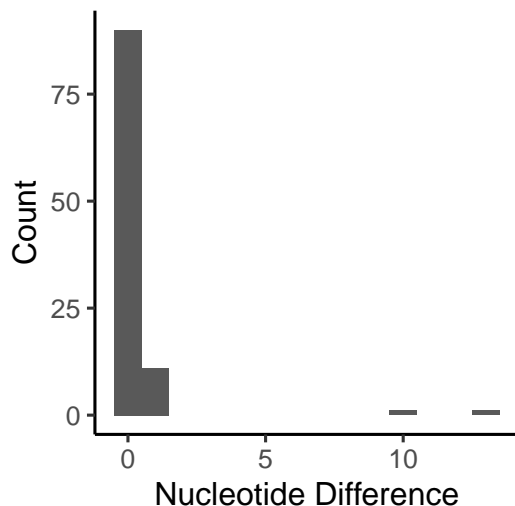


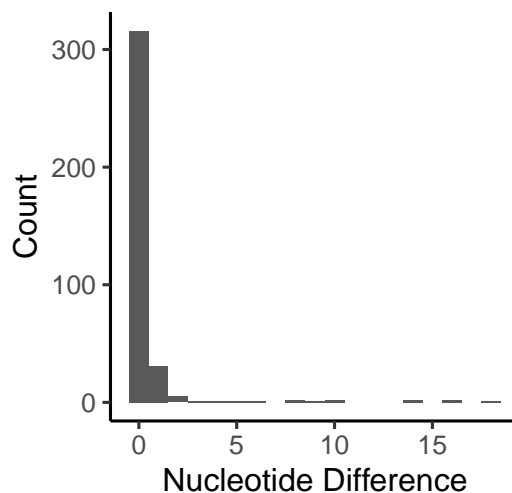
IGHV1-2*04

105 sequences assigned
90 (85.7%) exact matches, in which:
88 unique CDR3
6 unique J



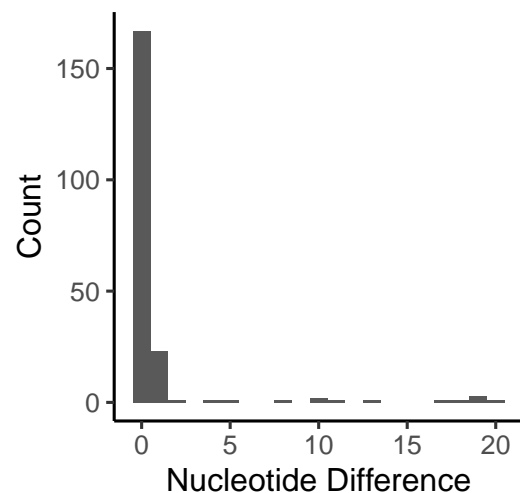
IGHV1-8*01

367 sequences assigned
316 (86.1%) exact matches, in which:
315 unique CDR3
7 unique J



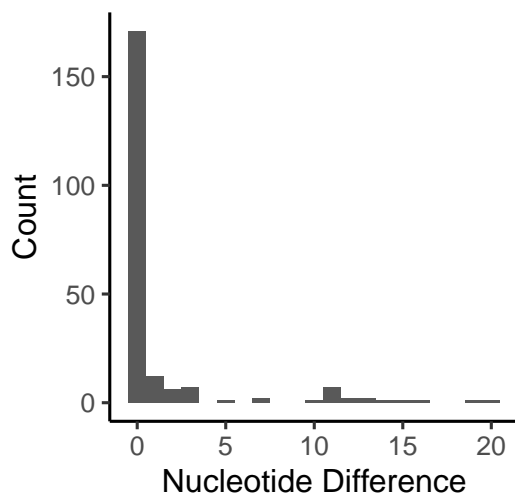
IGHV1-46*01

207 sequences assigned
167 (80.7%) exact matches, in which:
167 unique CDR3
7 unique J



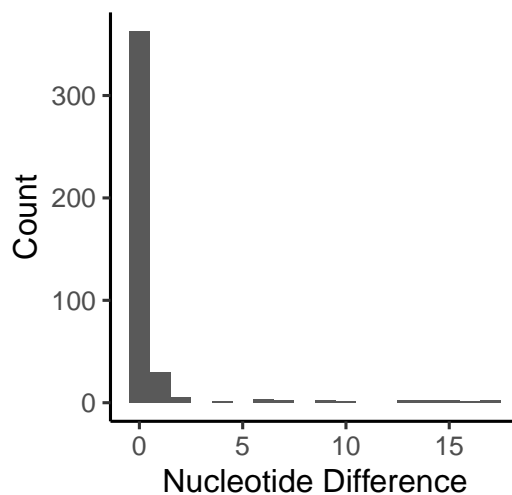
IGHV1-2*06

222 sequences assigned
171 (77%) exact matches, in which:
166 unique CDR3
7 unique J



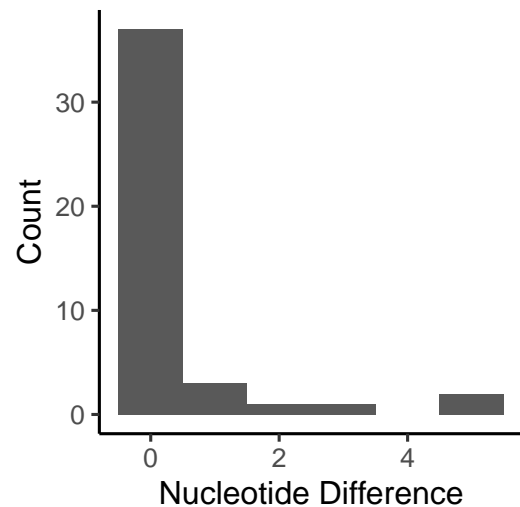
IGHV1-18*01

426 sequences assigned
363 (85.2%) exact matches, in which:
361 unique CDR3
7 unique J



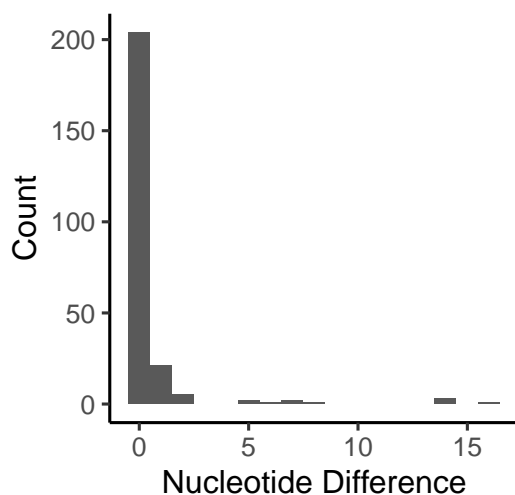
IGHV1-58*01

44 sequences assigned
37 (84.1%) exact matches, in which:
36 unique CDR3
7 unique J



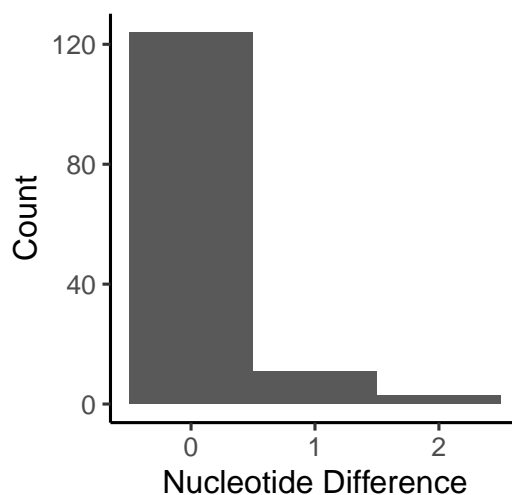
IGHV1-3*01

245 sequences assigned
204 (83.3%) exact matches, in which:
204 unique CDR3
7 unique J



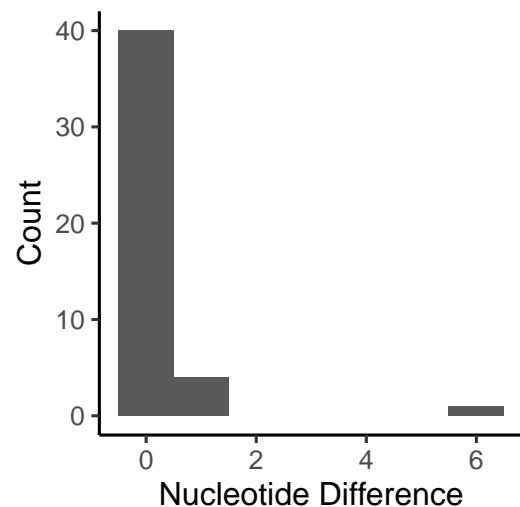
IGHV1-24*01

139 sequences assigned
124 (89.2%) exact matches, in which:
124 unique CDR3
7 unique J



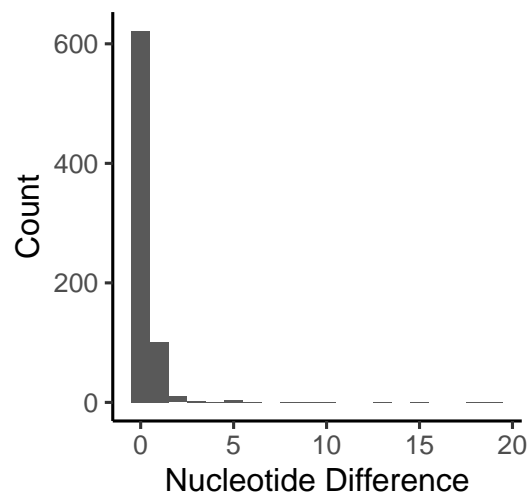
IGHV1-69-2*01

49 sequences assigned
40 (81.6%) exact matches, in which:
40 unique CDR3
5 unique J



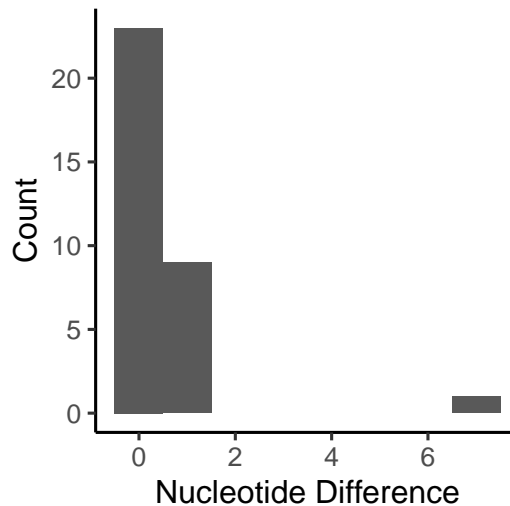
IGHV1–69*06

757 sequences assigned
622 (82.2%) exact matches, in which:
616 unique CDR3
7 unique J



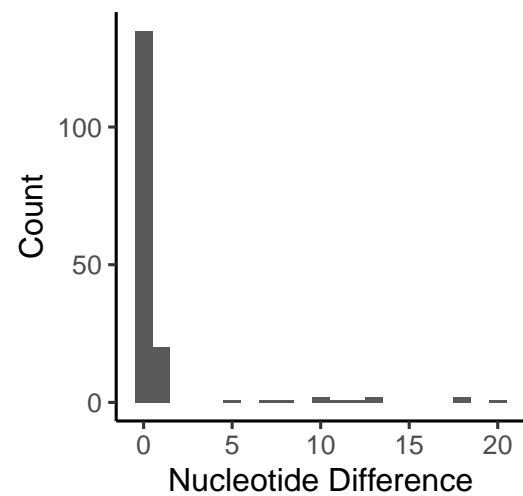
IGHV2–70*01

33 sequences assigned
23 (69.7%) exact matches, in which:
23 unique CDR3
6 unique J



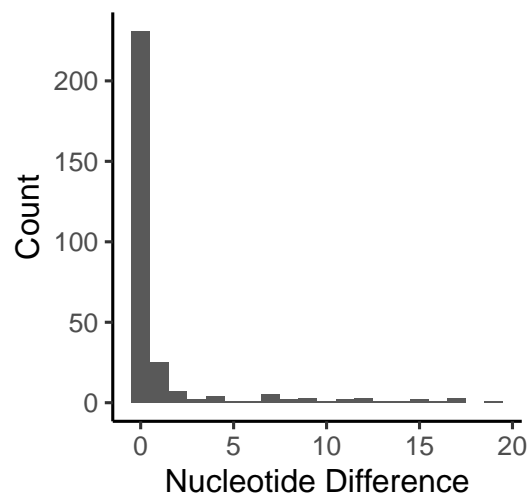
IGHV3–11*01

176 sequences assigned
135 (76.7%) exact matches, in which:
135 unique CDR3
6 unique J



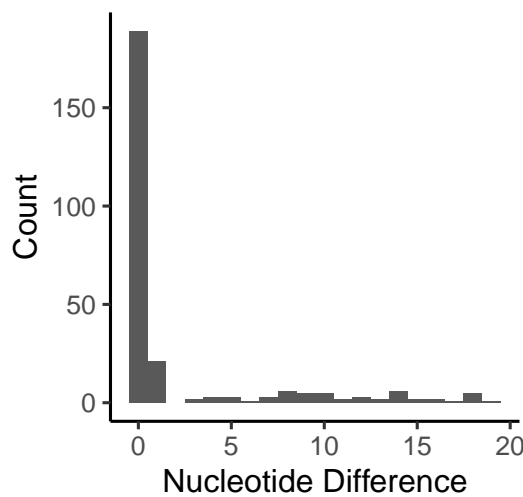
IGHV2–5*02

305 sequences assigned
231 (75.7%) exact matches, in which:
230 unique CDR3
7 unique J



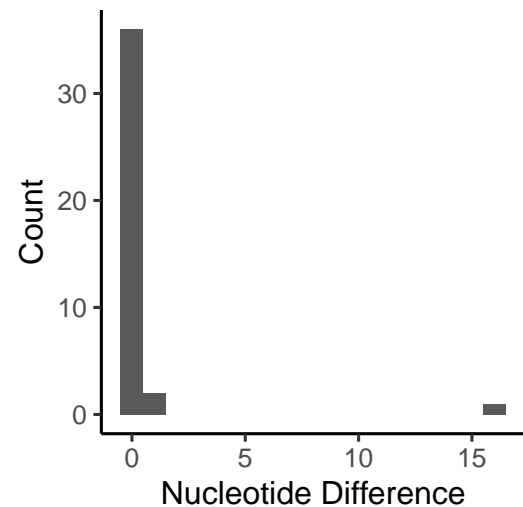
IGHV3–7*01

276 sequences assigned
189 (68.5%) exact matches, in which:
188 unique CDR3
7 unique J



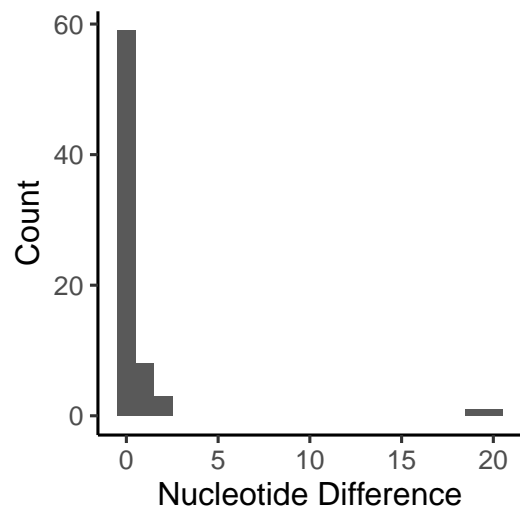
IGHV3–13*01

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



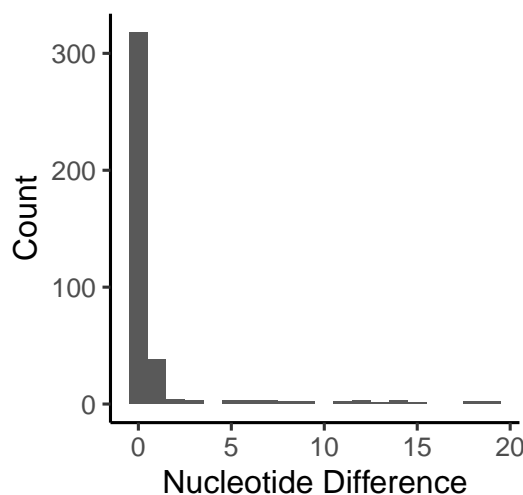
IGHV2–26*01

73 sequences assigned
59 (80.8%) exact matches, in which:
59 unique CDR3
6 unique J



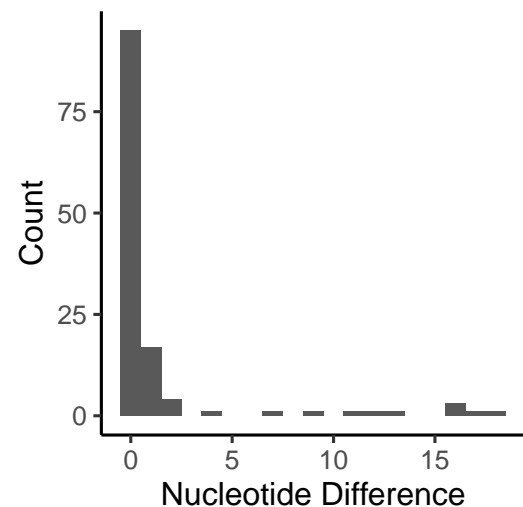
IGHV3–9*01

399 sequences assigned
318 (79.7%) exact matches, in which:
314 unique CDR3
7 unique J



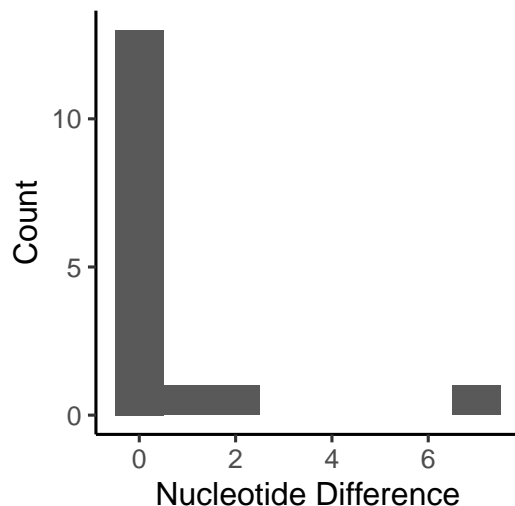
IGHV3–15*01

131 sequences assigned
95 (72.5%) exact matches, in which:
95 unique CDR3
6 unique J



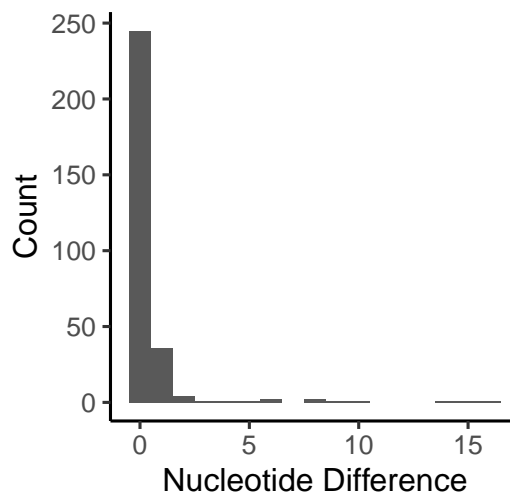
IGHV3-20*01

17 sequences assigned
13 (76.5%) exact matches, in which:
13 unique CDR3
6 unique J



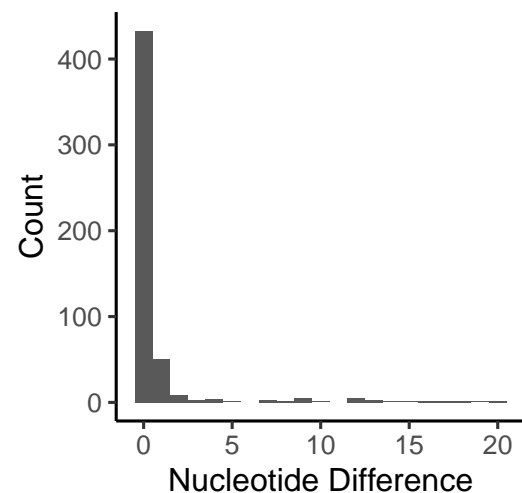
IGHV3-30-3*01

301 sequences assigned
245 (81.4%) exact matches, in which:
243 unique CDR3
6 unique J



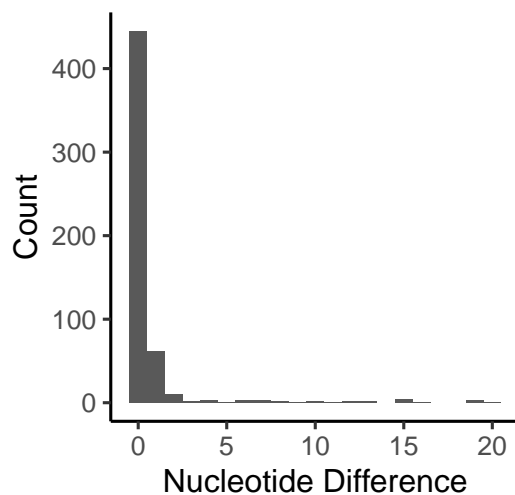
IGHV3-48*03

543 sequences assigned
433 (79.7%) exact matches, in which:
432 unique CDR3
7 unique J



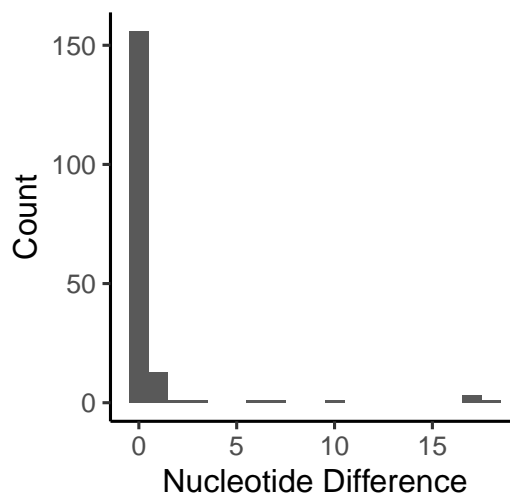
IGHV3-21*01

562 sequences assigned
445 (79.2%) exact matches, in which:
440 unique CDR3
7 unique J



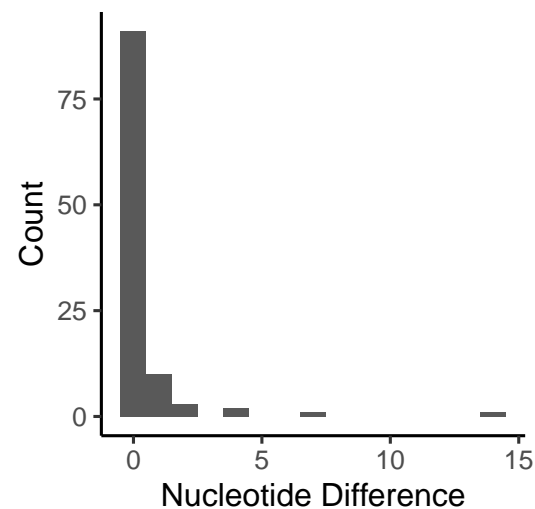
IGHV3-33*01

188 sequences assigned
156 (83%) exact matches, in which:
154 unique CDR3
7 unique J



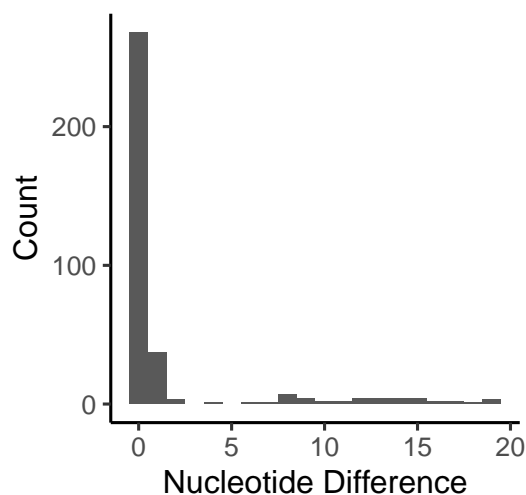
IGHV3-49*04

118 sequences assigned
91 (77.1%) exact matches, in which:
89 unique CDR3
7 unique J



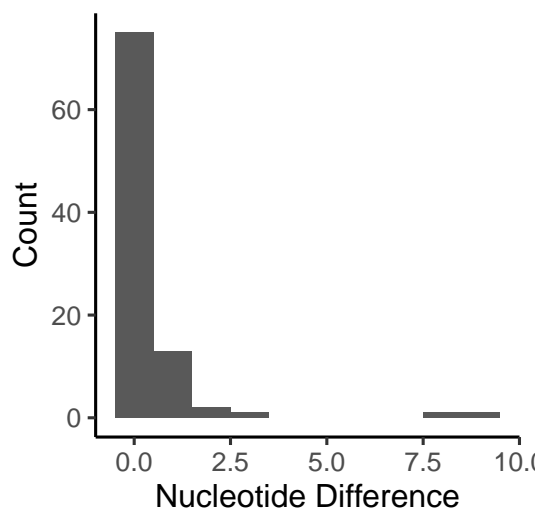
IGHV3-23*04

372 sequences assigned
268 (72%) exact matches, in which:
265 unique CDR3
6 unique J



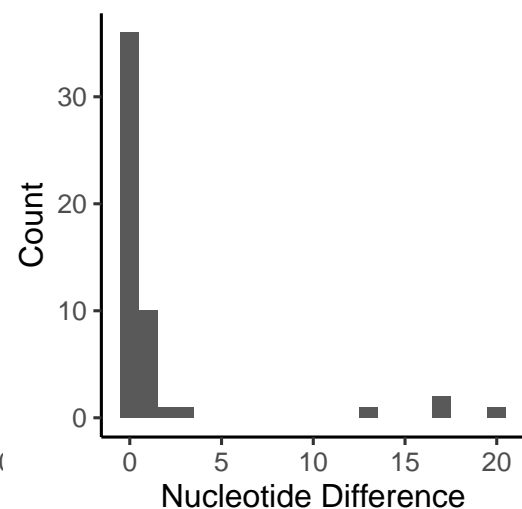
IGHV3-43*02

99 sequences assigned
75 (75.8%) exact matches, in which:
75 unique CDR3
6 unique J



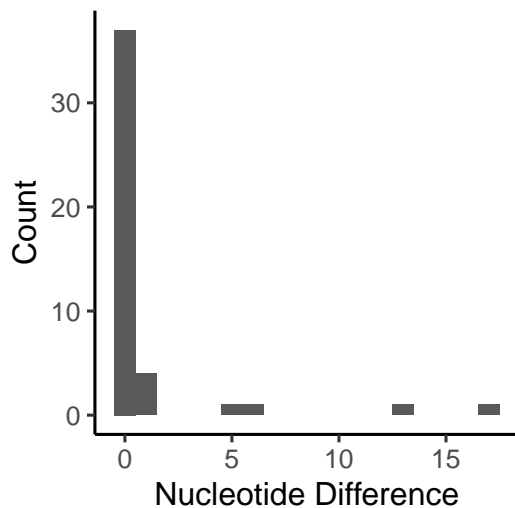
IGHV3-53*02

54 sequences assigned
36 (66.7%) exact matches, in which:
35 unique CDR3
5 unique J



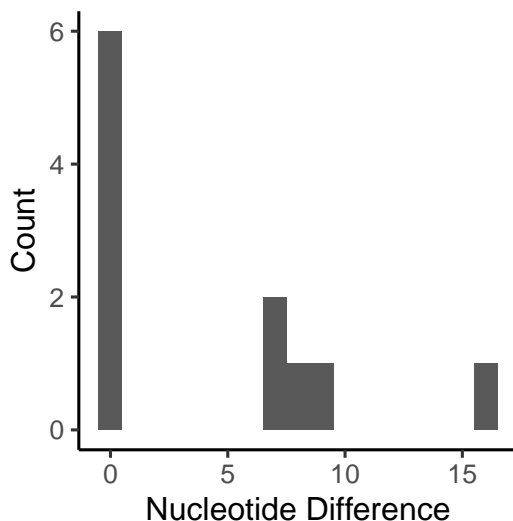
IGHV3-53*04

46 sequences assigned
37 (80.4%) exact matches, in which:
37 unique CDR3
4 unique J



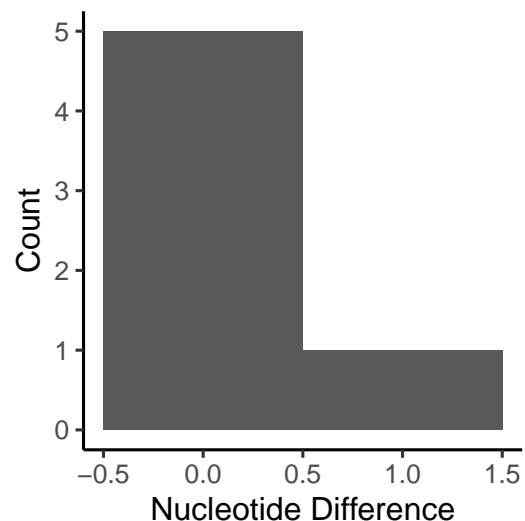
IGHV3-72*01

14 sequences assigned
6 (42.9%) exact matches, in which:
6 unique CDR3
3 unique J



IGHV3-43D*04

7 sequences assigned
5 (71.4%) exact matches, in which:
5 unique CDR3
3 unique J



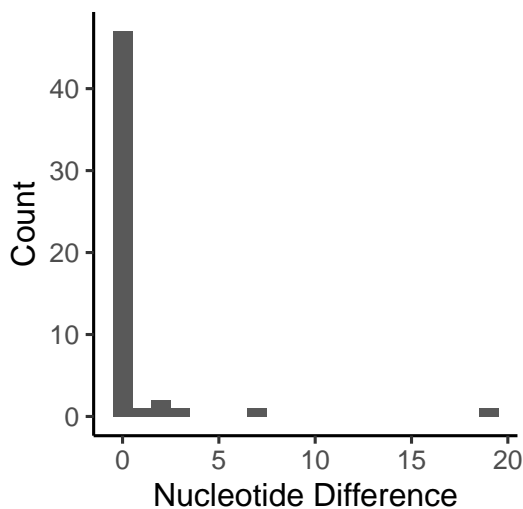
IGHV3-64*02

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



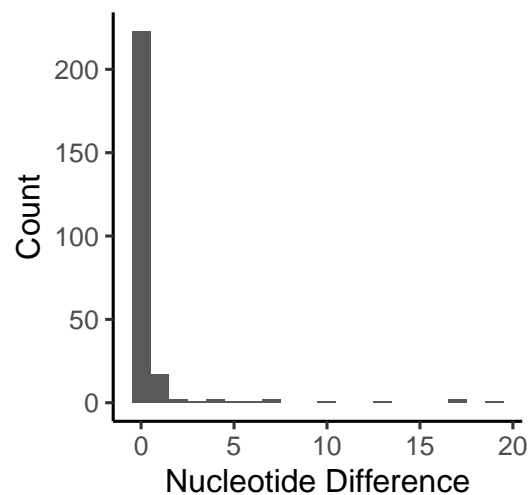
IGHV3-73*02

58 sequences assigned
47 (81%) exact matches, in which:
46 unique CDR3
7 unique J



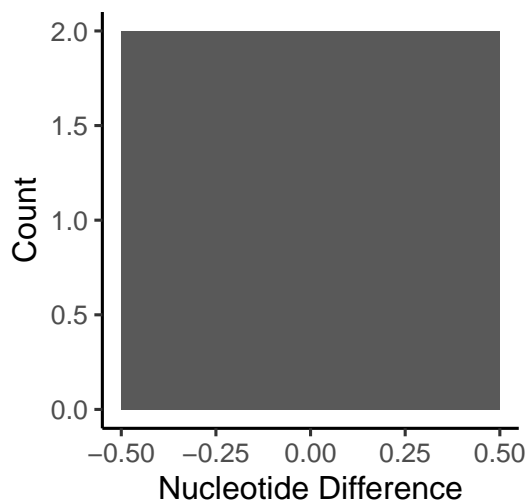
IGHV4-4*02

260 sequences assigned
223 (85.8%) exact matches, in which:
223 unique CDR3
7 unique J



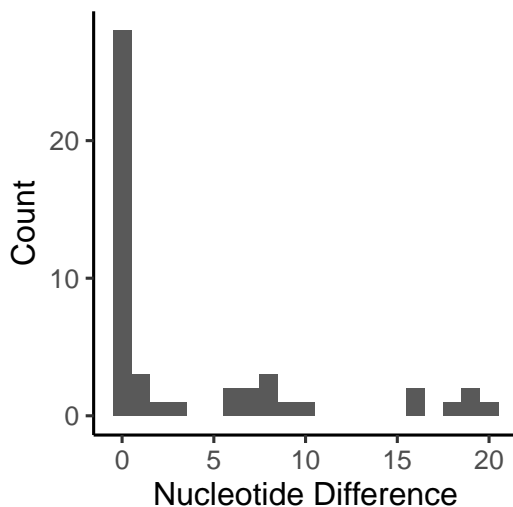
IGHV3-66*03

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



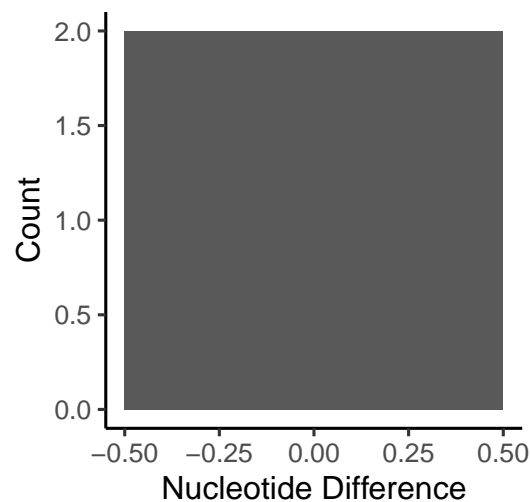
IGHV3-74*01

54 sequences assigned
28 (51.9%) 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



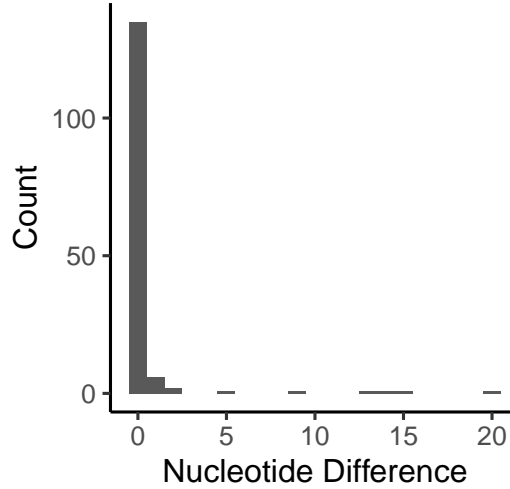
IGHV4-28*02

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



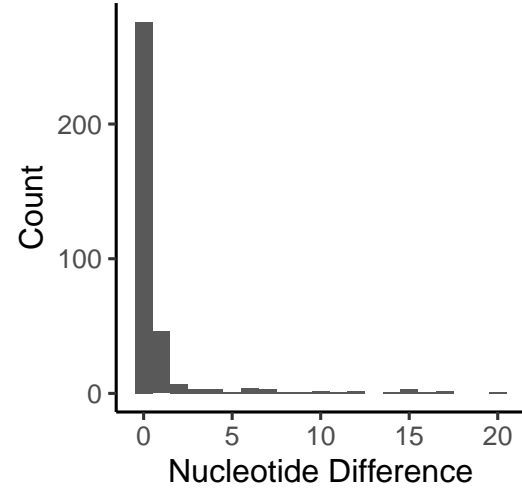
IGHV4-31*03

151 sequences assigned
135 (89.4%) exact matches, in which:
134 unique CDR3
6 unique J



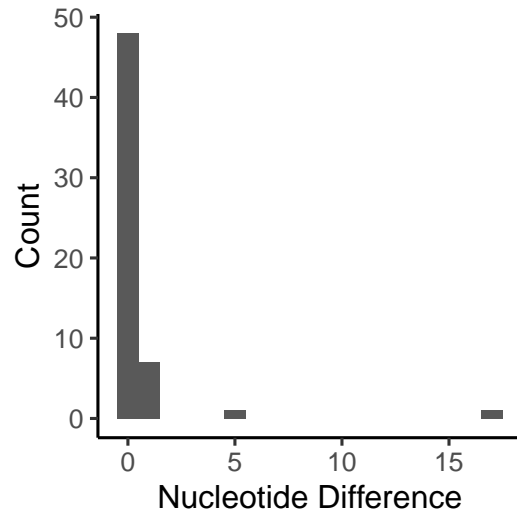
IGHV4-39*01

369 sequences assigned
276 (74.8%) exact matches, in which:
275 unique CDR3
6 unique J



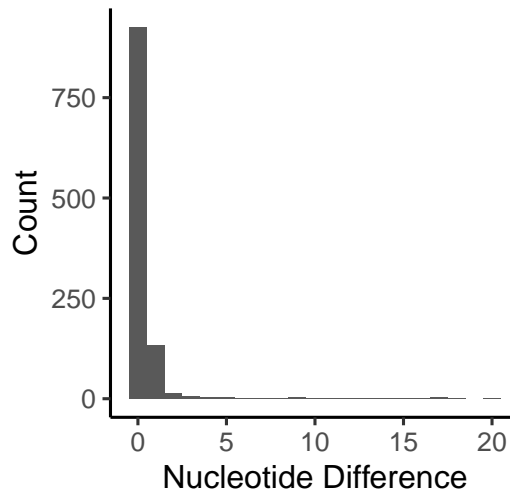
IGHV4-30-2*01

57 sequences assigned
48 (84.2%) exact matches, in which:
48 unique CDR3
5 unique J



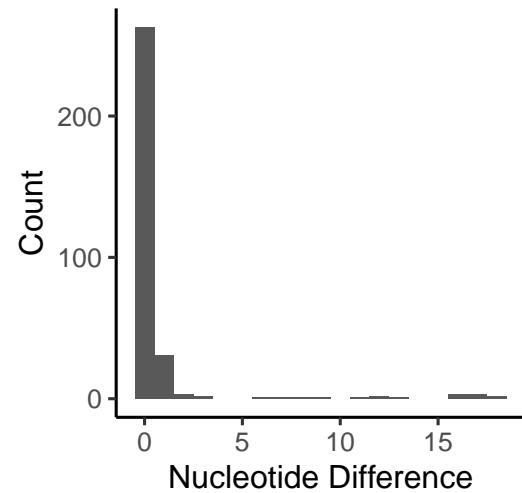
IGHV4-34*01

1134 sequences assigned
926 (81.7%) exact matches, in which:
904 unique CDR3
7 unique J



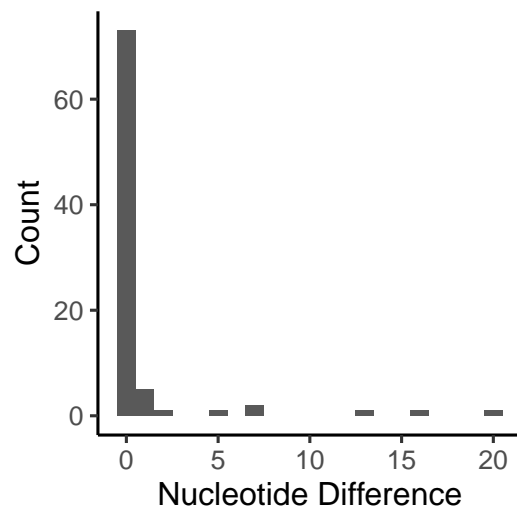
IGHV4-59*01

320 sequences assigned
263 (82.2%) exact matches, in which:
262 unique CDR3
7 unique J



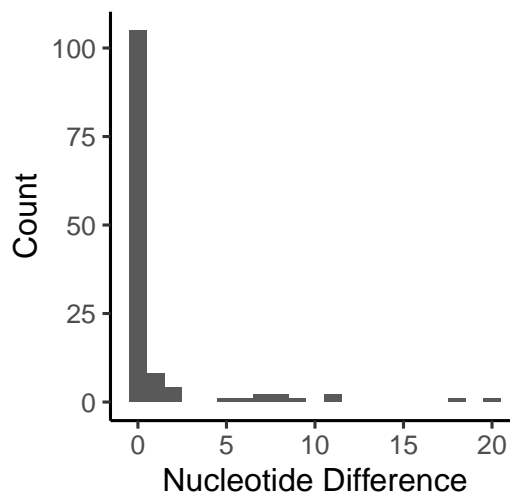
IGHV4-30-4*01

90 sequences assigned
73 (81.1%) exact matches, in which:
73 unique CDR3
5 unique J



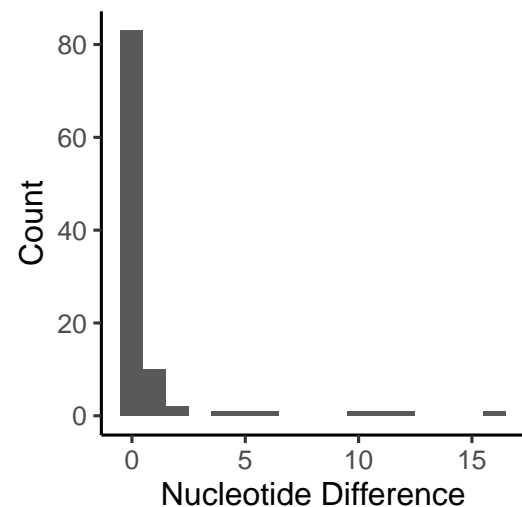
IGHV4-38-2*02_A70G

131 sequences assigned
105 (80.2%) exact matches, in which:
104 unique CDR3
6 unique J



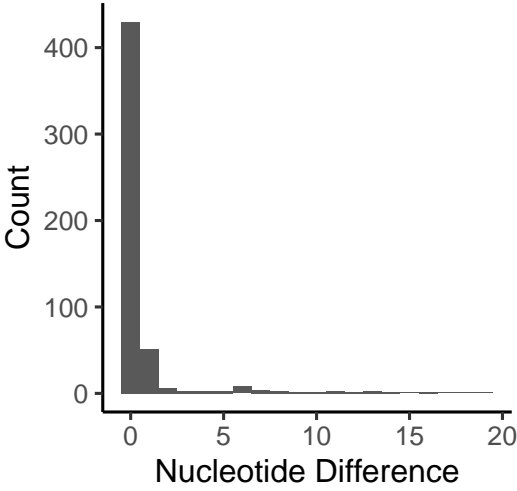
IGHV4-61*01

110 sequences assigned
83 (75.5%) exact matches, in which:
83 unique CDR3
6 unique J



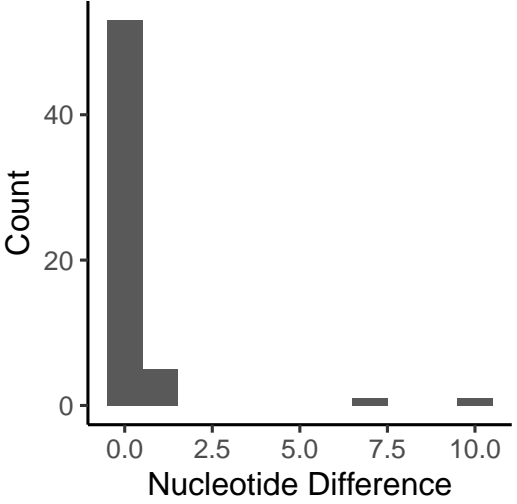
IGHV5–51*01

544 sequences assigned
430 (79%) exact matches, in which:
425 unique CDR3
7 unique J



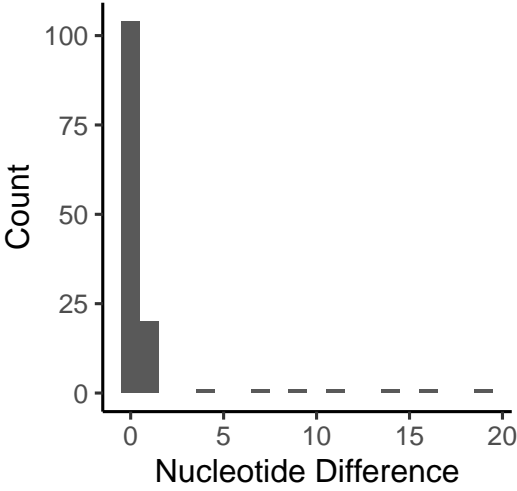
IGHV6–1*01

60 sequences assigned
53 (88.3%) exact matches, in which:
53 unique CDR3
7 unique J

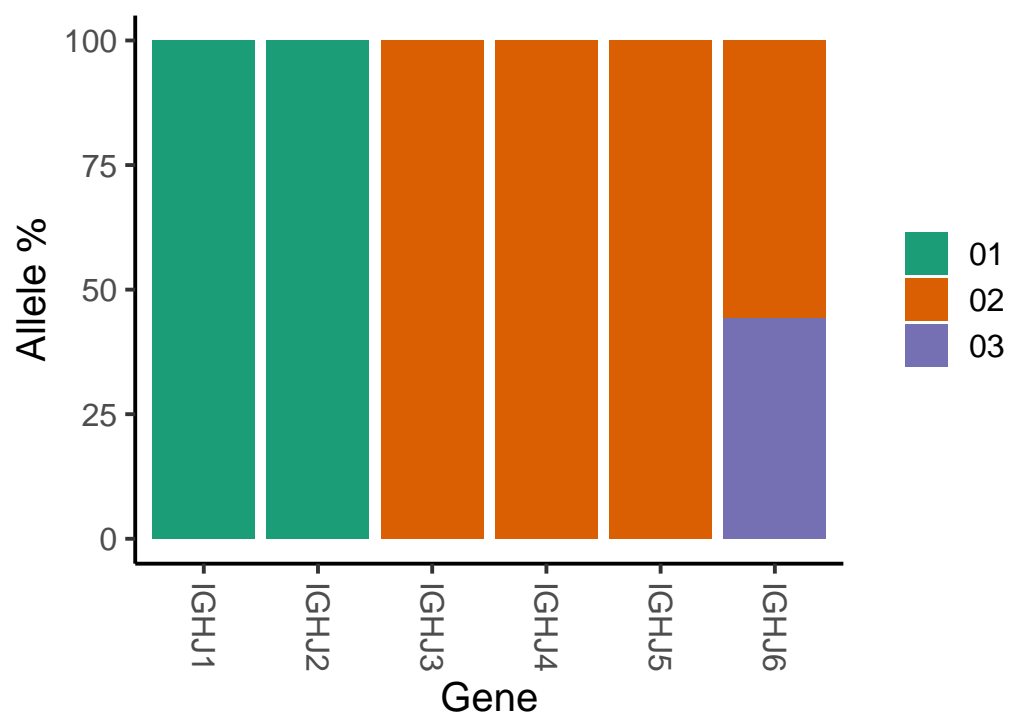


IGHV7–4–1*02

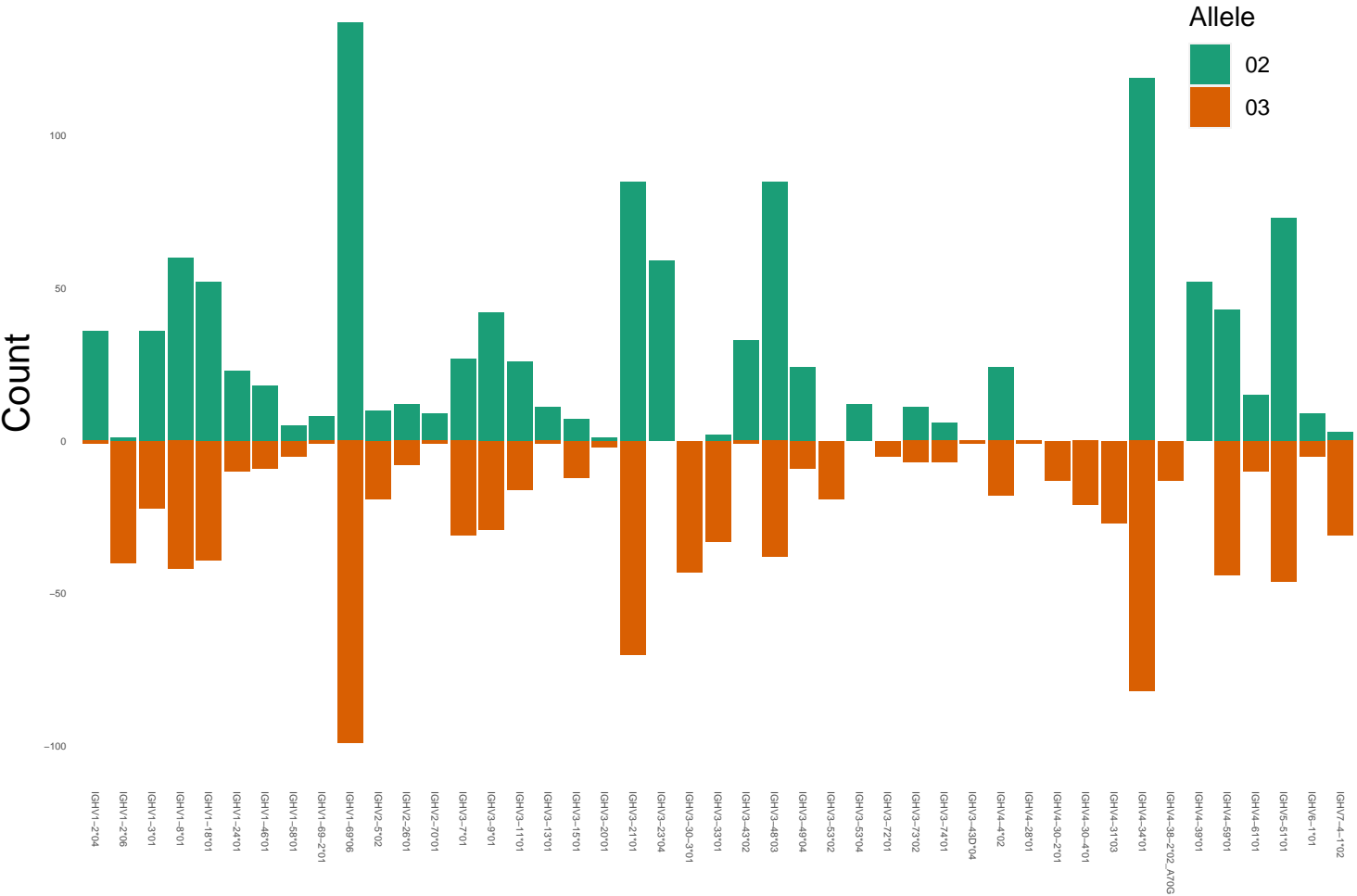
139 sequences assigned
104 (74.8%) exact matches, in which:
103 unique CDR3
6 unique J



Allele Usage



Sequence Count by IGHJ6 allele usage



Warning – no inferred sequences found.