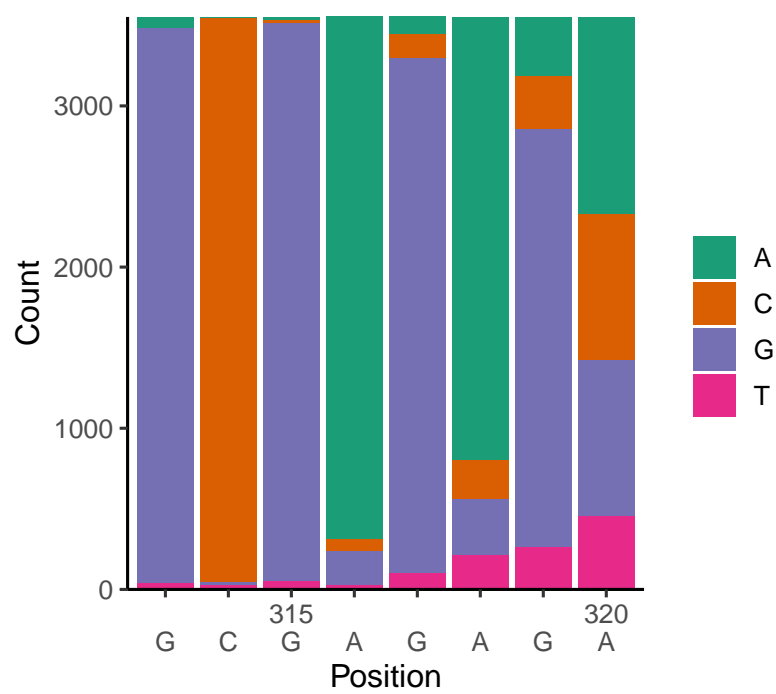


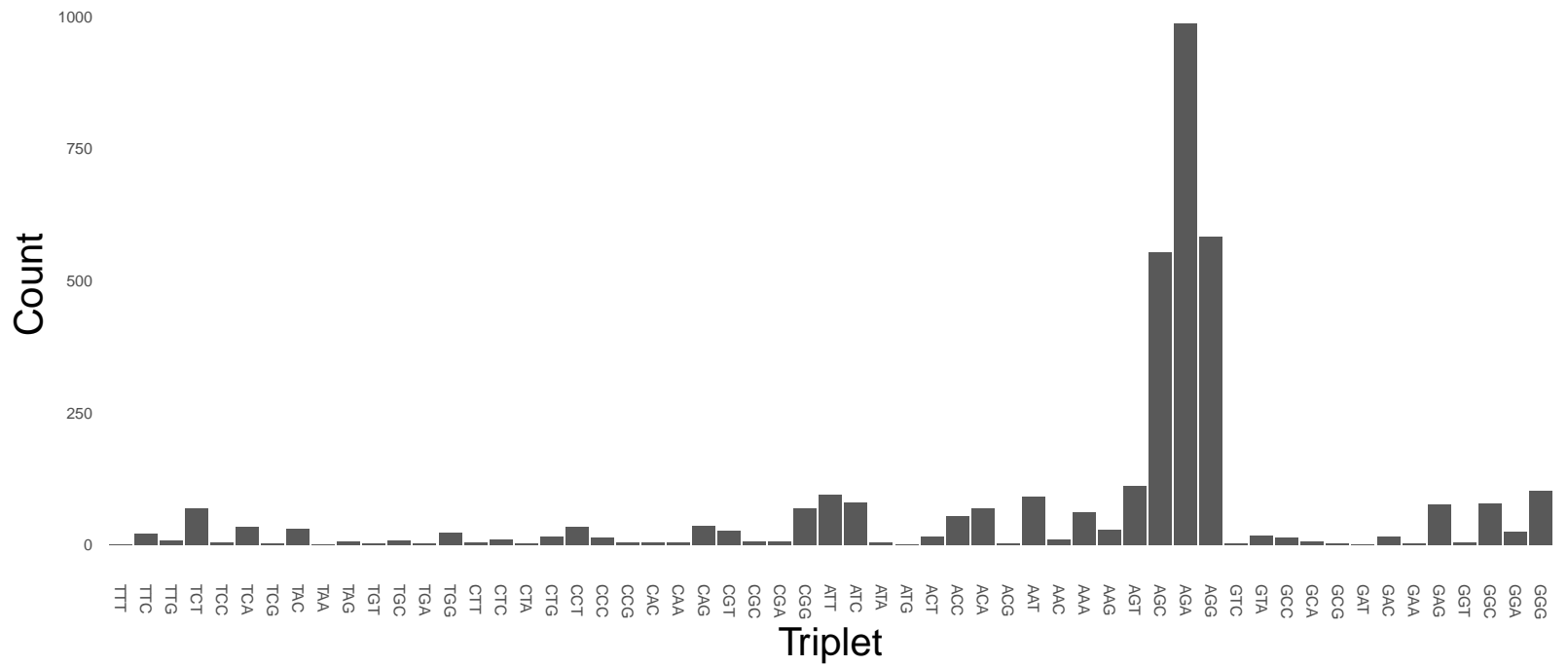
Gene IGHV1-69*10_A244G



Gene IGHV1-69*10_A244G

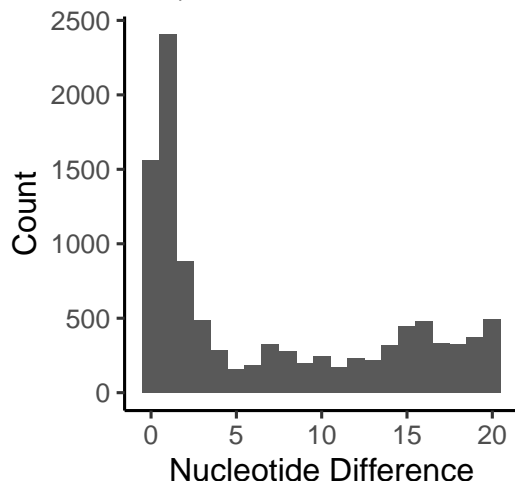


IGHV1-69*10_A244G- Final 3 nucleotides as a triplet



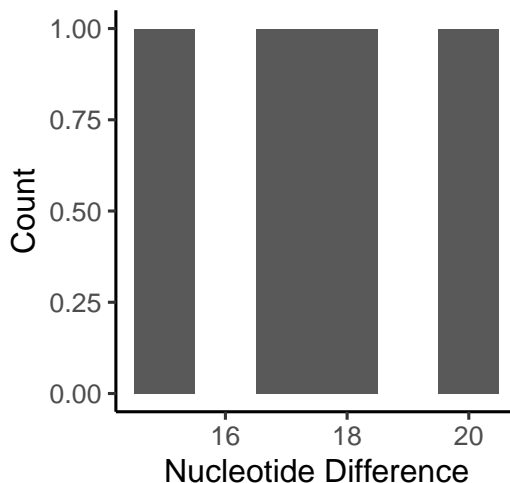
IGHV1-2*02

13124 sequences assigned
1561 (11.9%) exact matches, in which:
1177 unique CDR3
6 unique J



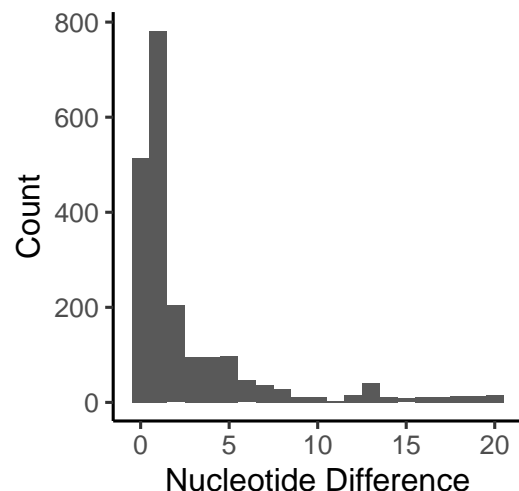
IGHV1-3*04

15 sequences assigned
No exact matches.



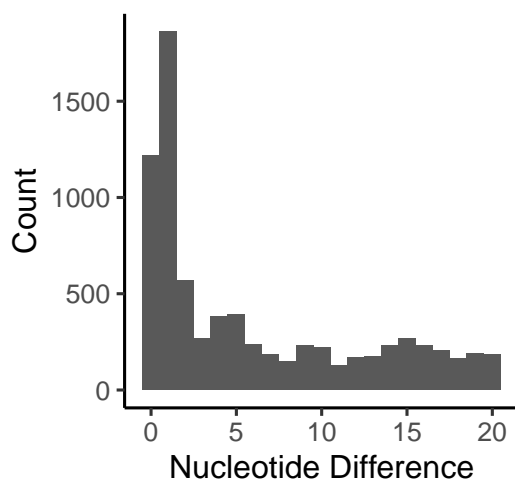
IGHV1-8*03

2332 sequences assigned
514 (22%) exact matches, in which:
372 unique CDR3
6 unique J



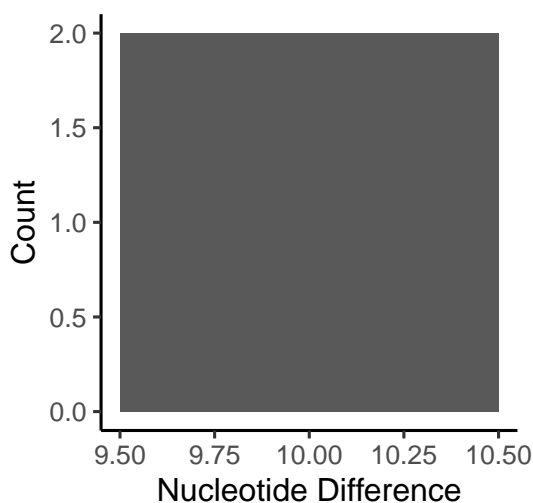
IGHV1-2*06

9028 sequences assigned
1217 (13.5%) exact matches, in which:
908 unique CDR3
6 unique J



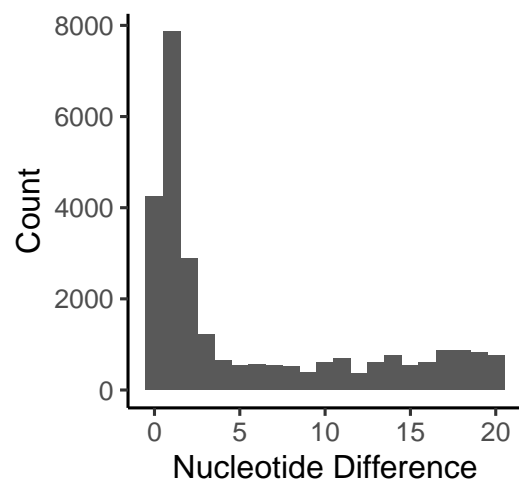
IGHV1-3*01_05

13 sequences assigned
No exact matches.



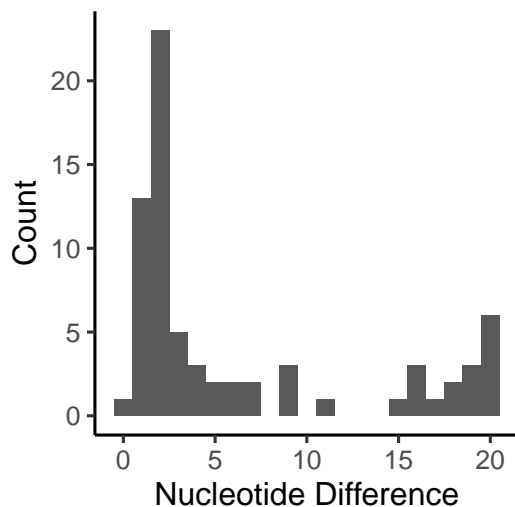
IGHV1-18*01

32210 sequences assigned
4253 (13.2%) exact matches, in which:
2922 unique CDR3
6 unique J



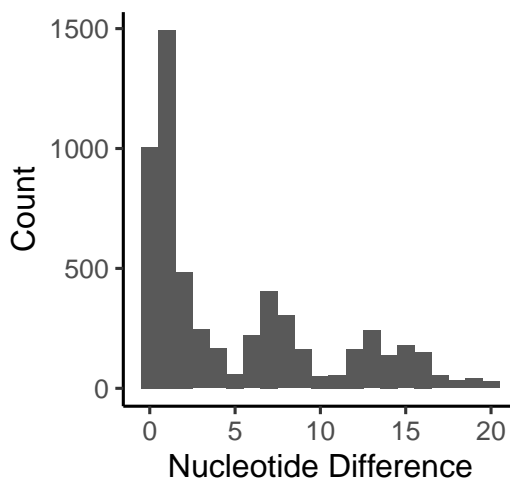
IGHV1-3*03

114 sequences assigned
1 (0.9%) exact matches, in which:
1 unique CDR3
1 unique J



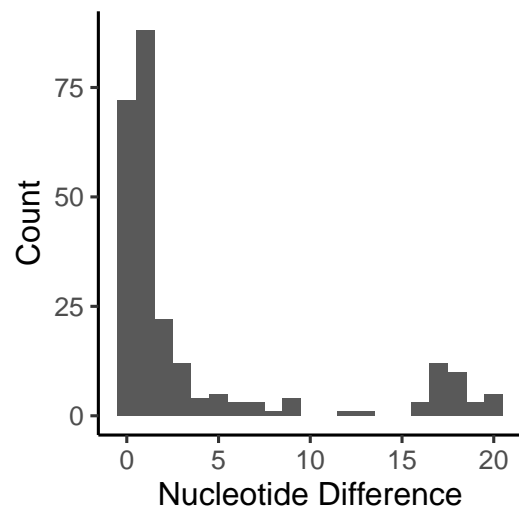
IGHV1-8*01

6885 sequences assigned
1007 (14.6%) exact matches, in which:
714 unique CDR3
6 unique J



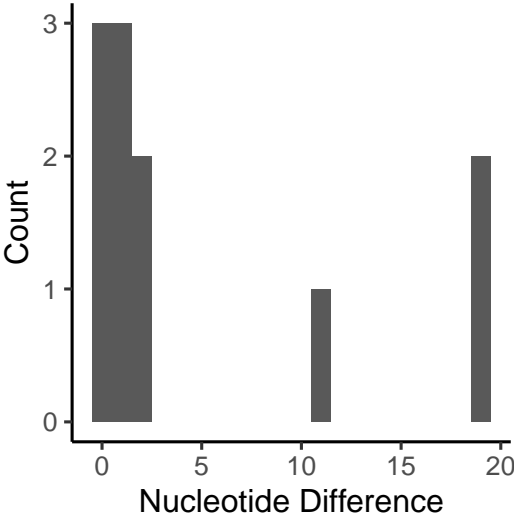
IGHV1-24*01

289 sequences assigned
72 (24.9%) exact matches, in which:
59 unique CDR3
6 unique J



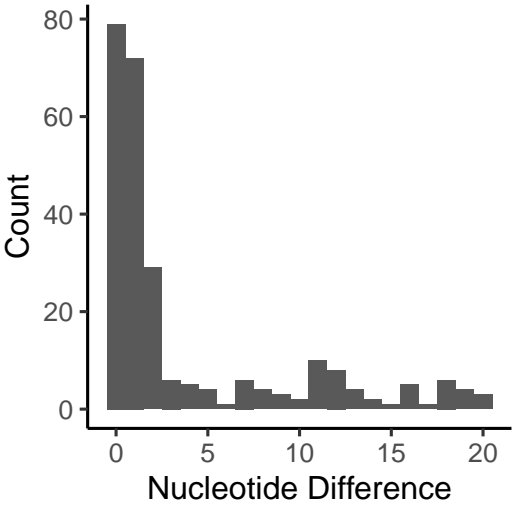
IGHV1-45*02

11 sequences assigned
3 (27.3%) exact matches, in which:
1 unique CDR3
1 unique J



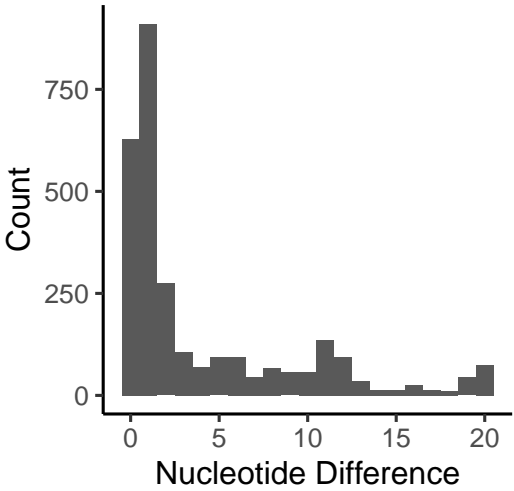
IGHV1-69-2*01

401 sequences assigned
79 (19.7%) exact matches, in which:
59 unique CDR3
5 unique J



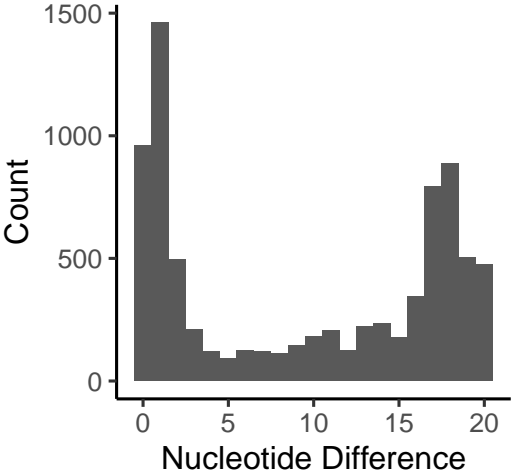
IGHV1-69*10_A244G

3552 sequences assigned
628 (17.7%) exact matches, in which:
476 unique CDR3
6 unique J



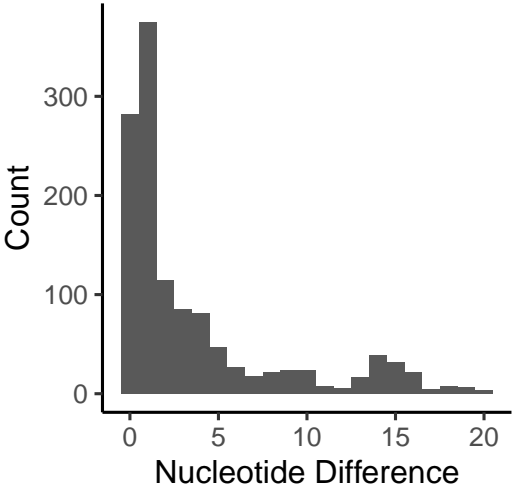
IGHV1-46*01

13847 sequences assigned
960 (6.9%) exact matches, in which:
692 unique CDR3
5 unique J



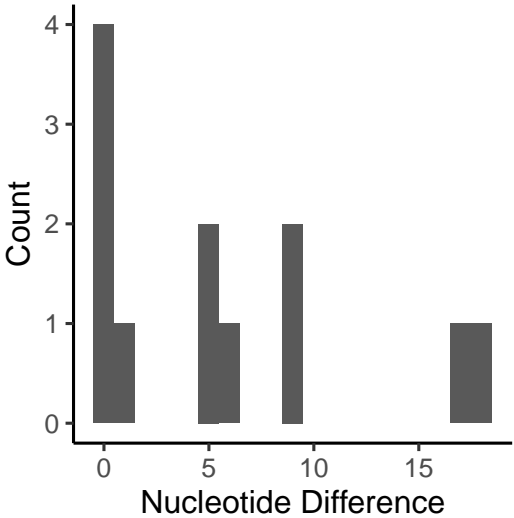
IGHV1-69*10

1789 sequences assigned
282 (15.8%) exact matches, in which:
229 unique CDR3
6 unique J



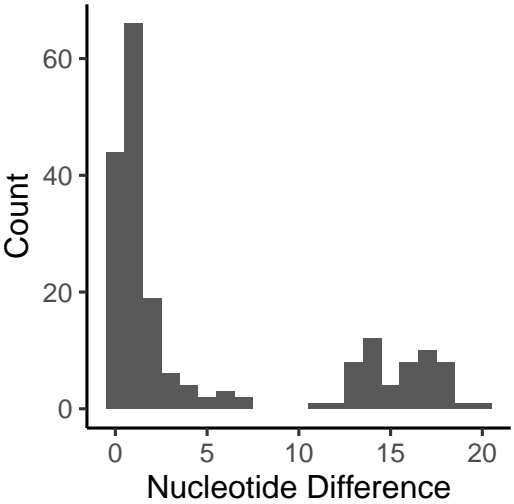
IGHV2-5*01

51 sequences assigned
4 (7.8%) exact matches, in which:
4 unique CDR3
2 unique J



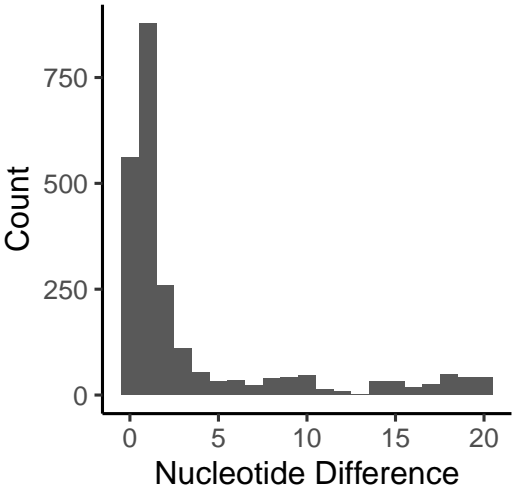
IGHV1-58*02

318 sequences assigned
44 (13.8%) exact matches, in which:
39 unique CDR3
4 unique J



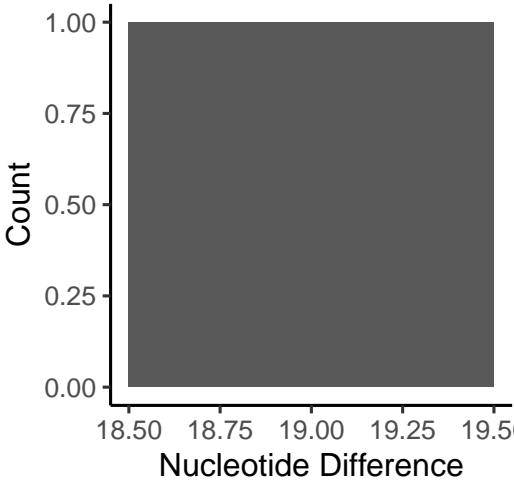
IGHV1-69*01_12_13

3468 sequences assigned
560 (16.1%) exact matches, in which:
427 unique CDR3
6 unique J



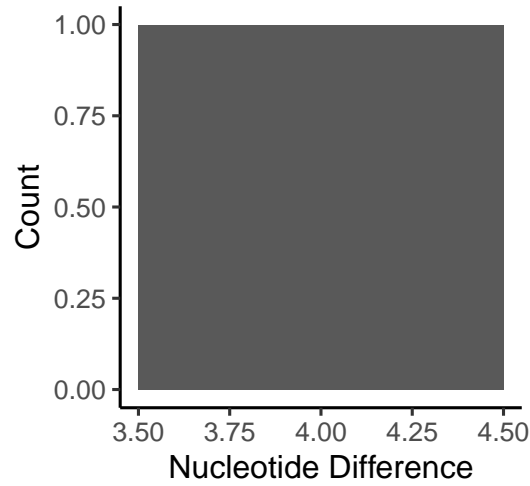
IGHV2-5*04

2 sequences assigned
No exact matches.



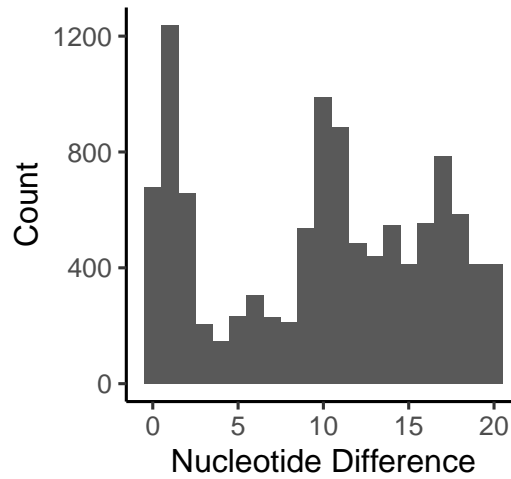
IGHV2-26*01

1 sequences assigned
No exact matches.



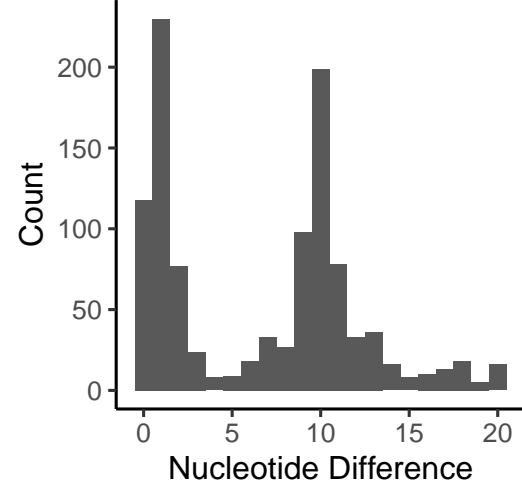
IGHV3-9*01

14646 sequences assigned
678 (4.6%) exact matches, in which:
411 unique CDR3
6 unique J



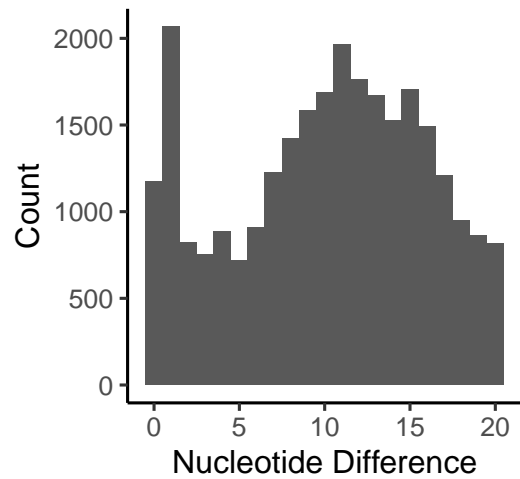
IGHV3-13*01

1504 sequences assigned
118 (7.8%) exact matches, in which:
76 unique CDR3
5 unique J



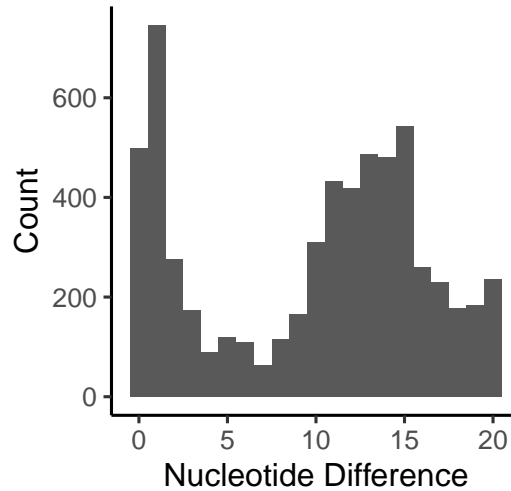
IGHV3-7*01

31597 sequences assigned
1174 (3.7%) exact matches, in which:
722 unique CDR3
6 unique J



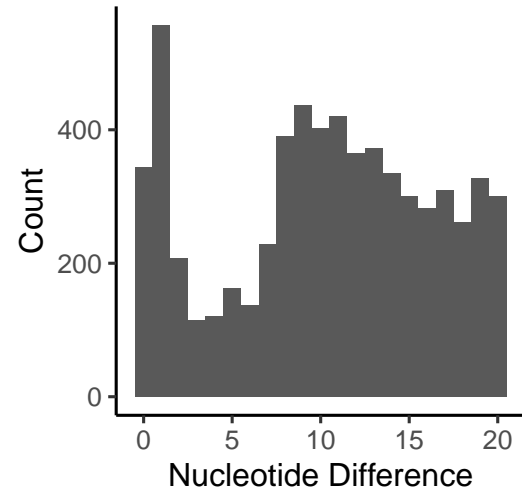
IGHV3-11*01

7826 sequences assigned
498 (6.4%) exact matches, in which:
345 unique CDR3
6 unique J



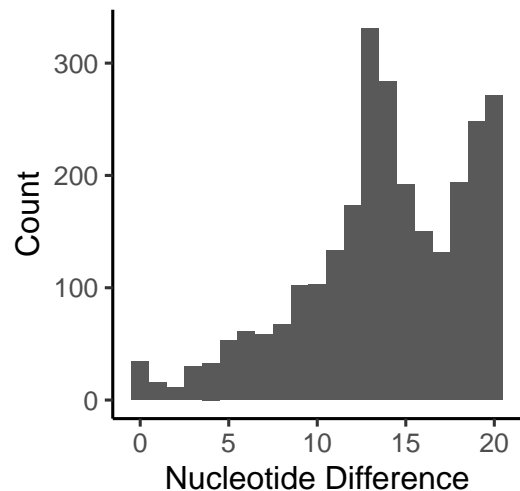
IGHV3-15*01_02

8800 sequences assigned
344 (3.9%) exact matches, in which:
256 unique CDR3
6 unique J



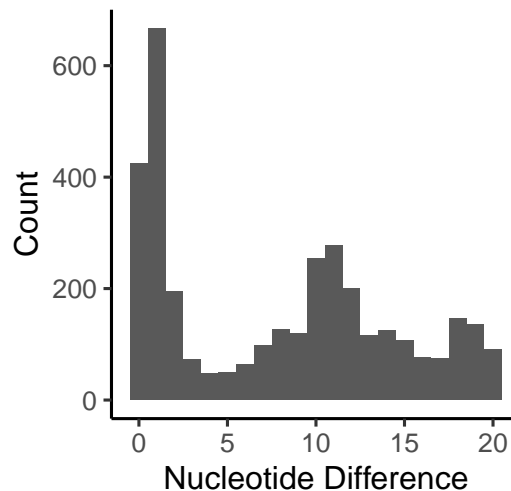
IGHV3-7*03

3384 sequences assigned
34 (1%) exact matches, in which:
34 unique CDR3
4 unique J



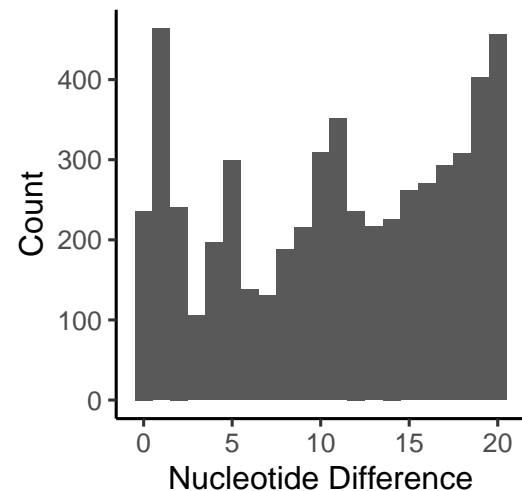
IGHV3-11*04

4052 sequences assigned
424 (10.5%) exact matches, in which:
279 unique CDR3
6 unique J



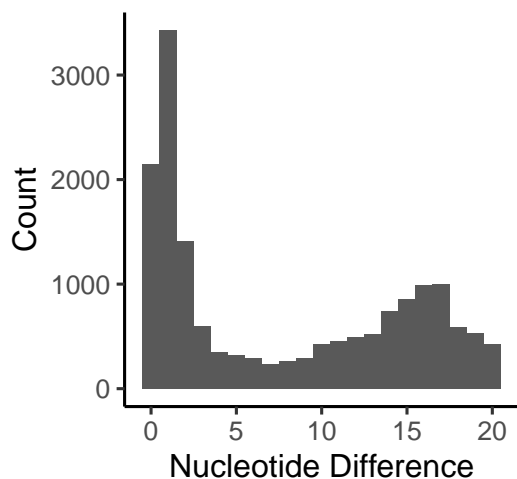
IGHV3-20*03_04

6857 sequences assigned
236 (3.4%) exact matches, in which:
160 unique CDR3
6 unique J



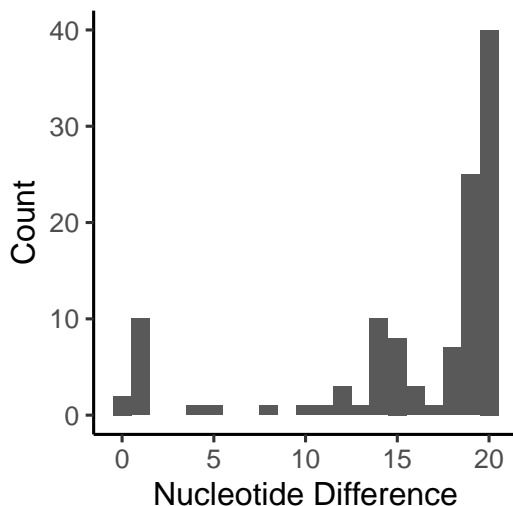
IGHV3-21*01_02

22092 sequences assigned
2145 (9.7%) exact matches, in which:
1319 unique CDR3
6 unique J



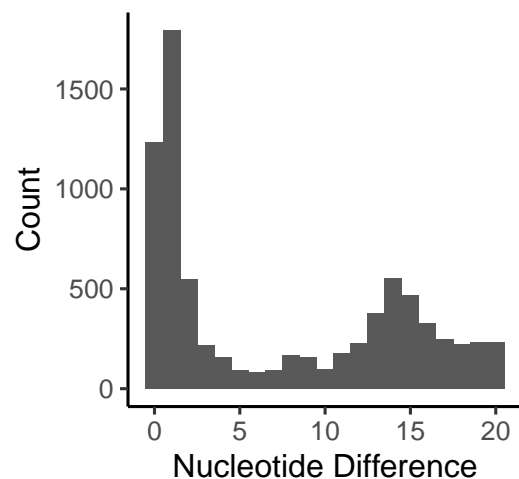
IGHV3-30-3*01

1394 sequences assigned
2 (0.1%) exact matches, in which:
2 unique CDR3
2 unique J



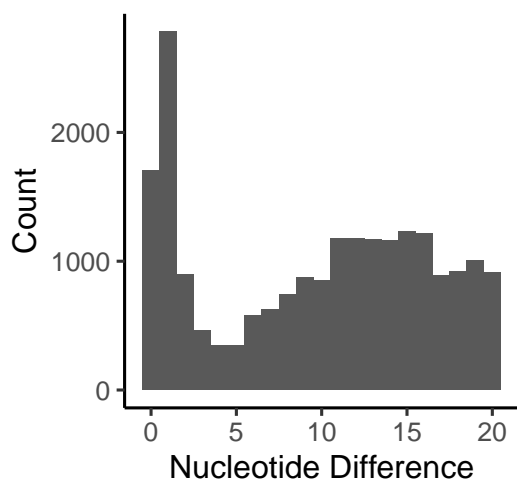
IGHV3-33*01

9864 sequences assigned
1232 (12.5%) exact matches, in which:
697 unique CDR3
6 unique J



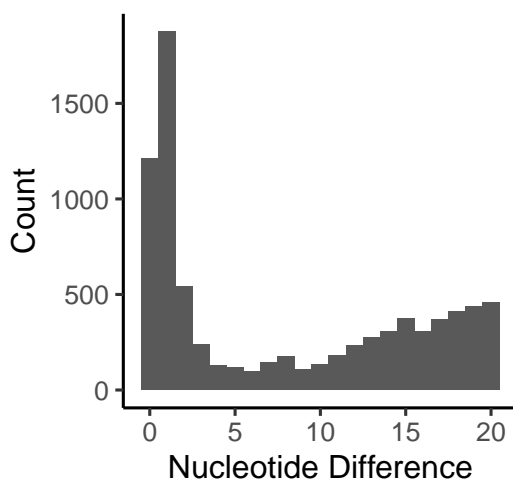
IGHV3-23*01_04

31745 sequences assigned
1707 (5.4%) exact matches, in which:
1145 unique CDR3
6 unique J



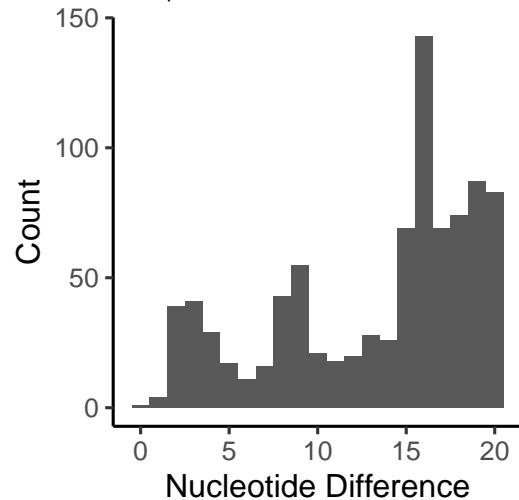
IGHV3-30*04

10776 sequences assigned
1210 (11.2%) exact matches, in which:
830 unique CDR3
6 unique J



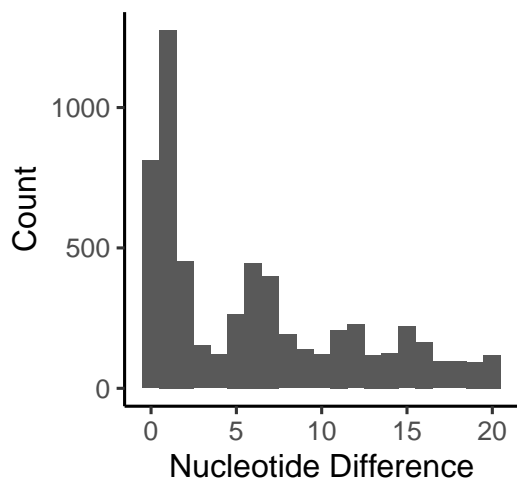
IGHV3-33*05

1818 sequences assigned
1 (0.1%) exact matches, in which:
1 unique CDR3
1 unique J



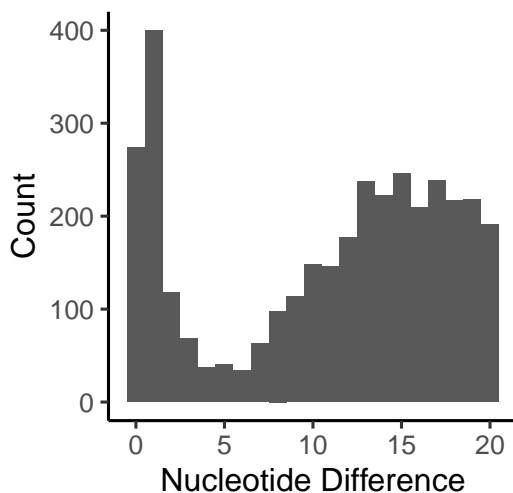
IGHV3-30*01

7633 sequences assigned
811 (10.6%) exact matches, in which:
540 unique CDR3
6 unique J



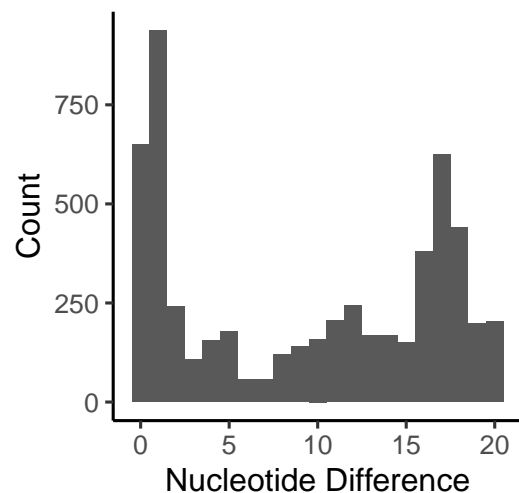
IGHV3-30*18

5301 sequences assigned
274 (5.2%) exact matches, in which:
198 unique CDR3
5 unique J



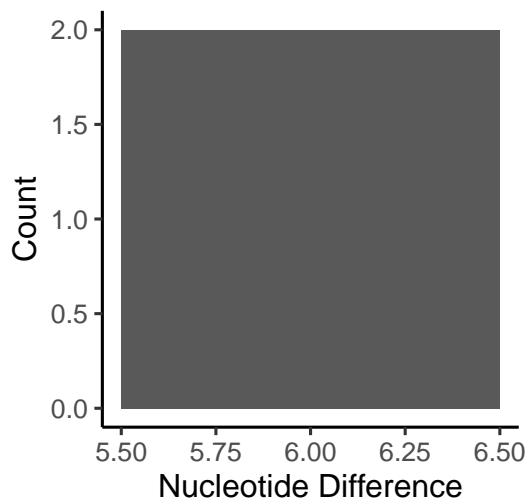
IGHV3-33*06

7077 sequences assigned
650 (9.2%) exact matches, in which:
340 unique CDR3
6 unique J



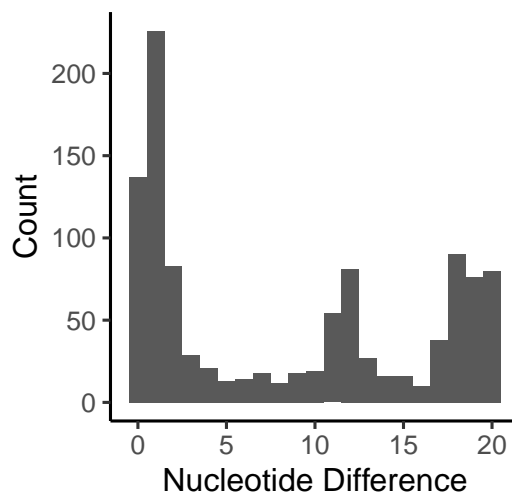
IGHV3-35*01

2 sequences assigned
No exact matches.



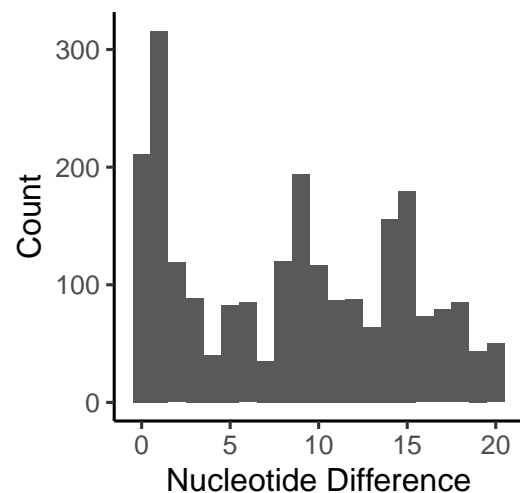
IGHV3-43*01

1975 sequences assigned
137 (6.9%) exact matches, in which:
93 unique CDR3
4 unique J



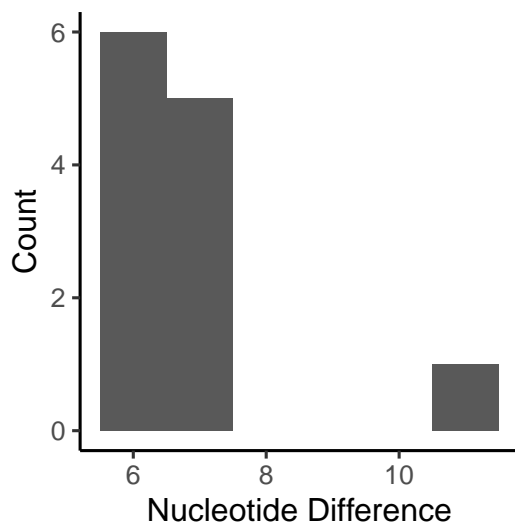
IGHV3-49*04

3264 sequences assigned
211 (6.5%) exact matches, in which:
143 unique CDR3
6 unique J



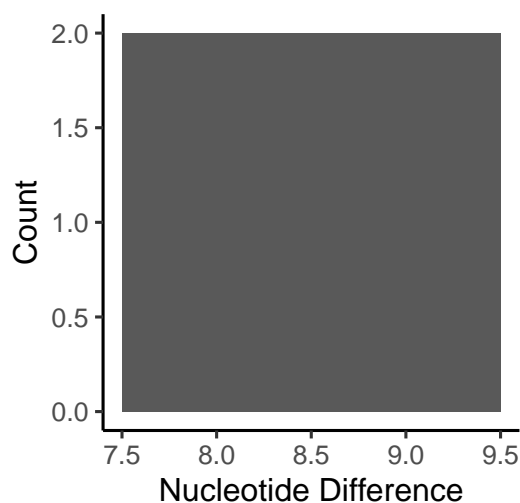
IGHV3-35*02

12 sequences assigned
No exact matches.



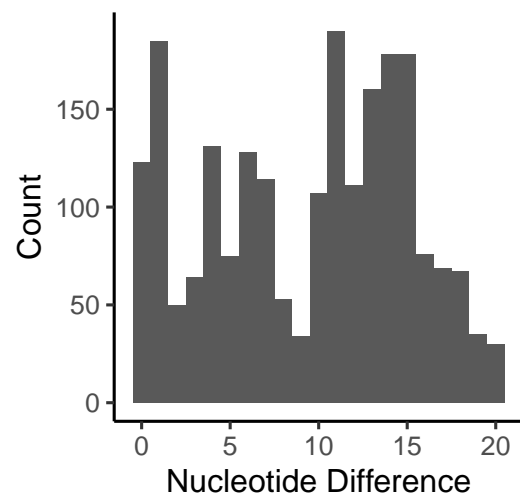
IGHV3-47*01

4 sequences assigned
No exact matches.



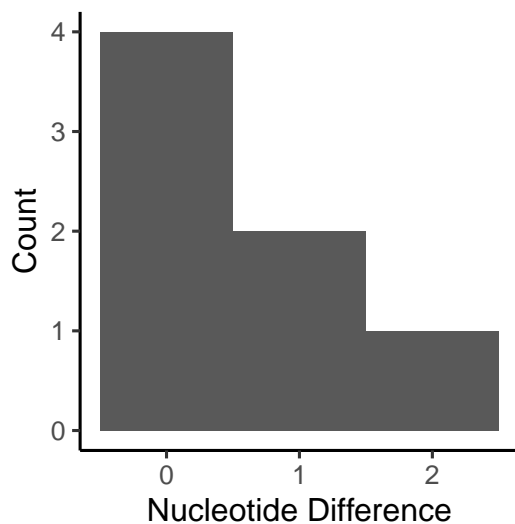
IGHV3-49*03_05

2982 sequences assigned
123 (4.1%) exact matches, in which:
79 unique CDR3
5 unique J



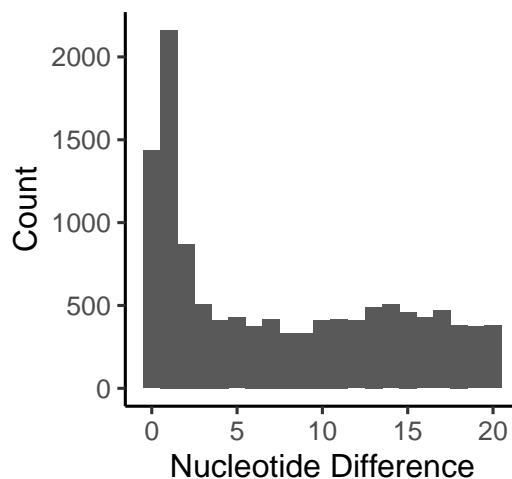
IGHV3-38-3*01

7 sequences assigned
4 (57.1%) exact matches, in which:
4 unique CDR3
1 unique J



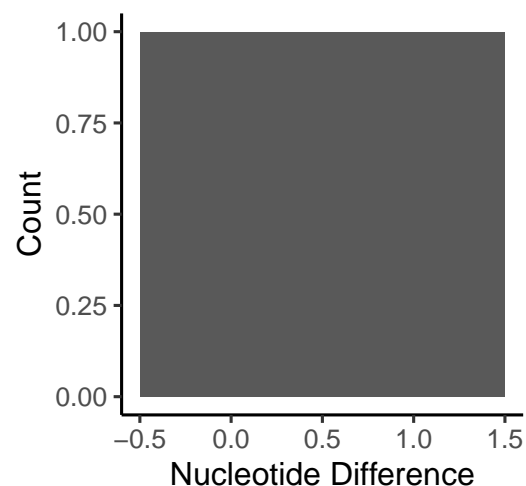
IGHV3-48*03

15727 sequences assigned
1436 (9.1%) exact matches, in which:
947 unique CDR3
6 unique J



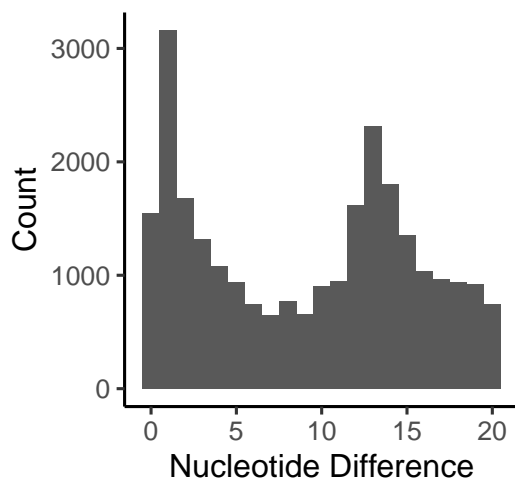
IGHV3-52*01_03

2 sequences assigned
1 (50%) exact matches, in which:
1 unique CDR3
1 unique J



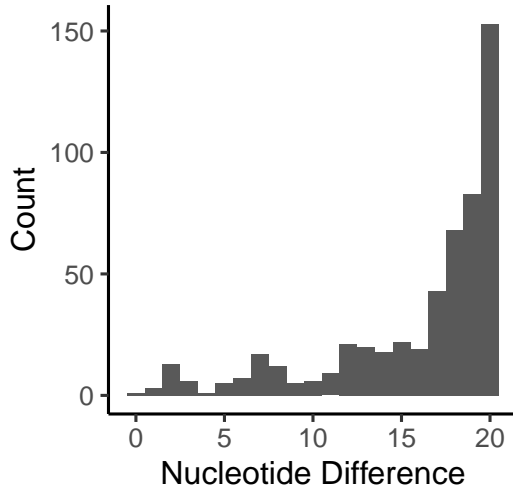
IGHV3-53*01_02

33883 sequences assigned
1547 (4.6%) exact matches, in which:
940 unique CDR3
6 unique J



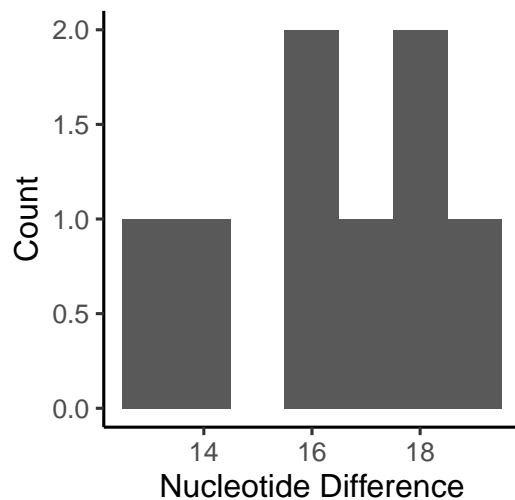
IGHV3-66*01

1235 sequences assigned
1 (0.1%) exact matches, in which:
1 unique CDR3
1 unique J



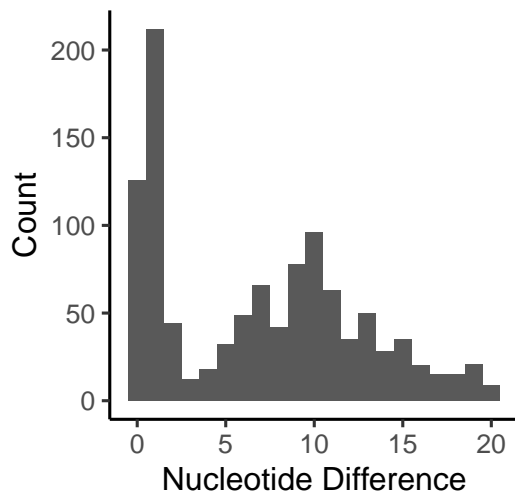
IGHV3-69-1*02

39 sequences assigned
No exact matches.



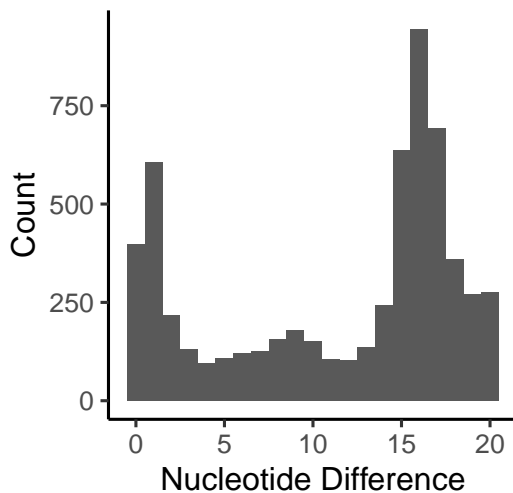
IGHV3-64*01

1562 sequences assigned
126 (8.1%) exact matches, in which:
77 unique CDR3
5 unique J



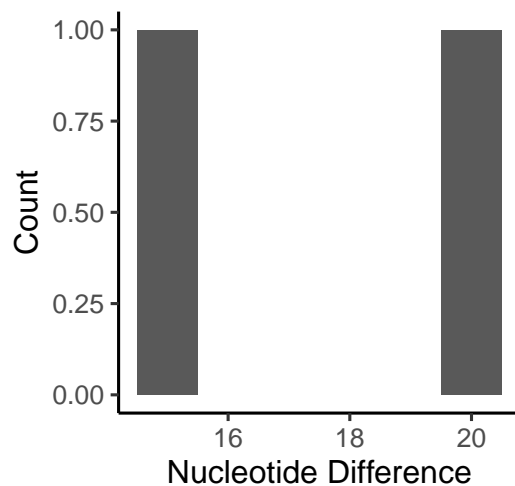
IGHV3-66*02

8174 sequences assigned
399 (4.9%) exact matches, in which:
235 unique CDR3
6 unique J



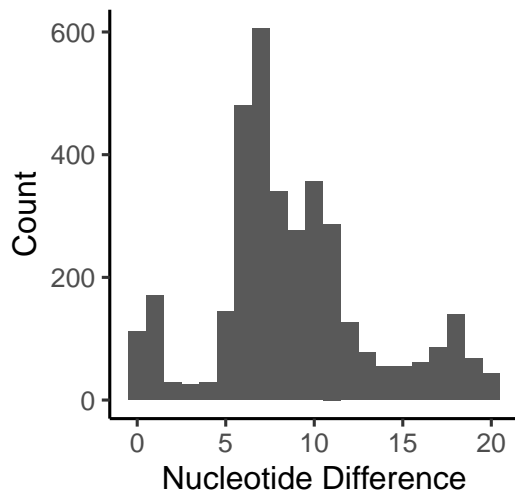
IGHV3-71*01_04

14 sequences assigned
No exact matches.



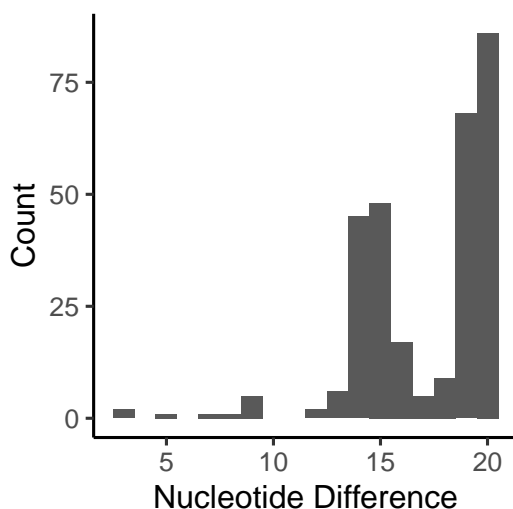
IGHV3-64*02_07

3941 sequences assigned
111 (2.8%) exact matches, in which:
73 unique CDR3
5 unique J



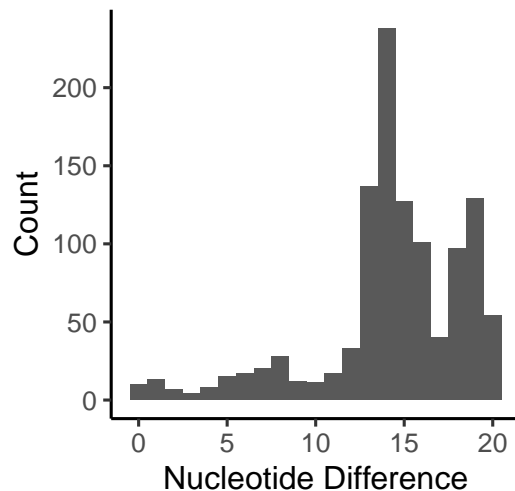
IGHV3-69-1*01

351 sequences assigned
No exact matches.



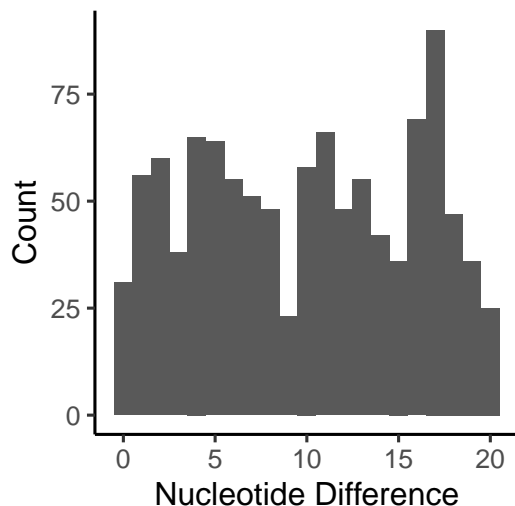
IGHV3-72*01

1743 sequences assigned
10 (0.6%) exact matches, in which:
6 unique CDR3
3 unique J



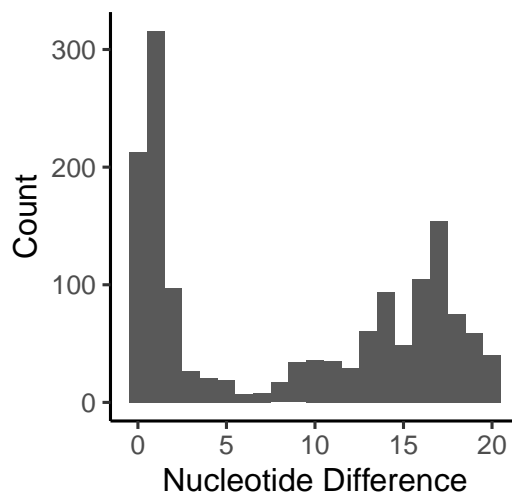
IGHV3-73*01_02

1600 sequences assigned
31 (1.9%) exact matches, in which:
28 unique CDR3
5 unique J



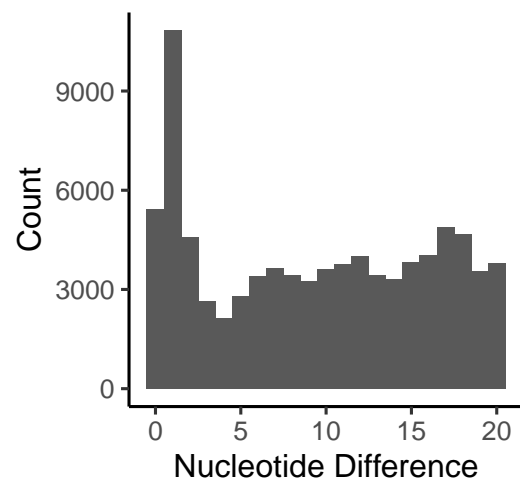
IGHV3-43D*03

1912 sequences assigned
213 (11.1%) exact matches, in which:
139 unique CDR3
6 unique J



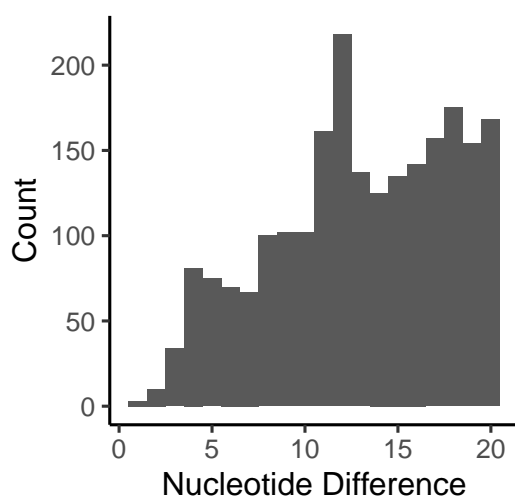
IGHV4-4*07

110735 sequences assigned
5433 (4.9%) exact matches, in which:
3233 unique CDR3
6 unique J



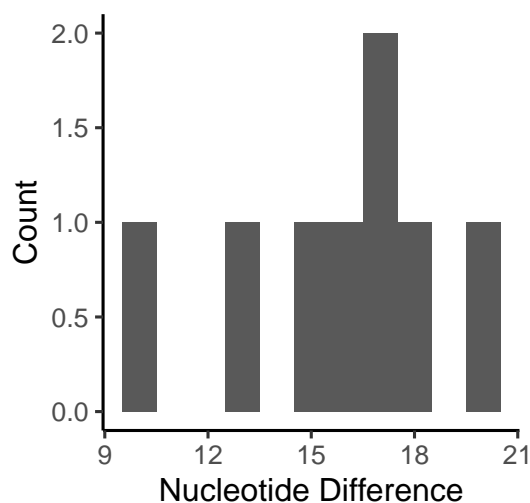
IGHV3-74*03

5099 sequences assigned
No exact matches.



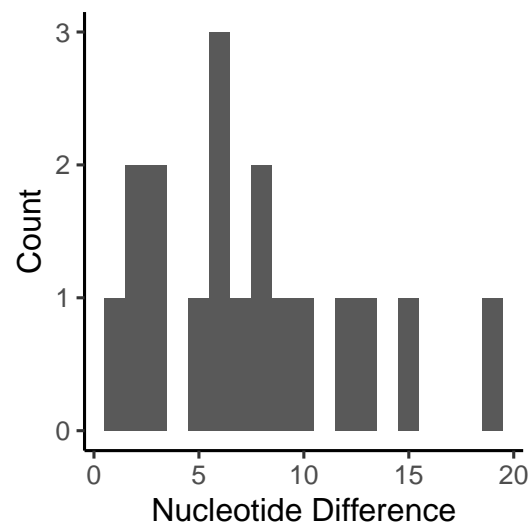
IGHV3-64D*06

10 sequences assigned
No exact matches.



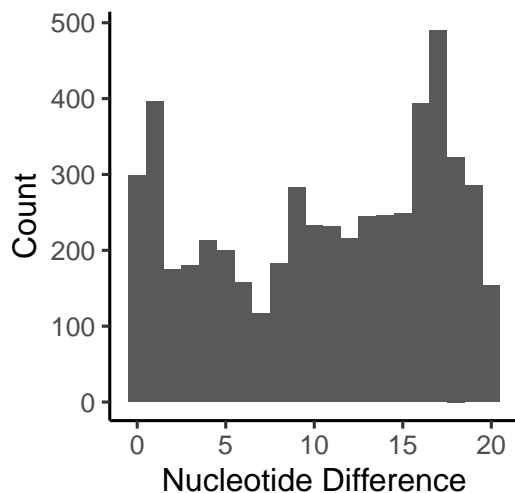
IGHV4-28*03

23 sequences assigned
No exact matches.



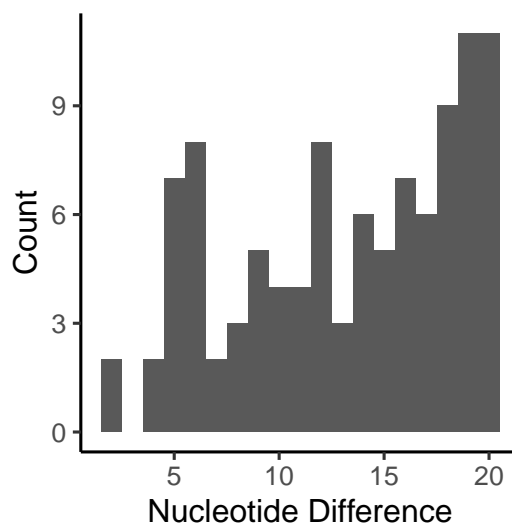
IGHV3-74*01_02

7041 sequences assigned
298 (4.2%) exact matches, in which:
192 unique CDR3
6 unique J



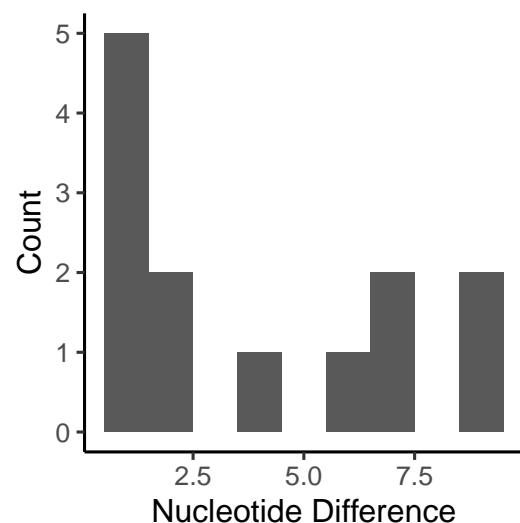
IGHV3-NL1*01

154 sequences assigned
No exact matches.



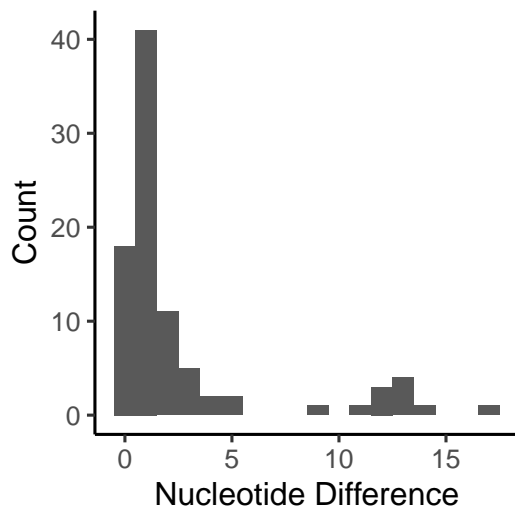
IGHV4-28*06

14 sequences assigned
No exact matches.



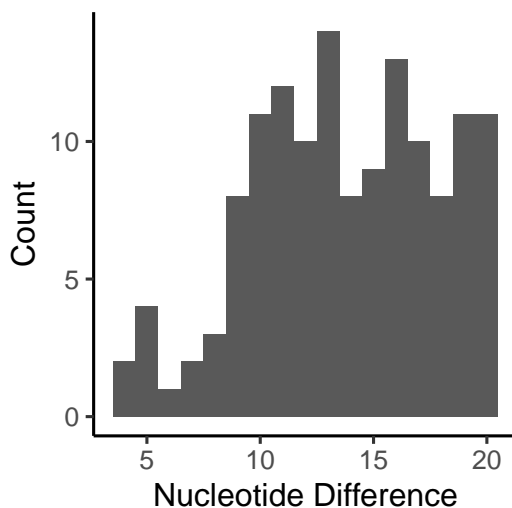
IGHV4-28*02_05

91 sequences assigned
18 (19.8%) exact matches, in which:
9 unique CDR3
2 unique J



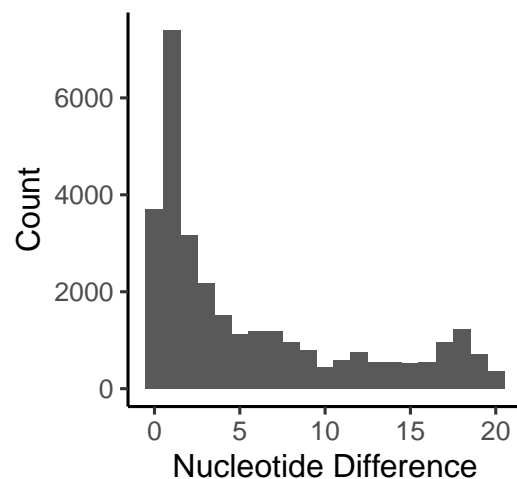
IGHV4-30-4*08

243 sequences assigned
No exact matches.



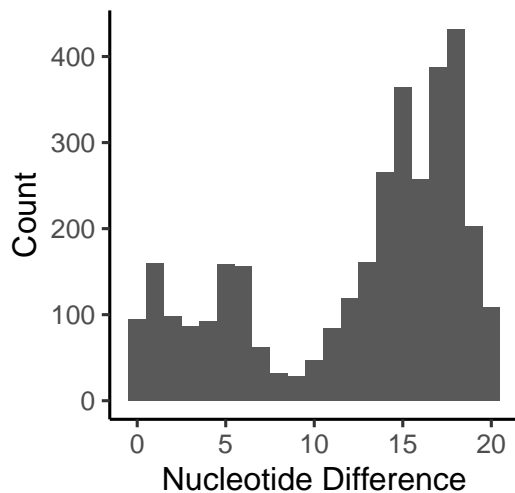
IGHV4-38-2*02

37304 sequences assigned
3699 (9.9%) exact matches, in which:
2146 unique CDR3
6 unique J



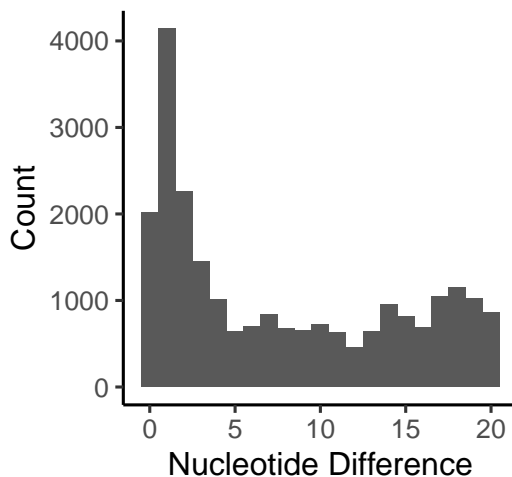
IGHV4-30-2*01

4673 sequences assigned
95 (2%) exact matches, in which:
66 unique CDR3
5 unique J



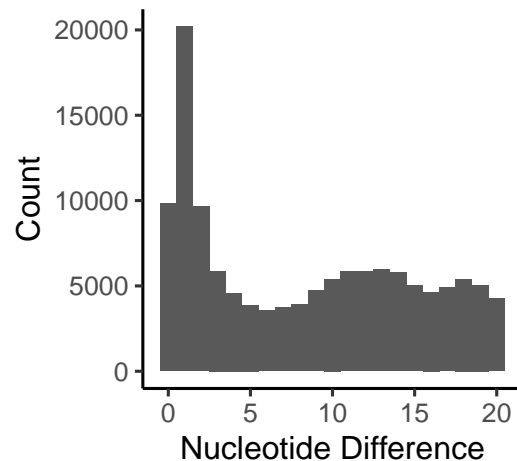
IGHV4-31*02

34486 sequences assigned
2021 (5.9%) exact matches, in which:
1207 unique CDR3
6 unique J



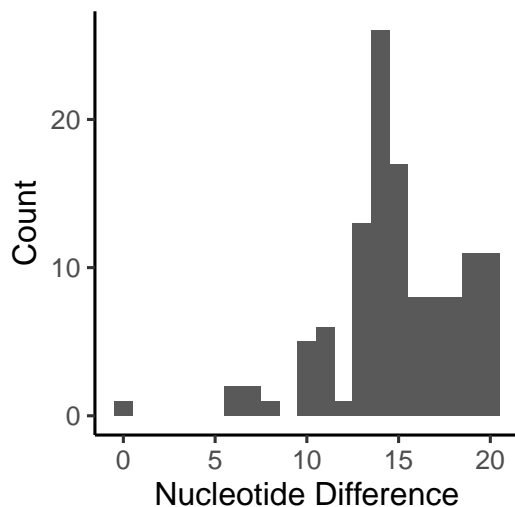
IGHV4-39*07

170102 sequences assigned
9829 (5.8%) exact matches, in which:
5466 unique CDR3
6 unique J



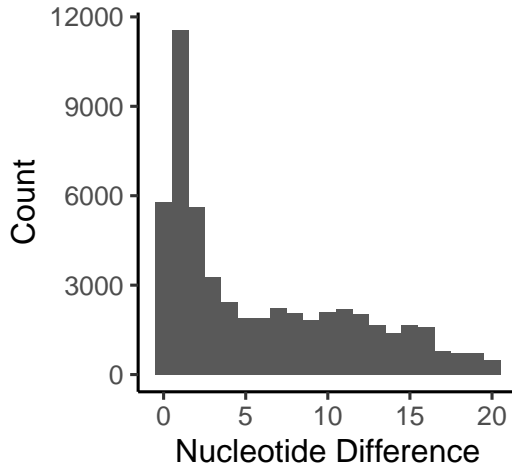
IGHV4-30-4*01

413 sequences assigned
1 (0.2%) exact matches, in which:
1 unique CDR3
1 unique J



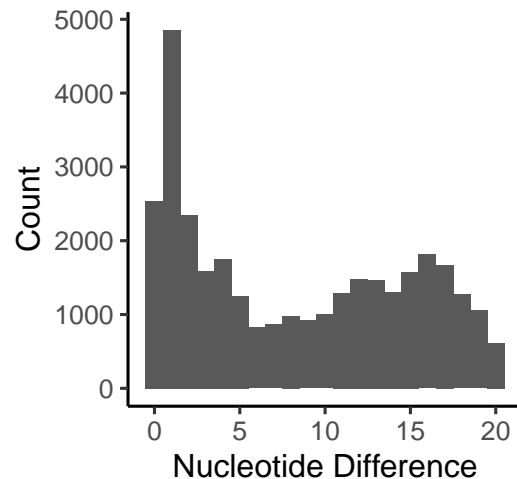
IGHV4-34*01_02

60603 sequences assigned
5772 (9.5%) exact matches, in which:
3263 unique CDR3
6 unique J



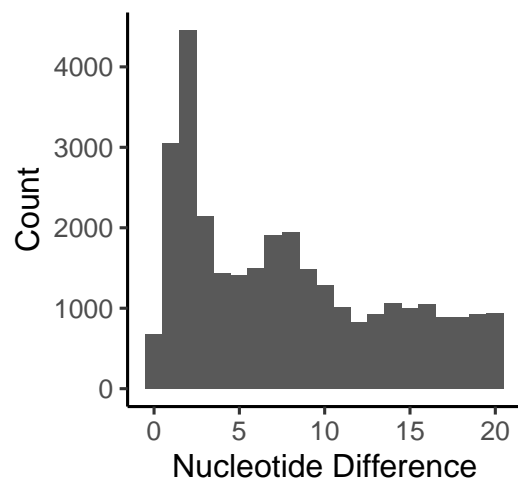
IGHV4-59*08

39004 sequences assigned
2537 (6.5%) exact matches, in which:
1498 unique CDR3
6 unique J



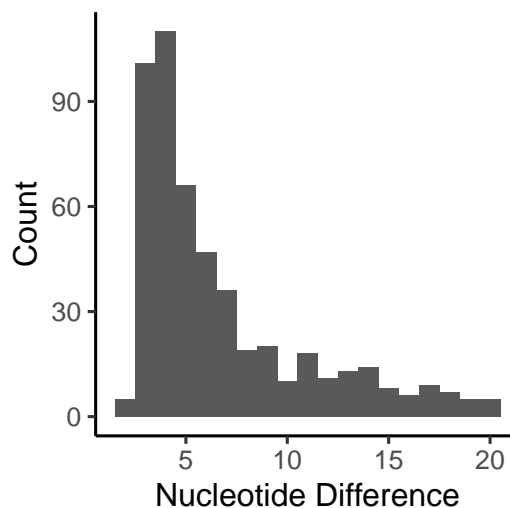
IGHV4–59*12

40016 sequences assigned
679 (1.7%) exact matches, in which:
594 unique CDR3
6 unique J



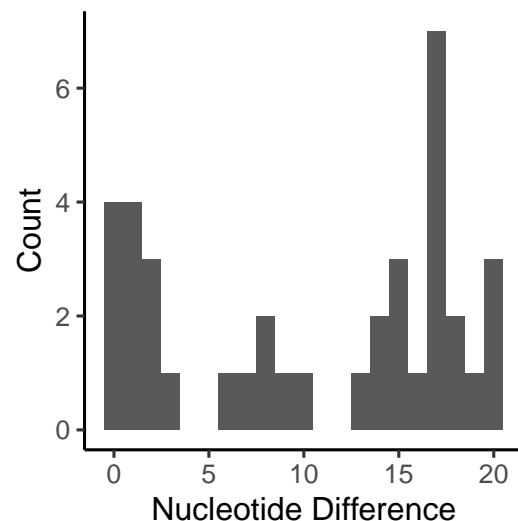
IGHV4/OR15–8*01

560 sequences assigned
No exact matches.



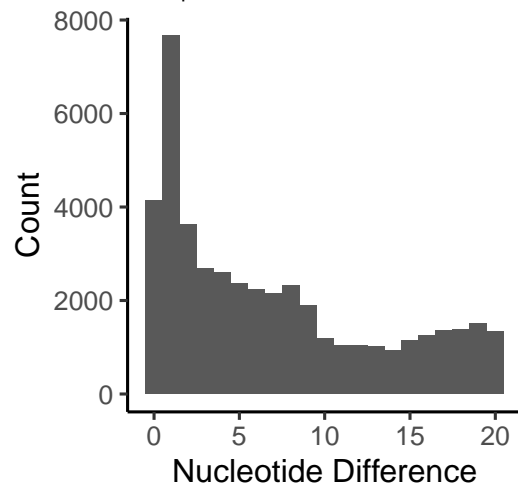
IGHV5–51*06

45 sequences assigned
4 (8.9%) exact matches, in which:
4 unique CDR3
2 unique J



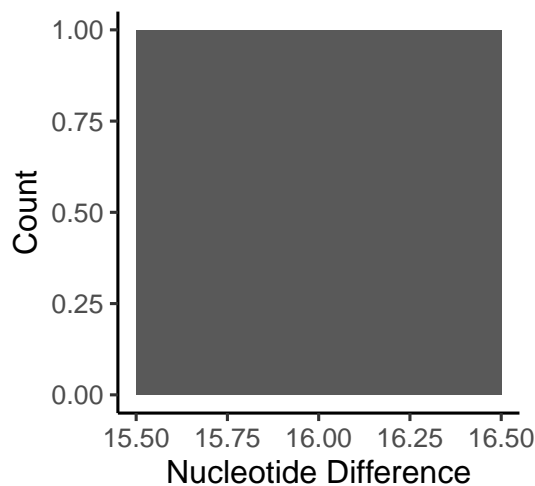
IGHV4–59*01_07

55692 sequences assigned
4146 (7.4%) exact matches, in which:
2358 unique CDR3
6 unique J



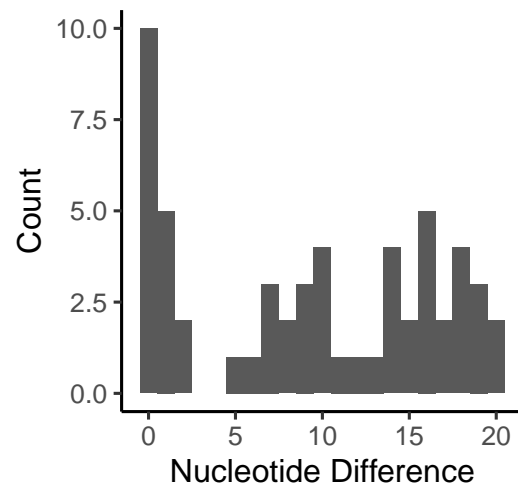
IGHV4/OR15–8*02

16 sequences assigned
No exact matches.



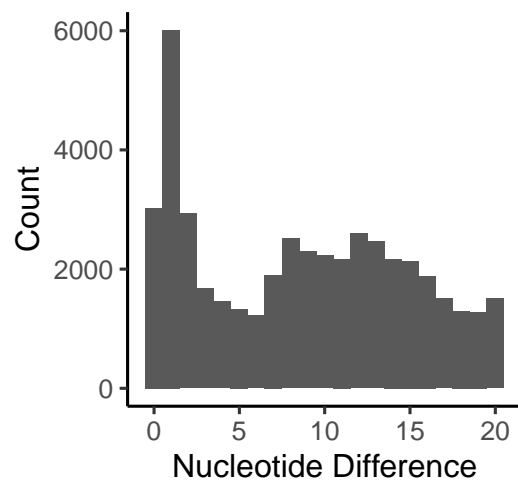
IGHV5–51*07

70 sequences assigned
10 (14.3%) exact matches, in which:
10 unique CDR3
3 unique J



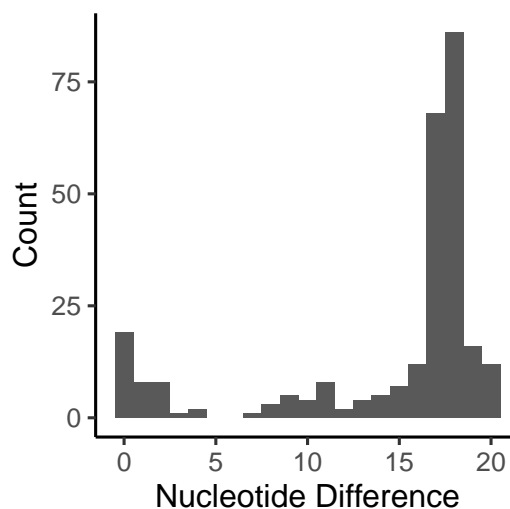
IGHV4–61*02

58819 sequences assigned
3024 (5.1%) exact matches, in which:
1736 unique CDR3
6 unique J



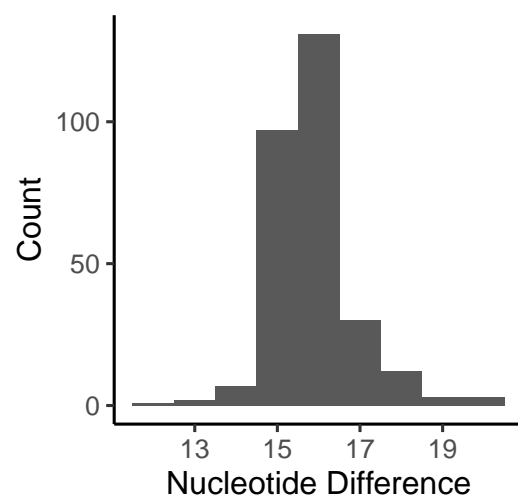
IGHV5–51*04

323 sequences assigned
19 (5.9%) exact matches, in which:
18 unique CDR3
3 unique J



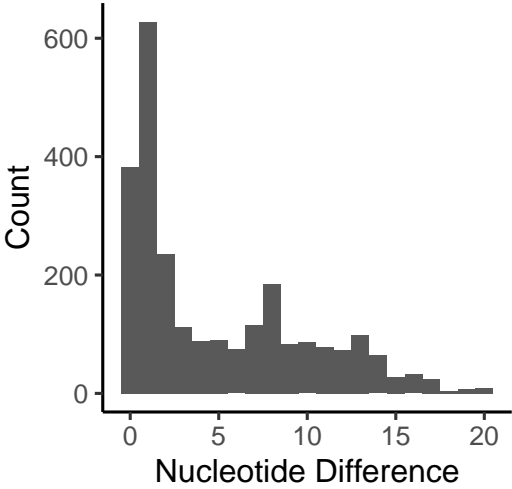
IGHV5–78*01

287 sequences assigned
No exact matches.



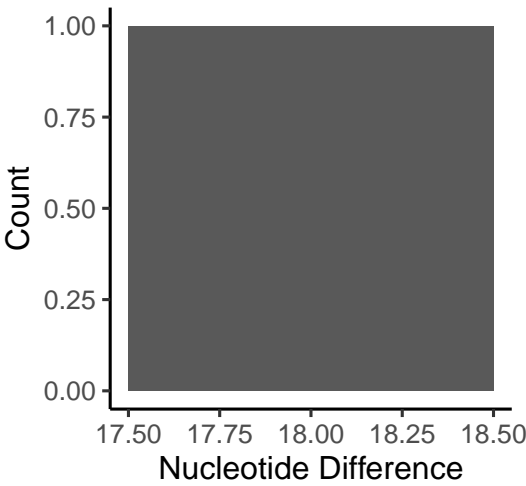
IGHV6-1*01_02

2806 sequences assigned
383 (13.6%) exact matches, in which:
250 unique CDR3
5 unique J



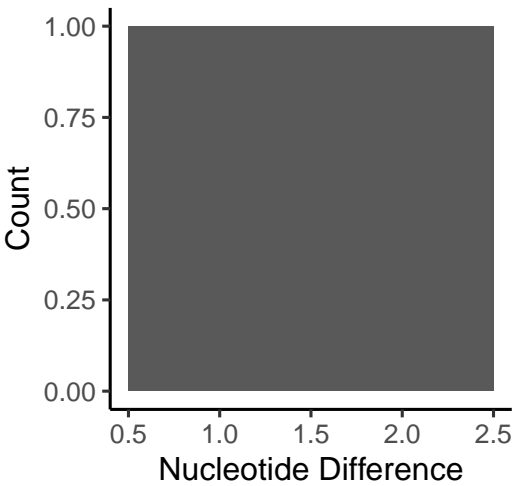
IGHV3/OR16-10*01_03

1 sequences assigned
No exact matches.



IGHV7-4-1*02

107 sequences assigned
No exact matches.



IGHV1-69*10_A244G

