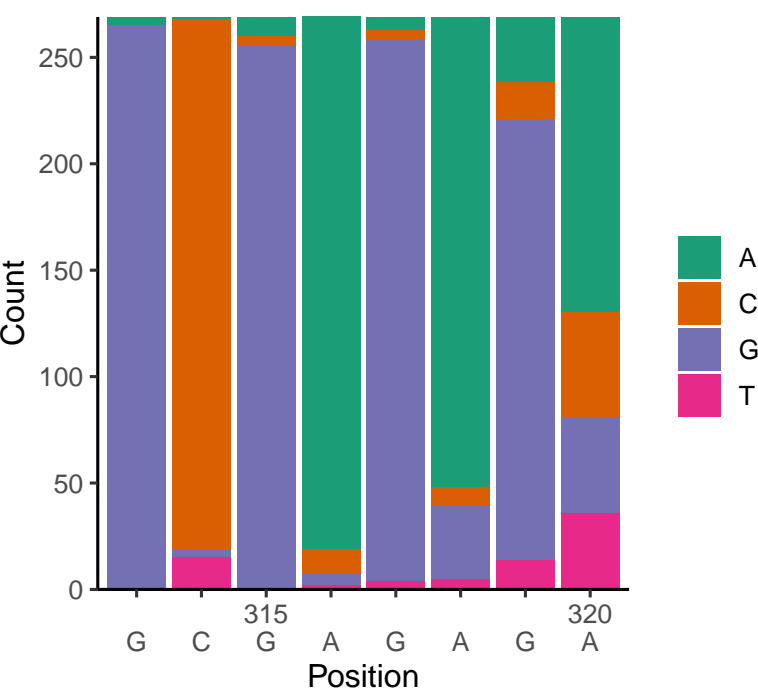
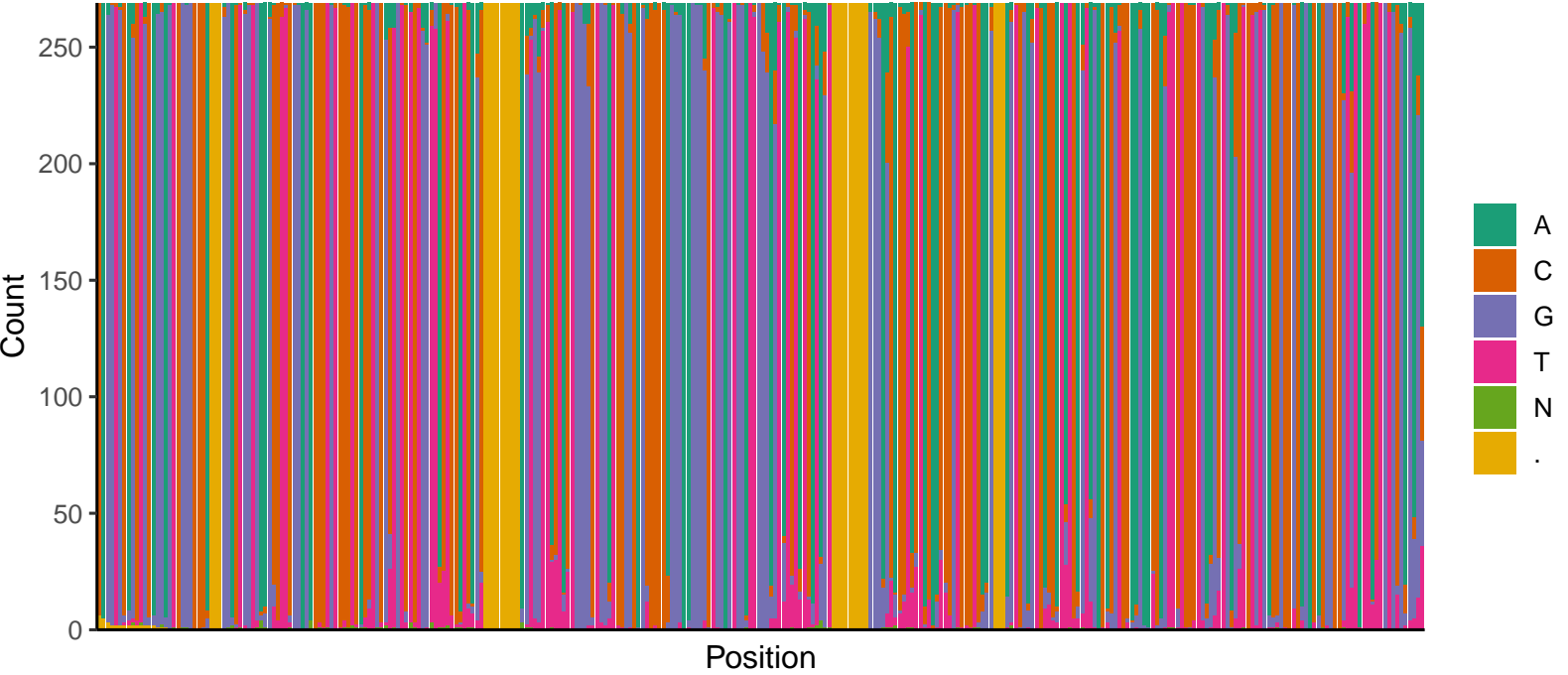


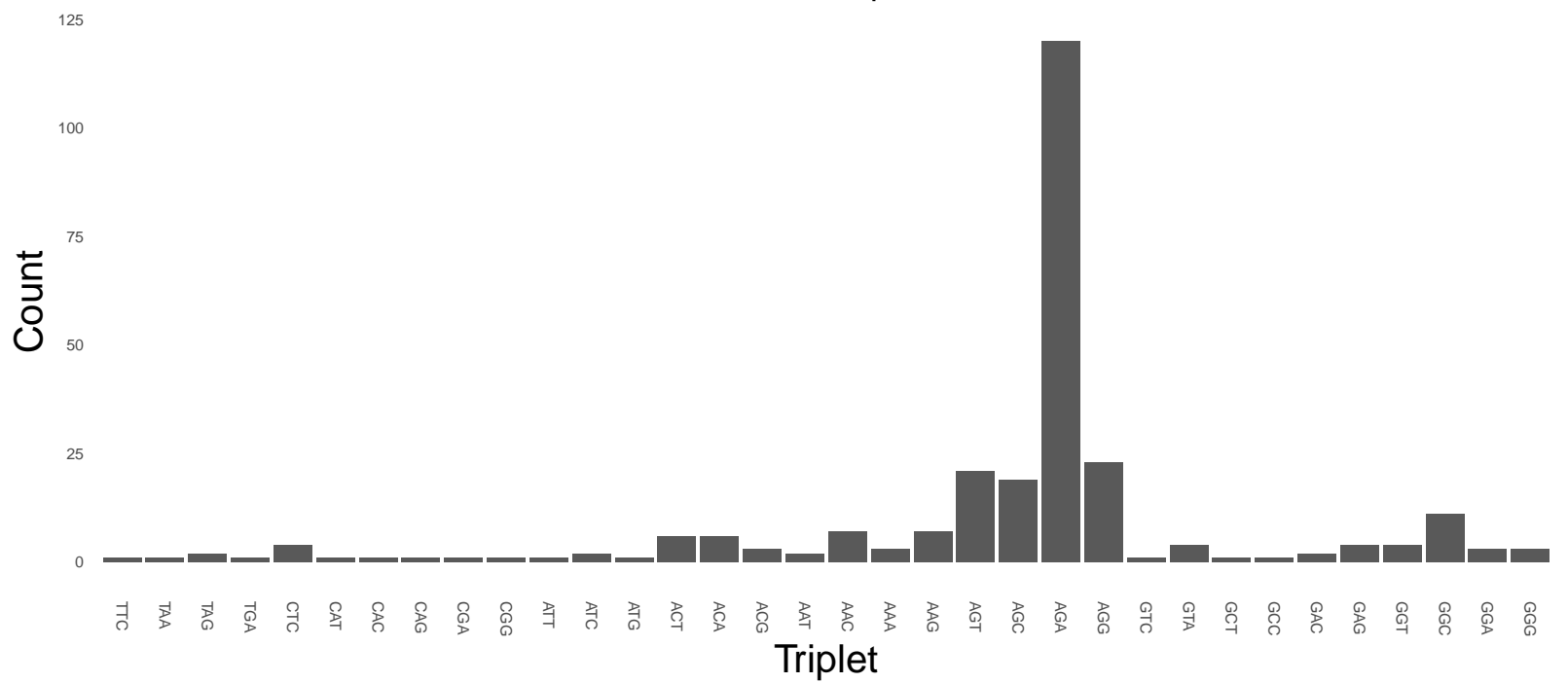
Gene IGHV4-38-2*02_A70G



Gene IGHV4-38-2*02_A70G

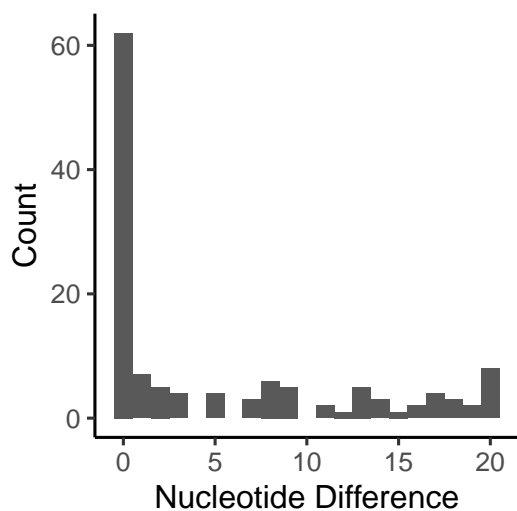


IGHV4-38-2*02_A70G- Final 3 nucleotides as a triplet



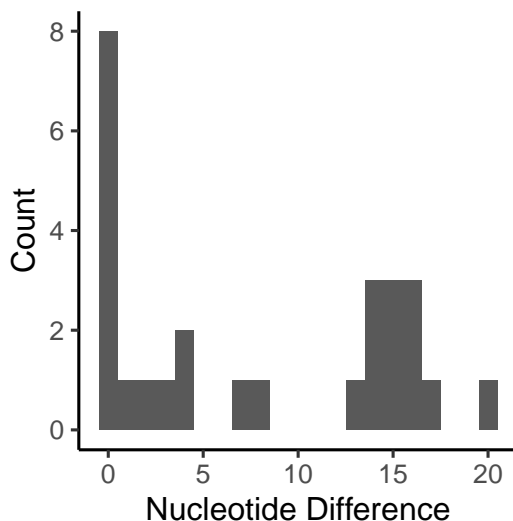
IGHV1-2*04

141 sequences assigned
62 (44%) exact matches, in which:
62 unique CDR3
7 unique J



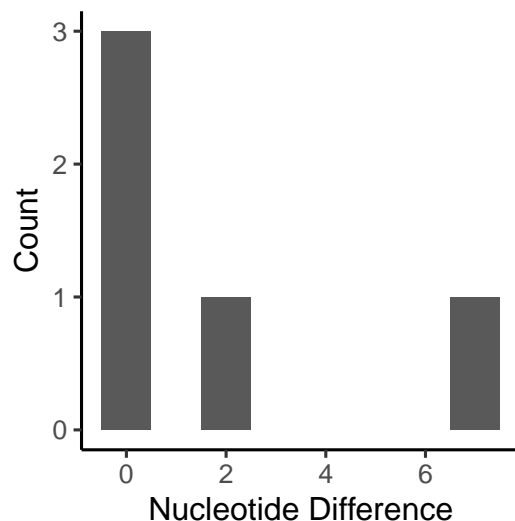
IGHV1-24*01

30 sequences assigned
8 (26.7%) exact matches, in which:
8 unique CDR3
2 unique J



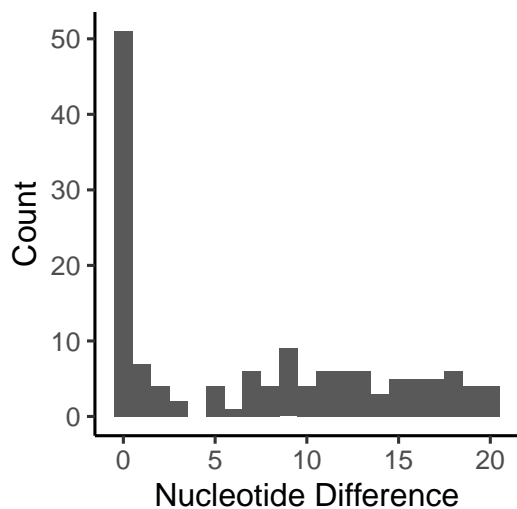
IGHV1-58*02

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



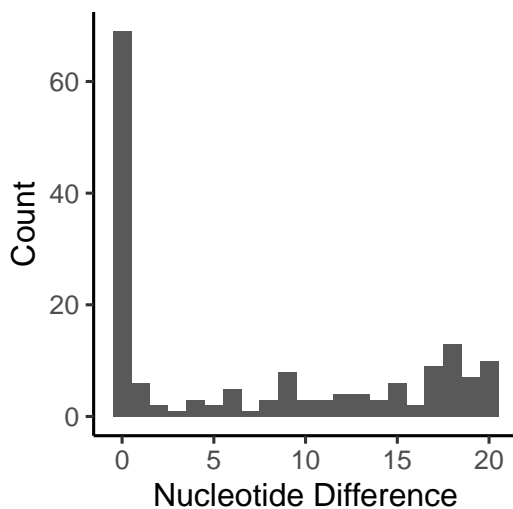
IGHV1-3*01

179 sequences assigned
51 (28.5%) exact matches, in which:
51 unique CDR3
6 unique J



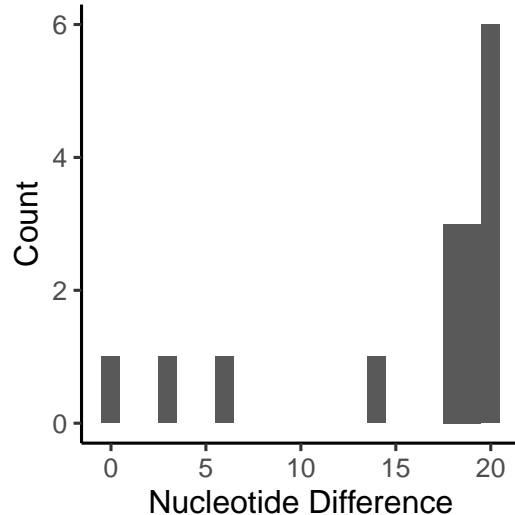
IGHV1-46*01

208 sequences assigned
69 (33.2%) exact matches, in which:
69 unique CDR3
6 unique J



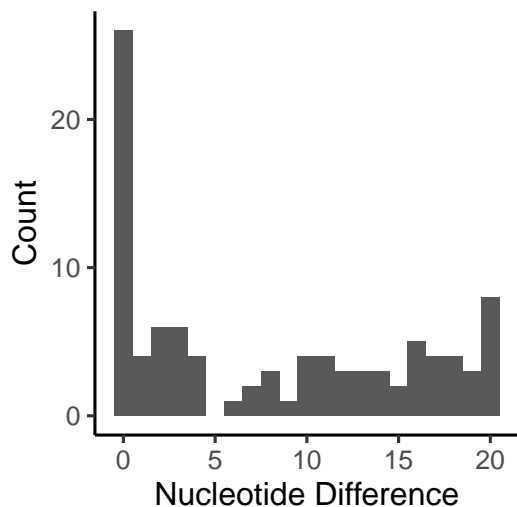
IGHV1-69-2*01

21 sequences assigned
1 (4.8%) exact matches, in which:
1 unique CDR3
1 unique J



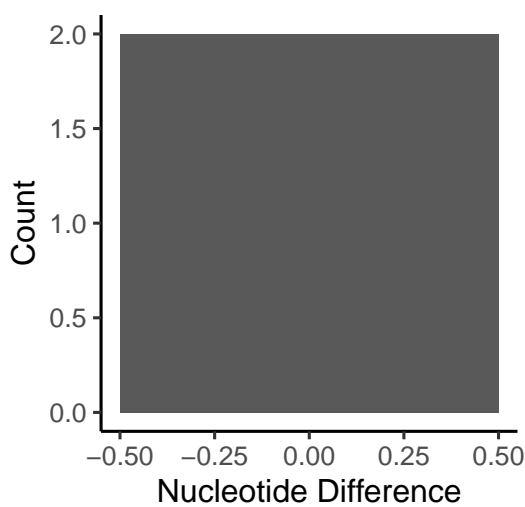
IGHV1-18*04

152 sequences assigned
26 (17.1%) exact matches, in which:
26 unique CDR3
4 unique J



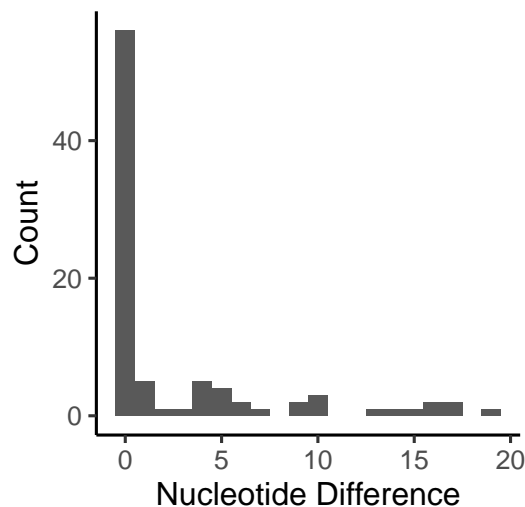
IGHV1-58*01

3 sequences assigned
2 (66.7%) exact matches, in which:
2 unique CDR3
1 unique J



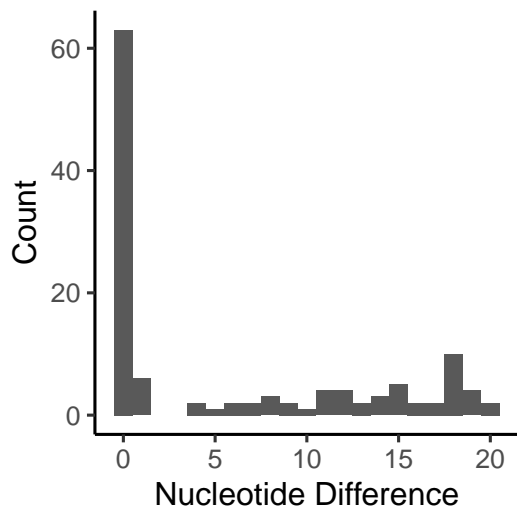
IGHV1-69*02

103 sequences assigned
56 (54.4%) exact matches, in which:
56 unique CDR3
6 unique J



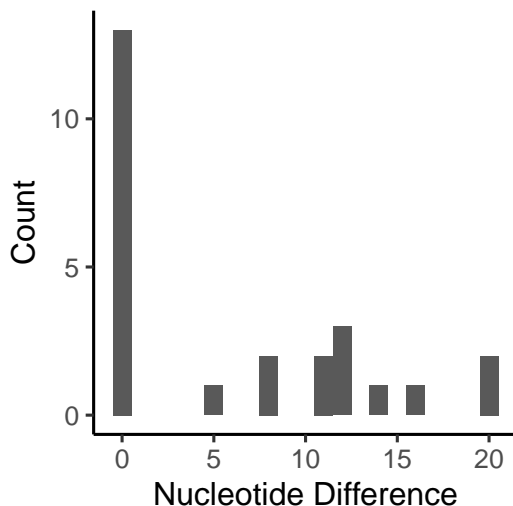
IGHV1-69*06

159 sequences assigned
63 (39.6%) exact matches, in which:
63 unique CDR3
5 unique J



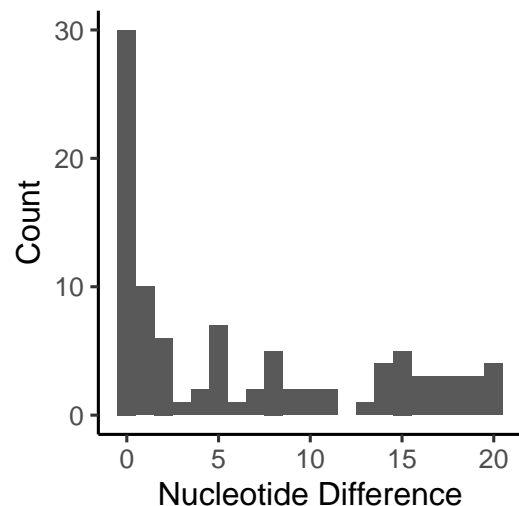
IGHV2-26*01

27 sequences assigned
13 (48.1%) exact matches, in which:
12 unique CDR3
5 unique J



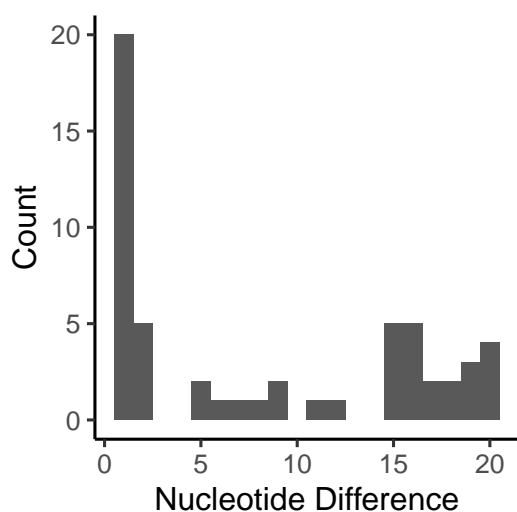
IGHV3-11*06

112 sequences assigned
30 (26.8%) exact matches, in which:
30 unique CDR3
5 unique J



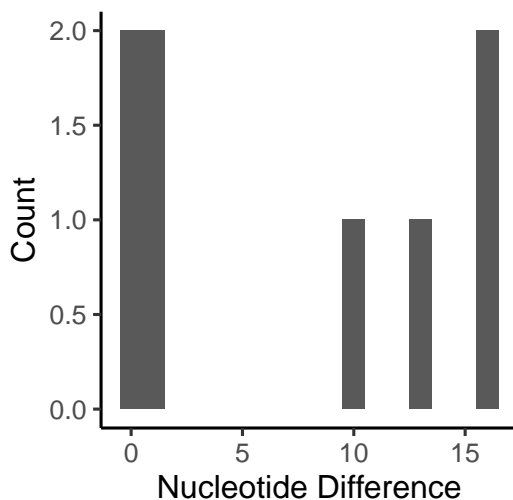
IGHV1-69*08

76 sequences assigned
No exact matches.



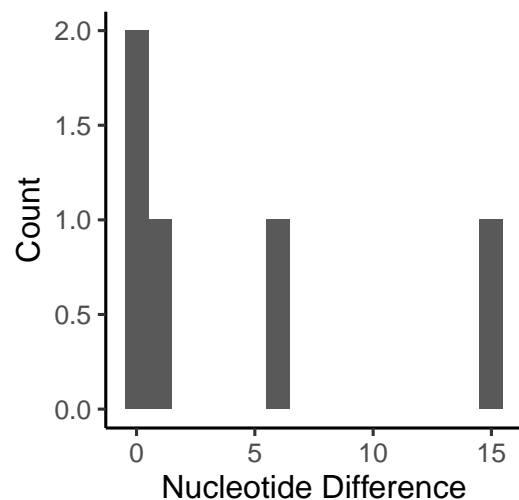
IGHV2-70*01

9 sequences assigned
2 (22.2%) exact matches, in which:
2 unique CDR3
1 unique J



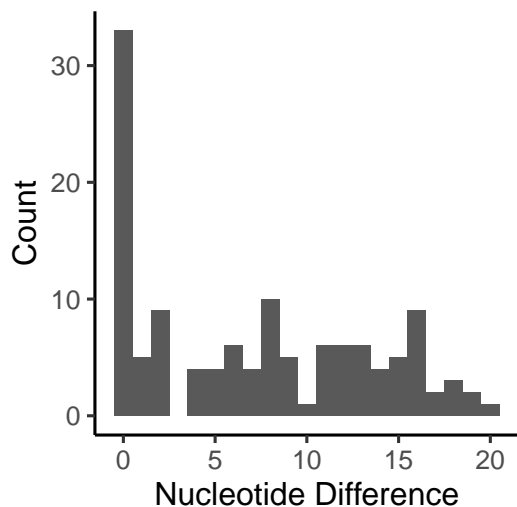
IGHV3-13*05

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



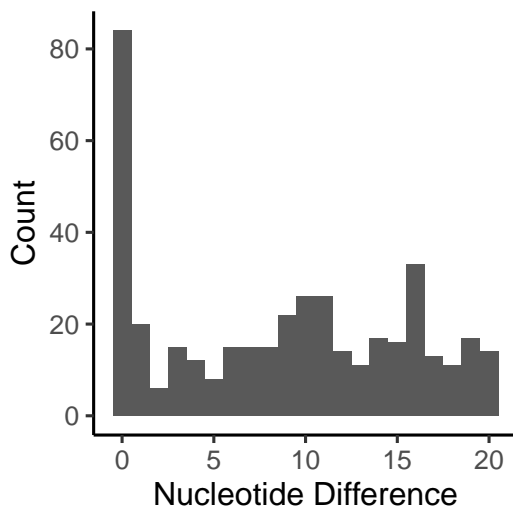
IGHV2-5*02

137 sequences assigned
33 (24.1%) exact matches, in which:
33 unique CDR3
3 unique J



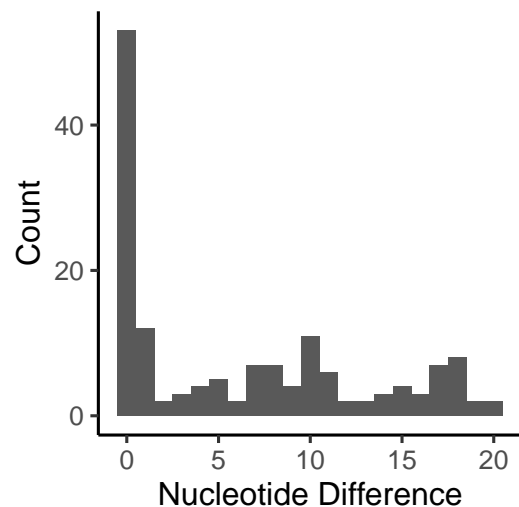
IGHV3-7*03

453 sequences assigned
84 (18.5%) exact matches, in which:
84 unique CDR3
7 unique J



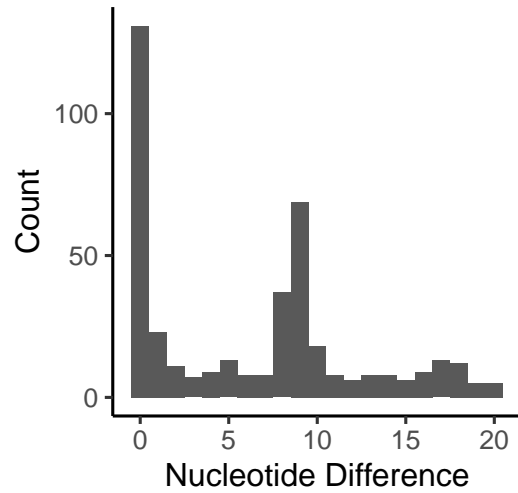
IGHV3-15*01

166 sequences assigned
53 (31.9%) exact matches, in which:
53 unique CDR3
6 unique J



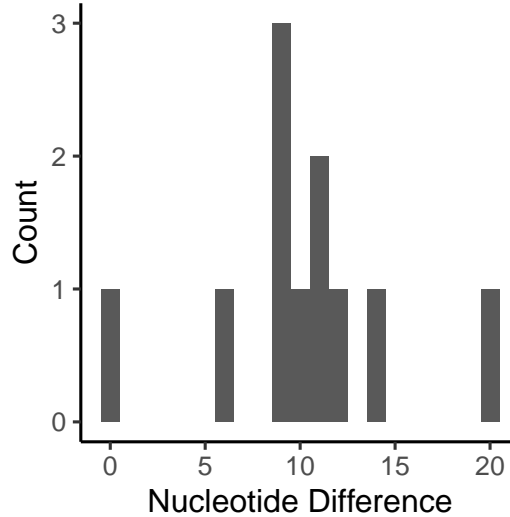
IGHV3-21*01

502 sequences assigned
131 (26.1%) exact matches, in which:
131 unique CDR3
6 unique J



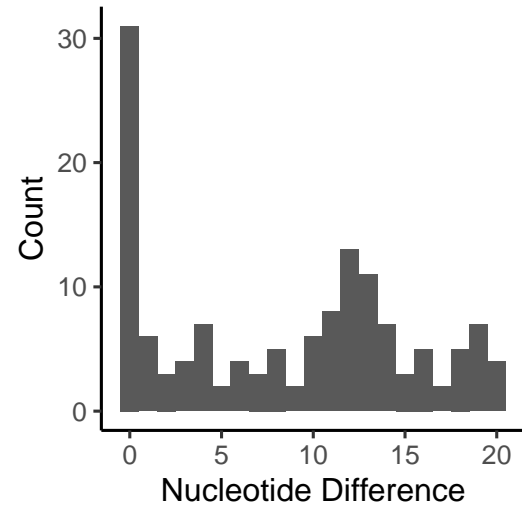
IGHV3-43*01

15 sequences assigned
1 (6.7%) exact matches, in which:
1 unique CDR3
1 unique J



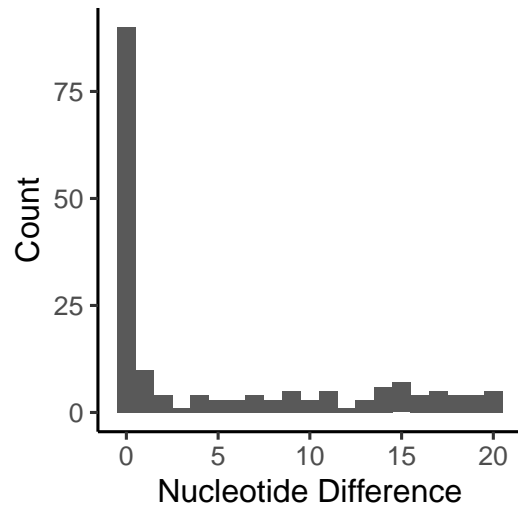
IGHV3-49*04

158 sequences assigned
31 (19.6%) exact matches, in which:
31 unique CDR3
4 unique J



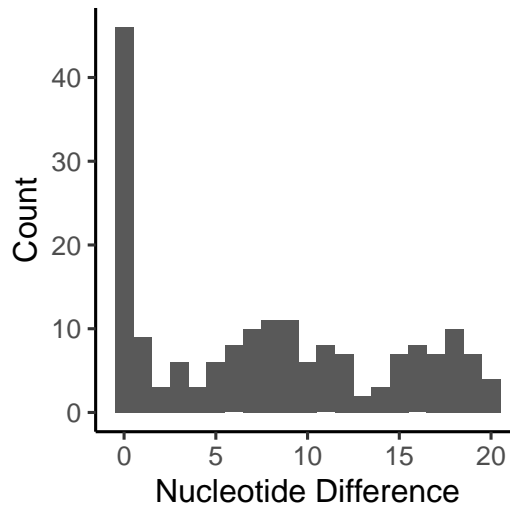
IGHV3-30-3*01

205 sequences assigned
90 (43.9%) exact matches, in which:
89 unique CDR3
5 unique J



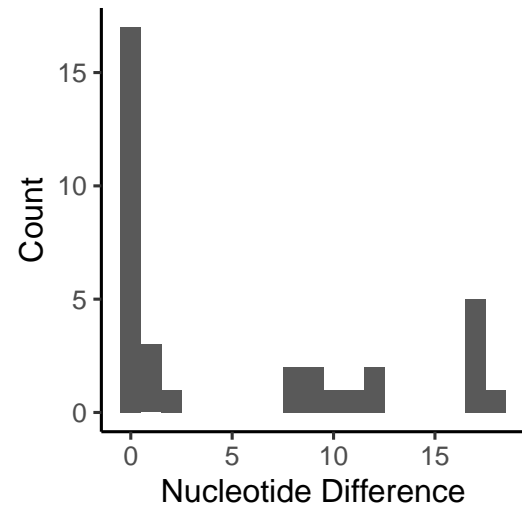
IGHV3-48*02

211 sequences assigned
46 (21.8%) exact matches, in which:
46 unique CDR3
5 unique J



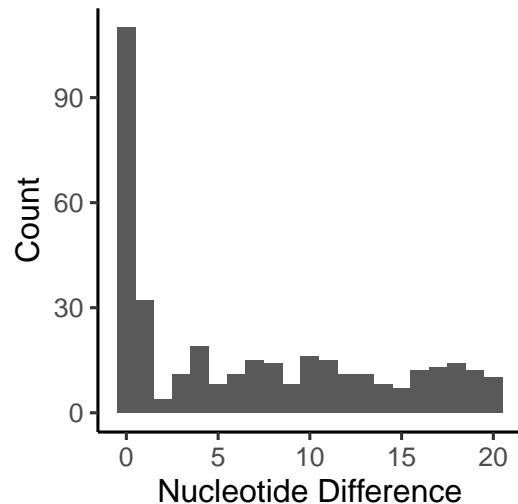
IGHV3-49*05

43 sequences assigned
17 (39.5%) exact matches, in which:
17 unique CDR3
2 unique J



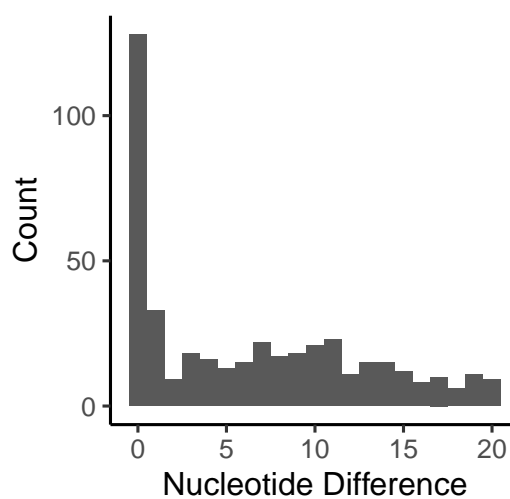
IGHV3-33*01

424 sequences assigned
110 (25.9%) exact matches, in which:
109 unique CDR3
5 unique J



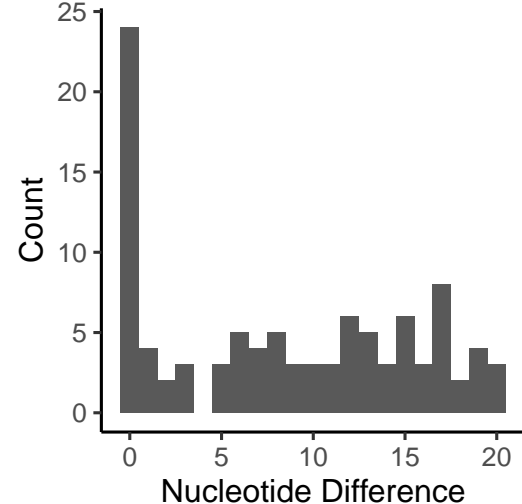
IGHV3-48*03

482 sequences assigned
128 (26.6%) exact matches, in which:
128 unique CDR3
5 unique J



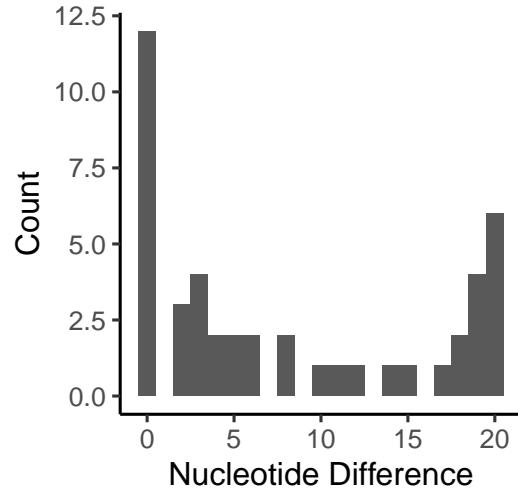
IGHV3-53*01

132 sequences assigned
24 (18.2%) exact matches, in which:
24 unique CDR3
4 unique J



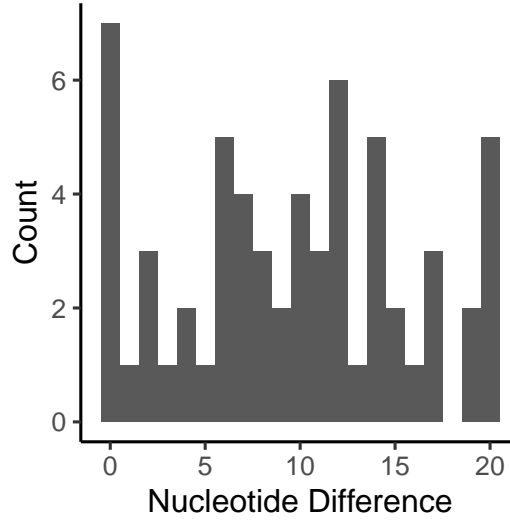
IGHV3-53*02

53 sequences assigned
12 (22.6%) exact matches, in which:
12 unique CDR3
3 unique J



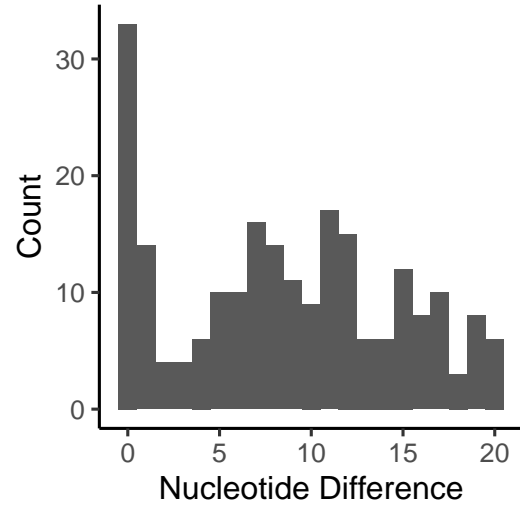
IGHV3-72*01

80 sequences assigned
7 (8.8%) exact matches, in which:
7 unique CDR3
5 unique J



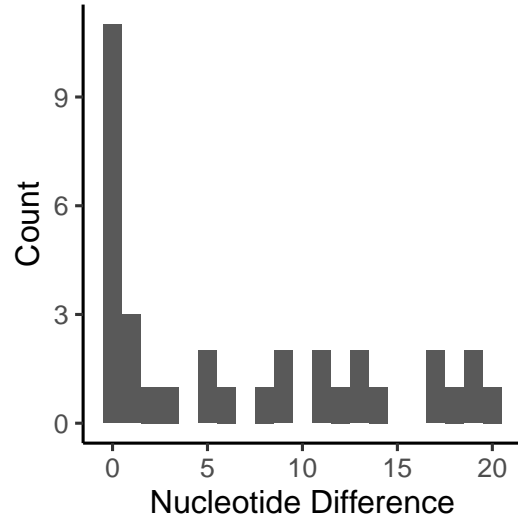
IGHV3-74*01

276 sequences assigned
33 (12%) exact matches, in which:
33 unique CDR3
5 unique J



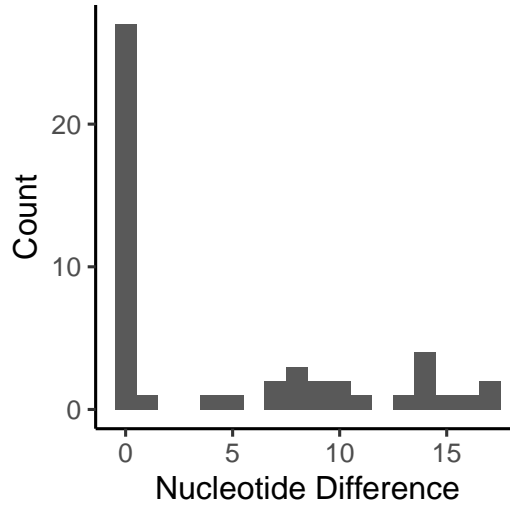
IGHV3-64*01

47 sequences assigned
11 (23.4%) exact matches, in which:
11 unique CDR3
5 unique J



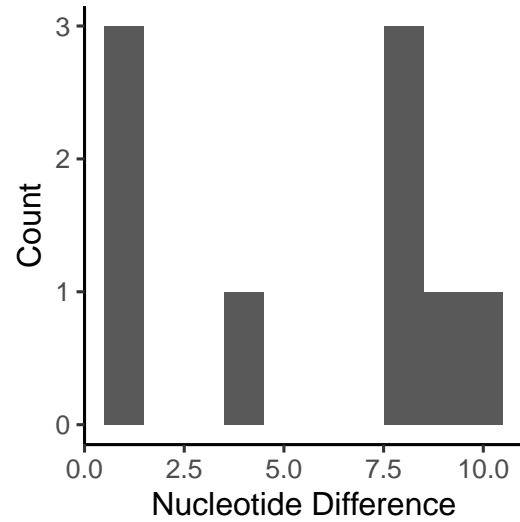
IGHV3-73*01

52 sequences assigned
27 (51.9%) exact matches, in which:
27 unique CDR3
4 unique J



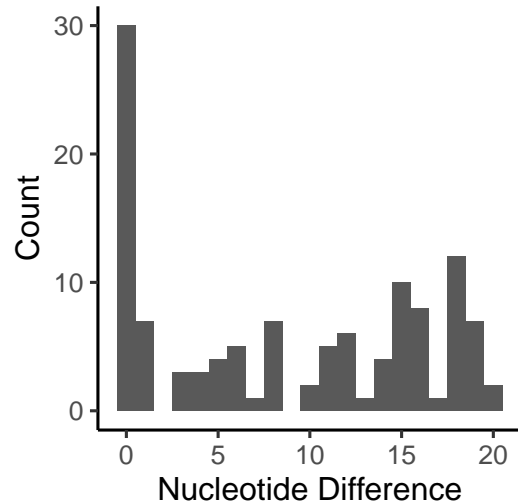
IGHV3-43D*04

15 sequences assigned
No exact matches.



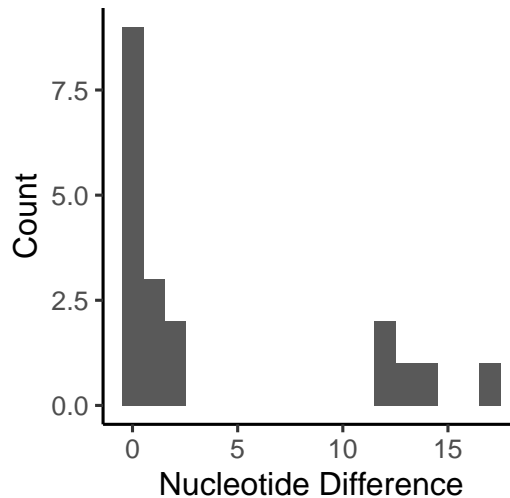
IGHV3-66*02

138 sequences assigned
30 (21.7%) exact matches, in which:
30 unique CDR3
5 unique J



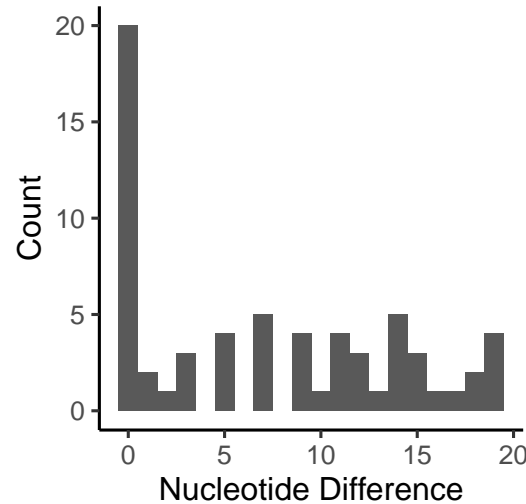
IGHV3-73*02

25 sequences assigned
9 (36%) exact matches, in which:
9 unique CDR3
4 unique J



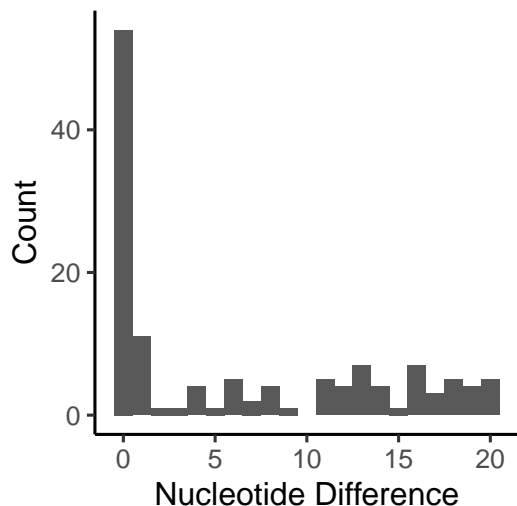
IGHV3-64D*09

85 sequences assigned
20 (23.5%) exact matches, in which:
20 unique CDR3
4 unique J



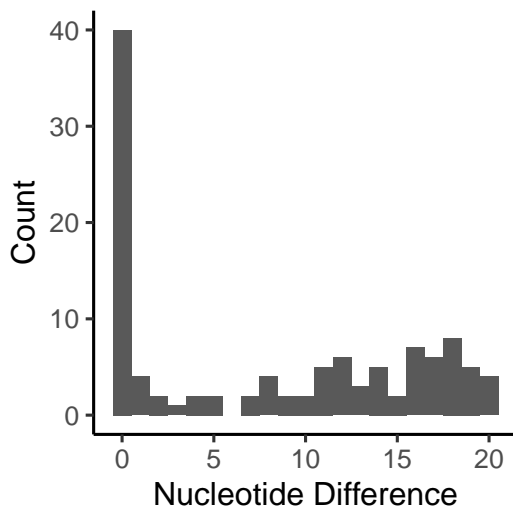
IGHV4-4*02

151 sequences assigned
54 (35.8%) exact matches, in which:
54 unique CDR3
6 unique J



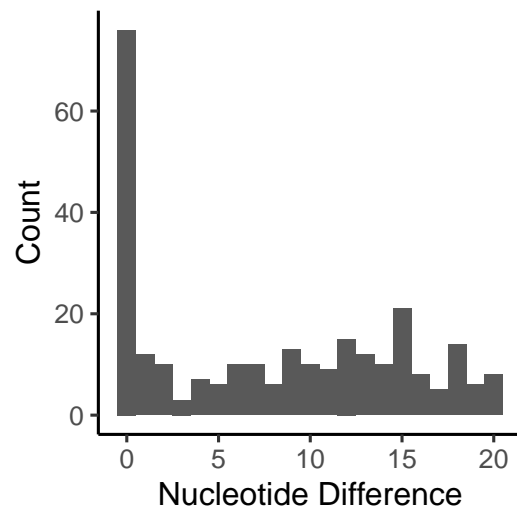
IGHV4-31*03

141 sequences assigned
40 (28.4%) exact matches, in which:
40 unique CDR3
6 unique J



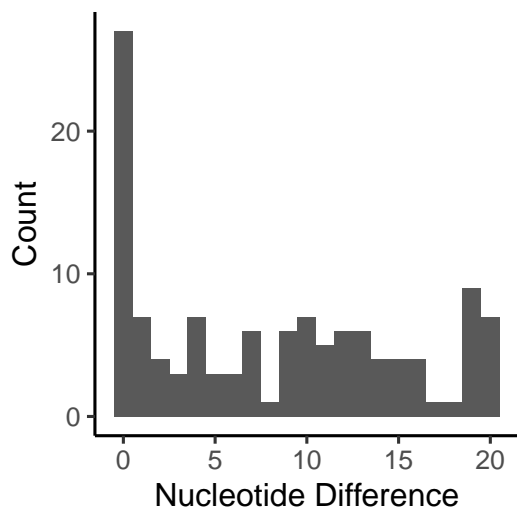
IGHV4-39*07

428 sequences assigned
76 (17.8%) exact matches, in which:
76 unique CDR3
5 unique J



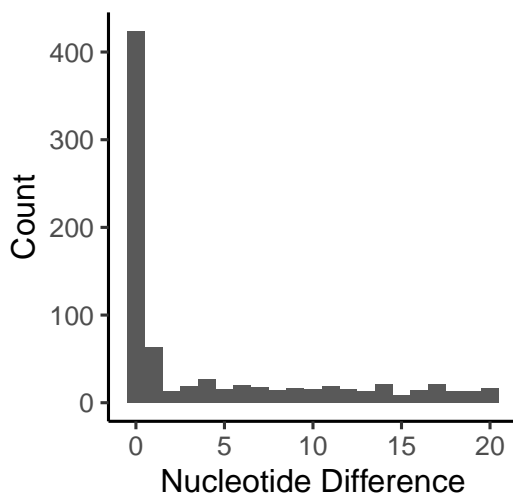
IGHV4-30-4*01

152 sequences assigned
27 (17.8%) exact matches, in which:
26 unique CDR3
6 unique J



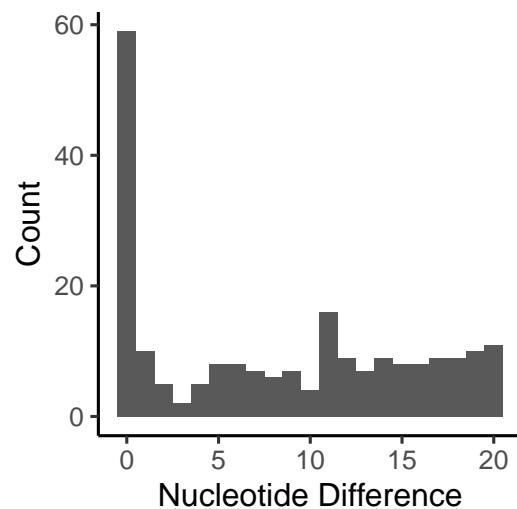
IGHV4-34*01

885 sequences assigned
424 (47.9%) exact matches, in which:
422 unique CDR3
7 unique J



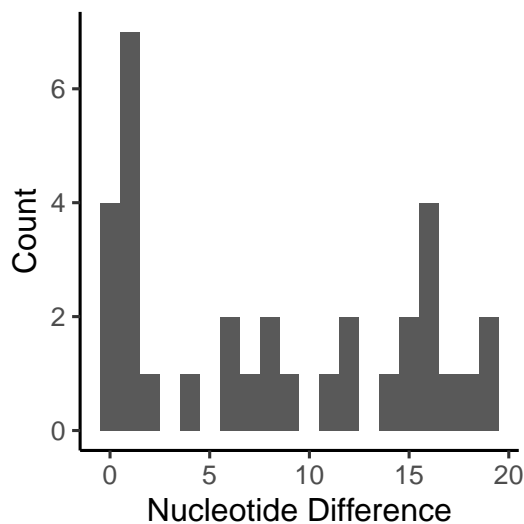
IGHV4-59*01

302 sequences assigned
59 (19.5%) exact matches, in which:
58 unique CDR3
7 unique J



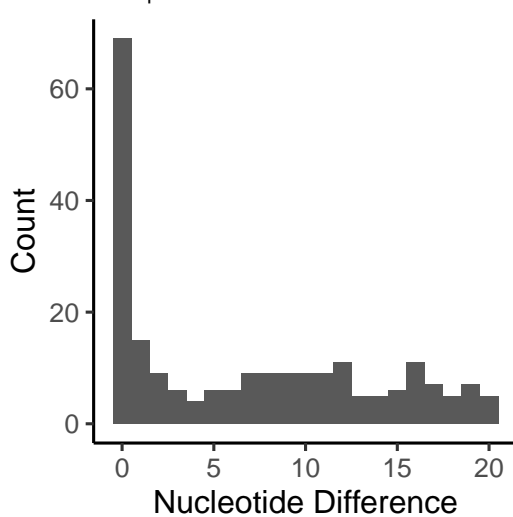
IGHV4-30-2*01

51 sequences assigned
4 (7.8%) exact matches, in which:
4 unique CDR3
2 unique J



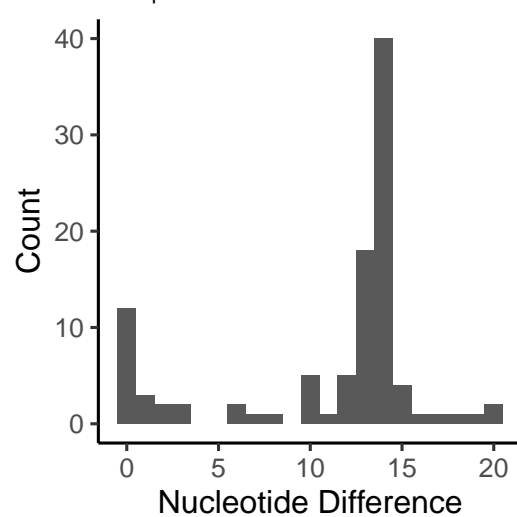
IGHV4-38-2*02_A70G

269 sequences assigned
69 (25.7%) exact matches, in which:
69 unique CDR3
6 unique J



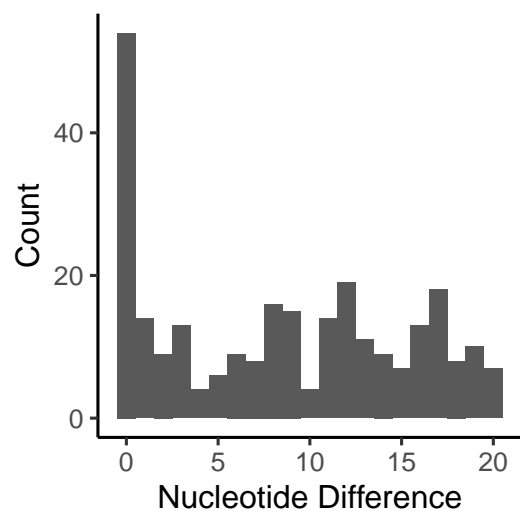
IGHV4-61*01

119 sequences assigned
12 (10.1%) exact matches, in which:
12 unique CDR3
5 unique J



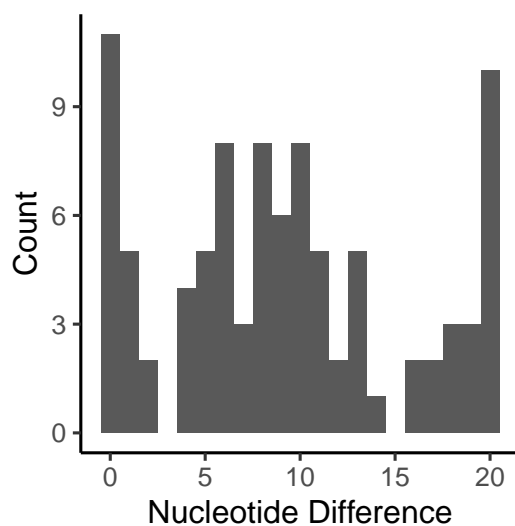
IGHV4-61*02

320 sequences assigned
54 (16.9%) exact matches, in which:
54 unique CDR3
6 unique J



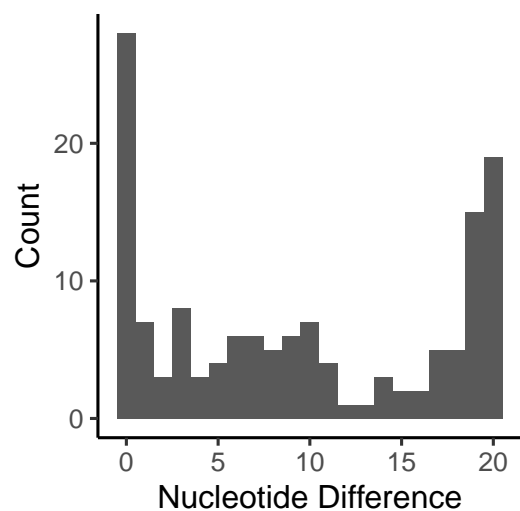
IGHV6-1*01

134 sequences assigned
11 (8.2%) exact matches, in which:
11 unique CDR3
2 unique J



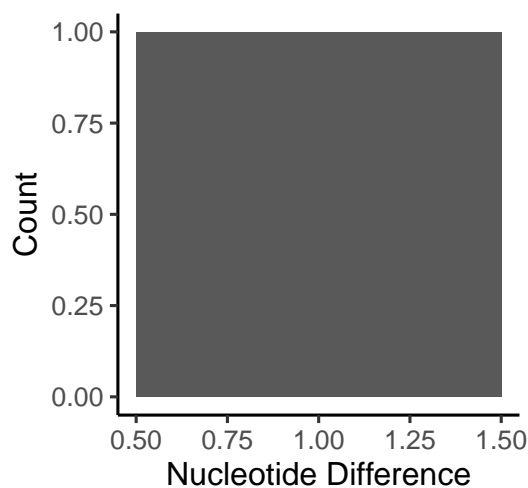
IGHV5-10-1*03

154 sequences assigned
28 (18.2%) exact matches, in which:
28 unique CDR3
6 unique J



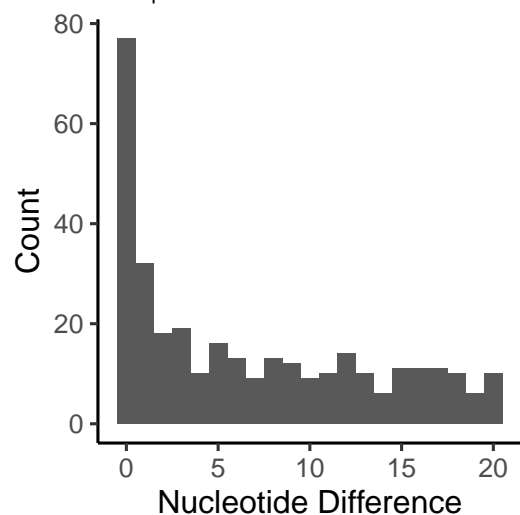
IGHV7-4-1*01

1 sequences assigned
No exact matches.

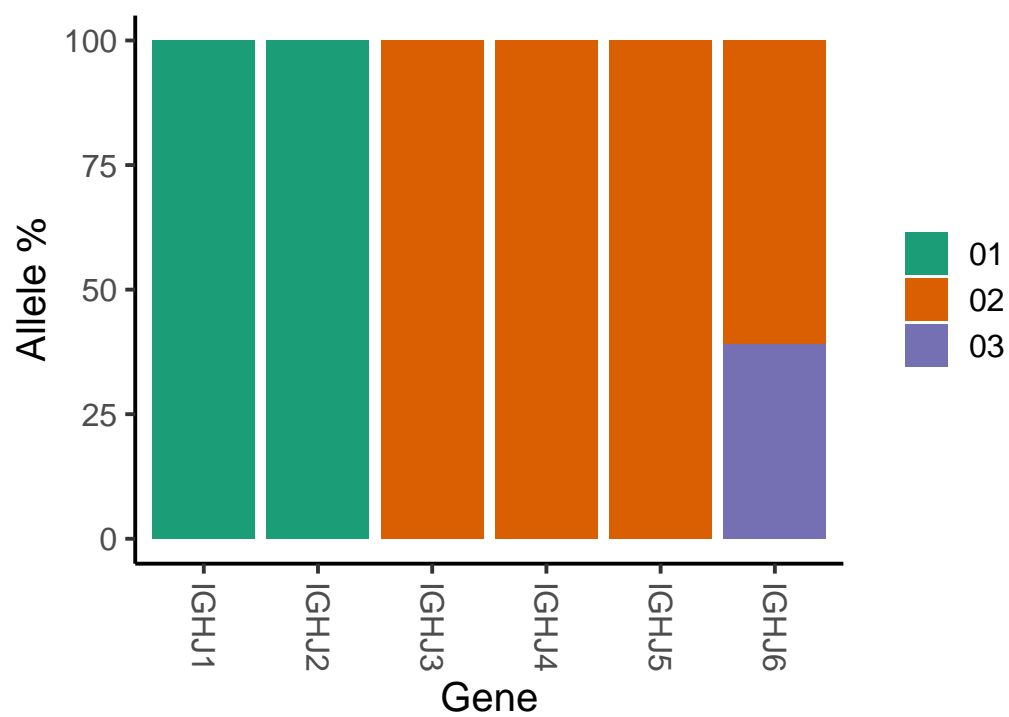


IGHV5-51*01

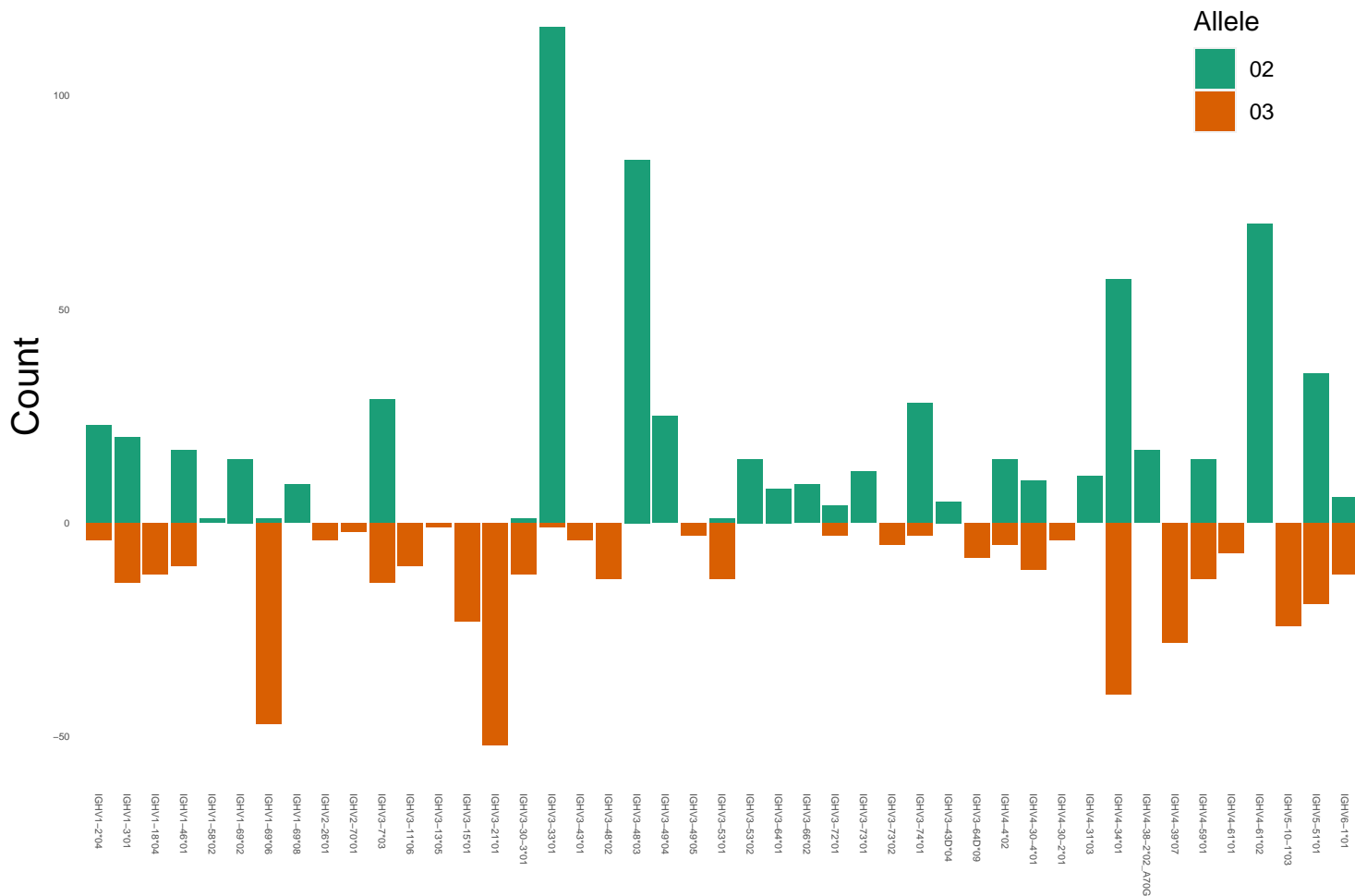
397 sequences assigned
77 (19.4%) exact matches, in which:
76 unique CDR3
6 unique J



Allele Usage



Sequence Count by IGHJ6 allele usage



[illegible]