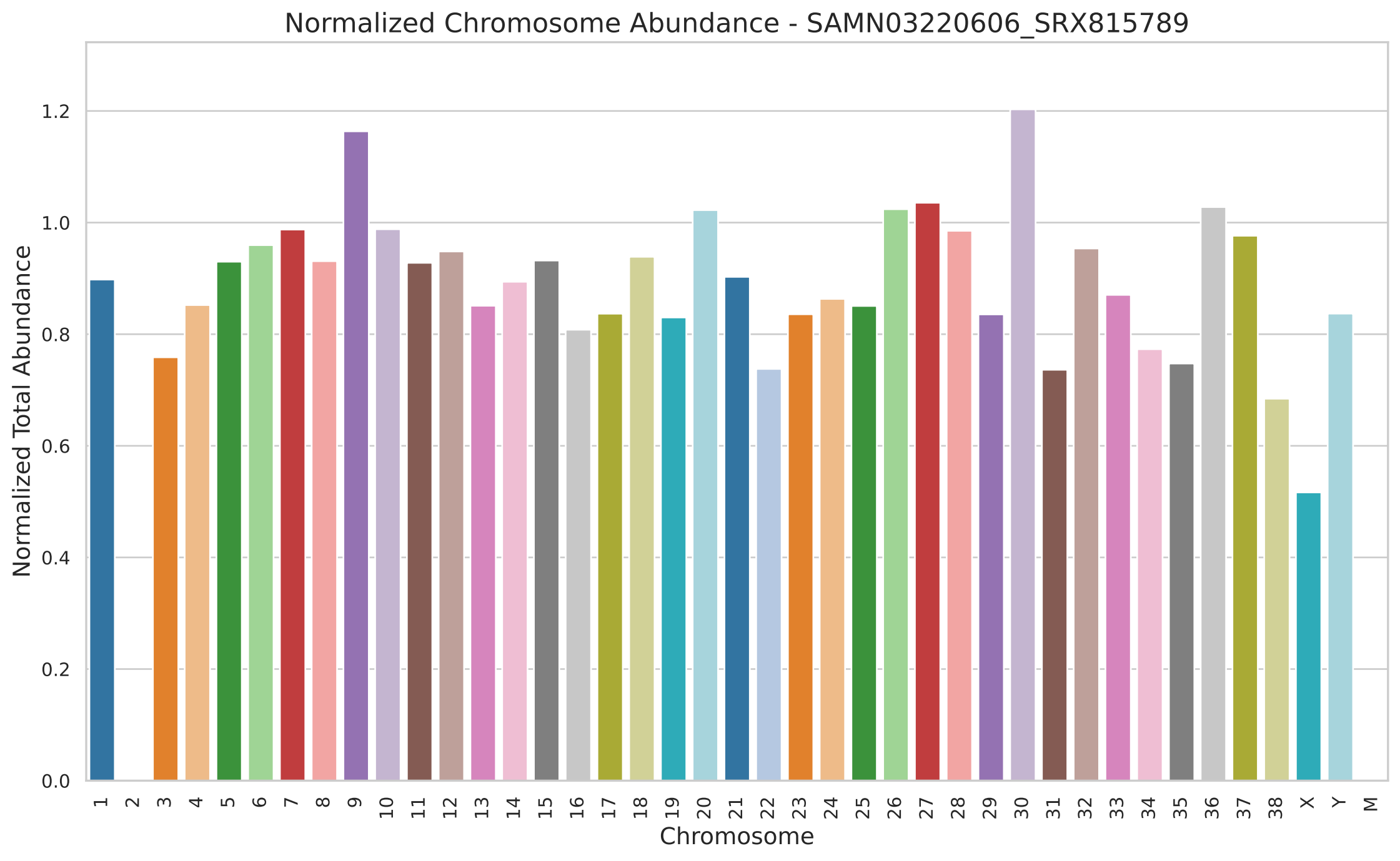

Normalized Chromosome Abundance - SAMEA111341898_ERX11504234
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

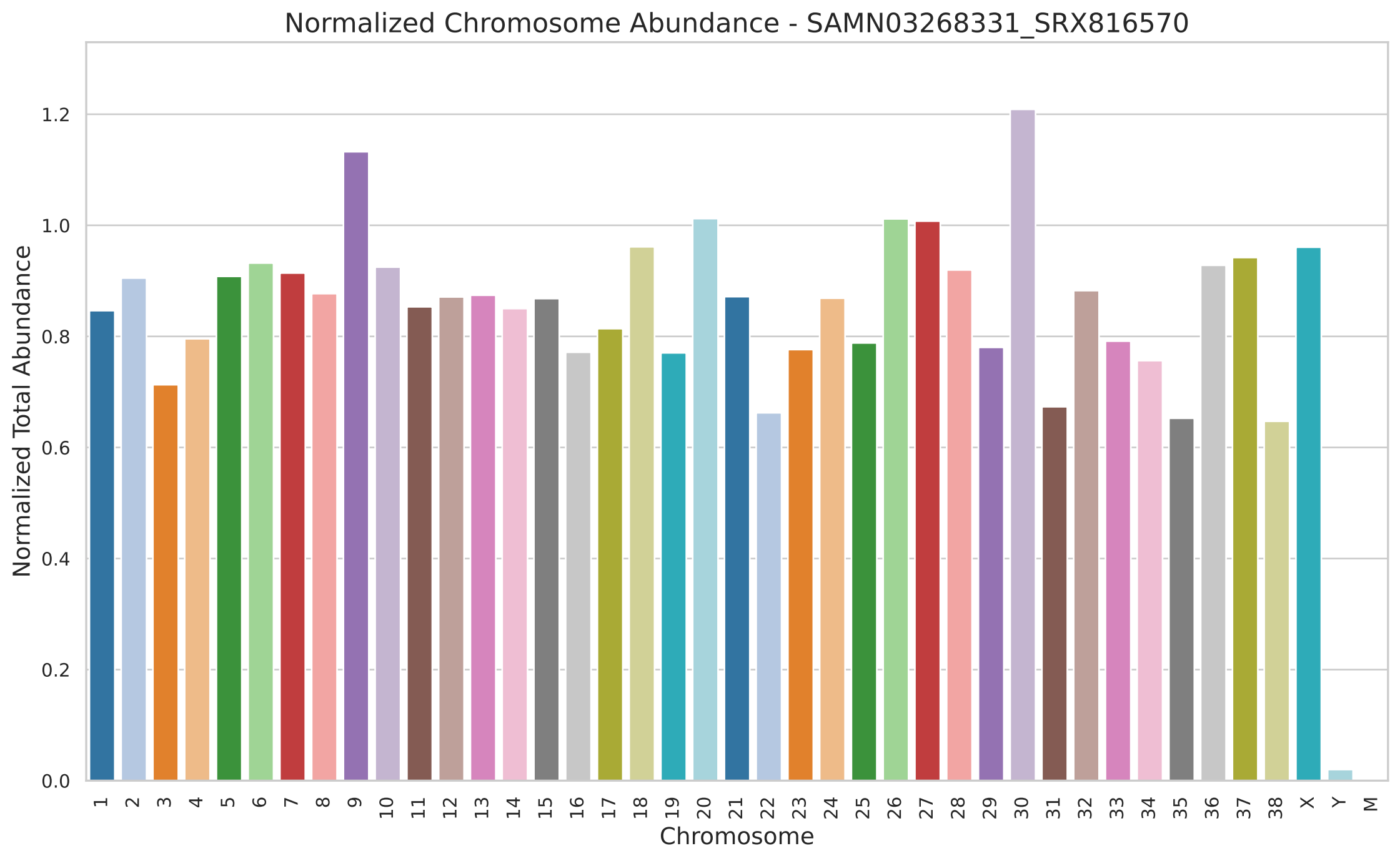

Normalized Chromosome Abundance - SAMN14426528_SRX7971282
Normalized Total Abundance
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5
20.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

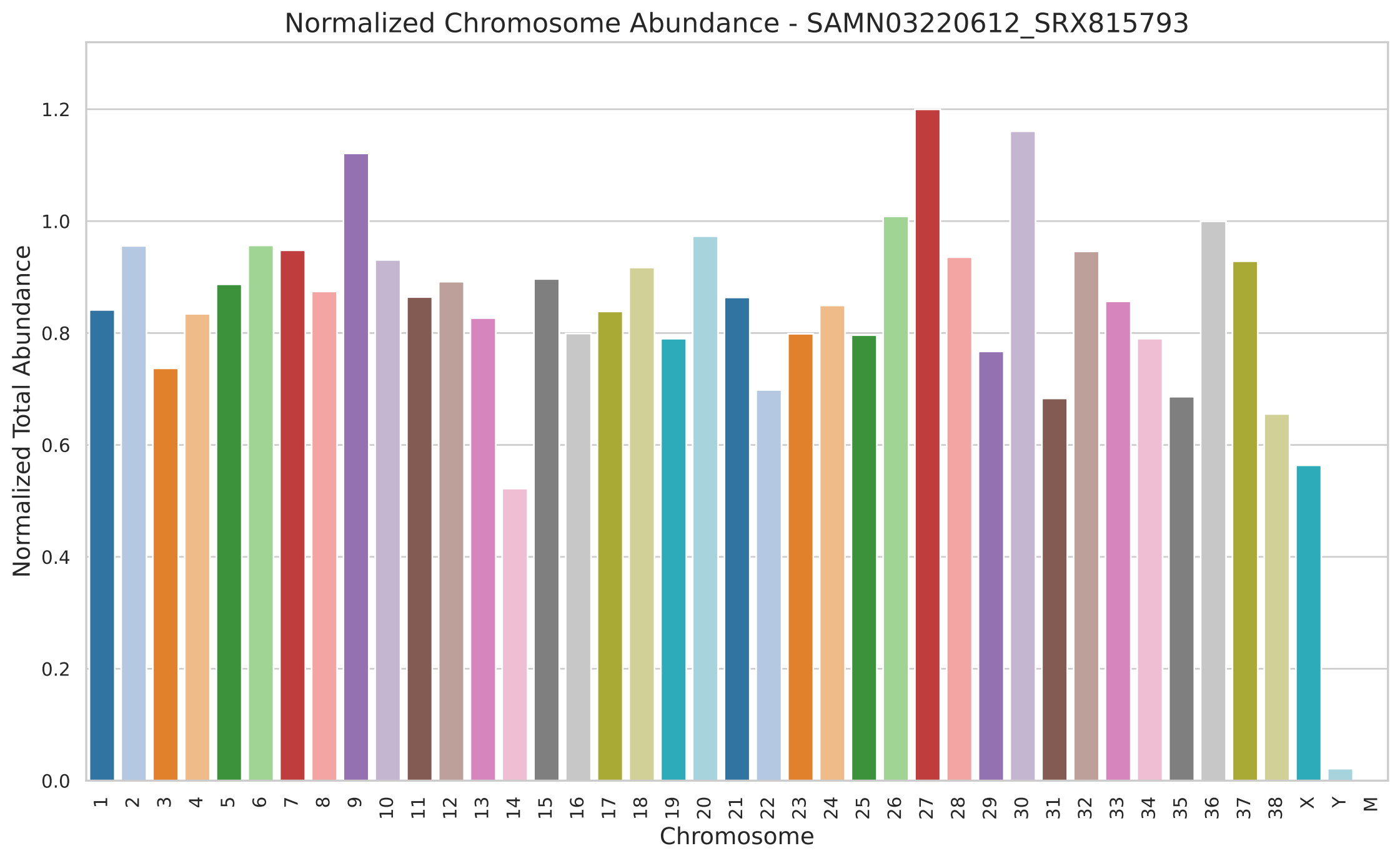

Normalized Chromosome Abundance - SAMN14426515_SRX7971293
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

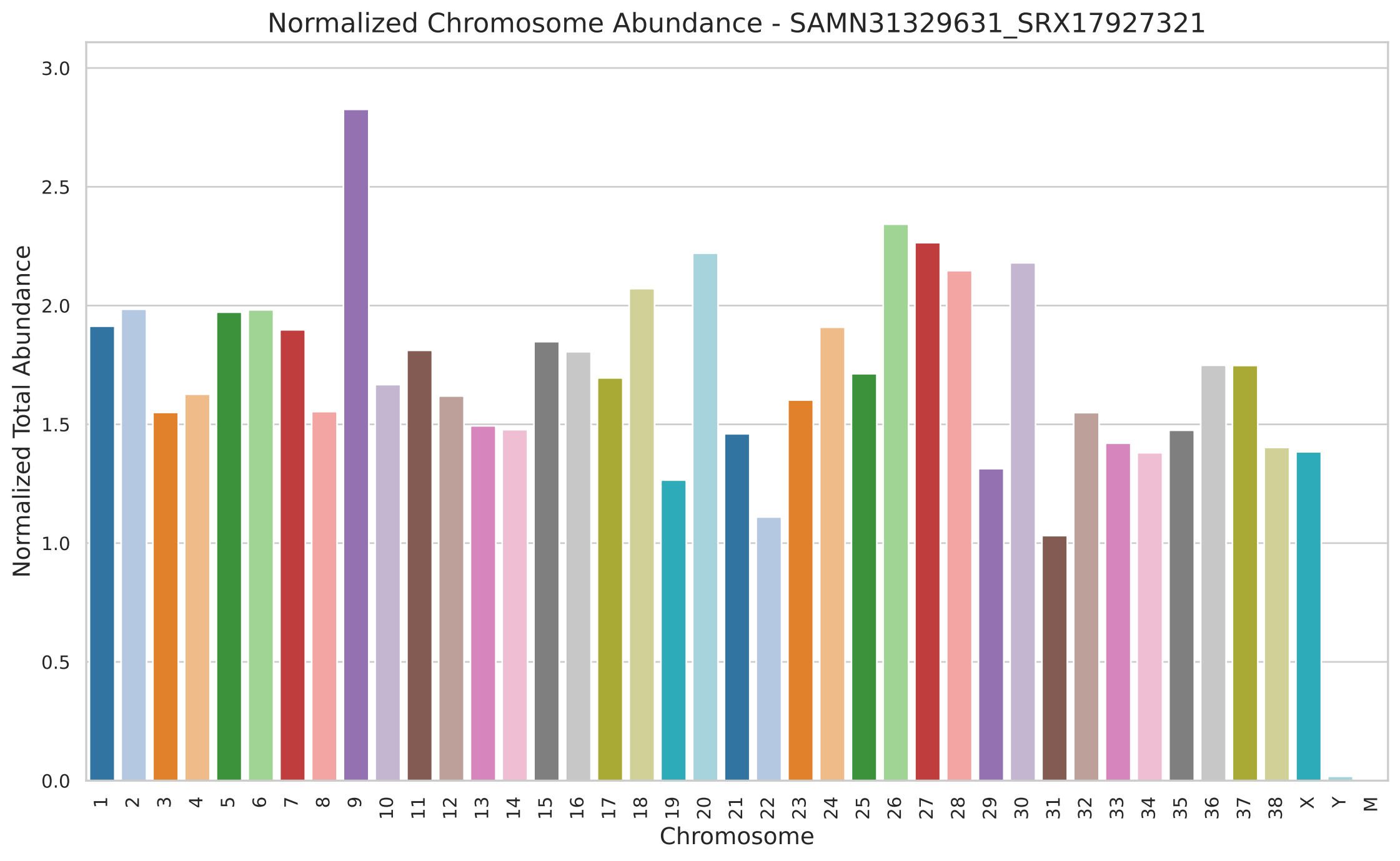

Normalized Chromosome Abundance - SAMN31329622_SRX17927339
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

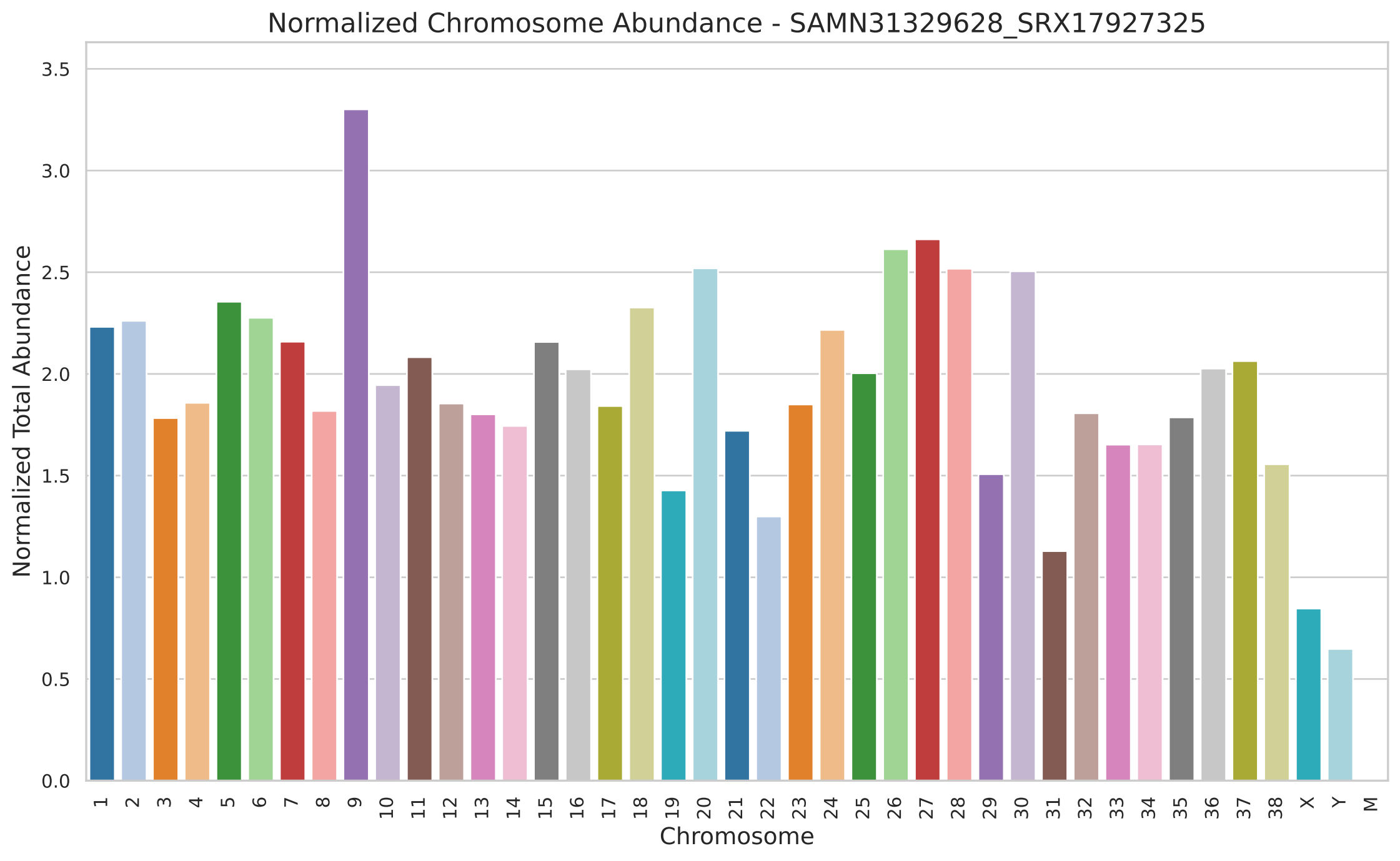

Normalized Chromosome Abundance - SAMEA111341903_ERX11504238
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

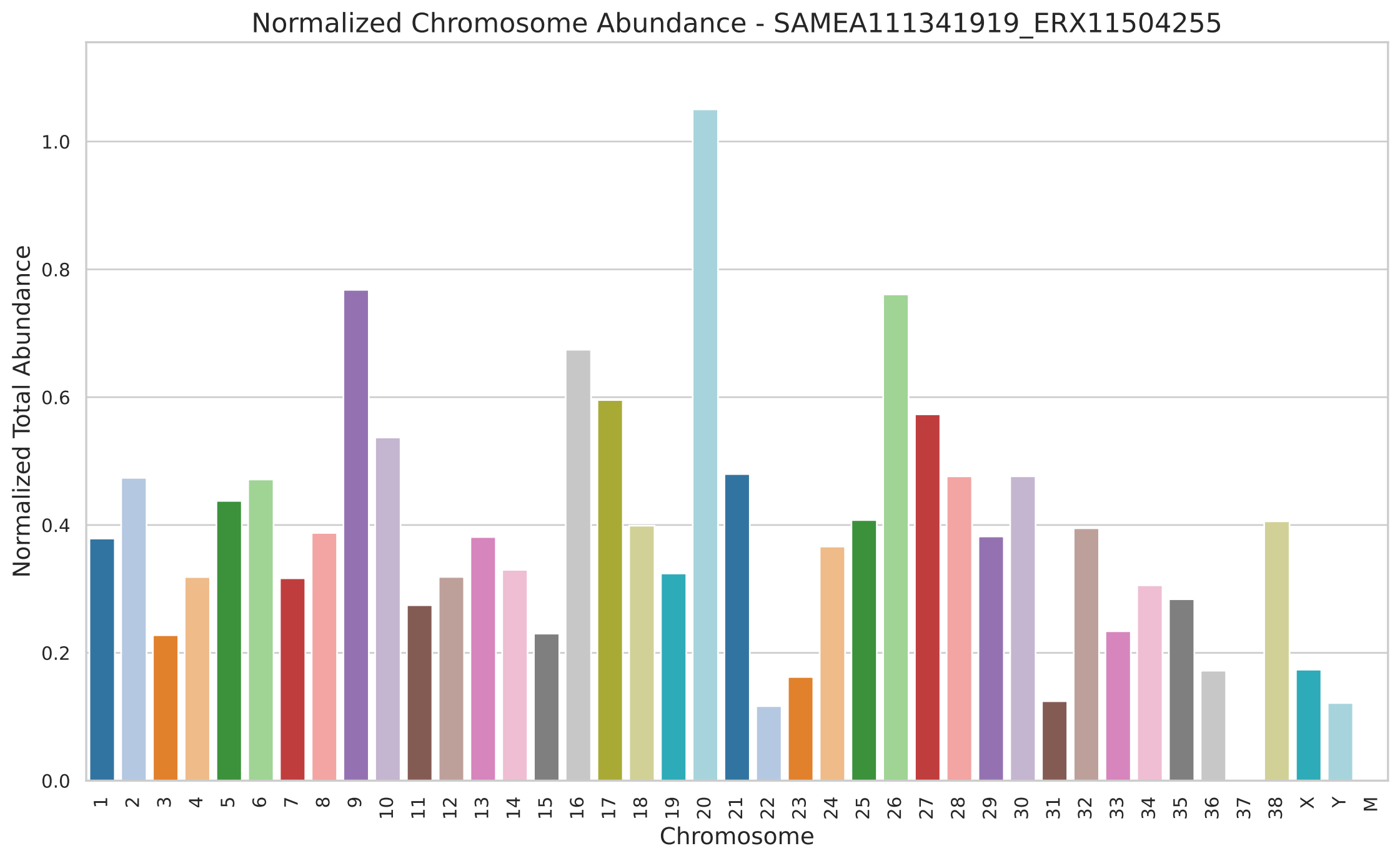

Normalized Chromosome Abundance - SAMN03220606_SRX815789
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

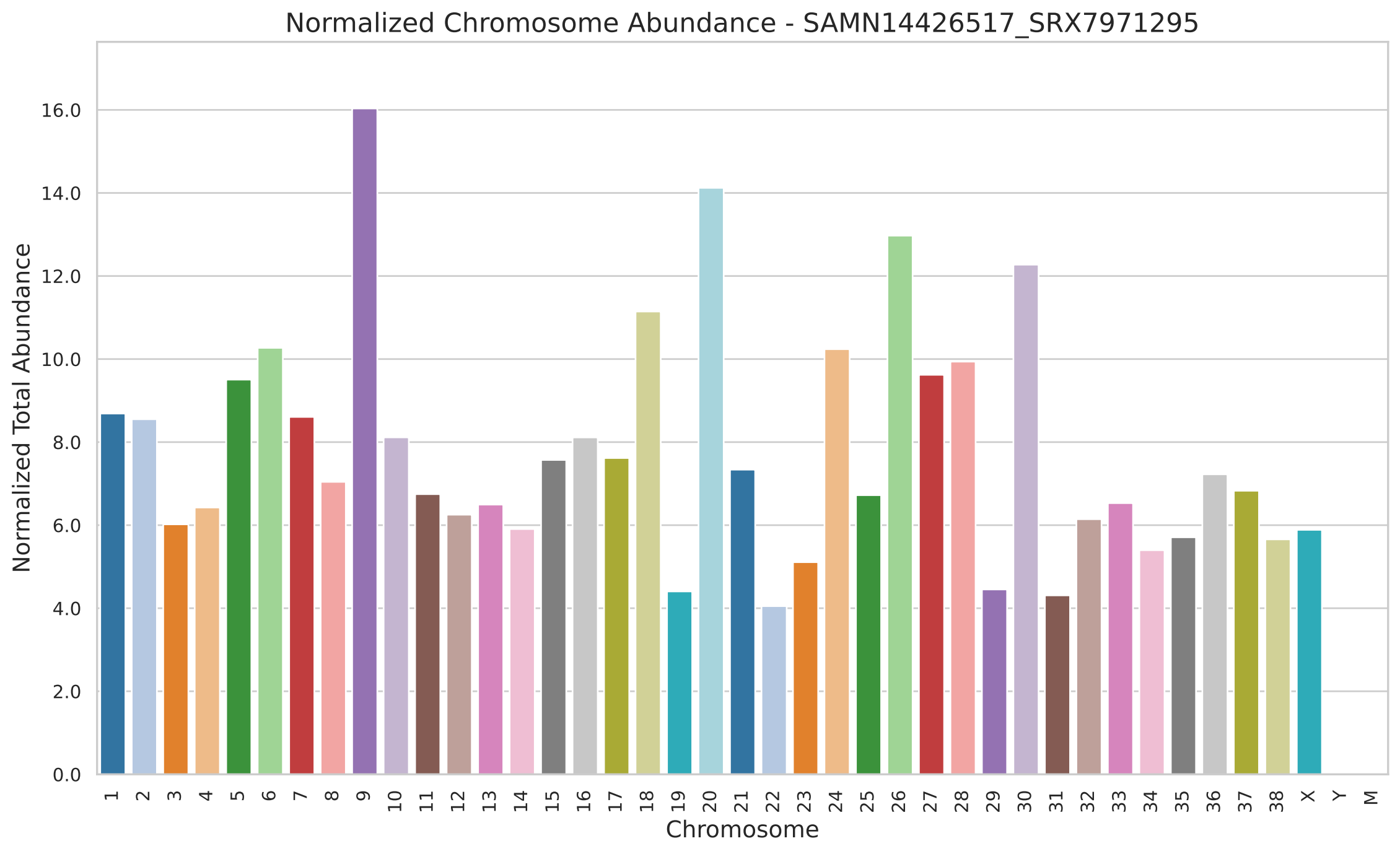

Normalized Chromosome Abundance - SAMN03268331_SRX816570
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

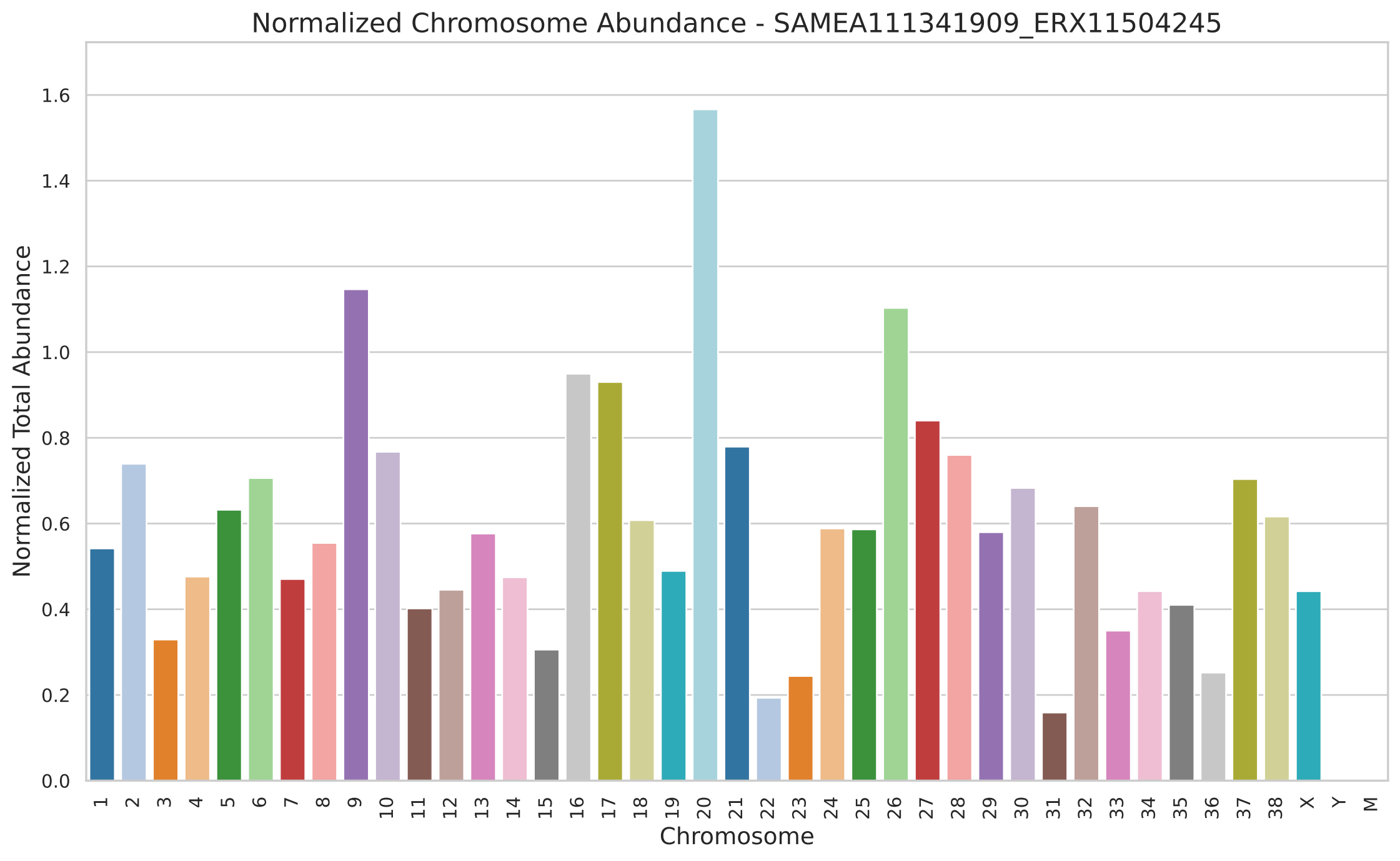

Normalized Chromosome Abundance - SAMN03220612_SRX815793
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

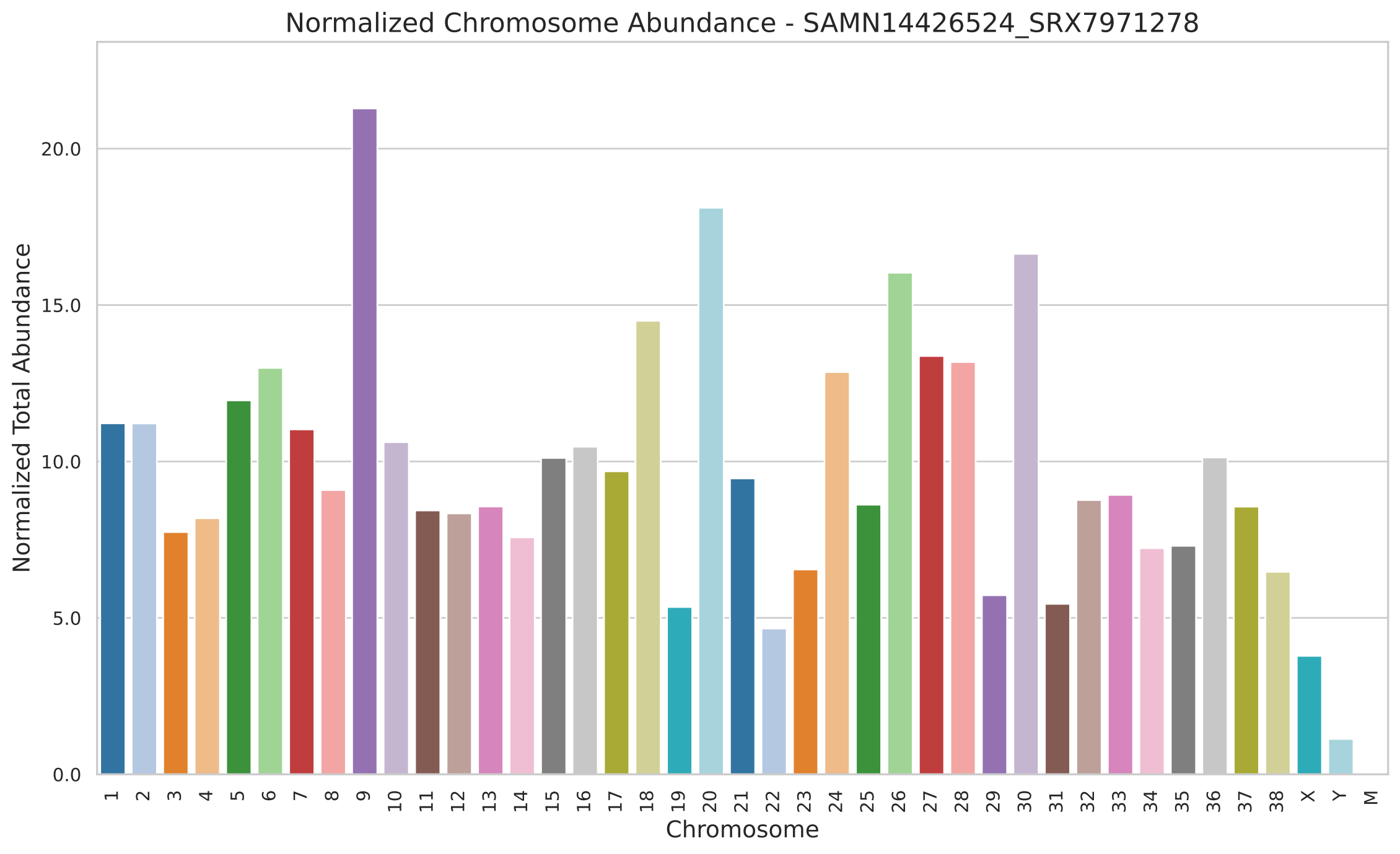

Normalized Chromosome Abundance - SAMN31329631_SRX17927321
Normalized Total Abundance
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

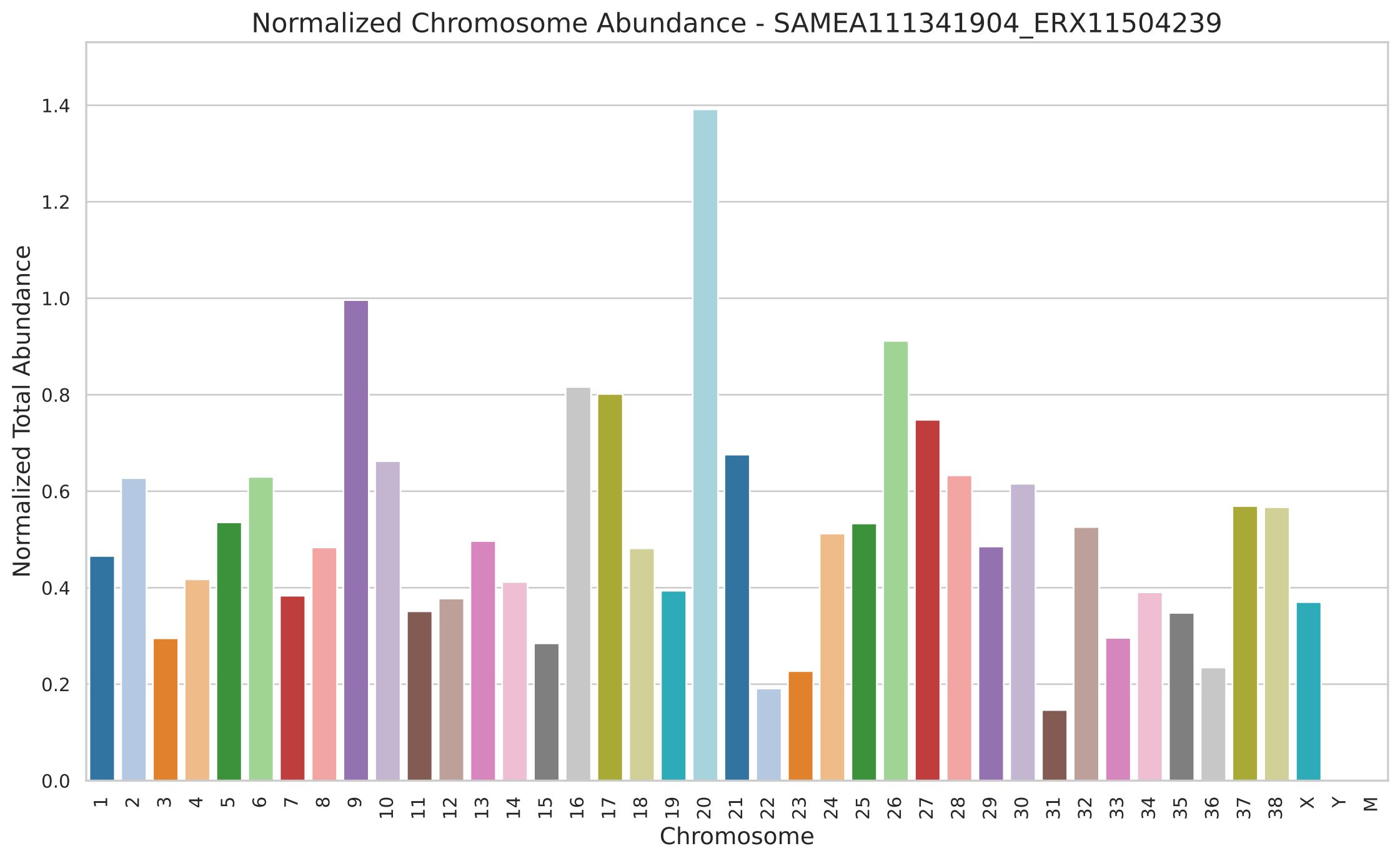

Normalized Chromosome Abundance - SAMN31329628_SRX17927325
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

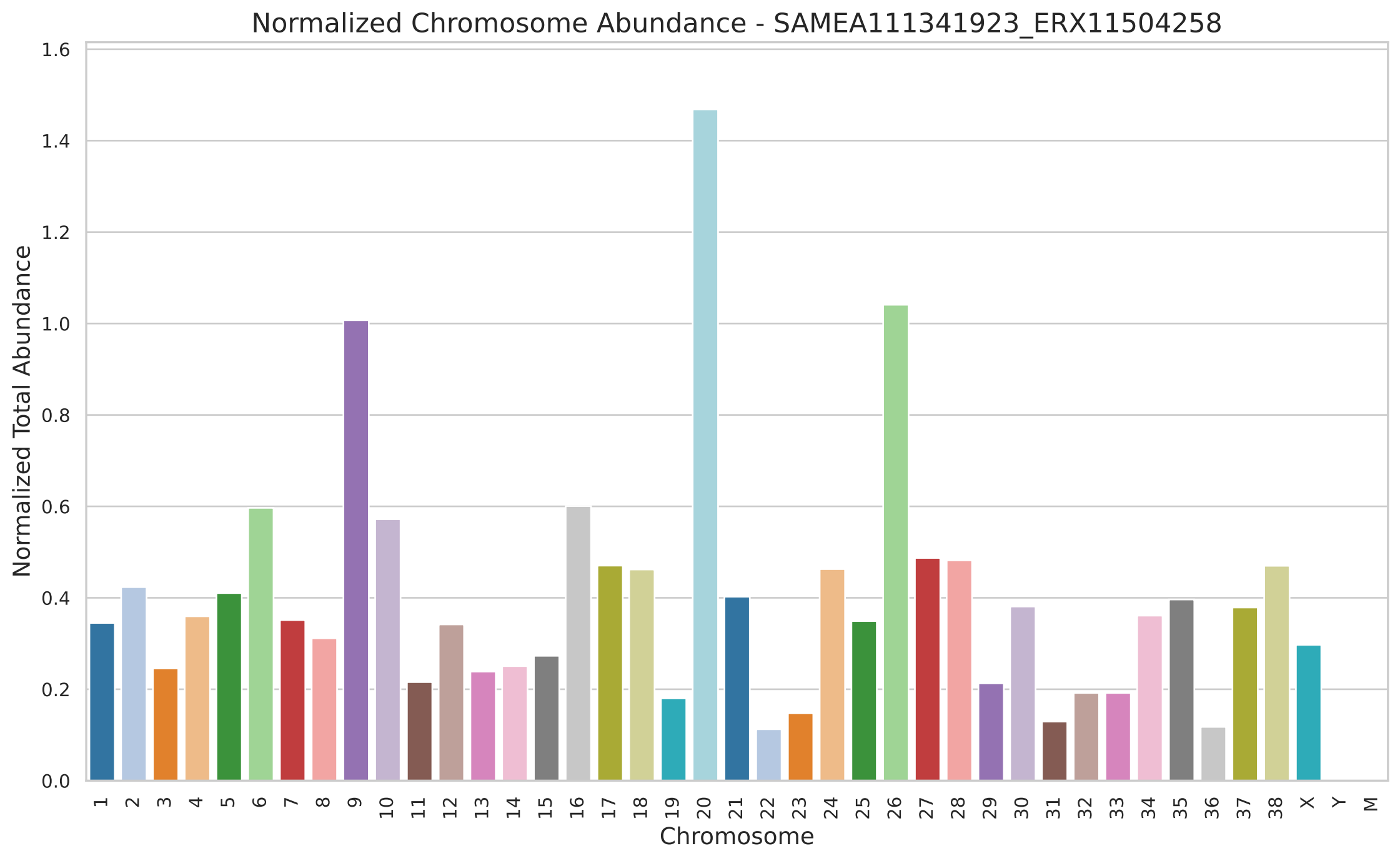

Normalized Chromosome Abundance - SAMEA111341919_ERX11504255
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

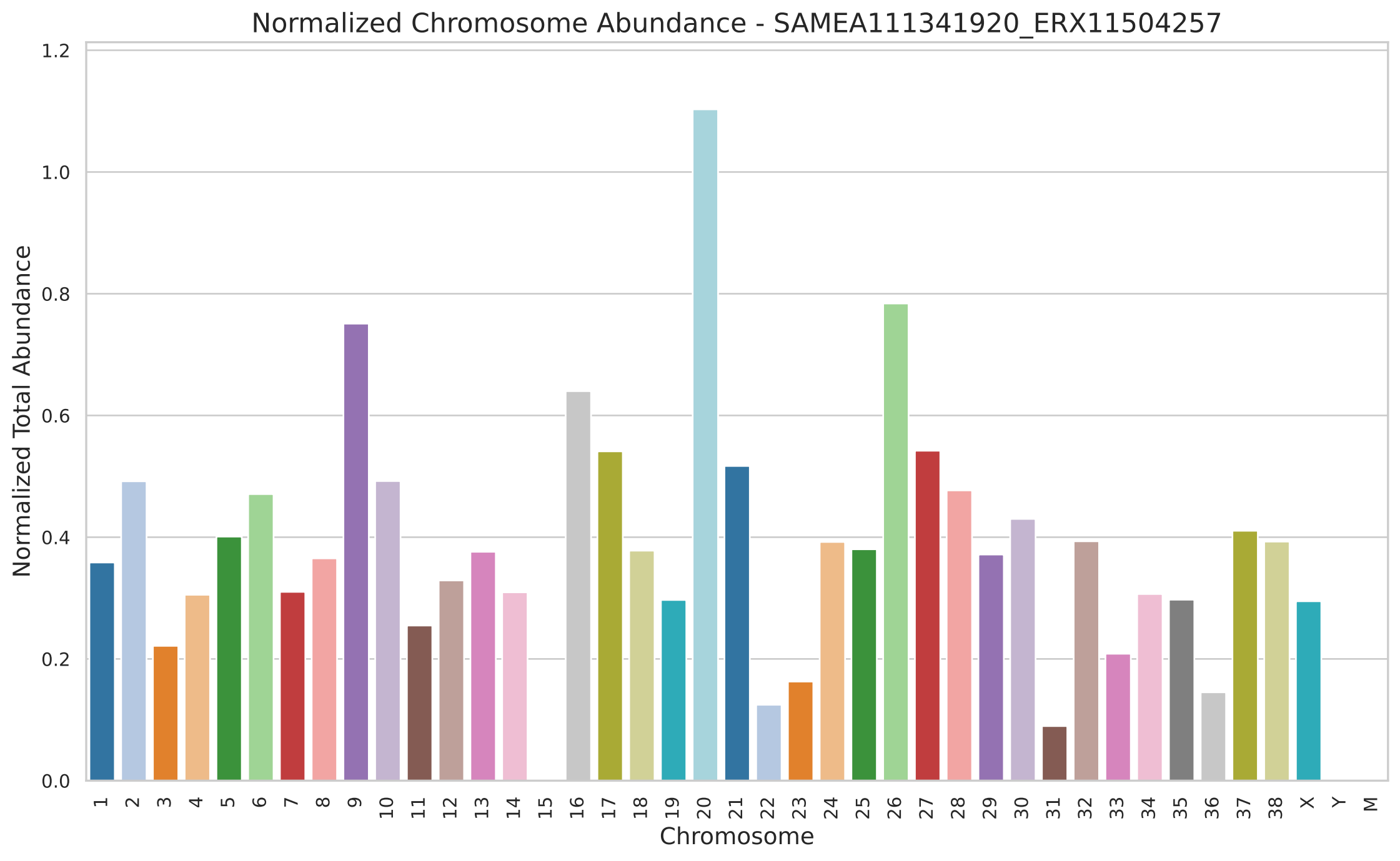

Normalized Chromosome Abundance - SAMN14426517_SRX7971295
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
12.0
14.0
16.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

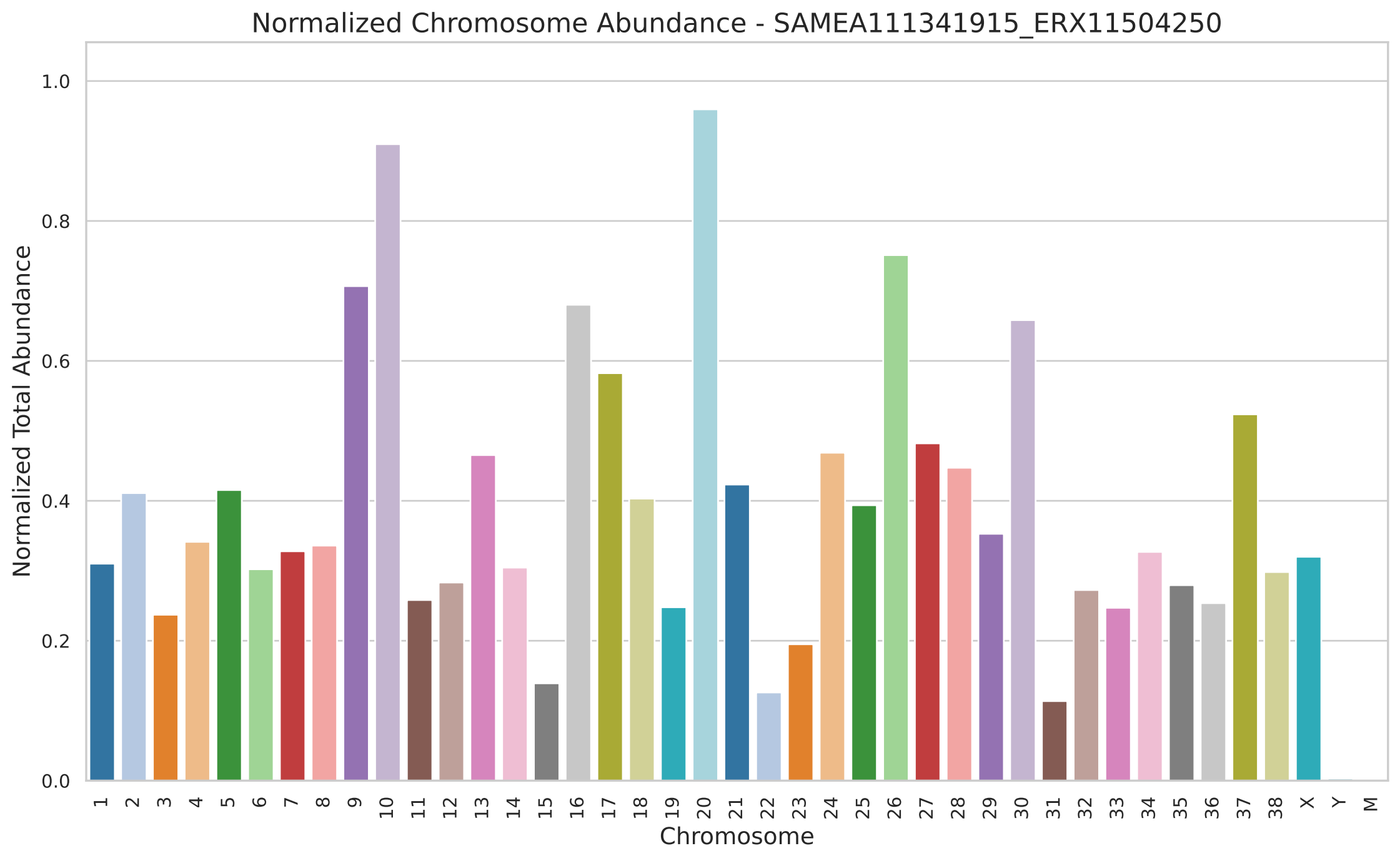

Normalized Chromosome Abundance - SAMEA111341909_ERX11504245
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

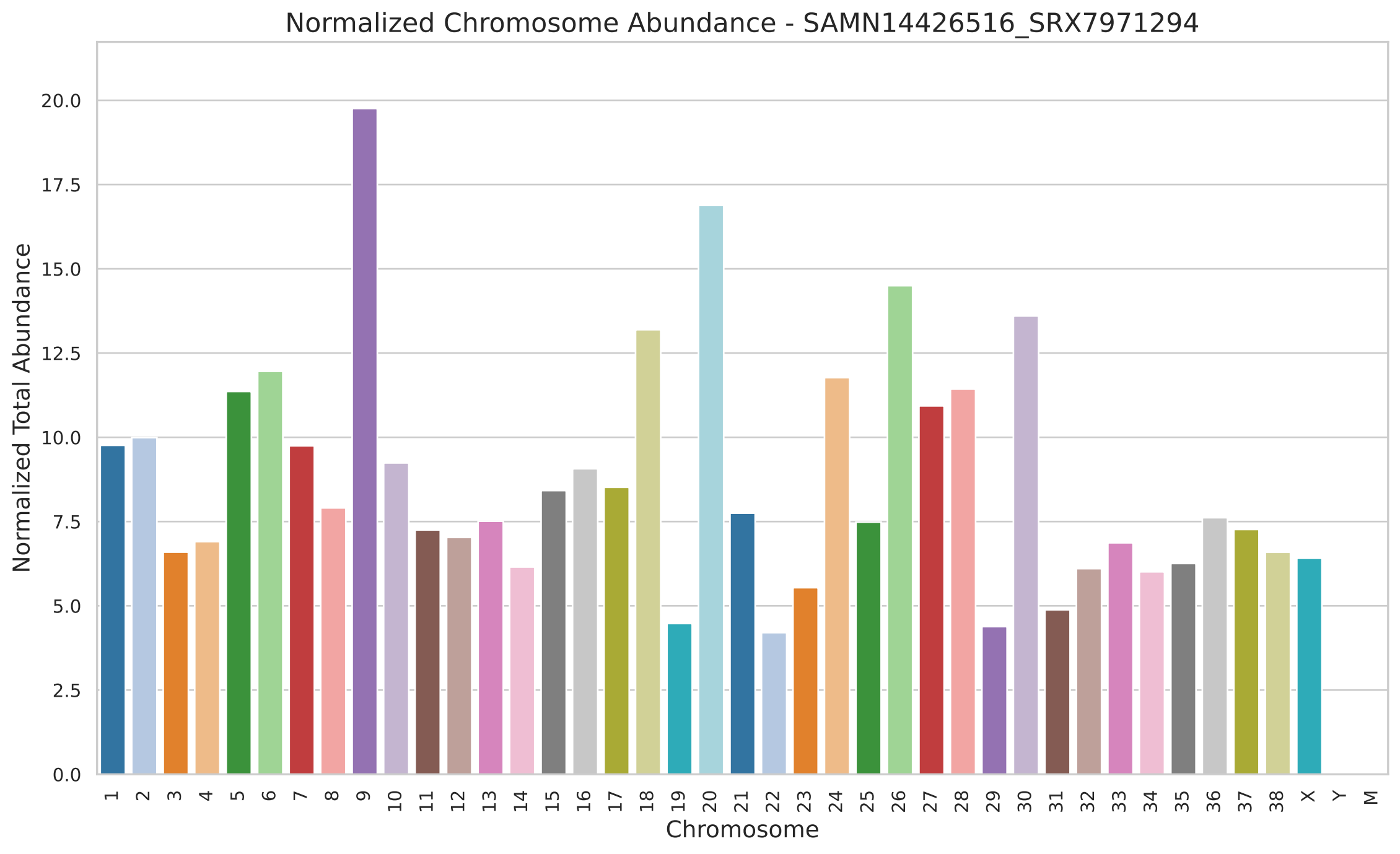

Normalized Chromosome Abundance - SAMN14426524_SRX7971278
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

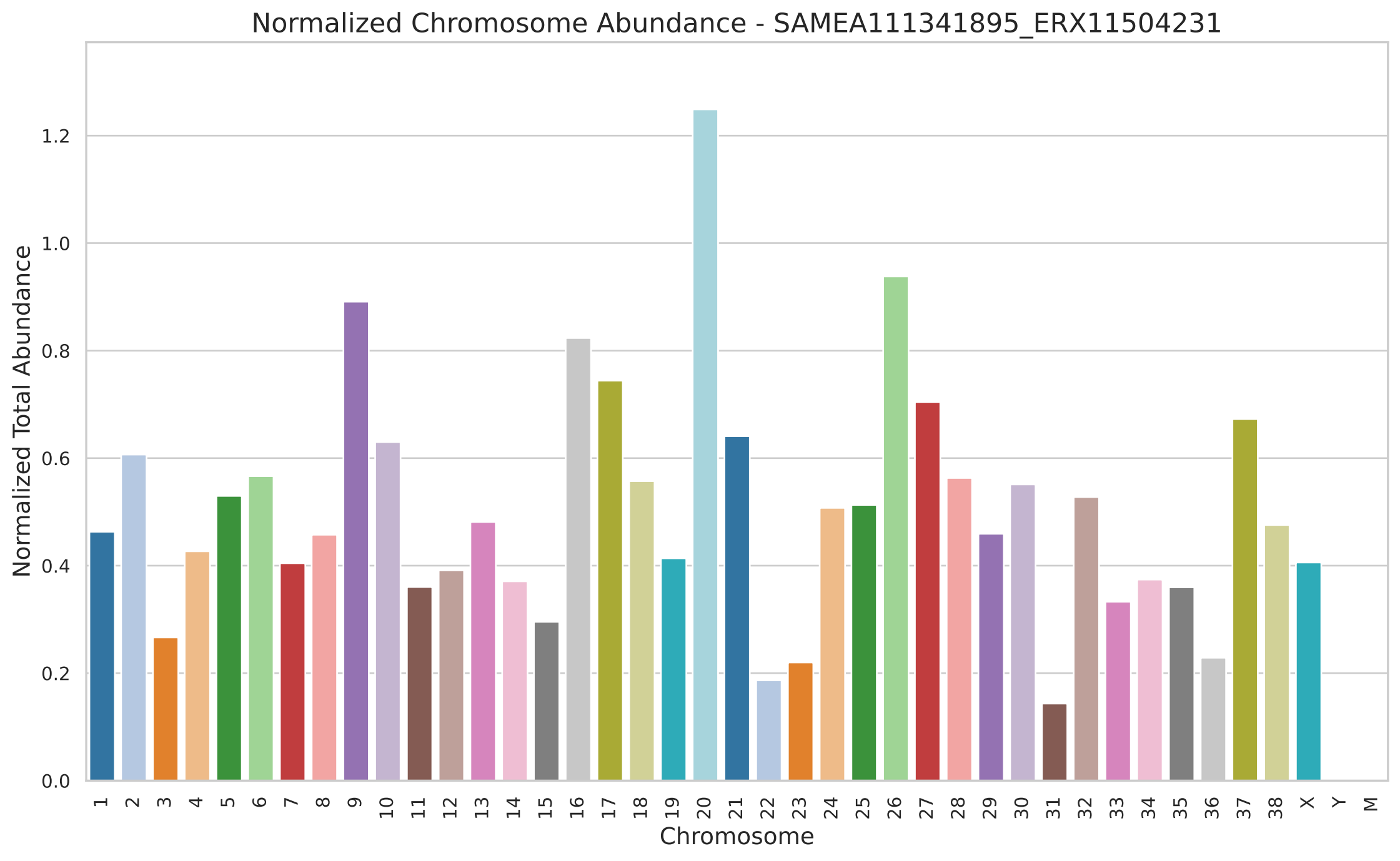

Normalized Chromosome Abundance - SAMEA111341904_ERX11504239
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

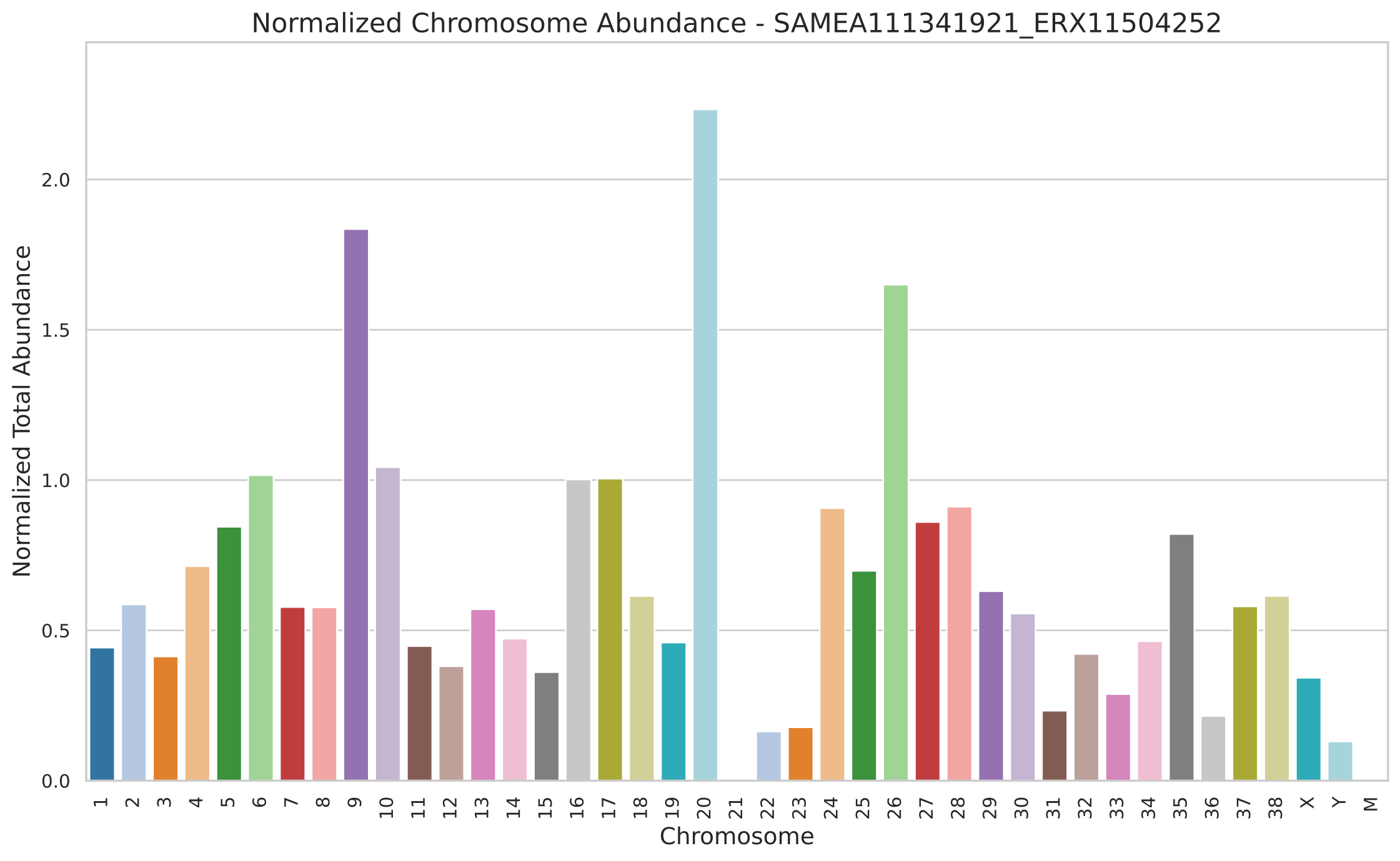

Normalized Chromosome Abundance - SAMEA111341923_ERX11504258
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

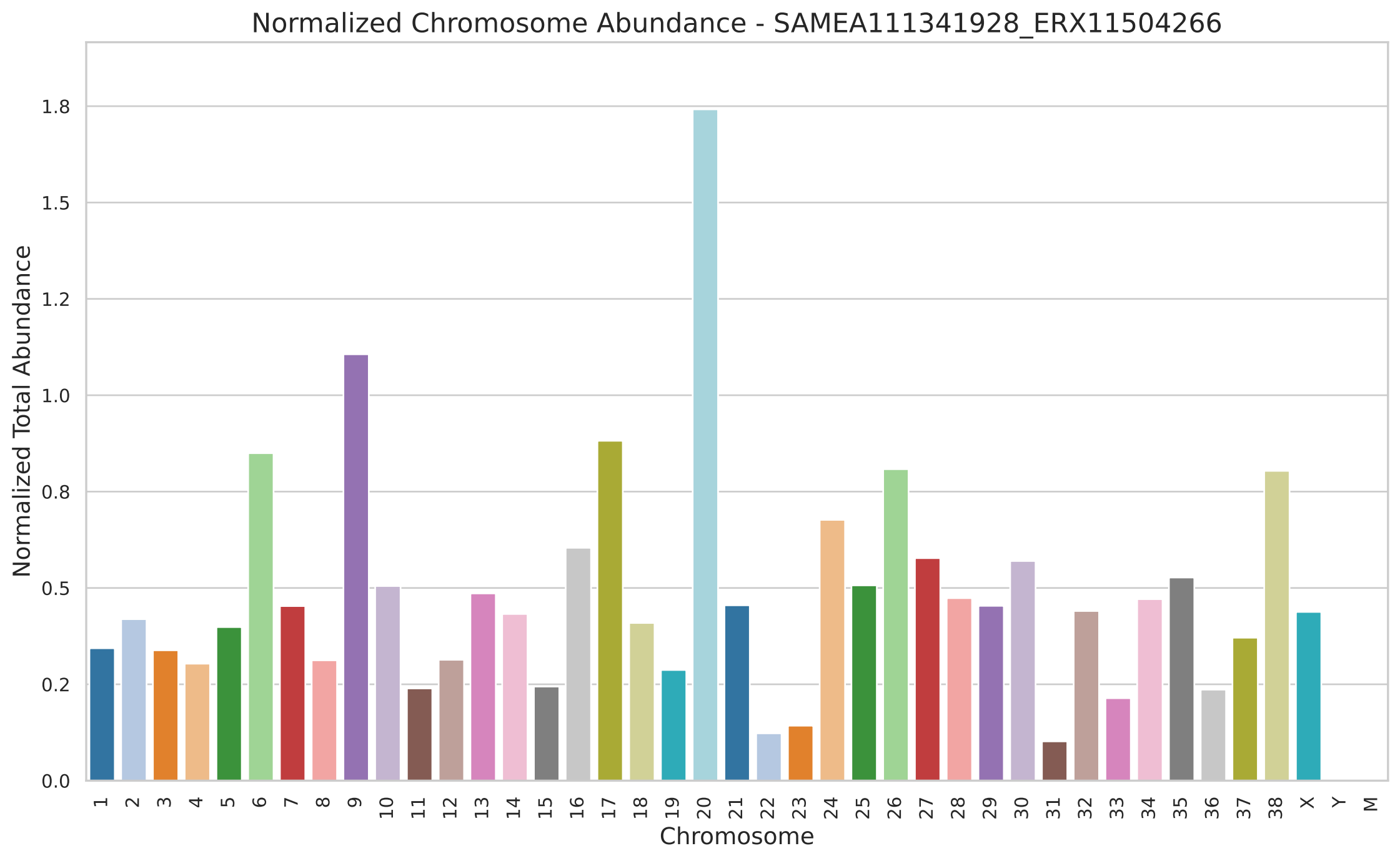

Normalized Chromosome Abundance - SAMEA111341920_ERX11504257
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

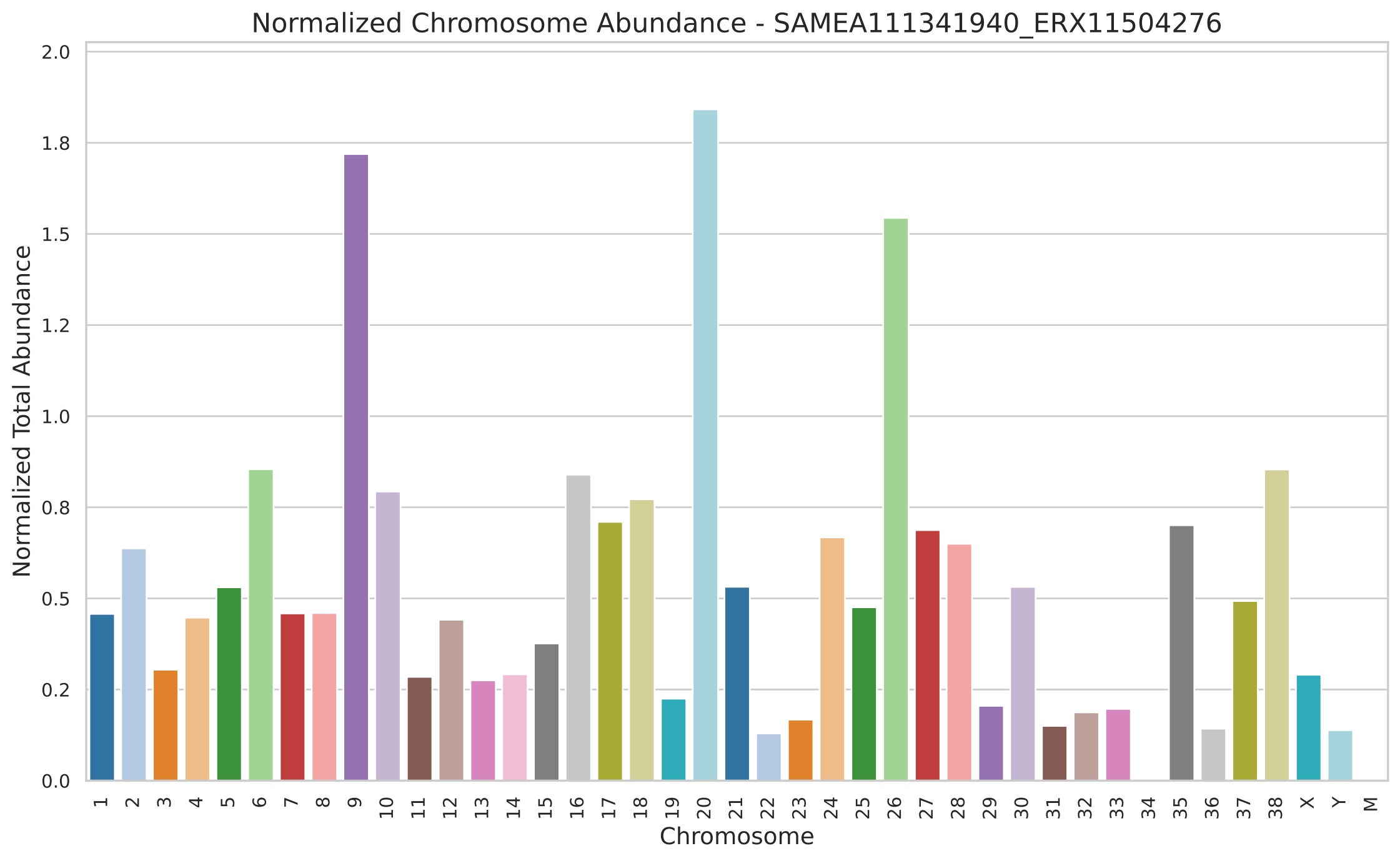

Normalized Chromosome Abundance - SAMEA111341915_ERX11504250
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

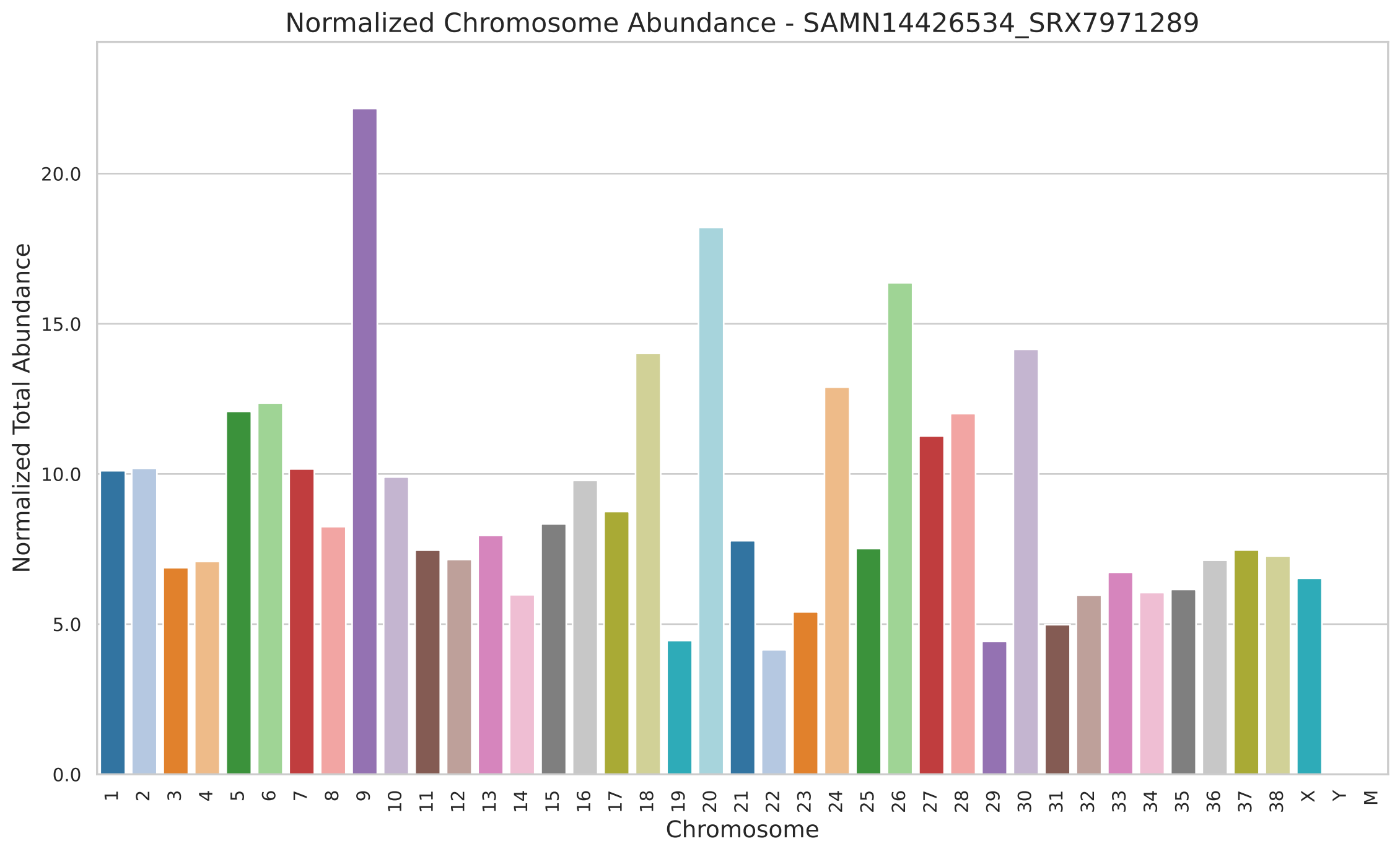

Normalized Chromosome Abundance - SAMN14426516_SRX7971294
Normalized Total Abundance
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5
20.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

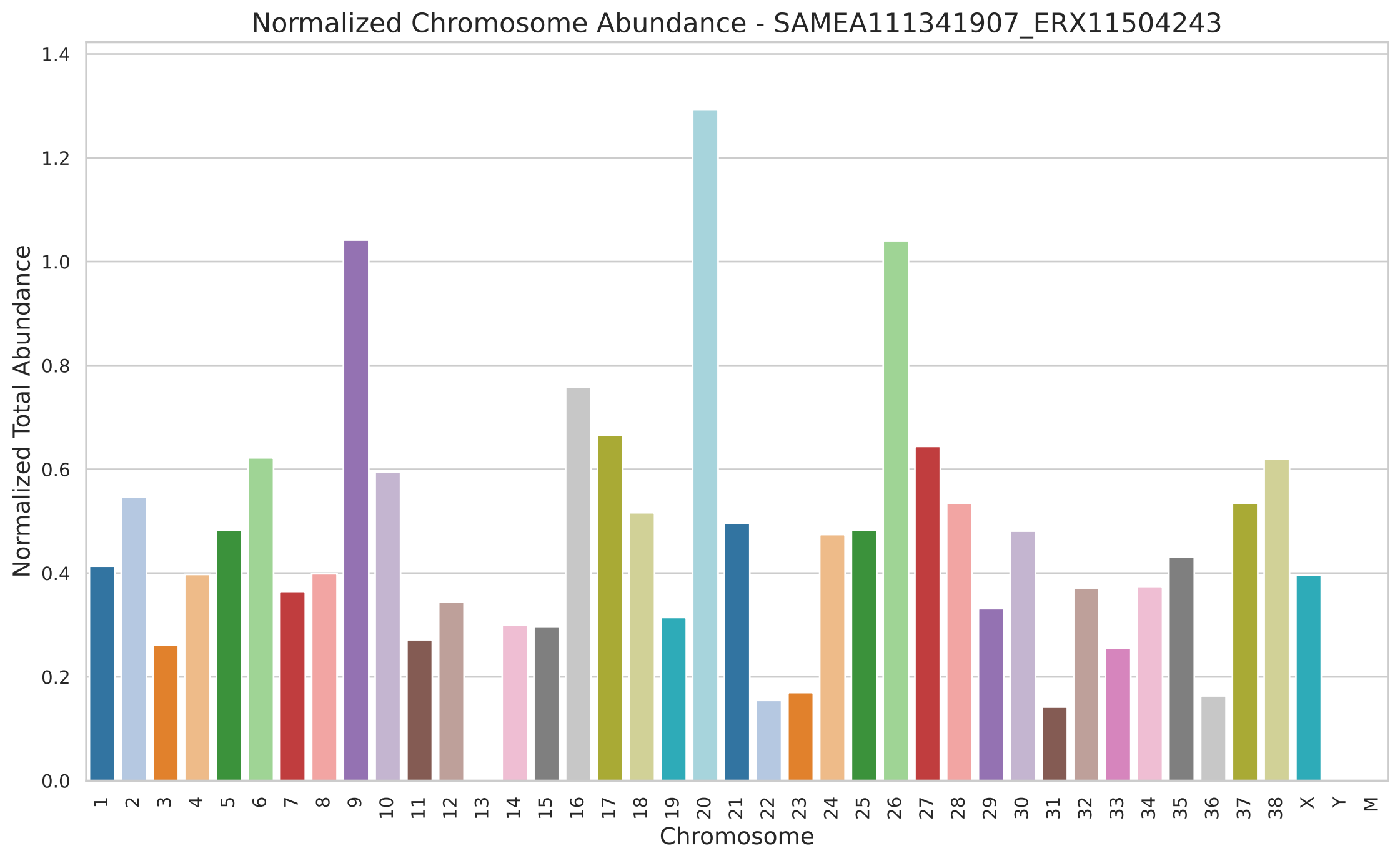

Normalized Chromosome Abundance - SAMEA111341895_ERX11504231
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

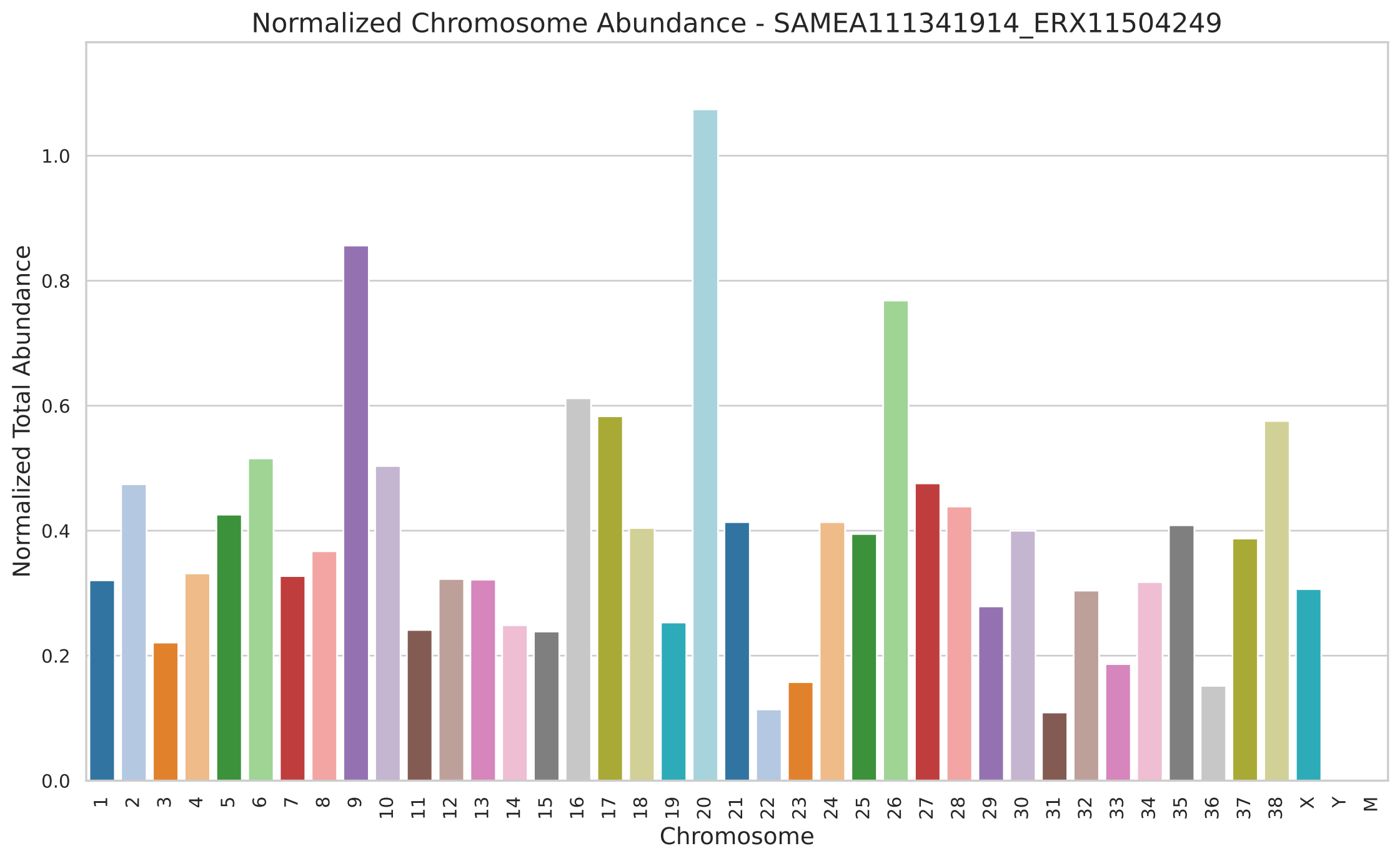

Normalized Chromosome Abundance - SAMEA111341921_ERX11504252
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

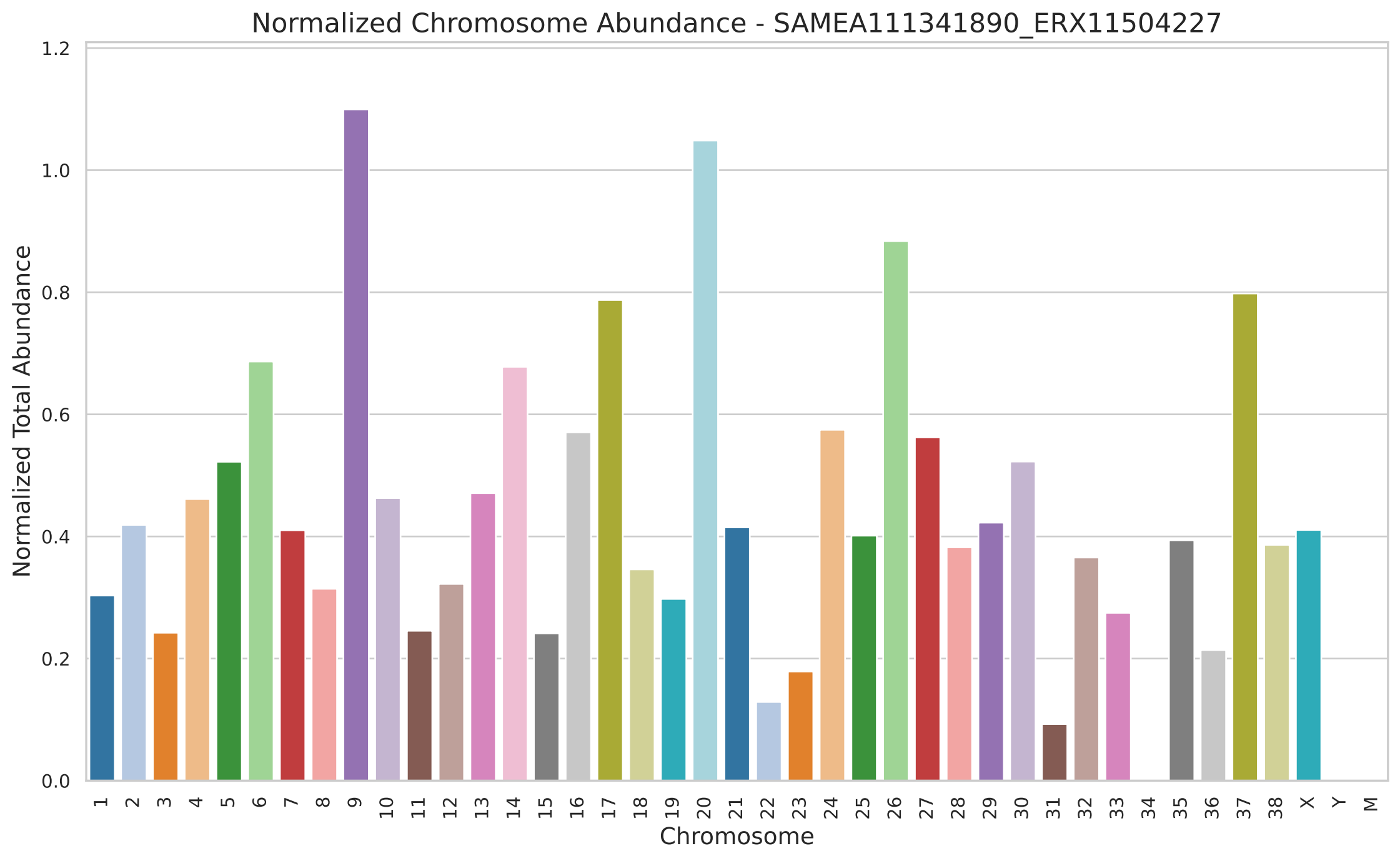

Normalized Chromosome Abundance - SAMEA111341928_ERX11504266
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

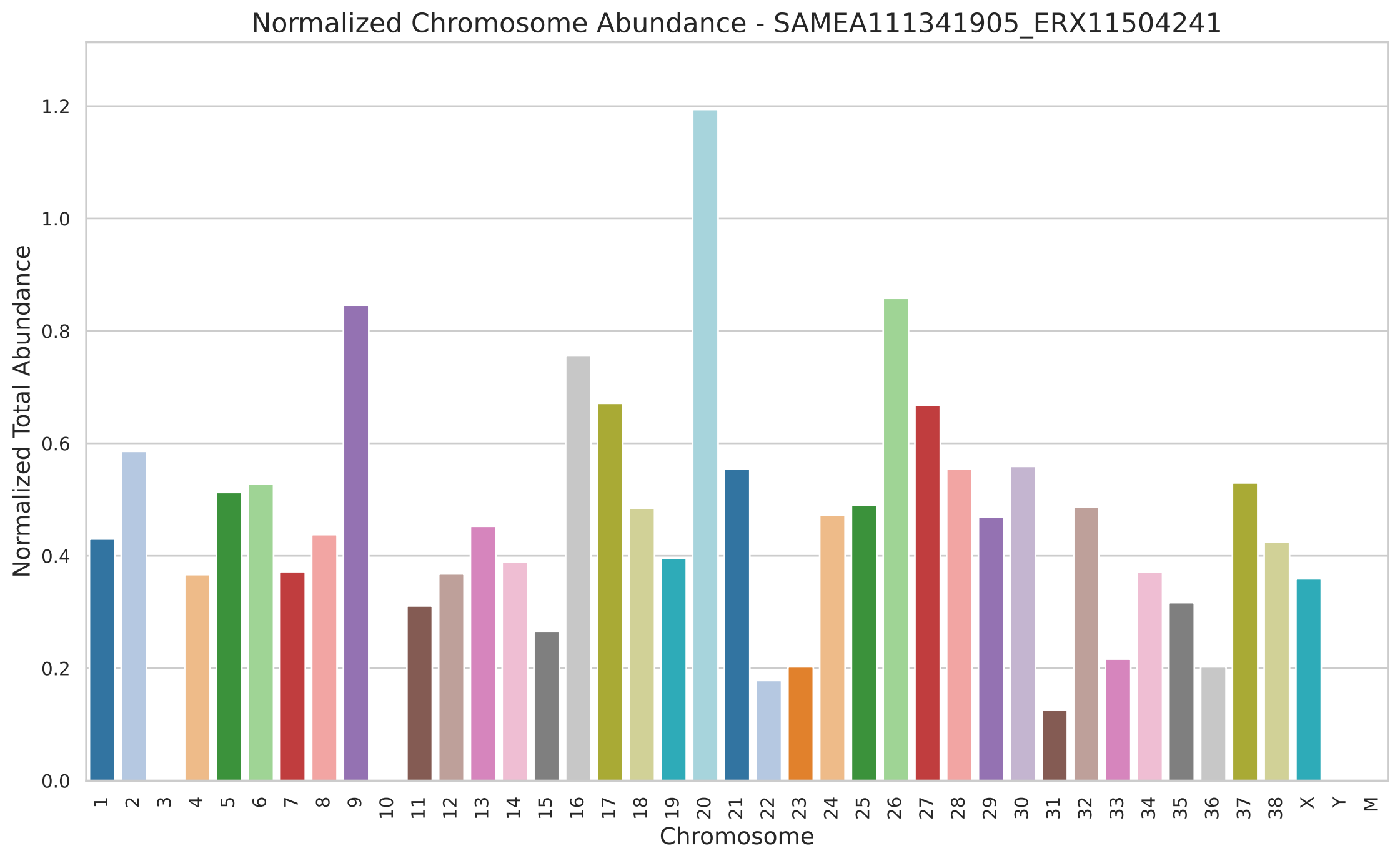

Normalized Chromosome Abundance - SAMEA111341940_ERX11504276
Normalized Total Abundance
2.0
1.8
1.5
1.2
1.0
0.8
0.5
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

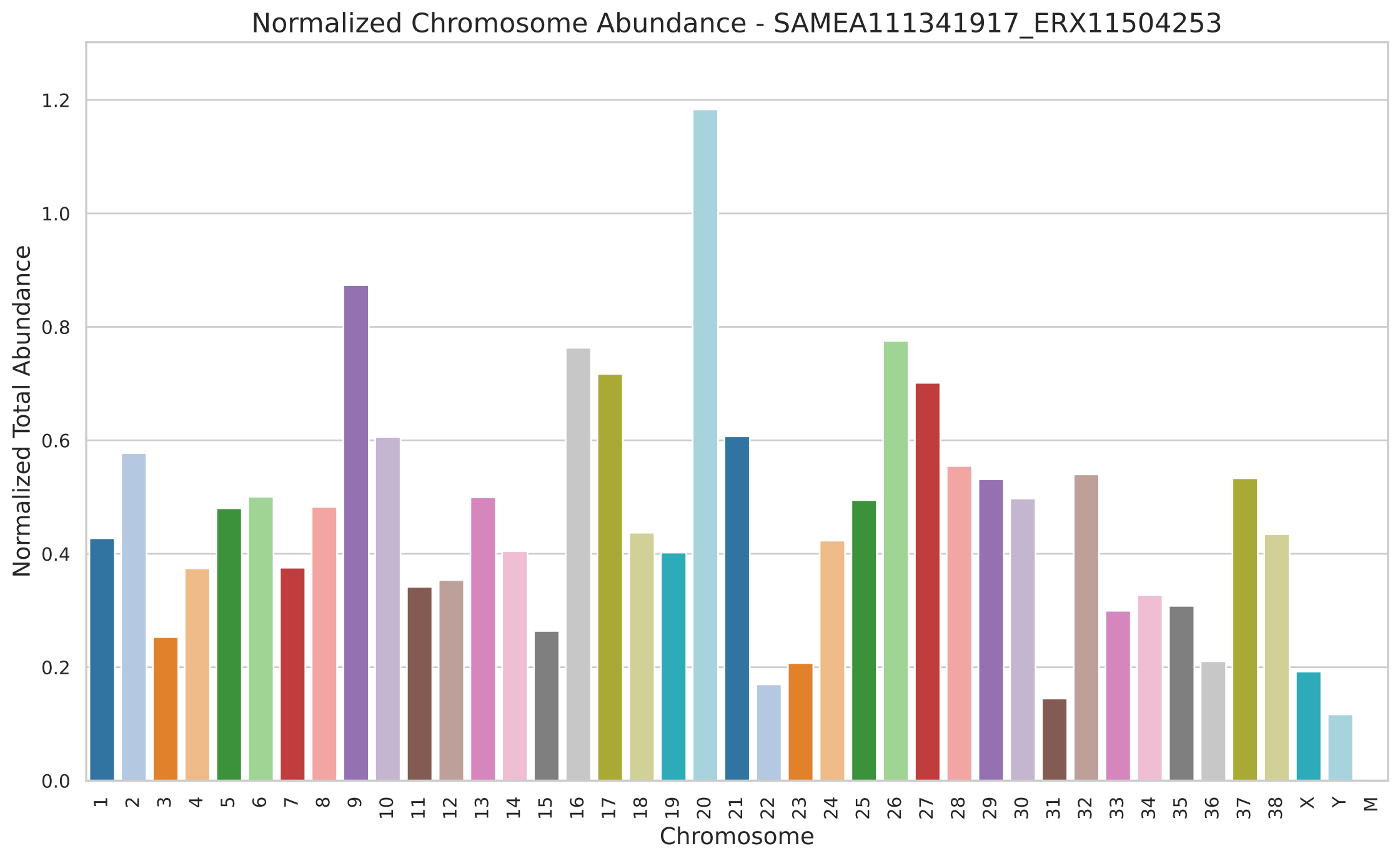

Normalized Chromosome Abundance - SAMN14426534_SRX7971289
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

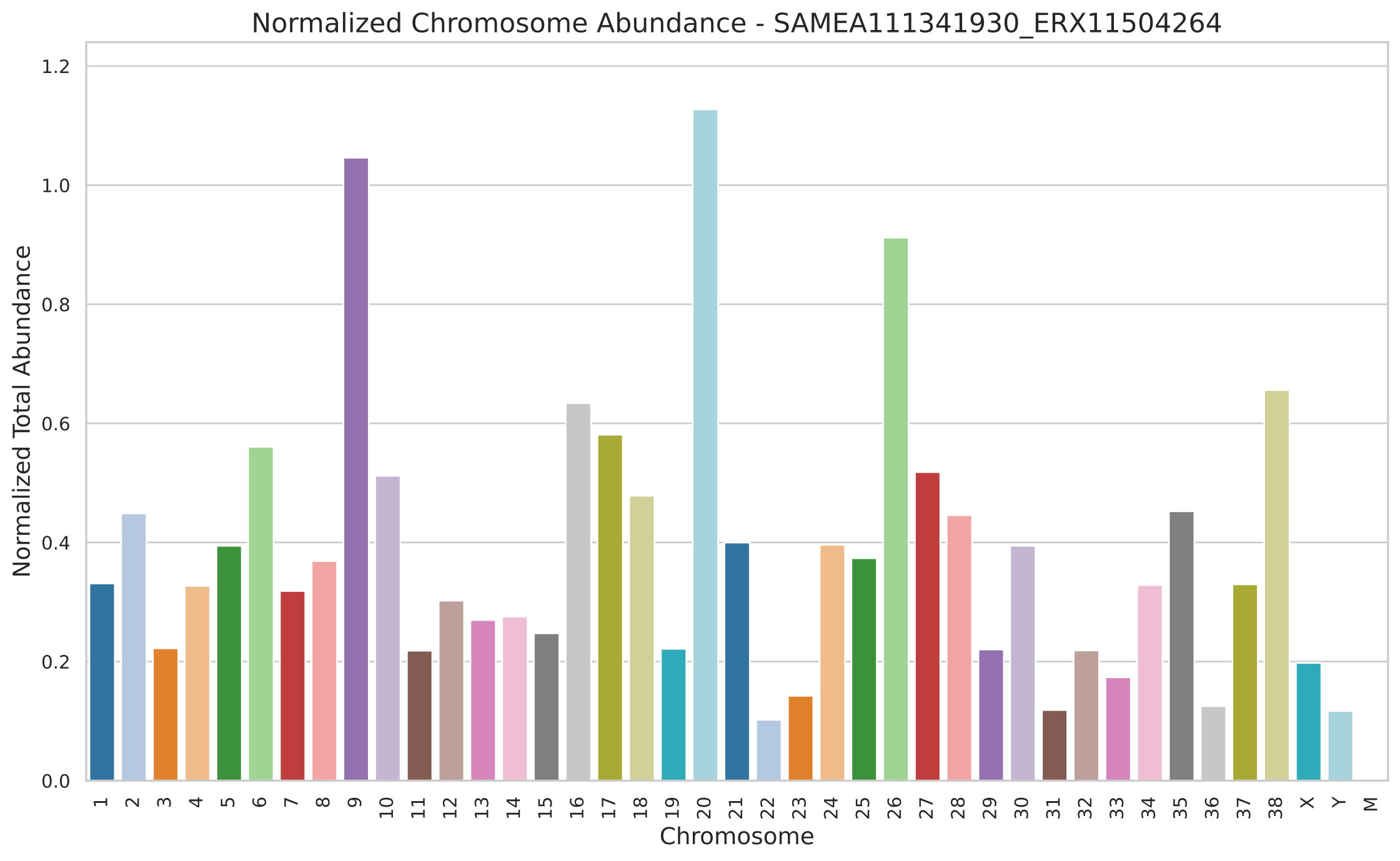

Normalized Chromosome Abundance - SAMEA111341907_ERX11504243
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

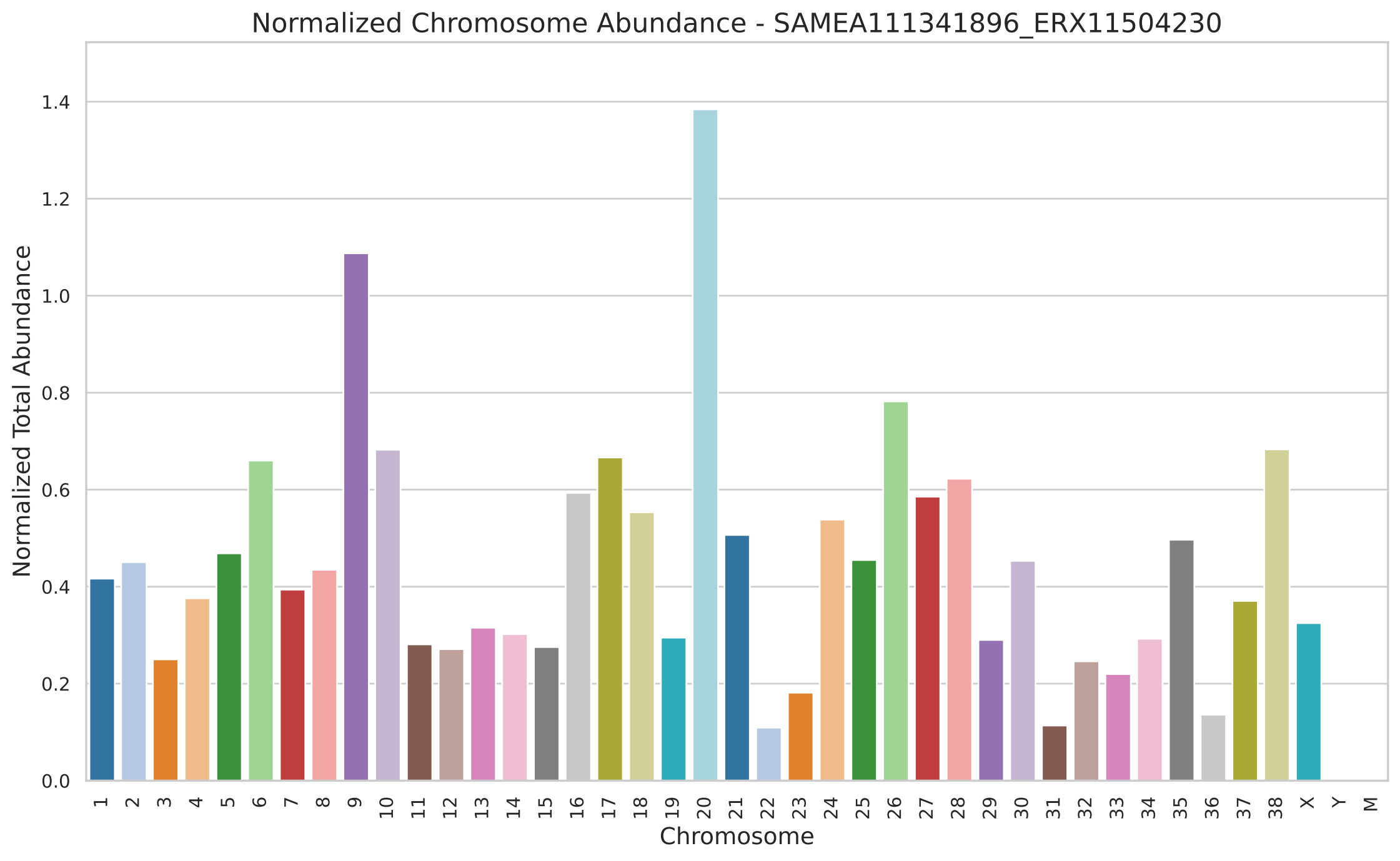

Normalized Chromosome Abundance - SAMEA111341914_ERX11504249
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

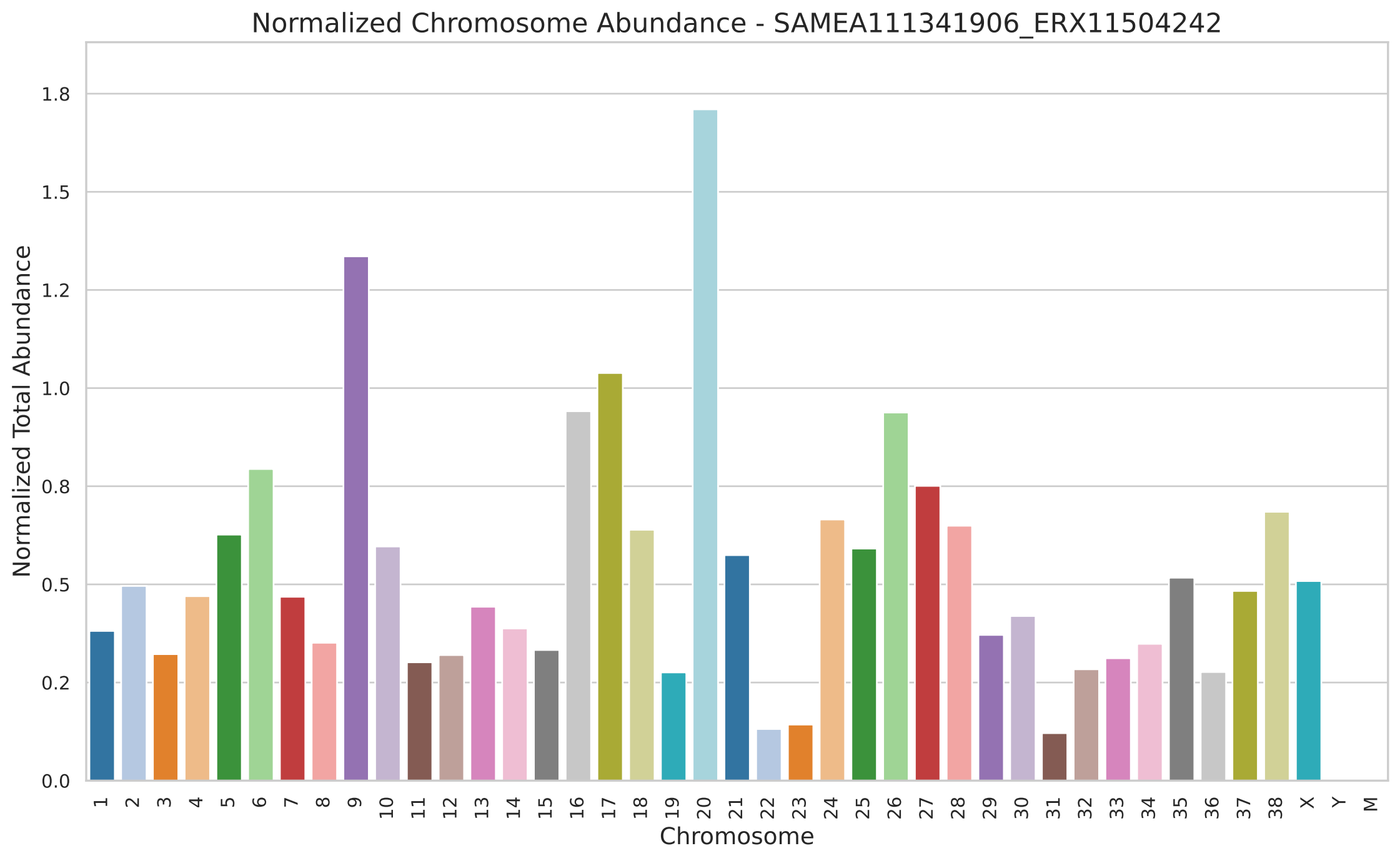

Normalized Chromosome Abundance - SAMEA111341890_ERX11504227
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

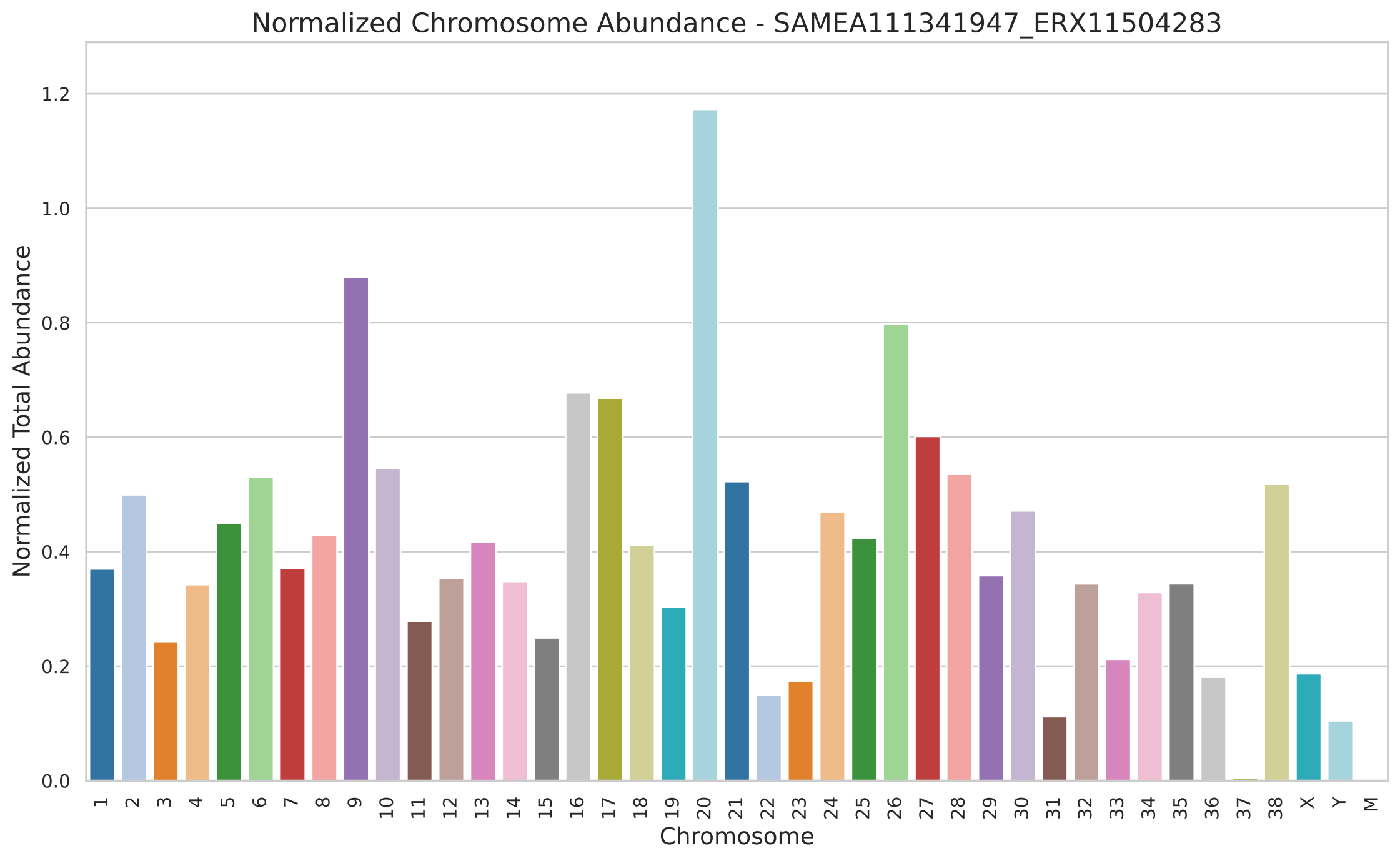

Normalized Chromosome Abundance - SAMEA111341905_ERX11504241
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

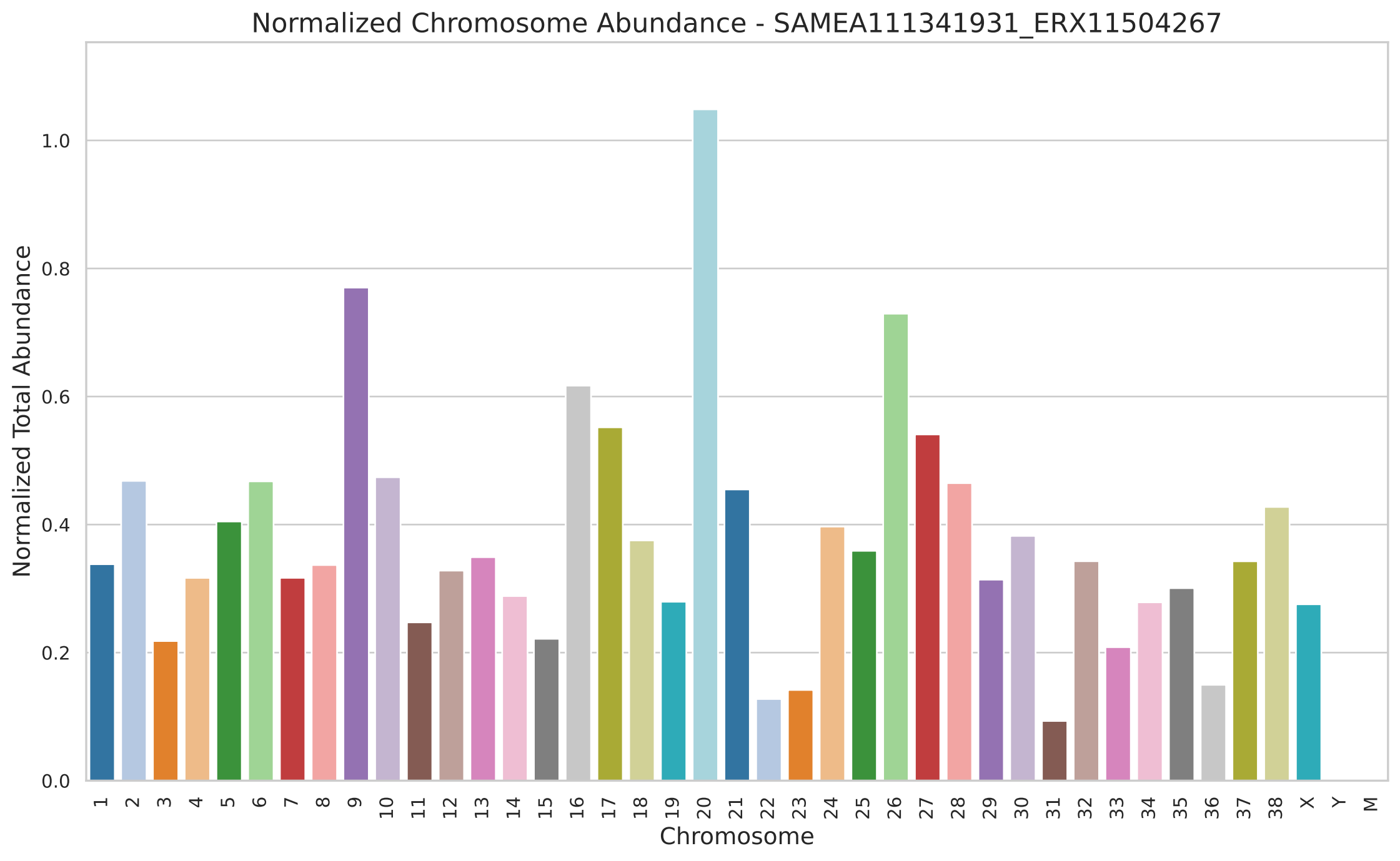

Normalized Chromosome Abundance - SAMEA111341917_ERX11504253
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

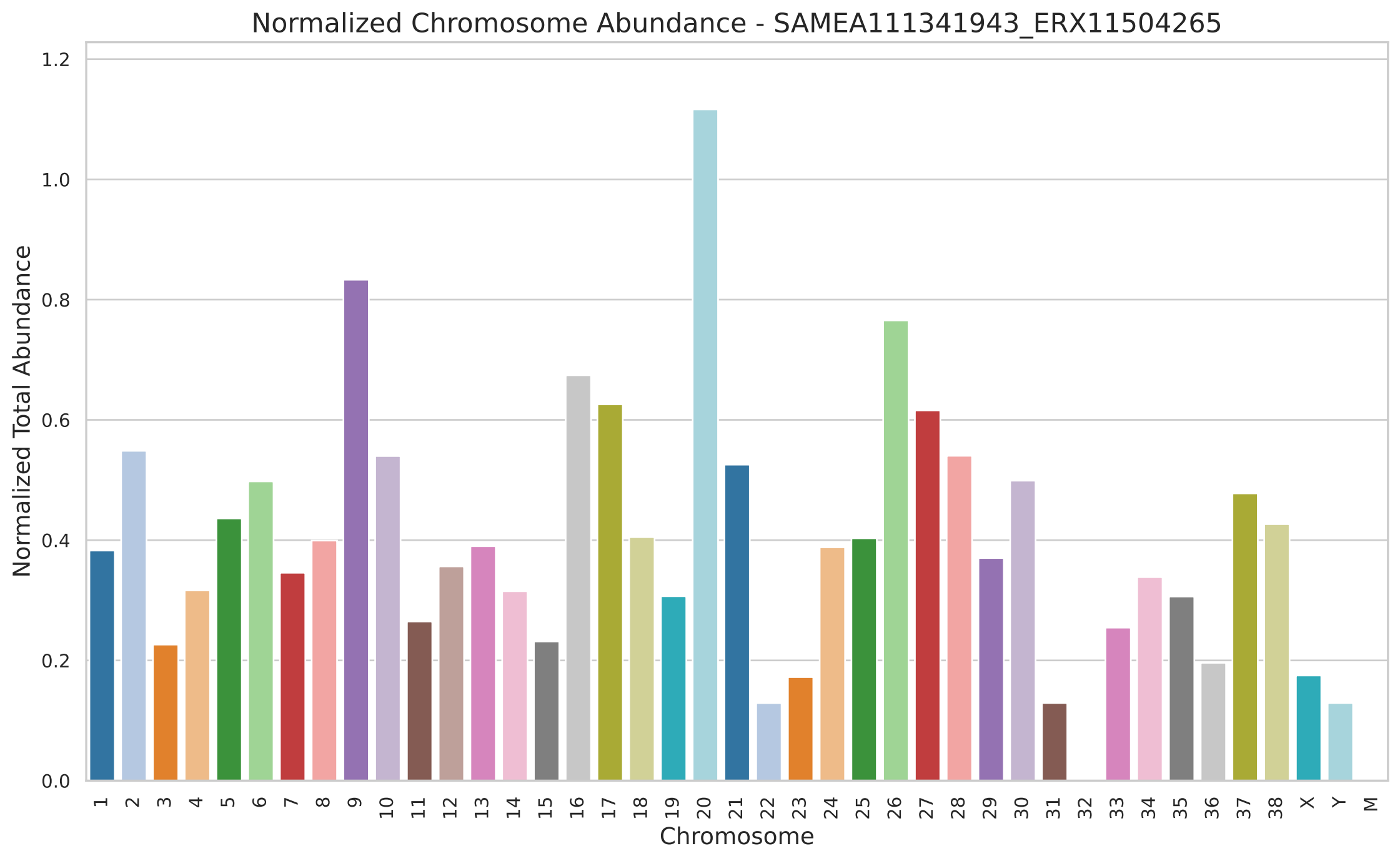

Normalized Chromosome Abundance - SAMEA111341930_ERX11504264
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

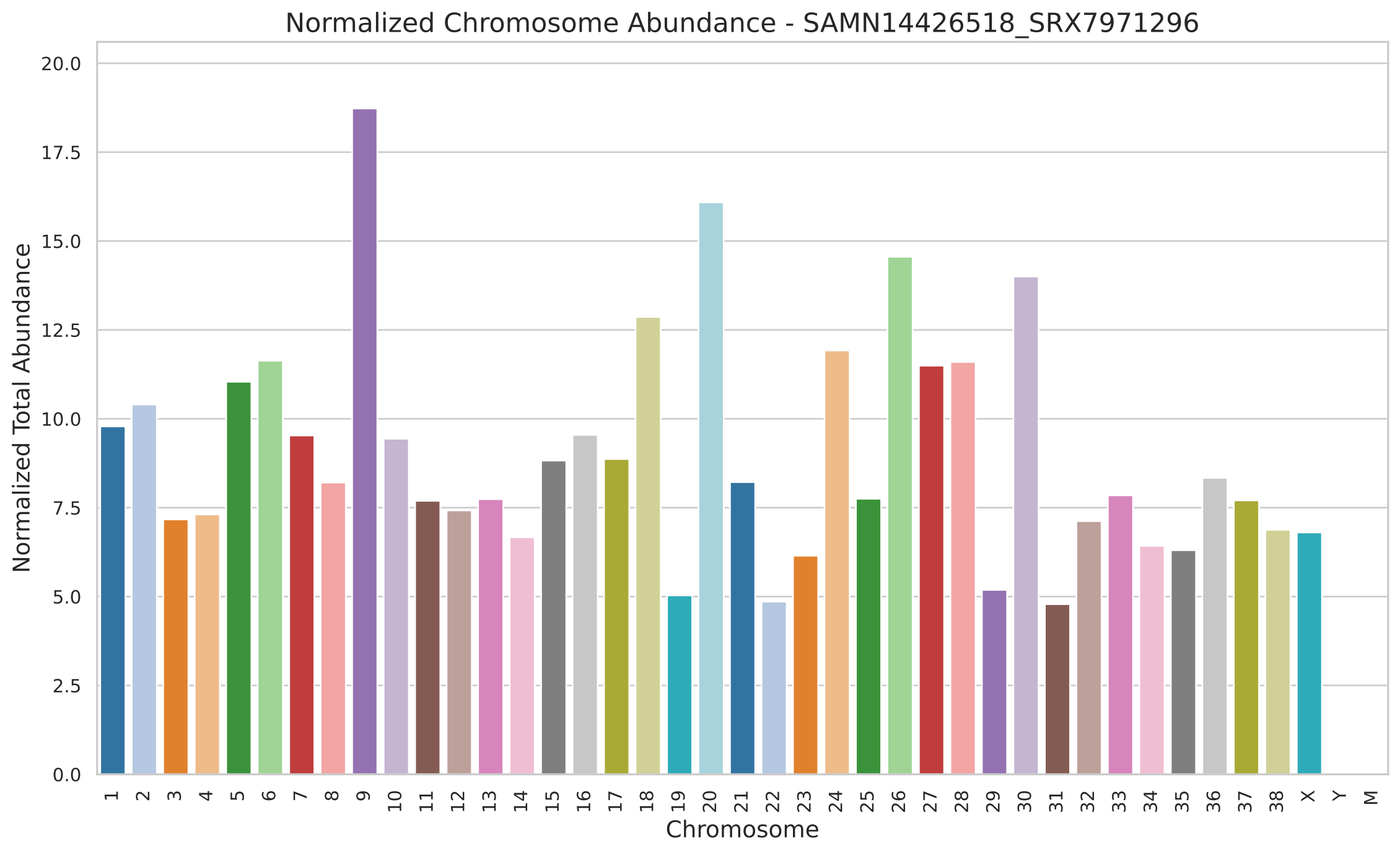

Normalized Chromosome Abundance - SAMEA111341896_ERX11504230
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

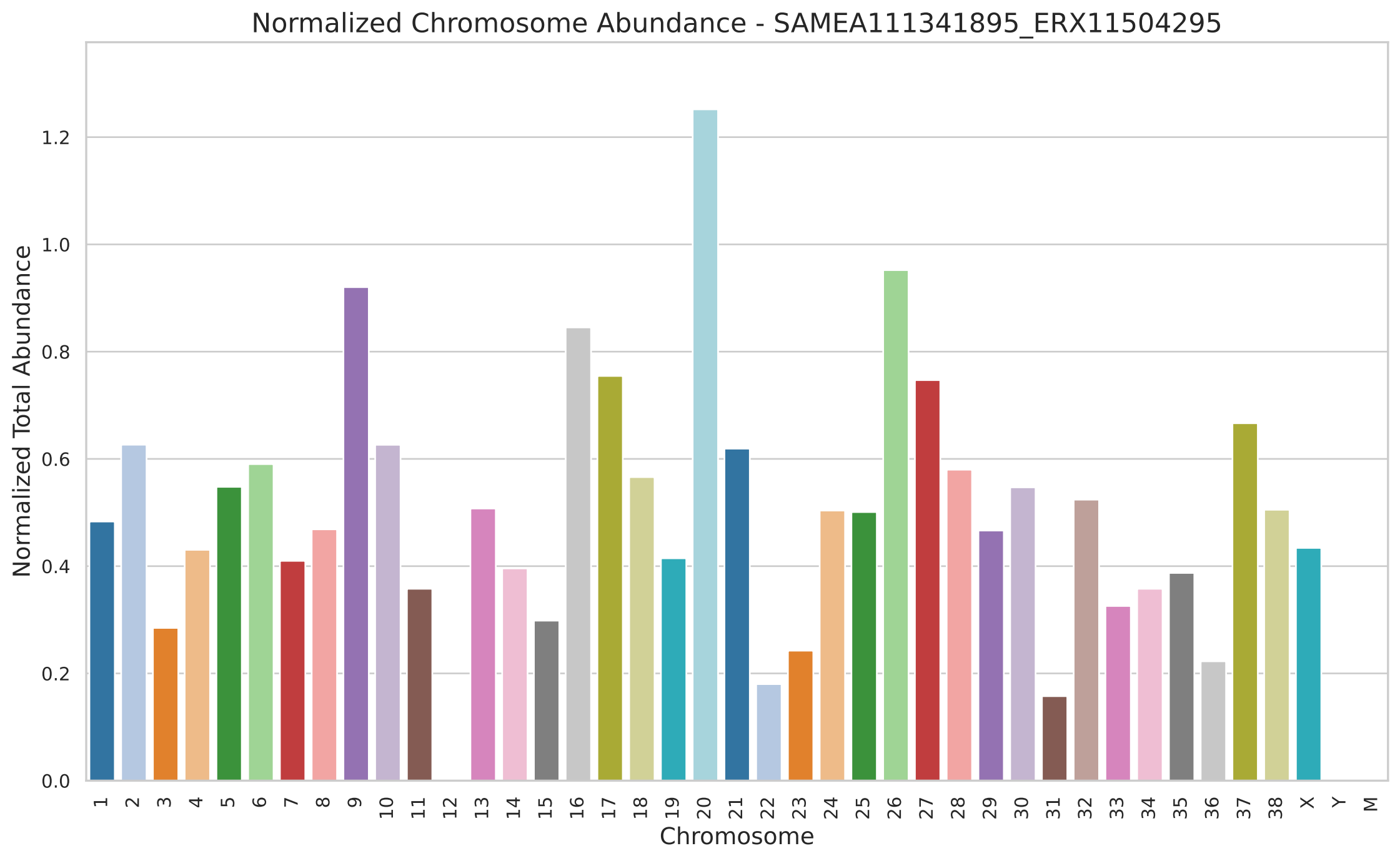

Normalized Chromosome Abundance - SAMEA111341906_ERX11504242
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

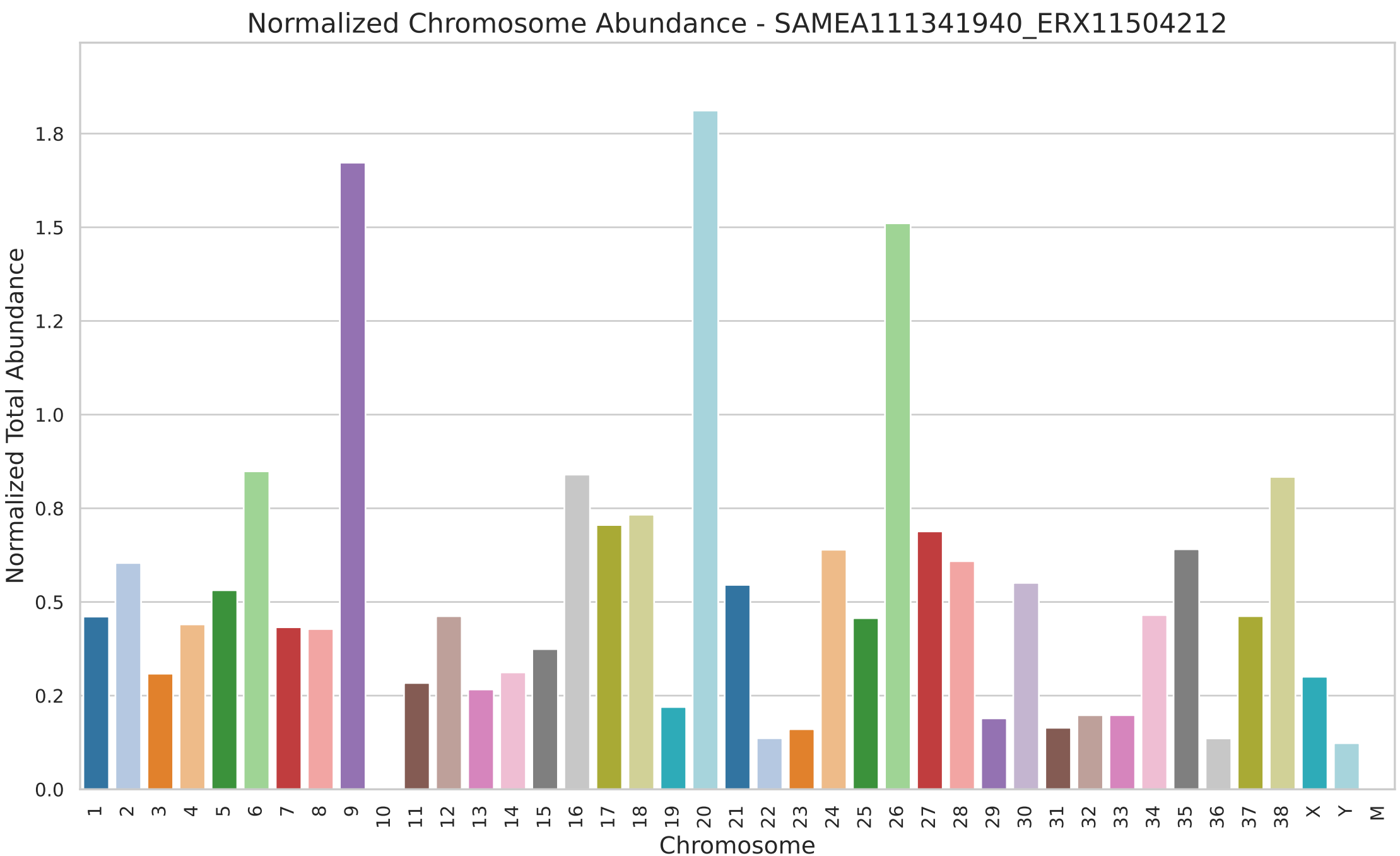

Normalized Chromosome Abundance - SAMEA111341947_ERX11504283
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

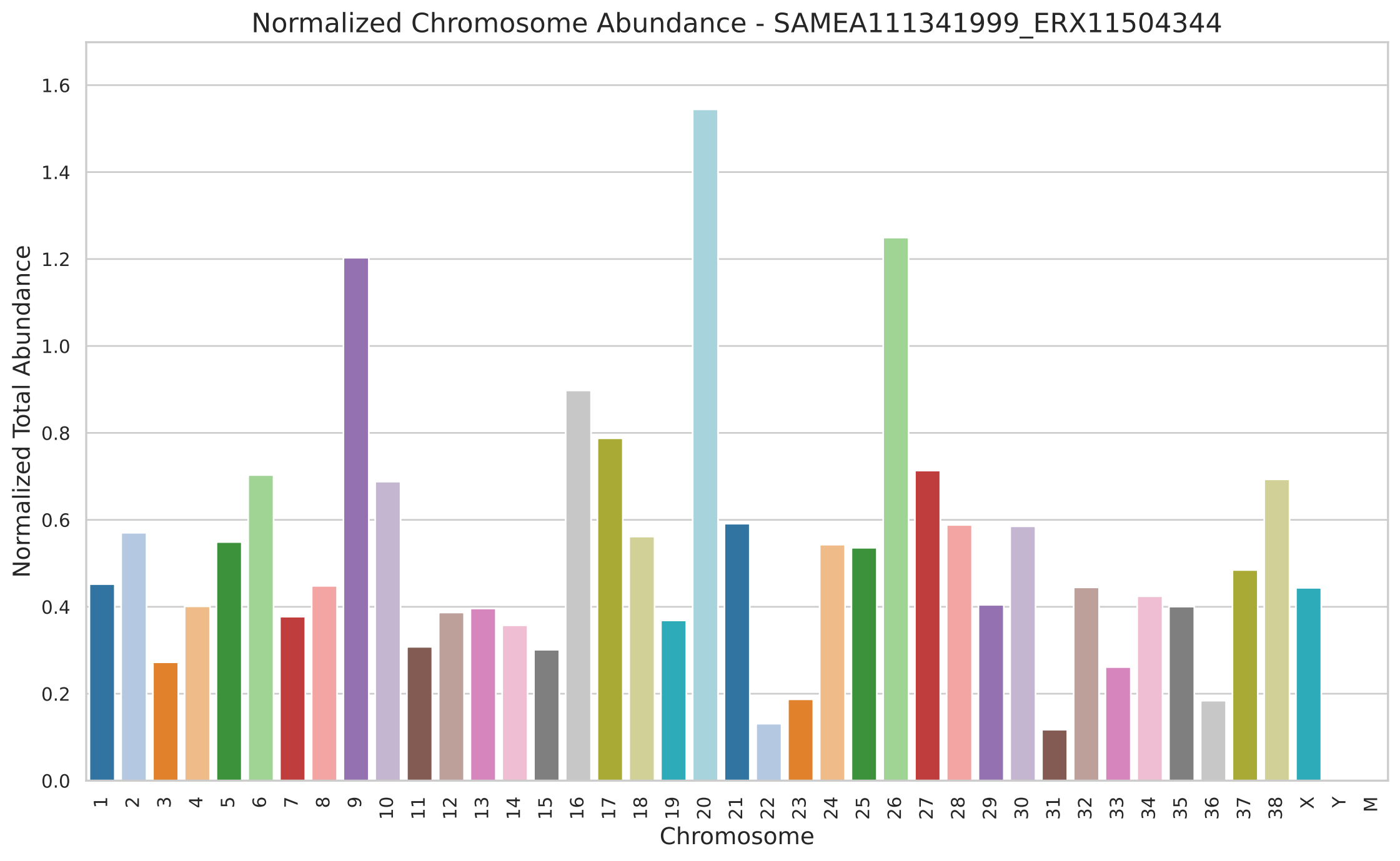

Normalized Chromosome Abundance - SAMEA111341931_ERX11504267
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

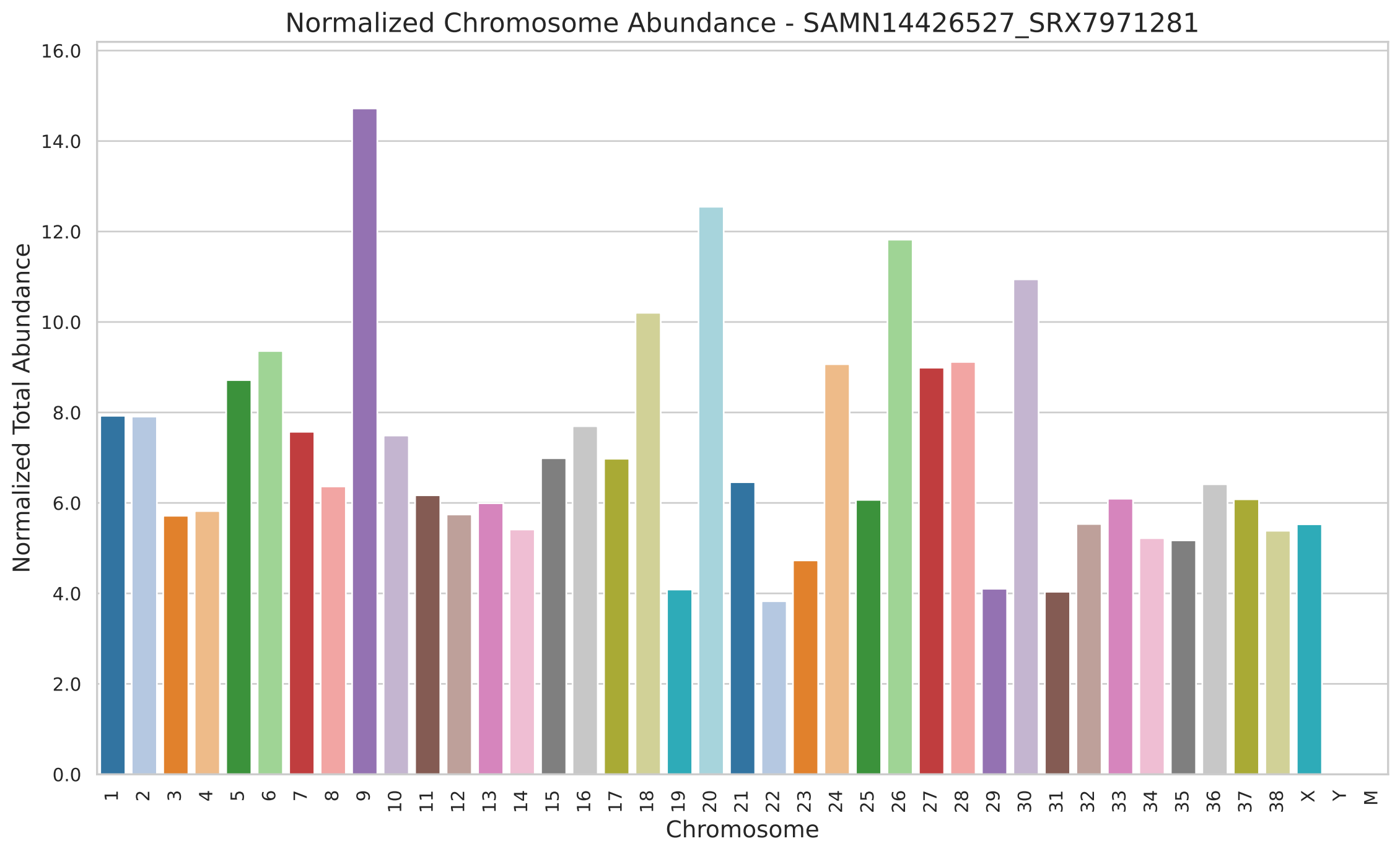

Normalized Chromosome Abundance - SAMEA111341943_ERX11504265
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

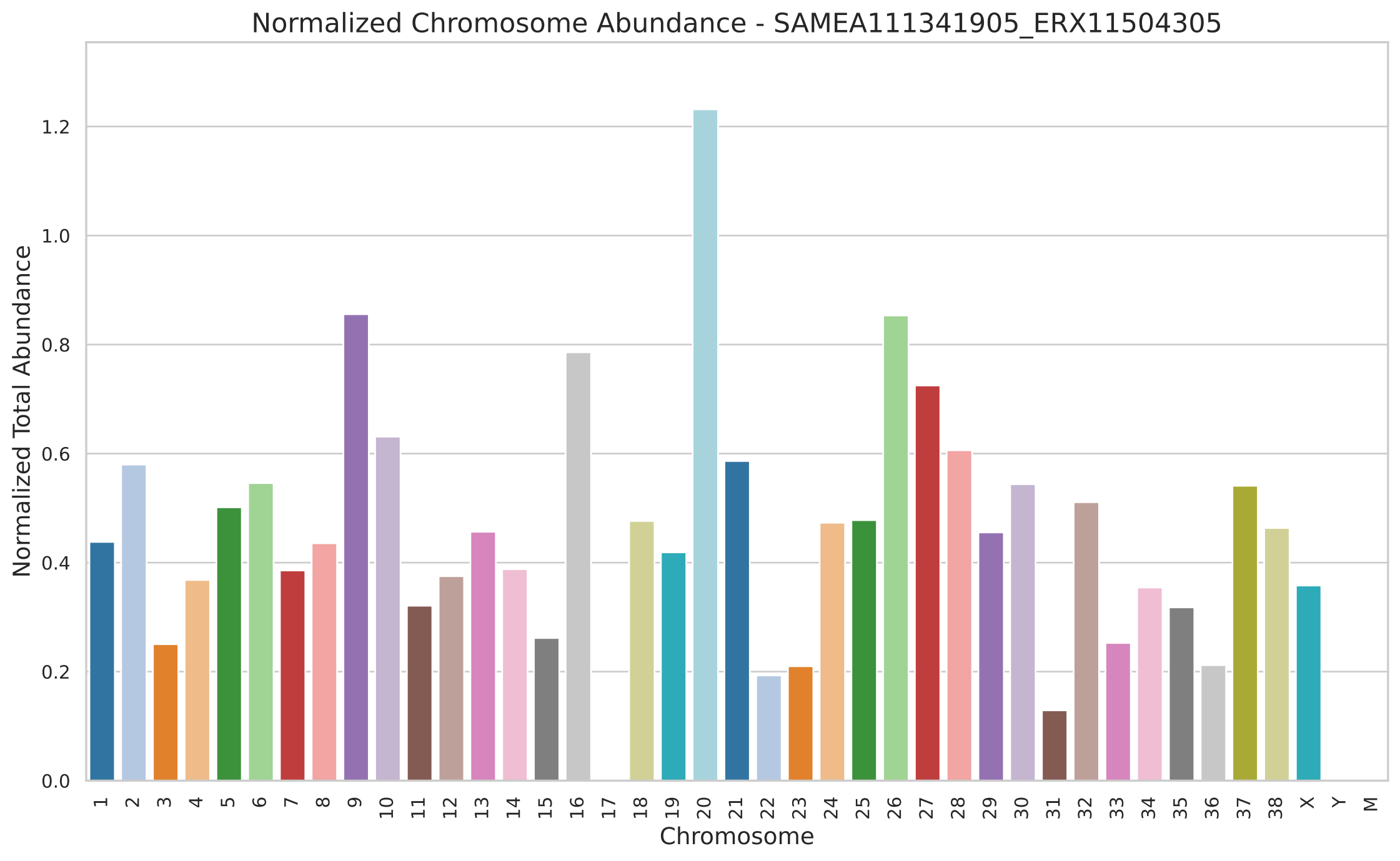

Normalized Chromosome Abundance - SAMN14426518_SRX7971296
Normalized Total Abundance
20.0
17.5
15.0
12.5
10.0
7.5
5.0
2.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

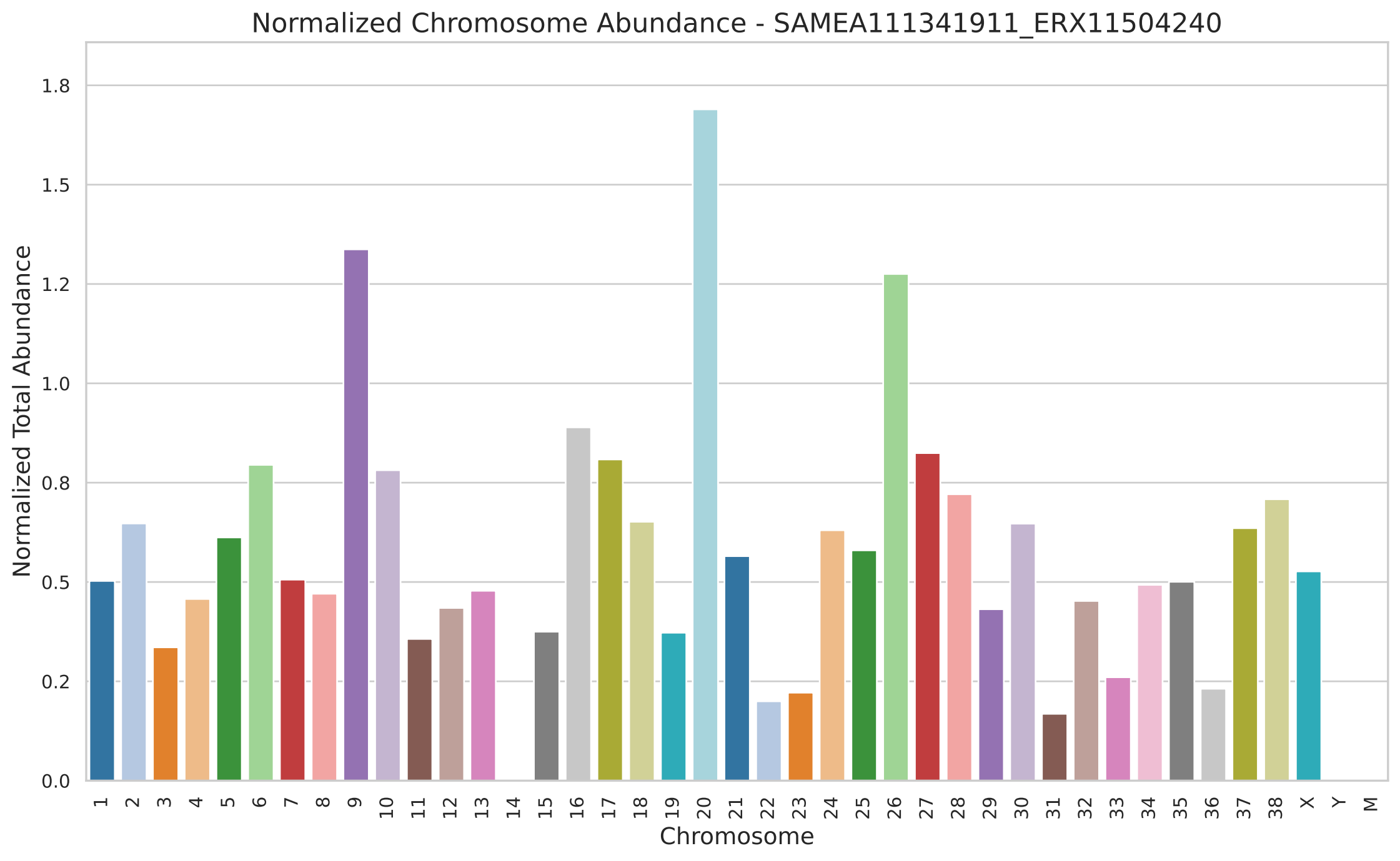

Normalized Chromosome Abundance - SAMEA111341895_ERX11504295
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

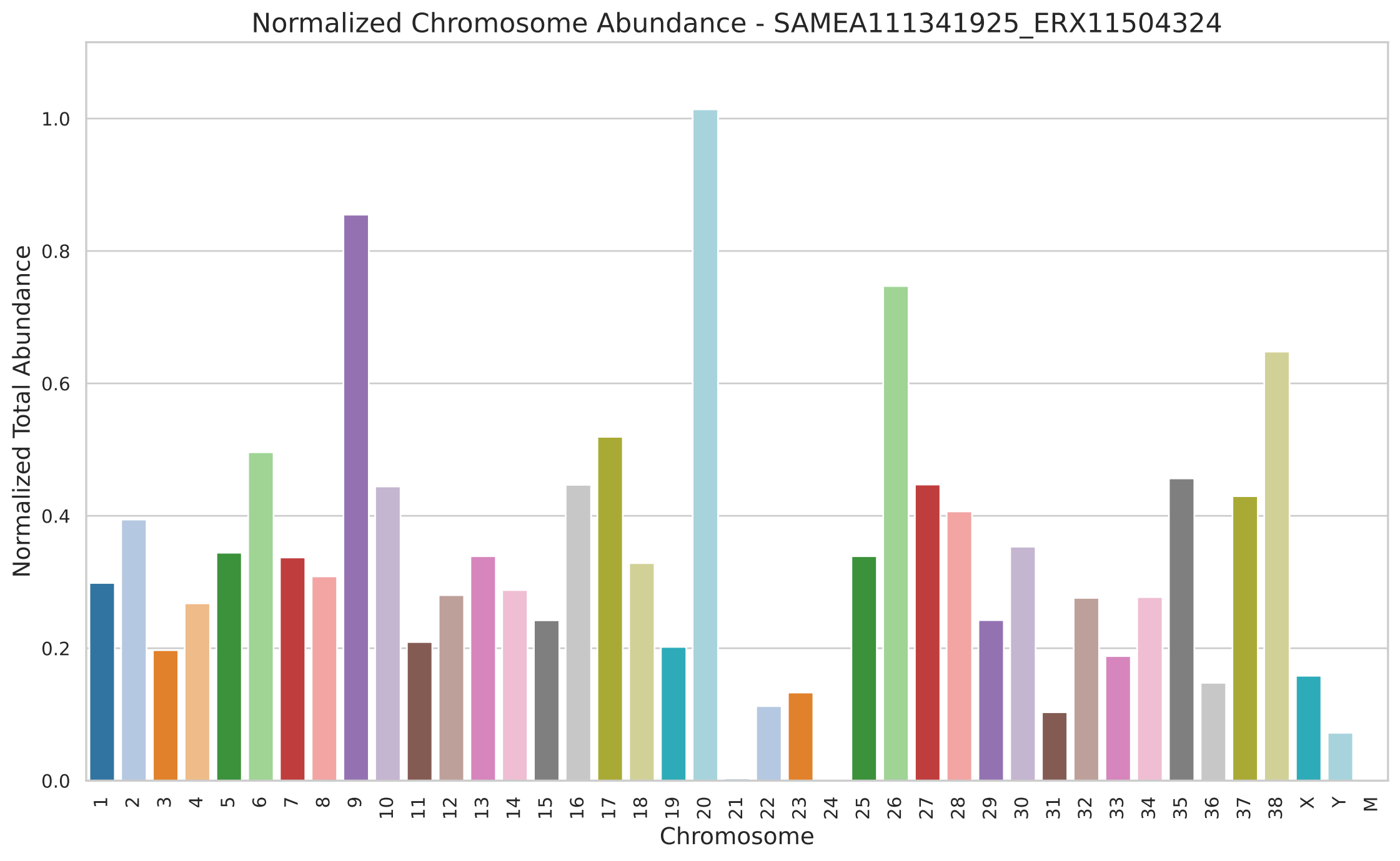

Normalized Chromosome Abundance - SAMEA111341940_ERX11504212
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 X Y M
Chromosome

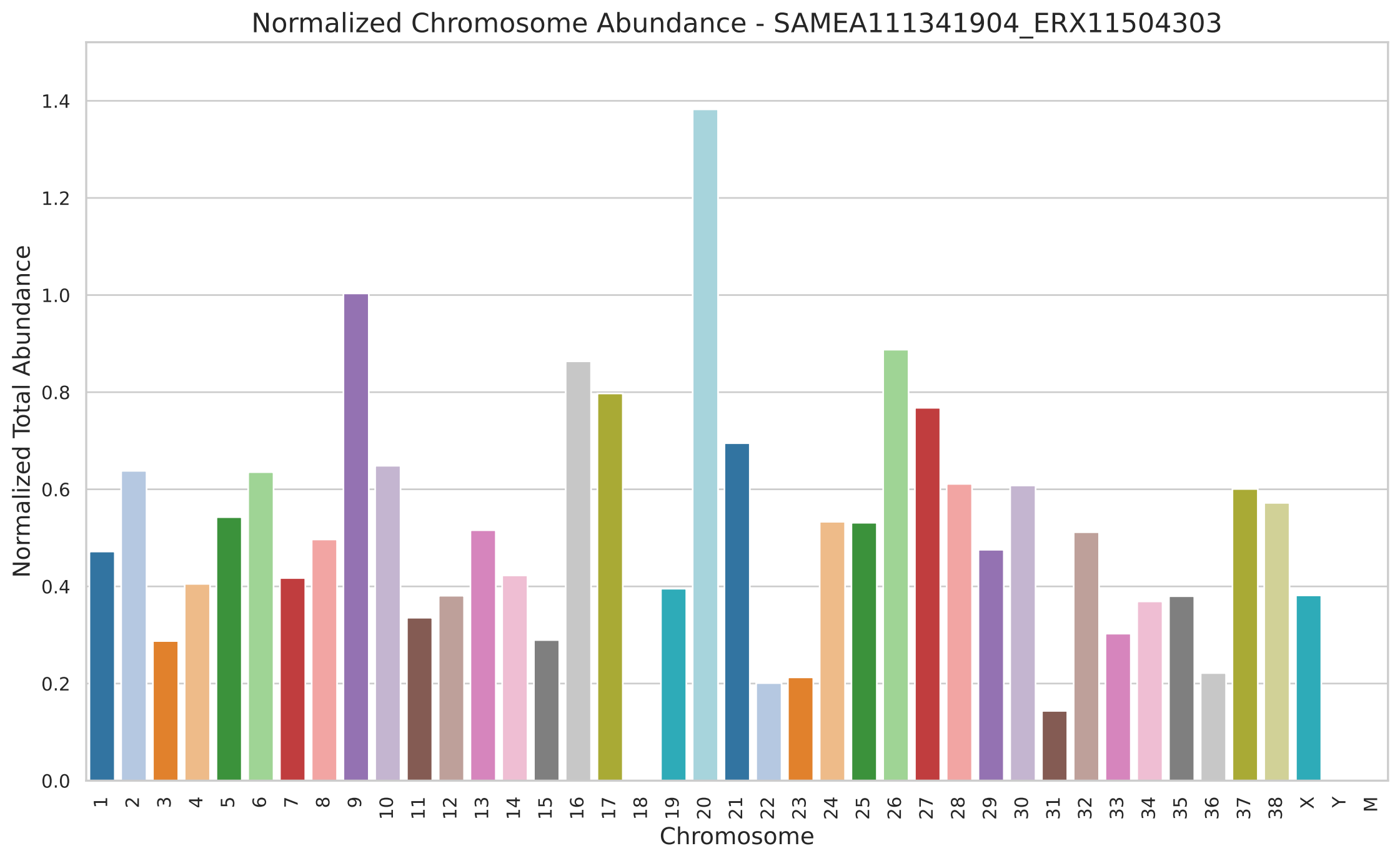

Normalized Chromosome Abundance - SAMEA111341999_ERX11504344
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

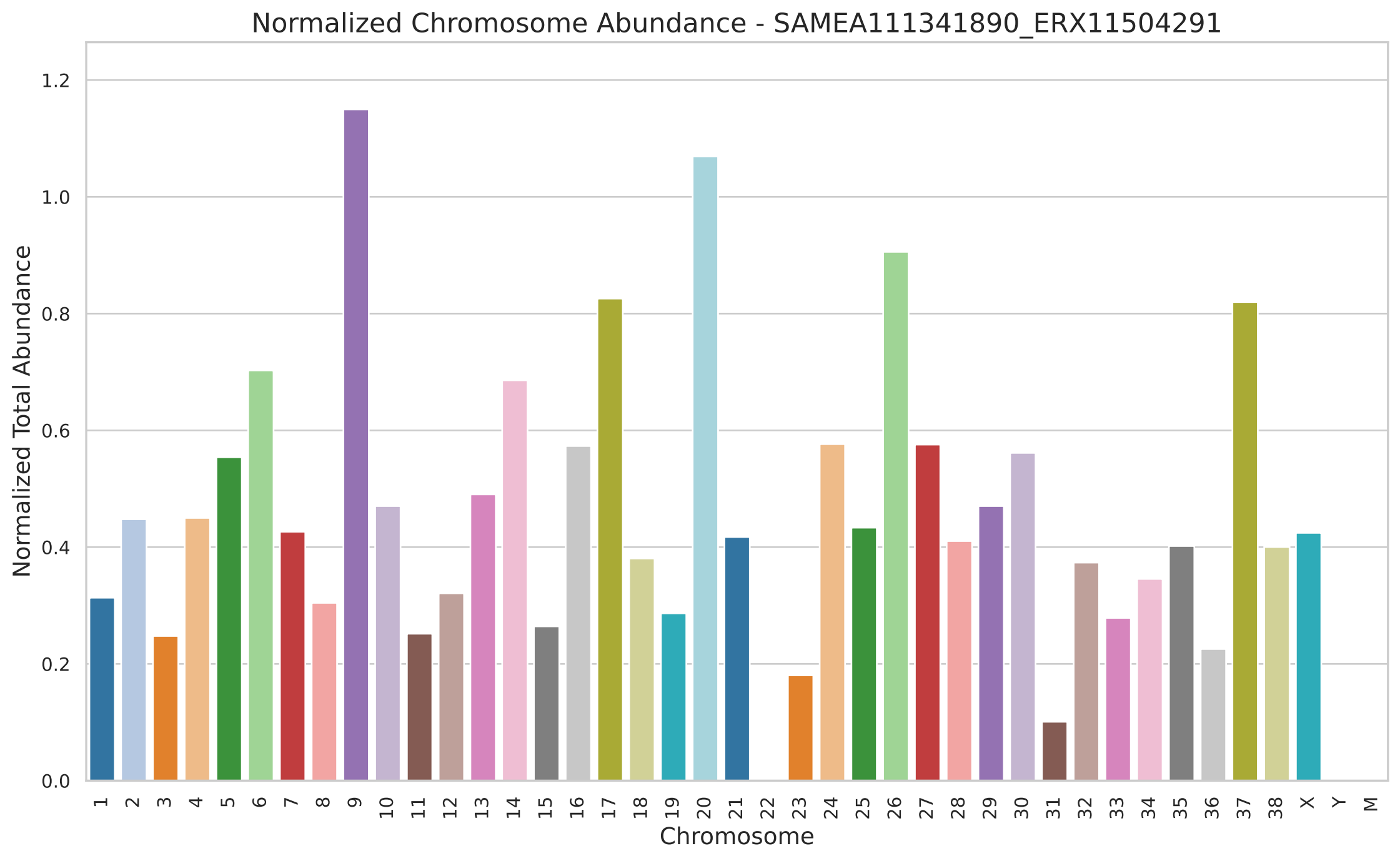

Normalized Chromosome Abundance - SAMN14426527_SRX7971281
Normalized Total Abundance
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

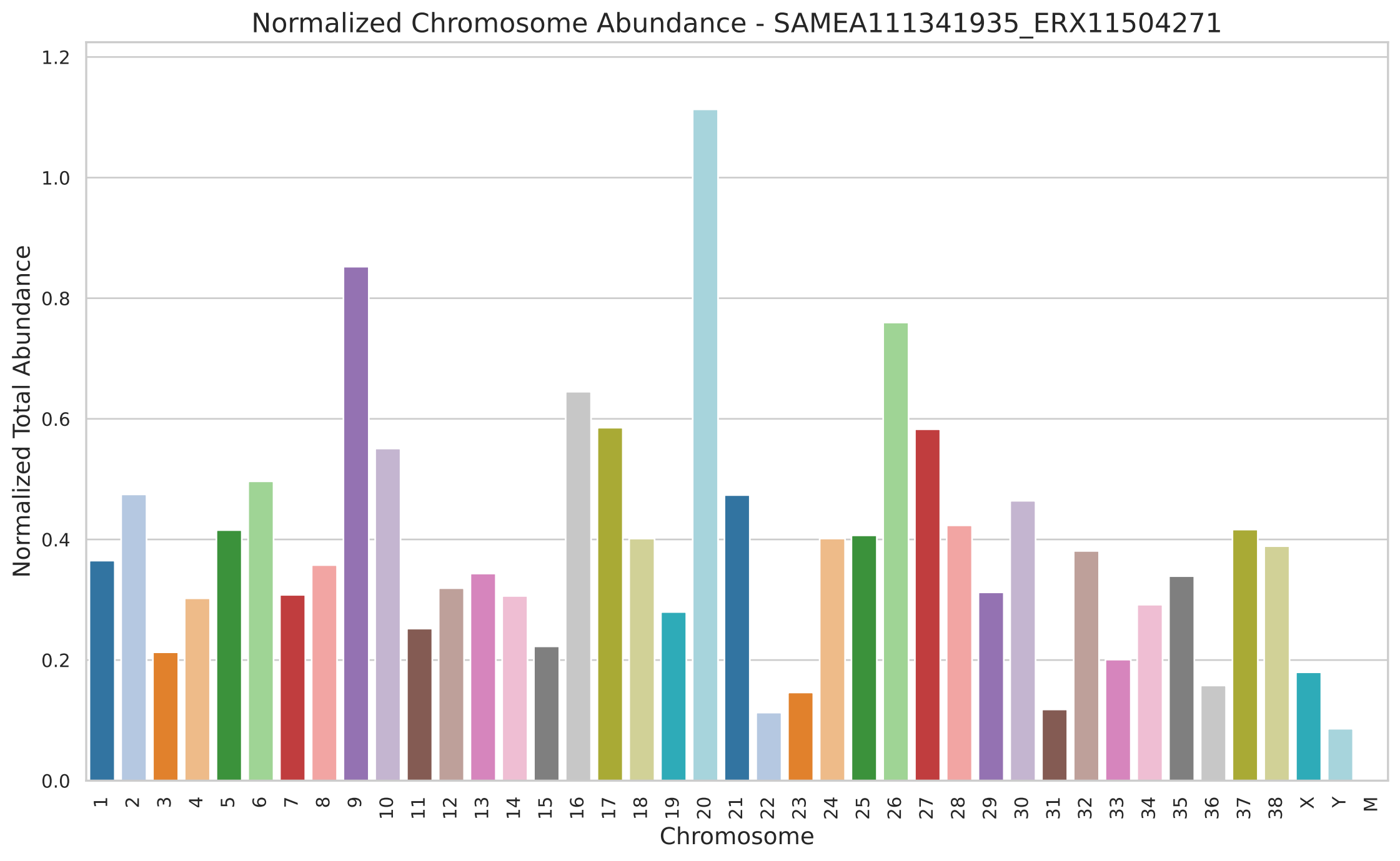

Normalized Chromosome Abundance - SAMEA111341905_ERX11504305
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

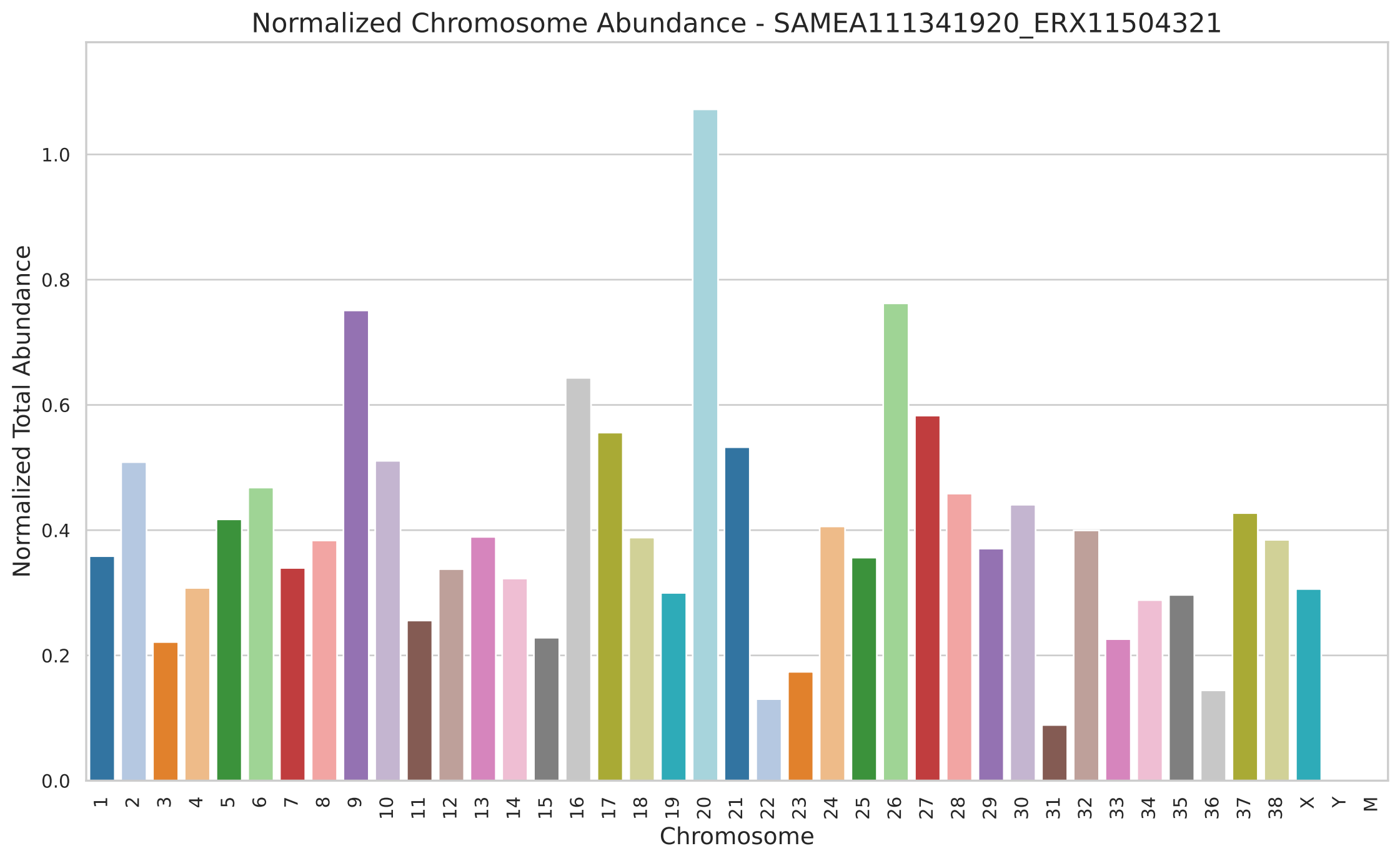

Normalized Chromosome Abundance - SAMEA111341911_ERX11504240
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

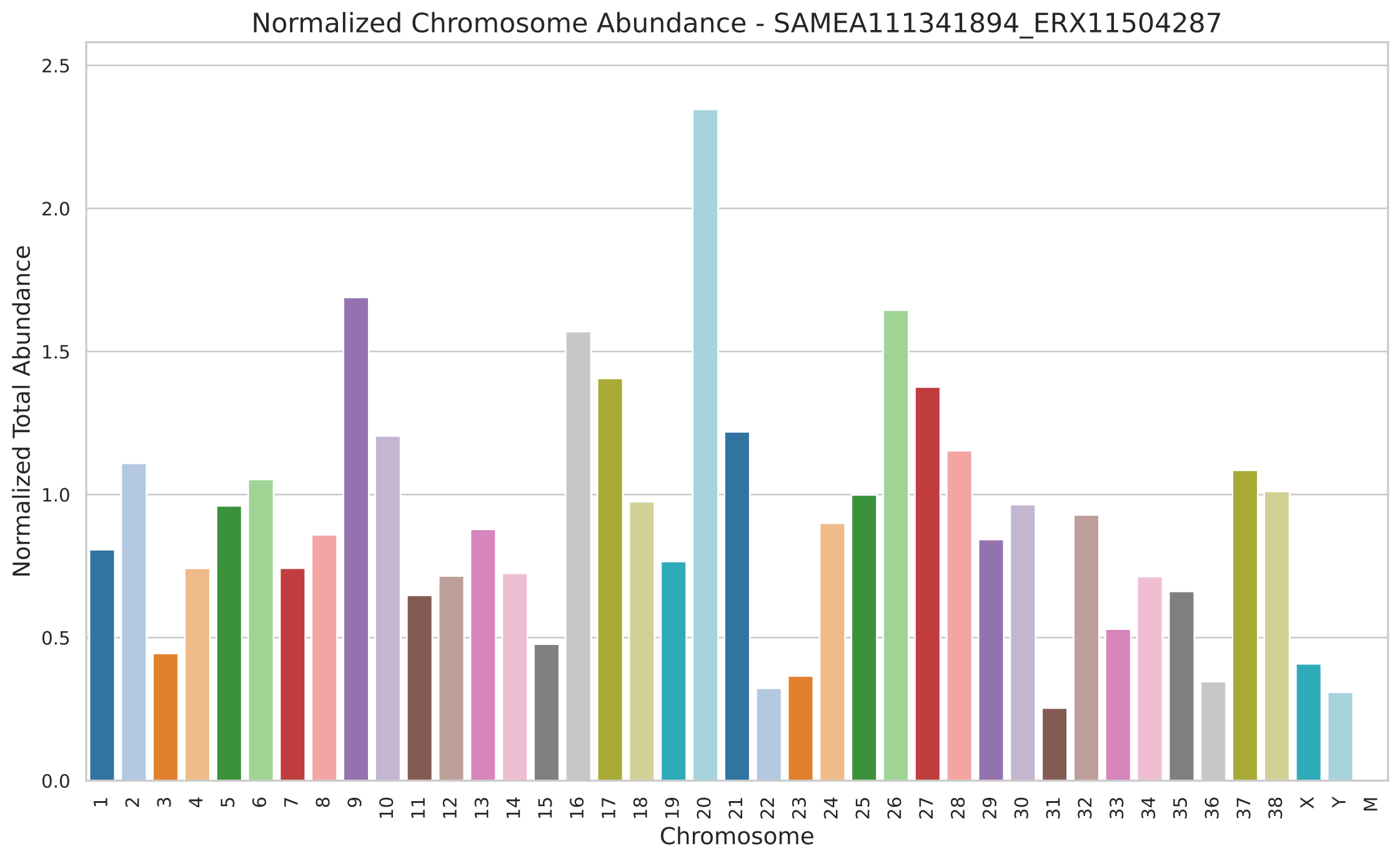

Normalized Chromosome Abundance - SAMEA111341925_ERX11504324
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

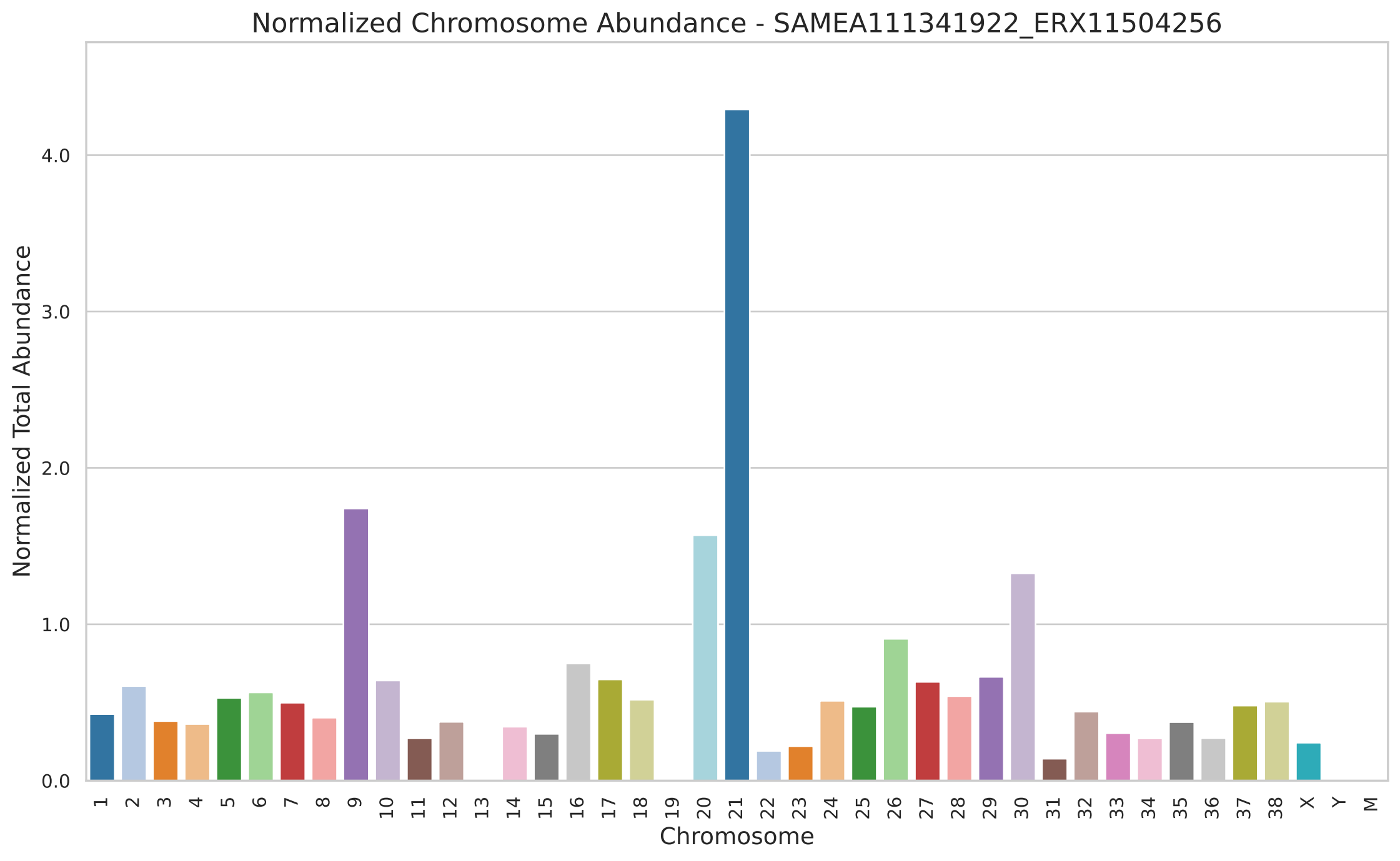

Normalized Chromosome Abundance - SAMEA111341904_ERX11504303
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

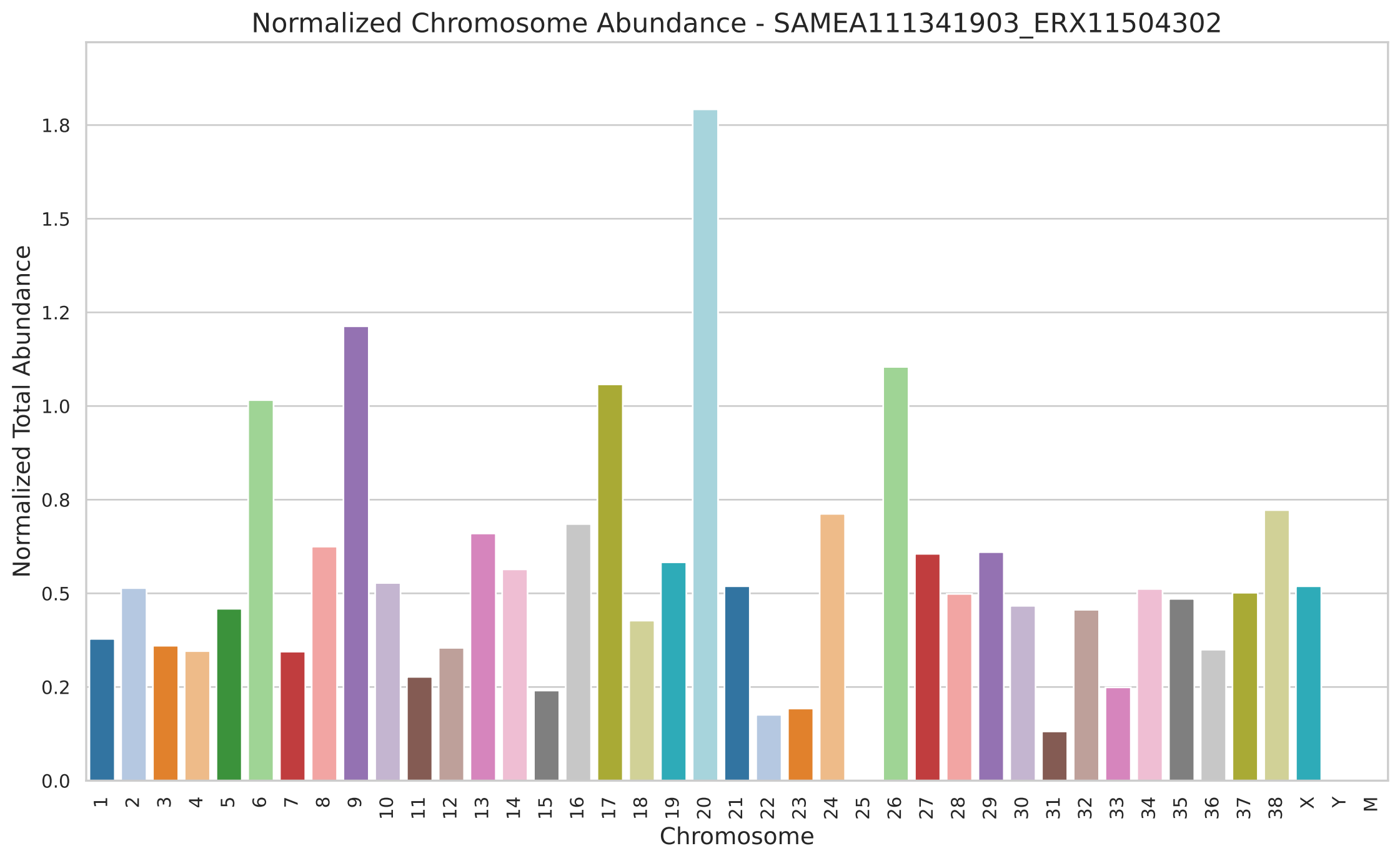

Normalized Chromosome Abundance - SAMEA111341890_ERX11504291
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

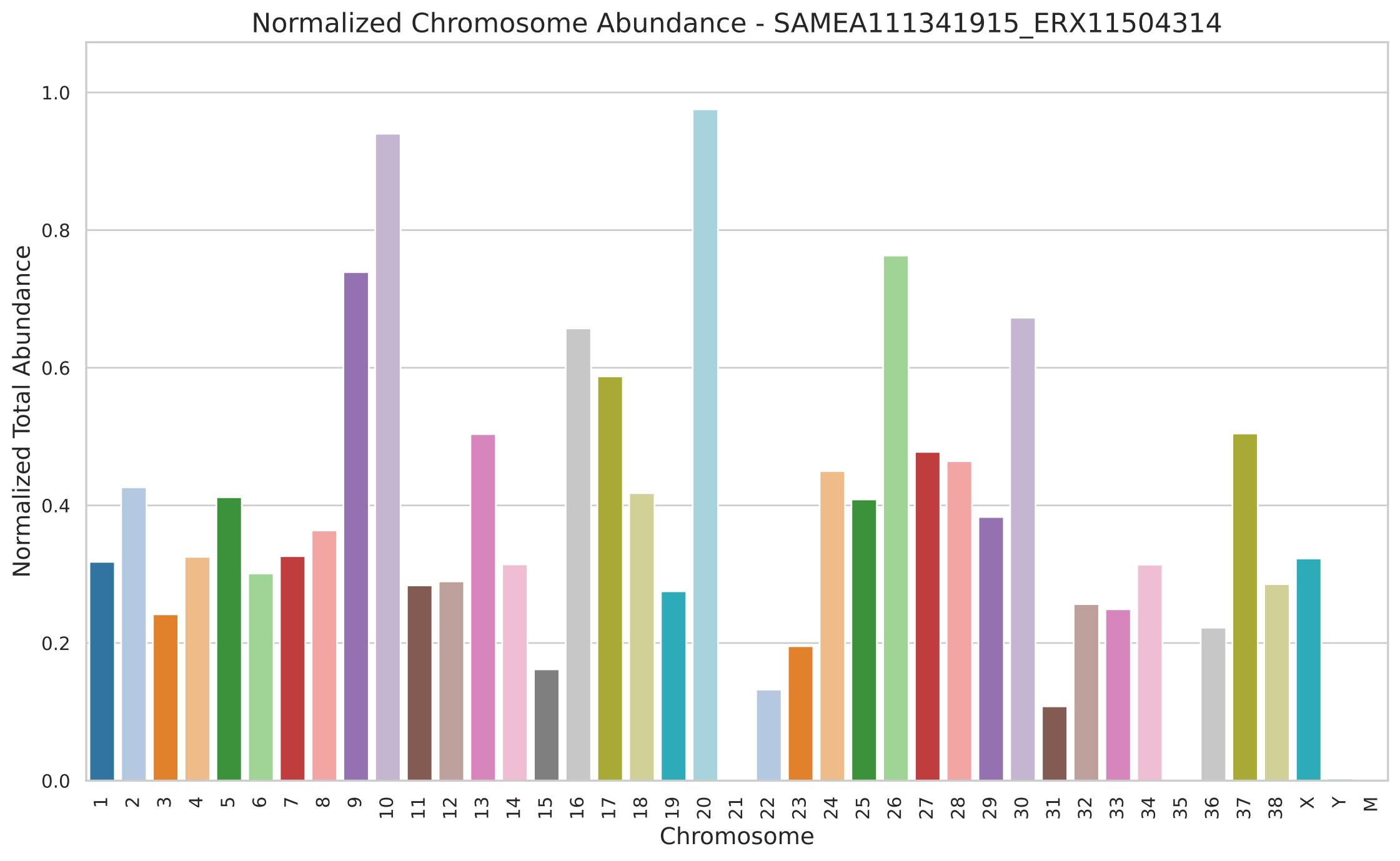

Normalized Chromosome Abundance - SAMEA111341935_ERX11504271
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

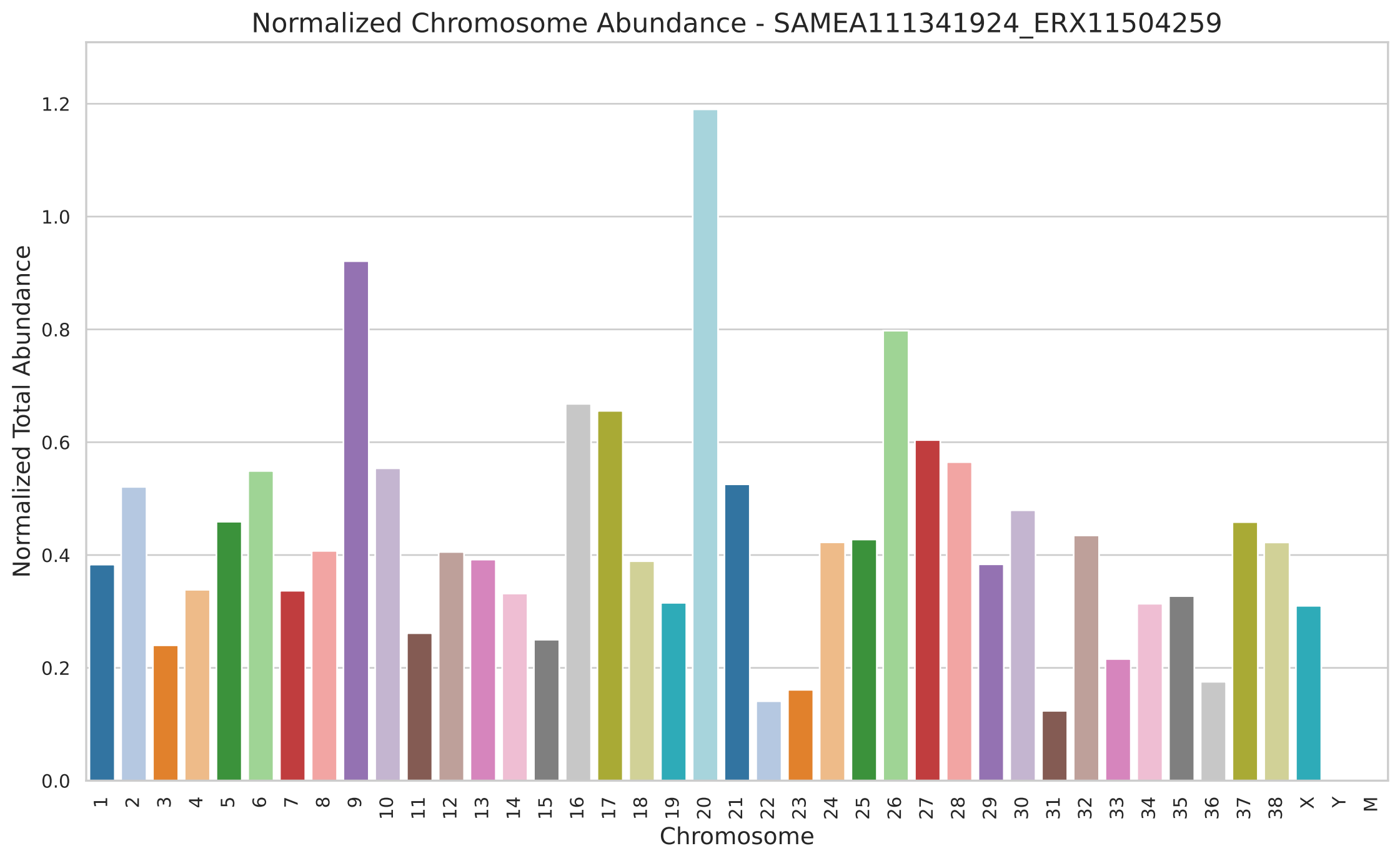

Normalized Chromosome Abundance - SAMEA111341920_ERX11504321
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

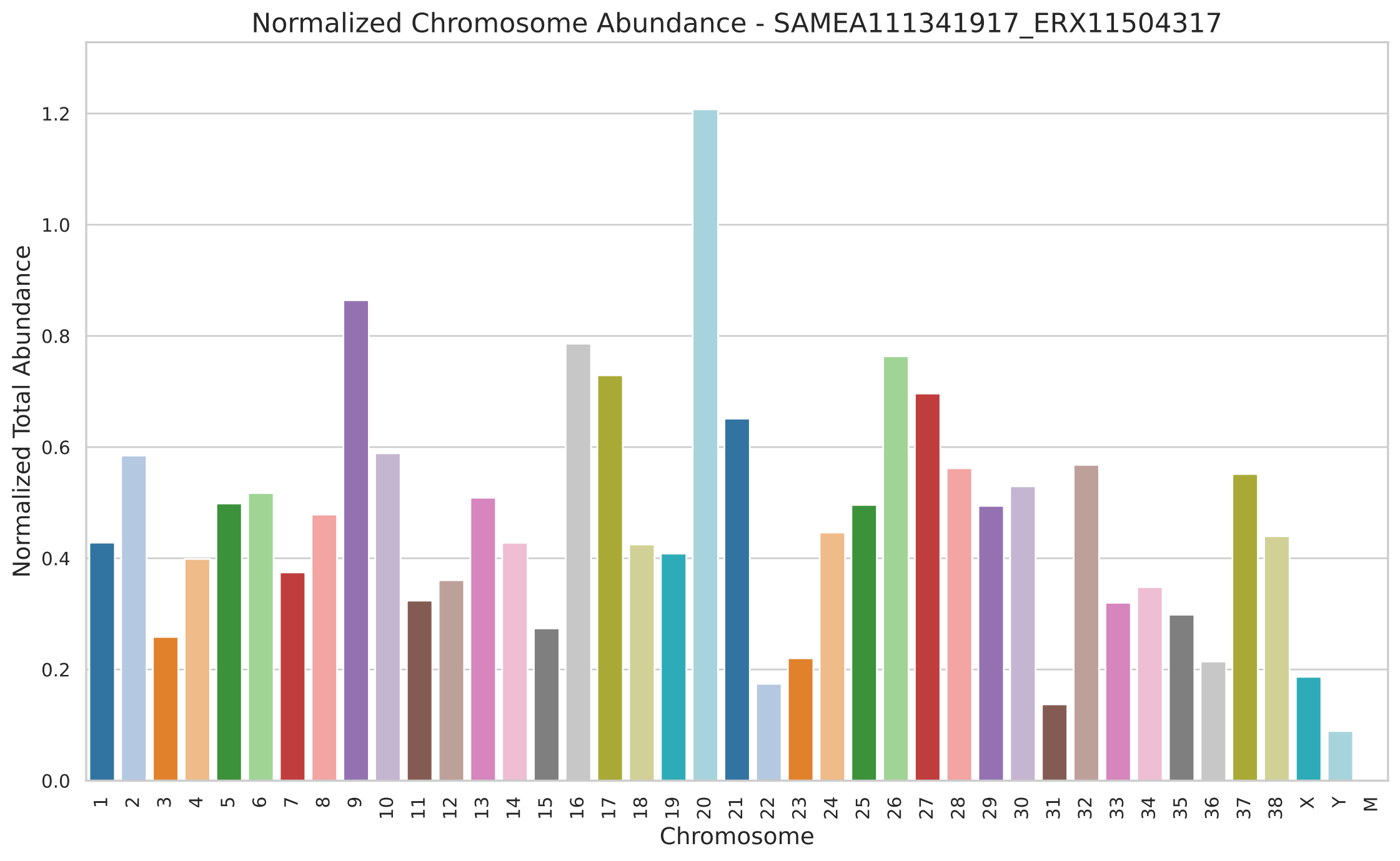

Normalized Chromosome Abundance - SAMEA111341894_ERX11504287
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
2.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

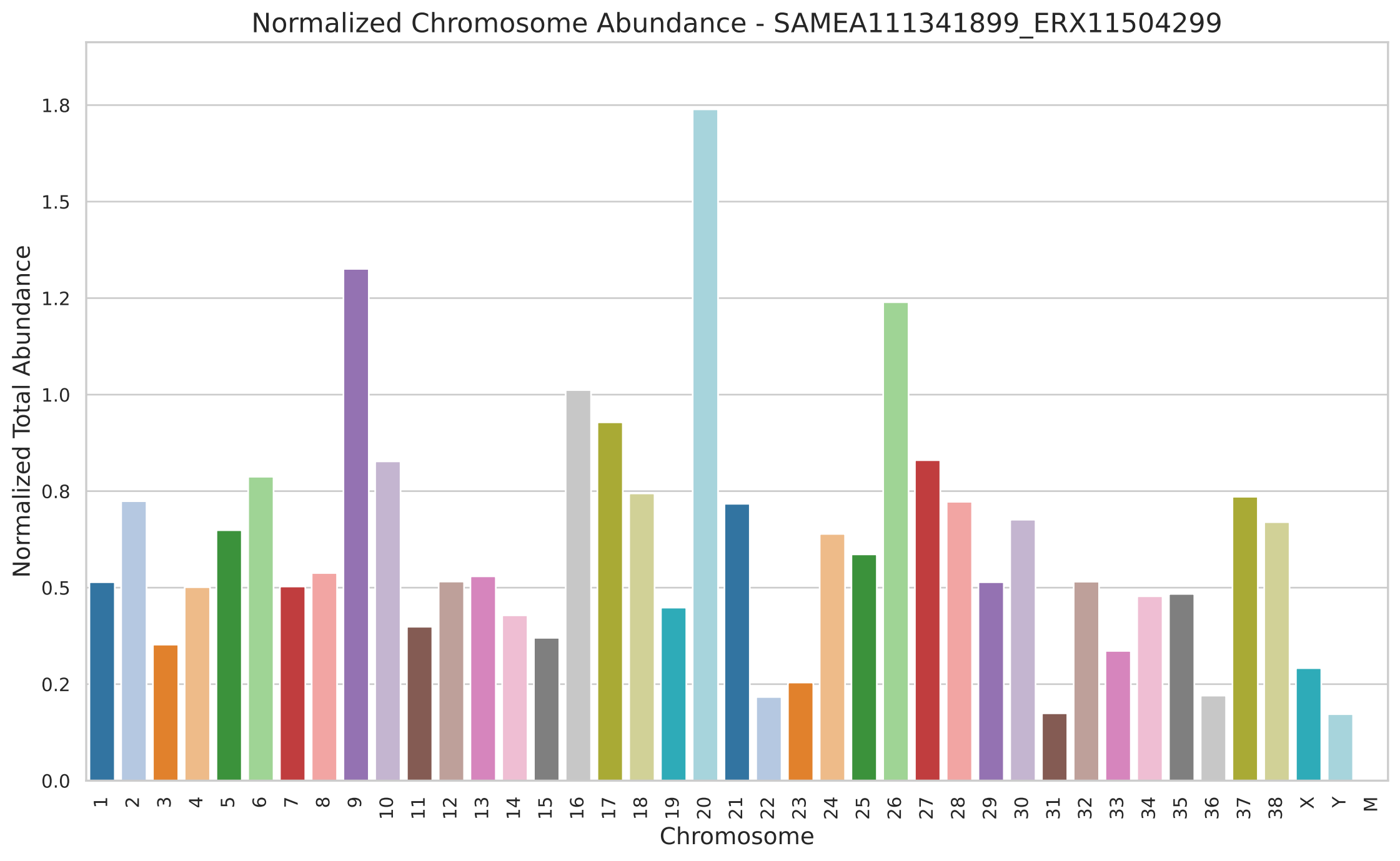

Normalized Chromosome Abundance - SAMEA111341922_ERX11504256
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

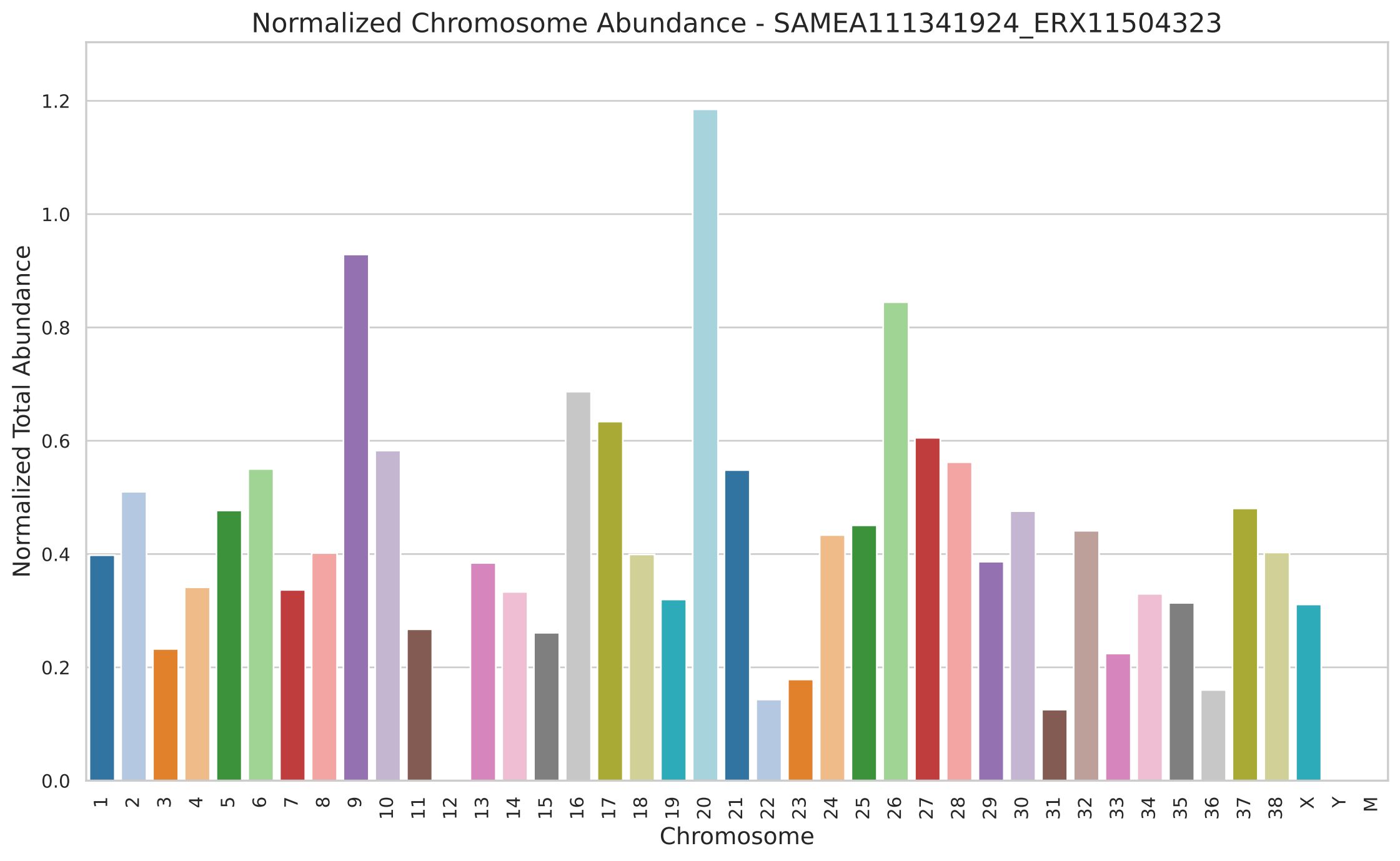

Normalized Chromosome Abundance - SAMEA111341903_ERX11504302
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

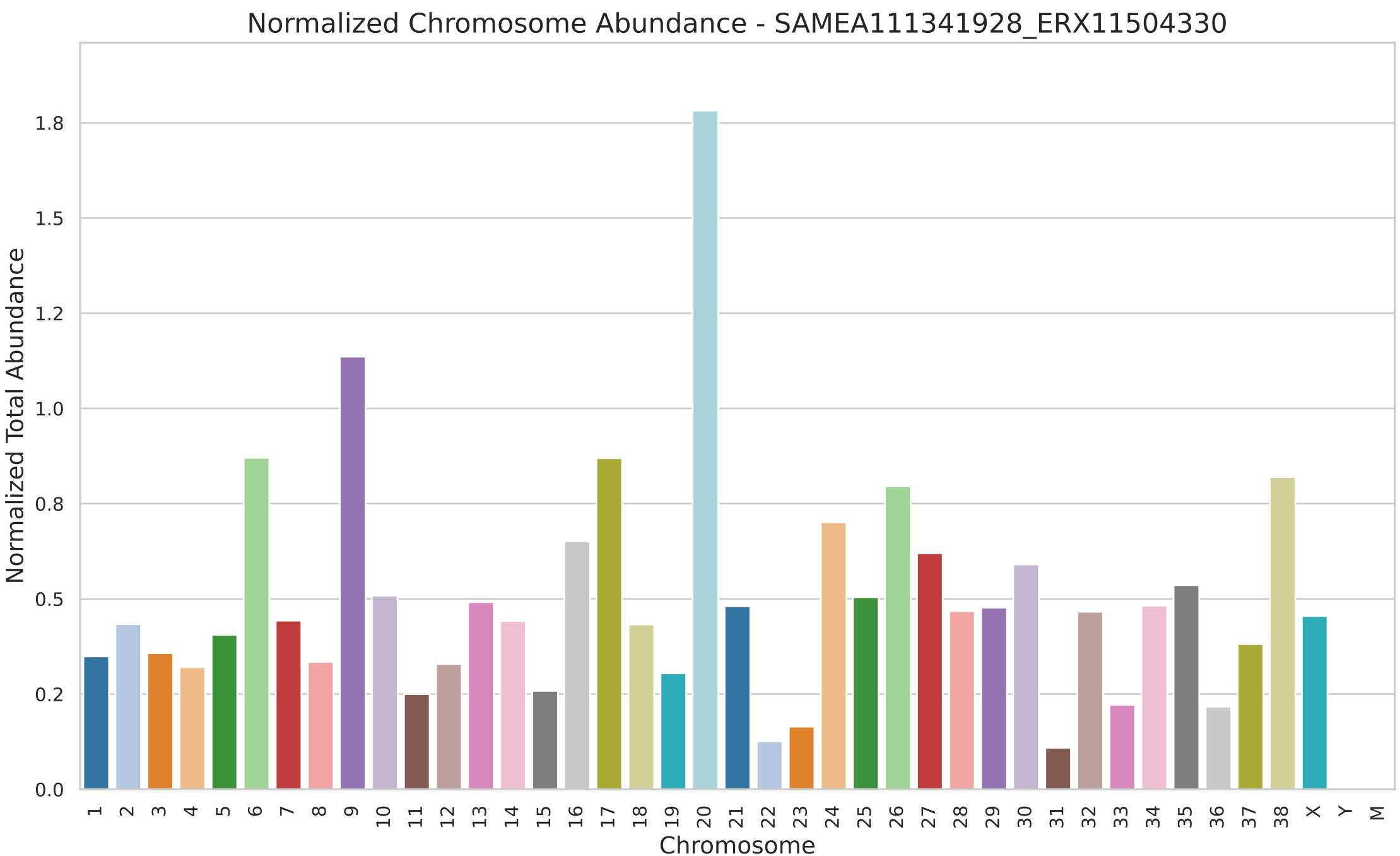

Normalized Chromosome Abundance - SAMEA111341915_ERX11504314
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

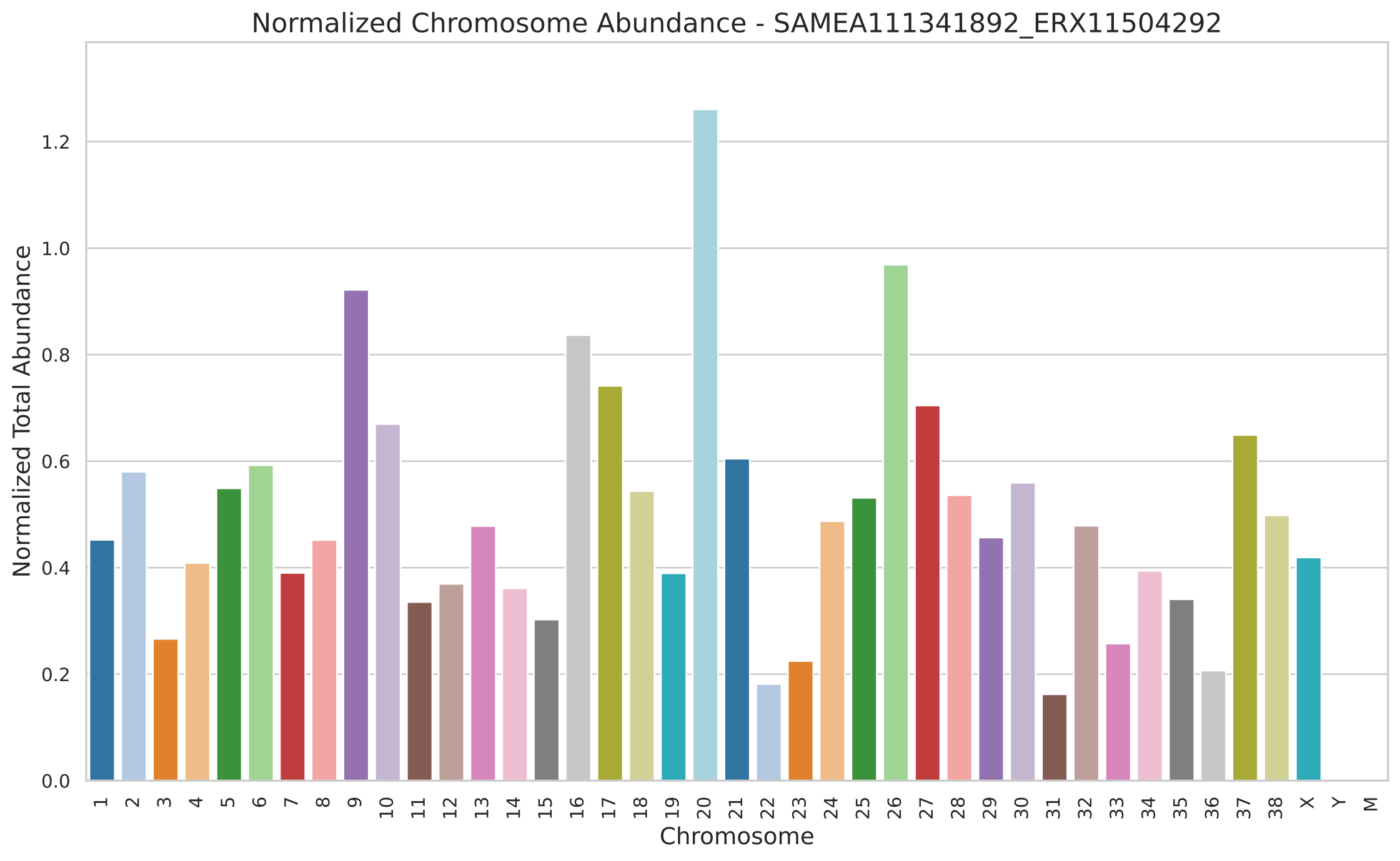

Normalized Chromosome Abundance - SAMEA111341924_ERX11504259
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

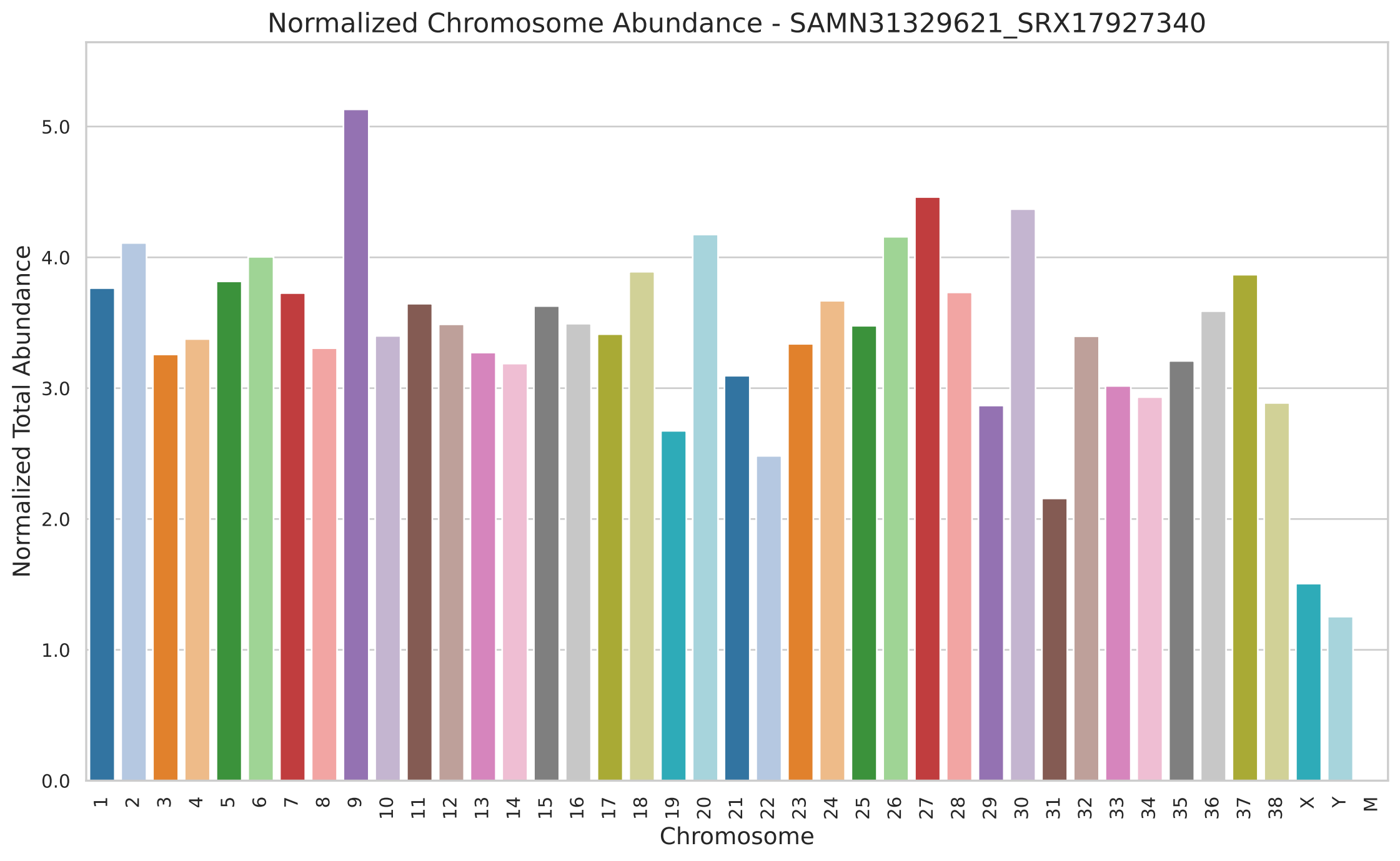

Normalized Chromosome Abundance - SAMEA111341917_ERX11504317
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

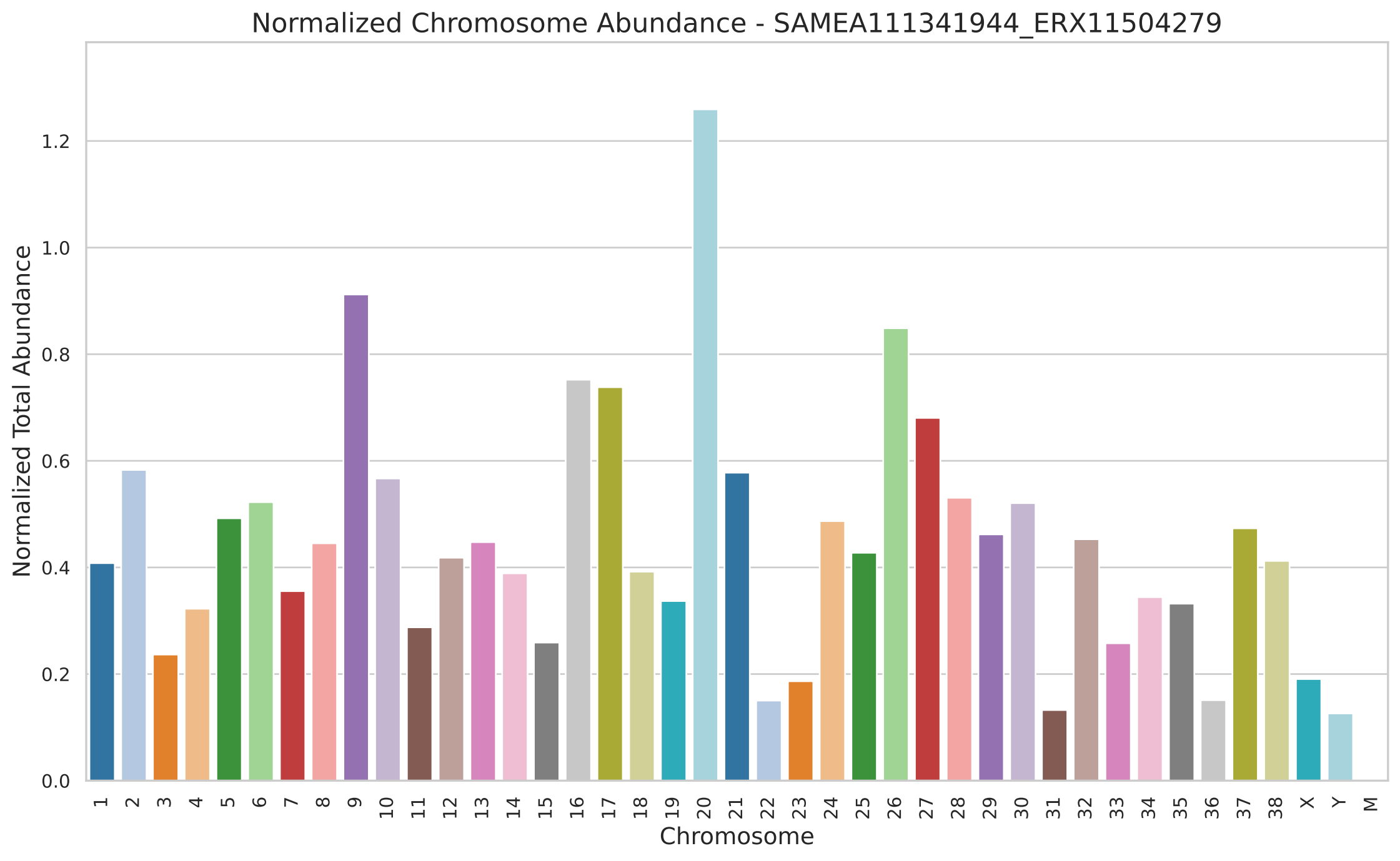

Normalized Chromosome Abundance - SAMEA111341899_ERX11504299
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

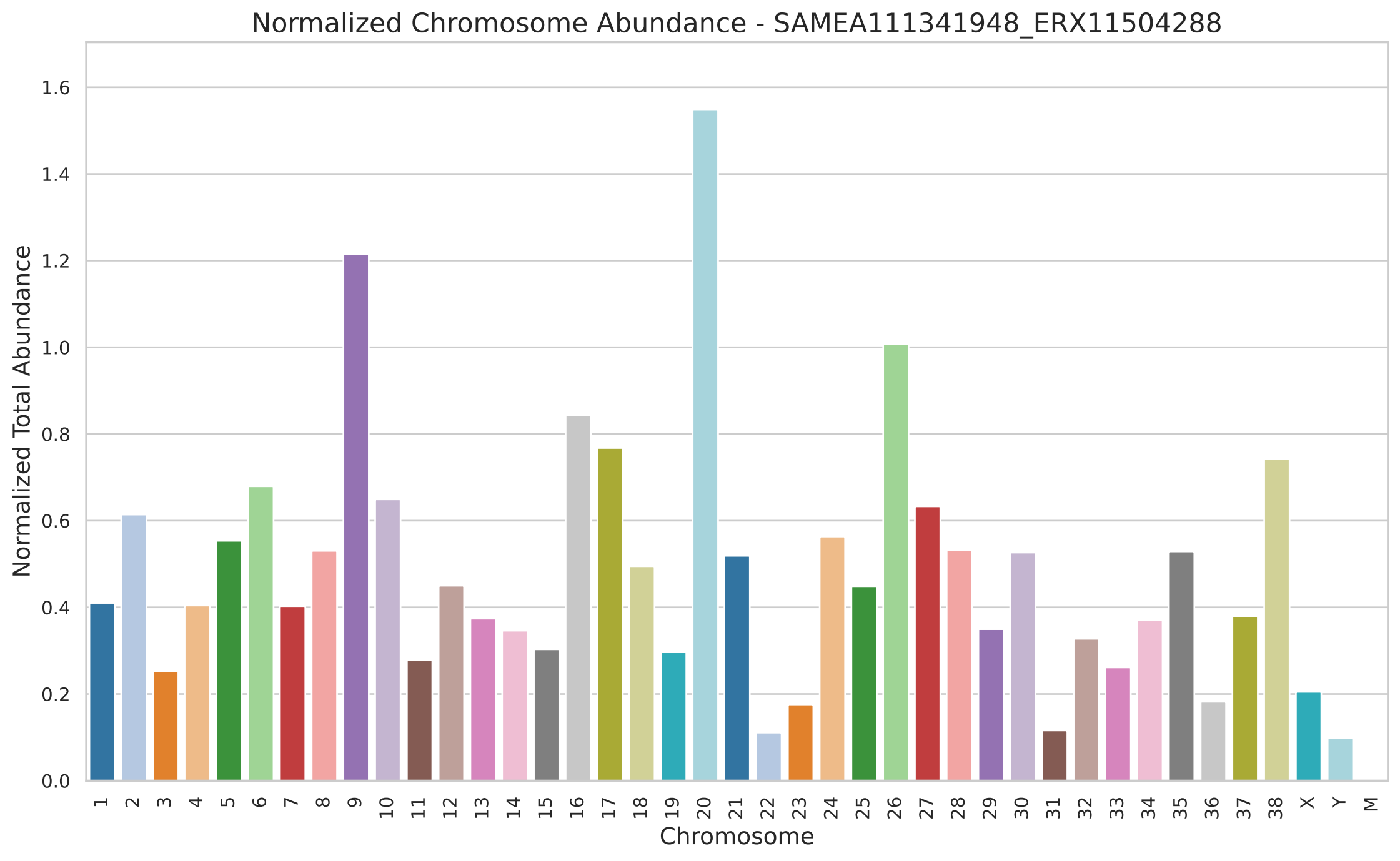

Normalized Chromosome Abundance - SAMEA111341924_ERX11504323
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

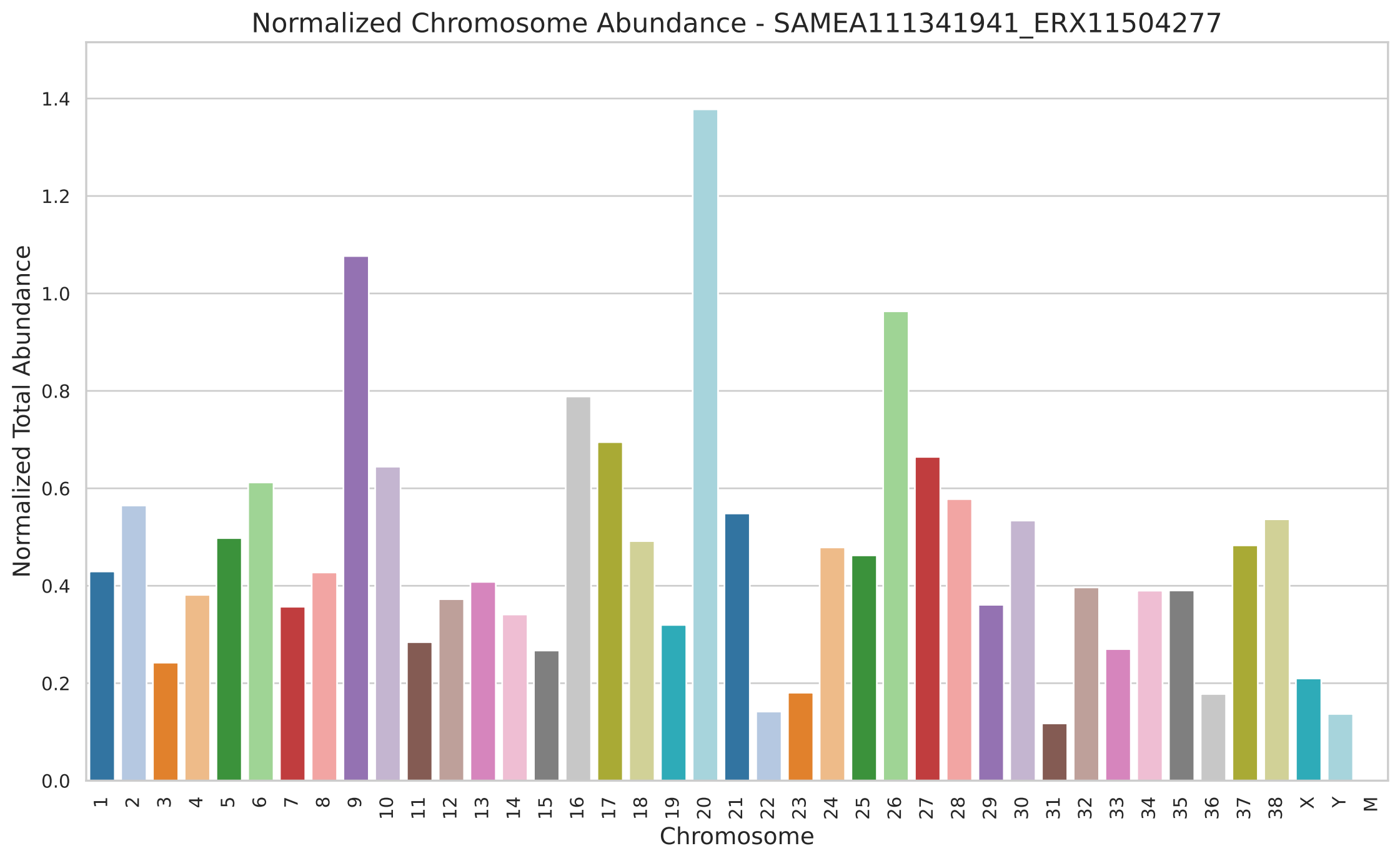

Normalized Chromosome Abundance - SAMEA111341928_ERX11504330
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

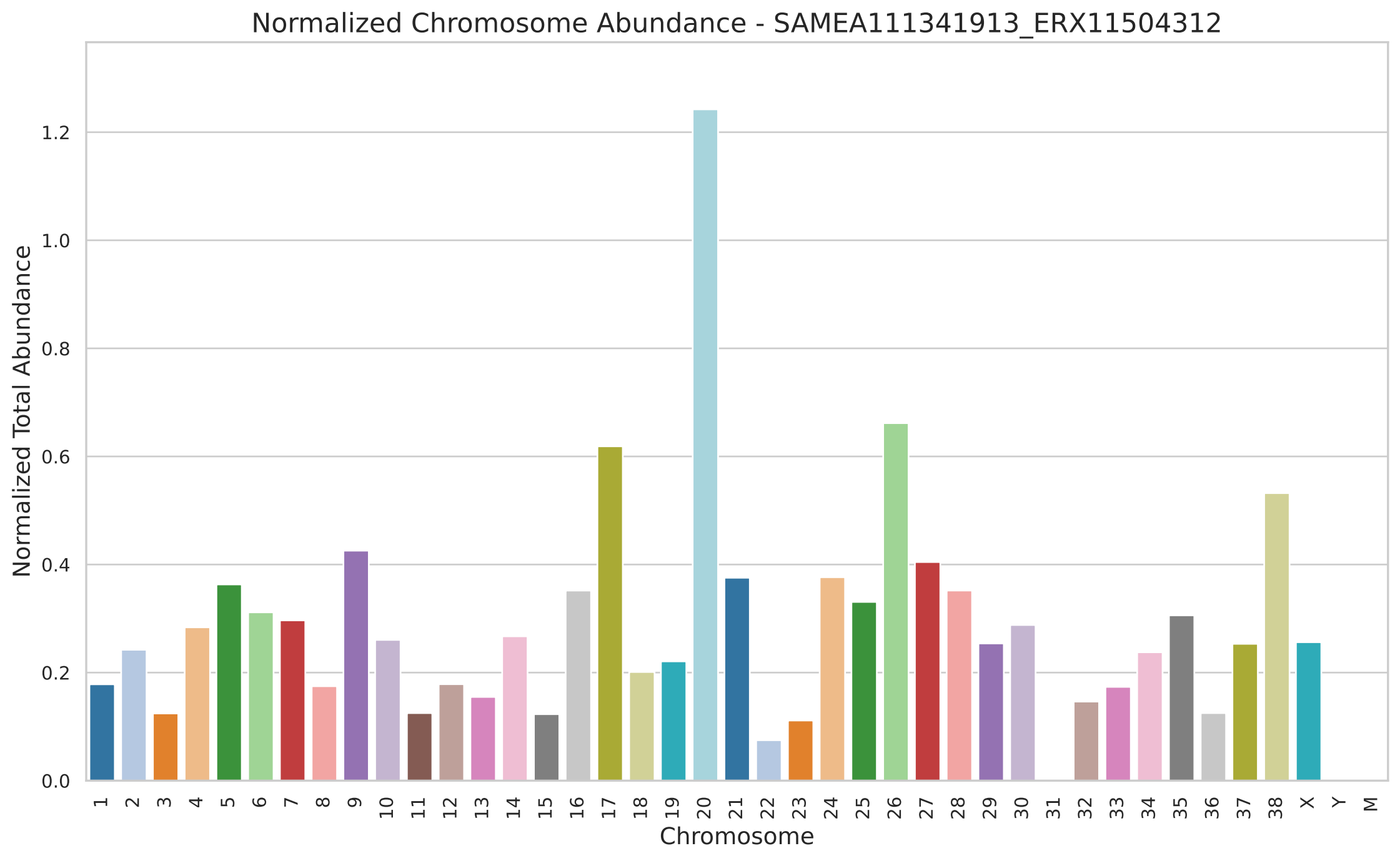

Normalized Chromosome Abundance - SAMEA111341892_ERX11504292
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

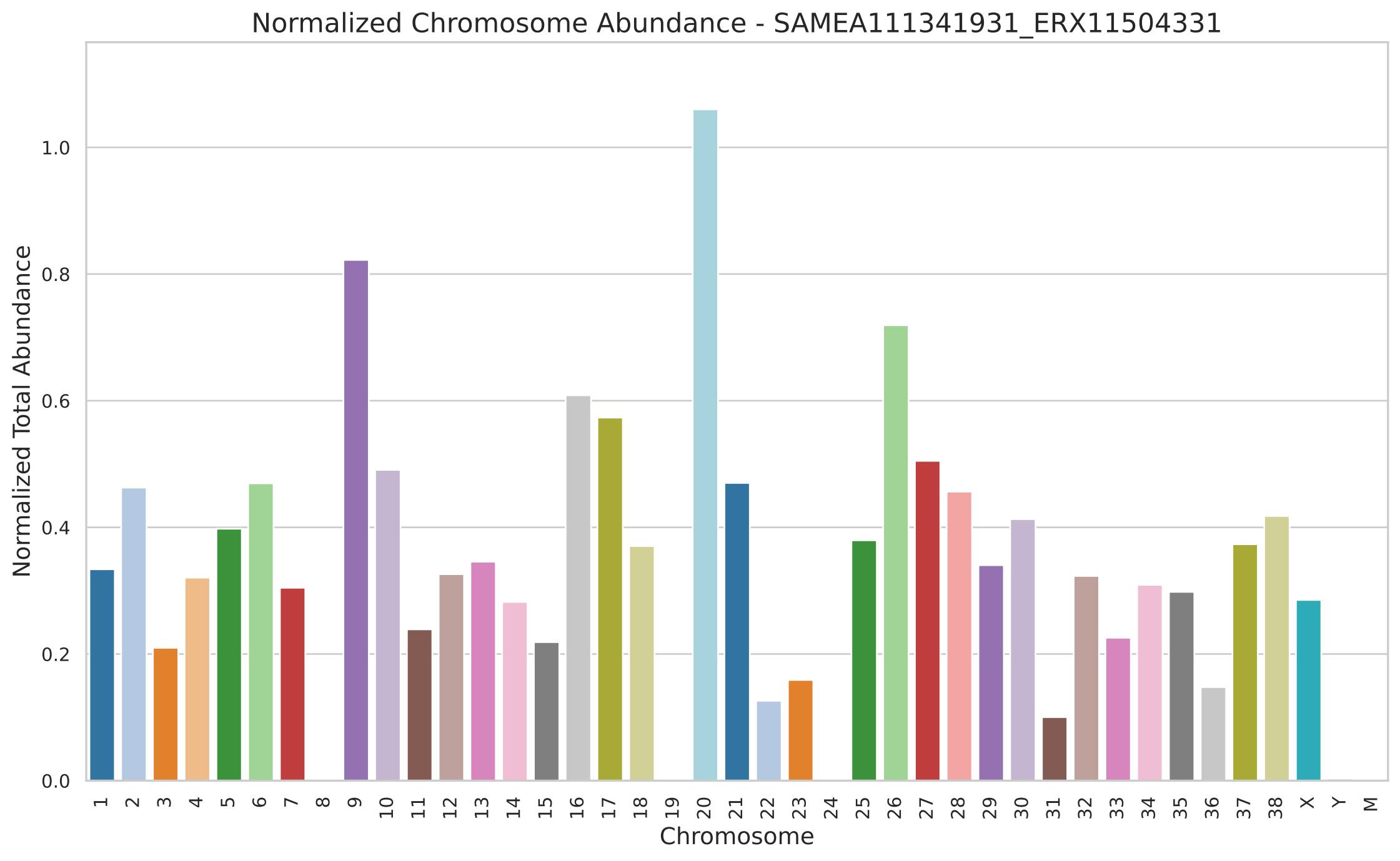

Normalized Chromosome Abundance - SAMN31329621_SRX17927340
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
5.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

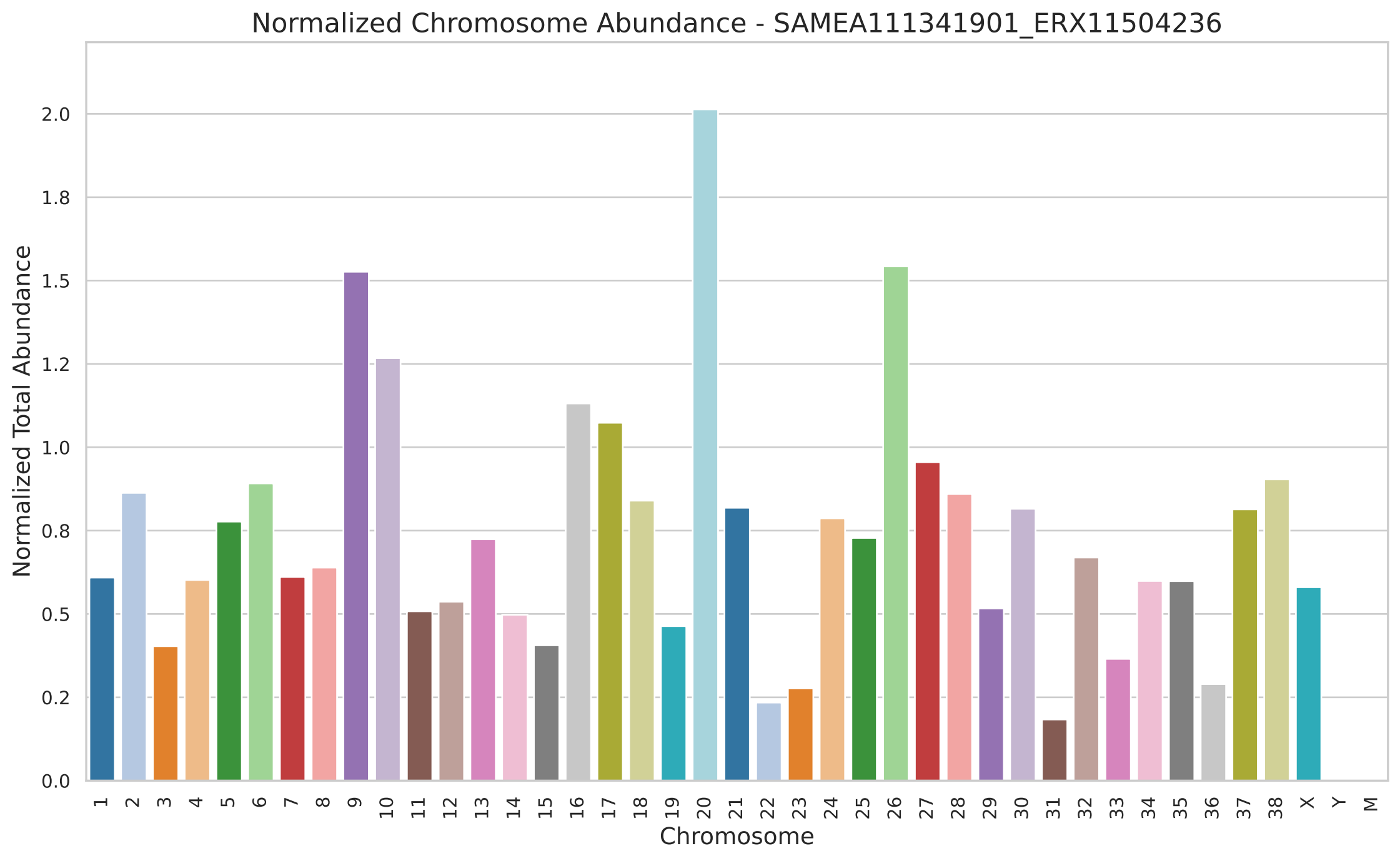

Normalized Chromosome Abundance - SAMEA111341944_ERX11504279
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

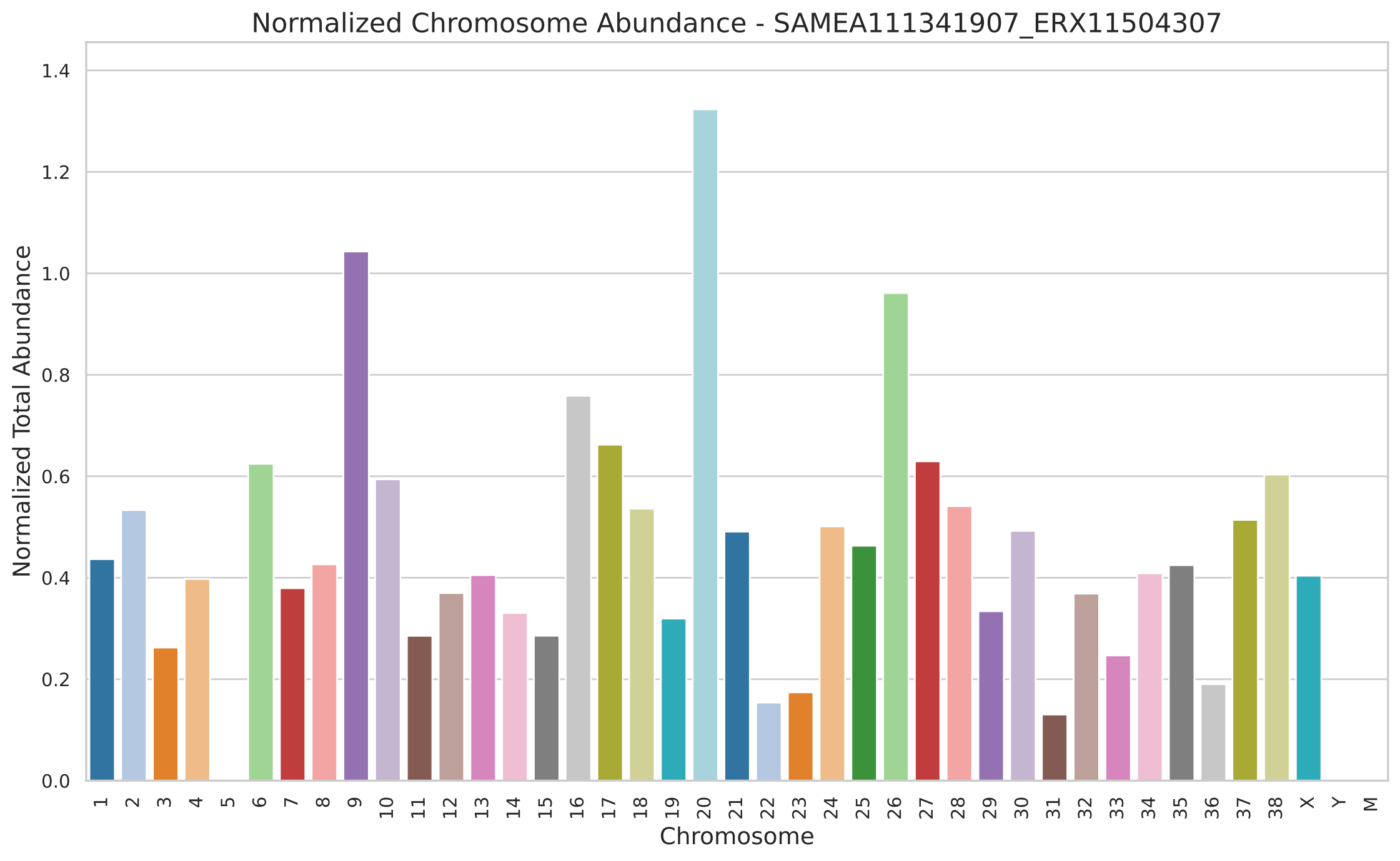

Normalized Chromosome Abundance - SAMEA111341948_ERX11504288
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

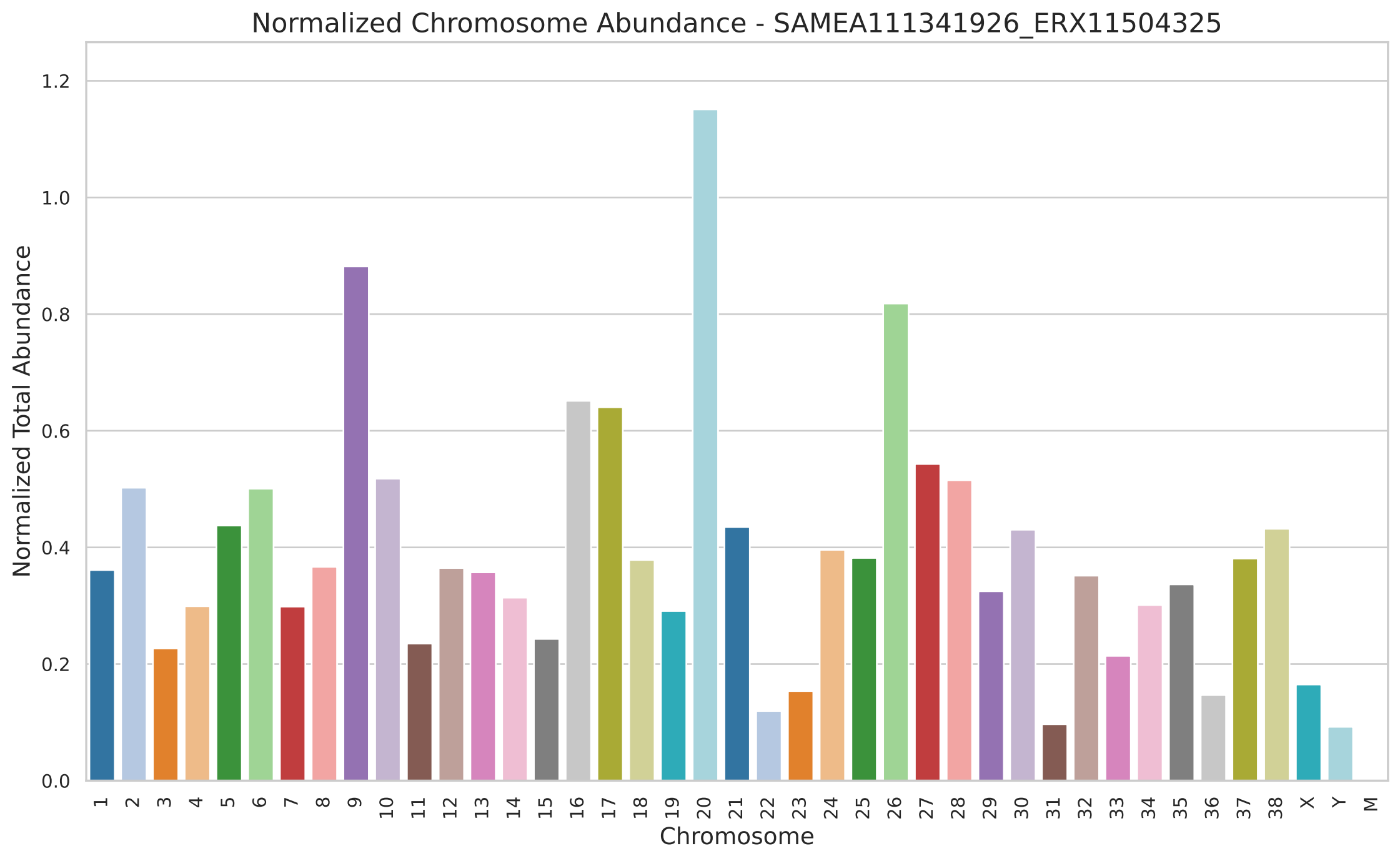

Normalized Chromosome Abundance - SAMEA111341941_ERX11504277
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

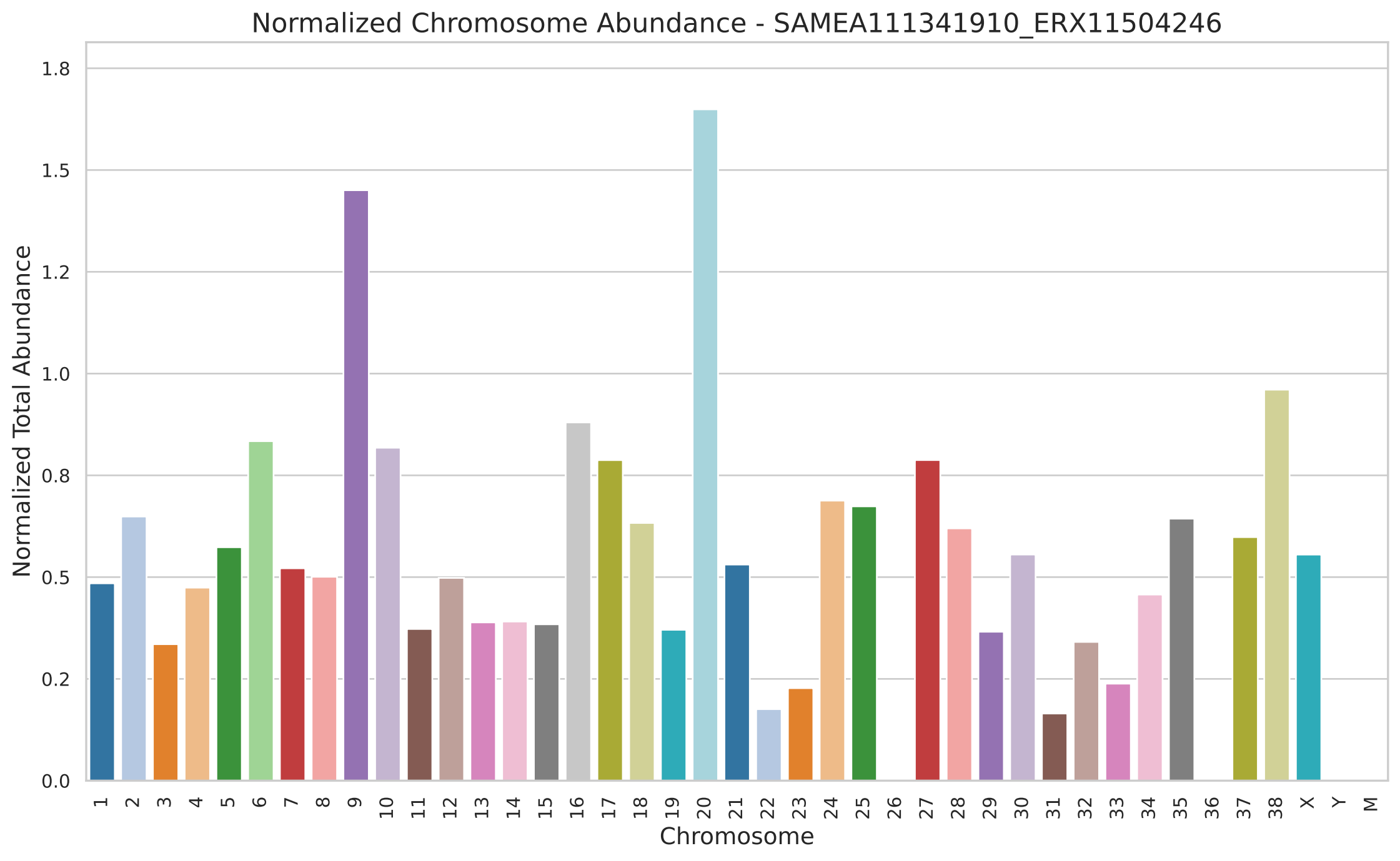

Normalized Chromosome Abundance - SAMEA111341913_ERX11504312
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

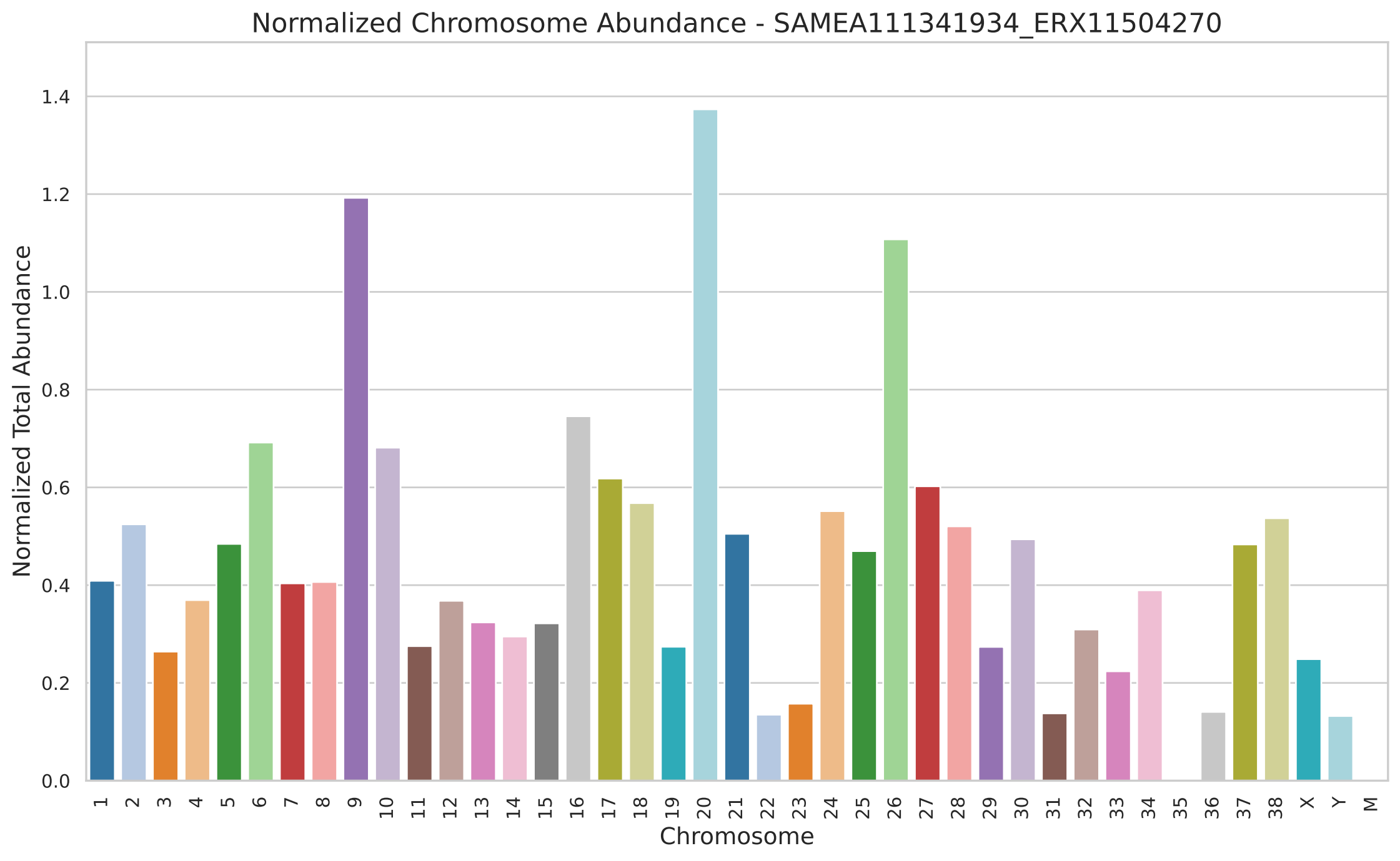

Normalized Chromosome Abundance - SAMEA111341931_ERX11504331
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

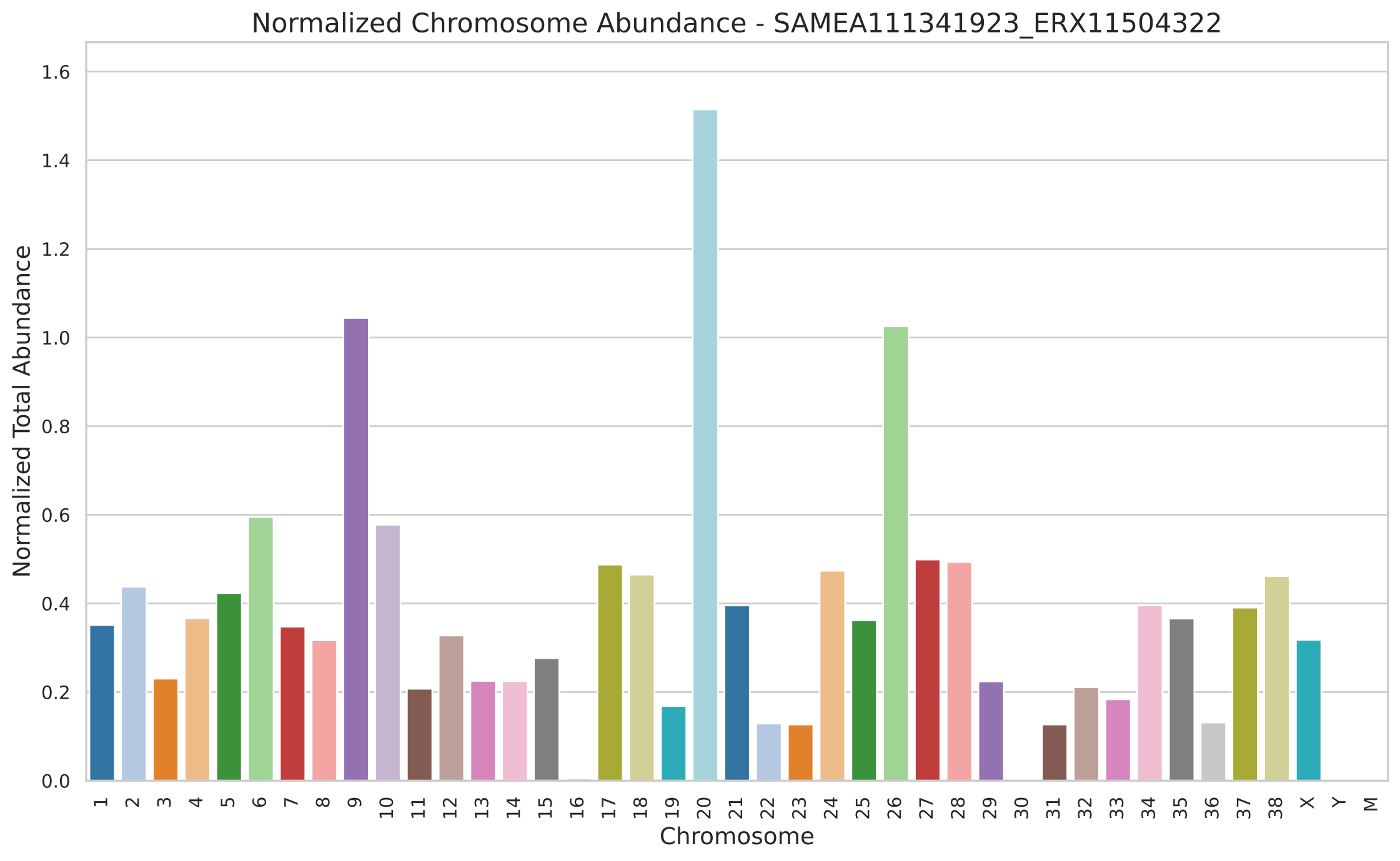

Normalized Chromosome Abundance - SAMEA111341901_ERX11504236
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

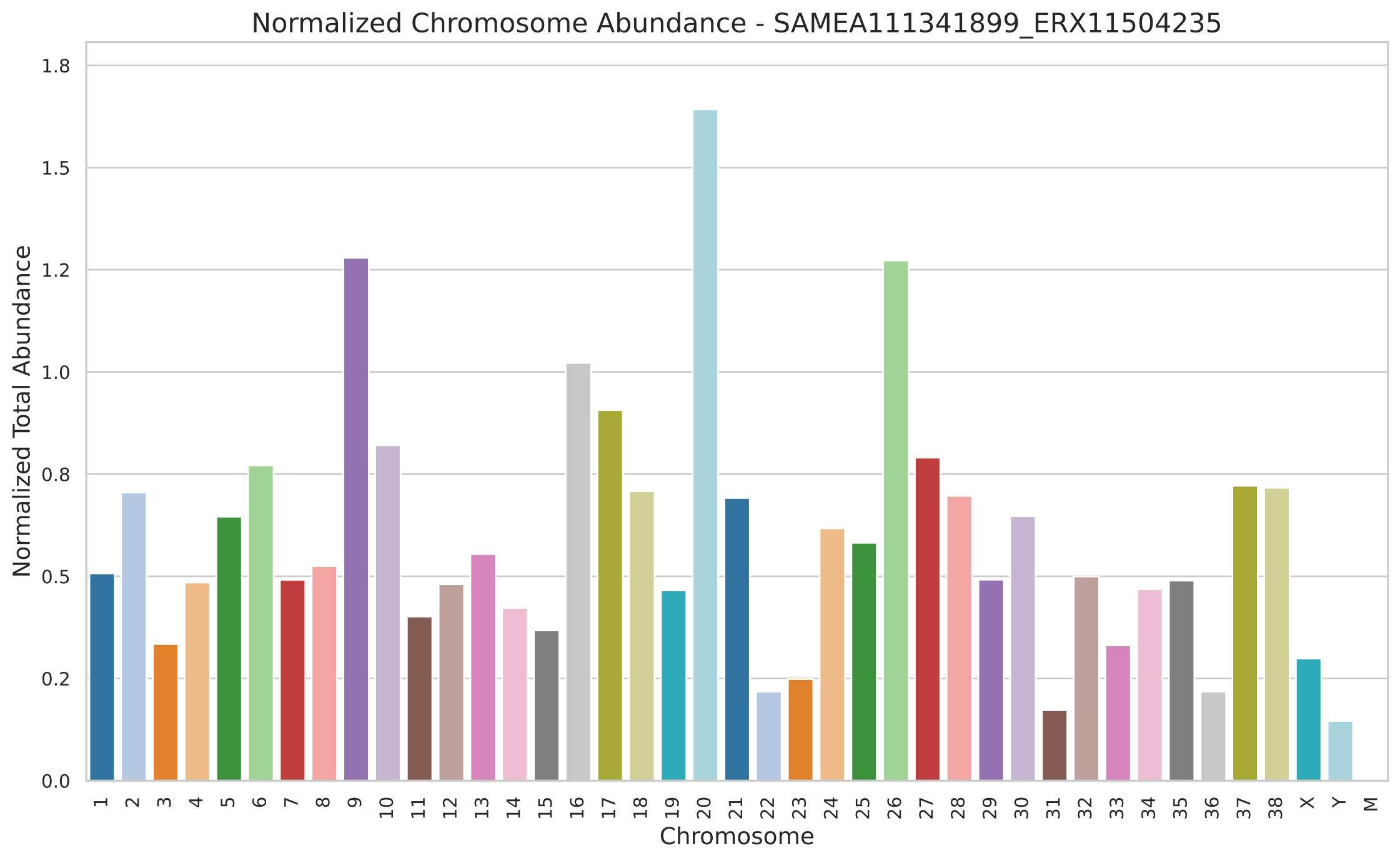

Normalized Chromosome Abundance - SAMEA111341907_ERX11504307
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

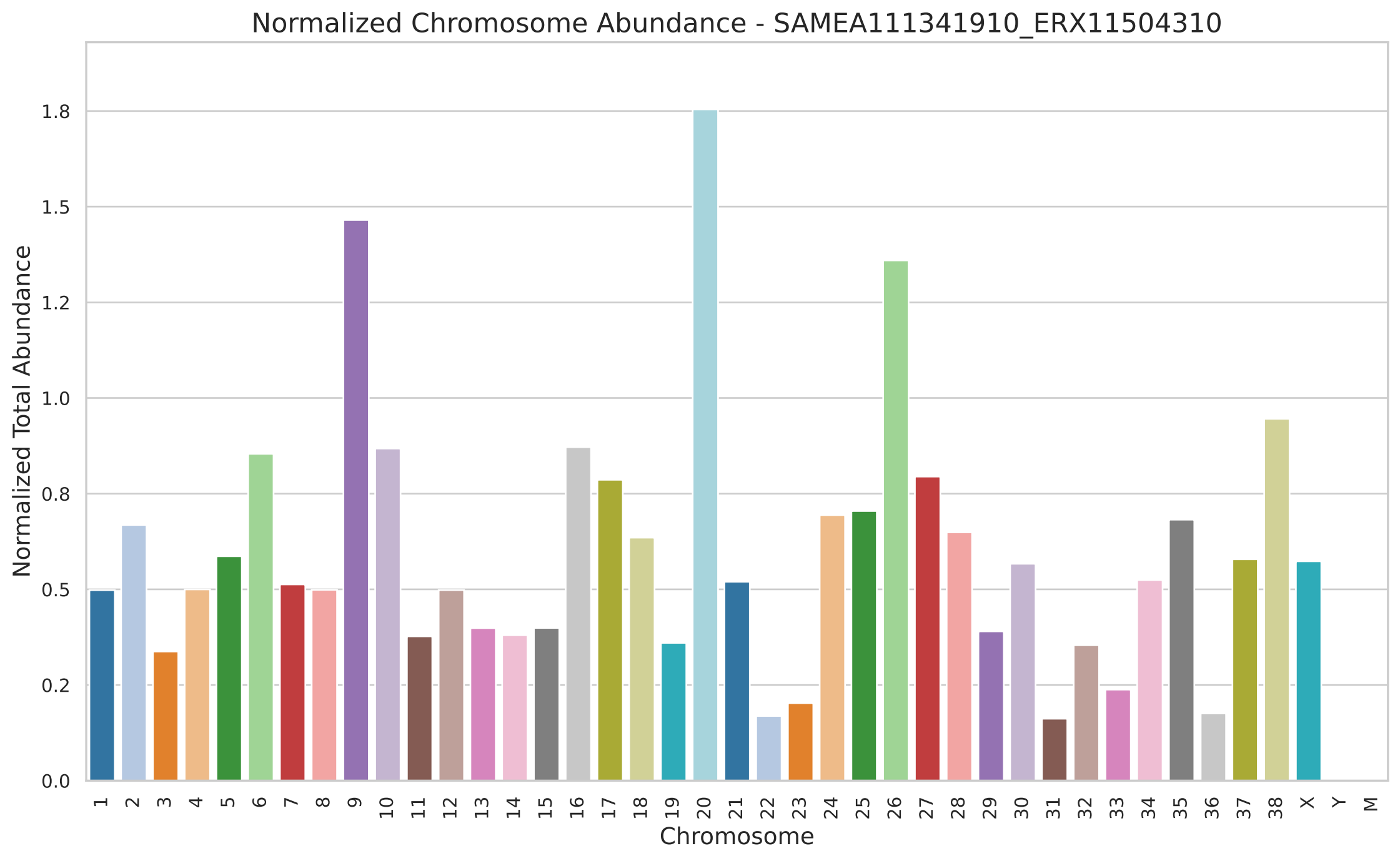

Normalized Chromosome Abundance - SAMEA111341926_ERX11504325
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

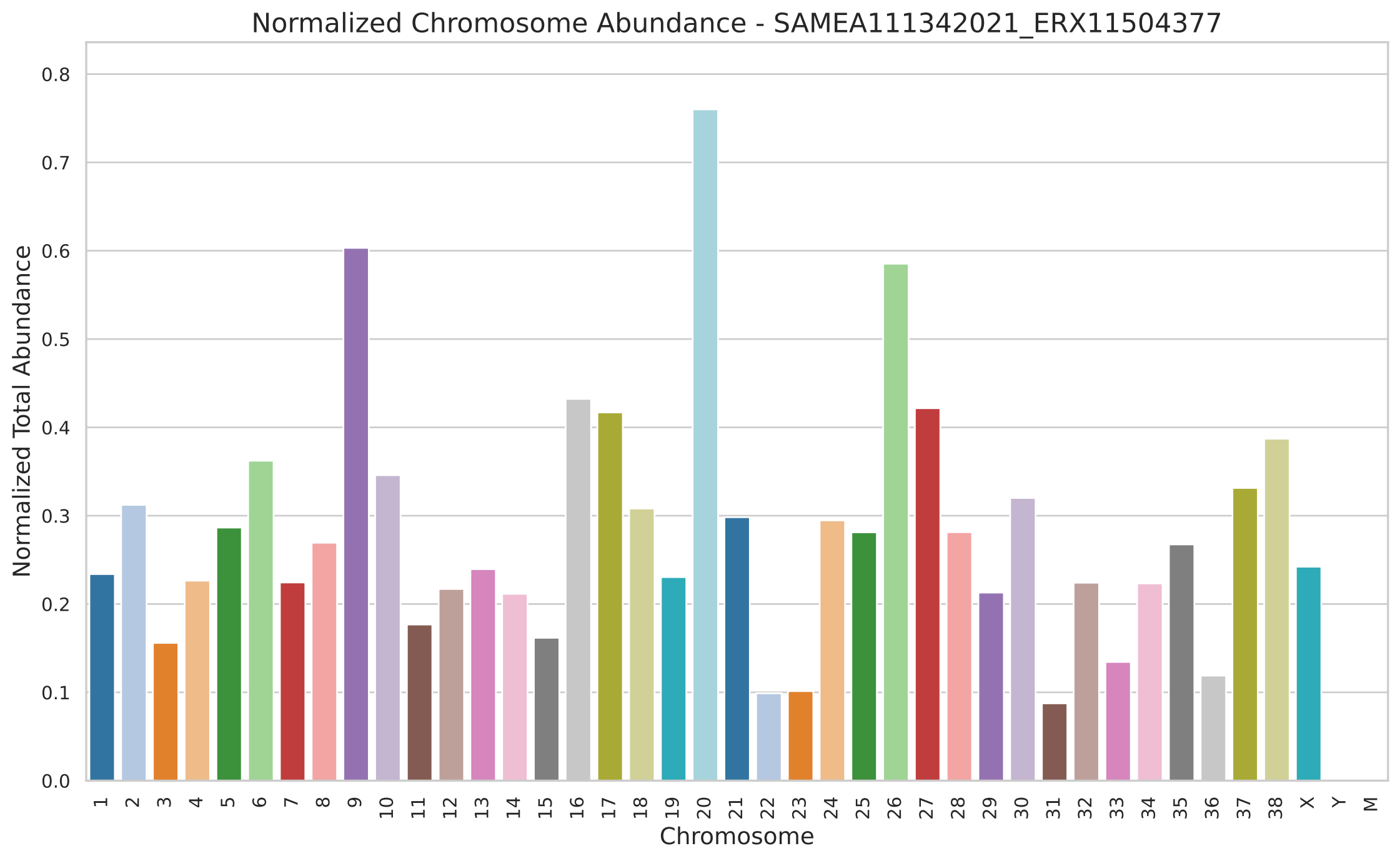

Normalized Chromosome Abundance - SAMEA111341910_ERX11504246
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

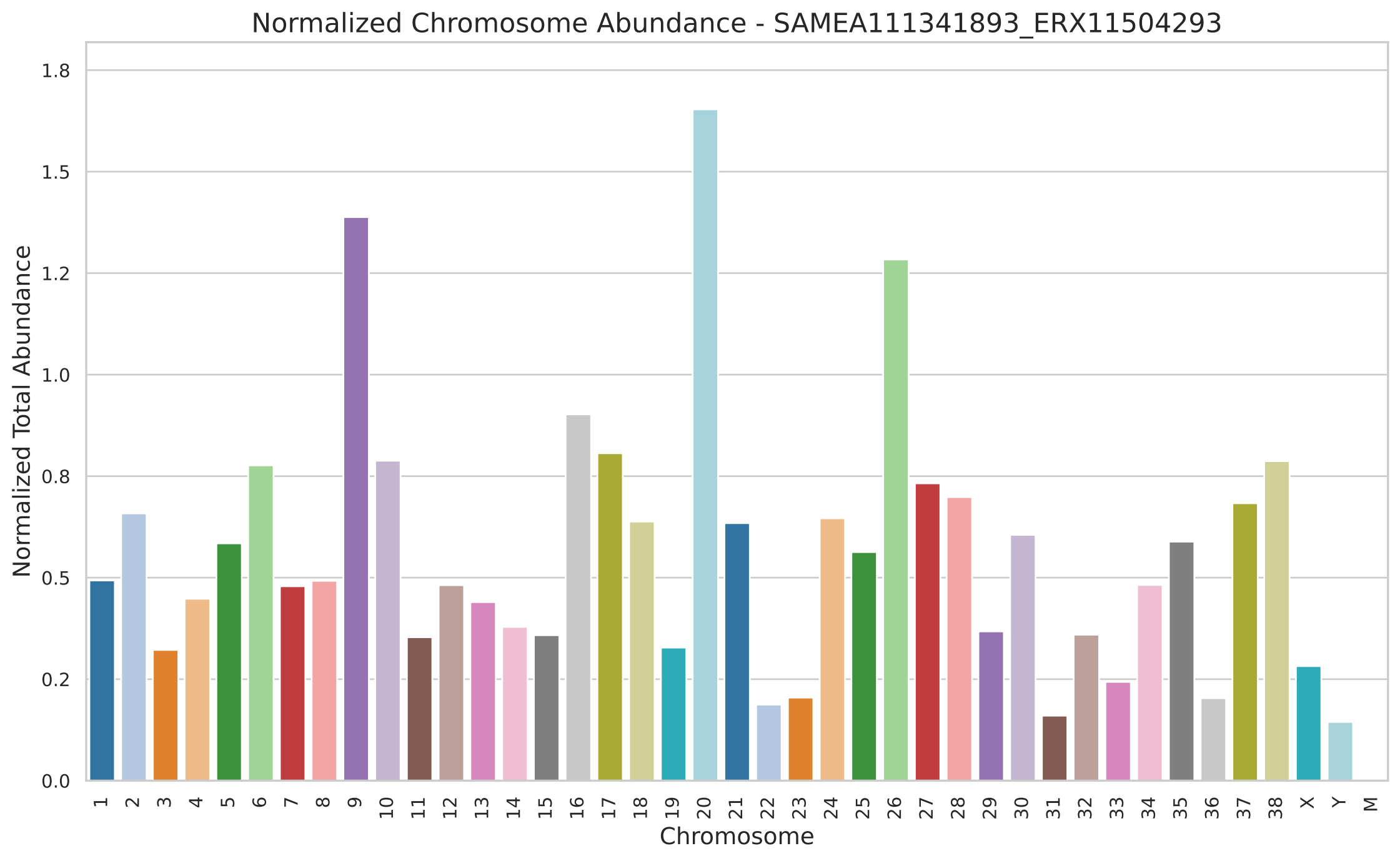

Normalized Chromosome Abundance - SAMEA111341934_ERX11504270
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

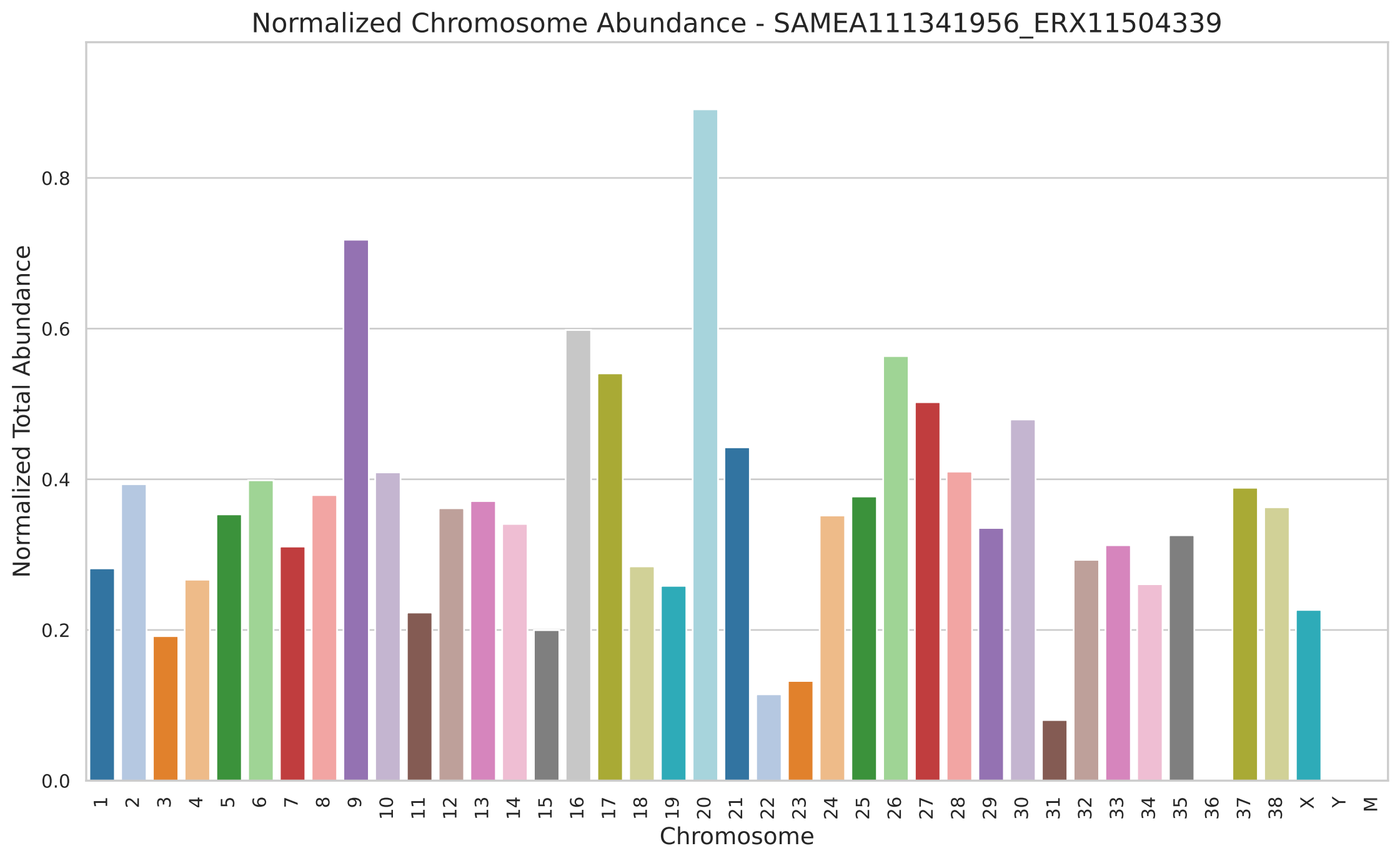

Normalized Chromosome Abundance - SAMEA111341923_ERX11504322
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

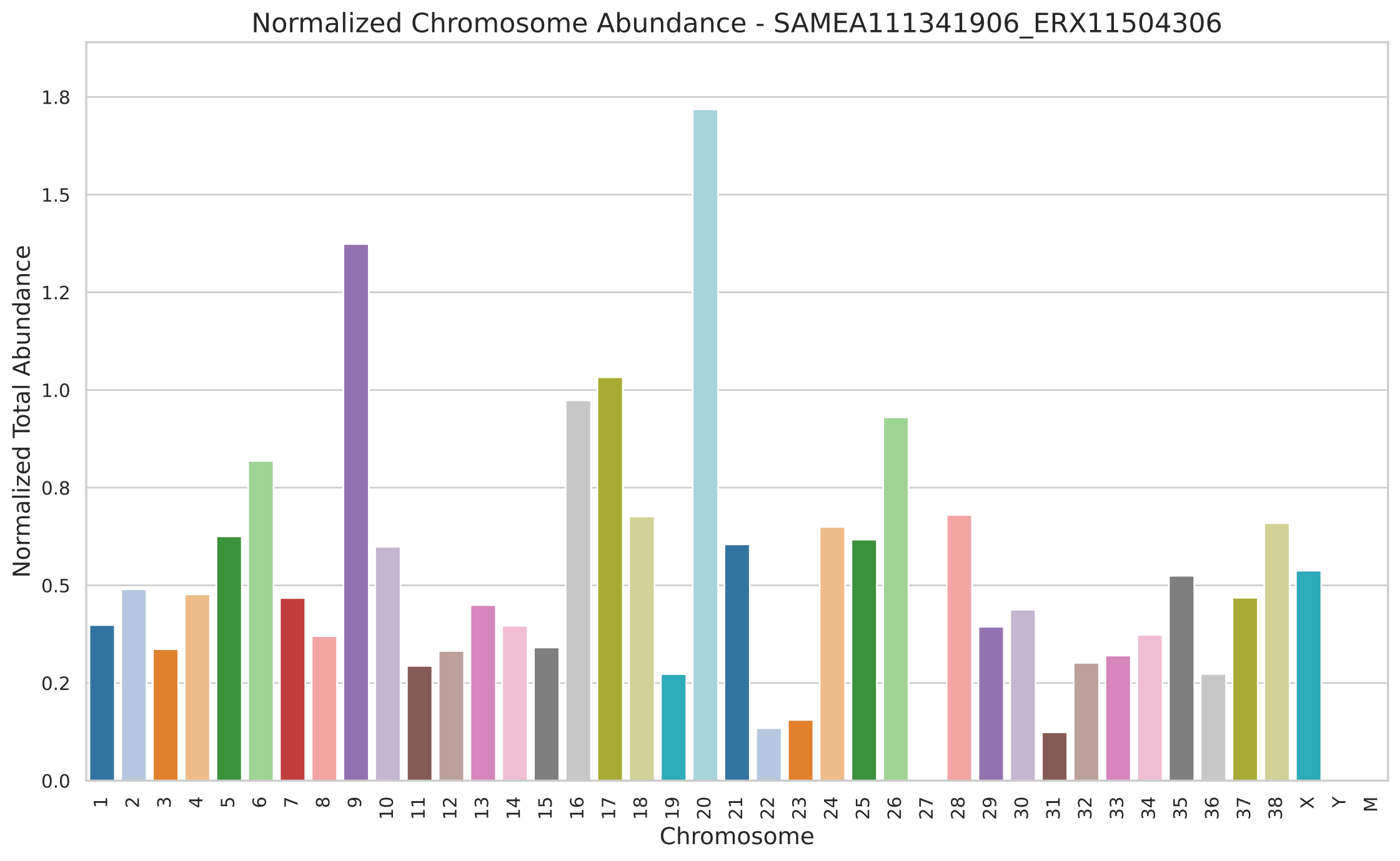

Normalized Chromosome Abundance - SAMEA111341899_ERX11504235
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

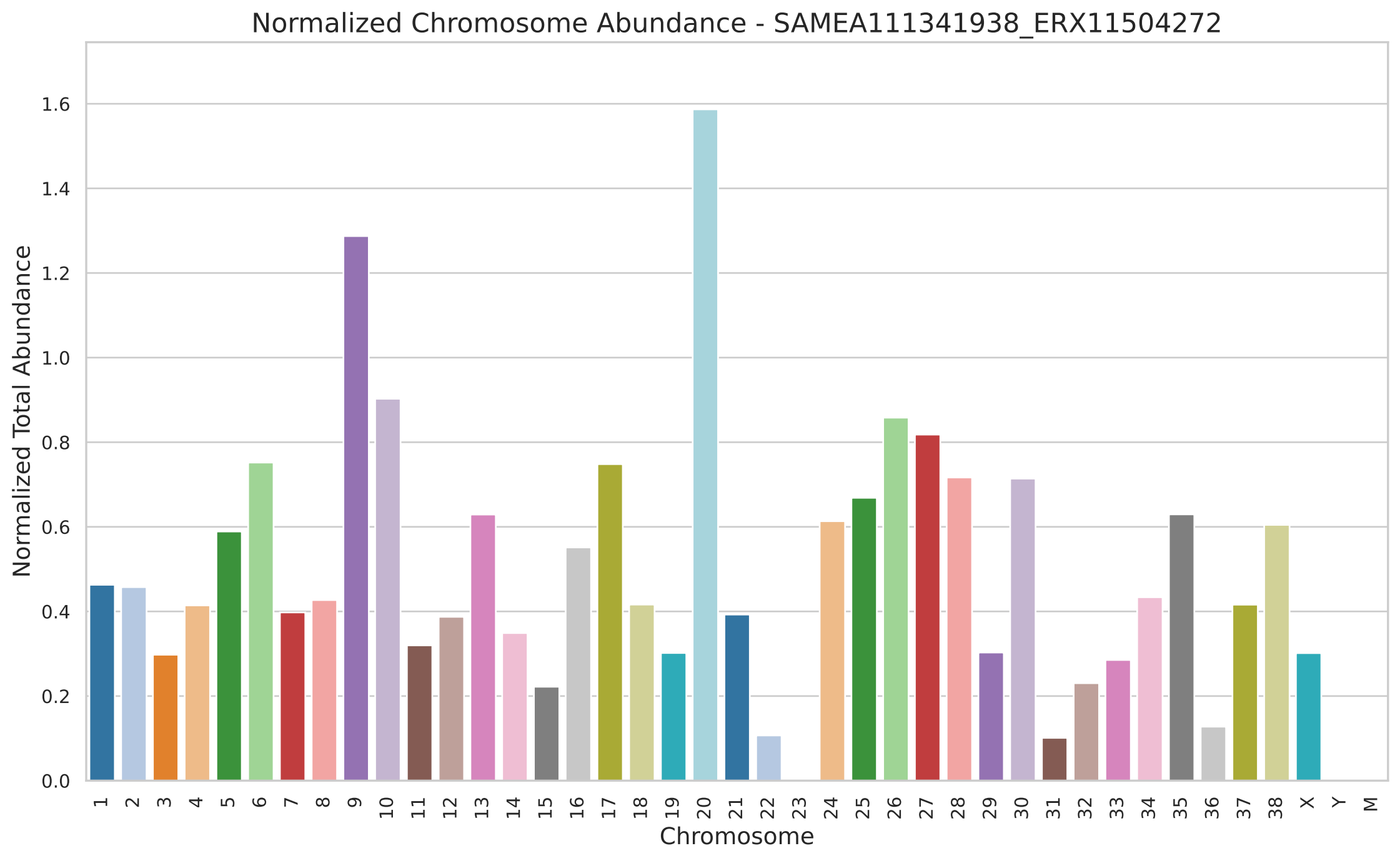

Normalized Chromosome Abundance - SAMEA111341910_ERX11504310
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

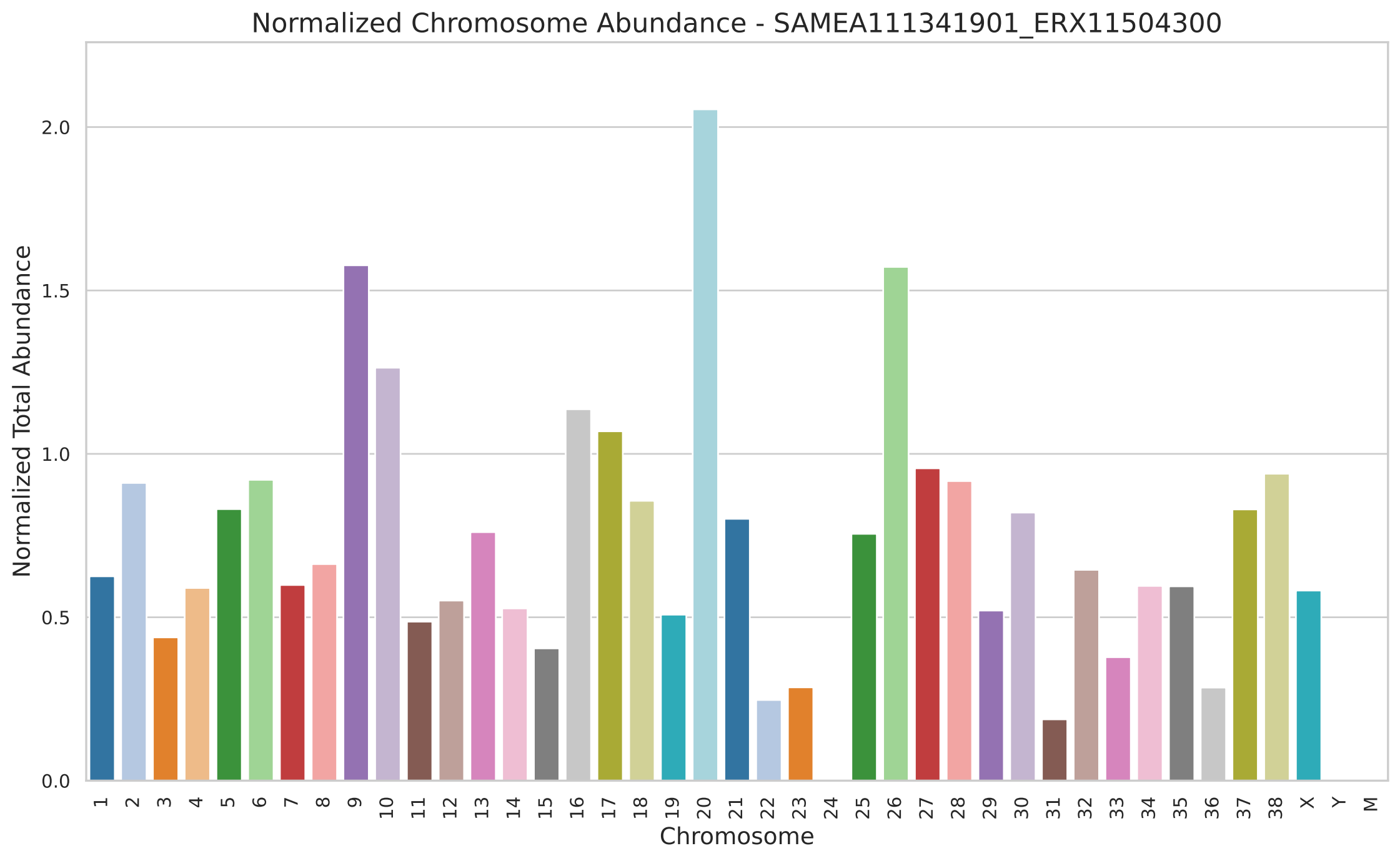

Normalized Chromosome Abundance - SAMEA111342021_ERX11504377
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

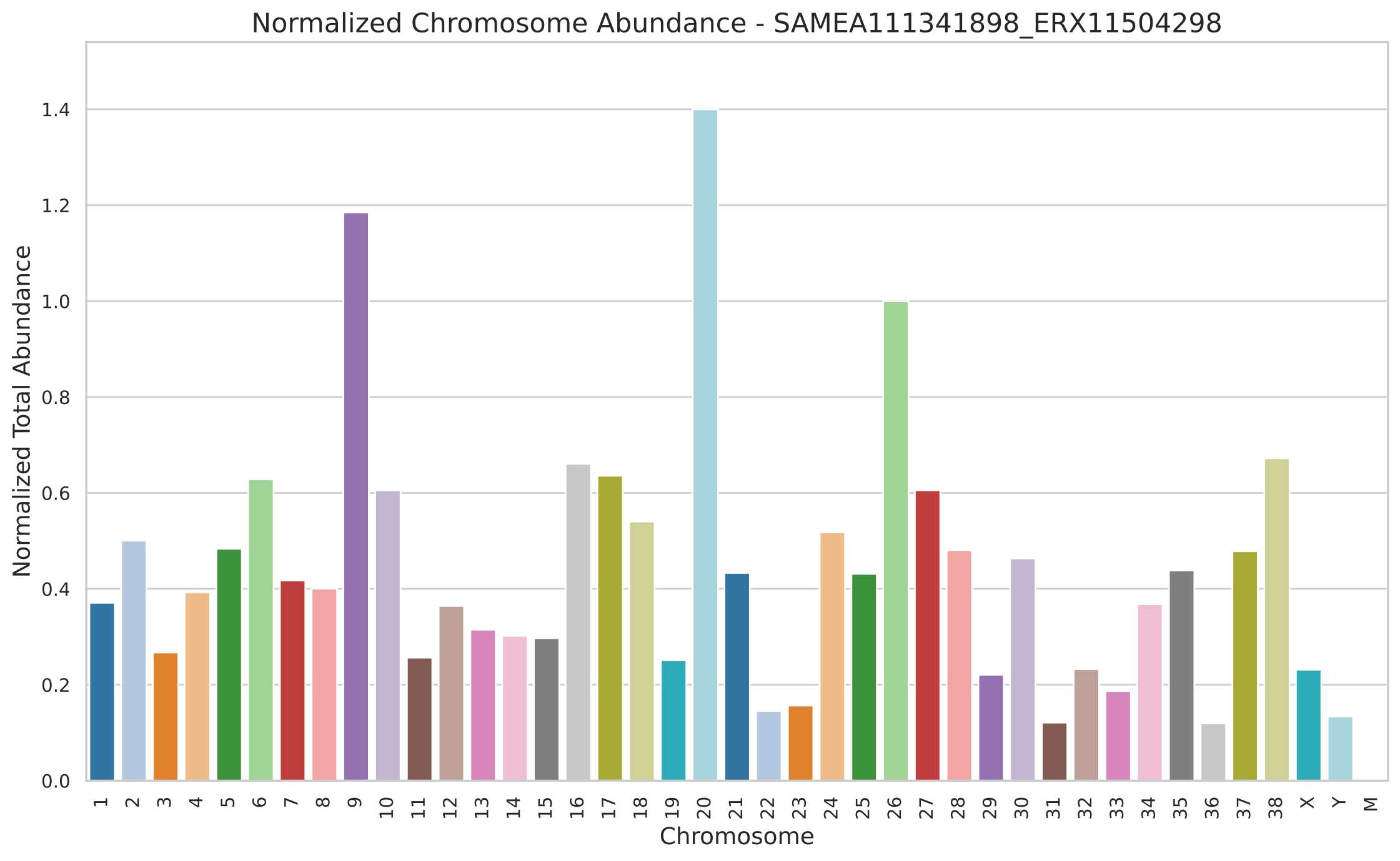

Normalized Chromosome Abundance - SAMEA111341893_ERX11504293
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

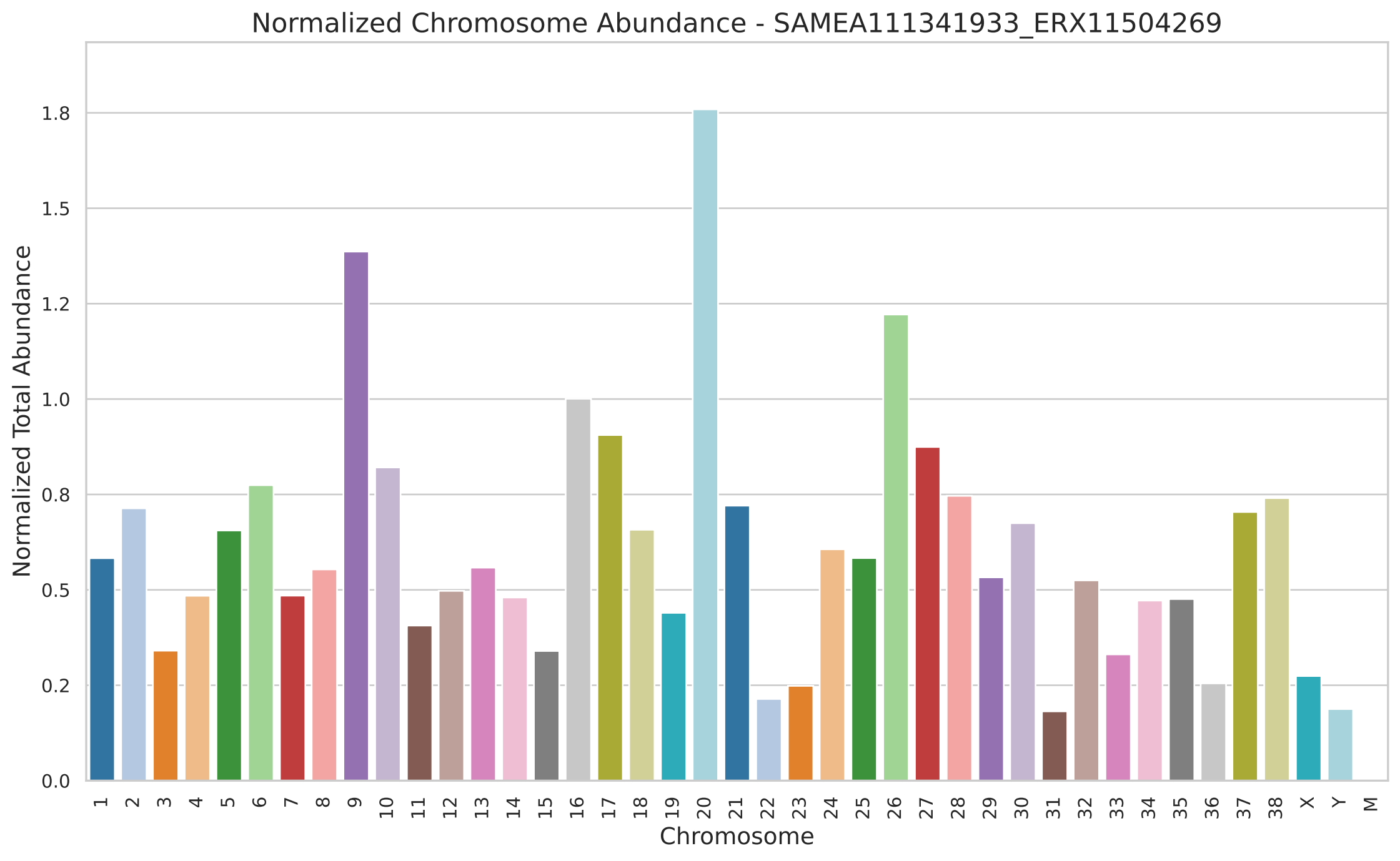

Normalized Chromosome Abundance - SAMEA111341956_ERX11504339
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

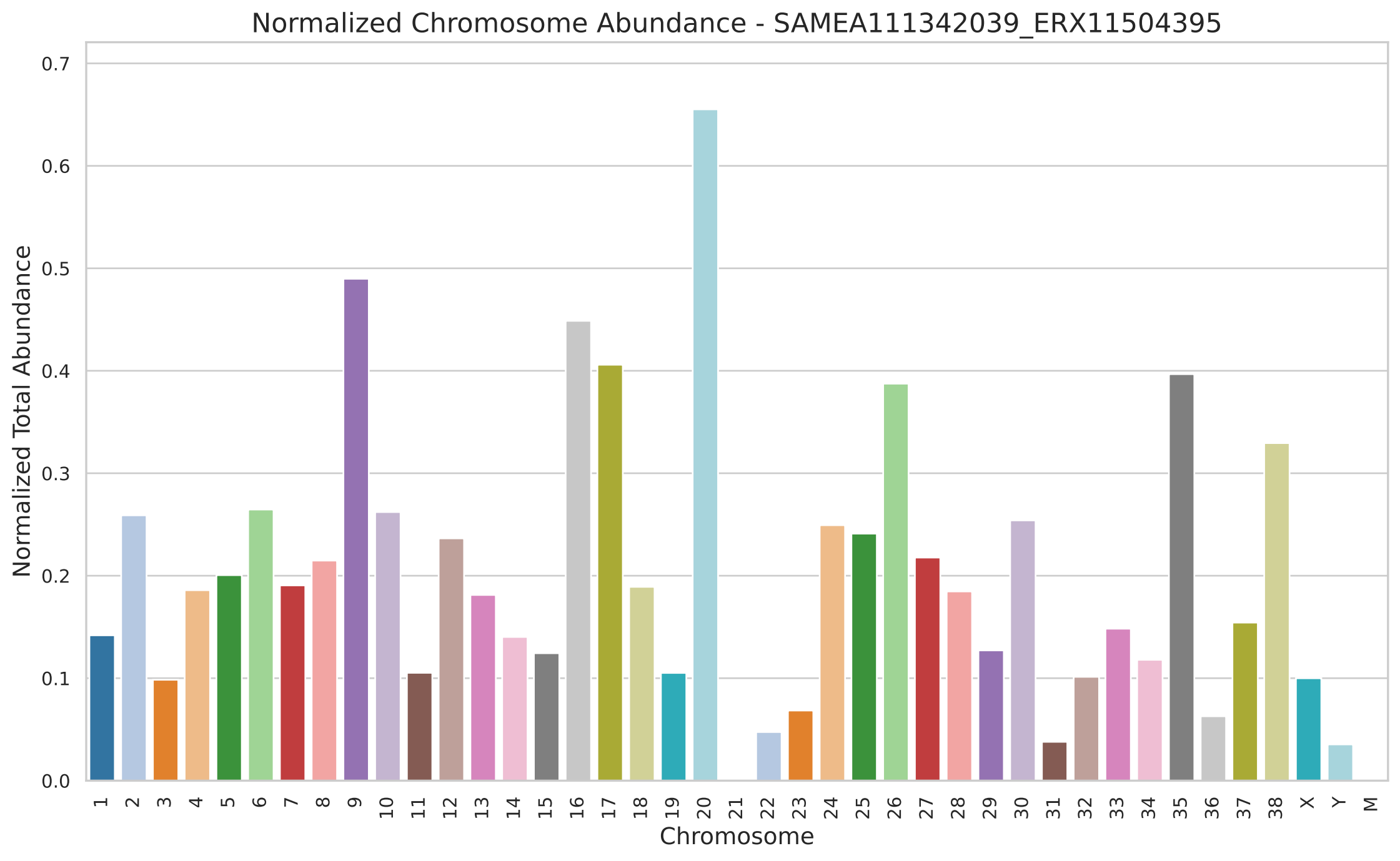

Normalized Chromosome Abundance - SAMEA111341906_ERX11504306
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

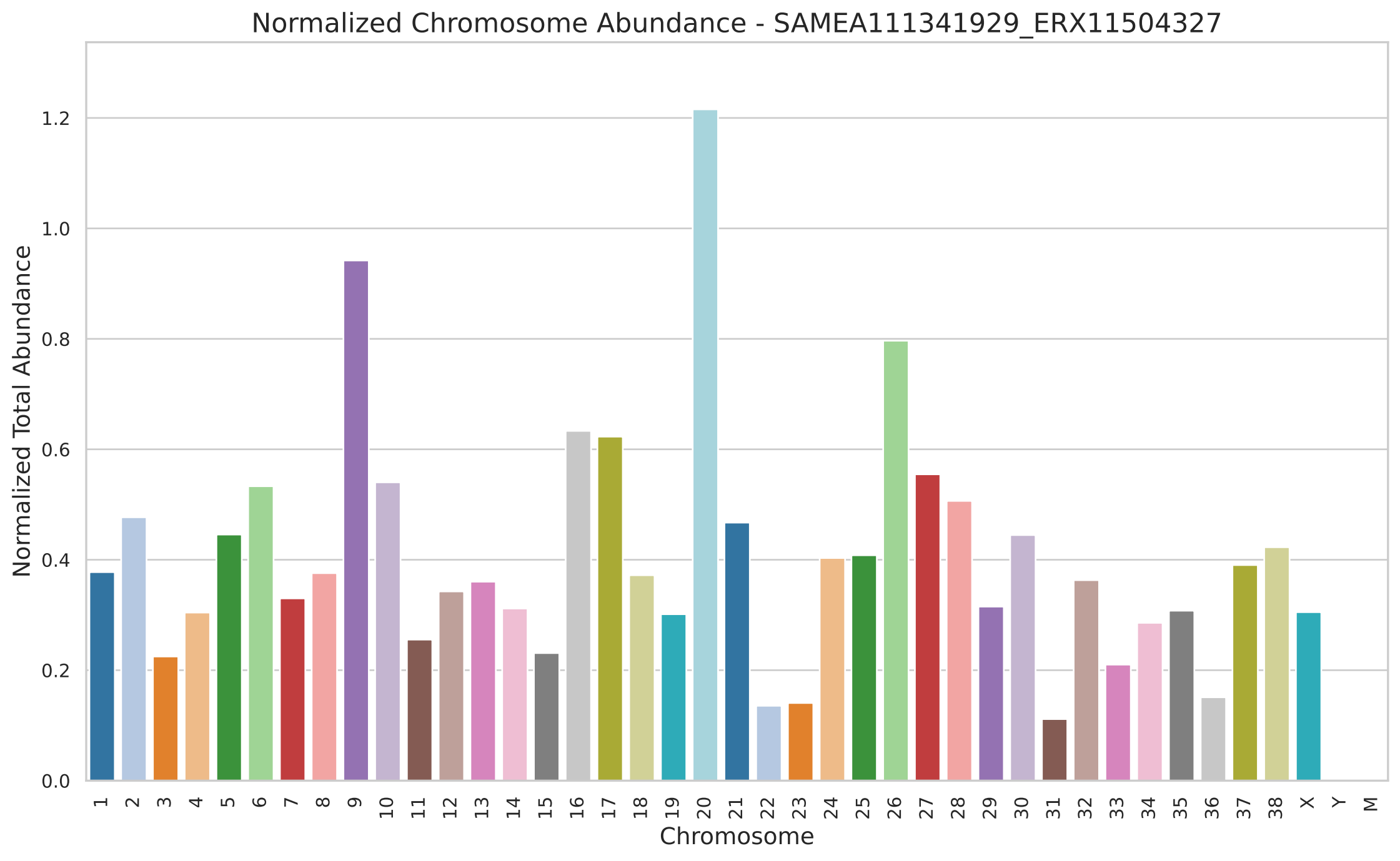

Normalized Chromosome Abundance - SAMEA111341938_ERX11504272
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

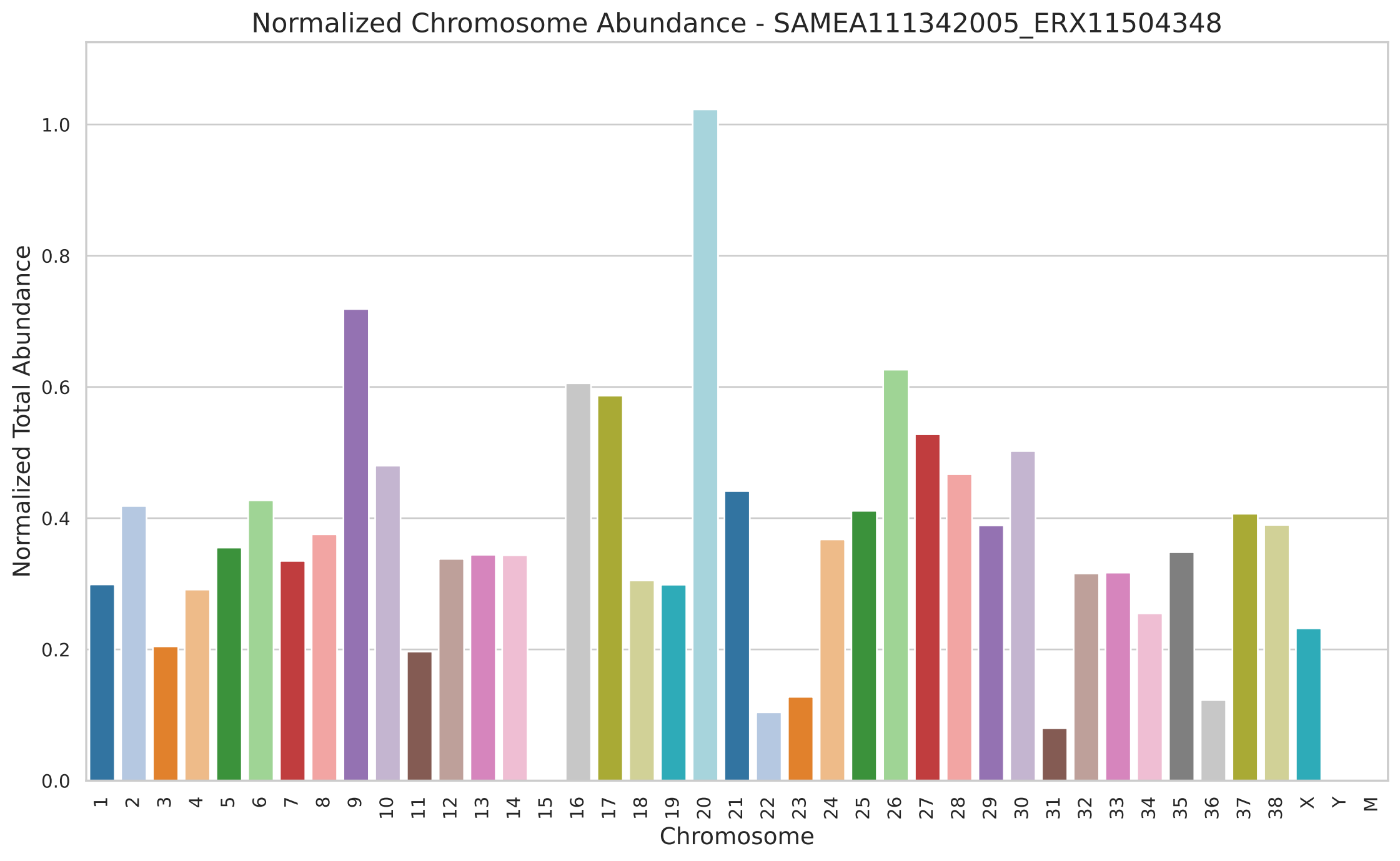

Normalized Chromosome Abundance - SAMEA111341901_ERX11504300
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

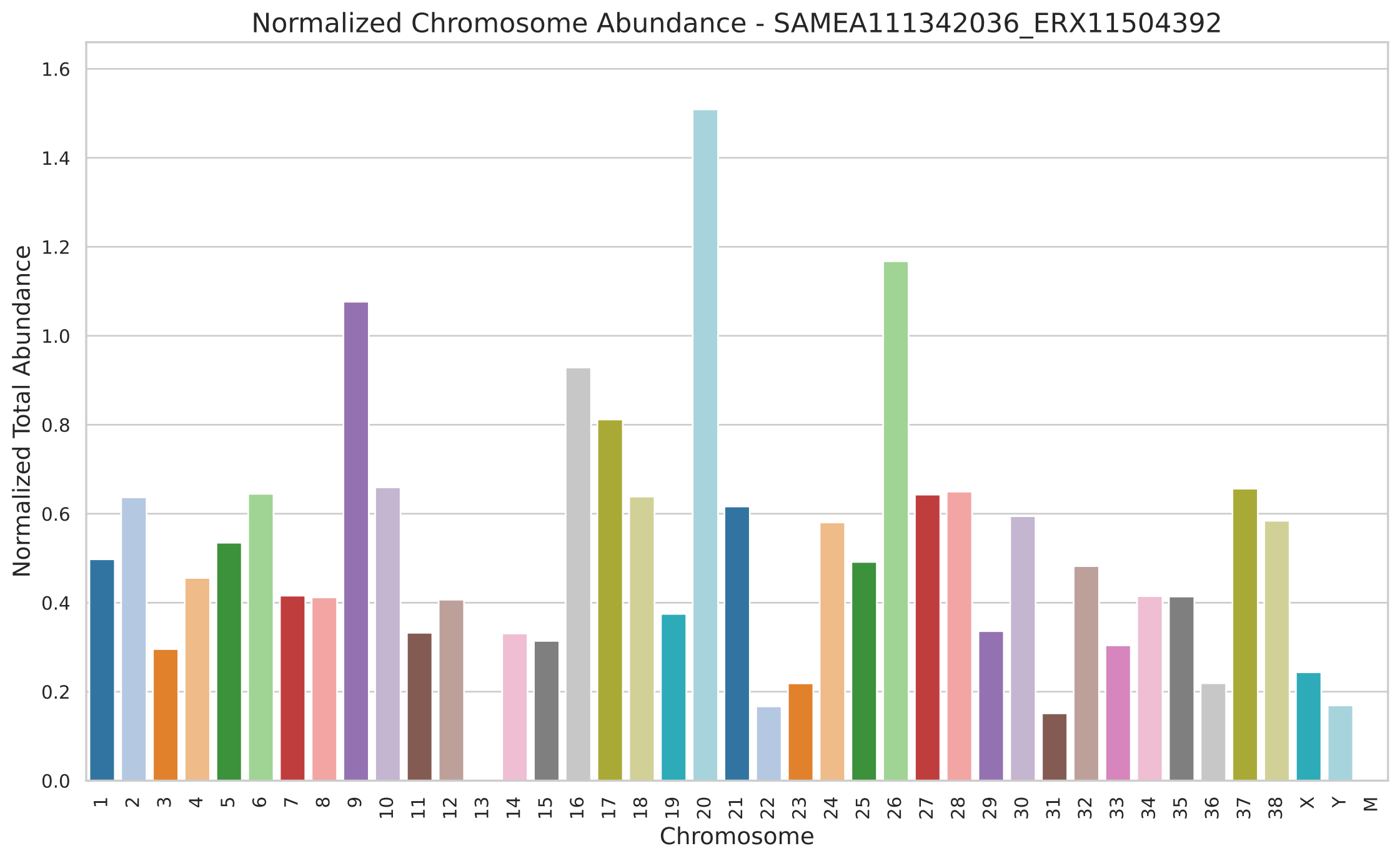

Normalized Chromosome Abundance - SAMEA111341898_ERX11504298
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

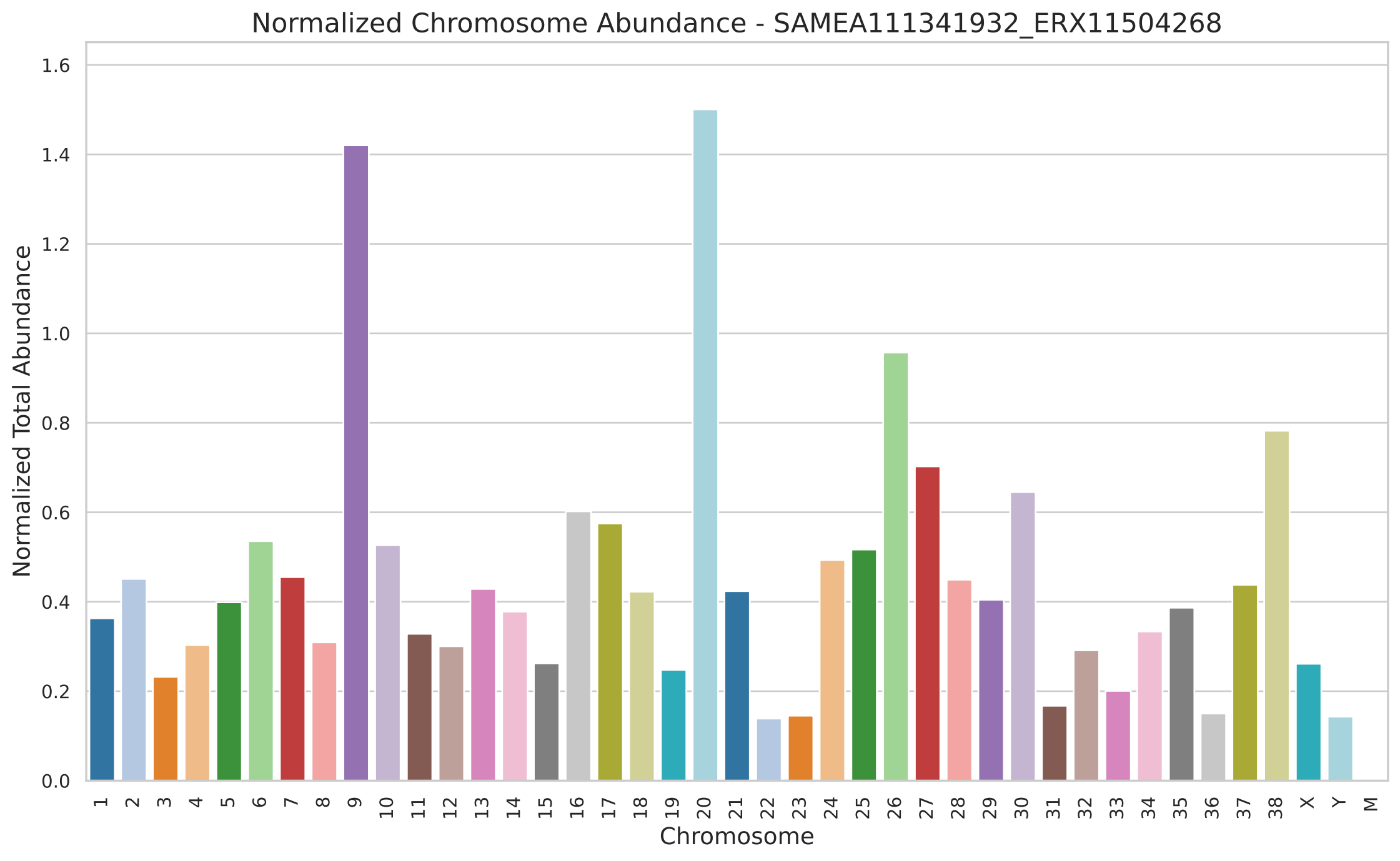

Normalized Chromosome Abundance - SAMEA111341933_ERX11504269
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

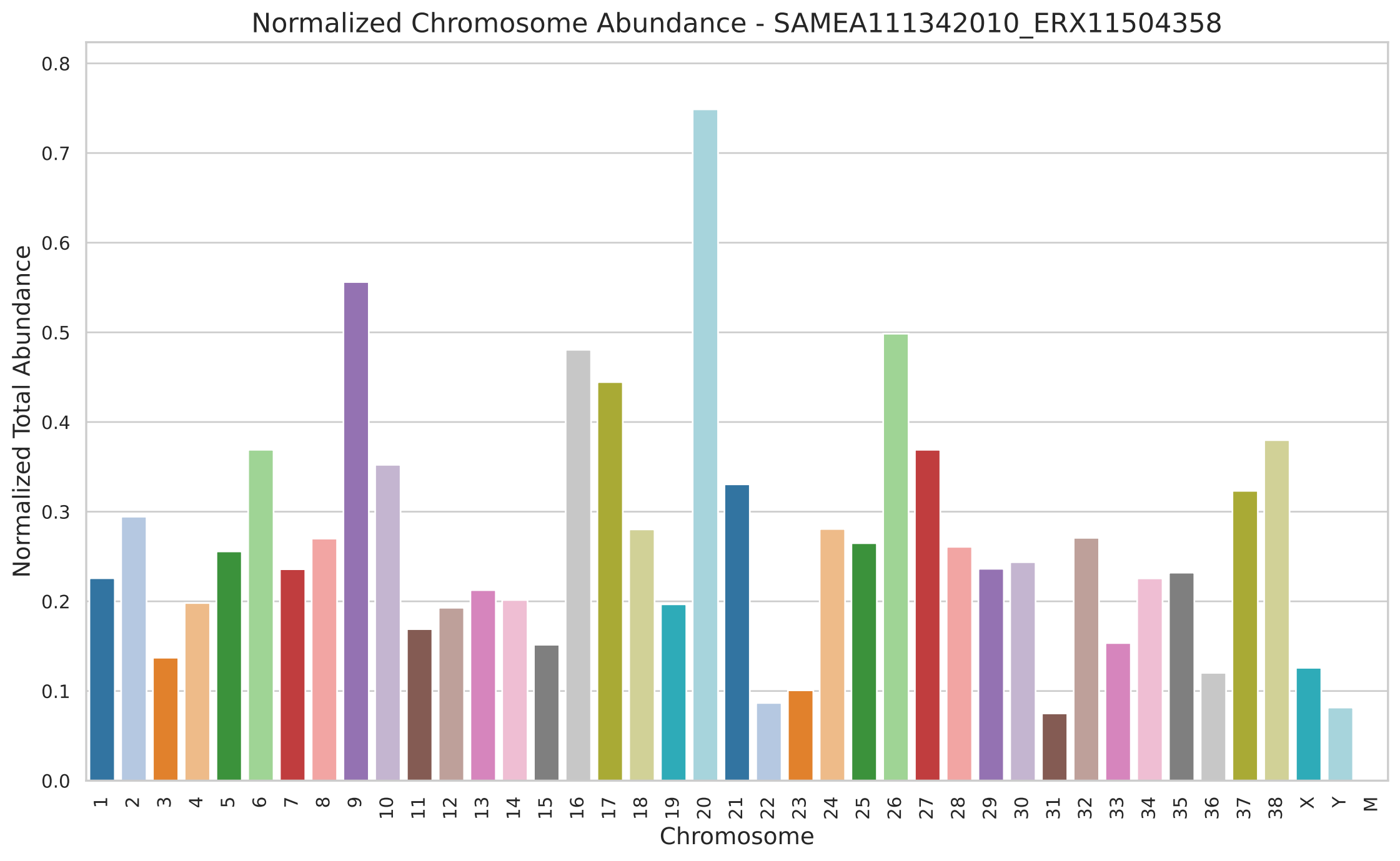

Normalized Chromosome Abundance - SAMEA111342039_ERX11504395
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

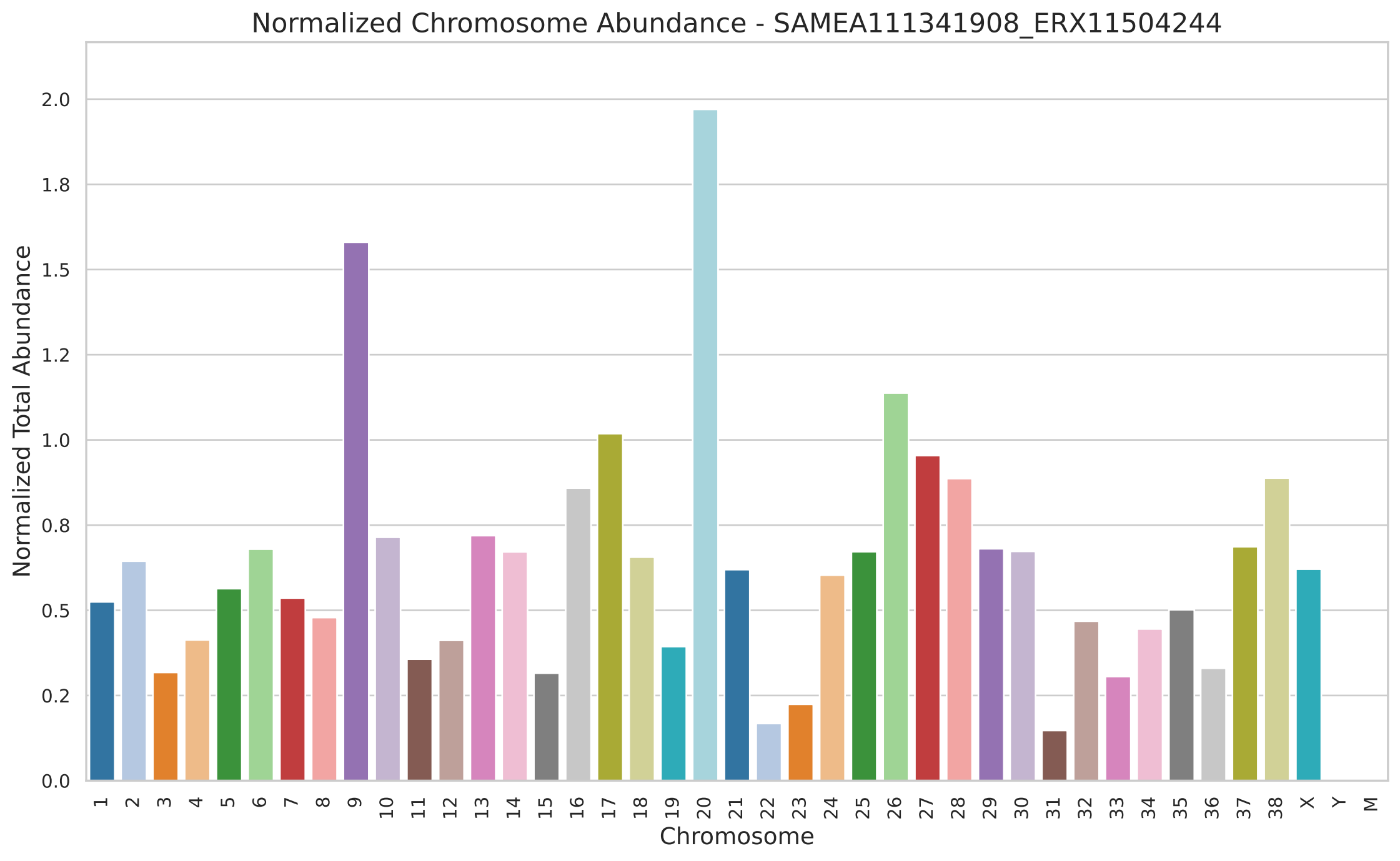

Normalized Chromosome Abundance - SAMEA111341929_ERX11504327
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

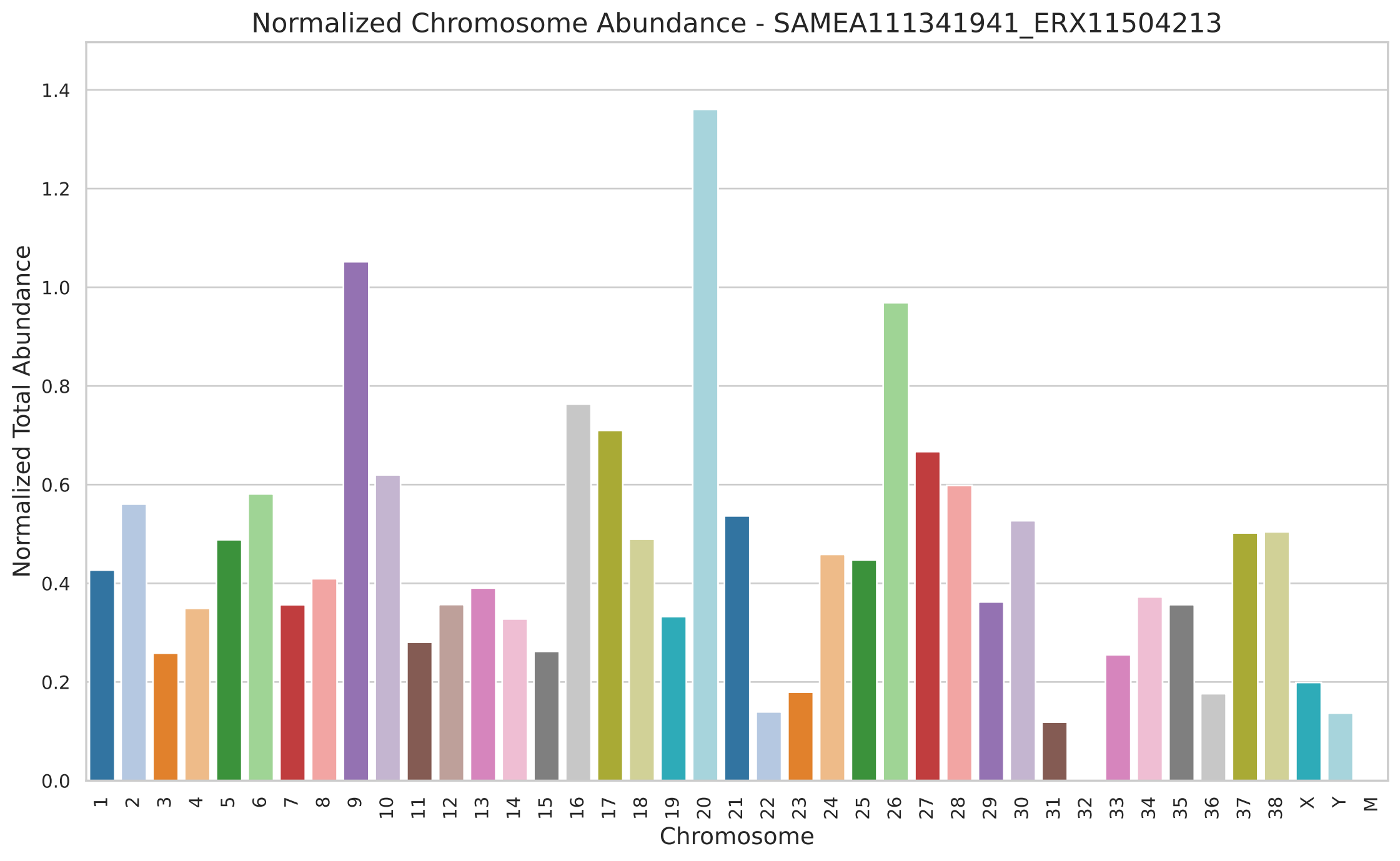

Normalized Chromosome Abundance - SAMEA111342005_ERX11504348
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

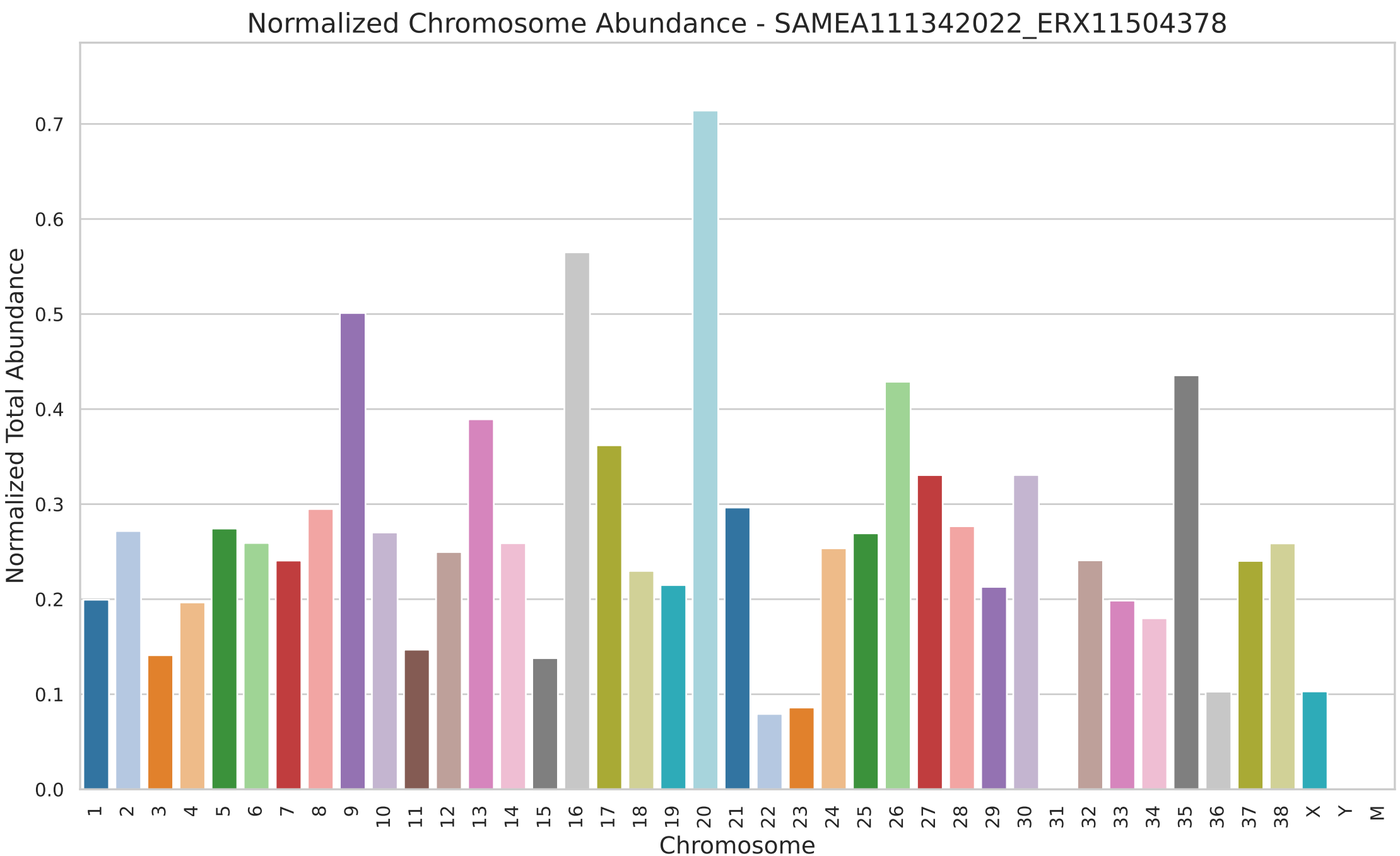

Normalized Chromosome Abundance - SAMEA111342036_ERX11504392
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

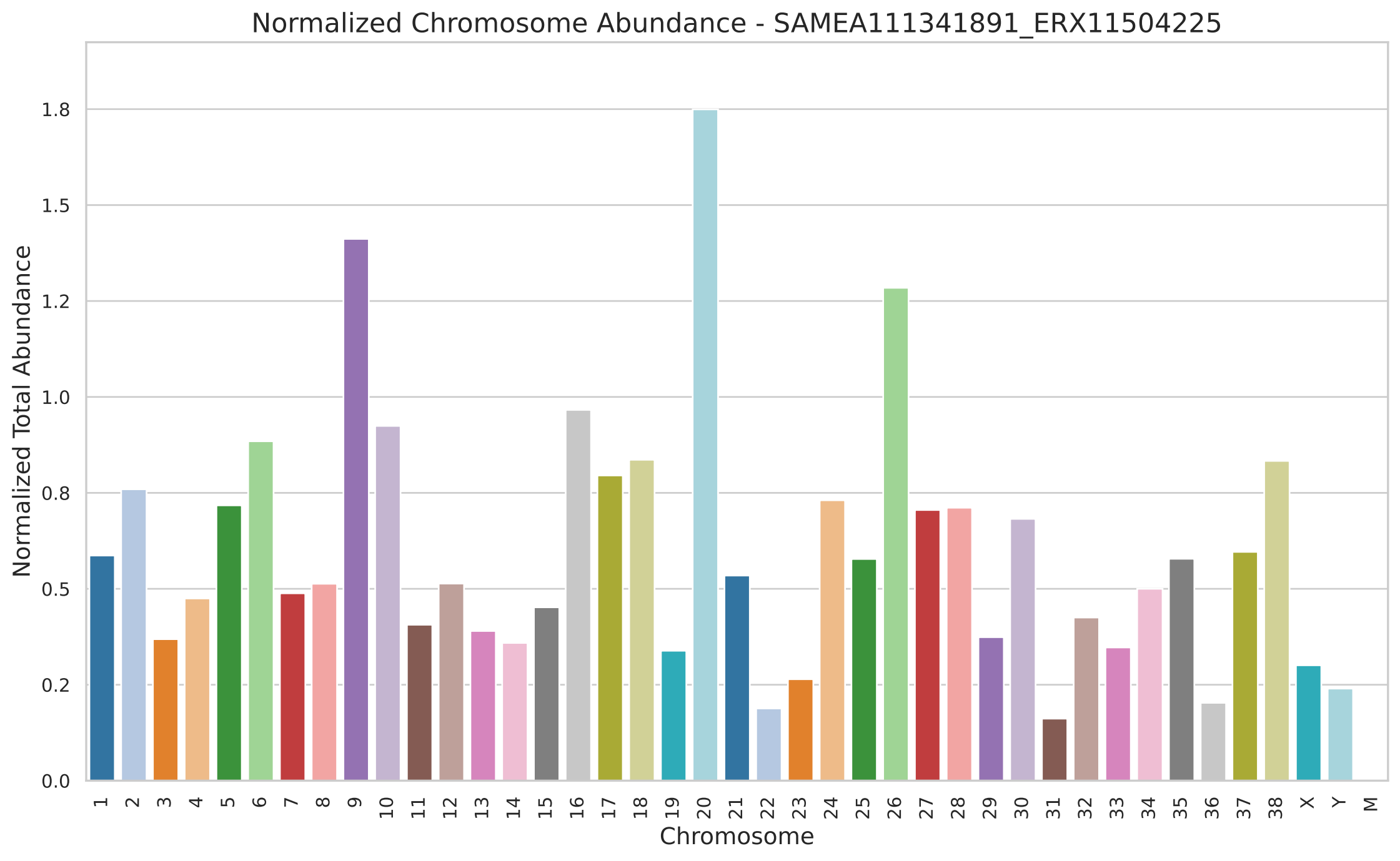

Normalized Chromosome Abundance - SAMEA111341932_ERX11504268
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

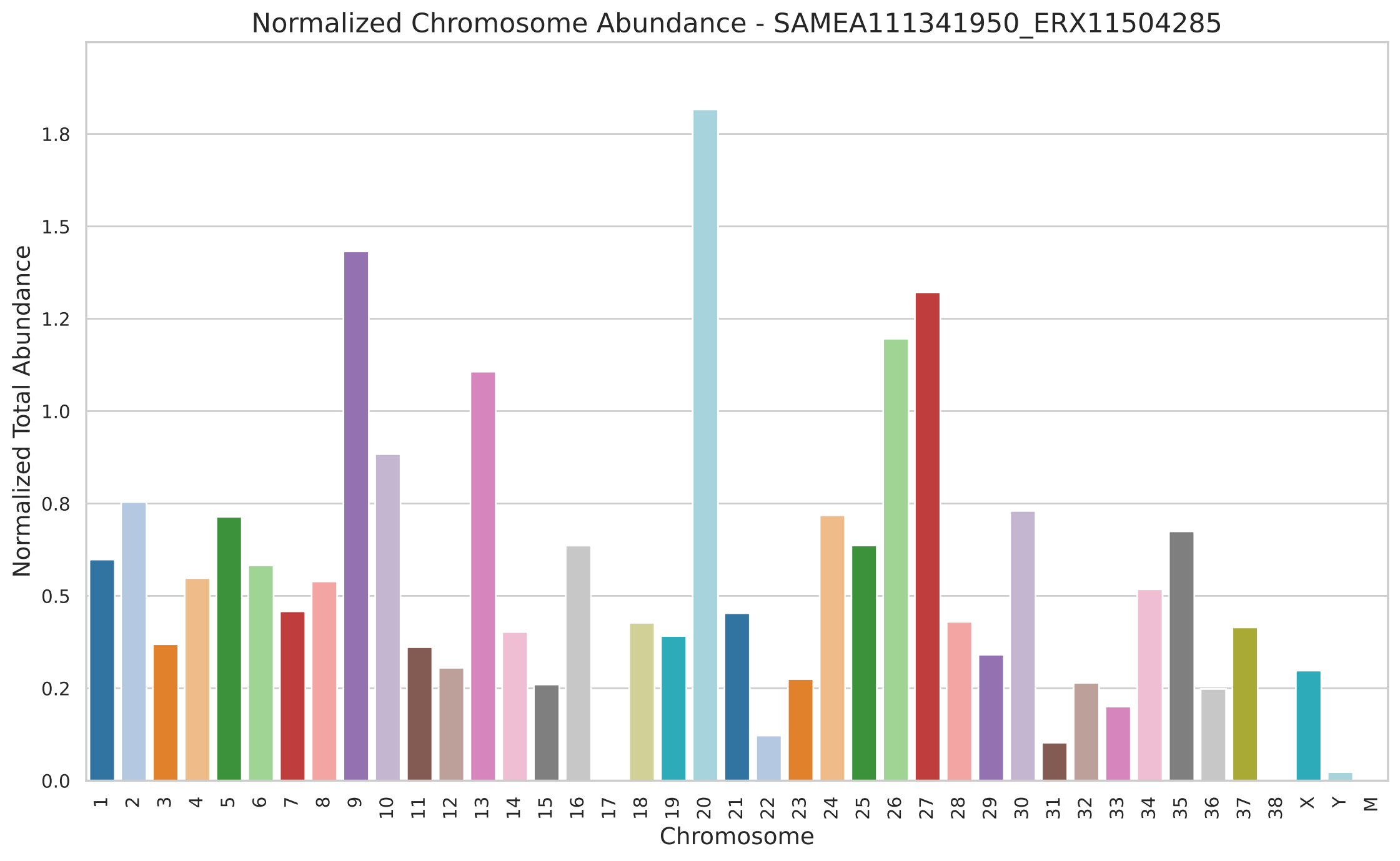

Normalized Chromosome Abundance - SAMEA111342010_ERX11504358
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

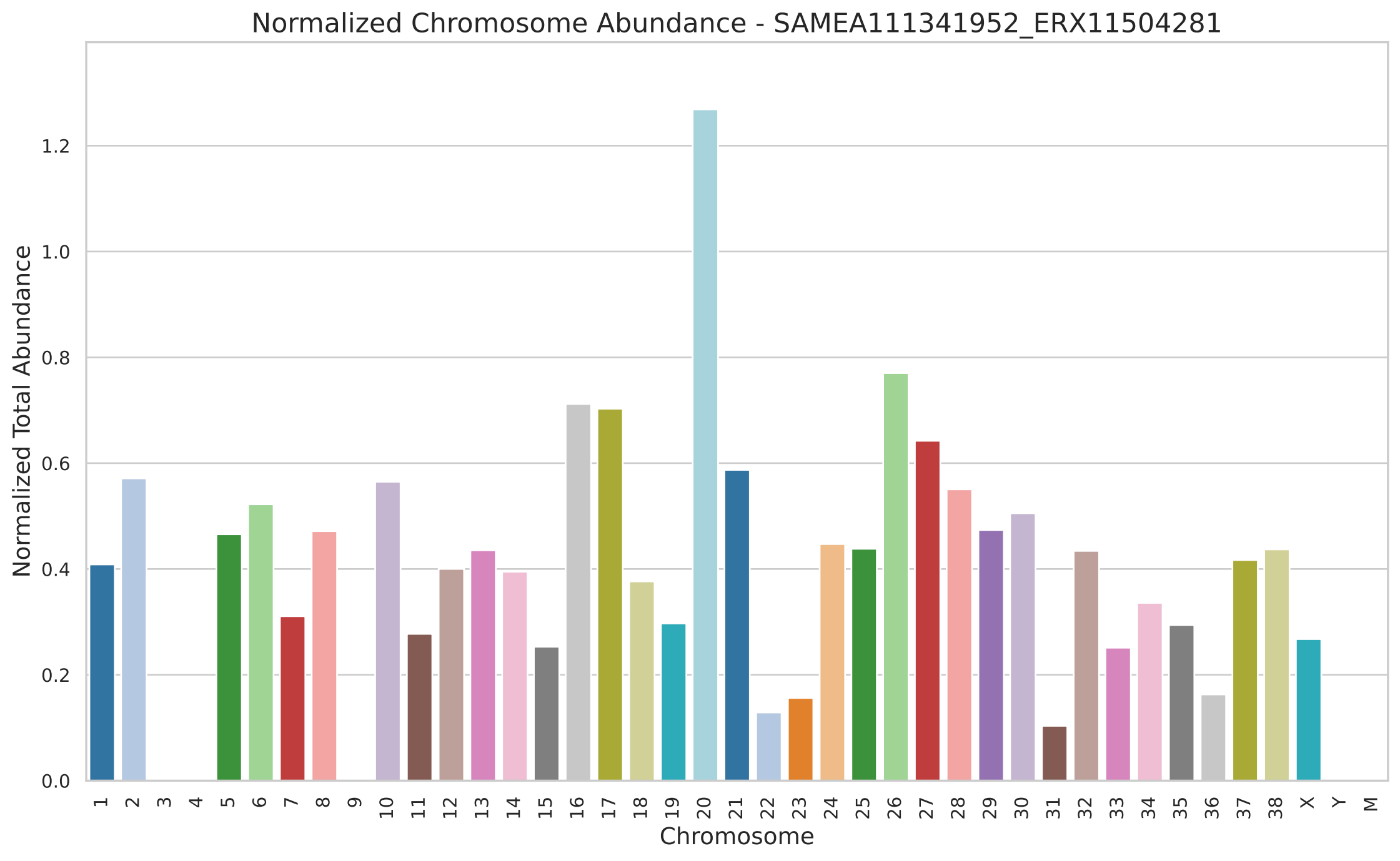

Normalized Chromosome Abundance - SAMEA111341908_ERX11504244
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

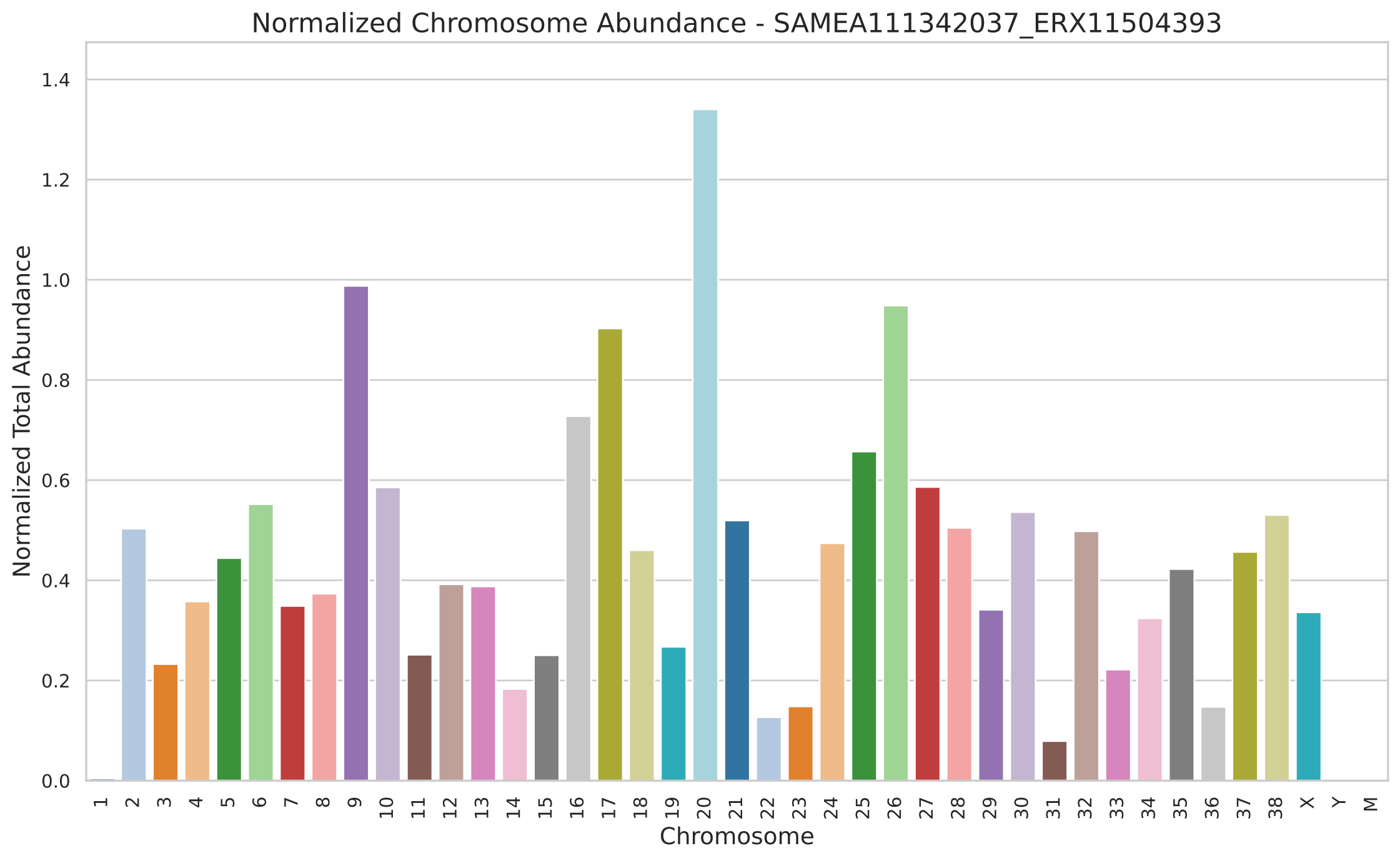

Normalized Chromosome Abundance - SAMEA111341941_ERX11504213
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

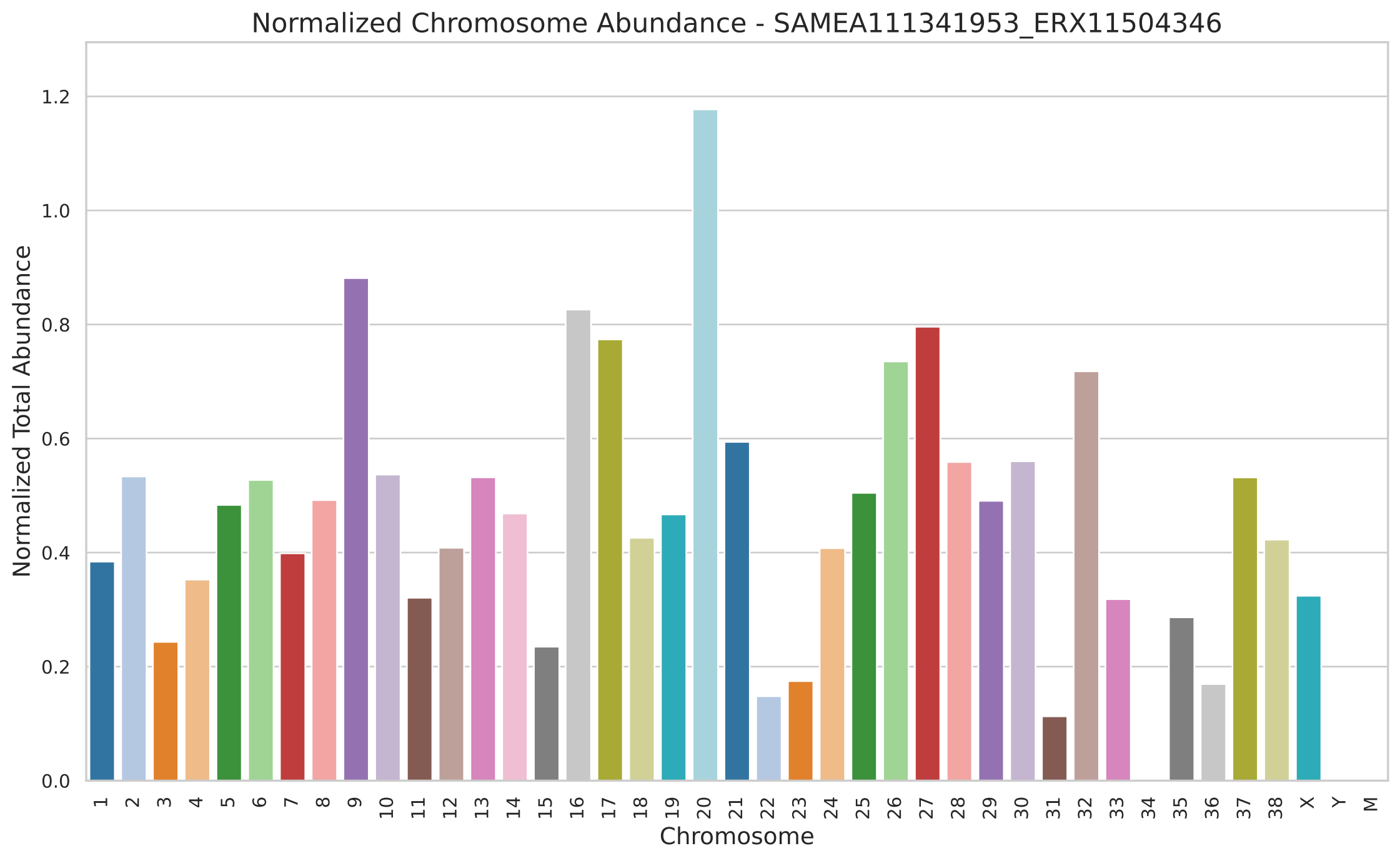

Normalized Chromosome Abundance - SAMEA111342022_ERX11504378
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

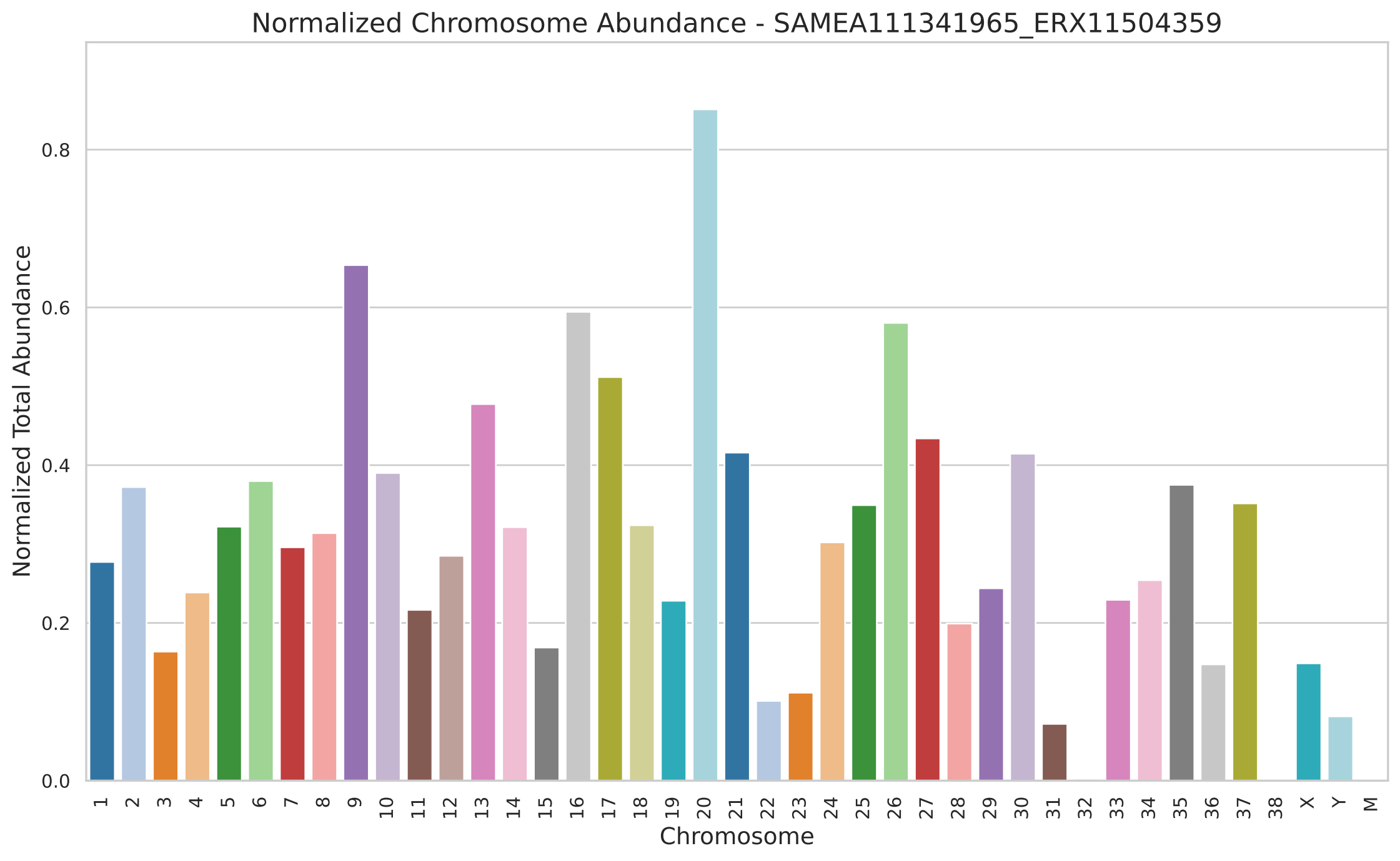

Normalized Chromosome Abundance - SAMEA111341891_ERX11504225
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

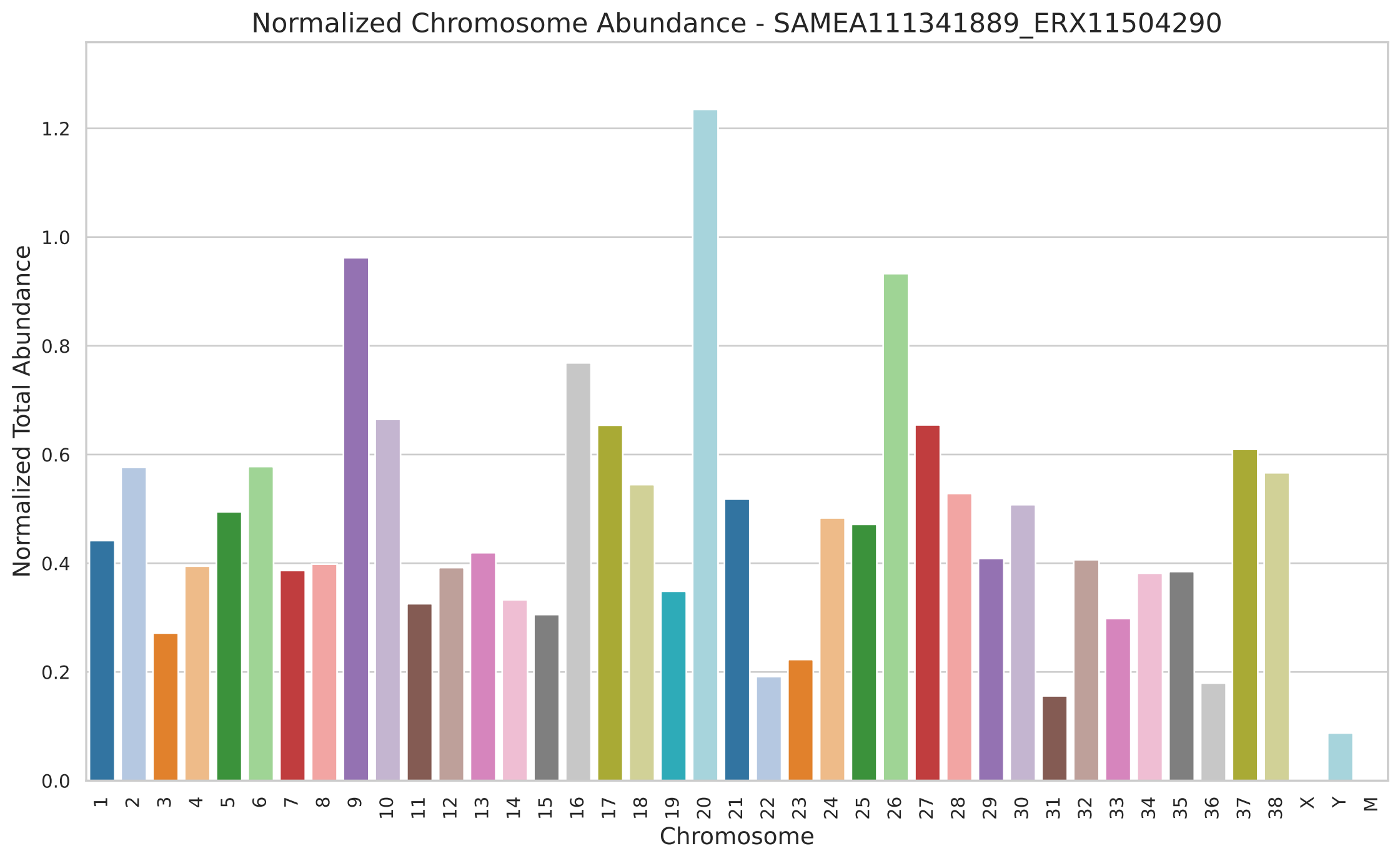

Normalized Chromosome Abundance - SAMEA111341950_ERX11504285
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

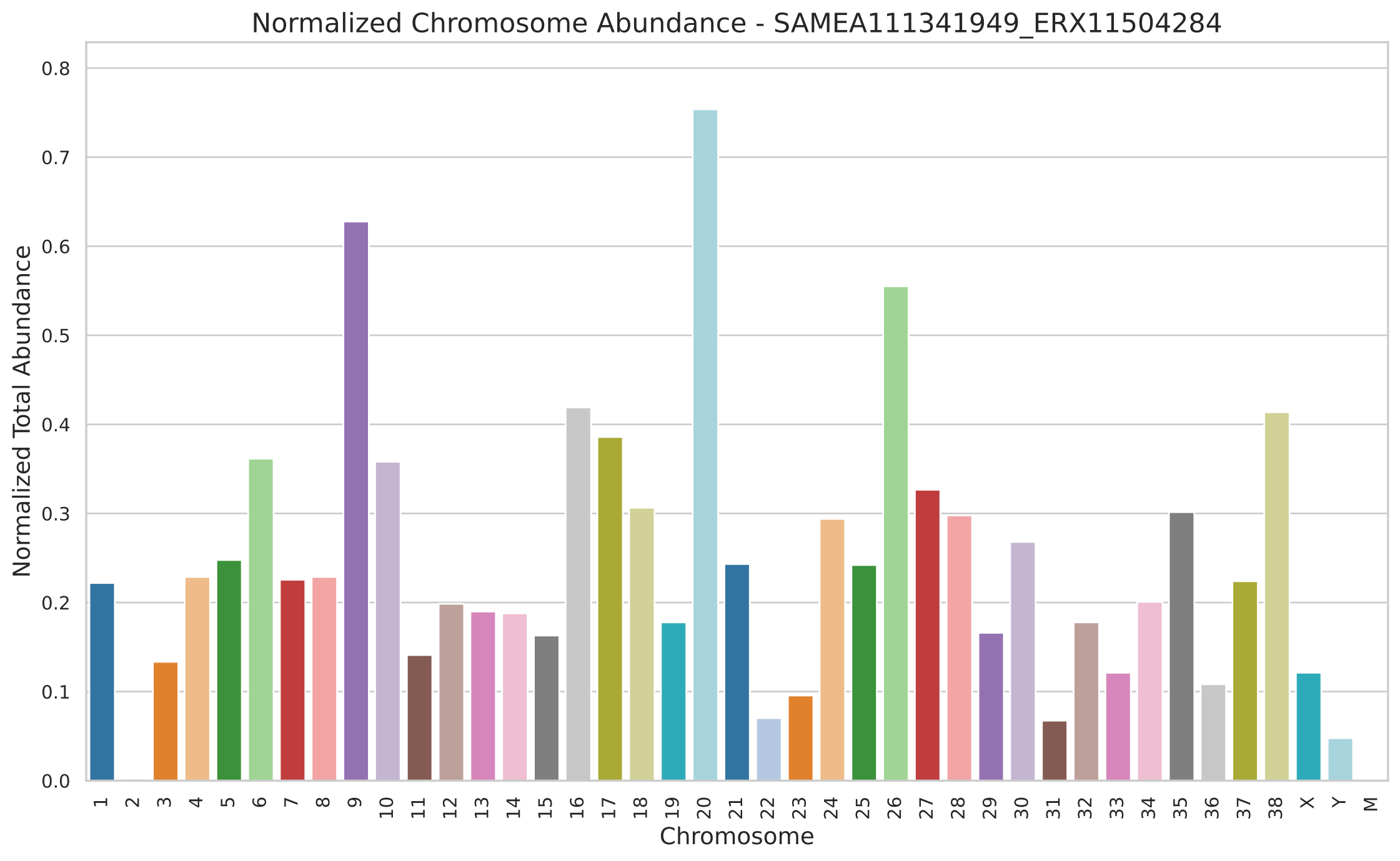

Normalized Chromosome Abundance - SAMEA111341952_ERX11504281
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

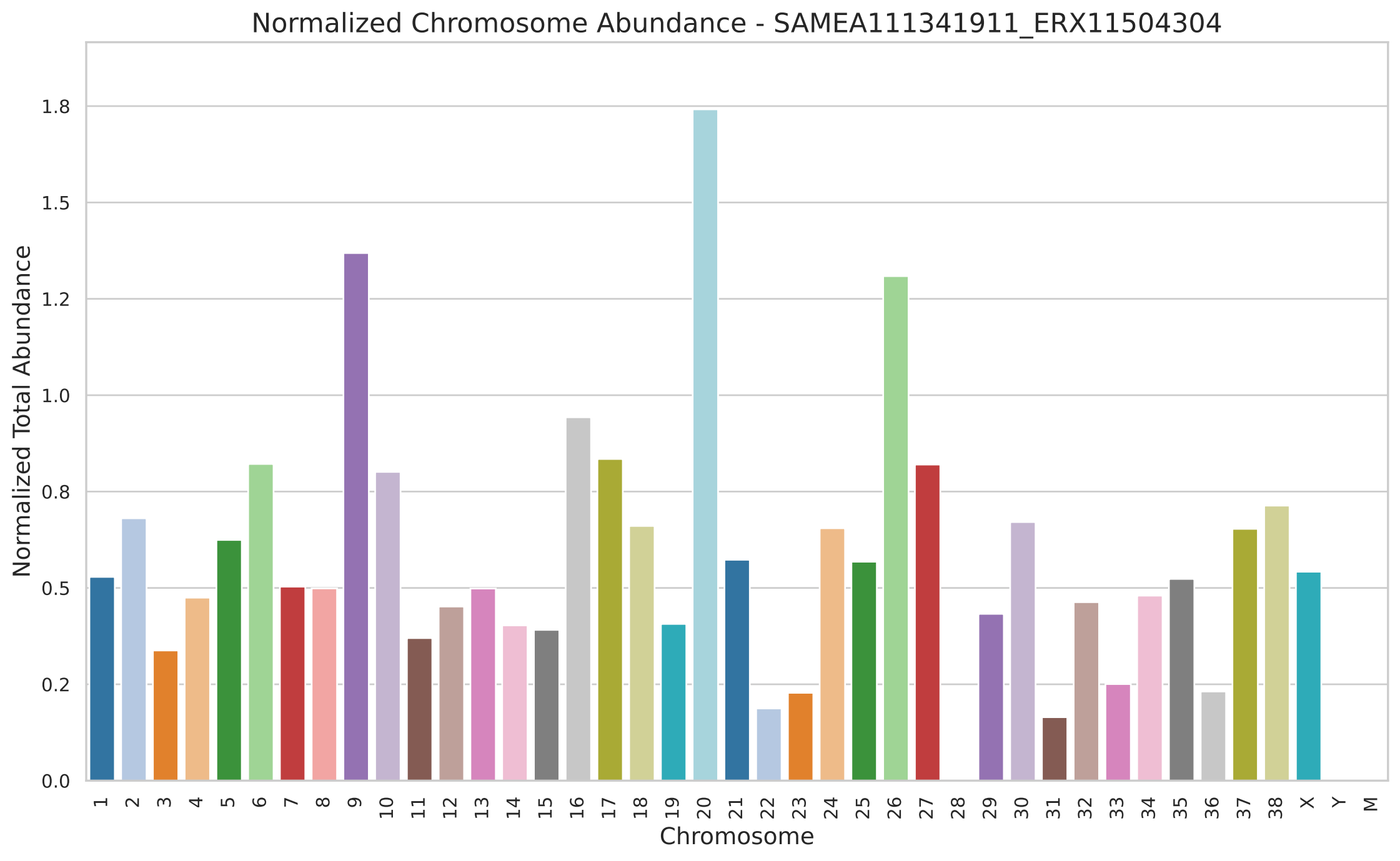

Normalized Chromosome Abundance - SAMEA111342037_ERX11504393
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

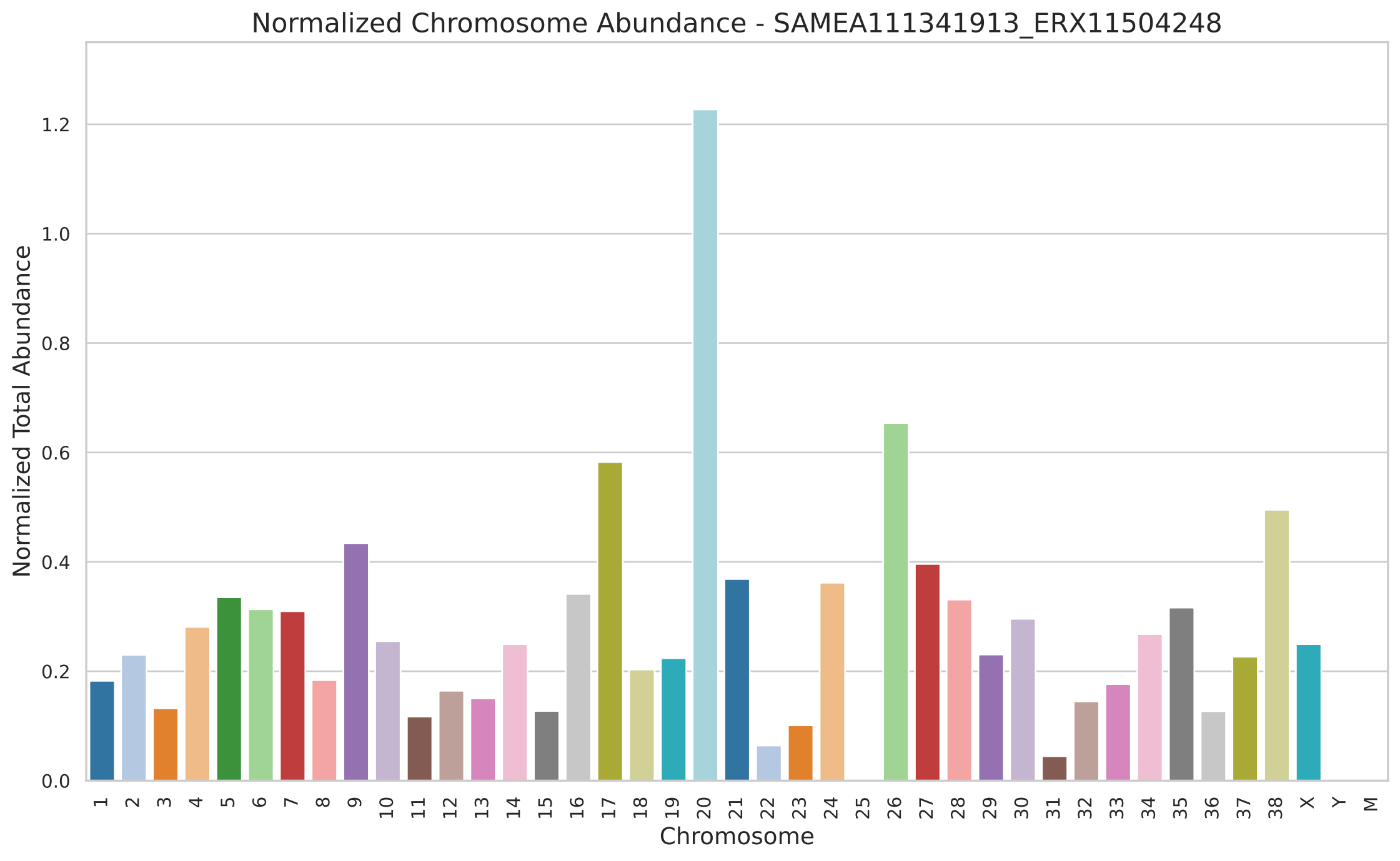

Normalized Chromosome Abundance - SAMEA111341953_ERX11504346
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

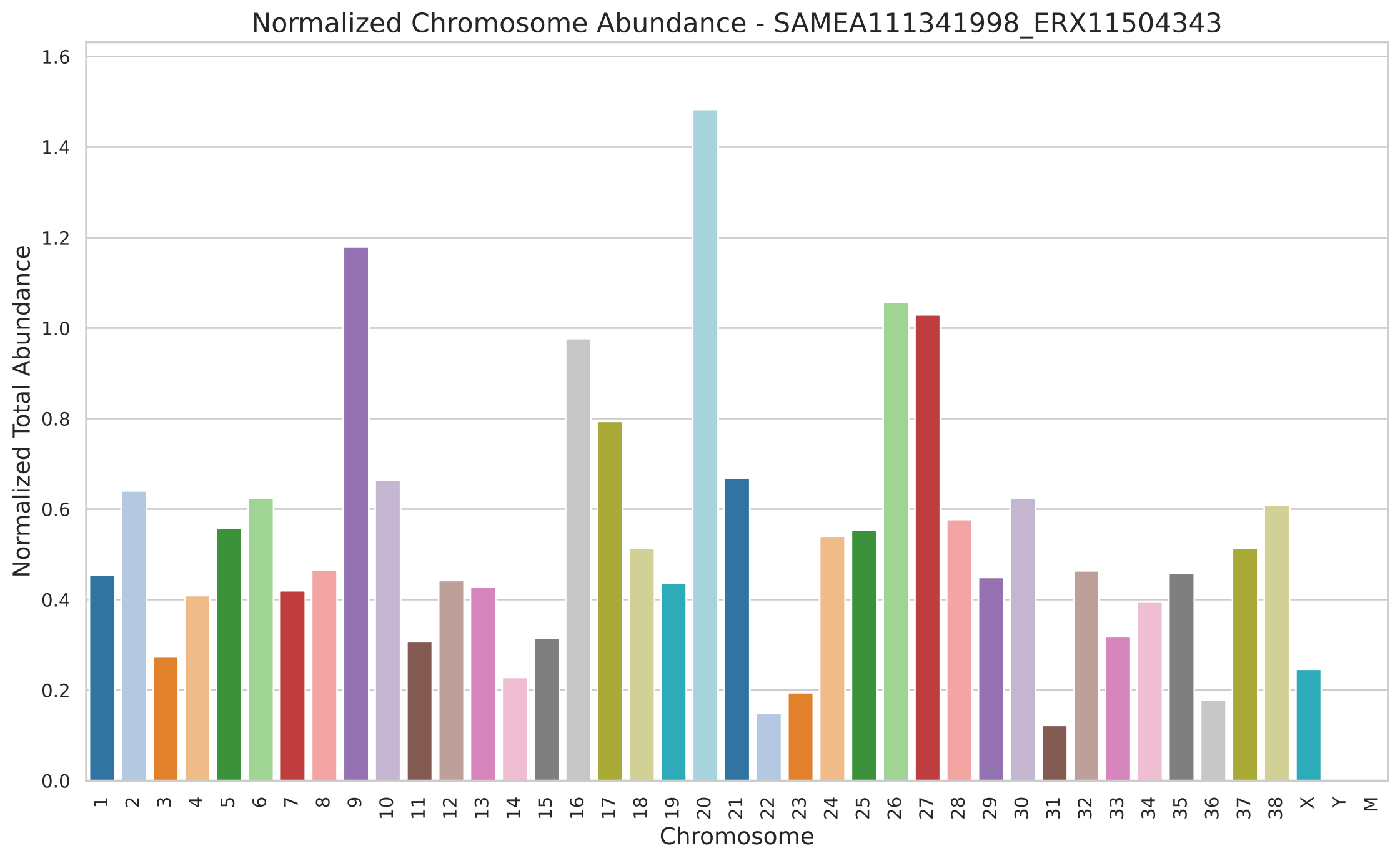

Normalized Chromosome Abundance - SAMEA111341965_ERX11504359
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

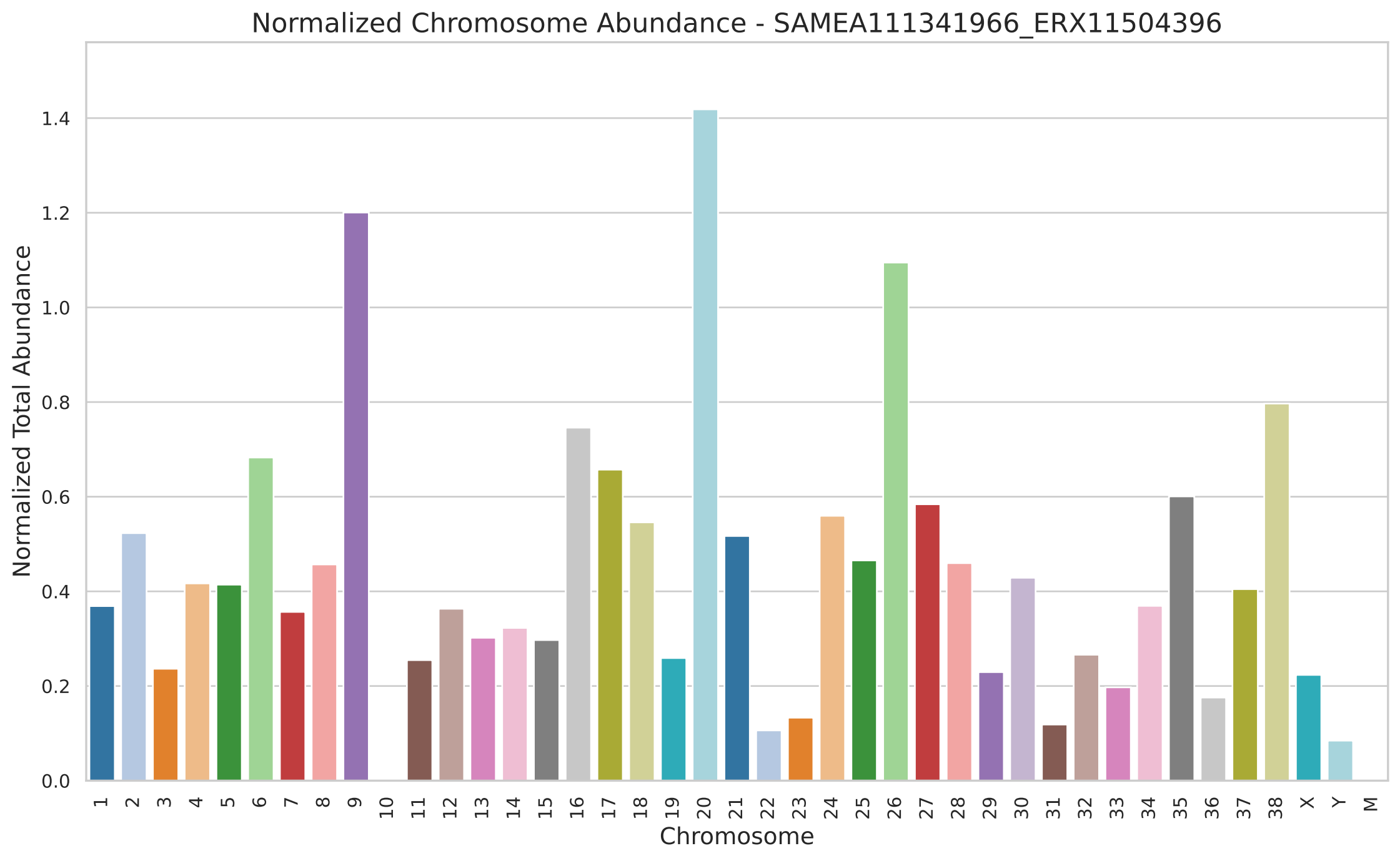

Normalized Chromosome Abundance - SAMEA111341889_ERX11504290
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

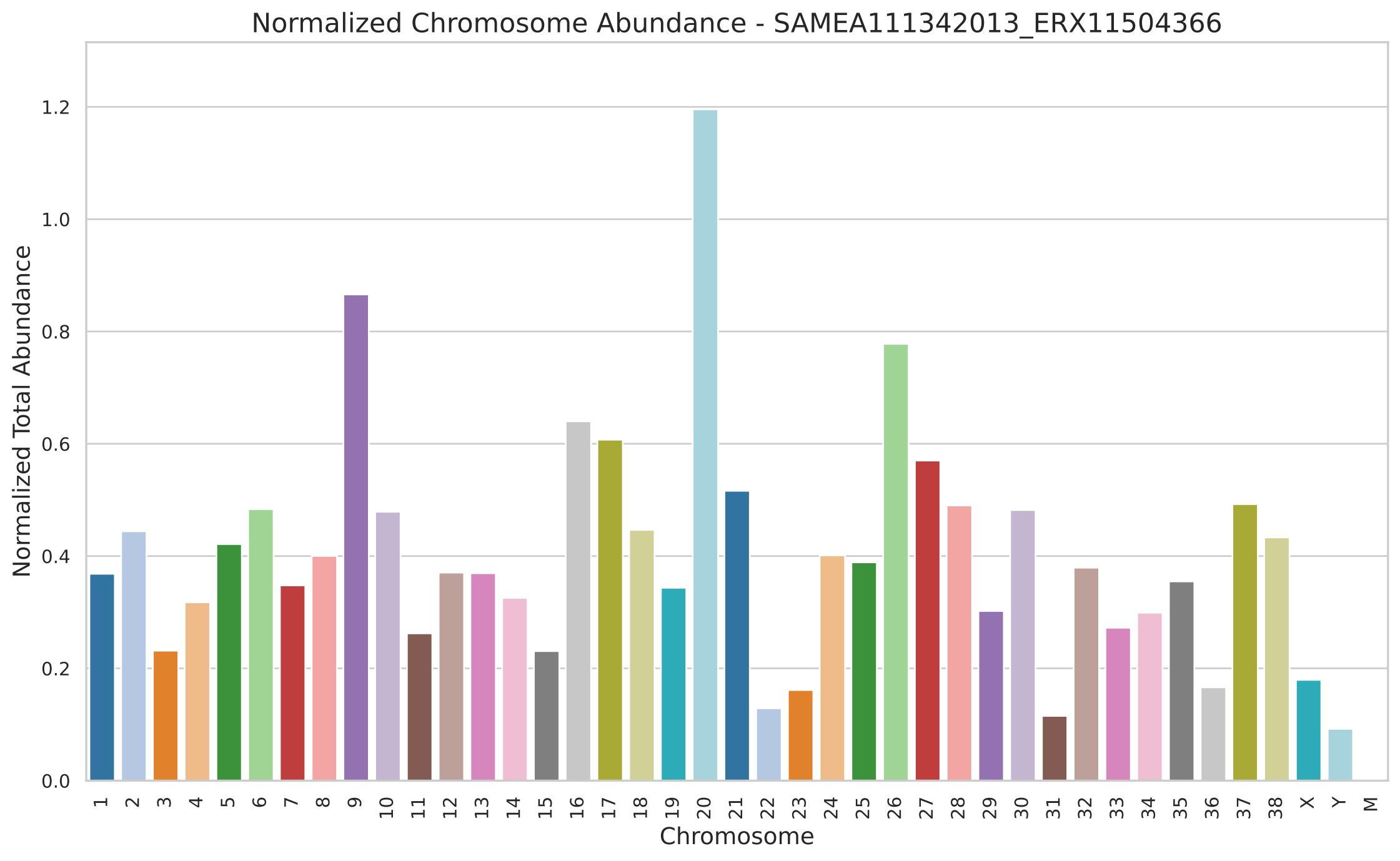

Normalized Chromosome Abundance - SAMEA111341949_ERX11504284
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

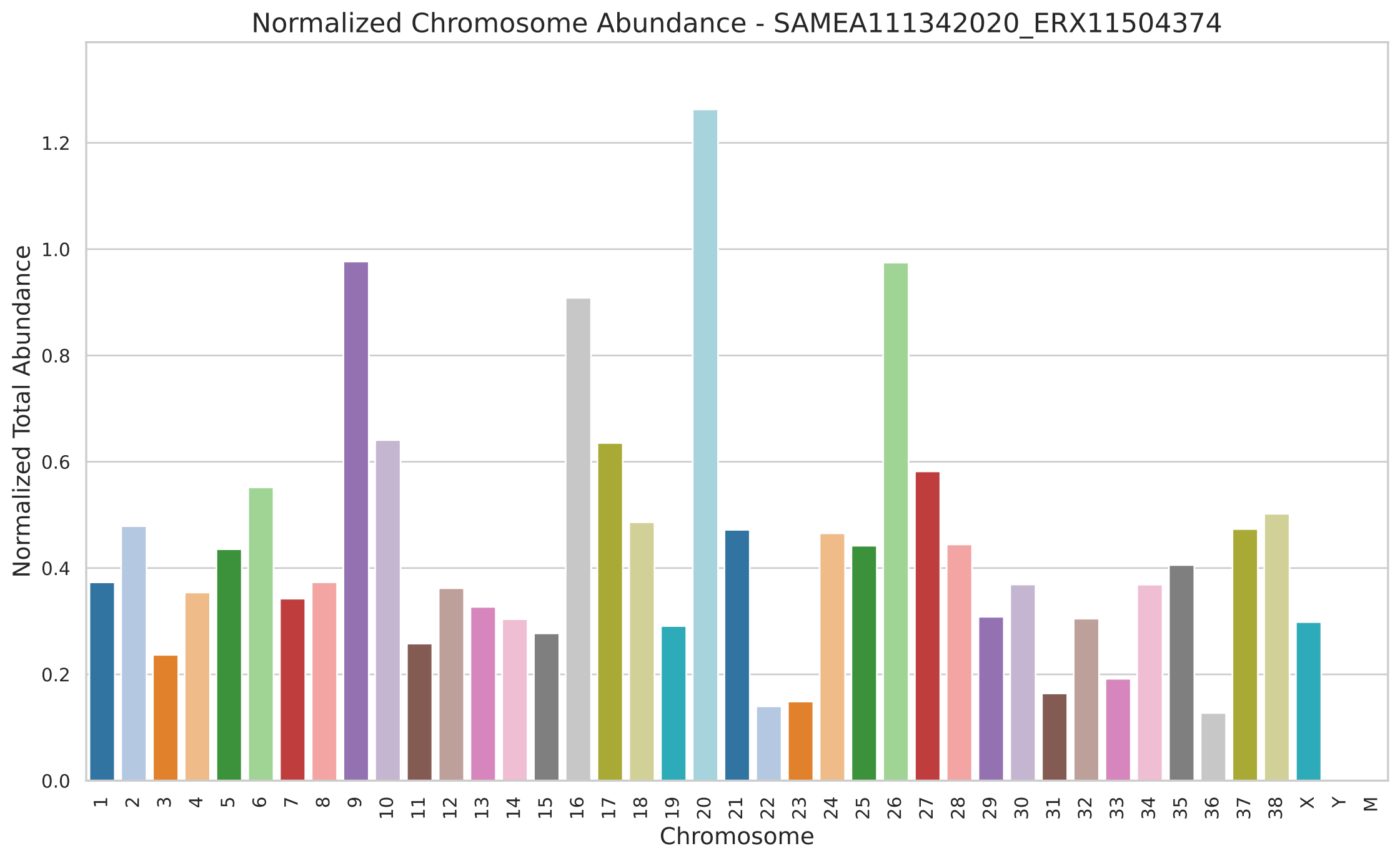

Normalized Chromosome Abundance - SAMEA111341911_ERX11504304
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

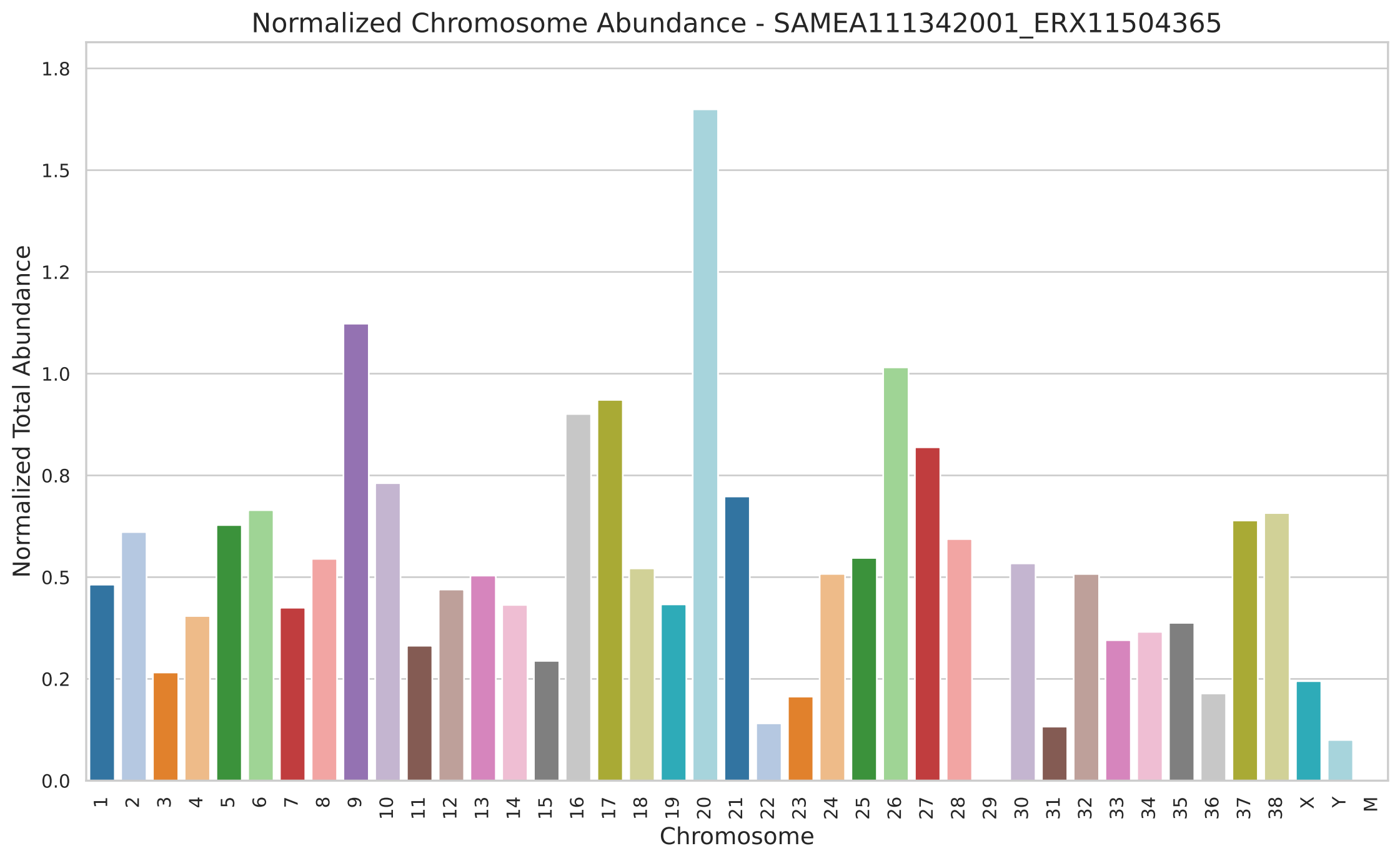

Normalized Chromosome Abundance - SAMEA111341913_ERX11504248
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

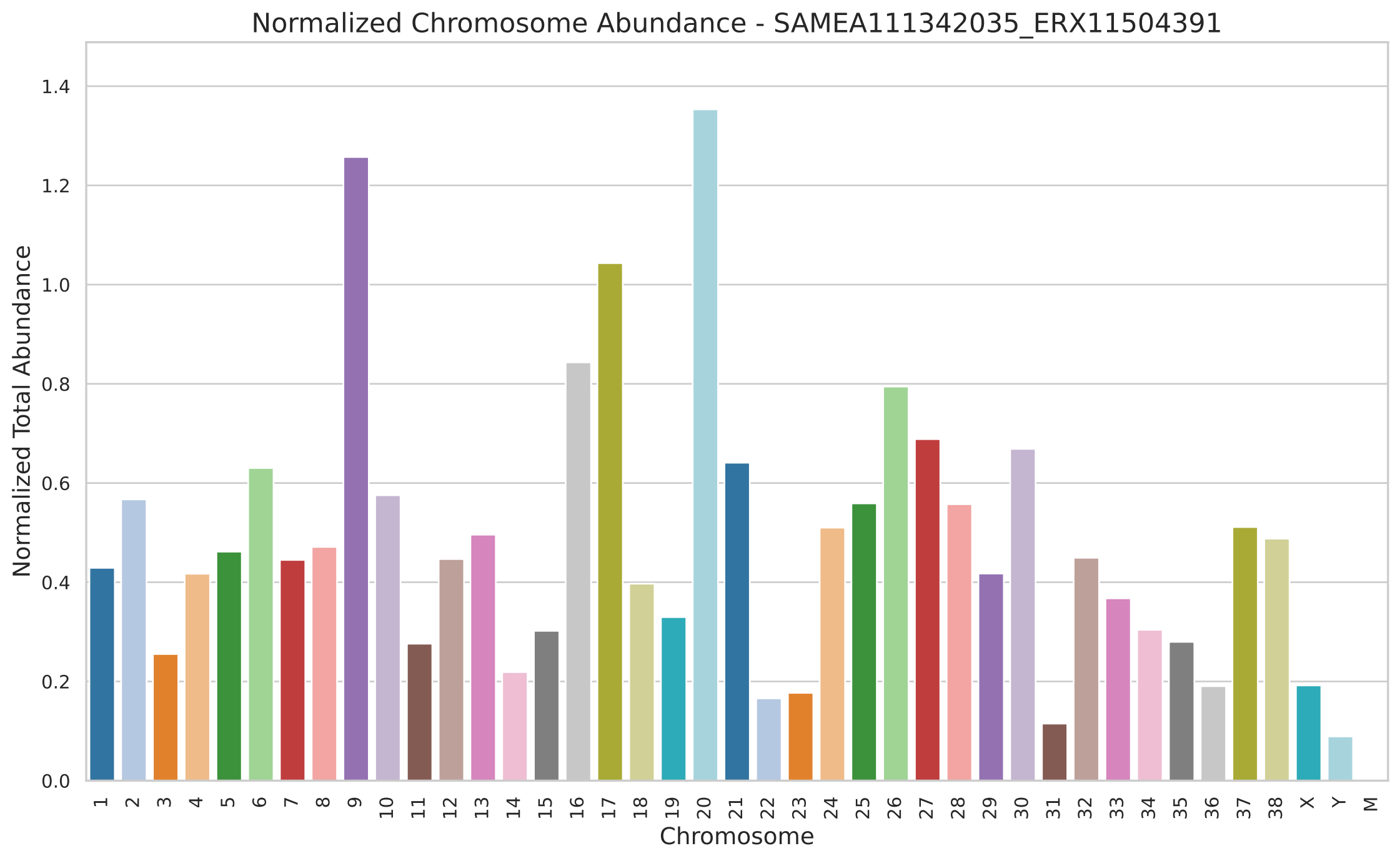

Normalized Chromosome Abundance - SAMEA111341998_ERX11504343
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

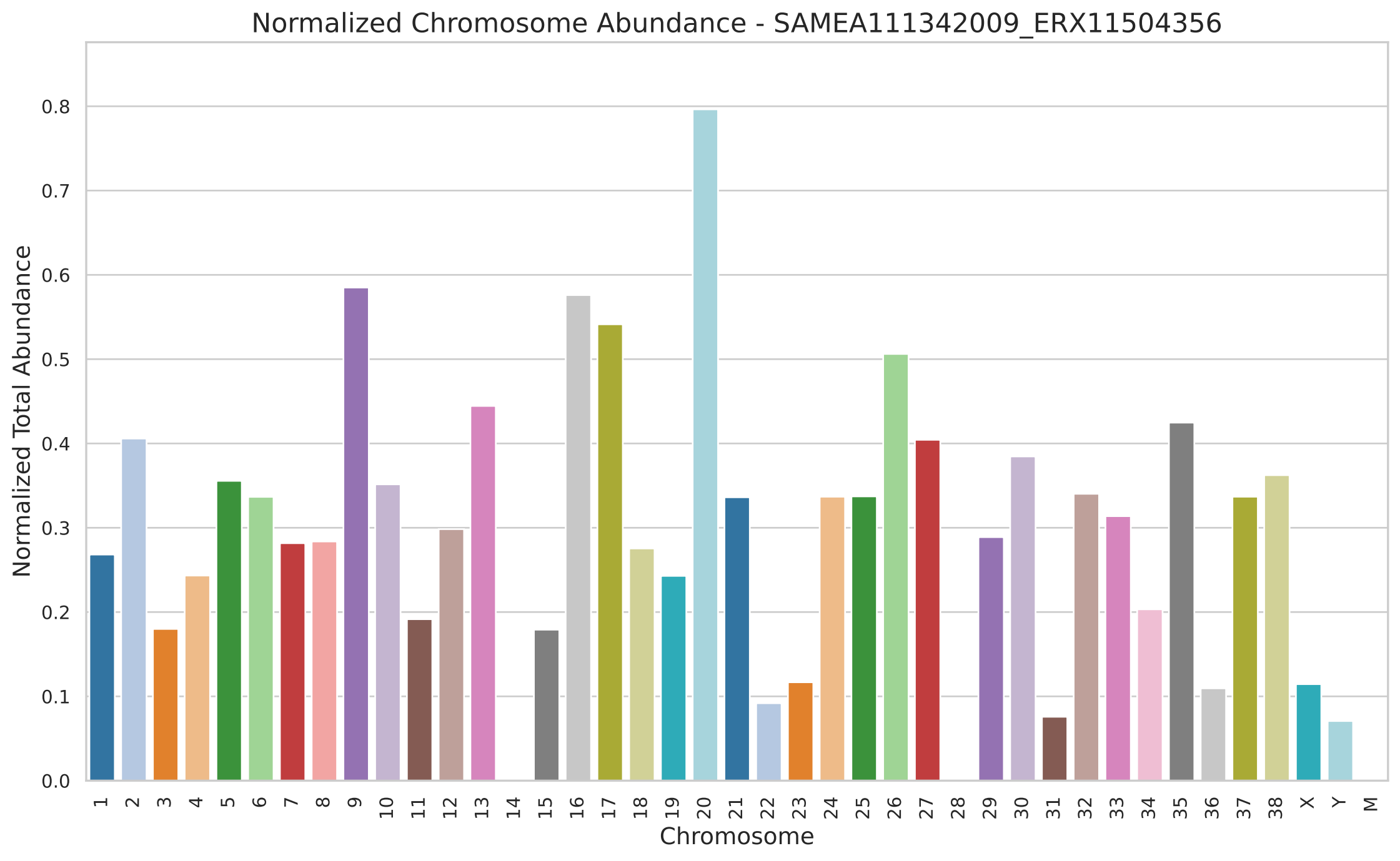

Normalized Chromosome Abundance - SAMEA111341966_ERX11504396
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 X Y M
Chromosome

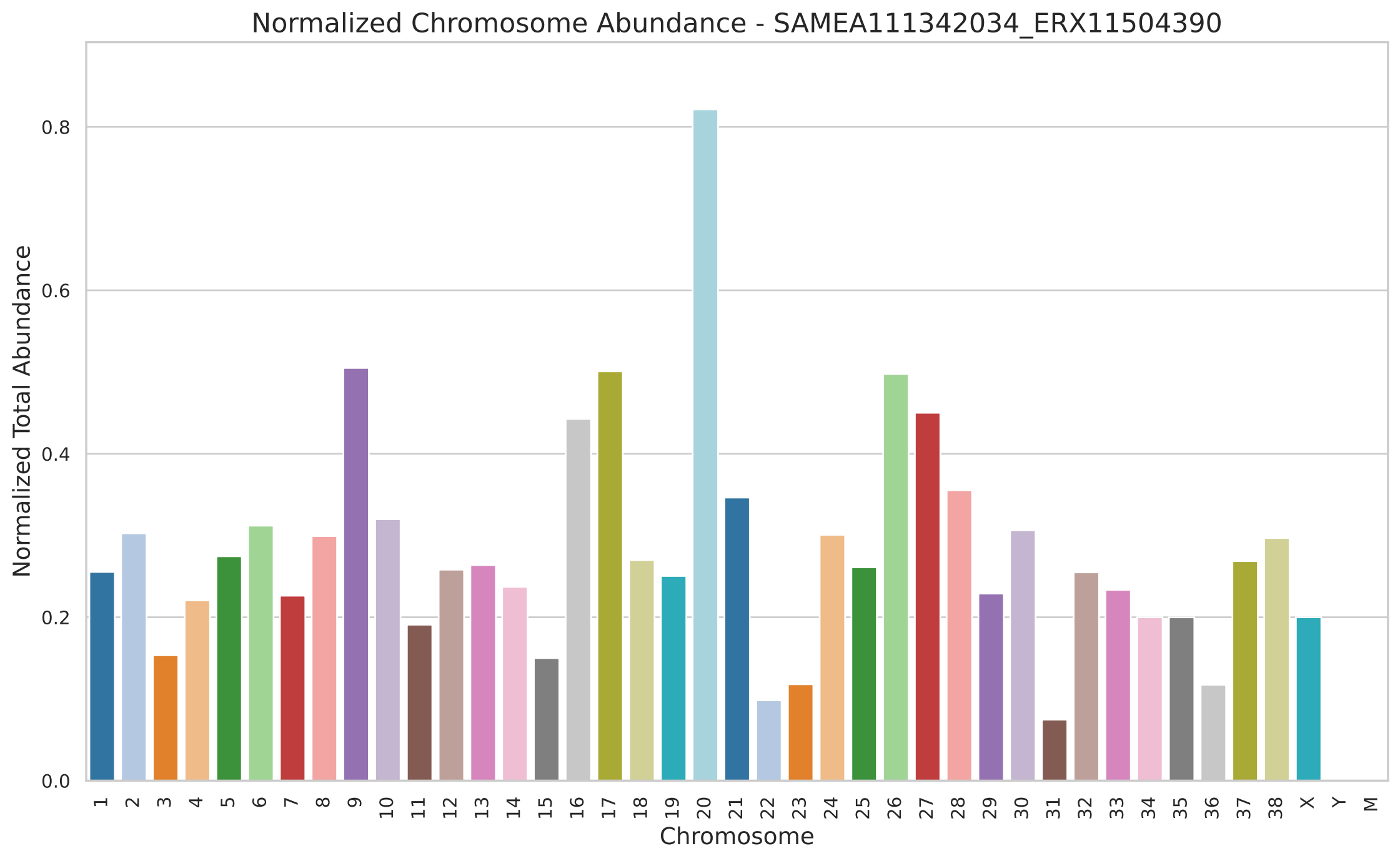

Normalized Chromosome Abundance - SAMEA111342013_ERX11504366
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

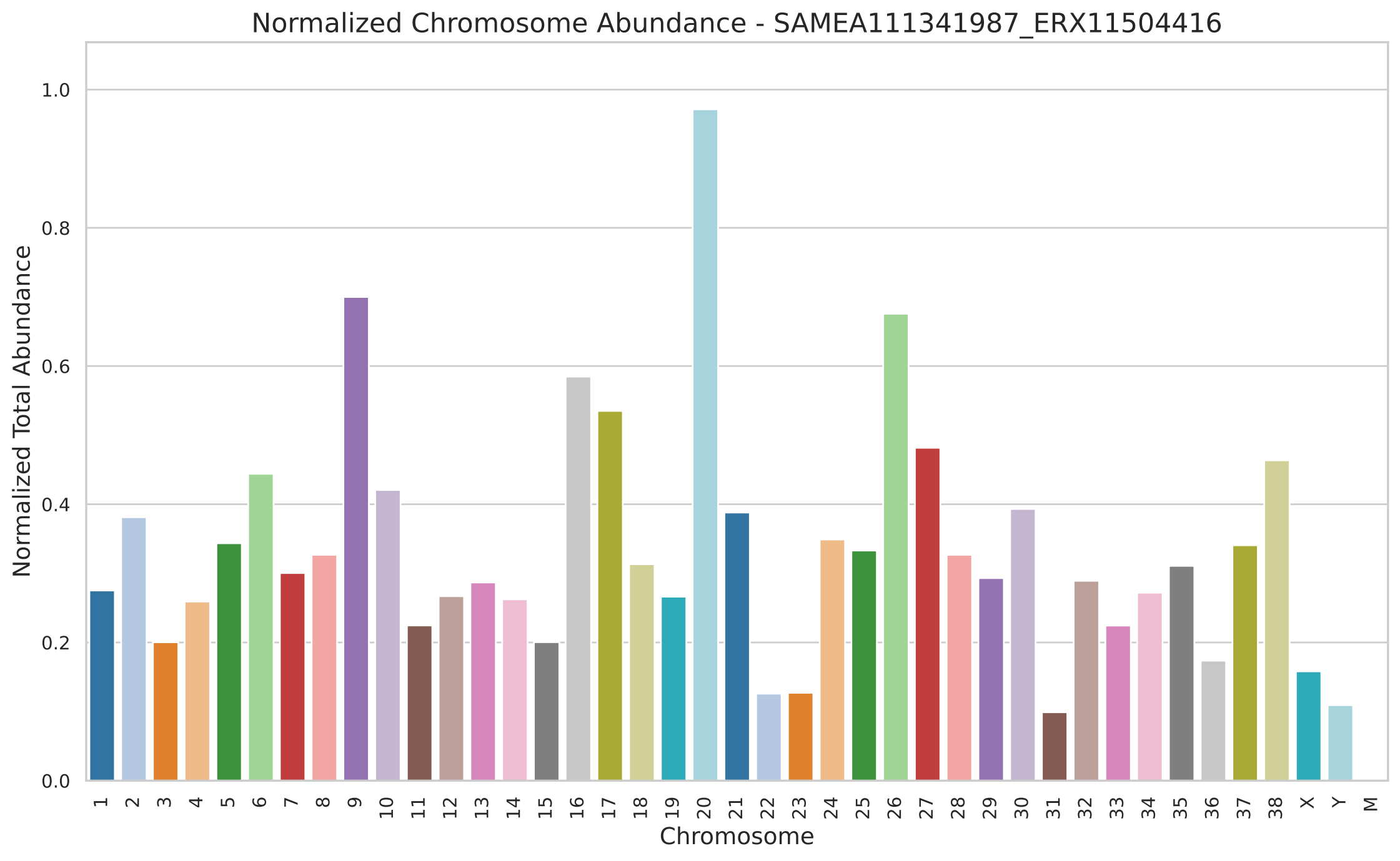

Normalized Chromosome Abundance - SAMEA111342020_ERX11504374
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

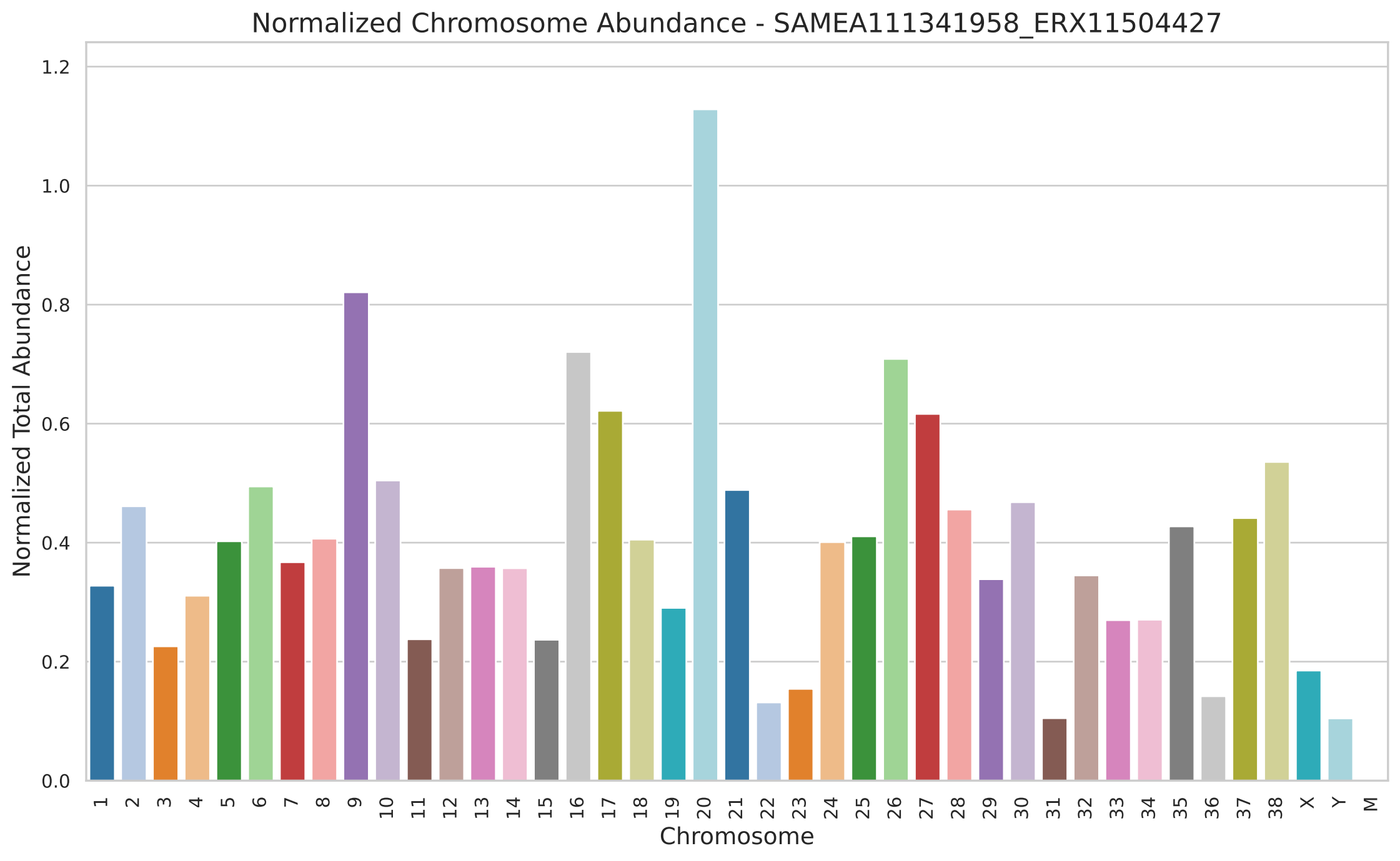

Normalized Chromosome Abundance - SAMEA111342001_ERX11504365
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

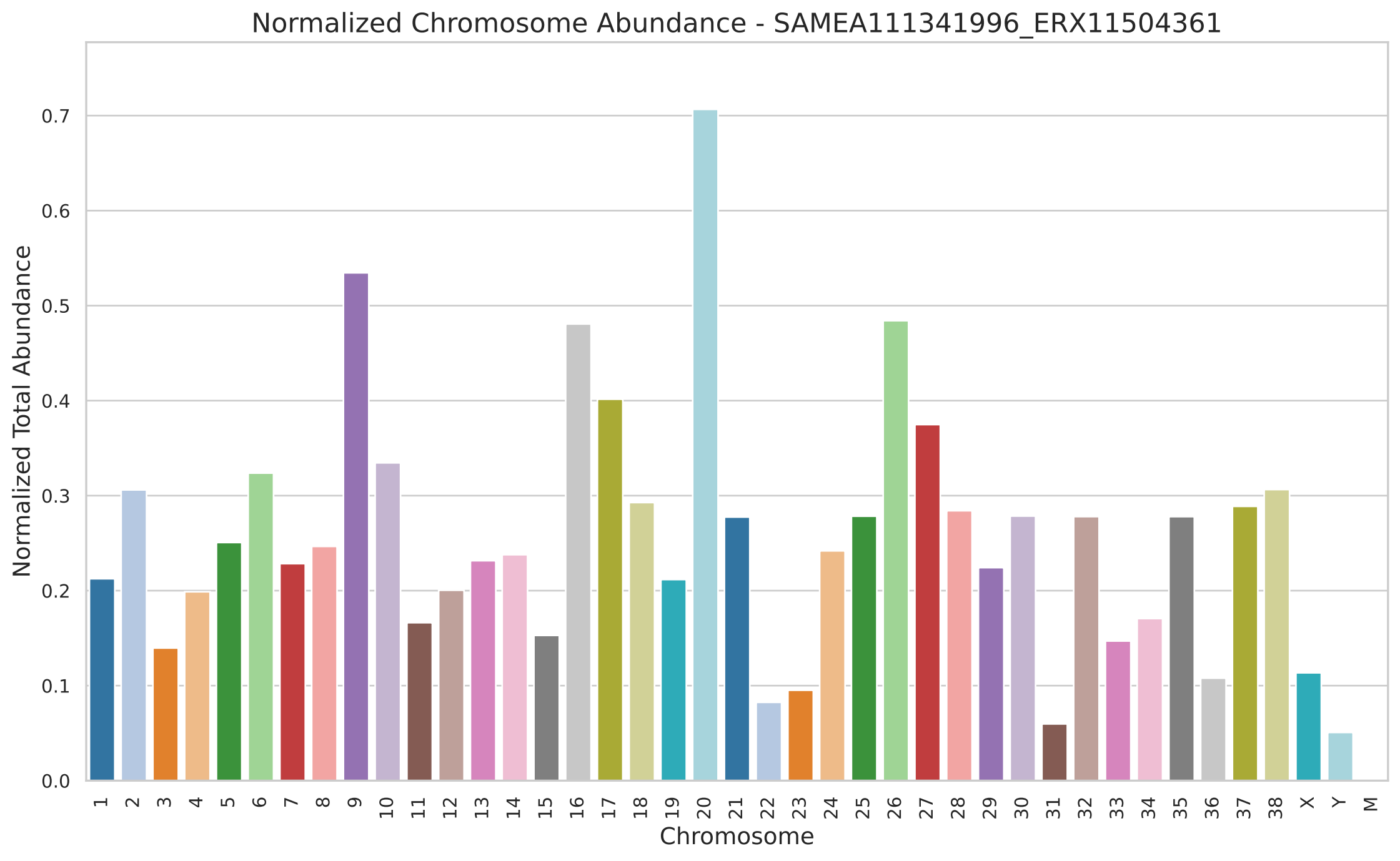

Normalized Chromosome Abundance - SAMEA111342035_ERX11504391
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

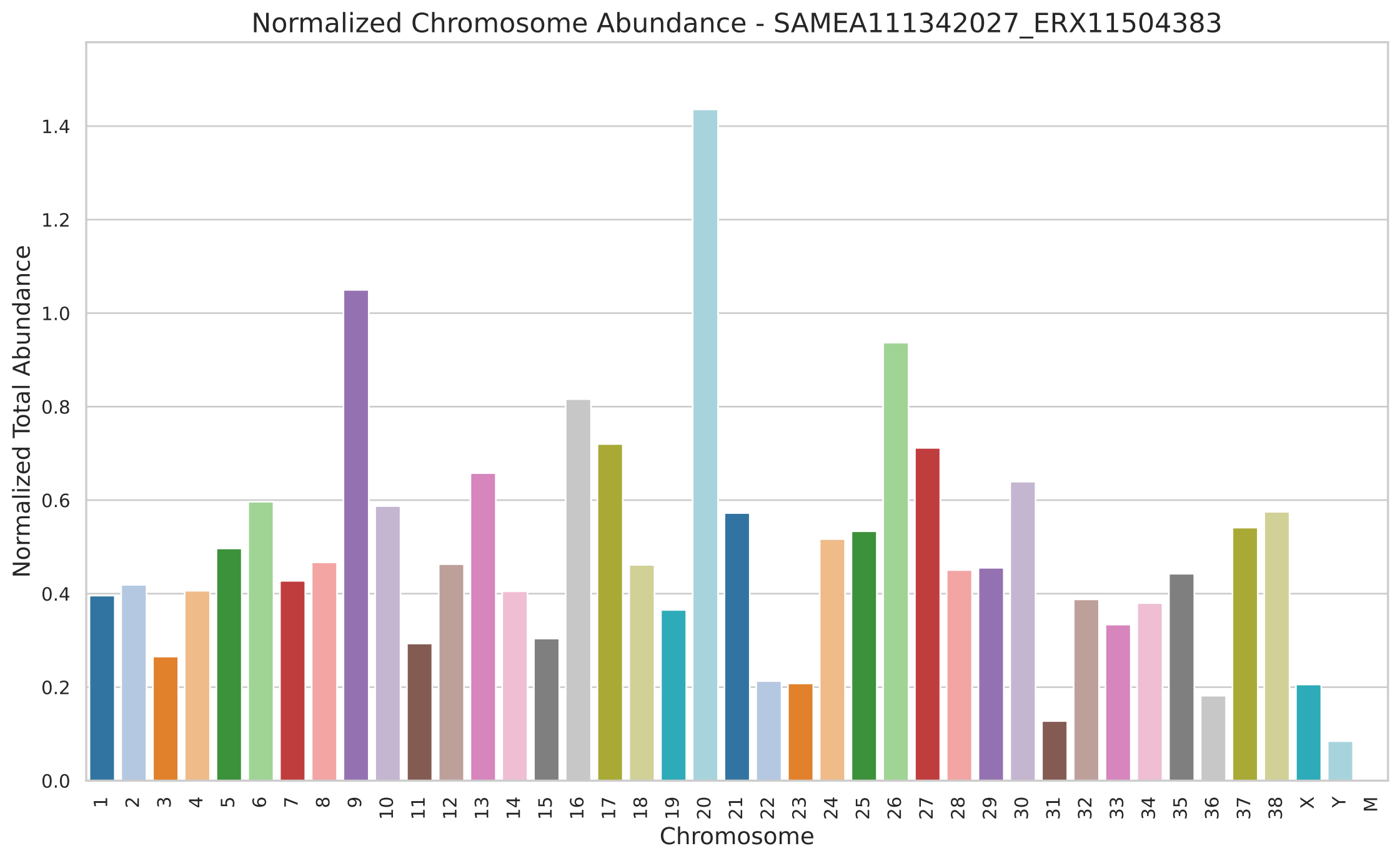

Normalized Chromosome Abundance - SAMEA111342009_ERX11504356
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

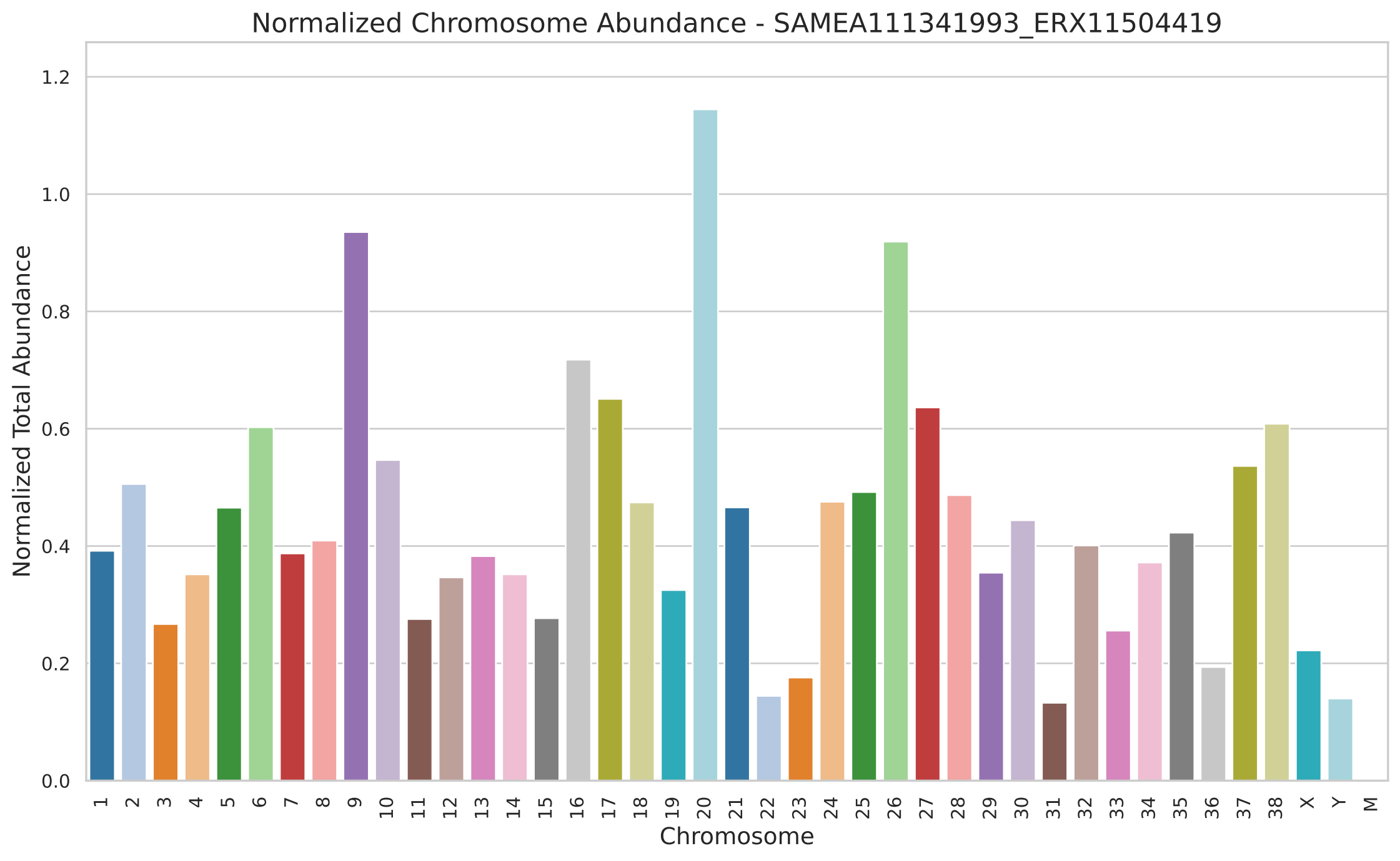

Normalized Chromosome Abundance - SAMEA111342034_ERX11504390
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

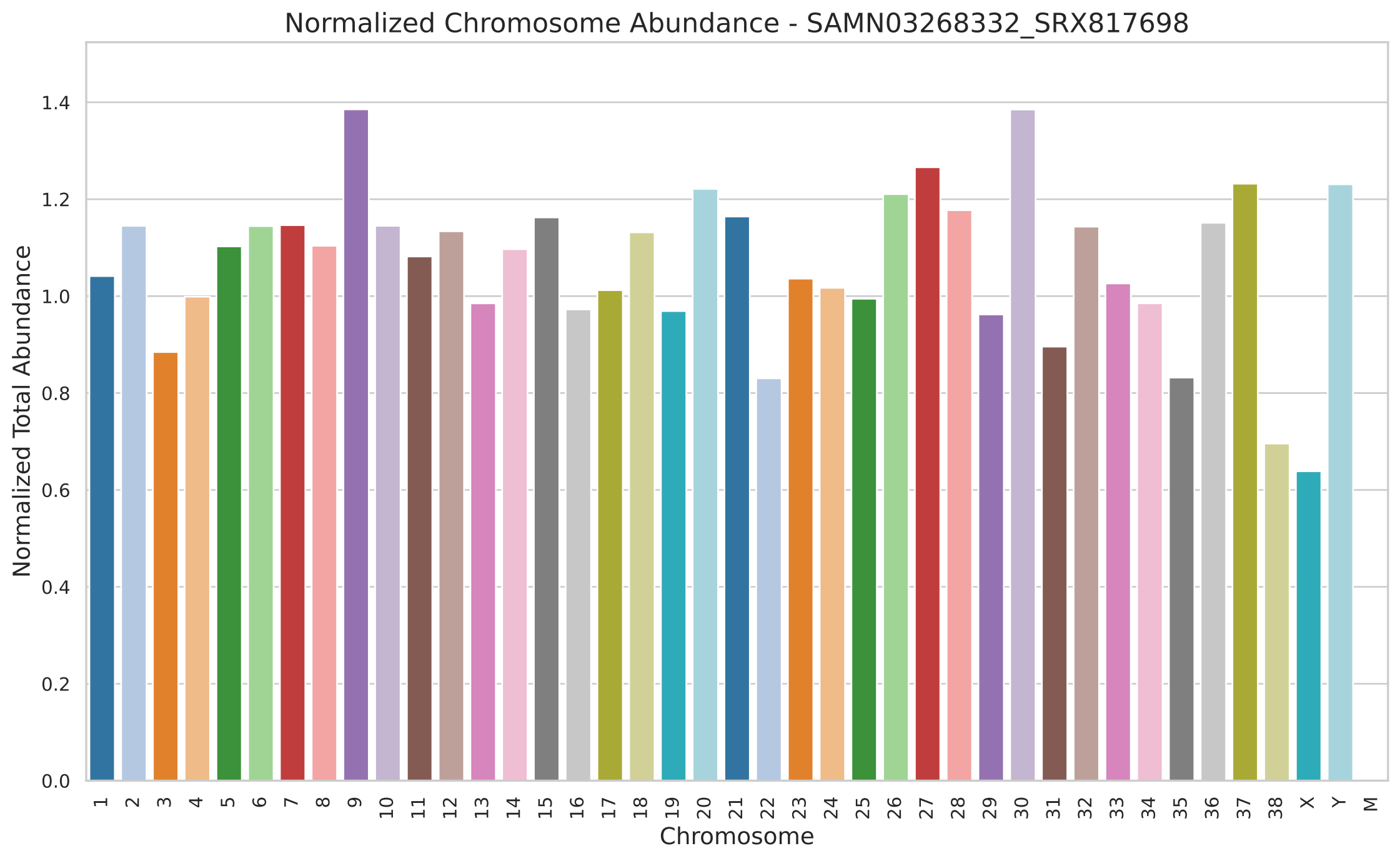

Normalized Chromosome Abundance - SAMEA111341987_ERX11504416
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

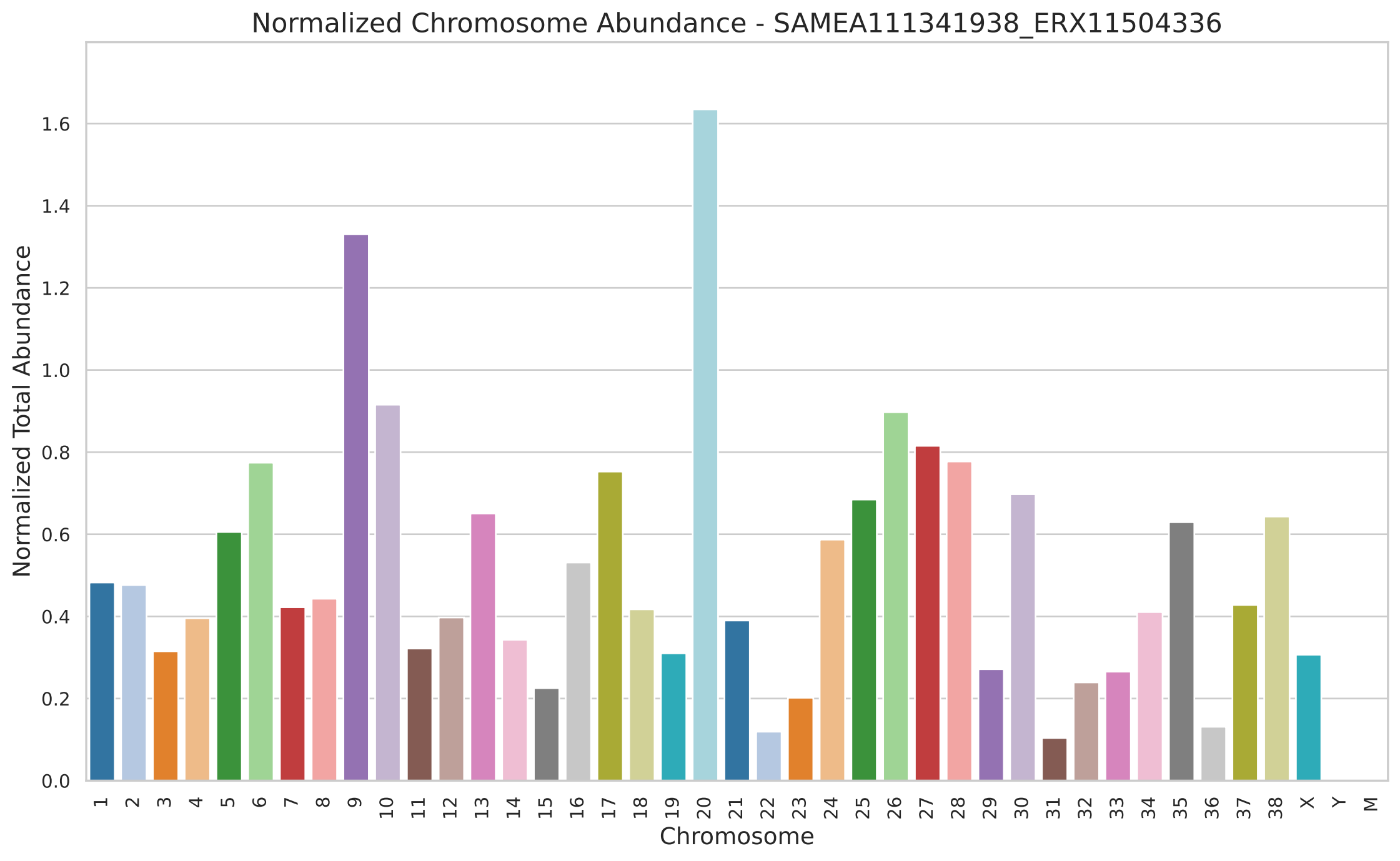

Normalized Chromosome Abundance - SAMEA111341958_ERX11504427
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

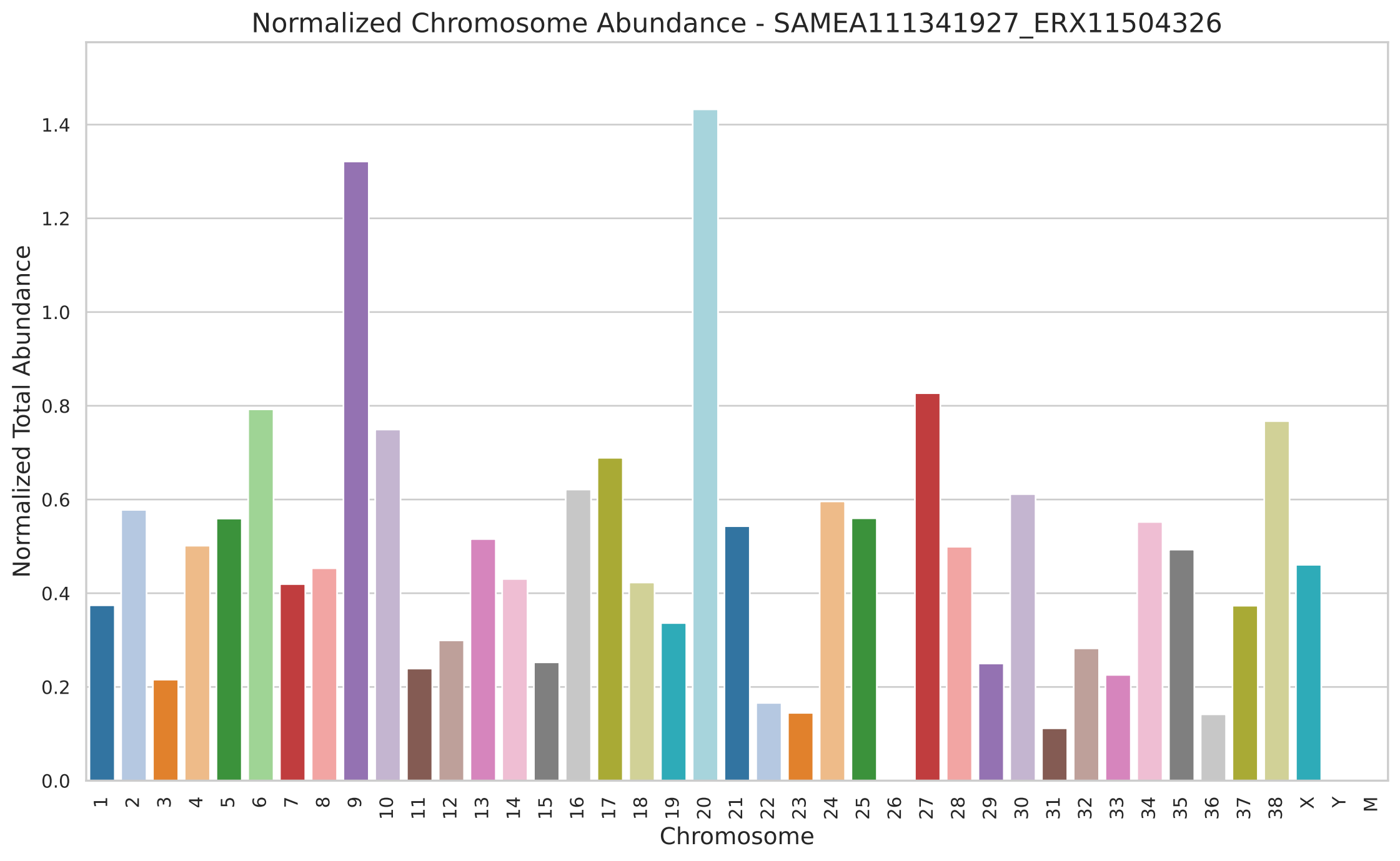

Normalized Chromosome Abundance - SAMEA111341996_ERX11504361
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

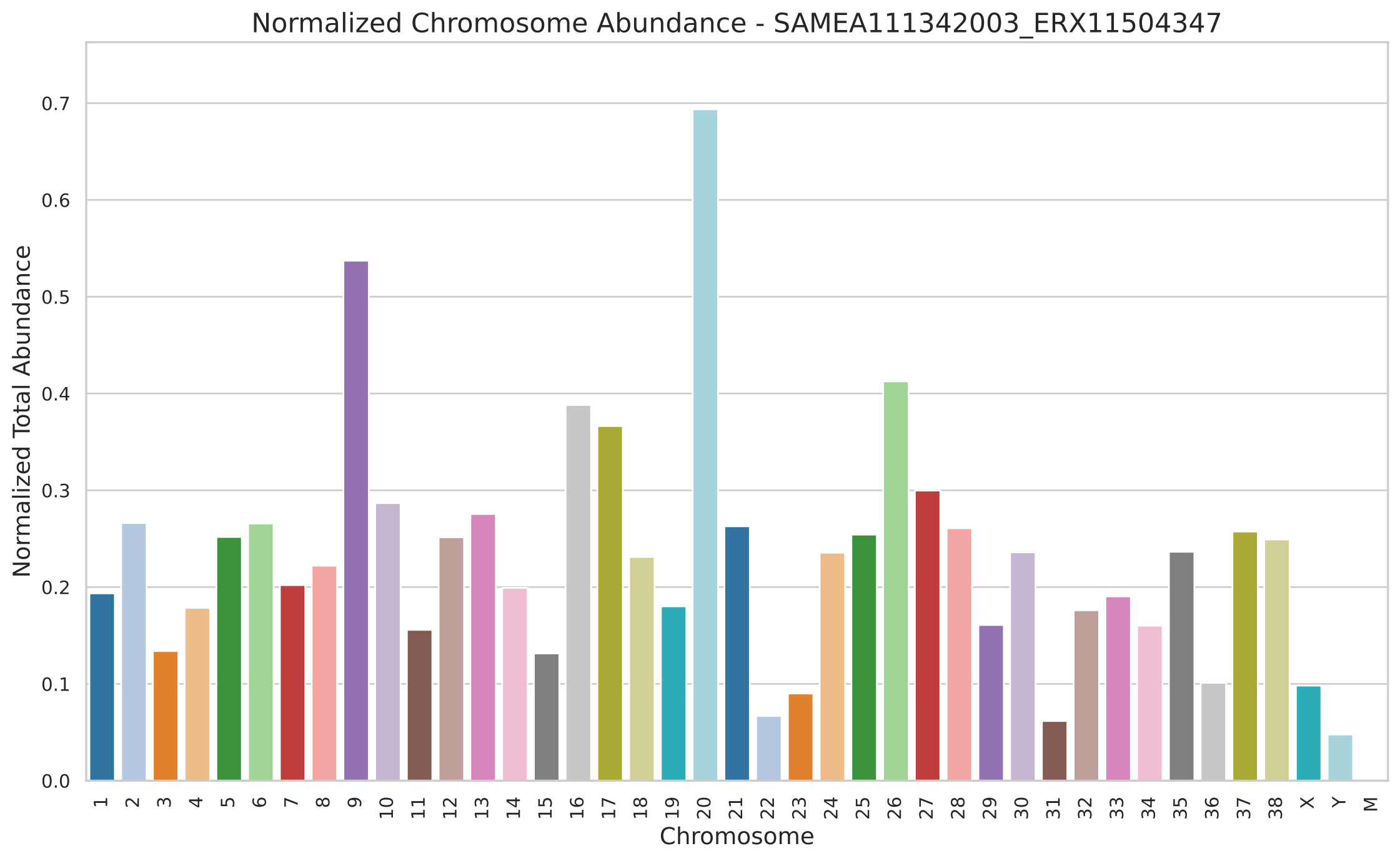

Normalized Chromosome Abundance - SAMEA111342027_ERX11504383
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

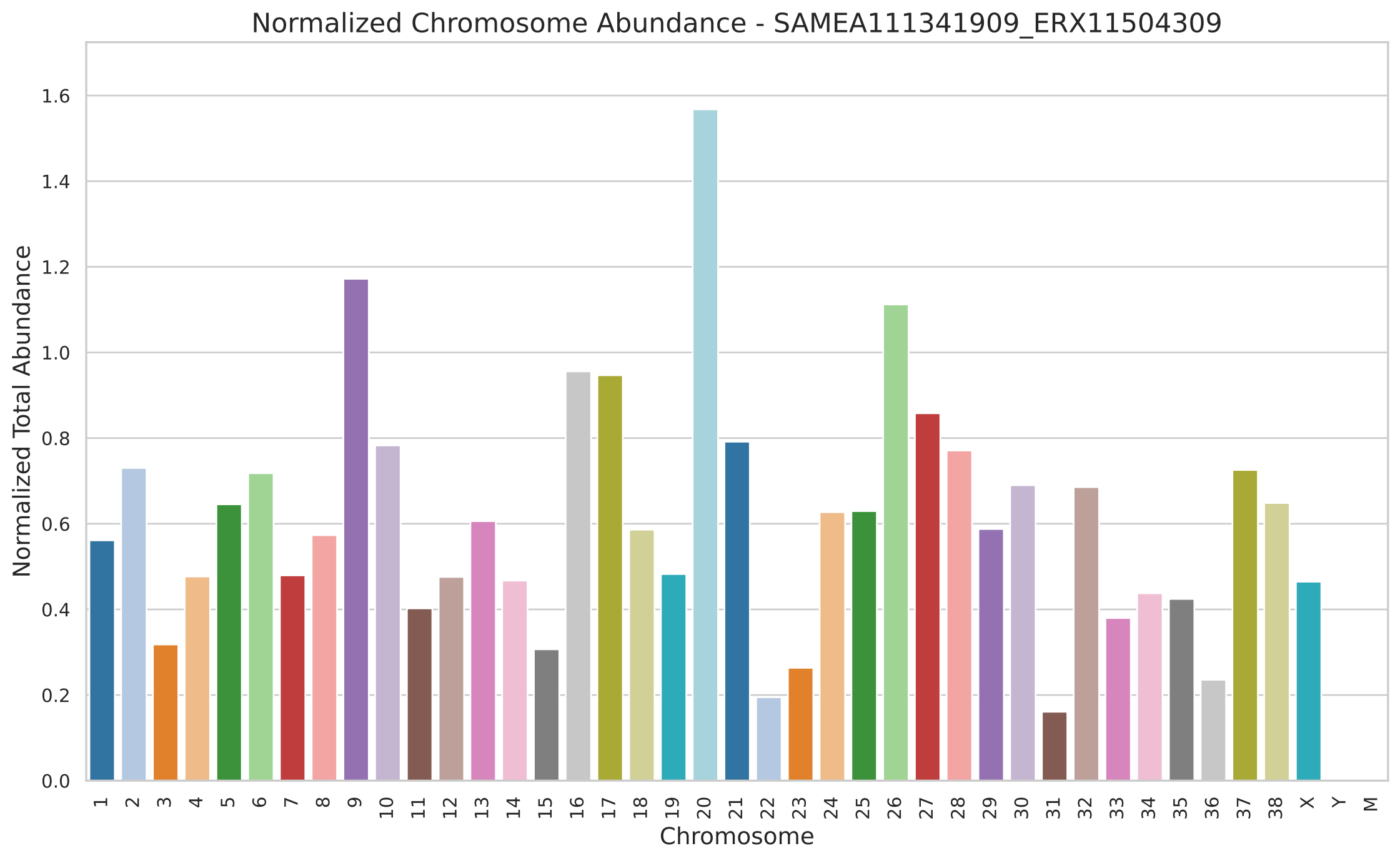

Normalized Chromosome Abundance - SAMEA111341993_ERX11504419
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

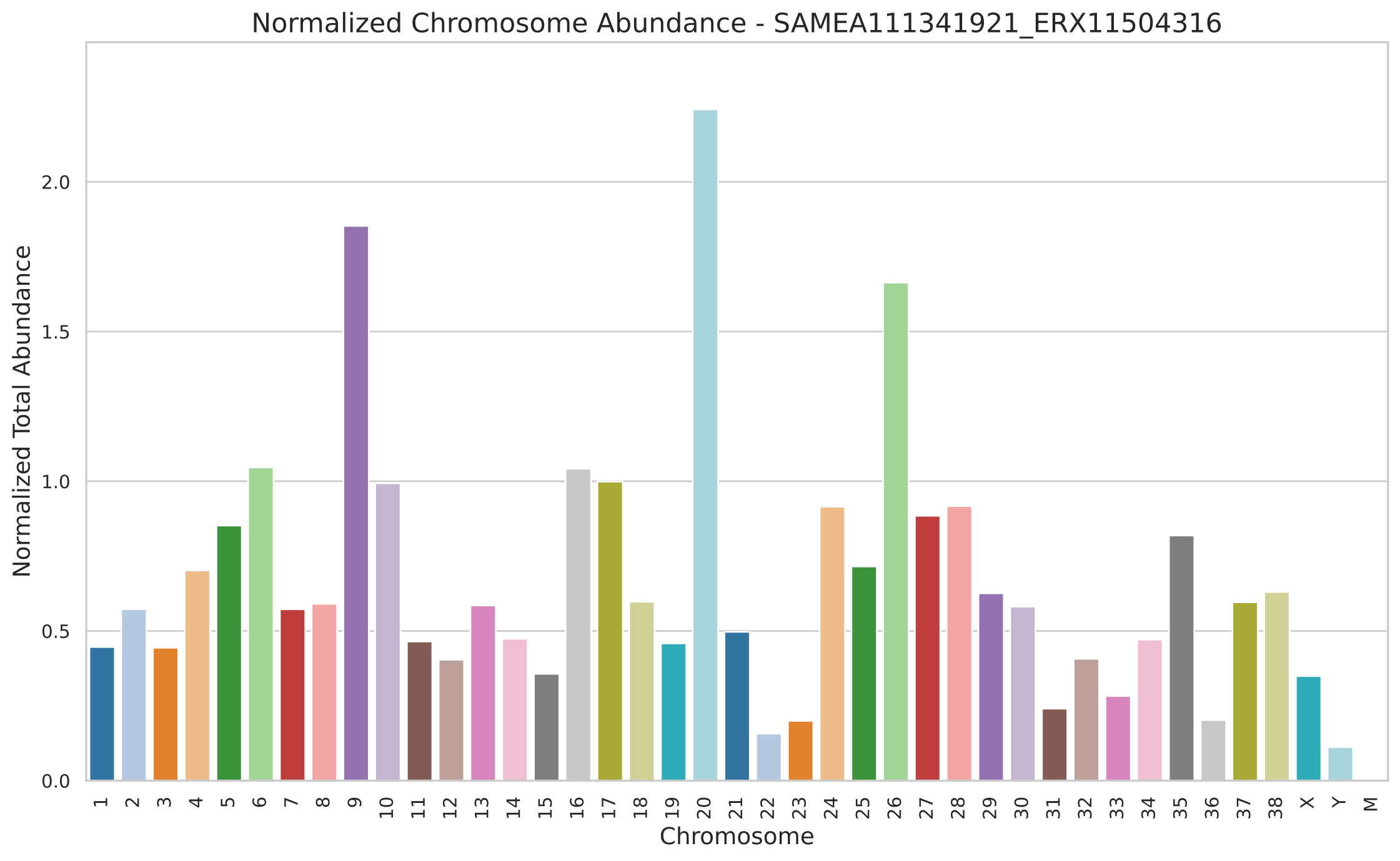

Normalized Chromosome Abundance - SAMN03268332_SRX817698
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

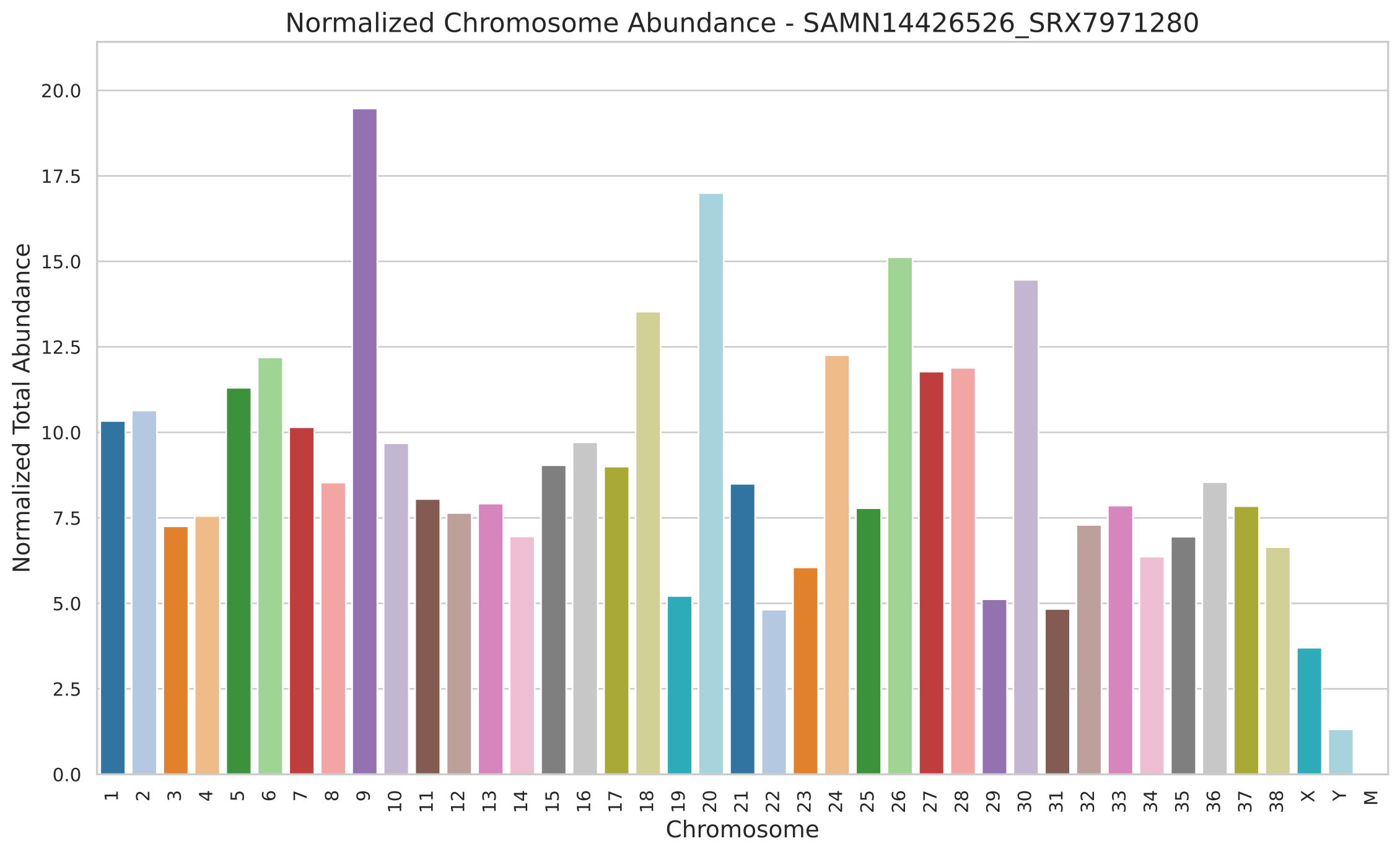

Normalized Chromosome Abundance - SAMEA111341938_ERX11504336
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

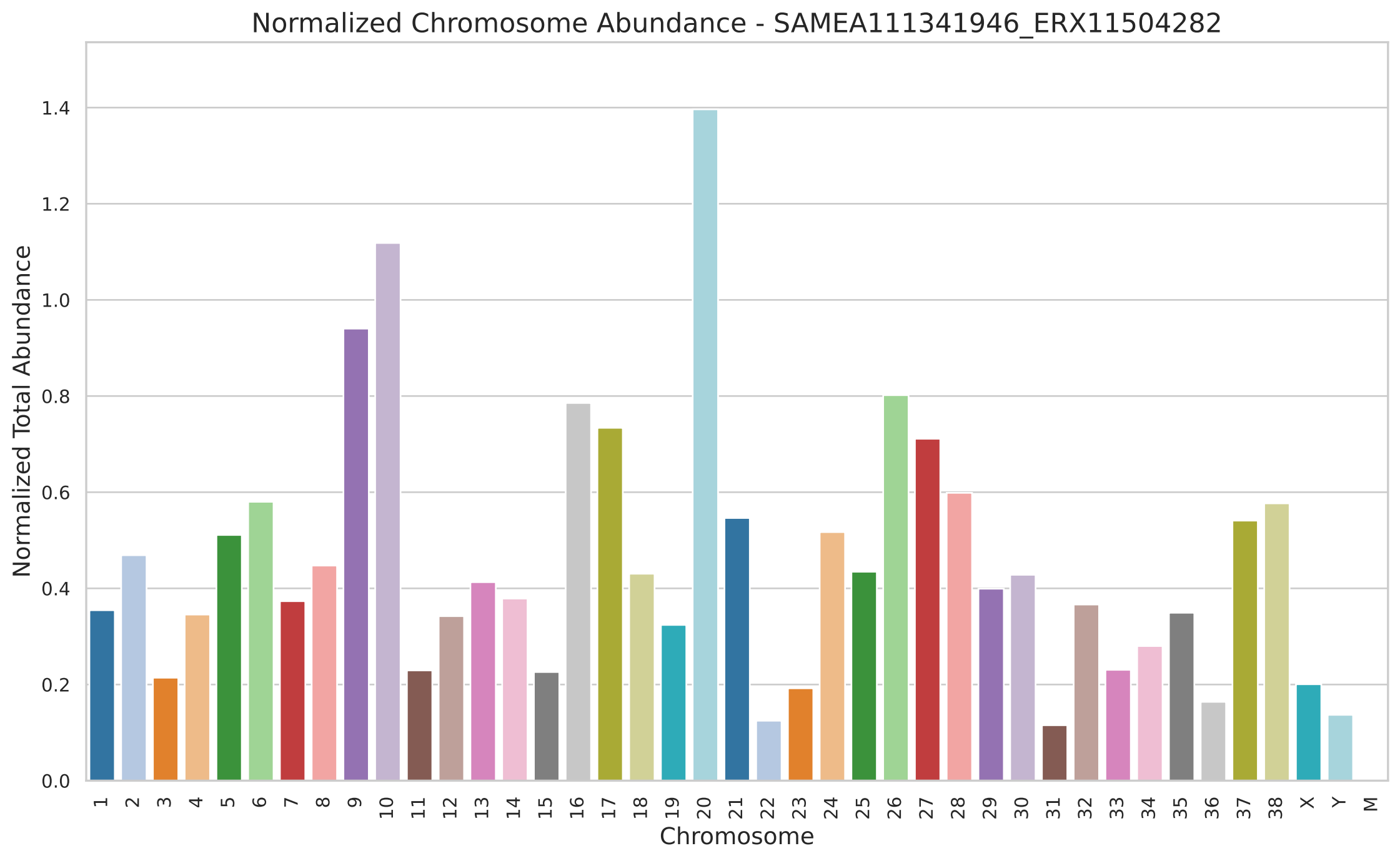

Normalized Chromosome Abundance - SAMEA111341927_ERX11504326
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

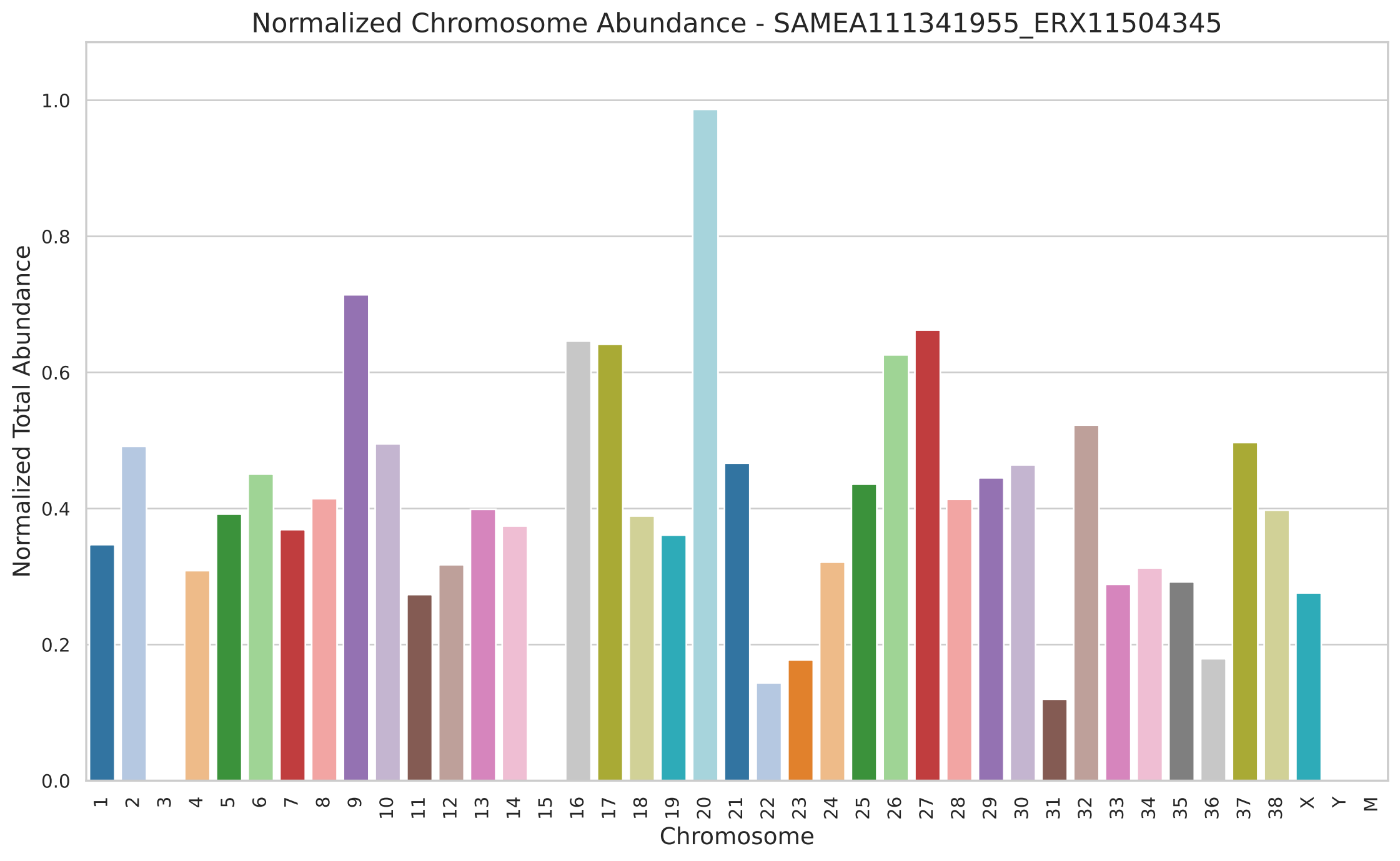

Normalized Chromosome Abundance - SAMEA111342003_ERX11504347
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

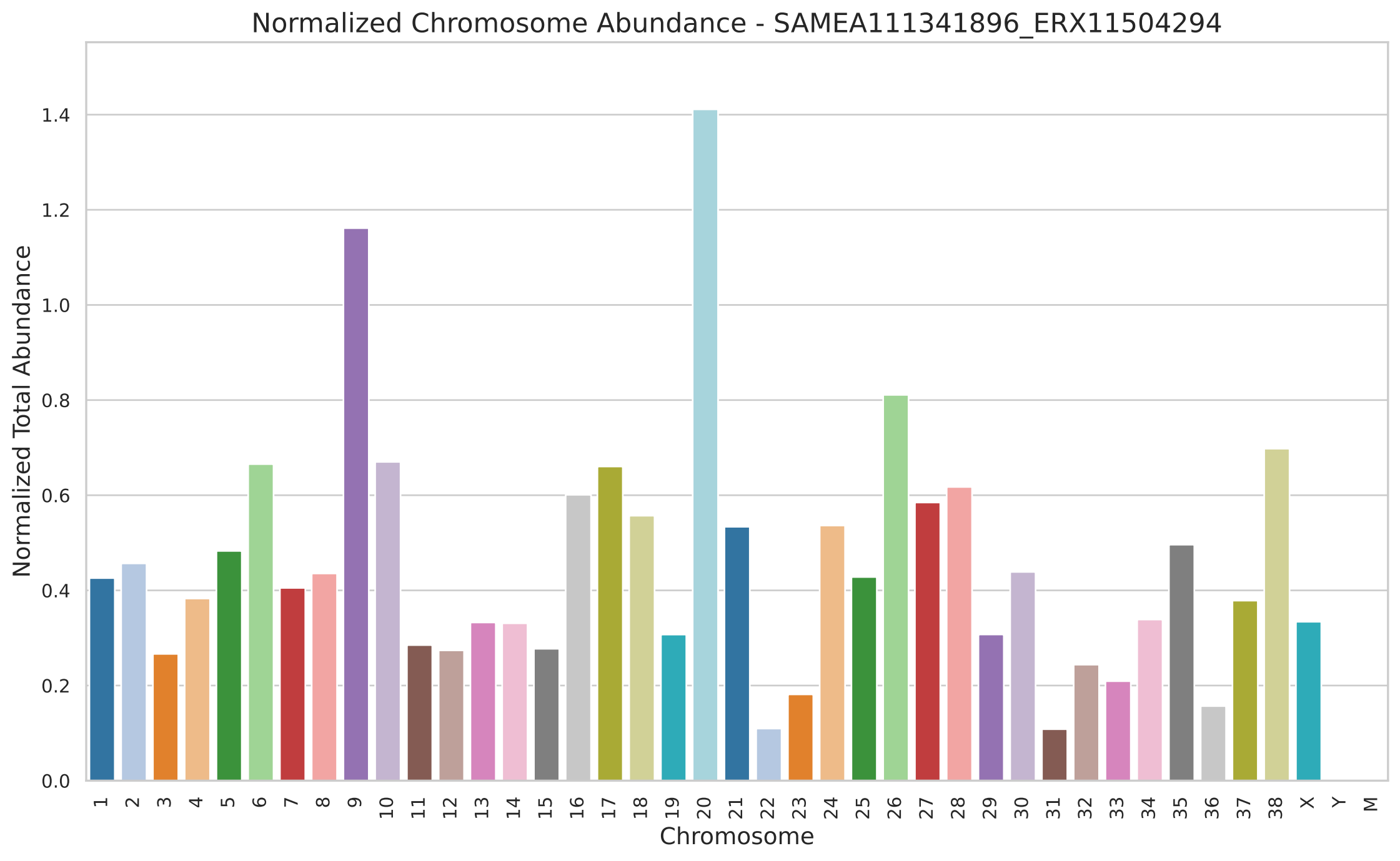

Normalized Chromosome Abundance - SAMEA111341909_ERX11504309
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

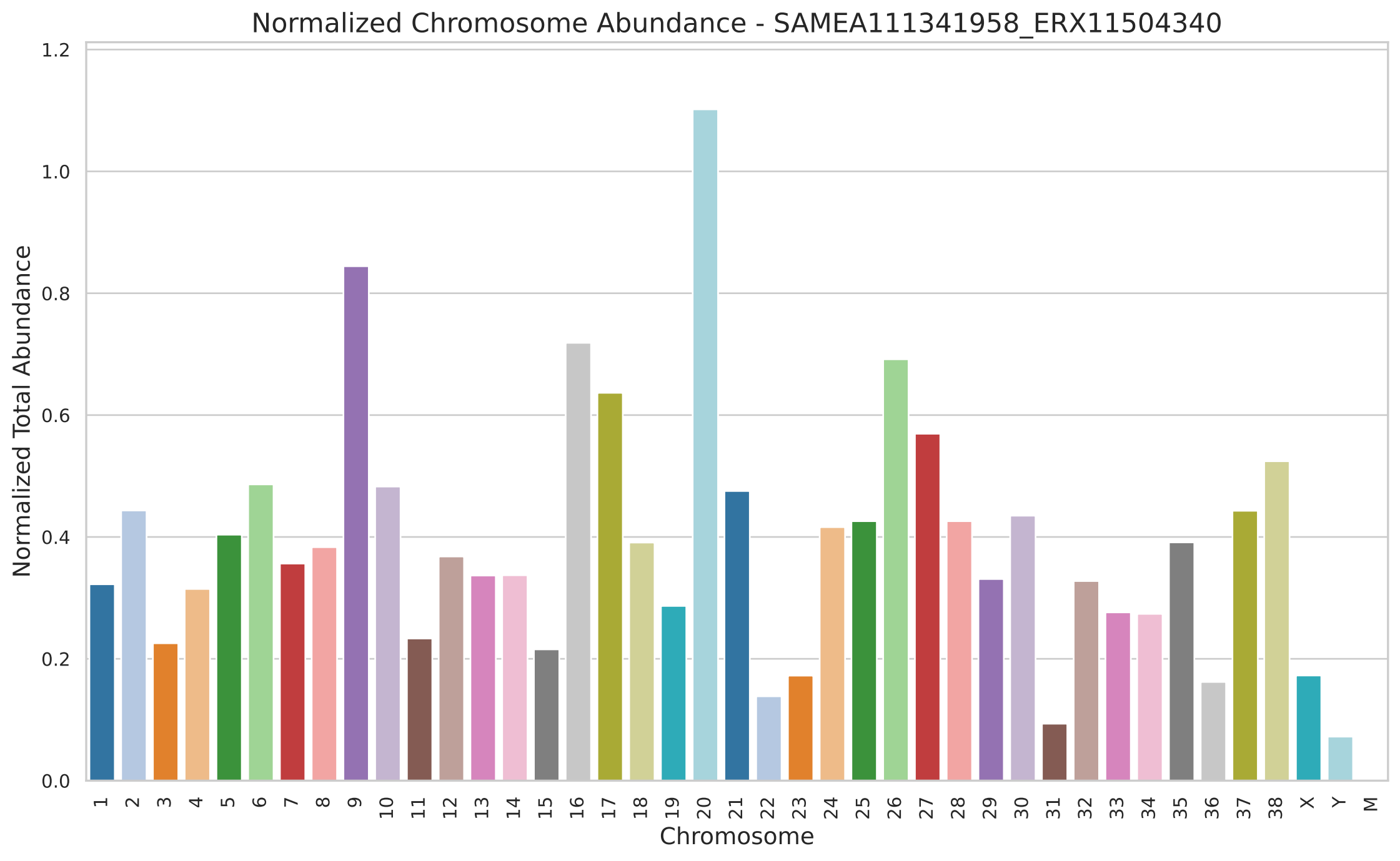

Normalized Chromosome Abundance - SAMEA111341921_ERX11504316
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

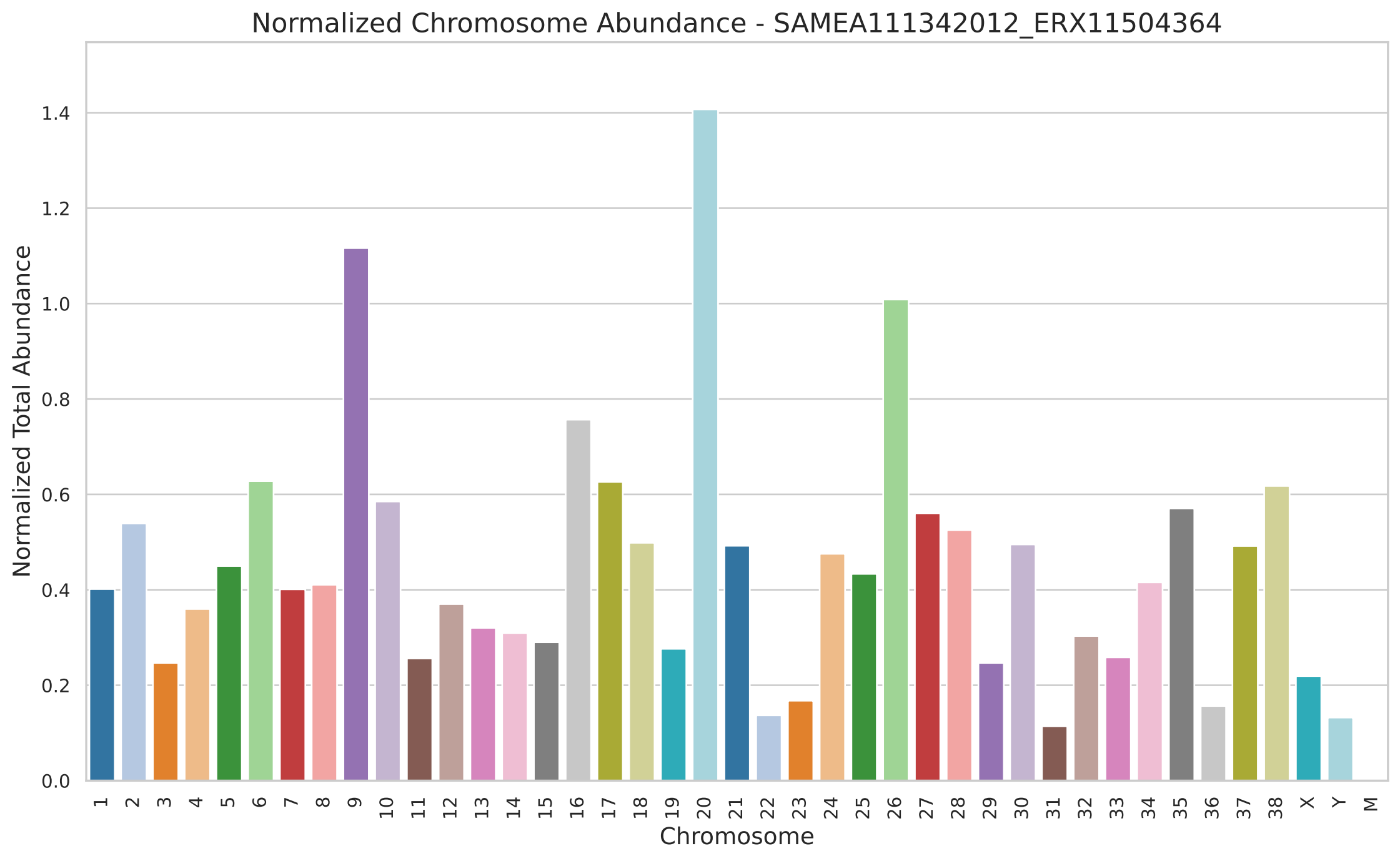

Normalized Chromosome Abundance - SAMN14426526_SRX7971280
Normalized Total Abundance
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5
20.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

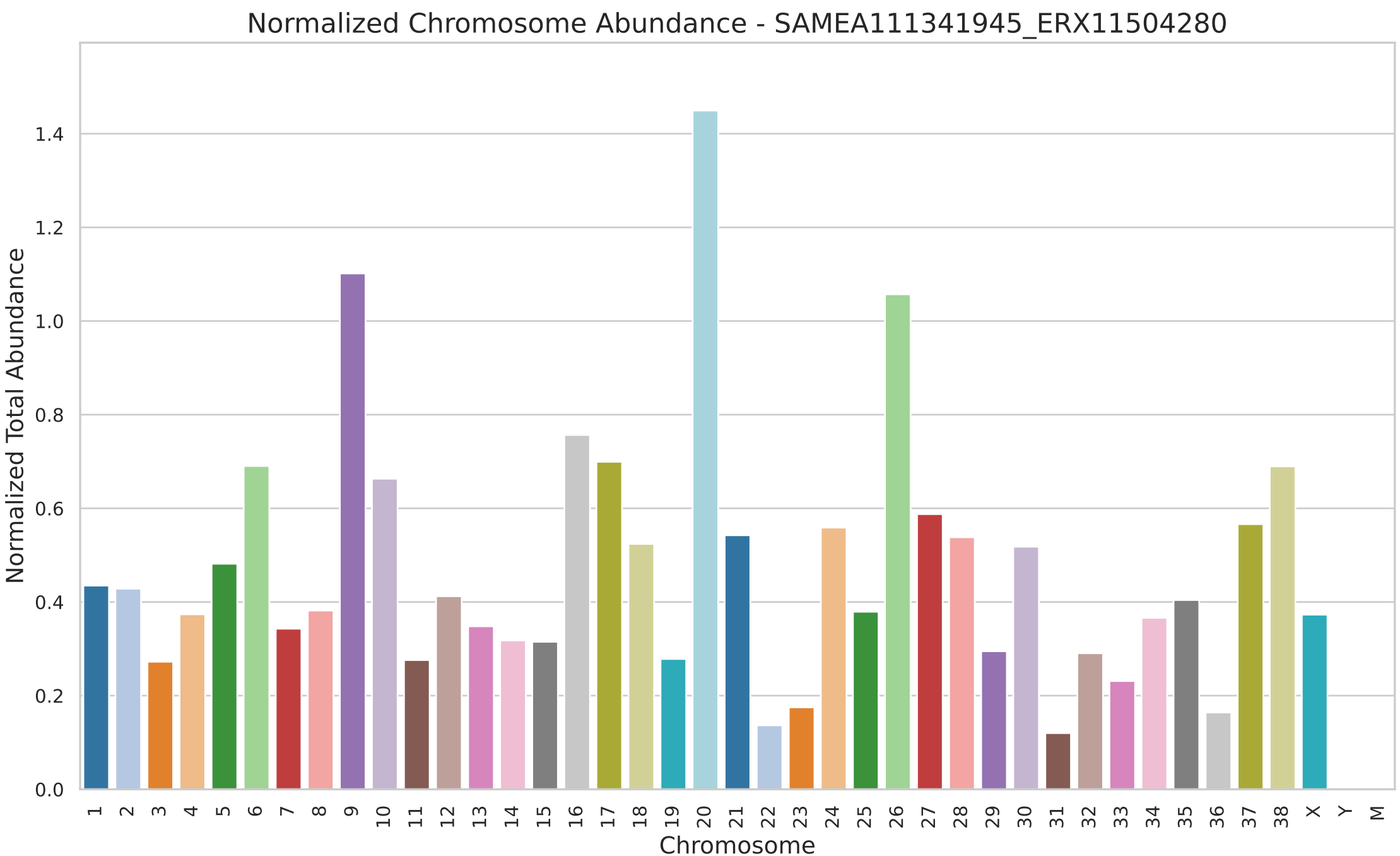

Normalized Chromosome Abundance - SAMEA111341946_ERX11504282
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

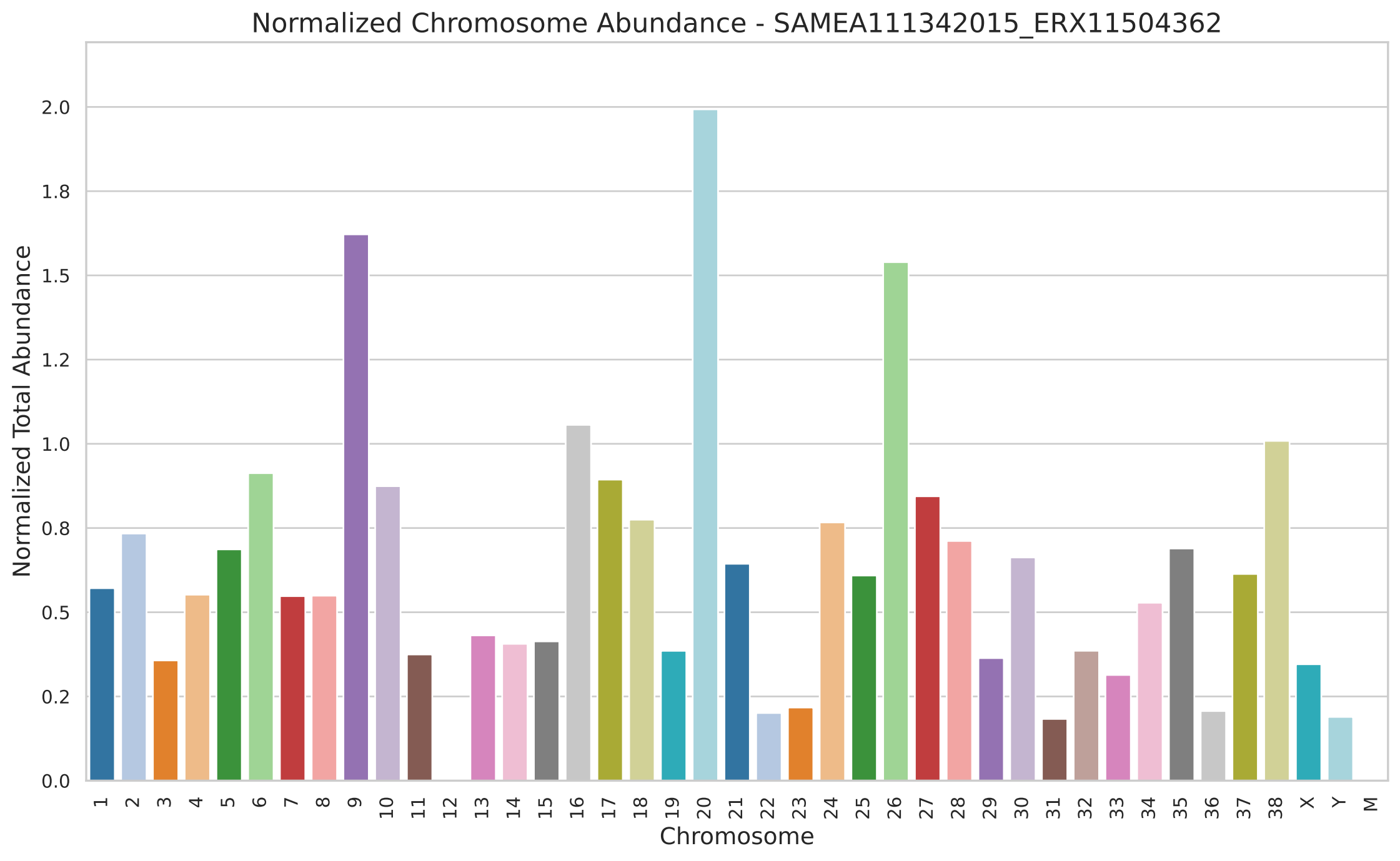

Normalized Chromosome Abundance - SAMEA111341955_ERX11504345
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

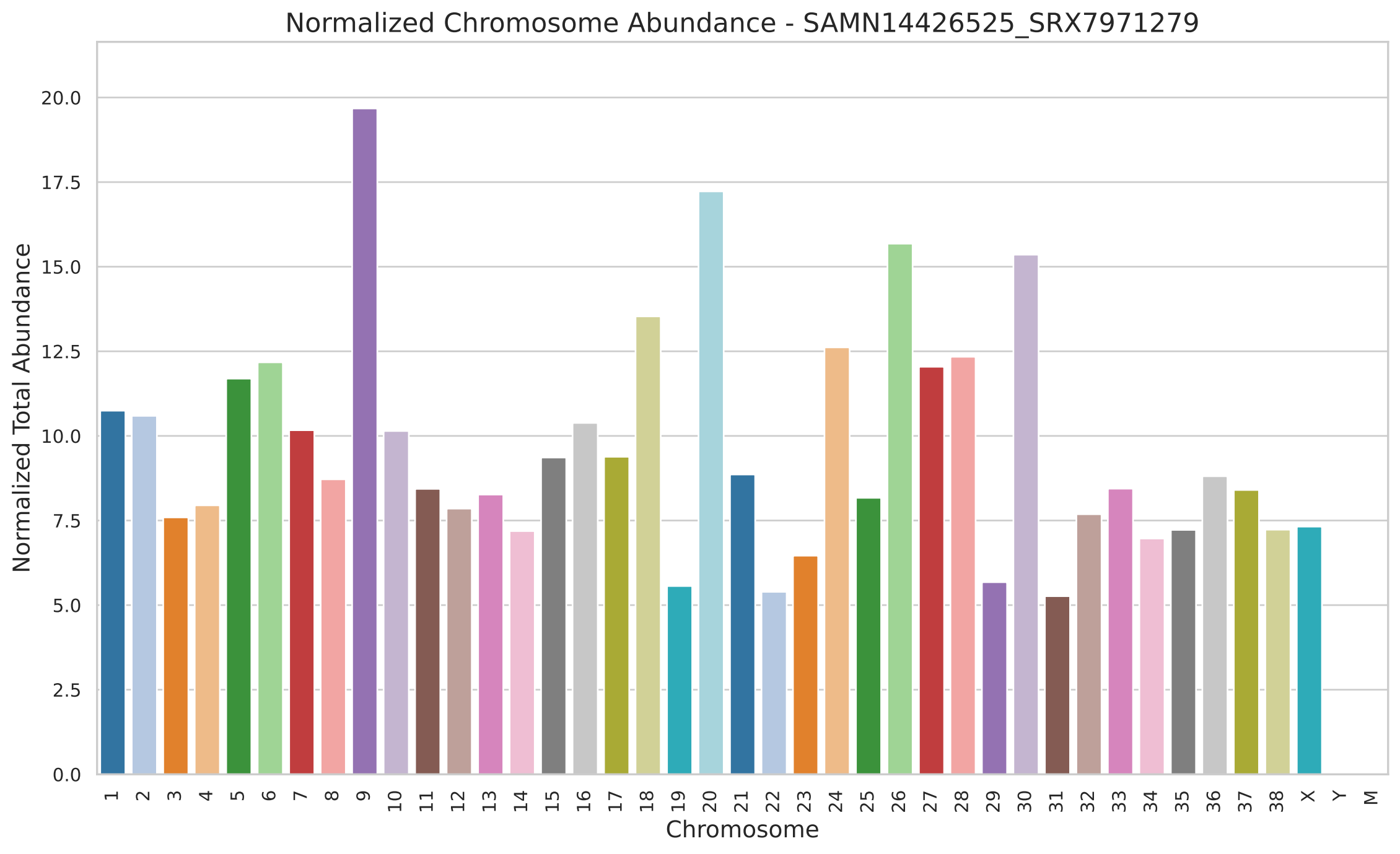

Normalized Chromosome Abundance - SAMEA111341896_ERX11504294
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

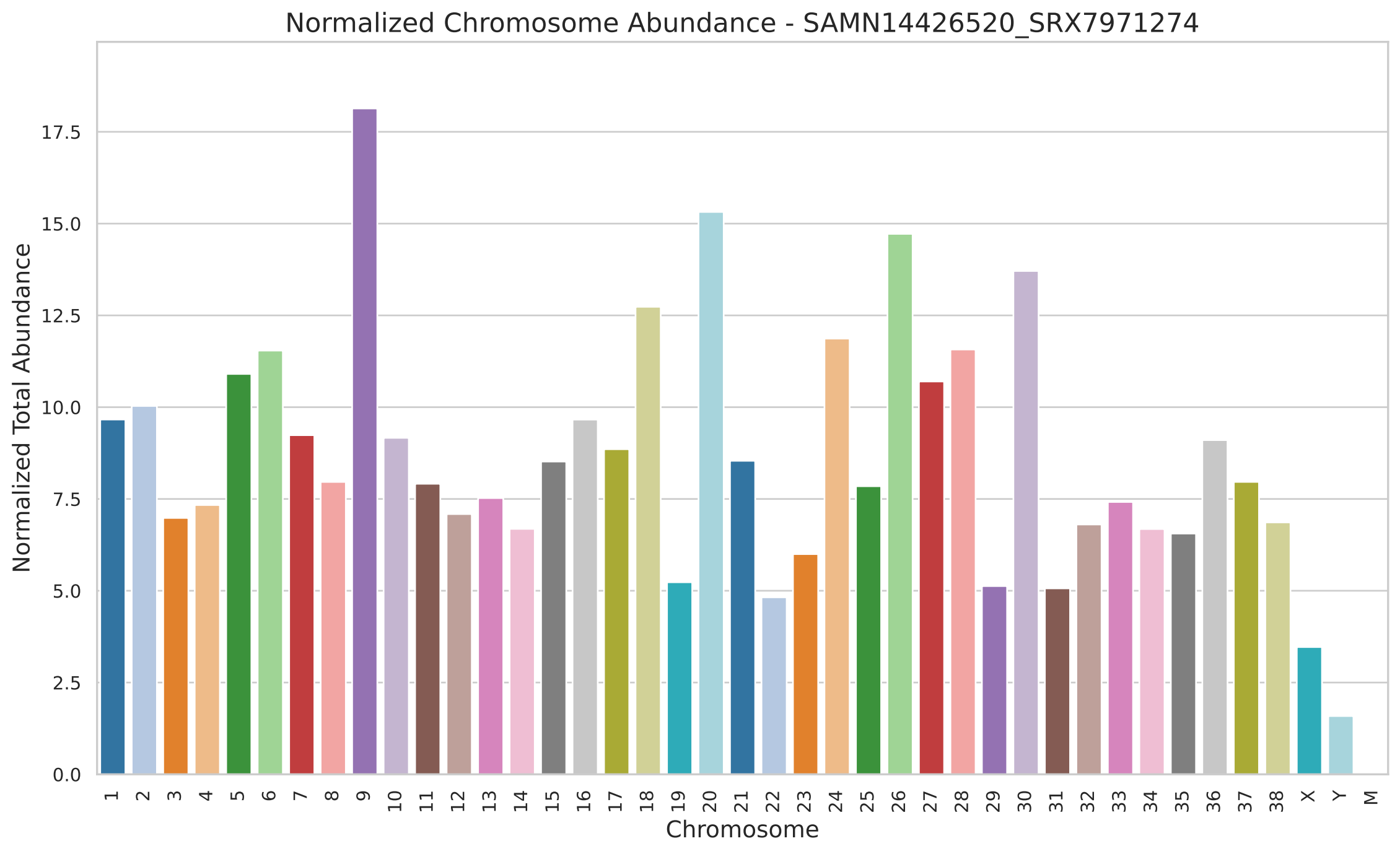

Normalized Chromosome Abundance - SAMEA111341958_ERX11504340
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

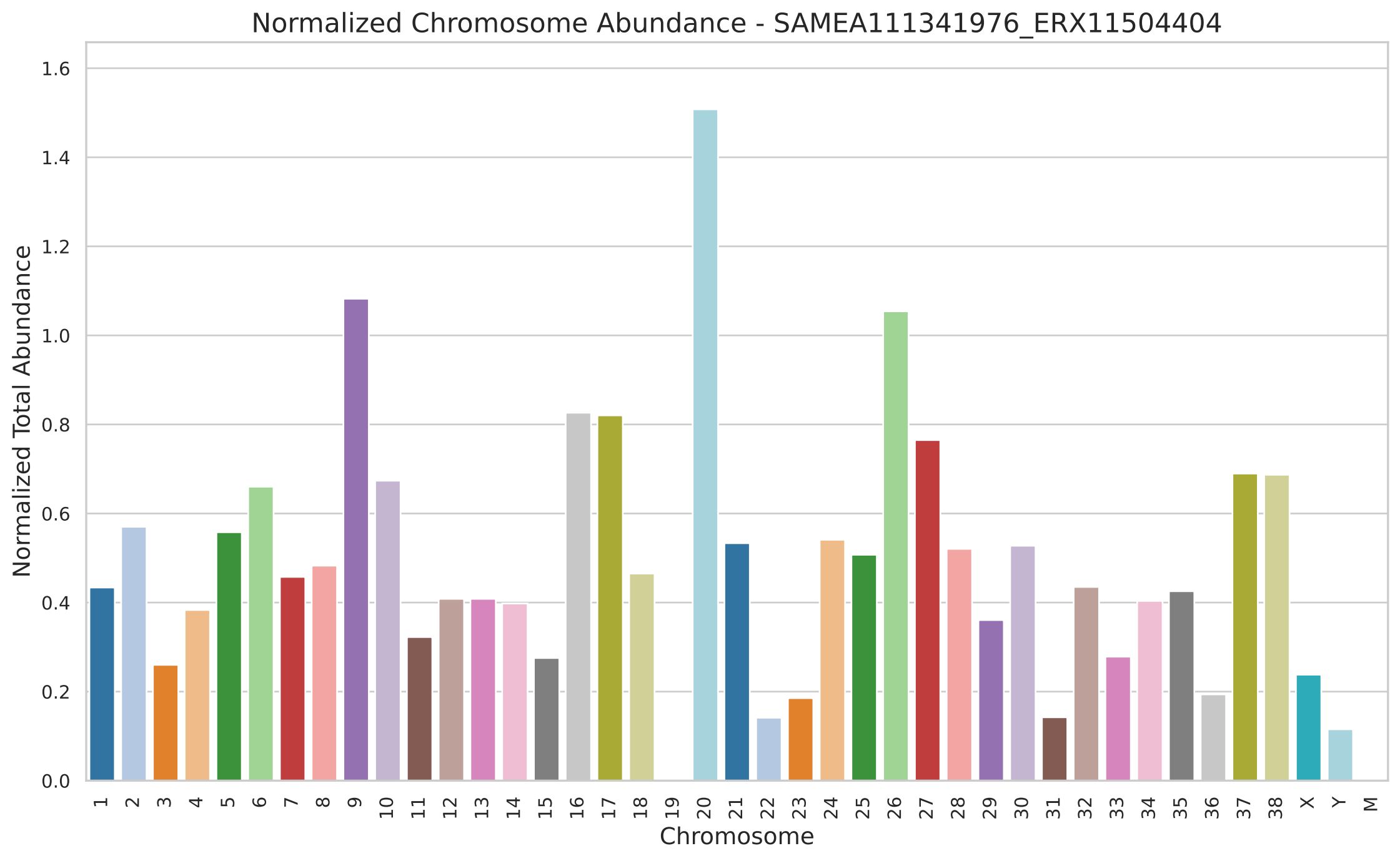

Normalized Chromosome Abundance - SAMEA111342012_ERX11504364
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

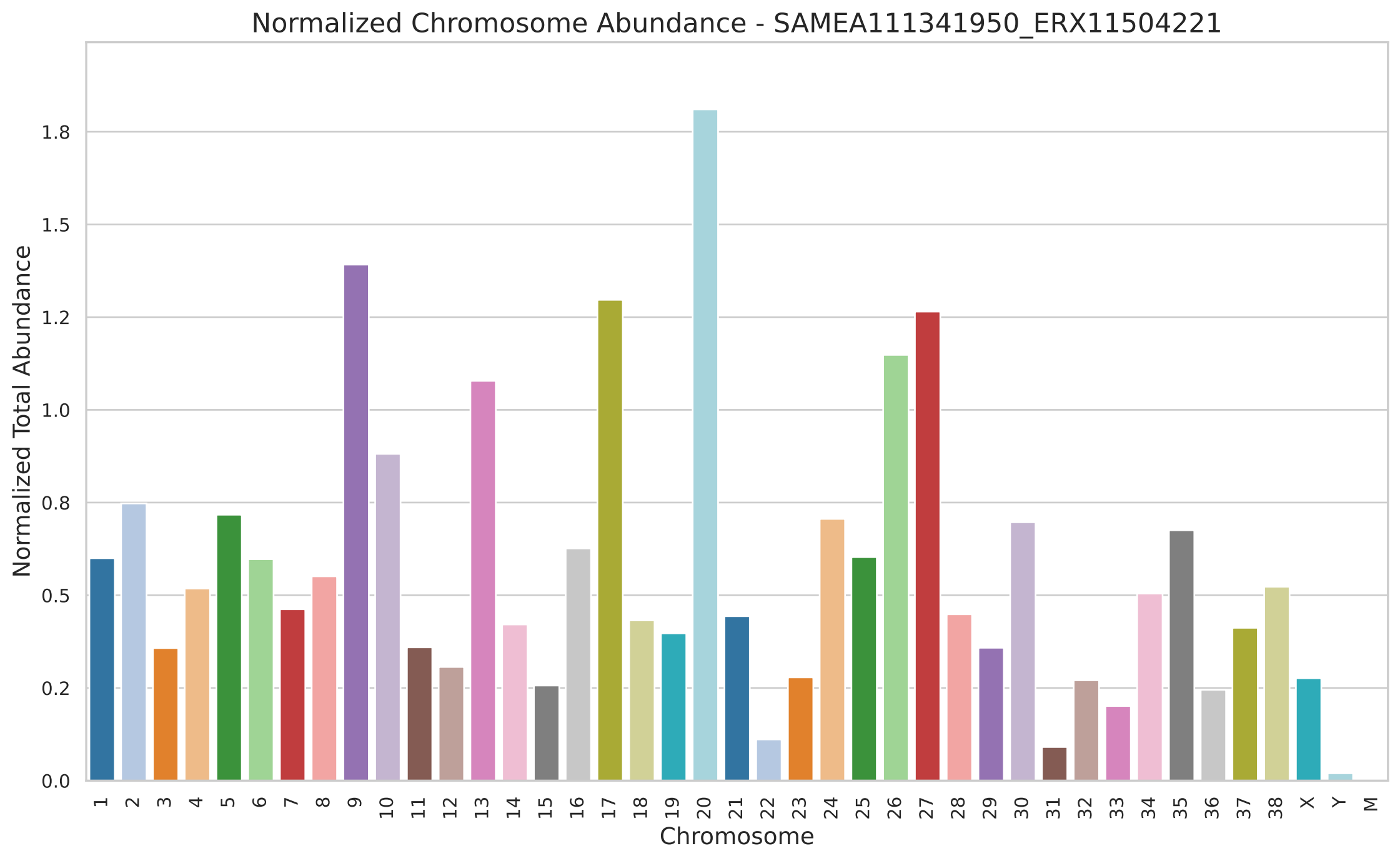

Normalized Chromosome Abundance - SAMEA111341945_ERX11504280
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

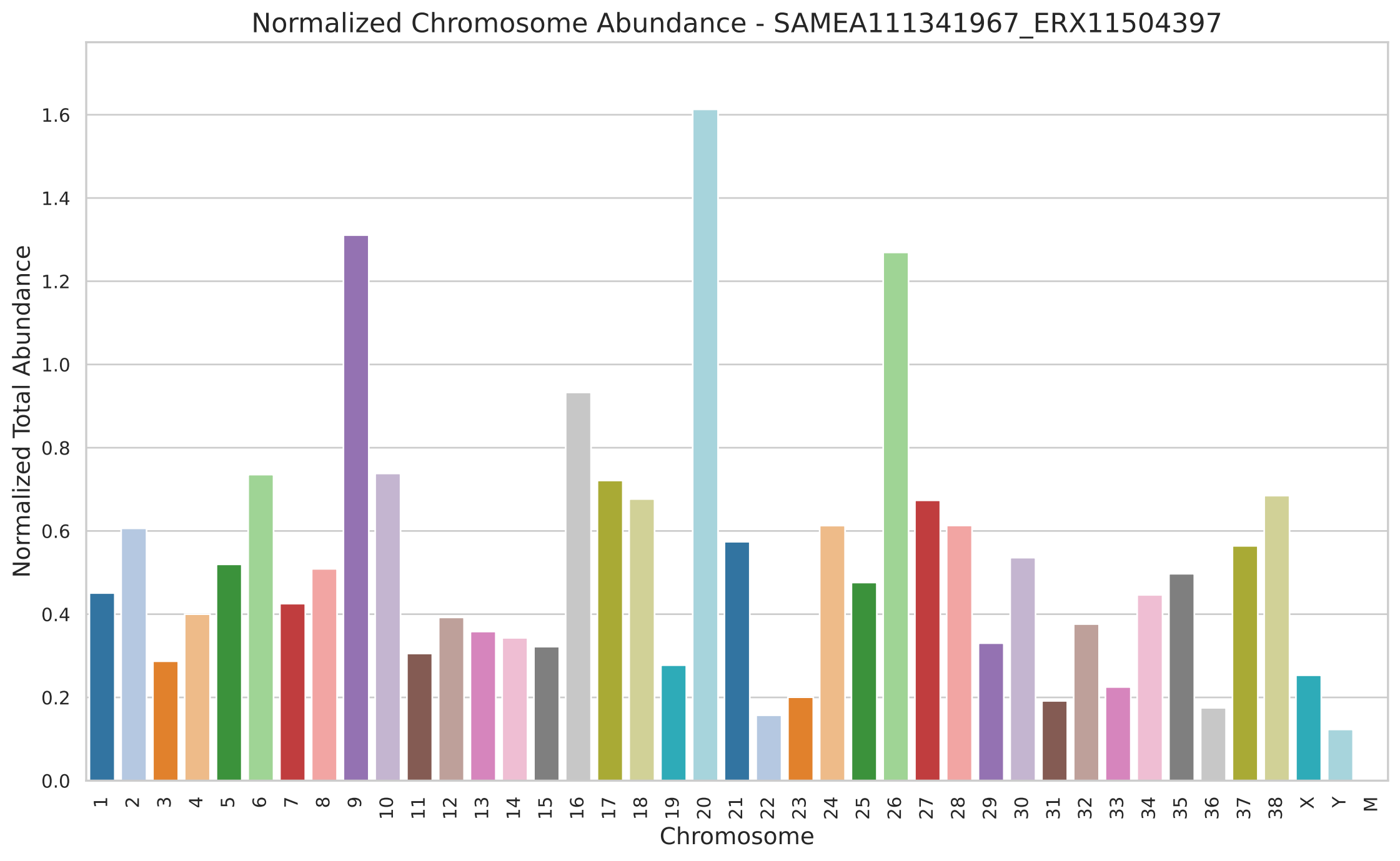

Normalized Chromosome Abundance - SAMEA111342015_ERX11504362
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

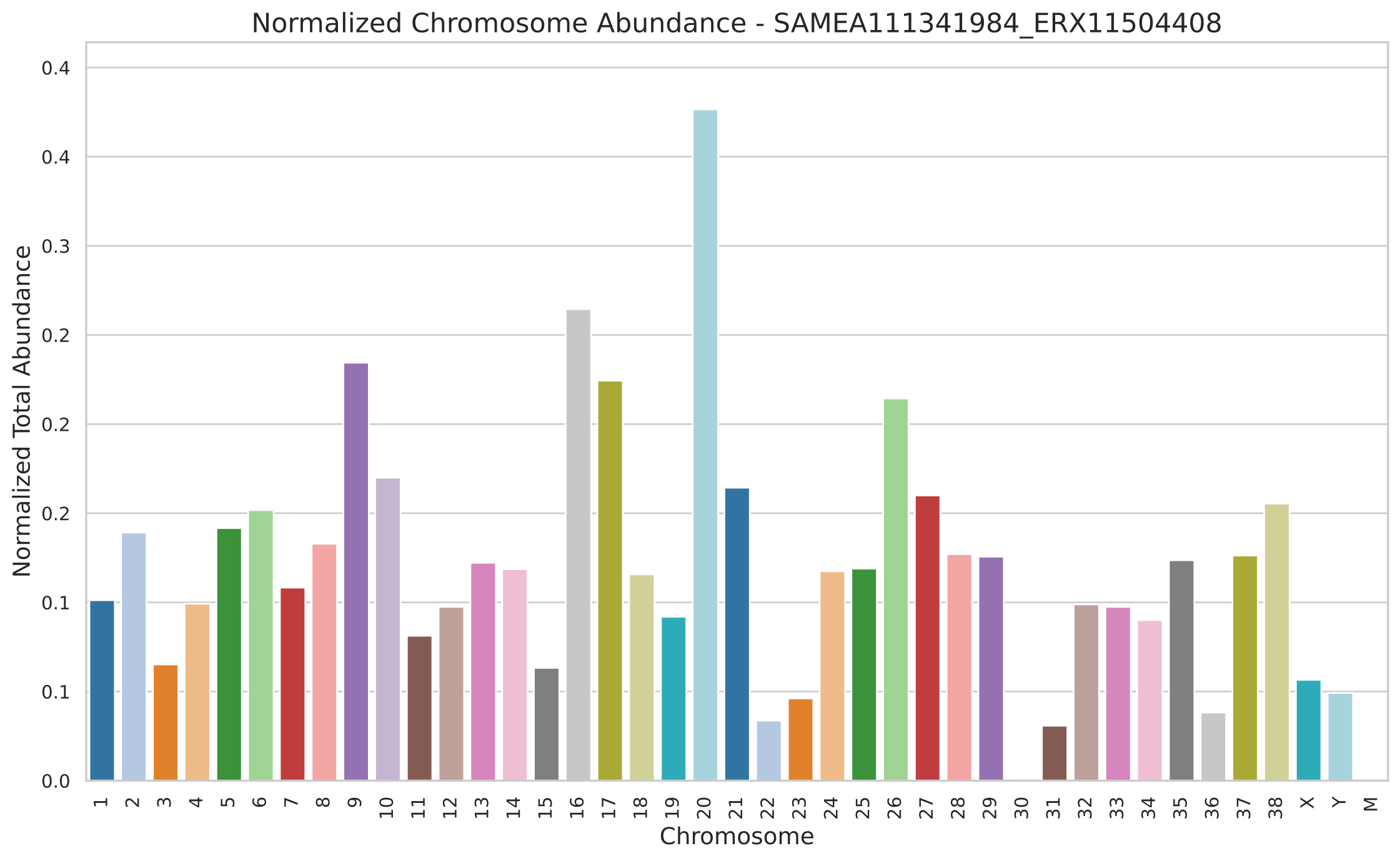

Normalized Chromosome Abundance - SAMN14426525_SRX7971279
Normalized Total Abundance
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5
20.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

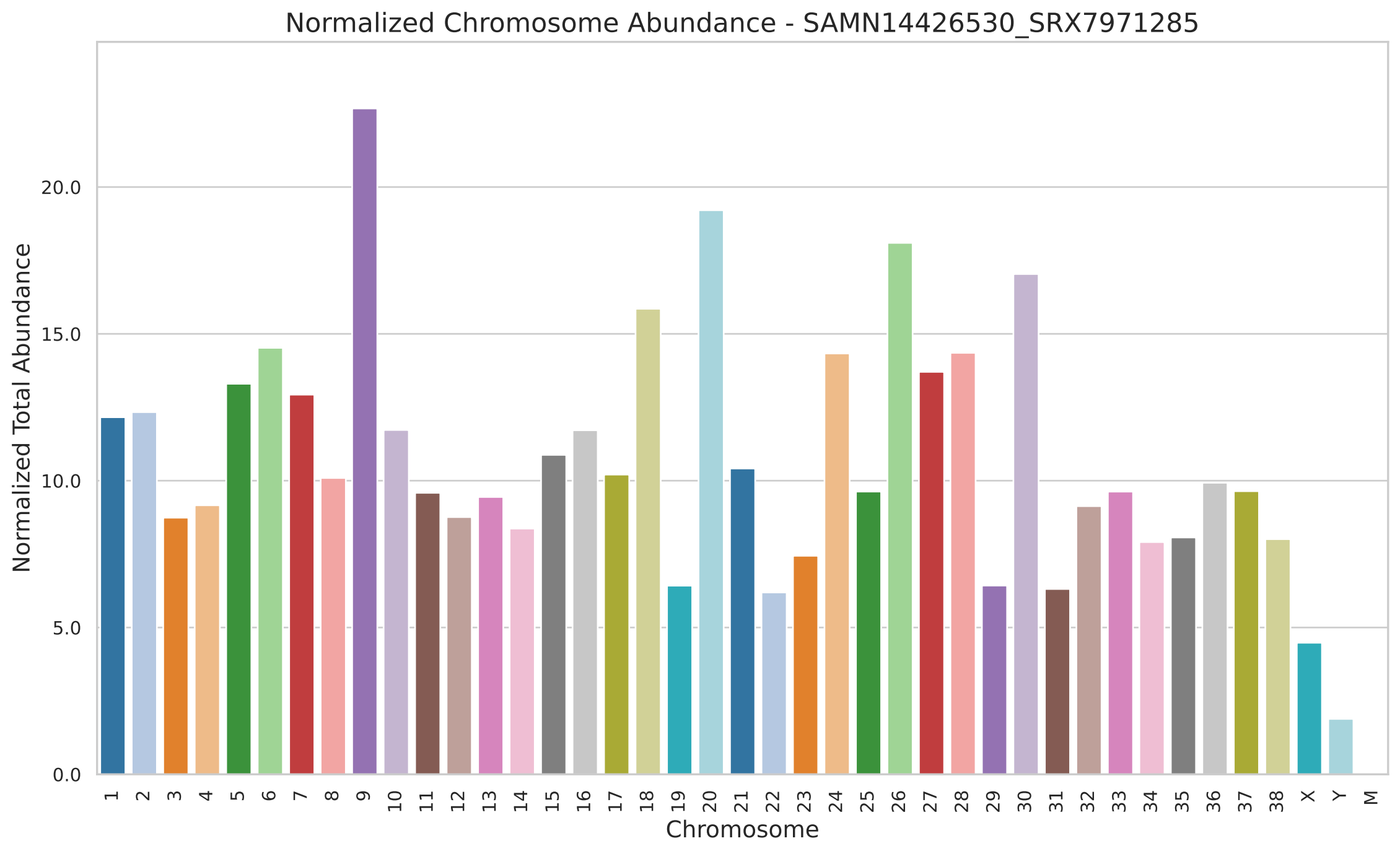

Normalized Chromosome Abundance - SAMN14426520_SRX7971274
Normalized Total Abundance
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

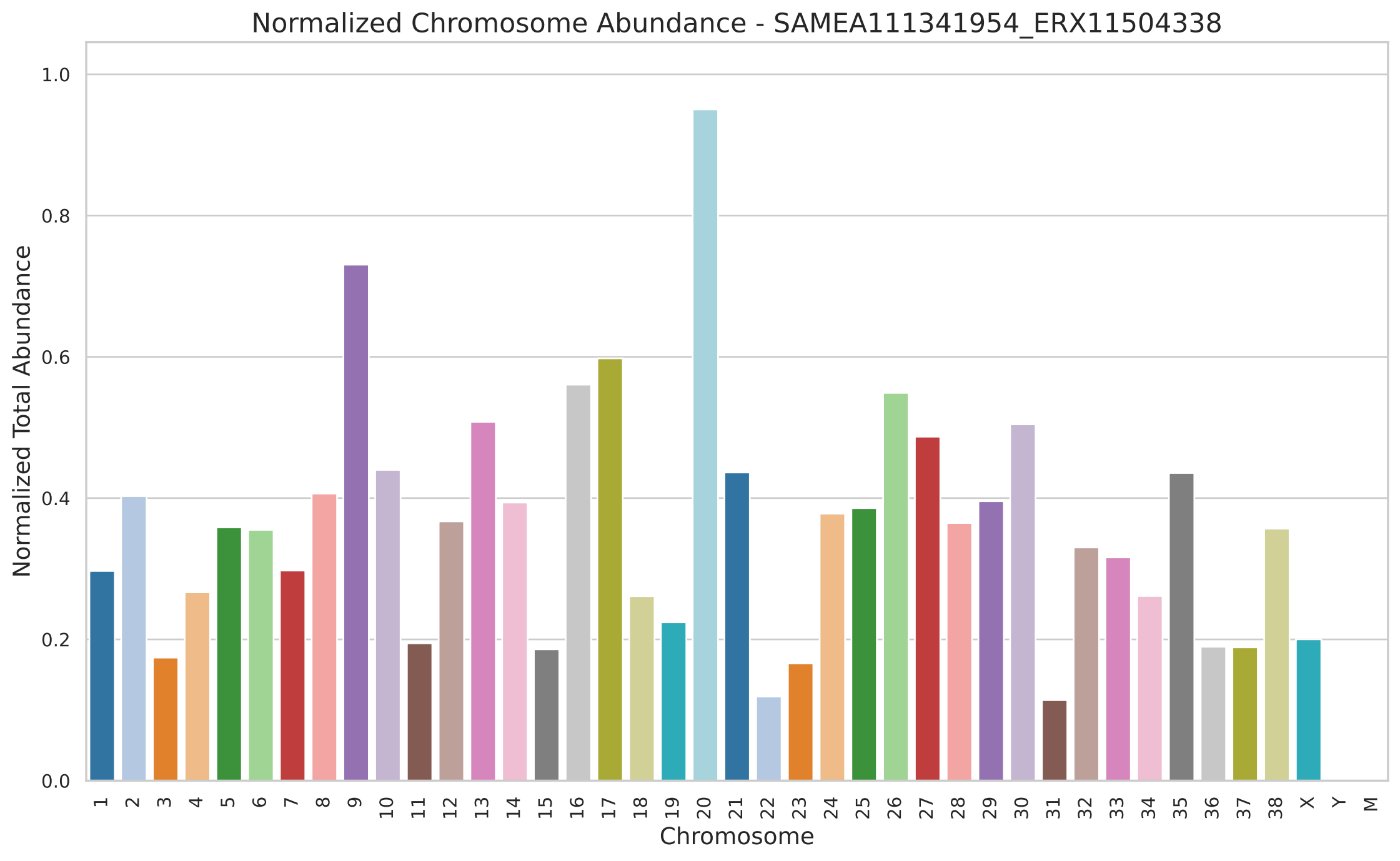

Normalized Chromosome Abundance - SAMEA111341976_ERX11504404
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

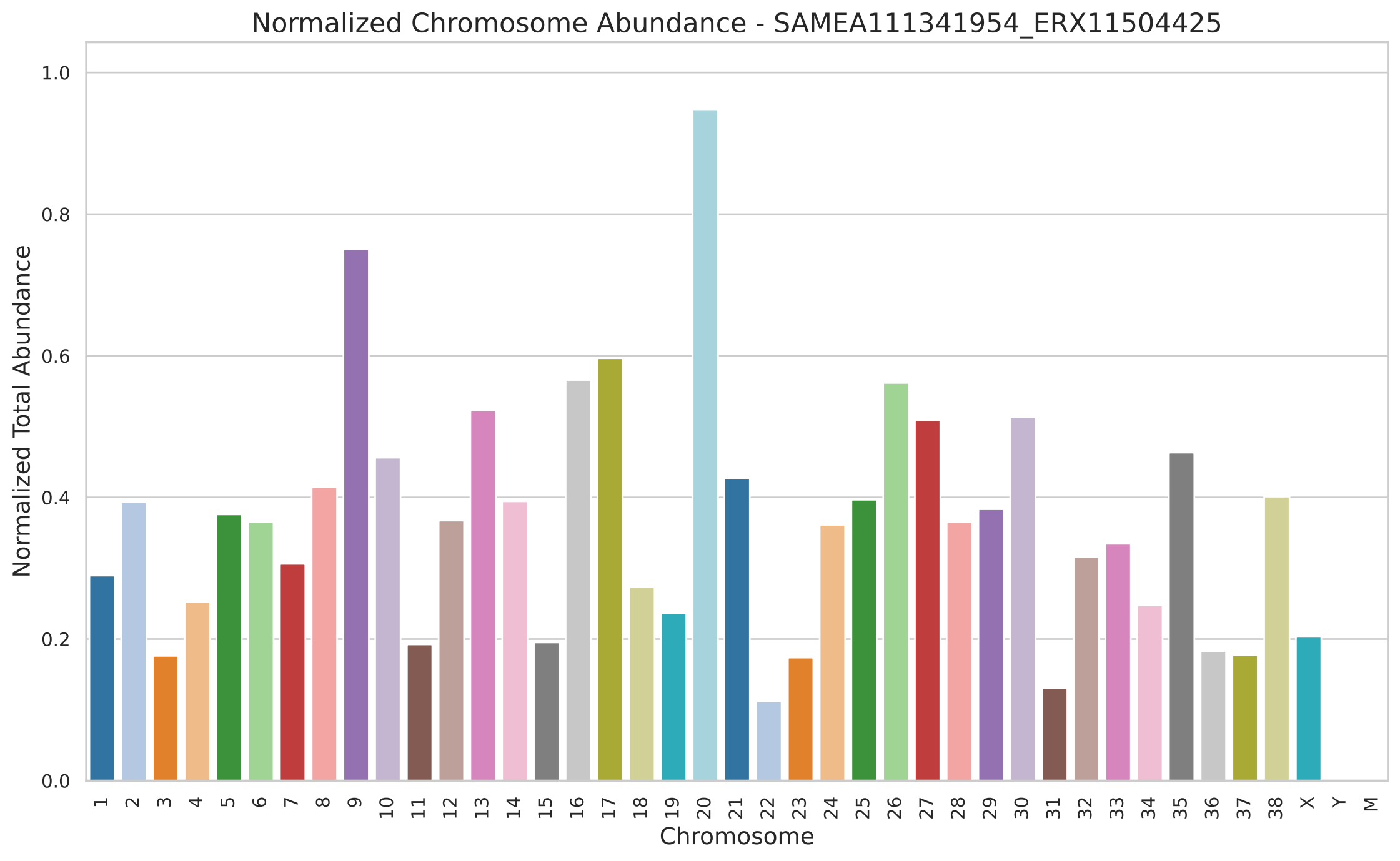

Normalized Chromosome Abundance - SAMEA111341950_ERX11504221
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

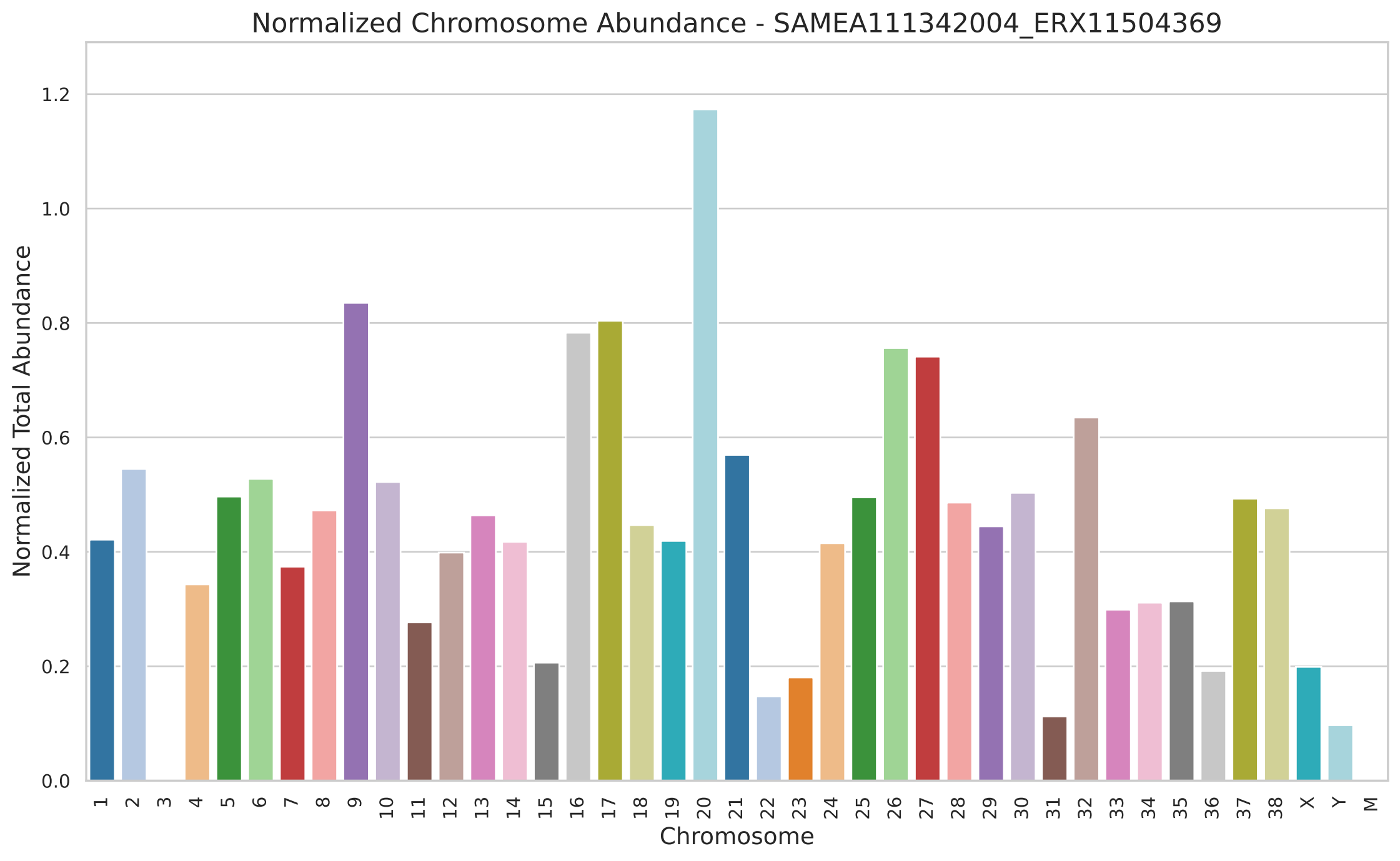

Normalized Chromosome Abundance - SAMEA111341967_ERX11504397
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

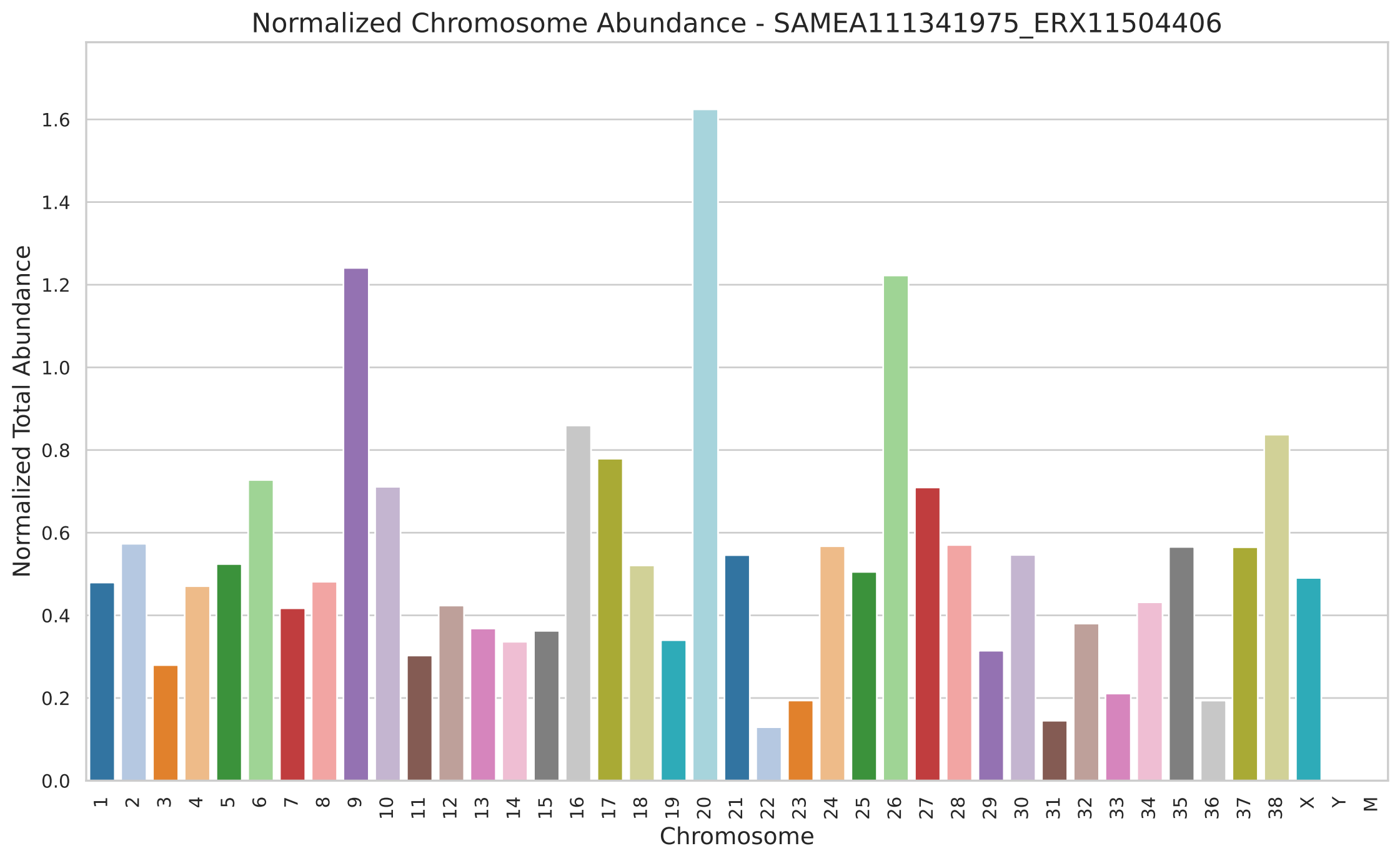

Normalized Chromosome Abundance - SAMEA111341984_ERX11504408
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
0.4
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

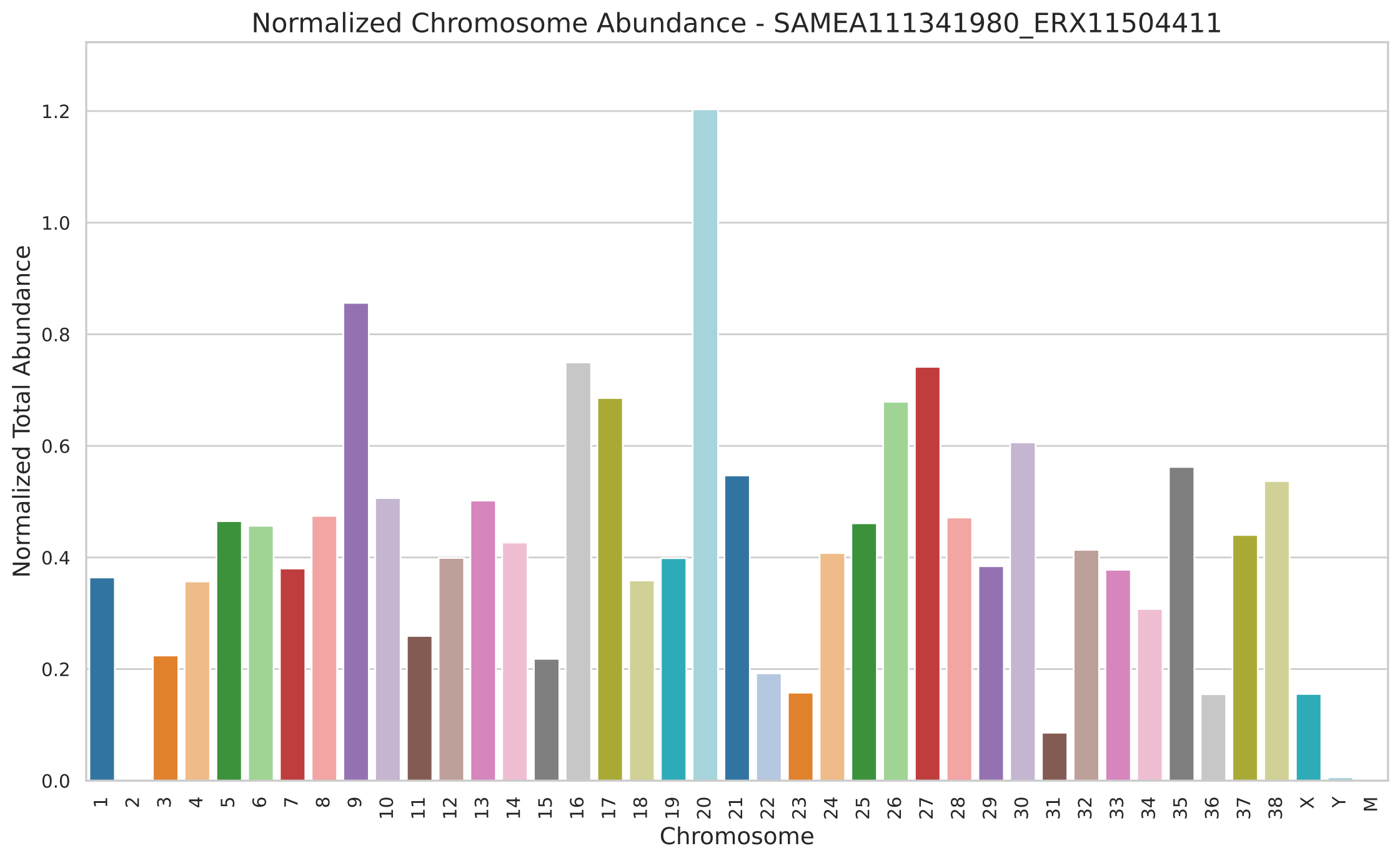

Normalized Chromosome Abundance - SAMN14426530_SRX7971285
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

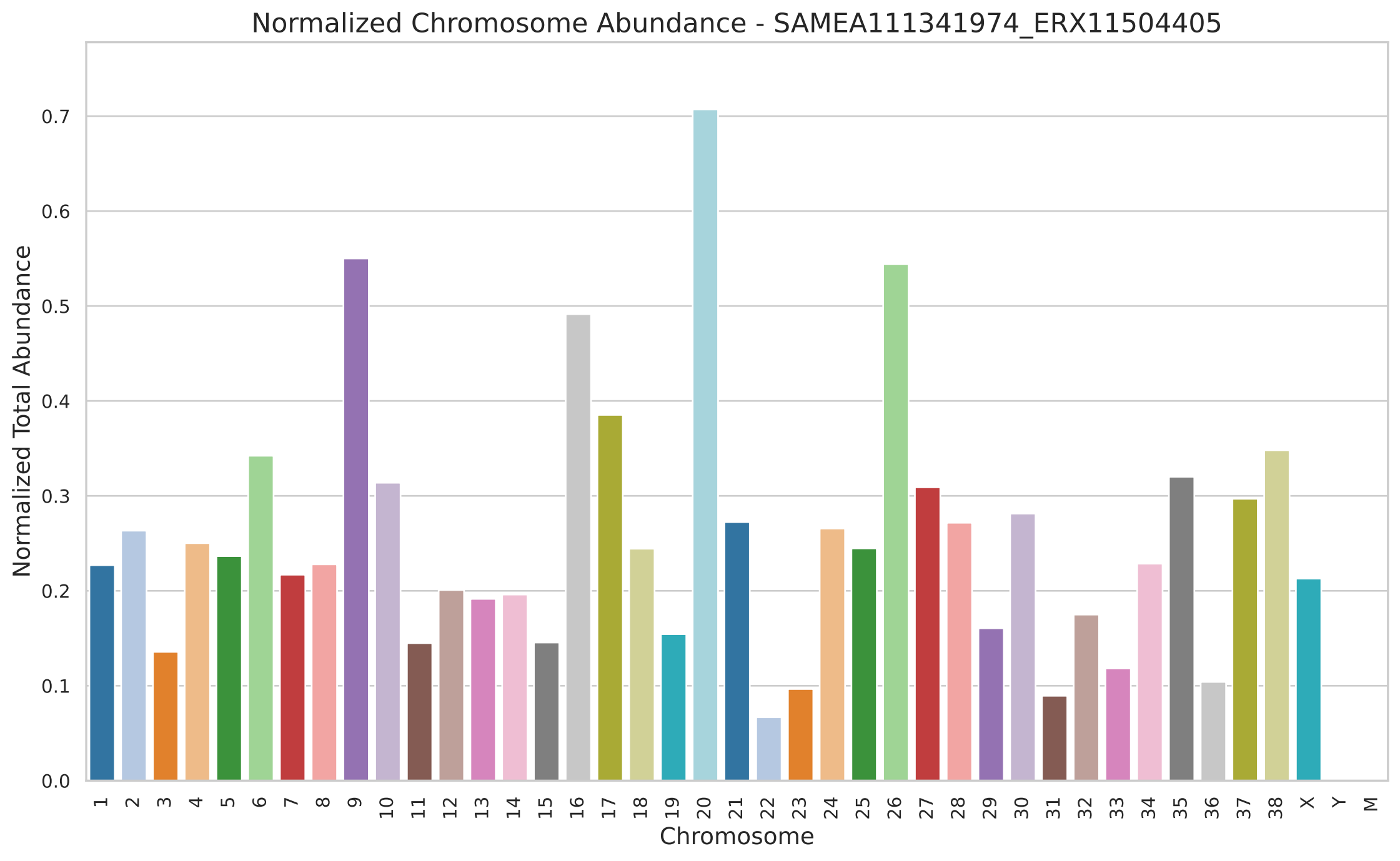

Normalized Chromosome Abundance - SAMEA111341954_ERX11504338
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

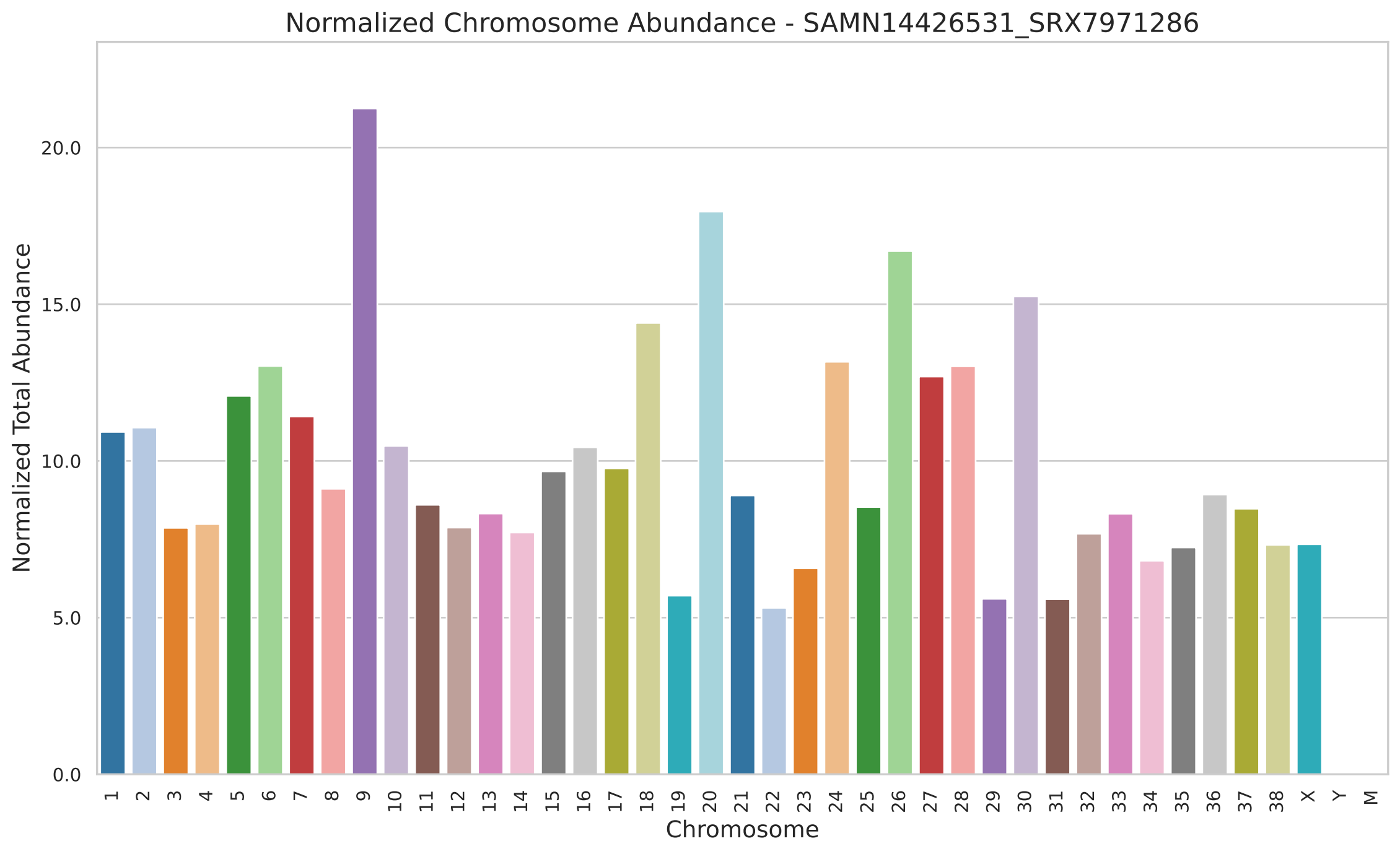

Normalized Chromosome Abundance - SAMEA111341954_ERX11504425
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

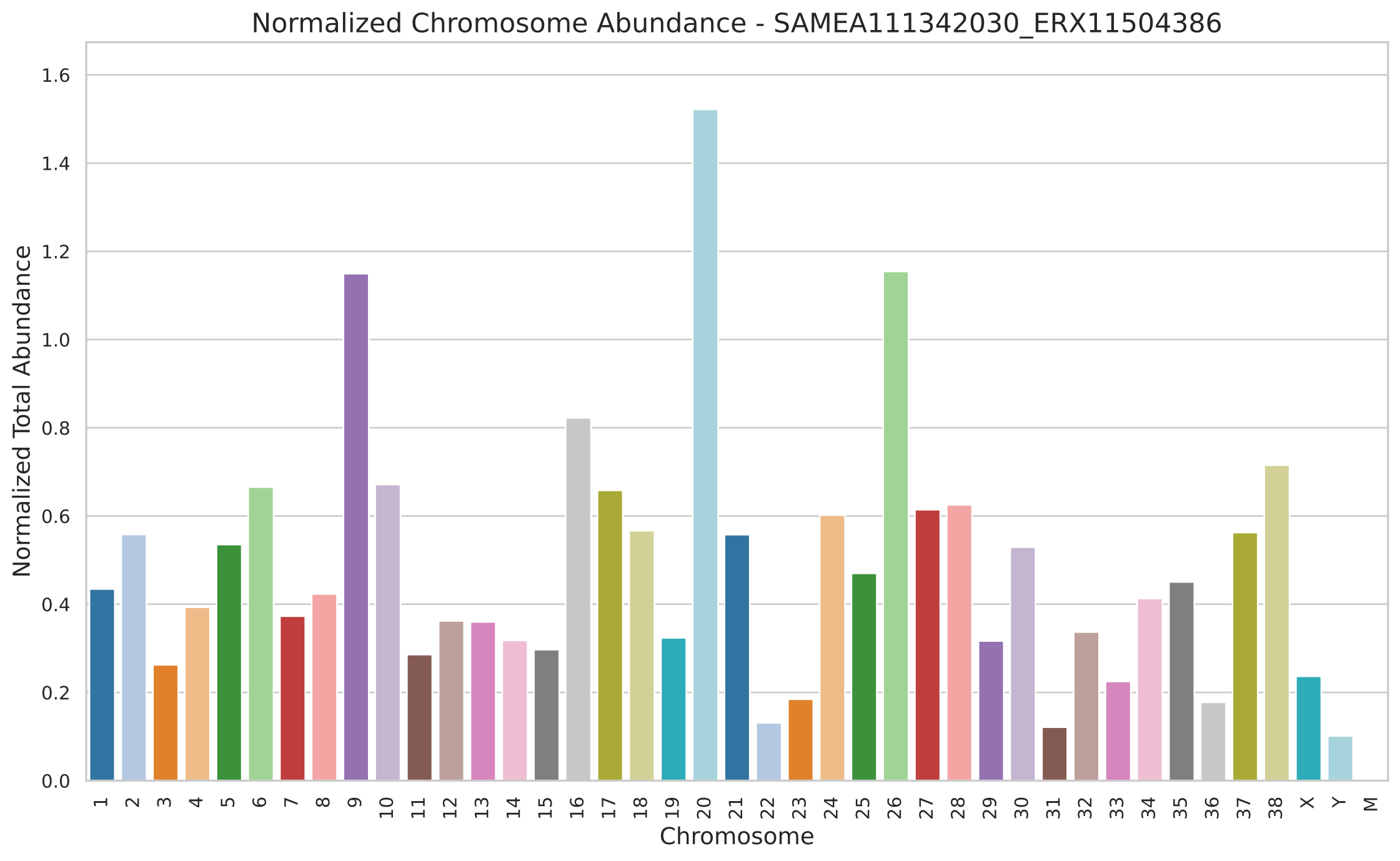

Normalized Chromosome Abundance - SAMEA111342004_ERX11504369
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

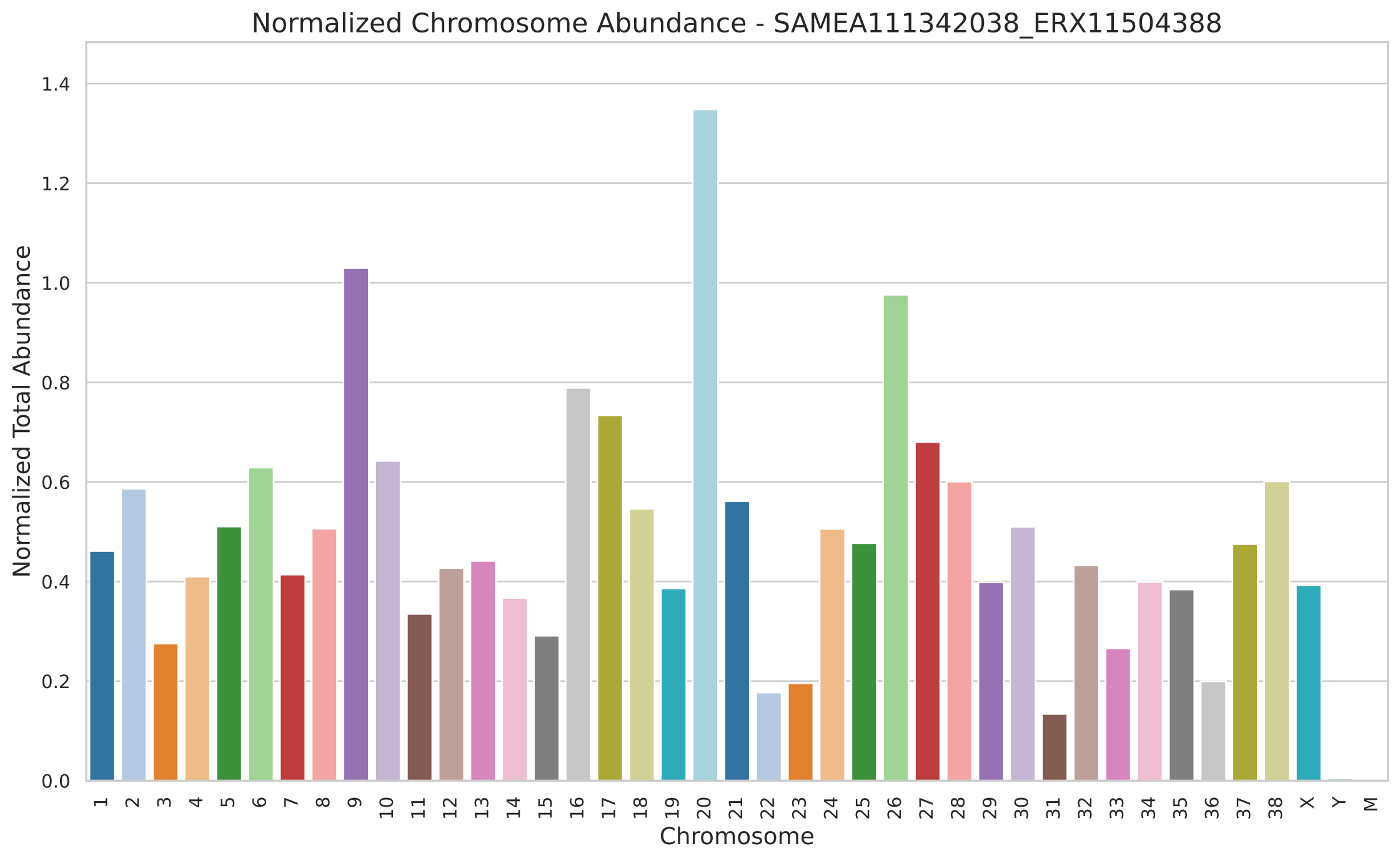

Normalized Chromosome Abundance - SAMEA111341975_ERX11504406
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

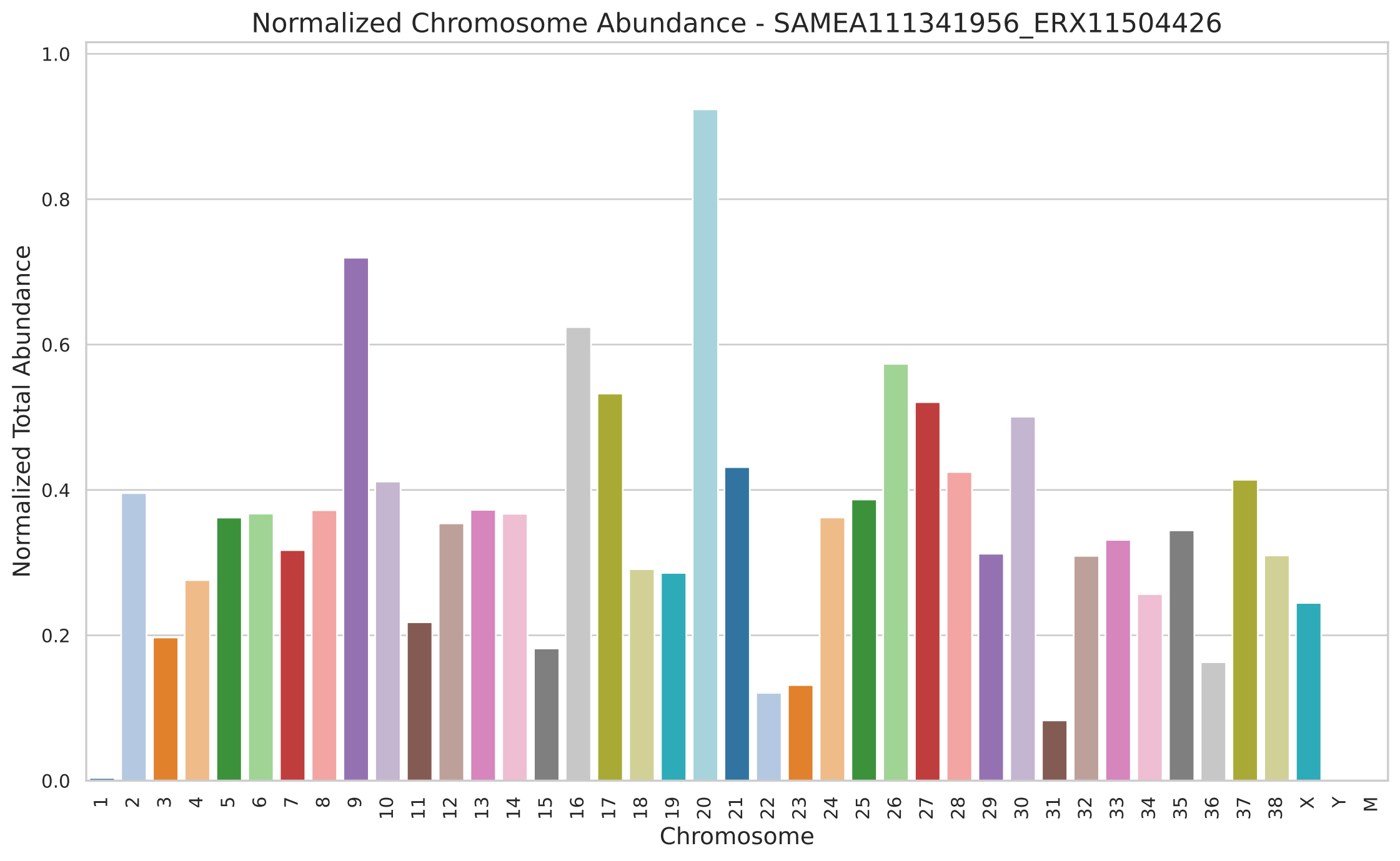

Normalized Chromosome Abundance - SAMEA111341980_ERX11504411
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

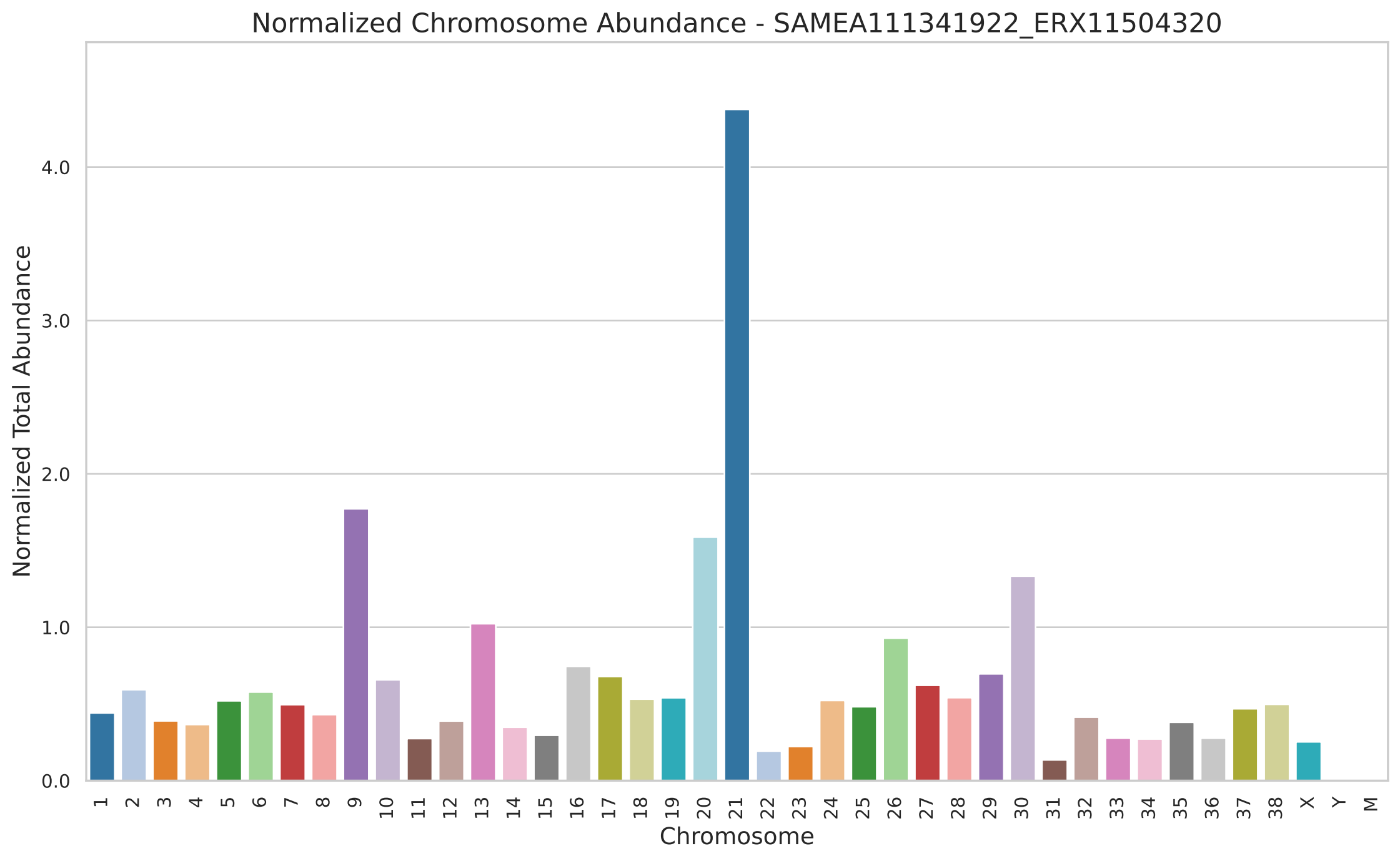

Normalized Chromosome Abundance - SAMEA111341974_ERX11504405
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

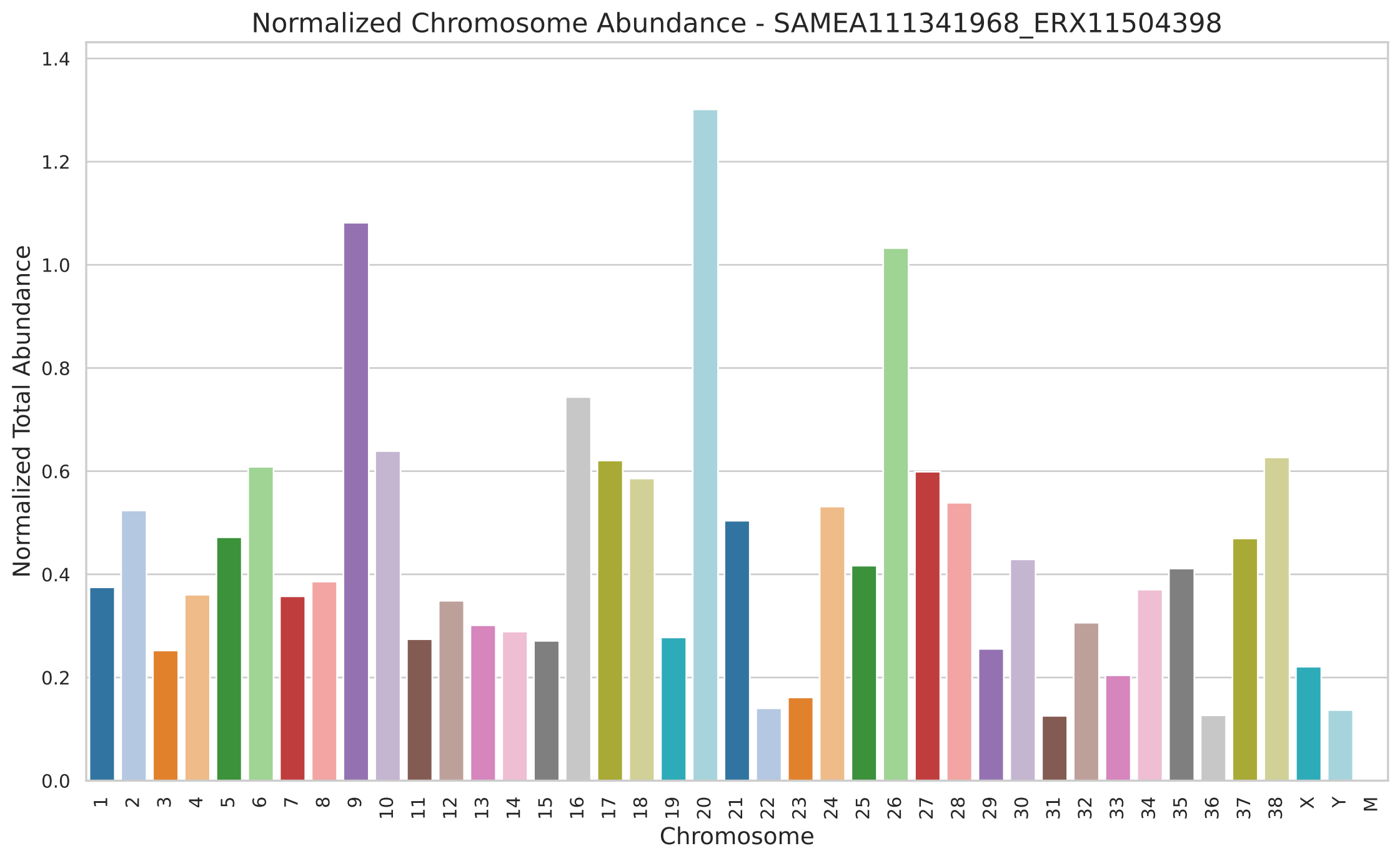

Normalized Chromosome Abundance - SAMN14426531_SRX7971286
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

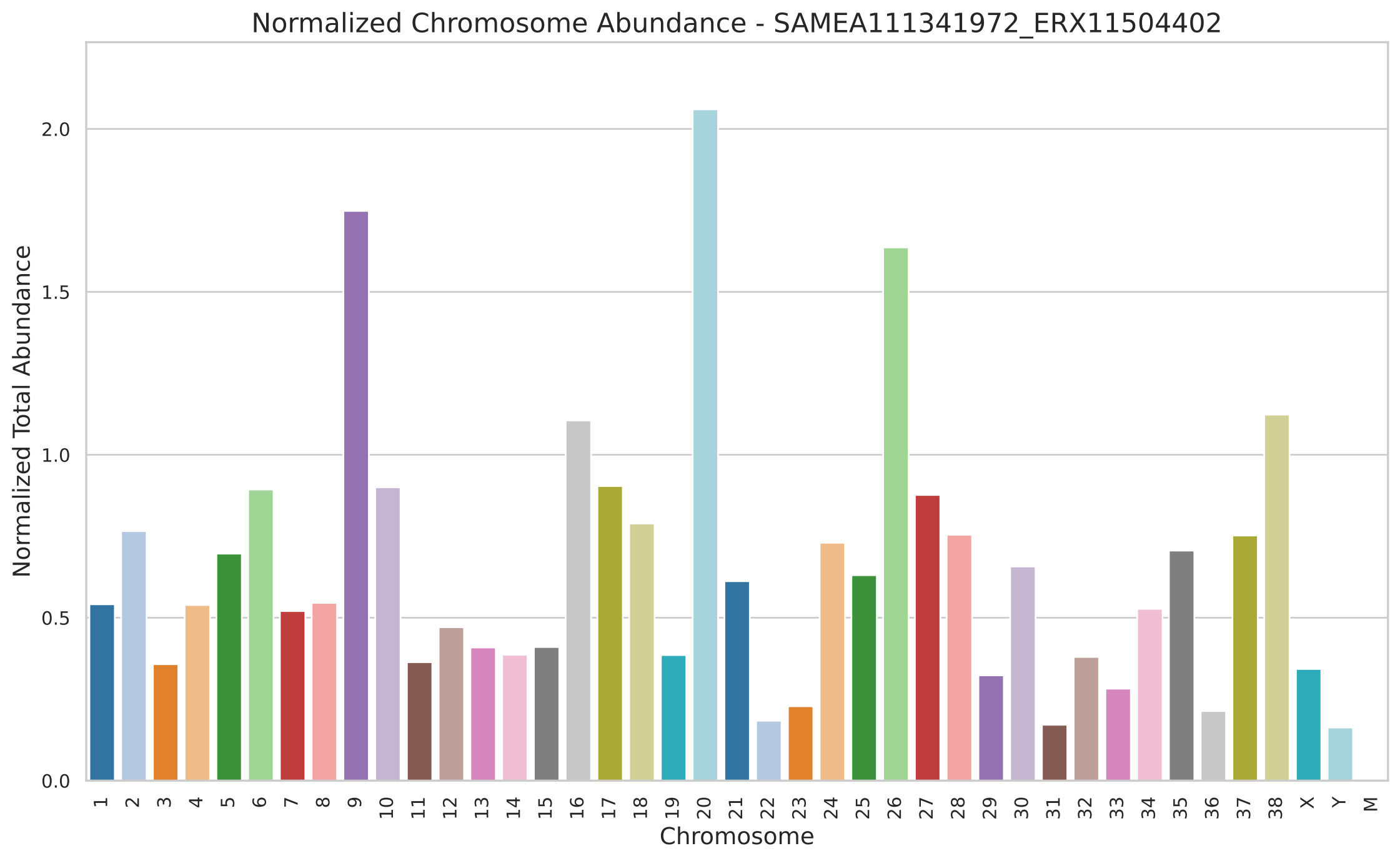

Normalized Chromosome Abundance - SAMEA111342030_ERX11504386
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

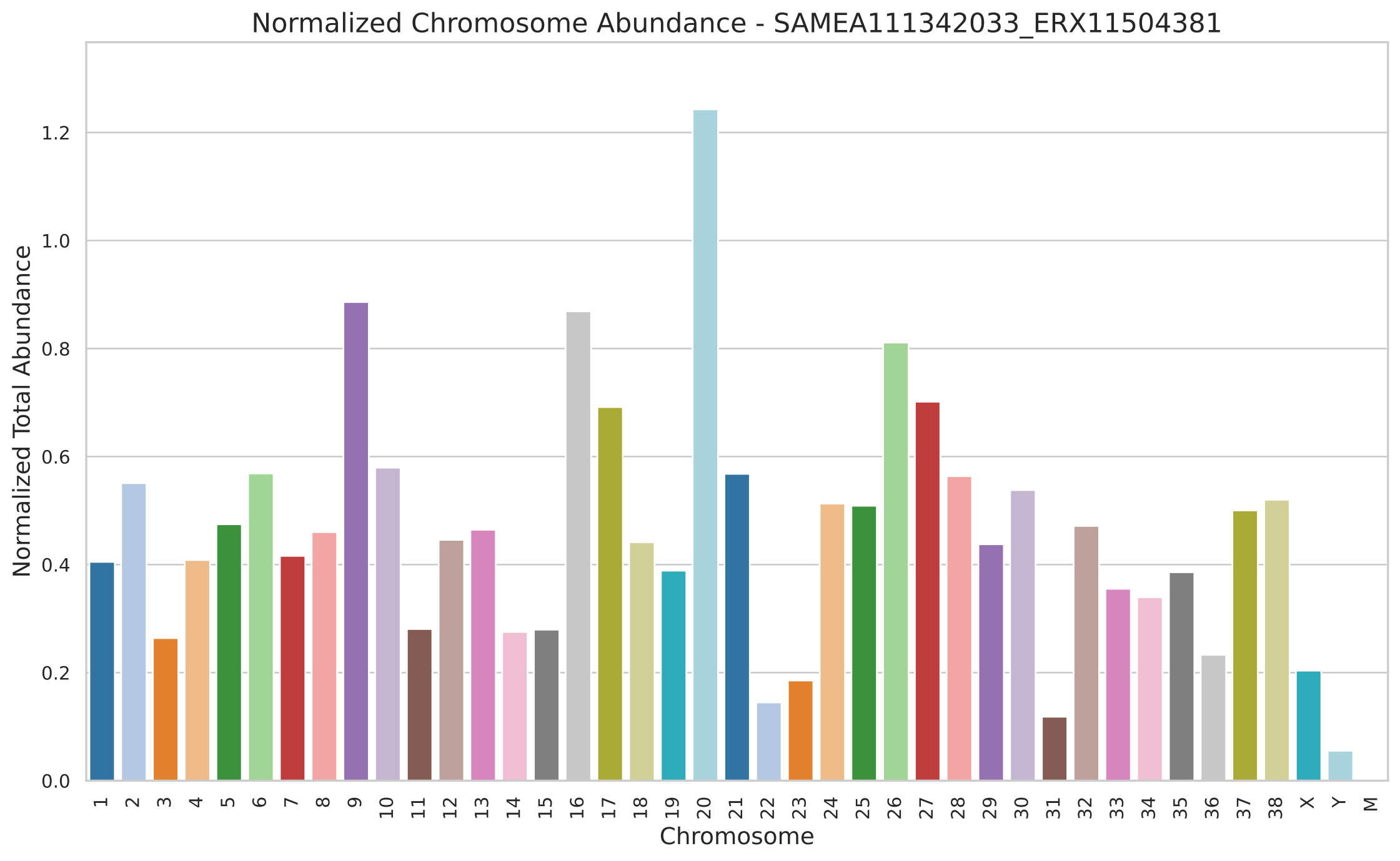

Normalized Chromosome Abundance - SAMEA111342038_ERX11504388
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

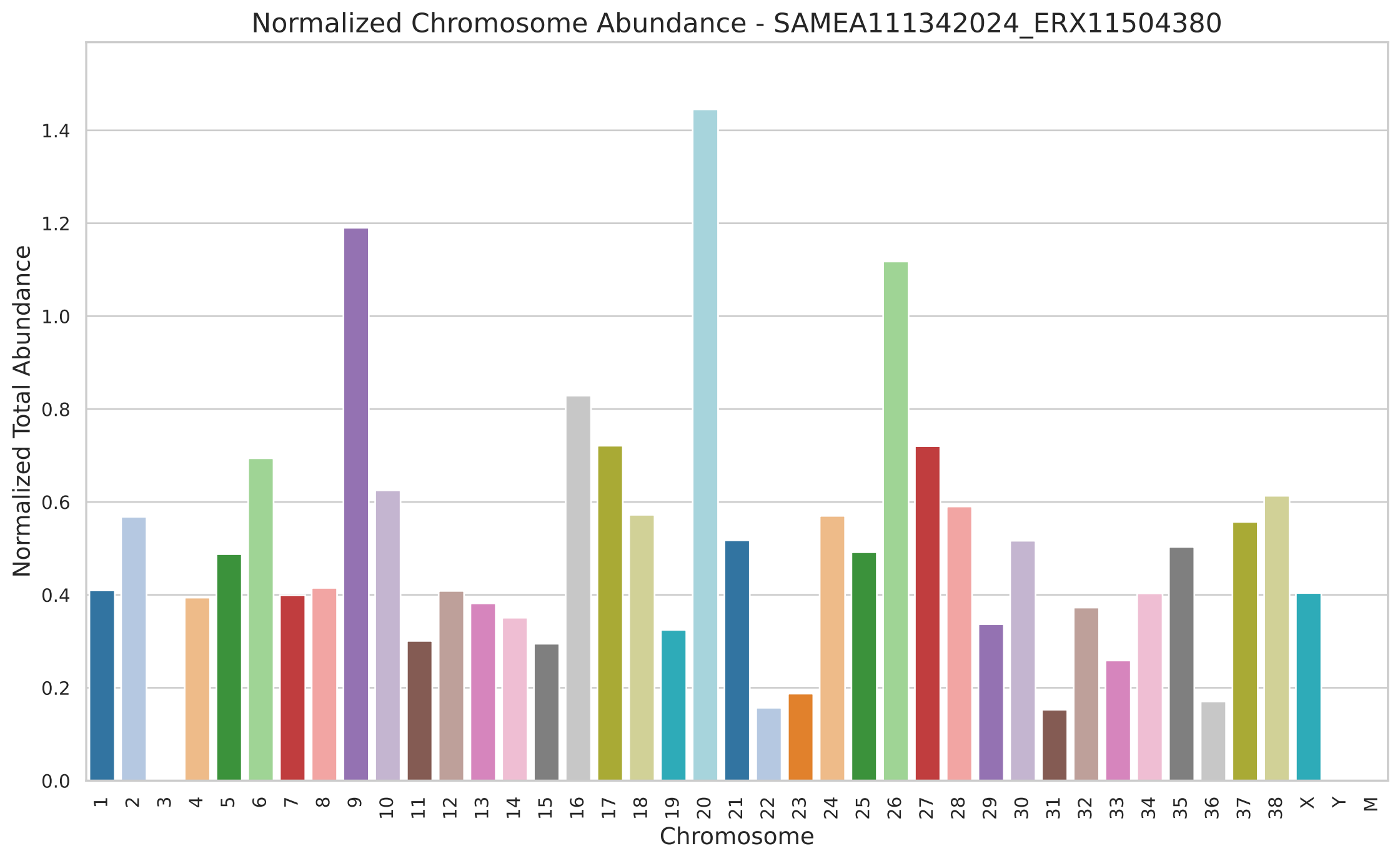

Normalized Chromosome Abundance - SAMEA111341956_ERX11504426
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

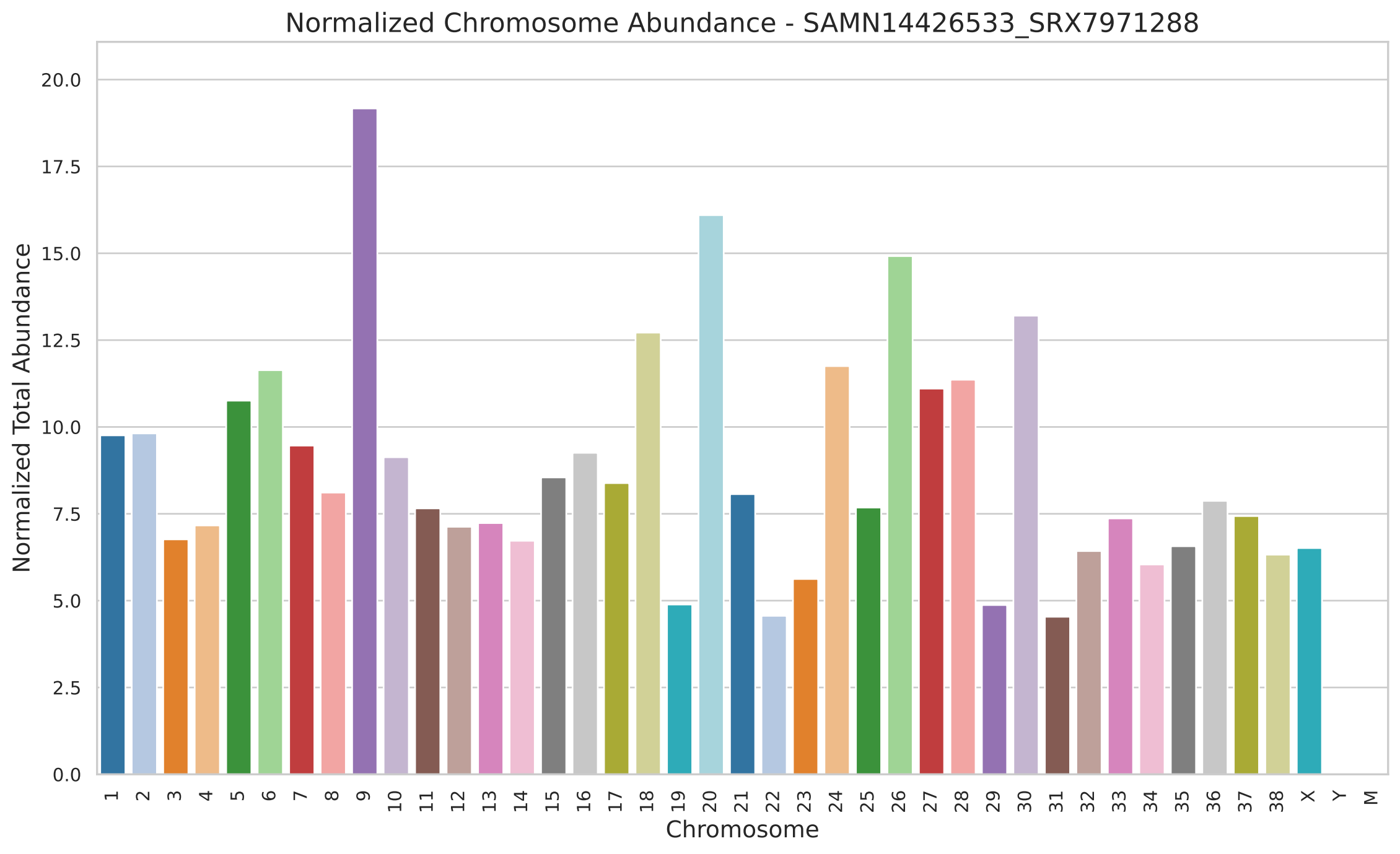

Normalized Chromosome Abundance - SAMEA111341922_ERX11504320
Normalized Total Abundance
0.0
1.0
2.0
3.0
4.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

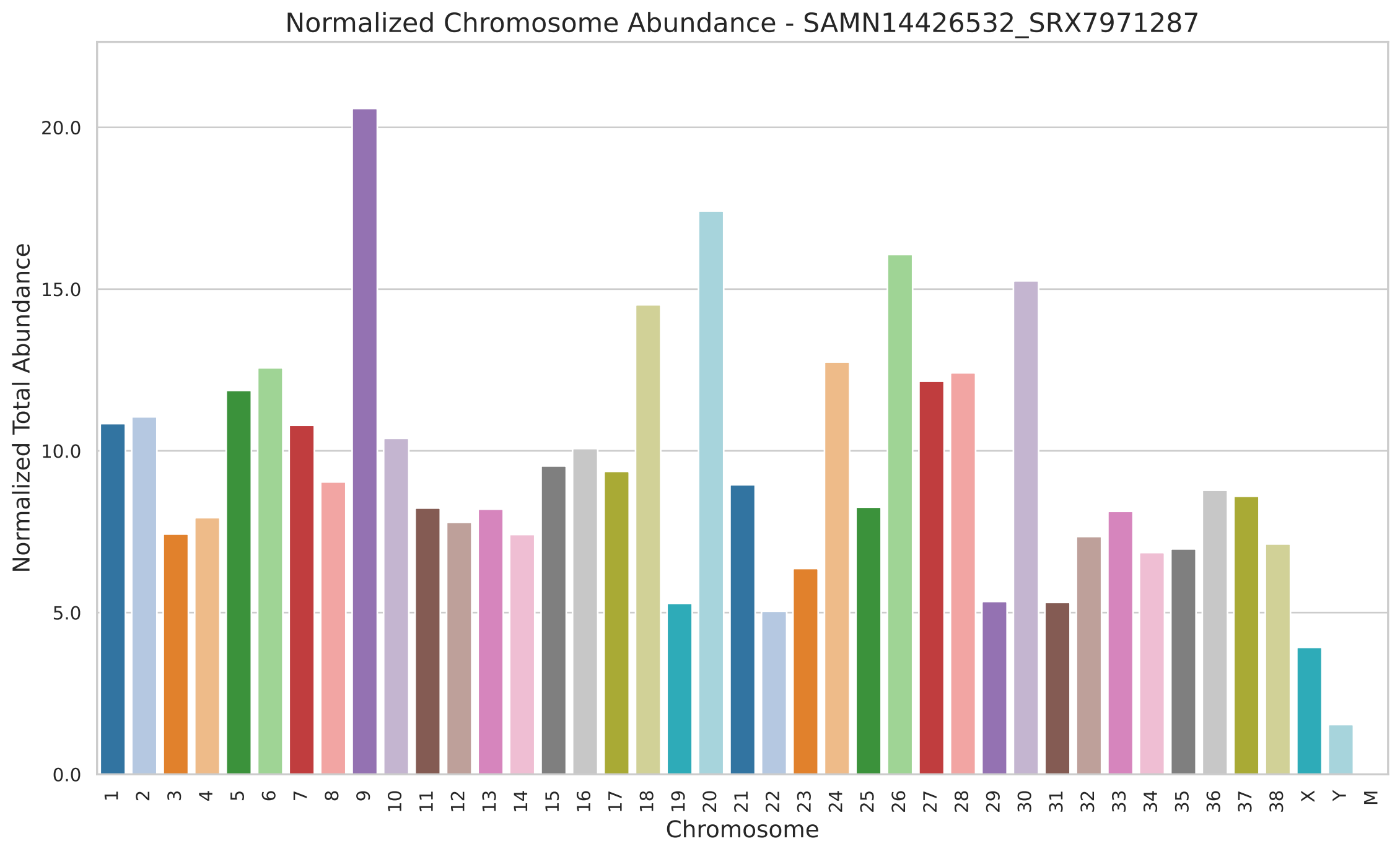

Normalized Chromosome Abundance - SAMEA111341968_ERX11504398
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

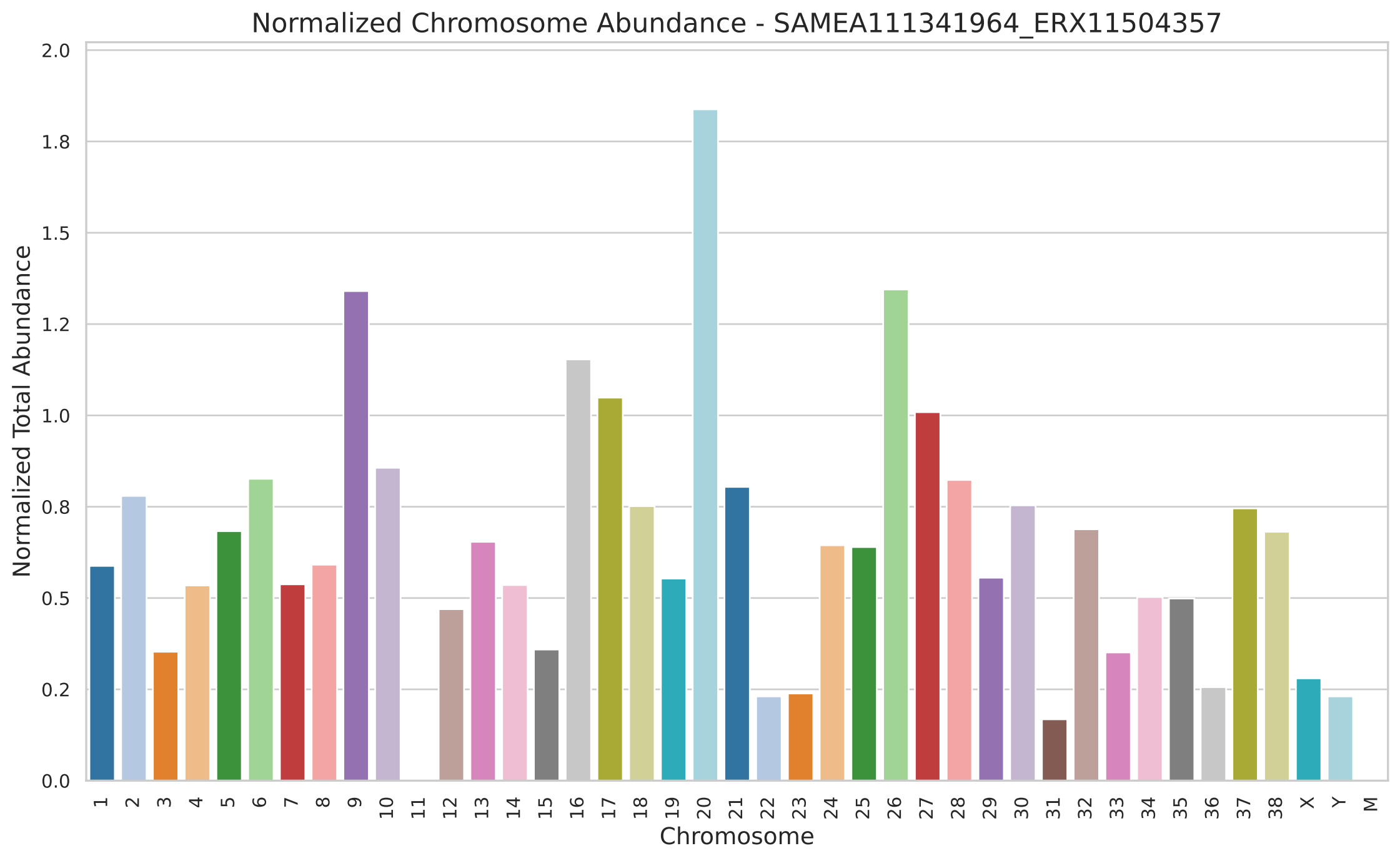

Normalized Chromosome Abundance - SAMEA111341972_ERX11504402
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

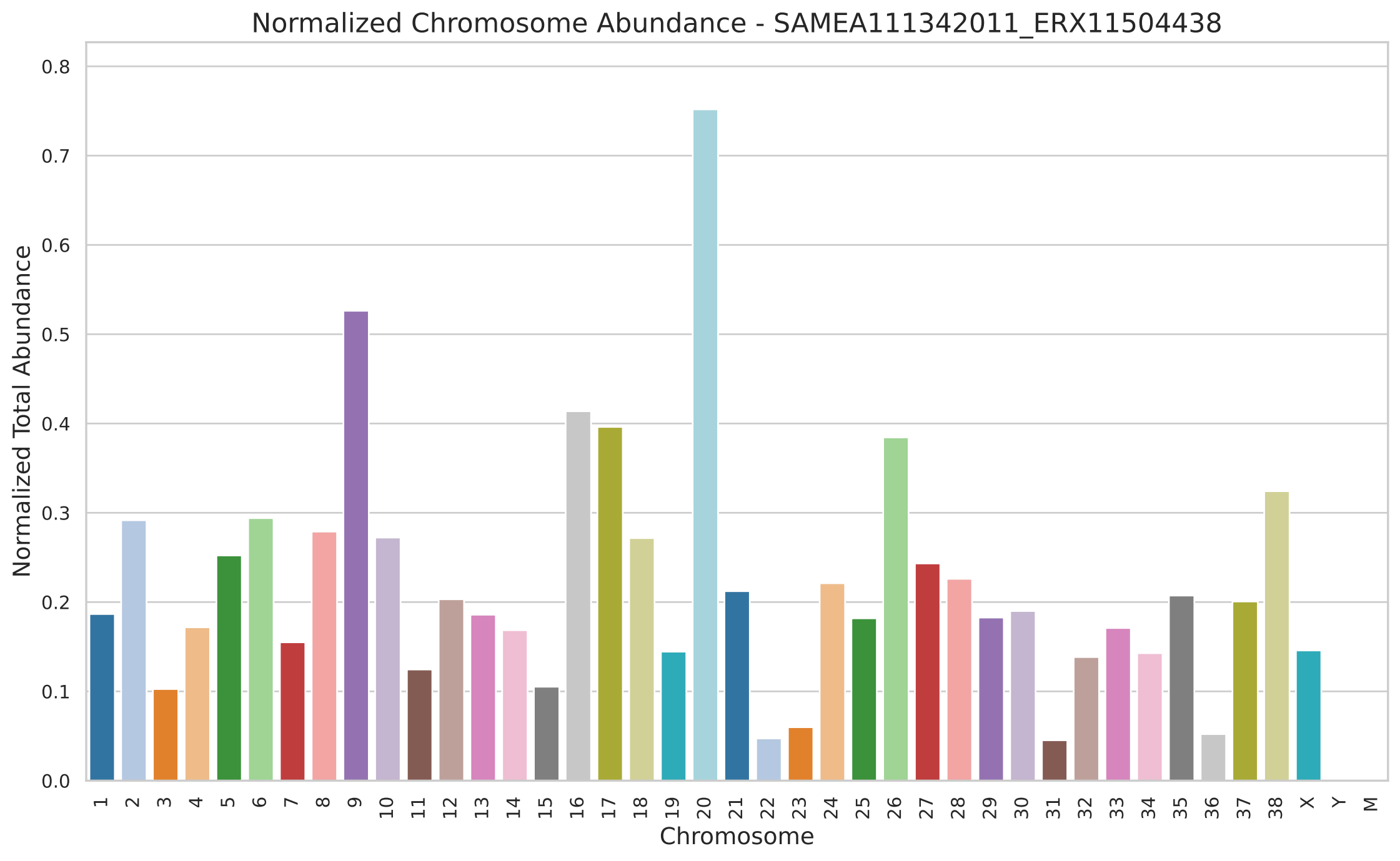

Normalized Chromosome Abundance - SAMEA111342033_ERX11504381
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

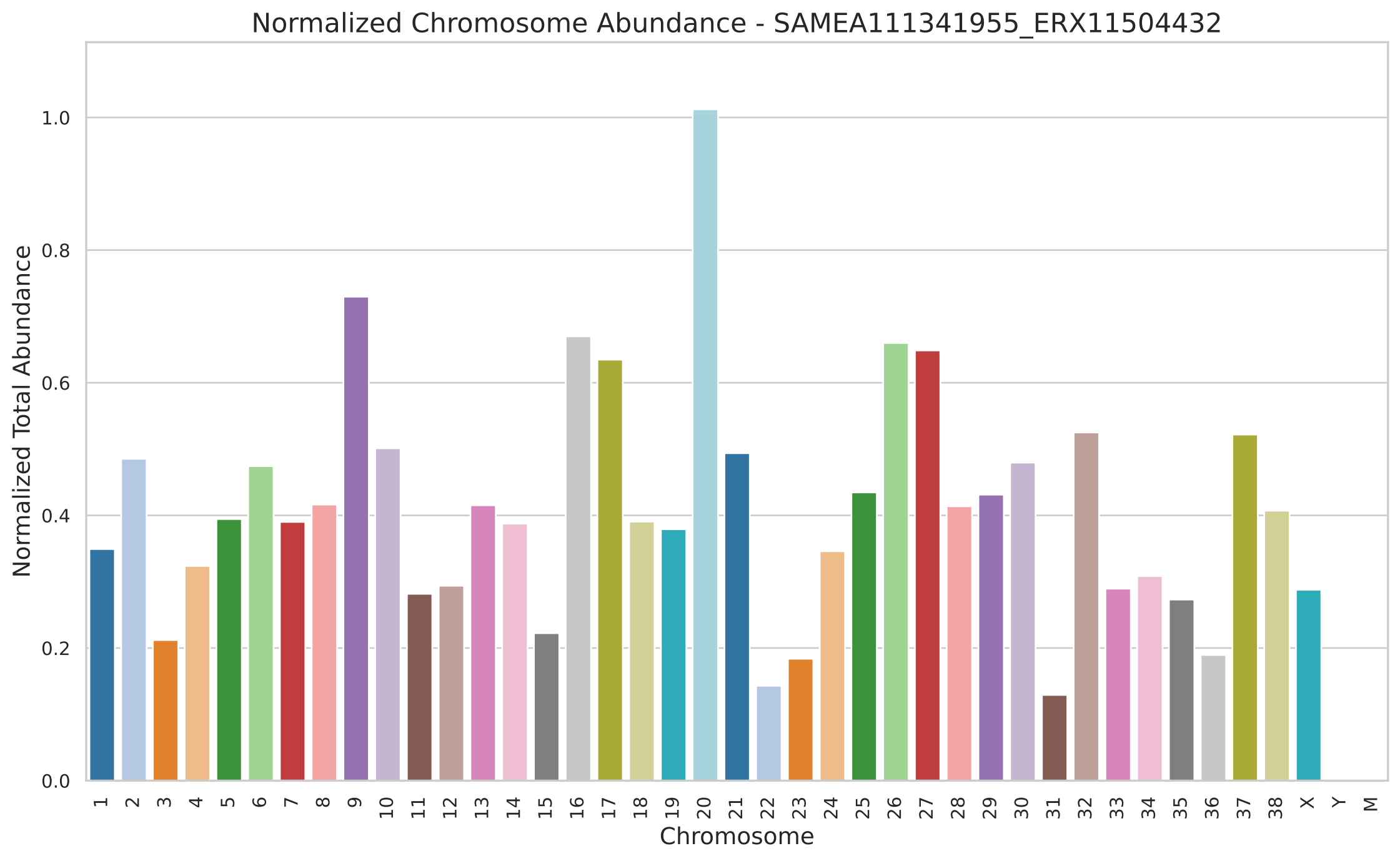

Normalized Chromosome Abundance - SAMEA111342024_ERX11504380
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

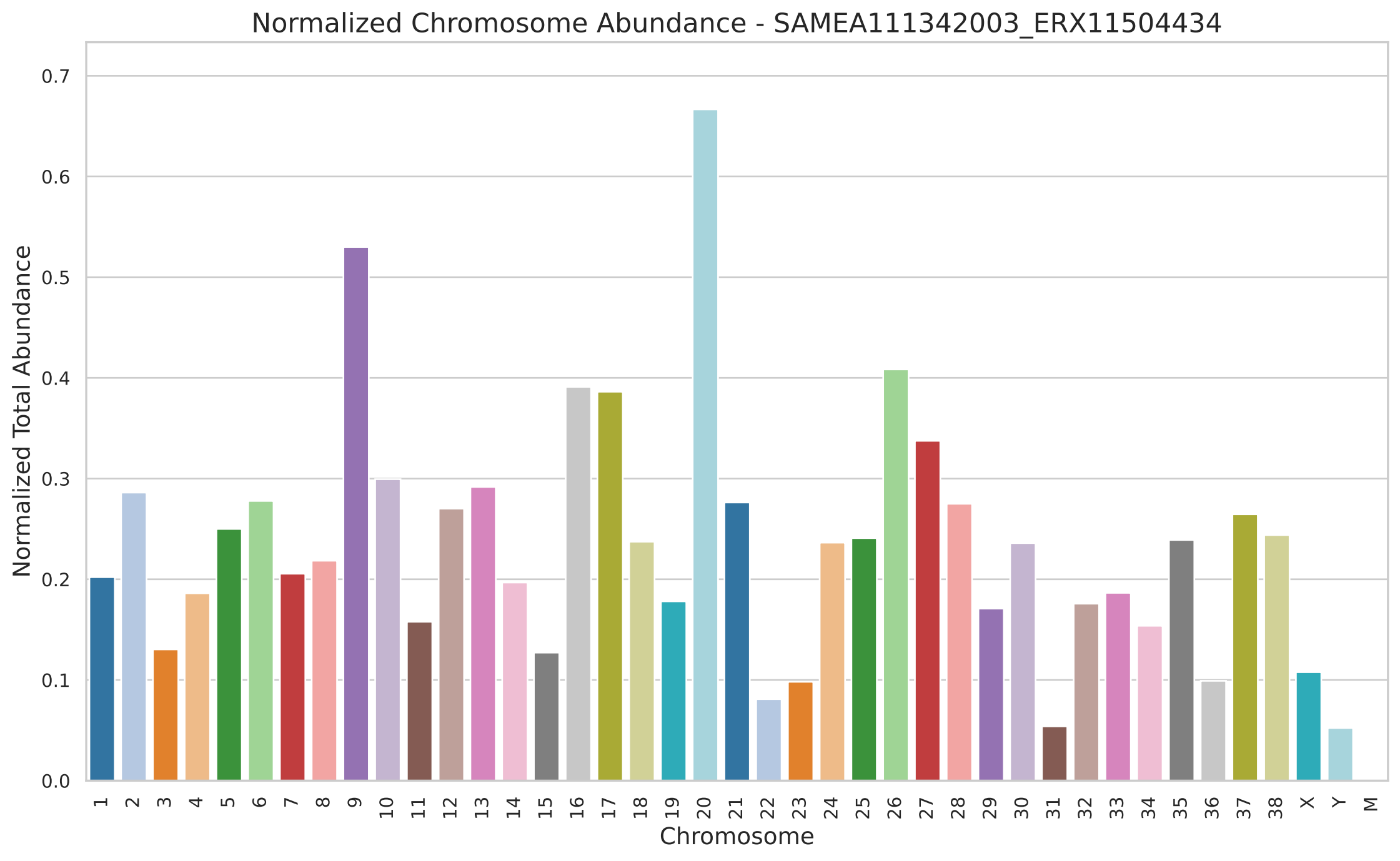

Normalized Chromosome Abundance - SAMN14426533_SRX7971288
Normalized Total Abundance
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5
20.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

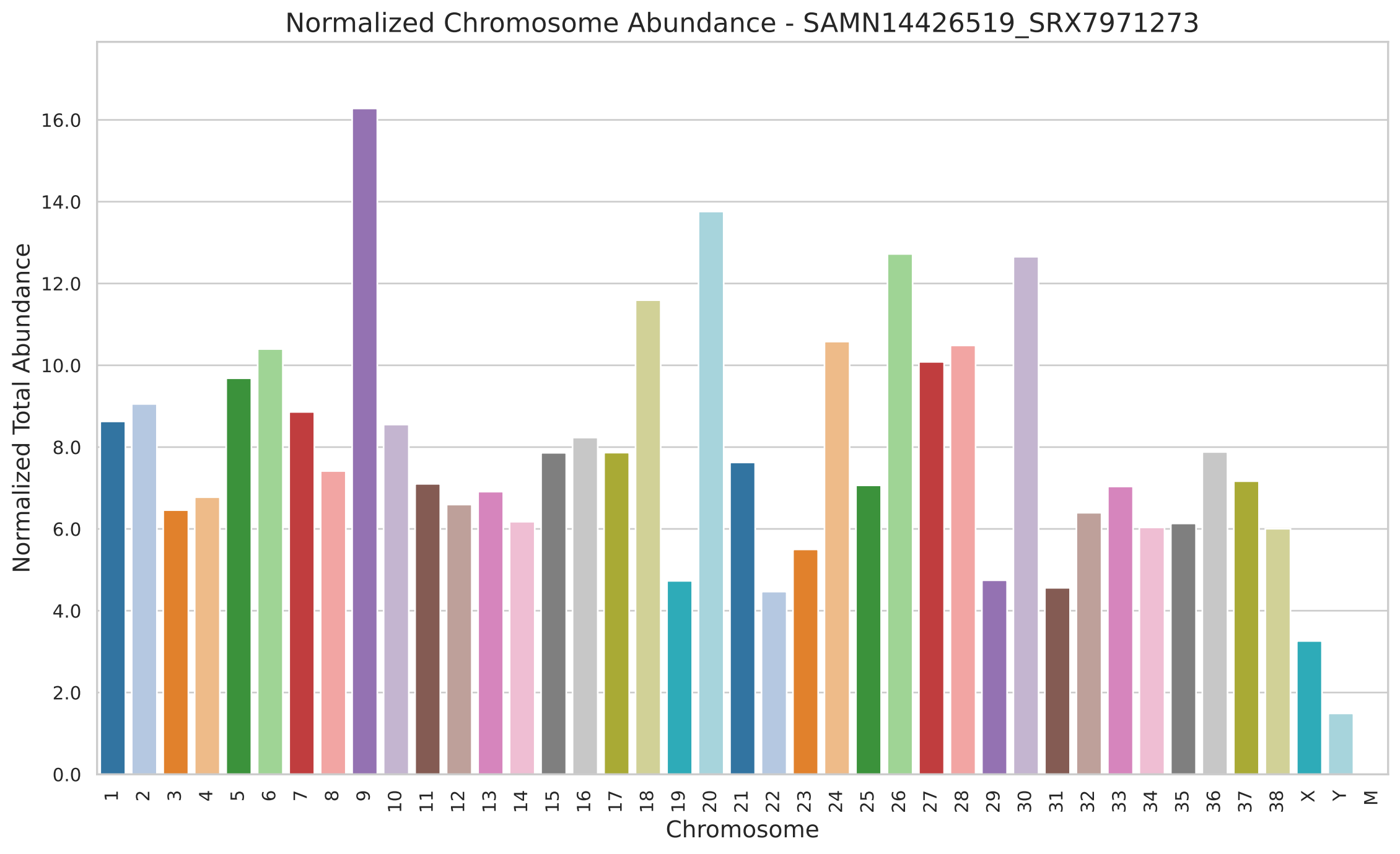

Normalized Chromosome Abundance - SAMN14426532_SRX7971287
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

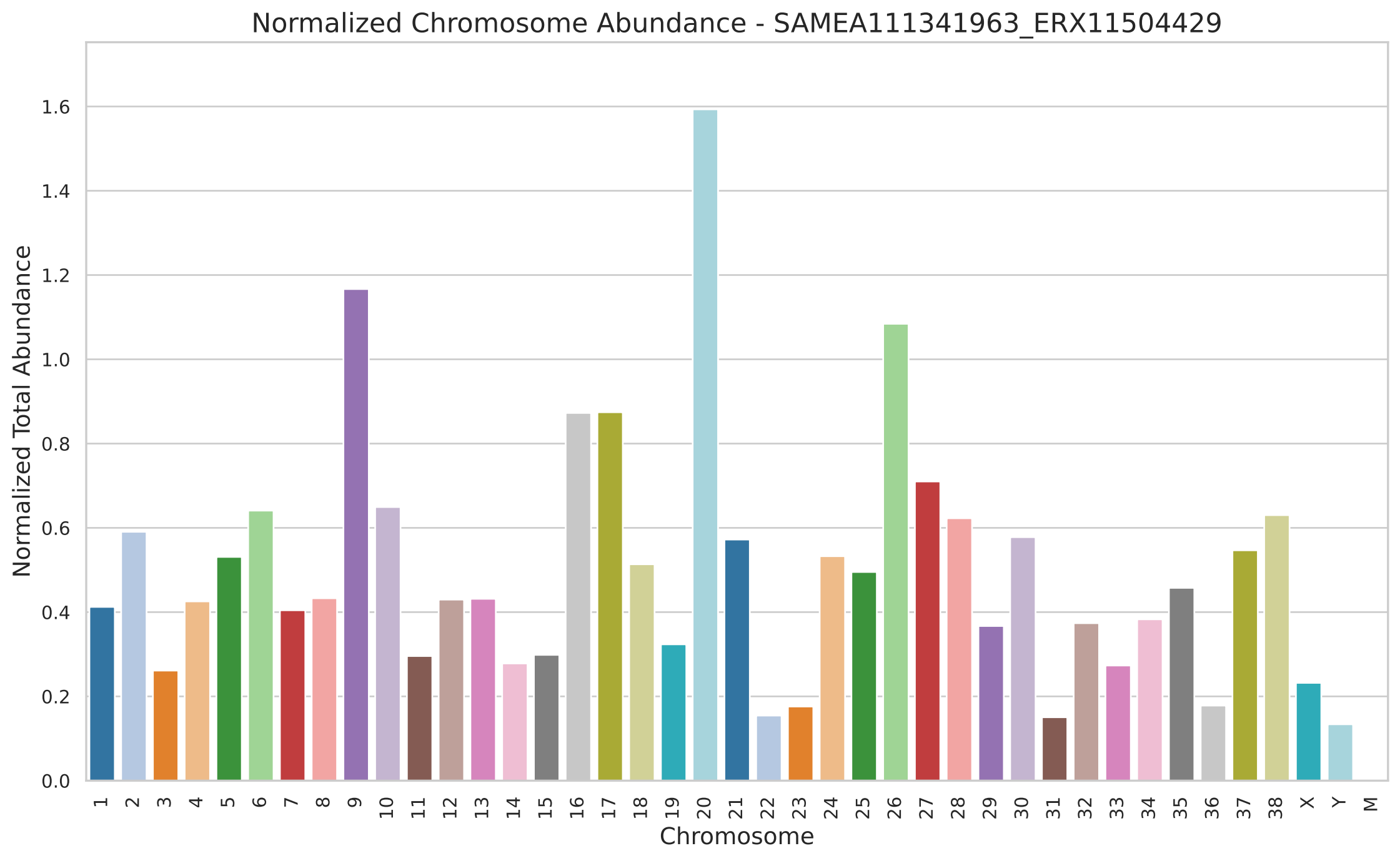

Normalized Chromosome Abundance - SAMEA111341964_ERX11504357
Normalized Total Abundance
2.0
1.8
1.5
1.2
1.0
0.8
0.5
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

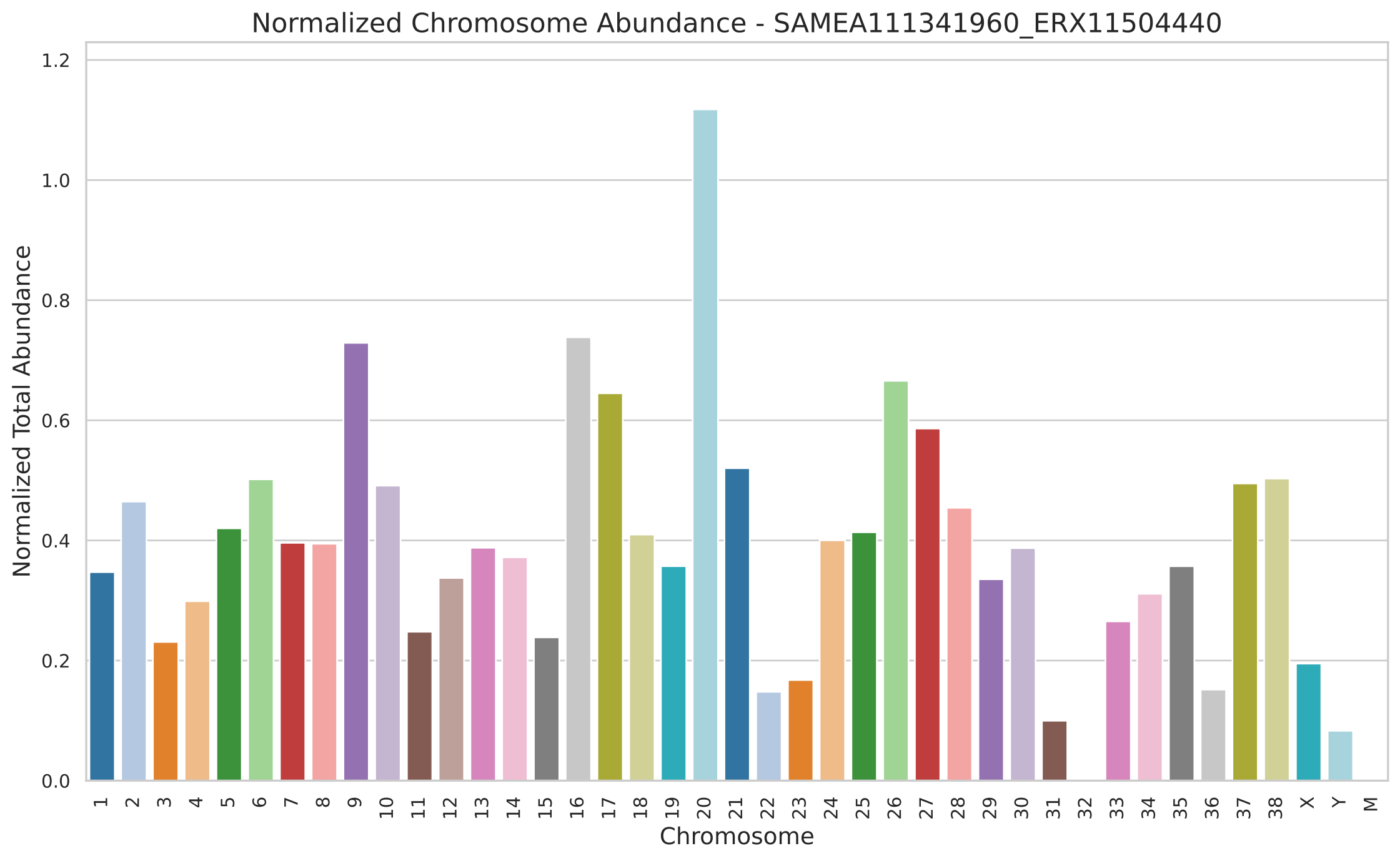

Normalized Chromosome Abundance - SAMEA111342011_ERX11504438
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

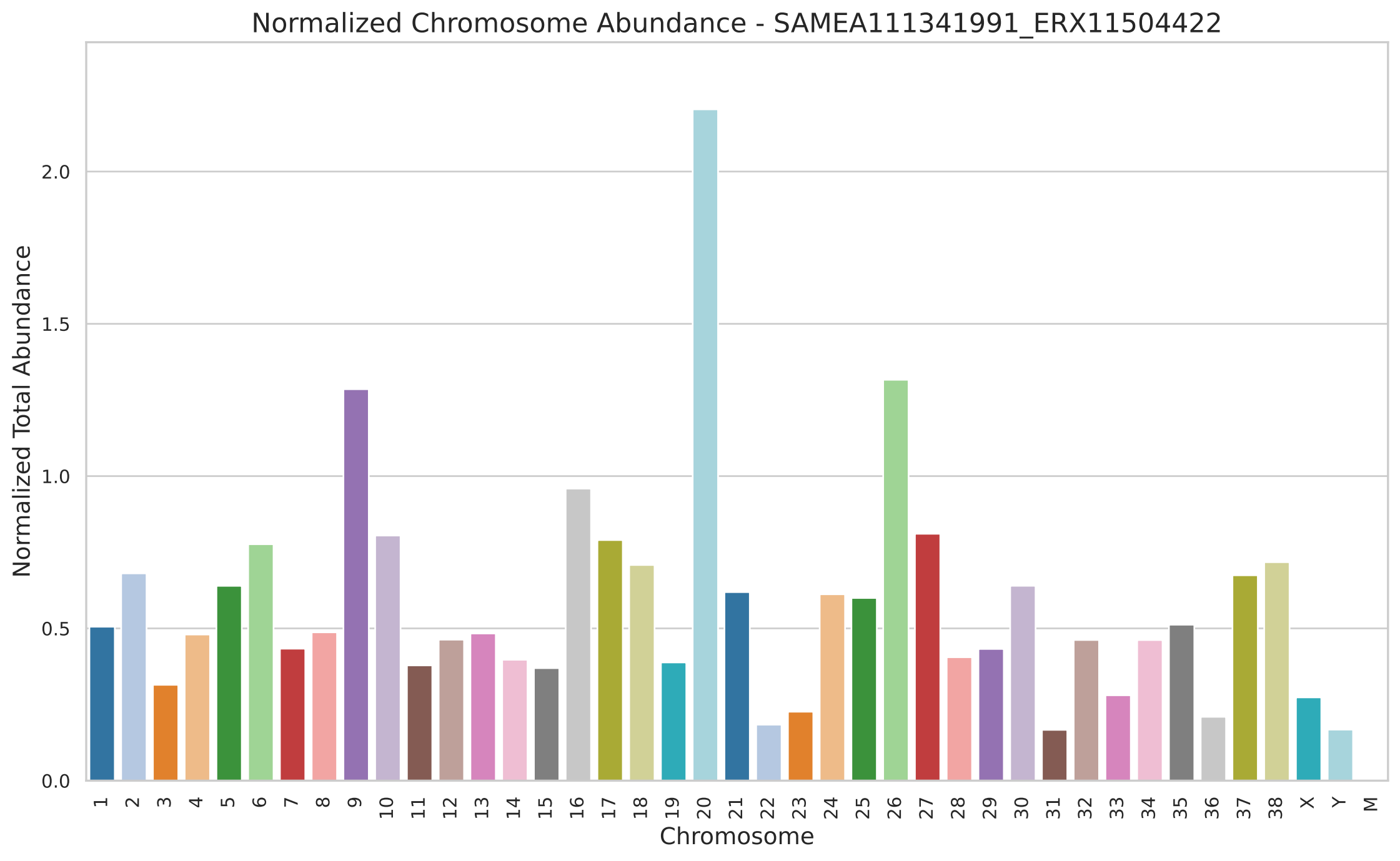

Normalized Chromosome Abundance - SAMEA111341955_ERX11504432
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

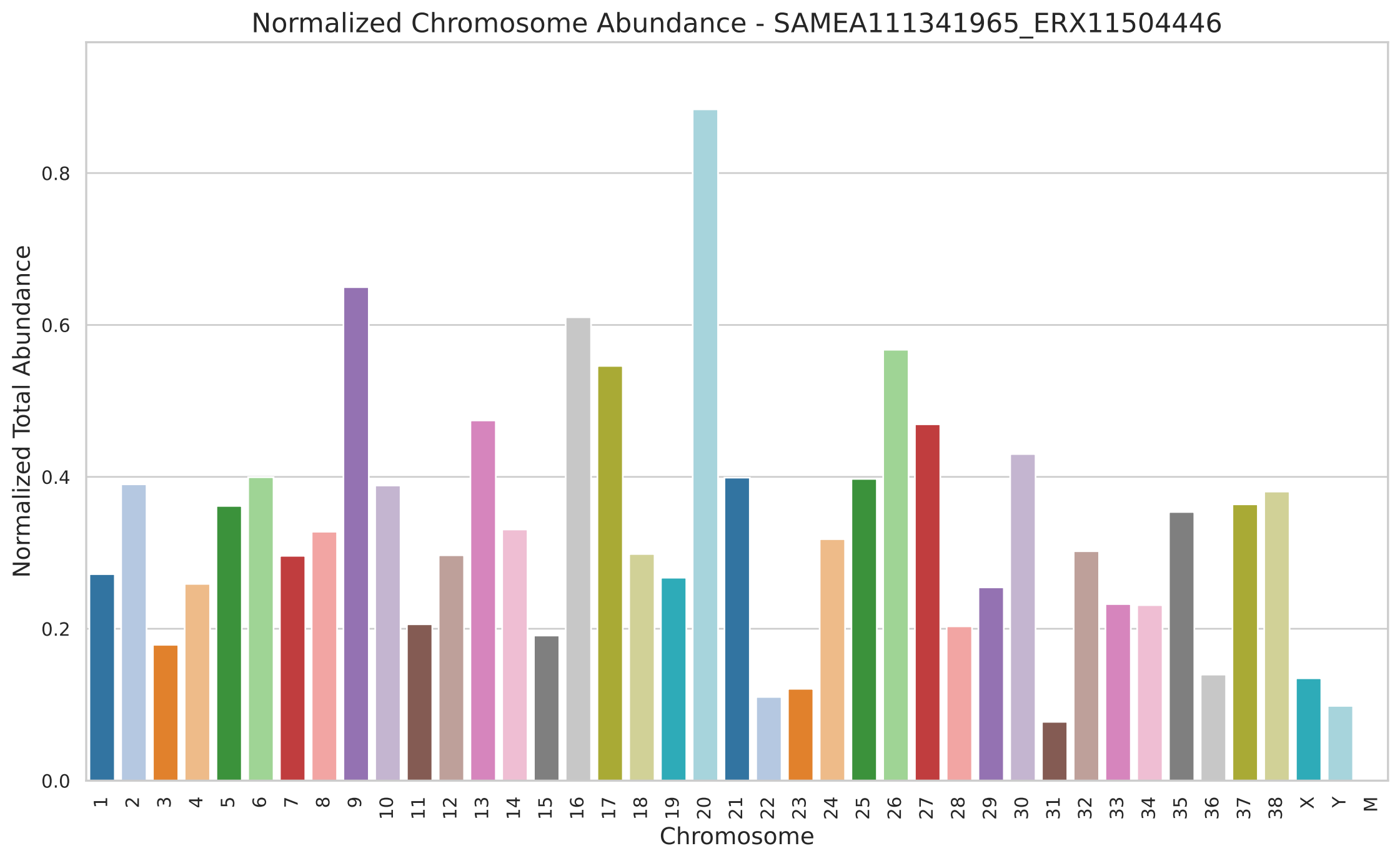

Normalized Chromosome Abundance - SAMEA111342003_ERX11504434
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

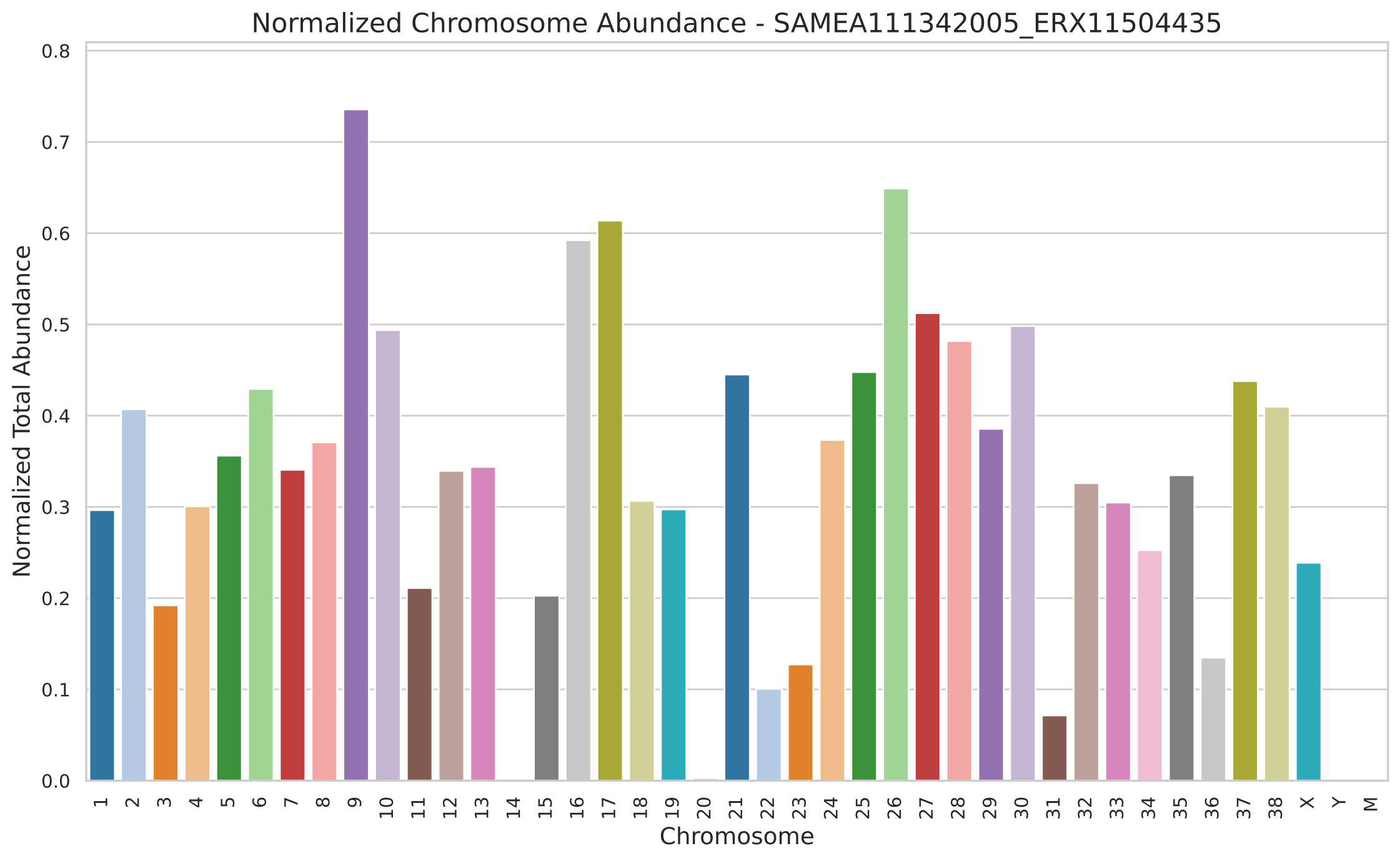

Normalized Chromosome Abundance - SAMN14426519_SRX7971273
Normalized Total Abundance
0.0
2.0
4.0
6.0
8.0
10.0
12.0
14.0
16.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

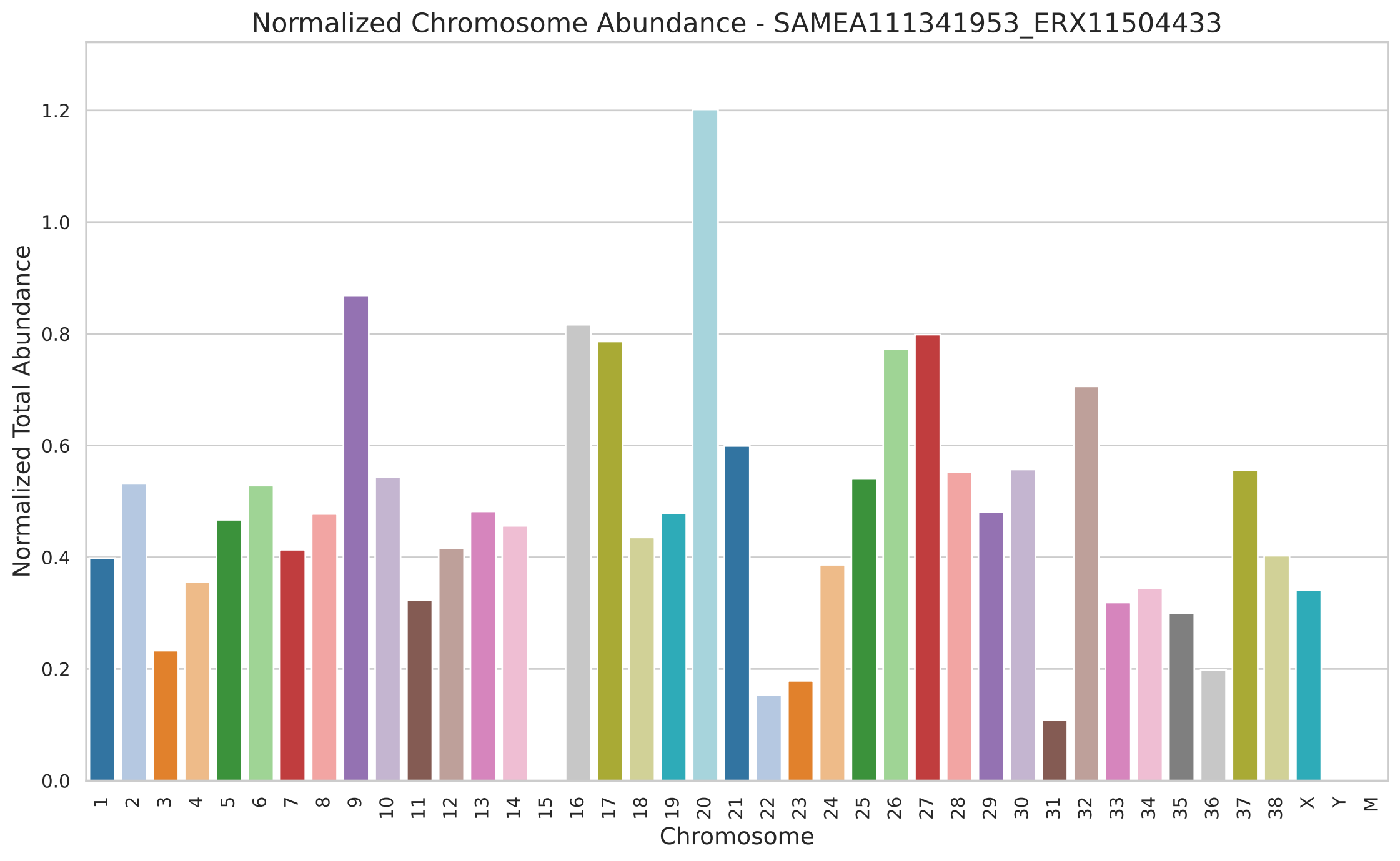

Normalized Chromosome Abundance - SAMEA111341963_ERX11504429
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

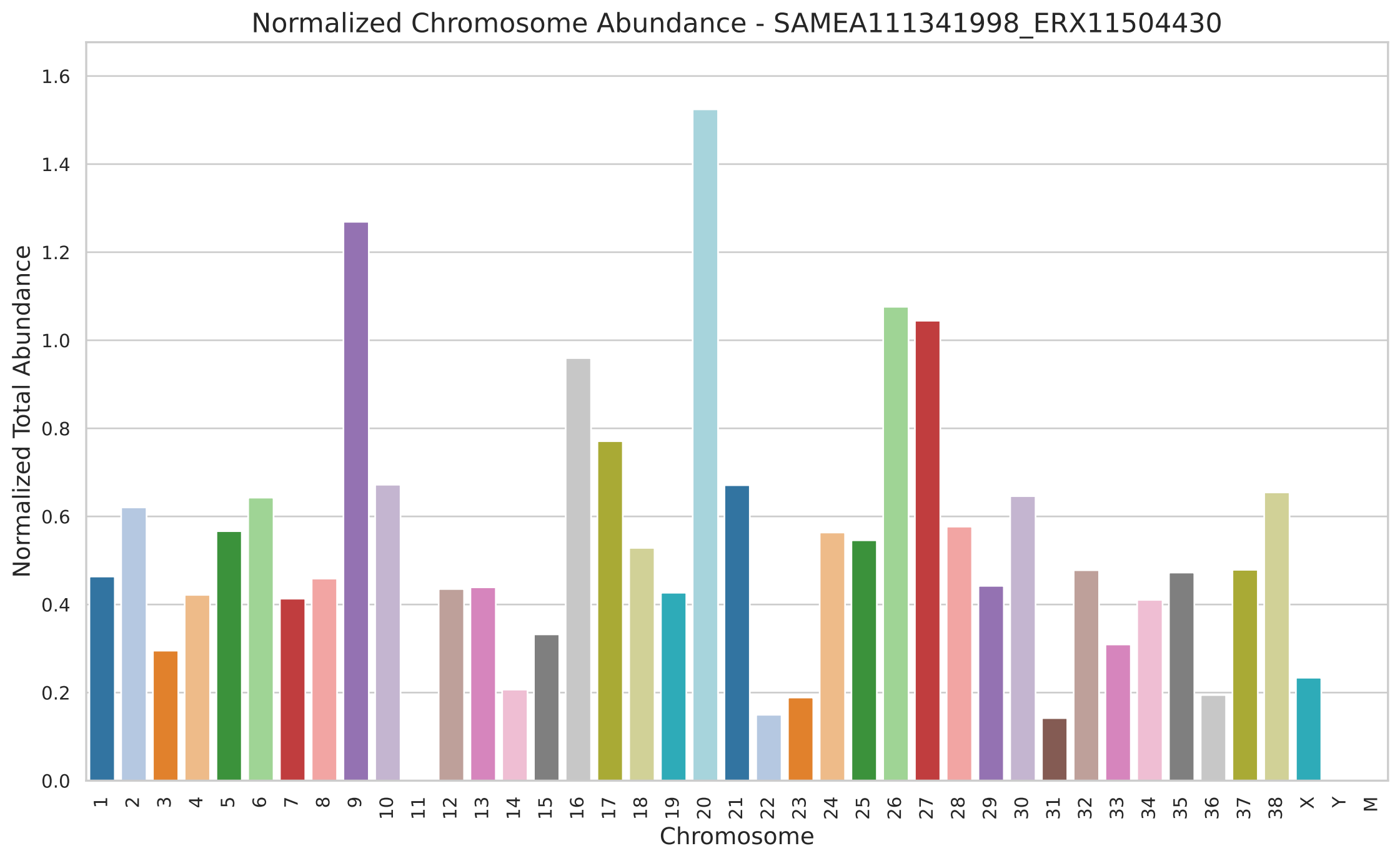

Normalized Chromosome Abundance - SAMEA111341960_ERX11504440
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

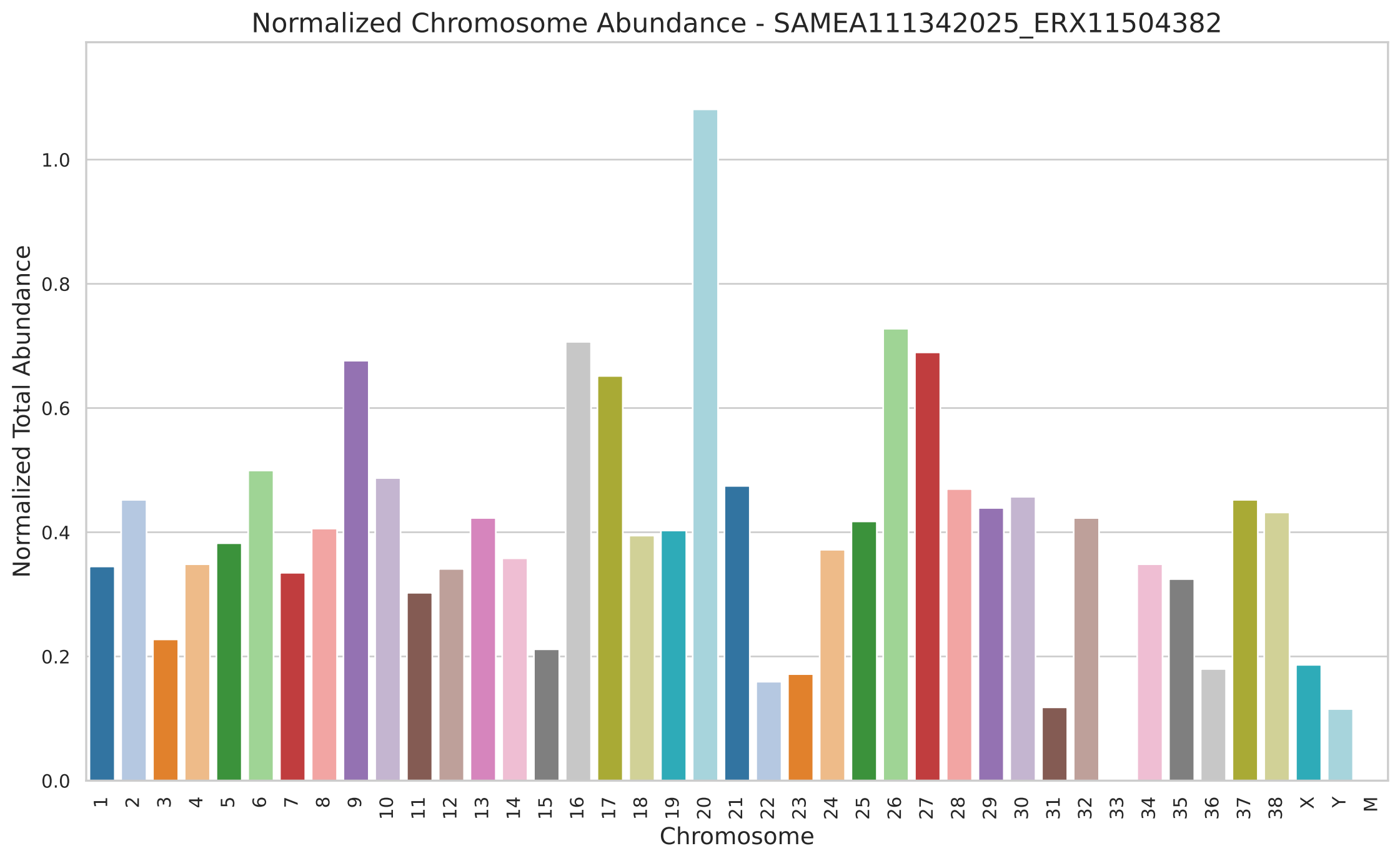

Normalized Chromosome Abundance - SAMEA111341991_ERX11504422
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

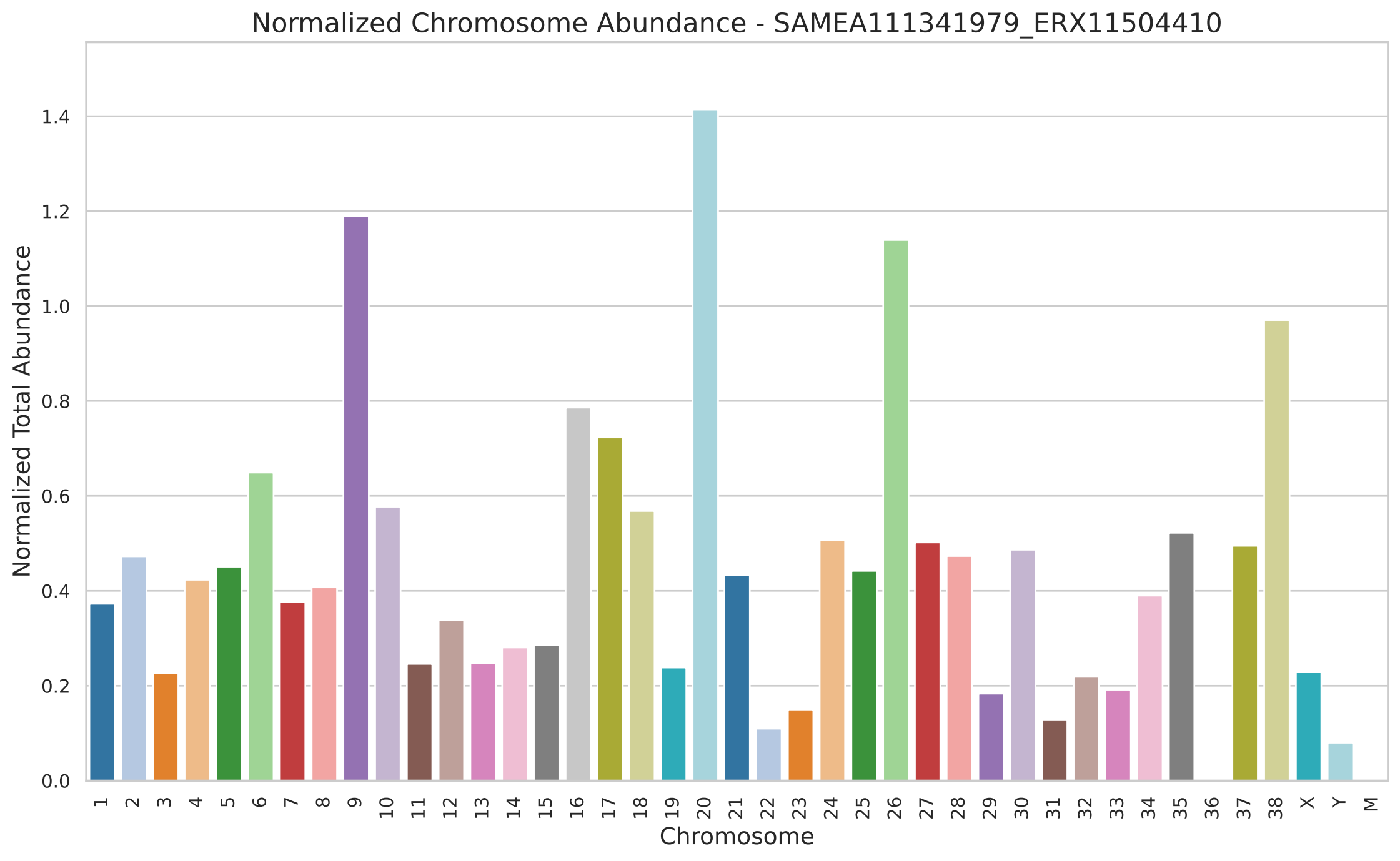

Normalized Chromosome Abundance - SAMEA111341965_ERX11504446
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

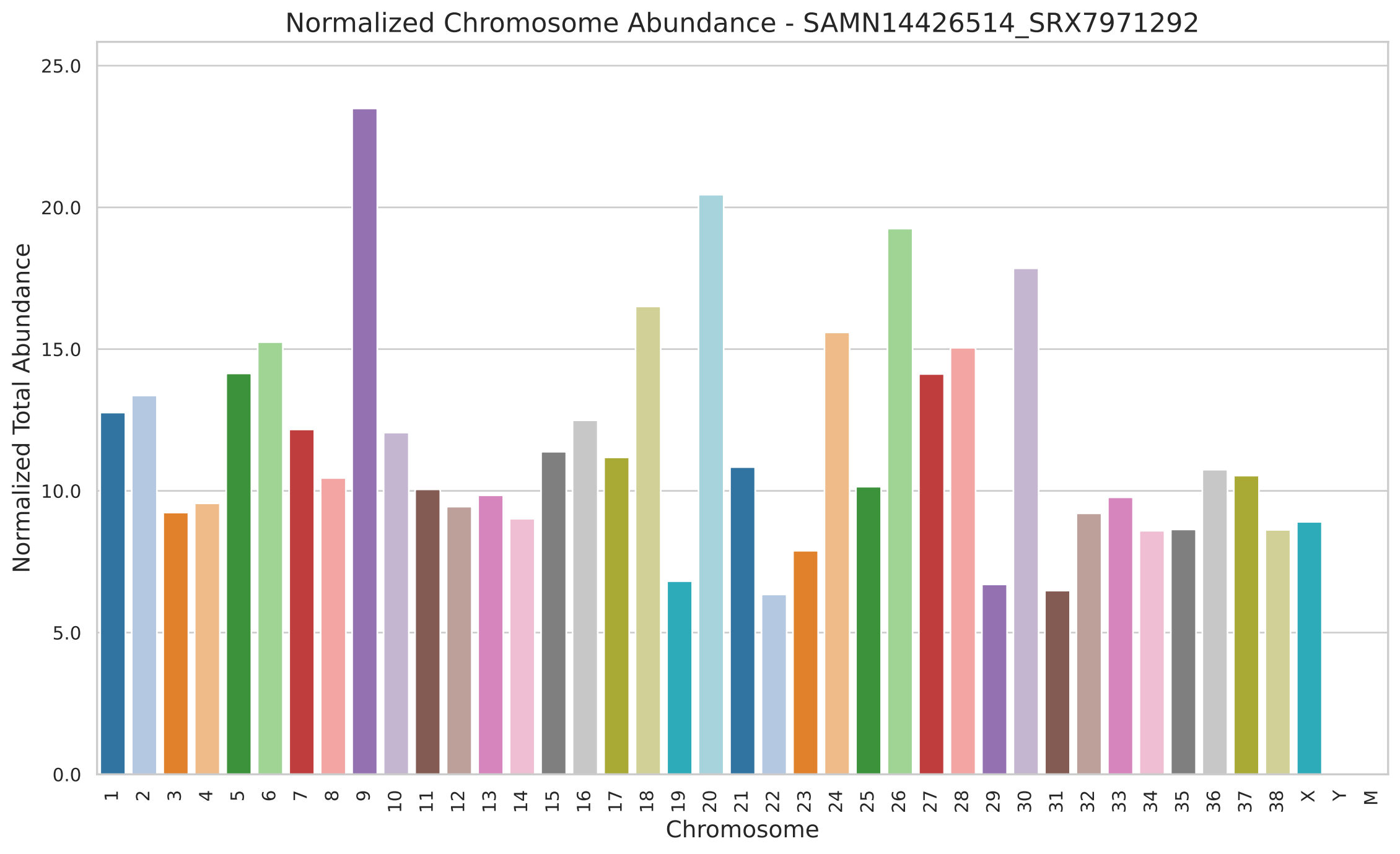

Normalized Chromosome Abundance - SAMEA111342005_ERX11504435
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

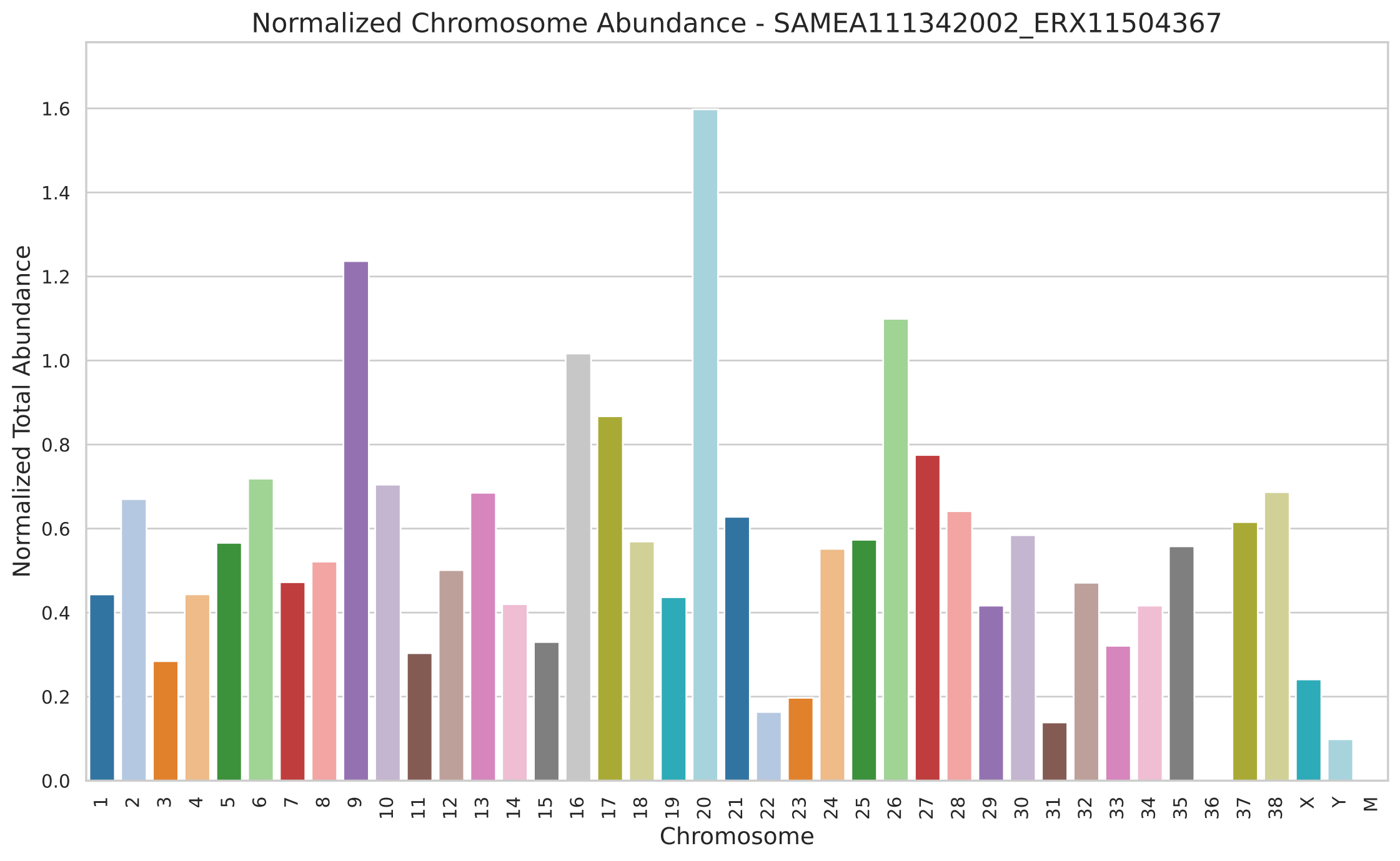

Normalized Chromosome Abundance - SAMEA111341953_ERX11504433
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

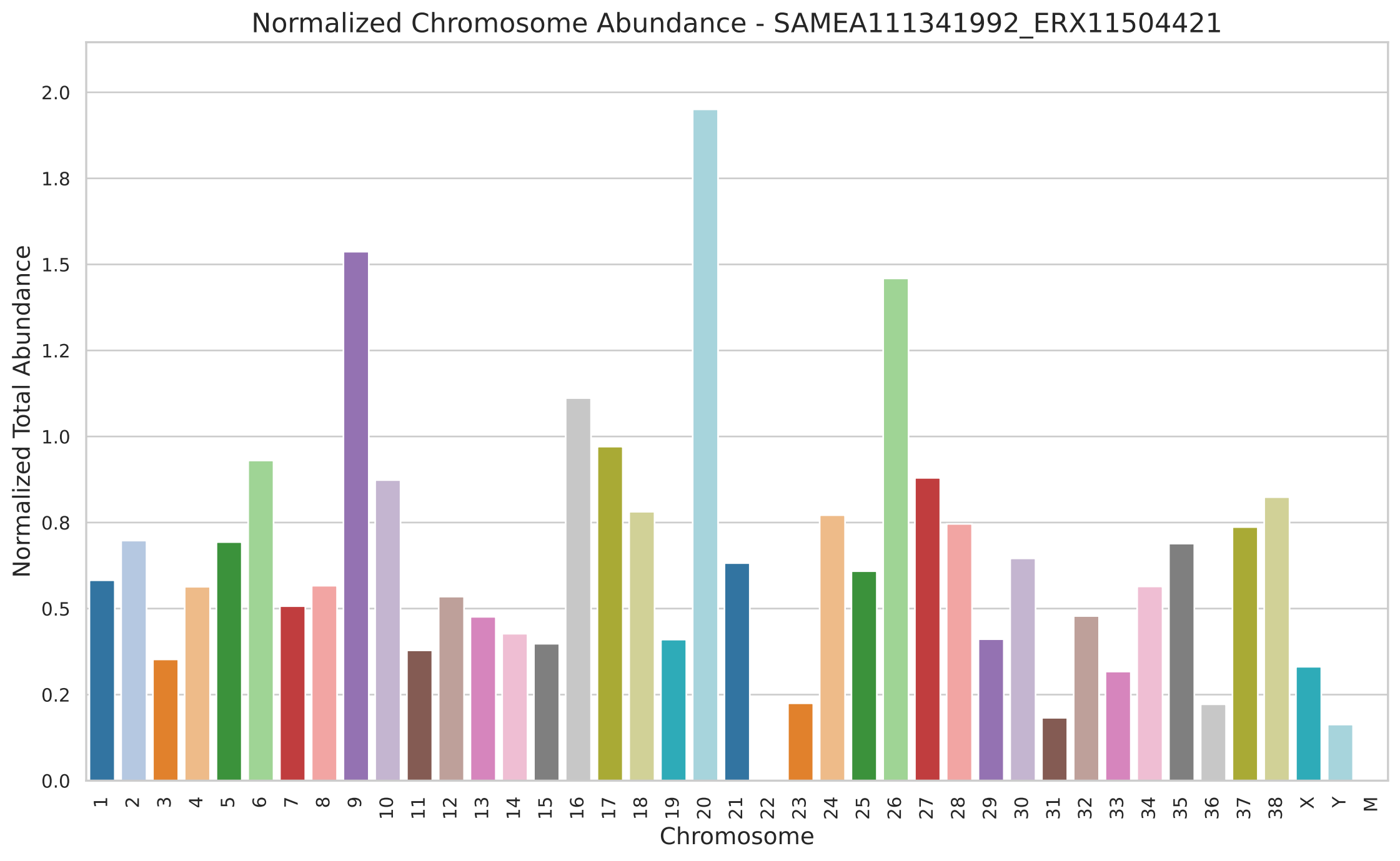

Normalized Chromosome Abundance - SAMEA111341998_ERX11504430
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

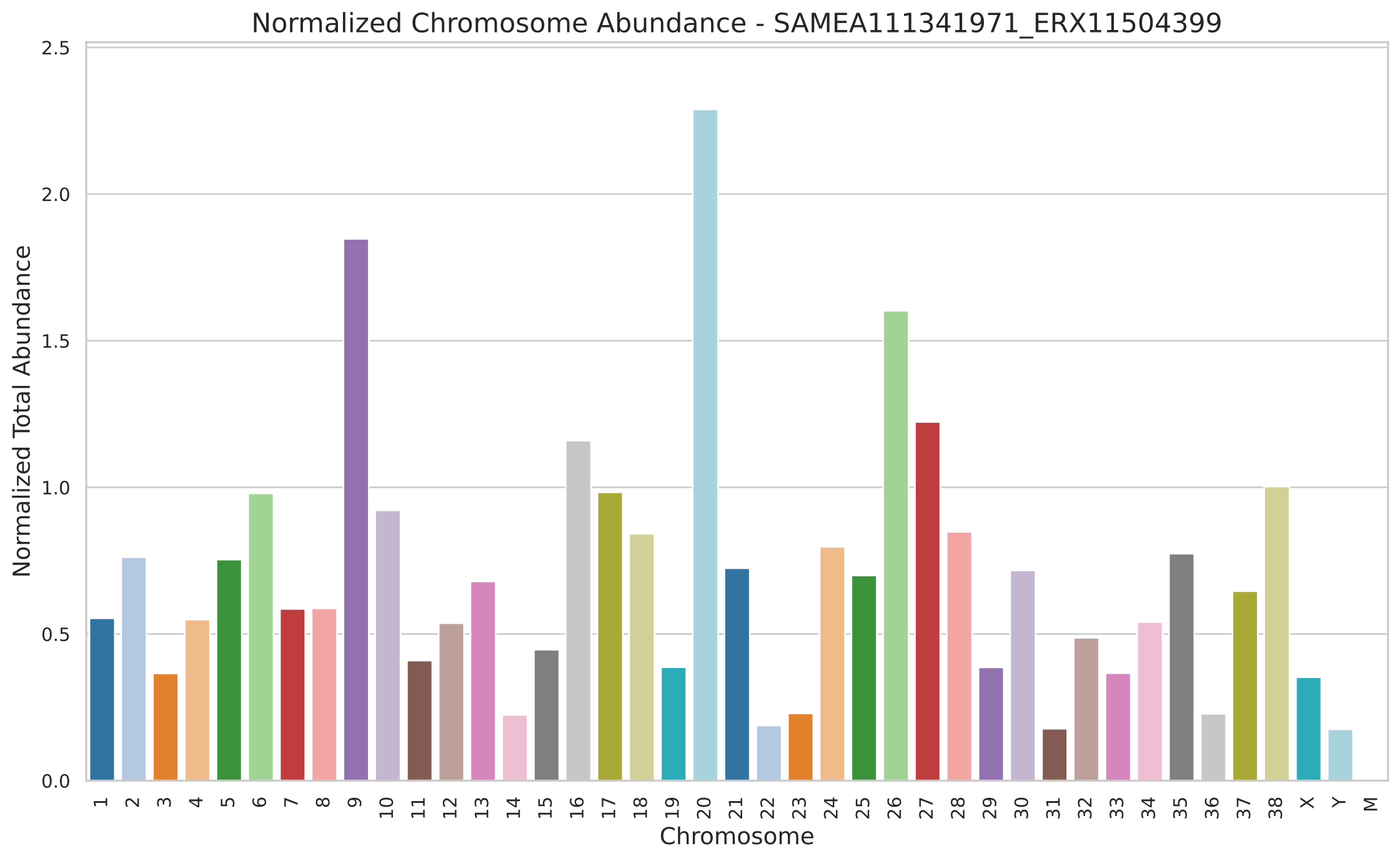

Normalized Chromosome Abundance - SAMEA111342025_ERX11504382
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

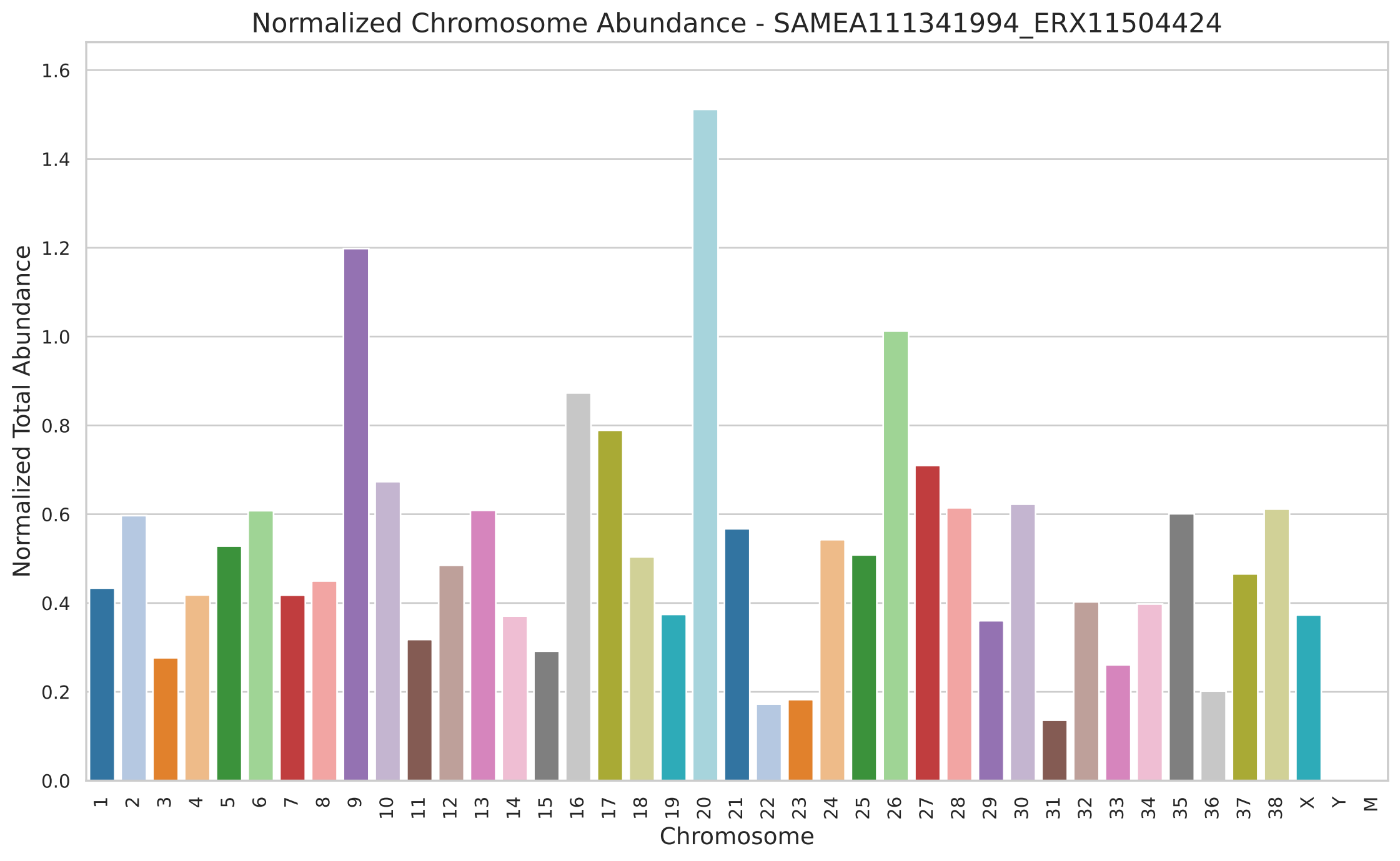

Normalized Chromosome Abundance - SAMEA111341979_ERX11504410
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

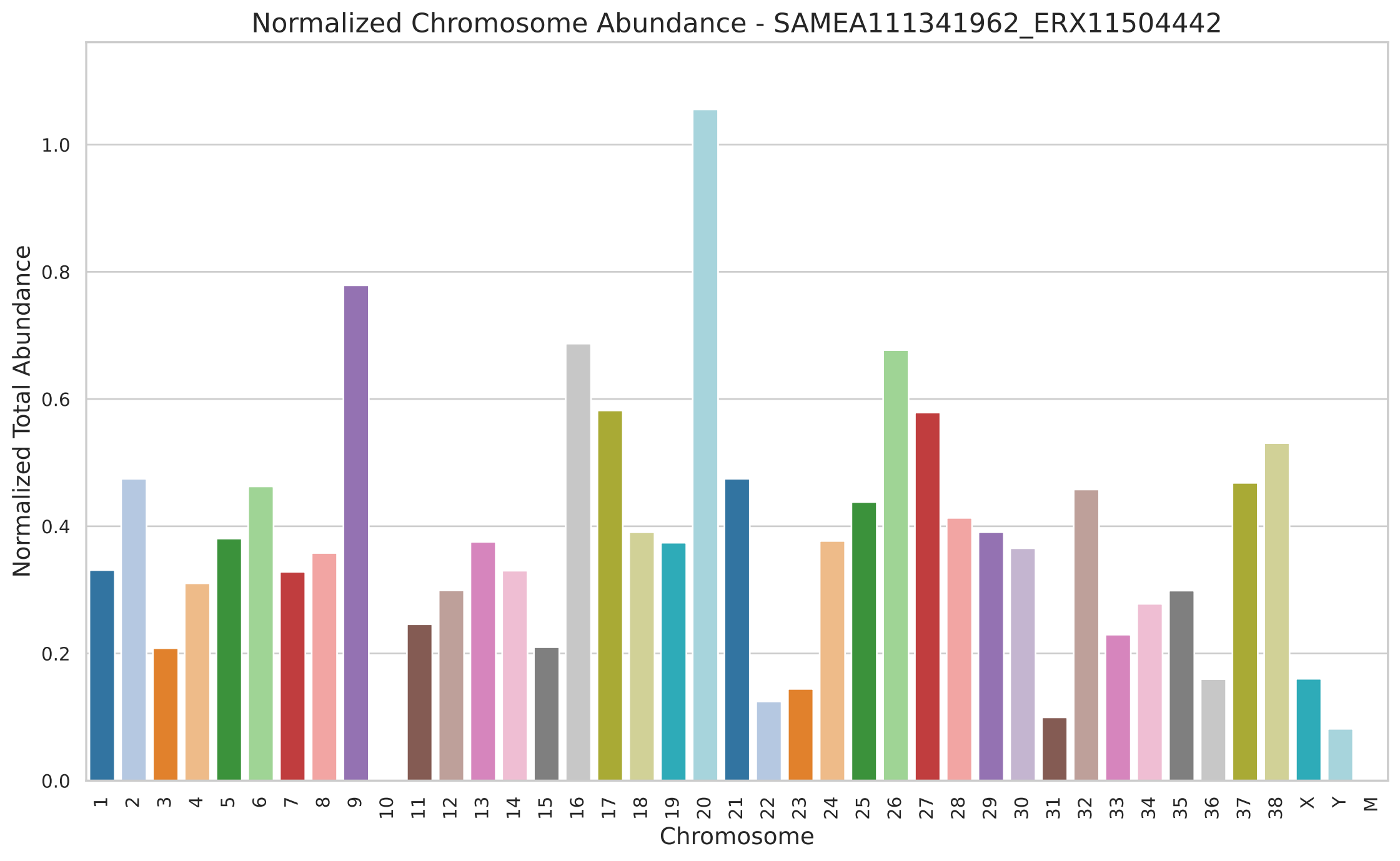

Normalized Chromosome Abundance - SAMN14426514_SRX7971292
Normalized Total Abundance
25.0
20.0
15.0
10.0
5.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

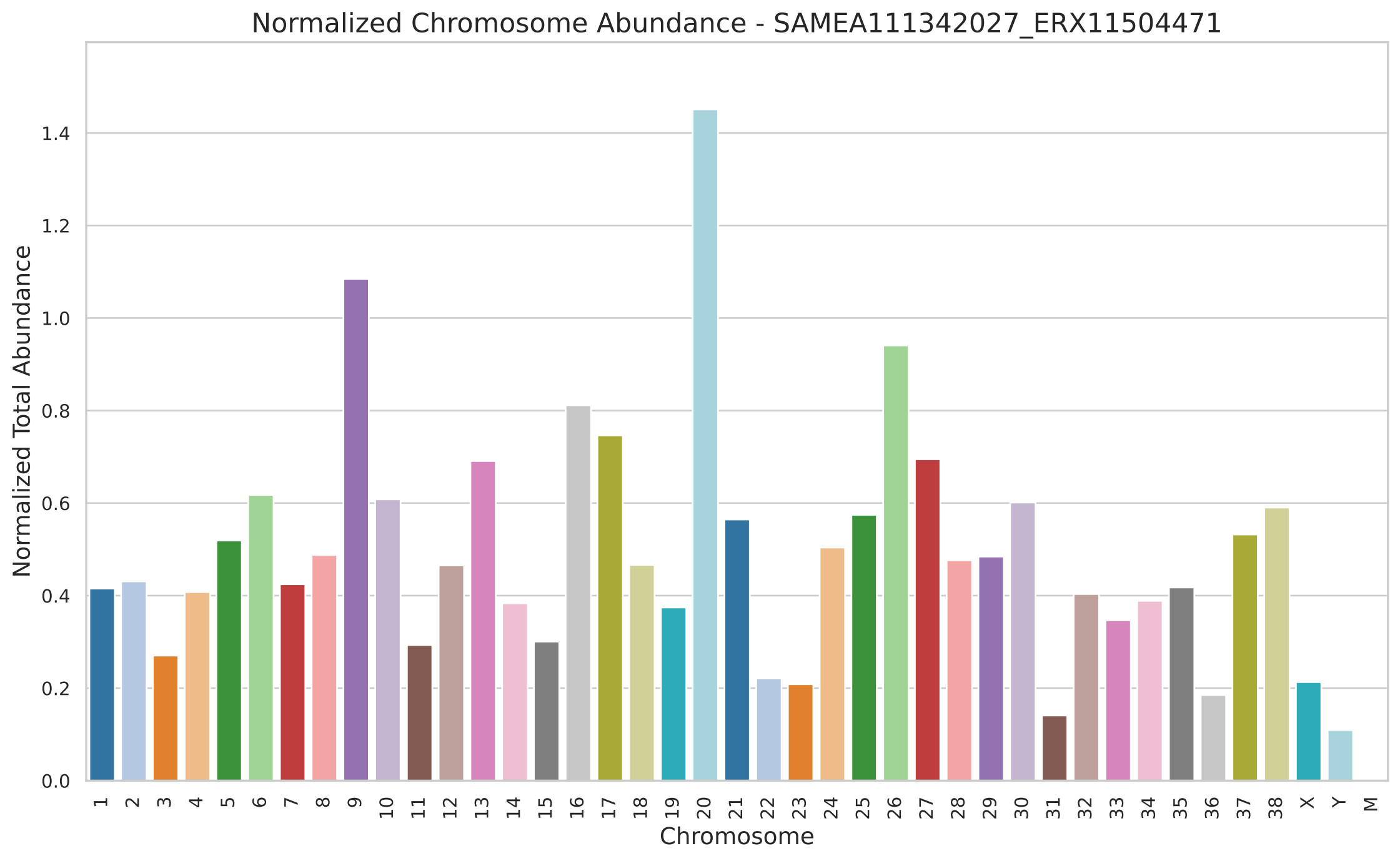

Normalized Chromosome Abundance - SAMEA111342002_ERX11504367
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

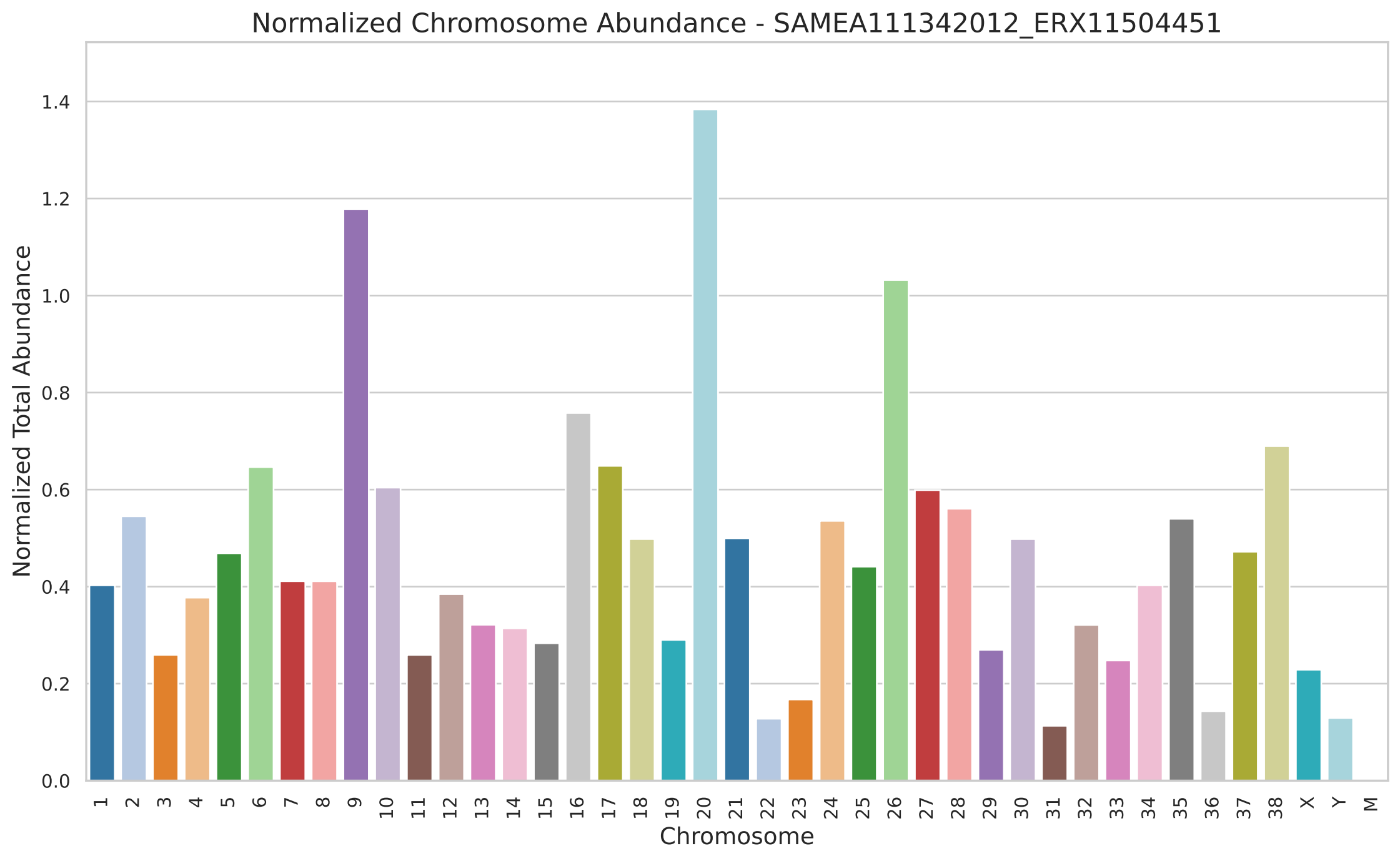

Normalized Chromosome Abundance - SAMEA111341992_ERX11504421
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

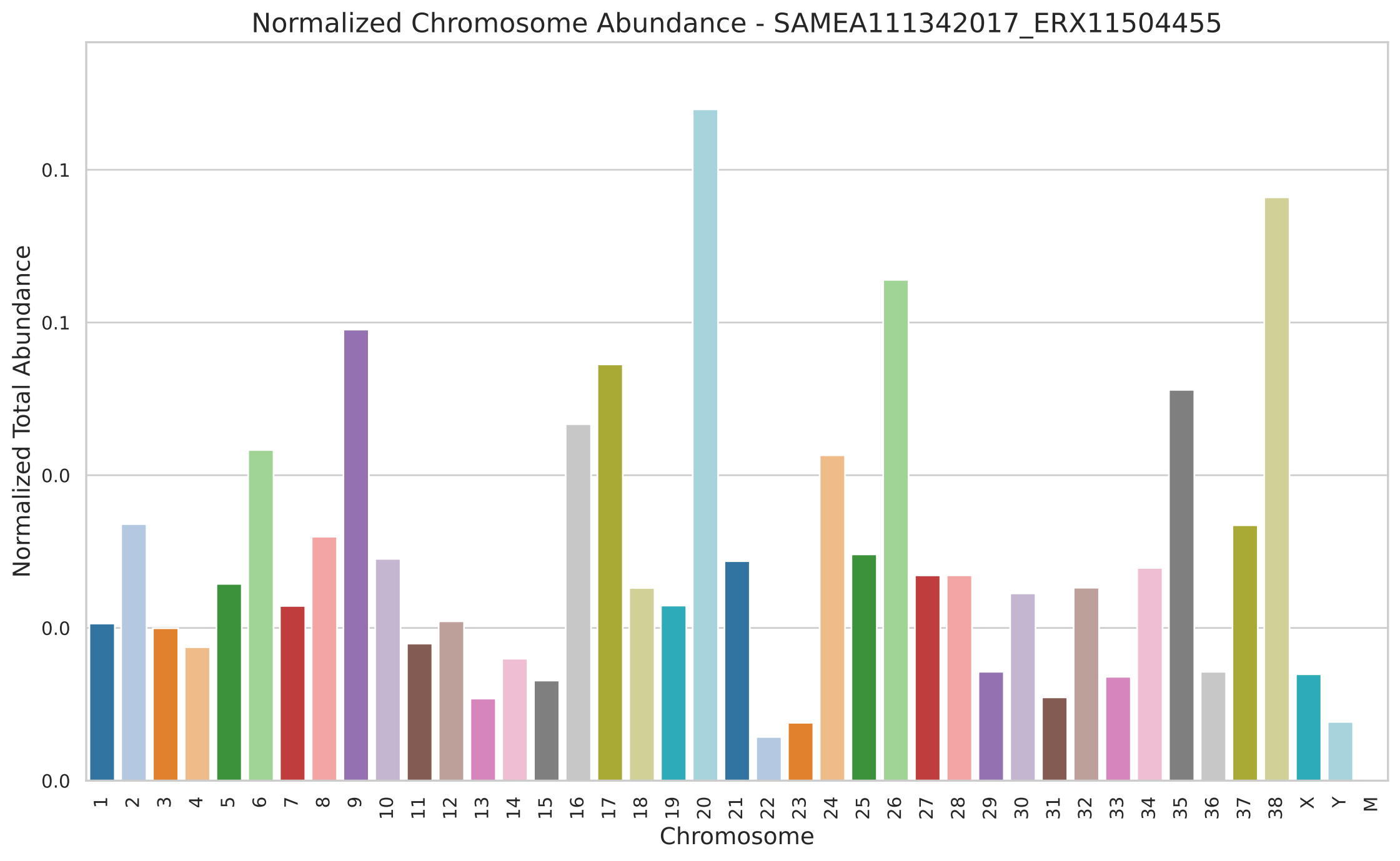

Normalized Chromosome Abundance - SAMEA111341971_ERX11504399
Normalized Total Abundance
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

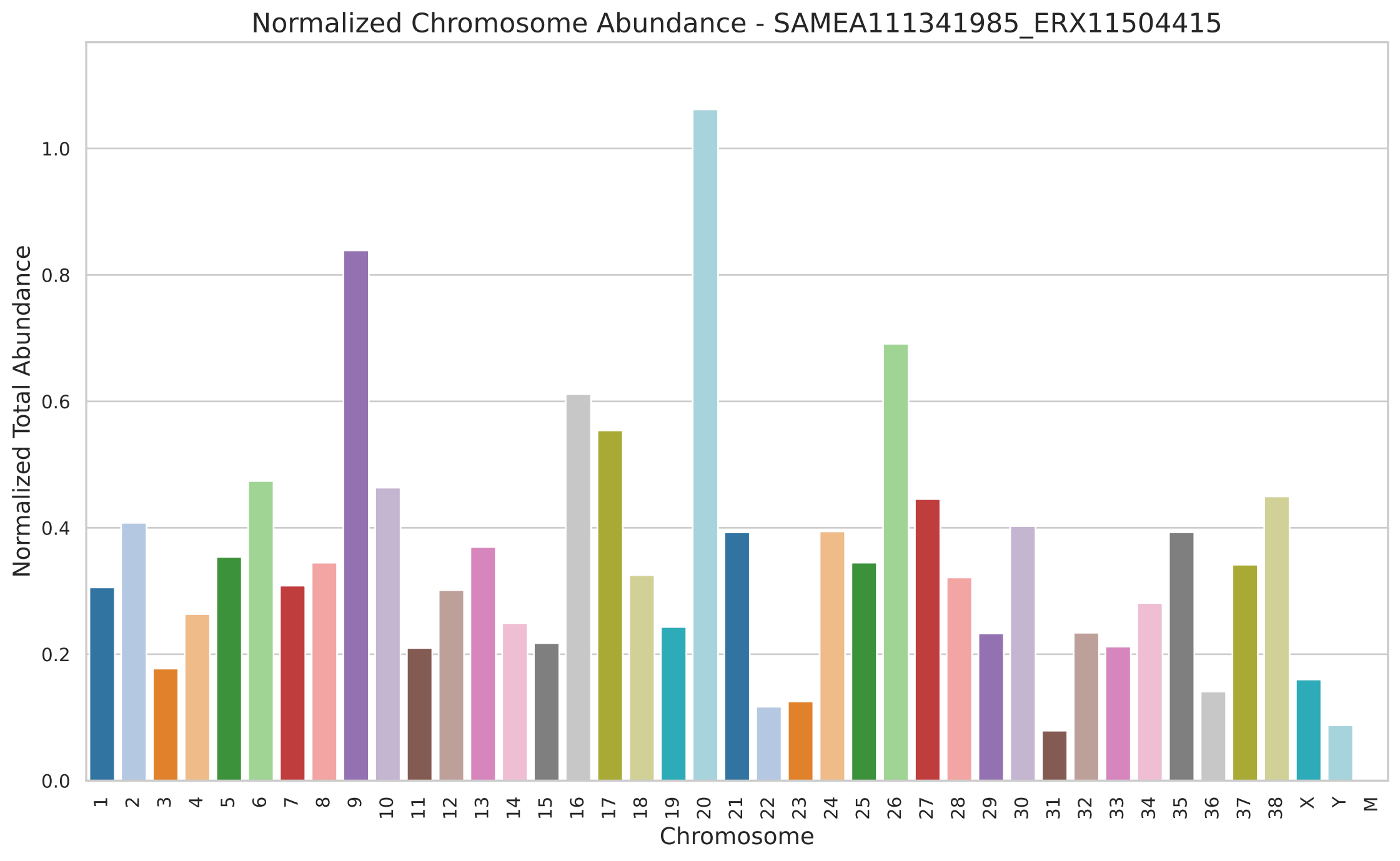

Normalized Chromosome Abundance - SAMEA111341994_ERX11504424
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

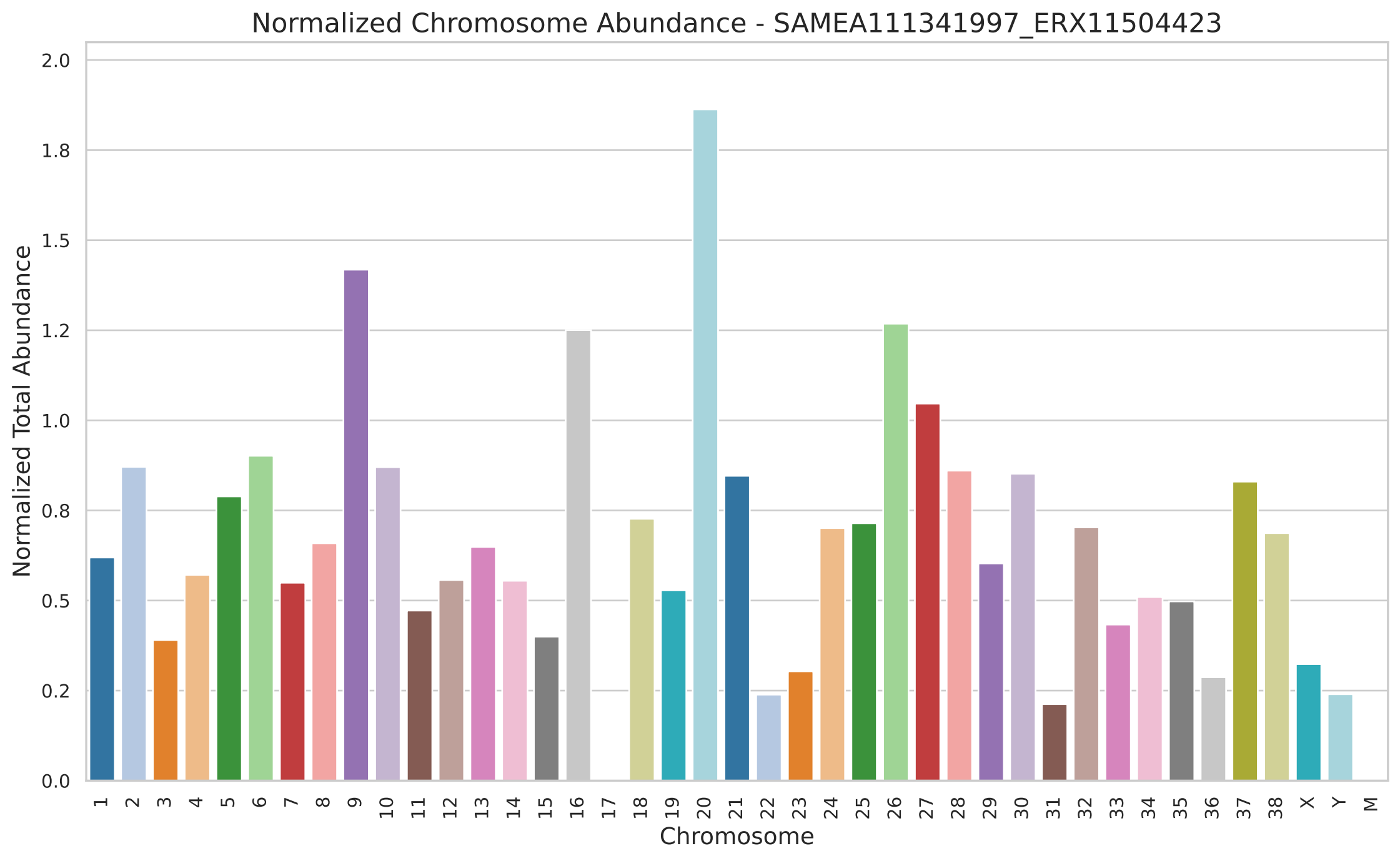

Normalized Chromosome Abundance - SAMEA111341962_ERX11504442
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

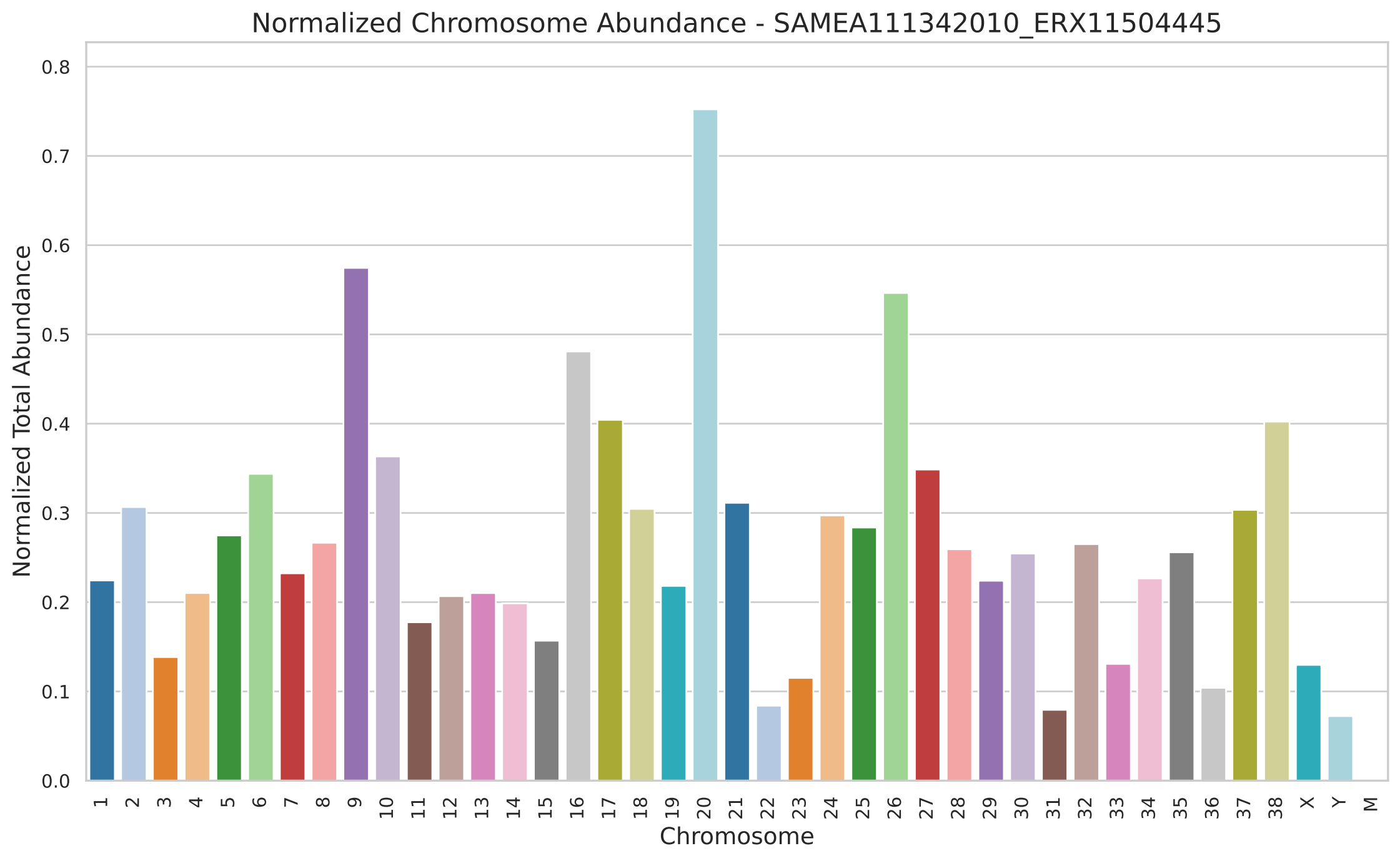

Normalized Chromosome Abundance - SAMEA111342027_ERX11504471
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

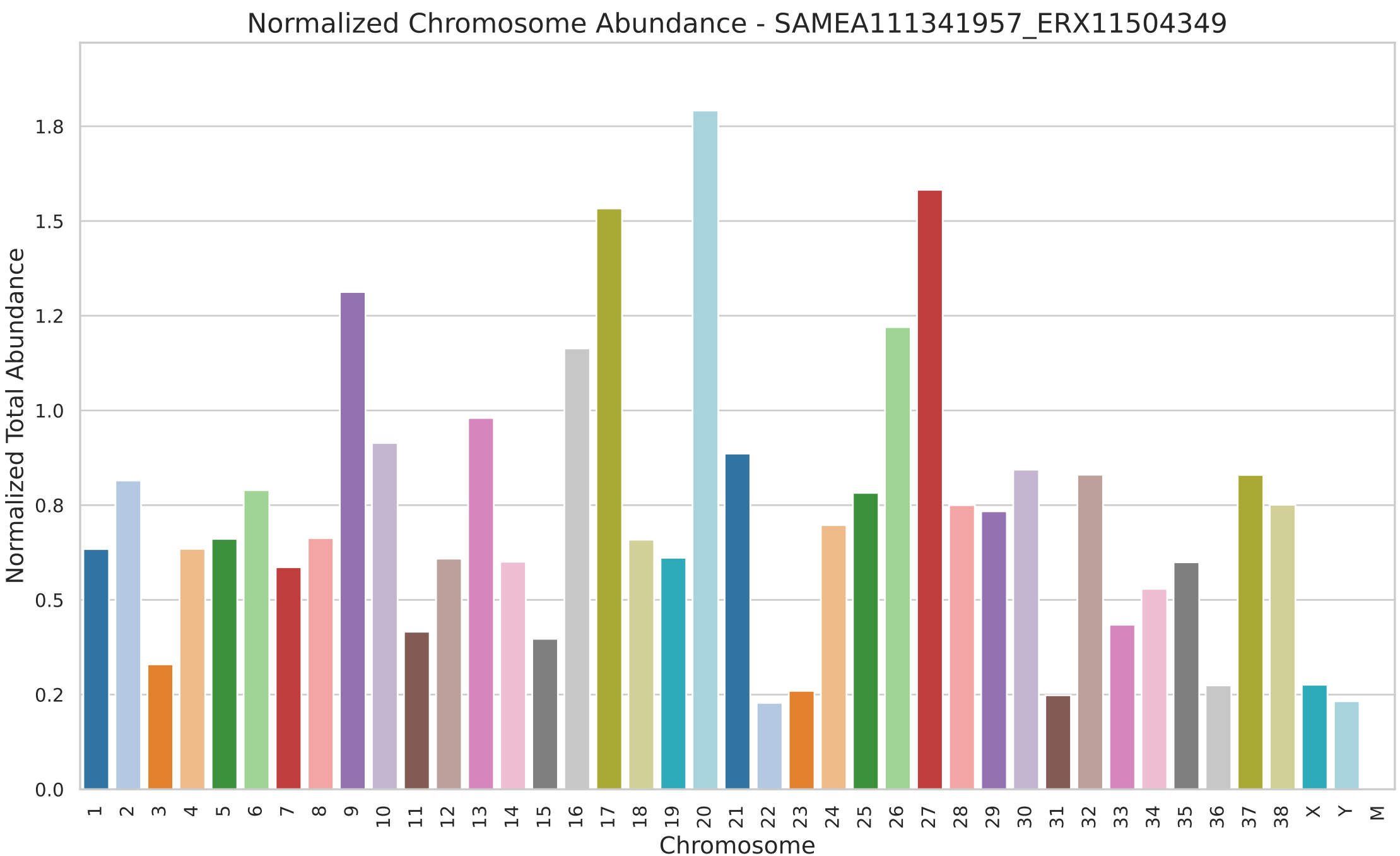

Normalized Chromosome Abundance - SAMEA111342012_ERX11504451
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

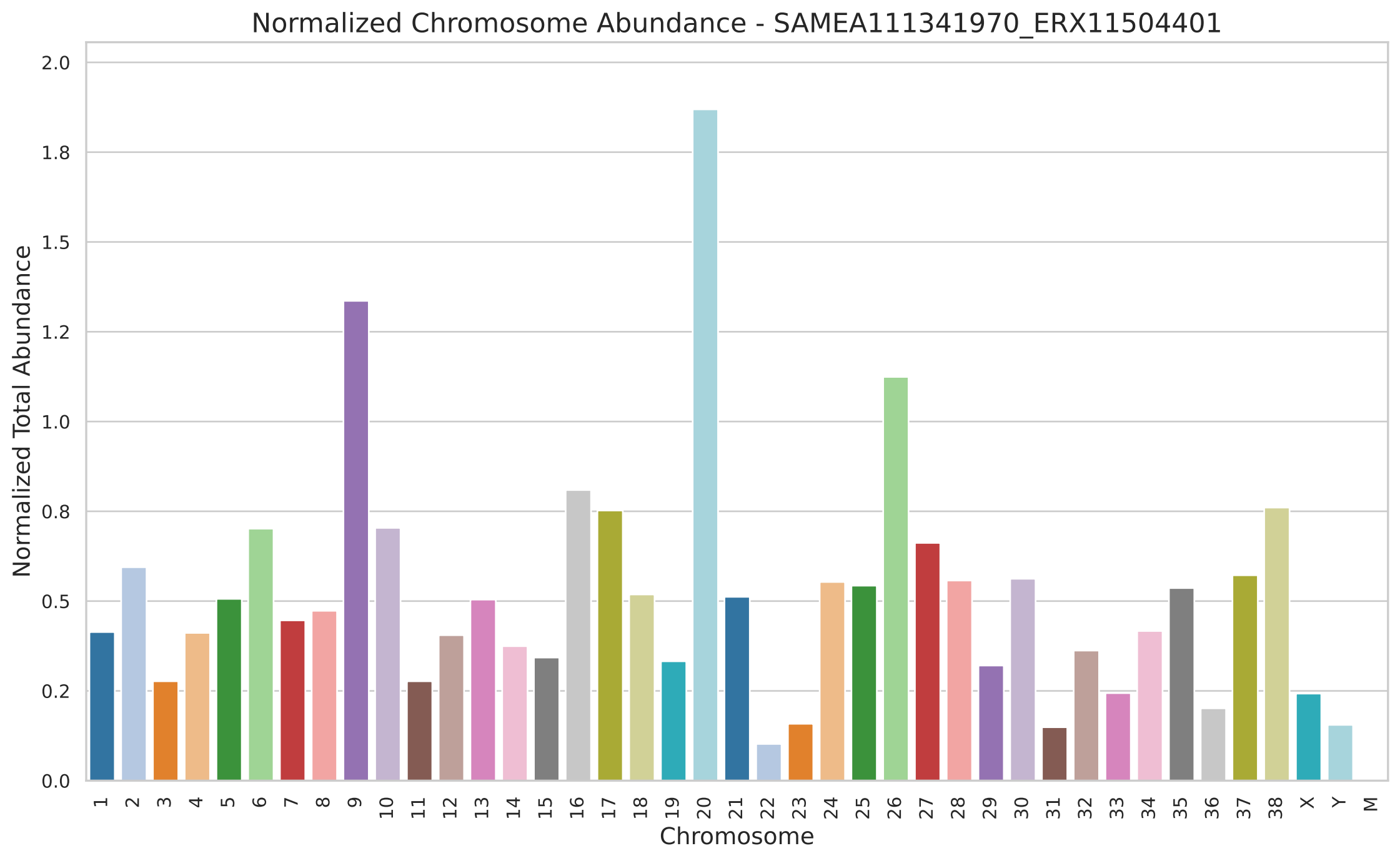

Normalized Chromosome Abundance - SAMEA111342017_ERX11504455
Normalized Total Abundance
0.1
0.1
0.0
0.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

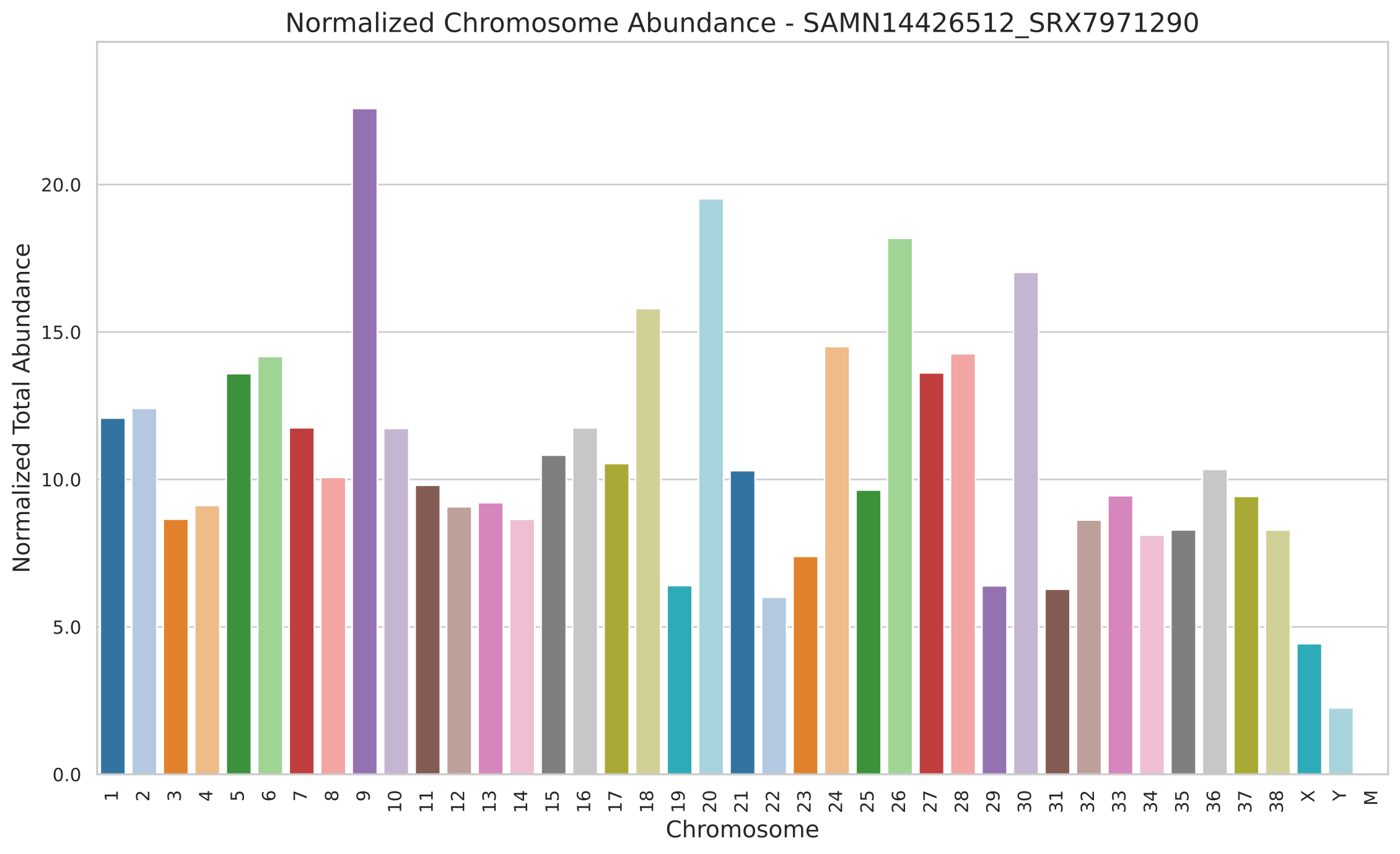

Normalized Chromosome Abundance - SAMEA111341985_ERX11504415
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

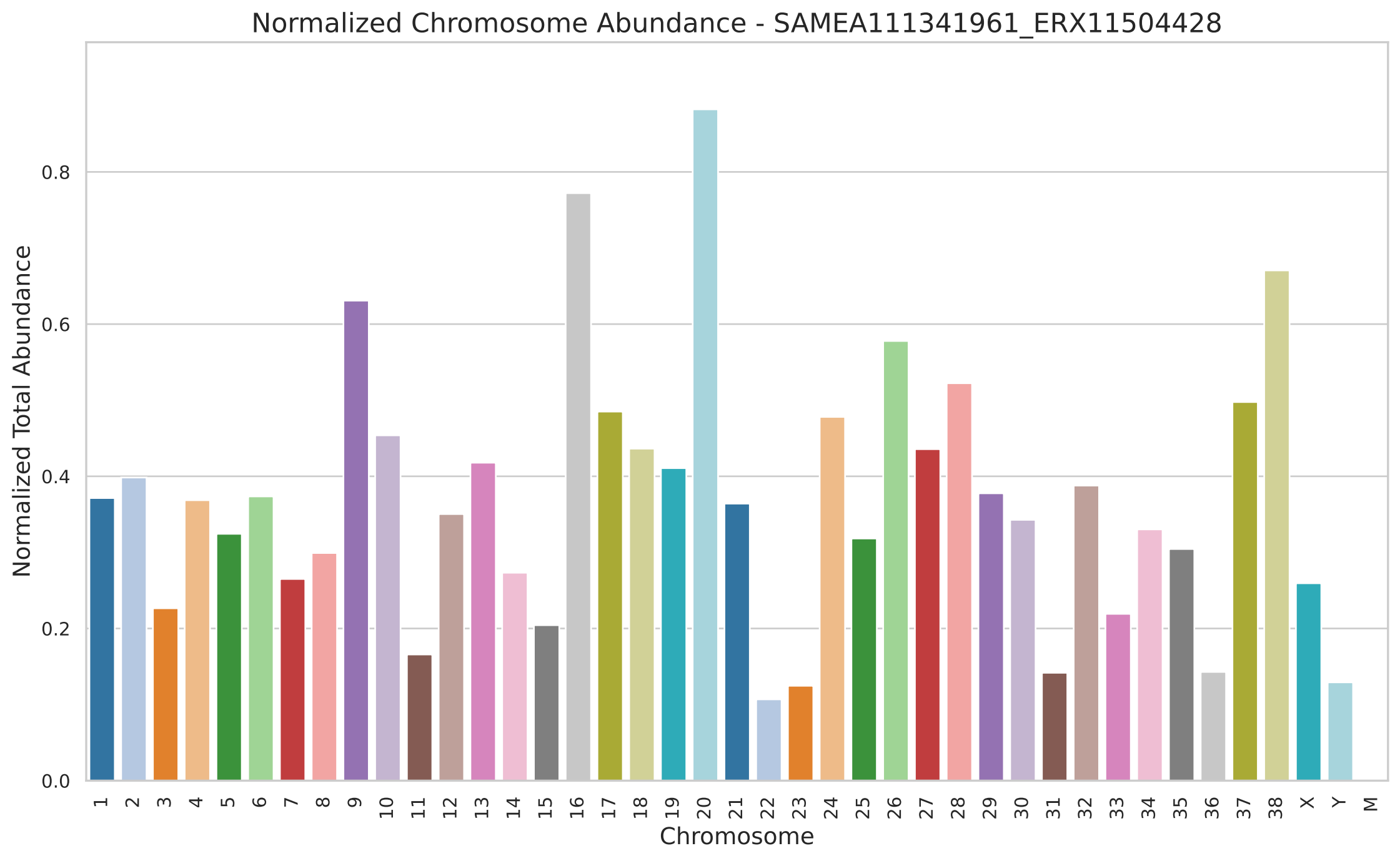

Normalized Chromosome Abundance - SAMEA111341997_ERX11504423
Normalized Total Abundance
2.0
1.8
1.5
1.2
1.0
0.8
0.5
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

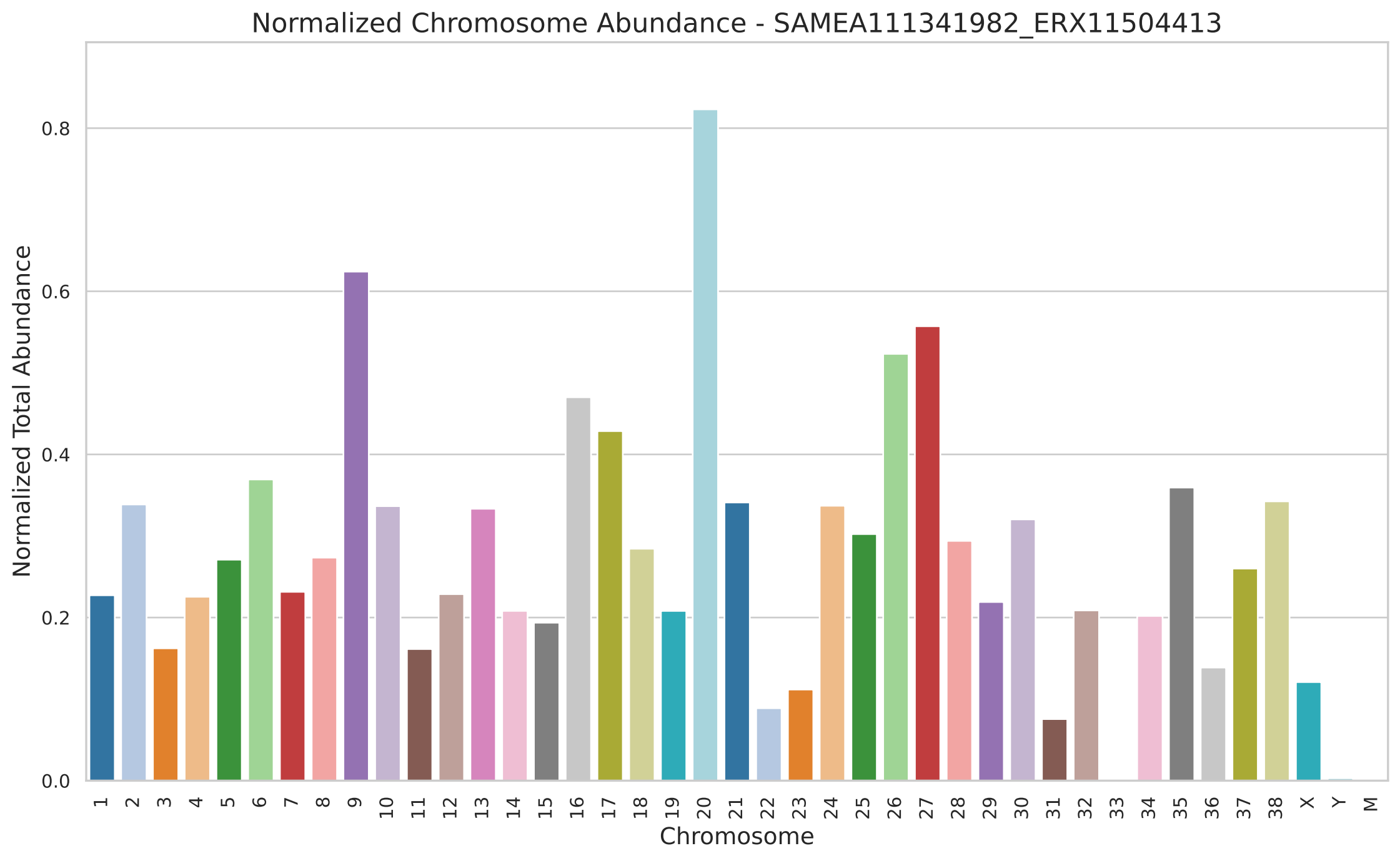

Normalized Chromosome Abundance - SAMEA111342010_ERX11504445
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

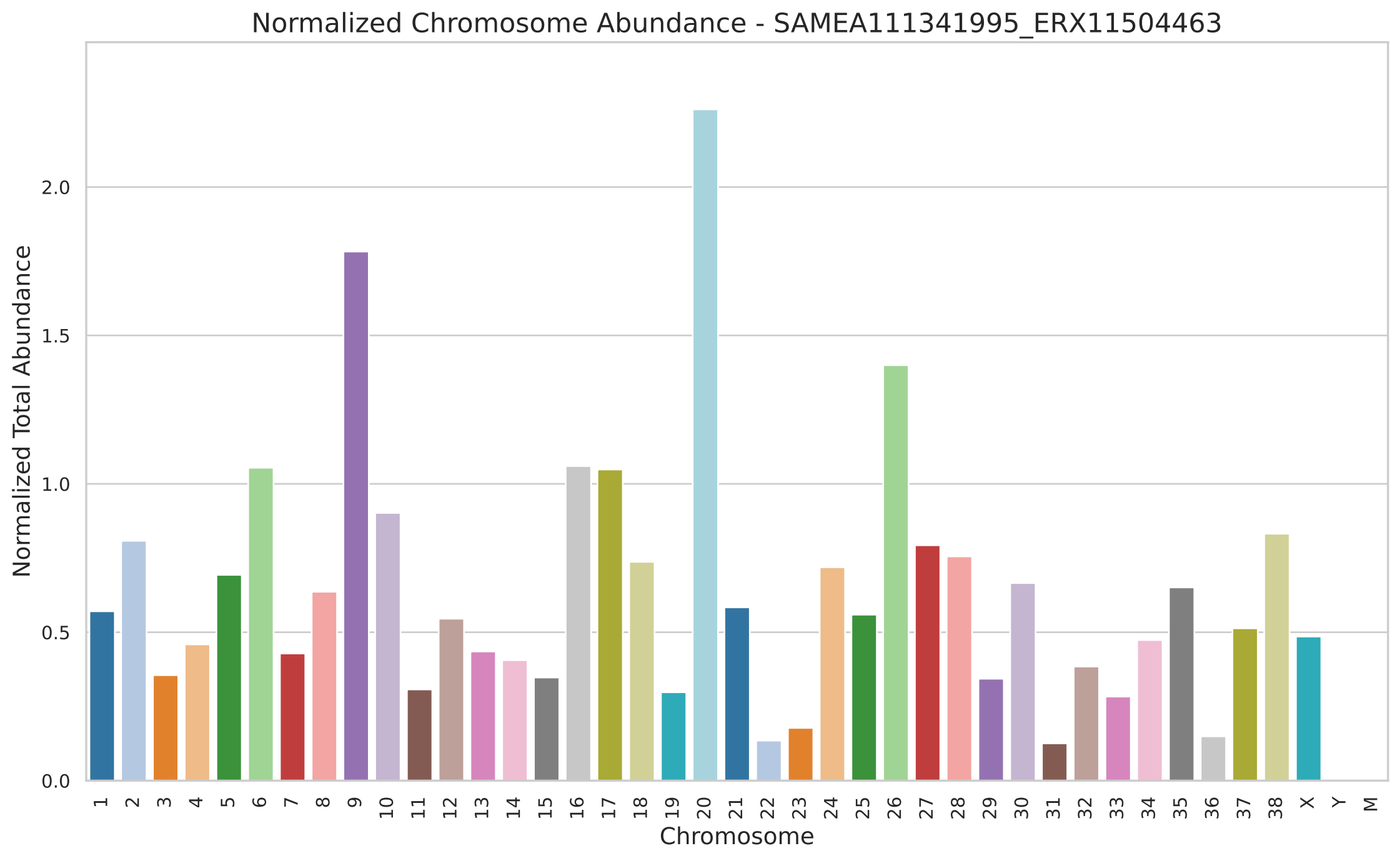

Normalized Chromosome Abundance - SAMEA111341957_ERX11504349
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

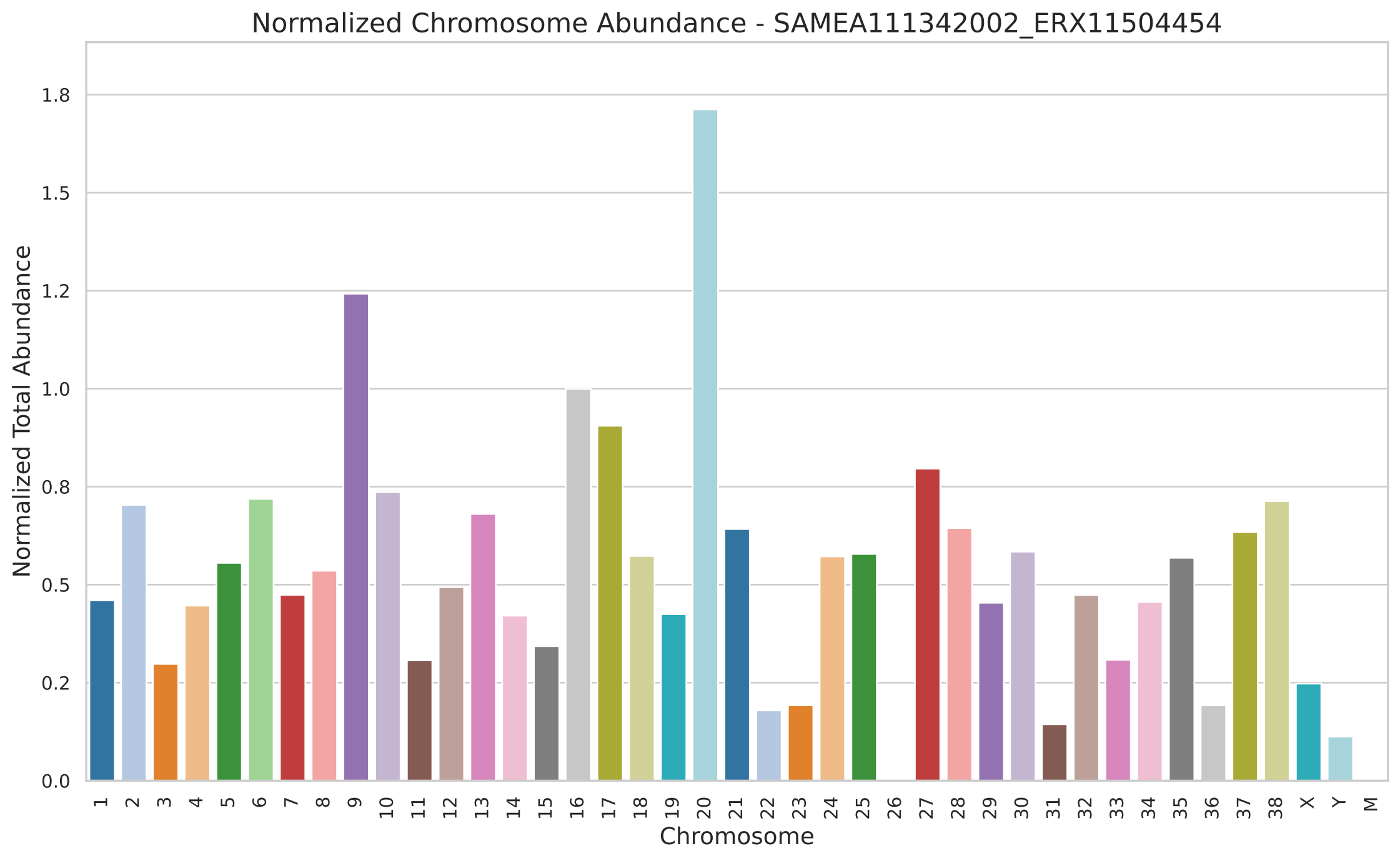

Normalized Chromosome Abundance - SAMEA111341970_ERX11504401
Normalized Total Abundance
2.0
1.8
1.5
1.2
1.0
0.8
0.5
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

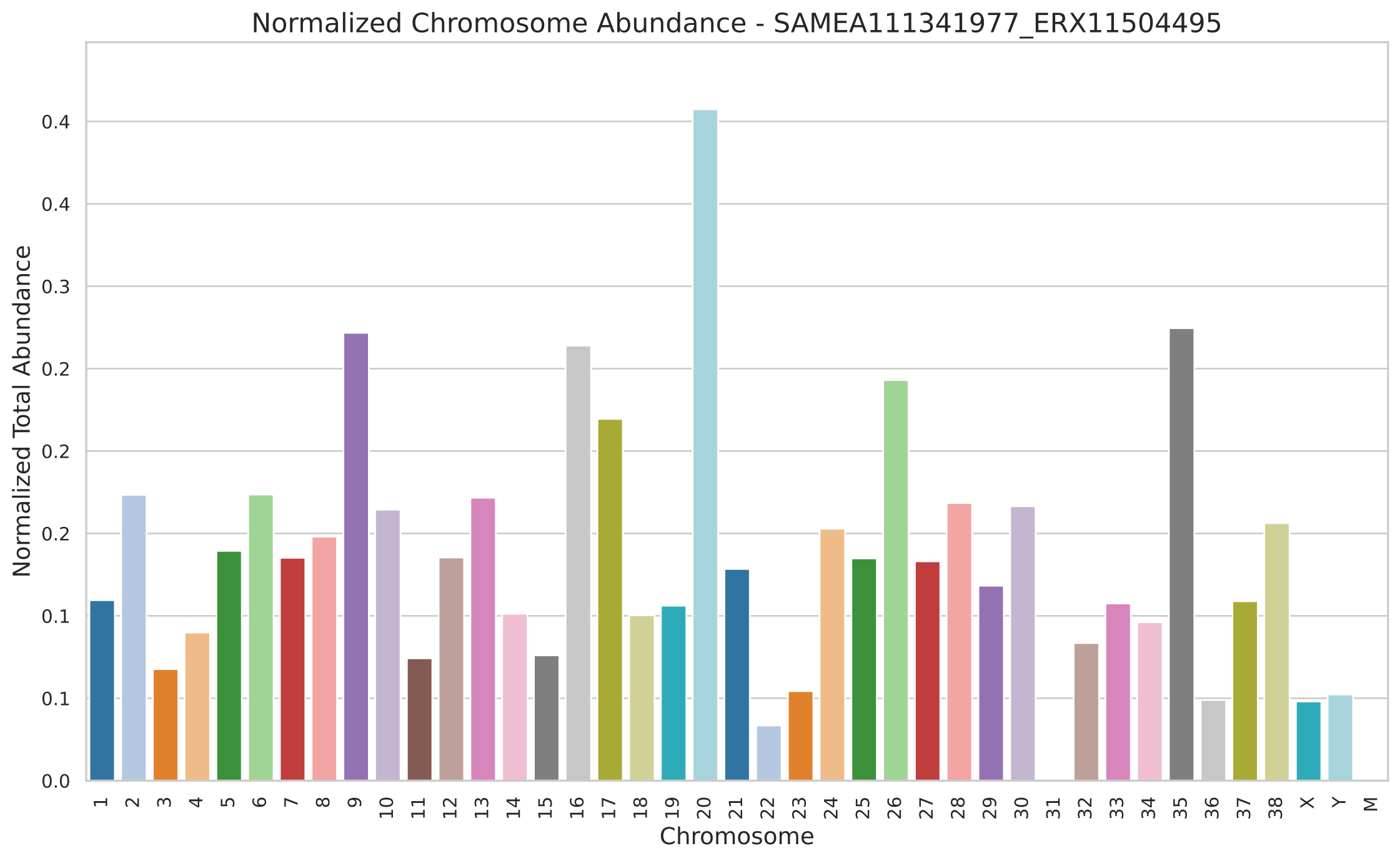

Normalized Chromosome Abundance - SAMN14426512_SRX7971290
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

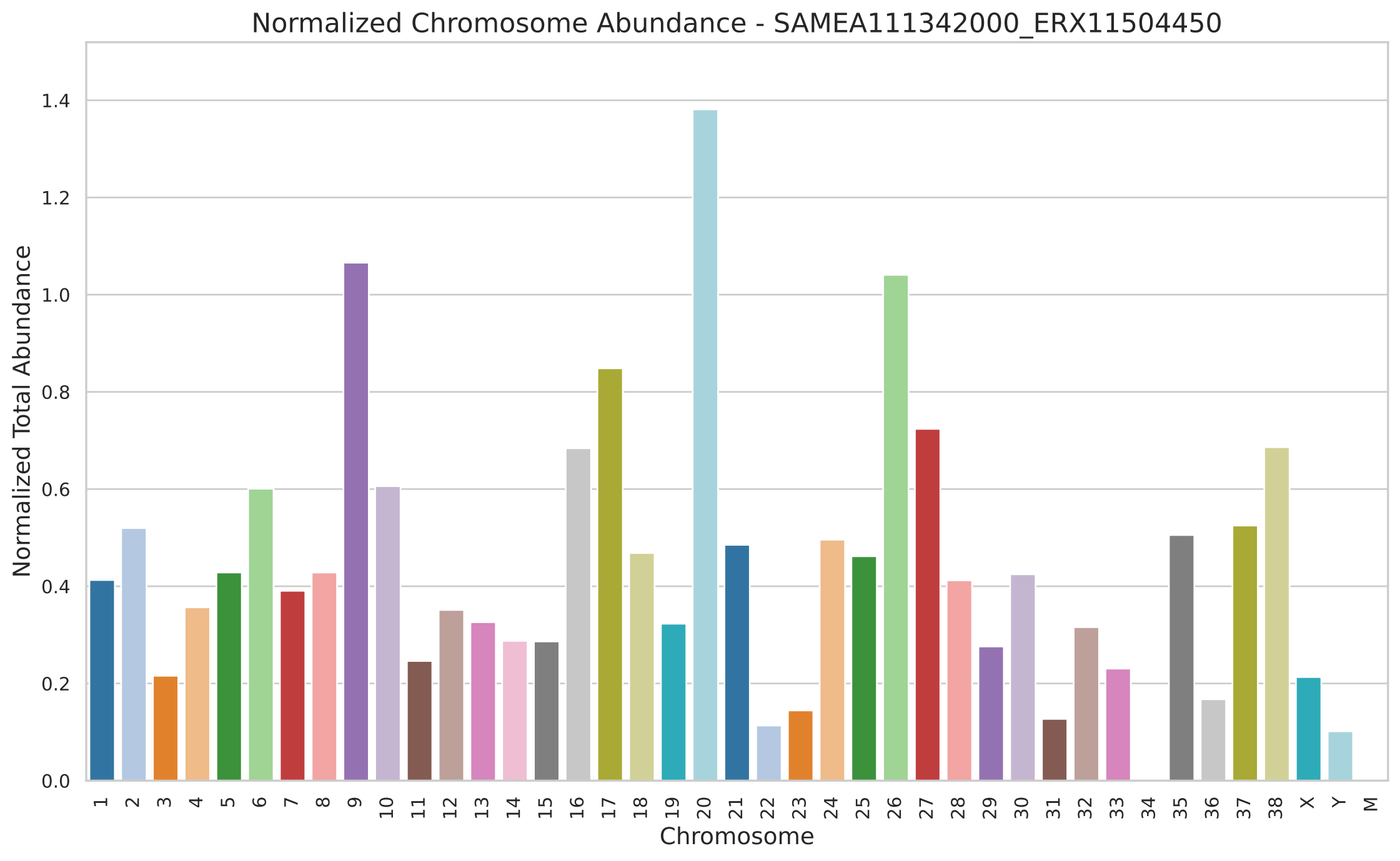

Normalized Chromosome Abundance - SAMEA111341961_ERX11504428
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

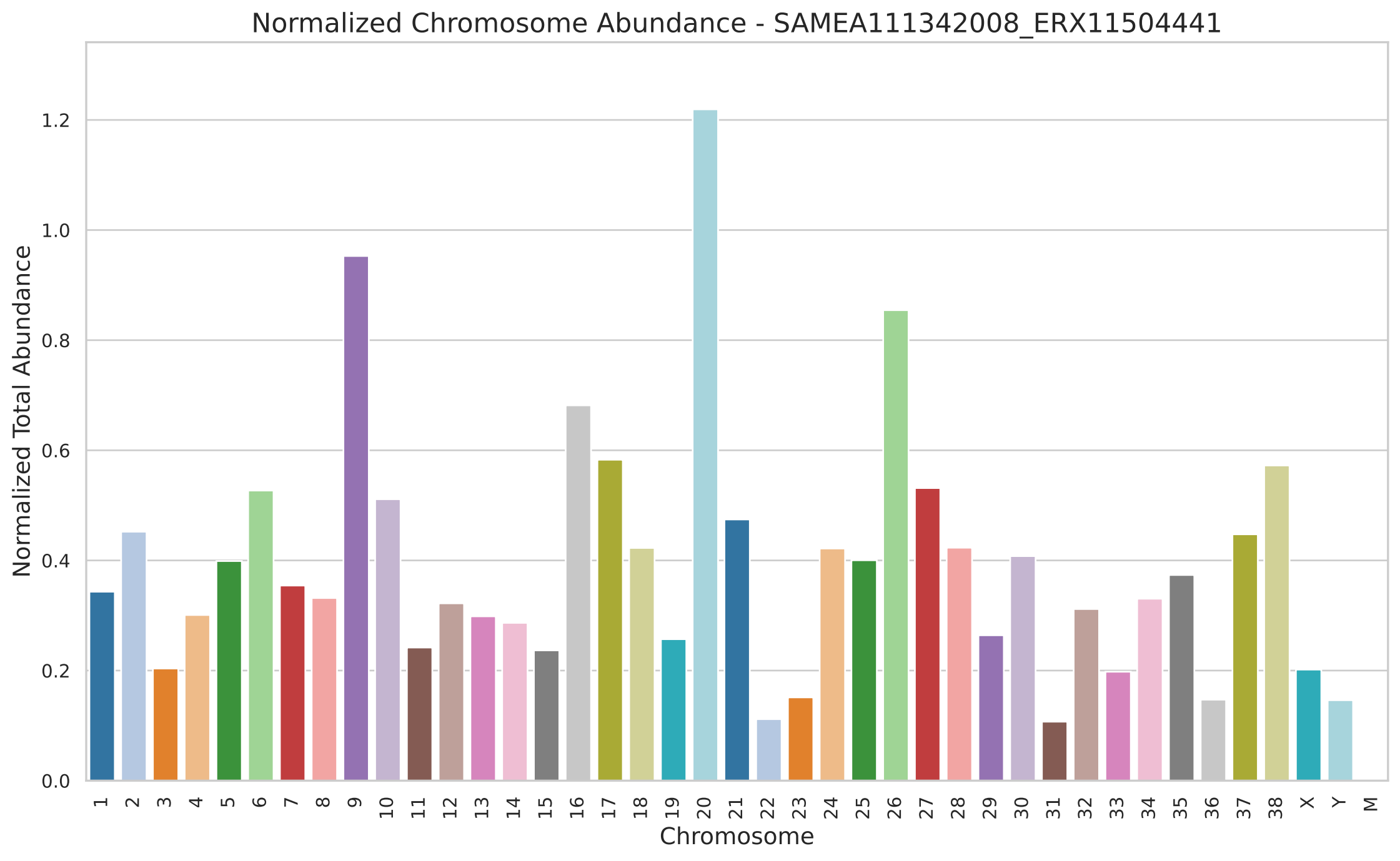

Normalized Chromosome Abundance - SAMEA111341982_ERX11504413
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

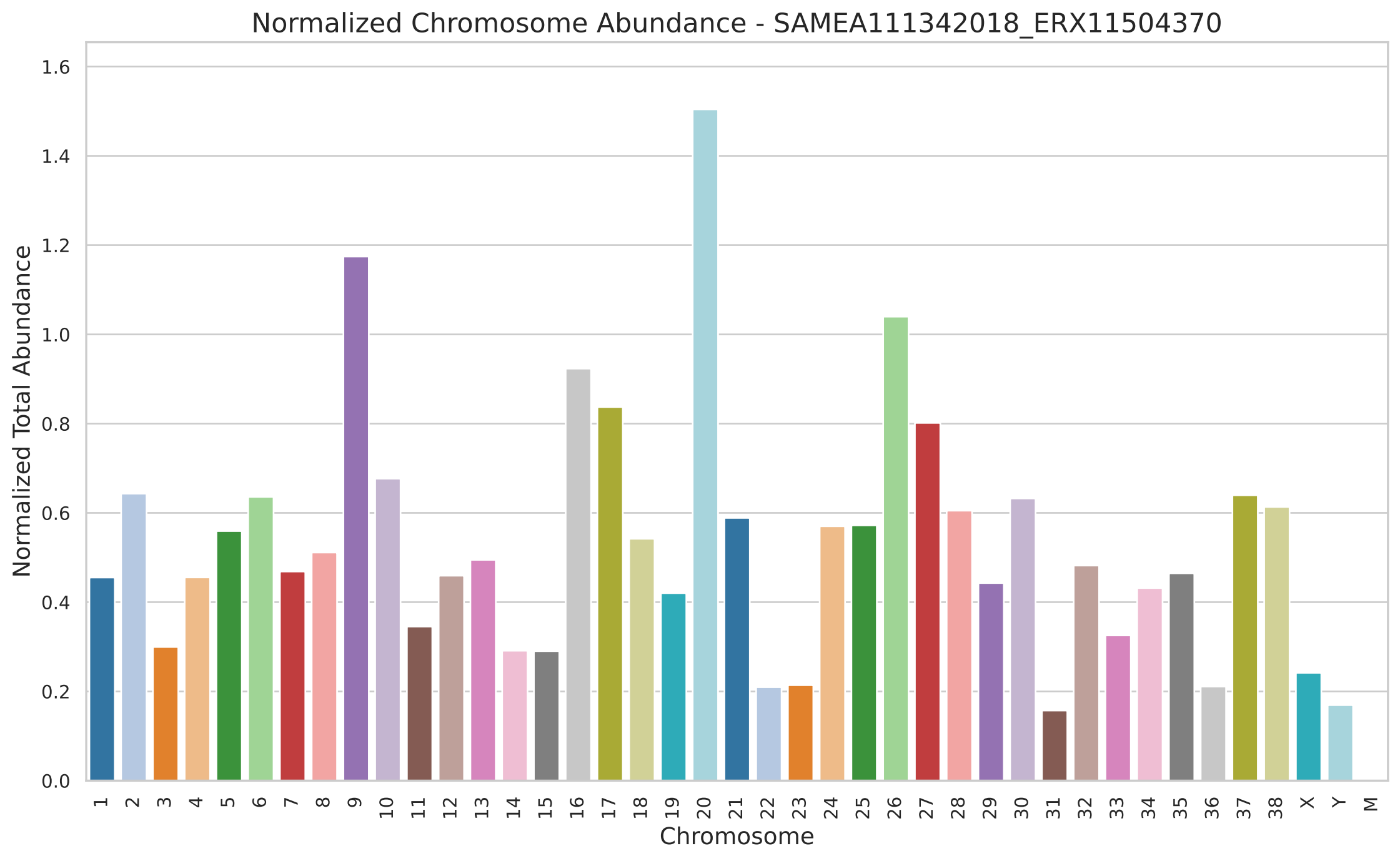

Normalized Chromosome Abundance - SAMEA111341995_ERX11504463
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

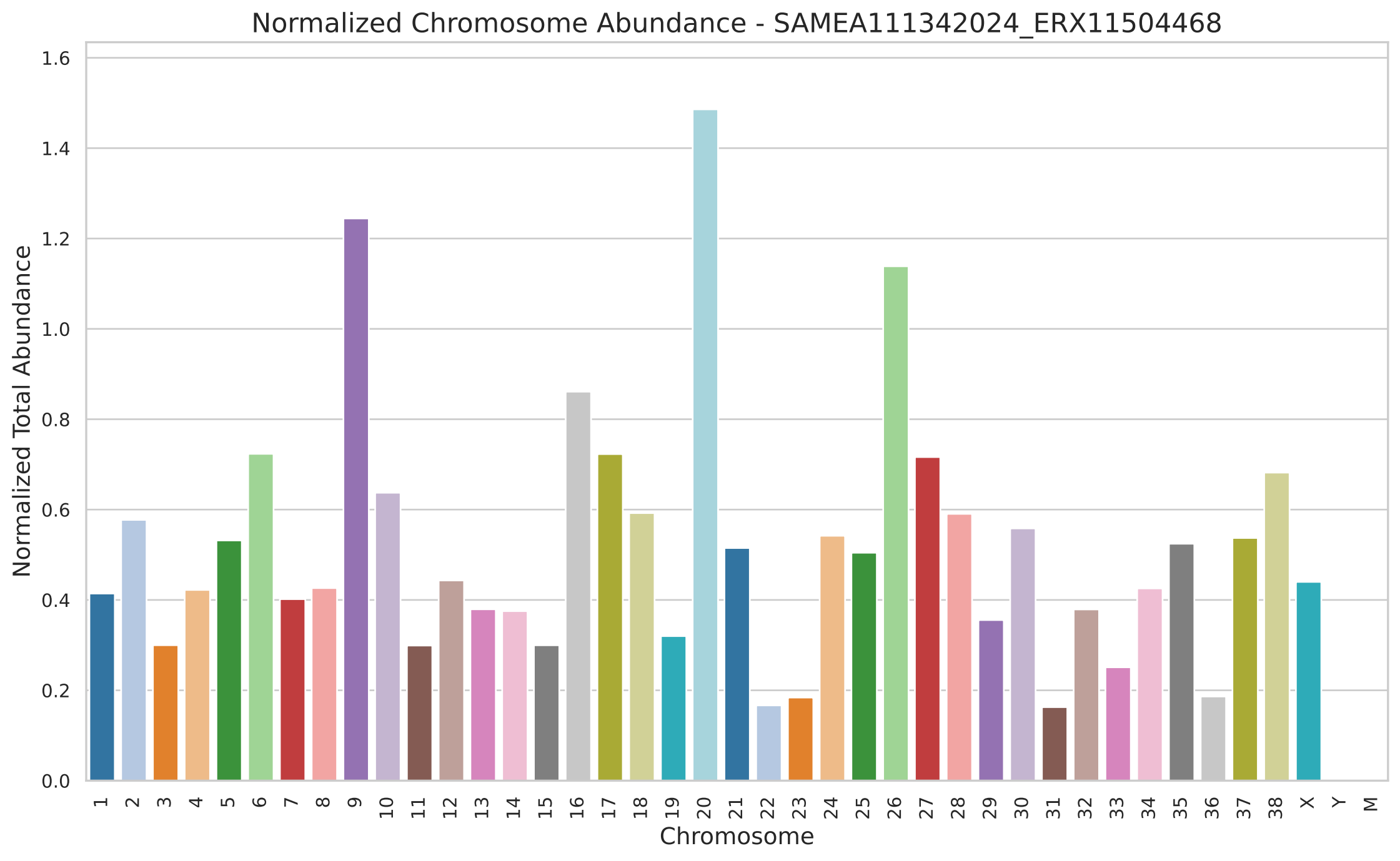

Normalized Chromosome Abundance - SAMEA111342002_ERX11504454
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

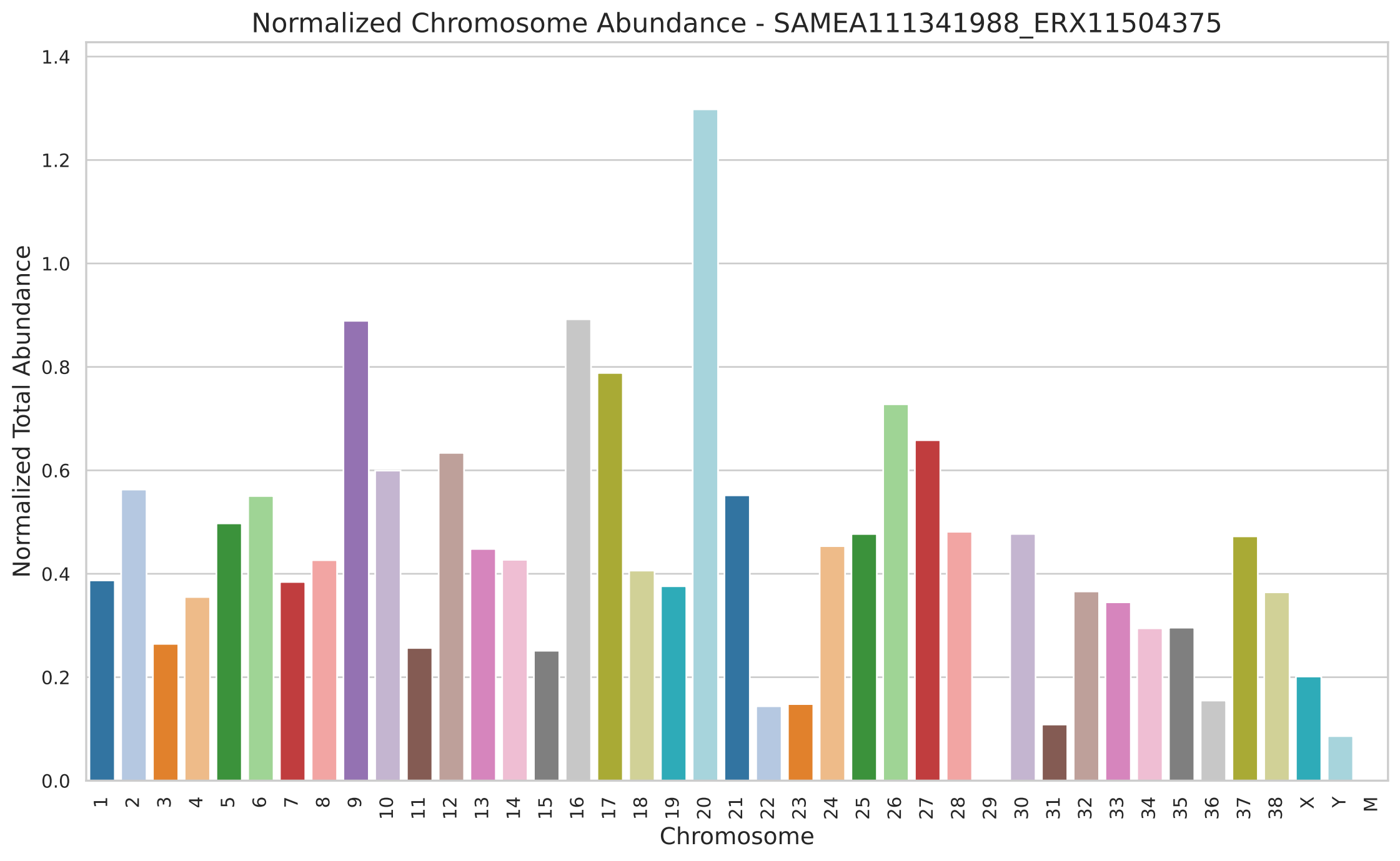

Normalized Chromosome Abundance - SAMEA111341977_ERX11504495
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
0.4
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

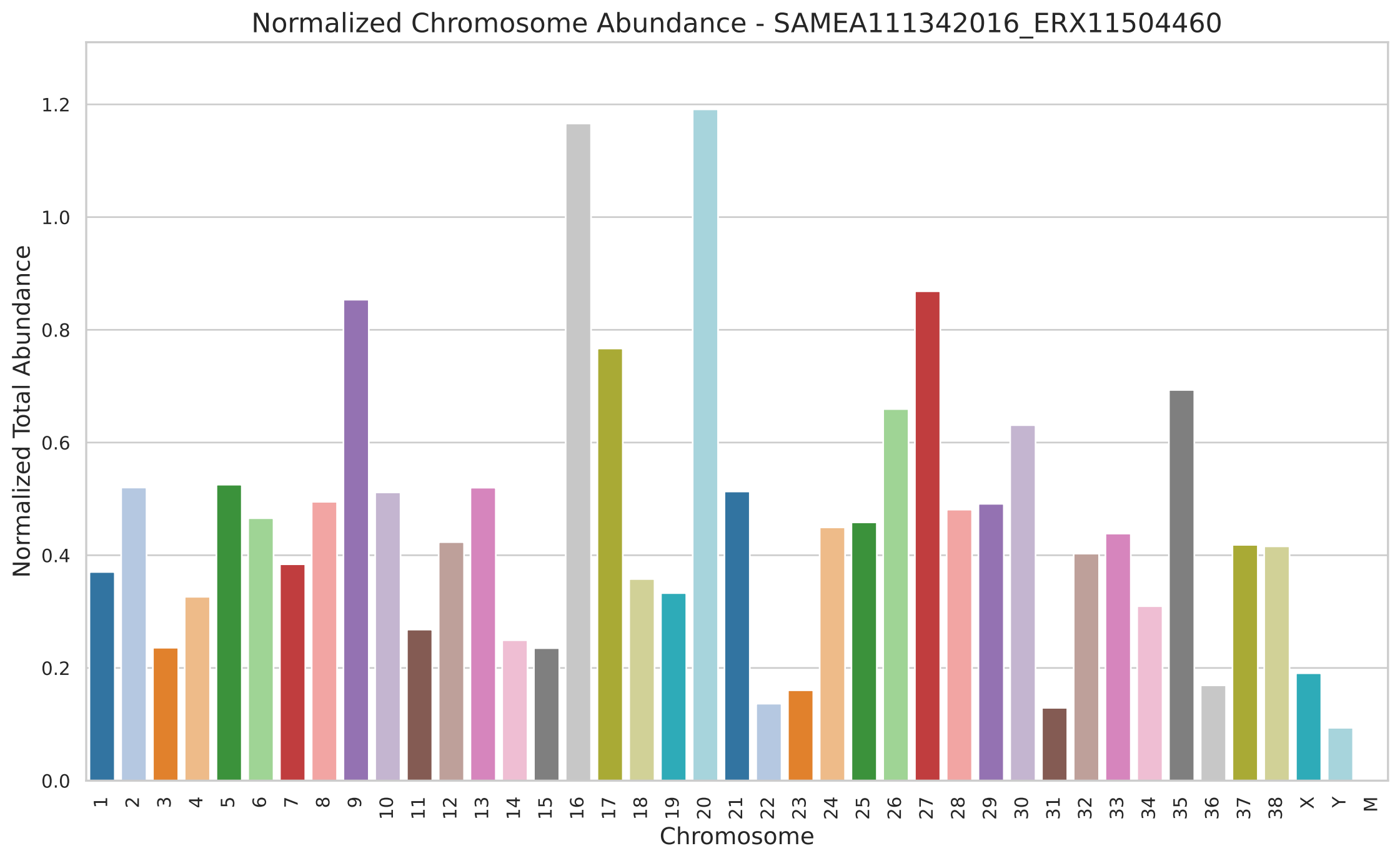

Normalized Chromosome Abundance - SAMEA111342000_ERX11504450
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

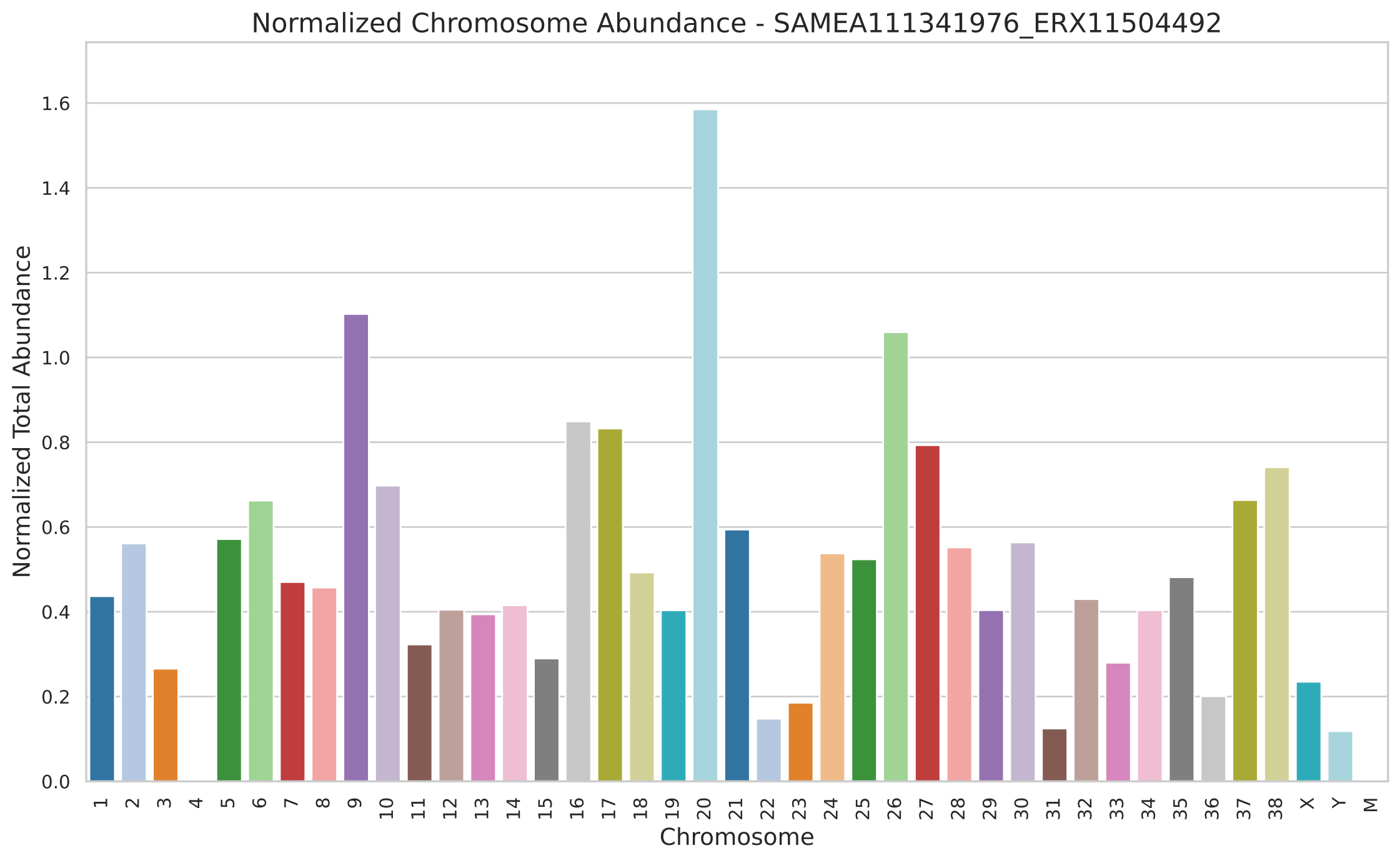

Normalized Chromosome Abundance - SAMEA111342008_ERX11504441
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

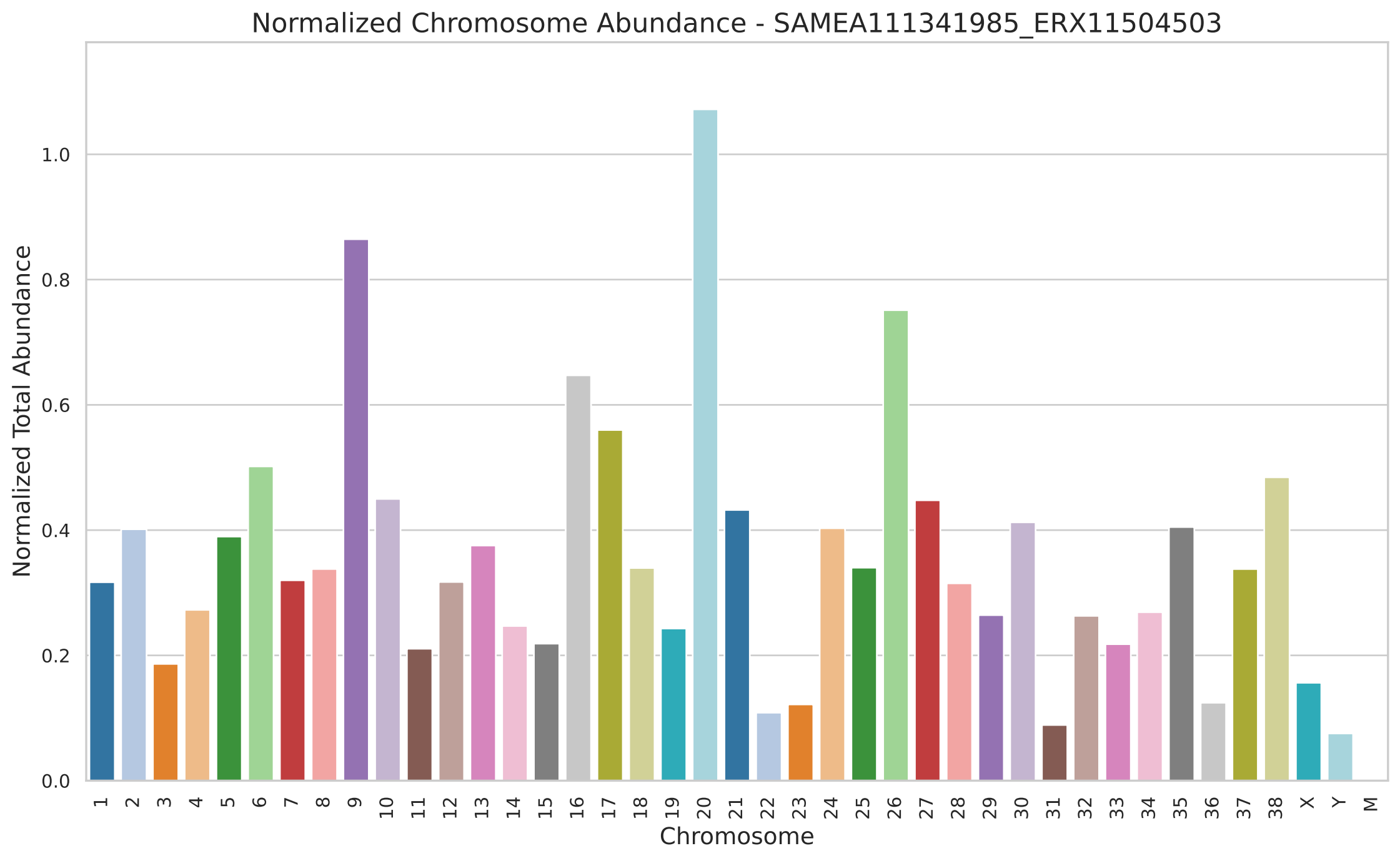

Normalized Chromosome Abundance - SAMEA111342018_ERX11504370
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

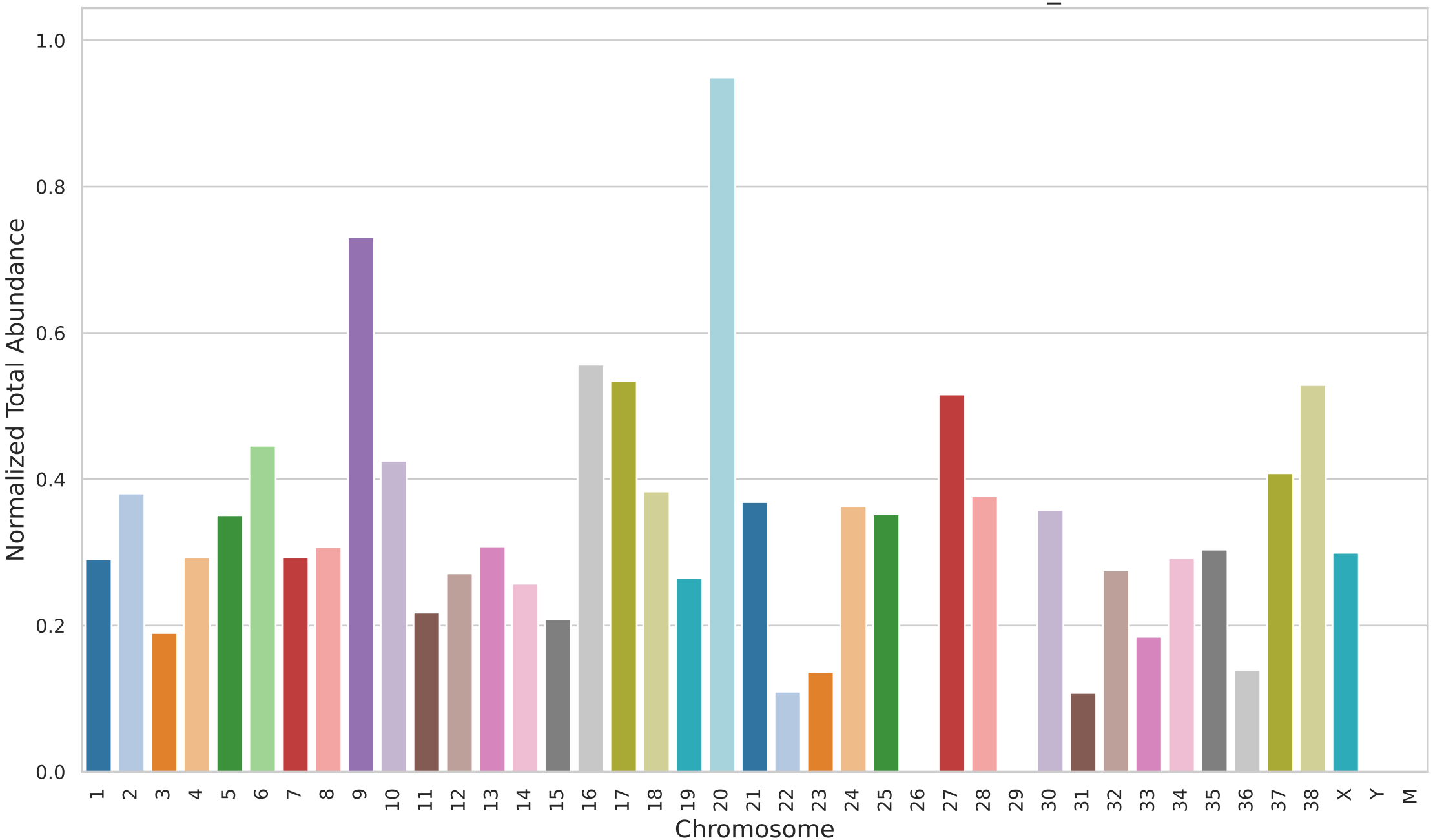

Normalized Chromosome Abundance - SAMEA111342024_ERX11504468
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

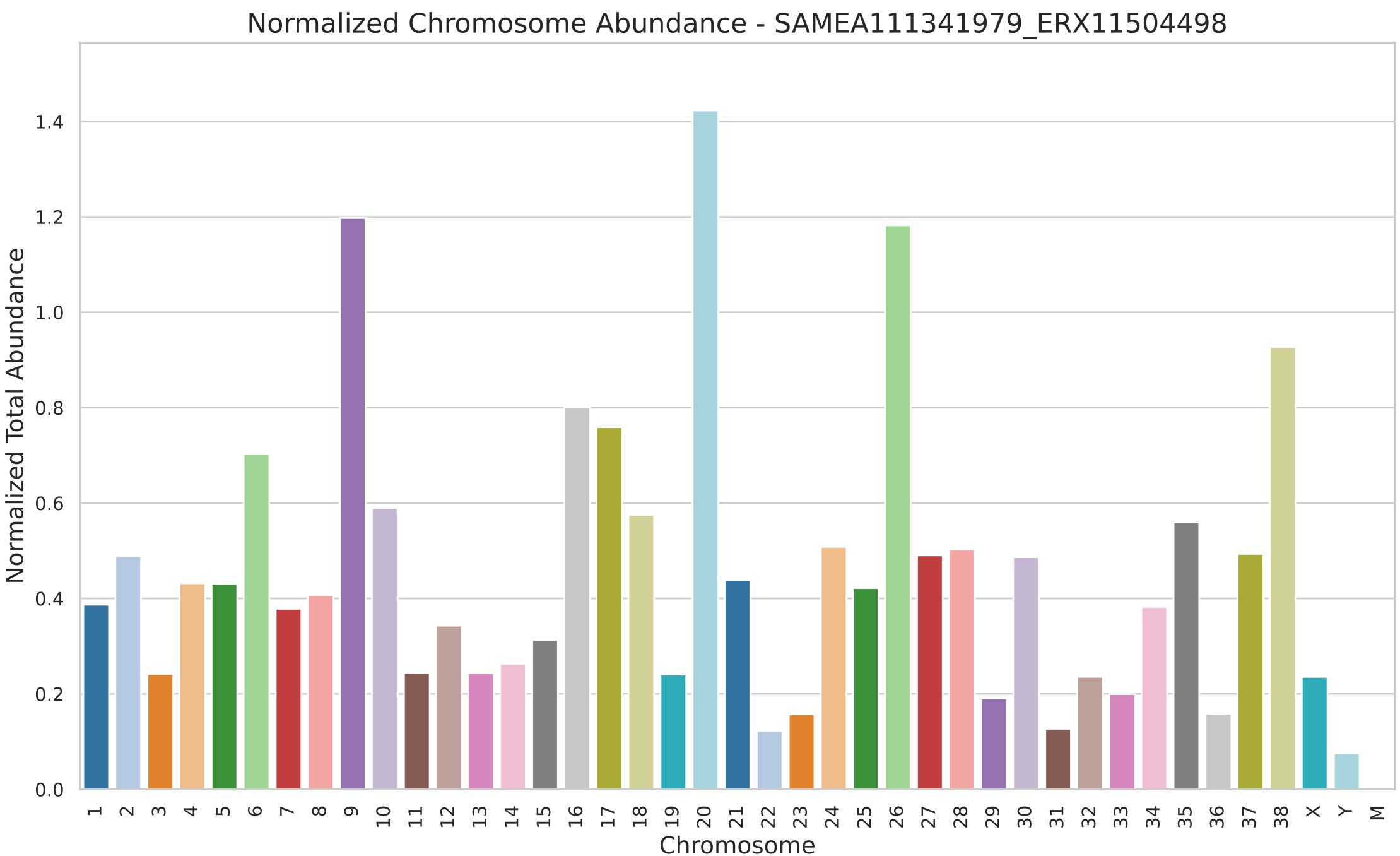

Normalized Chromosome Abundance - SAMEA111341988_ERX11504375
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

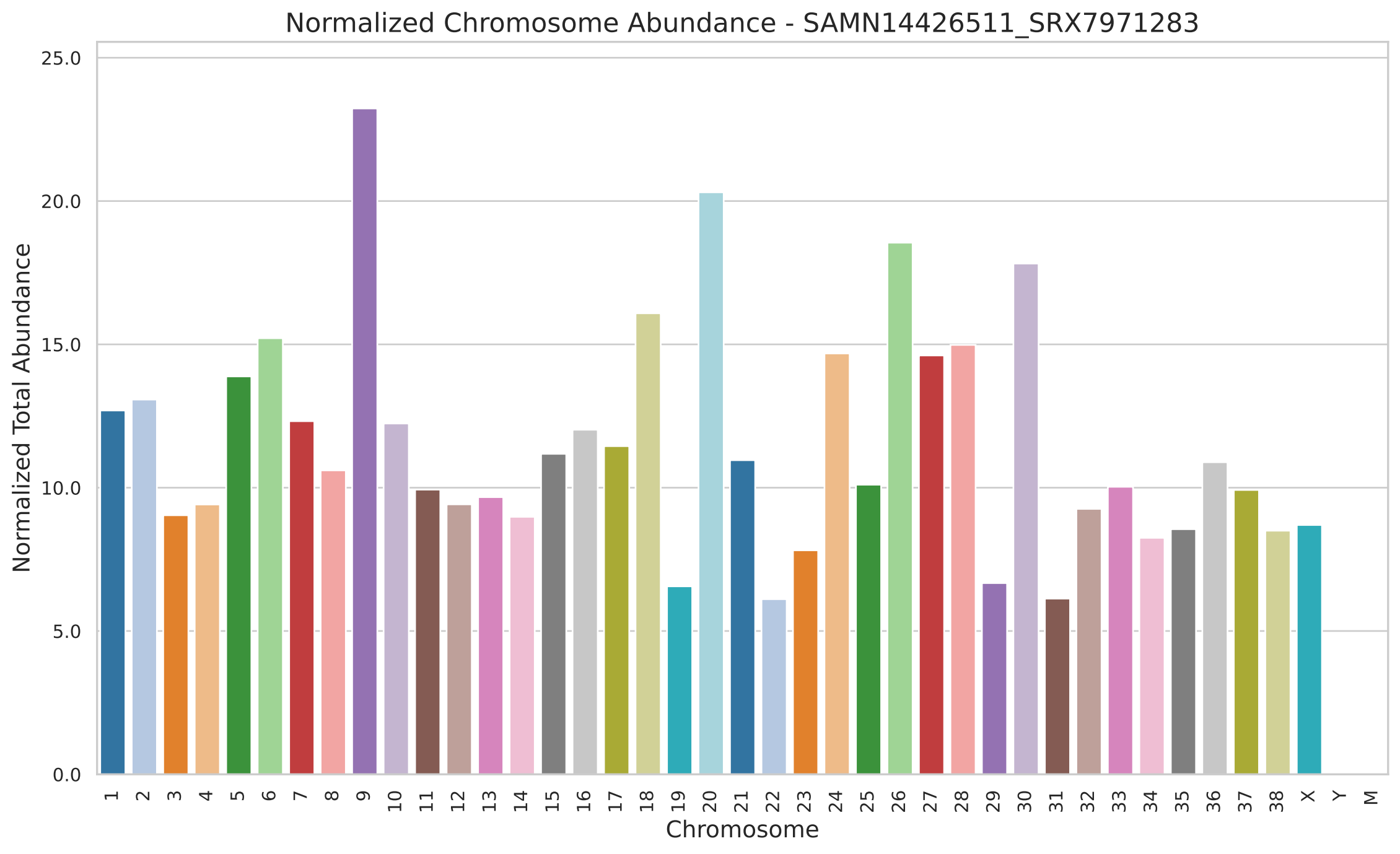

Normalized Chromosome Abundance - SAMEA111342016_ERX11504460
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

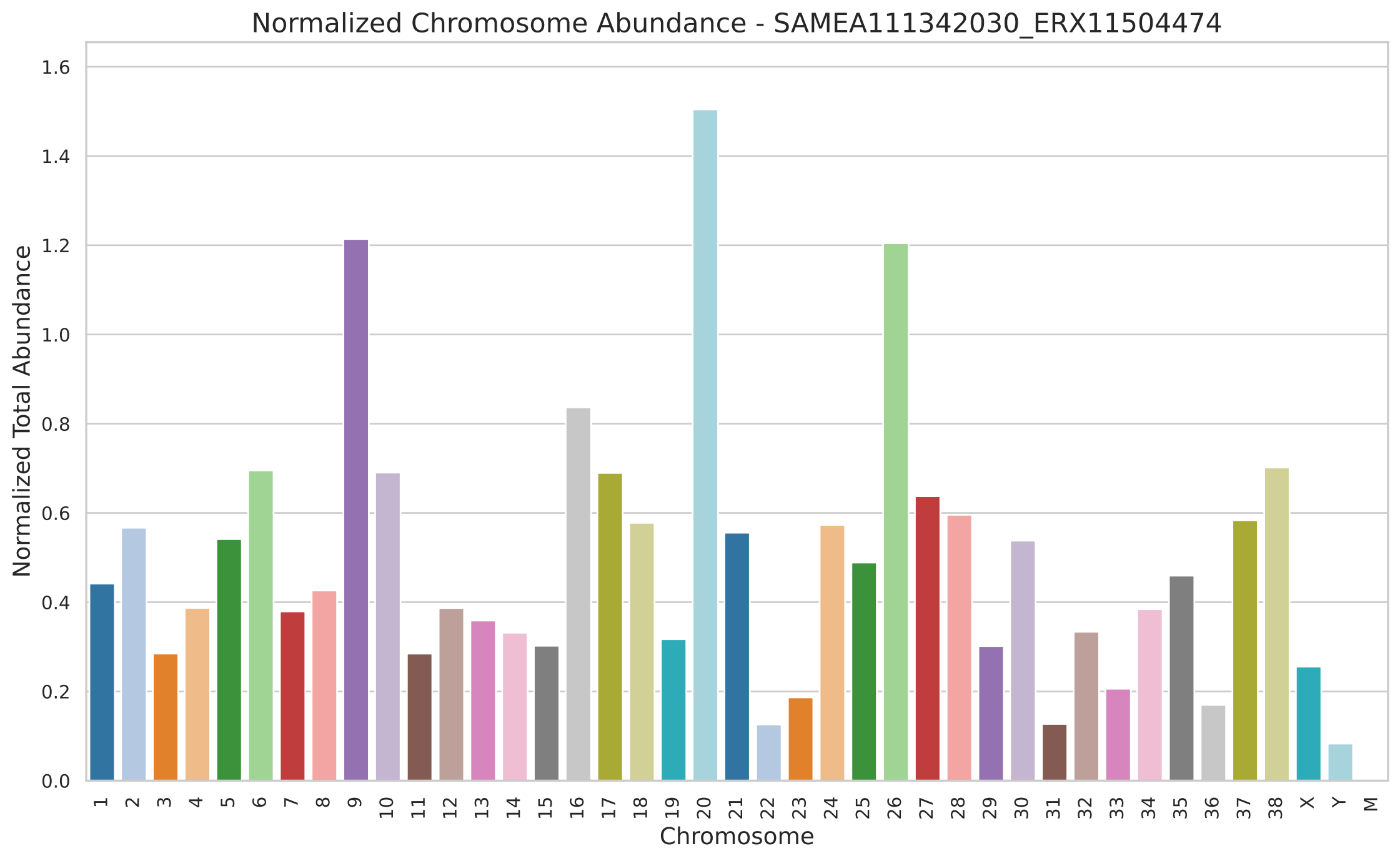

Normalized Chromosome Abundance - SAMEA111341976_ERX11504492
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

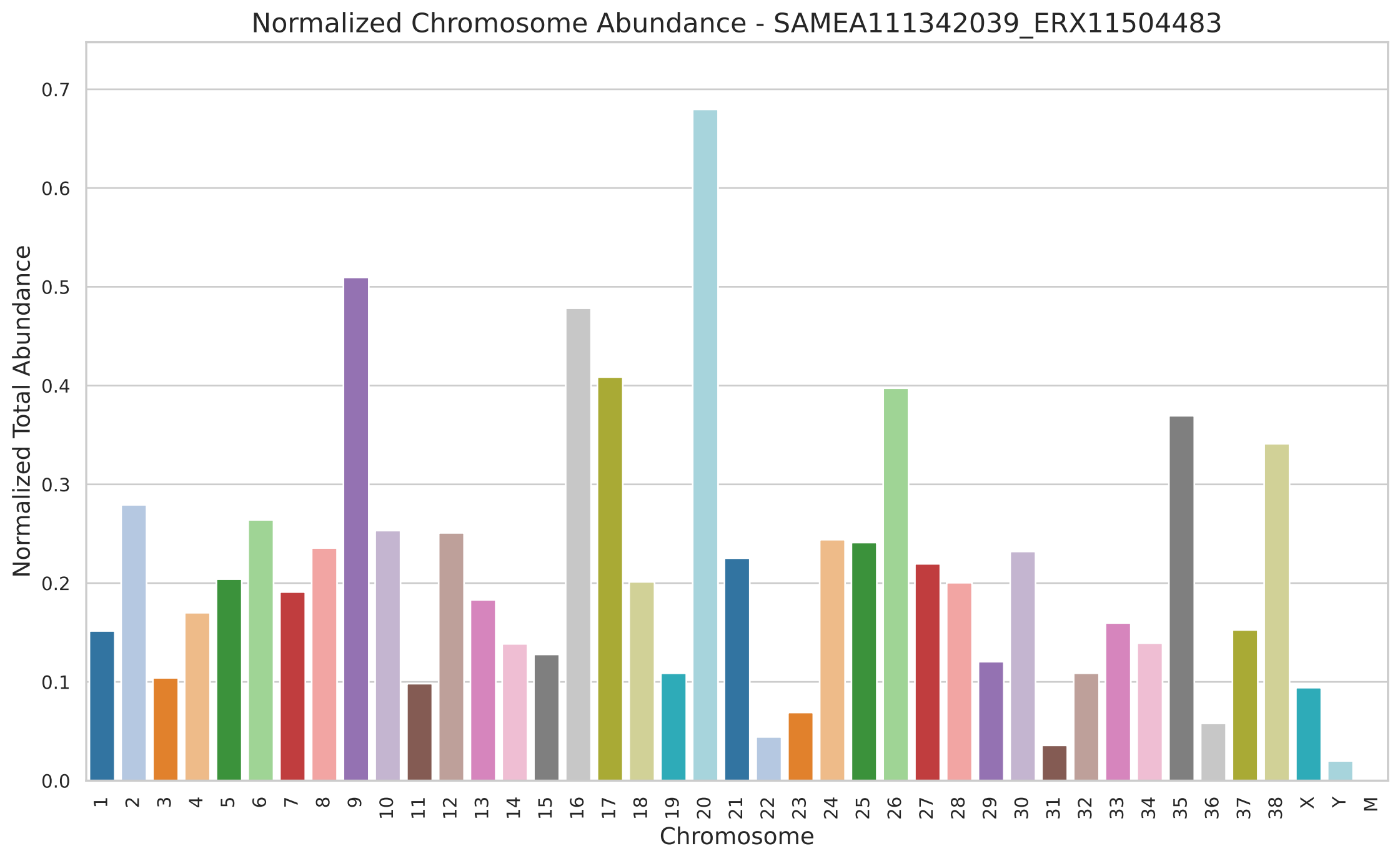

Normalized Chromosome Abundance - SAMEA111341985_ERX11504503
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

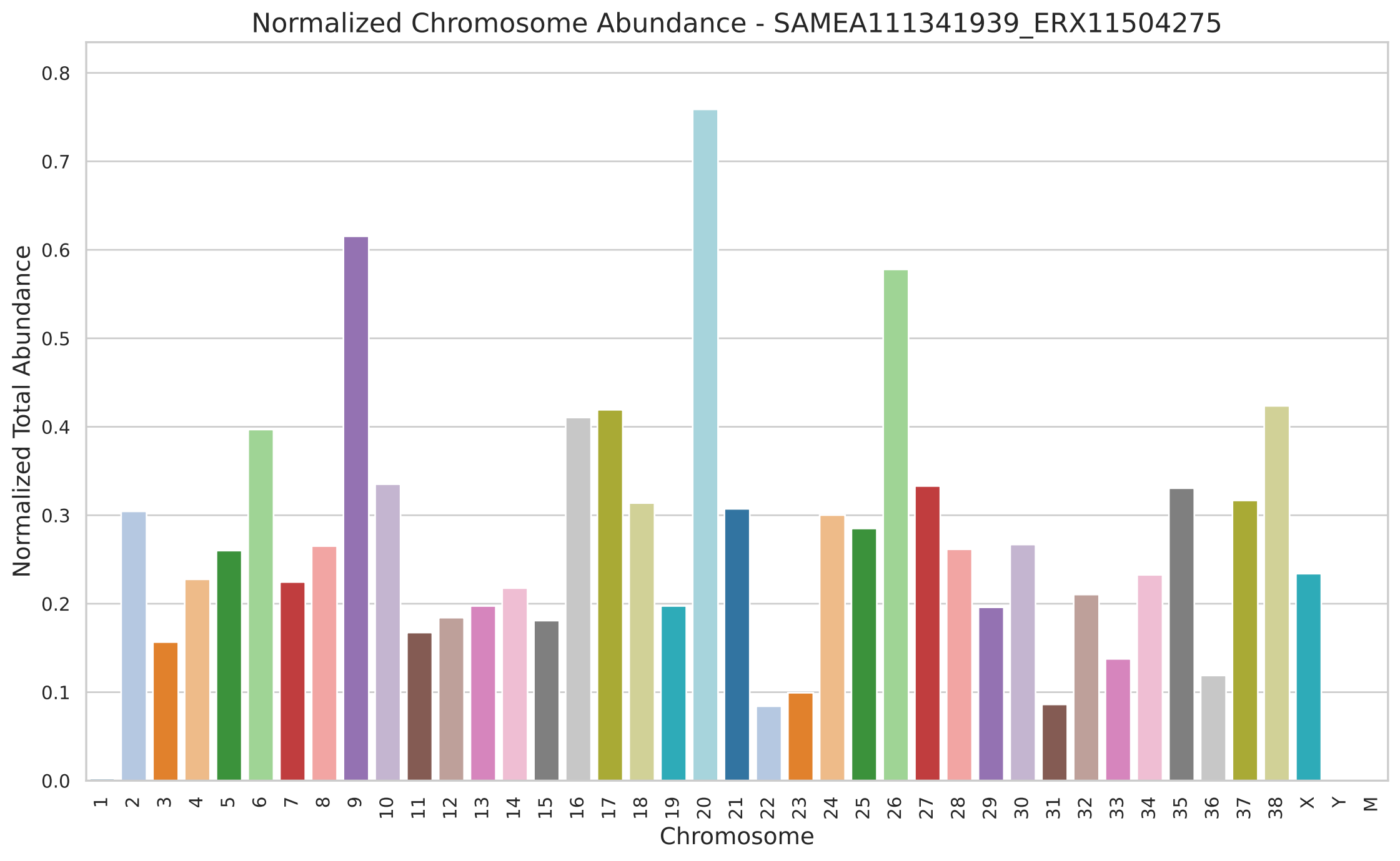

Normalized Chromosome Abundance - SAMEA111342021_ERX11504464
Normalized Total Abundance
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

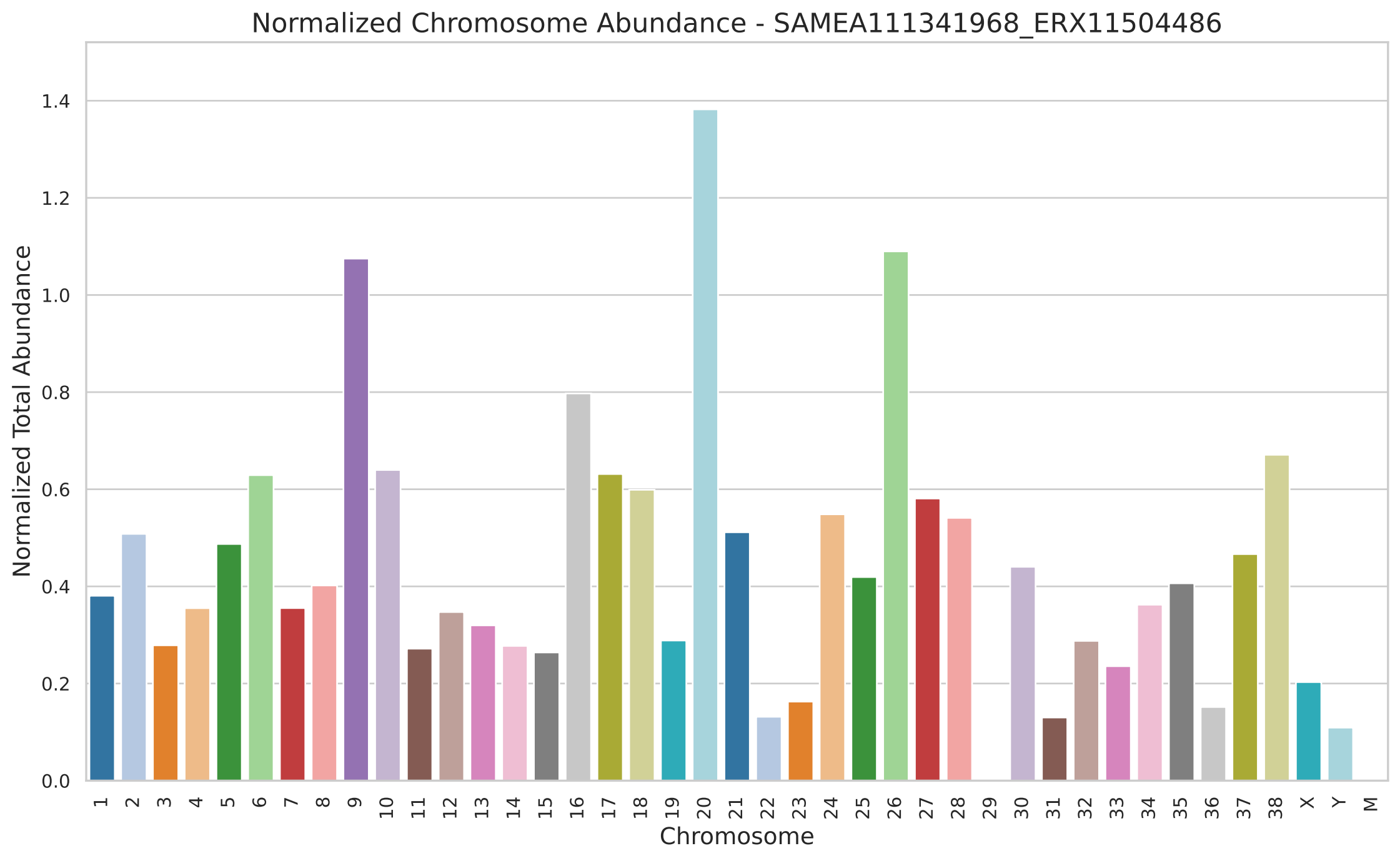

Normalized Chromosome Abundance - SAMEA111341979_ERX11504498
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 X Y M
Chromosome

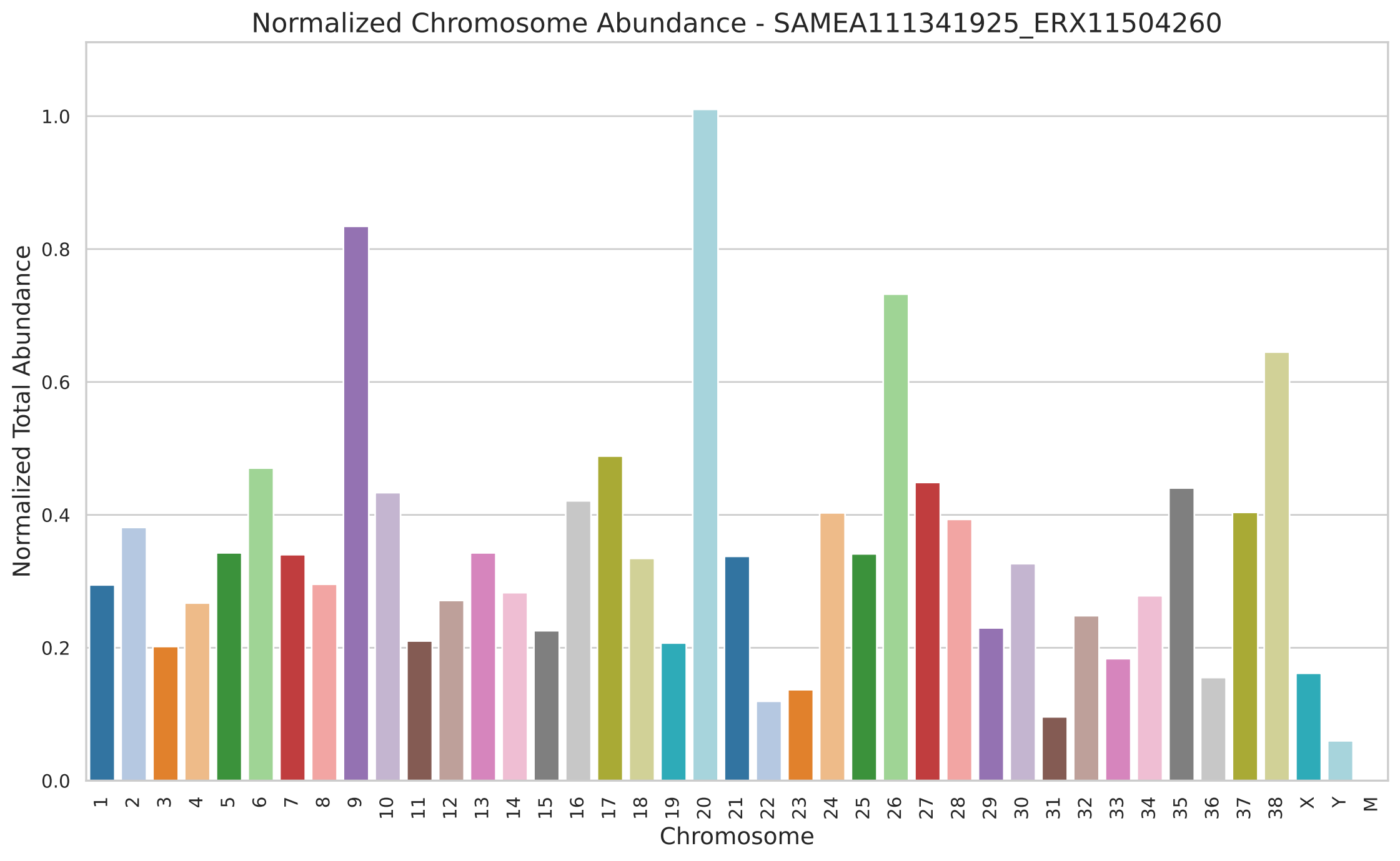

Normalized Chromosome Abundance - SAMN14426511_SRX7971283
Normalized Total Abundance
25.0
20.0
15.0
10.0
5.0
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

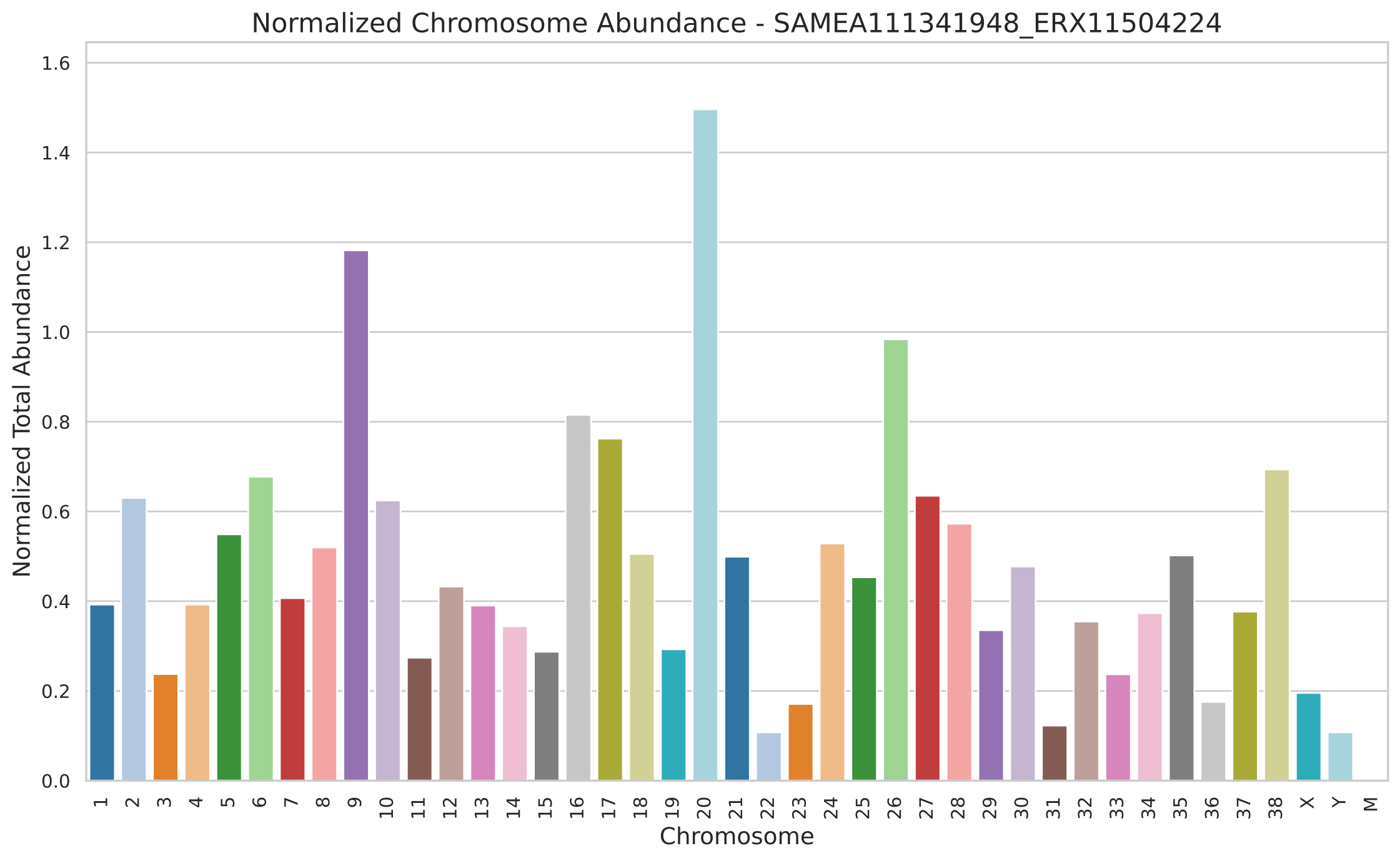

Normalized Chromosome Abundance - SAMEA111342030_ERX11504474
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

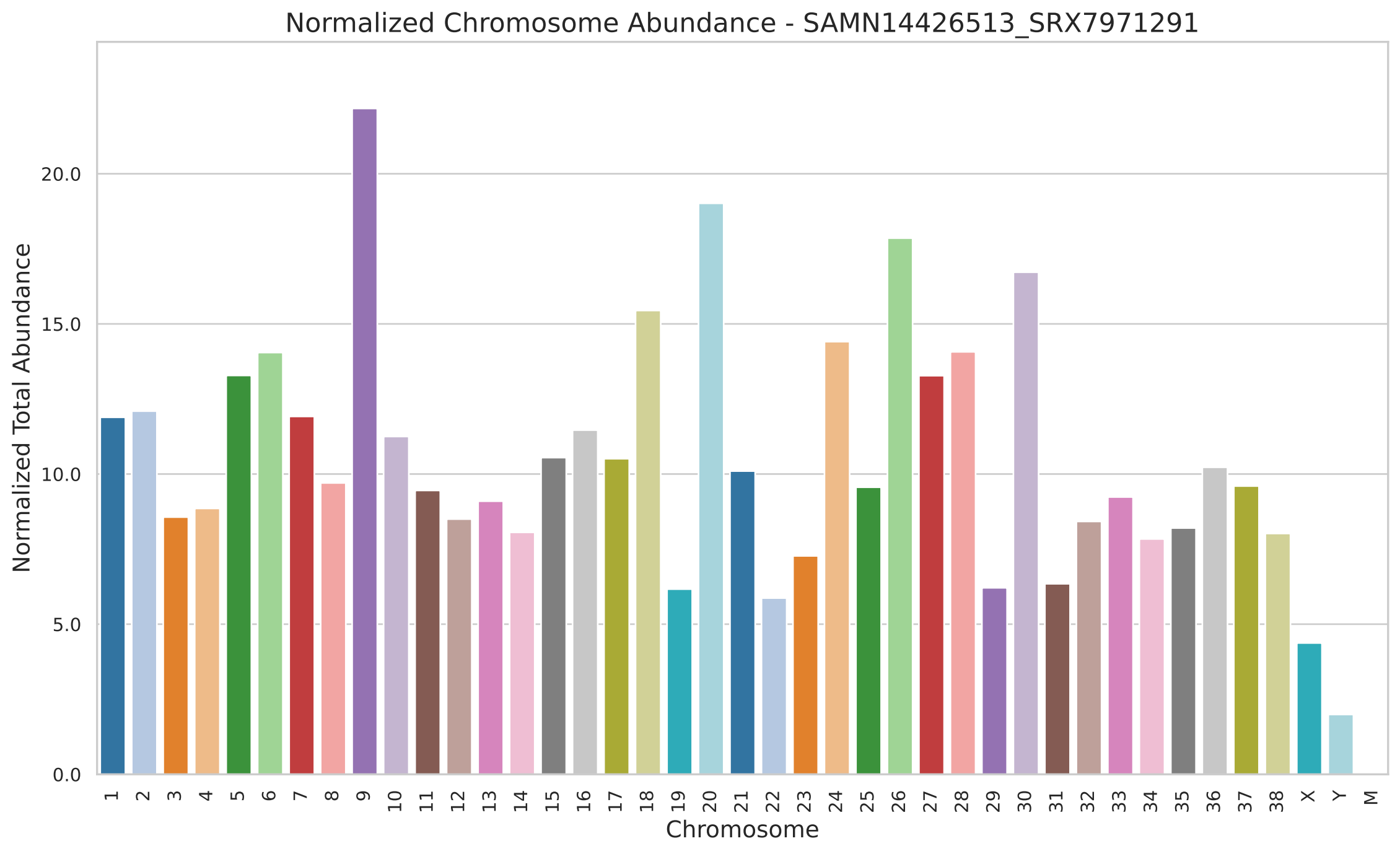

Normalized Chromosome Abundance - SAMEA111342039_ERX11504483
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

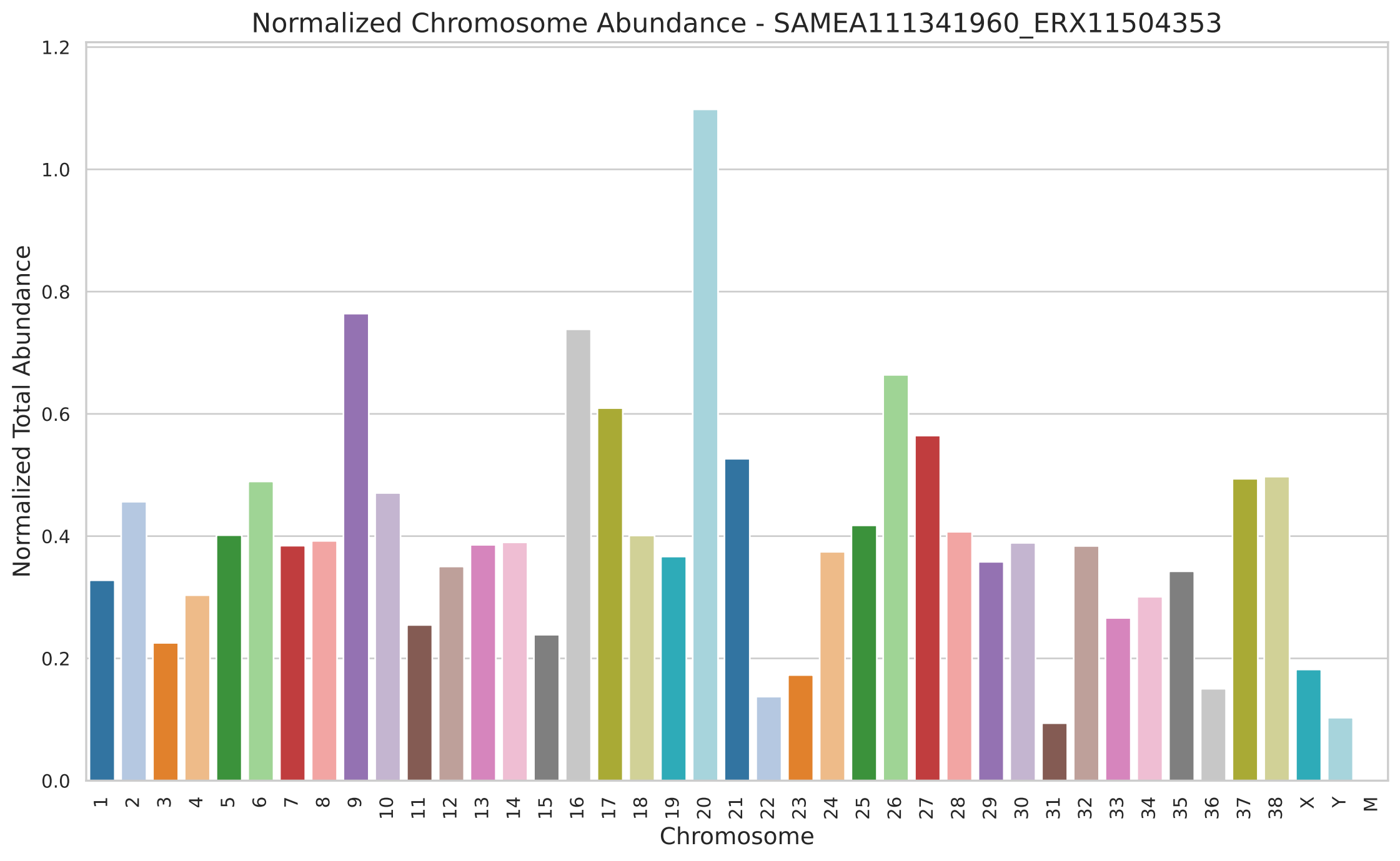

Normalized Chromosome Abundance - SAMEA111341939_ERX11504275
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

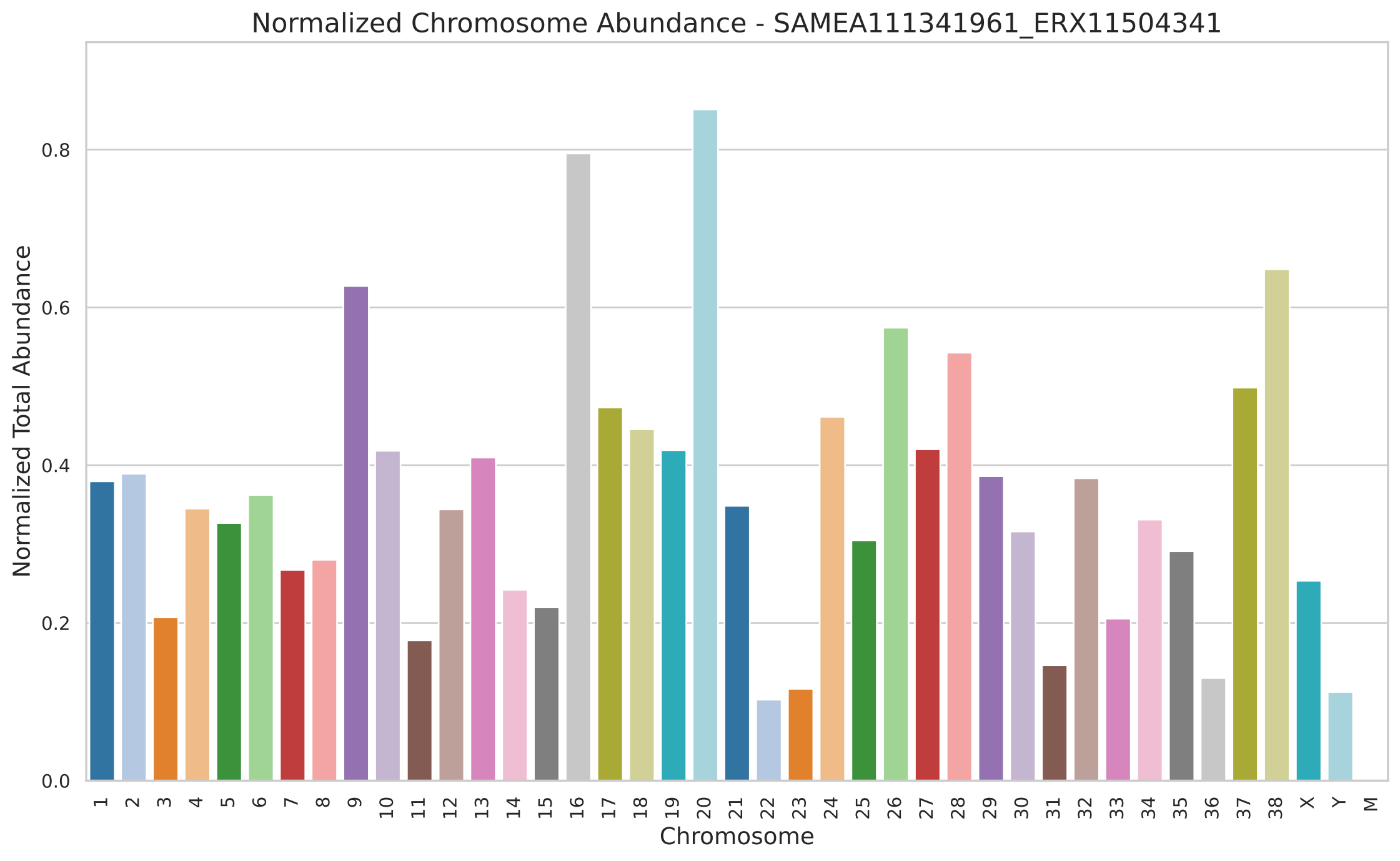

Normalized Chromosome Abundance - SAMEA111341968_ERX11504486
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

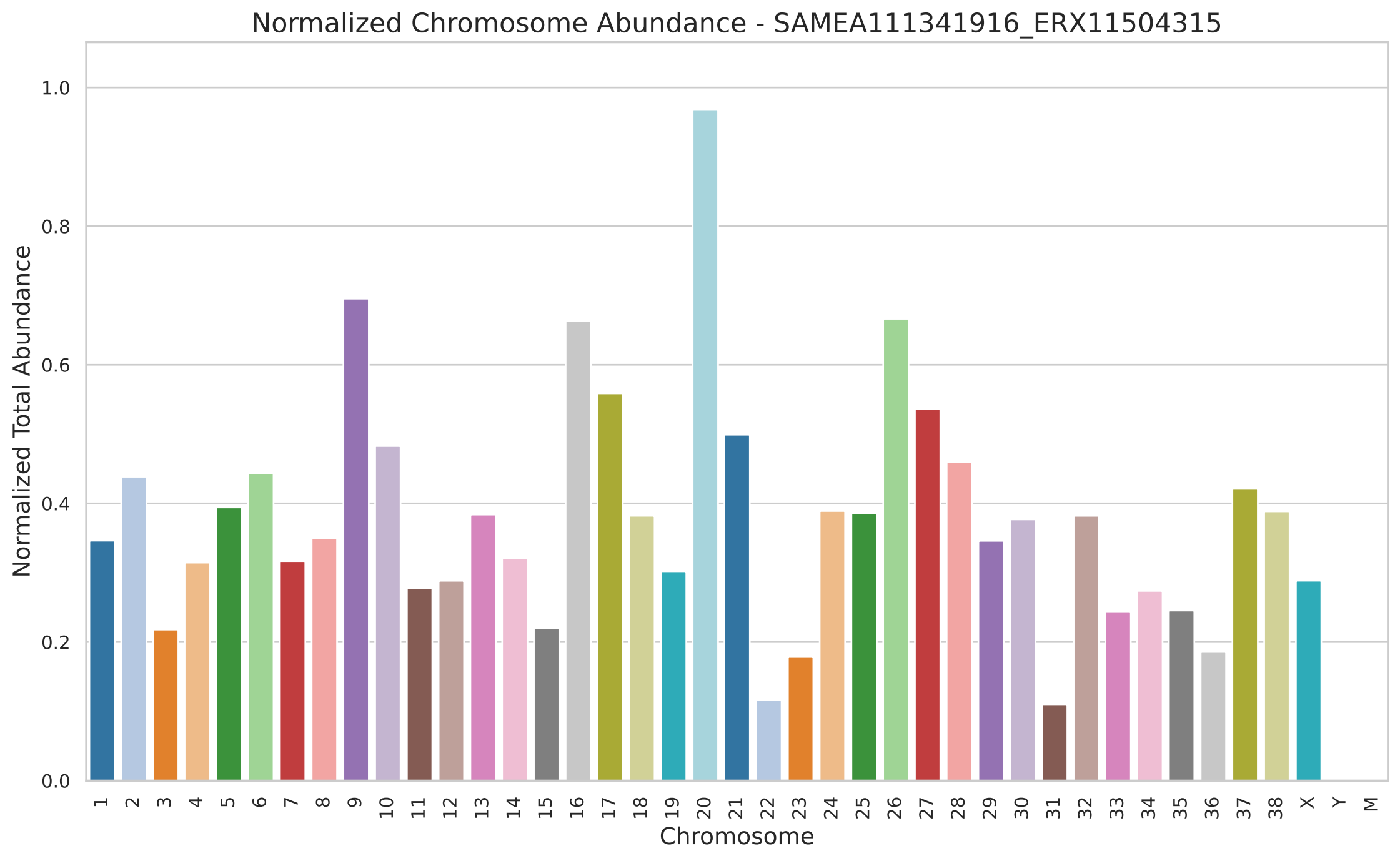

Normalized Chromosome Abundance - SAMEA111341925_ERX11504260
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

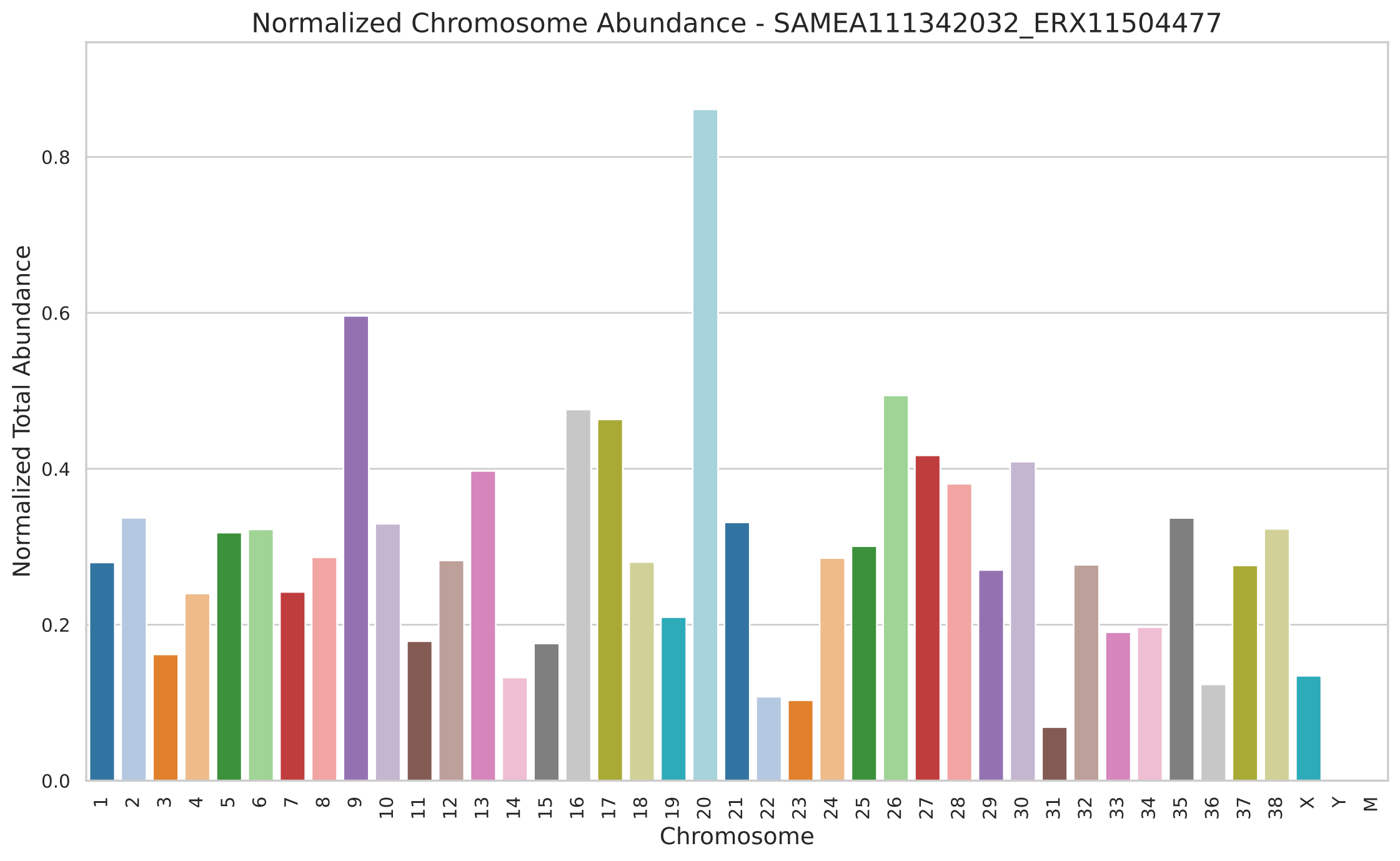

Normalized Chromosome Abundance - SAMEA111341948_ERX11504224
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

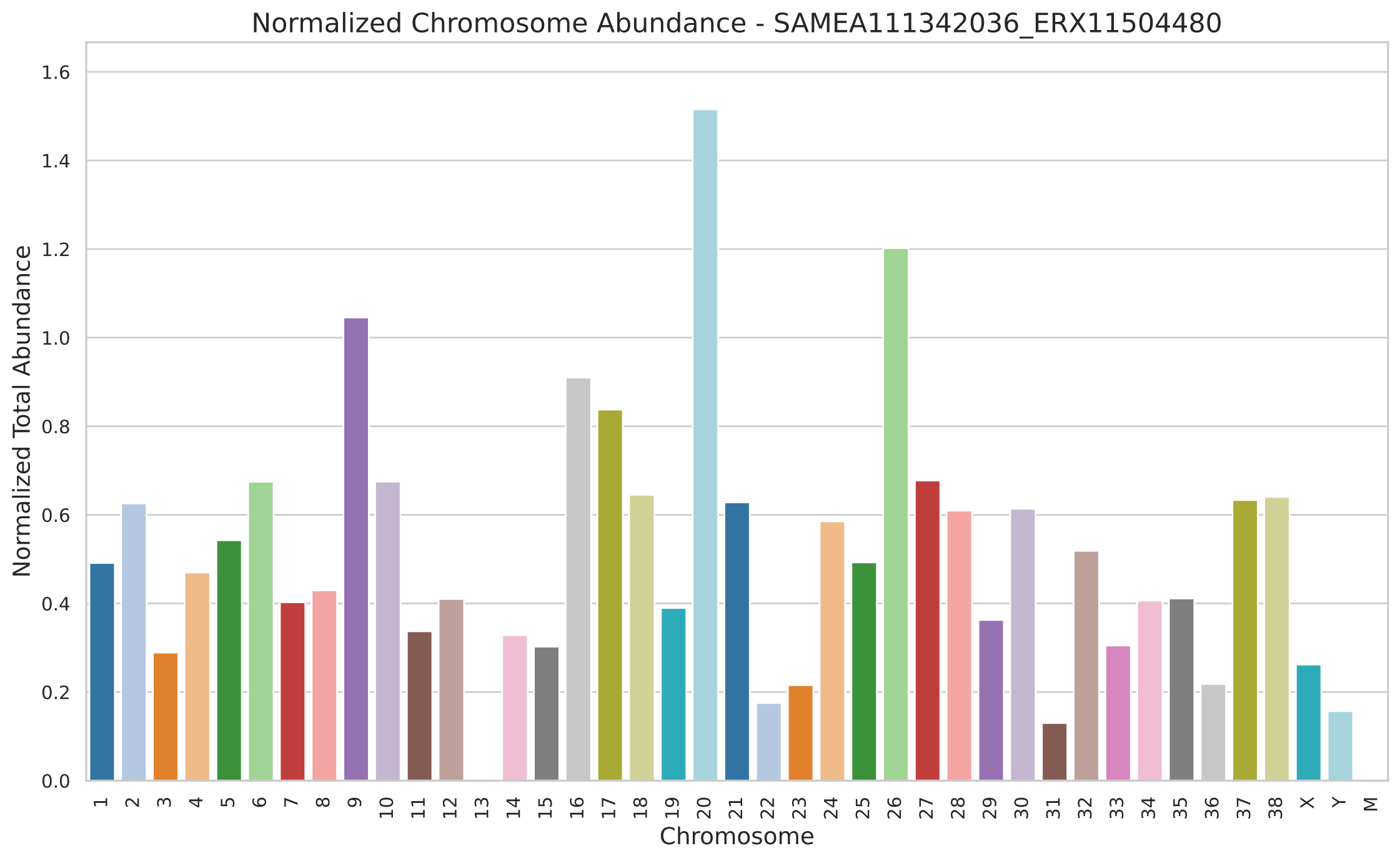

Normalized Chromosome Abundance - SAMN14426513_SRX7971291
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

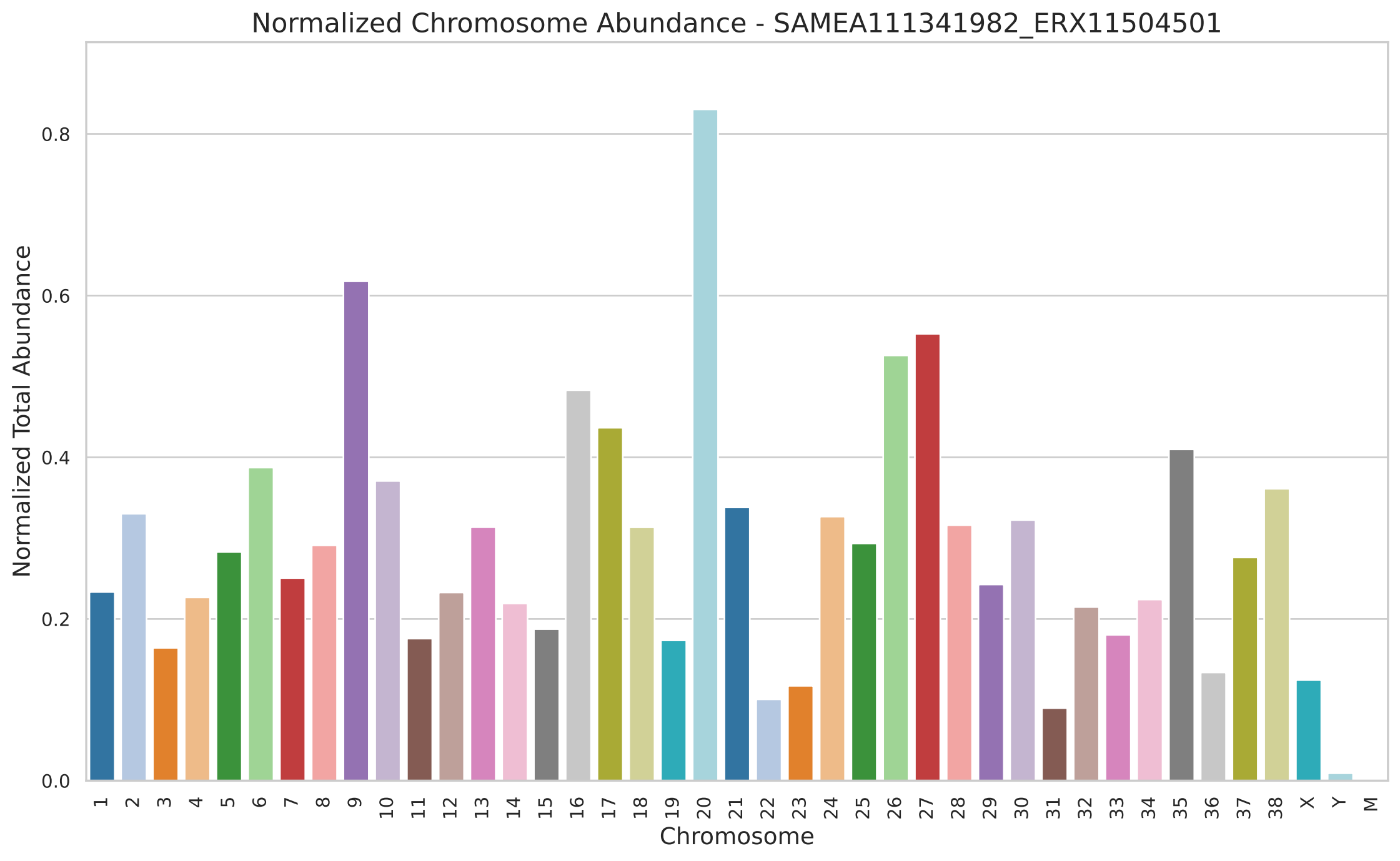

Normalized Chromosome Abundance - SAMEA111341960_ERX11504353
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

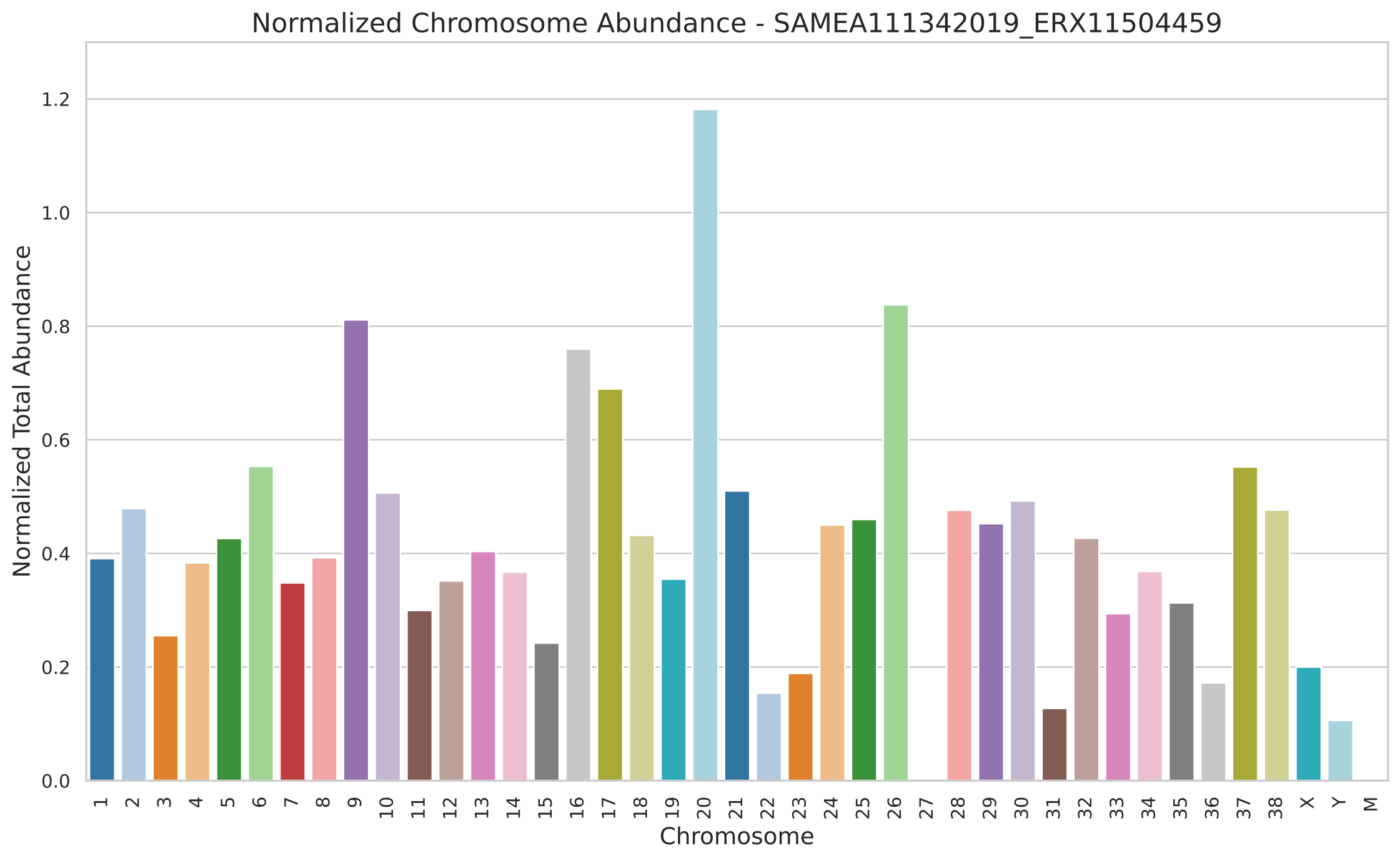

Normalized Chromosome Abundance - SAMEA111341961_ERX11504341
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

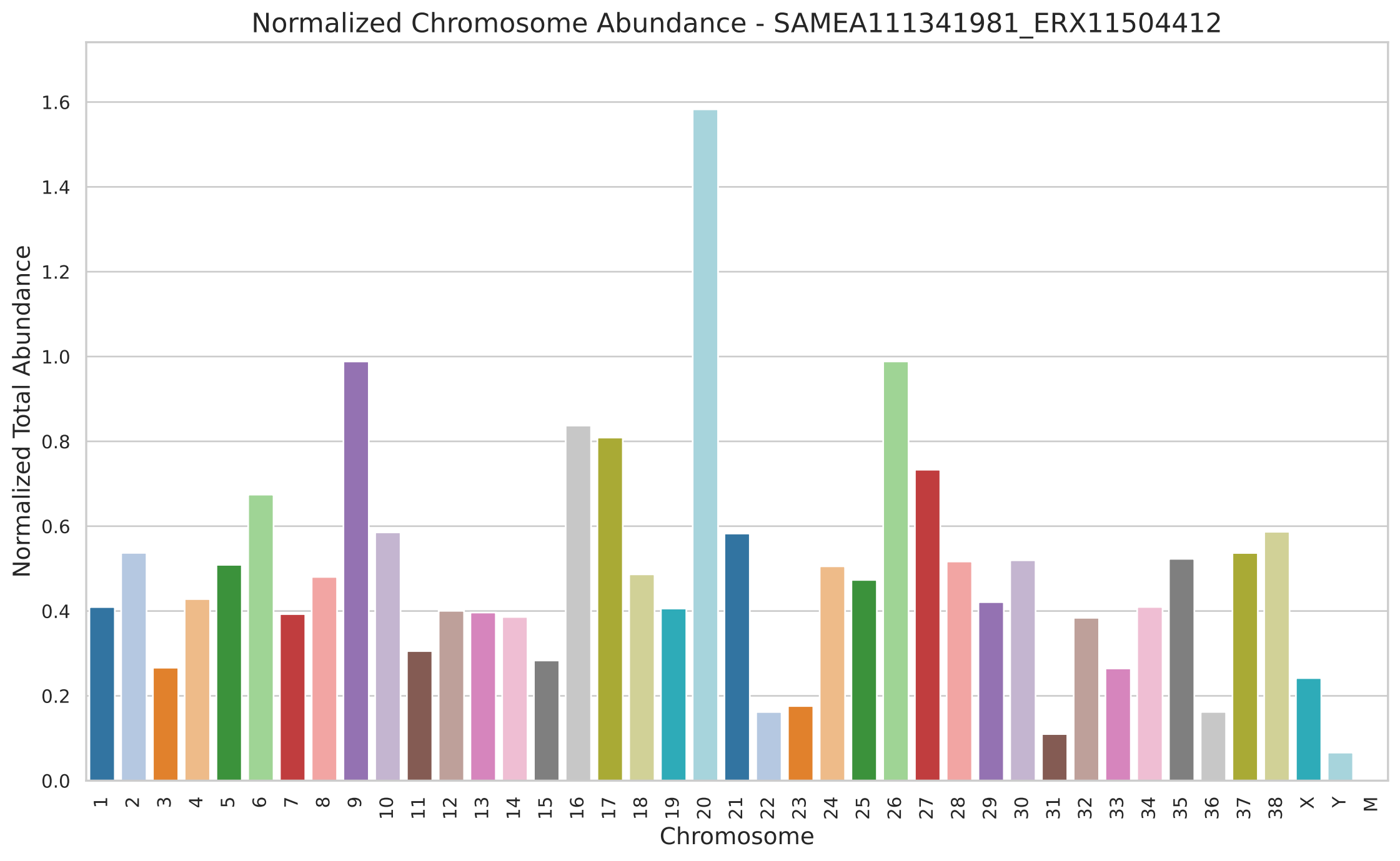

Normalized Chromosome Abundance - SAMEA111341916_ERX11504315
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

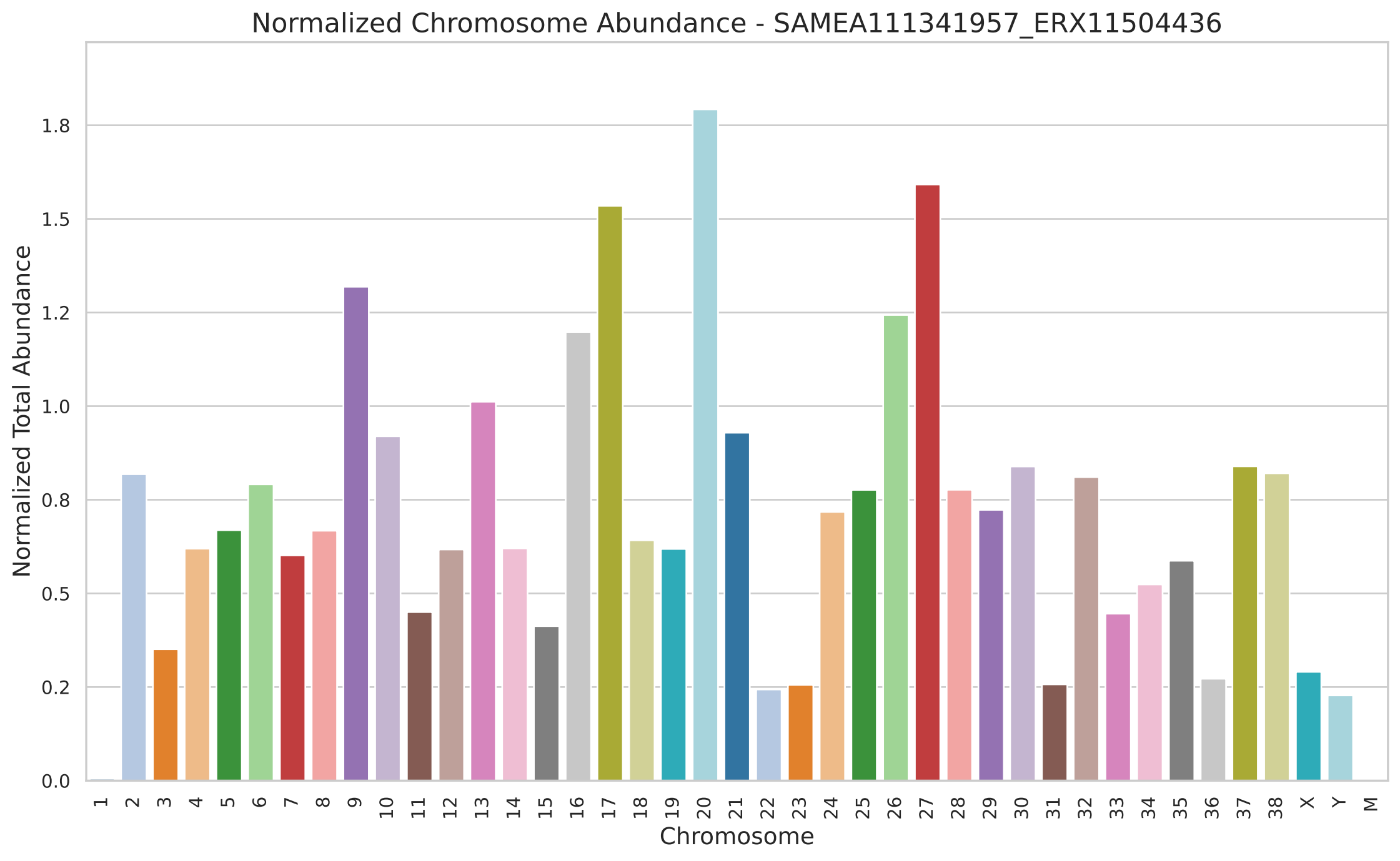

Normalized Chromosome Abundance - SAMEA111342032_ERX11504477
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

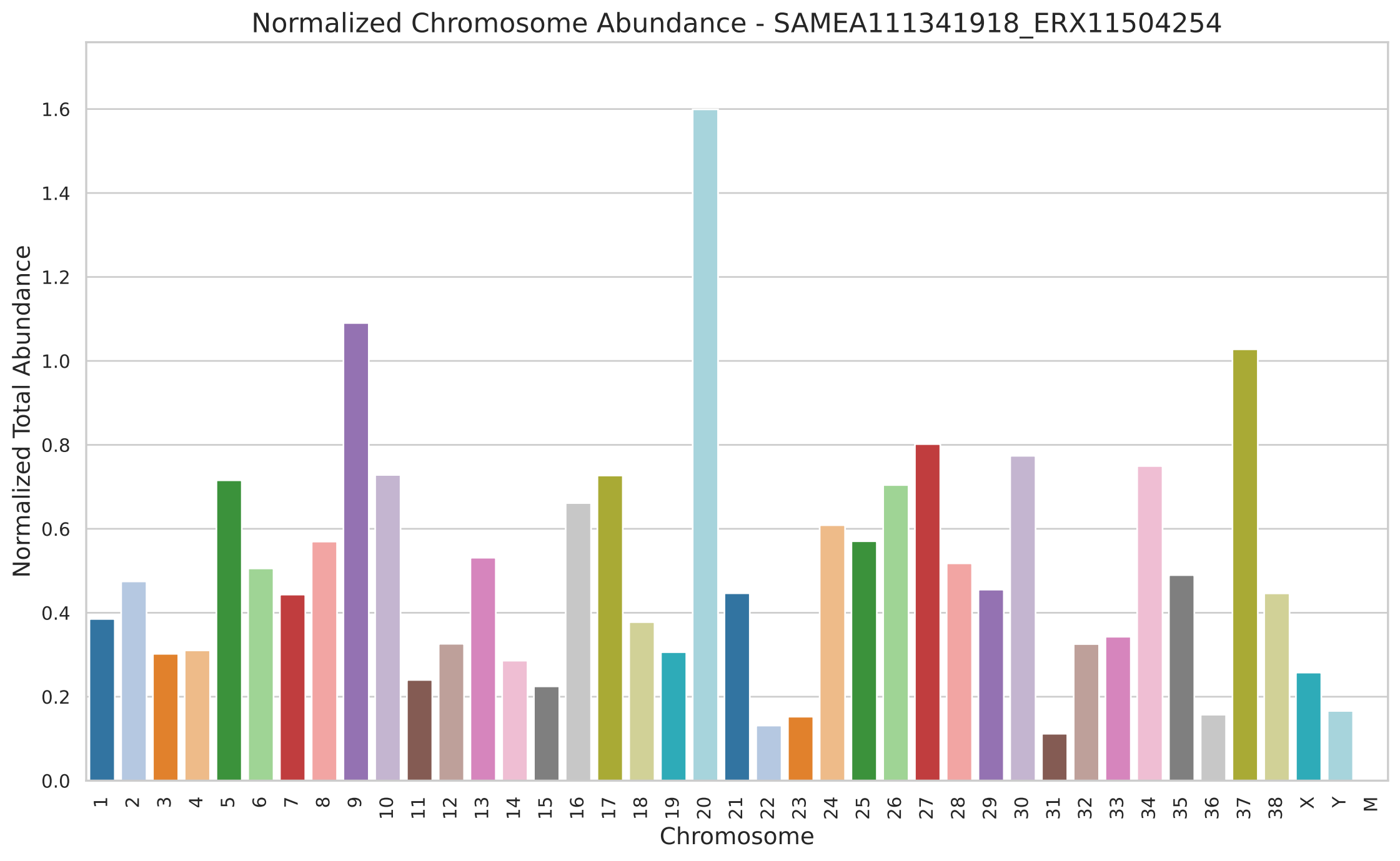

Normalized Chromosome Abundance - SAMEA111342036_ERX11504480
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

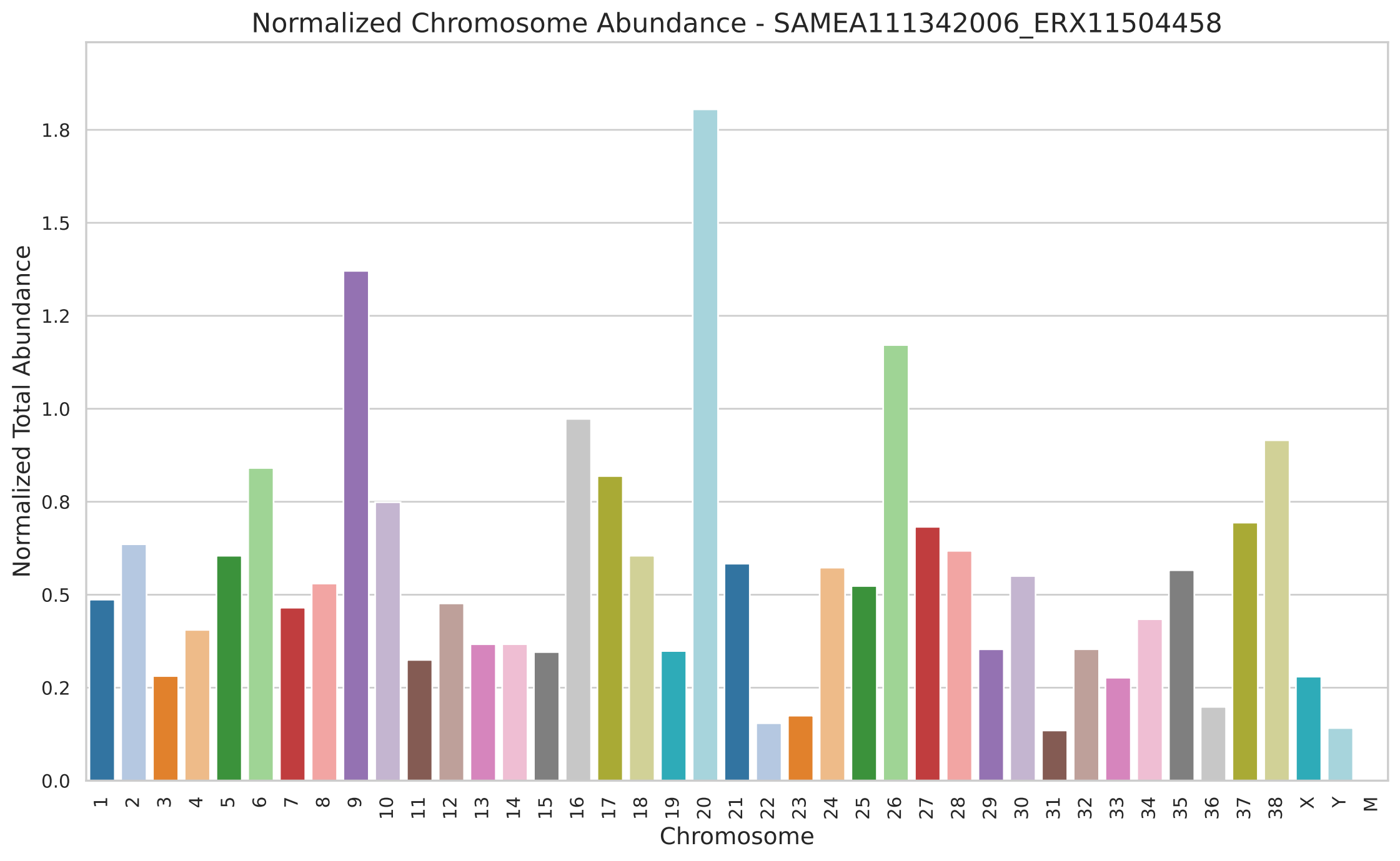

Normalized Chromosome Abundance - SAMEA111341982_ERX11504501
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

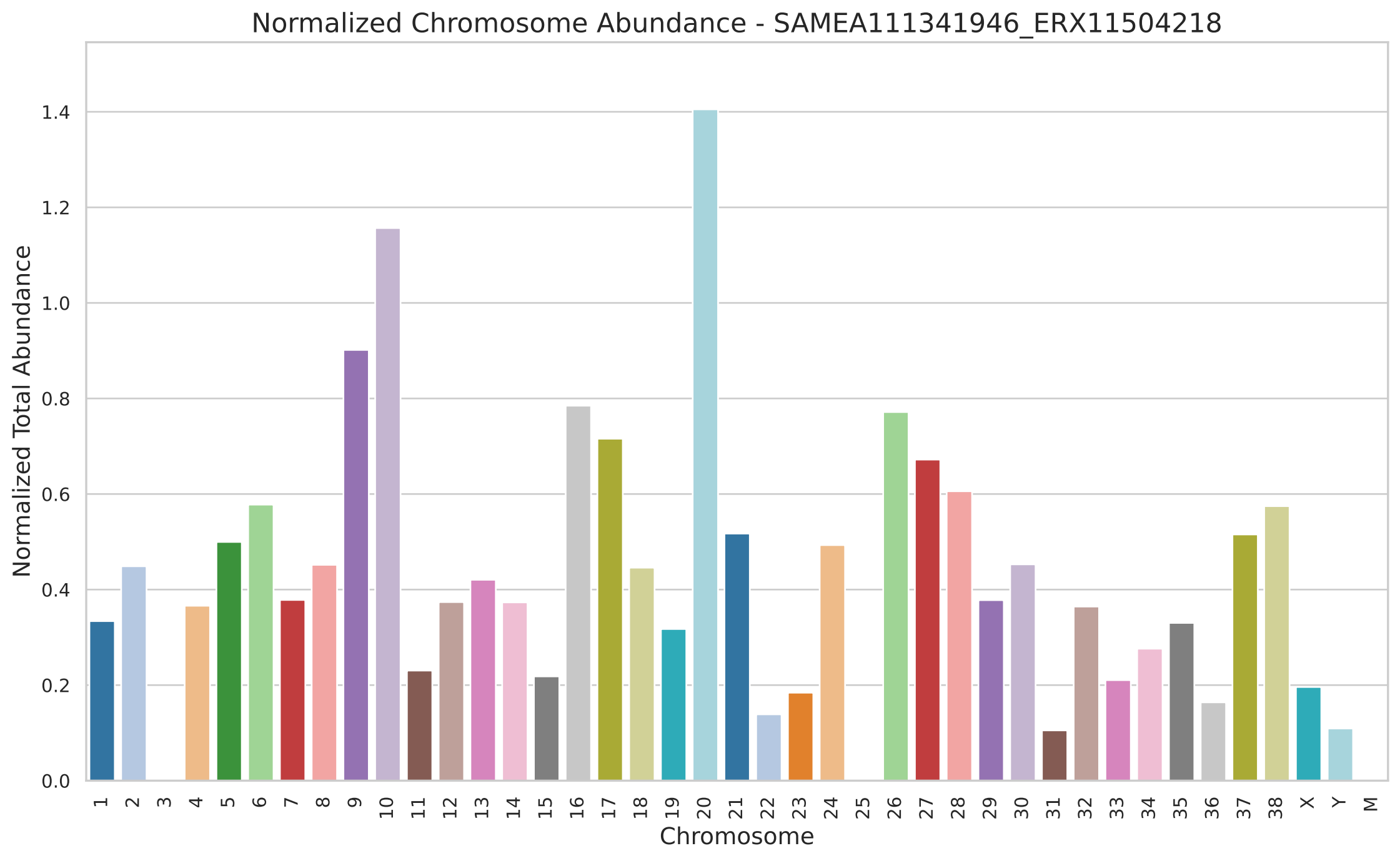

Normalized Chromosome Abundance - SAMEA111342019_ERX11504459
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

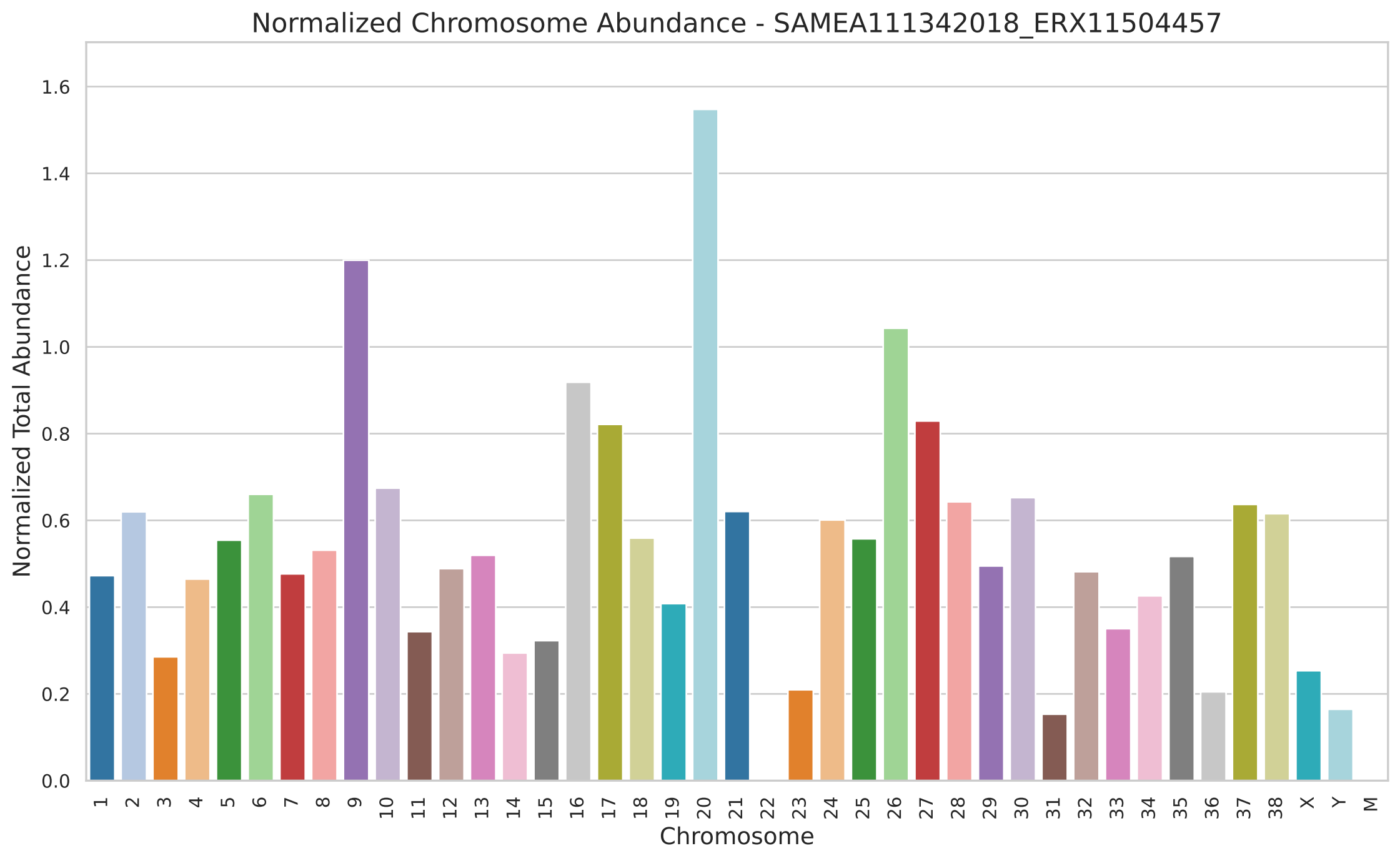

Normalized Chromosome Abundance - SAMEA111341981_ERX11504412
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

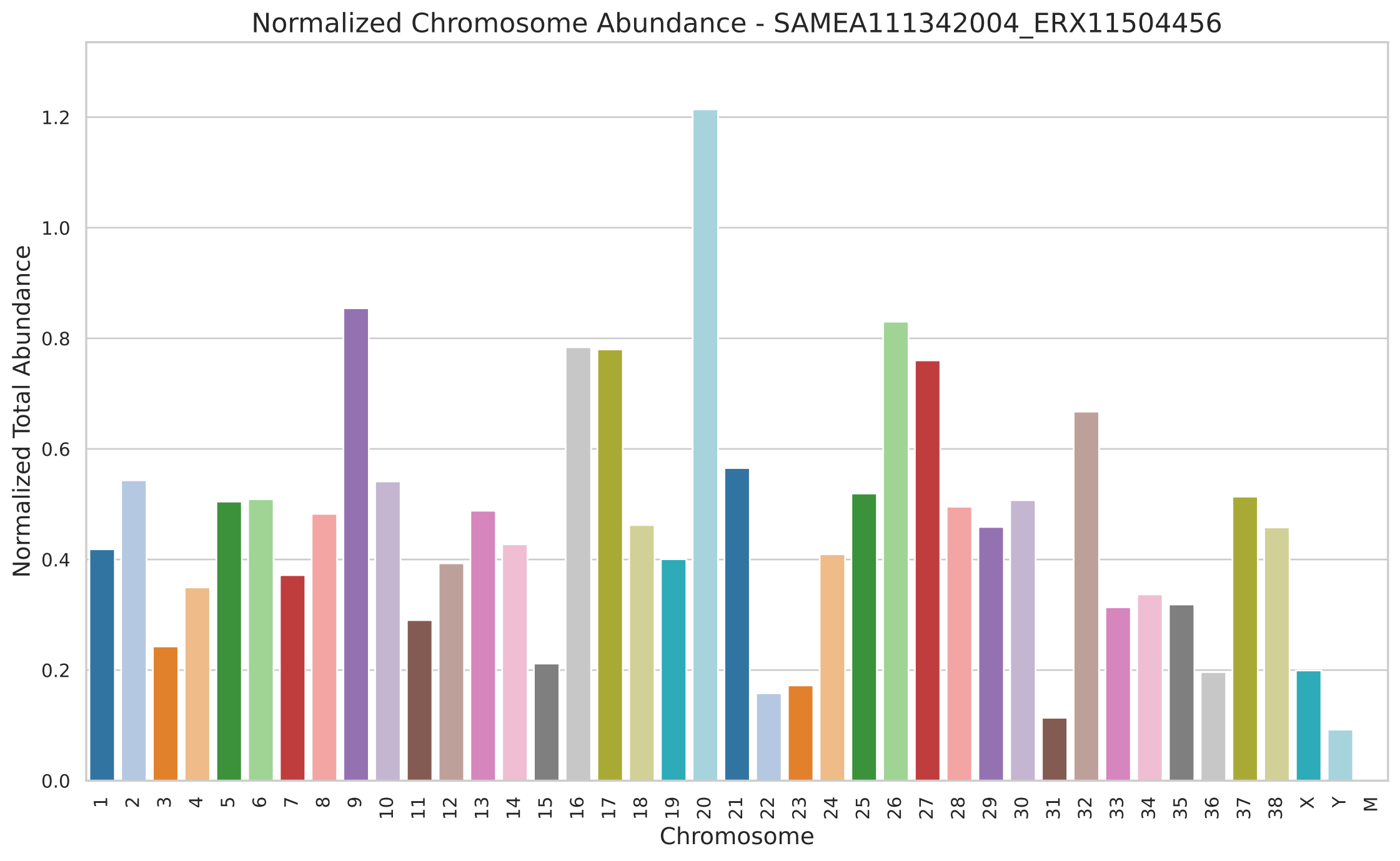

Normalized Chromosome Abundance - SAMEA111341957_ERX11504436
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

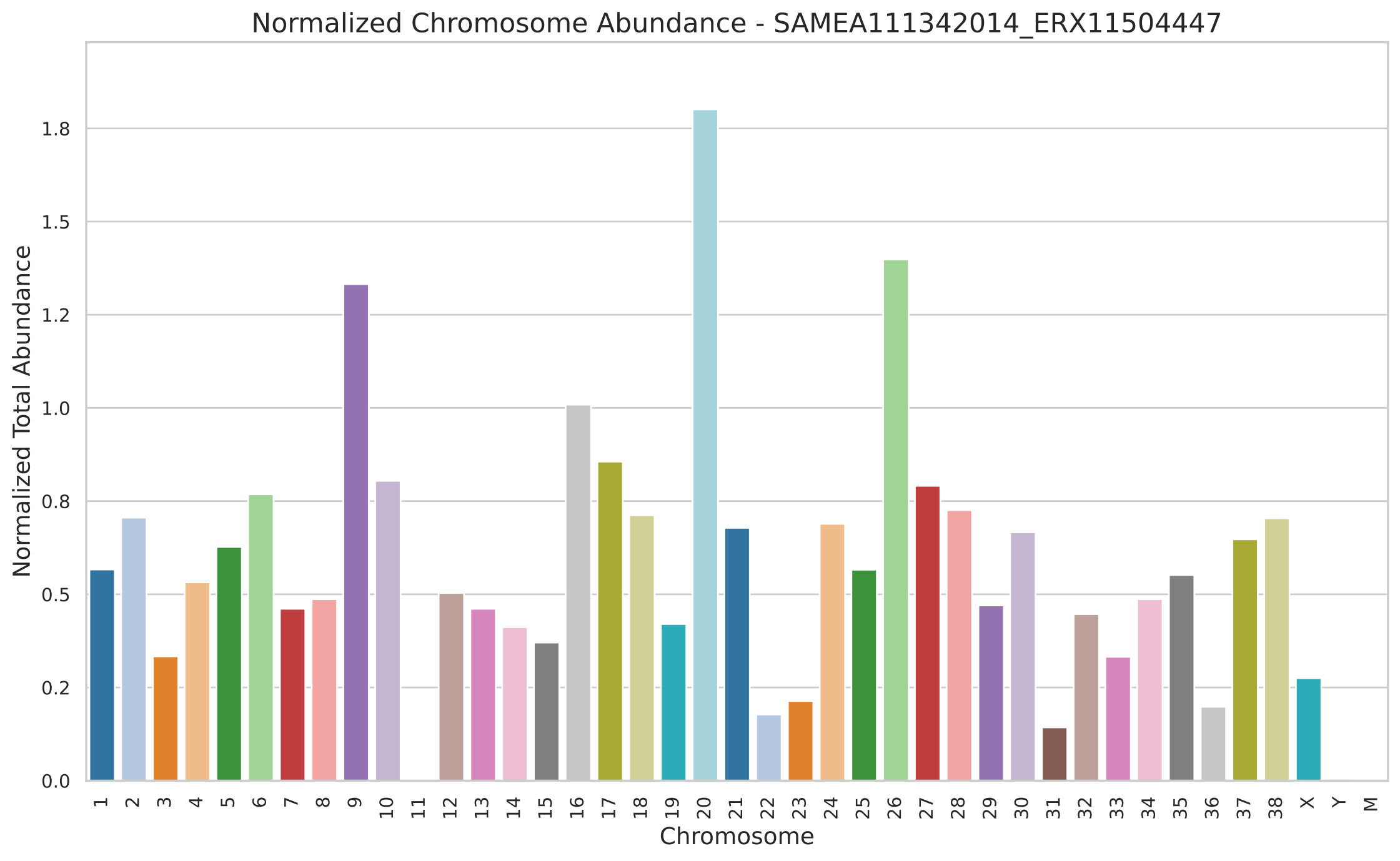

Normalized Chromosome Abundance - SAMEA111341918_ERX11504254
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

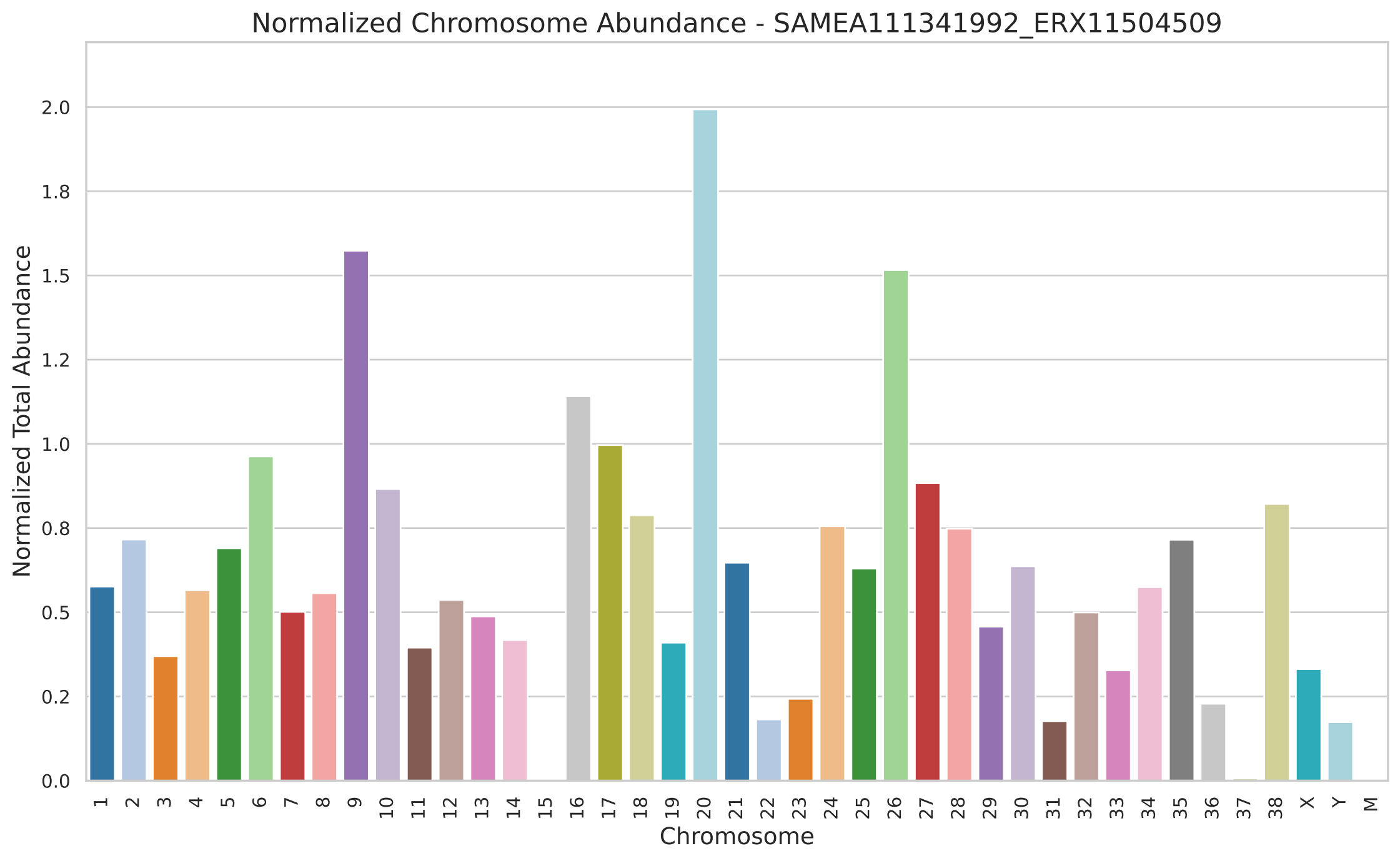

Normalized Chromosome Abundance - SAMEA111342006_ERX11504458
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

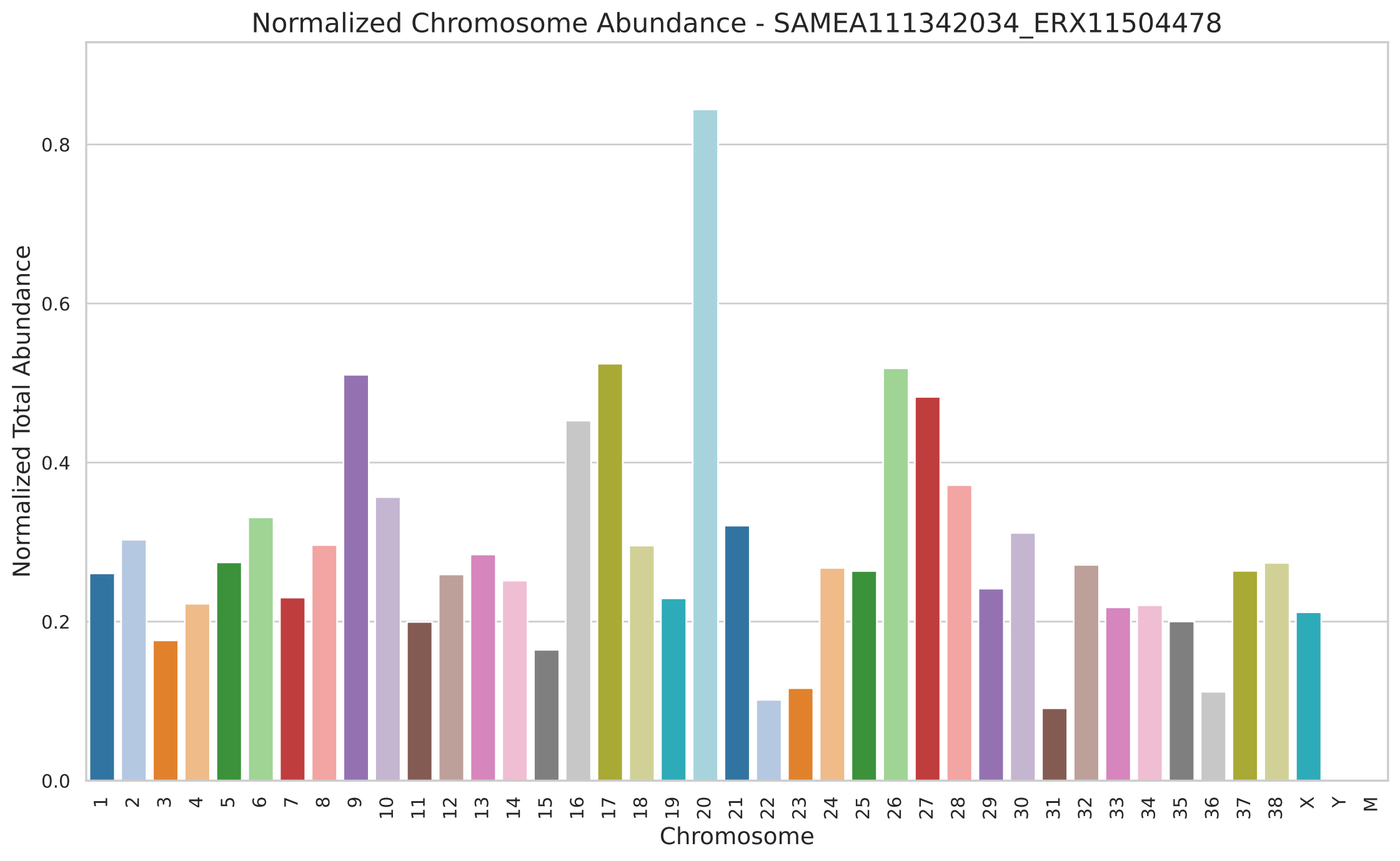

Normalized Chromosome Abundance - SAMEA111341946_ERX11504218
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

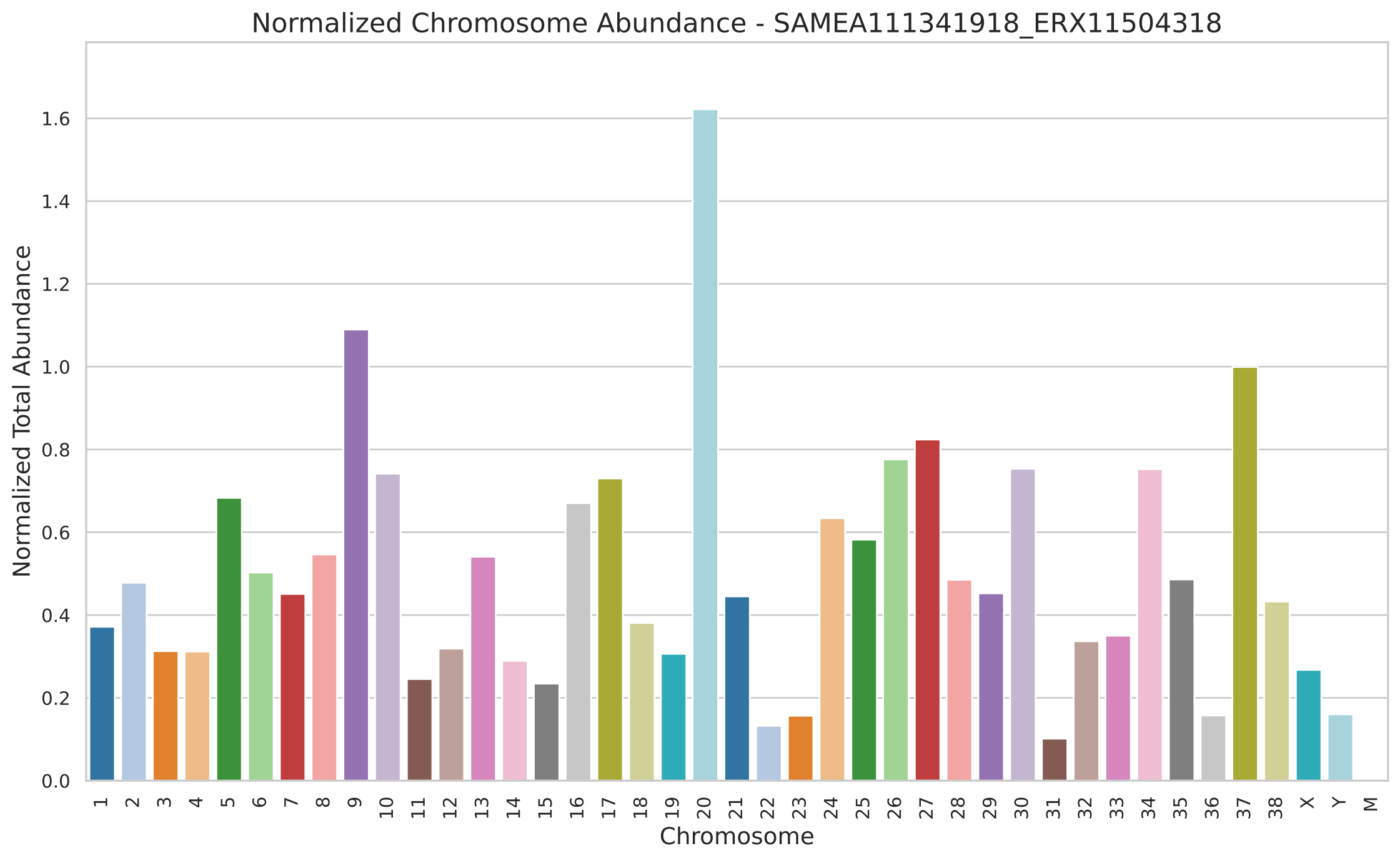

Normalized Chromosome Abundance - SAMEA111342018_ERX11504457
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

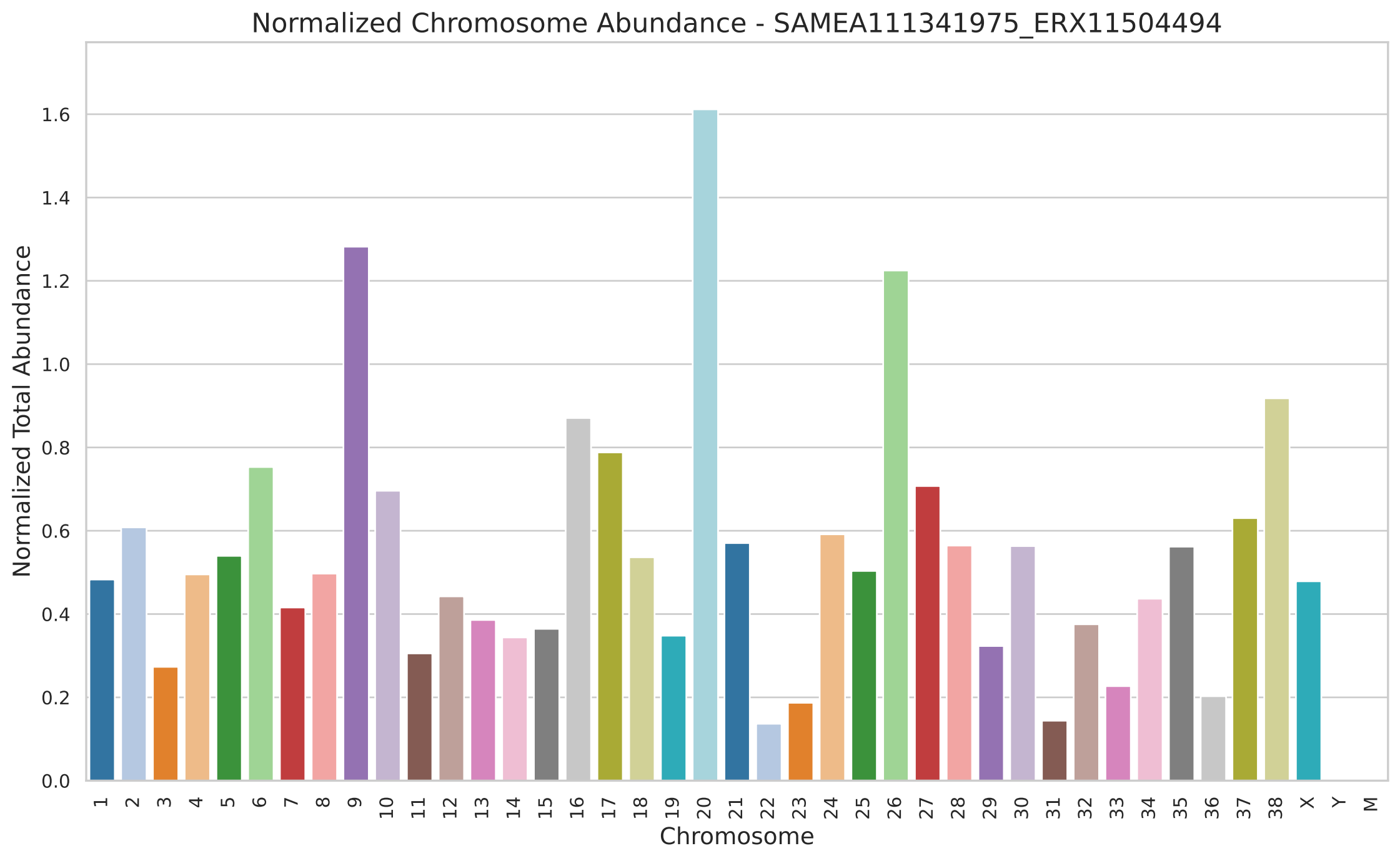

Normalized Chromosome Abundance - SAMEA111342004_ERX11504456
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

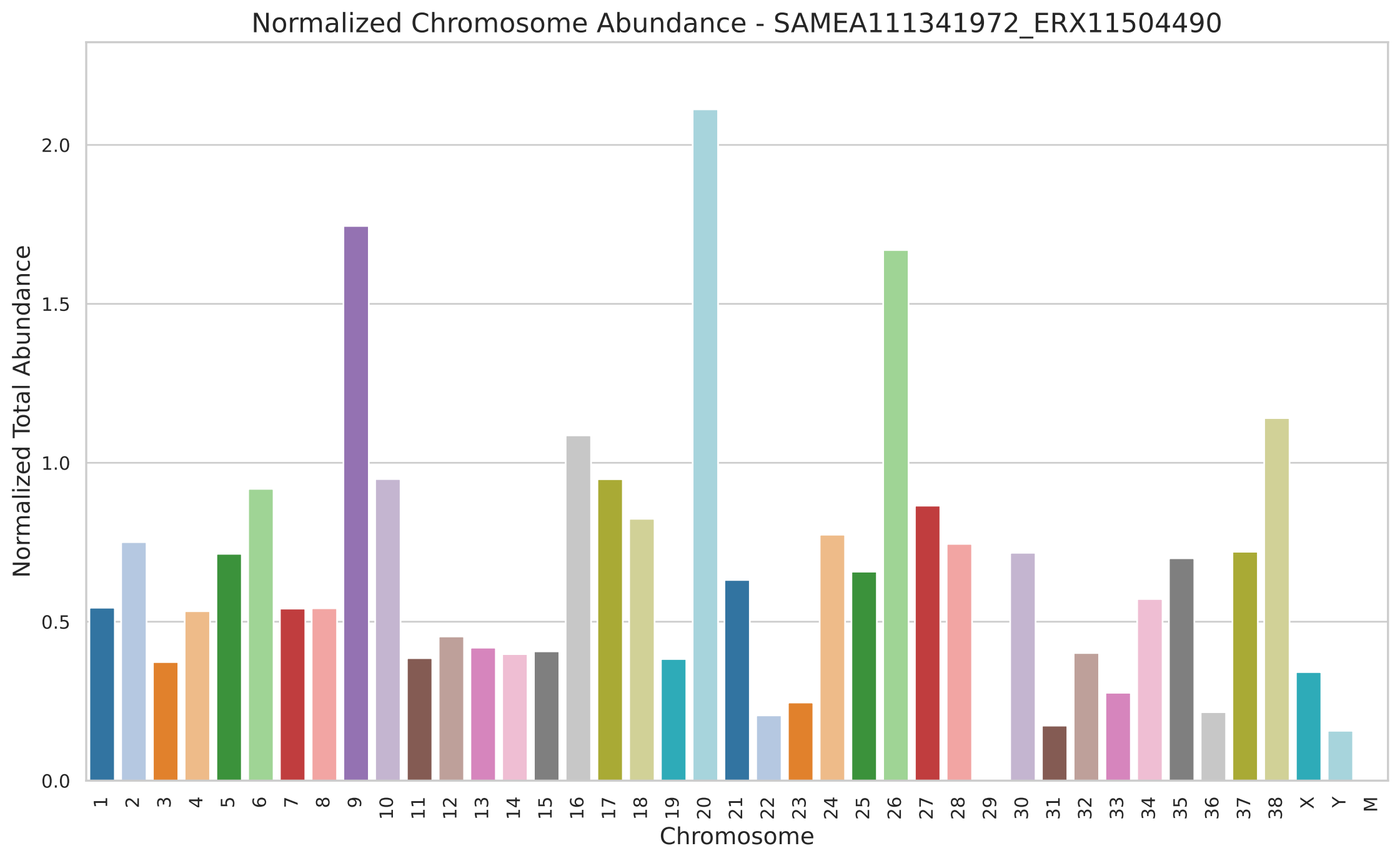

Normalized Chromosome Abundance - SAMEA111342014_ERX11504447
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

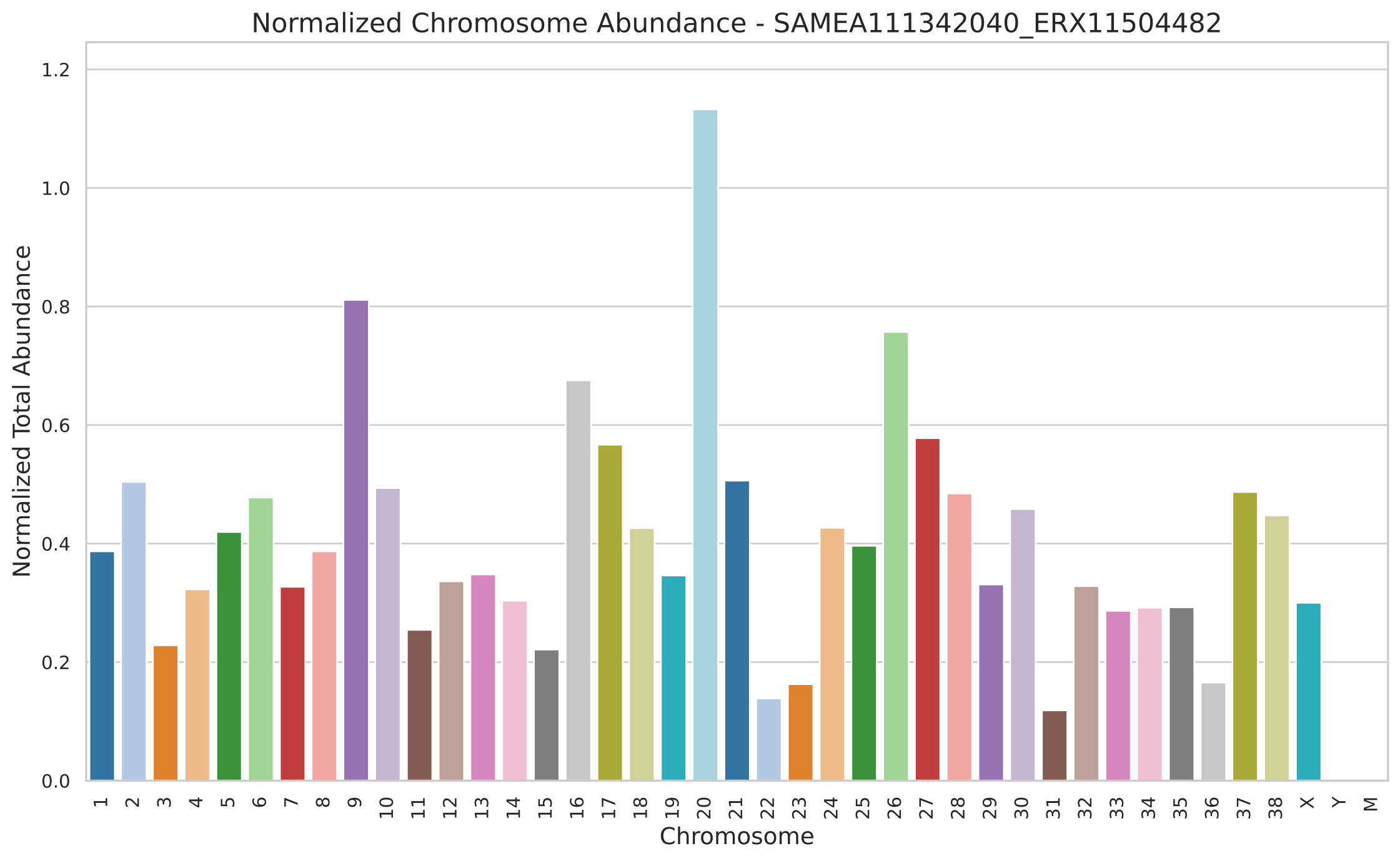

Normalized Chromosome Abundance - SAMEA111341992_ERX11504509
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

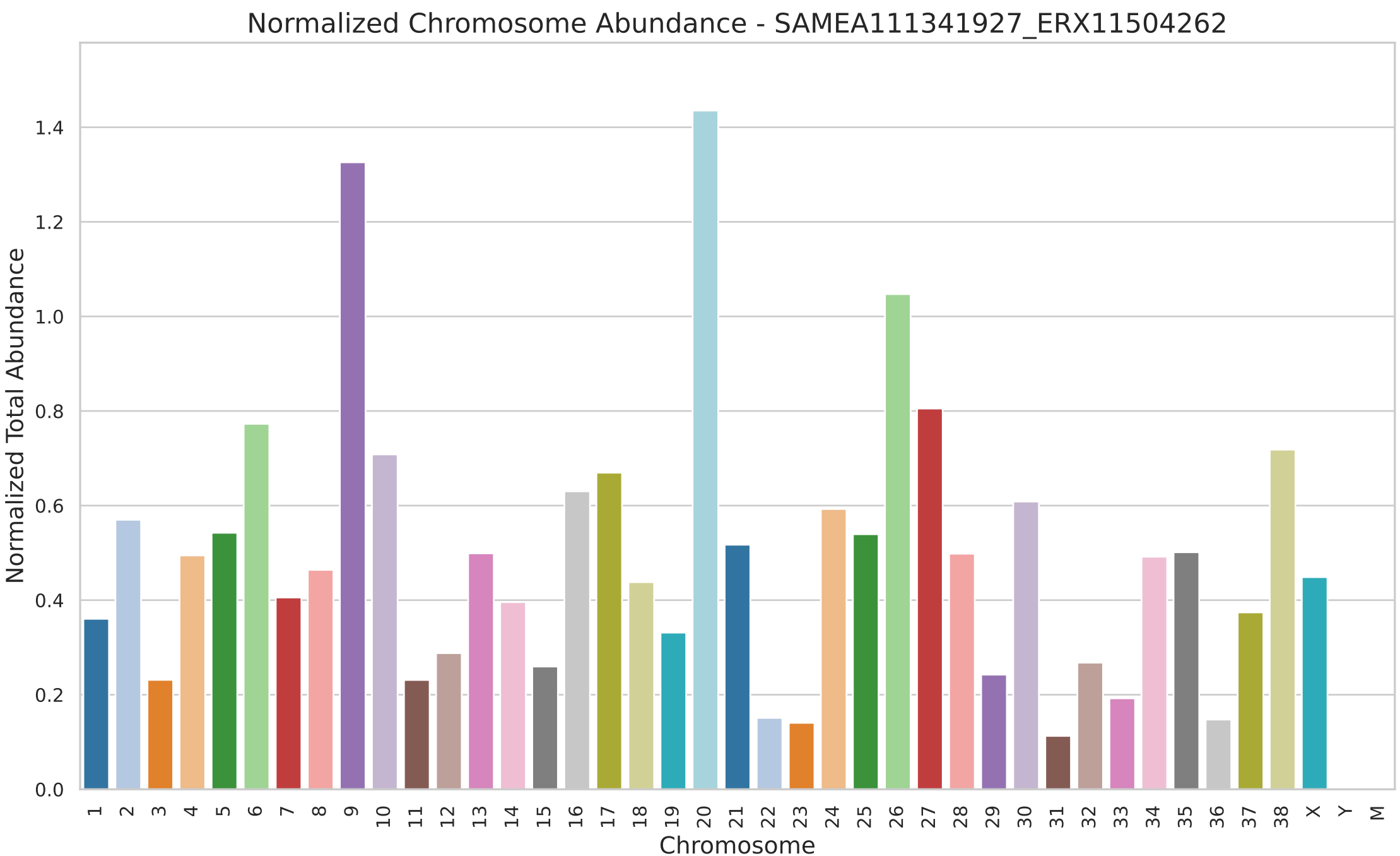

Normalized Chromosome Abundance - SAMEA111342034_ERX11504478
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

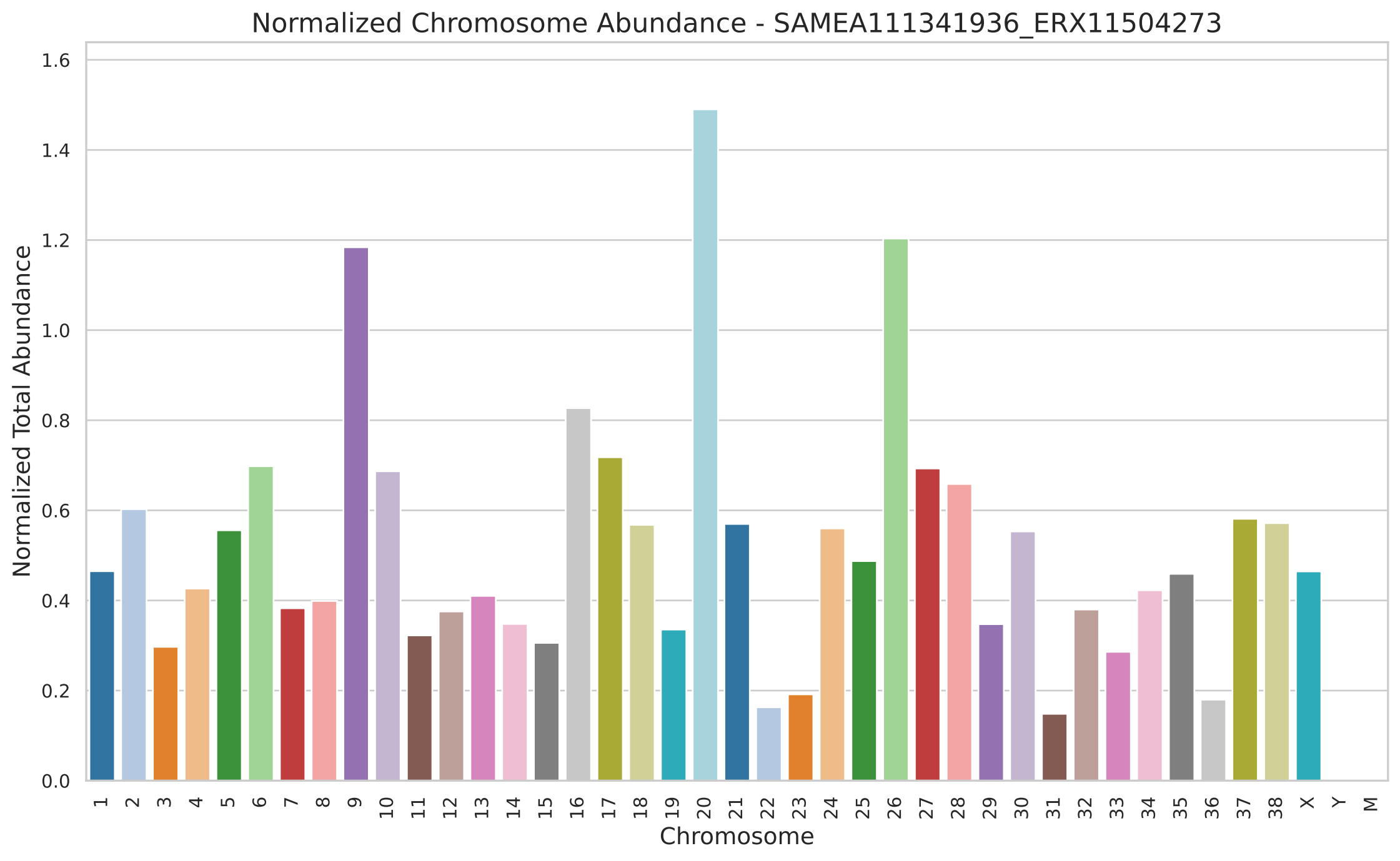

Normalized Chromosome Abundance - SAMEA111341918_ERX11504318
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

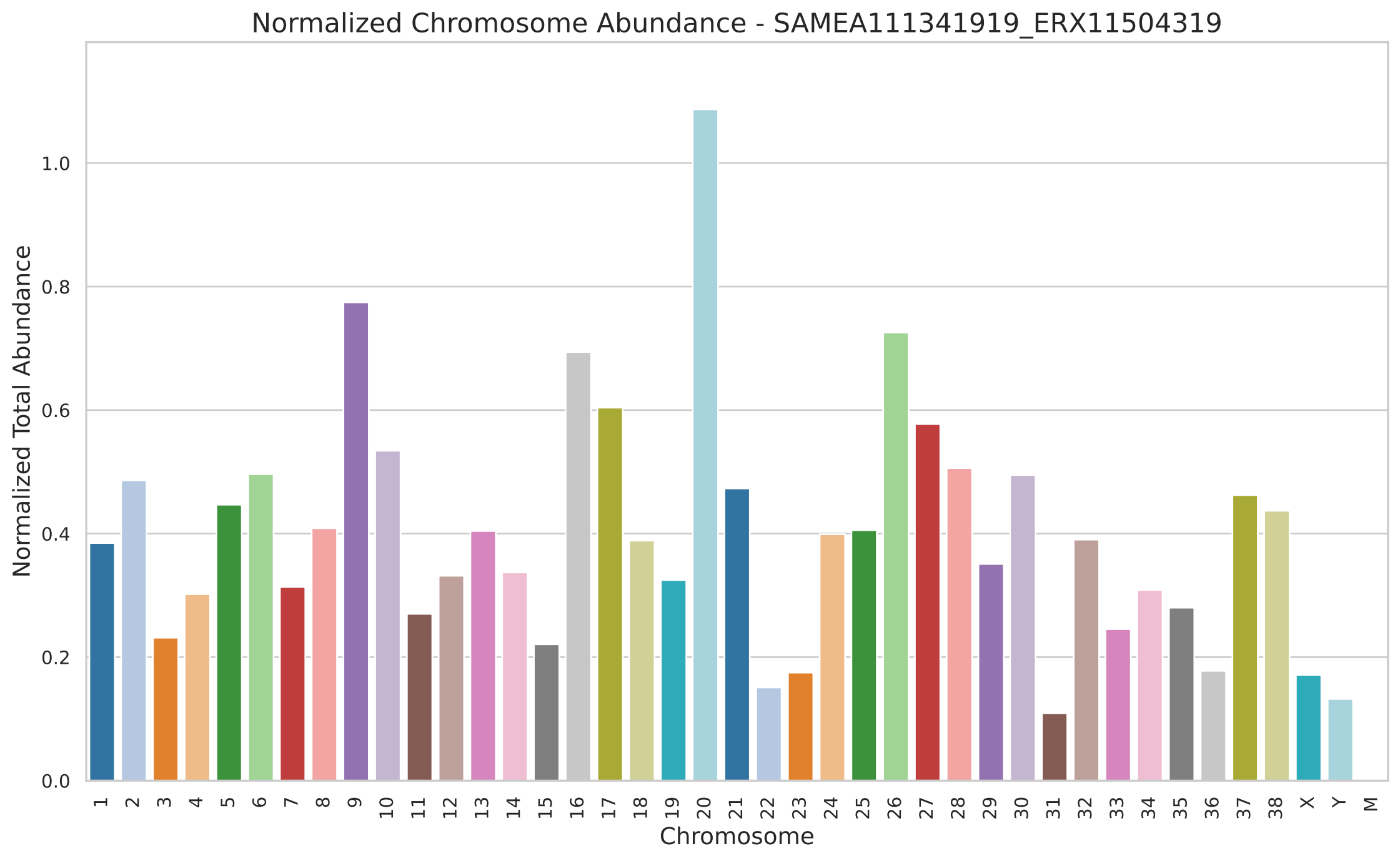

Normalized Chromosome Abundance - SAMEA111341975_ERX11504494
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

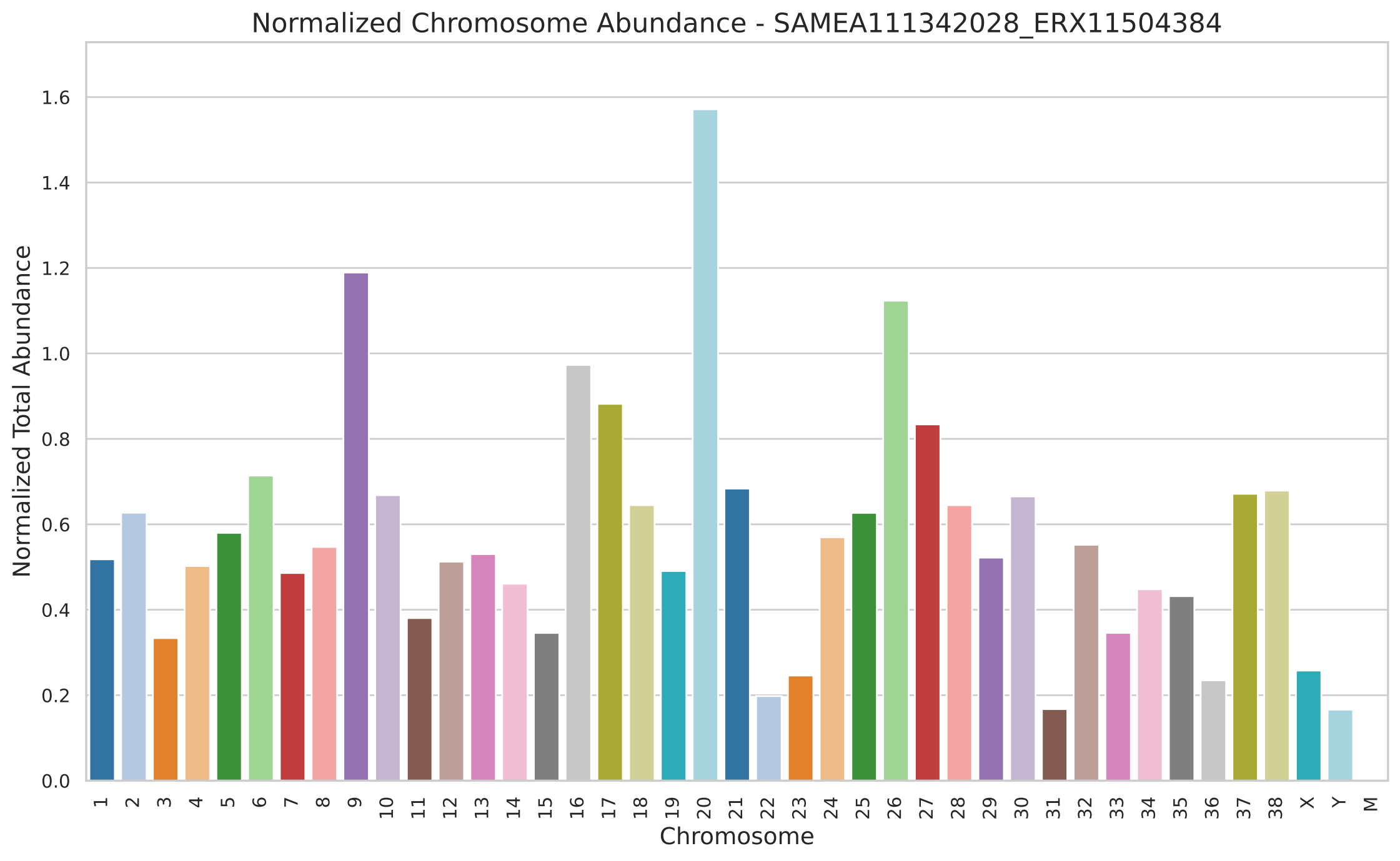

Normalized Chromosome Abundance - SAMEA111341972_ERX11504490
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

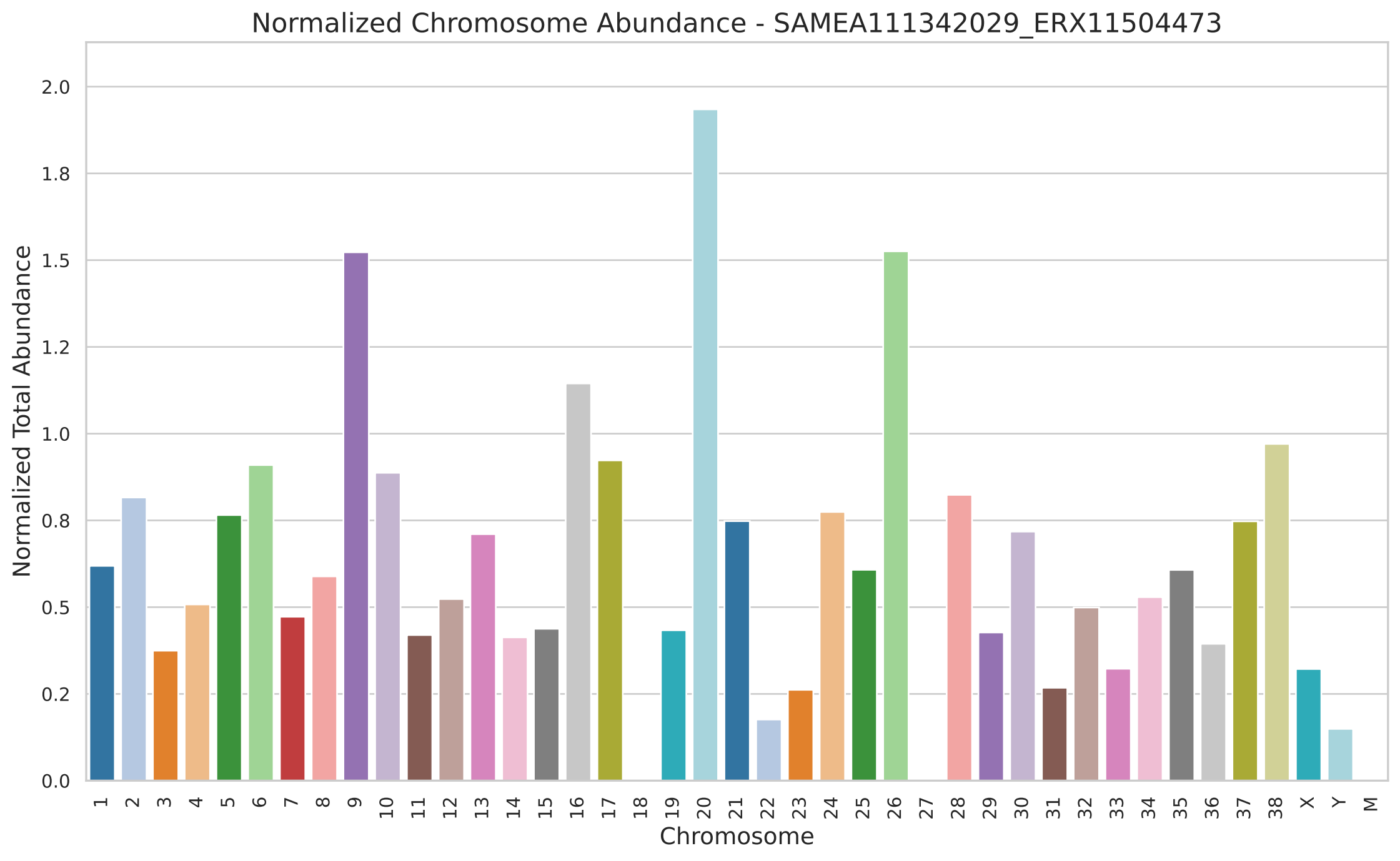

Normalized Chromosome Abundance - SAMEA111342040_ERX11504482
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

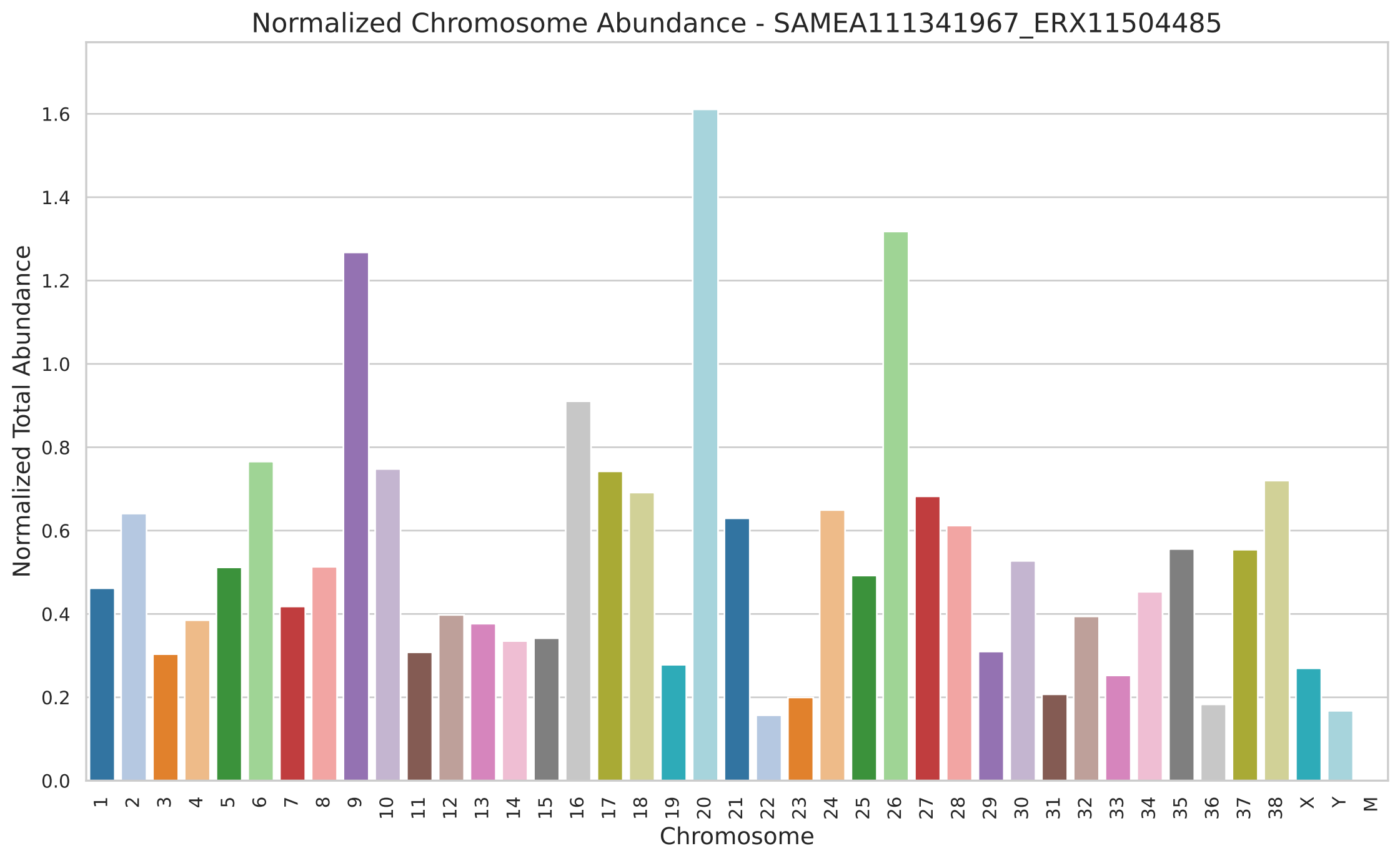

Normalized Chromosome Abundance - SAMEA111341927_ERX11504262
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 X Y M
Chromosome

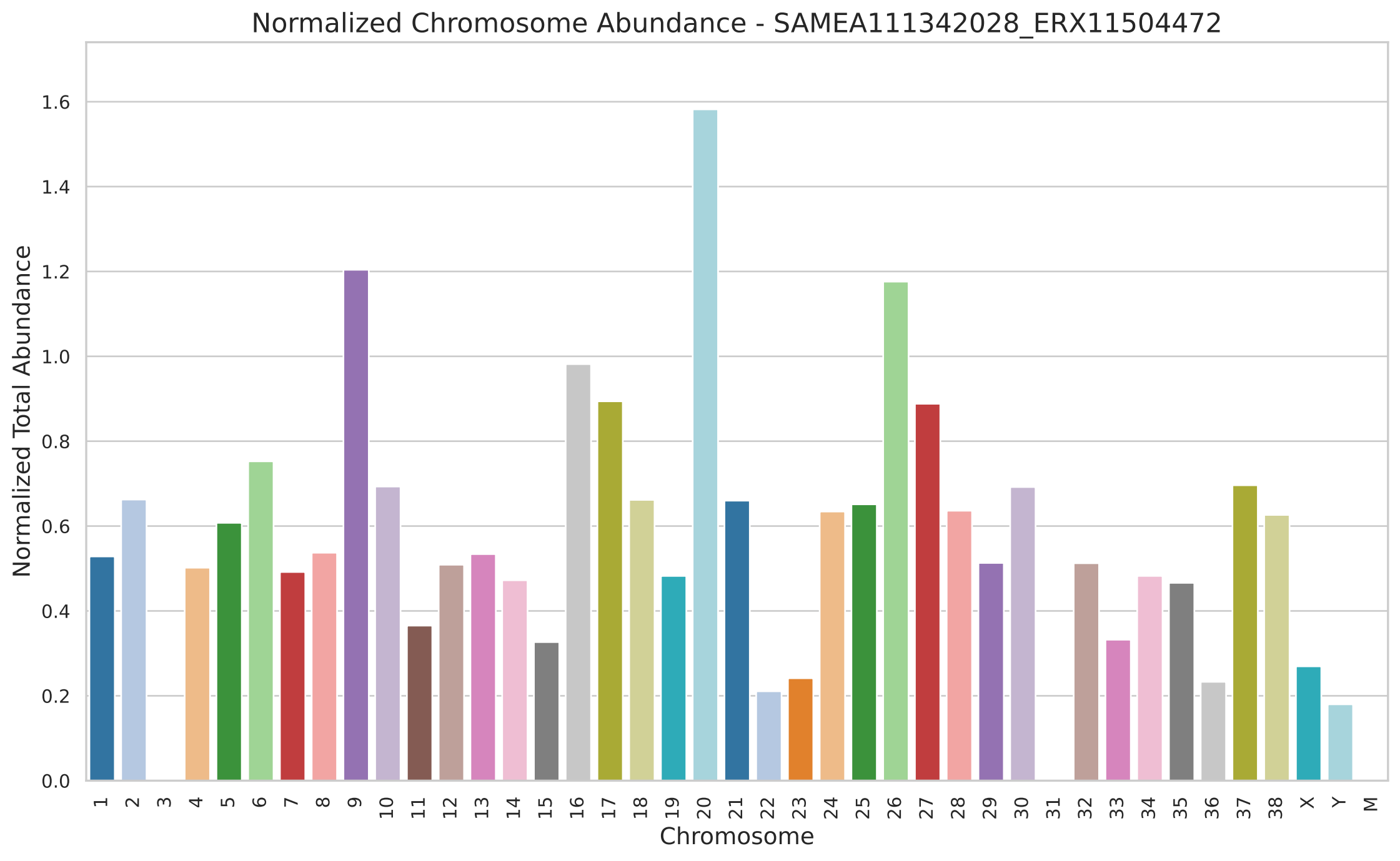

Normalized Chromosome Abundance - SAMEA111341936_ERX11504273
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

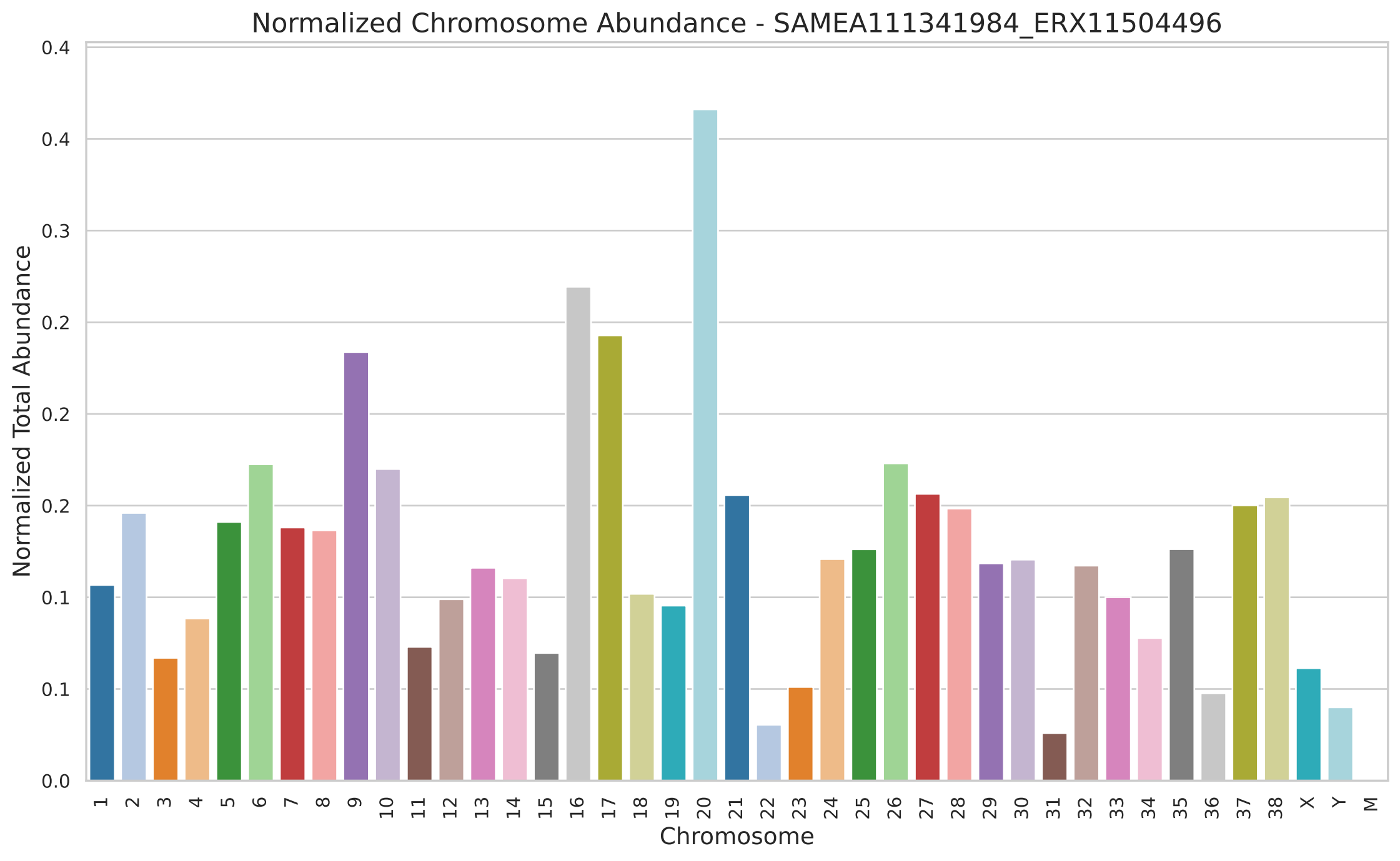

Normalized Chromosome Abundance - SAMEA111341919_ERX11504319
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

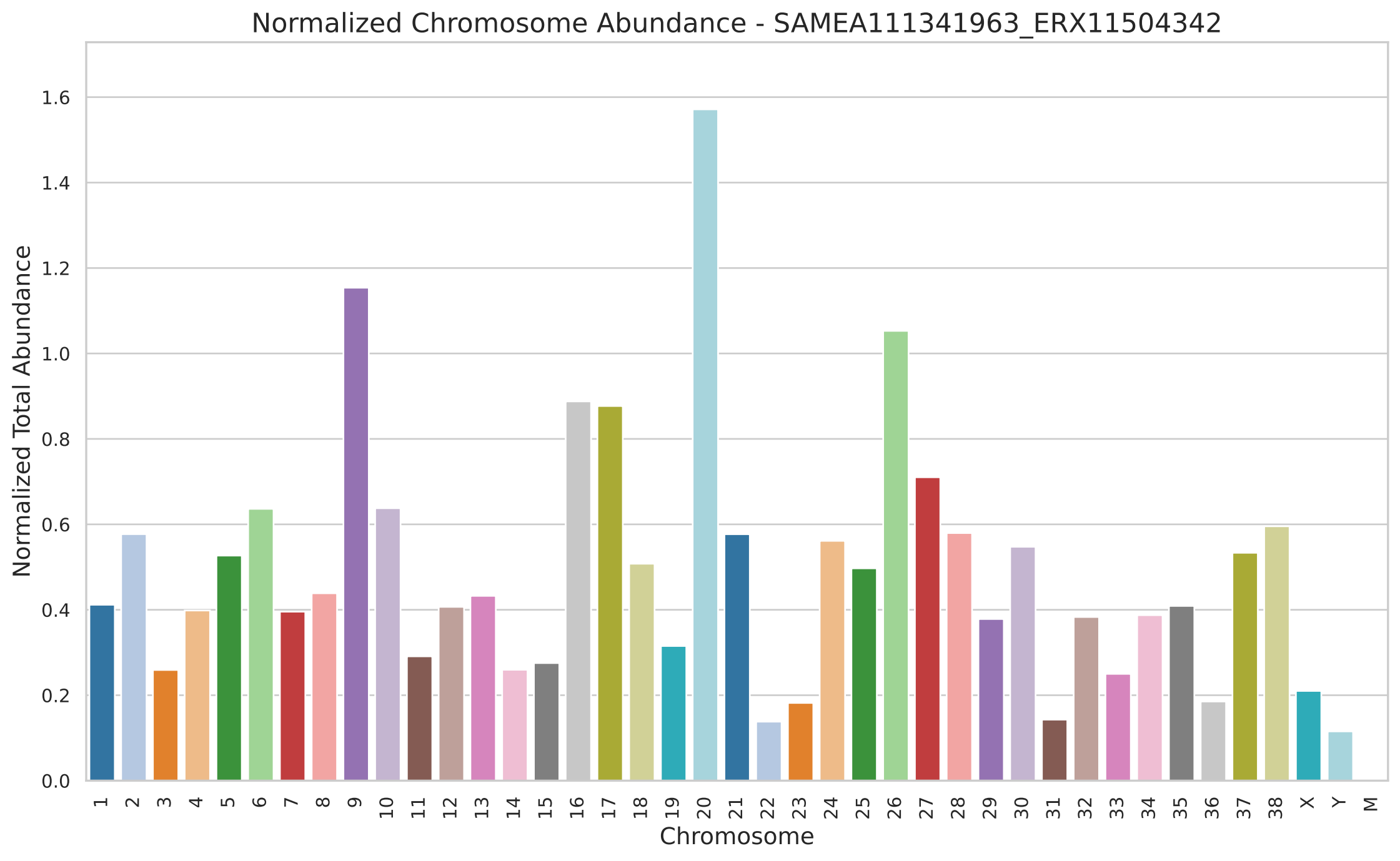

Normalized Chromosome Abundance - SAMEA111342028_ERX11504384
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

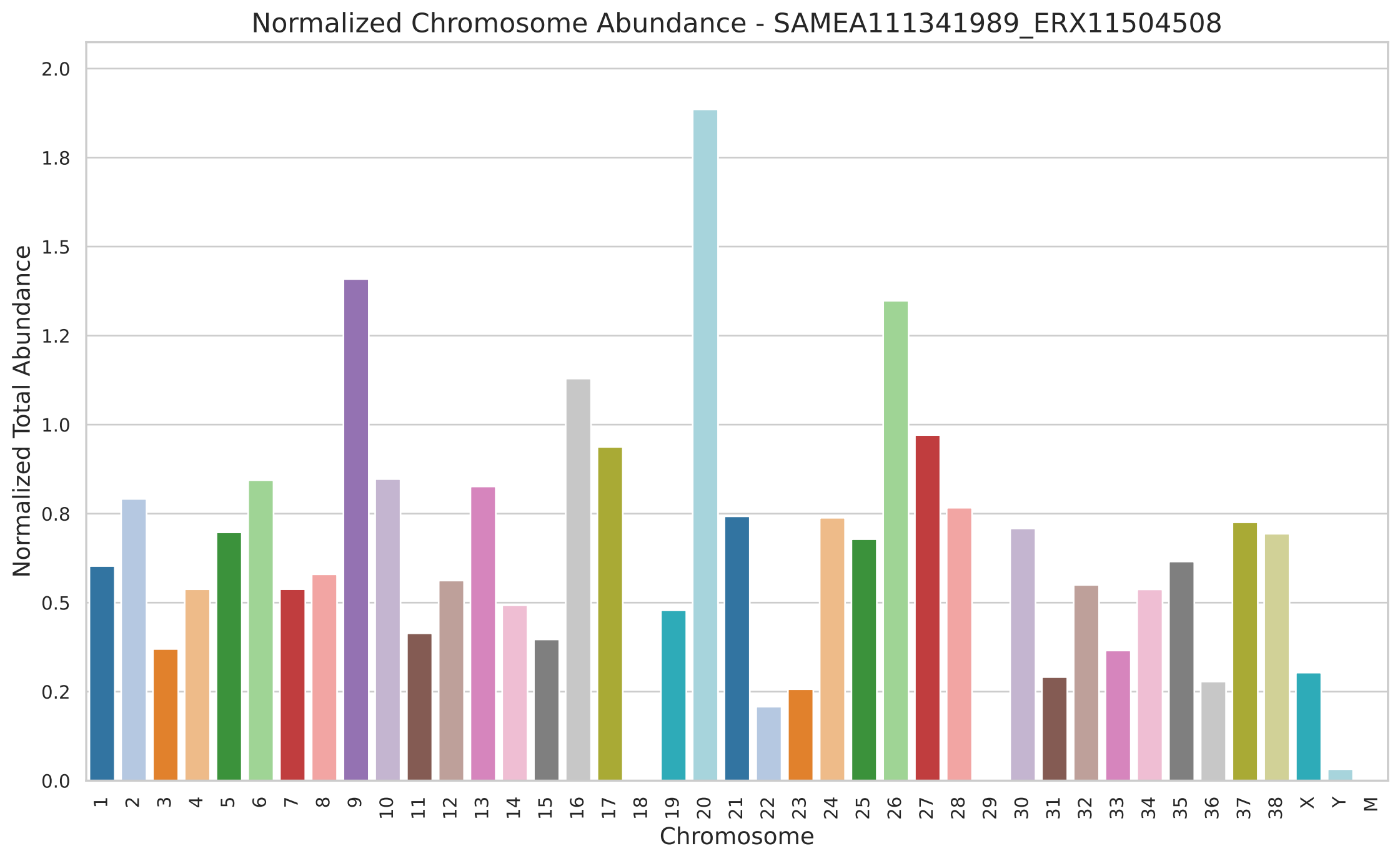

Normalized Chromosome Abundance - SAMEA111342029_ERX11504473
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

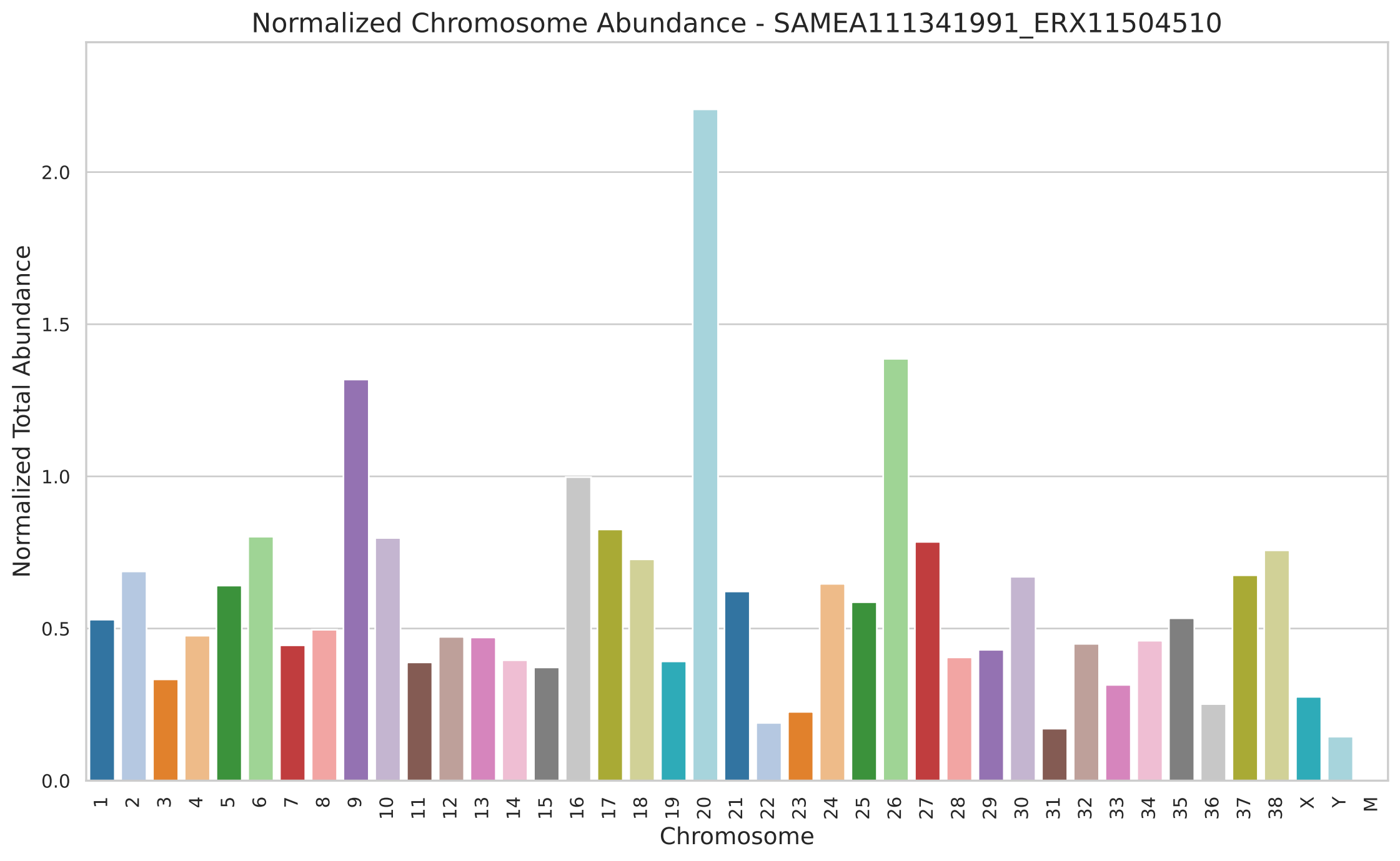

Normalized Chromosome Abundance - SAMEA111341967_ERX11504485
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

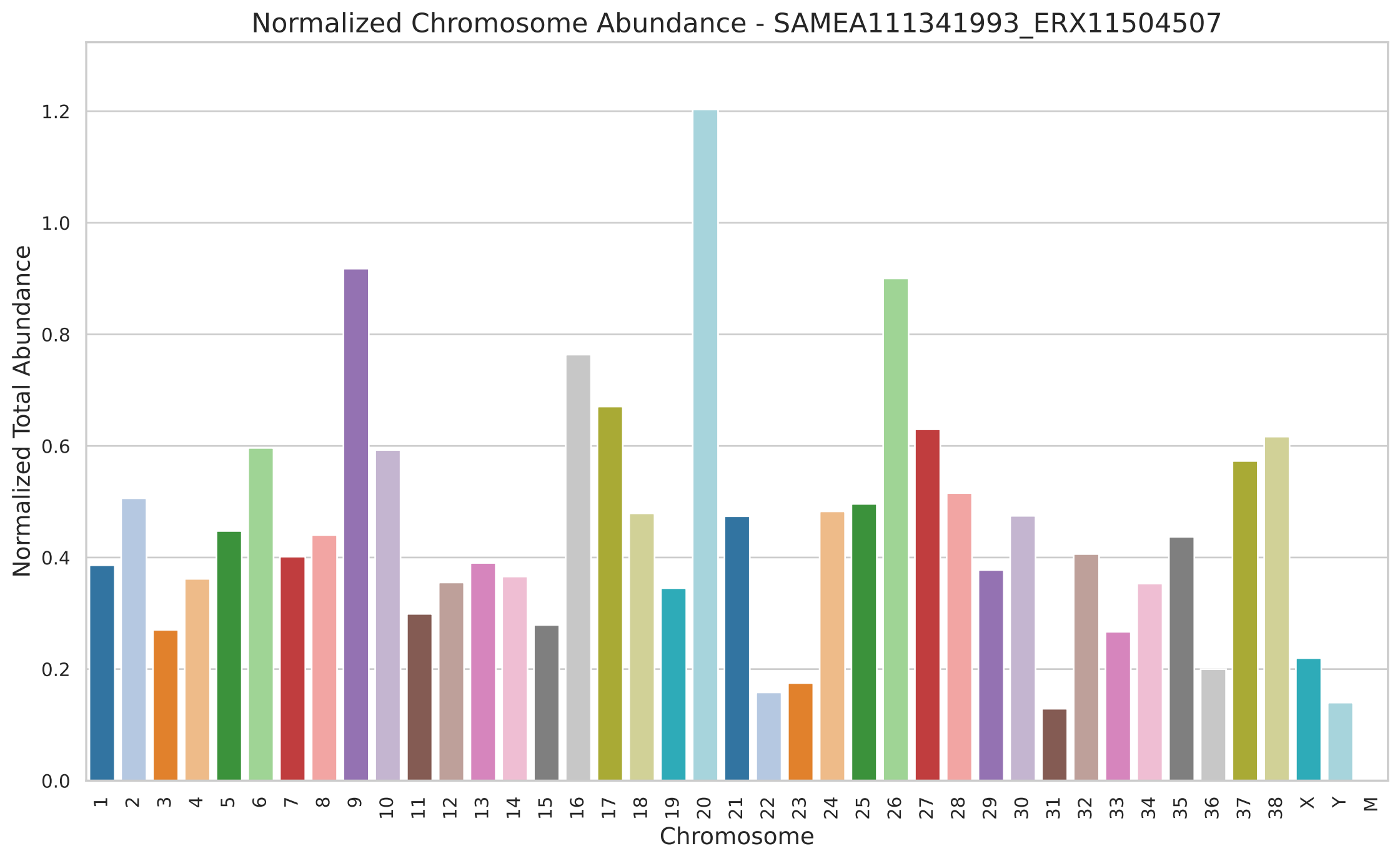

Normalized Chromosome Abundance - SAMEA111342028_ERX11504472
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

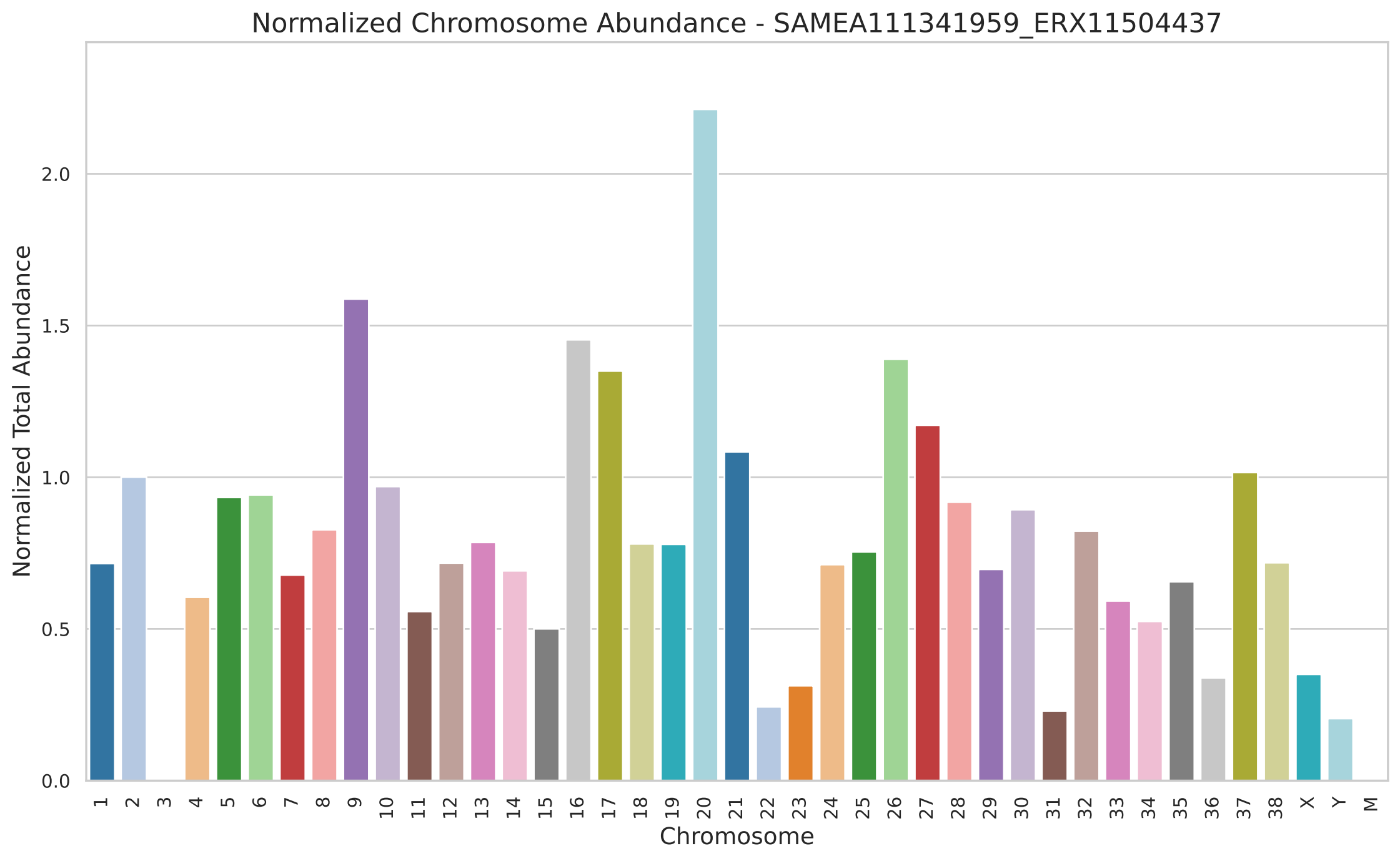

Normalized Chromosome Abundance - SAMEA111341984_ERX11504496
Normalized Total Abundance
0.0
0.1
0.1
0.2
0.2
0.3
0.4
0.4
Chromosome
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M

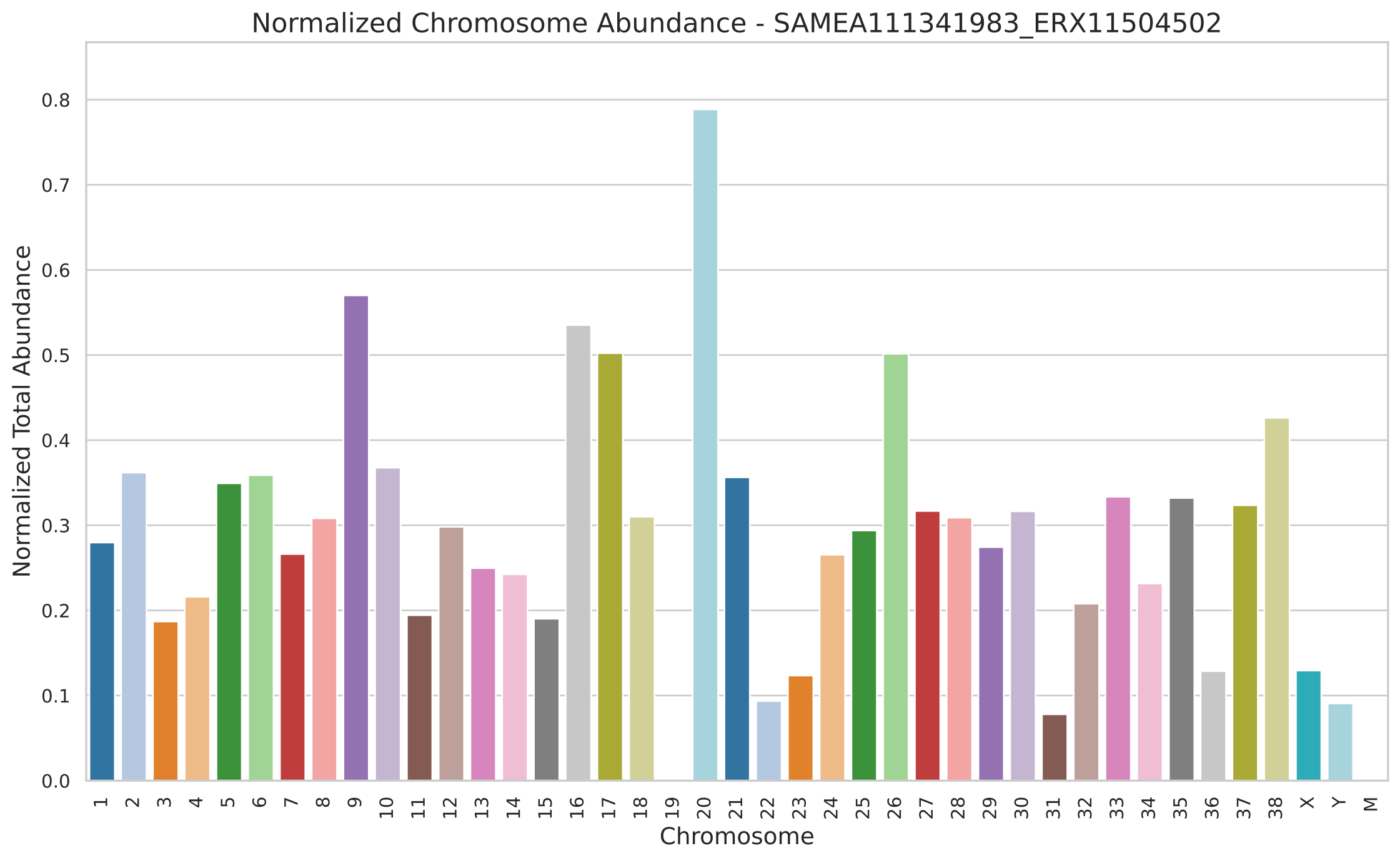

Normalized Chromosome Abundance - SAMEA111341963_ERX11504342
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

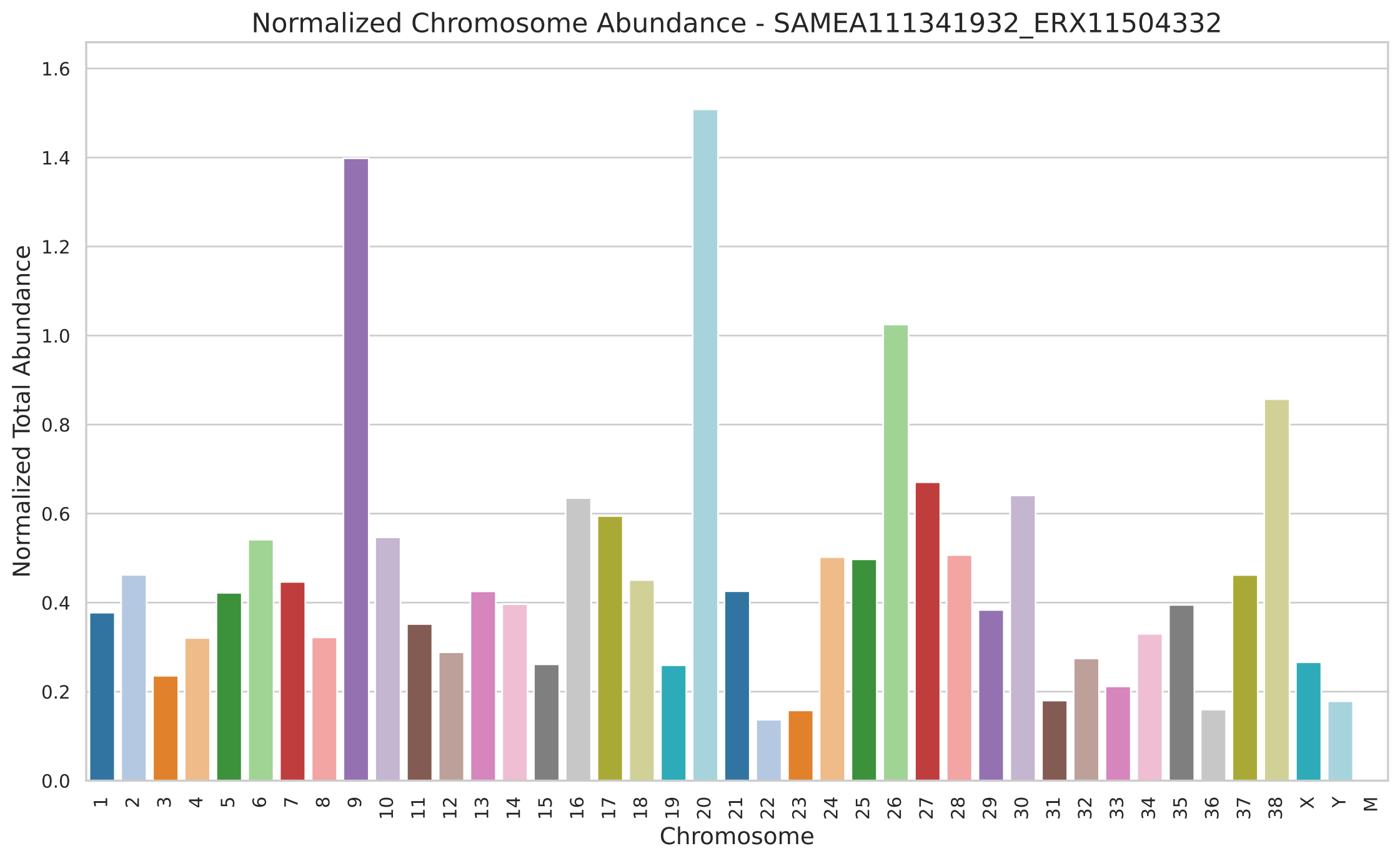

Normalized Chromosome Abundance - SAMEA111341989_ERX11504508
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

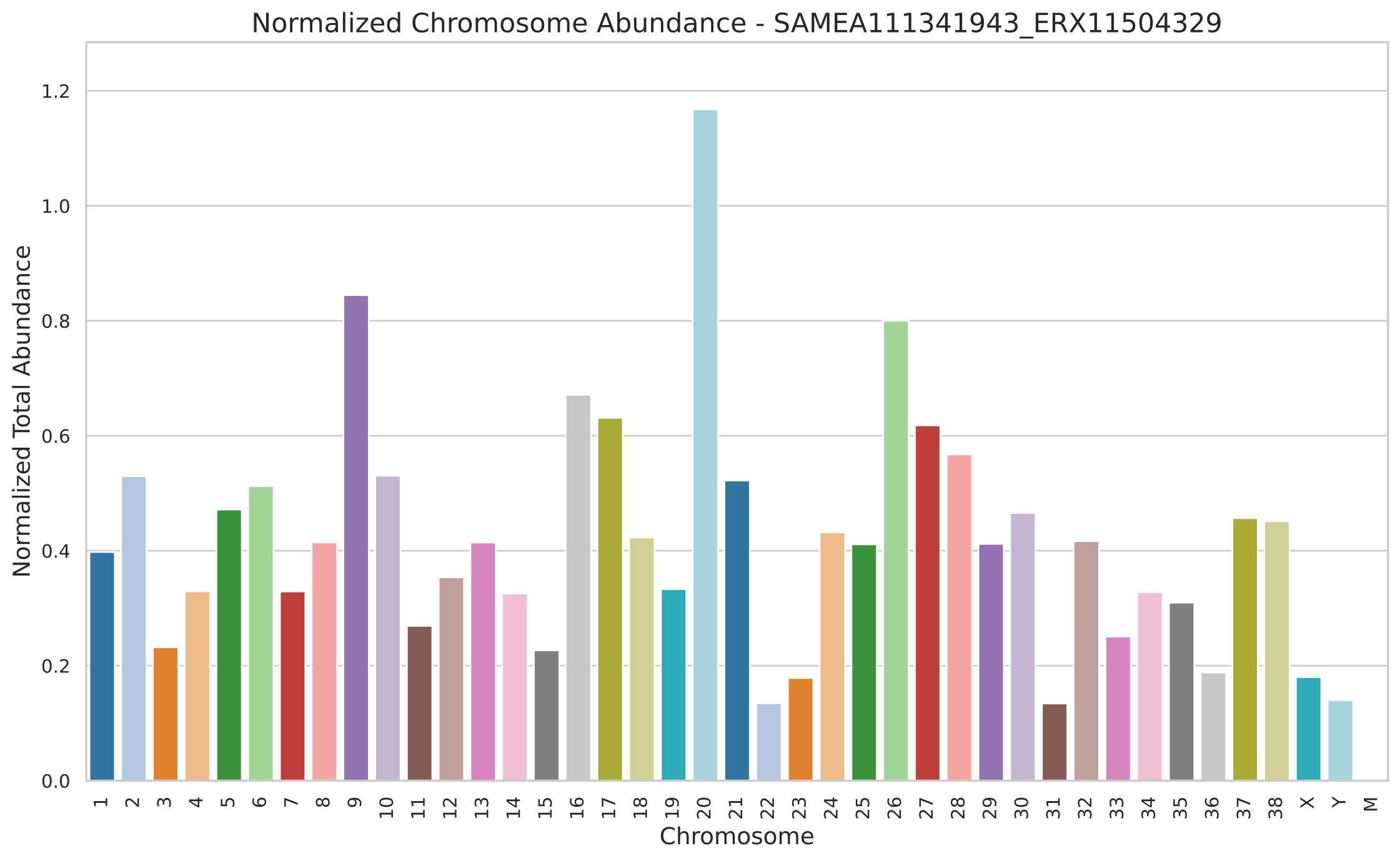

Normalized Chromosome Abundance - SAMEA111341991_ERX11504510
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

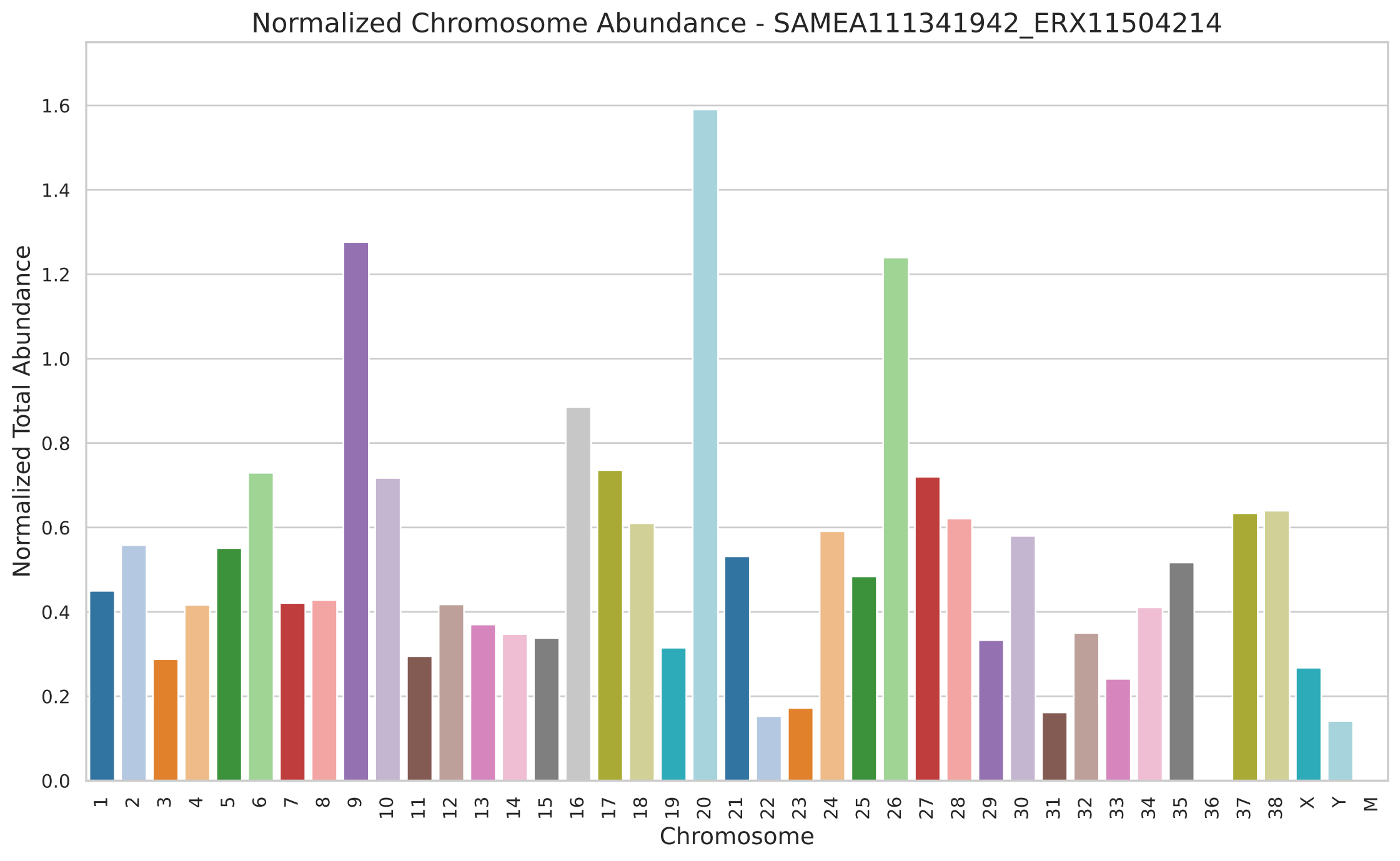

Normalized Chromosome Abundance - SAMEA111341993_ERX11504507
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

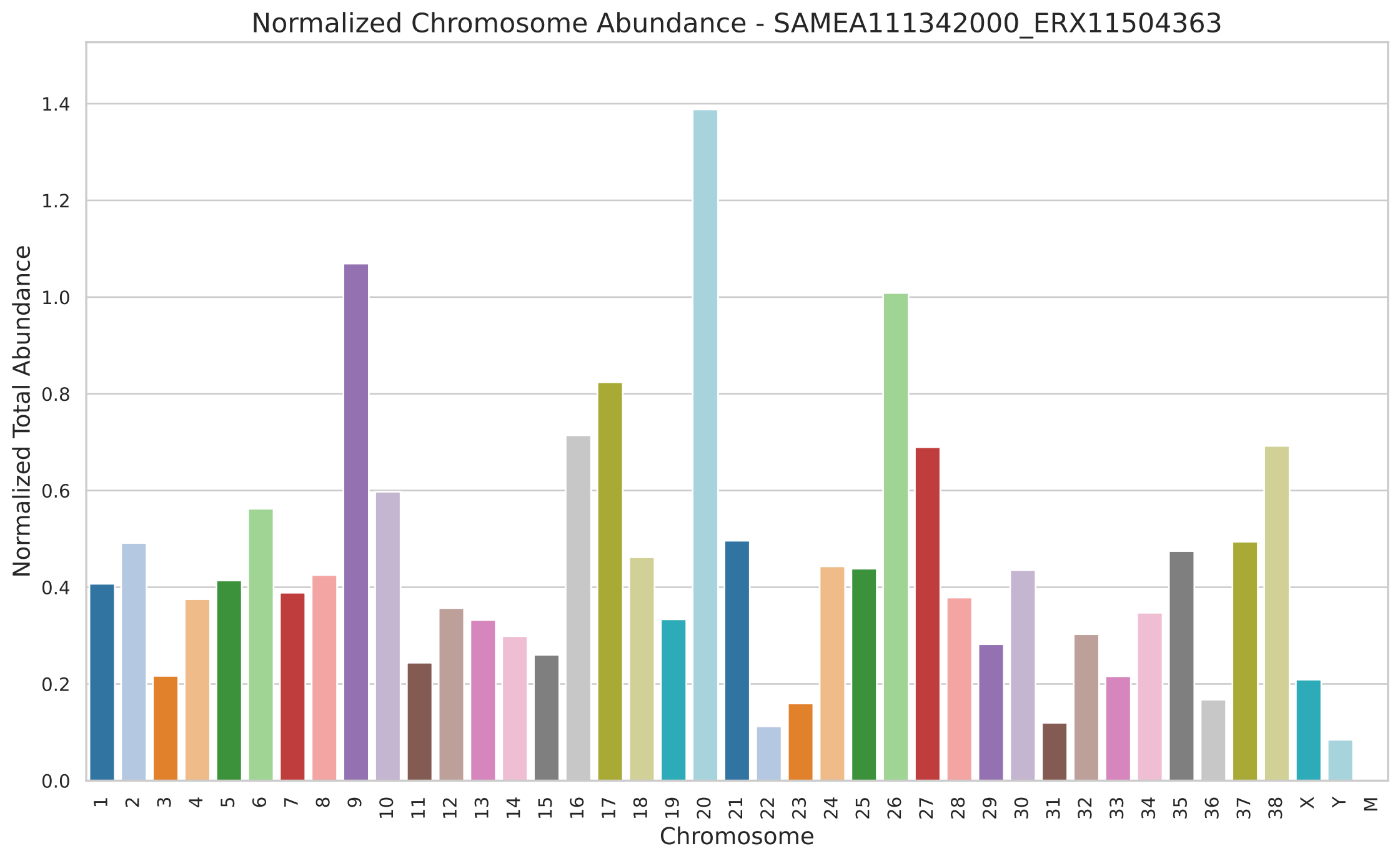

Normalized Chromosome Abundance - SAMEA111341959_ERX11504437
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

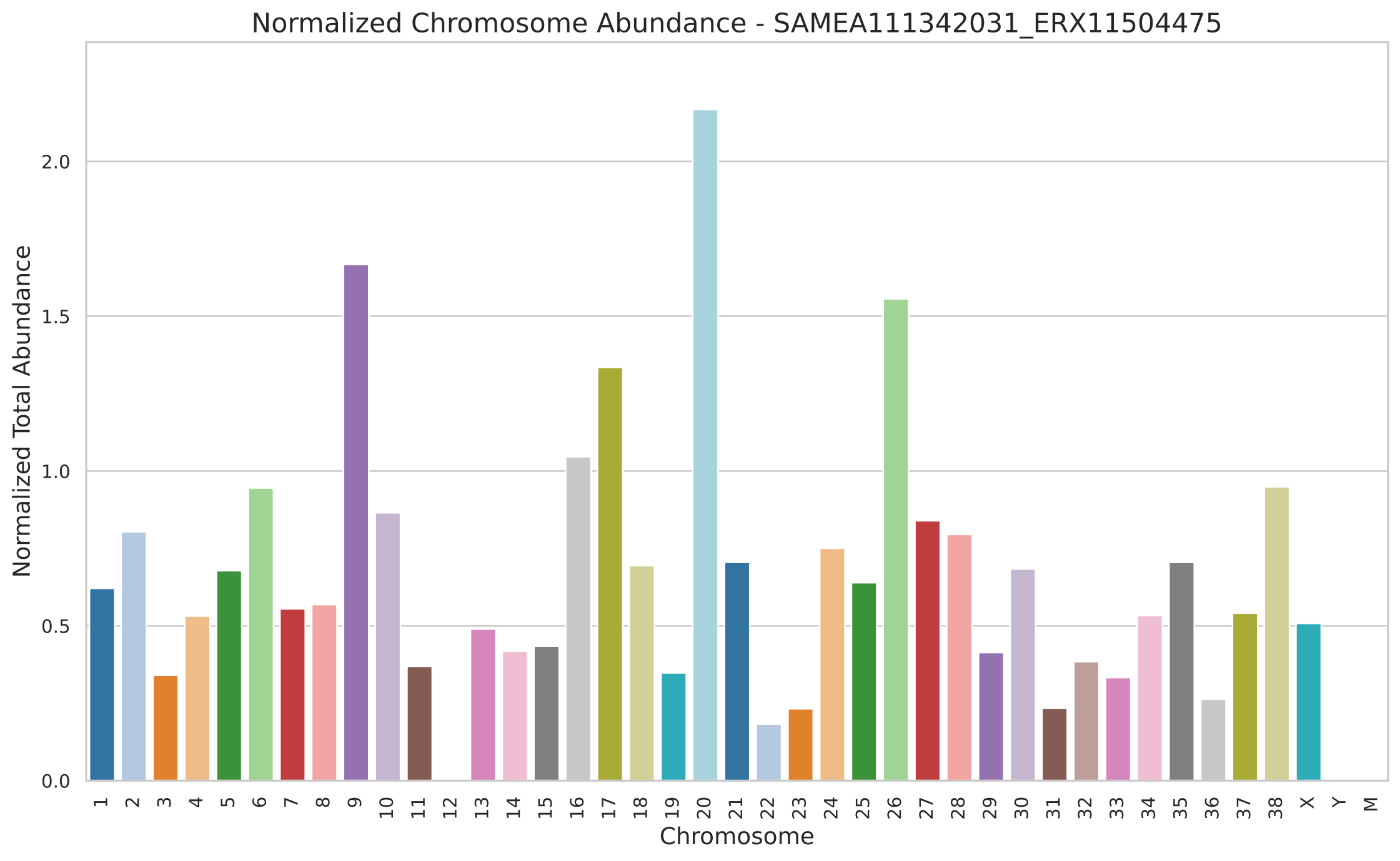

Normalized Chromosome Abundance - SAMEA111341983_ERX11504502
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

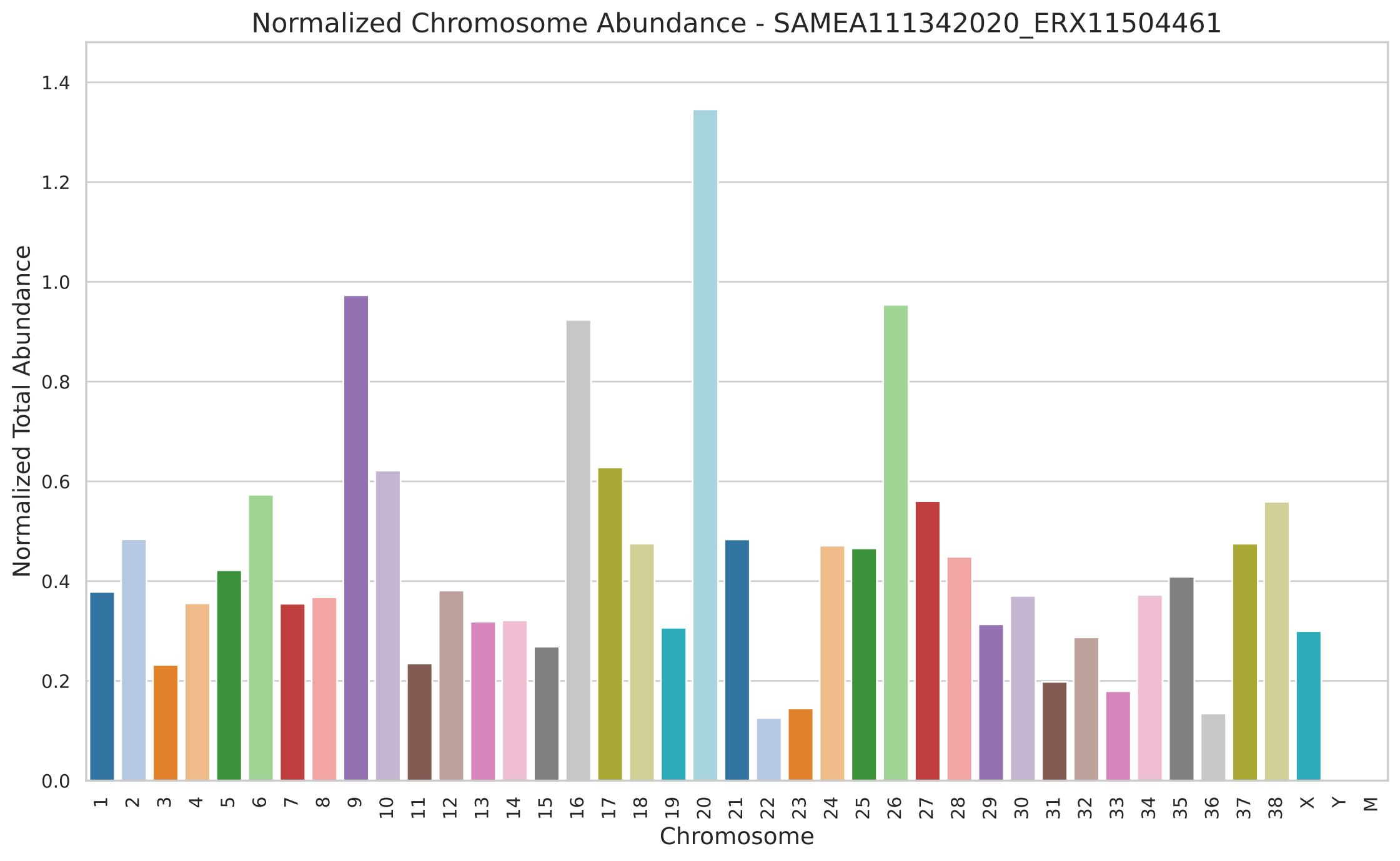

Normalized Chromosome Abundance - SAMEA111341932_ERX11504332
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

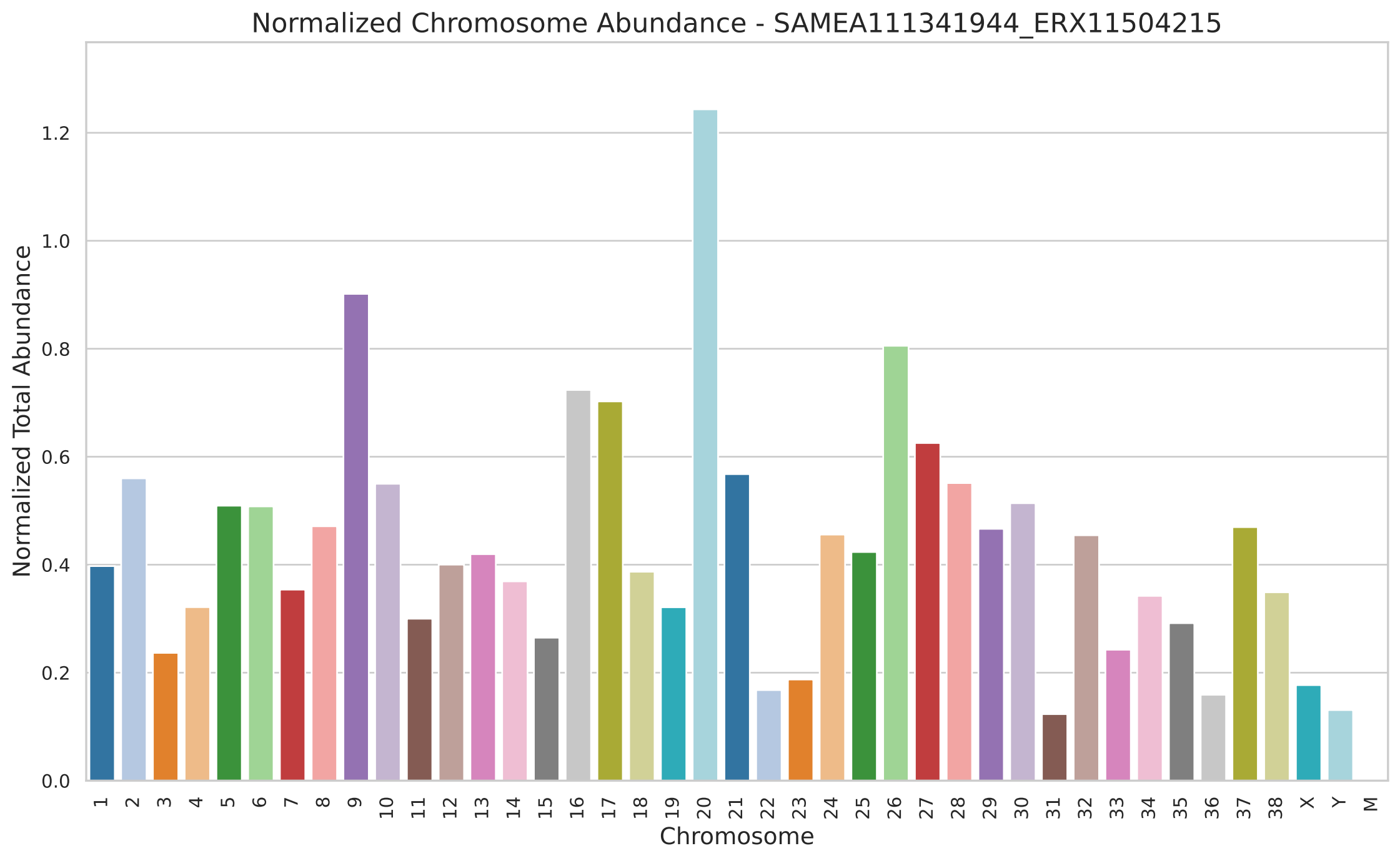

Normalized Chromosome Abundance - SAMEA111341943_ERX11504329
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

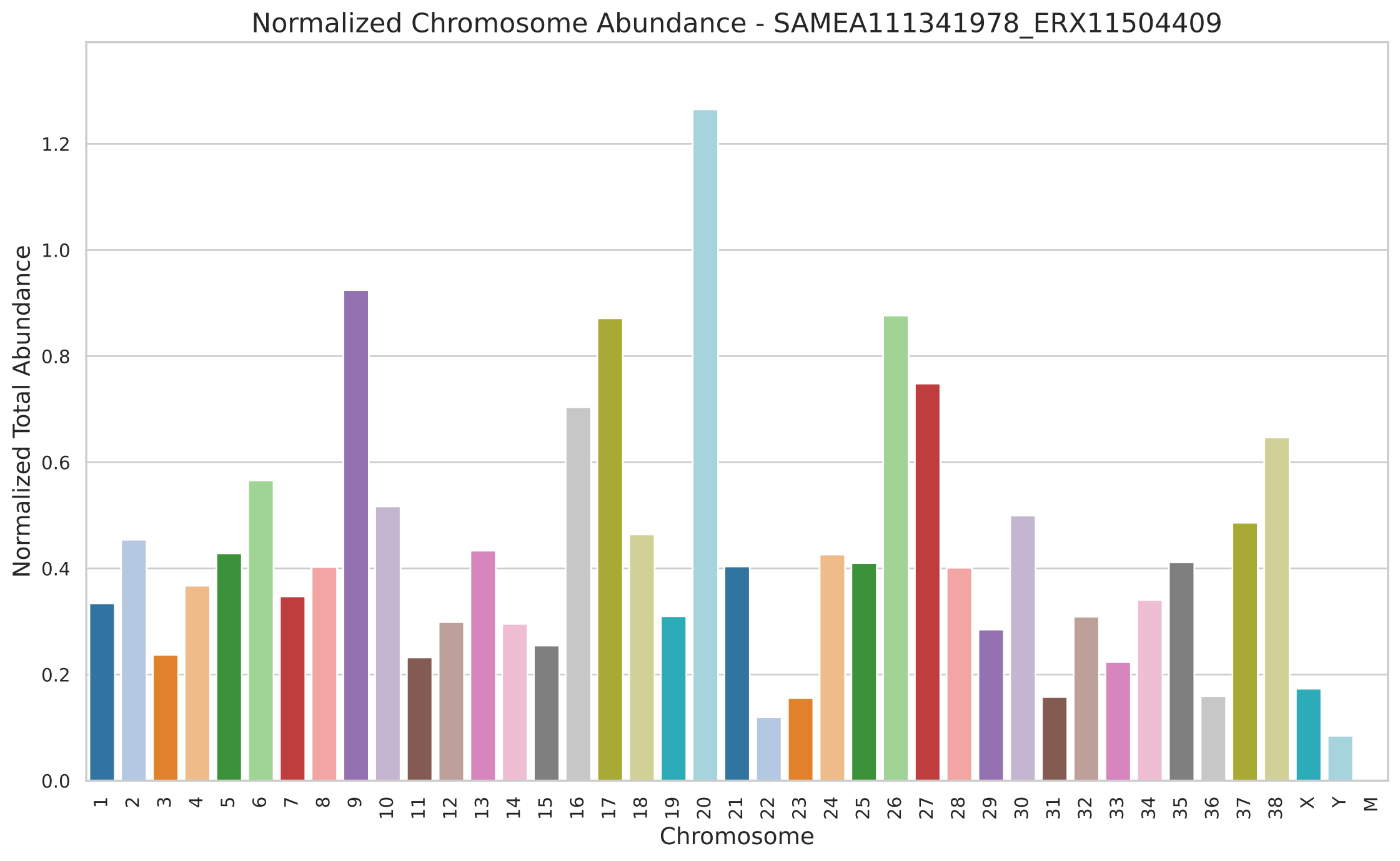

Normalized Chromosome Abundance - SAMEA111341942_ERX11504214
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

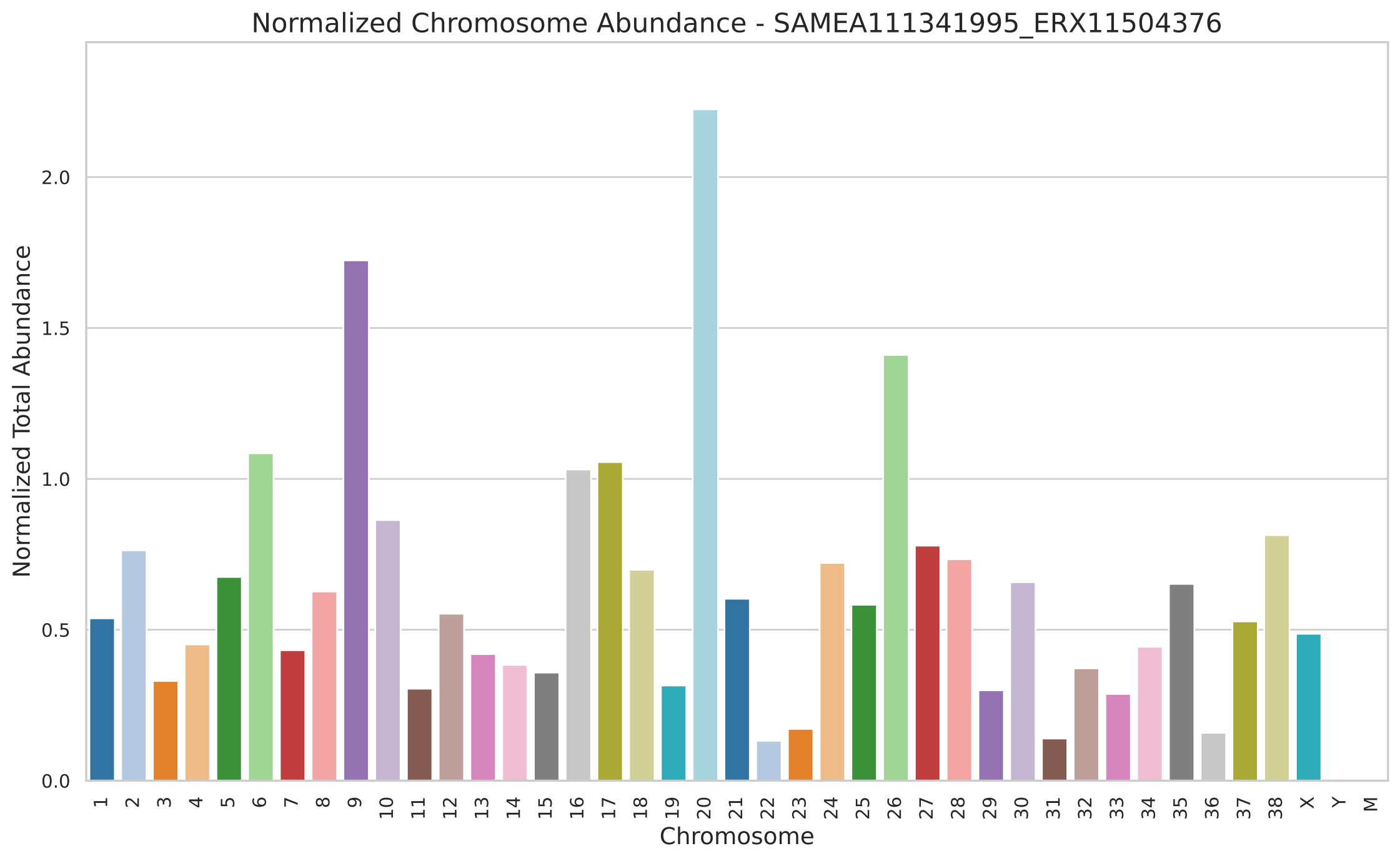

Normalized Chromosome Abundance - SAMEA111342000_ERX11504363
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

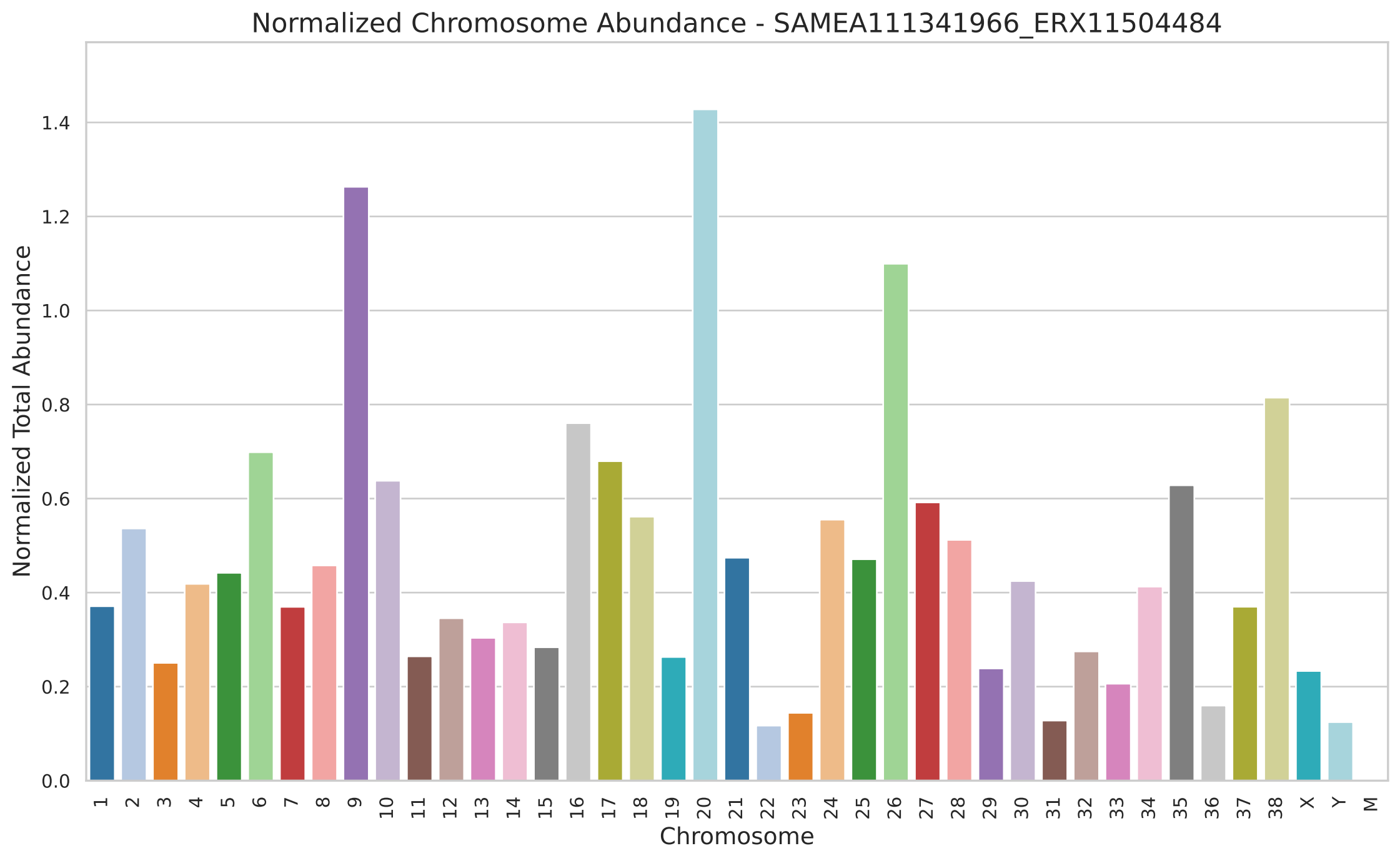

Normalized Chromosome Abundance - SAMEA111342031_ERX11504475
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

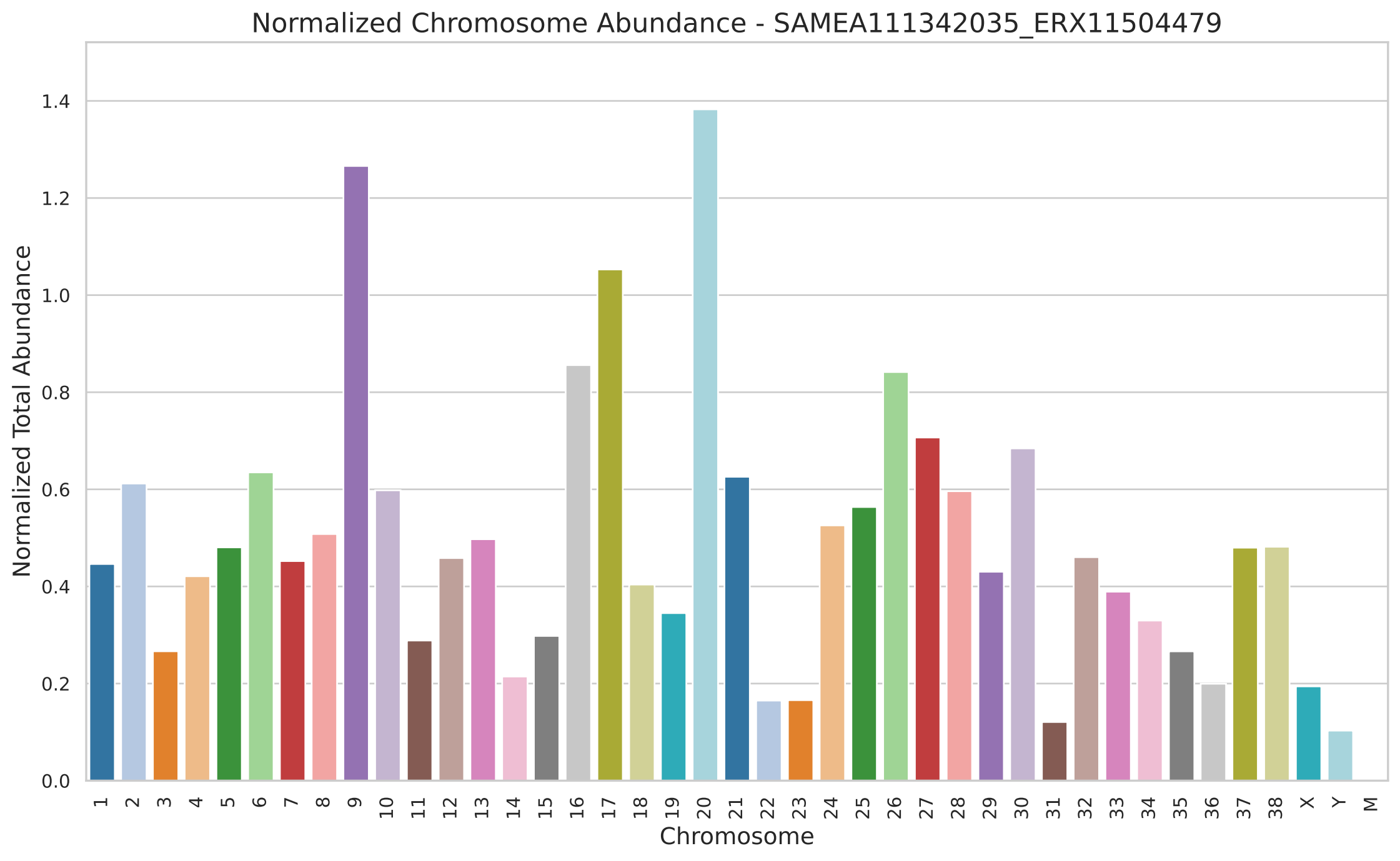

Normalized Chromosome Abundance - SAMEA111342020_ERX11504461
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

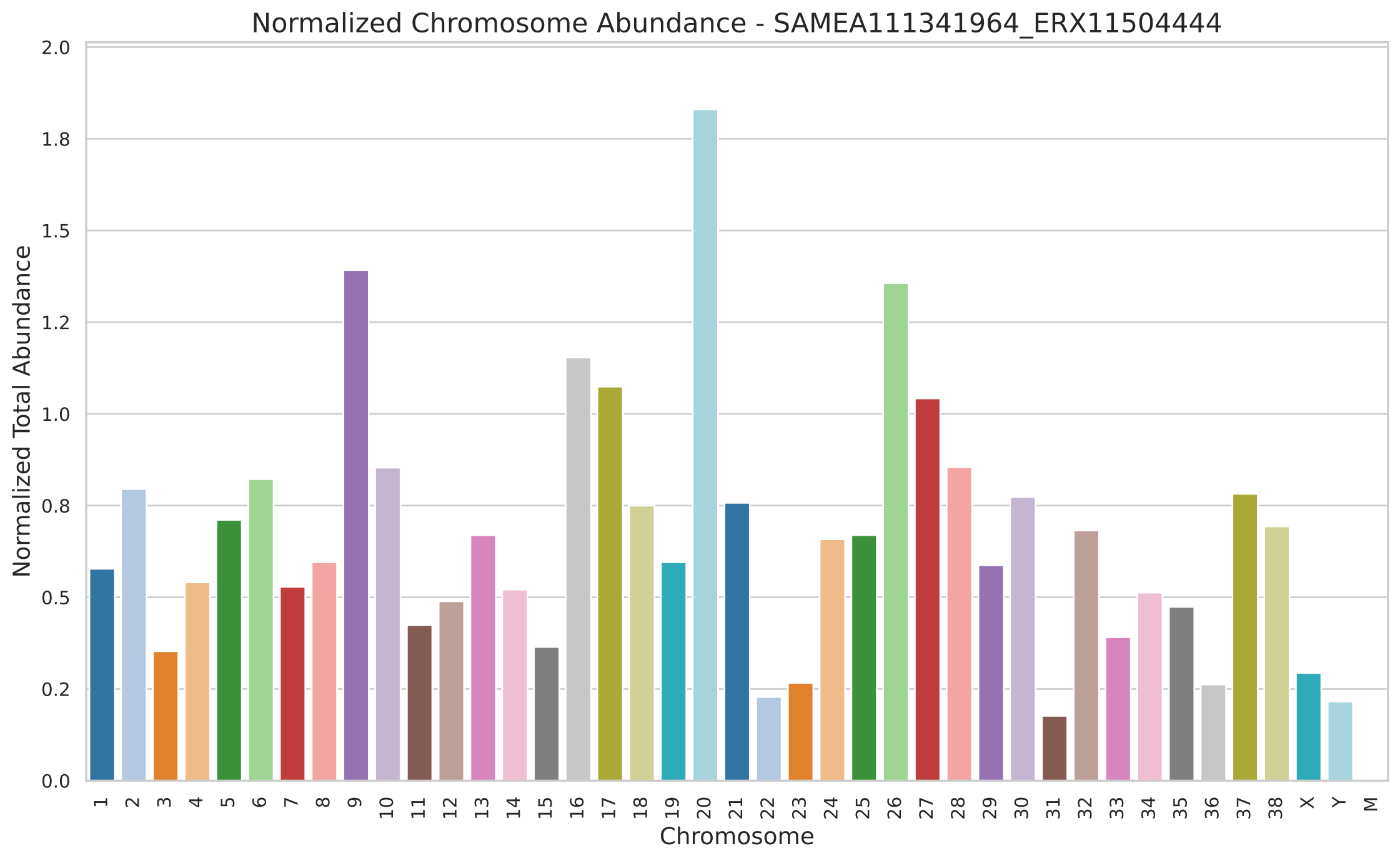

Normalized Chromosome Abundance - SAMEA111341944_ERX11504215
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 X Y M
Chromosome

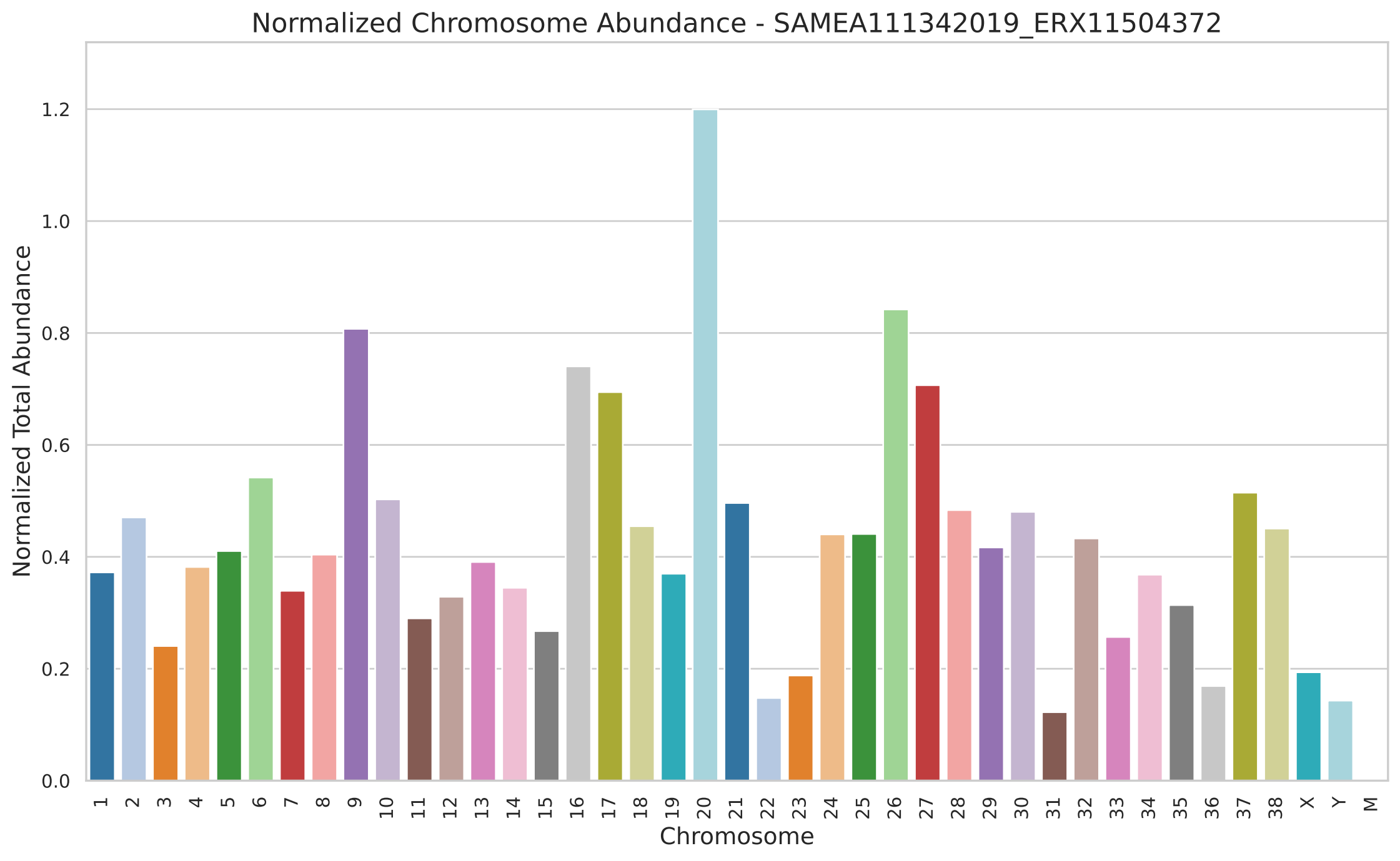

Normalized Chromosome Abundance - SAMEA111341978_ERX11504409
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

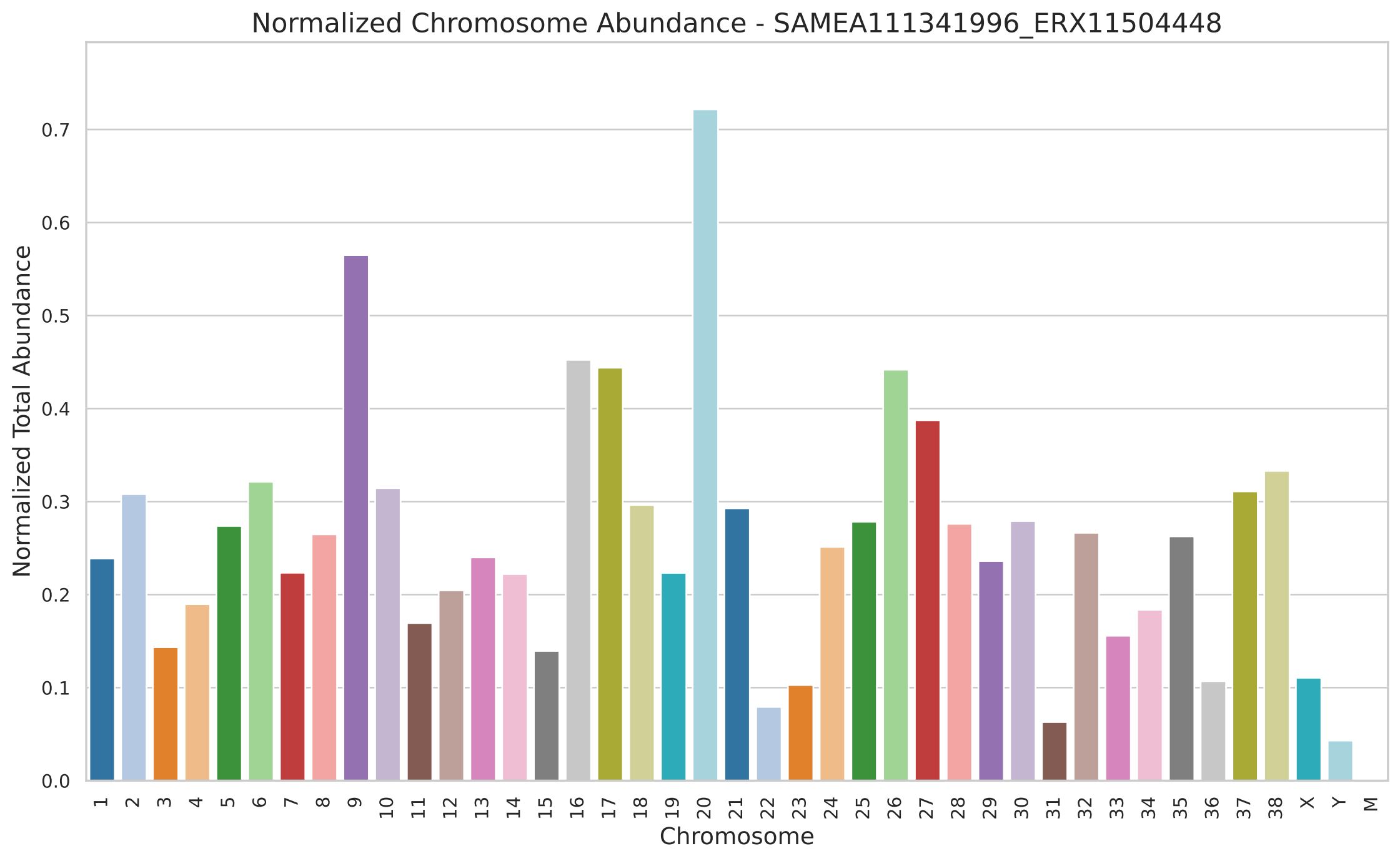

Normalized Chromosome Abundance - SAMEA111341995_ERX11504376
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

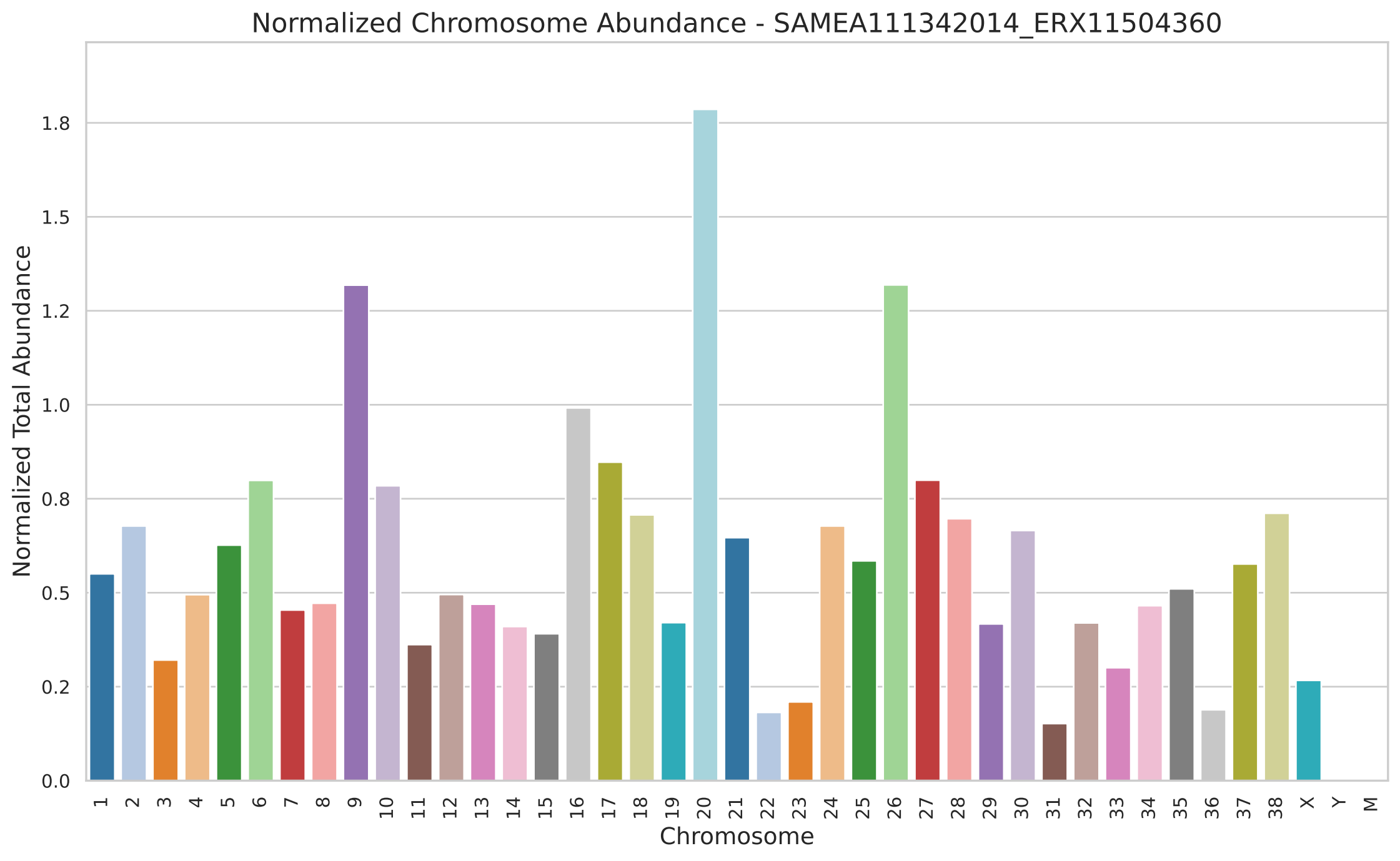

Normalized Chromosome Abundance - SAMEA111341966_ERX11504484
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

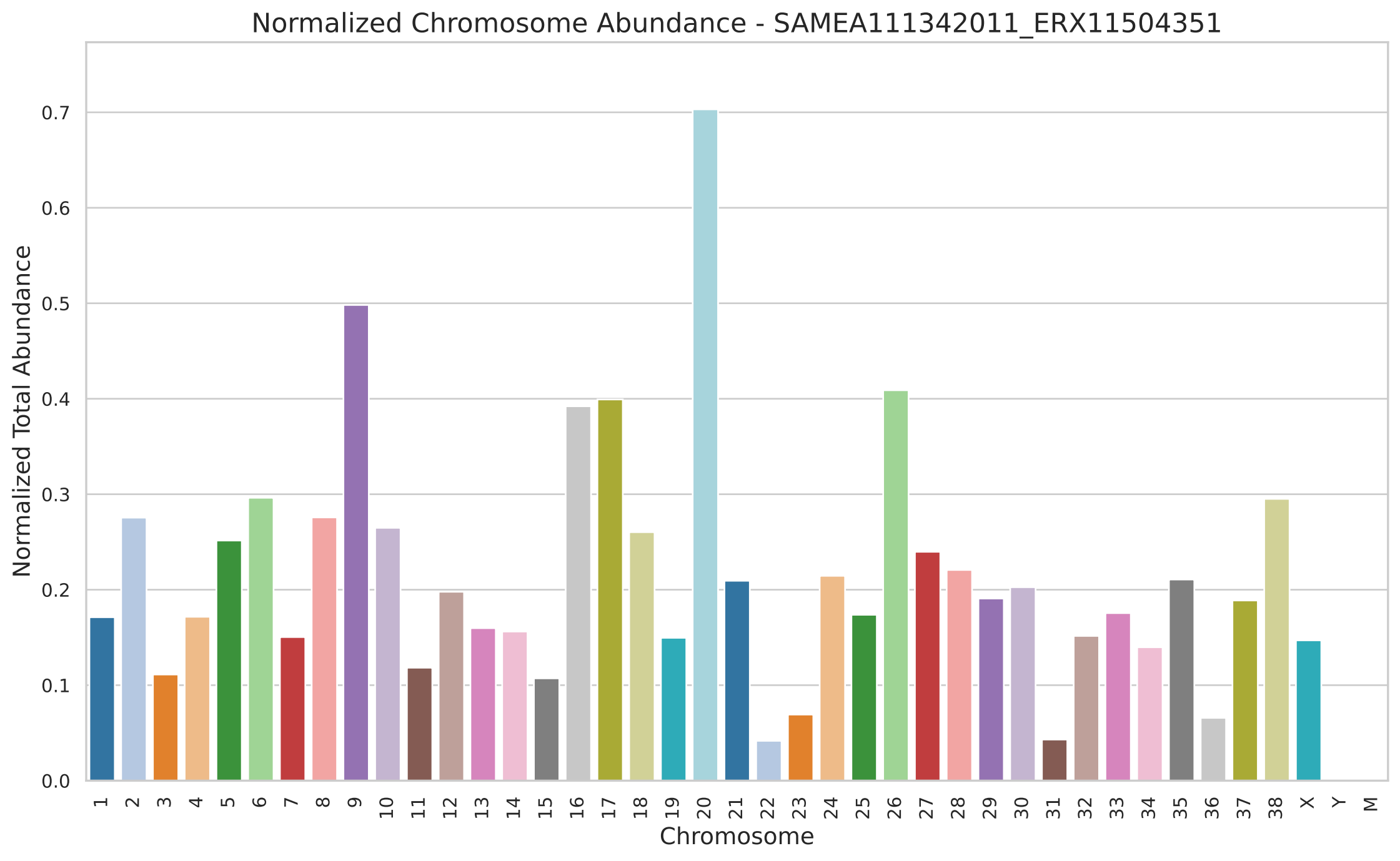

Normalized Chromosome Abundance - SAMEA111342035_ERX11504479
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

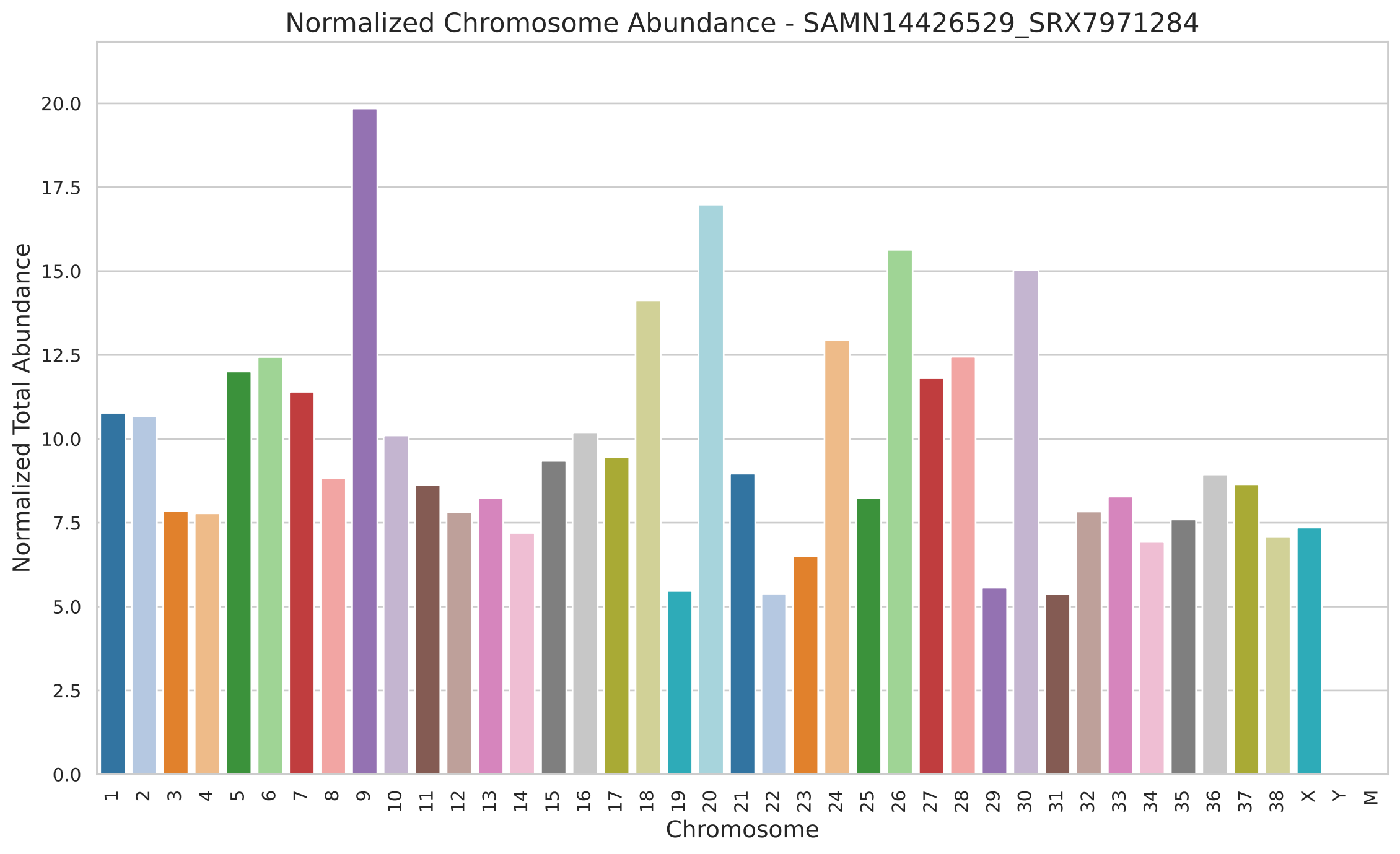

Normalized Chromosome Abundance - SAMEA111341964_ERX11504444
Normalized Total Abundance
2.0
1.8
1.5
1.2
1.0
0.8
0.5
0.2
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

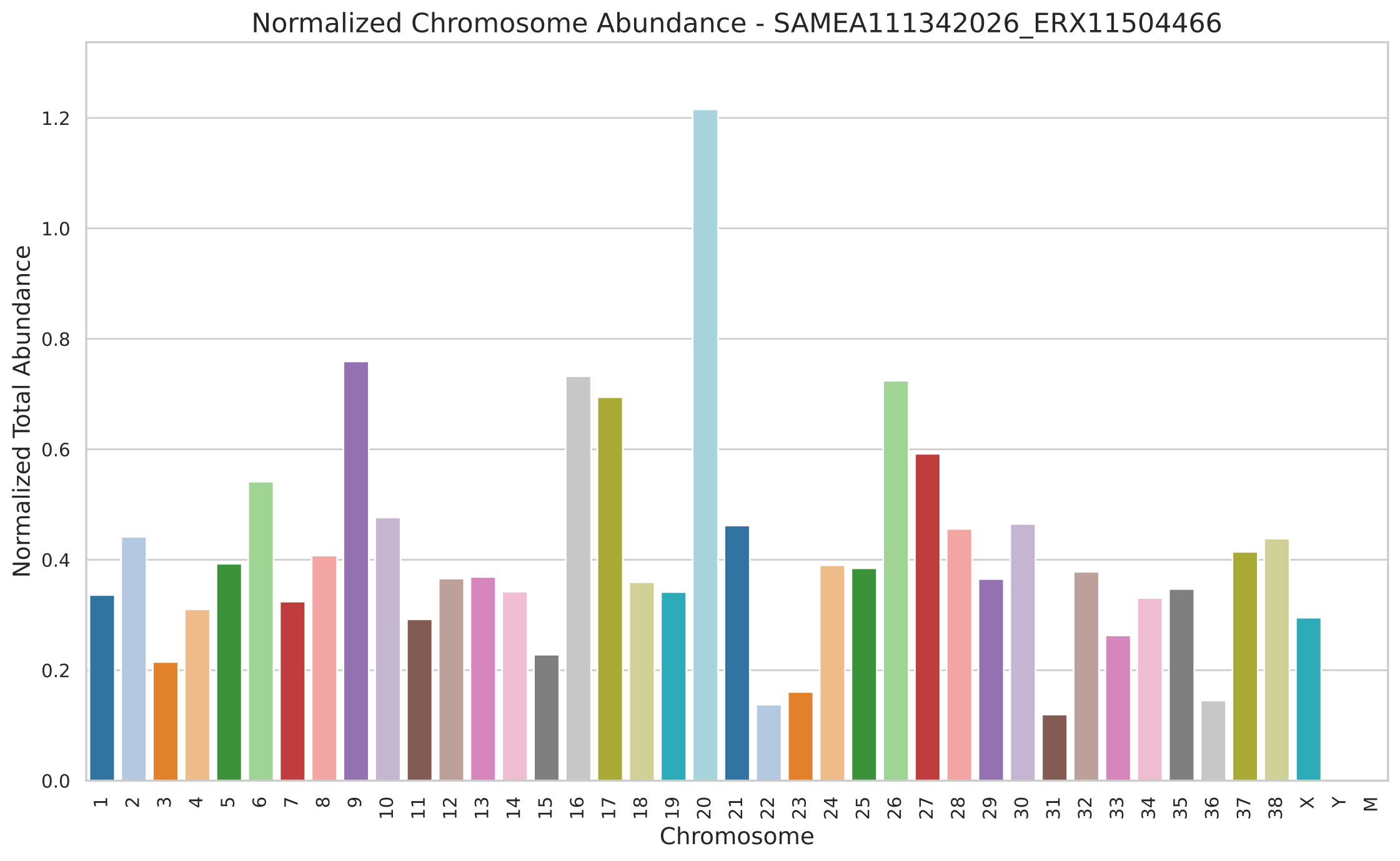

Normalized Chromosome Abundance - SAMEA111342019_ERX11504372
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

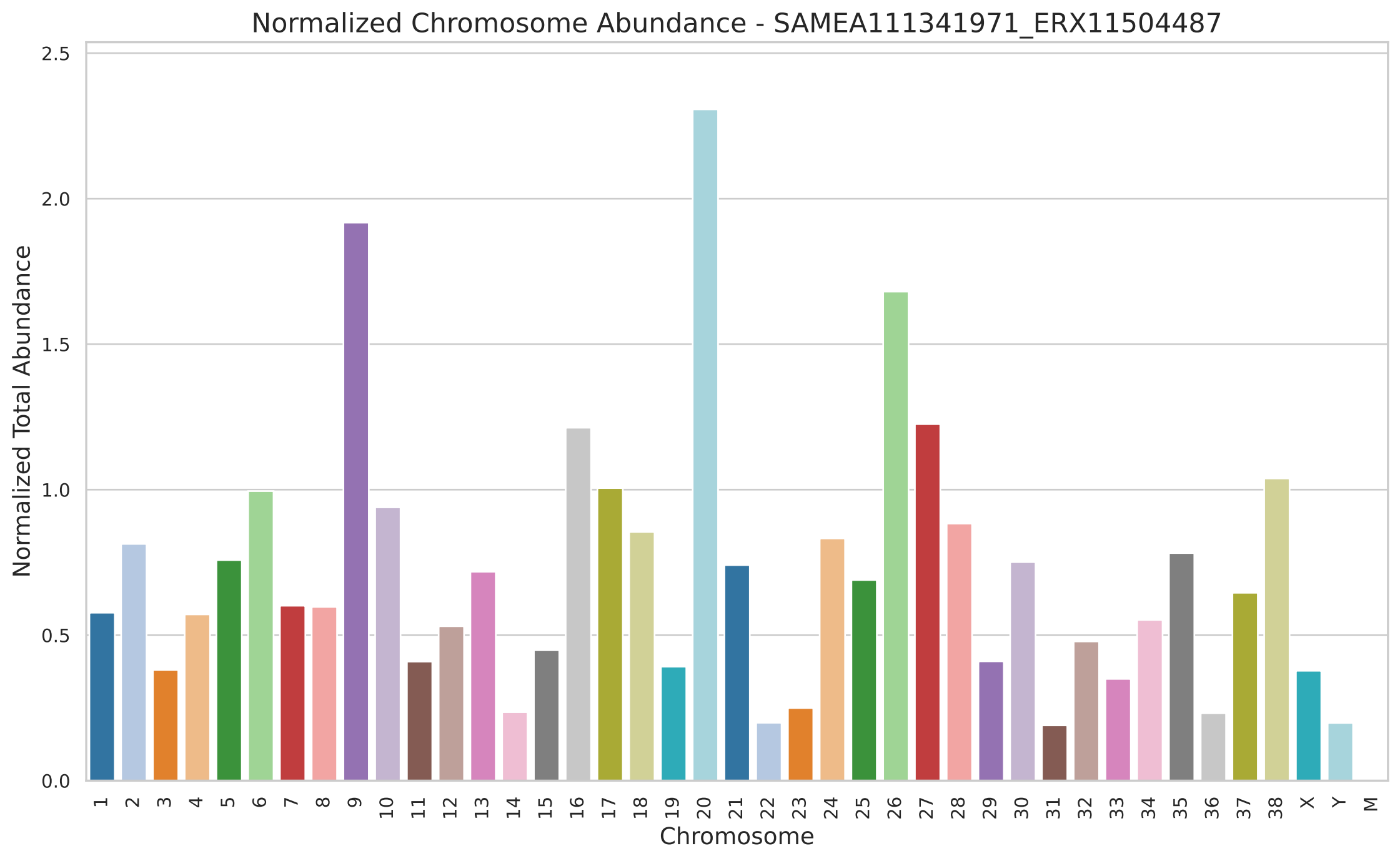

Normalized Chromosome Abundance - SAMEA111341996_ERX11504448
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

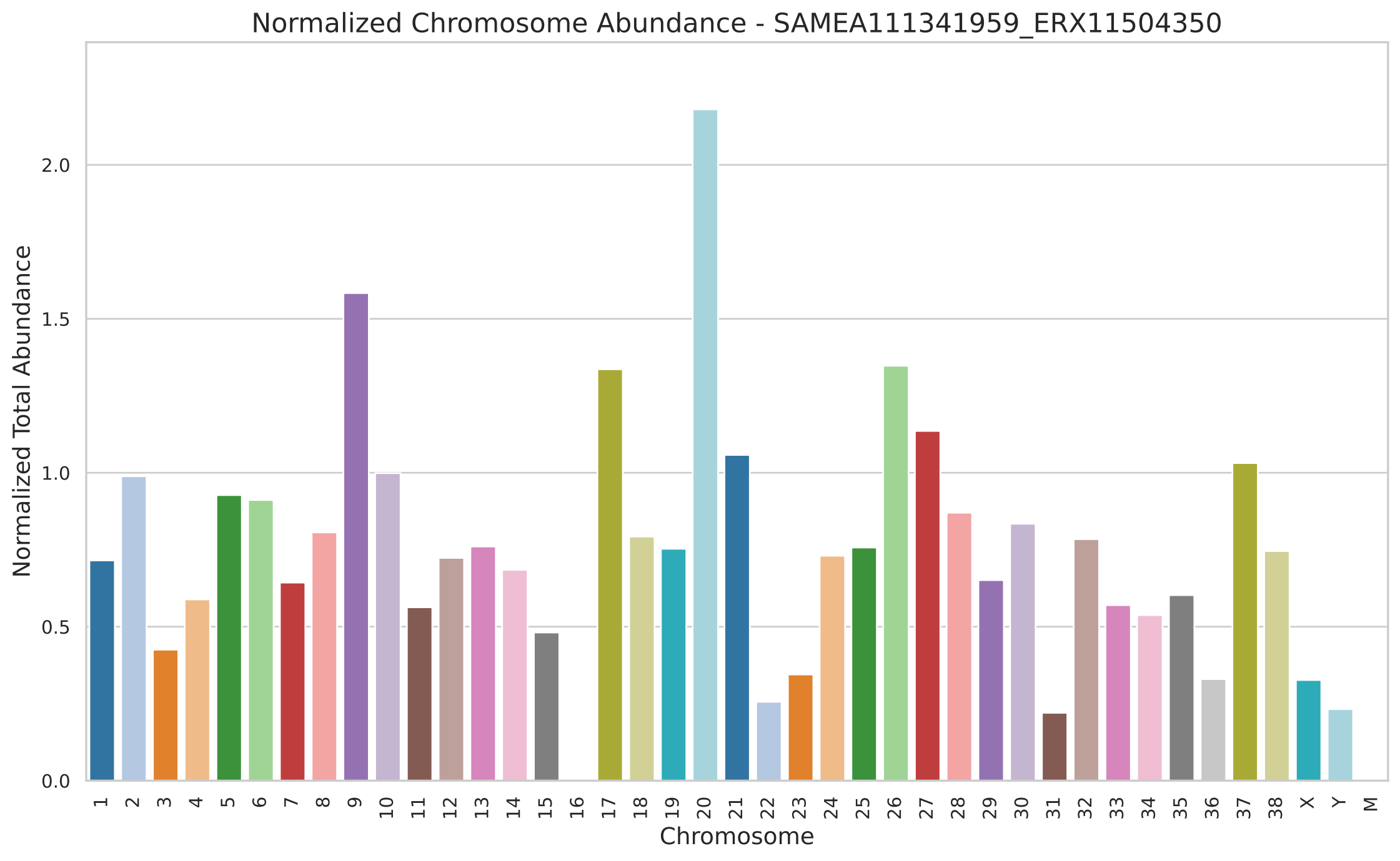

Normalized Chromosome Abundance - SAMEA111342014_ERX11504360
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

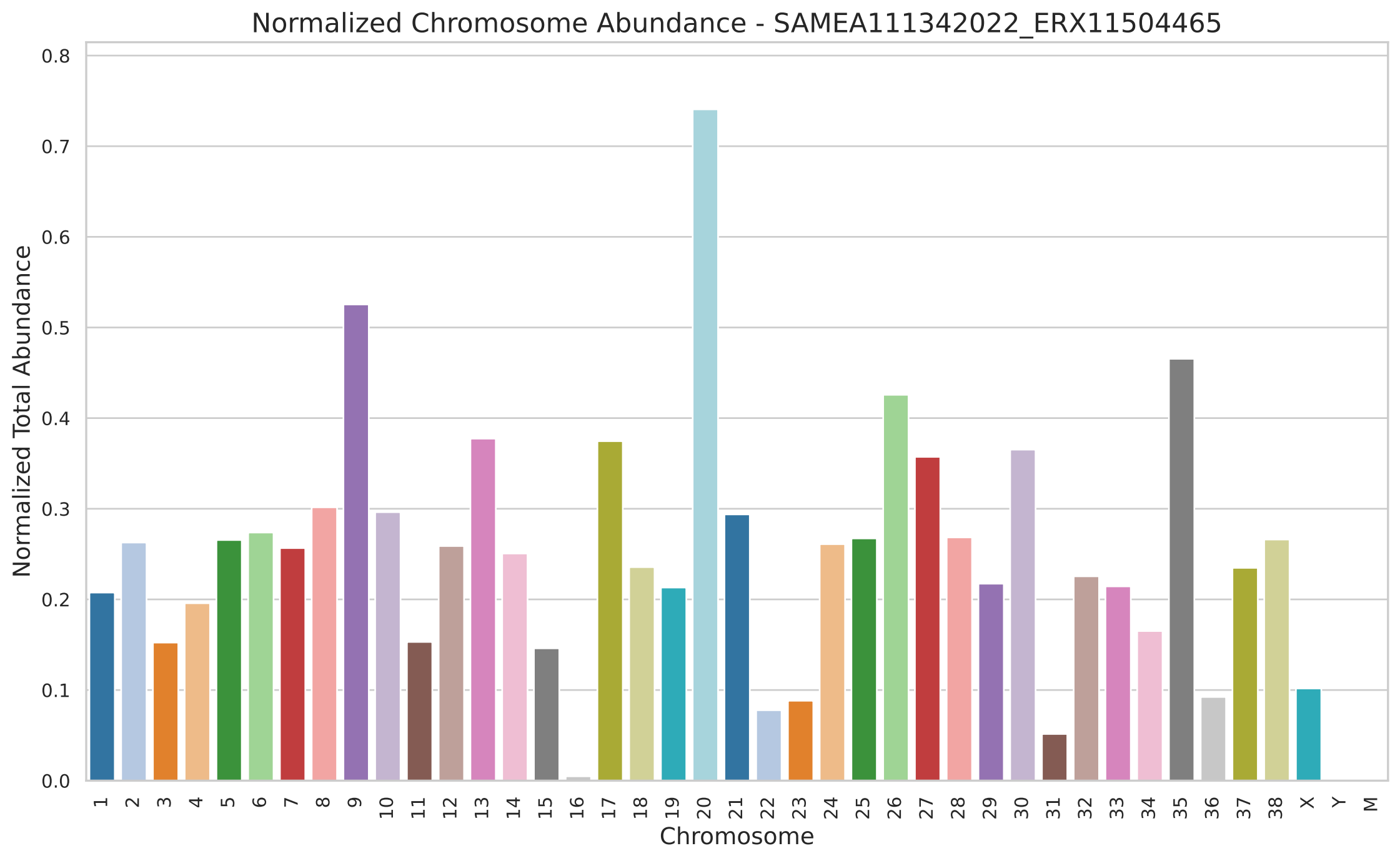

Normalized Chromosome Abundance - SAMEA111342011_ERX11504351
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

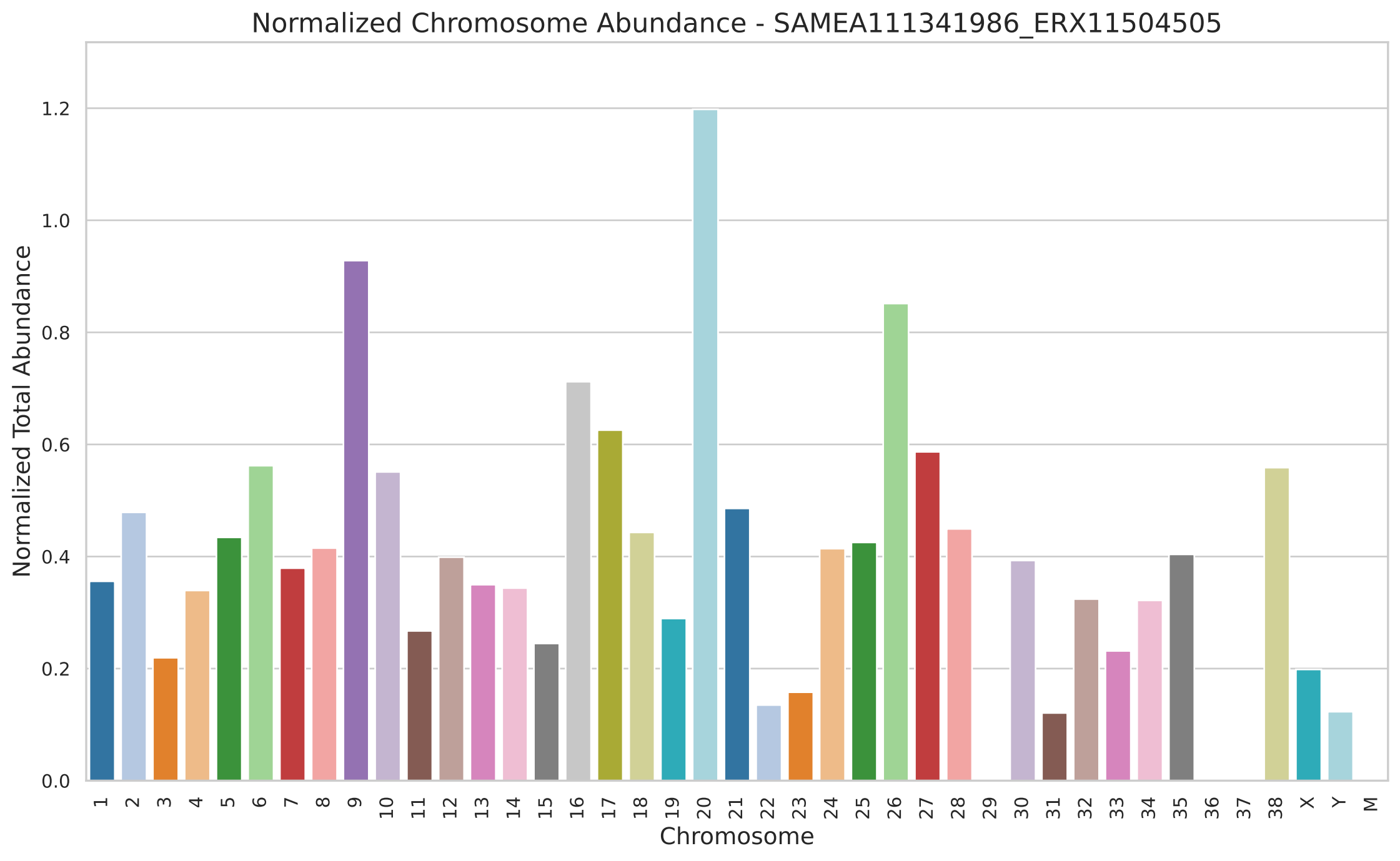

Normalized Chromosome Abundance - SAMN14426529_SRX7971284
Normalized Total Abundance
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5
20.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

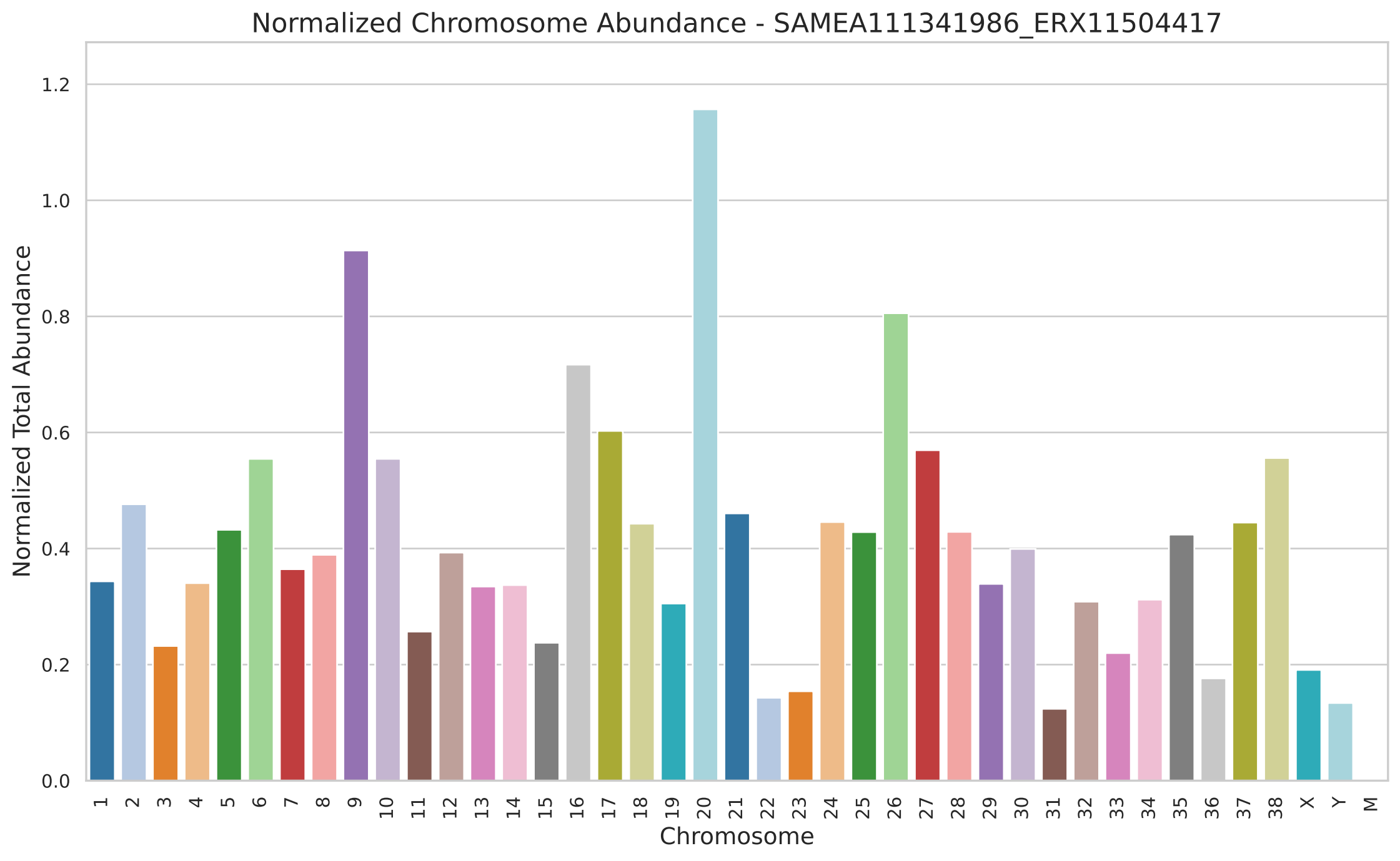

Normalized Chromosome Abundance - SAMEA111342026_ERX11504466
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

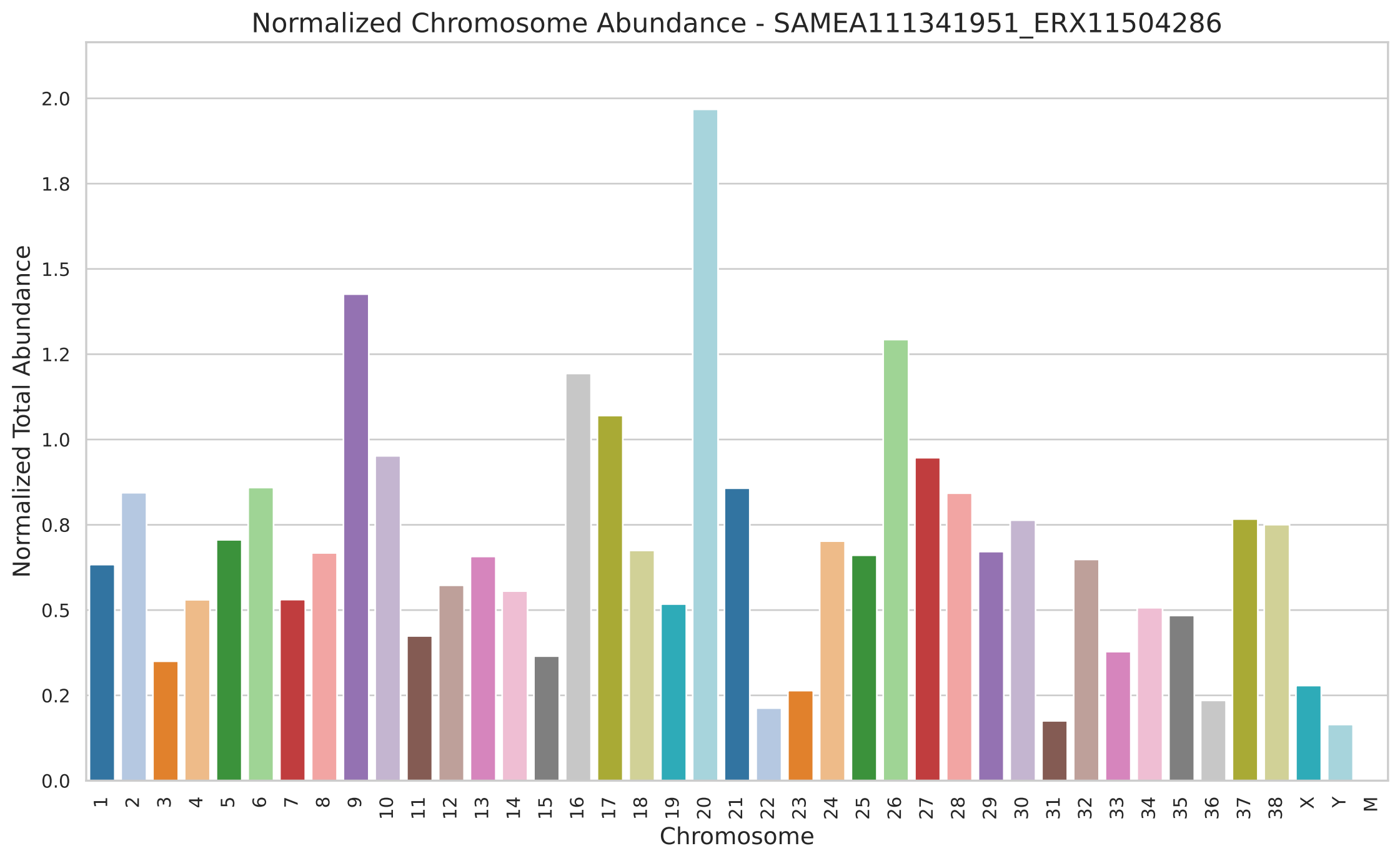

Normalized Chromosome Abundance - SAMEA111341971_ERX11504487
Normalized Total Abundance
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

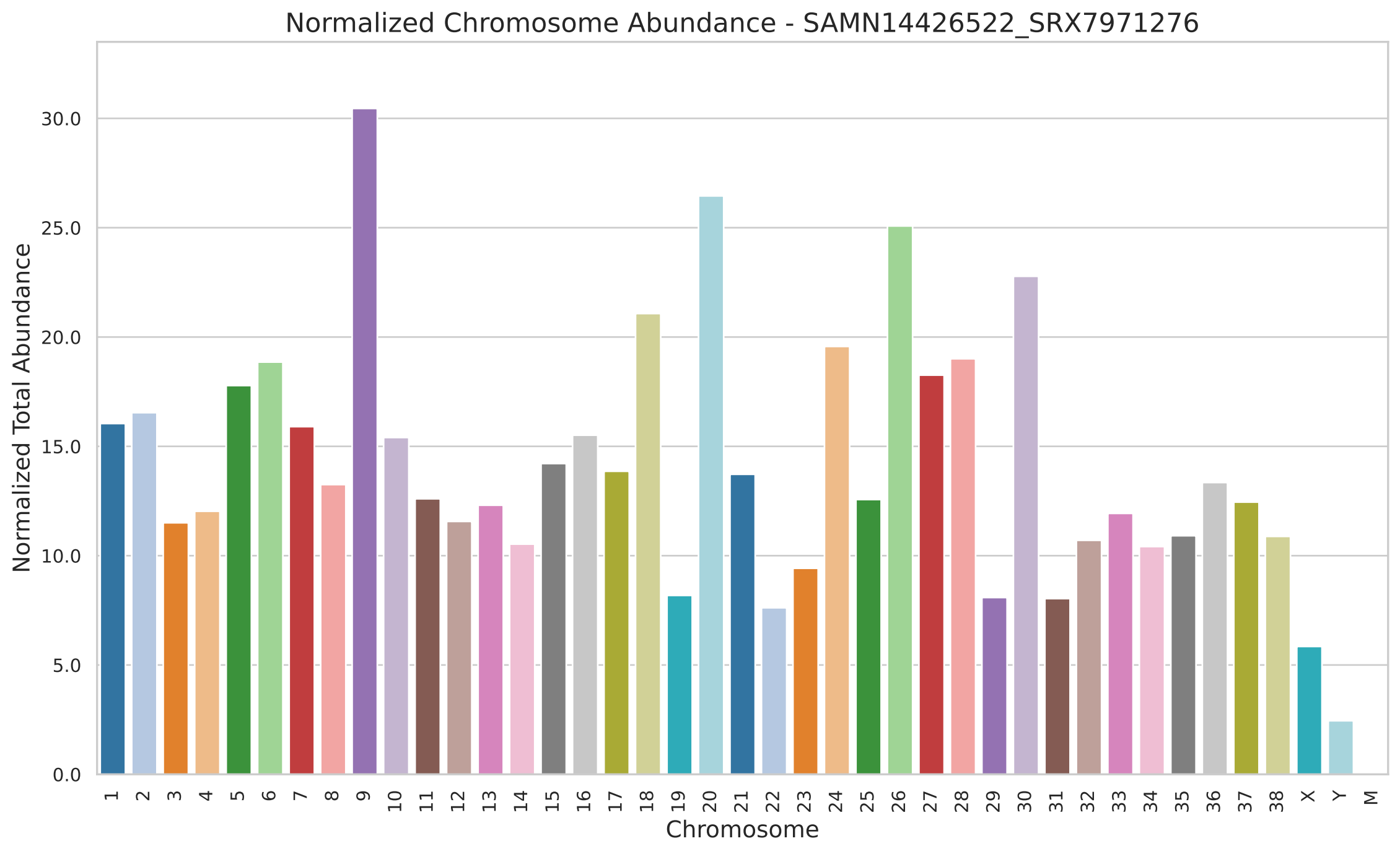

Normalized Chromosome Abundance - SAMEA111341959_ERX11504350
Normalized Total Abundance
0.0
0.5
1.0
1.5
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

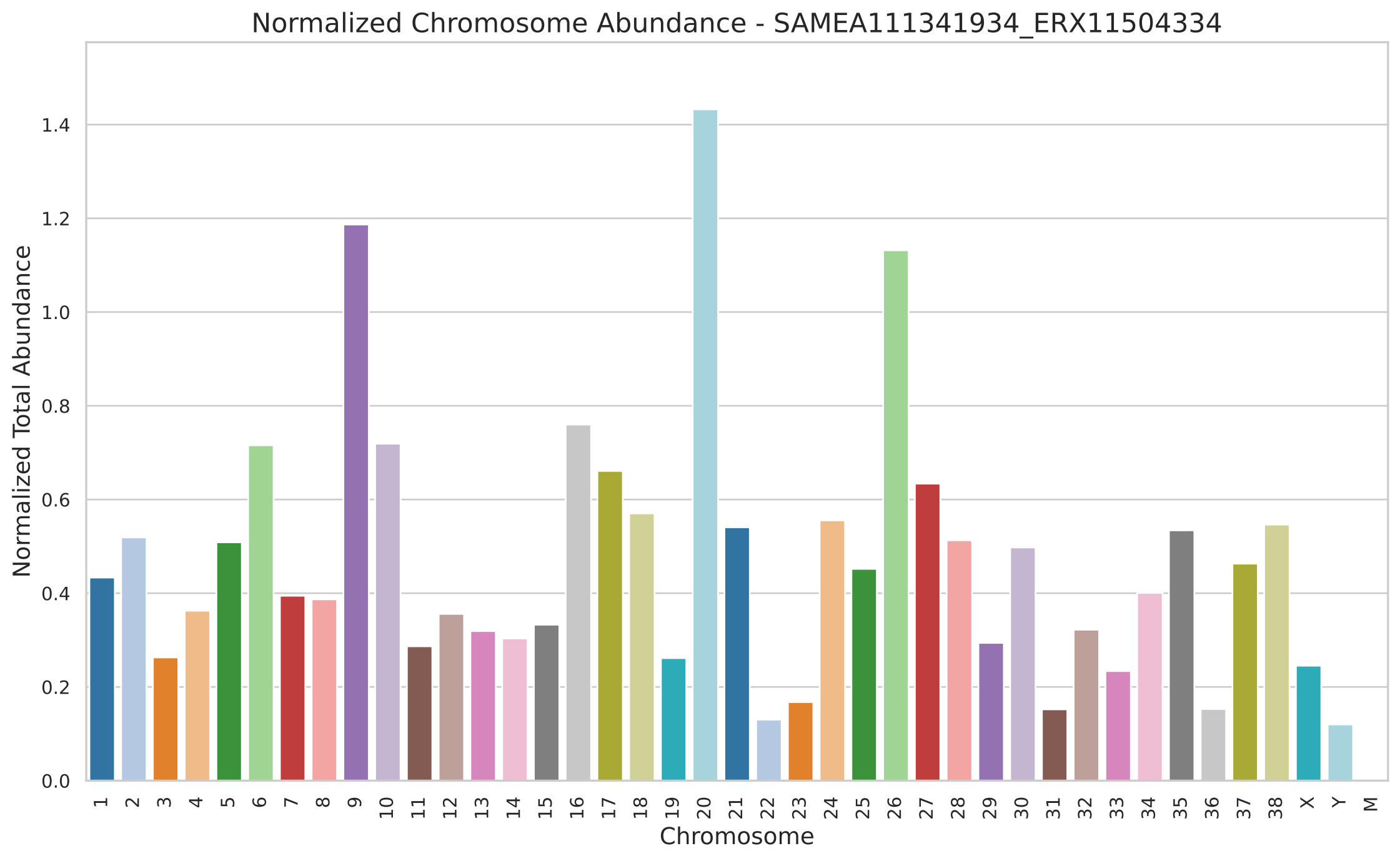

Normalized Chromosome Abundance - SAMEA111342022_ERX11504465
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

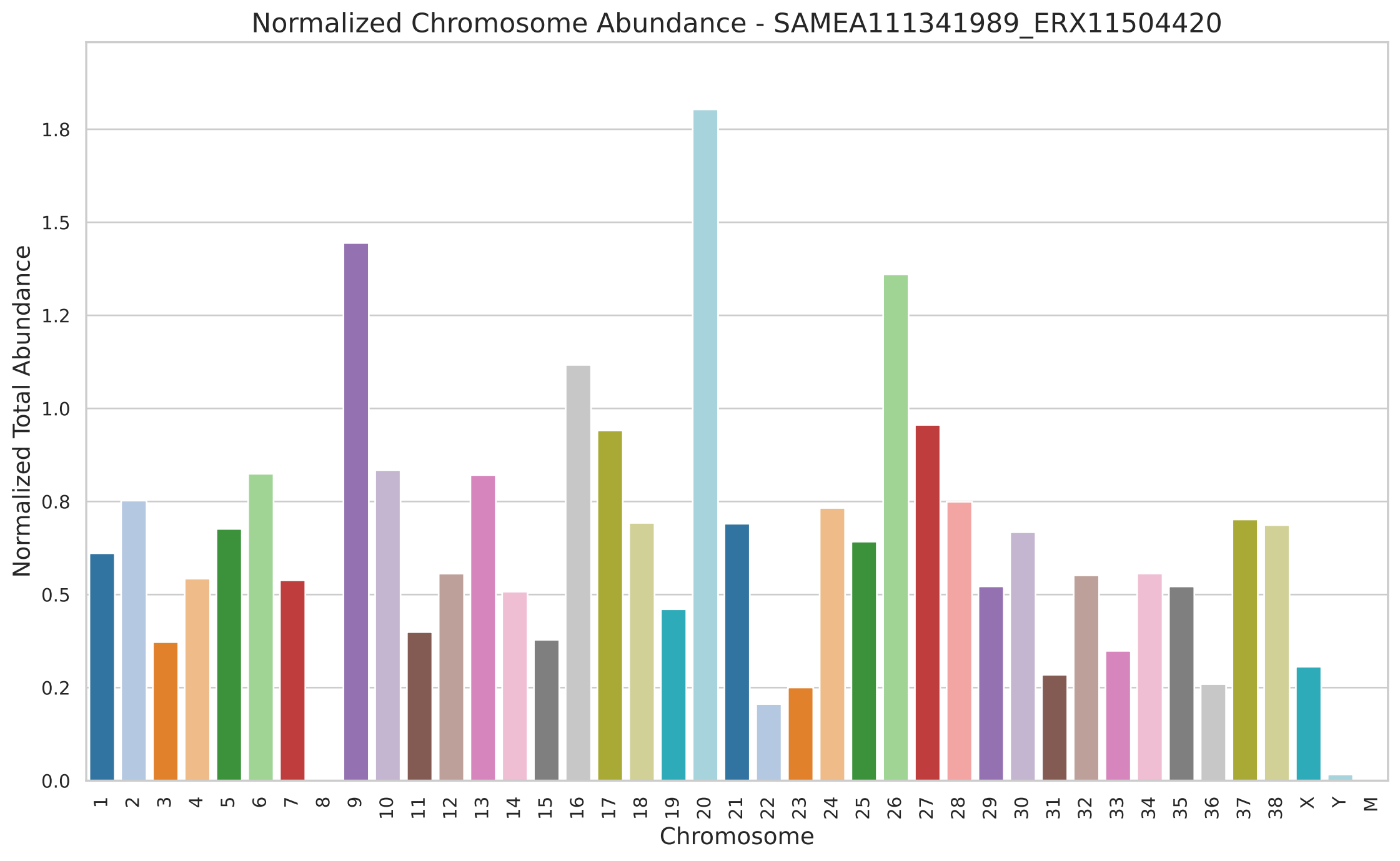

Normalized Chromosome Abundance - SAMEA111341986_ERX11504505
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

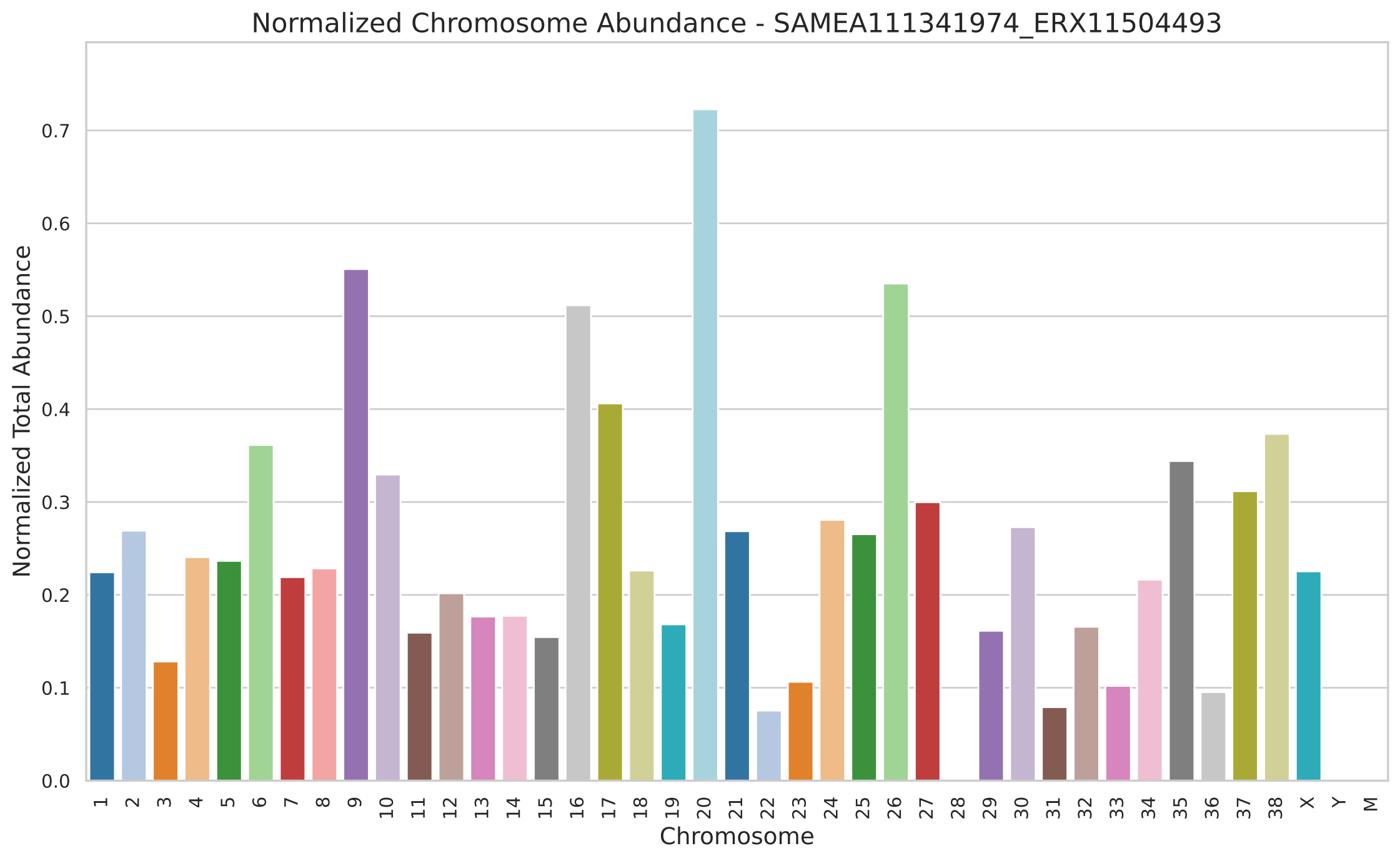

Normalized Chromosome Abundance - SAMEA111341986_ERX11504417
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

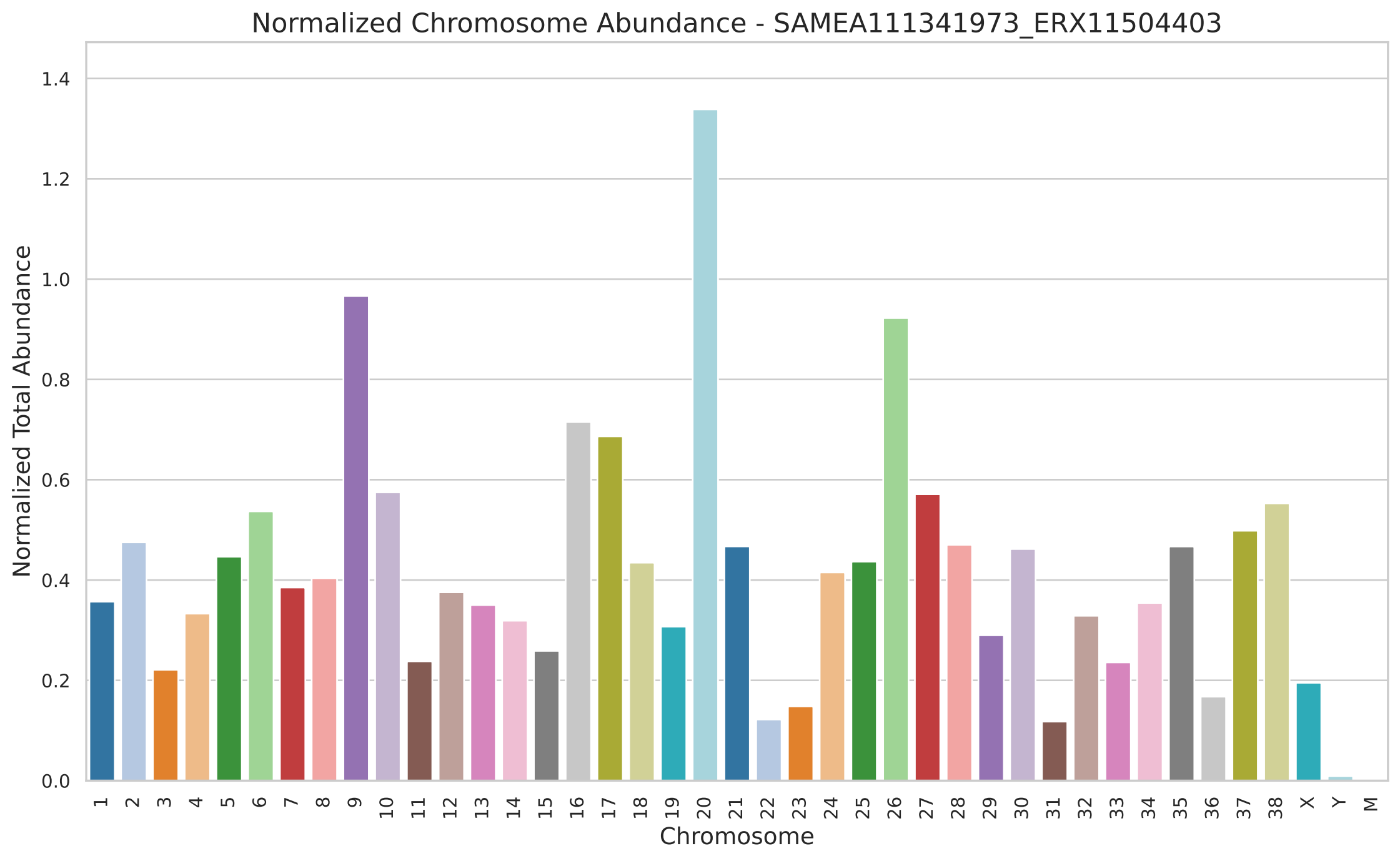

Normalized Chromosome Abundance - SAMEA111341951_ERX11504286
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

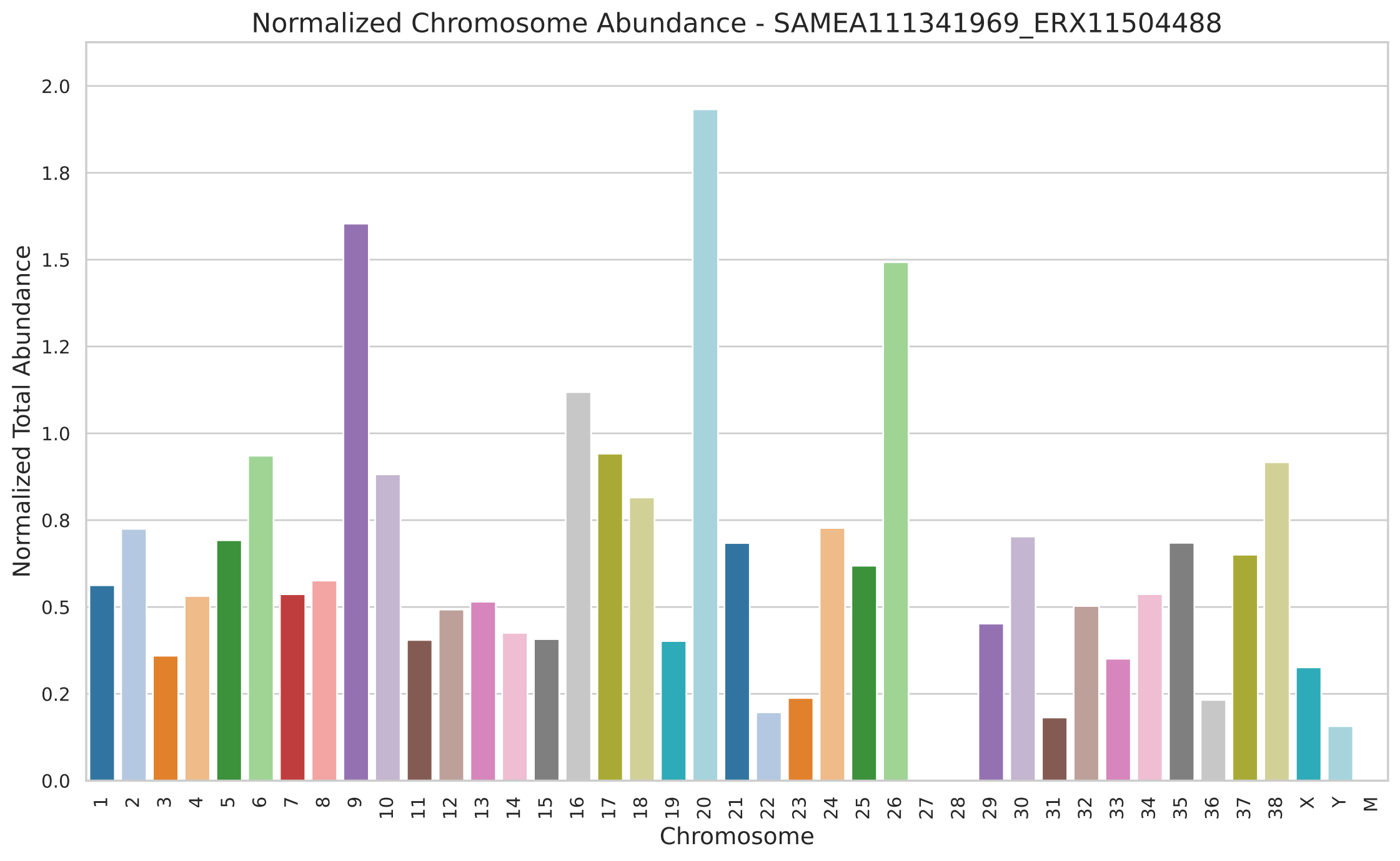

Normalized Chromosome Abundance - SAMN14426522_SRX7971276
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

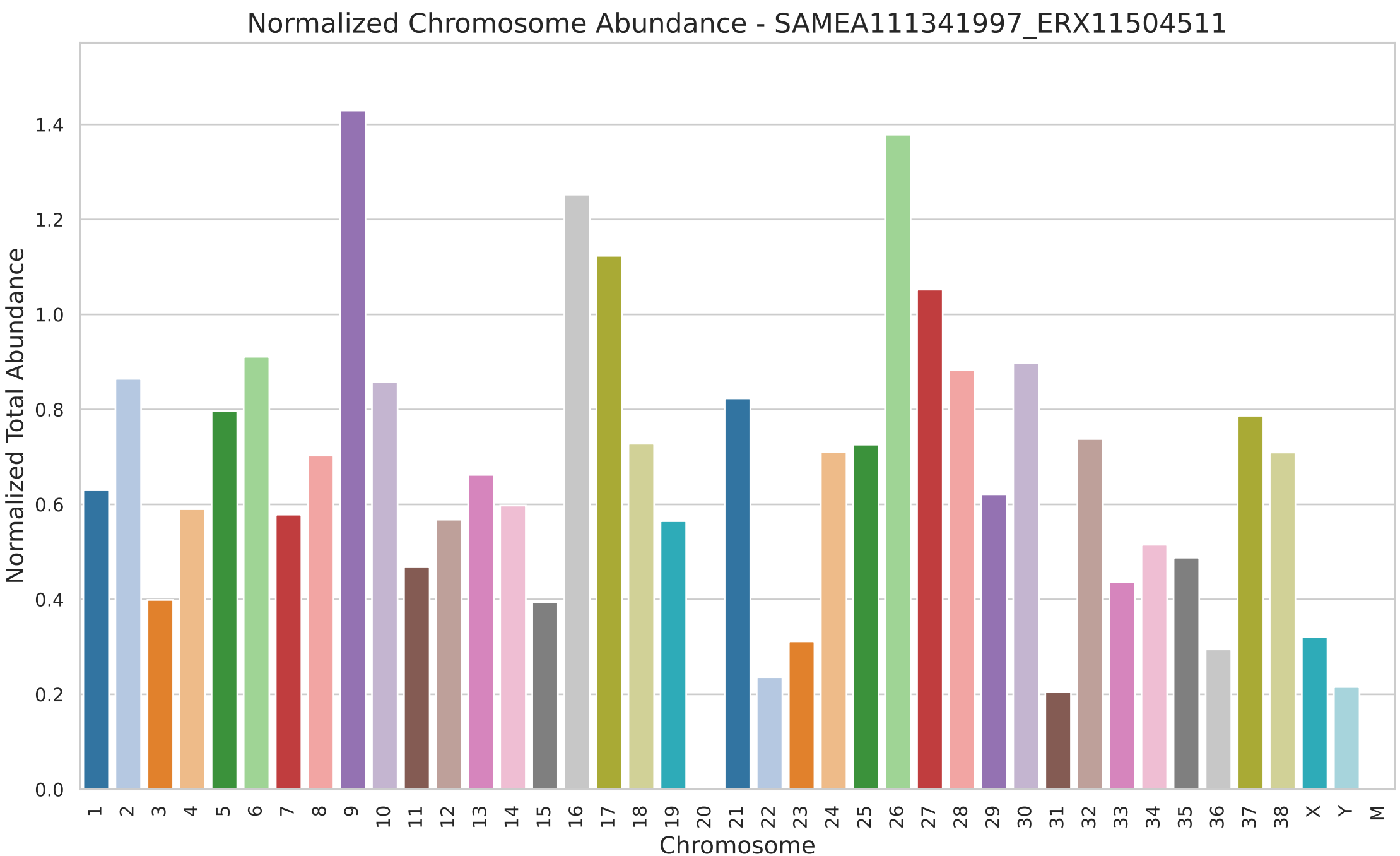

Normalized Chromosome Abundance - SAMEA111341934_ERX11504334
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

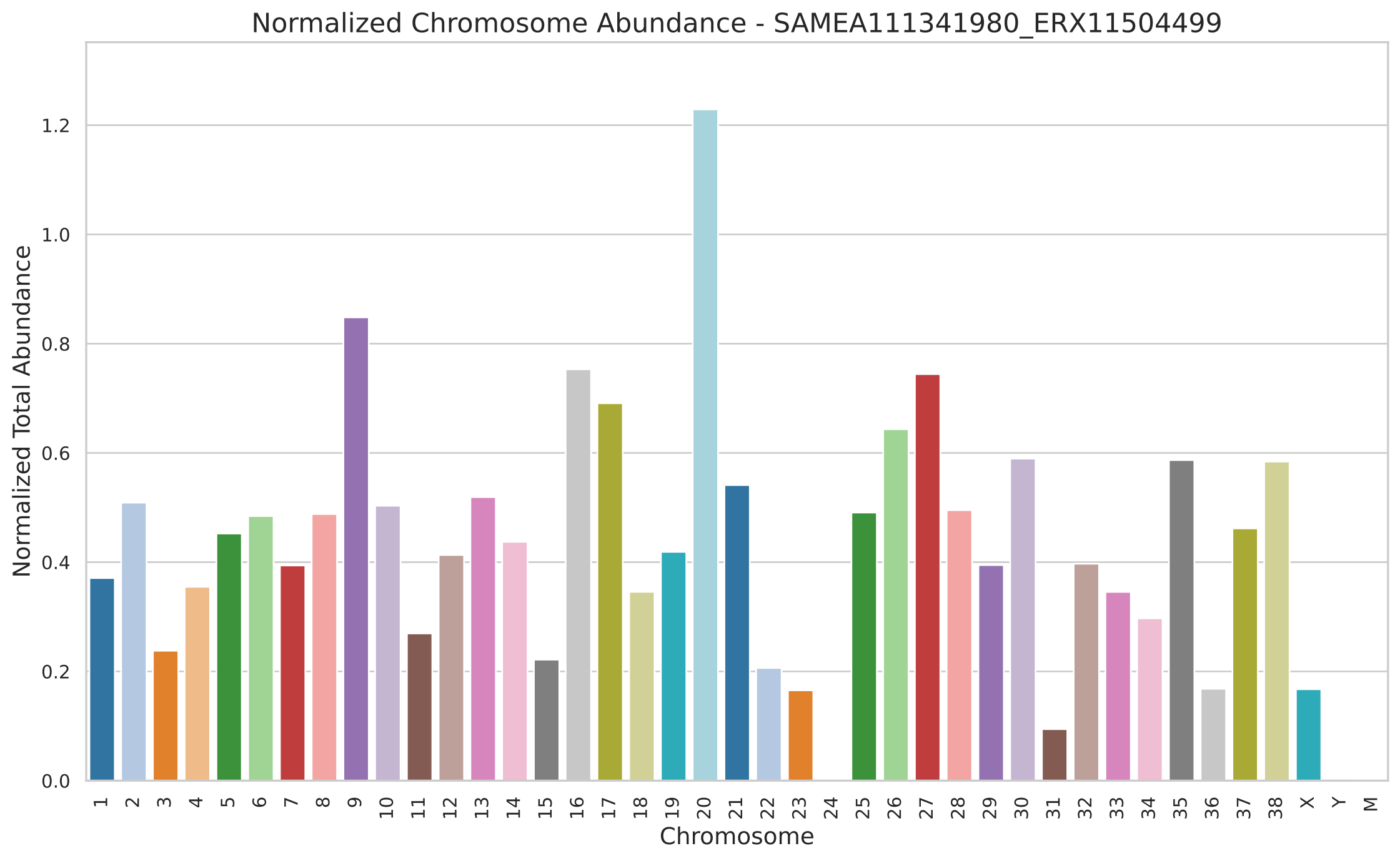

Normalized Chromosome Abundance - SAMEA111341989_ERX11504420
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome

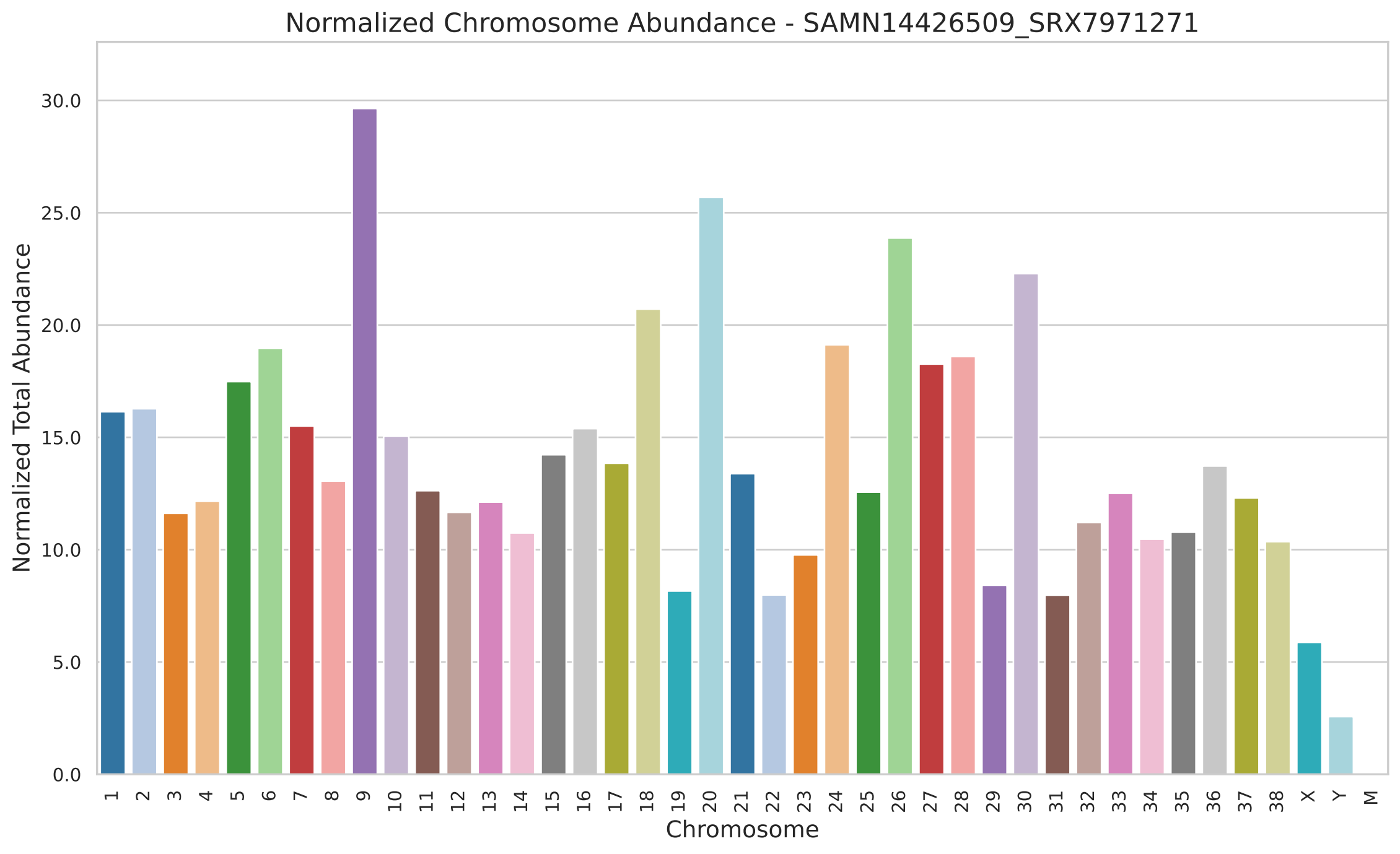

Normalized Chromosome Abundance - SAMEA111341974_ERX11504493
Normalized Total Abundance
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome


Normalized Chromosome Abundance - SAMEA111341973_ERX11504403
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome


Normalized Chromosome Abundance - SAMEA111341969_ERX11504488
Normalized Total Abundance
0.0
0.2
0.5
0.8
1.0
1.2
1.5
1.8
2.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome


Normalized Chromosome Abundance - SAMEA111341997_ERX11504511
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome


Normalized Chromosome Abundance - SAMEA111341980_ERX11504499
Normalized Total Abundance
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome


Normalized Chromosome Abundance - SAMN14426509_SRX7971271
Normalized Total Abundance
0.0
5.0
10.0
15.0
20.0
25.0
30.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
X
Y
M
Chromosome