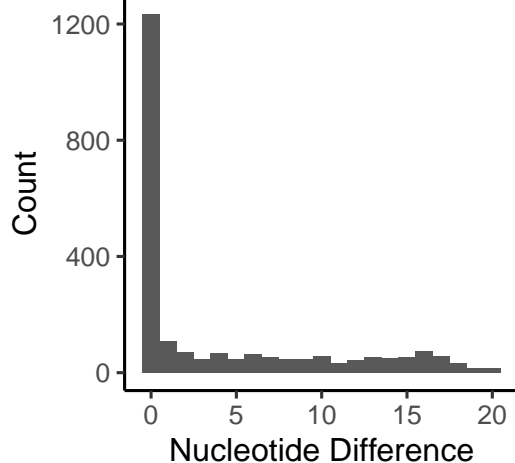


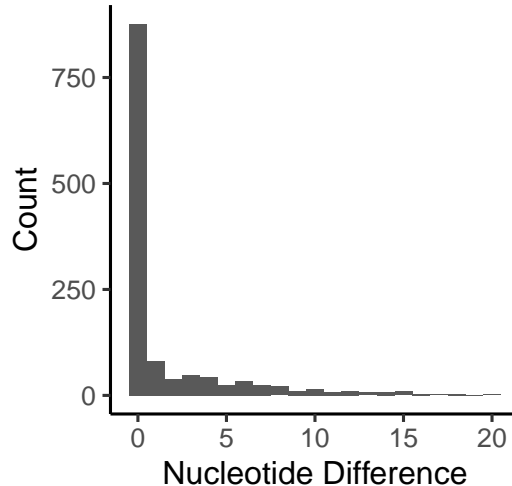
IGHV1-2*02

2328 sequences assigned
1233 (53%) exact matches, in which:
1228 unique CDR3
6 unique J



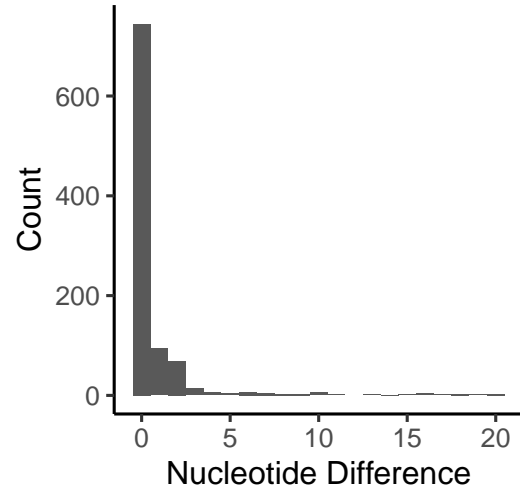
IGHV1-8*01

1284 sequences assigned
877 (68.3%) exact matches, in which:
874 unique CDR3
6 unique J



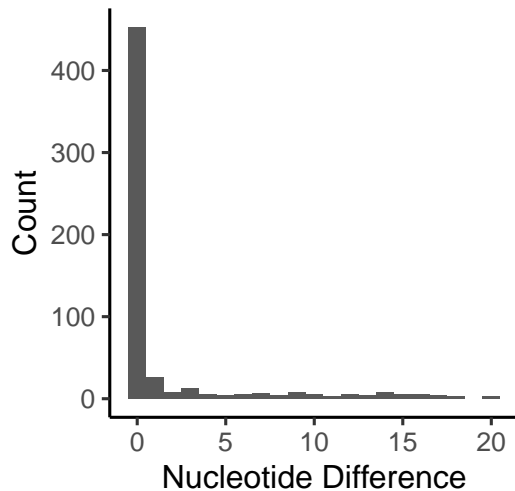
IGHV1-24*01

986 sequences assigned
745 (75.6%) exact matches, in which:
740 unique CDR3
6 unique J



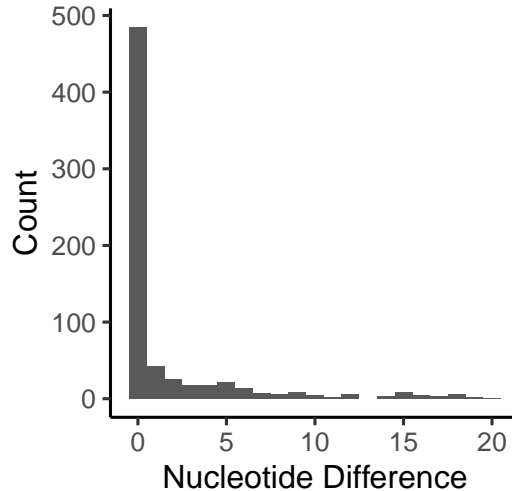
IGHV1-2*04

592 sequences assigned
453 (76.5%) exact matches, in which:
450 unique CDR3
6 unique J



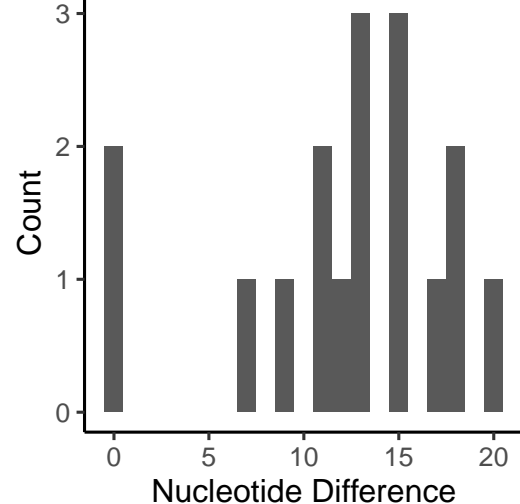
IGHV1-8*03

693 sequences assigned
485 (70%) exact matches, in which:
484 unique CDR3
6 unique J



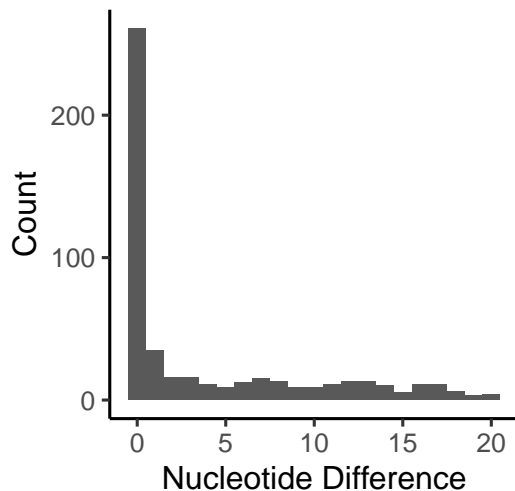
IGHV1-45*02

30 sequences assigned
2 (6.7%) exact matches, in which:
2 unique CDR3
2 unique J



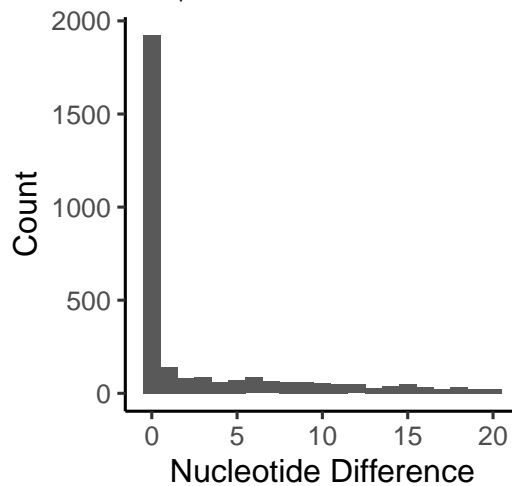
IGHV1-3*01_05

512 sequences assigned
261 (51%) exact matches, in which:
255 unique CDR3
6 unique J



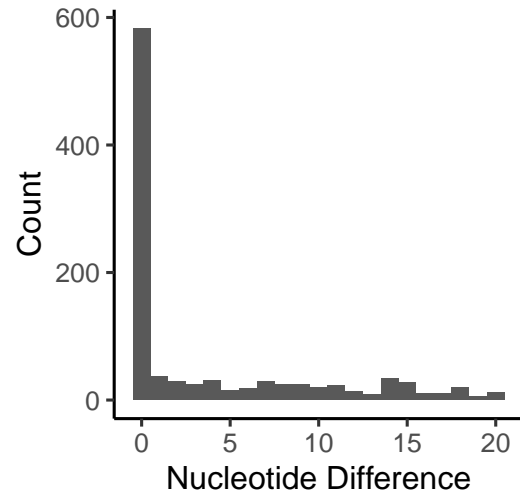
IGHV1-18*04

3172 sequences assigned
1924 (60.7%) exact matches, in which:
1918 unique CDR3
6 unique J



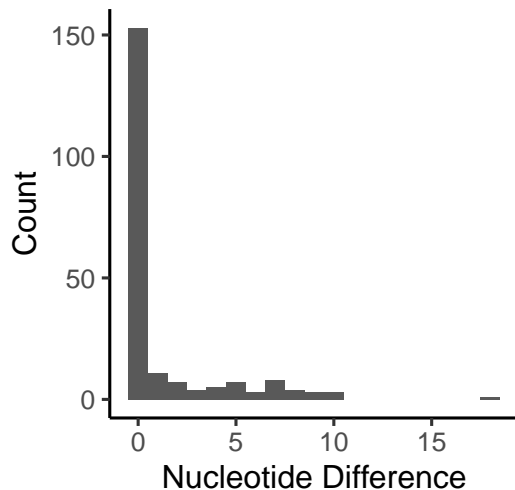
IGHV1-46*01

1078 sequences assigned
583 (54.1%) exact matches, in which:
578 unique CDR3
6 unique J



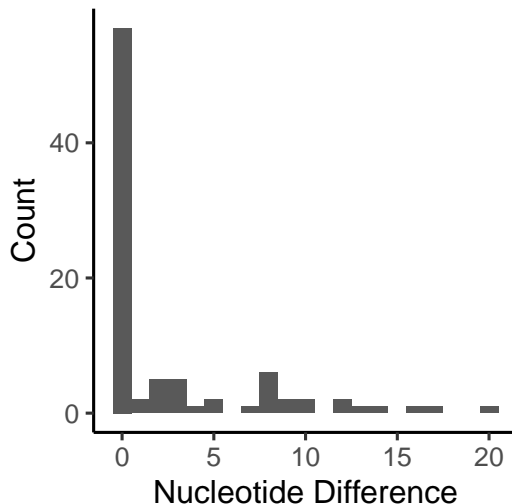
IGHV1–58*01_03

210 sequences assigned
153 (72.9%) exact matches, in which:
153 unique CDR3
6 unique J



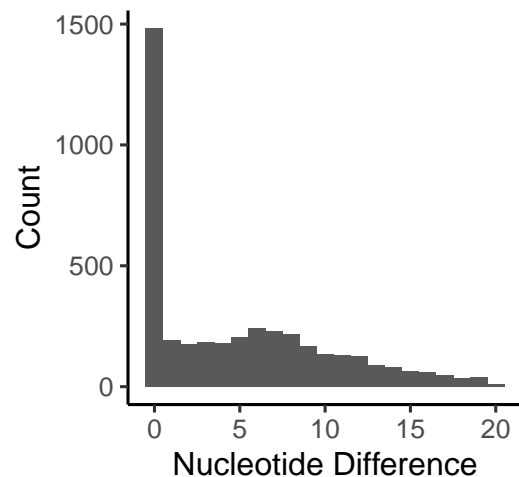
IGHV2–26*01

93 sequences assigned
57 (61.3%) exact matches, in which:
57 unique CDR3
6 unique J



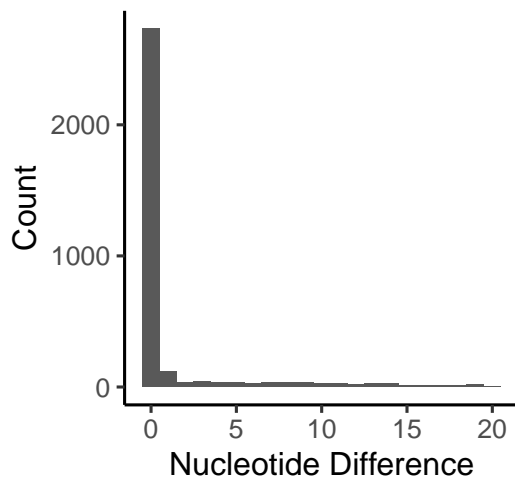
IGHV3–7*01

4163 sequences assigned
1482 (35.6%) exact matches, in which:
1422 unique CDR3
6 unique J



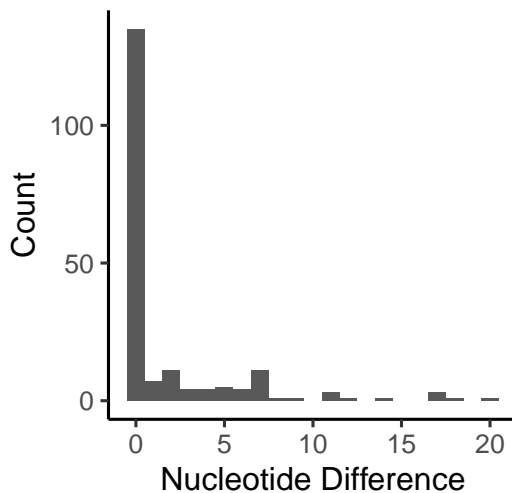
IGHV1–69*01_12_13

3416 sequences assigned
2733 (80%) exact matches, in which:
2728 unique CDR3
6 unique J



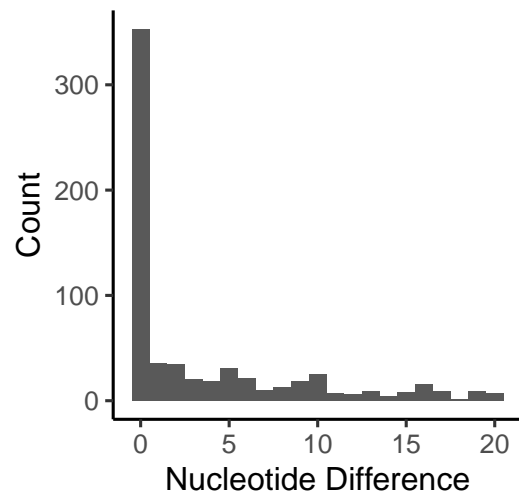
IGHV2–70*01

193 sequences assigned
135 (69.9%) exact matches, in which:
125 unique CDR3
5 unique J



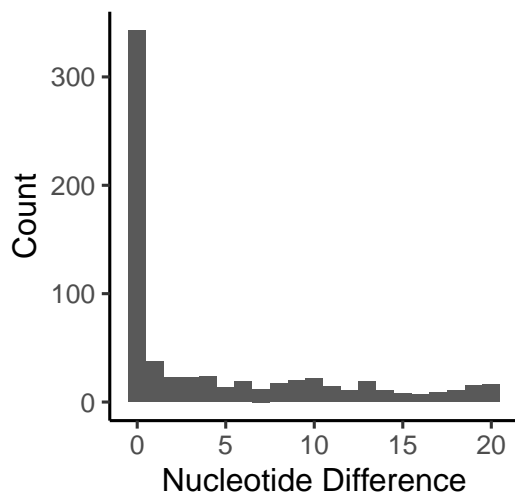
IGHV3–9*01

674 sequences assigned
353 (52.4%) exact matches, in which:
337 unique CDR3
6 unique J



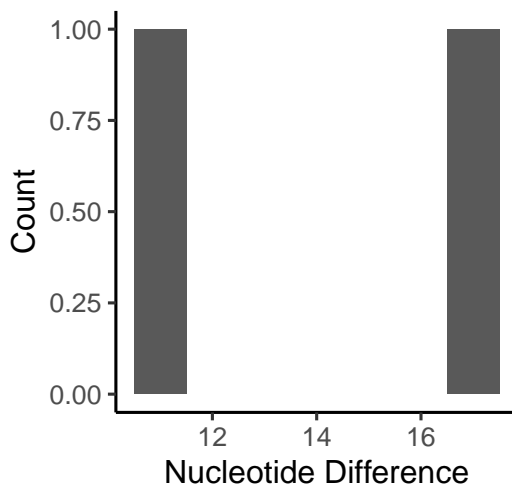
IGHV2–5*01

722 sequences assigned
343 (47.5%) exact matches, in which:
340 unique CDR3
6 unique J



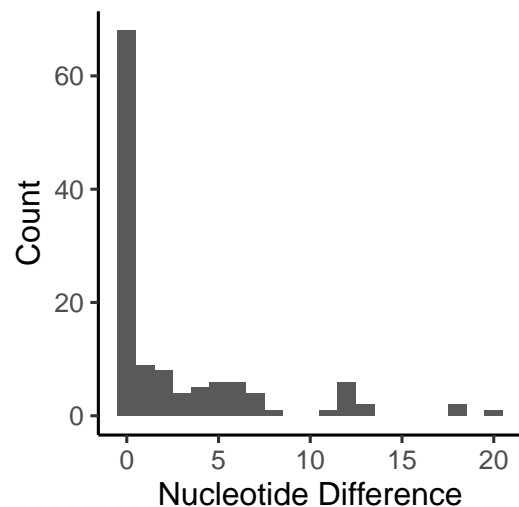
IGHV2–70D*04

2 sequences assigned
No exact matches.



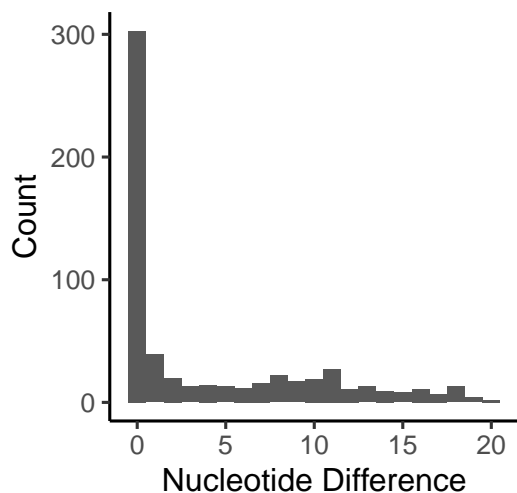
IGHV3–9*03

124 sequences assigned
68 (54.8%) exact matches, in which:
67 unique CDR3
5 unique J



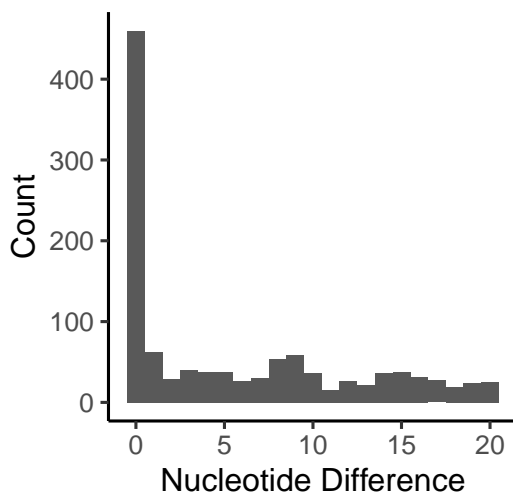
IGHV3-11*01

617 sequences assigned
303 (49.1%) exact matches, in which:
275 unique CDR3
6 unique J



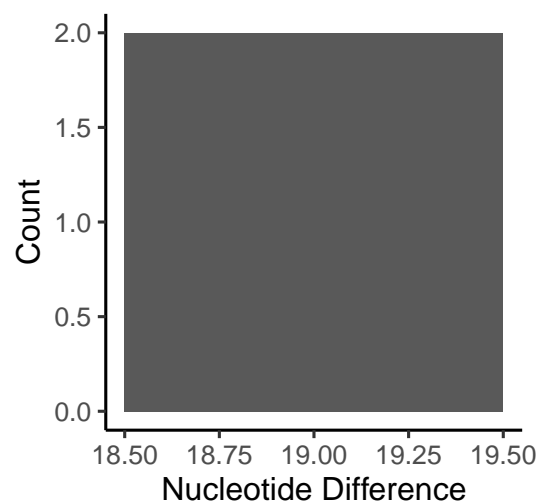
IGHV3-15*01_02

1237 sequences assigned
460 (37.2%) exact matches, in which:
424 unique CDR3
6 unique J



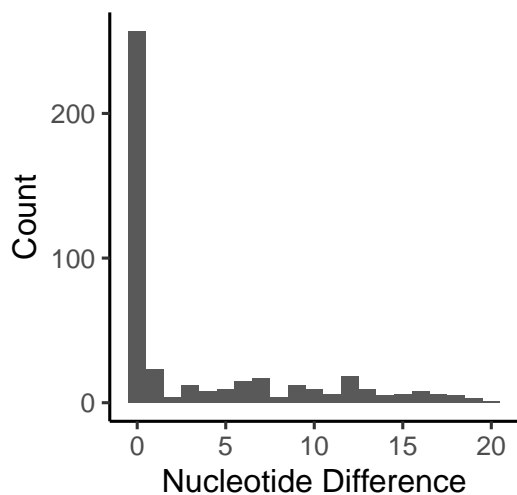
IGHV3-22*01_02

2 sequences assigned
No exact matches.



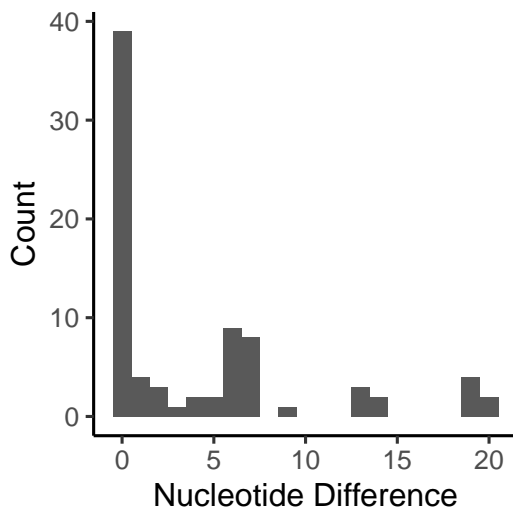
IGHV3-11*04

464 sequences assigned
257 (55.4%) exact matches, in which:
236 unique CDR3
6 unique J



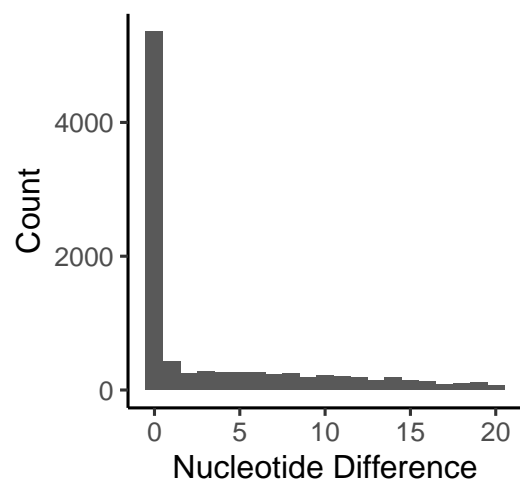
IGHV3-20*01_02

80 sequences assigned
39 (48.8%) exact matches, in which:
36 unique CDR3
5 unique J



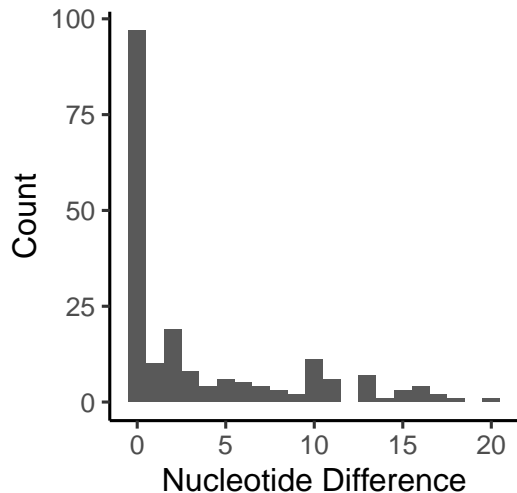
IGHV3-23*01_04

9691 sequences assigned
5356 (55.3%) exact matches, in which:
5200 unique CDR3
6 unique J



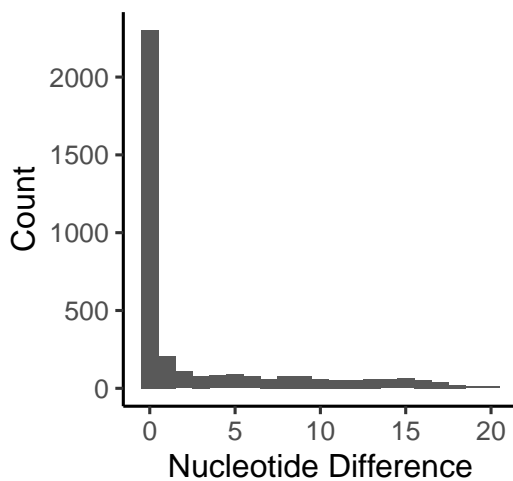
IGHV3-13*01

197 sequences assigned
97 (49.2%) exact matches, in which:
95 unique CDR3
5 unique J



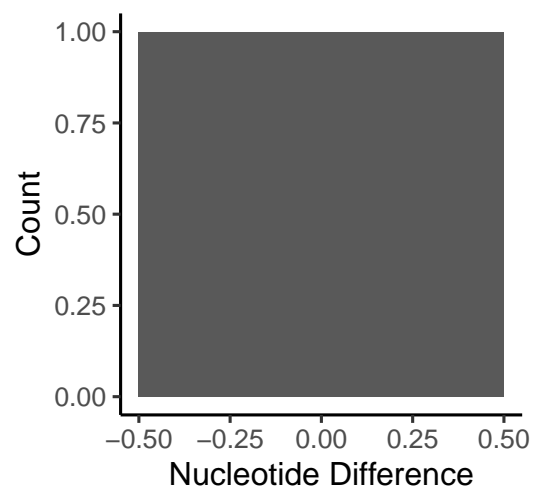
IGHV3-21*01_02

3905 sequences assigned
2302 (59%) exact matches, in which:
2219 unique CDR3
6 unique J



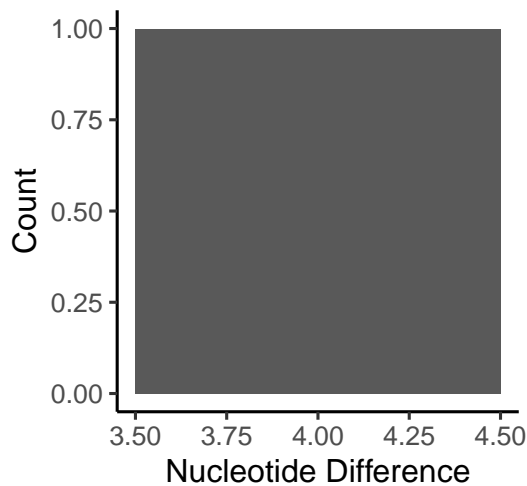
IGHV3-30-3*01

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



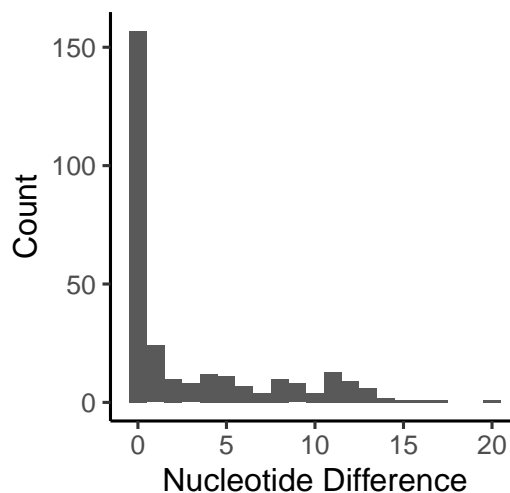
IGHV3-30-3*03

2 sequences assigned
No exact matches.



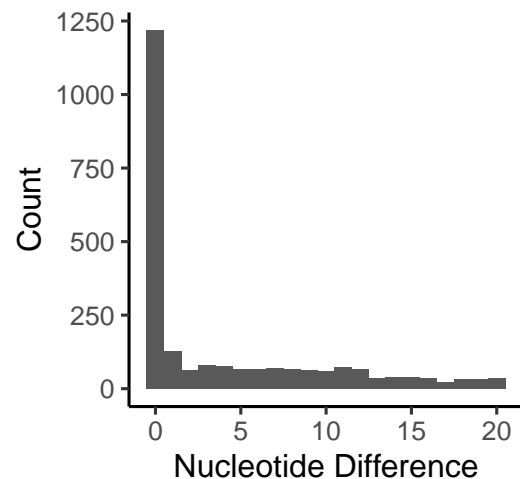
IGHV3-43*01

291 sequences assigned
157 (54%) exact matches, in which:
143 unique CDR3
6 unique J



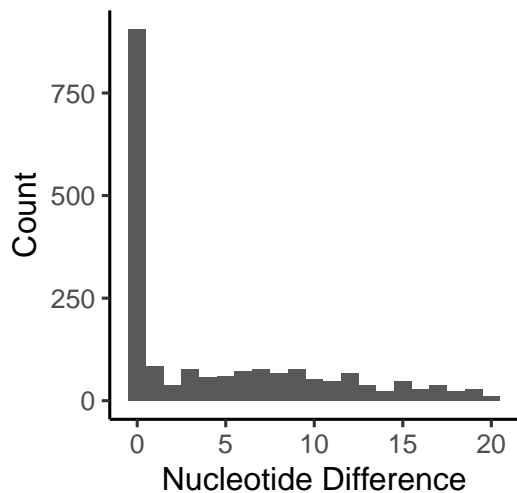
IGHV3-53*01_02

2497 sequences assigned
1218 (48.8%) exact matches, in which:
1173 unique CDR3
6 unique J



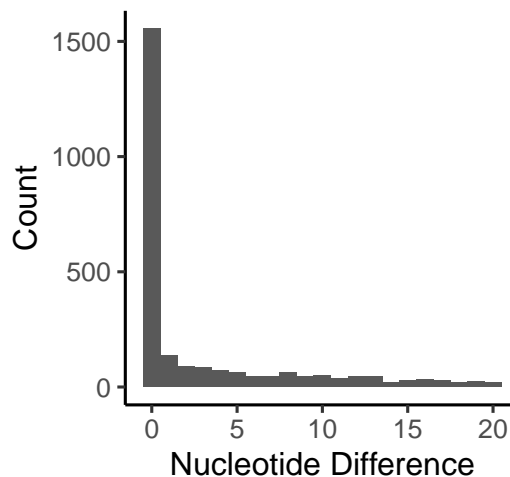
IGHV3-33*01

2022 sequences assigned
906 (44.8%) exact matches, in which:
873 unique CDR3
6 unique J



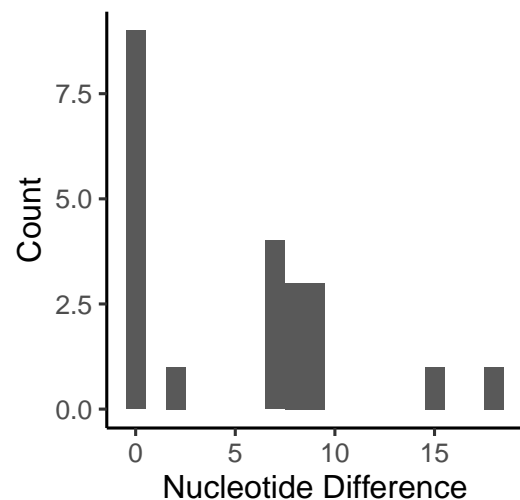
IGHV3-48*02

2616 sequences assigned
1555 (59.4%) exact matches, in which:
1461 unique CDR3
6 unique J



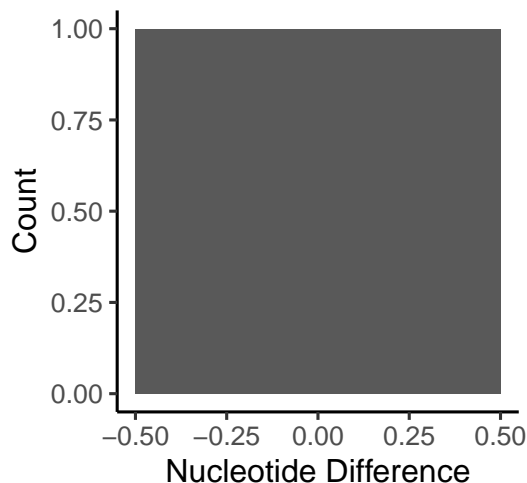
IGHV3-64*02_07

22 sequences assigned
9 (40.9%) exact matches, in which:
9 unique CDR3
3 unique J



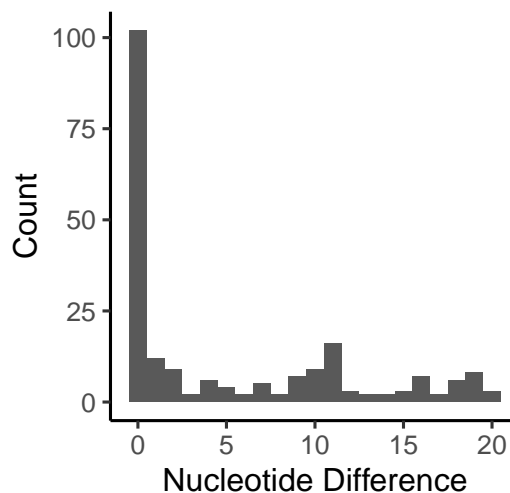
IGHV3-35*01

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



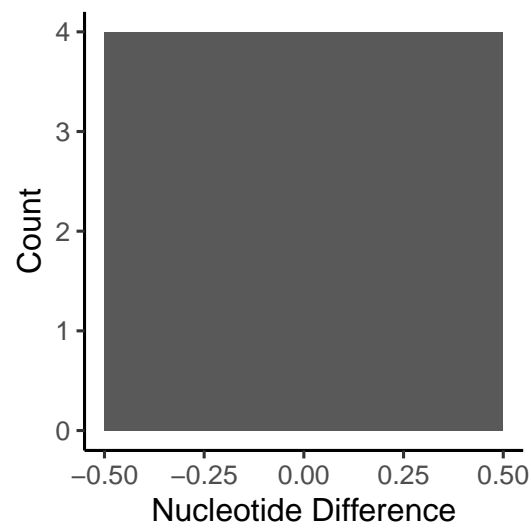
IGHV3-49*03_05

234 sequences assigned
102 (43.6%) exact matches, in which:
95 unique CDR3
5 unique J



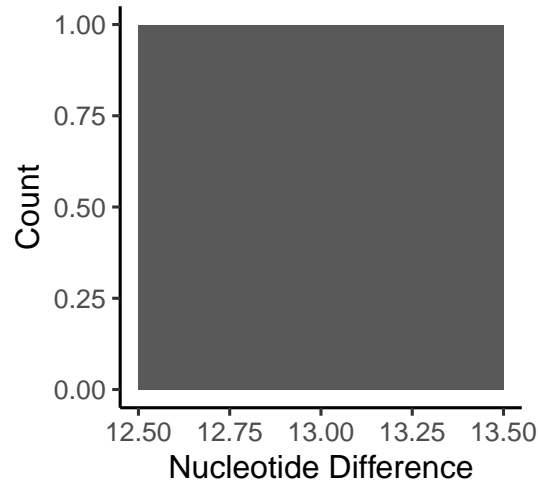
IGHV3-66*03

4 sequences assigned
4 (100%) exact matches, in which:
4 unique CDR3
2 unique J



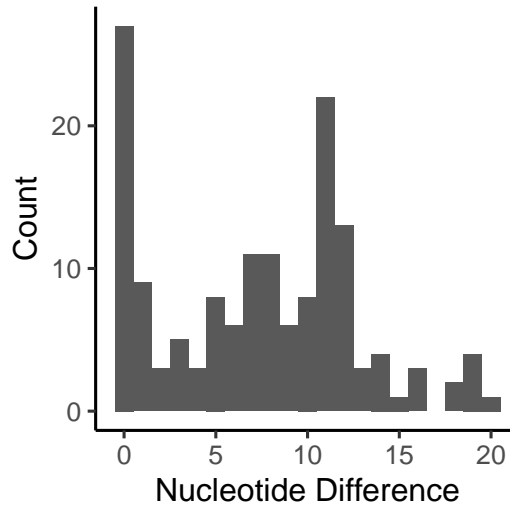
IGHV3-66*04

1 sequences assigned
No exact matches.



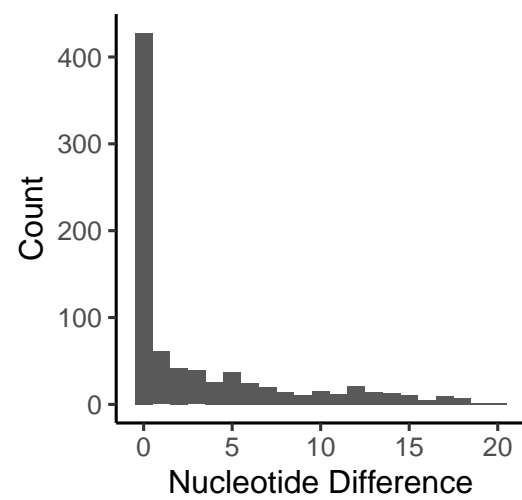
IGHV3-72*01

155 sequences assigned
27 (17.4%) exact matches, in which:
23 unique CDR3
5 unique J



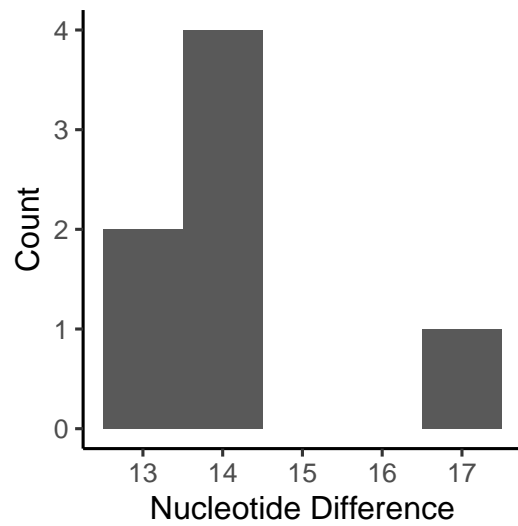
IGHV3-74*01_02

832 sequences assigned
428 (51.4%) exact matches, in which:
407 unique CDR3
6 unique J



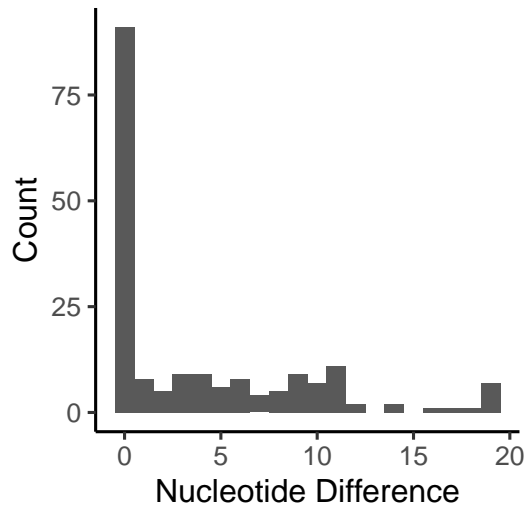
IGHV3-69-1*01

21 sequences assigned
No exact matches.



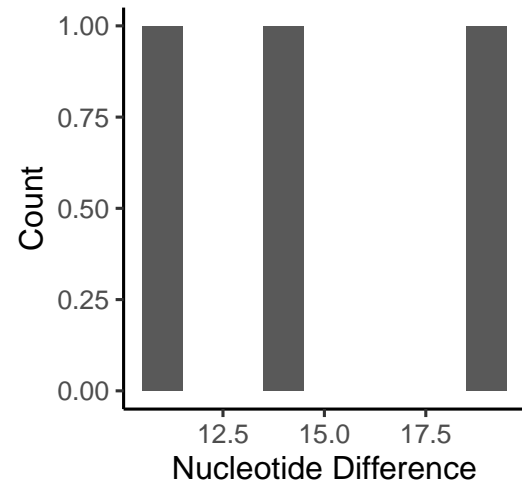
IGHV3-73*01_02

189 sequences assigned
91 (48.1%) exact matches, in which:
90 unique CDR3
6 unique J



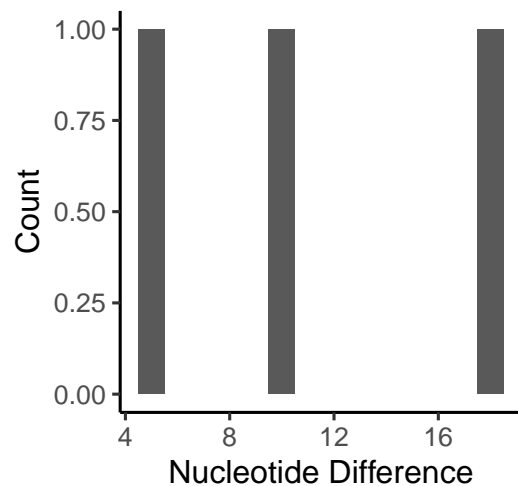
IGHV3-64D*06

3 sequences assigned
No exact matches.



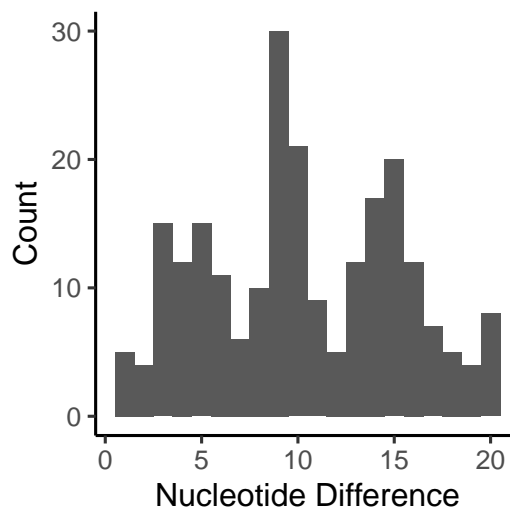
IGHV3-69-1*02

4 sequences assigned
No exact matches.



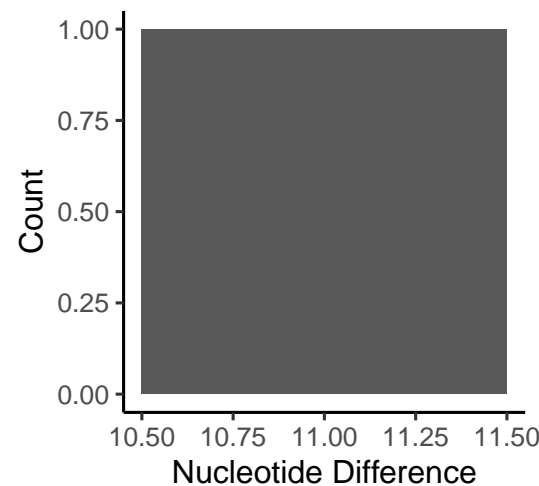
IGHV3-74*03

269 sequences assigned
No exact matches.



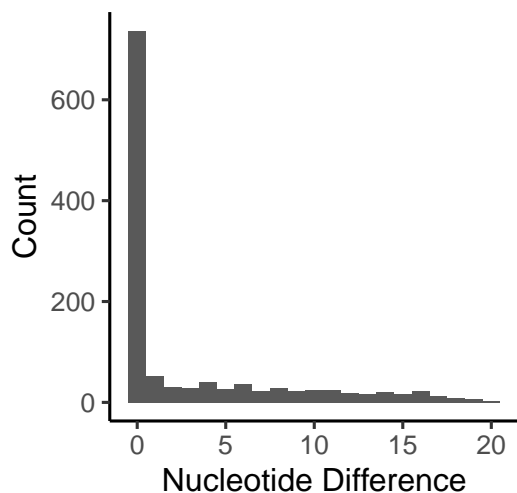
IGHV3-64D*09

1 sequences assigned
No exact matches.



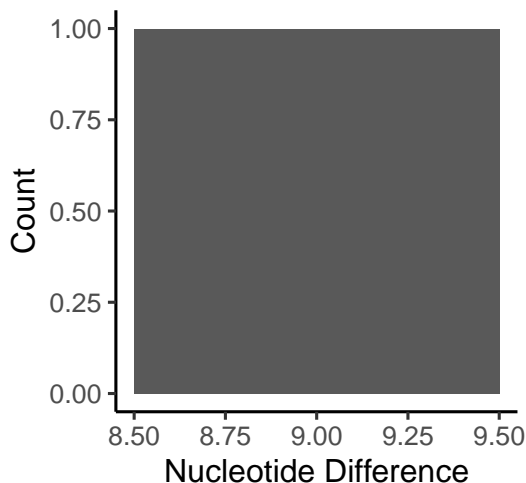
IGHV4-4*07

1236 sequences assigned
737 (59.6%) exact matches, in which:
709 unique CDR3
6 unique J



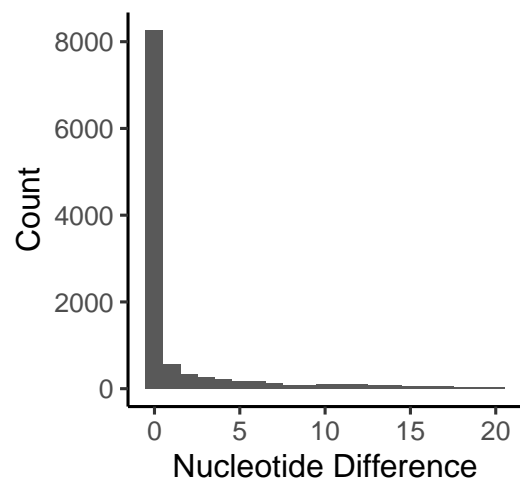
IGHV4-30-4*01

2 sequences assigned
No exact matches.



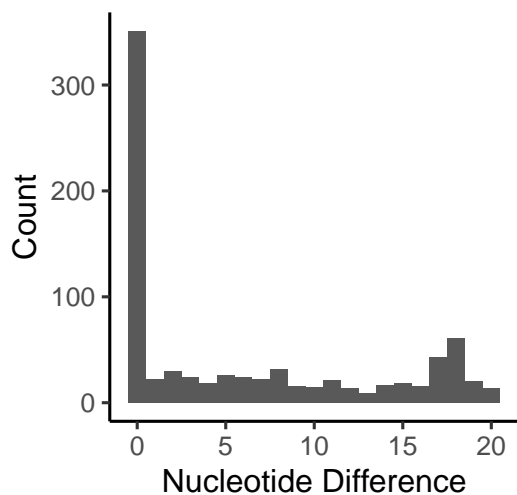
IGHV4-34*01_02

11198 sequences assigned
8260 (73.8%) exact matches, in which:
8117 unique CDR3
6 unique J



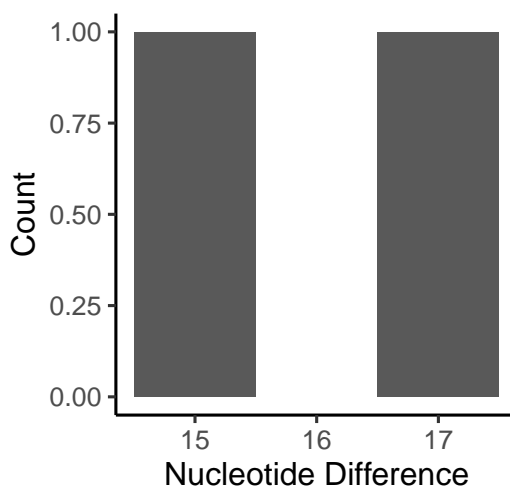
IGHV4-4*02_03

884 sequences assigned
351 (39.7%) exact matches, in which:
346 unique CDR3
6 unique J



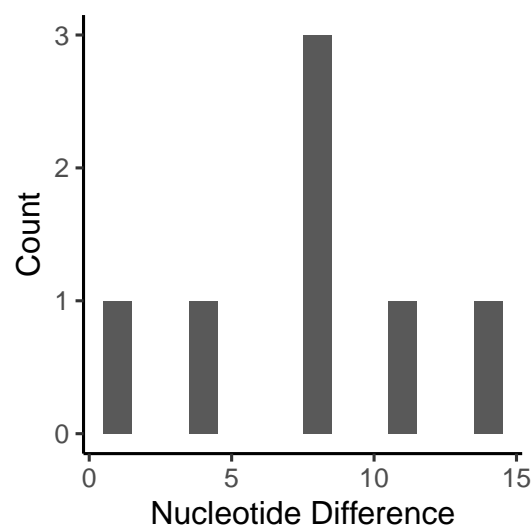
IGHV4-30-2*03

3 sequences assigned
No exact matches.



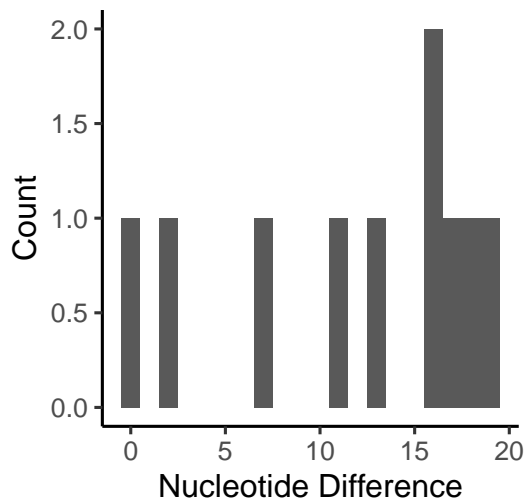
IGHV4-38-2*02

11 sequences assigned
No exact matches.



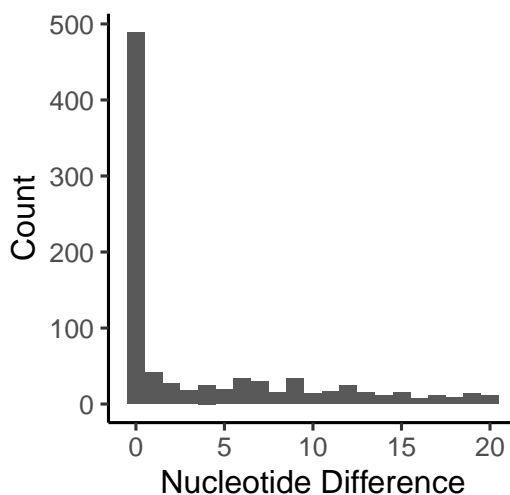
IGHV4-28*01_07

14 sequences assigned
1 (7.1%) exact matches, in which:
1 unique CDR3
1 unique J



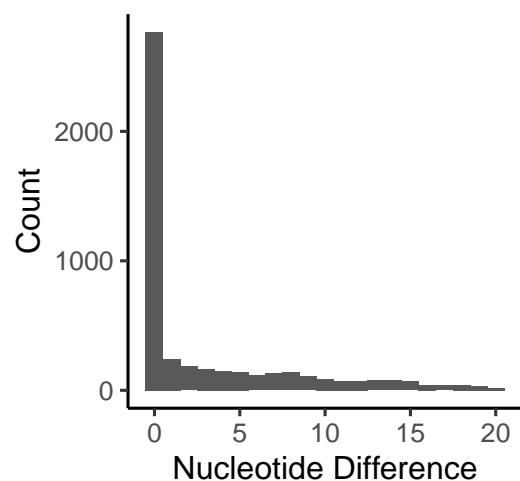
IGHV4-31*02

924 sequences assigned
489 (52.9%) exact matches, in which:
481 unique CDR3
6 unique J



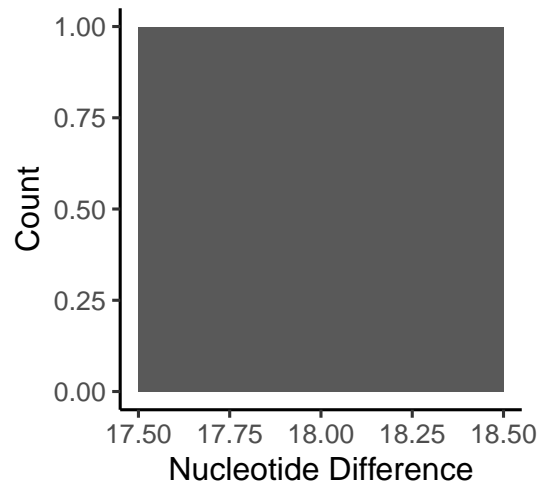
IGHV4-39*02_C258G

4985 sequences assigned
2767 (55.5%) exact matches, in which:
2721 unique CDR3
6 unique J



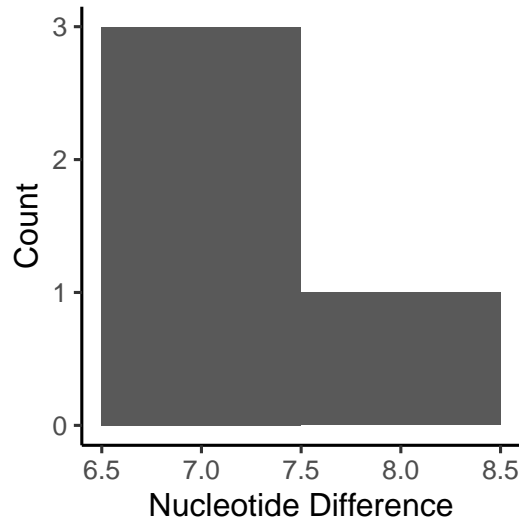
IGHV4-55*07

1 sequences assigned
No exact matches.



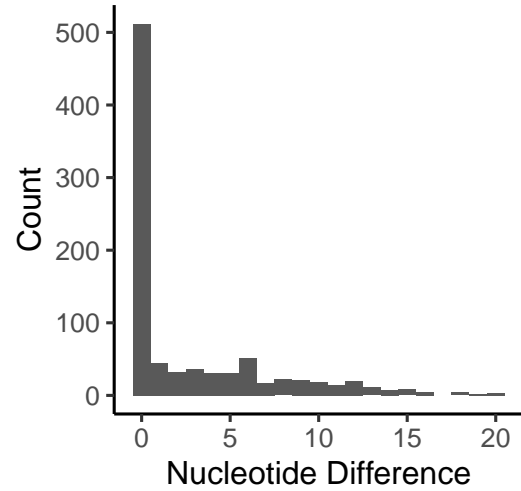
IGHV4/OR15-8*01

8 sequences assigned
No exact matches.



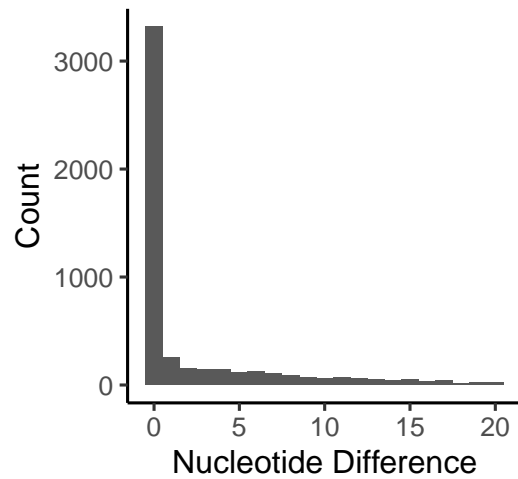
IGHV6-1*01_02

917 sequences assigned
512 (55.8%) exact matches, in which:
510 unique CDR3
6 unique J



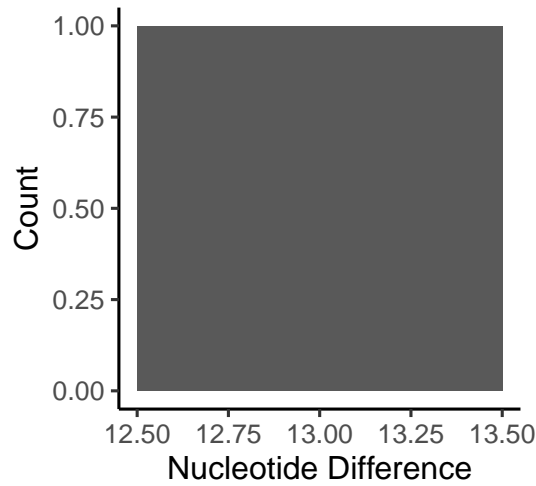
IGHV4-59*02_G88A

5174 sequences assigned
3318 (64.1%) exact matches, in which:
3253 unique CDR3
6 unique J



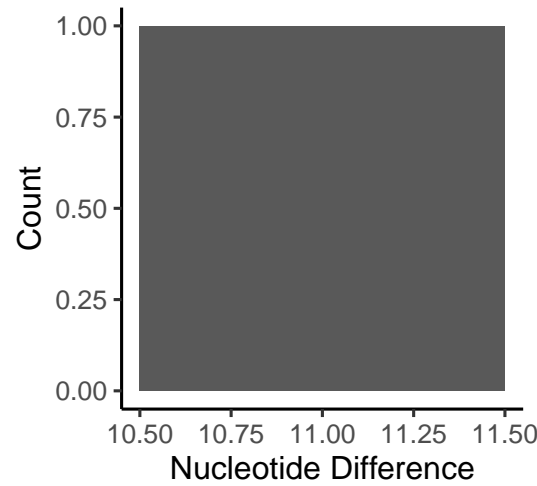
IGHV4/OR15-8*03

1 sequences assigned
No exact matches.



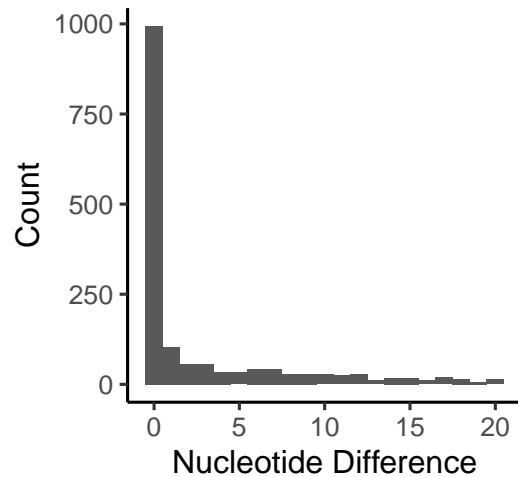
IGHV3/OR16-6*02

1 sequences assigned
No exact matches.



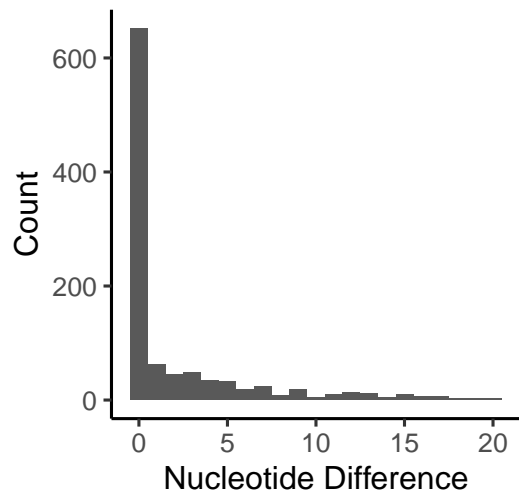
IGHV4-61*01

1676 sequences assigned
994 (59.3%) exact matches, in which:
966 unique CDR3
6 unique J



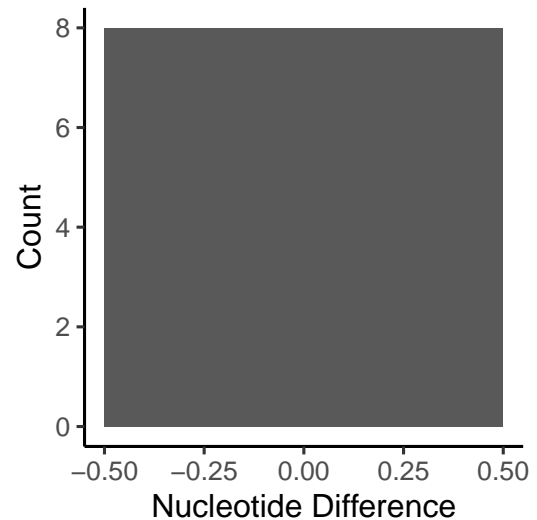
IGHV5-51*07_A128G

1027 sequences assigned
652 (63.5%) exact matches, in which:
652 unique CDR3
6 unique J



IGHV7-4-1*01

8 sequences assigned
8 (100%) exact matches, in which:
8 unique CDR3
4 unique J





Warning – no inferred sequences found.