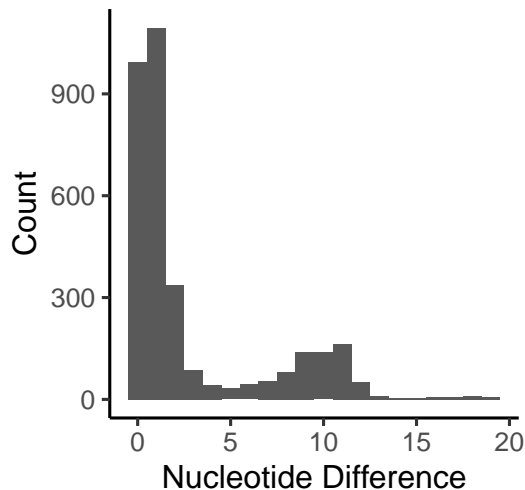


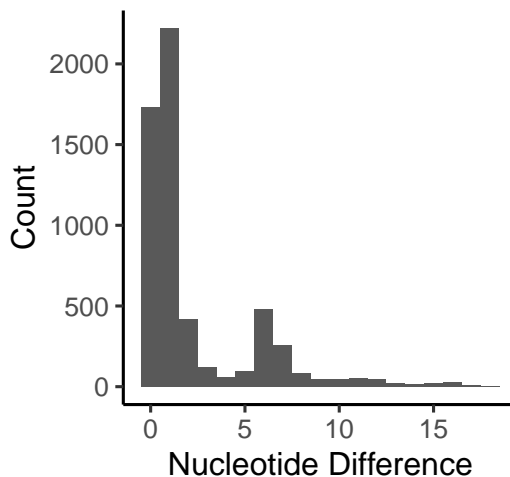
IGHV1-2*04

3314 sequences assigned
993 (30%) exact matches, in which:
820 unique CDR3
6 unique J



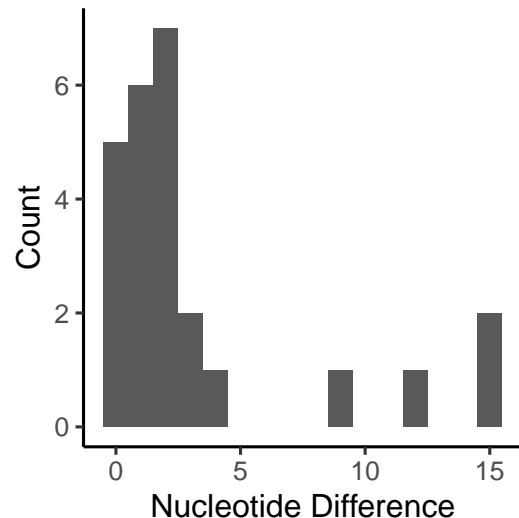
IGHV1-18*01

5759 sequences assigned
1731 (30.1%) exact matches, in which:
1382 unique CDR3
6 unique J



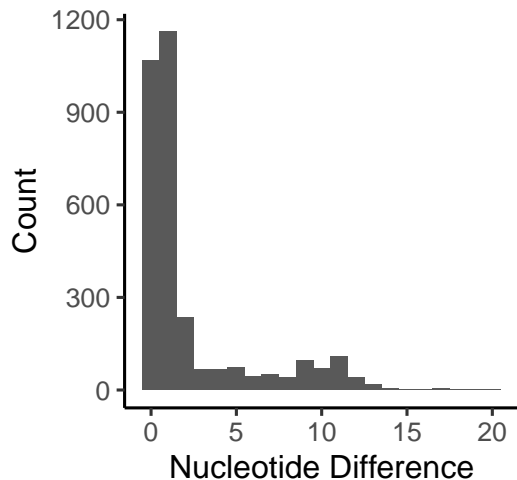
IGHV1-45*02

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



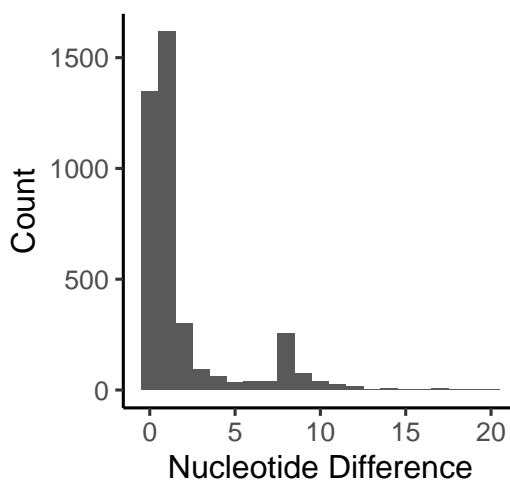
IGHV1-3*01_05

3157 sequences assigned
1069 (33.9%) exact matches, in which:
835 unique CDR3
6 unique J



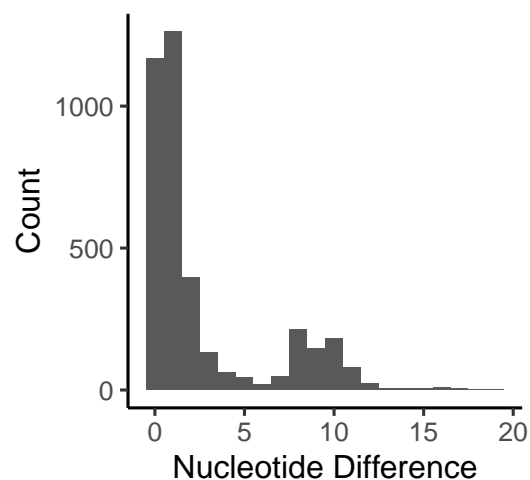
IGHV1-18*04

3978 sequences assigned
1349 (33.9%) exact matches, in which:
1102 unique CDR3
6 unique J



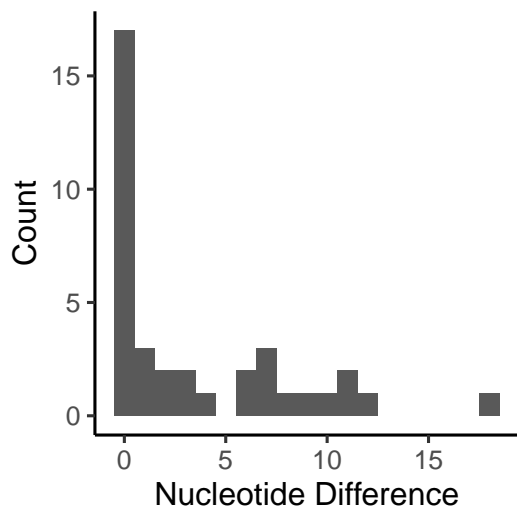
IGHV1-46*01

3822 sequences assigned
1168 (30.6%) exact matches, in which:
968 unique CDR3
6 unique J



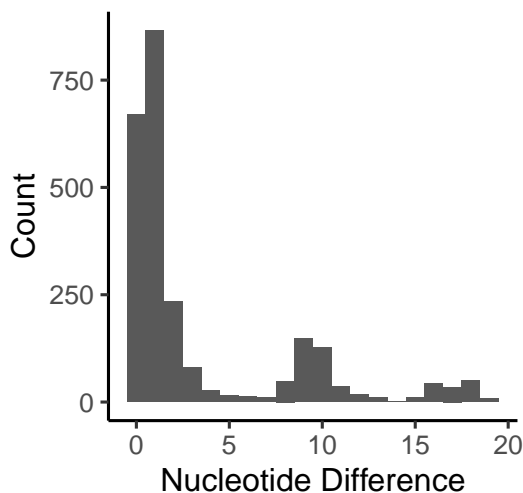
IGHV1-8*01

38 sequences assigned
17 (44.7%) exact matches, in which:
17 unique CDR3
4 unique J



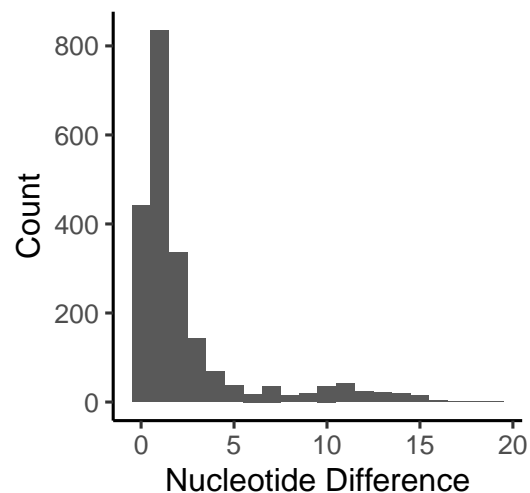
IGHV1-24*01

2457 sequences assigned
669 (27.2%) exact matches, in which:
542 unique CDR3
6 unique J



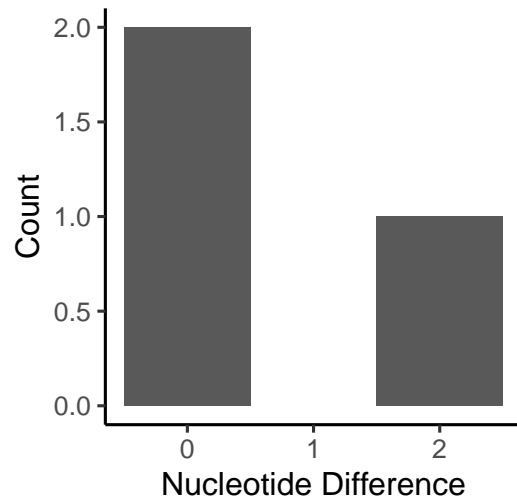
IGHV1-58*01_03

2112 sequences assigned
441 (20.9%) exact matches, in which:
325 unique CDR3
6 unique J



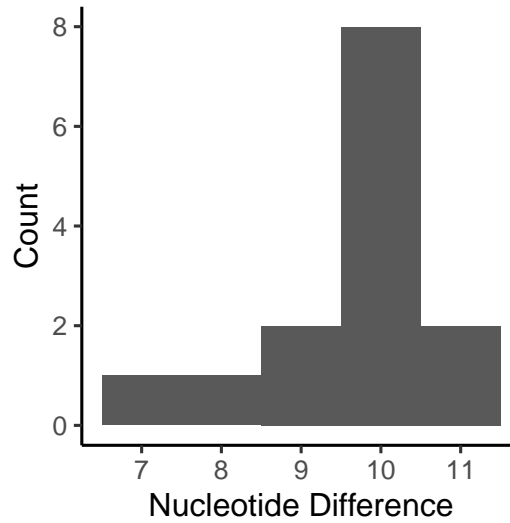
IGHV1-68*01

3 sequences assigned
2 (66.7%) exact matches, in which:
2 unique CDR3
2 unique J



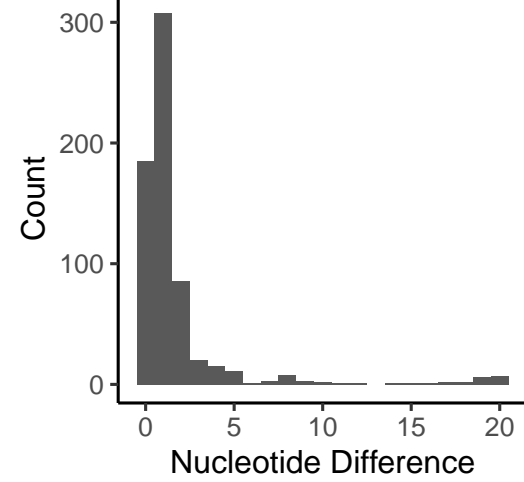
IGHV1-NL1*01

14 sequences assigned
No exact matches.



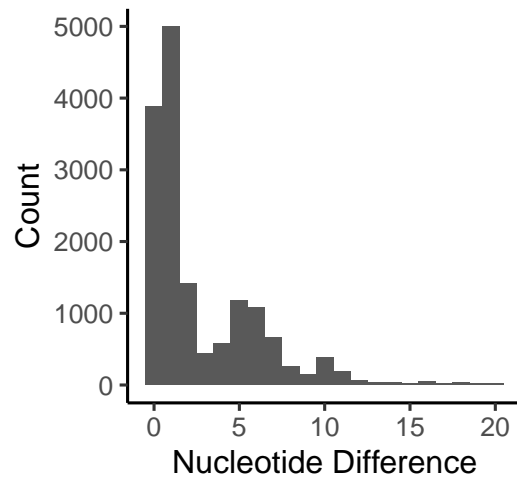
IGHV2-70*01

672 sequences assigned
185 (27.5%) exact matches, in which:
130 unique CDR3
5 unique J



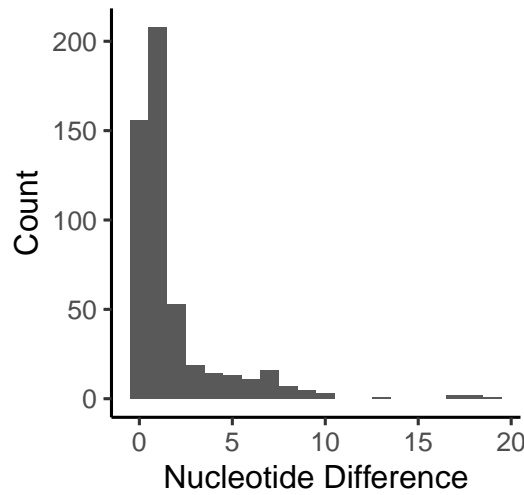
IGHV1-69*01_12_13

15615 sequences assigned
3889 (24.9%) exact matches, in which:
3135 unique CDR3
6 unique J



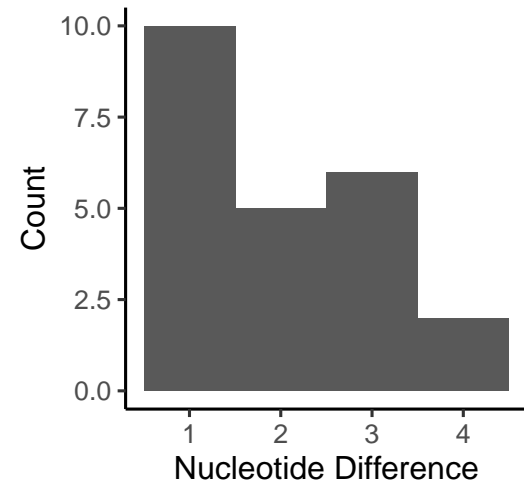
IGHV2-5*02

532 sequences assigned
156 (29.3%) exact matches, in which:
101 unique CDR3
5 unique J



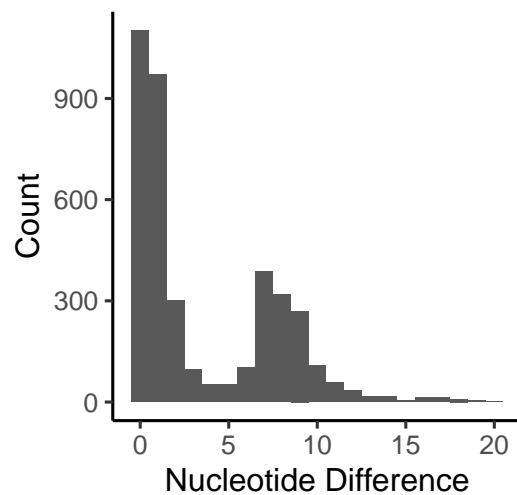
IGHV2-70*12

23 sequences assigned
No exact matches.



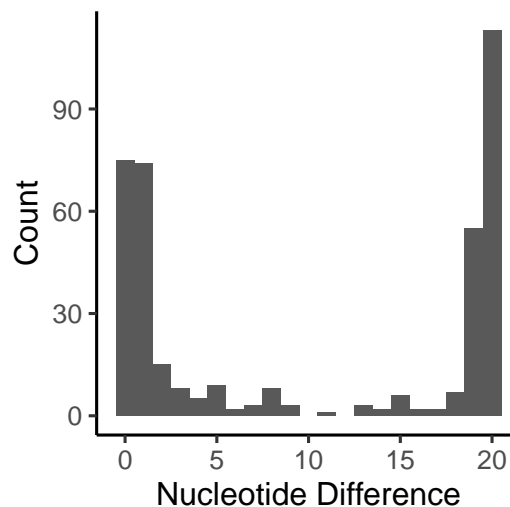
IGHV1-69*06_14

3940 sequences assigned
1102 (28%) exact matches, in which:
961 unique CDR3
6 unique J



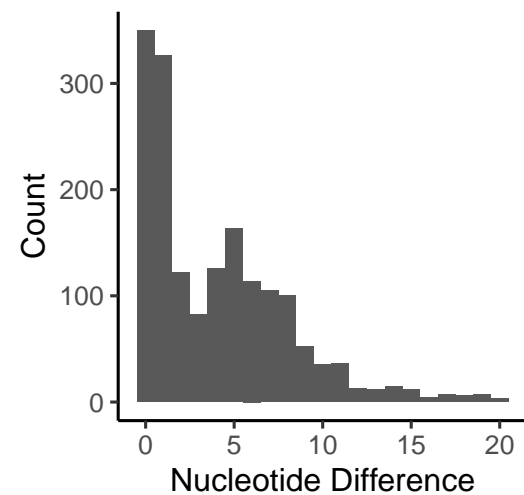
IGHV2-26*01

434 sequences assigned
75 (17.3%) exact matches, in which:
56 unique CDR3
5 unique J



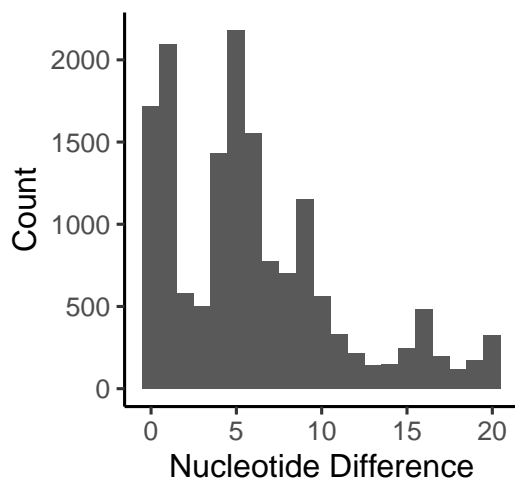
IGHV3-7*01

1709 sequences assigned
350 (20.5%) exact matches, in which:
310 unique CDR3
6 unique J



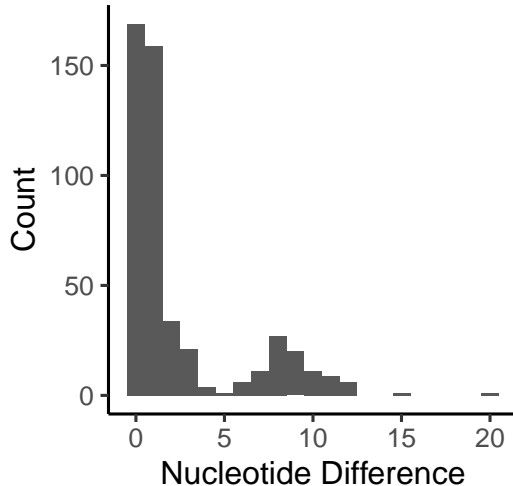
IGHV3-7*03

17043 sequences assigned
1716 (10.1%) exact matches, in which:
1074 unique CDR3
6 unique J



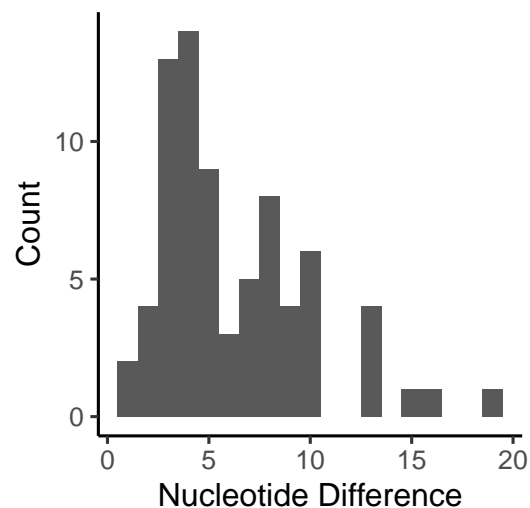
IGHV3-13*05

529 sequences assigned
169 (31.9%) exact matches, in which:
120 unique CDR3
6 unique J



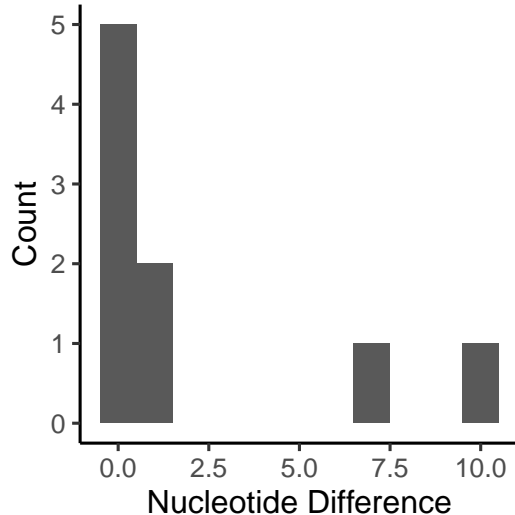
IGHV3-20*03_04

75 sequences assigned
No exact matches.



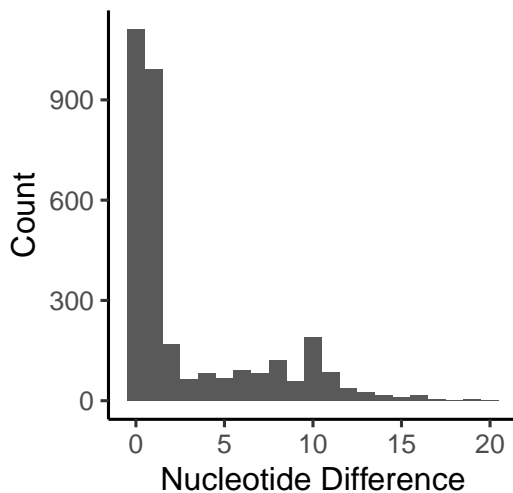
IGHV3-9*01

9 sequences assigned
5 (55.6%) exact matches, in which:
5 unique CDR3
3 unique J



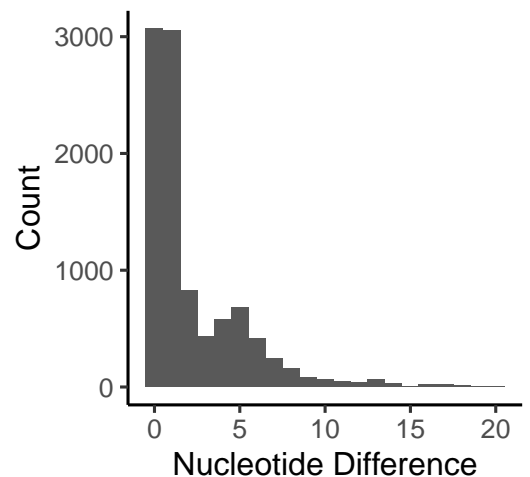
IGHV3-15*01_02

3340 sequences assigned
1112 (33.3%) exact matches, in which:
638 unique CDR3
6 unique J



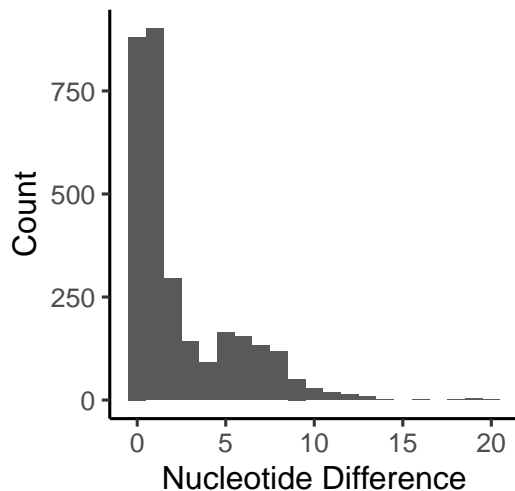
IGHV3-21*01_02

9903 sequences assigned
3068 (31%) exact matches, in which:
1896 unique CDR3
6 unique J



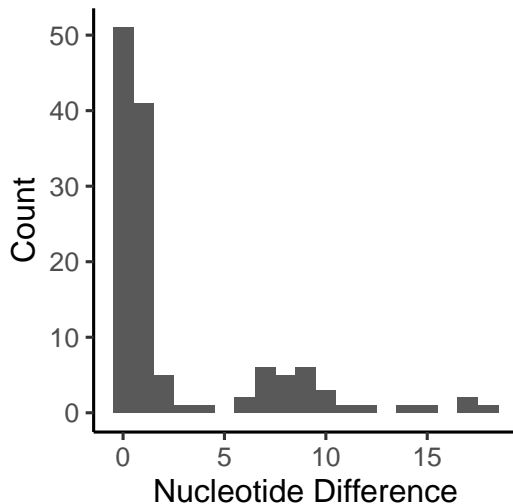
IGHV3-11*06

3009 sequences assigned
881 (29.3%) exact matches, in which:
599 unique CDR3
5 unique J



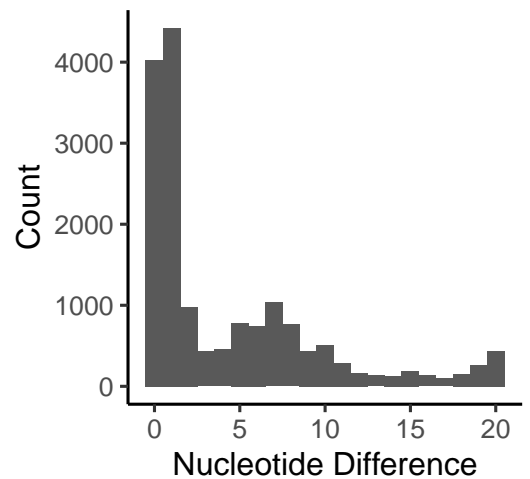
IGHV3-20*01_02

128 sequences assigned
51 (39.8%) exact matches, in which:
28 unique CDR3
4 unique J



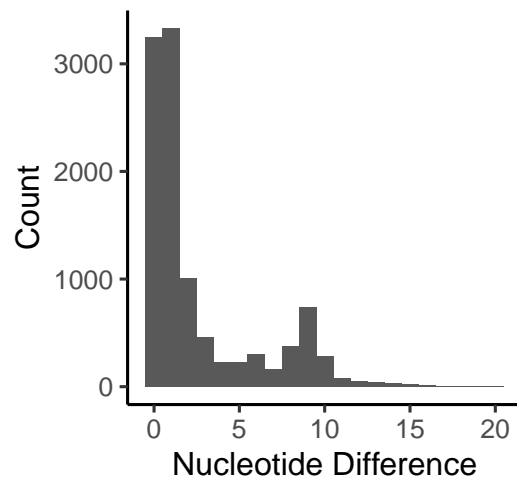
IGHV3-23*01_04

21256 sequences assigned
4029 (19%) exact matches, in which:
2248 unique CDR3
6 unique J



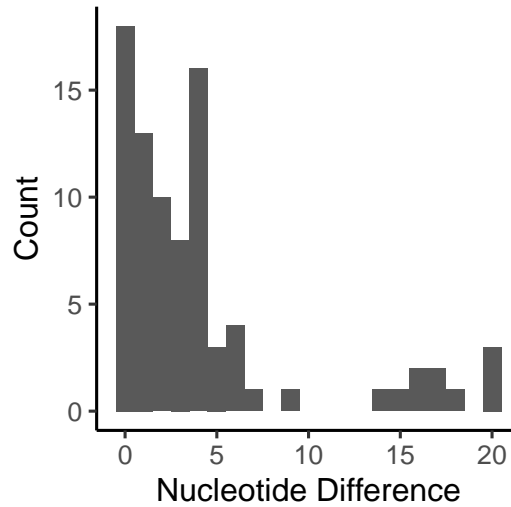
IGHV3-30-3*01

10643 sequences assigned
3245 (30.5%) exact matches, in which:
1959 unique CDR3
6 unique J



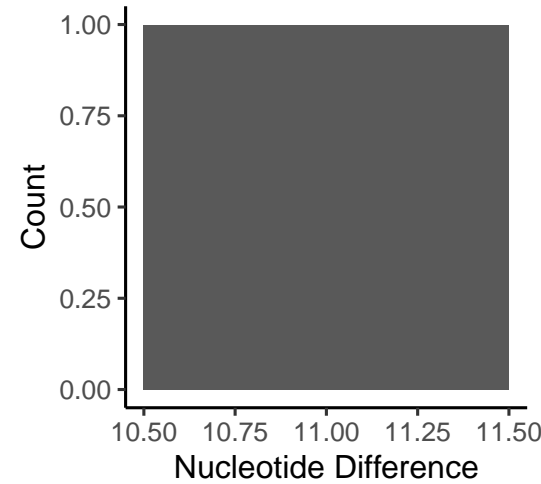
IGHV3-33*05

106 sequences assigned
18 (17%) exact matches, in which:
18 unique CDR3
4 unique J



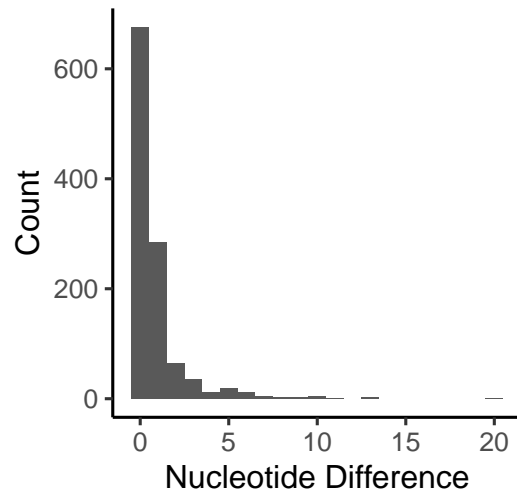
IGHV3-43*01

1 sequences assigned
No exact matches.



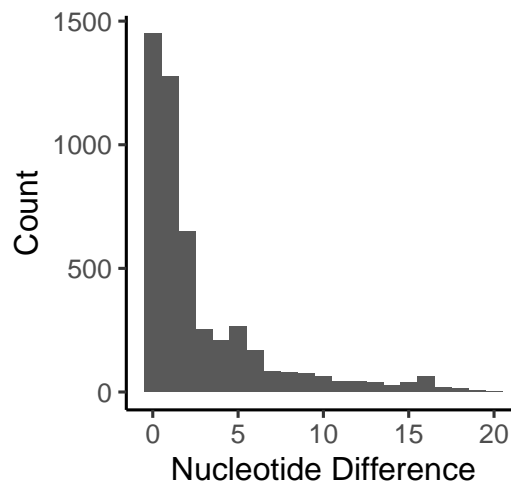
IGHV3-30*03

1124 sequences assigned
676 (60.1%) exact matches, in which:
583 unique CDR3
6 unique J



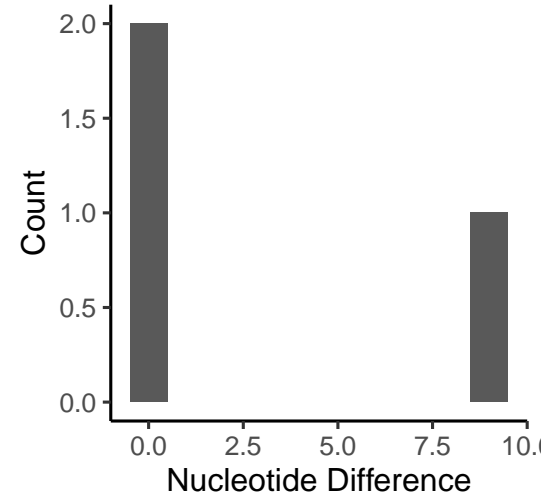
IGHV3-33*08

5040 sequences assigned
1449 (28.8%) exact matches, in which:
928 unique CDR3
6 unique J



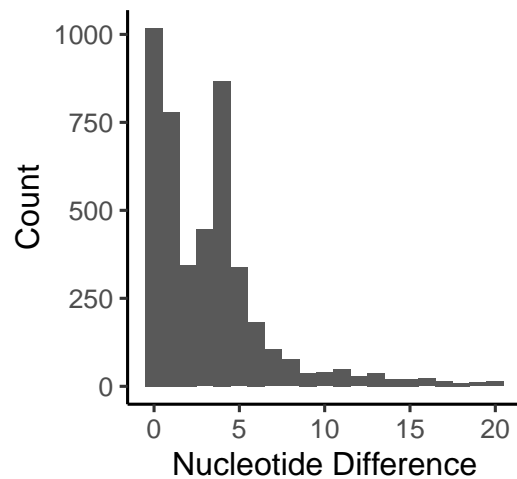
IGHV3-47*02

3 sequences assigned
2 (66.7%) exact matches, in which:
1 unique CDR3
1 unique J



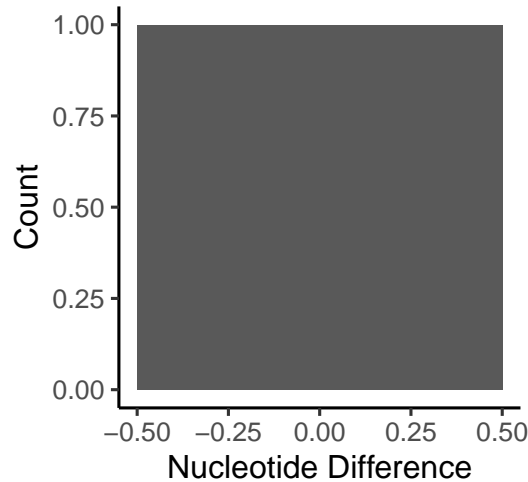
IGHV3-33*01

6938 sequences assigned
1018 (14.7%) exact matches, in which:
713 unique CDR3
6 unique J



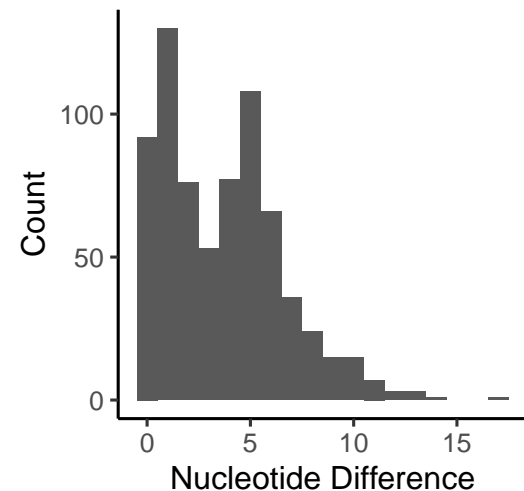
IGHV3-35*01

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



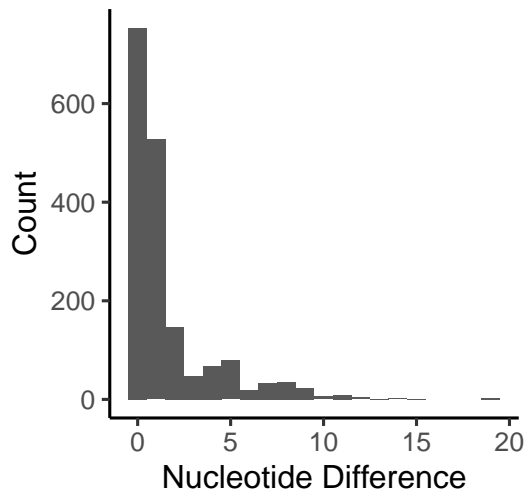
IGHV3-48*01

708 sequences assigned
92 (13%) exact matches, in which:
91 unique CDR3
5 unique J



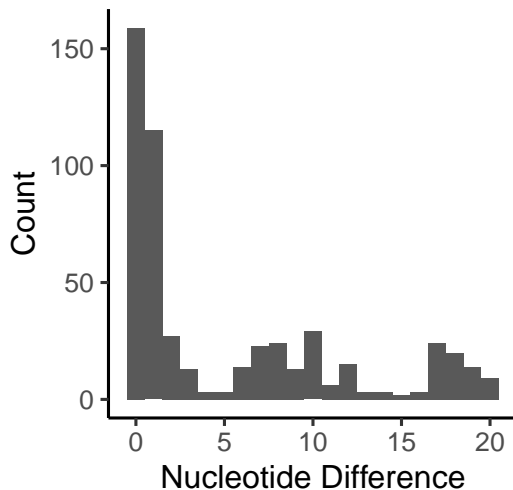
IGHV3-48*02

1761 sequences assigned
754 (42.8%) exact matches, in which:
475 unique CDR3
6 unique J



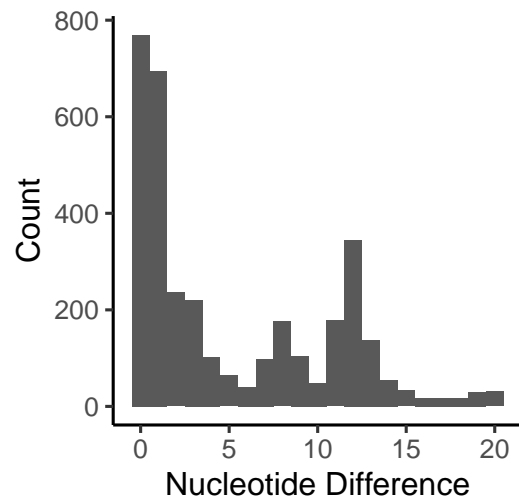
IGHV3-49*04

539 sequences assigned
159 (29.5%) exact matches, in which:
98 unique CDR3
6 unique J



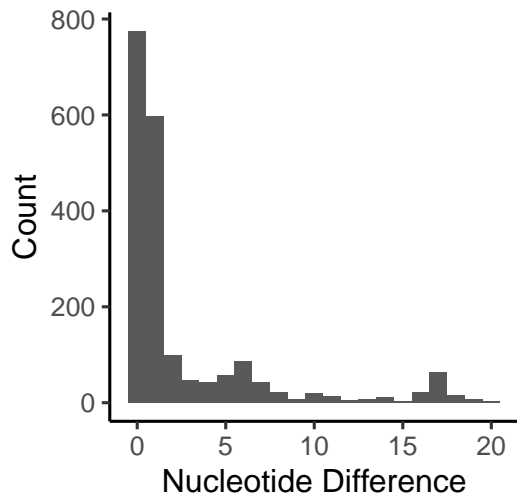
IGHV3-53*01_02

6093 sequences assigned
770 (12.6%) exact matches, in which:
526 unique CDR3
6 unique J



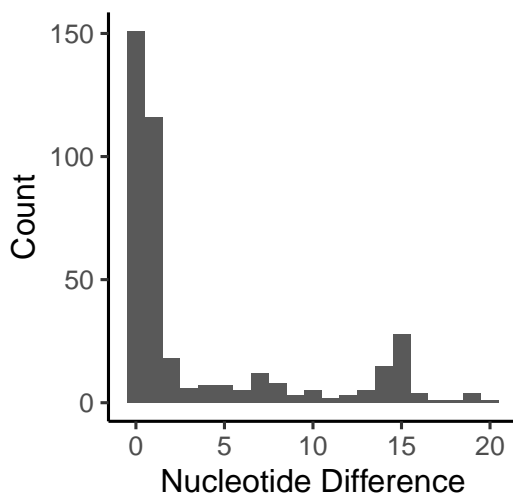
IGHV3-48*03

2243 sequences assigned
775 (34.6%) exact matches, in which:
472 unique CDR3
6 unique J



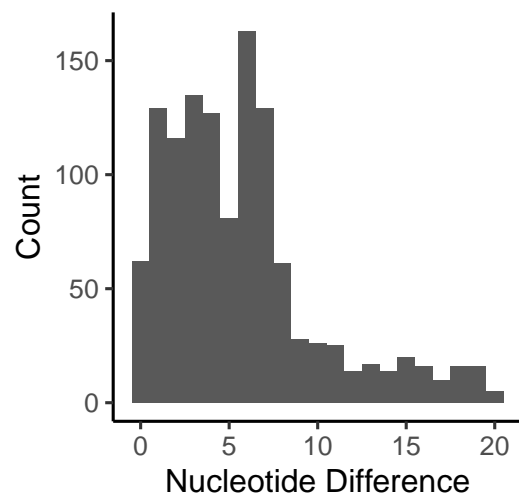
IGHV3-49*03_05

403 sequences assigned
151 (37.5%) exact matches, in which:
103 unique CDR3
5 unique J



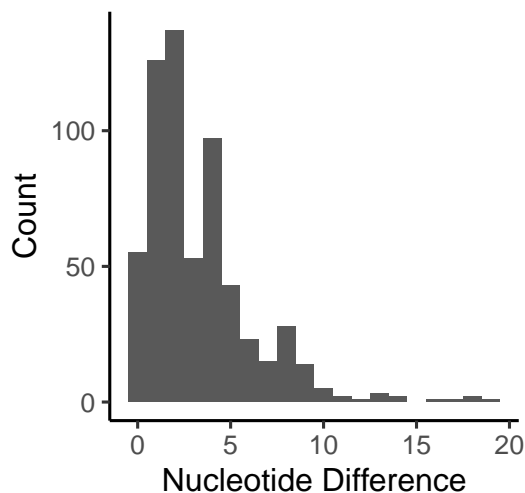
IGHV3-64*04

1223 sequences assigned
62 (5.1%) exact matches, in which:
60 unique CDR3
6 unique J



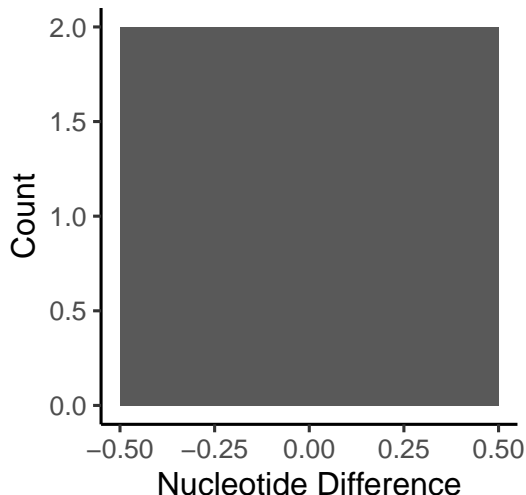
IGHV3-48*04

614 sequences assigned
55 (9%) exact matches, in which:
54 unique CDR3
6 unique J



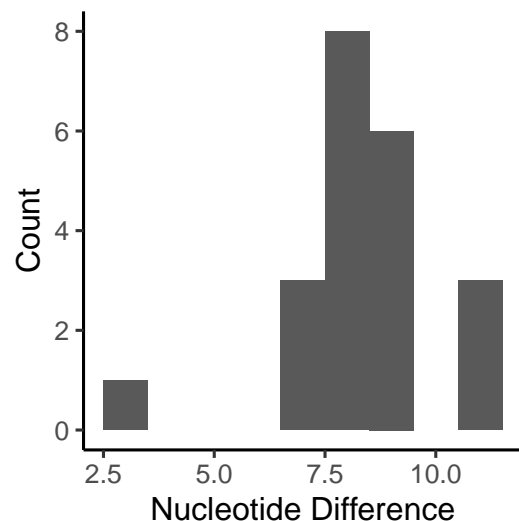
IGHV3-52*01_03

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



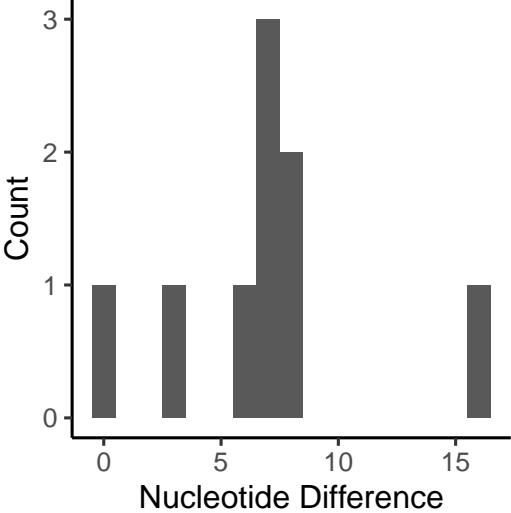
IGHV3-66*01

36 sequences assigned
No exact matches.



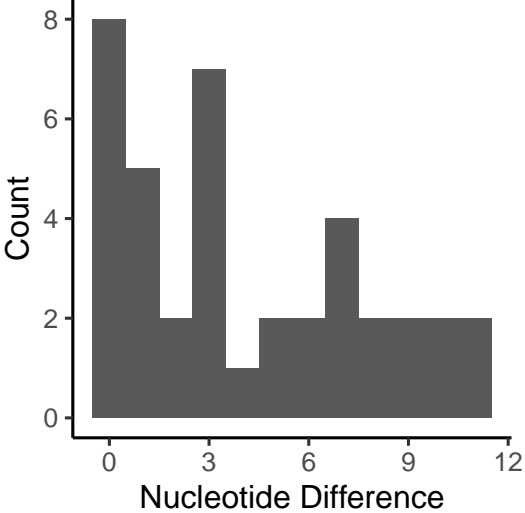
IGHV3-66*02

18 sequences assigned
1 (5.6%) exact matches, in which:
1 unique CDR3
1 unique J



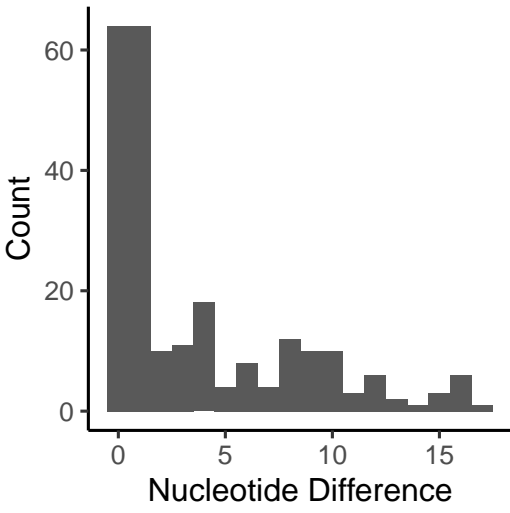
IGHV3-69-1*01

108 sequences assigned
8 (7.4%) exact matches, in which:
8 unique CDR3
4 unique J



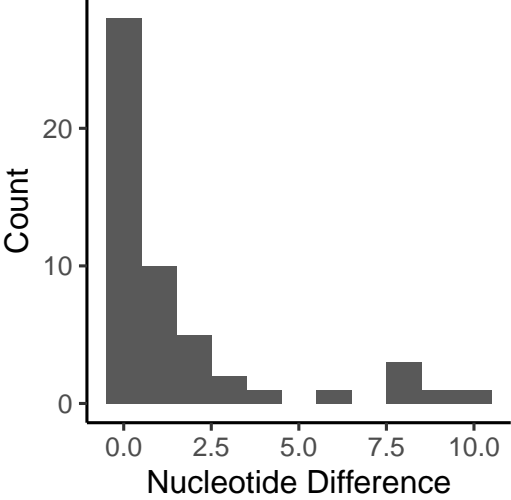
IGHV3-72*01

507 sequences assigned
64 (12.6%) exact matches, in which:
38 unique CDR3
5 unique J



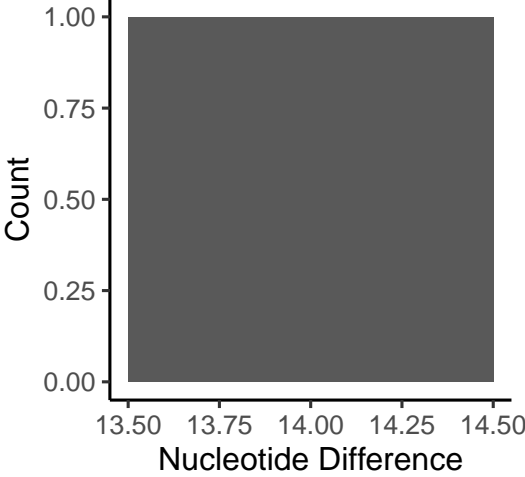
IGHV3-66*03

52 sequences assigned
28 (53.8%) exact matches, in which:
21 unique CDR3
4 unique J



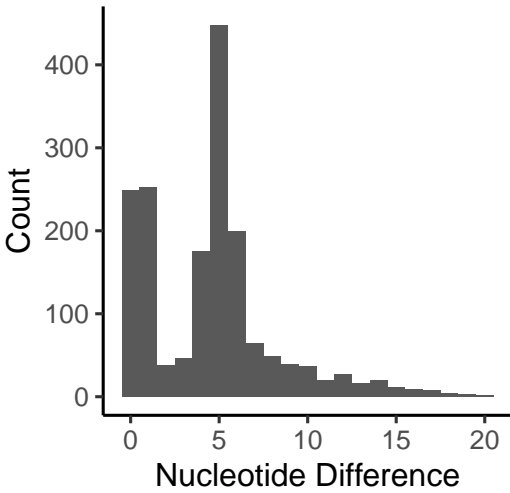
IGHV3-71*03

1 sequences assigned
No exact matches.



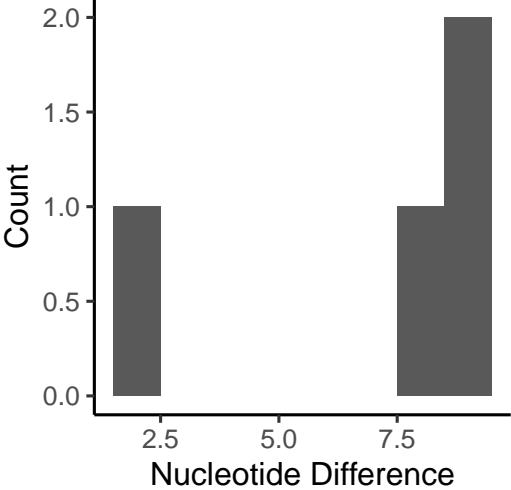
IGHV3-73*01_02

1722 sequences assigned
249 (14.5%) exact matches, in which:
159 unique CDR3
6 unique J



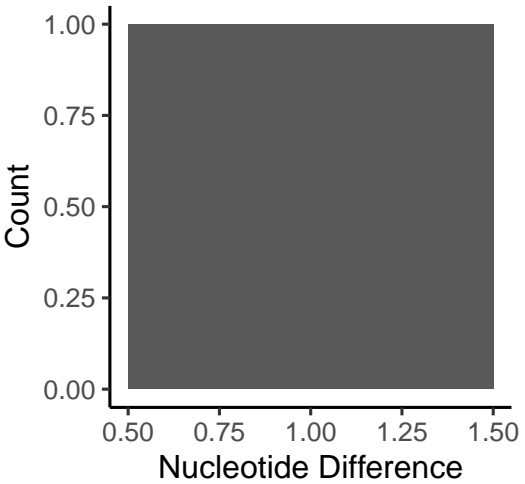
IGHV3-66*04

9 sequences assigned
No exact matches.



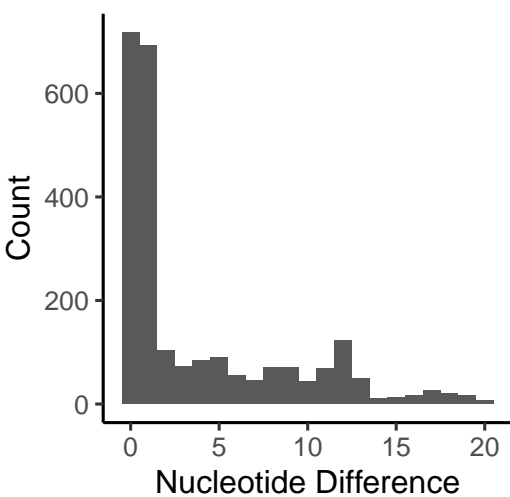
IGHV3-71*01_04

1 sequences assigned
No exact matches.



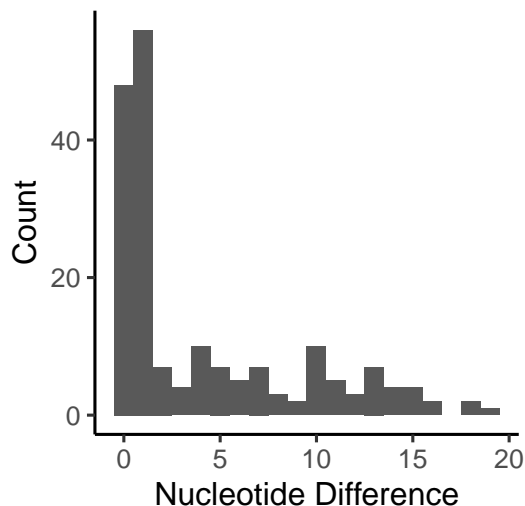
IGHV3-74*01_02

2414 sequences assigned
718 (29.7%) exact matches, in which:
482 unique CDR3
6 unique J



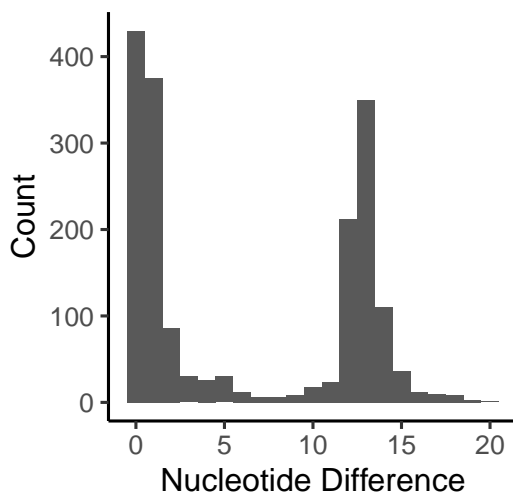
IGHV3-43D*04

187 sequences assigned
48 (25.7%) exact matches, in which:
27 unique CDR3
4 unique J



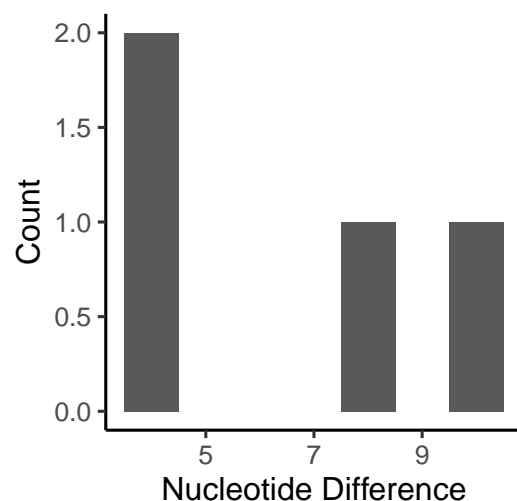
IGHV3-64D*09

1805 sequences assigned
430 (23.8%) exact matches, in which:
216 unique CDR3
6 unique J



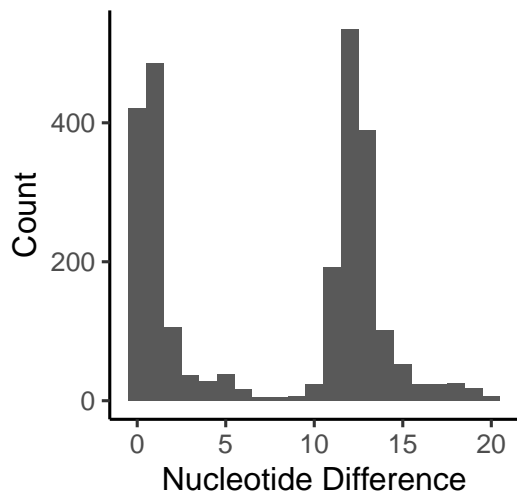
IGHV4-28*03

5 sequences assigned
No exact matches.



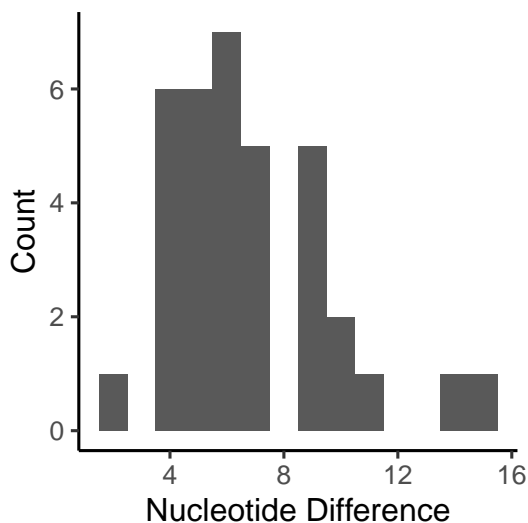
IGHV3-64D*06

2555 sequences assigned
421 (16.5%) exact matches, in which:
215 unique CDR3
6 unique J



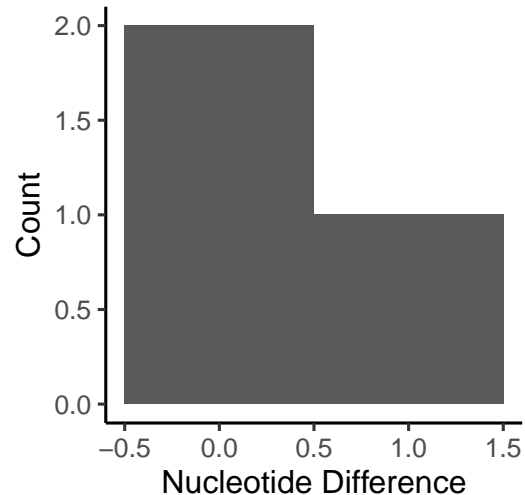
IGHV3-NL1*01

40 sequences assigned
No exact matches.



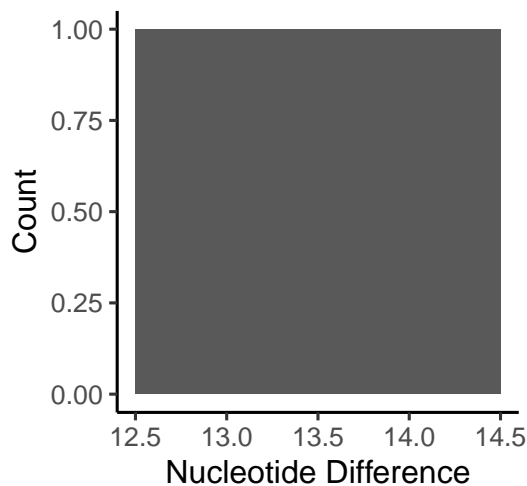
IGHV4-28*01_07

3 sequences assigned
2 (66.7%) exact matches, in which:
2 unique CDR3
2 unique J



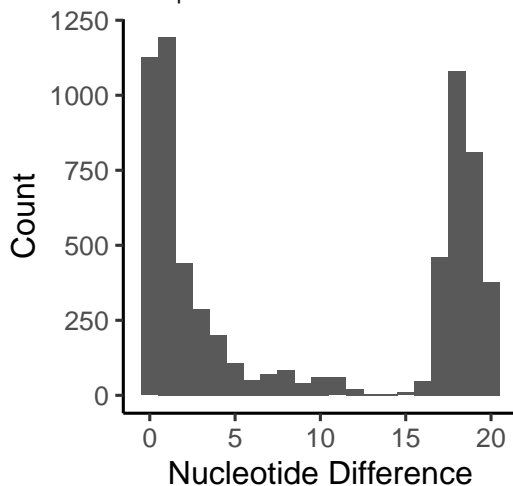
IGHV3-64D*08

2 sequences assigned
No exact matches.



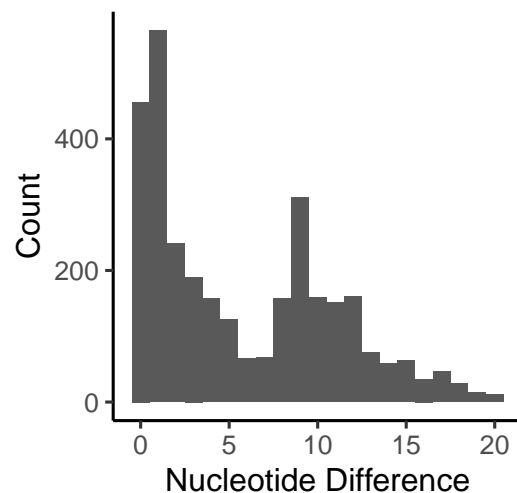
IGHV4-4*02_03

7429 sequences assigned
1126 (15.2%) exact matches, in which:
779 unique CDR3
6 unique J



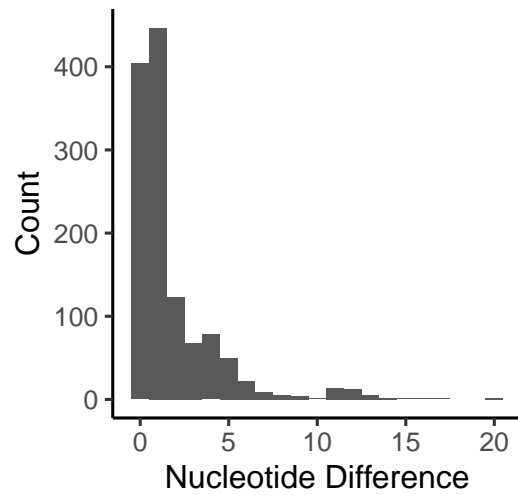
IGHV4-30-4*01

3177 sequences assigned
456 (14.4%) exact matches, in which:
360 unique CDR3
6 unique J



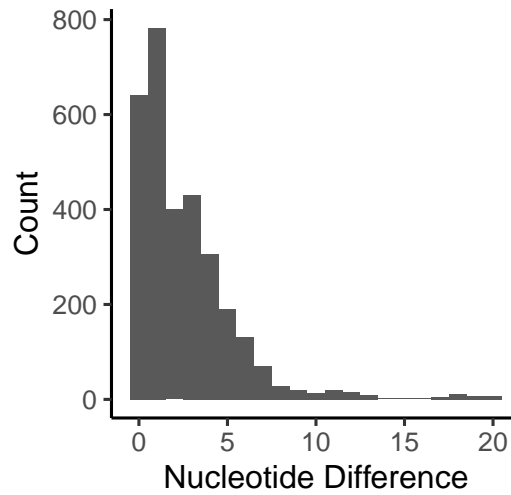
IGHV4-30-2*01

1250 sequences assigned
404 (32.3%) exact matches, in which:
279 unique CDR3
6 unique J



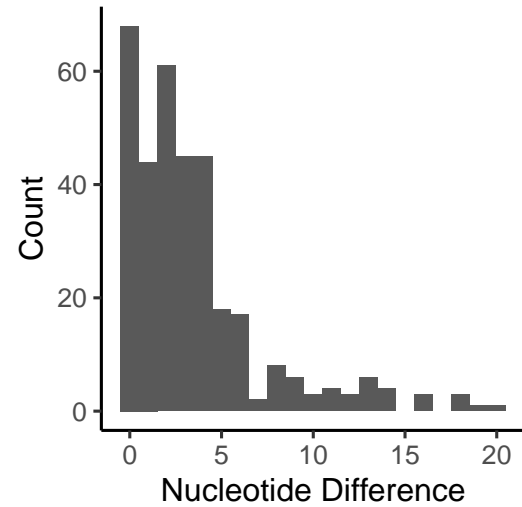
IGHV4-31*02

3452 sequences assigned
641 (18.6%) exact matches, in which:
495 unique CDR3
6 unique J



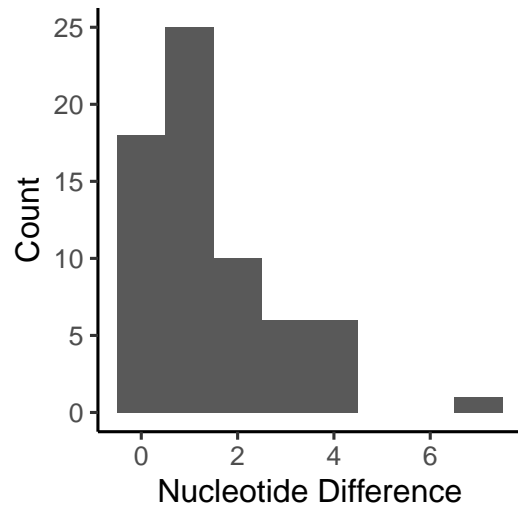
IGHV4-38-2*02

384 sequences assigned
68 (17.7%) exact matches, in which:
53 unique CDR3
5 unique J



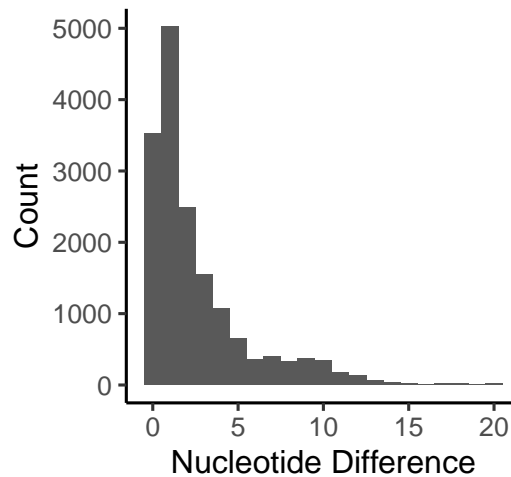
IGHV4-30-2*02

66 sequences assigned
18 (27.3%) exact matches, in which:
17 unique CDR3
4 unique J



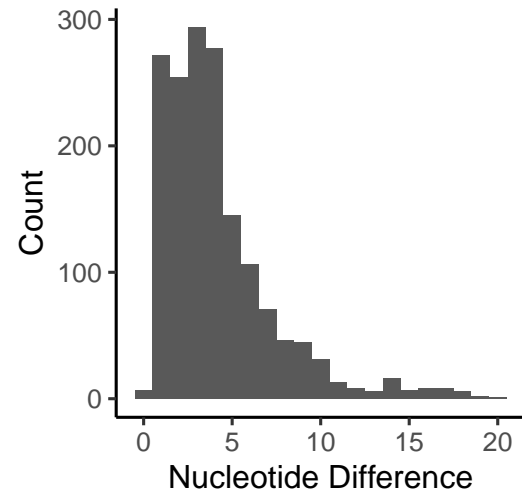
IGHV4-34*01_02

16786 sequences assigned
3526 (21%) exact matches, in which:
2271 unique CDR3
6 unique J



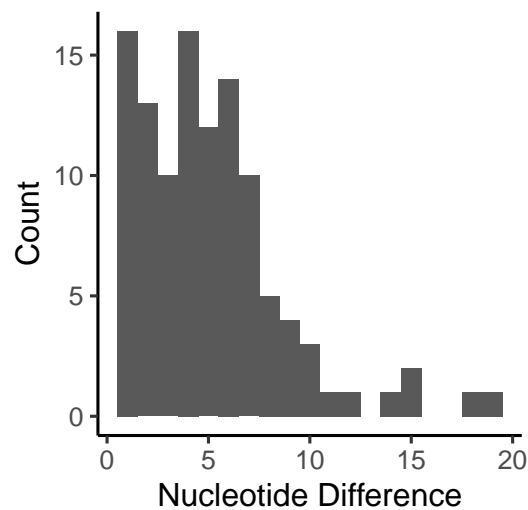
IGHV4-39*07

1663 sequences assigned
7 (0.4%) exact matches, in which:
6 unique CDR3
1 unique J



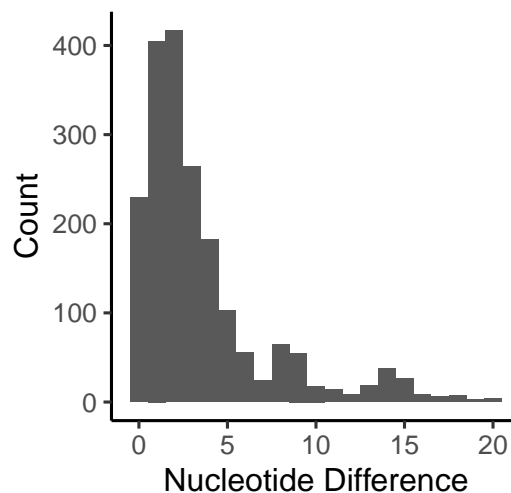
IGHV4-30-2*03

110 sequences assigned
No exact matches.



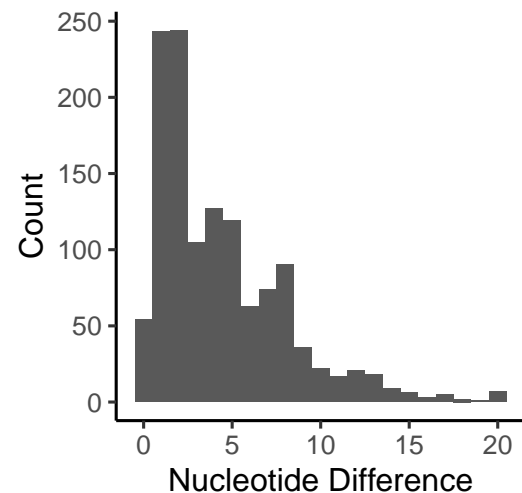
IGHV4-38-2*01

4615 sequences assigned
229 (5%) exact matches, in which:
196 unique CDR3
5 unique J



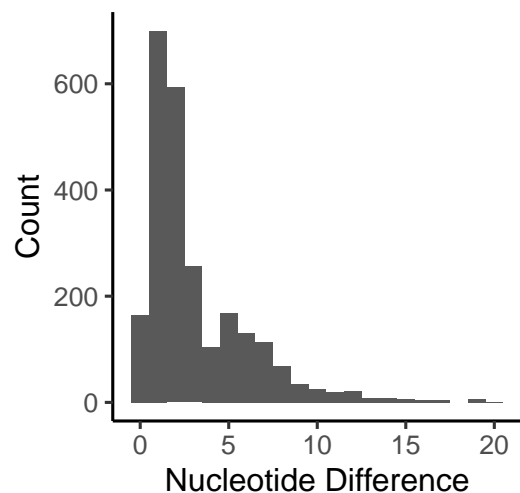
IGHV4-59*08

1449 sequences assigned
54 (3.7%) exact matches, in which:
50 unique CDR3
5 unique J



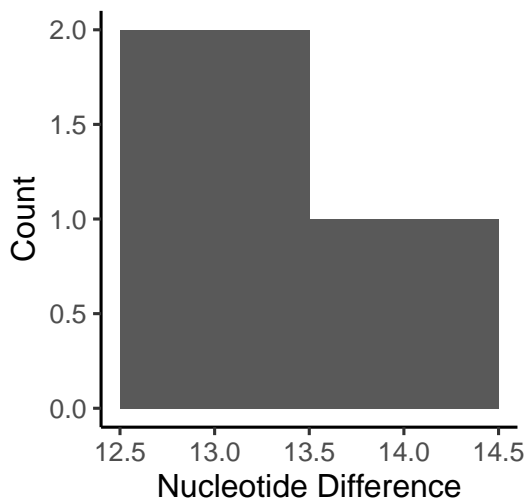
IGHV4-59*12

2445 sequences assigned
164 (6.7%) exact matches, in which:
155 unique CDR3
5 unique J



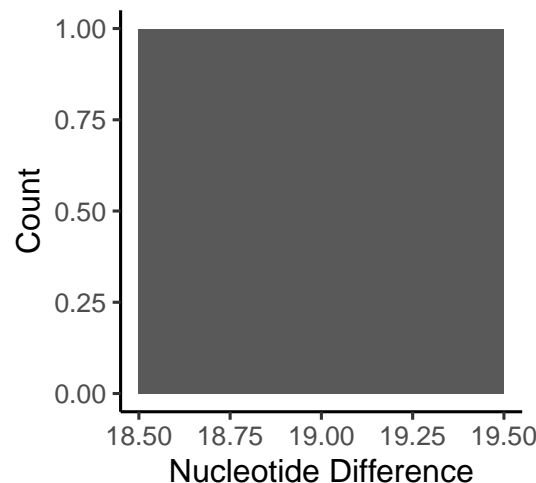
IGHV1/OR15-2*02_03

3 sequences assigned
No exact matches.



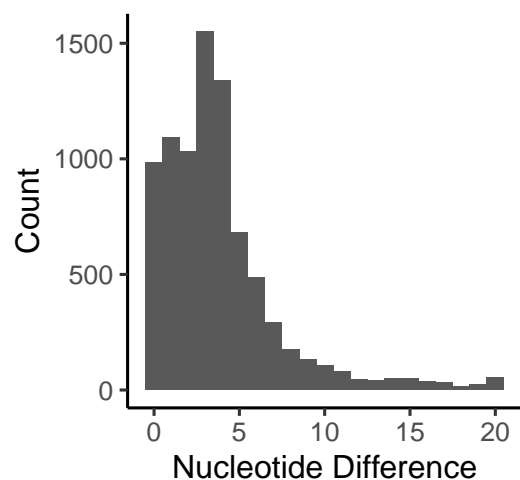
IGHV1/OR15-9*01

1 sequences assigned
No exact matches.



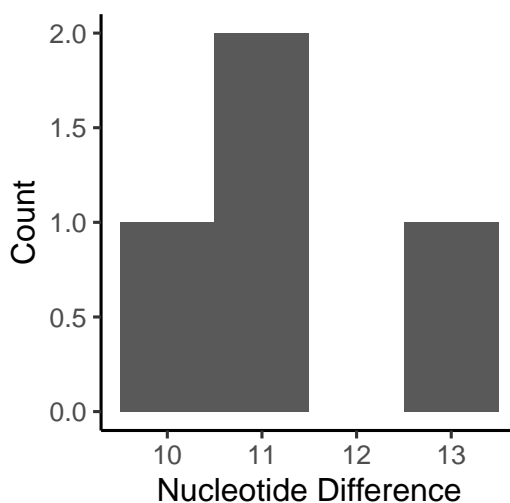
IGHV4-61*01

8547 sequences assigned
984 (11.5%) exact matches, in which:
786 unique CDR3
6 unique J



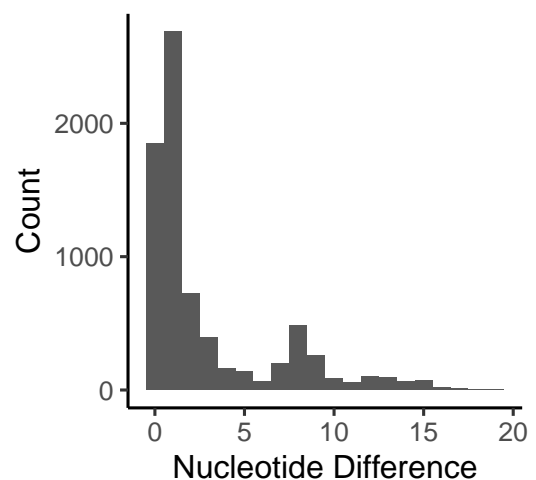
IGHV1/OR15-3*02

4 sequences assigned
No exact matches.



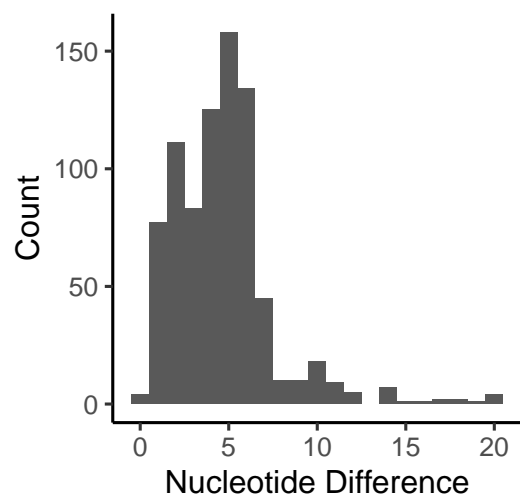
IGHV5-10-1*01_03

7498 sequences assigned
1850 (24.7%) exact matches, in which:
1073 unique CDR3
6 unique J



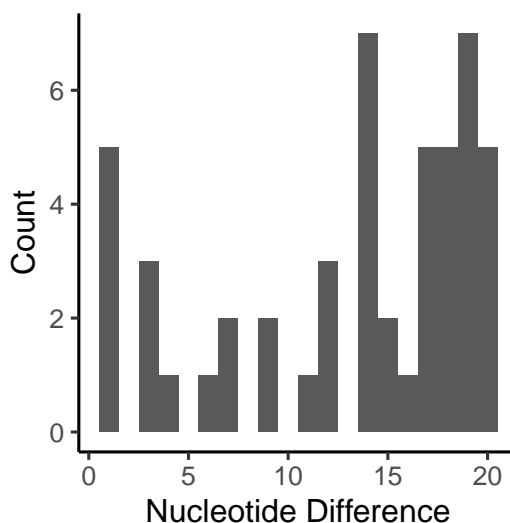
IGHV4-61*08

835 sequences assigned
4 (0.5%) exact matches, in which:
4 unique CDR3
2 unique J



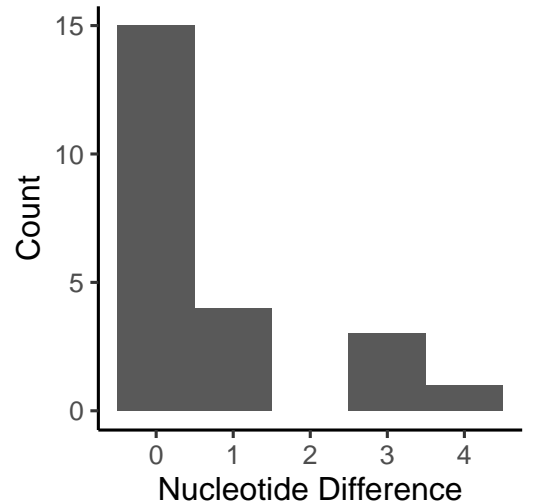
IGHV4/OR15-8*01

71 sequences assigned
No exact matches.



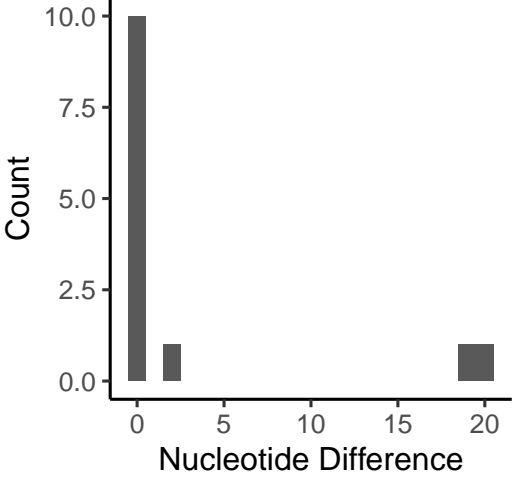
IGHV5-51*04

23 sequences assigned
15 (65.2%) exact matches, in which:
15 unique CDR3
5 unique J



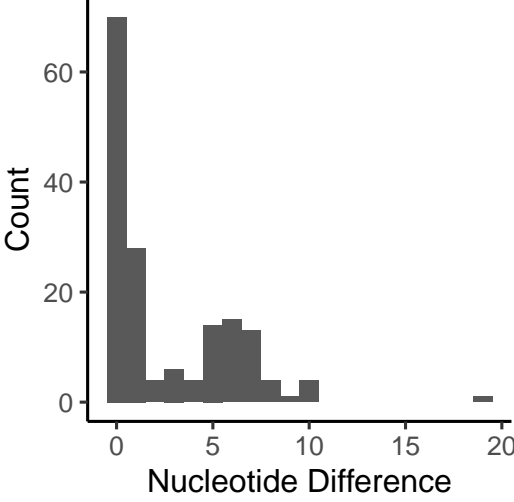
IGHV5-51*06

13 sequences assigned
10 (76.9%) exact matches, in which:
10 unique CDR3
3 unique J



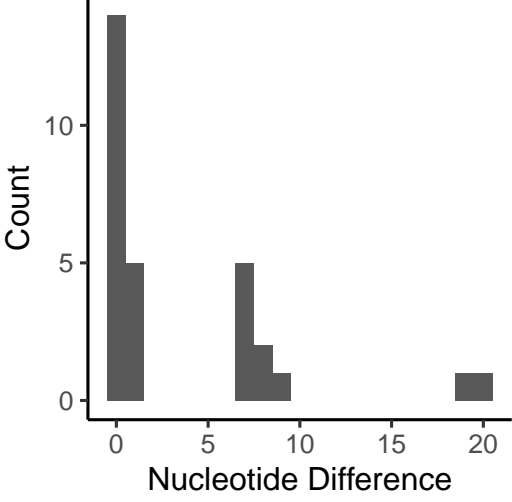
IGHV6-1*01_02_A315G

165 sequences assigned
70 (42.4%) exact matches, in which:
69 unique CDR3
6 unique J



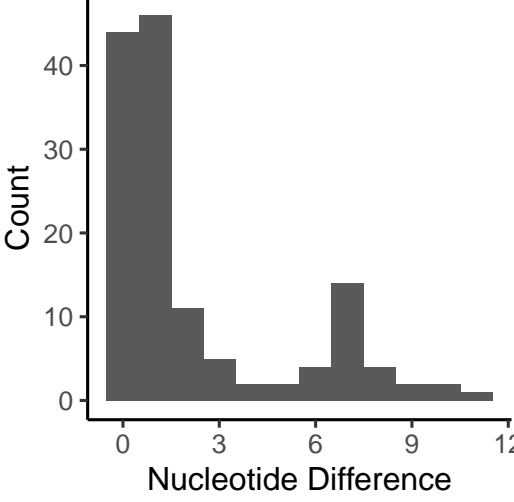
IGHV5-51*07

31 sequences assigned
14 (45.2%) exact matches, in which:
14 unique CDR3
6 unique J



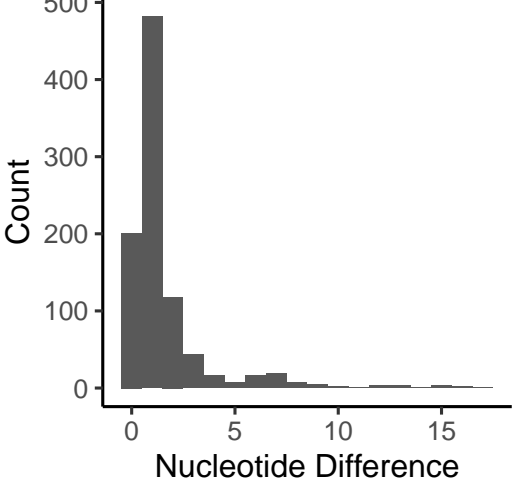
IGHV7-4-1*01

137 sequences assigned
44 (32.1%) exact matches, in which:
31 unique CDR3
4 unique J



IGHV6-1*01_02

1031 sequences assigned
201 (19.5%) exact matches, in which:
151 unique CDR3
5 unique J





Warning – no inferred sequences found.