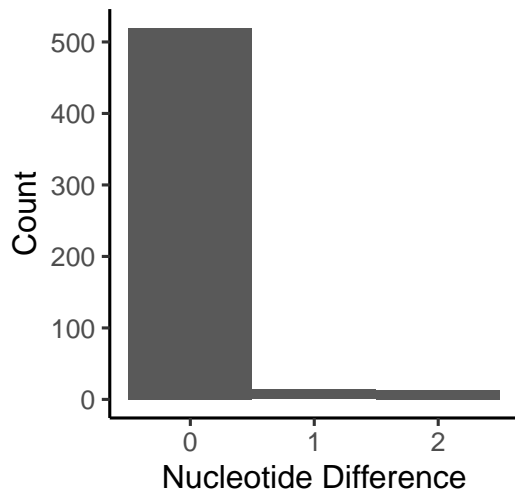


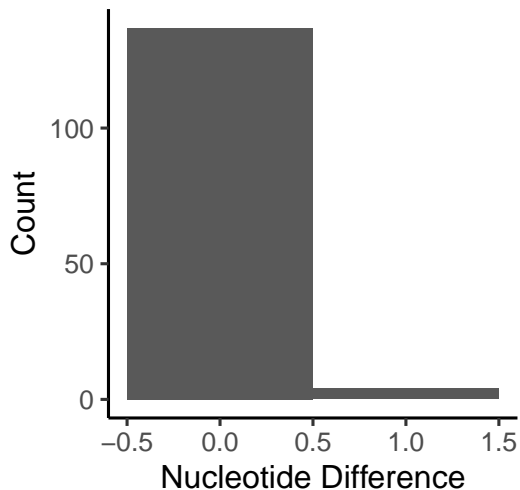
IGHV1-2*02

547 sequences assigned
520 (95.1%) exact matches, in which:
515 unique CDR3
6 unique J



IGHV1-24*01

141 sequences assigned
137 (97.2%) exact matches, in which:
136 unique CDR3
6 unique J



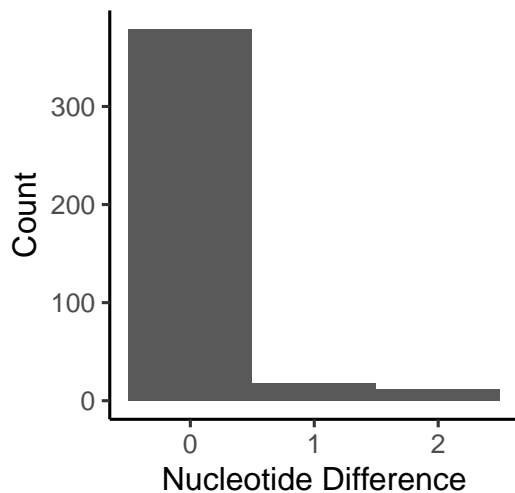
IGHV1-69-2*01

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



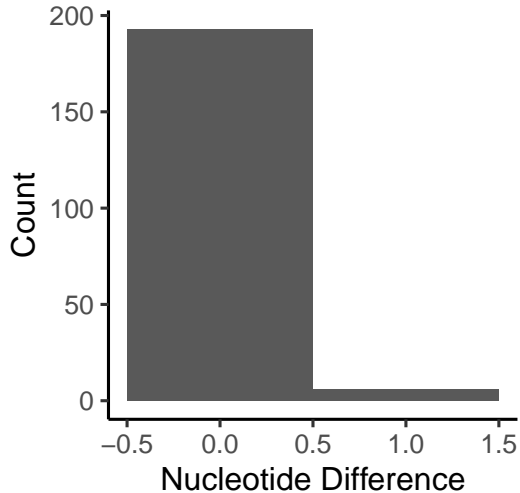
IGHV1-8*01

409 sequences assigned
379 (92.7%) exact matches, in which:
377 unique CDR3
6 unique J



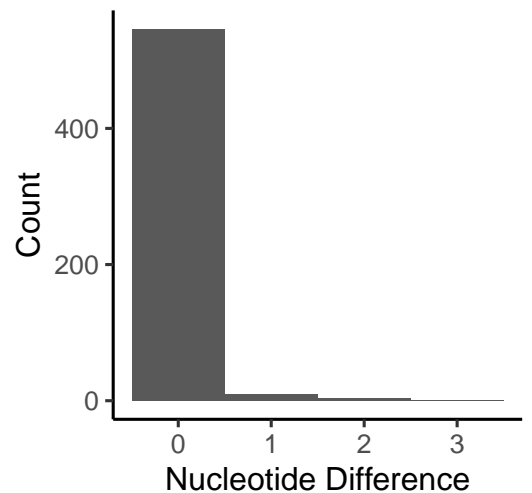
IGHV1-46*01

199 sequences assigned
193 (97%) exact matches, in which:
193 unique CDR3
6 unique J



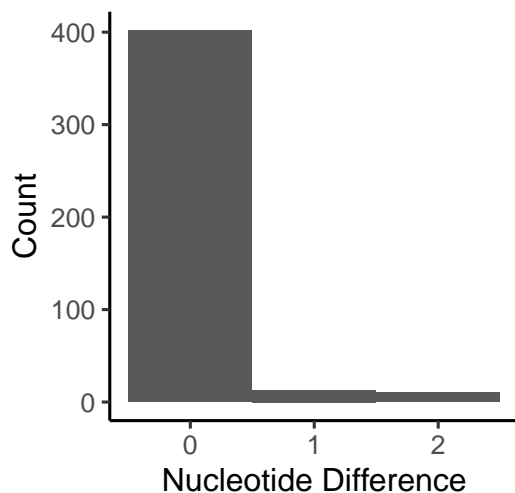
IGHV1-69*01_12_13

561 sequences assigned
546 (97.3%) exact matches, in which:
543 unique CDR3
6 unique J



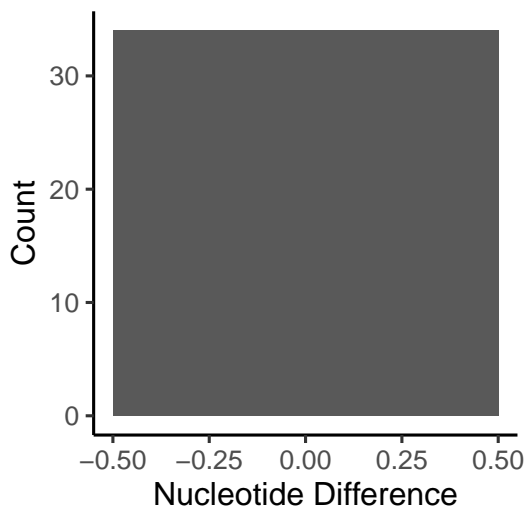
IGHV1-18*01

425 sequences assigned
402 (94.6%) exact matches, in which:
400 unique CDR3
6 unique J



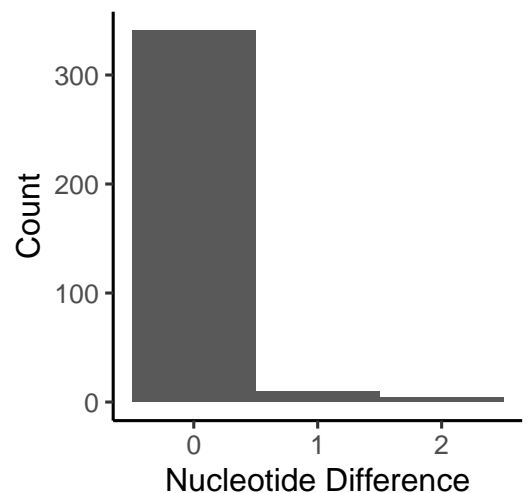
IGHV1-58*01_03

34 sequences assigned
34 (100%) exact matches, in which:
34 unique CDR3
4 unique J



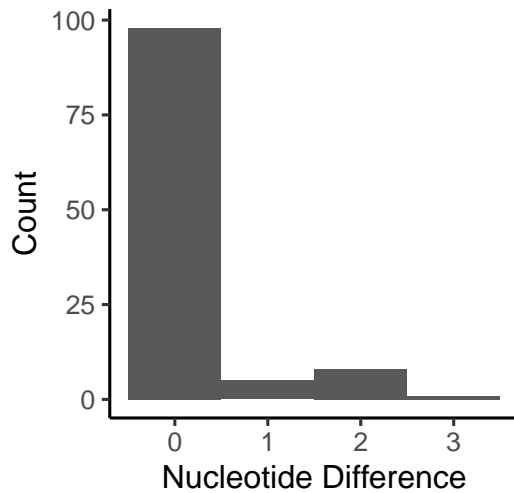
IGHV1-69*06_14

355 sequences assigned
341 (96.1%) exact matches, in which:
340 unique CDR3
6 unique J



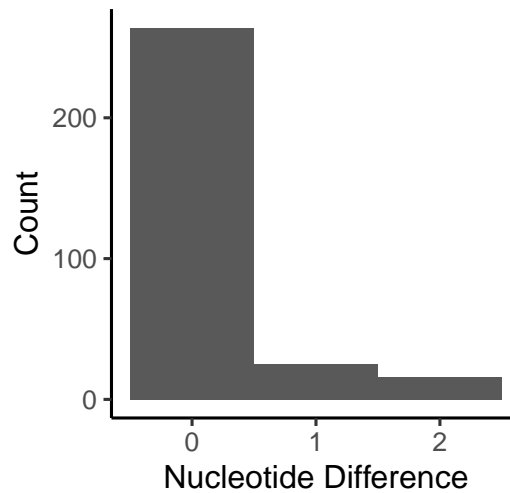
IGHV2-5*01

112 sequences assigned
98 (87.5%) exact matches, in which:
98 unique CDR3
6 unique J



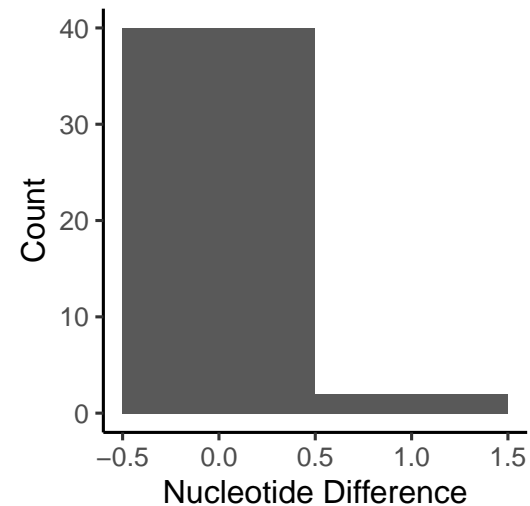
IGHV3-7*01

305 sequences assigned
264 (86.6%) exact matches, in which:
257 unique CDR3
6 unique J



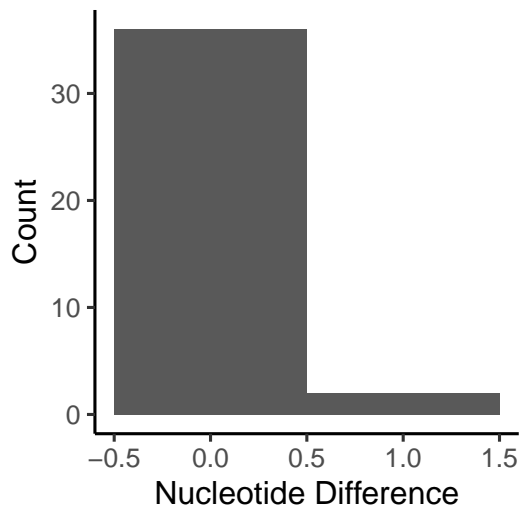
IGHV3-13*01

42 sequences assigned
40 (95.2%) exact matches, in which:
39 unique CDR3
5 unique J



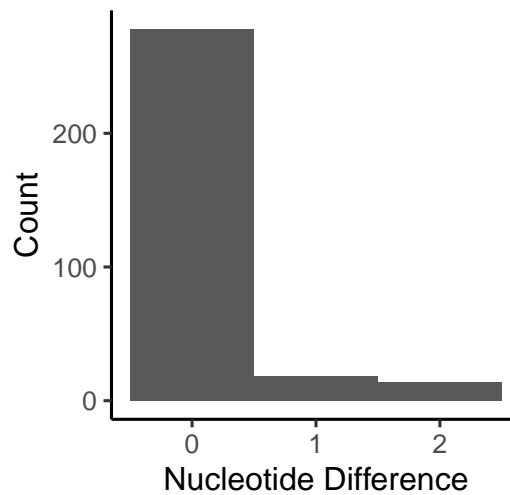
IGHV2-26*01

38 sequences assigned
36 (94.7%) exact matches, in which:
36 unique CDR3
5 unique J



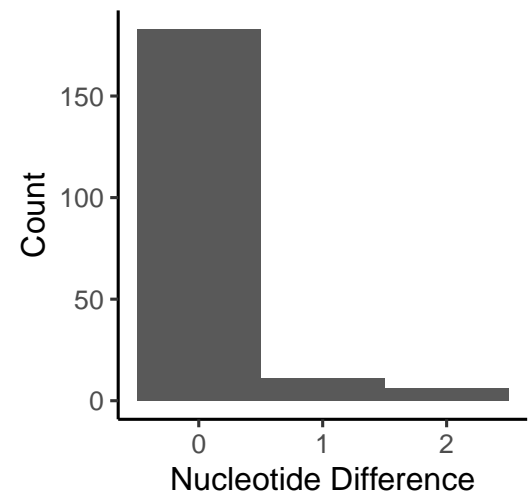
IGHV3-9*01

310 sequences assigned
278 (89.7%) exact matches, in which:
272 unique CDR3
6 unique J



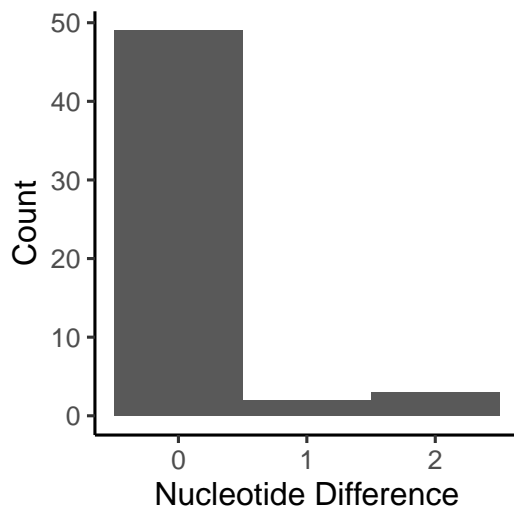
IGHV3-15*01_02

200 sequences assigned
183 (91.5%) exact matches, in which:
180 unique CDR3
6 unique J



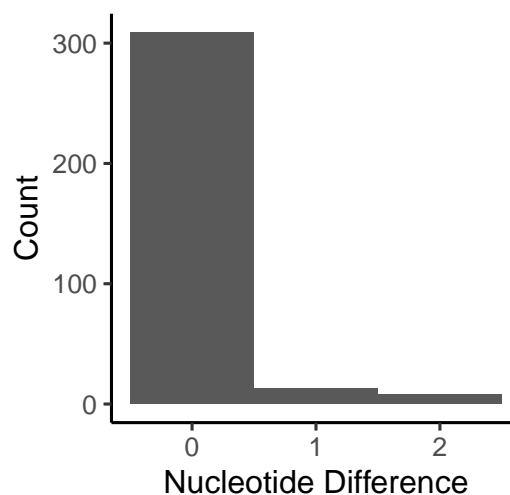
IGHV2-70*01

54 sequences assigned
49 (90.7%) exact matches, in which:
48 unique CDR3
5 unique J



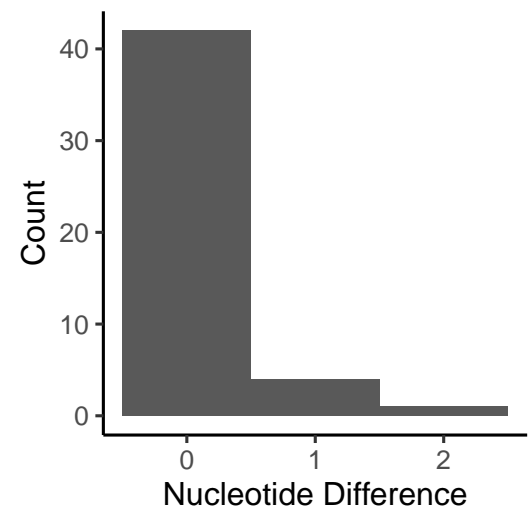
IGHV3-11*01

330 sequences assigned
309 (93.6%) exact matches, in which:
304 unique CDR3
6 unique J



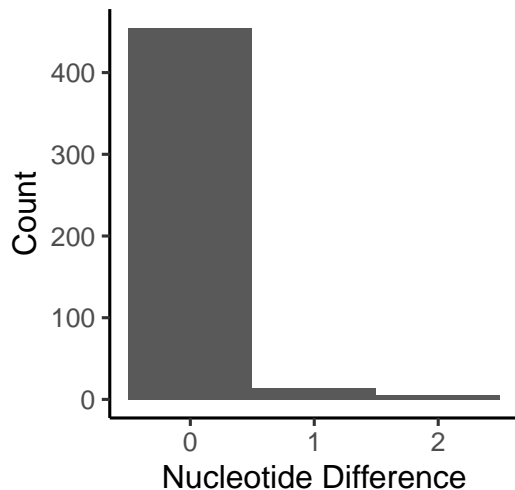
IGHV3-20*01_02

47 sequences assigned
42 (89.4%) exact matches, in which:
42 unique CDR3
5 unique J



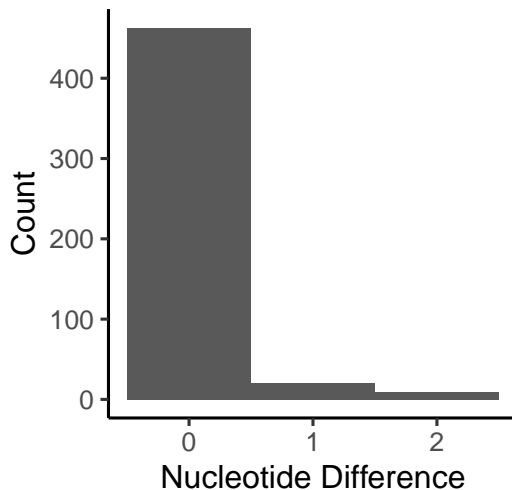
IGHV3-21*01_02

474 sequences assigned
455 (96%) exact matches, in which:
445 unique CDR3
6 unique J



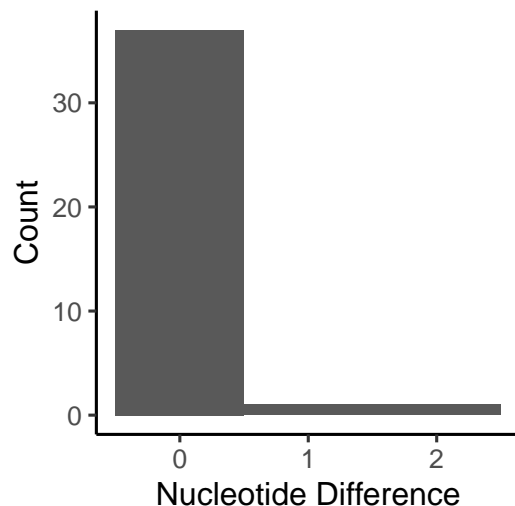
IGHV3-33*01

492 sequences assigned
463 (94.1%) exact matches, in which:
453 unique CDR3
6 unique J



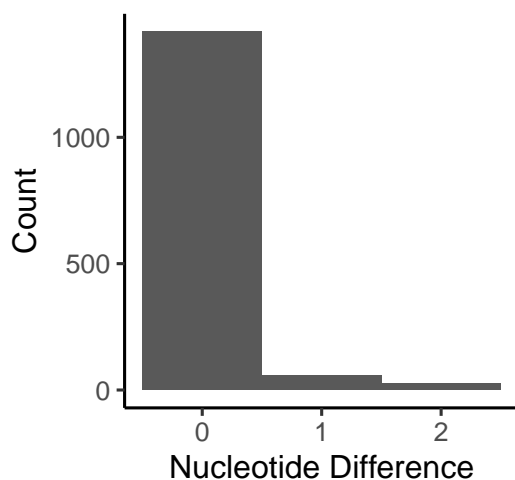
IGHV3-49*03_05

39 sequences assigned
37 (94.9%) exact matches, in which:
36 unique CDR3
4 unique J



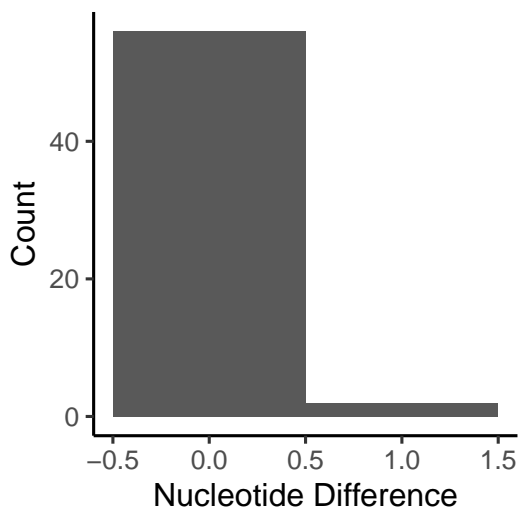
IGHV3-23*01_04

1502 sequences assigned
1418 (94.4%) exact matches, in which:
1374 unique CDR3
6 unique J



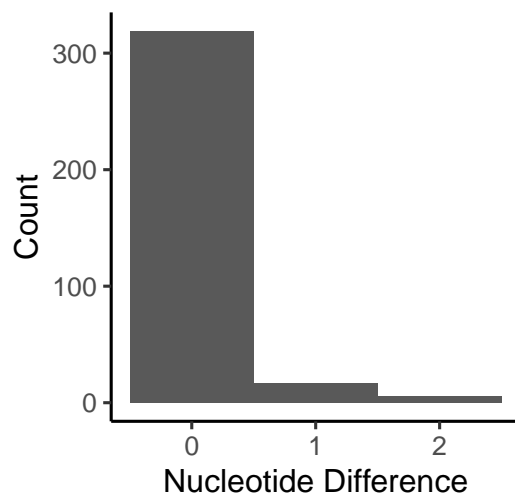
IGHV3-43*01

58 sequences assigned
56 (96.6%) exact matches, in which:
56 unique CDR3
6 unique J



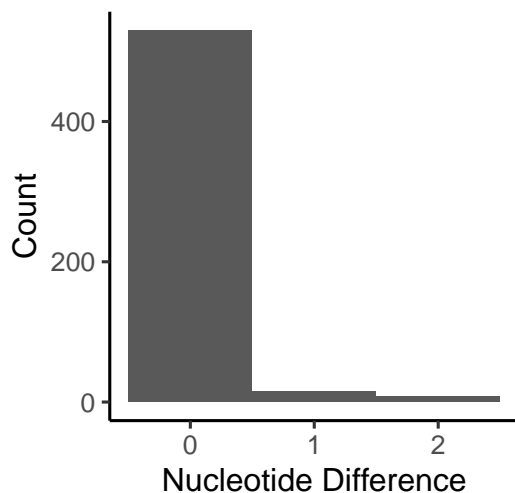
IGHV3-53*01_02

342 sequences assigned
319 (93.3%) exact matches, in which:
310 unique CDR3
6 unique J



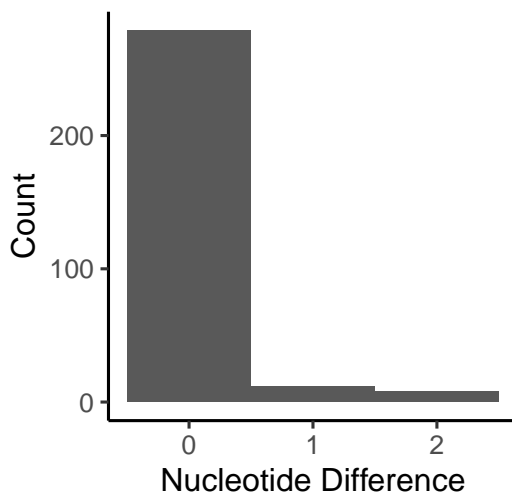
IGHV3-30-3*01

553 sequences assigned
530 (95.8%) exact matches, in which:
523 unique CDR3
6 unique J



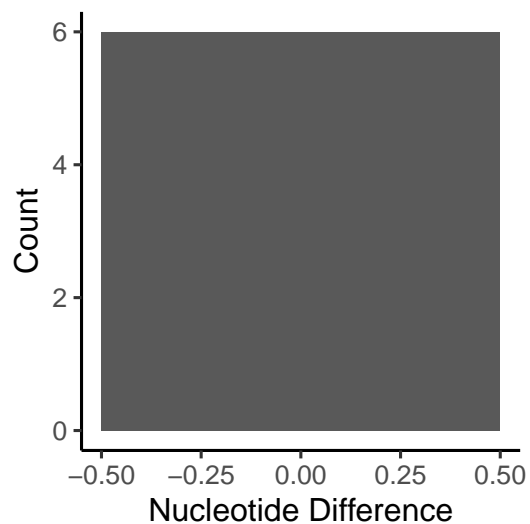
IGHV3-48*02

299 sequences assigned
279 (93.3%) exact matches, in which:
274 unique CDR3
6 unique J



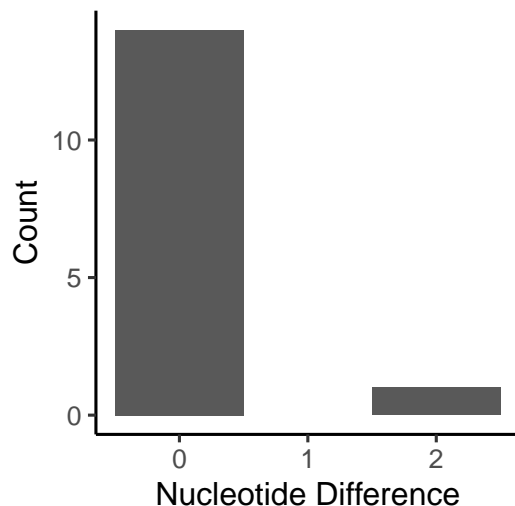
IGHV3-64*02_07

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



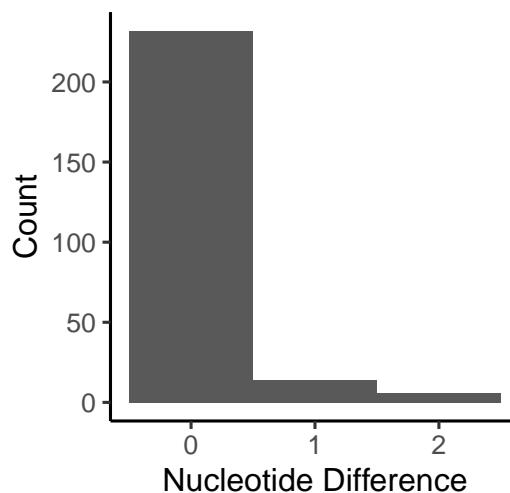
IGHV3-72*01

15 sequences assigned
14 (93.3%) exact matches, in which:
14 unique CDR3
3 unique J



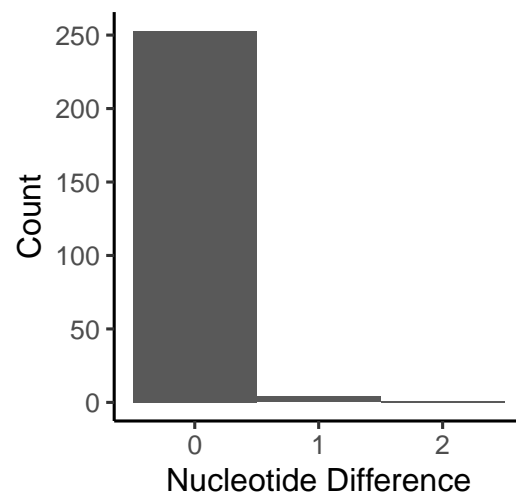
IGHV4-4*07

252 sequences assigned
232 (92.1%) exact matches, in which:
228 unique CDR3
6 unique J



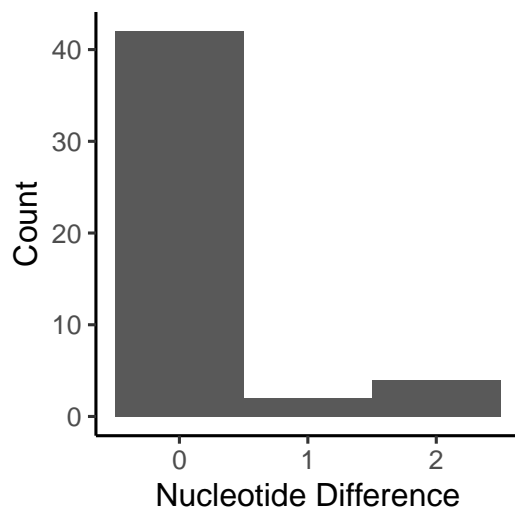
IGHV4-30-4*01

258 sequences assigned
253 (98.1%) exact matches, in which:
247 unique CDR3
6 unique J



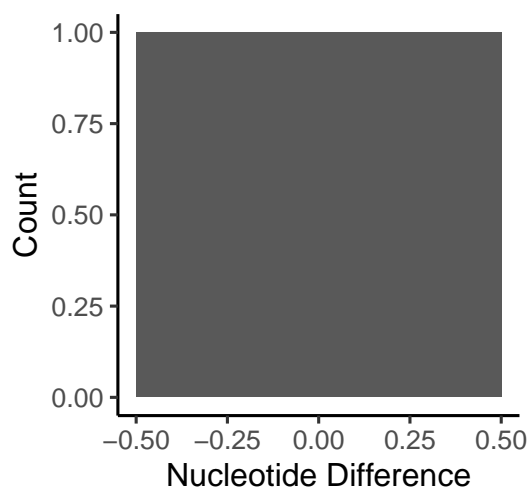
IGHV3-73*01_02

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



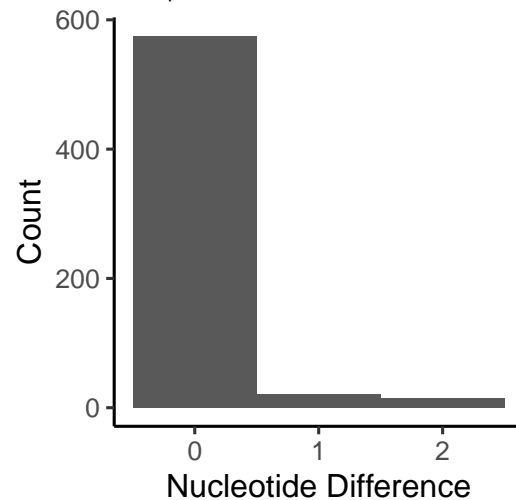
IGHV4-28*01_07

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



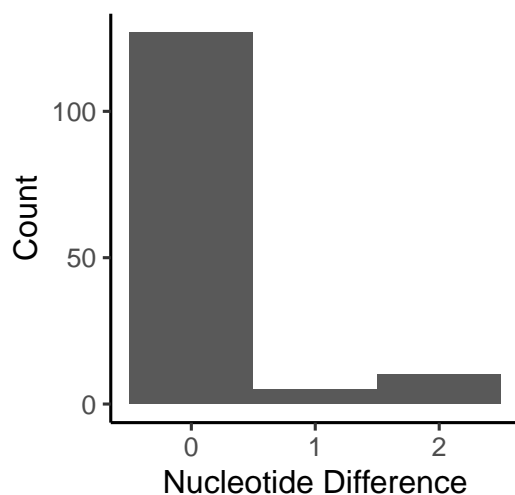
IGHV4-31*02

611 sequences assigned
575 (94.1%) exact matches, in which:
570 unique CDR3
6 unique J



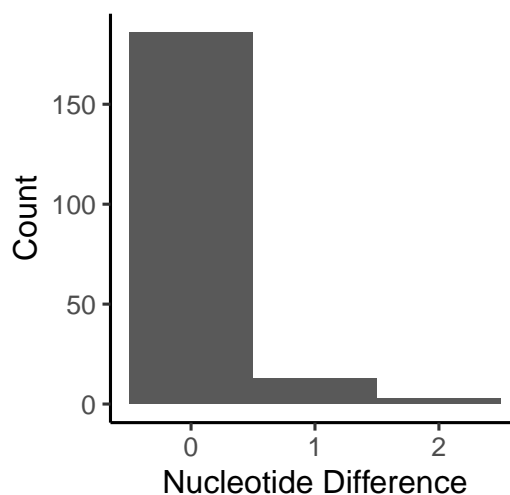
IGHV3-74*01_02

142 sequences assigned
127 (89.4%) exact matches, in which:
116 unique CDR3
5 unique J



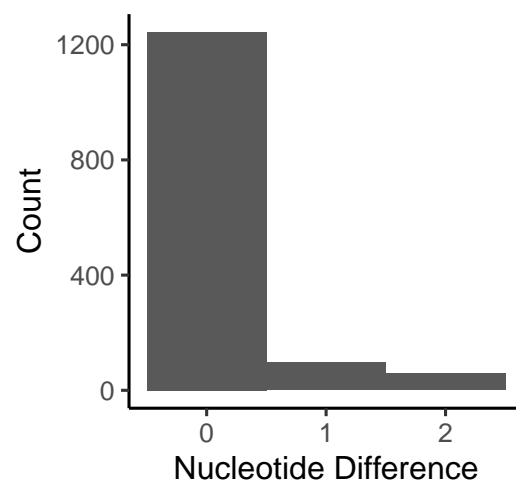
IGHV4-30-2*01

202 sequences assigned
186 (92.1%) exact matches, in which:
180 unique CDR3
6 unique J



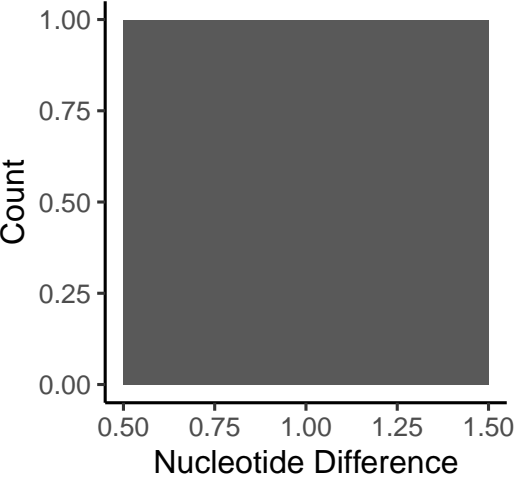
IGHV4-34*01_02

1400 sequences assigned
1244 (88.9%) exact matches, in which:
1213 unique CDR3
6 unique J



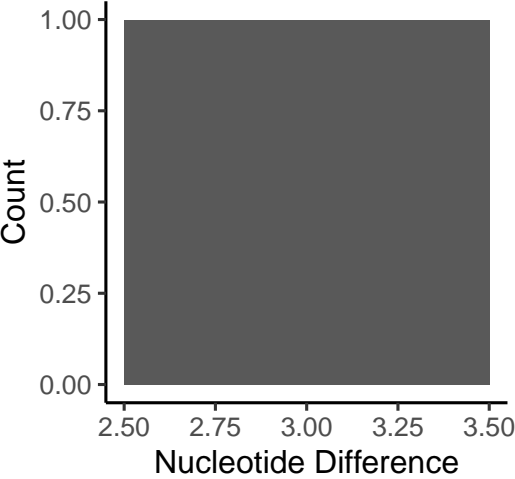
IGHV4-39*02

1 sequences assigned
No exact matches.



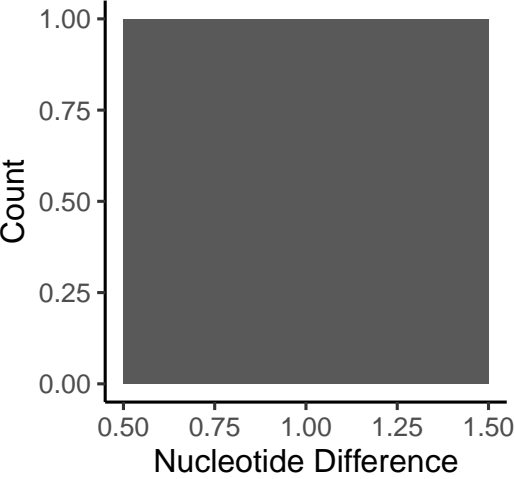
IGHV4/OR15-8*01

1 sequences assigned
No exact matches.



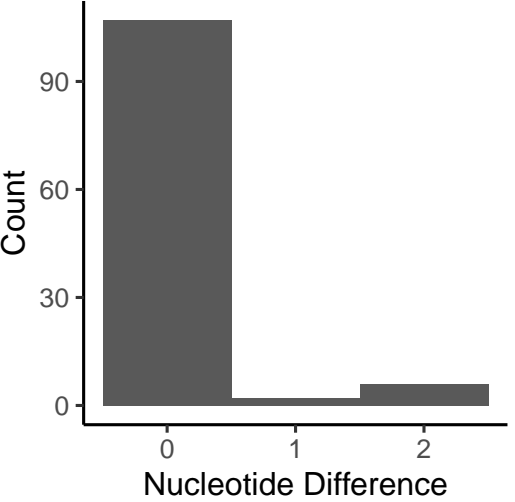
IGHV4-59*11

1 sequences assigned
No exact matches.



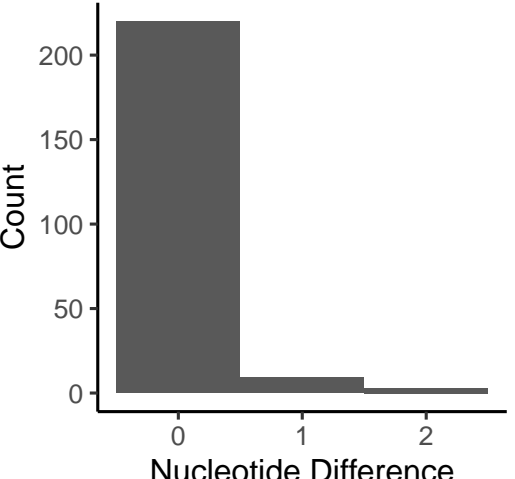
IGHV6-1*01_02

115 sequences assigned
107 (93%) exact matches, in which:
106 unique CDR3
6 unique J



IGHV4-61*01

232 sequences assigned
220 (94.8%) exact matches, in which:
218 unique CDR3
6 unique J



Allele Usage

