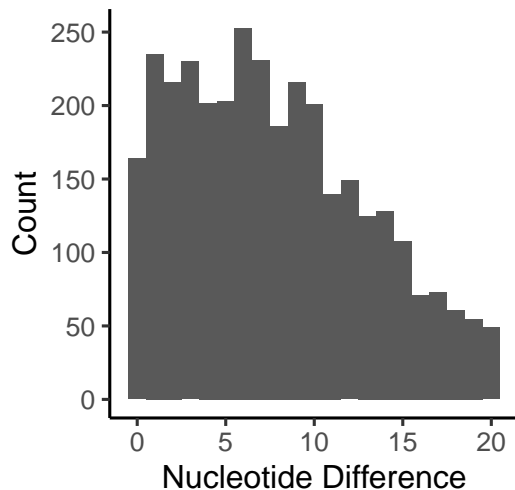


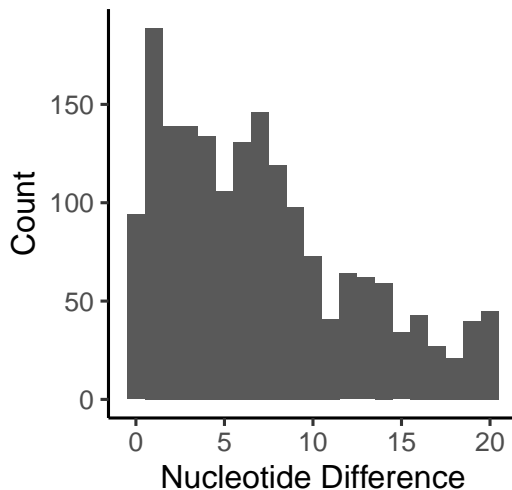
IGHV1-2*02

3601 sequences assigned
164 (4.6%) exact matches, in which:
145 unique CDR3
7 unique J



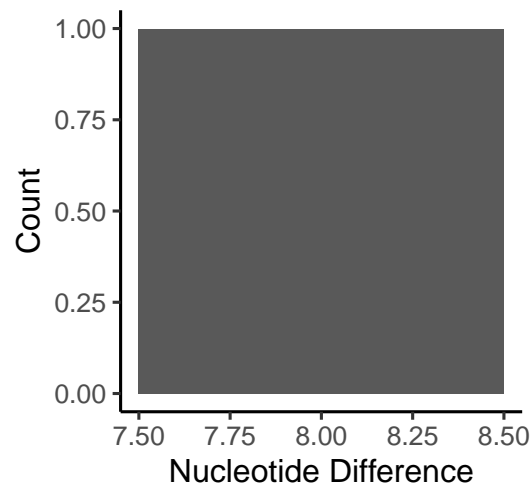
IGHV1-8*01

1867 sequences assigned
94 (5%) exact matches, in which:
89 unique CDR3
6 unique J



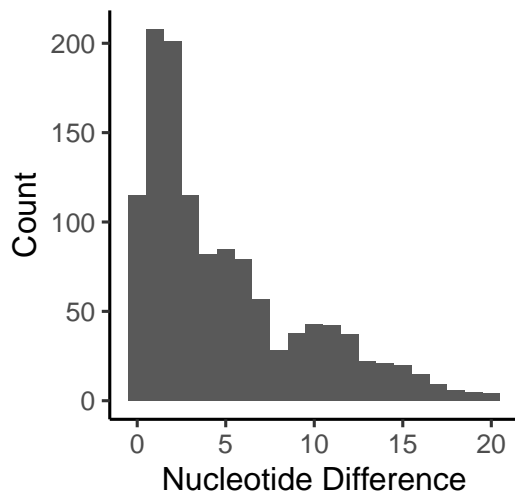
IGHV1-38-4*01

1 sequences assigned
No exact matches.



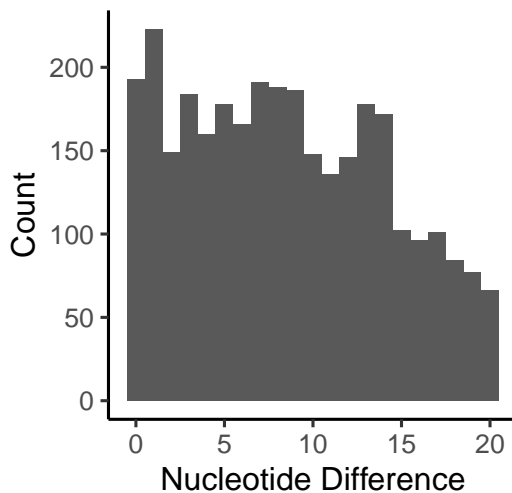
IGHV1-2*04

1237 sequences assigned
115 (9.3%) exact matches, in which:
101 unique CDR3
6 unique J



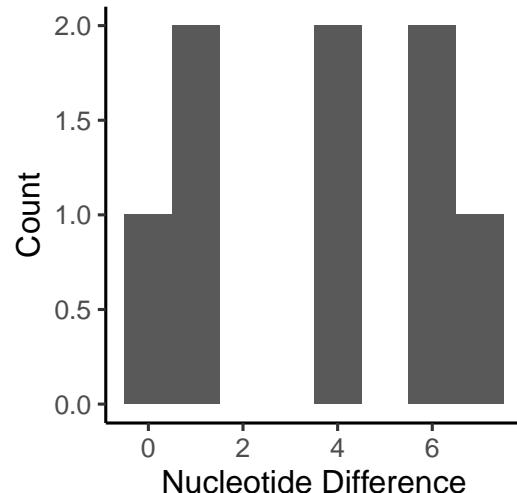
IGHV1-18*01

3450 sequences assigned
193 (5.6%) exact matches, in which:
159 unique CDR3
7 unique J



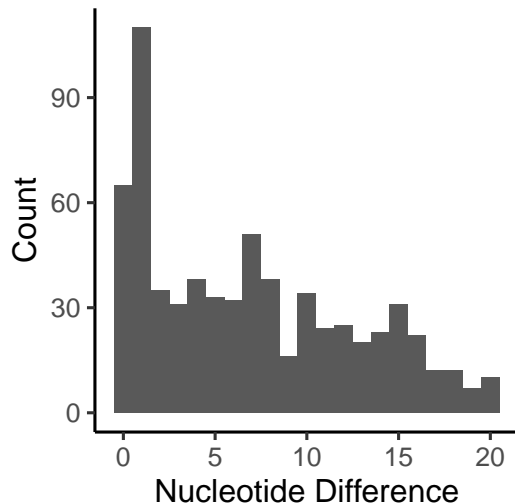
IGHV1-45*02

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



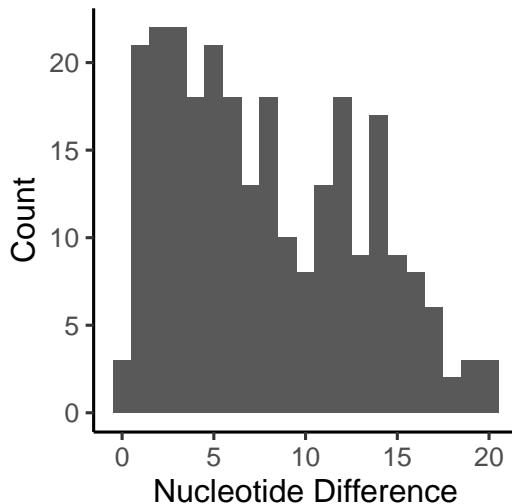
IGHV1-3*01_05

698 sequences assigned
65 (9.3%) exact matches, in which:
44 unique CDR3
4 unique J



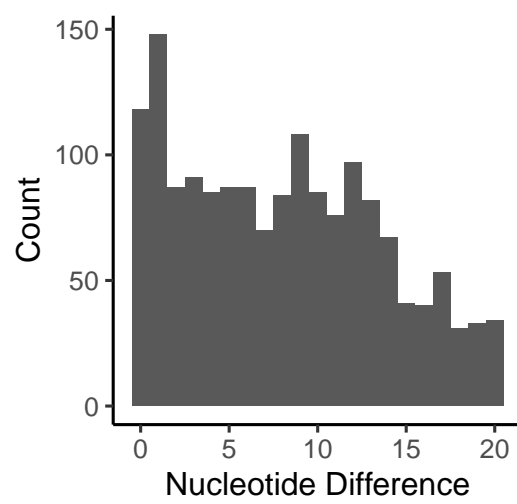
IGHV1-24*01

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



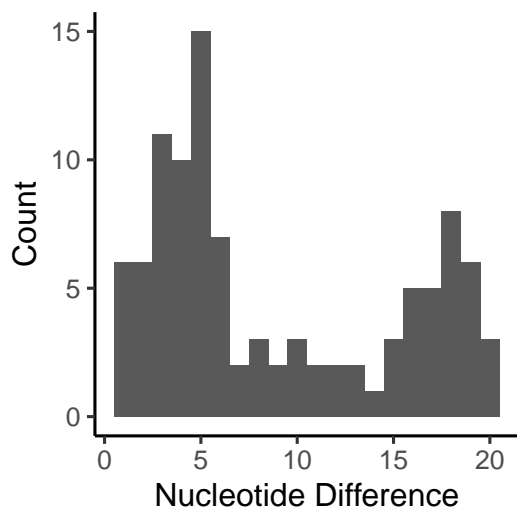
IGHV1-46*01

1808 sequences assigned
118 (6.5%) exact matches, in which:
107 unique CDR3
5 unique J



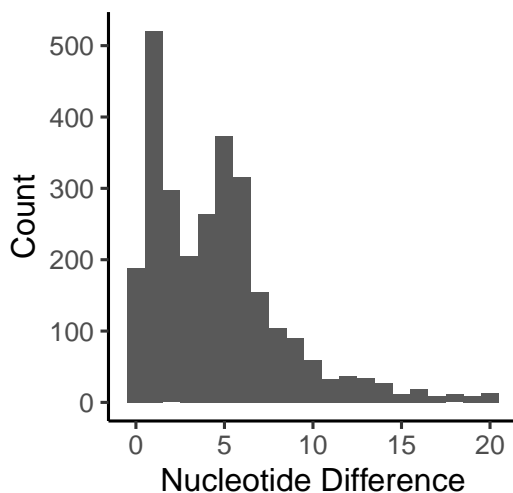
IGHV1-58*01_03

111 sequences assigned
No exact matches.



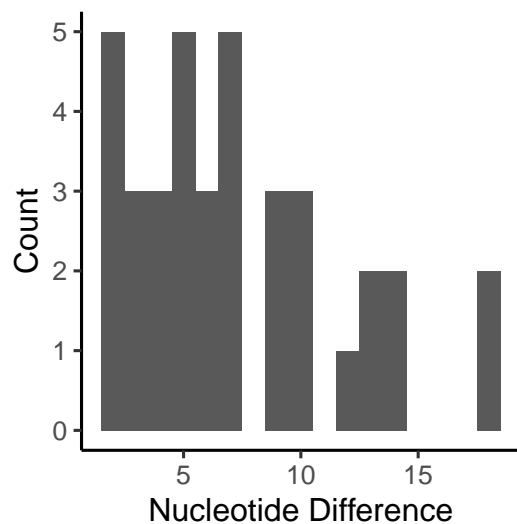
IGHV2-5*02

2796 sequences assigned
188 (6.7%) exact matches, in which:
120 unique CDR3
6 unique J



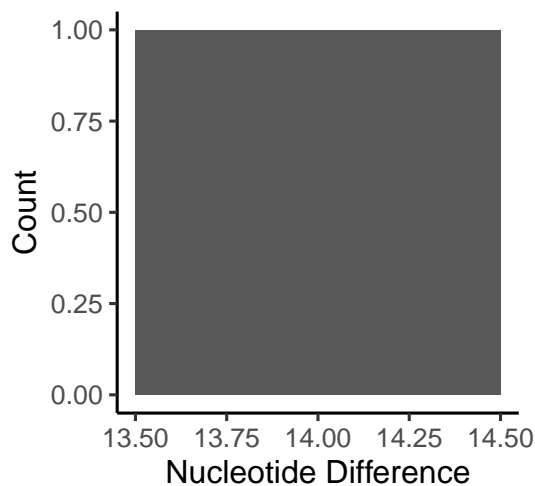
IGHV2-70*12

37 sequences assigned
No exact matches.



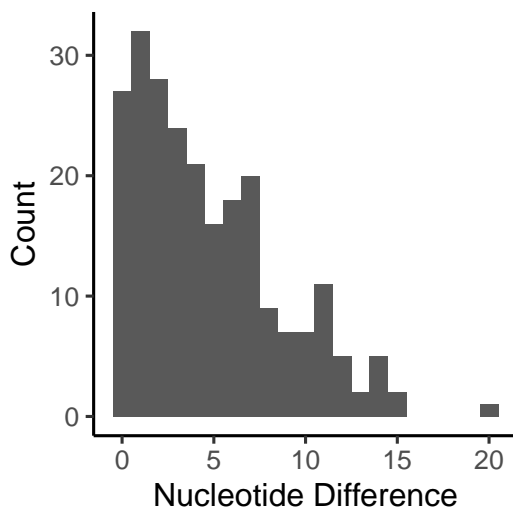
IGHV1-69-2*01

1 sequences assigned
No exact matches.



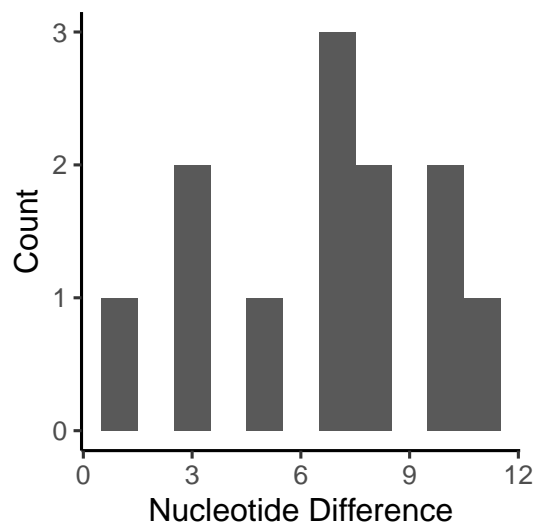
IGHV2-26*01

242 sequences assigned
27 (11.2%) exact matches, in which:
22 unique CDR3
4 unique J



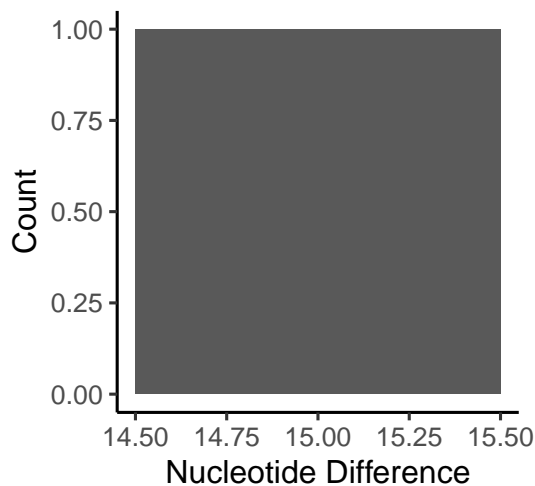
IGHV2-70D*04

12 sequences assigned
No exact matches.



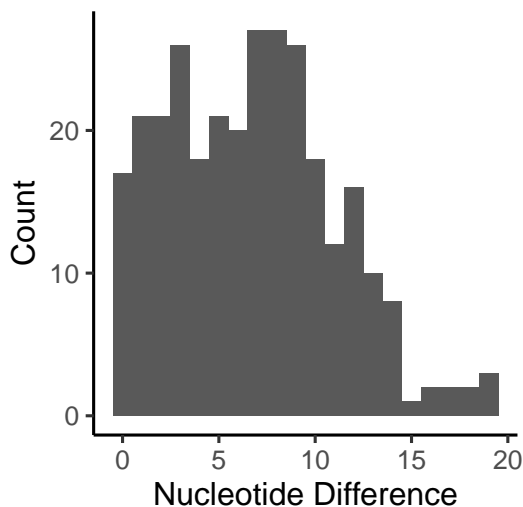
IGHV1-NL1*01

1 sequences assigned
No exact matches.



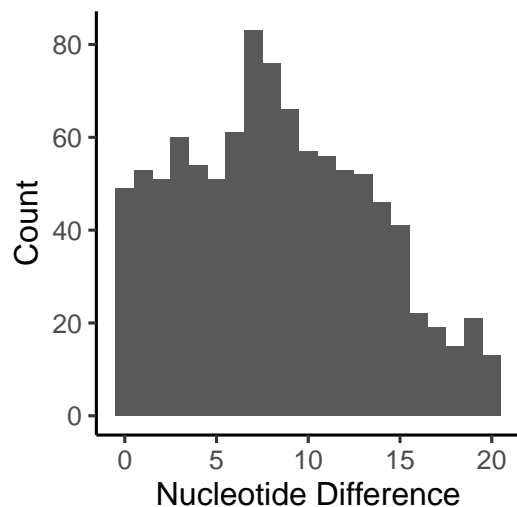
IGHV2-70*01

312 sequences assigned
17 (5.4%) exact matches, in which:
15 unique CDR3
4 unique J



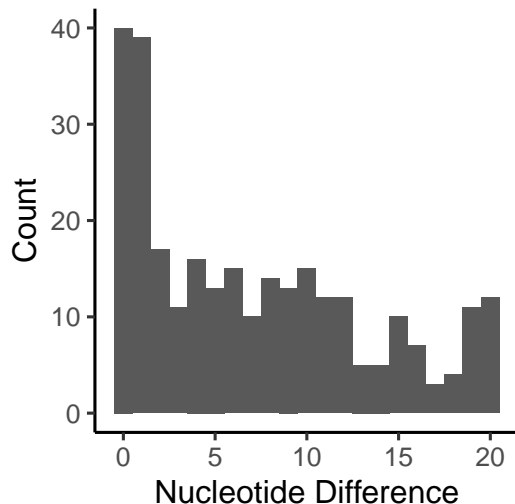
IGHV3-7*01

1061 sequences assigned
49 (4.6%) exact matches, in which:
44 unique CDR3
6 unique J



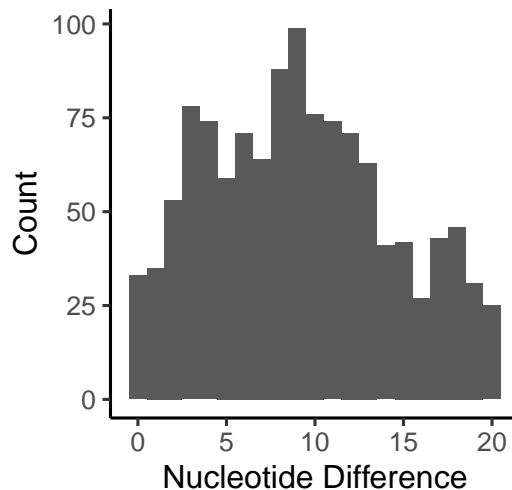
IGHV3-7*03

346 sequences assigned
40 (11.6%) exact matches, in which:
25 unique CDR3
3 unique J



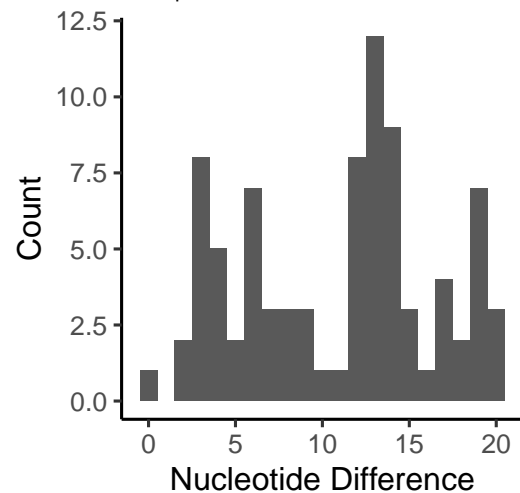
IGHV3-11*04

1302 sequences assigned
33 (2.5%) exact matches, in which:
20 unique CDR3
6 unique J



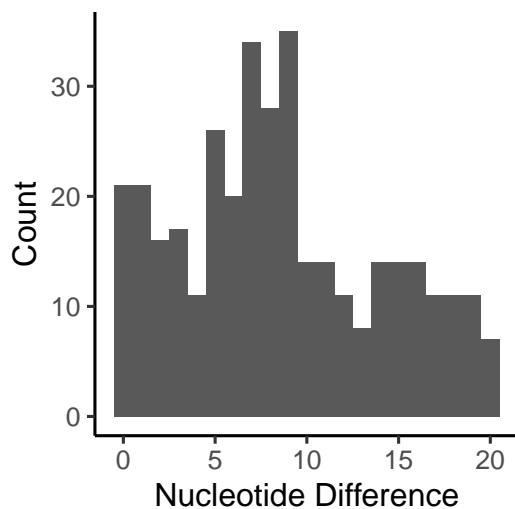
IGHV3-13*01

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



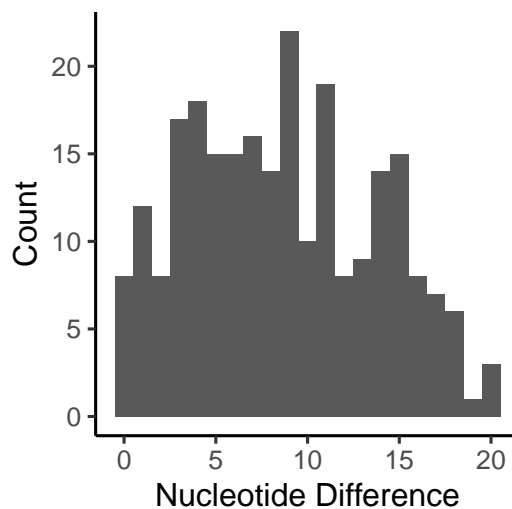
IGHV3-7*04

382 sequences assigned
21 (5.5%) exact matches, in which:
15 unique CDR3
6 unique J



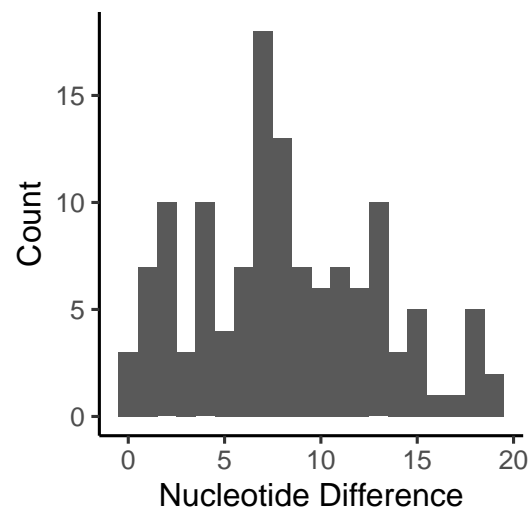
IGHV3-11*06

261 sequences assigned
8 (3.1%) exact matches, in which:
7 unique CDR3
3 unique J



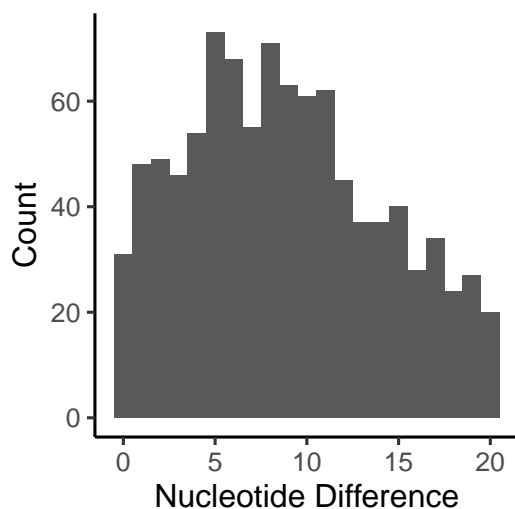
IGHV3-13*04

130 sequences assigned
3 (2.3%) exact matches, in which:
3 unique CDR3
2 unique J



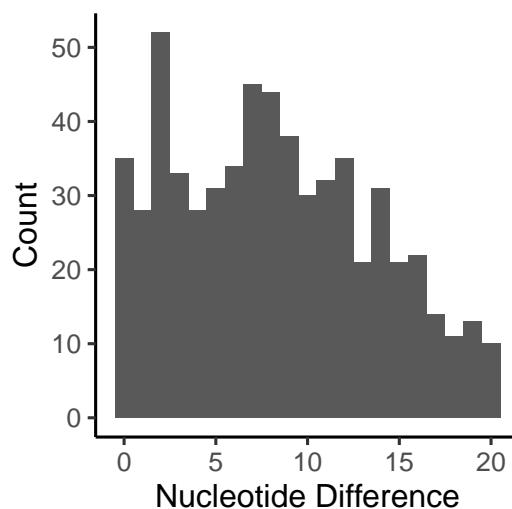
IGHV3-9*01

1051 sequences assigned
31 (2.9%) exact matches, in which:
25 unique CDR3
5 unique J



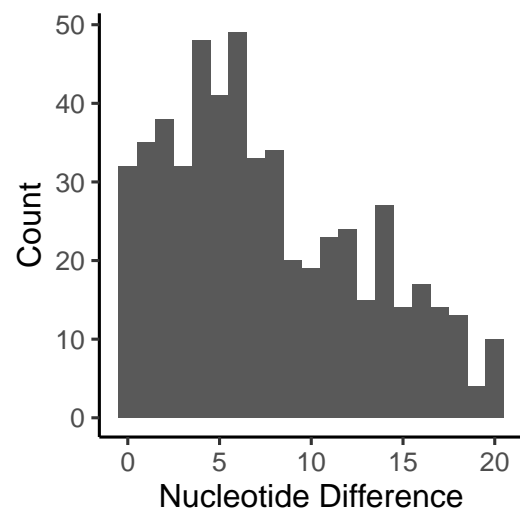
IGHV3-11*03_05

647 sequences assigned
35 (5.4%) exact matches, in which:
22 unique CDR3
4 unique J



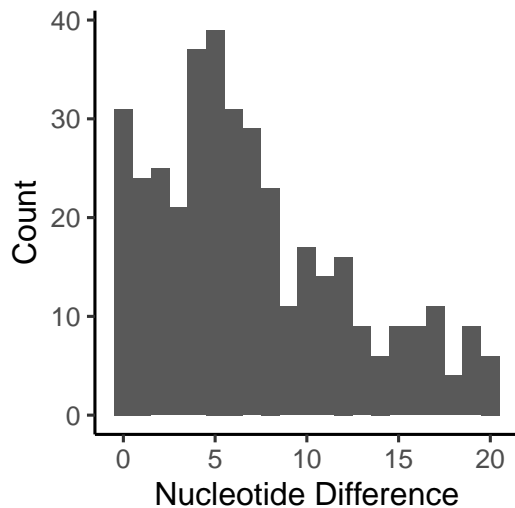
IGHV3-15*07

565 sequences assigned
32 (5.7%) exact matches, in which:
24 unique CDR3
5 unique J



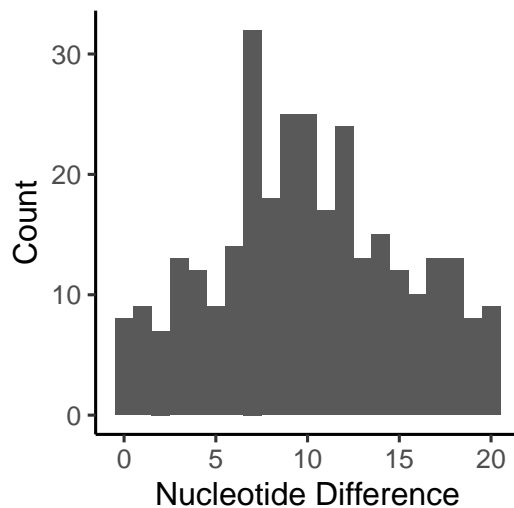
IGHV3-15*01_02

399 sequences assigned
31 (7.8%) exact matches, in which:
23 unique CDR3
6 unique J



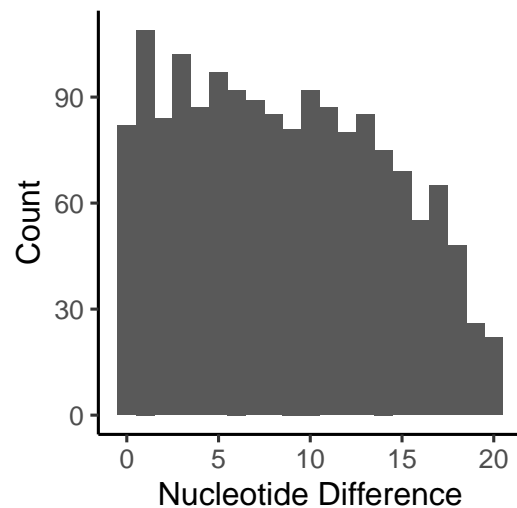
IGHV3-21*04

326 sequences assigned
8 (2.5%) exact matches, in which:
7 unique CDR3
4 unique J



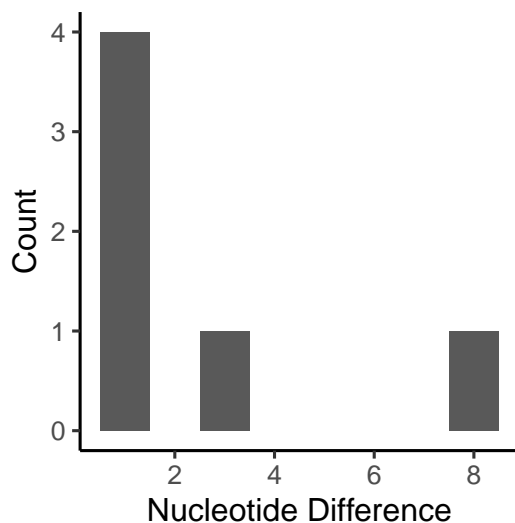
IGHV3-30-3*01

1745 sequences assigned
82 (4.7%) exact matches, in which:
57 unique CDR3
6 unique J



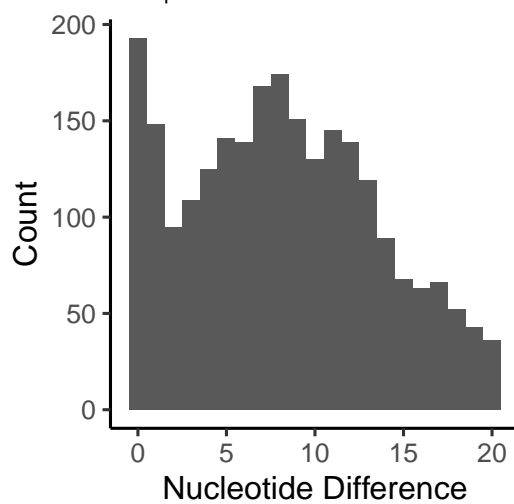
IGHV3-19*01

6 sequences assigned
No exact matches.



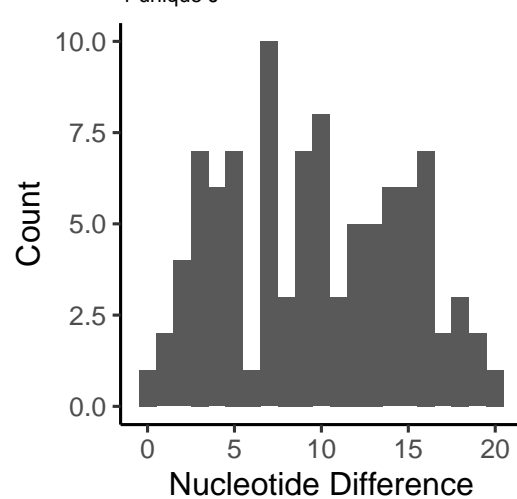
IGHV3-21*01_02

2598 sequences assigned
193 (7.4%) exact matches, in which:
135 unique CDR3
7 unique J



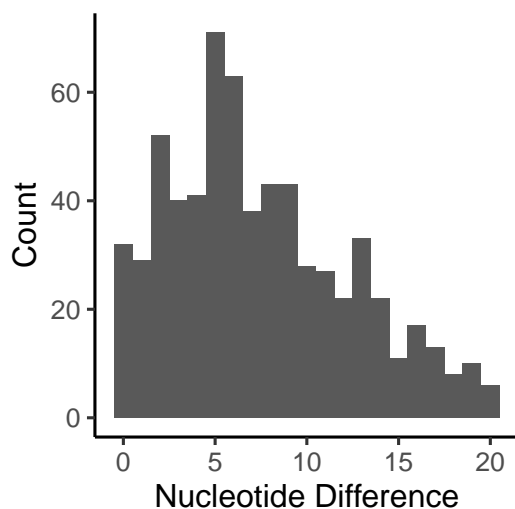
IGHV3-30-3*02

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



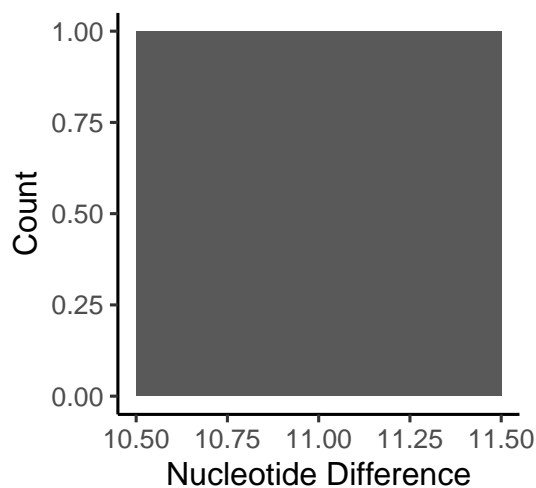
IGHV3-20*03_04

674 sequences assigned
32 (4.7%) exact matches, in which:
17 unique CDR3
4 unique J



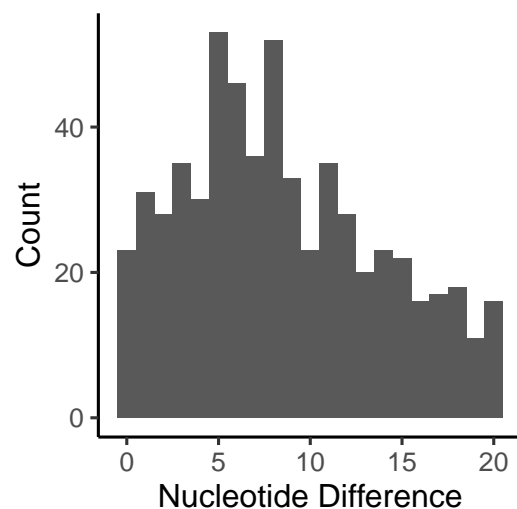
IGHV3-22*01_02

1 sequences assigned
No exact matches.



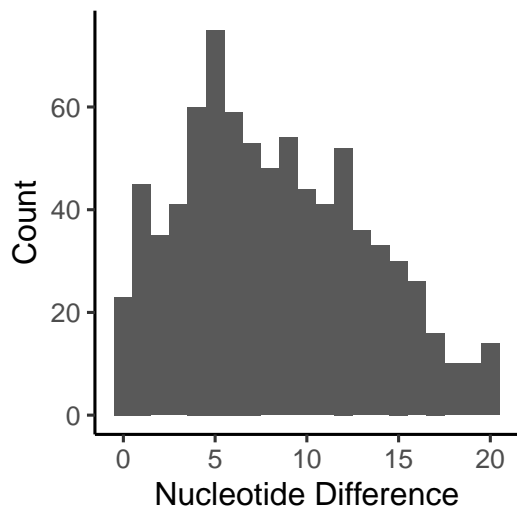
IGHV3-30*03

741 sequences assigned
23 (3.1%) exact matches, in which:
23 unique CDR3
7 unique J



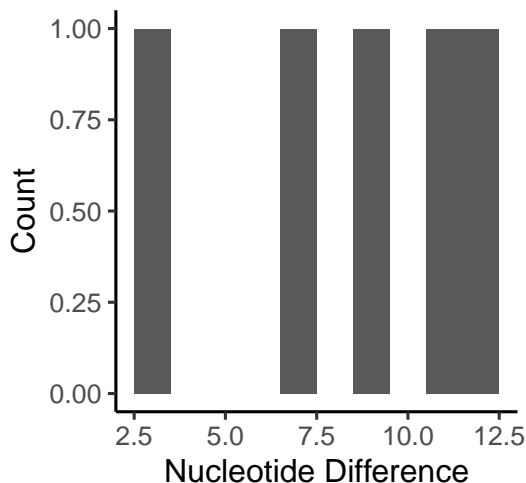
IGHV3-33*01

843 sequences assigned
23 (2.7%) exact matches, in which:
16 unique CDR3
5 unique J



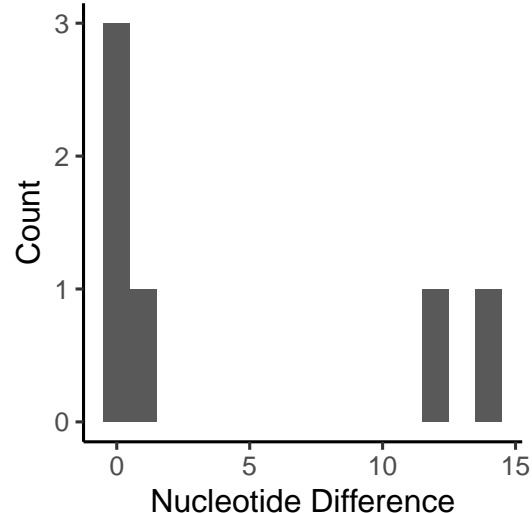
IGHV3-35*01

5 sequences assigned
No exact matches.



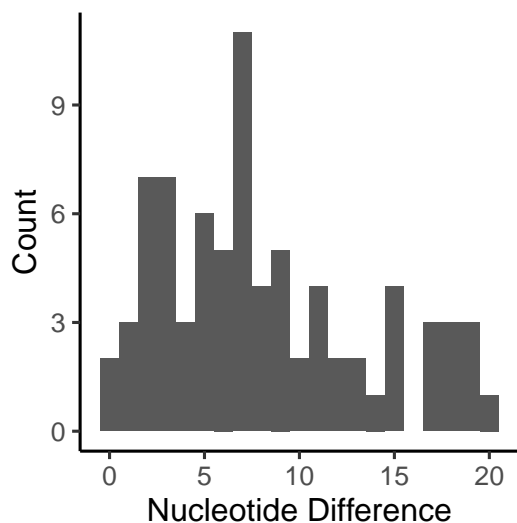
IGHV3-47*02

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



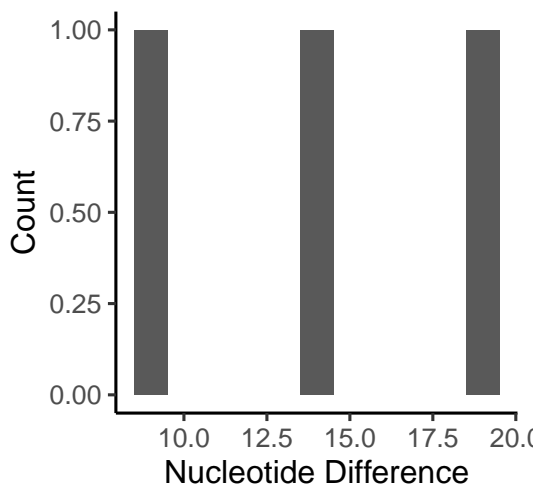
IGHV3-33*05

80 sequences assigned
2 (2.5%) exact matches, in which:
2 unique CDR3
2 unique J



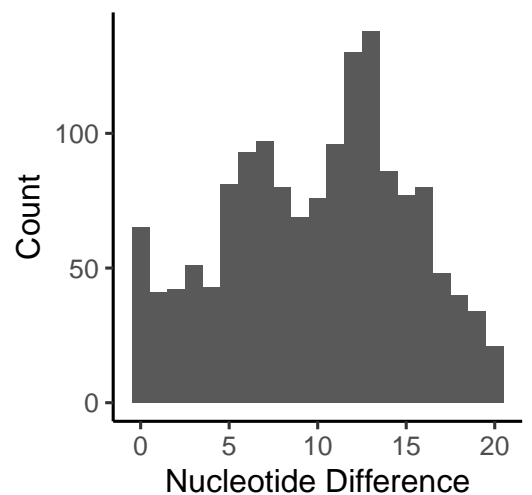
IGHV3-38-3*01

3 sequences assigned
No exact matches.



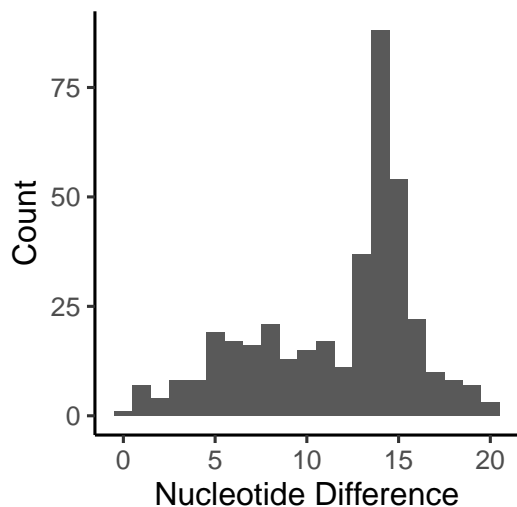
IGHV3-48*01

1567 sequences assigned
65 (4.1%) exact matches, in which:
49 unique CDR3
7 unique J



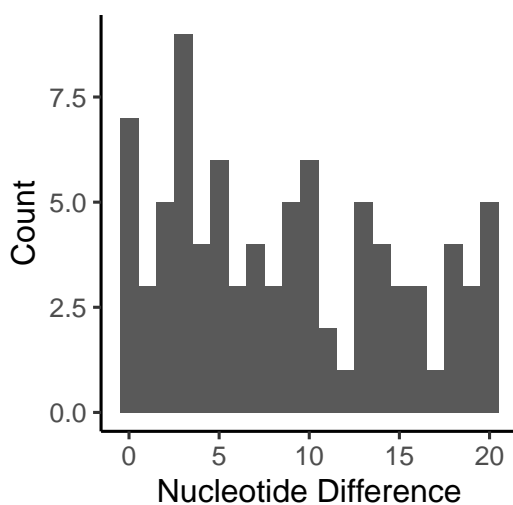
IGHV3-33*06

396 sequences assigned
1 (0.3%) exact matches, in which:
1 unique CDR3
1 unique J



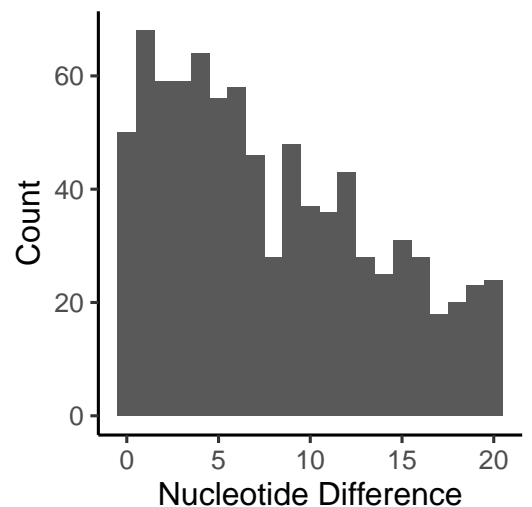
IGHV3-43*01

101 sequences assigned
7 (6.9%) exact matches, in which:
5 unique CDR3
2 unique J



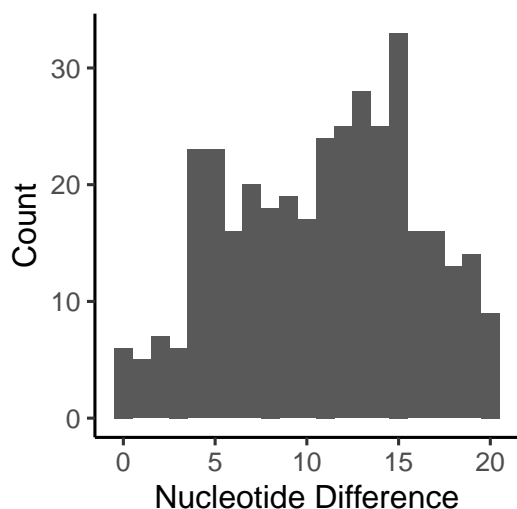
IGHV3-48*02

896 sequences assigned
50 (5.6%) exact matches, in which:
36 unique CDR3
4 unique J



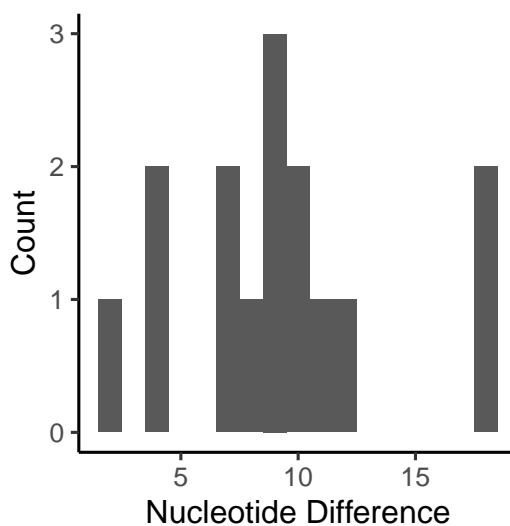
IGHV3-48*04

405 sequences assigned
6 (1.5%) exact matches, in which:
6 unique CDR3
4 unique J



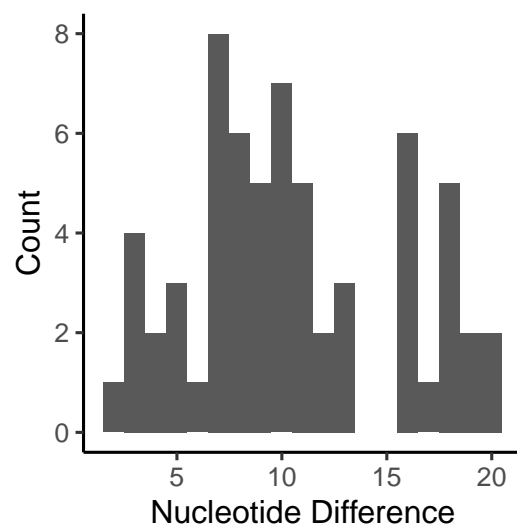
IGHV3-53*05

16 sequences assigned
No exact matches.



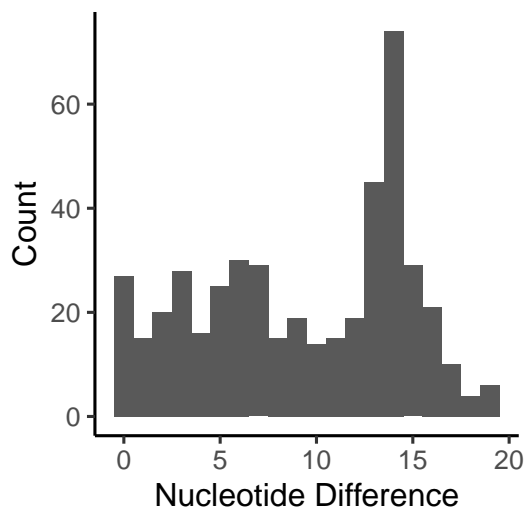
IGHV3-64*04

81 sequences assigned
No exact matches.



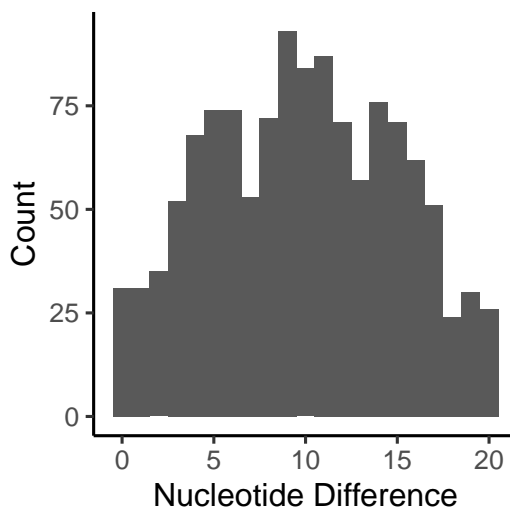
IGHV3-49*03_05

483 sequences assigned
27 (5.6%) exact matches, in which:
19 unique CDR3
4 unique J



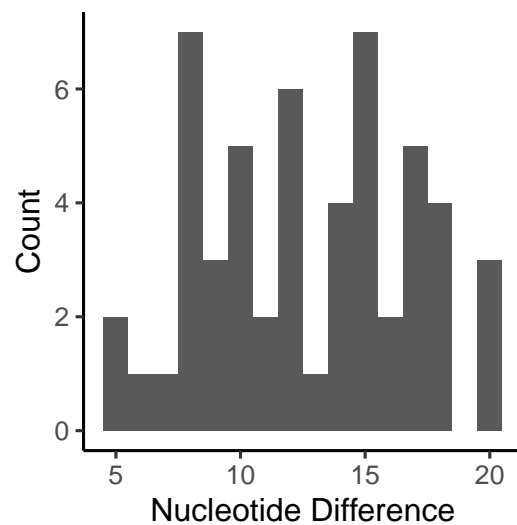
IGHV3-53*01_02

1353 sequences assigned
31 (2.3%) exact matches, in which:
22 unique CDR3
5 unique J



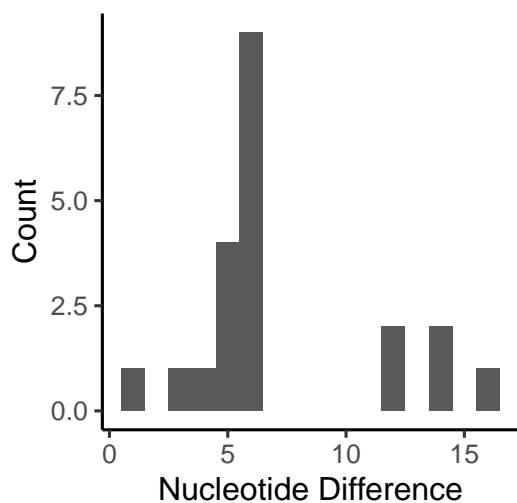
IGHV3-66*01

60 sequences assigned
No exact matches.



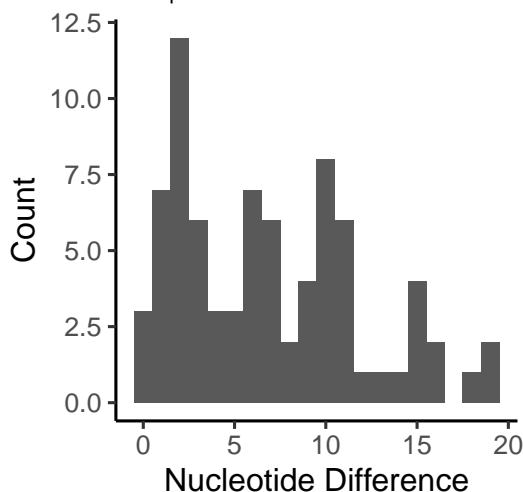
IGHV3-52*01_03

21 sequences assigned
No exact matches.



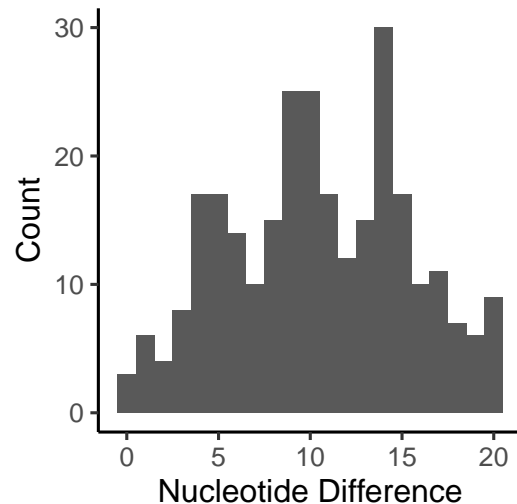
IGHV3-64*01

80 sequences assigned
3 (3.8%) exact matches, in which:
2 unique CDR3
1 unique J



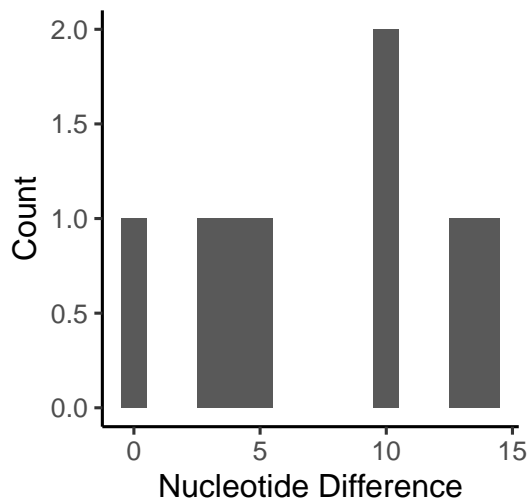
IGHV3-66*02

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



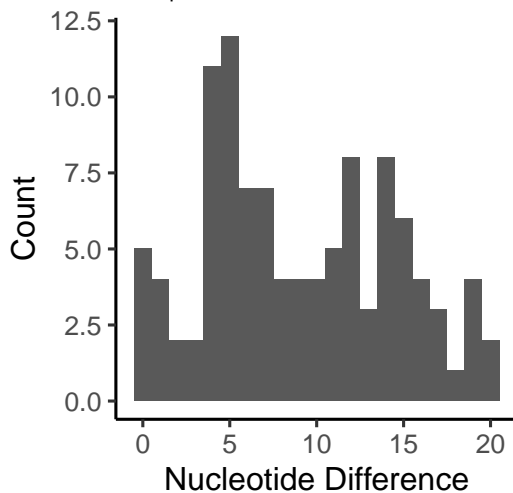
IGHV3-66*03

14 sequences assigned
1 (7.1%) exact matches, in which:
1 unique CDR3
1 unique J



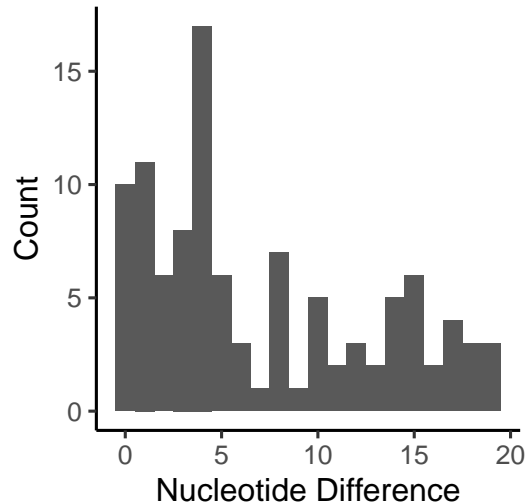
IGHV3-72*01

116 sequences assigned
5 (4.3%) exact matches, in which:
4 unique CDR3
3 unique J



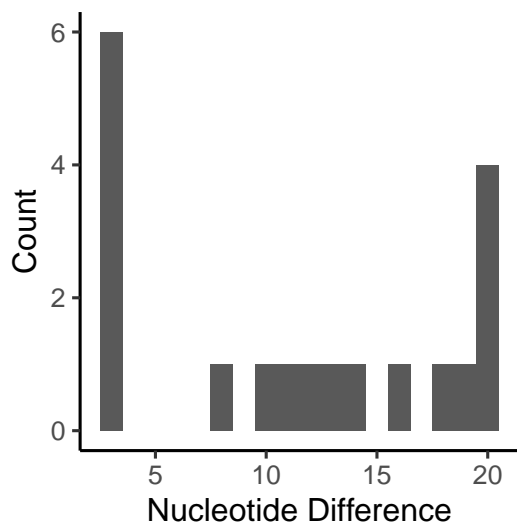
IGHV3-43D*03

126 sequences assigned
10 (7.9%) exact matches, in which:
7 unique CDR3
2 unique J



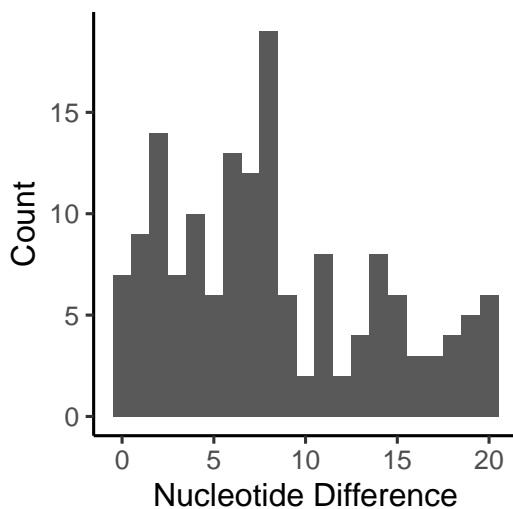
IGHV3-69-1*01

38 sequences assigned
No exact matches.



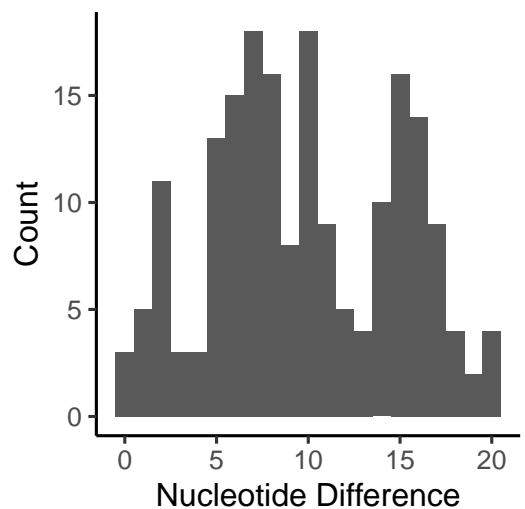
IGHV3-73*01_02

164 sequences assigned
7 (4.3%) exact matches, in which:
6 unique CDR3
2 unique J



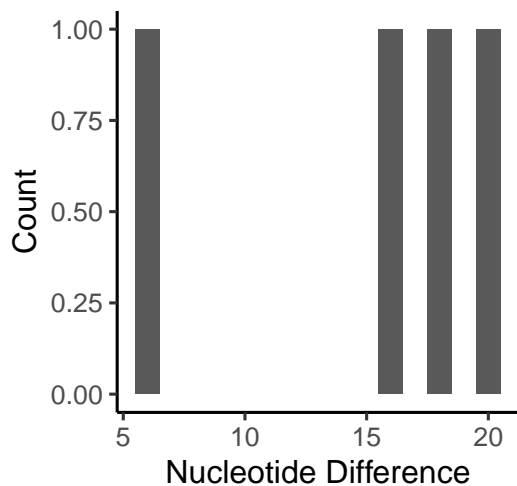
IGHV3-64D*06

261 sequences assigned
3 (1.1%) exact matches, in which:
3 unique CDR3
3 unique J



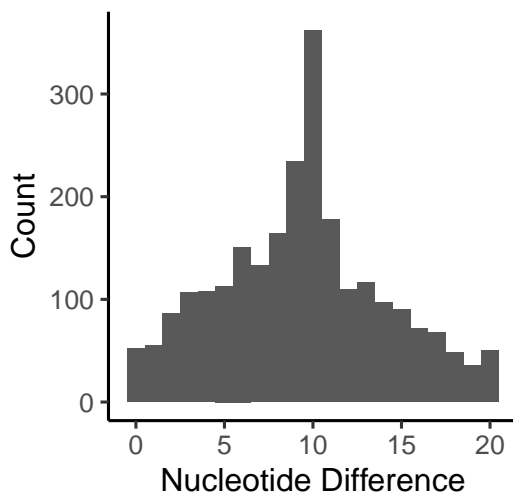
IGHV3-69-1*02

8 sequences assigned
No exact matches.



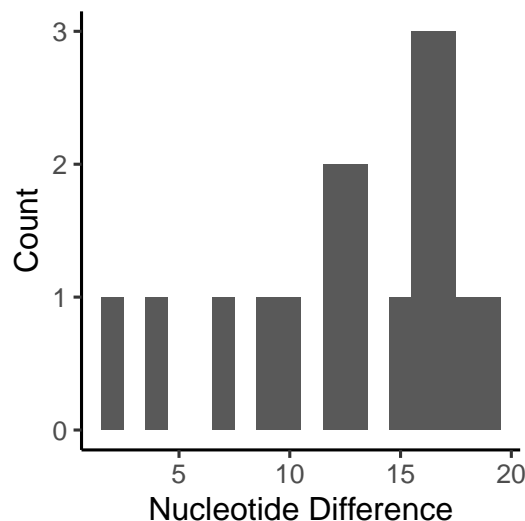
IGHV3-74*01_02

2667 sequences assigned
52 (1.9%) exact matches, in which:
37 unique CDR3
5 unique J



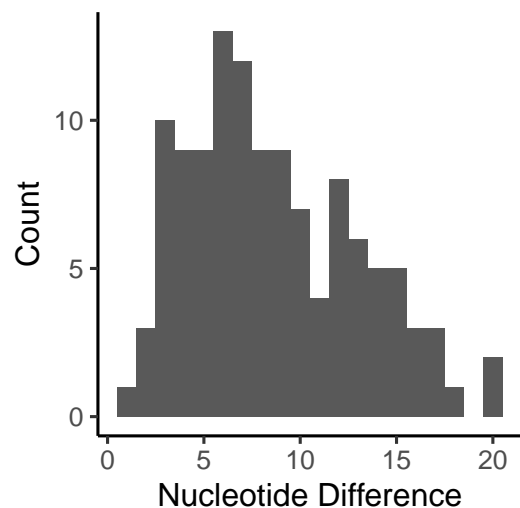
IGHV3-NL1*01

23 sequences assigned
No exact matches.



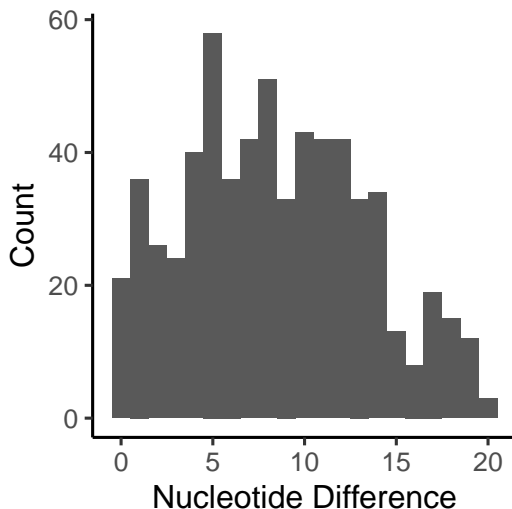
IGHV4-4*07

136 sequences assigned
No exact matches.



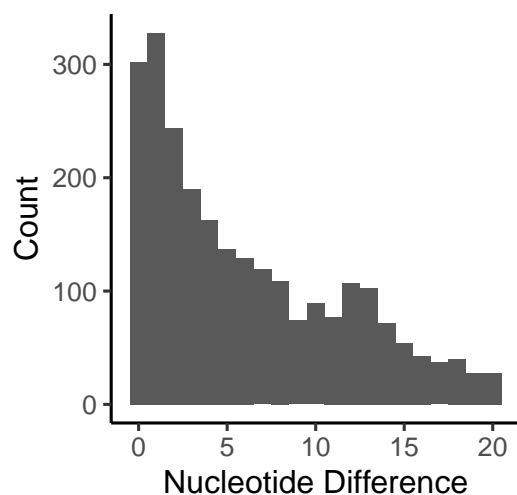
IGHV4-30-2*01

669 sequences assigned
21 (3.1%) exact matches, in which:
15 unique CDR3
6 unique J



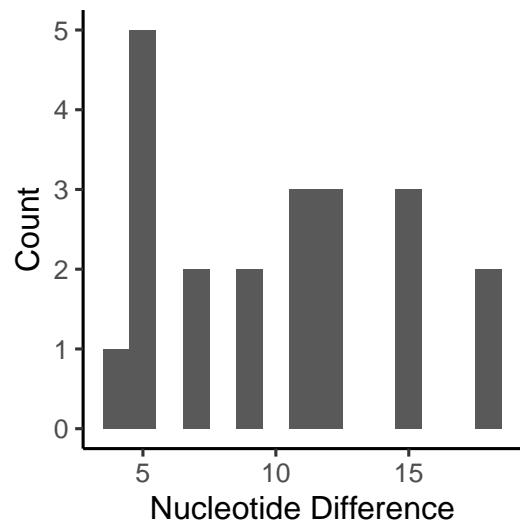
IGHV4-34*01_02

2588 sequences assigned
302 (11.7%) exact matches, in which:
231 unique CDR3
7 unique J



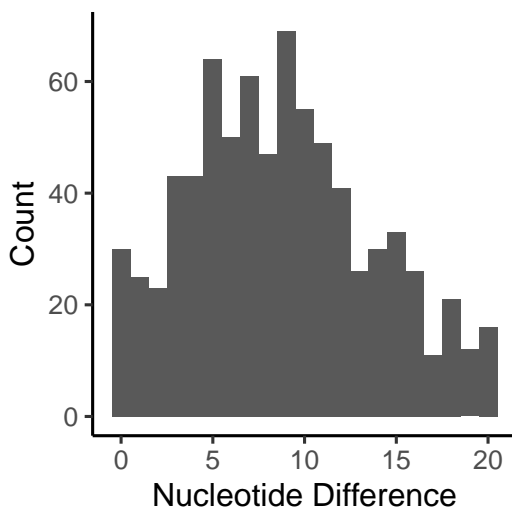
IGHV4-28*03

22 sequences assigned
No exact matches.



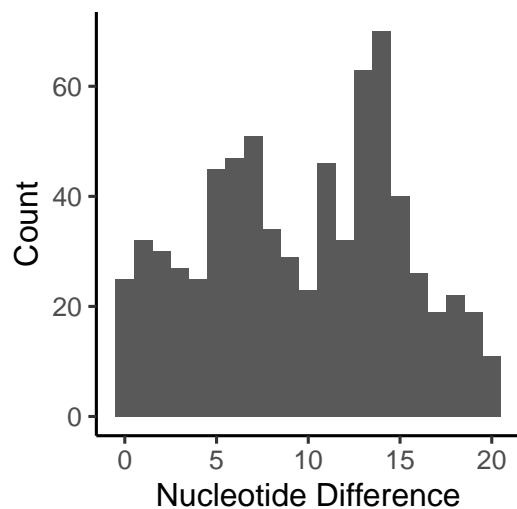
IGHV4-30-4*01

822 sequences assigned
30 (3.6%) exact matches, in which:
25 unique CDR3
6 unique J



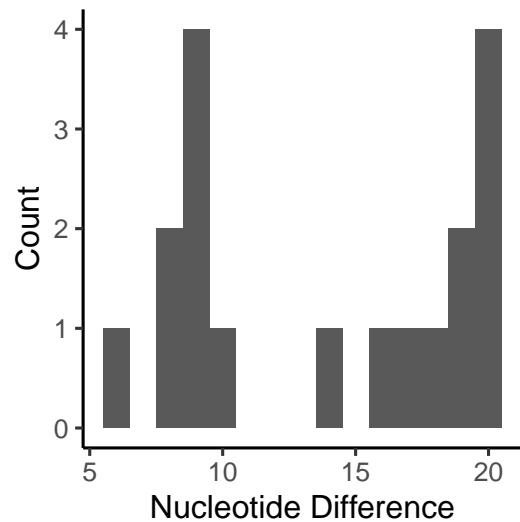
IGHV4-38-2*02

766 sequences assigned
25 (3.3%) exact matches, in which:
20 unique CDR3
5 unique J



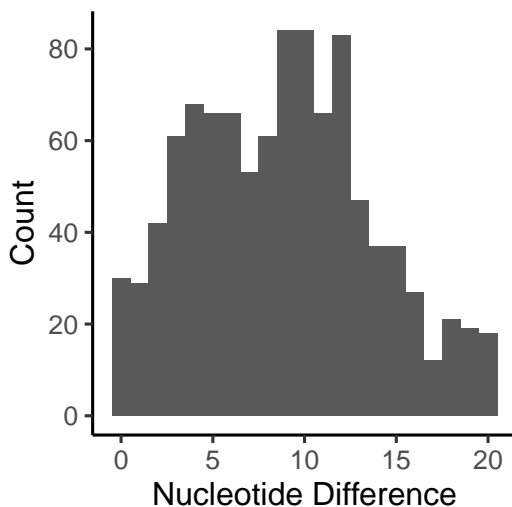
IGHV4-28*01_07

18 sequences assigned
No exact matches.



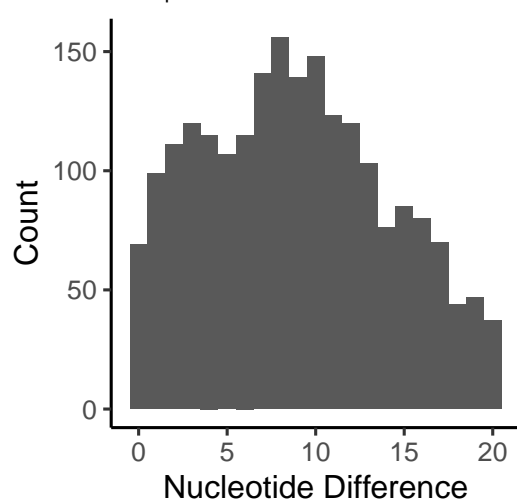
IGHV4-31*03_04

1177 sequences assigned
30 (2.5%) exact matches, in which:
24 unique CDR3
5 unique J



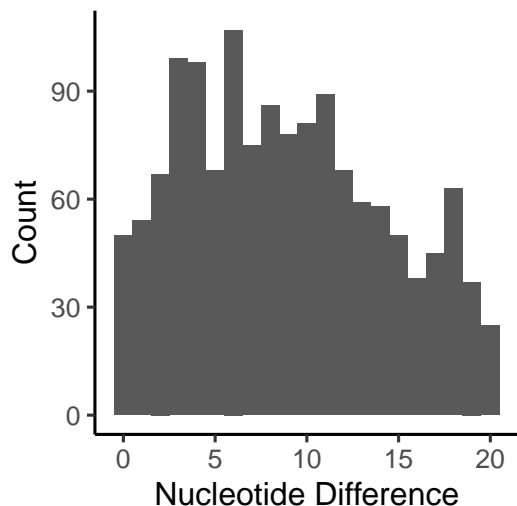
IGHV4-39*07

2519 sequences assigned
69 (2.7%) exact matches, in which:
55 unique CDR3
7 unique J



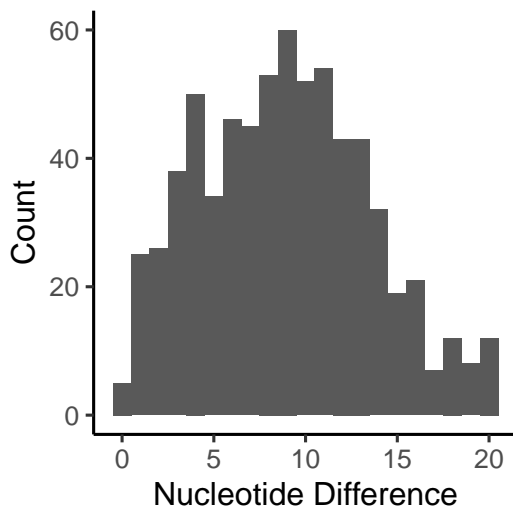
IGHV4-39*01_05

1808 sequences assigned
50 (2.8%) exact matches, in which:
39 unique CDR3
6 unique J



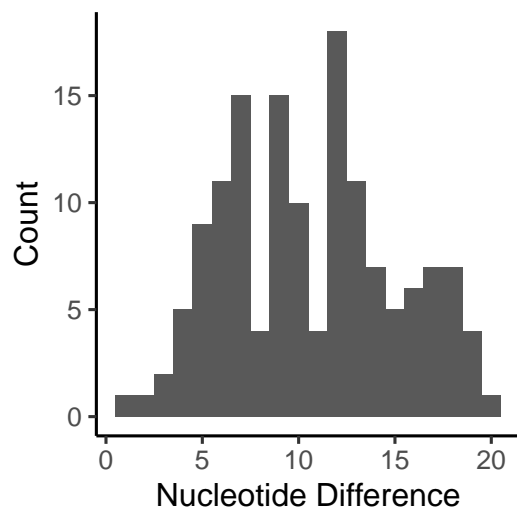
IGHV4-59*12

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



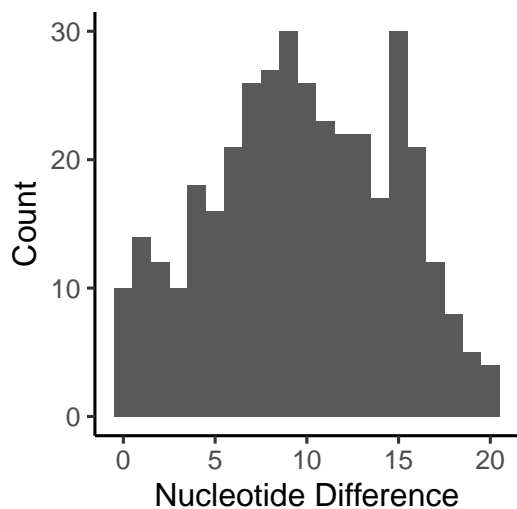
IGHV4-61*08

166 sequences assigned
No exact matches.



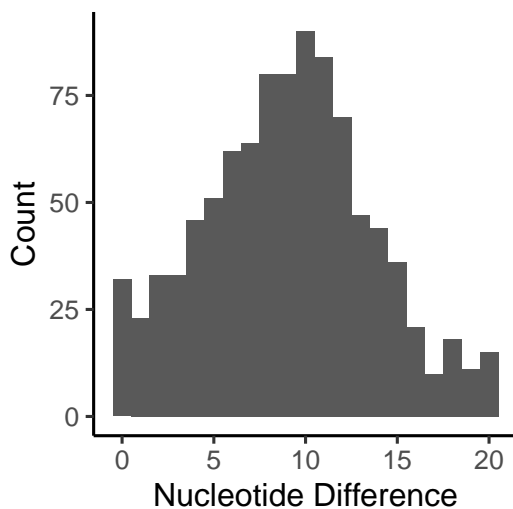
IGHV4-59*08

399 sequences assigned
10 (2.5%) exact matches, in which:
9 unique CDR3
4 unique J



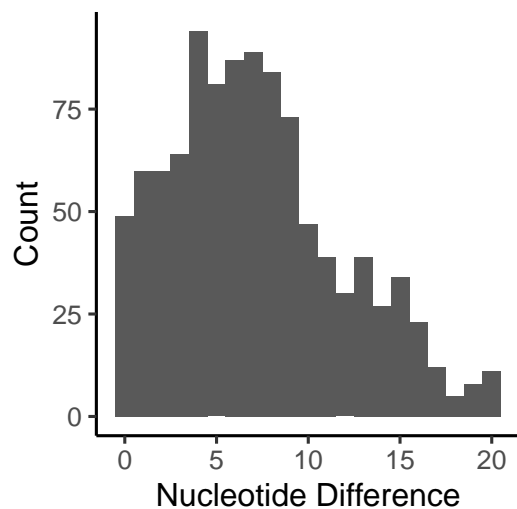
IGHV4-61*01

993 sequences assigned
32 (3.2%) exact matches, in which:
29 unique CDR3
6 unique J



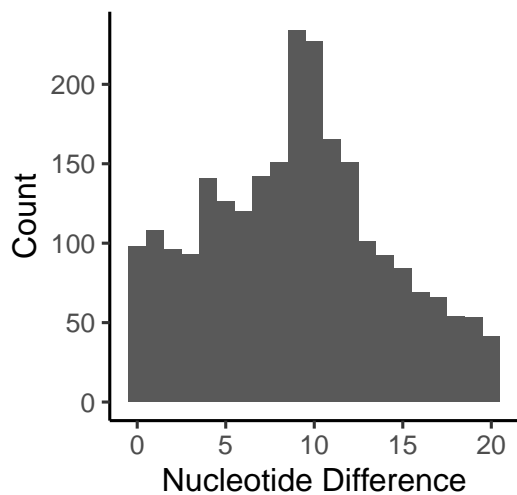
IGHV5-10-1*01_03

1043 sequences assigned
49 (4.7%) exact matches, in which:
35 unique CDR3
6 unique J



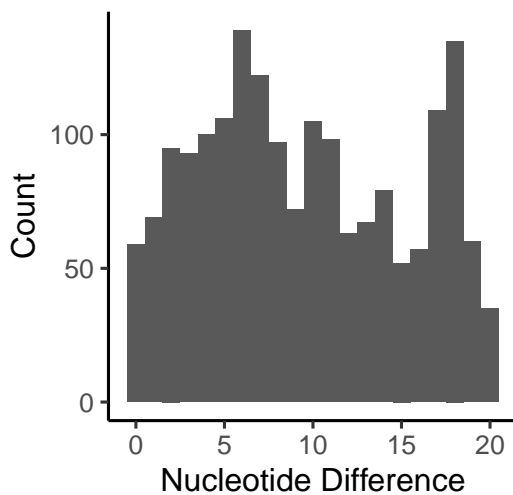
IGHV4-59*01_07

2640 sequences assigned
98 (3.7%) exact matches, in which:
91 unique CDR3
6 unique J



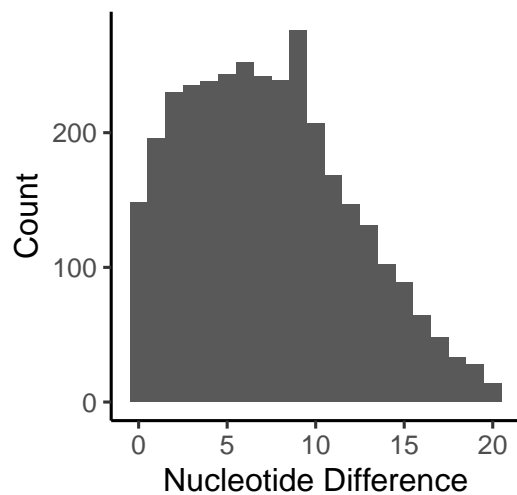
IGHV4-61*02

1909 sequences assigned
59 (3.1%) exact matches, in which:
51 unique CDR3
6 unique J



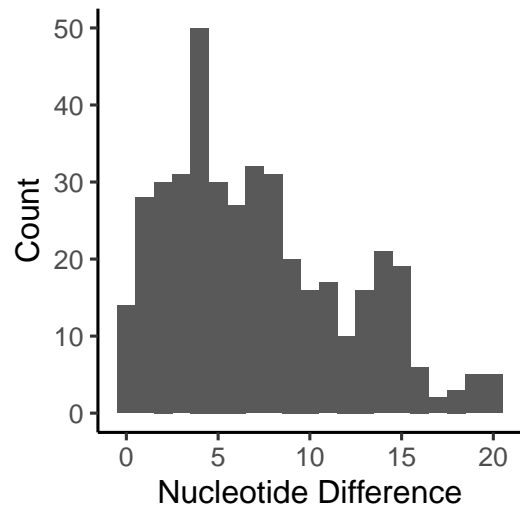
IGHV5-51*01_03

3567 sequences assigned
148 (4.1%) exact matches, in which:
110 unique CDR3
7 unique J



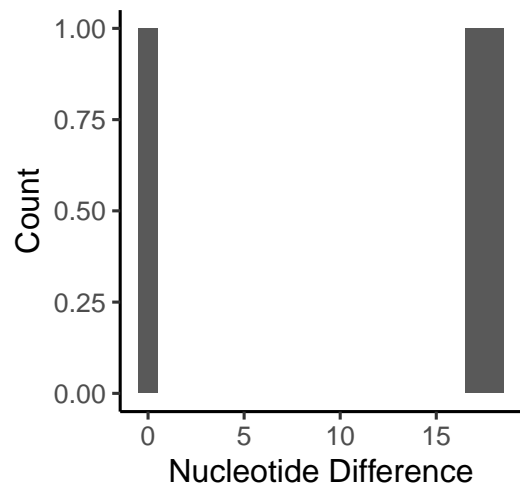
IGHV6-1*01_02

424 sequences assigned
14 (3.3%) exact matches, in which:
14 unique CDR3
4 unique J

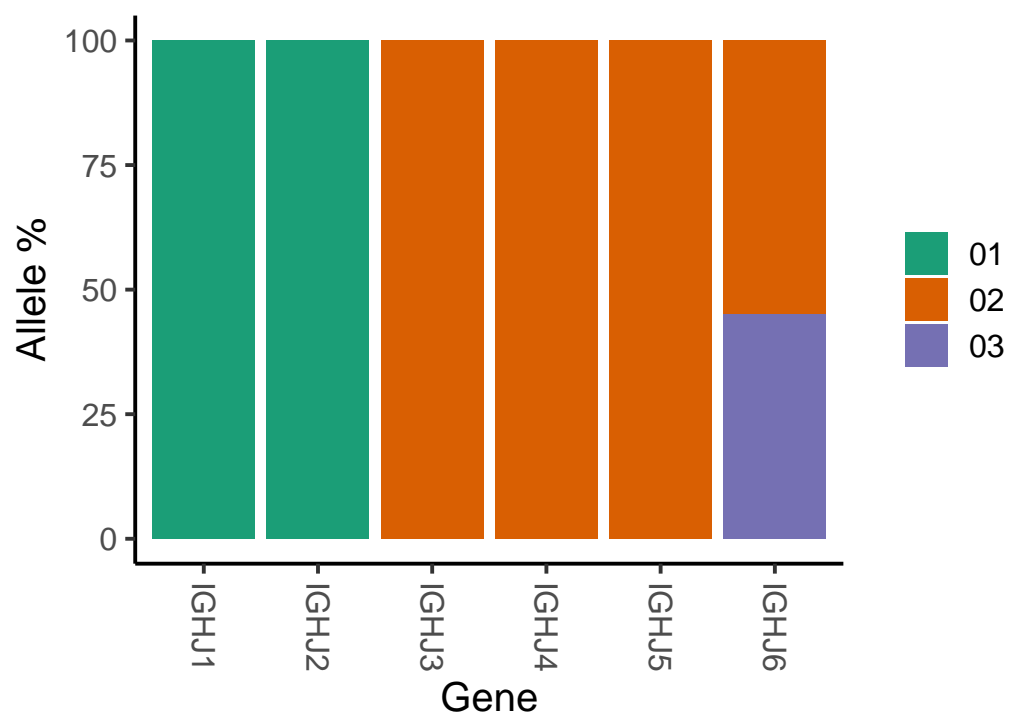


IGHV7-4-1*01

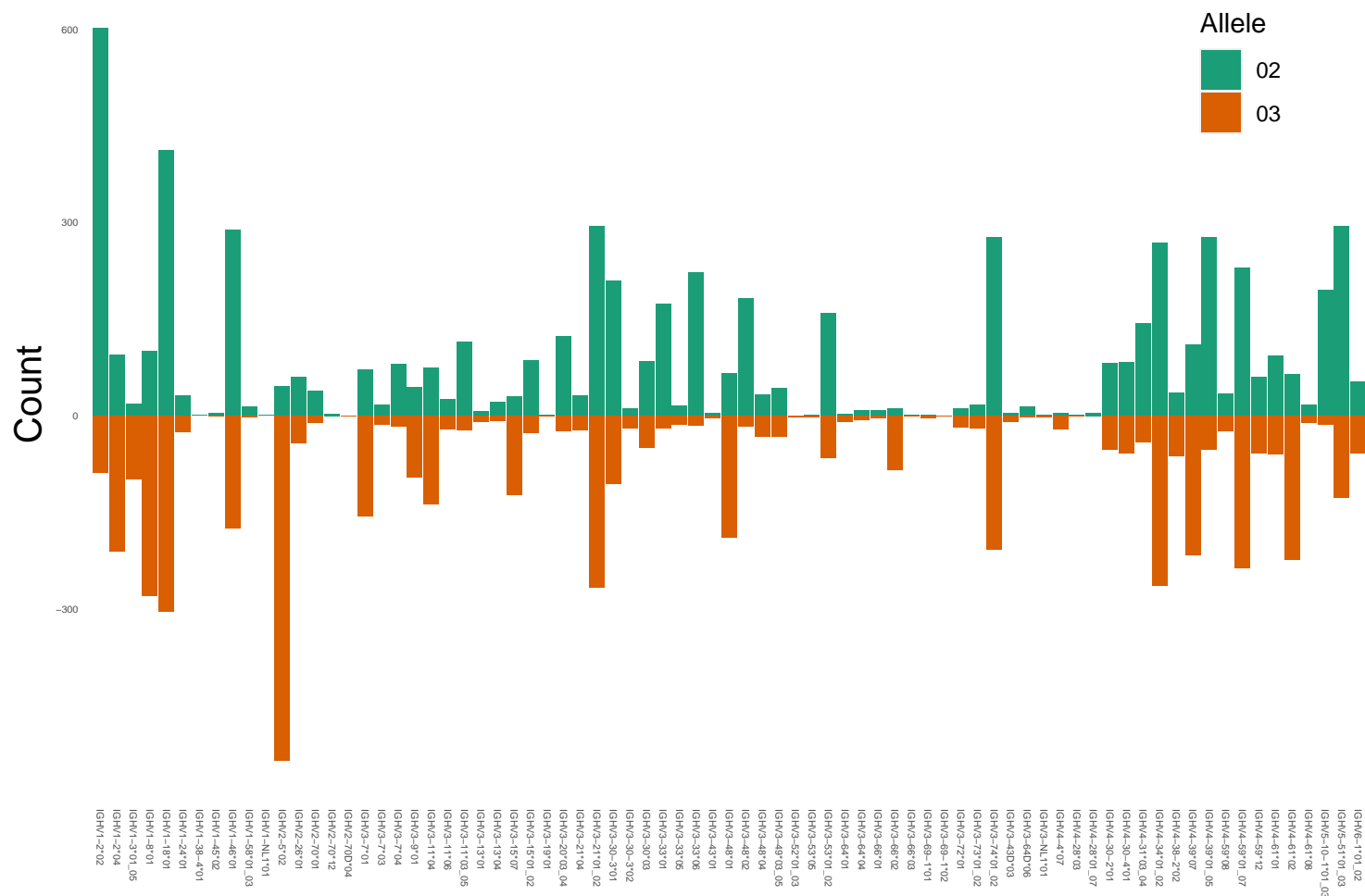
3 sequences assigned
1 (33.3%) exact matches, in which:
1 unique CDR3
1 unique J



Allele Usage



Sequence Count by IGHJ6 allele usage



Novel sequence(s)IGHV1-30*02_G88A are not listed in the genotype and will be ignored.

Novel sequence(s)IGHV3-30-3*01_T288CIGHV4-59*02_G88AIGHV5-51*07_A128G are not listed in the genotype and will be ignored.

Novel sequence(s)IGHV3-30*03_T288C 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.

Warning - no inferred sequences found.

Warning - no inferred sequences found.

Novel sequence(s)IGHV3-33*01_G75CIGHV4-59*02_G88AIGHV5-51*07_A128G are not listed in the genotype and will be ignored.

Novel sequence(s)IGHV3-33*01_G75CIGHV4-59*02_G88AIGHV5-51*07_A128G are not listed in the genotype and will be ignored.

Novel sequence(s)IGHV3-30*03_T288CIGHV4-59*02_G88AIGHV5-51*07_A128G are not listed in the genotype and will be ignored.

Warning - no inferred sequences found.

Warning - no inferred sequences found.

Warning - no inferred sequences found.

Novel sequence(s)IGHV1-69*08_09_G112AIGHV4-59*02_G88AIGHV5-10-1*01_03_T258CIGHV5-51*07_A128G are not listed in the genotype and will be ignored.

Warning - no inferred sequences found.

Novel sequence(s)IGHV1-69*08_C191TIGHV3-48*03_T303GIGHV4-59*02_G88AIGHV5-51*07_A128G are not listed in the genotype and will be ignored.

Warning - no inferred sequences found.