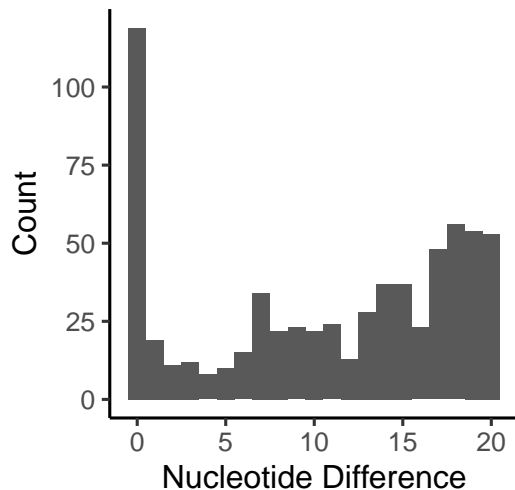


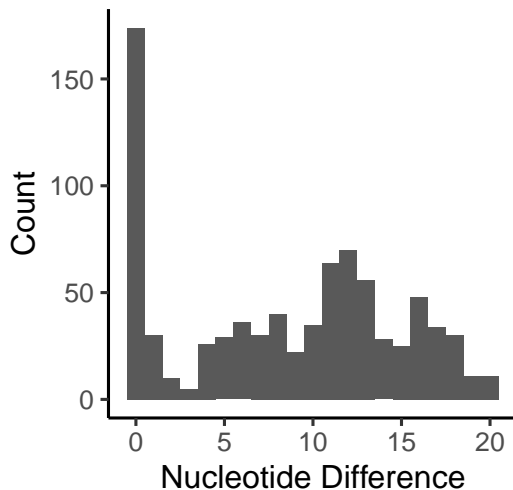
IGHV1-2*02

1360 sequences assigned
119 (8.8%) exact matches, in which:
117 unique CDR3
6 unique J



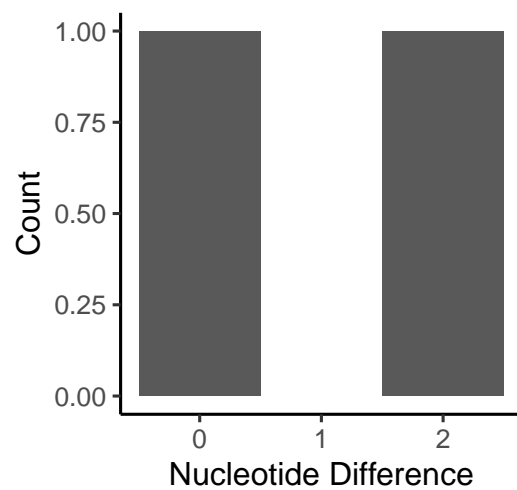
IGHV1-8*01

959 sequences assigned
174 (18.1%) exact matches, in which:
162 unique CDR3
7 unique J



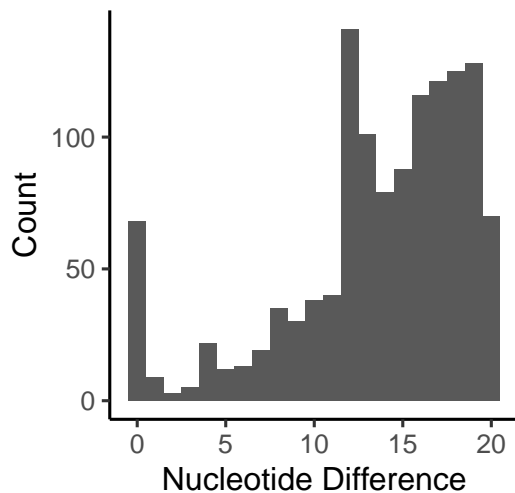
IGHV1-45*02

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



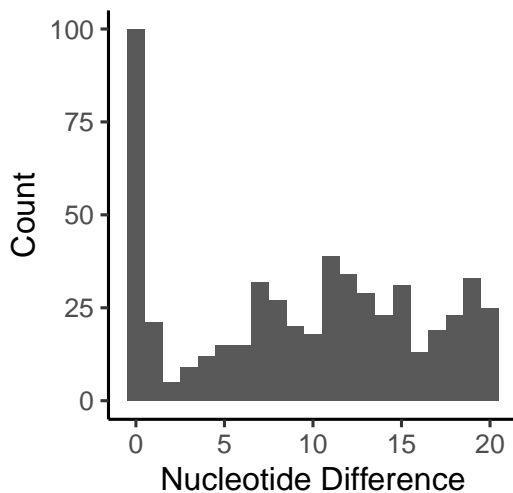
IGHV1-2*06

2120 sequences assigned
68 (3.2%) exact matches, in which:
68 unique CDR3
5 unique J



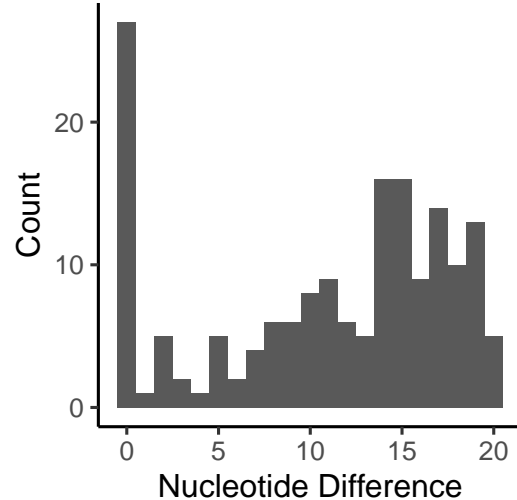
IGHV1-18*01

931 sequences assigned
100 (10.7%) exact matches, in which:
98 unique CDR3
6 unique J



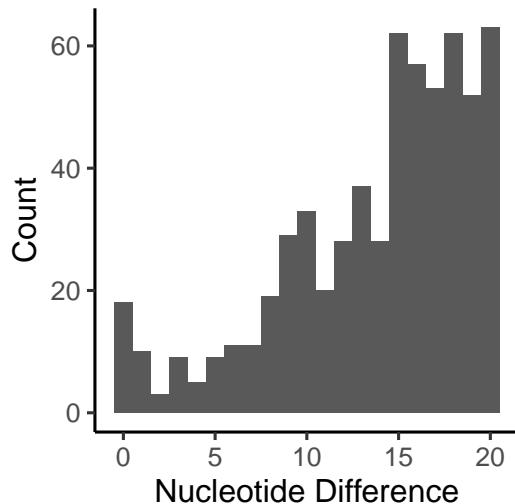
IGHV1-46*01

280 sequences assigned
27 (9.6%) exact matches, in which:
27 unique CDR3
4 unique J



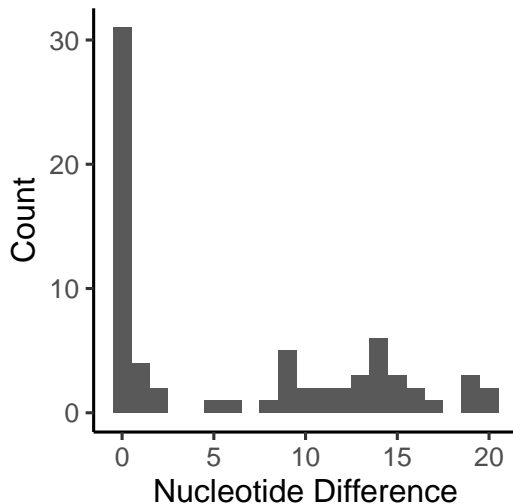
IGHV1-3*01

1073 sequences assigned
18 (1.7%) exact matches, in which:
18 unique CDR3
4 unique J



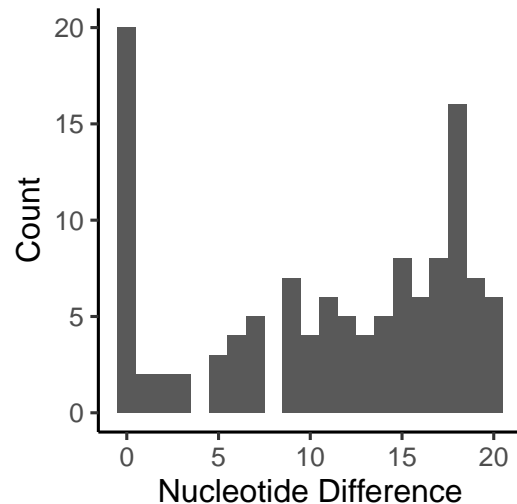
IGHV1-24*01

89 sequences assigned
31 (34.8%) exact matches, in which:
31 unique CDR3
5 unique J



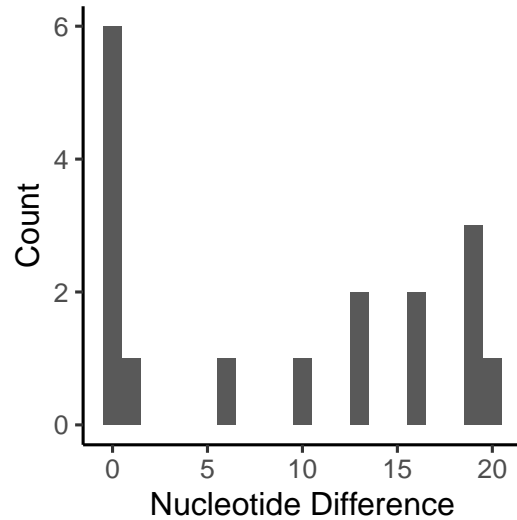
IGHV1-46*03

208 sequences assigned
20 (9.6%) exact matches, in which:
20 unique CDR3
4 unique J



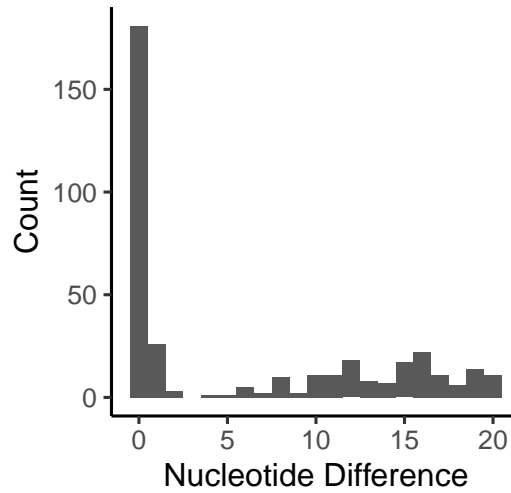
IGHV1-58*01

27 sequences assigned
6 (22.2%) exact matches, in which:
6 unique CDR3
4 unique J



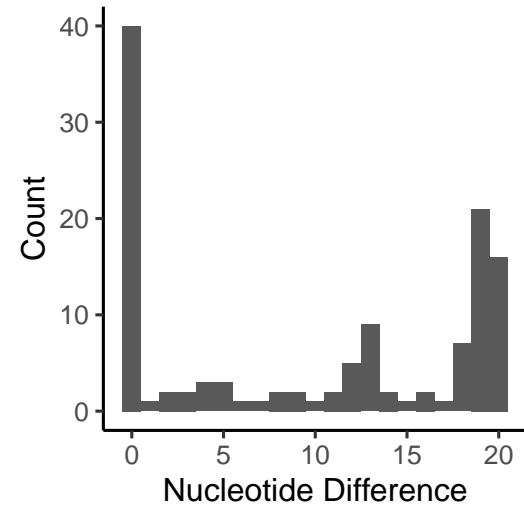
IGHV1-69*06

745 sequences assigned
181 (24.3%) exact matches, in which:
181 unique CDR3
7 unique J



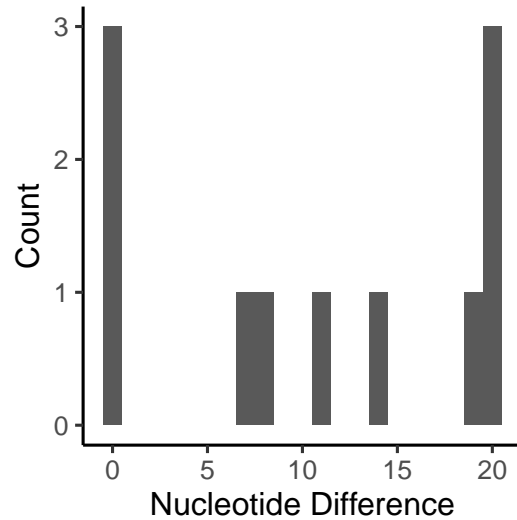
IGHV2-26*01

174 sequences assigned
40 (23%) exact matches, in which:
40 unique CDR3
5 unique J



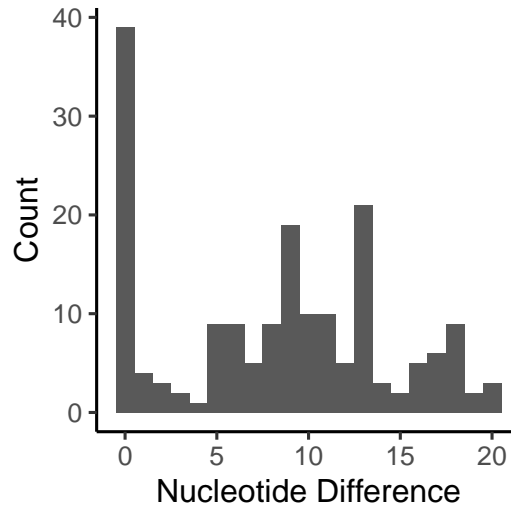
IGHV1-58*02

14 sequences assigned
3 (21.4%) exact matches, in which:
3 unique CDR3
2 unique J



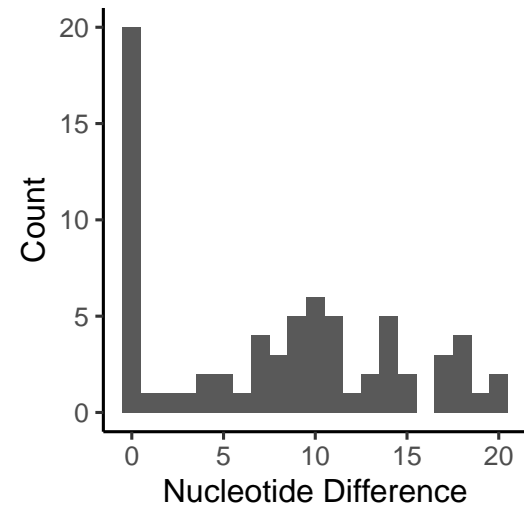
IGHV2-5*01

231 sequences assigned
39 (16.9%) exact matches, in which:
39 unique CDR3
4 unique J



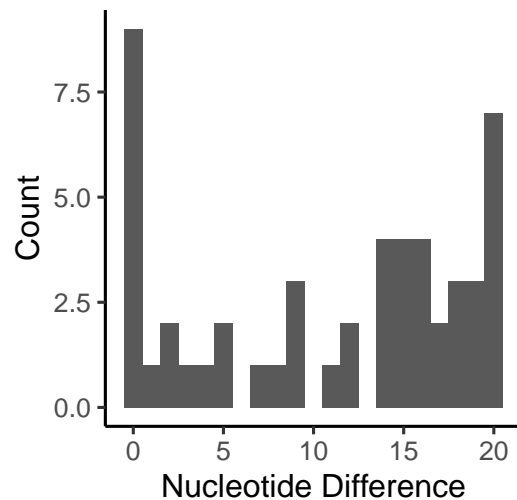
IGHV2-70*01

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



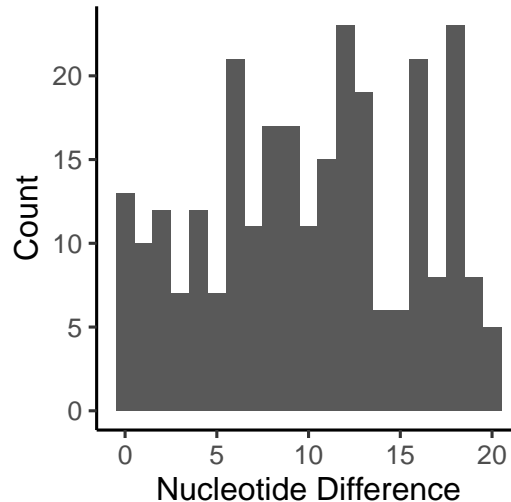
IGHV1-69-2*01

92 sequences assigned
9 (9.8%) exact matches, in which:
9 unique CDR3
5 unique J



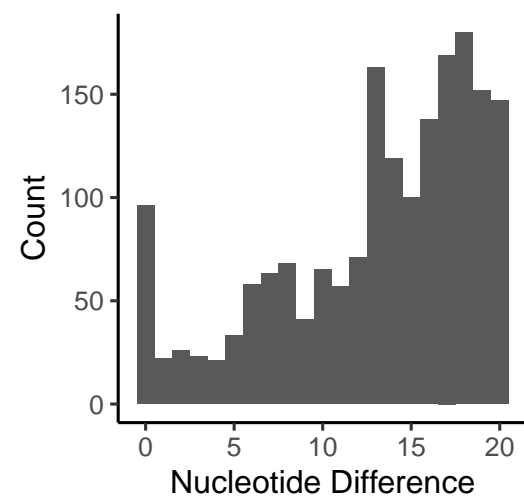
IGHV2-5*02

383 sequences assigned
13 (3.4%) exact matches, in which:
13 unique CDR3
4 unique J



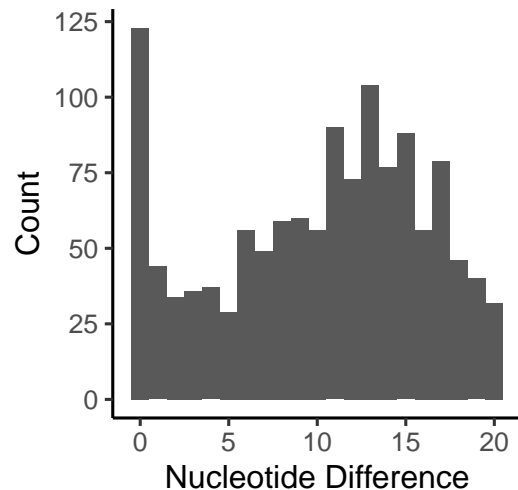
IGHV3-7*01

4082 sequences assigned
96 (2.4%) exact matches, in which:
90 unique CDR3
6 unique J



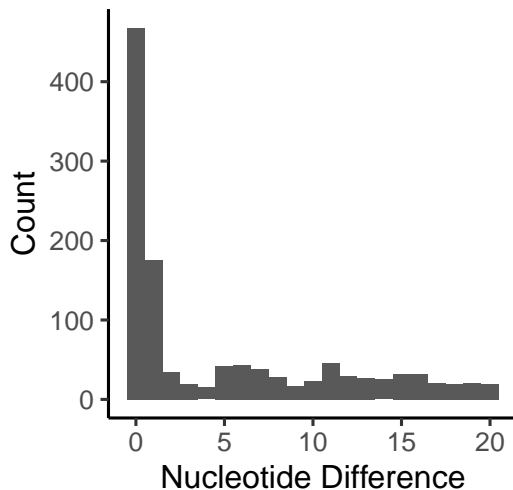
IGHV3-9*01

2026 sequences assigned
123 (6.1%) exact matches, in which:
113 unique CDR3
6 unique J



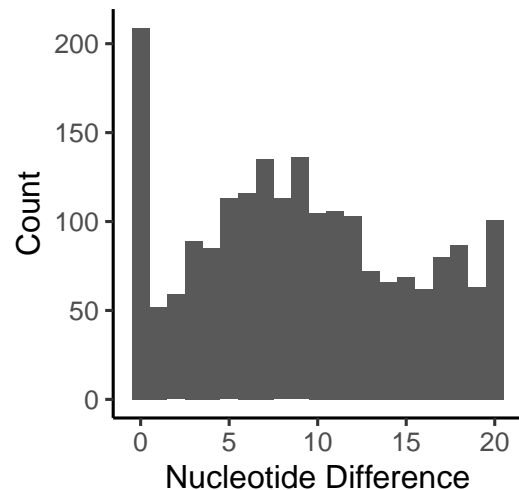
IGHV3-15*01

1578 sequences assigned
468 (29.7%) exact matches, in which:
91 unique CDR3
7 unique J



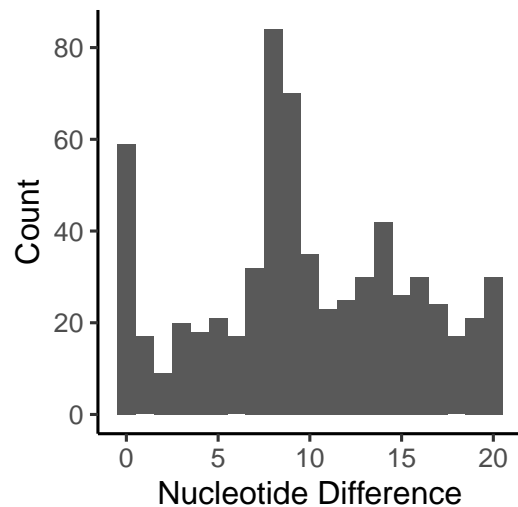
IGHV3-21*01

2690 sequences assigned
209 (7.8%) exact matches, in which:
197 unique CDR3
7 unique J



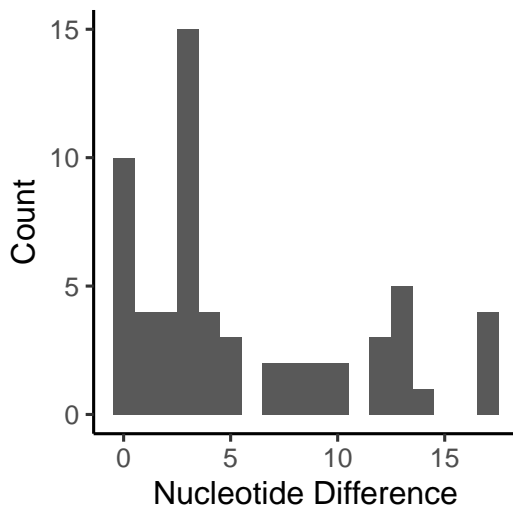
IGHV3-11*01

1176 sequences assigned
59 (5%) exact matches, in which:
59 unique CDR3
7 unique J



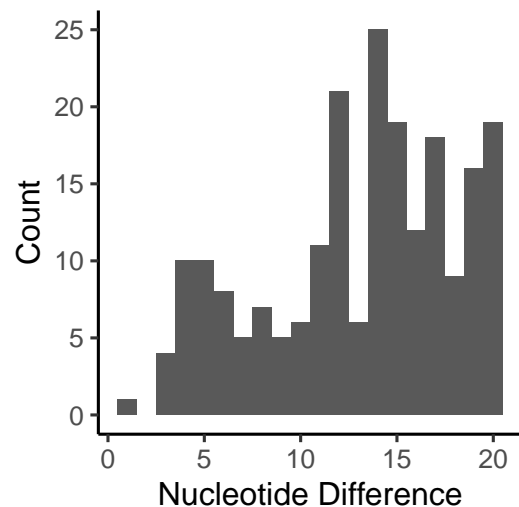
IGHV3-20*01

80 sequences assigned
10 (12.5%) exact matches, in which:
9 unique CDR3
5 unique J



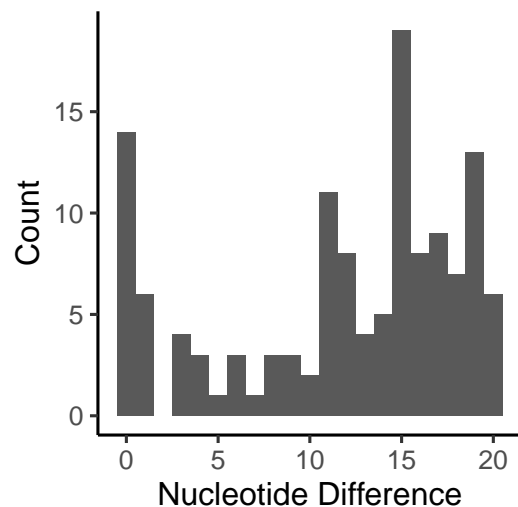
IGHV3-21*02

552 sequences assigned
No exact matches.



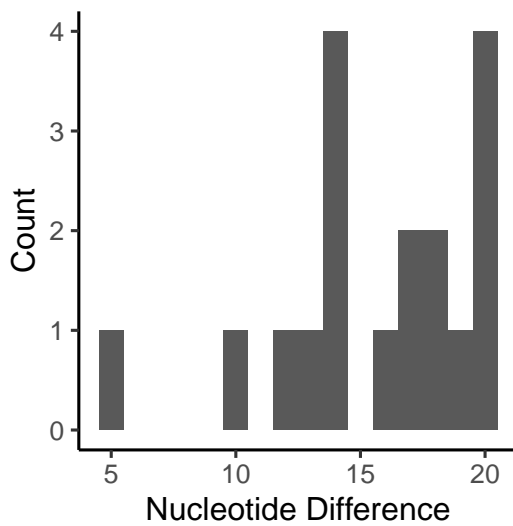
IGHV3-13*01

204 sequences assigned
14 (6.9%) exact matches, in which:
13 unique CDR3
6 unique J



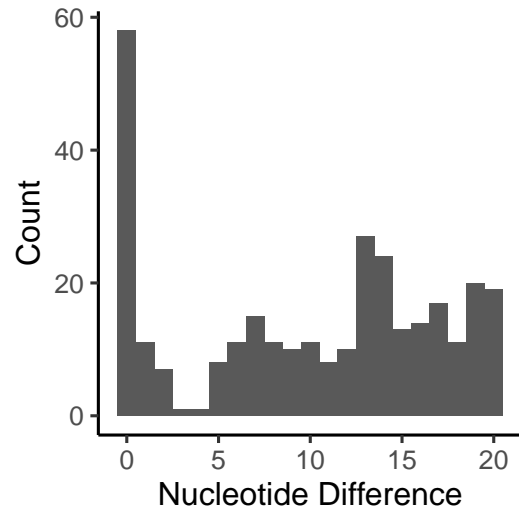
IGHV3-20*04

46 sequences assigned
No exact matches.



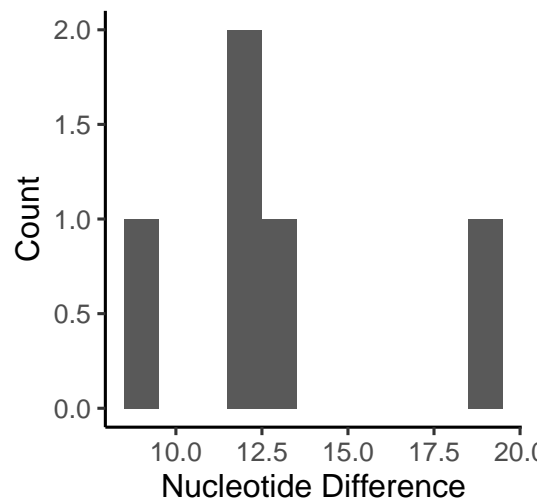
IGHV3-30-3*01

521 sequences assigned
58 (11.1%) exact matches, in which:
58 unique CDR3
7 unique J



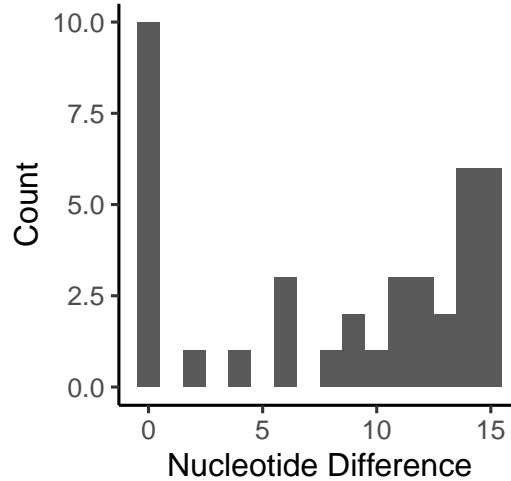
IGHV3-30-3*02

17 sequences assigned
No exact matches.



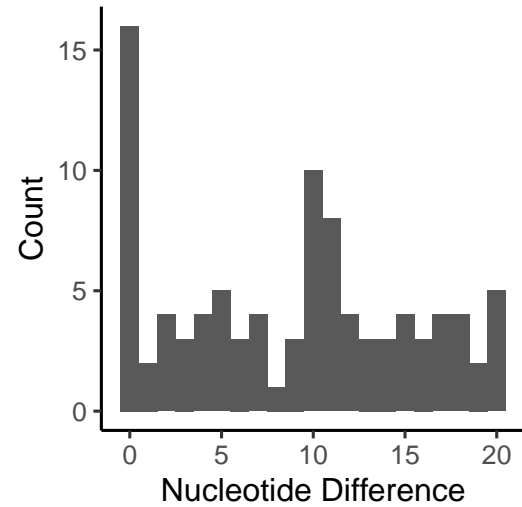
IGHV3-43*01

57 sequences assigned
10 (17.5%) exact matches, in which:
7 unique CDR3
3 unique J



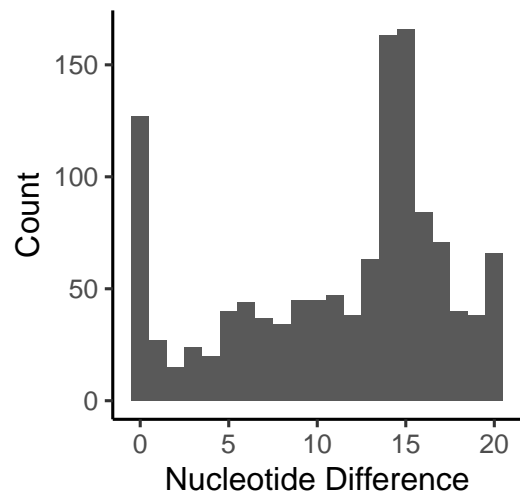
IGHV3-49*03

176 sequences assigned
16 (9.1%) exact matches, in which:
13 unique CDR3
3 unique J



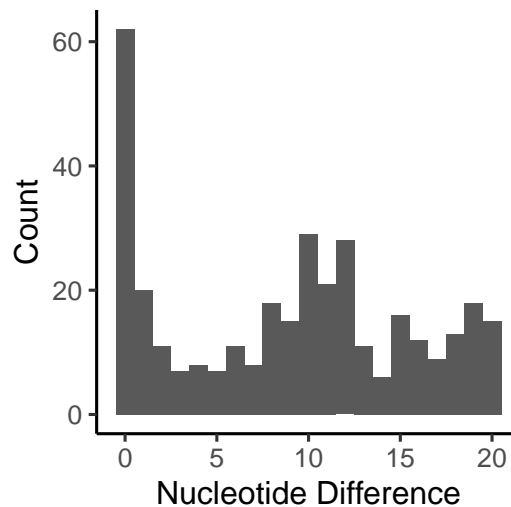
IGHV3-33*01

1734 sequences assigned
127 (7.3%) exact matches, in which:
118 unique CDR3
7 unique J



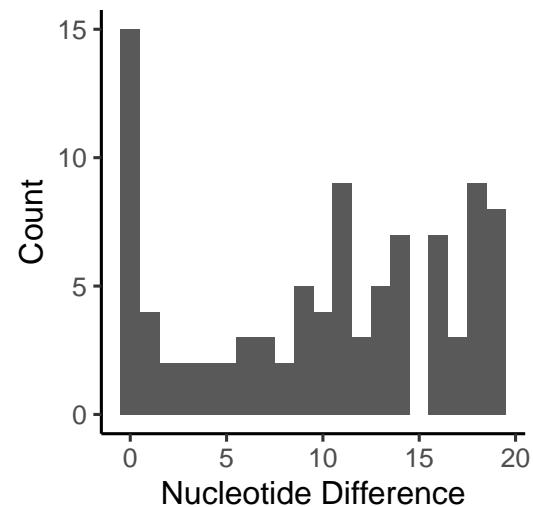
IGHV3-48*01

526 sequences assigned
62 (11.8%) exact matches, in which:
60 unique CDR3
4 unique J



IGHV3-49*04

176 sequences assigned
15 (8.5%) exact matches, in which:
13 unique CDR3
4 unique J



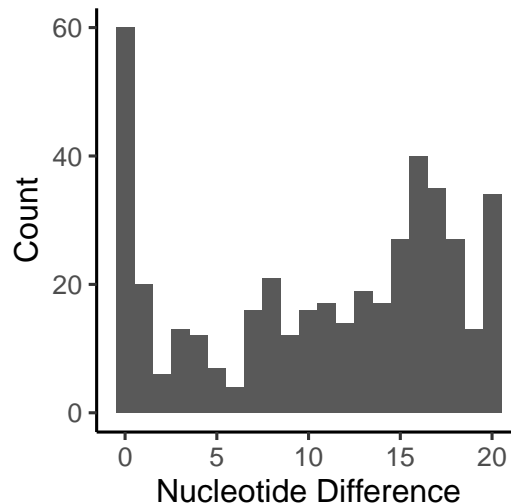
IGHV3-35*01

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



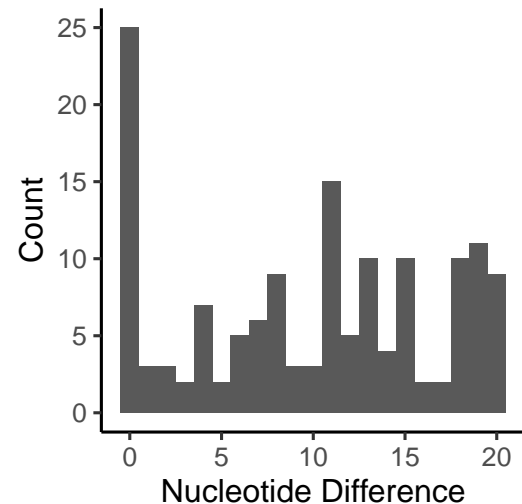
IGHV3-48*03

641 sequences assigned
60 (9.4%) exact matches, in which:
58 unique CDR3
6 unique J



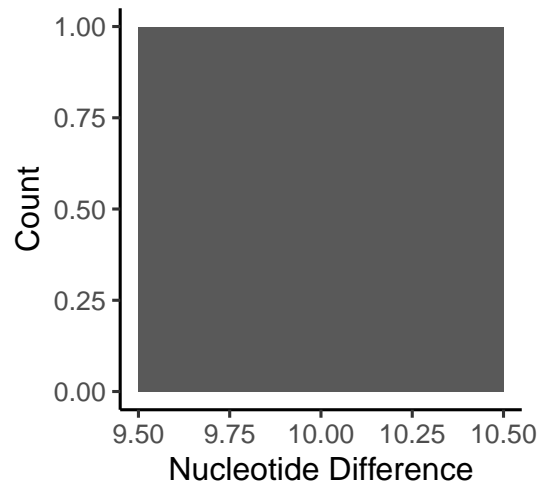
IGHV3-53*01

346 sequences assigned
25 (7.2%) exact matches, in which:
25 unique CDR3
5 unique J



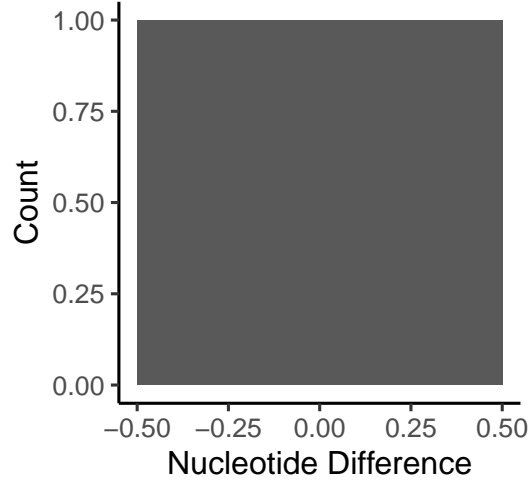
IGHV3-62*03

1 sequences assigned
No exact matches.



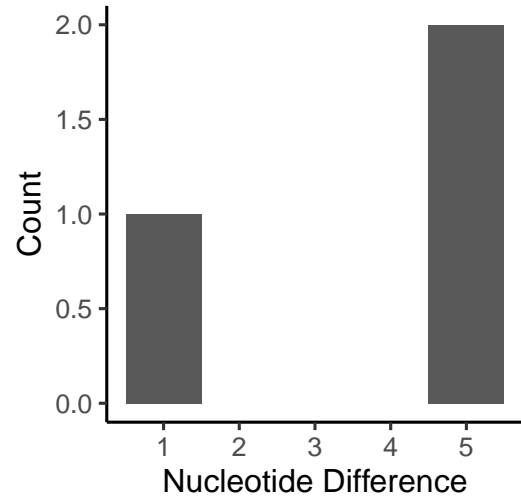
IGHV3-66*01

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



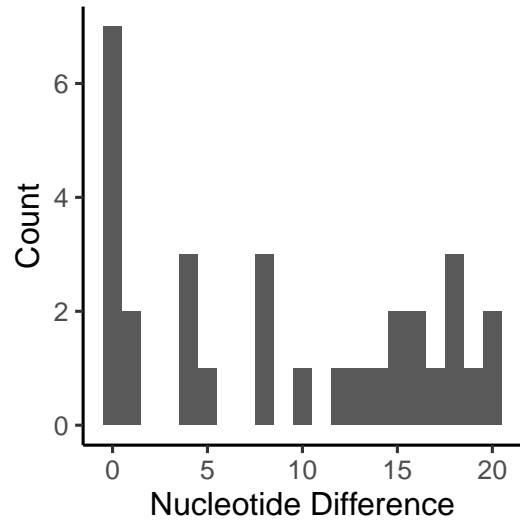
IGHV3-69-1*01

5 sequences assigned
No exact matches.



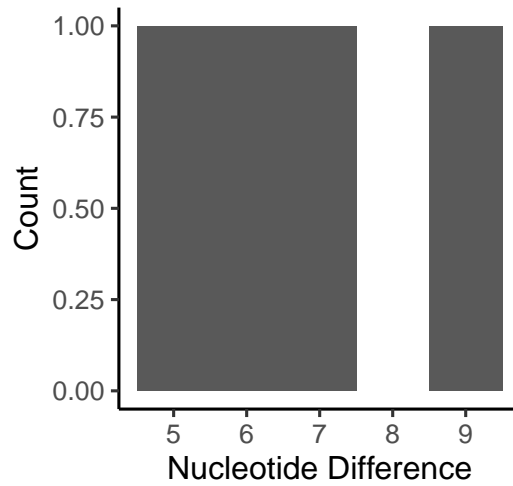
IGHV3-64*01

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



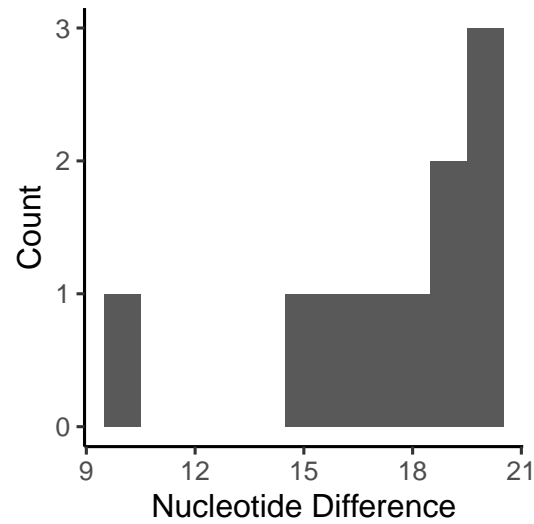
IGHV3-66*03

4 sequences assigned
No exact matches.



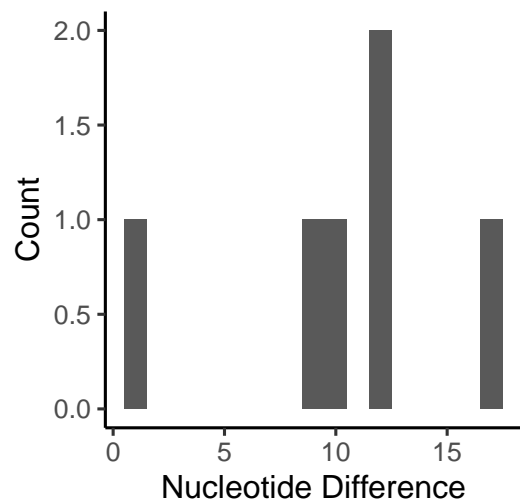
IGHV3-69-1*02

57 sequences assigned
No exact matches.



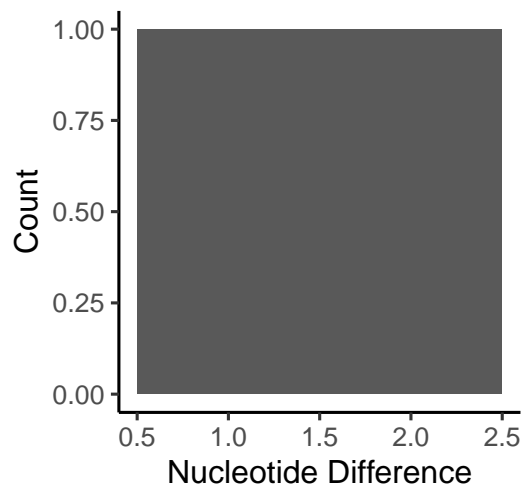
IGHV3-64*07

19 sequences assigned
No exact matches.



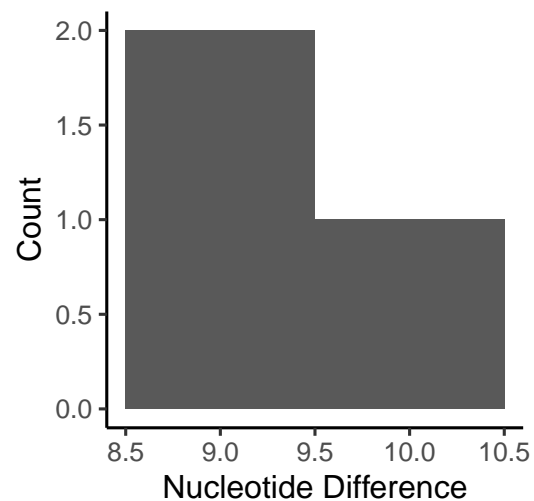
IGHV3-66*04

2 sequences assigned
No exact matches.



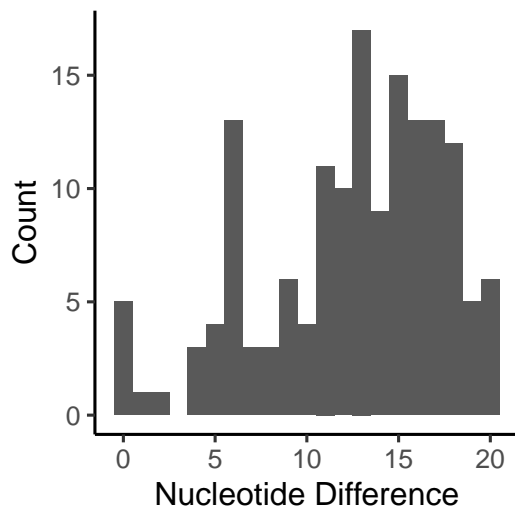
IGHV3-71*01

3 sequences assigned
No exact matches.



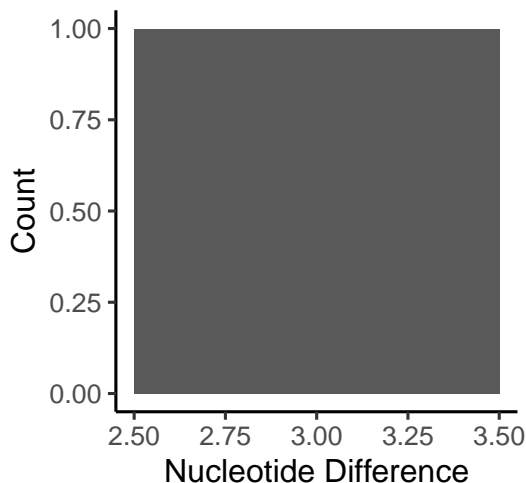
IGHV3-72*01

251 sequences assigned
5 (2%) exact matches, in which:
4 unique CDR3
3 unique J



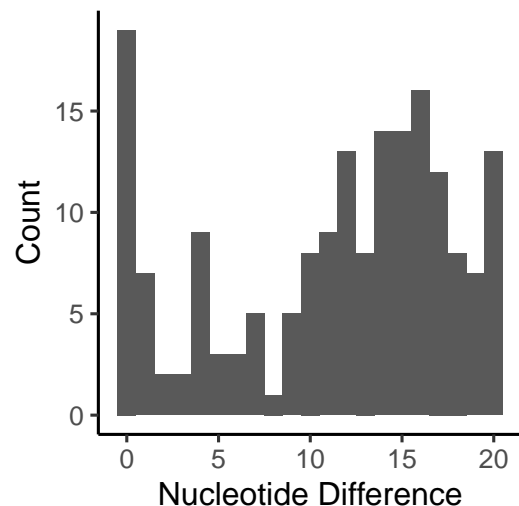
IGHV3-64D*06

1 sequences assigned
No exact matches.



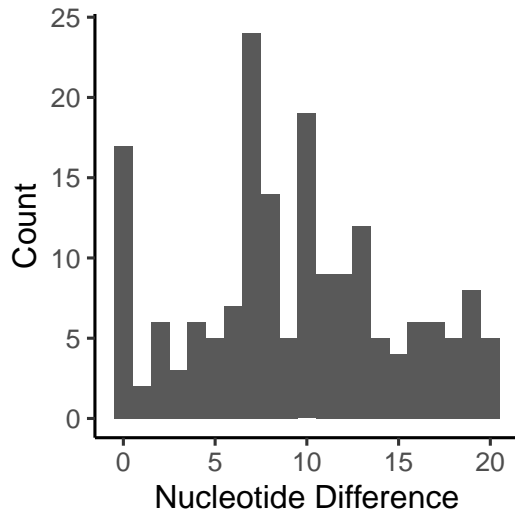
IGHV4-4*07

334 sequences assigned
19 (5.7%) exact matches, in which:
19 unique CDR3
4 unique J



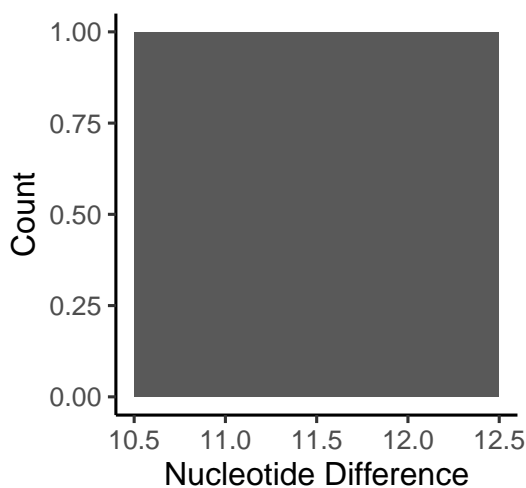
IGHV3-73*02

313 sequences assigned
17 (5.4%) exact matches, in which:
17 unique CDR3
5 unique J



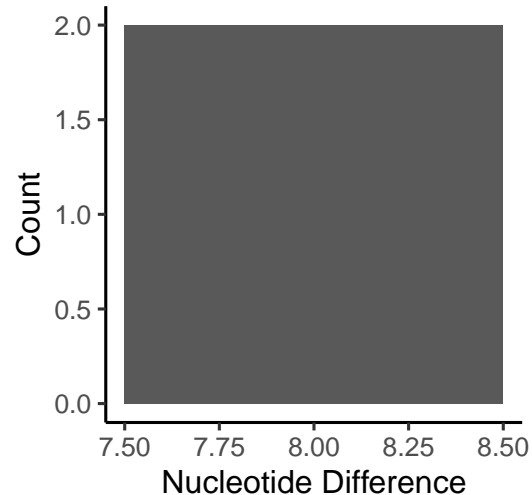
IGHV3-NL1*01

2 sequences assigned
No exact matches.



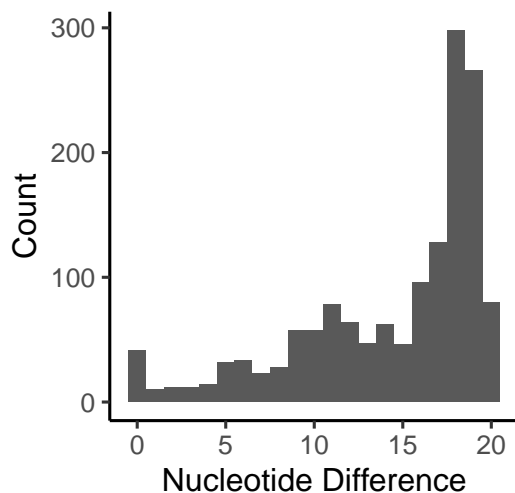
IGHV4-28*01

4 sequences assigned
No exact matches.



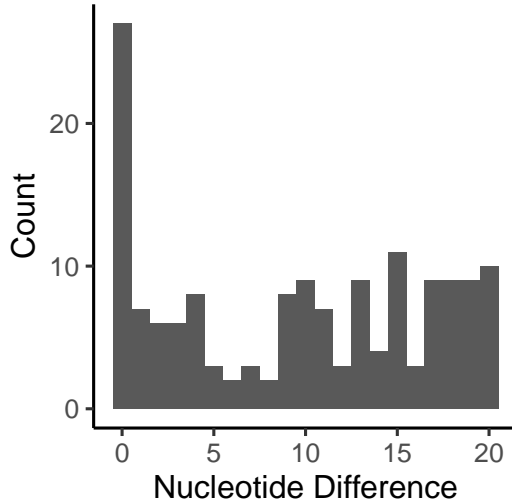
IGHV3-74*01

1948 sequences assigned
41 (2.1%) exact matches, in which:
38 unique CDR3
5 unique J



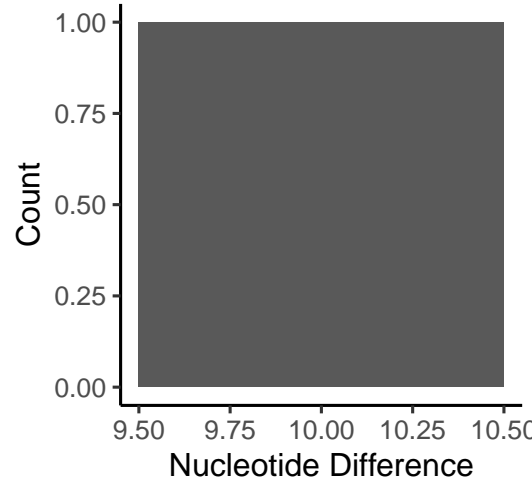
IGHV4-4*02

297 sequences assigned
27 (9.1%) exact matches, in which:
27 unique CDR3
4 unique J



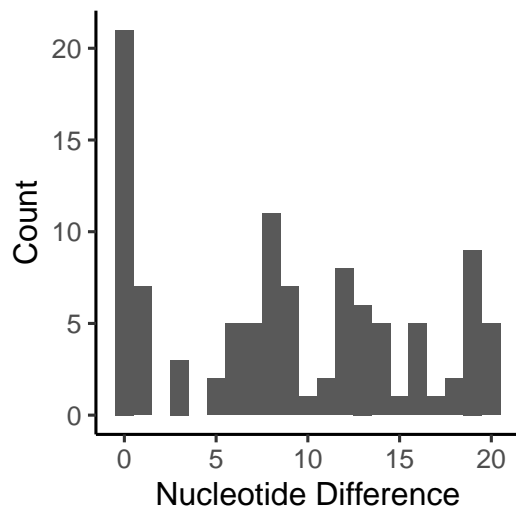
IGHV4-28*03

1 sequences assigned
No exact matches.



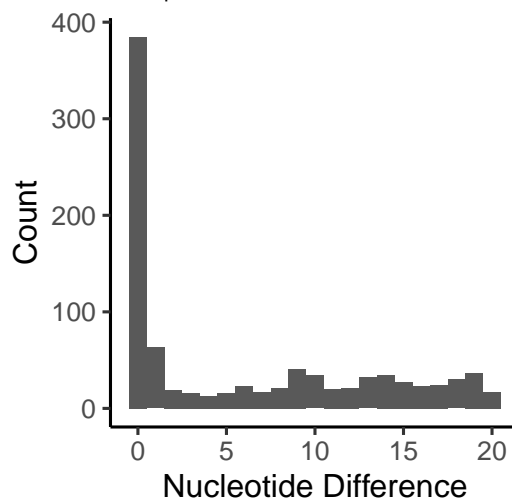
IGHV4-30-4*01

172 sequences assigned
21 (12.2%) exact matches, in which:
21 unique CDR3
5 unique J



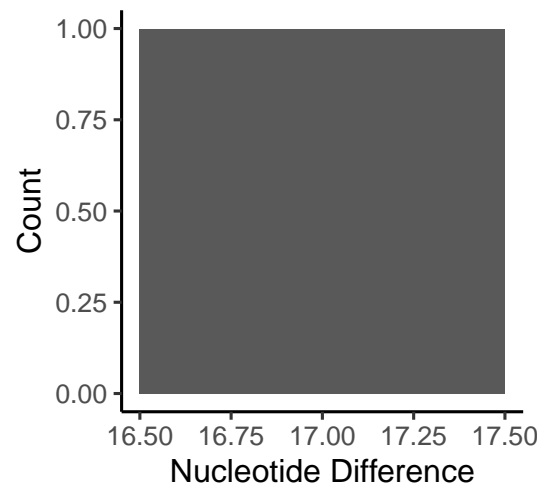
IGHV4-34*01

1481 sequences assigned
385 (26%) exact matches, in which:
382 unique CDR3
7 unique J



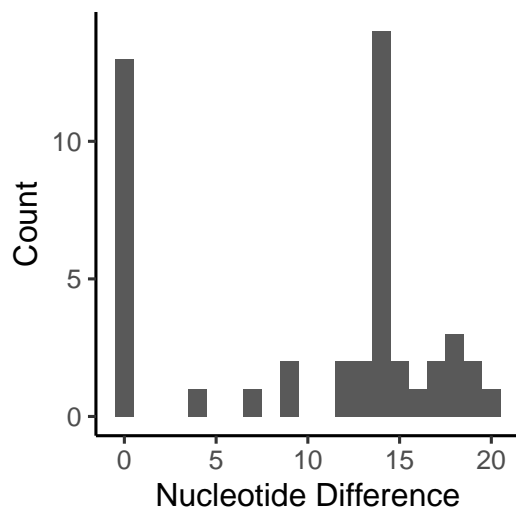
IGHV4-55*08

1 sequences assigned
No exact matches.



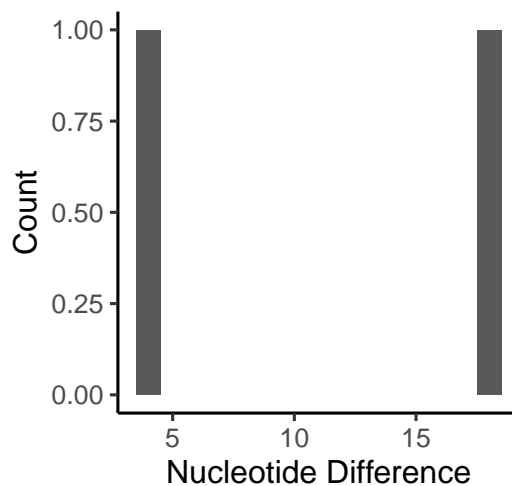
IGHV4-30-2*01

69 sequences assigned
13 (18.8%) exact matches, in which:
13 unique CDR3
4 unique J



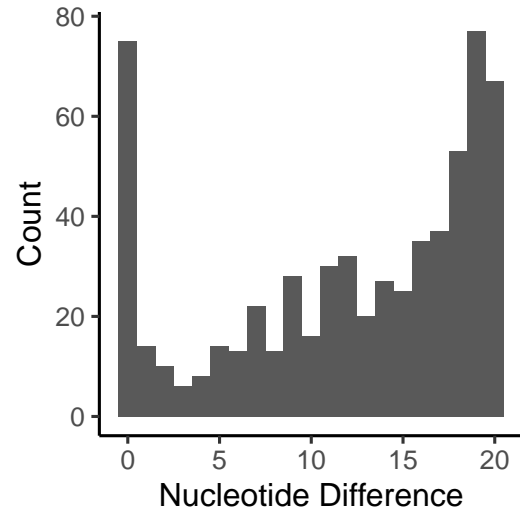
IGHV4-38-2*02

3 sequences assigned
No exact matches.



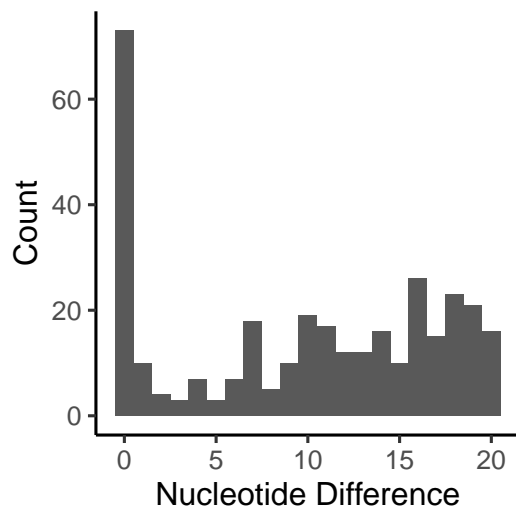
IGHV4-59*01

1054 sequences assigned
75 (7.1%) exact matches, in which:
73 unique CDR3
7 unique J



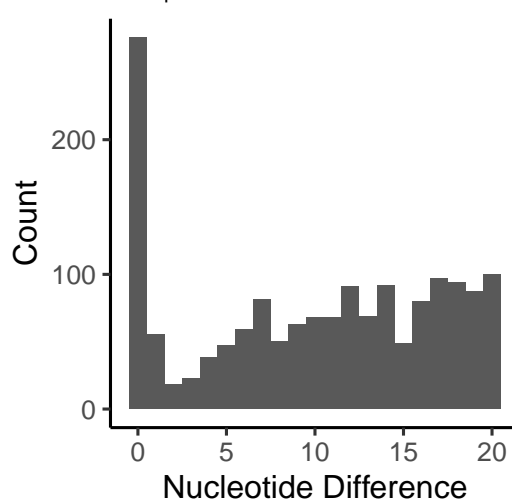
IGHV4-31*03

933 sequences assigned
73 (7.8%) exact matches, in which:
73 unique CDR3
6 unique J



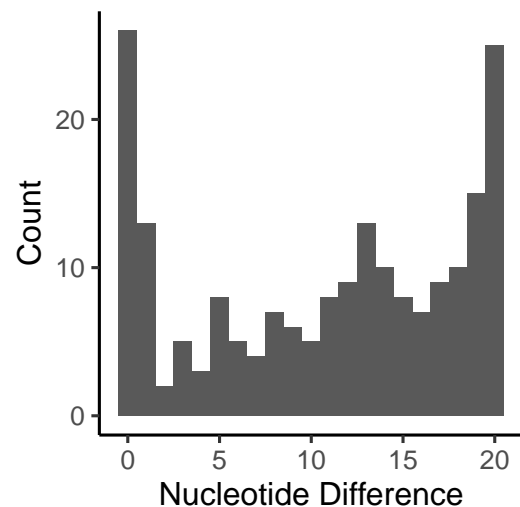
IGHV4-39*01

3258 sequences assigned
276 (8.5%) exact matches, in which:
268 unique CDR3
7 unique J



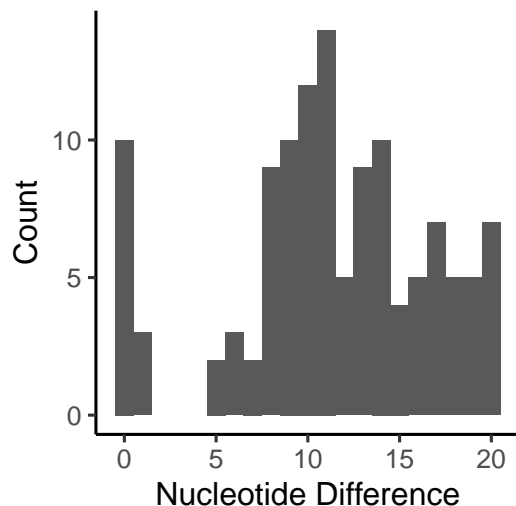
IGHV4-59*08

443 sequences assigned
26 (5.9%) exact matches, in which:
25 unique CDR3
5 unique J



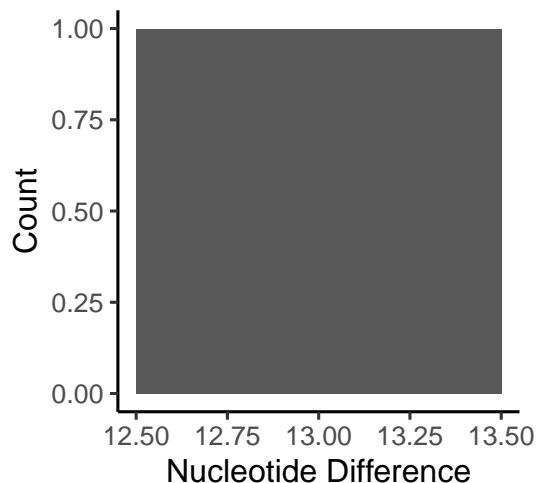
IGHV4-61*01

170 sequences assigned
10 (5.9%) exact matches, in which:
10 unique CDR3
4 unique J



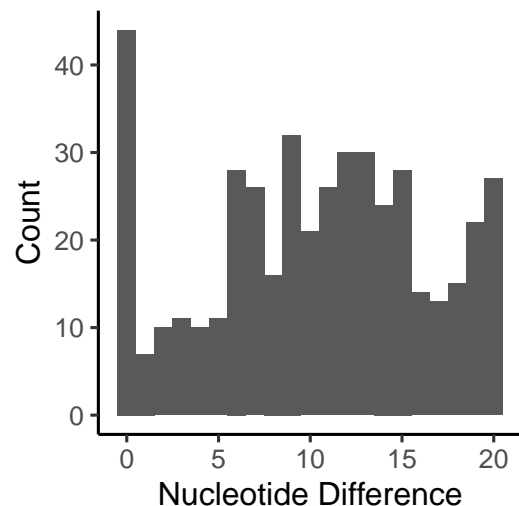
IGHV4/OR15-8*02

3 sequences assigned
No exact matches.



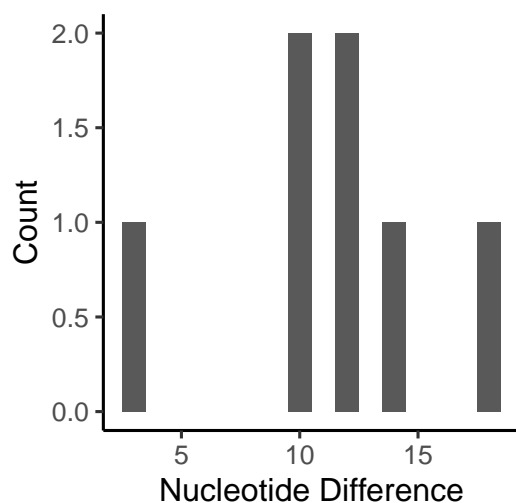
IGHV5-51*03

653 sequences assigned
44 (6.7%) exact matches, in which:
44 unique CDR3
6 unique J



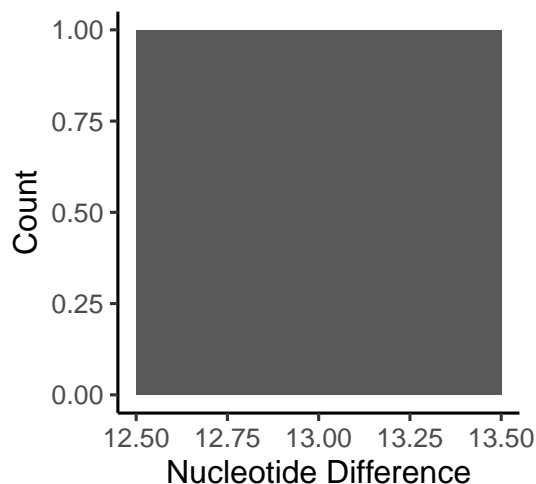
IGHV4-61*08

22 sequences assigned
No exact matches.



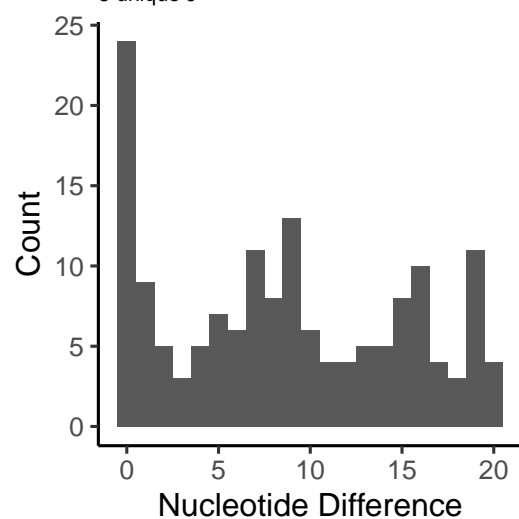
IGHV5-10-1*04

1 sequences assigned
No exact matches.



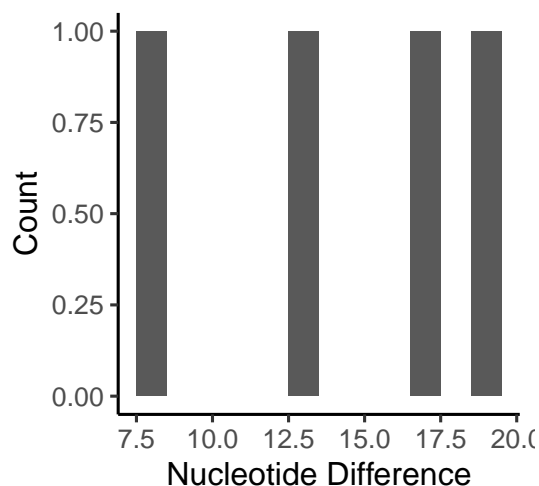
IGHV6-1*01

266 sequences assigned
24 (9%) exact matches, in which:
21 unique CDR3
5 unique J



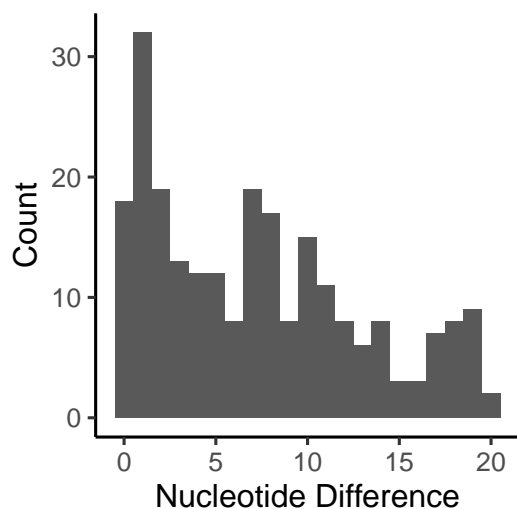
IGHV1/OR15-1*04

4 sequences assigned
No exact matches.



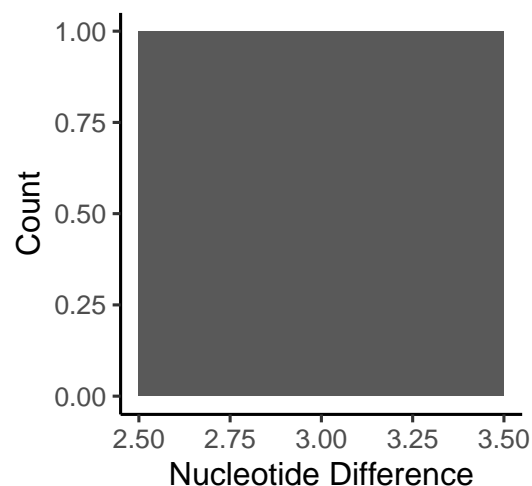
IGHV5-51*01

277 sequences assigned
18 (6.5%) exact matches, in which:
17 unique CDR3
6 unique J



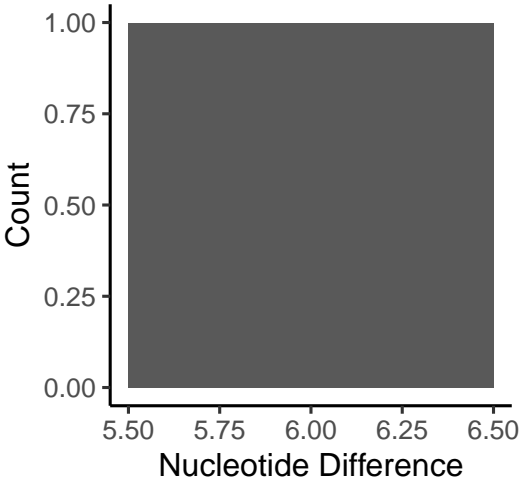
IGHV3/OR16-8*01

1 sequences assigned
No exact matches.



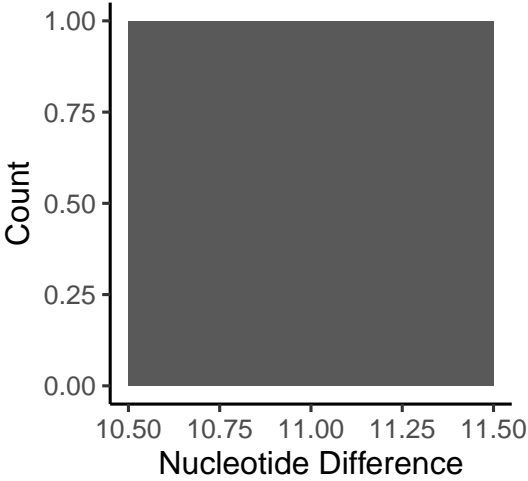
IGHV3/OR16-9*01

1 sequences assigned
No exact matches.



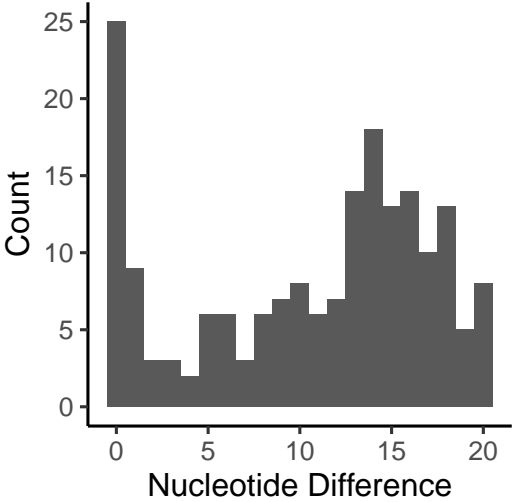
IGHV3/OR16-12*01

1 sequences assigned
No exact matches.

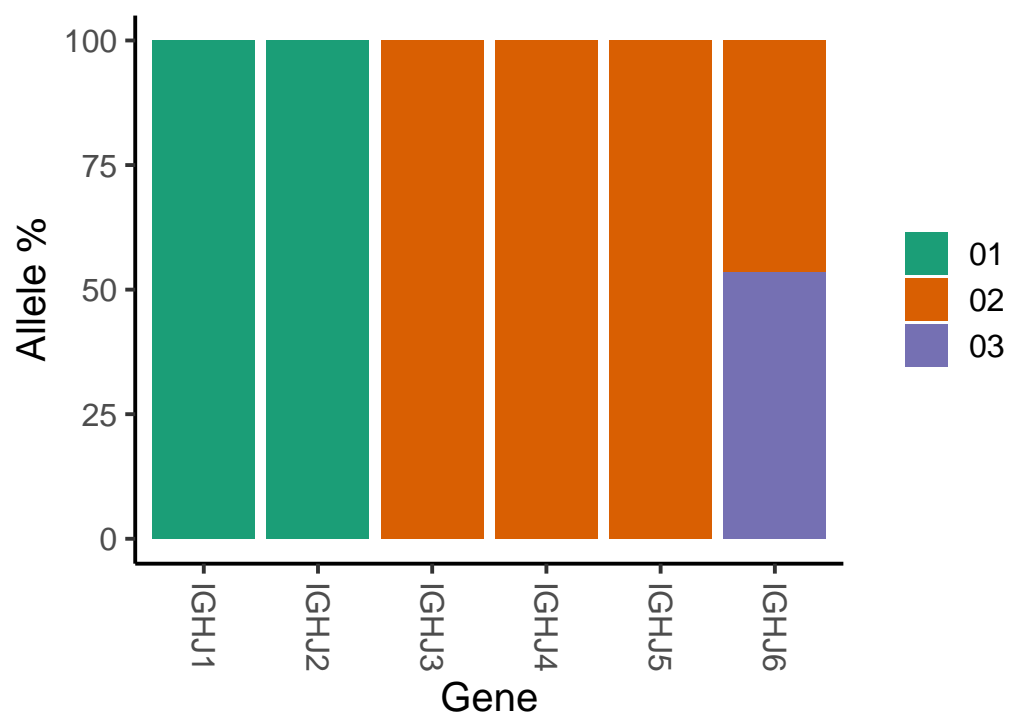


IGHV7-4-1*02

261 sequences assigned
25 (9.6%) exact matches, in which:
25 unique CDR3
4 unique J



Allele Usage



Sequence Count by IGHJ6 allele usage

