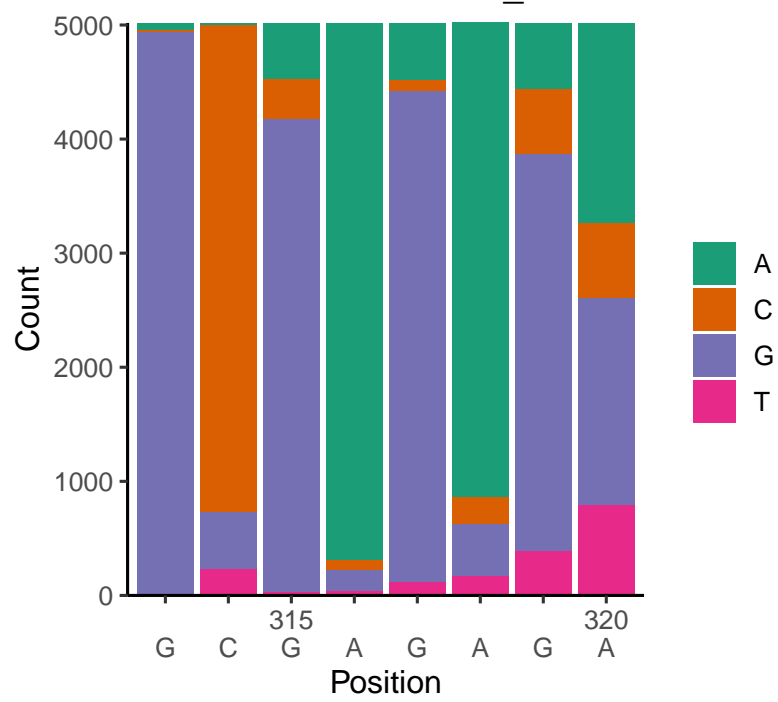


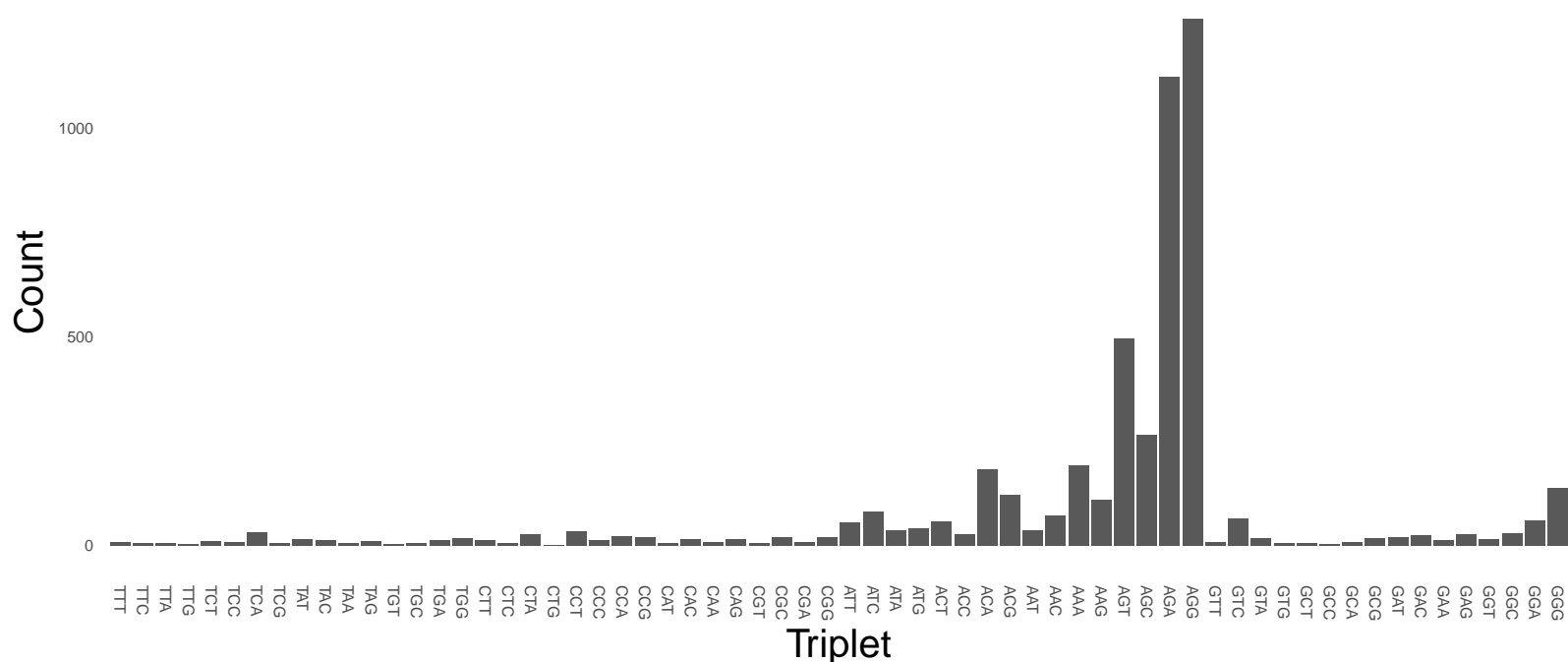
Gene IGHV4-38-2*02_A70G



Gene IGHV4-38-2*02_A70G

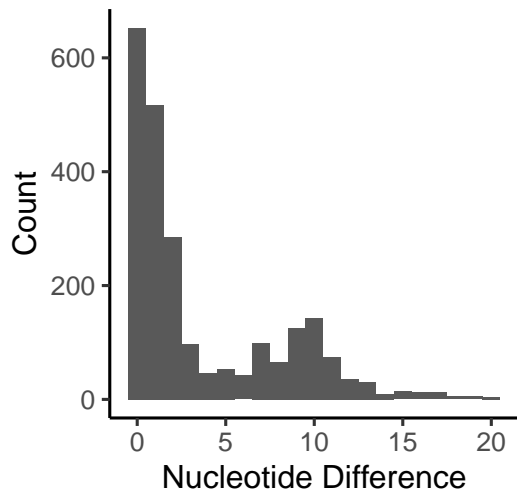


IGHV4-38-2*02_A70G- Final 3 nucleotides as a triplet



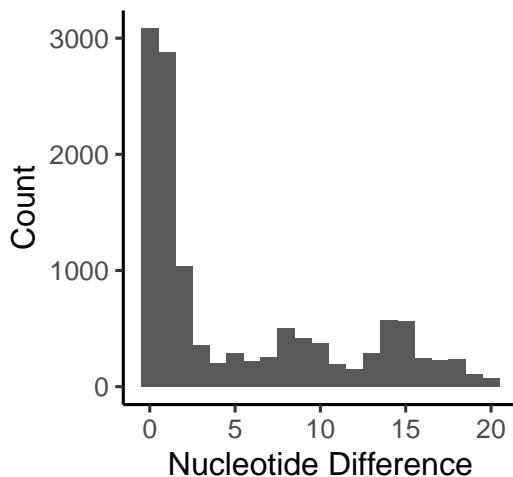
IGHV1-2*04

2508 sequences assigned
653 (26%) exact matches, in which:
561 unique CDR3
6 unique J



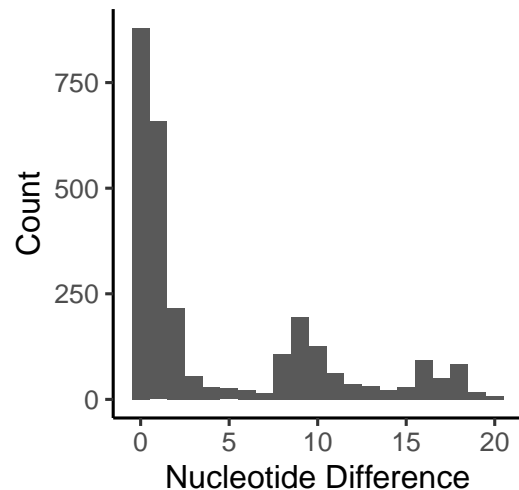
IGHV1-8*01

12934 sequences assigned
3084 (23.8%) exact matches, in which:
2605 unique CDR3
6 unique J



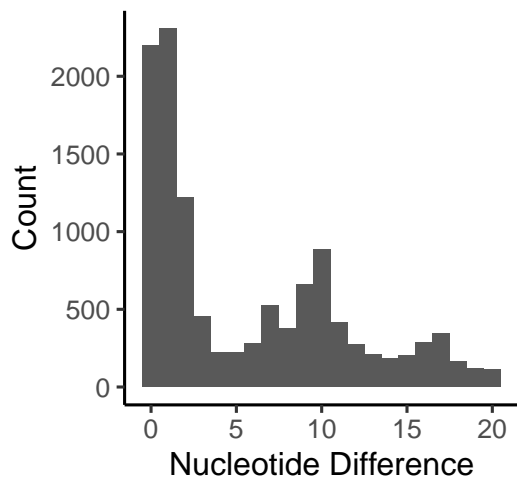
IGHV1-24*01

2794 sequences assigned
880 (31.5%) exact matches, in which:
762 unique CDR3
6 unique J



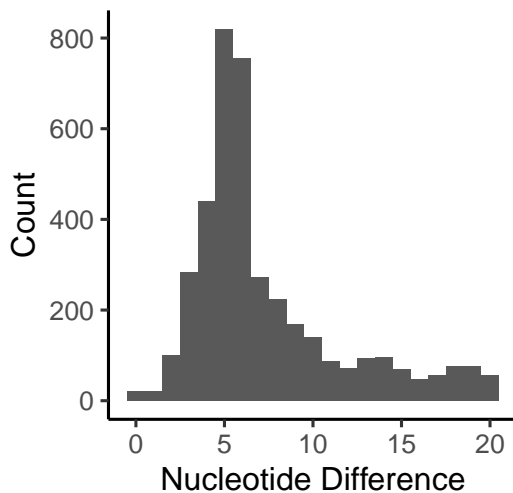
IGHV1-2*06

13039 sequences assigned
2198 (16.9%) exact matches, in which:
1851 unique CDR3
6 unique J



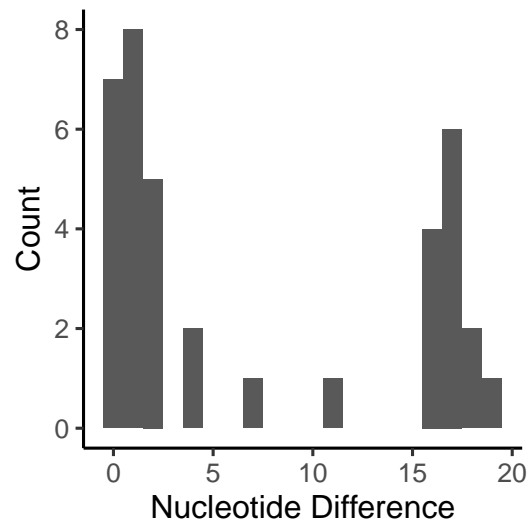
IGHV1-8*02

4178 sequences assigned
21 (0.5%) exact matches, in which:
21 unique CDR3
5 unique J



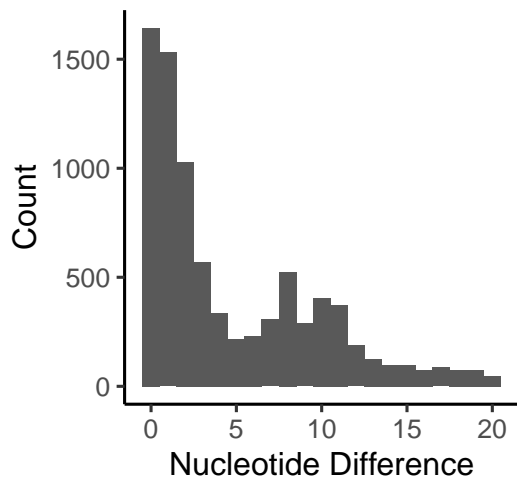
IGHV1-45*02

41 sequences assigned
7 (17.1%) exact matches, in which:
7 unique CDR3
2 unique J



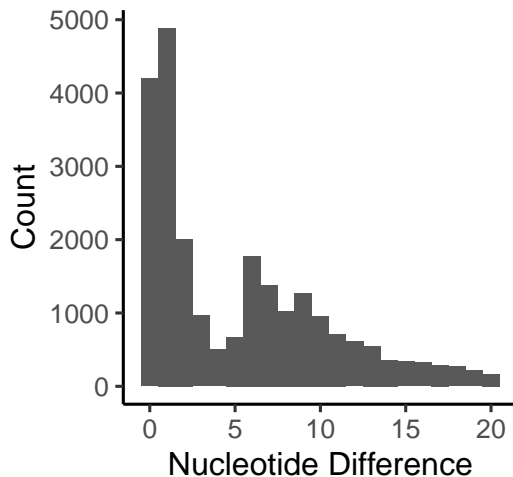
IGHV1-3*01_05

8909 sequences assigned
1643 (18.4%) exact matches, in which:
1316 unique CDR3
6 unique J



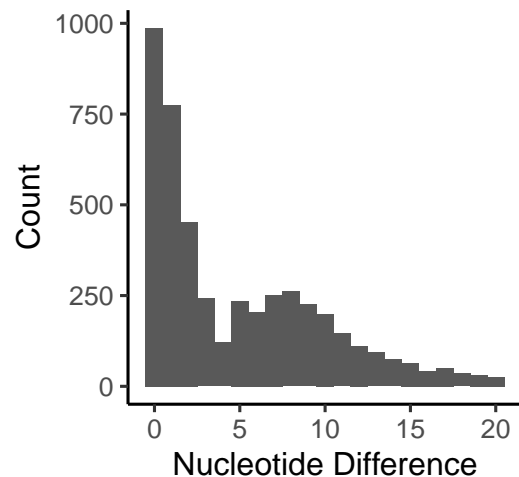
IGHV1-18*01

27600 sequences assigned
4200 (15.2%) exact matches, in which:
3399 unique CDR3
6 unique J



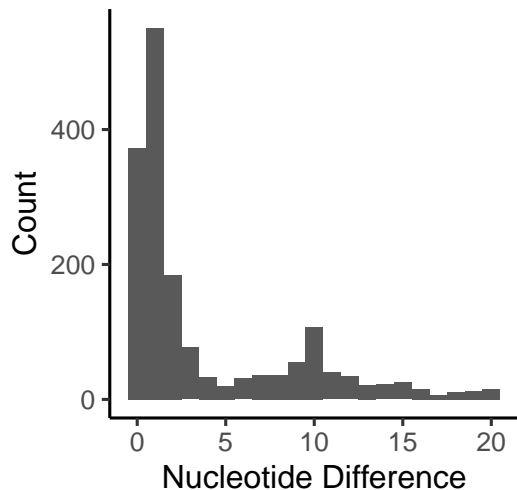
IGHV1-46*01

5428 sequences assigned
987 (18.2%) exact matches, in which:
905 unique CDR3
6 unique J



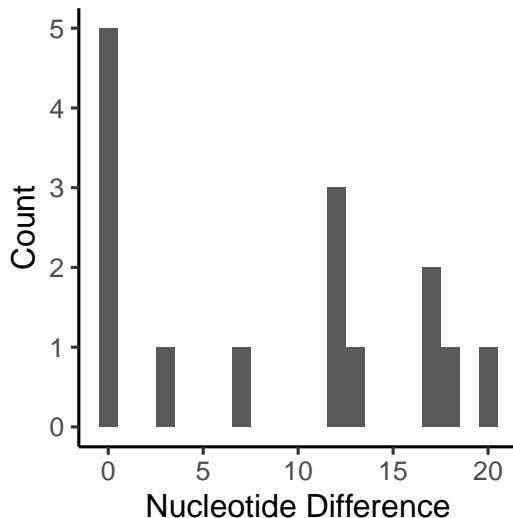
IGHV1-46*03

2086 sequences assigned
373 (17.9%) exact matches, in which:
261 unique CDR3
6 unique J



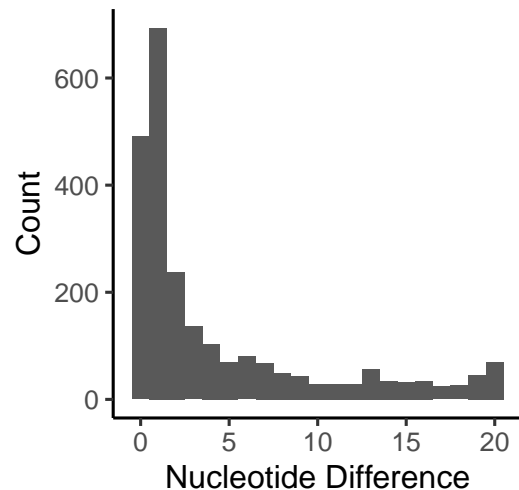
IGHV1-69-2*01

16 sequences assigned
5 (31.2%) exact matches, in which:
4 unique CDR3
3 unique J



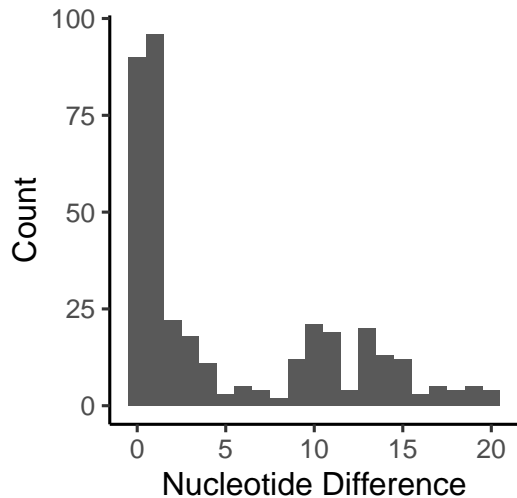
IGHV2-5*02

3034 sequences assigned
491 (16.2%) exact matches, in which:
381 unique CDR3
6 unique J



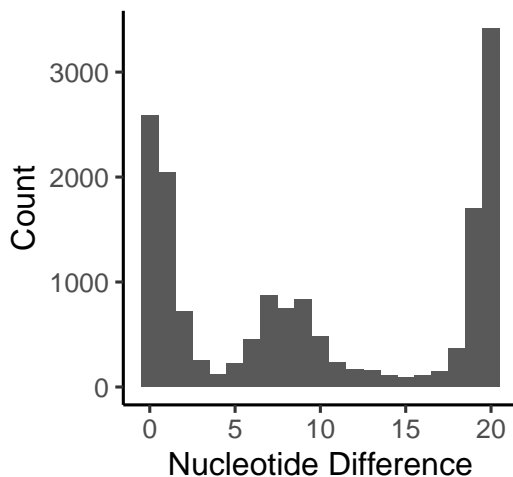
IGHV1-58*02

529 sequences assigned
90 (17%) exact matches, in which:
76 unique CDR3
6 unique J



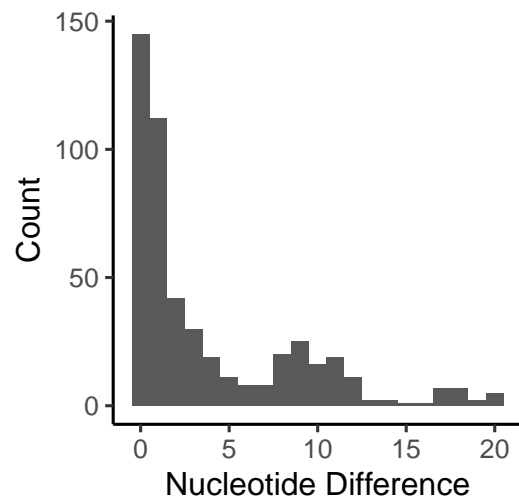
IGHV1-69*06_14

22214 sequences assigned
2584 (11.6%) exact matches, in which:
2276 unique CDR3
6 unique J



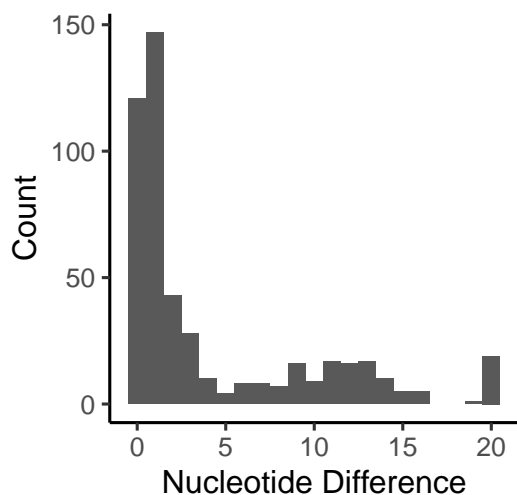
IGHV2-26*01

607 sequences assigned
145 (23.9%) exact matches, in which:
117 unique CDR3
6 unique J



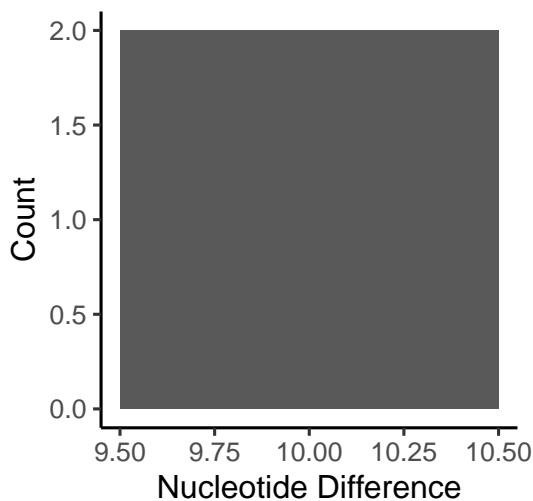
IGHV1-58*01_03

554 sequences assigned
121 (21.8%) exact matches, in which:
109 unique CDR3
5 unique J



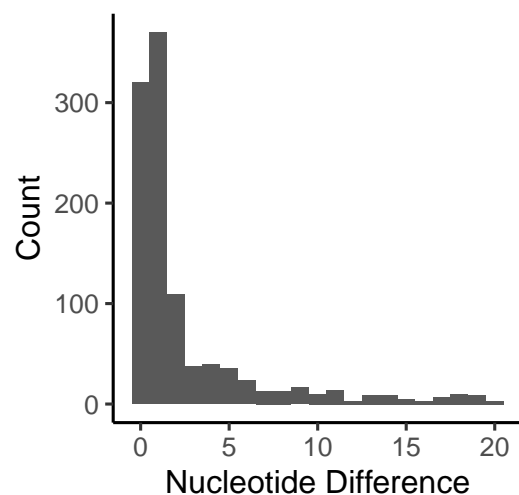
IGHV1-NL1*01

2 sequences assigned
No exact matches.



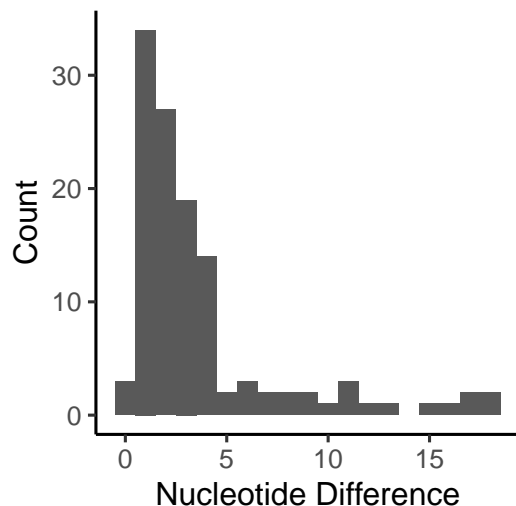
IGHV2-70*01

1102 sequences assigned
320 (29%) exact matches, in which:
237 unique CDR3
6 unique J



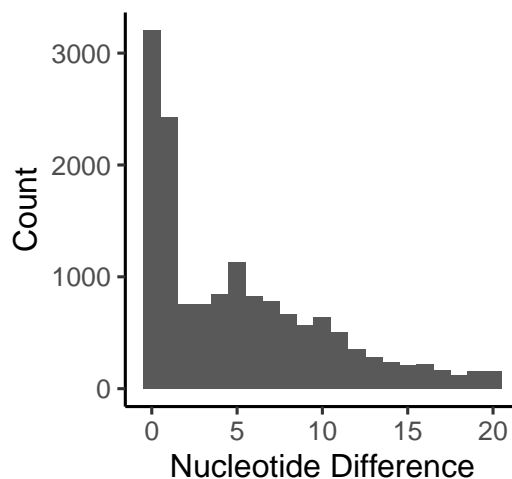
IGHV2-70*12

155 sequences assigned
3 (1.9%) exact matches, in which:
3 unique CDR3
2 unique J



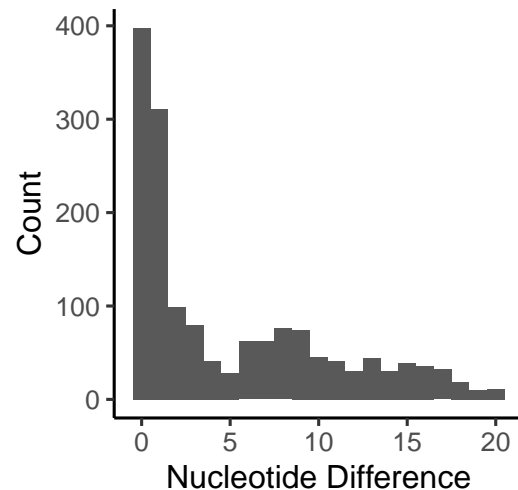
IGHV3-9*01

17519 sequences assigned
3203 (18.3%) exact matches, in which:
1805 unique CDR3
6 unique J



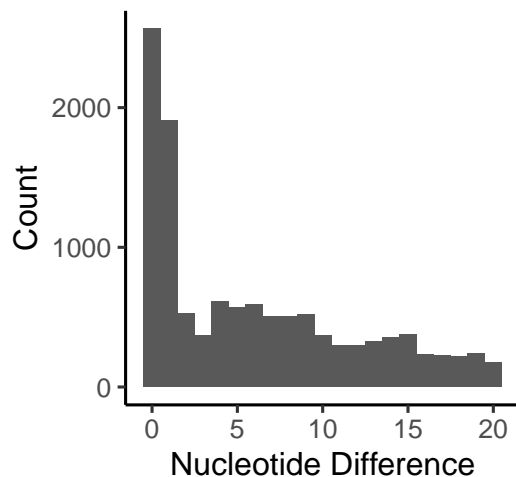
IGHV3-13*01

2215 sequences assigned
398 (18%) exact matches, in which:
257 unique CDR3
6 unique J



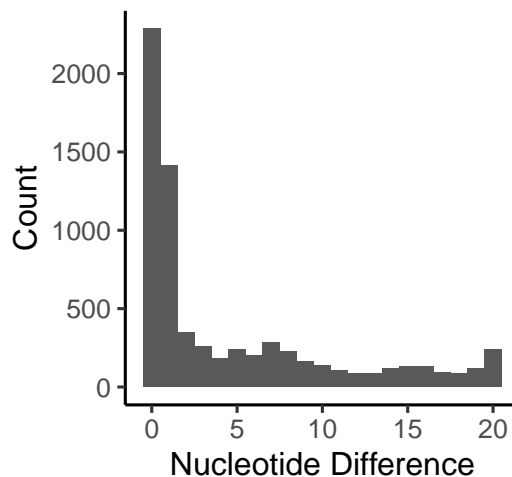
IGHV3-7*01

14139 sequences assigned
2565 (18.1%) exact matches, in which:
1748 unique CDR3
6 unique J



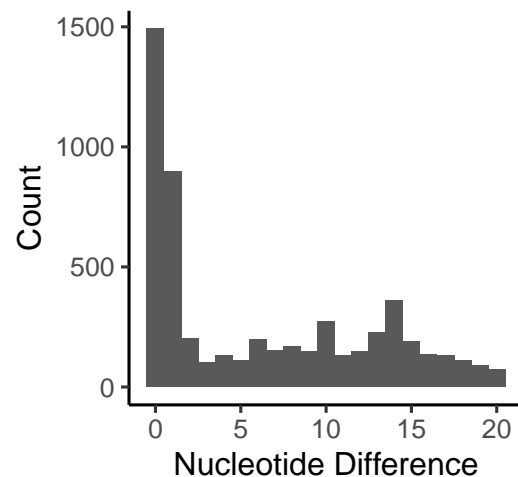
IGHV3-11*01

9466 sequences assigned
2286 (24.1%) exact matches, in which:
1528 unique CDR3
6 unique J



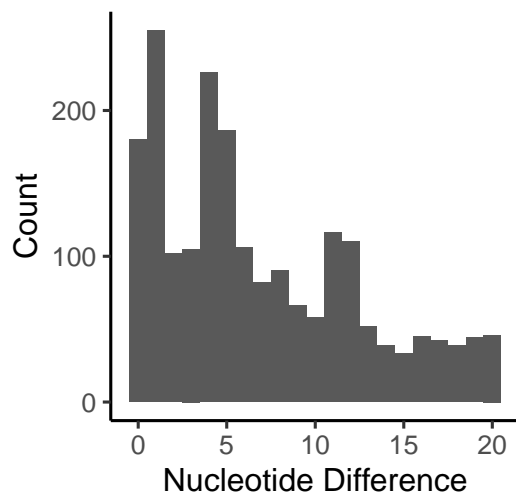
IGHV3-15*01_02

6798 sequences assigned
1492 (21.9%) exact matches, in which:
881 unique CDR3
6 unique J



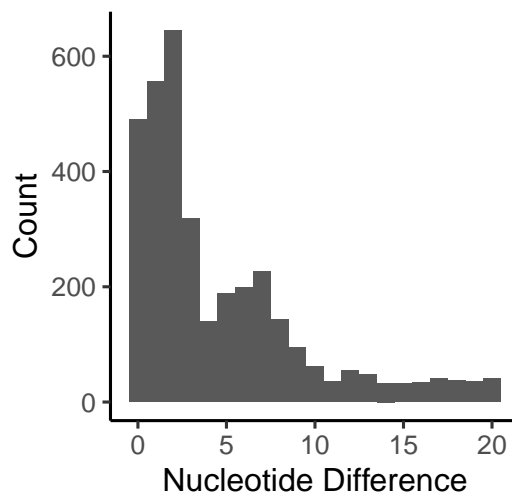
IGHV3-7*03

2513 sequences assigned
180 (7.2%) exact matches, in which:
168 unique CDR3
6 unique J



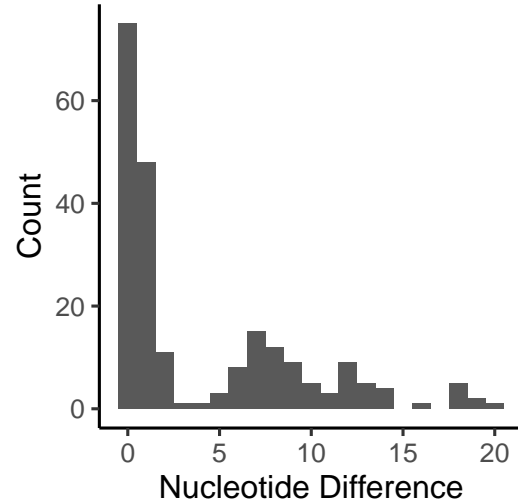
IGHV3-11*04

3851 sequences assigned
491 (12.7%) exact matches, in which:
462 unique CDR3
6 unique J



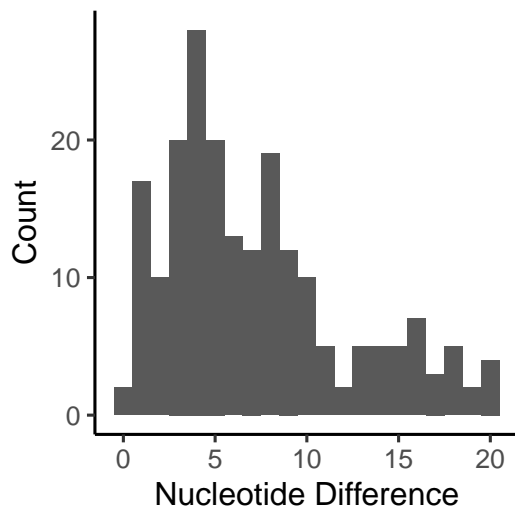
IGHV3-20*01_02

219 sequences assigned
75 (34.2%) exact matches, in which:
46 unique CDR3
5 unique J



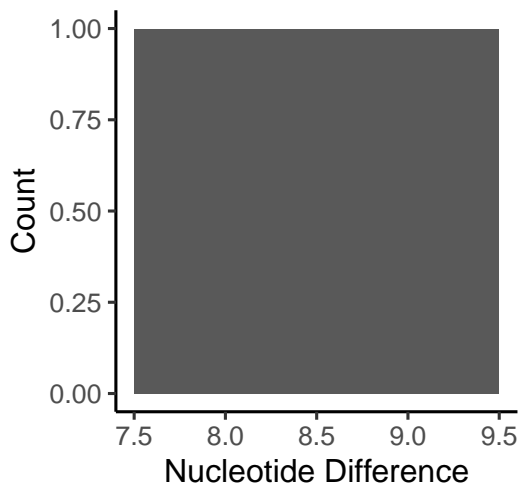
IGHV3-20*03_04

241 sequences assigned
2 (0.8%) exact matches, in which:
2 unique CDR3
1 unique J



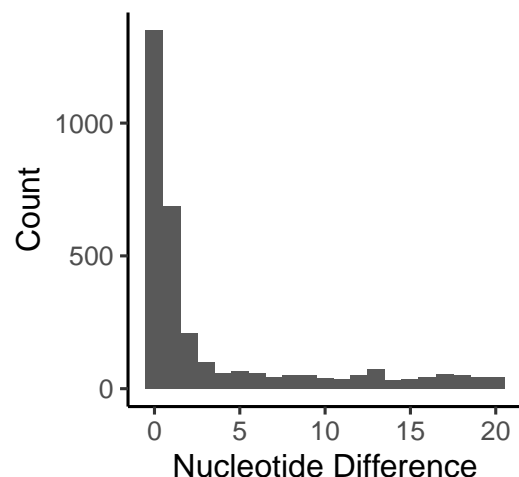
IGHV3-22*01_02

2 sequences assigned
No exact matches.



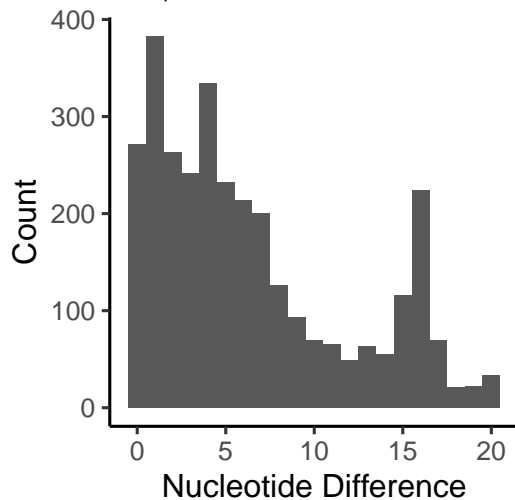
IGHV3-30*03

3831 sequences assigned
1349 (35.2%) exact matches, in which:
1187 unique CDR3
6 unique J



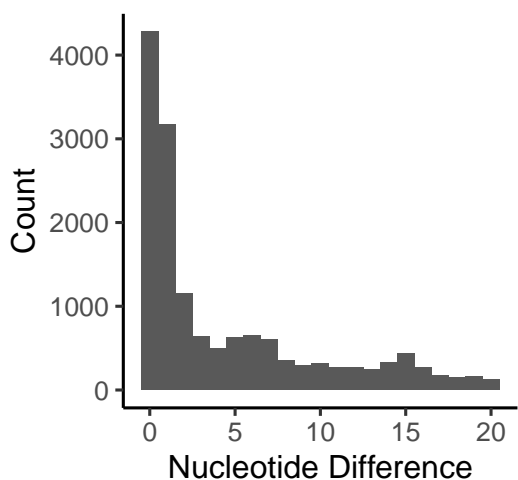
IGHV3-21*04

3488 sequences assigned
271 (7.8%) exact matches, in which:
246 unique CDR3
6 unique J



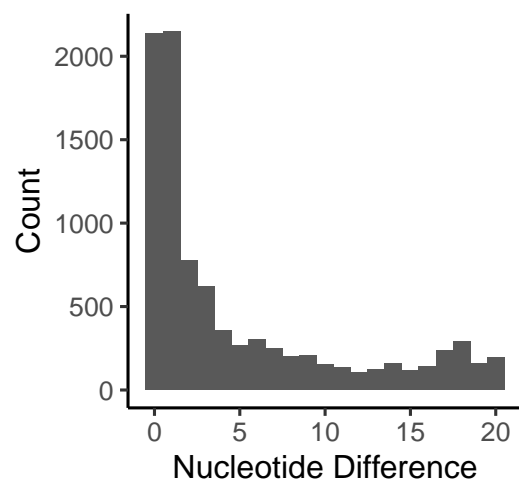
IGHV3-30-3*01

16447 sequences assigned
4279 (26%) exact matches, in which:
2674 unique CDR3
6 unique J



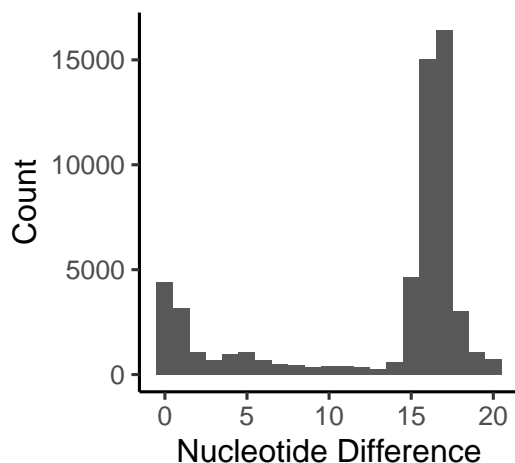
IGHV3-33*01

11494 sequences assigned
2135 (18.6%) exact matches, in which:
1423 unique CDR3
6 unique J



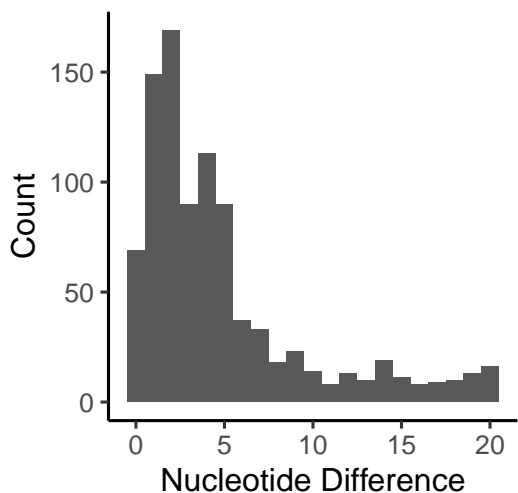
IGHV3-21*01_02

59199 sequences assigned
4429 (7.5%) exact matches, in which:
2826 unique CDR3
6 unique J



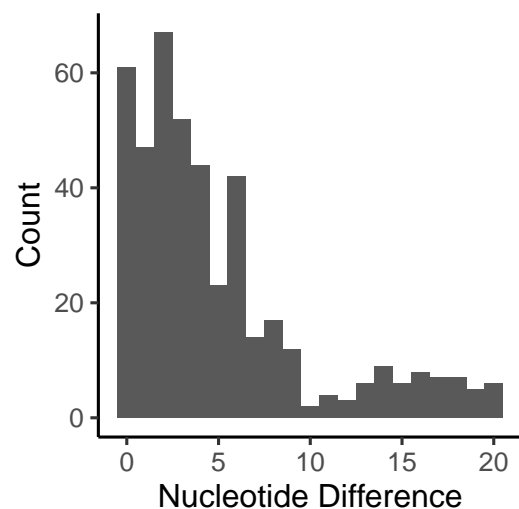
IGHV3-30-3*02

1011 sequences assigned
69 (6.8%) exact matches, in which:
66 unique CDR3
5 unique J



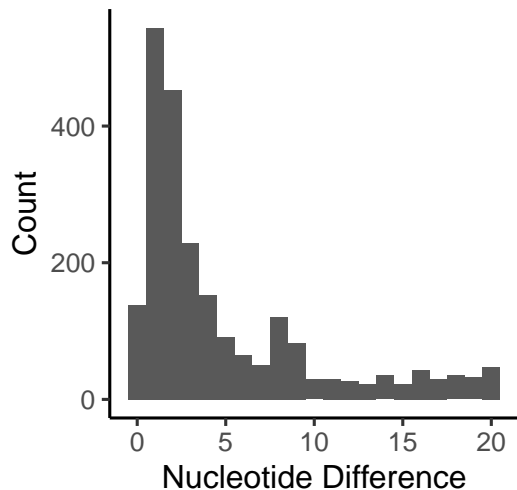
IGHV3-33*05

773 sequences assigned
61 (7.9%) exact matches, in which:
58 unique CDR3
5 unique J



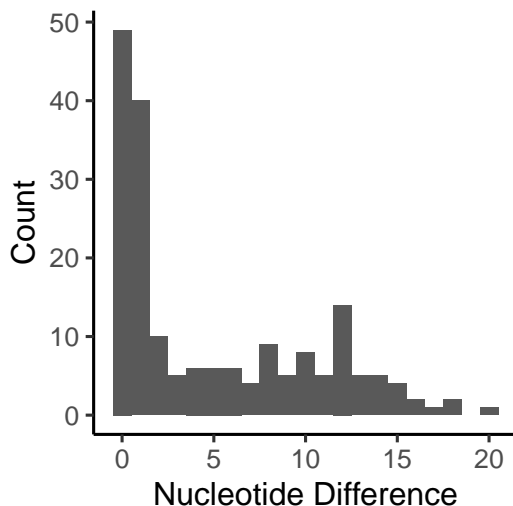
IGHV3–33*06

2569 sequences assigned
138 (5.4%) exact matches, in which:
134 unique CDR3
6 unique J



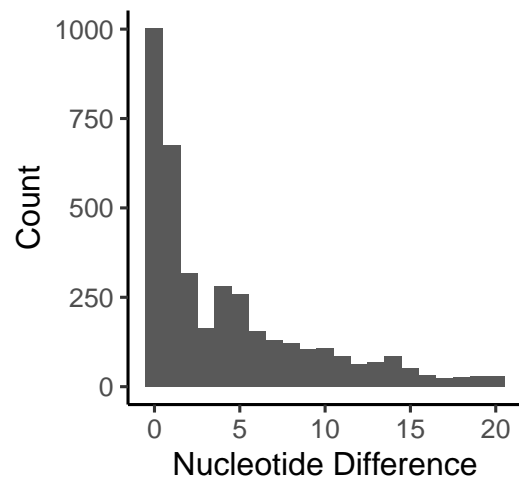
IGHV3–43*01

190 sequences assigned
49 (25.8%) exact matches, in which:
30 unique CDR3
4 unique J



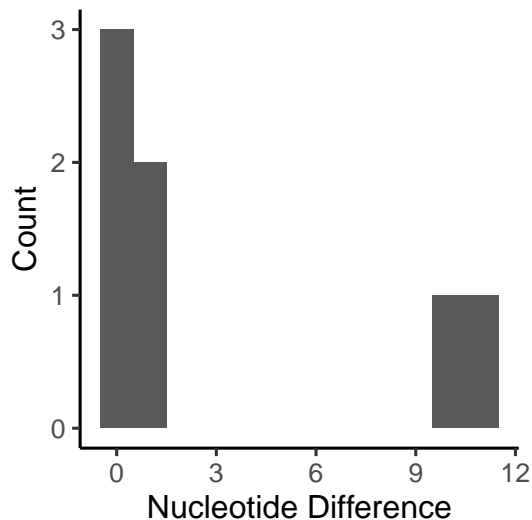
IGHV3–48*01

4463 sequences assigned
1002 (22.5%) exact matches, in which:
674 unique CDR3
6 unique J



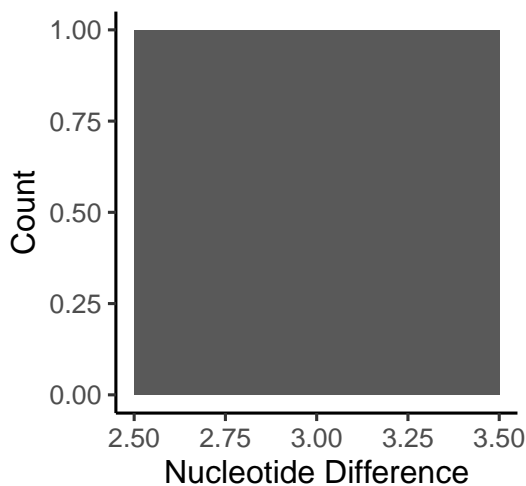
IGHV3–35*01

7 sequences assigned
3 (42.9%) exact matches, in which:
2 unique CDR3
2 unique J



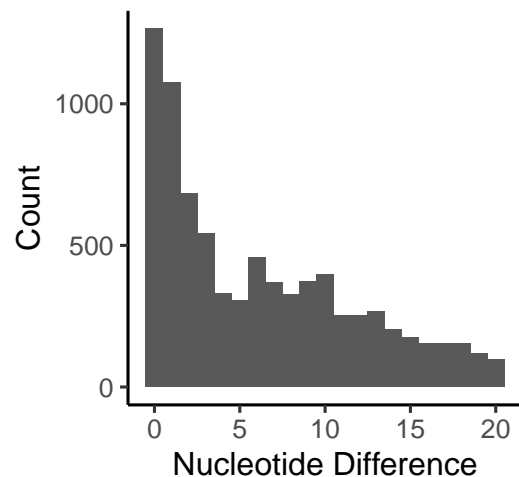
IGHV3–47*01

1 sequences assigned
No exact matches.



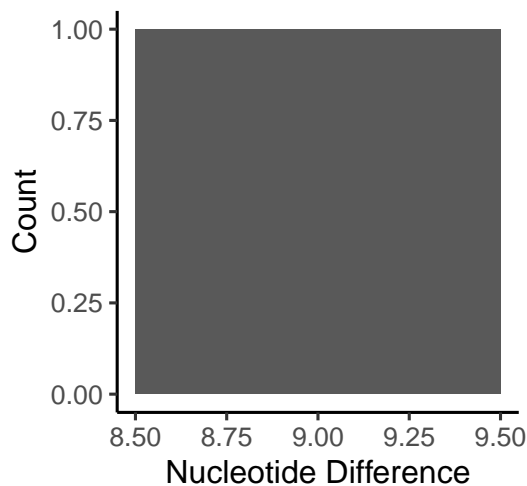
IGHV3–48*03

9776 sequences assigned
1265 (12.9%) exact matches, in which:
768 unique CDR3
6 unique J



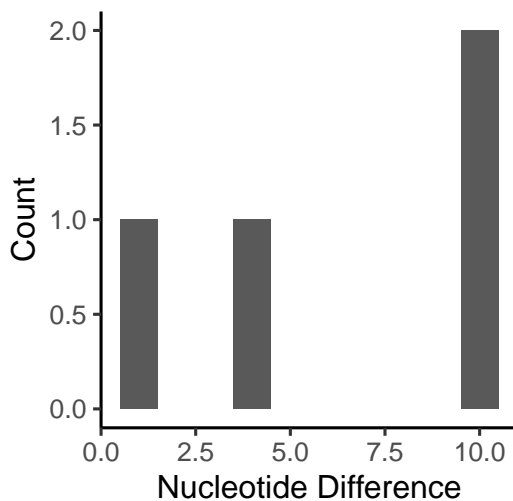
IGHV3–38–3*01

1 sequences assigned
No exact matches.



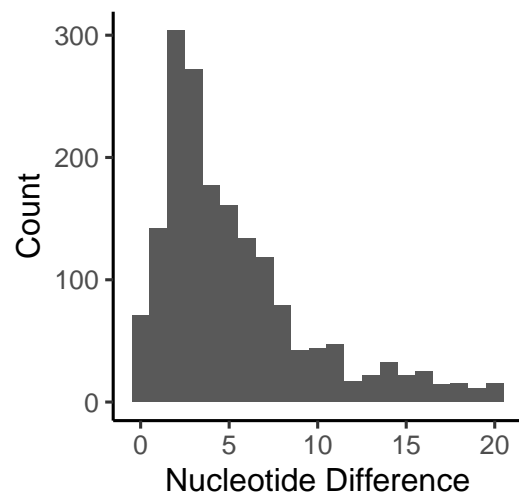
IGHV3–47*02

4 sequences assigned
No exact matches.



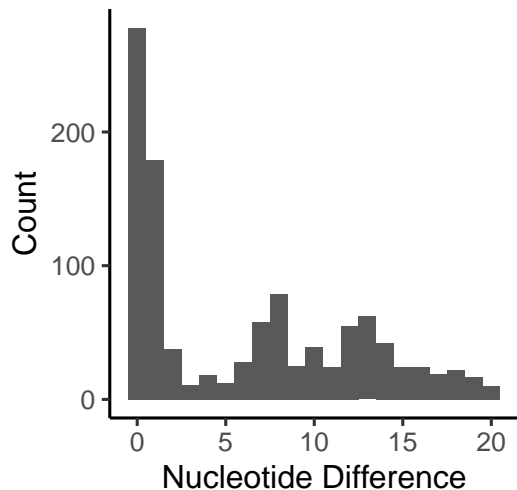
IGHV3–48*04

1930 sequences assigned
71 (3.7%) exact matches, in which:
70 unique CDR3
5 unique J



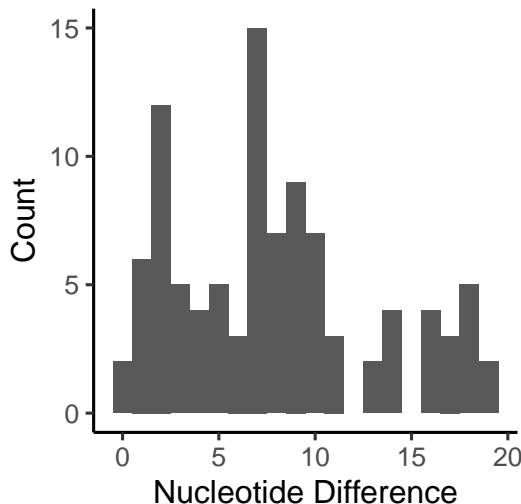
IGHV3-49*04

1285 sequences assigned
278 (21.6%) exact matches, in which:
170 unique CDR3
6 unique J



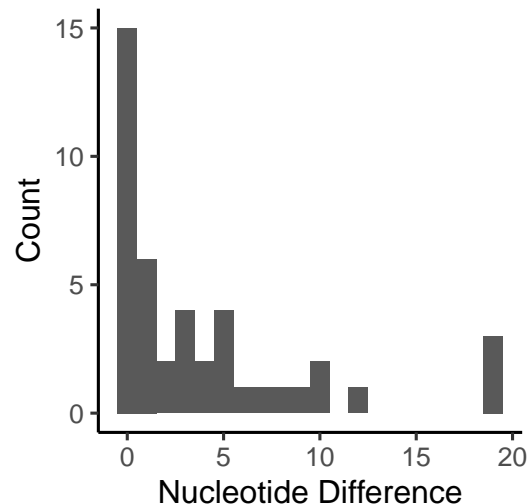
IGHV3-53*05

108 sequences assigned
2 (1.9%) exact matches, in which:
2 unique CDR3
2 unique J



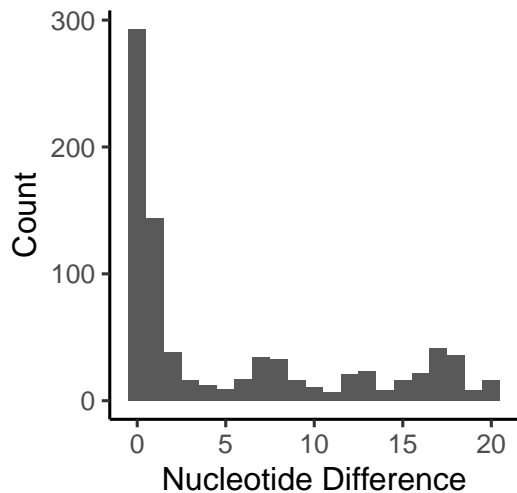
IGHV3-64*02_07

44 sequences assigned
15 (34.1%) exact matches, in which:
14 unique CDR3
4 unique J



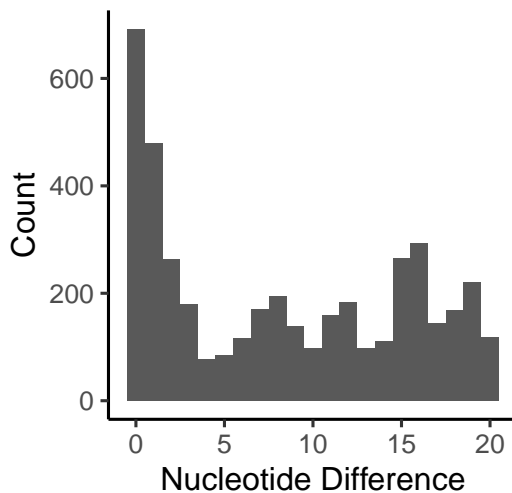
IGHV3-49*03_05

974 sequences assigned
293 (30.1%) exact matches, in which:
192 unique CDR3
6 unique J



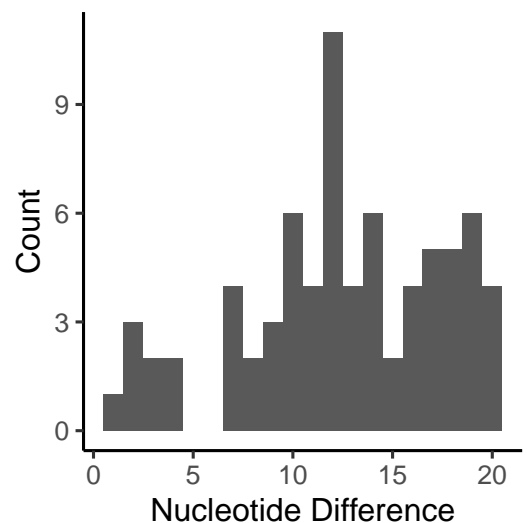
IGHV3-53*01_02

5548 sequences assigned
692 (12.5%) exact matches, in which:
462 unique CDR3
6 unique J



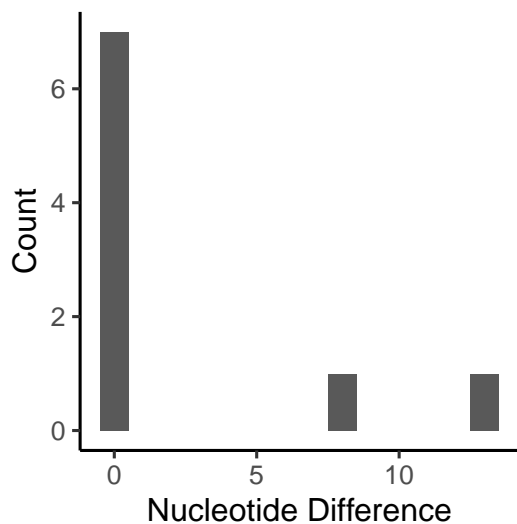
IGHV3-66*01

123 sequences assigned
No exact matches.



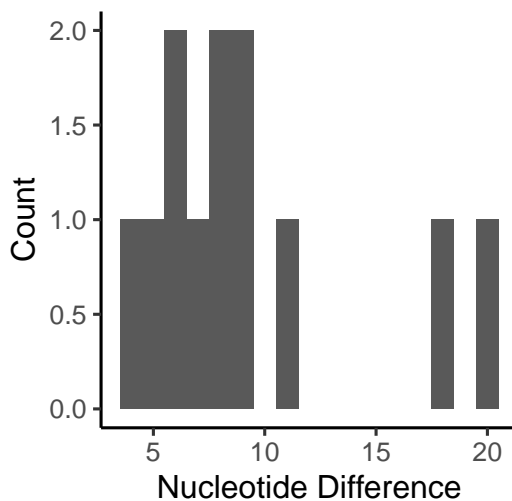
IGHV3-52*02

9 sequences assigned
7 (77.8%) exact matches, in which:
7 unique CDR3
3 unique J



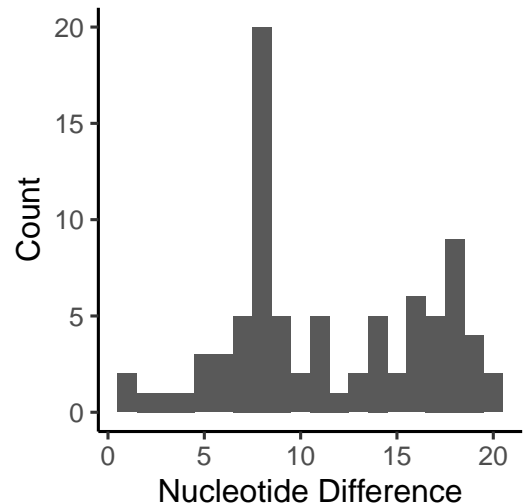
IGHV3-64*04

17 sequences assigned
No exact matches.



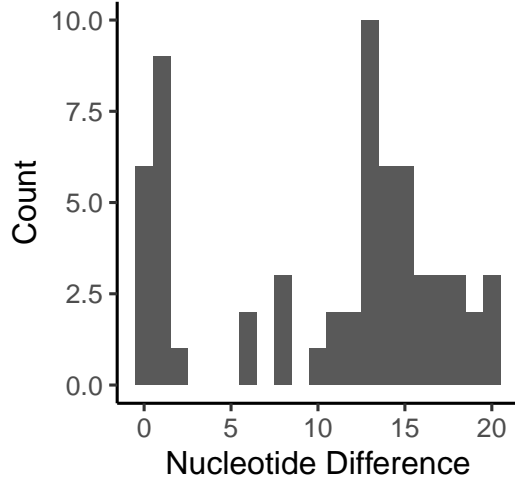
IGHV3-66*02

120 sequences assigned
No exact matches.



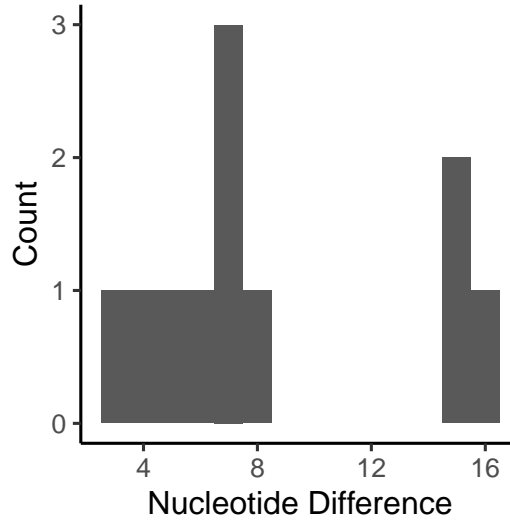
IGHV3-66*03

76 sequences assigned
6 (7.9%) exact matches, in which:
4 unique CDR3
2 unique J



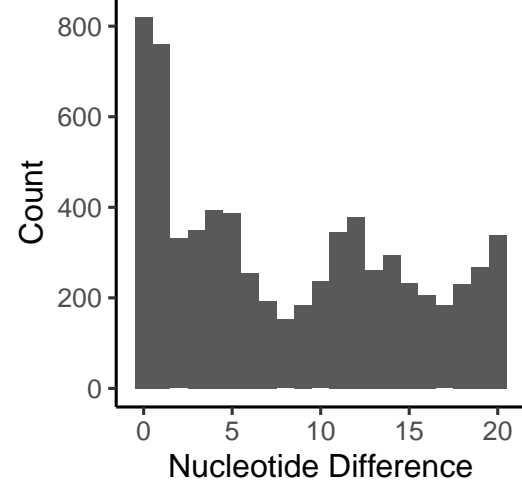
IGHV3-71*01_04

12 sequences assigned
No exact matches.



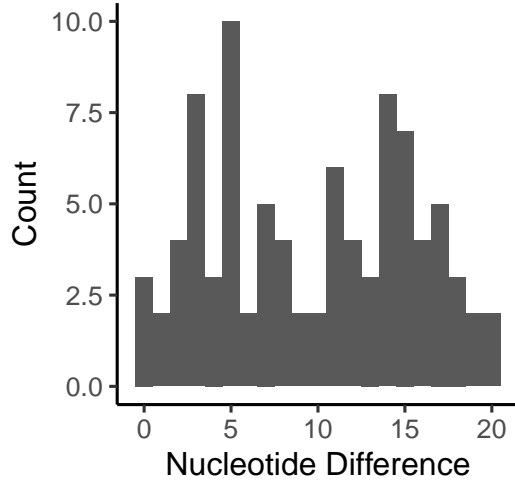
IGHV3-74*01_02

12721 sequences assigned
821 (6.5%) exact matches, in which:
524 unique CDR3
6 unique J



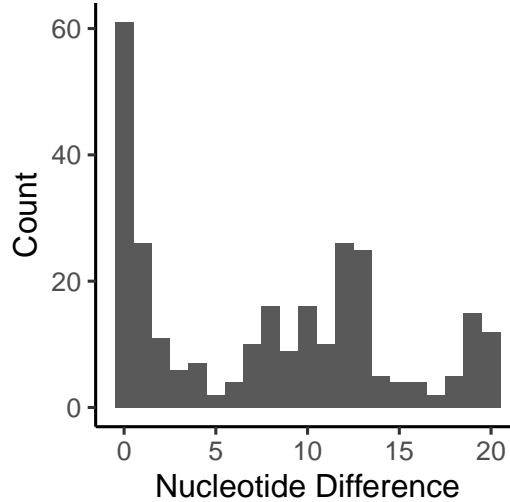
IGHV3-69-1*01

109 sequences assigned
3 (2.8%) exact matches, in which:
3 unique CDR3
2 unique J



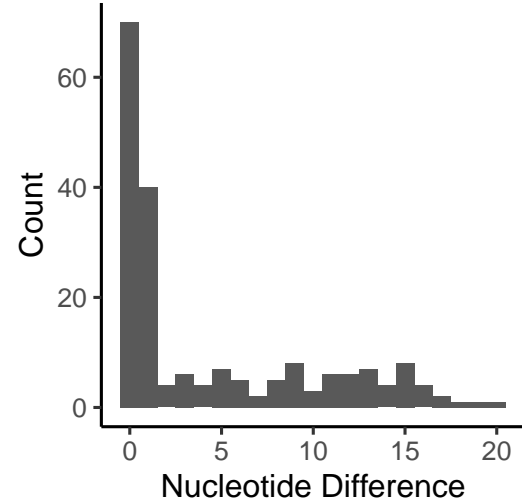
IGHV3-72*01

763 sequences assigned
61 (8%) exact matches, in which:
38 unique CDR3
6 unique J



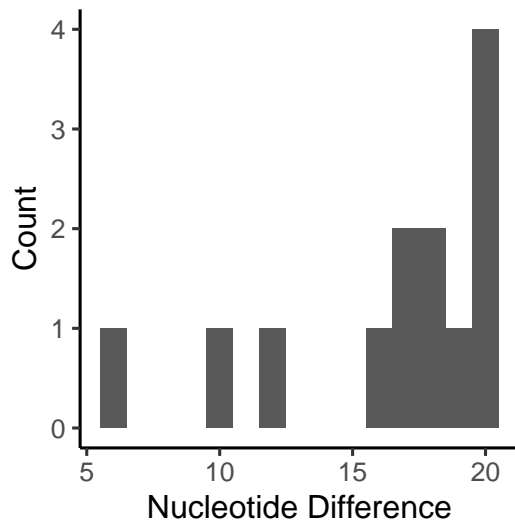
IGHV3-43D*04

204 sequences assigned
70 (34.3%) exact matches, in which:
39 unique CDR3
5 unique J



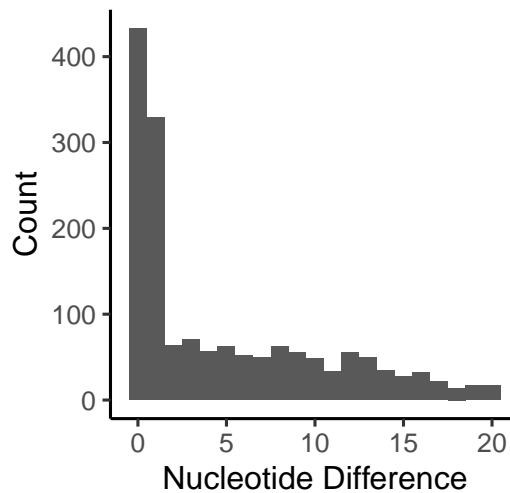
IGHV3-69-1*02

407 sequences assigned
No exact matches.



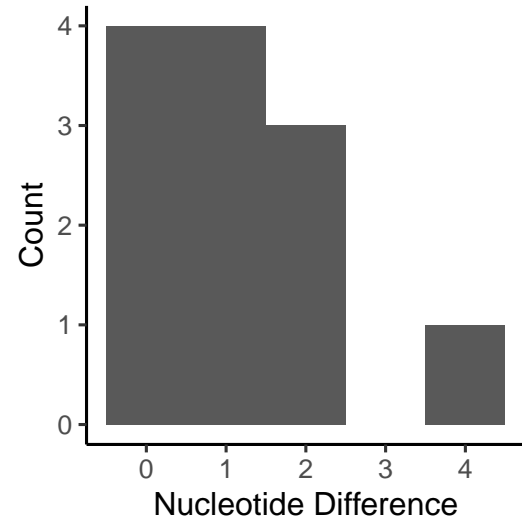
IGHV3-73*01_02

1625 sequences assigned
433 (26.6%) exact matches, in which:
277 unique CDR3
5 unique J



IGHV3-64D*06

13 sequences assigned
4 (30.8%) exact matches, in which:
2 unique CDR3
1 unique J



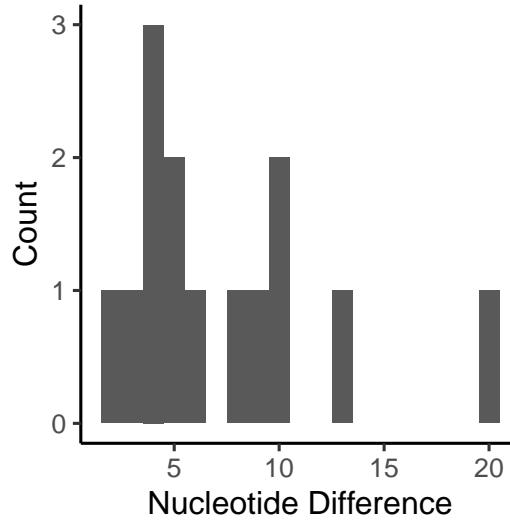
IGHV3-64D*08

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



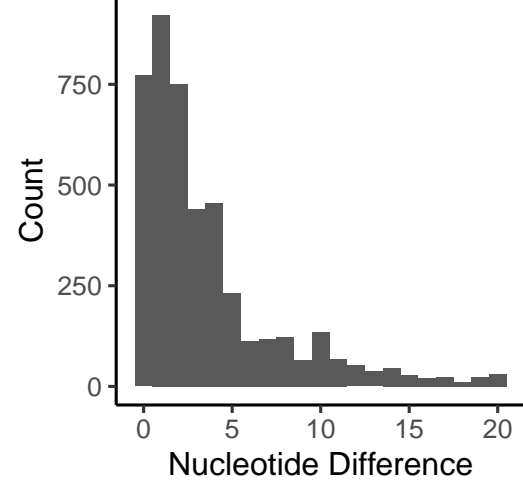
IGHV4-28*03

21 sequences assigned
No exact matches.



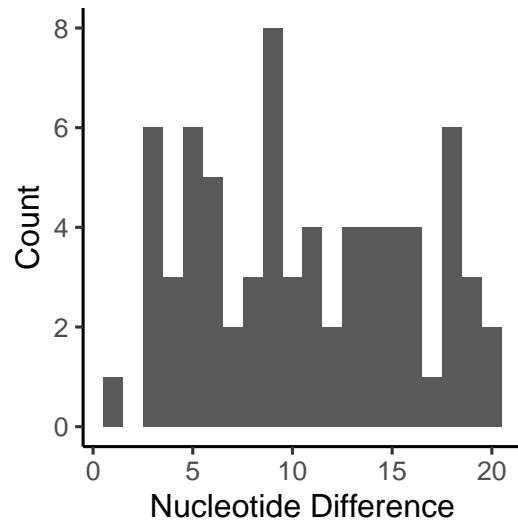
IGHV4-30-2*01

4766 sequences assigned
772 (16.2%) exact matches, in which:
553 unique CDR3
6 unique J



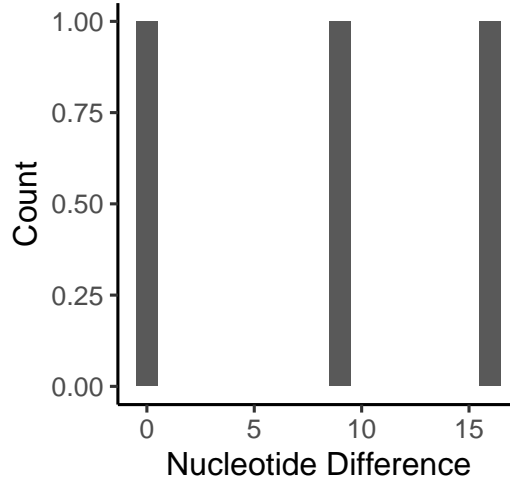
IGHV3-NL1*01

144 sequences assigned
No exact matches.



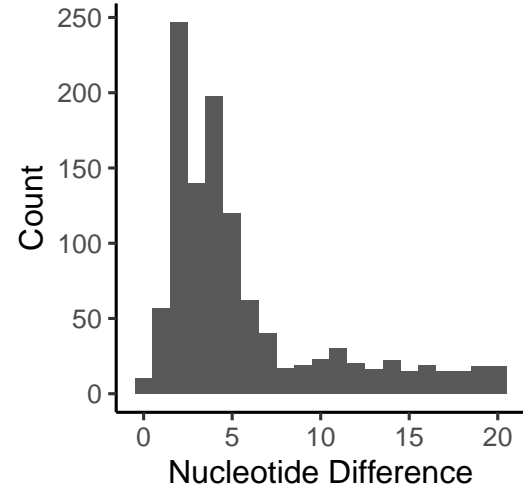
IGHV4-28*01_07

19 sequences assigned
1 (5.3%) exact matches, in which:
1 unique CDR3
1 unique J



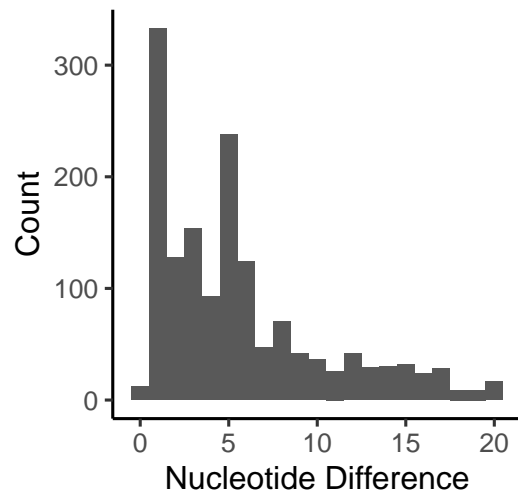
IGHV4-30-4*08

1227 sequences assigned
10 (0.8%) exact matches, in which:
10 unique CDR3
4 unique J



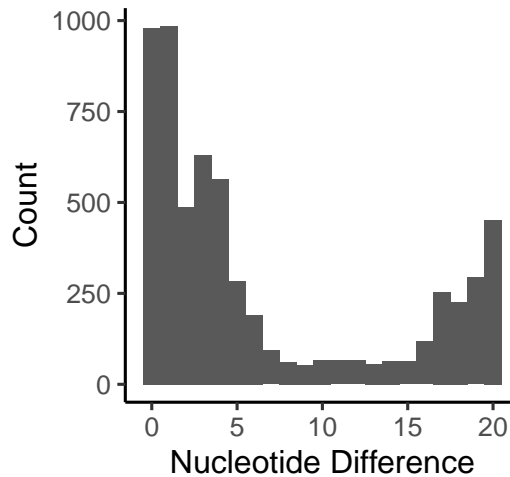
IGHV4-4*07

1633 sequences assigned
12 (0.7%) exact matches, in which:
12 unique CDR3
6 unique J



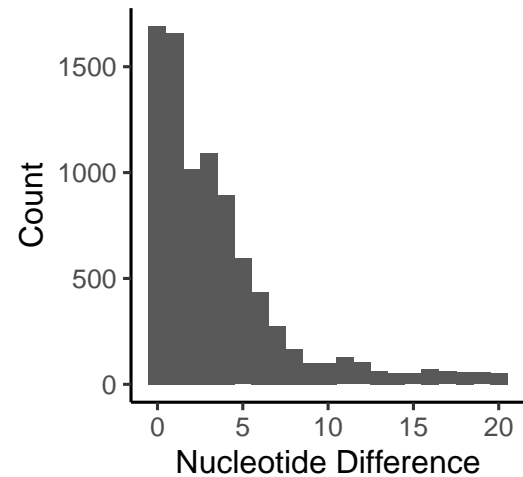
IGHV4-30-4*01

6795 sequences assigned
979 (14.4%) exact matches, in which:
833 unique CDR3
6 unique J



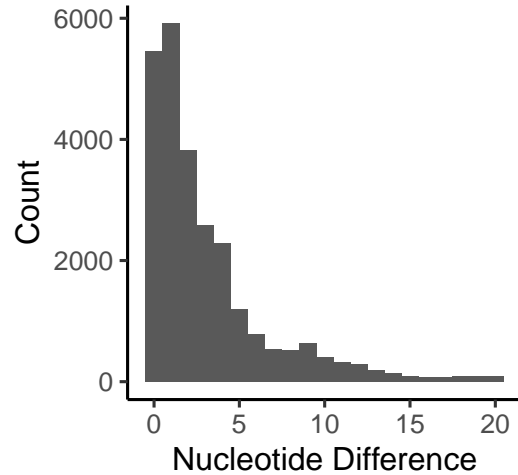
IGHV4-31*03_04

10271 sequences assigned
1692 (16.5%) exact matches, in which:
1391 unique CDR3
6 unique J



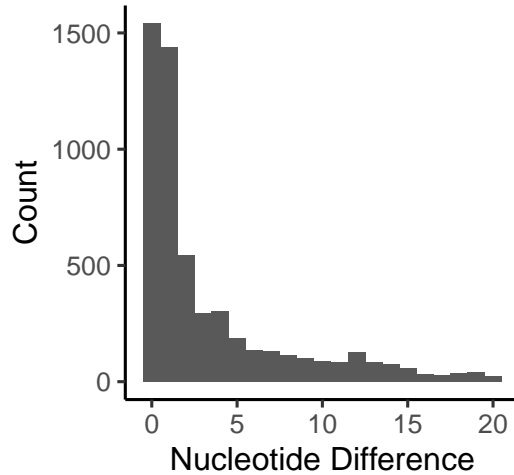
IGHV4-34*01_02

27488 sequences assigned
5453 (19.8%) exact matches, in which:
4049 unique CDR3
6 unique J



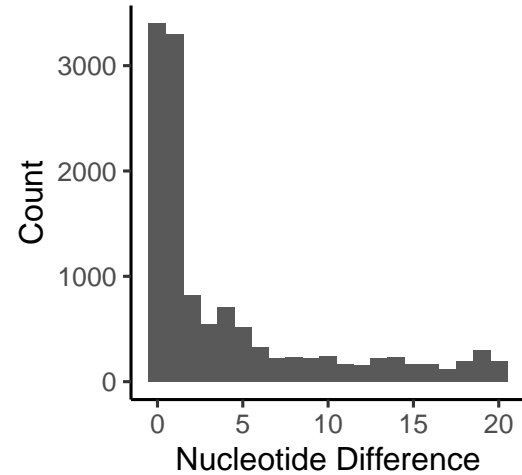
IGHV4-39*01_05

6698 sequences assigned
1541 (23%) exact matches, in which:
1174 unique CDR3
6 unique J



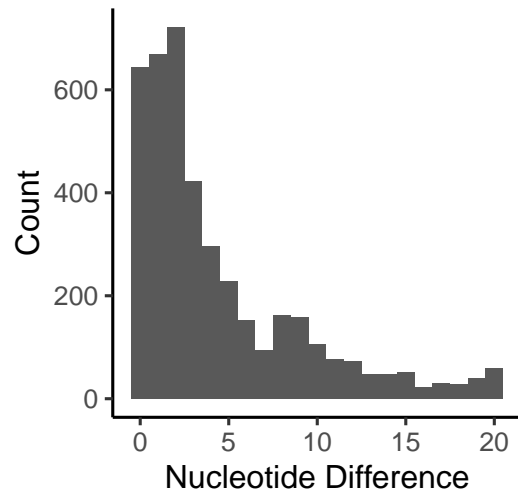
IGHV4-59*01_07

14053 sequences assigned
3401 (24.2%) exact matches, in which:
2735 unique CDR3
6 unique J



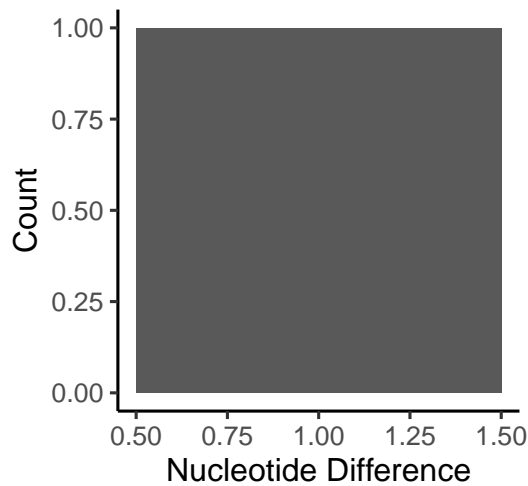
IGHV4-38-2*02_A70G

5018 sequences assigned
643 (12.8%) exact matches, in which:
497 unique CDR3
6 unique J



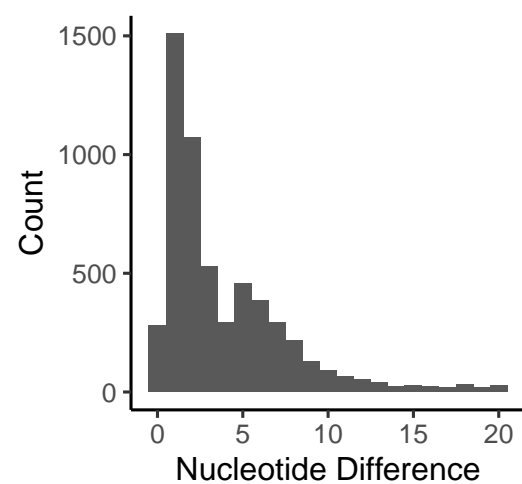
IGHV4-55*01_05

2 sequences assigned
No exact matches.



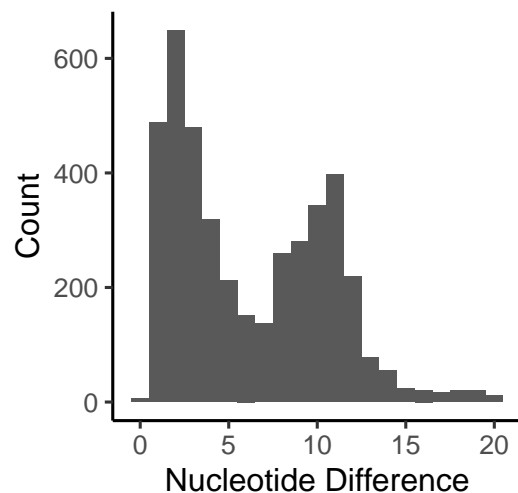
IGHV4-59*12

5980 sequences assigned
282 (4.7%) exact matches, in which:
276 unique CDR3
5 unique J



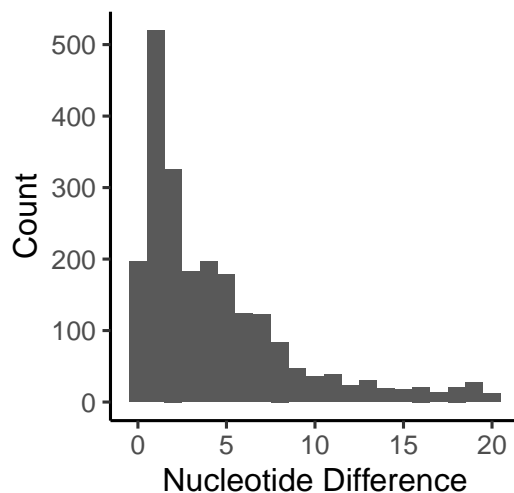
IGHV4-39*07

4360 sequences assigned
7 (0.2%) exact matches, in which:
7 unique CDR3
3 unique J



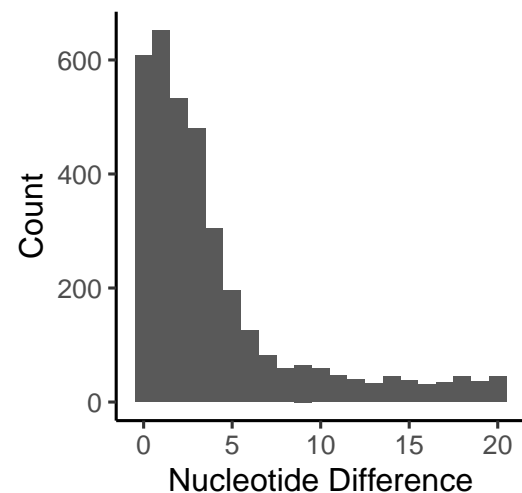
IGHV4-59*08

2374 sequences assigned
197 (8.3%) exact matches, in which:
190 unique CDR3
6 unique J



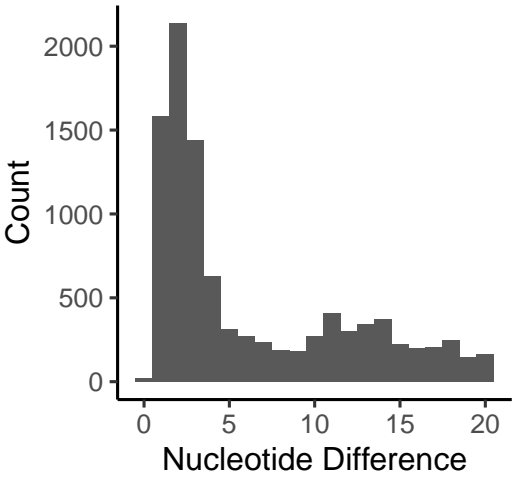
IGHV4-61*01

4221 sequences assigned
608 (14.4%) exact matches, in which:
566 unique CDR3
6 unique J



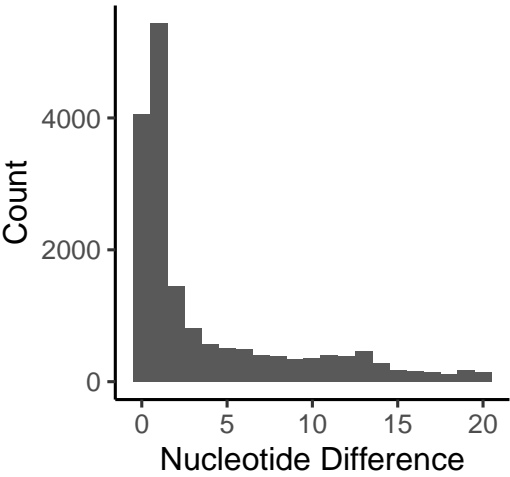
IGHV4-61*02

12698 sequences assigned
20 (0.2%) exact matches, in which:
20 unique CDR3
4 unique J



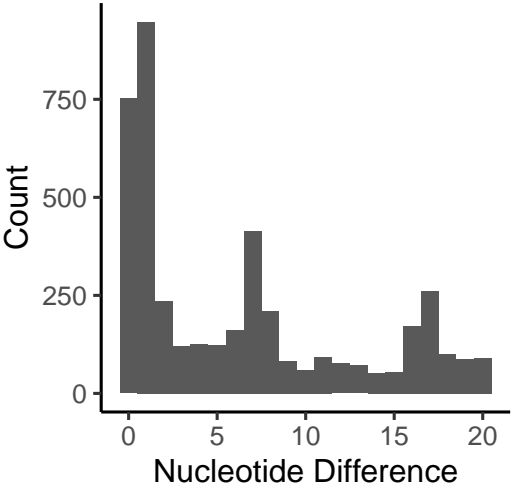
IGHV5-51*01_03

18246 sequences assigned
4061 (22.3%) exact matches, in which:
2039 unique CDR3
6 unique J



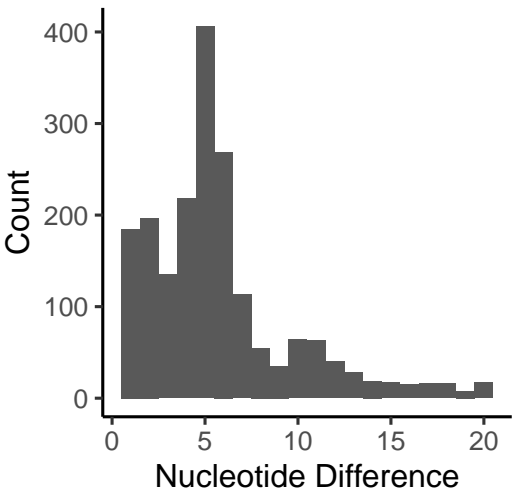
IGHV7-4-1*02

8073 sequences assigned
752 (9.3%) exact matches, in which:
576 unique CDR3
6 unique J



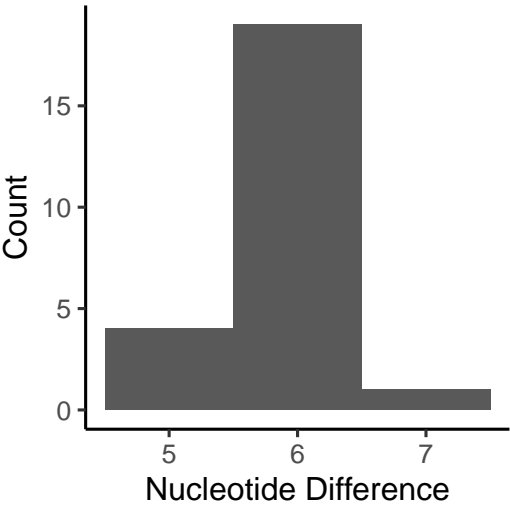
IGHV4-61*08

2242 sequences assigned
No exact matches.



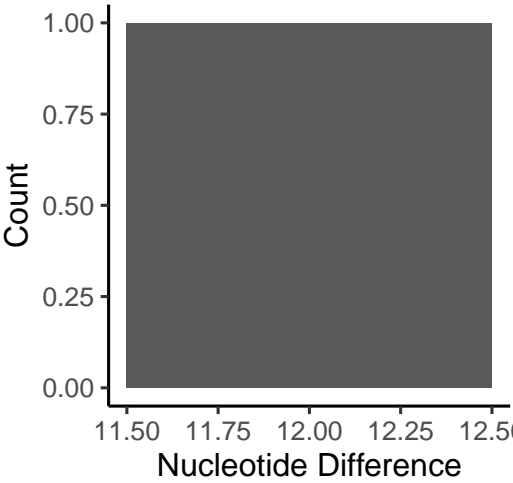
IGHV5-78*01

25 sequences assigned
No exact matches.



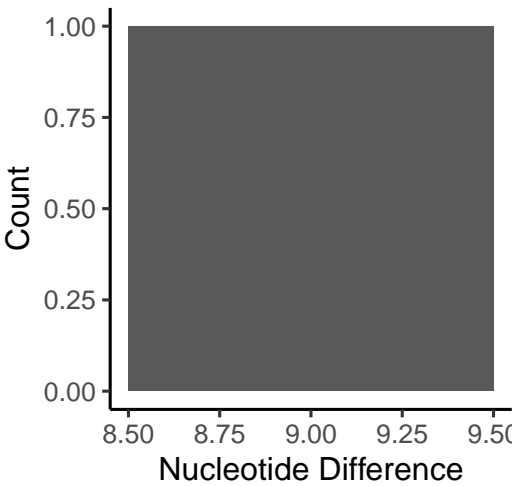
IGHV7-81*01

1 sequences assigned
No exact matches.



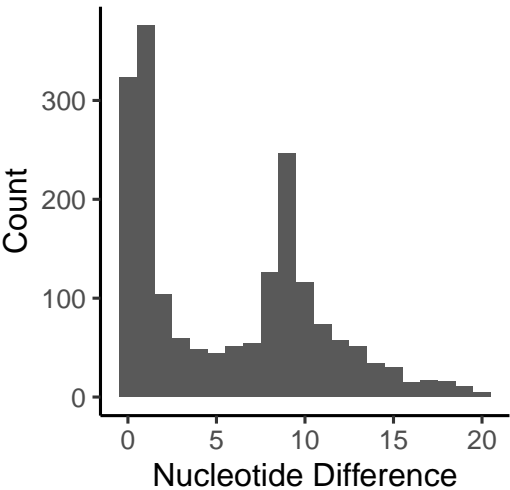
IGHV5-10-1*01_03

1 sequences assigned
No exact matches.



IGHV6-1*01_02

2376 sequences assigned
323 (13.6%) exact matches, in which:
254 unique CDR3
6 unique J





Novel sequence(s)IGHV5-51*07_A128G are not listed in the genotype and will be ignored.