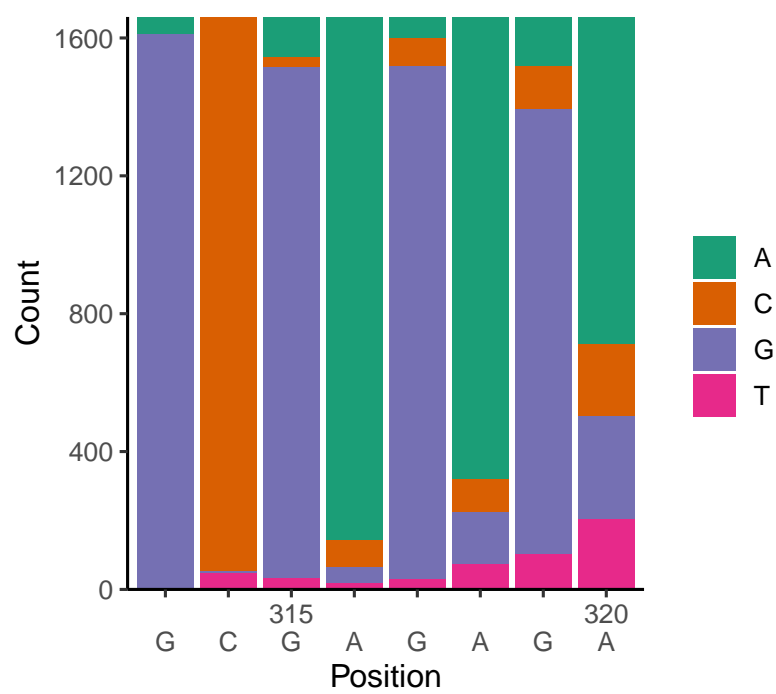


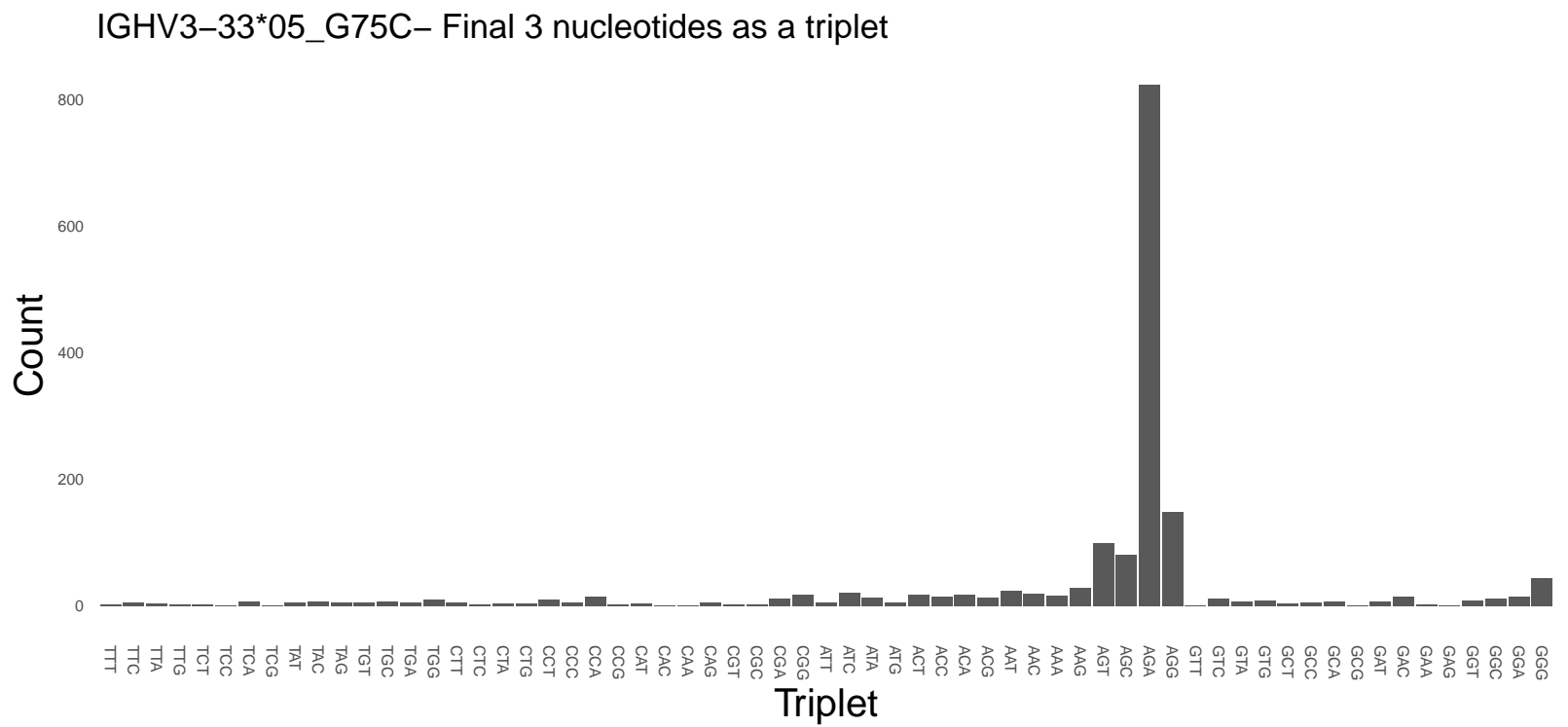
Gene IGHV3-33*05_G75C



Gene IGHV3-33*05_G75C

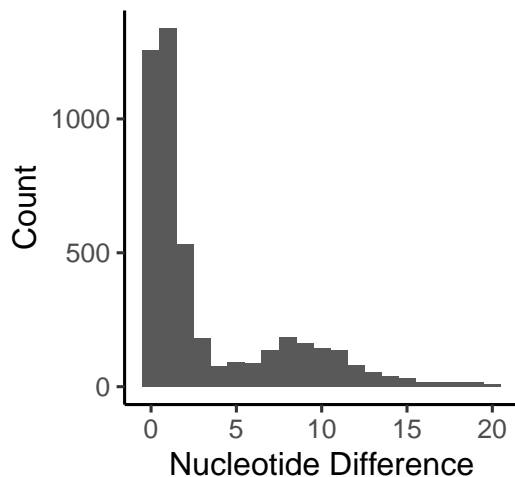


IGHV3-33*05_G75C- Final 3 nucleotides as a triplet



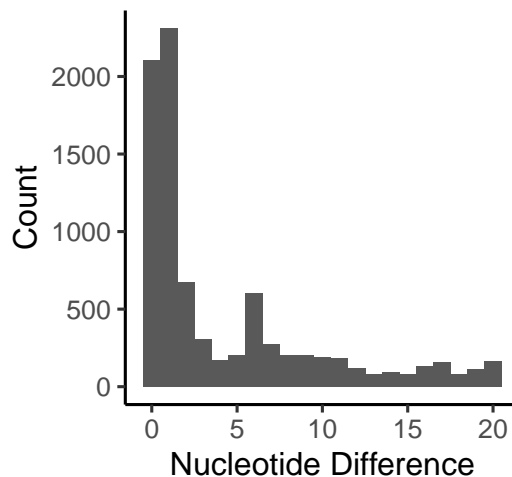
IGHV1-2*04

5139 sequences assigned
1255 (24.4%) exact matches, in which:
1048 unique CDR3
6 unique J



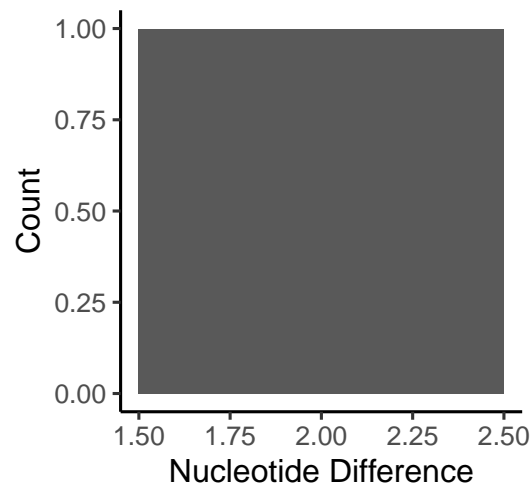
IGHV1-18*01

20715 sequences assigned
2108 (10.2%) exact matches, in which:
1749 unique CDR3
6 unique J



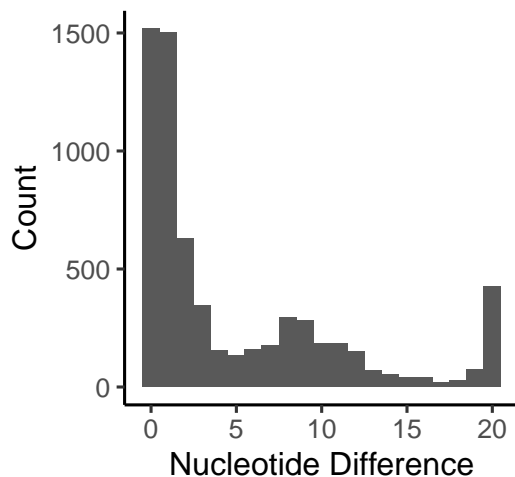
IGHV1-38-4*01

1 sequences assigned
No exact matches.



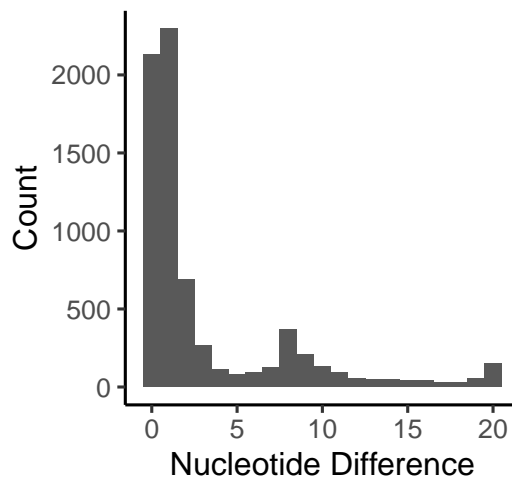
IGHV1-3*01_05

8383 sequences assigned
1518 (18.1%) exact matches, in which:
1235 unique CDR3
6 unique J



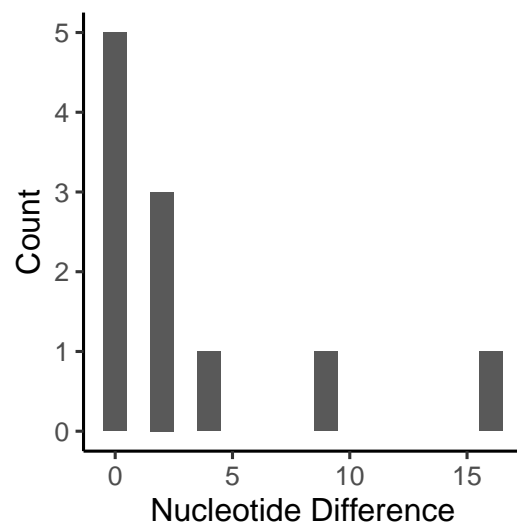
IGHV1-18*04

7905 sequences assigned
2130 (26.9%) exact matches, in which:
1786 unique CDR3
6 unique J



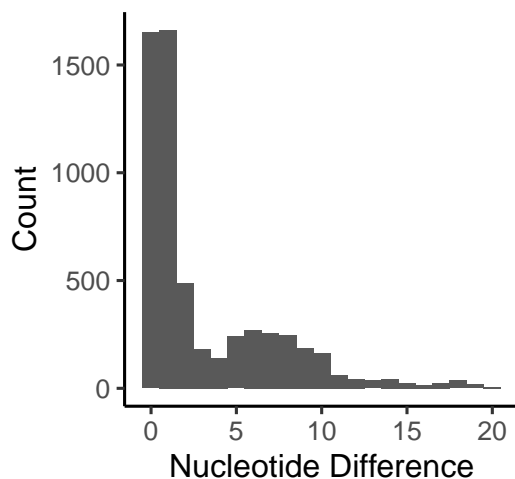
IGHV1-45*02

17 sequences assigned
5 (29.4%) exact matches, in which:
4 unique CDR3
1 unique J



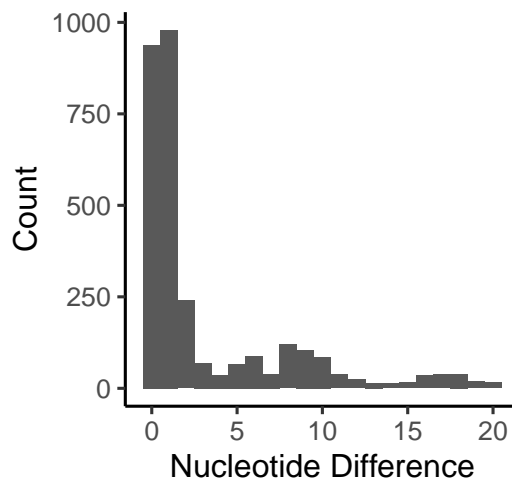
IGHV1-8*01

5909 sequences assigned
1650 (27.9%) exact matches, in which:
1388 unique CDR3
6 unique J



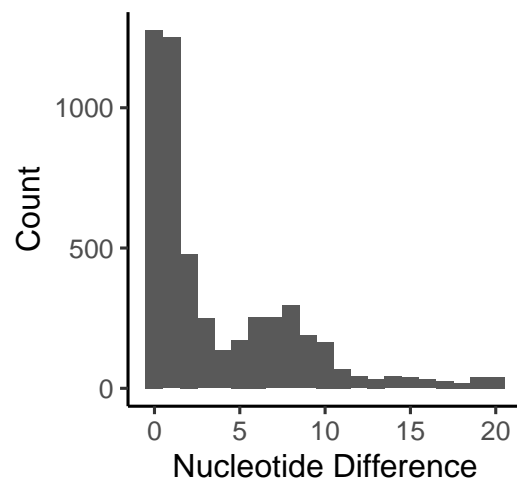
IGHV1-24*01

3850 sequences assigned
938 (24.4%) exact matches, in which:
790 unique CDR3
6 unique J



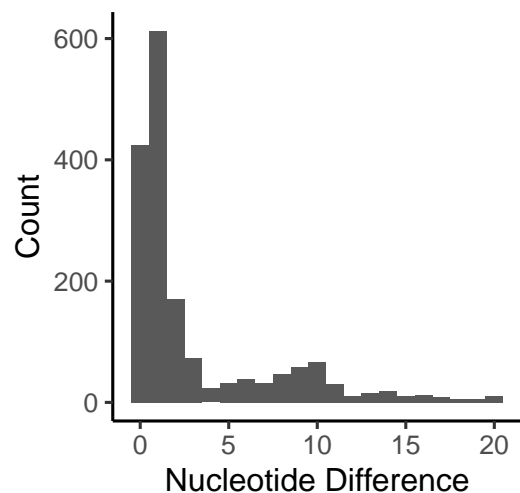
IGHV1-46*01

5781 sequences assigned
1277 (22.1%) exact matches, in which:
1112 unique CDR3
6 unique J



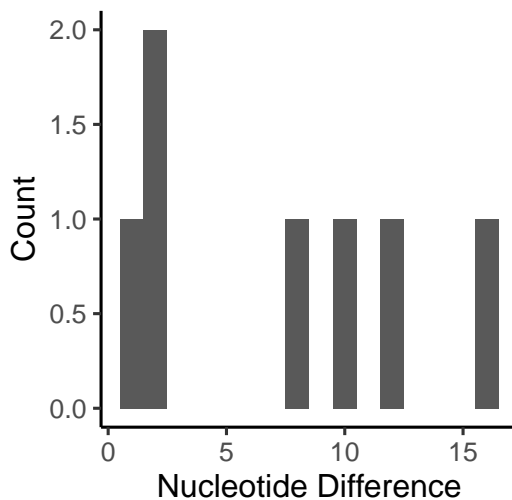
IGHV1-46*03

1731 sequences assigned
425 (24.6%) exact matches, in which:
323 unique CDR3
6 unique J



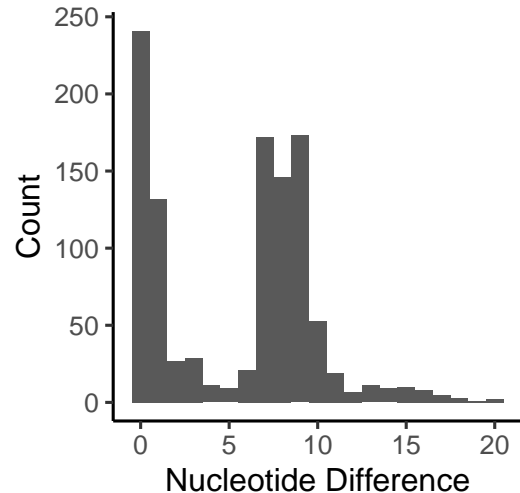
IGHV1-68*01

7 sequences assigned
No exact matches.



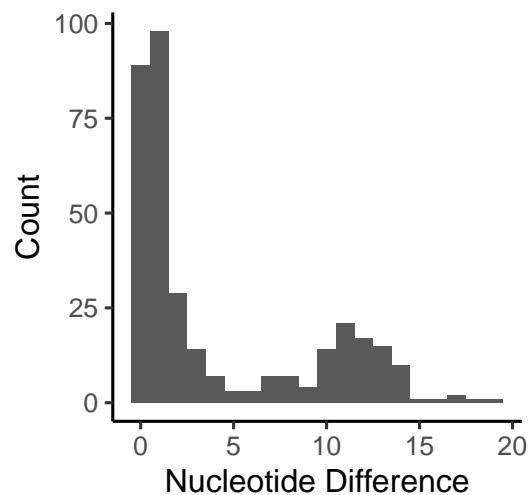
IGHV1-69*06_14

1126 sequences assigned
241 (21.4%) exact matches, in which:
232 unique CDR3
5 unique J



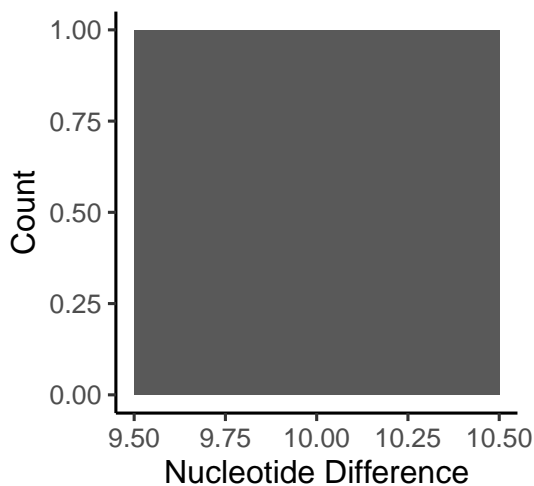
IGHV1-58*02

348 sequences assigned
89 (25.6%) exact matches, in which:
75 unique CDR3
6 unique J



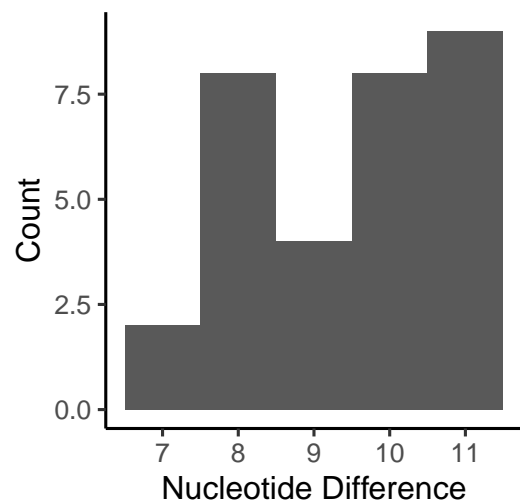
IGHV1-69-2*01

1 sequences assigned
No exact matches.



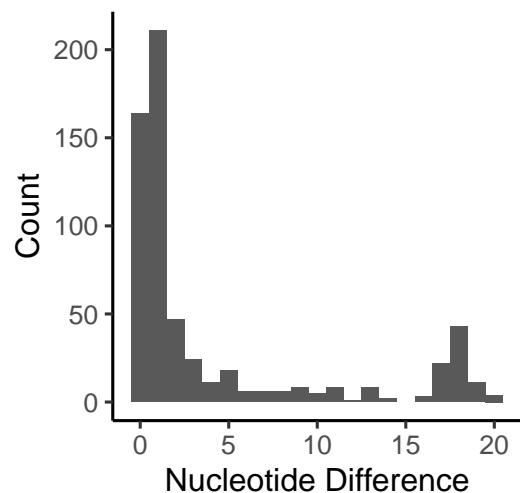
IGHV1-NL1*01

31 sequences assigned
No exact matches.



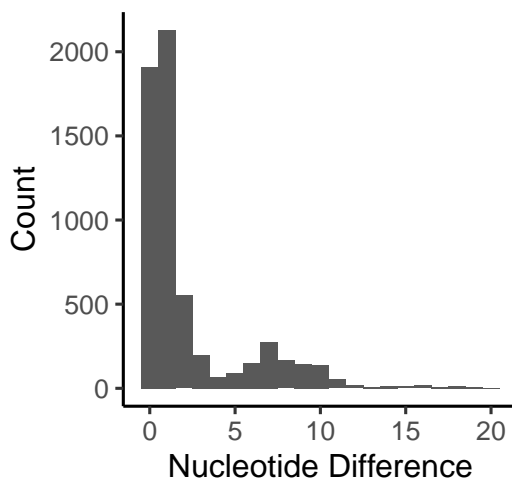
IGHV1-58*01_03

629 sequences assigned
164 (26.1%) exact matches, in which:
141 unique CDR3
6 unique J



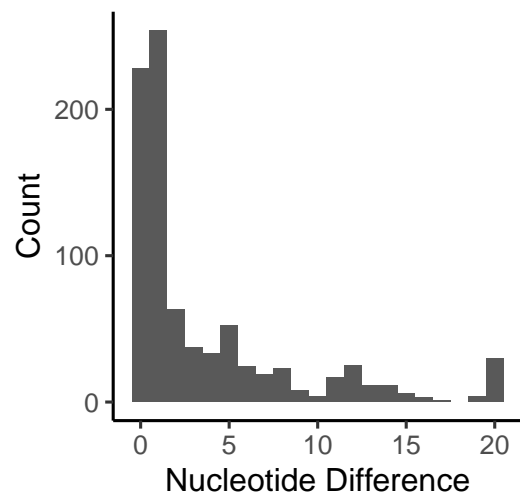
IGHV1-69*04_09

6205 sequences assigned
1910 (30.8%) exact matches, in which:
1647 unique CDR3
6 unique J



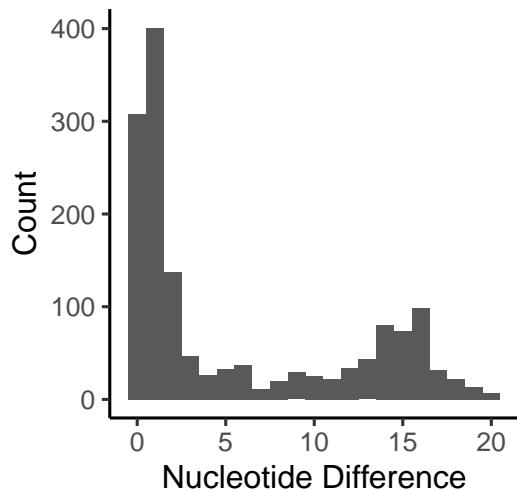
IGHV2-5*01

1020 sequences assigned
228 (22.4%) exact matches, in which:
198 unique CDR3
6 unique J



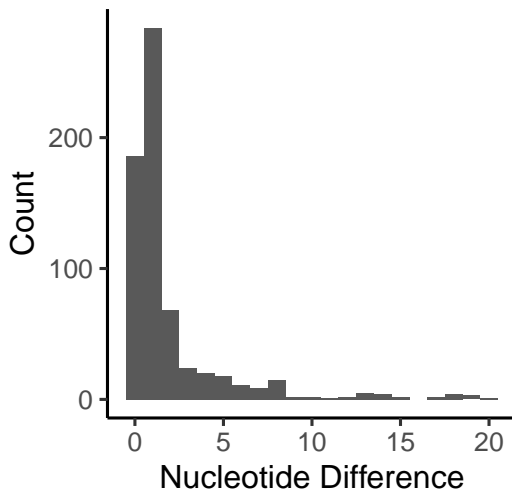
IGHV2-5*02

2151 sequences assigned
308 (14.3%) exact matches, in which:
248 unique CDR3
6 unique J



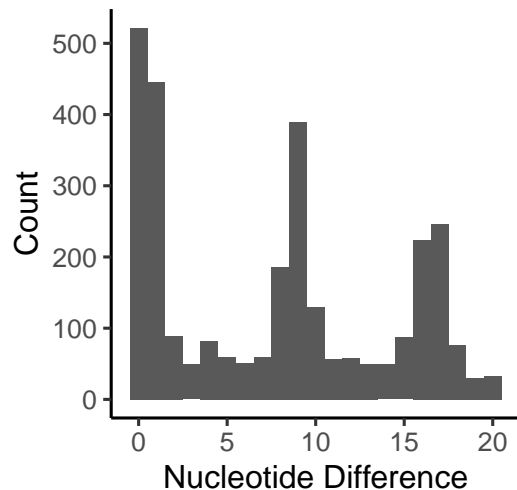
IGHV2-70*11_15

668 sequences assigned
186 (27.8%) exact matches, in which:
151 unique CDR3
5 unique J



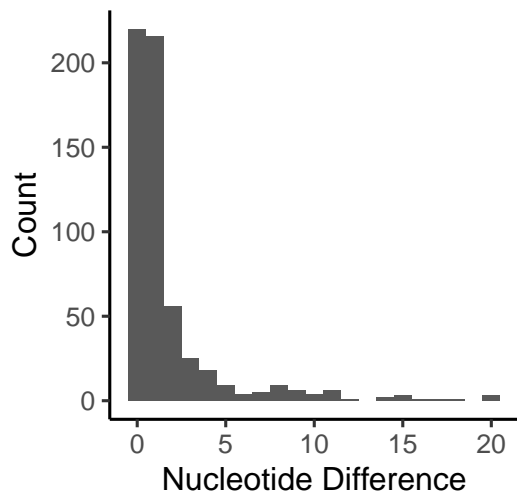
IGHV3-7*05

3271 sequences assigned
522 (16%) exact matches, in which:
343 unique CDR3
6 unique J



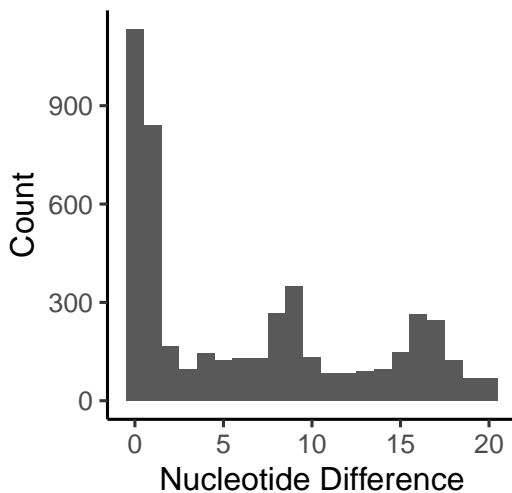
IGHV2-26*01

768 sequences assigned
220 (28.6%) exact matches, in which:
182 unique CDR3
5 unique J



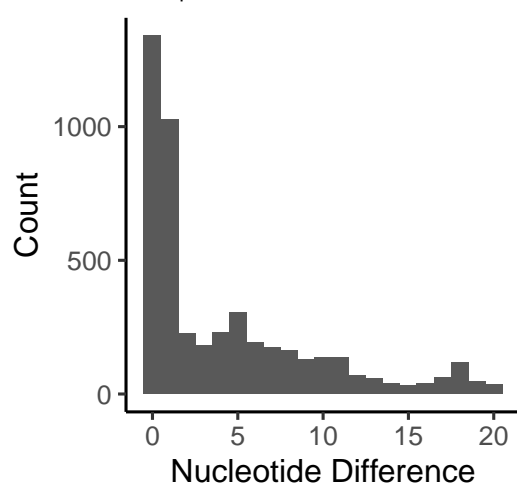
IGHV3-7*01

5766 sequences assigned
1134 (19.7%) exact matches, in which:
789 unique CDR3
6 unique J



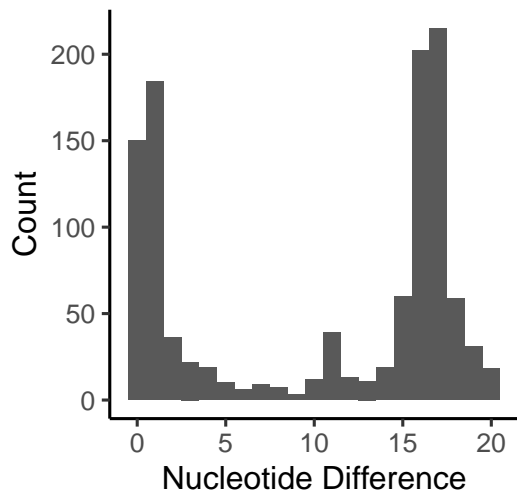
IGHV3-9*01

5183 sequences assigned
1340 (25.9%) exact matches, in which:
800 unique CDR3
6 unique J



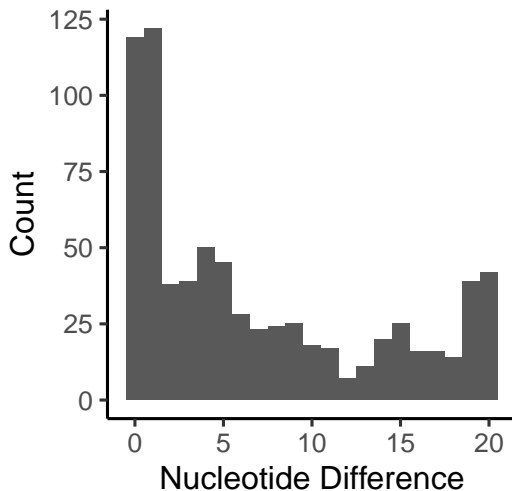
IGHV2-70*01

1183 sequences assigned
150 (12.7%) exact matches, in which:
124 unique CDR3
5 unique J



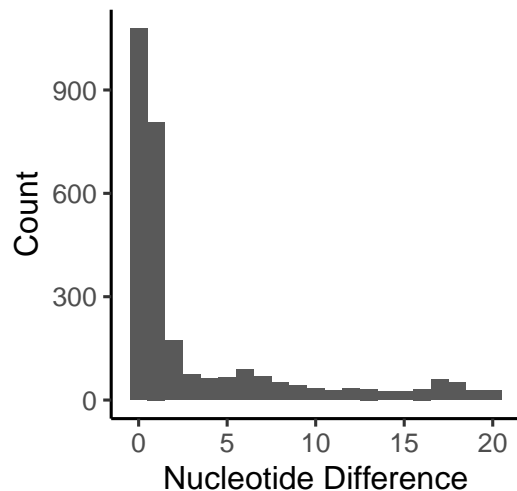
IGHV3-7*03

1154 sequences assigned
119 (10.3%) exact matches, in which:
101 unique CDR3
5 unique J



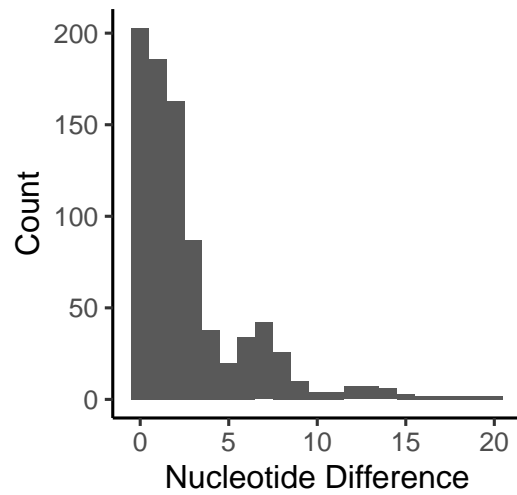
IGHV3-11*01

3688 sequences assigned
1079 (29.3%) exact matches, in which:
714 unique CDR3
6 unique J



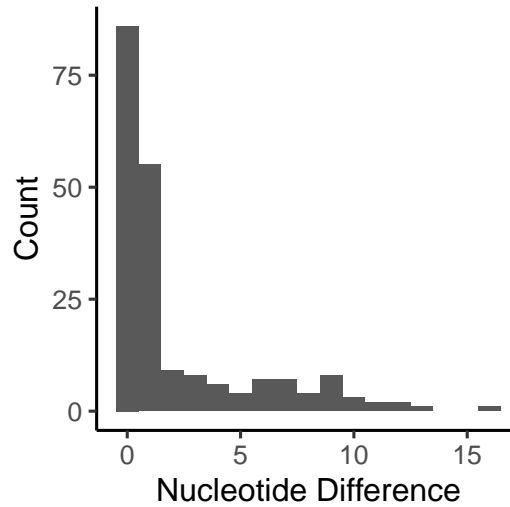
IGHV3-11*04

897 sequences assigned
203 (22.6%) exact matches, in which:
196 unique CDR3
6 unique J



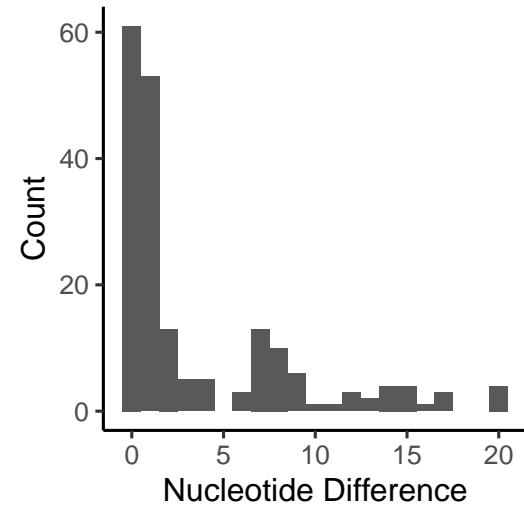
IGHV3-13*05

204 sequences assigned
86 (42.2%) exact matches, in which:
62 unique CDR3
5 unique J



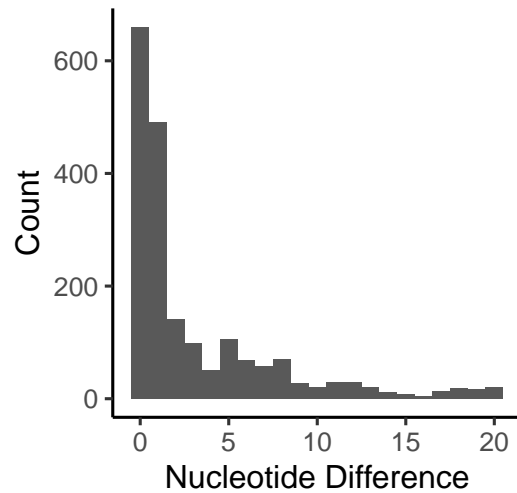
IGHV3-20*01_02

239 sequences assigned
61 (25.5%) exact matches, in which:
37 unique CDR3
6 unique J



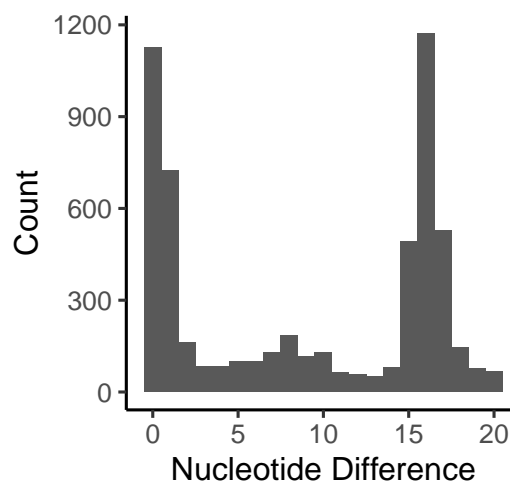
IGHV3-11*06

2063 sequences assigned
660 (32%) exact matches, in which:
441 unique CDR3
6 unique J



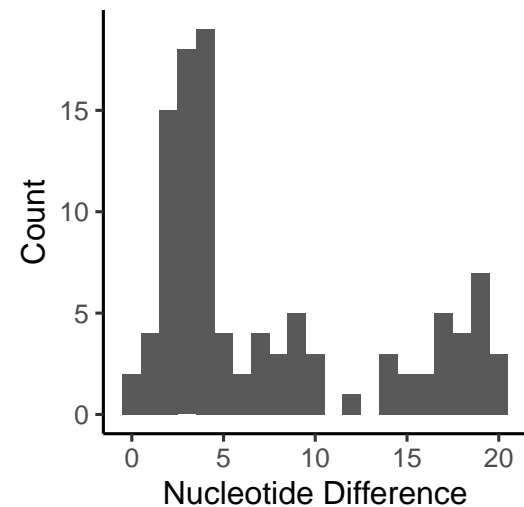
IGHV3-15*01_02

6576 sequences assigned
1126 (17.1%) exact matches, in which:
696 unique CDR3
6 unique J



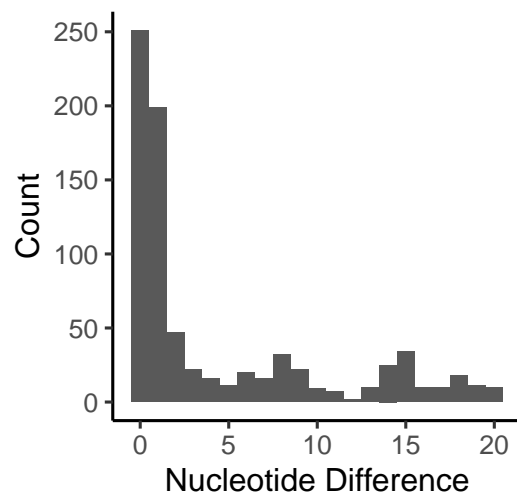
IGHV3-20*03_04

341 sequences assigned
2 (0.6%) exact matches, in which:
2 unique CDR3
2 unique J



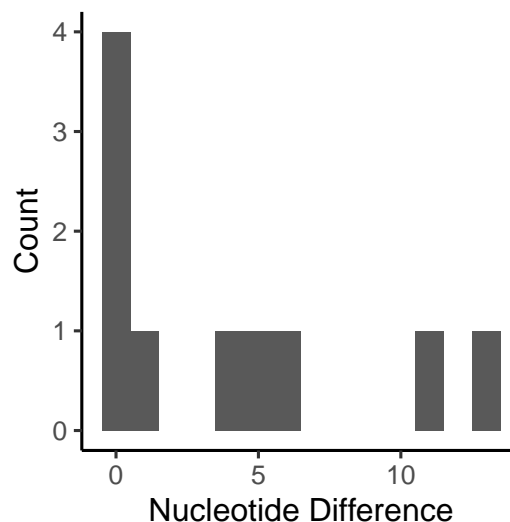
IGHV3-13*01

884 sequences assigned
251 (28.4%) exact matches, in which:
162 unique CDR3
5 unique J



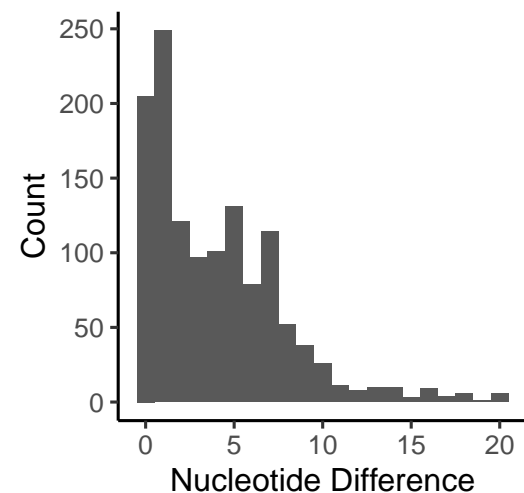
IGHV3-19*01

10 sequences assigned
4 (40%) exact matches, in which:
4 unique CDR3
2 unique J



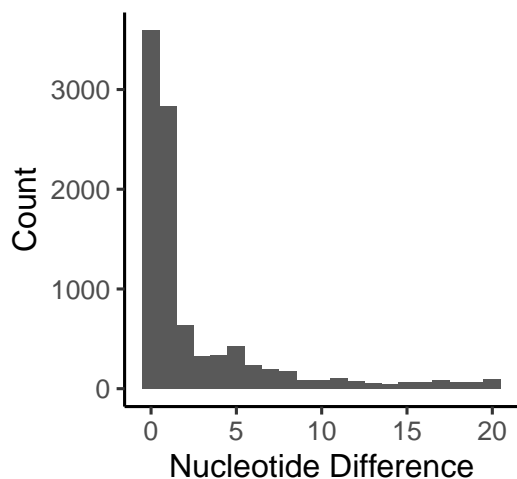
IGHV3-21*04

1419 sequences assigned
205 (14.4%) exact matches, in which:
184 unique CDR3
5 unique J



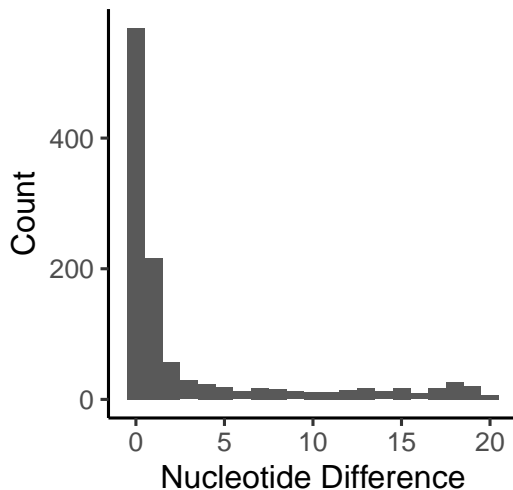
IGHV3–21*01_02

12511 sequences assigned
3593 (28.7%) exact matches, in which:
2231 unique CDR3
6 unique J



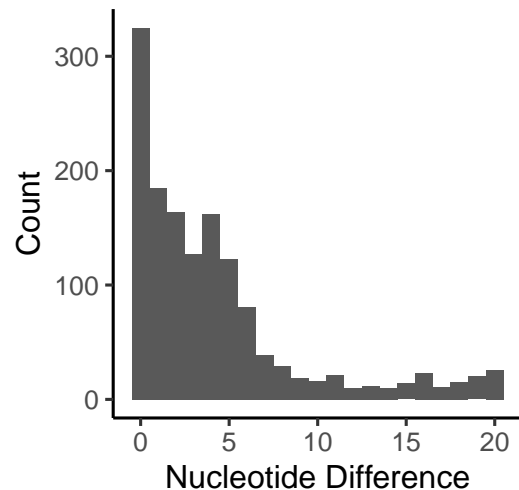
IGHV3–30*03

1304 sequences assigned
569 (43.6%) exact matches, in which:
505 unique CDR3
6 unique J



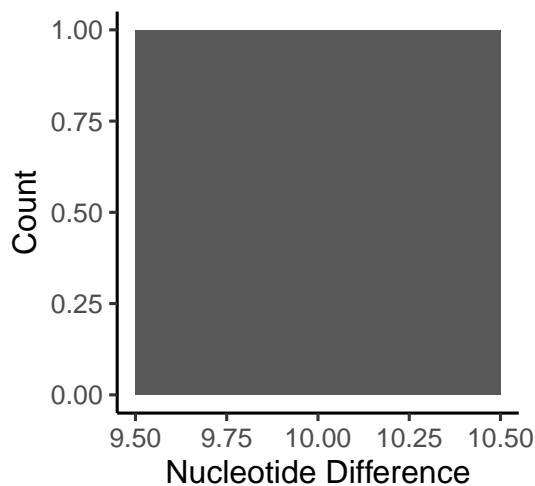
IGHV3–33*05_G75C

1661 sequences assigned
325 (19.6%) exact matches, in which:
298 unique CDR3
6 unique J



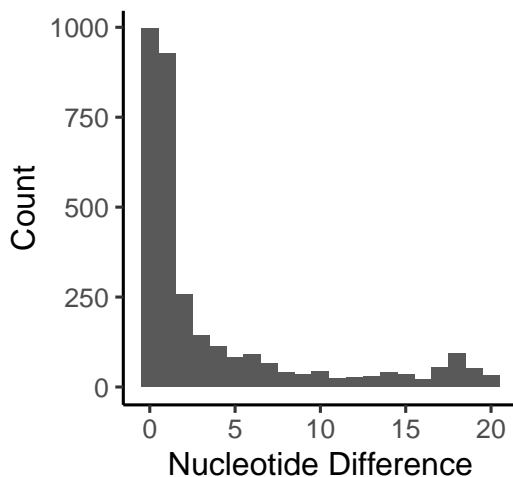
IGHV3–22*01_02

1 sequences assigned
No exact matches.



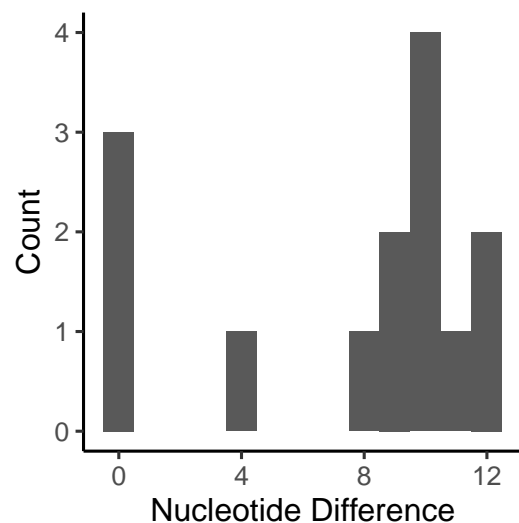
IGHV3–33*01

4520 sequences assigned
996 (22%) exact matches, in which:
656 unique CDR3
6 unique J



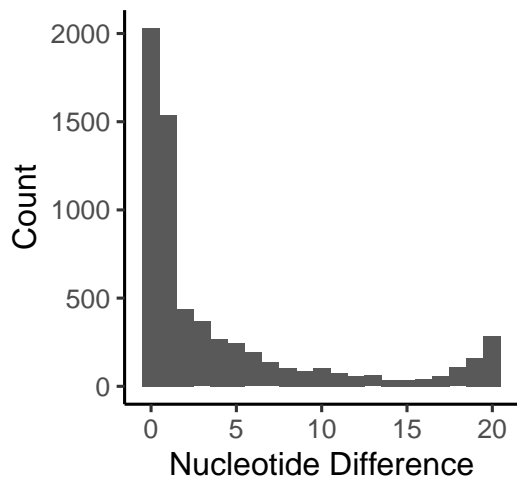
IGHV3–35*01

14 sequences assigned
3 (21.4%) exact matches, in which:
3 unique CDR3
3 unique J



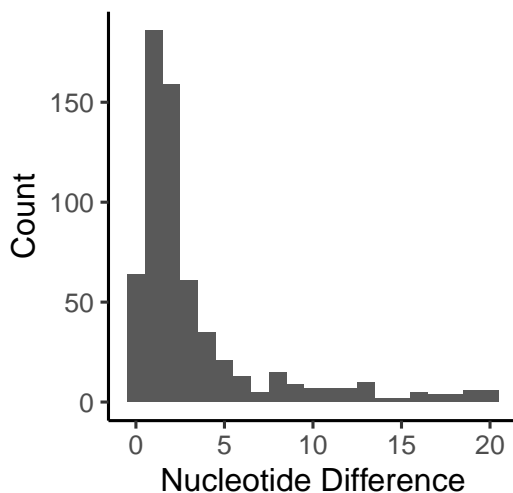
IGHV3–30–3*01

7483 sequences assigned
2031 (27.1%) exact matches, in which:
1360 unique CDR3
6 unique J



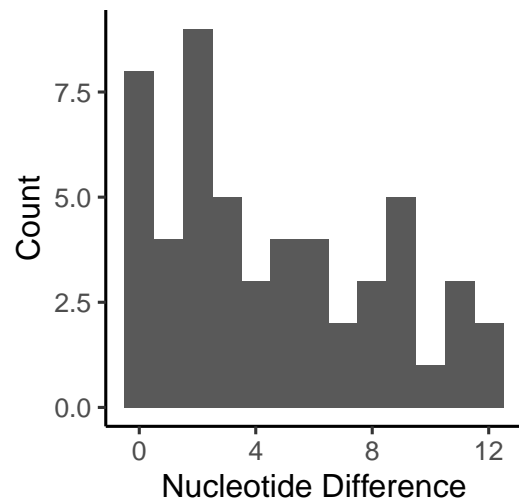
IGHV3–33*06

681 sequences assigned
64 (9.4%) exact matches, in which:
62 unique CDR3
6 unique J



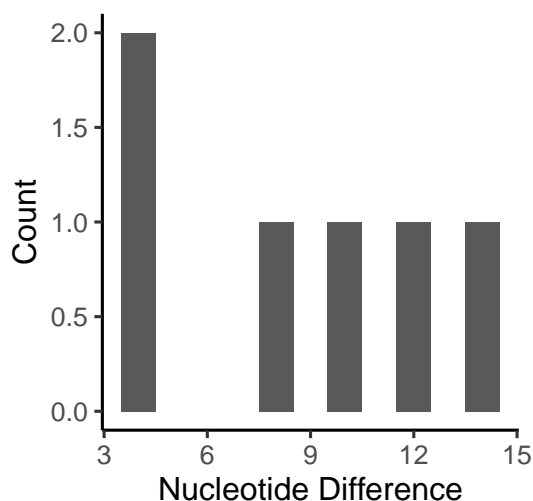
IGHV3–38–3*01

53 sequences assigned
8 (15.1%) exact matches, in which:
8 unique CDR3
3 unique J



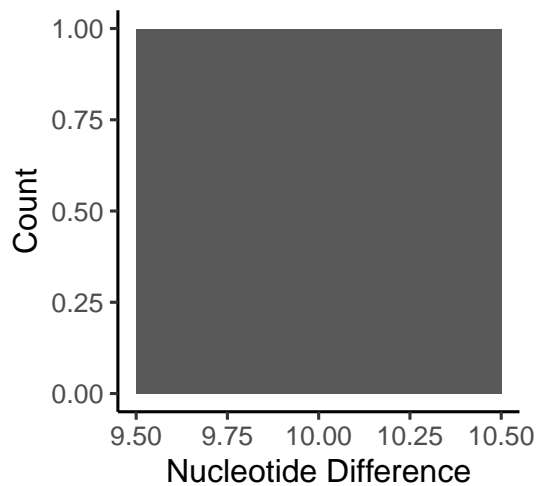
IGHV3-38*03

6 sequences assigned
No exact matches.



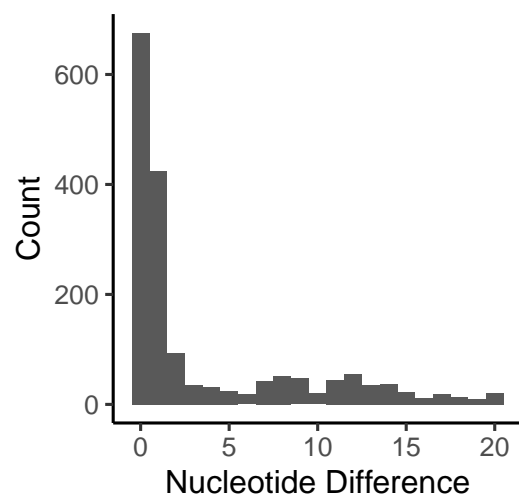
IGHV3-47*02

1 sequences assigned
No exact matches.



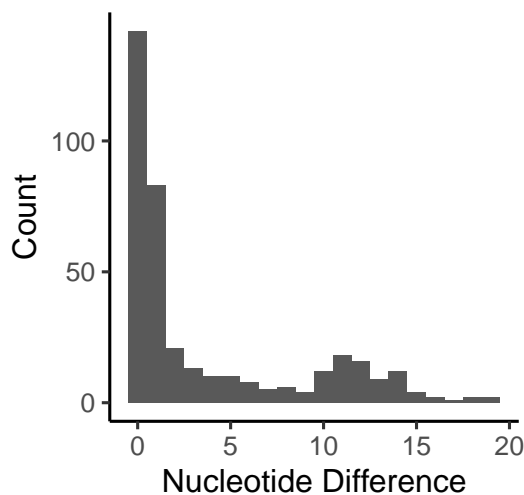
IGHV3-49*03_05

2458 sequences assigned
676 (27.5%) exact matches, in which:
395 unique CDR3
6 unique J



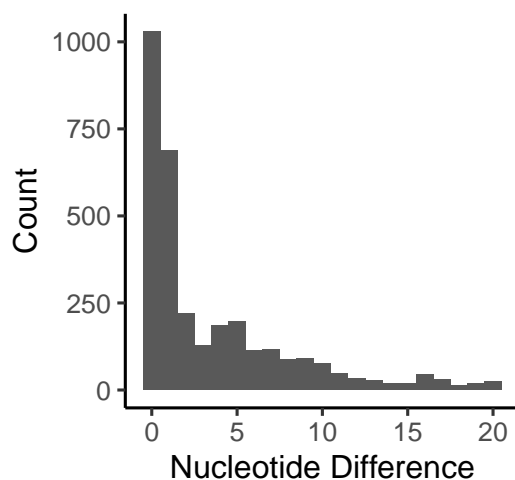
IGHV3-43*01

1384 sequences assigned
142 (10.3%) exact matches, in which:
83 unique CDR3
6 unique J



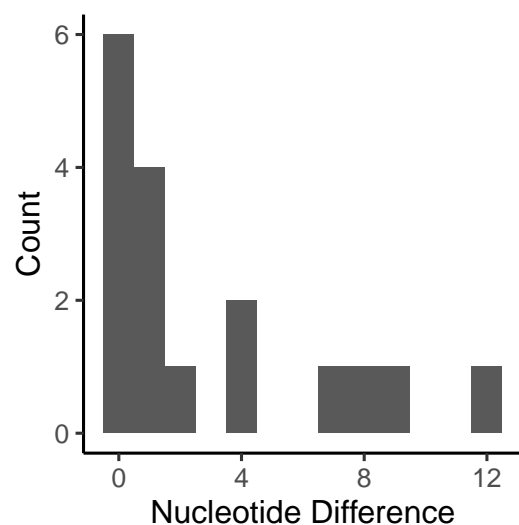
IGHV3-48*01

4371 sequences assigned
1029 (23.5%) exact matches, in which:
667 unique CDR3
6 unique J



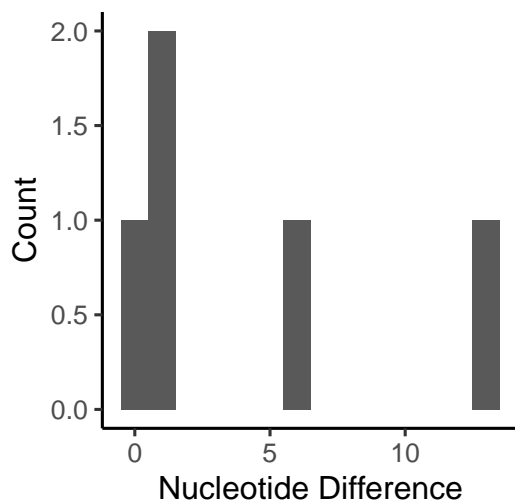
IGHV3-52*02

17 sequences assigned
6 (35.3%) exact matches, in which:
4 unique CDR3
2 unique J



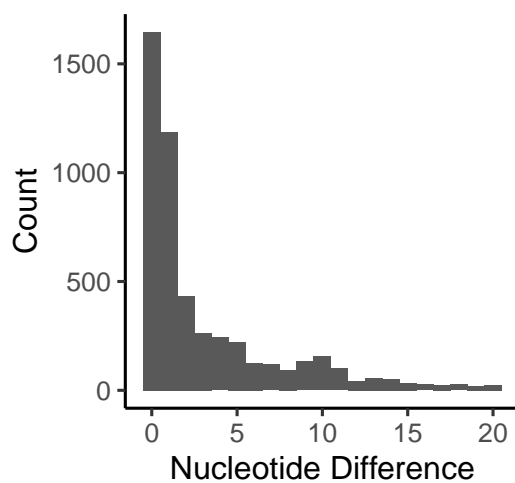
IGHV3-47*01

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



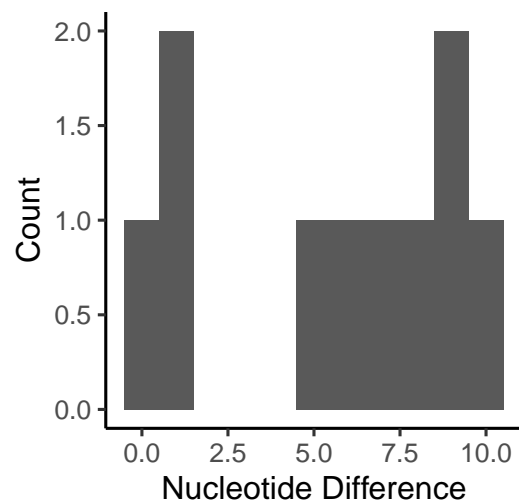
IGHV3-48*04

6095 sequences assigned
1646 (27%) exact matches, in which:
1105 unique CDR3
6 unique J



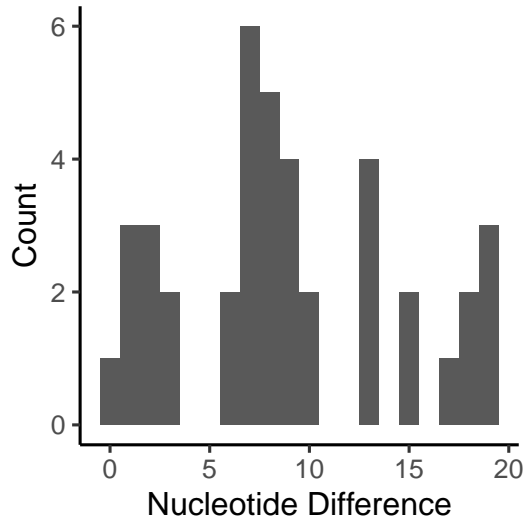
IGHV3-52*01_03

10 sequences assigned
1 (10%) exact matches, in which:
1 unique CDR3
1 unique J



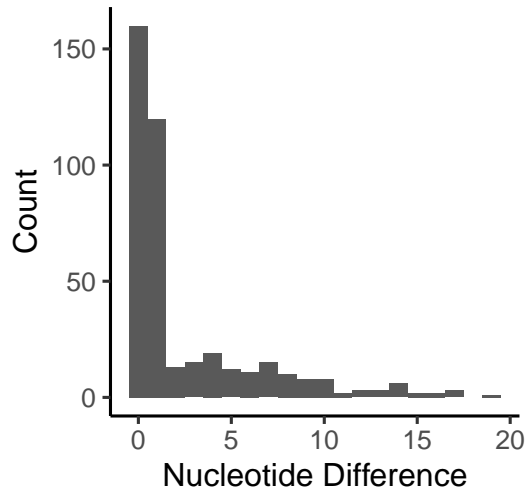
IGHV3-53*05

54 sequences assigned
1 (1.9%) exact matches, in which:
1 unique CDR3
1 unique J



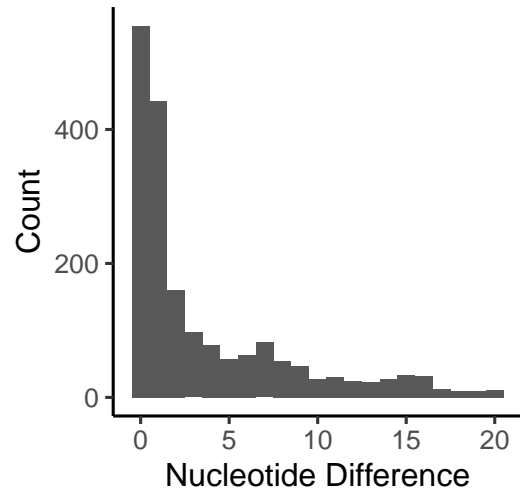
IGHV3-64*01

473 sequences assigned
160 (33.8%) exact matches, in which:
101 unique CDR3
5 unique J



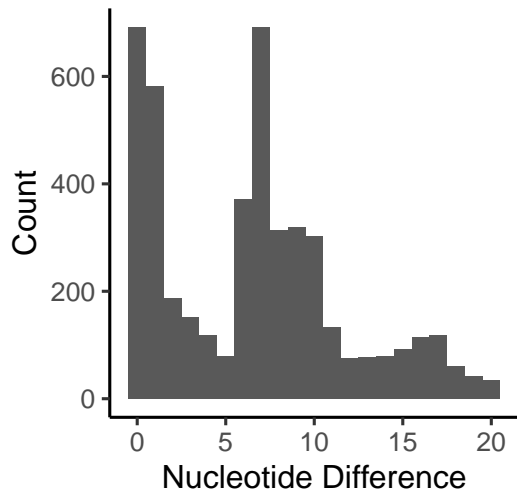
IGHV3-66*01

2002 sequences assigned
555 (27.7%) exact matches, in which:
366 unique CDR3
6 unique J



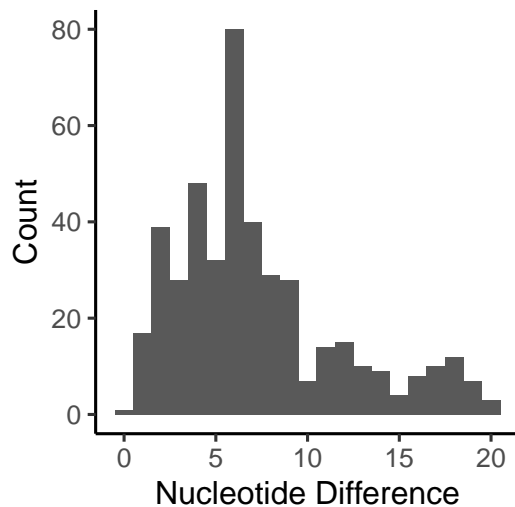
IGHV3-53*01_02

6144 sequences assigned
691 (11.2%) exact matches, in which:
441 unique CDR3
6 unique J



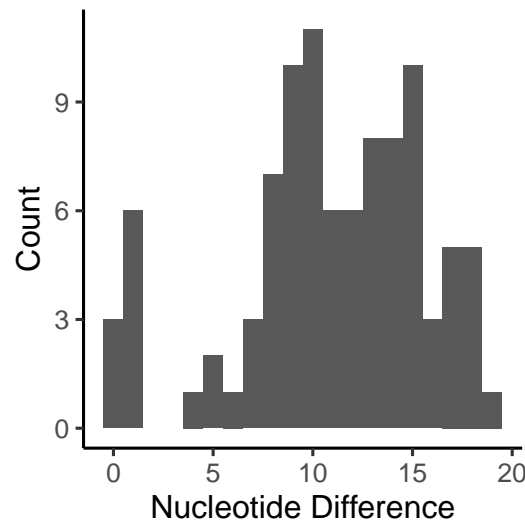
IGHV3-64*04

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



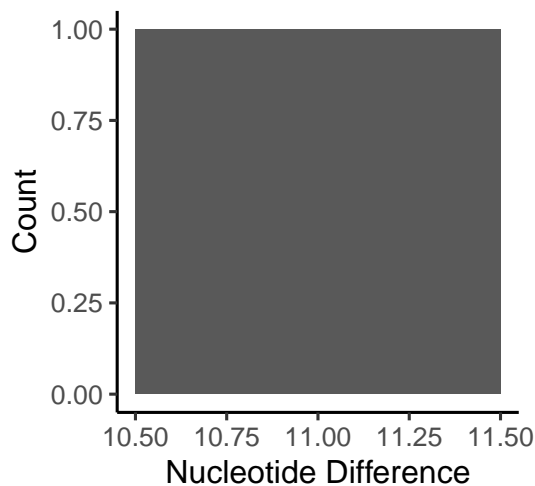
IGHV3-66*03

98 sequences assigned
3 (3.1%) exact matches, in which:
3 unique CDR3
2 unique J



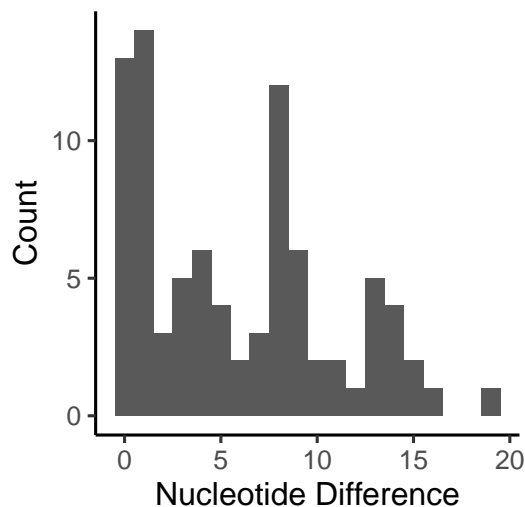
IGHV3-62*04

11 sequences assigned
No exact matches.



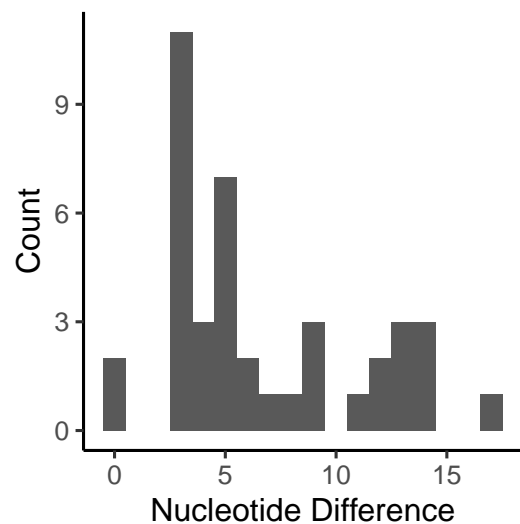
IGHV3-64*02_07

86 sequences assigned
13 (15.1%) exact matches, in which:
9 unique CDR3
2 unique J



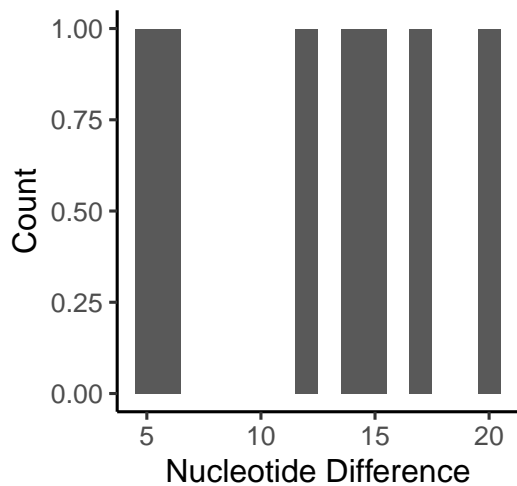
IGHV3-69-1*01

59 sequences assigned
2 (3.4%) exact matches, in which:
1 unique CDR3
1 unique J



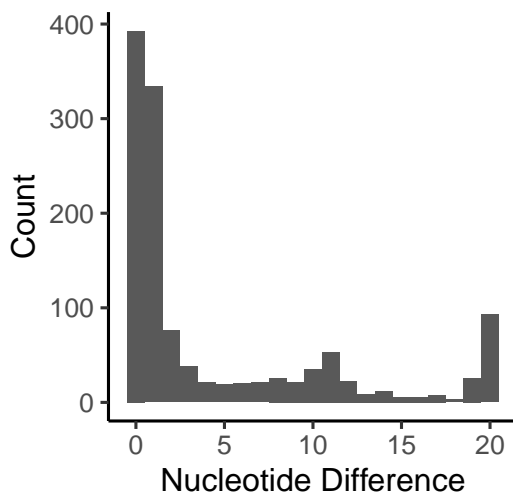
IGHV3-69-1*02

26 sequences assigned
No exact matches.



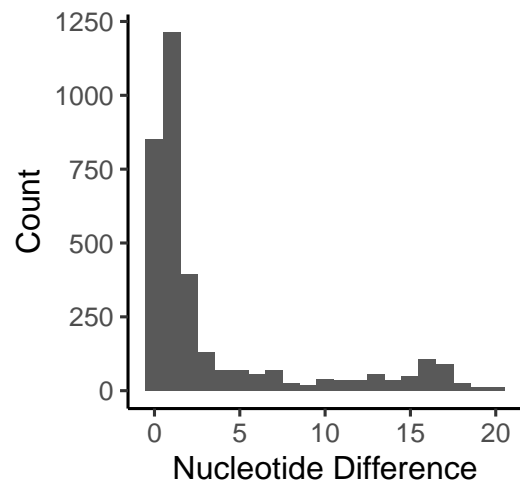
IGHV3-73*01_02

2245 sequences assigned
393 (17.5%) exact matches, in which:
242 unique CDR3
6 unique J



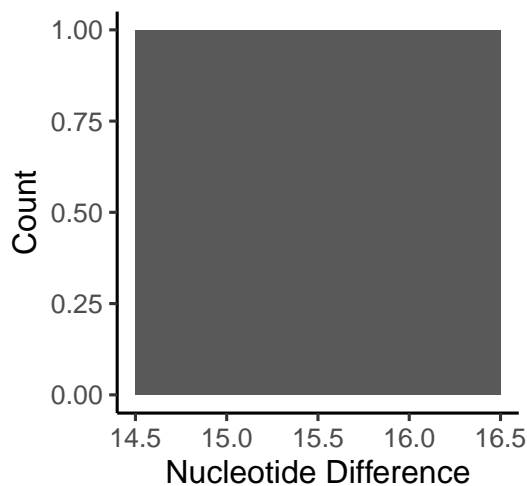
IGHV3-64D*08

3531 sequences assigned
852 (24.1%) exact matches, in which:
425 unique CDR3
6 unique J



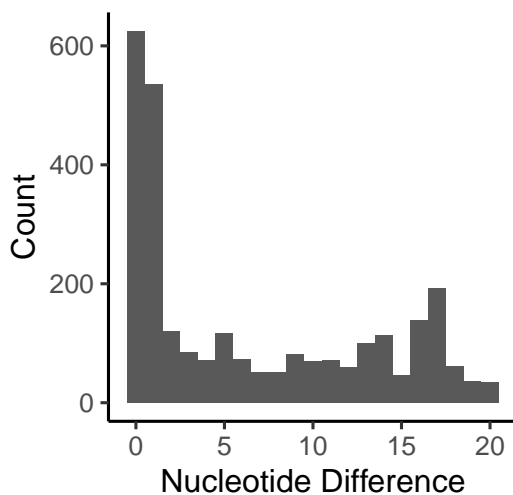
IGHV3-71*01_04

5 sequences assigned
No exact matches.



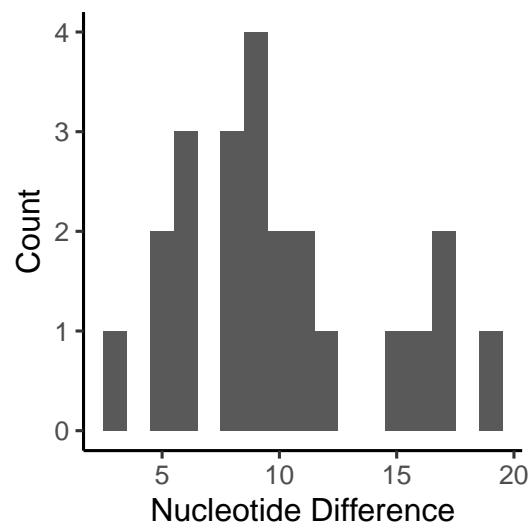
IGHV3-74*01_02

3327 sequences assigned
625 (18.8%) exact matches, in which:
361 unique CDR3
6 unique J



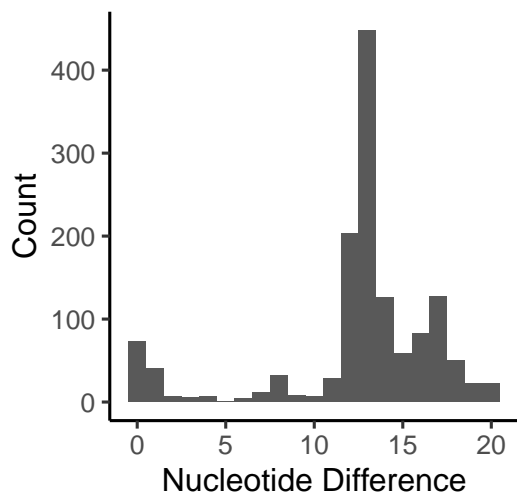
IGHV3-NL1*01

45 sequences assigned
No exact matches.



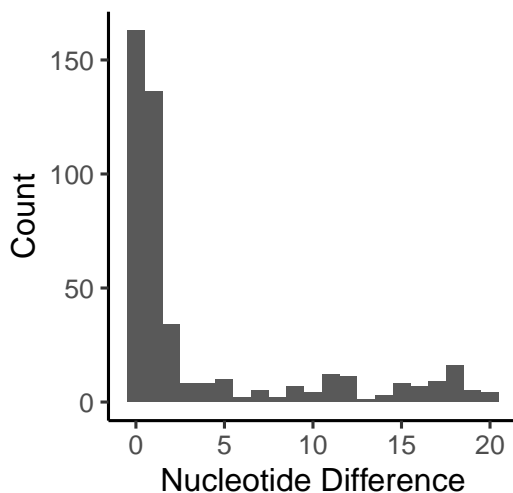
IGHV3-72*01

1721 sequences assigned
73 (4.2%) exact matches, in which:
49 unique CDR3
6 unique J



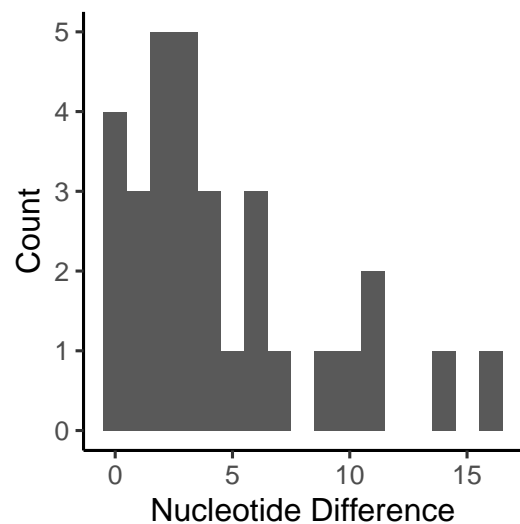
IGHV3-43D*03

1139 sequences assigned
163 (14.3%) exact matches, in which:
103 unique CDR3
5 unique J



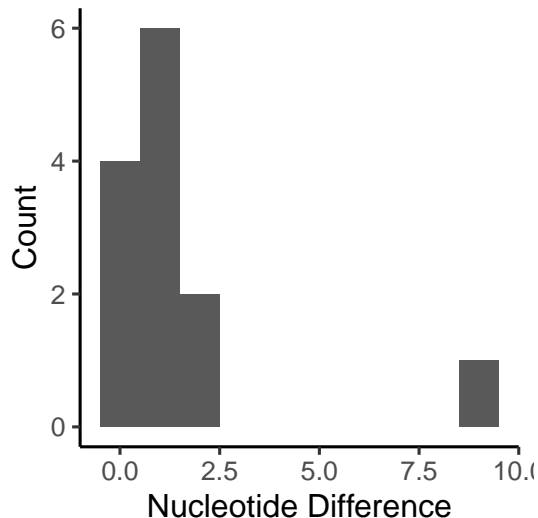
IGHV4-28*03

32 sequences assigned
4 (12.5%) exact matches, in which:
4 unique CDR3
3 unique J



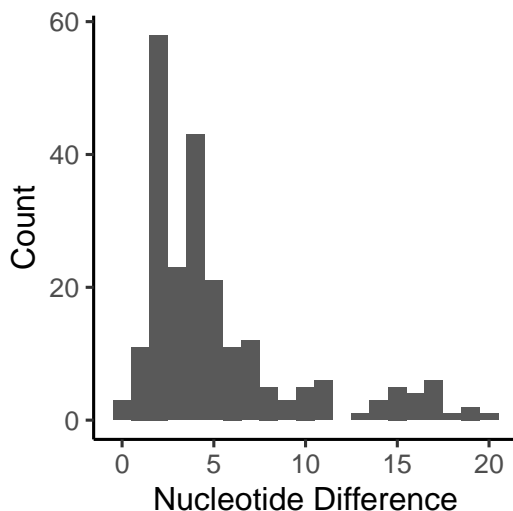
IGHV4-28*01_07

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



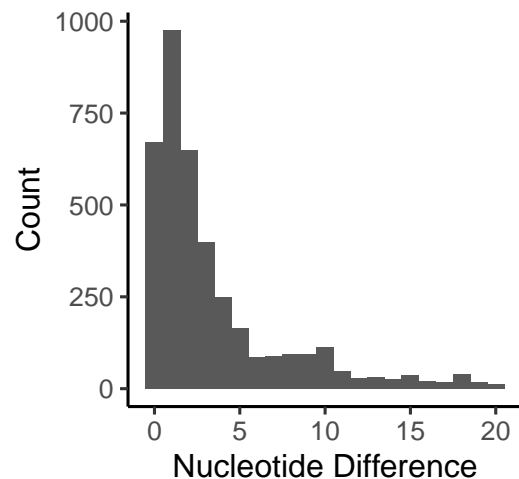
IGHV4-30-4*08

488 sequences assigned
3 (0.6%) exact matches, in which:
3 unique CDR3
1 unique J



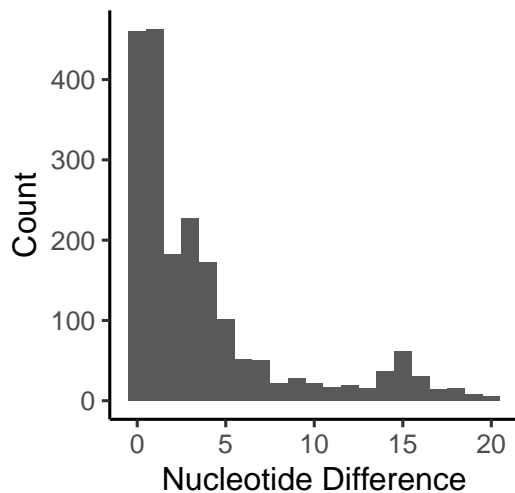
IGHV4-38-2*02

4663 sequences assigned
670 (14.4%) exact matches, in which:
578 unique CDR3
6 unique J



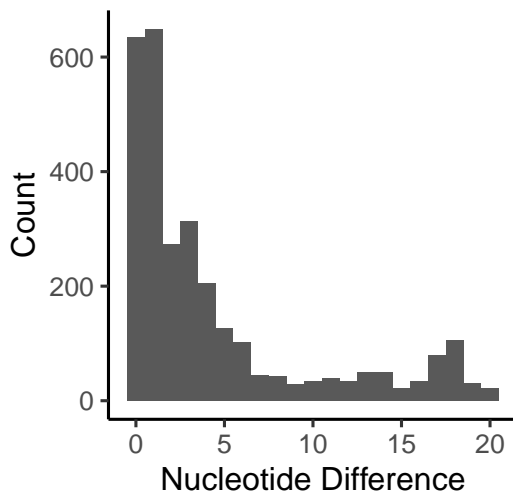
IGHV4-30-4*01

8519 sequences assigned
460 (5.4%) exact matches, in which:
399 unique CDR3
6 unique J



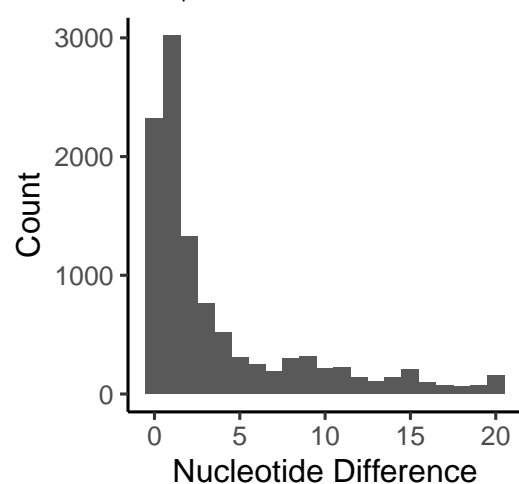
IGHV4-31*03_04

4035 sequences assigned
635 (15.7%) exact matches, in which:
534 unique CDR3
6 unique J



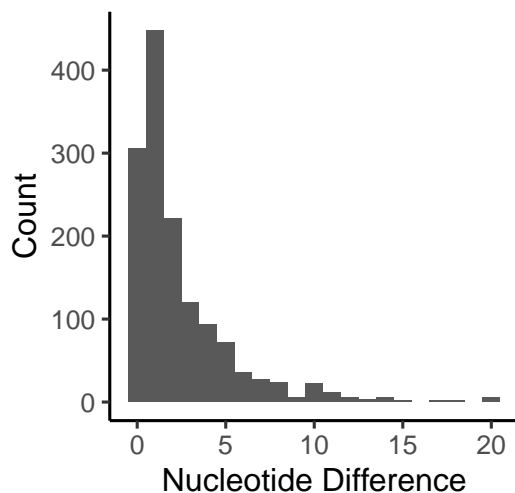
IGHV4-39*07

13673 sequences assigned
2325 (17%) exact matches, in which:
1873 unique CDR3
6 unique J



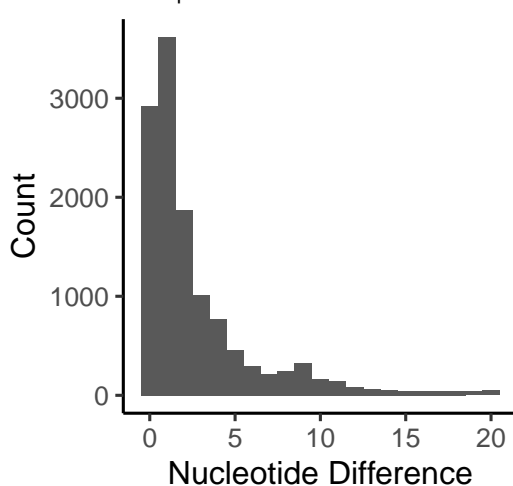
IGHV4-30-2*01

2214 sequences assigned
306 (13.8%) exact matches, in which:
233 unique CDR3
6 unique J



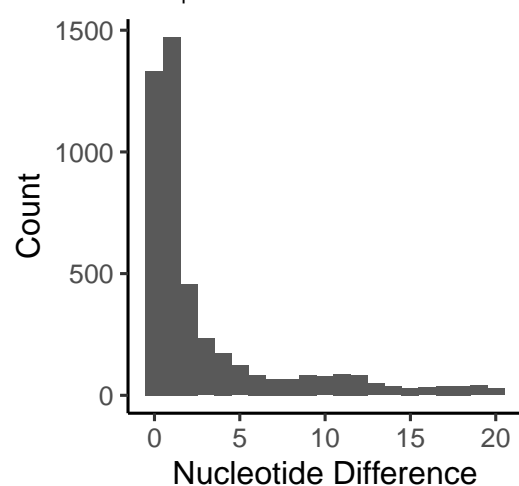
IGHV4-34*01_02

15760 sequences assigned
2922 (18.5%) exact matches, in which:
2169 unique CDR3
6 unique J



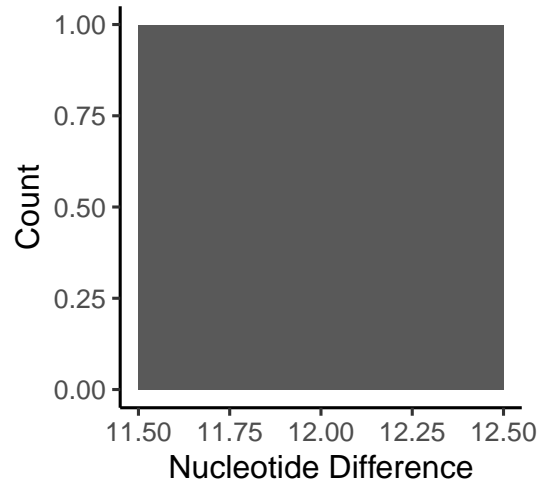
IGHV4-39*01_05

6944 sequences assigned
1333 (19.2%) exact matches, in which:
1042 unique CDR3
6 unique J



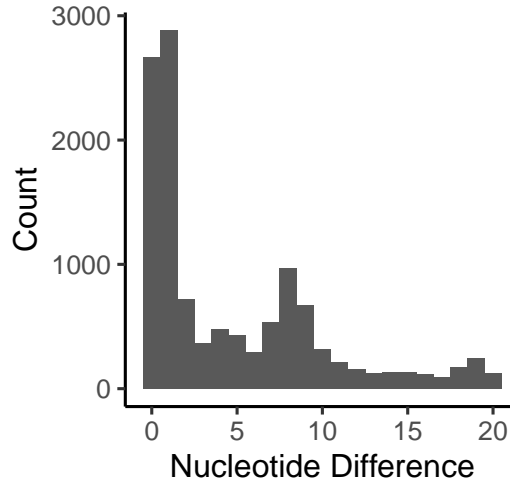
IGHV4-55*09

3 sequences assigned
No exact matches.



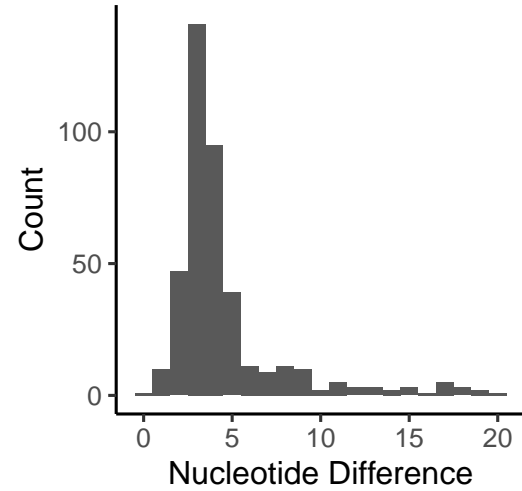
IGHV4-59*01_07

14056 sequences assigned
2670 (19%) exact matches, in which:
2147 unique CDR3
6 unique J



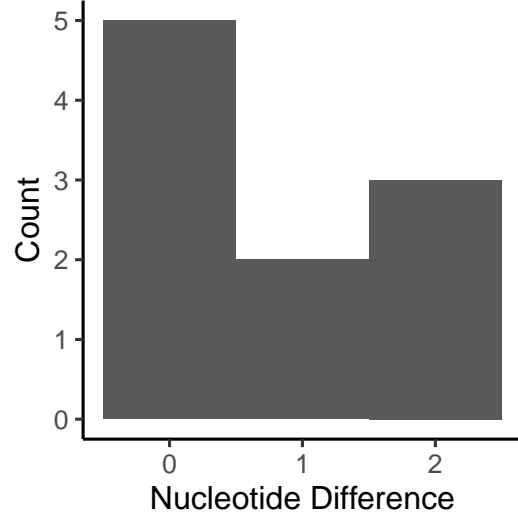
IGHV4-61*05

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



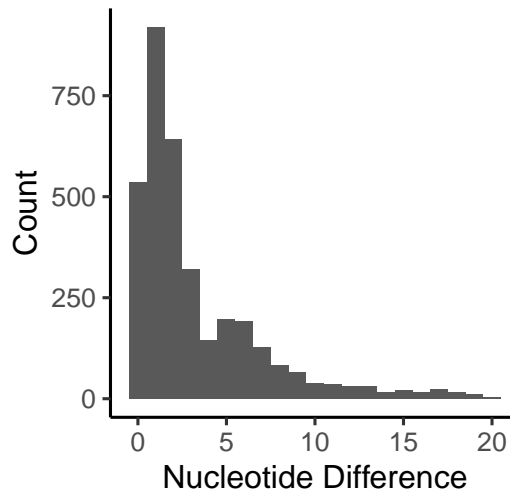
IGHV4-55*02_04_08

10 sequences assigned
5 (50%) exact matches, in which:
3 unique CDR3
2 unique J



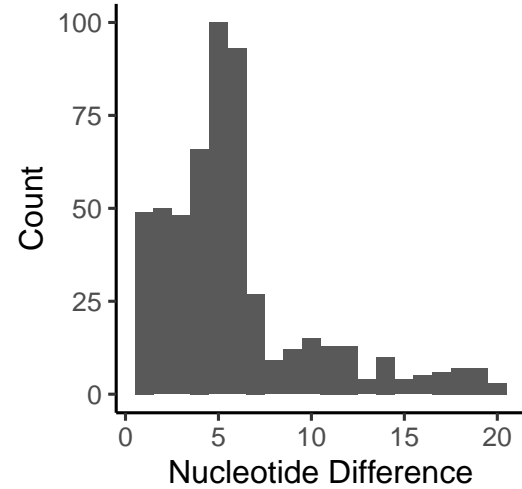
IGHV4-59*12

3588 sequences assigned
535 (14.9%) exact matches, in which:
519 unique CDR3
6 unique J



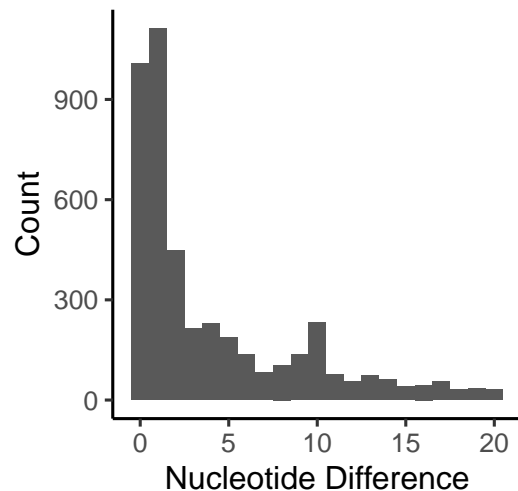
IGHV4-61*08

600 sequences assigned
No exact matches.



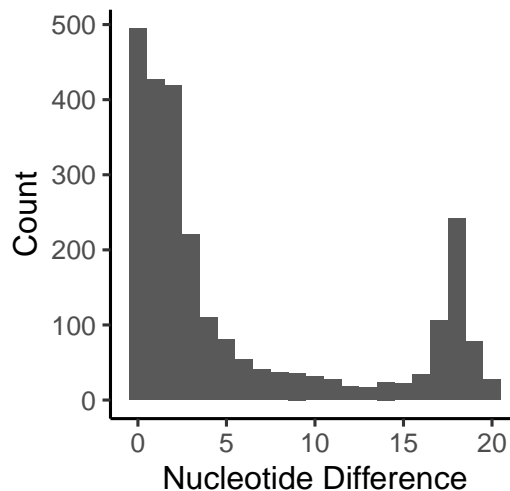
IGHV4-59*08

4869 sequences assigned
1007 (20.7%) exact matches, in which:
818 unique CDR3
6 unique J



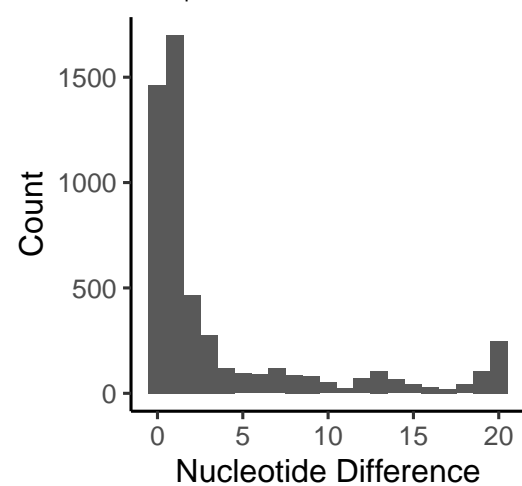
IGHV4-61*01

2671 sequences assigned
495 (18.5%) exact matches, in which:
445 unique CDR3
6 unique J



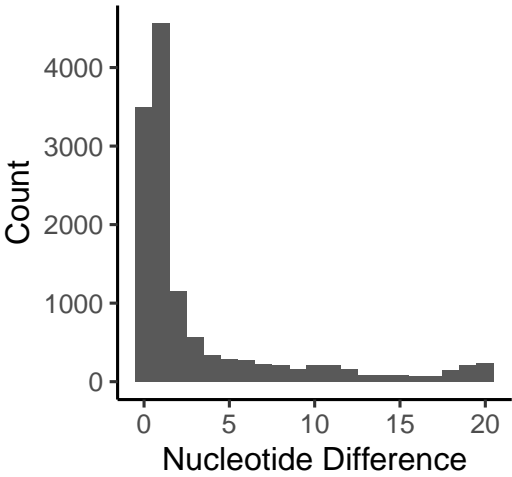
IGHV5-10-1*01_03

7761 sequences assigned
1464 (18.9%) exact matches, in which:
988 unique CDR3
6 unique J



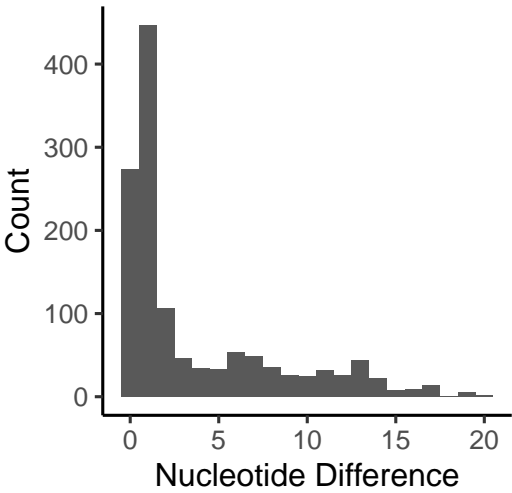
IGHV5-51*01_03

15147 sequences assigned
3498 (23.1%) exact matches, in which:
2088 unique CDR3
6 unique J



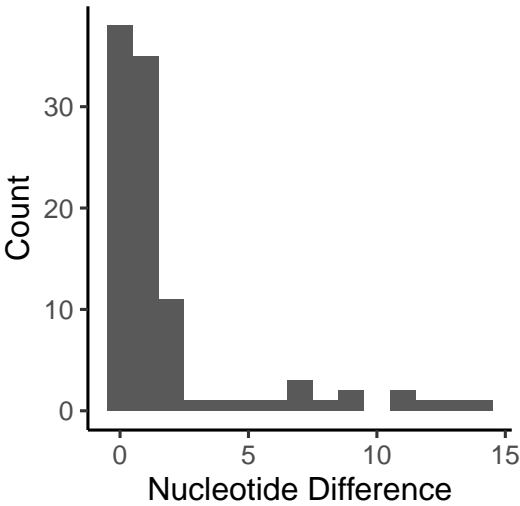
IGHV6-1*01_02

1708 sequences assigned
274 (16%) exact matches, in which:
223 unique CDR3
6 unique J



IGHV7-4-1*01

100 sequences assigned
38 (38%) exact matches, in which:
36 unique CDR3
5 unique J





Novel sequence(s)IGHV1-69*01_12_13_G238AIGHV3-48*03_T303G are not listed in the genotype and will be ignored.

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

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