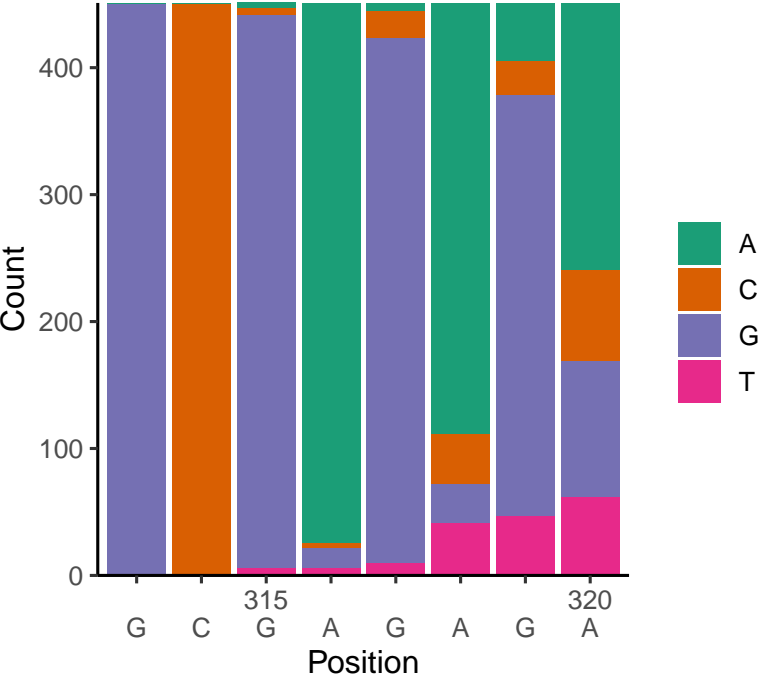
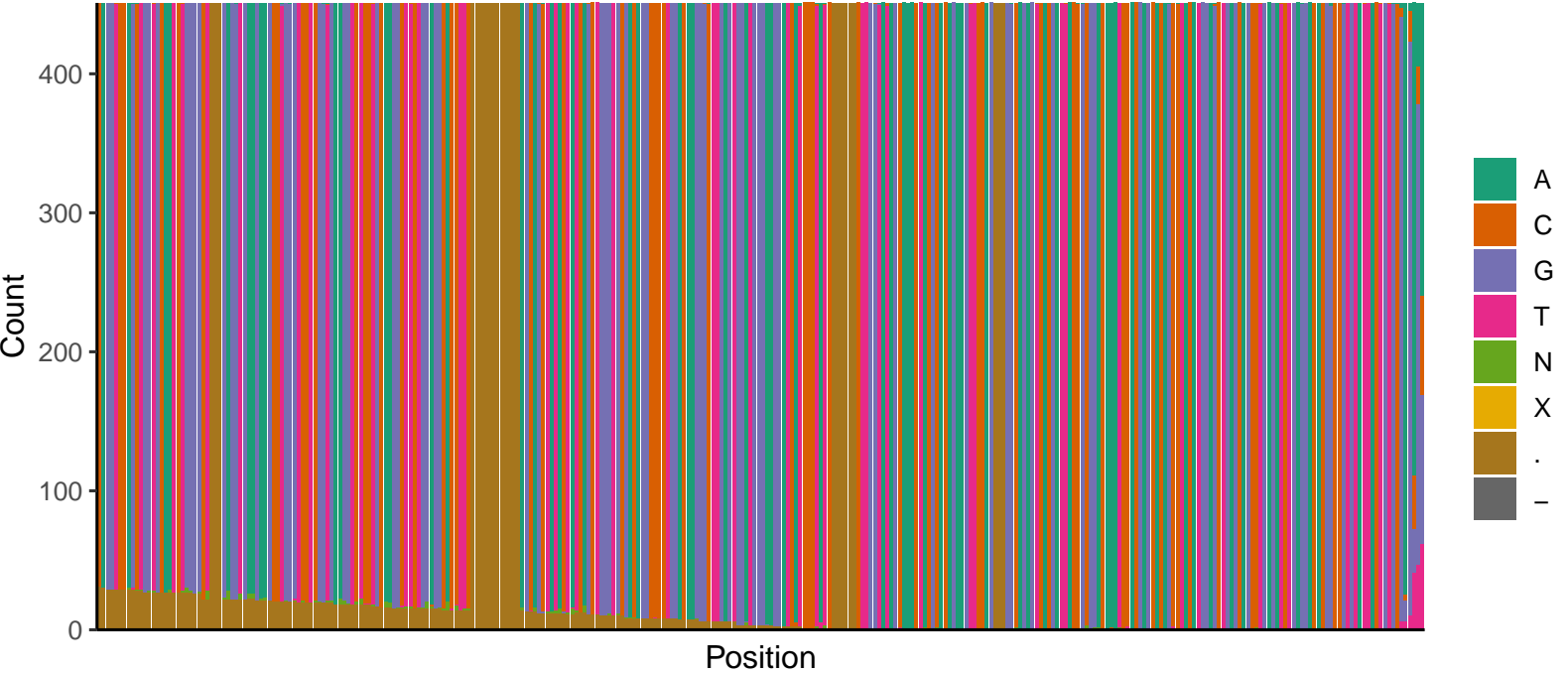


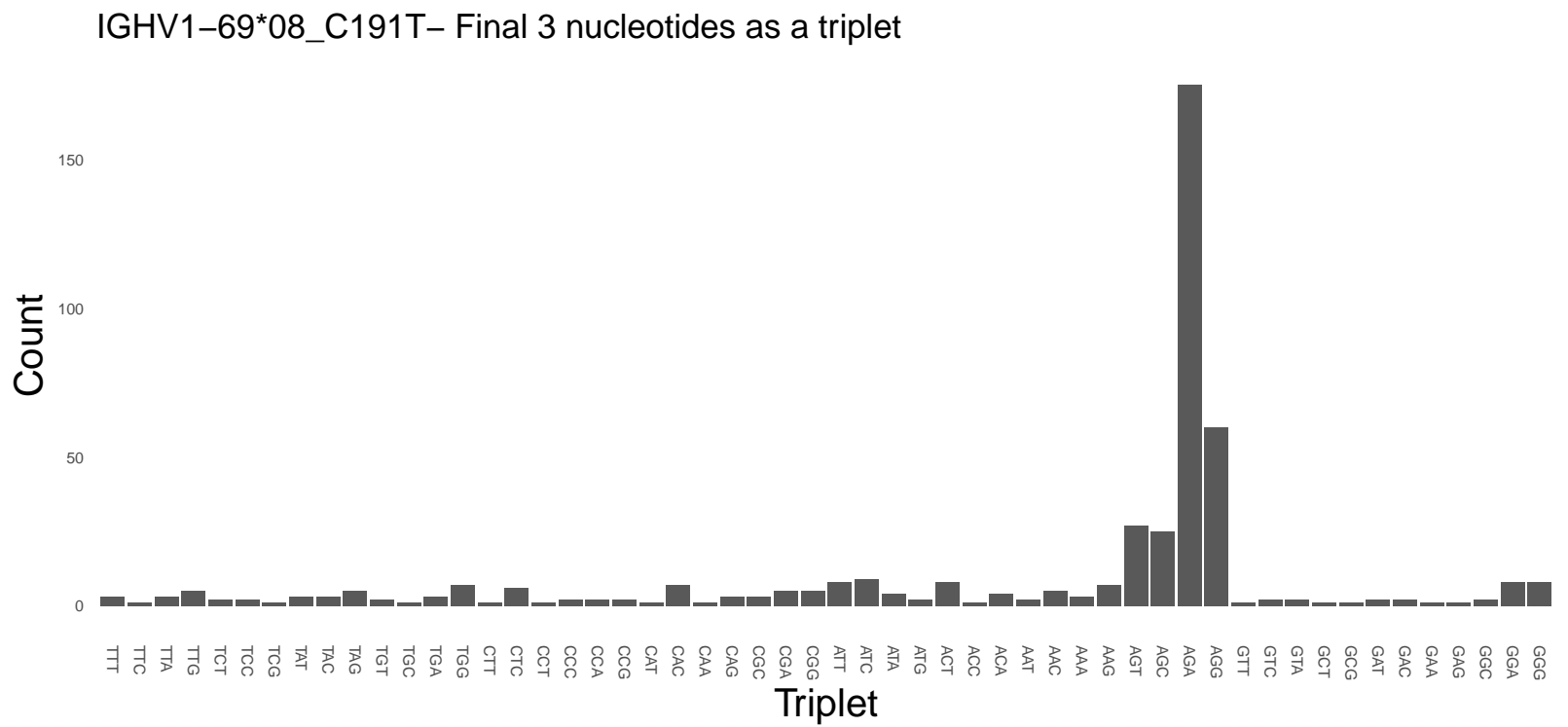
Gene IGHV1-69*08_C191T



Gene IGHV1-69*08_C191T

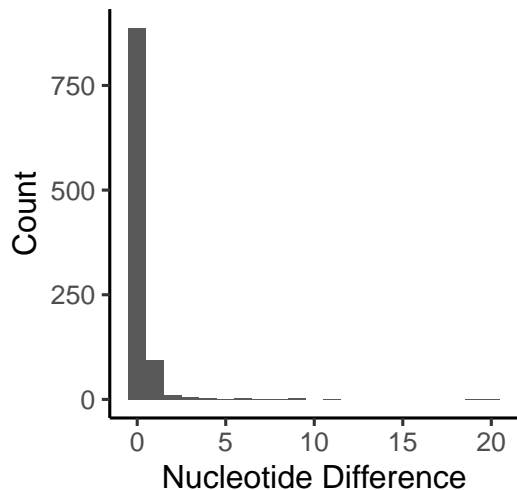


IGHV1-69*08_C191T- Final 3 nucleotides as a triplet



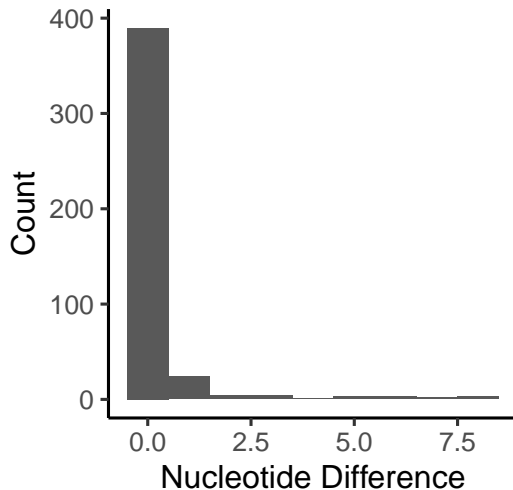
IGHV1-2*02

1015 sequences assigned
888 (87.5%) exact matches, in which:
849 unique CDR3
6 unique J



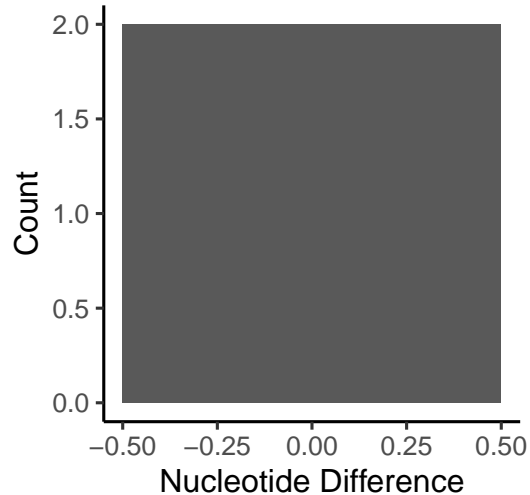
IGHV1-8*01

434 sequences assigned
390 (89.9%) exact matches, in which:
375 unique CDR3
6 unique J



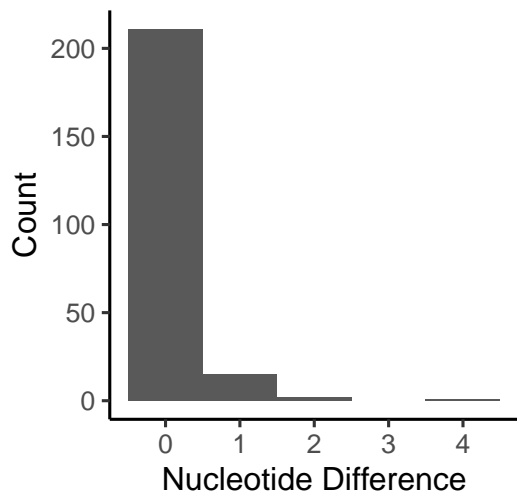
IGHV1-45*02

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



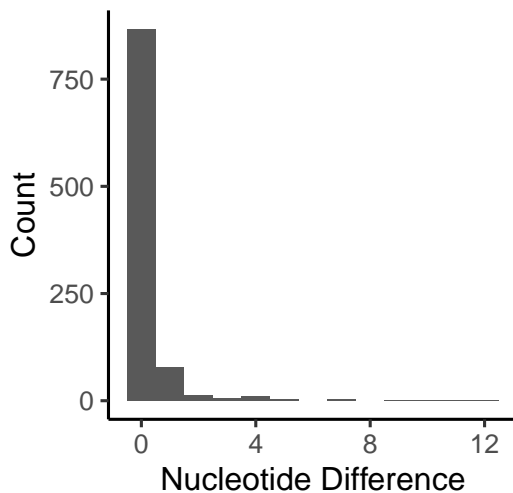
IGHV1-2*04

229 sequences assigned
211 (92.1%) exact matches, in which:
199 unique CDR3
6 unique J



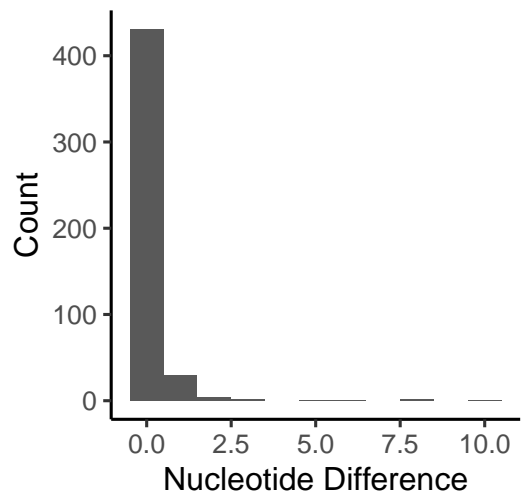
IGHV1-18*01

990 sequences assigned
867 (87.6%) exact matches, in which:
837 unique CDR3
6 unique J



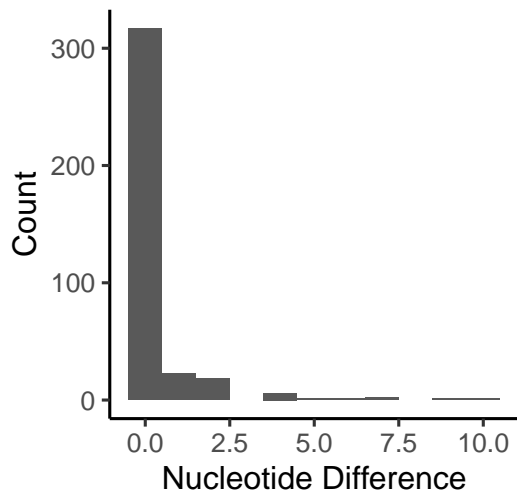
IGHV1-46*01

471 sequences assigned
431 (91.5%) exact matches, in which:
418 unique CDR3
6 unique J



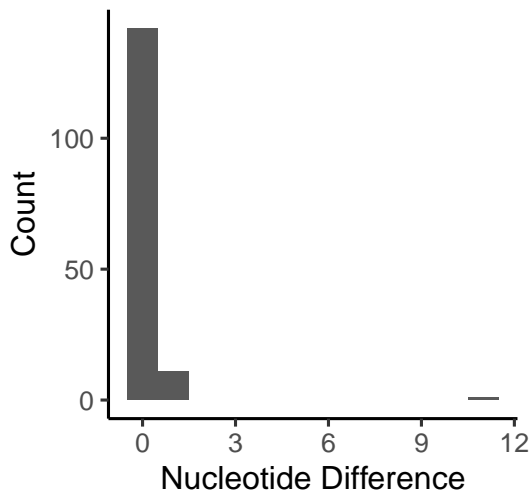
IGHV1-3*01

370 sequences assigned
317 (85.7%) exact matches, in which:
308 unique CDR3
6 unique J



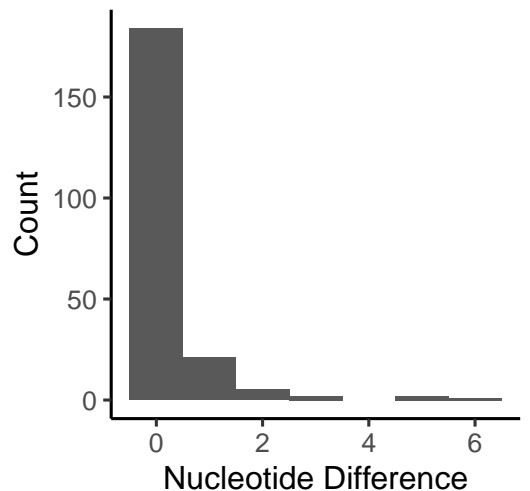
IGHV1-24*01

154 sequences assigned
142 (92.2%) exact matches, in which:
138 unique CDR3
6 unique J



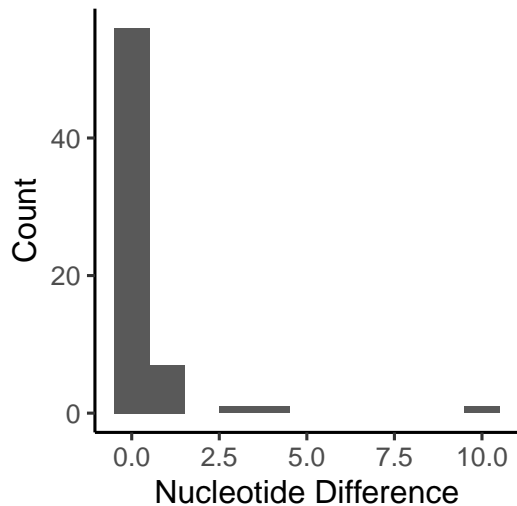
IGHV1-46*03

215 sequences assigned
184 (85.6%) exact matches, in which:
179 unique CDR3
6 unique J



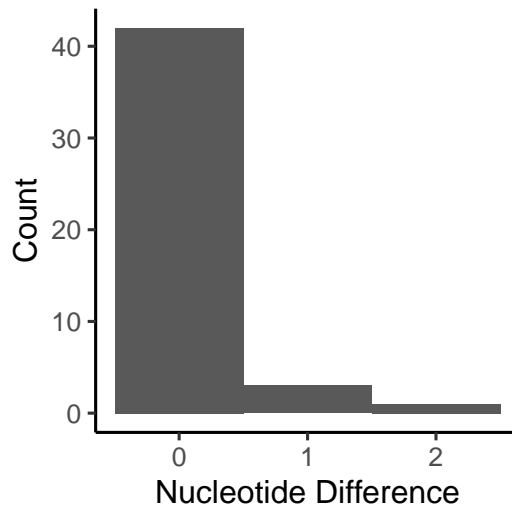
IGHV1-58*01

66 sequences assigned
56 (84.8%) exact matches, in which:
55 unique CDR3
6 unique J



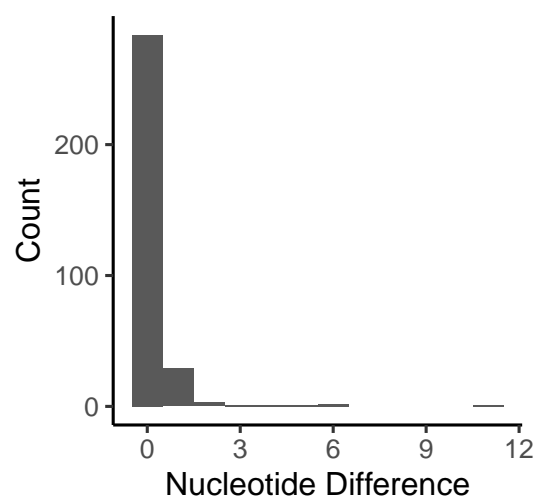
IGHV1-69-2*01

46 sequences assigned
42 (91.3%) exact matches, in which:
42 unique CDR3
6 unique J



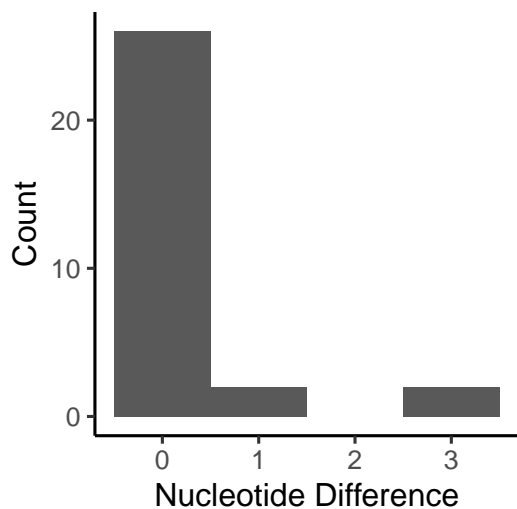
IGHV2-5*01

322 sequences assigned
284 (88.2%) exact matches, in which:
277 unique CDR3
6 unique J



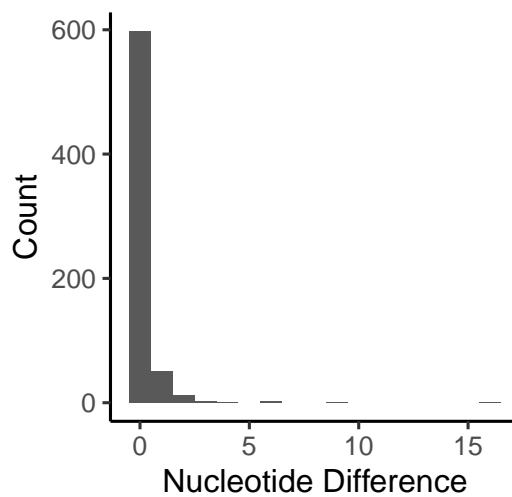
IGHV1-58*02

30 sequences assigned
26 (86.7%) exact matches, in which:
26 unique CDR3
4 unique J



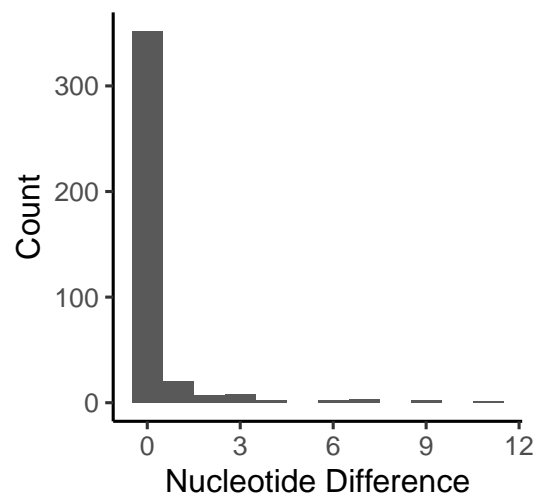
IGHV1-69*06

669 sequences assigned
598 (89.4%) exact matches, in which:
575 unique CDR3
6 unique J



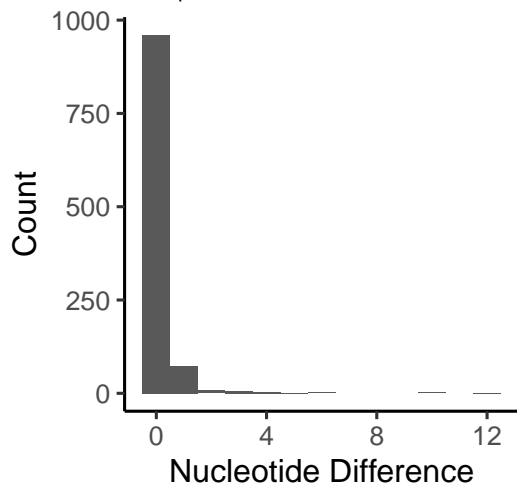
IGHV2-5*02

397 sequences assigned
352 (88.7%) exact matches, in which:
343 unique CDR3
6 unique J



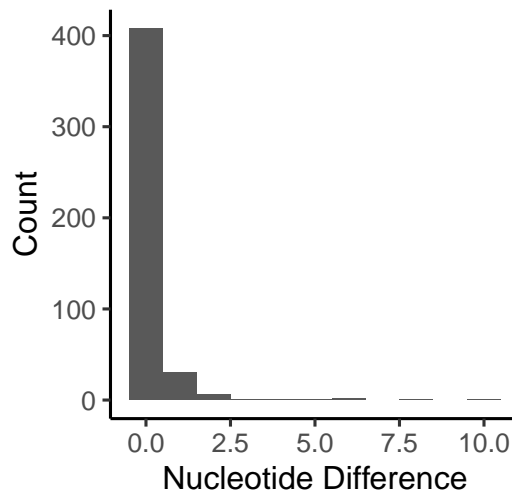
IGHV1-69*01

1057 sequences assigned
960 (90.8%) exact matches, in which:
929 unique CDR3
6 unique J



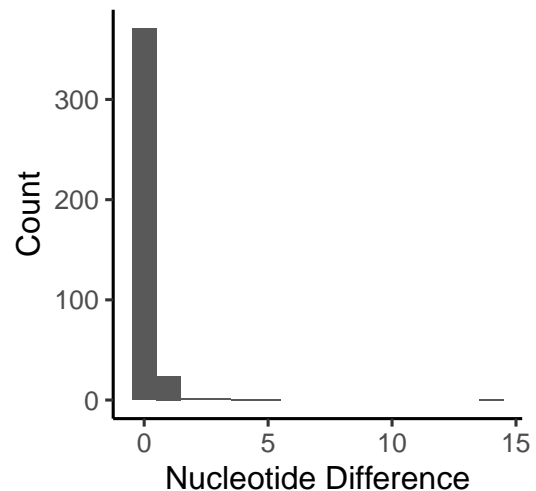
IGHV1-69*08_C191T

451 sequences assigned
408 (90.5%) exact matches, in which:
384 unique CDR3
6 unique J



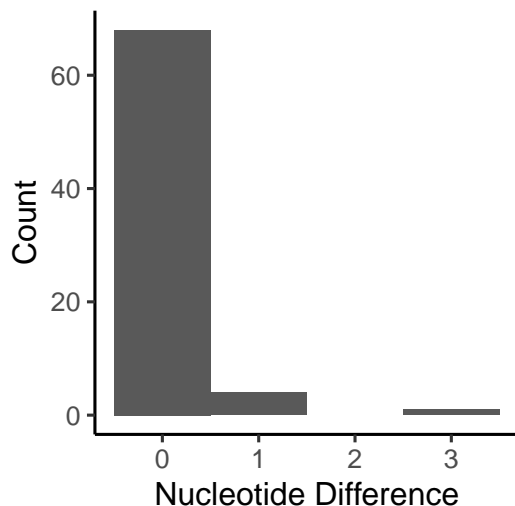
IGHV2-26*01

402 sequences assigned
371 (92.3%) exact matches, in which:
360 unique CDR3
6 unique J



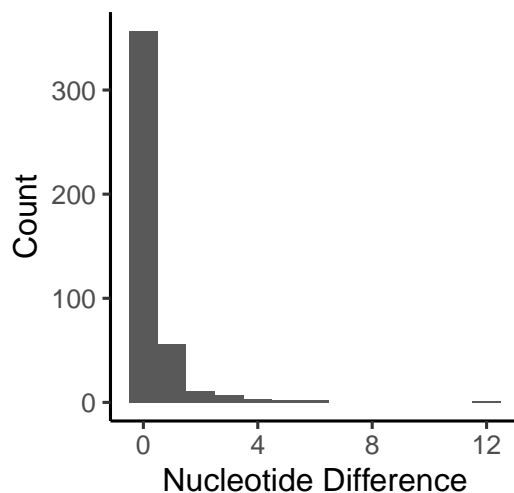
IGHV2-70*01

73 sequences assigned
68 (93.2%) exact matches, in which:
68 unique CDR3
5 unique J



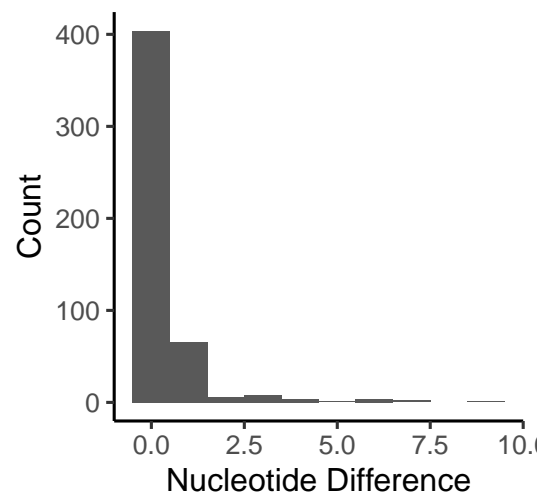
IGHV3-7*01

439 sequences assigned
357 (81.3%) exact matches, in which:
338 unique CDR3
6 unique J



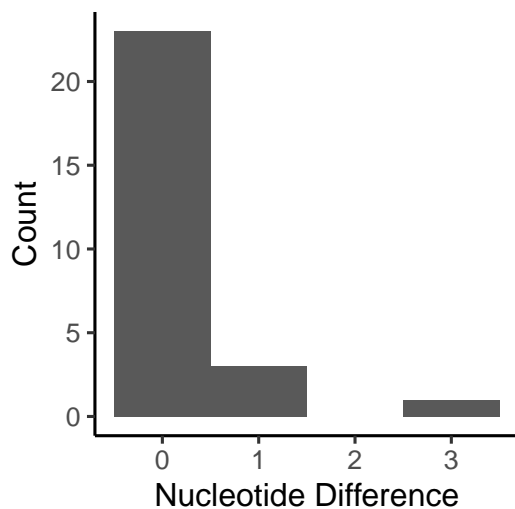
IGHV3-11*01

496 sequences assigned
404 (81.5%) exact matches, in which:
389 unique CDR3
6 unique J



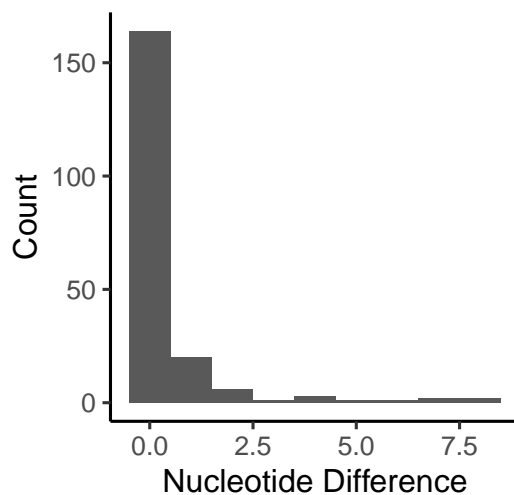
IGHV2-70*04

27 sequences assigned
23 (85.2%) exact matches, in which:
23 unique CDR3
3 unique J



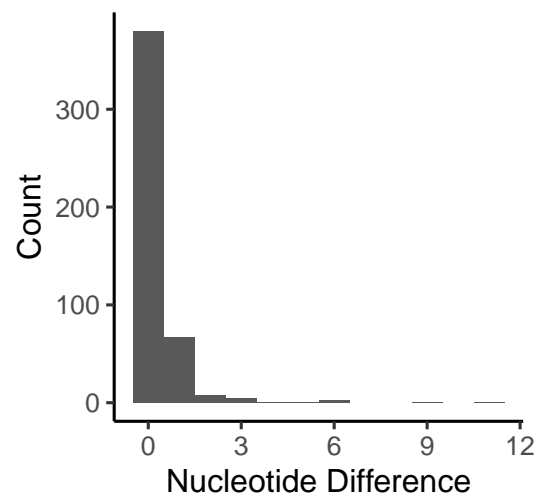
IGHV3-7*04

200 sequences assigned
164 (82%) exact matches, in which:
157 unique CDR3
6 unique J



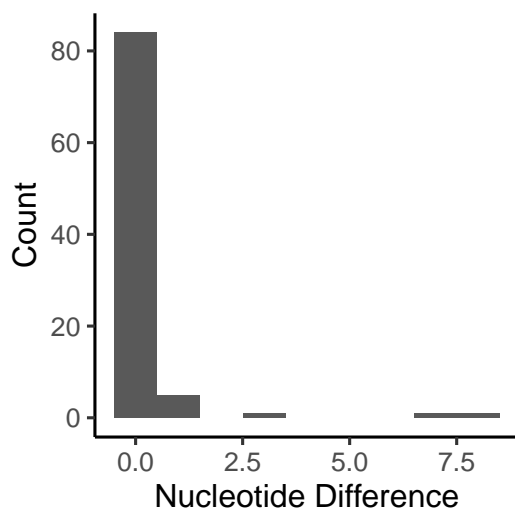
IGHV3-11*05

467 sequences assigned
380 (81.4%) exact matches, in which:
359 unique CDR3
6 unique J



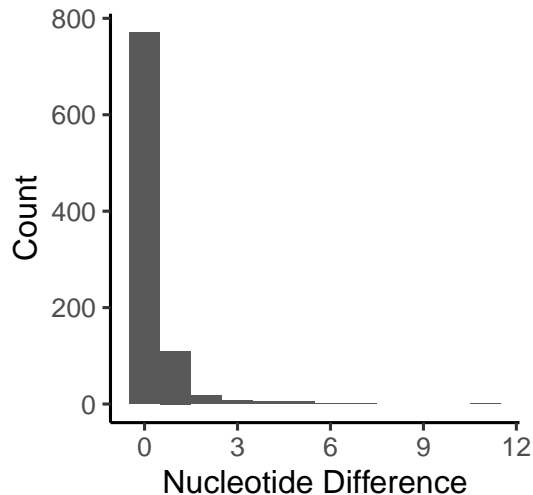
IGHV2-70*15

92 sequences assigned
84 (91.3%) exact matches, in which:
83 unique CDR3
5 unique J



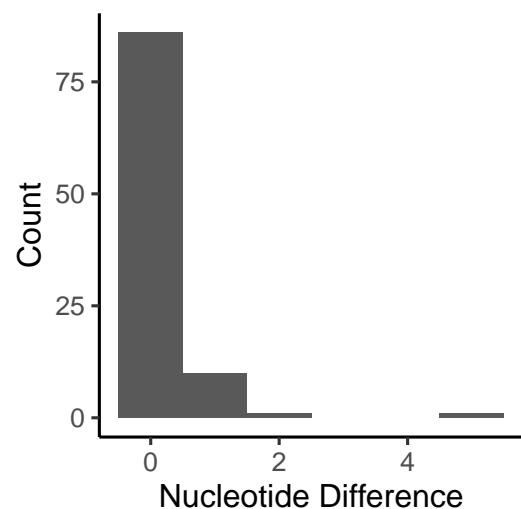
IGHV3-9*01

921 sequences assigned
771 (83.7%) exact matches, in which:
717 unique CDR3
6 unique J



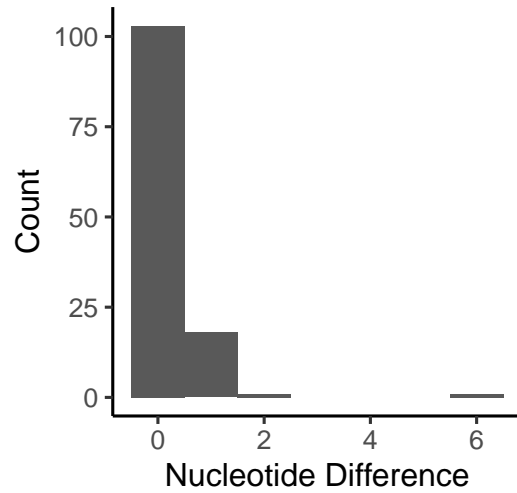
IGHV3-13*01

98 sequences assigned
86 (87.8%) exact matches, in which:
80 unique CDR3
5 unique J



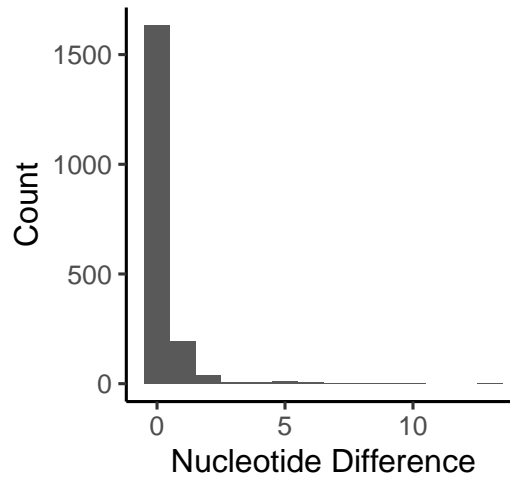
IGHV3-13*04

123 sequences assigned
103 (83.7%) exact matches, in which:
98 unique CDR3
6 unique J



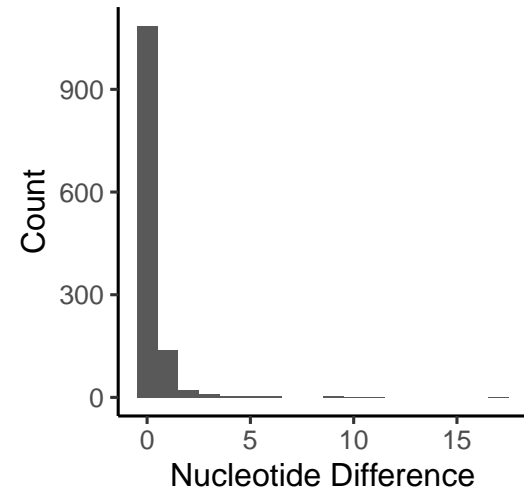
IGHV3-21*01

1913 sequences assigned
1633 (85.4%) exact matches, in which:
1539 unique CDR3
6 unique J



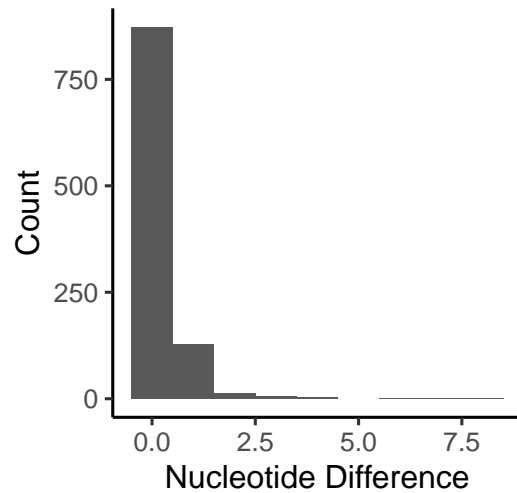
IGHV3-30*18

1280 sequences assigned
1086 (84.8%) exact matches, in which:
1024 unique CDR3
6 unique J



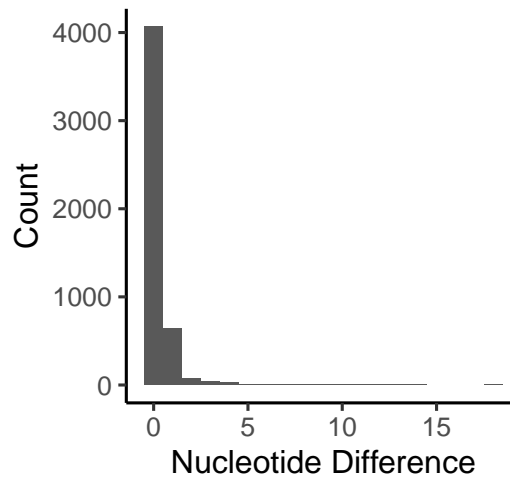
IGHV3-15*01

1027 sequences assigned
873 (85%) exact matches, in which:
826 unique CDR3
6 unique J



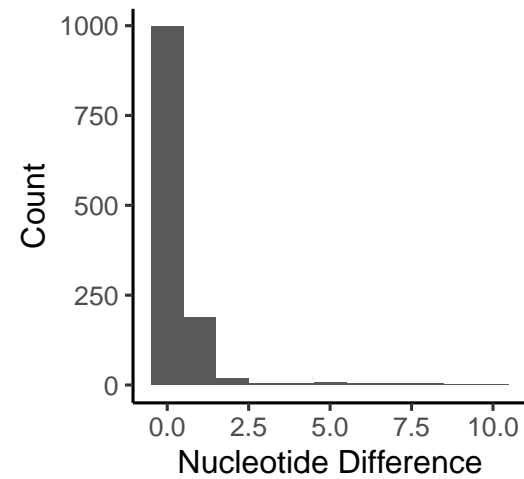
IGHV3-23*01

4887 sequences assigned
4066 (83.2%) exact matches, in which:
3773 unique CDR3
6 unique J



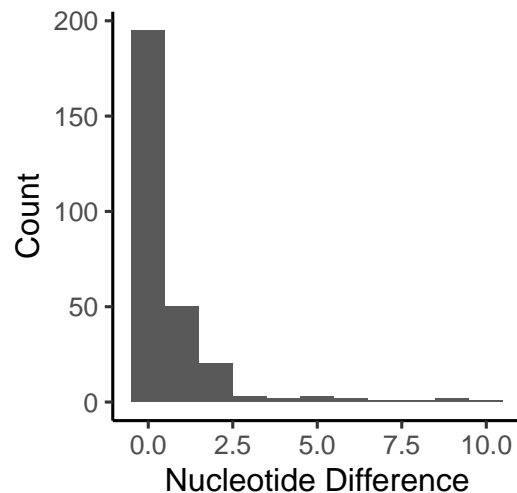
IGHV3-33*01

1235 sequences assigned
997 (80.7%) exact matches, in which:
944 unique CDR3
6 unique J



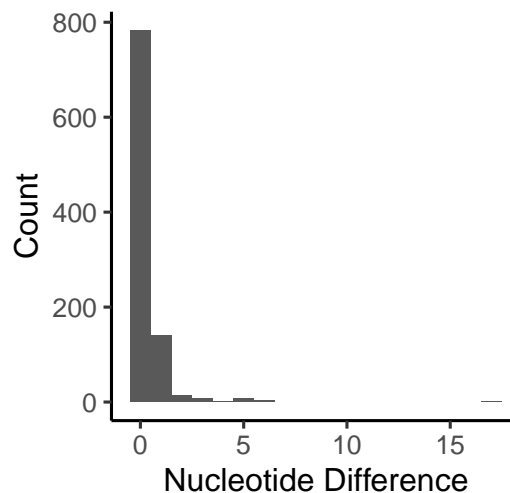
IGHV3-20*04

280 sequences assigned
195 (69.6%) exact matches, in which:
179 unique CDR3
6 unique J



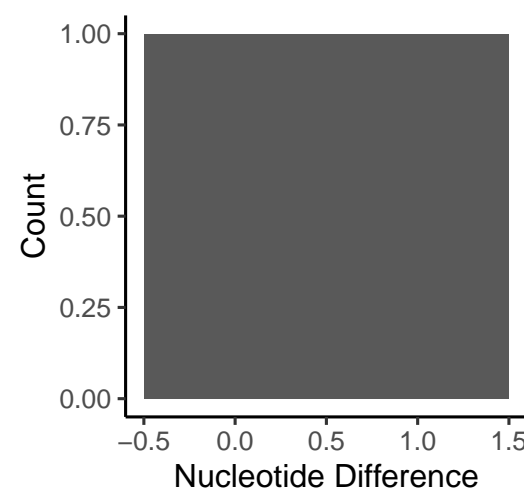
IGHV3-30-3*01

959 sequences assigned
783 (81.6%) exact matches, in which:
738 unique CDR3
6 unique J



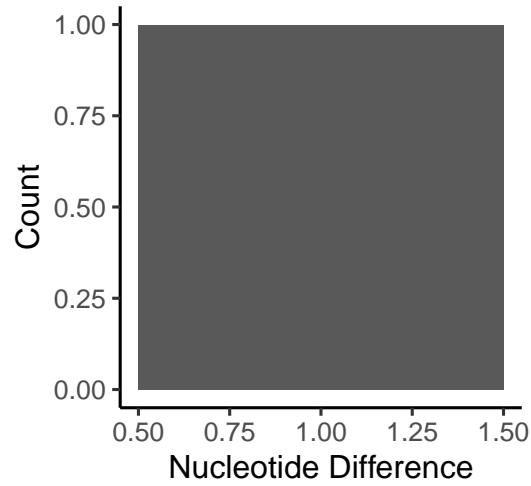
IGHV3-35*01

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



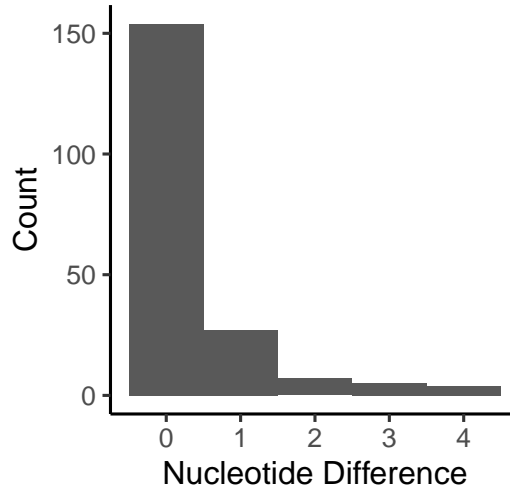
IGHV3-38-3*01

1 sequences assigned
No exact matches.



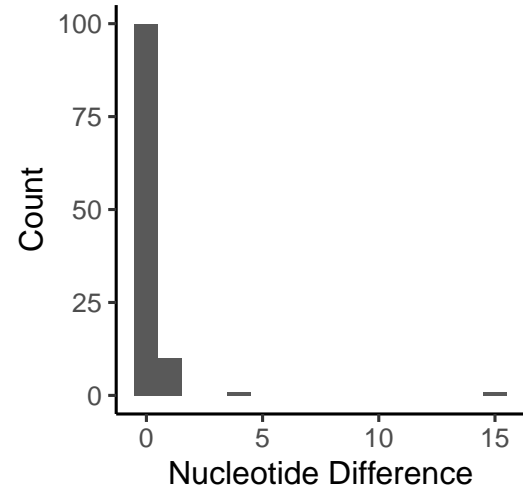
IGHV3-49*04

197 sequences assigned
154 (78.2%) exact matches, in which:
149 unique CDR3
6 unique J



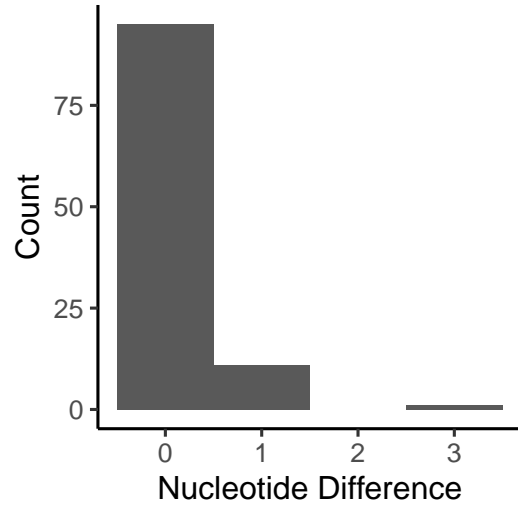
IGHV3-53*04

112 sequences assigned
100 (89.3%) exact matches, in which:
97 unique CDR3
6 unique J



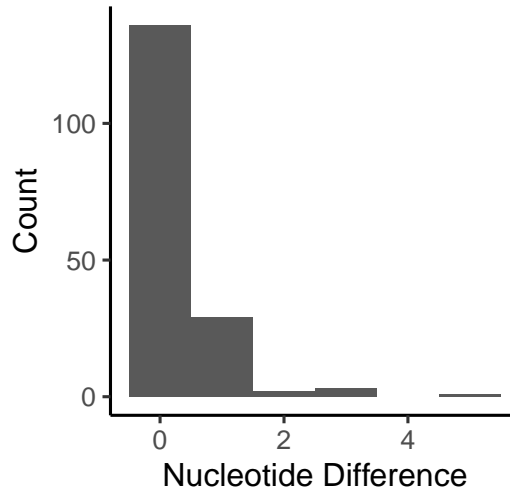
IGHV3-43*01

107 sequences assigned
95 (88.8%) exact matches, in which:
91 unique CDR3
6 unique J



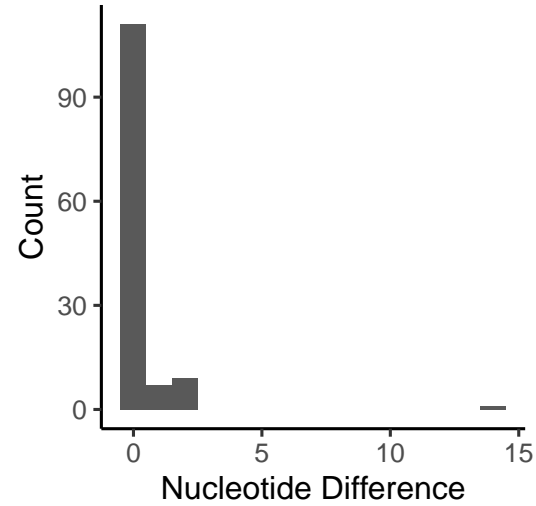
IGHV3-49*05

171 sequences assigned
136 (79.5%) exact matches, in which:
132 unique CDR3
6 unique J



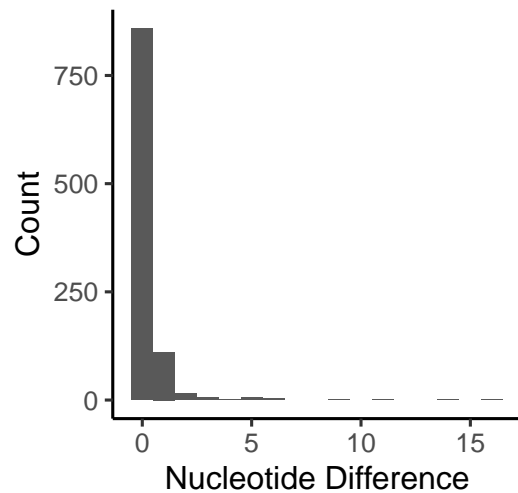
IGHV3-64*01

128 sequences assigned
111 (86.7%) exact matches, in which:
102 unique CDR3
5 unique J



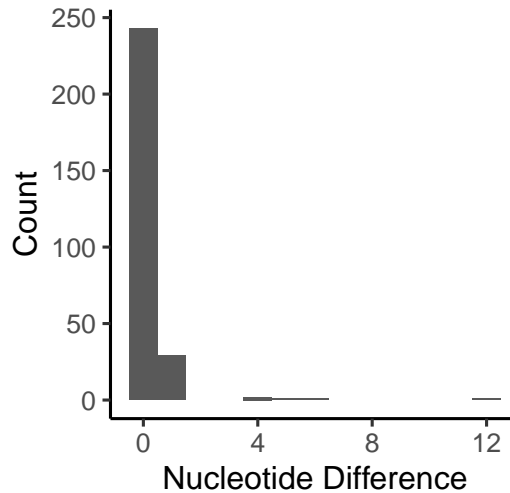
IGHV3-48*02

1005 sequences assigned
859 (85.5%) exact matches, in which:
802 unique CDR3
6 unique J



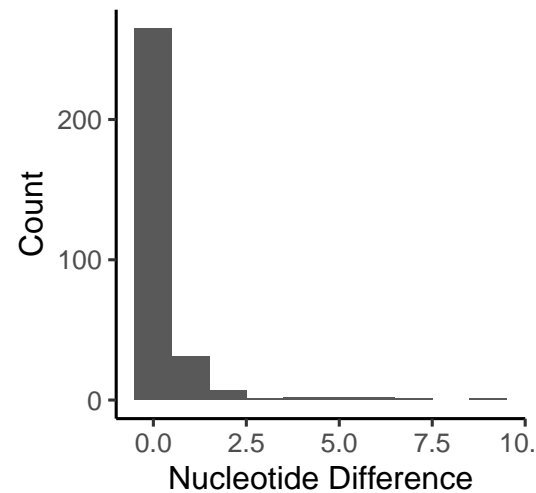
IGHV3-53*01

277 sequences assigned
243 (87.7%) exact matches, in which:
231 unique CDR3
6 unique J



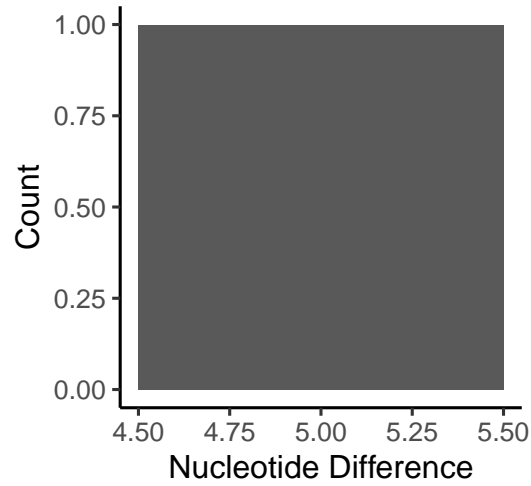
IGHV3-66*01

312 sequences assigned
265 (84.9%) exact matches, in which:
246 unique CDR3
6 unique J



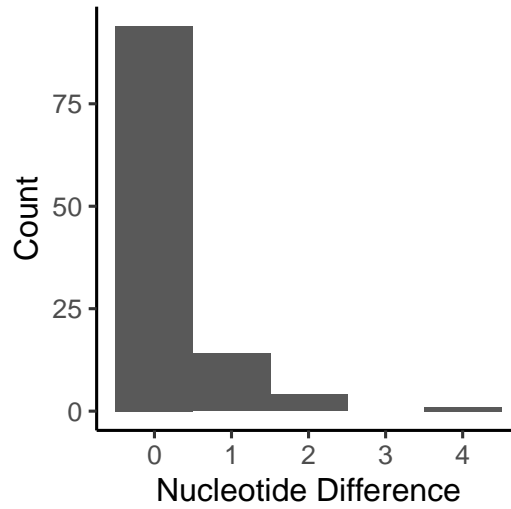
IGHV3-71*03

1 sequences assigned
No exact matches.



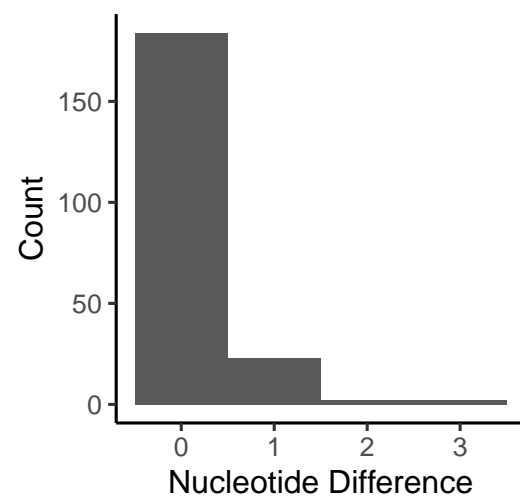
IGHV3-73*02

113 sequences assigned
94 (83.2%) exact matches, in which:
89 unique CDR3
6 unique J



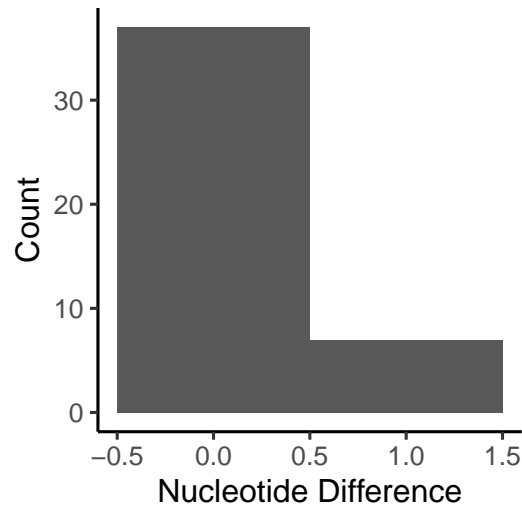
IGHV3-64D*06

211 sequences assigned
184 (87.2%) exact matches, in which:
172 unique CDR3
6 unique J



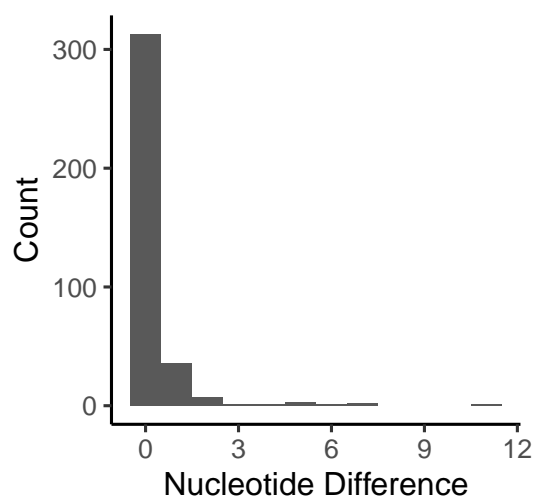
IGHV3-72*01

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



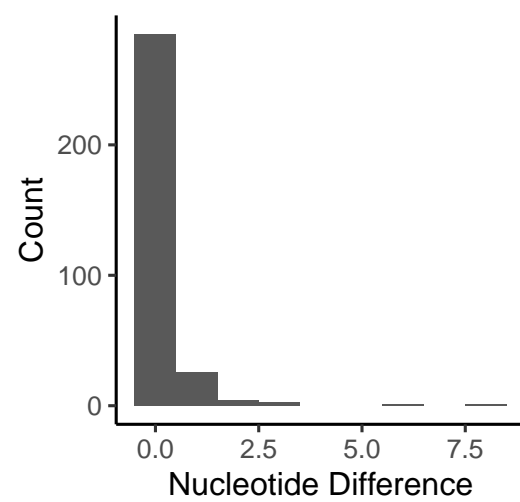
IGHV3-74*01

365 sequences assigned
313 (85.8%) exact matches, in which:
294 unique CDR3
6 unique J



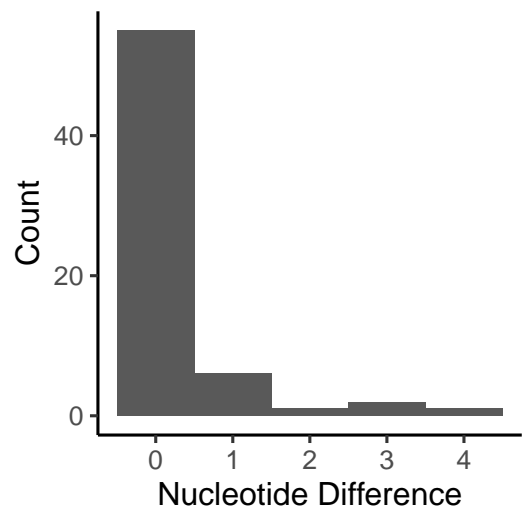
IGHV4-4*02

320 sequences assigned
285 (89.1%) exact matches, in which:
276 unique CDR3
6 unique J



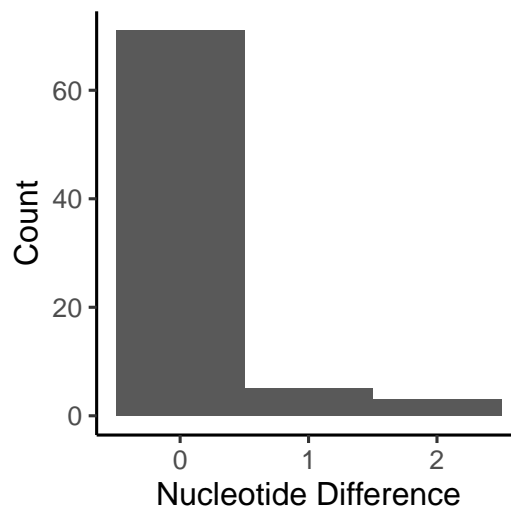
IGHV3-73*01

65 sequences assigned
55 (84.6%) exact matches, in which:
50 unique CDR3
4 unique J



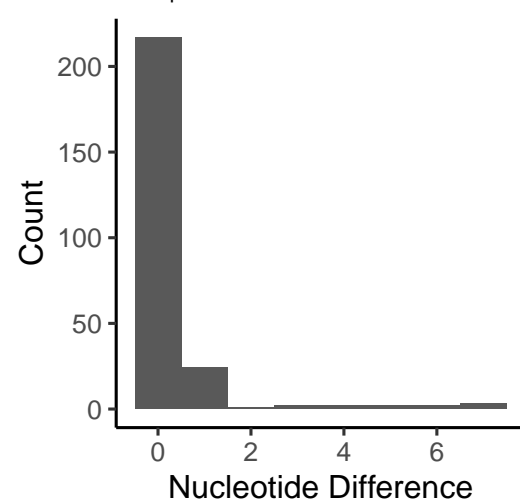
IGHV3-43D*03

79 sequences assigned
71 (89.9%) exact matches, in which:
69 unique CDR3
5 unique J



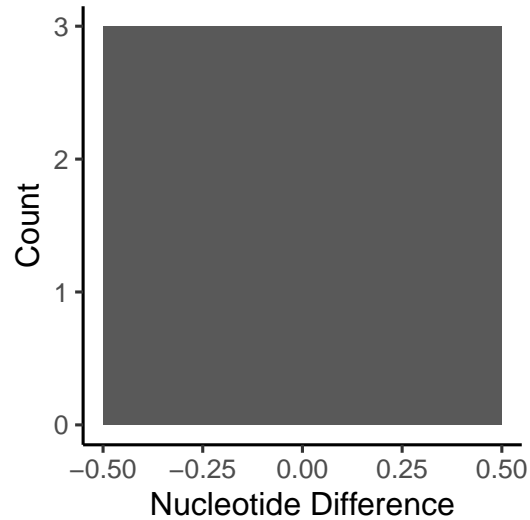
IGHV4-4*07

253 sequences assigned
217 (85.8%) exact matches, in which:
212 unique CDR3
6 unique J



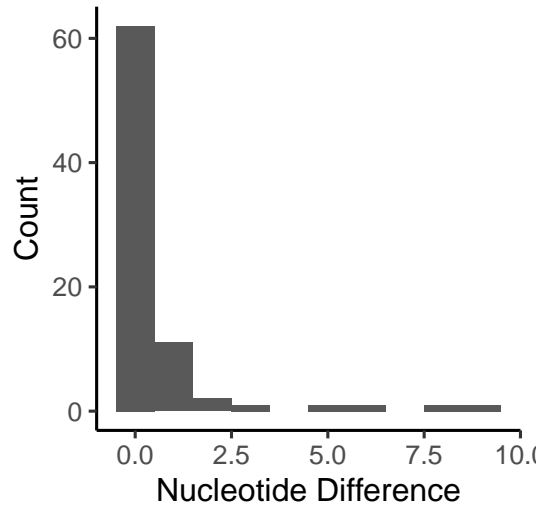
IGHV4-28*01

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



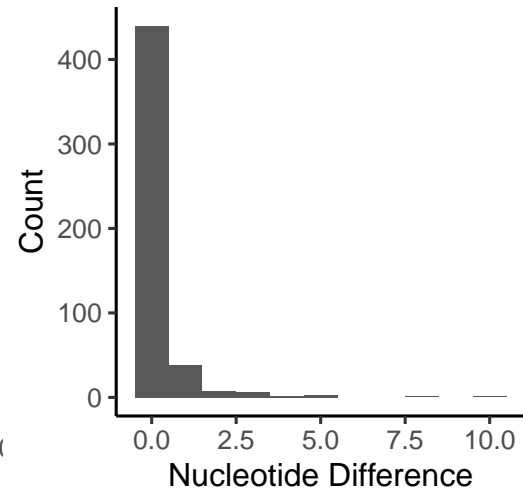
IGHV4-30-2*01

80 sequences assigned
62 (77.5%) exact matches, in which:
62 unique CDR3
6 unique J



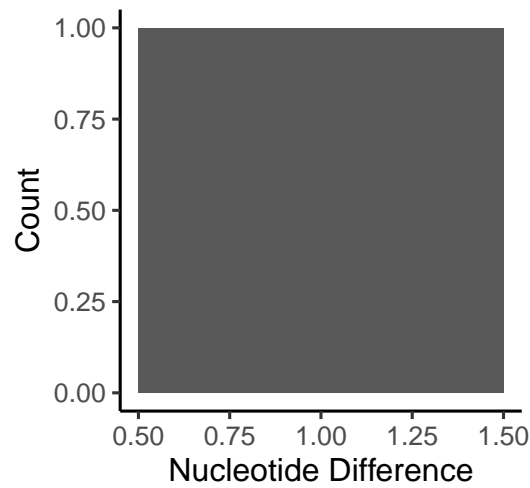
IGHV4-38-2*02

500 sequences assigned
440 (88%) exact matches, in which:
421 unique CDR3
6 unique J



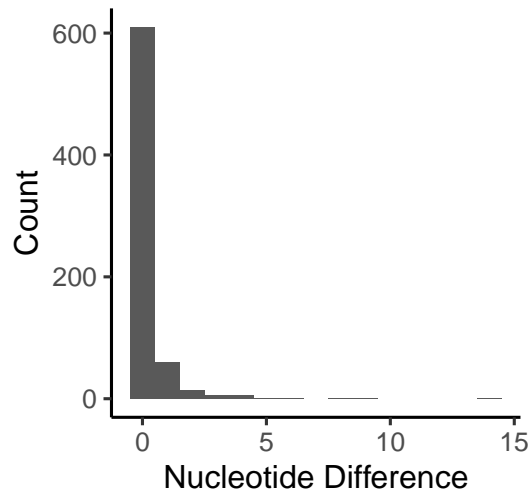
IGHV4-28*04

1 sequences assigned
No exact matches.



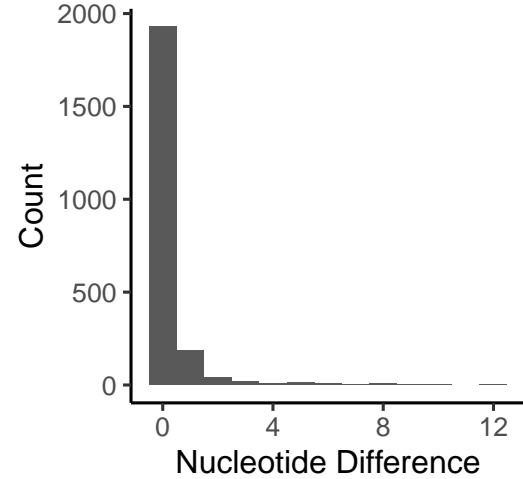
IGHV4-31*03

700 sequences assigned
610 (87.1%) exact matches, in which:
585 unique CDR3
6 unique J



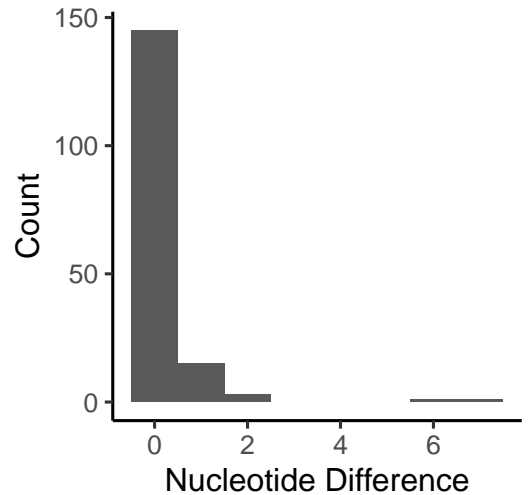
IGHV4-39*01

2221 sequences assigned
1929 (86.9%) exact matches, in which:
1838 unique CDR3
6 unique J



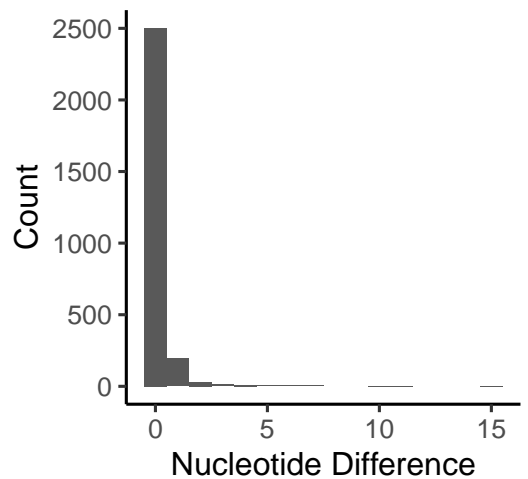
IGHV4-30-4*01

165 sequences assigned
145 (87.9%) exact matches, in which:
141 unique CDR3
6 unique J



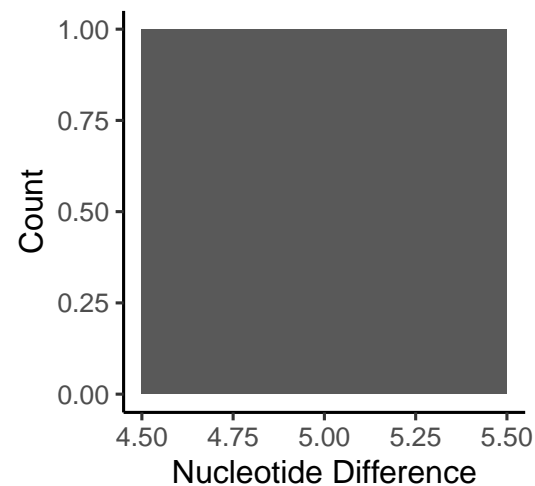
IGHV4-34*01

2774 sequences assigned
2502 (90.2%) exact matches, in which:
2368 unique CDR3
6 unique J



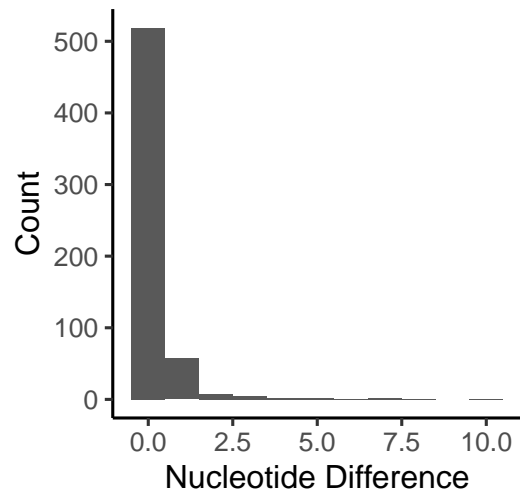
IGHV4-55*08

1 sequences assigned
No exact matches.



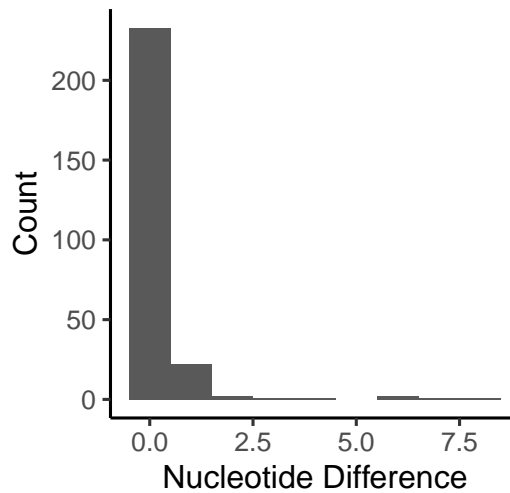
IGHV4-59*01

598 sequences assigned
519 (86.8%) exact matches, in which:
515 unique CDR3
6 unique J



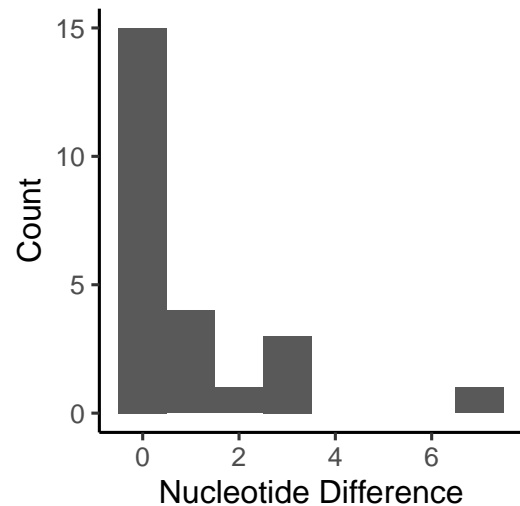
IGHV5-10-1*01

263 sequences assigned
233 (88.6%) exact matches, in which:
225 unique CDR3
6 unique J



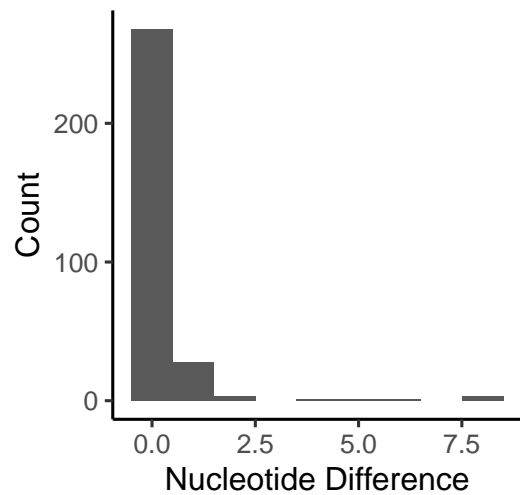
IGHV7-4-1*01

24 sequences assigned
15 (62.5%) exact matches, in which:
15 unique CDR3
5 unique J



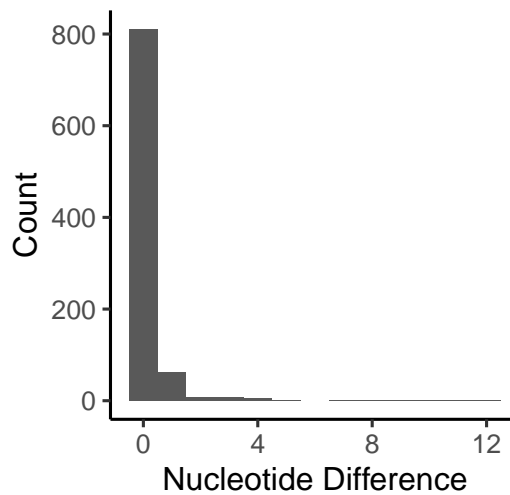
IGHV4-59*08

305 sequences assigned
268 (87.9%) exact matches, in which:
263 unique CDR3
6 unique J



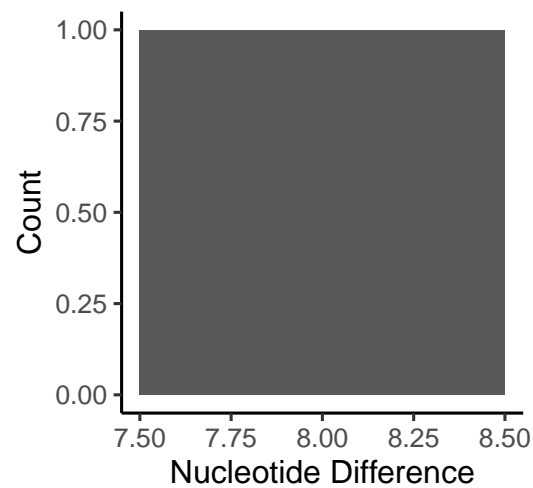
IGHV5-51*01

902 sequences assigned
811 (89.9%) exact matches, in which:
774 unique CDR3
6 unique J



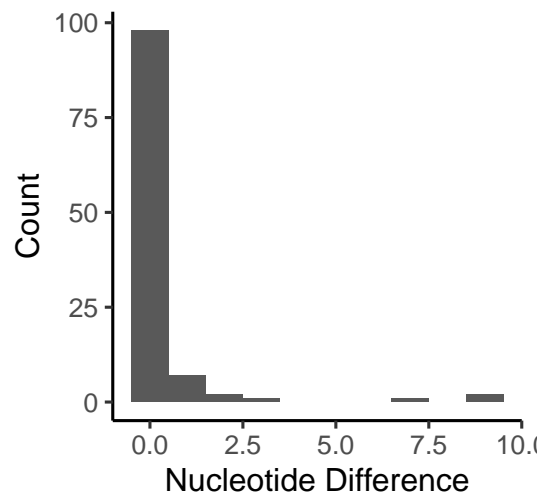
IGHV7-81*01

1 sequences assigned
No exact matches.



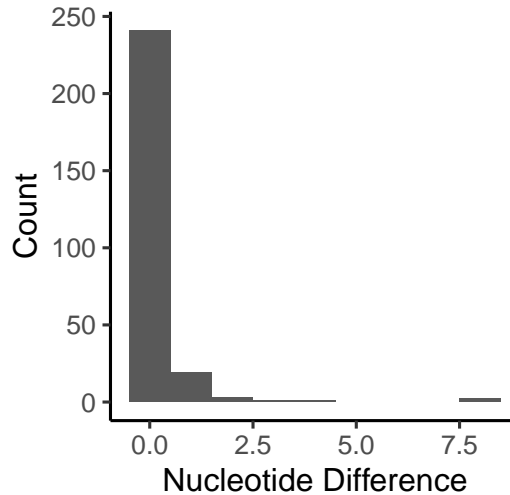
IGHV4-61*01

111 sequences assigned
98 (88.3%) exact matches, in which:
96 unique CDR3
6 unique J



IGHV6-1*01

267 sequences assigned
241 (90.3%) exact matches, in which:
226 unique CDR3
6 unique J



IGHV1-69*08_C191T

