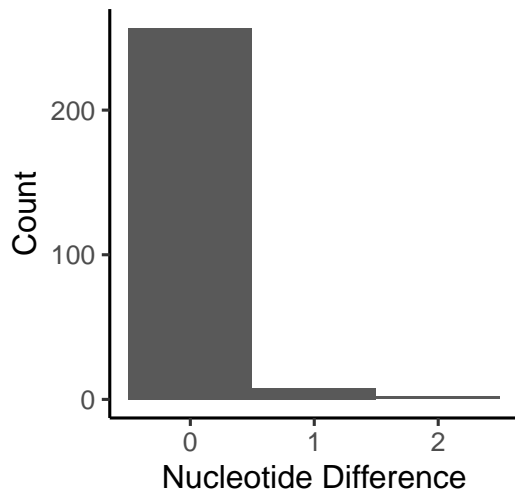


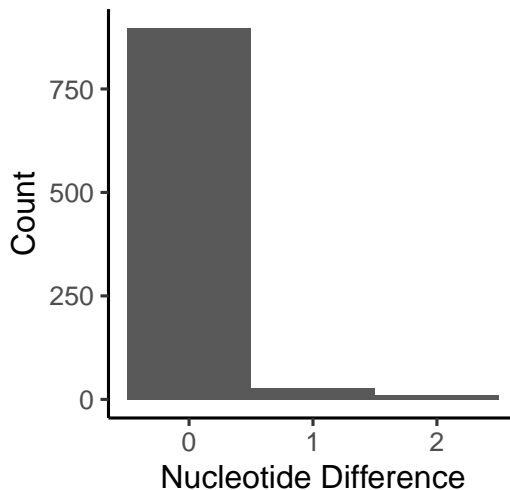
IGHV1-2*04

267 sequences assigned
257 (96.3%) exact matches, in which:
255 unique CDR3
7 unique J



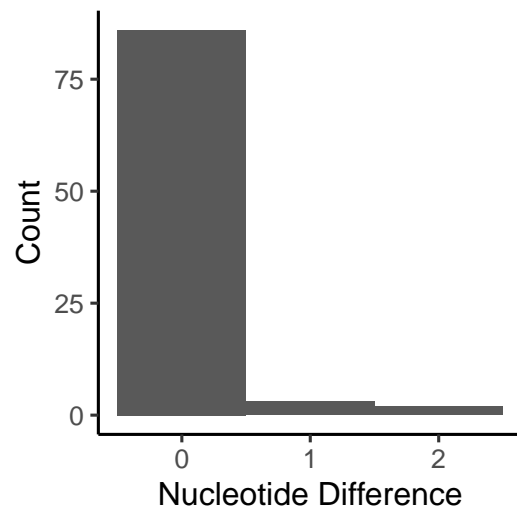
IGHV1-18*01

937 sequences assigned
898 (95.8%) exact matches, in which:
895 unique CDR3
7 unique J



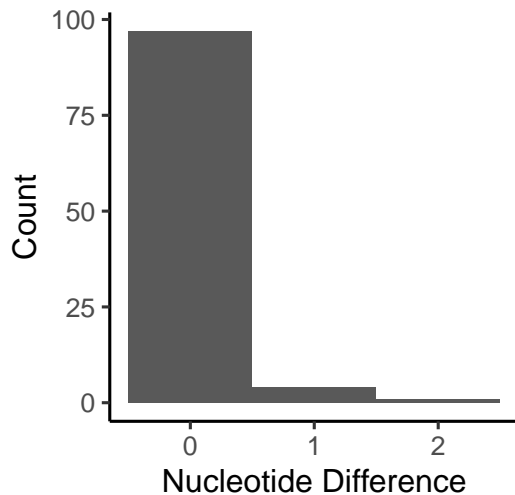
IGHV1-46*03

91 sequences assigned
86 (94.5%) exact matches, in which:
86 unique CDR3
4 unique J



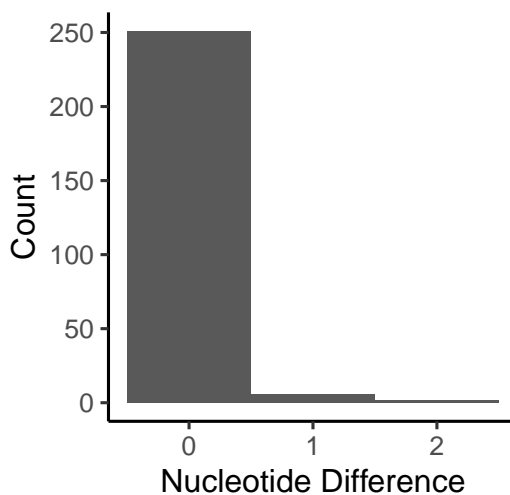
IGHV1-3*01_05

102 sequences assigned
97 (95.1%) exact matches, in which:
97 unique CDR3
4 unique J



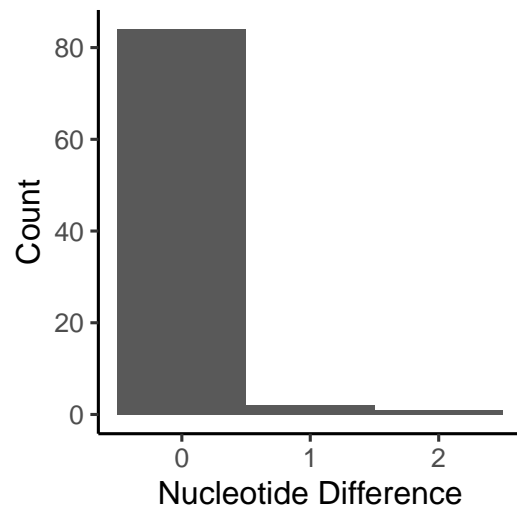
IGHV1-24*01

259 sequences assigned
251 (96.9%) exact matches, in which:
251 unique CDR3
6 unique J



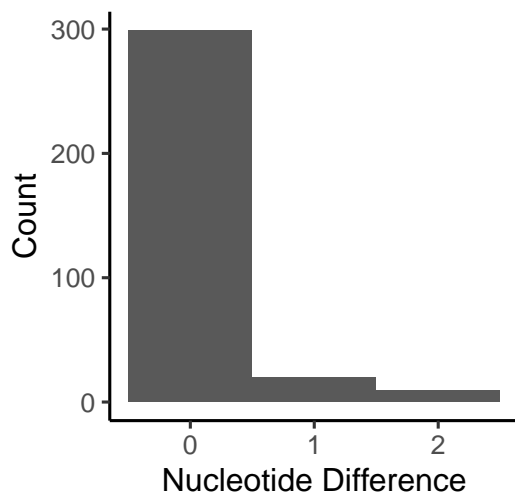
IGHV1-58*01_03

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



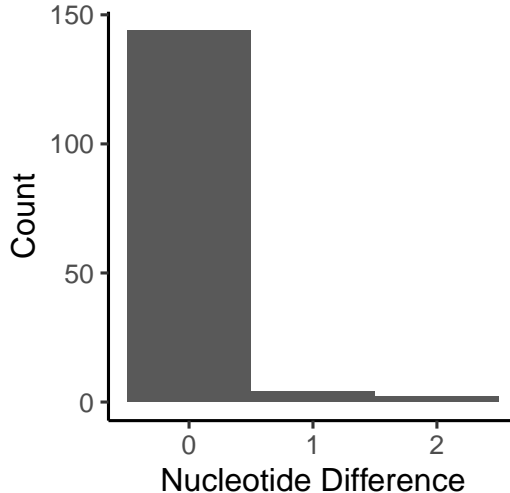
IGHV1-8*01

328 sequences assigned
299 (91.2%) exact matches, in which:
299 unique CDR3
7 unique J



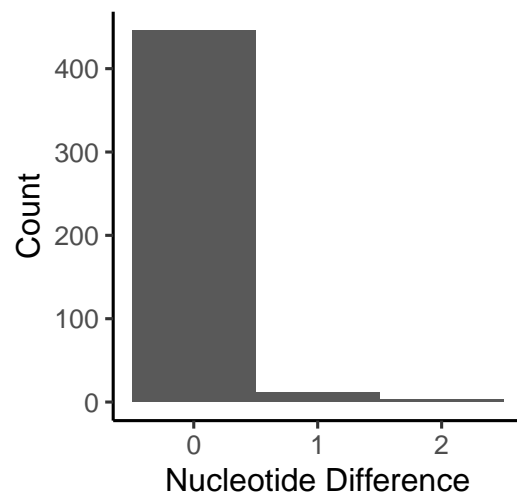
IGHV1-46*01

150 sequences assigned
144 (96%) exact matches, in which:
144 unique CDR3
6 unique J



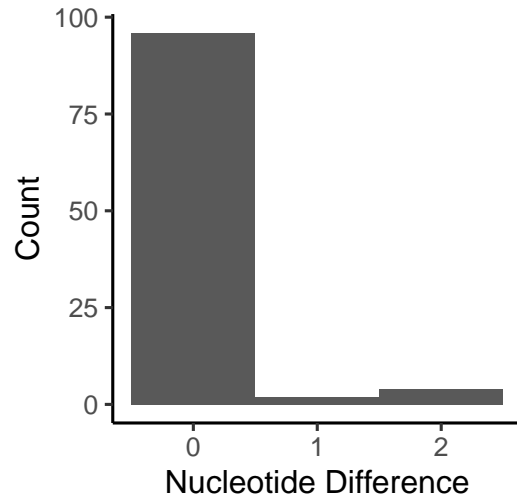
IGHV1-69*06_14

460 sequences assigned
446 (97%) exact matches, in which:
446 unique CDR3
6 unique J



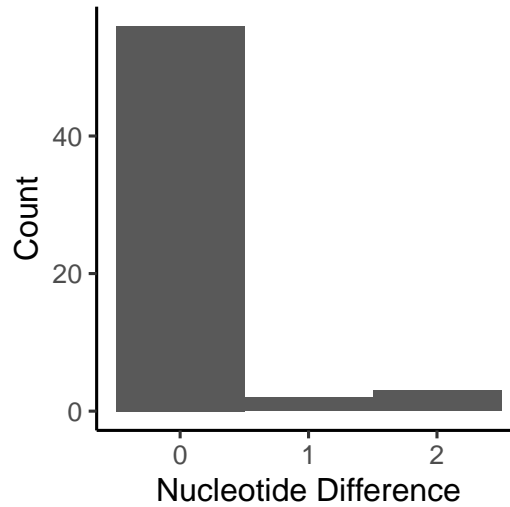
IGHV2-5*01

102 sequences assigned
96 (94.1%) exact matches, in which:
96 unique CDR3
6 unique J



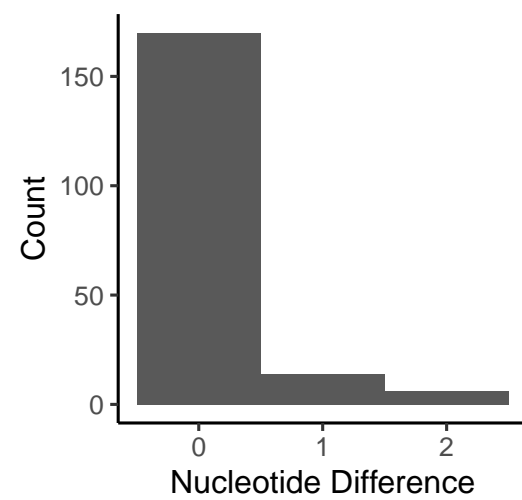
IGHV2-70*01

61 sequences assigned
56 (91.8%) exact matches, in which:
55 unique CDR3
6 unique J



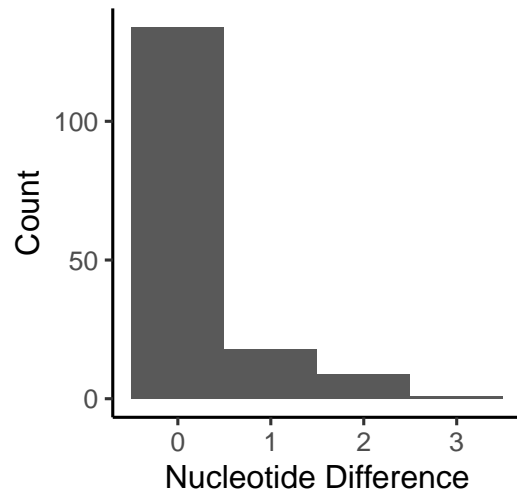
IGHV3-9*01

190 sequences assigned
170 (89.5%) exact matches, in which:
169 unique CDR3
6 unique J



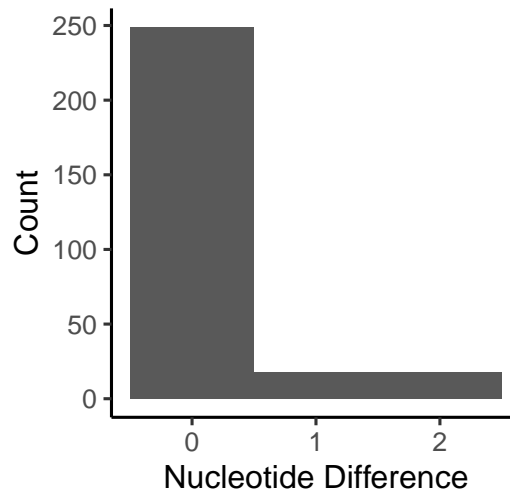
IGHV2-5*02

162 sequences assigned
134 (82.7%) exact matches, in which:
133 unique CDR3
6 unique J



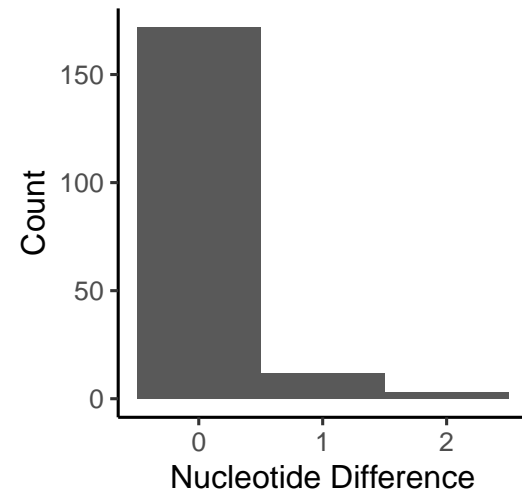
IGHV3-7*01

285 sequences assigned
249 (87.4%) exact matches, in which:
245 unique CDR3
6 unique J



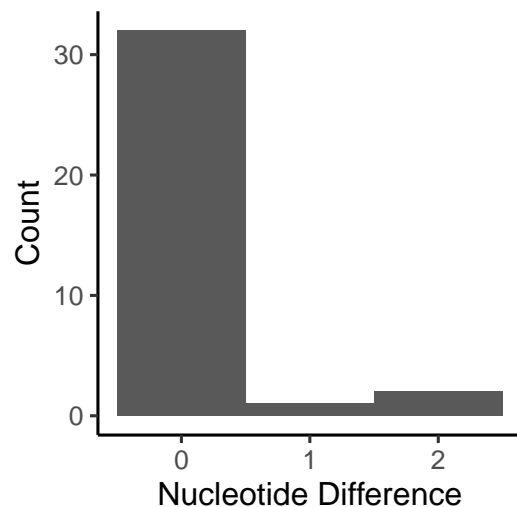
IGHV3-11*01

187 sequences assigned
172 (92%) exact matches, in which:
167 unique CDR3
6 unique J



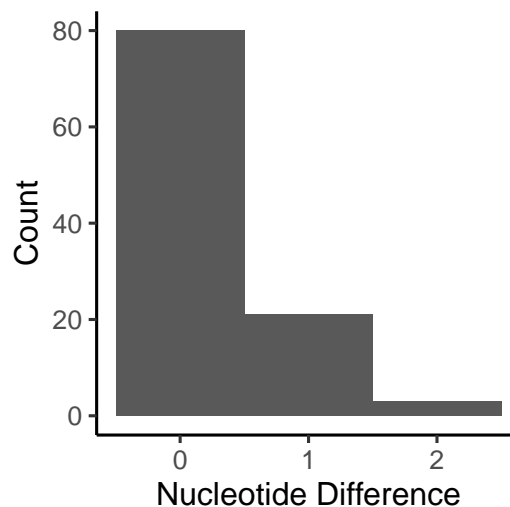
IGHV2-26*01

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



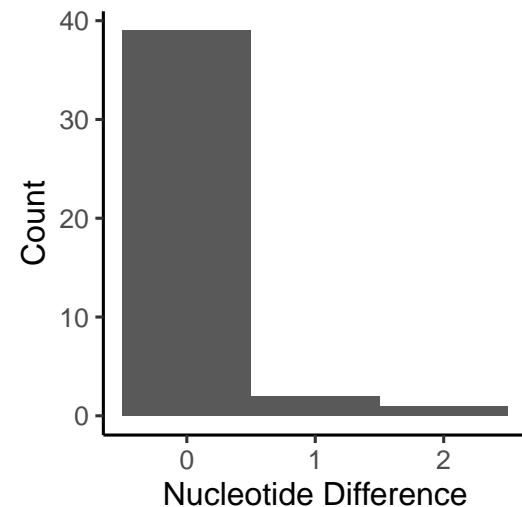
IGHV3-7*04

104 sequences assigned
80 (76.9%) exact matches, in which:
78 unique CDR3
6 unique J



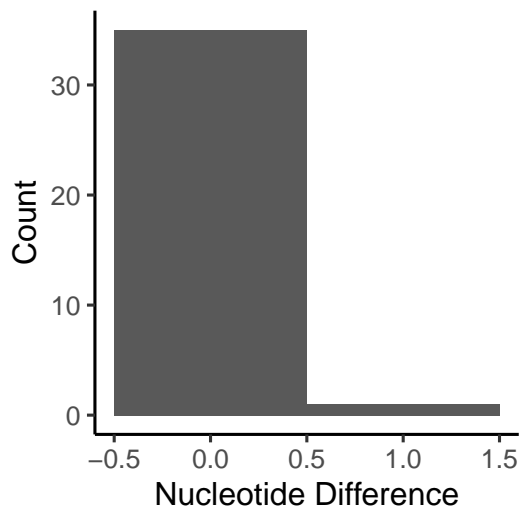
IGHV3-11*06

42 sequences assigned
39 (92.9%) exact matches, in which:
39 unique CDR3
5 unique J



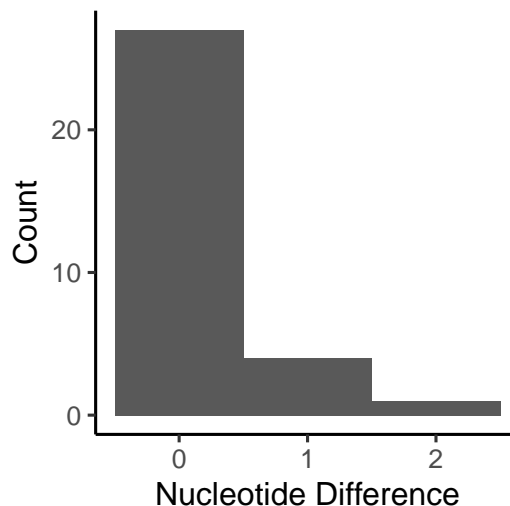
IGHV3-13*01

36 sequences assigned
35 (97.2%) exact matches, in which:
33 unique CDR3
4 unique J



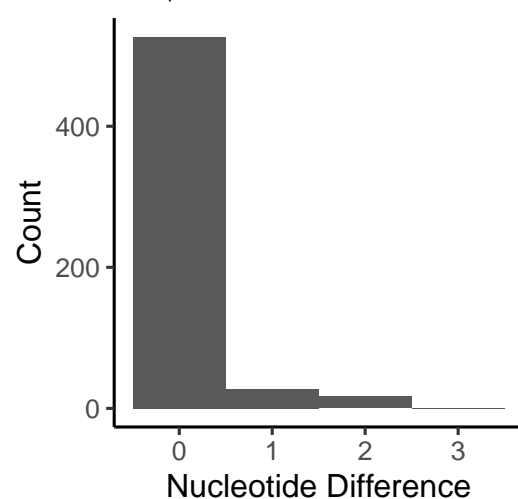
IGHV3-20*01_02

32 sequences assigned
27 (84.4%) exact matches, in which:
25 unique CDR3
5 unique J



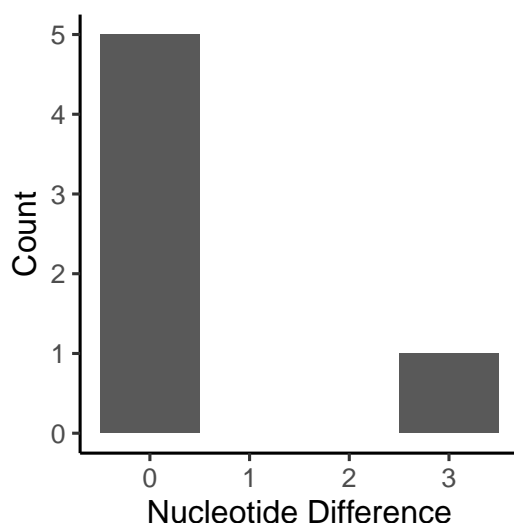
IGHV3-33*01

573 sequences assigned
527 (92%) exact matches, in which:
517 unique CDR3
7 unique J



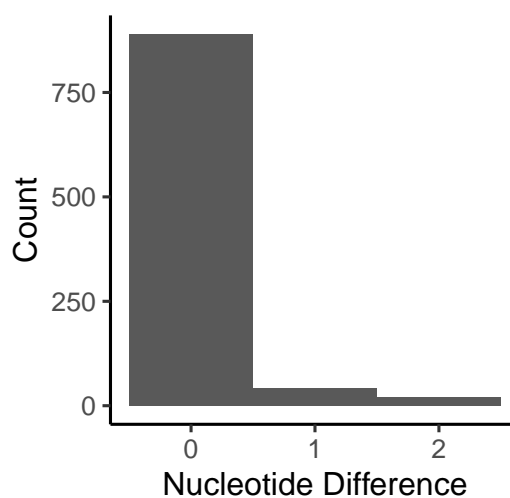
IGHV3-13*05

6 sequences assigned
5 (83.3%) exact matches, in which:
5 unique CDR3
4 unique J



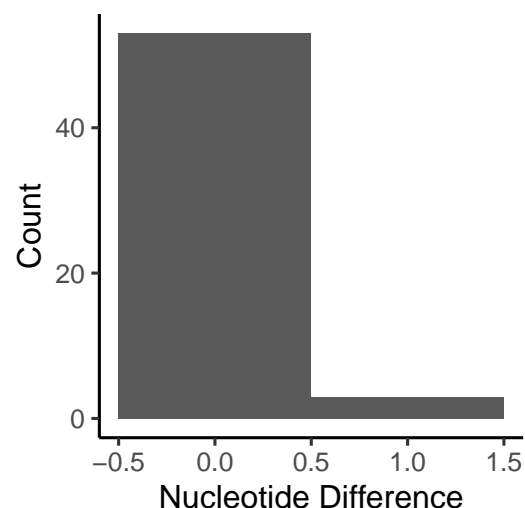
IGHV3-21*01_02

954 sequences assigned
890 (93.3%) exact matches, in which:
863 unique CDR3
7 unique J



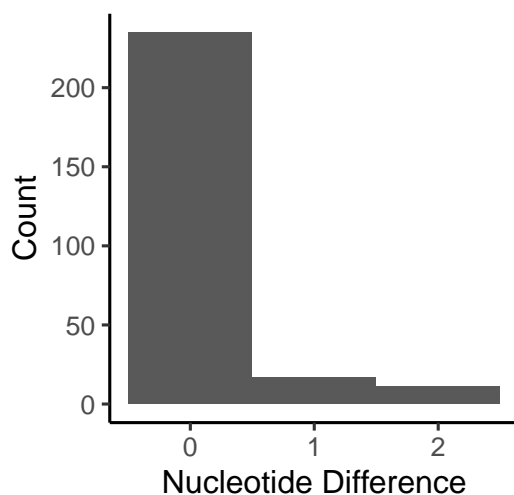
IGHV3-43*01

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



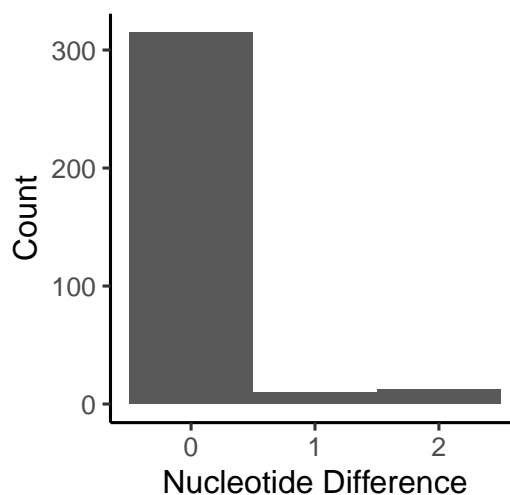
IGHV3-15*01_02

263 sequences assigned
235 (89.4%) exact matches, in which:
231 unique CDR3
7 unique J



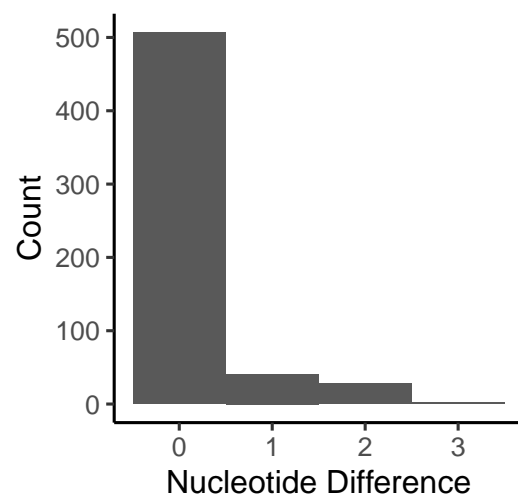
IGHV3-30*03

337 sequences assigned
315 (93.5%) exact matches, in which:
311 unique CDR3
7 unique J



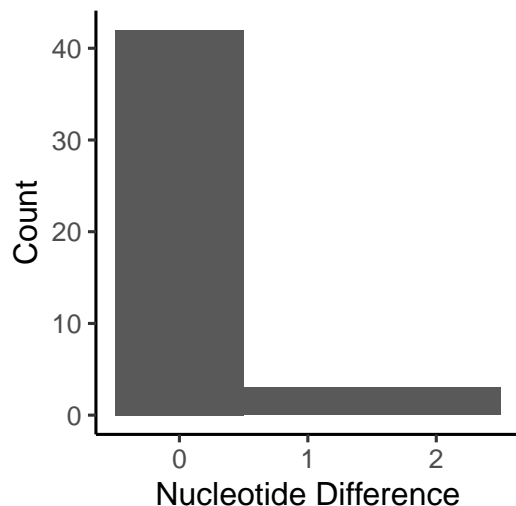
IGHV3-48*02

578 sequences assigned
507 (87.7%) exact matches, in which:
497 unique CDR3
7 unique J



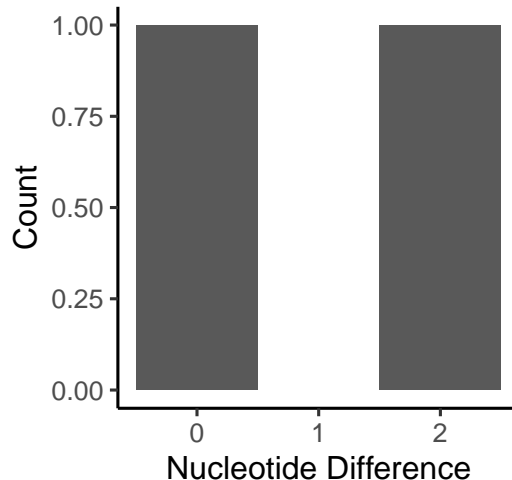
IGHV3-49*03_05

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



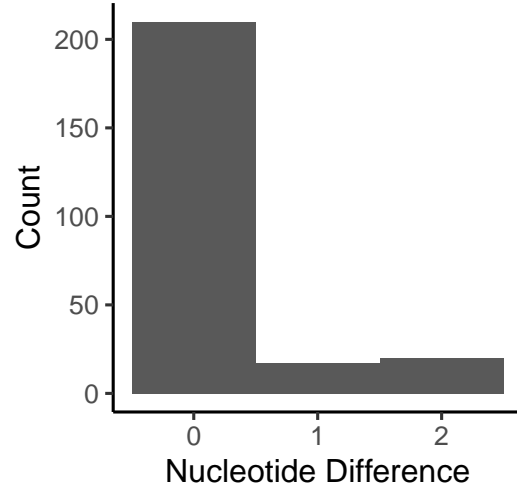
IGHV3-69-1*01

2 sequences assigned
1 (50%) exact matches, in which:
1 unique CDR3
1 unique J



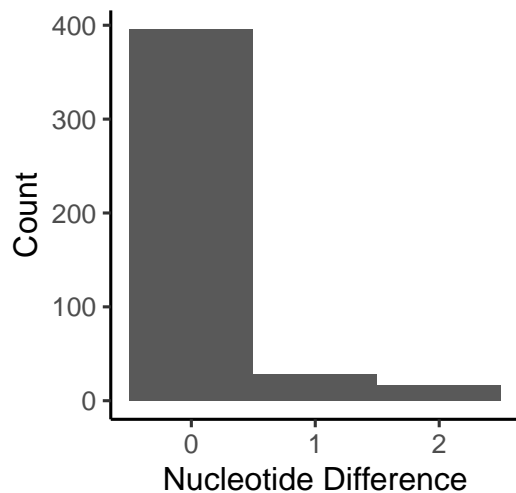
IGHV3-74*01_02

247 sequences assigned
210 (85%) exact matches, in which:
200 unique CDR3
7 unique J



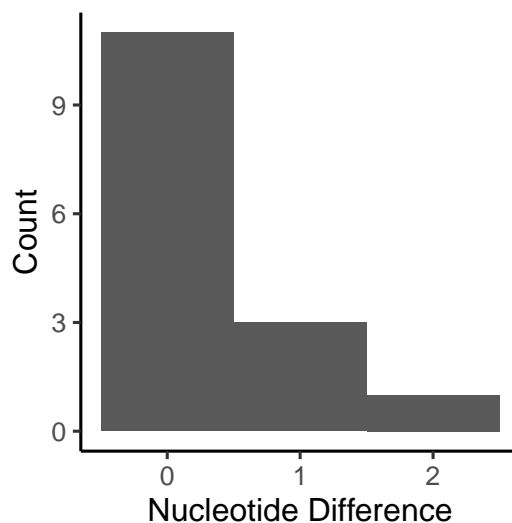
IGHV3-53*01_02

440 sequences assigned
396 (90%) exact matches, in which:
388 unique CDR3
7 unique J



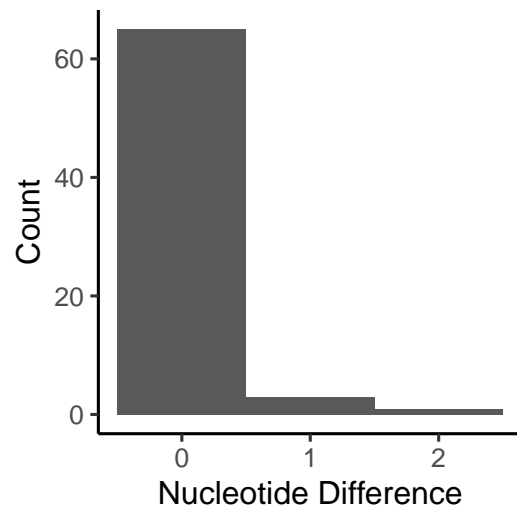
IGHV3-72*01

15 sequences assigned
11 (73.3%) exact matches, in which:
11 unique CDR3
3 unique J



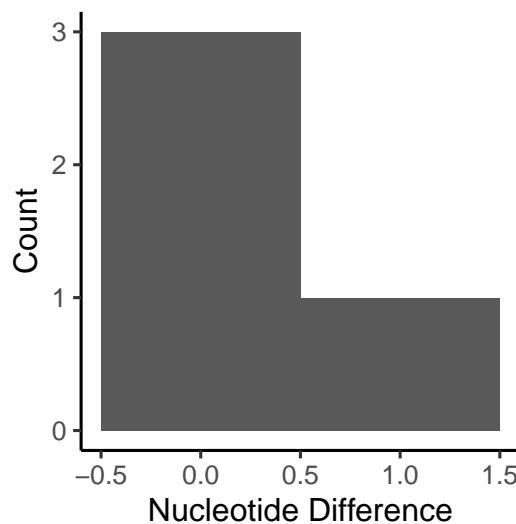
IGHV3-64D*06

69 sequences assigned
65 (94.2%) exact matches, in which:
63 unique CDR3
5 unique J



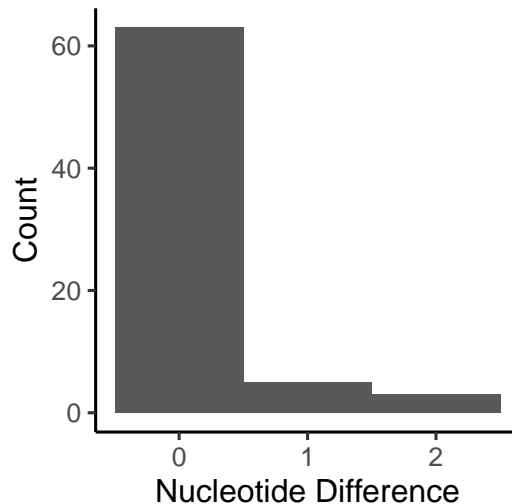
IGHV3-64*02_07

4 sequences assigned
3 (75%) exact matches, in which:
3 unique CDR3
3 unique J



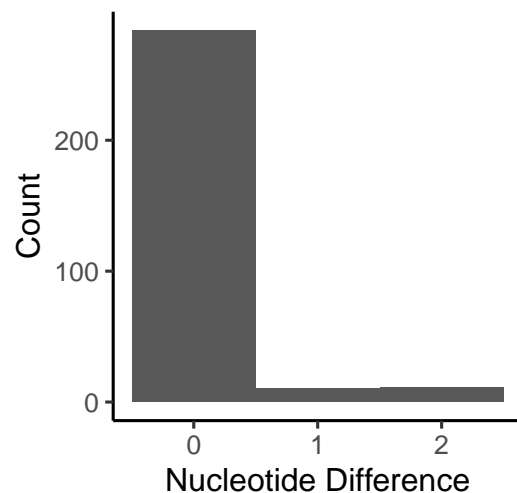
IGHV3-73*01_02

71 sequences assigned
63 (88.7%) exact matches, in which:
62 unique CDR3
6 unique J



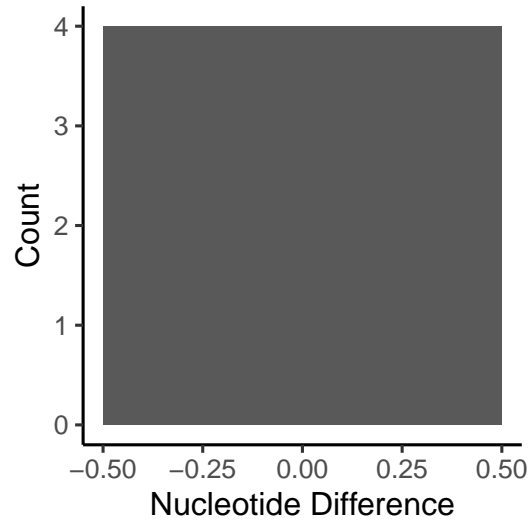
IGHV4-4*07

305 sequences assigned
284 (93.1%) exact matches, in which:
281 unique CDR3
5 unique J



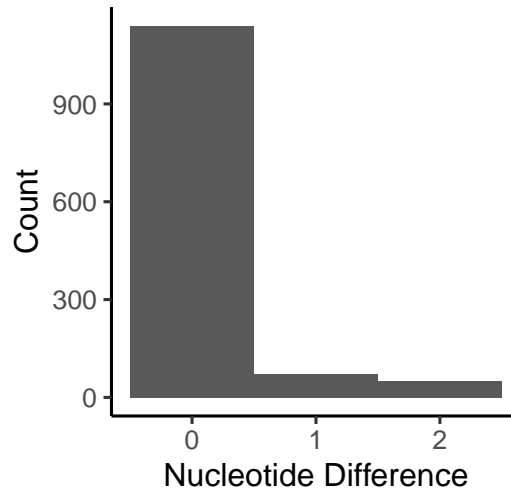
IGHV4-28*01_07

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



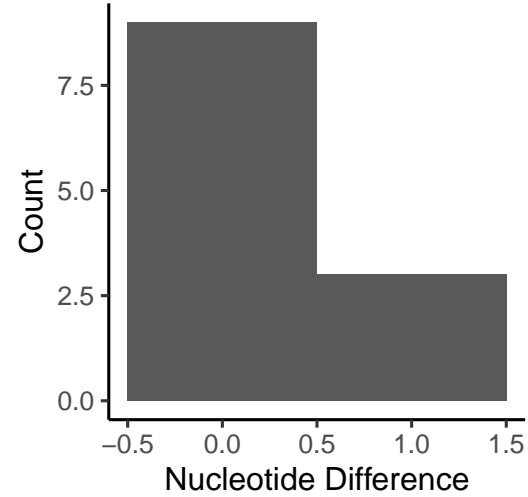
IGHV4-39*01_05

1262 sequences assigned
1140 (90.3%) exact matches, in which:
1121 unique CDR3
7 unique J



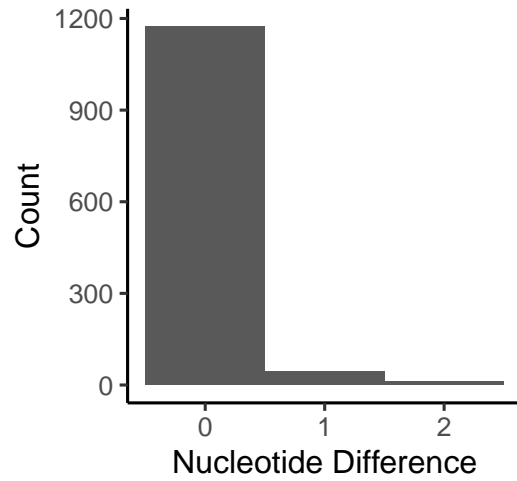
IGHV5-10-1*01_03

12 sequences assigned
9 (75%) exact matches, in which:
9 unique CDR3
4 unique J



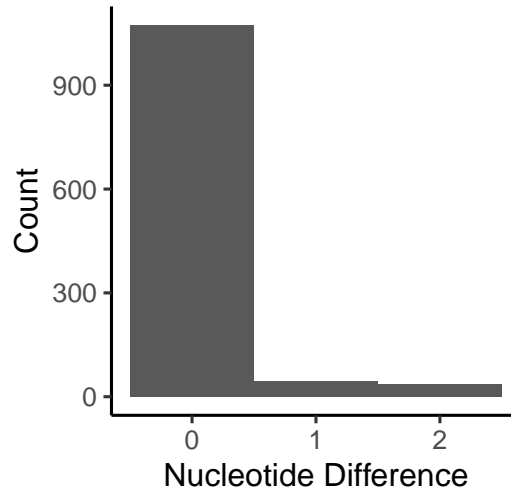
IGHV4-31*03_04

1229 sequences assigned
1173 (95.4%) exact matches, in which:
1150 unique CDR3
7 unique J



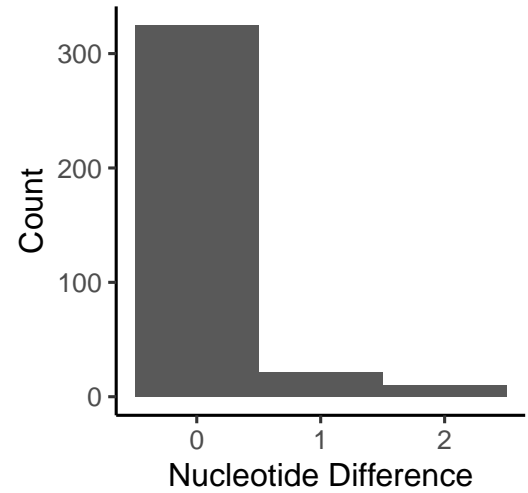
IGHV4-59*01_07

1155 sequences assigned
1074 (93%) exact matches, in which:
1042 unique CDR3
7 unique J



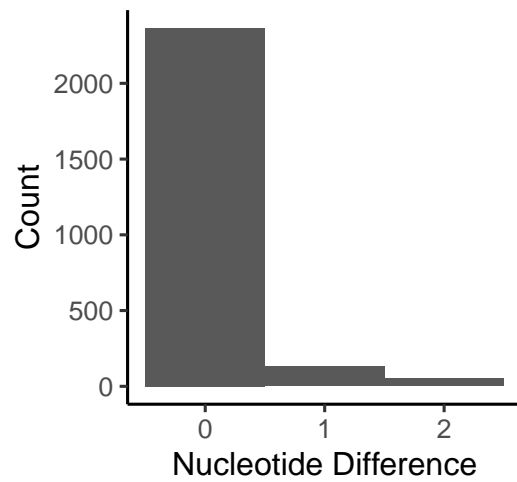
IGHV5-51*01_03

356 sequences assigned
325 (91.3%) exact matches, in which:
325 unique CDR3
7 unique J



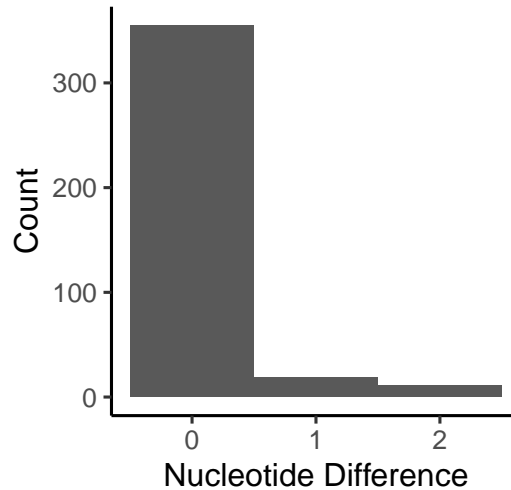
IGHV4-34*01_02

2546 sequences assigned
2365 (92.9%) exact matches, in which:
2290 unique CDR3
7 unique J



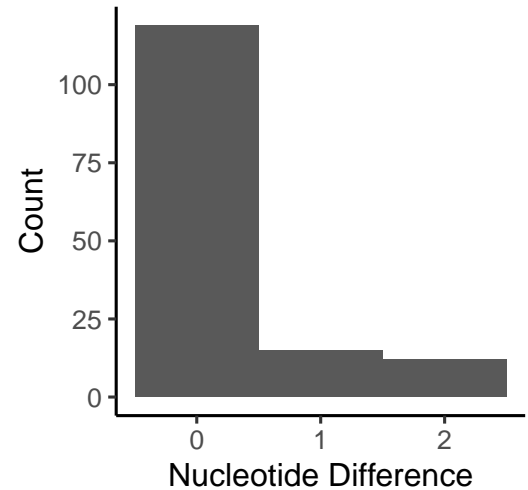
IGHV4-61*01

385 sequences assigned
355 (92.2%) exact matches, in which:
349 unique CDR3
7 unique J

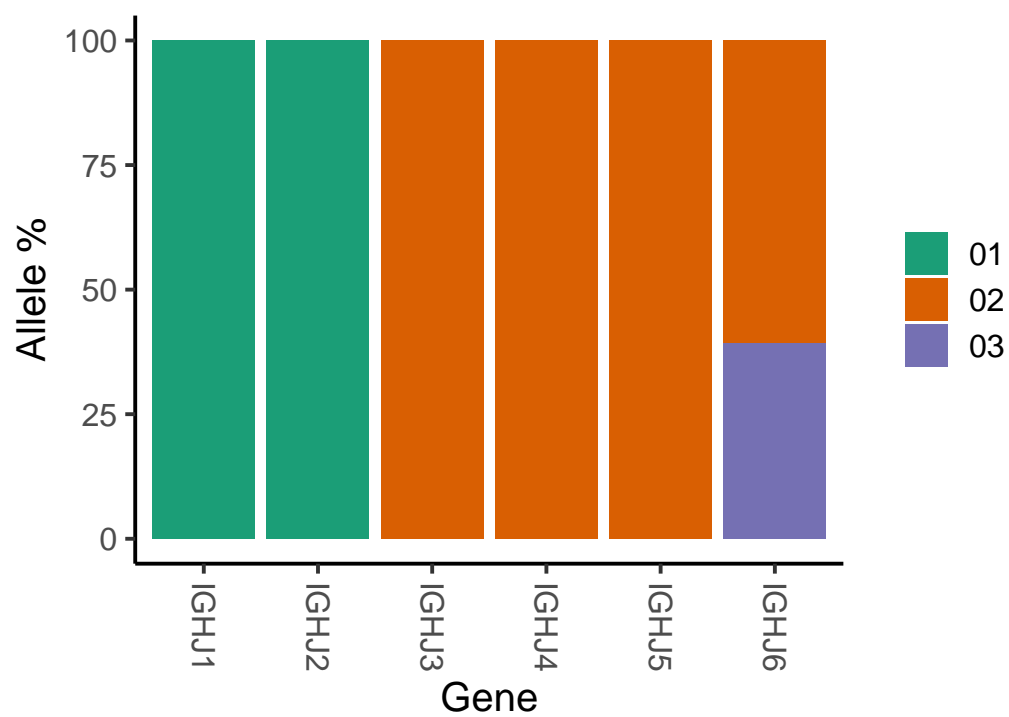


IGHV6-1*01_02

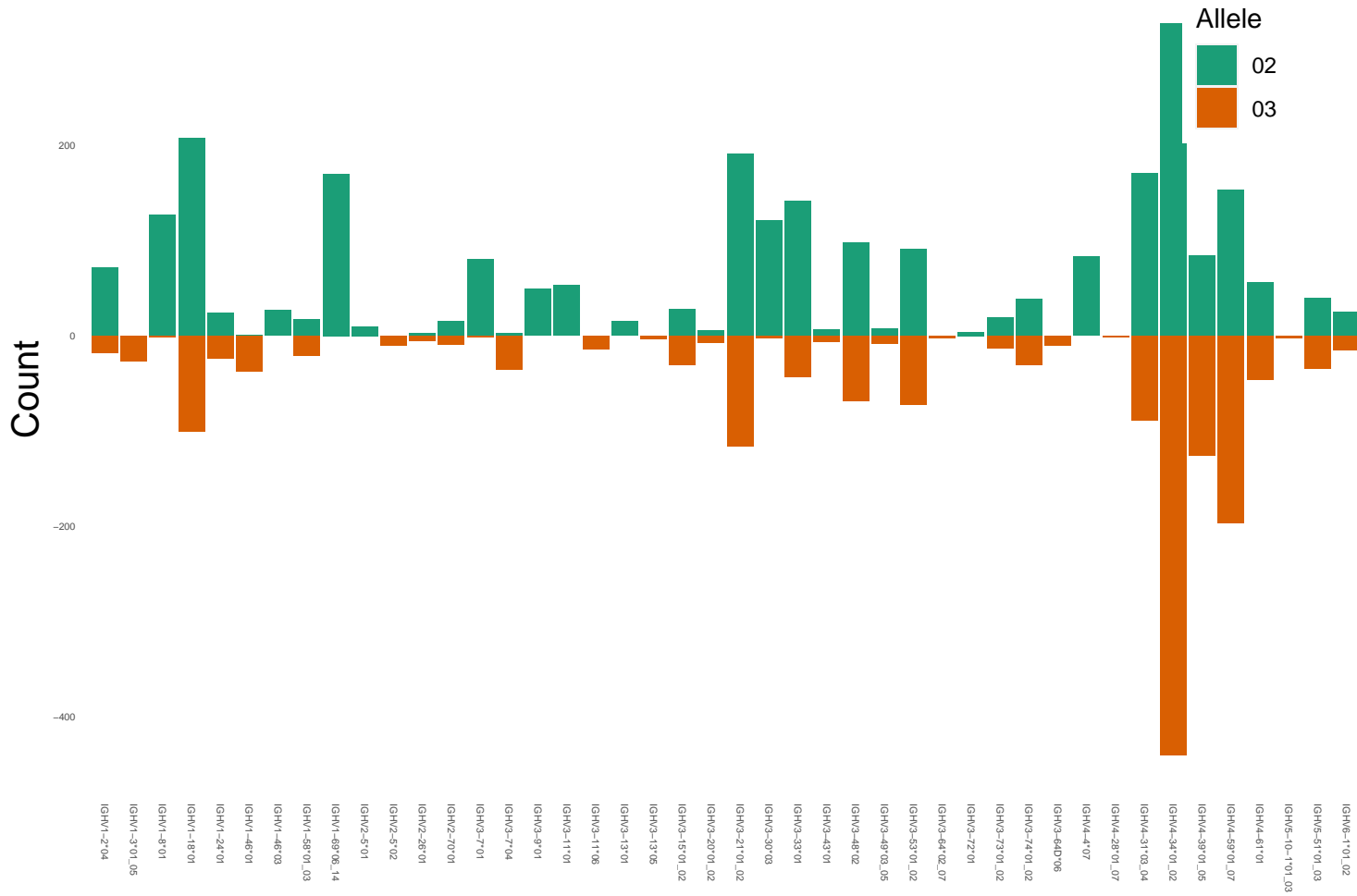
146 sequences assigned
119 (81.5%) exact matches, in which:
119 unique CDR3
7 unique J



Allele Usage



Sequence Count by IGHJ6 allele usage



Never sequences(0) for IV 1 00 02=0000 for IV 0 0 07=01200 are not listed in the genotype and will be ignored.