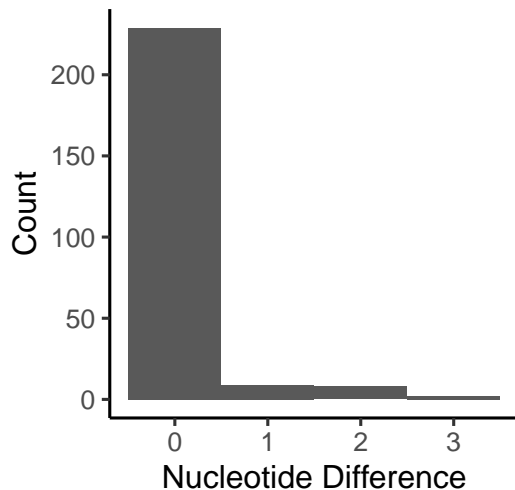


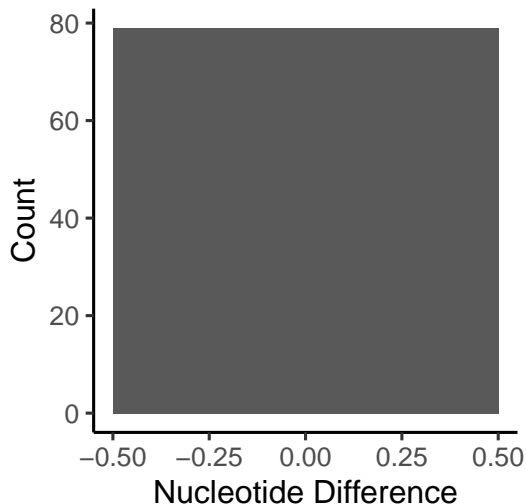
IGHV1-2*02

248 sequences assigned
229 (92.3%) exact matches, in which:
229 unique CDR3
6 unique J



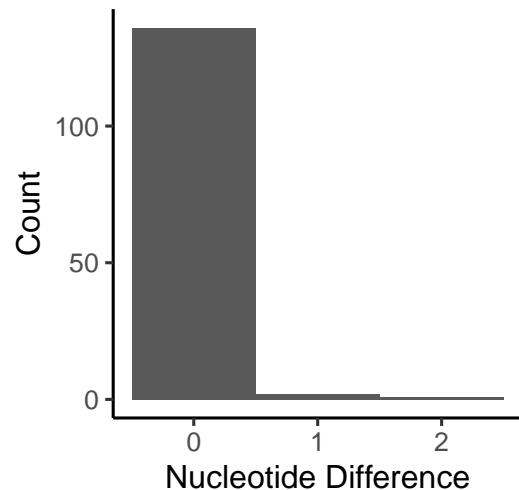
IGHV1-24*01

79 sequences assigned
79 (100%) exact matches, in which:
78 unique CDR3
5 unique J



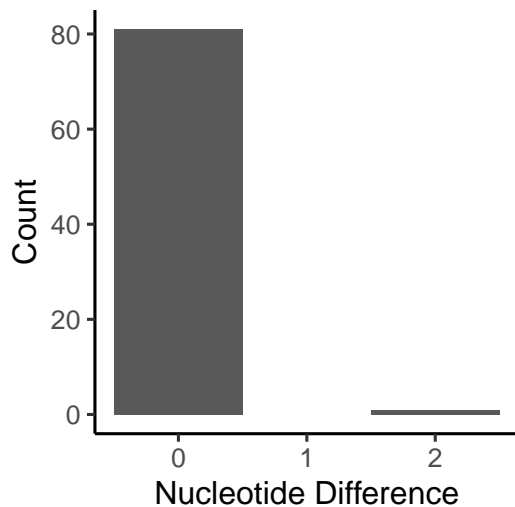
IGHV1-46*03

139 sequences assigned
136 (97.8%) exact matches, in which:
136 unique CDR3
7 unique J



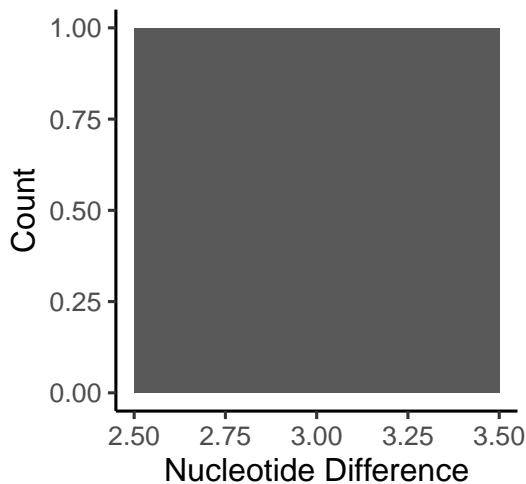
IGHV1-3*01_05

82 sequences assigned
81 (98.8%) exact matches, in which:
81 unique CDR3
6 unique J



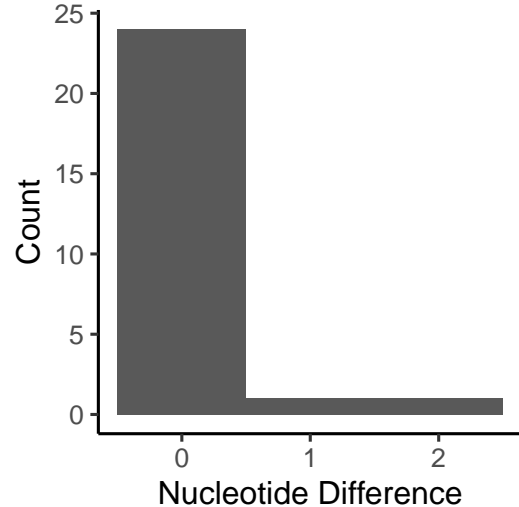
IGHV1-38-4*01

1 sequences assigned
No exact matches.



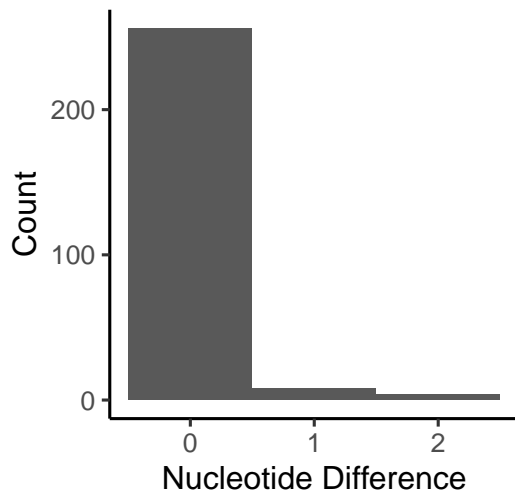
IGHV1-58*02

26 sequences assigned
24 (92.3%) exact matches, in which:
24 unique CDR3
6 unique J



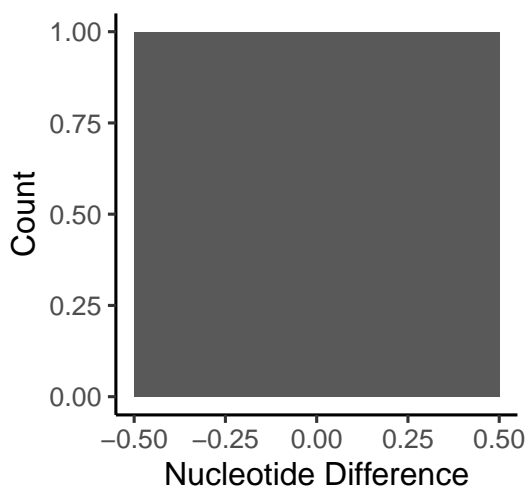
IGHV1-18*04

268 sequences assigned
256 (95.5%) exact matches, in which:
254 unique CDR3
6 unique J



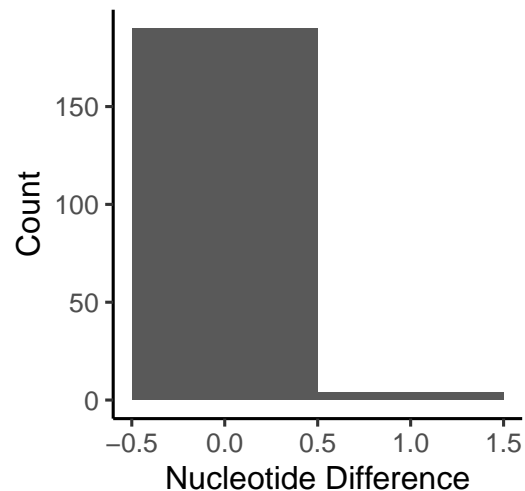
IGHV1-45*02

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



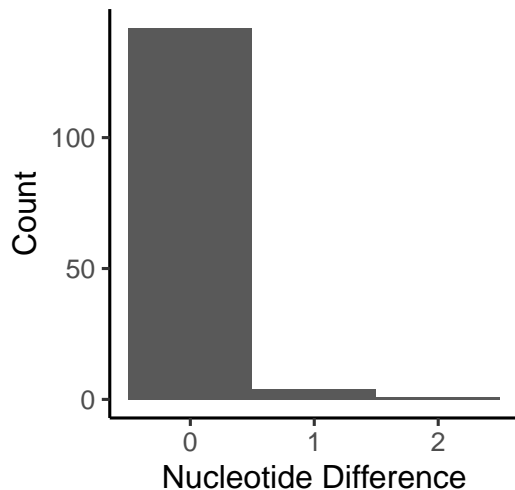
IGHV1-69*02

194 sequences assigned
190 (97.9%) exact matches, in which:
188 unique CDR3
7 unique J



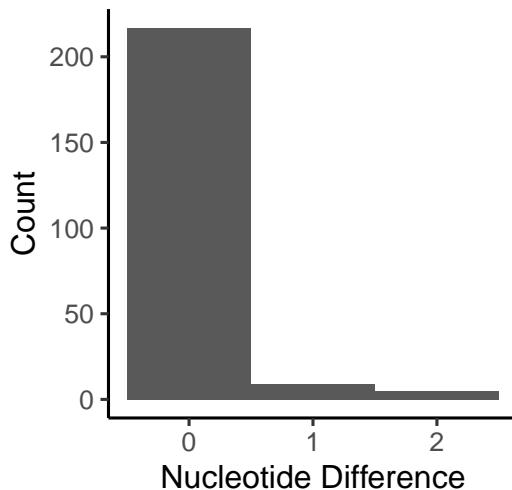
IGHV2–5*02

147 sequences assigned
142 (96.6%) exact matches, in which:
139 unique CDR3
7 unique J



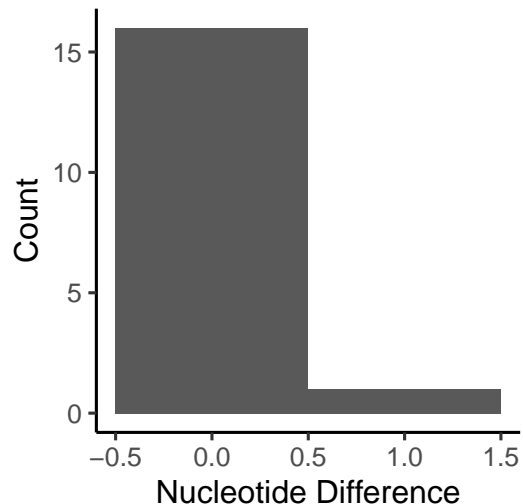
IGHV3–7*03

231 sequences assigned
217 (93.9%) exact matches, in which:
212 unique CDR3
6 unique J



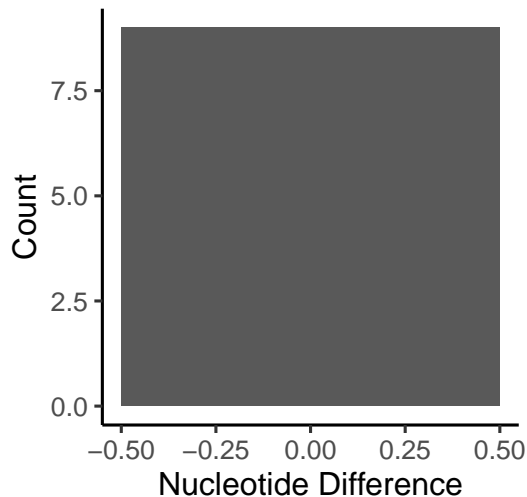
IGHV3–13*05

17 sequences assigned
16 (94.1%) exact matches, in which:
15 unique CDR3
5 unique J



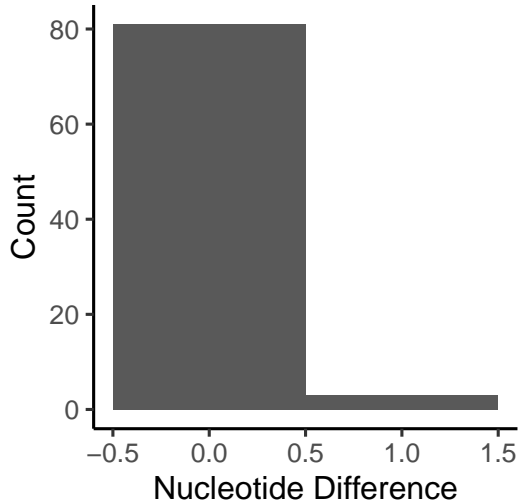
IGHV2–26*01

9 sequences assigned
9 (100%) exact matches, in which:
9 unique CDR3
3 unique J



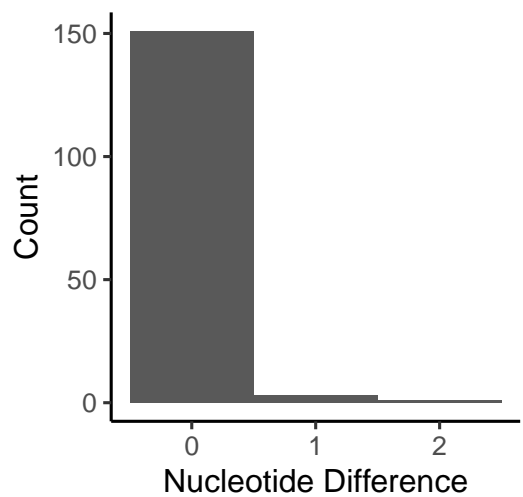
IGHV3–7*04

84 sequences assigned
81 (96.4%) exact matches, in which:
81 unique CDR3
6 unique J



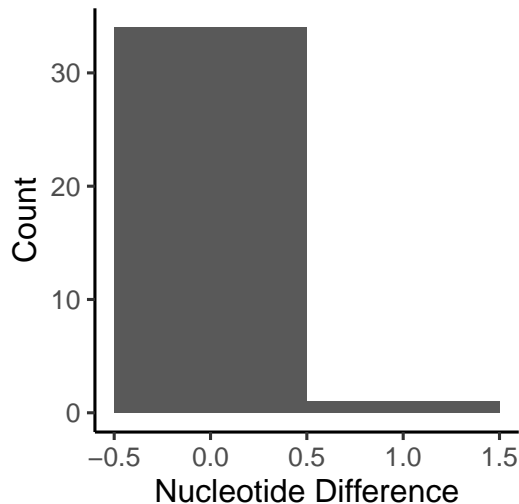
IGHV3–15*01_02

155 sequences assigned
151 (97.4%) exact matches, in which:
149 unique CDR3
5 unique J



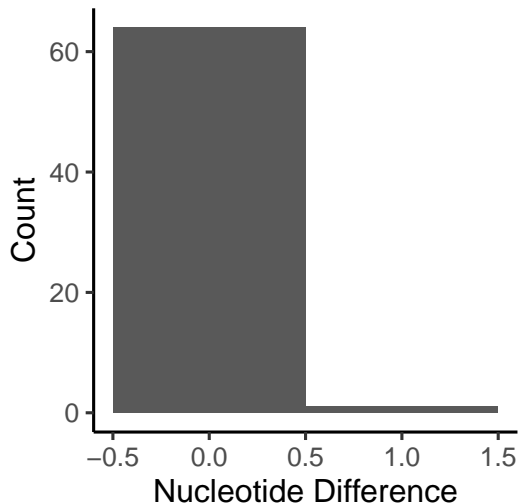
IGHV2–70*11_15

35 sequences assigned
34 (97.1%) exact matches, in which:
34 unique CDR3
4 unique J



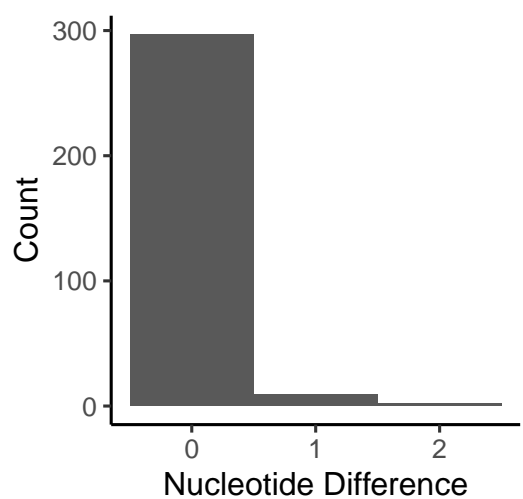
IGHV3–11*06

65 sequences assigned
64 (98.5%) exact matches, in which:
64 unique CDR3
6 unique J



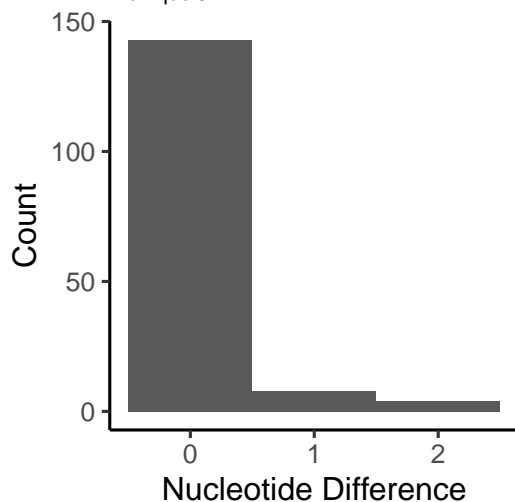
IGHV3–21*01_02

308 sequences assigned
297 (96.4%) exact matches, in which:
289 unique CDR3
7 unique J



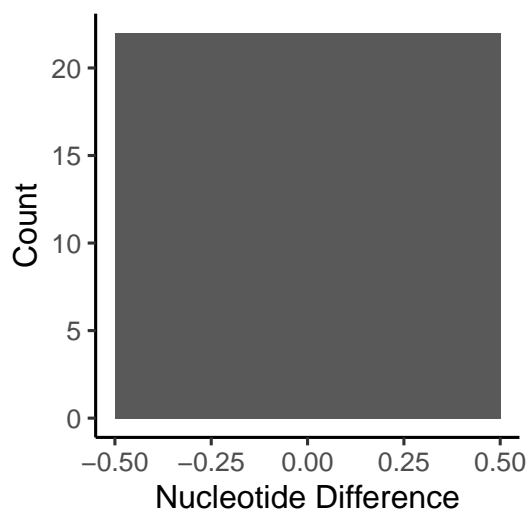
IGHV3–33*01

155 sequences assigned
143 (92.3%) exact matches, in which:
137 unique CDR3
7 unique J



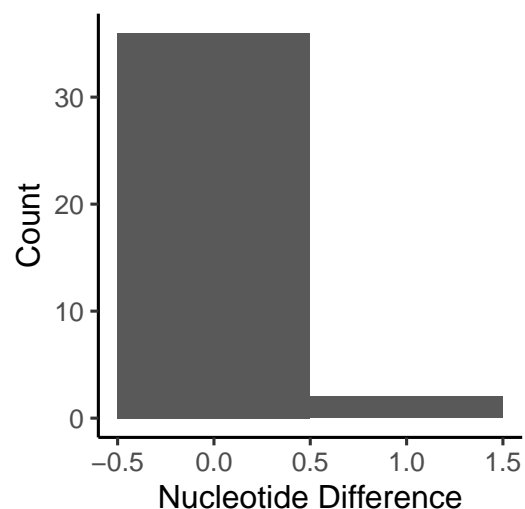
IGHV3–43*01

22 sequences assigned
22 (100%) exact matches, in which:
22 unique CDR3
4 unique J



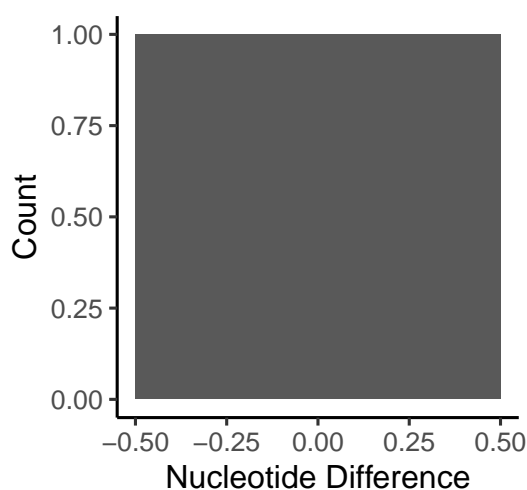
IGHV3–49*04

38 sequences assigned
36 (94.7%) exact matches, in which:
36 unique CDR3
4 unique J



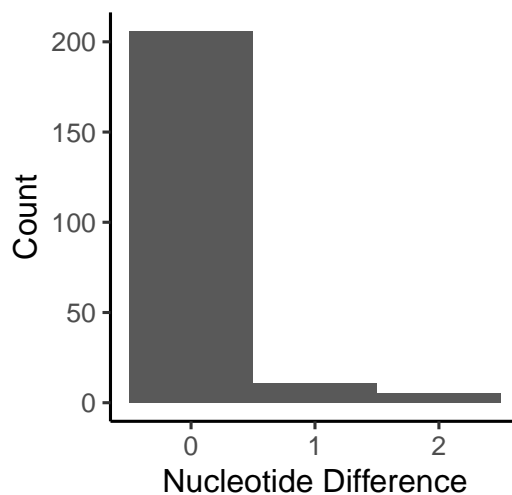
IGHV3–35*01

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



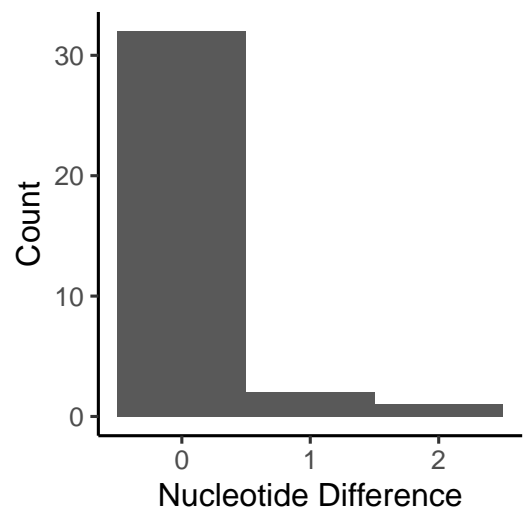
IGHV3–48*01

222 sequences assigned
206 (92.8%) exact matches, in which:
196 unique CDR3
7 unique J



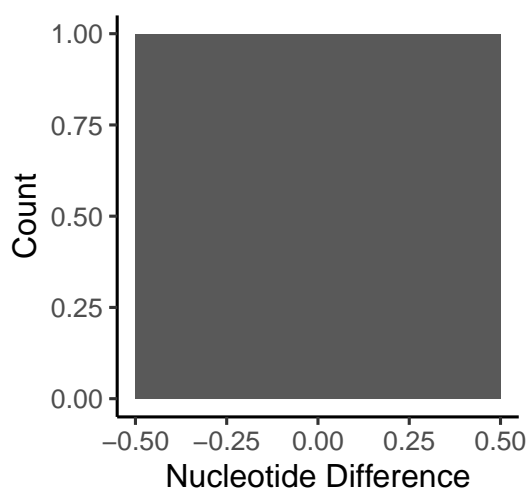
IGHV3–49*03_05

35 sequences assigned
32 (91.4%) exact matches, in which:
32 unique CDR3
5 unique J



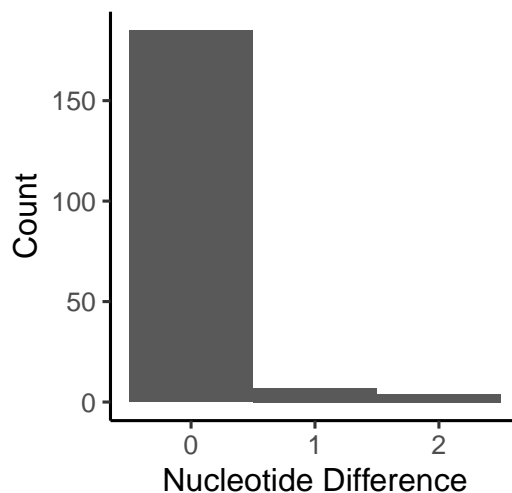
IGHV3–38–3*01

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



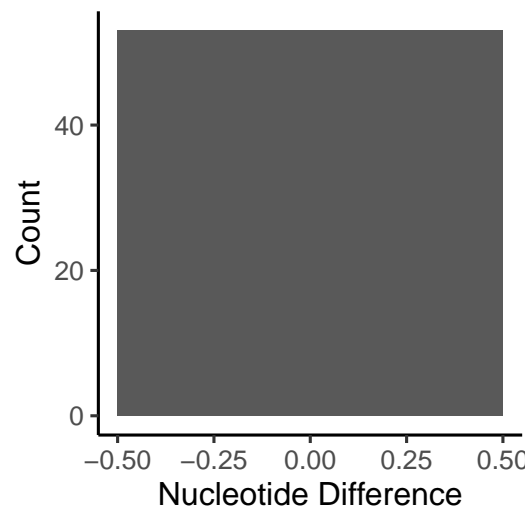
IGHV3–48*02

196 sequences assigned
185 (94.4%) exact matches, in which:
180 unique CDR3
6 unique J



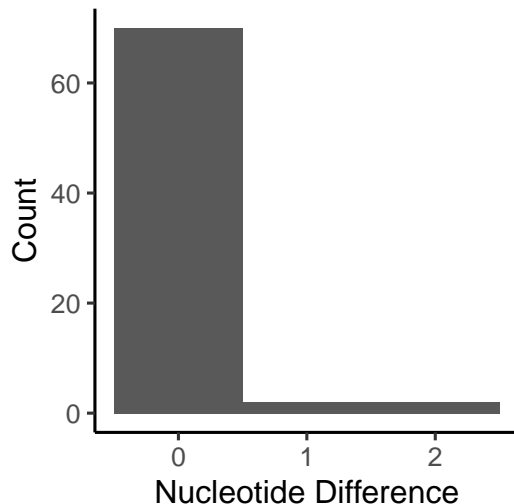
IGHV3–53*04

53 sequences assigned
53 (100%) exact matches, in which:
51 unique CDR3
6 unique J



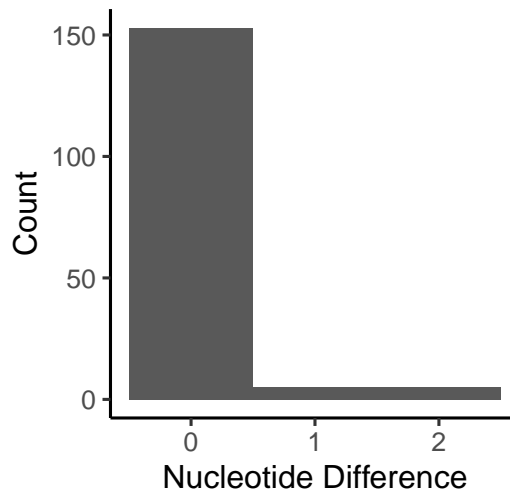
IGHV3-53*01_02

74 sequences assigned
70 (94.6%) exact matches, in which:
70 unique CDR3
5 unique J



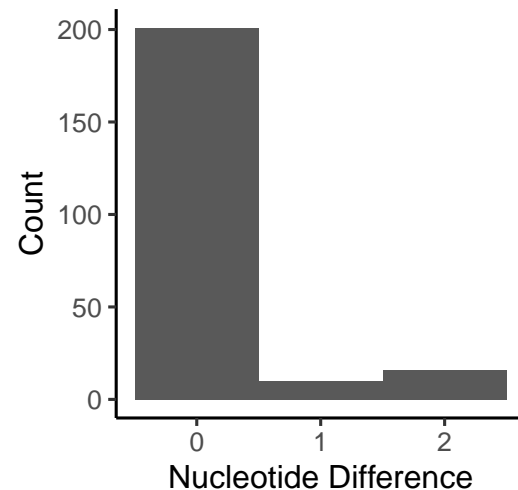
IGHV3-66*02

163 sequences assigned
153 (93.9%) exact matches, in which:
148 unique CDR3
6 unique J



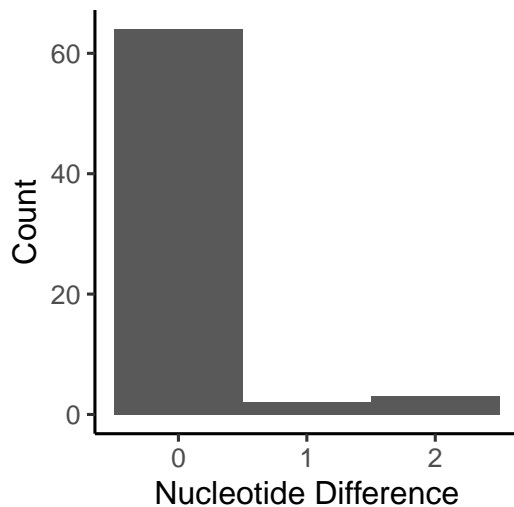
IGHV3-74*01_02

227 sequences assigned
201 (88.5%) exact matches, in which:
194 unique CDR3
7 unique J



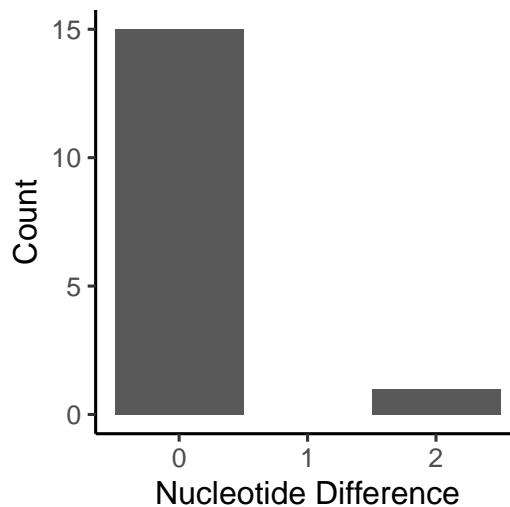
IGHV3-64*01

69 sequences assigned
64 (92.8%) exact matches, in which:
61 unique CDR3
5 unique J



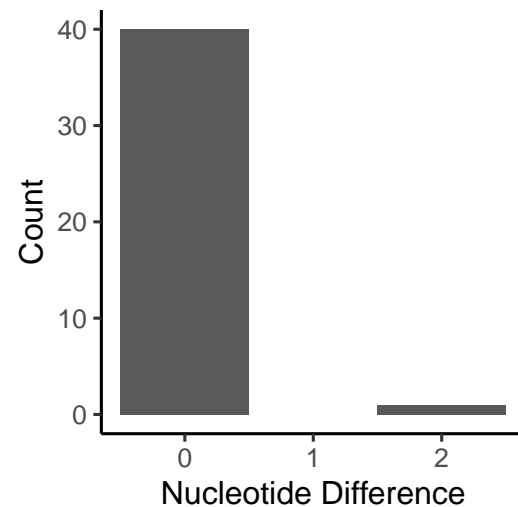
IGHV3-72*01

16 sequences assigned
15 (93.8%) exact matches, in which:
15 unique CDR3
6 unique J



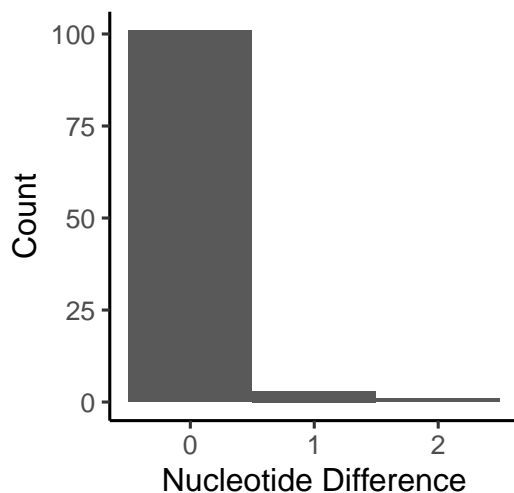
IGHV3-43D*03

41 sequences assigned
40 (97.6%) exact matches, in which:
39 unique CDR3
5 unique J



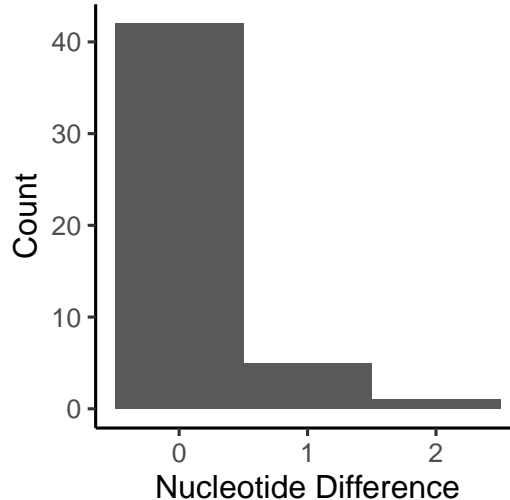
IGHV3-66*01

105 sequences assigned
101 (96.2%) exact matches, in which:
98 unique CDR3
5 unique J



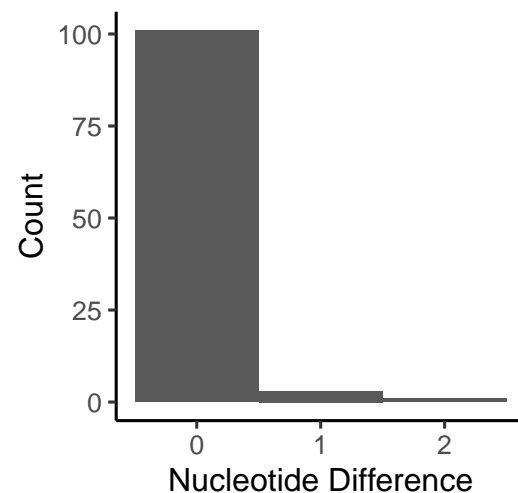
IGHV3-73*01_02

48 sequences assigned
42 (87.5%) exact matches, in which:
38 unique CDR3
7 unique J



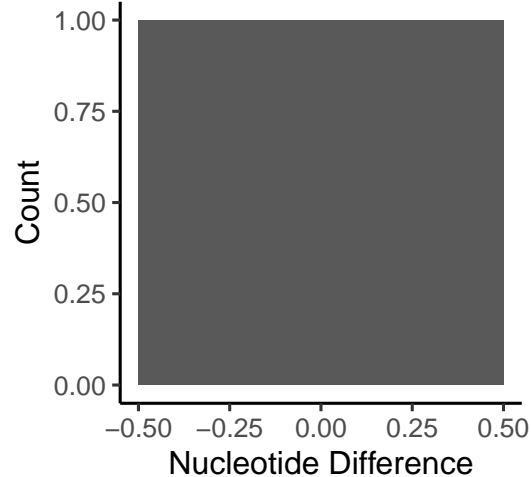
IGHV3-64D*06

105 sequences assigned
101 (96.2%) exact matches, in which:
100 unique CDR3
6 unique J



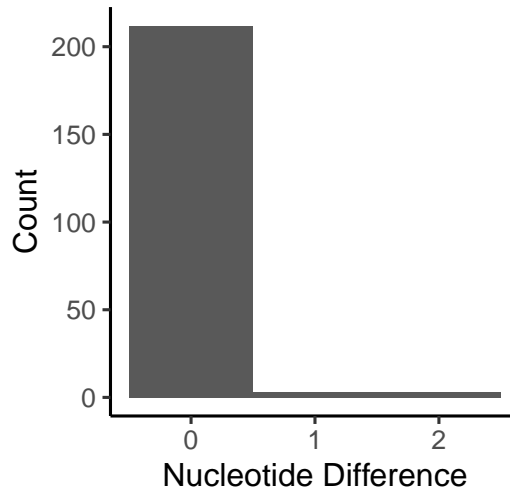
IGHV4-28*01_07

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



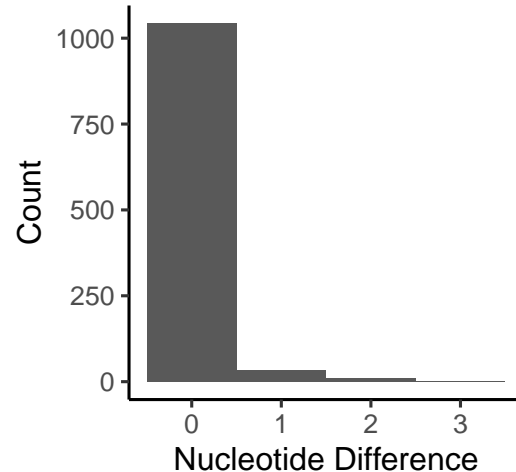
IGHV4-31*03_04

218 sequences assigned
212 (97.2%) exact matches, in which:
205 unique CDR3
5 unique J



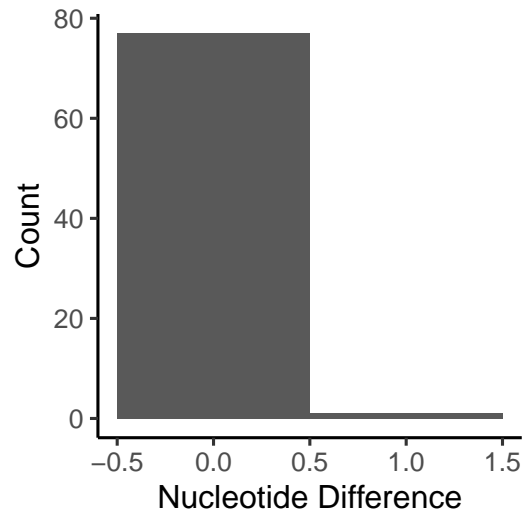
IGHV4-39*01_05

1088 sequences assigned
1043 (95.9%) exact matches, in which:
1009 unique CDR3
7 unique J



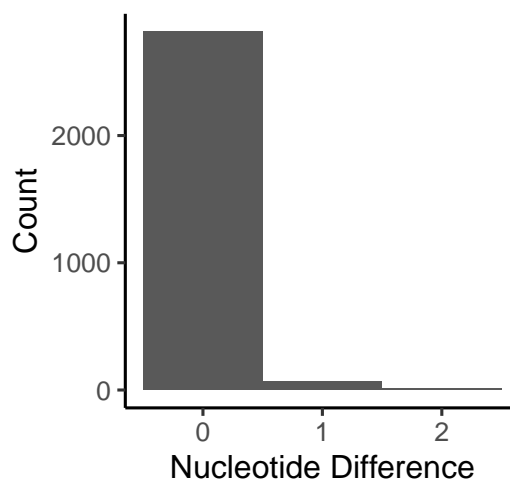
IGHV4-30-2*01

78 sequences assigned
77 (98.7%) exact matches, in which:
75 unique CDR3
6 unique J



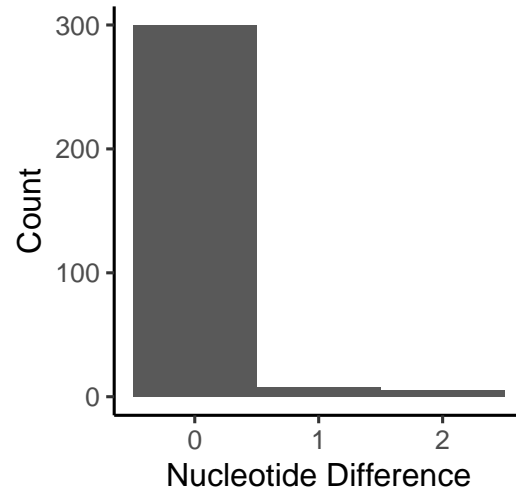
IGHV4-34*01_02

2898 sequences assigned
2816 (97.2%) exact matches, in which:
2715 unique CDR3
7 unique J



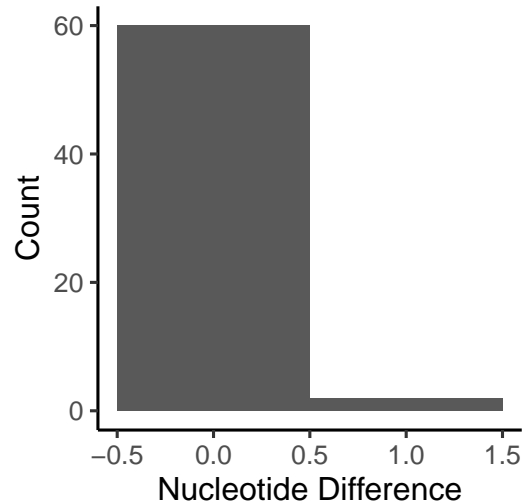
IGHV4-59*08

313 sequences assigned
300 (95.8%) exact matches, in which:
296 unique CDR3
6 unique J



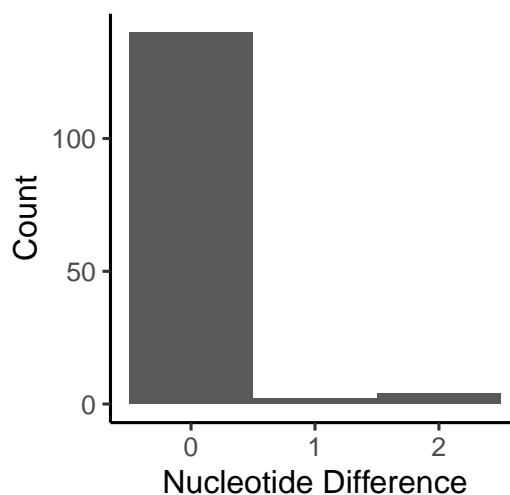
IGHV4-30-4*07

62 sequences assigned
60 (96.8%) exact matches, in which:
60 unique CDR3
5 unique J



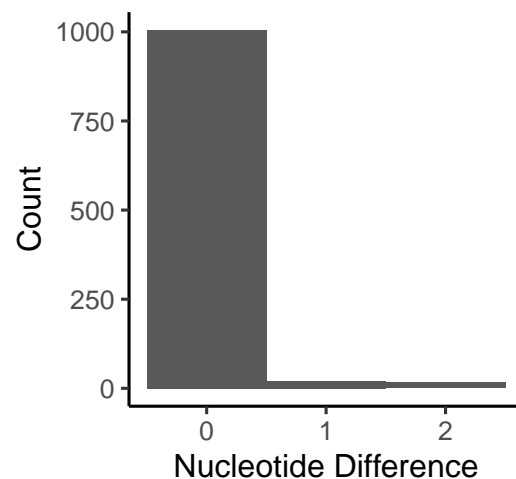
IGHV4-38-2*02

146 sequences assigned
140 (95.9%) exact matches, in which:
137 unique CDR3
6 unique J



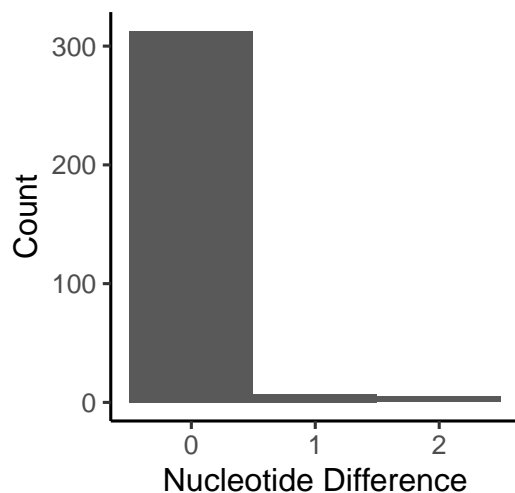
IGHV4-59*01_07

1042 sequences assigned
1005 (96.4%) exact matches, in which:
969 unique CDR3
7 unique J



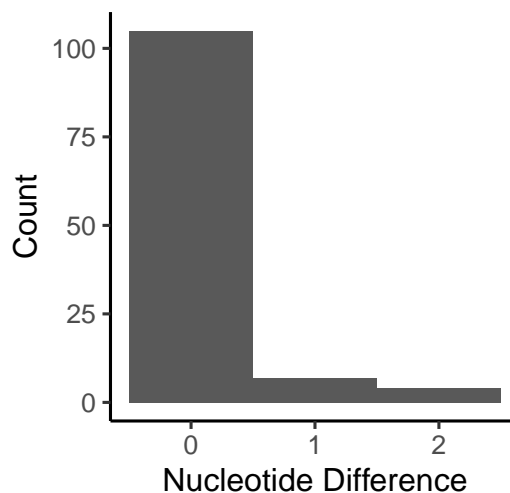
IGHV4–61*02

325 sequences assigned
313 (96.3%) exact matches, in which:
306 unique CDR3
6 unique J



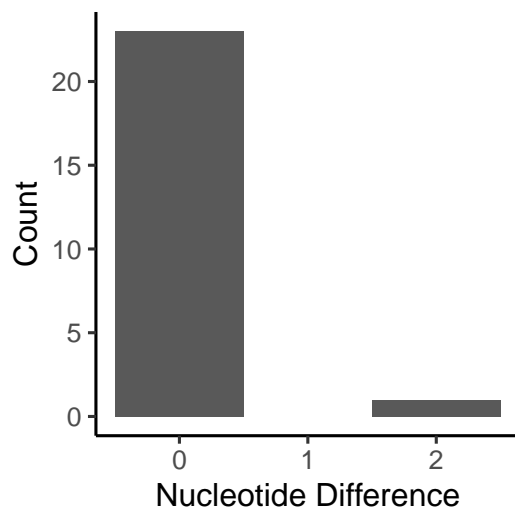
IGHV6–1*01_02

116 sequences assigned
105 (90.5%) exact matches, in which:
105 unique CDR3
6 unique J



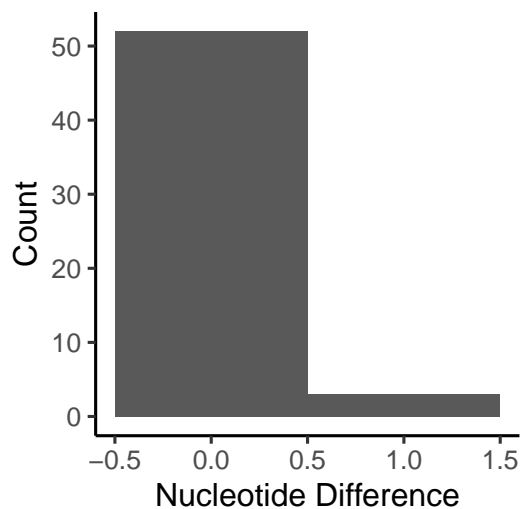
IGHV5–10–1*01_03

24 sequences assigned
23 (95.8%) exact matches, in which:
23 unique CDR3
3 unique J



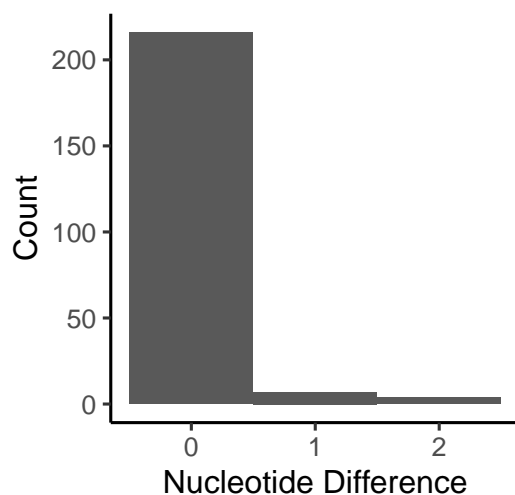
IGHV7–4–1*02

55 sequences assigned
52 (94.5%) exact matches, in which:
52 unique CDR3
5 unique J

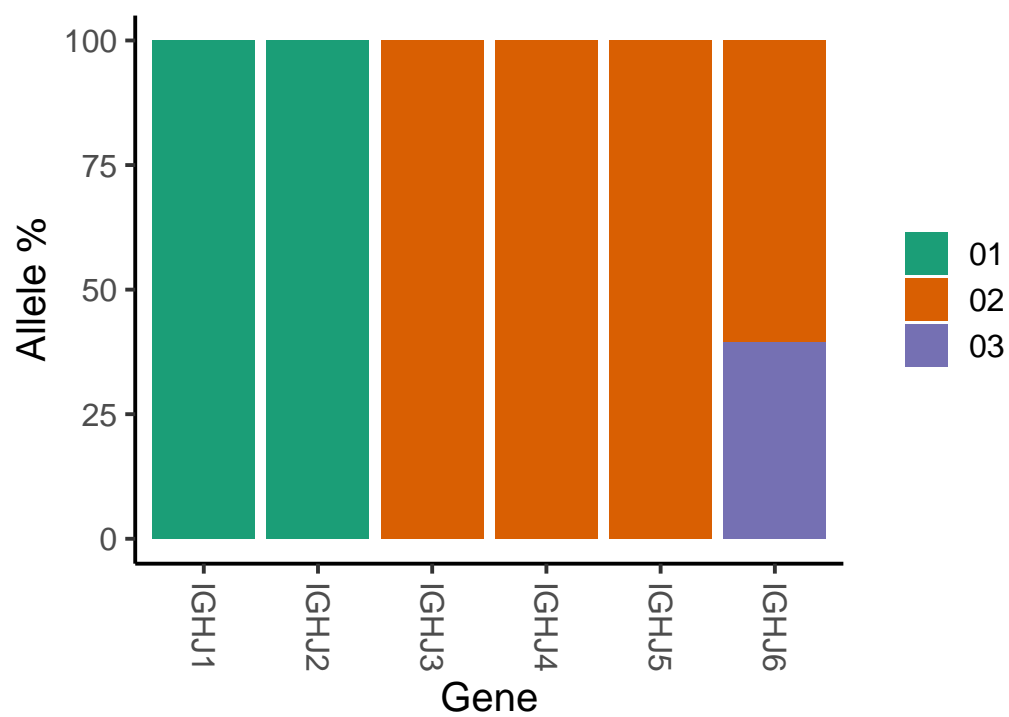


IGHV5–51*01_03

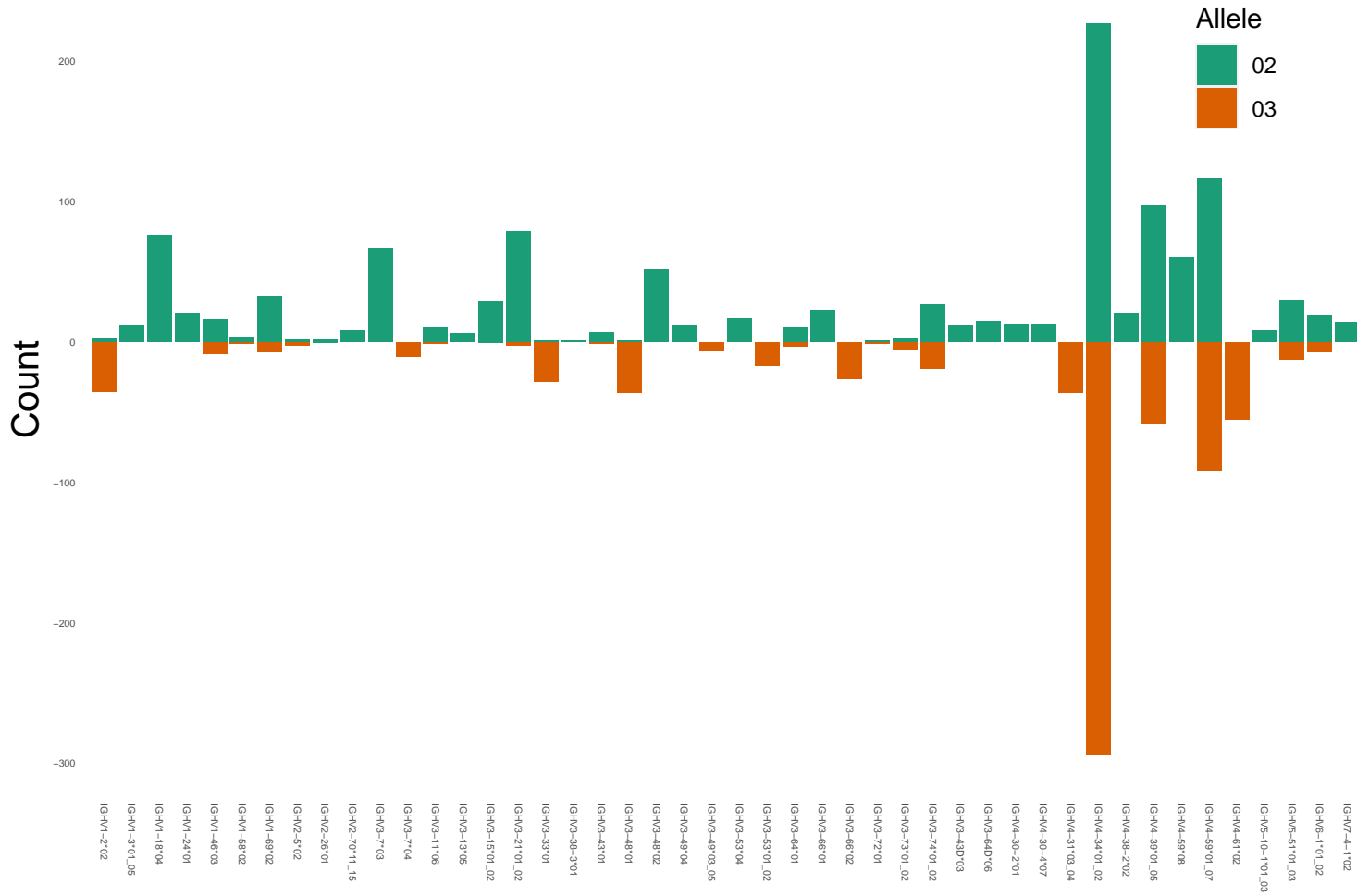
227 sequences assigned
216 (95.2%) exact matches, in which:
216 unique CDR3
7 unique J



Allele Usage



Sequence Count by IGHJ6 allele usage



Never sequences(0) for IV 1 00 02_C000A for IV 0 0 01_01200 are not listed in the genotype and will be ignored.