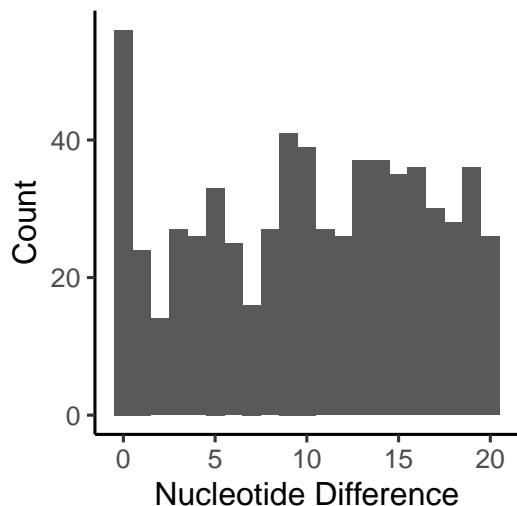


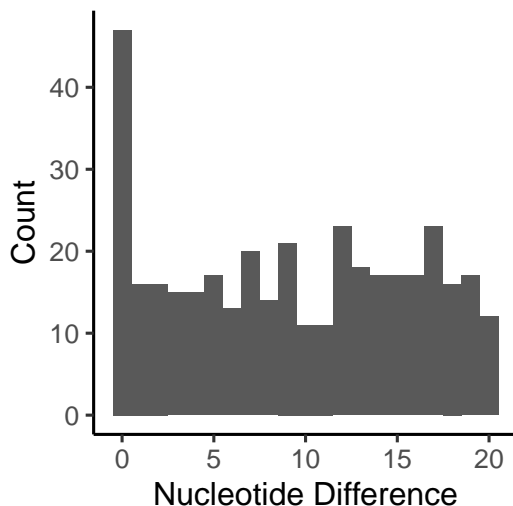
IGHV1-2*02

839 sequences assigned
56 (6.7%) exact matches, in which:
56 unique CDR3
6 unique J



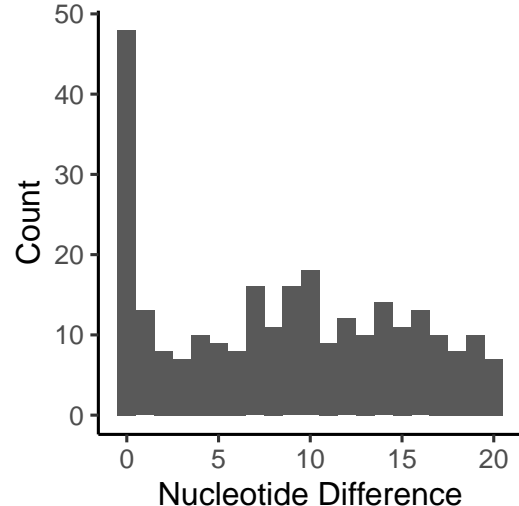
IGHV1-8*01

426 sequences assigned
47 (11%) exact matches, in which:
44 unique CDR3
4 unique J



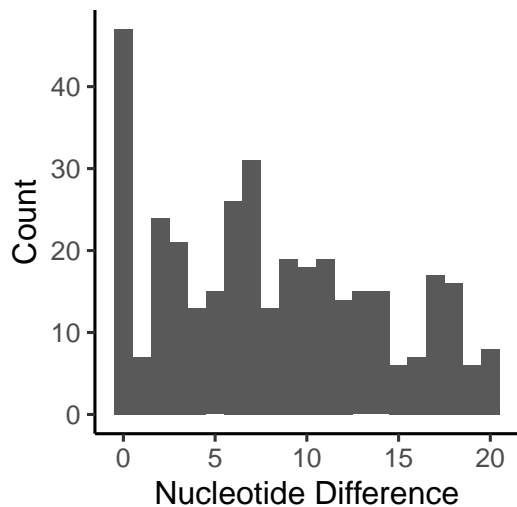
IGHV1-46*01

358 sequences assigned
48 (13.4%) exact matches, in which:
47 unique CDR3
5 unique J



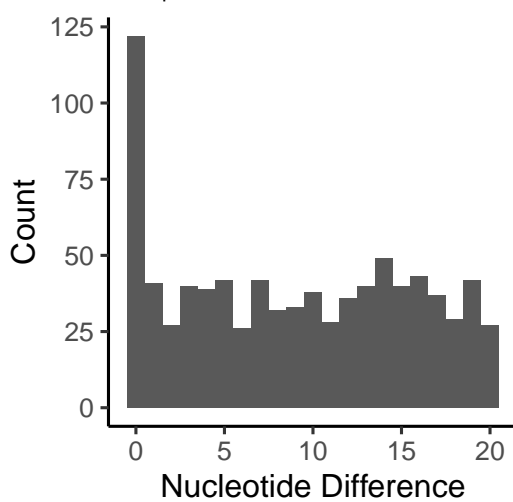
IGHV1-2*06

437 sequences assigned
47 (10.8%) exact matches, in which:
44 unique CDR3
5 unique J



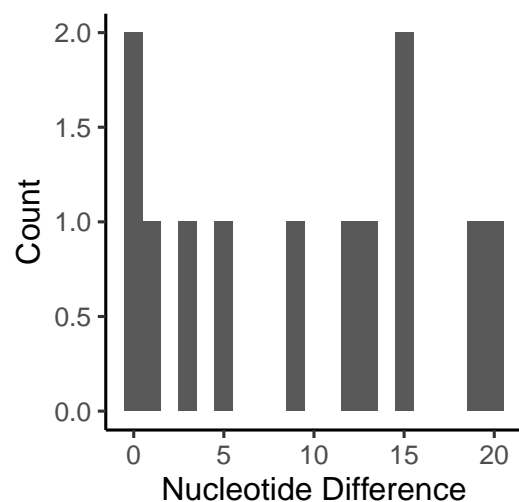
IGHV1-18*01

1073 sequences assigned
122 (11.4%) exact matches, in which:
112 unique CDR3
4 unique J



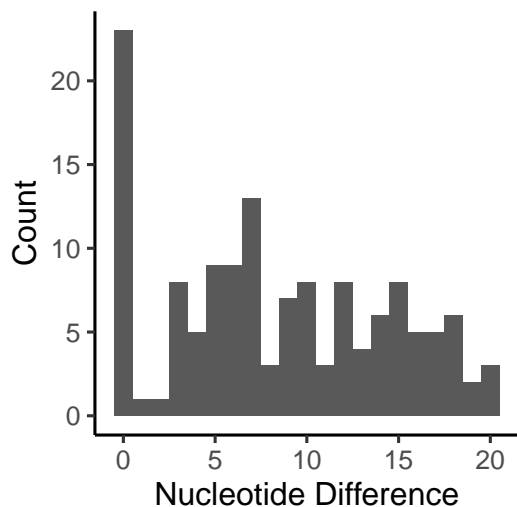
IGHV1-58*02

17 sequences assigned
2 (11.8%) exact matches, in which:
2 unique CDR3
1 unique J



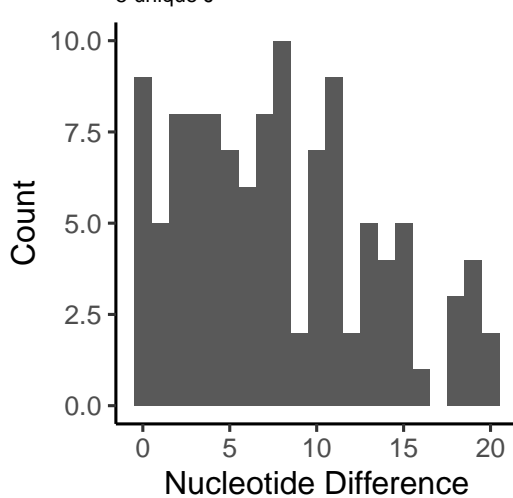
IGHV1-3*01_05

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



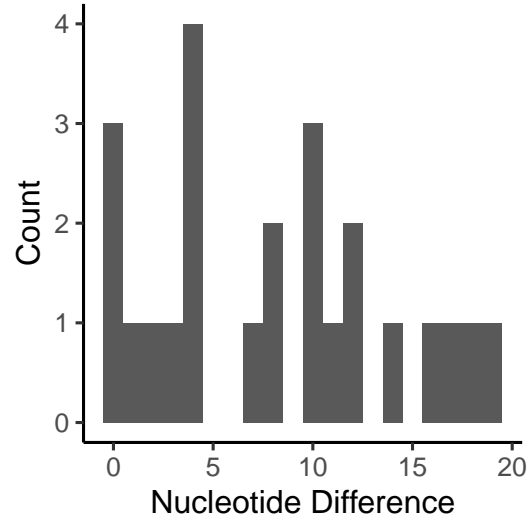
IGHV1-24*01

137 sequences assigned
9 (6.6%) exact matches, in which:
9 unique CDR3
5 unique J



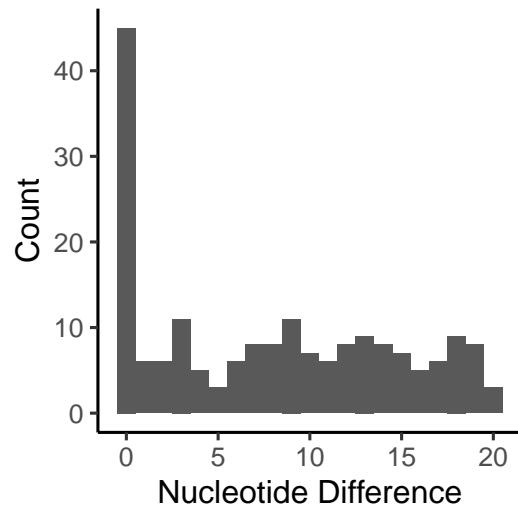
IGHV1-58*01_03

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



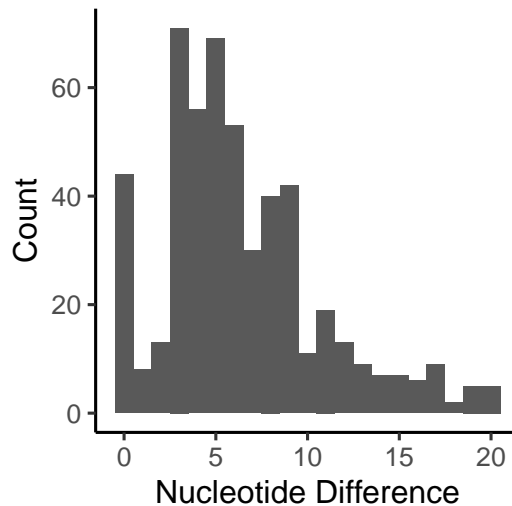
IGHV1-69*01_12_13

275 sequences assigned
45 (16.4%) exact matches, in which:
44 unique CDR3
4 unique J



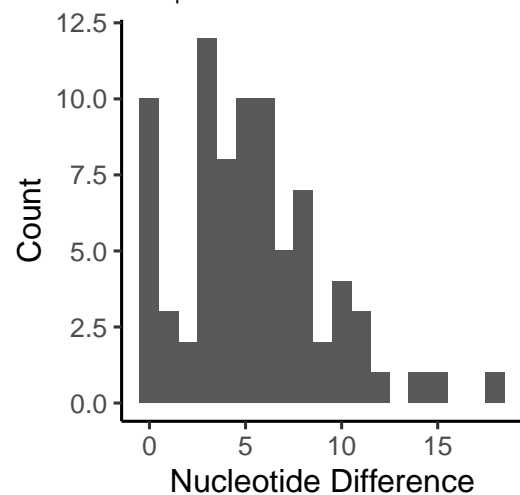
IGHV2-5*02

543 sequences assigned
44 (8.1%) exact matches, in which:
42 unique CDR3
5 unique J



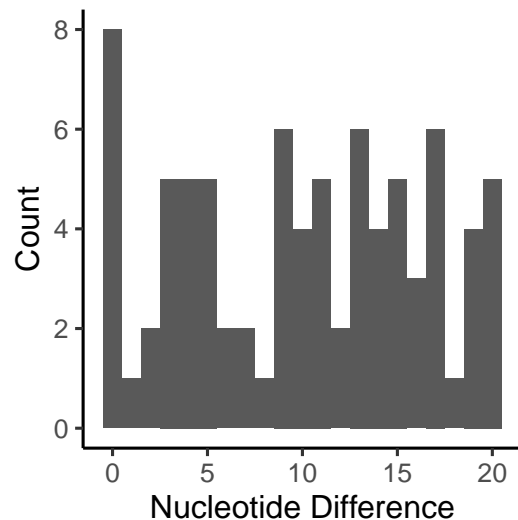
IGHV2-70*11_15

81 sequences assigned
10 (12.3%) exact matches, in which:
9 unique CDR3
2 unique J



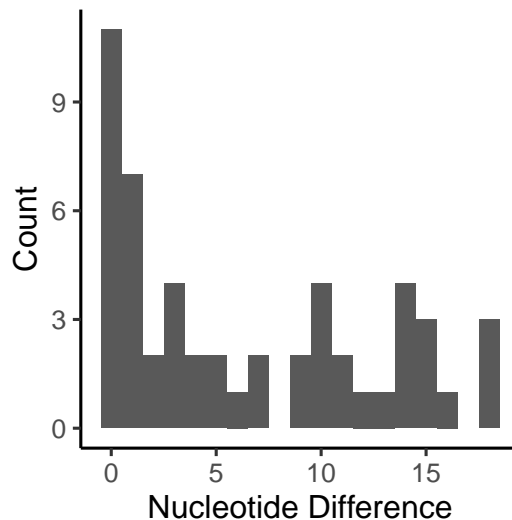
IGHV1-69*04_09

134 sequences assigned
8 (6%) exact matches, in which:
7 unique CDR3
2 unique J



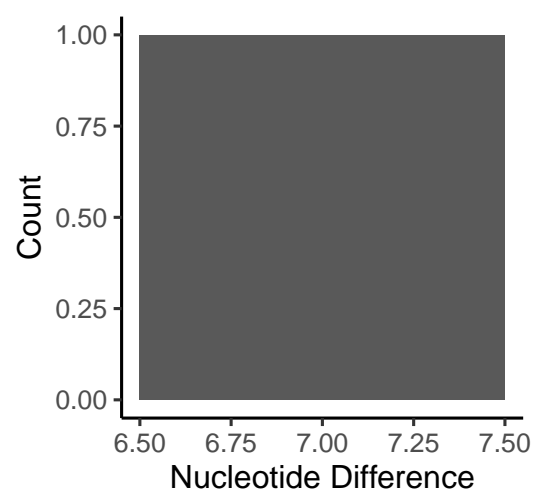
IGHV2-26*01

61 sequences assigned
11 (18%) exact matches, in which:
10 unique CDR3
3 unique J



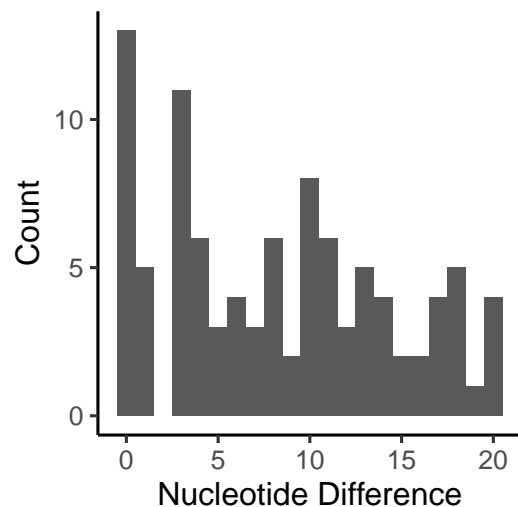
IGHV2-70D*04

1 sequences assigned
No exact matches.



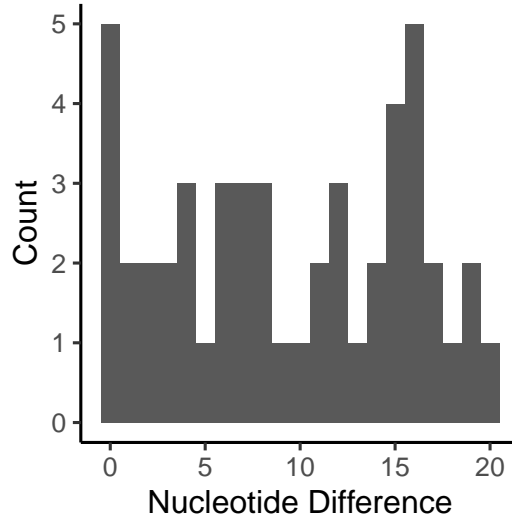
IGHV2-5*01

107 sequences assigned
13 (12.1%) exact matches, in which:
13 unique CDR3
3 unique J



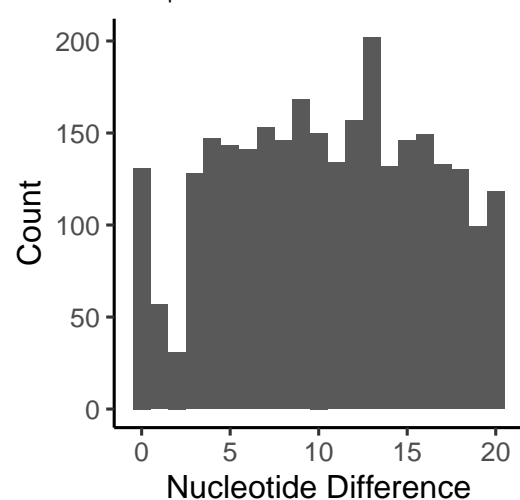
IGHV2-70*01

55 sequences assigned
5 (9.1%) exact matches, in which:
5 unique CDR3
2 unique J



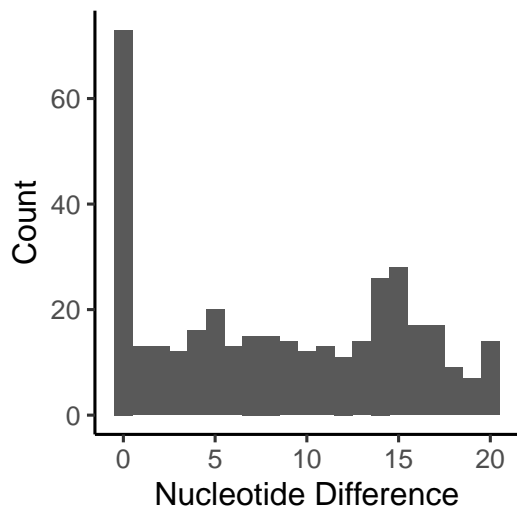
IGHV3-7*01

3190 sequences assigned
131 (4.1%) exact matches, in which:
70 unique CDR3
5 unique J



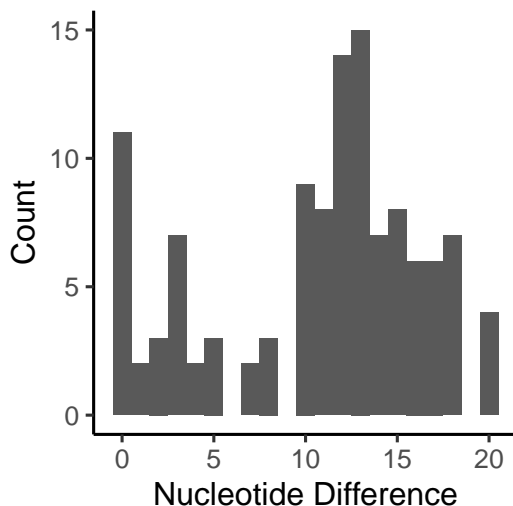
IGHV3-9*01

452 sequences assigned
73 (16.2%) exact matches, in which:
54 unique CDR3
5 unique J



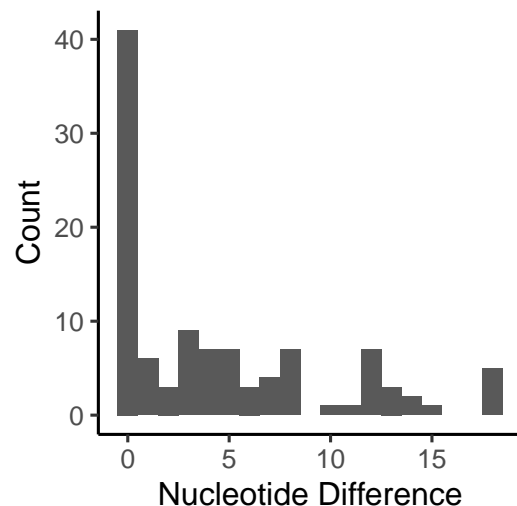
IGHV3-13*01

123 sequences assigned
11 (8.9%) exact matches, in which:
5 unique CDR3
4 unique J



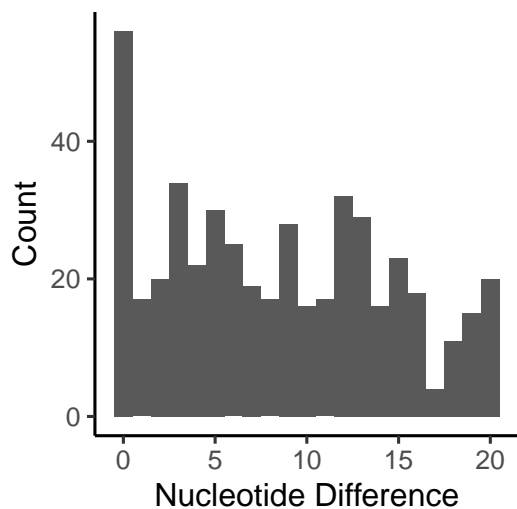
IGHV3-20*01_02

113 sequences assigned
41 (36.3%) exact matches, in which:
19 unique CDR3
5 unique J



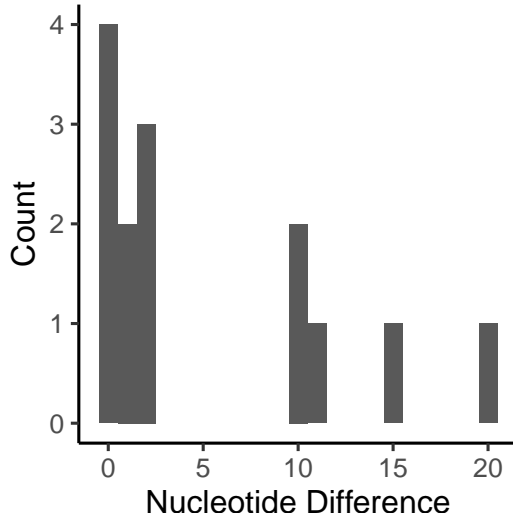
IGHV3-11*01

545 sequences assigned
56 (10.3%) exact matches, in which:
34 unique CDR3
4 unique J



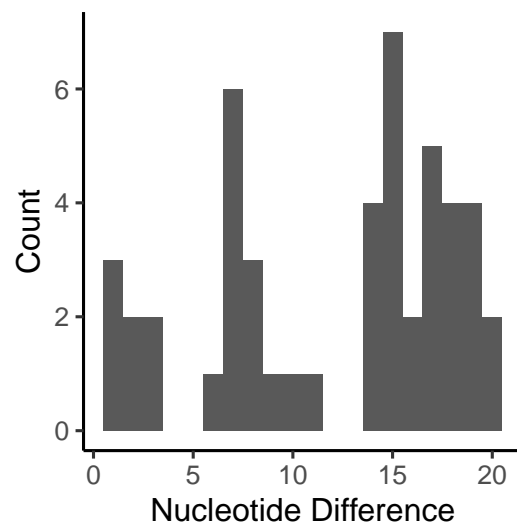
IGHV3-13*05

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



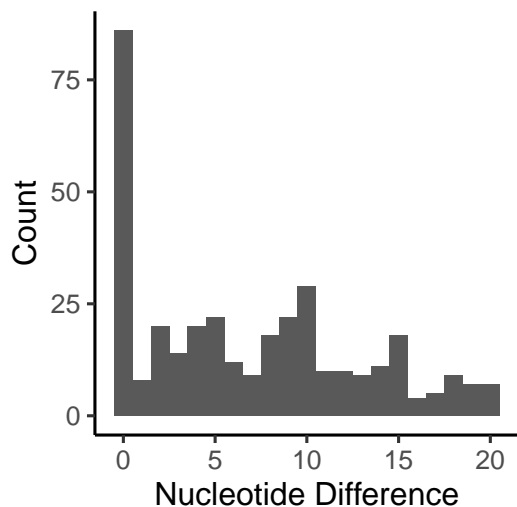
IGHV3-20*03_04

77 sequences assigned
No exact matches.



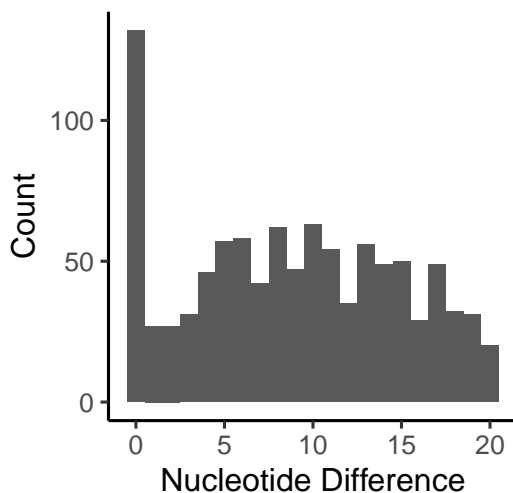
IGHV3-11*06

419 sequences assigned
86 (20.5%) exact matches, in which:
51 unique CDR3
6 unique J



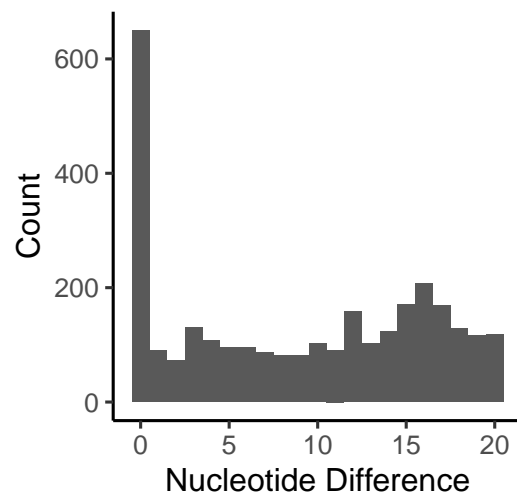
IGHV3-15*01_02

1224 sequences assigned
132 (10.8%) exact matches, in which:
88 unique CDR3
6 unique J



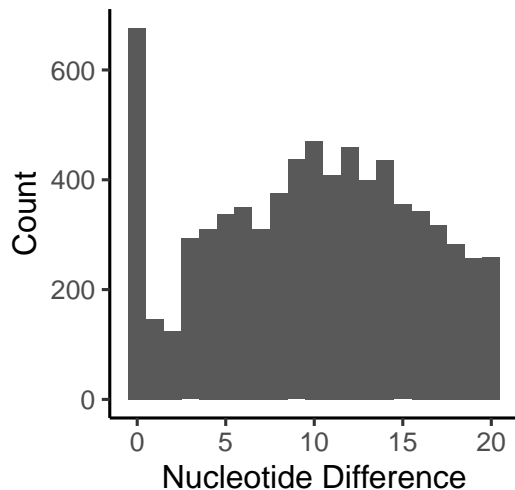
IGHV3-21*01_02

3721 sequences assigned
650 (17.5%) exact matches, in which:
308 unique CDR3
6 unique J



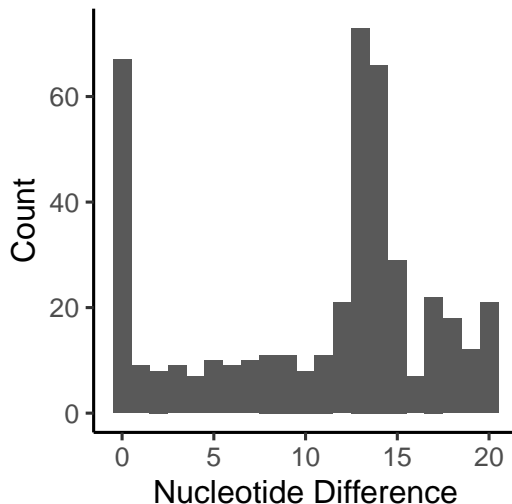
IGHV3-23*01_04

9857 sequences assigned
677 (6.9%) exact matches, in which:
366 unique CDR3
6 unique J



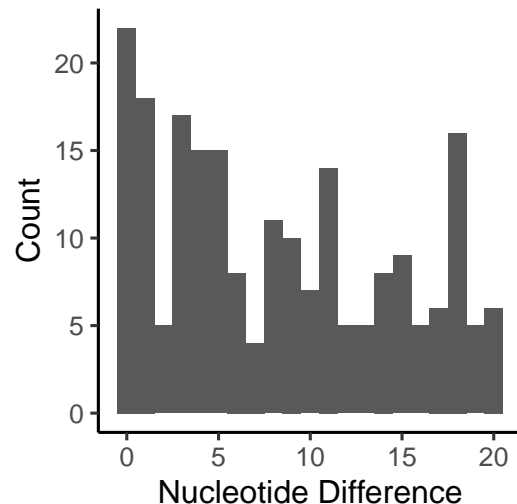
IGHV3-30*03_T288C

587 sequences assigned
67 (11.4%) exact matches, in which:
37 unique CDR3
6 unique J



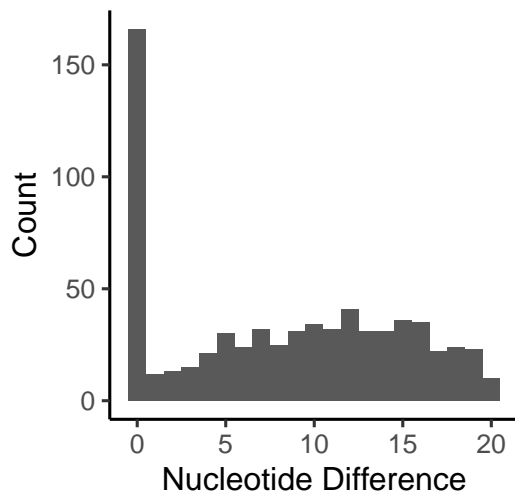
IGHV3-43*02

282 sequences assigned
22 (7.8%) exact matches, in which:
15 unique CDR3
4 unique J



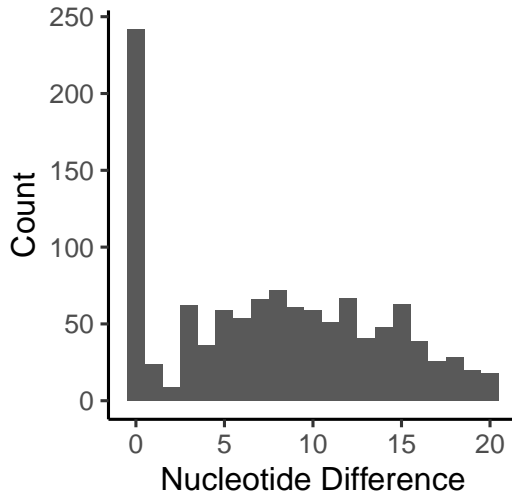
IGHV3-30-3*01

866 sequences assigned
166 (19.2%) exact matches, in which:
115 unique CDR3
6 unique J



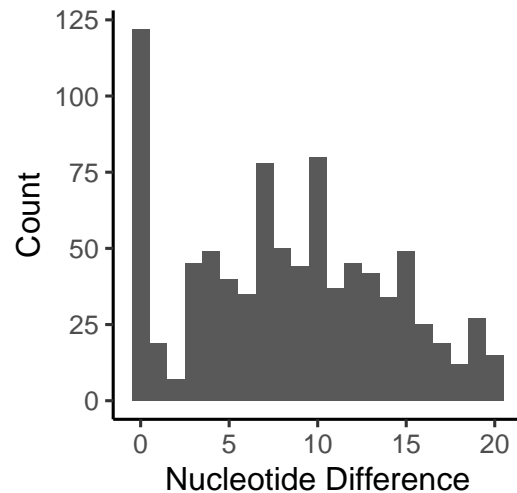
IGHV3-33*01

1267 sequences assigned
242 (19.1%) exact matches, in which:
143 unique CDR3
5 unique J



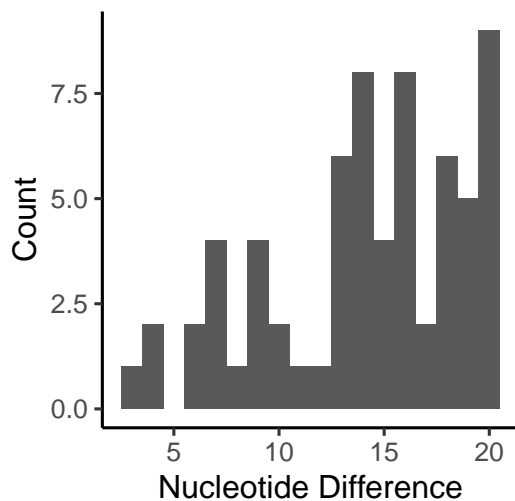
IGHV3-48*02

960 sequences assigned
122 (12.7%) exact matches, in which:
52 unique CDR3
4 unique J



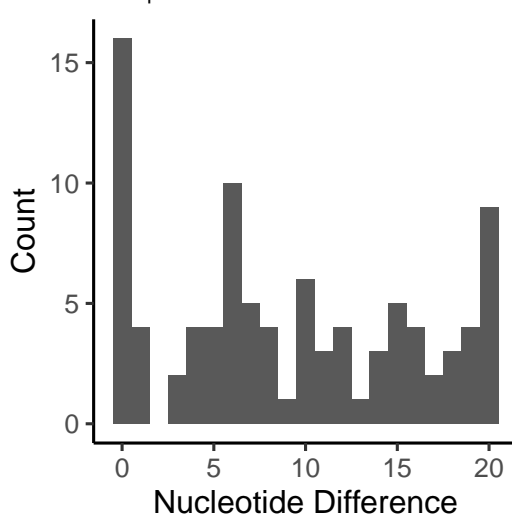
IGHV3-30*04

145 sequences assigned
No exact matches.



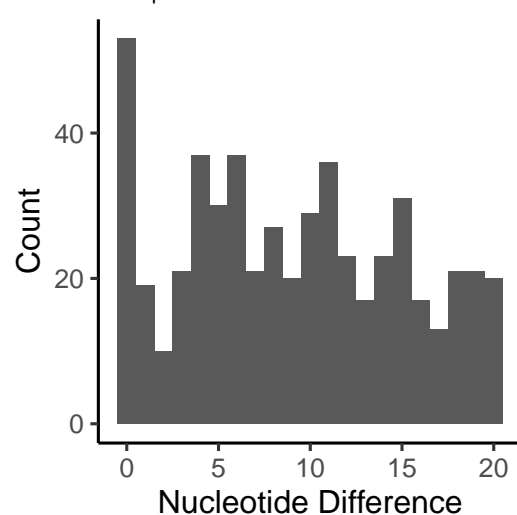
IGHV3-43*01

108 sequences assigned
16 (14.8%) exact matches, in which:
8 unique CDR3
4 unique J



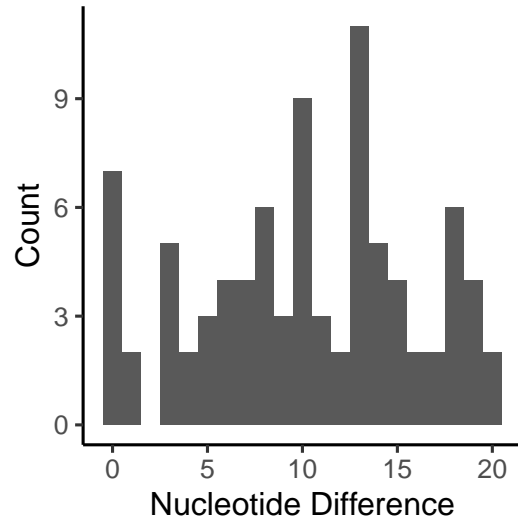
IGHV3-48*03

642 sequences assigned
53 (8.3%) exact matches, in which:
28 unique CDR3
4 unique J



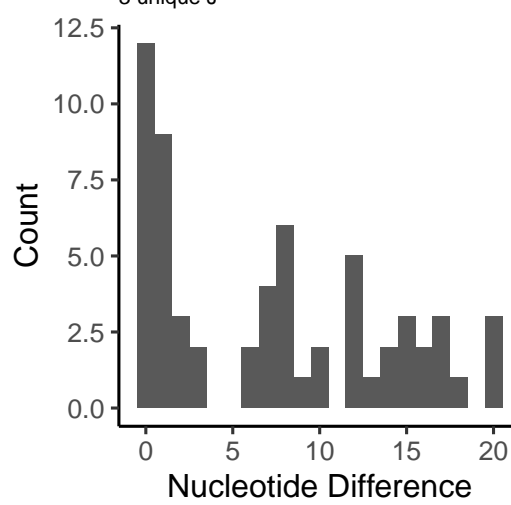
IGHV3-49*04

116 sequences assigned
7 (6%) exact matches, in which:
6 unique CDR3
3 unique J



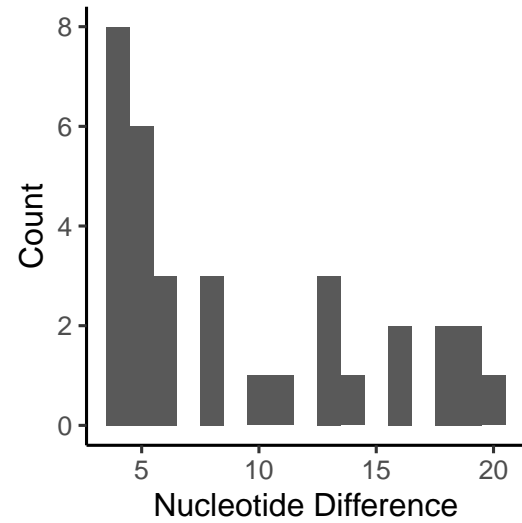
IGHV3-53*04

75 sequences assigned
12 (16%) exact matches, in which:
5 unique CDR3
3 unique J



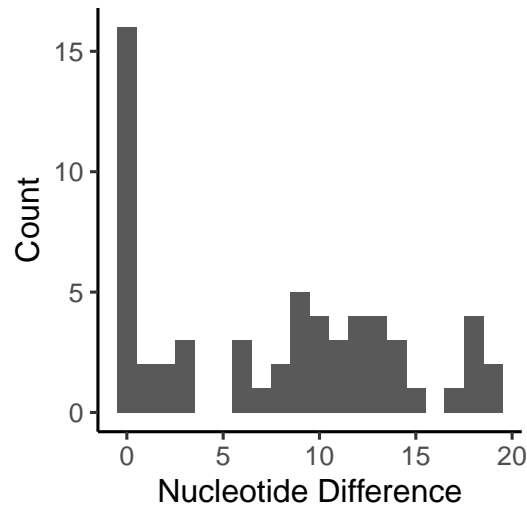
IGHV3-64*02_07

43 sequences assigned
No exact matches.



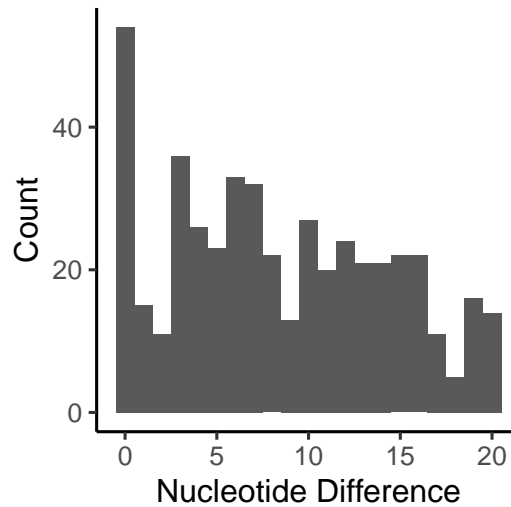
IGHV3-49*03_05

66 sequences assigned
16 (24.2%) exact matches, in which:
14 unique CDR3
4 unique J



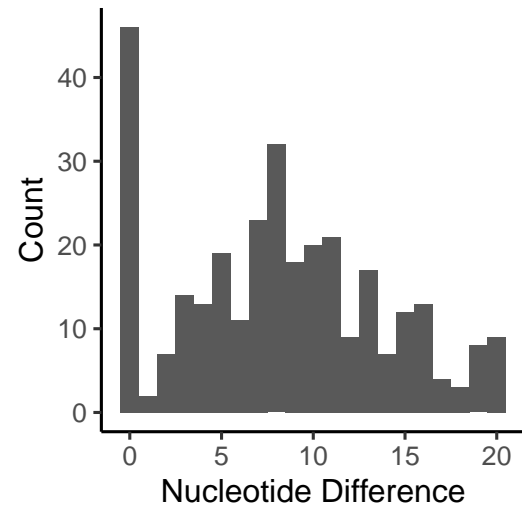
IGHV3-53*01_02

546 sequences assigned
54 (9.9%) exact matches, in which:
31 unique CDR3
4 unique J



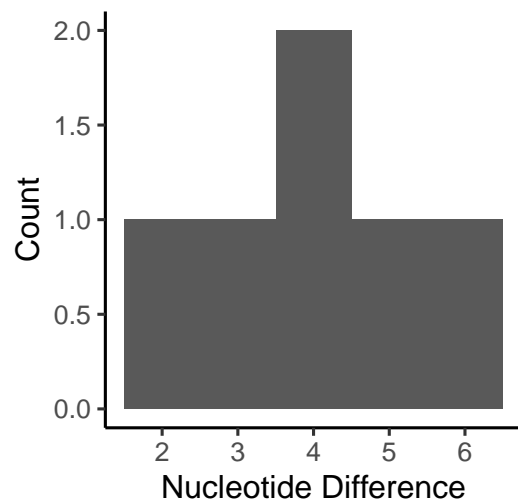
IGHV3-66*01

401 sequences assigned
46 (11.5%) exact matches, in which:
22 unique CDR3
5 unique J



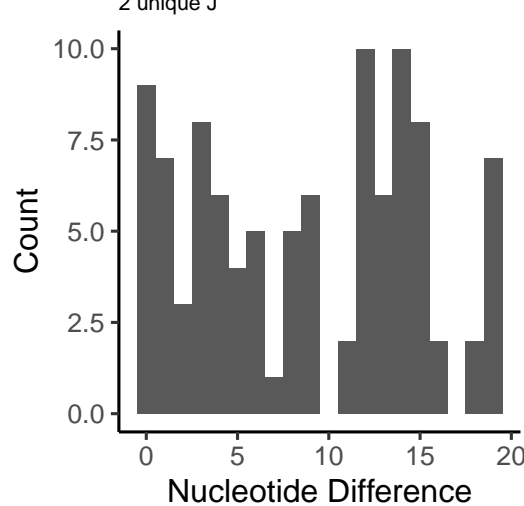
IGHV3-52*01_03

6 sequences assigned
No exact matches.



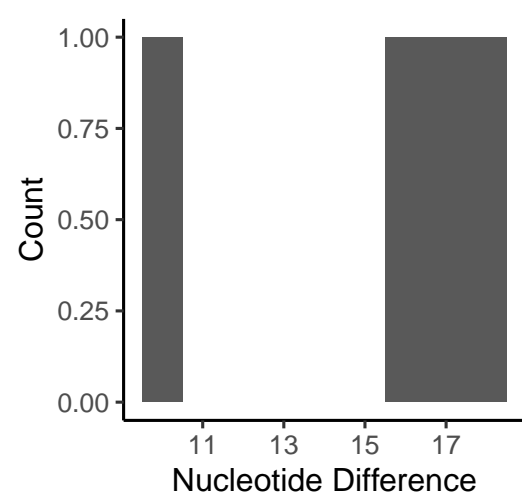
IGHV3-64*01

110 sequences assigned
9 (8.2%) exact matches, in which:
4 unique CDR3
2 unique J



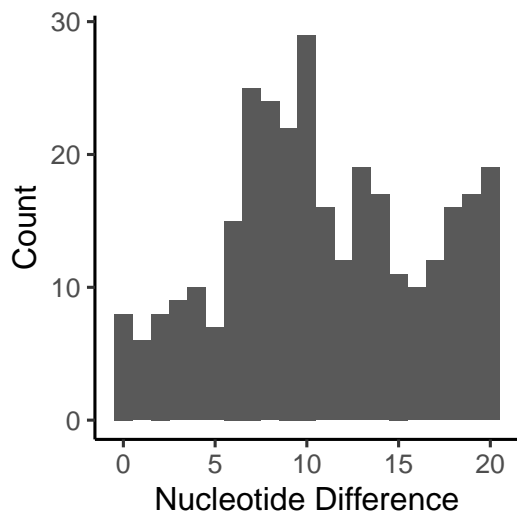
IGHV3-69-1*01

16 sequences assigned
No exact matches.



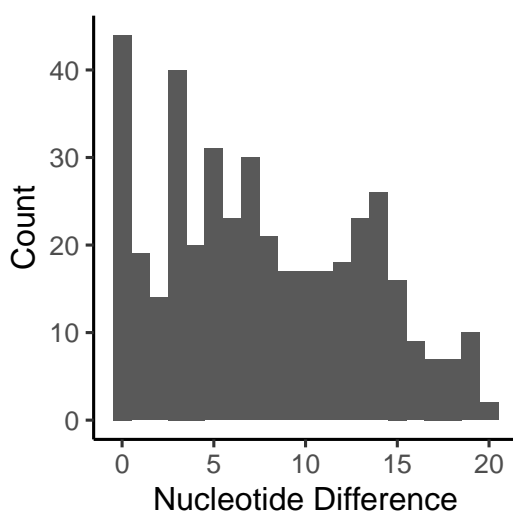
IGHV3-72*01

374 sequences assigned
8 (2.1%) exact matches, in which:
5 unique CDR3
3 unique J



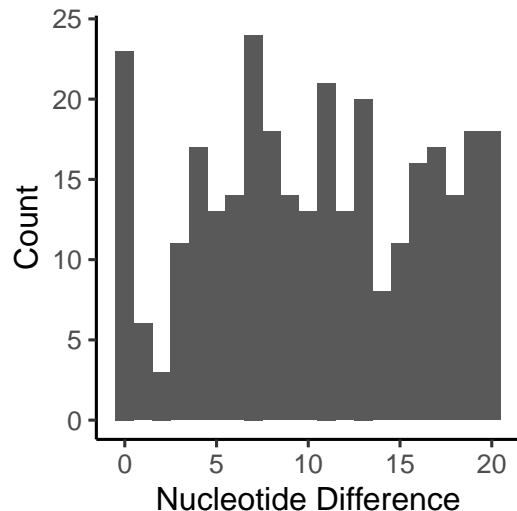
IGHV3-74*01_02

477 sequences assigned
44 (9.2%) exact matches, in which:
26 unique CDR3
4 unique J



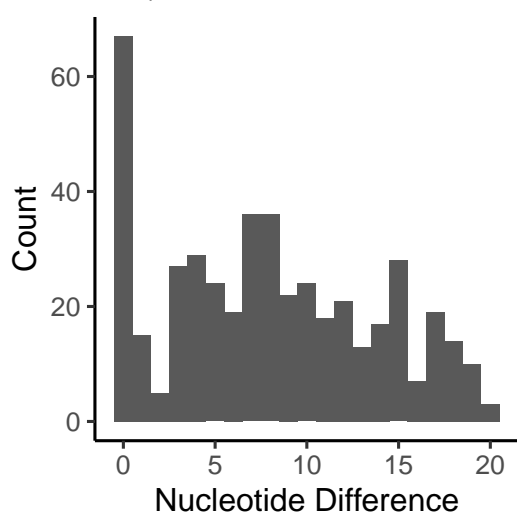
IGHV4-4*07

372 sequences assigned
23 (6.2%) exact matches, in which:
16 unique CDR3
3 unique J



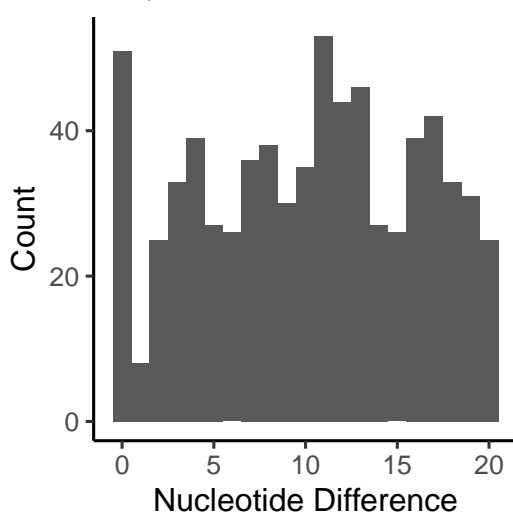
IGHV3-73*01_02

512 sequences assigned
67 (13.1%) exact matches, in which:
31 unique CDR3
4 unique J



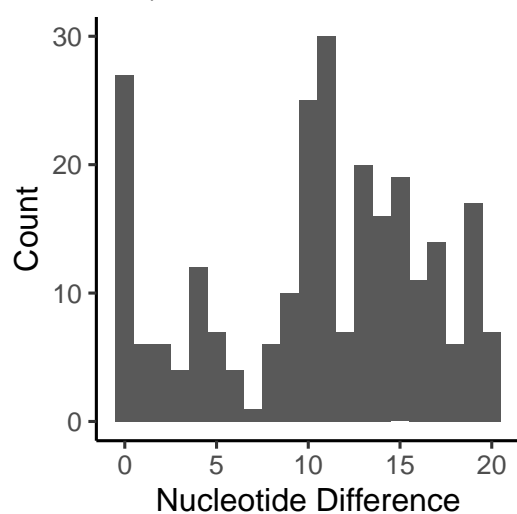
IGHV3-74*01_02_G297A

855 sequences assigned
51 (6%) exact matches, in which:
25 unique CDR3
5 unique J



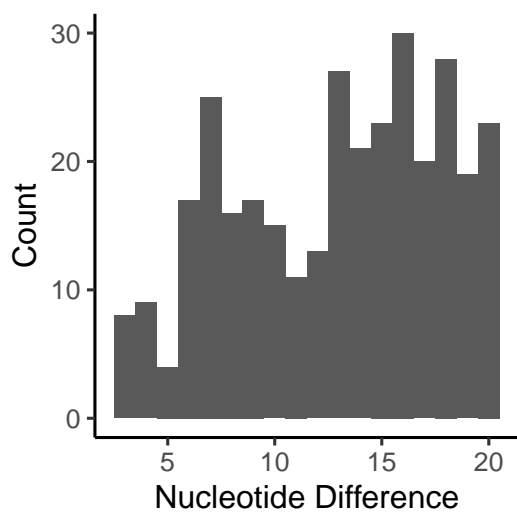
IGHV4-4*02_03

295 sequences assigned
27 (9.2%) exact matches, in which:
20 unique CDR3
4 unique J



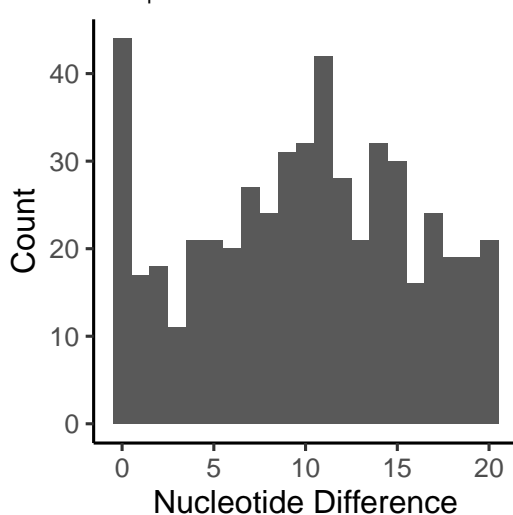
IGHV3-74*03

452 sequences assigned
No exact matches.



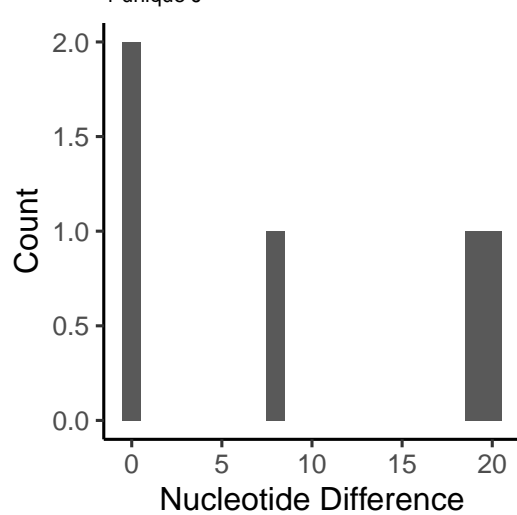
IGHV3-64D*06

625 sequences assigned
44 (7%) exact matches, in which:
23 unique CDR3
6 unique J



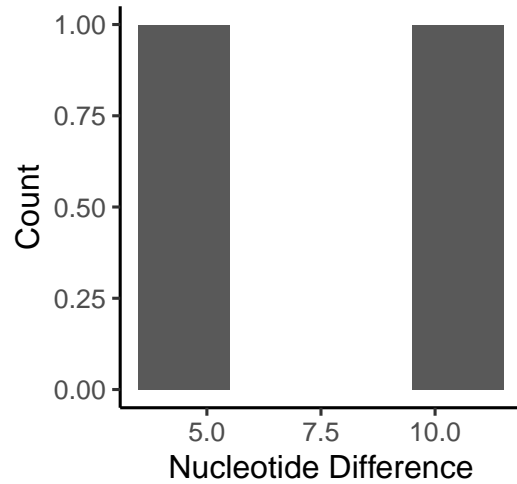
IGHV4-28*03

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



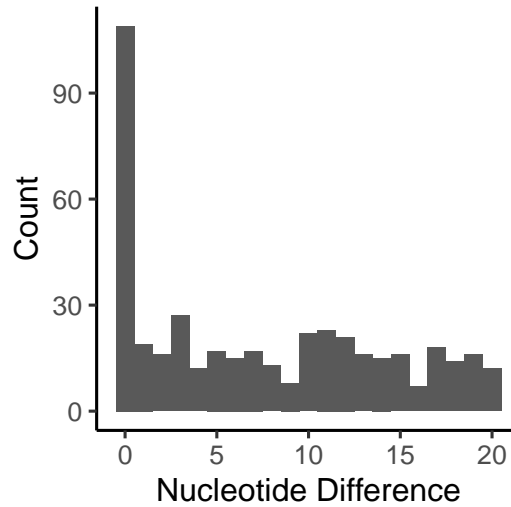
IGHV4-28*01_07

5 sequences assigned
No exact matches.



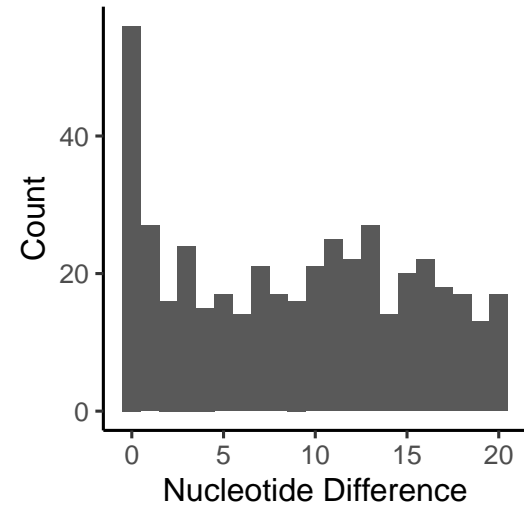
IGHV4-31*02

526 sequences assigned
109 (20.7%) exact matches, in which:
81 unique CDR3
5 unique J



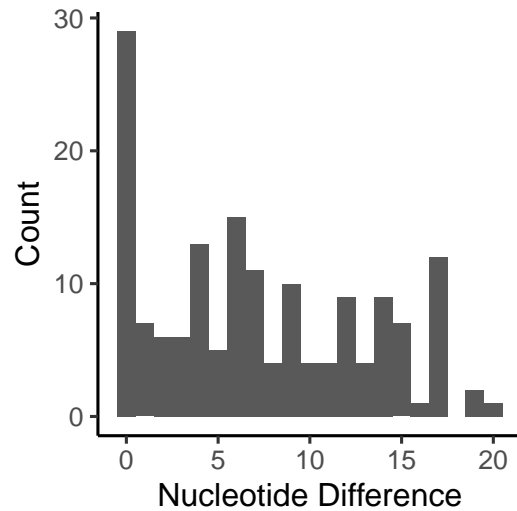
IGHV4-59*08

607 sequences assigned
56 (9.2%) exact matches, in which:
37 unique CDR3
5 unique J



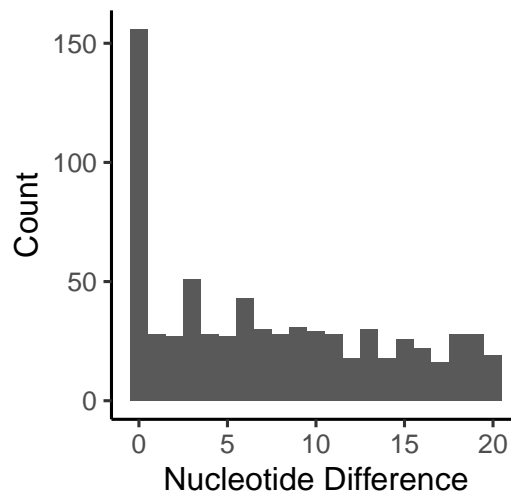
IGHV4-30-2*01

197 sequences assigned
29 (14.7%) exact matches, in which:
17 unique CDR3
4 unique J



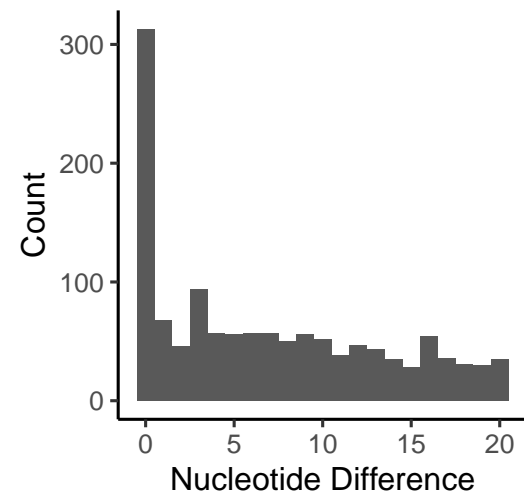
IGHV4-34*01_02

890 sequences assigned
156 (17.5%) exact matches, in which:
87 unique CDR3
4 unique J



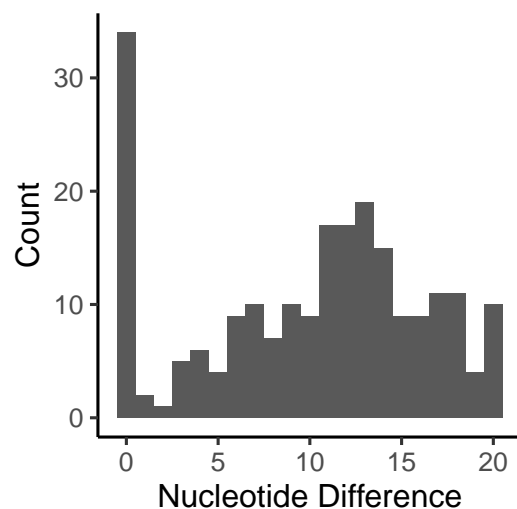
IGHV4-59*02_G88A

1700 sequences assigned
313 (18.4%) exact matches, in which:
196 unique CDR3
6 unique J



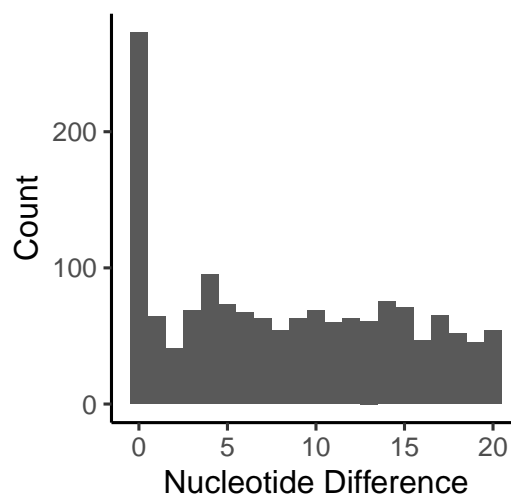
IGHV4-30-4*01

314 sequences assigned
34 (10.8%) exact matches, in which:
24 unique CDR3
5 unique J



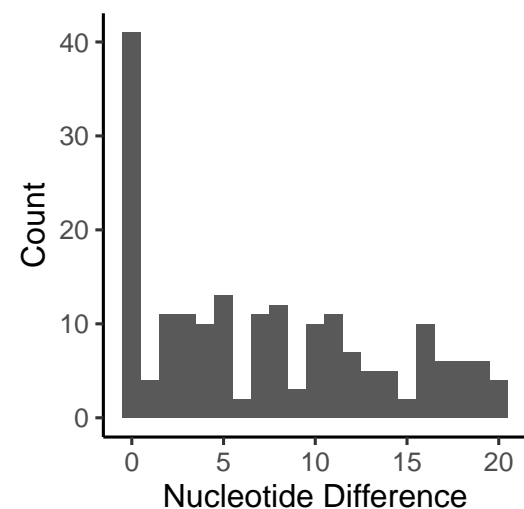
IGHV4-39*02_C258G

1955 sequences assigned
273 (14%) exact matches, in which:
170 unique CDR3
6 unique J



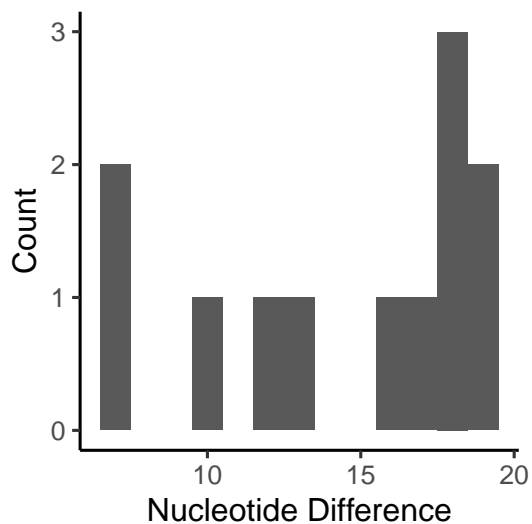
IGHV4-61*01

214 sequences assigned
41 (19.2%) exact matches, in which:
30 unique CDR3
4 unique J



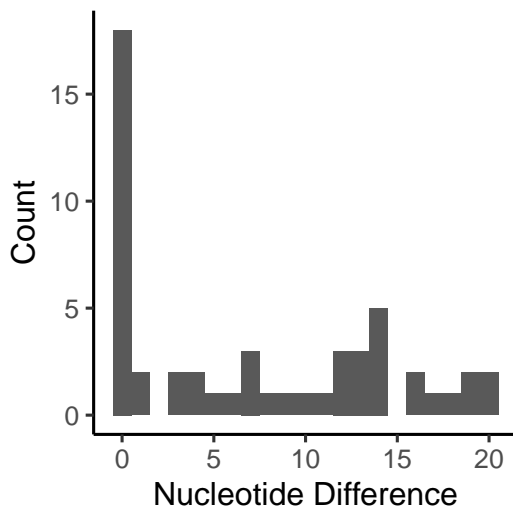
IGHV4-61*02

36 sequences assigned
No exact matches.



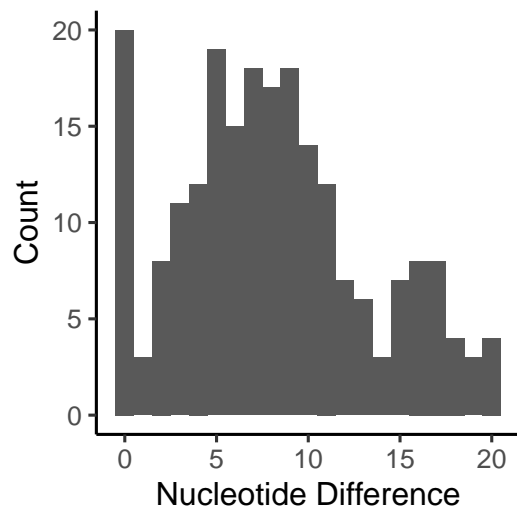
IGHV5-10-1*01_03

67 sequences assigned
18 (26.9%) exact matches, in which:
18 unique CDR3
4 unique J



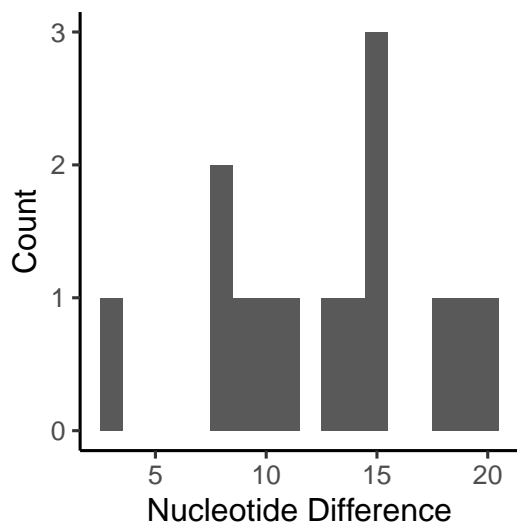
IGHV7-4-1*02

225 sequences assigned
20 (8.9%) exact matches, in which:
20 unique CDR3
3 unique J



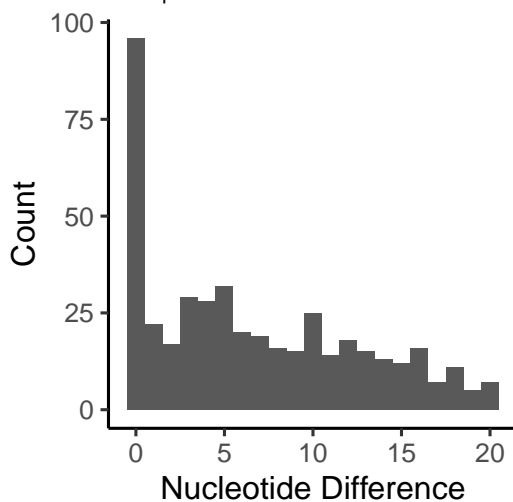
IGHV4-61*08

33 sequences assigned
No exact matches.



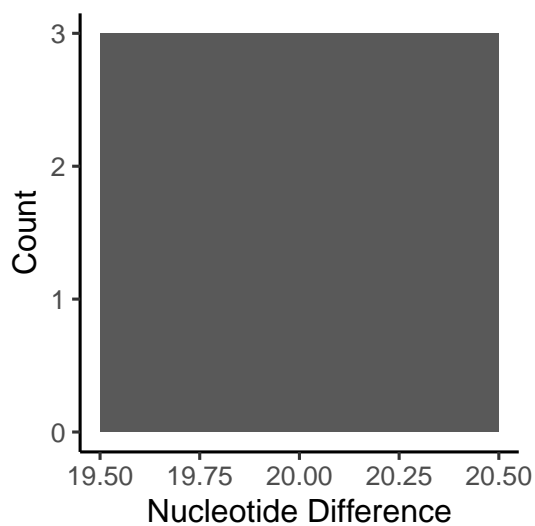
IGHV5-51*07_A128G

466 sequences assigned
96 (20.6%) exact matches, in which:
96 unique CDR3
6 unique J



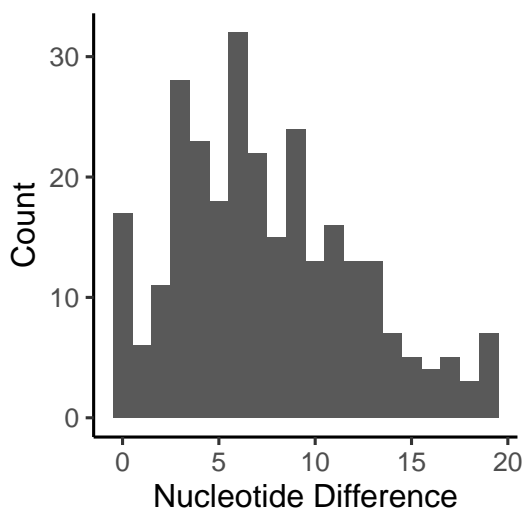
IGHV4/OR15-8*01

6 sequences assigned
No exact matches.

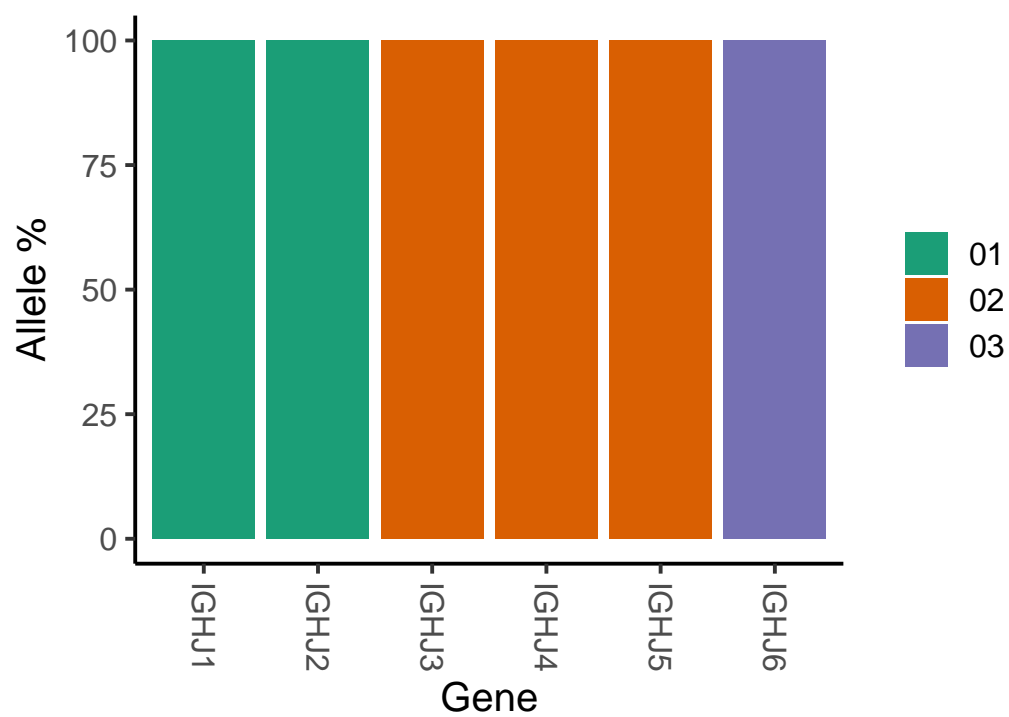


IGHV6-1*01_02

309 sequences assigned
17 (5.5%) exact matches, in which:
15 unique CDR3
4 unique J



Allele Usage



Warning – no inferred sequences found.