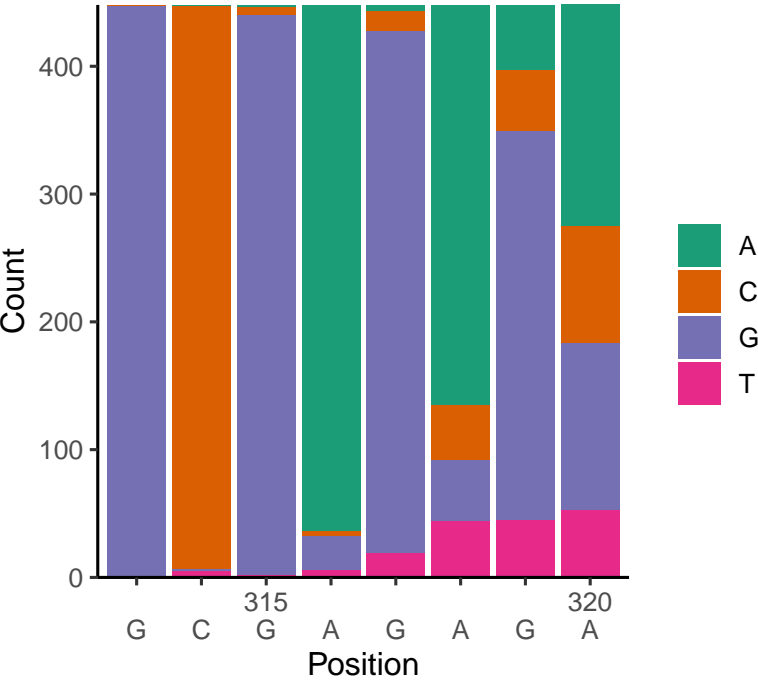
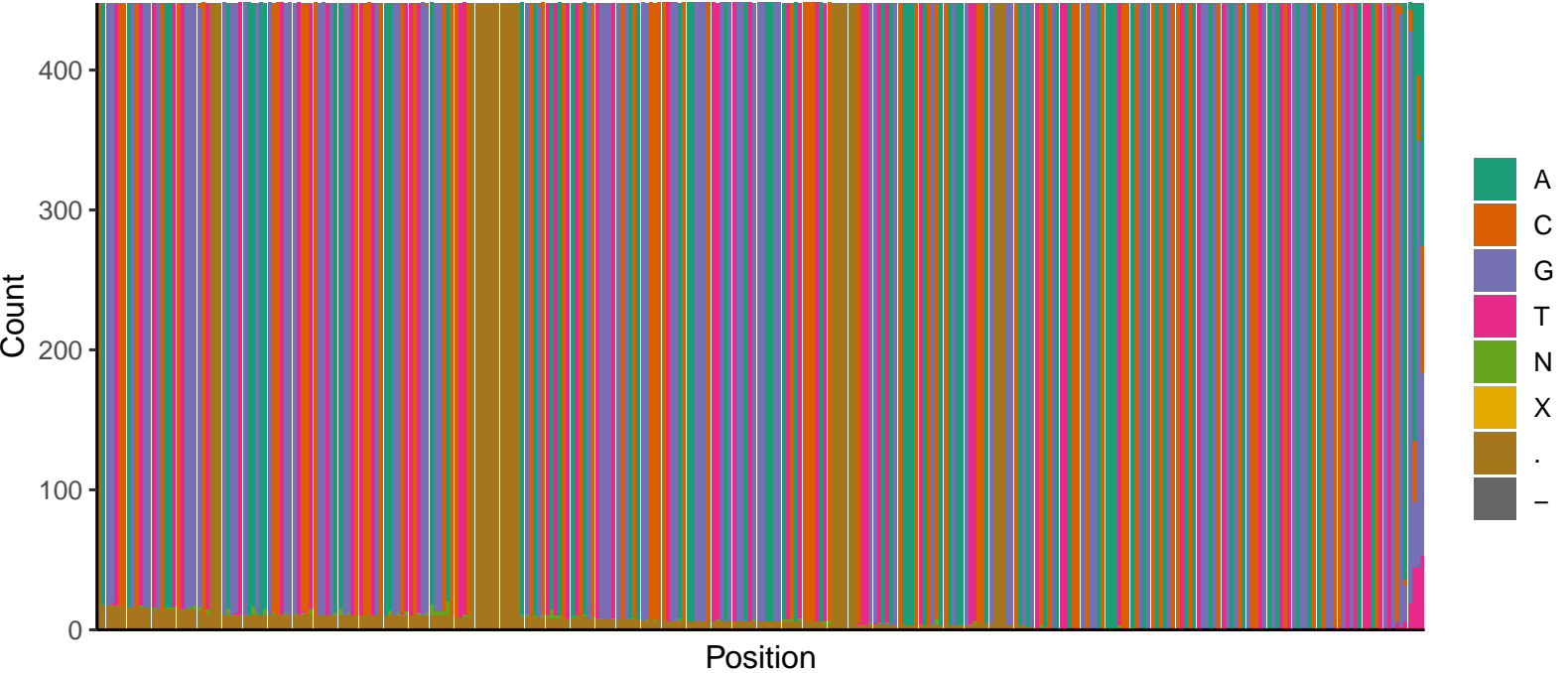


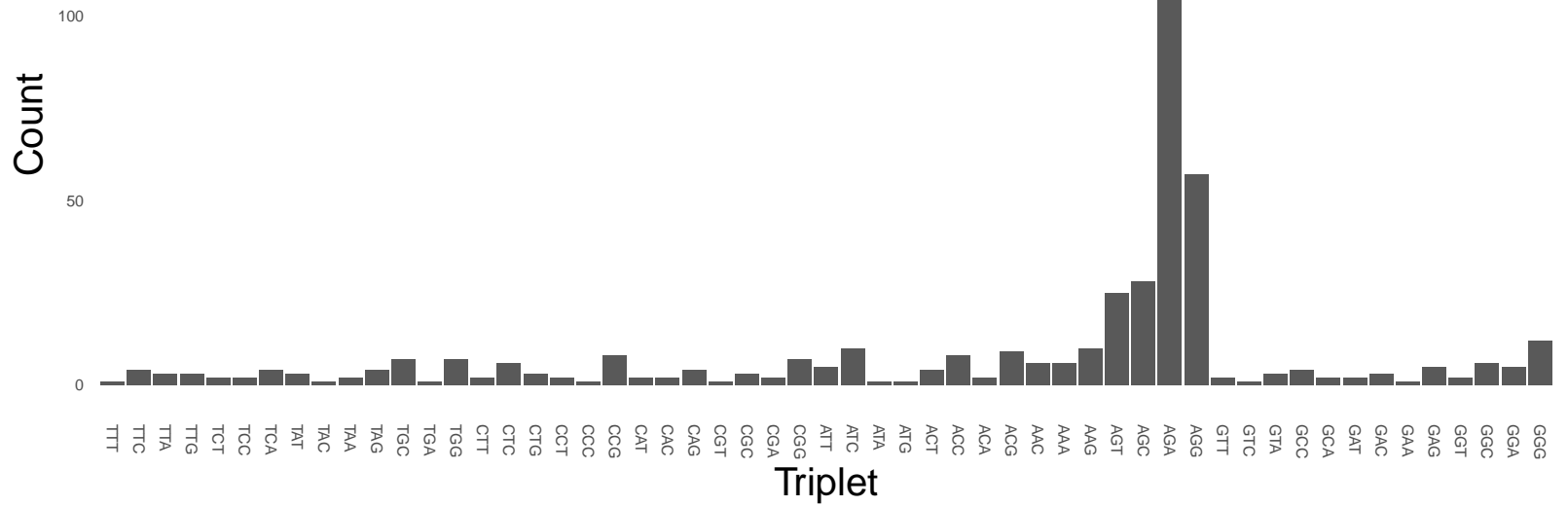
Gene IGHV1-69*08_C191T



Gene IGHV1-69*08_C191T

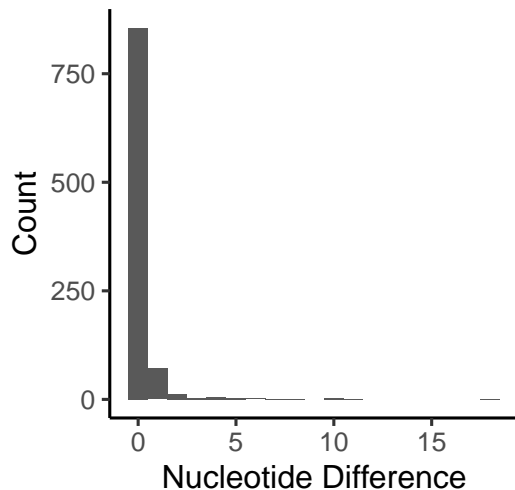


IGHV1-69*08_C191T- Final 3 nucleotides as a triplet



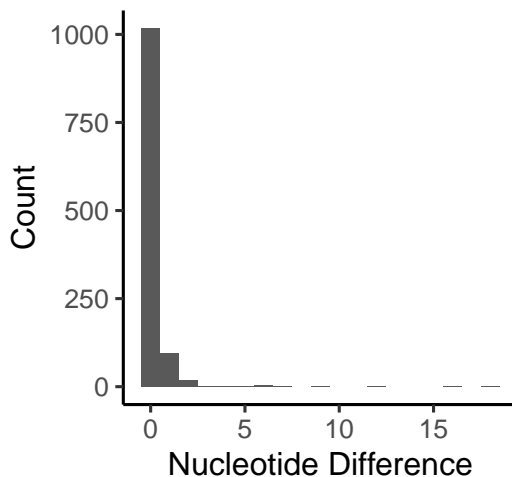
IGHV1-2*02

965 sequences assigned
856 (88.7%) exact matches, in which:
830 unique CDR3
6 unique J



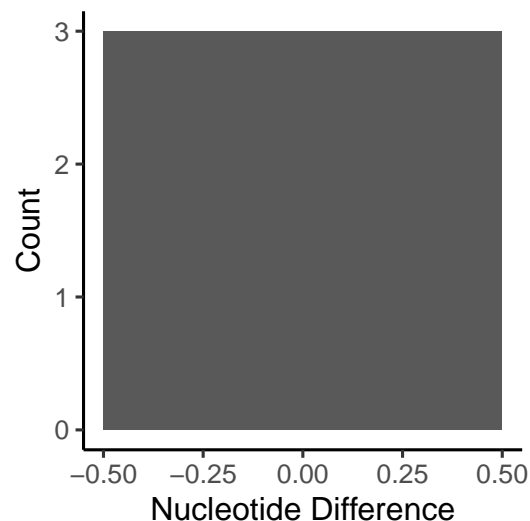
IGHV1-8*01

1143 sequences assigned
1017 (89%) exact matches, in which:
978 unique CDR3
6 unique J



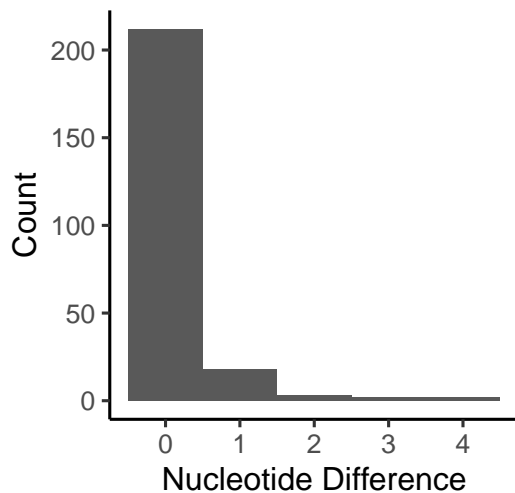
IGHV1-45*02

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



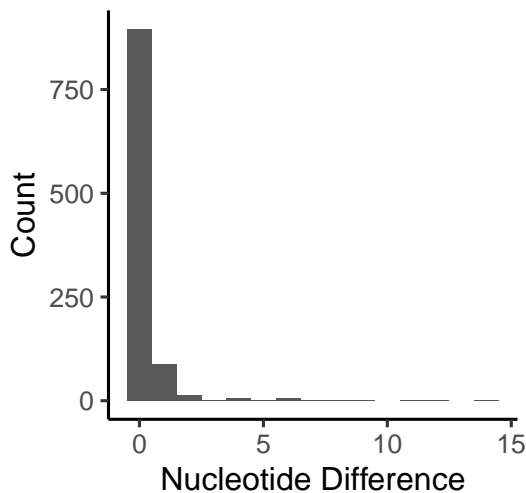
IGHV1-2*04

237 sequences assigned
212 (89.5%) exact matches, in which:
200 unique CDR3
6 unique J



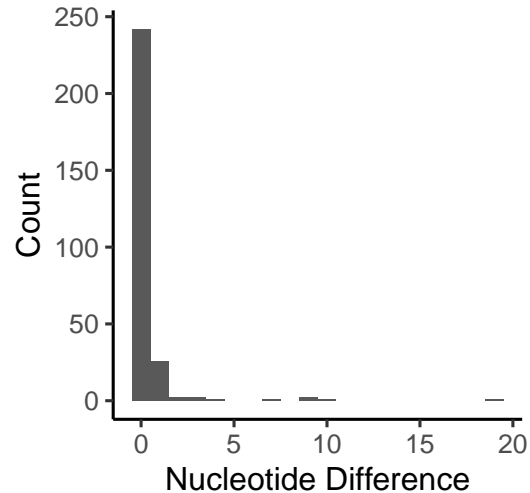
IGHV1-18*01

1023 sequences assigned
896 (87.6%) exact matches, in which:
872 unique CDR3
6 unique J



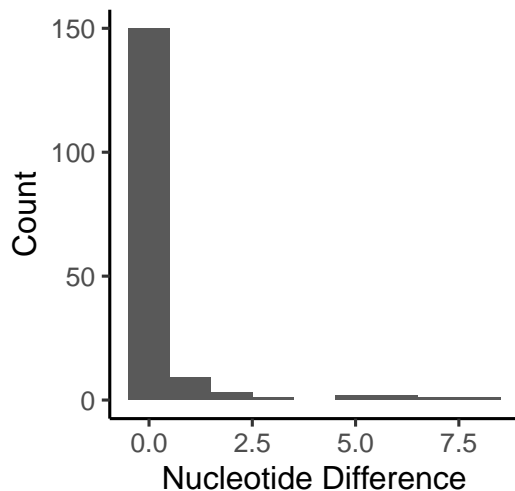
IGHV1-46*01

285 sequences assigned
242 (84.9%) exact matches, in which:
233 unique CDR3
6 unique J



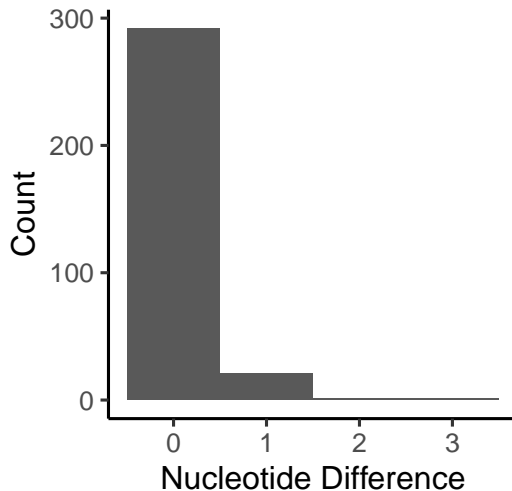
IGHV1-3*05

169 sequences assigned
150 (88.8%) exact matches, in which:
148 unique CDR3
6 unique J



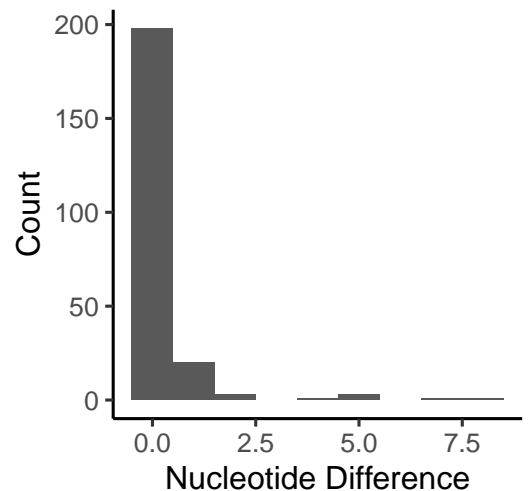
IGHV1-24*01

315 sequences assigned
292 (92.7%) exact matches, in which:
279 unique CDR3
6 unique J



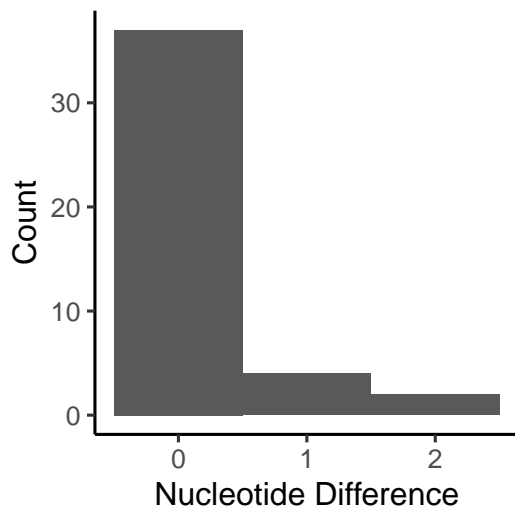
IGHV1-46*03

227 sequences assigned
198 (87.2%) exact matches, in which:
189 unique CDR3
6 unique J



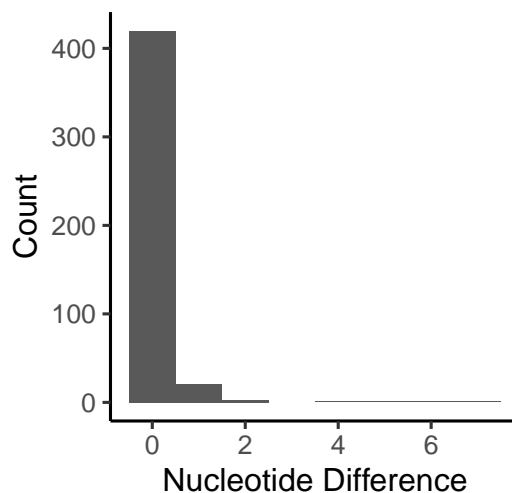
IGHV1-58*01

43 sequences assigned
37 (86%) exact matches, in which:
37 unique CDR3
4 unique J



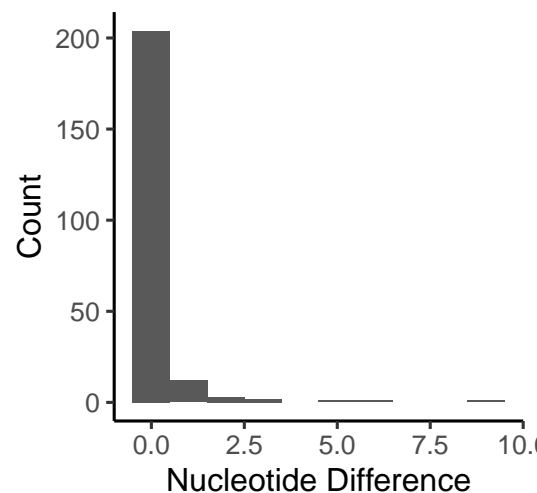
IGHV1-69*08_C191T

448 sequences assigned
420 (93.8%) exact matches, in which:
401 unique CDR3
6 unique J



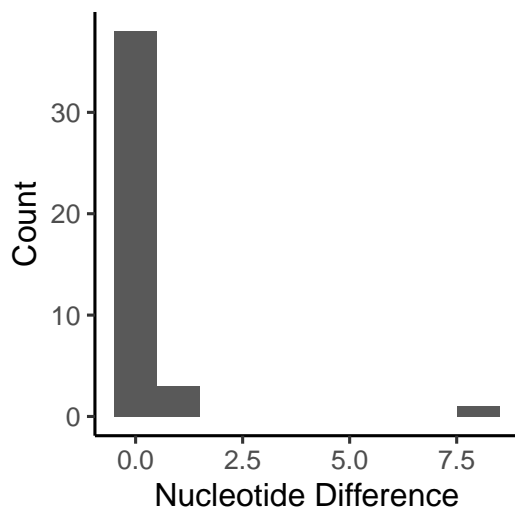
IGHV2-26*01

224 sequences assigned
204 (91.1%) exact matches, in which:
201 unique CDR3
6 unique J



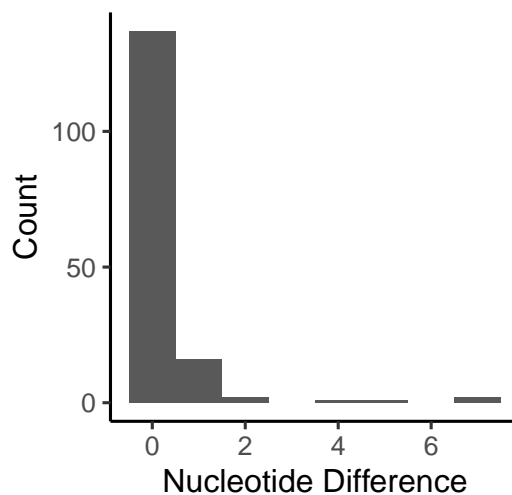
IGHV1-58*02

42 sequences assigned
38 (90.5%) exact matches, in which:
38 unique CDR3
6 unique J



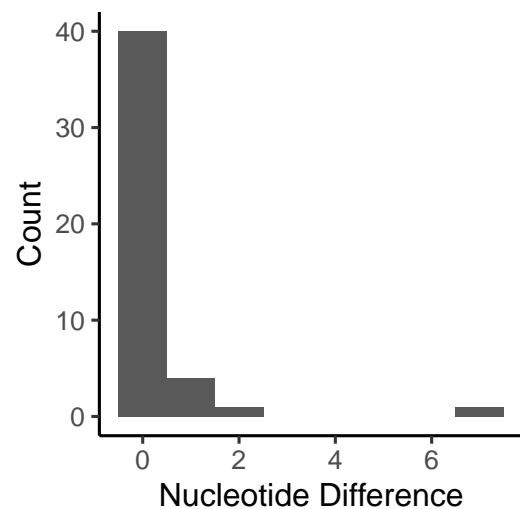
IGHV2-5*01

159 sequences assigned
137 (86.2%) exact matches, in which:
135 unique CDR3
6 unique J



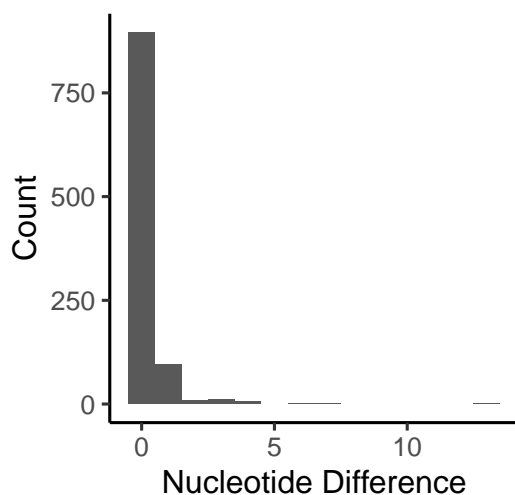
IGHV2-70*01

46 sequences assigned
40 (87%) exact matches, in which:
39 unique CDR3
5 unique J



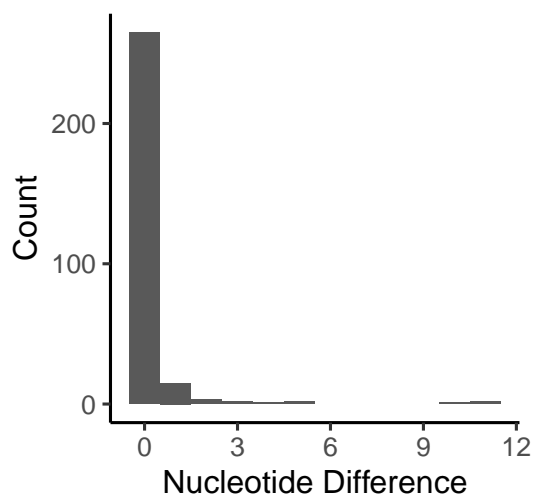
IGHV1-69*01

1021 sequences assigned
896 (87.8%) exact matches, in which:
860 unique CDR3
6 unique J



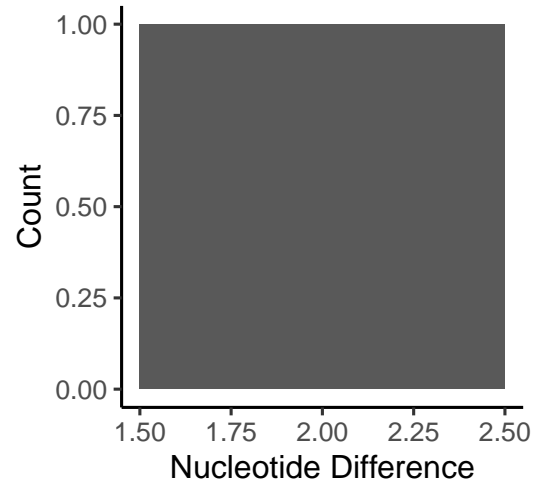
IGHV2-5*02

292 sequences assigned
265 (90.8%) exact matches, in which:
262 unique CDR3
6 unique J



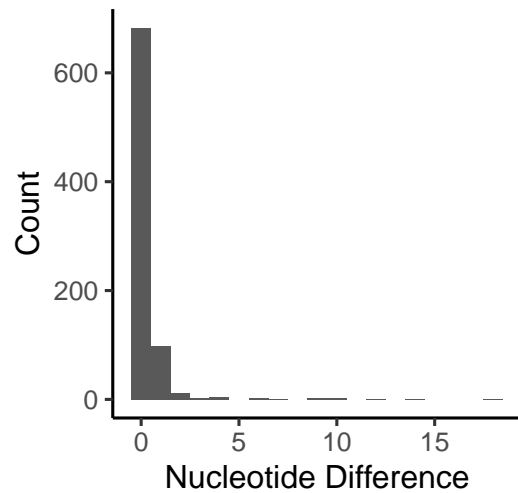
IGHV2-70D*14

1 sequences assigned
No exact matches.



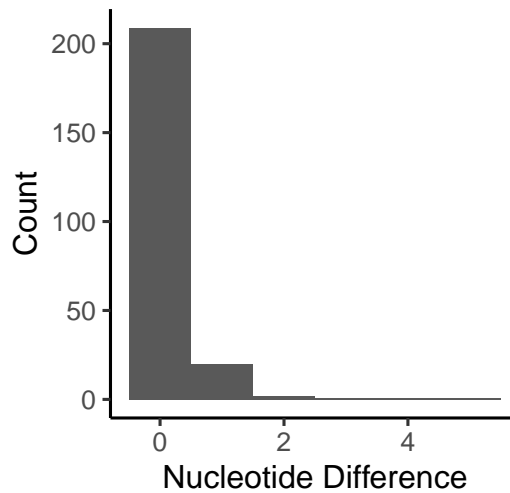
IGHV3-7*01

810 sequences assigned
683 (84.3%) exact matches, in which:
662 unique CDR3
6 unique J



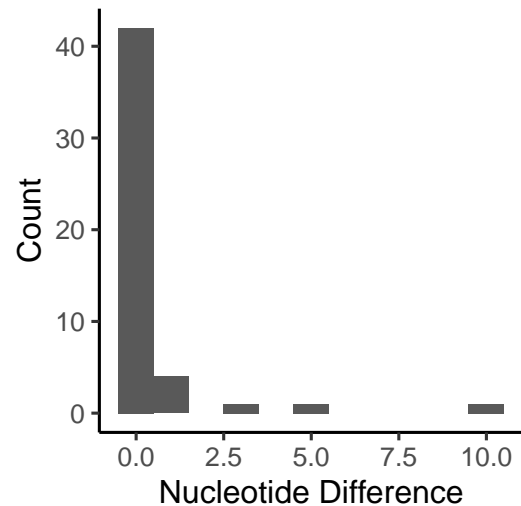
IGHV3-13*01

238 sequences assigned
209 (87.8%) exact matches, in which:
197 unique CDR3
6 unique J



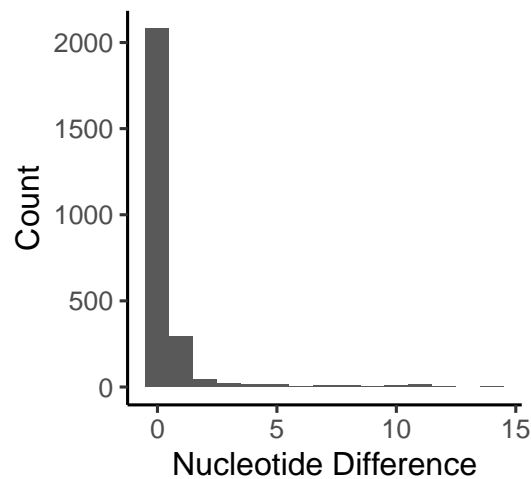
IGHV3-20*01

49 sequences assigned
42 (85.7%) exact matches, in which:
39 unique CDR3
5 unique J



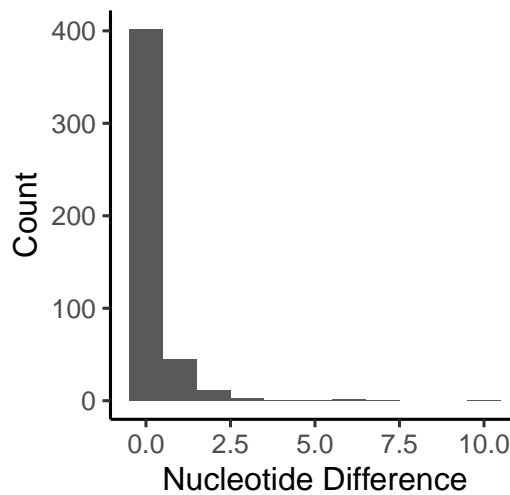
IGHV3-9*01

2503 sequences assigned
2080 (83.1%) exact matches, in which:
1970 unique CDR3
6 unique J



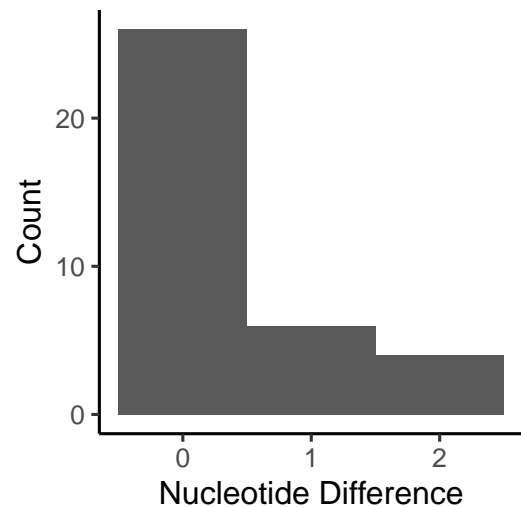
IGHV3-15*01

468 sequences assigned
402 (85.9%) exact matches, in which:
386 unique CDR3
6 unique J



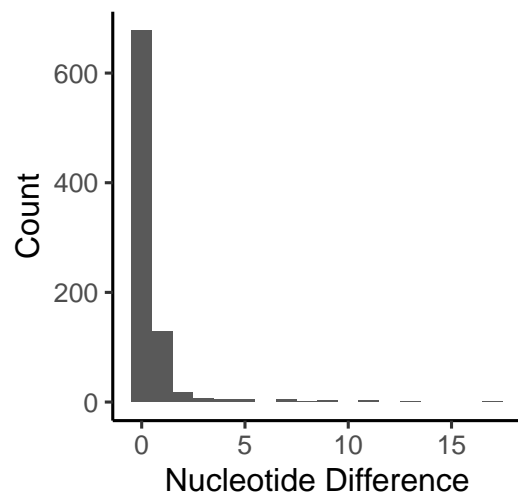
IGHV3-20*04

36 sequences assigned
26 (72.2%) exact matches, in which:
25 unique CDR3
3 unique J



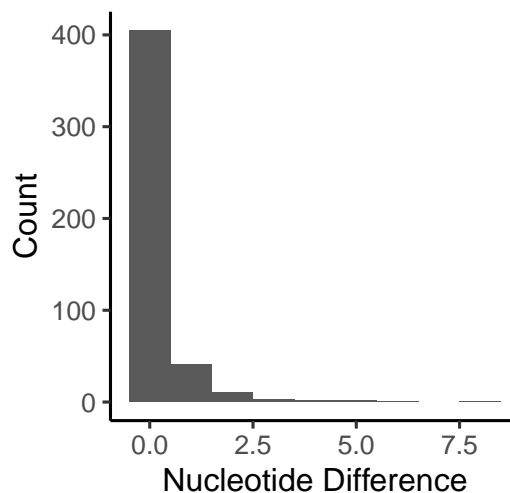
IGHV3-11*01

852 sequences assigned
678 (79.6%) exact matches, in which:
648 unique CDR3
6 unique J



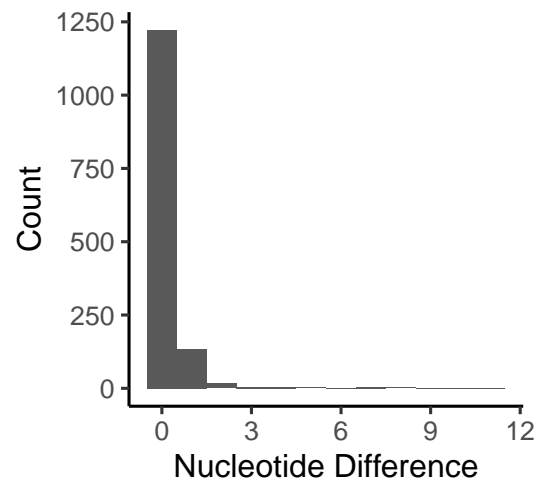
IGHV3-15*07

465 sequences assigned
405 (87.1%) exact matches, in which:
391 unique CDR3
6 unique J



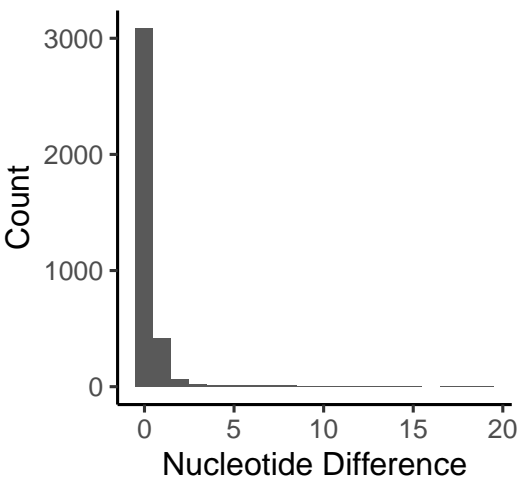
IGHV3-21*01

1399 sequences assigned
1222 (87.3%) exact matches, in which:
1150 unique CDR3
6 unique J



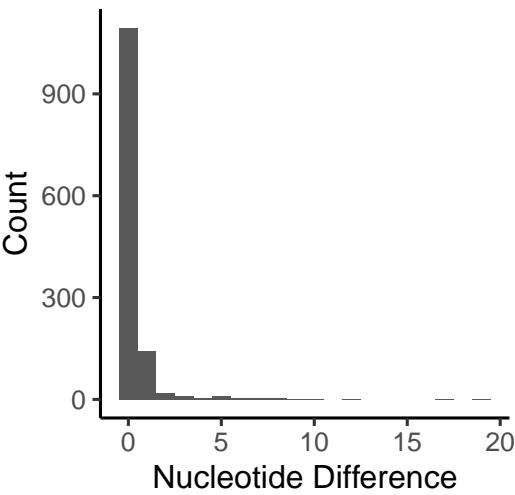
IGHV3-23*01

3706 sequences assigned
3085 (83.2%) exact matches, in which:
2907 unique CDR3
6 unique J



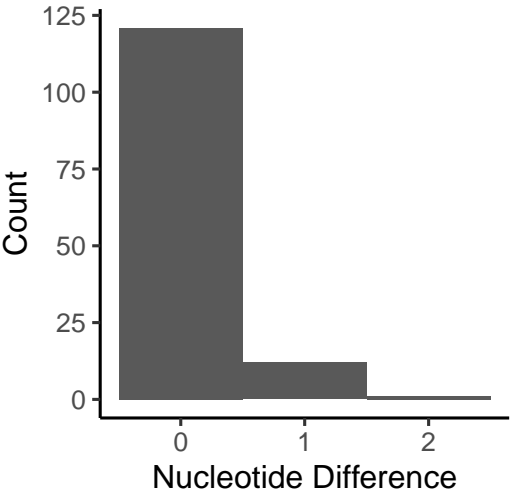
IGHV3-30*18

1301 sequences assigned
1095 (84.2%) exact matches, in which:
1057 unique CDR3
6 unique J



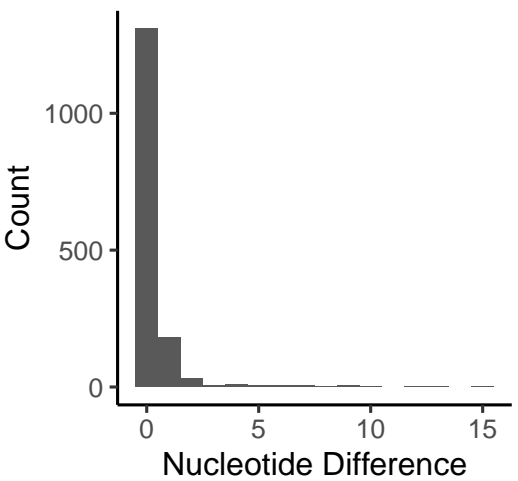
IGHV3-43*01

134 sequences assigned
121 (90.3%) exact matches, in which:
115 unique CDR3
6 unique J



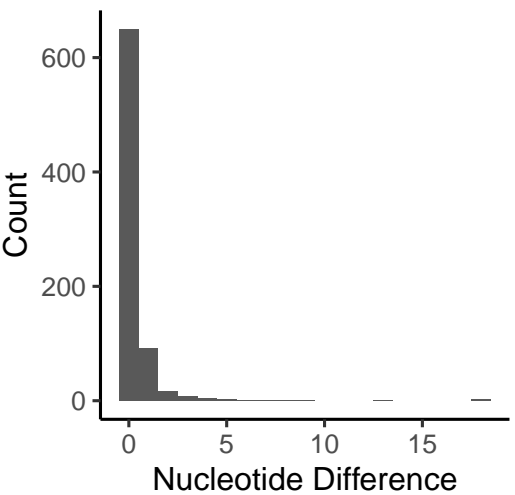
IGHV3-30-3*01

1562 sequences assigned
1309 (83.8%) exact matches, in which:
1229 unique CDR3
6 unique J



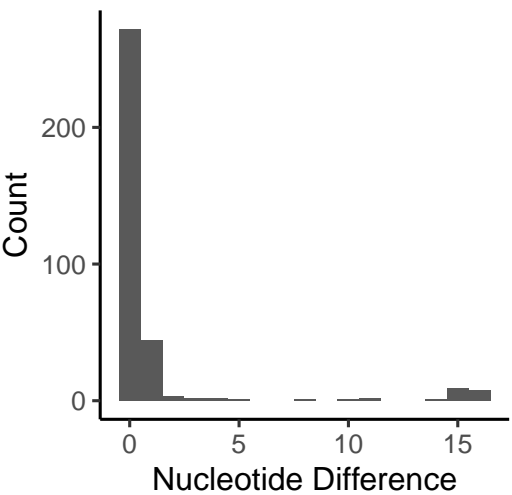
IGHV3-33*01

779 sequences assigned
650 (83.4%) exact matches, in which:
613 unique CDR3
6 unique J



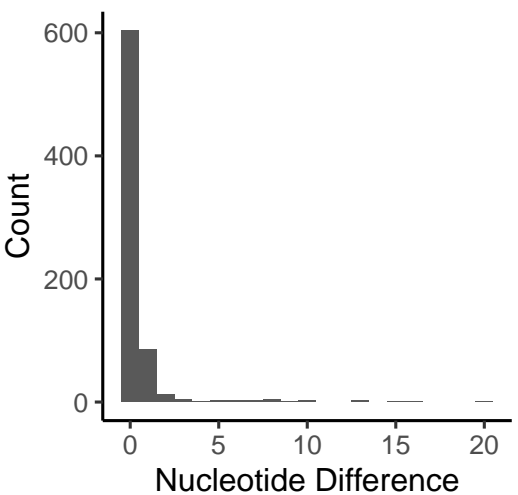
IGHV3-48*01

346 sequences assigned
272 (78.6%) exact matches, in which:
266 unique CDR3
6 unique J



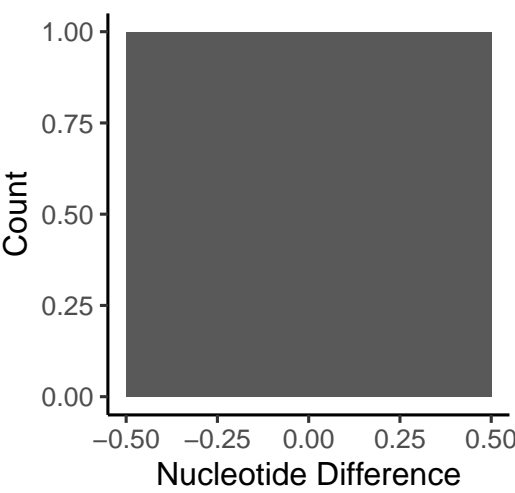
IGHV3-30*02

727 sequences assigned
604 (83.1%) exact matches, in which:
576 unique CDR3
6 unique J



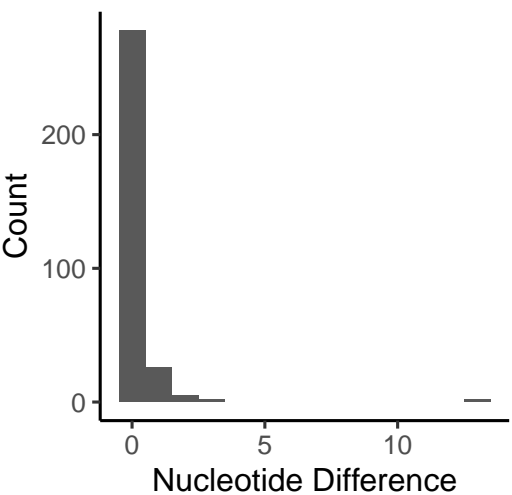
IGHV3-38-3*01

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



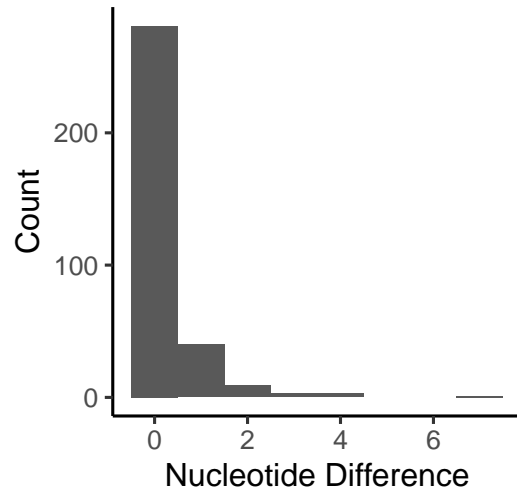
IGHV3-48*04

313 sequences assigned
278 (88.8%) exact matches, in which:
263 unique CDR3
6 unique J



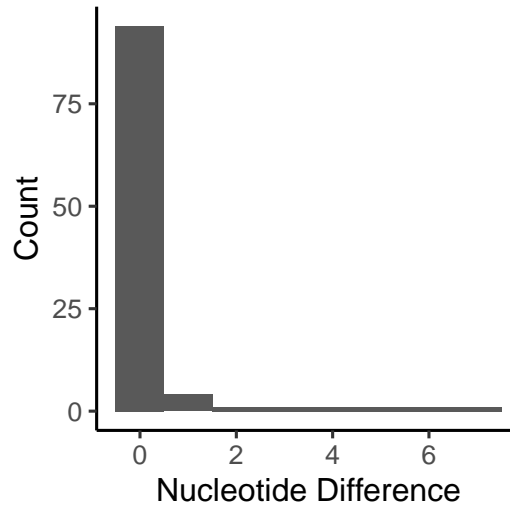
IGHV3-49*03

337 sequences assigned
281 (83.4%) exact matches, in which:
267 unique CDR3
6 unique J



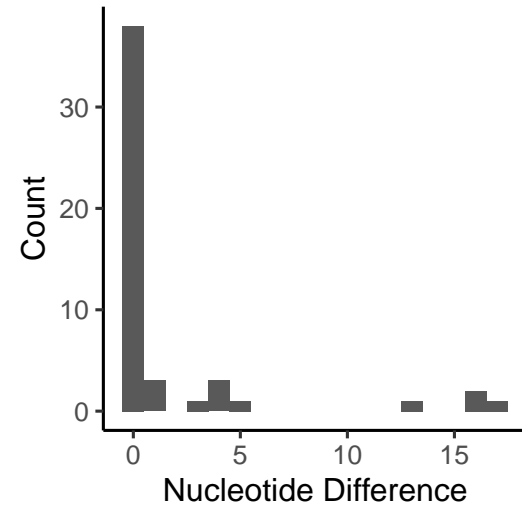
IGHV3-53*02

104 sequences assigned
94 (90.4%) exact matches, in which:
91 unique CDR3
6 unique J



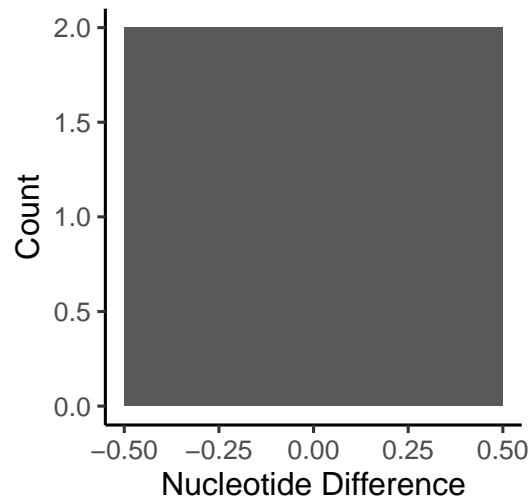
IGHV3-72*01

50 sequences assigned
38 (76%) exact matches, in which:
38 unique CDR3
4 unique J



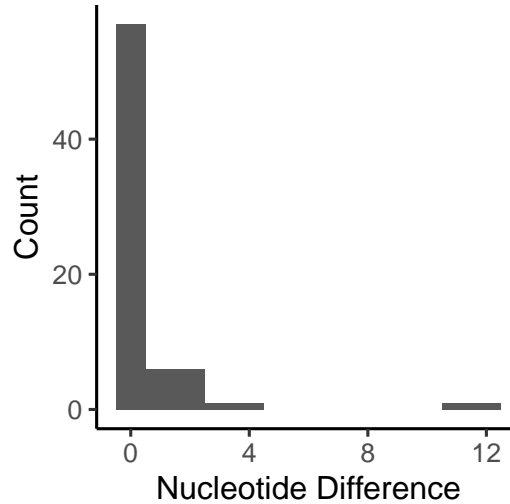
IGHV3-52*01

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



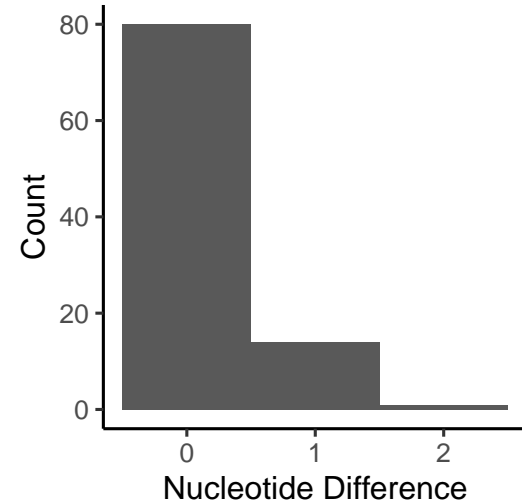
IGHV3-64*01

73 sequences assigned
57 (78.1%) exact matches, in which:
52 unique CDR3
5 unique J



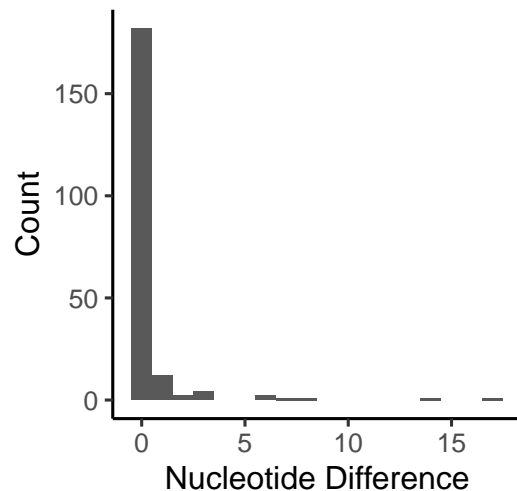
IGHV3-73*01

95 sequences assigned
80 (84.2%) exact matches, in which:
78 unique CDR3
5 unique J



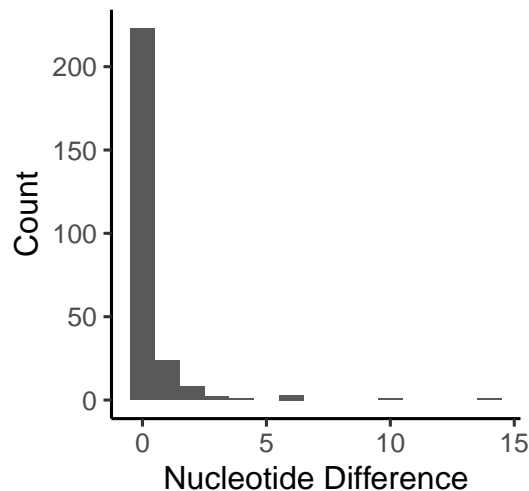
IGHV3-53*01

207 sequences assigned
182 (87.9%) exact matches, in which:
176 unique CDR3
6 unique J



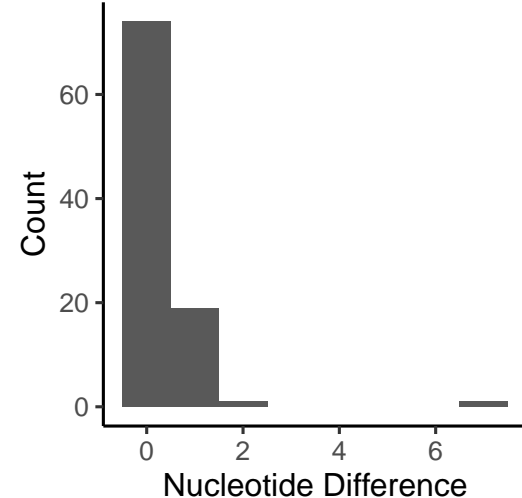
IGHV3-66*02

263 sequences assigned
223 (84.8%) exact matches, in which:
214 unique CDR3
6 unique J



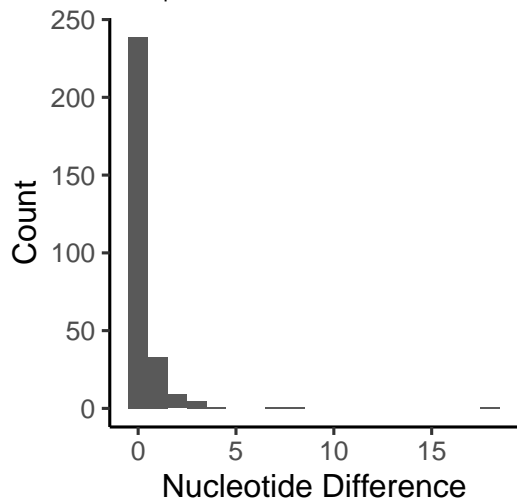
IGHV3-73*02

95 sequences assigned
74 (77.9%) exact matches, in which:
72 unique CDR3
4 unique J



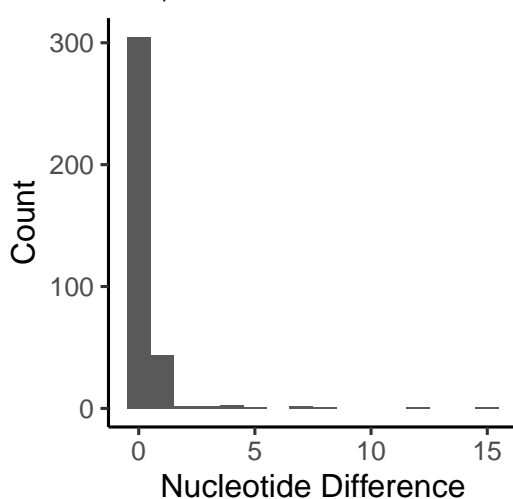
IGHV3–74*01

290 sequences assigned
239 (82.4%) exact matches, in which:
225 unique CDR3
6 unique J



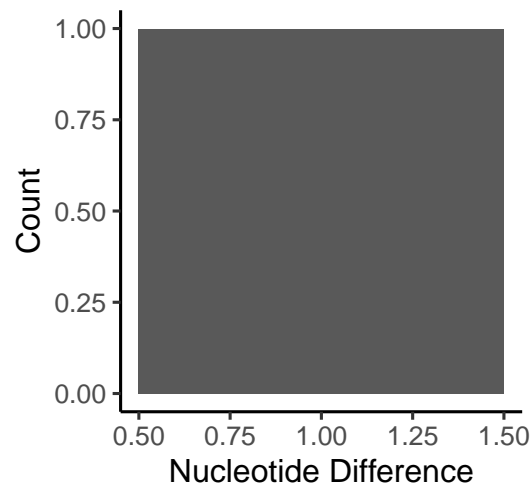
IGHV4–4*07

362 sequences assigned
305 (84.3%) exact matches, in which:
297 unique CDR3
6 unique J



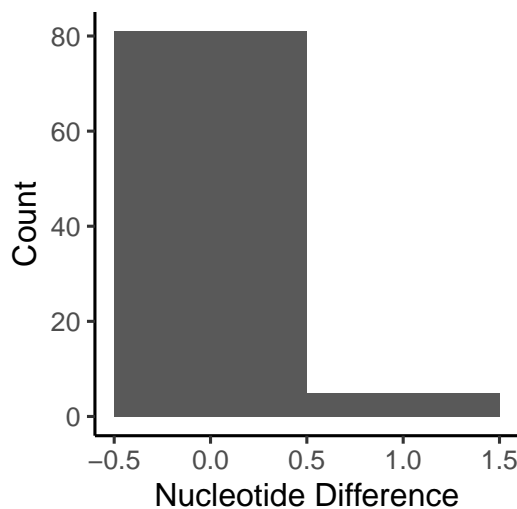
IGHV4–28*04

1 sequences assigned
No exact matches.



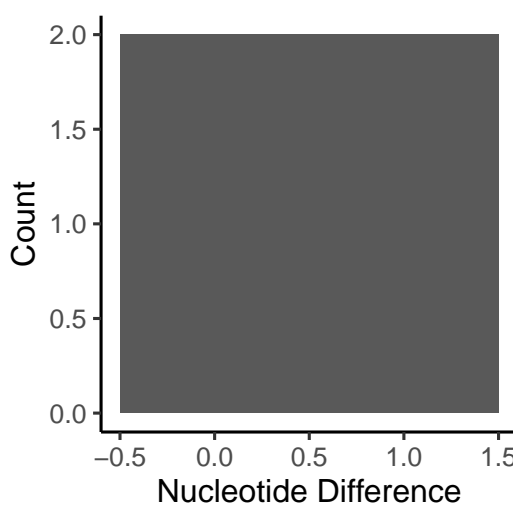
IGHV3–43D*03

86 sequences assigned
81 (94.2%) exact matches, in which:
78 unique CDR3
5 unique J



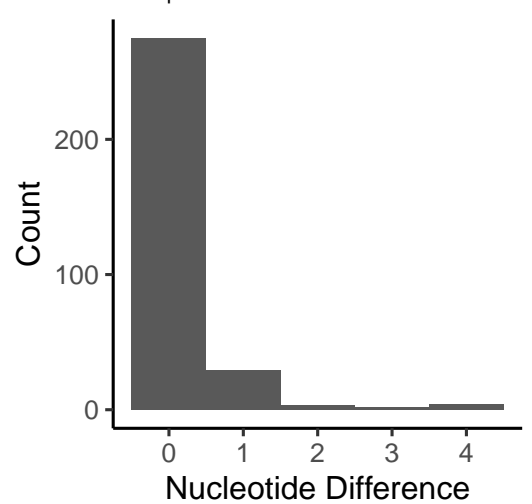
IGHV4–28*01

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



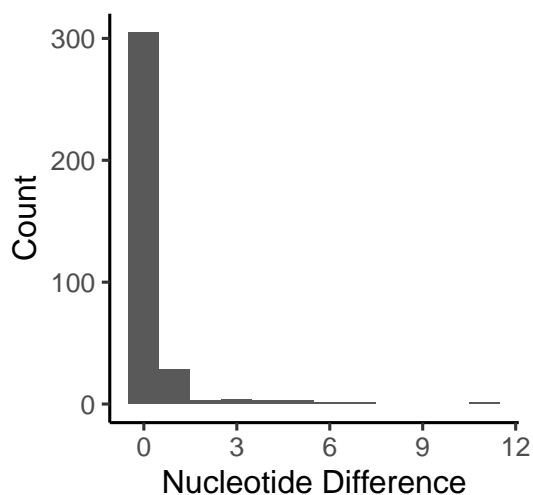
IGHV4–30–4*01

313 sequences assigned
275 (87.9%) exact matches, in which:
271 unique CDR3
6 unique J



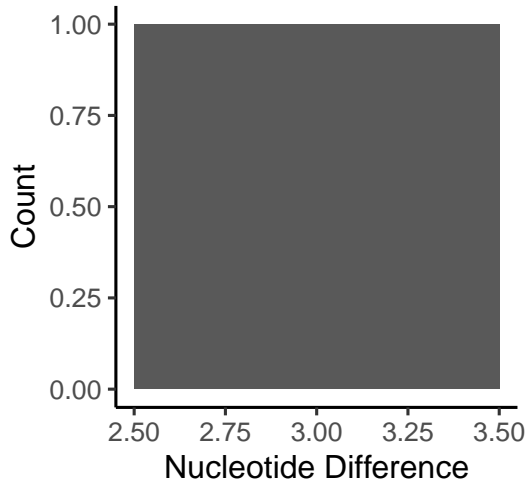
IGHV4–4*02

349 sequences assigned
305 (87.4%) exact matches, in which:
297 unique CDR3
6 unique J



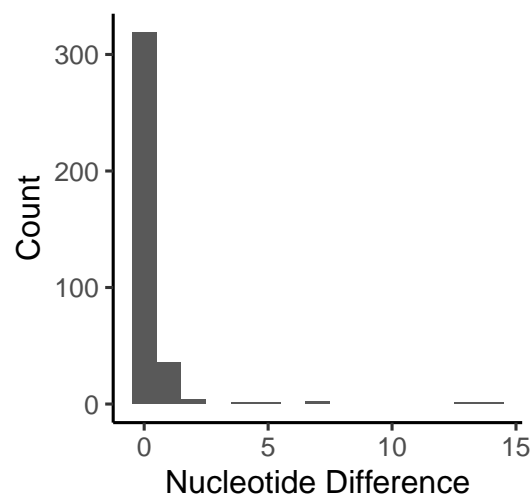
IGHV4–28*03

1 sequences assigned
No exact matches.



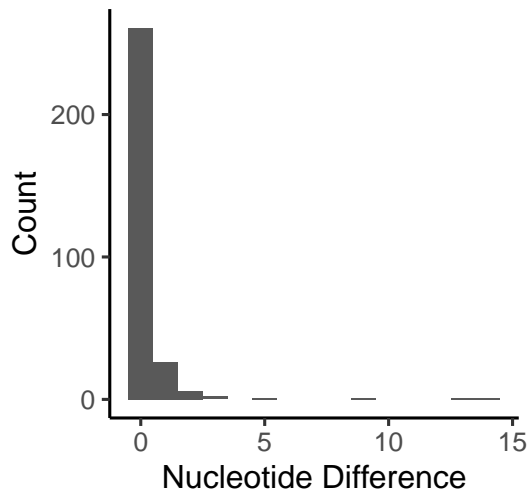
IGHV4–30–2*01

365 sequences assigned
319 (87.4%) exact matches, in which:
314 unique CDR3
6 unique J



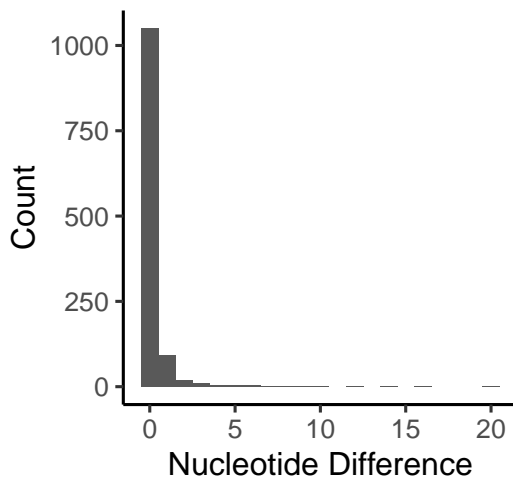
IGHV4–31*03

299 sequences assigned
261 (87.3%) exact matches, in which:
252 unique CDR3
6 unique J



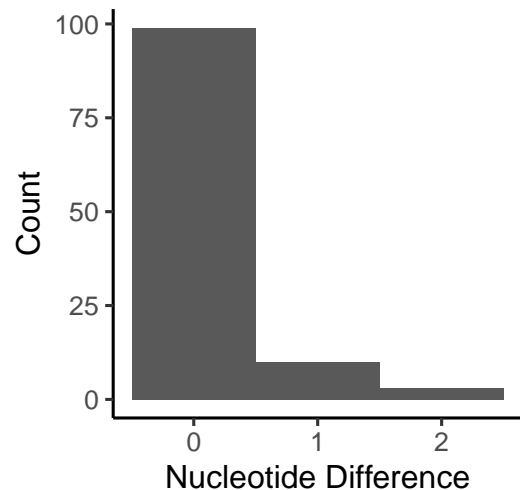
IGHV4–39*01

1190 sequences assigned
1050 (88.2%) exact matches, in which:
990 unique CDR3
6 unique J



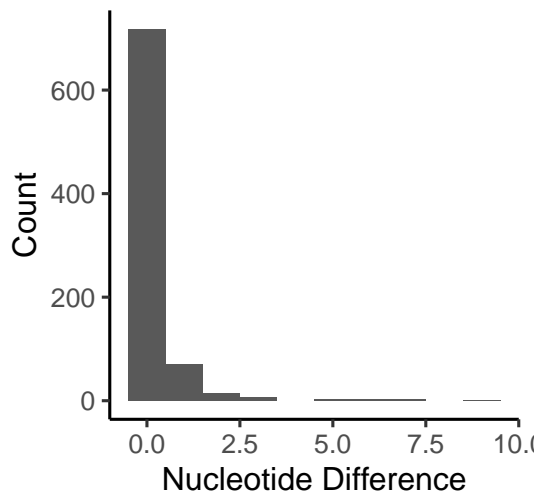
IGHV4–61*01

112 sequences assigned
99 (88.4%) exact matches, in which:
99 unique CDR3
6 unique J



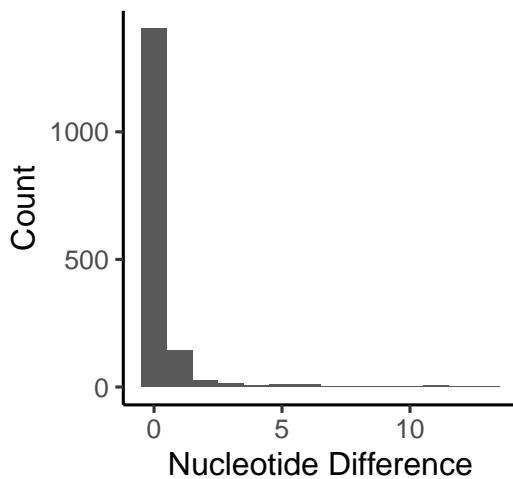
IGHV4–34*01

815 sequences assigned
718 (88.1%) exact matches, in which:
695 unique CDR3
6 unique J



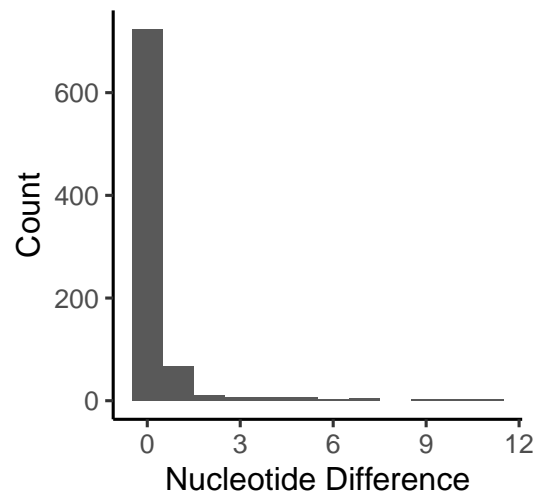
IGHV4–39*07

1628 sequences assigned
1404 (86.2%) exact matches, in which:
1347 unique CDR3
6 unique J



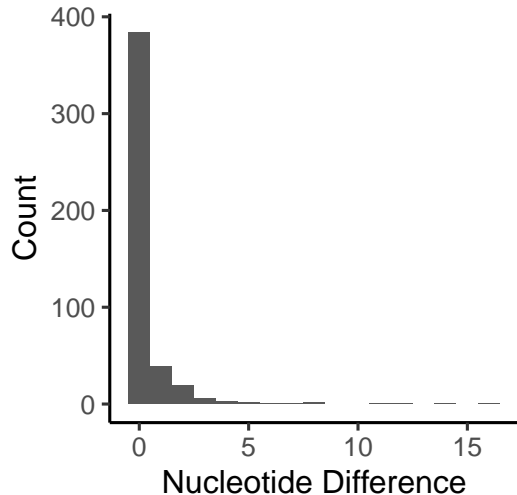
IGHV4–61*02

835 sequences assigned
724 (86.7%) exact matches, in which:
699 unique CDR3
6 unique J



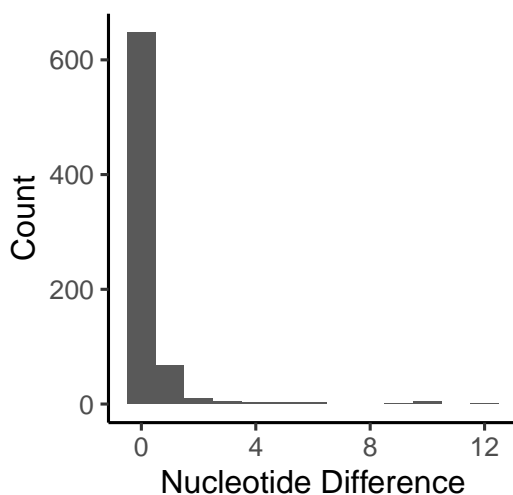
IGHV4–38–2*02

470 sequences assigned
384 (81.7%) exact matches, in which:
371 unique CDR3
6 unique J



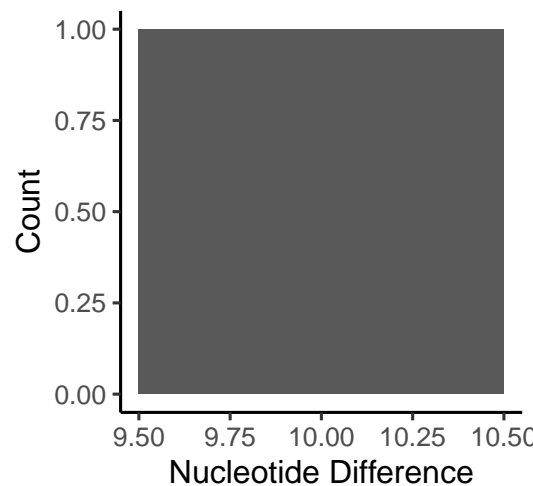
IGHV4–59*01

743 sequences assigned
648 (87.2%) exact matches, in which:
640 unique CDR3
6 unique J



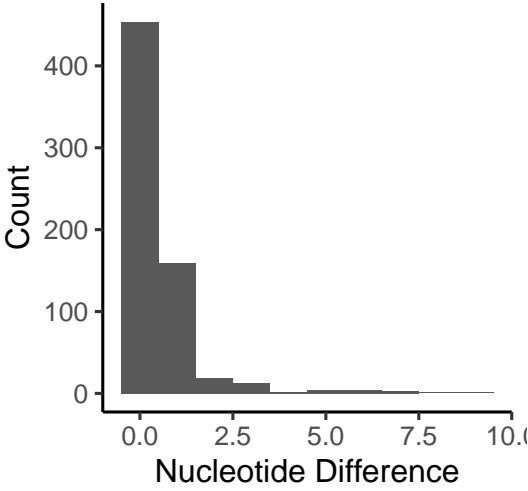
IGHV1/OR15–4*01

1 sequences assigned
No exact matches.



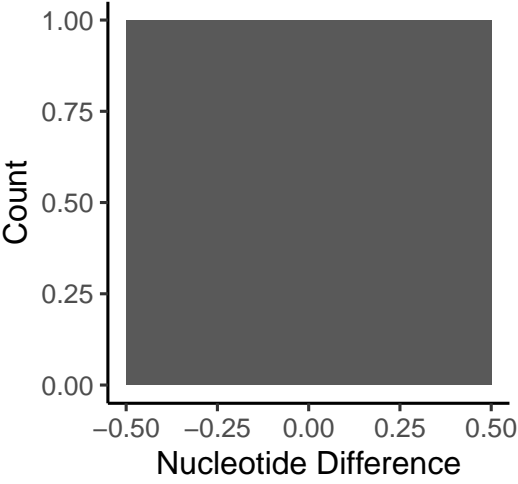
IGHV5–51*01

660 sequences assigned
454 (68.8%) exact matches, in which:
440 unique CDR3
6 unique J



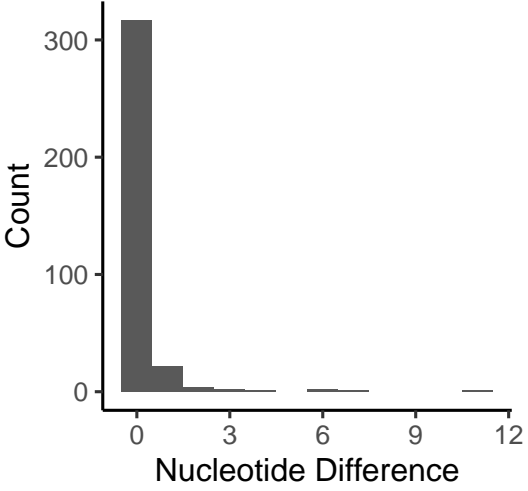
IGHV3/OR16–12*01

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



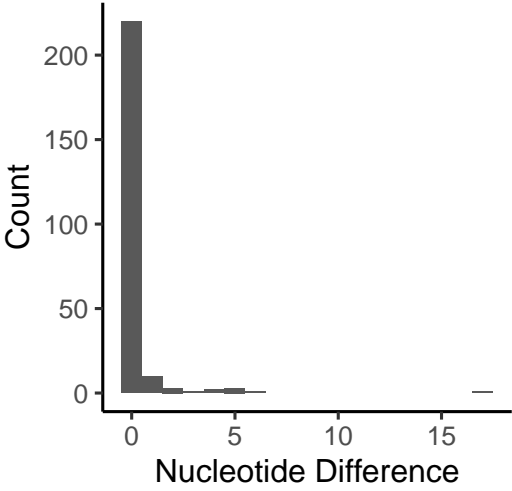
IGHV5–51*03

350 sequences assigned
317 (90.6%) exact matches, in which:
306 unique CDR3
6 unique J



IGHV6–1*01

241 sequences assigned
220 (91.3%) exact matches, in which:
211 unique CDR3
6 unique J



IGHV1-69*08_C191T

