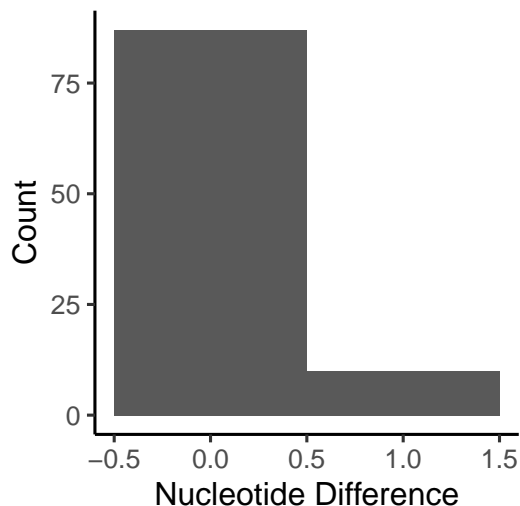


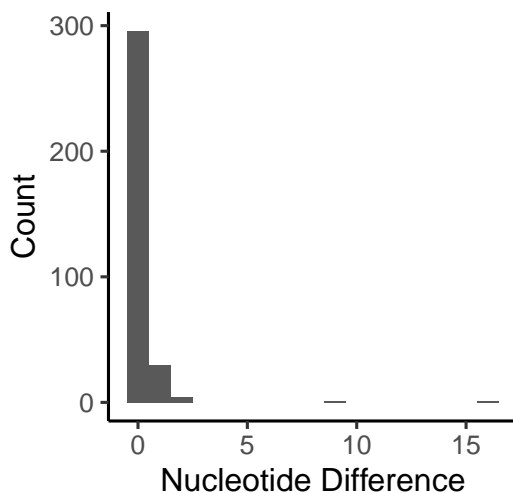
IGHV1-2*04

97 sequences assigned
87 (89.7%) exact matches, in which:
85 unique CDR3
6 unique J



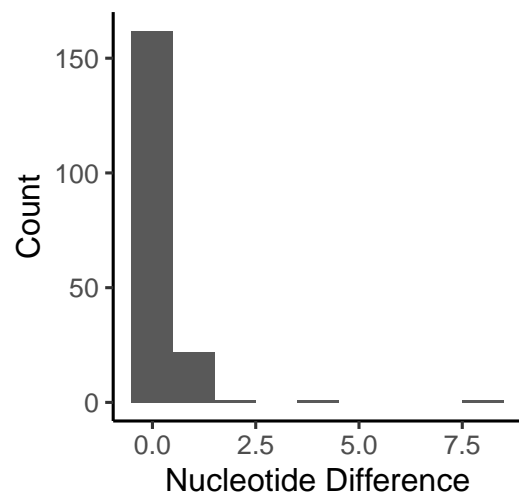
IGHV1-8*01

332 sequences assigned
296 (89.2%) exact matches, in which:
290 unique CDR3
7 unique J



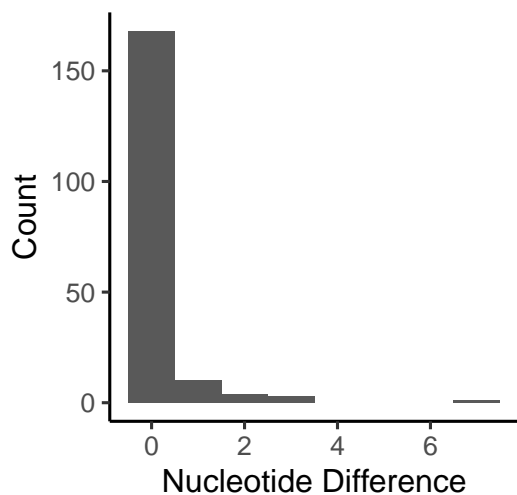
IGHV1-46*01

187 sequences assigned
162 (86.6%) exact matches, in which:
159 unique CDR3
7 unique J



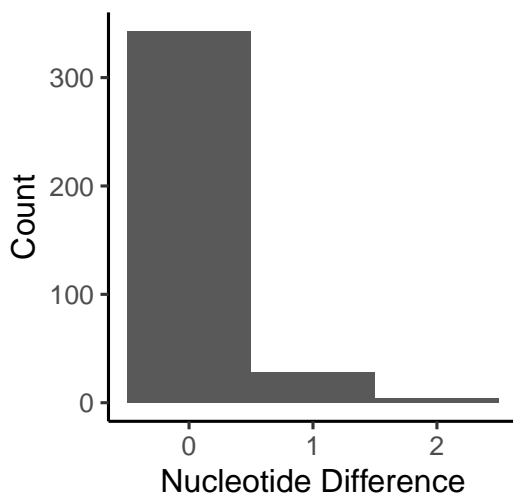
IGHV1-2*06

186 sequences assigned
168 (90.3%) exact matches, in which:
161 unique CDR3
7 unique J



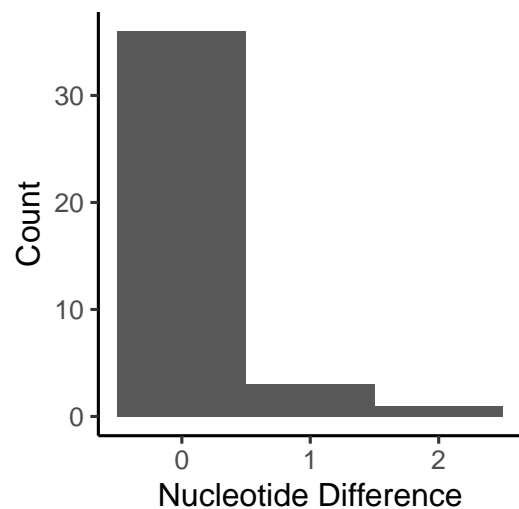
IGHV1-18*01

375 sequences assigned
343 (91.5%) exact matches, in which:
339 unique CDR3
7 unique J



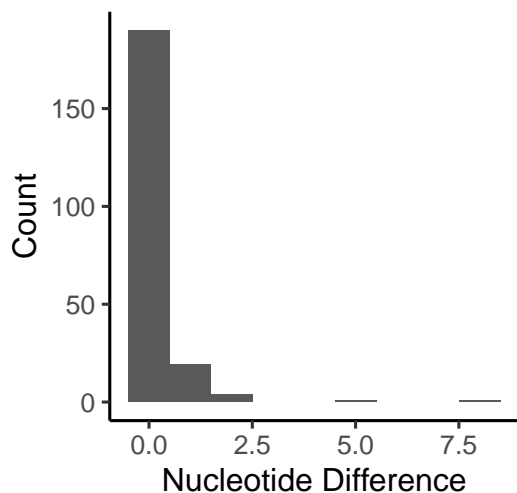
IGHV1-58*01

40 sequences assigned
36 (90%) exact matches, in which:
35 unique CDR3
7 unique J



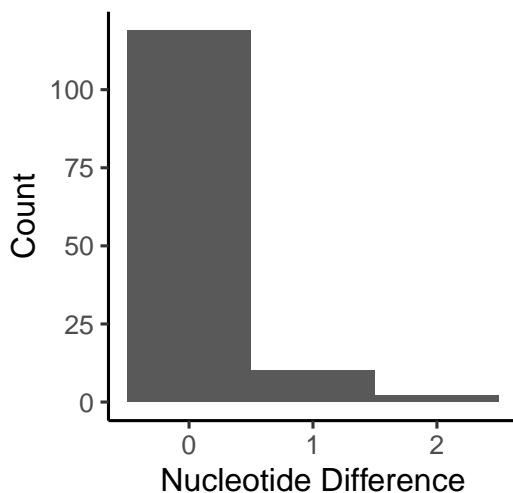
IGHV1-3*01

215 sequences assigned
190 (88.4%) exact matches, in which:
188 unique CDR3
7 unique J



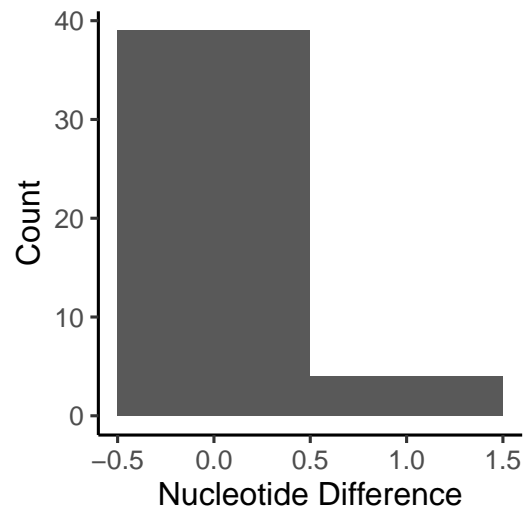
IGHV1-24*01

131 sequences assigned
119 (90.8%) exact matches, in which:
118 unique CDR3
7 unique J



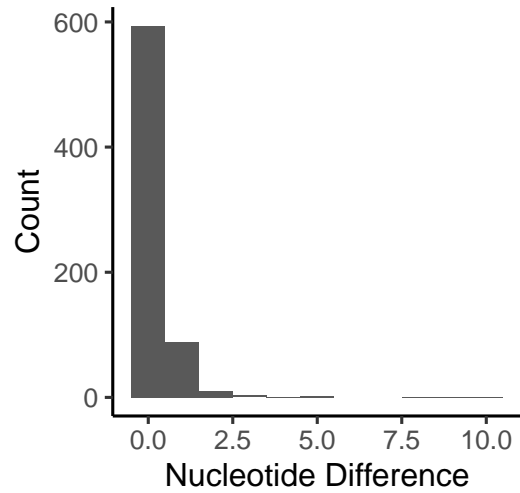
IGHV1-69-2*01

43 sequences assigned
39 (90.7%) exact matches, in which:
39 unique CDR3
5 unique J



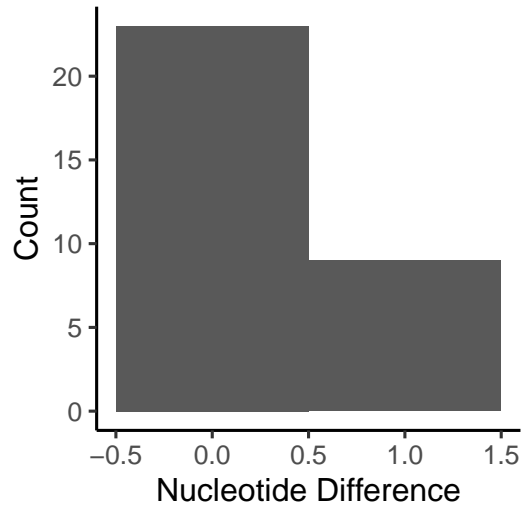
IGHV1–69*06

701 sequences assigned
594 (84.7%) exact matches, in which:
583 unique CDR3
7 unique J



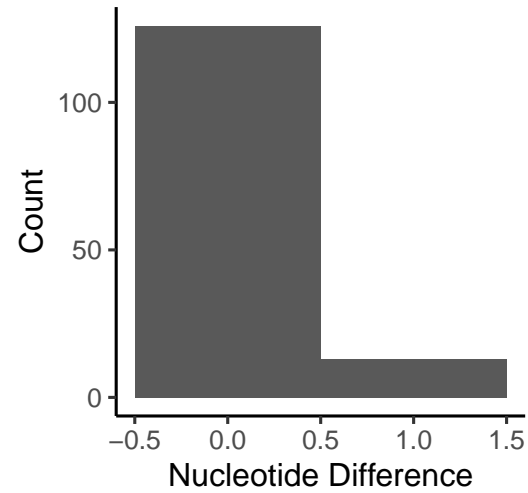
IGHV2–70*01

32 sequences assigned
23 (71.9%) exact matches, in which:
23 unique CDR3
6 unique J



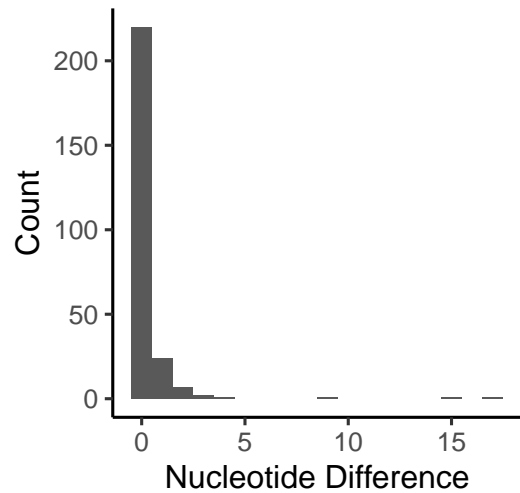
IGHV3–11*01

139 sequences assigned
126 (90.6%) exact matches, in which:
124 unique CDR3
6 unique J



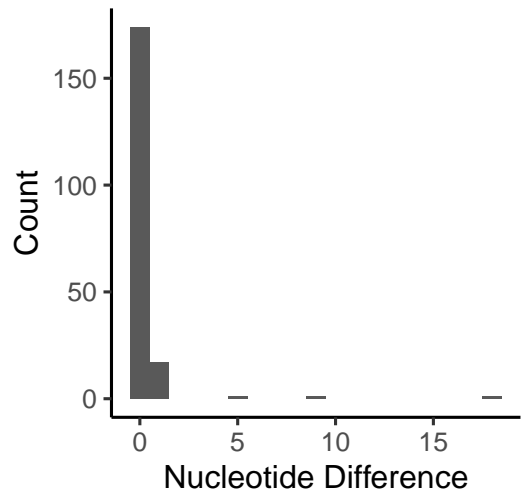
IGHV2–5*02

257 sequences assigned
220 (85.6%) exact matches, in which:
219 unique CDR3
7 unique J



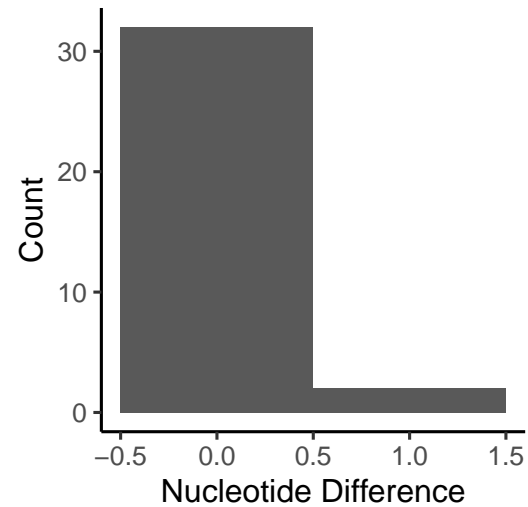
IGHV3–7*01

194 sequences assigned
174 (89.7%) exact matches, in which:
171 unique CDR3
7 unique J



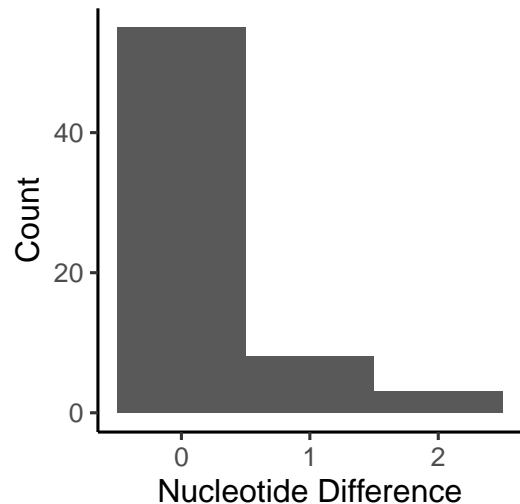
IGHV3–13*01

34 sequences assigned
32 (94.1%) exact matches, in which:
31 unique CDR3
6 unique J



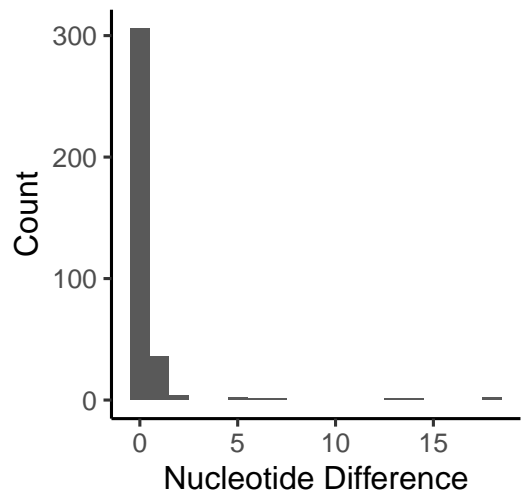
IGHV2–26*01

66 sequences assigned
55 (83.3%) exact matches, in which:
54 unique CDR3
6 unique J



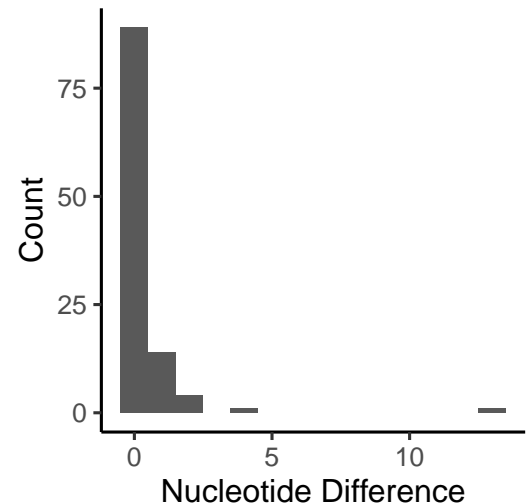
IGHV3–9*01

354 sequences assigned
306 (86.4%) exact matches, in which:
290 unique CDR3
7 unique J



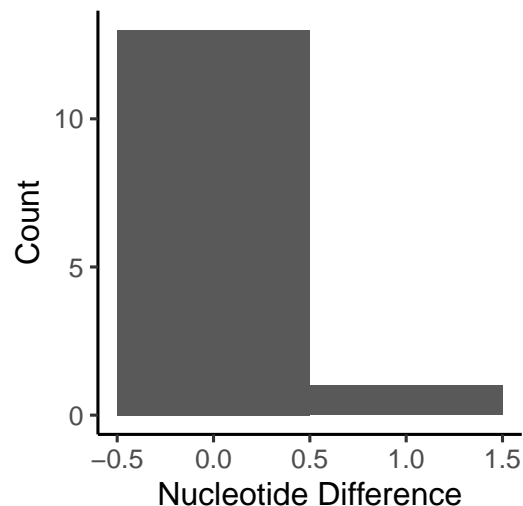
IGHV3–15*01

109 sequences assigned
89 (81.7%) exact matches, in which:
89 unique CDR3
6 unique J



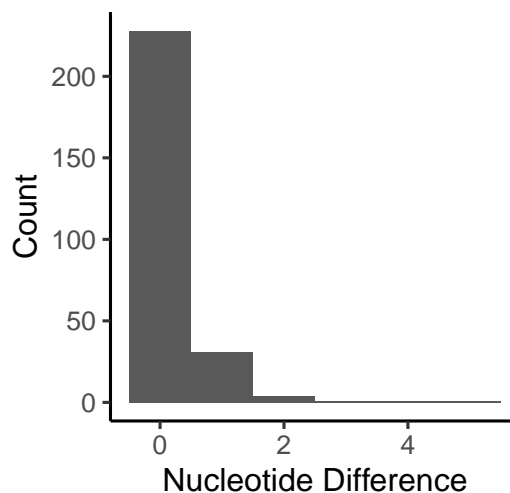
IGHV3-20*01

14 sequences assigned
13 (92.9%) exact matches, in which:
13 unique CDR3
6 unique J



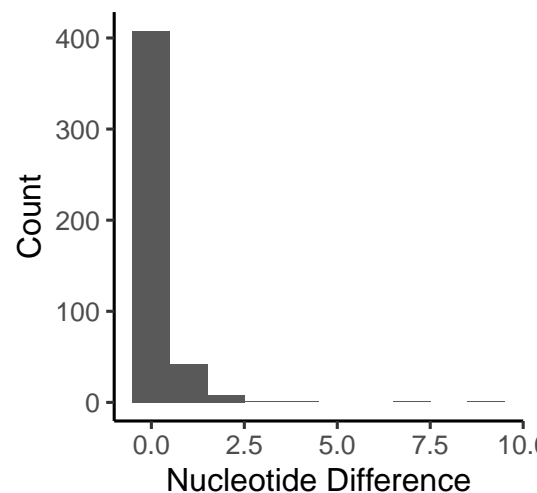
IGHV3-30-3*01

266 sequences assigned
228 (85.7%) exact matches, in which:
221 unique CDR3
6 unique J



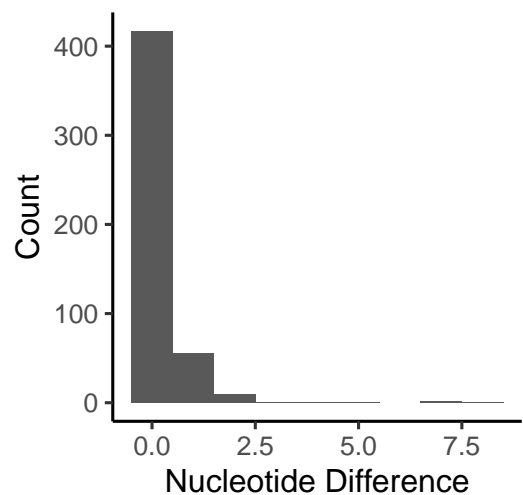
IGHV3-48*03

462 sequences assigned
408 (88.3%) exact matches, in which:
401 unique CDR3
7 unique J



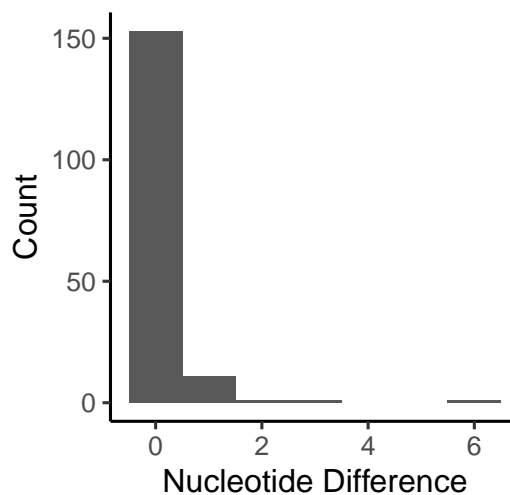
IGHV3-21*01

490 sequences assigned
417 (85.1%) exact matches, in which:
406 unique CDR3
7 unique J



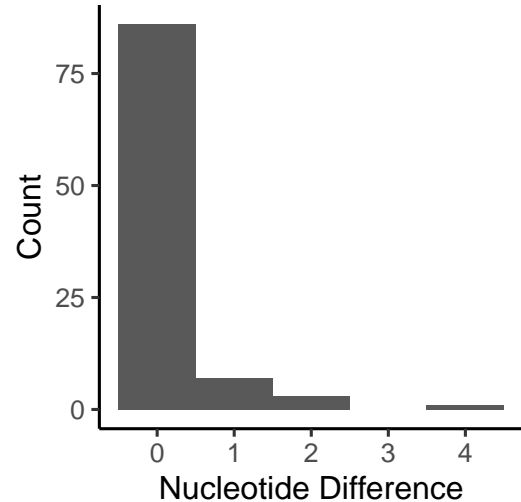
IGHV3-33*01

168 sequences assigned
153 (91.1%) exact matches, in which:
147 unique CDR3
7 unique J



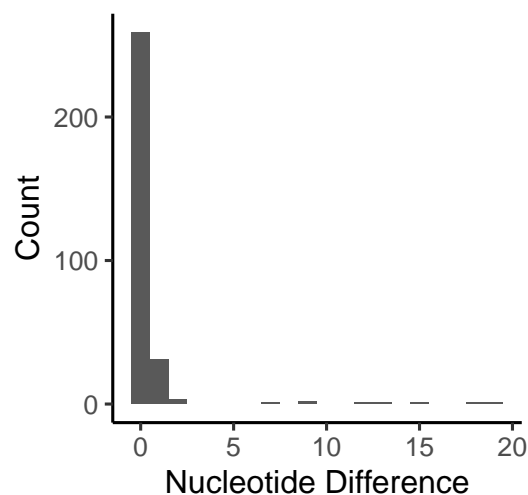
IGHV3-49*04

98 sequences assigned
86 (87.8%) exact matches, in which:
84 unique CDR3
7 unique J



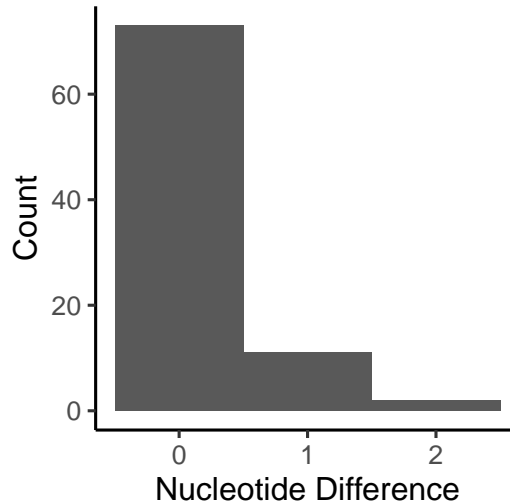
IGHV3-23*04

301 sequences assigned
259 (86%) exact matches, in which:
247 unique CDR3
6 unique J



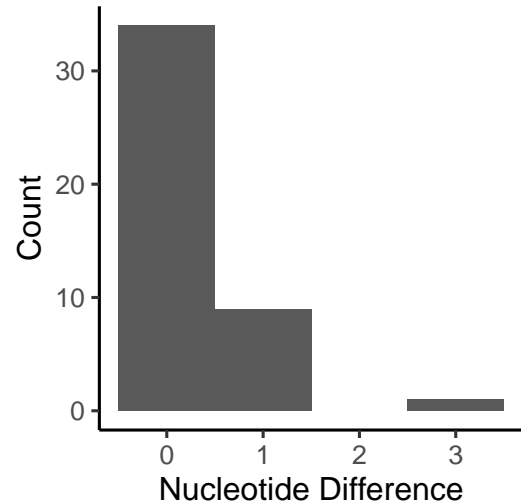
IGHV3-43*02

86 sequences assigned
73 (84.9%) exact matches, in which:
72 unique CDR3
6 unique J



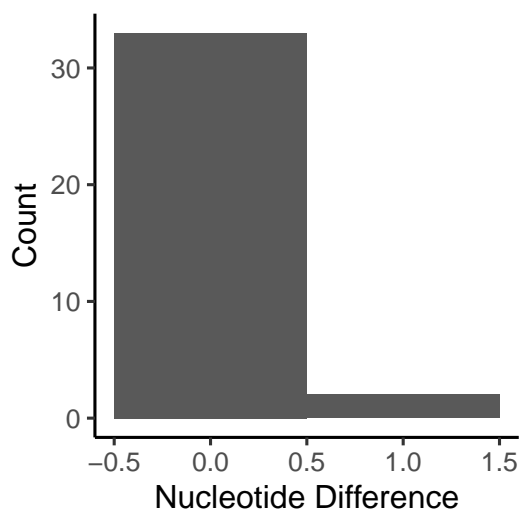
IGHV3-53*02

44 sequences assigned
34 (77.3%) exact matches, in which:
32 unique CDR3
5 unique J



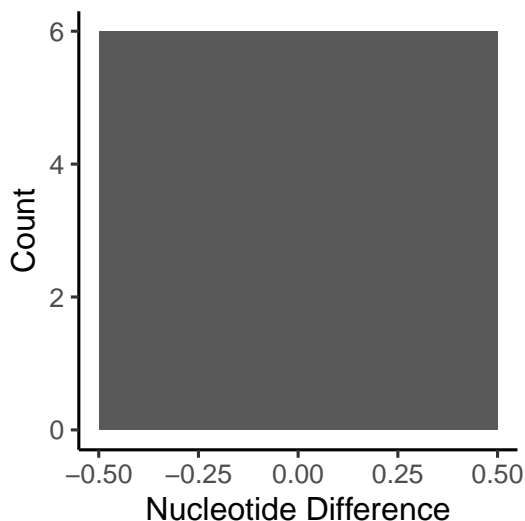
IGHV3-53*04

35 sequences assigned
33 (94.3%) exact matches, in which:
33 unique CDR3
4 unique J



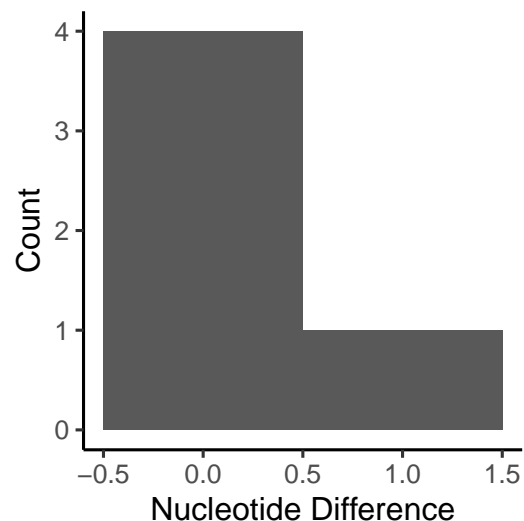
IGHV3-72*01

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



IGHV3-43D*04

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



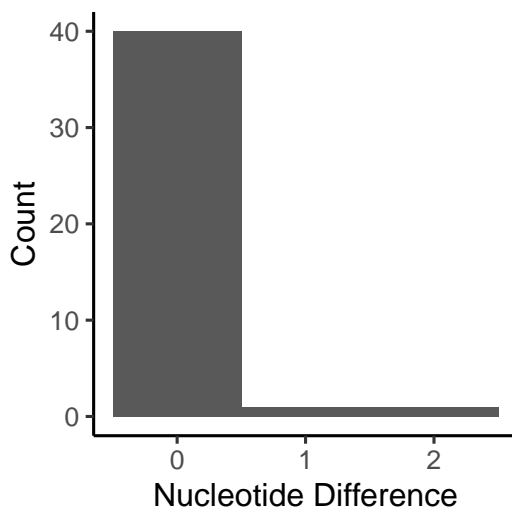
IGHV3-64*02

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



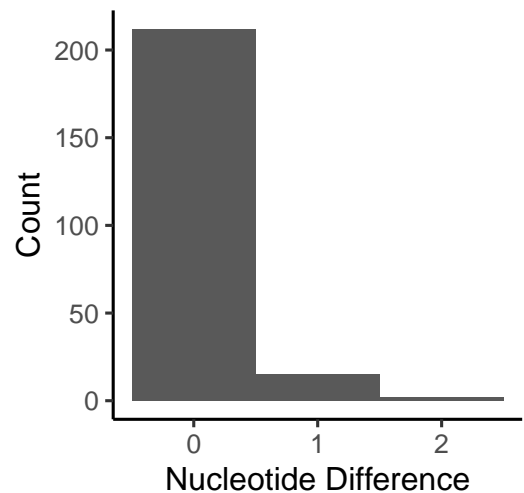
IGHV3-73*02

42 sequences assigned
40 (95.2%) exact matches, in which:
38 unique CDR3
7 unique J



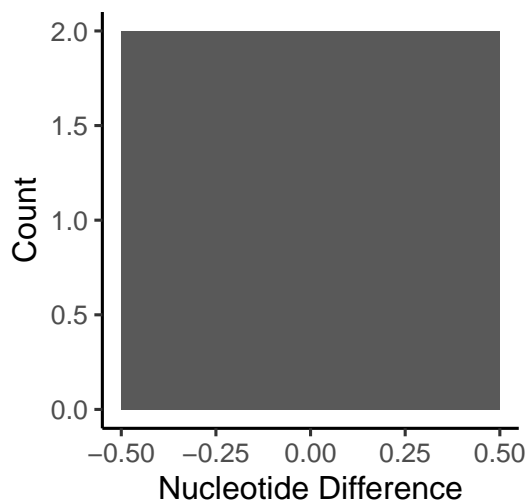
IGHV4-4*02

229 sequences assigned
212 (92.6%) exact matches, in which:
212 unique CDR3
7 unique J



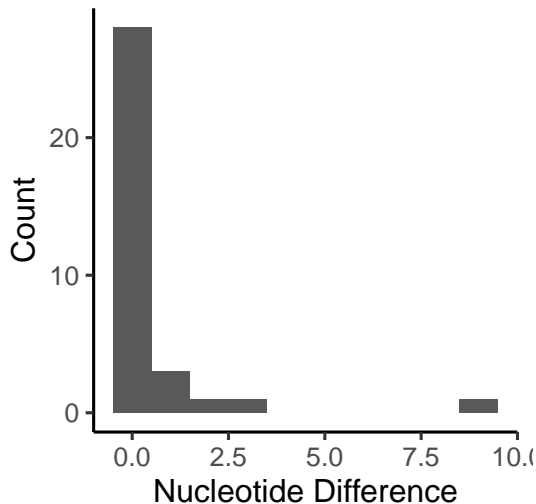
IGHV3-66*03

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



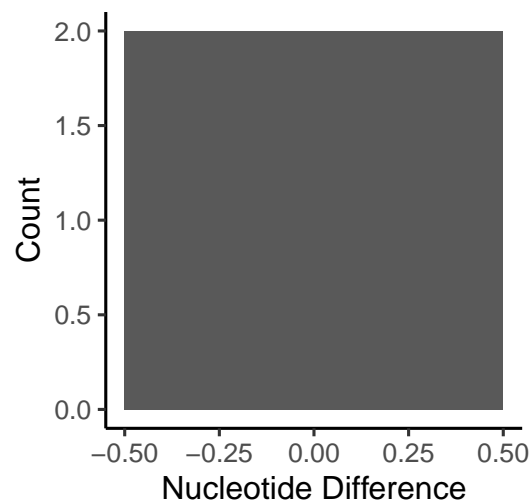
IGHV3-74*01

35 sequences assigned
28 (80%) exact matches, in which:
28 unique CDR3
5 unique J



IGHV4-28*01

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



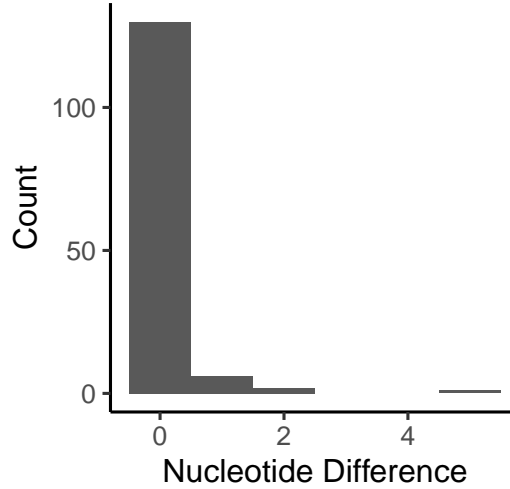
IGHV4-28*02

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



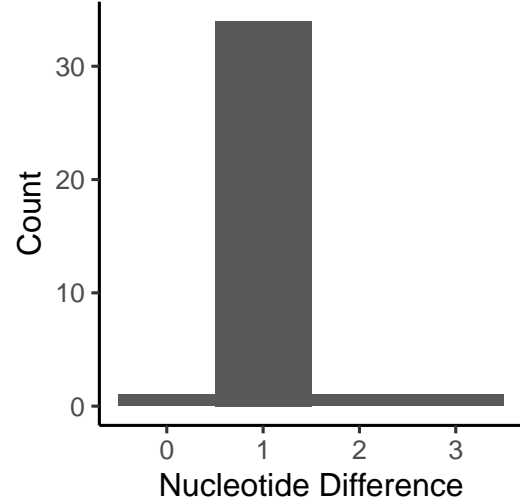
IGHV4-31*03

139 sequences assigned
130 (93.5%) exact matches, in which:
127 unique CDR3
6 unique J



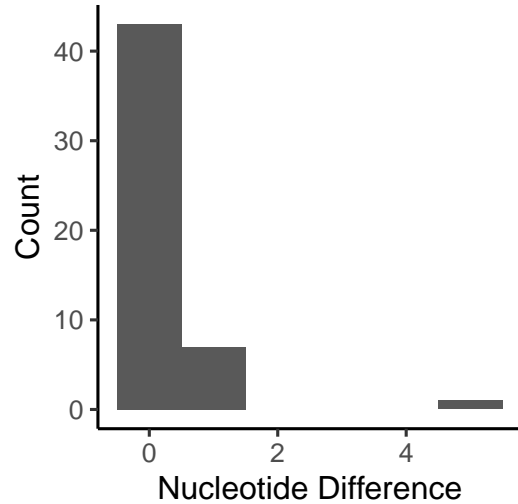
IGHV4-38-2*02

37 sequences assigned
1 (2.7%) exact matches, in which:
1 unique CDR3
1 unique J



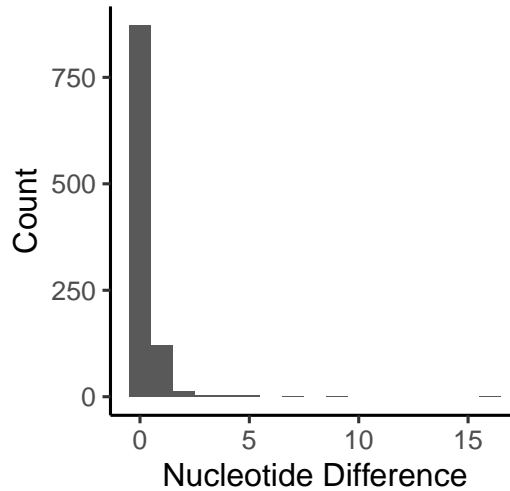
IGHV4-30-2*01

51 sequences assigned
43 (84.3%) exact matches, in which:
42 unique CDR3
5 unique J



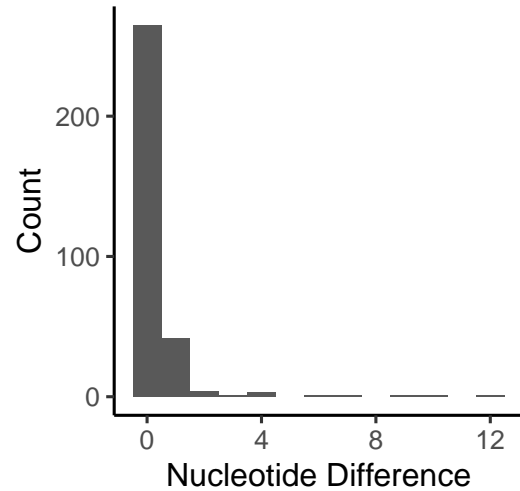
IGHV4-34*01

1020 sequences assigned
873 (85.6%) exact matches, in which:
838 unique CDR3
7 unique J



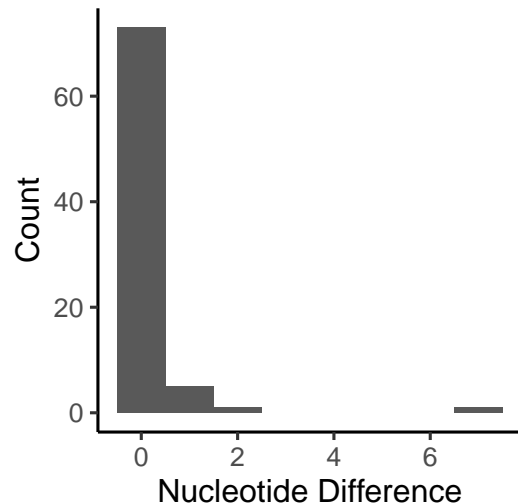
IGHV4-39*01

321 sequences assigned
265 (82.6%) exact matches, in which:
260 unique CDR3
6 unique J



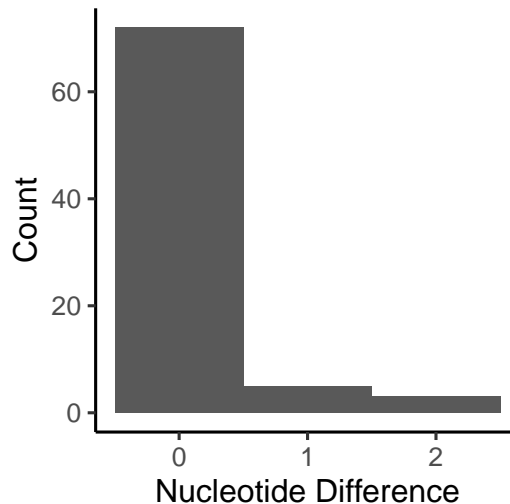
IGHV4-30-4*01

80 sequences assigned
73 (91.2%) exact matches, in which:
72 unique CDR3
5 unique J



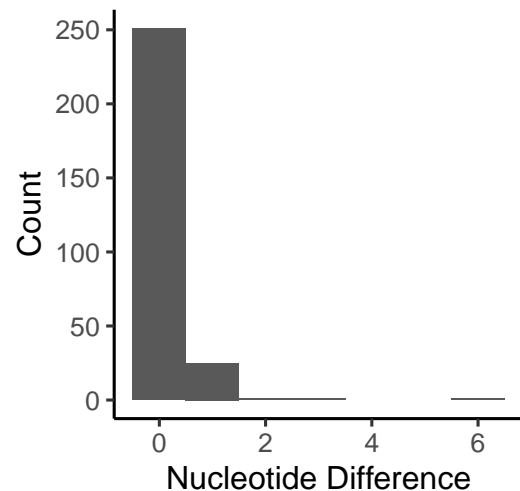
IGHV4-38-2*01

80 sequences assigned
72 (90%) exact matches, in which:
69 unique CDR3
6 unique J



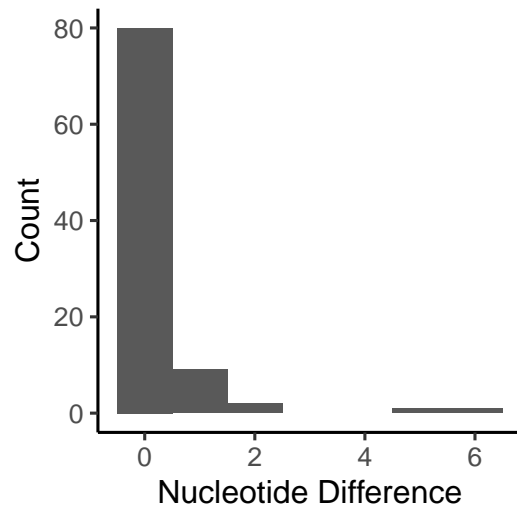
IGHV4-59*01

279 sequences assigned
251 (90%) exact matches, in which:
250 unique CDR3
7 unique J



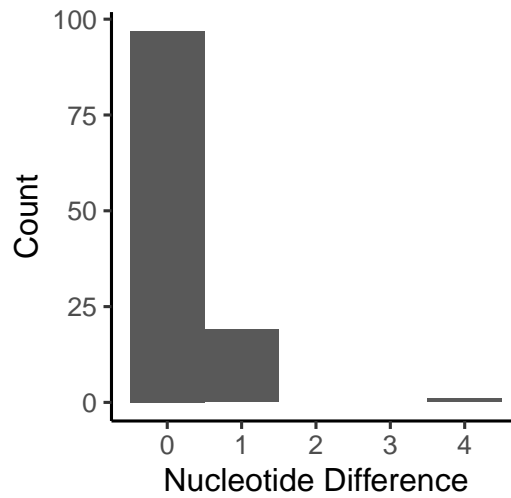
IGHV4-61*01

93 sequences assigned
80 (86%) exact matches, in which:
79 unique CDR3
6 unique J



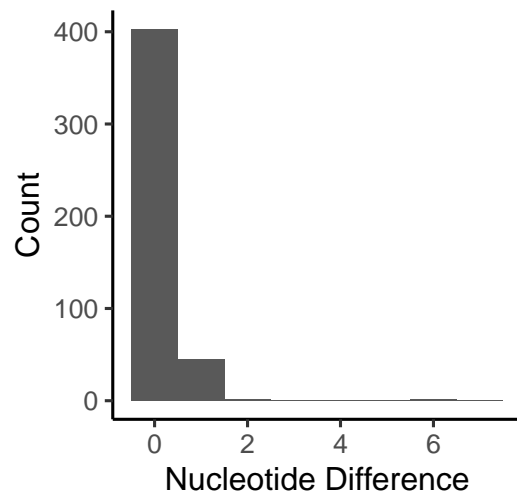
IGHV7-4-1*02

117 sequences assigned
97 (82.9%) exact matches, in which:
96 unique CDR3
6 unique J



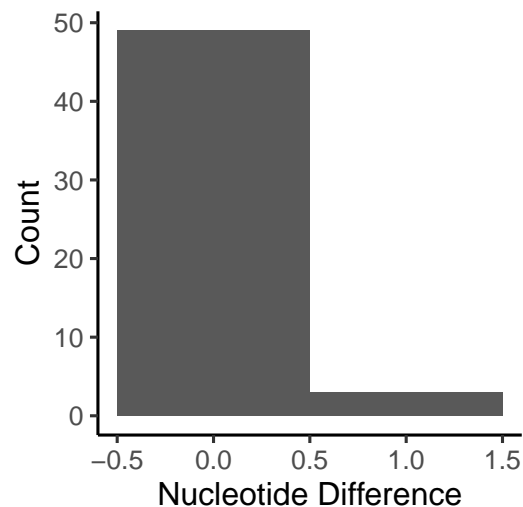
IGHV5-51*01

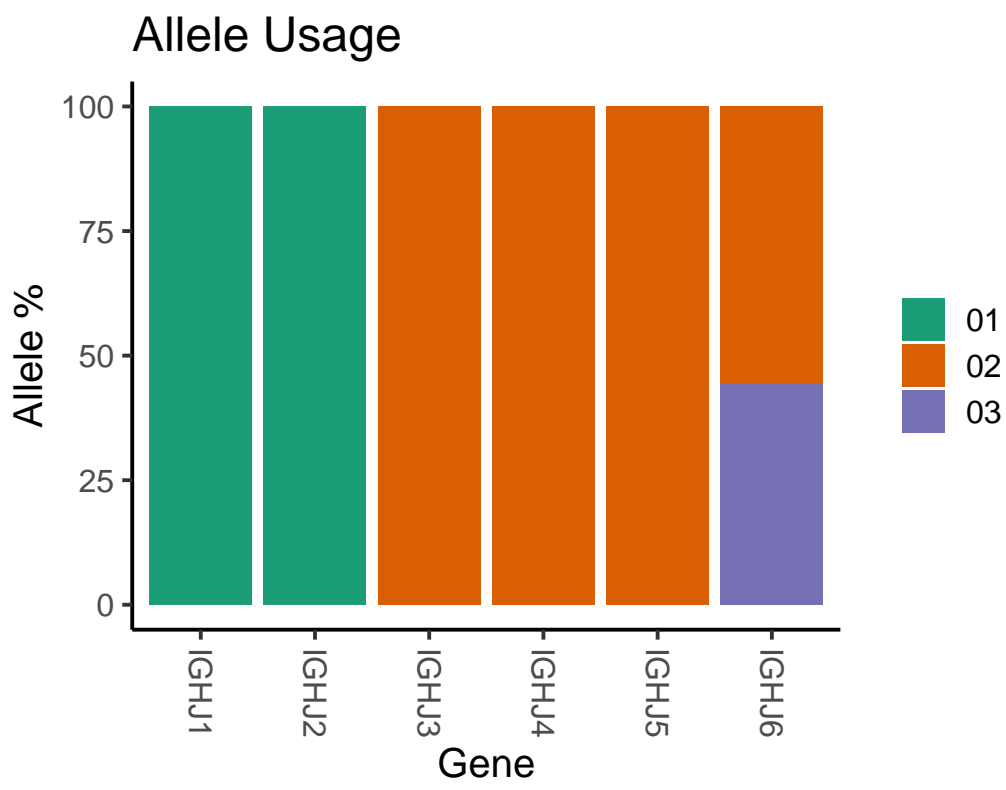
457 sequences assigned
403 (88.2%) exact matches, in which:
394 unique CDR3
7 unique J



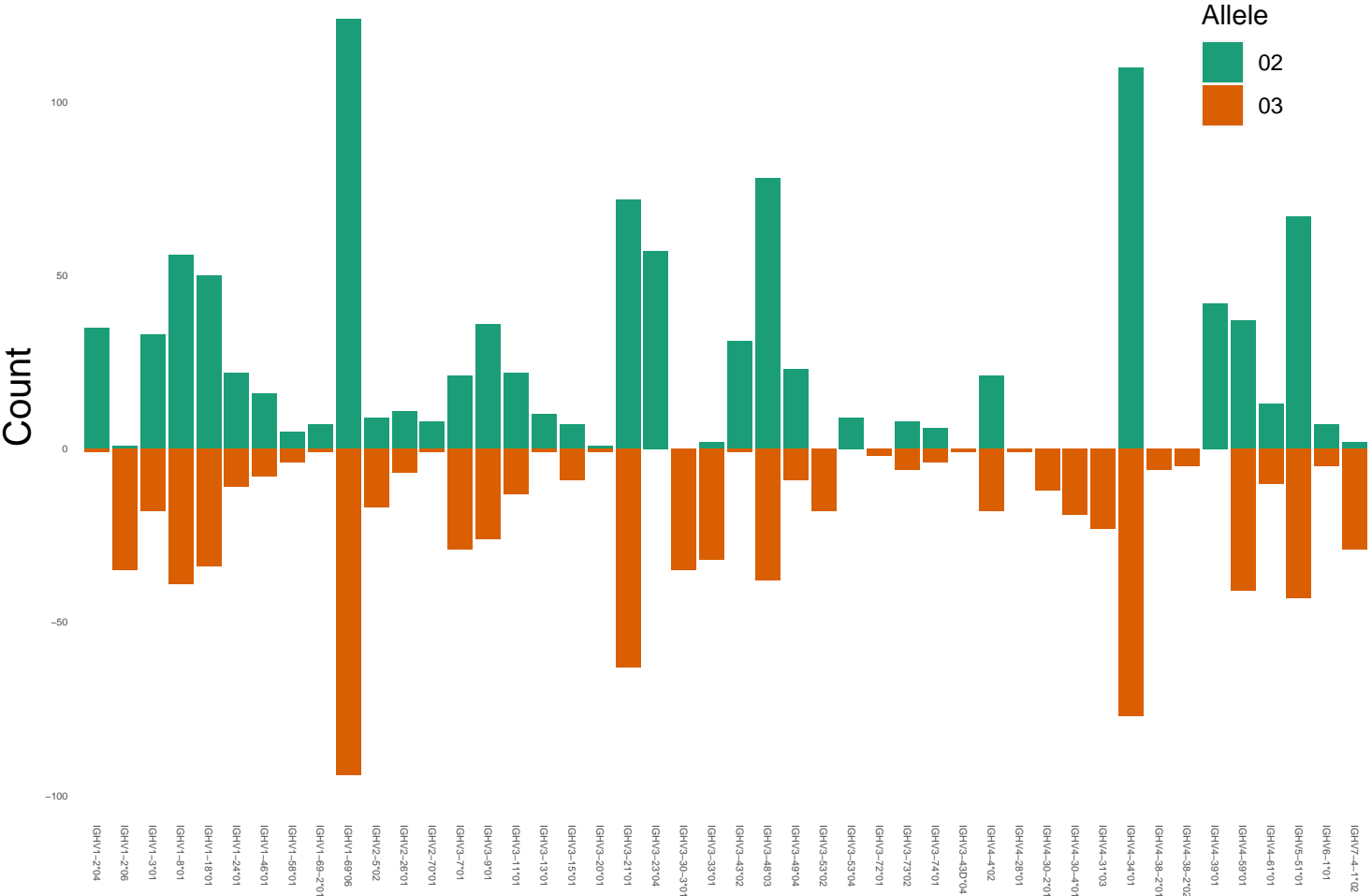
IGHV6-1*01

52 sequences assigned
49 (94.2%) exact matches, in which:
49 unique CDR3
7 unique J





Sequence Count by IGHJ6 allele usage



[illegible]