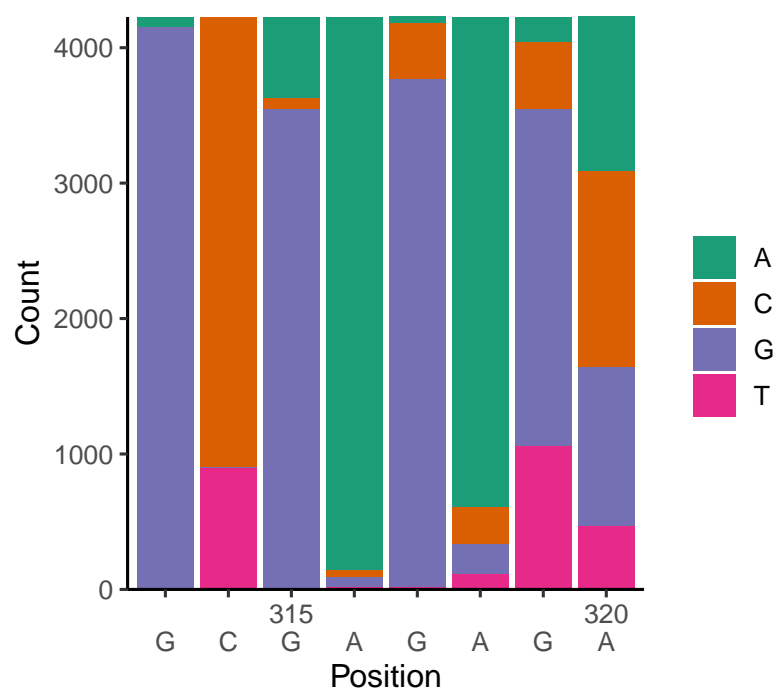


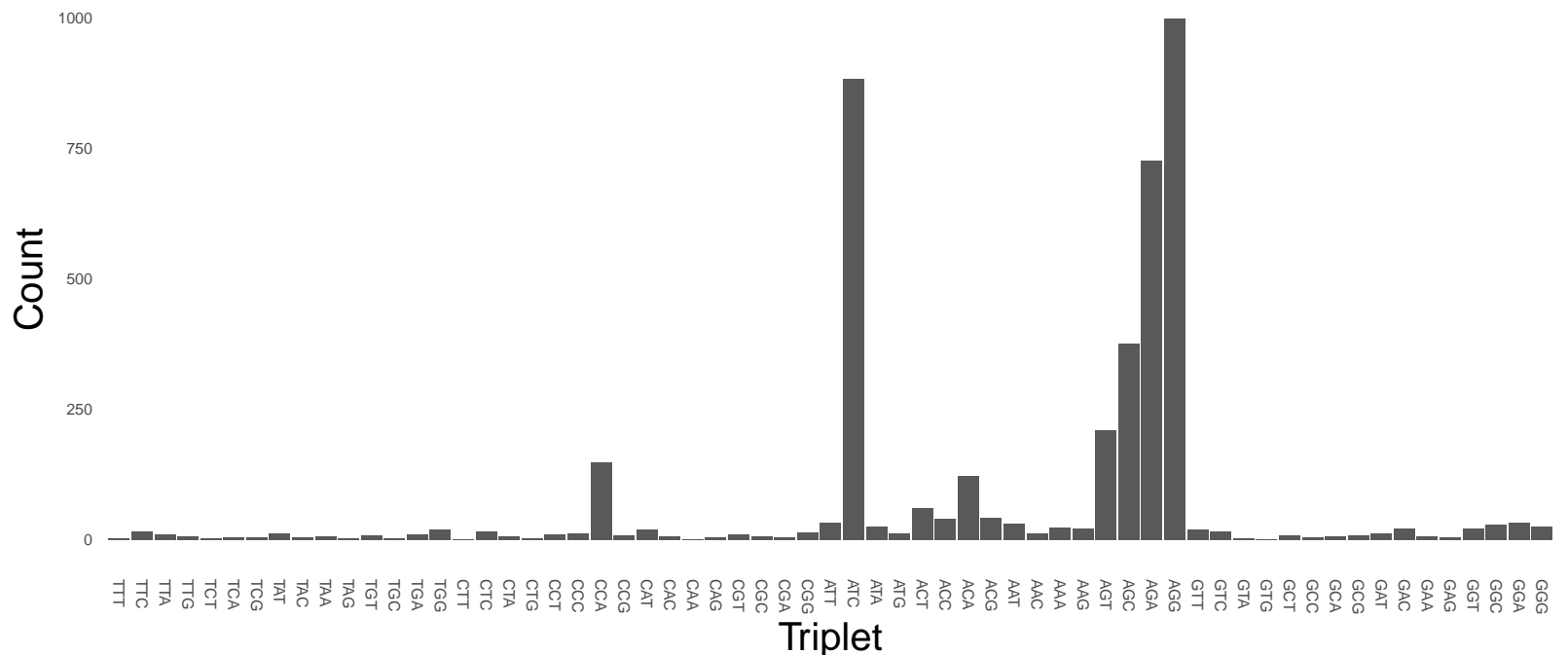
Gene IGHV4-38-2*02_A70G



Gene IGHV4-38-2*02_A70G

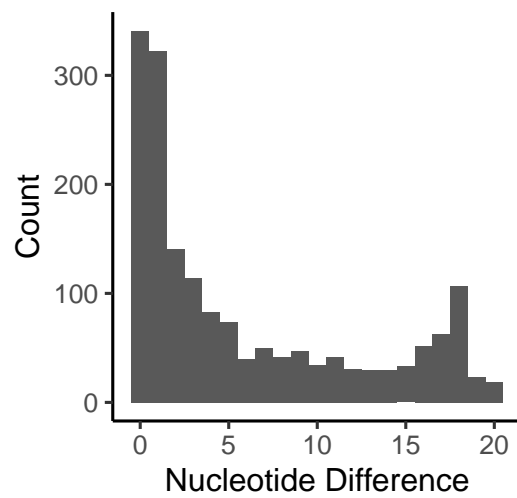


IGHV4-38-2*02_A70G- Final 3 nucleotides as a triplet



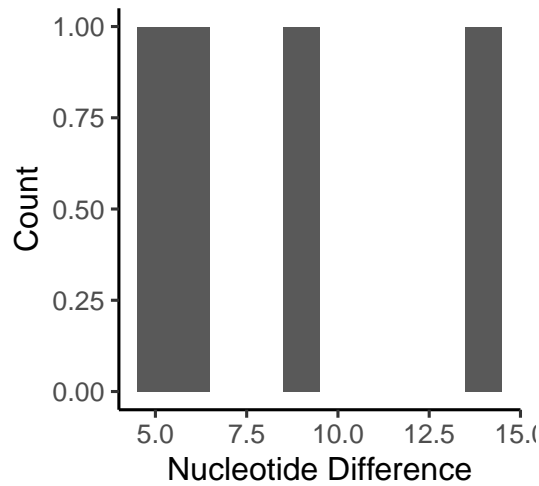
IGHV1-2*04

2141 sequences assigned
341 (15.9%) exact matches, in which:
301 unique CDR3
6 unique J



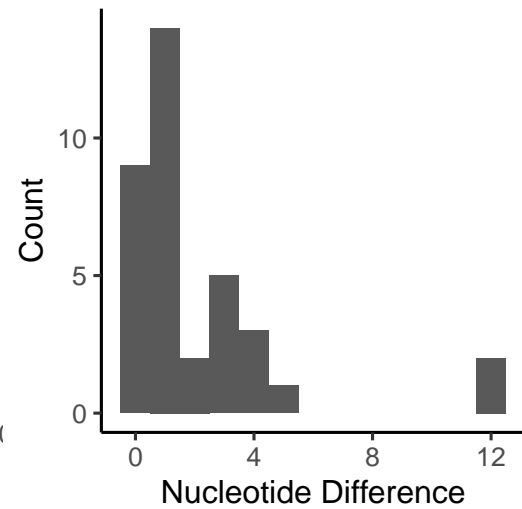
IGHV1-8*02

4 sequences assigned
No exact matches.



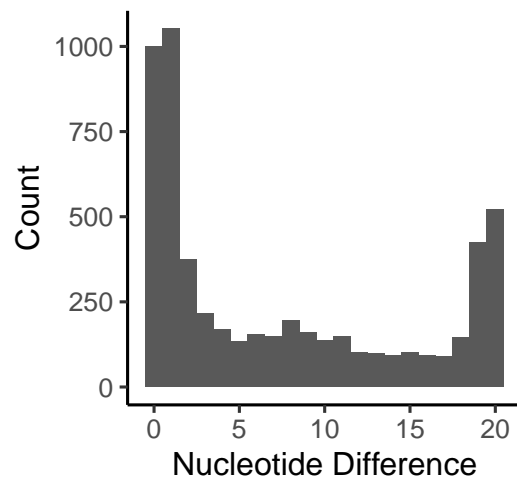
IGHV1-45*02

37 sequences assigned
9 (24.3%) exact matches, in which:
7 unique CDR3
1 unique J



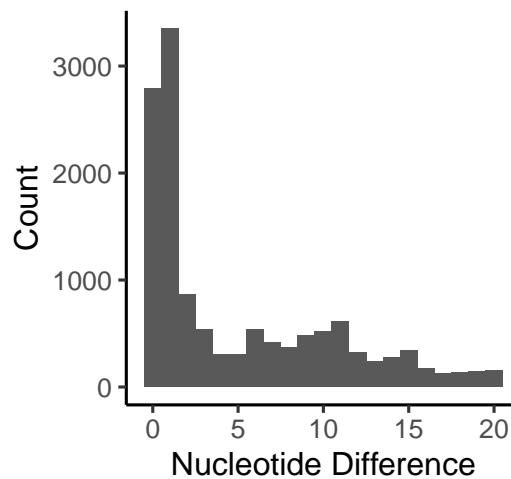
IGHV1-3*01_05

6634 sequences assigned
1001 (15.1%) exact matches, in which:
855 unique CDR3
6 unique J



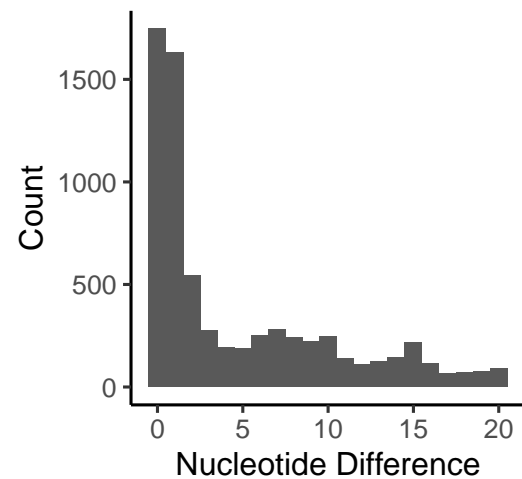
IGHV1-18*01

15095 sequences assigned
2794 (18.5%) exact matches, in which:
2284 unique CDR3
6 unique J



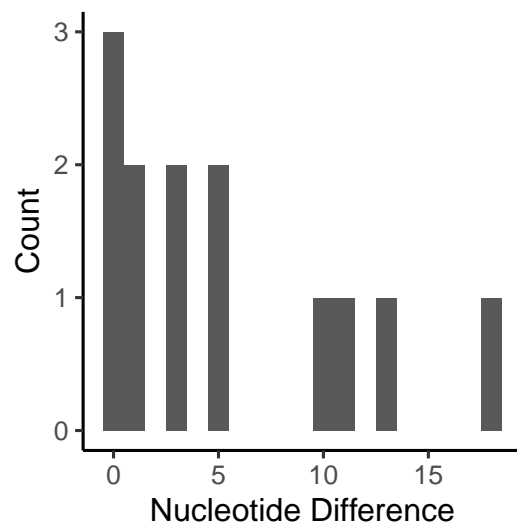
IGHV1-46*01

7892 sequences assigned
1747 (22.1%) exact matches, in which:
1454 unique CDR3
6 unique J



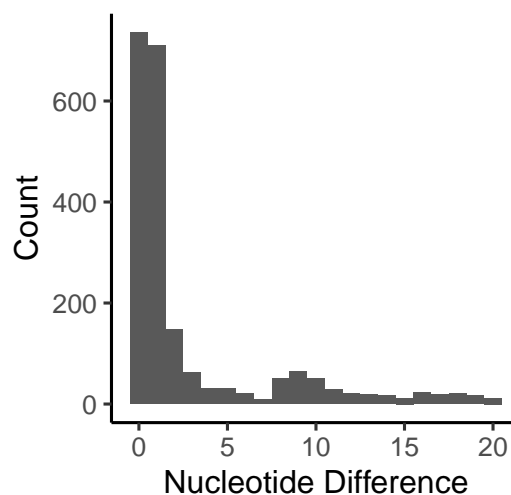
IGHV1-8*01

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



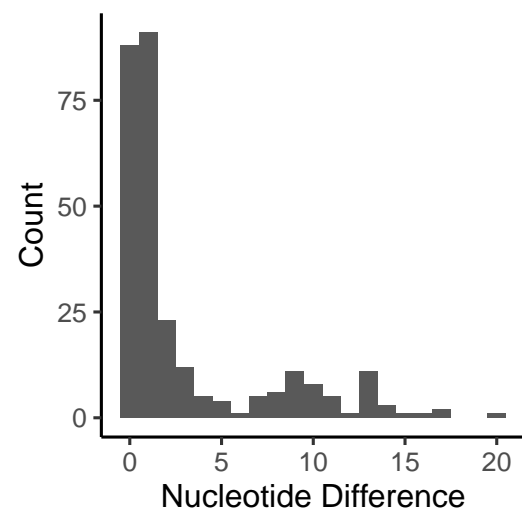
IGHV1-24*01

2701 sequences assigned
736 (27.2%) exact matches, in which:
642 unique CDR3
6 unique J



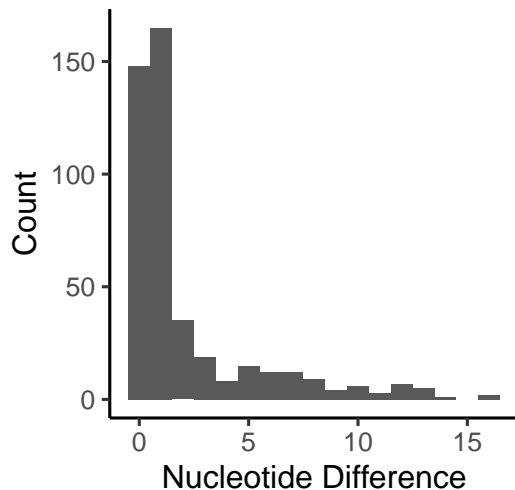
IGHV1-58*02

285 sequences assigned
88 (30.9%) exact matches, in which:
74 unique CDR3
5 unique J



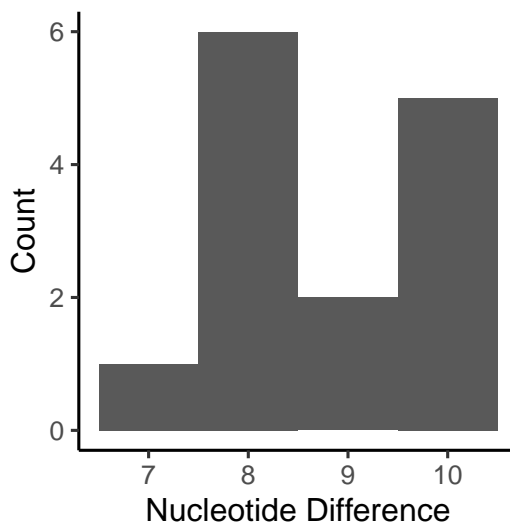
IGHV1-58*01_03

465 sequences assigned
148 (31.8%) exact matches, in which:
122 unique CDR3
5 unique J



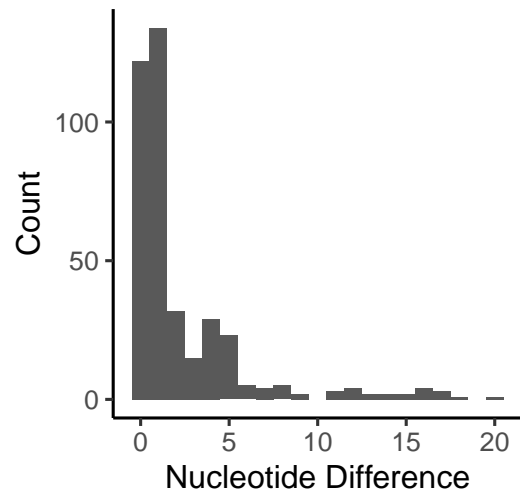
IGHV1-NL1*01

14 sequences assigned
No exact matches.



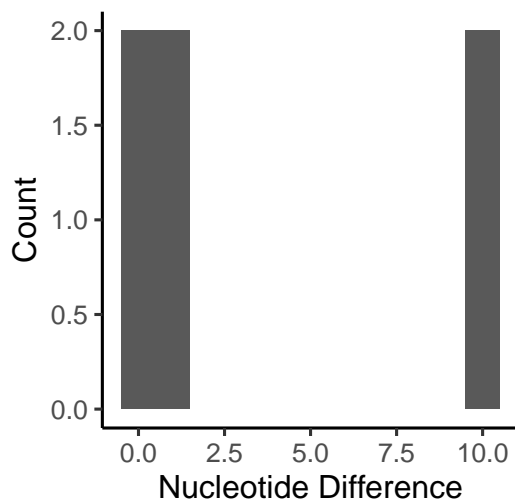
IGHV2-70*01

456 sequences assigned
122 (26.8%) exact matches, in which:
103 unique CDR3
5 unique J



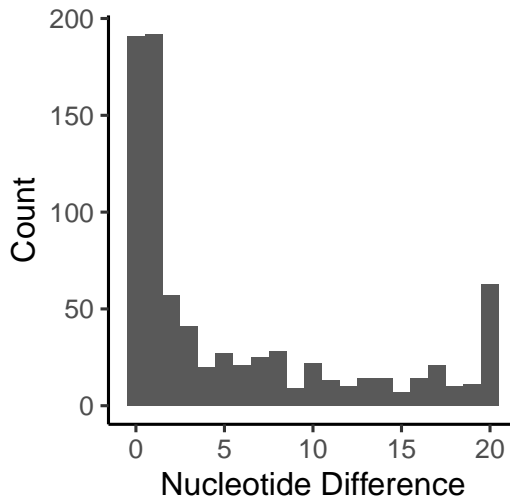
IGHV1-68*01

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



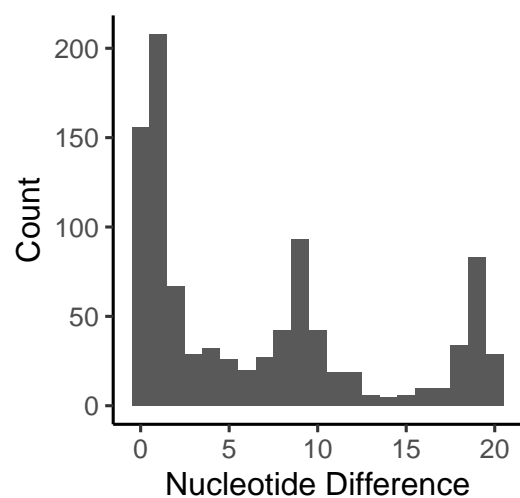
IGHV2-5*02

1551 sequences assigned
191 (12.3%) exact matches, in which:
166 unique CDR3
6 unique J



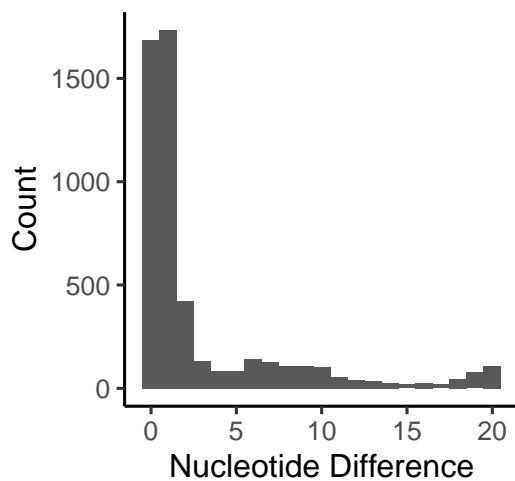
IGHV2-70*11_15

989 sequences assigned
156 (15.8%) exact matches, in which:
134 unique CDR3
5 unique J



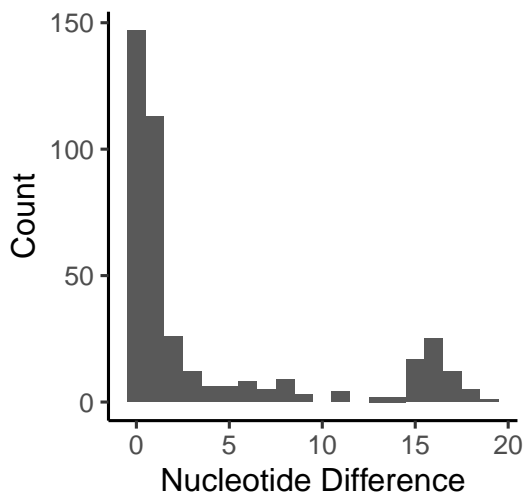
IGHV1-69*04_09

5720 sequences assigned
1686 (29.5%) exact matches, in which:
1460 unique CDR3
6 unique J



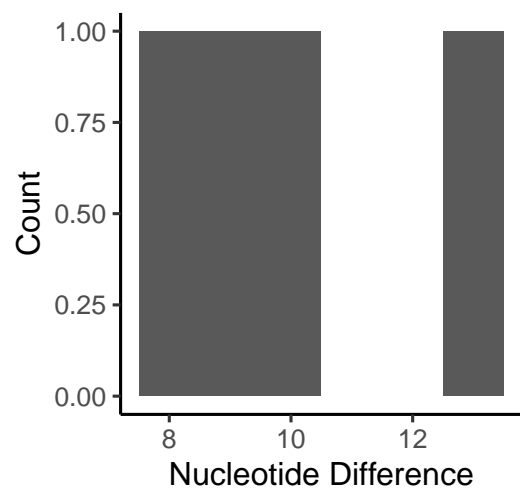
IGHV2-26*01

403 sequences assigned
147 (36.5%) exact matches, in which:
122 unique CDR3
5 unique J



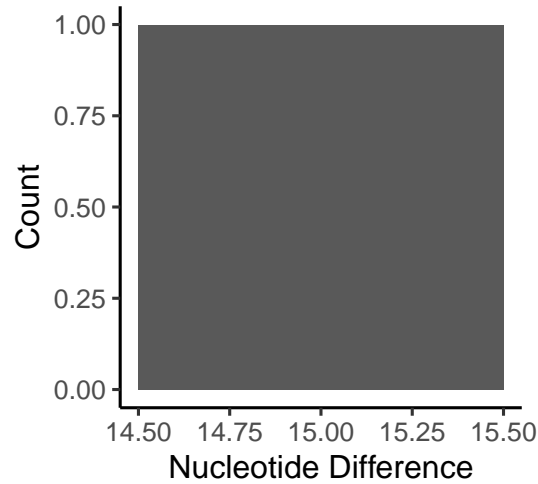
IGHV2-70D*04

4 sequences assigned
No exact matches.



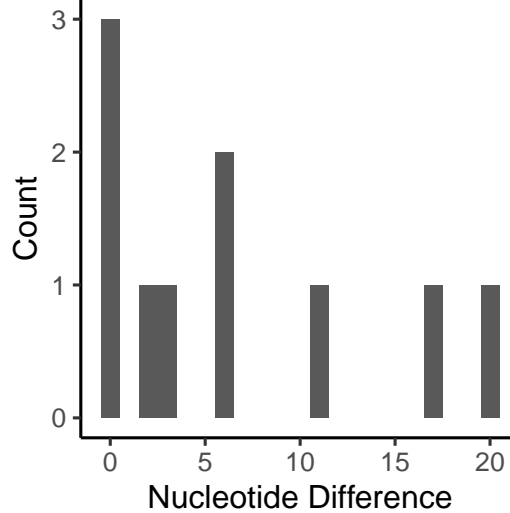
IGHV2-70D*14

1 sequences assigned
No exact matches.



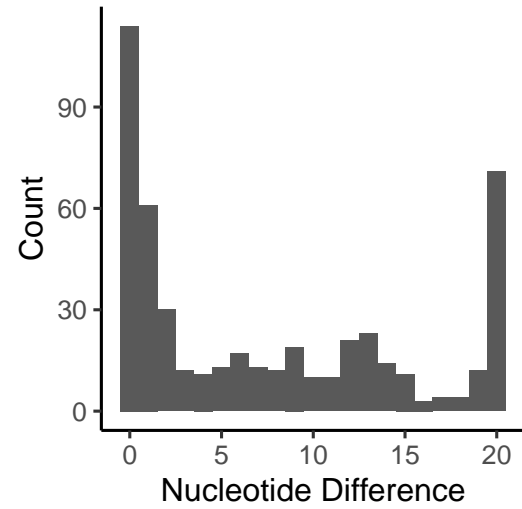
IGHV3-9*01

14 sequences assigned
3 (21.4%) exact matches, in which:
2 unique CDR3
1 unique J



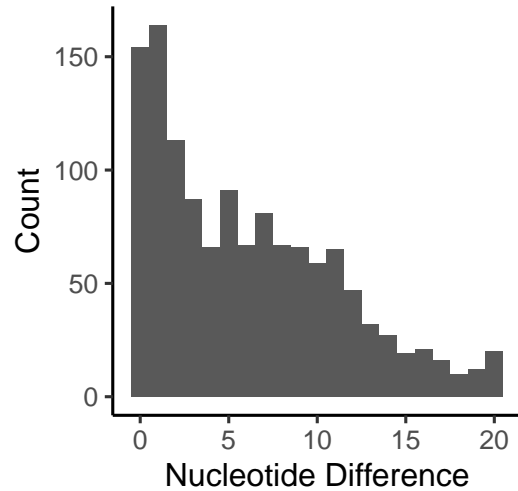
IGHV3-13*05

706 sequences assigned
114 (16.1%) exact matches, in which:
80 unique CDR3
5 unique J



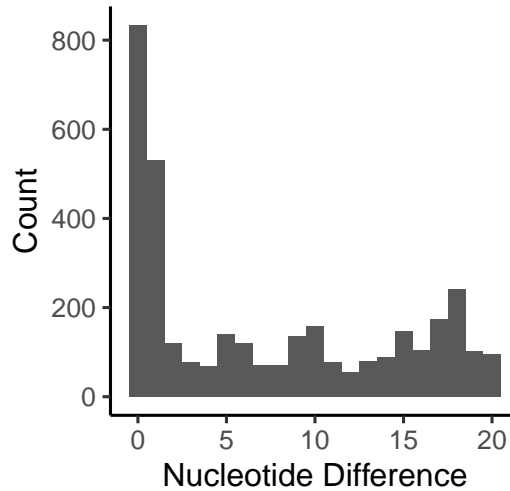
IGHV3-7*01

1346 sequences assigned
154 (11.4%) exact matches, in which:
148 unique CDR3
5 unique J



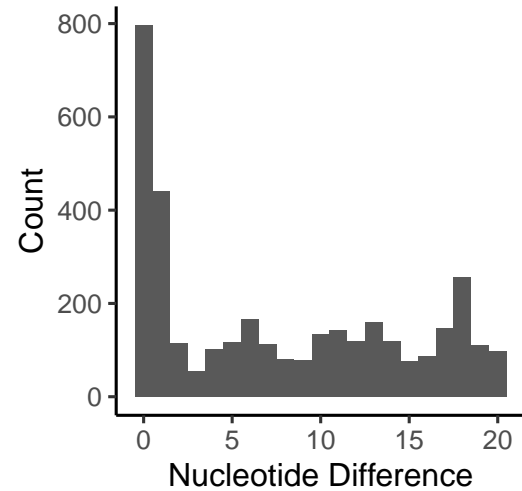
IGHV3-11*06

5061 sequences assigned
834 (16.5%) exact matches, in which:
521 unique CDR3
6 unique J



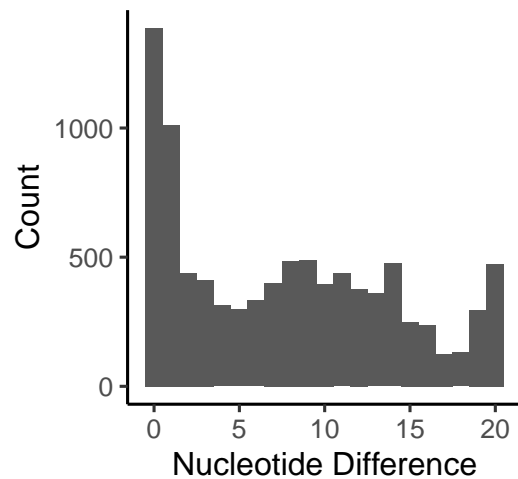
IGHV3-15*01_02

4677 sequences assigned
797 (17%) exact matches, in which:
480 unique CDR3
6 unique J



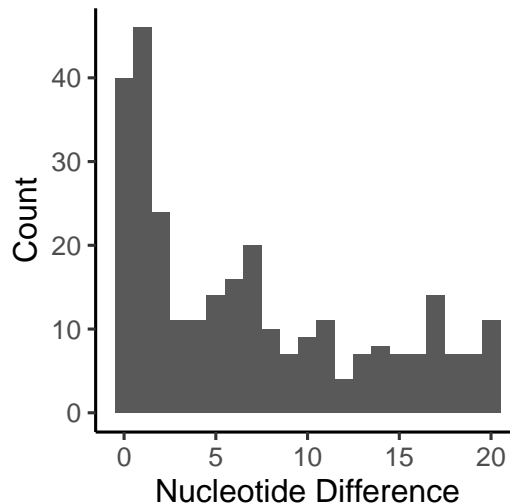
IGHV3-7*03

10623 sequences assigned
1387 (13.1%) exact matches, in which:
861 unique CDR3
6 unique J



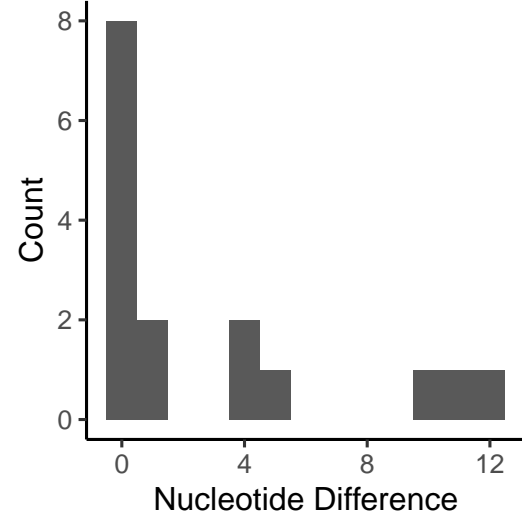
IGHV3-11*03_05

524 sequences assigned
40 (7.6%) exact matches, in which:
38 unique CDR3
4 unique J



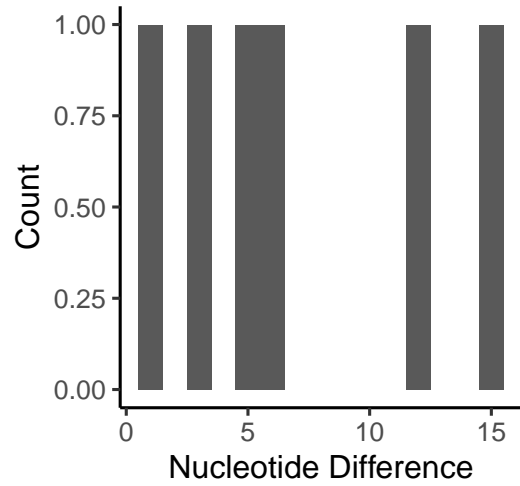
IGHV3-19*01

16 sequences assigned
8 (50%) exact matches, in which:
7 unique CDR3
3 unique J



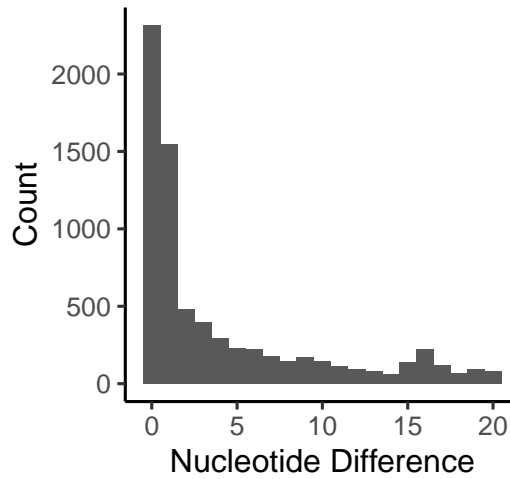
IGHV3-20*03_04

12 sequences assigned
No exact matches.



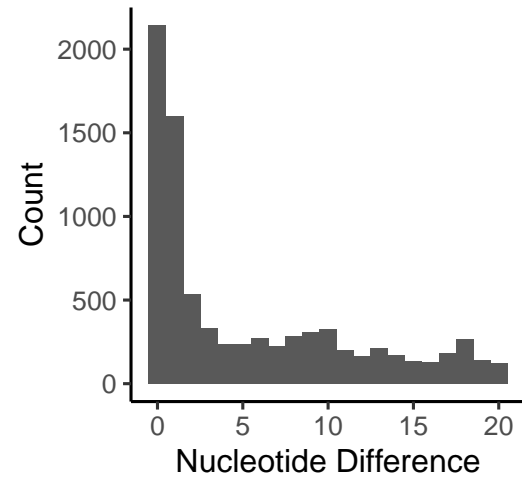
IGHV3-30-3*01

8367 sequences assigned
2314 (27.7%) exact matches, in which:
1473 unique CDR3
6 unique J



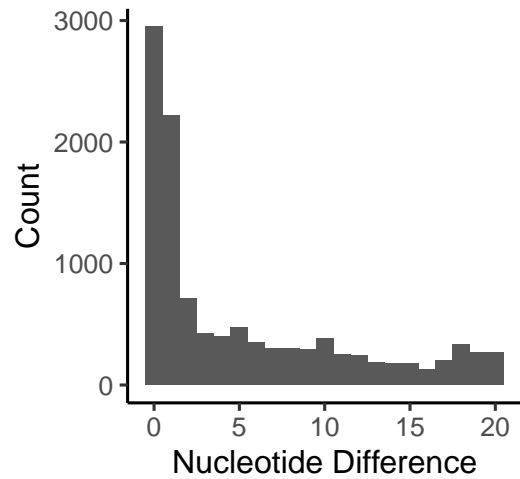
IGHV3-33*01

9691 sequences assigned
2142 (22.1%) exact matches, in which:
1334 unique CDR3
6 unique J



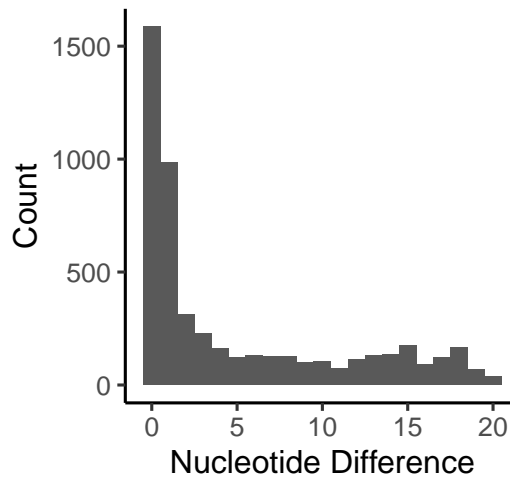
IGHV3-21*01_02

13693 sequences assigned
2949 (21.5%) exact matches, in which:
1767 unique CDR3
6 unique J



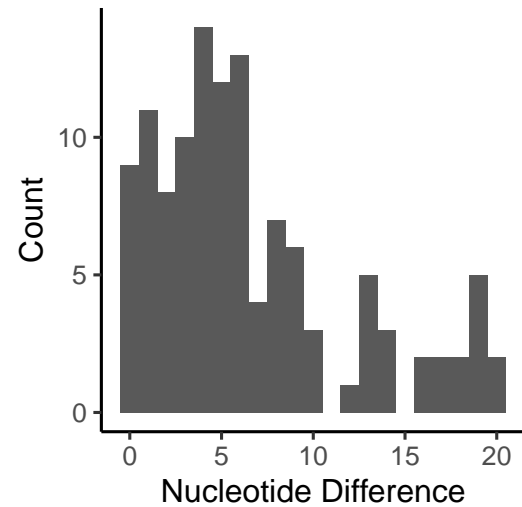
IGHV3-30*01

5880 sequences assigned
1586 (27%) exact matches, in which:
1034 unique CDR3
6 unique J



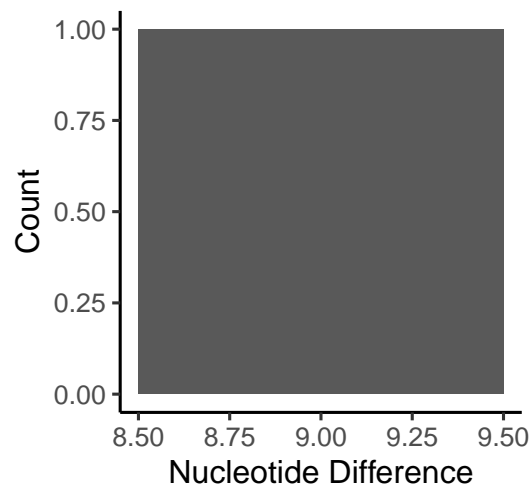
IGHV3-33*05

132 sequences assigned
9 (6.8%) exact matches, in which:
9 unique CDR3
2 unique J



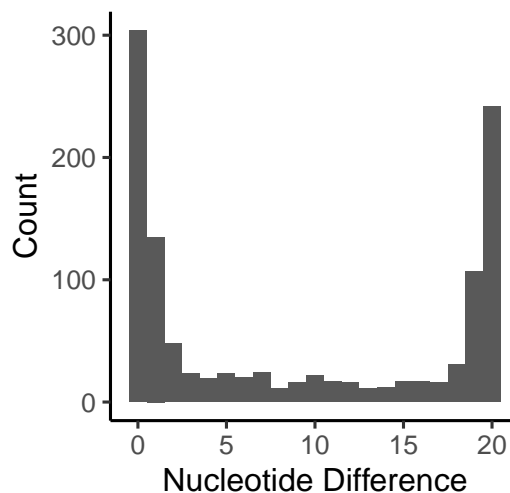
IGHV3-22*01_02

1 sequences assigned
No exact matches.



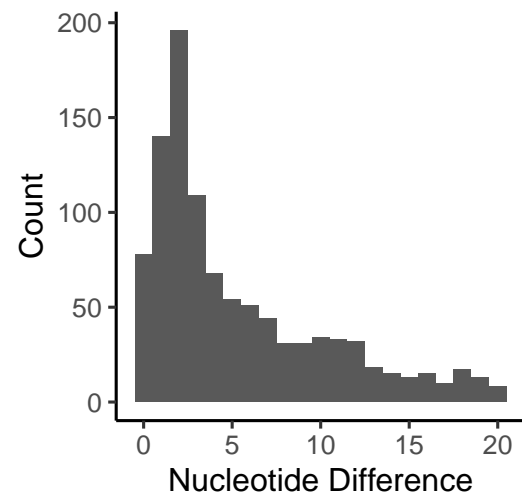
IGHV3-30*03

1506 sequences assigned
304 (20.2%) exact matches, in which:
292 unique CDR3
6 unique J



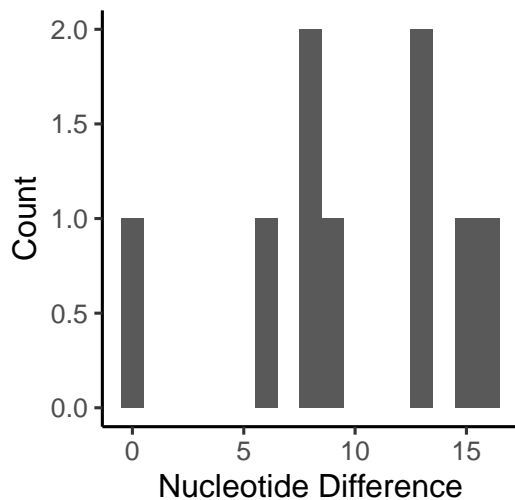
IGHV3-33*06

1059 sequences assigned
78 (7.4%) exact matches, in which:
73 unique CDR3
6 unique J



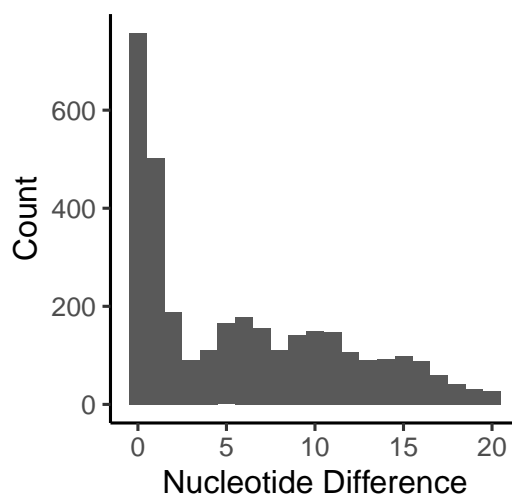
IGHV3-35*01

9 sequences assigned
1 (11.1%) exact matches, in which:
1 unique CDR3
1 unique J



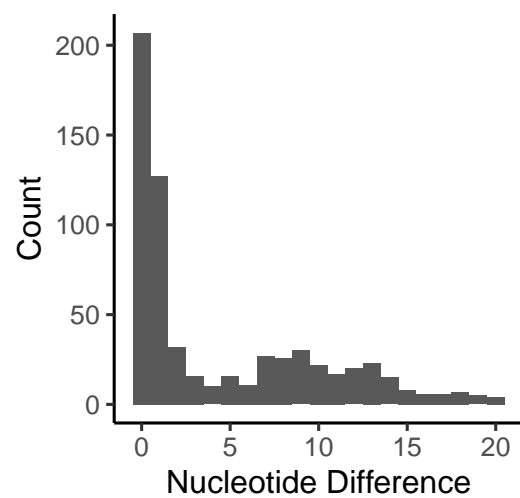
IGHV3-48*01

4127 sequences assigned
758 (18.4%) exact matches, in which:
462 unique CDR3
6 unique J



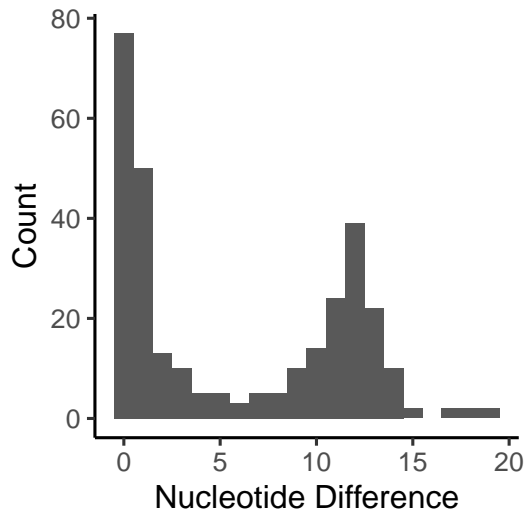
IGHV3-49*04

661 sequences assigned
207 (31.3%) exact matches, in which:
120 unique CDR3
6 unique J



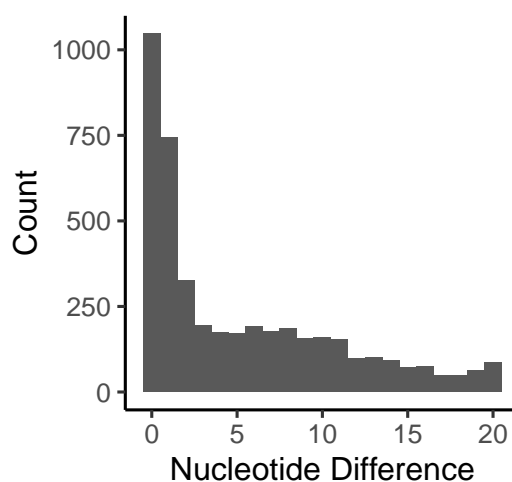
IGHV3-43*01

393 sequences assigned
77 (19.6%) exact matches, in which:
45 unique CDR3
5 unique J



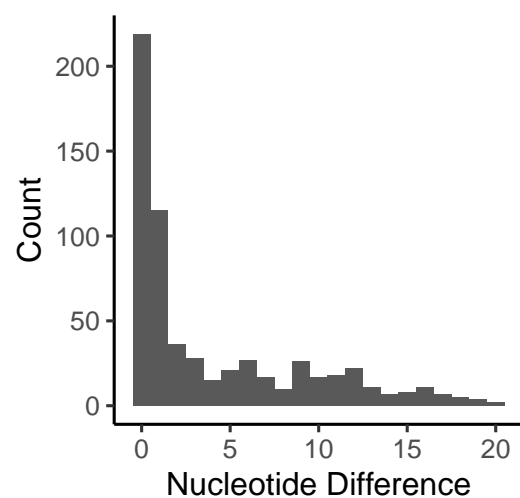
IGHV3-48*03

6334 sequences assigned
1047 (16.5%) exact matches, in which:
635 unique CDR3
6 unique J



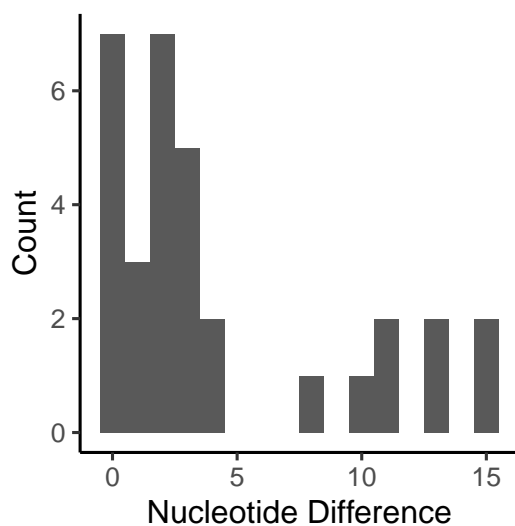
IGHV3-49*03_05

689 sequences assigned
219 (31.8%) exact matches, in which:
127 unique CDR3
6 unique J



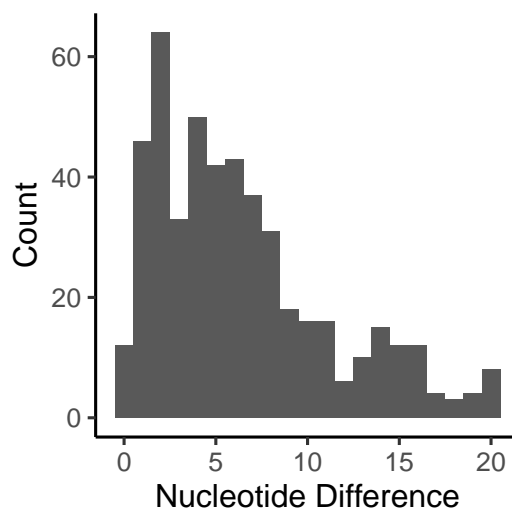
IGHV3-47*02

32 sequences assigned
7 (21.9%) exact matches, in which:
4 unique CDR3
2 unique J



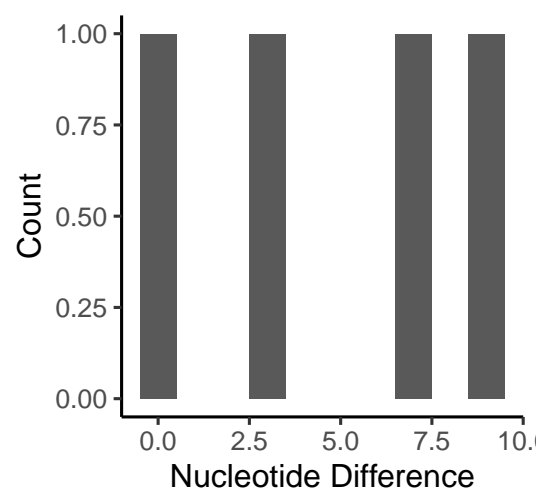
IGHV3-48*04

687 sequences assigned
12 (1.7%) exact matches, in which:
12 unique CDR3
5 unique J



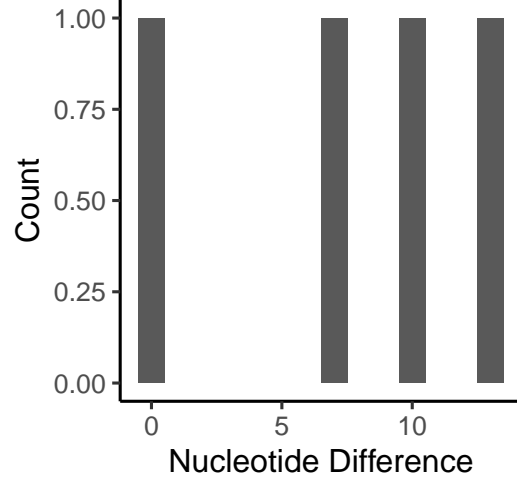
IGHV3-52*02

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



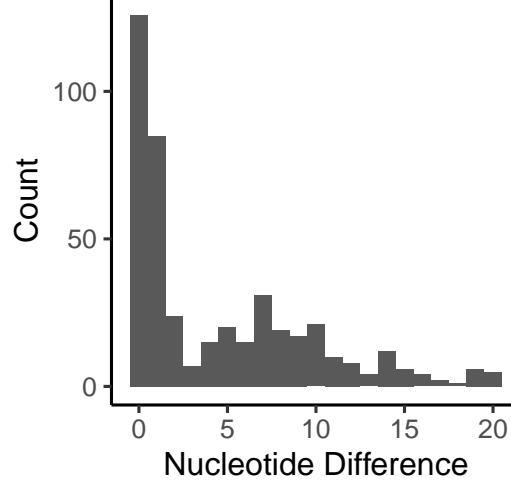
IGHV3-52*01_03

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



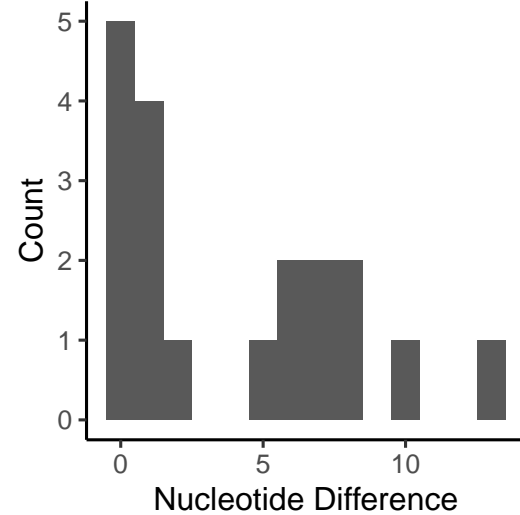
IGHV3-64*01

787 sequences assigned
126 (16%) exact matches, in which:
80 unique CDR3
5 unique J



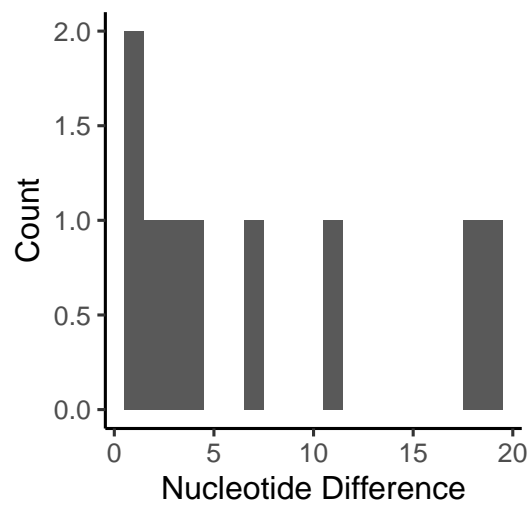
IGHV3-66*03

22 sequences assigned
5 (22.7%) exact matches, in which:
4 unique CDR3
3 unique J



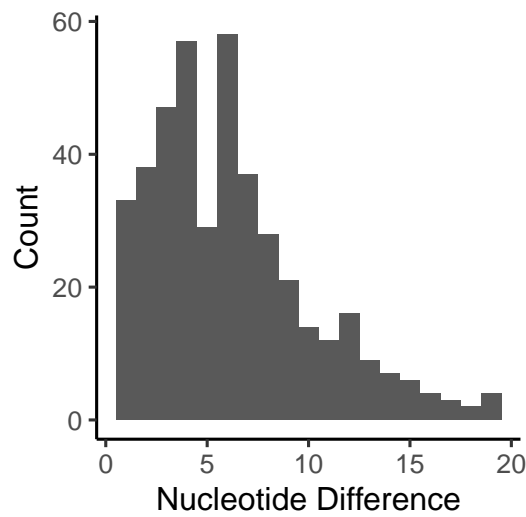
IGHV3-53*05

10 sequences assigned
No exact matches.



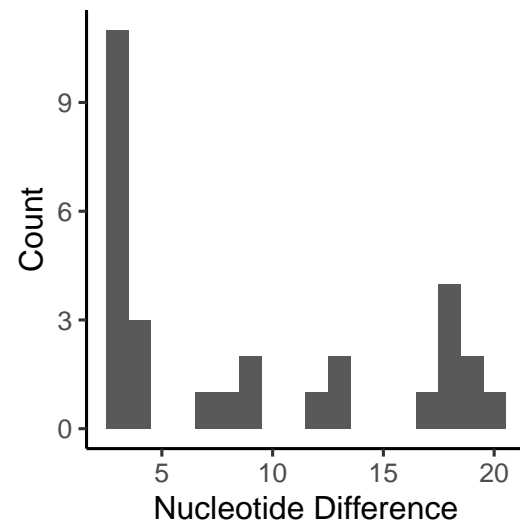
IGHV3-64*04

443 sequences assigned
No exact matches.



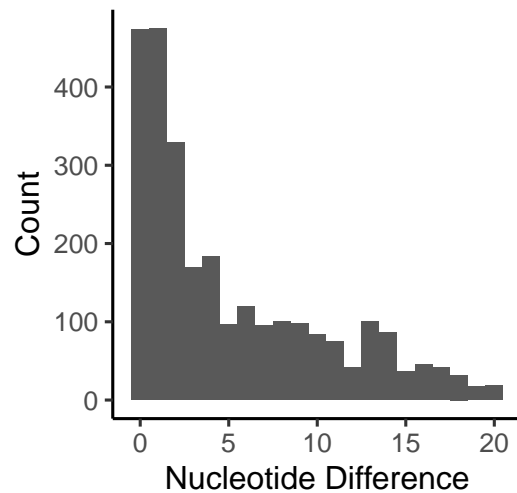
IGHV3-69-1*01

549 sequences assigned
No exact matches.



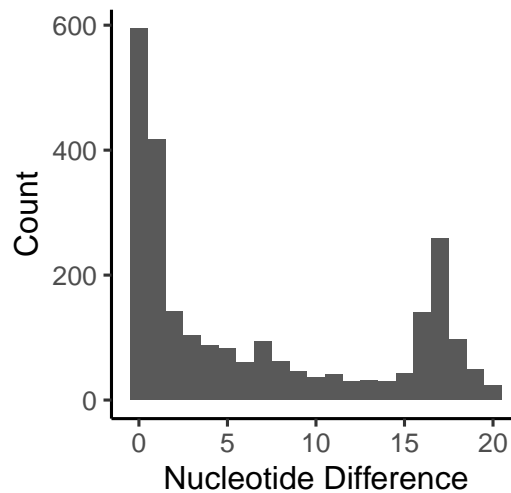
IGHV3-53*01_02

3080 sequences assigned
474 (15.4%) exact matches, in which:
292 unique CDR3
6 unique J



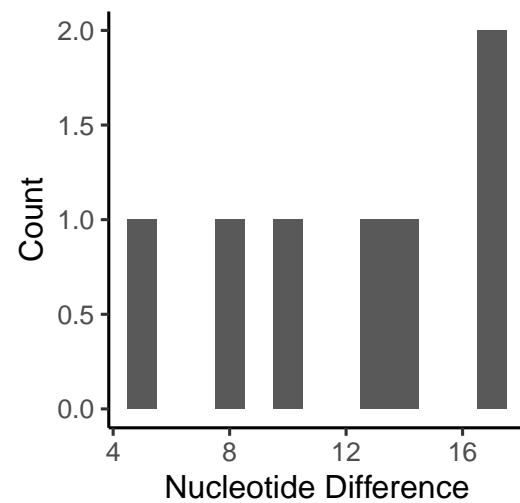
IGHV3-66*01

2752 sequences assigned
595 (21.6%) exact matches, in which:
384 unique CDR3
6 unique J



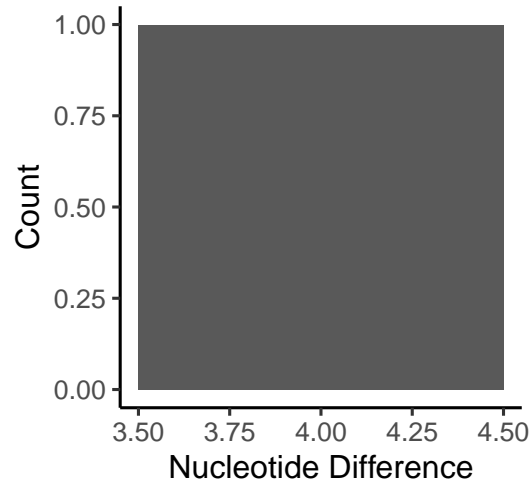
IGHV3-69-1*02

20 sequences assigned
No exact matches.



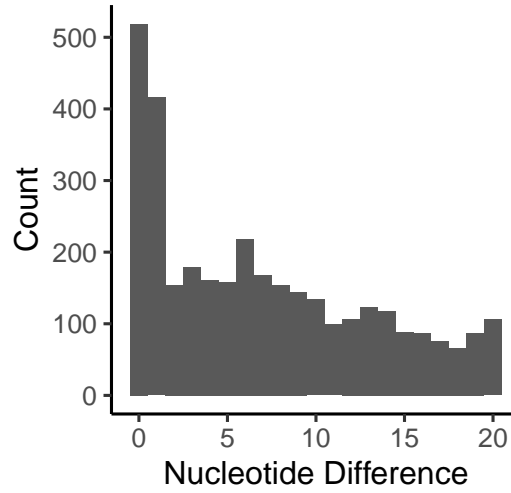
IGHV3-71*01_04

2 sequences assigned
No exact matches.



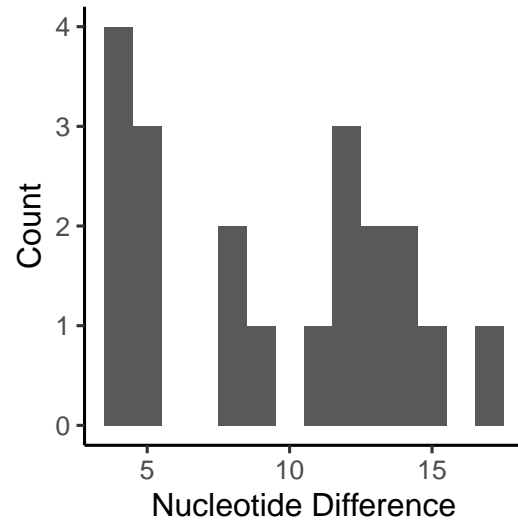
IGHV3-74*01_02

4851 sequences assigned
519 (10.7%) exact matches, in which:
322 unique CDR3
6 unique J



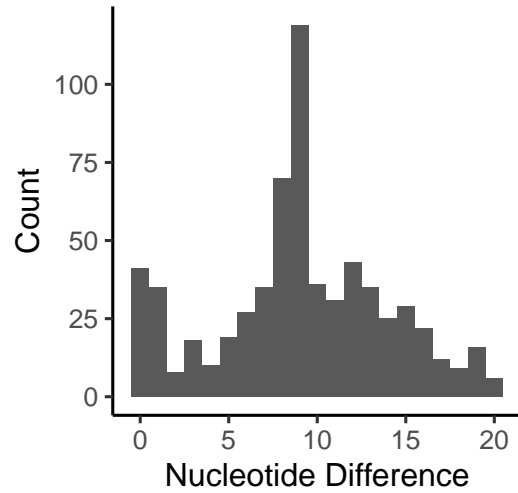
IGHV3-NL1*01

30 sequences assigned
No exact matches.



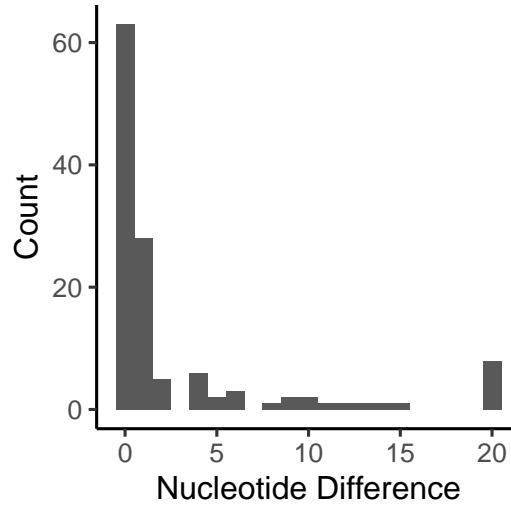
IGHV3-72*01

757 sequences assigned
41 (5.4%) exact matches, in which:
23 unique CDR3
5 unique J



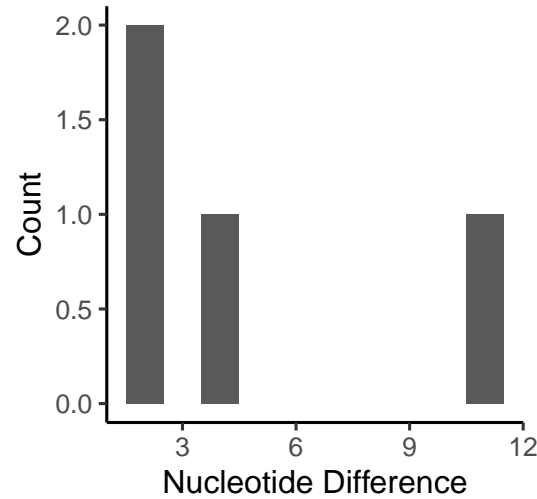
IGHV3-43D*04

143 sequences assigned
63 (44.1%) exact matches, in which:
35 unique CDR3
3 unique J



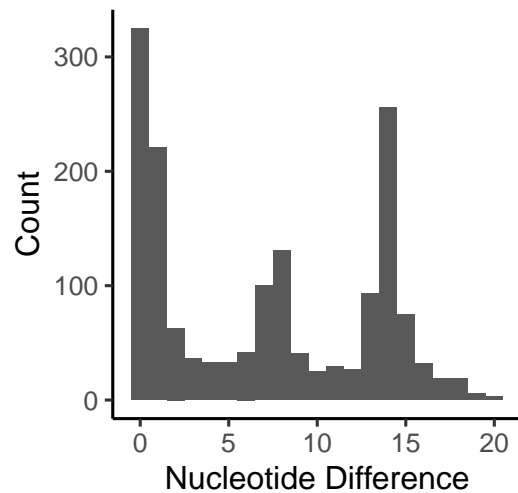
IGHV4-28*03

4 sequences assigned
No exact matches.



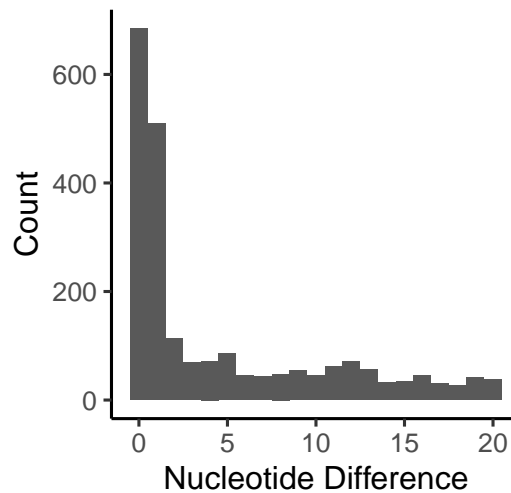
IGHV3-73*01_02

2327 sequences assigned
325 (14%) exact matches, in which:
195 unique CDR3
6 unique J



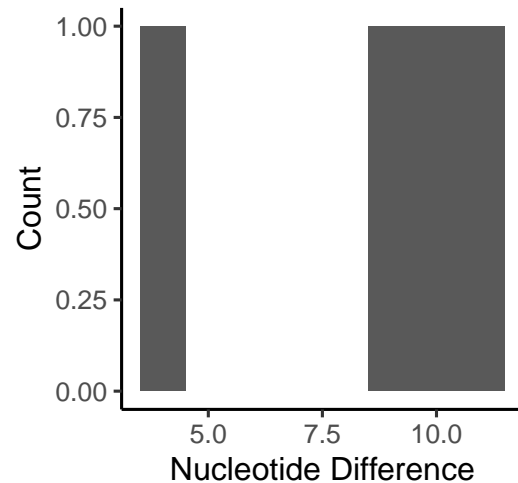
IGHV3-64D*06

3030 sequences assigned
685 (22.6%) exact matches, in which:
381 unique CDR3
6 unique J



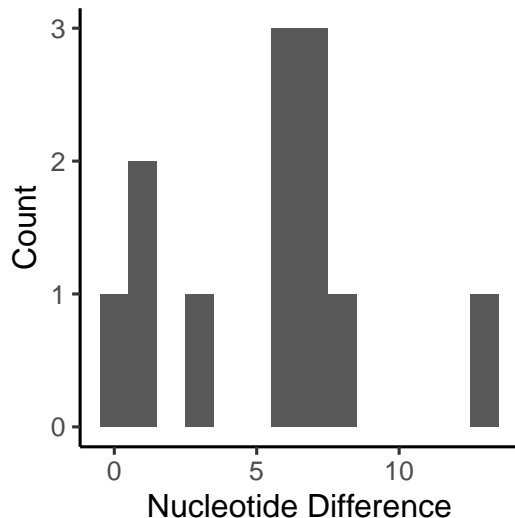
IGHV4-28*01_07

4 sequences assigned
No exact matches.



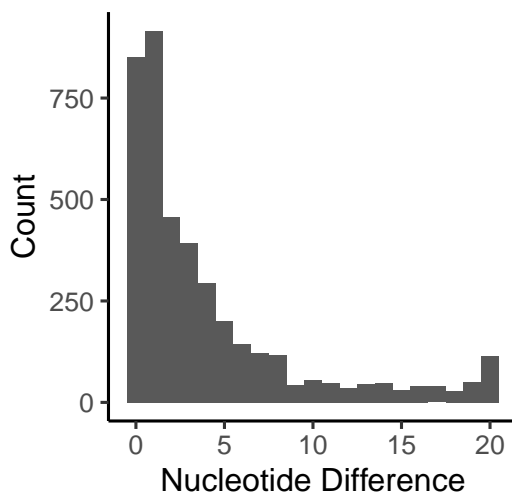
IGHV4-28*02_05

12 sequences assigned
1 (8.3%) exact matches, in which:
1 unique CDR3
1 unique J



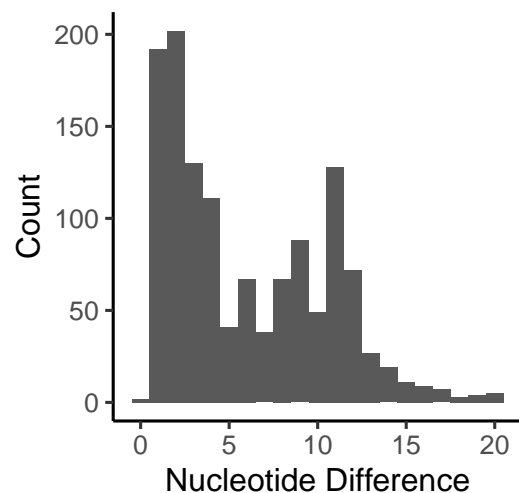
IGHV4-31*03_04

4745 sequences assigned
851 (17.9%) exact matches, in which:
731 unique CDR3
6 unique J



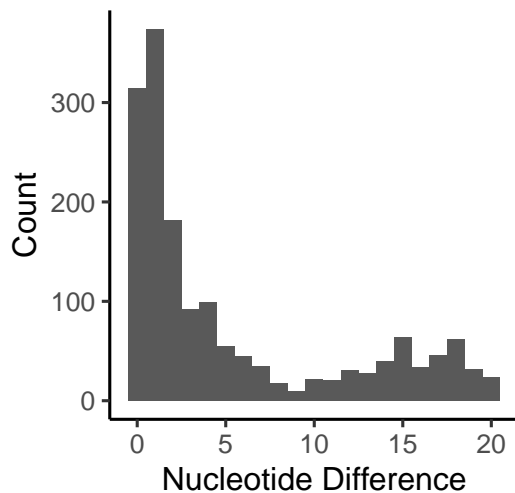
IGHV4-39*07

1326 sequences assigned
2 (0.2%) exact matches, in which:
2 unique CDR3
1 unique J



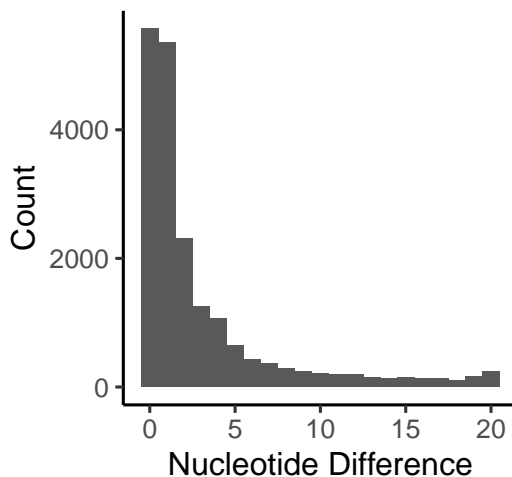
IGHV4-30-2*01

2230 sequences assigned
314 (14.1%) exact matches, in which:
246 unique CDR3
6 unique J



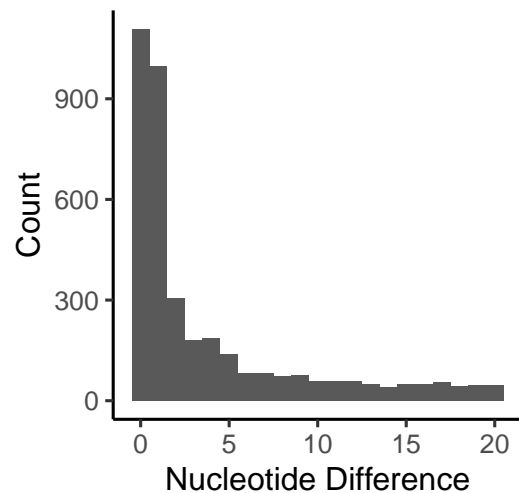
IGHV4-34*01_02

21869 sequences assigned
5572 (25.5%) exact matches, in which:
4444 unique CDR3
6 unique J



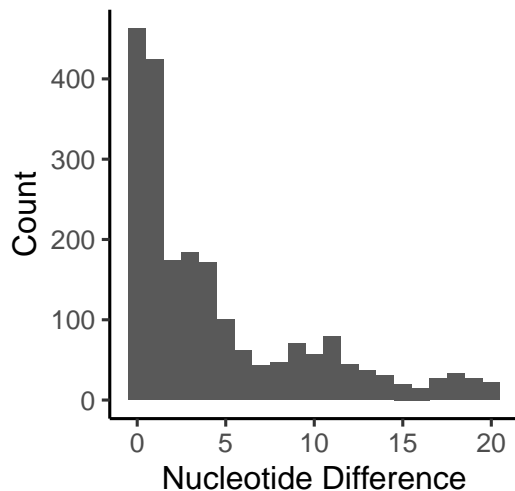
IGHV4-39*01_05

5578 sequences assigned
1108 (19.9%) exact matches, in which:
900 unique CDR3
6 unique J



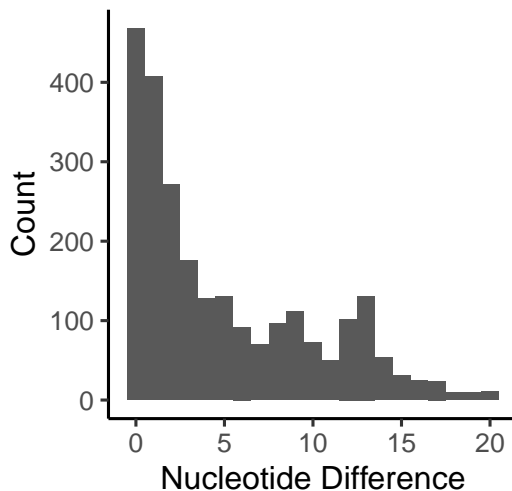
IGHV4-30-4*01

2566 sequences assigned
463 (18%) exact matches, in which:
395 unique CDR3
6 unique J



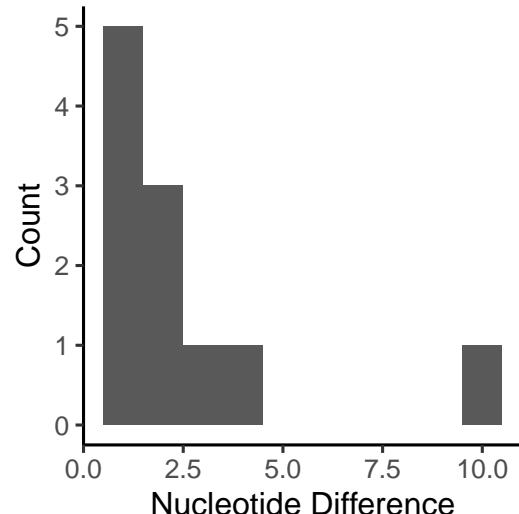
IGHV4-38-2*02_A70G

4227 sequences assigned
468 (11.1%) exact matches, in which:
386 unique CDR3
6 unique J



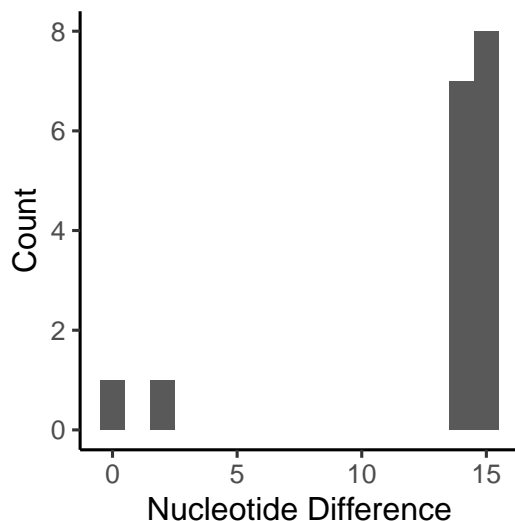
IGHV4-55*01_05

11 sequences assigned
No exact matches.



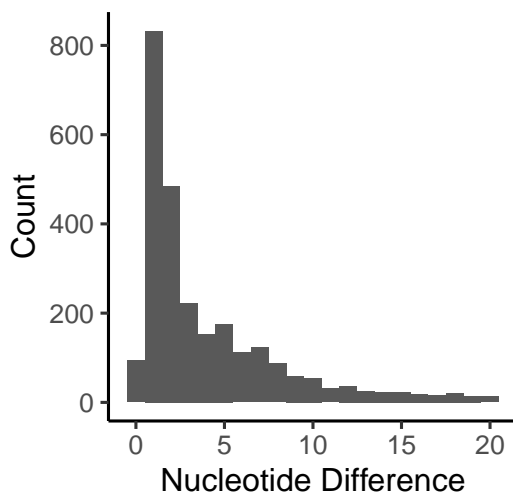
IGHV4-55*02_04_08

17 sequences assigned
1 (5.9%) exact matches, in which:
1 unique CDR3
1 unique J



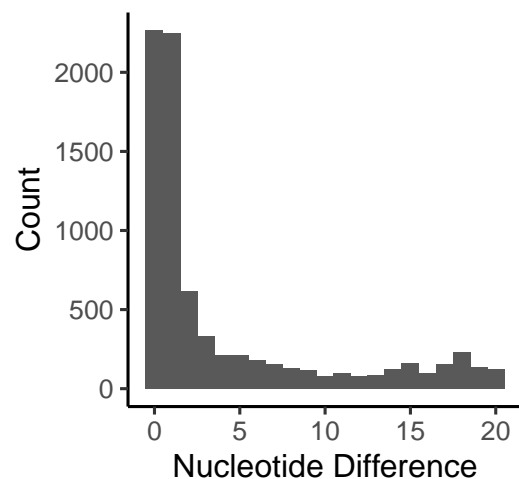
IGHV4-59*12

2884 sequences assigned
94 (3.3%) exact matches, in which:
94 unique CDR3
5 unique J



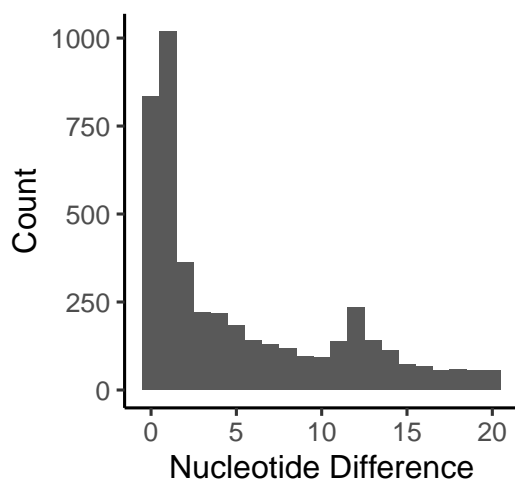
IGHV5-10-1*01_03

9402 sequences assigned
2265 (24.1%) exact matches, in which:
1581 unique CDR3
6 unique J



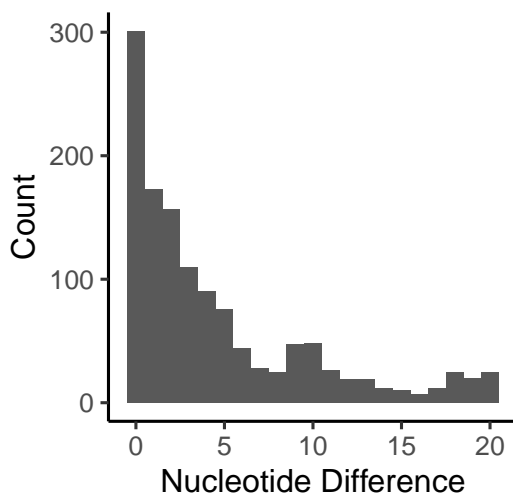
IGHV4-59*08

7062 sequences assigned
834 (11.8%) exact matches, in which:
690 unique CDR3
6 unique J



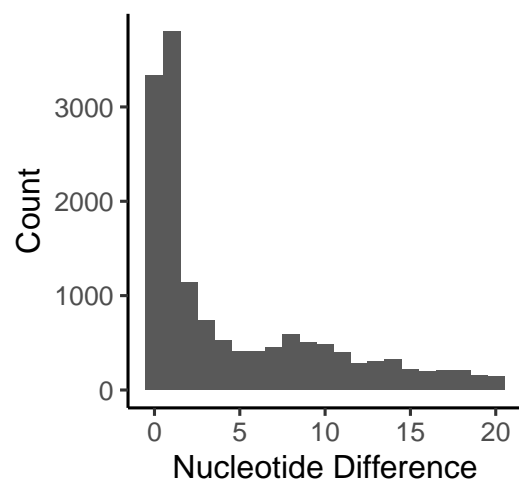
IGHV4-61*01

1380 sequences assigned
301 (21.8%) exact matches, in which:
257 unique CDR3
6 unique J



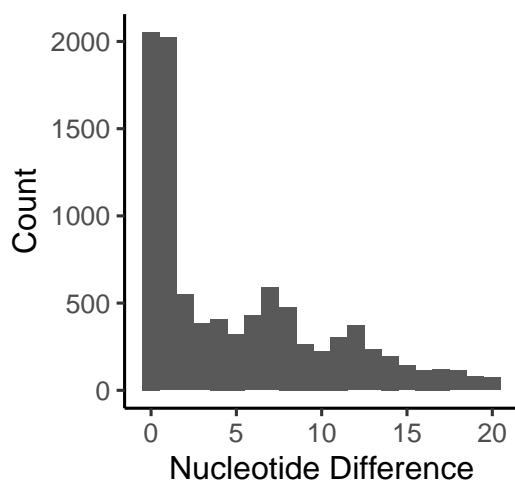
IGHV5-51*01_03

18479 sequences assigned
3332 (18%) exact matches, in which:
2189 unique CDR3
6 unique J



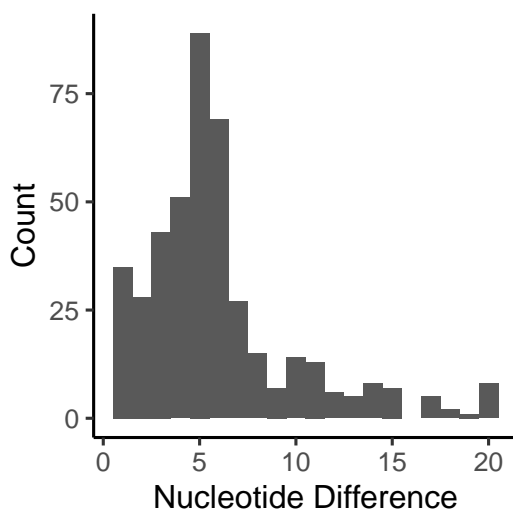
IGHV4-59*01_07

11259 sequences assigned
2054 (18.2%) exact matches, in which:
1694 unique CDR3
6 unique J



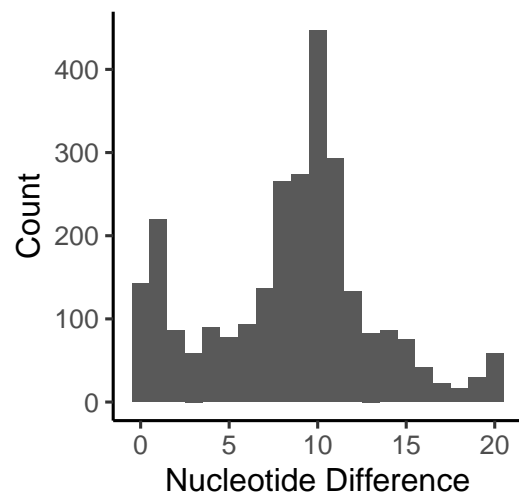
IGHV4-61*08

462 sequences assigned
No exact matches.



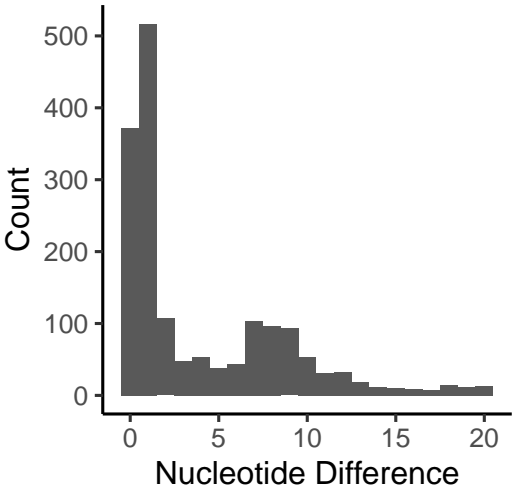
IGHV6-1*01_02

3004 sequences assigned
142 (4.7%) exact matches, in which:
121 unique CDR3
5 unique J



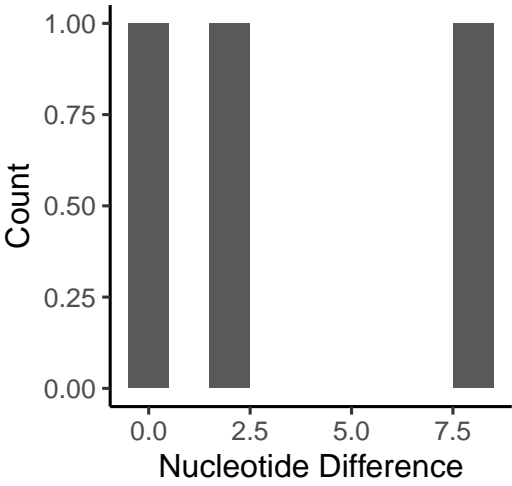
IGHV7-4-1*02

1834 sequences assigned
372 (20.3%) exact matches, in which:
312 unique CDR3
5 unique J



IGHV7-81*01

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





Novel sequence(s)IGHV1-69*01_12_13_G238AIGHV3-48*03_T303G are not listed in the genotype and will be ignored.