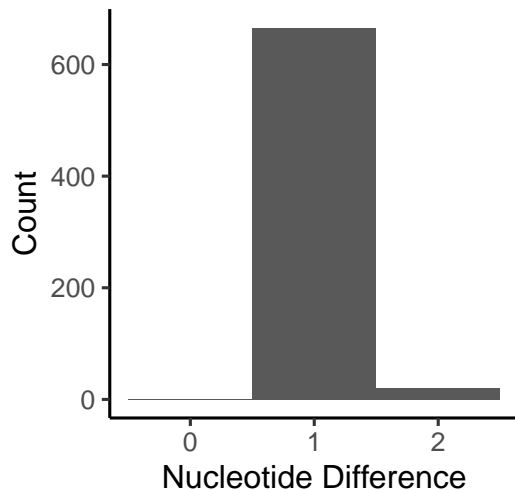


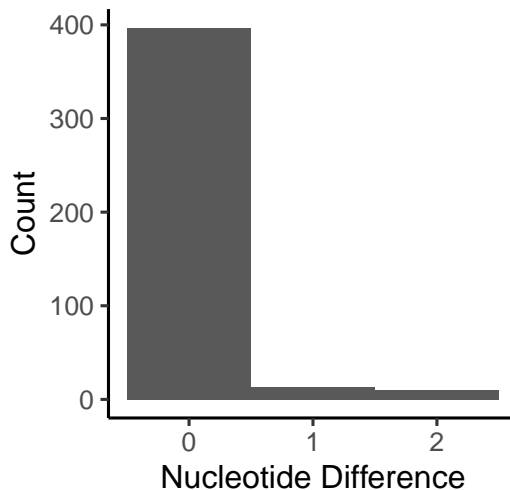
IGHV1-2*02

688 sequences assigned
1 (0.1%) exact matches, in which:
1 unique CDR3
1 unique J



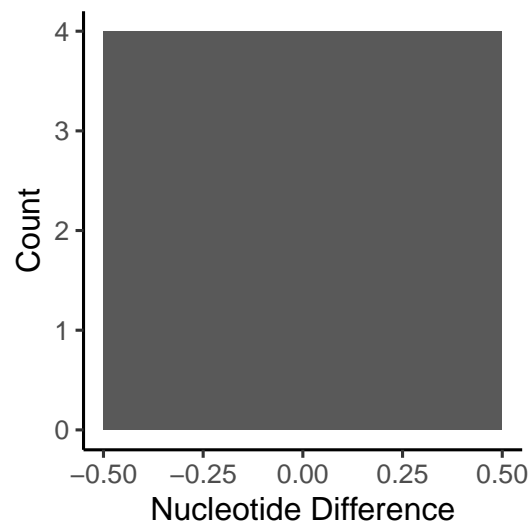
IGHV1-8*01

420 sequences assigned
397 (94.5%) exact matches, in which:
387 unique CDR3
5 unique J



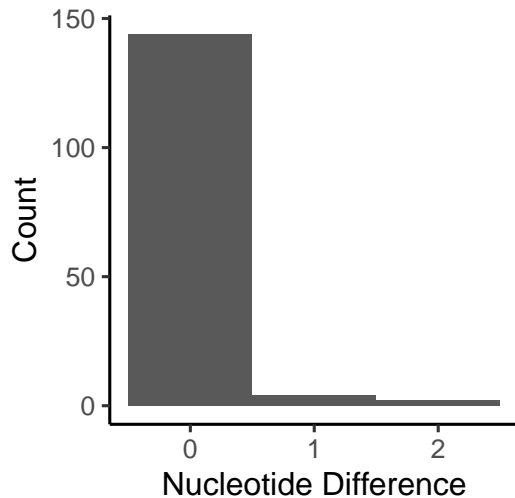
IGHV1-45*02

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



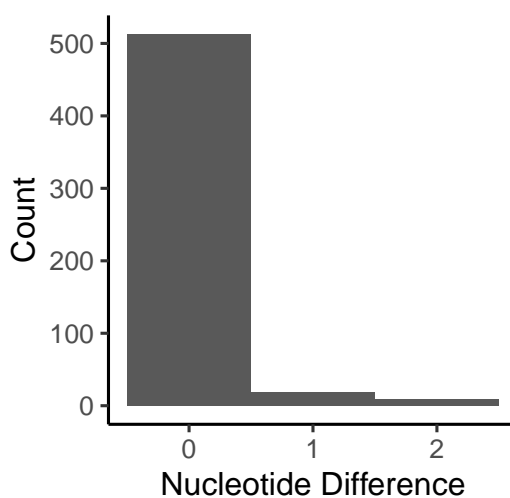
IGHV1-2*04

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



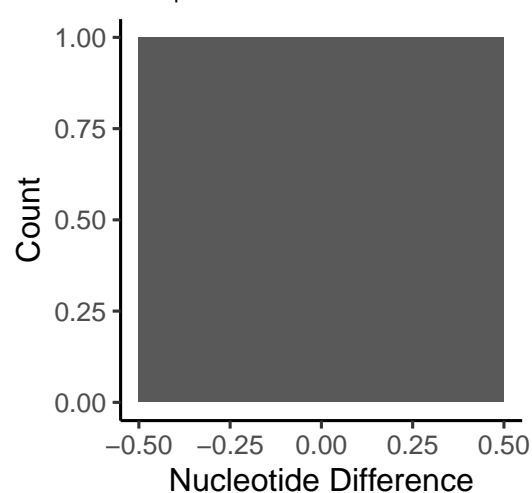
IGHV1-18*01

540 sequences assigned
513 (95%) exact matches, in which:
498 unique CDR3
6 unique J



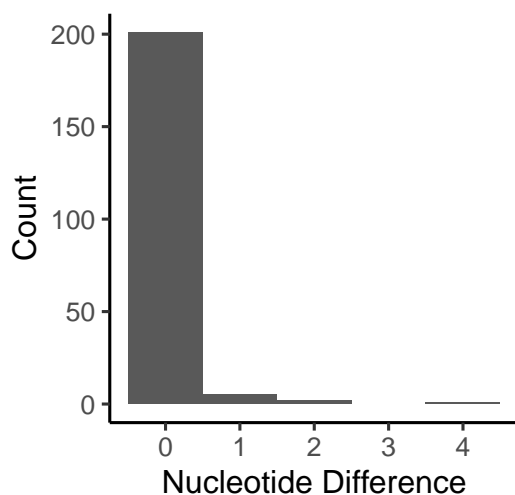
IGHV1-45*03

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



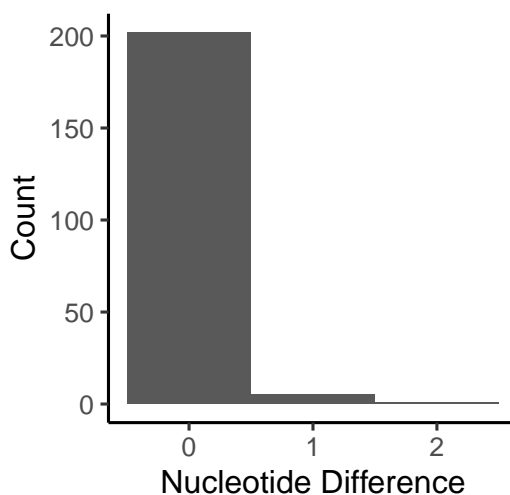
IGHV1-3*01_05

209 sequences assigned
201 (96.2%) exact matches, in which:
200 unique CDR3
6 unique J



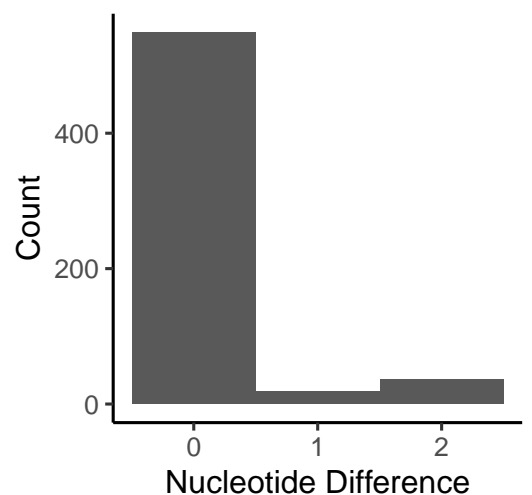
IGHV1-24*01

208 sequences assigned
202 (97.1%) exact matches, in which:
195 unique CDR3
6 unique J



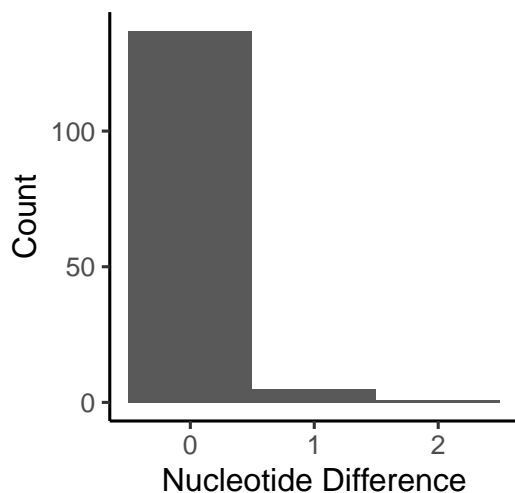
IGHV1-46*01

604 sequences assigned
549 (90.9%) exact matches, in which:
538 unique CDR3
6 unique J



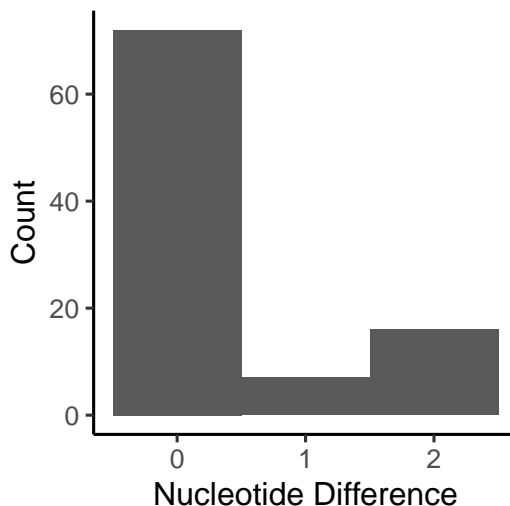
IGHV1-58*01_03

143 sequences assigned
137 (95.8%) exact matches, in which:
134 unique CDR3
6 unique J



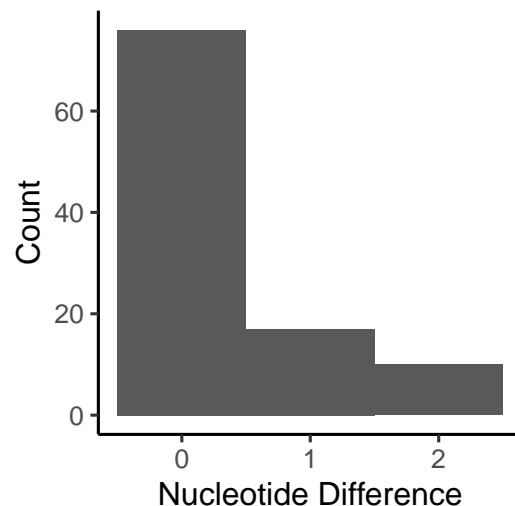
IGHV2-5*02

95 sequences assigned
72 (75.8%) exact matches, in which:
71 unique CDR3
6 unique J



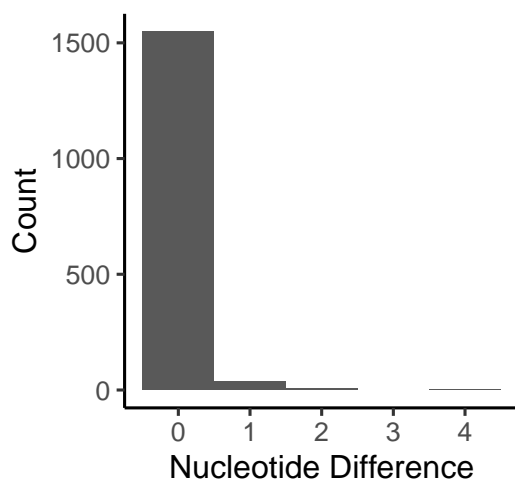
IGHV2-70*11_15

103 sequences assigned
76 (73.8%) exact matches, in which:
74 unique CDR3
5 unique J



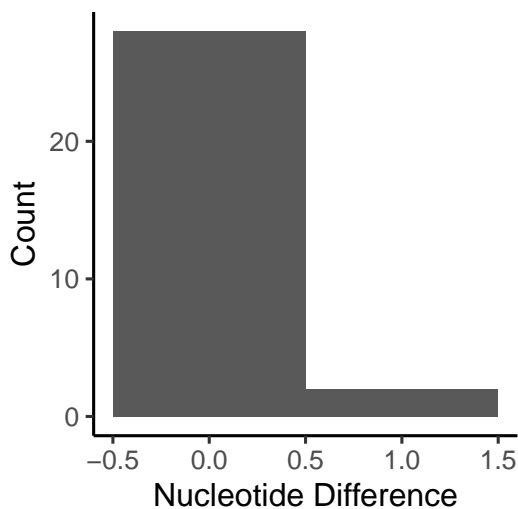
IGHV1-69*04_09

1594 sequences assigned
1548 (97.1%) exact matches, in which:
1517 unique CDR3
6 unique J



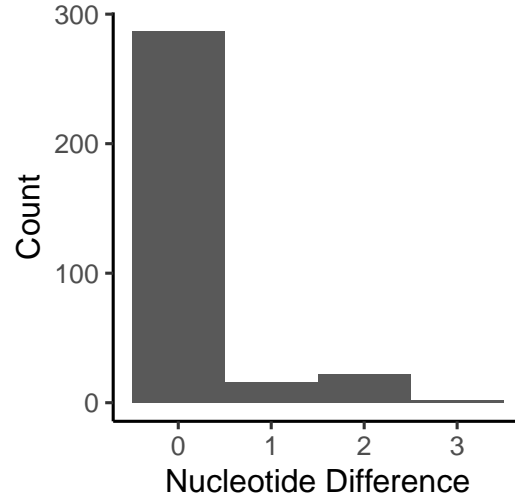
IGHV2-26*01

30 sequences assigned
28 (93.3%) exact matches, in which:
28 unique CDR3
5 unique J



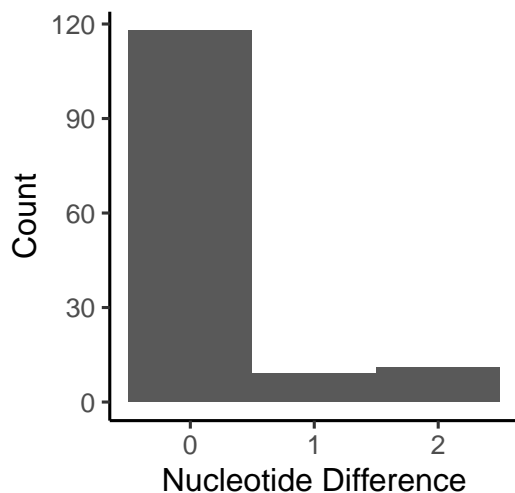
IGHV3-7*01

327 sequences assigned
287 (87.8%) exact matches, in which:
264 unique CDR3
6 unique J



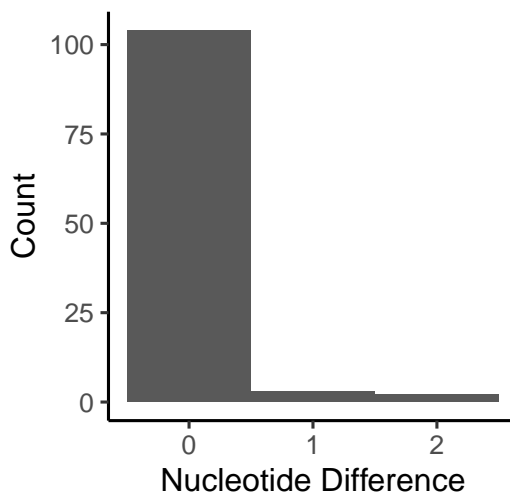
IGHV2-5*01

138 sequences assigned
118 (85.5%) exact matches, in which:
117 unique CDR3
5 unique J



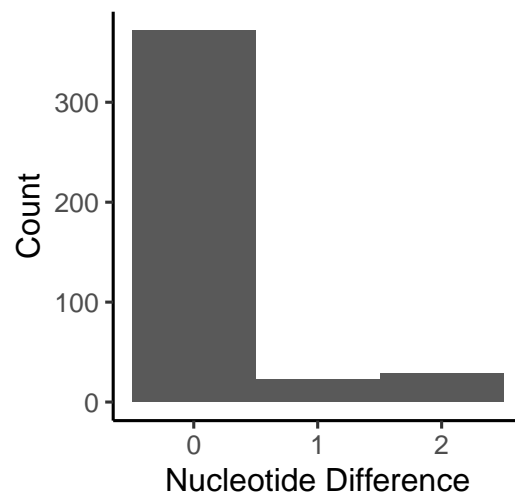
IGHV2-70*01

109 sequences assigned
104 (95.4%) exact matches, in which:
103 unique CDR3
6 unique J



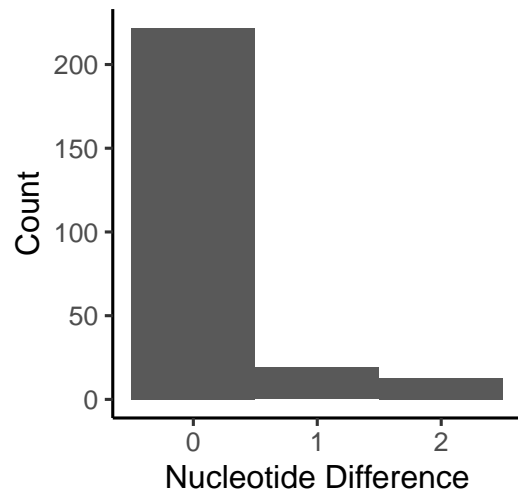
IGHV3-7*03

424 sequences assigned
372 (87.7%) exact matches, in which:
332 unique CDR3
6 unique J



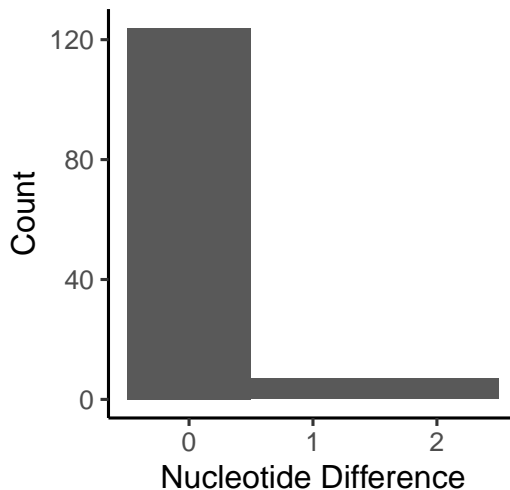
IGHV3-9*01

254 sequences assigned
222 (87.4%) exact matches, in which:
214 unique CDR3
6 unique J



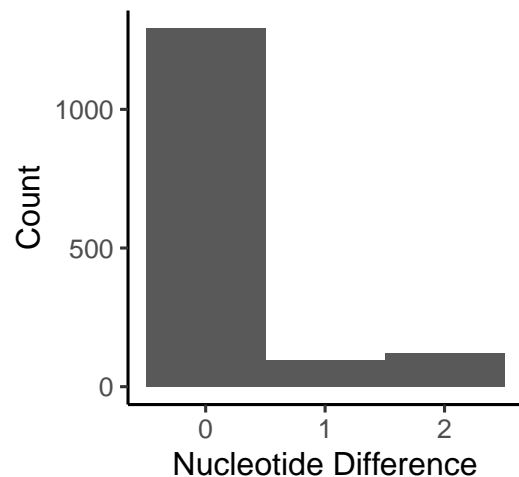
IGHV3-15*01_02

138 sequences assigned
124 (89.9%) exact matches, in which:
118 unique CDR3
6 unique J



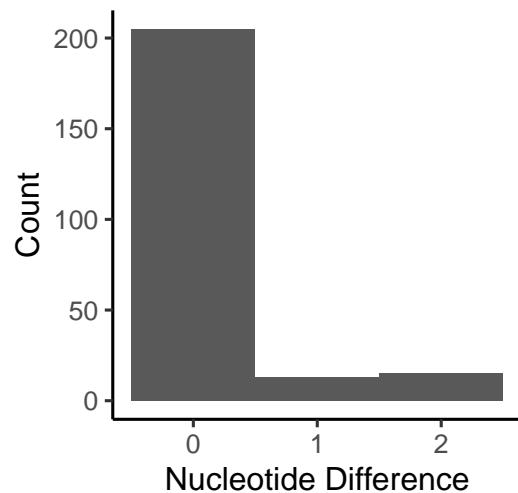
IGHV3-23*01_04

1506 sequences assigned
1292 (85.8%) exact matches, in which:
1185 unique CDR3
6 unique J



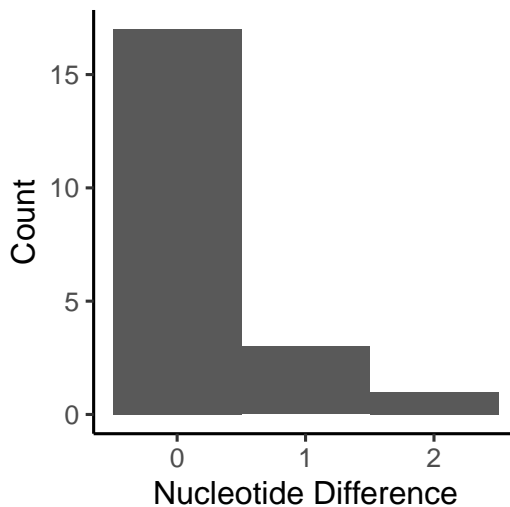
IGHV3-11*01

233 sequences assigned
205 (88%) exact matches, in which:
196 unique CDR3
5 unique J



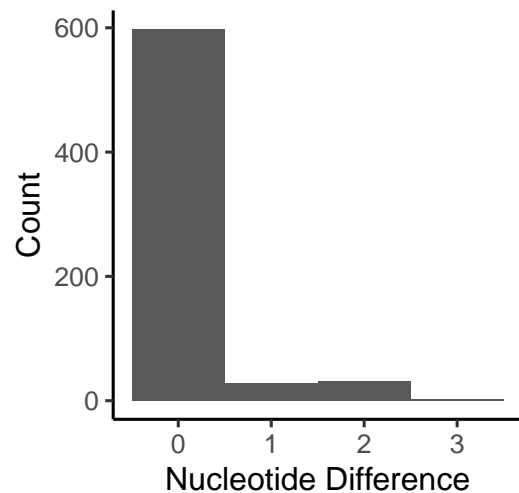
IGHV3-20*01_02

21 sequences assigned
17 (81%) exact matches, in which:
17 unique CDR3
5 unique J



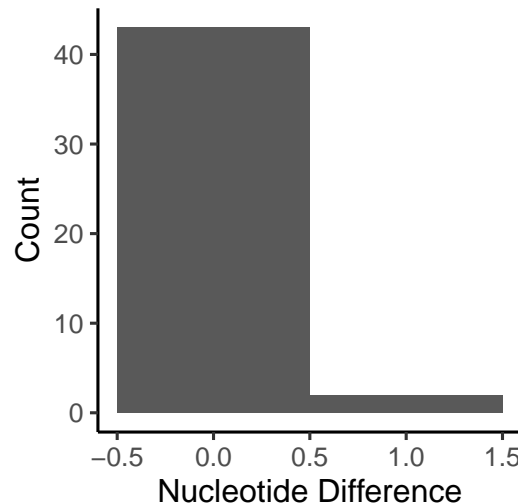
IGHV3-33*01

660 sequences assigned
598 (90.6%) exact matches, in which:
564 unique CDR3
6 unique J



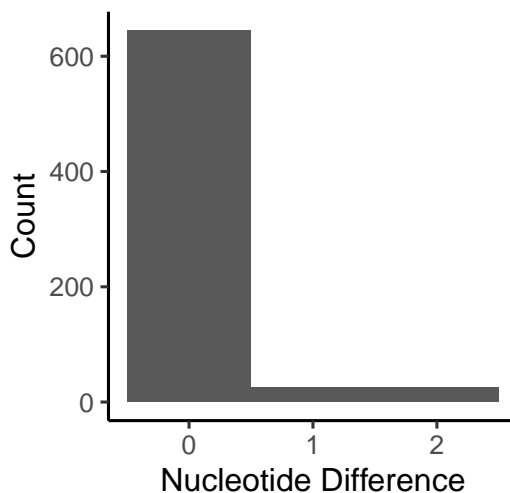
IGHV3-13*01

45 sequences assigned
43 (95.6%) exact matches, in which:
38 unique CDR3
5 unique J



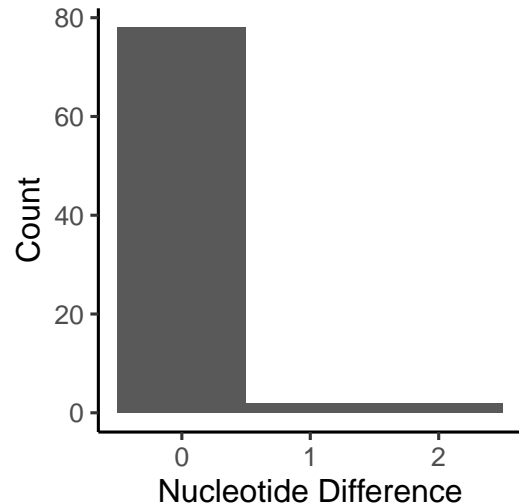
IGHV3-21*01_02

696 sequences assigned
645 (92.7%) exact matches, in which:
588 unique CDR3
6 unique J



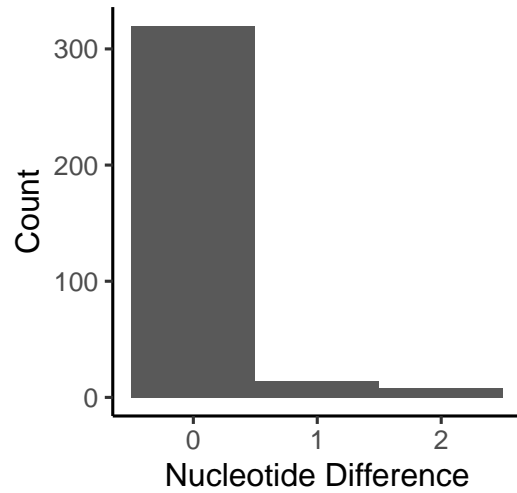
IGHV3-43*01

82 sequences assigned
78 (95.1%) exact matches, in which:
72 unique CDR3
6 unique J



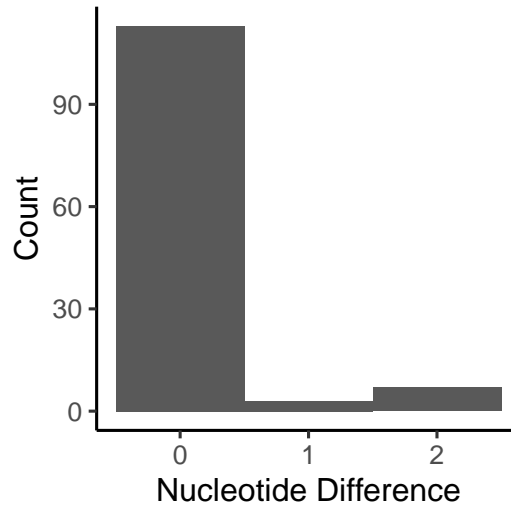
IGHV3-43*02

342 sequences assigned
320 (93.6%) exact matches, in which:
304 unique CDR3
6 unique J



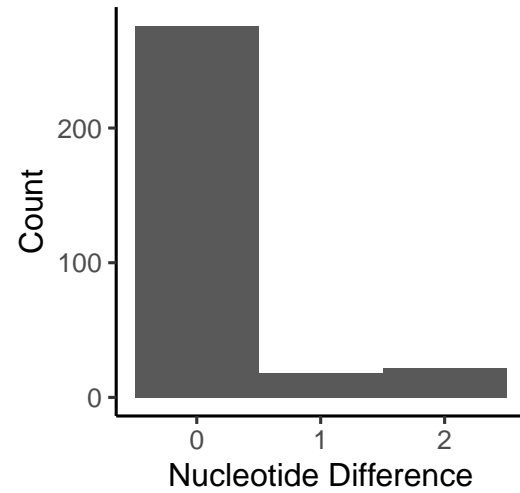
IGHV3-49*04

123 sequences assigned
113 (91.9%) exact matches, in which:
109 unique CDR3
6 unique J



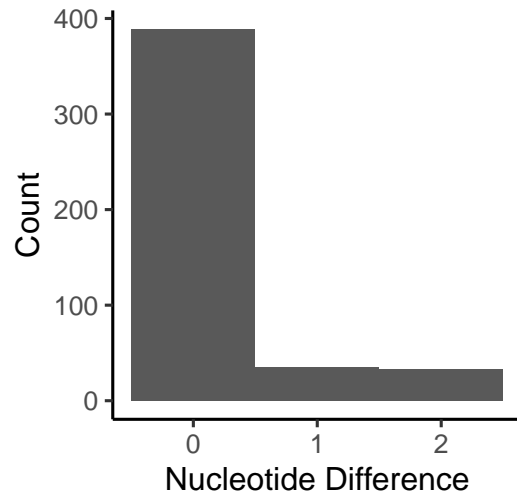
IGHV3-53*01_02

316 sequences assigned
276 (87.3%) exact matches, in which:
255 unique CDR3
6 unique J



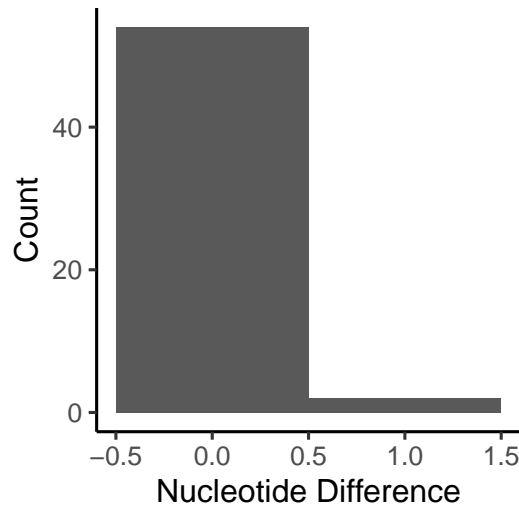
IGHV3-48*02

457 sequences assigned
389 (85.1%) exact matches, in which:
350 unique CDR3
6 unique J



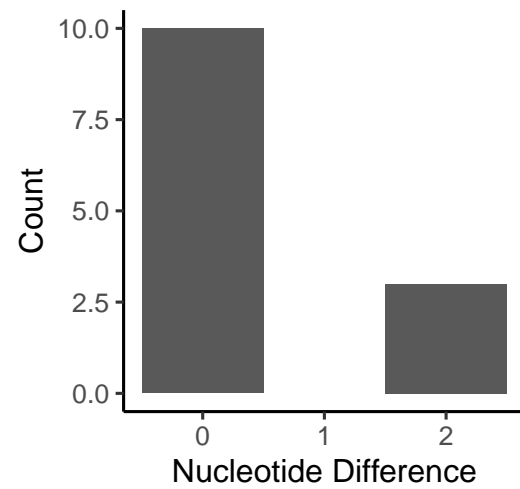
IGHV3-49*03_05

56 sequences assigned
54 (96.4%) exact matches, in which:
52 unique CDR3
5 unique J



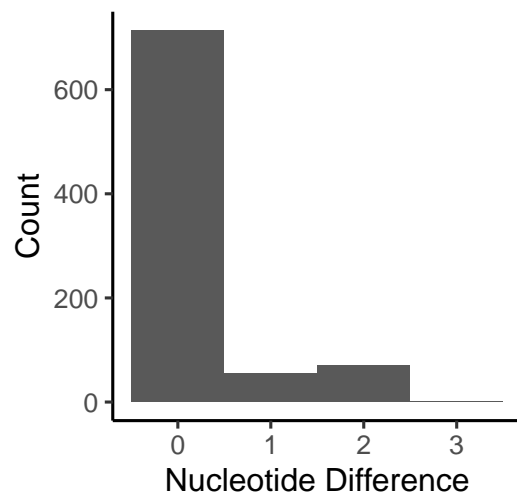
IGHV3-64*02_07

13 sequences assigned
10 (76.9%) exact matches, in which:
9 unique CDR3
4 unique J



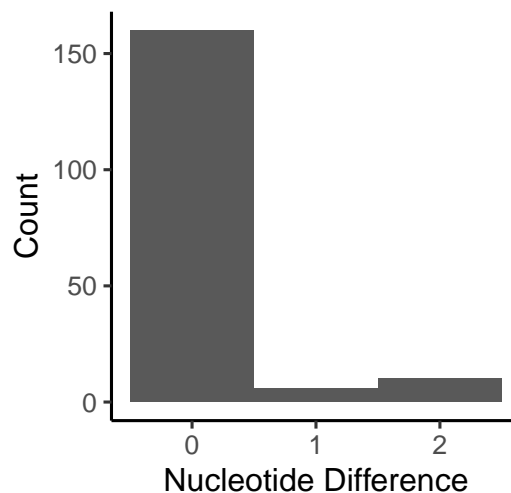
IGHV3-48*03

839 sequences assigned
714 (85.1%) exact matches, in which:
672 unique CDR3
6 unique J



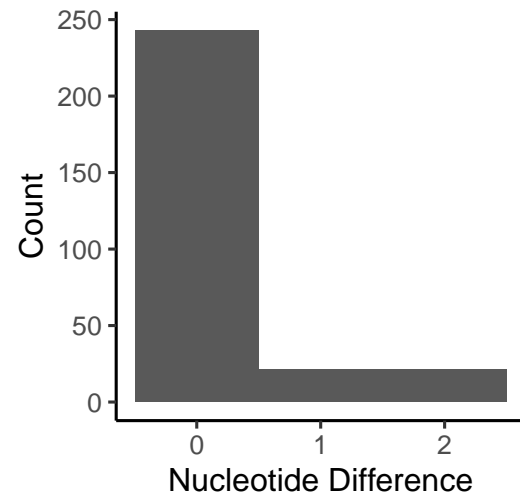
IGHV3-53*04

176 sequences assigned
160 (90.9%) exact matches, in which:
152 unique CDR3
6 unique J



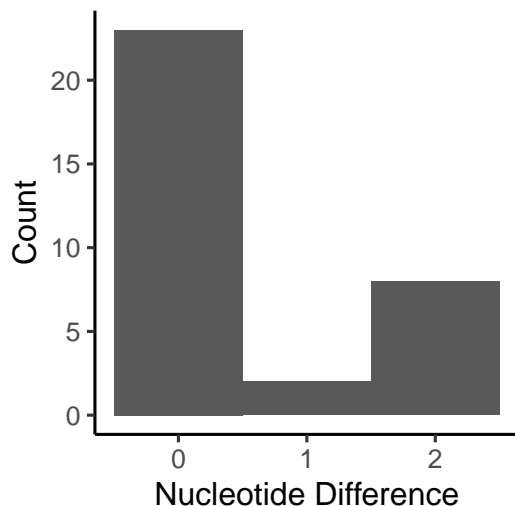
IGHV3-66*01

285 sequences assigned
243 (85.3%) exact matches, in which:
225 unique CDR3
6 unique J



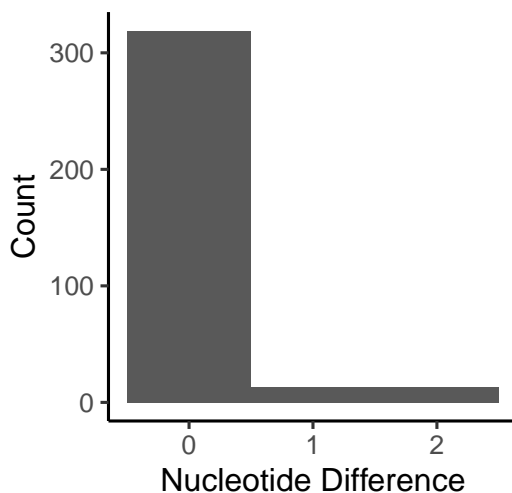
IGHV3-72*01

33 sequences assigned
23 (69.7%) exact matches, in which:
22 unique CDR3
4 unique J



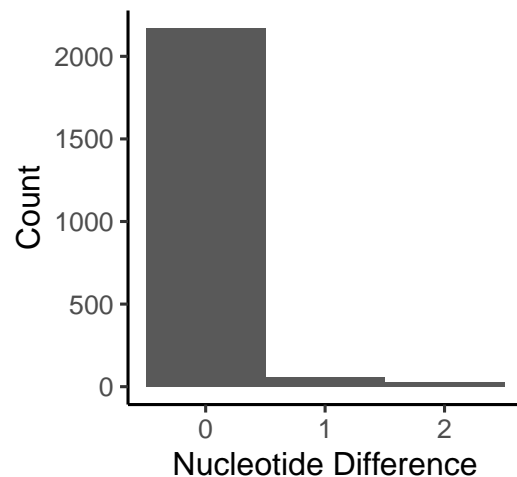
IGHV4-4*07

345 sequences assigned
319 (92.5%) exact matches, in which:
292 unique CDR3
5 unique J



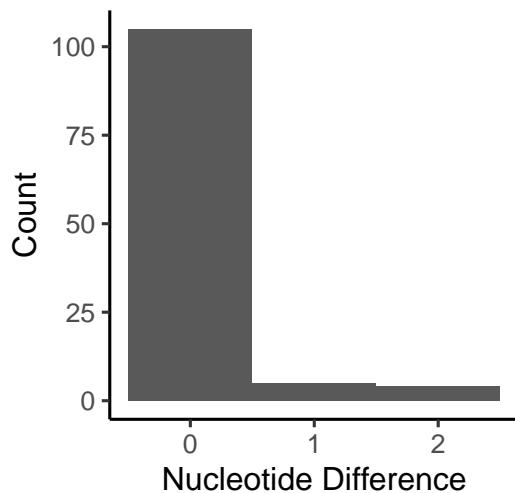
IGHV4-34*01_02

2255 sequences assigned
2169 (96.2%) exact matches, in which:
1982 unique CDR3
6 unique J



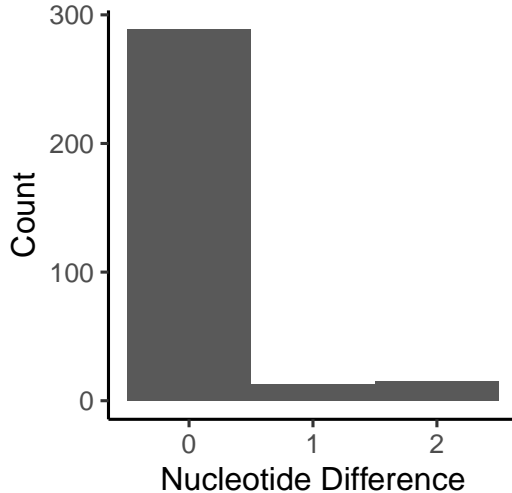
IGHV3-73*01_02

114 sequences assigned
105 (92.1%) exact matches, in which:
100 unique CDR3
6 unique J



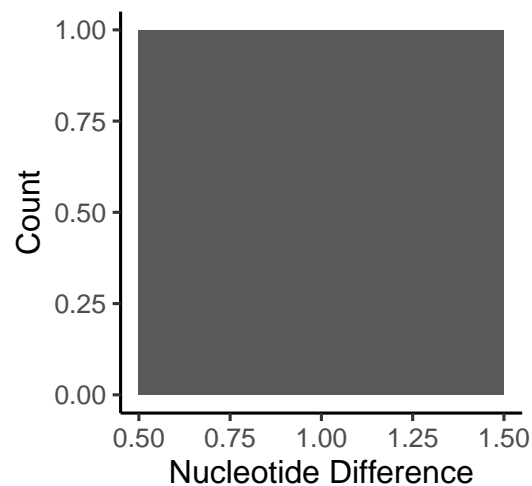
IGHV4-4*02_03

317 sequences assigned
289 (91.2%) exact matches, in which:
274 unique CDR3
6 unique J



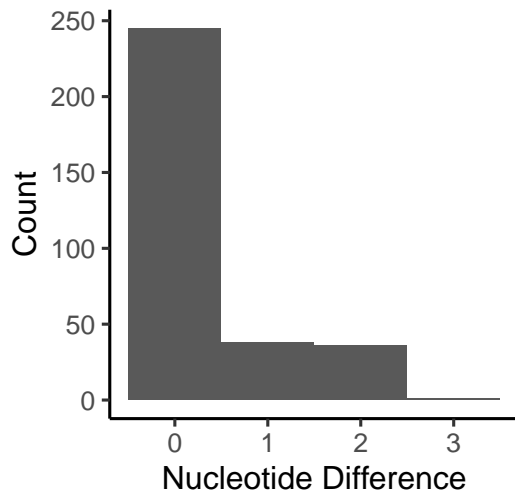
IGHV4-39*02

1 sequences assigned
No exact matches.



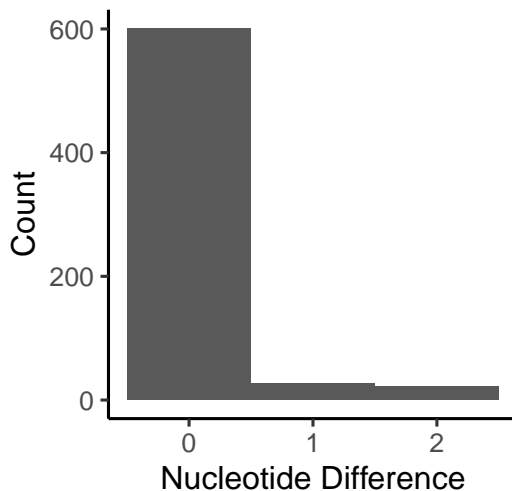
IGHV3-74*01_02

320 sequences assigned
245 (76.6%) exact matches, in which:
230 unique CDR3
6 unique J



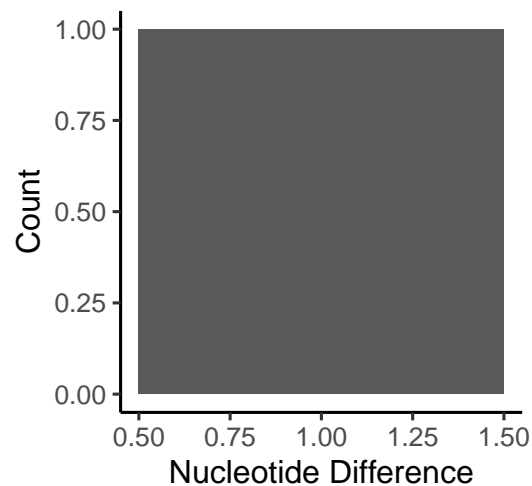
IGHV4-31*02

649 sequences assigned
601 (92.6%) exact matches, in which:
578 unique CDR3
6 unique J



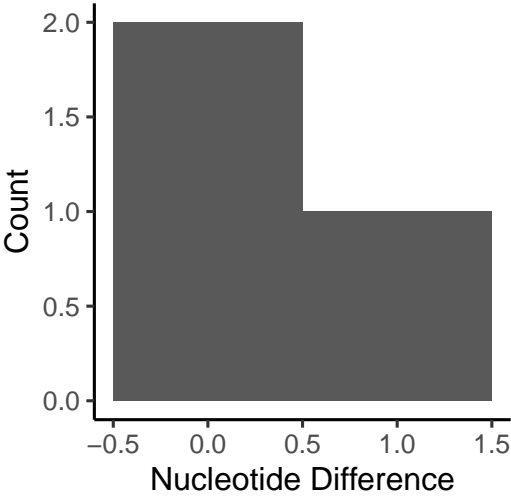
IGHV4-59*03

1 sequences assigned
No exact matches.



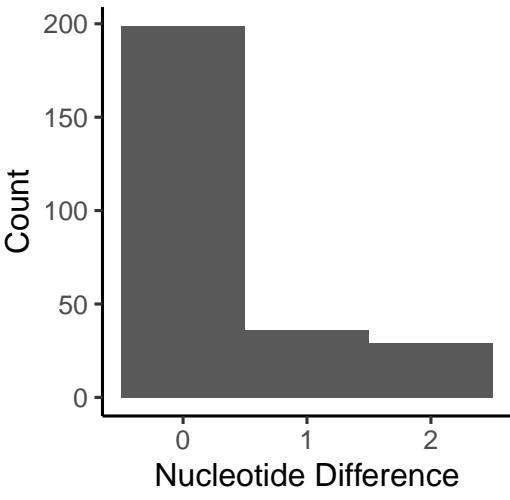
IGHV4-59*08

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



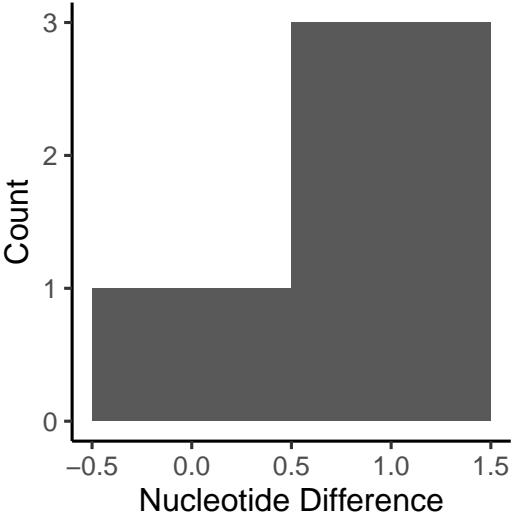
IGHV6-1*01_02

264 sequences assigned
199 (75.4%) exact matches, in which:
193 unique CDR3
6 unique J



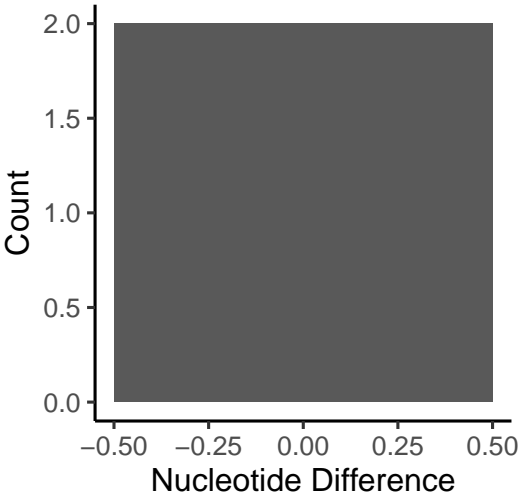
IGHV4-59*11

4 sequences assigned
1 (25%) exact matches, in which:
1 unique CDR3
0 unique J



IGHV7-4-1*01

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



IGHV4-61*01

514 sequences assigned
476 (92.6%) exact matches, in which:
446 unique CDR3
6 unique J

