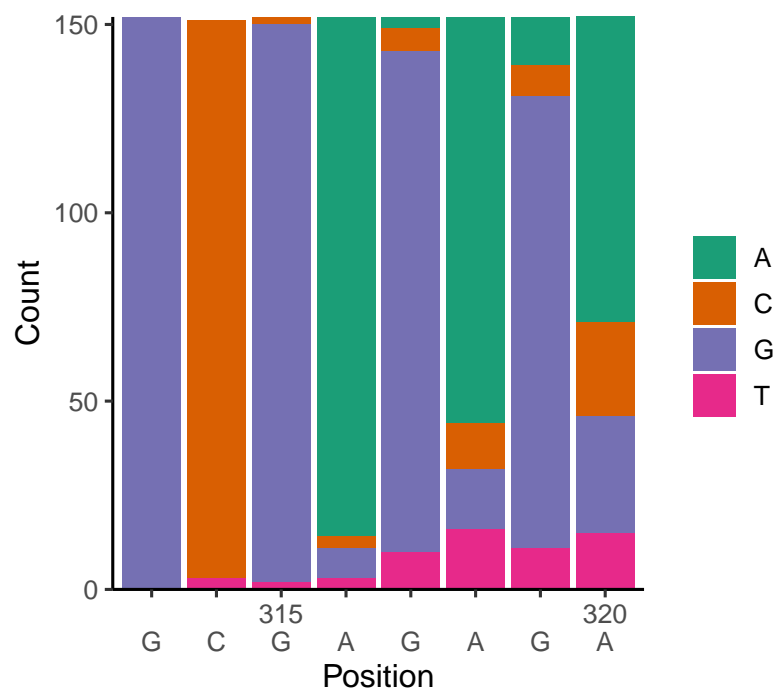
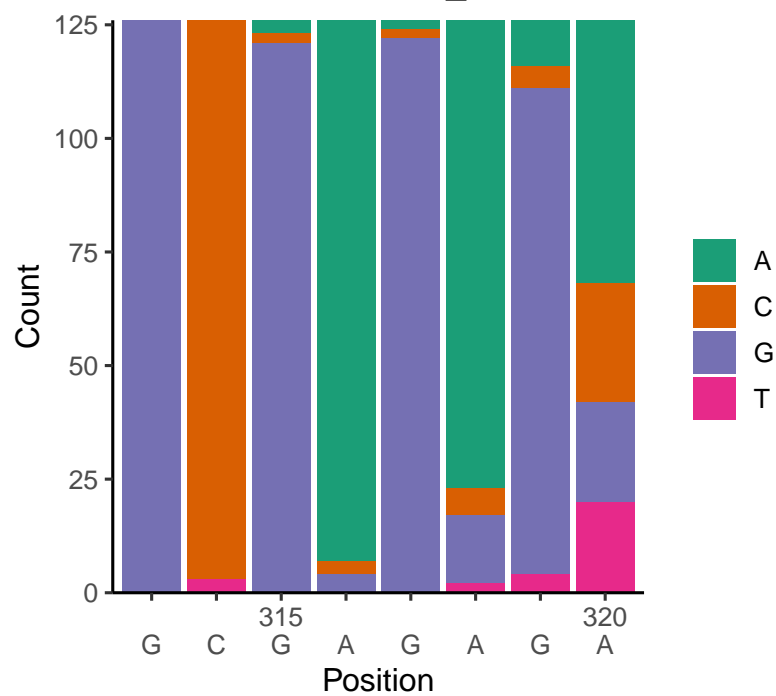


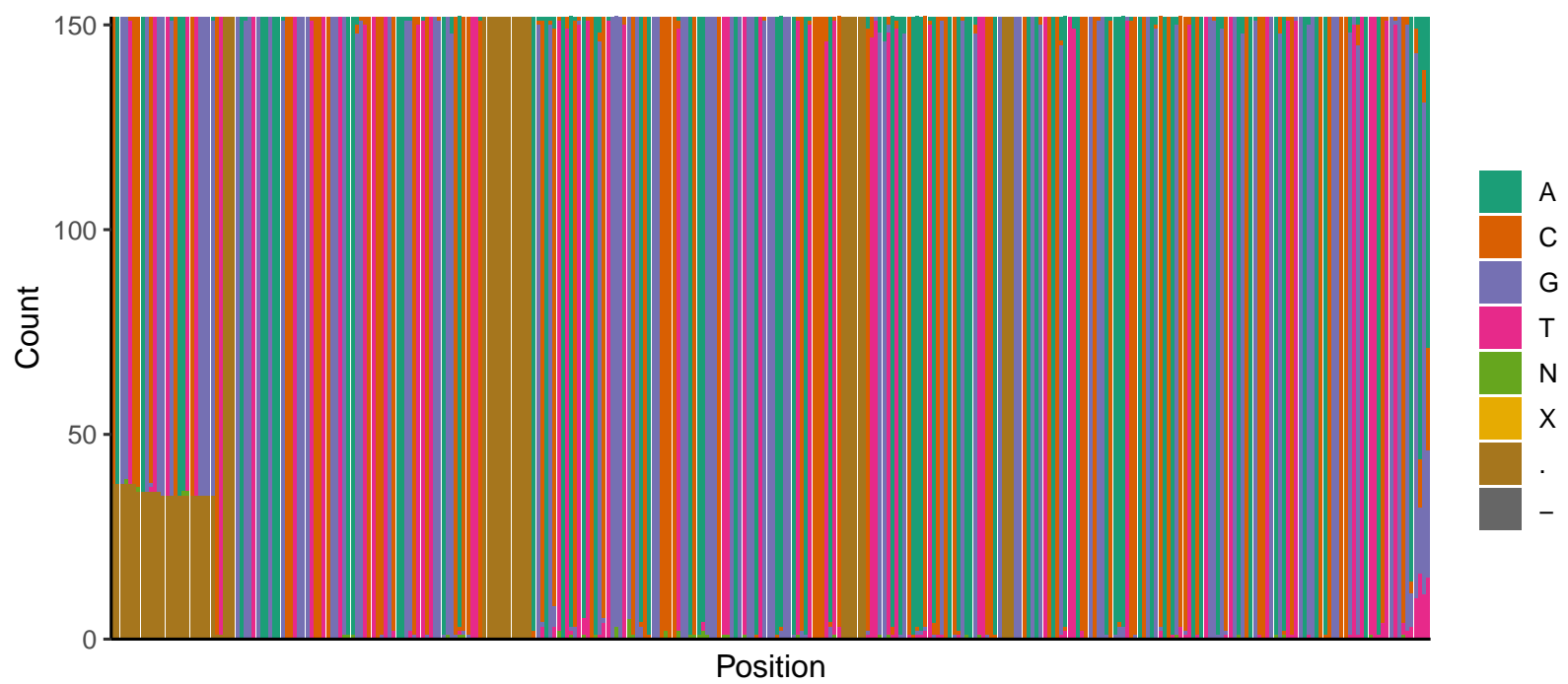
Gene IGHV1-69*08_C191T



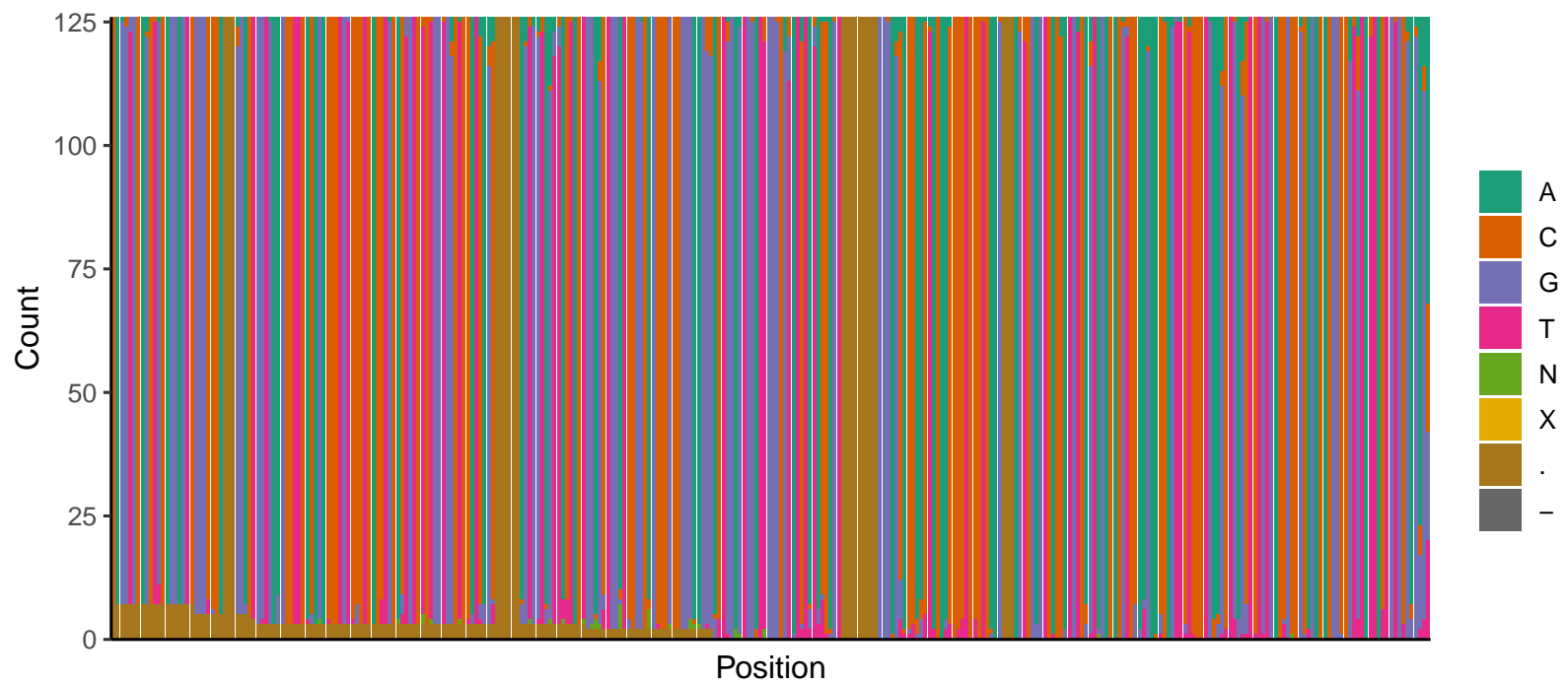
Gene IGHV4-61*02_A234G



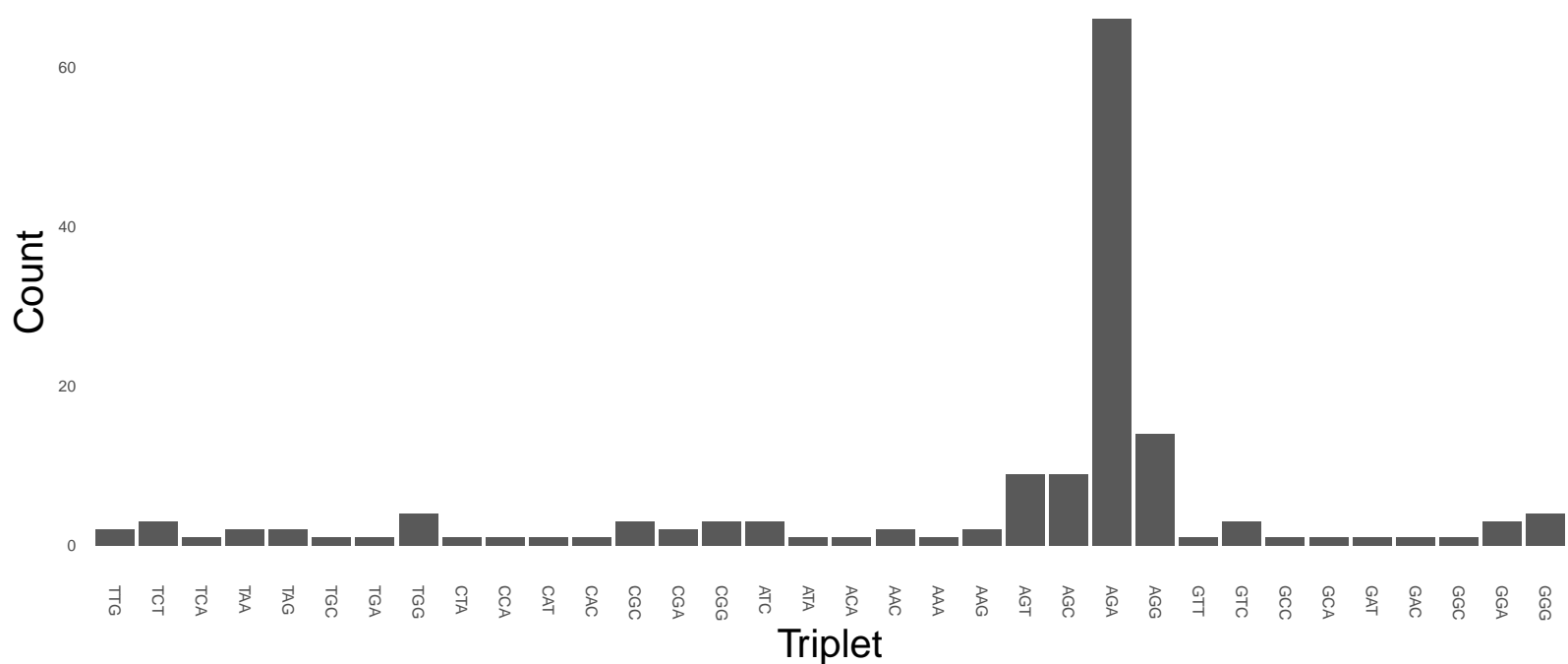
Gene IGHV1-69*08_C191T



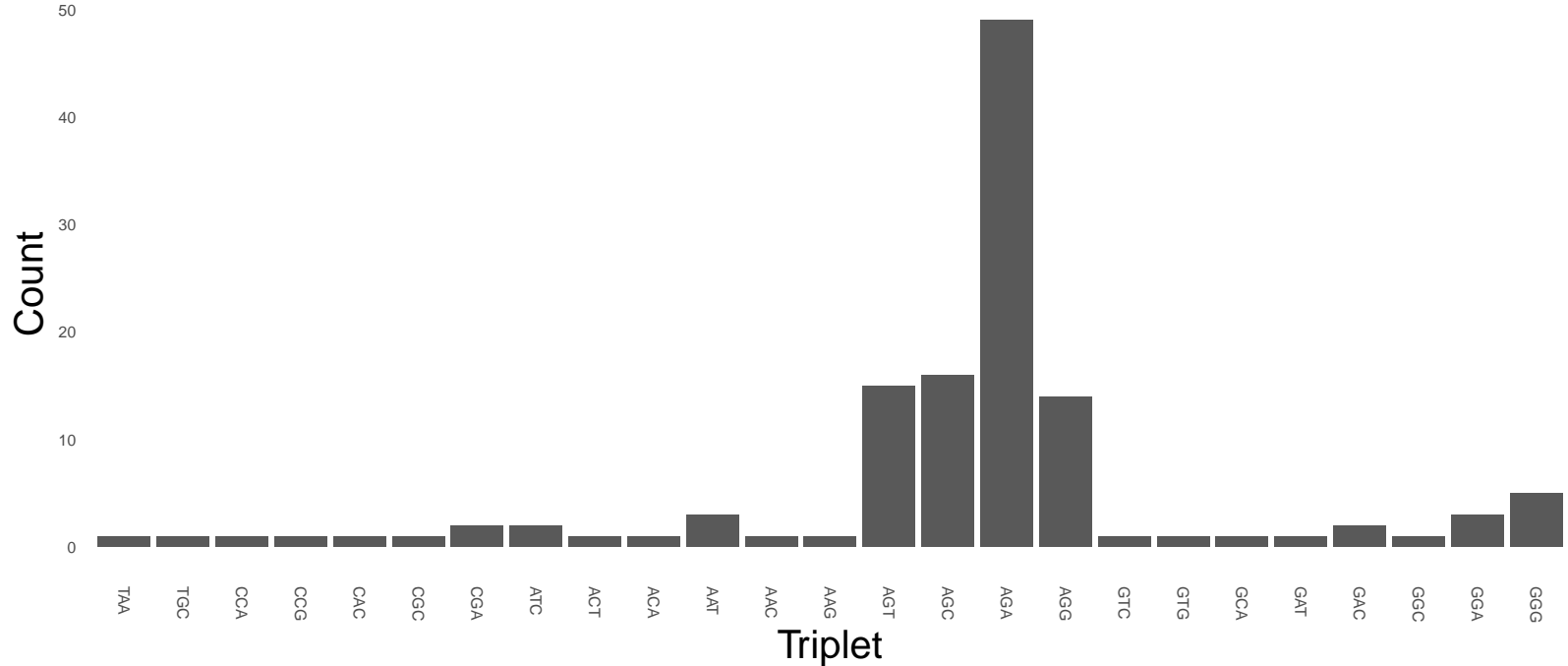
Gene IGHV4-61*02_A234G



IGHV1-69*08_C191T- Final 3 nucleotides as a triplet

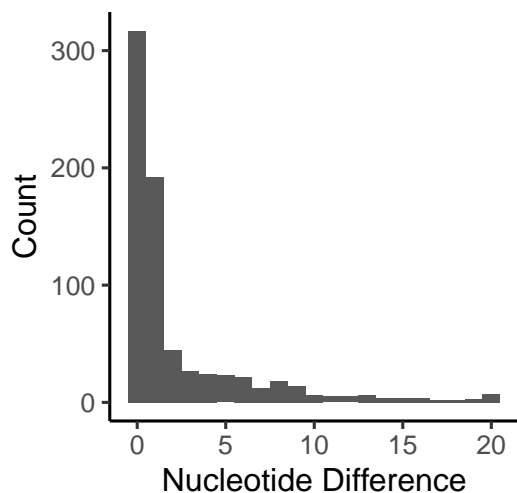


IGHV4-61*02_A234G- Final 3 nucleotides as a triplet



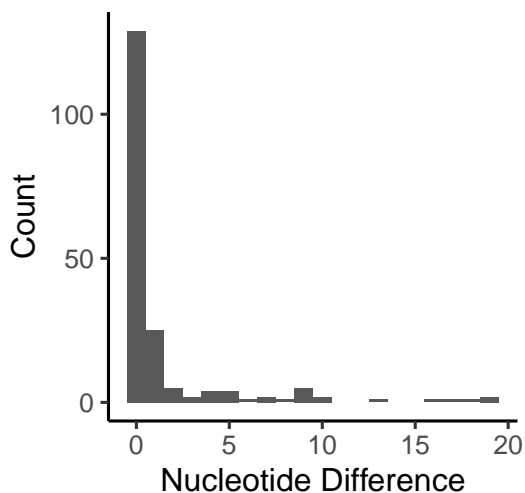
IGHV1-2*02

770 sequences assigned
317 (41.2%) exact matches, in which:
313 unique CDR3
7 unique J



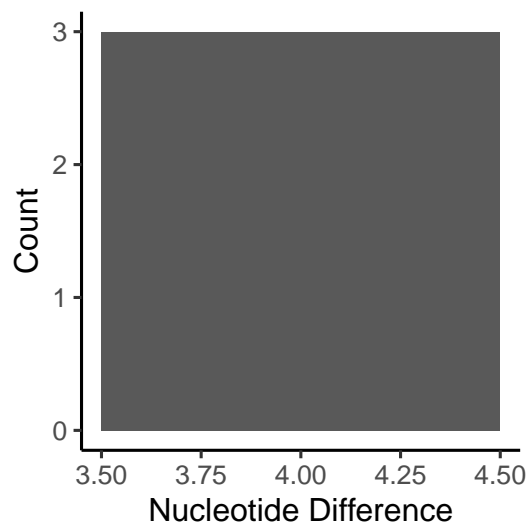
IGHV1-8*01

190 sequences assigned
129 (67.9%) exact matches, in which:
126 unique CDR3
7 unique J



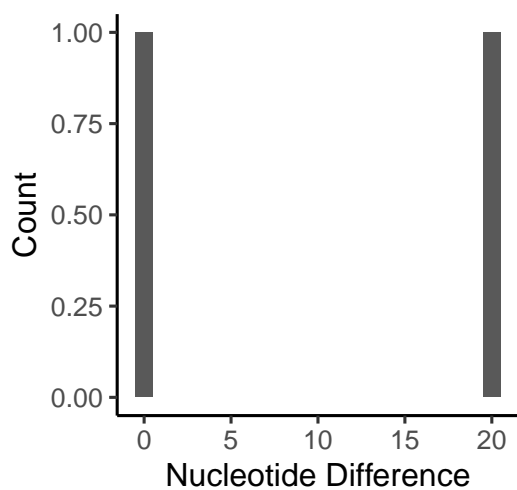
IGHV1-45*02

3 sequences assigned
No exact matches.



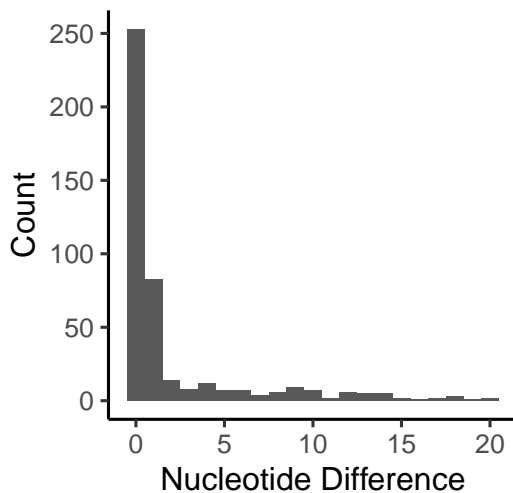
IGHV1-3*01

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



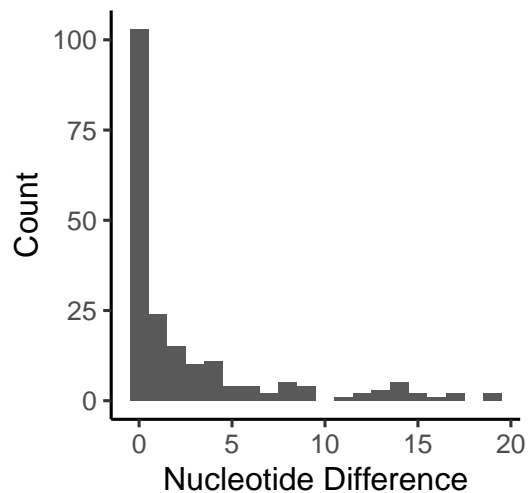
IGHV1-18*01

449 sequences assigned
253 (56.3%) exact matches, in which:
247 unique CDR3
7 unique J



IGHV1-46*03

206 sequences assigned
103 (50%) exact matches, in which:
102 unique CDR3
7 unique J



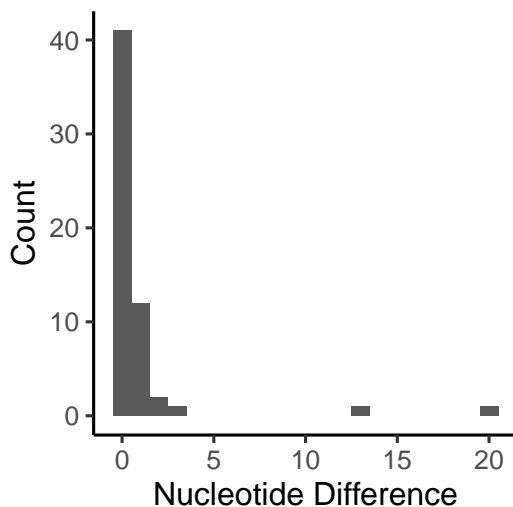
IGHV1-3*02

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



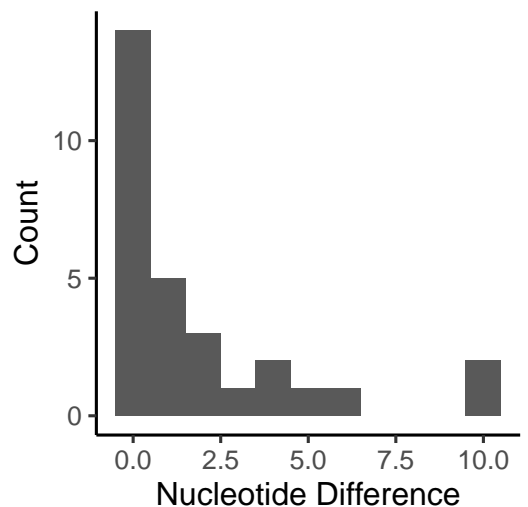
IGHV1-24*01

62 sequences assigned
41 (66.1%) exact matches, in which:
40 unique CDR3
7 unique J



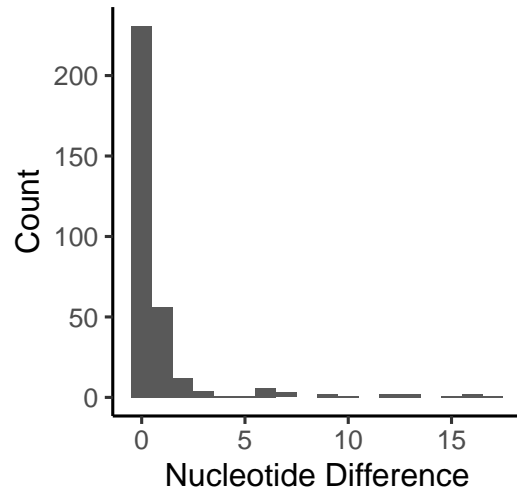
IGHV1-58*02

33 sequences assigned
14 (42.4%) exact matches, in which:
13 unique CDR3
5 unique J



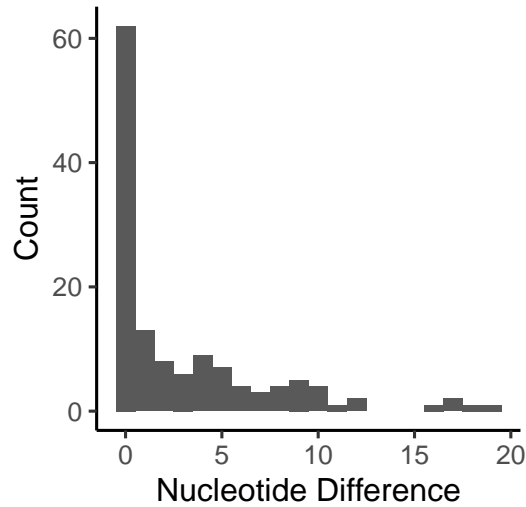
IGHV1-69*01

328 sequences assigned
231 (70.4%) exact matches, in which:
226 unique CDR3
7 unique J



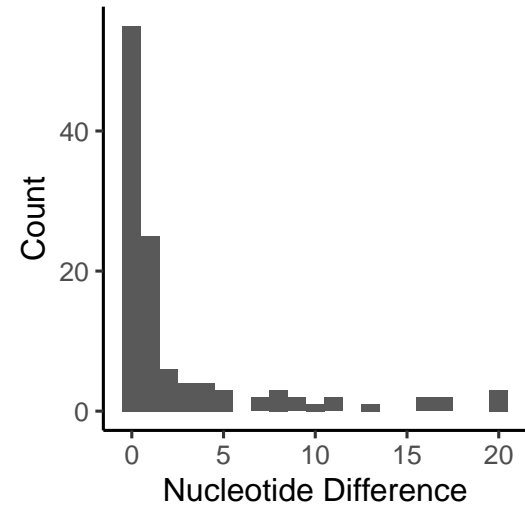
IGHV2-5*02

136 sequences assigned
62 (45.6%) exact matches, in which:
62 unique CDR3
5 unique J



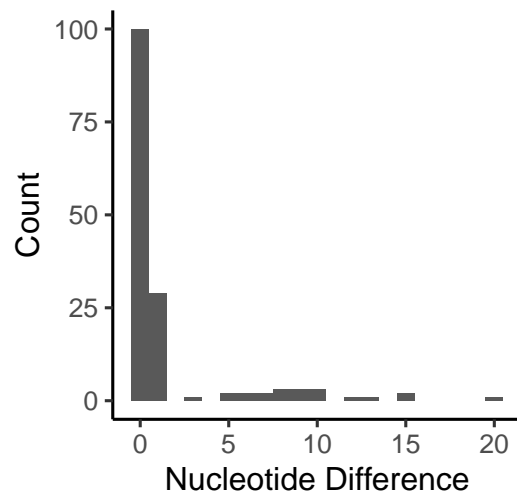
IGHV3-7*01

163 sequences assigned
55 (33.7%) exact matches, in which:
53 unique CDR3
4 unique J



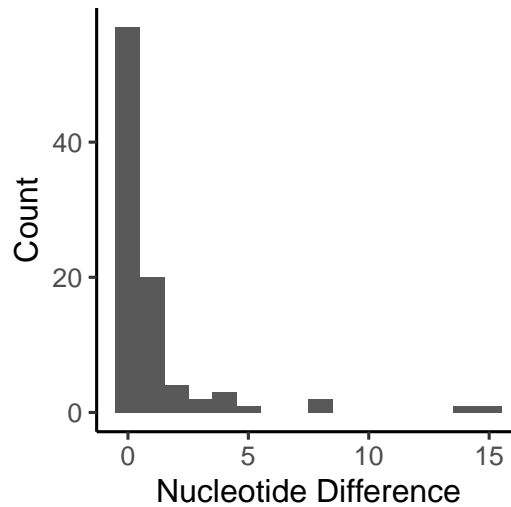
IGHV1-69*08_C191T

152 sequences assigned
100 (65.8%) exact matches, in which:
94 unique CDR3
5 unique J



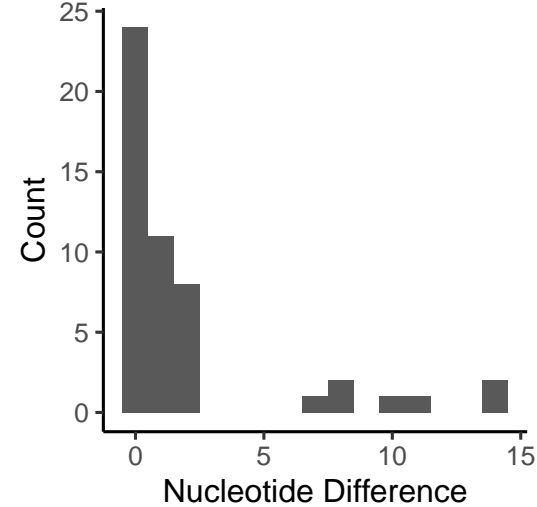
IGHV2-26*01

92 sequences assigned
57 (62%) exact matches, in which:
57 unique CDR3
6 unique J



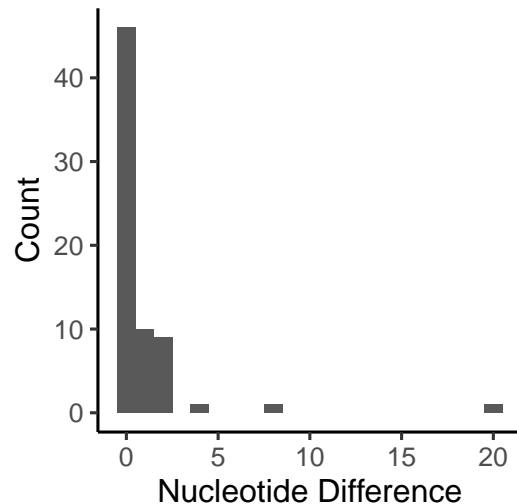
IGHV3-7*04

50 sequences assigned
24 (48%) exact matches, in which:
24 unique CDR3
6 unique J



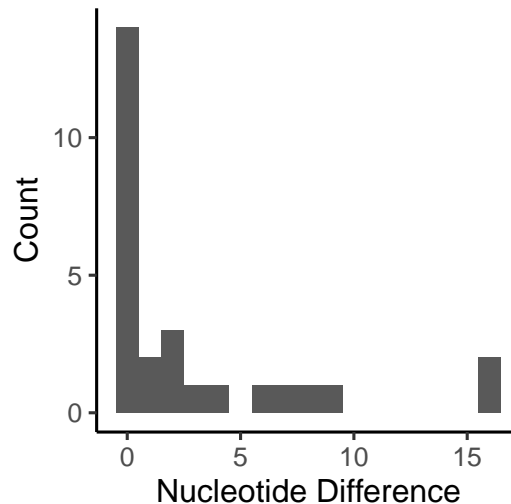
IGHV2-5*01

68 sequences assigned
46 (67.6%) exact matches, in which:
46 unique CDR3
5 unique J



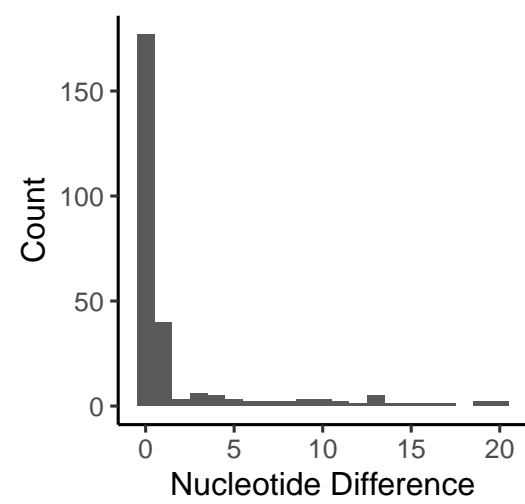
IGHV2-70*01

27 sequences assigned
14 (51.9%) exact matches, in which:
14 unique CDR3
3 unique J



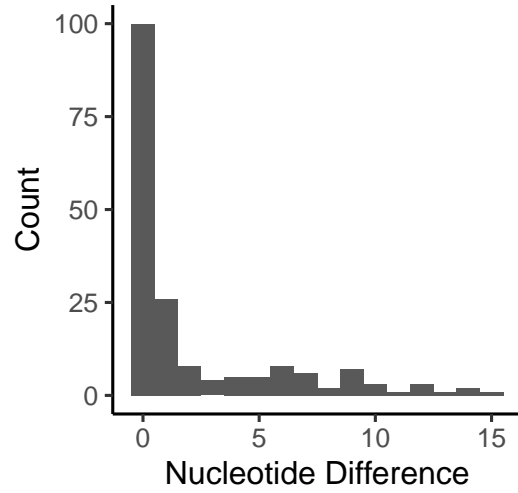
IGHV3-9*01

277 sequences assigned
177 (63.9%) exact matches, in which:
171 unique CDR3
7 unique J



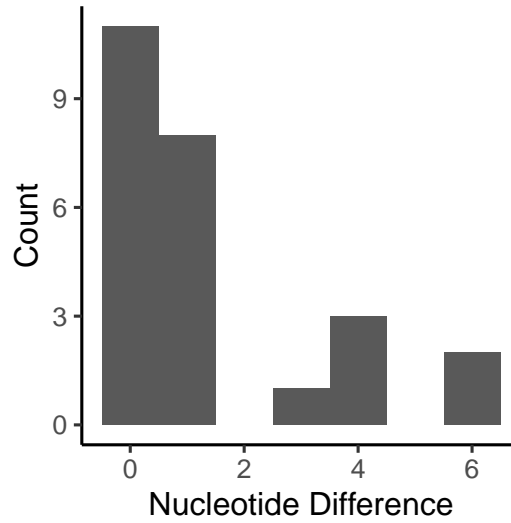
IGHV3-11*01

199 sequences assigned
100 (50.3%) exact matches, in which:
96 unique CDR3
6 unique J



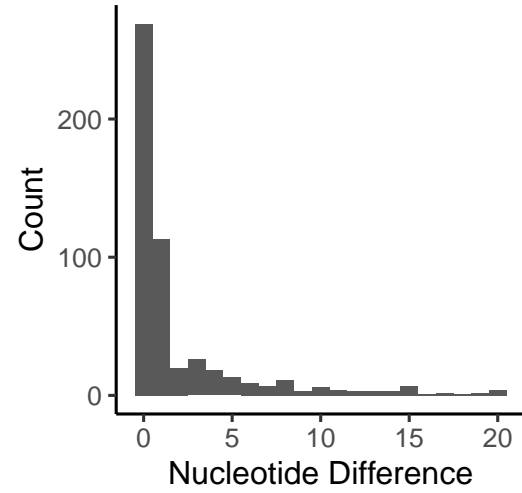
IGHV3-13*05

25 sequences assigned
11 (44%) exact matches, in which:
11 unique CDR3
4 unique J



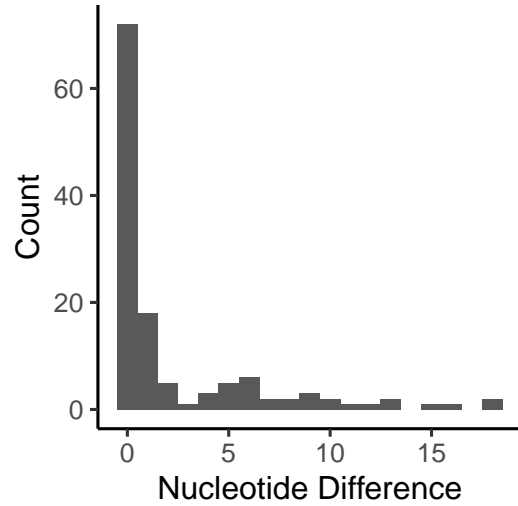
IGHV3-21*01

538 sequences assigned
269 (50%) exact matches, in which:
266 unique CDR3
7 unique J



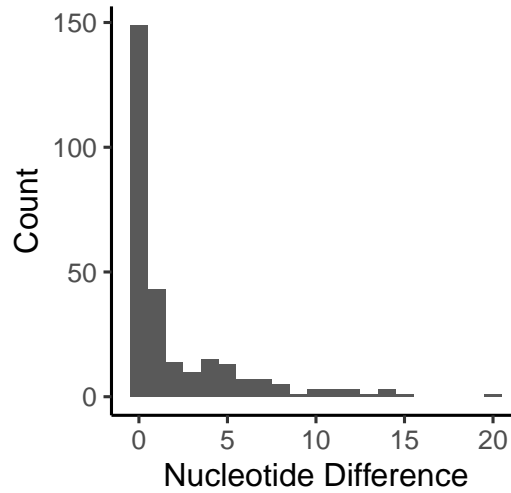
IGHV3-11*06

127 sequences assigned
72 (56.7%) exact matches, in which:
71 unique CDR3
5 unique J



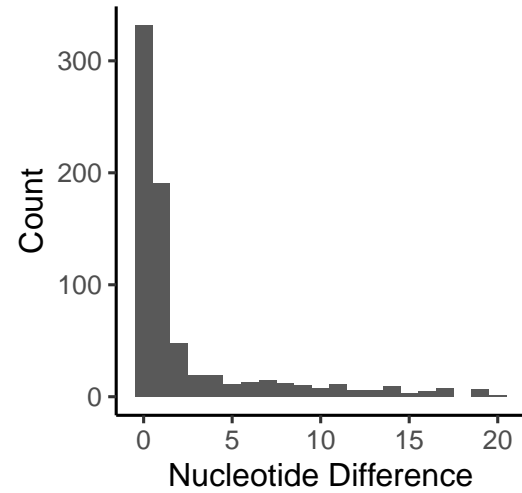
IGHV3-15*01

290 sequences assigned
149 (51.4%) exact matches, in which:
145 unique CDR3
6 unique J



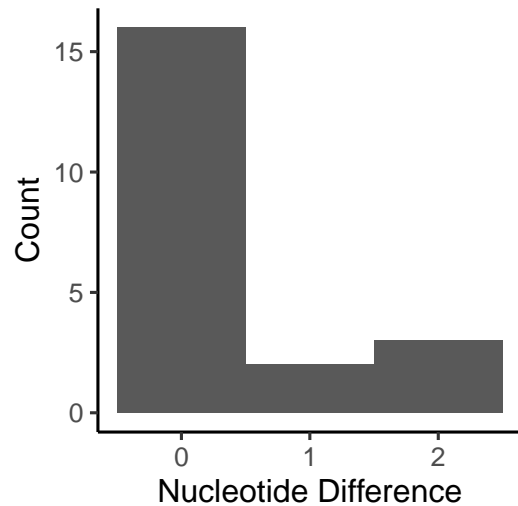
IGHV3-23*01

784 sequences assigned
332 (42.3%) exact matches, in which:
329 unique CDR3
7 unique J



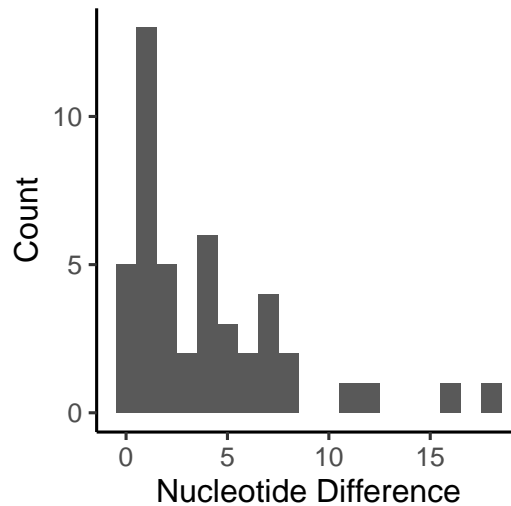
IGHV3-13*01

21 sequences assigned
16 (76.2%) exact matches, in which:
16 unique CDR3
4 unique J



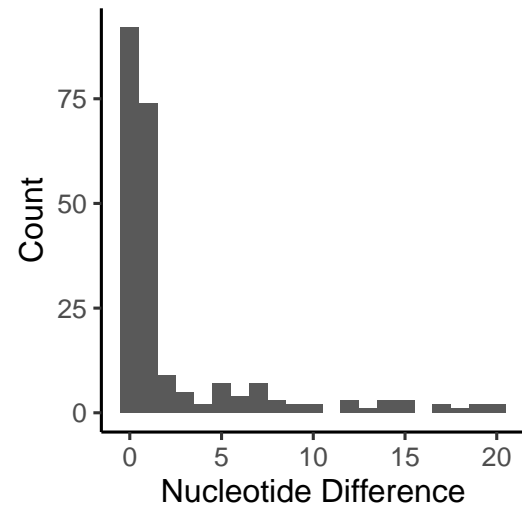
IGHV3-20*01

46 sequences assigned
5 (10.9%) exact matches, in which:
4 unique CDR3
4 unique J



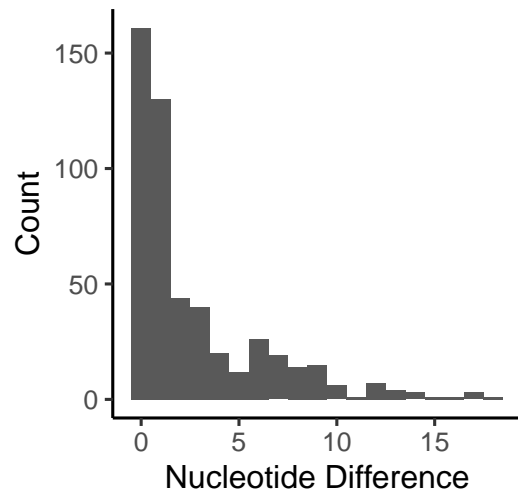
IGHV3-30-3*01

238 sequences assigned
92 (38.7%) exact matches, in which:
92 unique CDR3
5 unique J



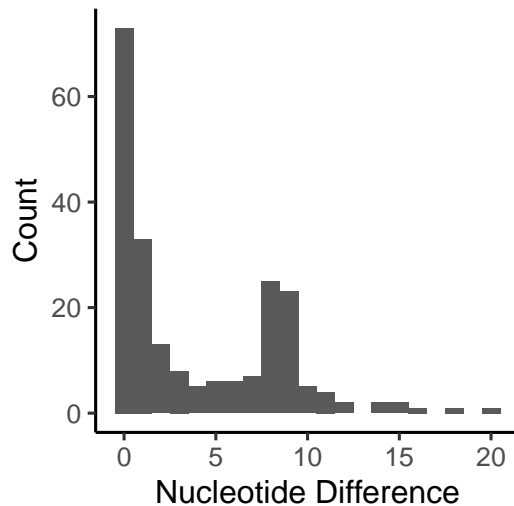
IGHV3–30*18

520 sequences assigned
161 (31%) exact matches, in which:
159 unique CDR3
7 unique J



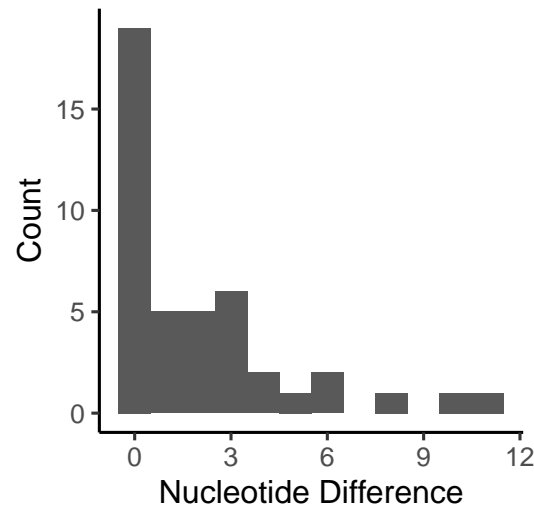
IGHV3–48*01

222 sequences assigned
73 (32.9%) exact matches, in which:
72 unique CDR3
7 unique J



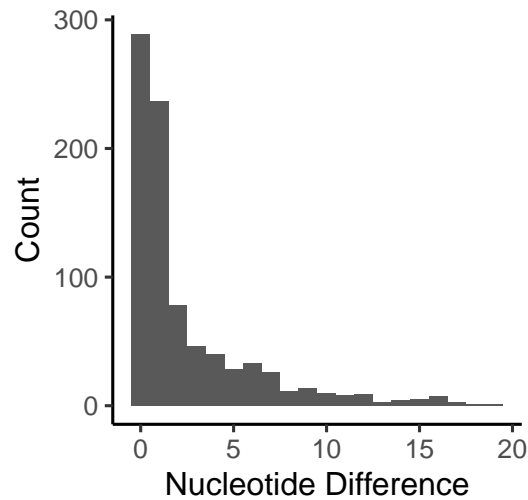
IGHV3–64*01

43 sequences assigned
19 (44.2%) exact matches, in which:
18 unique CDR3
3 unique J



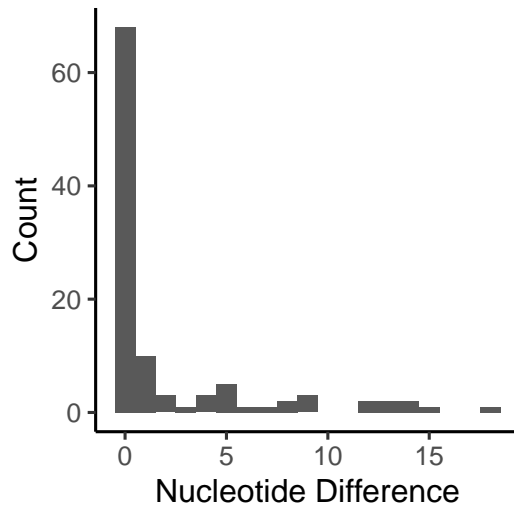
IGHV3–33*01

869 sequences assigned
289 (33.3%) exact matches, in which:
281 unique CDR3
6 unique J



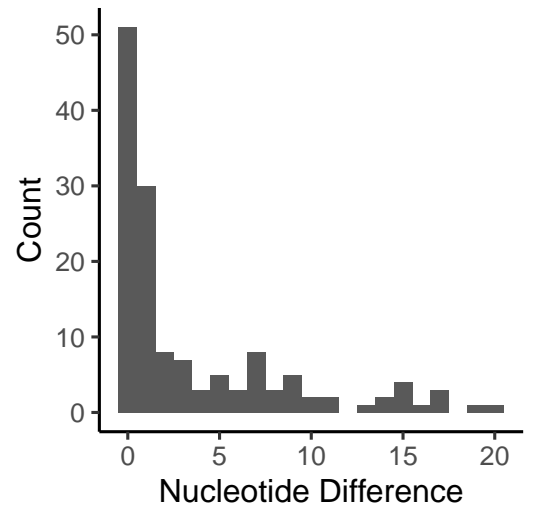
IGHV3–49*03

106 sequences assigned
68 (64.2%) exact matches, in which:
67 unique CDR3
6 unique J



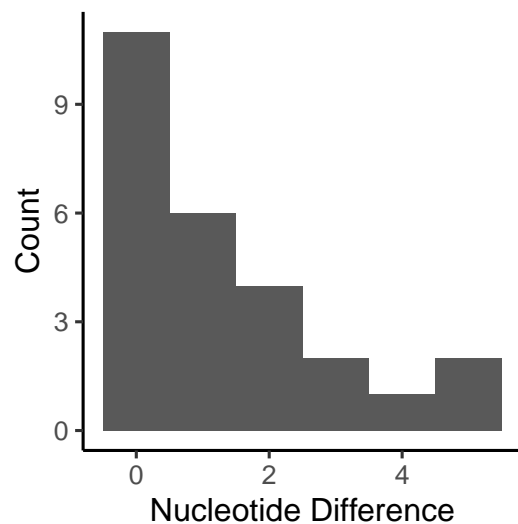
IGHV3–66*02

141 sequences assigned
51 (36.2%) exact matches, in which:
50 unique CDR3
5 unique J



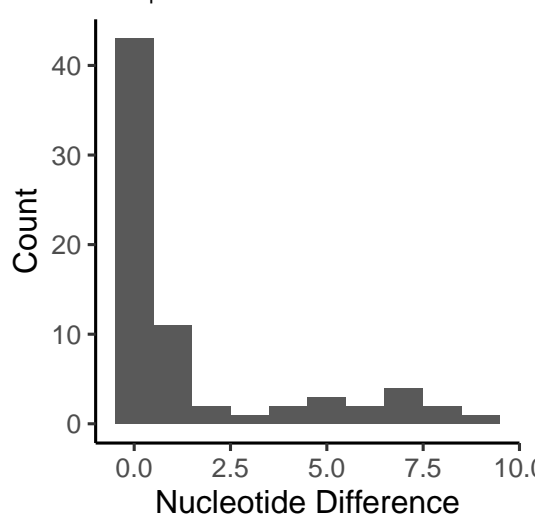
IGHV3–43*01

27 sequences assigned
11 (40.7%) exact matches, in which:
10 unique CDR3
3 unique J



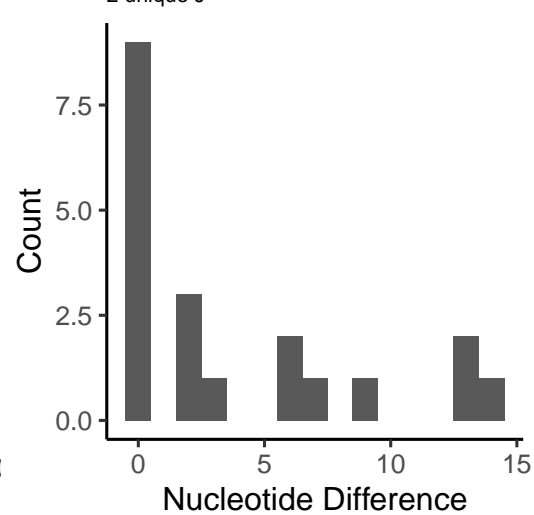
IGHV3–53*02

74 sequences assigned
43 (58.1%) exact matches, in which:
41 unique CDR3
6 unique J



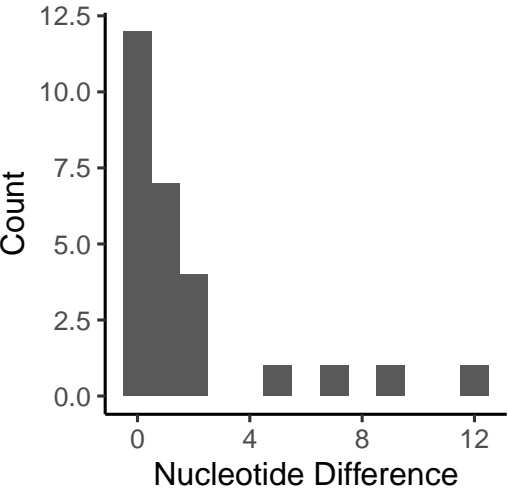
IGHV3–72*01

22 sequences assigned
9 (40.9%) exact matches, in which:
7 unique CDR3
2 unique J



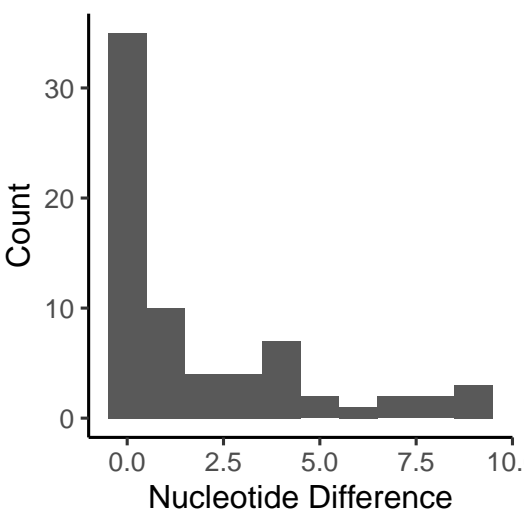
IGHV3-73*01

28 sequences assigned
12 (42.9%) exact matches, in which:
12 unique CDR3
4 unique J



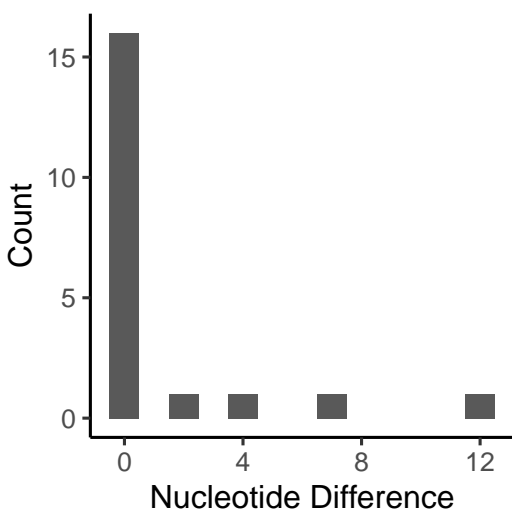
IGHV3-64D*06

70 sequences assigned
35 (50%) exact matches, in which:
34 unique CDR3
4 unique J



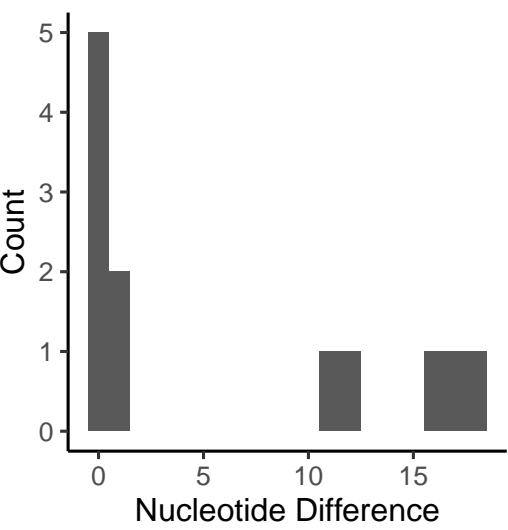
IGHV4-30-2*01

20 sequences assigned
16 (80%) exact matches, in which:
16 unique CDR3
5 unique J



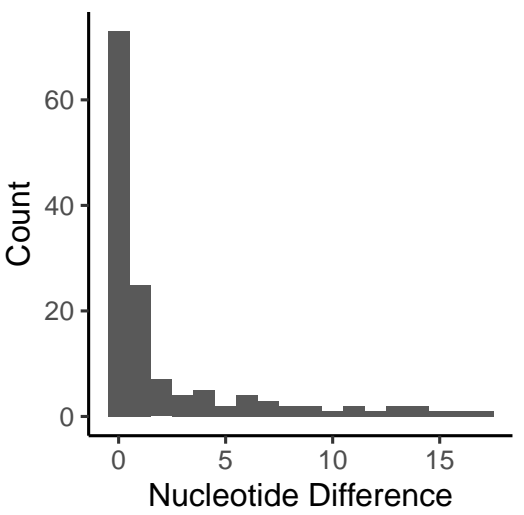
IGHV3-73*02

15 sequences assigned
5 (33.3%) exact matches, in which:
5 unique CDR3
2 unique J



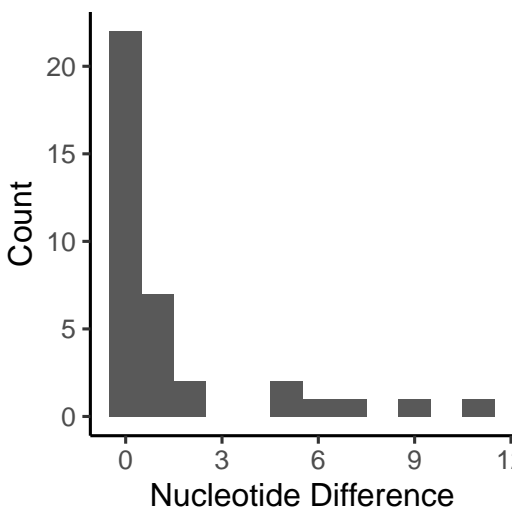
IGHV4-4*07

144 sequences assigned
73 (50.7%) exact matches, in which:
73 unique CDR3
5 unique J



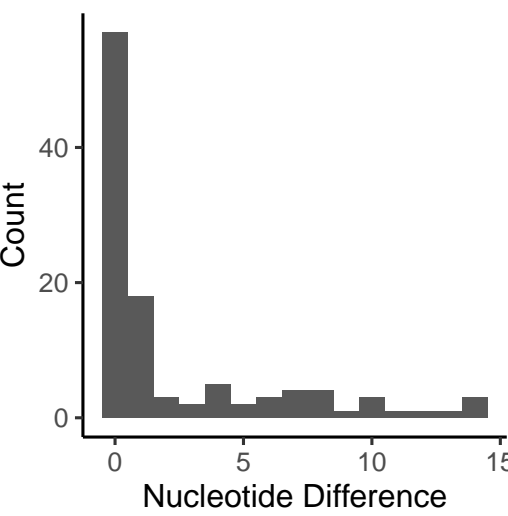
IGHV4-30-4*01

38 sequences assigned
22 (57.9%) exact matches, in which:
21 unique CDR3
6 unique J



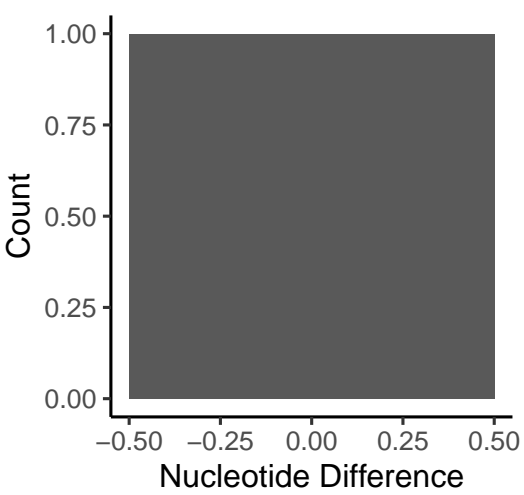
IGHV3-74*01

114 sequences assigned
57 (50%) exact matches, in which:
57 unique CDR3
6 unique J



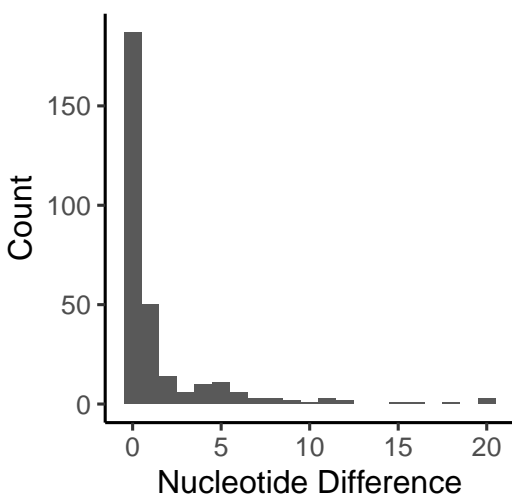
IGHV4-28*01

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



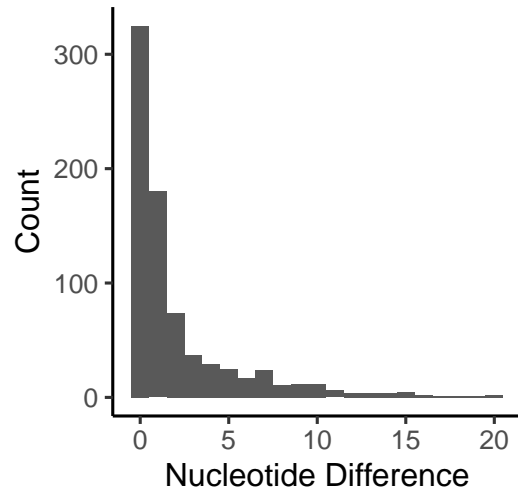
IGHV4-31*03

315 sequences assigned
187 (59.4%) exact matches, in which:
185 unique CDR3
7 unique J



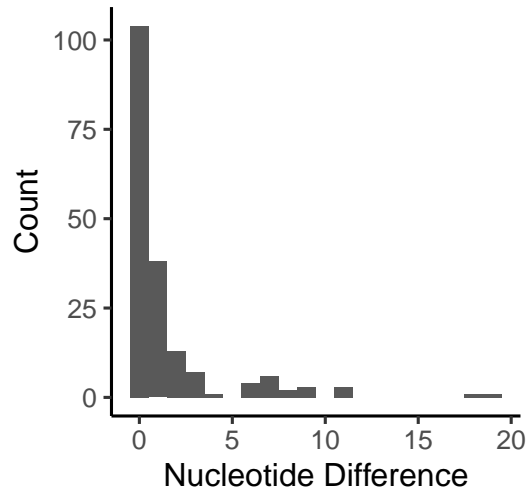
IGHV4-34*01

785 sequences assigned
325 (41.4%) exact matches, in which:
310 unique CDR3
7 unique J



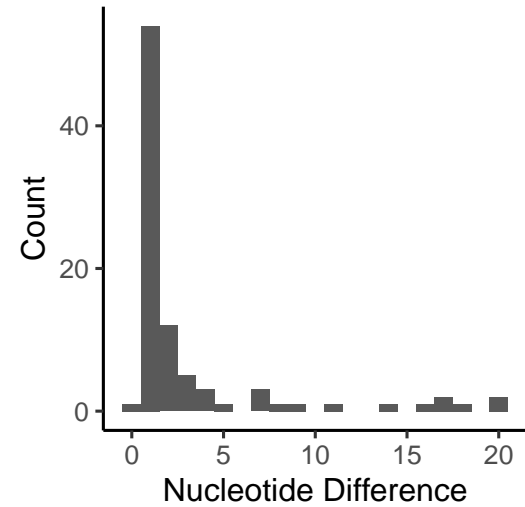
IGHV4-61*02

185 sequences assigned
104 (56.2%) exact matches, in which:
103 unique CDR3
5 unique J



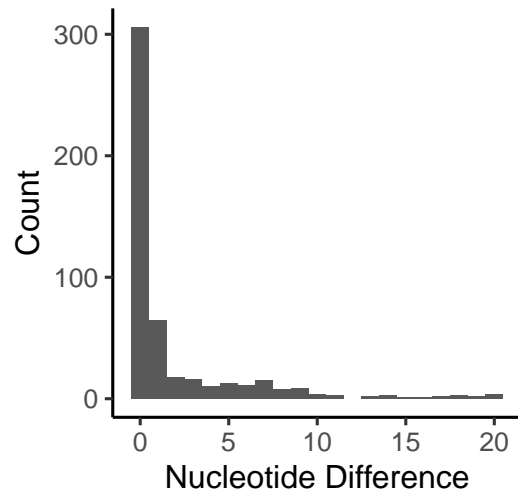
IGHV5-51*01

90 sequences assigned
1 (1.1%) exact matches, in which:
1 unique CDR3
1 unique J



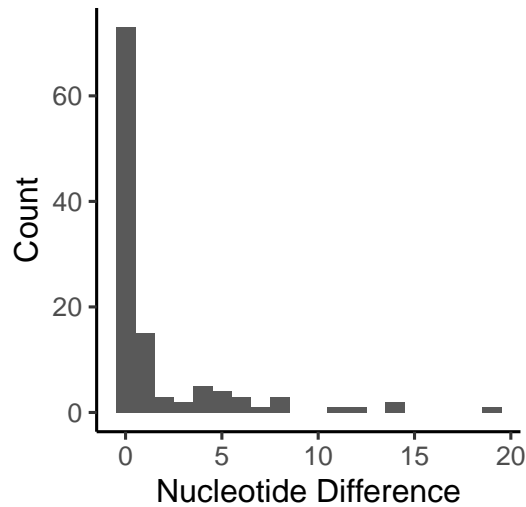
IGHV4-39*01

506 sequences assigned
306 (60.5%) exact matches, in which:
299 unique CDR3
6 unique J



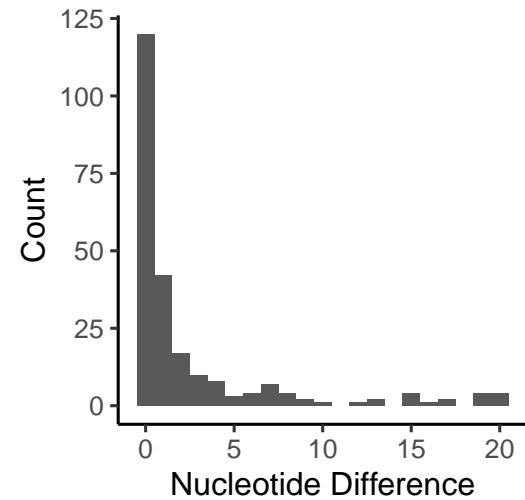
IGHV4-61*02_A234G

126 sequences assigned
73 (57.9%) exact matches, in which:
73 unique CDR3
5 unique J



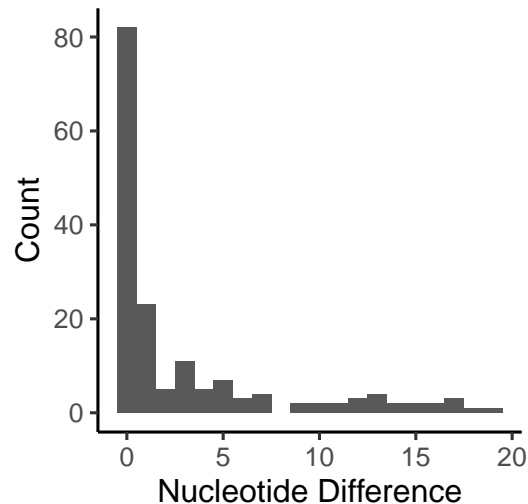
IGHV5-51*03

241 sequences assigned
120 (49.8%) exact matches, in which:
117 unique CDR3
7 unique J



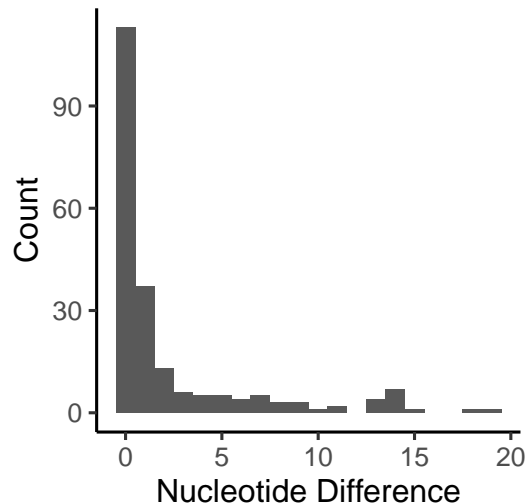
IGHV4-59*01

185 sequences assigned
82 (44.3%) exact matches, in which:
81 unique CDR3
6 unique J



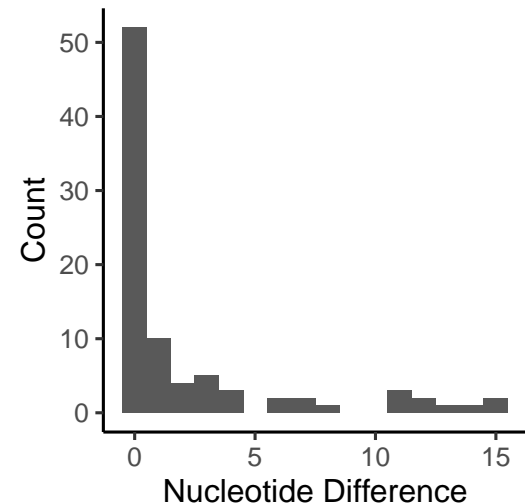
IGHV5-10-1*03

212 sequences assigned
113 (53.3%) exact matches, in which:
112 unique CDR3
6 unique J

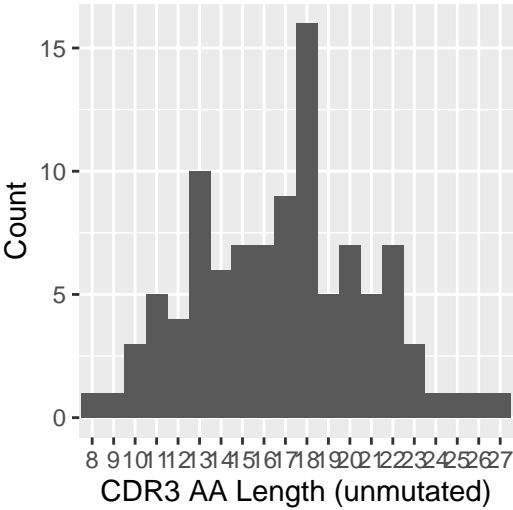


IGHV6-1*01

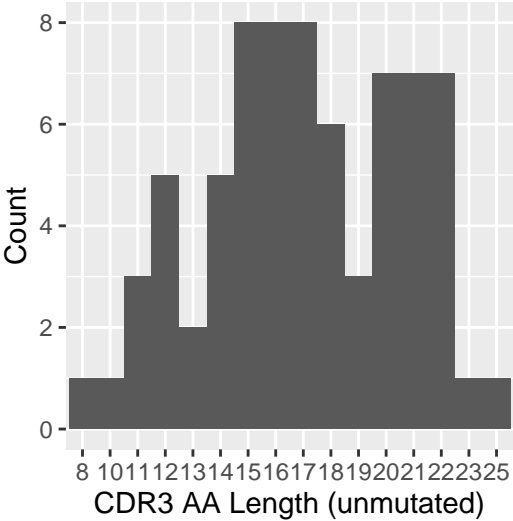
93 sequences assigned
52 (55.9%) exact matches, in which:
49 unique CDR3
6 unique J



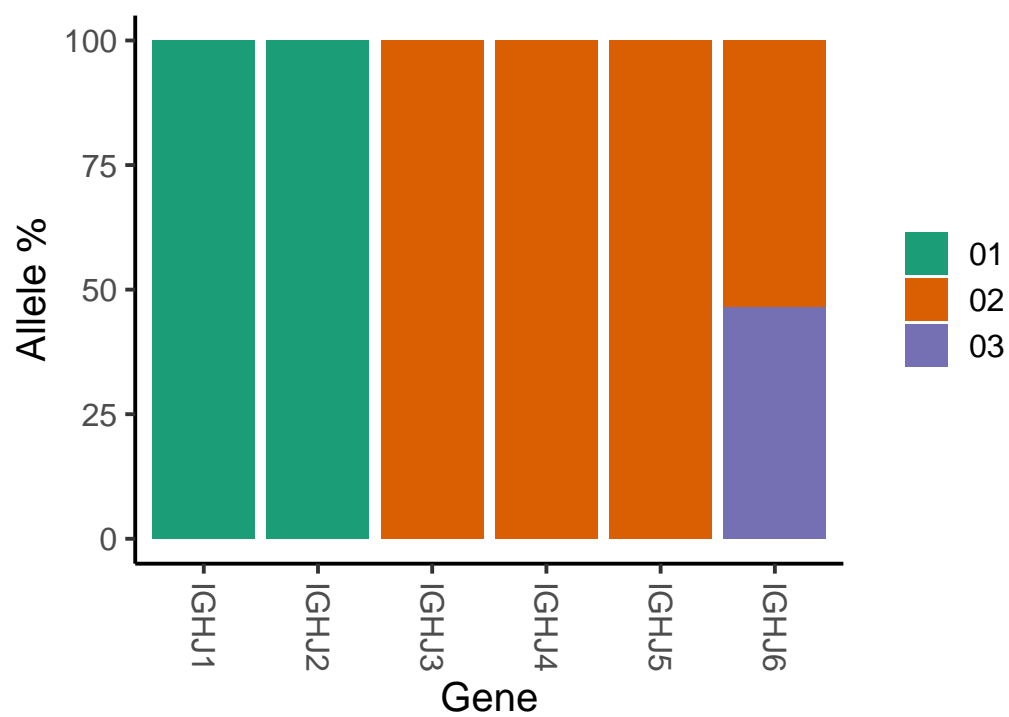
IGHV1-69*08_C191T



IGHV4-61*02_A234G



Allele Usage



Sequence Count by IGHJ6 allele usage

