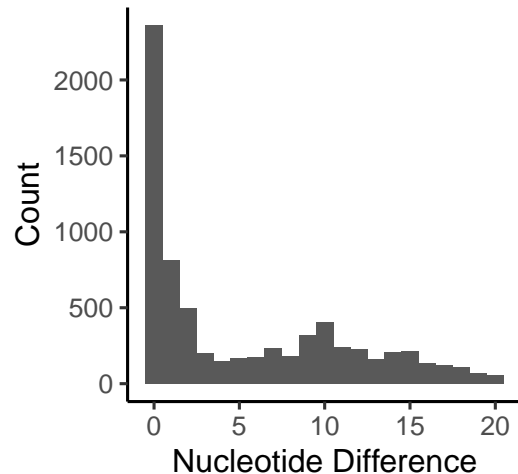


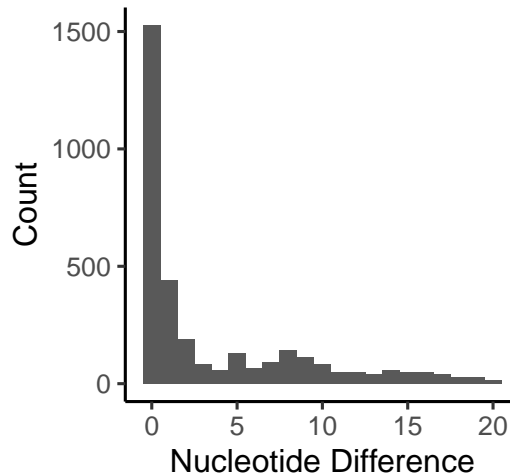
IGHV1-2*02

8633 sequences assigned
2359 (27.3%) exact matches, in which:
2320 unique CDR3
7 unique J



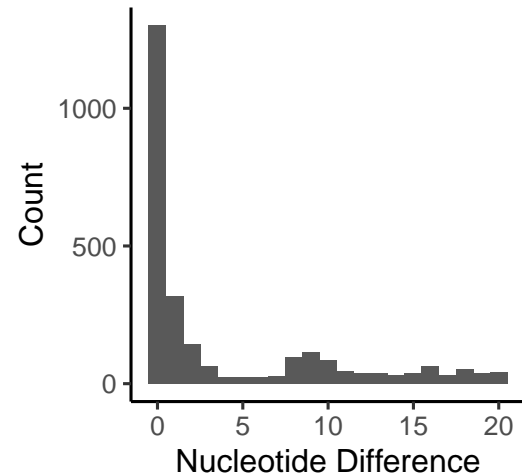
IGHV1-8*01

3469 sequences assigned
1526 (44%) exact matches, in which:
1510 unique CDR3
7 unique J



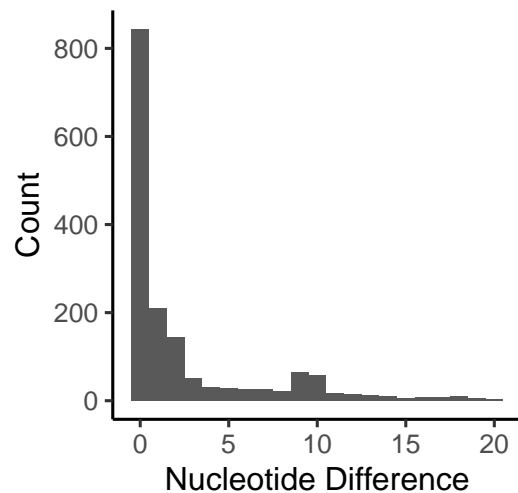
IGHV1-24*01

2806 sequences assigned
1301 (46.4%) exact matches, in which:
1289 unique CDR3
7 unique J



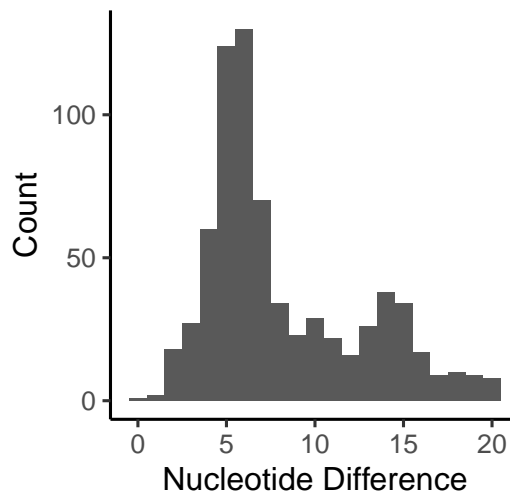
IGHV1-2*04

1621 sequences assigned
844 (52.1%) exact matches, in which:
834 unique CDR3
7 unique J



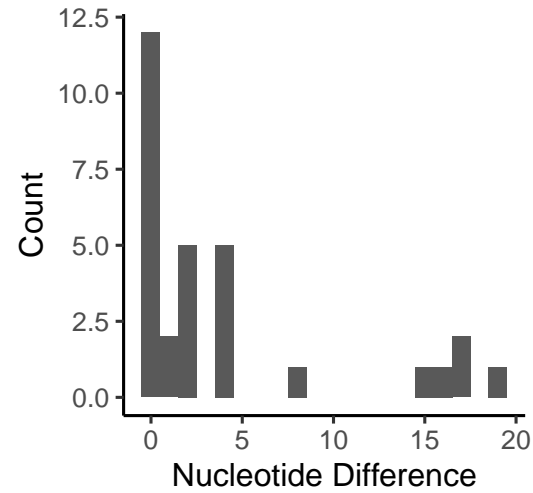
IGHV1-8*02

790 sequences assigned
1 (0.1%) exact matches, in which:
1 unique CDR3
1 unique J



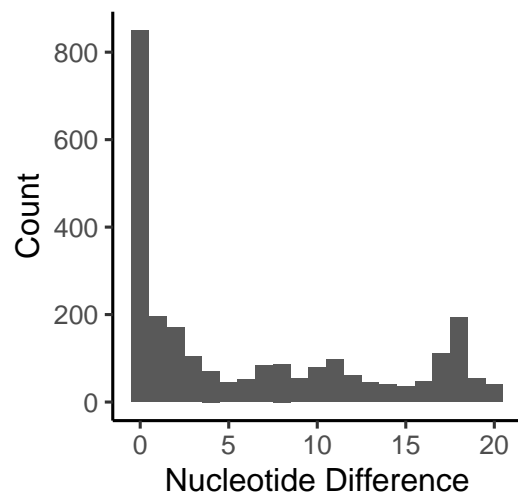
IGHV1-45*02

32 sequences assigned
12 (37.5%) exact matches, in which:
12 unique CDR3
5 unique J



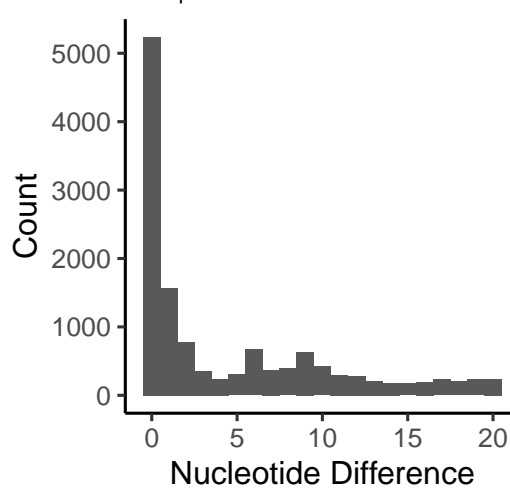
IGHV1-3*01_05

3519 sequences assigned
850 (24.2%) exact matches, in which:
848 unique CDR3
7 unique J



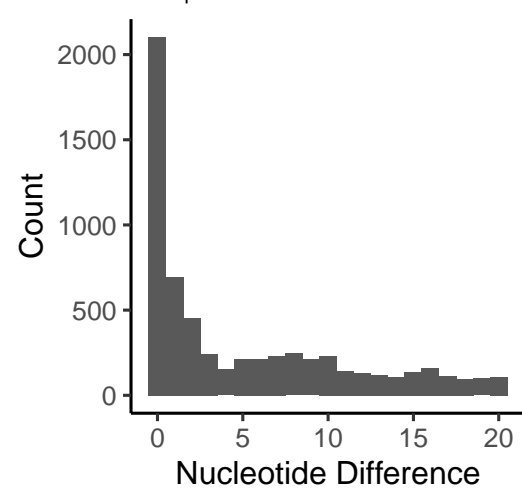
IGHV1-18*01

14845 sequences assigned
5237 (35.3%) exact matches, in which:
5149 unique CDR3
7 unique J



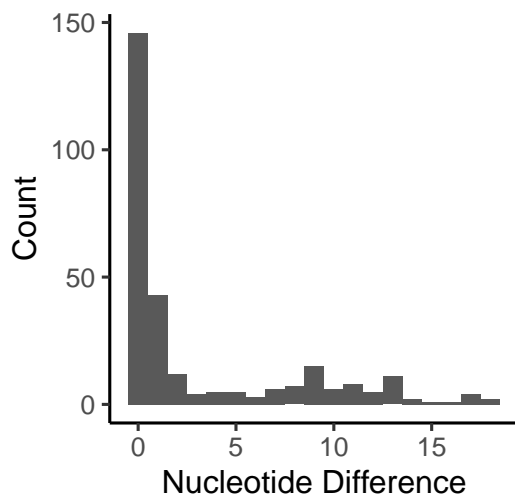
IGHV1-46*01

7057 sequences assigned
2103 (29.8%) exact matches, in which:
2076 unique CDR3
7 unique J



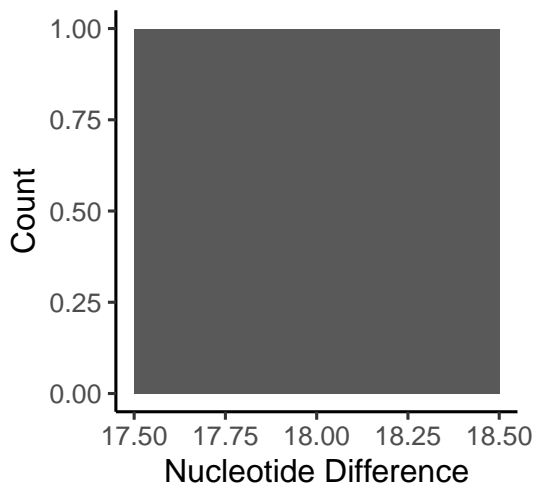
IGHV1-58*02

327 sequences assigned
146 (44.6%) exact matches, in which:
146 unique CDR3
7 unique J



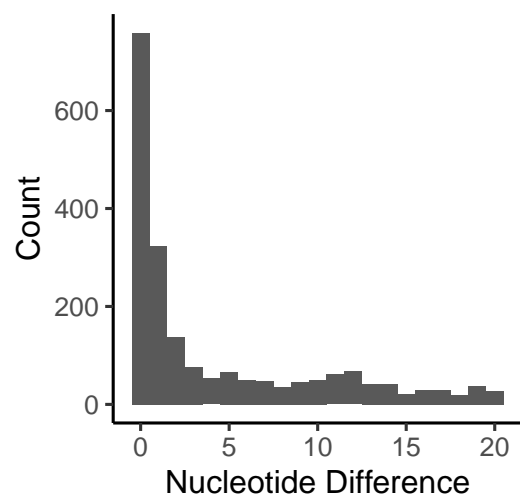
IGHV1-69-2*01

8 sequences assigned
No exact matches.



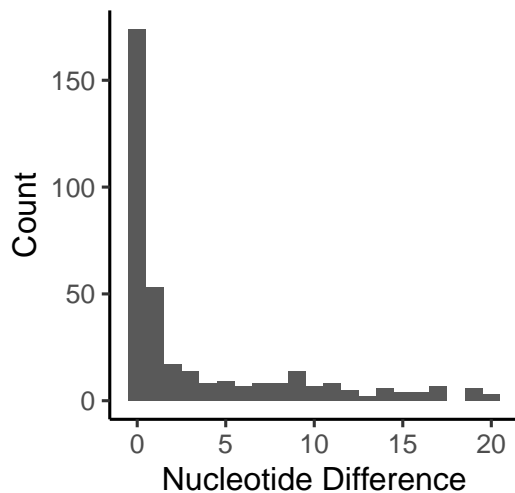
IGHV2-5*02

2196 sequences assigned
759 (34.6%) exact matches, in which:
758 unique CDR3
7 unique J



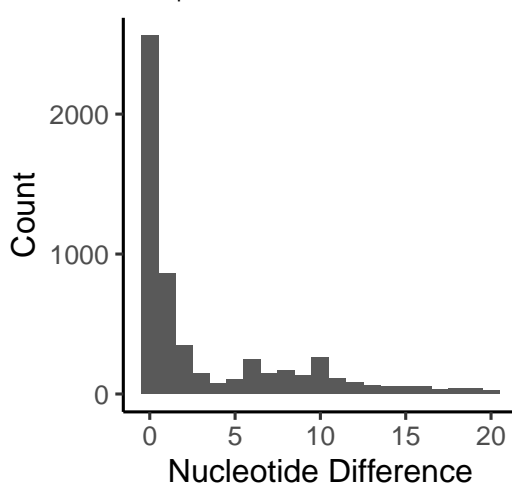
IGHV1-58*01_03

375 sequences assigned
174 (46.4%) exact matches, in which:
174 unique CDR3
6 unique J



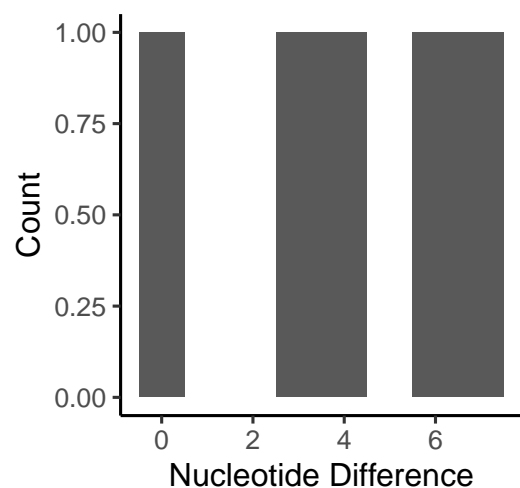
IGHV1-69*01_12_13

6073 sequences assigned
2560 (42.2%) exact matches, in which:
2542 unique CDR3
7 unique J



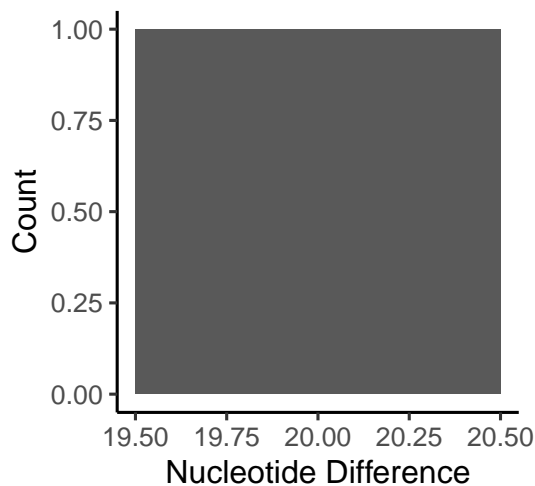
IGHV2-26*01

6 sequences assigned
1 (16.7%) exact matches, in which:
1 unique CDR3
1 unique J



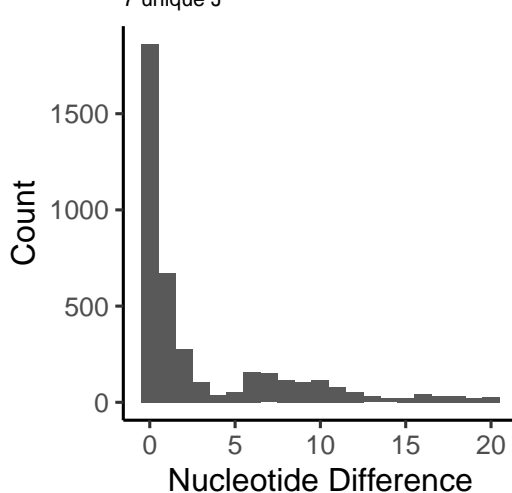
IGHV1-68*01

1 sequences assigned
No exact matches.



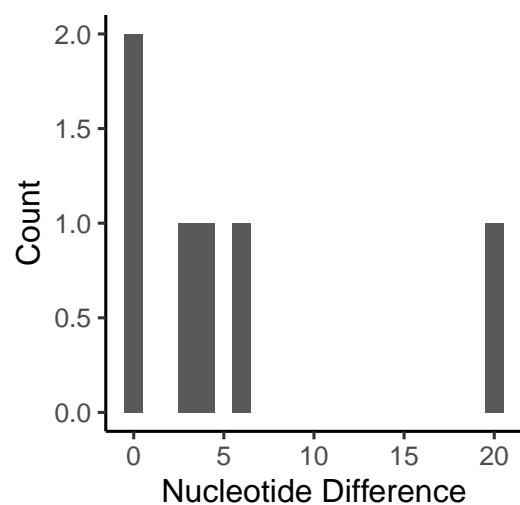
IGHV1-69*04_09

4428 sequences assigned
1862 (42.1%) exact matches, in which:
1848 unique CDR3
7 unique J



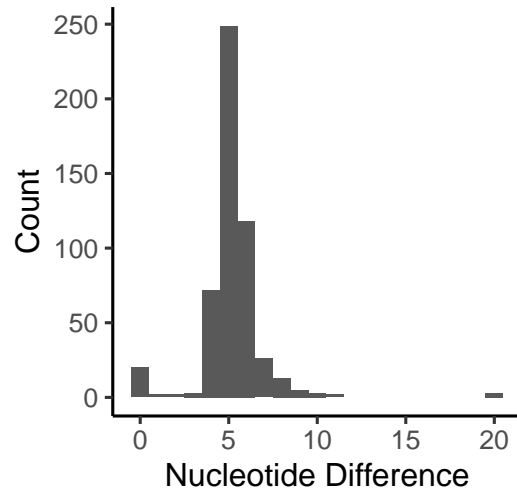
IGHV2-26*02

15 sequences assigned
2 (13.3%) exact matches, in which:
2 unique CDR3
2 unique J



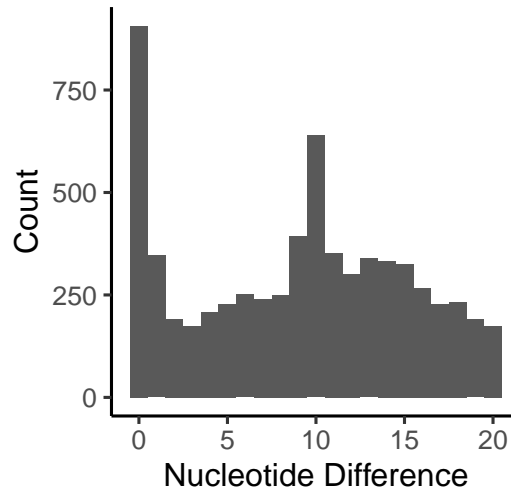
IGHV2-26*04

523 sequences assigned
20 (3.8%) exact matches, in which:
20 unique CDR3
5 unique J



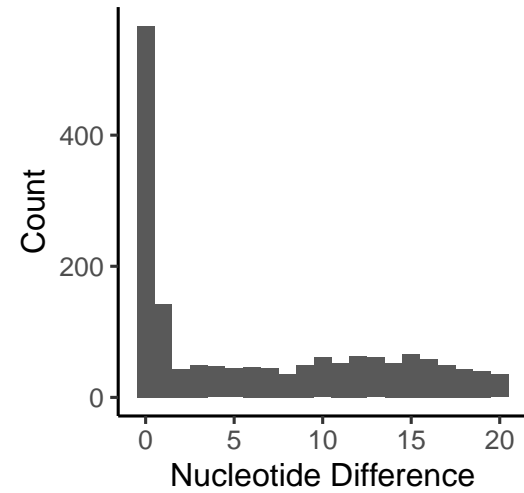
IGHV3-7*01

7464 sequences assigned
907 (12.2%) exact matches, in which:
864 unique CDR3
7 unique J



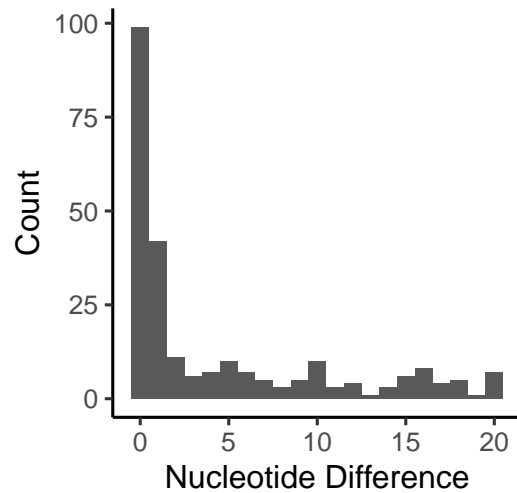
IGHV3-11*01

2268 sequences assigned
567 (25%) exact matches, in which:
541 unique CDR3
7 unique J



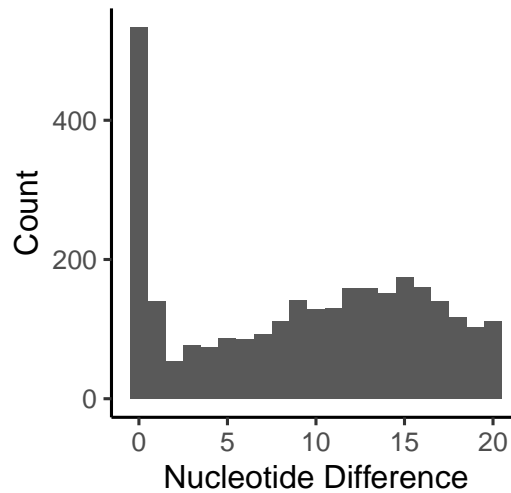
IGHV2-70*01

288 sequences assigned
99 (34.4%) exact matches, in which:
99 unique CDR3
5 unique J



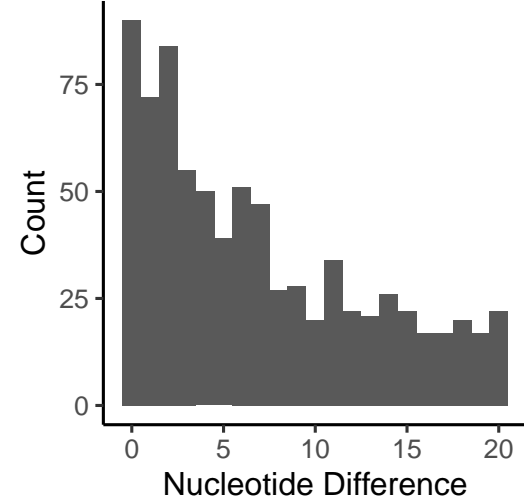
IGHV3-7*04

3612 sequences assigned
534 (14.8%) exact matches, in which:
507 unique CDR3
7 unique J



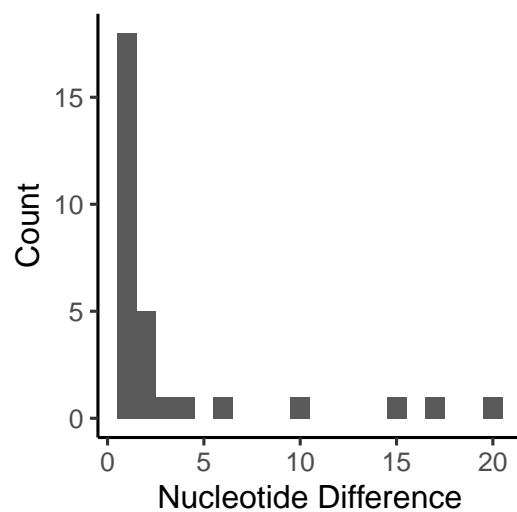
IGHV3-11*04

949 sequences assigned
90 (9.5%) exact matches, in which:
90 unique CDR3
7 unique J



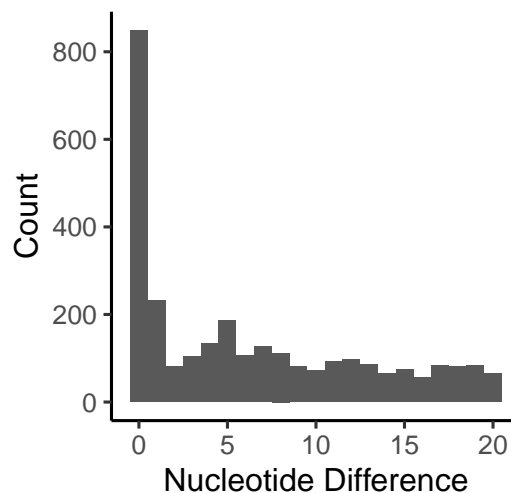
IGHV2-70*12

33 sequences assigned
No exact matches.



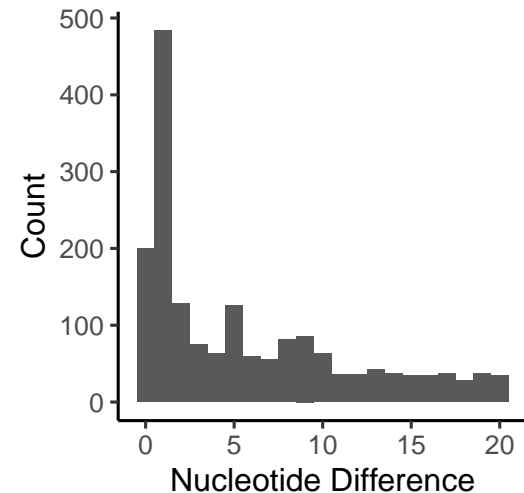
IGHV3-9*01

3470 sequences assigned
849 (24.5%) exact matches, in which:
797 unique CDR3
7 unique J



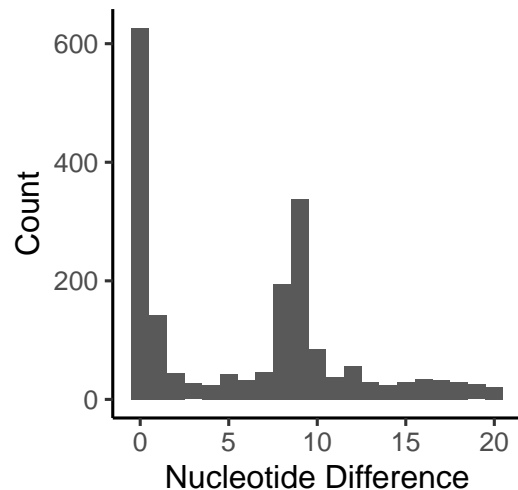
IGHV3-11*06

2100 sequences assigned
200 (9.5%) exact matches, in which:
200 unique CDR3
7 unique J



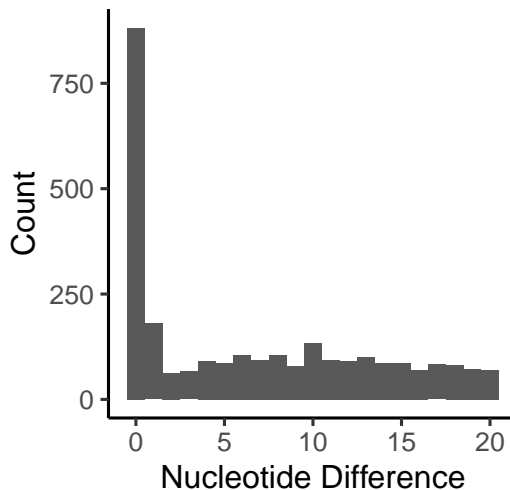
IGHV3-11*03_05

2541 sequences assigned
627 (24.7%) exact matches, in which:
597 unique CDR3
7 unique J



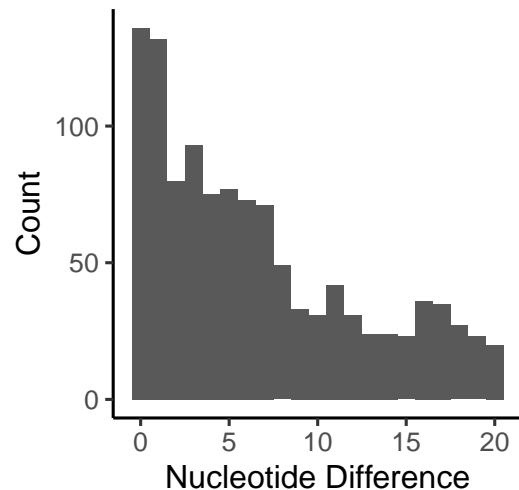
IGHV3-15*01_02

3385 sequences assigned
882 (26.1%) exact matches, in which:
851 unique CDR3
7 unique J



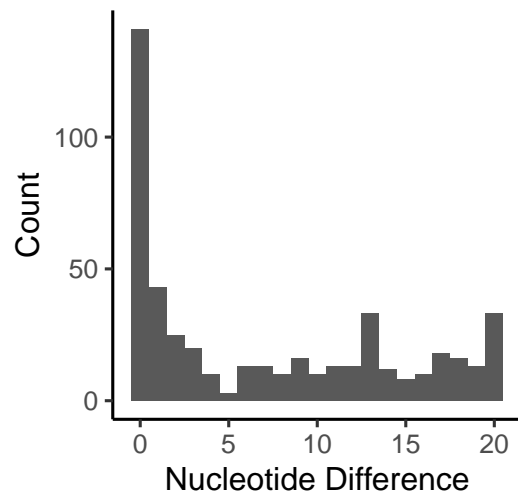
IGHV3-21*04

1372 sequences assigned
136 (9.9%) exact matches, in which:
136 unique CDR3
7 unique J



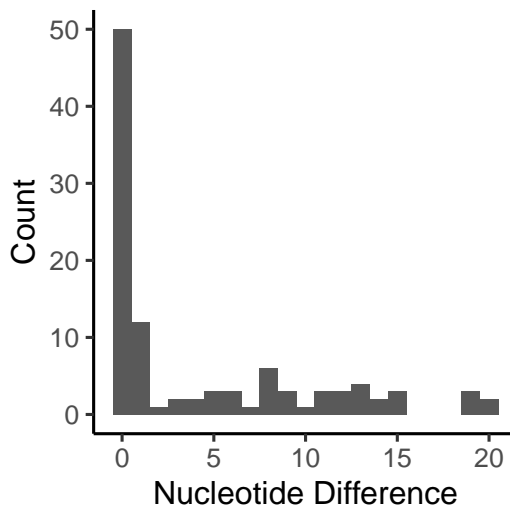
IGHV3-13*01

677 sequences assigned
141 (20.8%) exact matches, in which:
126 unique CDR3
6 unique J



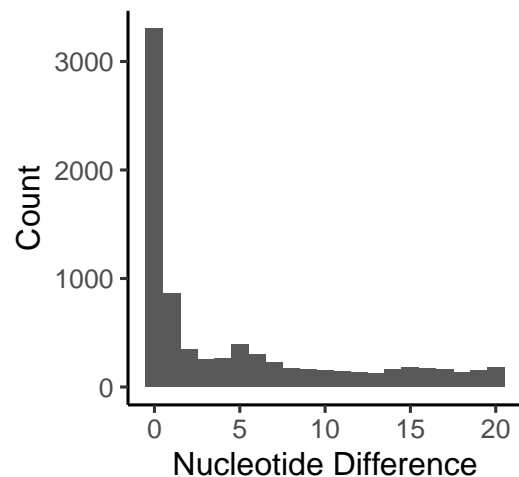
IGHV3-20*01_02

125 sequences assigned
50 (40%) exact matches, in which:
47 unique CDR3
5 unique J



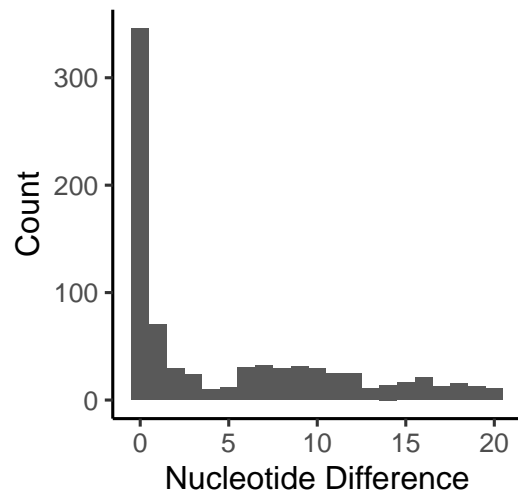
IGHV3-21*01_02

9407 sequences assigned
3302 (35.1%) exact matches, in which:
3111 unique CDR3
7 unique J



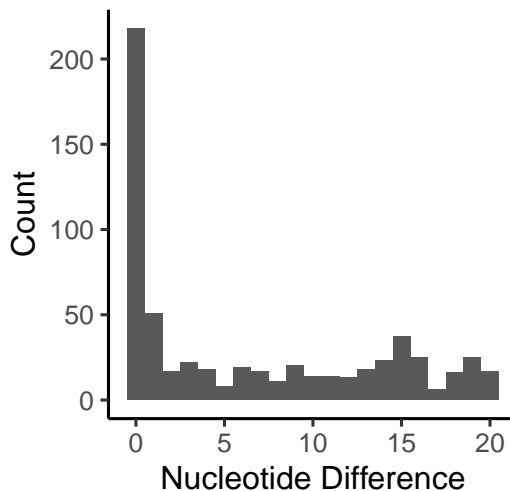
IGHV3-13*04

1343 sequences assigned
346 (25.8%) exact matches, in which:
327 unique CDR3
6 unique J



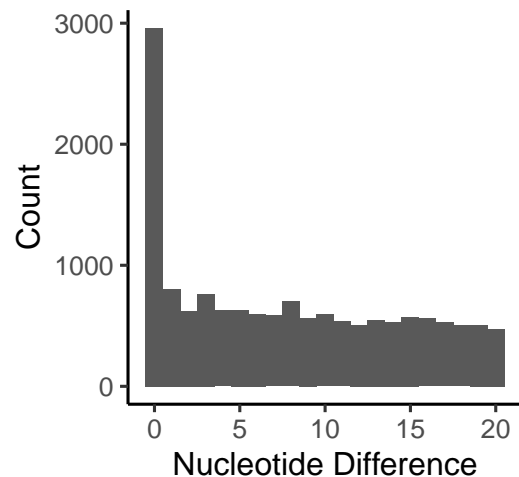
IGHV3-20*03_04

746 sequences assigned
218 (29.2%) exact matches, in which:
209 unique CDR3
7 unique J



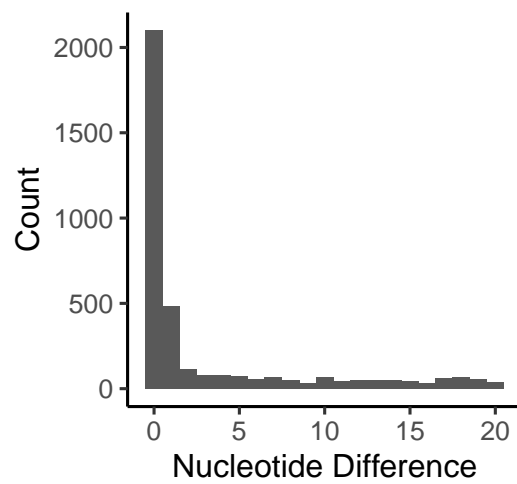
IGHV3-23*01_04

19158 sequences assigned
2960 (15.5%) exact matches, in which:
2774 unique CDR3
7 unique J



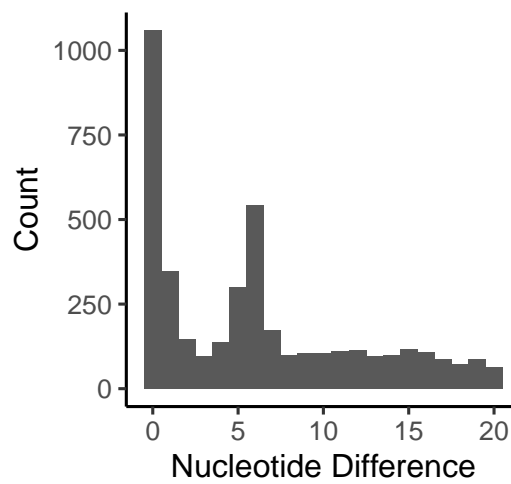
IGHV3-30-3*01

4218 sequences assigned
2100 (49.8%) exact matches, in which:
2012 unique CDR3
7 unique J



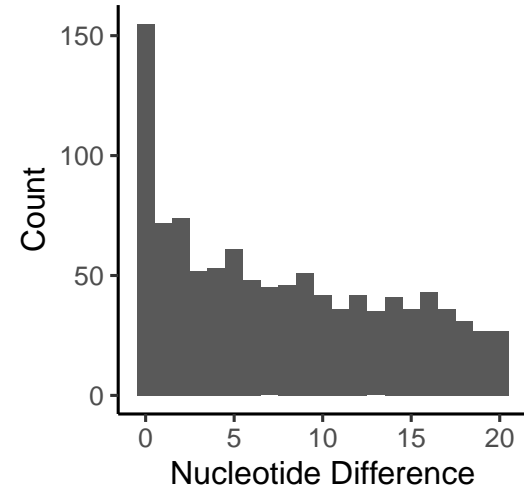
IGHV3-33*01

4398 sequences assigned
1059 (24.1%) exact matches, in which:
1020 unique CDR3
7 unique J



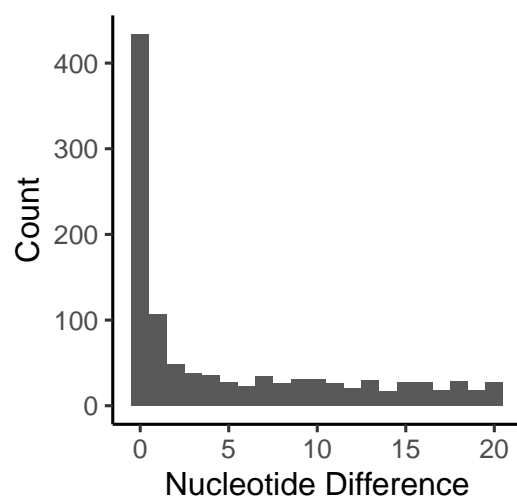
IGHV3-33*08

1207 sequences assigned
155 (12.8%) exact matches, in which:
154 unique CDR3
7 unique J



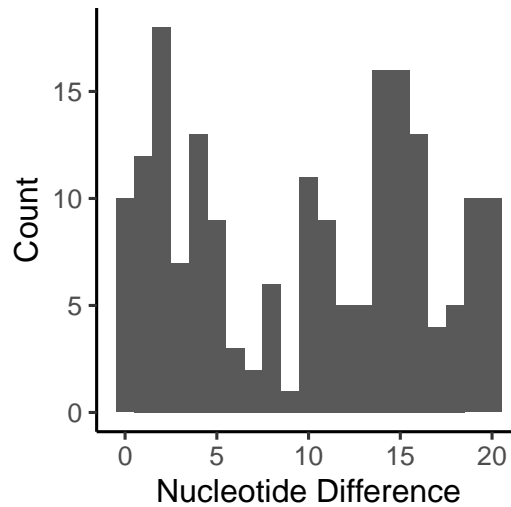
IGHV3-30*03

1335 sequences assigned
434 (32.5%) exact matches, in which:
429 unique CDR3
7 unique J



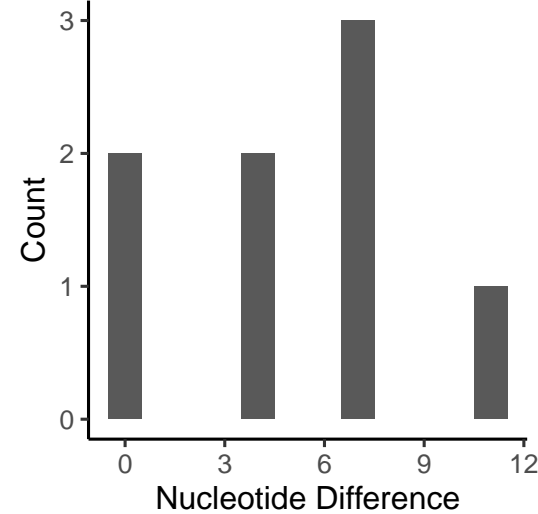
IGHV3-33*05

276 sequences assigned
10 (3.6%) exact matches, in which:
10 unique CDR3
4 unique J



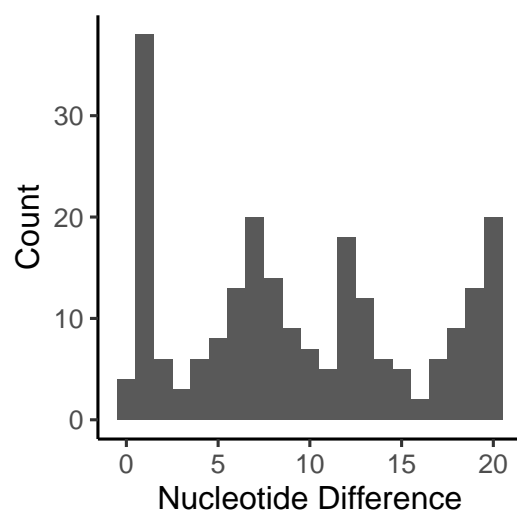
IGHV3-35*01

8 sequences assigned
2 (25%) exact matches, in which:
2 unique CDR3
1 unique J



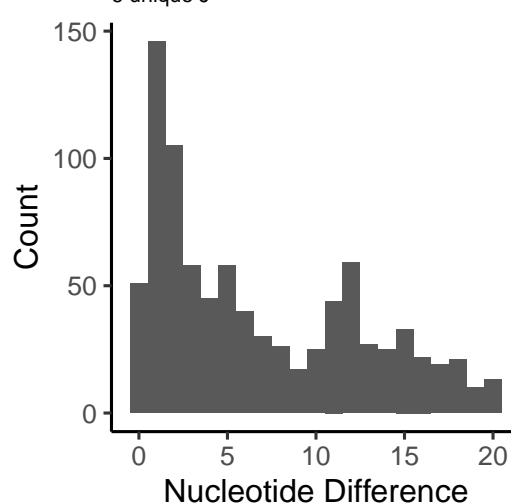
IGHV3-30*04

358 sequences assigned
4 (1.1%) exact matches, in which:
4 unique CDR3
4 unique J



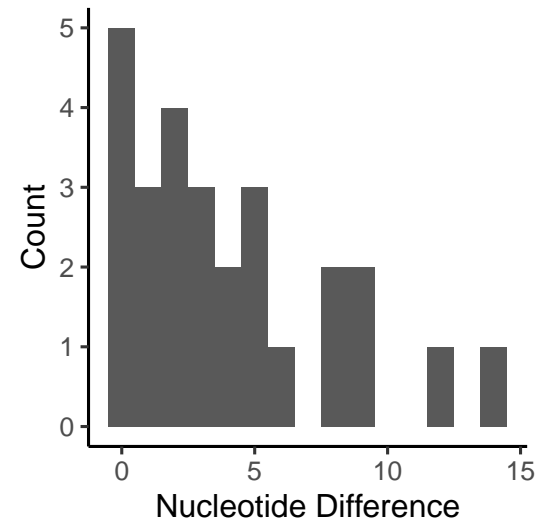
IGHV3-33*06

946 sequences assigned
51 (5.4%) exact matches, in which:
50 unique CDR3
6 unique J



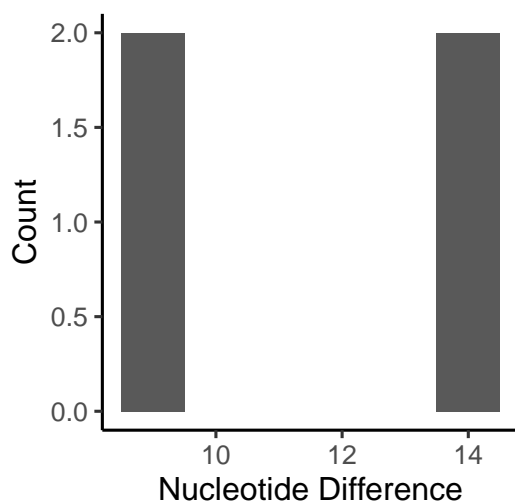
IGHV3-38-3*01

28 sequences assigned
5 (17.9%) exact matches, in which:
5 unique CDR3
2 unique J



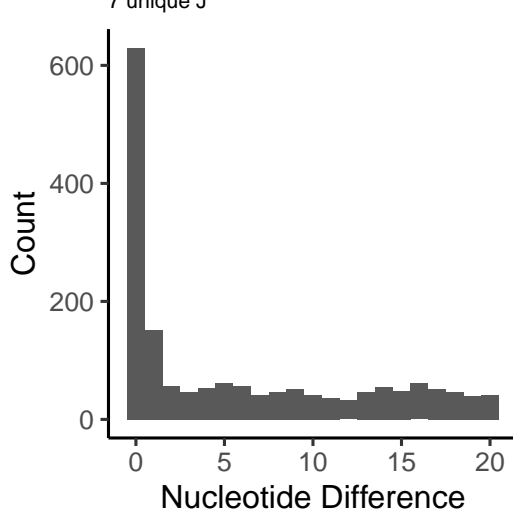
IGHV3-38*03

4 sequences assigned
No exact matches.



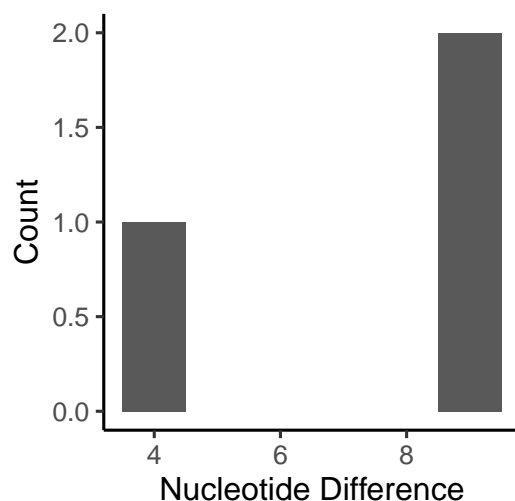
IGHV3-48*02

1994 sequences assigned
630 (31.6%) exact matches, in which:
593 unique CDR3
7 unique J



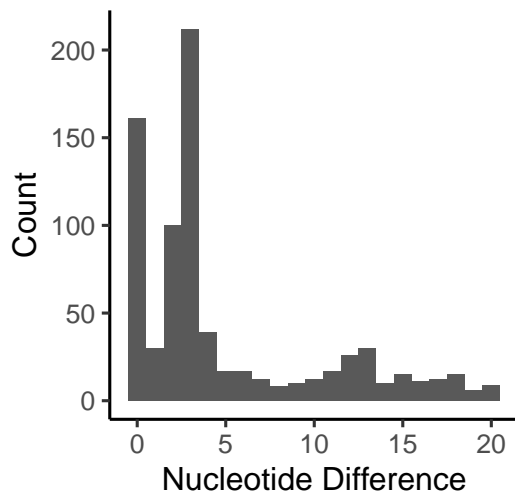
IGHV3-52*01_03

3 sequences assigned
No exact matches.



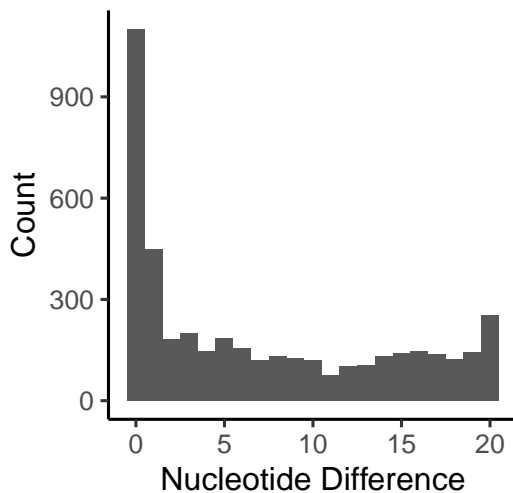
IGHV3-43*01

863 sequences assigned
161 (18.7%) exact matches, in which:
154 unique CDR3
7 unique J



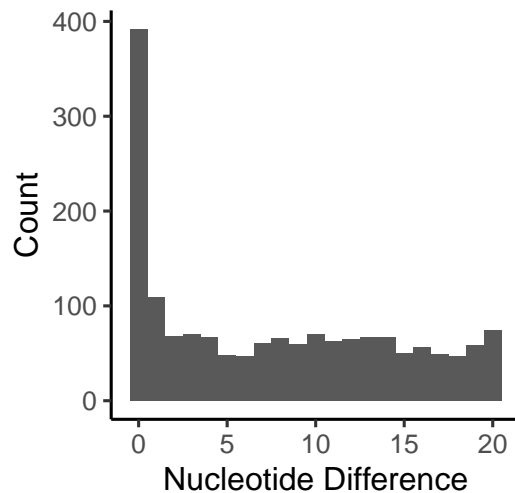
IGHV3-48*04

6725 sequences assigned
1101 (16.4%) exact matches, in which:
1055 unique CDR3
7 unique J



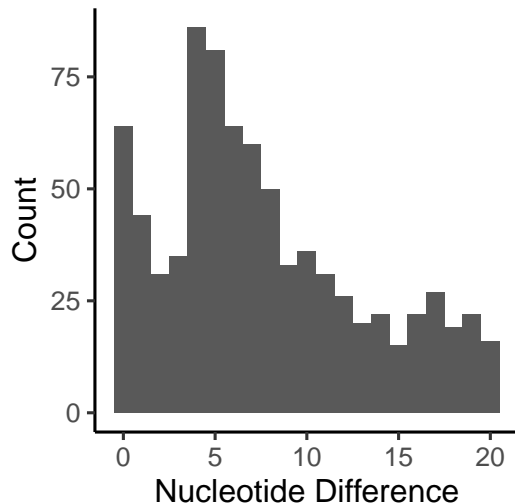
IGHV3-53*01_02

2175 sequences assigned
392 (18%) exact matches, in which:
378 unique CDR3
7 unique J



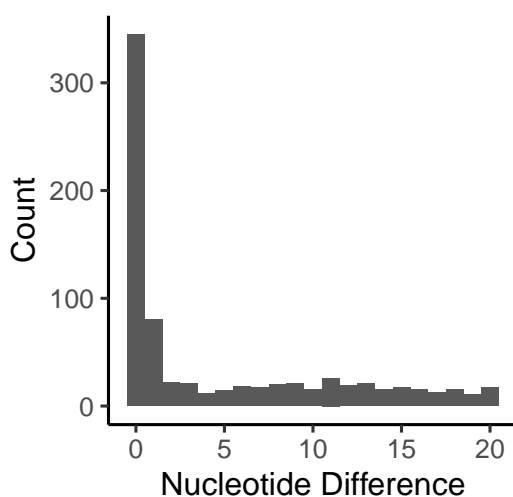
IGHV3-48*01

1000 sequences assigned
64 (6.4%) exact matches, in which:
64 unique CDR3
6 unique J



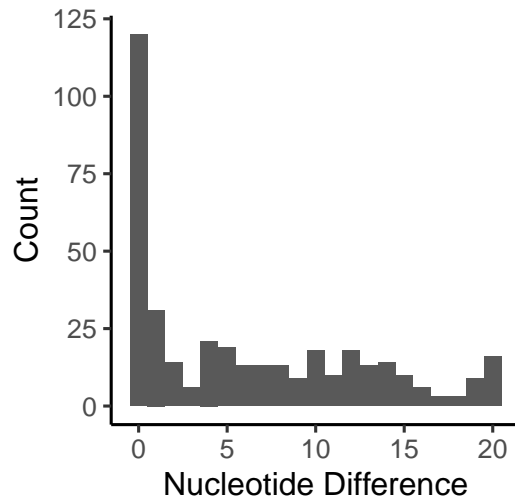
IGHV3-49*03_05

901 sequences assigned
345 (38.3%) exact matches, in which:
336 unique CDR3
7 unique J



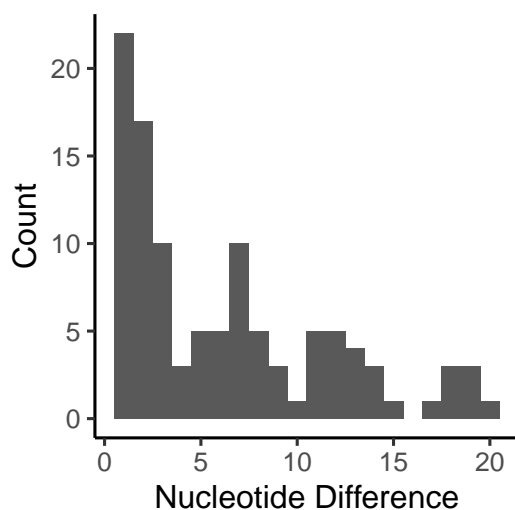
IGHV3-64*01

512 sequences assigned
120 (23.4%) exact matches, in which:
113 unique CDR3
6 unique J



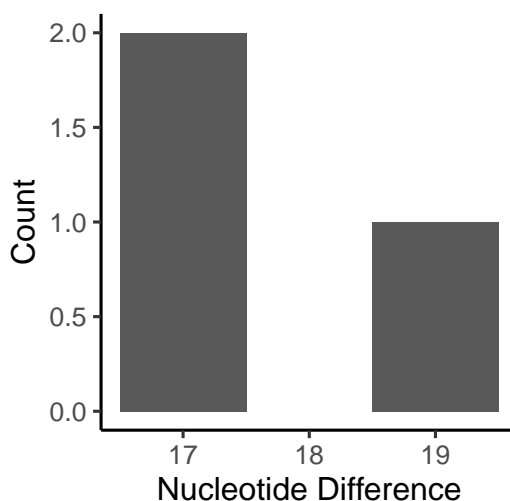
IGHV3-64*04

119 sequences assigned
No exact matches.



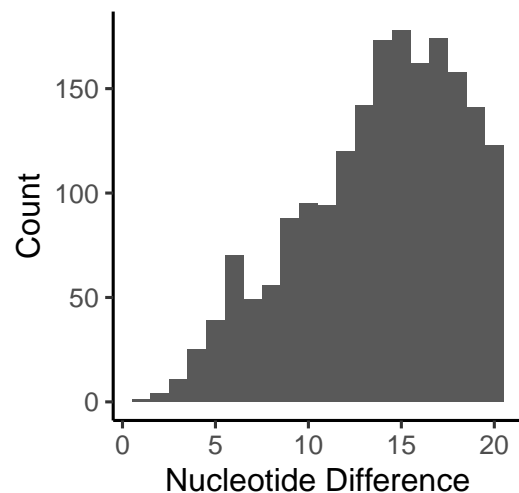
IGHV3-69-1*02

71 sequences assigned
No exact matches.



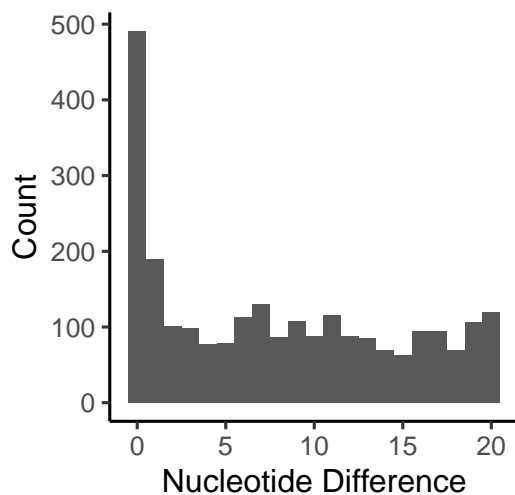
IGHV3-74*03

2736 sequences assigned
No exact matches.



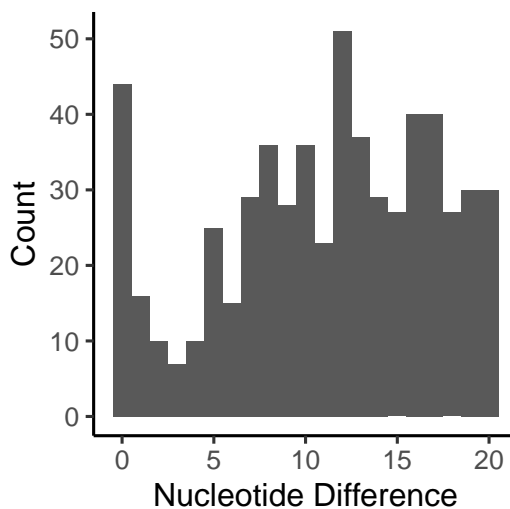
IGHV3-66*01

3537 sequences assigned
491 (13.9%) exact matches, in which:
468 unique CDR3
7 unique J



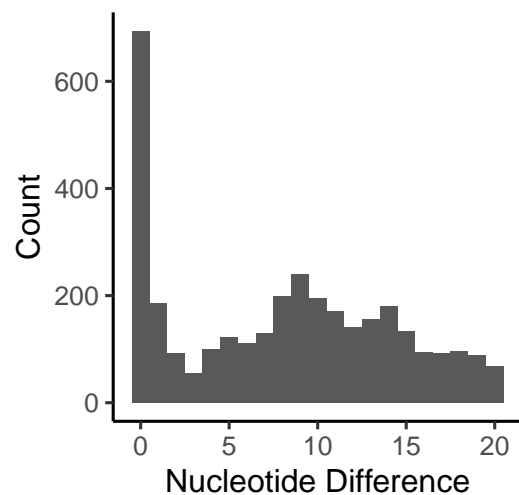
IGHV3-72*01

787 sequences assigned
44 (5.6%) exact matches, in which:
40 unique CDR3
5 unique J



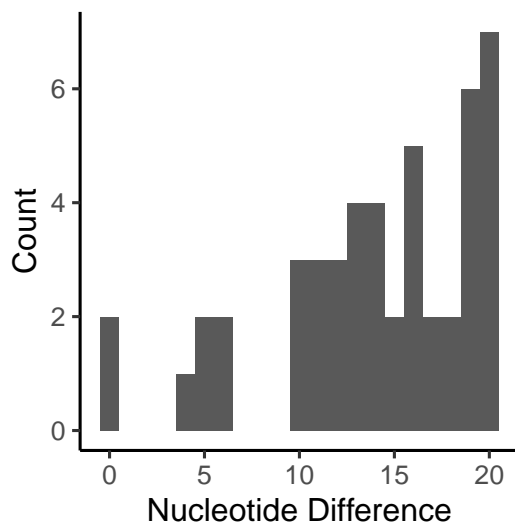
IGHV3-74*01_02

3815 sequences assigned
694 (18.2%) exact matches, in which:
650 unique CDR3
7 unique J



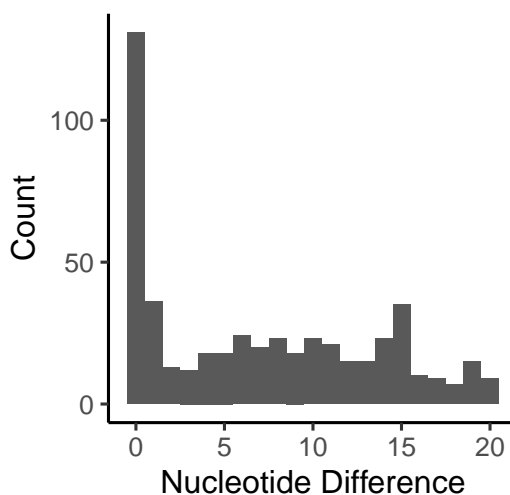
IGHV3-69-1*01

151 sequences assigned
2 (1.3%) exact matches, in which:
2 unique CDR3
2 unique J



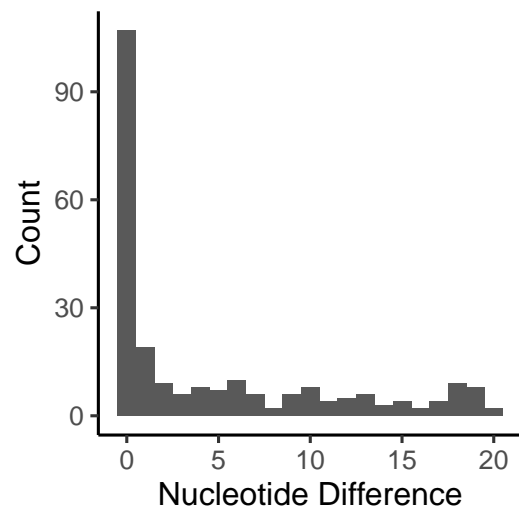
IGHV3-73*01_02

592 sequences assigned
131 (22.1%) exact matches, in which:
126 unique CDR3
7 unique J



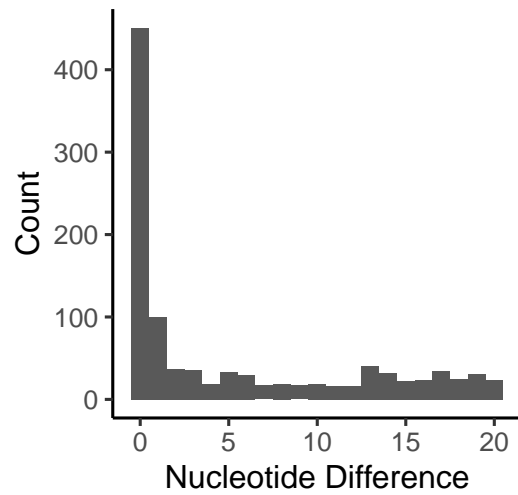
IGHV3-43D*03

300 sequences assigned
107 (35.7%) exact matches, in which:
103 unique CDR3
6 unique J



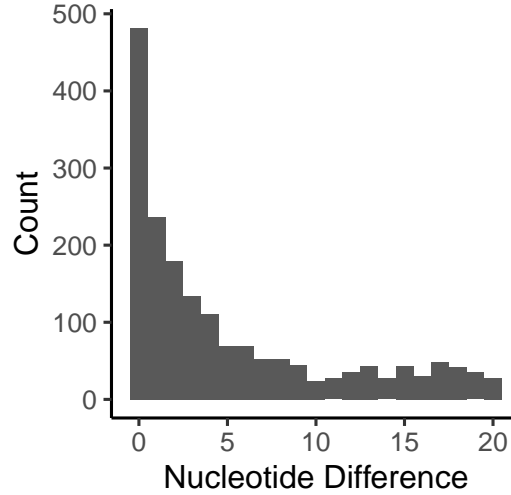
IGHV3-64D*06

1287 sequences assigned
451 (35%) exact matches, in which:
416 unique CDR3
7 unique J



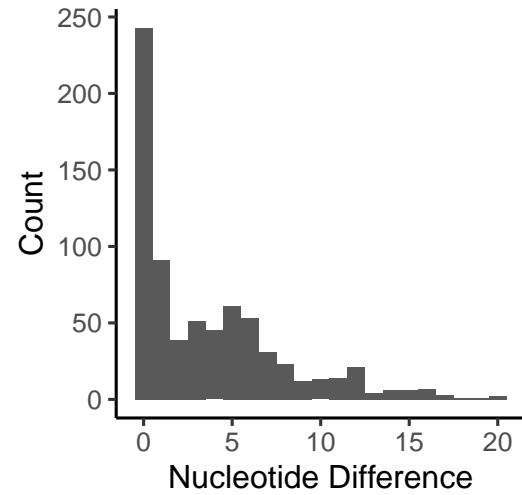
IGHV4-4*02_03

2324 sequences assigned
482 (20.7%) exact matches, in which:
480 unique CDR3
7 unique J



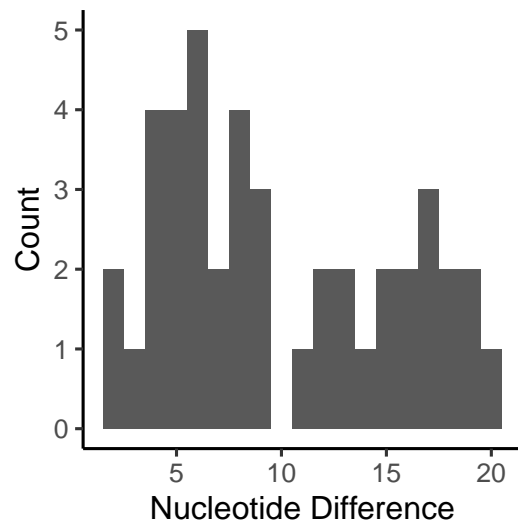
IGHV4-30-2*01

784 sequences assigned
243 (31%) exact matches, in which:
239 unique CDR3
7 unique J



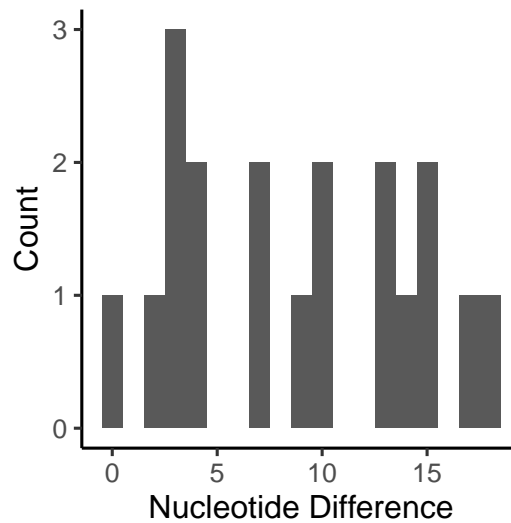
IGHV3-NL1*01

76 sequences assigned
No exact matches.



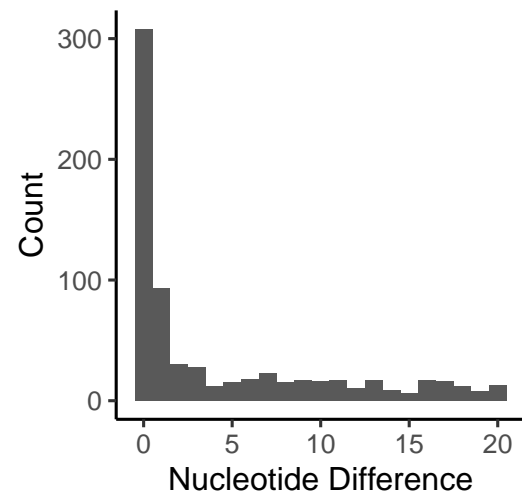
IGHV4-28*03

23 sequences assigned
1 (4.3%) exact matches, in which:
1 unique CDR3
1 unique J



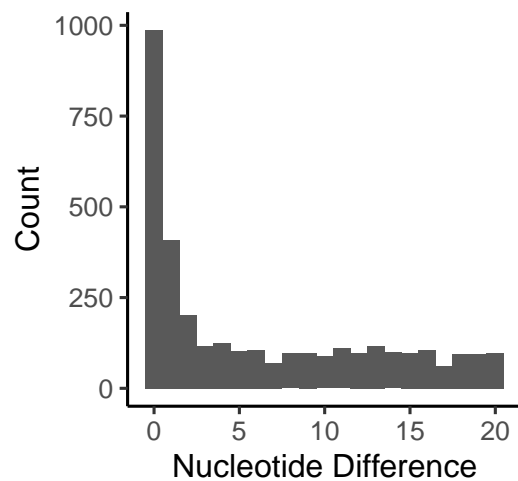
IGHV4-30-4*01

889 sequences assigned
308 (34.6%) exact matches, in which:
306 unique CDR3
7 unique J



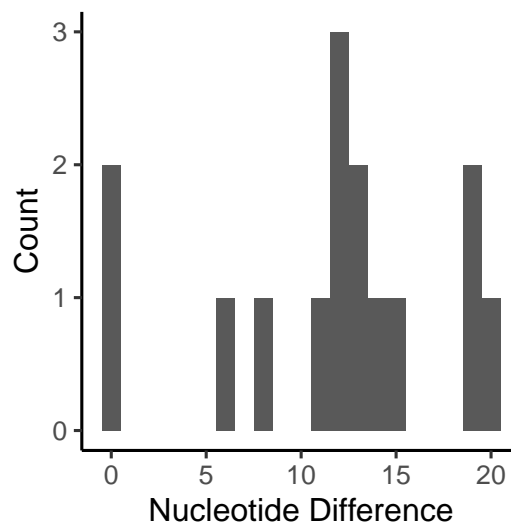
IGHV4-4*07

4089 sequences assigned
987 (24.1%) exact matches, in which:
968 unique CDR3
7 unique J



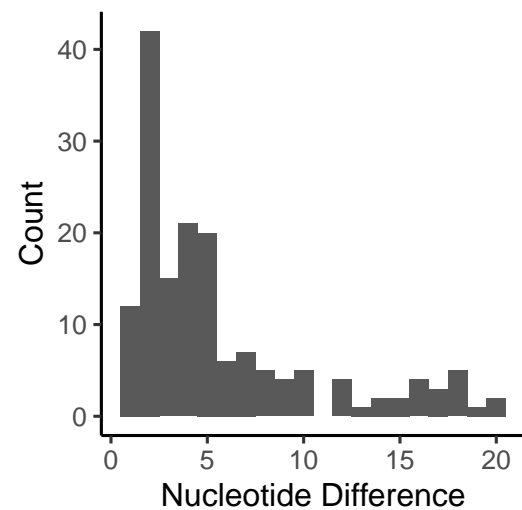
IGHV4-28*01_07

17 sequences assigned
2 (11.8%) exact matches, in which:
2 unique CDR3
2 unique J



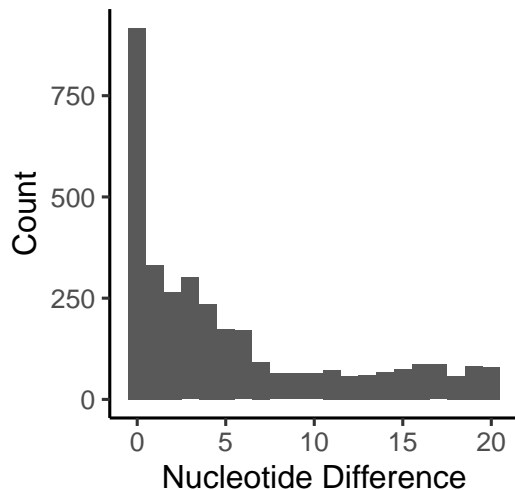
IGHV4-30-4*08

190 sequences assigned
No exact matches.



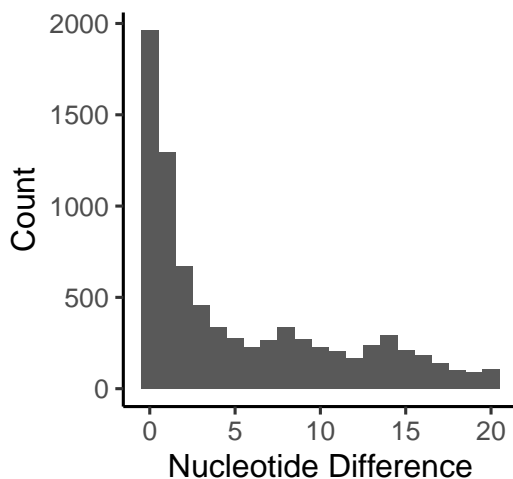
IGHV4-31*02

4405 sequences assigned
918 (20.8%) exact matches, in which:
913 unique CDR3
7 unique J



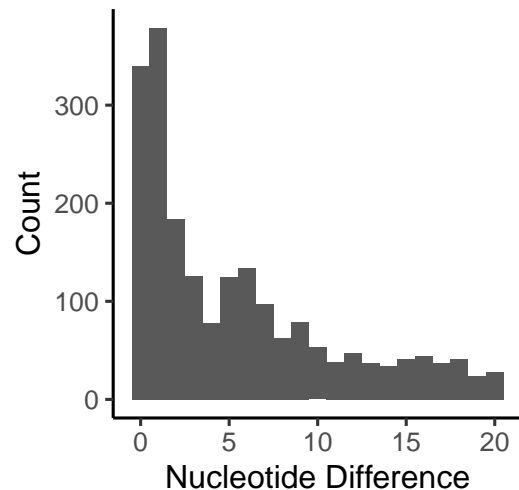
IGHV4-39*07

9534 sequences assigned
1962 (20.6%) exact matches, in which:
1928 unique CDR3
7 unique J



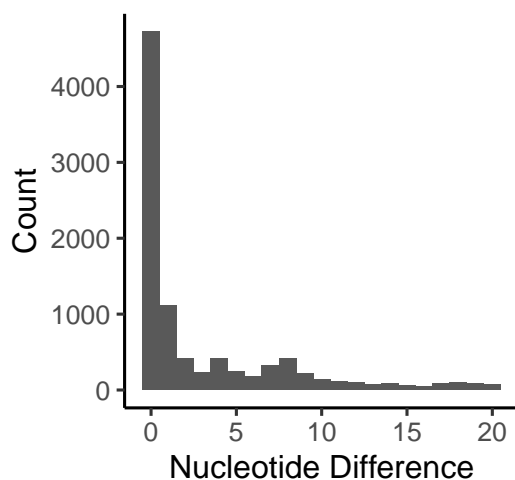
IGHV4-59*12

2279 sequences assigned
340 (14.9%) exact matches, in which:
338 unique CDR3
7 unique J



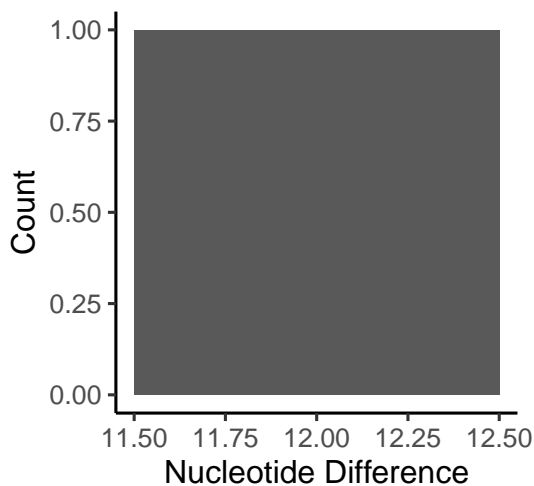
IGHV4-34*01_02

10093 sequences assigned
4722 (46.8%) exact matches, in which:
4655 unique CDR3
7 unique J



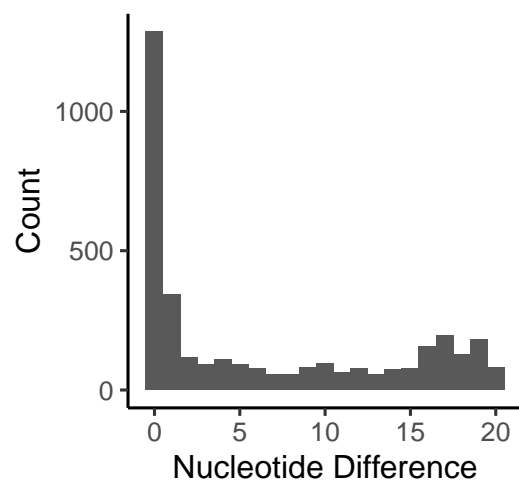
IGHV4-55*07

1 sequences assigned
No exact matches.



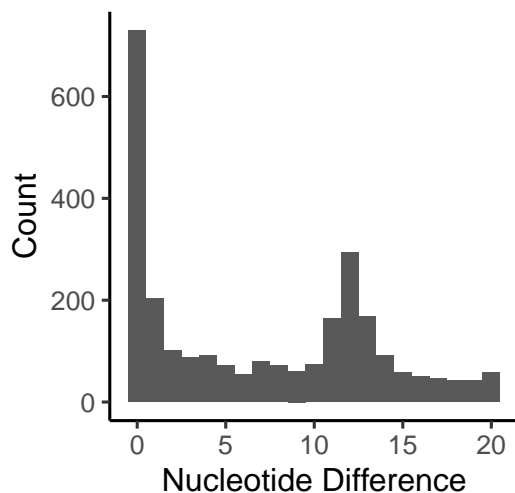
IGHV4-59*13

4324 sequences assigned
1286 (29.7%) exact matches, in which:
1276 unique CDR3
7 unique J



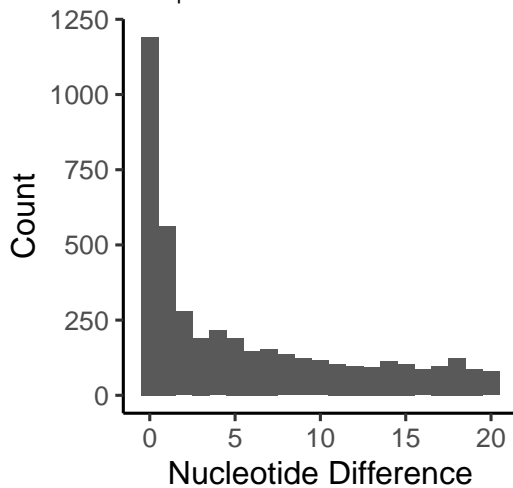
IGHV4-38-2*02

3105 sequences assigned
730 (23.5%) exact matches, in which:
727 unique CDR3
7 unique J



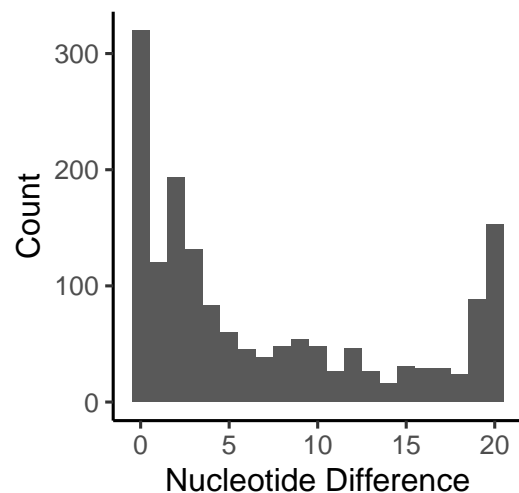
IGHV4-59*08

5116 sequences assigned
1191 (23.3%) exact matches, in which:
1177 unique CDR3
7 unique J



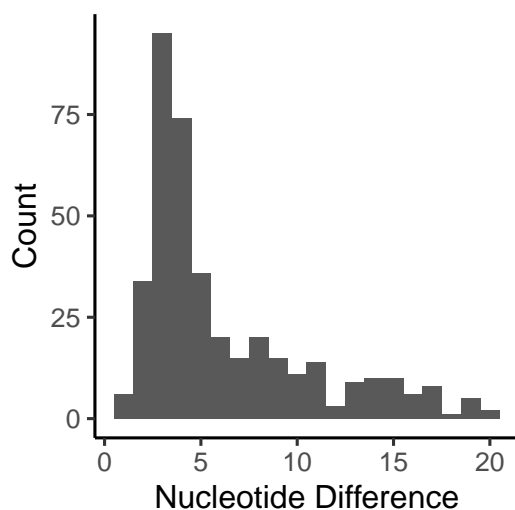
IGHV4-61*01

2045 sequences assigned
320 (15.6%) exact matches, in which:
320 unique CDR3
7 unique J



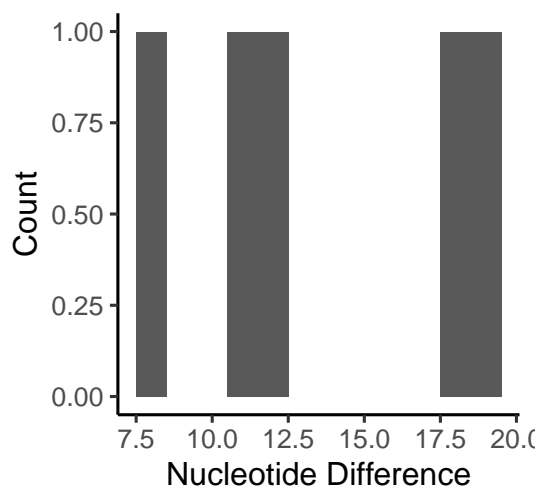
IGHV4-61*05

434 sequences assigned
No exact matches.



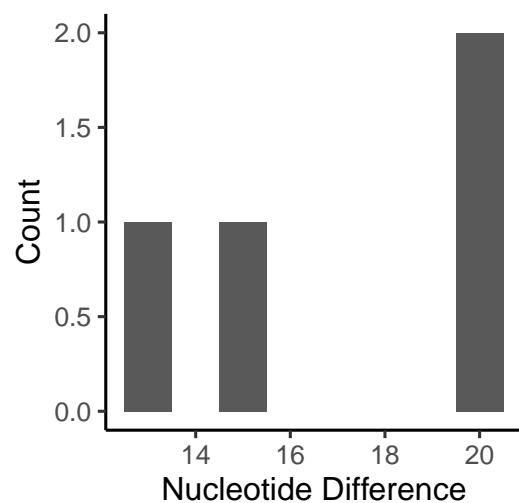
IGHV1/OR15-3*02

5 sequences assigned
No exact matches.



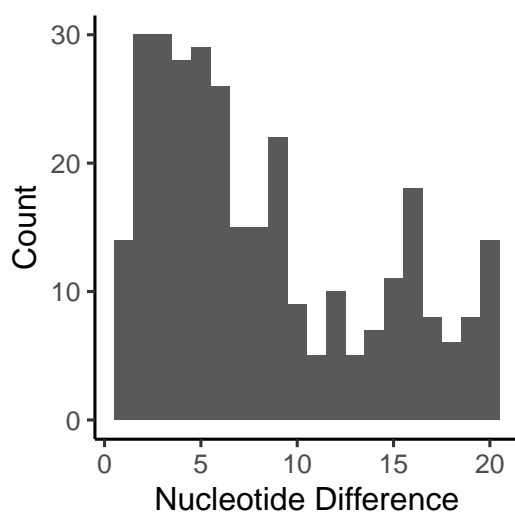
IGHV4/OR15-8*02

36 sequences assigned
No exact matches.



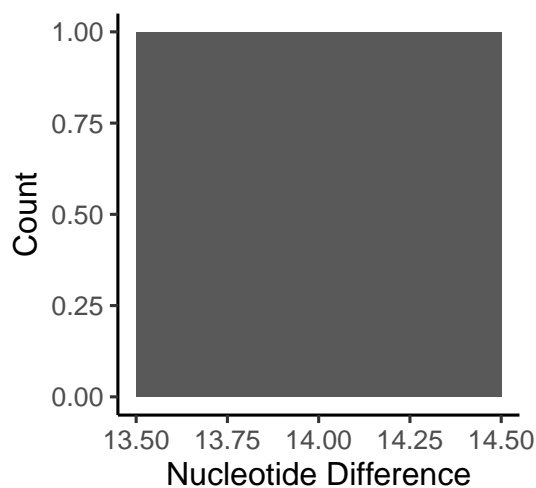
IGHV4-61*08

400 sequences assigned
No exact matches.



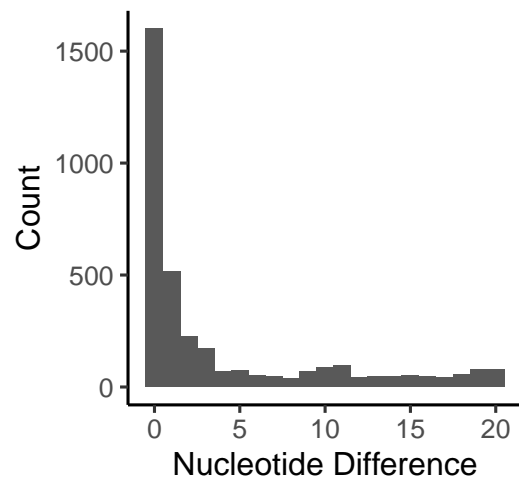
IGHV1/OR15-4*01

1 sequences assigned
No exact matches.



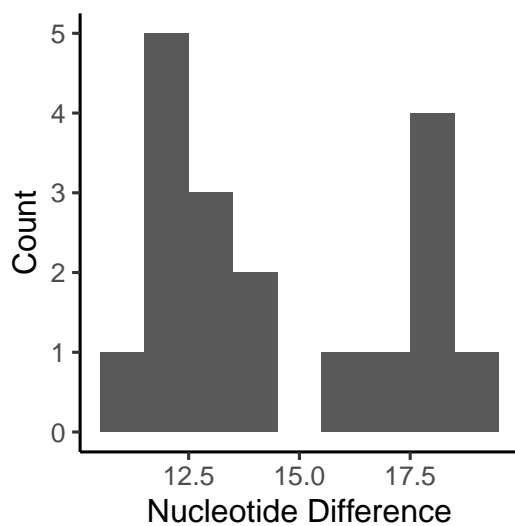
IGHV5-10-1*01_03

3967 sequences assigned
1600 (40.3%) exact matches, in which:
1548 unique CDR3
7 unique J



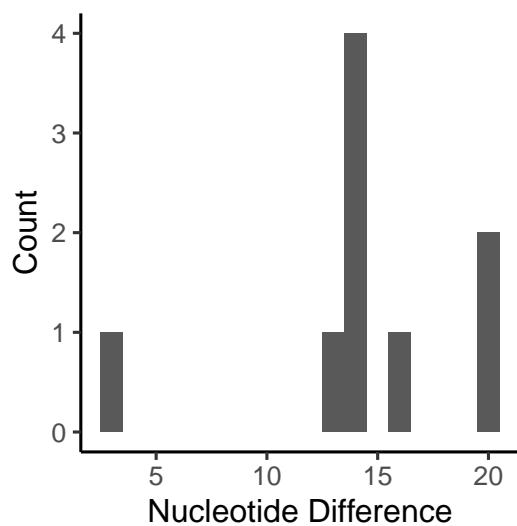
IGHV1/OR15-2*02_03

26 sequences assigned
No exact matches.



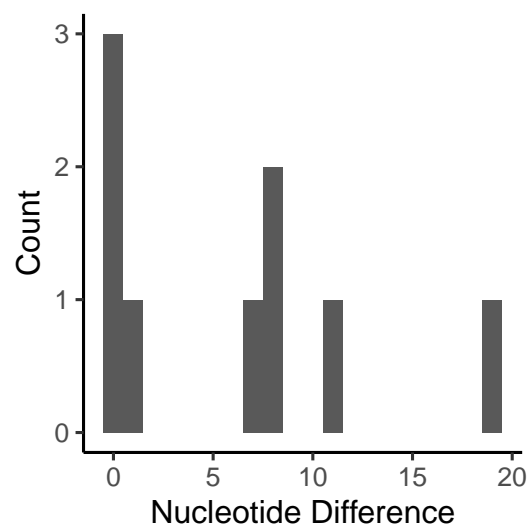
IGHV4/OR15-8*01

37 sequences assigned
No exact matches.



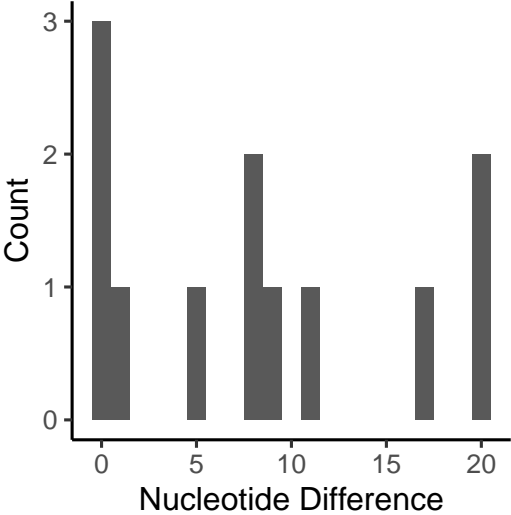
IGHV5-51*04

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



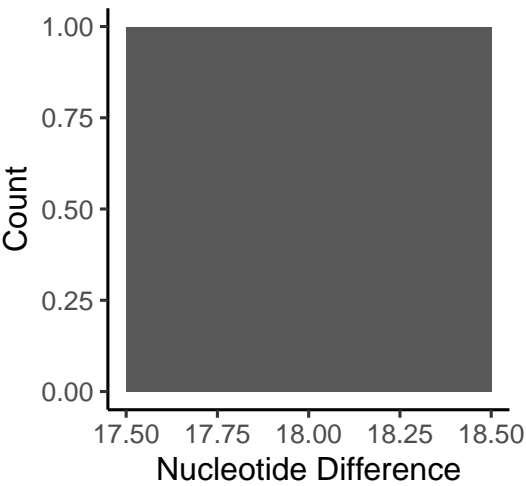
IGHV5–51*06

13 sequences assigned
3 (23.1%) exact matches, in which:
3 unique CDR3
3 unique J



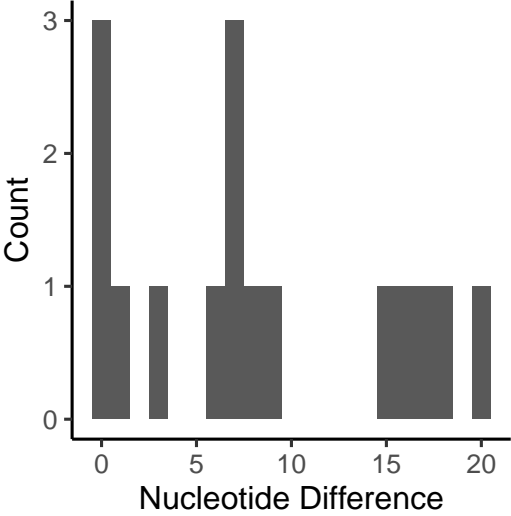
IGHV3/OR16–13*01

1 sequences assigned
No exact matches.



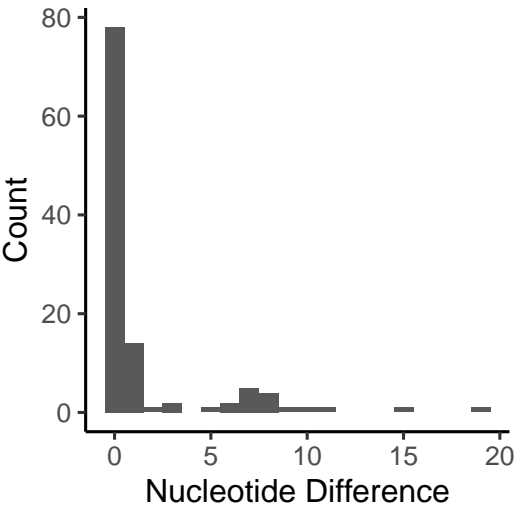
IGHV5–51*07

20 sequences assigned
3 (15%) exact matches, in which:
3 unique CDR3
3 unique J



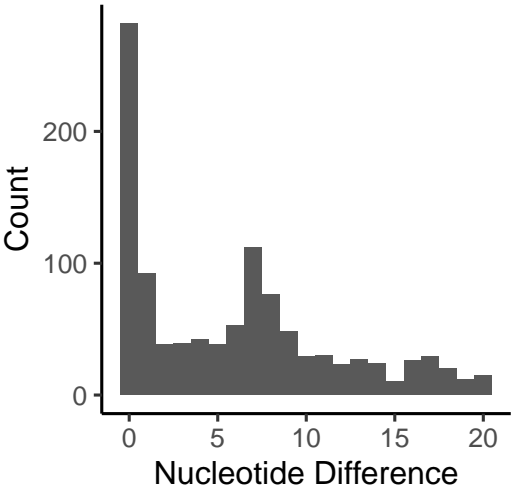
IGHV7–4–1*01_T63C

120 sequences assigned
78 (65%) exact matches, in which:
73 unique CDR3
5 unique J

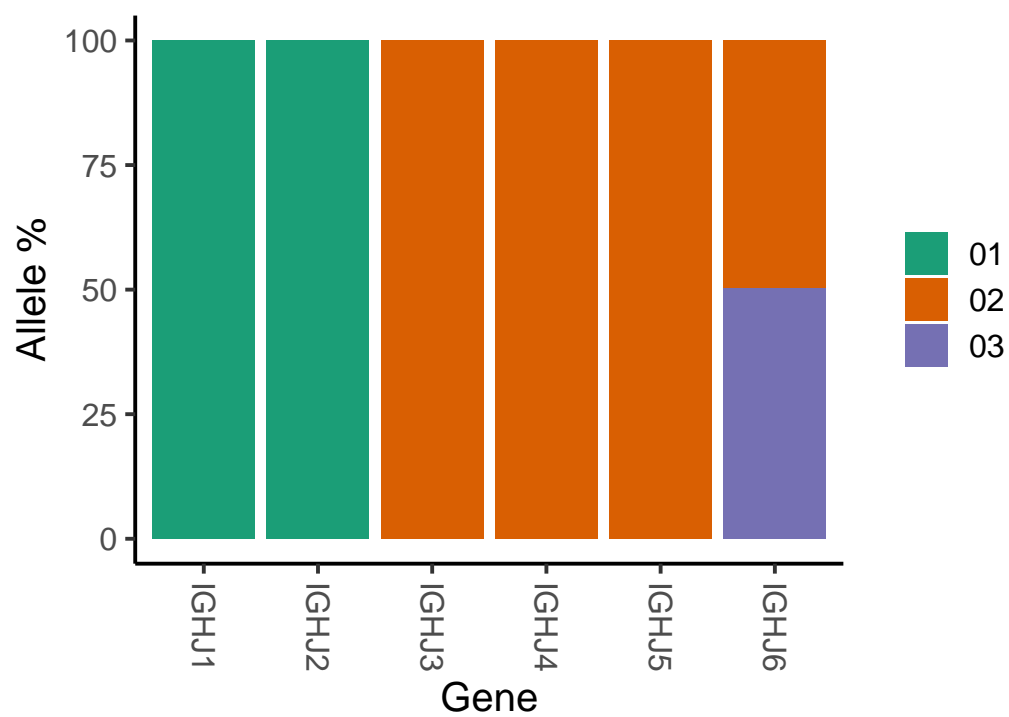


IGHV6–1*01_02

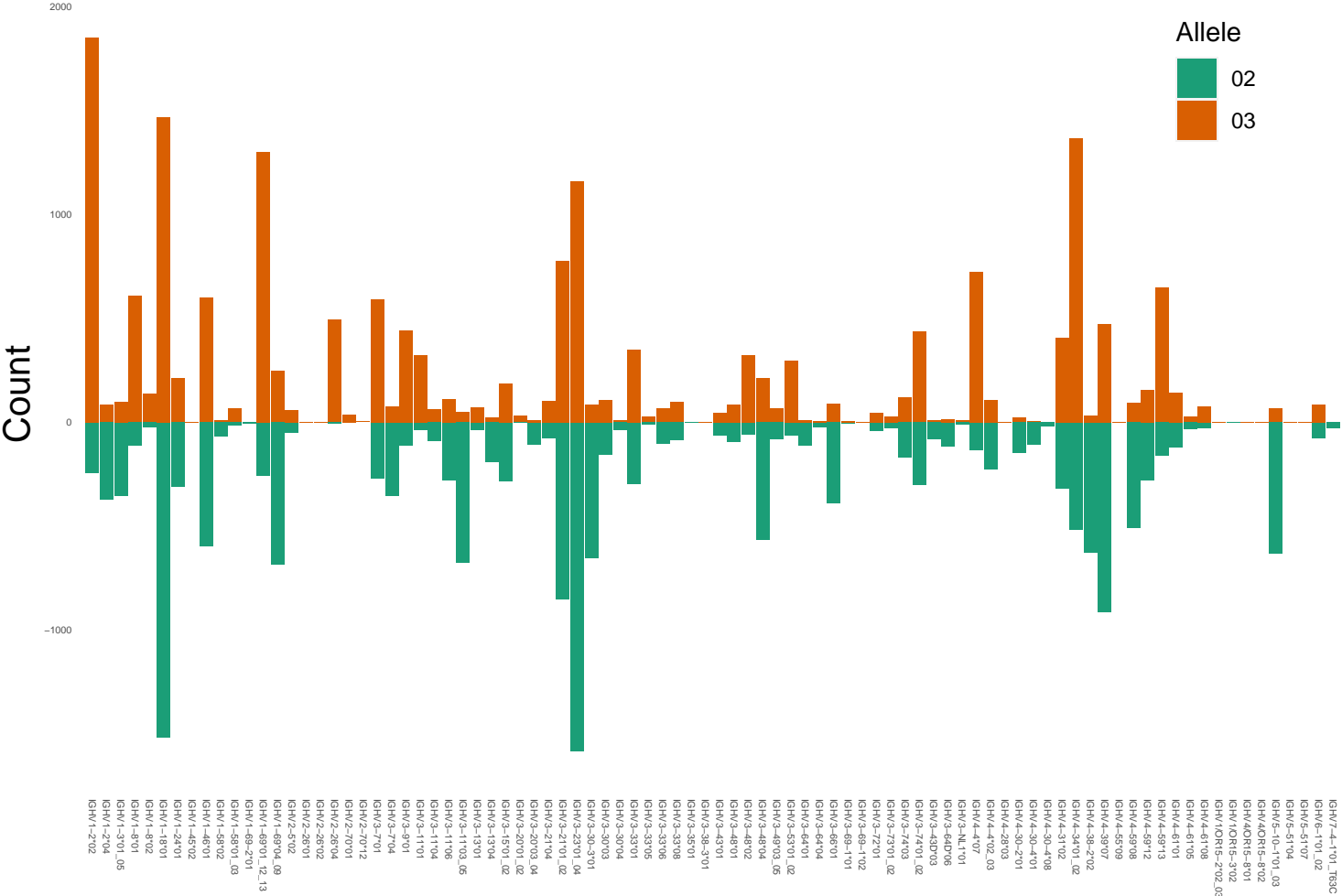
1182 sequences assigned
282 (23.9%) exact matches, in which:
279 unique CDR3
7 unique J



Allele Usage



Sequence Count by IGHJ6 allele usage



Warning – no inferred sequences found.