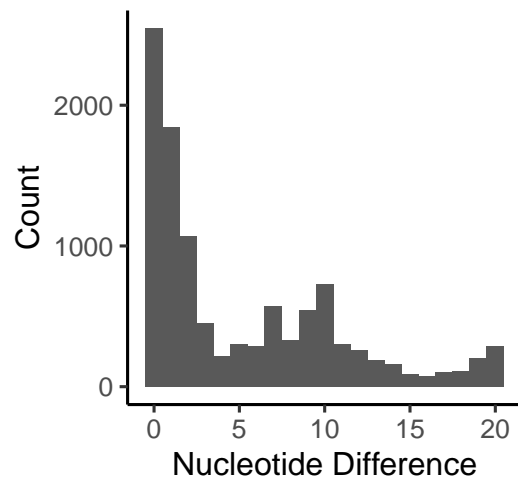


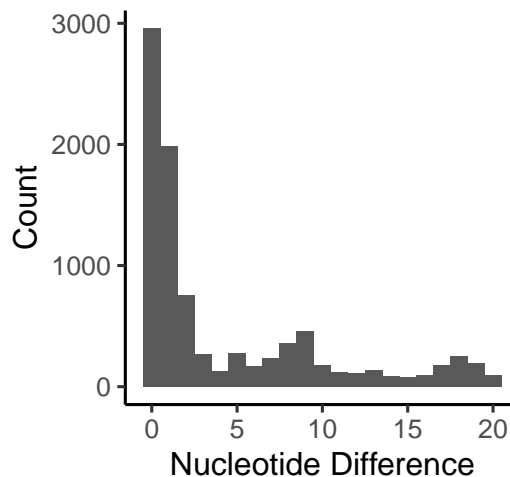
IGHV1-2*02

12128 sequences assigned
2546 (21%) exact matches, in which:
2296 unique CDR3
6 unique J



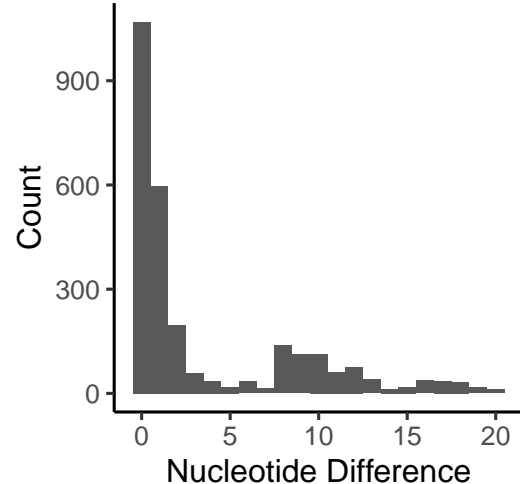
IGHV1-8*01

9757 sequences assigned
2958 (30.3%) exact matches, in which:
2651 unique CDR3
6 unique J



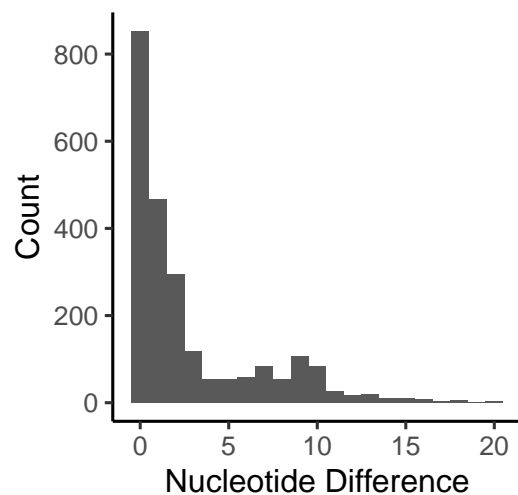
IGHV1-24*01

3091 sequences assigned
1070 (34.6%) exact matches, in which:
970 unique CDR3
6 unique J



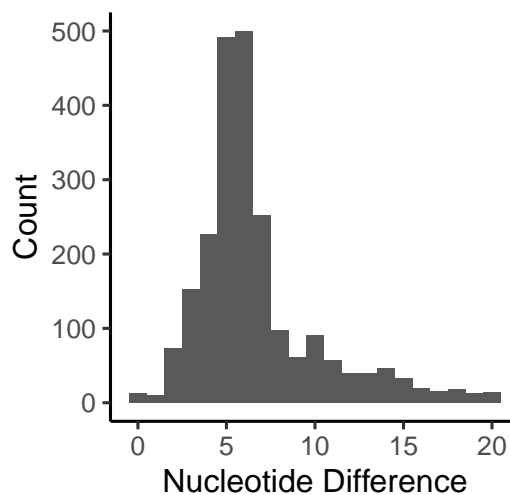
IGHV1-2*04

2345 sequences assigned
853 (36.4%) exact matches, in which:
794 unique CDR3
6 unique J



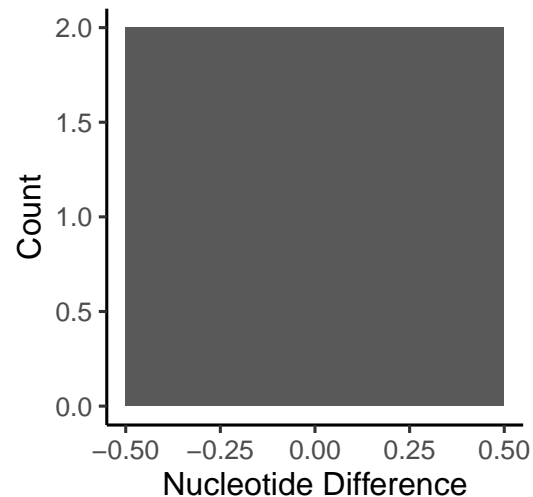
IGHV1-8*02

2460 sequences assigned
13 (0.5%) exact matches, in which:
13 unique CDR3
4 unique J



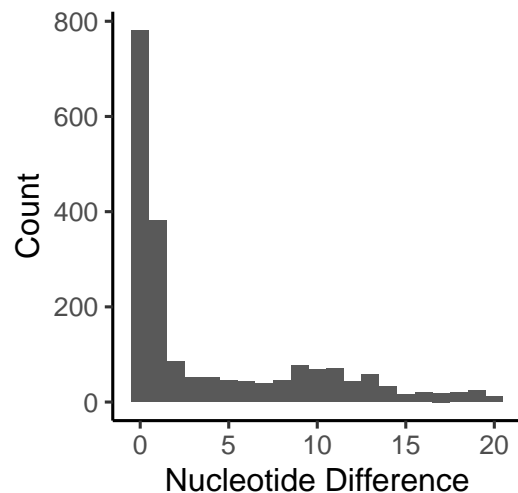
IGHV1-38-4*01

2 sequences assigned
2 (100%) exact matches, in which:
2 unique CDR3
1 unique J



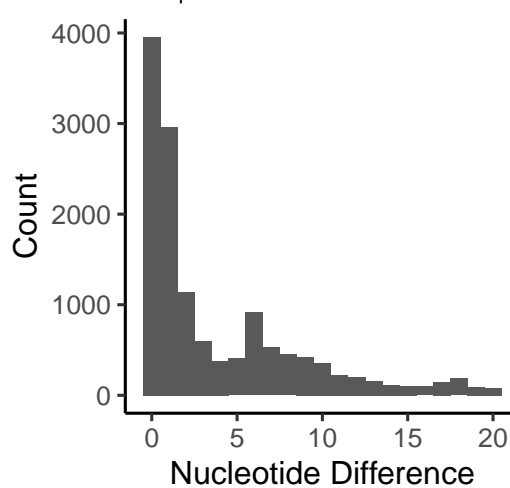
IGHV1-3*01_05

2551 sequences assigned
781 (30.6%) exact matches, in which:
709 unique CDR3
6 unique J



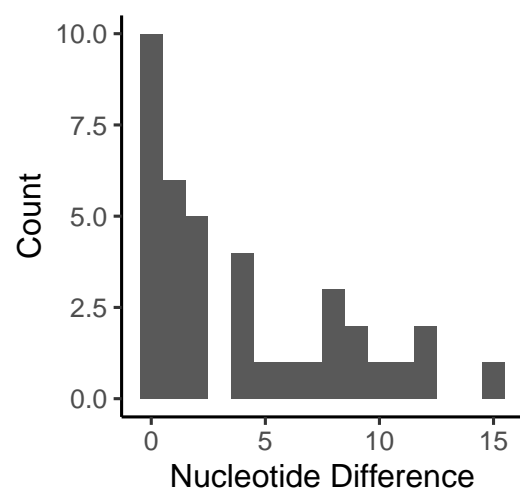
IGHV1-18*01

15295 sequences assigned
3955 (25.9%) exact matches, in which:
3483 unique CDR3
6 unique J



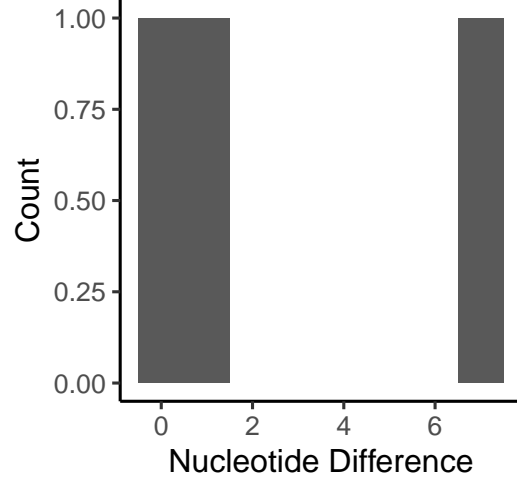
IGHV1-45*02

38 sequences assigned
10 (26.3%) exact matches, in which:
10 unique CDR3
4 unique J



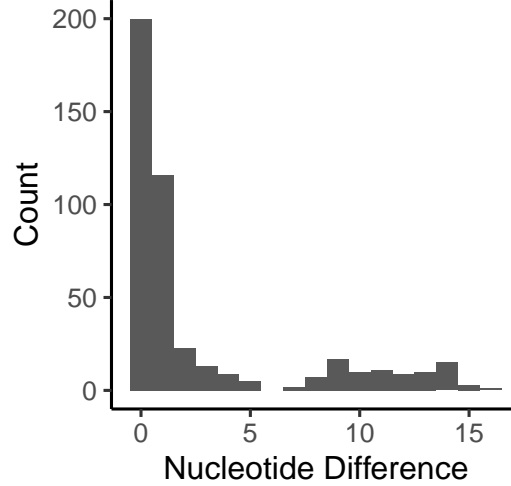
IGHV1-45*03

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



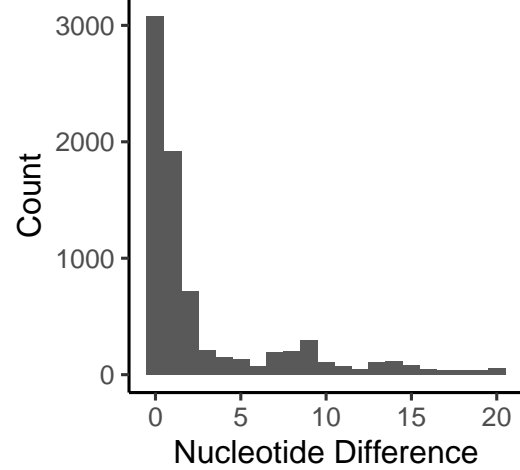
IGHV1-58*02

455 sequences assigned
200 (44%) exact matches, in which:
180 unique CDR3
6 unique J



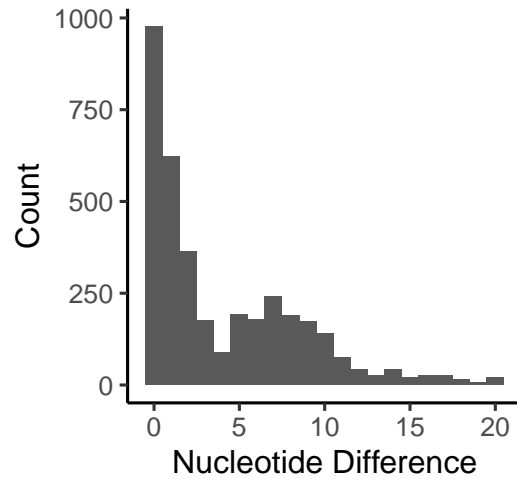
IGHV1-69*04_09

8494 sequences assigned
3077 (36.2%) exact matches, in which:
2805 unique CDR3
6 unique J



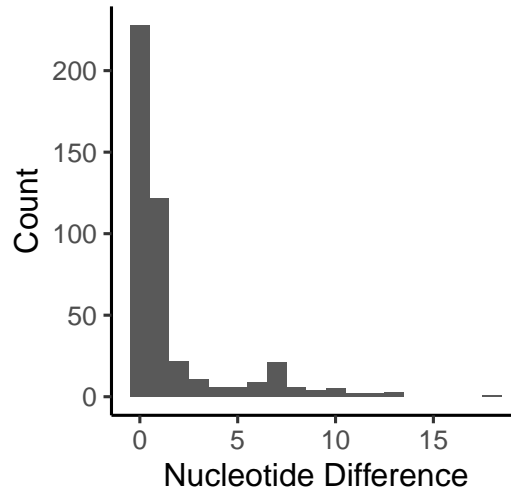
IGHV1-46*01

3917 sequences assigned
976 (24.9%) exact matches, in which:
905 unique CDR3
6 unique J



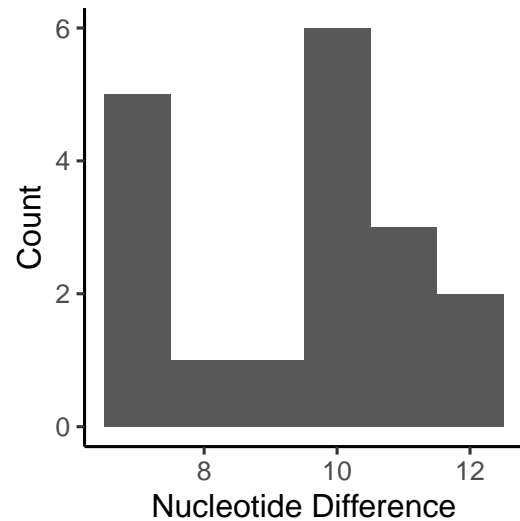
IGHV1-58*01_03

495 sequences assigned
228 (46.1%) exact matches, in which:
209 unique CDR3
6 unique J



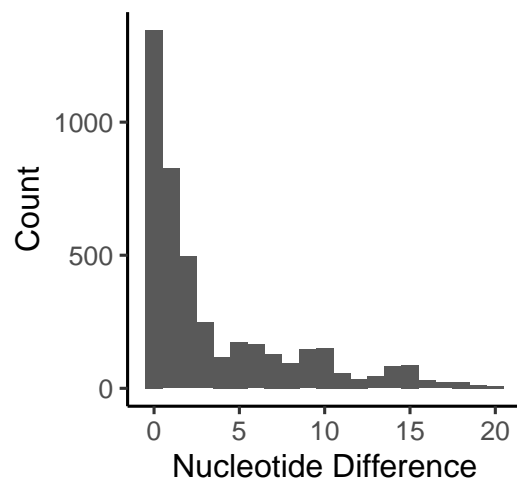
IGHV1-NL1*01

18 sequences assigned
No exact matches.



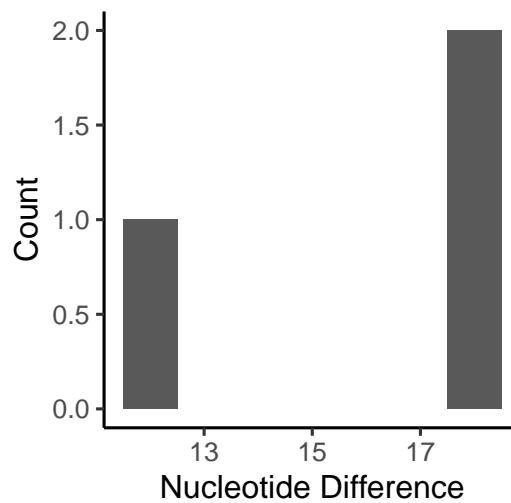
IGHV1-46*04

4540 sequences assigned
1346 (29.6%) exact matches, in which:
1238 unique CDR3
6 unique J



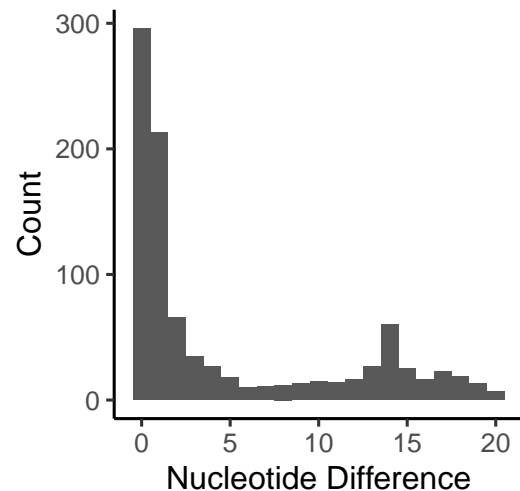
IGHV1-69-2*01

3 sequences assigned
No exact matches.



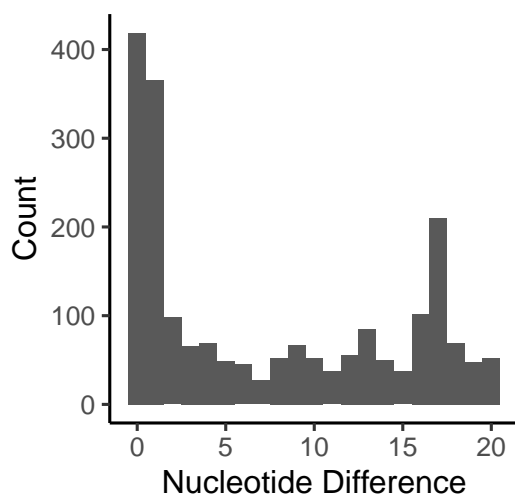
IGHV2-5*01

1273 sequences assigned
296 (23.3%) exact matches, in which:
267 unique CDR3
6 unique J



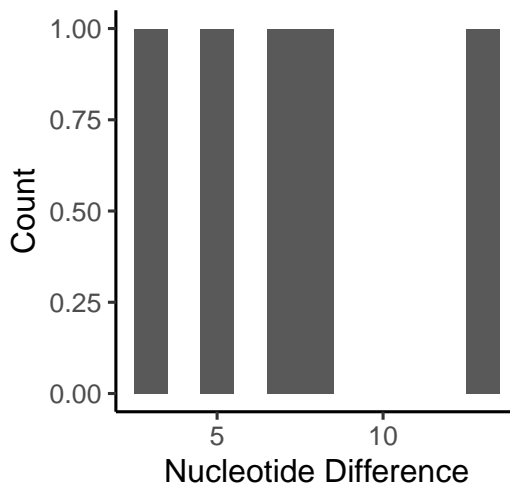
IGHV2-5*02

2404 sequences assigned
419 (17.4%) exact matches, in which:
381 unique CDR3
6 unique J



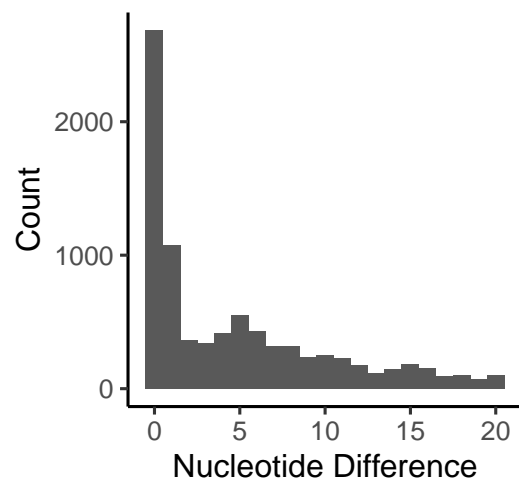
IGHV2-70D*04

6 sequences assigned
No exact matches.



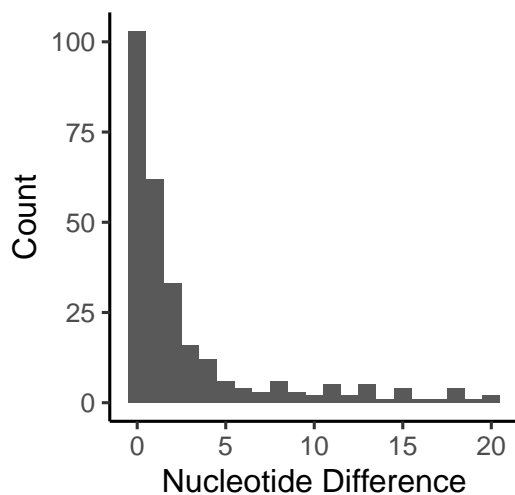
IGHV3-9*01

9375 sequences assigned
2684 (28.6%) exact matches, in which:
1782 unique CDR3
6 unique J



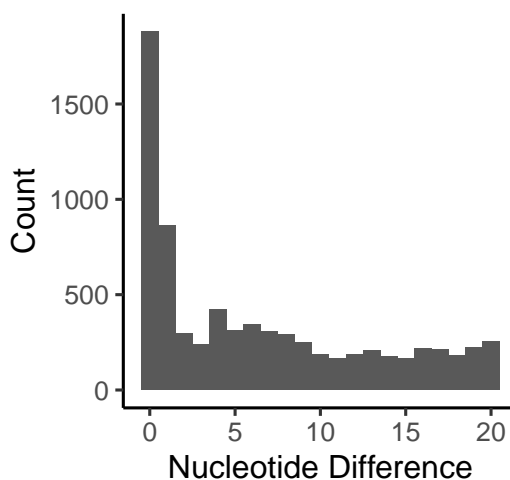
IGHV2-26*01

292 sequences assigned
103 (35.3%) exact matches, in which:
92 unique CDR3
6 unique J



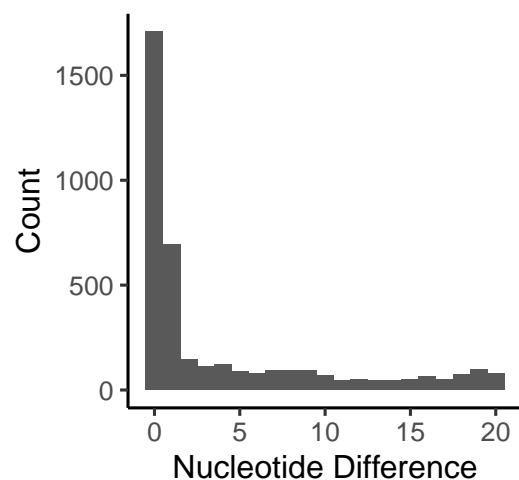
IGHV3-7*01

10765 sequences assigned
1879 (17.5%) exact matches, in which:
1392 unique CDR3
6 unique J



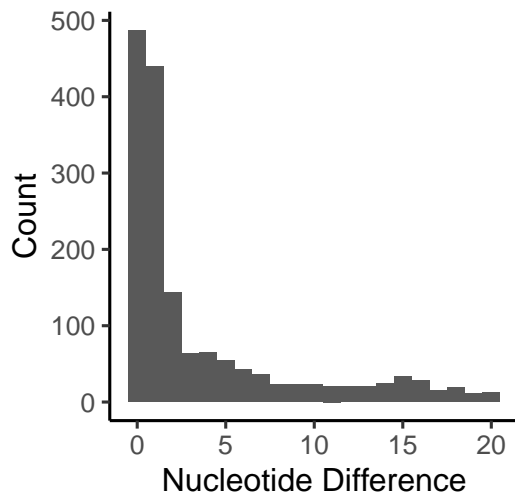
IGHV3-11*01

4790 sequences assigned
1708 (35.7%) exact matches, in which:
1245 unique CDR3
6 unique J



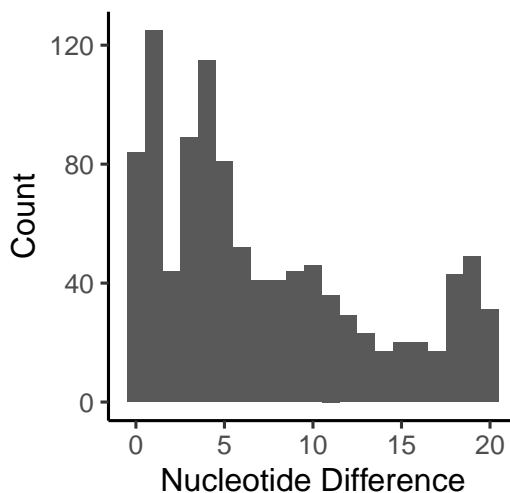
IGHV2-70*11_15

5102 sequences assigned
487 (9.5%) exact matches, in which:
418 unique CDR3
6 unique J



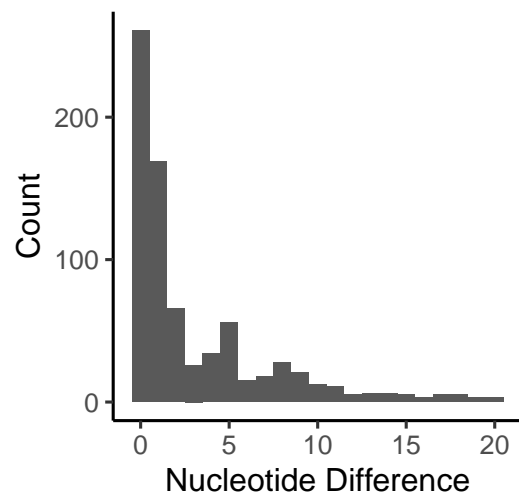
IGHV3-7*03

1302 sequences assigned
84 (6.5%) exact matches, in which:
81 unique CDR3
6 unique J



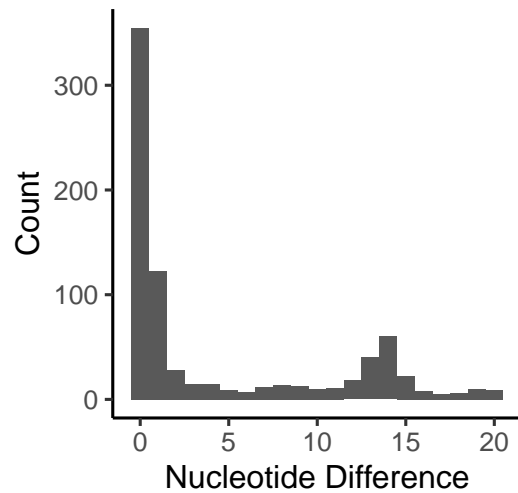
IGHV3-11*04

798 sequences assigned
261 (32.7%) exact matches, in which:
256 unique CDR3
6 unique J



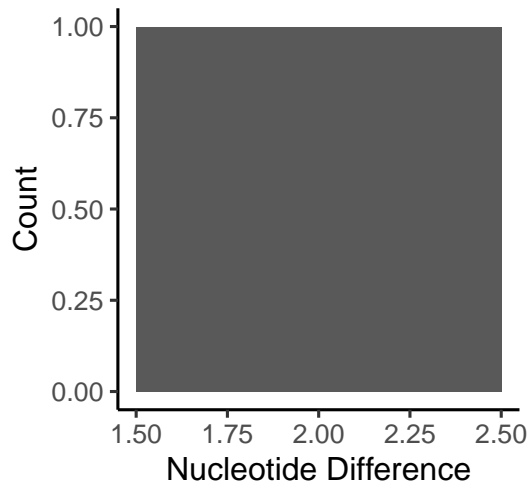
IGHV3-13*01

868 sequences assigned
355 (40.9%) exact matches, in which:
249 unique CDR3
6 unique J



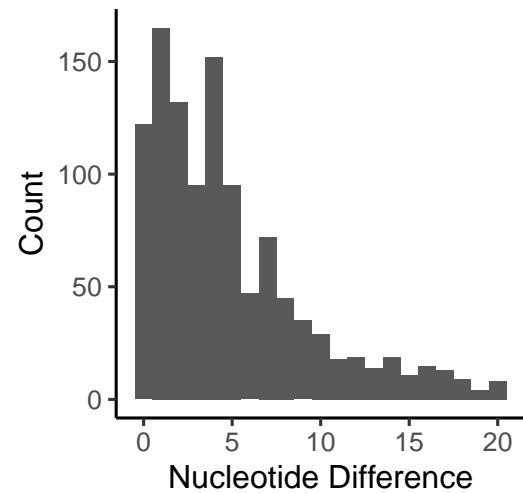
IGHV3-19*01

1 sequences assigned
No exact matches.



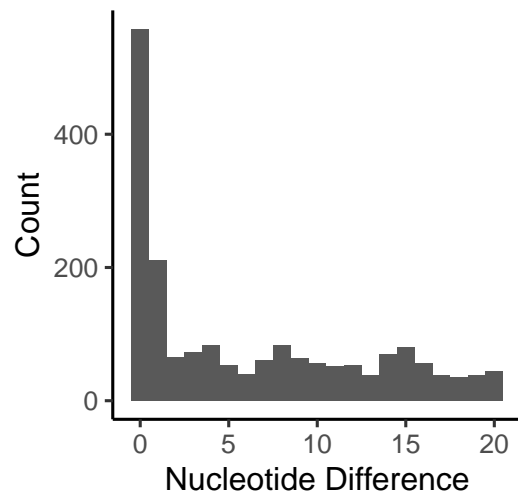
IGHV3-21*04

1250 sequences assigned
122 (9.8%) exact matches, in which:
117 unique CDR3
6 unique J



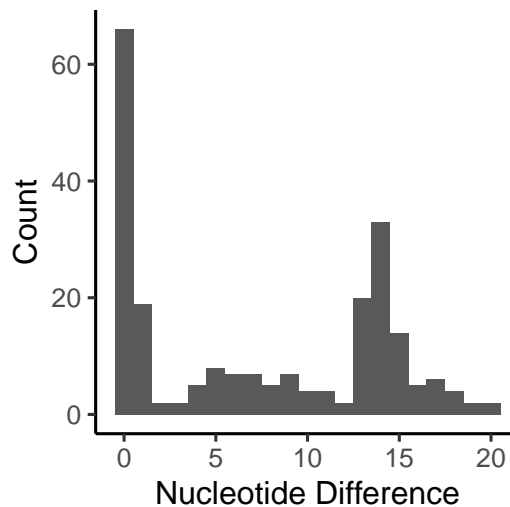
IGHV3-15*07

2726 sequences assigned
558 (20.5%) exact matches, in which:
441 unique CDR3
5 unique J



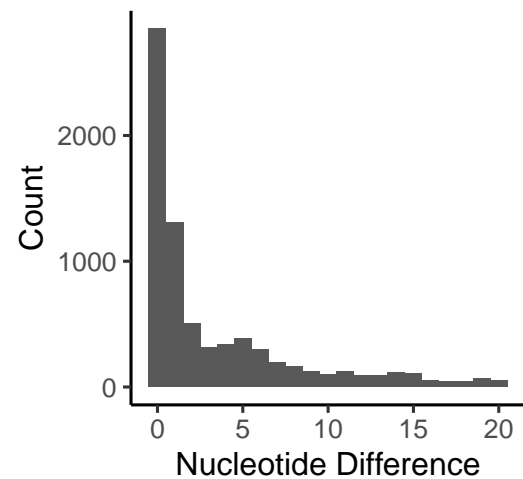
IGHV3-20*01_02

241 sequences assigned
66 (27.4%) exact matches, in which:
41 unique CDR3
5 unique J



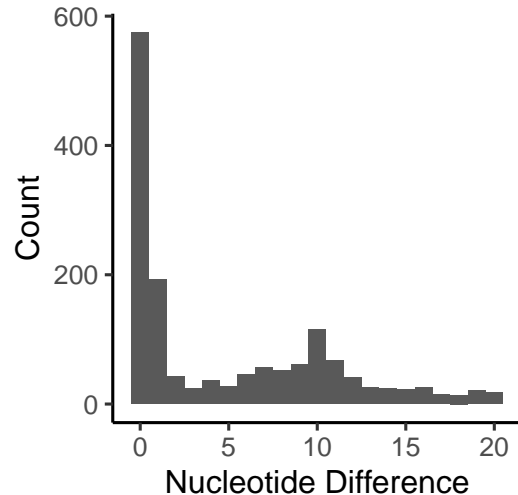
IGHV3-21*01_02

8472 sequences assigned
2849 (33.6%) exact matches, in which:
2039 unique CDR3
6 unique J



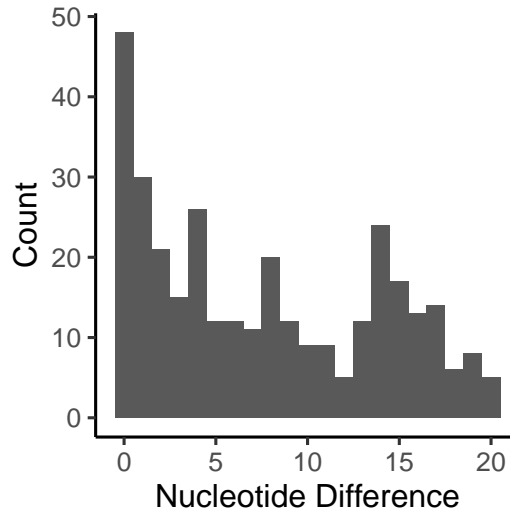
IGHV3-15*01_02

1919 sequences assigned
575 (30%) exact matches, in which:
431 unique CDR3
6 unique J



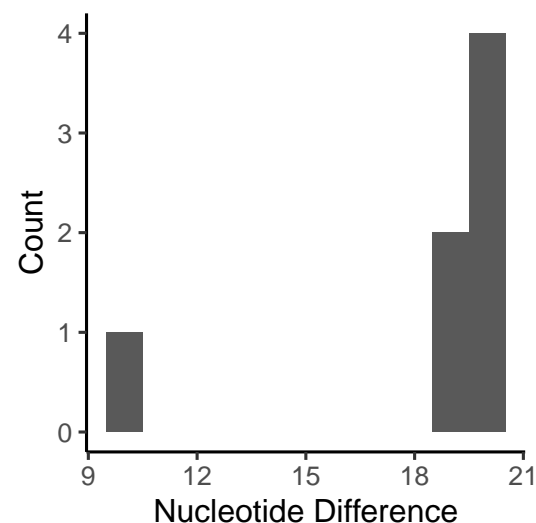
IGHV3-20*03_04

455 sequences assigned
48 (10.5%) exact matches, in which:
35 unique CDR3
5 unique J



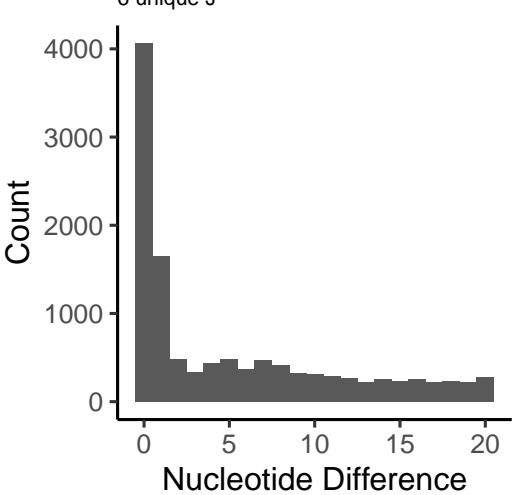
IGHV3-22*01_02

8 sequences assigned
No exact matches.



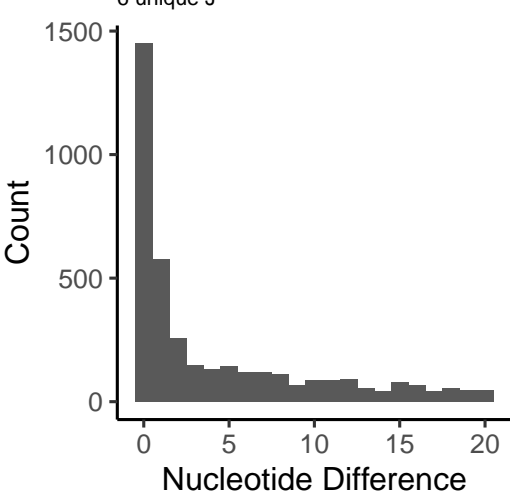
IGHV3-23*01_04

15869 sequences assigned
4062 (25.6%) exact matches, in which:
2695 unique CDR3
6 unique J



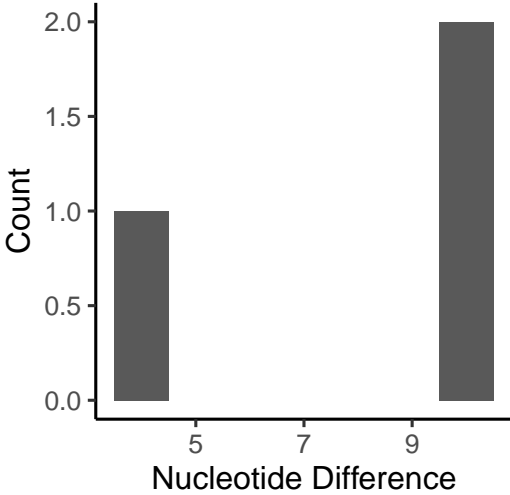
IGHV3-33*08

4030 sequences assigned
1450 (36%) exact matches, in which:
1109 unique CDR3
6 unique J



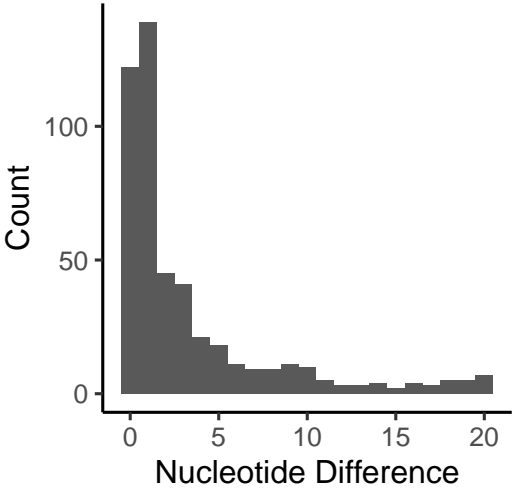
IGHV3-38*03

3 sequences assigned
No exact matches.



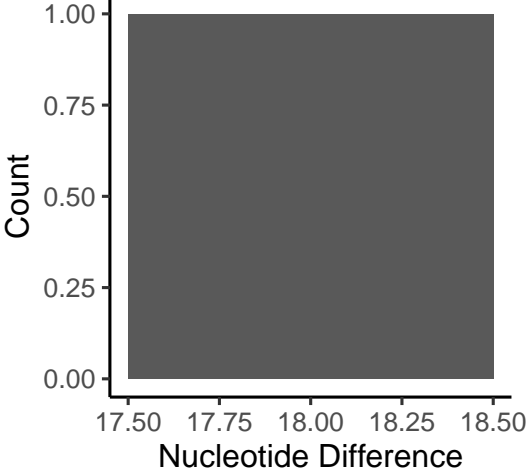
IGHV3-30*03

636 sequences assigned
122 (19.2%) exact matches, in which:
119 unique CDR3
5 unique J



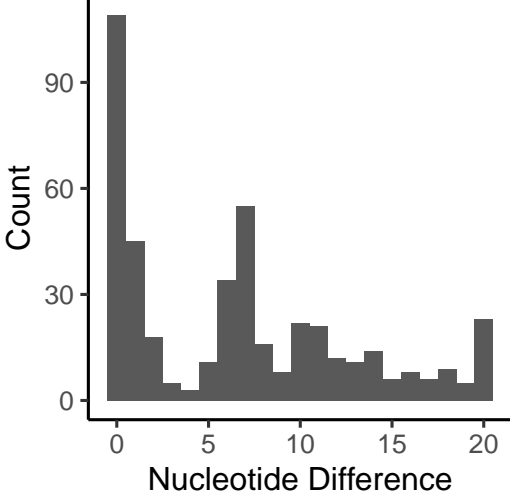
IGHV3-35*01

1 sequences assigned
No exact matches.



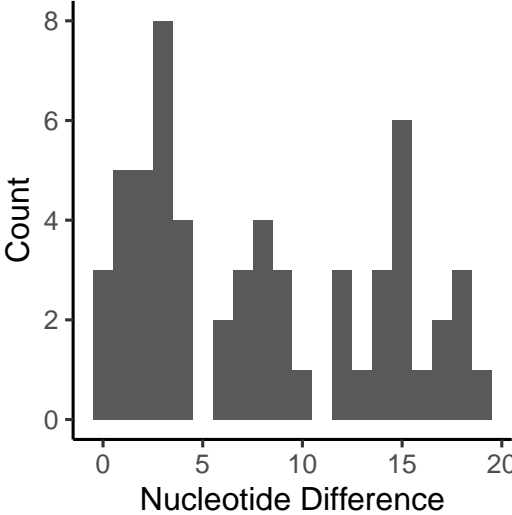
IGHV3-43*01

551 sequences assigned
109 (19.8%) exact matches, in which:
79 unique CDR3
6 unique J



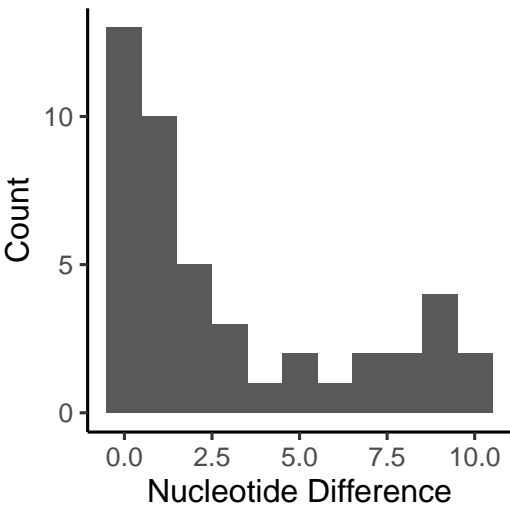
IGHV3-33*05

233 sequences assigned
3 (1.3%) exact matches, in which:
3 unique CDR3
2 unique J



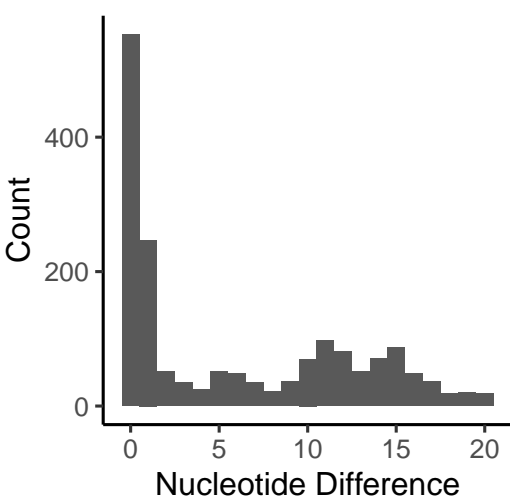
IGHV3-38-3*01

45 sequences assigned
13 (28.9%) exact matches, in which:
10 unique CDR3
3 unique J



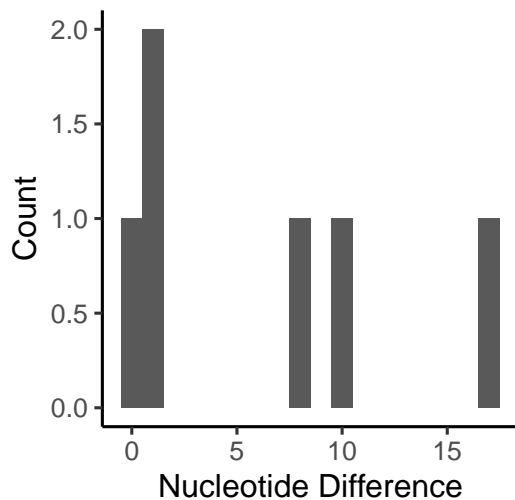
IGHV3-43*02

2137 sequences assigned
553 (25.9%) exact matches, in which:
379 unique CDR3
6 unique J



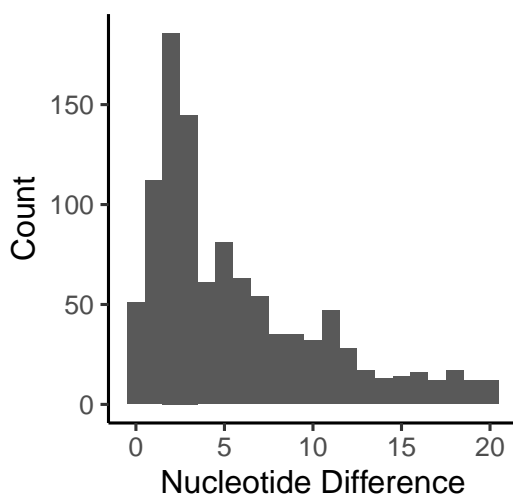
IGHV3-47*02

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



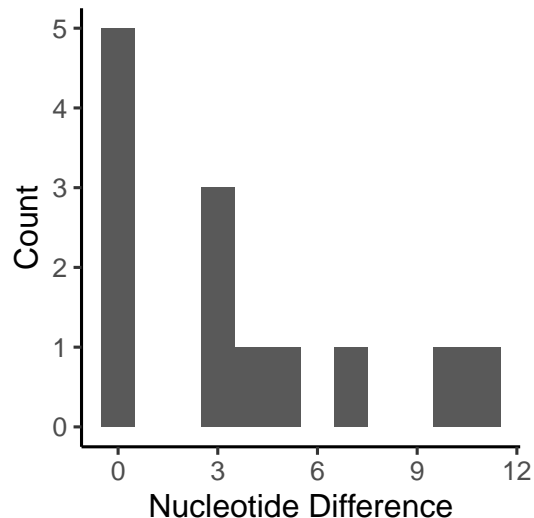
IGHV3-48*04

1147 sequences assigned
51 (4.4%) exact matches, in which:
50 unique CDR3
6 unique J



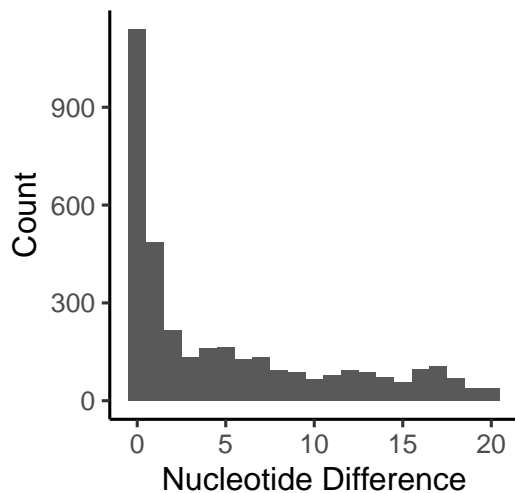
IGHV3-52*01_03

13 sequences assigned
5 (38.5%) exact matches, in which:
5 unique CDR3
2 unique J



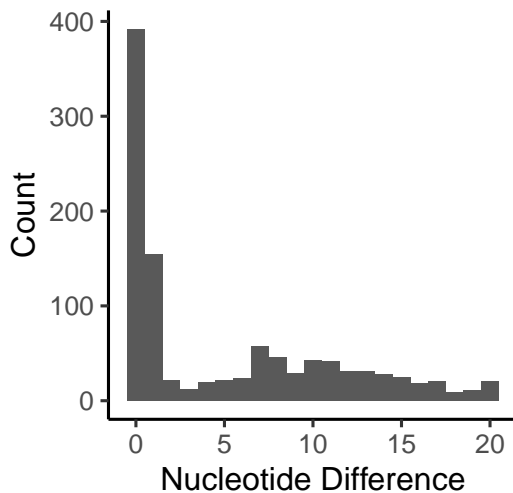
IGHV3-48*01

4159 sequences assigned
1140 (27.4%) exact matches, in which:
827 unique CDR3
6 unique J



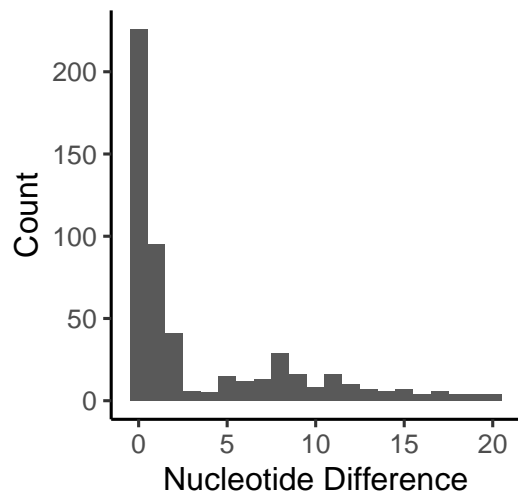
IGHV3-49*04

1296 sequences assigned
392 (30.2%) exact matches, in which:
286 unique CDR3
6 unique J



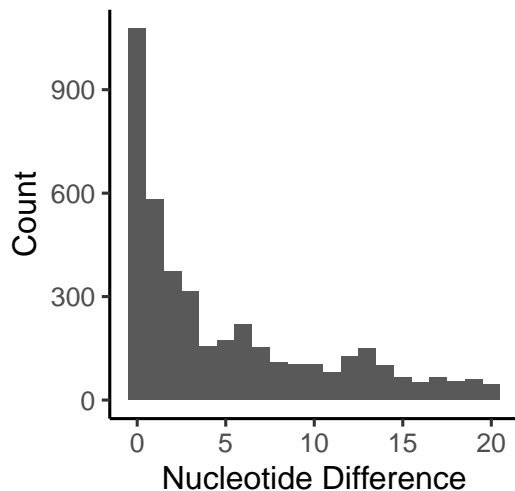
IGHV3-53*04

555 sequences assigned
226 (40.7%) exact matches, in which:
163 unique CDR3
6 unique J



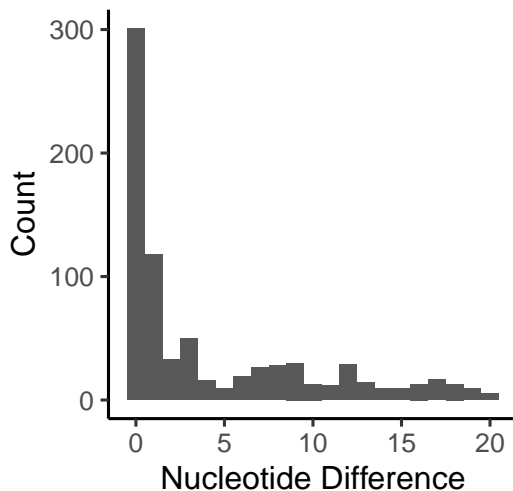
IGHV3-48*03

4901 sequences assigned
1078 (22%) exact matches, in which:
771 unique CDR3
6 unique J



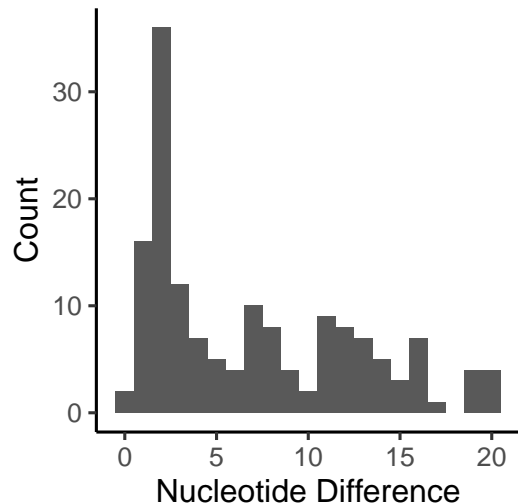
IGHV3-49*03_05

933 sequences assigned
301 (32.3%) exact matches, in which:
232 unique CDR3
6 unique J



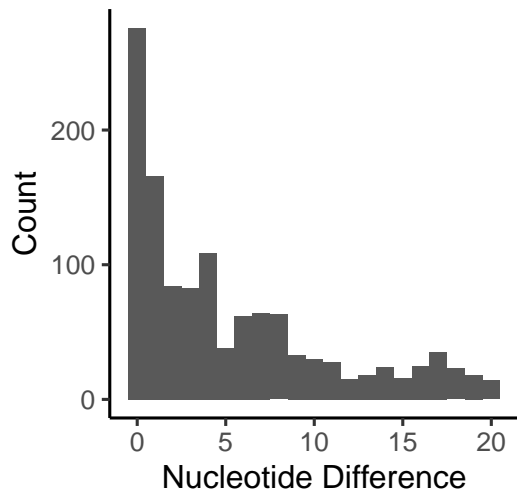
IGHV3-53*05

179 sequences assigned
2 (1.1%) exact matches, in which:
2 unique CDR3
2 unique J



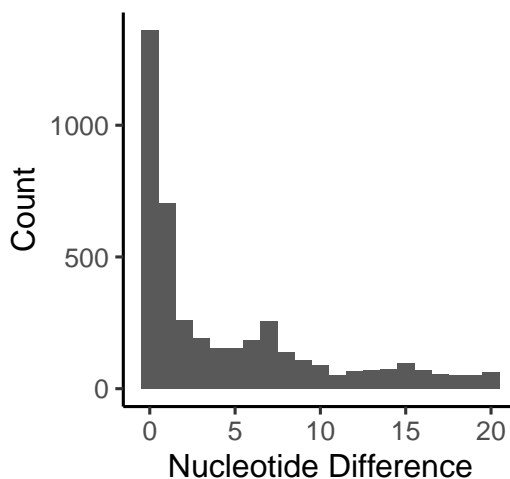
IGHV3-53*01_02

1488 sequences assigned
276 (18.5%) exact matches, in which:
200 unique CDR3
6 unique J



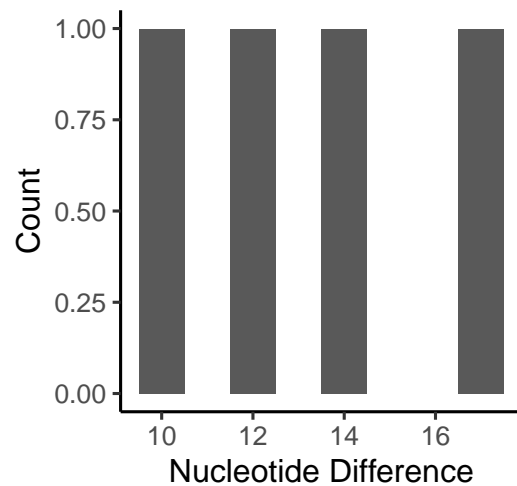
IGHV3-66*01

4930 sequences assigned
1360 (27.6%) exact matches, in which:
984 unique CDR3
6 unique J



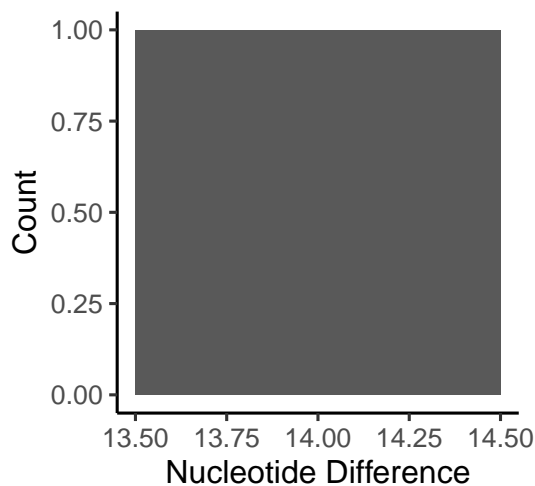
IGHV3-71*01_04

4 sequences assigned
No exact matches.



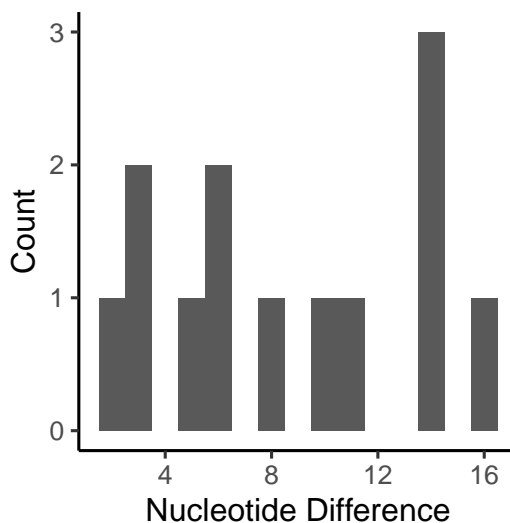
IGHV3-62*04

1 sequences assigned
No exact matches.



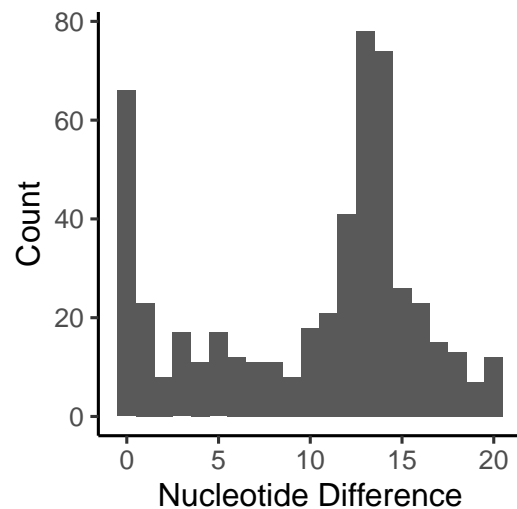
IGHV3-69-1*01

33 sequences assigned
No exact matches.



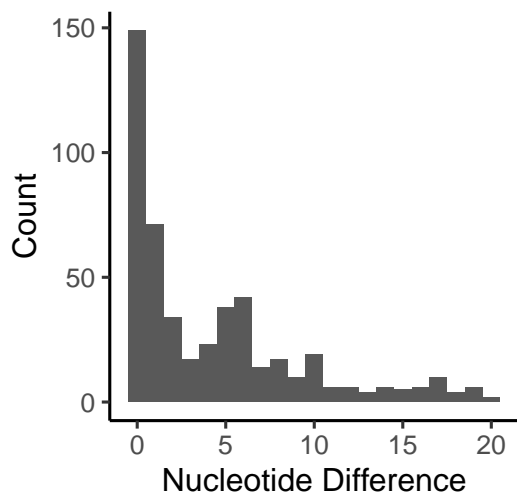
IGHV3-72*01

673 sequences assigned
66 (9.8%) exact matches, in which:
49 unique CDR3
6 unique J



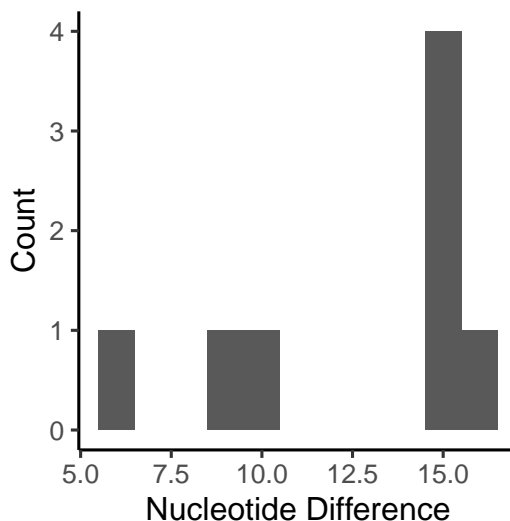
IGHV3-64*01

542 sequences assigned
149 (27.5%) exact matches, in which:
107 unique CDR3
6 unique J



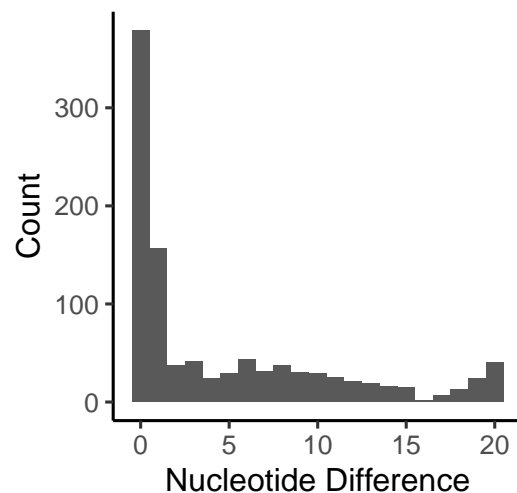
IGHV3-69-1*02

22 sequences assigned
No exact matches.



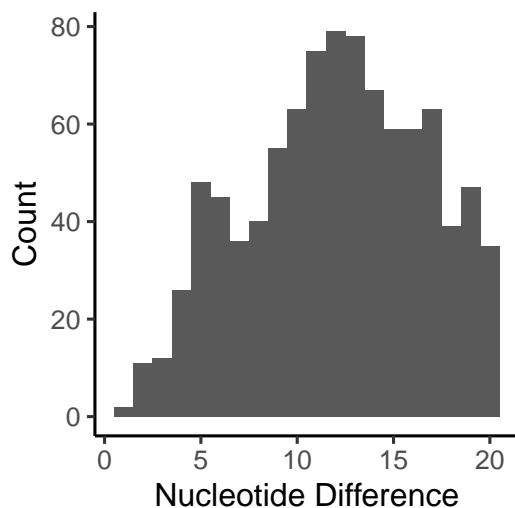
IGHV3-73*01_02

1153 sequences assigned
379 (32.9%) exact matches, in which:
275 unique CDR3
6 unique J



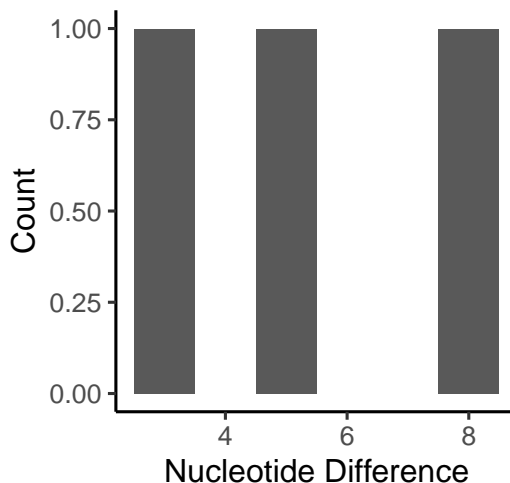
IGHV3-74*03

1618 sequences assigned
No exact matches.



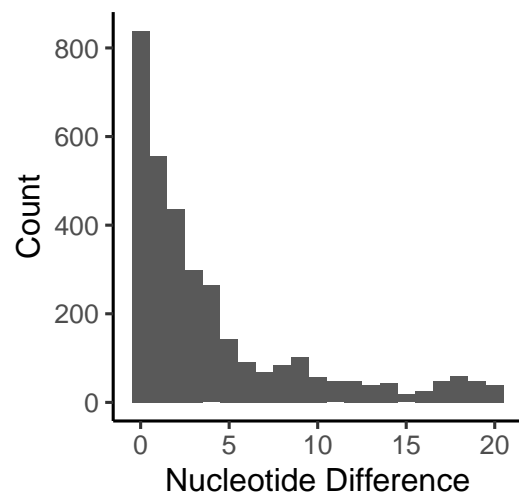
IGHV3-64D*06

5 sequences assigned
No exact matches.



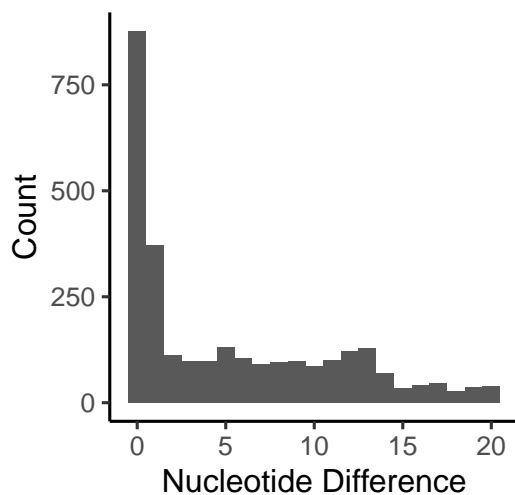
IGHV4-4*02_03

4267 sequences assigned
839 (19.7%) exact matches, in which:
720 unique CDR3
6 unique J



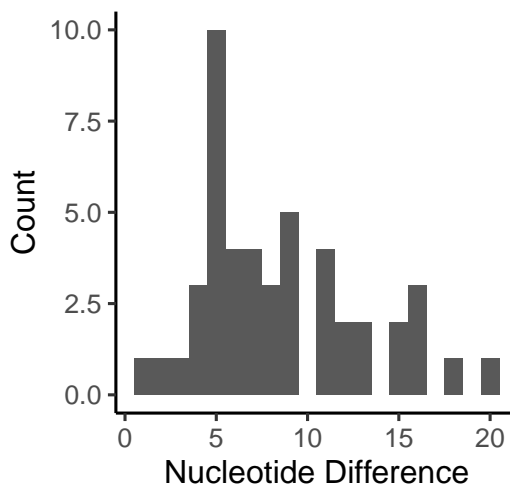
IGHV3-74*01_02

3334 sequences assigned
877 (26.3%) exact matches, in which:
629 unique CDR3
6 unique J



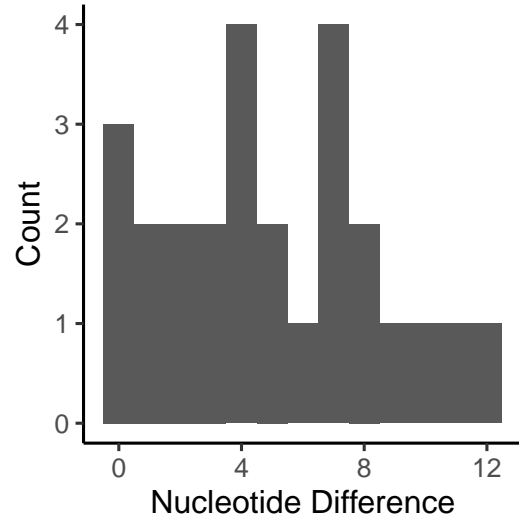
IGHV3-NL1*01

59 sequences assigned
No exact matches.



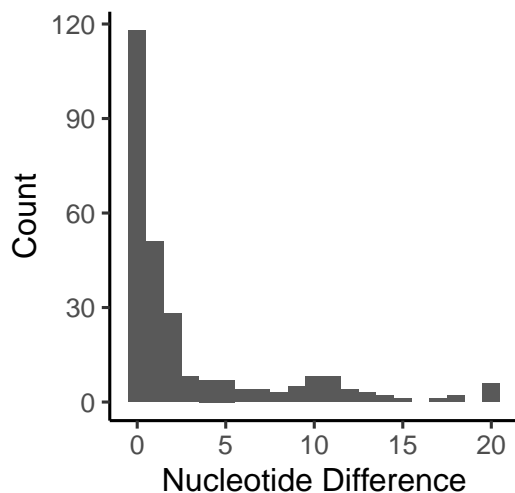
IGHV4-28*03

26 sequences assigned
3 (11.5%) exact matches, in which:
3 unique CDR3
3 unique J



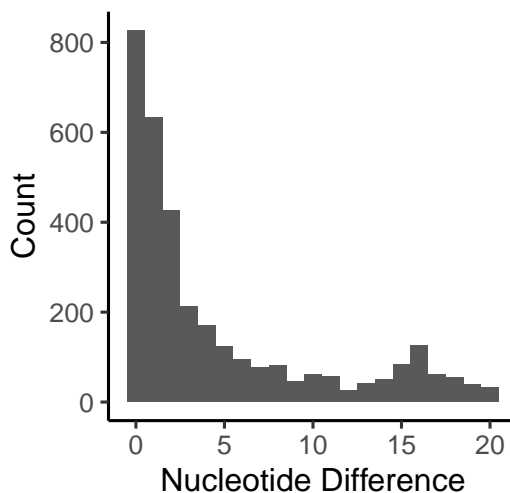
IGHV3-43D*03

295 sequences assigned
118 (40%) exact matches, in which:
84 unique CDR3
6 unique J



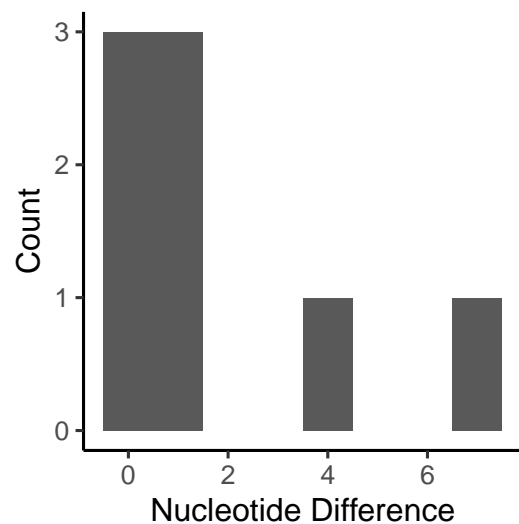
IGHV4-4*07

3855 sequences assigned
827 (21.5%) exact matches, in which:
747 unique CDR3
6 unique J



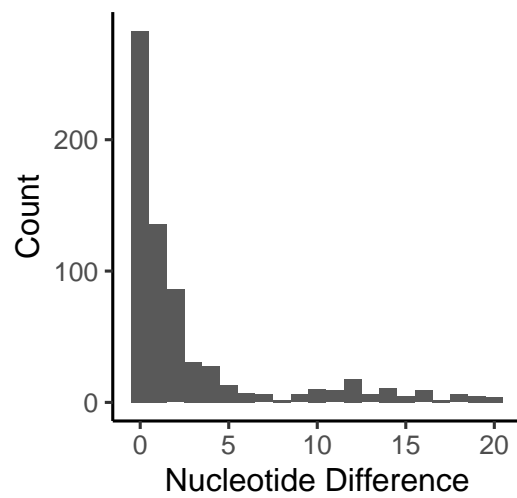
IGHV4-28*01_07

8 sequences assigned
3 (37.5%) exact matches, in which:
2 unique CDR3
2 unique J



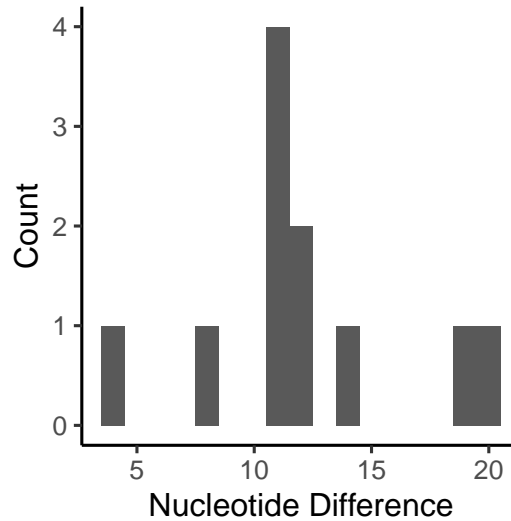
IGHV4-30-2*01

736 sequences assigned
283 (38.5%) exact matches, in which:
229 unique CDR3
5 unique J



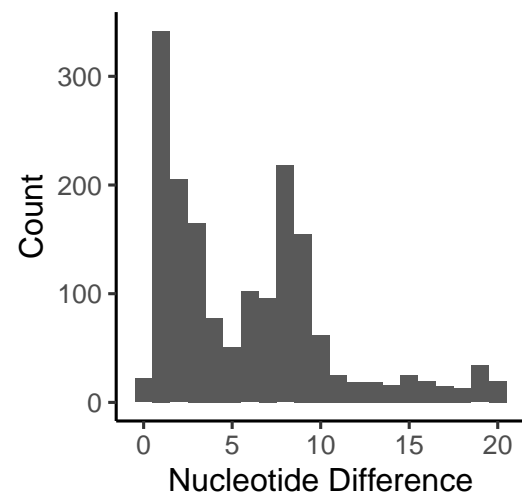
IGHV4-31*02

13 sequences assigned
No exact matches.



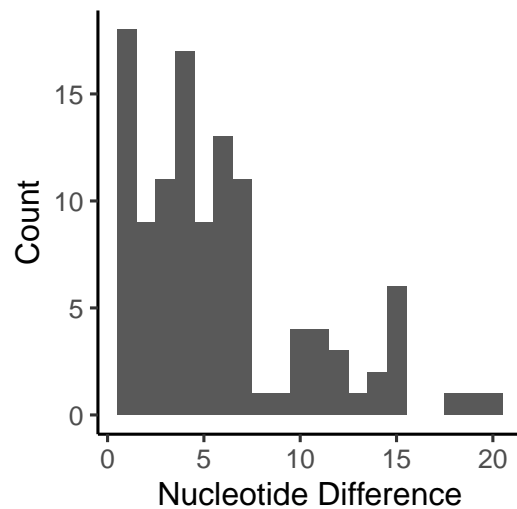
IGHV4-39*07

1941 sequences assigned
22 (1.1%) exact matches, in which:
22 unique CDR3
4 unique J



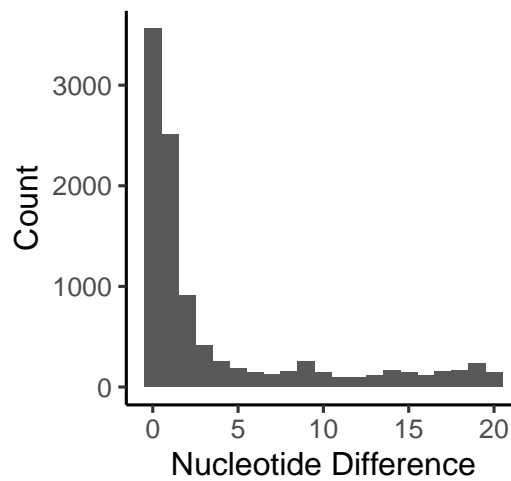
IGHV4-30-2*03

132 sequences assigned
No exact matches.



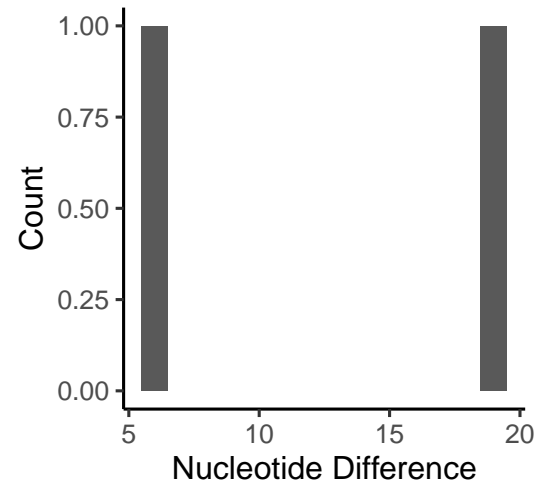
IGHV4-34*01_02

12419 sequences assigned
3561 (28.7%) exact matches, in which:
3006 unique CDR3
6 unique J



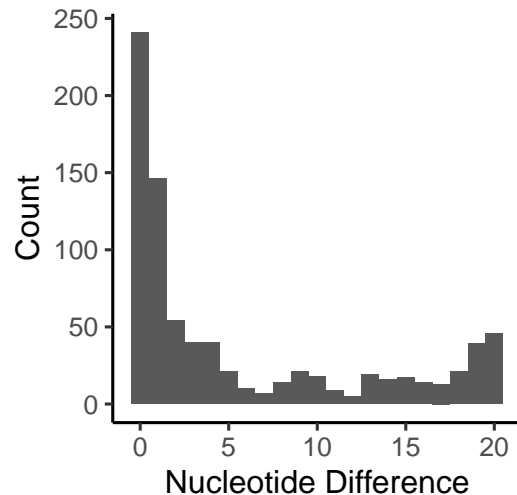
IGHV4-55*09

4 sequences assigned
No exact matches.



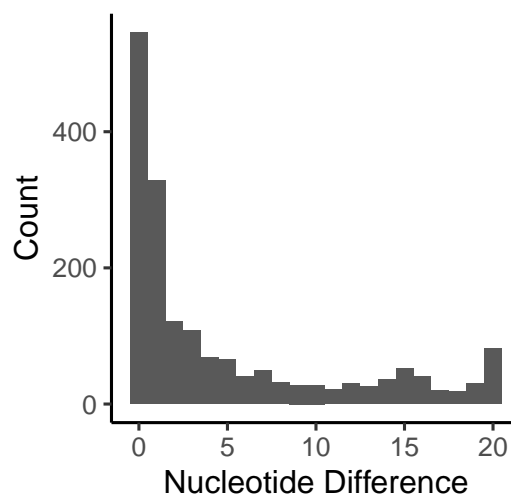
IGHV4-30-4*07

1013 sequences assigned
241 (23.8%) exact matches, in which:
216 unique CDR3
6 unique J



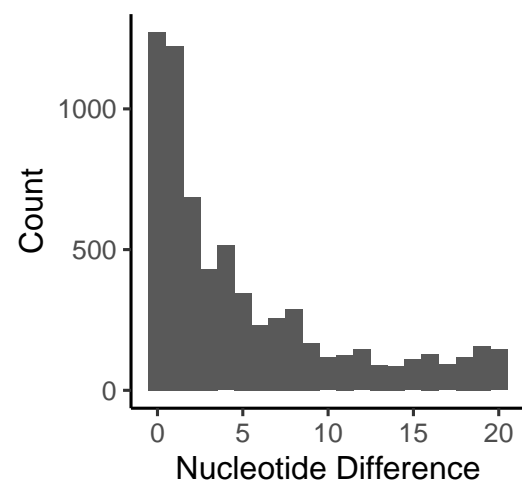
IGHV4-38-2*02

2371 sequences assigned
546 (23%) exact matches, in which:
504 unique CDR3
6 unique J



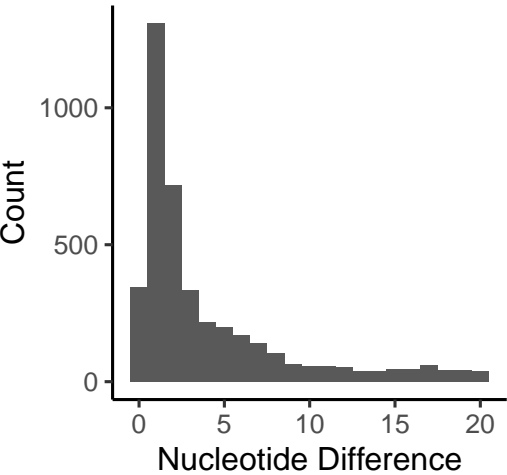
IGHV4-59*08

8825 sequences assigned
1273 (14.4%) exact matches, in which:
1104 unique CDR3
6 unique J



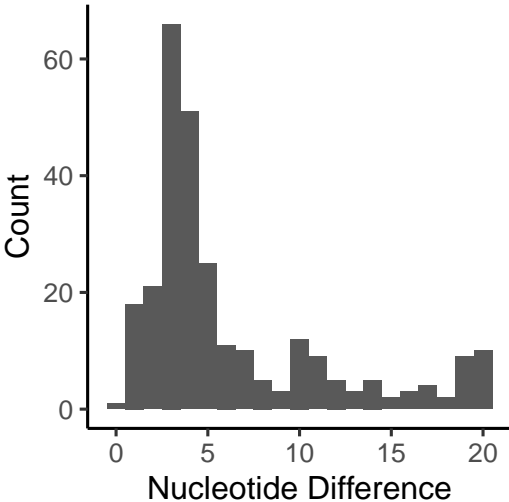
IGHV4-59*12

6754 sequences assigned
346 (5.1%) exact matches, in which:
339 unique CDR3
6 unique J



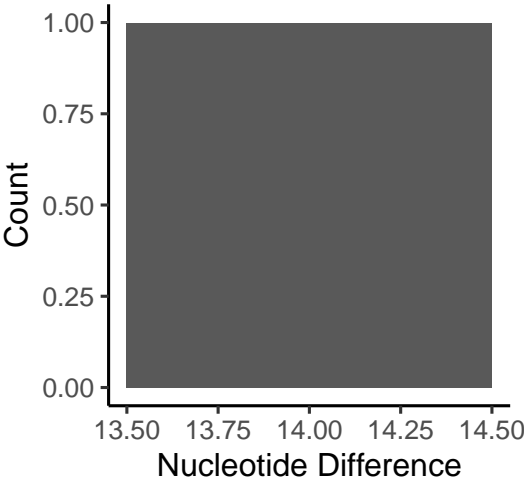
IGHV4-61*08

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



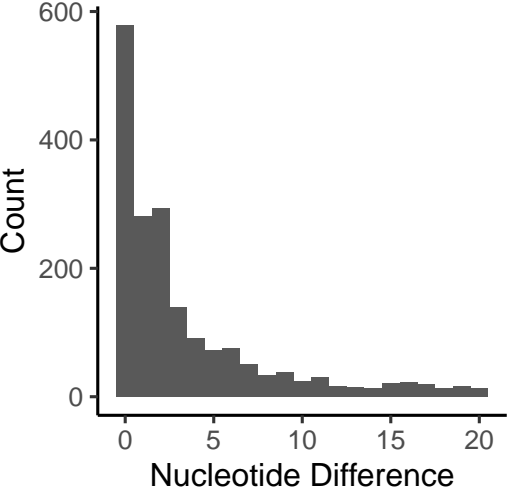
IGHV1/OR15-4*01

1 sequences assigned
No exact matches.



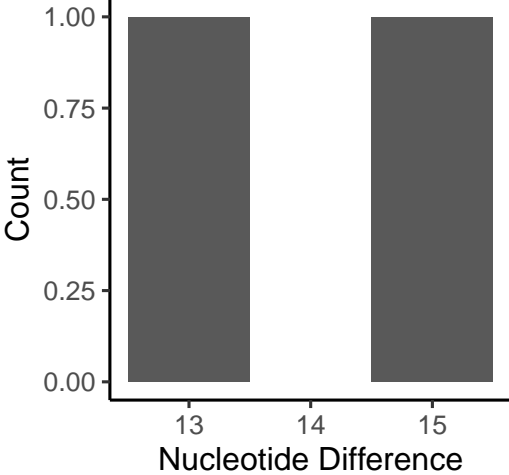
IGHV4-61*01

2372 sequences assigned
579 (24.4%) exact matches, in which:
547 unique CDR3
6 unique J



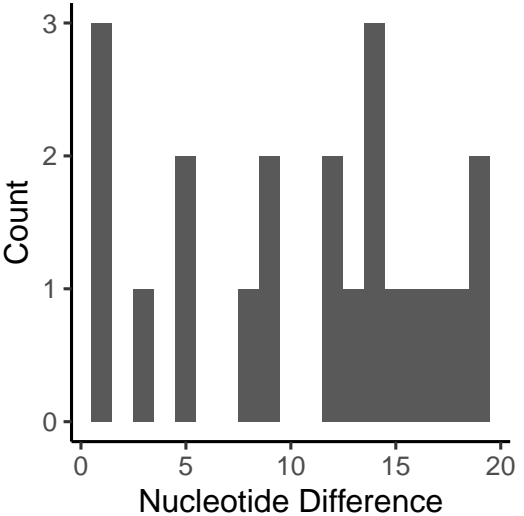
IGHV1/OR15-2*02_03

4 sequences assigned
No exact matches.



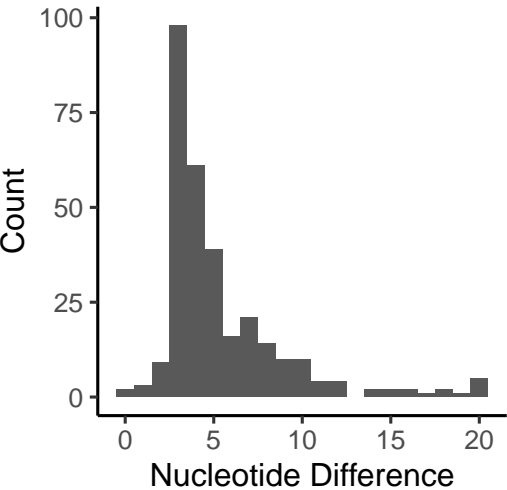
IGHV4/OR15-8*01

44 sequences assigned
No exact matches.



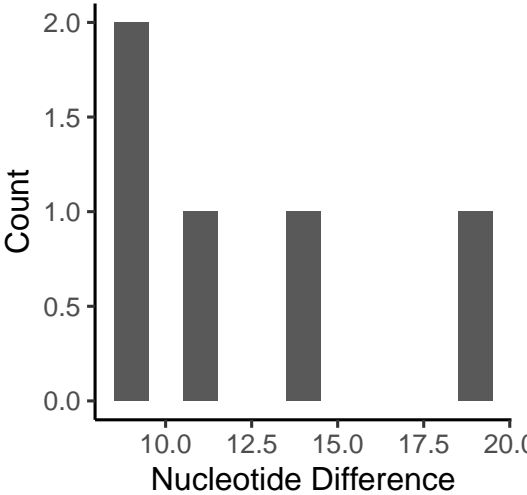
IGHV4-61*02

314 sequences assigned
2 (0.6%) exact matches, in which:
2 unique CDR3
2 unique J



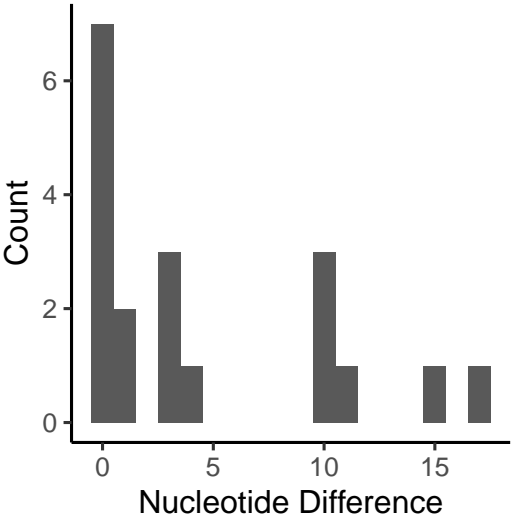
IGHV1/OR15-3*02

6 sequences assigned
No exact matches.



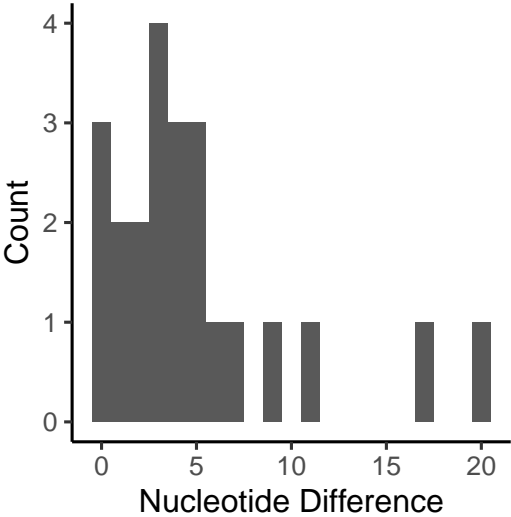
IGHV5-51*04

21 sequences assigned
7 (33.3%) exact matches, in which:
7 unique CDR3
3 unique J



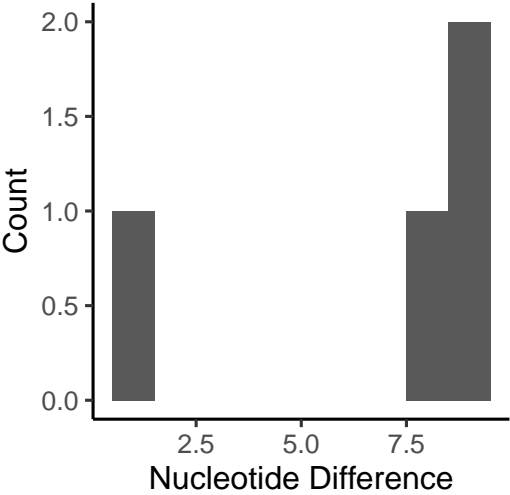
IGHV5-51*06

24 sequences assigned
3 (12.5%) exact matches, in which:
3 unique CDR3
2 unique J



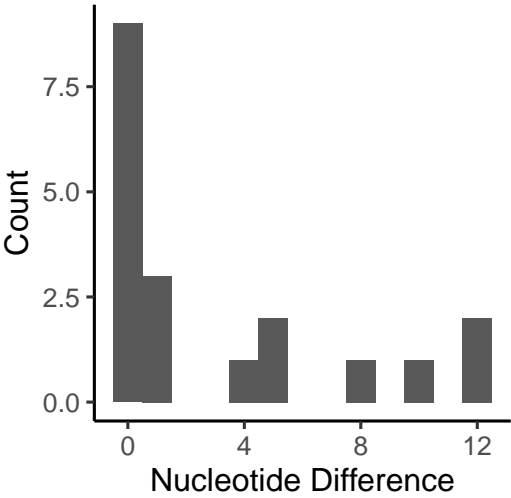
IGHV3/OR16-9*01

4 sequences assigned
No exact matches.



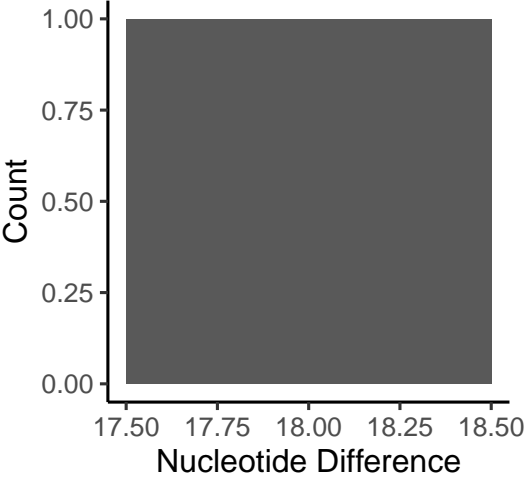
IGHV5-51*07

24 sequences assigned
9 (37.5%) exact matches, in which:
9 unique CDR3
4 unique J



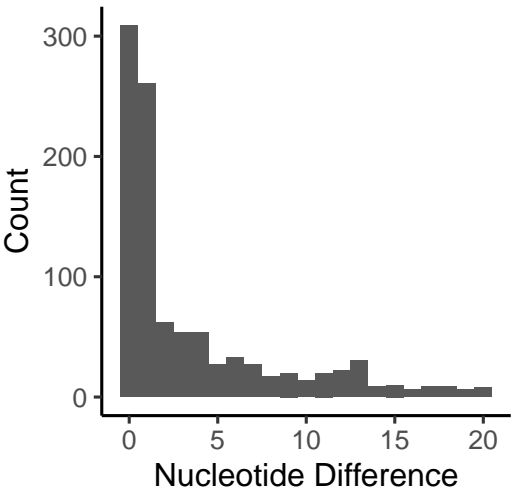
IGHV3/OR16-10*01_03

1 sequences assigned
No exact matches.



IGHV6-1*01_02

1217 sequences assigned
309 (25.4%) exact matches, in which:
275 unique CDR3
6 unique J



IGHV7-4-1*01

38 sequences assigned
21 (55.3%) exact matches, in which:
18 unique CDR3
4 unique J

