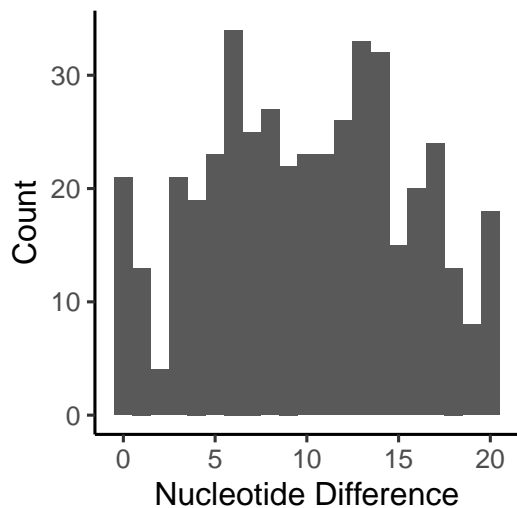


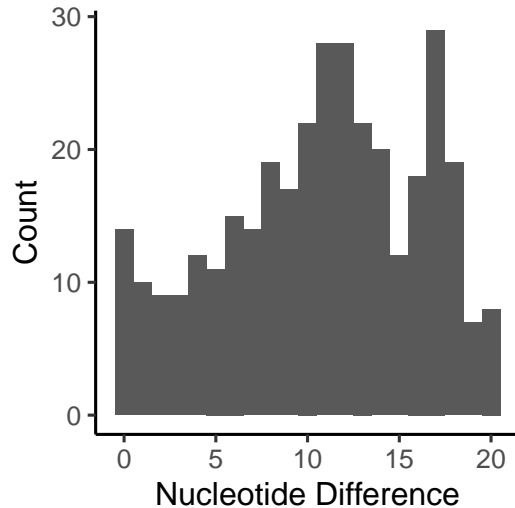
IGHV1-2*02

615 sequences assigned
21 (3.4%) exact matches, in which:
18 unique CDR3
4 unique J



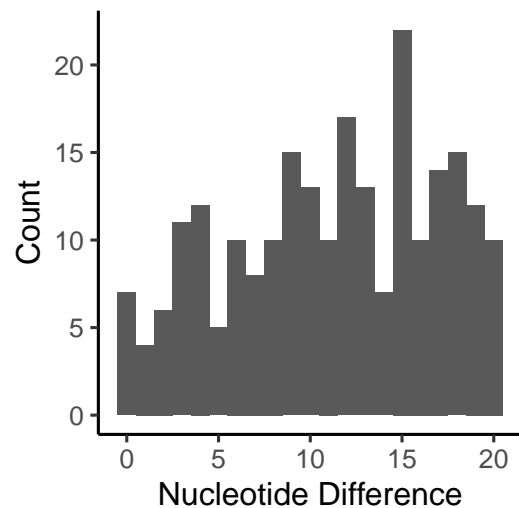
IGHV1-3*01_05

404 sequences assigned
14 (3.5%) exact matches, in which:
14 unique CDR3
4 unique J



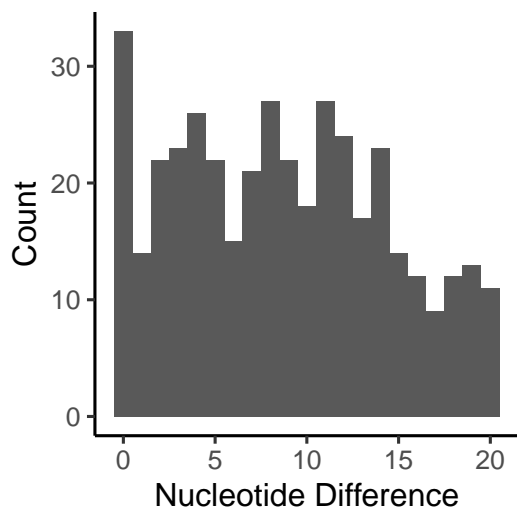
IGHV1-18*04

317 sequences assigned
7 (2.2%) exact matches, in which:
7 unique CDR3
4 unique J



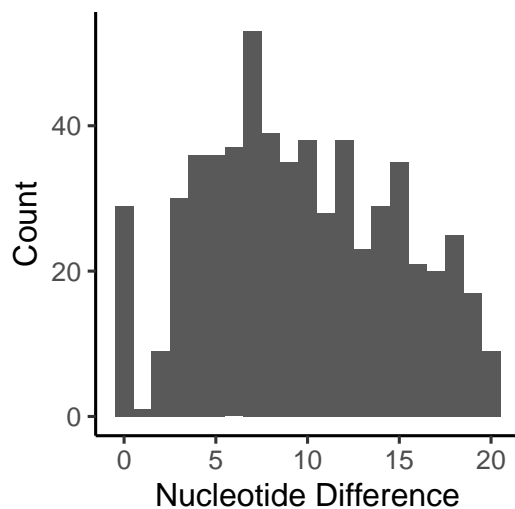
IGHV1-2*06

465 sequences assigned
33 (7.1%) exact matches, in which:
29 unique CDR3
4 unique J



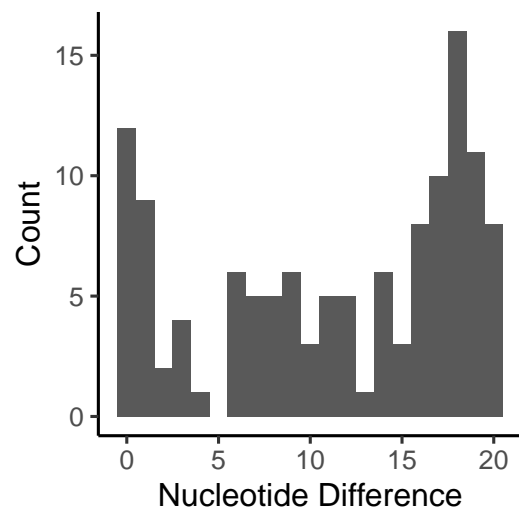
IGHV1-8*01

699 sequences assigned
29 (4.1%) exact matches, in which:
29 unique CDR3
5 unique J



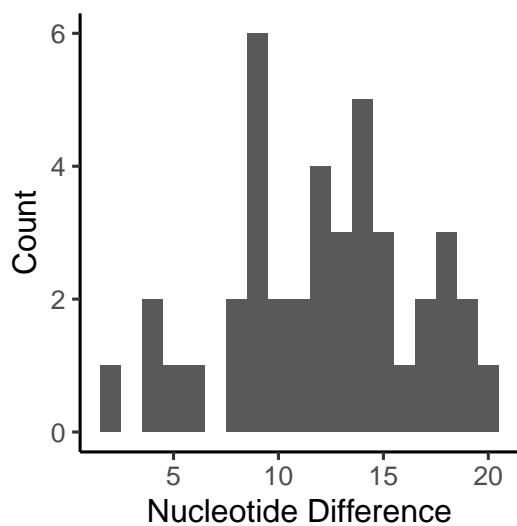
IGHV1-24*01

175 sequences assigned
12 (6.9%) exact matches, in which:
10 unique CDR3
5 unique J



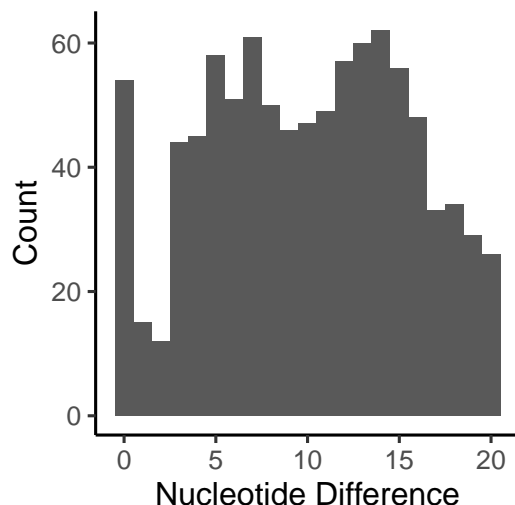
IGHV1-3*04

67 sequences assigned
No exact matches.



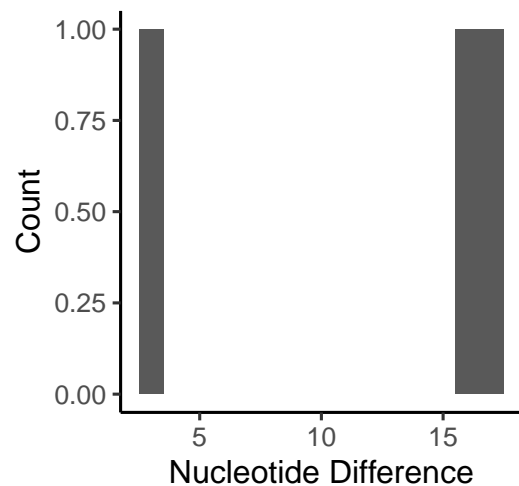
IGHV1-18*01

1217 sequences assigned
54 (4.4%) exact matches, in which:
51 unique CDR3
7 unique J



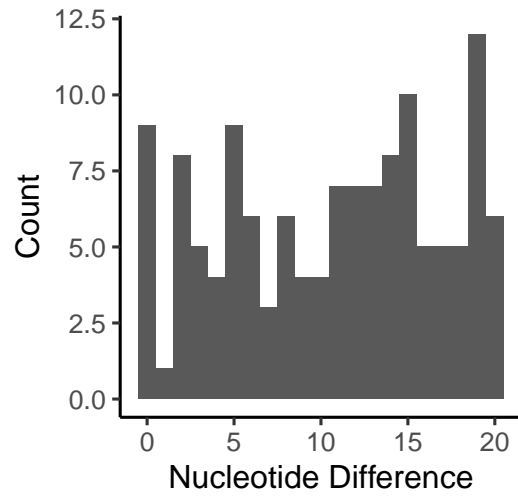
IGHV1-45*02

4 sequences assigned
No exact matches.



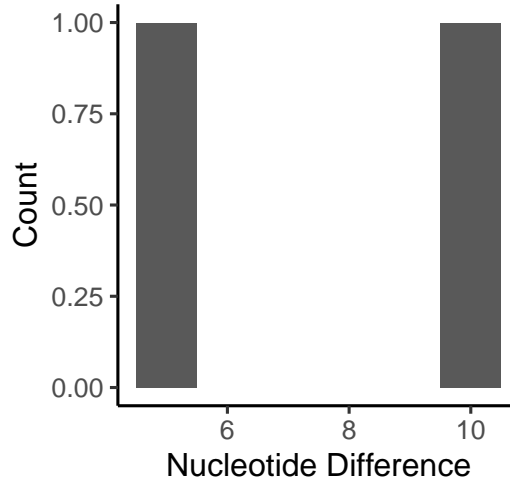
IGHV1-46*01

173 sequences assigned
9 (5.2%) exact matches, in which:
9 unique CDR3
5 unique J



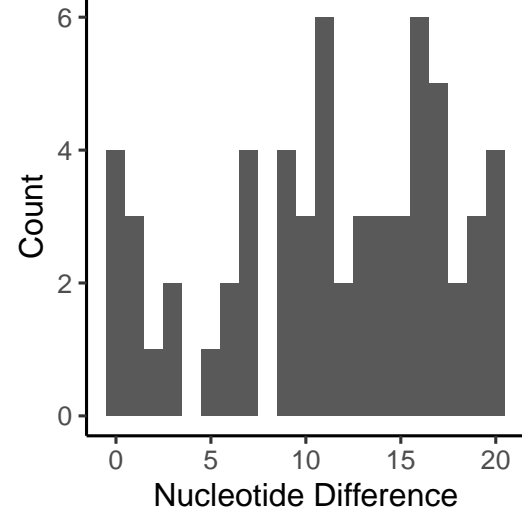
IGHV1-58*01_03

4 sequences assigned
No exact matches.



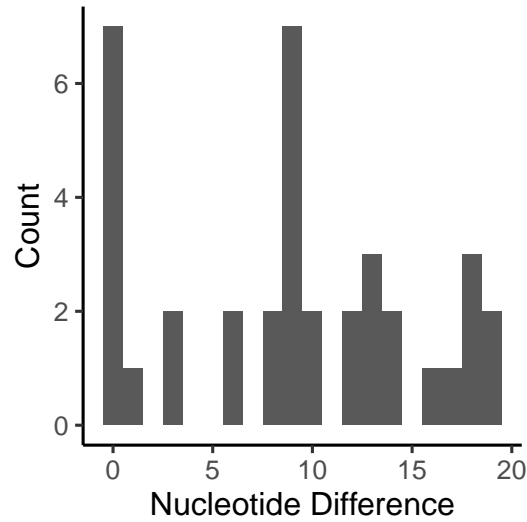
IGHV1-69*04_09

89 sequences assigned
4 (4.5%) exact matches, in which:
4 unique CDR3
1 unique J



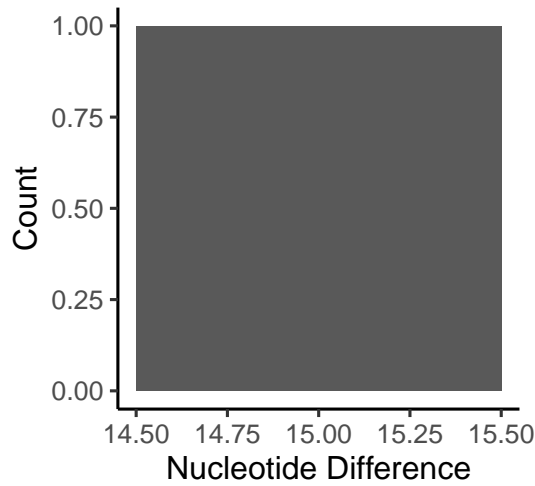
IGHV1-46*03

43 sequences assigned
7 (16.3%) exact matches, in which:
7 unique CDR3
4 unique J



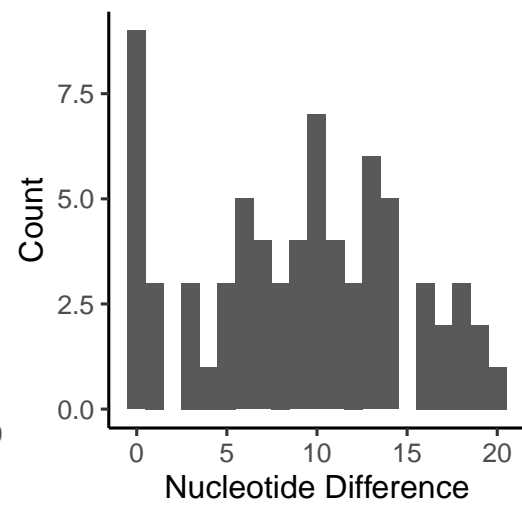
IGHV1-69-2*01

4 sequences assigned
No exact matches.



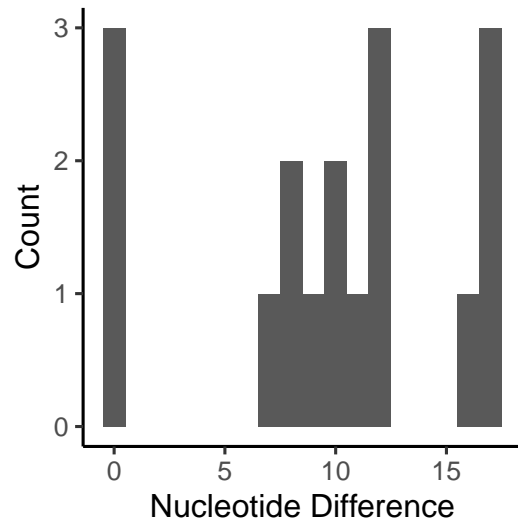
IGHV1-69*04_09_C184T

103 sequences assigned
9 (8.7%) exact matches, in which:
9 unique CDR3
4 unique J



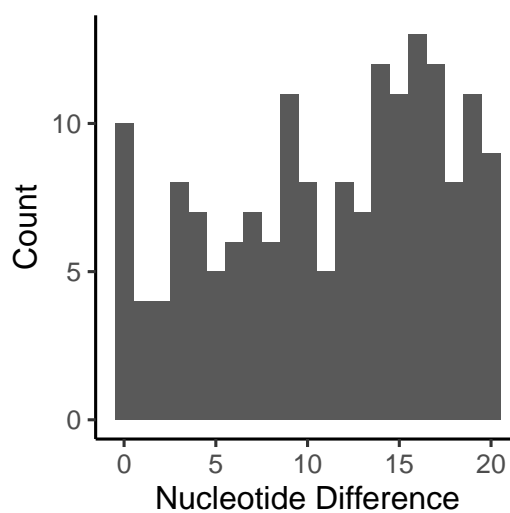
IGHV1-58*02

18 sequences assigned
3 (16.7%) exact matches, in which:
3 unique CDR3
2 unique J



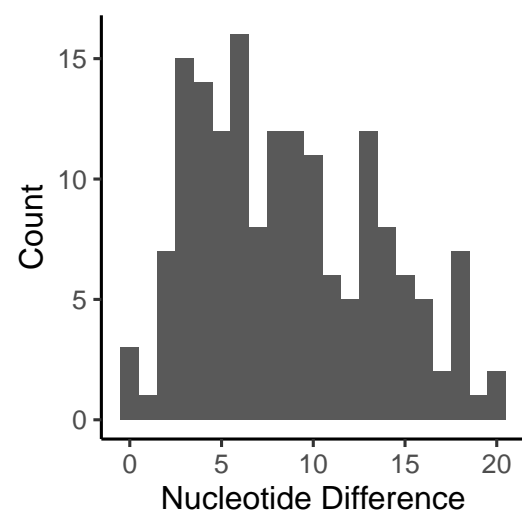
IGHV1-69*01_12_13

219 sequences assigned
10 (4.6%) exact matches, in which:
9 unique CDR3
3 unique J



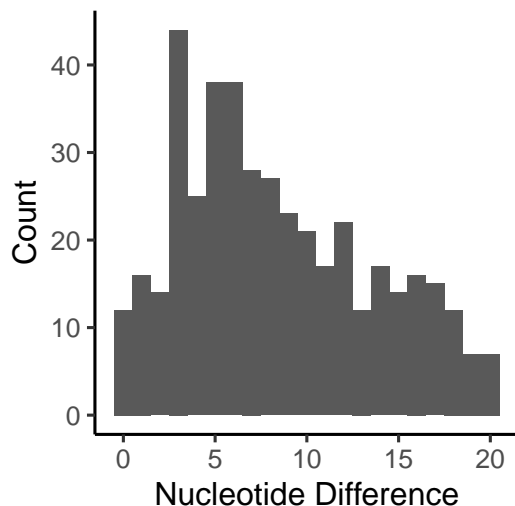
IGHV2-5*01

170 sequences assigned
3 (1.8%) exact matches, in which:
3 unique CDR3
2 unique J



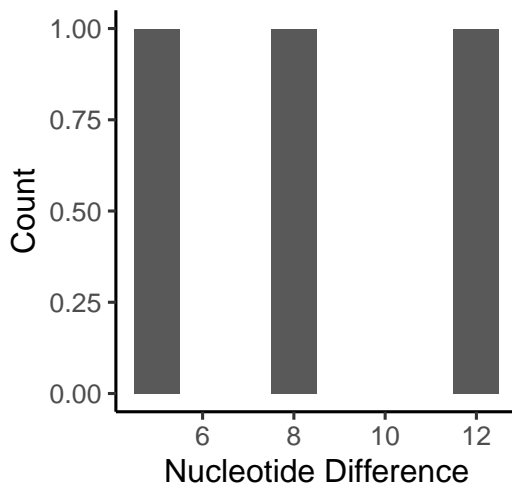
IGHV2-5*02

466 sequences assigned
12 (2.6%) exact matches, in which:
12 unique CDR3
2 unique J



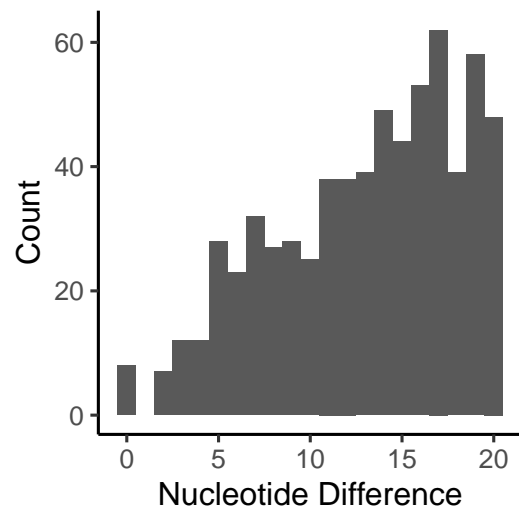
IGHV2-70*13

5 sequences assigned
No exact matches.



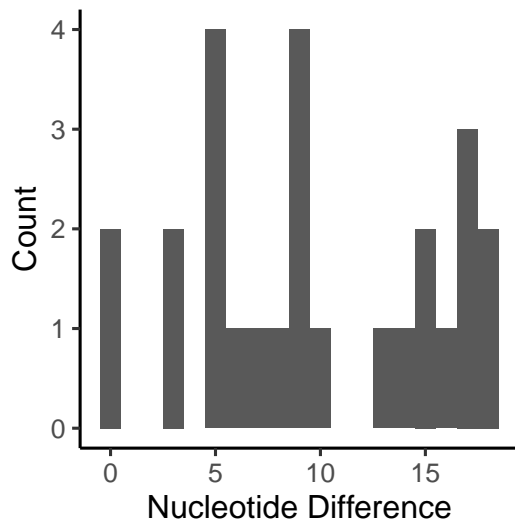
IGHV3-7*03

1042 sequences assigned
8 (0.8%) exact matches, in which:
4 unique CDR3
4 unique J



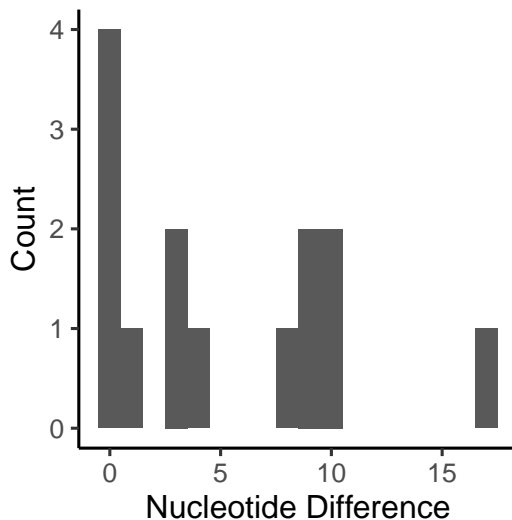
IGHV2-26*01

26 sequences assigned
2 (7.7%) exact matches, in which:
2 unique CDR3
2 unique J



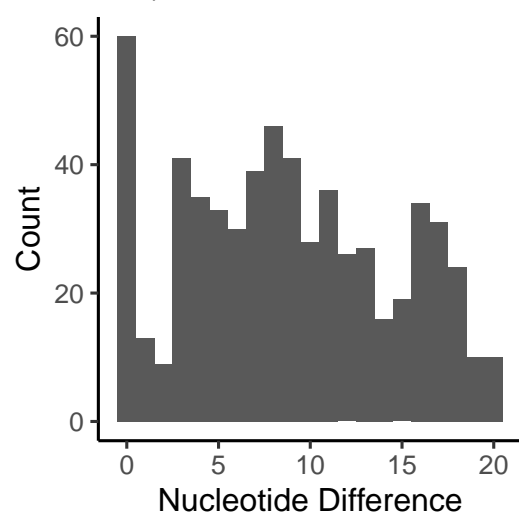
IGHV2-70*11_15

14 sequences assigned
4 (28.6%) exact matches, in which:
3 unique CDR3
1 unique J



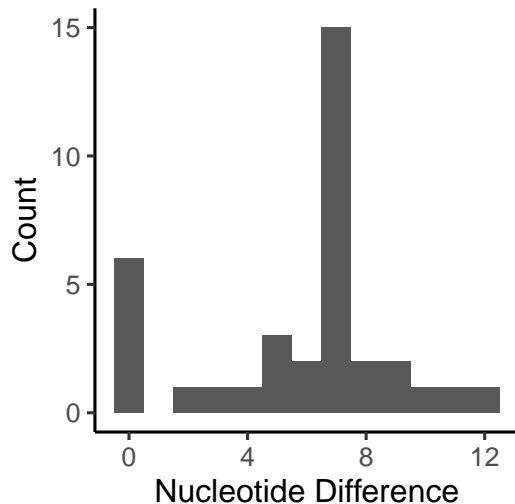
IGHV3-9*01

692 sequences assigned
60 (8.7%) exact matches, in which:
44 unique CDR3
7 unique J



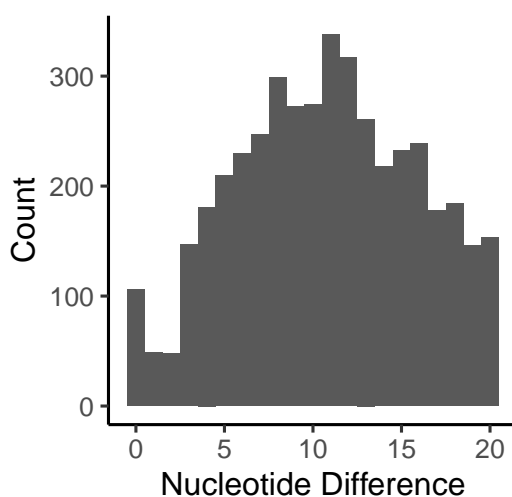
IGHV2-70*01

38 sequences assigned
6 (15.8%) exact matches, in which:
5 unique CDR3
4 unique J



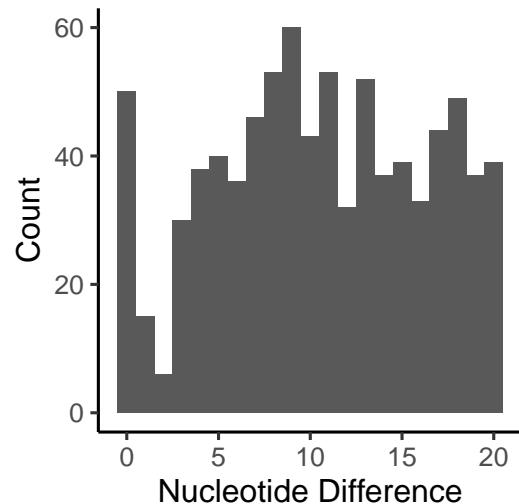
IGHV3-7*01

4978 sequences assigned
106 (2.1%) exact matches, in which:
56 unique CDR3
7 unique J



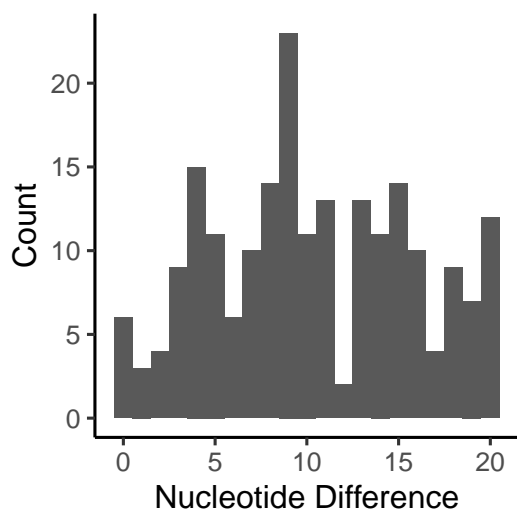
IGHV3-11*01

1074 sequences assigned
50 (4.7%) exact matches, in which:
27 unique CDR3
5 unique J



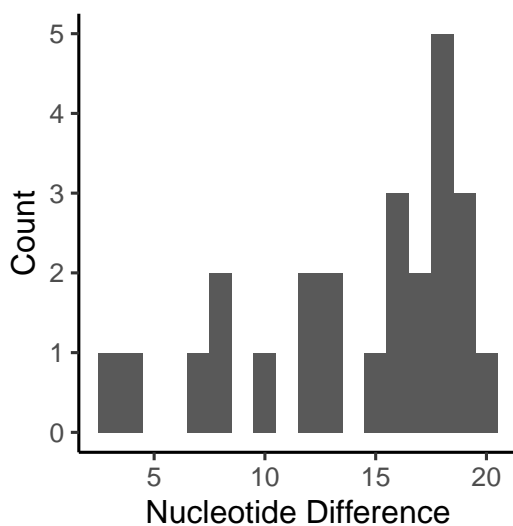
IGHV3-13*01

239 sequences assigned
6 (2.5%) exact matches, in which:
5 unique CDR3
3 unique J



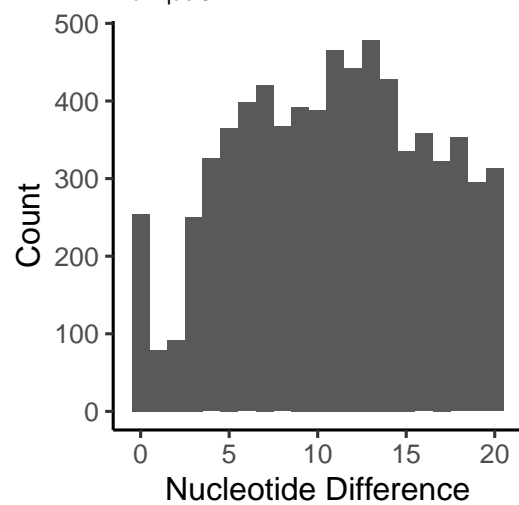
IGHV3-20*03_04

33 sequences assigned
No exact matches.



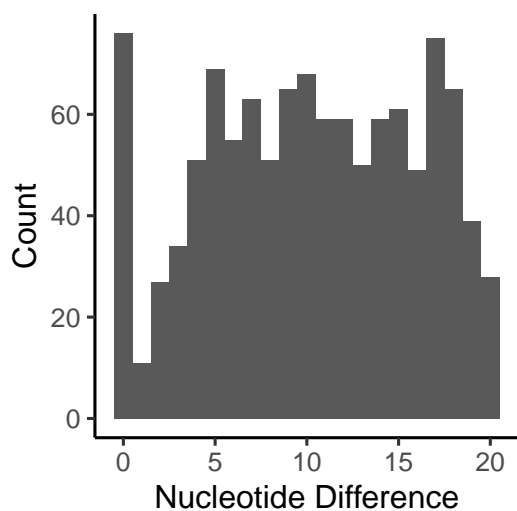
IGHV3-23*01_04

9212 sequences assigned
254 (2.8%) exact matches, in which:
151 unique CDR3
7 unique J



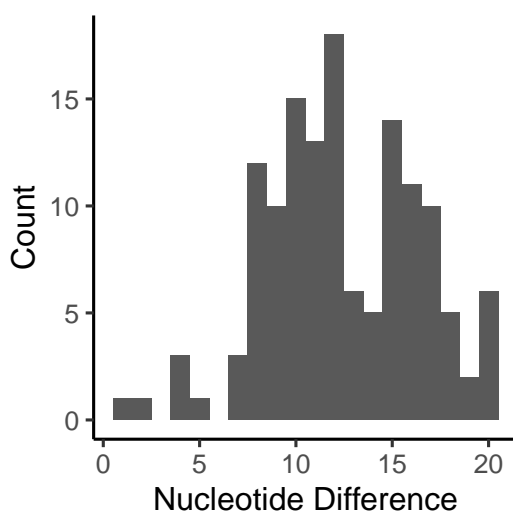
IGHV3-15*01_02

1361 sequences assigned
76 (5.6%) exact matches, in which:
53 unique CDR3
5 unique J



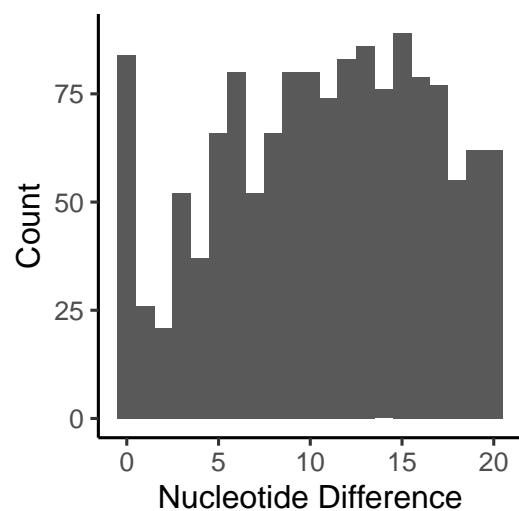
IGHV3-21*06

202 sequences assigned
No exact matches.



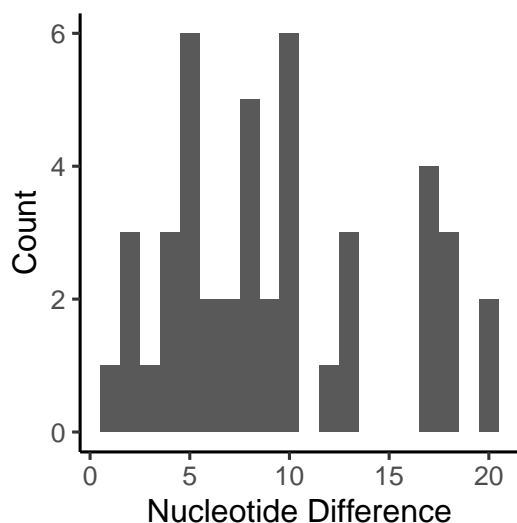
IGHV3-30-3*01

1673 sequences assigned
84 (5%) exact matches, in which:
60 unique CDR3
6 unique J



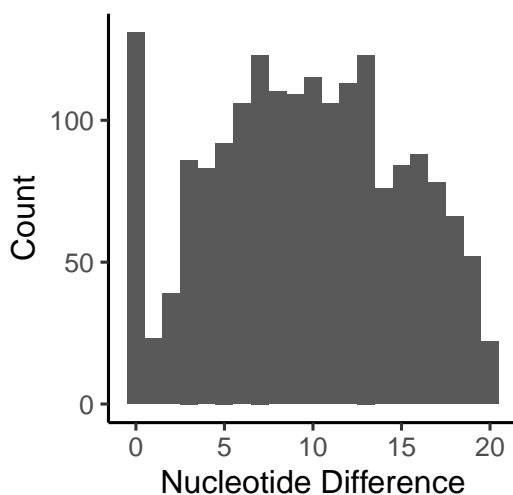
IGHV3-20*01_02

45 sequences assigned
No exact matches.



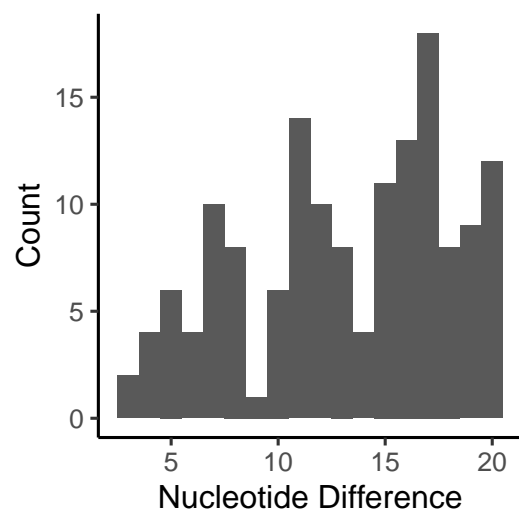
IGHV3-21*01_02

2024 sequences assigned
131 (6.5%) exact matches, in which:
75 unique CDR3
7 unique J



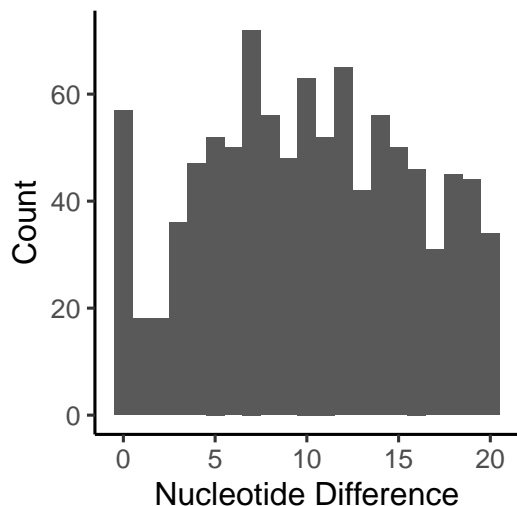
IGHV3-30*04

221 sequences assigned
No exact matches.



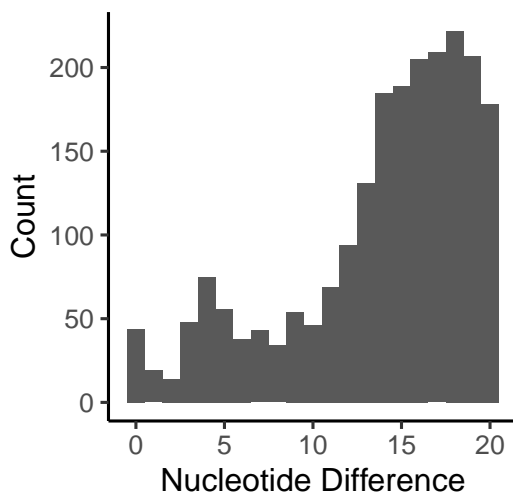
IGHV3-33*01

1248 sequences assigned
57 (4.6%) exact matches, in which:
43 unique CDR3
6 unique J



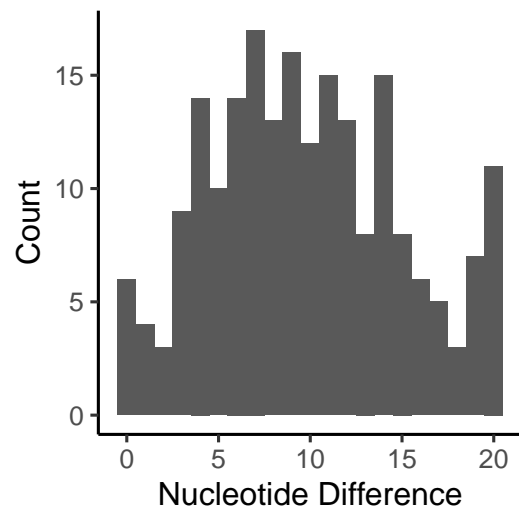
IGHV3-48*01

3015 sequences assigned
44 (1.5%) exact matches, in which:
19 unique CDR3
3 unique J



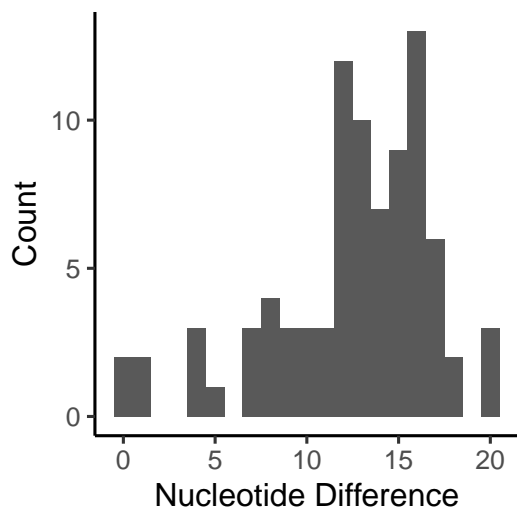
IGHV3-49*04

247 sequences assigned
6 (2.4%) exact matches, in which:
3 unique CDR3
2 unique J



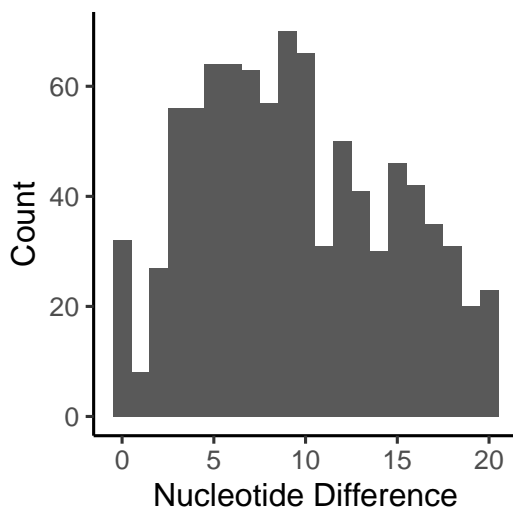
IGHV3-43*01

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



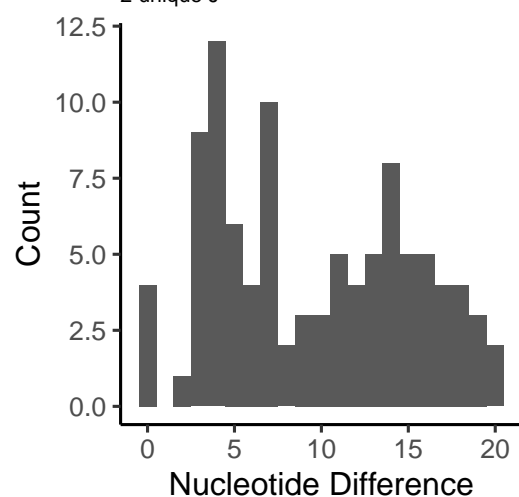
IGHV3-48*03

1088 sequences assigned
32 (2.9%) exact matches, in which:
22 unique CDR3
4 unique J



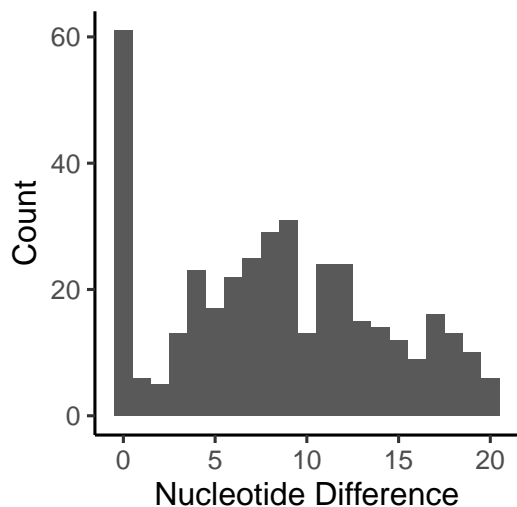
IGHV3-49*03_05

112 sequences assigned
4 (3.6%) exact matches, in which:
3 unique CDR3
2 unique J



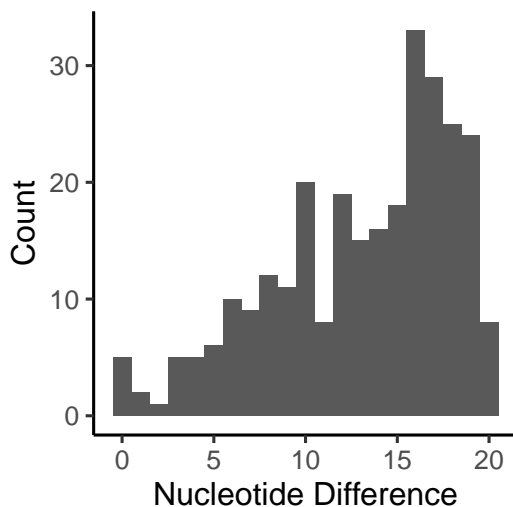
IGHV3-43*02

435 sequences assigned
61 (14%) exact matches, in which:
34 unique CDR3
4 unique J



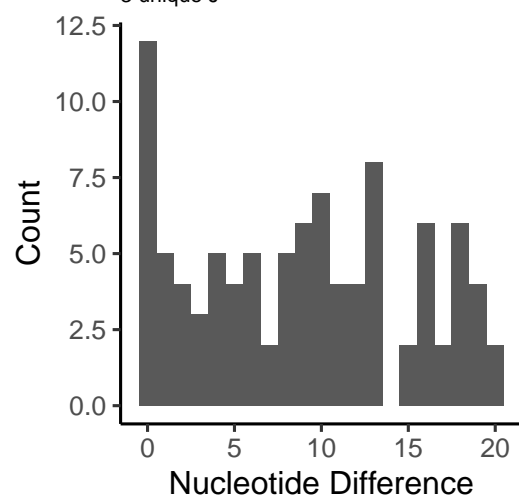
IGHV3-48*04

391 sequences assigned
5 (1.3%) exact matches, in which:
3 unique CDR3
1 unique J



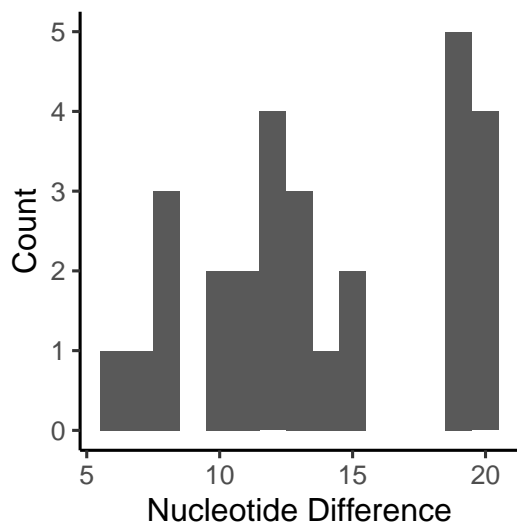
IGHV3-53*04

136 sequences assigned
12 (8.8%) exact matches, in which:
6 unique CDR3
3 unique J



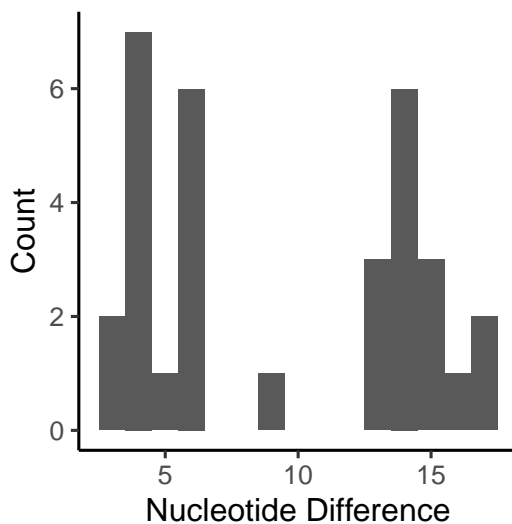
IGHV3-53*05

53 sequences assigned
No exact matches.



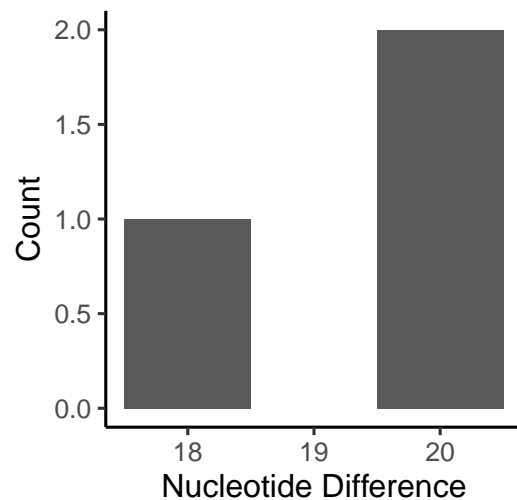
IGHV3-64*02_07

43 sequences assigned
No exact matches.



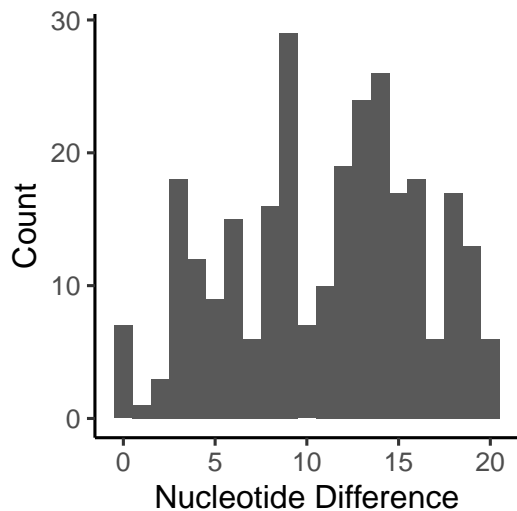
IGHV3-69-1*01

4 sequences assigned
No exact matches.



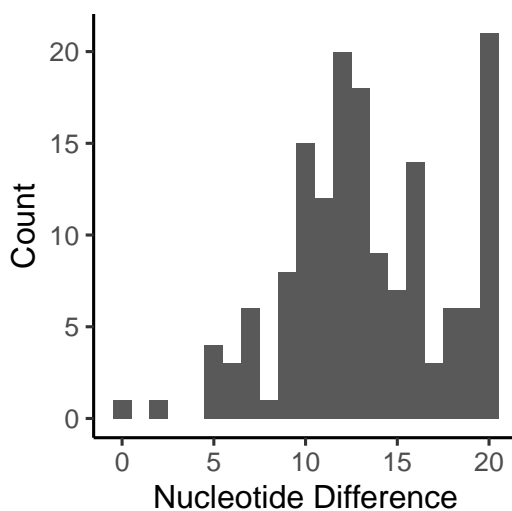
IGHV3-53*01_02

328 sequences assigned
7 (2.1%) exact matches, in which:
2 unique CDR3
2 unique J



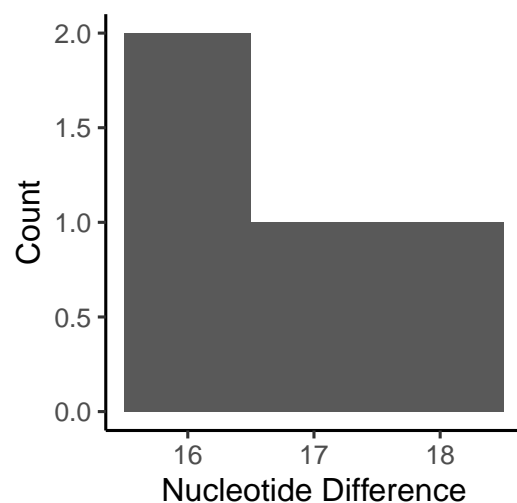
IGHV3-66*01

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



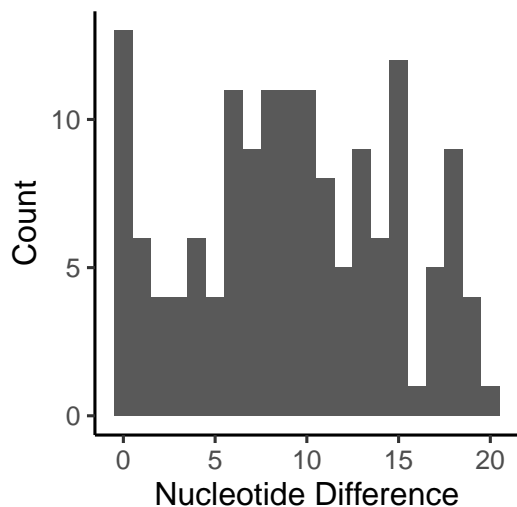
IGHV3-69-1*02

8 sequences assigned
No exact matches.



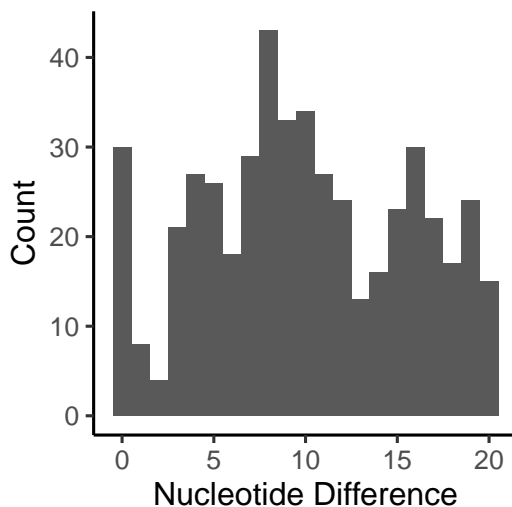
IGHV3-64*01

167 sequences assigned
13 (7.8%) exact matches, in which:
7 unique CDR3
3 unique J



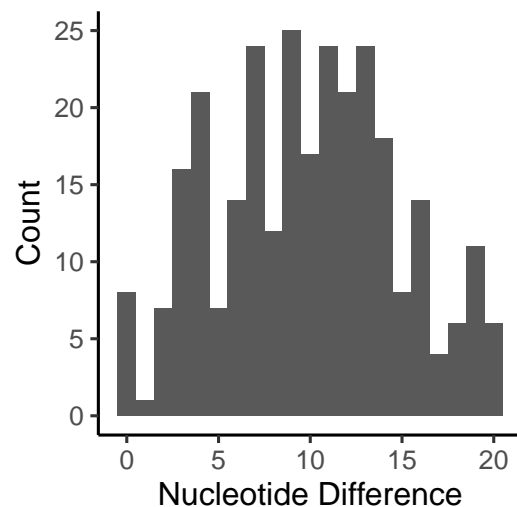
IGHV3-66*02

602 sequences assigned
30 (5%) exact matches, in which:
19 unique CDR3
4 unique J



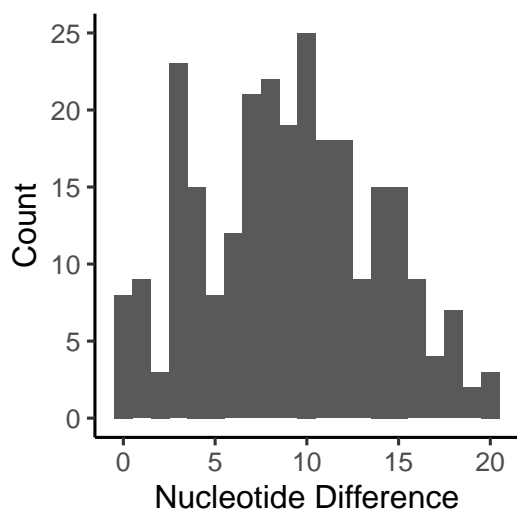
IGHV3-72*01

314 sequences assigned
8 (2.5%) exact matches, in which:
5 unique CDR3
2 unique J



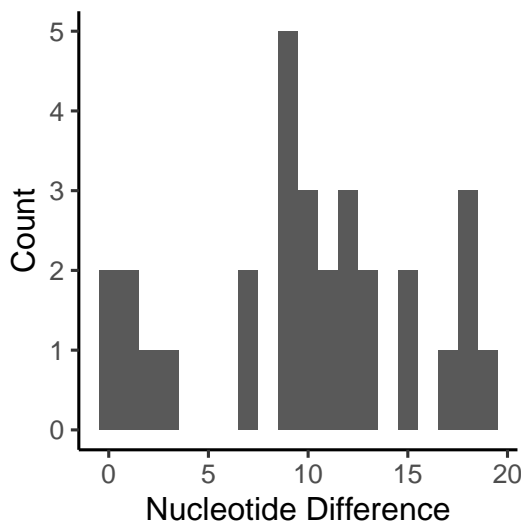
IGHV3-73*01_02

298 sequences assigned
8 (2.7%) exact matches, in which:
5 unique CDR3
2 unique J



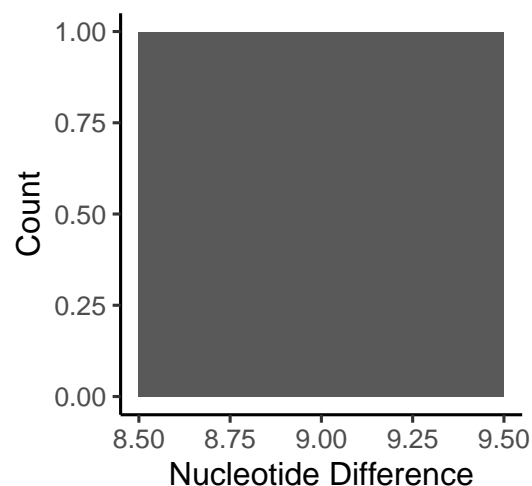
IGHV3-43D*03

34 sequences assigned
2 (5.9%) exact matches, in which:
2 unique CDR3
1 unique J



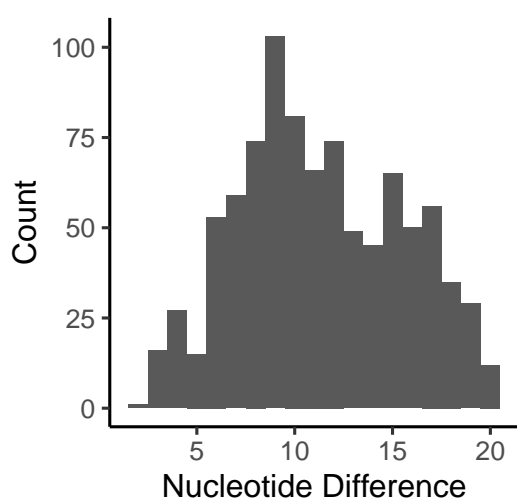
IGHV3-NL1*01

1 sequences assigned
No exact matches.



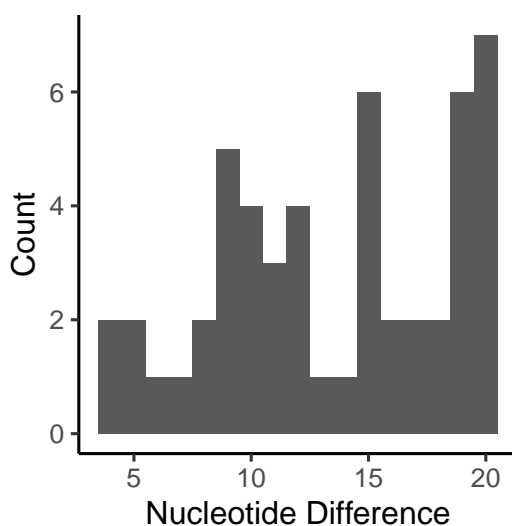
IGHV3-74*03

997 sequences assigned
No exact matches.



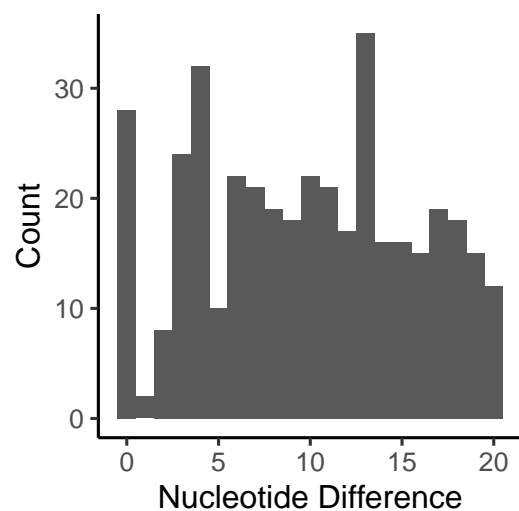
IGHV3-64D*06

158 sequences assigned
No exact matches.



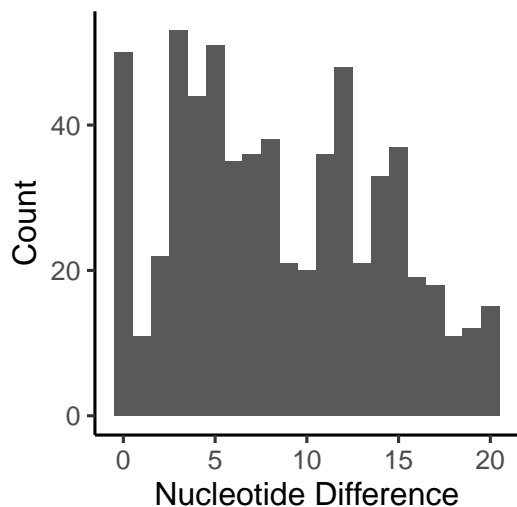
IGHV4-4*07

462 sequences assigned
28 (6.1%) exact matches, in which:
16 unique CDR3
3 unique J



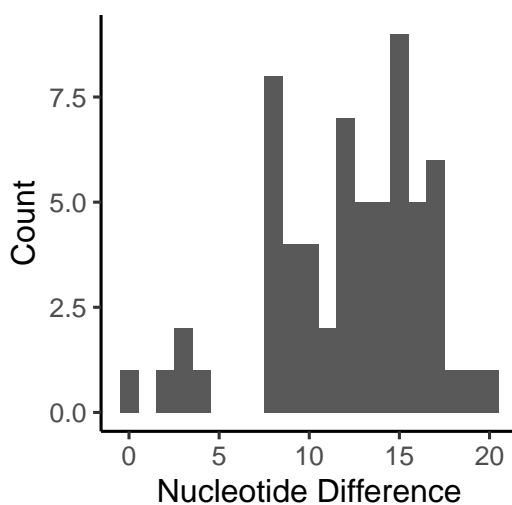
IGHV3-74*01_02

674 sequences assigned
50 (7.4%) exact matches, in which:
28 unique CDR3
6 unique J



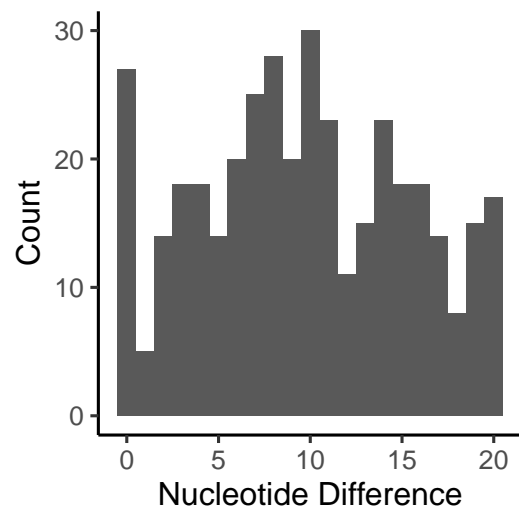
IGHV3-64D*09

80 sequences assigned
1 (1.2%) exact matches, in which:
1 unique CDR3
1 unique J



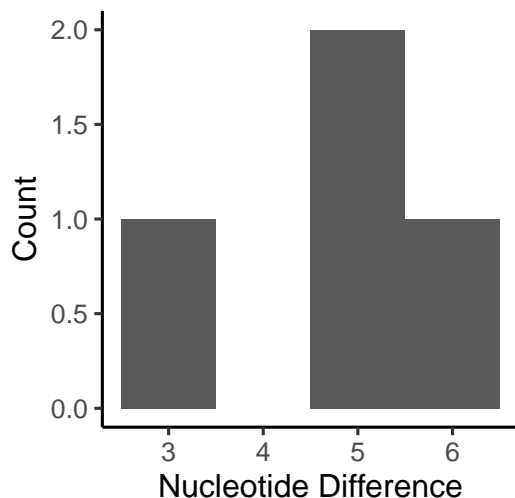
IGHV4-4*02_03

485 sequences assigned
27 (5.6%) exact matches, in which:
21 unique CDR3
6 unique J



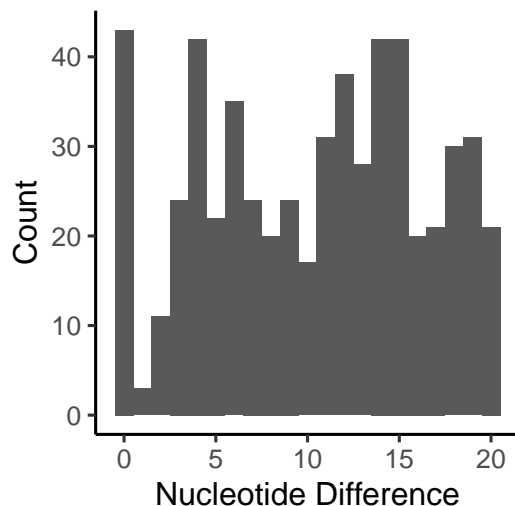
IGHV4-28*01_07

7 sequences assigned
No exact matches.



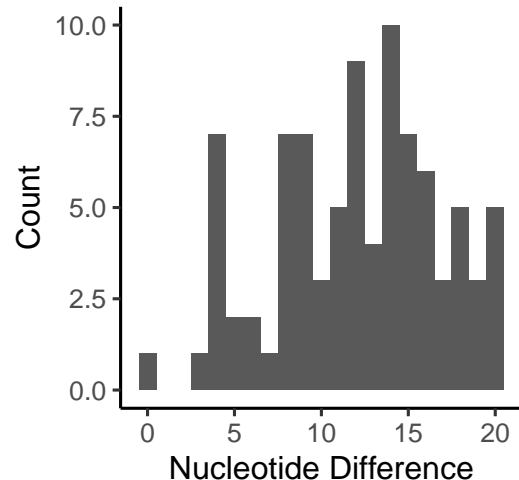
IGHV4-31*02

842 sequences assigned
43 (5.1%) exact matches, in which:
35 unique CDR3
4 unique J



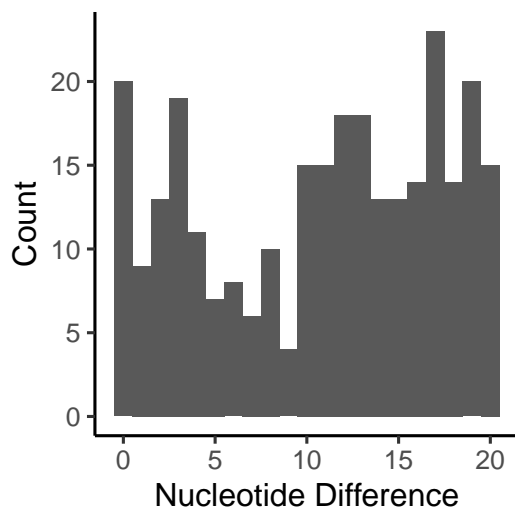
IGHV4-39*02

146 sequences assigned
1 (0.7%) exact matches, in which:
1 unique CDR3
1 unique J



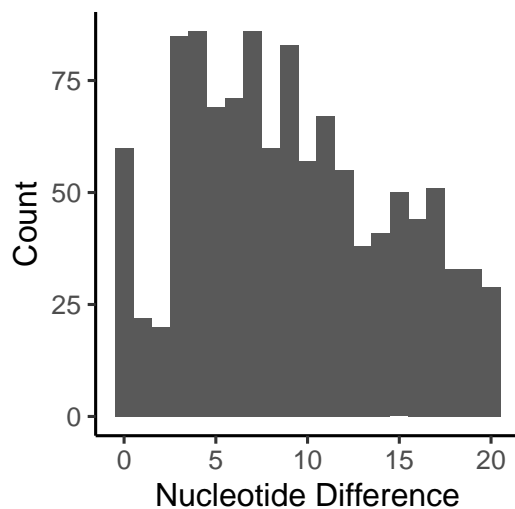
IGHV4-30-2*01

491 sequences assigned
20 (4.1%) exact matches, in which:
12 unique CDR3
3 unique J



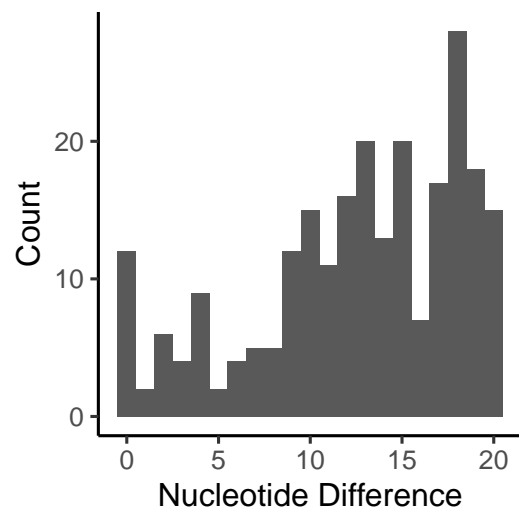
IGHV4-34*01_02

1418 sequences assigned
60 (4.2%) exact matches, in which:
37 unique CDR3
6 unique J



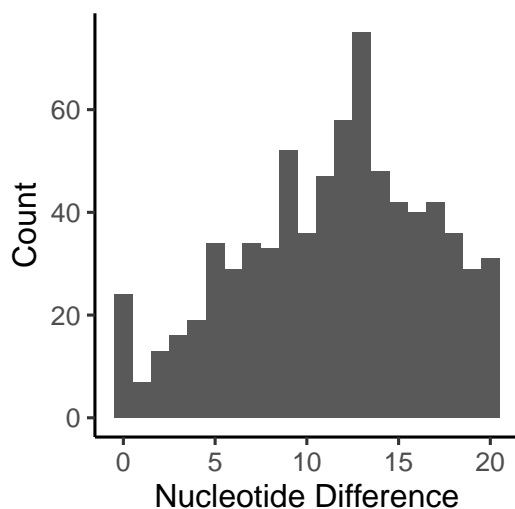
IGHV4-39*07

423 sequences assigned
12 (2.8%) exact matches, in which:
11 unique CDR3
3 unique J



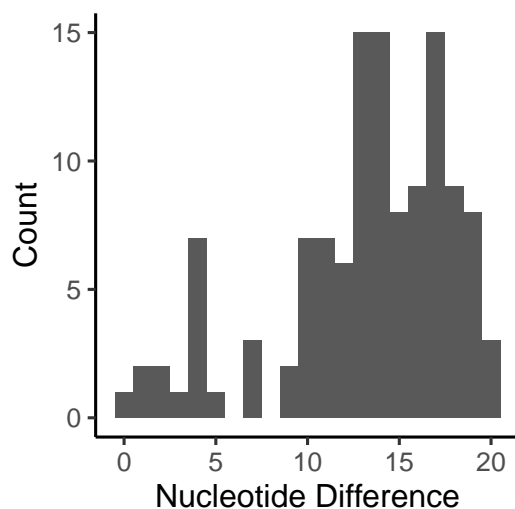
IGHV4-30-4*01

930 sequences assigned
24 (2.6%) exact matches, in which:
16 unique CDR3
3 unique J



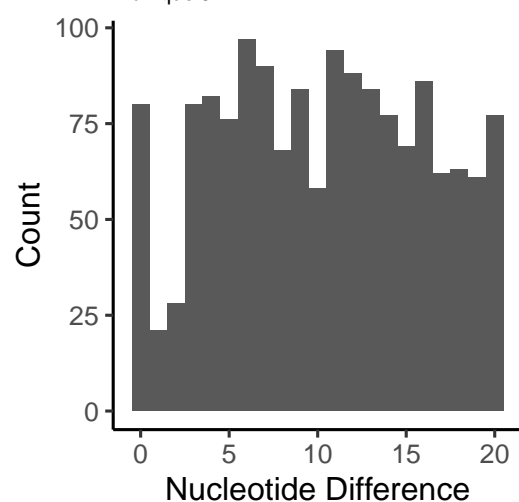
IGHV4-38-2*02

186 sequences assigned
1 (0.5%) exact matches, in which:
1 unique CDR3
1 unique J



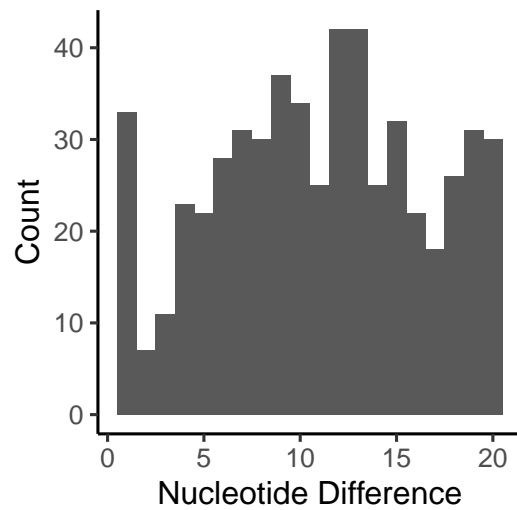
IGHV4-59*01_07

2168 sequences assigned
80 (3.7%) exact matches, in which:
49 unique CDR3
7 unique J



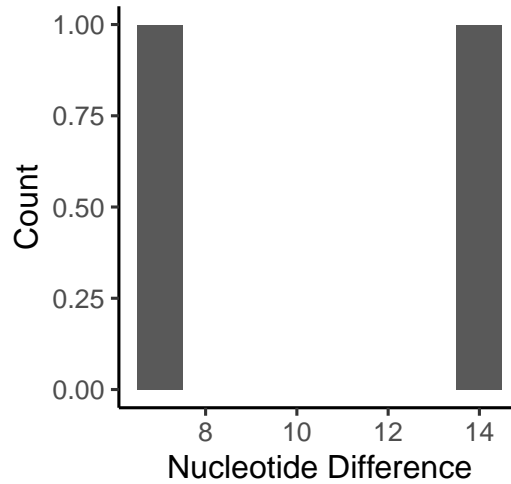
IGHV4–59*11

903 sequences assigned
No exact matches.



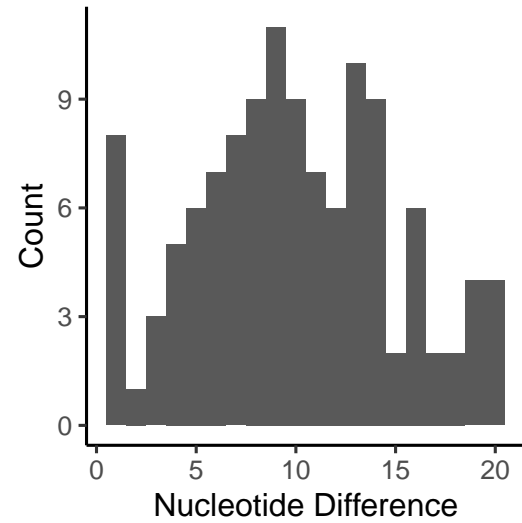
IGHV4/OR15–8*01

4 sequences assigned
No exact matches.



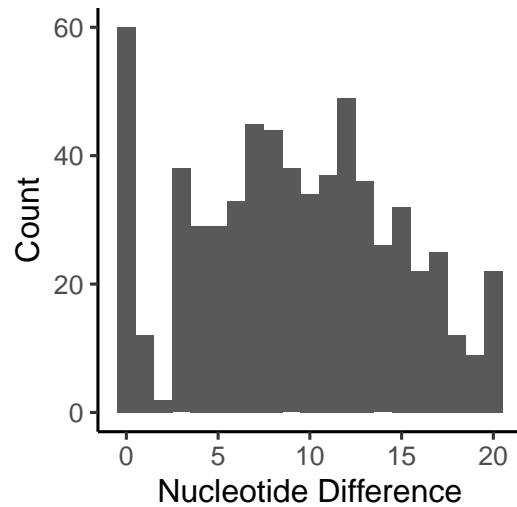
IGHV5–51*07

135 sequences assigned
No exact matches.



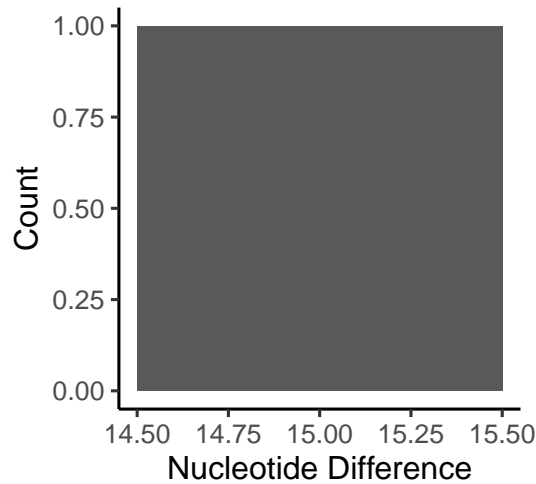
IGHV4–61*02

706 sequences assigned
60 (8.5%) exact matches, in which:
45 unique CDR3
5 unique J



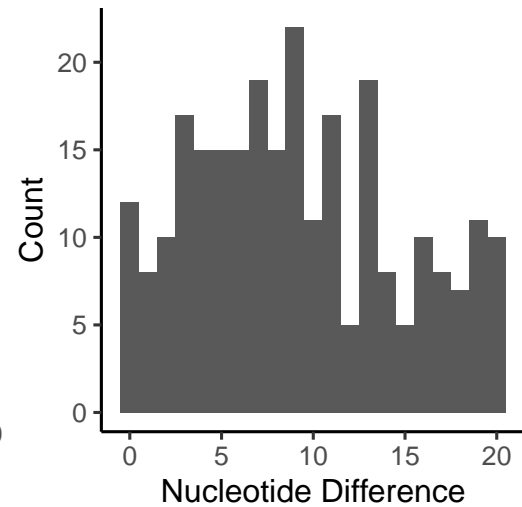
IGHV4/OR15–8*02

5 sequences assigned
No exact matches.



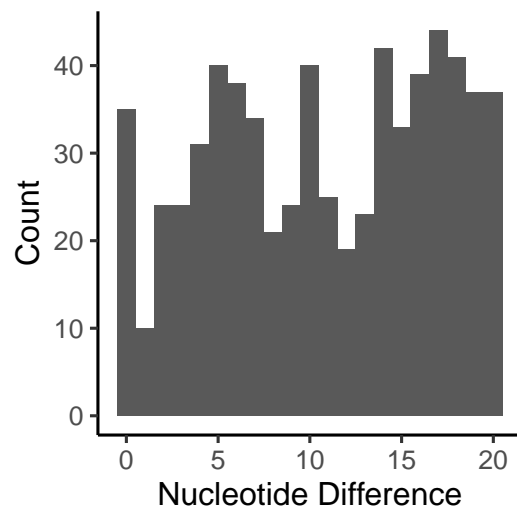
IGHV5–51*01_03

288 sequences assigned
12 (4.2%) exact matches, in which:
11 unique CDR3
4 unique J



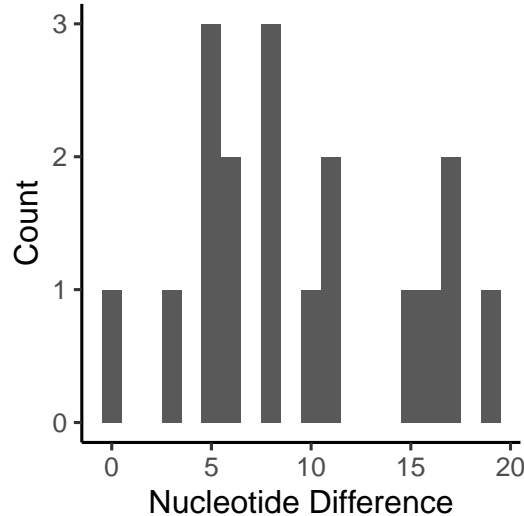
IGHV4–61*02_A234G

919 sequences assigned
35 (3.8%) exact matches, in which:
25 unique CDR3
5 unique J



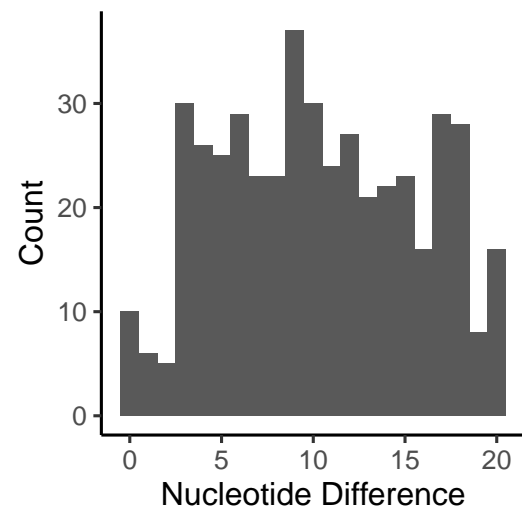
IGHV5–10–1*01_03

19 sequences assigned
1 (5.3%) exact matches, in which:
1 unique CDR3
1 unique J



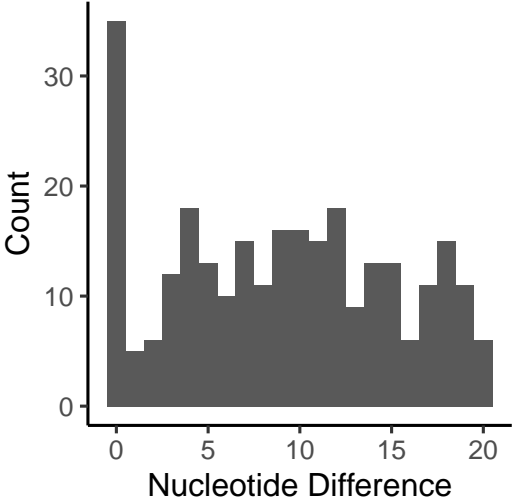
IGHV6–1*01_02

520 sequences assigned
10 (1.9%) exact matches, in which:
8 unique CDR3
5 unique J

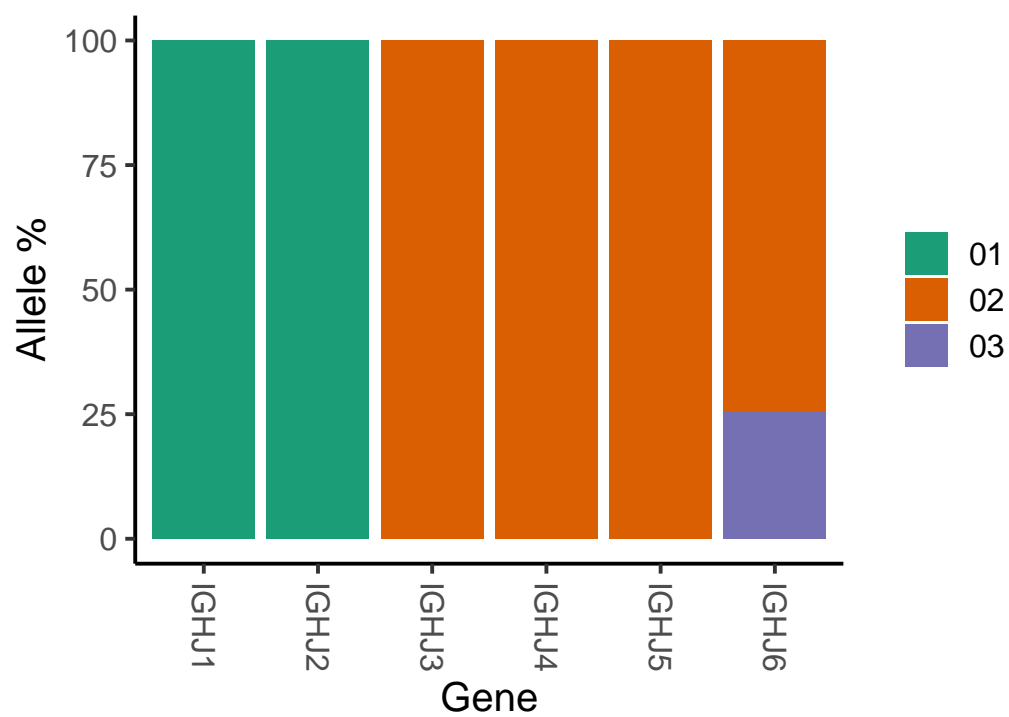


IGHV7-4-1*02

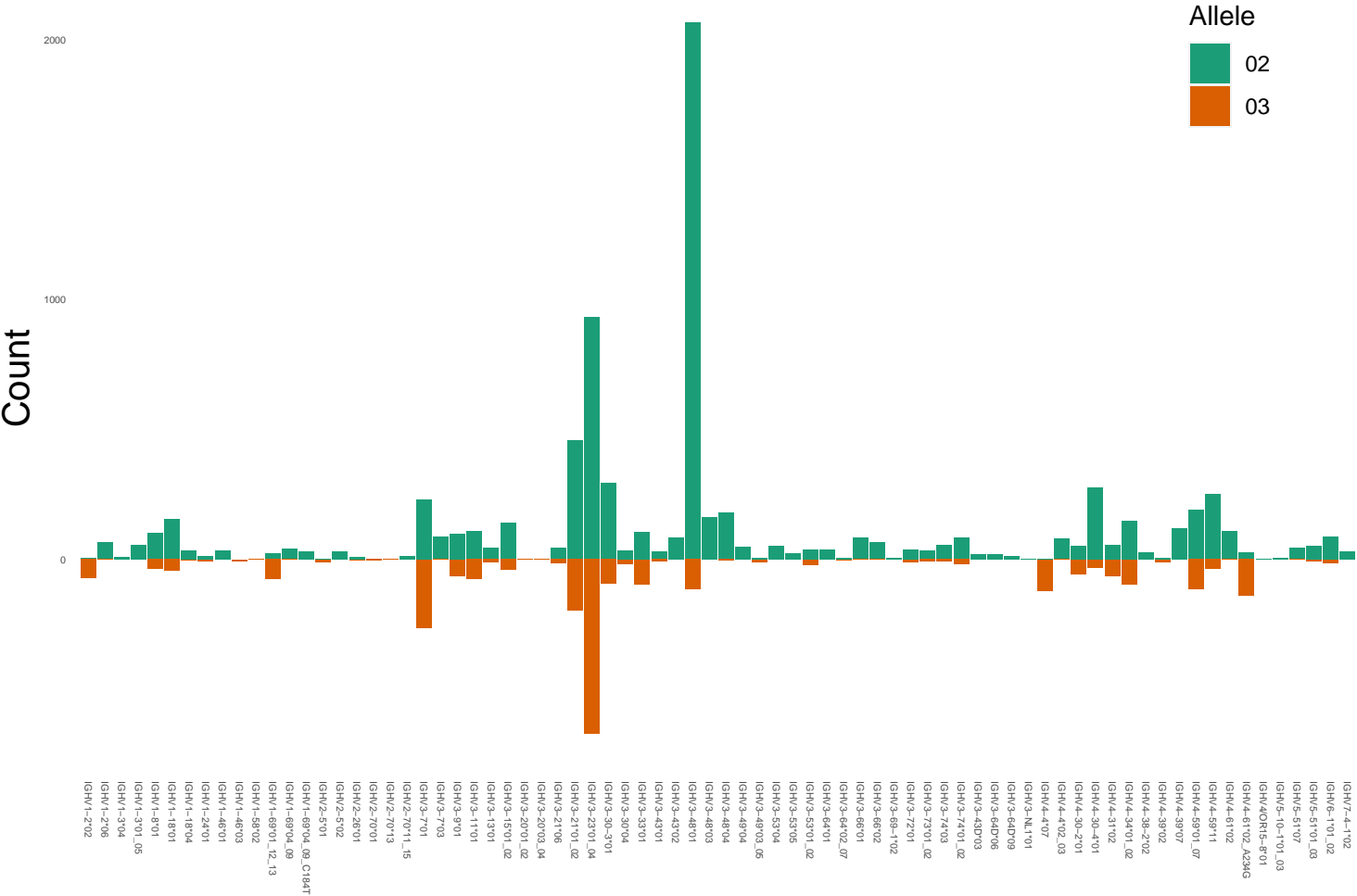
311 sequences assigned
35 (11.3%) exact matches, in which:
33 unique CDR3
5 unique J



Allele Usage



Sequence Count byIGHJ6 allele usage



Warning – no inferred sequences found.