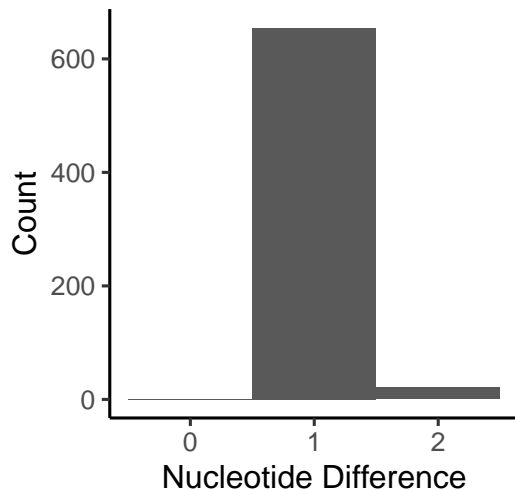


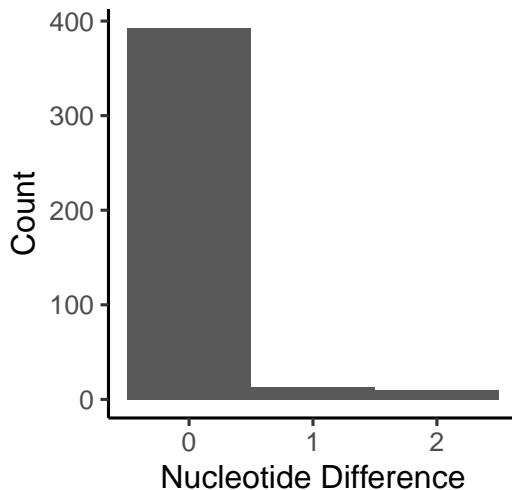
IGHV1-2*02

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



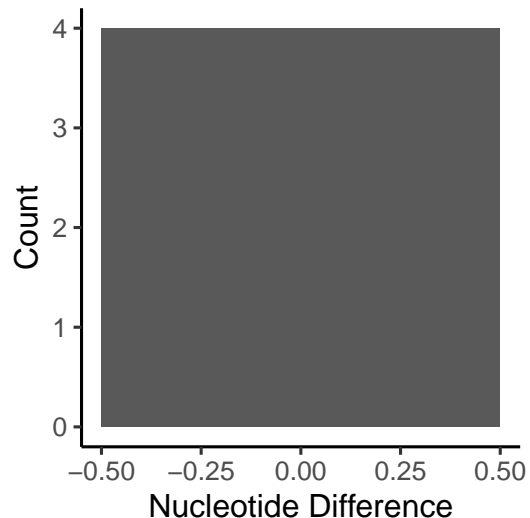
IGHV1-8*01

416 sequences assigned
393 (94.5%) exact matches, in which:
389 unique CDR3
5 unique J



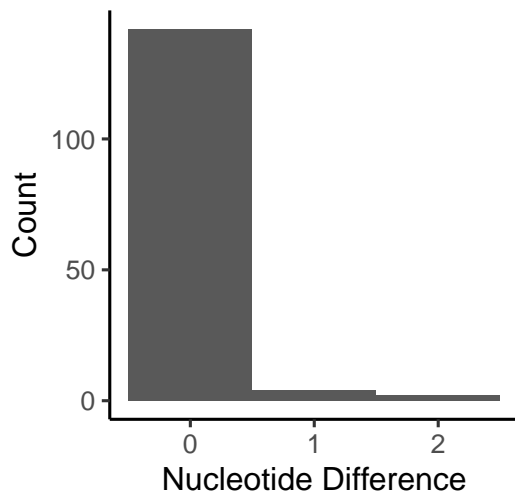
IGHV1-45*02

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



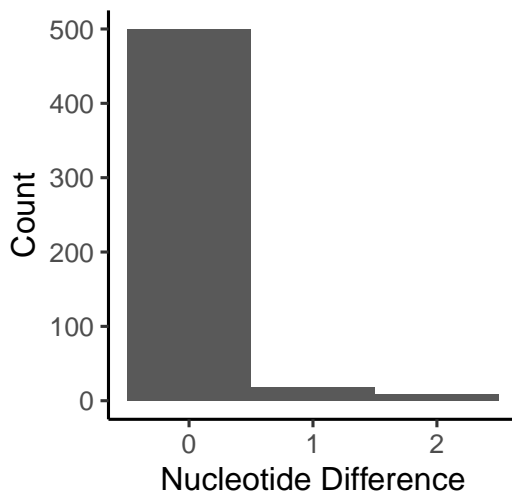
IGHV1-2*04

148 sequences assigned
142 (95.9%) exact matches, in which:
140 unique CDR3
4 unique J



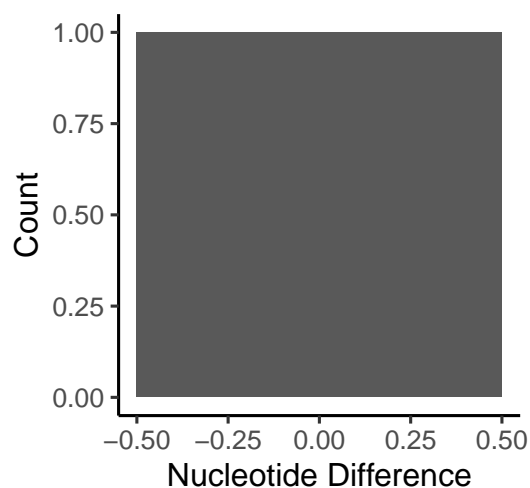
IGHV1-18*01

527 sequences assigned
500 (94.9%) exact matches, in which:
496 unique CDR3
6 unique J



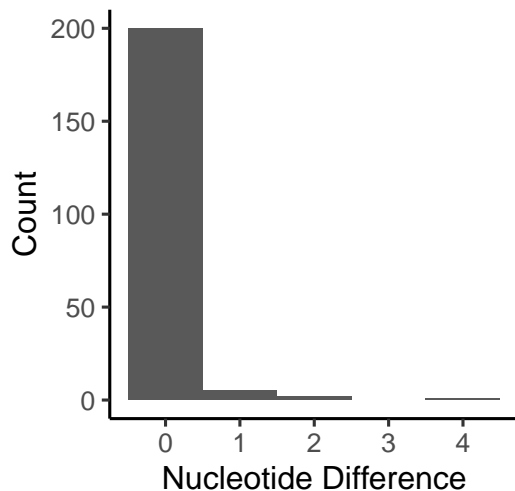
IGHV1-45*03

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



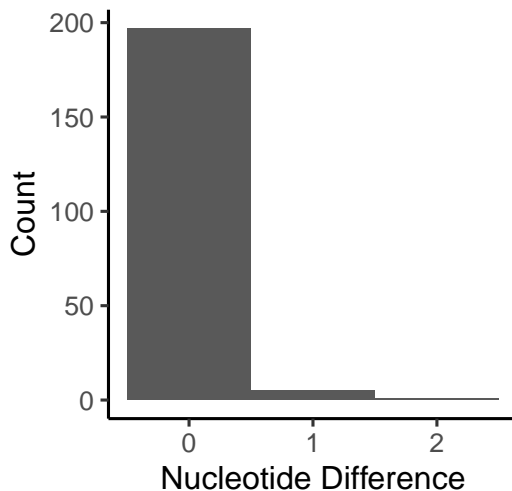
IGHV1-3*01_05

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



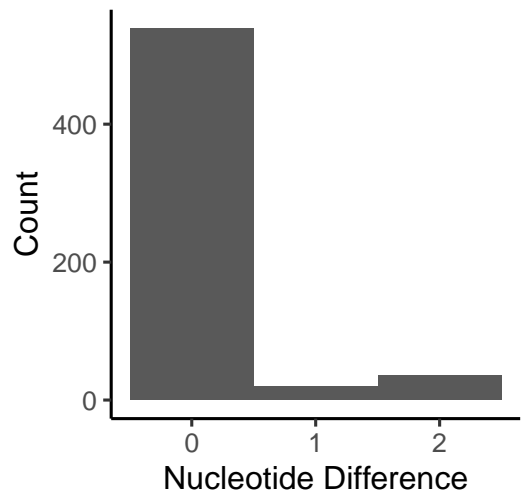
IGHV1-24*01

203 sequences assigned
197 (97%) exact matches, in which:
194 unique CDR3
6 unique J



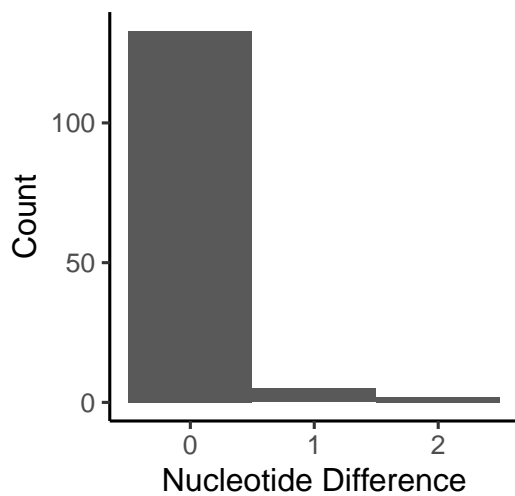
IGHV1-46*01

594 sequences assigned
539 (90.7%) exact matches, in which:
536 unique CDR3
6 unique J



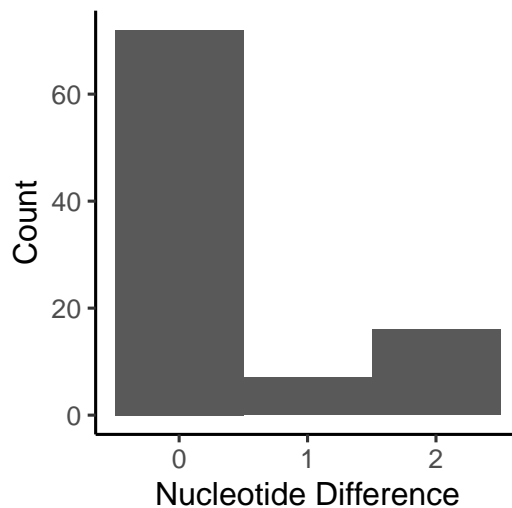
IGHV1-58*01_03

140 sequences assigned
133 (95%) exact matches, in which:
132 unique CDR3
6 unique J



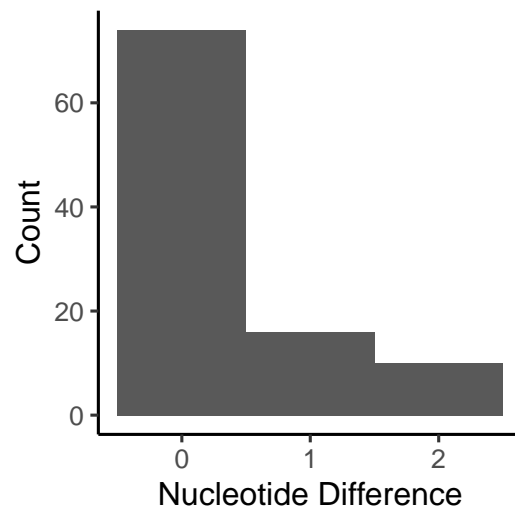
IGHV2-5*02

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



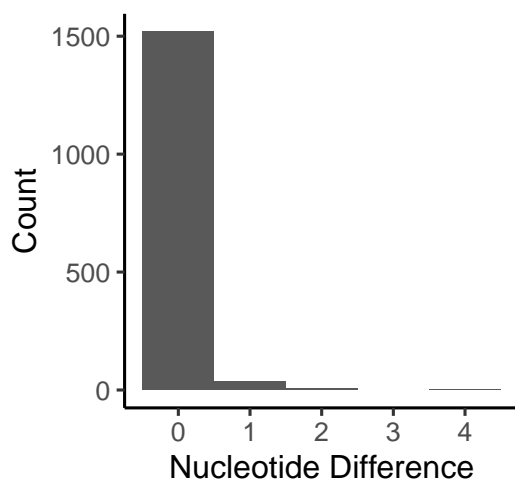
IGHV2-70*11_15

100 sequences assigned
74 (74%) exact matches, in which:
73 unique CDR3
5 unique J



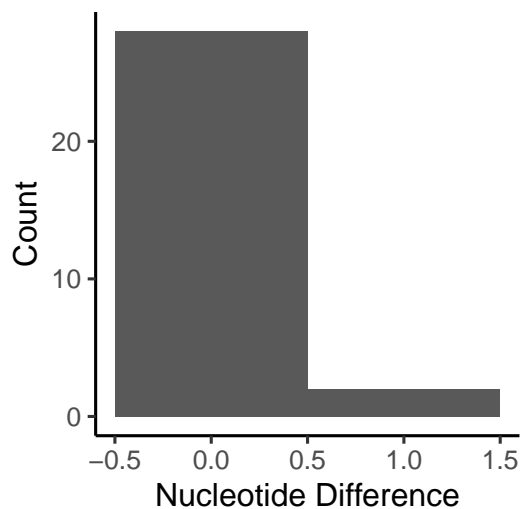
IGHV1-69*04_09

1565 sequences assigned
1519 (97.1%) exact matches, in which:
1512 unique CDR3
6 unique J



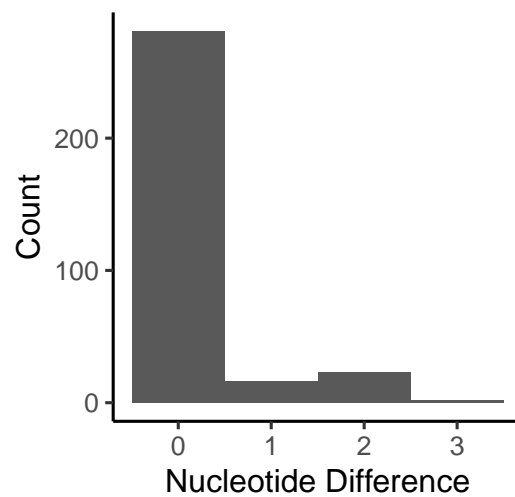
IGHV2-26*01

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



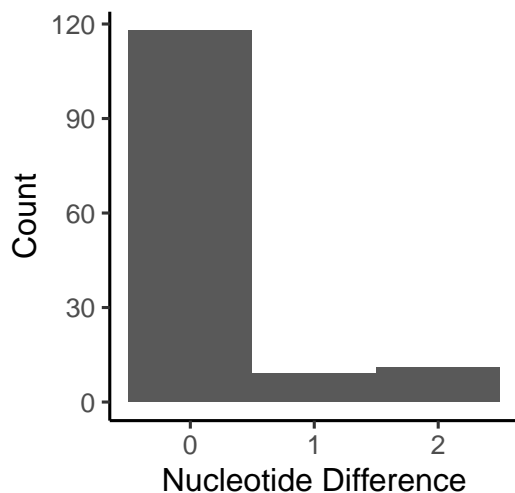
IGHV3-7*01

322 sequences assigned
281 (87.3%) exact matches, in which:
261 unique CDR3
6 unique J



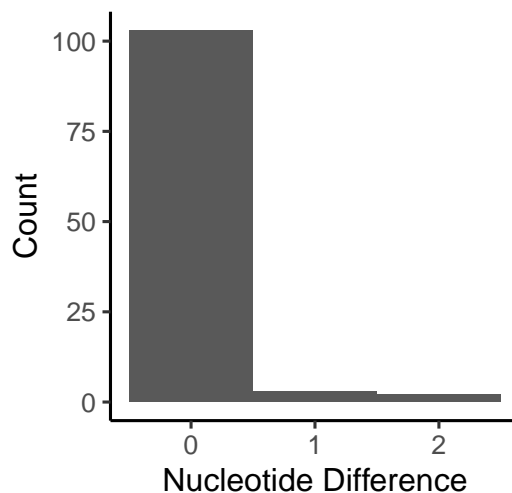
IGHV2-5*01

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



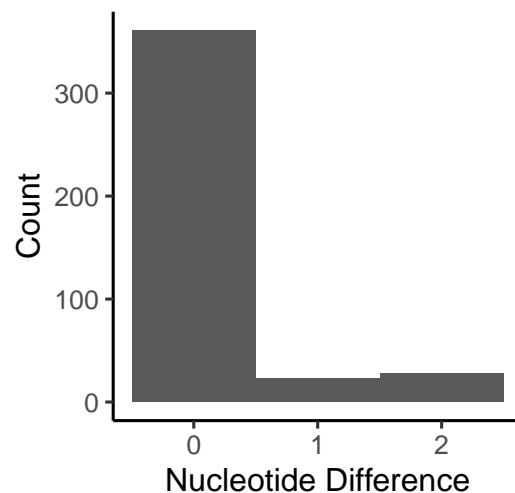
IGHV2-70*01

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



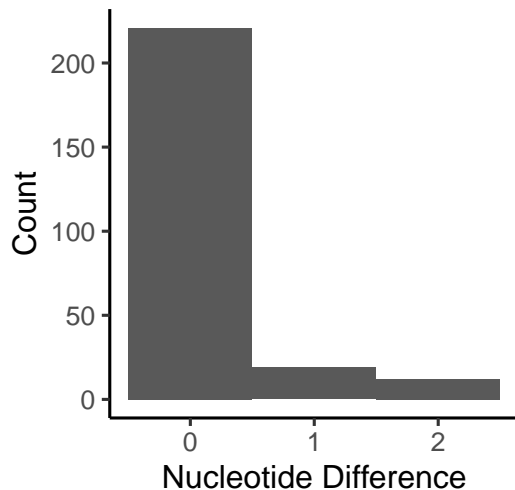
IGHV3-7*03

412 sequences assigned
361 (87.6%) exact matches, in which:
330 unique CDR3
6 unique J



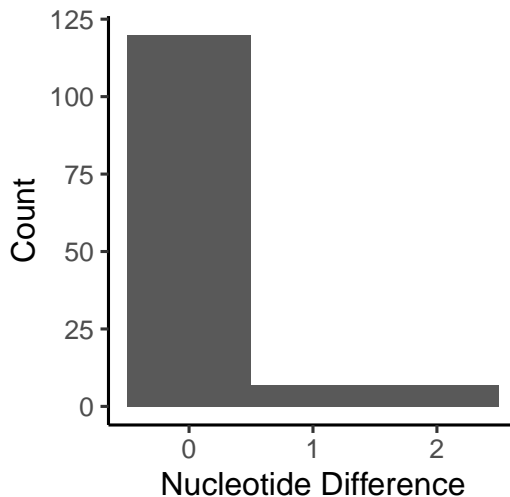
IGHV3-9*01

252 sequences assigned
221 (87.7%) exact matches, in which:
214 unique CDR3
6 unique J



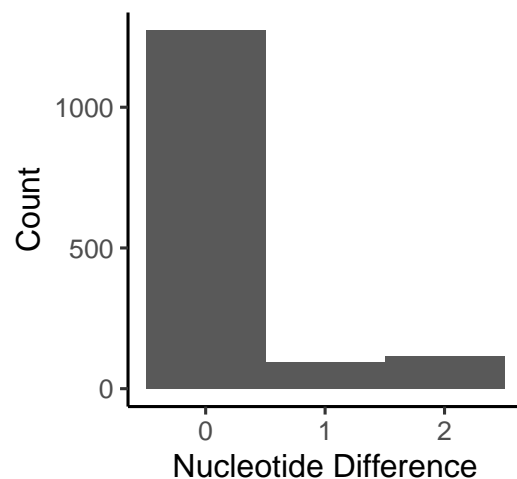
IGHV3-15*01_02

134 sequences assigned
120 (89.6%) exact matches, in which:
116 unique CDR3
6 unique J



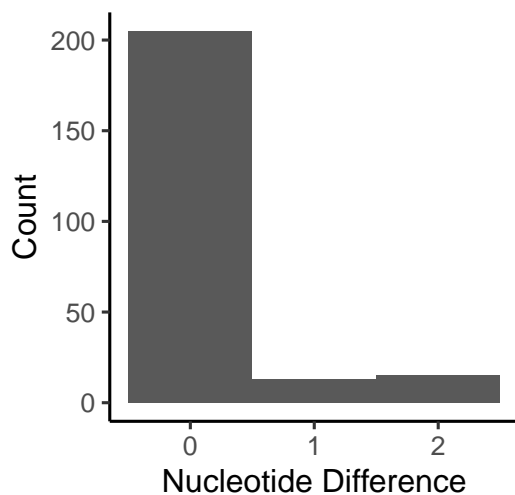
IGHV3-23*01_04

1485 sequences assigned
1273 (85.7%) exact matches, in which:
1185 unique CDR3
6 unique J



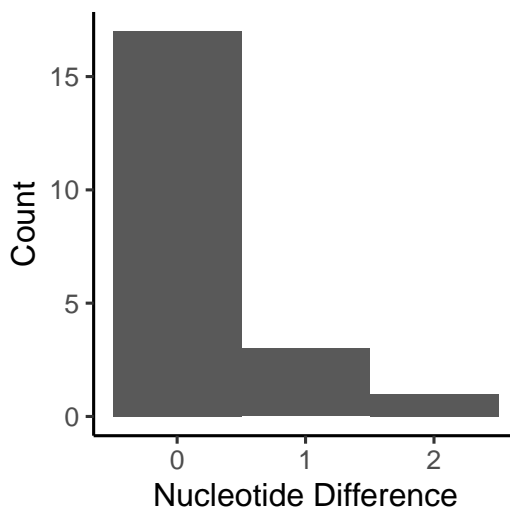
IGHV3-11*01

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



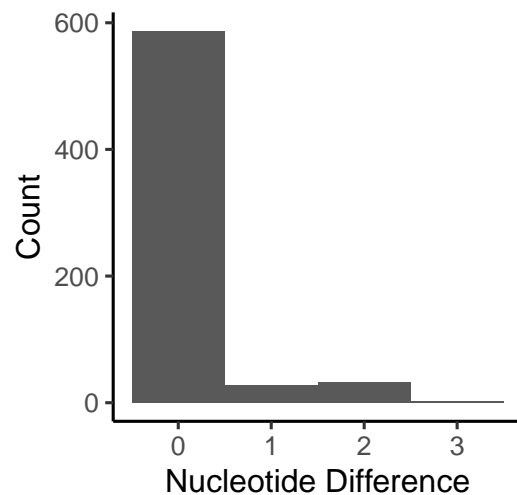
IGHV3-20*01_02

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



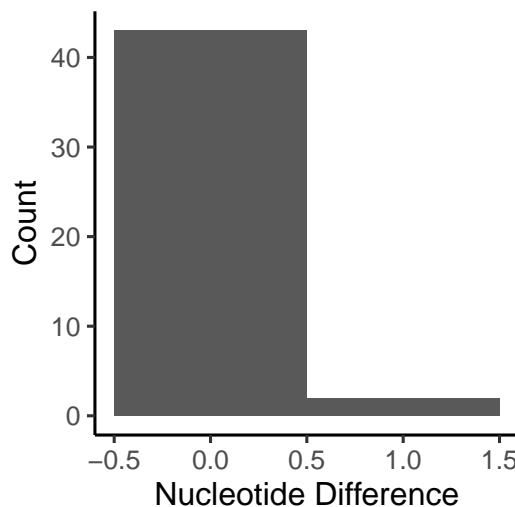
IGHV3-33*01

649 sequences assigned
587 (90.4%) exact matches, in which:
562 unique CDR3
6 unique J



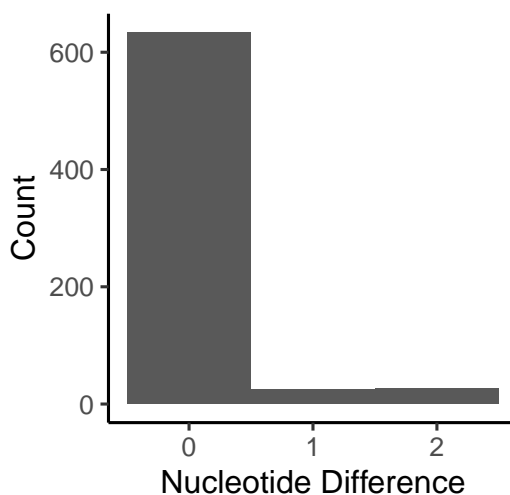
IGHV3-13*01

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



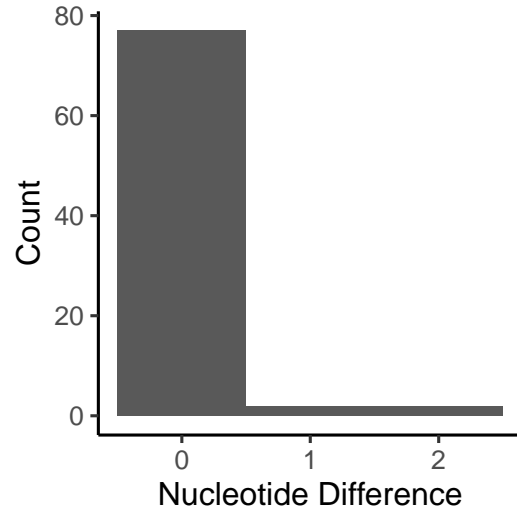
IGHV3-21*01_02

686 sequences assigned
634 (92.4%) exact matches, in which:
586 unique CDR3
6 unique J



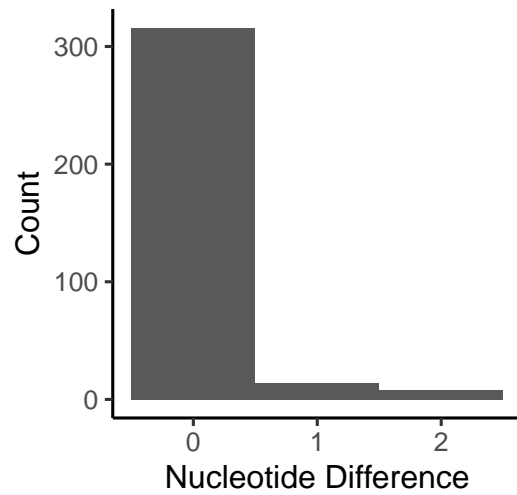
IGHV3-43*01

81 sequences assigned
77 (95.1%) exact matches, in which:
71 unique CDR3
6 unique J



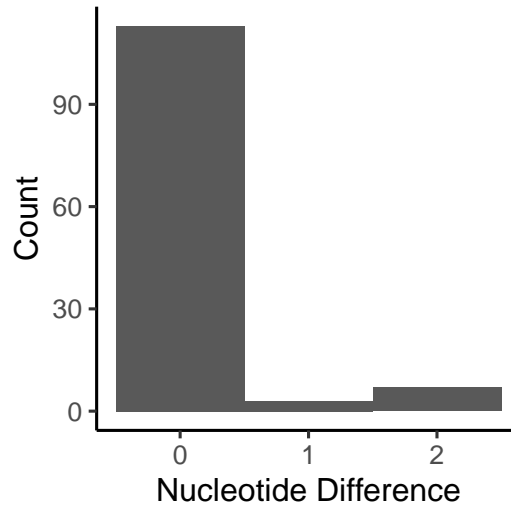
IGHV3-43*02

338 sequences assigned
316 (93.5%) exact matches, in which:
303 unique CDR3
6 unique J



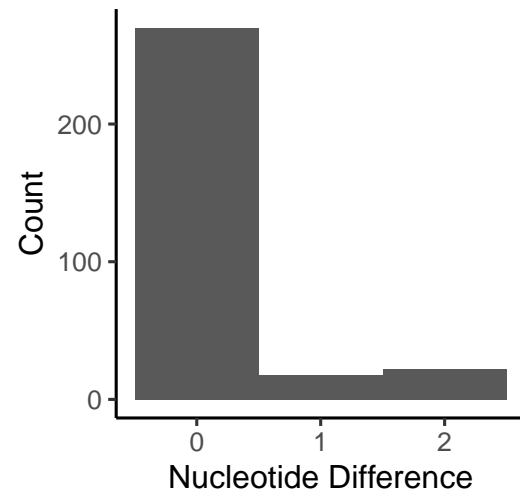
IGHV3-49*04

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



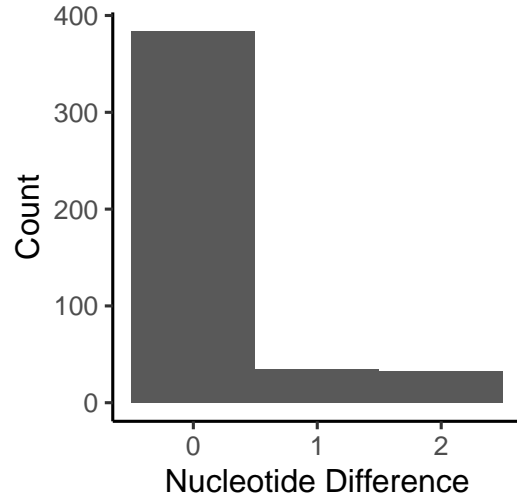
IGHV3-53*01_02

310 sequences assigned
270 (87.1%) exact matches, in which:
254 unique CDR3
6 unique J



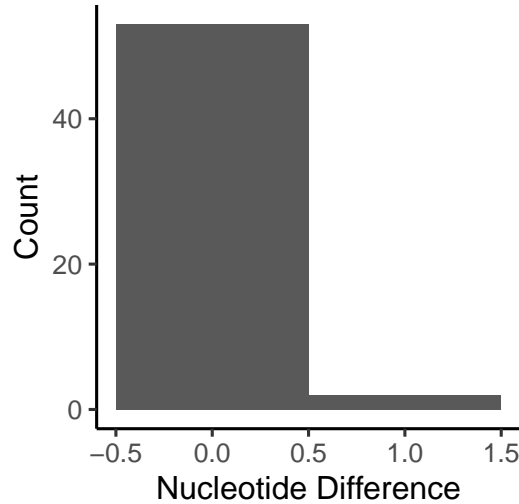
IGHV3-48*02

452 sequences assigned
384 (85%) exact matches, in which:
349 unique CDR3
6 unique J



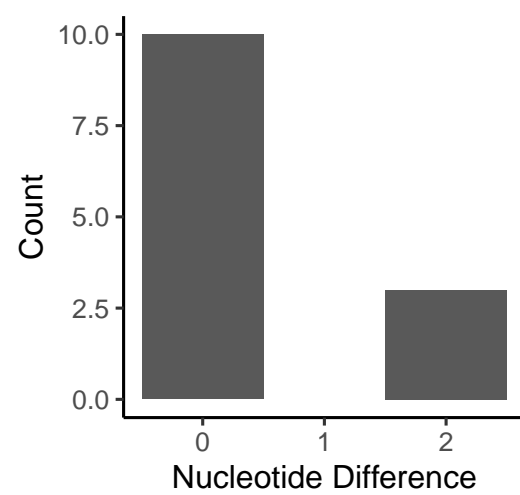
IGHV3-49*03_05

55 sequences assigned
53 (96.4%) exact matches, in which:
52 unique CDR3
5 unique J



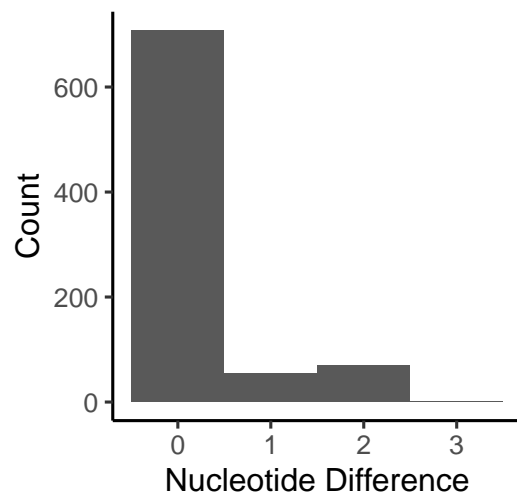
IGHV3-64*02_07

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



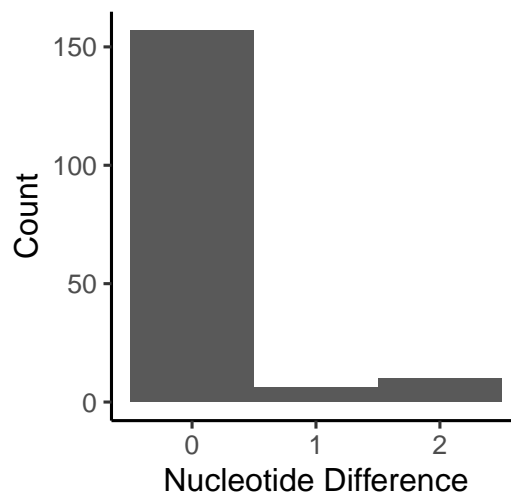
IGHV3-48*03

832 sequences assigned
708 (85.1%) exact matches, in which:
671 unique CDR3
6 unique J



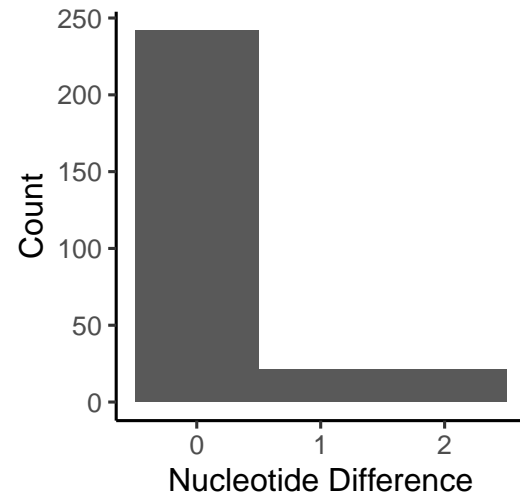
IGHV3-53*04

173 sequences assigned
157 (90.8%) exact matches, in which:
152 unique CDR3
6 unique J



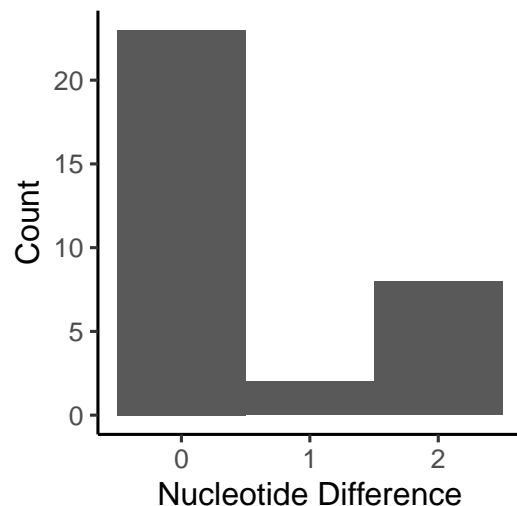
IGHV3-66*01

284 sequences assigned
242 (85.2%) exact matches, in which:
225 unique CDR3
6 unique J



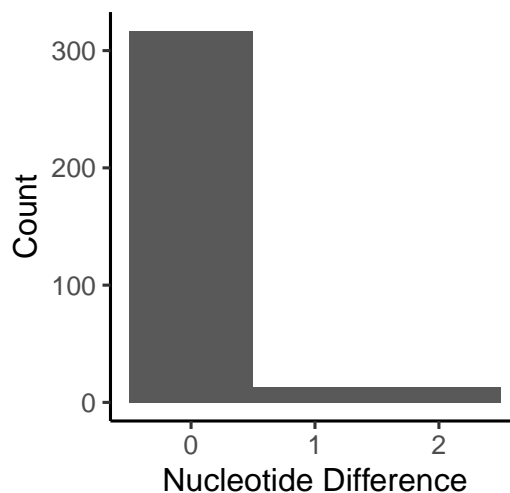
IGHV3-72*01

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



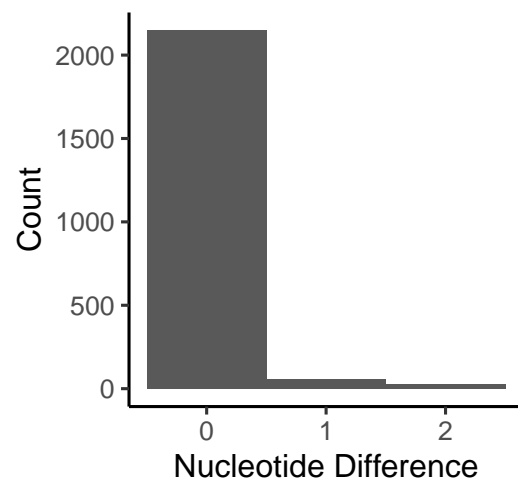
IGHV4-4*07

343 sequences assigned
317 (92.4%) exact matches, in which:
292 unique CDR3
5 unique J



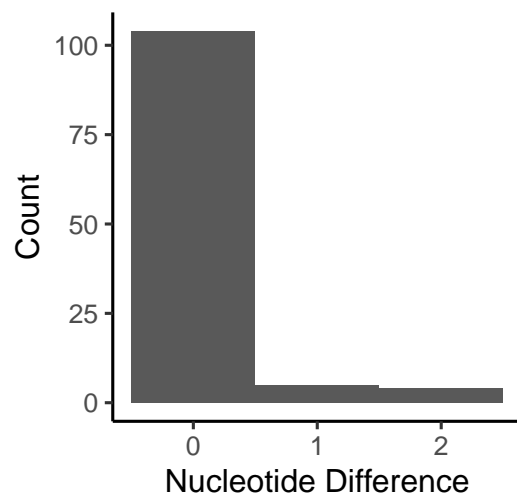
IGHV4-34*01_02

2233 sequences assigned
2148 (96.2%) exact matches, in which:
1982 unique CDR3
6 unique J



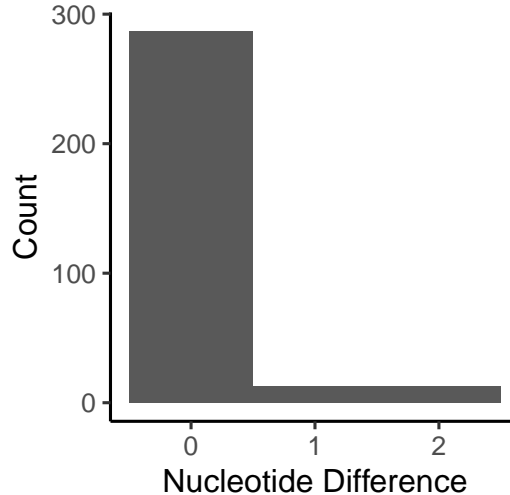
IGHV3-73*01_02

113 sequences assigned
104 (92%) exact matches, in which:
100 unique CDR3
6 unique J



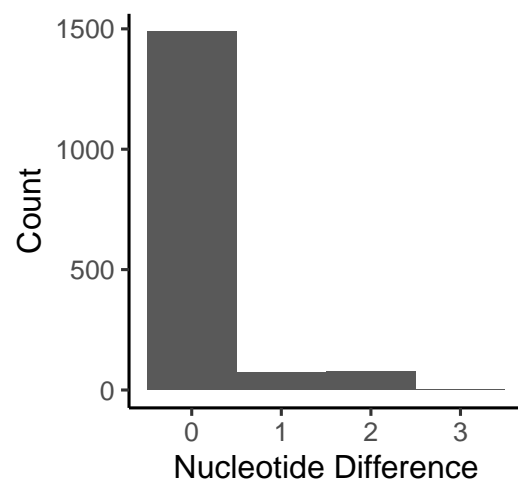
IGHV4-4*02_03

313 sequences assigned
287 (91.7%) exact matches, in which:
274 unique CDR3
6 unique J



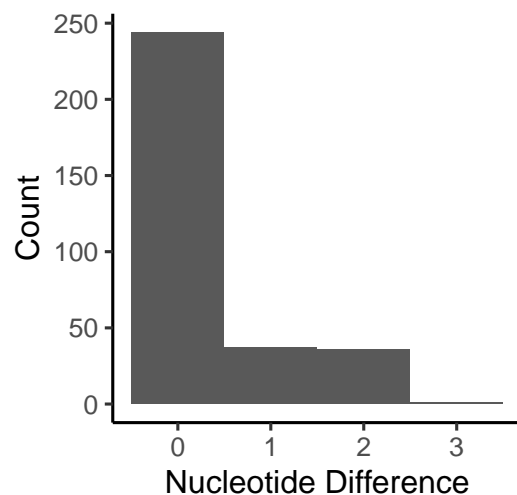
IGHV4-39*02_C258G

1636 sequences assigned
1488 (91%) exact matches, in which:
1400 unique CDR3
6 unique J



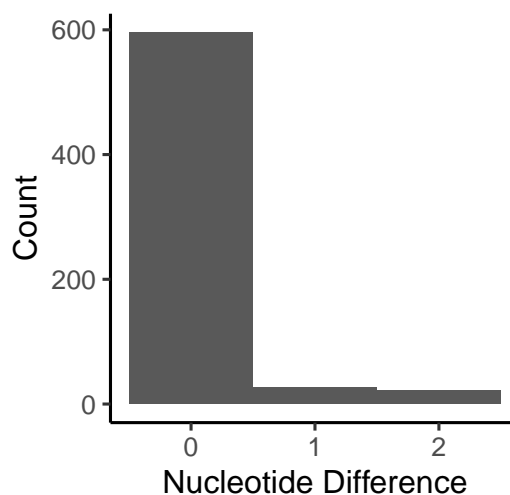
IGHV3-74*01_02

318 sequences assigned
244 (76.7%) exact matches, in which:
230 unique CDR3
6 unique J



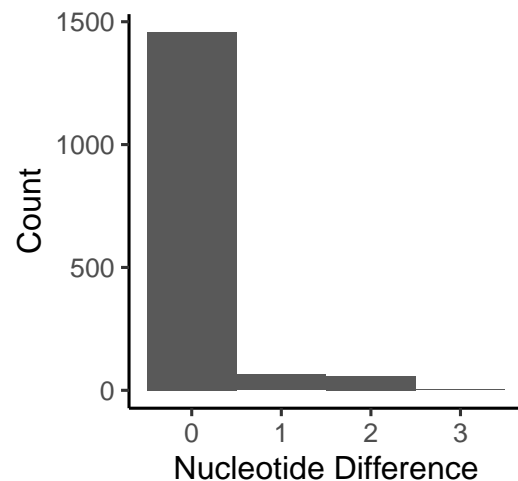
IGHV4-31*02

643 sequences assigned
596 (92.7%) exact matches, in which:
579 unique CDR3
6 unique J



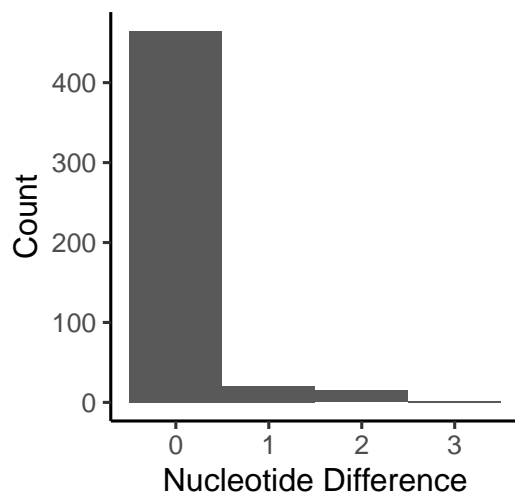
IGHV4-59*02_G88A

1584 sequences assigned
1458 (92%) exact matches, in which:
1354 unique CDR3
6 unique J



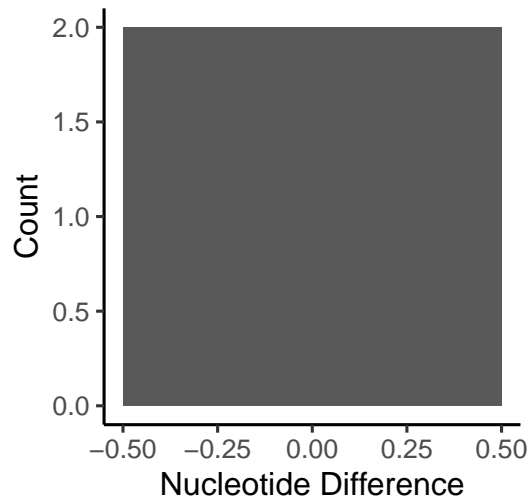
IGHV4-61*01

503 sequences assigned
465 (92.4%) exact matches, in which:
443 unique CDR3
6 unique J



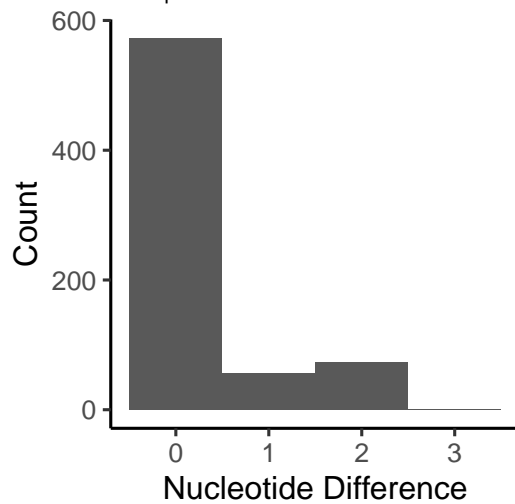
IGHV7-4-1*01

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



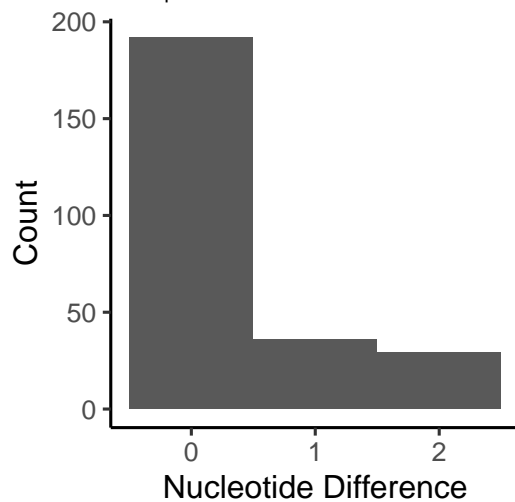
IGHV5-51*07_A128G

704 sequences assigned
573 (81.4%) exact matches, in which:
571 unique CDR3
6 unique J



IGHV6-1*01_02

257 sequences assigned
192 (74.7%) exact matches, in which:
192 unique CDR3
6 unique J





Warning – no inferred sequences found.