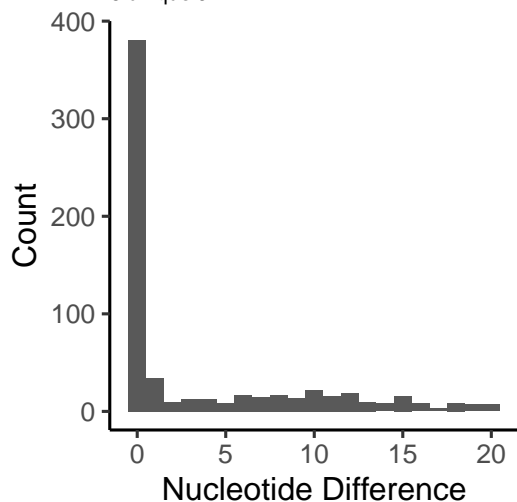


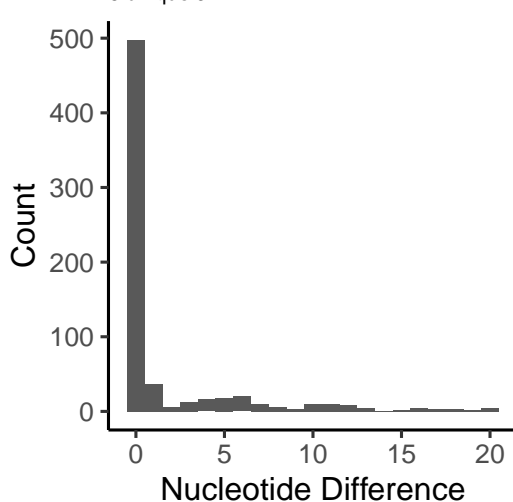
IGHV1-2*02

744 sequences assigned
381 (51.2%) exact matches, in which:
378 unique CDR3
6 unique J



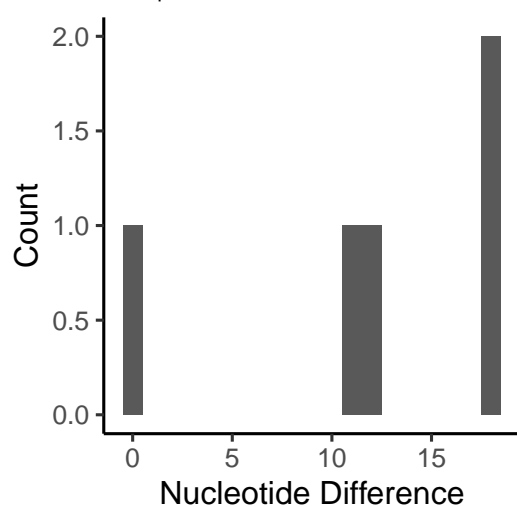
IGHV1-8*01

764 sequences assigned
498 (65.2%) exact matches, in which:
489 unique CDR3
6 unique J



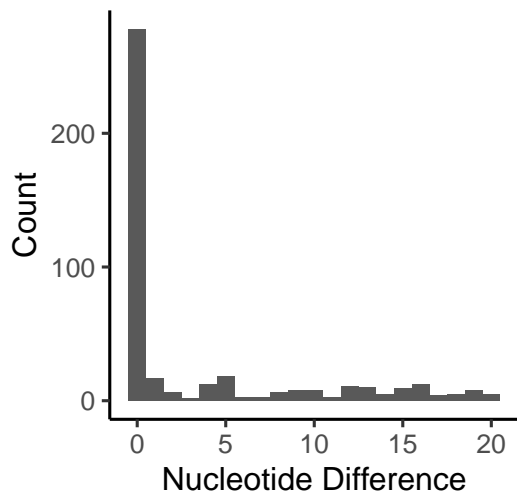
IGHV1-45*02

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



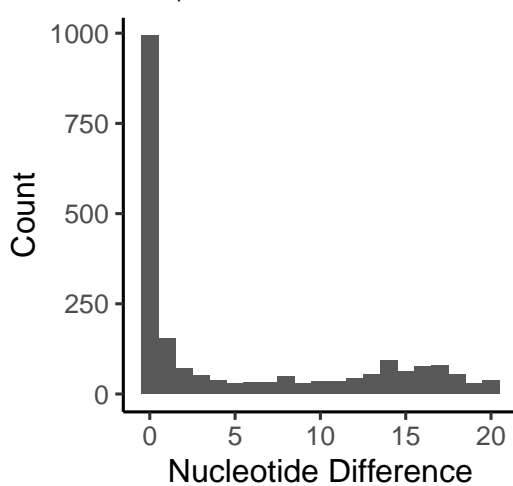
IGHV1-2*06

536 sequences assigned
278 (51.9%) exact matches, in which:
276 unique CDR3
6 unique J



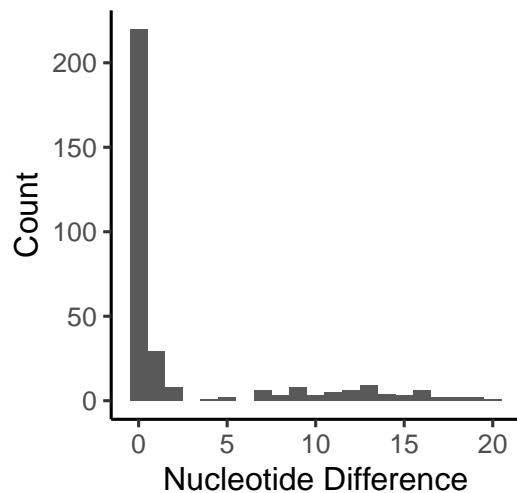
IGHV1-18*01

2299 sequences assigned
993 (43.2%) exact matches, in which:
967 unique CDR3
6 unique J



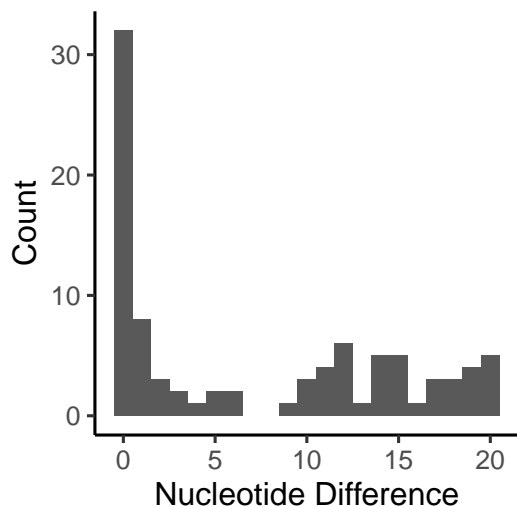
IGHV1-46*01

341 sequences assigned
220 (64.5%) exact matches, in which:
216 unique CDR3
6 unique J



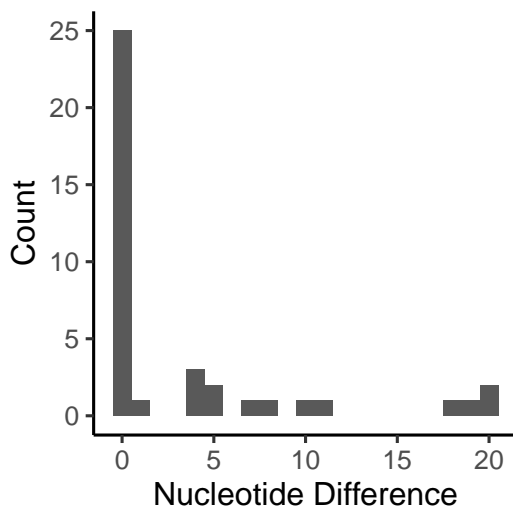
IGHV1-3*01_05

113 sequences assigned
32 (28.3%) exact matches, in which:
31 unique CDR3
5 unique J



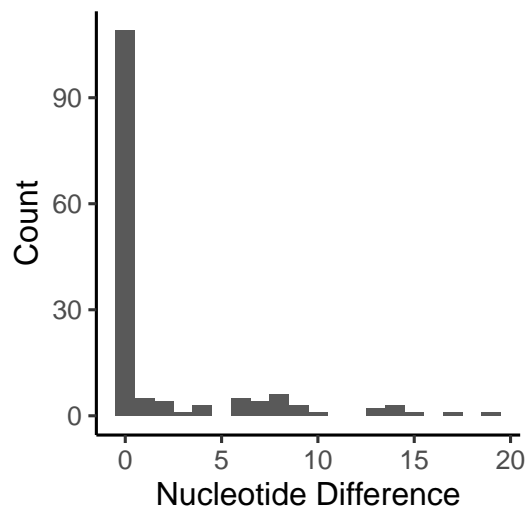
IGHV1-24*01

47 sequences assigned
25 (53.2%) exact matches, in which:
25 unique CDR3
4 unique J



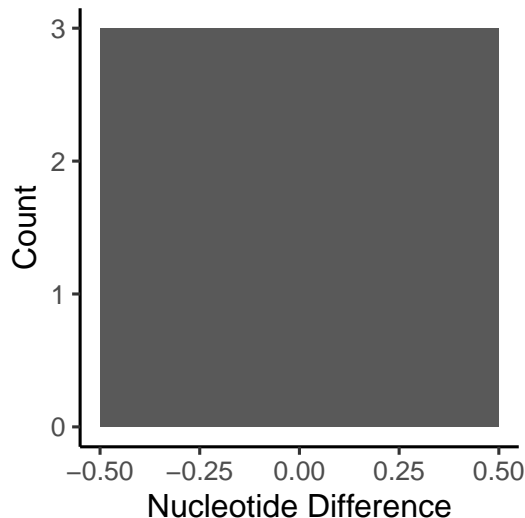
IGHV1-46*03

172 sequences assigned
109 (63.4%) exact matches, in which:
109 unique CDR3
5 unique J



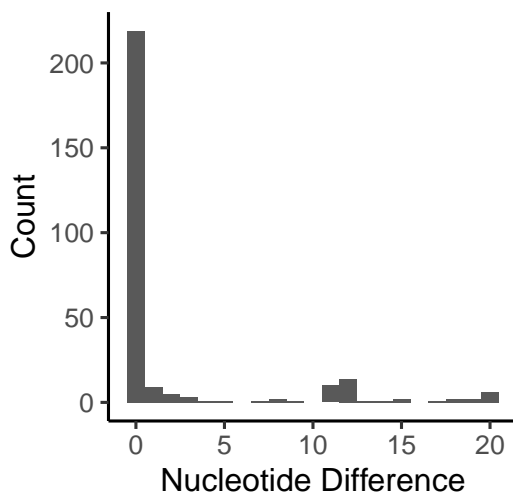
IGHV1-58*02

3 sequences assigned
3 (100%) exact matches, in which:
3 unique CDR3
2 unique J



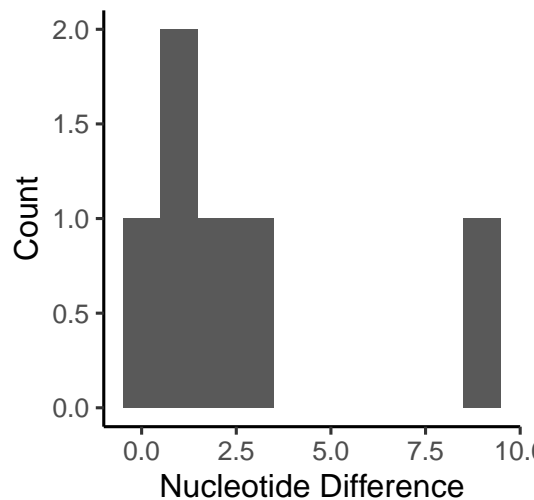
IGHV1-69*04_09

328 sequences assigned
219 (66.8%) exact matches, in which:
216 unique CDR3
6 unique J



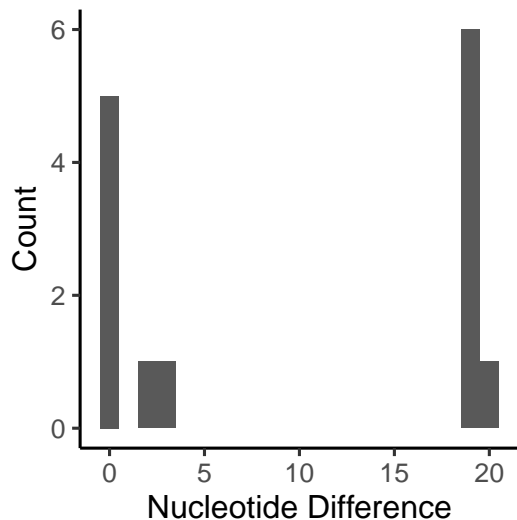
IGHV2-70*11_15

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



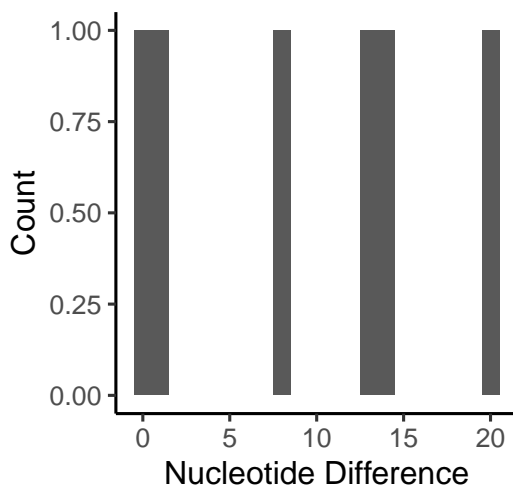
IGHV1-58*01_03

23 sequences assigned
5 (21.7%) exact matches, in which:
5 unique CDR3
2 unique J



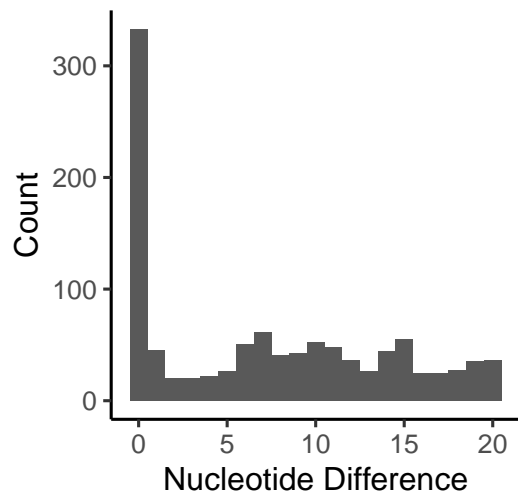
IGHV2-5*01

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



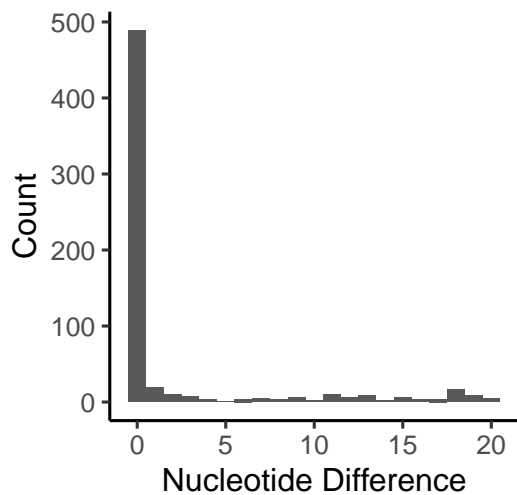
IGHV3-7*01

1189 sequences assigned
333 (28%) exact matches, in which:
324 unique CDR3
6 unique J



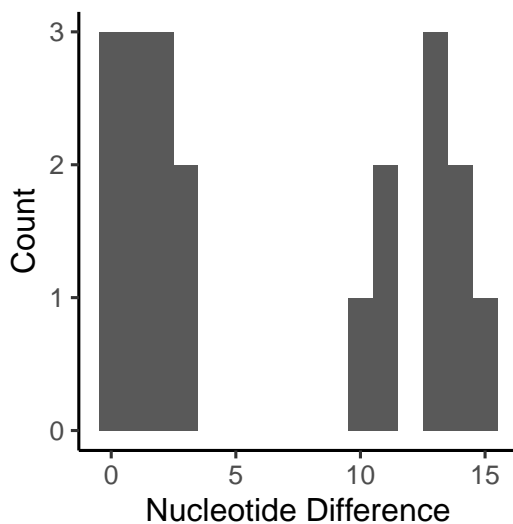
IGHV1-69*01_12_13

765 sequences assigned
489 (63.9%) exact matches, in which:
487 unique CDR3
6 unique J



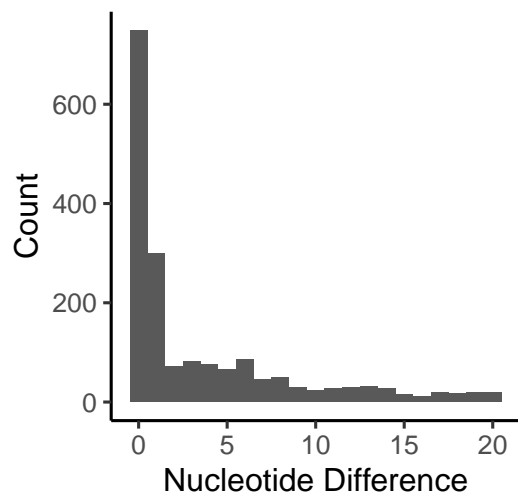
IGHV2-5*02

20 sequences assigned
3 (15%) exact matches, in which:
2 unique CDR3
1 unique J



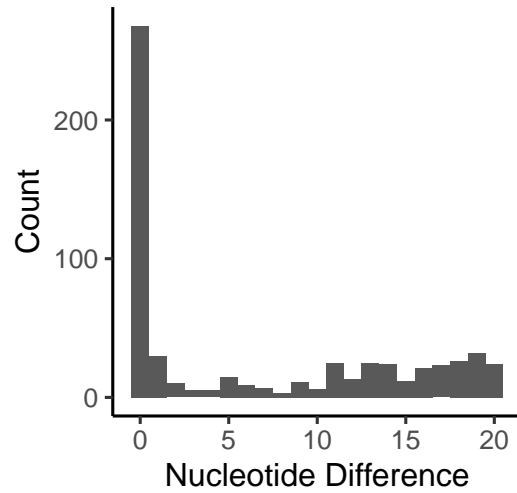
IGHV3-9*01

1936 sequences assigned
749 (38.7%) exact matches, in which:
678 unique CDR3
6 unique J



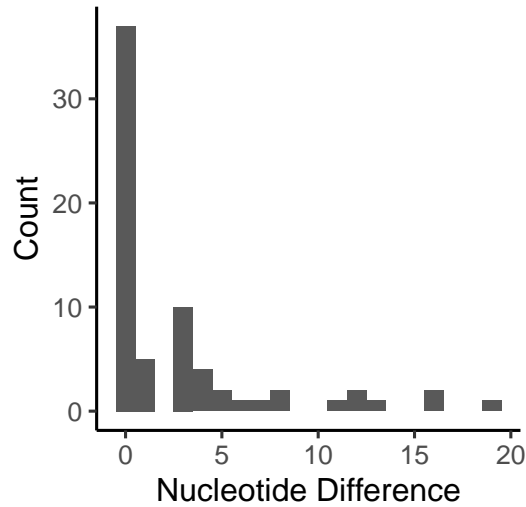
IGHV3-11*01

733 sequences assigned
268 (36.6%) exact matches, in which:
262 unique CDR3
6 unique J



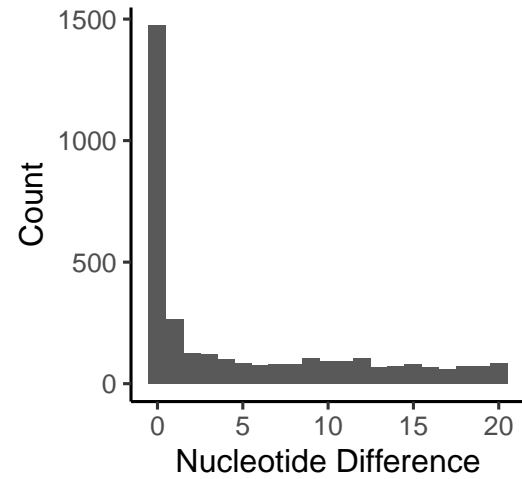
IGHV3-20*01_02

70 sequences assigned
37 (52.9%) exact matches, in which:
37 unique CDR3
5 unique J



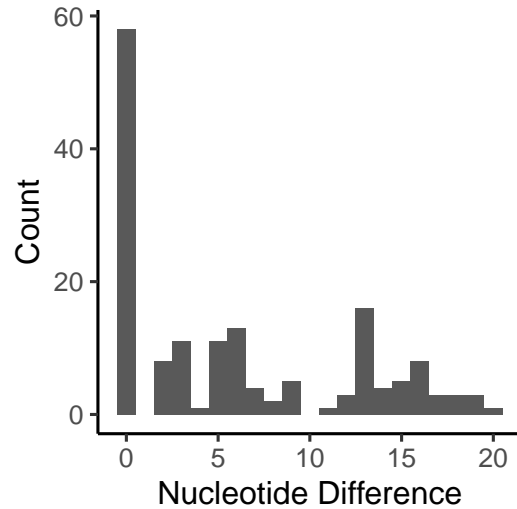
IGHV3-23*01_04

4037 sequences assigned
1474 (36.5%) exact matches, in which:
1422 unique CDR3
6 unique J



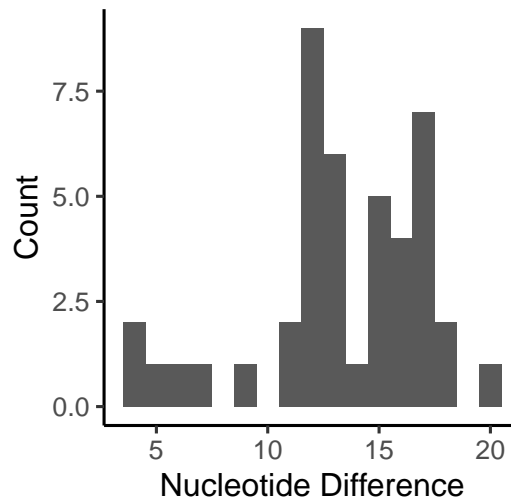
IGHV3-13*01

179 sequences assigned
58 (32.4%) exact matches, in which:
56 unique CDR3
5 unique J



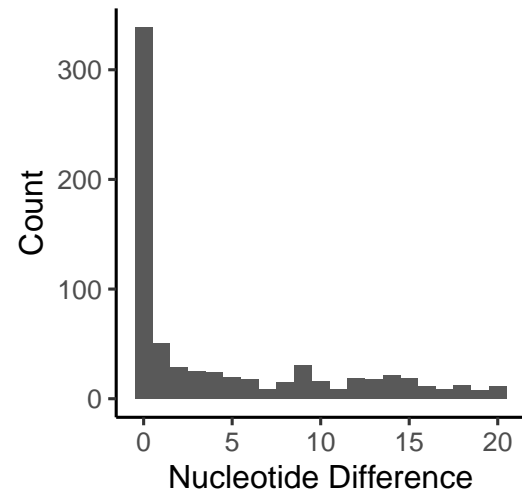
IGHV3-20*03_04

43 sequences assigned
No exact matches.



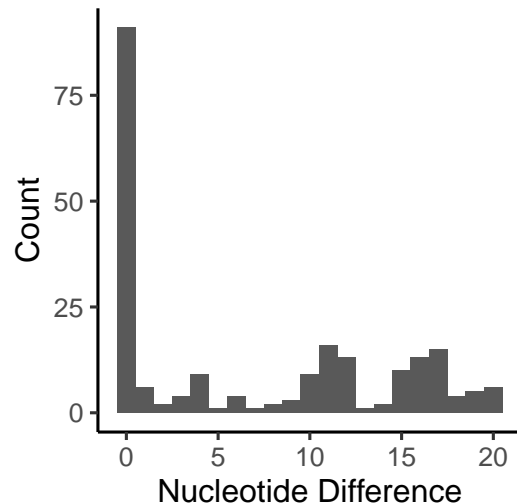
IGHV3-33*01

919 sequences assigned
339 (36.9%) exact matches, in which:
325 unique CDR3
6 unique J



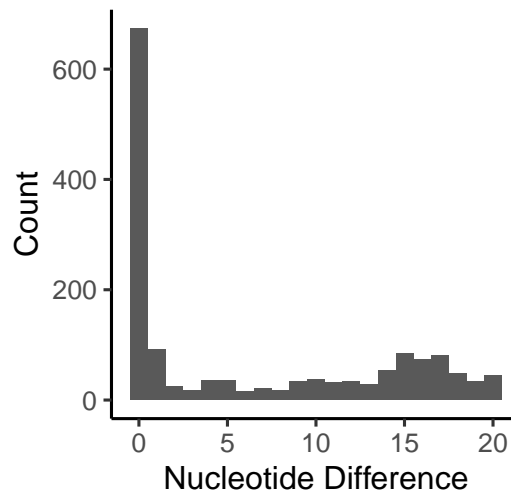
IGHV3-15*01_02

264 sequences assigned
91 (34.5%) exact matches, in which:
89 unique CDR3
6 unique J



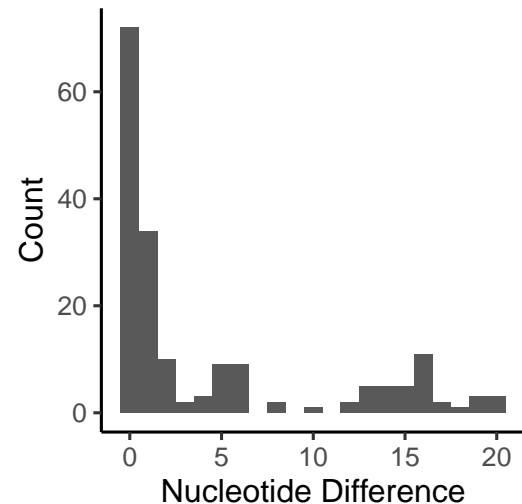
IGHV3-21*01_02

1892 sequences assigned
674 (35.6%) exact matches, in which:
649 unique CDR3
6 unique J



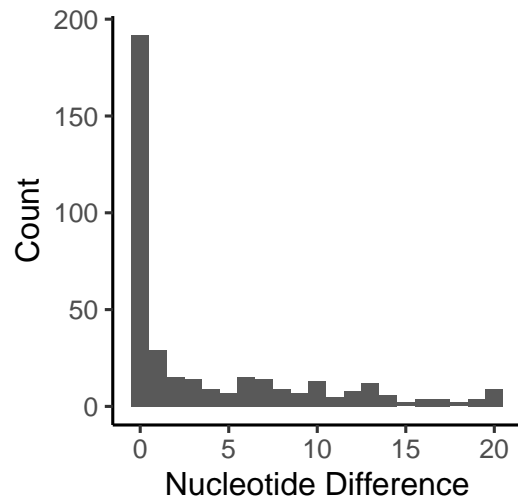
IGHV3-43*01

193 sequences assigned
72 (37.3%) exact matches, in which:
63 unique CDR3
5 unique J



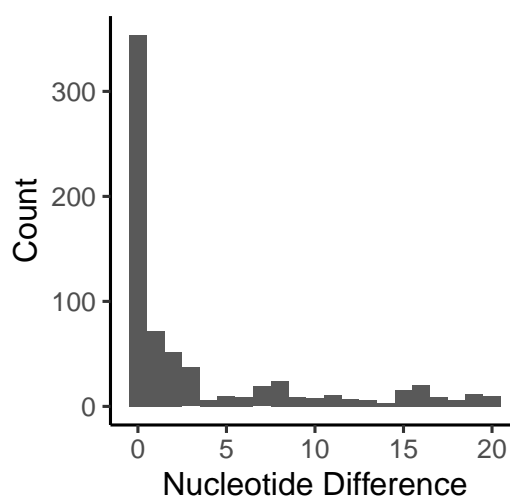
IGHV3-48*01

409 sequences assigned
192 (46.9%) exact matches, in which:
188 unique CDR3
5 unique J



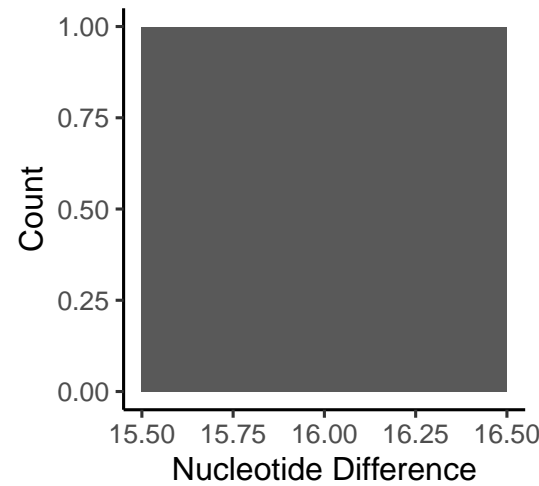
IGHV3-53*01_02

791 sequences assigned
354 (44.8%) exact matches, in which:
336 unique CDR3
6 unique J



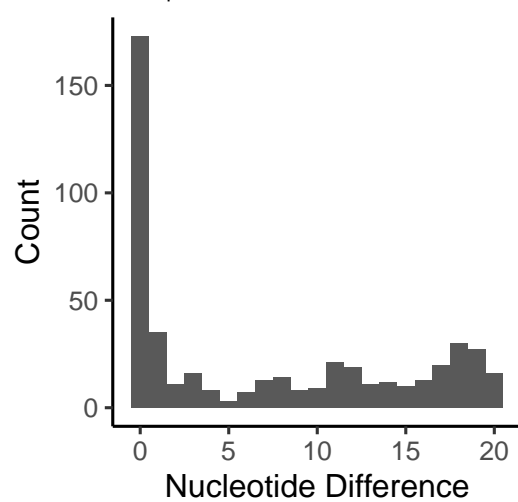
IGHV3-69-1*02

17 sequences assigned
No exact matches.



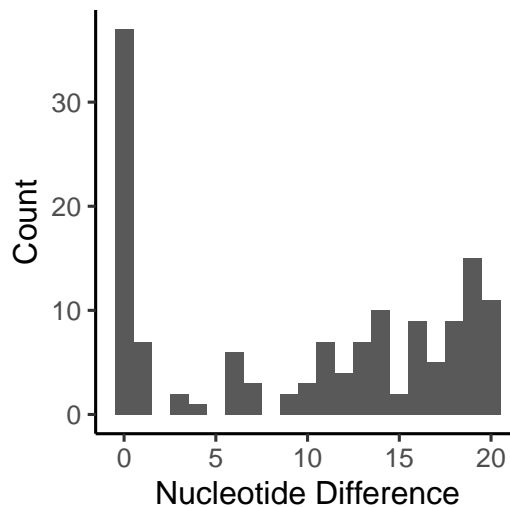
IGHV3-48*02

567 sequences assigned
173 (30.5%) exact matches, in which:
169 unique CDR3
6 unique J



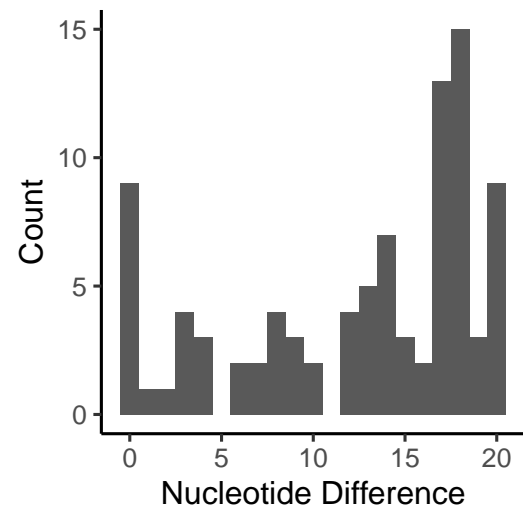
IGHV3-64*01

436 sequences assigned
37 (8.5%) exact matches, in which:
36 unique CDR3
6 unique J



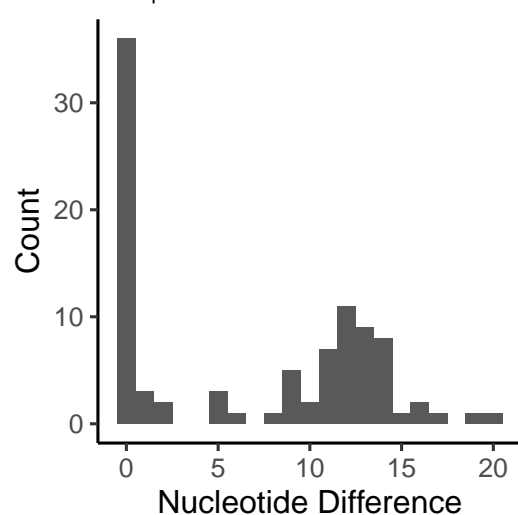
IGHV3-72*01

112 sequences assigned
9 (8%) exact matches, in which:
9 unique CDR3
2 unique J



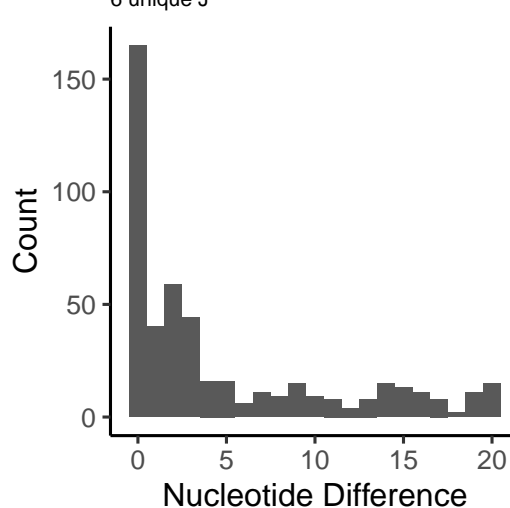
IGHV3-49*03_05

108 sequences assigned
36 (33.3%) exact matches, in which:
36 unique CDR3
5 unique J



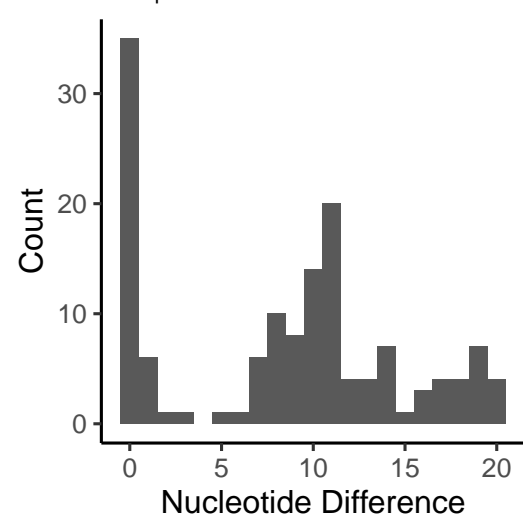
IGHV3-66*01

573 sequences assigned
165 (28.8%) exact matches, in which:
155 unique CDR3
6 unique J



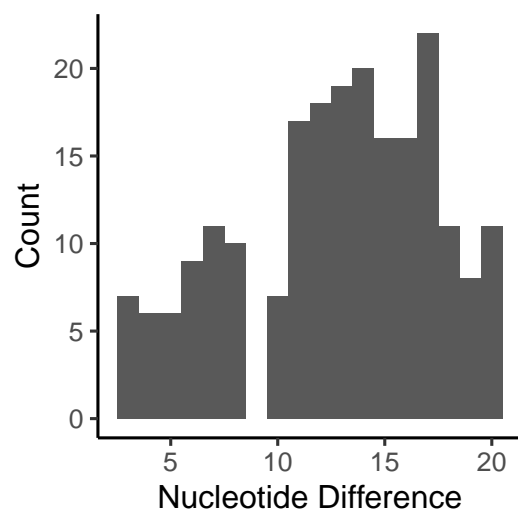
IGHV3-73*01_02

193 sequences assigned
35 (18.1%) exact matches, in which:
34 unique CDR3
4 unique J



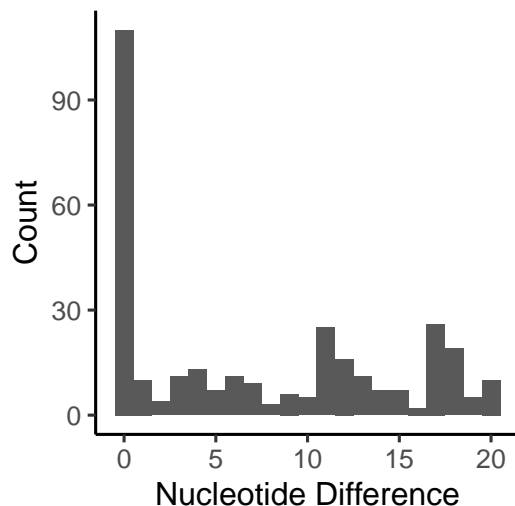
IGHV3-74*03

267 sequences assigned
No exact matches.



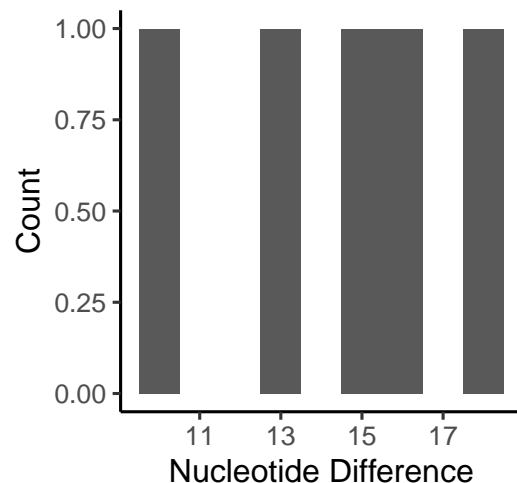
IGHV4-4*02_03

394 sequences assigned
110 (27.9%) exact matches, in which:
106 unique CDR3
5 unique J



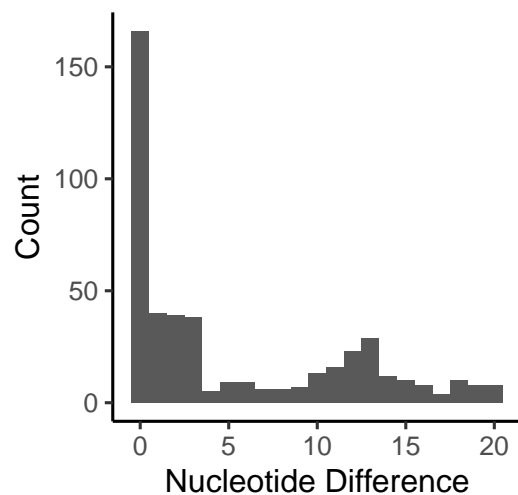
IGHV4-30-4*01

8 sequences assigned
No exact matches.



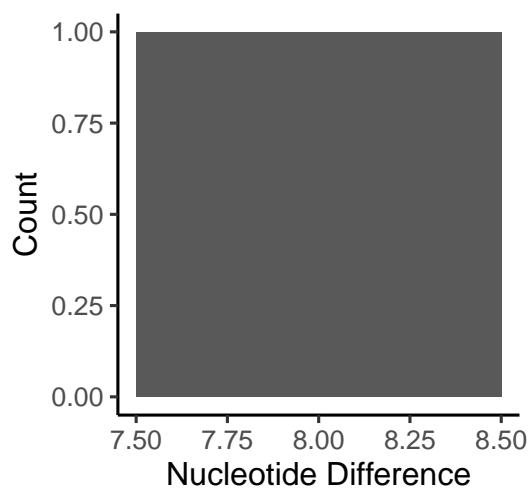
IGHV3-74*01_02

502 sequences assigned
166 (33.1%) exact matches, in which:
159 unique CDR3
6 unique J



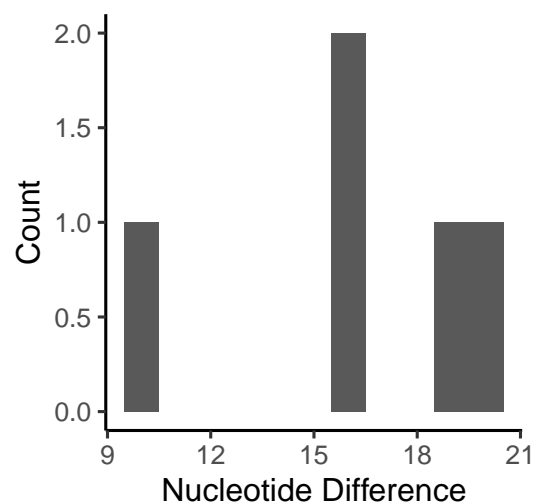
IGHV4-28*01_07

1 sequences assigned
No exact matches.



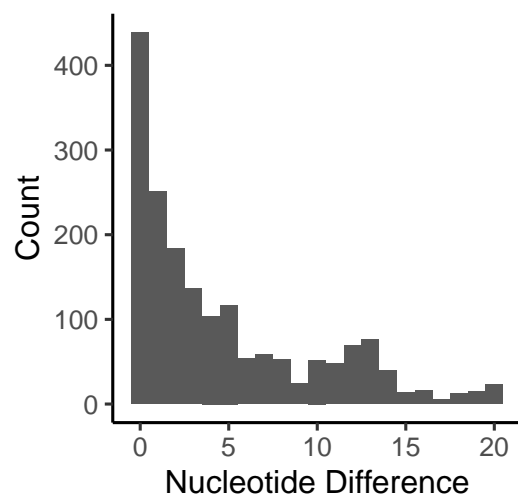
IGHV4-30-4*08

10 sequences assigned
No exact matches.



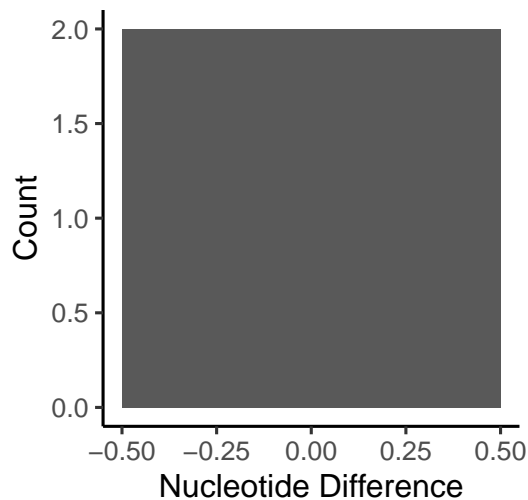
IGHV4-4*07

2059 sequences assigned
439 (21.3%) exact matches, in which:
400 unique CDR3
6 unique J



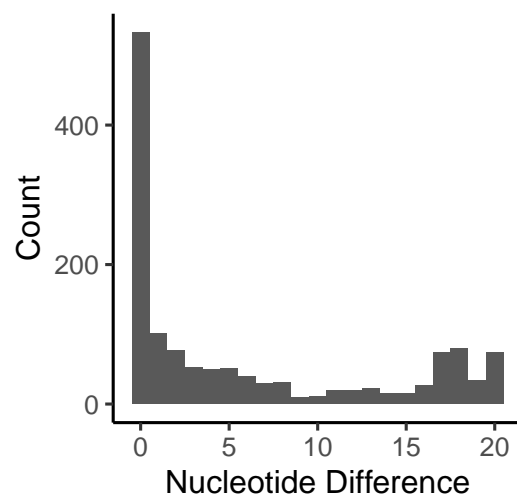
IGHV4-28*02_05

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



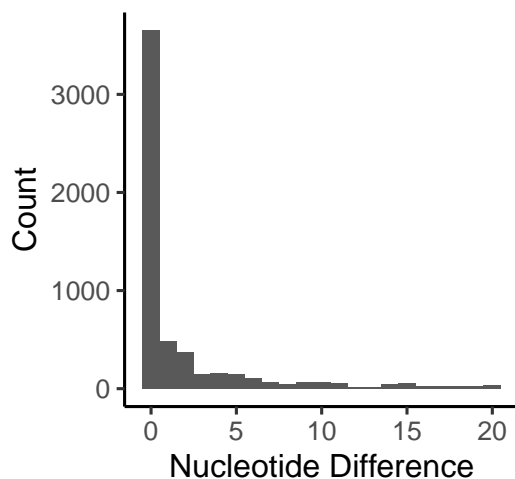
IGHV4-31*02

1746 sequences assigned
533 (30.5%) exact matches, in which:
493 unique CDR3
6 unique J



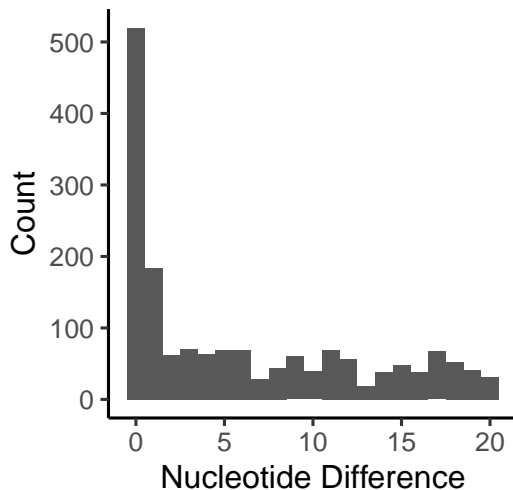
IGHV4–34*01_02

6006 sequences assigned
3652 (60.8%) exact matches, in which:
3501 unique CDR3
6 unique J



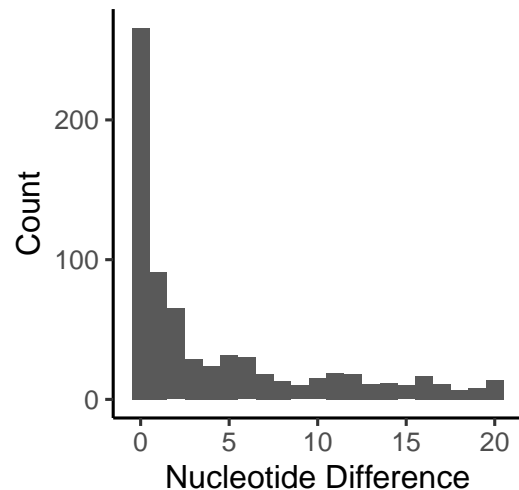
IGHV4–59*08

1881 sequences assigned
520 (27.6%) exact matches, in which:
458 unique CDR3
6 unique J



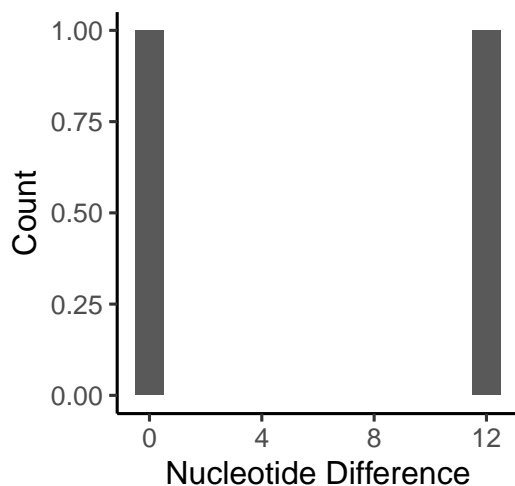
IGHV4–61*01

774 sequences assigned
266 (34.4%) exact matches, in which:
234 unique CDR3
6 unique J



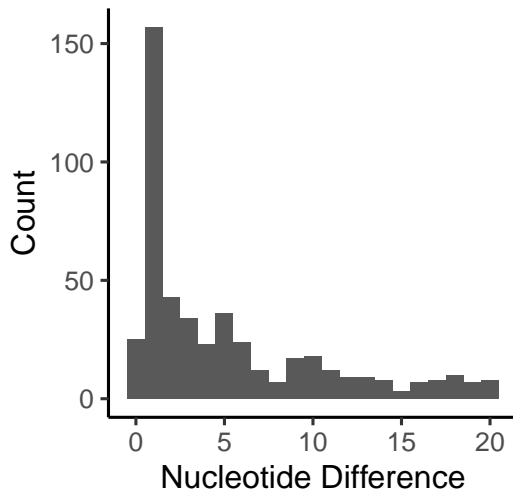
IGHV4–38–2*01

2 sequences assigned
1 (50%) exact matches, in which:
1 unique CDR3
1 unique J



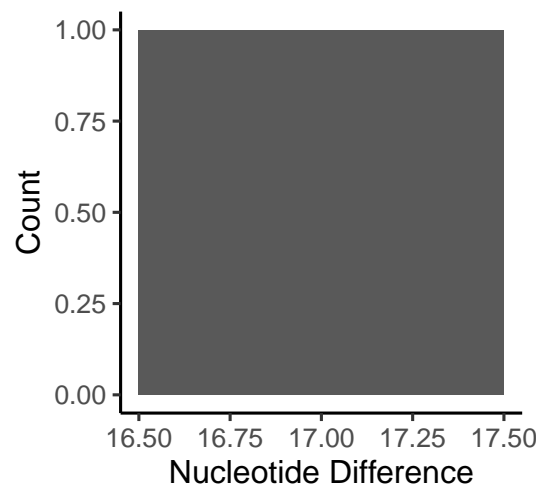
IGHV4–59*12

563 sequences assigned
25 (4.4%) exact matches, in which:
25 unique CDR3
4 unique J



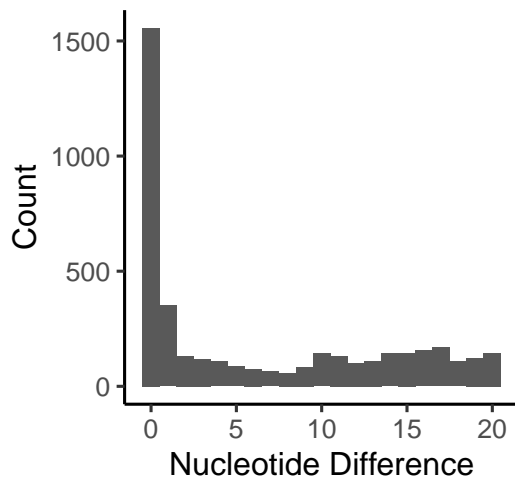
IGHV1/OR15–2*02_03

1 sequences assigned
No exact matches.



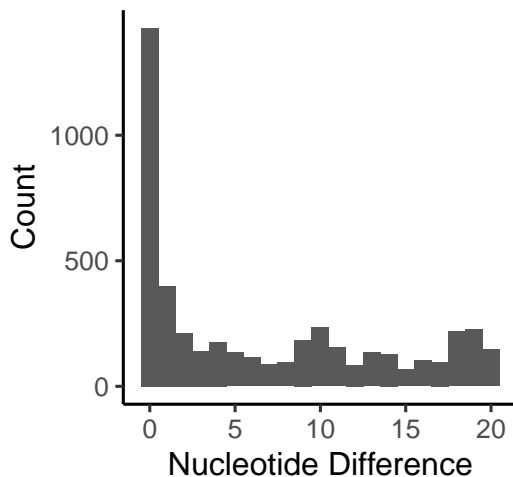
IGHV4–39*02_C258G

5738 sequences assigned
1556 (27.1%) exact matches, in which:
1458 unique CDR3
6 unique J



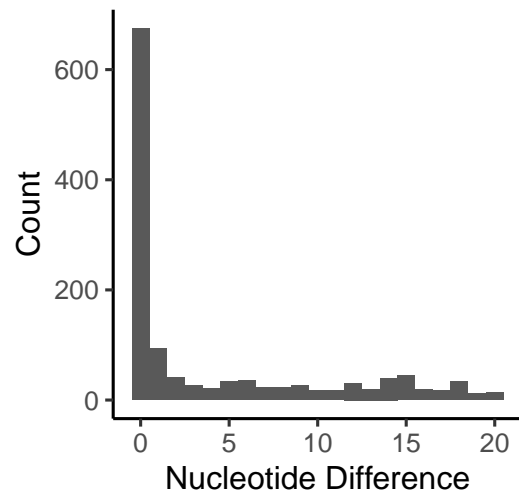
IGHV4–59*02_G88A

5466 sequences assigned
1427 (26.1%) exact matches, in which:
1298 unique CDR3
6 unique J



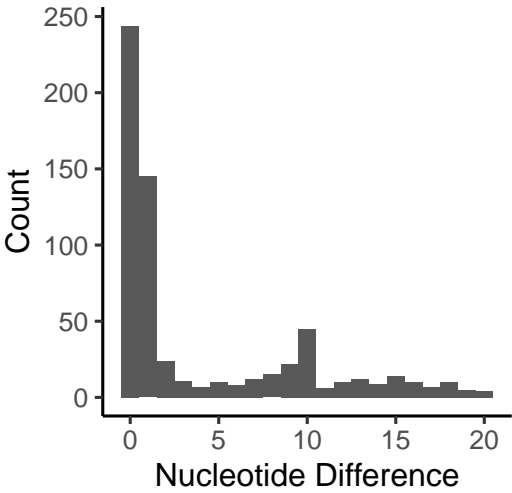
IGHV5–51*07_A128G

1445 sequences assigned
675 (46.7%) exact matches, in which:
660 unique CDR3
6 unique J



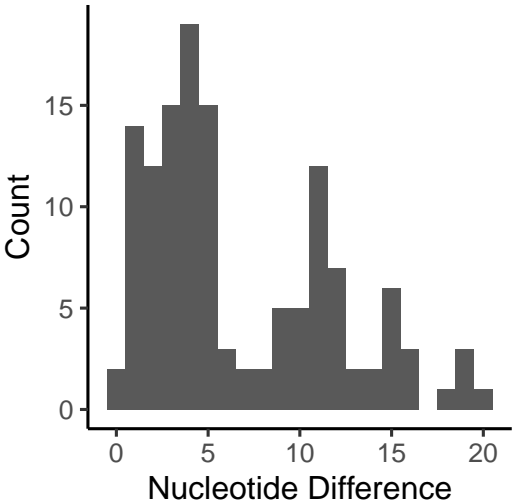
IGHV6-1*01_02

667 sequences assigned
244 (36.6%) exact matches, in which:
215 unique CDR3
6 unique J



IGHV7-4-1*02

160 sequences assigned
2 (1.2%) exact matches, in which:
2 unique CDR3
2 unique J





Warning – no inferred sequences found.