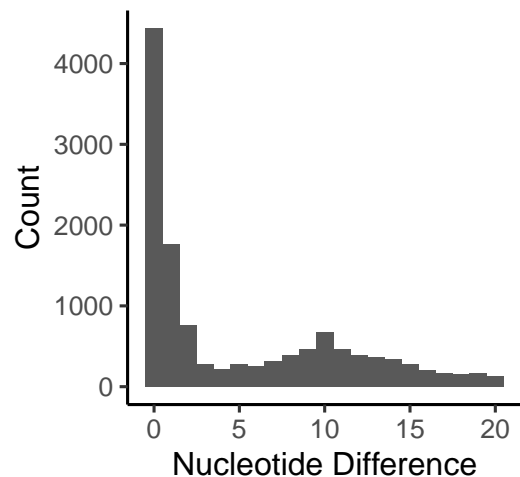


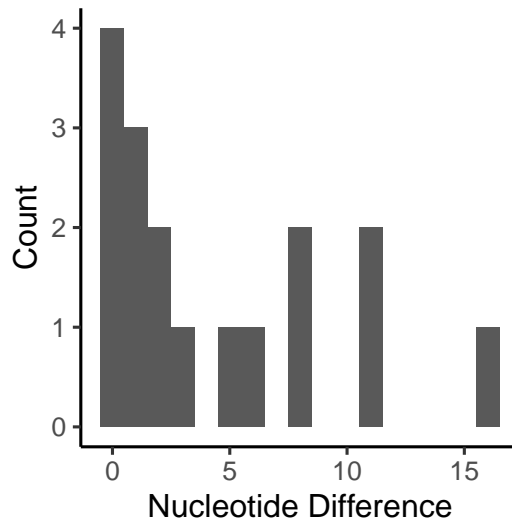
IGHV1-2*02

13730 sequences assigned
4435 (32.3%) exact matches, in which:
4209 unique CDR3
7 unique J



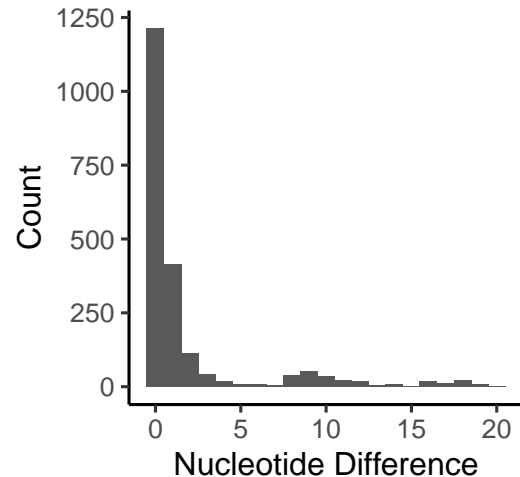
IGHV1-8*01

19 sequences assigned
4 (21.1%) exact matches, in which:
4 unique CDR3
2 unique J



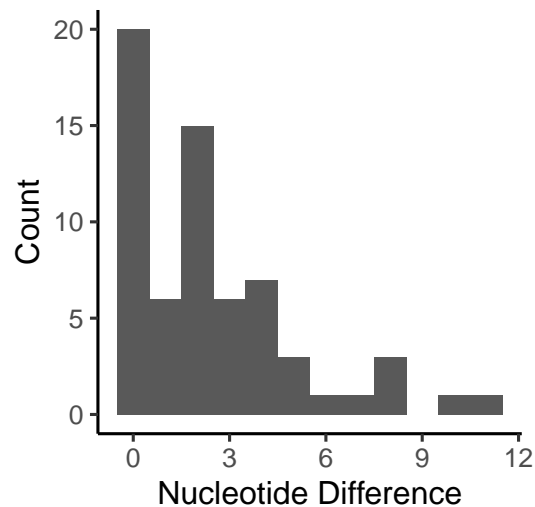
IGHV1-24*01

2511 sequences assigned
1213 (48.3%) exact matches, in which:
1179 unique CDR3
7 unique J



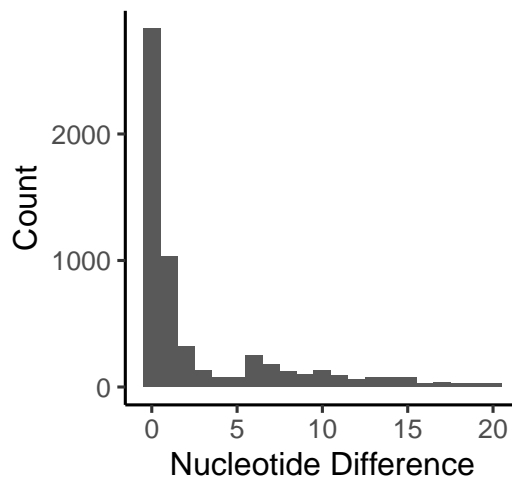
IGHV1-3*02

64 sequences assigned
20 (31.2%) exact matches, in which:
19 unique CDR3
4 unique J



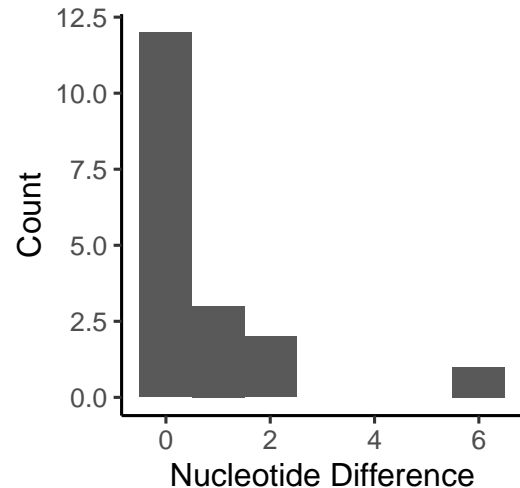
IGHV1-18*01

6416 sequences assigned
2832 (44.1%) exact matches, in which:
2715 unique CDR3
7 unique J



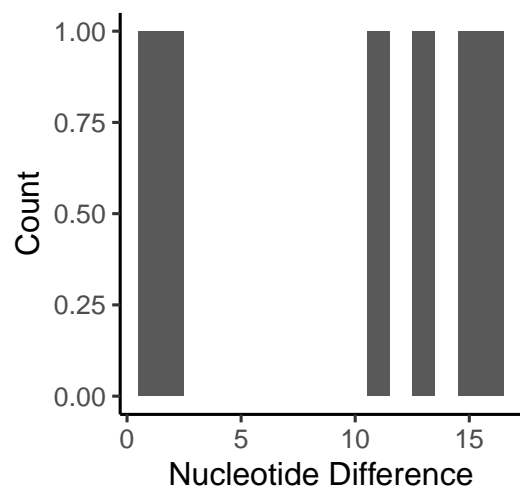
IGHV1-45*02

18 sequences assigned
12 (66.7%) exact matches, in which:
12 unique CDR3
3 unique J



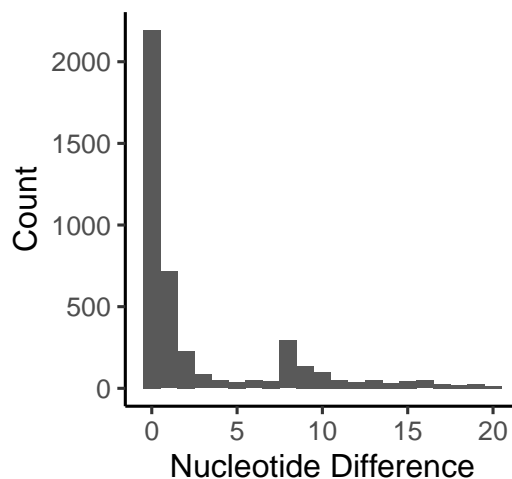
IGHV1-3*01_05

9 sequences assigned
No exact matches.



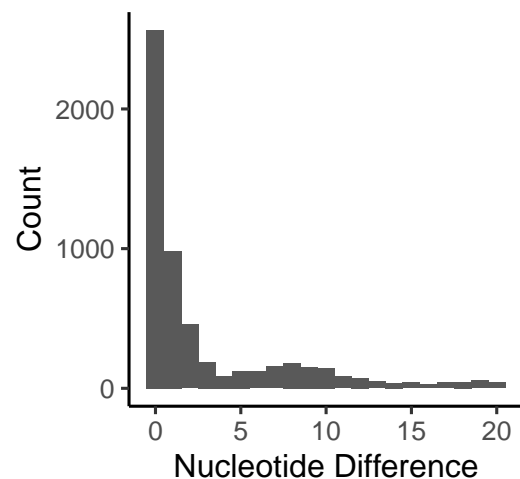
IGHV1-18*04

4738 sequences assigned
2194 (46.3%) exact matches, in which:
2104 unique CDR3
7 unique J



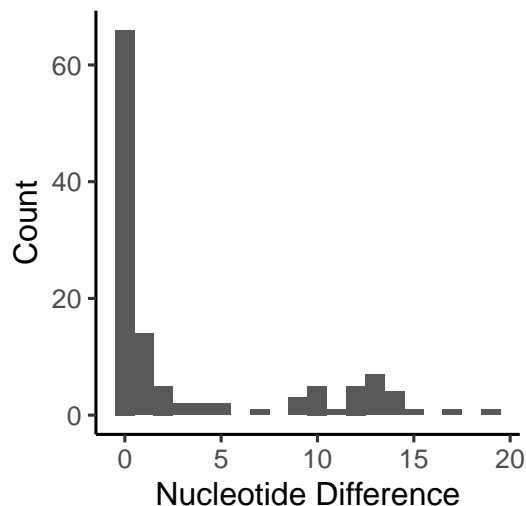
IGHV1-46*01

6132 sequences assigned
2565 (41.8%) exact matches, in which:
2459 unique CDR3
7 unique J



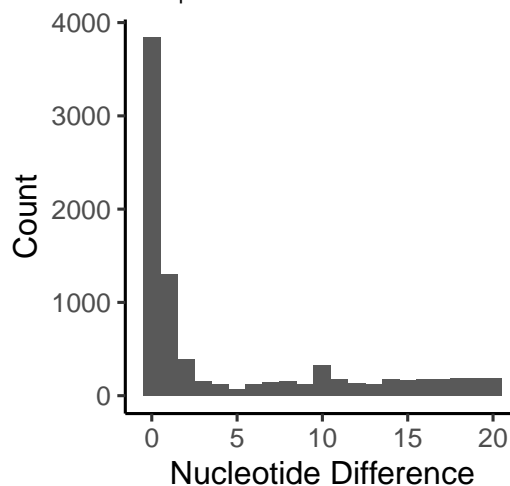
IGHV1-58*02

127 sequences assigned
66 (52%) exact matches, in which:
66 unique CDR3
7 unique J



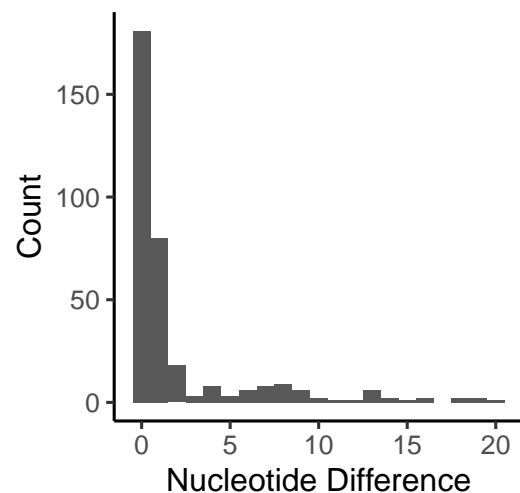
IGHV1-69*01_12_13

9838 sequences assigned
3841 (39%) exact matches, in which:
3717 unique CDR3
7 unique J



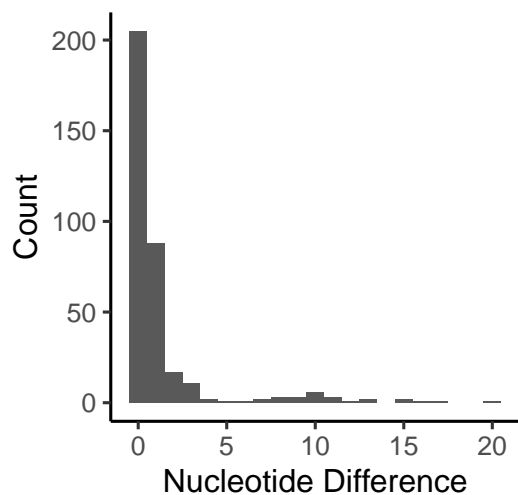
IGHV2-70*01

386 sequences assigned
181 (46.9%) exact matches, in which:
176 unique CDR3
6 unique J



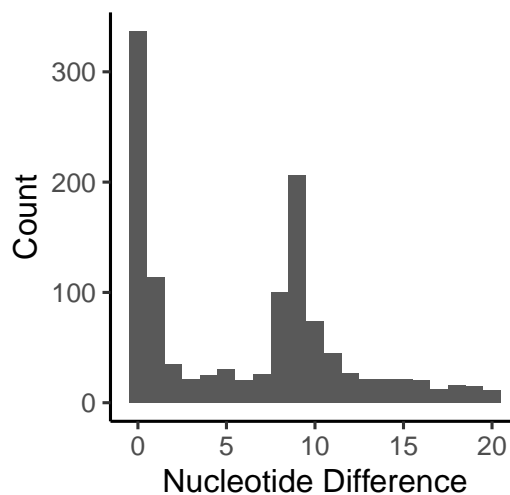
IGHV1-58*01_03

357 sequences assigned
205 (57.4%) exact matches, in which:
199 unique CDR3
7 unique J



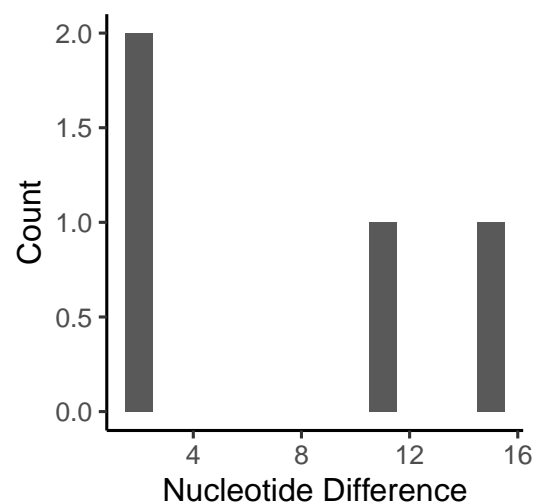
IGHV2-5*02

1310 sequences assigned
337 (25.7%) exact matches, in which:
331 unique CDR3
7 unique J



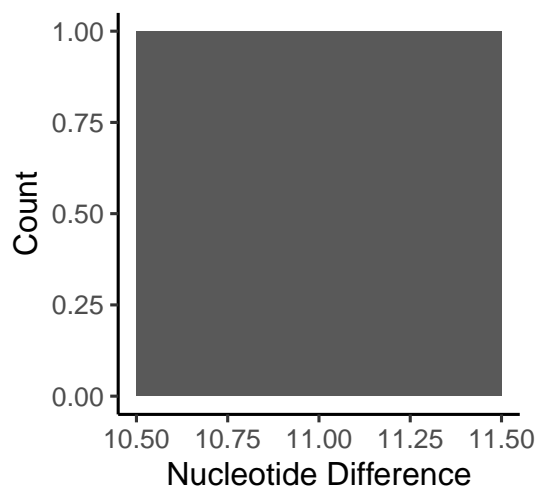
IGHV2-70D*14

4 sequences assigned
No exact matches.



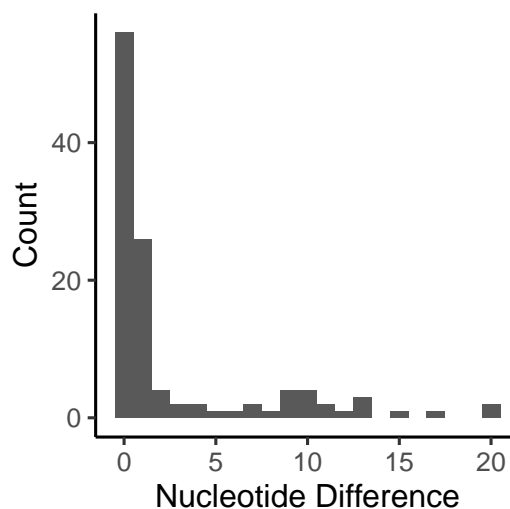
IGHV1-69-2*01

6 sequences assigned
No exact matches.



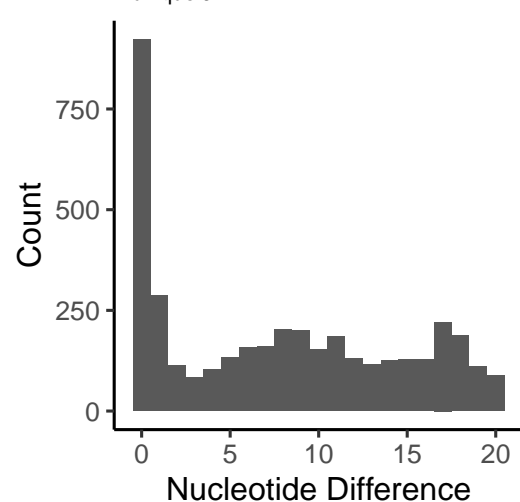
IGHV2-26*01

116 sequences assigned
56 (48.3%) exact matches, in which:
54 unique CDR3
5 unique J



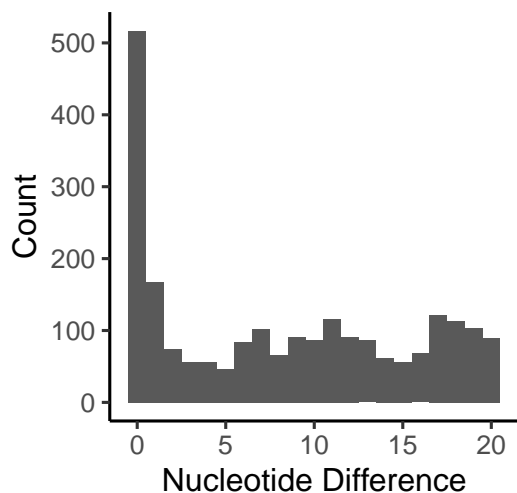
IGHV3-7*03

4917 sequences assigned
923 (18.8%) exact matches, in which:
752 unique CDR3
7 unique J



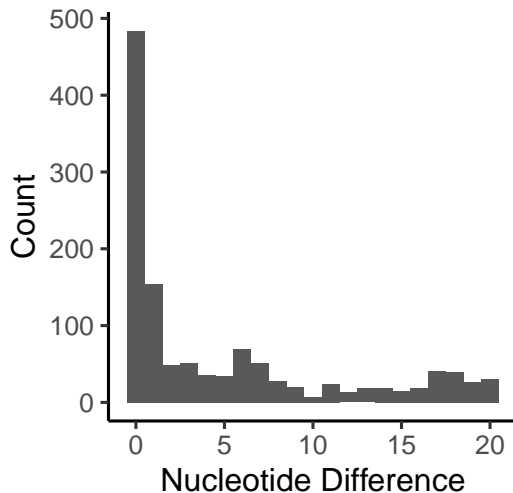
IGHV3-7*05

2901 sequences assigned
517 (17.8%) exact matches, in which:
426 unique CDR3
7 unique J



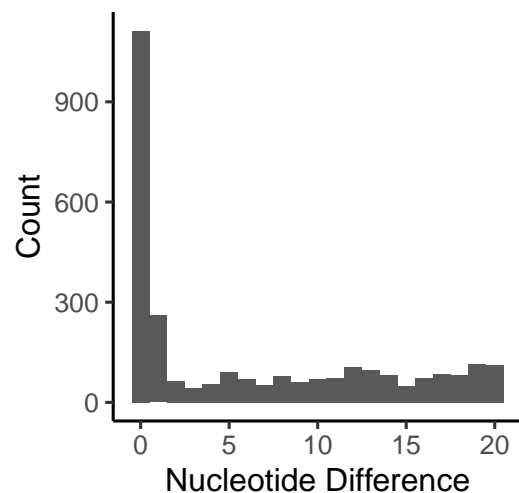
IGHV3-11*06

2034 sequences assigned
484 (23.8%) exact matches, in which:
413 unique CDR3
7 unique J



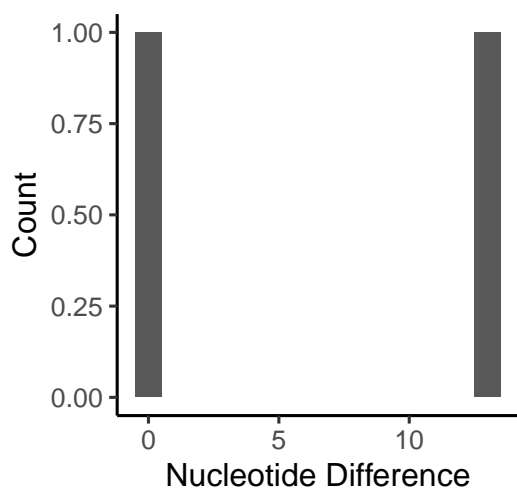
IGHV3-15*01_02

3803 sequences assigned
1113 (29.3%) exact matches, in which:
960 unique CDR3
7 unique J



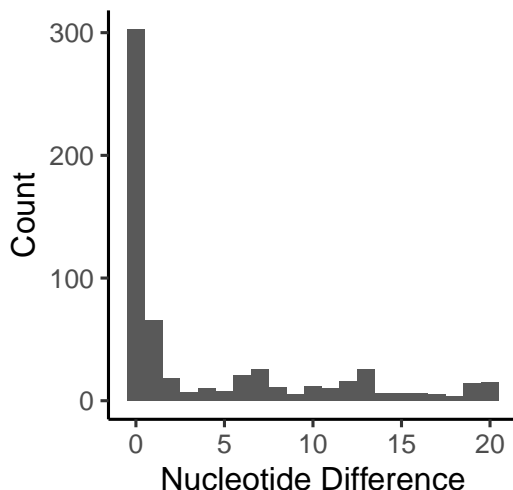
IGHV3-9*01

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



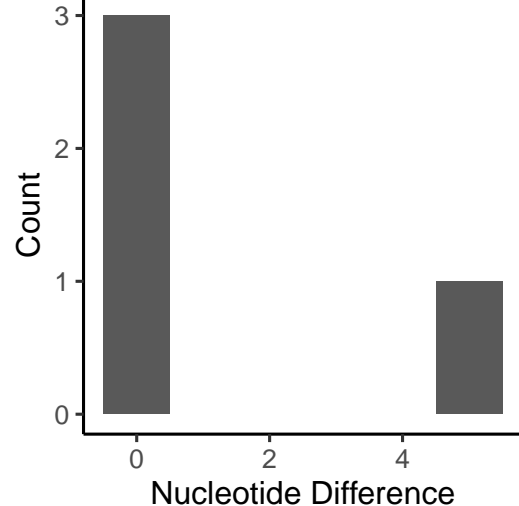
IGHV3-13*04

624 sequences assigned
303 (48.6%) exact matches, in which:
229 unique CDR3
6 unique J



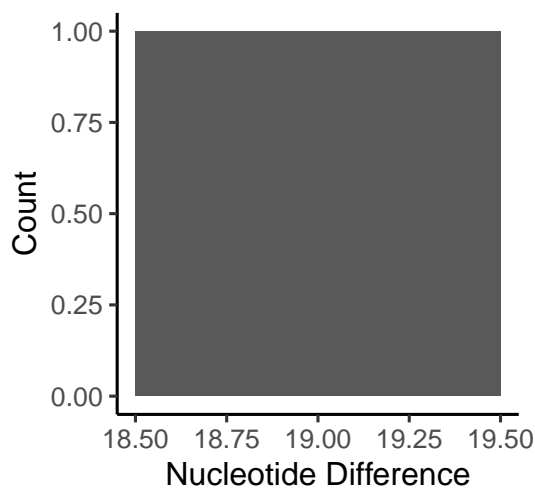
IGHV3-19*01

4 sequences assigned
3 (75%) exact matches, in which:
3 unique CDR3
1 unique J



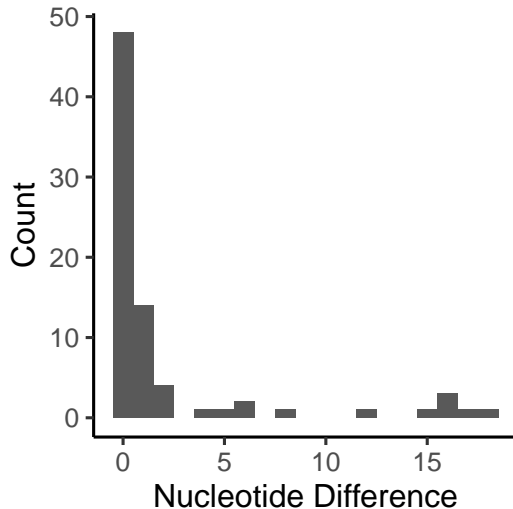
IGHV3-9*02

1 sequences assigned
No exact matches.



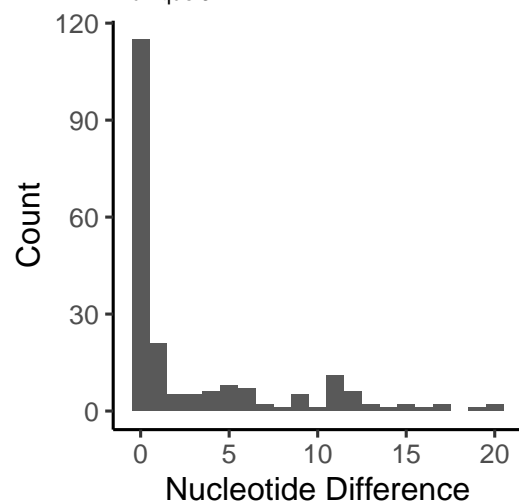
IGHV3-13*05

98 sequences assigned
48 (49%) exact matches, in which:
36 unique CDR3
4 unique J



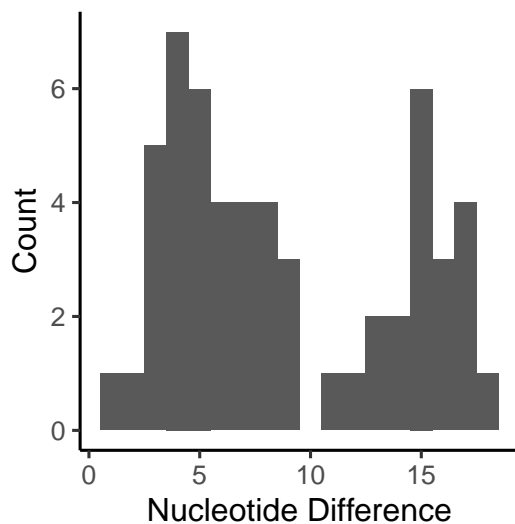
IGHV3-20*01_02

204 sequences assigned
115 (56.4%) exact matches, in which:
89 unique CDR3
7 unique J



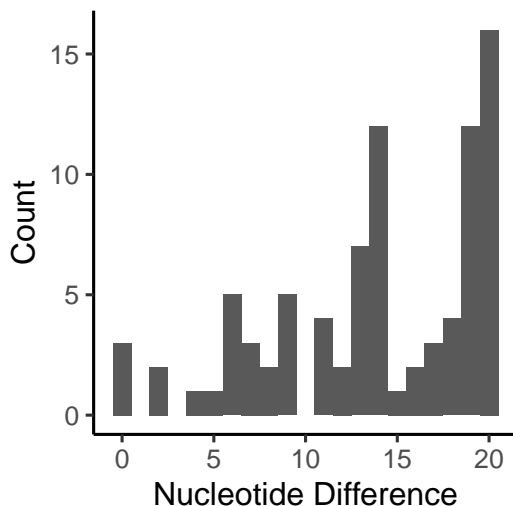
IGHV3-20*03_04

106 sequences assigned
No exact matches.



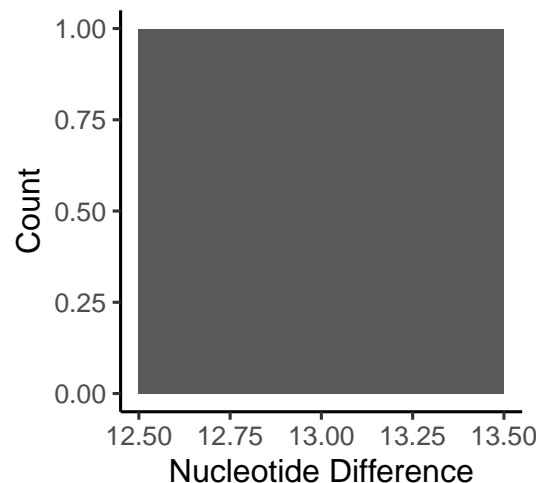
IGHV3-30-3*01

212 sequences assigned
3 (1.4%) exact matches, in which:
3 unique CDR3
1 unique J



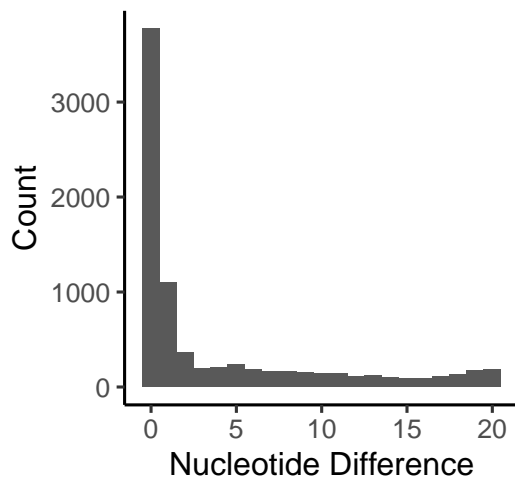
IGHV3-35*01

1 sequences assigned
No exact matches.



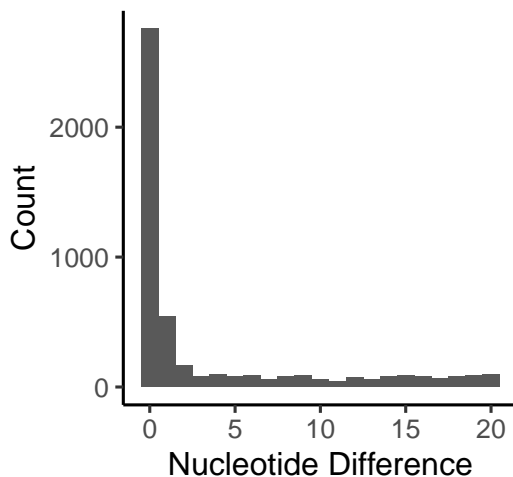
IGHV3-21*01_02

11686 sequences assigned
3772 (32.3%) exact matches, in which:
2989 unique CDR3
7 unique J



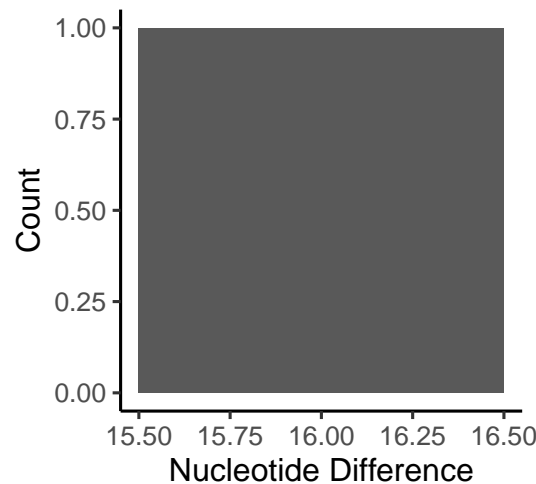
IGHV3-30*04

6003 sequences assigned
2758 (45.9%) exact matches, in which:
2228 unique CDR3
7 unique J



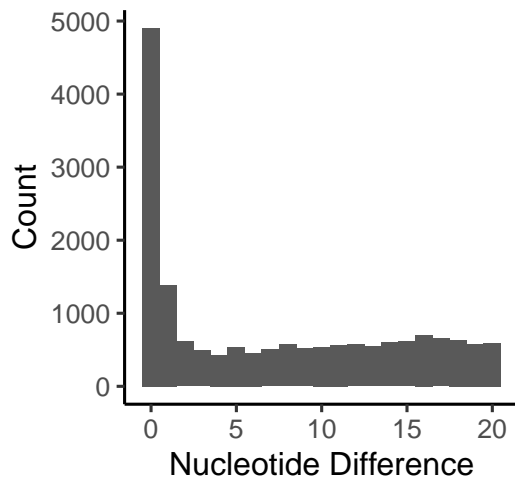
IGHV3-38*03

2 sequences assigned
No exact matches.



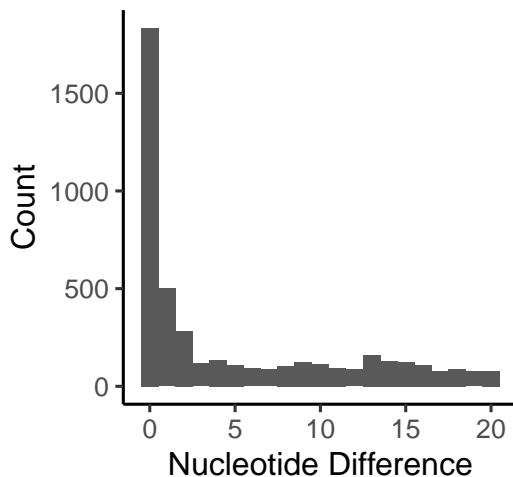
IGHV3-23*01_04

22563 sequences assigned
4904 (21.7%) exact matches, in which:
3891 unique CDR3
7 unique J



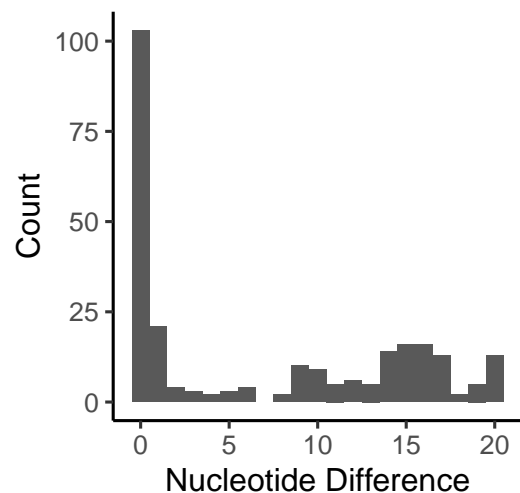
IGHV3-33*08

5368 sequences assigned
1834 (34.2%) exact matches, in which:
1549 unique CDR3
7 unique J



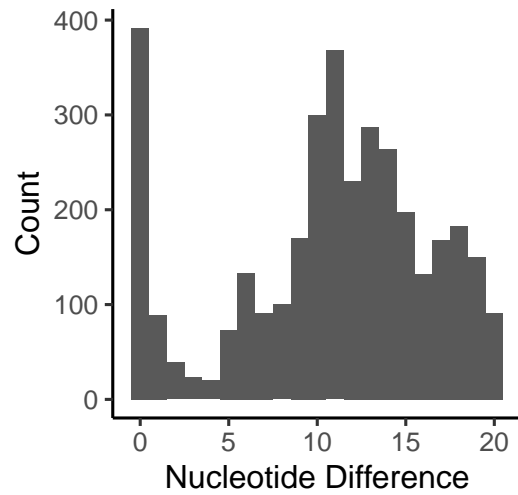
IGHV3-43*01

298 sequences assigned
103 (34.6%) exact matches, in which:
89 unique CDR3
7 unique J



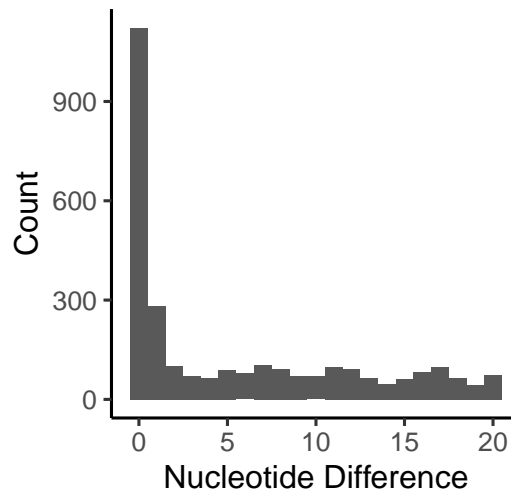
IGHV3-43*02

4093 sequences assigned
392 (9.6%) exact matches, in which:
316 unique CDR3
7 unique J



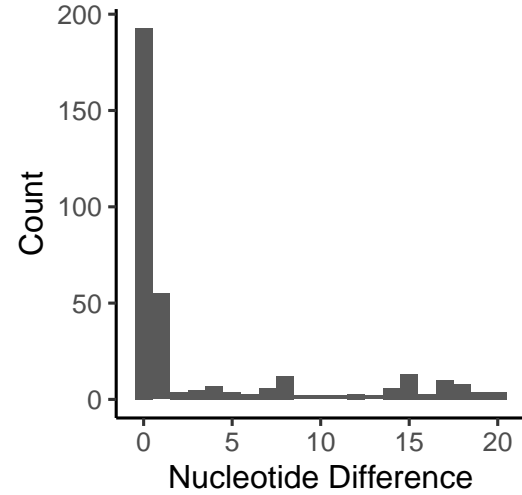
IGHV3-48*02

3575 sequences assigned
1123 (31.4%) exact matches, in which:
909 unique CDR3
7 unique J



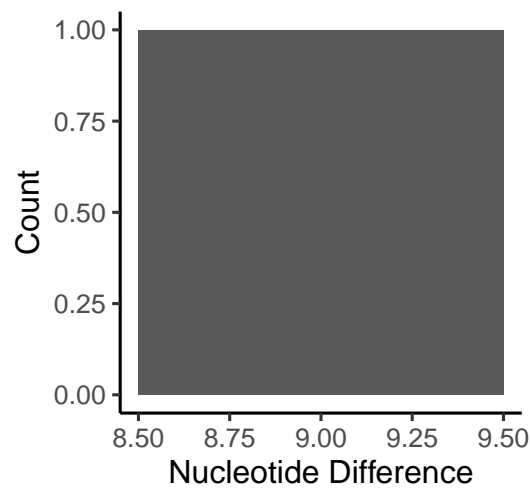
IGHV3-49*03_05

432 sequences assigned
193 (44.7%) exact matches, in which:
168 unique CDR3
6 unique J



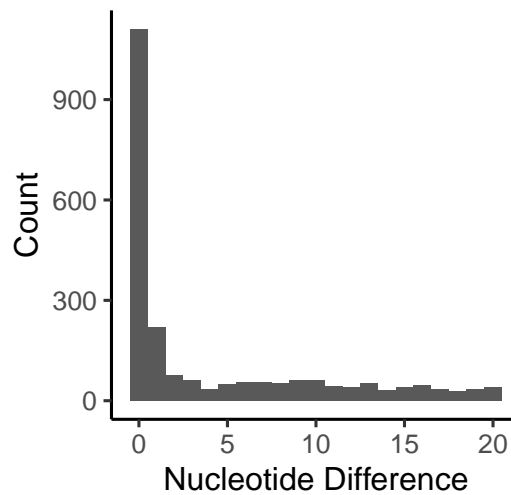
IGHV3-47*02

1 sequences assigned
No exact matches.



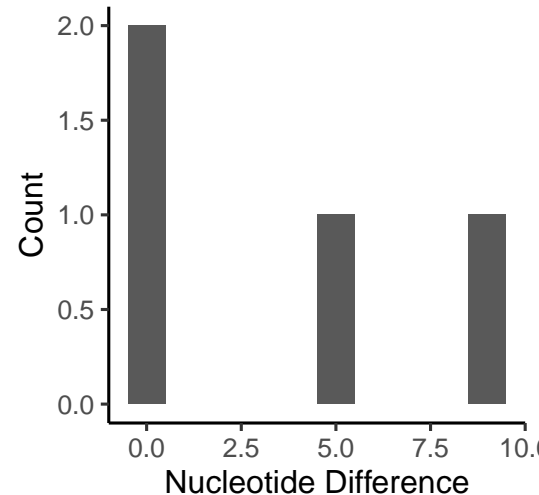
IGHV3-48*03

2513 sequences assigned
1111 (44.2%) exact matches, in which:
928 unique CDR3
7 unique J



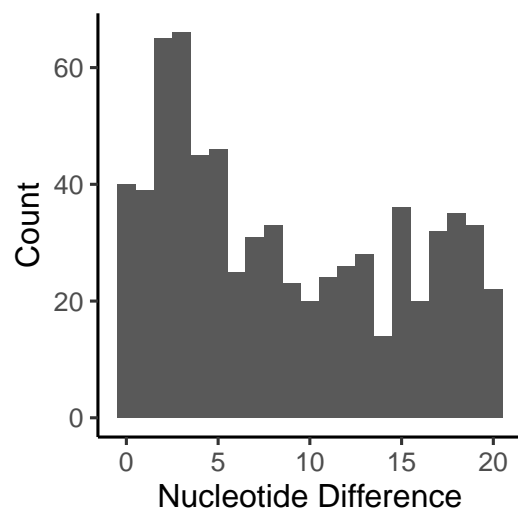
IGHV3-52*01_03

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



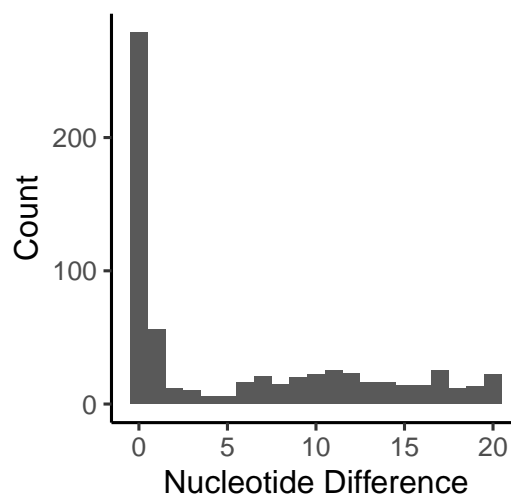
IGHV3-48*01

881 sequences assigned
40 (4.5%) exact matches, in which:
40 unique CDR3
5 unique J



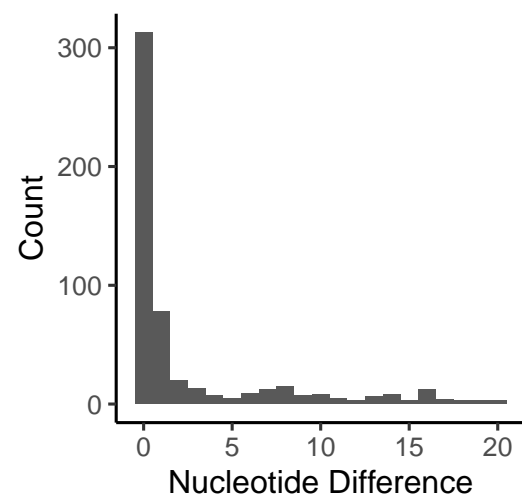
IGHV3-49*04

3709 sequences assigned
279 (7.5%) exact matches, in which:
240 unique CDR3
6 unique J



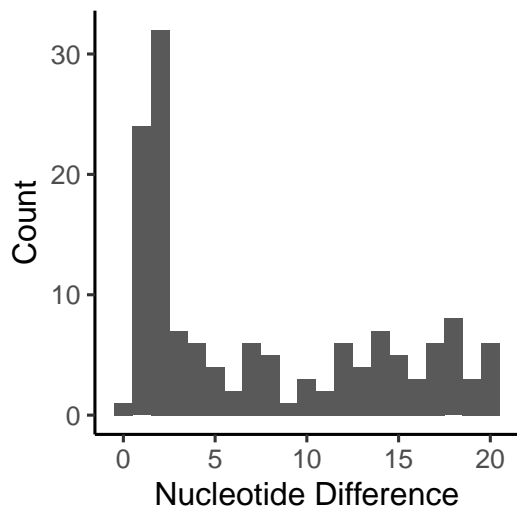
IGHV3-53*04

563 sequences assigned
313 (55.6%) exact matches, in which:
251 unique CDR3
7 unique J



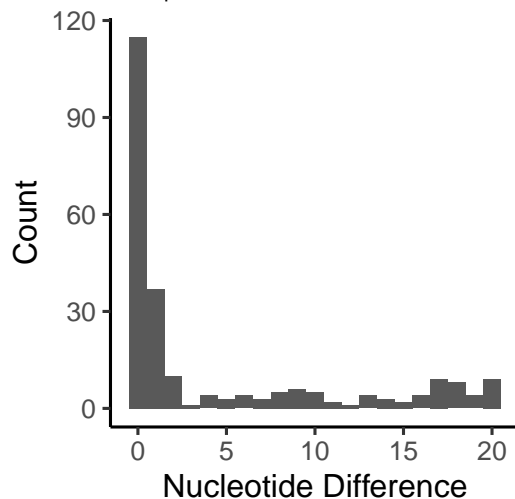
IGHV3-53*05

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



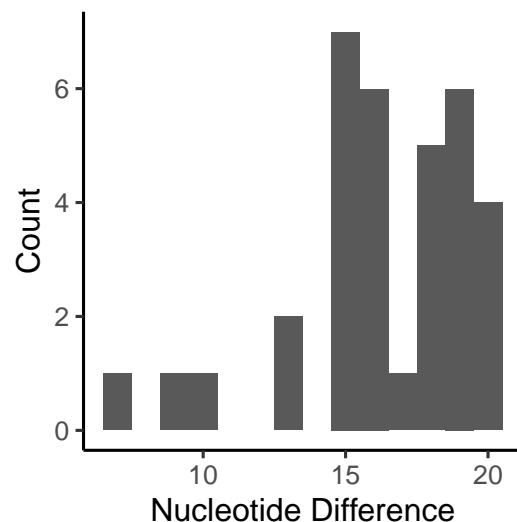
IGHV3-64*01

289 sequences assigned
115 (39.8%) exact matches, in which:
87 unique CDR3
6 unique J



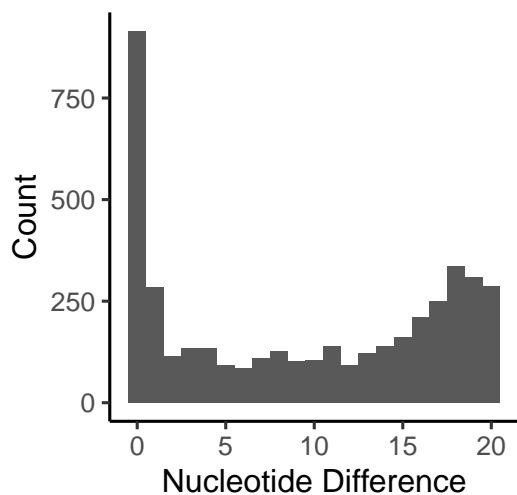
IGHV3-69-1*01

166 sequences assigned
No exact matches.



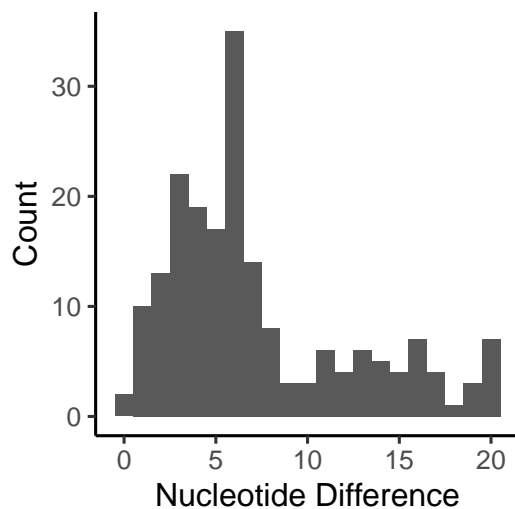
IGHV3-53*01_02

9889 sequences assigned
915 (9.3%) exact matches, in which:
759 unique CDR3
7 unique J



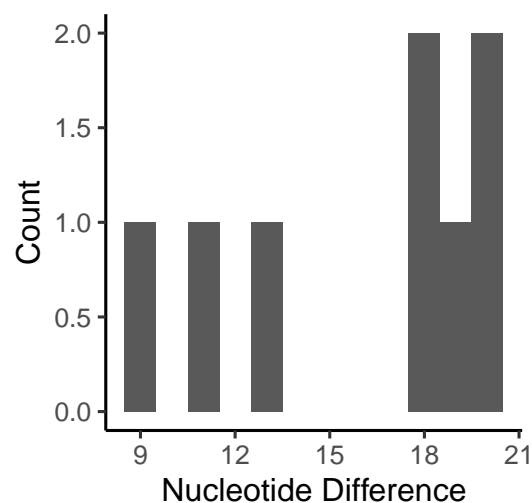
IGHV3-64*04

225 sequences assigned
2 (0.9%) exact matches, in which:
2 unique CDR3
1 unique J



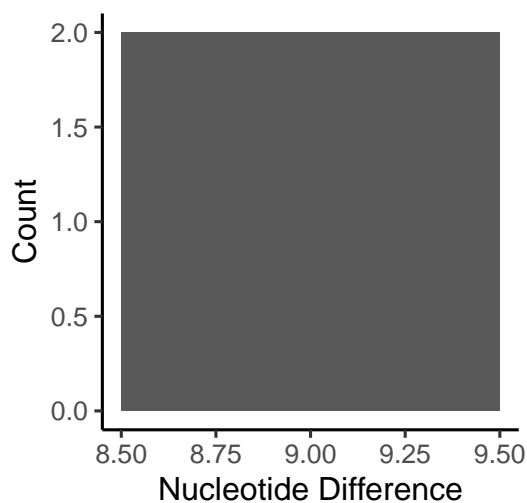
IGHV3-69-1*02

50 sequences assigned
No exact matches.



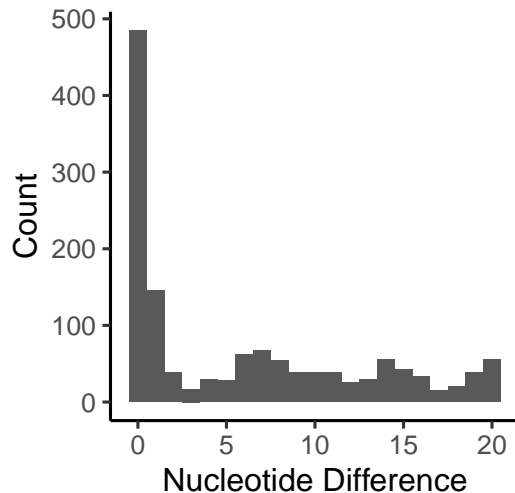
IGHV3-62*03

2 sequences assigned
No exact matches.



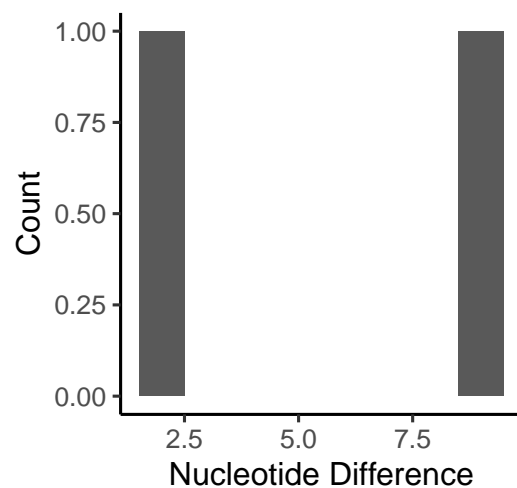
IGHV3-66*02

2377 sequences assigned
485 (20.4%) exact matches, in which:
404 unique CDR3
7 unique J



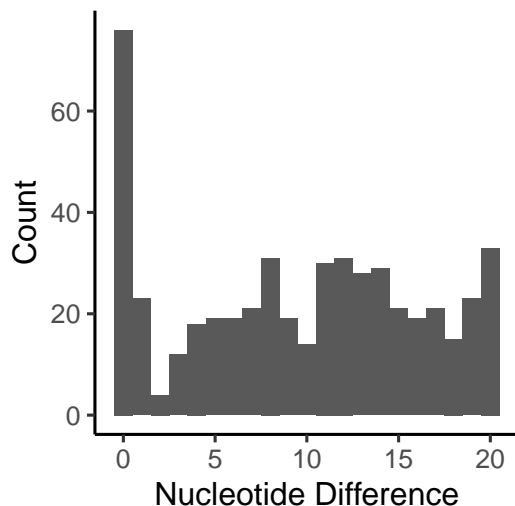
IGHV3-71*01_04

6 sequences assigned
No exact matches.



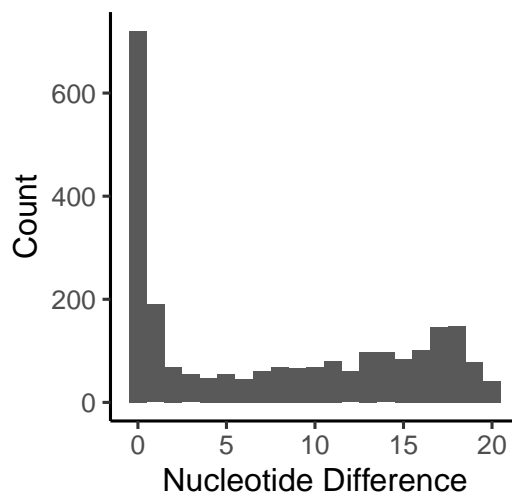
IGHV3-72*01

730 sequences assigned
76 (10.4%) exact matches, in which:
67 unique CDR3
5 unique J



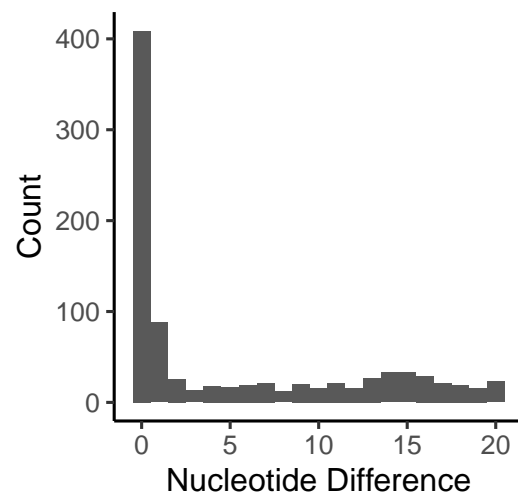
IGHV3-74*01_02

2687 sequences assigned
721 (26.8%) exact matches, in which:
564 unique CDR3
7 unique J



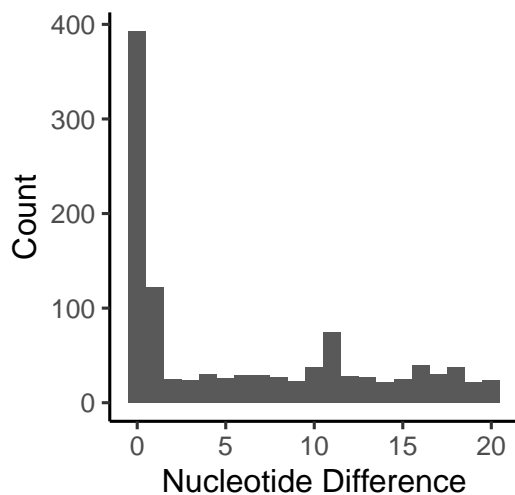
IGHV3-64D*09

1023 sequences assigned
409 (40%) exact matches, in which:
324 unique CDR3
7 unique J



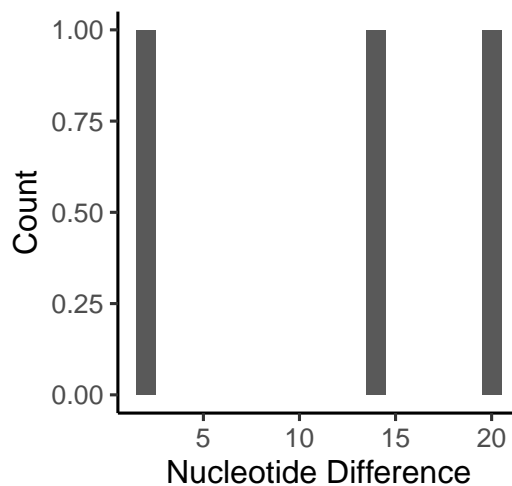
IGHV3-73*01_02

1318 sequences assigned
393 (29.8%) exact matches, in which:
324 unique CDR3
7 unique J



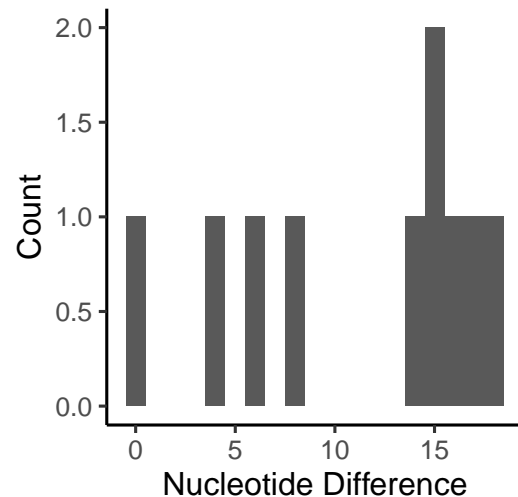
IGHV3-43D*04

4 sequences assigned
No exact matches.



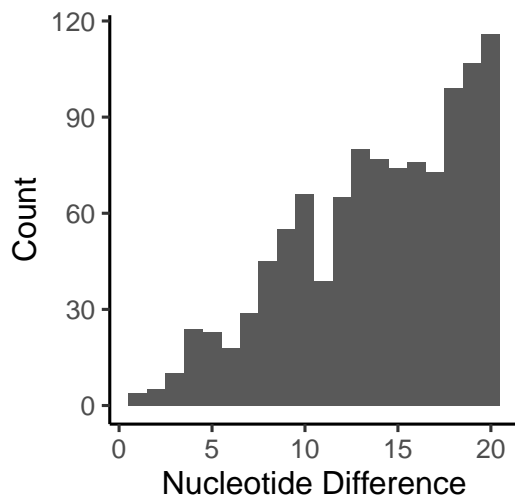
IGHV3-NL1*01

26 sequences assigned
1 (3.8%) exact matches, in which:
1 unique CDR3
1 unique J



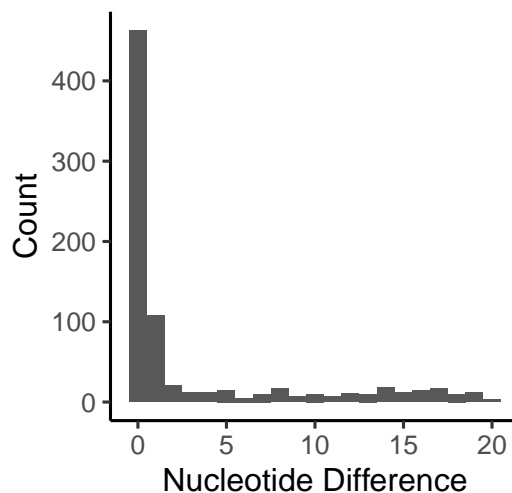
IGHV3-74*03

2409 sequences assigned
No exact matches.



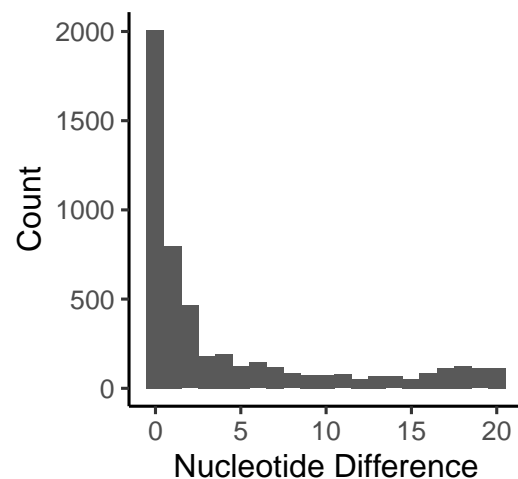
IGHV3-64D*06

915 sequences assigned
463 (50.6%) exact matches, in which:
360 unique CDR3
7 unique J



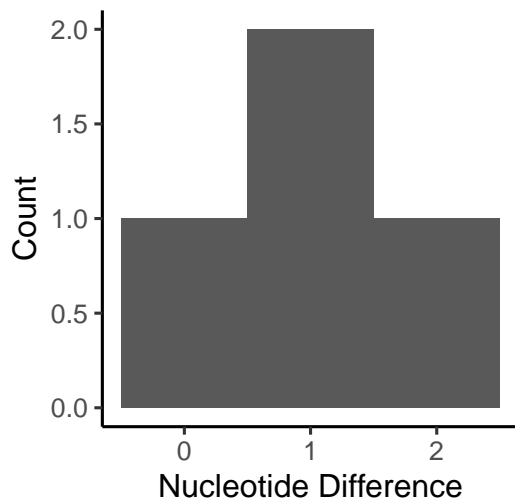
IGHV4-4*07

6763 sequences assigned
2008 (29.7%) exact matches, in which:
1933 unique CDR3
7 unique J



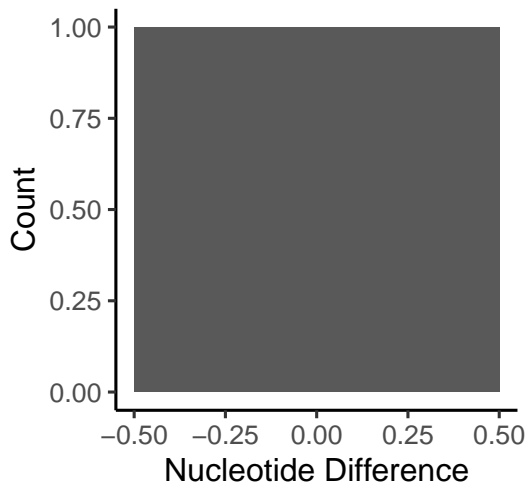
IGHV4-28*03

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



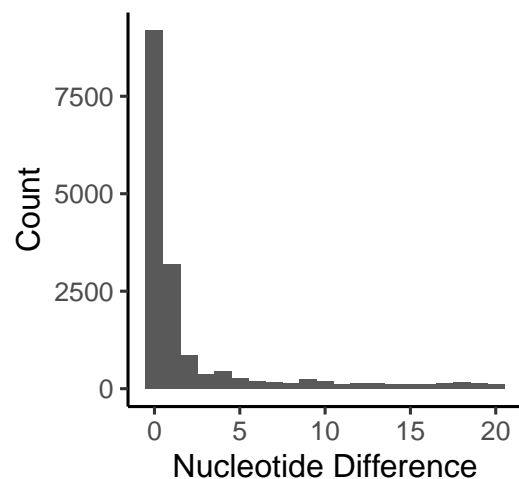
IGHV4-30-4*01

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



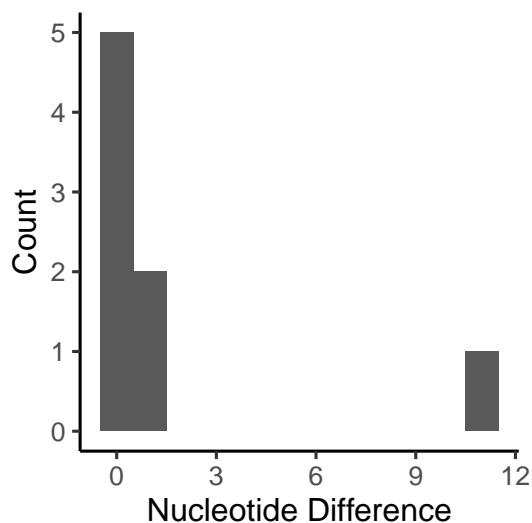
IGHV4-34*01_02

18567 sequences assigned
9189 (49.5%) exact matches, in which:
8731 unique CDR3
7 unique J



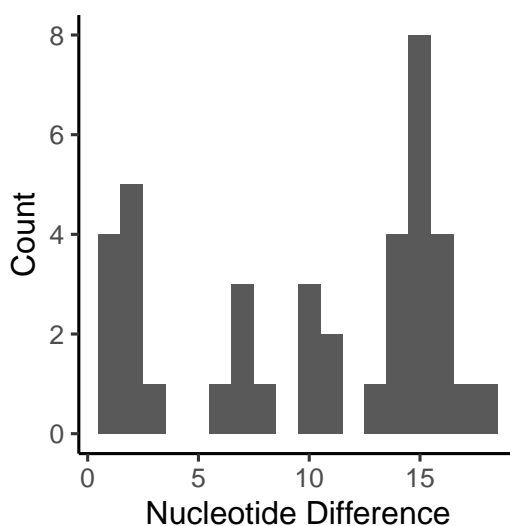
IGHV4-28*01_07

8 sequences assigned
5 (62.5%) exact matches, in which:
5 unique CDR3
2 unique J



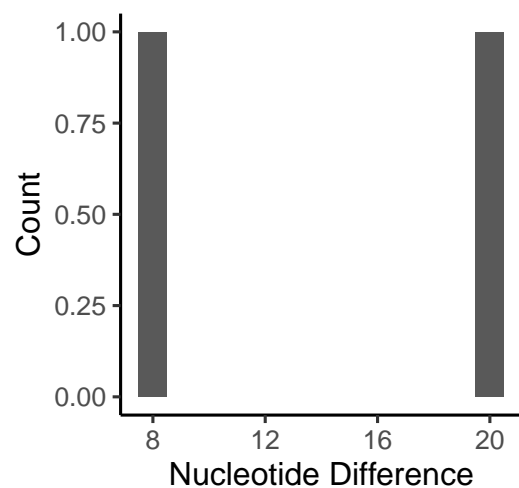
IGHV4-30-2*03

64 sequences assigned
No exact matches.



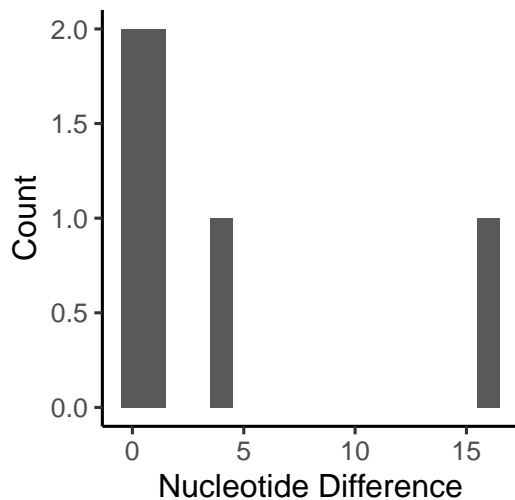
IGHV4-38-2*01

4 sequences assigned
No exact matches.



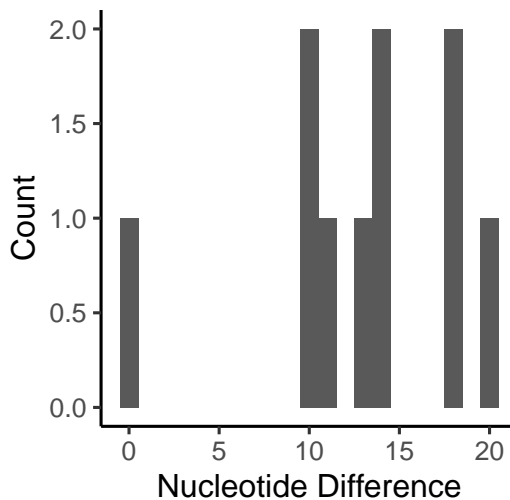
IGHV4-28*02_05

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



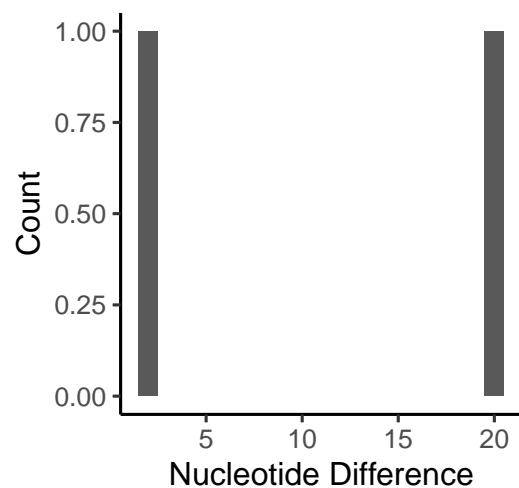
IGHV4-31*02

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



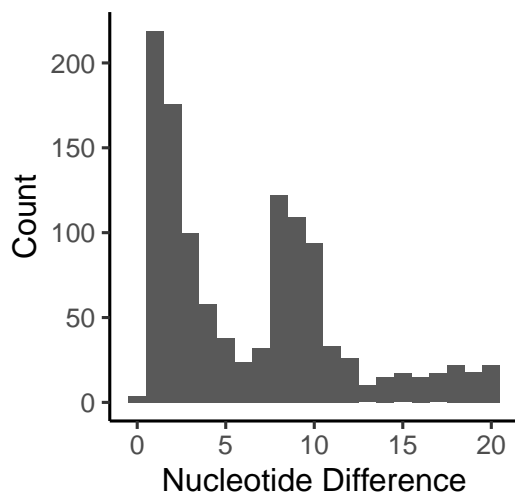
IGHV4-38-2*02

14 sequences assigned
No exact matches.



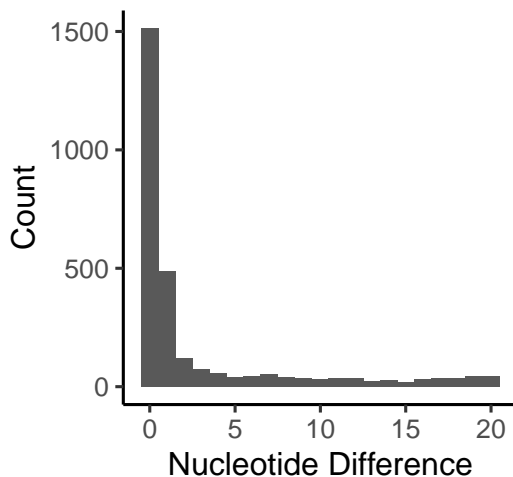
IGHV4–39*07

1549 sequences assigned
4 (0.3%) exact matches, in which:
4 unique CDR3
3 unique J



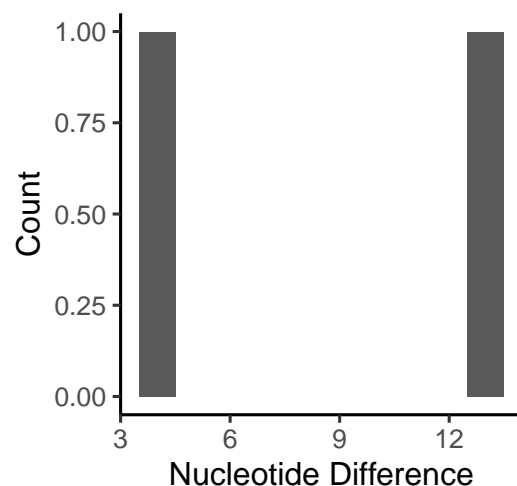
IGHV4–61*02

3403 sequences assigned
1513 (44.5%) exact matches, in which:
1477 unique CDR3
7 unique J



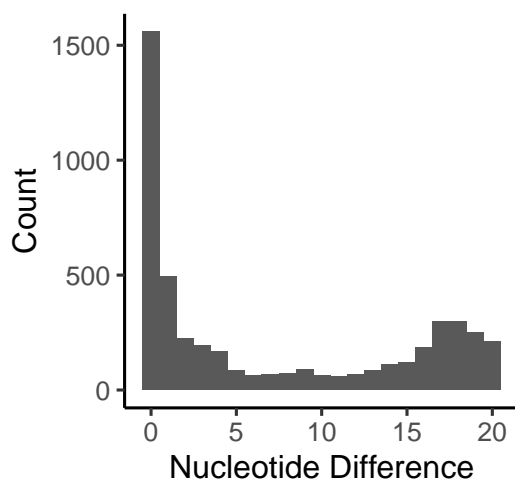
IGHV4/OR15–8*01

4 sequences assigned
No exact matches.



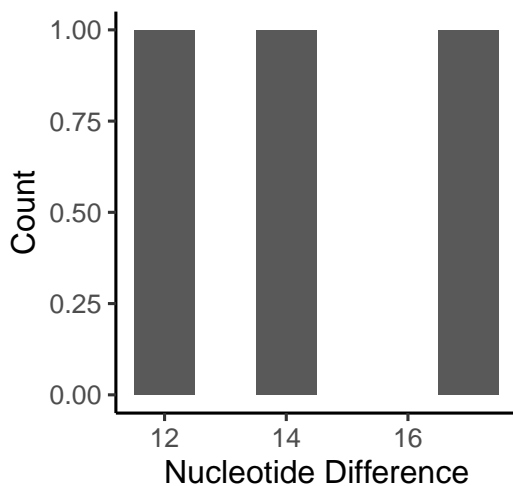
IGHV4–59*13

7248 sequences assigned
1559 (21.5%) exact matches, in which:
1524 unique CDR3
7 unique J



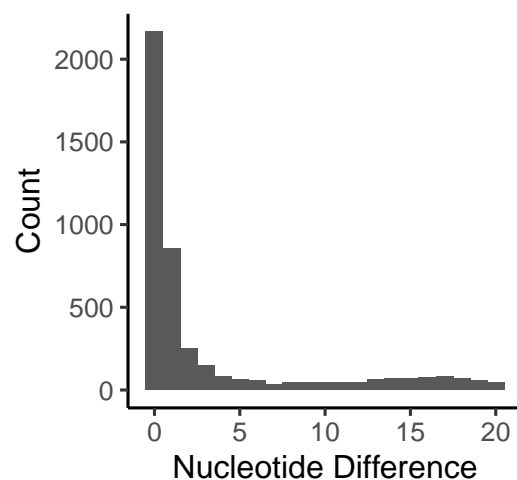
IGHV1/OR15–2*02_03

8 sequences assigned
No exact matches.



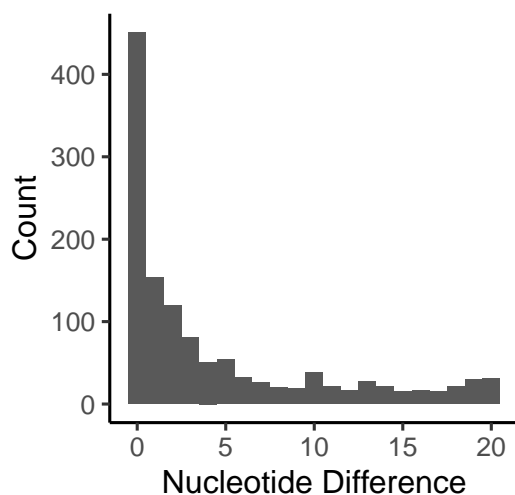
IGHV5–10–1*01_03

5016 sequences assigned
2166 (43.2%) exact matches, in which:
1973 unique CDR3
7 unique J



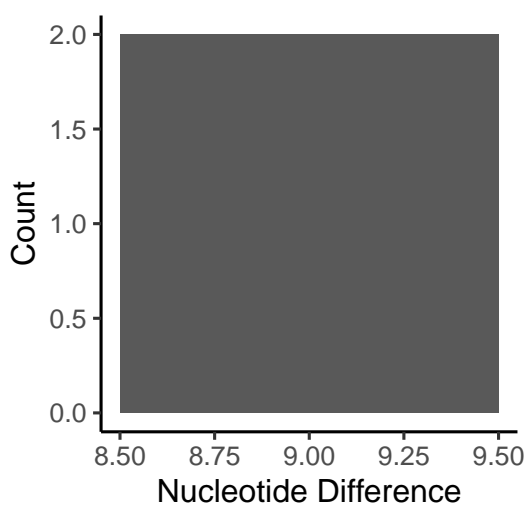
IGHV4–61*01

1538 sequences assigned
451 (29.3%) exact matches, in which:
437 unique CDR3
7 unique J



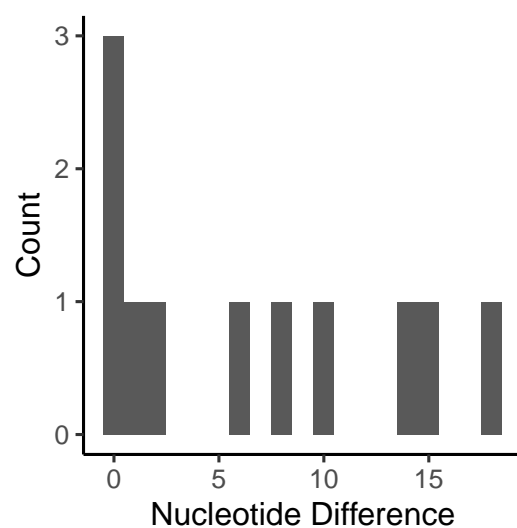
IGHV1/OR15–3*01

2 sequences assigned
No exact matches.



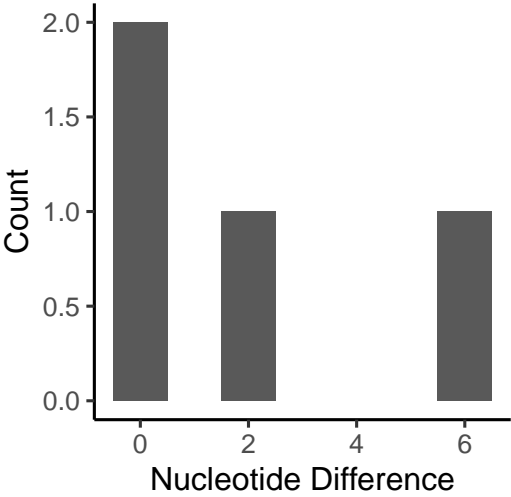
IGHV5–51*04

11 sequences assigned
3 (27.3%) exact matches, in which:
3 unique CDR3
2 unique J



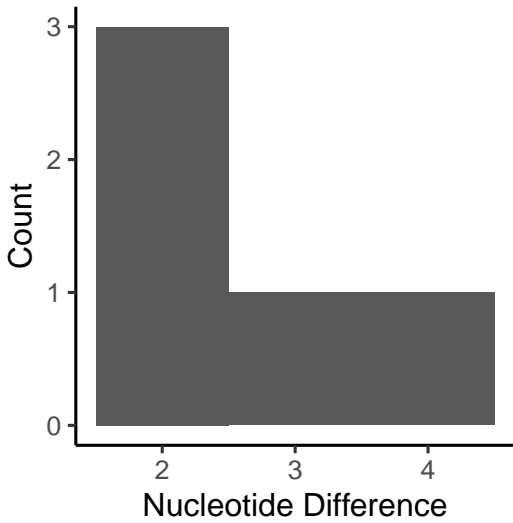
IGHV5-51*06

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



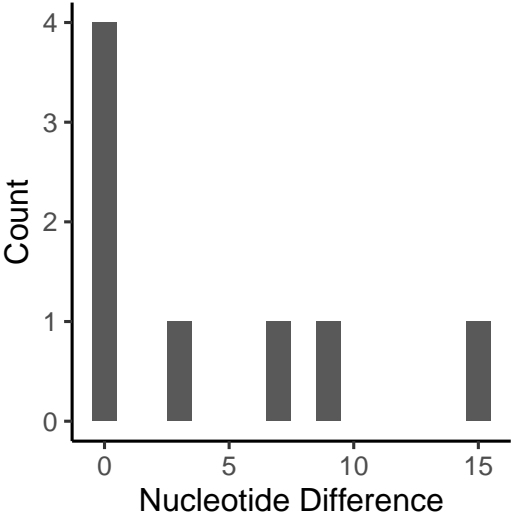
IGHV3/OR16-9*01

5 sequences assigned
No exact matches.



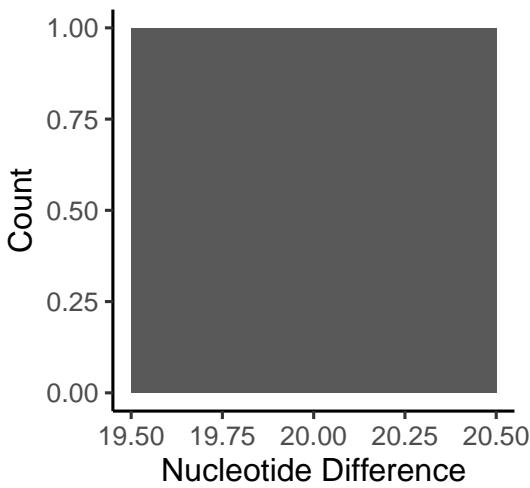
IGHV5-51*07

8 sequences assigned
4 (50%) exact matches, in which:
4 unique CDR3
3 unique J



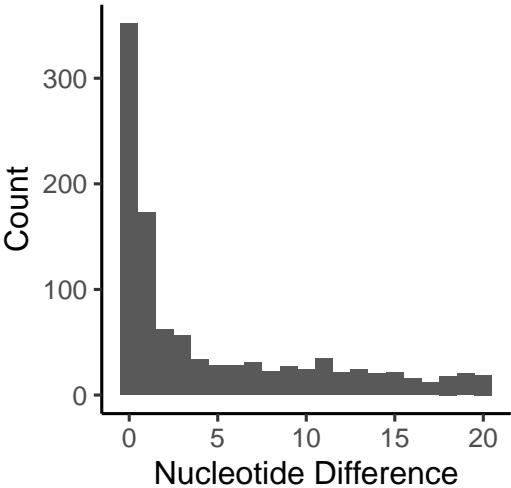
IGHV3/OR16-10*01_03

2 sequences assigned
No exact matches.



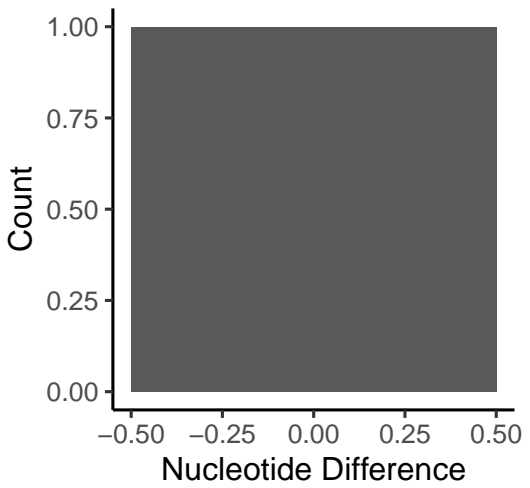
IGHV6-1*01_02

1196 sequences assigned
352 (29.4%) exact matches, in which:
339 unique CDR3
7 unique J

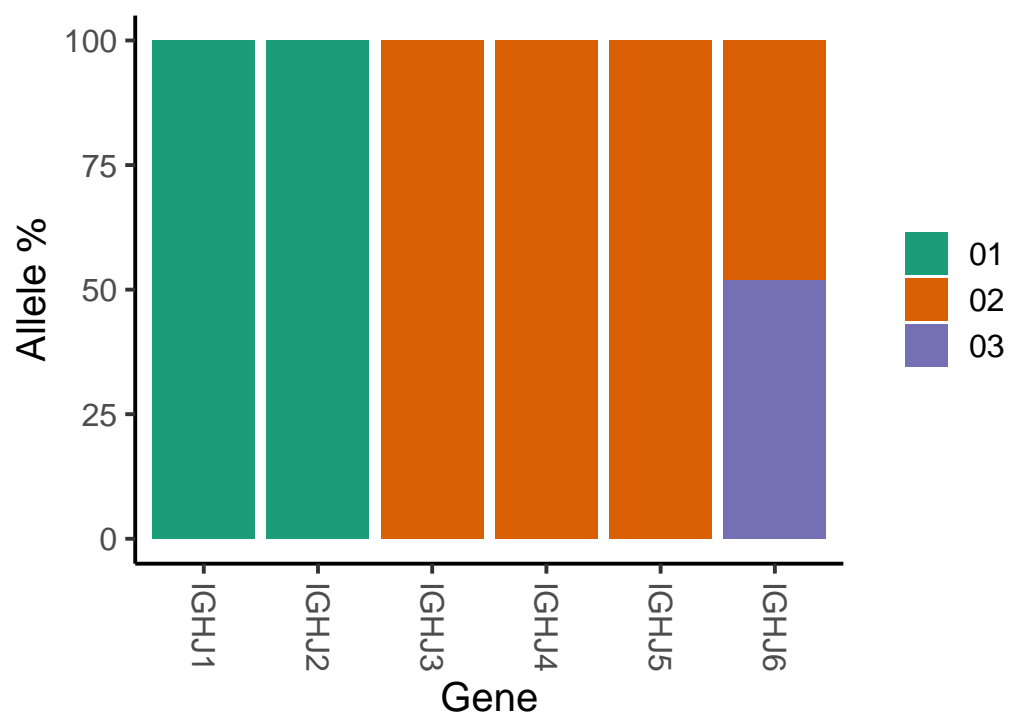


IGHV7-4-1*02

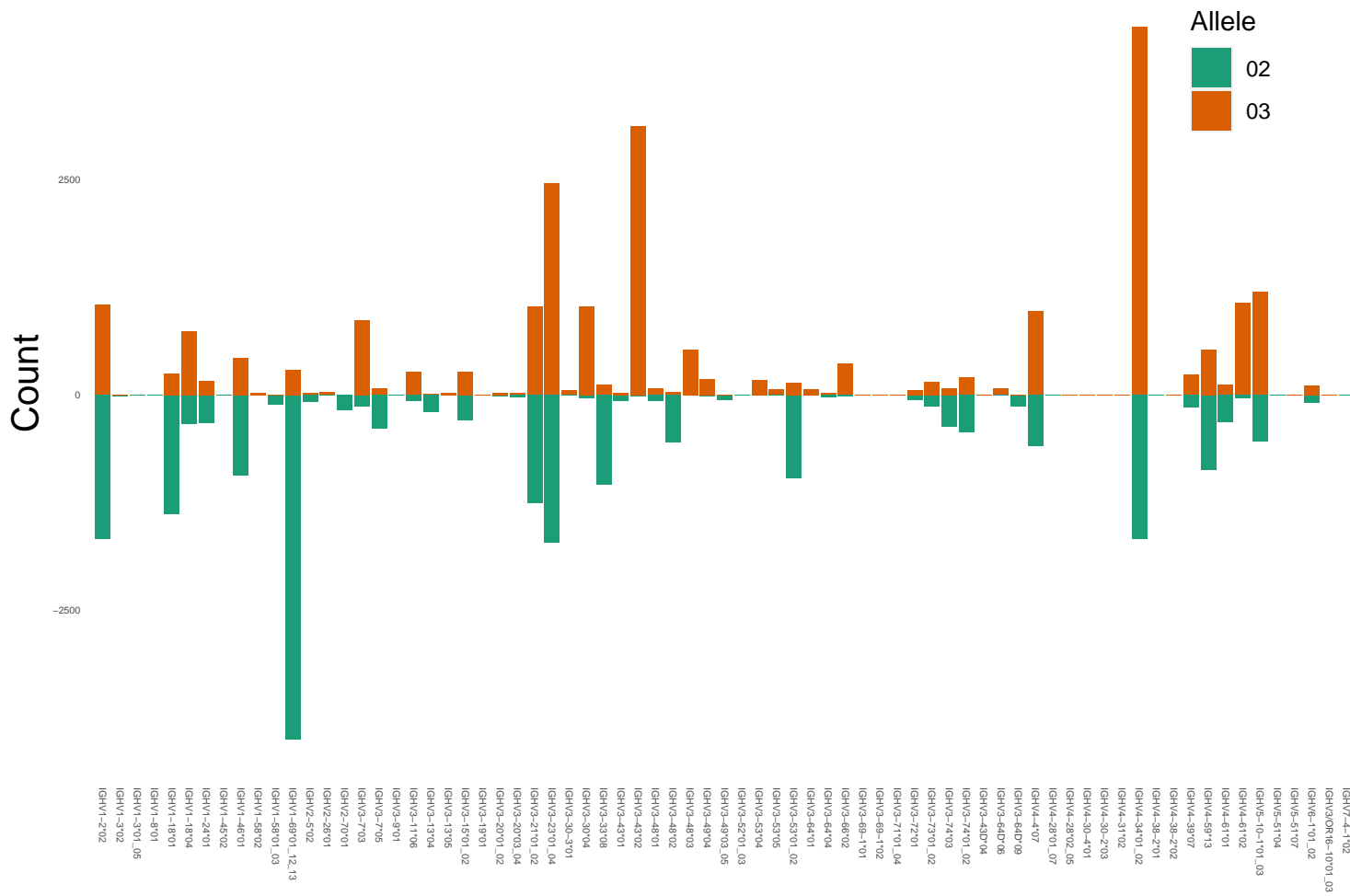
1 sequences assigned
1 (100%) exact matches, in which:
1 unique CDR3
1 unique J



Allele Usage



Sequence Count by IGHJ6 allele usage



Warning – no inferred sequences found.