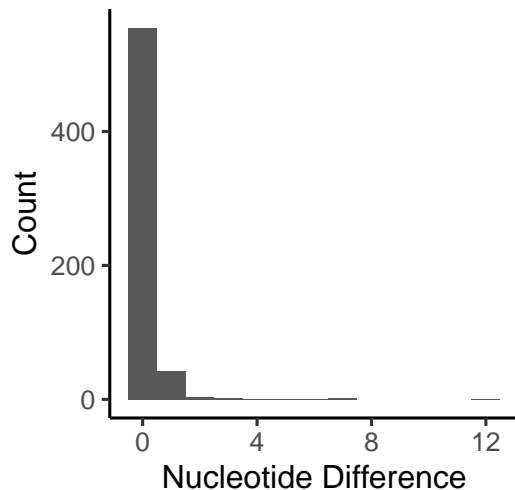


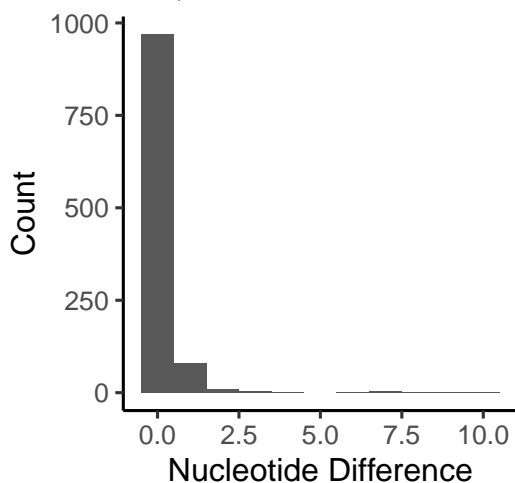
IGHV1-2*02

612 sequences assigned
555 (90.7%) exact matches, in which:
533 unique CDR3
6 unique J



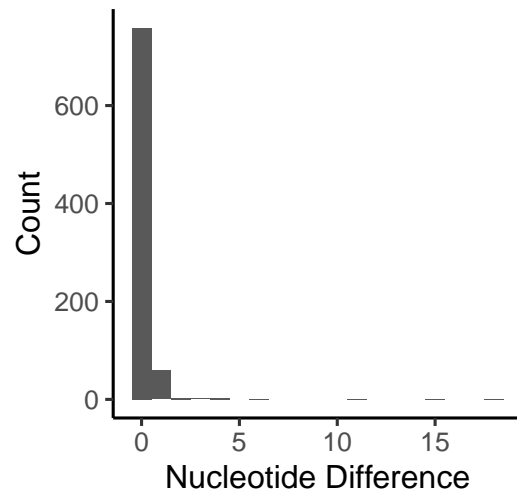
IGHV1-18*01

1075 sequences assigned
969 (90.1%) exact matches, in which:
945 unique CDR3
6 unique J



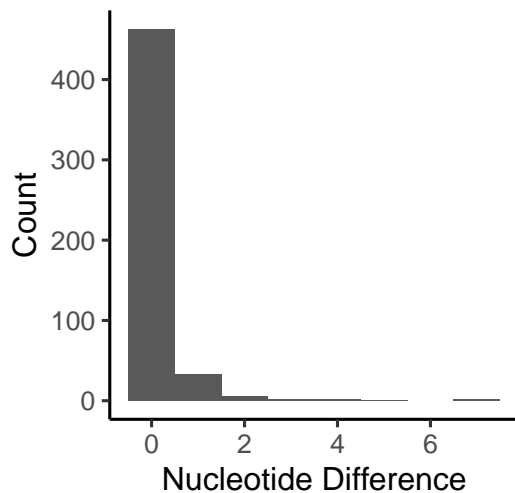
IGHV1-46*01

831 sequences assigned
759 (91.3%) exact matches, in which:
741 unique CDR3
6 unique J



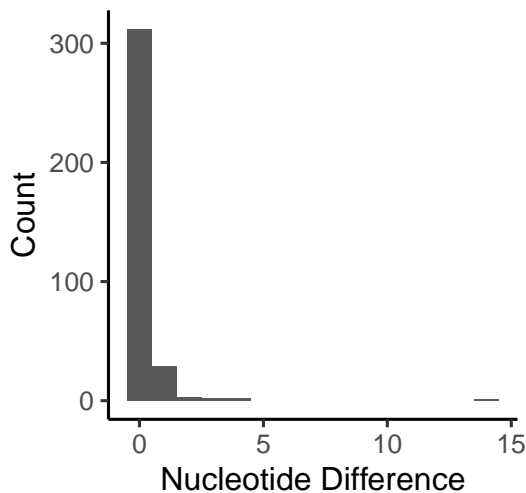
IGHV1-2*06

509 sequences assigned
463 (91%) exact matches, in which:
450 unique CDR3
6 unique J



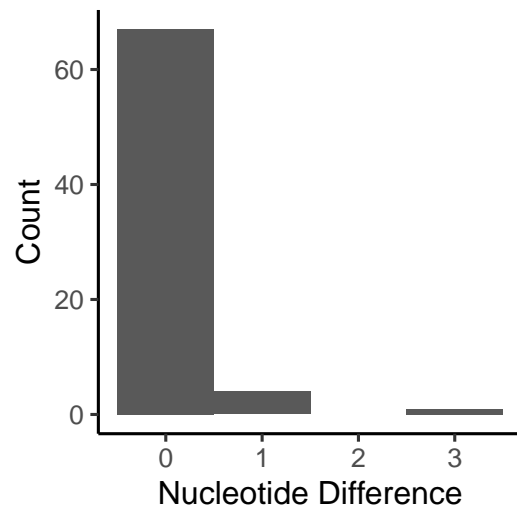
IGHV1-24*01

349 sequences assigned
312 (89.4%) exact matches, in which:
302 unique CDR3
6 unique J



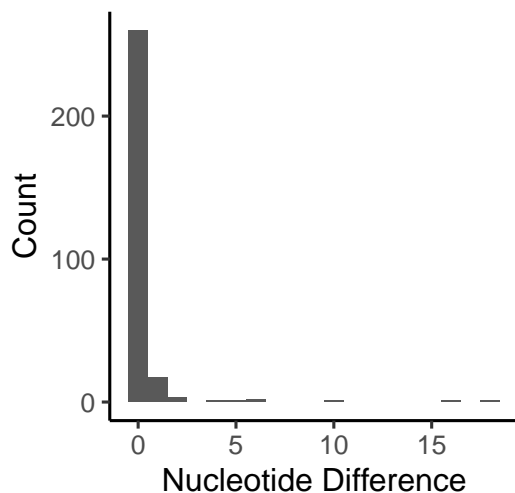
IGHV1-58*02

72 sequences assigned
67 (93.1%) exact matches, in which:
64 unique CDR3
6 unique J



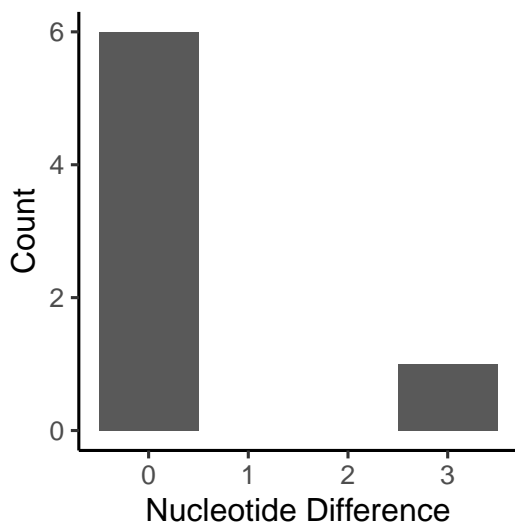
IGHV1-3*01

288 sequences assigned
260 (90.3%) exact matches, in which:
255 unique CDR3
6 unique J



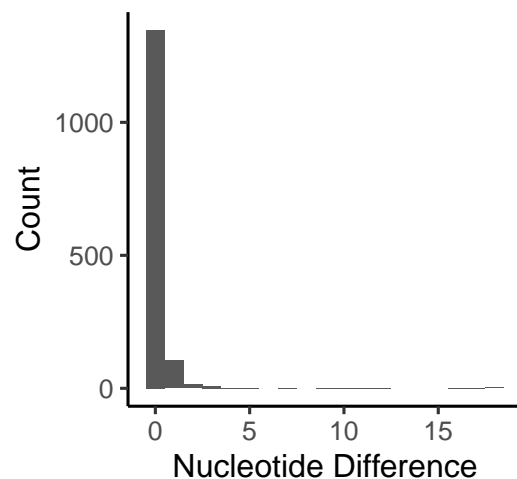
IGHV1-45*02

7 sequences assigned
6 (85.7%) exact matches, in which:
6 unique CDR3
3 unique J



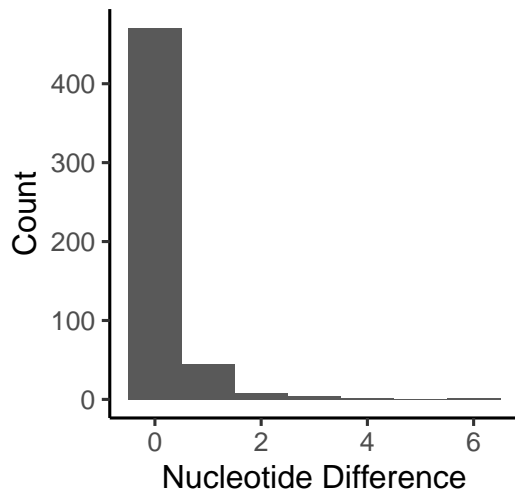
IGHV1-69*04

1490 sequences assigned
1347 (90.4%) exact matches, in which:
1304 unique CDR3
6 unique J



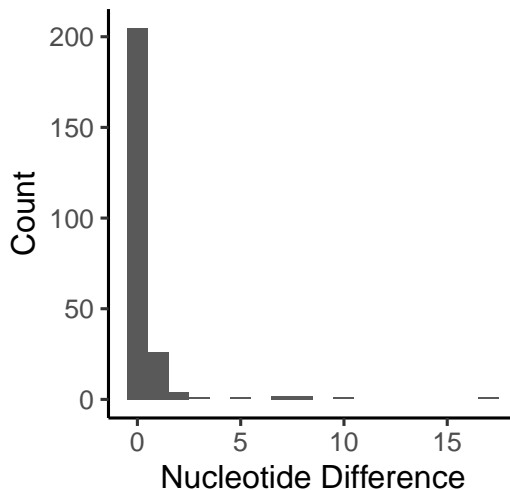
IGHV2-5*02

533 sequences assigned
471 (88.4%) exact matches, in which:
467 unique CDR3
6 unique J



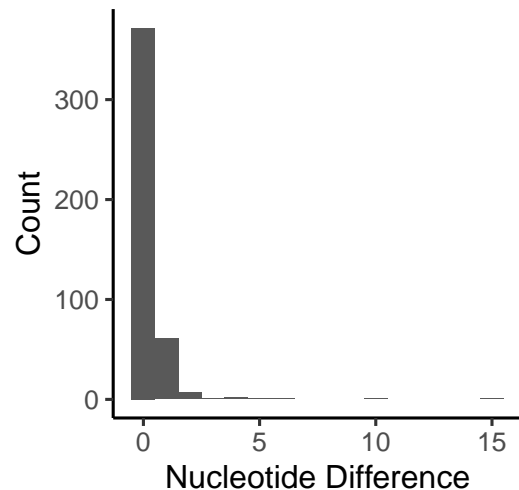
IGHV3-7*03

246 sequences assigned
205 (83.3%) exact matches, in which:
203 unique CDR3
5 unique J



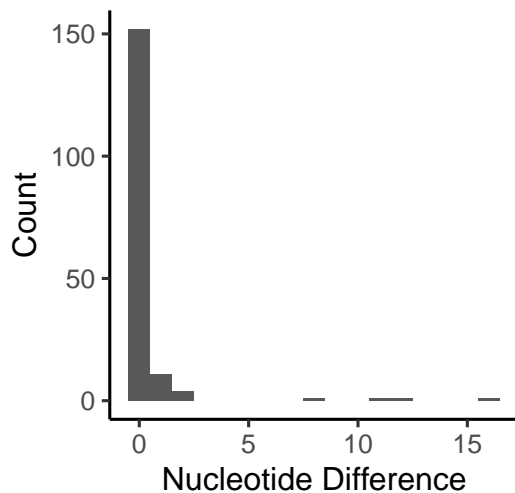
IGHV3-11*05

447 sequences assigned
372 (83.2%) exact matches, in which:
353 unique CDR3
6 unique J



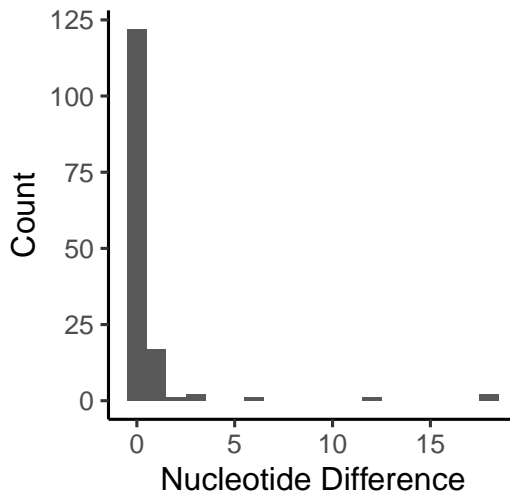
IGHV2-26*01

171 sequences assigned
152 (88.9%) exact matches, in which:
152 unique CDR3
5 unique J



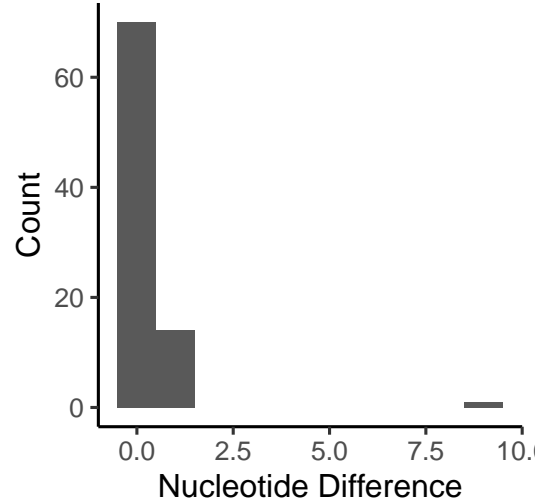
IGHV3-7*04

152 sequences assigned
122 (80.3%) exact matches, in which:
120 unique CDR3
5 unique J



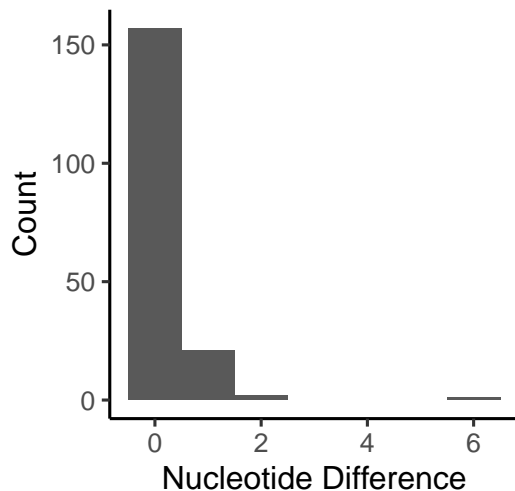
IGHV3-11*06

85 sequences assigned
70 (82.4%) exact matches, in which:
66 unique CDR3
6 unique J



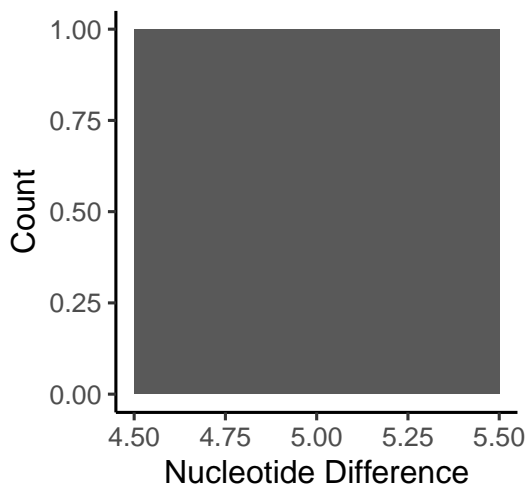
IGHV2-70*15

181 sequences assigned
157 (86.7%) exact matches, in which:
156 unique CDR3
5 unique J



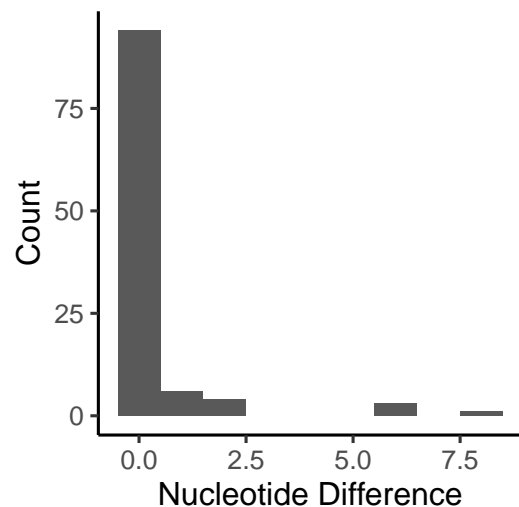
IGHV3-9*01

1 sequences assigned
No exact matches.



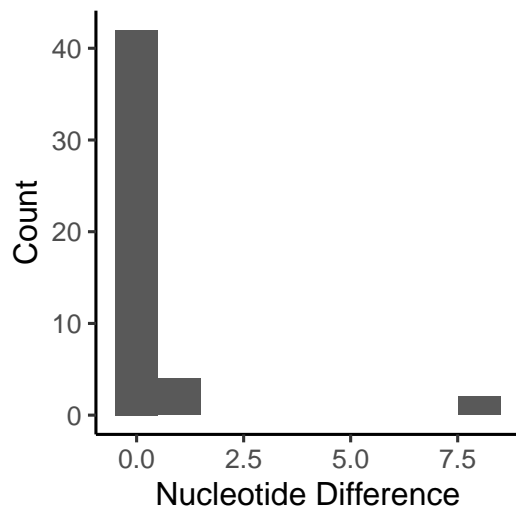
IGHV3-13*04

108 sequences assigned
94 (87%) exact matches, in which:
92 unique CDR3
5 unique J



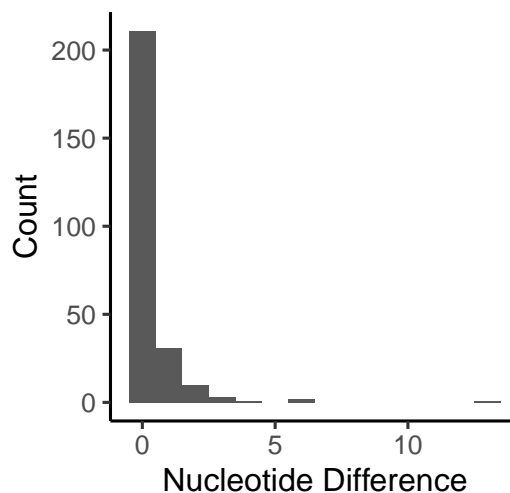
IGHV3-13*01_G290A_T3I

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



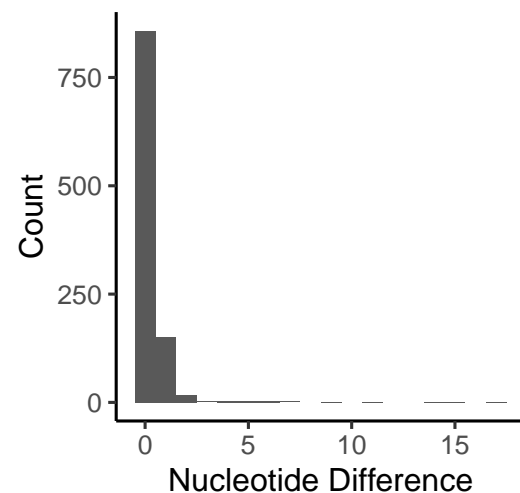
IGHV3-20*04

259 sequences assigned
211 (81.5%) exact matches, in which:
203 unique CDR3
6 unique J



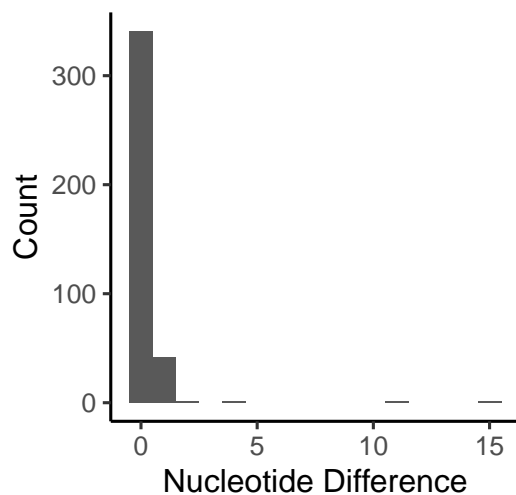
IGHV3-33*01

1046 sequences assigned
858 (82%) exact matches, in which:
834 unique CDR3
6 unique J



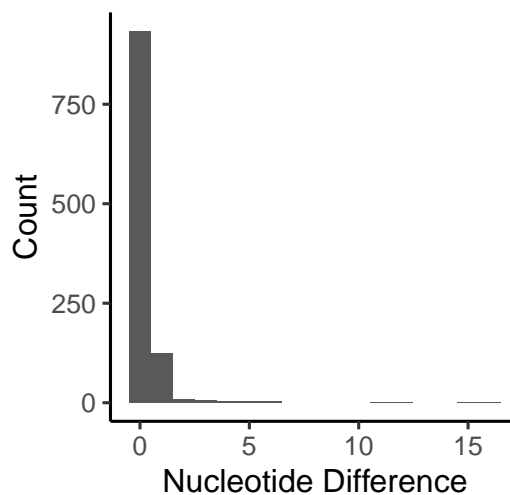
IGHV3-15*01

388 sequences assigned
341 (87.9%) exact matches, in which:
326 unique CDR3
6 unique J



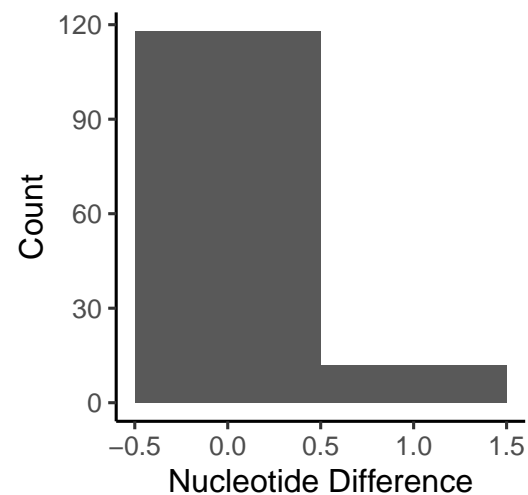
IGHV3-21*01

1091 sequences assigned
934 (85.6%) exact matches, in which:
906 unique CDR3
6 unique J



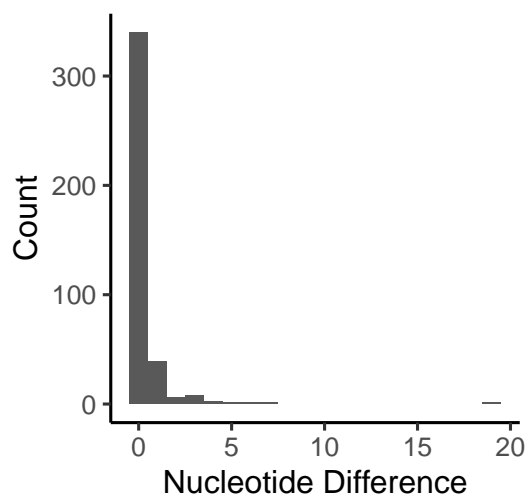
IGHV3-43*01

130 sequences assigned
118 (90.8%) exact matches, in which:
114 unique CDR3
6 unique J



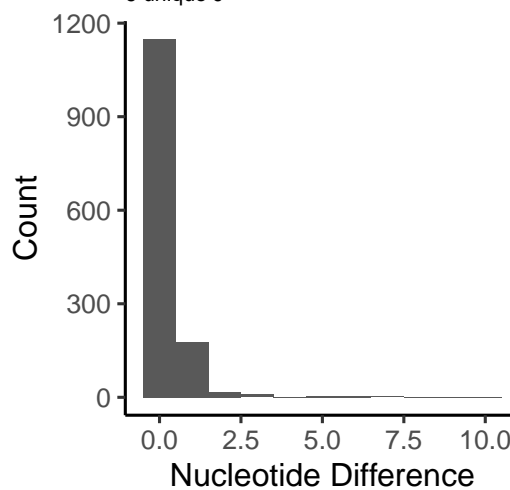
IGHV3-15*07

402 sequences assigned
340 (84.6%) exact matches, in which:
332 unique CDR3
6 unique J



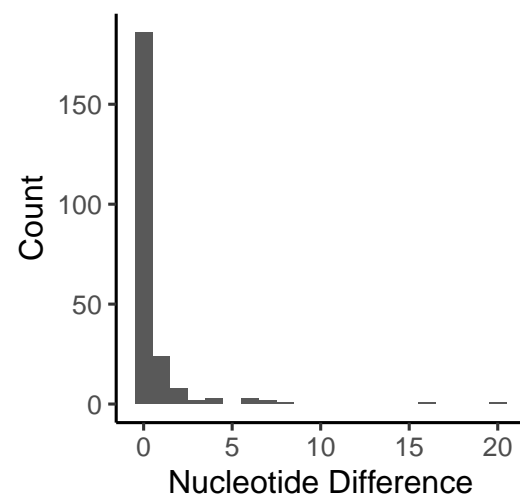
IGHV3-30-3*01

1371 sequences assigned
1149 (83.8%) exact matches, in which:
1101 unique CDR3
6 unique J



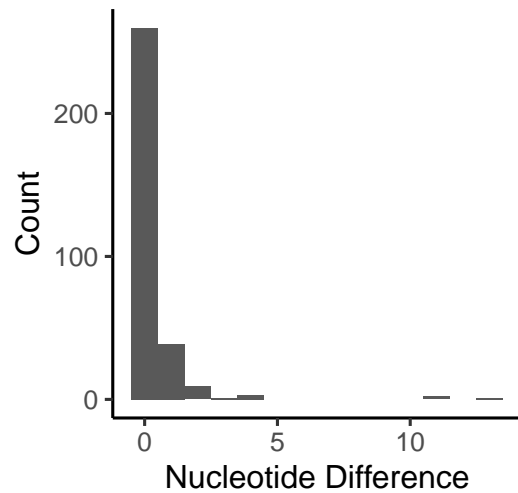
IGHV3-48*01

232 sequences assigned
186 (80.2%) exact matches, in which:
185 unique CDR3
6 unique J



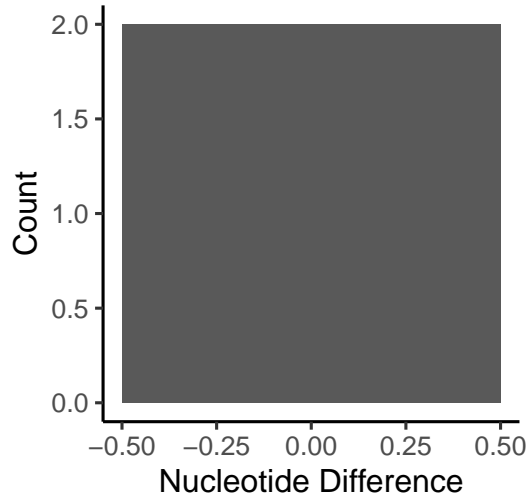
IGHV3-48*02

315 sequences assigned
260 (82.5%) exact matches, in which:
253 unique CDR3
6 unique J



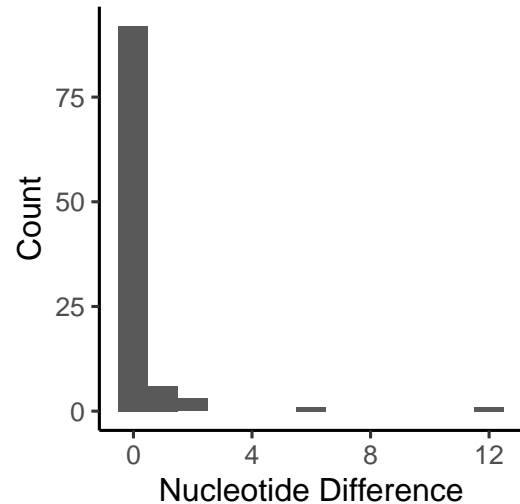
IGHV3-52*01

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



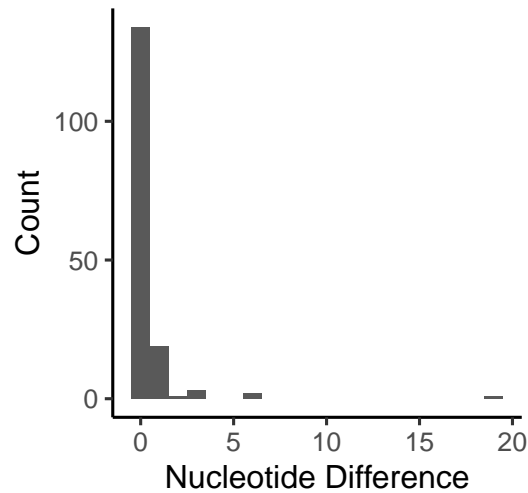
IGHV3-64*01

103 sequences assigned
92 (89.3%) exact matches, in which:
92 unique CDR3
6 unique J



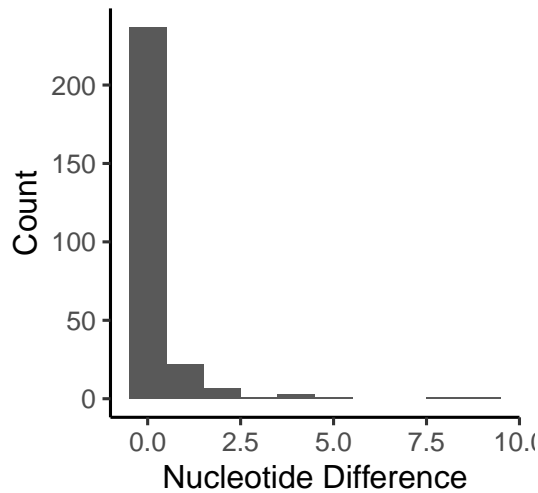
IGHV3-49*03

161 sequences assigned
134 (83.2%) exact matches, in which:
133 unique CDR3
6 unique J



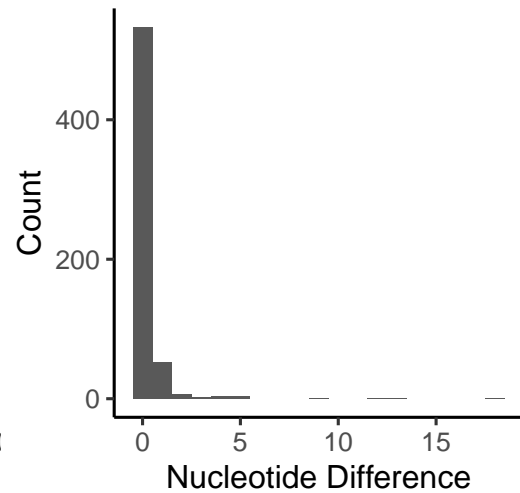
IGHV3-53*01

273 sequences assigned
237 (86.8%) exact matches, in which:
227 unique CDR3
6 unique J



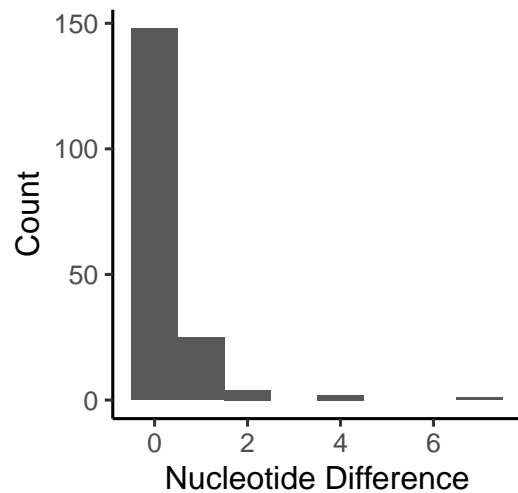
IGHV3-66*01

606 sequences assigned
533 (88%) exact matches, in which:
506 unique CDR3
6 unique J



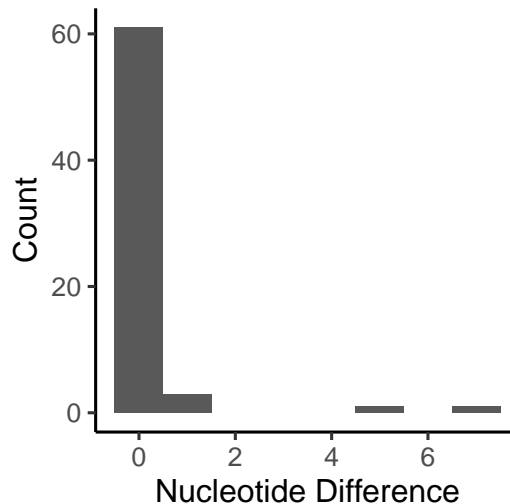
IGHV3-49*05

180 sequences assigned
148 (82.2%) exact matches, in which:
144 unique CDR3
6 unique J



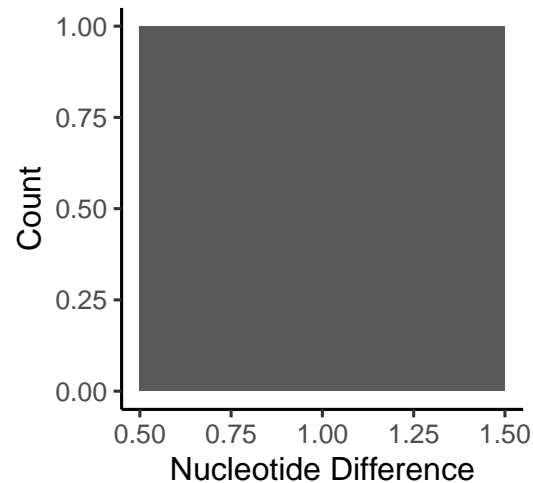
IGHV3-53*02

66 sequences assigned
61 (92.4%) exact matches, in which:
57 unique CDR3
6 unique J



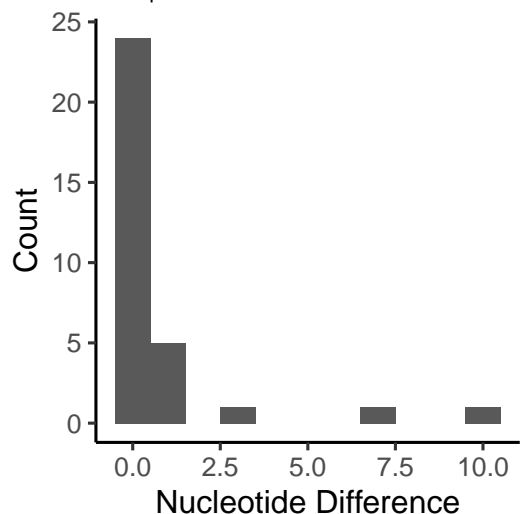
IGHV3-69-1*02

1 sequences assigned
No exact matches.



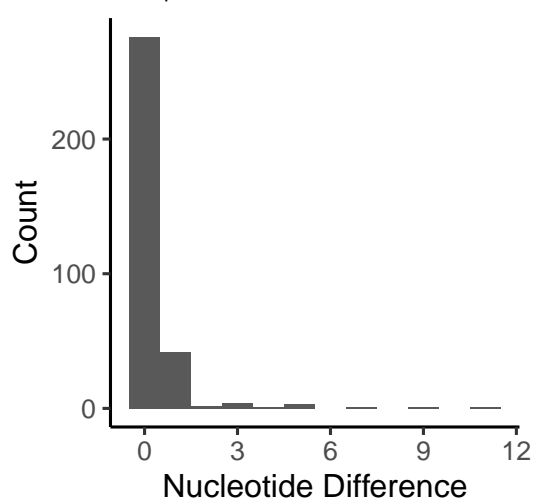
IGHV3-72*01

32 sequences assigned
24 (75%) exact matches, in which:
21 unique CDR3
4 unique J



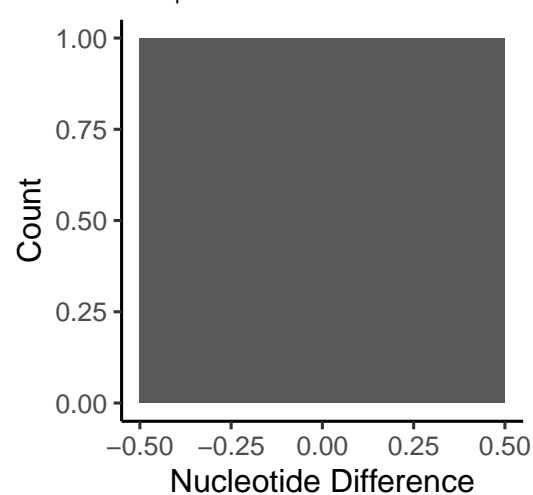
IGHV3-64D*06

331 sequences assigned
276 (83.4%) exact matches, in which:
260 unique CDR3
6 unique J



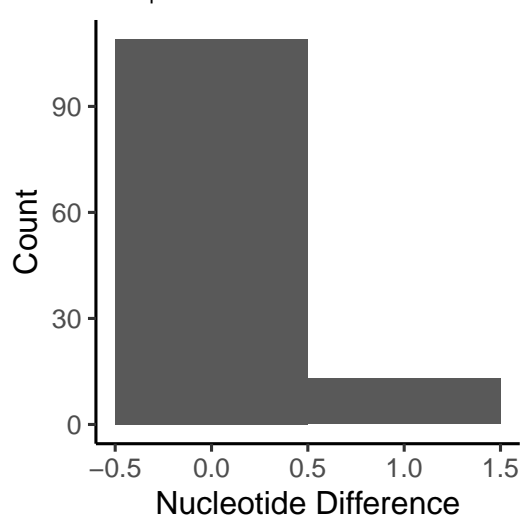
IGHV4-28*03

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



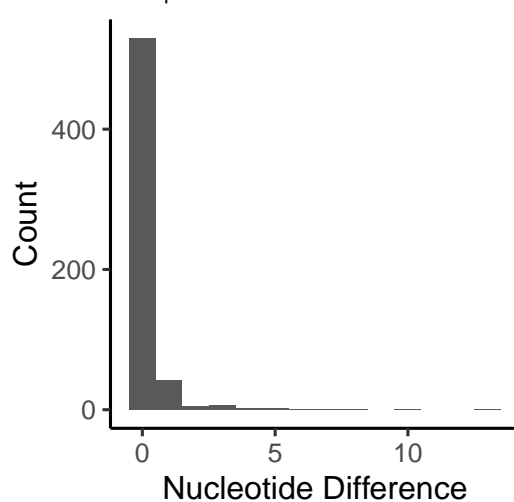
IGHV3-73*01

123 sequences assigned
109 (88.6%) exact matches, in which:
100 unique CDR3
6 unique J



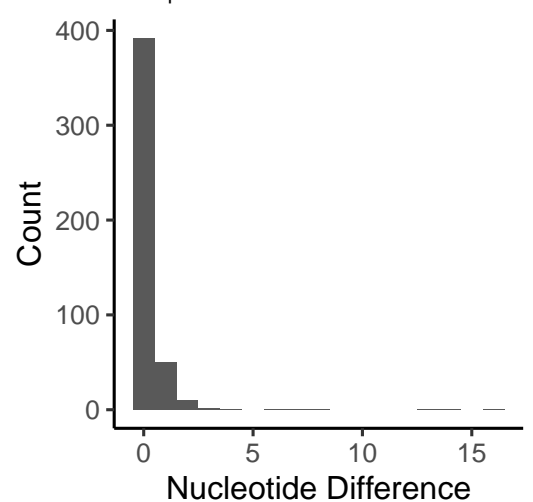
IGHV4-4*02

592 sequences assigned
530 (89.5%) exact matches, in which:
524 unique CDR3
6 unique J



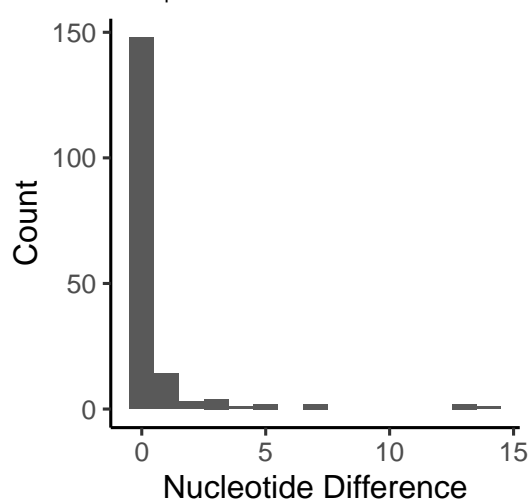
IGHV4-30-4*01

461 sequences assigned
392 (85%) exact matches, in which:
383 unique CDR3
6 unique J



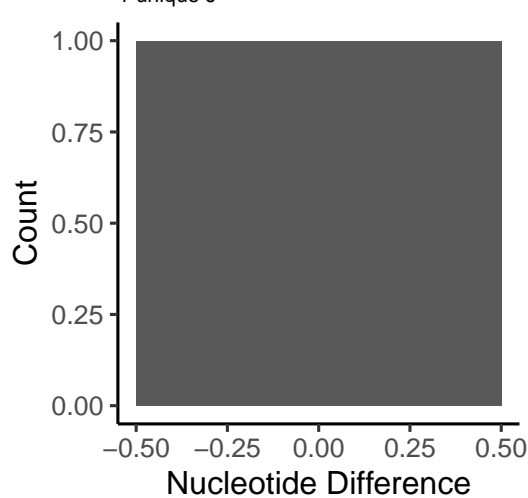
IGHV3-74*01

177 sequences assigned
148 (83.6%) exact matches, in which:
139 unique CDR3
5 unique J



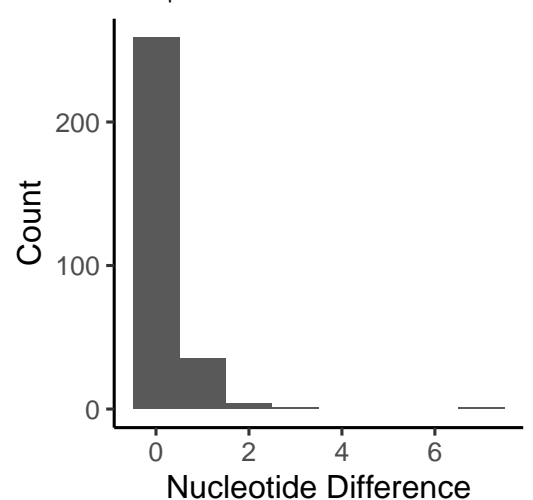
IGHV4-28*01

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



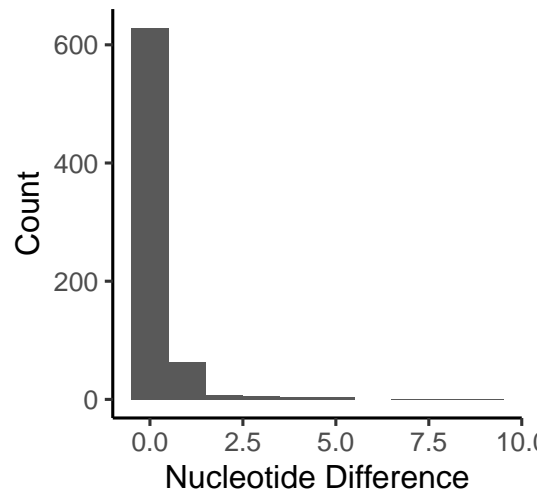
IGHV4-30-2*01

300 sequences assigned
259 (86.3%) exact matches, in which:
252 unique CDR3
6 unique J



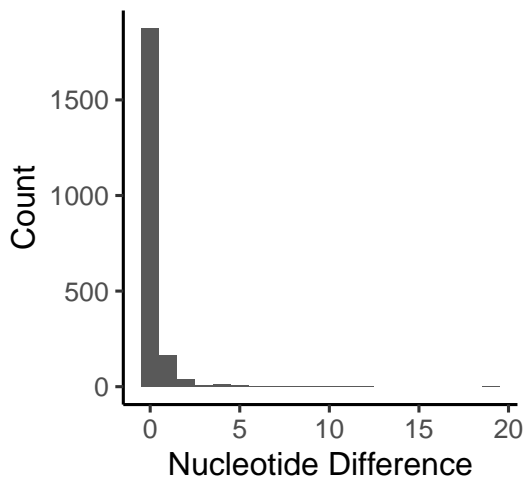
IGHV4–31*03

717 sequences assigned
629 (87.7%) exact matches, in which:
614 unique CDR3
6 unique J



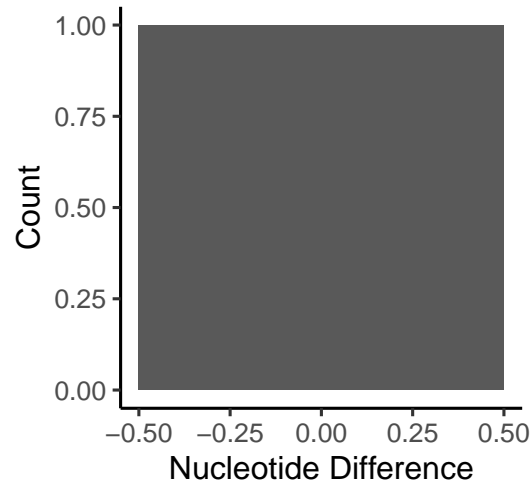
IGHV4–39*01

2124 sequences assigned
1874 (88.2%) exact matches, in which:
1805 unique CDR3
6 unique J



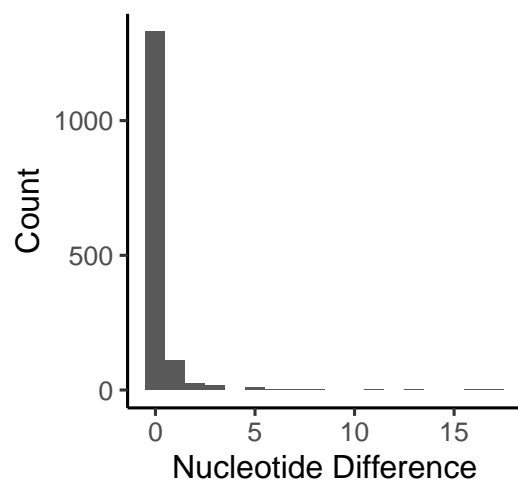
IGHV4–61*07

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



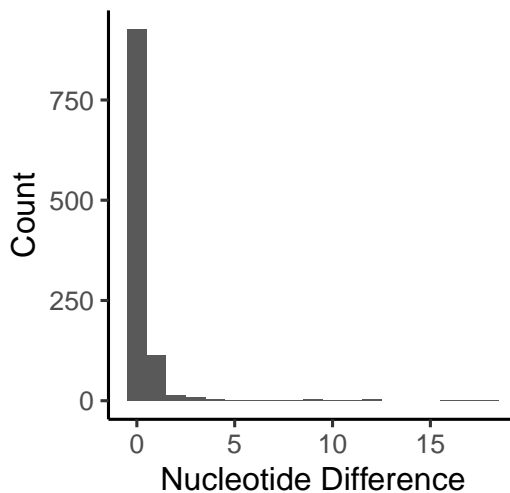
IGHV4–34*01

1498 sequences assigned
1330 (88.8%) exact matches, in which:
1286 unique CDR3
6 unique J



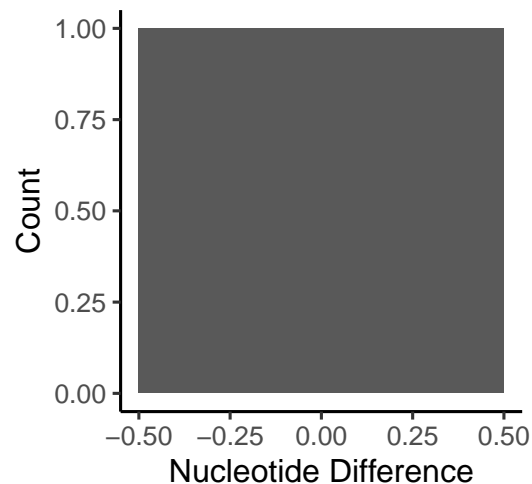
IGHV4–59*01

1086 sequences assigned
927 (85.4%) exact matches, in which:
913 unique CDR3
6 unique J



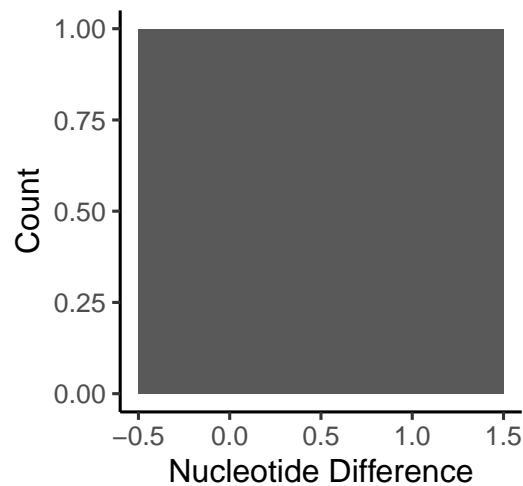
IGHV4/OR15–8*01

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



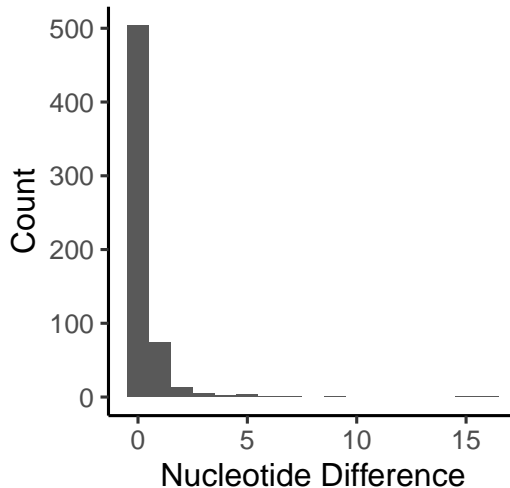
IGHV4–38–2*02

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



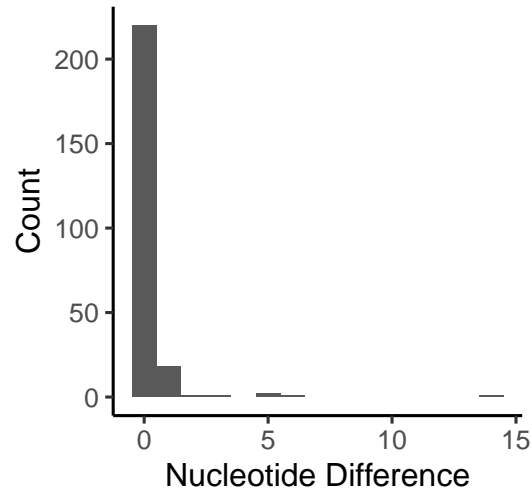
IGHV4–59*08

607 sequences assigned
504 (83%) exact matches, in which:
496 unique CDR3
6 unique J



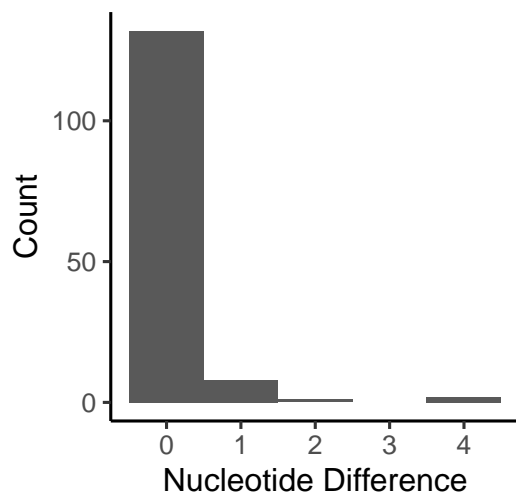
IGHV5–10–1*01

244 sequences assigned
220 (90.2%) exact matches, in which:
218 unique CDR3
6 unique J



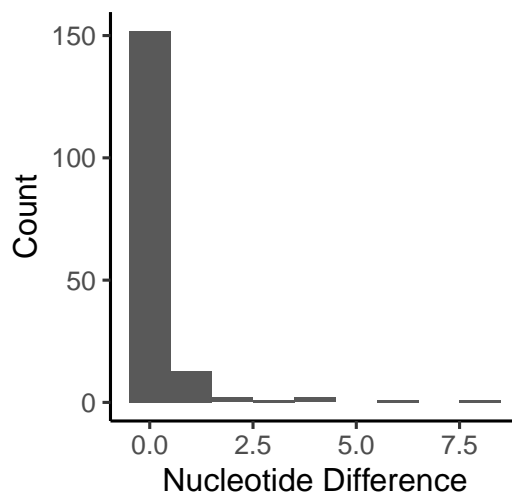
IGHV5-10-1*03

143 sequences assigned
132 (92.3%) exact matches, in which:
127 unique CDR3
6 unique J



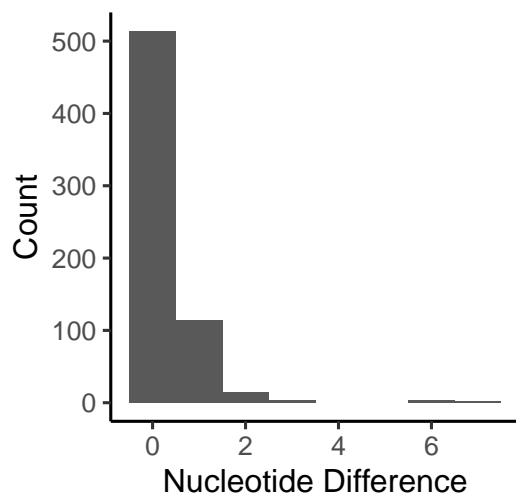
IGHV6-1*01

172 sequences assigned
152 (88.4%) exact matches, in which:
147 unique CDR3
6 unique J



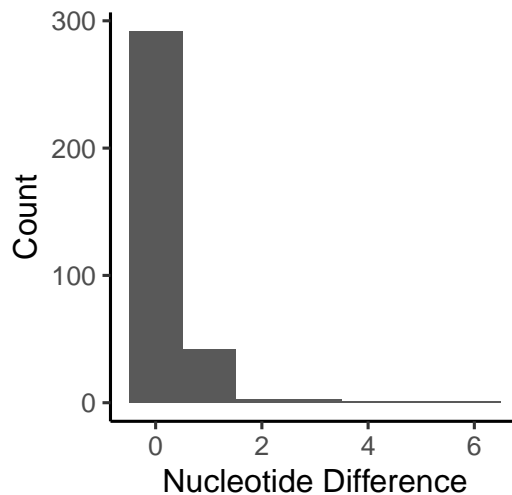
IGHV5-51*01

653 sequences assigned
514 (78.7%) exact matches, in which:
503 unique CDR3
6 unique J



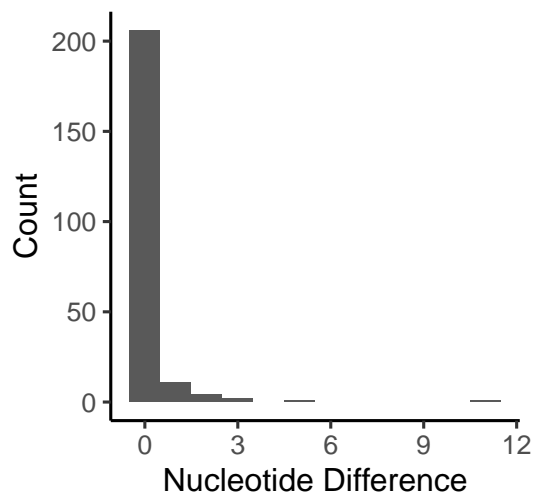
IGHV7-4-1*02

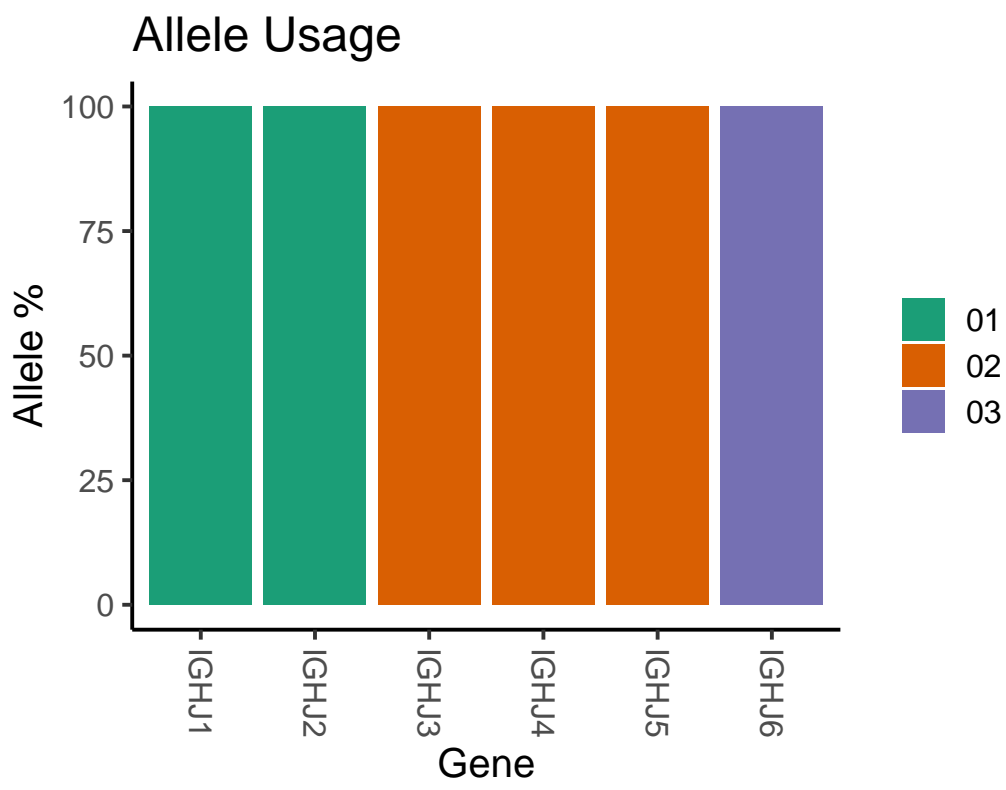
343 sequences assigned
292 (85.1%) exact matches, in which:
291 unique CDR3
6 unique J



IGHV5-51*03

225 sequences assigned
206 (91.6%) exact matches, in which:
199 unique CDR3
6 unique J





Warning – no inferred sequences found.