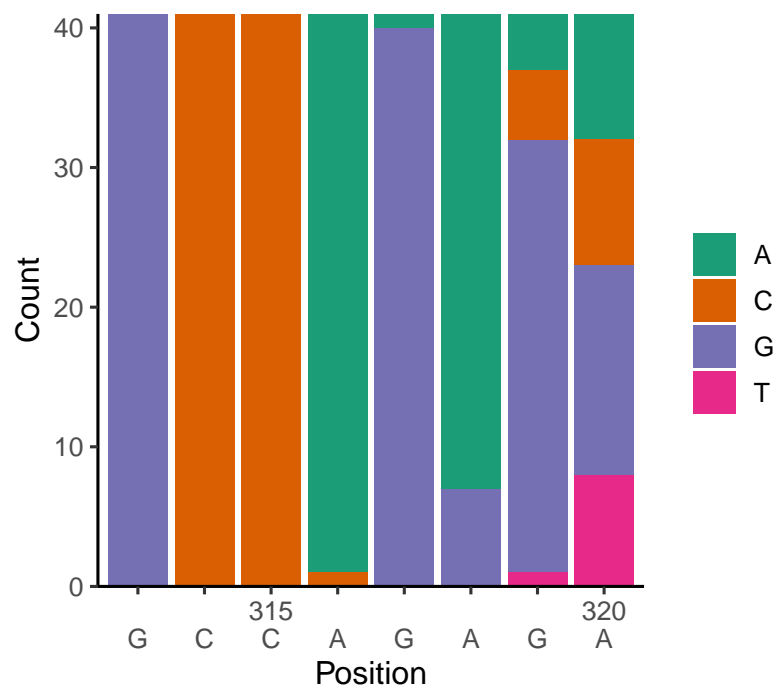
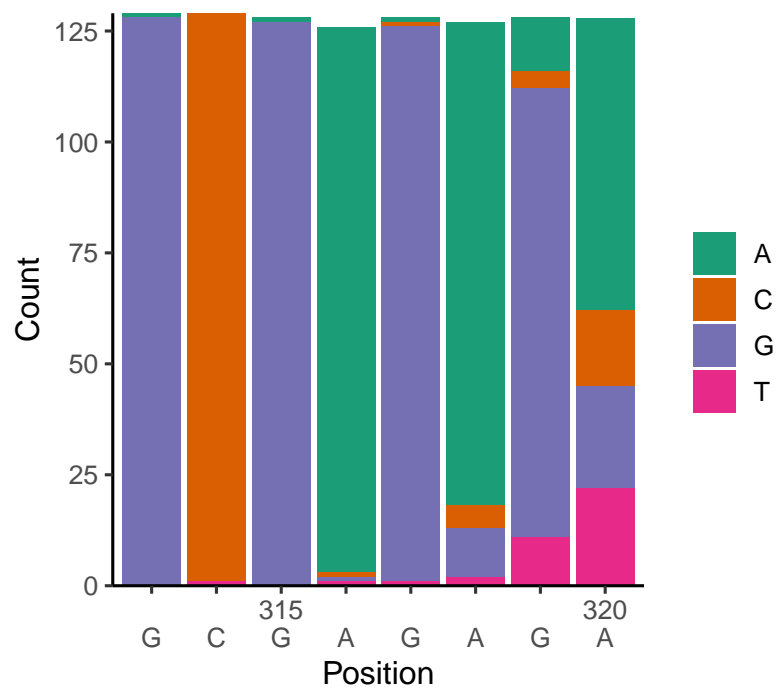


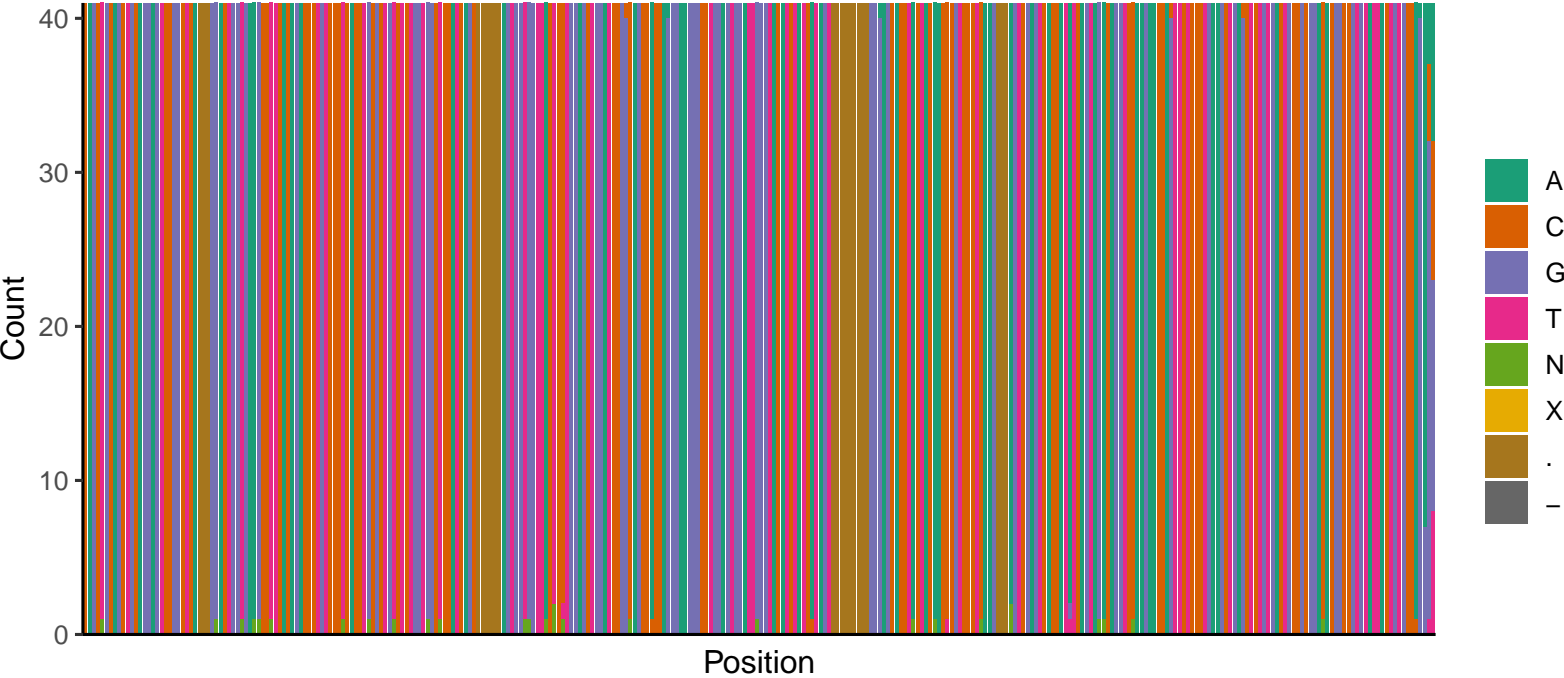
Gene IGHV4-30-2*01_C285T



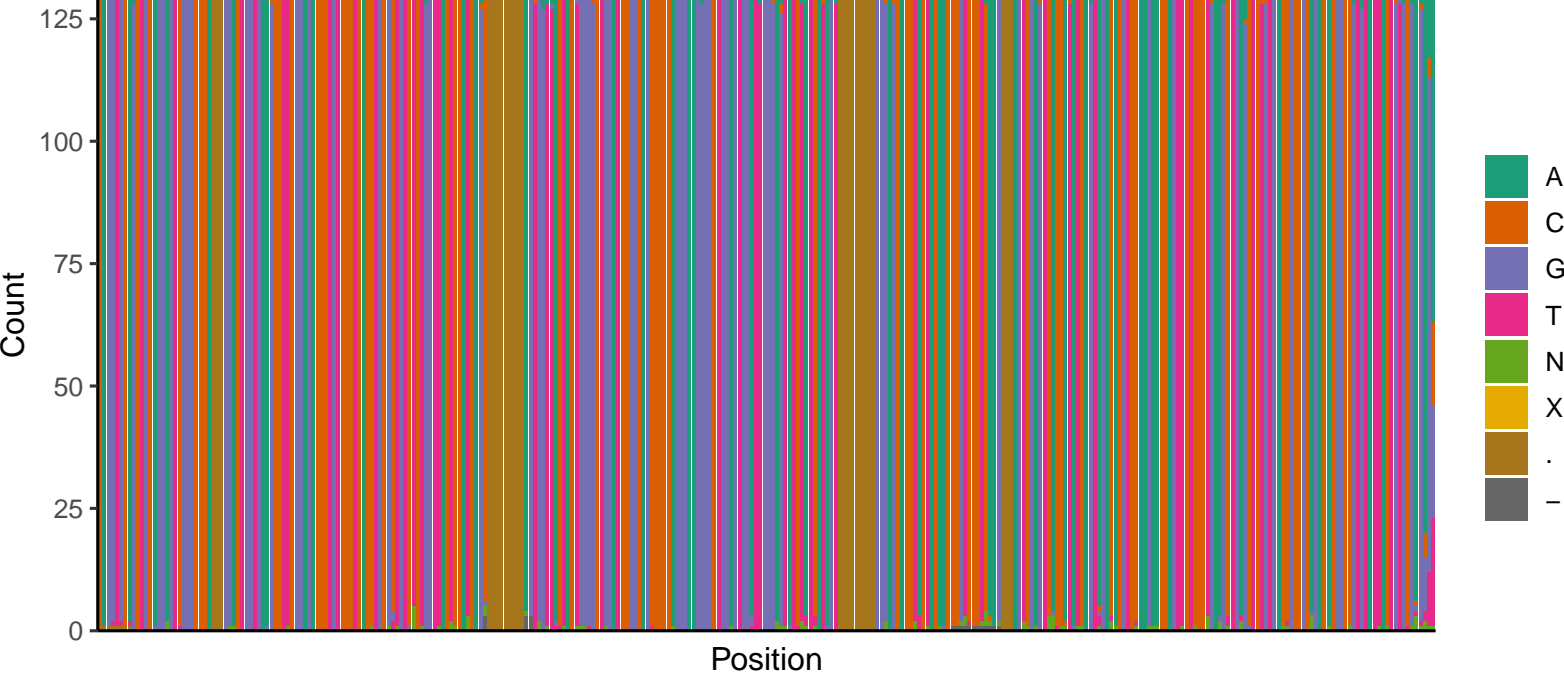
Gene IGHV4-38-2*02_A70G



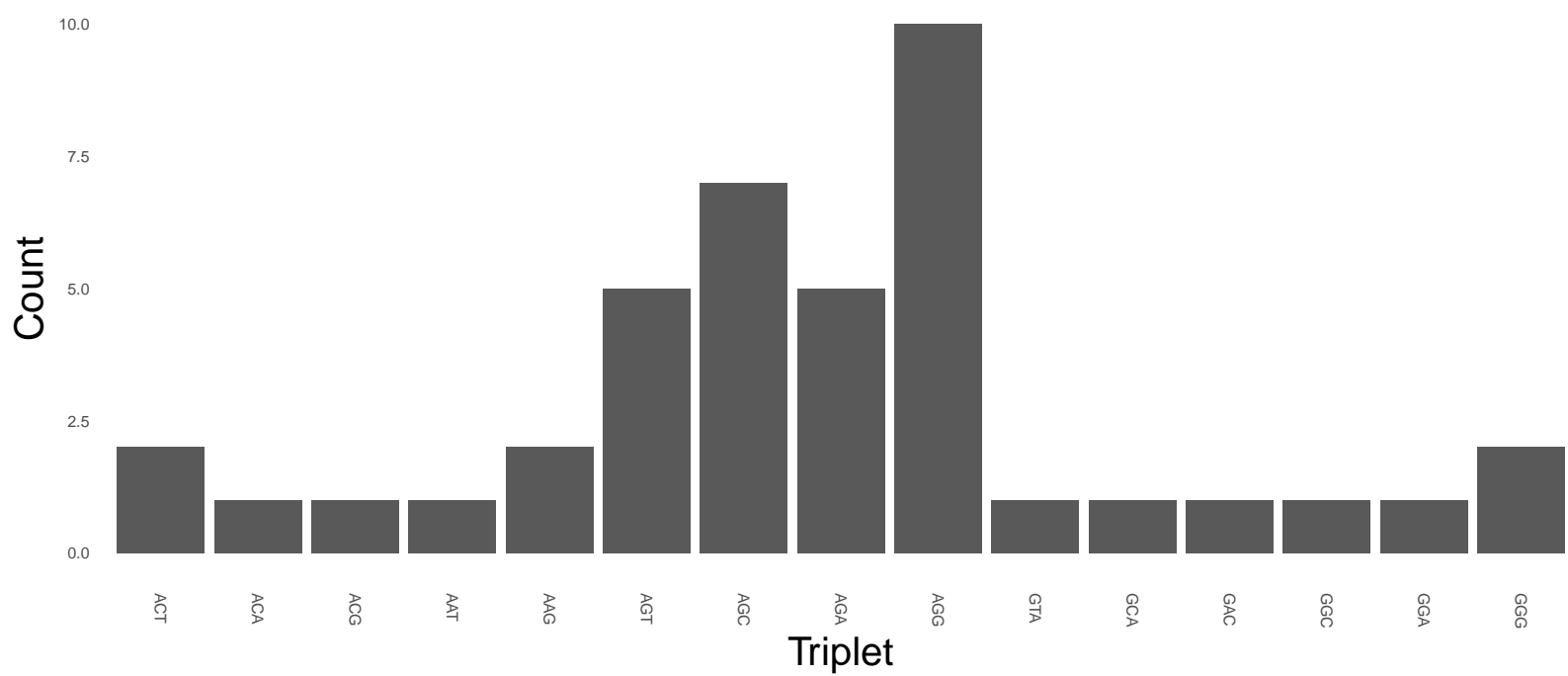
Gene IGHV4-30-2*01_C285T



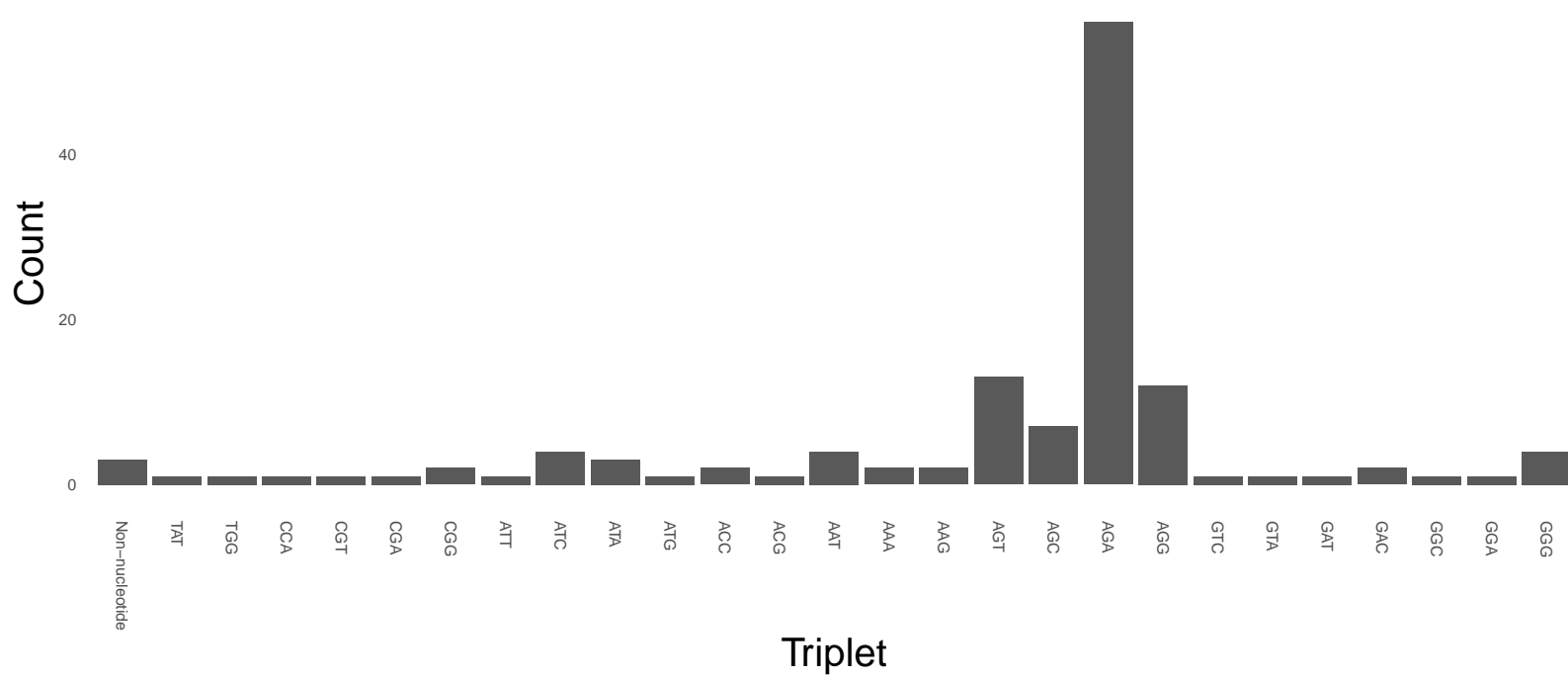
Gene IGHV4-38-2*02_A70G



IGHV4-30-2*01_C285T- Final 3 nucleotides as a triplet

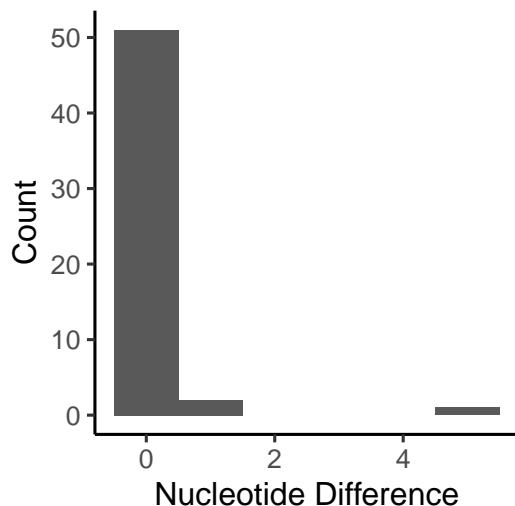


IGHV4-38-2*02_A70G- Final 3 nucleotides as a triplet



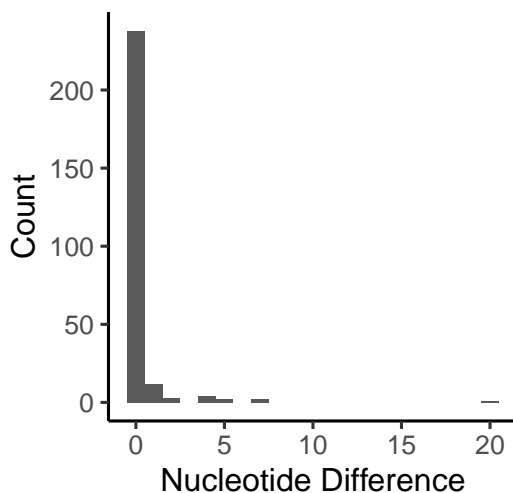
IGHV1-2*04

55 sequences assigned
51 (92.7%) exact matches, in which:
51 unique CDR3
5 unique J



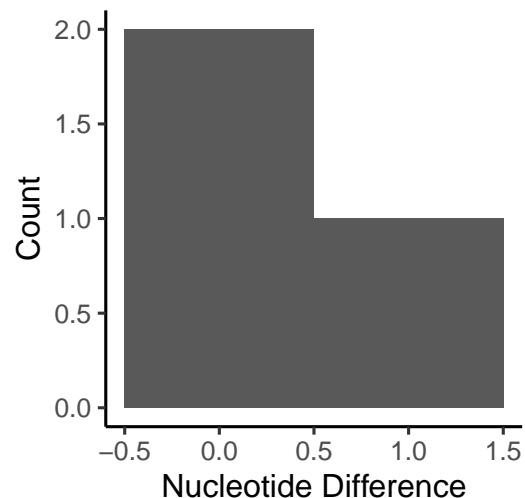
IGHV1-18*01

262 sequences assigned
238 (90.8%) exact matches, in which:
237 unique CDR3
7 unique J



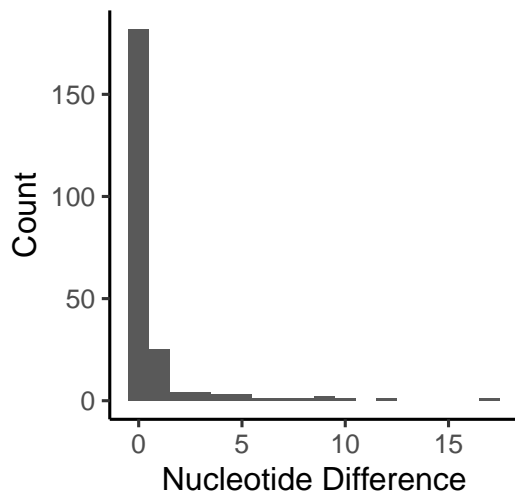
IGHV1-45*02

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



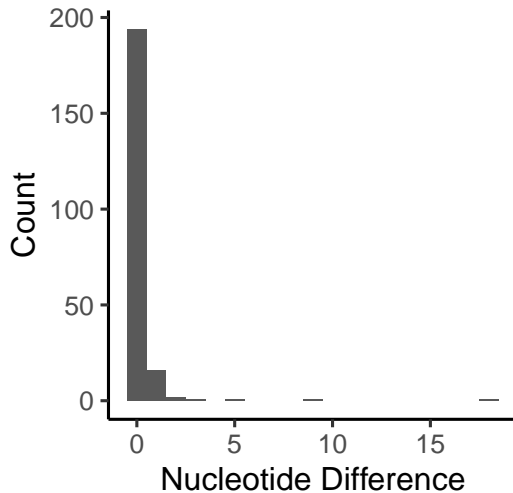
IGHV1-2*06

229 sequences assigned
182 (79.5%) exact matches, in which:
182 unique CDR3
6 unique J



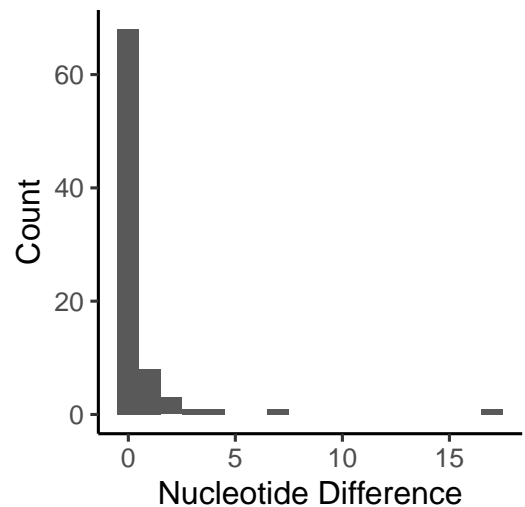
IGHV1-18*04

217 sequences assigned
194 (89.4%) exact matches, in which:
193 unique CDR3
7 unique J



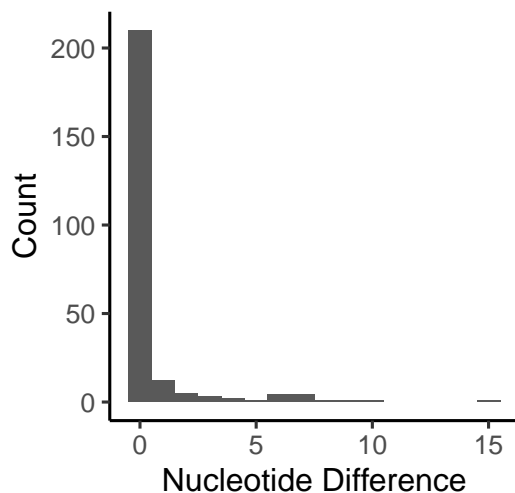
IGHV1-46*01

83 sequences assigned
68 (81.9%) exact matches, in which:
68 unique CDR3
6 unique J



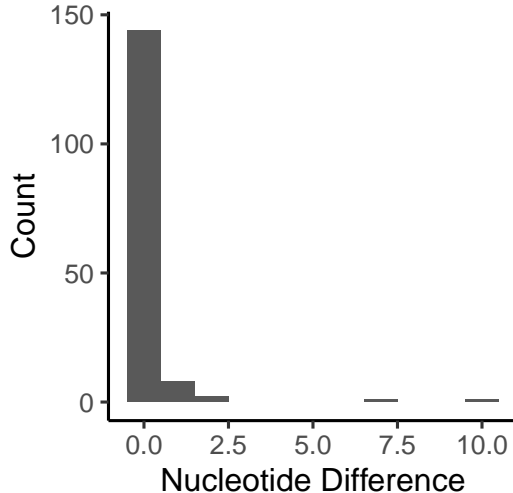
IGHV1-3*01

247 sequences assigned
210 (85%) exact matches, in which:
210 unique CDR3
7 unique J



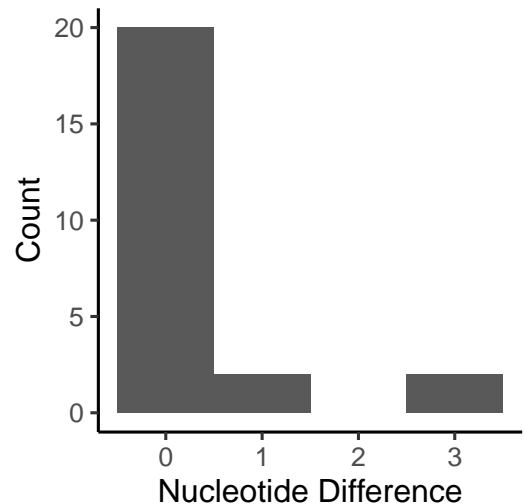
IGHV1-24*01

156 sequences assigned
144 (92.3%) exact matches, in which:
144 unique CDR3
7 unique J



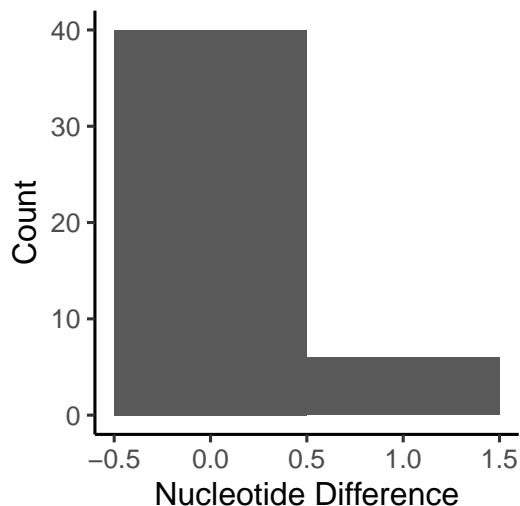
IGHV1-58*01

24 sequences assigned
20 (83.3%) exact matches, in which:
20 unique CDR3
6 unique J



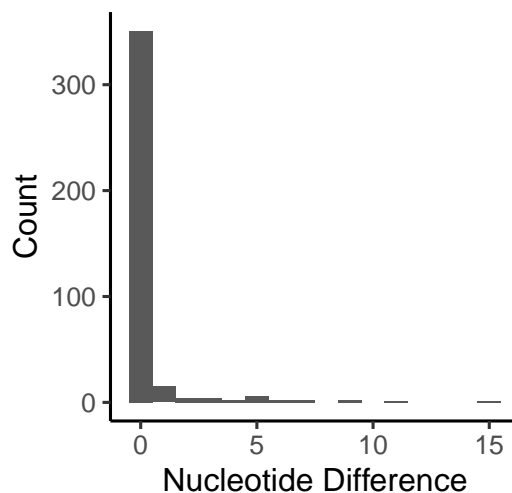
IGHV1-69-2*01

46 sequences assigned
40 (87%) exact matches, in which:
40 unique CDR3
6 unique J



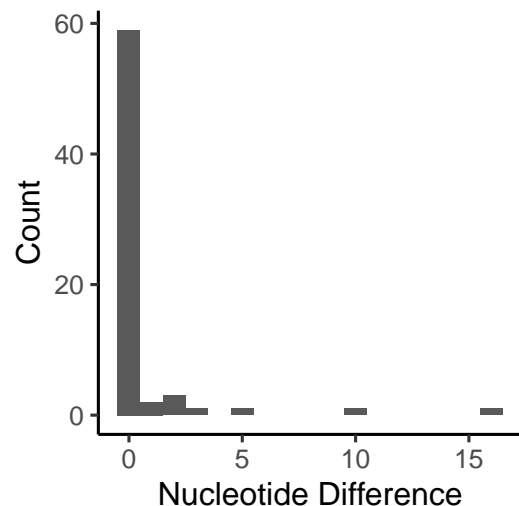
IGHV2-5*02

390 sequences assigned
351 (90%) exact matches, in which:
351 unique CDR3
7 unique J



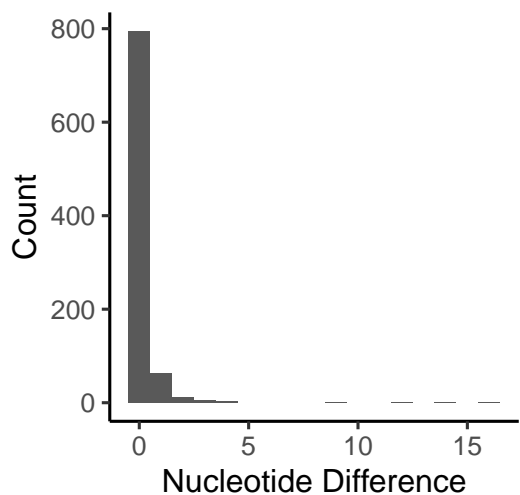
IGHV2-70*04

68 sequences assigned
59 (86.8%) exact matches, in which:
59 unique CDR3
5 unique J



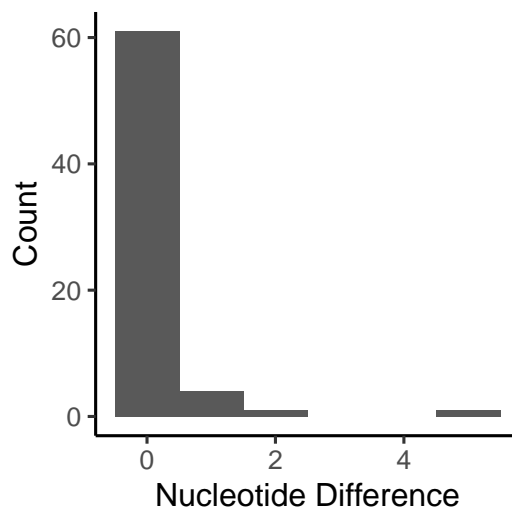
IGHV1-69*01

884 sequences assigned
795 (89.9%) exact matches, in which:
795 unique CDR3
7 unique J



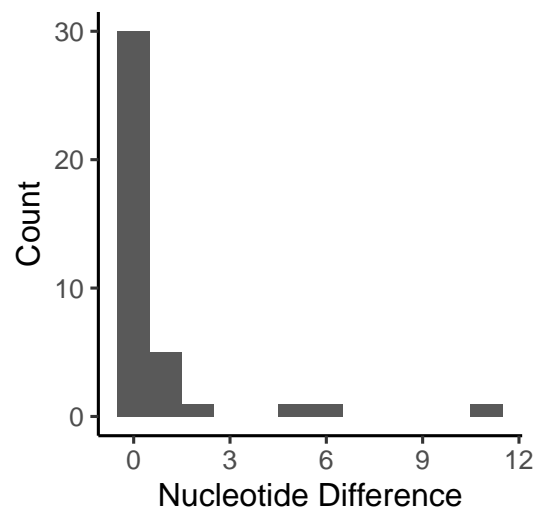
IGHV2-26*01

67 sequences assigned
61 (91%) exact matches, in which:
61 unique CDR3
6 unique J



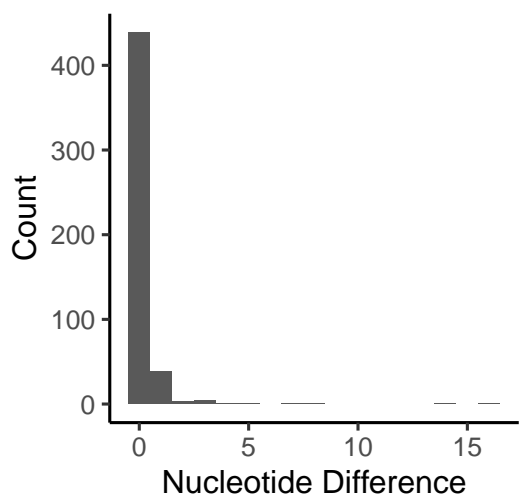
IGHV3-7*01

39 sequences assigned
30 (76.9%) exact matches, in which:
30 unique CDR3
6 unique J



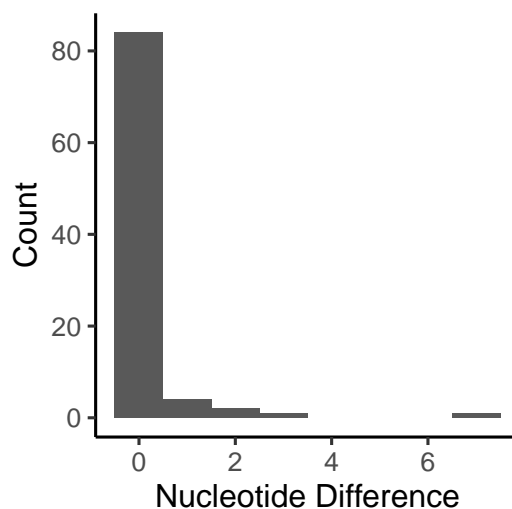
IGHV1-69*06

491 sequences assigned
439 (89.4%) exact matches, in which:
438 unique CDR3
7 unique J



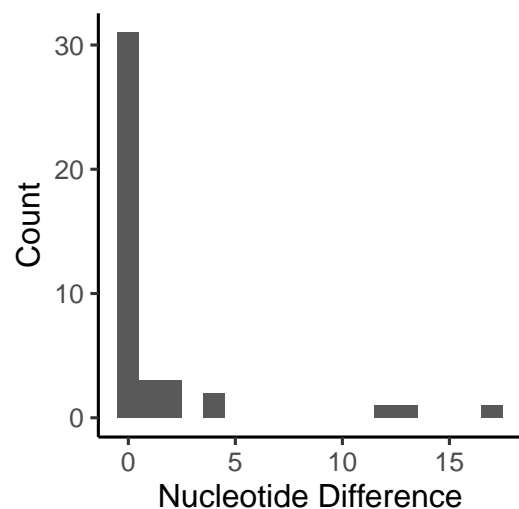
IGHV2-70*01

92 sequences assigned
84 (91.3%) exact matches, in which:
84 unique CDR3
6 unique J



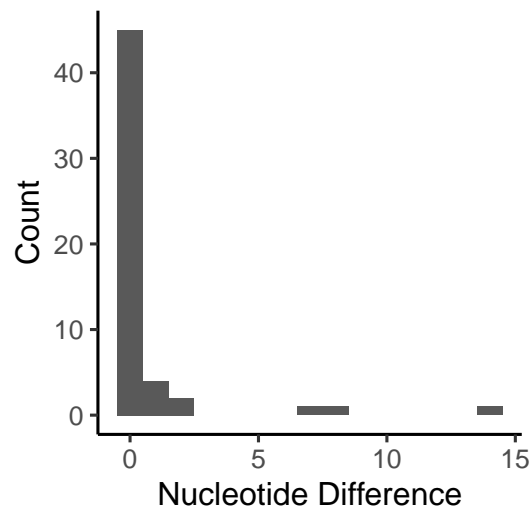
IGHV3-7*03

42 sequences assigned
31 (73.8%) exact matches, in which:
31 unique CDR3
6 unique J



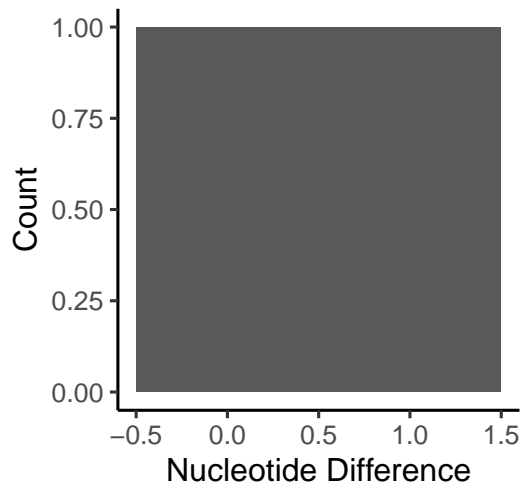
IGHV3-11*06

54 sequences assigned
45 (83.3%) exact matches, in which:
45 unique CDR3
7 unique J



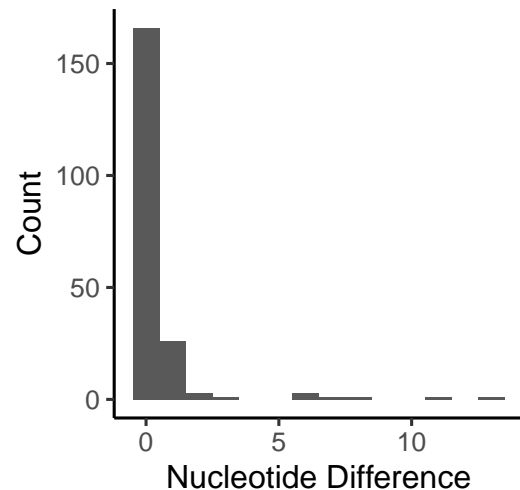
IGHV3-20*01

2 sequences assigned
1 (50%) exact matches, in which:
1 unique CDR3
1 unique J



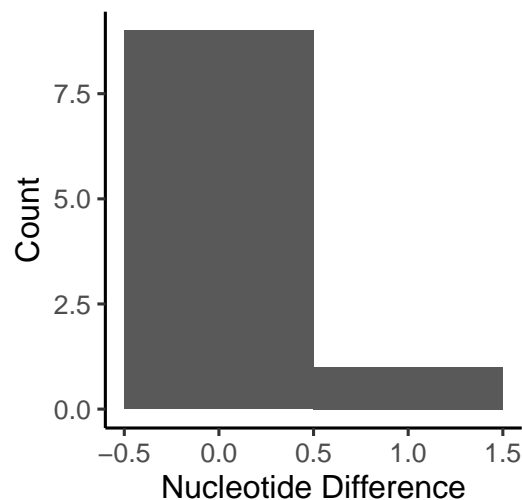
IGHV3-30-3*01

204 sequences assigned
166 (81.4%) exact matches, in which:
166 unique CDR3
7 unique J



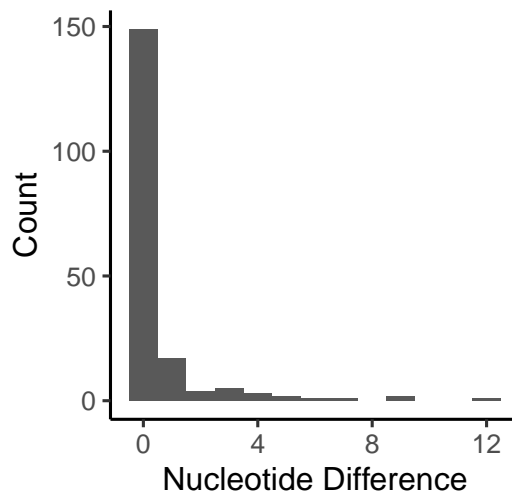
IGHV3-13*05

10 sequences assigned
9 (90%) exact matches, in which:
9 unique CDR3
4 unique J



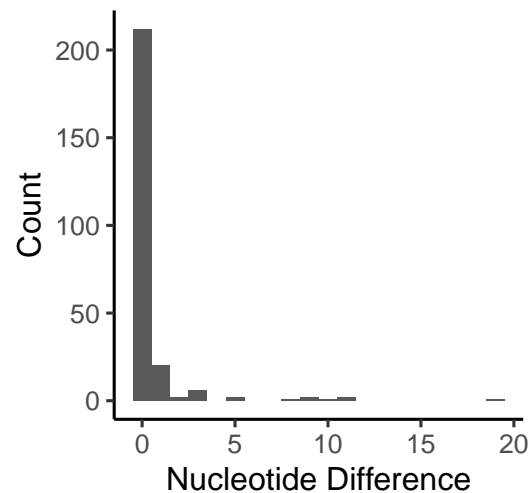
IGHV3-21*01

185 sequences assigned
149 (80.5%) exact matches, in which:
149 unique CDR3
6 unique J



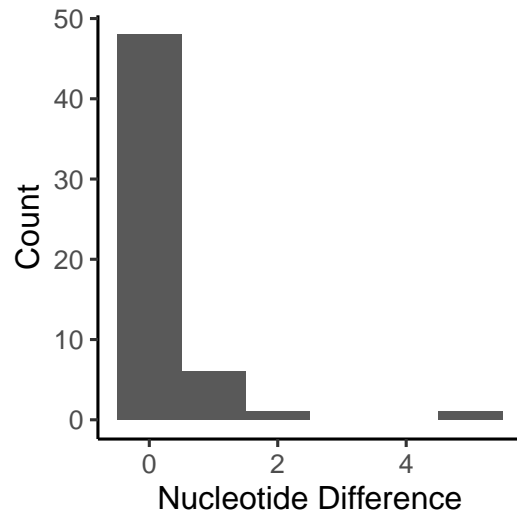
IGHV3-30*18

249 sequences assigned
212 (85.1%) exact matches, in which:
212 unique CDR3
7 unique J



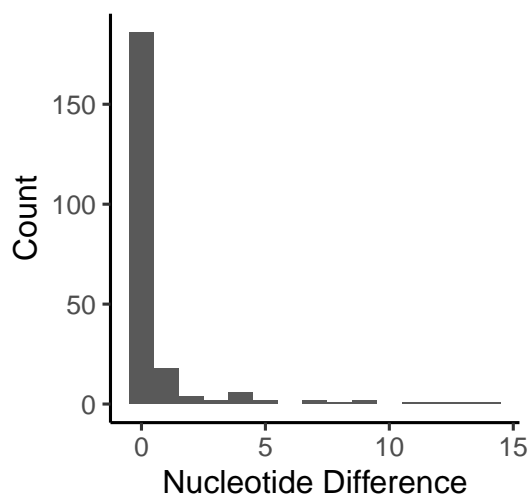
IGHV3-15*01

57 sequences assigned
48 (84.2%) exact matches, in which:
48 unique CDR3
5 unique J



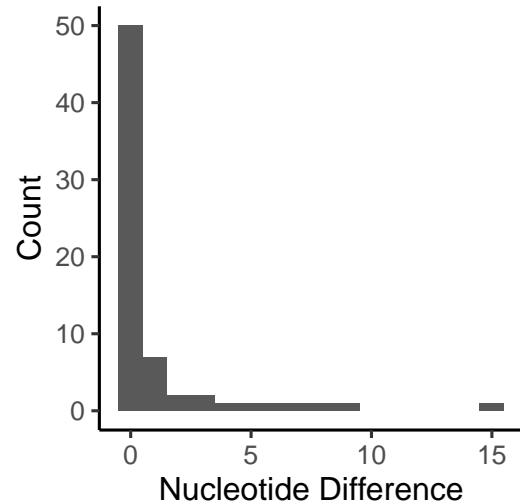
IGHV3-23*01

227 sequences assigned
186 (81.9%) exact matches, in which:
186 unique CDR3
7 unique J



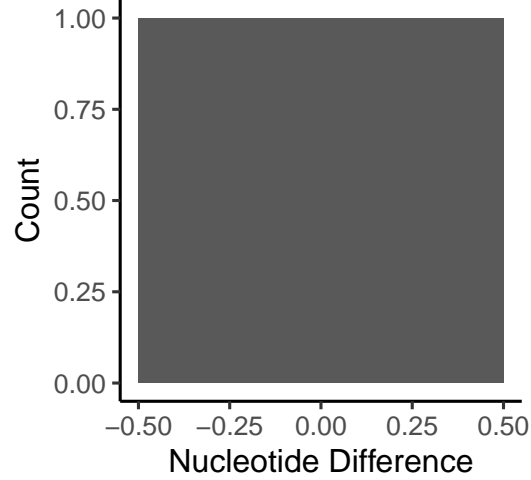
IGHV3-33*01

68 sequences assigned
50 (73.5%) exact matches, in which:
50 unique CDR3
6 unique J



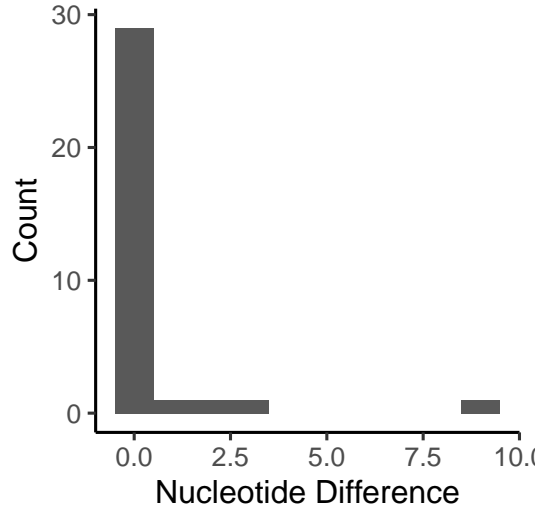
IGHV3–35*01

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



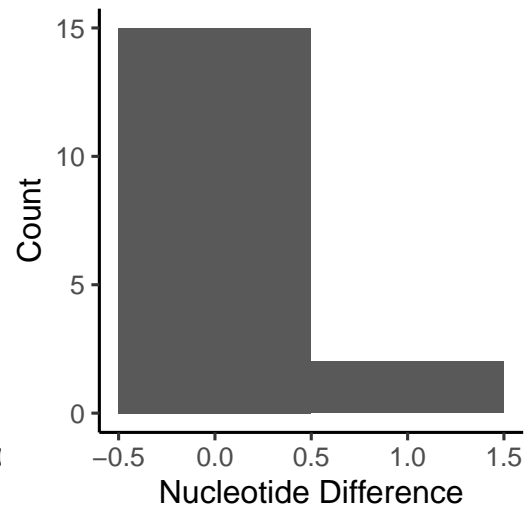
IGHV3–48*02

33 sequences assigned
29 (87.9%) exact matches, in which:
29 unique CDR3
6 unique J



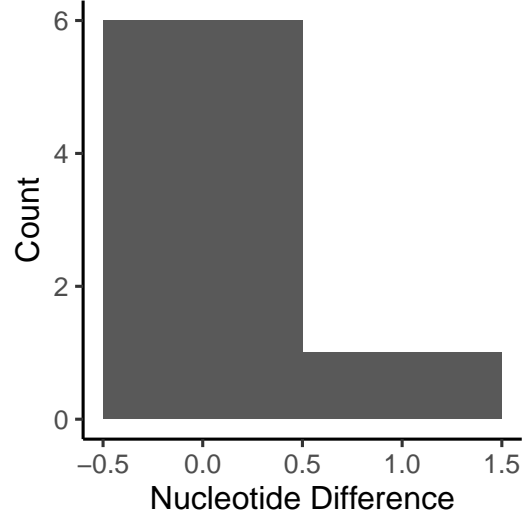
IGHV3–49*05

17 sequences assigned
15 (88.2%) exact matches, in which:
15 unique CDR3
5 unique J



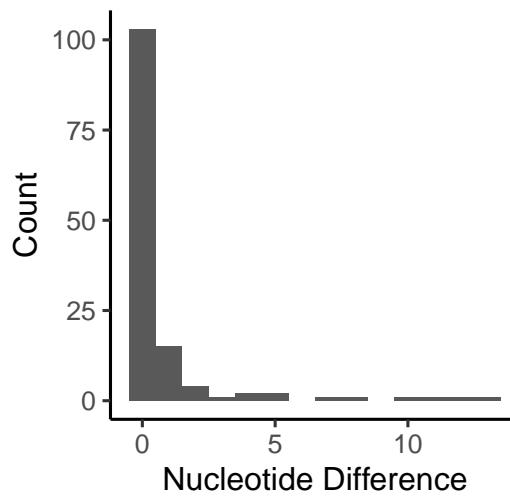
IGHV3–43*01

7 sequences assigned
6 (85.7%) exact matches, in which:
6 unique CDR3
3 unique J



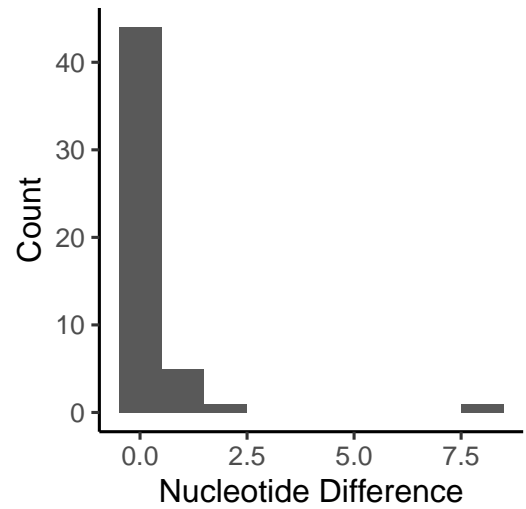
IGHV3–48*03

133 sequences assigned
103 (77.4%) exact matches, in which:
103 unique CDR3
5 unique J



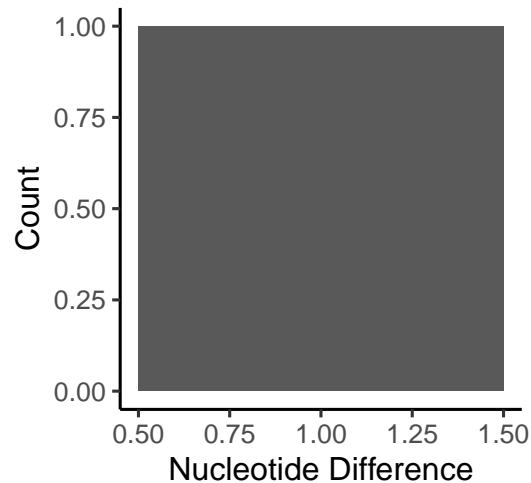
IGHV3–53*01

51 sequences assigned
44 (86.3%) exact matches, in which:
44 unique CDR3
6 unique J



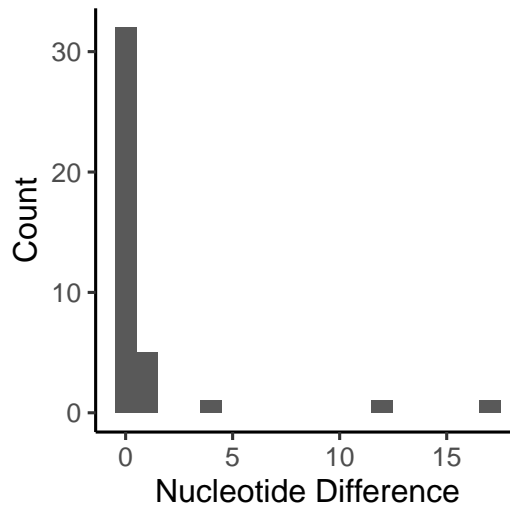
IGHV3–47*02

1 sequences assigned
No exact matches.



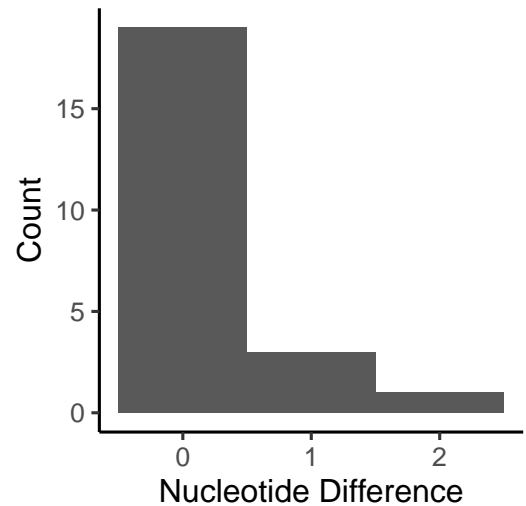
IGHV3–49*04

40 sequences assigned
32 (80%) exact matches, in which:
32 unique CDR3
4 unique J



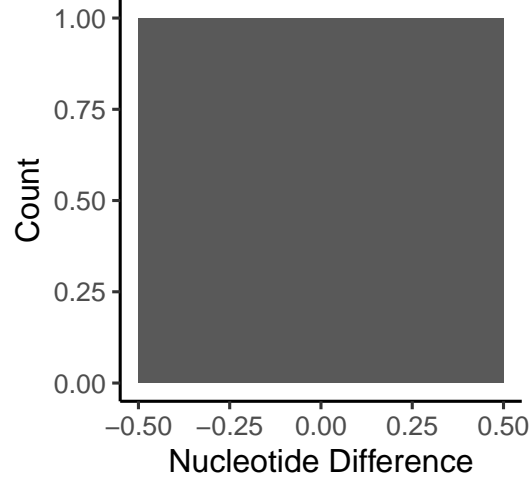
IGHV3–53*02

23 sequences assigned
19 (82.6%) exact matches, in which:
19 unique CDR3
5 unique J



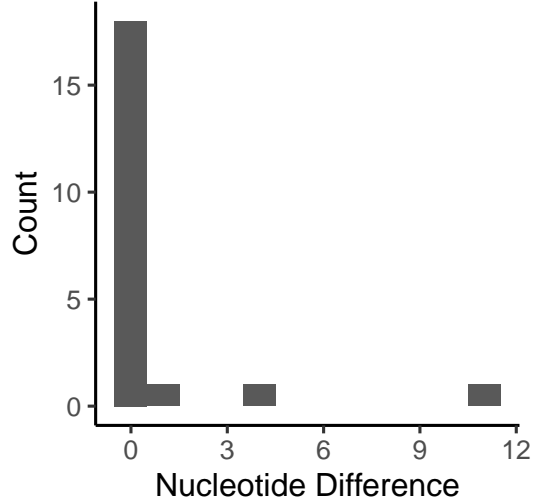
IGHV3-64*02

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



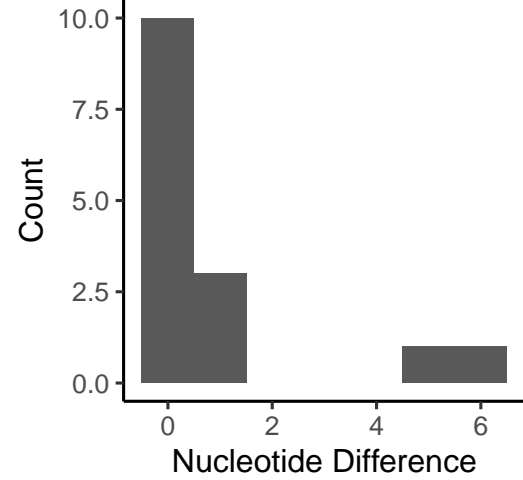
IGHV3-73*02

21 sequences assigned
18 (85.7%) exact matches, in which:
18 unique CDR3
4 unique J



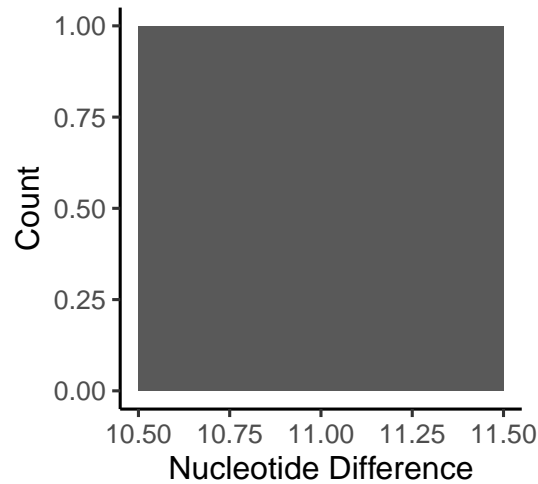
IGHV3-64D*06

15 sequences assigned
10 (66.7%) exact matches, in which:
10 unique CDR3
4 unique J



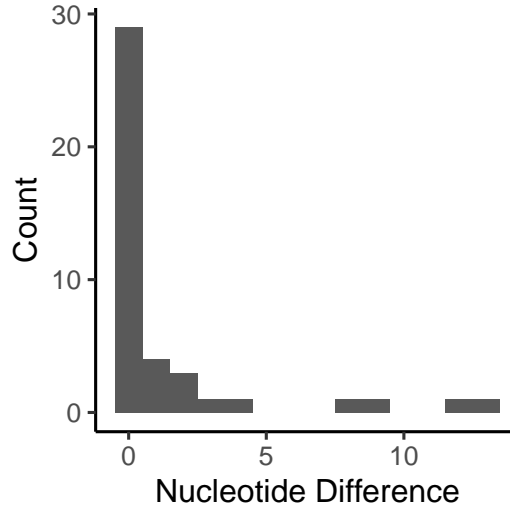
IGHV3-66*01

1 sequences assigned
No exact matches.



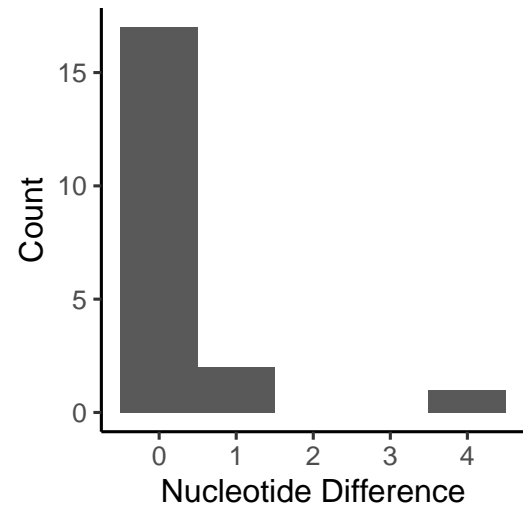
IGHV3-74*01

43 sequences assigned
29 (67.4%) exact matches, in which:
29 unique CDR3
5 unique J



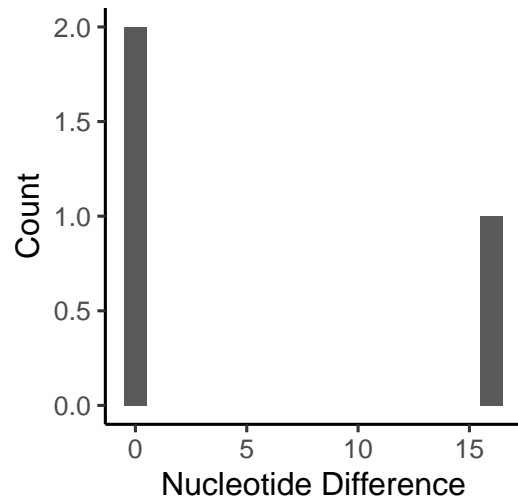
IGHV3-64D*09

20 sequences assigned
17 (85%) exact matches, in which:
17 unique CDR3
4 unique J



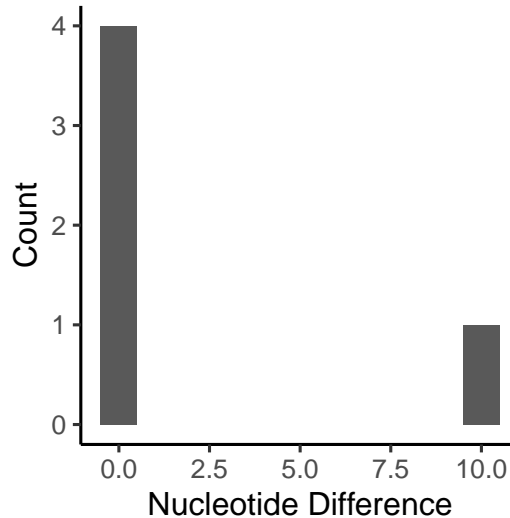
IGHV3-72*01

4 sequences assigned
2 (50%) exact matches, in which:
2 unique CDR3
2 unique J



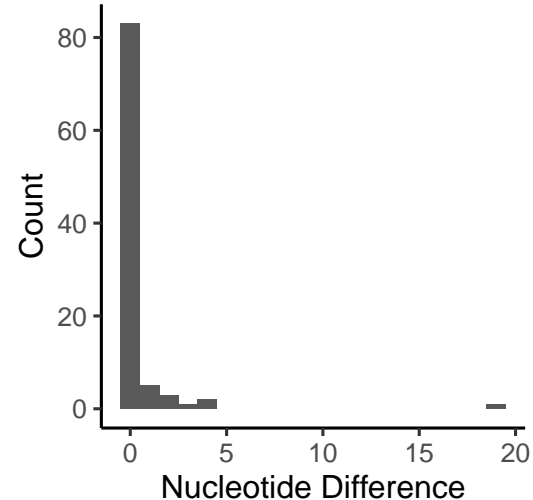
IGHV3-43D*04

5 sequences assigned
4 (80%) exact matches, in which:
4 unique CDR3
2 unique J



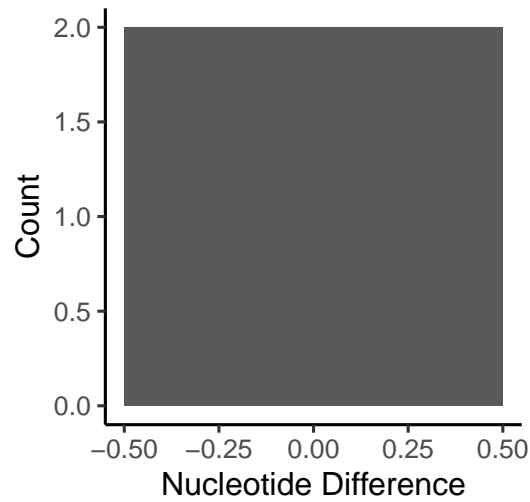
IGHV4-4*02

95 sequences assigned
83 (87.4%) exact matches, in which:
83 unique CDR3
6 unique J



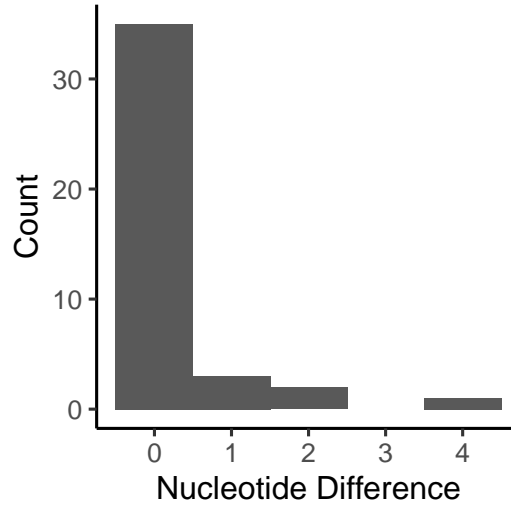
IGHV4-28*01

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



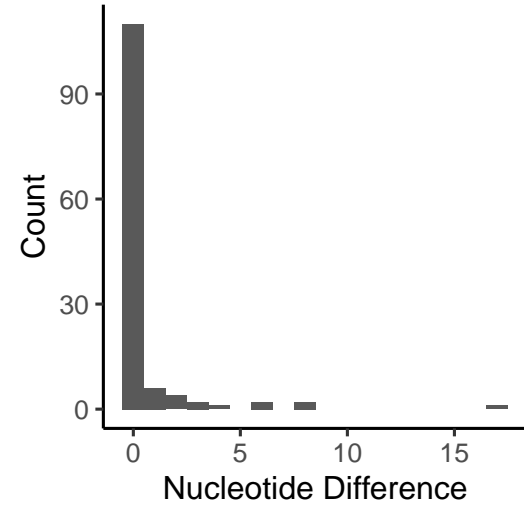
IGHV4-30-2*01_C285T

41 sequences assigned
35 (85.4%) exact matches, in which:
35 unique CDR3
5 unique J



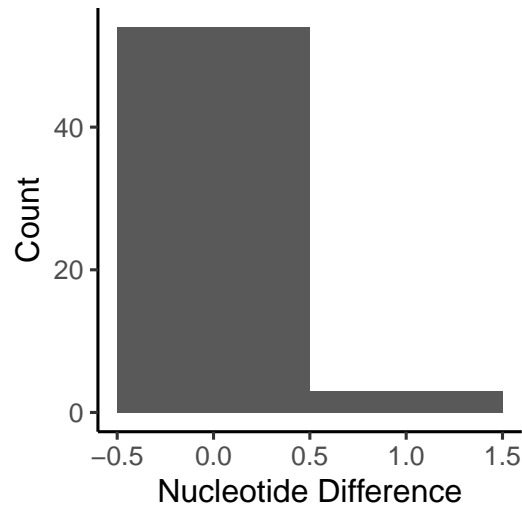
IGHV4-38-2*02_A70G

129 sequences assigned
110 (85.3%) exact matches, in which:
109 unique CDR3
5 unique J



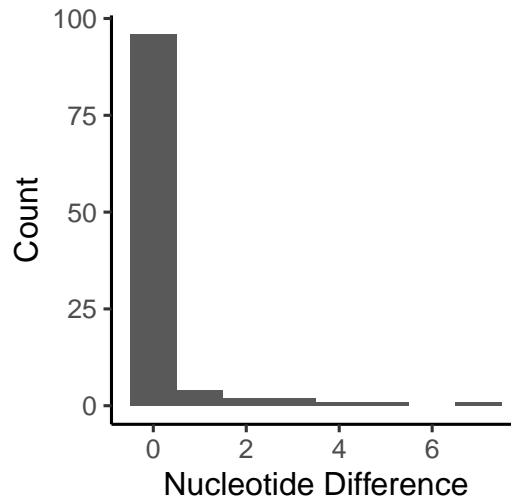
IGHV4-30-2*01

57 sequences assigned
54 (94.7%) exact matches, in which:
54 unique CDR3
6 unique J



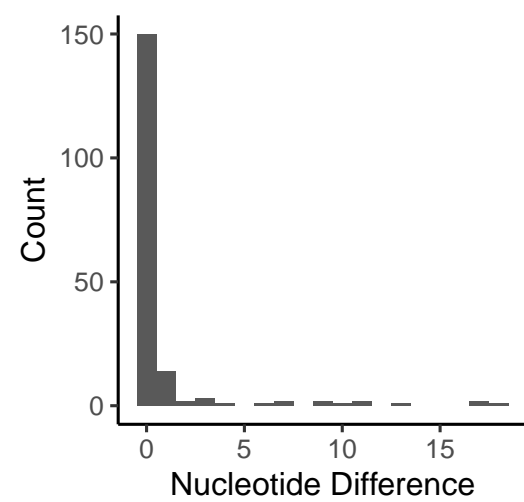
IGHV4-31*03

107 sequences assigned
96 (89.7%) exact matches, in which:
96 unique CDR3
5 unique J



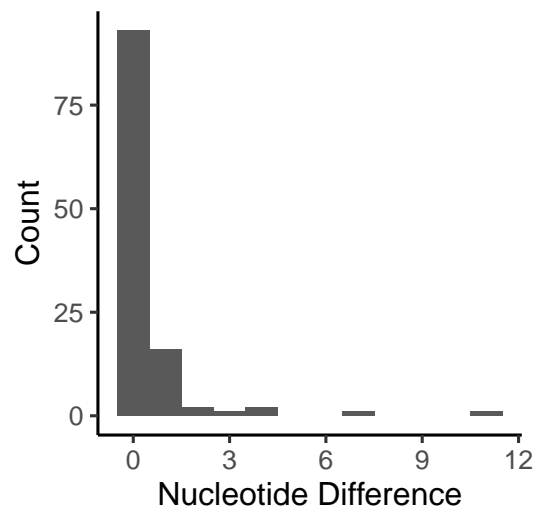
IGHV4-39*07

182 sequences assigned
150 (82.4%) exact matches, in which:
149 unique CDR3
5 unique J



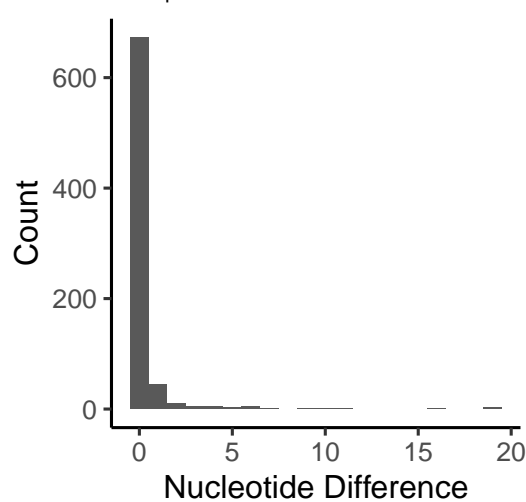
IGHV4-30-4*01

116 sequences assigned
93 (80.2%) exact matches, in which:
93 unique CDR3
6 unique J



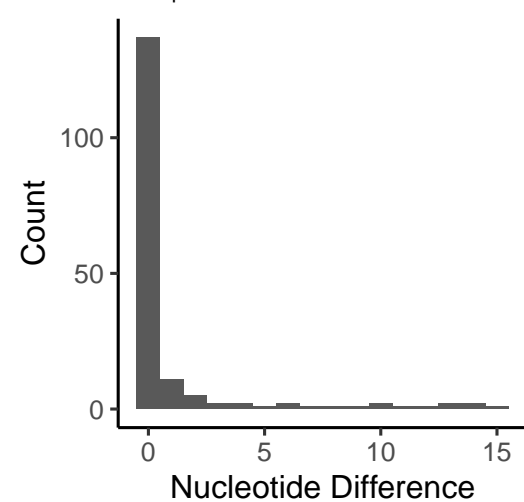
IGHV4-34*01

752 sequences assigned
673 (89.5%) exact matches, in which:
673 unique CDR3
7 unique J



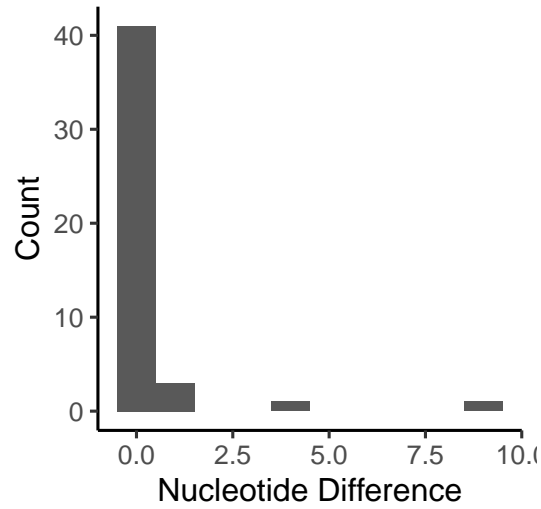
IGHV4-59*01

172 sequences assigned
137 (79.7%) exact matches, in which:
137 unique CDR3
6 unique J



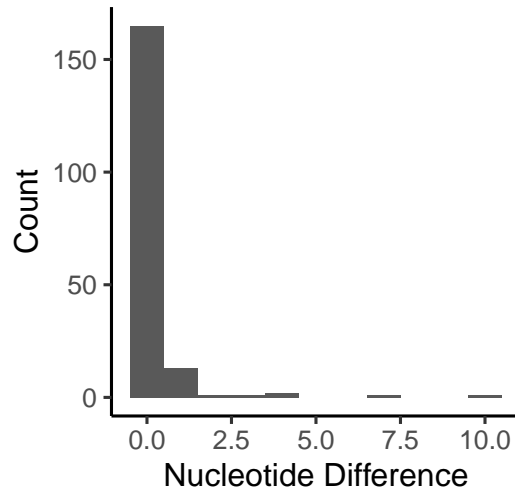
IGHV4-61*01

46 sequences assigned
41 (89.1%) exact matches, in which:
41 unique CDR3
7 unique J



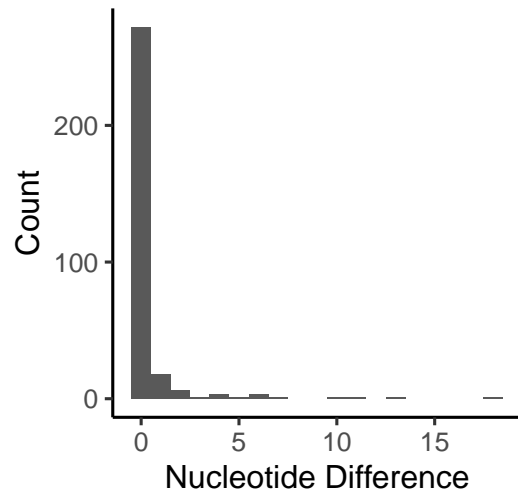
IGHV6-1*01

184 sequences assigned
165 (89.7%) exact matches, in which:
164 unique CDR3
6 unique J



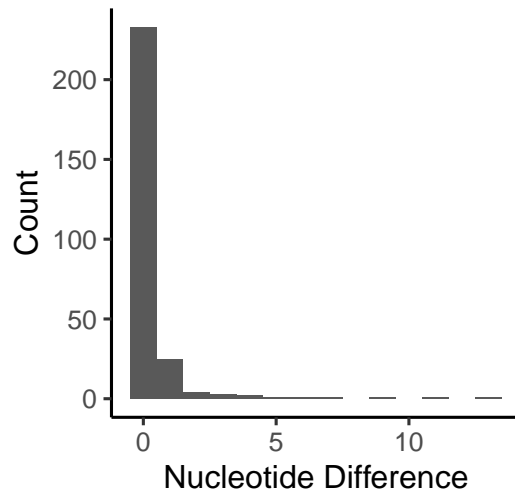
IGHV5-10-1*03

309 sequences assigned
272 (88%) exact matches, in which:
272 unique CDR3
7 unique J



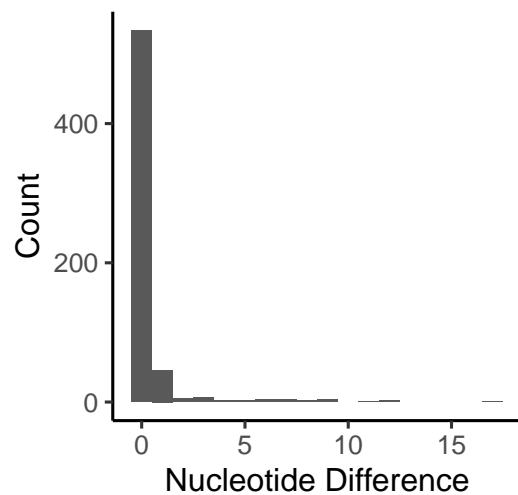
IGHV7-4-1*02

273 sequences assigned
233 (85.3%) exact matches, in which:
233 unique CDR3
7 unique J

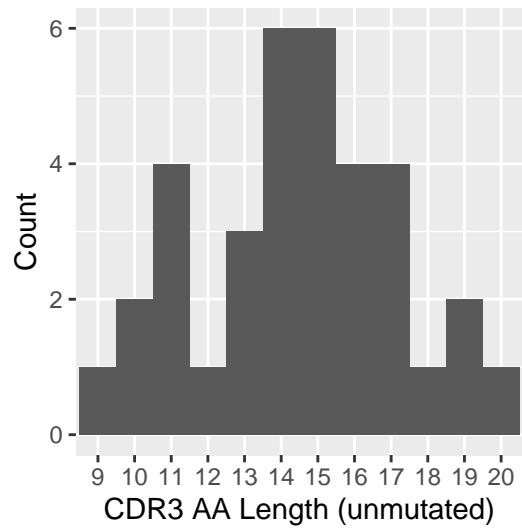


IGHV5-51*01

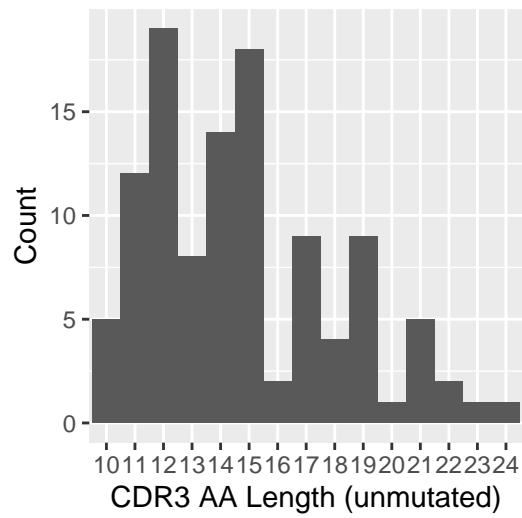
614 sequences assigned
534 (87%) exact matches, in which:
533 unique CDR3
7 unique J



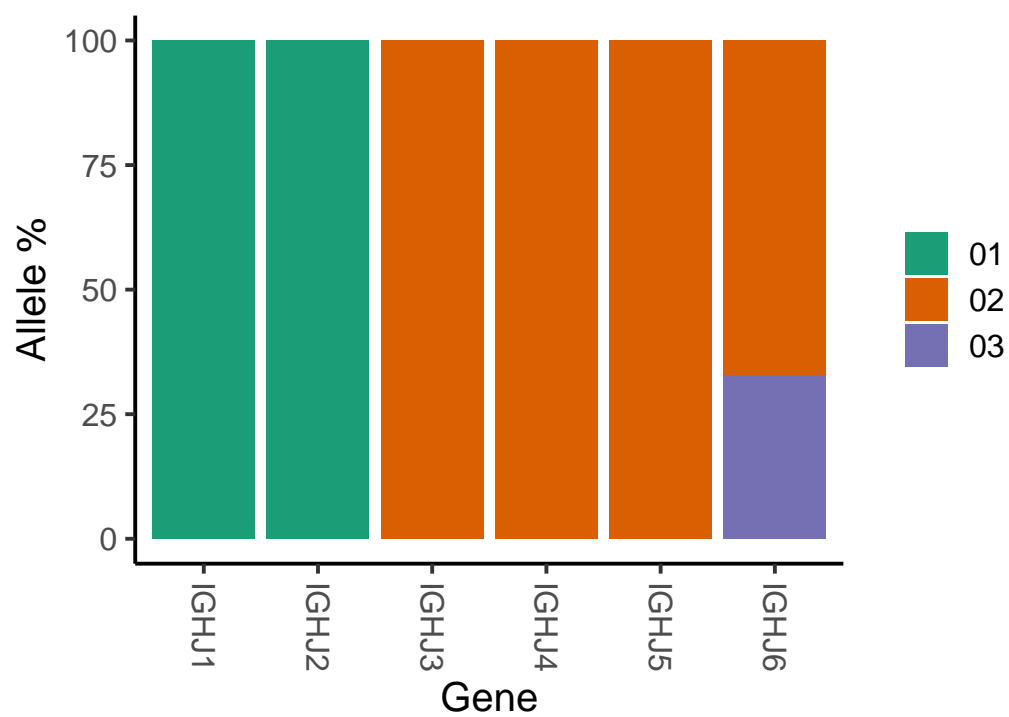
IGHV4-30-2*01_C285T



IGHV4-38-2*02_A70G



Allele Usage



Sequence Count by IGHJ6 allele usage

