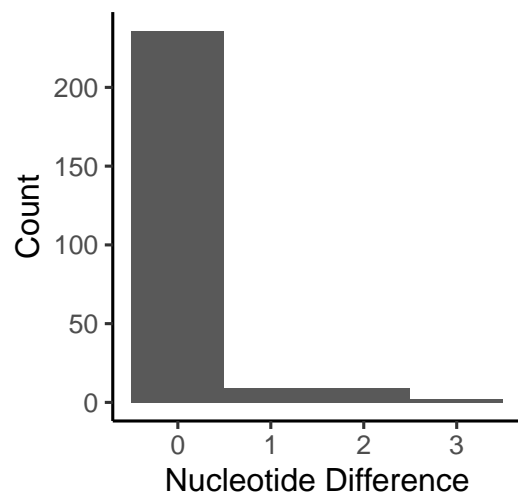


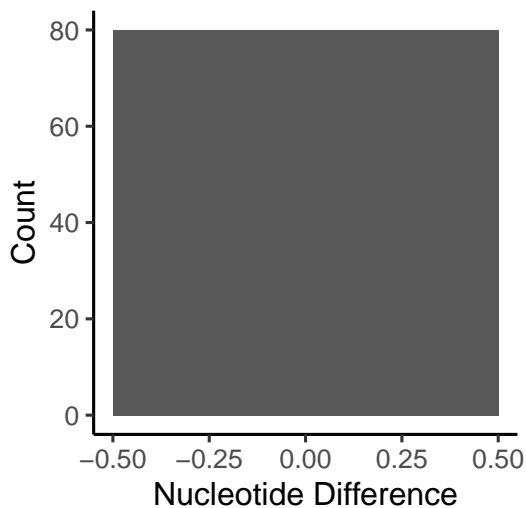
IGHV1–2*02

256 sequences assigned
236 (92.2%) exact matches, in which:
235 unique CDR3
6 unique J



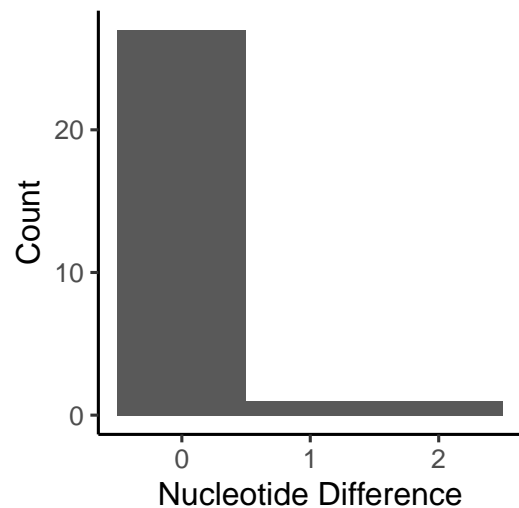
IGHV1–24*01

80 sequences assigned
80 (100%) exact matches, in which:
78 unique CDR3
5 unique J



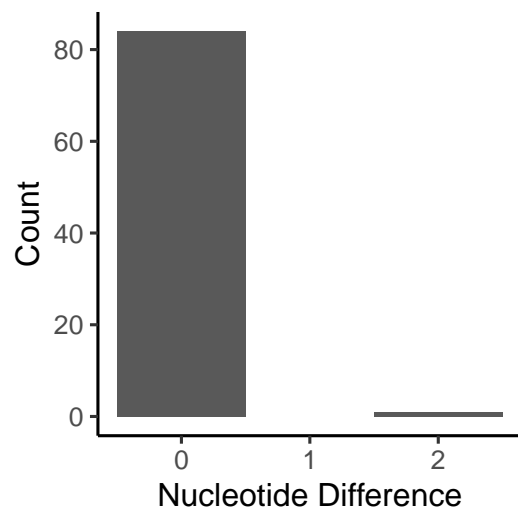
IGHV1–58*02

29 sequences assigned
27 (93.1%) exact matches, in which:
26 unique CDR3
6 unique J



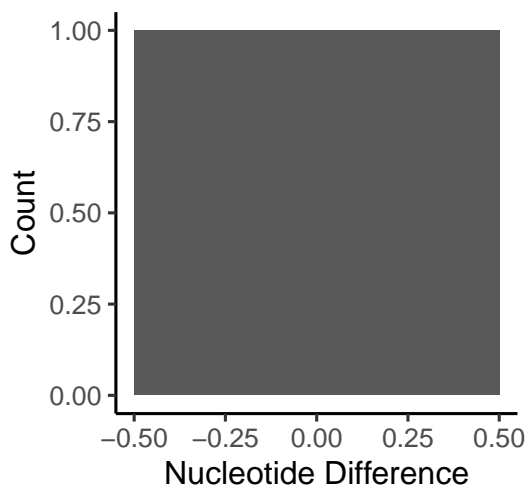
IGHV1–3*01_05

85 sequences assigned
84 (98.8%) exact matches, in which:
83 unique CDR3
6 unique J



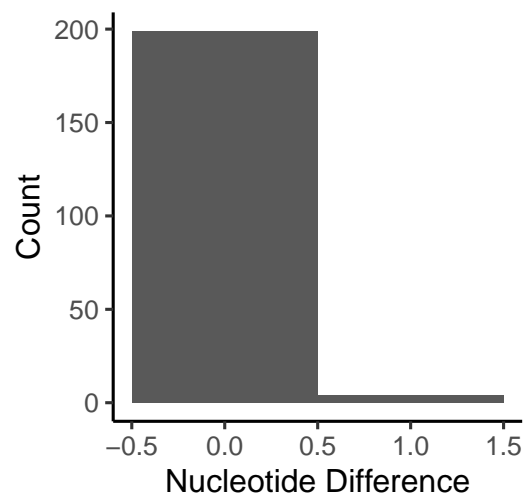
IGHV1–45*02

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



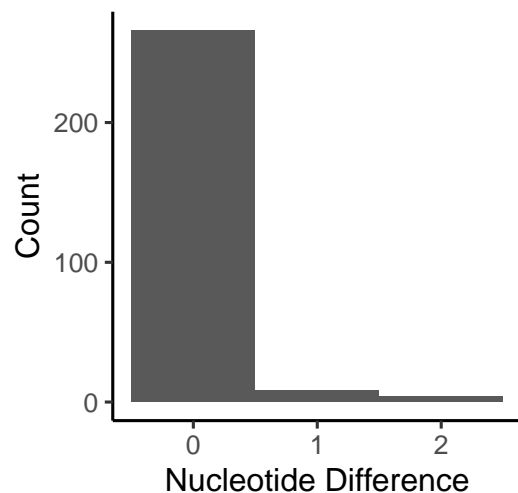
IGHV1–69*02

203 sequences assigned
199 (98%) exact matches, in which:
196 unique CDR3
7 unique J



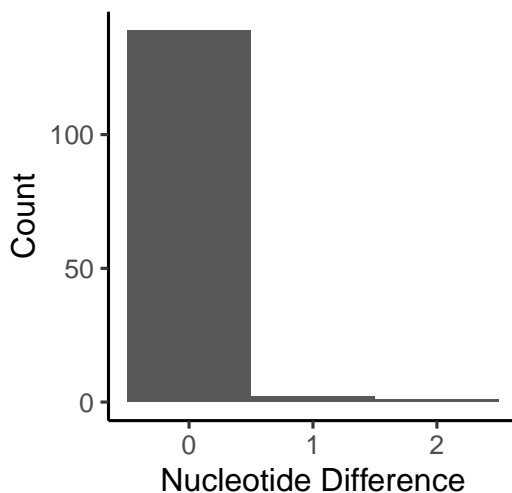
IGHV1–18*04

278 sequences assigned
266 (95.7%) exact matches, in which:
264 unique CDR3
6 unique J



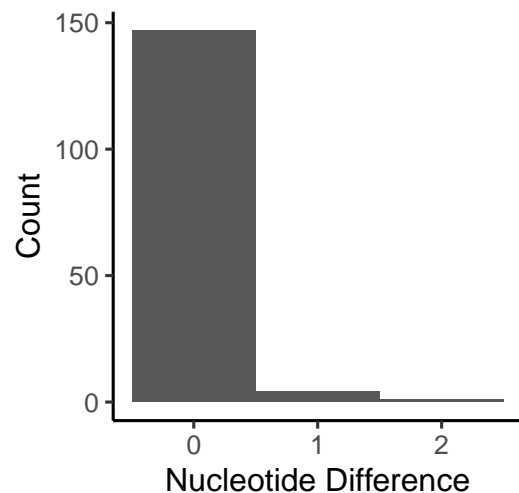
IGHV1–46*03

142 sequences assigned
139 (97.9%) exact matches, in which:
138 unique CDR3
7 unique J



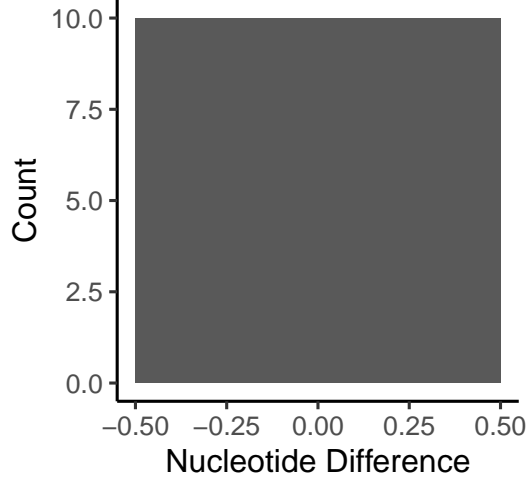
IGHV2–5*02

152 sequences assigned
147 (96.7%) exact matches, in which:
143 unique CDR3
7 unique J



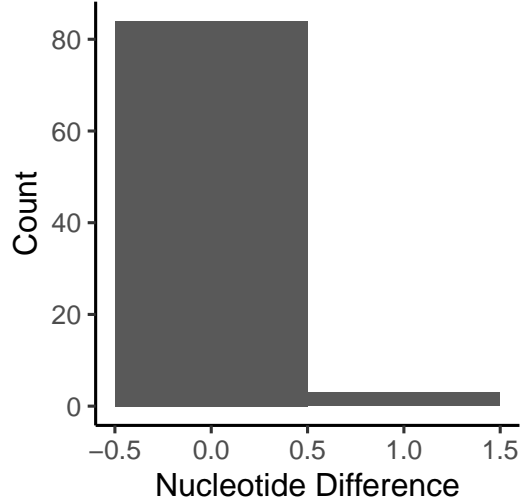
IGHV2–26*01

10 sequences assigned
10 (100%) exact matches, in which:
10 unique CDR3
3 unique J



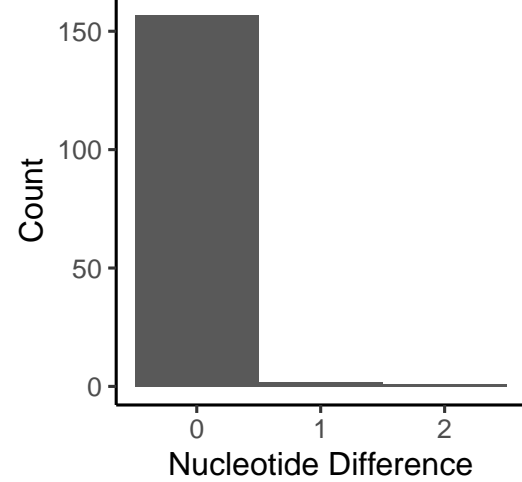
IGHV3–7*04

87 sequences assigned
84 (96.6%) exact matches, in which:
84 unique CDR3
6 unique J



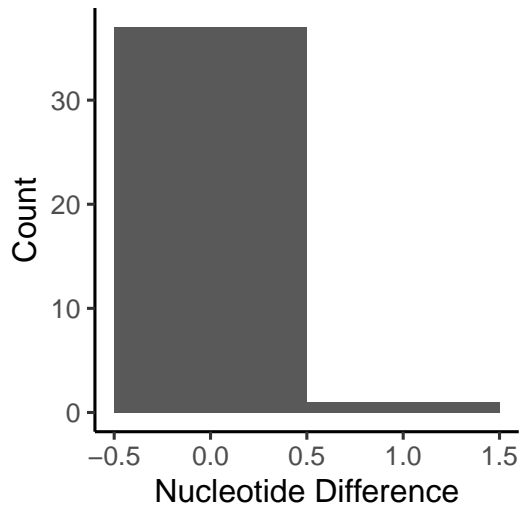
IGHV3–15*01_02

160 sequences assigned
157 (98.1%) exact matches, in which:
155 unique CDR3
5 unique J



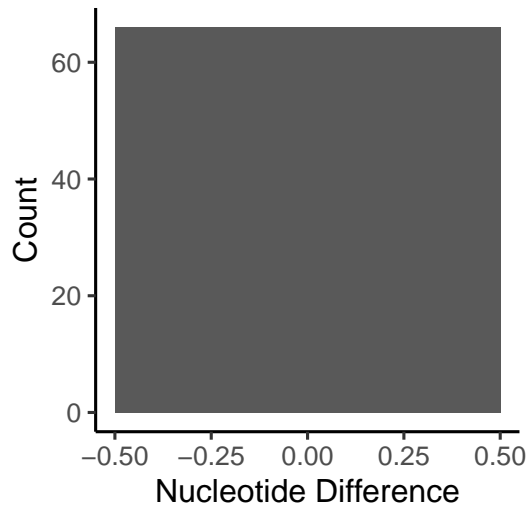
IGHV2–70*11_15

38 sequences assigned
37 (97.4%) exact matches, in which:
37 unique CDR3
4 unique J



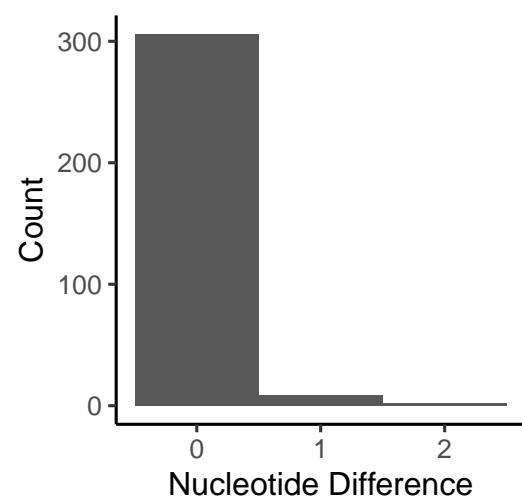
IGHV3–11*06

66 sequences assigned
66 (100%) exact matches, in which:
66 unique CDR3
6 unique J



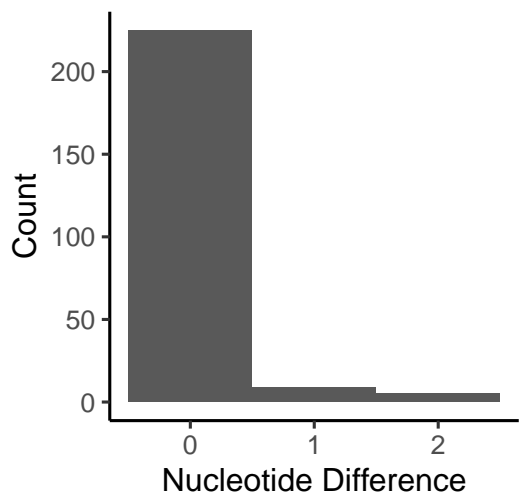
IGHV3–21*01_02

317 sequences assigned
306 (96.5%) exact matches, in which:
296 unique CDR3
7 unique J



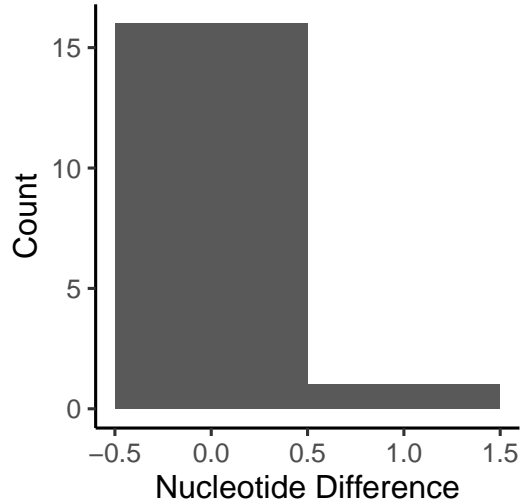
IGHV3–7*03

239 sequences assigned
225 (94.1%) exact matches, in which:
216 unique CDR3
6 unique J



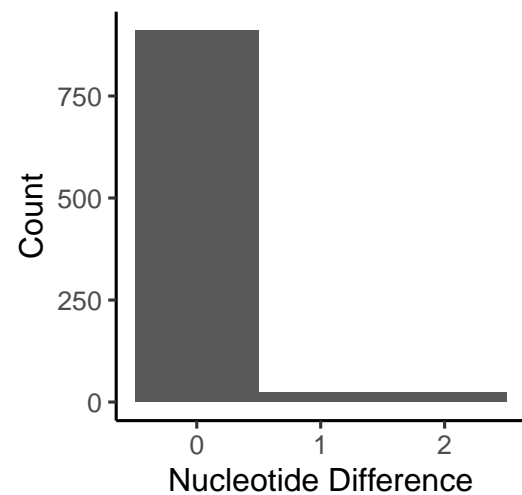
IGHV3–13*05

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



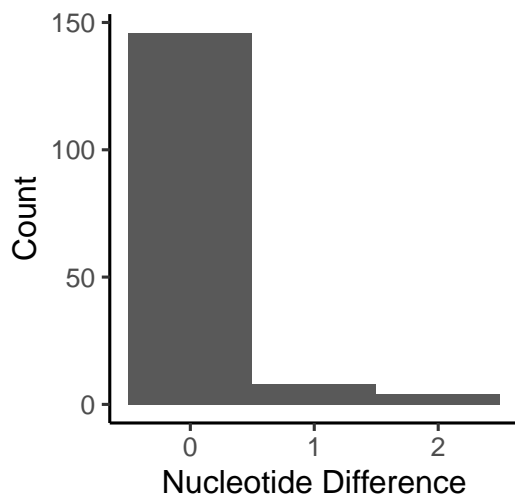
IGHV3–23*01_04

957 sequences assigned
911 (95.2%) exact matches, in which:
878 unique CDR3
7 unique J



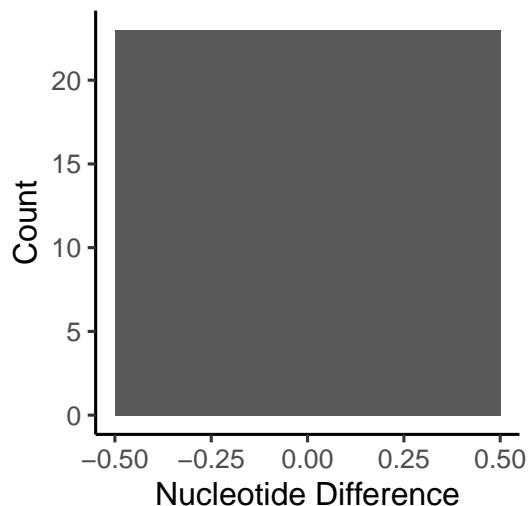
IGHV3–33*01

158 sequences assigned
146 (92.4%) exact matches, in which:
139 unique CDR3
7 unique J



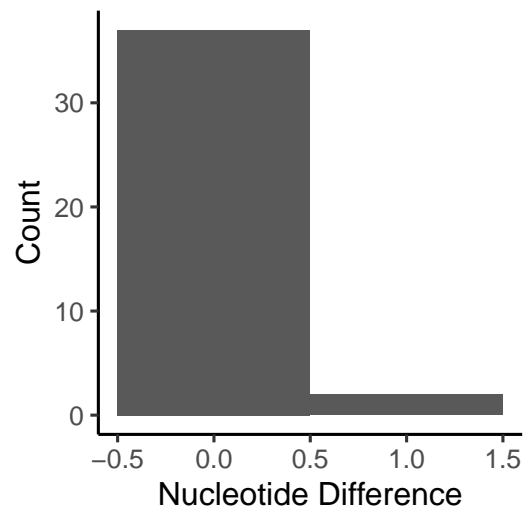
IGHV3–43*01

23 sequences assigned
23 (100%) exact matches, in which:
23 unique CDR3
5 unique J



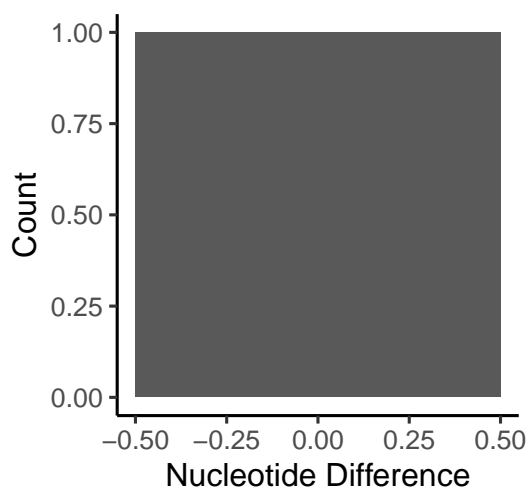
IGHV3–49*04

39 sequences assigned
37 (94.9%) exact matches, in which:
37 unique CDR3
4 unique J



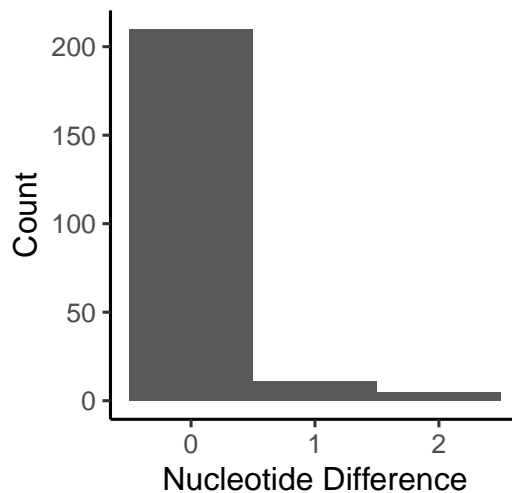
IGHV3–35*01

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



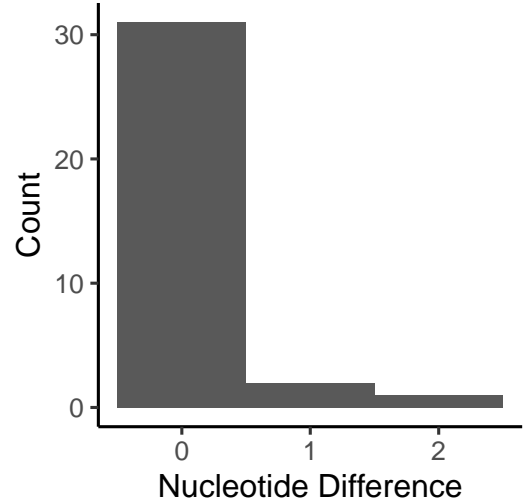
IGHV3–48*01

226 sequences assigned
210 (92.9%) exact matches, in which:
199 unique CDR3
7 unique J



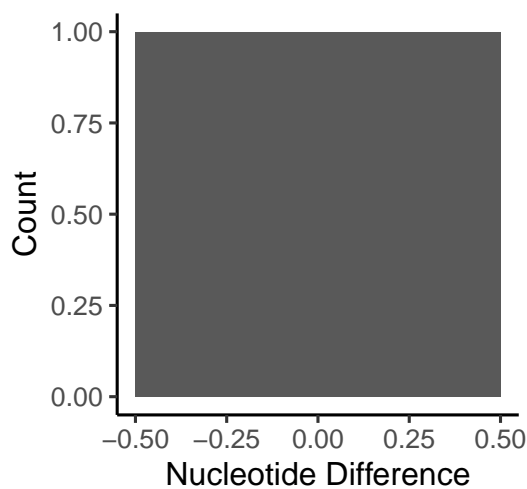
IGHV3–49*03_05

34 sequences assigned
31 (91.2%) exact matches, in which:
31 unique CDR3
5 unique J



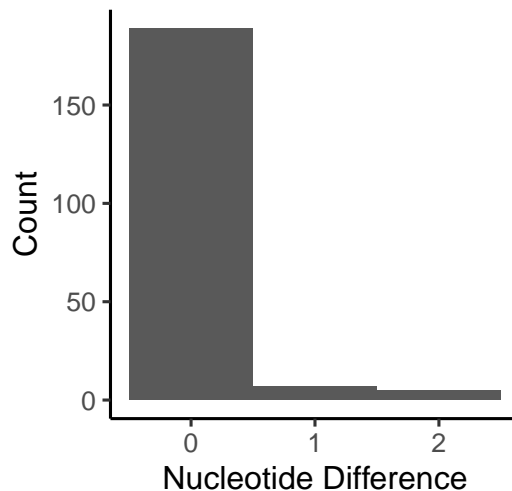
IGHV3–38–3*01

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



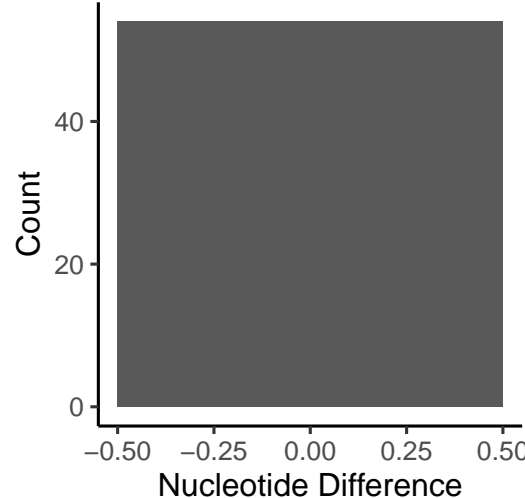
IGHV3–48*02

201 sequences assigned
189 (94%) exact matches, in which:
181 unique CDR3
6 unique J



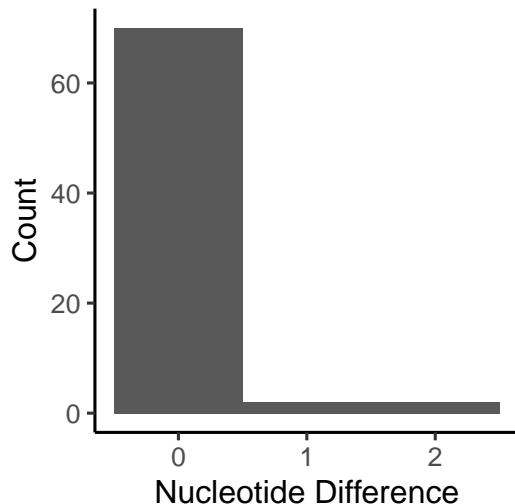
IGHV3–53*04

54 sequences assigned
54 (100%) exact matches, in which:
51 unique CDR3
6 unique J



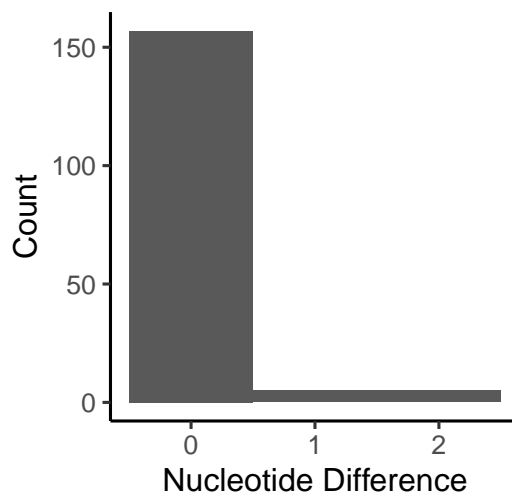
IGHV3-53*01_02

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



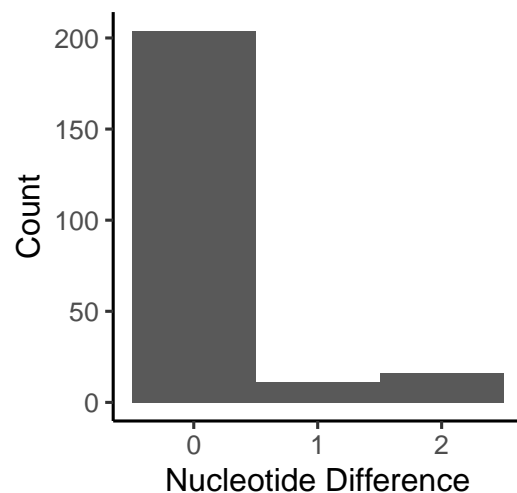
IGHV3-66*02

167 sequences assigned
157 (94%) exact matches, in which:
151 unique CDR3
6 unique J



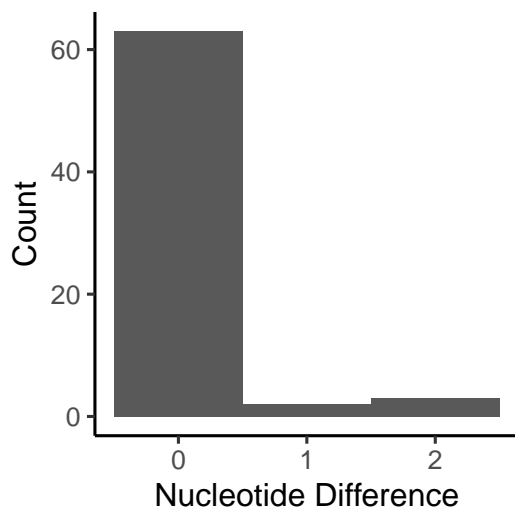
IGHV3-74*01_02

231 sequences assigned
204 (88.3%) exact matches, in which:
194 unique CDR3
7 unique J



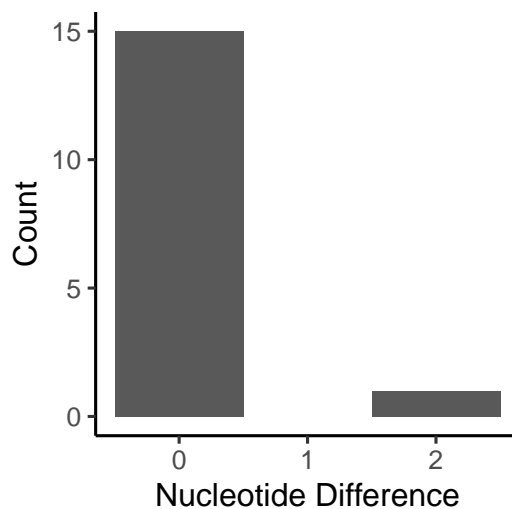
IGHV3-64*01

68 sequences assigned
63 (92.6%) exact matches, in which:
60 unique CDR3
5 unique J



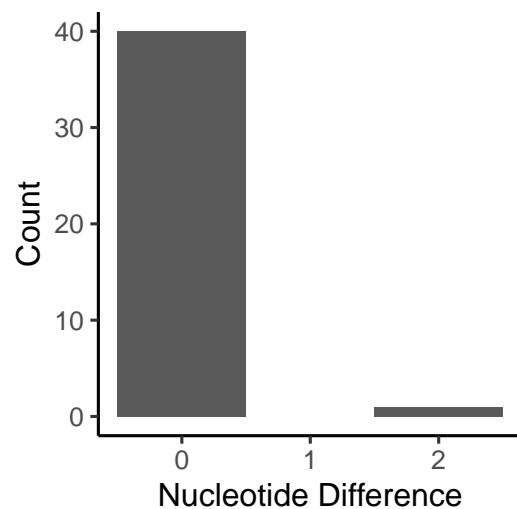
IGHV3-72*01

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



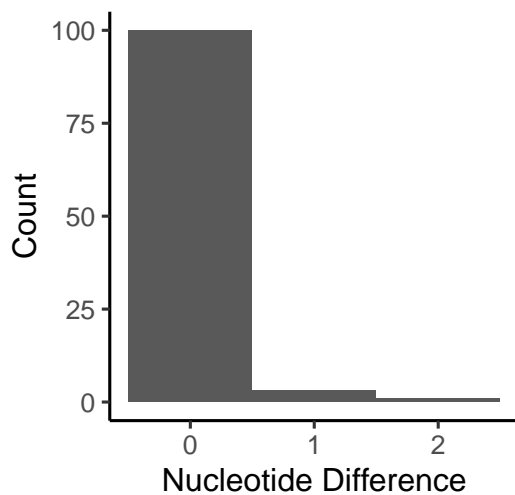
IGHV3-43D*03

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



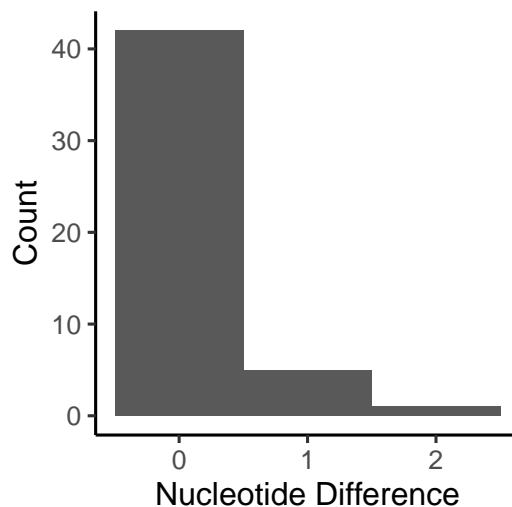
IGHV3-66*01

104 sequences assigned
100 (96.2%) exact matches, in which:
97 unique CDR3
5 unique J



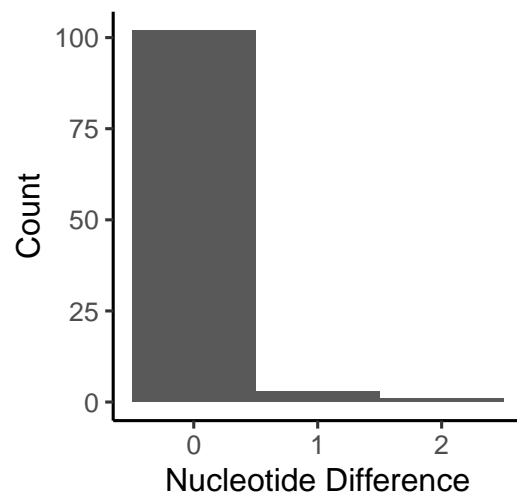
IGHV3-73*01_02

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



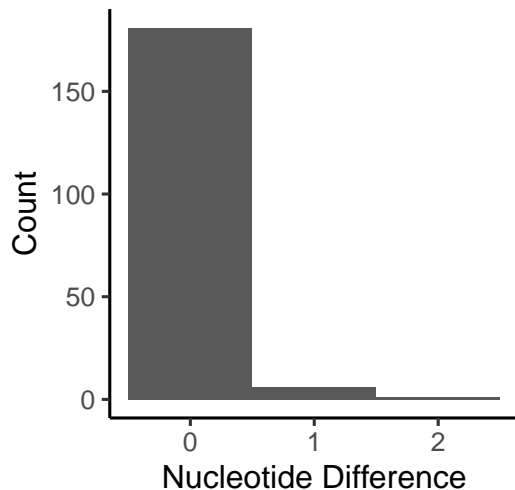
IGHV3-64D*06

106 sequences assigned
102 (96.2%) exact matches, in which:
101 unique CDR3
6 unique J



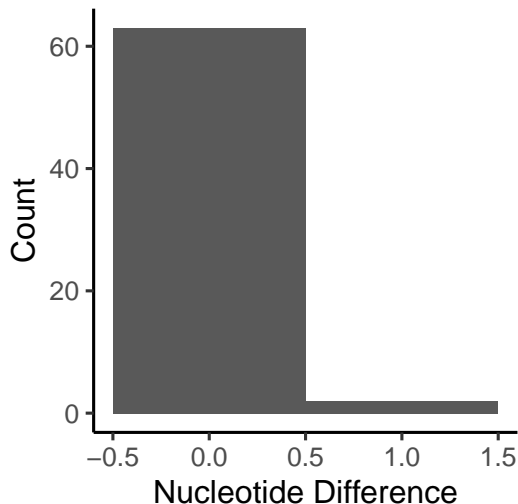
IGHV4-4*02_03

188 sequences assigned
181 (96.3%) exact matches, in which:
177 unique CDR3
6 unique J



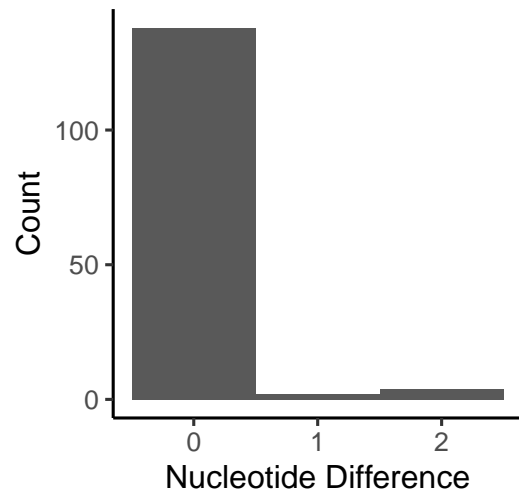
IGHV4-30-4*07

65 sequences assigned
63 (96.9%) exact matches, in which:
63 unique CDR3
5 unique J



IGHV4-38-2*02

144 sequences assigned
138 (95.8%) exact matches, in which:
135 unique CDR3
6 unique J



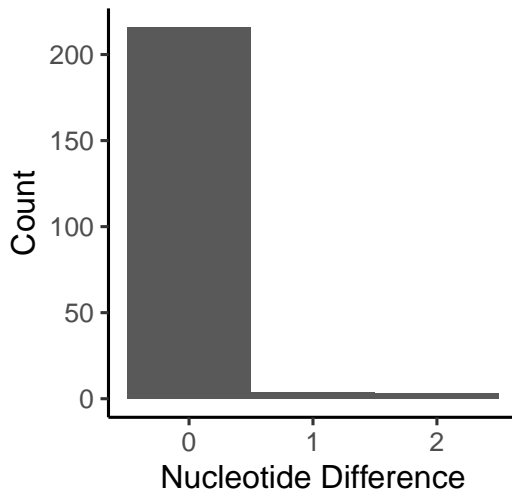
IGHV4-28*01_07

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



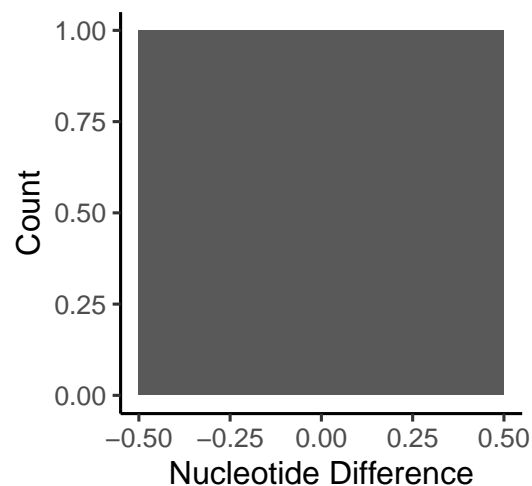
IGHV4-31*02

223 sequences assigned
216 (96.9%) exact matches, in which:
209 unique CDR3
5 unique J



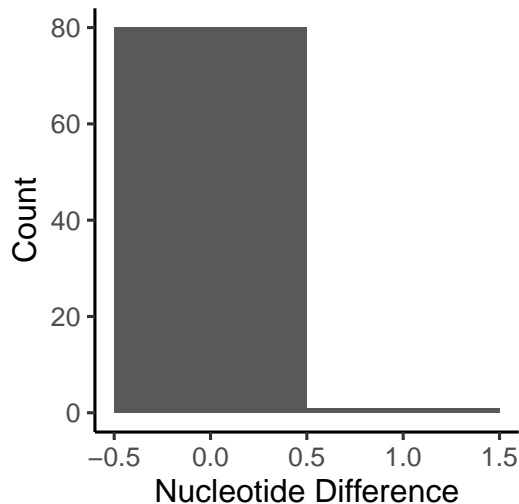
IGHV4-39*01_05

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



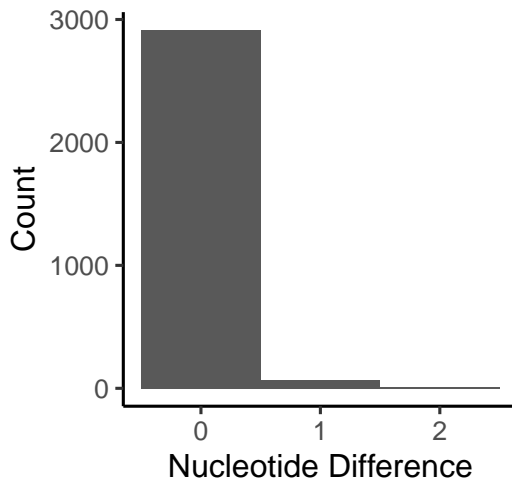
IGHV4-30-2*01

81 sequences assigned
80 (98.8%) exact matches, in which:
77 unique CDR3
6 unique J



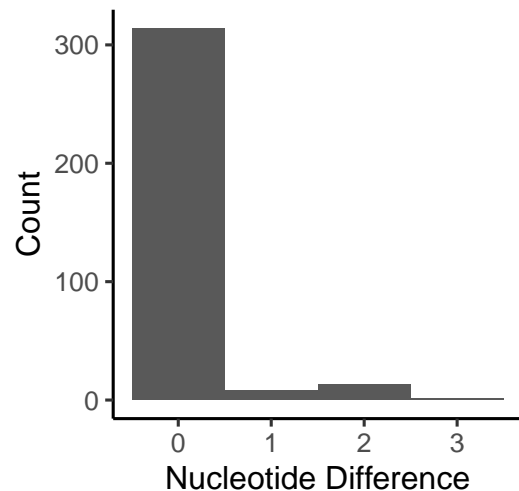
IGHV4-34*01_02

2996 sequences assigned
2914 (97.3%) exact matches, in which:
2787 unique CDR3
7 unique J



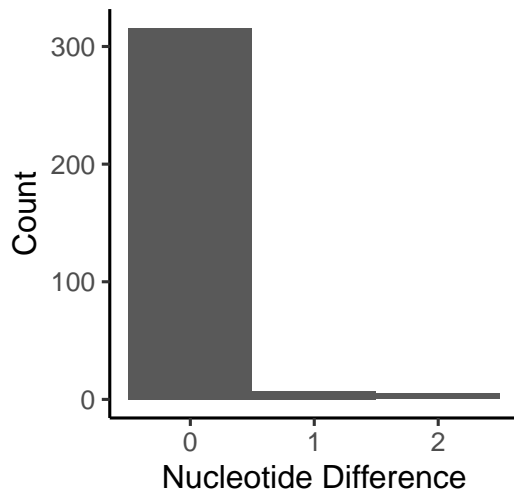
IGHV4-59*08

336 sequences assigned
314 (93.5%) exact matches, in which:
304 unique CDR3
6 unique J



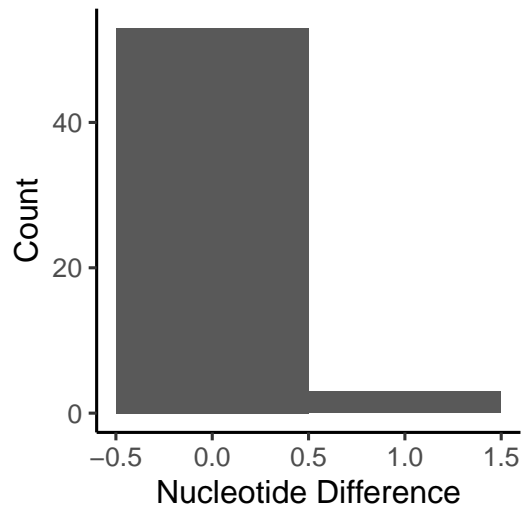
IGHV4–61*02

328 sequences assigned
316 (96.3%) exact matches, in which:
309 unique CDR3
6 unique J



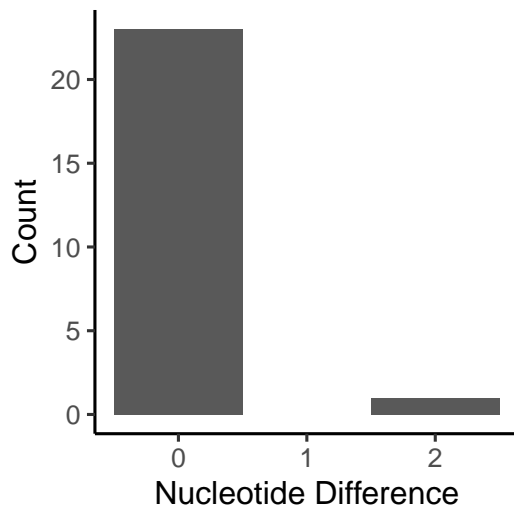
IGHV7–4–1*02

56 sequences assigned
53 (94.6%) exact matches, in which:
53 unique CDR3
5 unique J



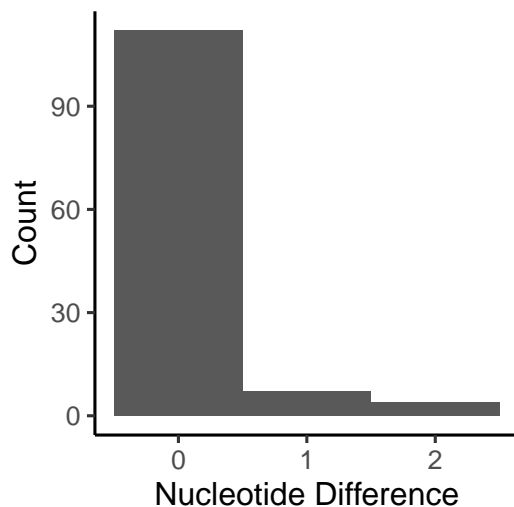
IGHV5–10–1*01_03

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

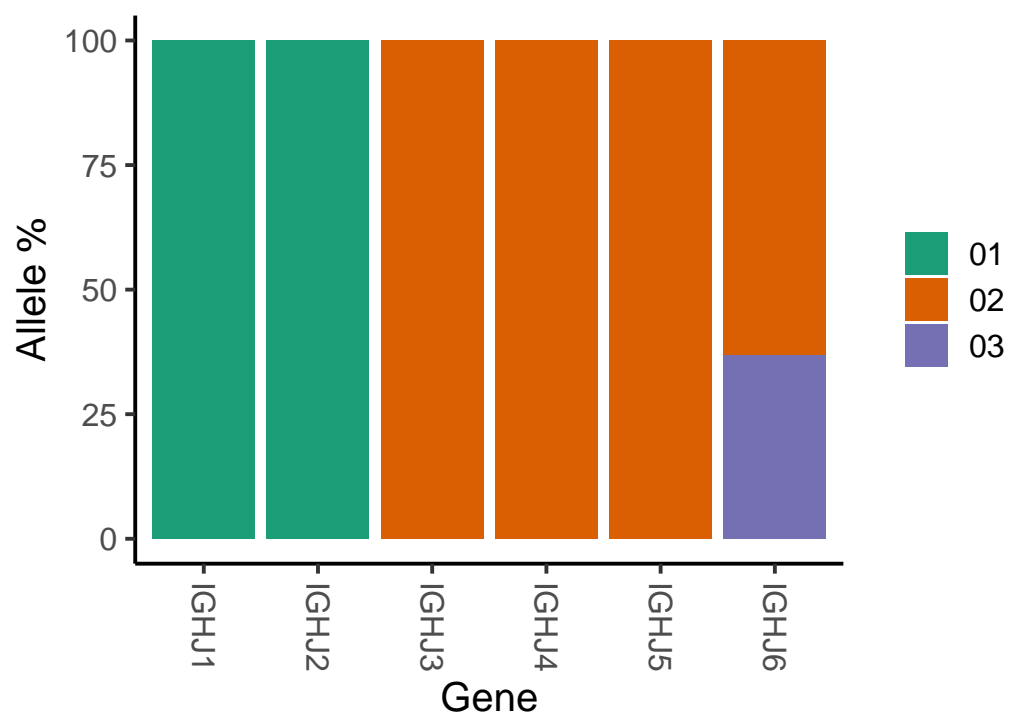


IGHV6–1*01_02

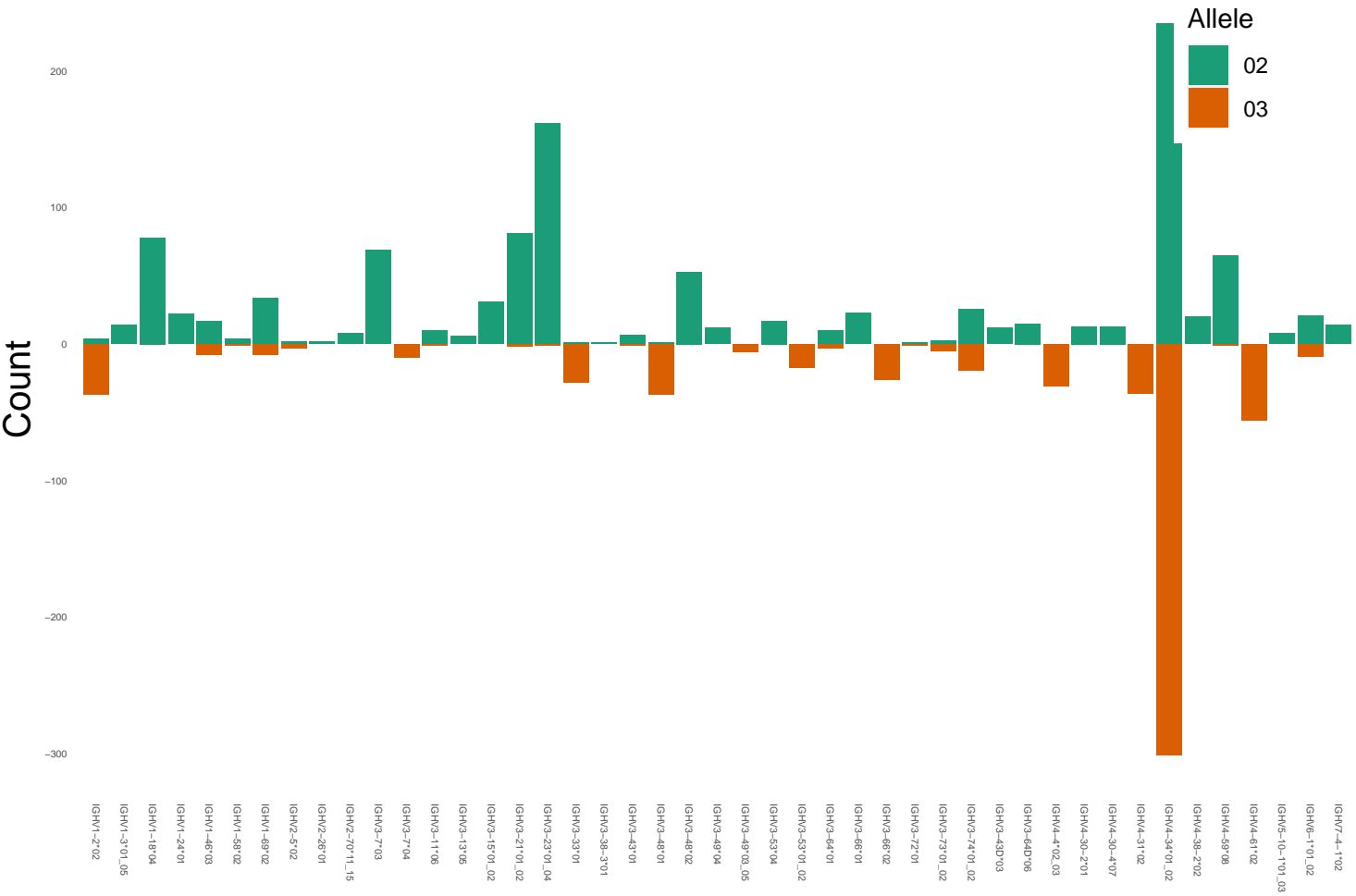
123 sequences assigned
112 (91.1%) exact matches, in which:
111 unique CDR3
6 unique J



Allele Usage



Sequence Count by IGHJ6 allele usage



[illegible]