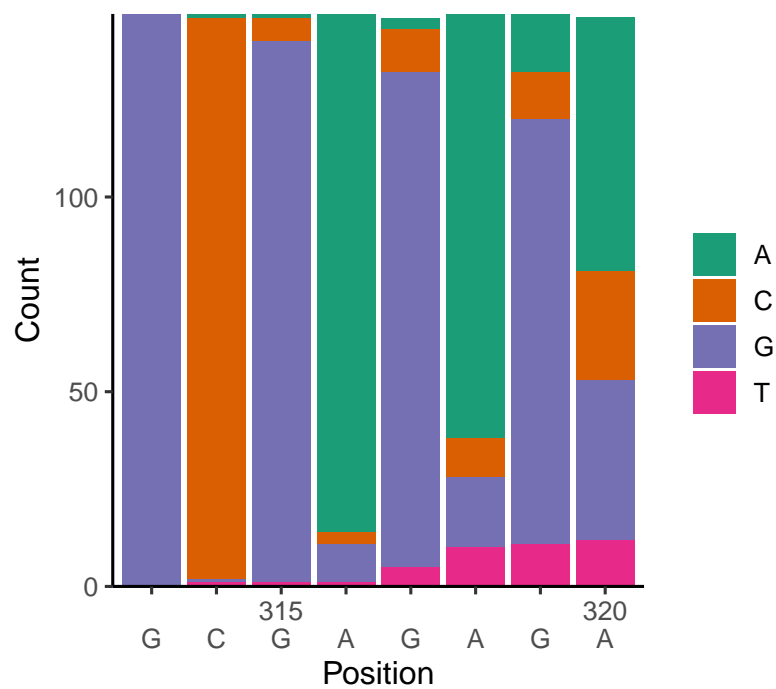
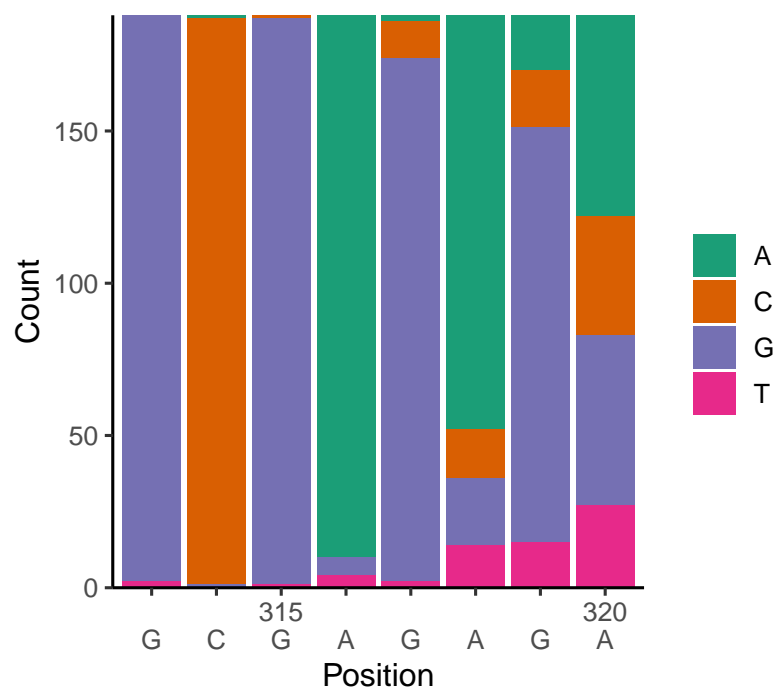


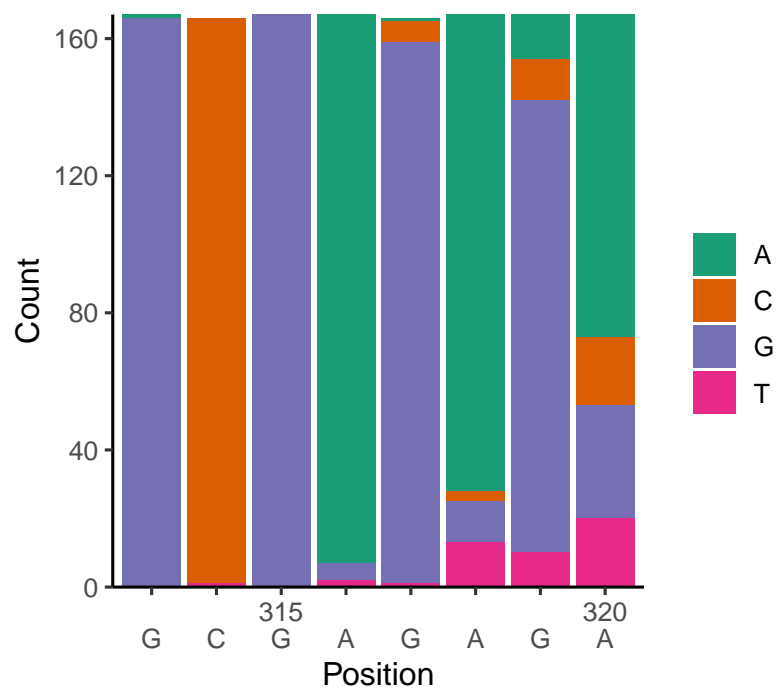
Gene IGHV1-69*08_C191T



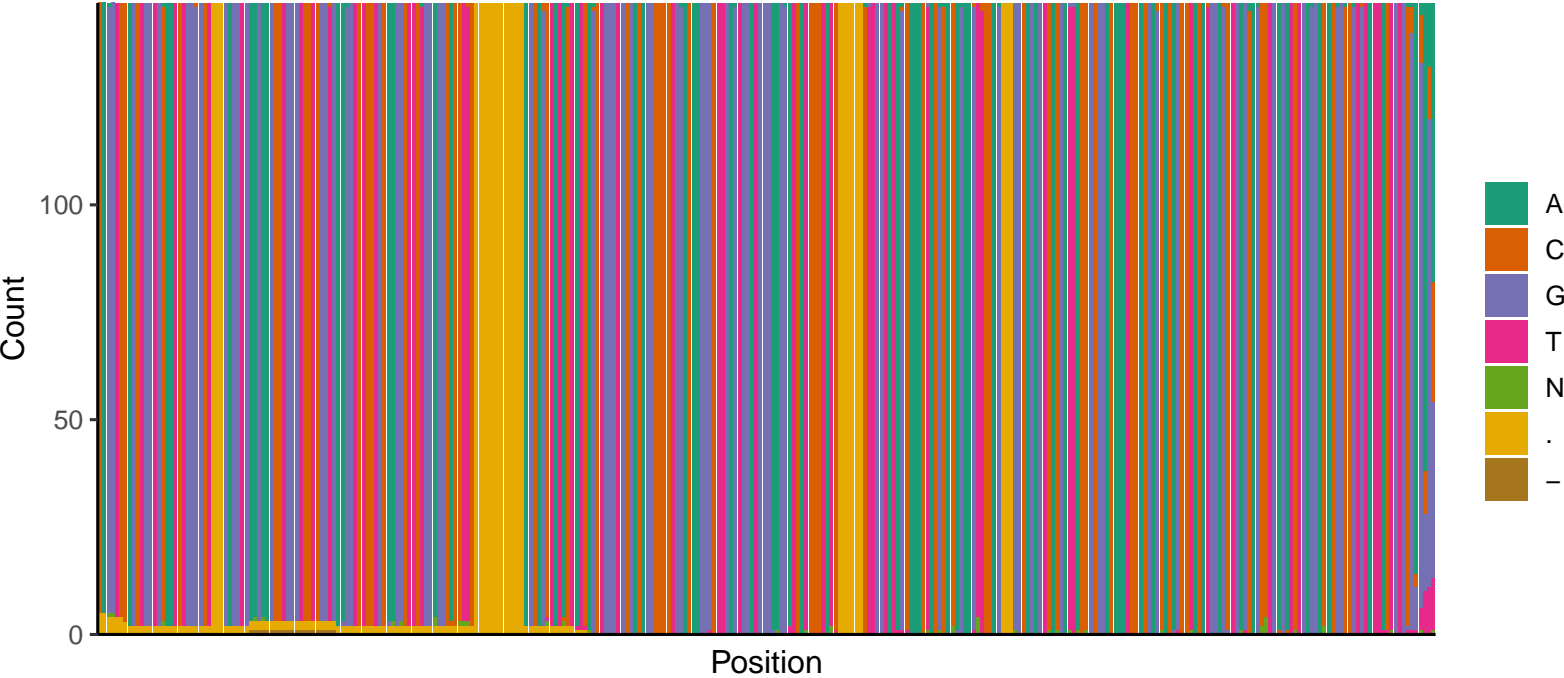
Gene IGHV1-69*12_G48A



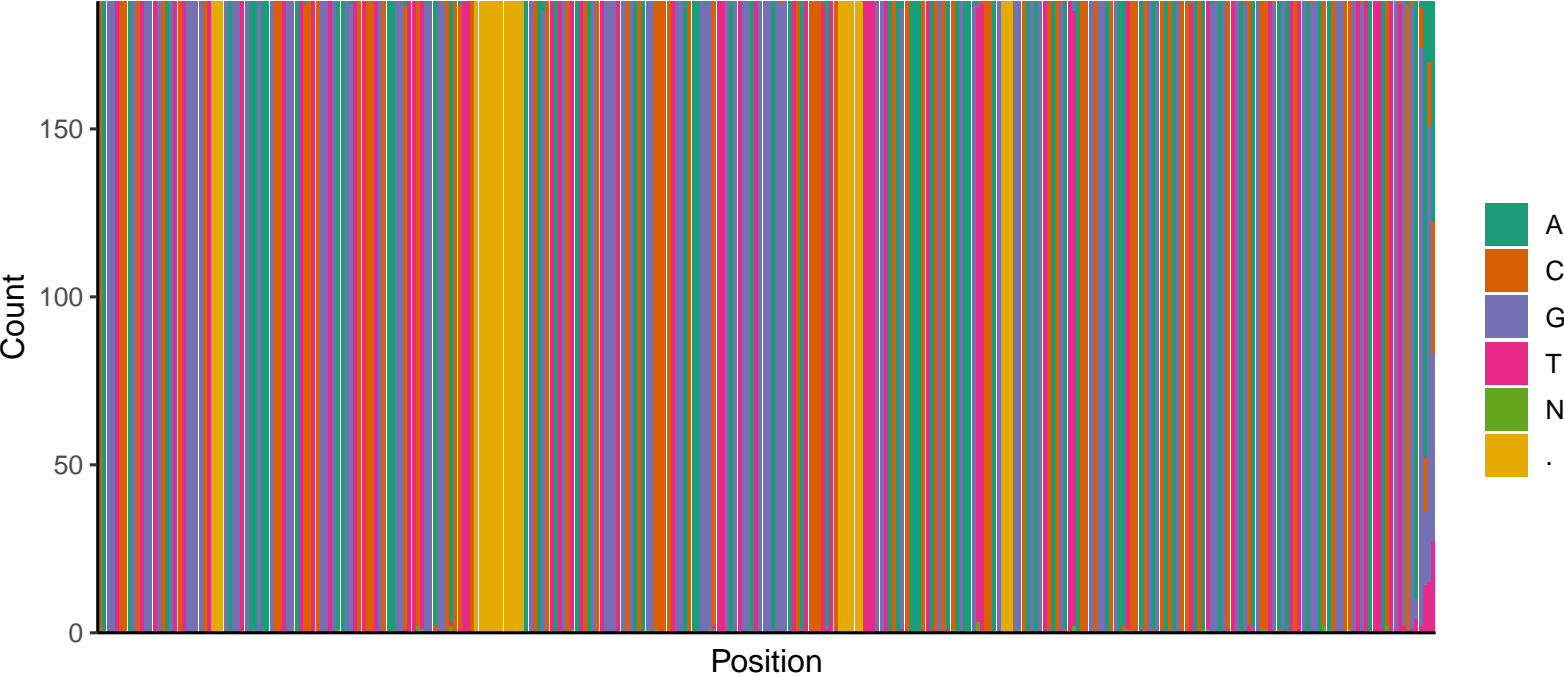
Gene IGHV3-48*01_A39C



Gene IGHV1-69*08_C191T



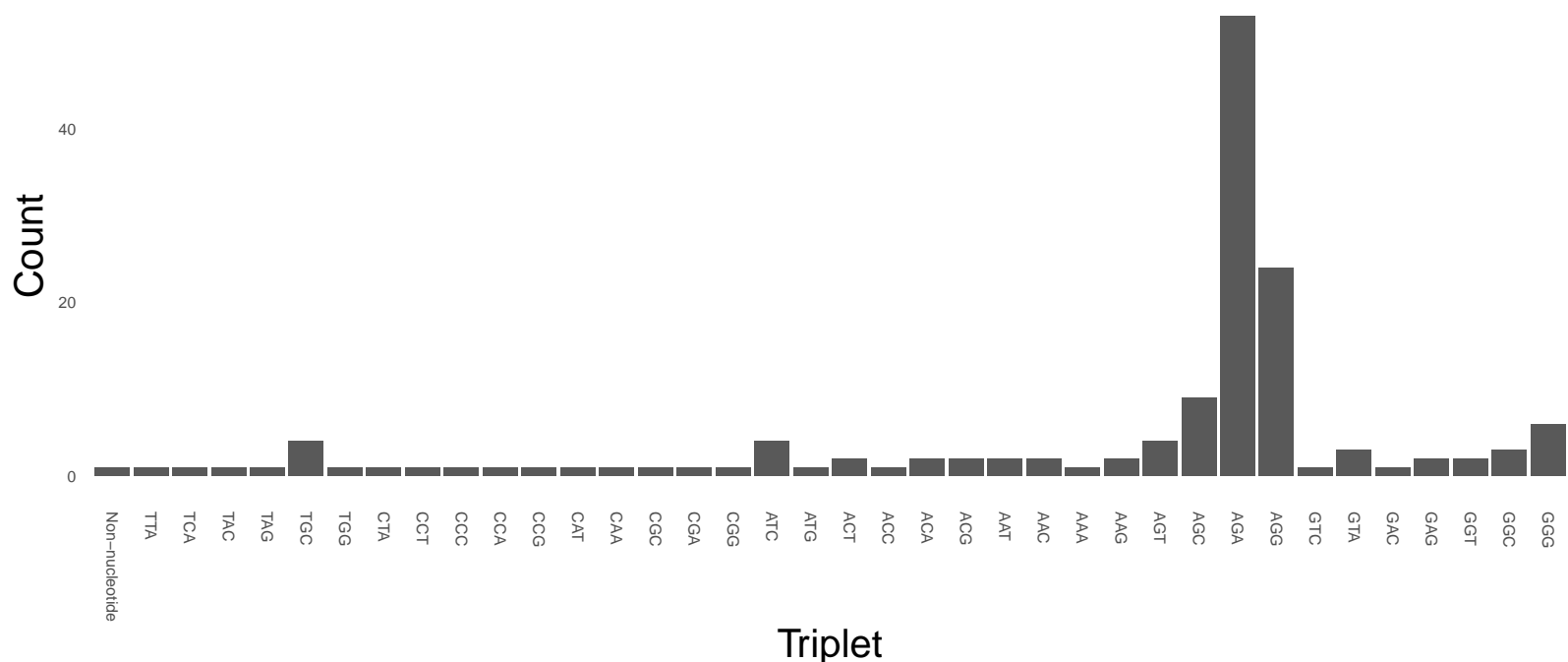
Gene IGHV1-69*12_G48A



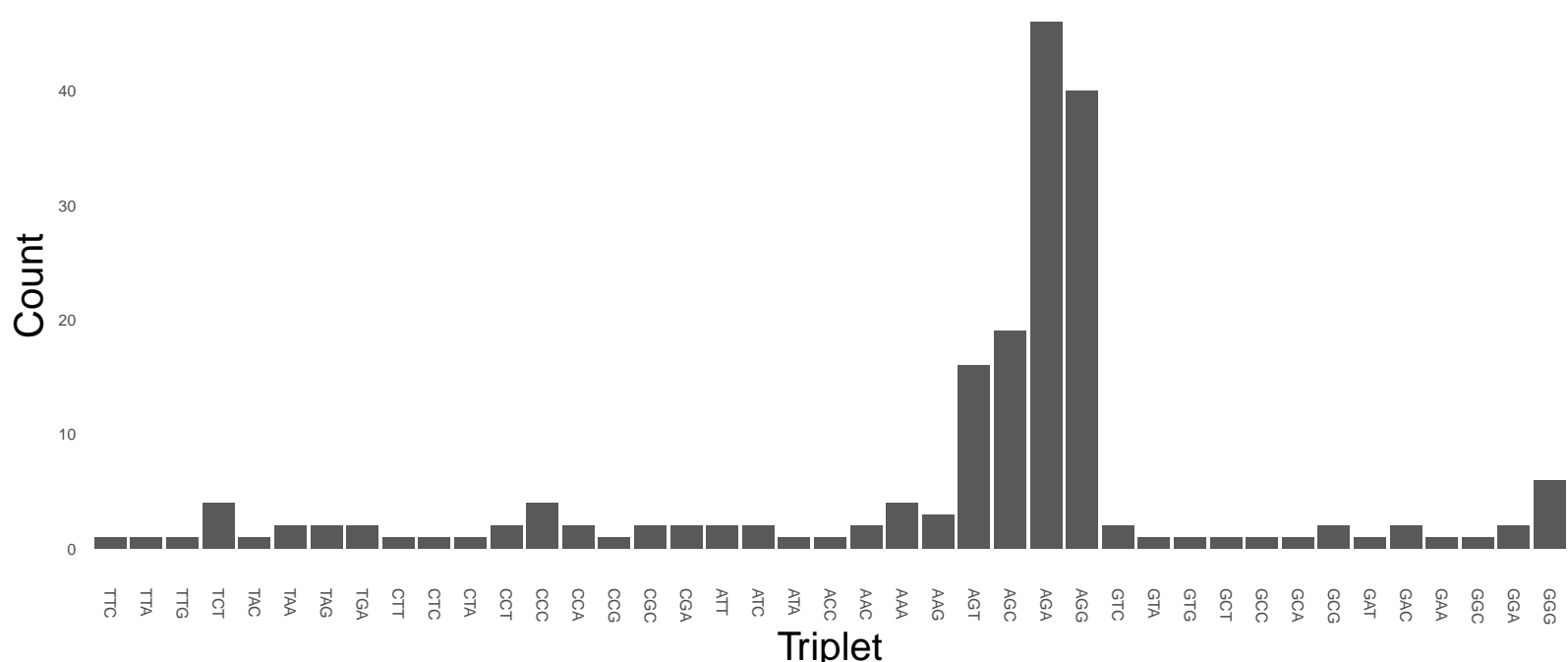
Gene IGHV3-48*01_A39C



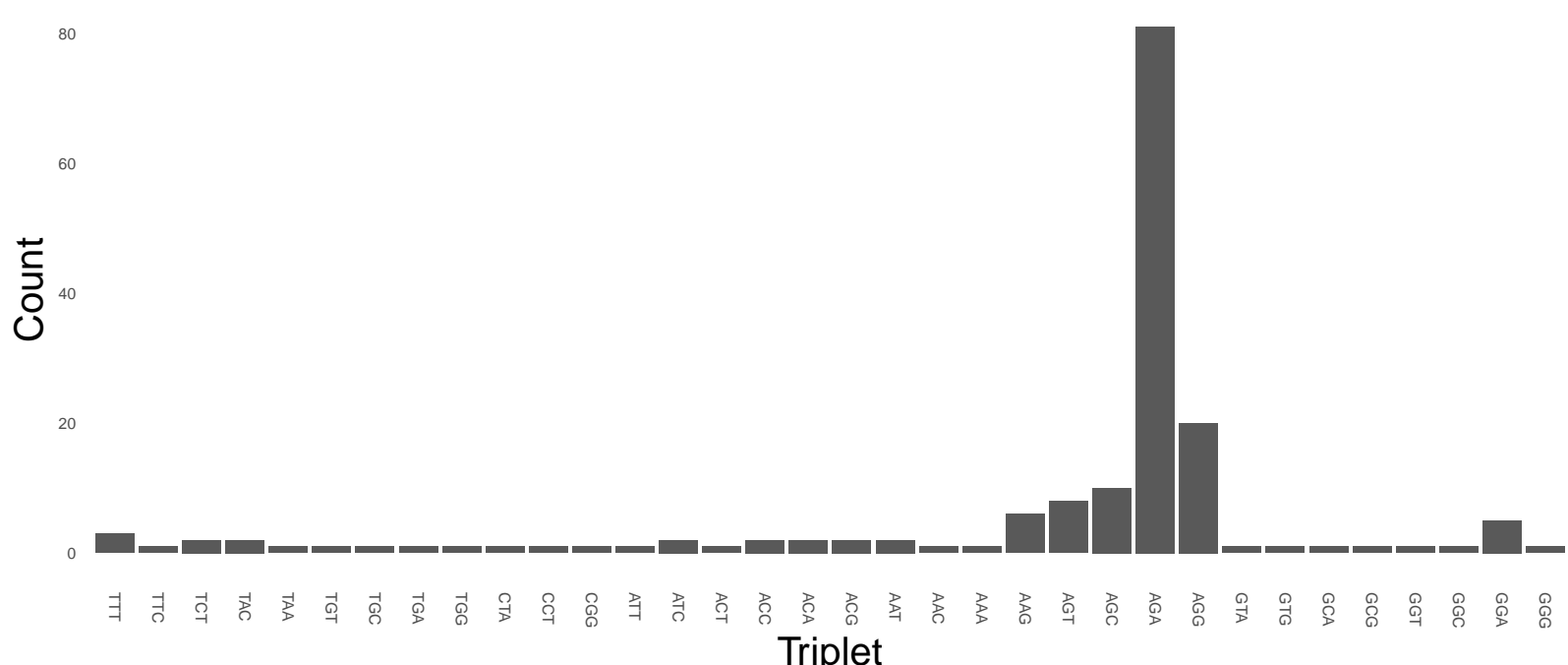
IGHV1-69*08_C191T- Final 3 nucleotides as a triplet



IGHV1-69*12_G48A- Final 3 nucleotides as a triplet

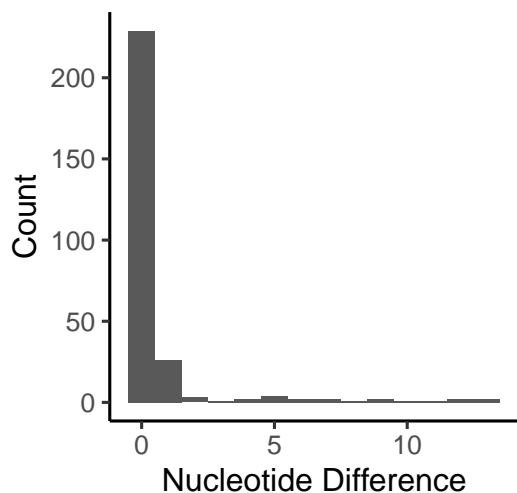


IGHV3-48*01_A39C- Final 3 nucleotides as a triplet



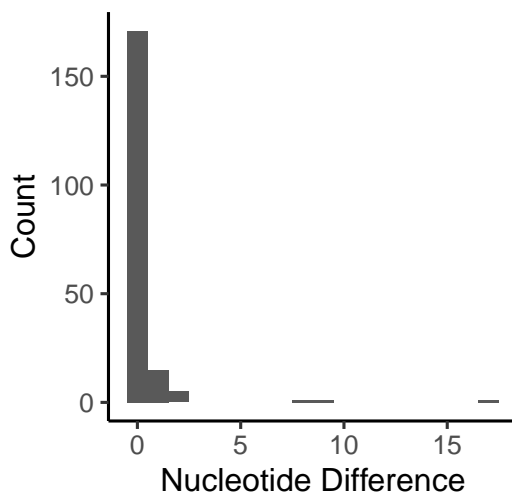
IGHV1-2*02

278 sequences assigned
229 (82.4%) exact matches, in which:
229 unique CDR3
6 unique J



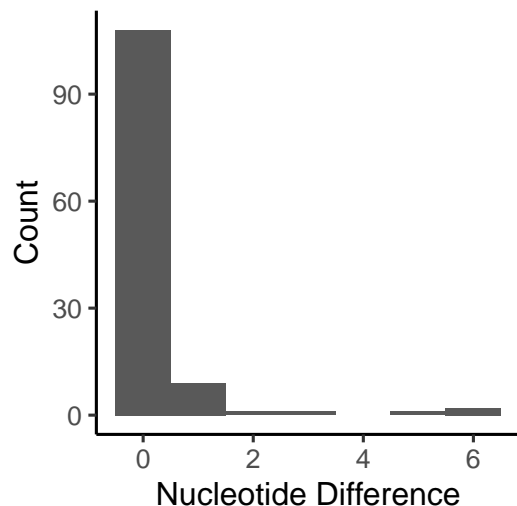
IGHV1-8*03

195 sequences assigned
171 (87.7%) exact matches, in which:
170 unique CDR3
5 unique J



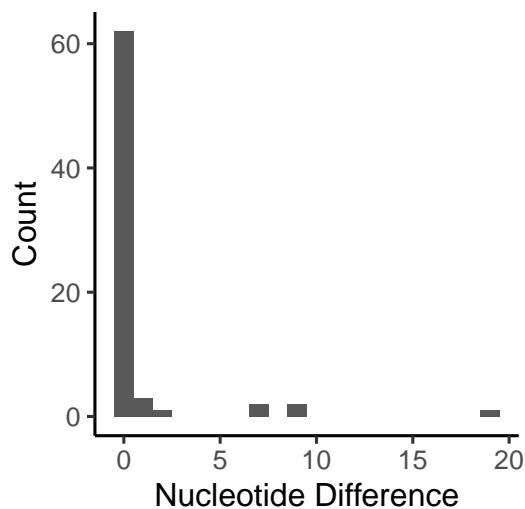
IGHV1-46*03

122 sequences assigned
108 (88.5%) exact matches, in which:
108 unique CDR3
5 unique J



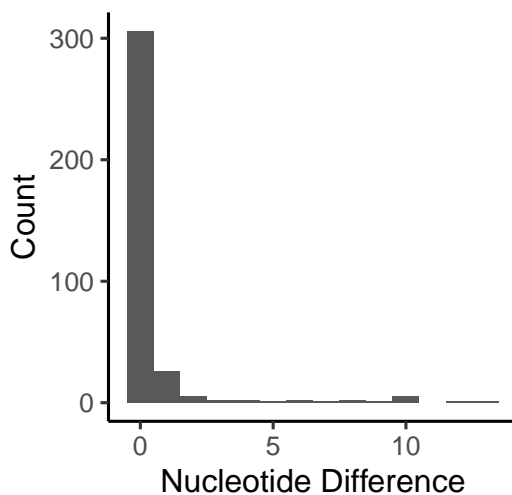
IGHV1-2*04

71 sequences assigned
62 (87.3%) exact matches, in which:
62 unique CDR3
5 unique J



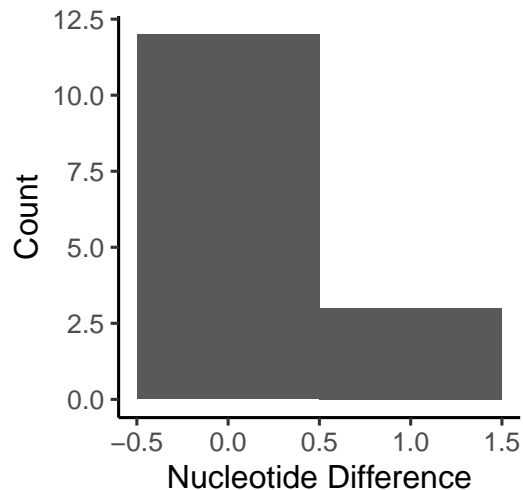
IGHV1-18*01

355 sequences assigned
306 (86.2%) exact matches, in which:
305 unique CDR3
6 unique J



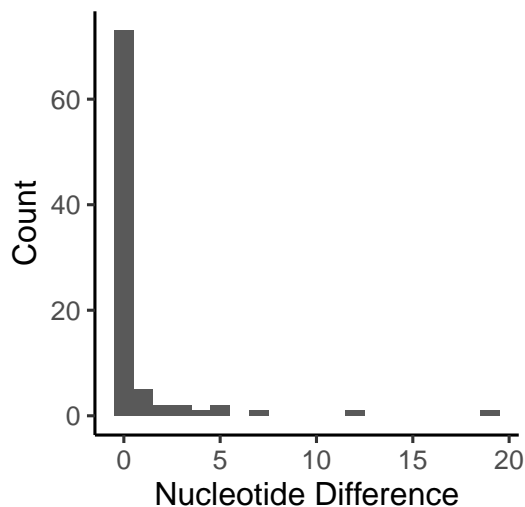
IGHV1-58*02

15 sequences assigned
12 (80%) exact matches, in which:
11 unique CDR3
4 unique J



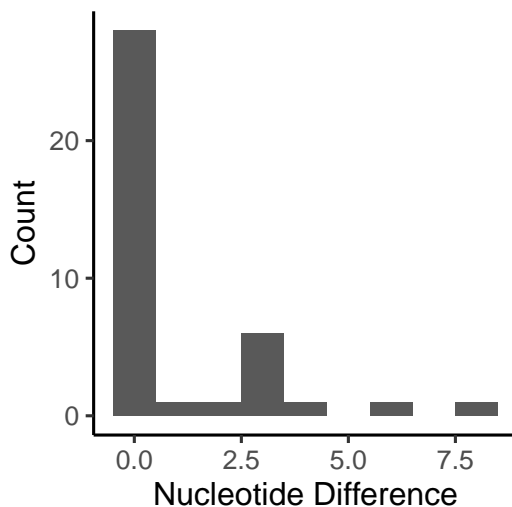
IGHV1-3*01

88 sequences assigned
73 (83%) exact matches, in which:
73 unique CDR3
5 unique J



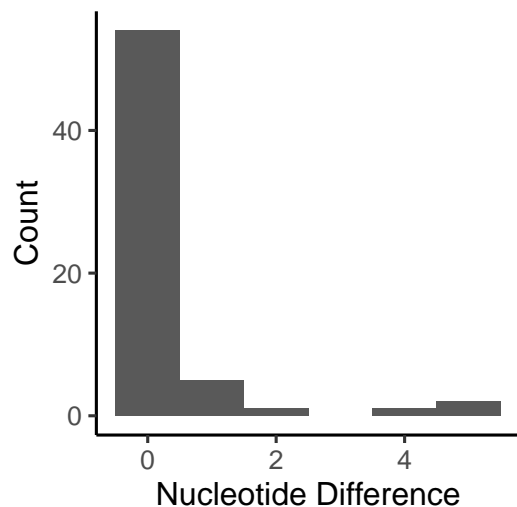
IGHV1-24*01

39 sequences assigned
28 (71.8%) exact matches, in which:
28 unique CDR3
5 unique J



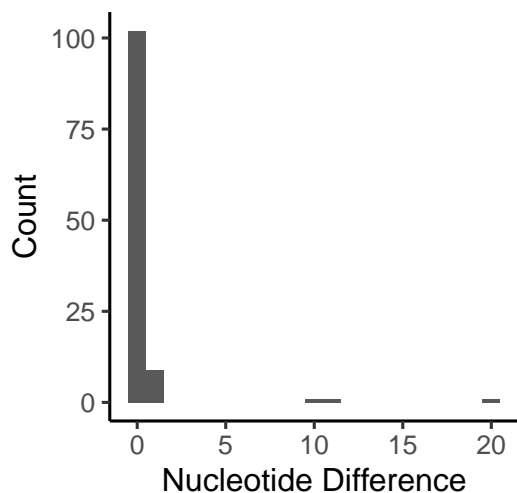
IGHV1-69-2*01

63 sequences assigned
54 (85.7%) exact matches, in which:
54 unique CDR3
4 unique J



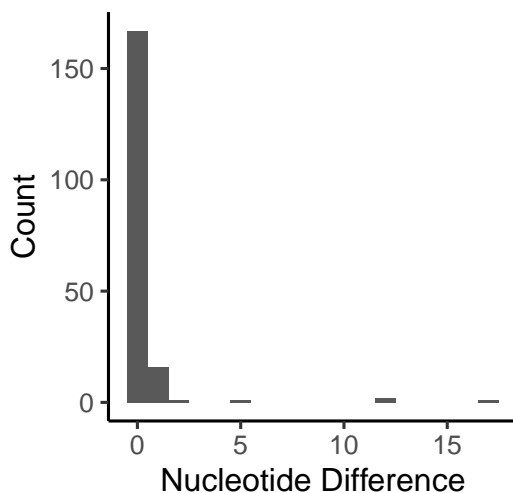
IGHV1-69*10

114 sequences assigned
102 (89.5%) exact matches, in which:
102 unique CDR3
6 unique J



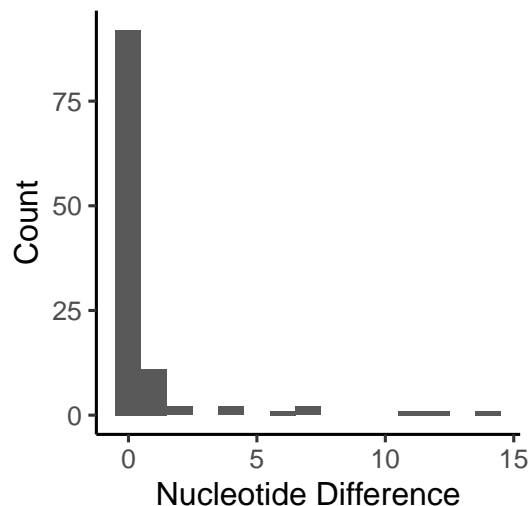
IGHV1-69*12_G48A

188 sequences assigned
167 (88.8%) exact matches, in which:
167 unique CDR3
6 unique J



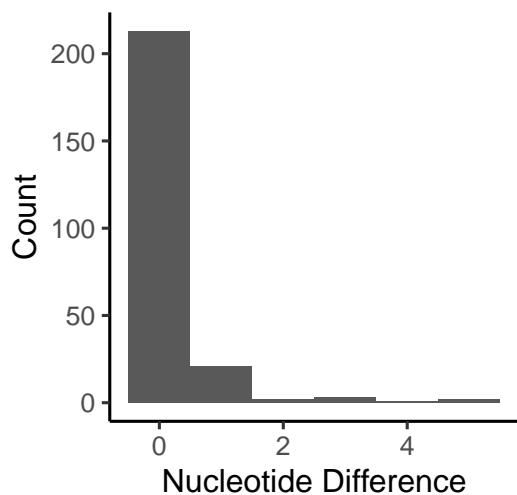
IGHV2-5*02

115 sequences assigned
92 (80%) exact matches, in which:
92 unique CDR3
5 unique J



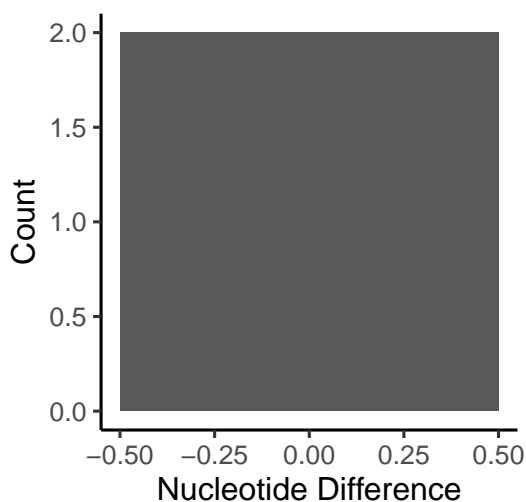
IGHV1-69*12

242 sequences assigned
213 (88%) exact matches, in which:
213 unique CDR3
6 unique J



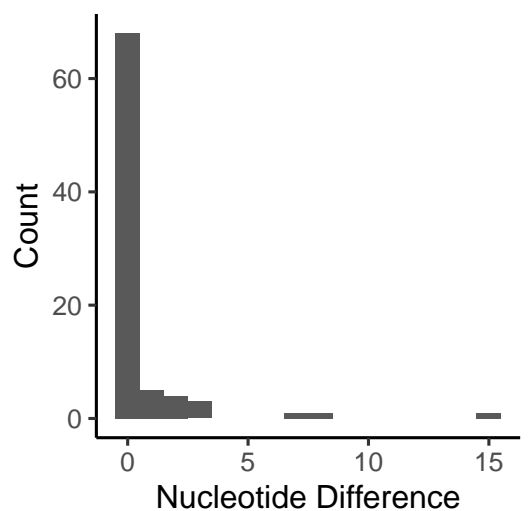
IGHV1-69D*01

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



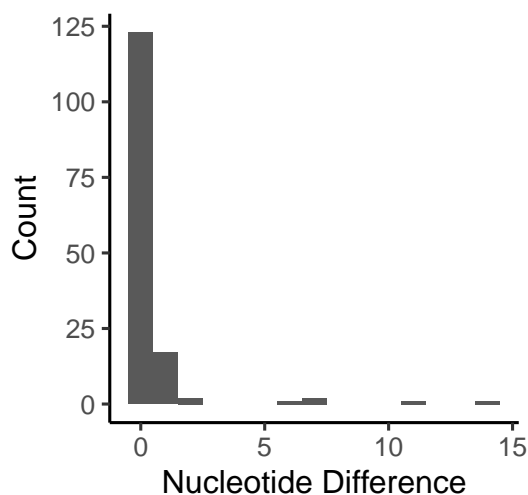
IGHV2-26*01

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



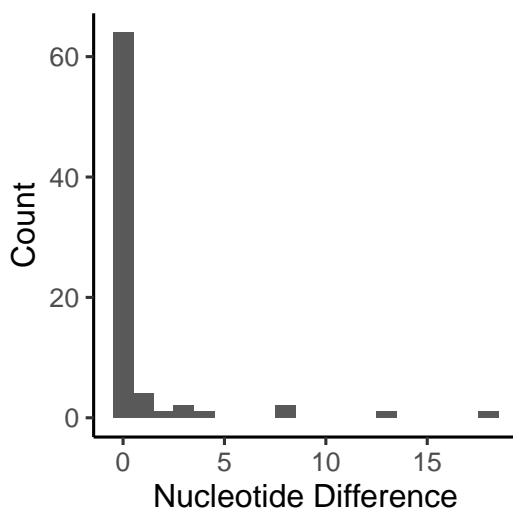
IGHV1-69*08_C191T

147 sequences assigned
123 (83.7%) exact matches, in which:
123 unique CDR3
6 unique J



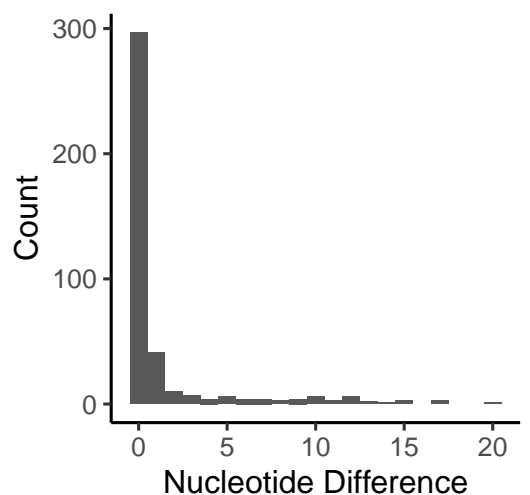
IGHV2-5*01

76 sequences assigned
64 (84.2%) exact matches, in which:
64 unique CDR3
5 unique J



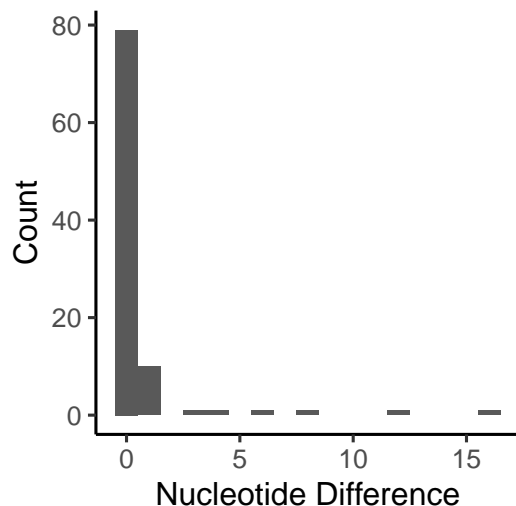
IGHV3-7*01

410 sequences assigned
297 (72.4%) exact matches, in which:
297 unique CDR3
6 unique J



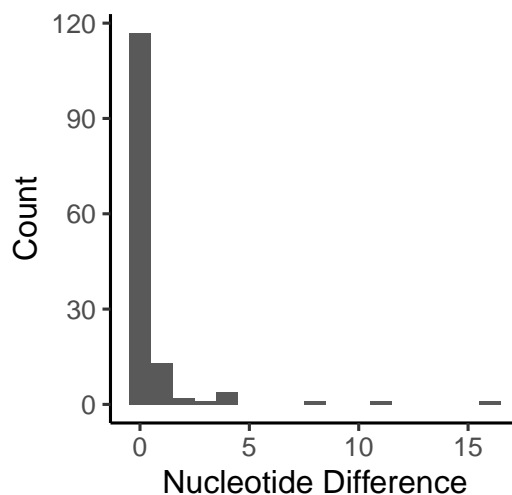
IGHV3-9*03

95 sequences assigned
79 (83.2%) exact matches, in which:
78 unique CDR3
4 unique J



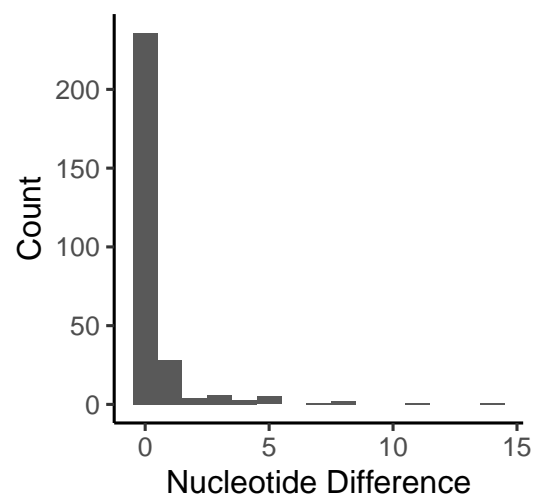
IGHV3-15*01

141 sequences assigned
117 (83%) exact matches, in which:
117 unique CDR3
6 unique J



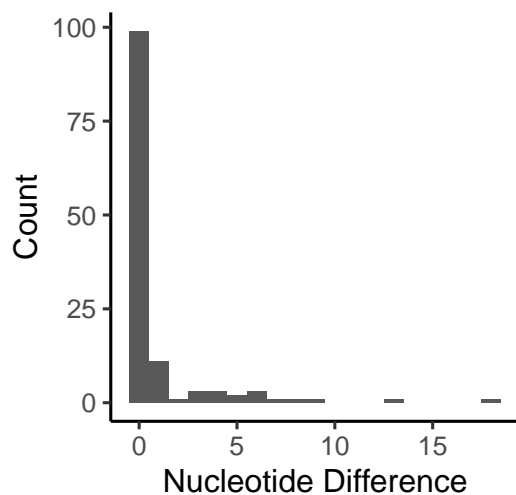
IGHV3-21*03

288 sequences assigned
236 (81.9%) exact matches, in which:
236 unique CDR3
6 unique J



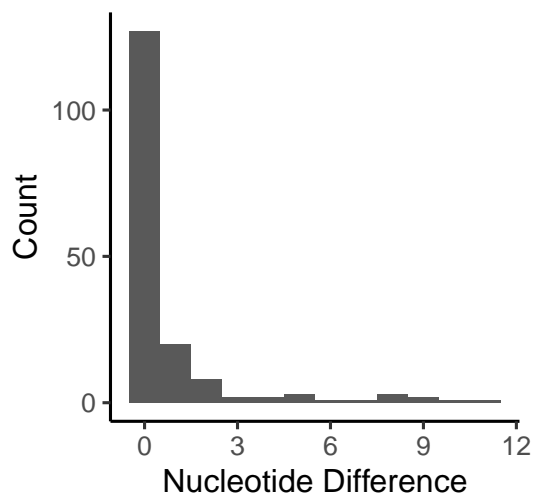
IGHV3-11*04

128 sequences assigned
99 (77.3%) exact matches, in which:
99 unique CDR3
6 unique J



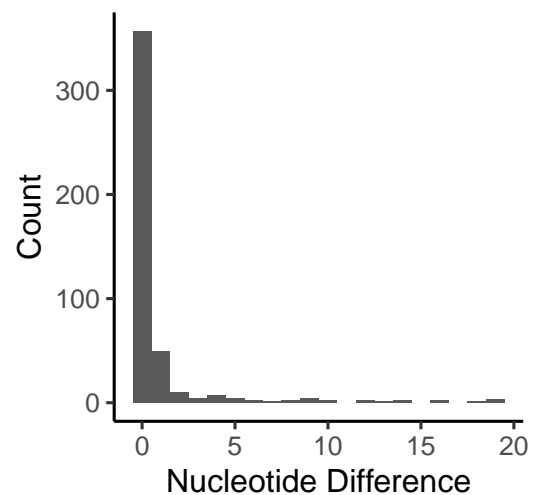
IGHV3-20*04

172 sequences assigned
127 (73.8%) exact matches, in which:
126 unique CDR3
6 unique J



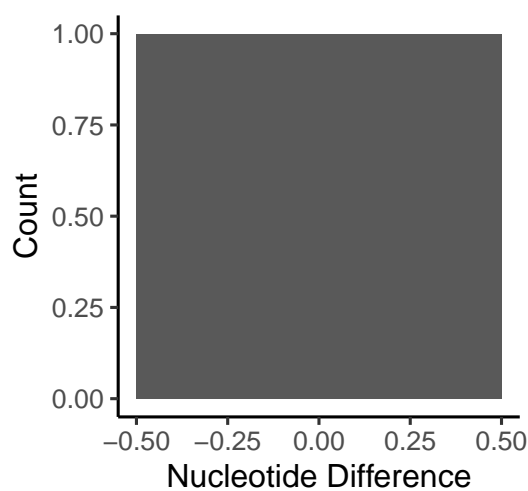
IGHV3-23*04

456 sequences assigned
357 (78.3%) exact matches, in which:
356 unique CDR3
6 unique J



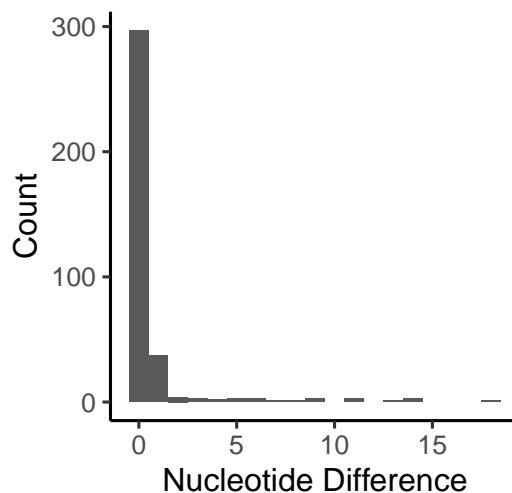
IGHV3-13*03

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



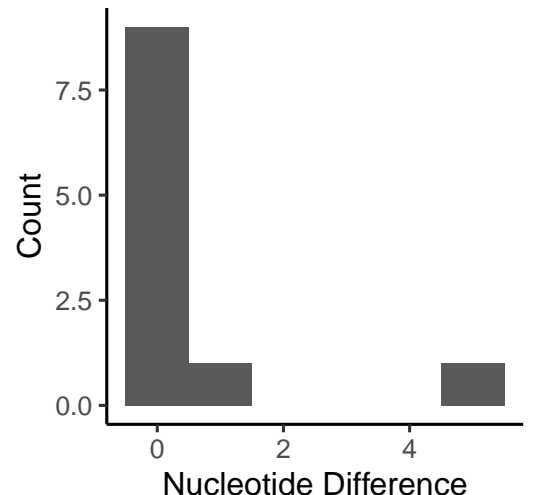
IGHV3-21*01

363 sequences assigned
297 (81.8%) exact matches, in which:
296 unique CDR3
6 unique J



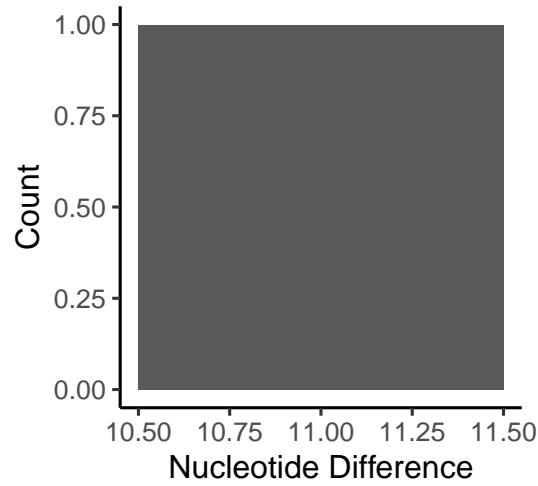
IGHV3-30-3*01

11 sequences assigned
9 (81.8%) exact matches, in which:
9 unique CDR3
4 unique J



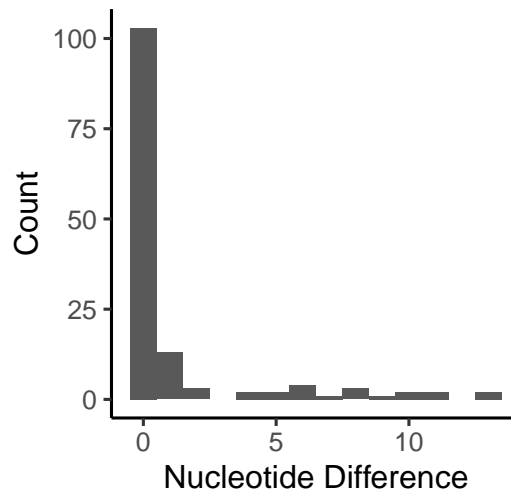
IGHV3–33*05

1 sequences assigned
No exact matches.



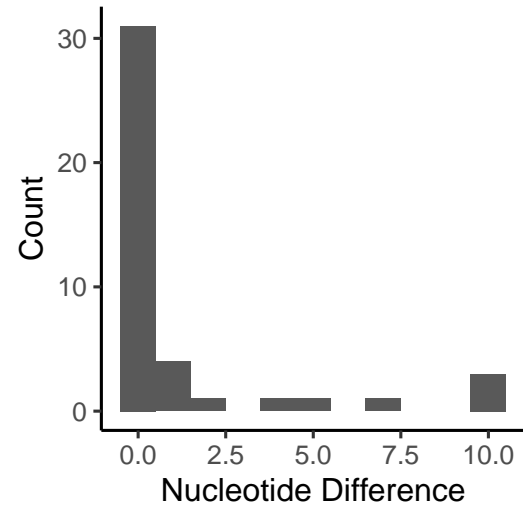
IGHV3–48*01

139 sequences assigned
103 (74.1%) exact matches, in which:
103 unique CDR3
5 unique J



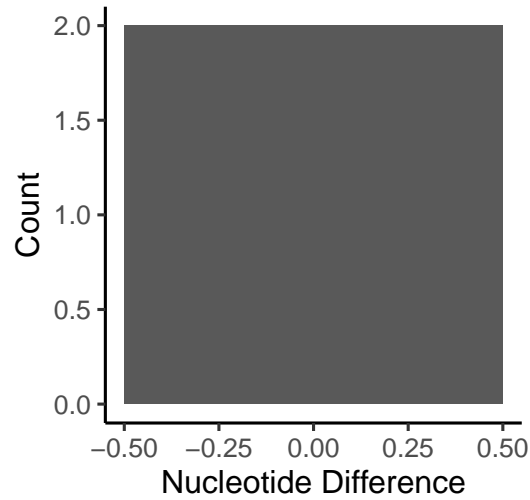
IGHV3–64*01

43 sequences assigned
31 (72.1%) exact matches, in which:
31 unique CDR3
5 unique J



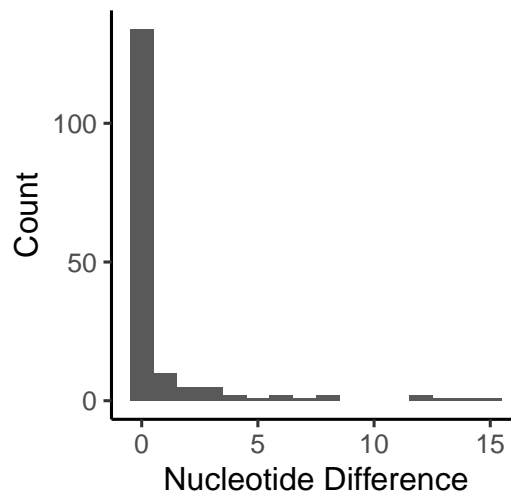
IGHV3–38–3*01

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



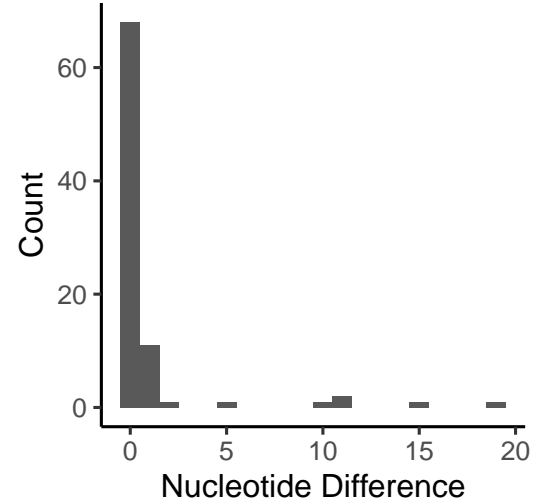
IGHV3–48*01_A39C

167 sequences assigned
134 (80.2%) exact matches, in which:
134 unique CDR3
6 unique J



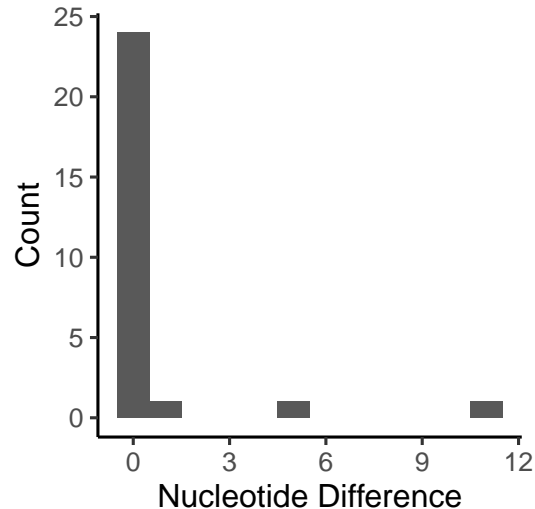
IGHV3–66*02

88 sequences assigned
68 (77.3%) exact matches, in which:
68 unique CDR3
5 unique J



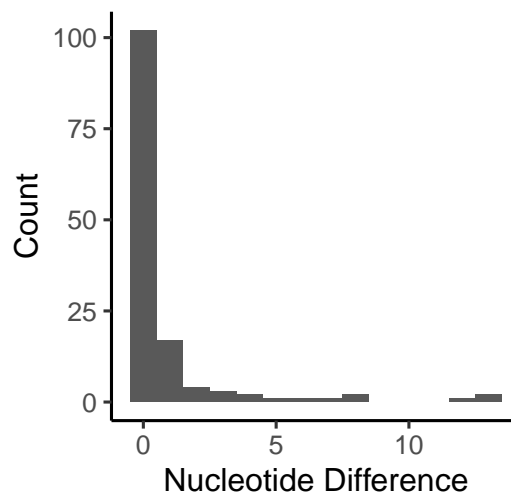
IGHV3–43*01

27 sequences assigned
24 (88.9%) exact matches, in which:
24 unique CDR3
5 unique J



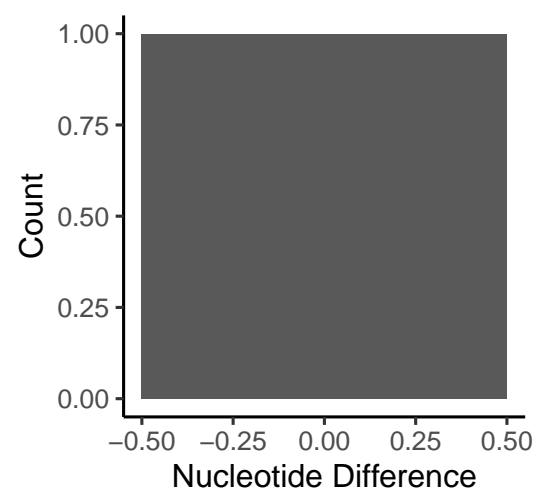
IGHV3–49*04

137 sequences assigned
102 (74.5%) exact matches, in which:
102 unique CDR3
5 unique J



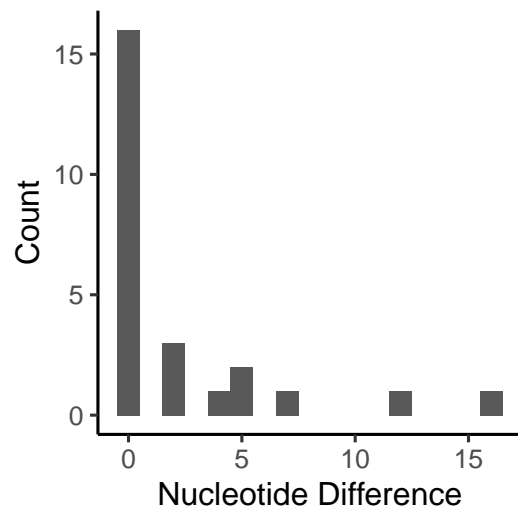
IGHV3–69–1*02

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



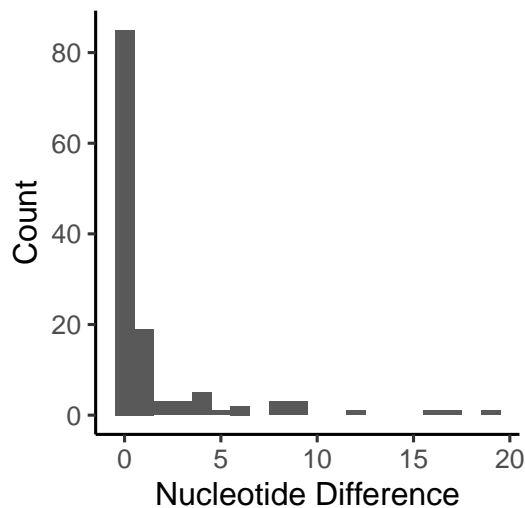
IGHV3-72*01

25 sequences assigned
16 (64%) exact matches, in which:
16 unique CDR3
3 unique J



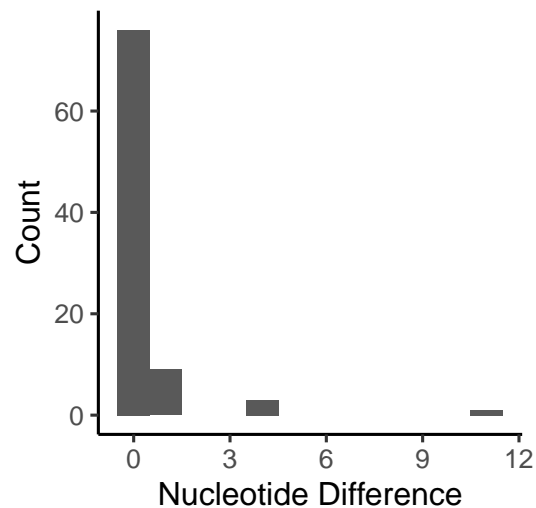
IGHV3-74*01

129 sequences assigned
85 (65.9%) exact matches, in which:
85 unique CDR3
6 unique J



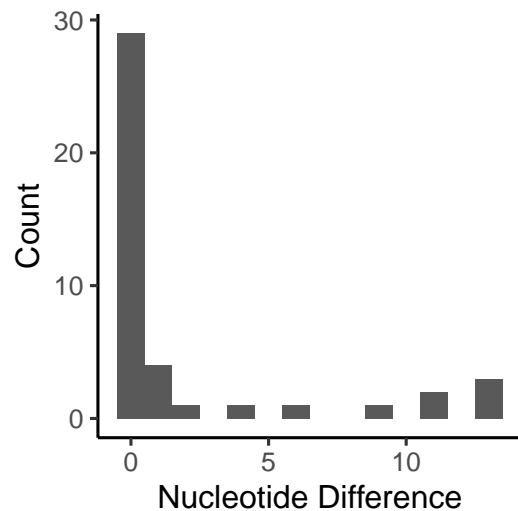
IGHV4-4*02

89 sequences assigned
76 (85.4%) exact matches, in which:
76 unique CDR3
5 unique J



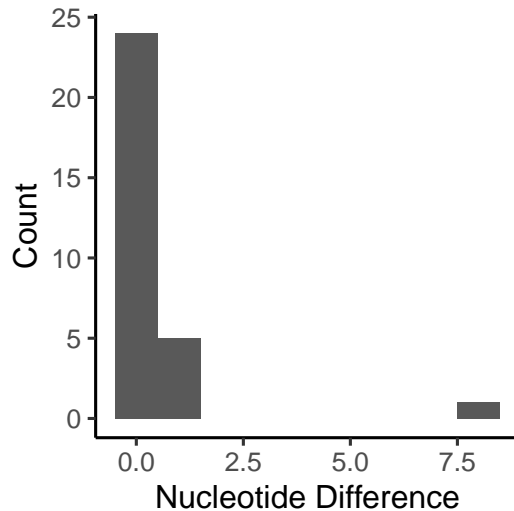
IGHV3-73*01

42 sequences assigned
29 (69%) exact matches, in which:
29 unique CDR3
5 unique J



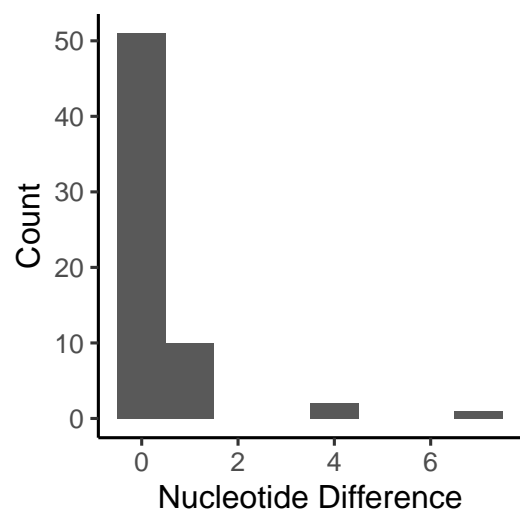
IGHV3-43D*03

30 sequences assigned
24 (80%) exact matches, in which:
24 unique CDR3
5 unique J



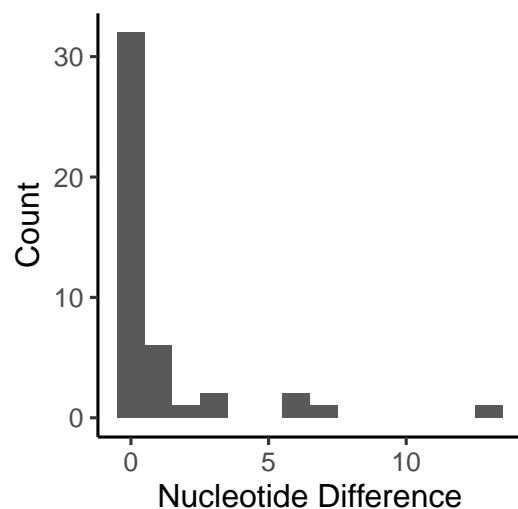
IGHV4-4*07

64 sequences assigned
51 (79.7%) exact matches, in which:
51 unique CDR3
5 unique J



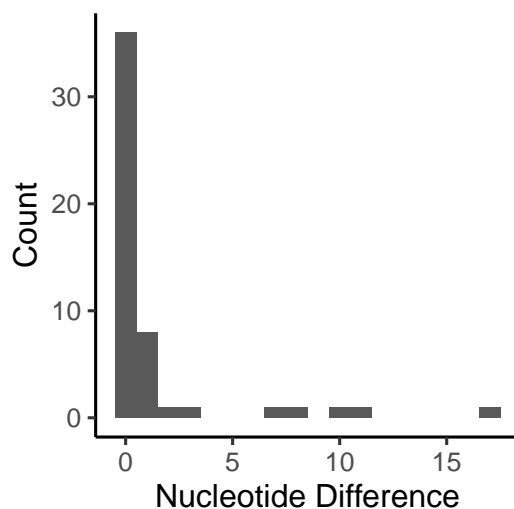
IGHV3-73*02

45 sequences assigned
32 (71.1%) exact matches, in which:
32 unique CDR3
4 unique J



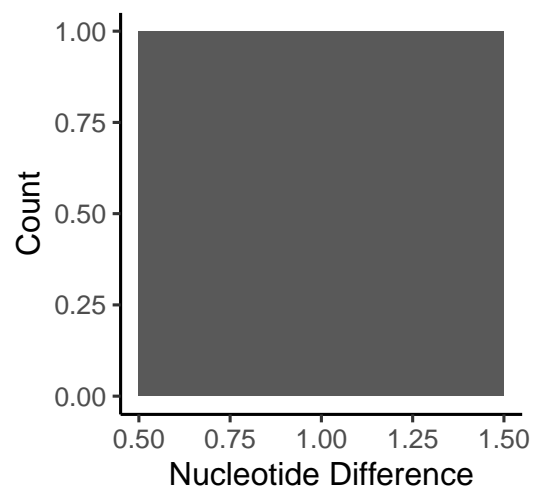
IGHV3-43D*04

51 sequences assigned
36 (70.6%) exact matches, in which:
36 unique CDR3
6 unique J



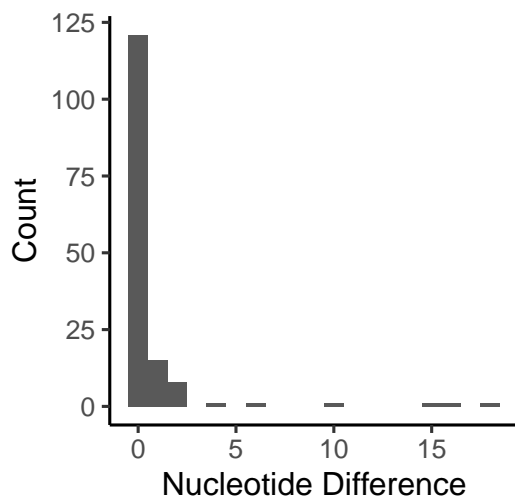
IGHV4-30-2*05

1 sequences assigned
No exact matches.



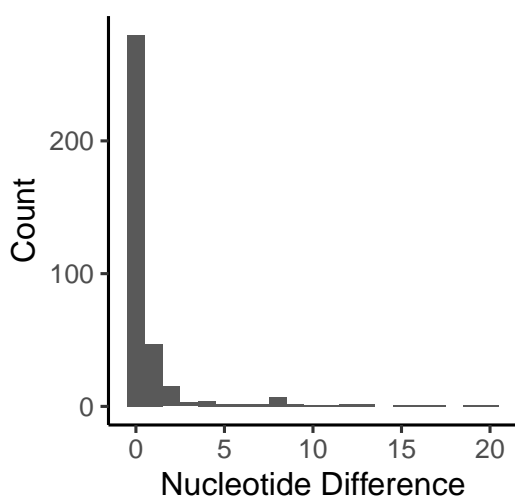
IGHV4-30-4*08

150 sequences assigned
121 (80.7%) exact matches, in which:
121 unique CDR3
6 unique J



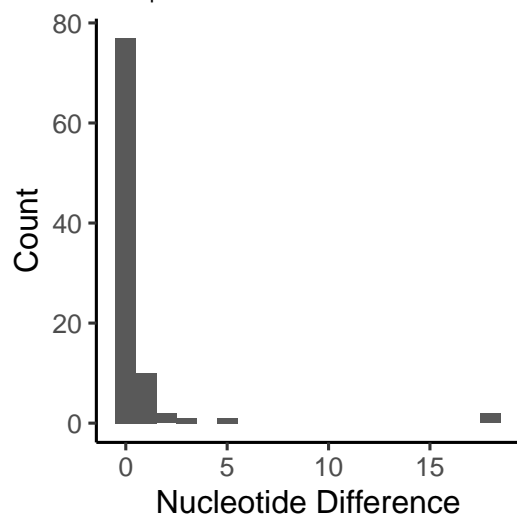
IGHV4-38-2*02

375 sequences assigned
280 (74.7%) exact matches, in which:
278 unique CDR3
6 unique J



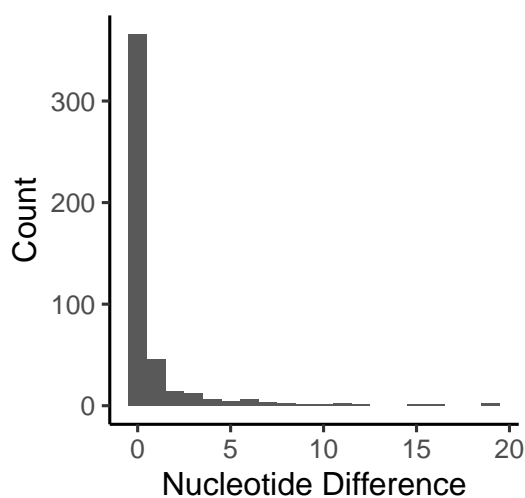
IGHV4-59*08

94 sequences assigned
77 (81.9%) exact matches, in which:
77 unique CDR3
6 unique J



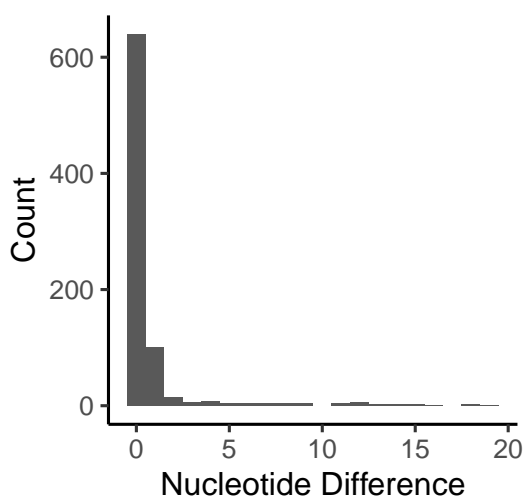
IGHV4-34*01

470 sequences assigned
366 (77.9%) exact matches, in which:
363 unique CDR3
6 unique J



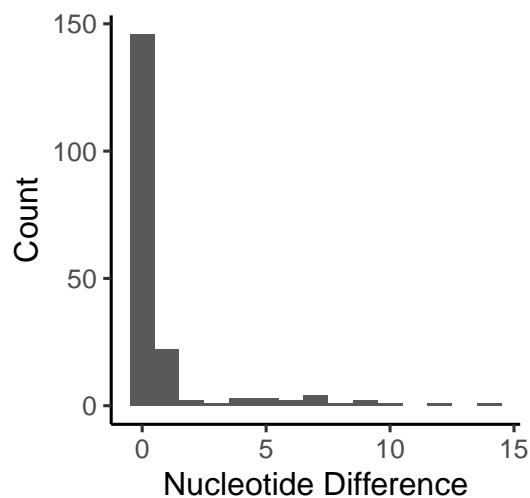
IGHV4-39*01

813 sequences assigned
640 (78.7%) exact matches, in which:
639 unique CDR3
6 unique J



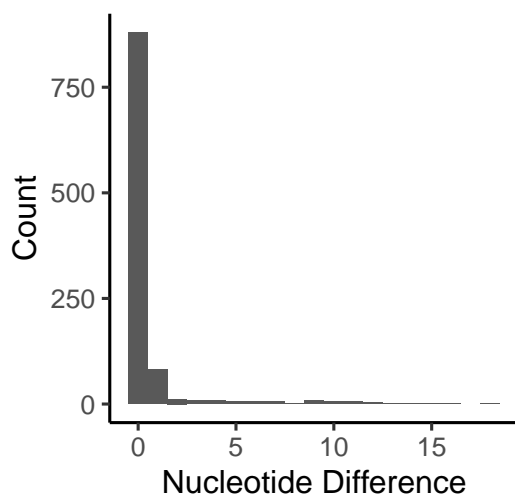
IGHV4-61*02

192 sequences assigned
146 (76%) exact matches, in which:
146 unique CDR3
6 unique J



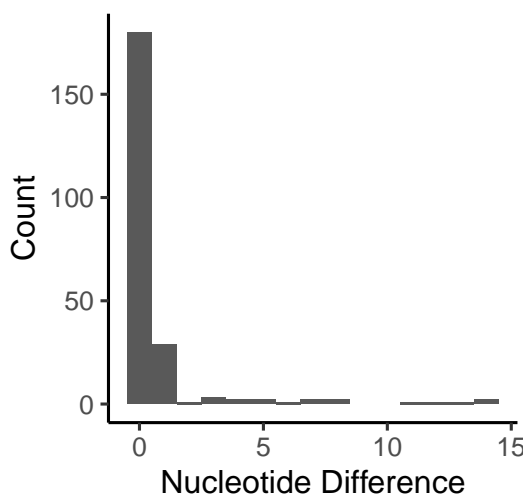
IGHV4-38-2*01

1041 sequences assigned
880 (84.5%) exact matches, in which:
880 unique CDR3
6 unique J



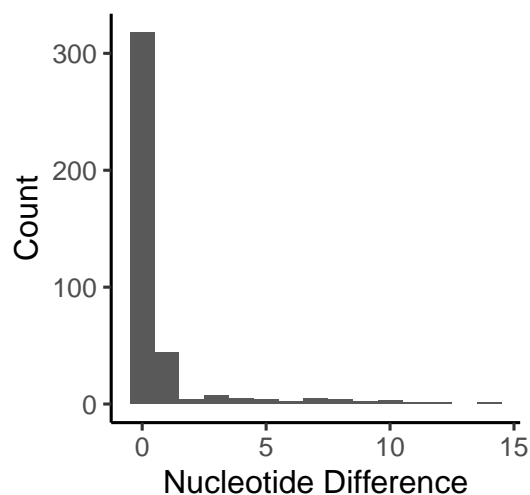
IGHV4-59*01

227 sequences assigned
180 (79.3%) exact matches, in which:
178 unique CDR3
6 unique J



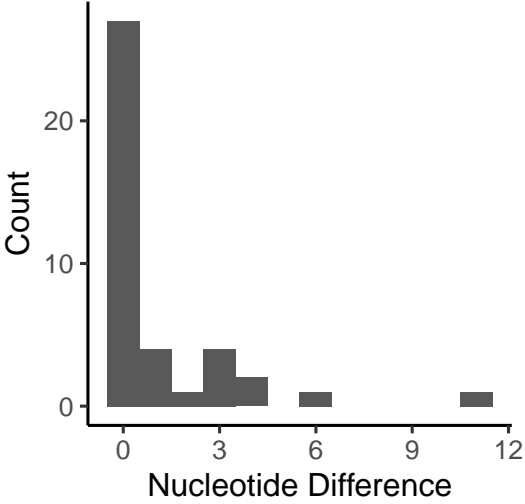
IGHV5-51*01

405 sequences assigned
318 (78.5%) exact matches, in which:
318 unique CDR3
6 unique J



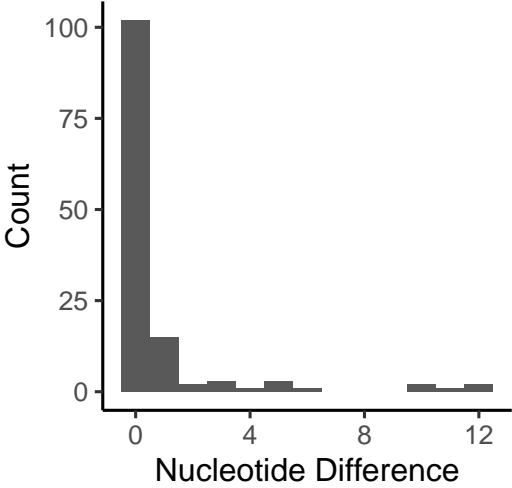
IGHV6-1*01

41 sequences assigned
27 (65.9%) exact matches, in which:
27 unique CDR3
4 unique J

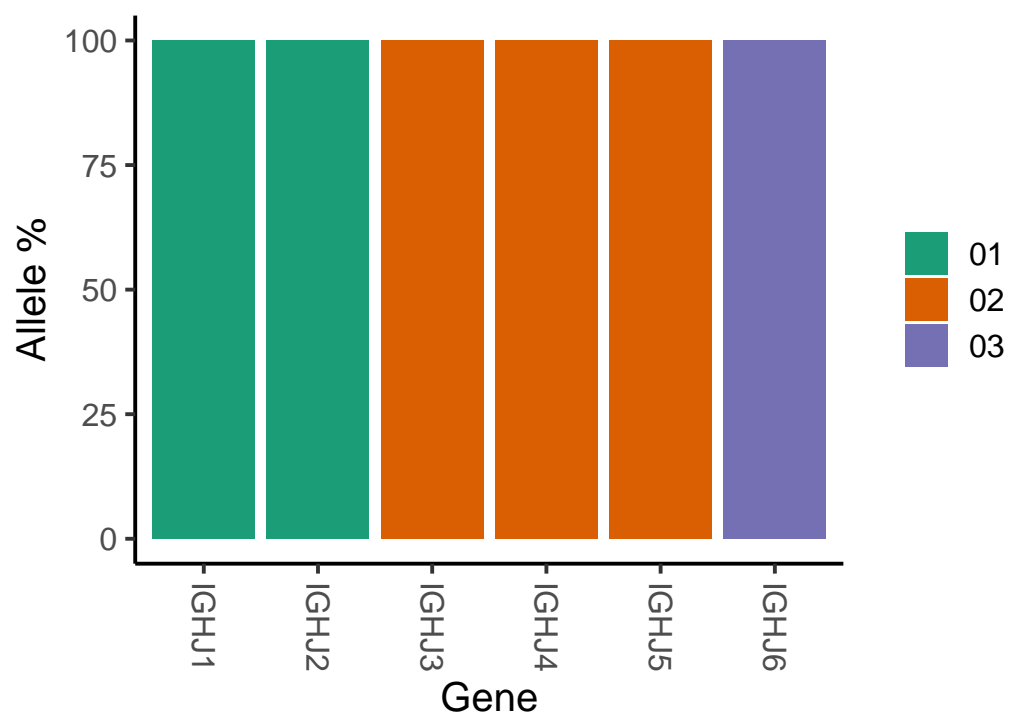


IGHV7-4-1*02

132 sequences assigned
102 (77.3%) exact matches, in which:
102 unique CDR3
6 unique J



Allele Usage



Warning – no inferred sequences found.

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