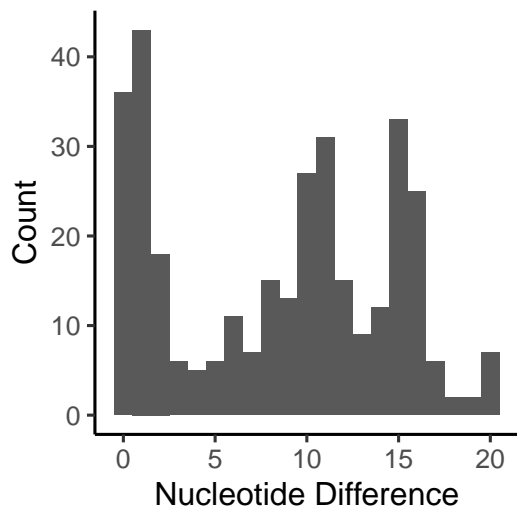


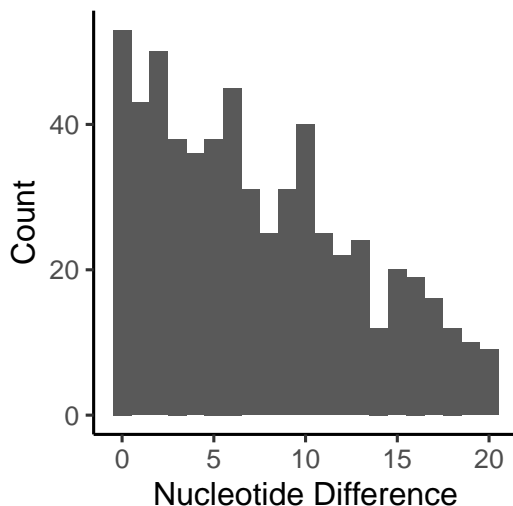
IGHV1-2*04

502 sequences assigned
36 (7.2%) exact matches, in which:
28 unique CDR3
5 unique J



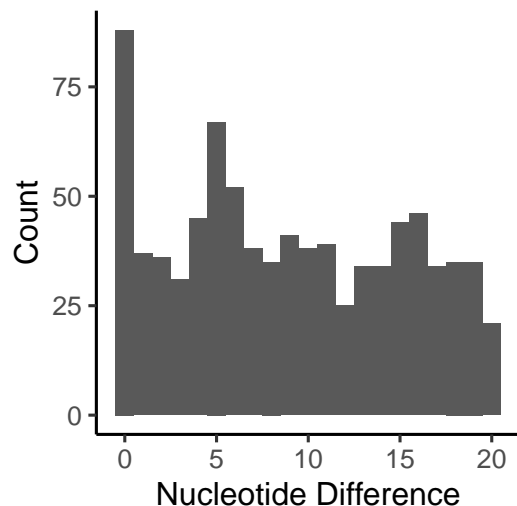
IGHV1-8*01

942 sequences assigned
53 (5.6%) exact matches, in which:
50 unique CDR3
6 unique J



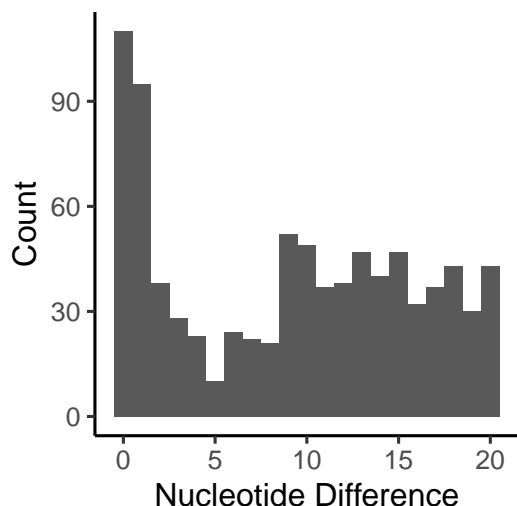
IGHV1-46*01

1478 sequences assigned
88 (6%) exact matches, in which:
83 unique CDR3
6 unique J



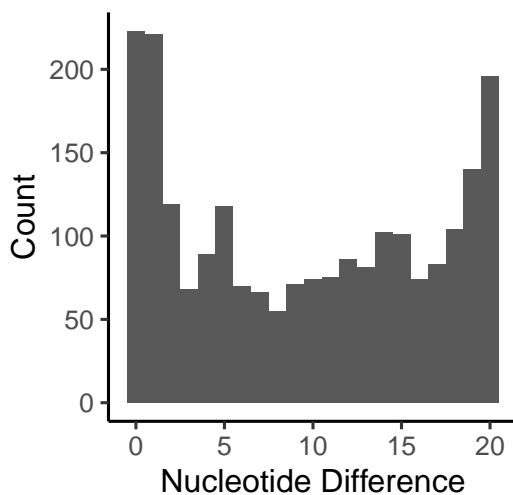
IGHV1-3*01

1333 sequences assigned
110 (8.3%) exact matches, in which:
101 unique CDR3
6 unique J



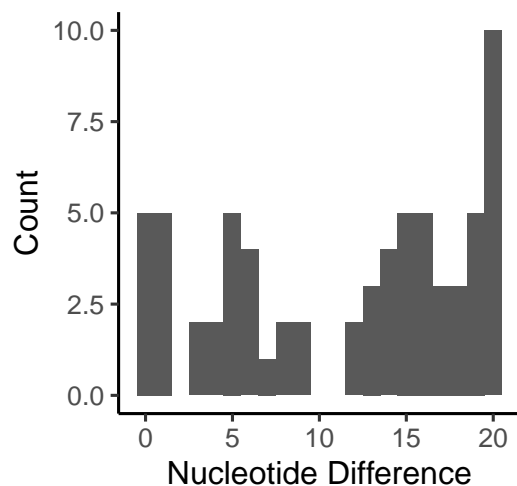
IGHV1-18*01

5042 sequences assigned
223 (4.4%) exact matches, in which:
197 unique CDR3
7 unique J



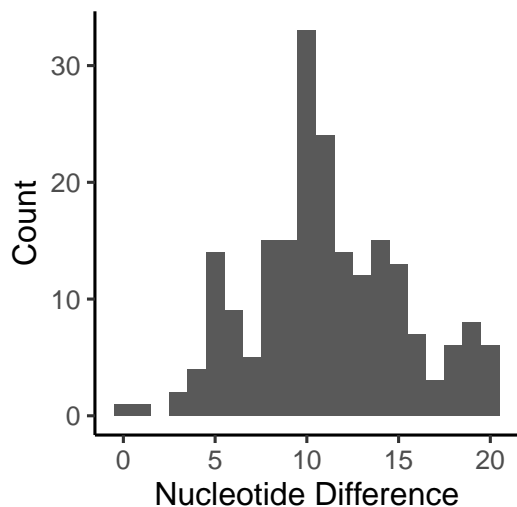
IGHV1-58*01

90 sequences assigned
5 (5.6%) exact matches, in which:
5 unique CDR3
3 unique J



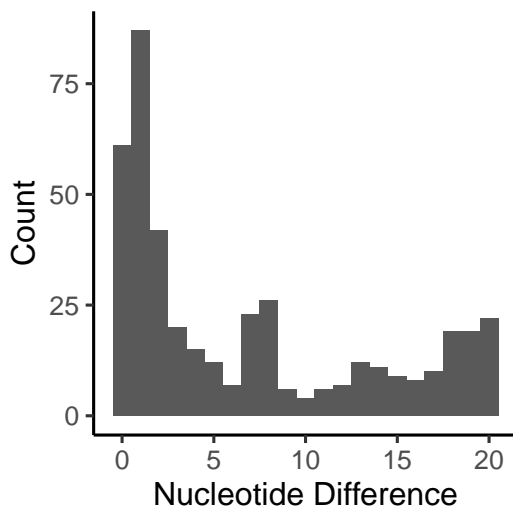
IGHV1-3*04

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



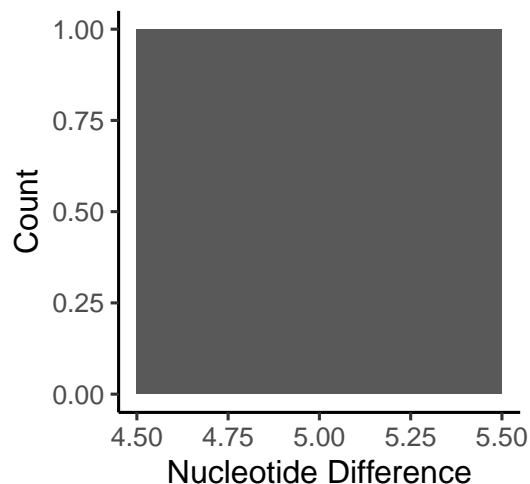
IGHV1-24*01

575 sequences assigned
61 (10.6%) exact matches, in which:
57 unique CDR3
7 unique J



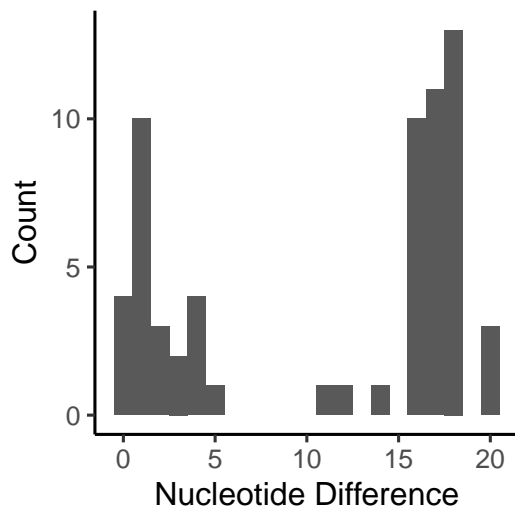
IGHV1-68*02

1 sequences assigned
No exact matches.



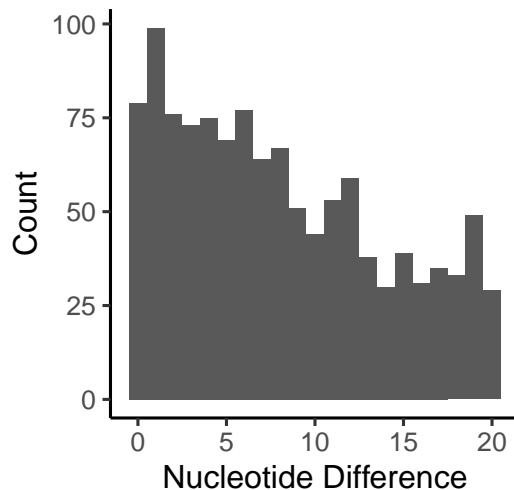
IGHV1-69-2*01

127 sequences assigned
4 (3.1%) exact matches, in which:
4 unique CDR3
3 unique J



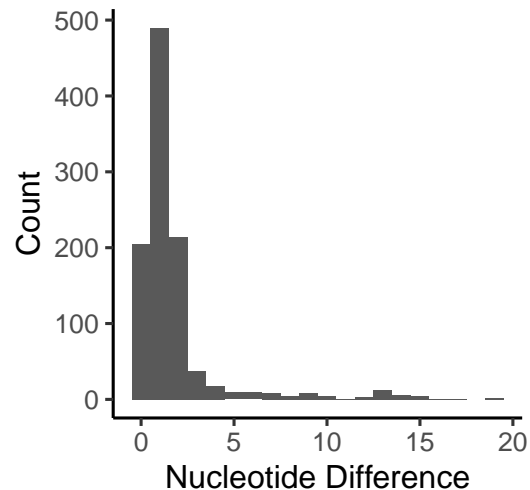
IGHV2-5*02

1382 sequences assigned
79 (5.7%) exact matches, in which:
74 unique CDR3
5 unique J



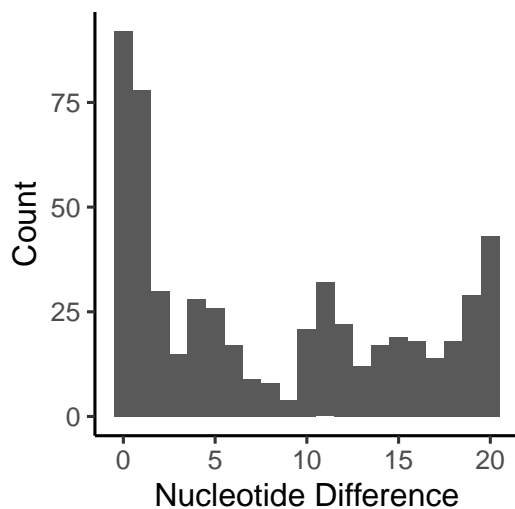
IGHV2-70*15

1064 sequences assigned
205 (19.3%) exact matches, in which:
76 unique CDR3
4 unique J



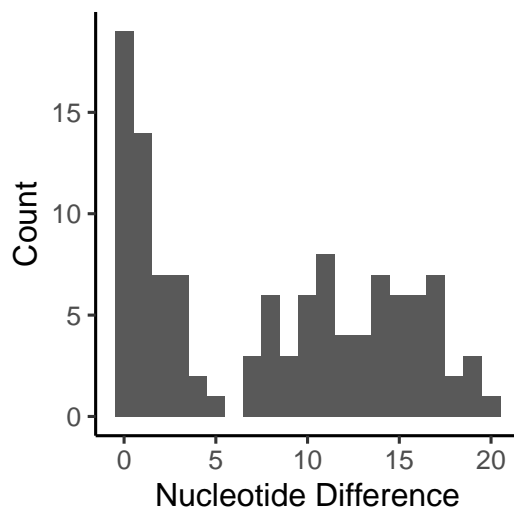
IGHV1-69*04

1233 sequences assigned
92 (7.5%) exact matches, in which:
89 unique CDR3
6 unique J



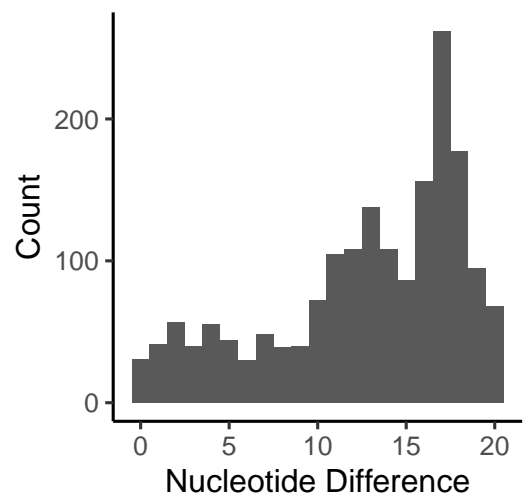
IGHV2-26*01

122 sequences assigned
19 (15.6%) exact matches, in which:
18 unique CDR3
6 unique J



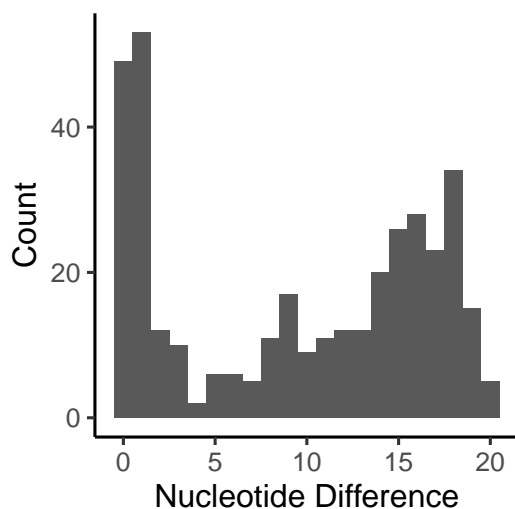
IGHV3-7*01

2152 sequences assigned
31 (1.4%) exact matches, in which:
31 unique CDR3
5 unique J



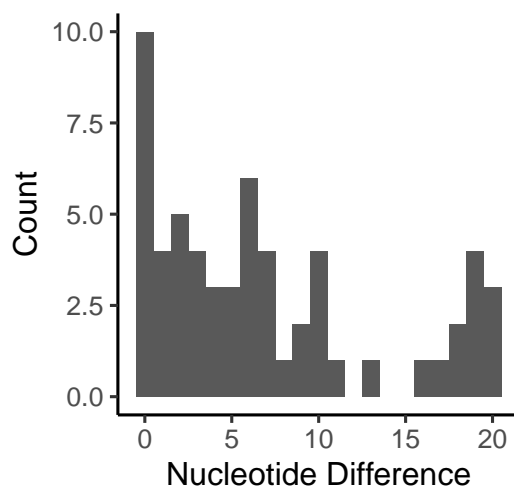
IGHV1-69*06

697 sequences assigned
49 (7%) exact matches, in which:
40 unique CDR3
4 unique J



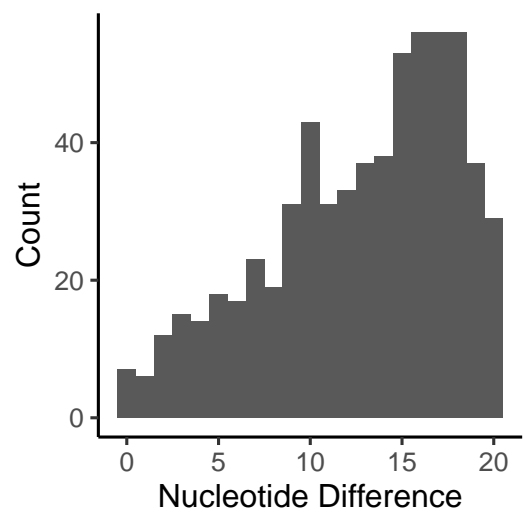
IGHV2-70*01

75 sequences assigned
10 (13.3%) exact matches, in which:
10 unique CDR3
4 unique J



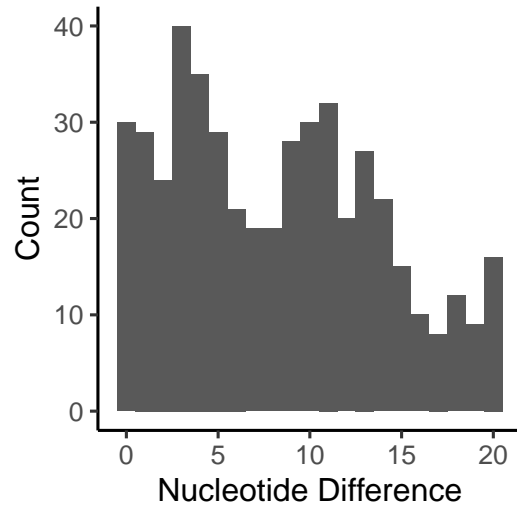
IGHV3-7*04

1093 sequences assigned
7 (0.6%) exact matches, in which:
7 unique CDR3
3 unique J



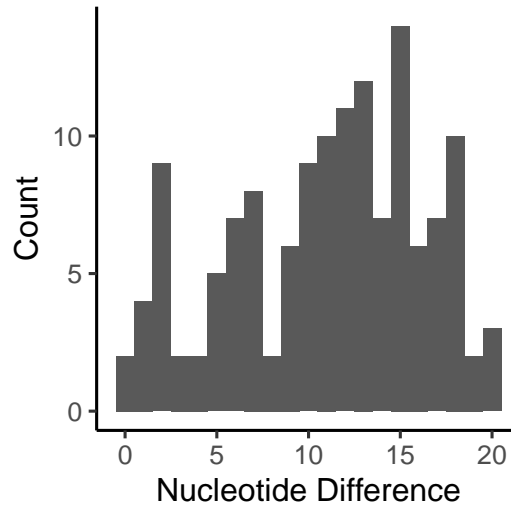
IGHV3-9*01

639 sequences assigned
30 (4.7%) exact matches, in which:
28 unique CDR3
5 unique J



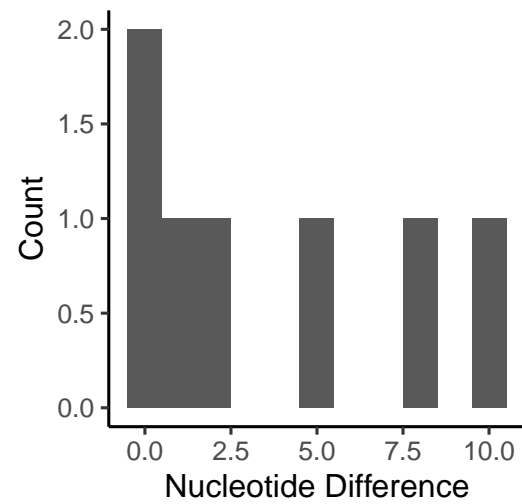
IGHV3-13*01

226 sequences assigned
2 (0.9%) exact matches, in which:
2 unique CDR3
2 unique J



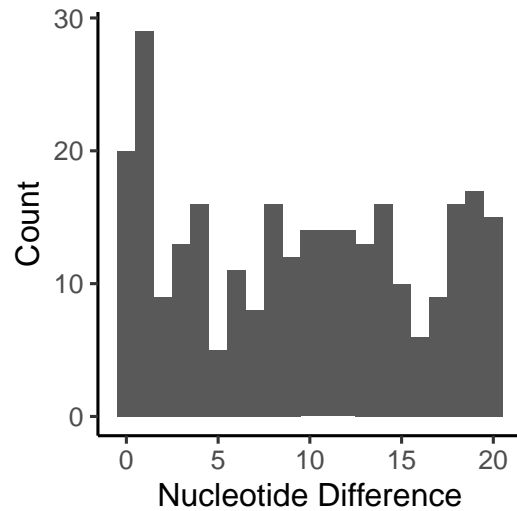
IGHV3-20*01

7 sequences assigned
2 (28.6%) exact matches, in which:
2 unique CDR3
2 unique J



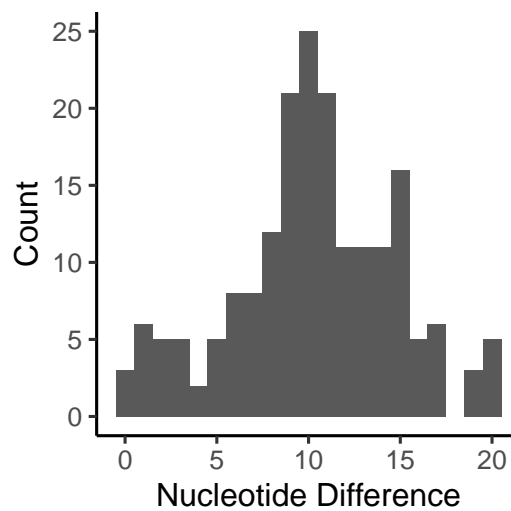
IGHV3-11*01

426 sequences assigned
20 (4.7%) exact matches, in which:
19 unique CDR3
4 unique J



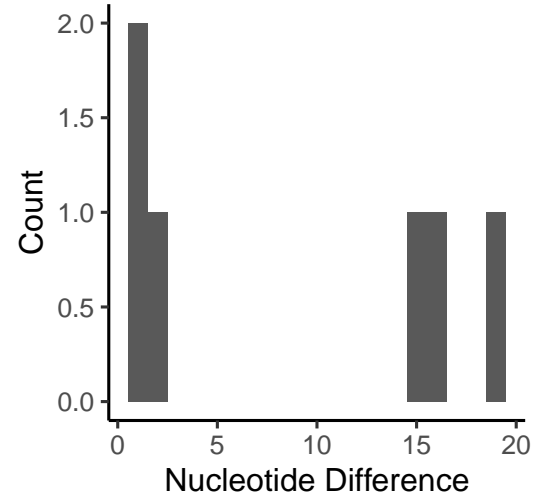
IGHV3-15*01

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



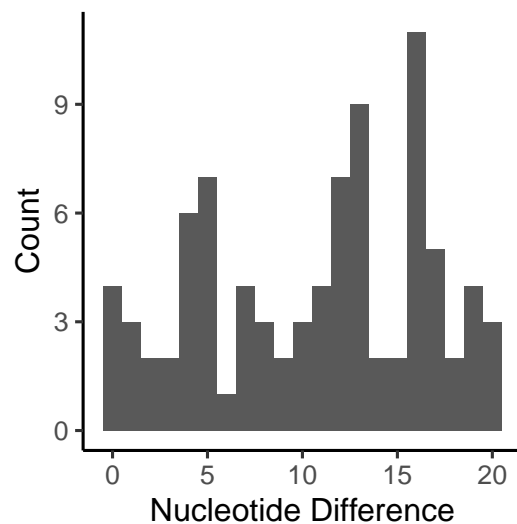
IGHV3-20*04

12 sequences assigned
No exact matches.



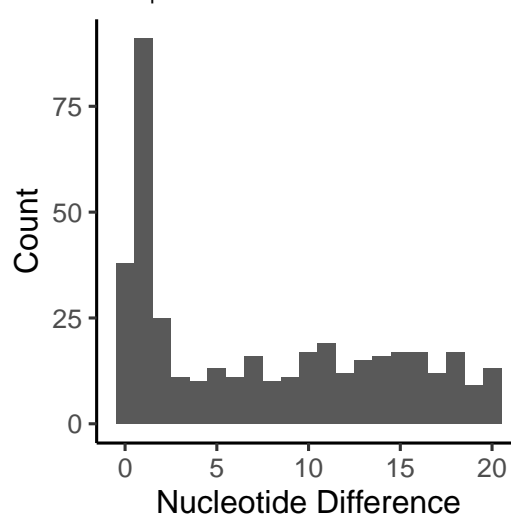
IGHV3-11*06

144 sequences assigned
4 (2.8%) exact matches, in which:
4 unique CDR3
2 unique J



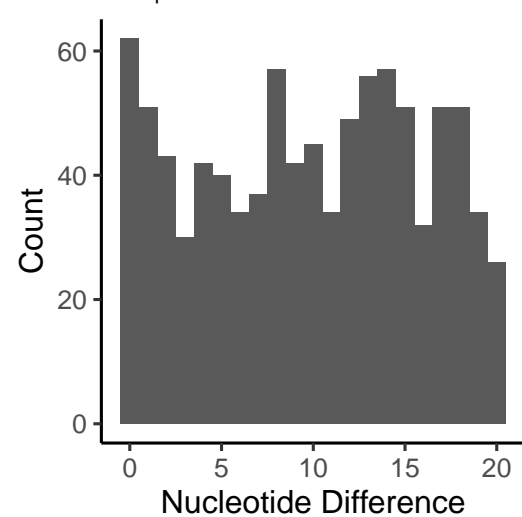
IGHV3-15*07

566 sequences assigned
38 (6.7%) exact matches, in which:
24 unique CDR3
3 unique J



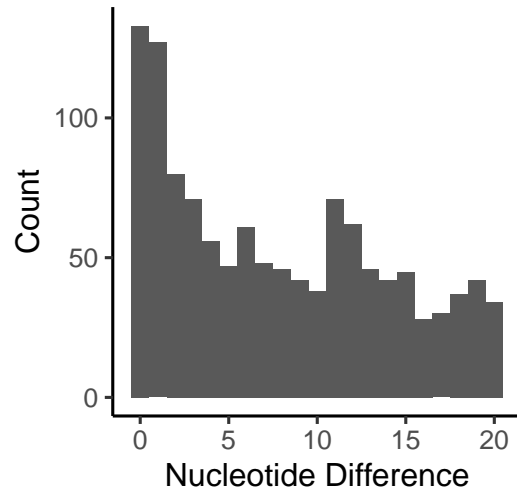
IGHV3-21*01

1564 sequences assigned
62 (4%) exact matches, in which:
53 unique CDR3
7 unique J



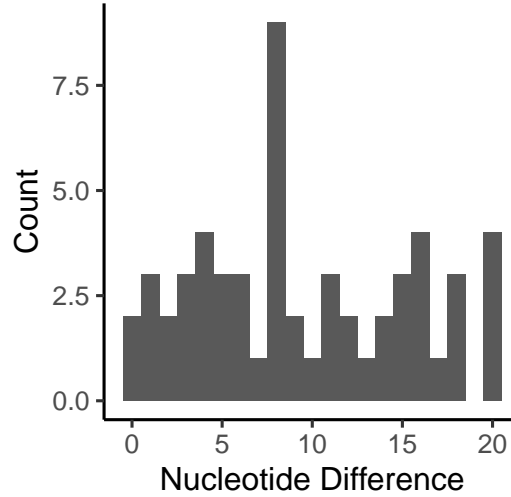
IGHV3-30-3*01

1712 sequences assigned
133 (7.8%) exact matches, in which:
117 unique CDR3
7 unique J



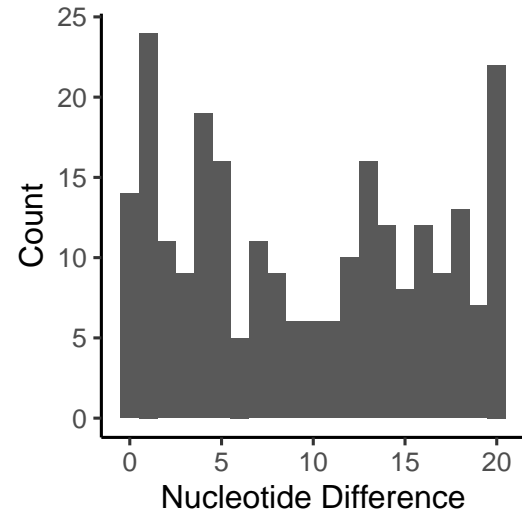
IGHV3-43*01

93 sequences assigned
2 (2.2%) exact matches, in which:
2 unique CDR3
2 unique J



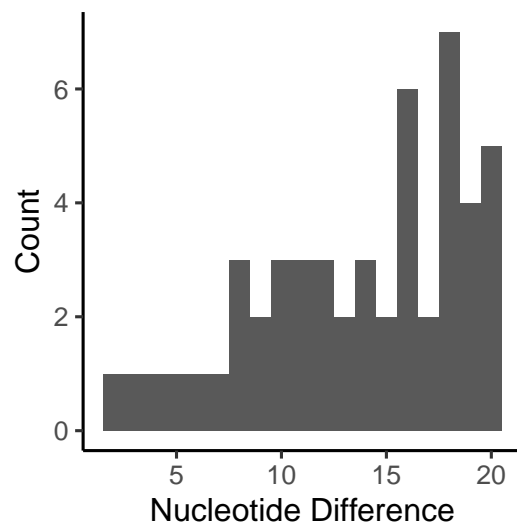
IGHV3-49*03

324 sequences assigned
14 (4.3%) exact matches, in which:
11 unique CDR3
2 unique J



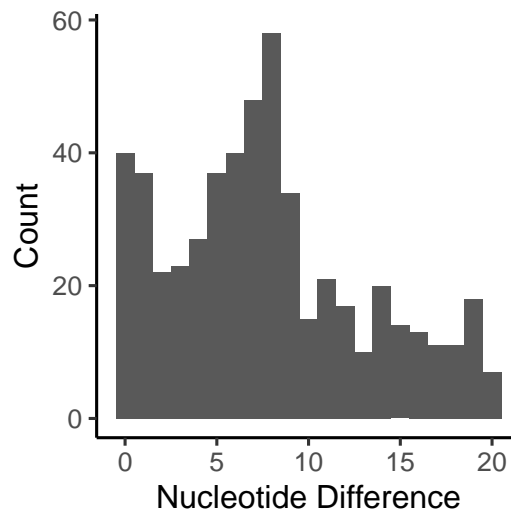
IGHV3-30*04

151 sequences assigned
No exact matches.



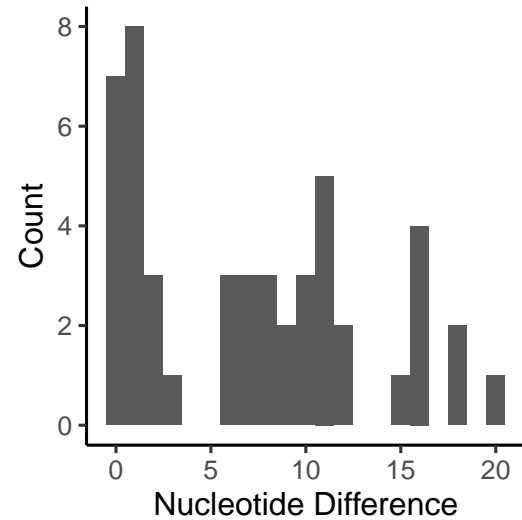
IGHV3-48*01

719 sequences assigned
40 (5.6%) exact matches, in which:
34 unique CDR3
4 unique J



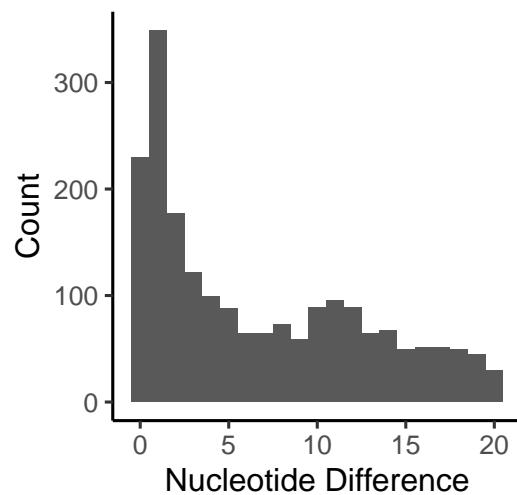
IGHV3-49*05

84 sequences assigned
7 (8.3%) exact matches, in which:
7 unique CDR3
3 unique J



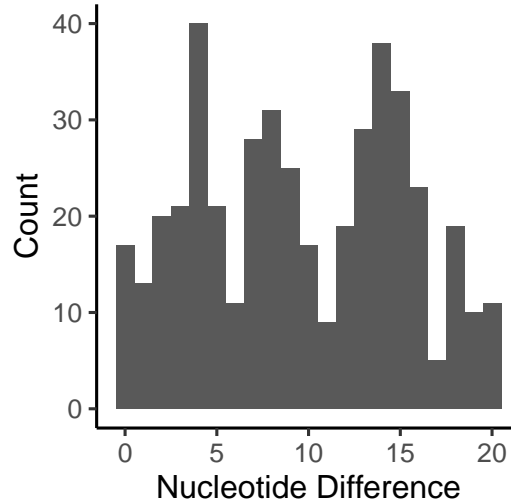
IGHV3-33*01

2523 sequences assigned
230 (9.1%) exact matches, in which:
159 unique CDR3
6 unique J



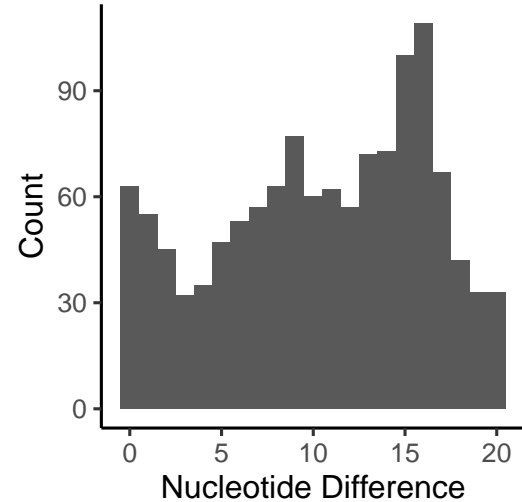
IGHV3-48*02

645 sequences assigned
17 (2.6%) exact matches, in which:
14 unique CDR3
4 unique J



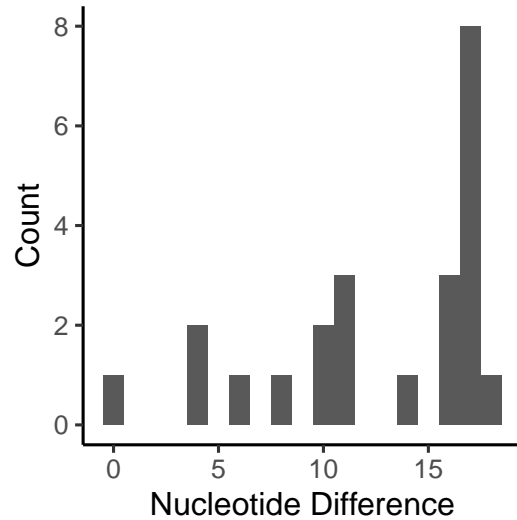
IGHV3-53*01

1927 sequences assigned
63 (3.3%) exact matches, in which:
62 unique CDR3
6 unique J



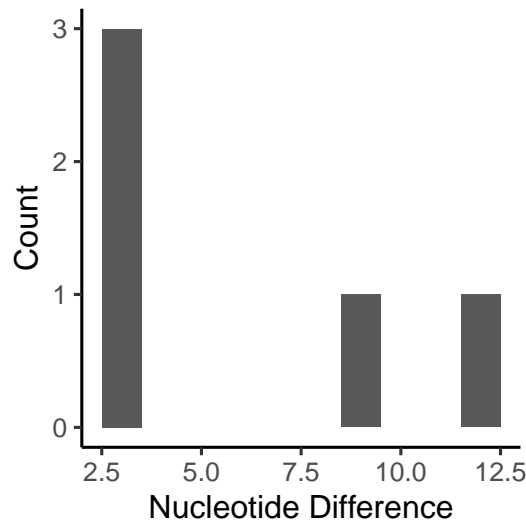
IGHV3-64*02

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



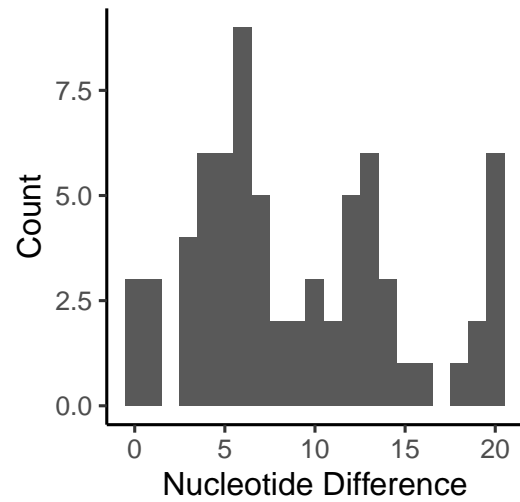
IGHV3-69-1*01

10 sequences assigned
No exact matches.



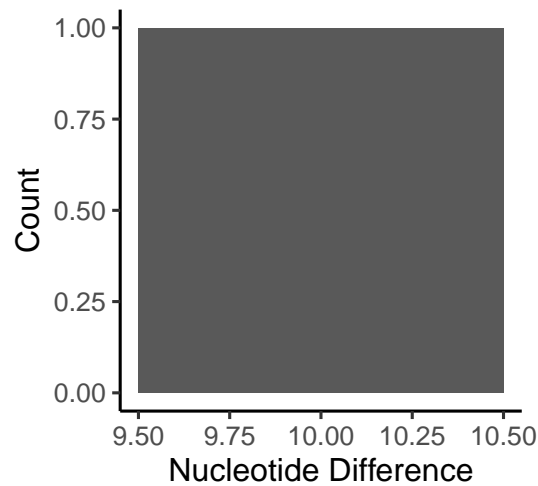
IGHV3-73*01

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



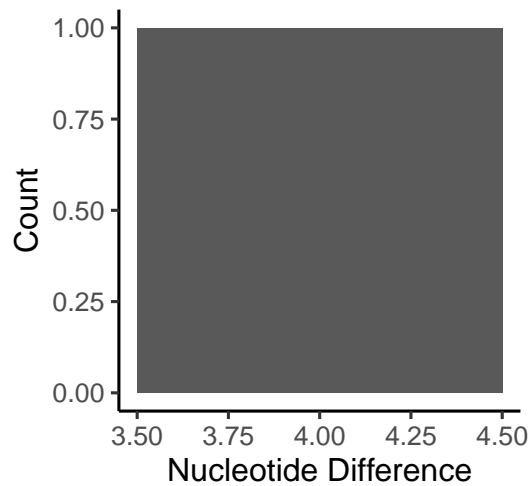
IGHV3-64*04

1 sequences assigned
No exact matches.



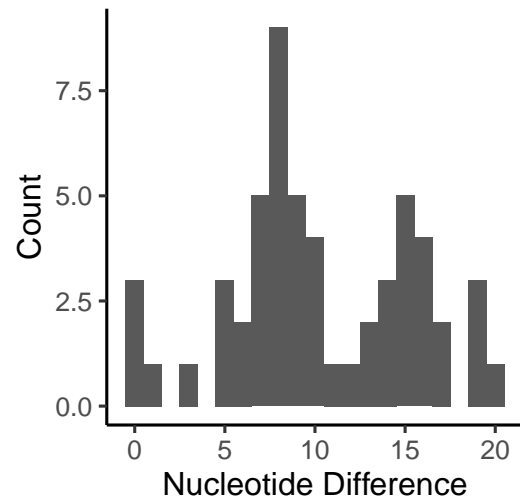
IGHV3-69-1*02

9 sequences assigned
No exact matches.



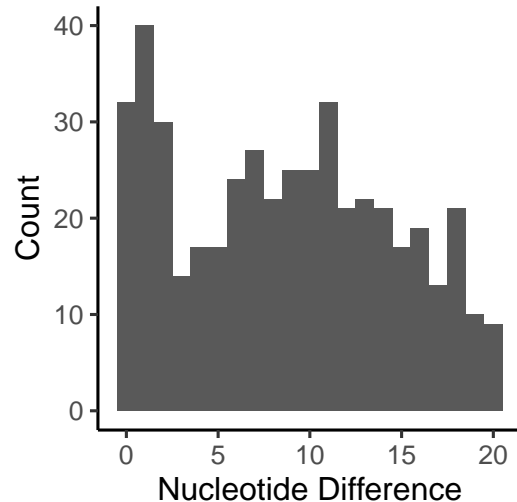
IGHV3-73*02

105 sequences assigned
3 (2.9%) exact matches, in which:
3 unique CDR3
2 unique J



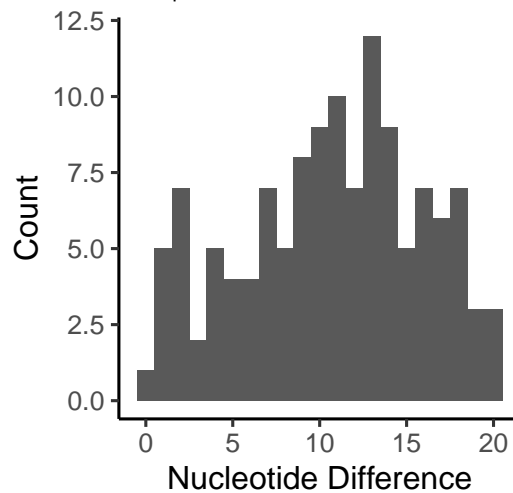
IGHV3-66*01

561 sequences assigned
32 (5.7%) exact matches, in which:
29 unique CDR3
4 unique J



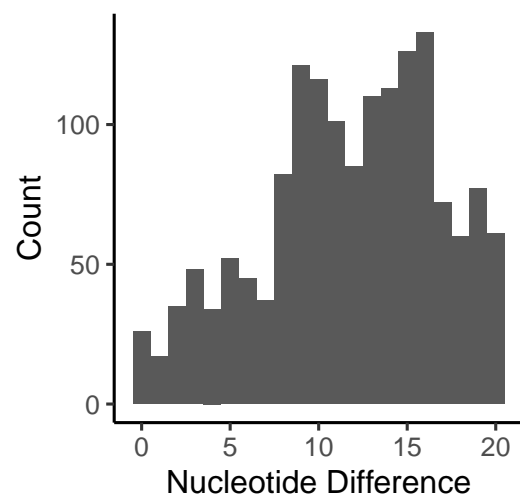
IGHV3-72*01

166 sequences assigned
1 (0.6%) exact matches, in which:
1 unique CDR3
1 unique J



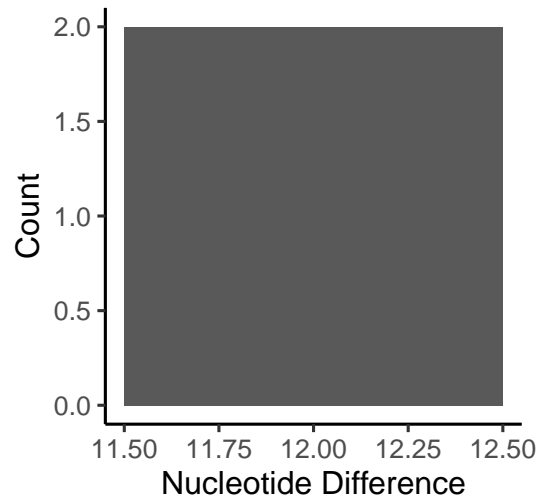
IGHV3-74*01

2493 sequences assigned
26 (1%) exact matches, in which:
21 unique CDR3
5 unique J



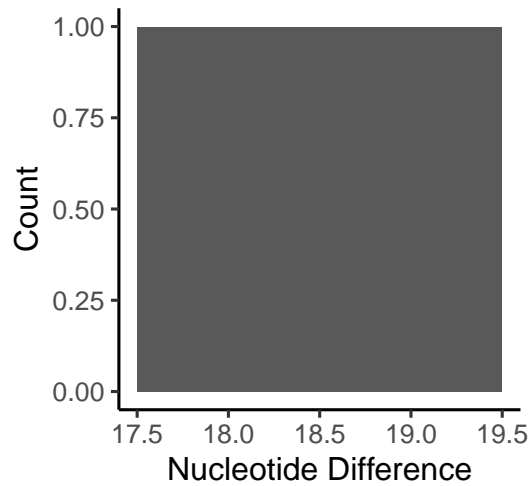
IGHV3-43D*04

9 sequences assigned
No exact matches.



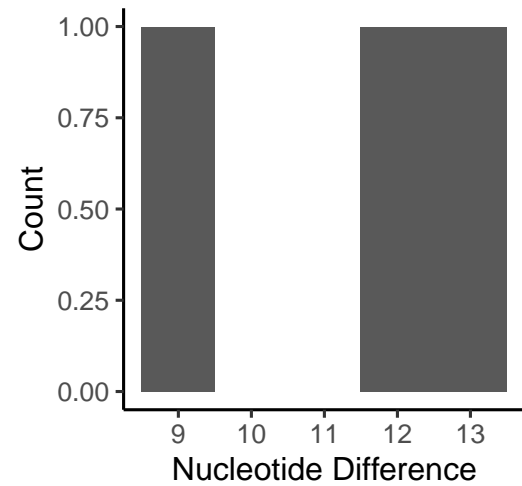
IGHV3-NL1*01

2 sequences assigned
No exact matches.



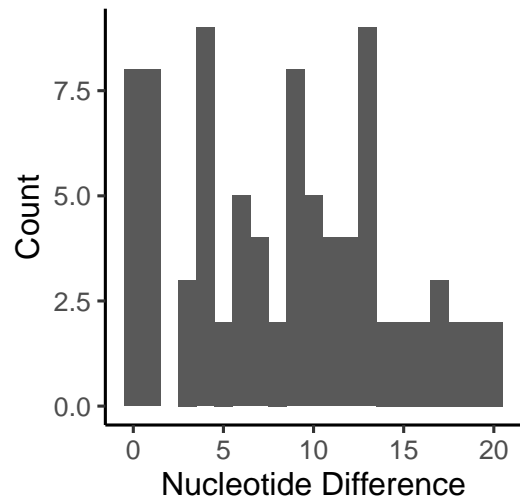
IGHV4-28*07

3 sequences assigned
No exact matches.



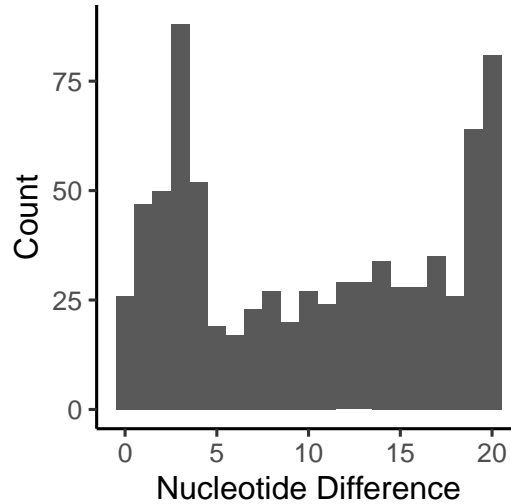
IGHV3-64D*06

91 sequences assigned
8 (8.8%) exact matches, in which:
7 unique CDR3
1 unique J



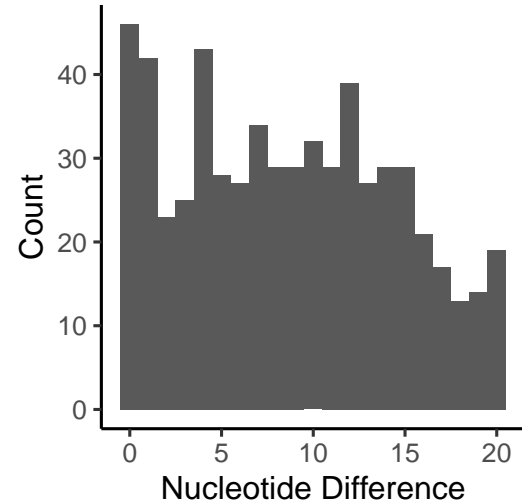
IGHV4-4*02

1238 sequences assigned
26 (2.1%) exact matches, in which:
22 unique CDR3
7 unique J



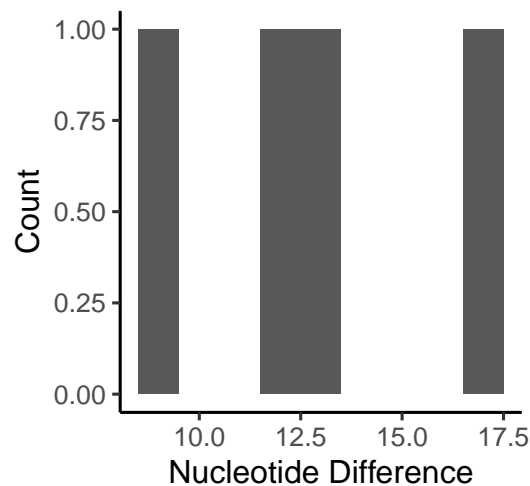
IGHV4-30-4*01

837 sequences assigned
46 (5.5%) exact matches, in which:
43 unique CDR3
6 unique J



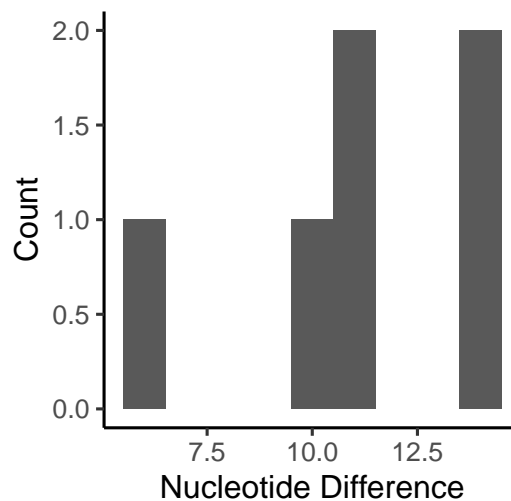
IGHV3-64D*08

8 sequences assigned
No exact matches.



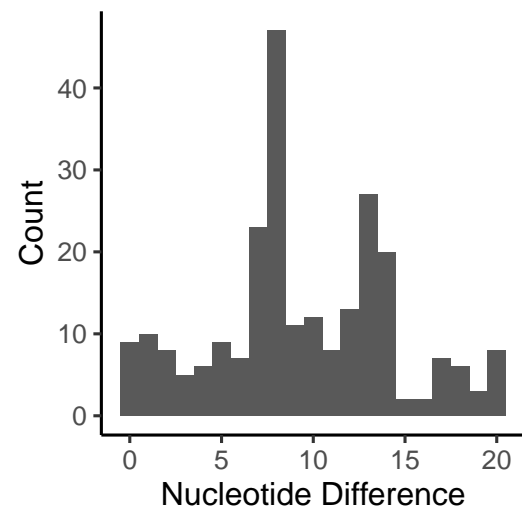
IGHV4-28*01

6 sequences assigned
No exact matches.



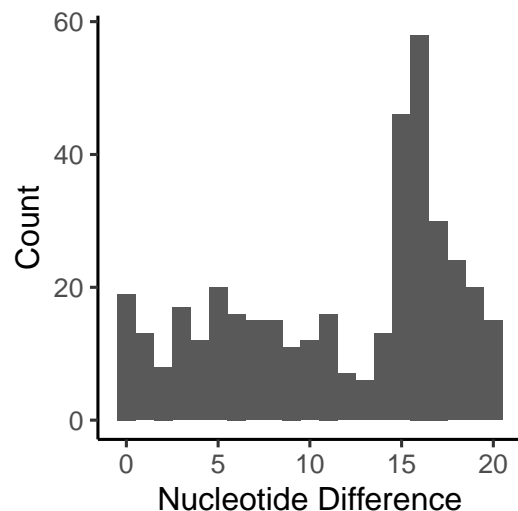
IGHV4-30-2*01

463 sequences assigned
9 (1.9%) exact matches, in which:
8 unique CDR3
4 unique J



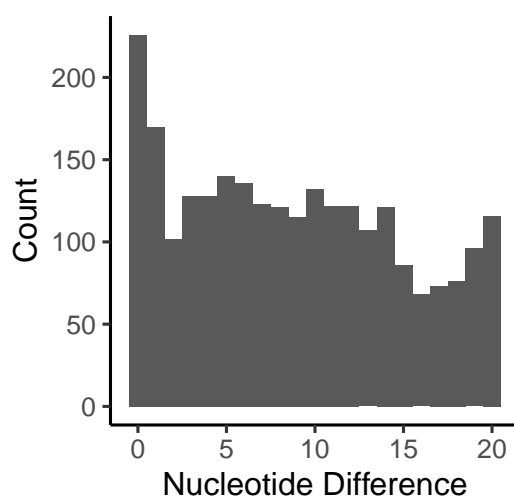
IGHV4-31*03

663 sequences assigned
19 (2.9%) exact matches, in which:
17 unique CDR3
6 unique J



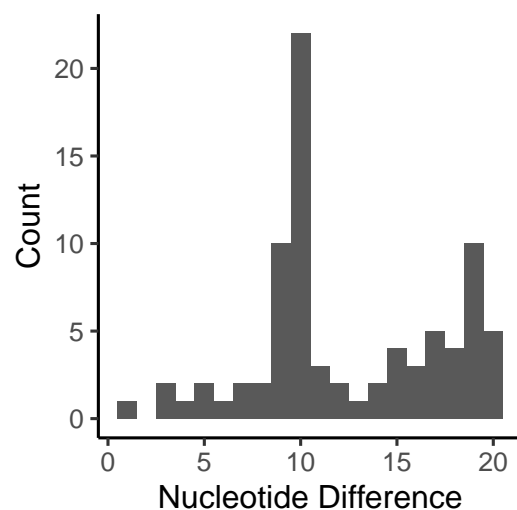
IGHV4-39*01

4353 sequences assigned
226 (5.2%) exact matches, in which:
202 unique CDR3
7 unique J



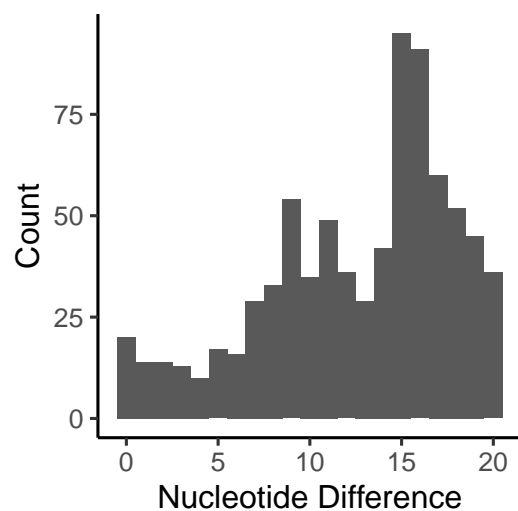
IGHV4-61*08

109 sequences assigned
No exact matches.



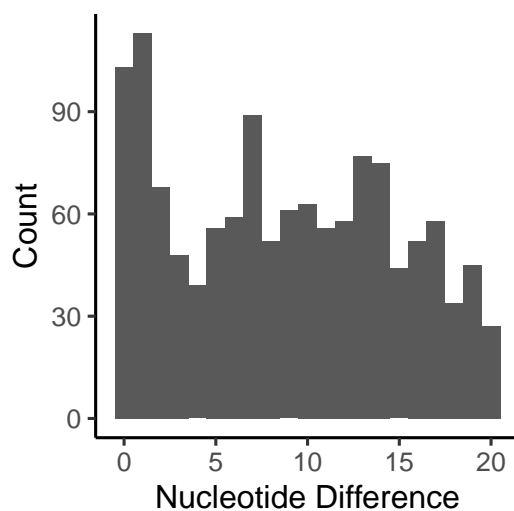
IGHV4-34*01

1100 sequences assigned
20 (1.8%) exact matches, in which:
16 unique CDR3
6 unique J



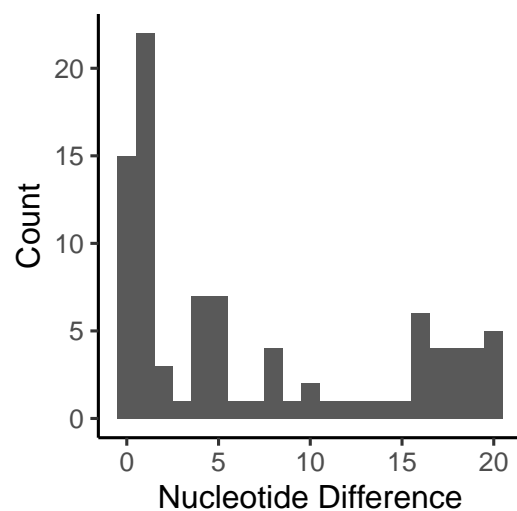
IGHV4-59*01

2053 sequences assigned
103 (5%) exact matches, in which:
77 unique CDR3
7 unique J



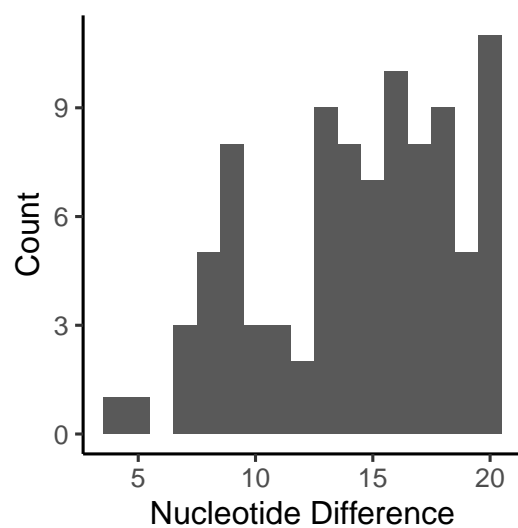
IGHV5-10-1*03

140 sequences assigned
15 (10.7%) exact matches, in which:
10 unique CDR3
3 unique J



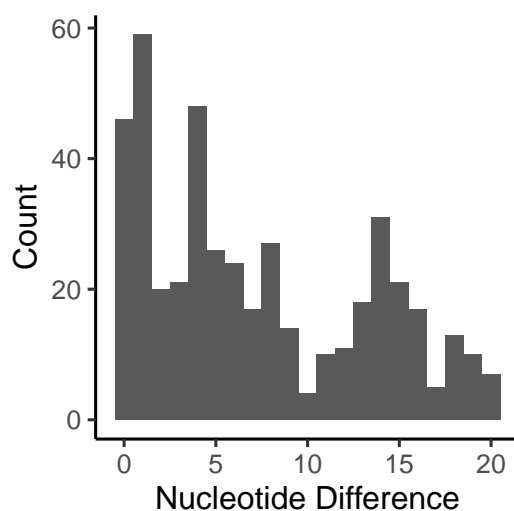
IGHV4-34*02

174 sequences assigned
No exact matches.



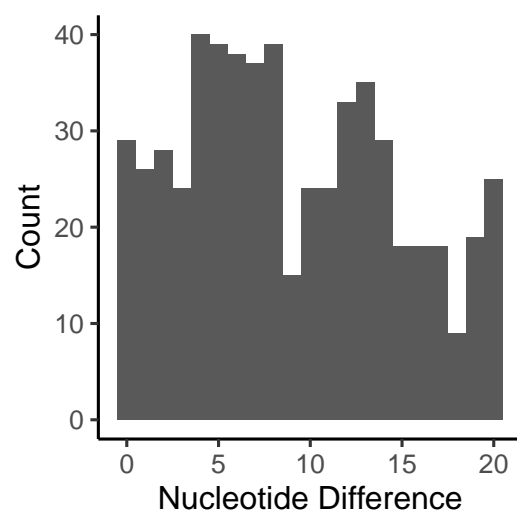
IGHV4-61*01

571 sequences assigned
46 (8.1%) exact matches, in which:
28 unique CDR3
6 unique J



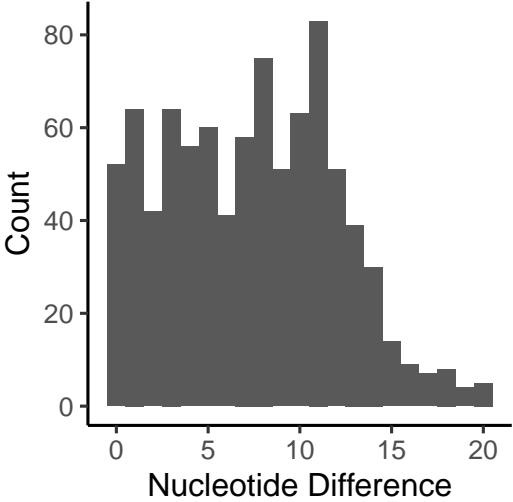
IGHV5-51*01

970 sequences assigned
29 (3%) exact matches, in which:
27 unique CDR3
5 unique J



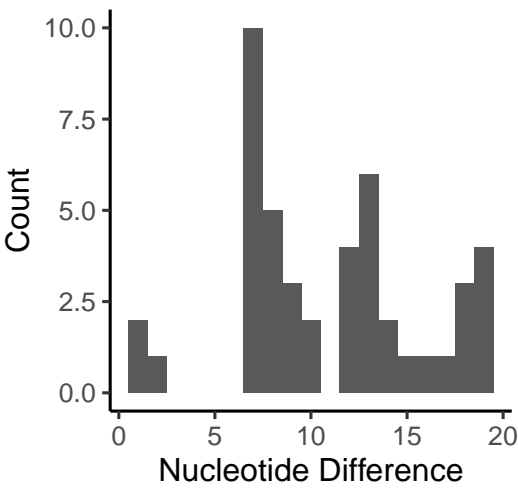
IGHV6-1*01

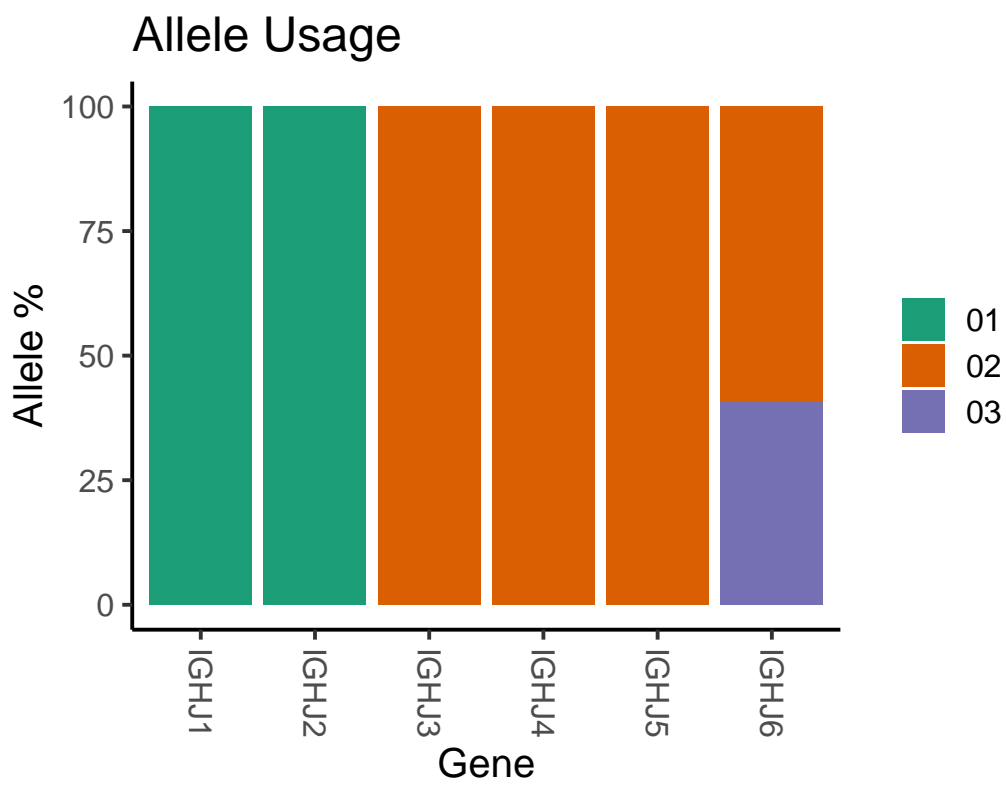
942 sequences assigned
52 (5.5%) exact matches, in which:
48 unique CDR3
5 unique J



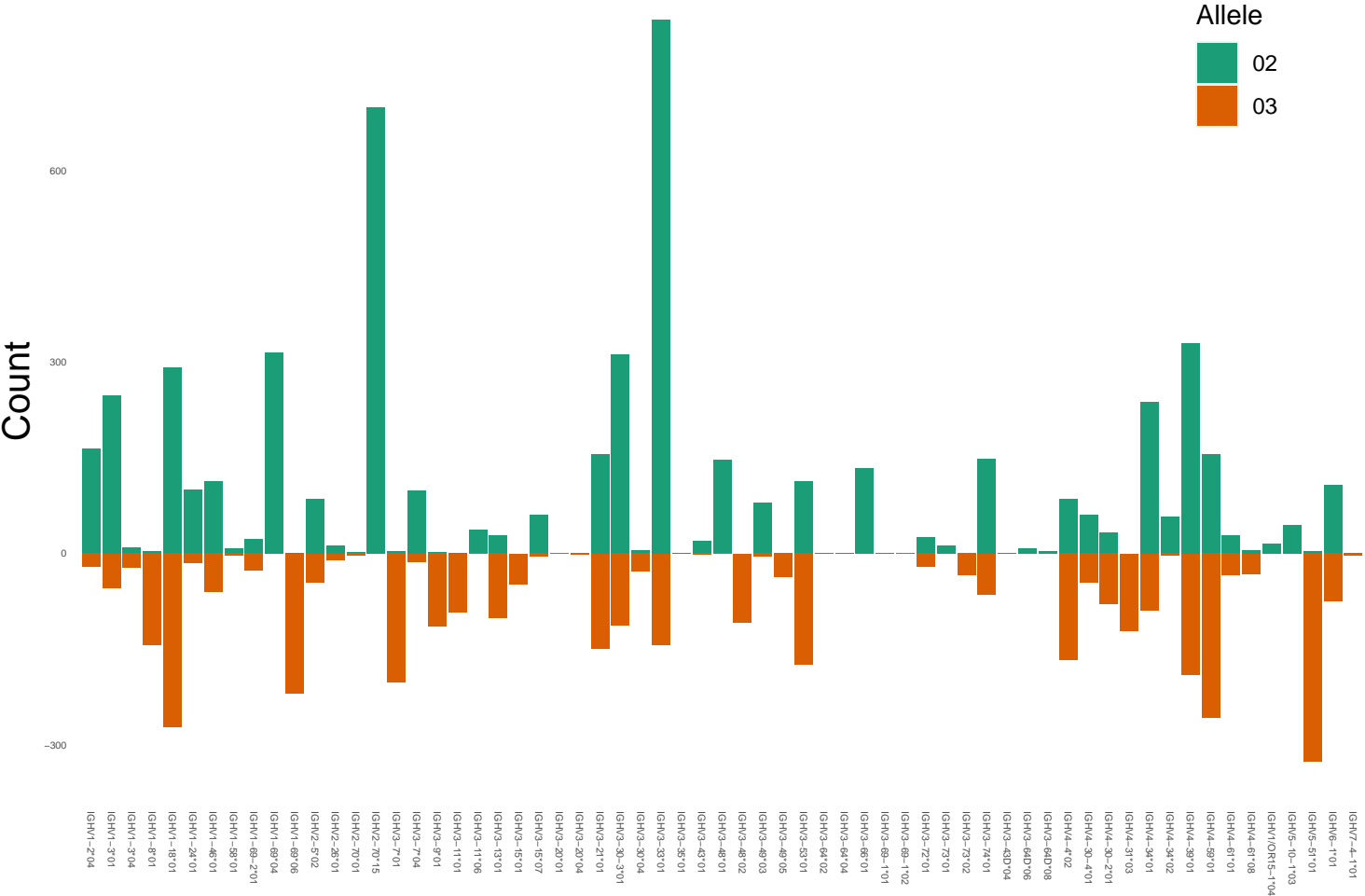
IGHV7-4-1*01

80 sequences assigned
No exact matches.





Sequence Count by IGHJ6 allele usage



[illegible]