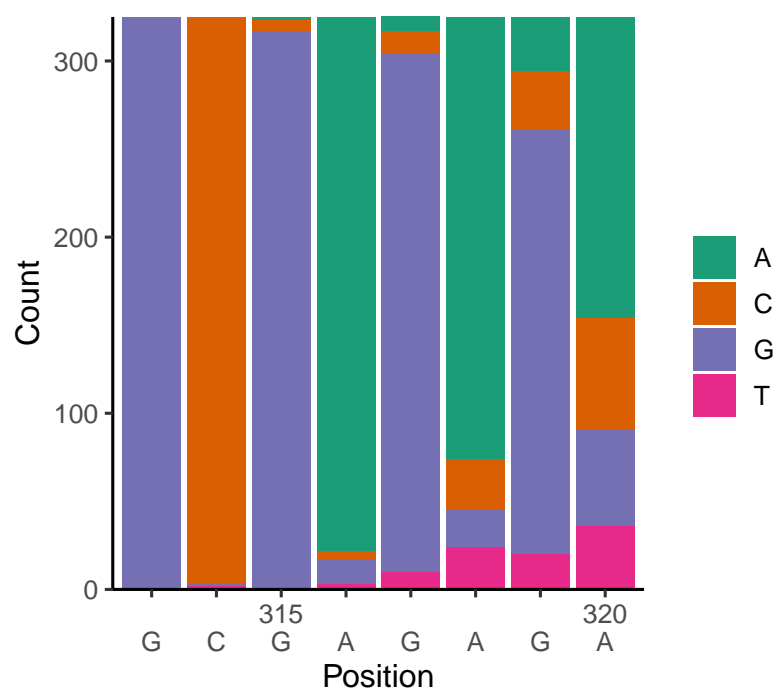
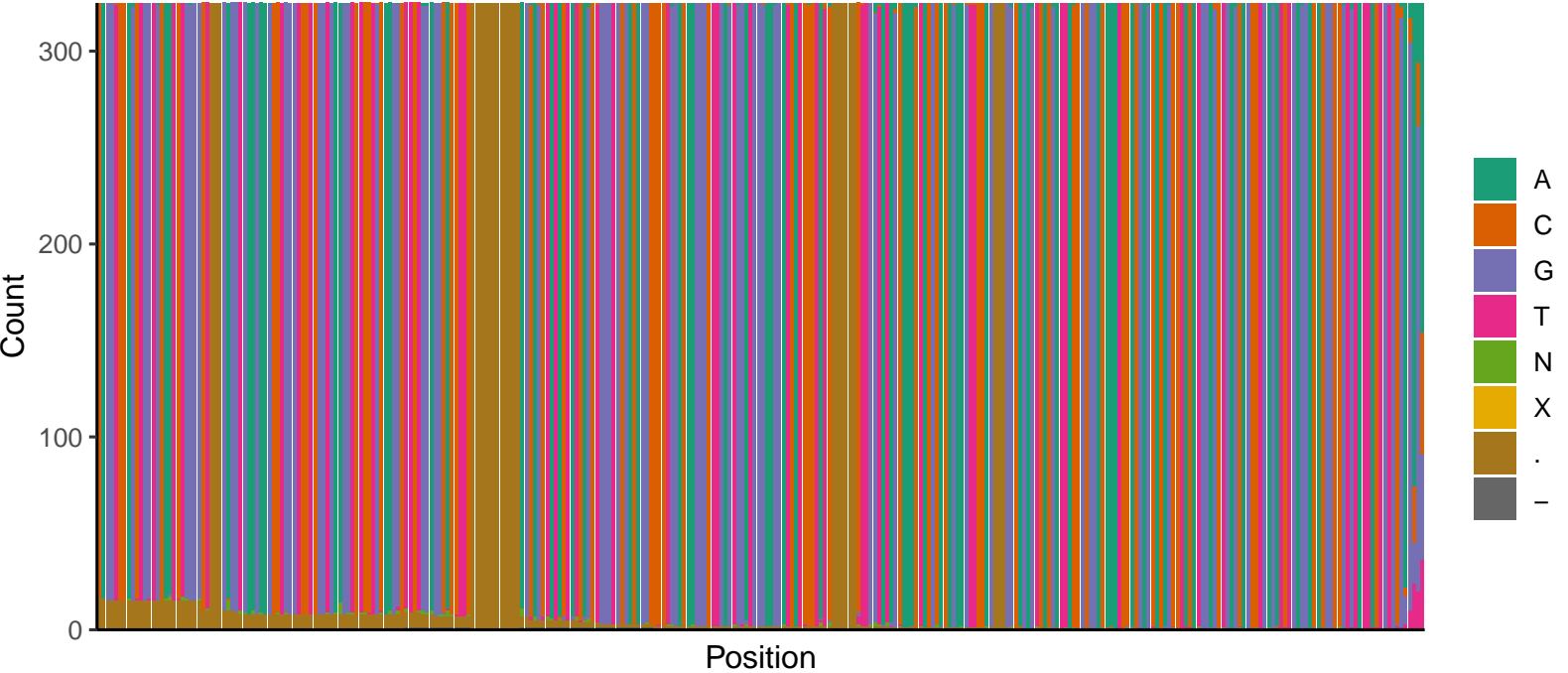


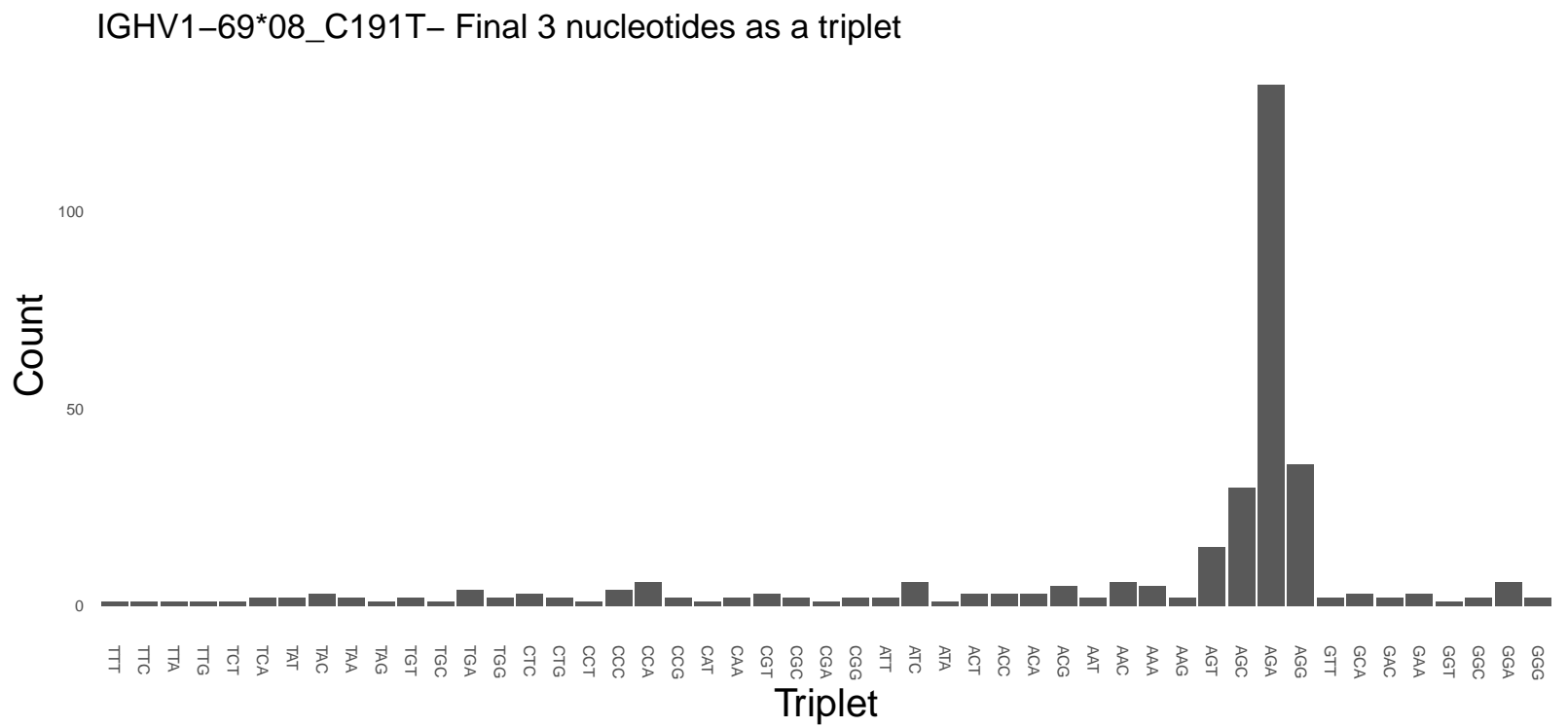
Gene IGHV1-69*08_C191T



Gene IGHV1-69*08_C191T

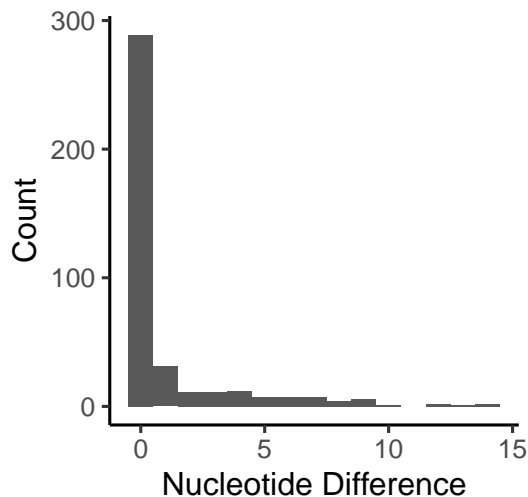


IGHV1-69*08_C191T- Final 3 nucleotides as a triplet



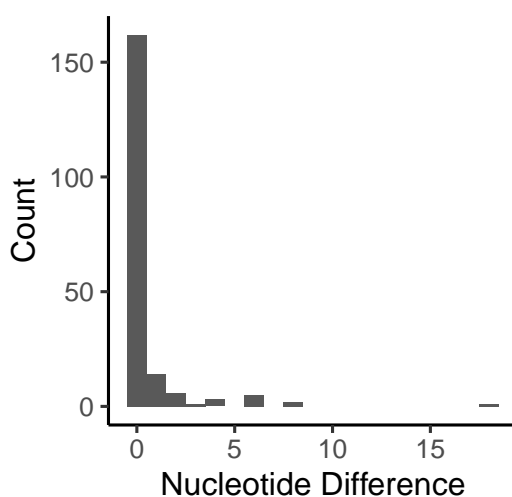
IGHV1-2*02

391 sequences assigned
289 (73.9%) exact matches, in which:
278 unique CDR3
6 unique J



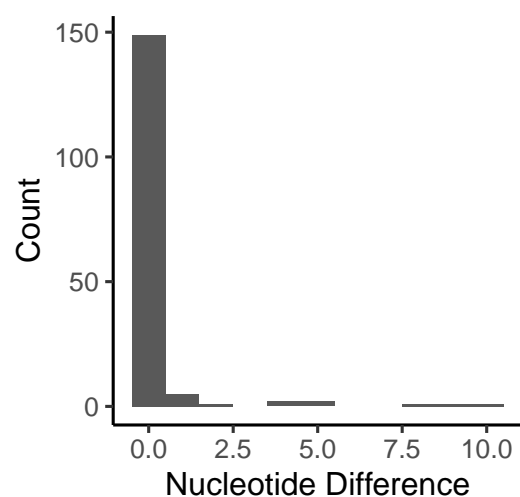
IGHV1-8*01

195 sequences assigned
162 (83.1%) exact matches, in which:
160 unique CDR3
6 unique J



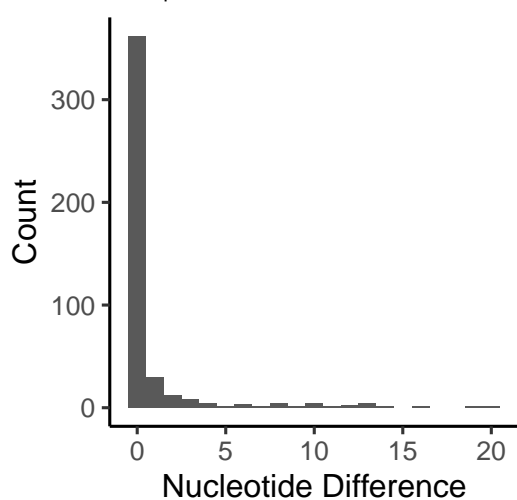
IGHV1-24*01

162 sequences assigned
149 (92%) exact matches, in which:
141 unique CDR3
6 unique J



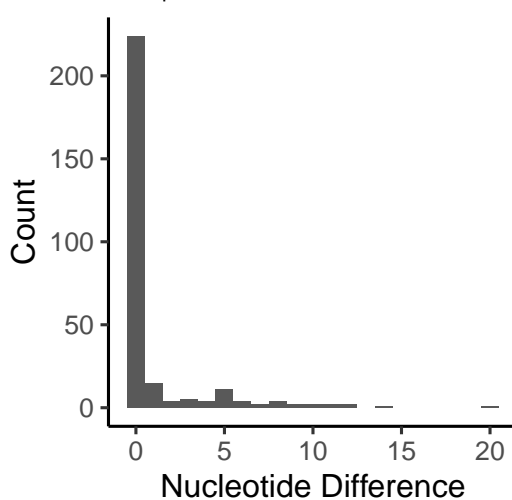
IGHV1-2*06

442 sequences assigned
362 (81.9%) exact matches, in which:
341 unique CDR3
6 unique J



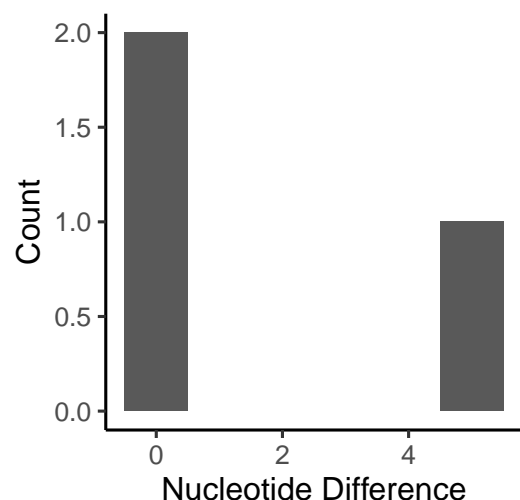
IGHV1-18*01

285 sequences assigned
224 (78.6%) exact matches, in which:
217 unique CDR3
6 unique J



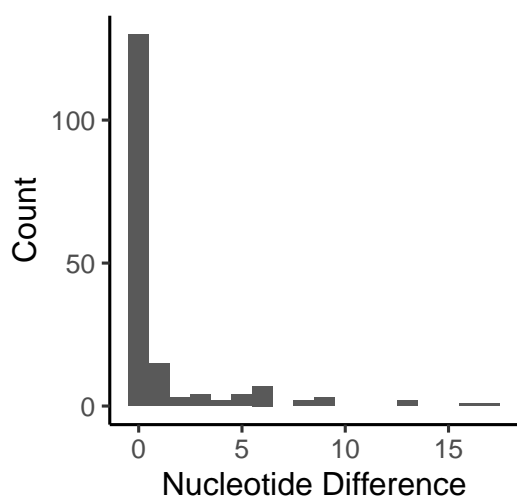
IGHV1-45*02

3 sequences assigned
2 (66.7%) exact matches, in which:
2 unique CDR3
2 unique J



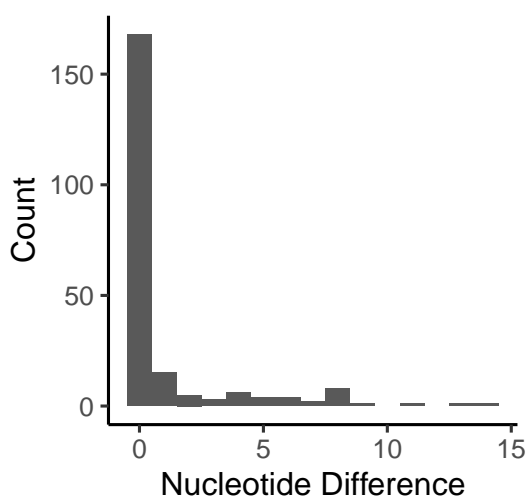
IGHV1-3*01

175 sequences assigned
130 (74.3%) exact matches, in which:
124 unique CDR3
6 unique J



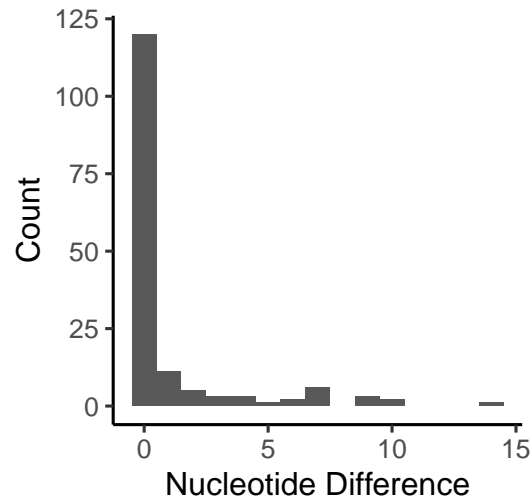
IGHV1-18*04

219 sequences assigned
168 (76.7%) exact matches, in which:
162 unique CDR3
6 unique J



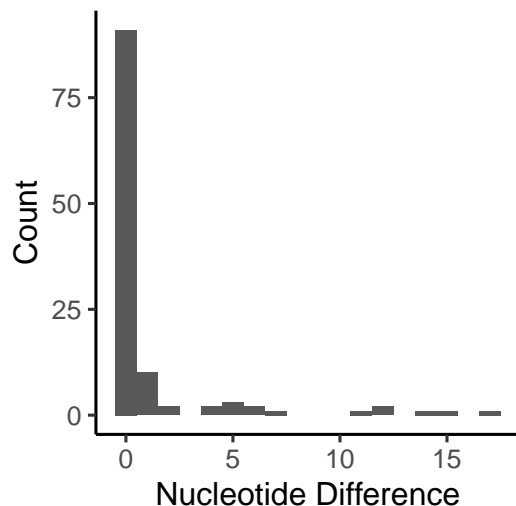
IGHV1-46*01

157 sequences assigned
120 (76.4%) exact matches, in which:
117 unique CDR3
5 unique J



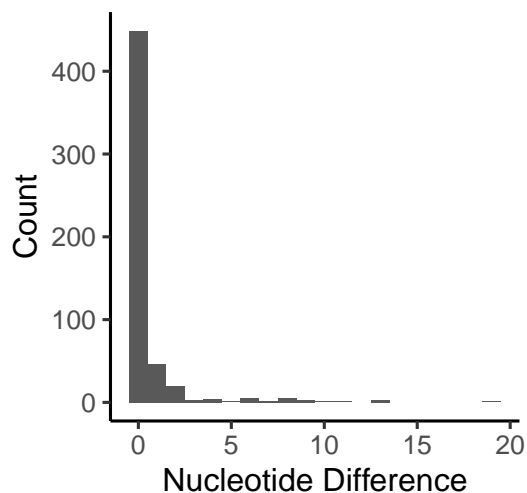
IGHV1-46*03

117 sequences assigned
91 (77.8%) exact matches, in which:
85 unique CDR3
5 unique J



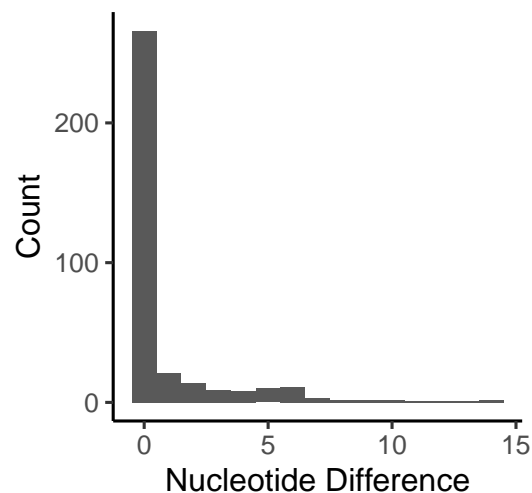
IGHV1-69*12

544 sequences assigned
449 (82.5%) exact matches, in which:
428 unique CDR3
6 unique J



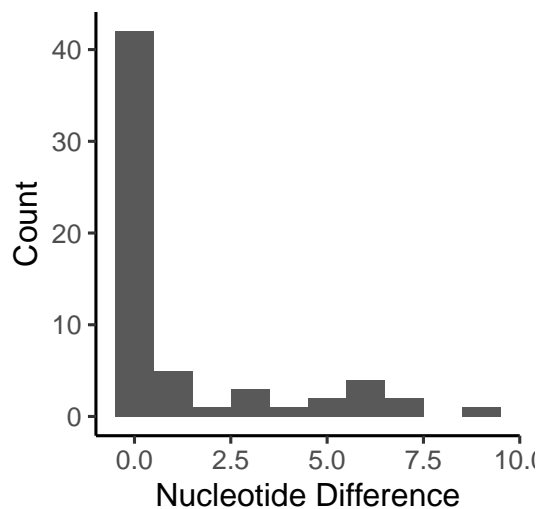
IGHV2-5*02

353 sequences assigned
266 (75.4%) exact matches, in which:
257 unique CDR3
6 unique J



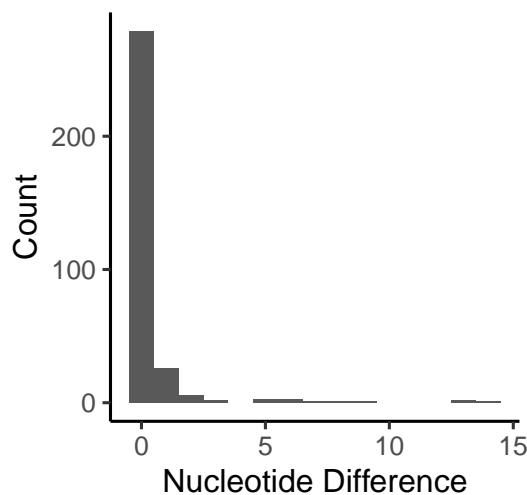
IGHV1-58*01

61 sequences assigned
42 (68.9%) exact matches, in which:
40 unique CDR3
6 unique J



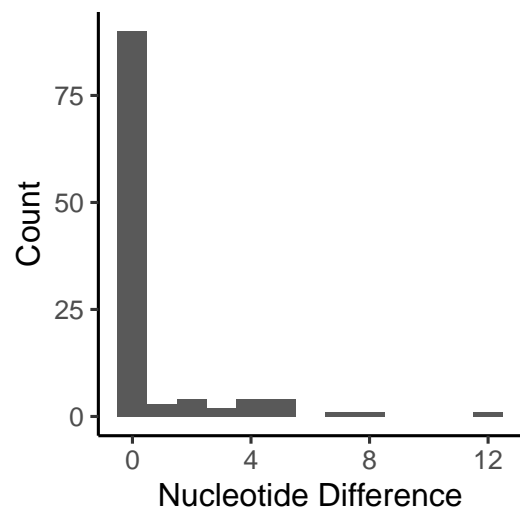
IGHV1-69*08_C191T

325 sequences assigned
279 (85.8%) exact matches, in which:
266 unique CDR3
6 unique J



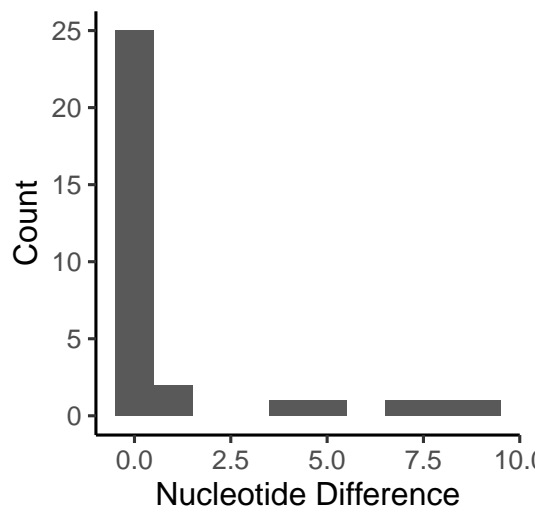
IGHV2-26*01

110 sequences assigned
90 (81.8%) exact matches, in which:
89 unique CDR3
5 unique J



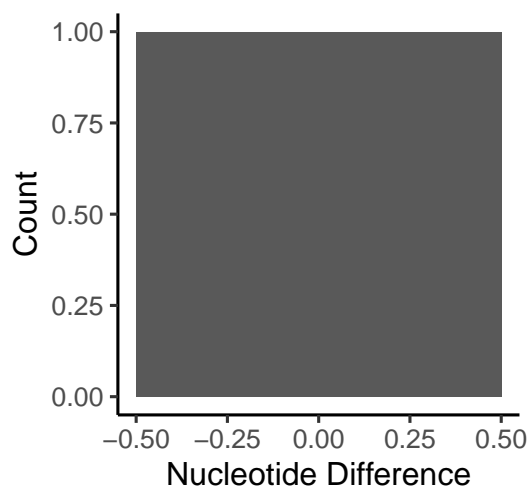
IGHV1-58*02

32 sequences assigned
25 (78.1%) exact matches, in which:
25 unique CDR3
5 unique J



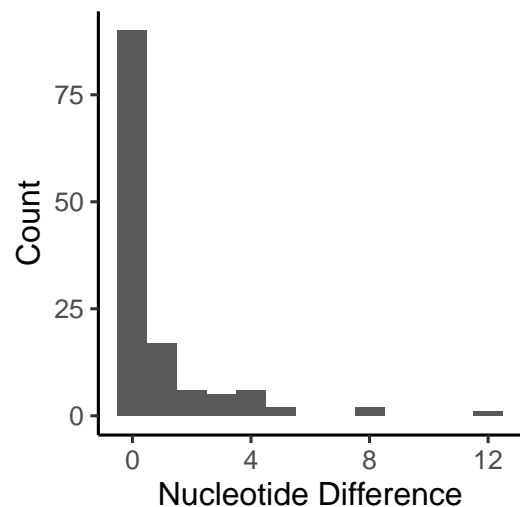
IGHV1-NL1*01

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



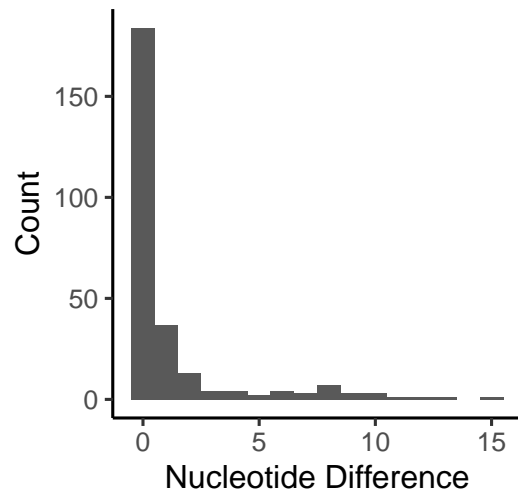
IGHV2-70*15

129 sequences assigned
90 (69.8%) exact matches, in which:
89 unique CDR3
5 unique J



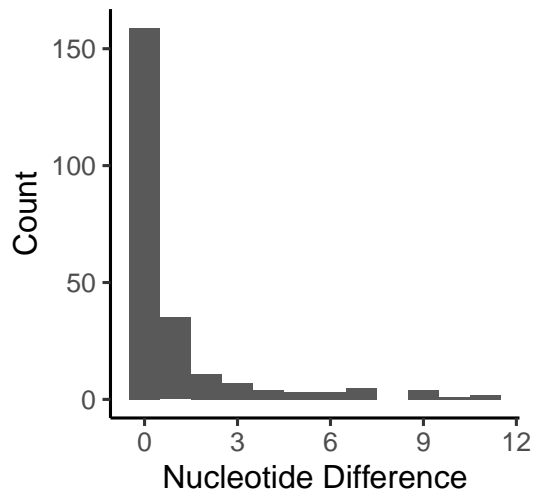
IGHV3-7*01

268 sequences assigned
184 (68.7%) exact matches, in which:
173 unique CDR3
6 unique J



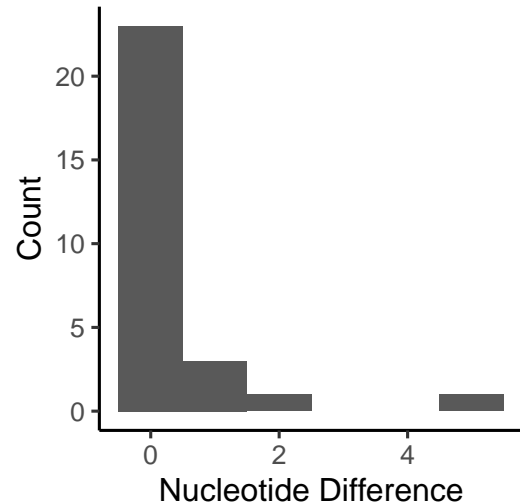
IGHV3-11*01

234 sequences assigned
159 (67.9%) exact matches, in which:
150 unique CDR3
6 unique J



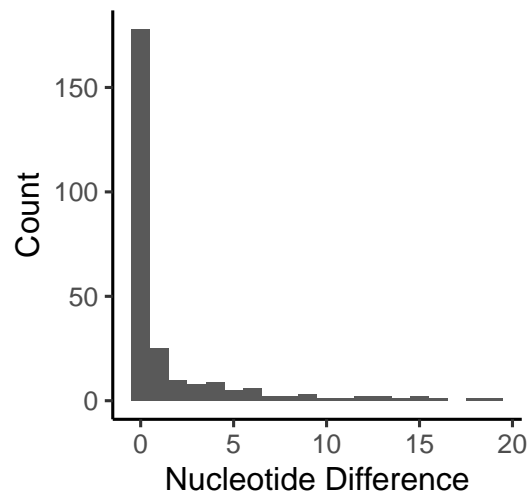
IGHV3-13*05

28 sequences assigned
23 (82.1%) exact matches, in which:
22 unique CDR3
5 unique J



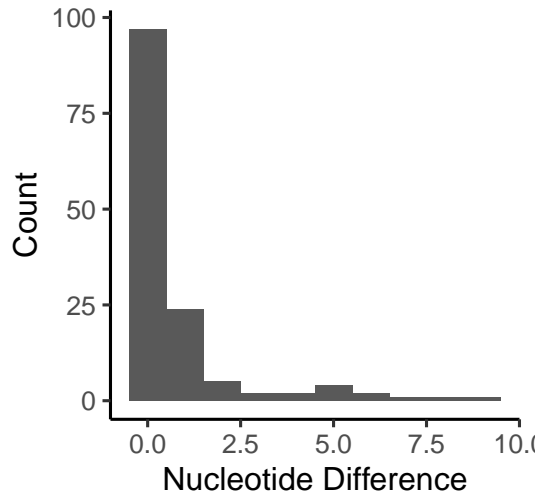
IGHV3-7*03

261 sequences assigned
178 (68.2%) exact matches, in which:
169 unique CDR3
5 unique J



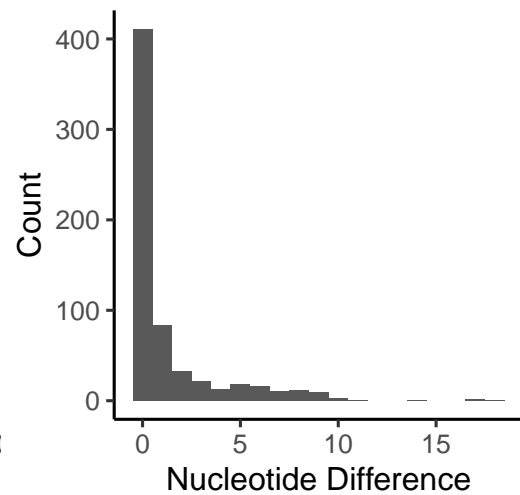
IGHV3-11*06

139 sequences assigned
97 (69.8%) exact matches, in which:
91 unique CDR3
5 unique J



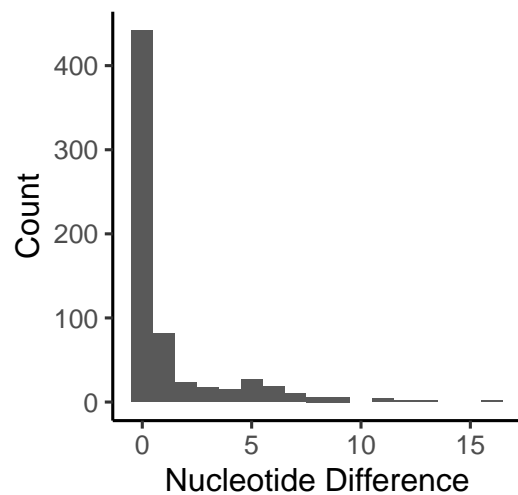
IGHV3-15*01

637 sequences assigned
411 (64.5%) exact matches, in which:
389 unique CDR3
6 unique J



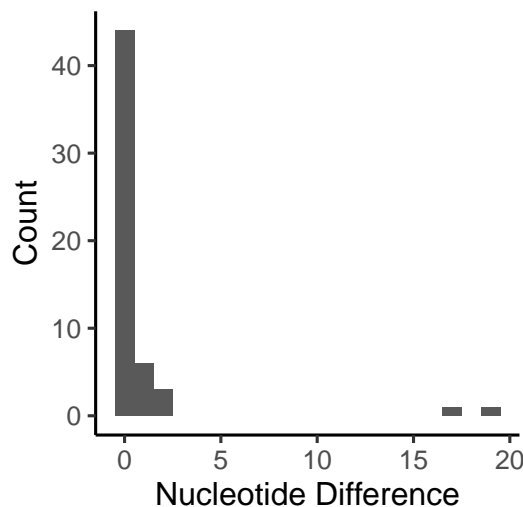
IGHV3-9*01

655 sequences assigned
442 (67.5%) exact matches, in which:
403 unique CDR3
6 unique J



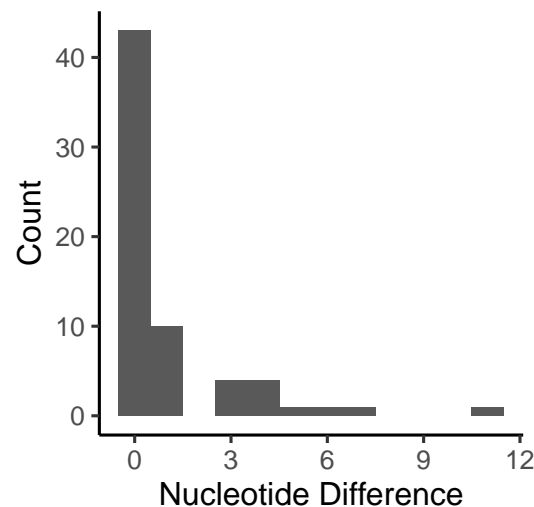
IGHV3-13*01

55 sequences assigned
44 (80%) exact matches, in which:
41 unique CDR3
6 unique J



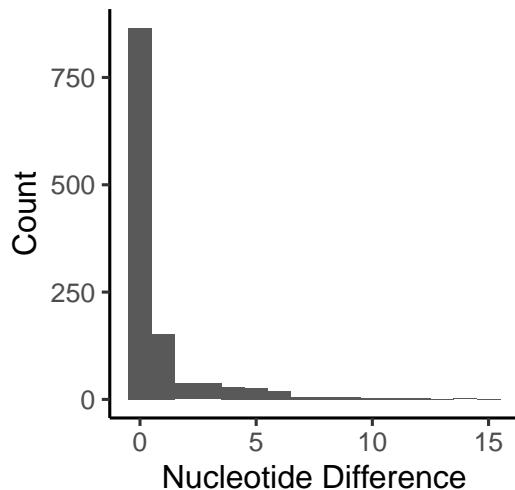
IGHV3-20*01

65 sequences assigned
43 (66.2%) exact matches, in which:
39 unique CDR3
6 unique J



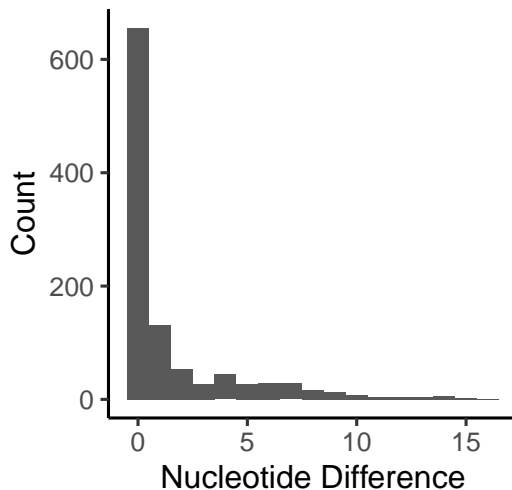
IGHV3-21*01

1199 sequences assigned
866 (72.2%) exact matches, in which:
811 unique CDR3
6 unique J



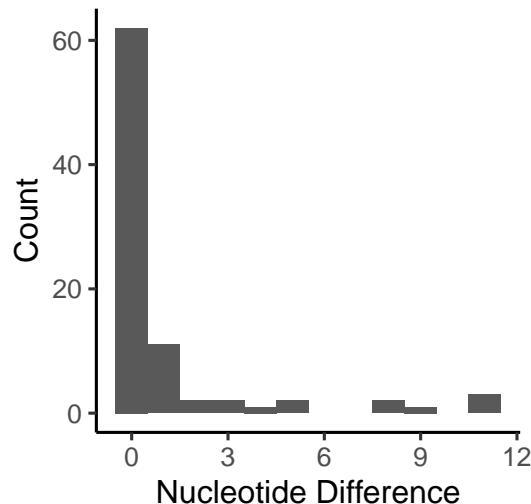
IGHV3-30*18

1057 sequences assigned
656 (62.1%) exact matches, in which:
621 unique CDR3
6 unique J



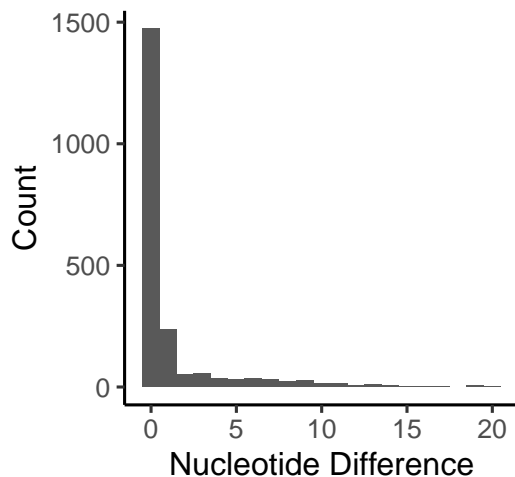
IGHV3-43*01

86 sequences assigned
62 (72.1%) exact matches, in which:
56 unique CDR3
6 unique J



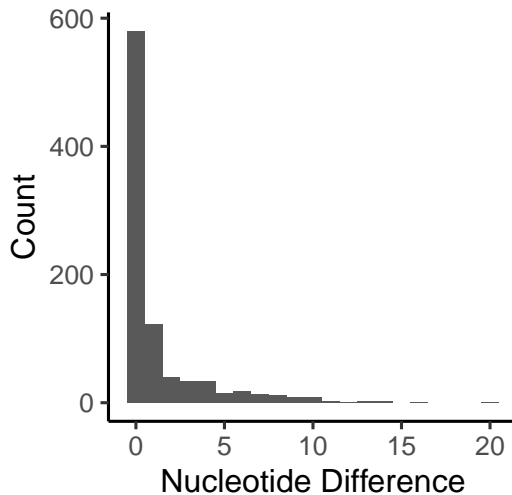
IGHV3-23*01

2070 sequences assigned
1473 (71.2%) exact matches, in which:
1370 unique CDR3
6 unique J



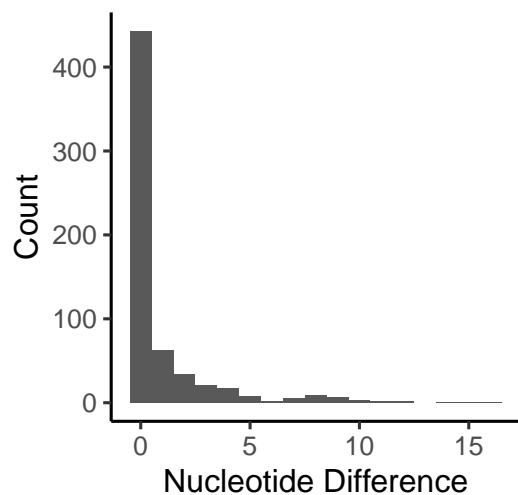
IGHV3-33*01

899 sequences assigned
580 (64.5%) exact matches, in which:
542 unique CDR3
6 unique J



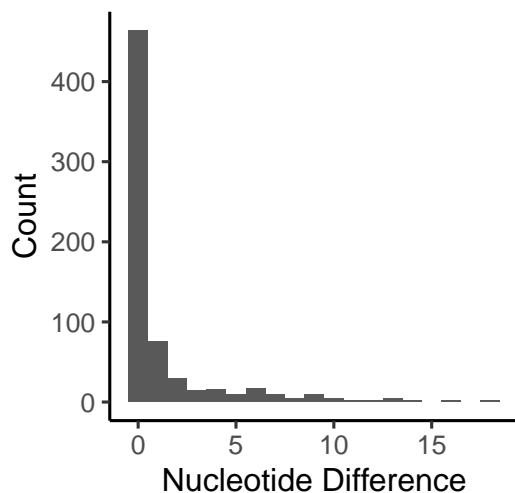
IGHV3-48*02

618 sequences assigned
443 (71.7%) exact matches, in which:
426 unique CDR3
6 unique J



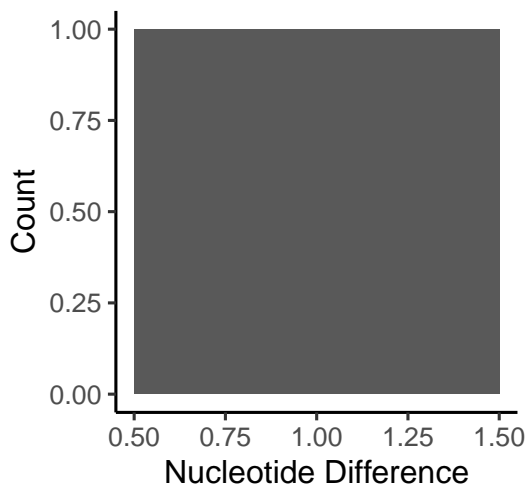
IGHV3-30-3*01

667 sequences assigned
464 (69.6%) exact matches, in which:
428 unique CDR3
6 unique J



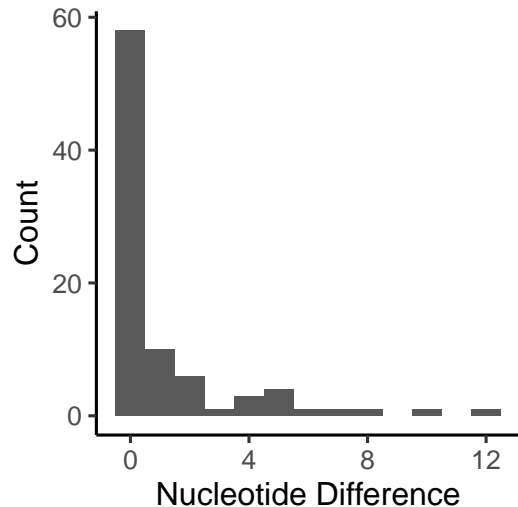
IGHV3-35*01

1 sequences assigned
No exact matches.



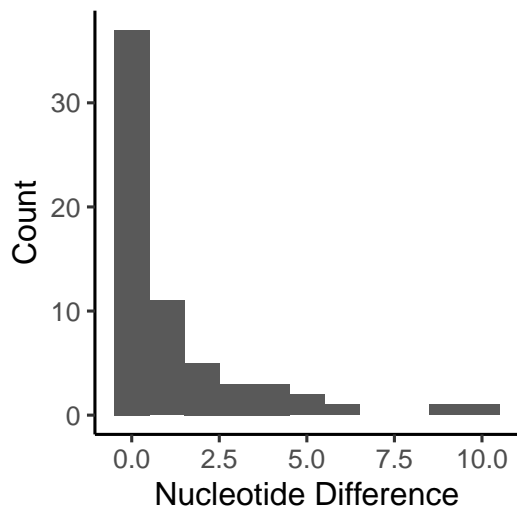
IGHV3-49*03

87 sequences assigned
58 (66.7%) exact matches, in which:
56 unique CDR3
5 unique J



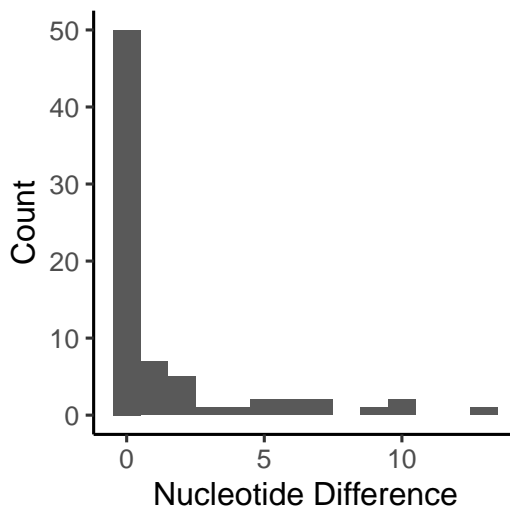
IGHV3-49*05

64 sequences assigned
37 (57.8%) exact matches, in which:
35 unique CDR3
5 unique J



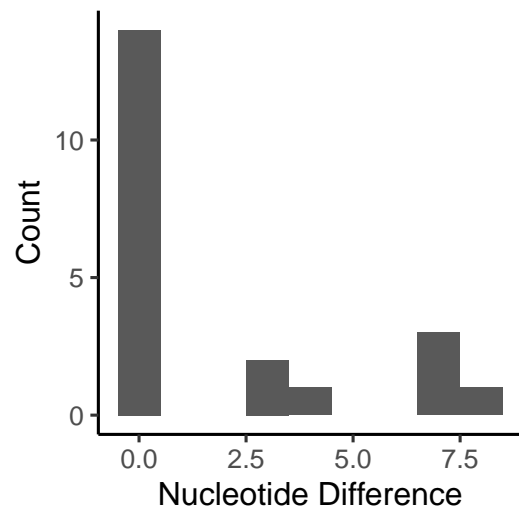
IGHV3-53*04

74 sequences assigned
50 (67.6%) exact matches, in which:
48 unique CDR3
6 unique J



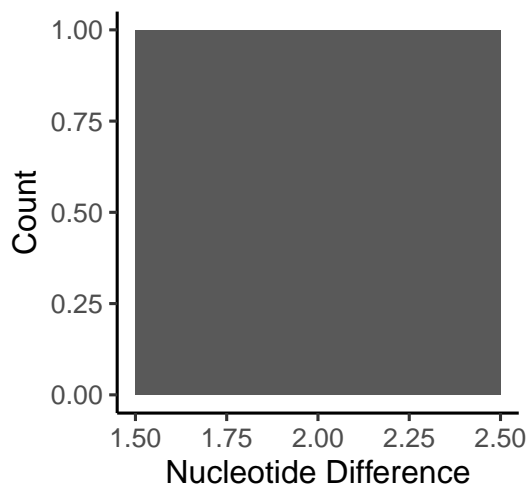
IGHV3-72*01

21 sequences assigned
14 (66.7%) exact matches, in which:
13 unique CDR3
4 unique J



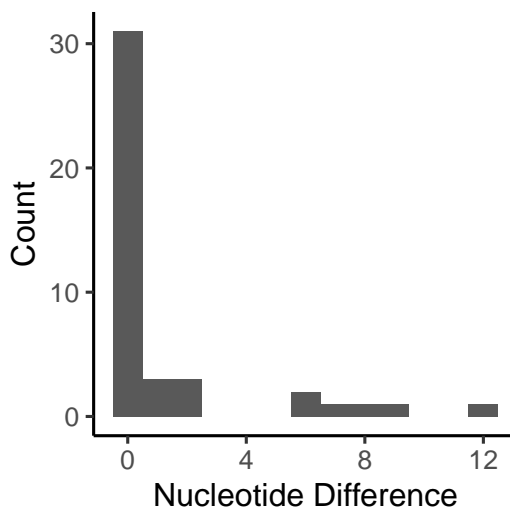
IGHV3-52*01

1 sequences assigned
No exact matches.



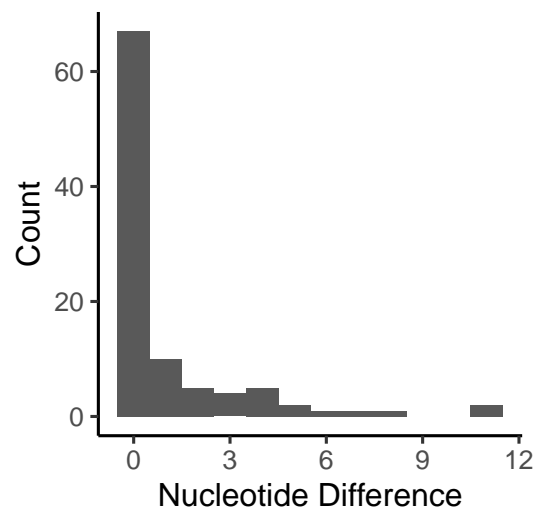
IGHV3-64*01

43 sequences assigned
31 (72.1%) exact matches, in which:
29 unique CDR3
4 unique J



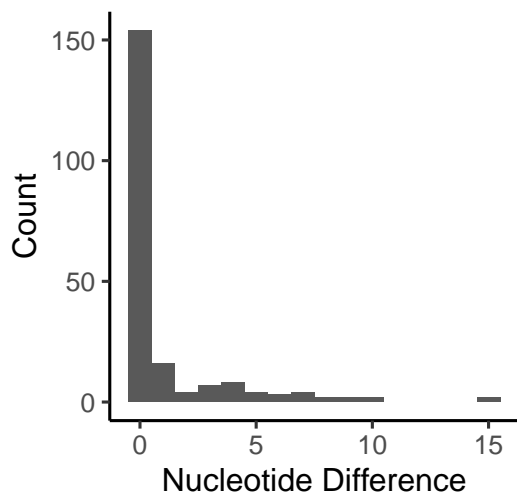
IGHV3-73*01

103 sequences assigned
67 (65%) exact matches, in which:
61 unique CDR3
6 unique J



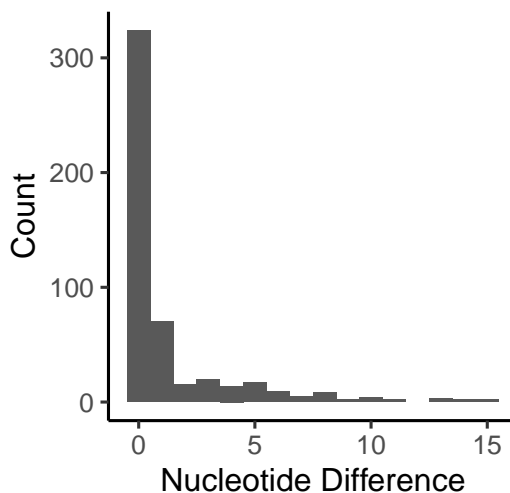
IGHV3-53*01

208 sequences assigned
154 (74%) exact matches, in which:
142 unique CDR3
6 unique J



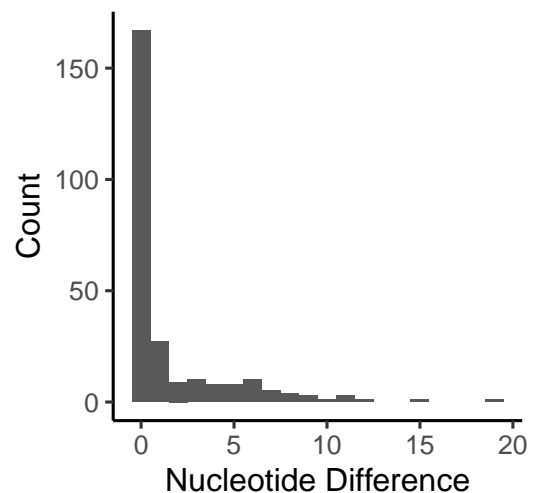
IGHV3-66*01

497 sequences assigned
324 (65.2%) exact matches, in which:
301 unique CDR3
6 unique J



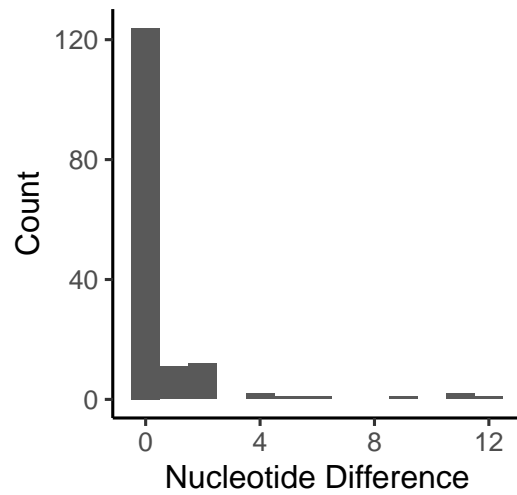
IGHV3-74*01

259 sequences assigned
167 (64.5%) exact matches, in which:
161 unique CDR3
6 unique J



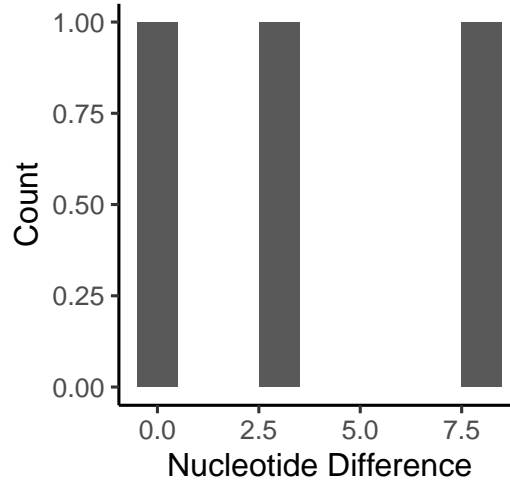
IGHV3–64D*09

156 sequences assigned
124 (79.5%) exact matches, in which:
115 unique CDR3
6 unique J



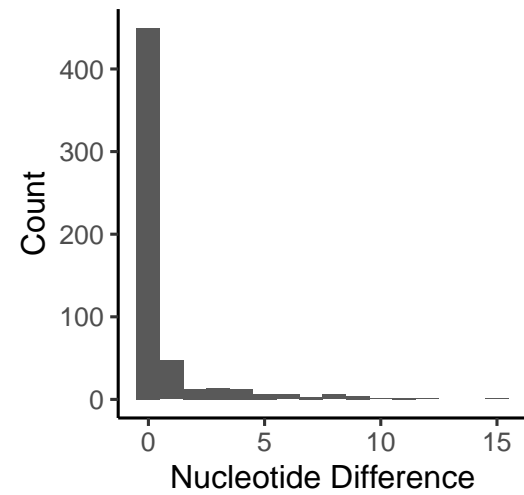
IGHV4–28*01

3 sequences assigned
1 (33.3%) exact matches, in which:
1 unique CDR3
1 unique J



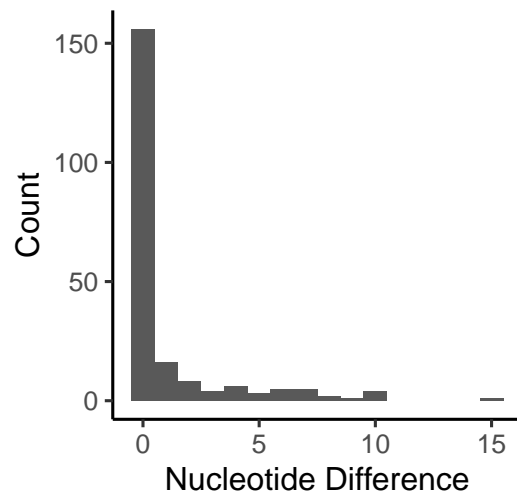
IGHV4–31*03

568 sequences assigned
450 (79.2%) exact matches, in which:
440 unique CDR3
6 unique J



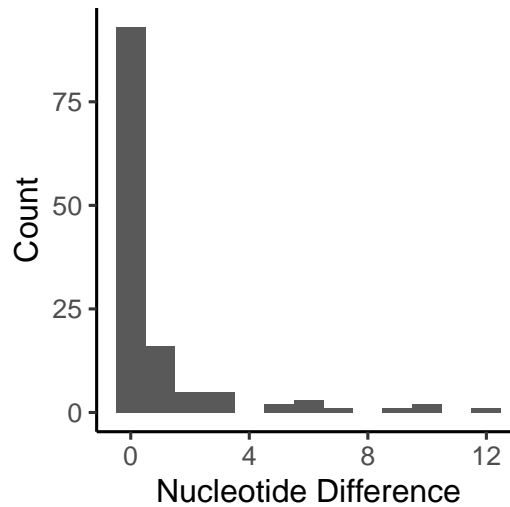
IGHV4–4*02

211 sequences assigned
156 (73.9%) exact matches, in which:
150 unique CDR3
5 unique J



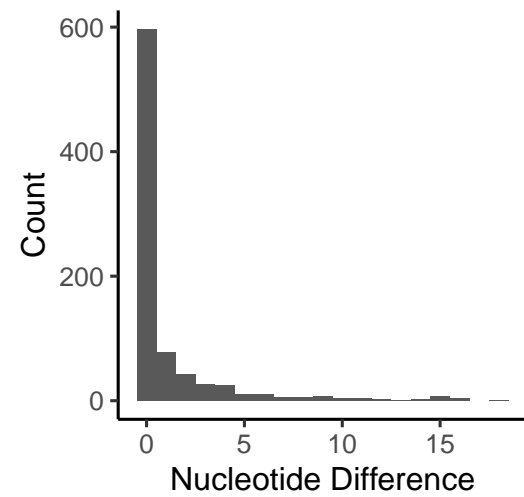
IGHV4–30–4*01

129 sequences assigned
93 (72.1%) exact matches, in which:
91 unique CDR3
6 unique J



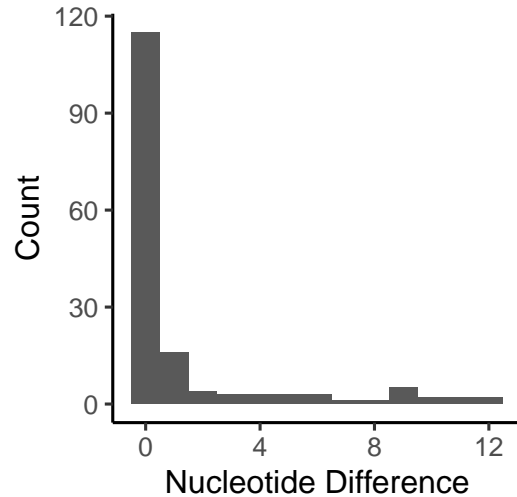
IGHV4–34*01

838 sequences assigned
597 (71.2%) exact matches, in which:
562 unique CDR3
6 unique J



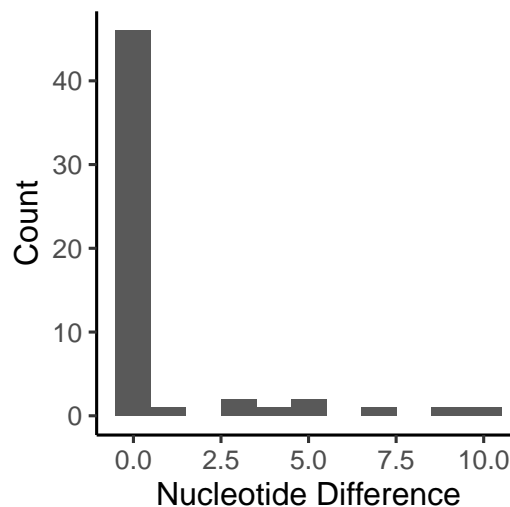
IGHV4–4*07

160 sequences assigned
115 (71.9%) exact matches, in which:
111 unique CDR3
6 unique J



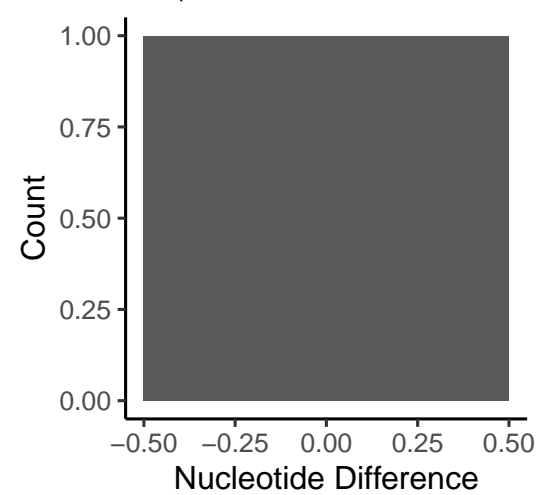
IGHV4–30–2*01

55 sequences assigned
46 (83.6%) exact matches, in which:
43 unique CDR3
6 unique J



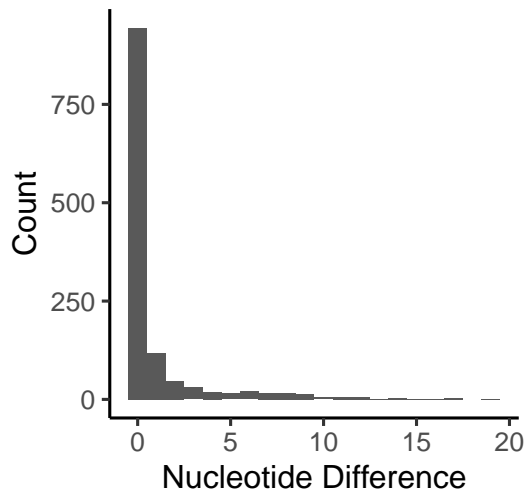
IGHV4–38–2*02

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



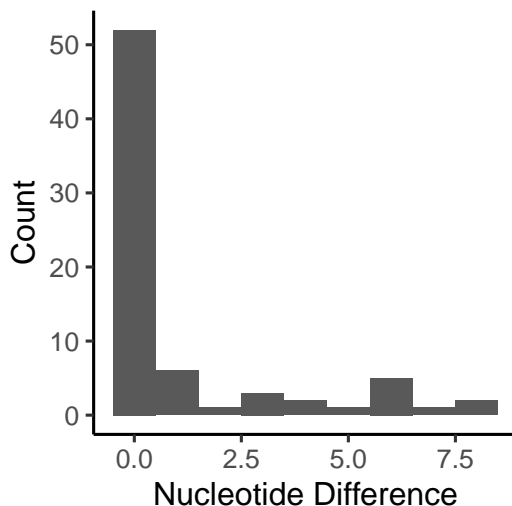
IGHV4–39*01

1271 sequences assigned
945 (74.4%) exact matches, in which:
898 unique CDR3
6 unique J



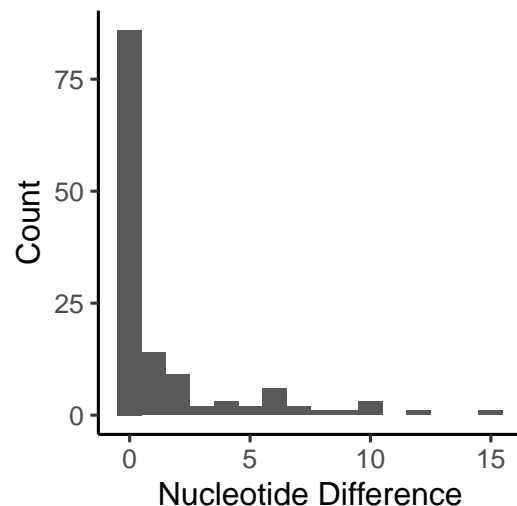
IGHV4–61*01

73 sequences assigned
52 (71.2%) exact matches, in which:
52 unique CDR3
5 unique J



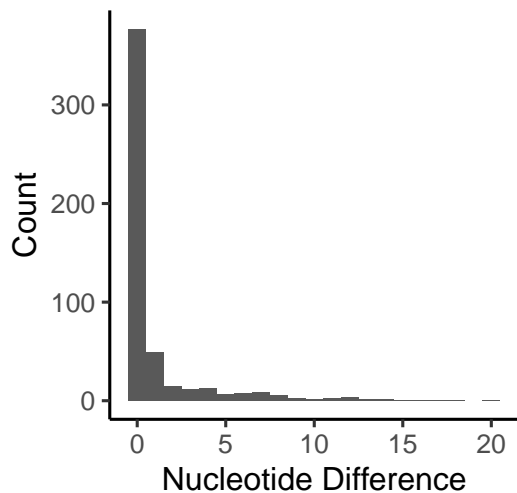
IGHV5–51*03

131 sequences assigned
86 (65.6%) exact matches, in which:
84 unique CDR3
6 unique J



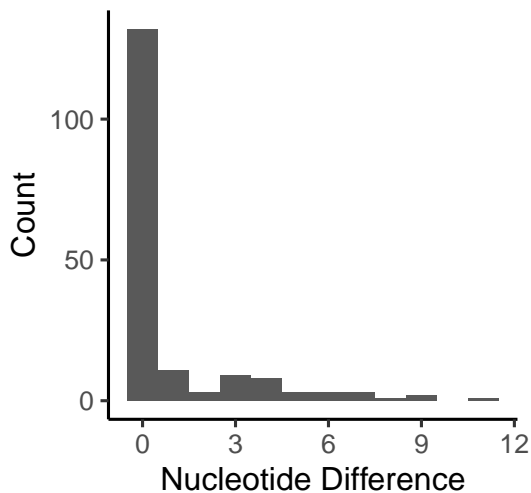
IGHV4–59*01

519 sequences assigned
377 (72.6%) exact matches, in which:
369 unique CDR3
6 unique J



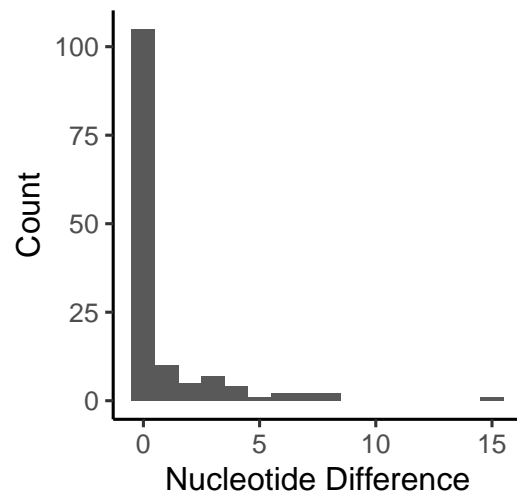
IGHV5–10–1*03

176 sequences assigned
132 (75%) exact matches, in which:
125 unique CDR3
6 unique J



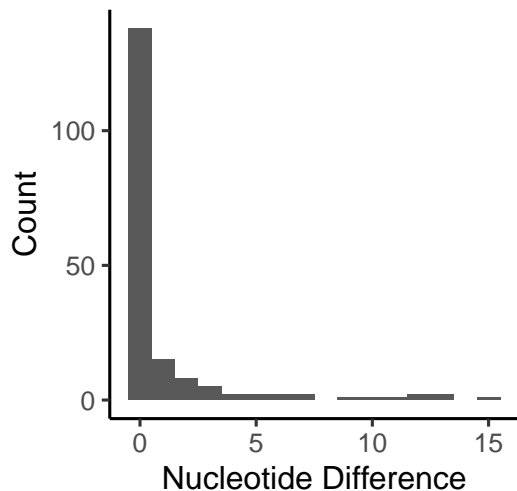
IGHV6–1*01

139 sequences assigned
105 (75.5%) exact matches, in which:
99 unique CDR3
5 unique J



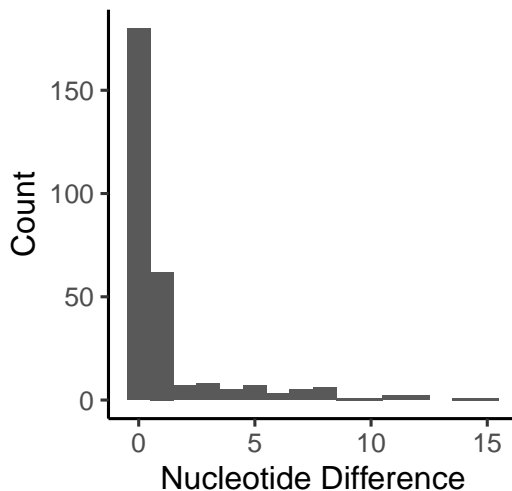
IGHV4–59*08

183 sequences assigned
138 (75.4%) exact matches, in which:
135 unique CDR3
6 unique J



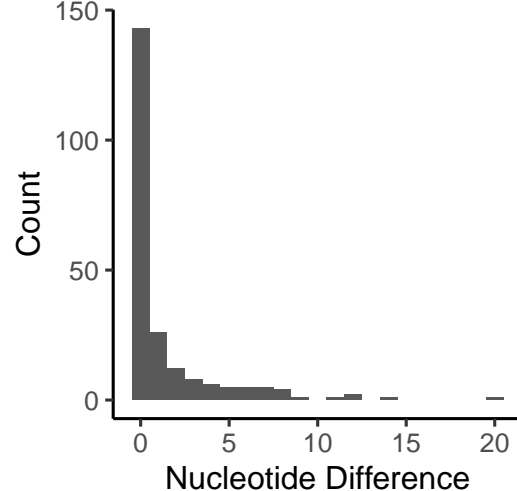
IGHV5–51*01

291 sequences assigned
180 (61.9%) exact matches, in which:
172 unique CDR3
5 unique J



IGHV7–4–1*02

220 sequences assigned
143 (65%) exact matches, in which:
140 unique CDR3
5 unique J



IGHV1-69*08_C191T

