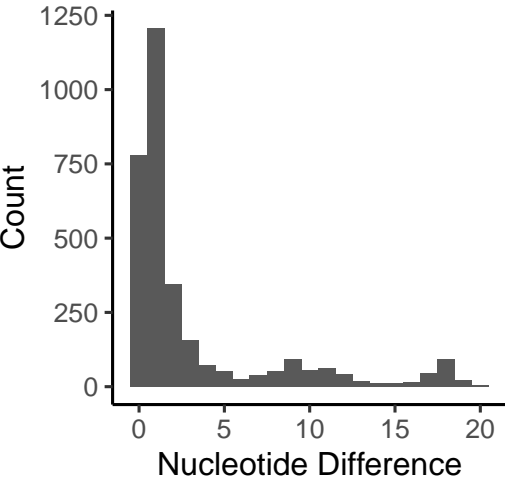


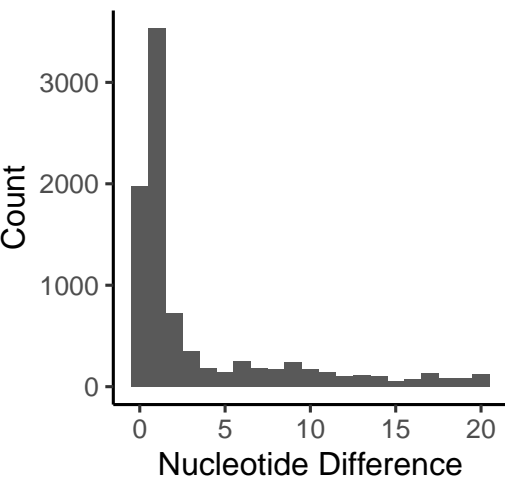
IGHV1-2*04

3479 sequences assigned
781 (22.4%) exact matches, in which:
615 unique CDR3
6 unique J



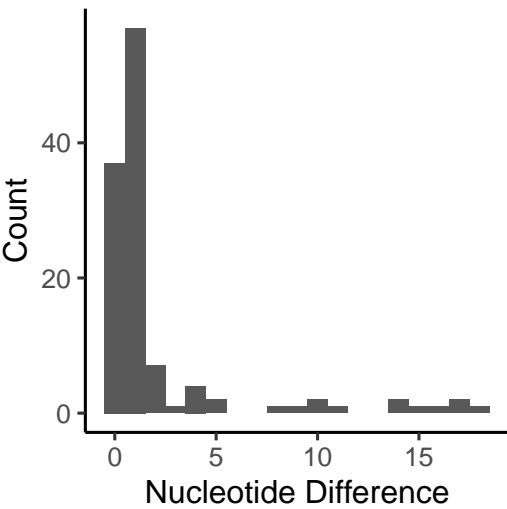
IGHV1-18*01

10872 sequences assigned
1974 (18.2%) exact matches, in which:
1427 unique CDR3
6 unique J



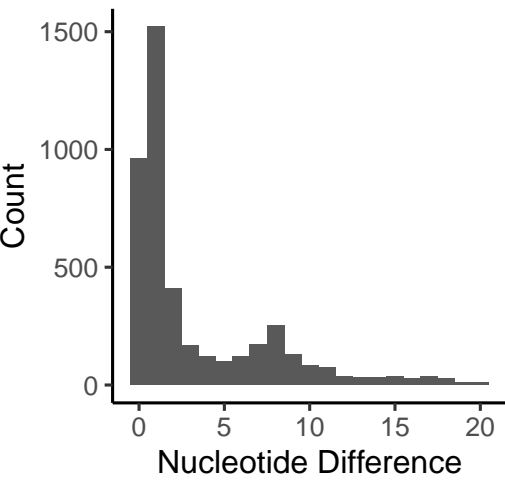
IGHV1-45*02

120 sequences assigned
37 (30.8%) exact matches, in which:
23 unique CDR3
4 unique J



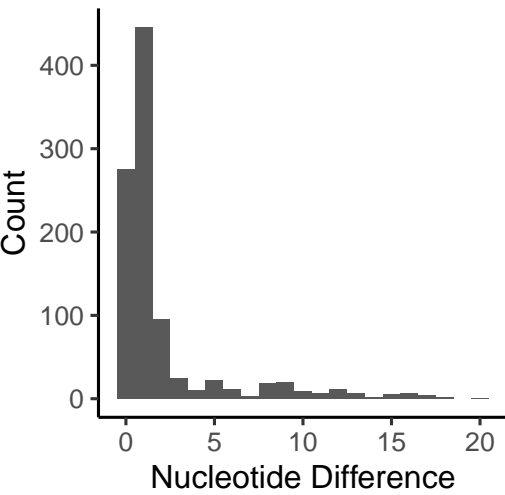
IGHV1-3*01_05

4515 sequences assigned
960 (21.3%) exact matches, in which:
707 unique CDR3
6 unique J



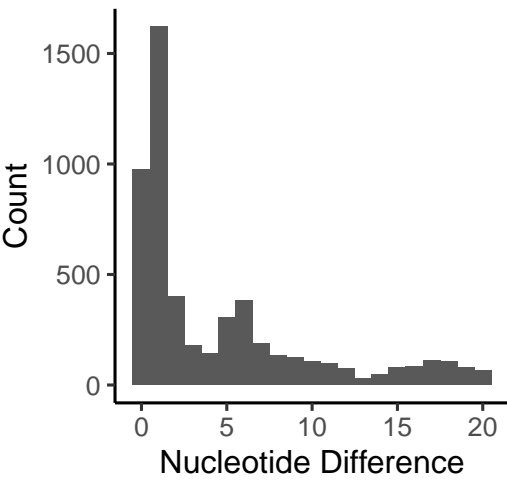
IGHV1-24*01

1019 sequences assigned
275 (27%) exact matches, in which:
206 unique CDR3
6 unique J



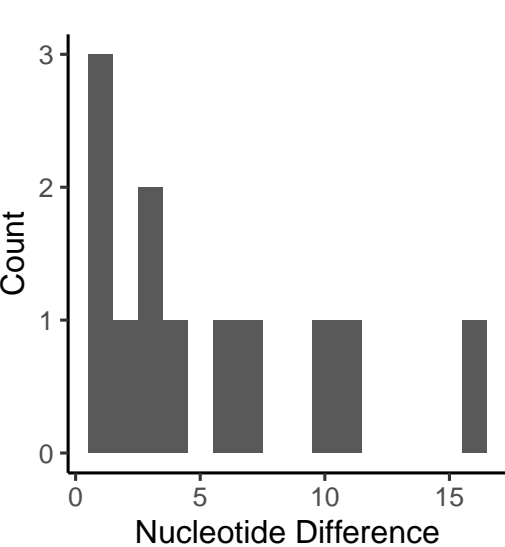
IGHV1-46*01

5495 sequences assigned
977 (17.8%) exact matches, in which:
746 unique CDR3
6 unique J



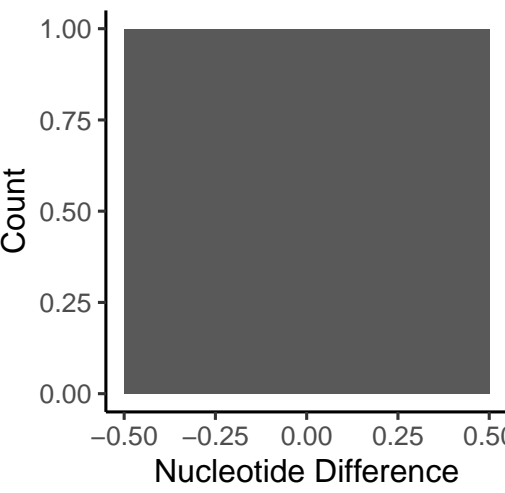
IGHV1-8*01

12 sequences assigned
No exact matches.



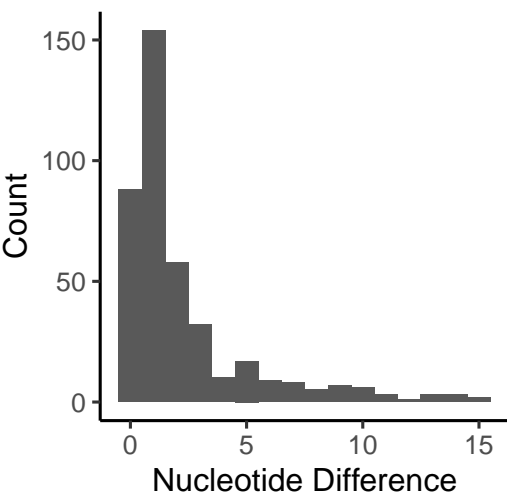
IGHV1-38-4*01

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



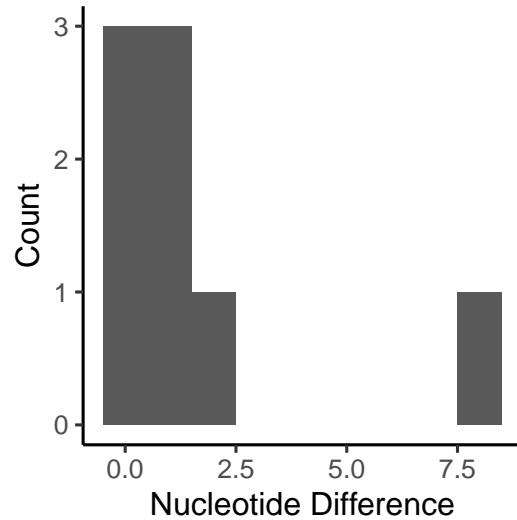
IGHV1-58*02

1765 sequences assigned
88 (5%) exact matches, in which:
66 unique CDR3
5 unique J



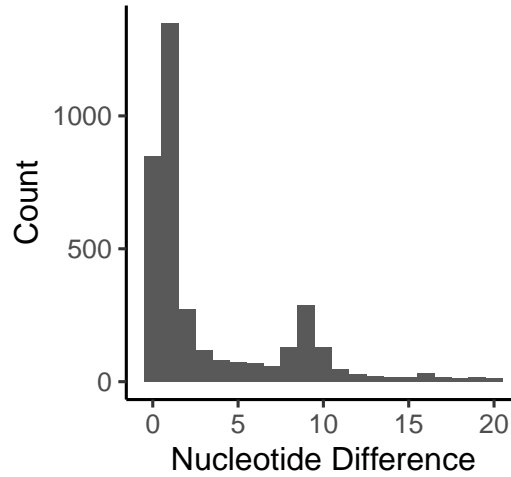
IGHV1-69-2*01

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



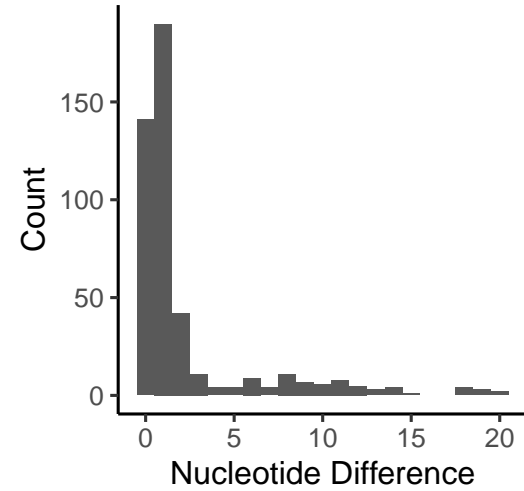
IGHV1-69*04_09

4492 sequences assigned
850 (18.9%) exact matches, in which:
653 unique CDR3
6 unique J



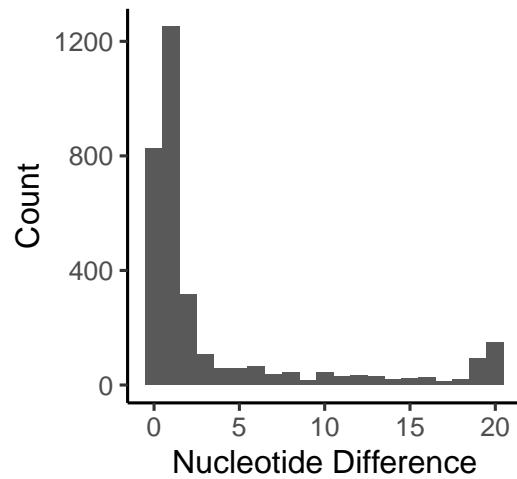
IGHV2-26*01

459 sequences assigned
141 (30.7%) exact matches, in which:
111 unique CDR3
5 unique J



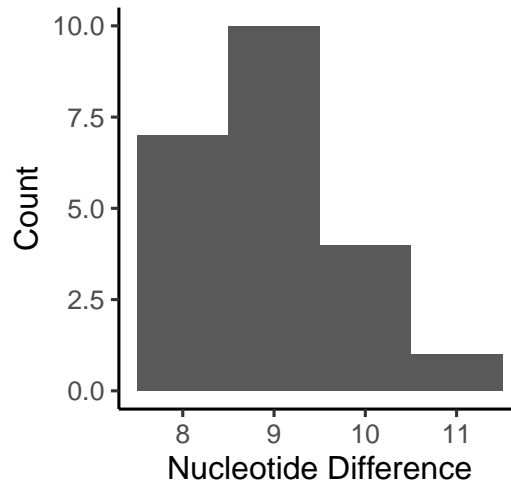
IGHV1-69*01_12_13

3463 sequences assigned
825 (23.8%) exact matches, in which:
642 unique CDR3
6 unique J



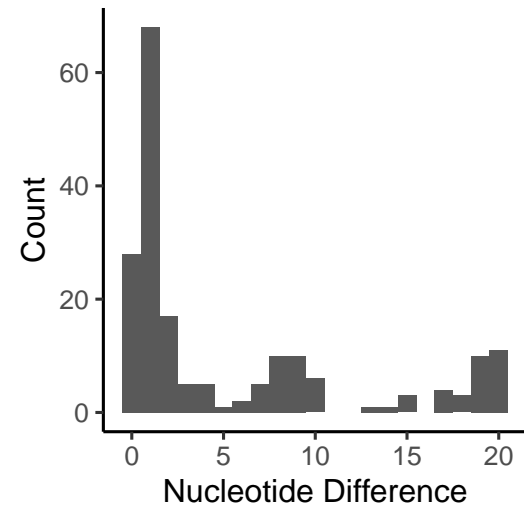
IGHV1-NL1*01

22 sequences assigned
No exact matches.



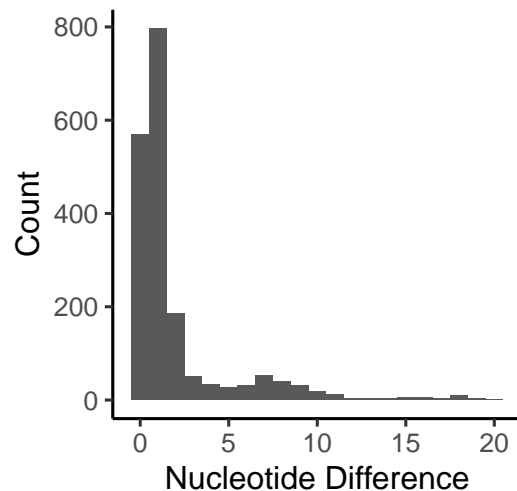
IGHV2-70*01

201 sequences assigned
28 (13.9%) exact matches, in which:
21 unique CDR3
4 unique J



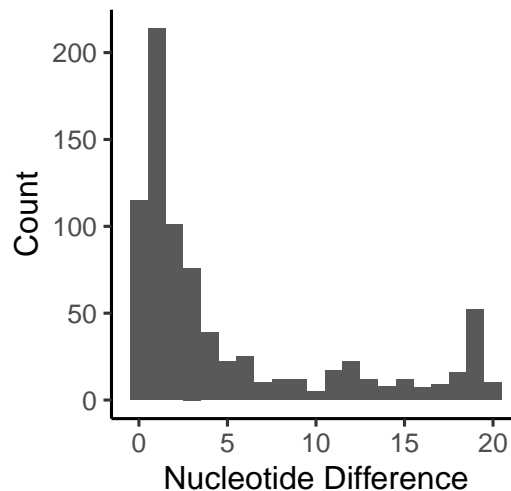
IGHV1-69*17

2037 sequences assigned
570 (28%) exact matches, in which:
474 unique CDR3
6 unique J



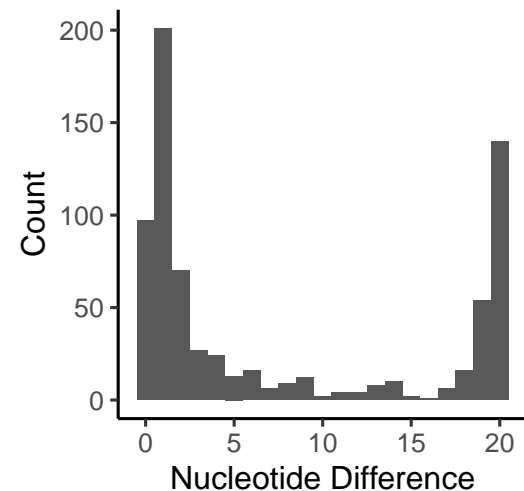
IGHV2-5*02

875 sequences assigned
115 (13.1%) exact matches, in which:
91 unique CDR3
4 unique J



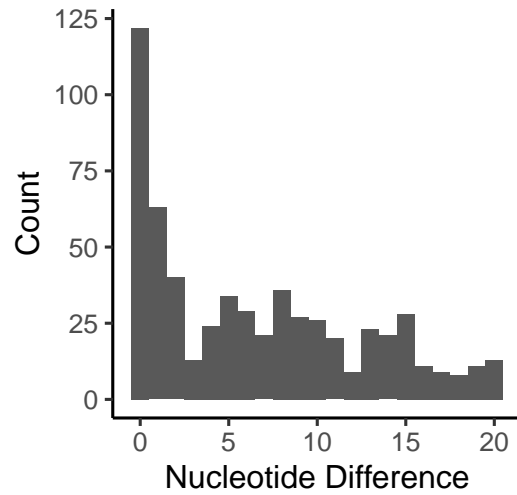
IGHV2-70*11_15

861 sequences assigned
97 (11.3%) exact matches, in which:
64 unique CDR3
5 unique J



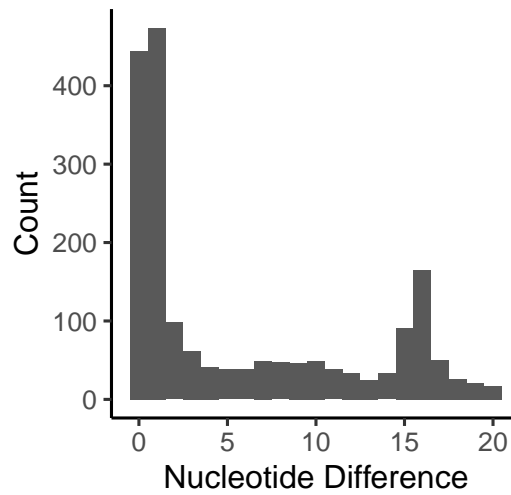
IGHV3-7*01

621 sequences assigned
122 (19.6%) exact matches, in which:
109 unique CDR3
5 unique J



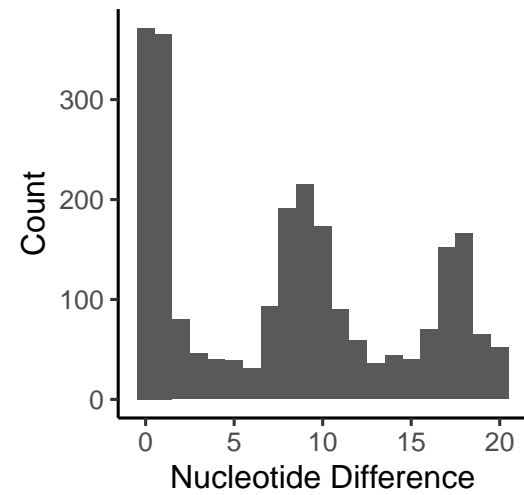
IGHV3-11*06

3116 sequences assigned
444 (14.2%) exact matches, in which:
279 unique CDR3
6 unique J



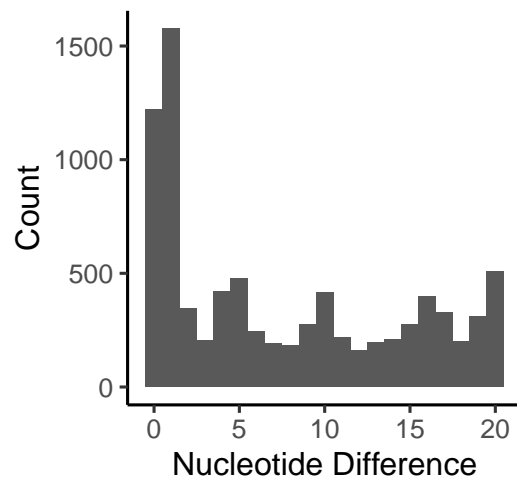
IGHV3-15*07

2808 sequences assigned
372 (13.2%) exact matches, in which:
212 unique CDR3
6 unique J



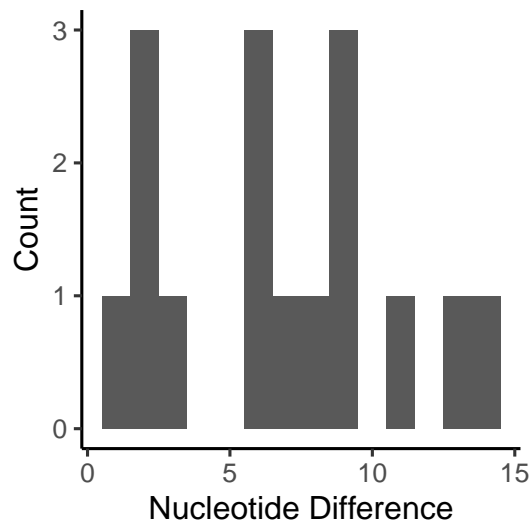
IGHV3-7*03

9731 sequences assigned
1221 (12.5%) exact matches, in which:
728 unique CDR3
6 unique J



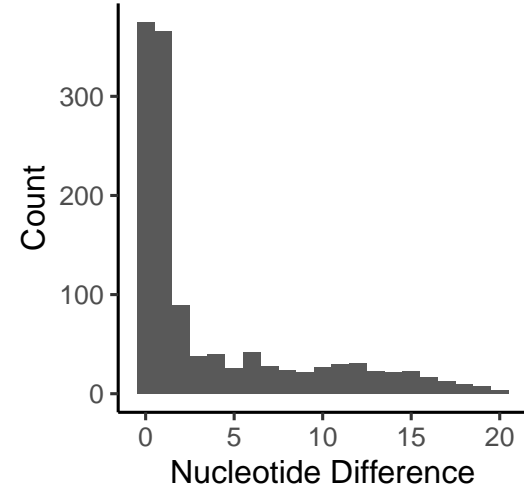
IGHV3-13*01

17 sequences assigned
No exact matches.



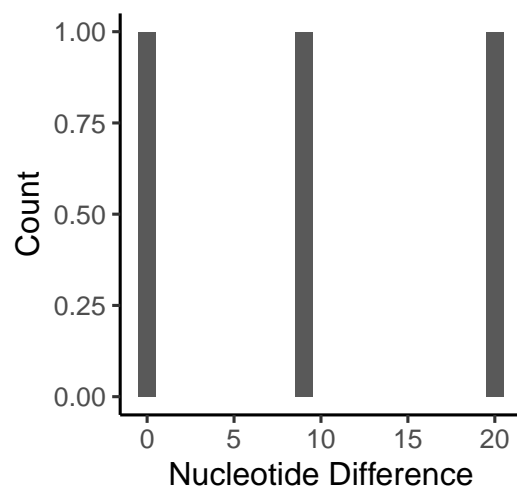
IGHV3-15*01_02

1380 sequences assigned
375 (27.2%) exact matches, in which:
208 unique CDR3
6 unique J



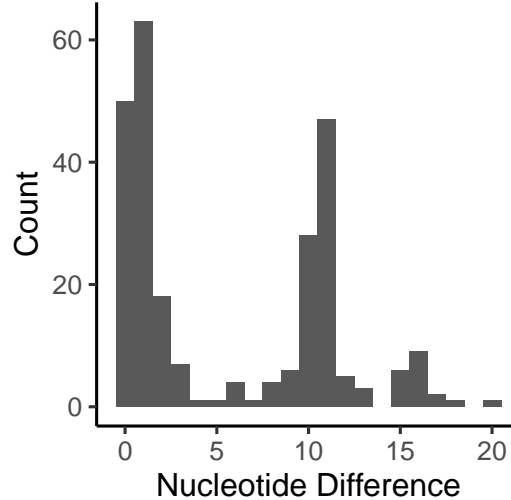
IGHV3-9*01

5 sequences assigned
1 (20%) exact matches, in which:
1 unique CDR3
1 unique J



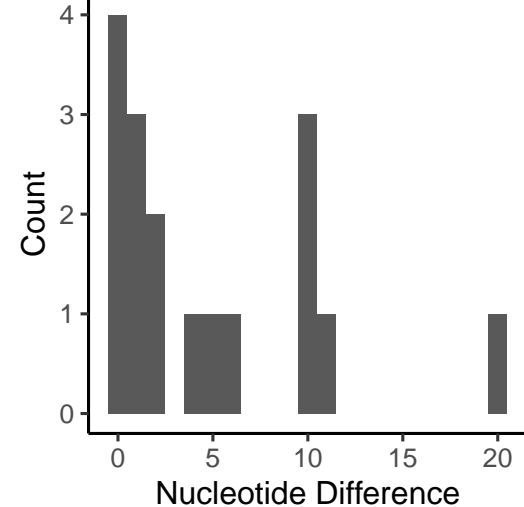
IGHV3-13*05

258 sequences assigned
50 (19.4%) exact matches, in which:
27 unique CDR3
4 unique J



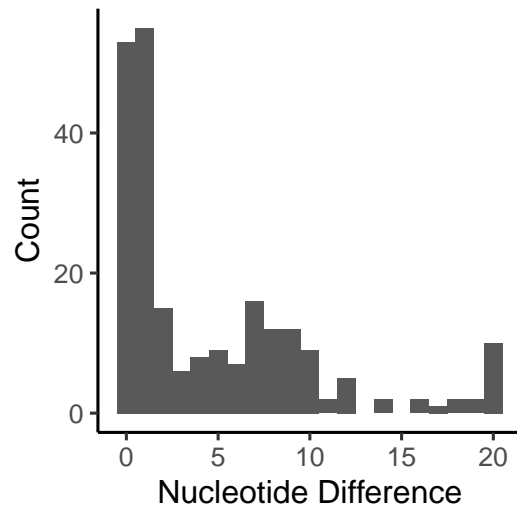
IGHV3-19*01

17 sequences assigned
4 (23.5%) exact matches, in which:
3 unique CDR3
2 unique J



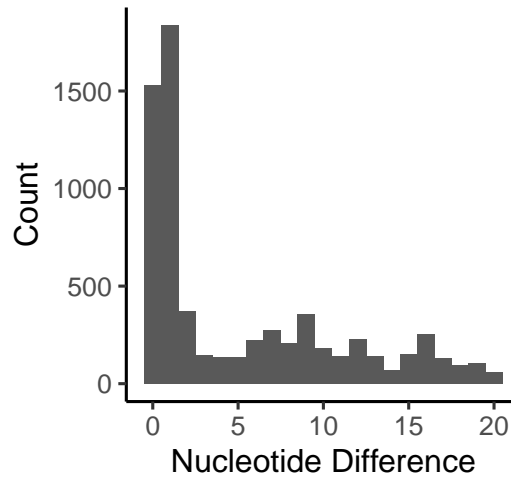
IGHV3-20*01_02

406 sequences assigned
53 (13.1%) exact matches, in which:
30 unique CDR3
5 unique J



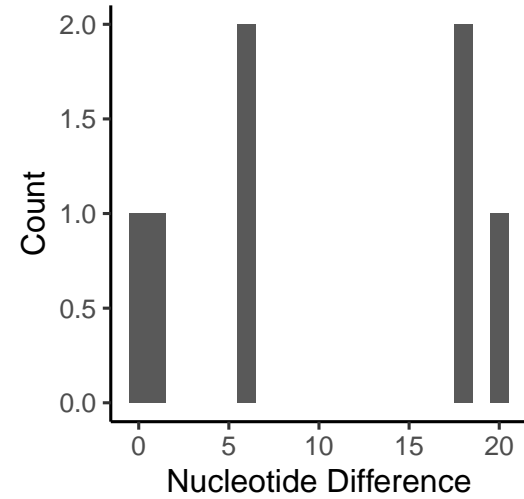
IGHV3-21*01_02

8715 sequences assigned
1530 (17.6%) exact matches, in which:
882 unique CDR3
6 unique J



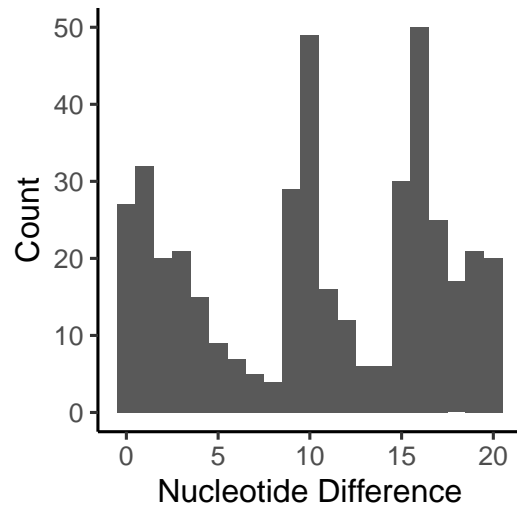
IGHV3-30-3*01

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



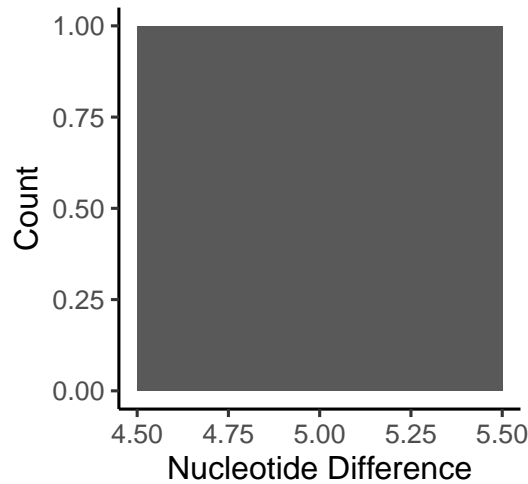
IGHV3-20*03_04

468 sequences assigned
27 (5.8%) exact matches, in which:
19 unique CDR3
4 unique J



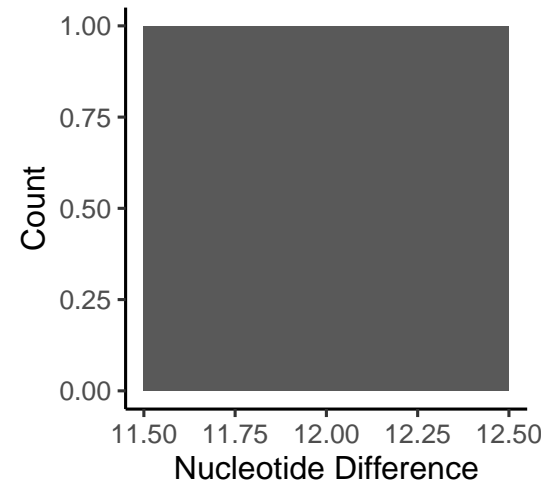
IGHV3-22*01_02

1 sequences assigned
No exact matches.



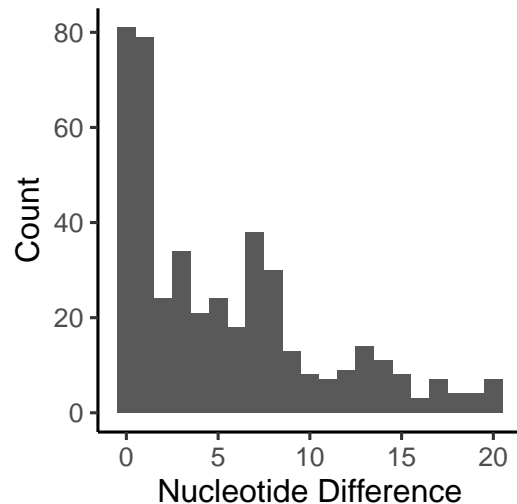
IGHV3-30-3*02

1 sequences assigned
No exact matches.



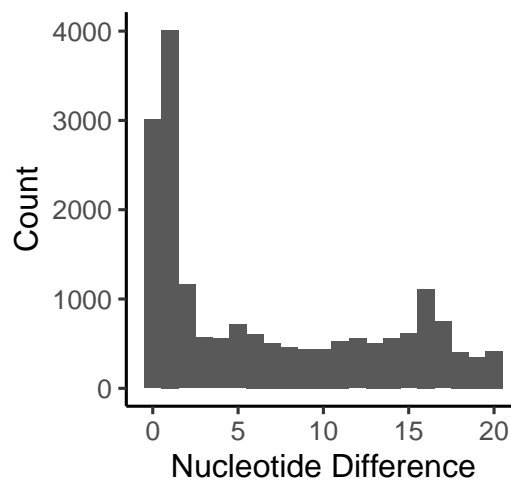
IGHV3-21*04

755 sequences assigned
81 (10.7%) exact matches, in which:
75 unique CDR3
5 unique J



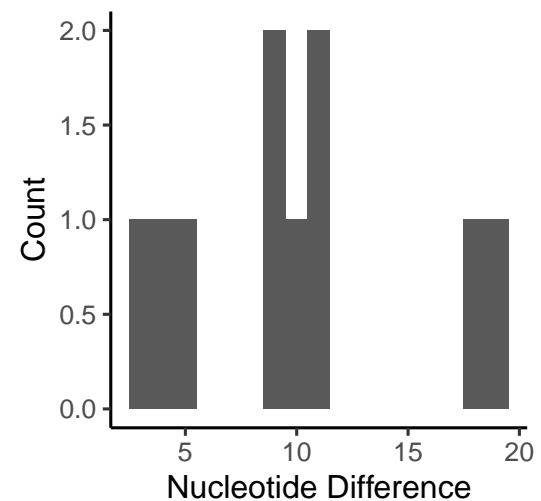
IGHV3-23*01_04

22938 sequences assigned
3009 (13.1%) exact matches, in which:
1648 unique CDR3
6 unique J



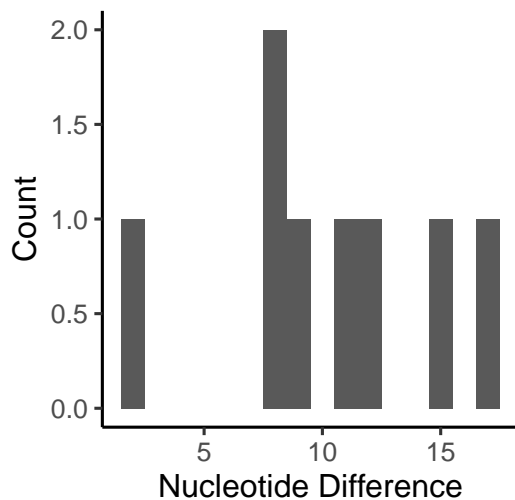
IGHV3-33*01

21 sequences assigned
No exact matches.



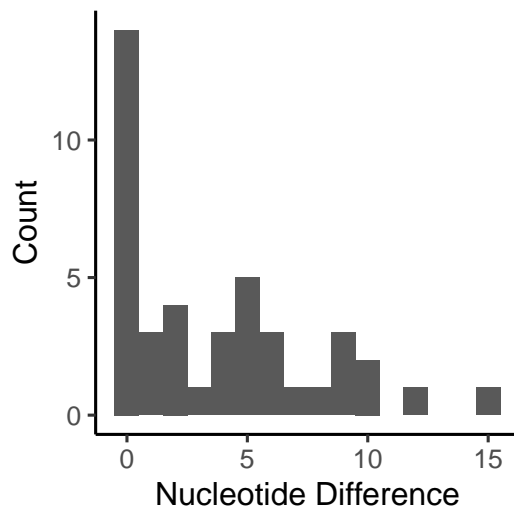
IGHV3-33*06

8 sequences assigned
No exact matches.



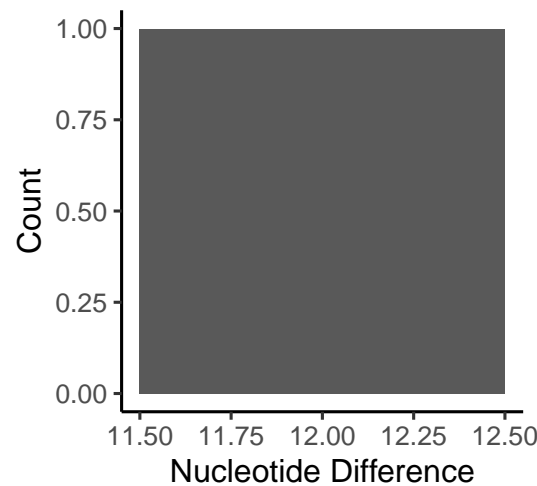
IGHV3-38-3*01

42 sequences assigned
14 (33.3%) exact matches, in which:
12 unique CDR3
3 unique J



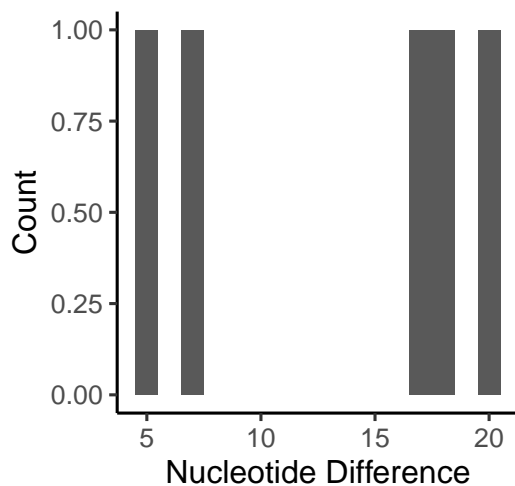
IGHV3-47*02

1 sequences assigned
No exact matches.



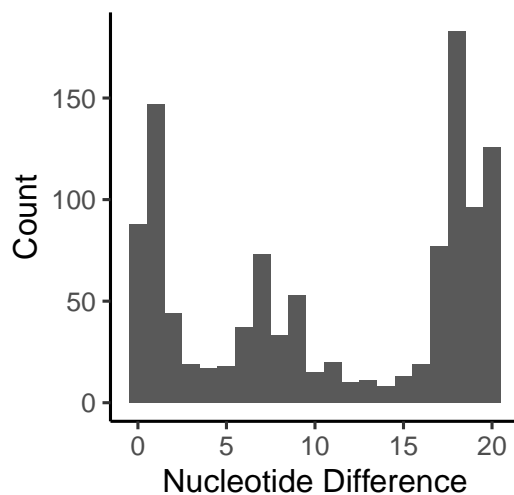
IGHV3-33*08

6 sequences assigned
No exact matches.



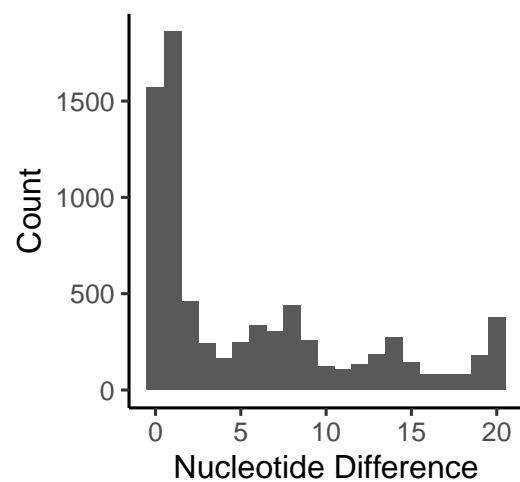
IGHV3-43*01

1260 sequences assigned
88 (7%) exact matches, in which:
47 unique CDR3
5 unique J



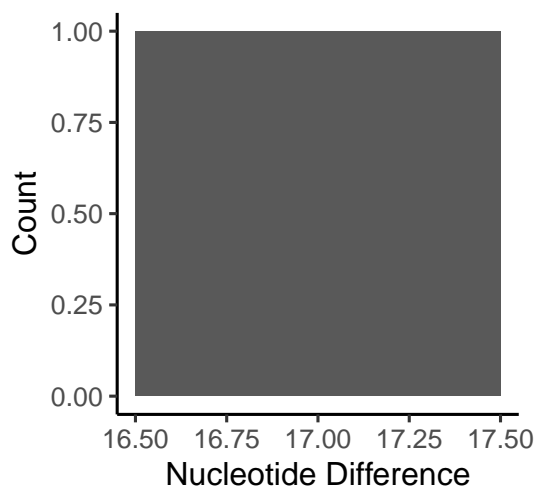
IGHV3-48*04

9225 sequences assigned
1569 (17%) exact matches, in which:
856 unique CDR3
6 unique J



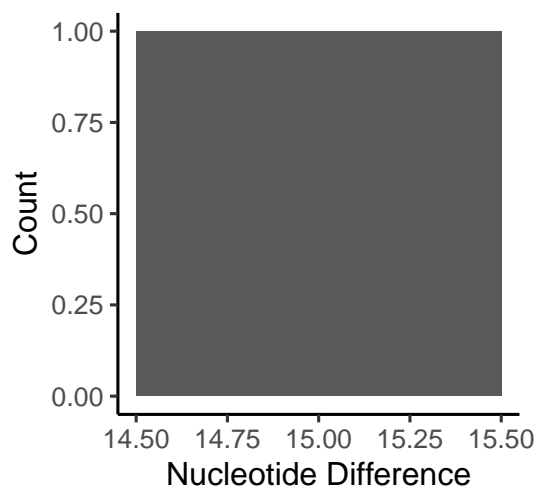
IGHV3-35*01

1 sequences assigned
No exact matches.



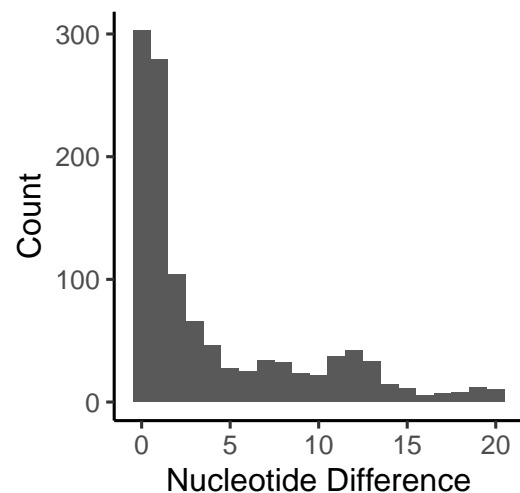
IGHV3-47*01

1 sequences assigned
No exact matches.



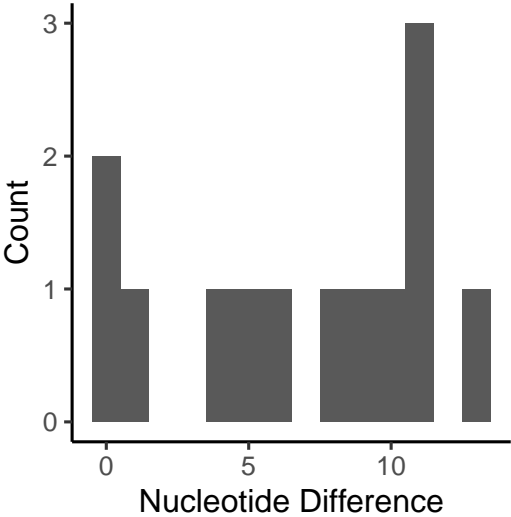
IGHV3-49*03_05

1327 sequences assigned
303 (22.8%) exact matches, in which:
175 unique CDR3
6 unique J



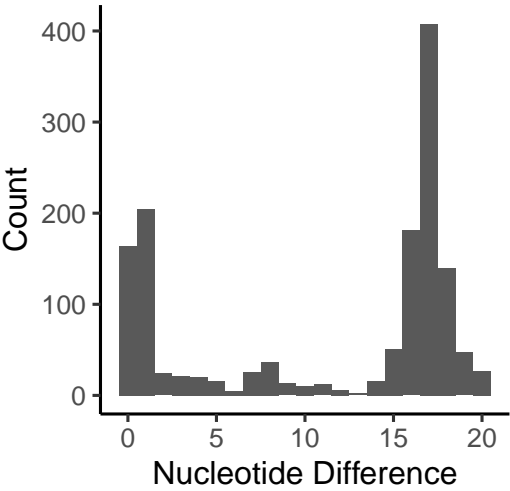
IGHV3-52*01_03

13 sequences assigned
2 (15.4%) exact matches, in which:
2 unique CDR3
2 unique J



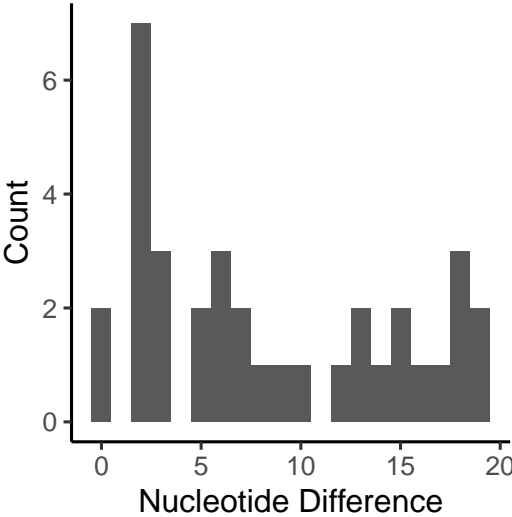
IGHV3-64*01

1896 sequences assigned
164 (8.6%) exact matches, in which:
92 unique CDR3
6 unique J



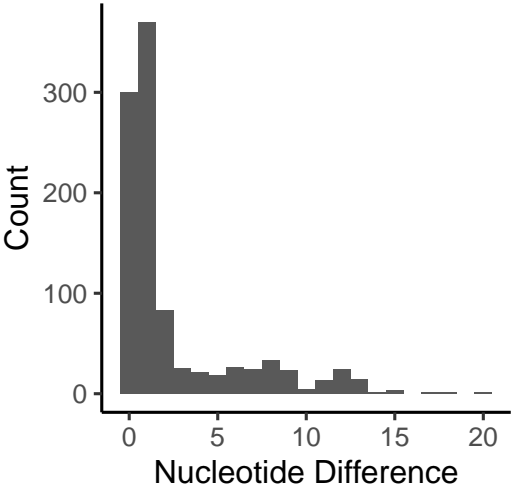
IGHV3-69-1*01

42 sequences assigned
2 (4.8%) exact matches, in which:
2 unique CDR3
2 unique J



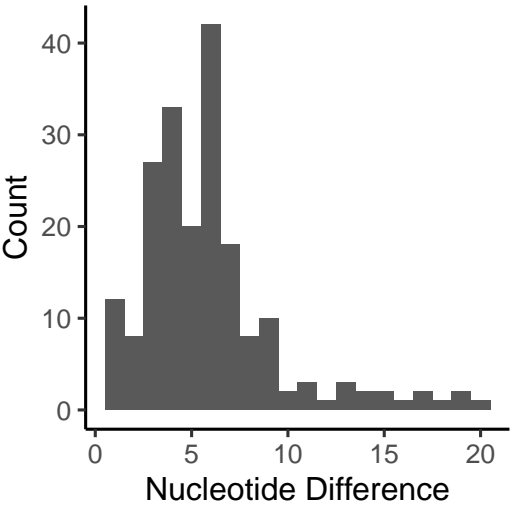
IGHV3-53*04

1326 sequences assigned
300 (22.6%) exact matches, in which:
185 unique CDR3
6 unique J



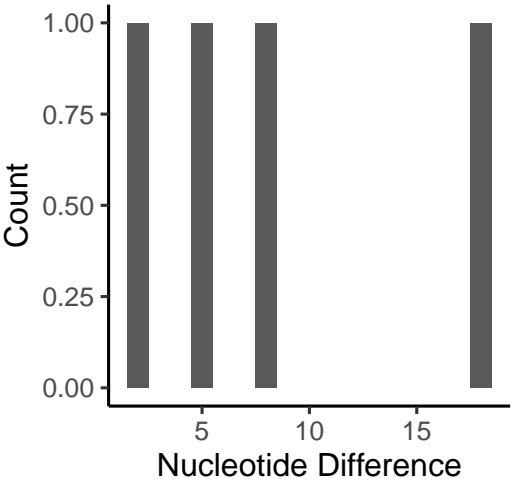
IGHV3-64*04

239 sequences assigned
No exact matches.



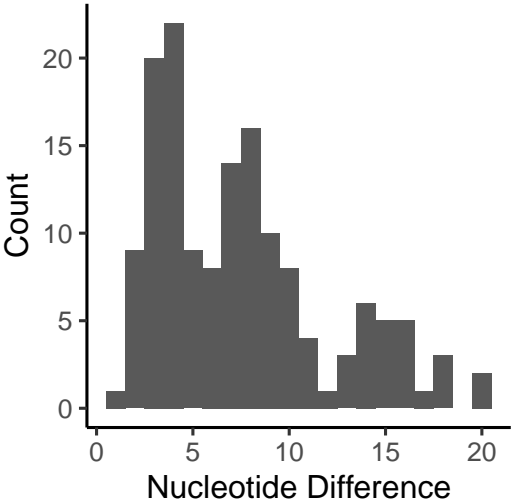
IGHV3-69-1*02

9 sequences assigned
No exact matches.



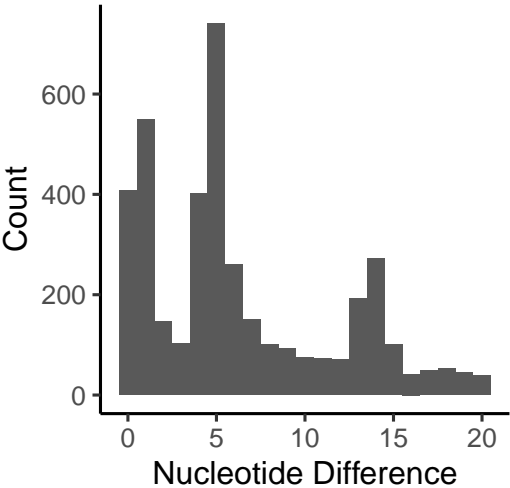
IGHV3-53*01_02

198 sequences assigned
No exact matches.



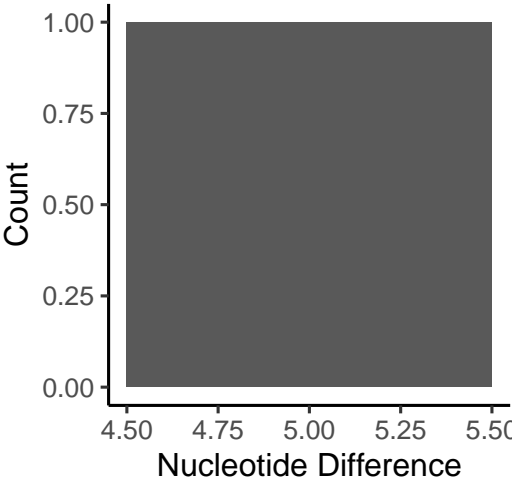
IGHV3-66*01

5375 sequences assigned
407 (7.6%) exact matches, in which:
230 unique CDR3
5 unique J



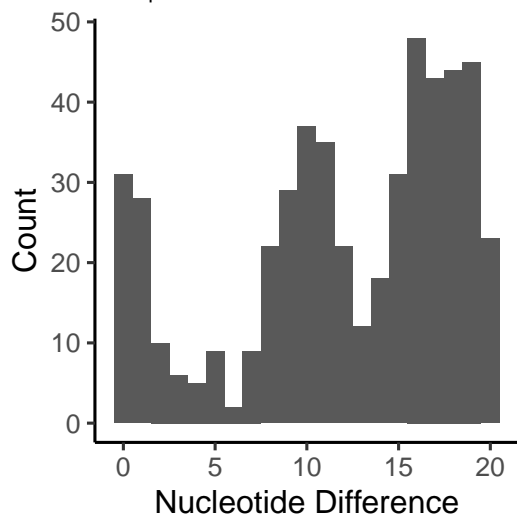
IGHV3-71*03

1 sequences assigned
No exact matches.



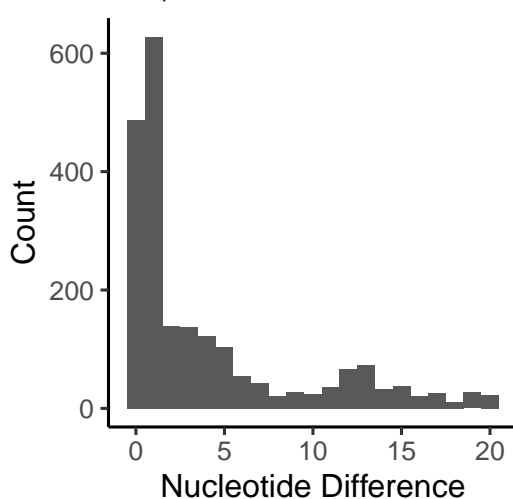
IGHV3-72*01

566 sequences assigned
31 (5.5%) exact matches, in which:
22 unique CDR3
4 unique J



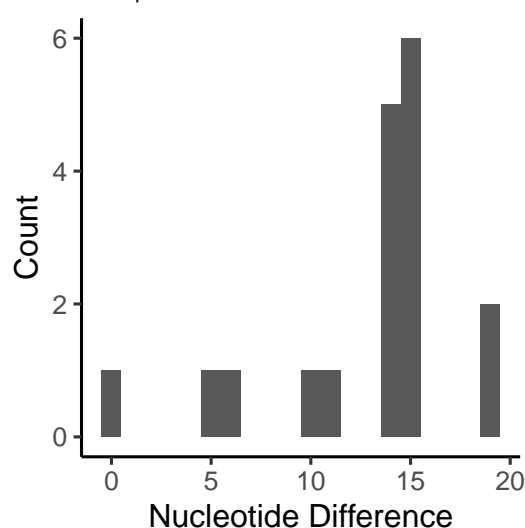
IGHV3-74*01_02

2628 sequences assigned
487 (18.5%) exact matches, in which:
294 unique CDR3
5 unique J



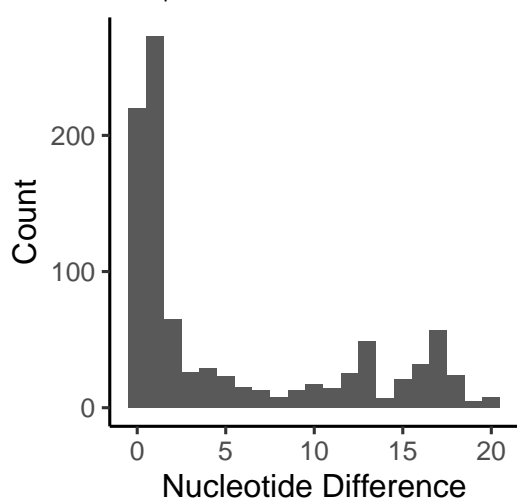
IGHV3-NL1*01

24 sequences assigned
1 (4.2%) exact matches, in which:
1 unique CDR3
1 unique J



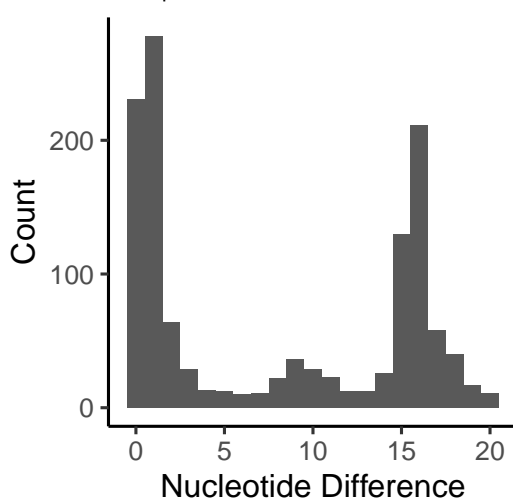
IGHV3-73*01_02

1510 sequences assigned
220 (14.6%) exact matches, in which:
121 unique CDR3
6 unique J



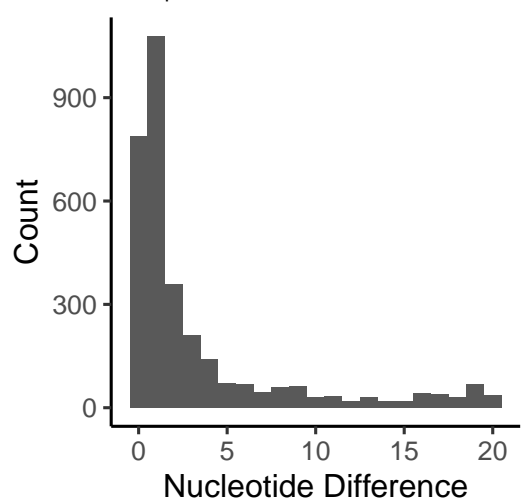
IGHV3-43D*03

1651 sequences assigned
231 (14%) exact matches, in which:
131 unique CDR3
6 unique J



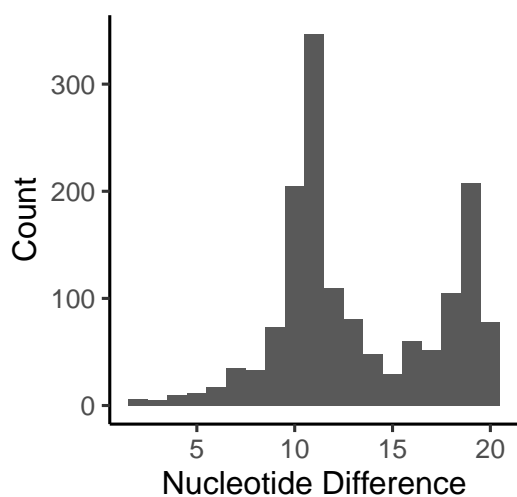
IGHV4-4*02_03

3609 sequences assigned
787 (21.8%) exact matches, in which:
563 unique CDR3
6 unique J



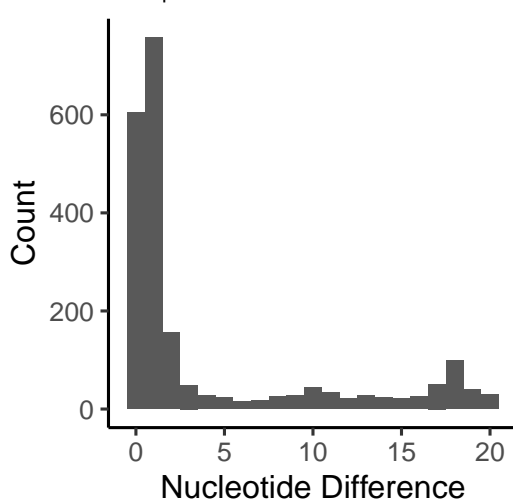
IGHV3-74*03

1627 sequences assigned
No exact matches.



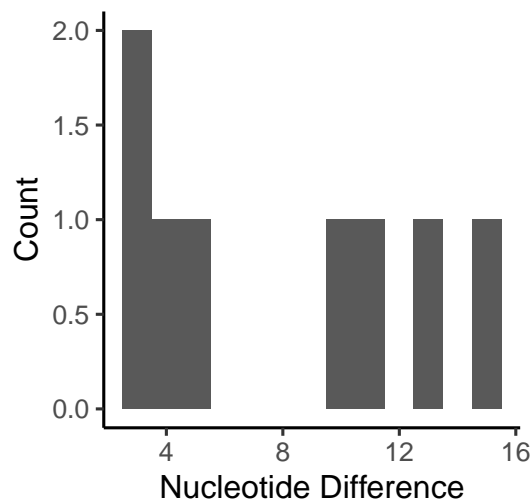
IGHV3-64D*06

3127 sequences assigned
604 (19.3%) exact matches, in which:
333 unique CDR3
6 unique J



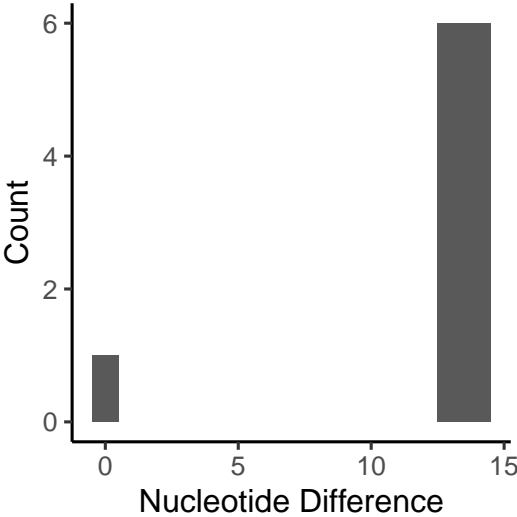
IGHV4-28*03

8 sequences assigned
No exact matches.



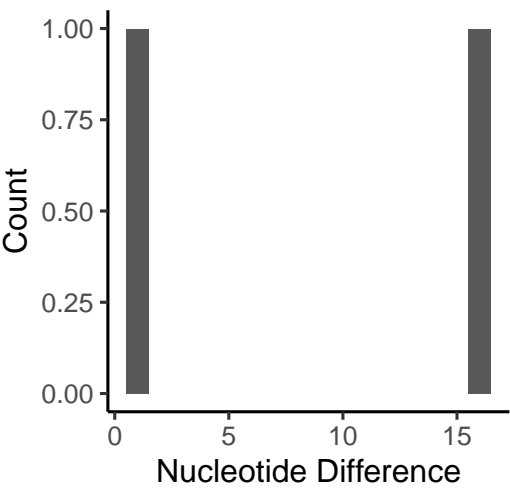
IGHV4-28*01_07

13 sequences assigned
1 (7.7%) exact matches, in which:
1 unique CDR3
1 unique J



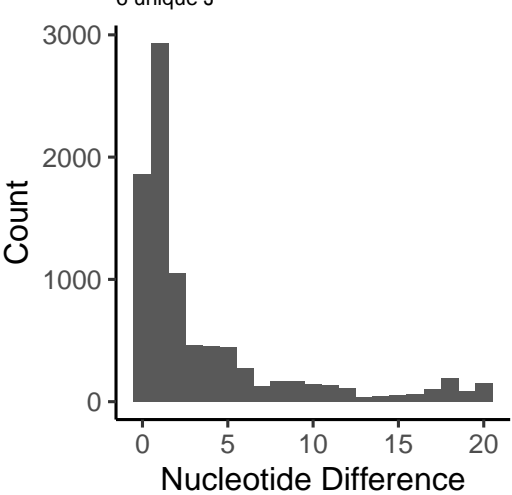
IGHV4-30-2*04

2 sequences assigned
No exact matches.



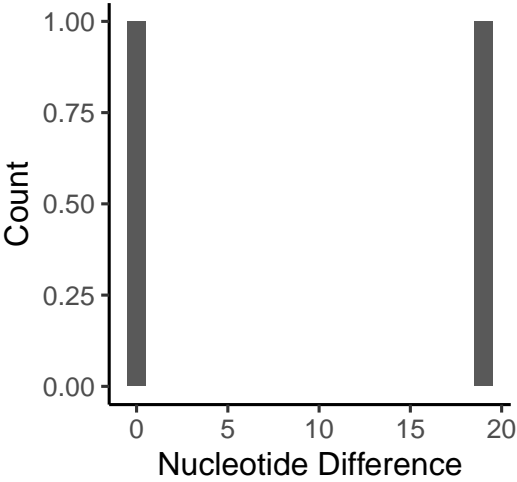
IGHV4-34*01_02

9646 sequences assigned
1864 (19.3%) exact matches, in which:
1260 unique CDR3
6 unique J



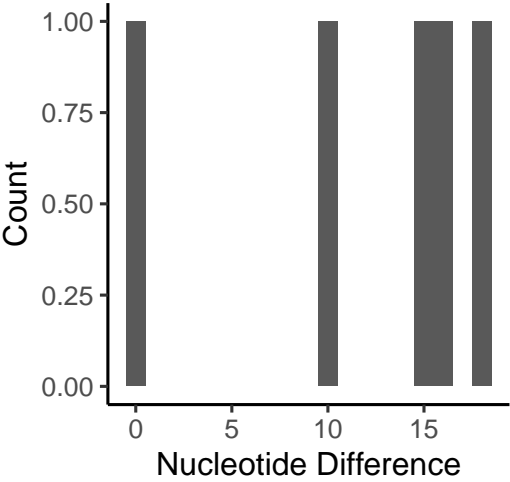
IGHV4-30-2*01

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



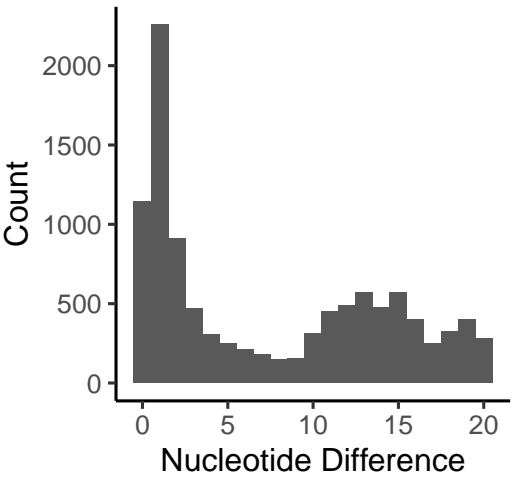
IGHV4-31*02

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



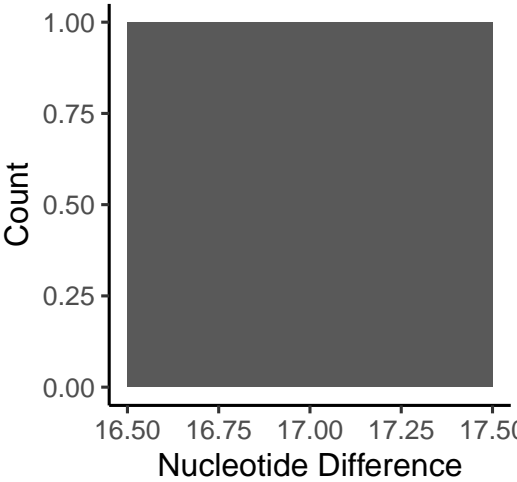
IGHV4-38-2*02

12328 sequences assigned
1145 (9.3%) exact matches, in which:
835 unique CDR3
6 unique J



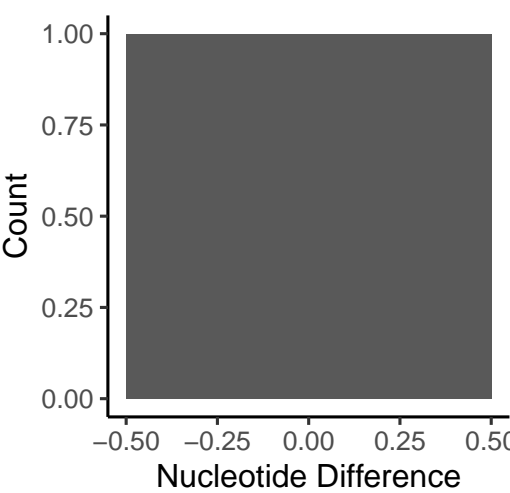
IGHV4-30-4*01

1 sequences assigned
No exact matches.



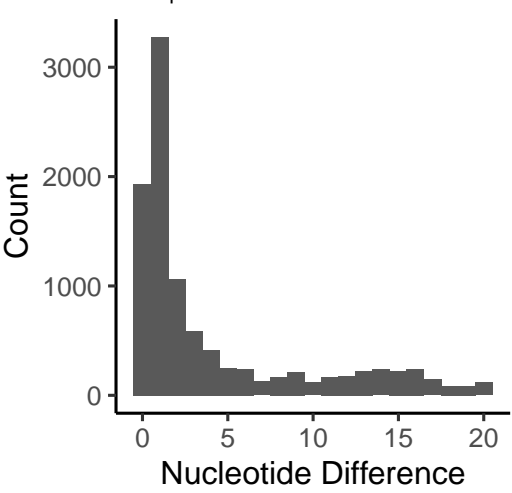
IGHV4-31*03_04

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



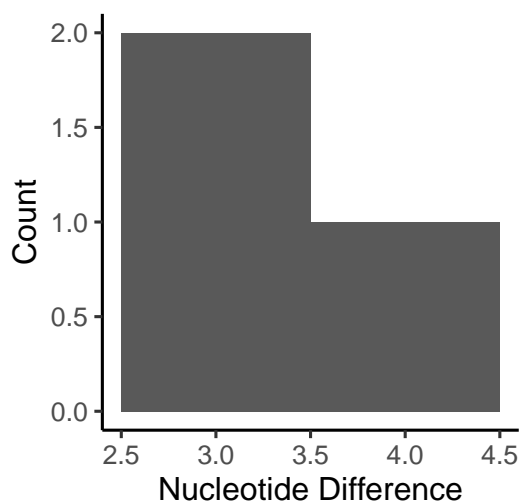
IGHV4-39*07

12615 sequences assigned
1935 (15.3%) exact matches, in which:
1434 unique CDR3
6 unique J



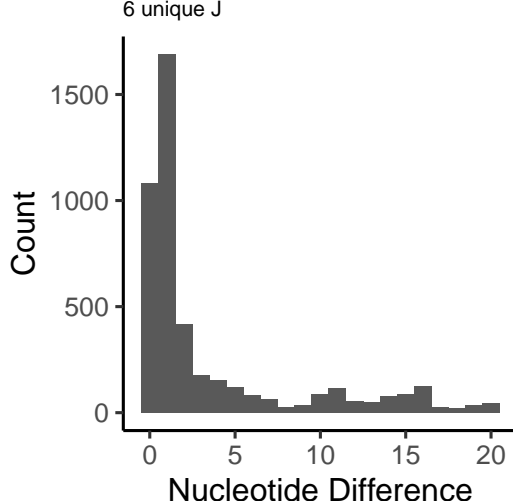
IGHV4-55*09

3 sequences assigned
No exact matches.



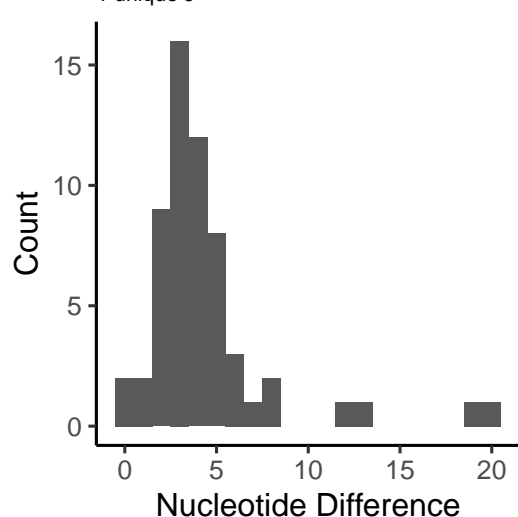
IGHV4-59*01_07

5113 sequences assigned
1082 (21.2%) exact matches, in which:
751 unique CDR3
6 unique J



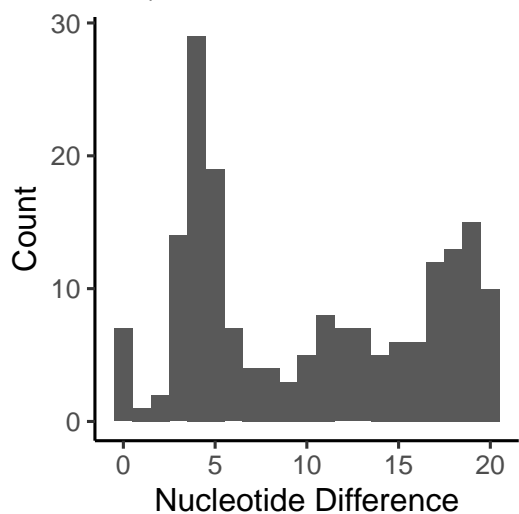
IGHV4-61*05

62 sequences assigned
2 (3.2%) exact matches, in which:
2 unique CDR3
1 unique J



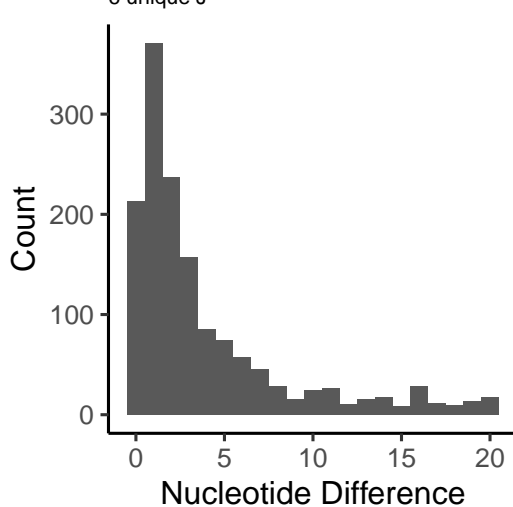
IGHV4-59*02

538 sequences assigned
7 (1.3%) exact matches, in which:
7 unique CDR3
4 unique J



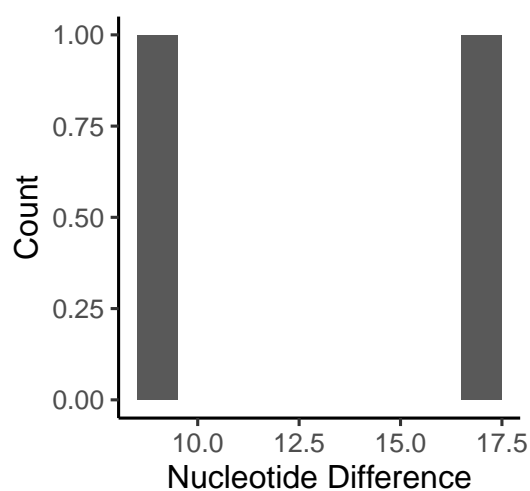
IGHV4-59*12

2040 sequences assigned
213 (10.4%) exact matches, in which:
211 unique CDR3
6 unique J



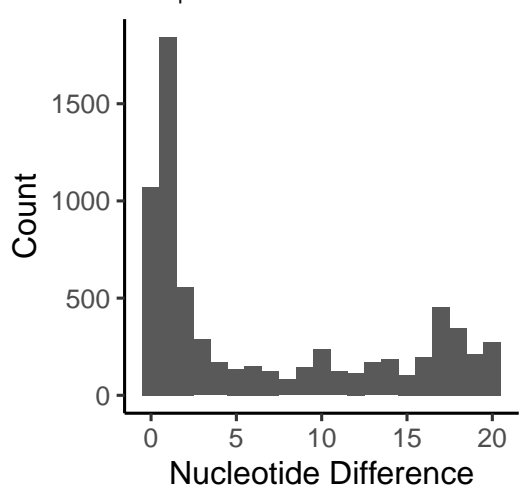
IGHV1/OR15-3*02

2 sequences assigned
No exact matches.



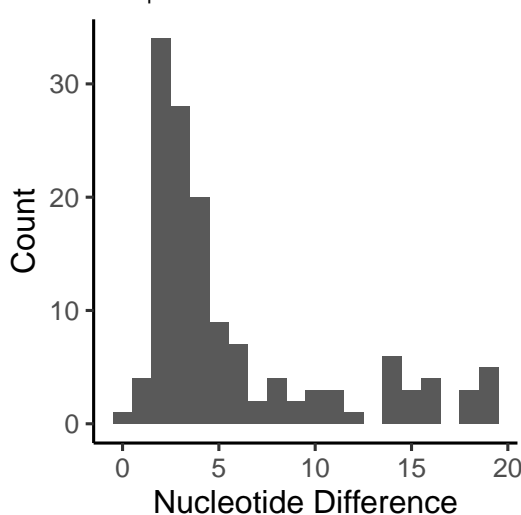
IGHV4-59*08

14731 sequences assigned
1073 (7.3%) exact matches, in which:
779 unique CDR3
6 unique J



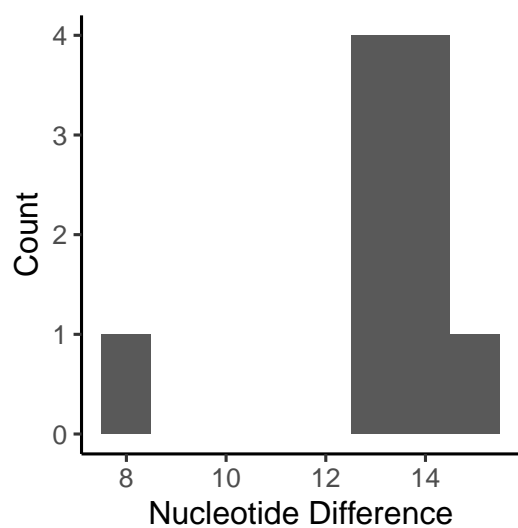
IGHV4-61*01

151 sequences assigned
1 (0.7%) exact matches, in which:
1 unique CDR3
1 unique J



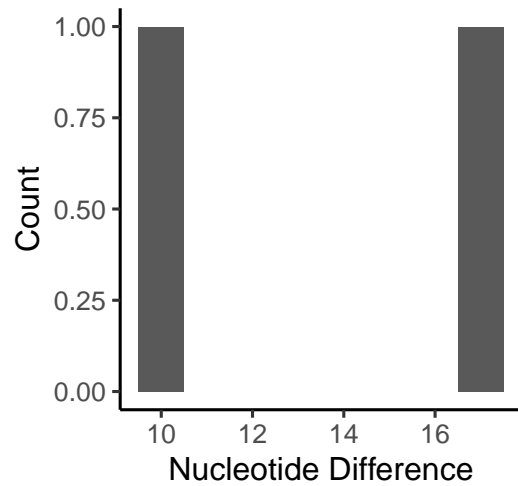
IGHV4/OR15-8*01

10 sequences assigned
No exact matches.



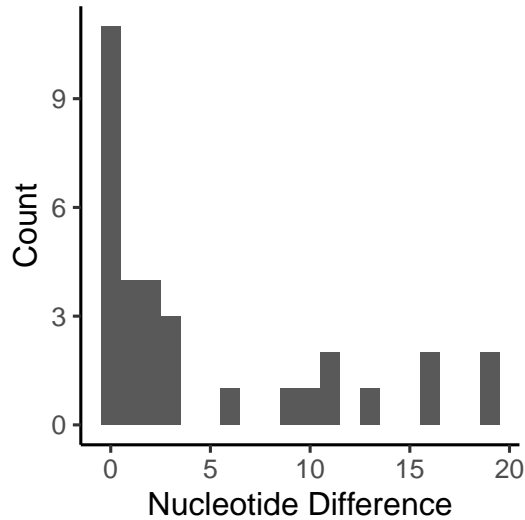
IGHV4/OR15–8*02

3 sequences assigned
No exact matches.



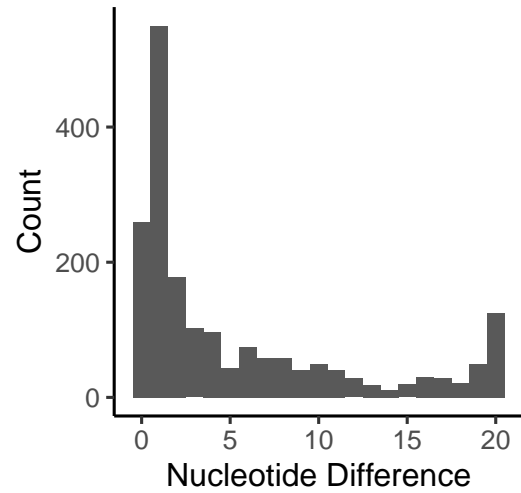
IGHV5–51*04

35 sequences assigned
11 (31.4%) exact matches, in which:
11 unique CDR3
4 unique J



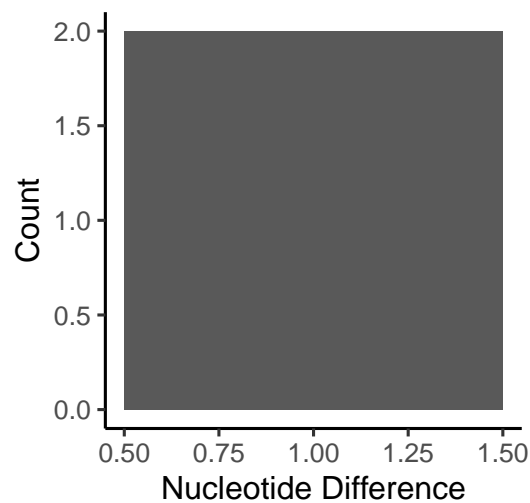
IGHV6–1*01_02

3343 sequences assigned
259 (7.7%) exact matches, in which:
186 unique CDR3
5 unique J



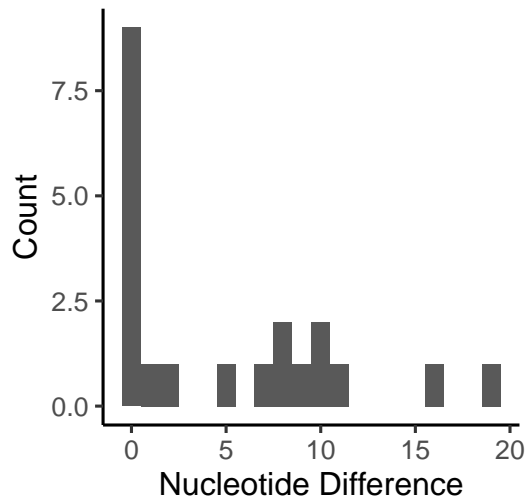
IGHV4/OR15–8*03

2 sequences assigned
No exact matches.



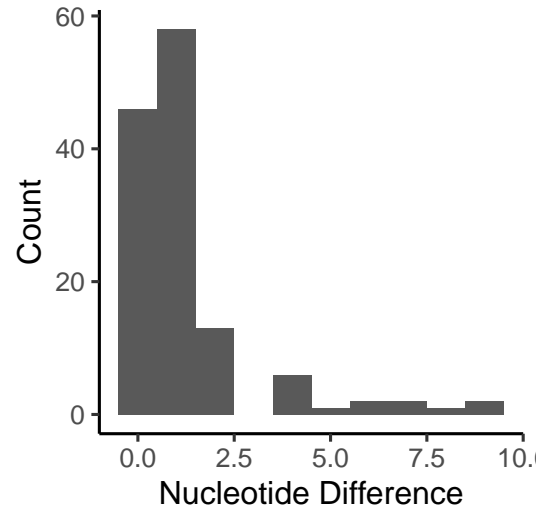
IGHV5–51*06

21 sequences assigned
9 (42.9%) exact matches, in which:
9 unique CDR3
3 unique J



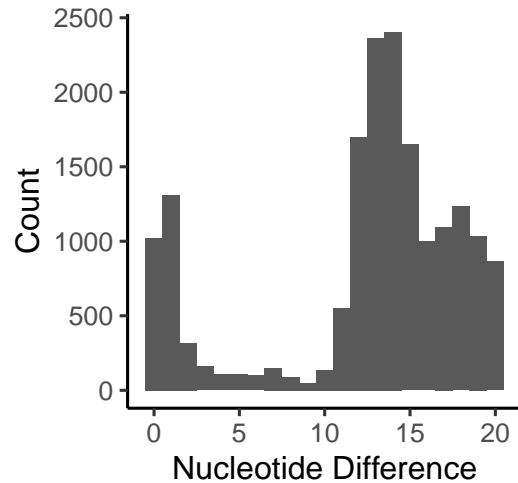
IGHV7–4–1*01

131 sequences assigned
46 (35.1%) exact matches, in which:
35 unique CDR3
5 unique J



IGHV5–10–1*01_03

18700 sequences assigned
1020 (5.5%) exact matches, in which:
598 unique CDR3
6 unique J



IGHV5–51*07

29 sequences assigned
7 (24.1%) exact matches, in which:
7 unique CDR3
3 unique J

