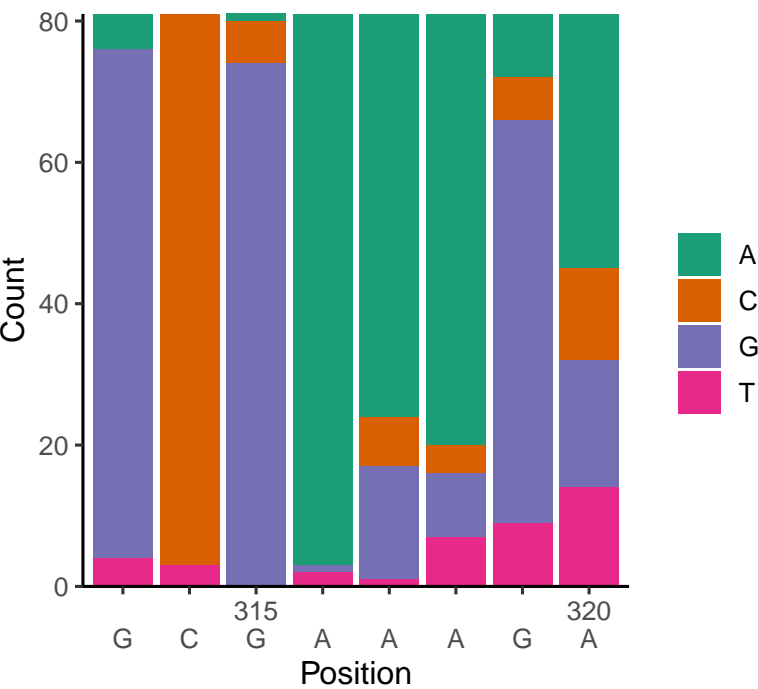
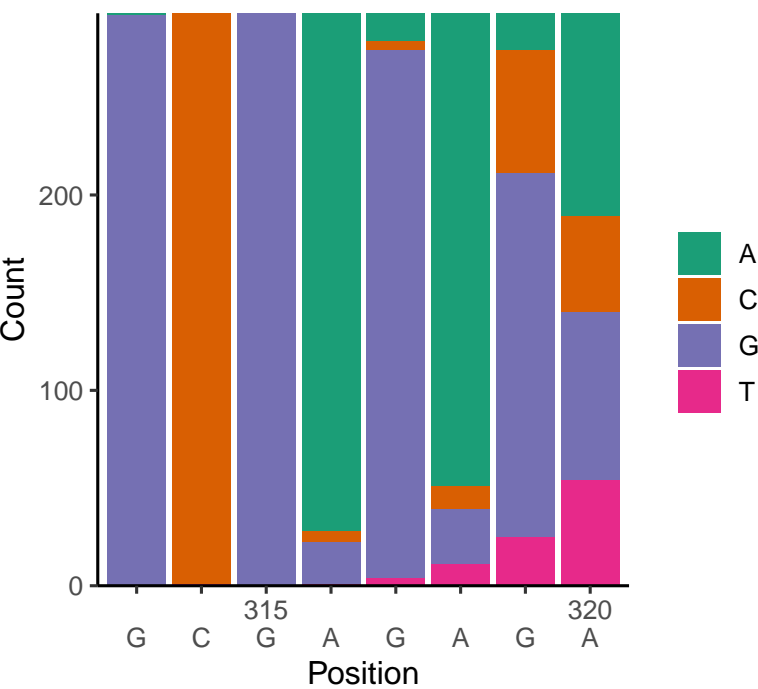


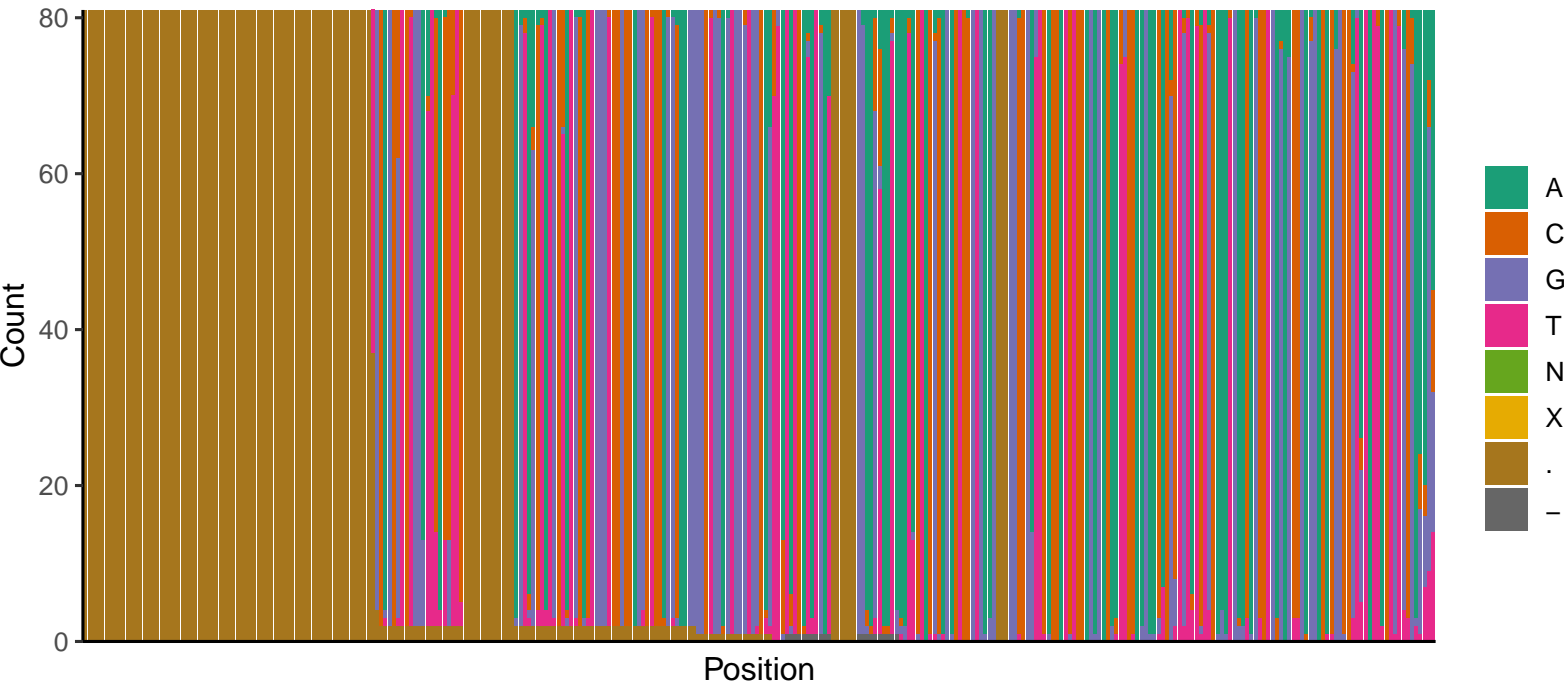
Gene IGHV3-30-3*02_C189T_T288C_T300C_G303A



Gene IGHV6-1*01_02_A315G



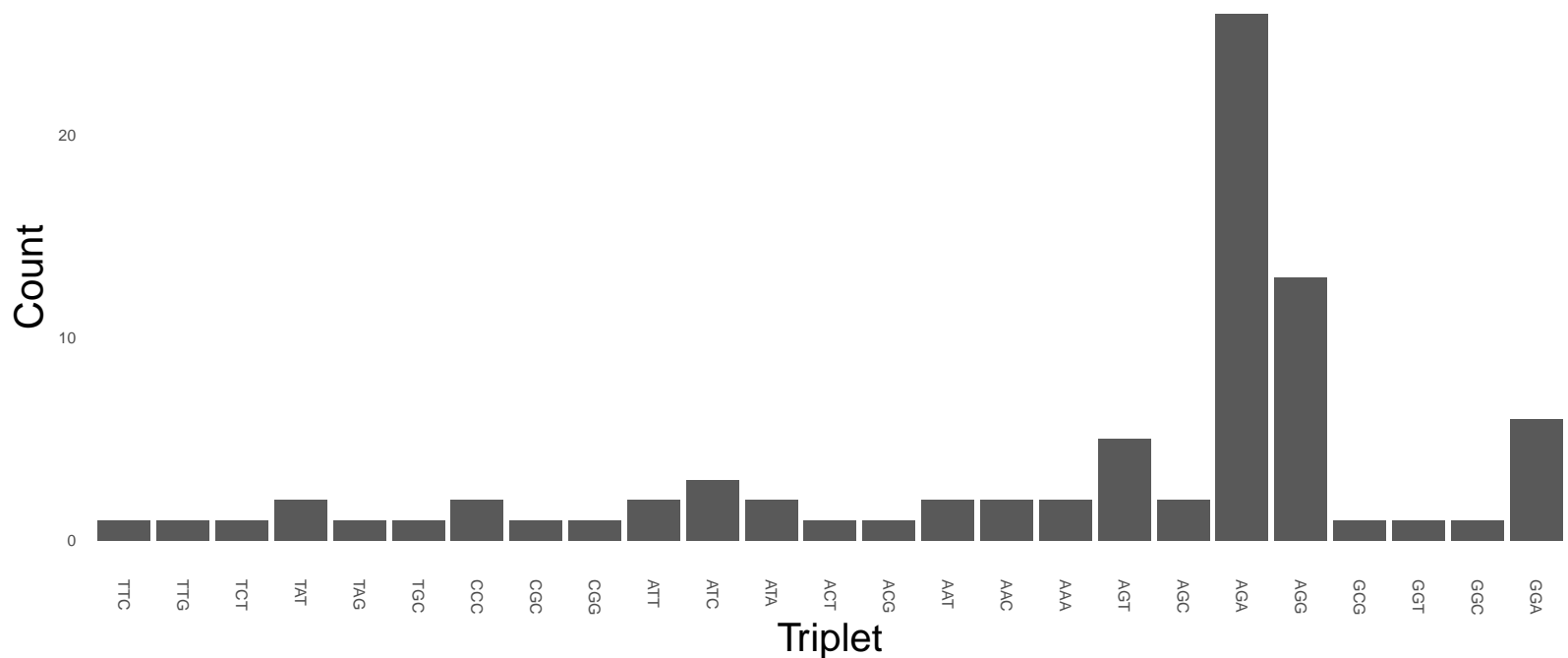
Gene IGHV3-30-3*02_C189T_T288C_T300C_G303A



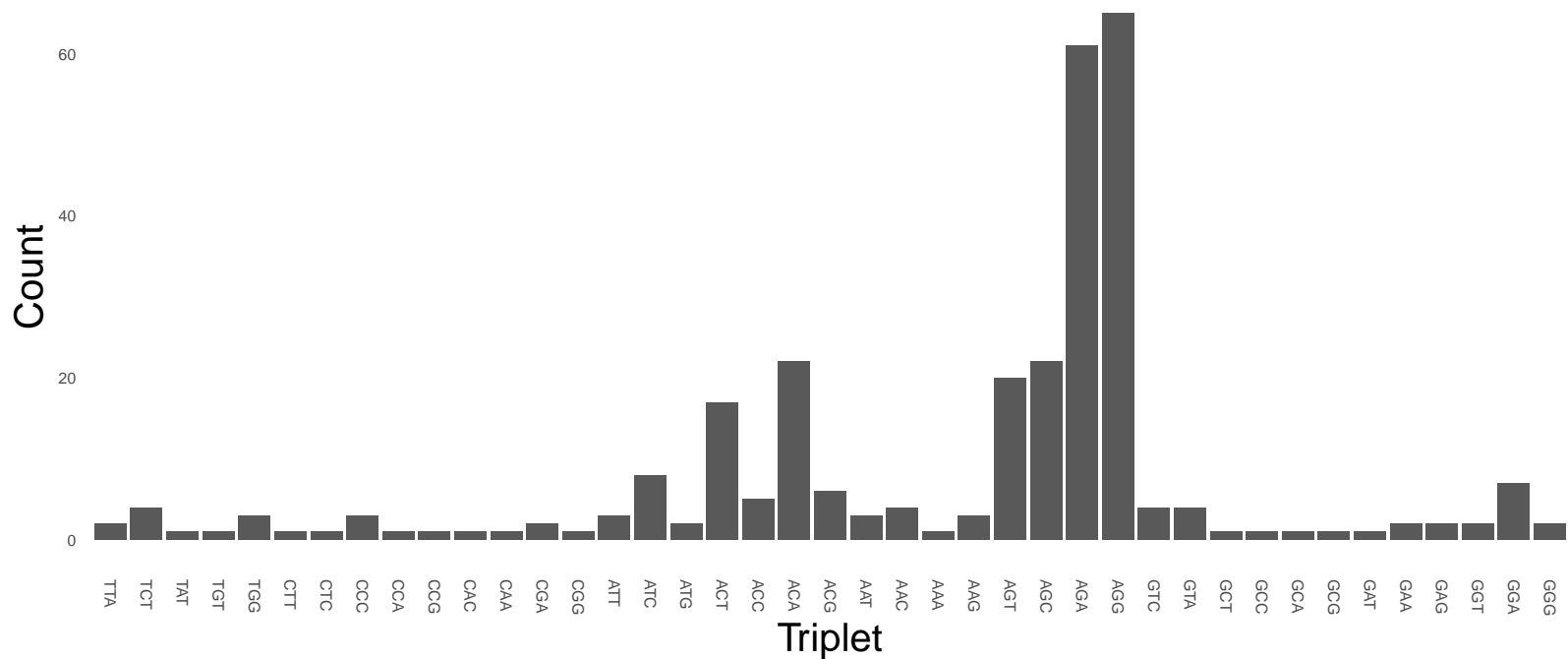
Gene IGHV6-1*01_02_A315G



IGHV3-30-3*02_C189T_T288C_T300C_G303A- Final 3 nucleotides as a triplet

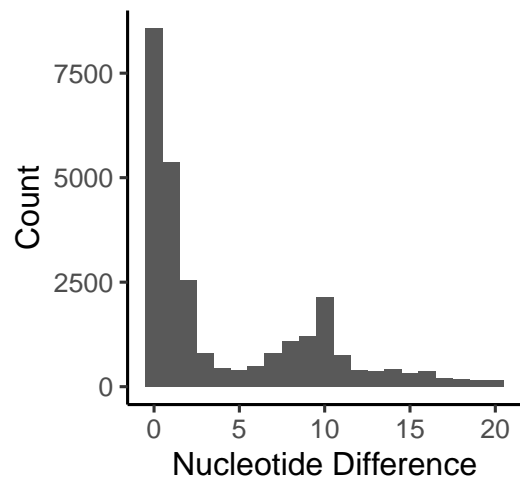


IGHV6-1*01_02_A315G- Final 3 nucleotides as a triplet



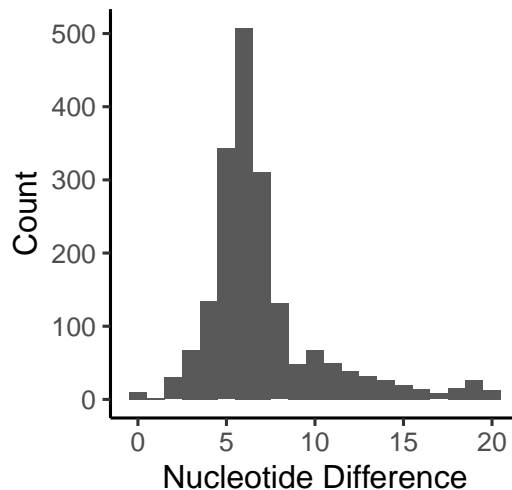
IGHV1-2*02

29658 sequences assigned
8571 (28.9%) exact matches, in which:
7712 unique CDR3
7 unique J



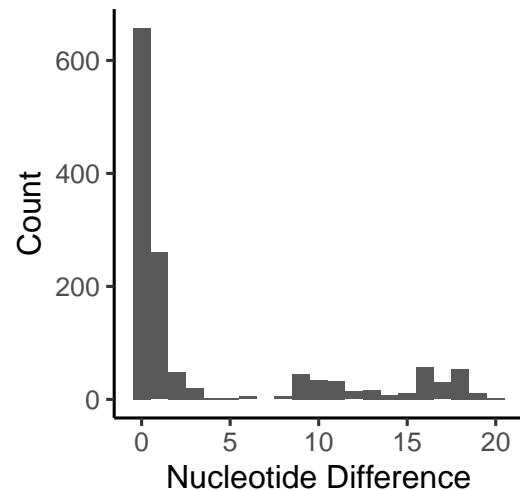
IGHV1-8*02

1960 sequences assigned
10 (0.5%) exact matches, in which:
10 unique CDR3
4 unique J



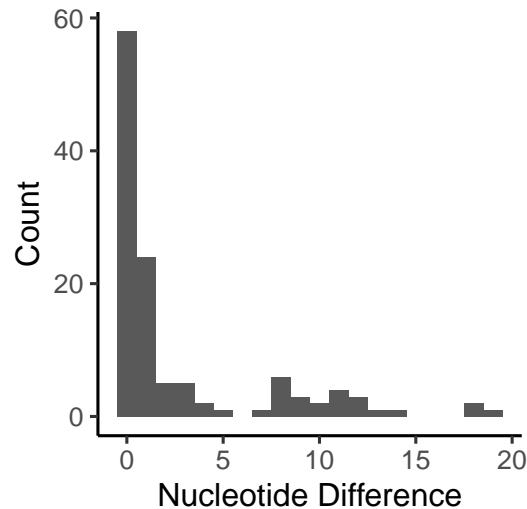
IGHV1-24*01

1351 sequences assigned
658 (48.7%) exact matches, in which:
597 unique CDR3
7 unique J



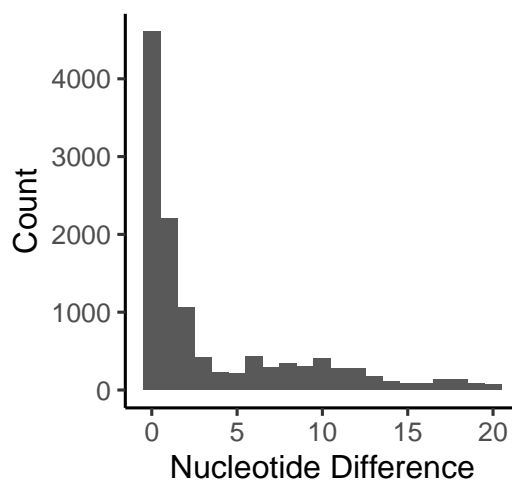
IGHV1-3*02

123 sequences assigned
58 (47.2%) exact matches, in which:
56 unique CDR3
6 unique J



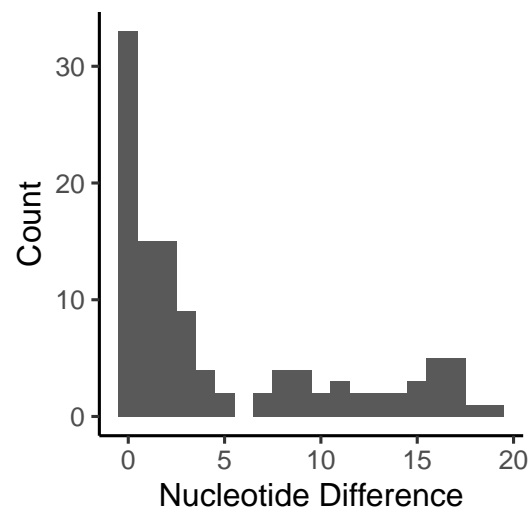
IGHV1-18*01

13037 sequences assigned
4605 (35.3%) exact matches, in which:
4318 unique CDR3
7 unique J



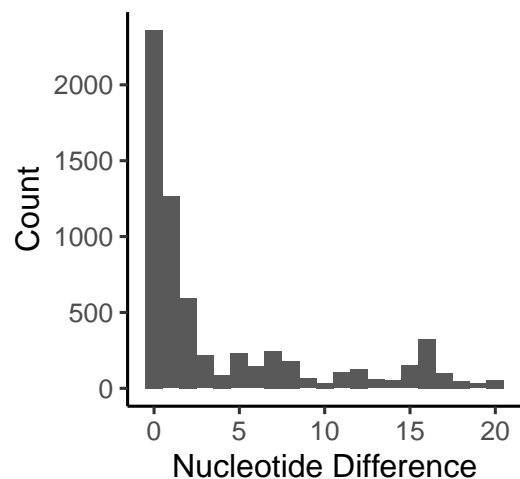
IGHV1-45*02

144 sequences assigned
33 (22.9%) exact matches, in which:
29 unique CDR3
6 unique J



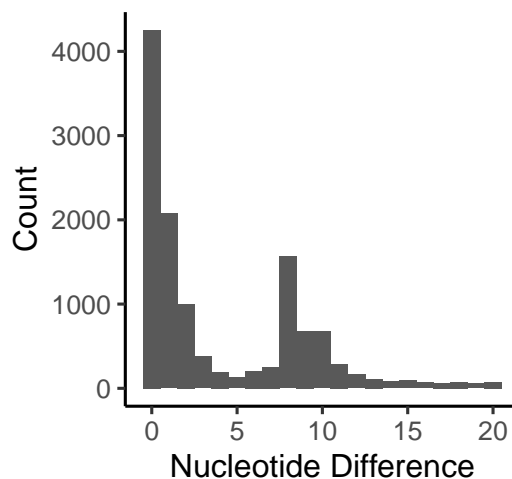
IGHV1-8*01

6704 sequences assigned
2361 (35.2%) exact matches, in which:
2202 unique CDR3
7 unique J



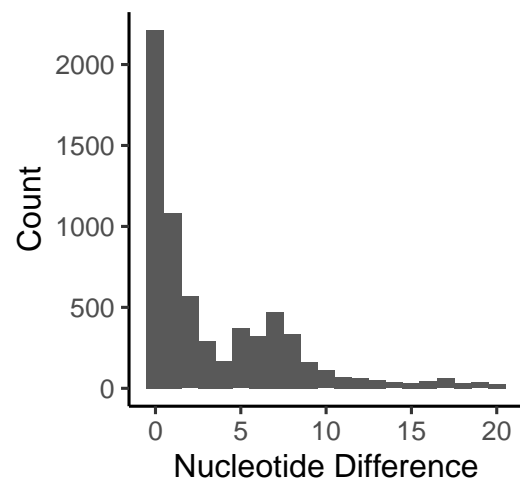
IGHV1-18*04

13061 sequences assigned
4253 (32.6%) exact matches, in which:
3964 unique CDR3
7 unique J



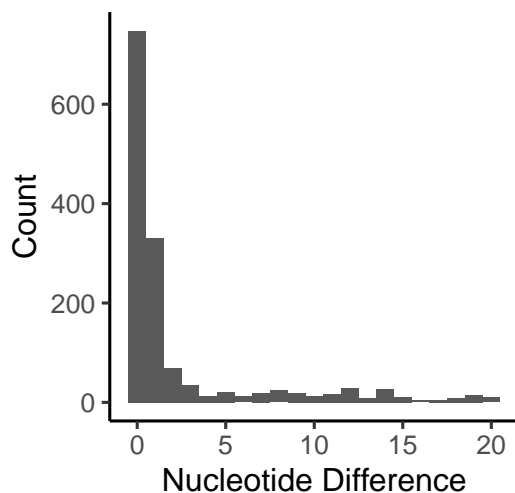
IGHV1-46*01

6807 sequences assigned
2213 (32.5%) exact matches, in which:
2088 unique CDR3
7 unique J



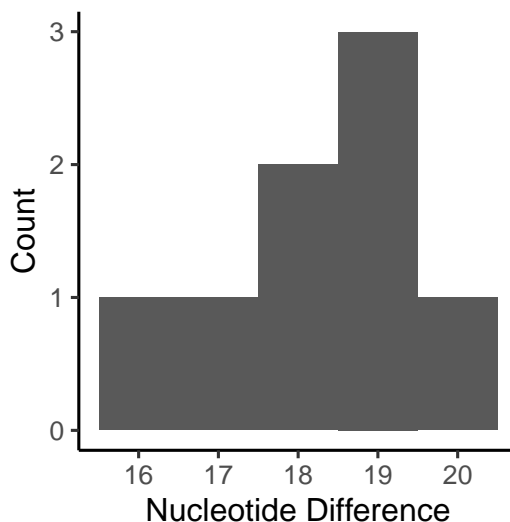
IGHV1-46*03

1489 sequences assigned
748 (50.2%) exact matches, in which:
664 unique CDR3
7 unique J



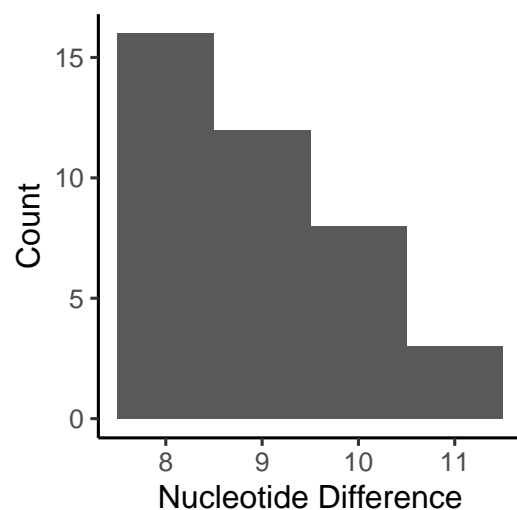
IGHV1-69-2*01

8 sequences assigned
No exact matches.



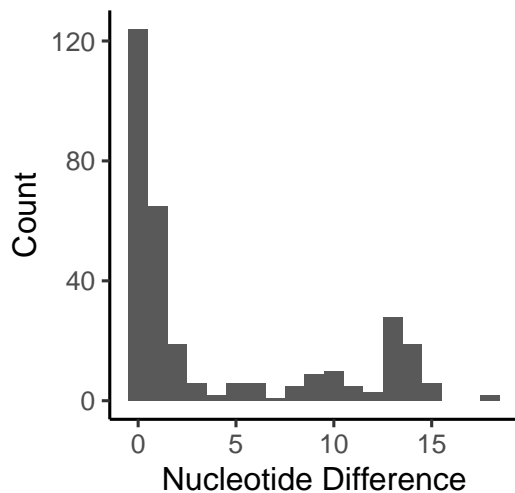
IGHV1-NL1*01

39 sequences assigned
No exact matches.



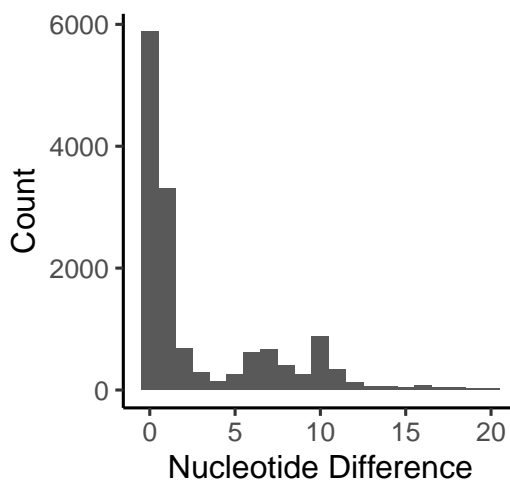
IGHV1-58*02

328 sequences assigned
124 (37.8%) exact matches, in which:
116 unique CDR3
7 unique J



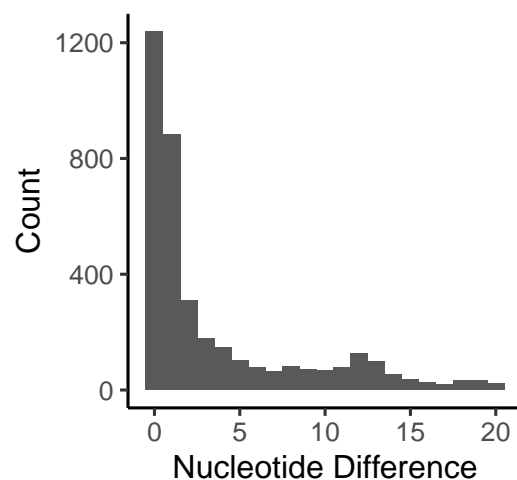
IGHV1-69*01_12_13

14716 sequences assigned
5879 (39.9%) exact matches, in which:
5492 unique CDR3
7 unique J



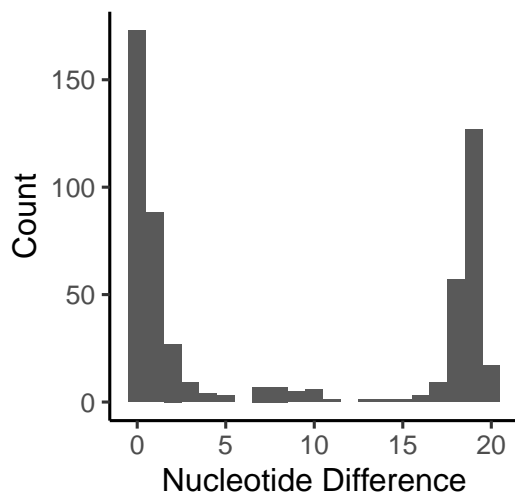
IGHV2-5*02

4189 sequences assigned
1238 (29.6%) exact matches, in which:
1122 unique CDR3
7 unique J



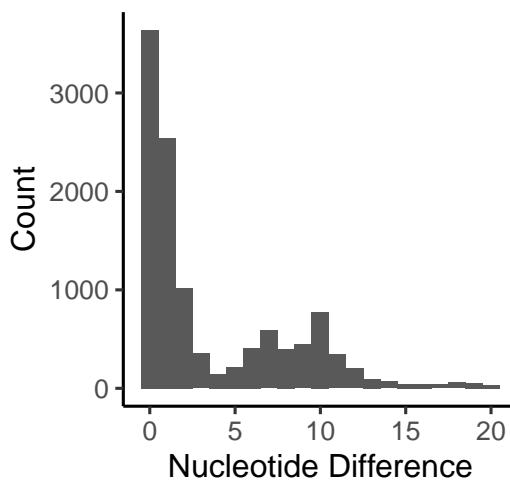
IGHV1-58*01_03

568 sequences assigned
173 (30.5%) exact matches, in which:
159 unique CDR3
7 unique J



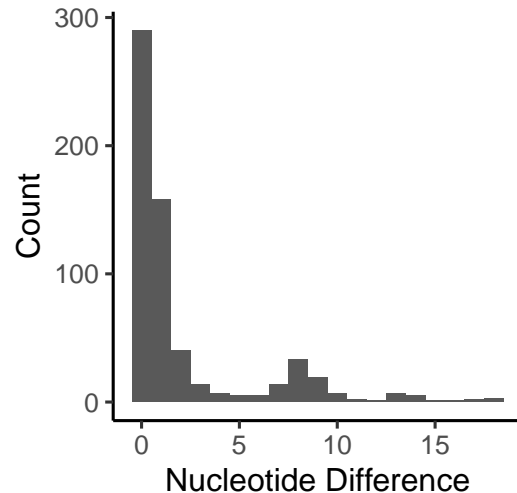
IGHV1-69*04_09

12036 sequences assigned
3639 (30.2%) exact matches, in which:
3425 unique CDR3
7 unique J



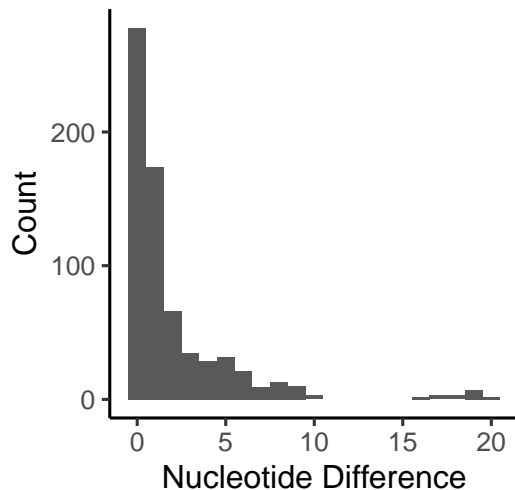
IGHV2-26*01

629 sequences assigned
290 (46.1%) exact matches, in which:
269 unique CDR3
7 unique J



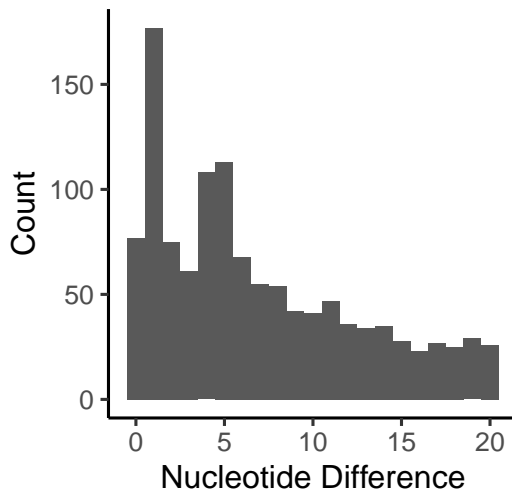
IGHV2-70*01

697 sequences assigned
278 (39.9%) exact matches, in which:
253 unique CDR3
7 unique J



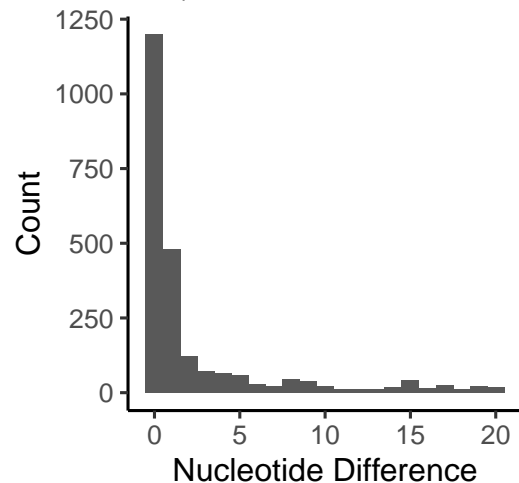
IGHV3-7*03

1439 sequences assigned
77 (5.4%) exact matches, in which:
74 unique CDR3
7 unique J



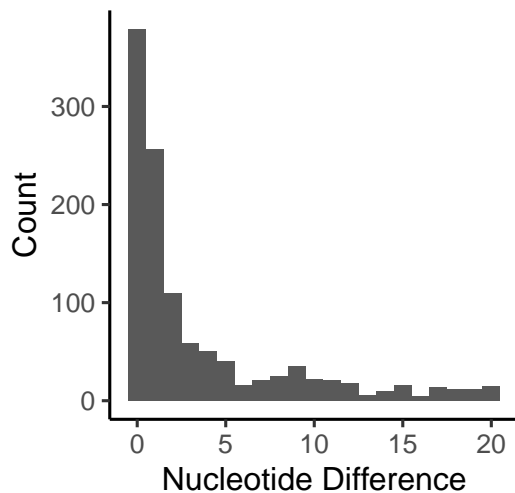
IGHV3-11*01

4263 sequences assigned
1199 (28.1%) exact matches, in which:
968 unique CDR3
7 unique J



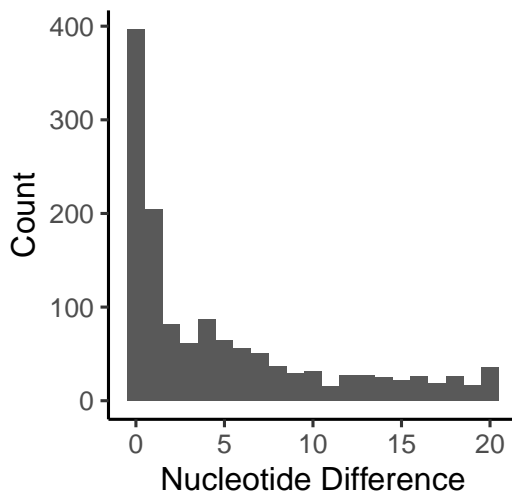
IGHV2-70*11_15

1381 sequences assigned
379 (27.4%) exact matches, in which:
349 unique CDR3
7 unique J



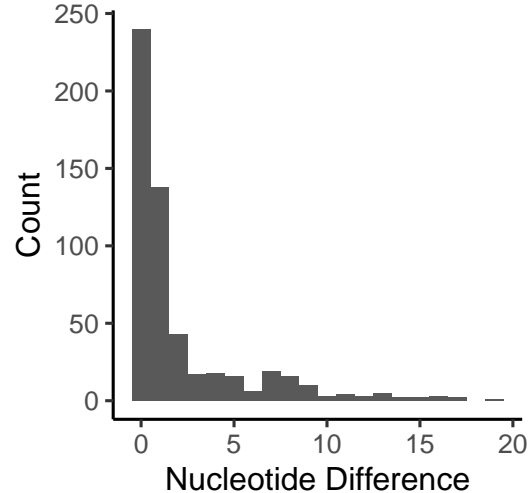
IGHV3-7*04

2970 sequences assigned
397 (13.4%) exact matches, in which:
314 unique CDR3
7 unique J



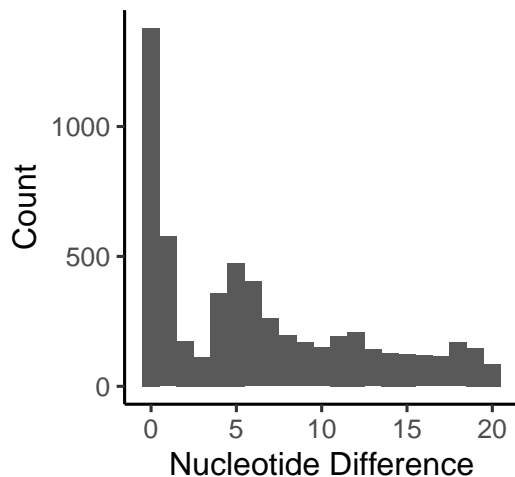
IGHV3-11*04

583 sequences assigned
240 (41.2%) exact matches, in which:
240 unique CDR3
7 unique J



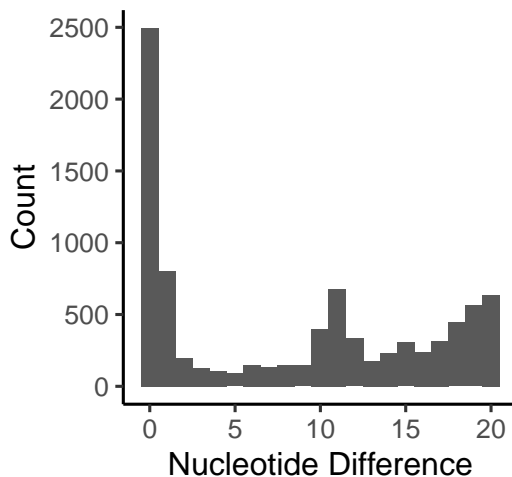
IGHV3-7*01

6173 sequences assigned
1379 (22.3%) exact matches, in which:
1118 unique CDR3
7 unique J



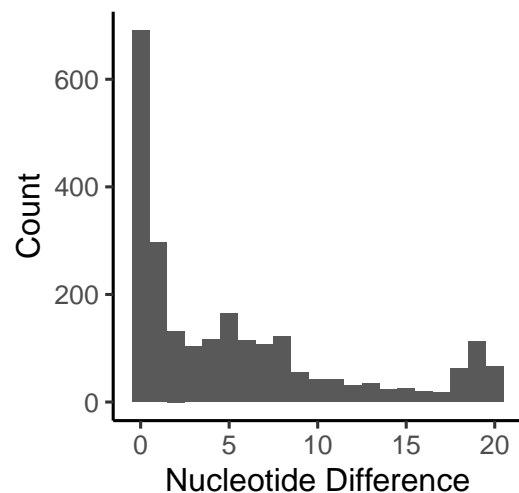
IGHV3-9*01

10012 sequences assigned
2495 (24.9%) exact matches, in which:
1834 unique CDR3
7 unique J



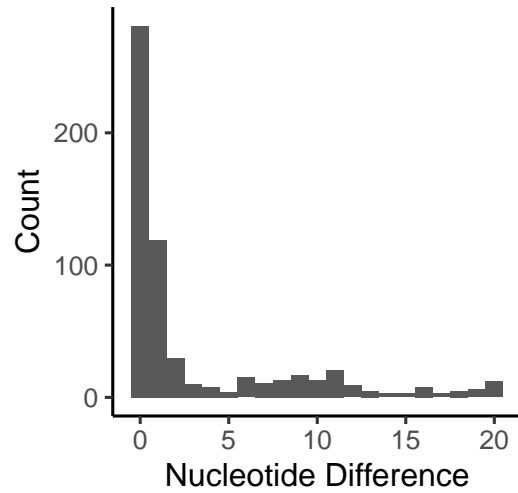
IGHV3-11*06

2534 sequences assigned
691 (27.3%) exact matches, in which:
570 unique CDR3
7 unique J



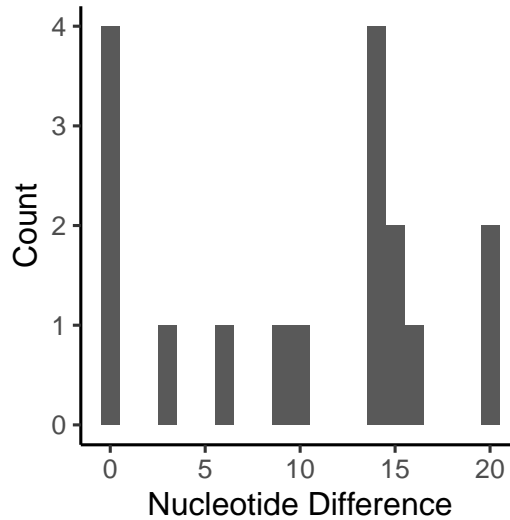
IGHV3-13*01

652 sequences assigned
281 (43.1%) exact matches, in which:
202 unique CDR3
6 unique J



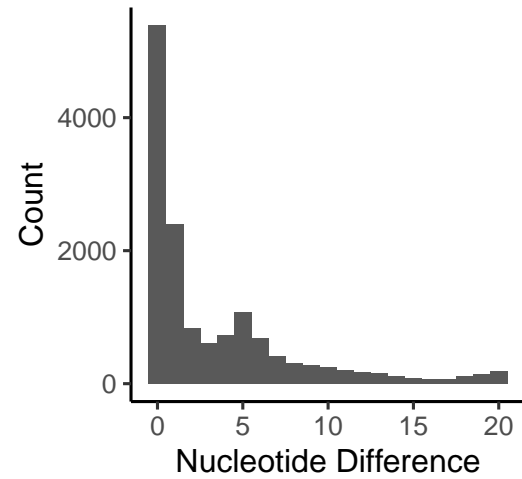
IGHV3-19*01

17 sequences assigned
4 (23.5%) exact matches, in which:
4 unique CDR3
3 unique J



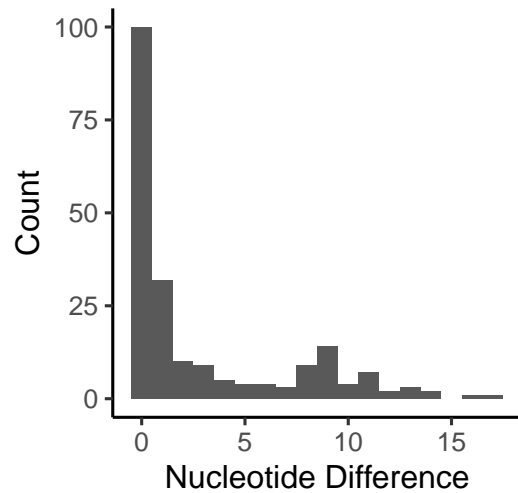
IGHV3-21*01_02

16193 sequences assigned
5387 (33.3%) exact matches, in which:
4133 unique CDR3
7 unique J



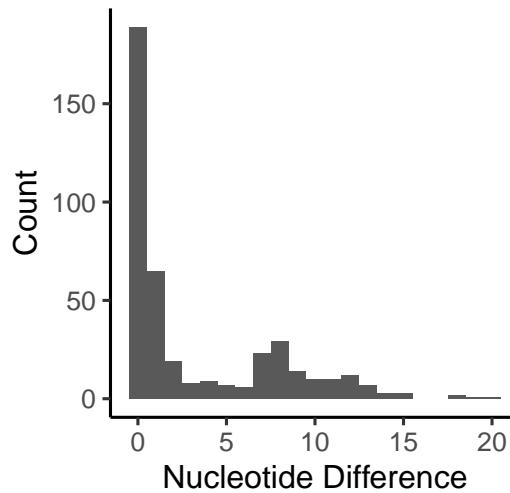
IGHV3-13*05

216 sequences assigned
100 (46.3%) exact matches, in which:
73 unique CDR3
6 unique J



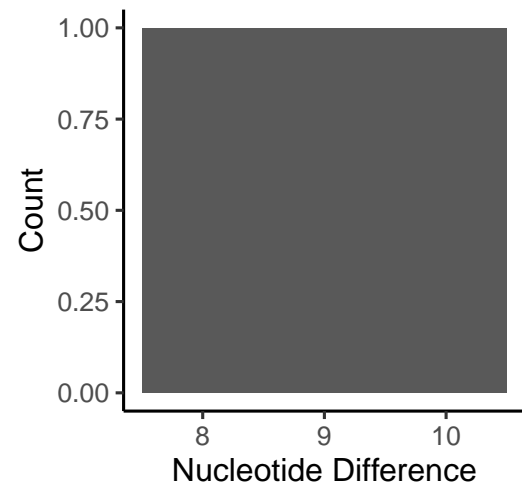
IGHV3-20*01_02

419 sequences assigned
189 (45.1%) exact matches, in which:
150 unique CDR3
7 unique J



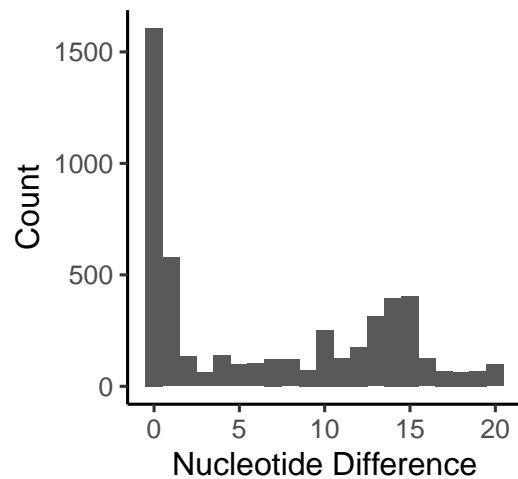
IGHV3-22*01_02

4 sequences assigned
No exact matches.



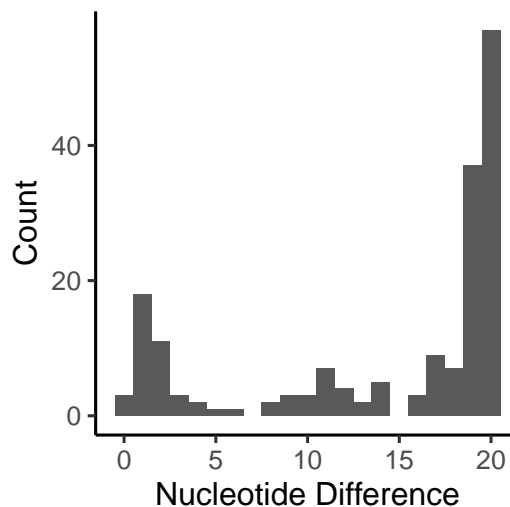
IGHV3-15*01_02

5910 sequences assigned
1607 (27.2%) exact matches, in which:
1215 unique CDR3
7 unique J



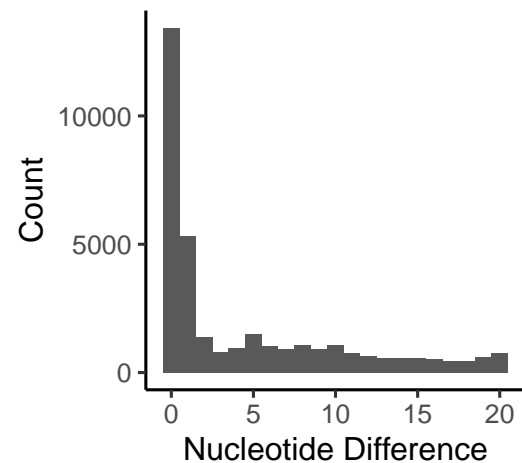
IGHV3-20*03_04

320 sequences assigned
3 (0.9%) exact matches, in which:
3 unique CDR3
2 unique J



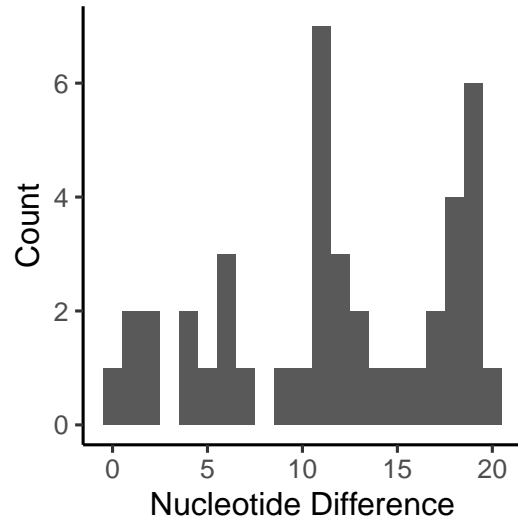
IGHV3-23*01_04

41238 sequences assigned
13434 (32.6%) exact matches, in which:
9297 unique CDR3
7 unique J



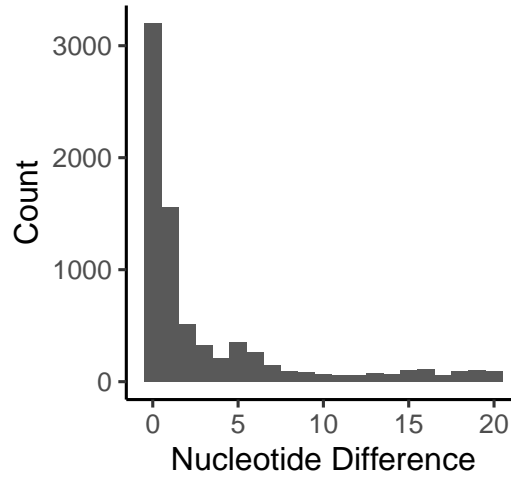
IGHV3-30-3*01

98 sequences assigned
1 (1%) exact matches, in which:
1 unique CDR3
1 unique J



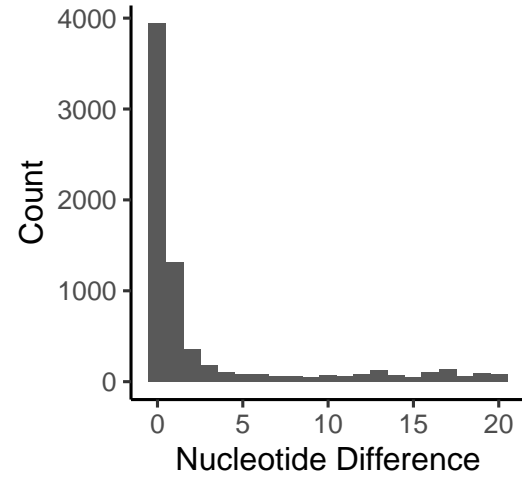
IGHV3-30*04

9365 sequences assigned
3199 (34.2%) exact matches, in which:
2605 unique CDR3
7 unique J



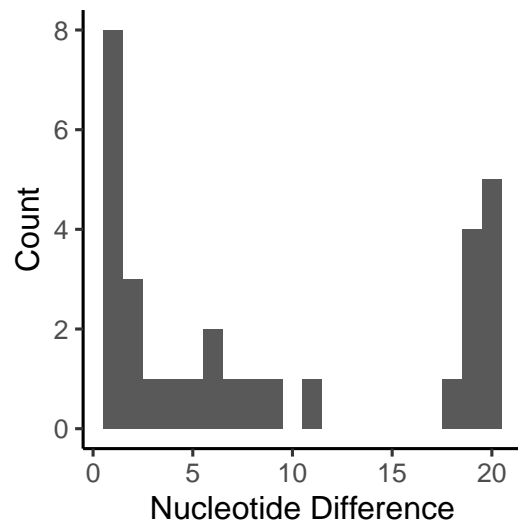
IGHV3-33*01

8345 sequences assigned
3942 (47.2%) exact matches, in which:
3247 unique CDR3
7 unique J



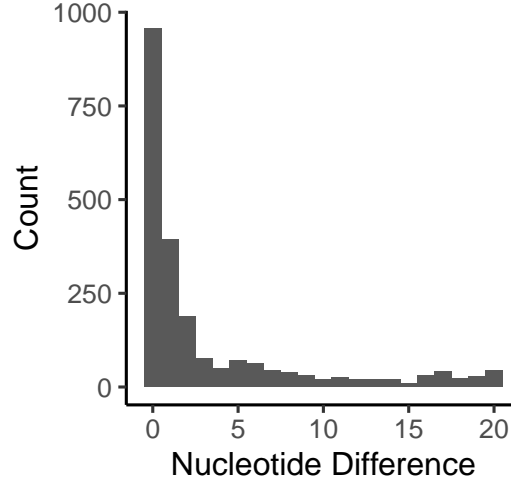
IGHV3-30-3*02

214 sequences assigned
No exact matches.



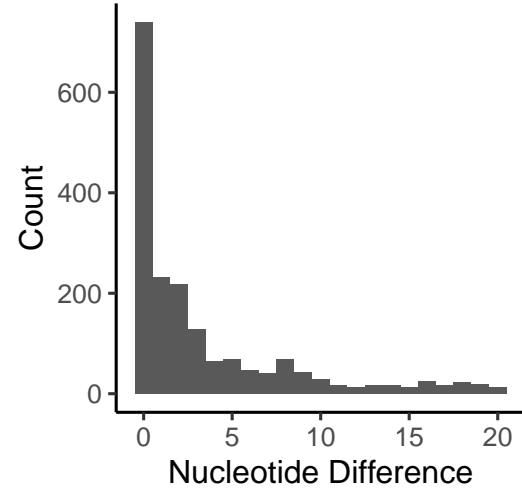
IGHV3-30*18

3569 sequences assigned
956 (26.8%) exact matches, in which:
767 unique CDR3
7 unique J



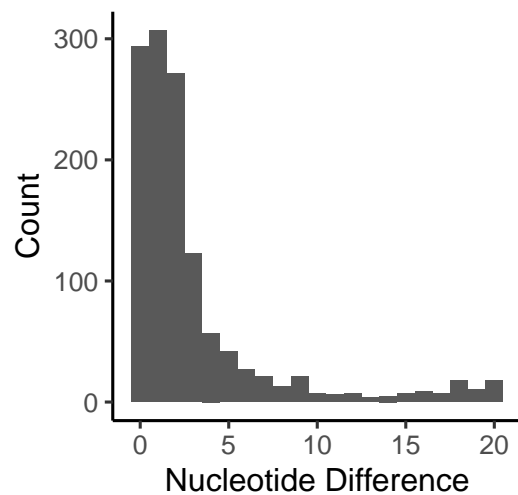
IGHV3-33*08

2004 sequences assigned
740 (36.9%) exact matches, in which:
698 unique CDR3
7 unique J



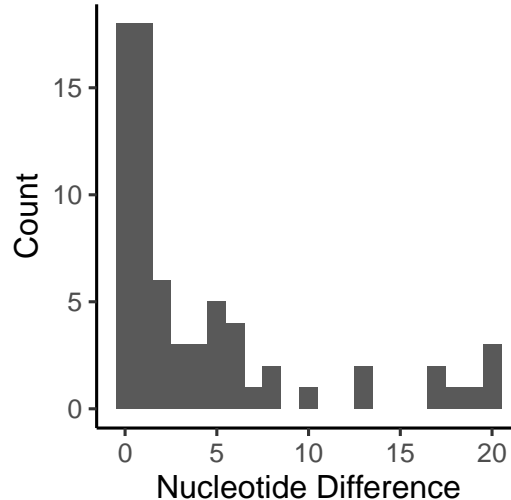
IGHV3-30*03

1698 sequences assigned
294 (17.3%) exact matches, in which:
290 unique CDR3
7 unique J



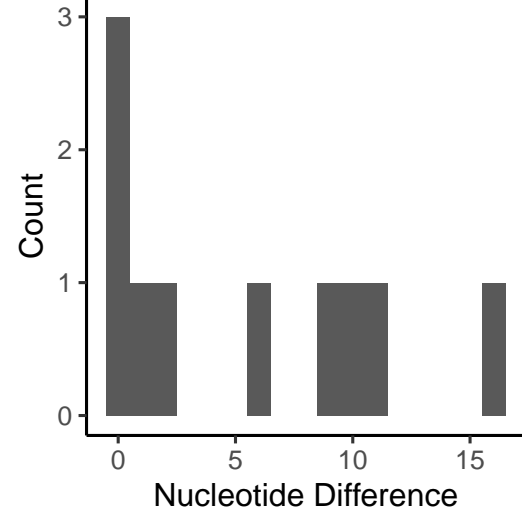
IGHV3-30-3*02_C189T_1

81 sequences assigned
18 (22.2%) exact matches, in which:
18 unique CDR3
4 unique J



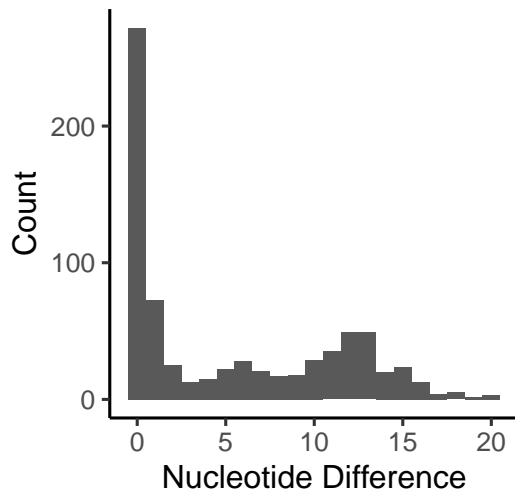
IGHV3-35*01

10 sequences assigned
3 (30%) exact matches, in which:
2 unique CDR3
1 unique J



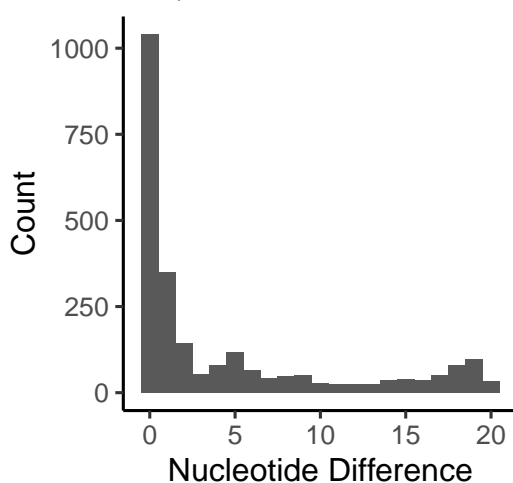
IGHV3-43*01

1100 sequences assigned
272 (24.7%) exact matches, in which:
210 unique CDR3
7 unique J



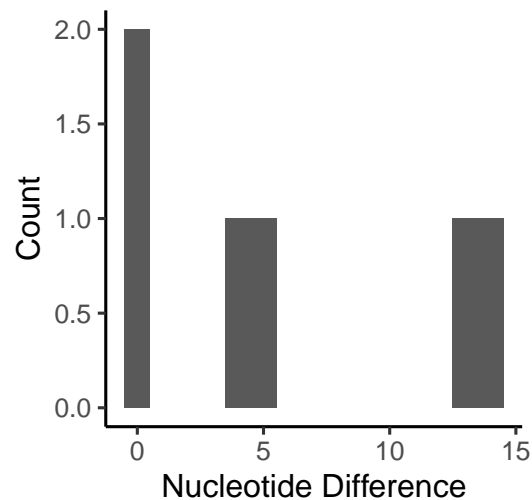
IGHV3-48*02

2843 sequences assigned
1040 (36.6%) exact matches, in which:
798 unique CDR3
7 unique J



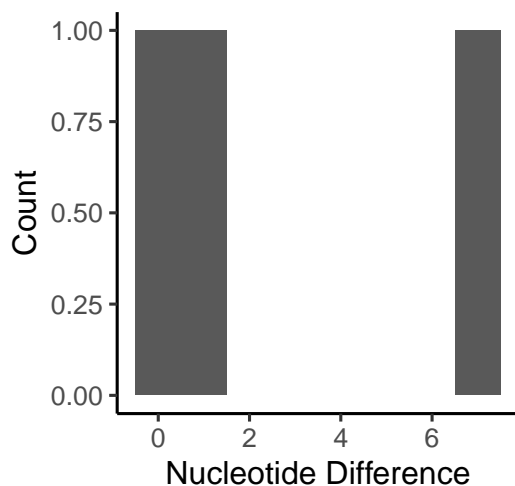
IGHV3-52*02

6 sequences assigned
2 (33.3%) exact matches, in which:
2 unique CDR3
1 unique J



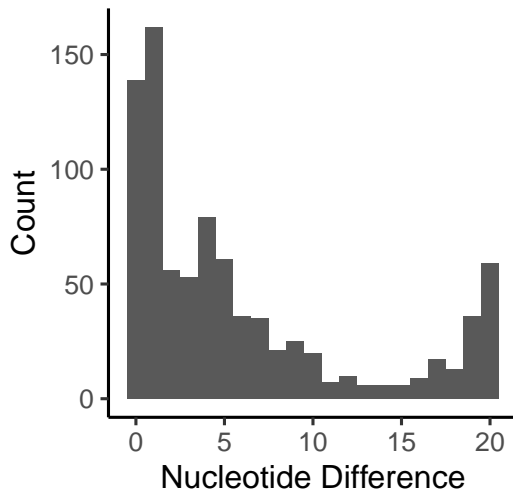
IGHV3-47*02

3 sequences assigned
1 (33.3%) exact matches, in which:
1 unique CDR3
1 unique J



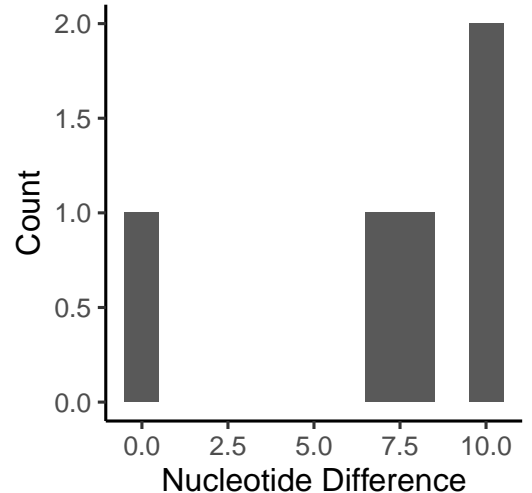
IGHV3-48*04

1070 sequences assigned
139 (13%) exact matches, in which:
138 unique CDR3
7 unique J



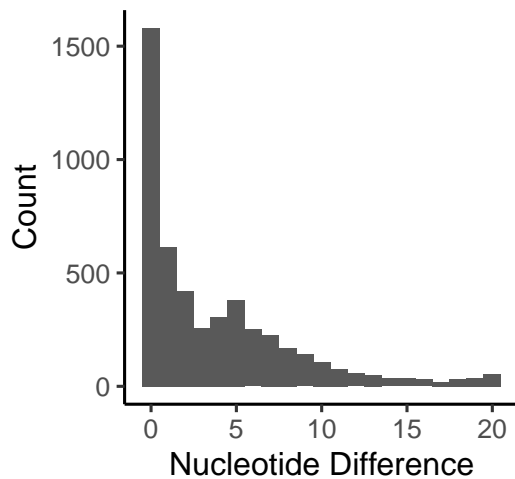
IGHV3-52*01_03

5 sequences assigned
1 (20%) exact matches, in which:
1 unique CDR3
0 unique J



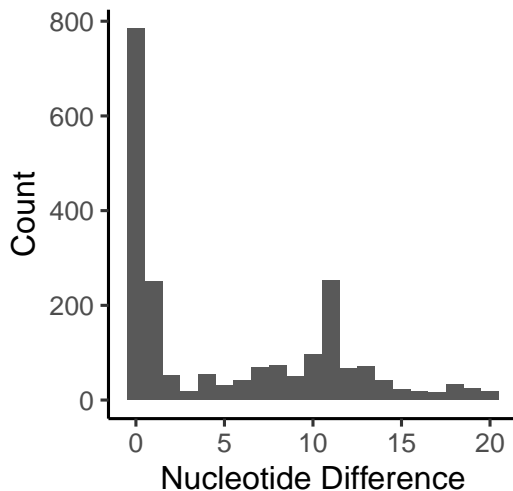
IGHV3-48*01

5527 sequences assigned
1580 (28.6%) exact matches, in which:
1271 unique CDR3
7 unique J



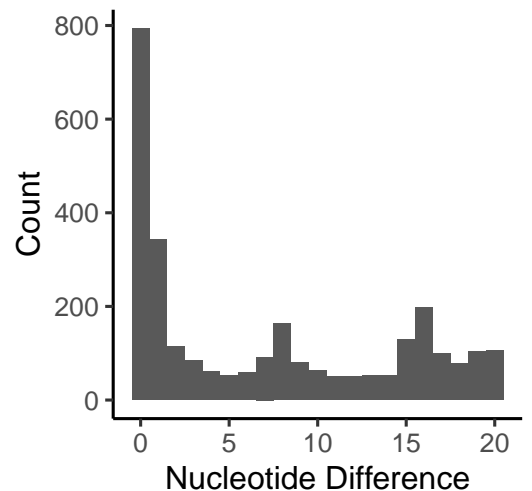
IGHV3-49*03_05

2203 sequences assigned
785 (35.6%) exact matches, in which:
605 unique CDR3
6 unique J



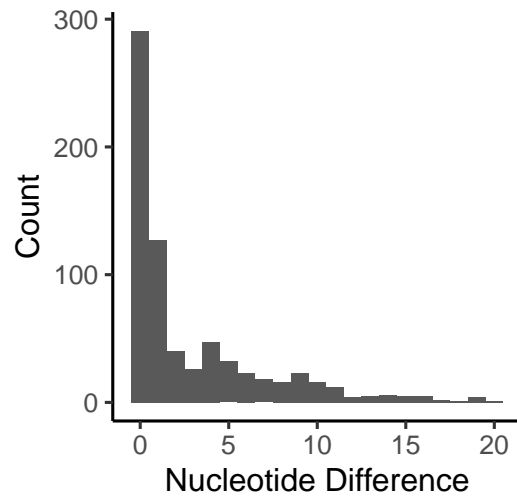
IGHV3-53*01_02

3287 sequences assigned
794 (24.2%) exact matches, in which:
626 unique CDR3
7 unique J



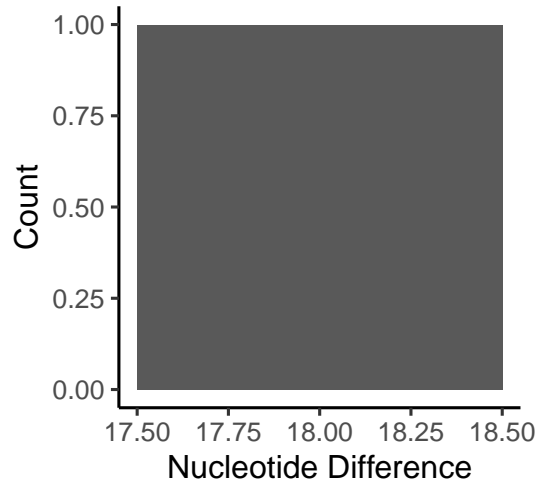
IGHV3-64*01

732 sequences assigned
291 (39.8%) exact matches, in which:
211 unique CDR3
6 unique J



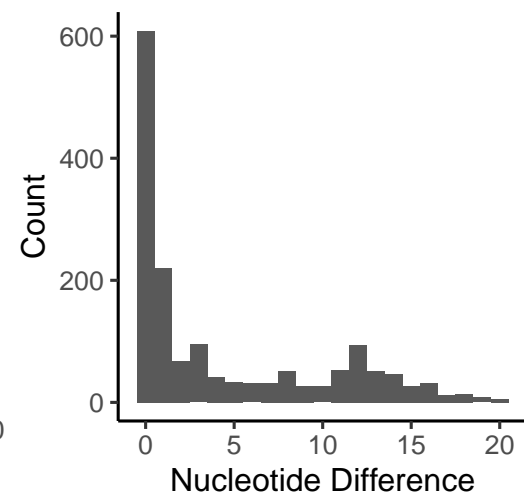
IGHV3-71*03

1 sequences assigned
No exact matches.



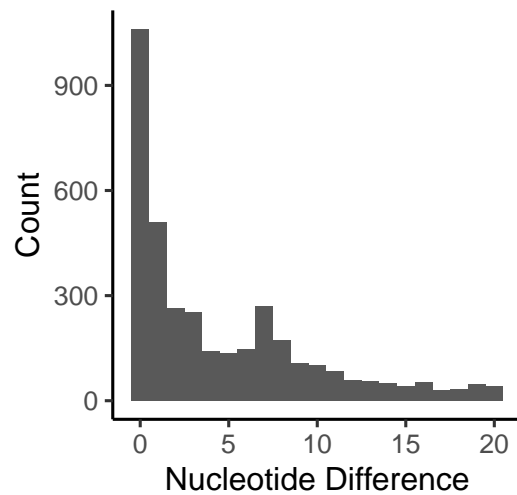
IGHV3-73*01_02

1739 sequences assigned
609 (35%) exact matches, in which:
458 unique CDR3
7 unique J



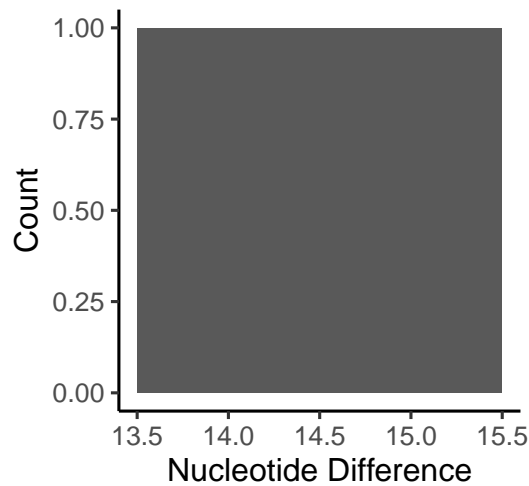
IGHV3-66*01

4287 sequences assigned
1061 (24.7%) exact matches, in which:
855 unique CDR3
7 unique J



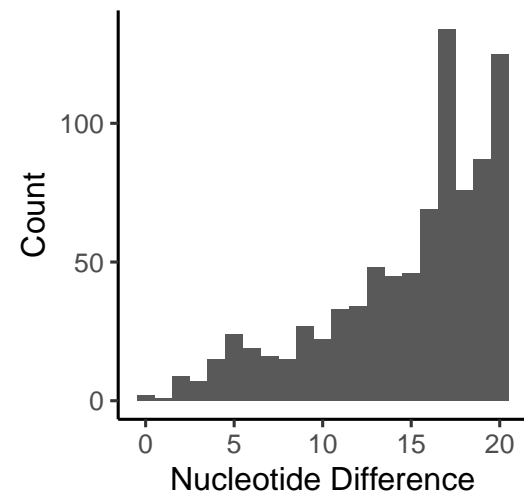
IGHV3-71*01_04

3 sequences assigned
No exact matches.



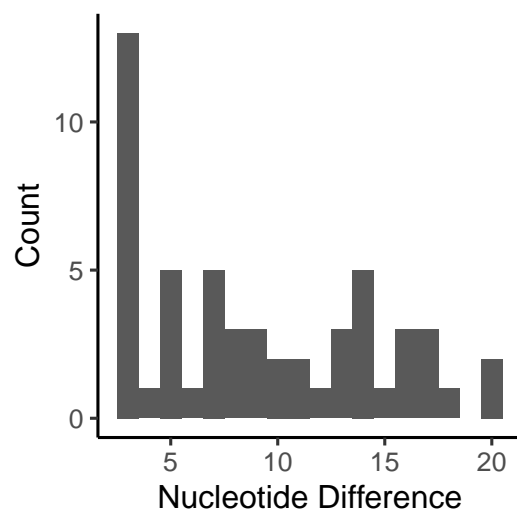
IGHV3-74*03

2319 sequences assigned
2 (0.1%) exact matches, in which:
2 unique CDR3
2 unique J



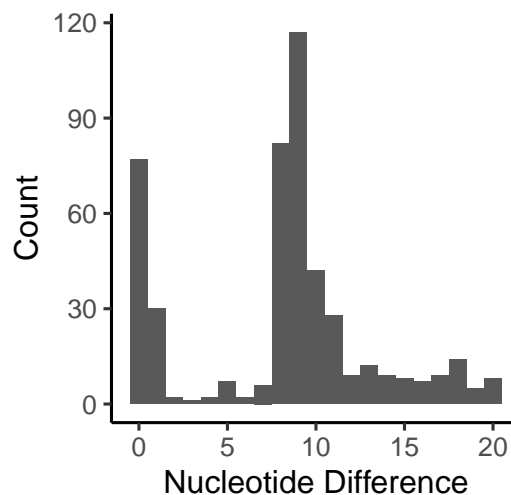
IGHV3-69-1*01

114 sequences assigned
No exact matches.



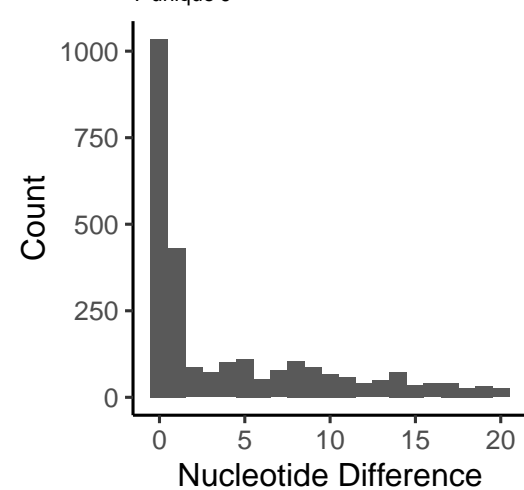
IGHV3-72*01

665 sequences assigned
77 (11.6%) exact matches, in which:
57 unique CDR3
6 unique J



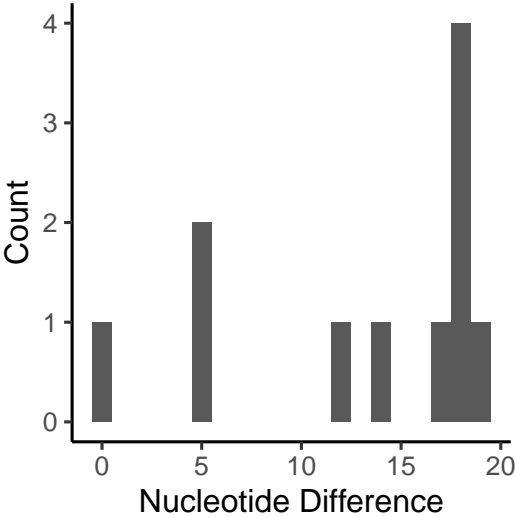
IGHV3-74*01_02

2978 sequences assigned
1035 (34.8%) exact matches, in which:
749 unique CDR3
7 unique J



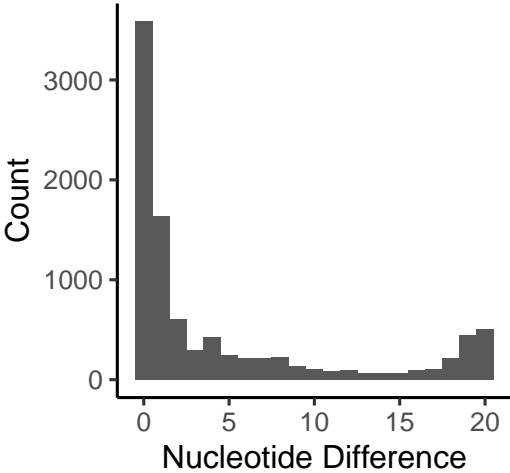
IGHV3-43D*04

13 sequences assigned
1 (7.7%) exact matches, in which:
1 unique CDR3
1 unique J



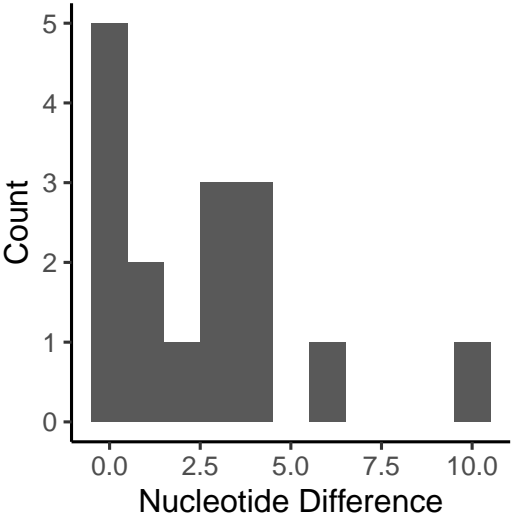
IGHV4-4*07

10710 sequences assigned
3586 (33.5%) exact matches, in which:
3321 unique CDR3
7 unique J



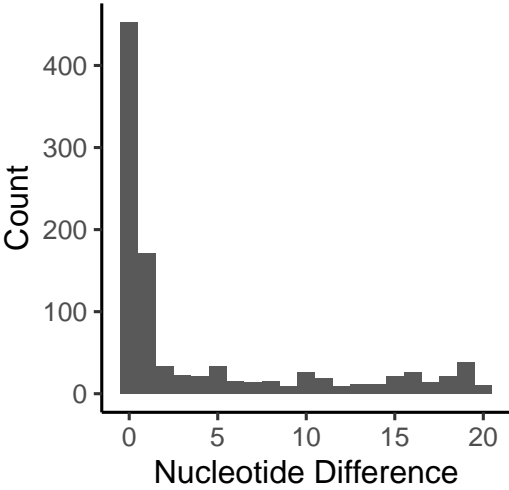
IGHV4-28*02_05

17 sequences assigned
5 (29.4%) exact matches, in which:
5 unique CDR3
3 unique J



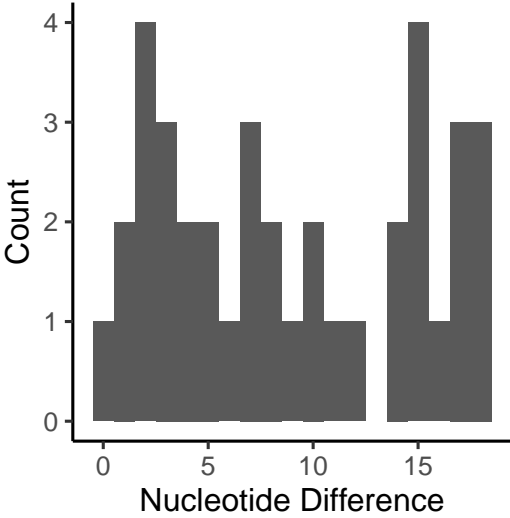
IGHV3-64D*06

1287 sequences assigned
453 (35.2%) exact matches, in which:
303 unique CDR3
7 unique J



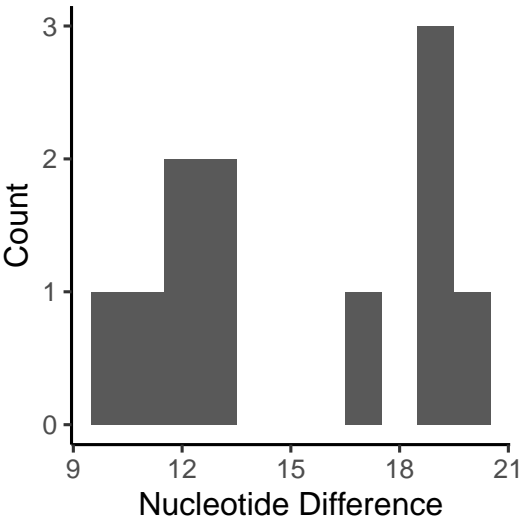
IGHV4-28*03

49 sequences assigned
1 (2%) exact matches, in which:
1 unique CDR3
1 unique J



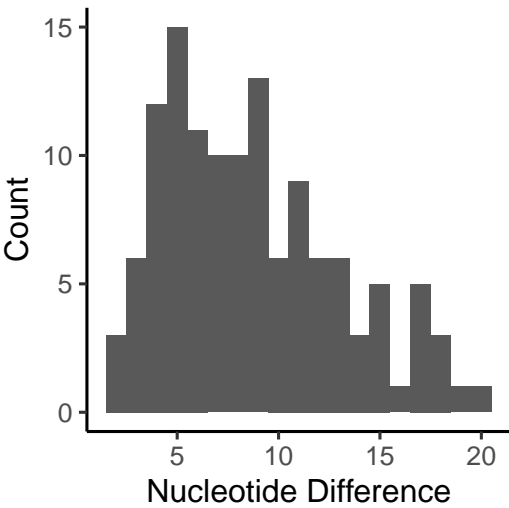
IGHV4-30-4*01

29 sequences assigned
No exact matches.



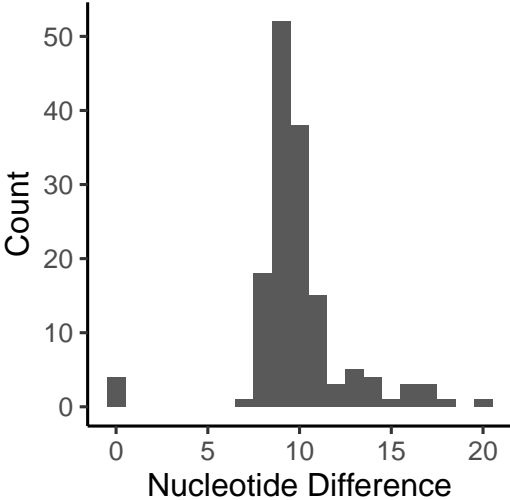
IGHV3-NL1*01

144 sequences assigned
No exact matches.



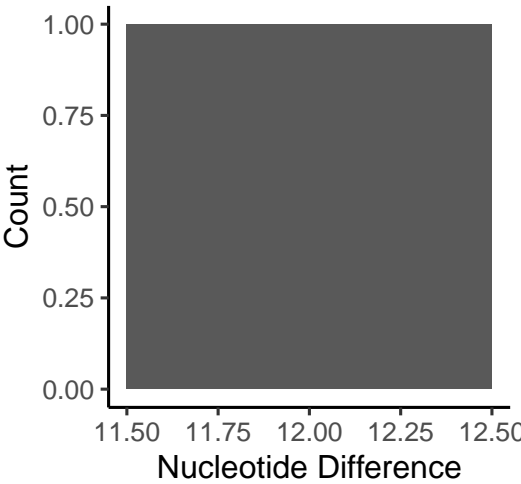
IGHV4-28*01_07

155 sequences assigned
4 (2.6%) exact matches, in which:
4 unique CDR3
2 unique J



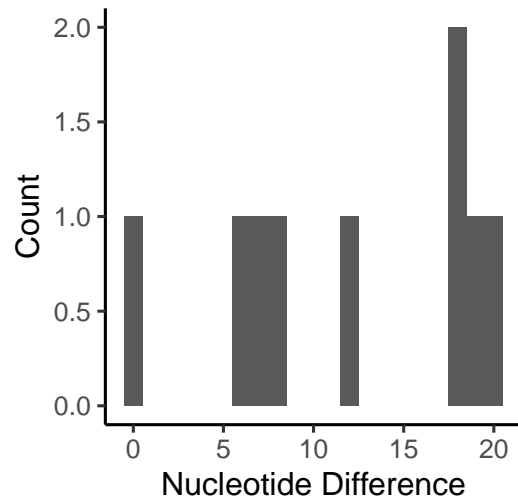
IGHV4-30-2*01

4 sequences assigned
No exact matches.



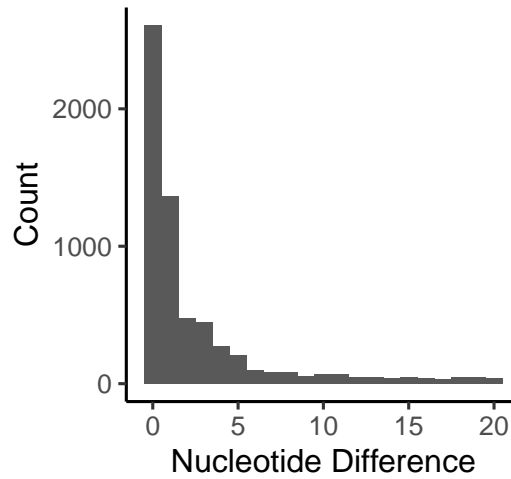
IGHV4-30-2*03

78 sequences assigned
1 (1.3%) exact matches, in which:
1 unique CDR3
1 unique J



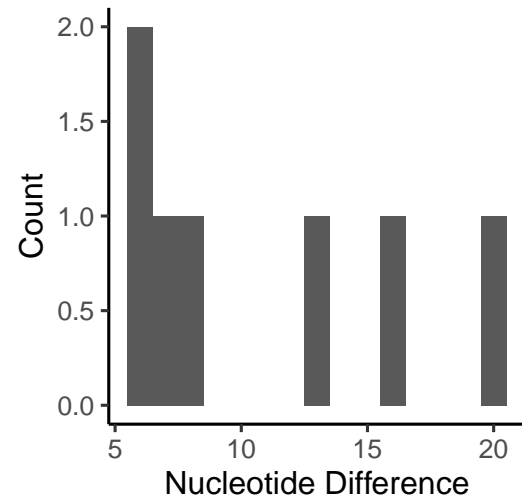
IGHV4-31*02

7098 sequences assigned
2607 (36.7%) exact matches, in which:
2444 unique CDR3
7 unique J



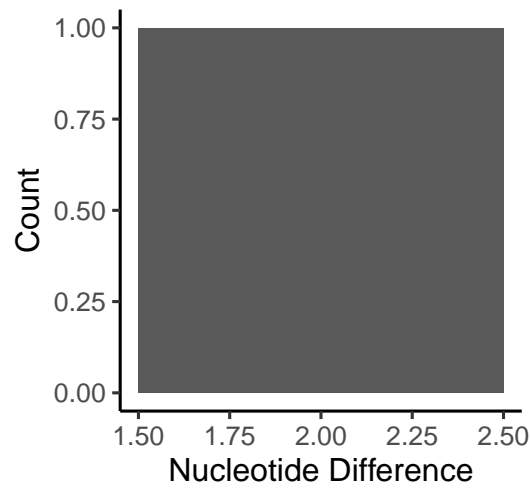
IGHV4-38-2*02

22 sequences assigned
No exact matches.



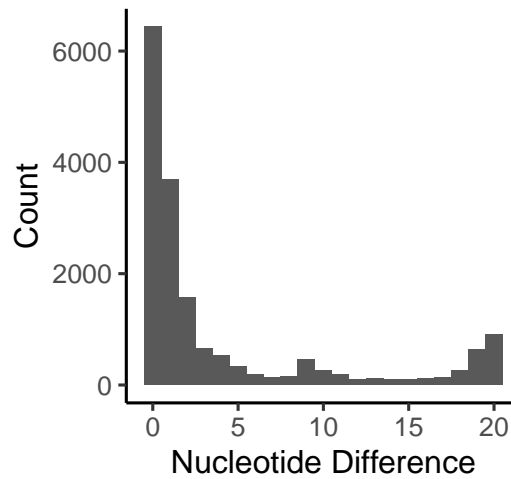
IGHV4-30-2*04

1 sequences assigned
No exact matches.



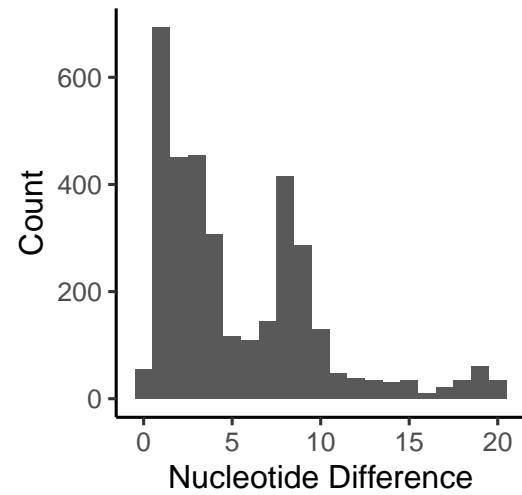
IGHV4-34*01_02

18817 sequences assigned
6437 (34.2%) exact matches, in which:
5753 unique CDR3
7 unique J



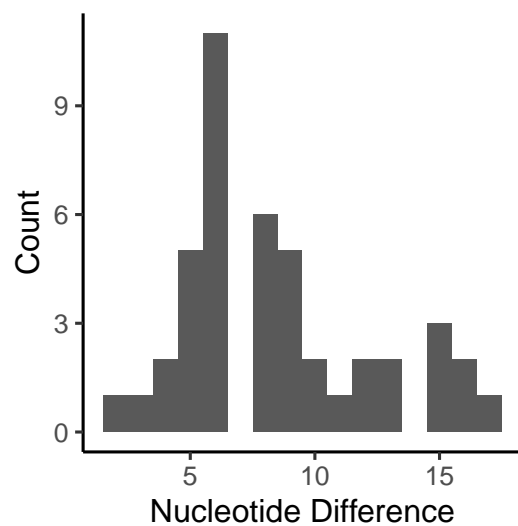
IGHV4-39*07

4324 sequences assigned
56 (1.3%) exact matches, in which:
56 unique CDR3
6 unique J



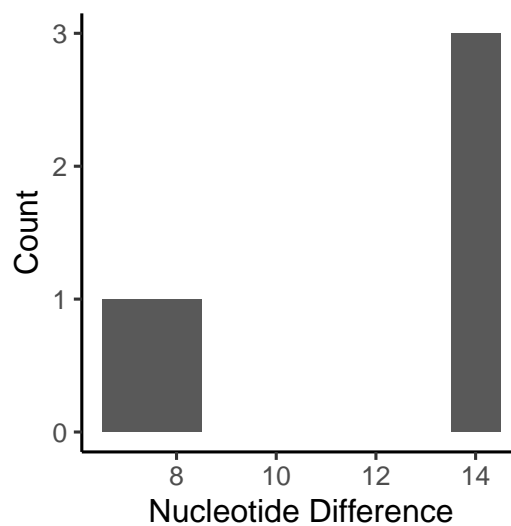
IGHV4-30-4*08

90 sequences assigned
No exact matches.



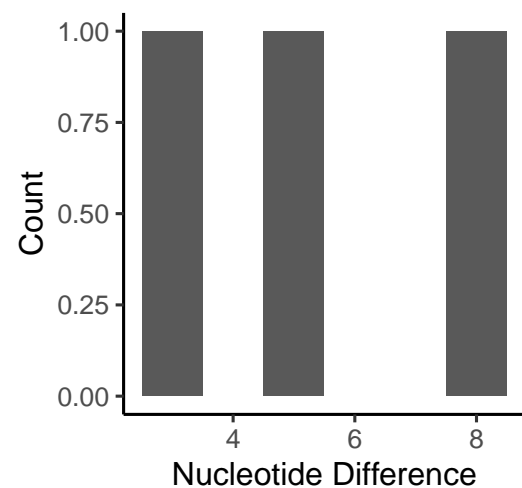
IGHV4-38-2*01

8 sequences assigned
No exact matches.



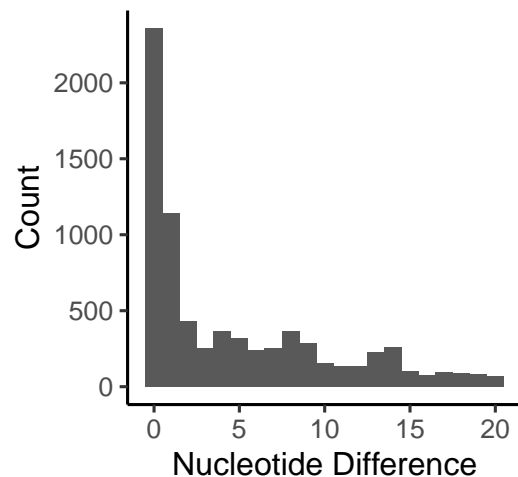
IGHV4-55*09

3 sequences assigned
No exact matches.



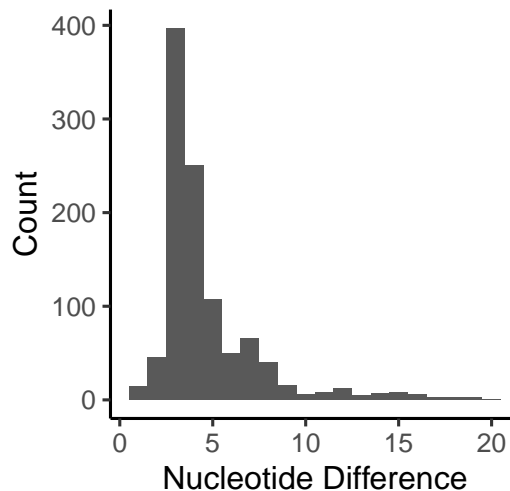
IGHV4-59*08

9851 sequences assigned
2358 (23.9%) exact matches, in which:
2155 unique CDR3
7 unique J



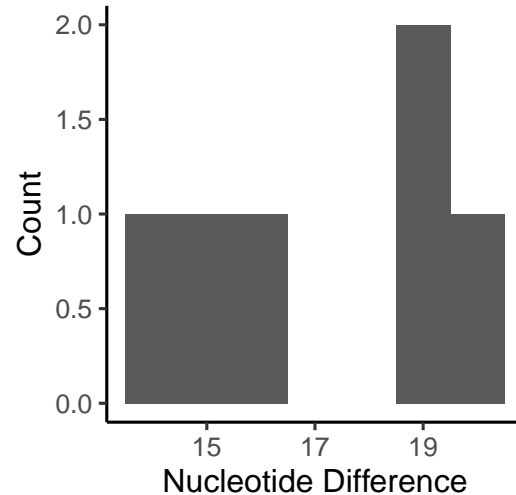
IGHV4-61*02

1094 sequences assigned
No exact matches.



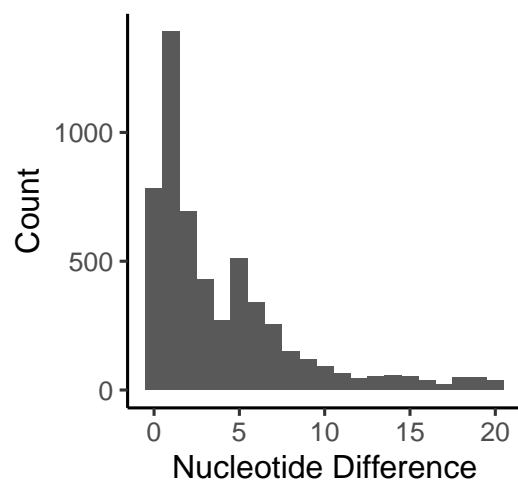
IGHV4/OR15-8*01

12 sequences assigned
No exact matches.



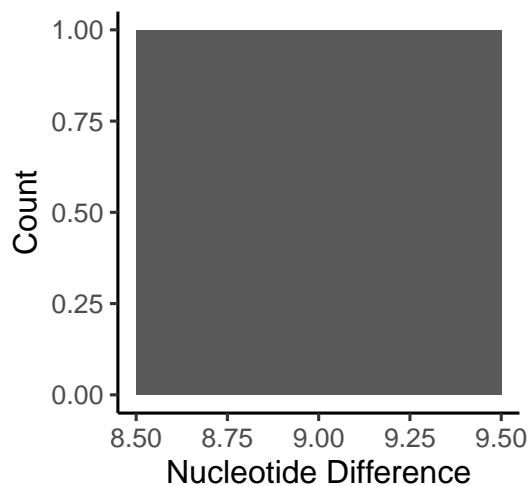
IGHV4-59*12

6355 sequences assigned
784 (12.3%) exact matches, in which:
767 unique CDR3
7 unique J



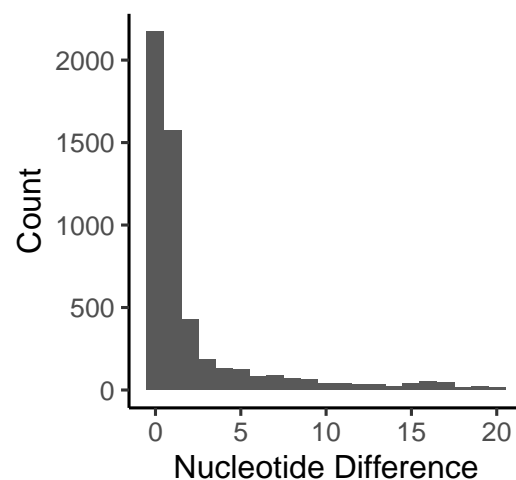
IGHV1/OR15-1*04

2 sequences assigned
No exact matches.



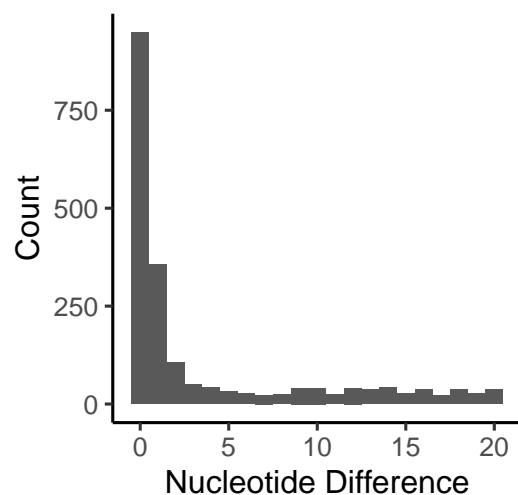
IGHV5-10-1*01_03

5603 sequences assigned
2172 (38.8%) exact matches, in which:
1779 unique CDR3
7 unique J



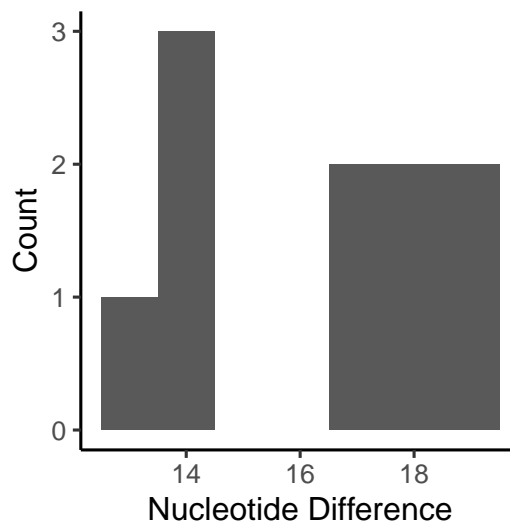
IGHV4-61*01

3991 sequences assigned
949 (23.8%) exact matches, in which:
904 unique CDR3
7 unique J



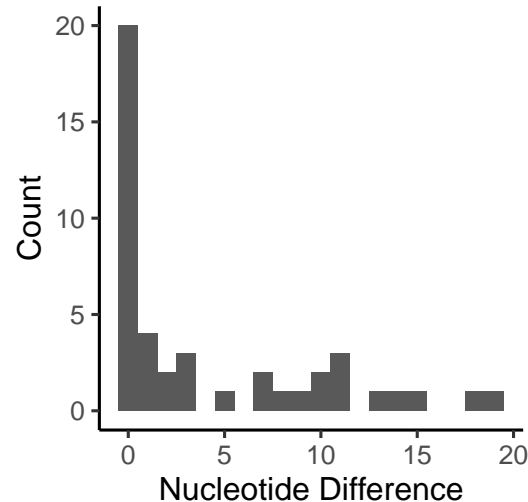
IGHV1/OR15-2*02_03

17 sequences assigned
No exact matches.



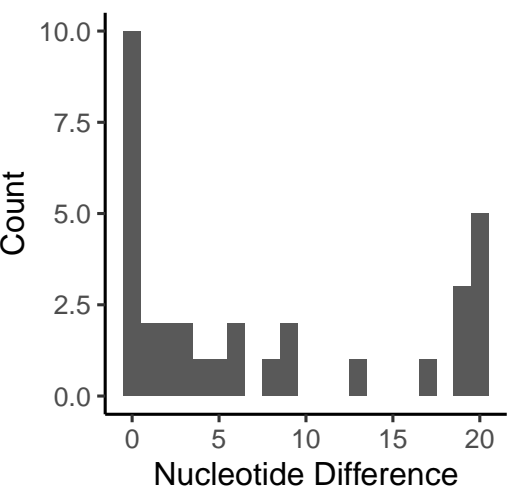
IGHV5-51*04

46 sequences assigned
20 (43.5%) exact matches, in which:
18 unique CDR3
4 unique J



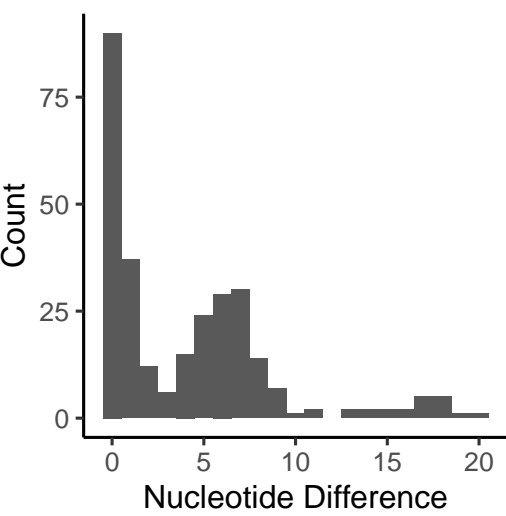
IGHV5-51*06

86 sequences assigned
10 (11.6%) exact matches, in which:
10 unique CDR3
3 unique J



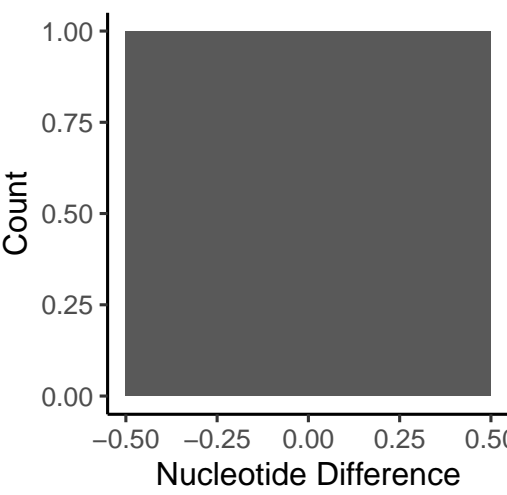
IGHV6-1*01_02_A315G

293 sequences assigned
90 (30.7%) exact matches, in which:
90 unique CDR3
5 unique J



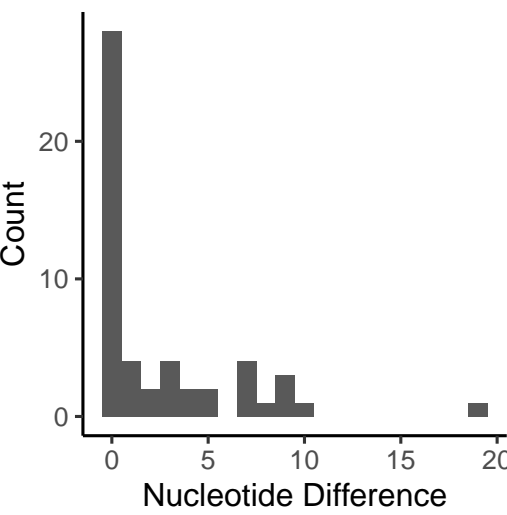
IGHV7-81*01

1 sequences assigned
1 (100%) exact matches, in which:
1 unique CDR3
1 unique J



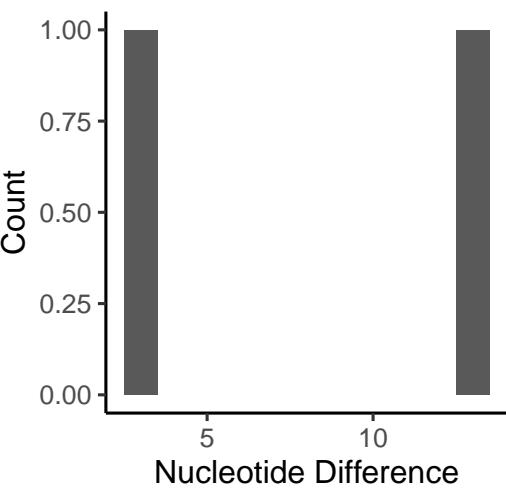
IGHV5-51*07

53 sequences assigned
28 (52.8%) exact matches, in which:
27 unique CDR3
6 unique J



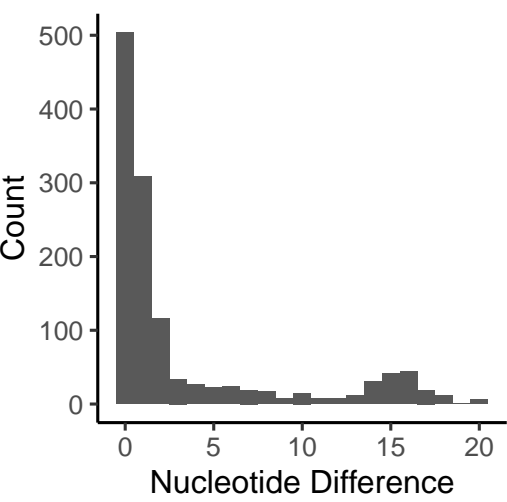
IGHV3/OR16-10*01_03

3 sequences assigned
No exact matches.



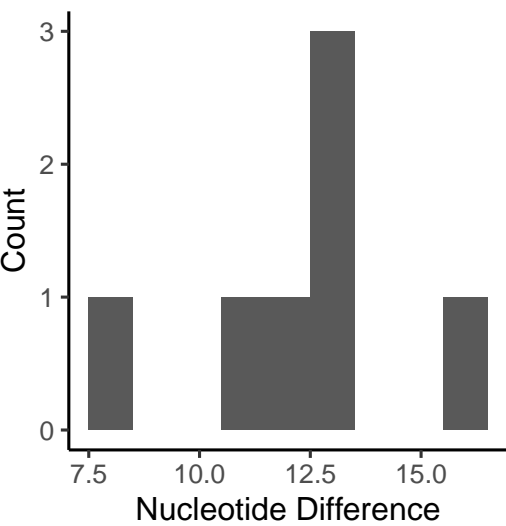
IGHV6-1*01_02

1366 sequences assigned
504 (36.9%) exact matches, in which:
456 unique CDR3
7 unique J

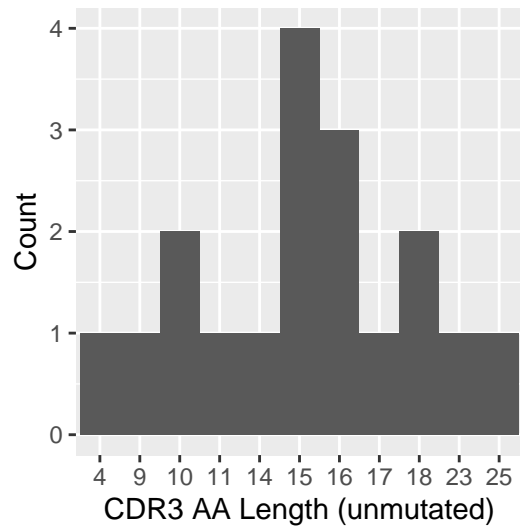


IGHV7-4-1*02

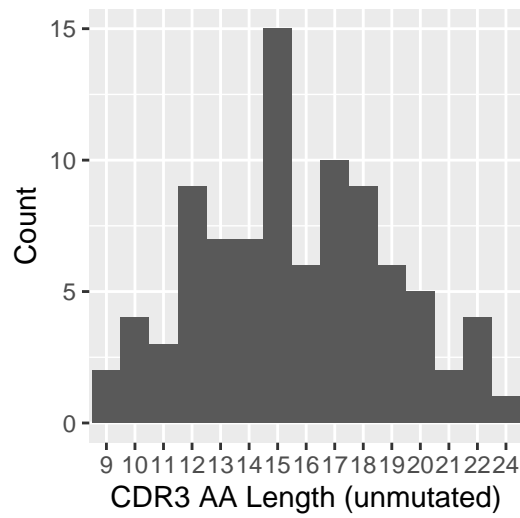
7 sequences assigned
No exact matches.



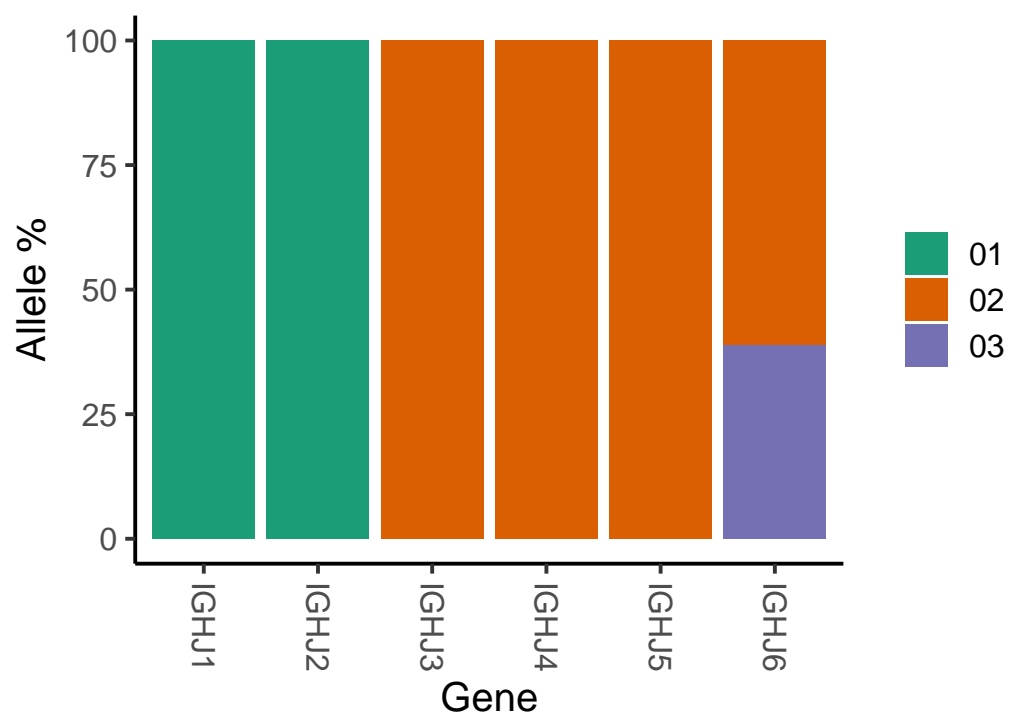
IGHV3-30-3*02_C189T_T288C_T300C_G303A



IGHV6-1*01_02_A315G



Allele Usage



Sequence Count by IGHJ6 allele usage

