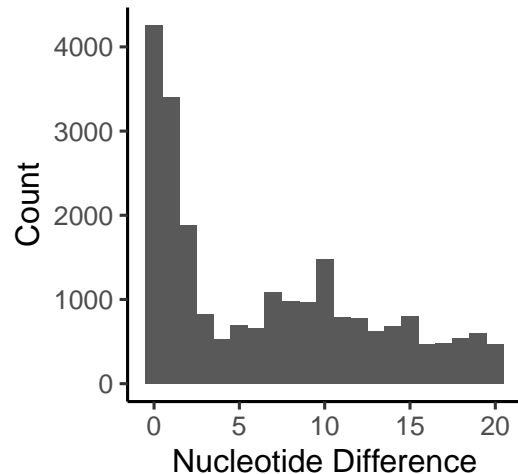


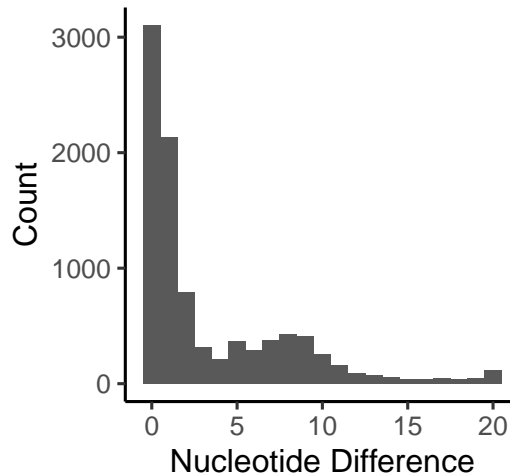
IGHV1-2*02

25755 sequences assigned
4255 (16.5%) exact matches, in which:
3743 unique CDR3
6 unique J



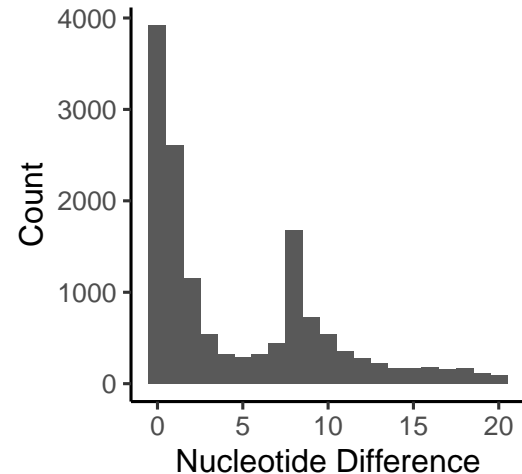
IGHV1-8*01

9803 sequences assigned
3102 (31.6%) exact matches, in which:
2778 unique CDR3
6 unique J



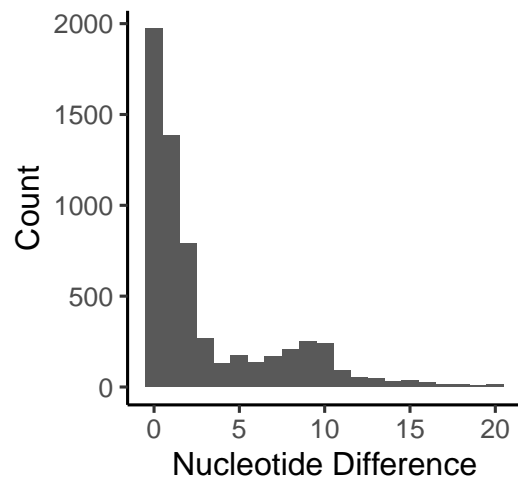
IGHV1-18*04

16179 sequences assigned
3919 (24.2%) exact matches, in which:
3531 unique CDR3
6 unique J



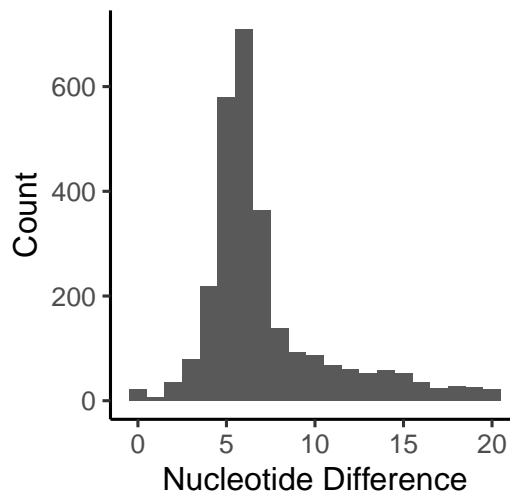
IGHV1-2*04

6194 sequences assigned
1972 (31.8%) exact matches, in which:
1778 unique CDR3
6 unique J



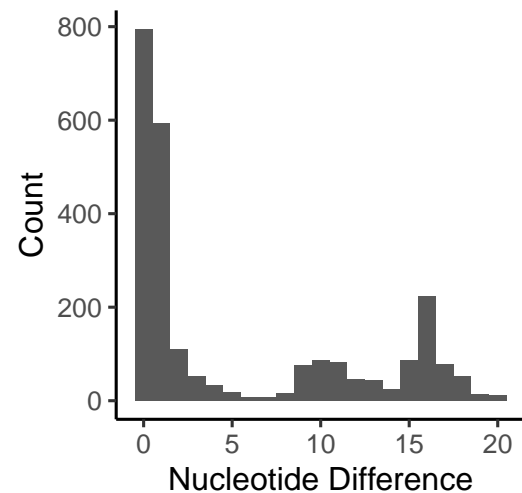
IGHV1-8*02

3182 sequences assigned
22 (0.7%) exact matches, in which:
22 unique CDR3
5 unique J



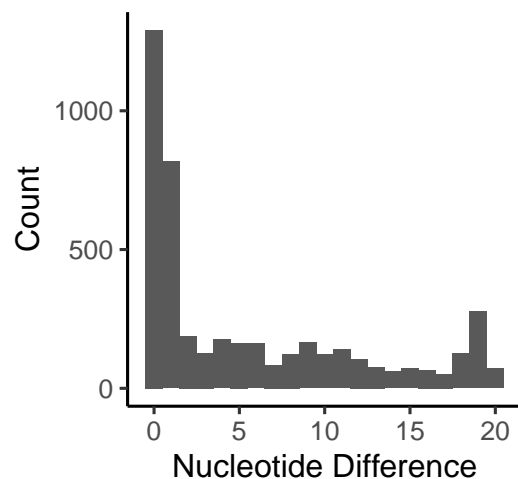
IGHV1-24*01

2520 sequences assigned
795 (31.5%) exact matches, in which:
688 unique CDR3
6 unique J



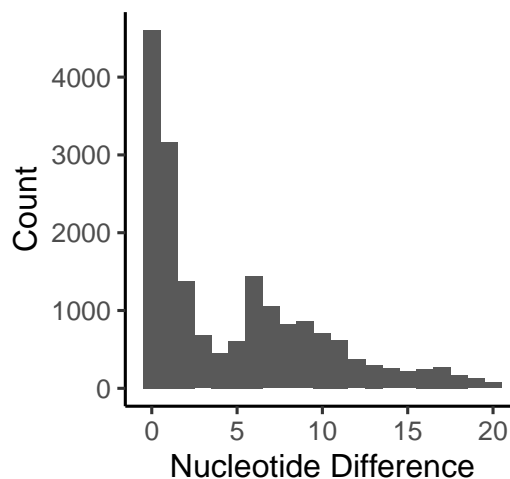
IGHV1-3*01_05

4949 sequences assigned
1291 (26.1%) exact matches, in which:
1141 unique CDR3
6 unique J



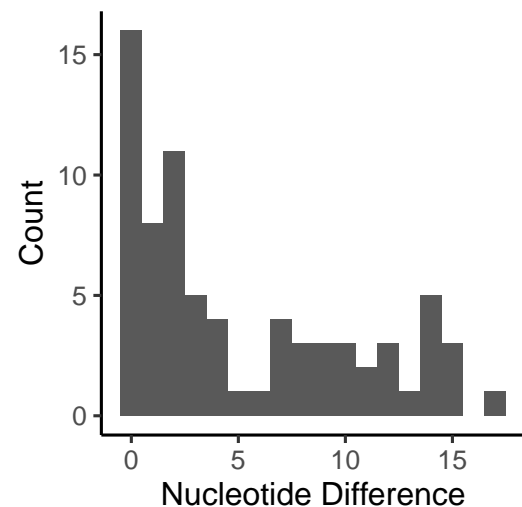
IGHV1-18*01

19413 sequences assigned
4605 (23.7%) exact matches, in which:
4122 unique CDR3
6 unique J



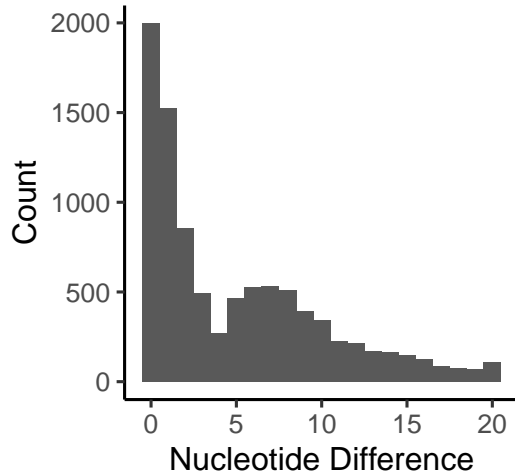
IGHV1-45*02

98 sequences assigned
16 (16.3%) exact matches, in which:
14 unique CDR3
4 unique J



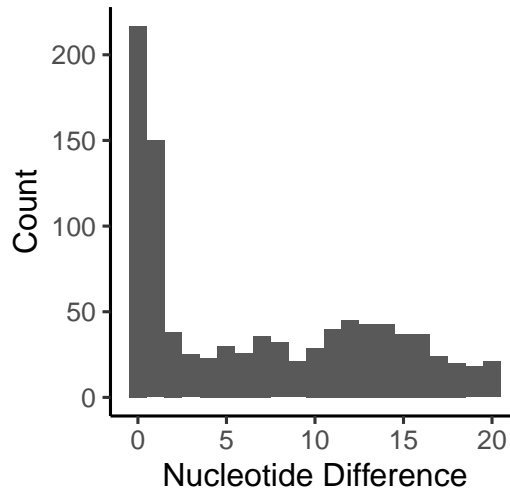
IGHV1-46*01

9763 sequences assigned
1997 (20.5%) exact matches, in which:
1842 unique CDR3
6 unique J



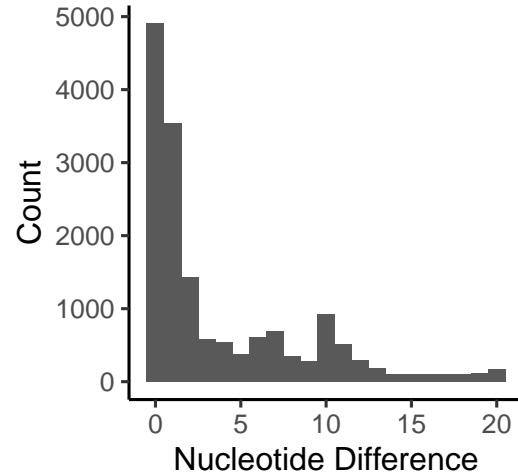
IGHV1-58*01_03

1100 sequences assigned
217 (19.7%) exact matches, in which:
199 unique CDR3
6 unique J



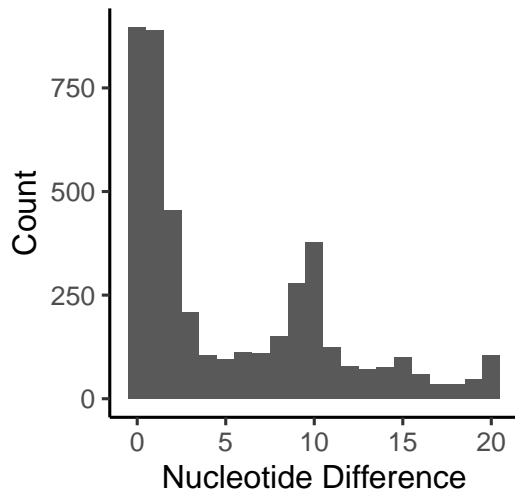
IGHV1-69*01_12_13

17898 sequences assigned
4907 (27.4%) exact matches, in which:
4519 unique CDR3
6 unique J



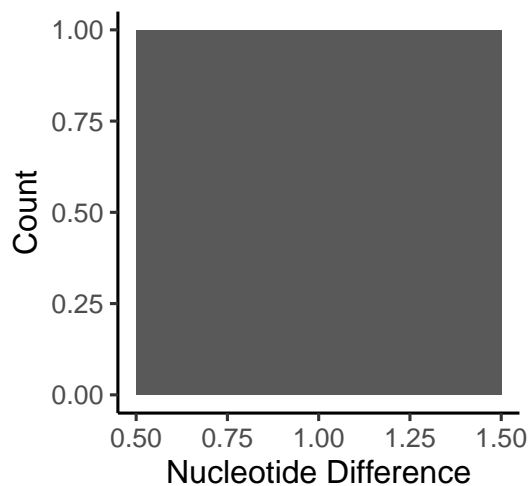
IGHV1-46*03

5317 sequences assigned
897 (16.9%) exact matches, in which:
741 unique CDR3
6 unique J



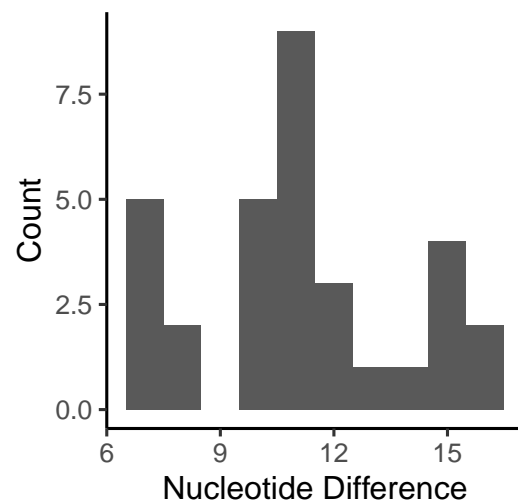
IGHV1-68*01

1 sequences assigned
No exact matches.



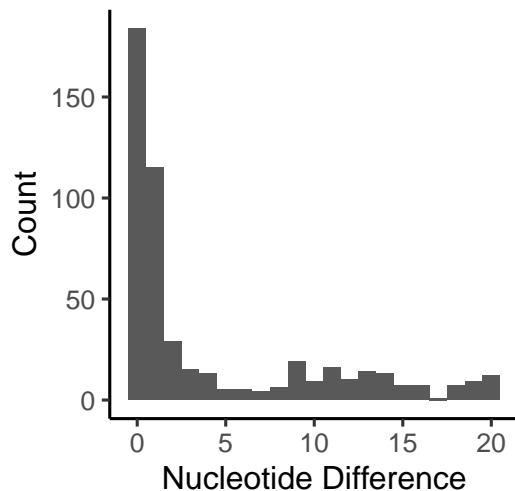
IGHV1-NL1*01

33 sequences assigned
No exact matches.



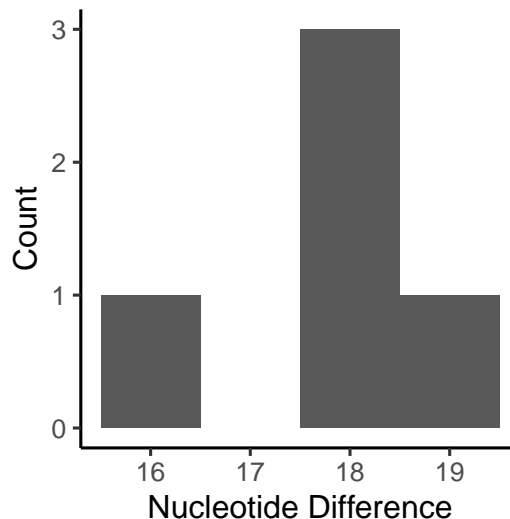
IGHV1-58*02

522 sequences assigned
184 (35.2%) exact matches, in which:
165 unique CDR3
6 unique J



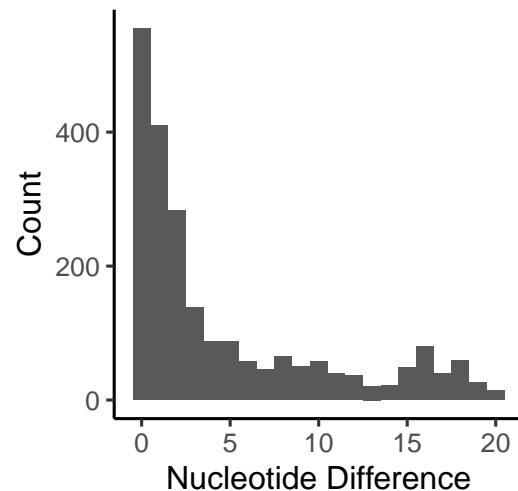
IGHV1-69-2*01

6 sequences assigned
No exact matches.



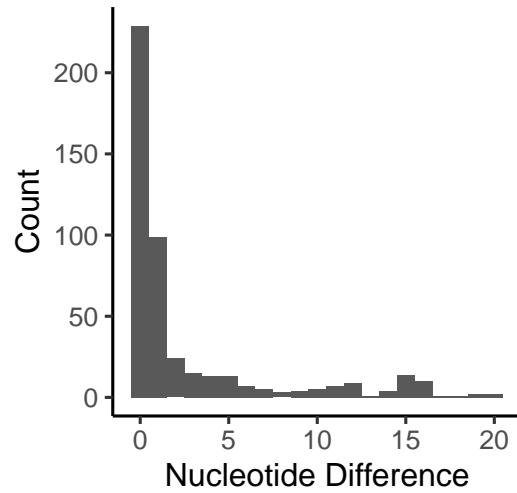
IGHV2-5*01

2379 sequences assigned
555 (23.3%) exact matches, in which:
493 unique CDR3
6 unique J



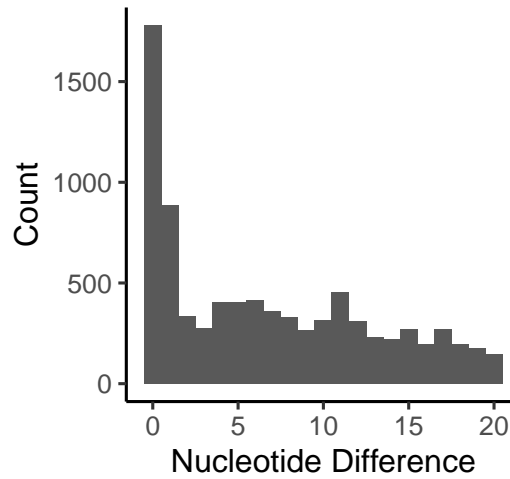
IGHV2-26*01

488 sequences assigned
229 (46.9%) exact matches, in which:
210 unique CDR3
6 unique J



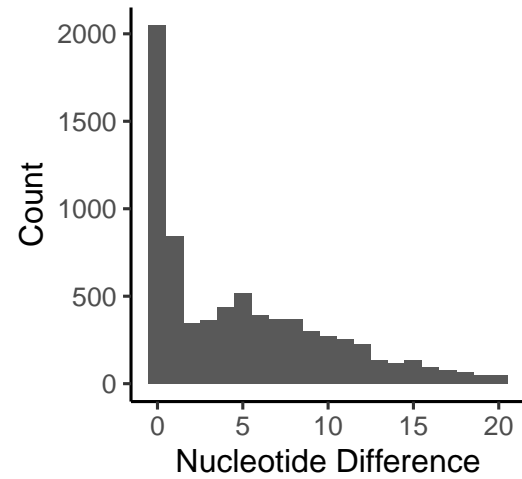
IGHV3-7*01

9668 sequences assigned
1779 (18.4%) exact matches, in which:
1312 unique CDR3
6 unique J



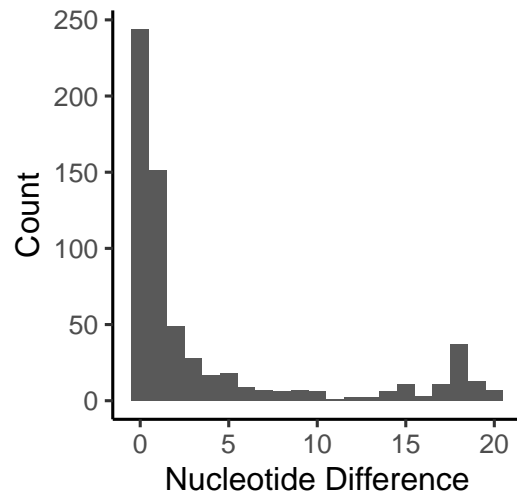
IGHV3-9*01

8158 sequences assigned
2048 (25.1%) exact matches, in which:
1349 unique CDR3
6 unique J



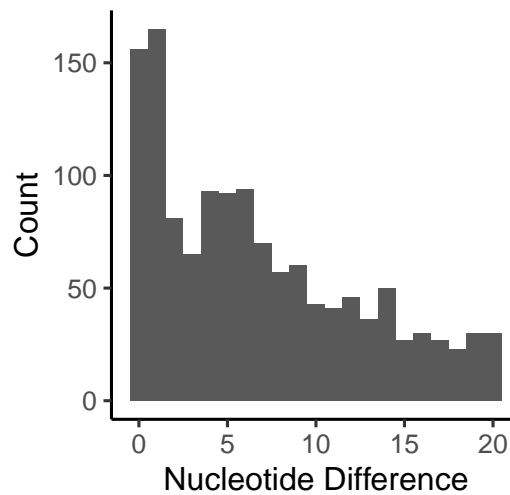
IGHV2-70*01

654 sequences assigned
244 (37.3%) exact matches, in which:
213 unique CDR3
5 unique J



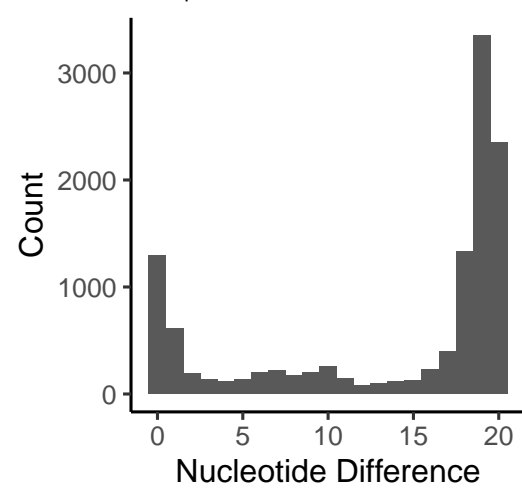
IGHV3-7*03

1724 sequences assigned
156 (9%) exact matches, in which:
139 unique CDR3
5 unique J



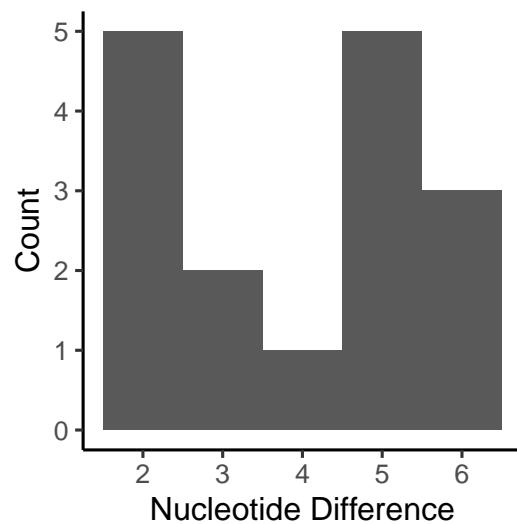
IGHV3-11*01

13337 sequences assigned
1295 (9.7%) exact matches, in which:
915 unique CDR3
6 unique J



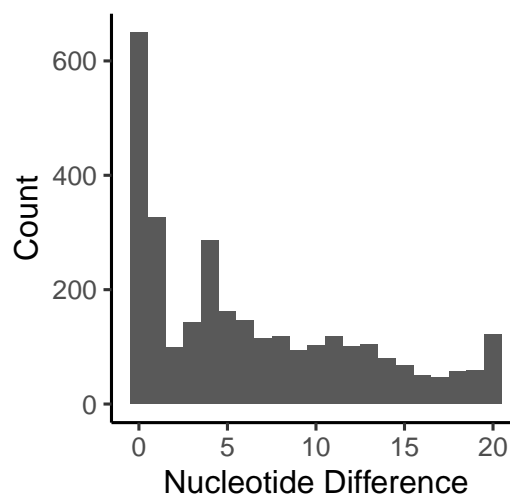
IGHV2-70D*14

16 sequences assigned
No exact matches.



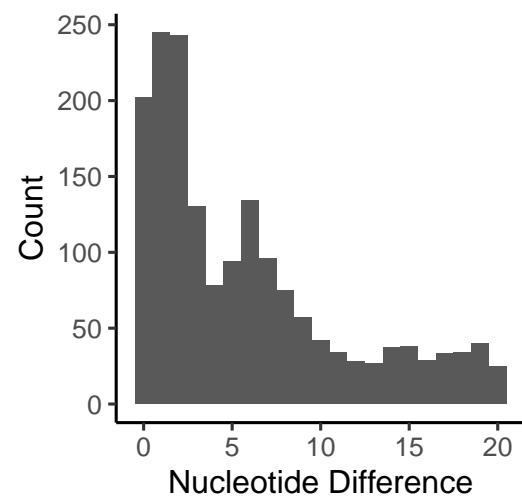
IGHV3-7*05

4068 sequences assigned
650 (16%) exact matches, in which:
449 unique CDR3
6 unique J



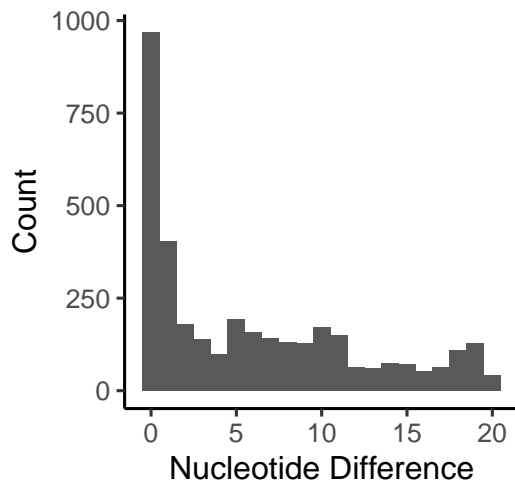
IGHV3-11*04

1851 sequences assigned
202 (10.9%) exact matches, in which:
196 unique CDR3
6 unique J



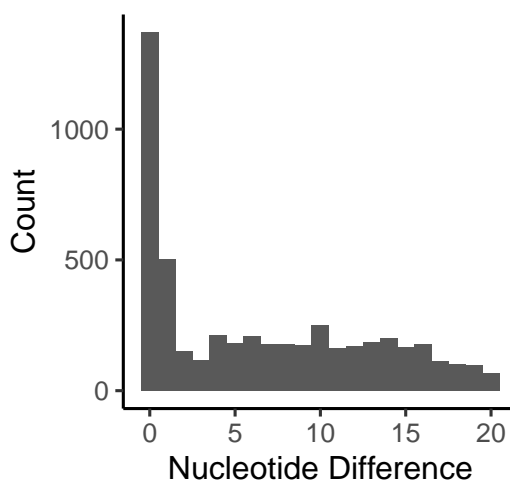
IGHV3-11*06

4160 sequences assigned
968 (23.3%) exact matches, in which:
721 unique CDR3
6 unique J



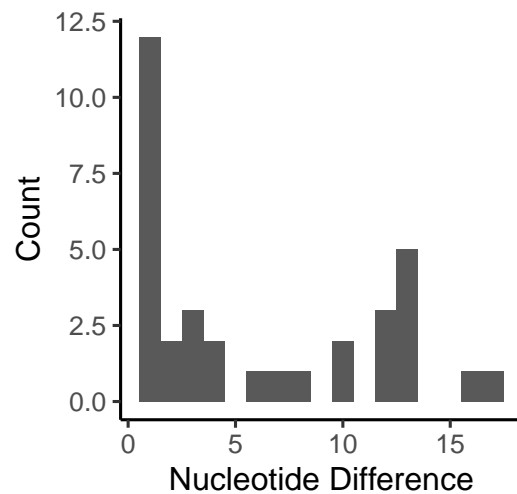
IGHV3-15*01_02

6116 sequences assigned
1370 (22.4%) exact matches, in which:
956 unique CDR3
6 unique J



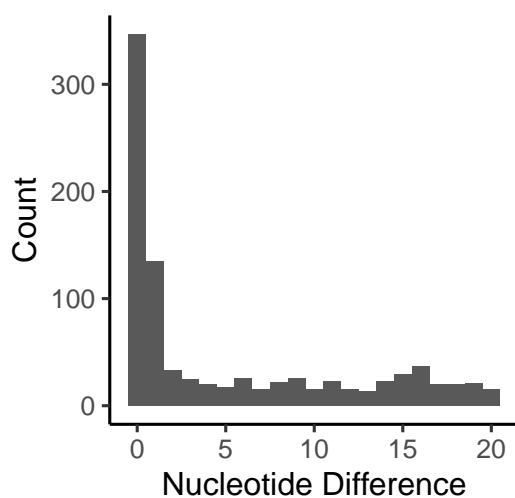
IGHV3-20*03_04

55 sequences assigned
No exact matches.



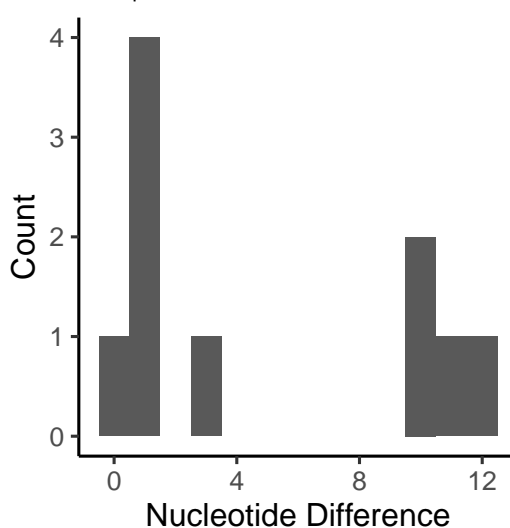
IGHV3-13*01

1032 sequences assigned
347 (33.6%) exact matches, in which:
215 unique CDR3
5 unique J



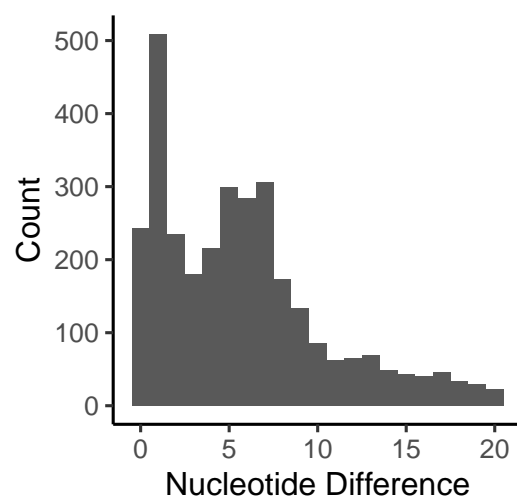
IGHV3-19*01

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



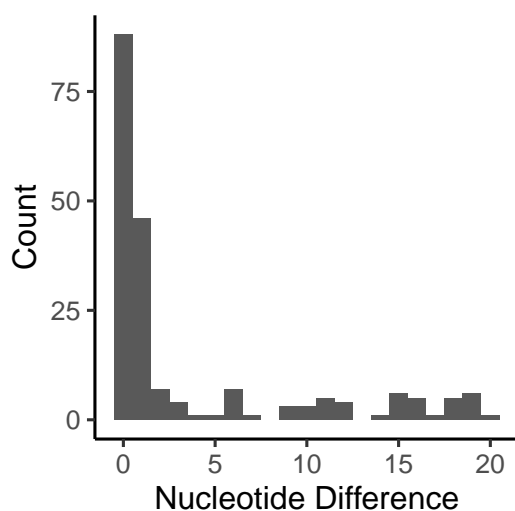
IGHV3-21*04

3318 sequences assigned
243 (7.3%) exact matches, in which:
228 unique CDR3
5 unique J



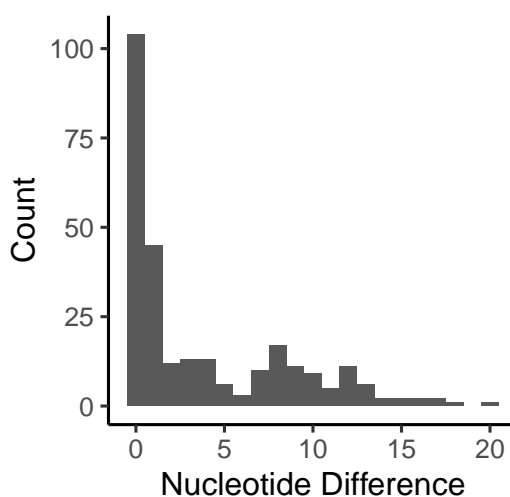
IGHV3-13*05

200 sequences assigned
88 (44%) exact matches, in which:
58 unique CDR3
5 unique J



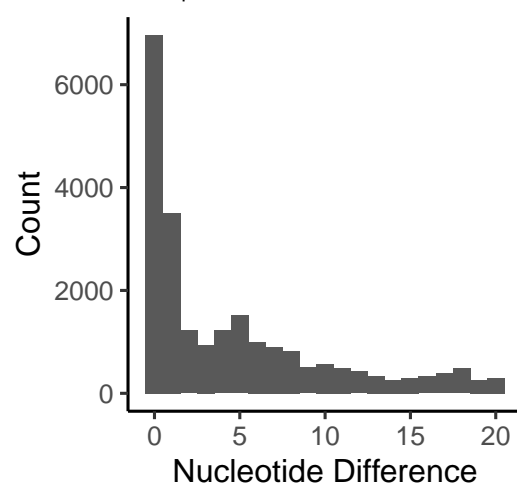
IGHV3-20*01_02

283 sequences assigned
104 (36.7%) exact matches, in which:
73 unique CDR3
5 unique J



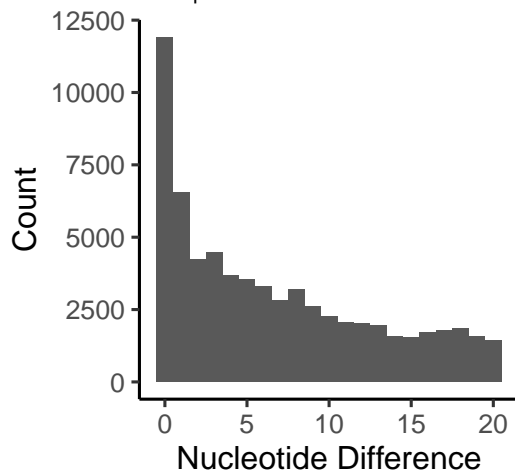
IGHV3-21*01_02

24996 sequences assigned
6965 (27.9%) exact matches, in which:
4755 unique CDR3
6 unique J



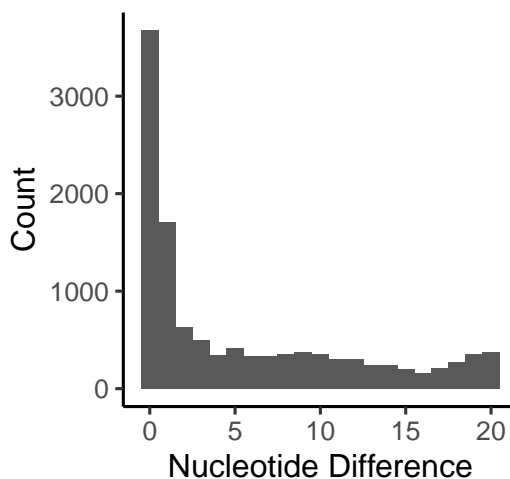
IGHV3-23*01_04

77018 sequences assigned
11912 (15.5%) exact matches, in which:
7410 unique CDR3
6 unique J



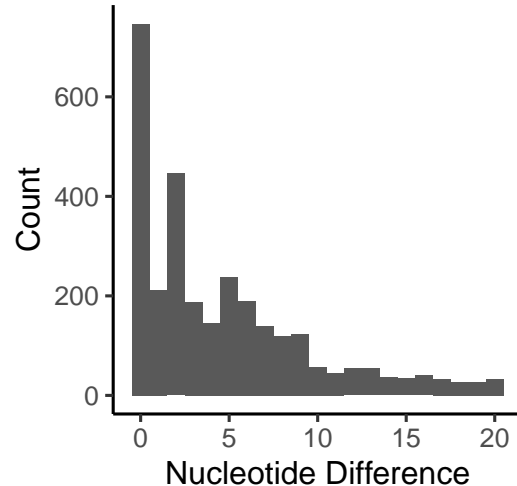
IGHV3-30*18

13820 sequences assigned
3674 (26.6%) exact matches, in which:
2441 unique CDR3
6 unique J



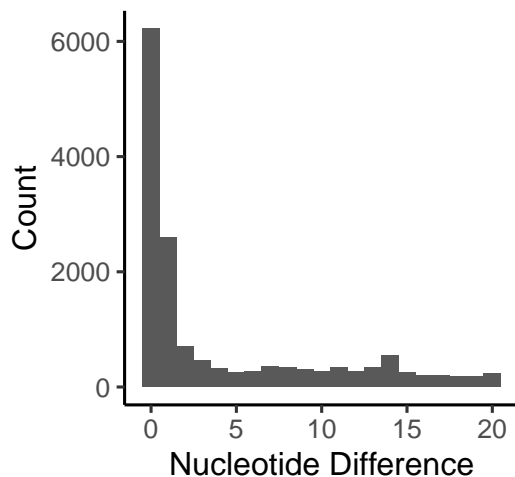
IGHV3-33*08

3136 sequences assigned
747 (23.8%) exact matches, in which:
671 unique CDR3
6 unique J



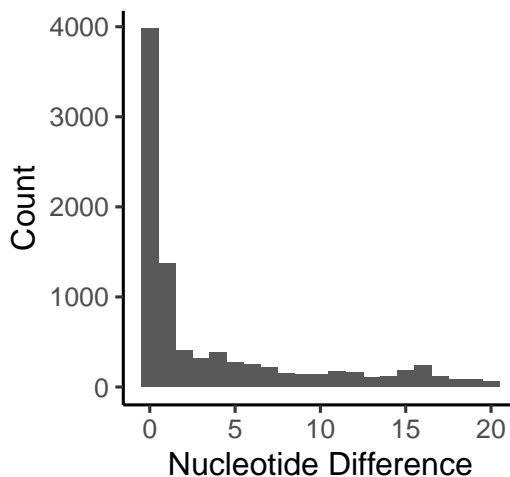
IGHV3-30-3*01

16702 sequences assigned
6220 (37.2%) exact matches, in which:
4164 unique CDR3
6 unique J



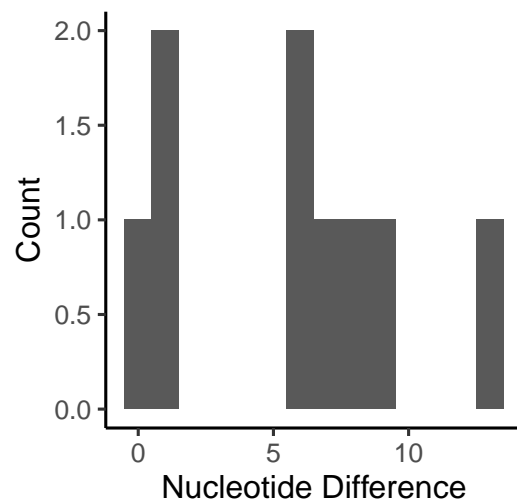
IGHV3-33*01

9475 sequences assigned
3978 (42%) exact matches, in which:
2829 unique CDR3
6 unique J



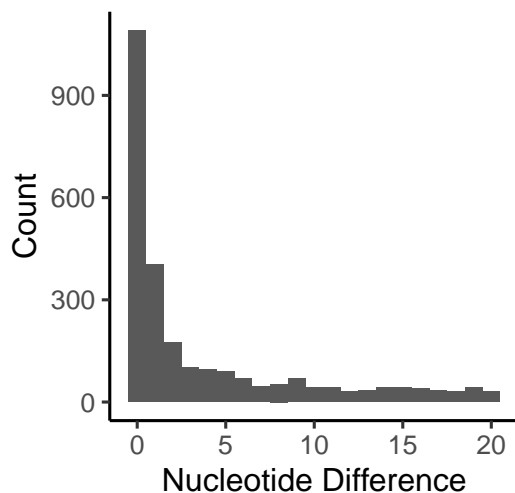
IGHV3-35*01

9 sequences assigned
1 (11.1%) exact matches, in which:
1 unique CDR3
1 unique J



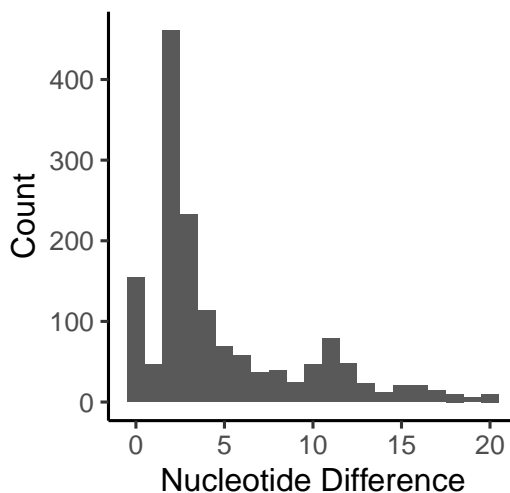
IGHV3-30*03

2948 sequences assigned
1091 (37%) exact matches, in which:
1007 unique CDR3
6 unique J



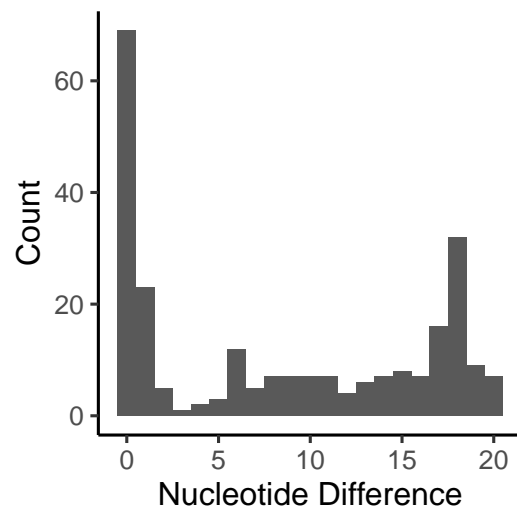
IGHV3-33*06

1657 sequences assigned
155 (9.4%) exact matches, in which:
154 unique CDR3
6 unique J



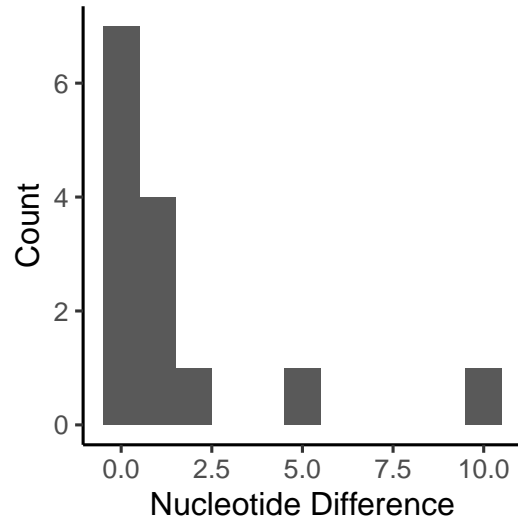
IGHV3-43*01

272 sequences assigned
69 (25.4%) exact matches, in which:
45 unique CDR3
4 unique J



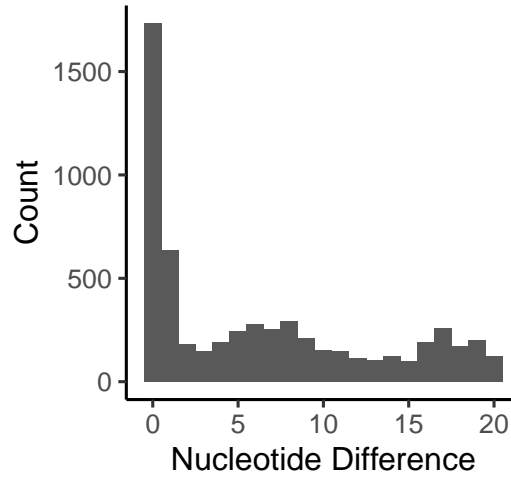
IGHV3-47*01

14 sequences assigned
7 (50%) exact matches, in which:
5 unique CDR3
2 unique J



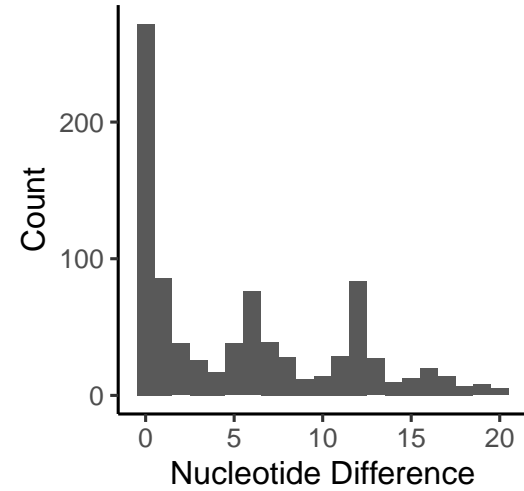
IGHV3-48*03

6938 sequences assigned
1733 (25%) exact matches, in which:
1163 unique CDR3
6 unique J



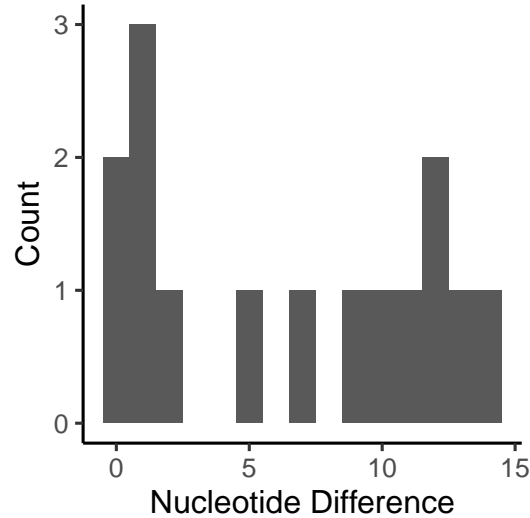
IGHV3-49*03_05

954 sequences assigned
272 (28.5%) exact matches, in which:
196 unique CDR3
5 unique J



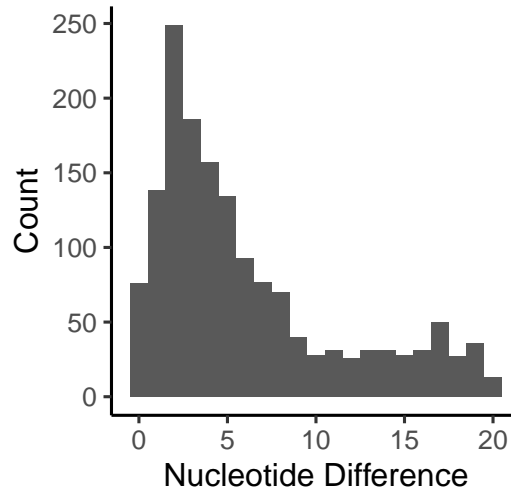
IGHV3-47*02

15 sequences assigned
2 (13.3%) exact matches, in which:
1 unique CDR3
1 unique J



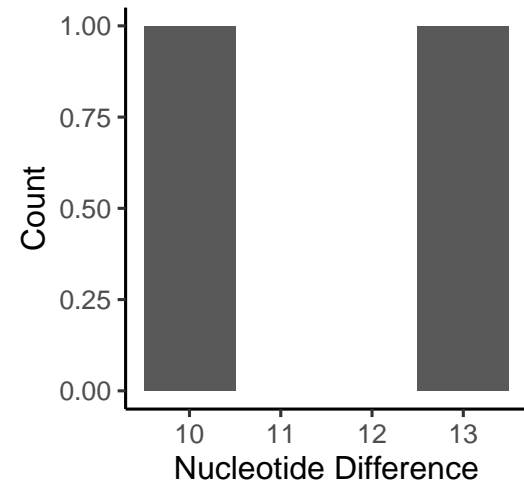
IGHV3-48*04

1695 sequences assigned
76 (4.5%) exact matches, in which:
76 unique CDR3
5 unique J



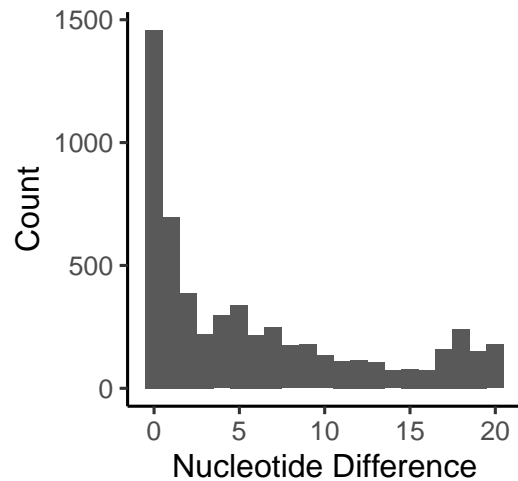
IGHV3-52*02

2 sequences assigned
No exact matches.



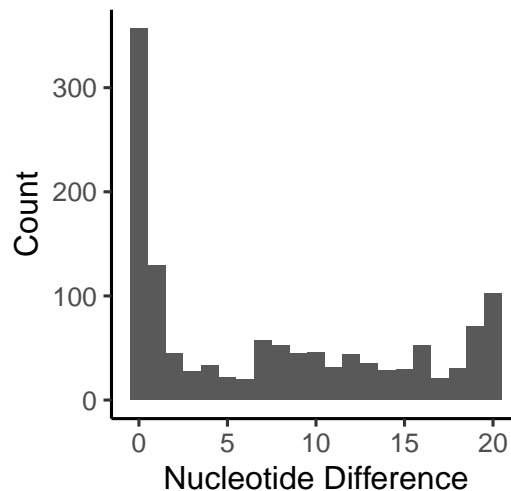
IGHV3-48*01

6566 sequences assigned
1458 (22.2%) exact matches, in which:
1036 unique CDR3
6 unique J



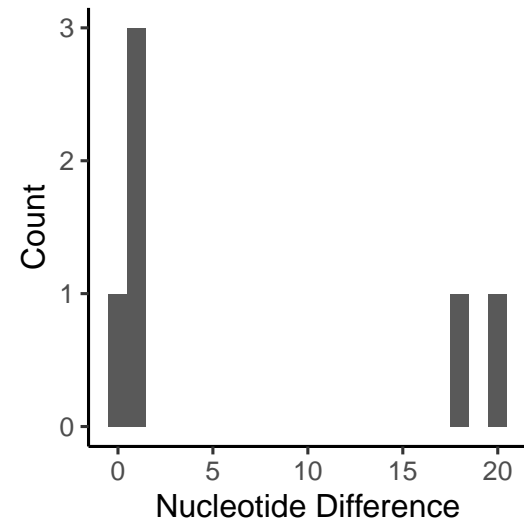
IGHV3-49*04

1583 sequences assigned
357 (22.6%) exact matches, in which:
251 unique CDR3
5 unique J



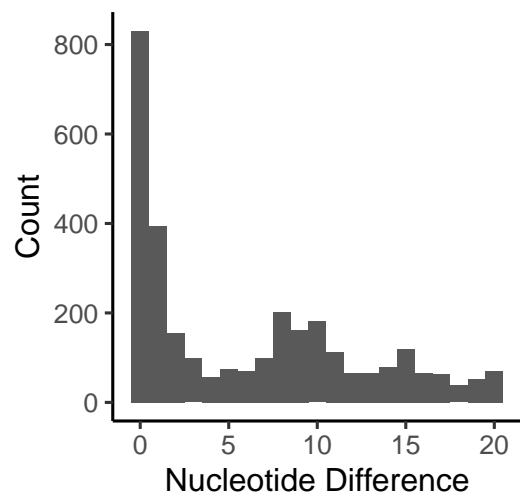
IGHV3-52*01_03

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



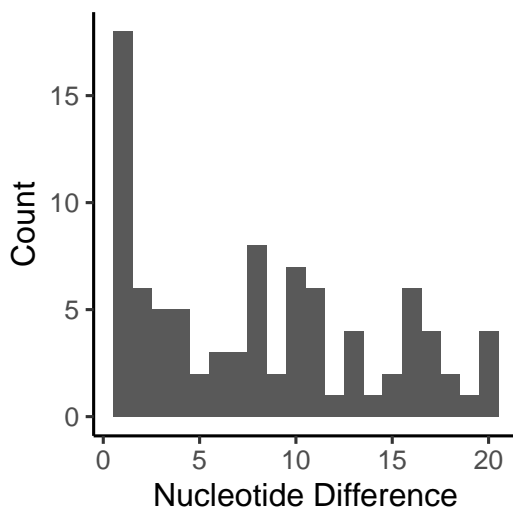
IGHV3-53*01_02

3464 sequences assigned
831 (24%) exact matches, in which:
584 unique CDR3
6 unique J



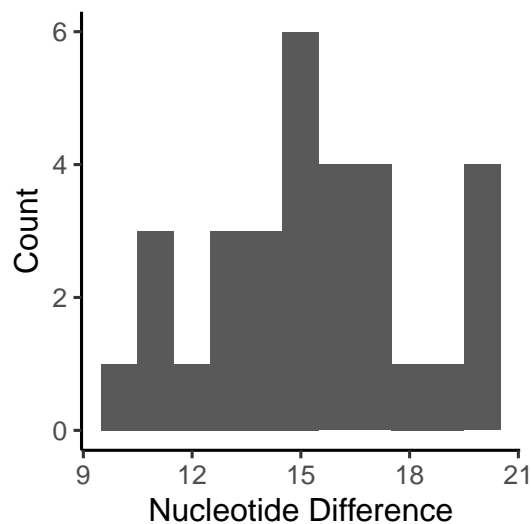
IGHV3-66*01

103 sequences assigned
No exact matches.



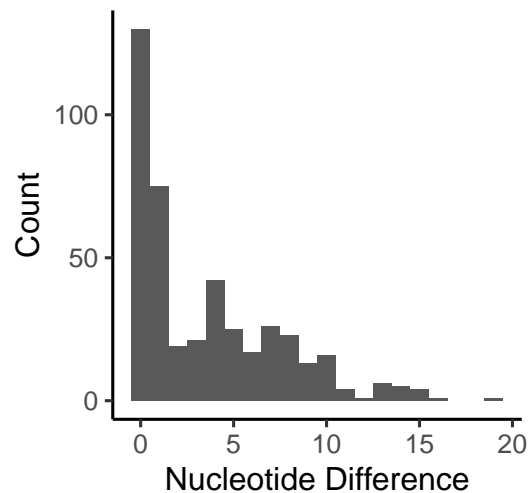
IGHV3-69-1*02

64 sequences assigned
No exact matches.



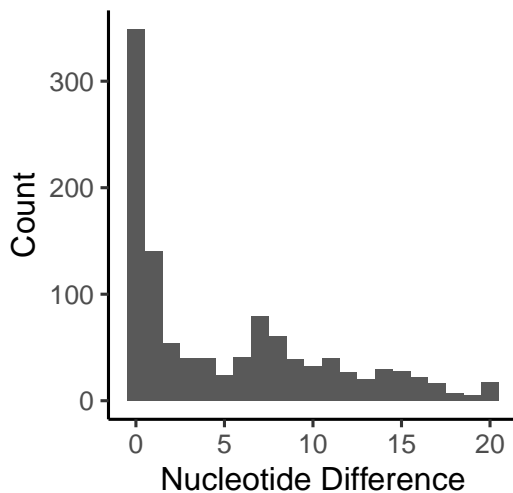
IGHV3-64*01

436 sequences assigned
130 (29.8%) exact matches, in which:
87 unique CDR3
5 unique J



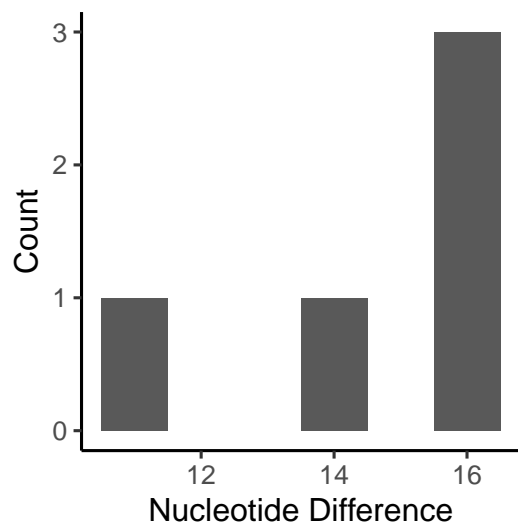
IGHV3-66*02

1212 sequences assigned
349 (28.8%) exact matches, in which:
257 unique CDR3
6 unique J



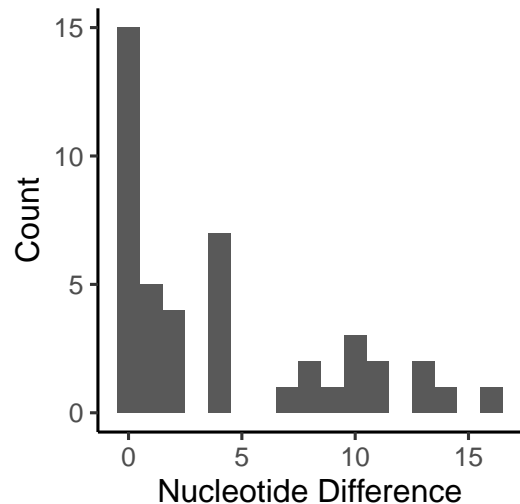
IGHV3-71*01_04

7 sequences assigned
No exact matches.



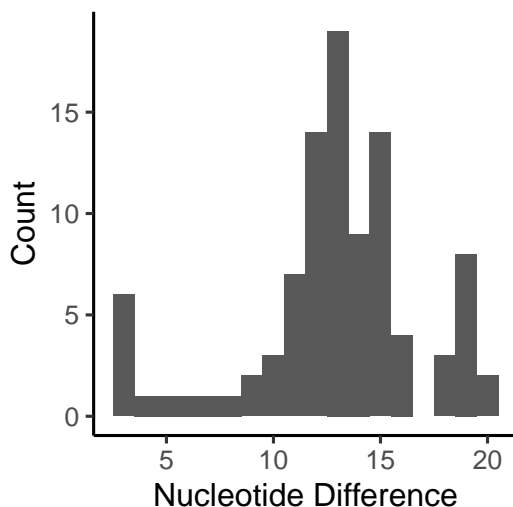
IGHV3-64*02_07

51 sequences assigned
15 (29.4%) exact matches, in which:
11 unique CDR3
4 unique J



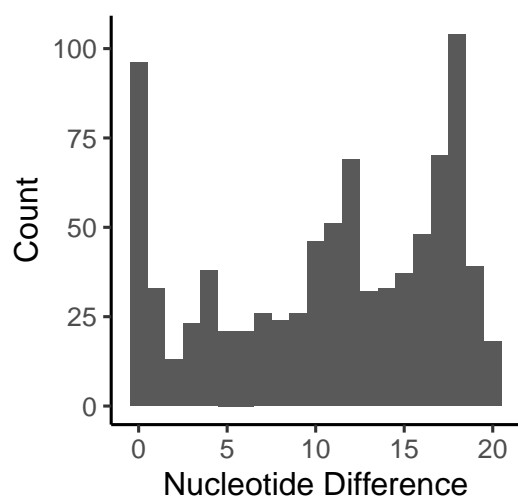
IGHV3-69-1*01

160 sequences assigned
No exact matches.



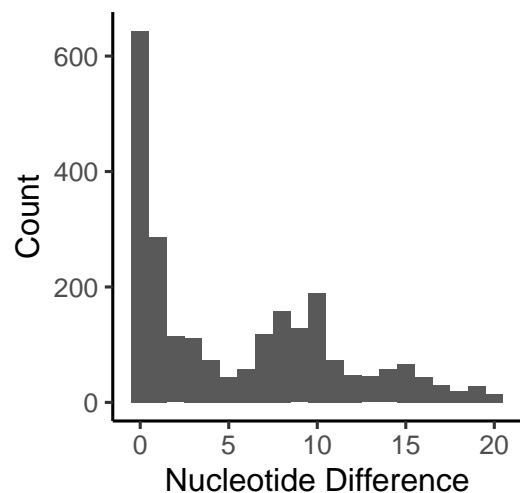
IGHV3-72*01

1138 sequences assigned
96 (8.4%) exact matches, in which:
69 unique CDR3
5 unique J



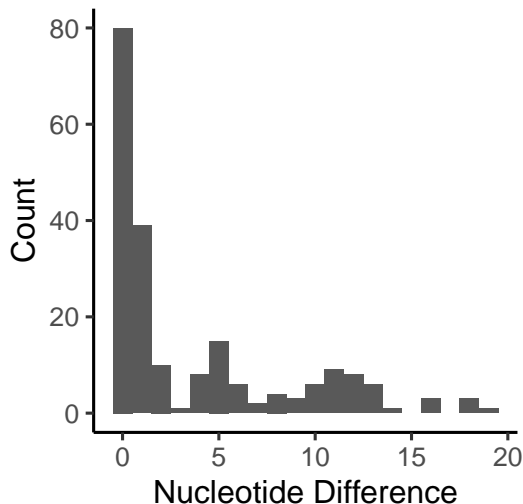
IGHV3-73*01_02

2561 sequences assigned
644 (25.1%) exact matches, in which:
435 unique CDR3
6 unique J



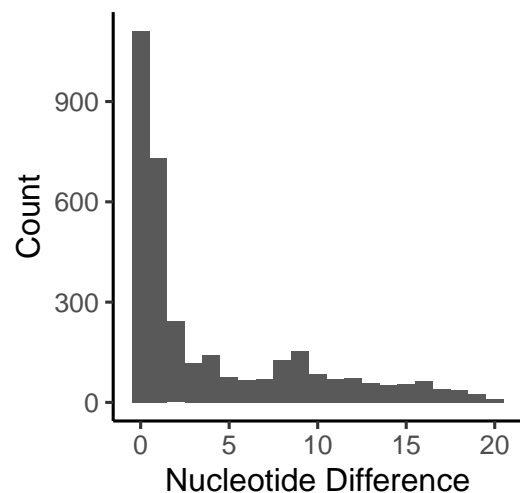
IGHV3-43D*04

215 sequences assigned
80 (37.2%) exact matches, in which:
50 unique CDR3
4 unique J



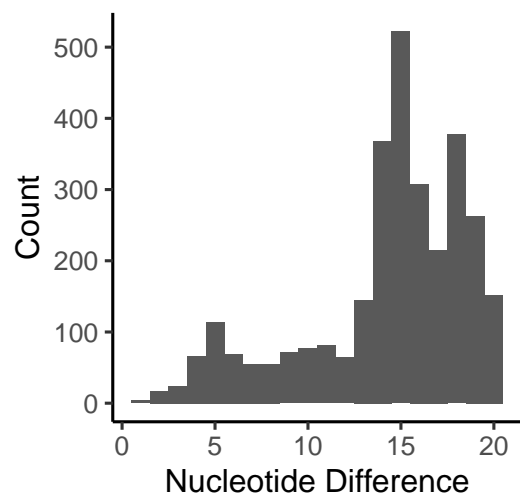
IGHV4-4*07

3929 sequences assigned
1112 (28.3%) exact matches, in which:
1005 unique CDR3
6 unique J



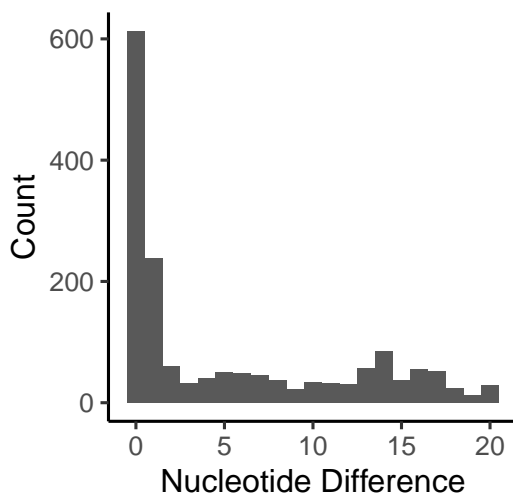
IGHV3-74*03

3633 sequences assigned
No exact matches.



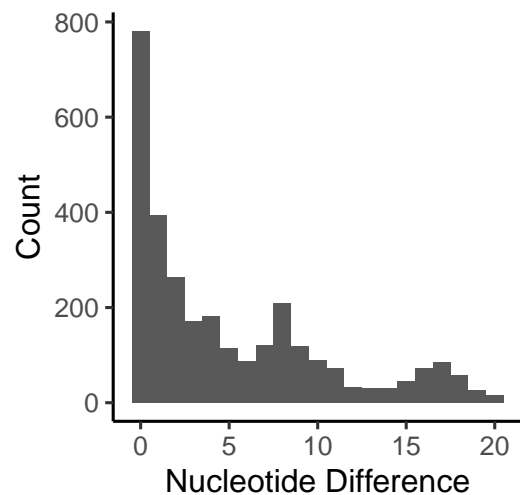
IGHV3-64D*08

2206 sequences assigned
613 (27.8%) exact matches, in which:
374 unique CDR3
6 unique J



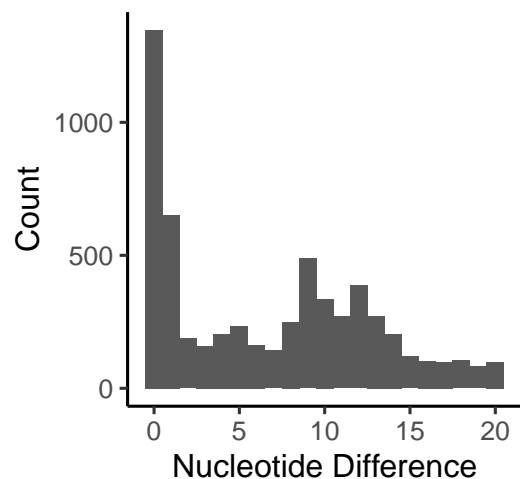
IGHV4-4*02_03

3152 sequences assigned
781 (24.8%) exact matches, in which:
715 unique CDR3
6 unique J



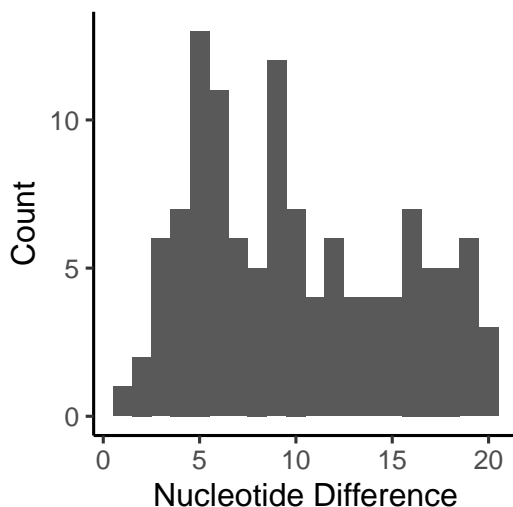
IGHV3-74*01_02

6303 sequences assigned
1347 (21.4%) exact matches, in which:
810 unique CDR3
6 unique J



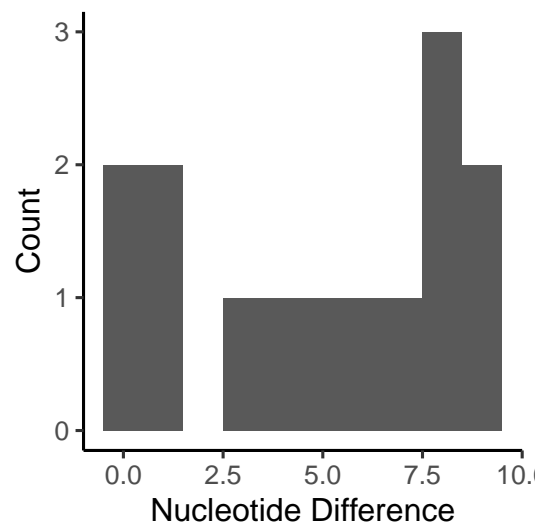
IGHV3-NL1*01

137 sequences assigned
No exact matches.



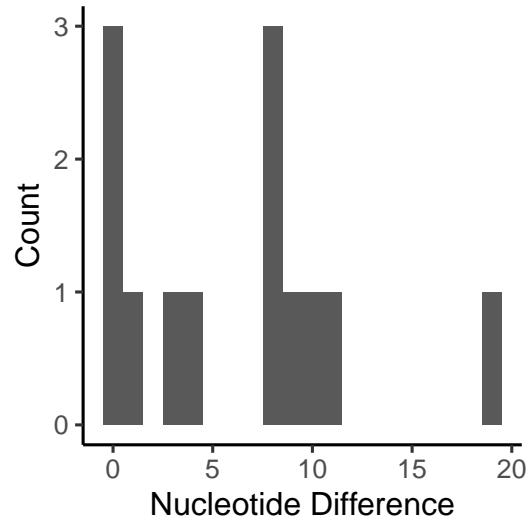
IGHV4-28*03

16 sequences assigned
2 (12.5%) exact matches, in which:
2 unique CDR3
1 unique J



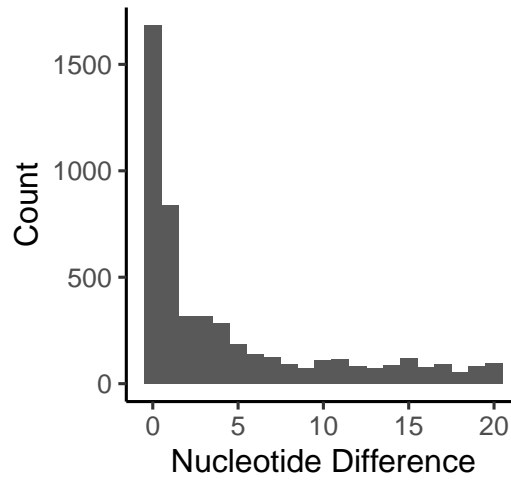
IGHV4-28*01_07

13 sequences assigned
3 (23.1%) exact matches, in which:
3 unique CDR3
2 unique J



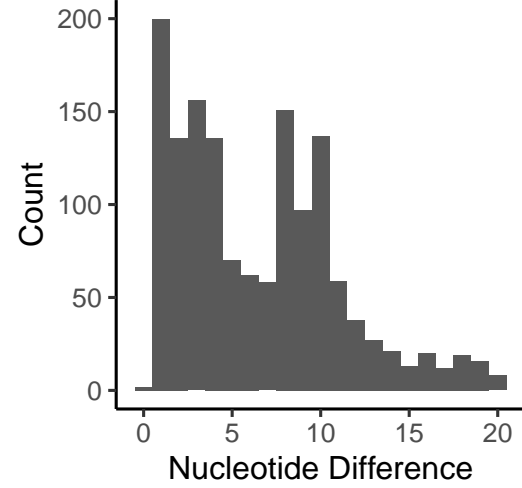
IGHV4-31*02

5295 sequences assigned
1683 (31.8%) exact matches, in which:
1550 unique CDR3
6 unique J



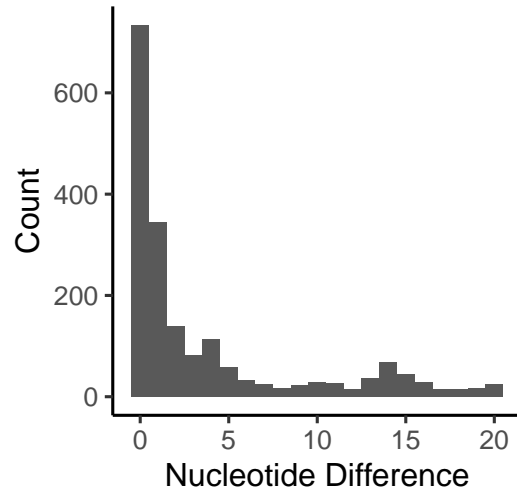
IGHV4-39*07

1949 sequences assigned
2 (0.1%) exact matches, in which:
2 unique CDR3
1 unique J



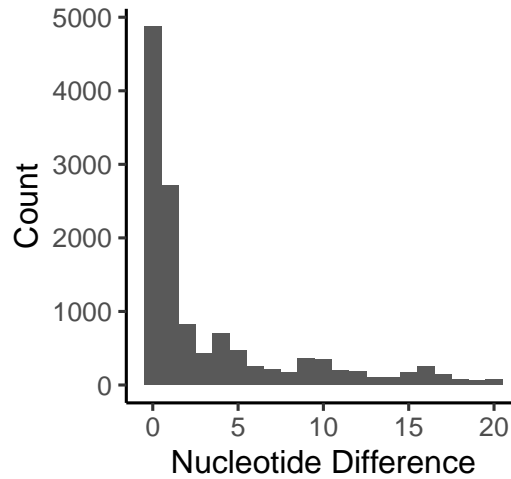
IGHV4-30-2*01

2051 sequences assigned
734 (35.8%) exact matches, in which:
582 unique CDR3
6 unique J



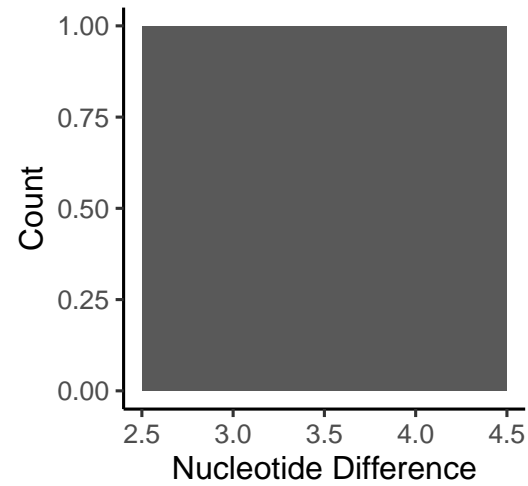
IGHV4-34*01_02

14235 sequences assigned
4871 (34.2%) exact matches, in which:
4297 unique CDR3
6 unique J



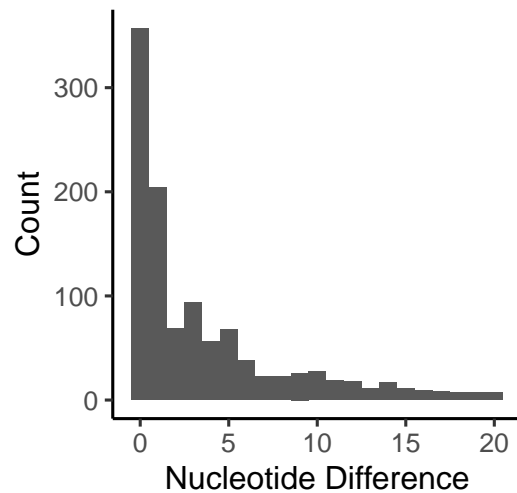
IGHV4-55*09

2 sequences assigned
No exact matches.



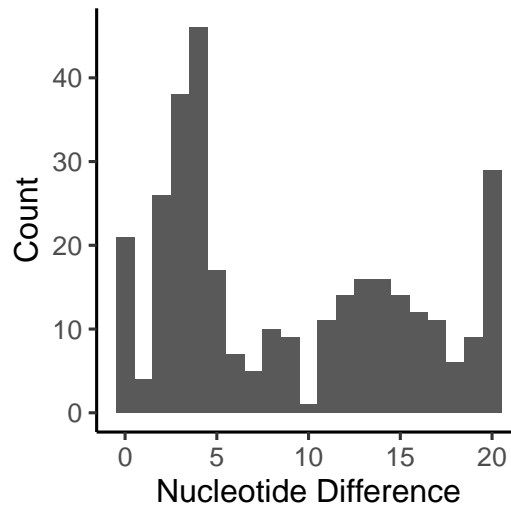
IGHV4-30-4*01

1368 sequences assigned
357 (26.1%) exact matches, in which:
328 unique CDR3
6 unique J



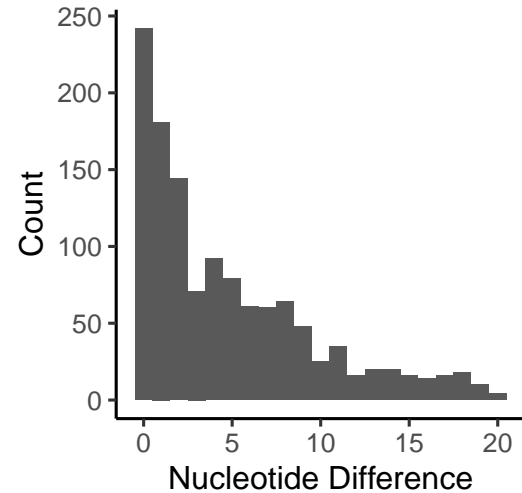
IGHV4-38-2*02

569 sequences assigned
21 (3.7%) exact matches, in which:
21 unique CDR3
4 unique J



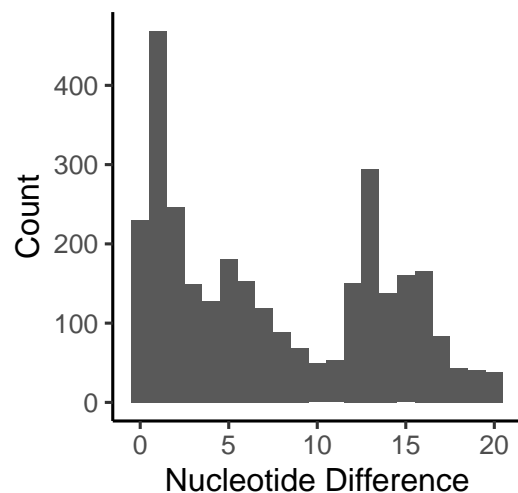
IGHV4-59*08

1304 sequences assigned
242 (18.6%) exact matches, in which:
241 unique CDR3
6 unique J



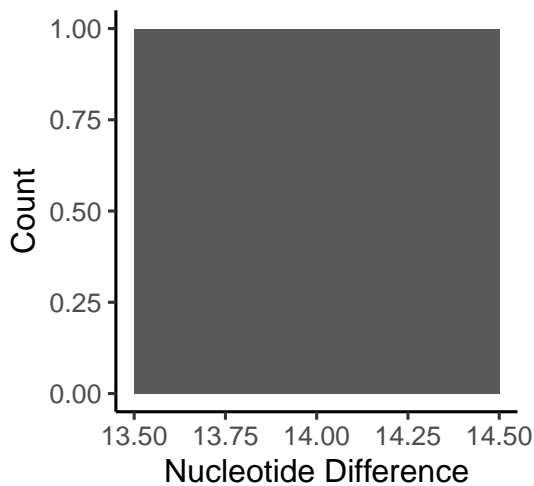
IGHV4–59*12

3307 sequences assigned
230 (7%) exact matches, in which:
227 unique CDR3
6 unique J



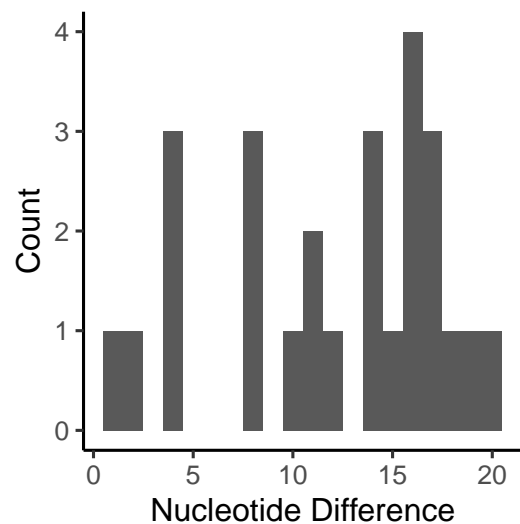
IGHV1/OR15–1*04

2 sequences assigned
No exact matches.



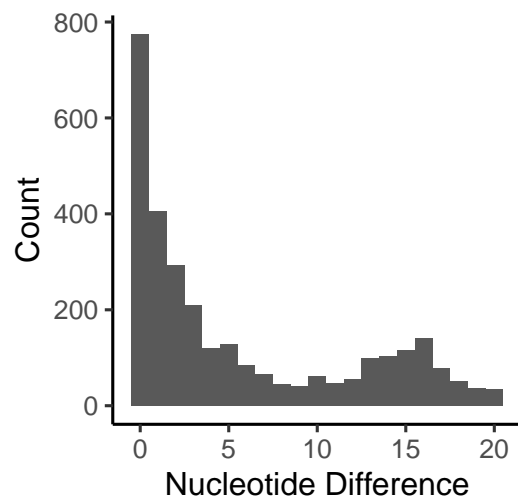
IGHV4/OR15–8*01

31 sequences assigned
No exact matches.



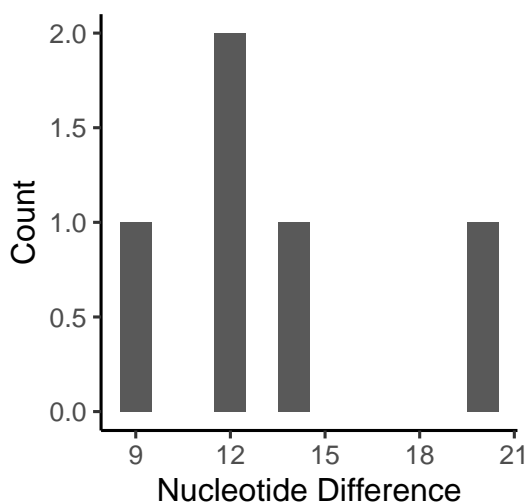
IGHV4–61*01

3167 sequences assigned
775 (24.5%) exact matches, in which:
724 unique CDR3
6 unique J



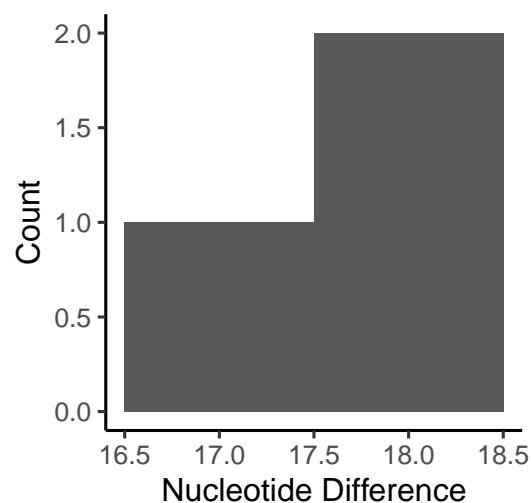
IGHV1/OR15–2*02_03

7 sequences assigned
No exact matches.



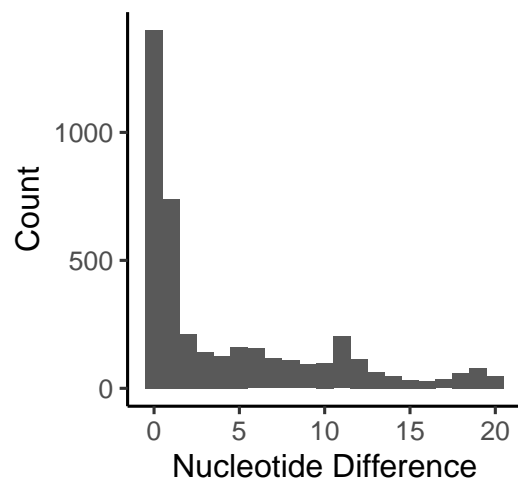
IGHV4/OR15–8*02

9 sequences assigned
No exact matches.



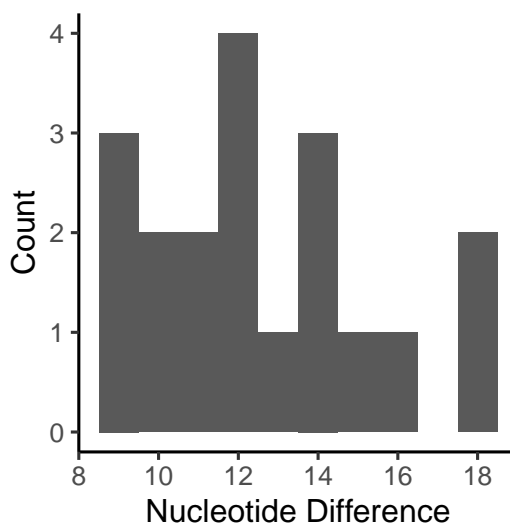
IGHV4–61*02

5034 sequences assigned
1400 (27.8%) exact matches, in which:
1318 unique CDR3
6 unique J



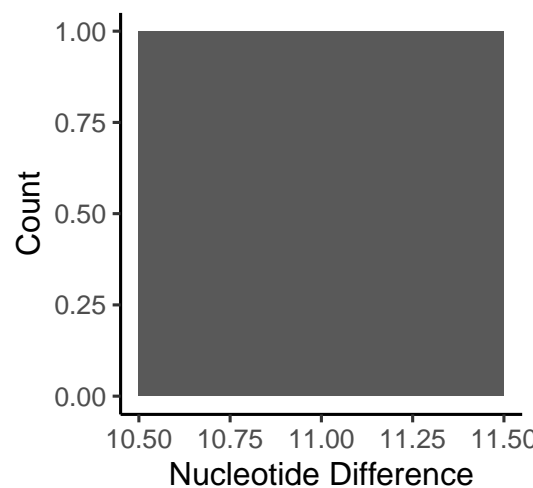
IGHV1/OR15–3*02

31 sequences assigned
No exact matches.



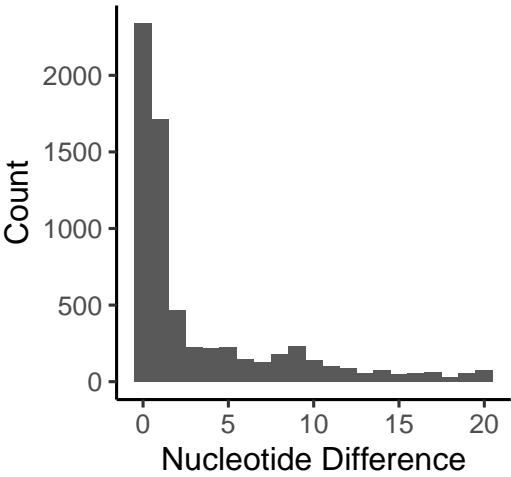
IGHV1/OR15–9*01

1 sequences assigned
No exact matches.



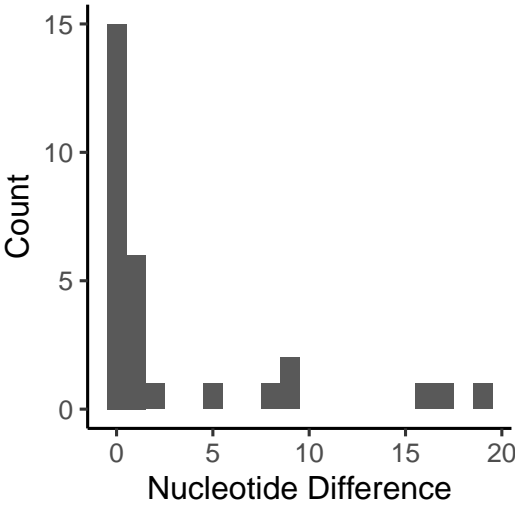
IGHV5-10-1*01_03

6880 sequences assigned
2339 (34%) exact matches, in which:
1608 unique CDR3
6 unique J



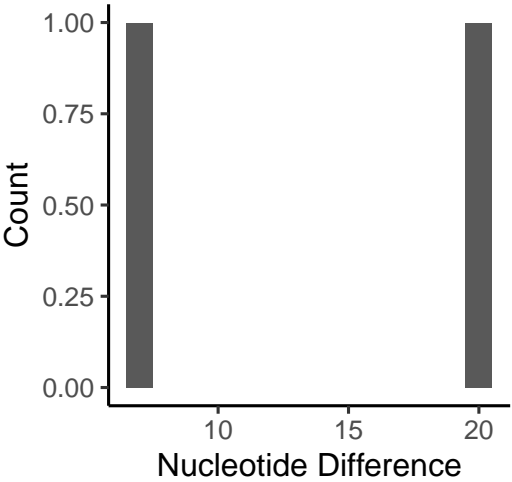
IGHV5-51*07

30 sequences assigned
15 (50%) exact matches, in which:
15 unique CDR3
4 unique J



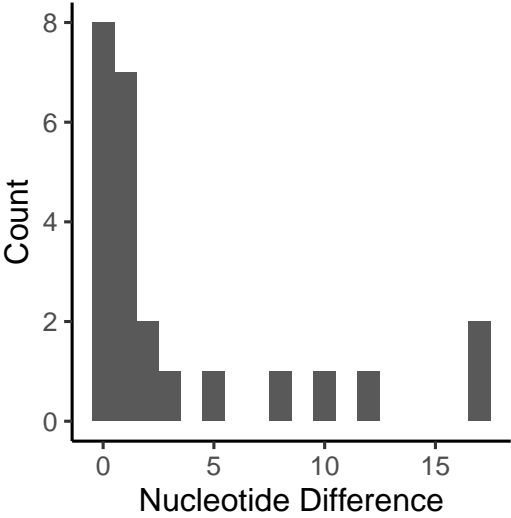
IGHV3/OR16-13*01

4 sequences assigned
No exact matches.



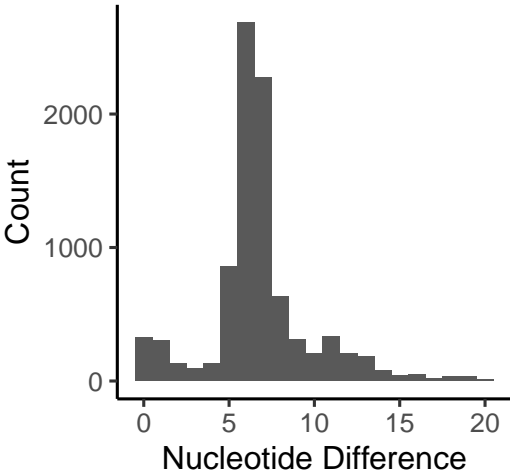
IGHV5-51*04

29 sequences assigned
8 (27.6%) exact matches, in which:
8 unique CDR3
3 unique J



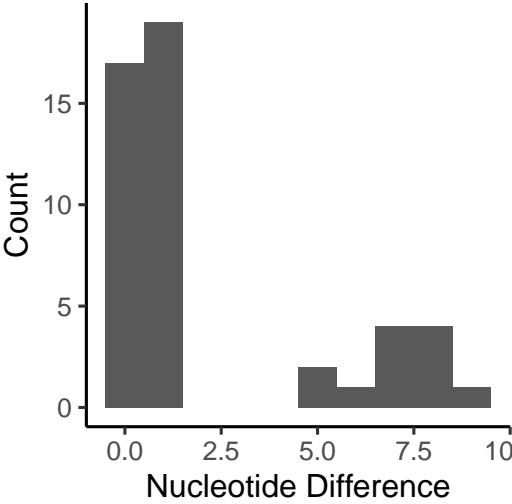
IGHV6-1*01_02

9180 sequences assigned
329 (3.6%) exact matches, in which:
293 unique CDR3
6 unique J



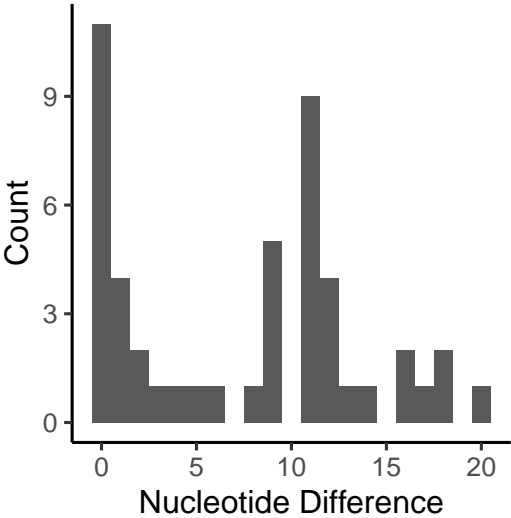
IGHV7-4-1*01

48 sequences assigned
17 (35.4%) exact matches, in which:
15 unique CDR3
4 unique J



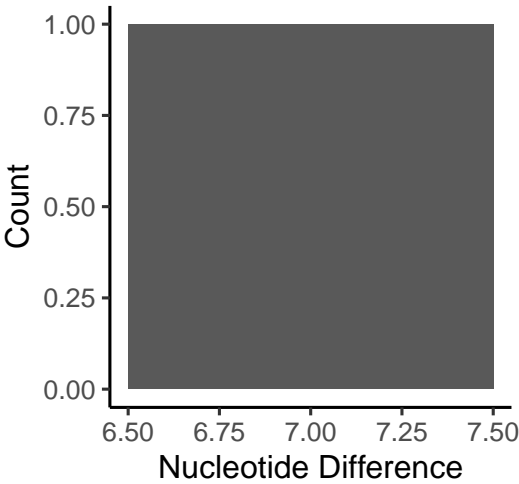
IGHV5-51*06

84 sequences assigned
11 (13.1%) exact matches, in which:
11 unique CDR3
5 unique J



IGHV3/OR16-6*02

1 sequences assigned
No exact matches.





Warning – no inferred sequences found.