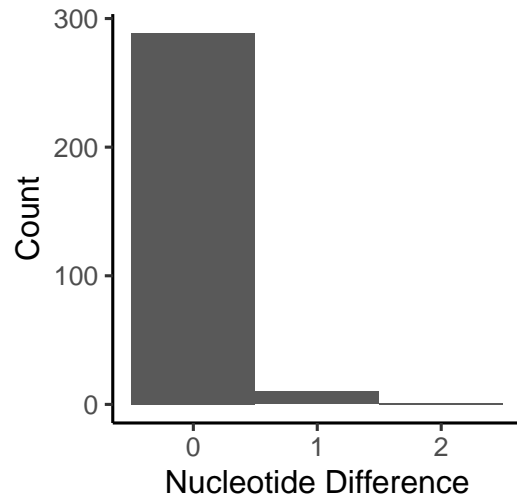


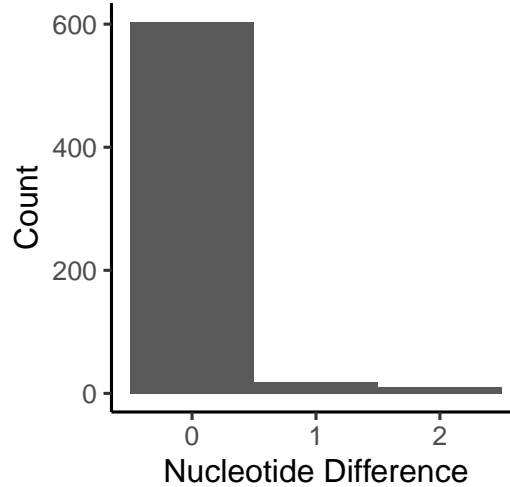
IGHV1-2*04

300 sequences assigned
289 (96.3%) exact matches, in which:
283 unique CDR3
7 unique J



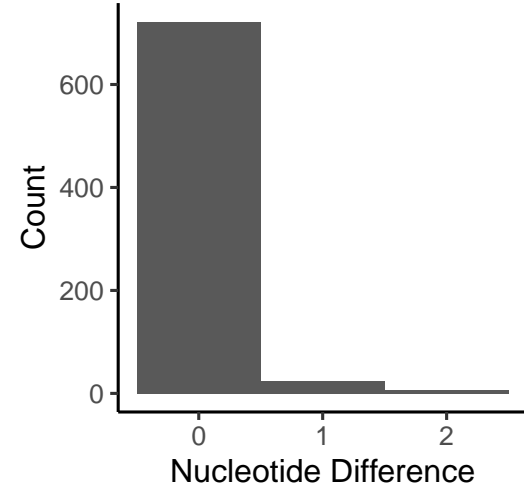
IGHV1-8*01

634 sequences assigned
604 (95.3%) exact matches, in which:
600 unique CDR3
6 unique J



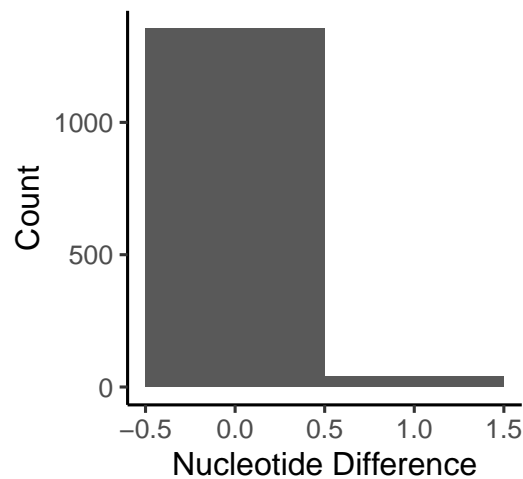
IGHV1-24*01

753 sequences assigned
722 (95.9%) exact matches, in which:
711 unique CDR3
7 unique J



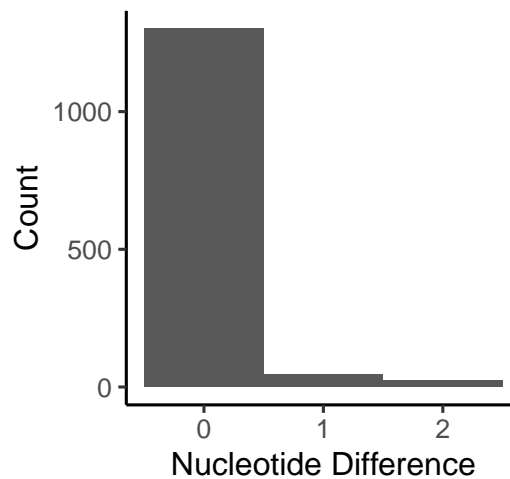
IGHV1-2*06

1395 sequences assigned
1354 (97.1%) exact matches, in which:
1340 unique CDR3
7 unique J



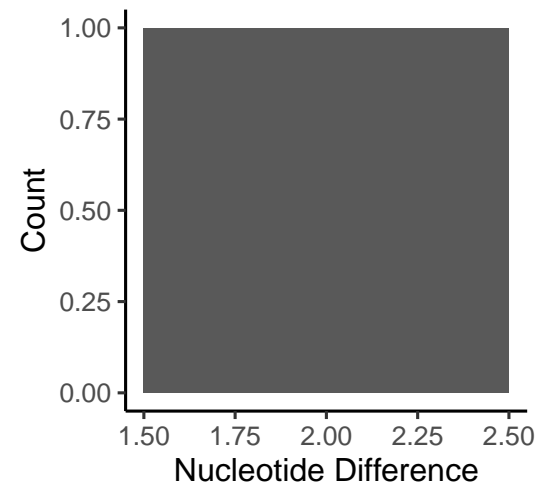
IGHV1-18*01

1370 sequences assigned
1301 (95%) exact matches, in which:
1289 unique CDR3
7 unique J



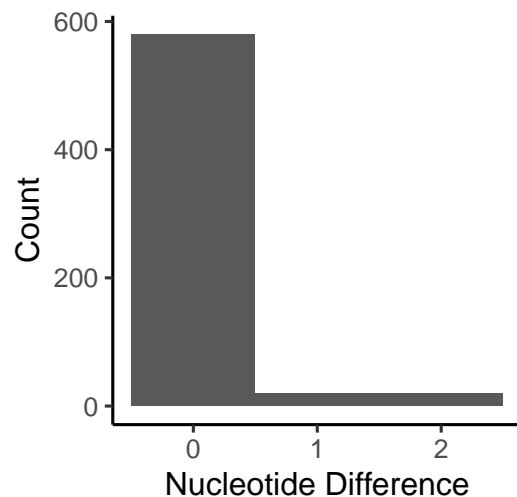
IGHV1-38-4*01

1 sequences assigned
No exact matches.



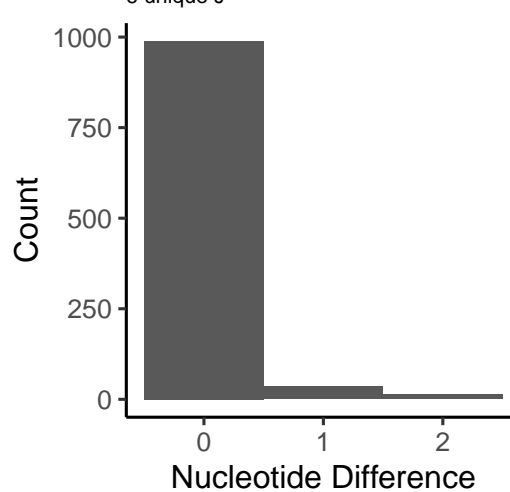
IGHV1-3*01_05

620 sequences assigned
580 (93.5%) exact matches, in which:
579 unique CDR3
7 unique J



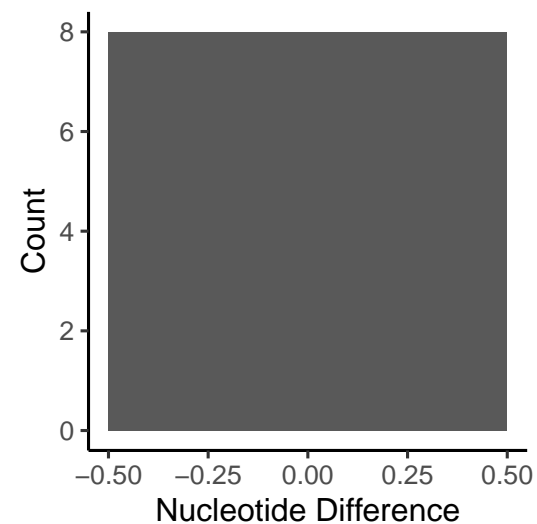
IGHV1-18*04

1037 sequences assigned
989 (95.4%) exact matches, in which:
978 unique CDR3
6 unique J



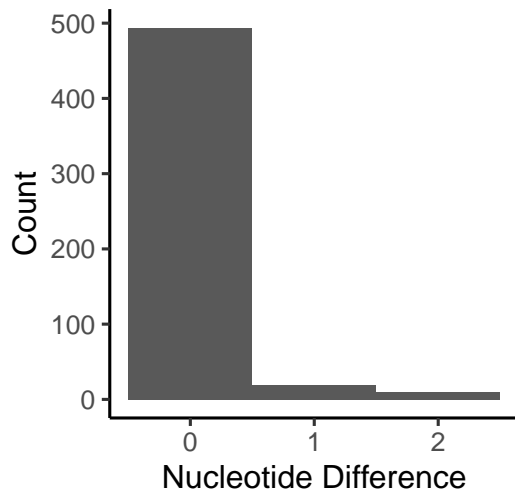
IGHV1-45*02

8 sequences assigned
8 (100%) exact matches, in which:
8 unique CDR3
2 unique J



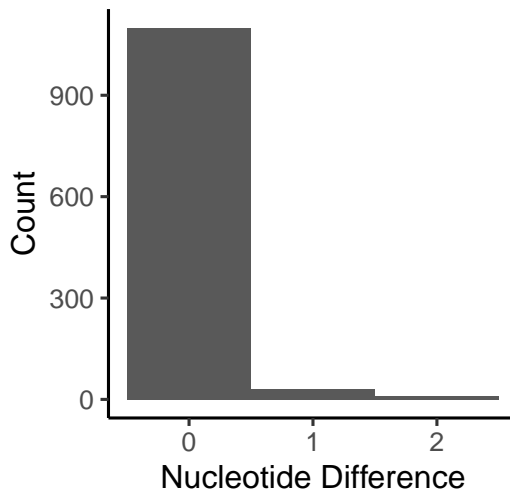
IGHV1-46*03

523 sequences assigned
494 (94.5%) exact matches, in which:
489 unique CDR3
7 unique J



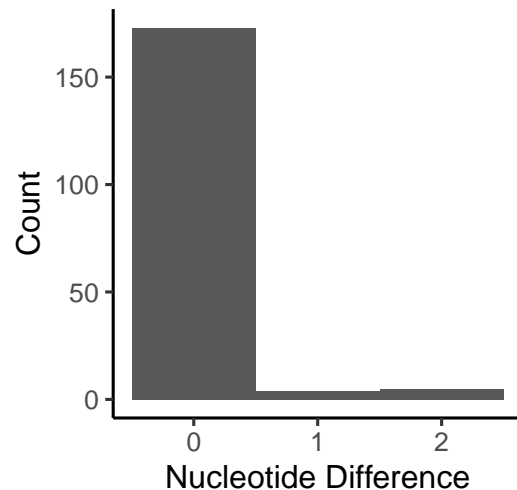
IGHV1-69*01_12_13

1140 sequences assigned
1100 (96.5%) exact matches, in which:
1091 unique CDR3
6 unique J



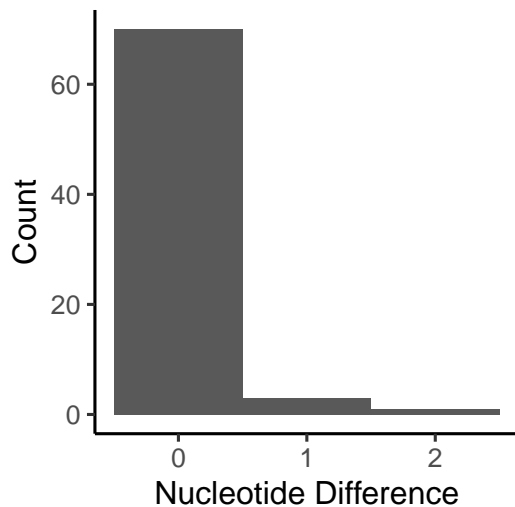
IGHV2-26*01

182 sequences assigned
173 (95.1%) exact matches, in which:
173 unique CDR3
7 unique J



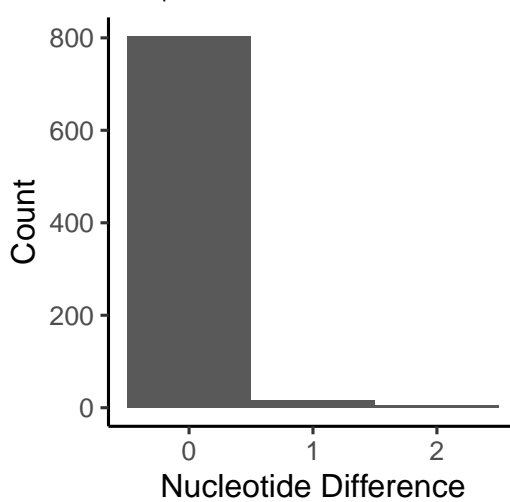
IGHV1-58*02

74 sequences assigned
70 (94.6%) exact matches, in which:
70 unique CDR3
6 unique J



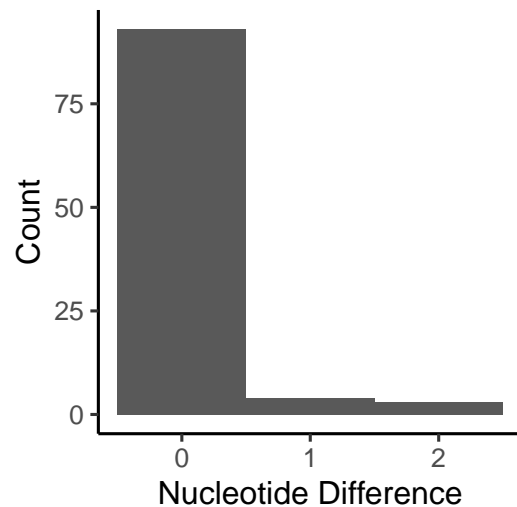
IGHV1-69*04_09

826 sequences assigned
804 (97.3%) exact matches, in which:
799 unique CDR3
7 unique J



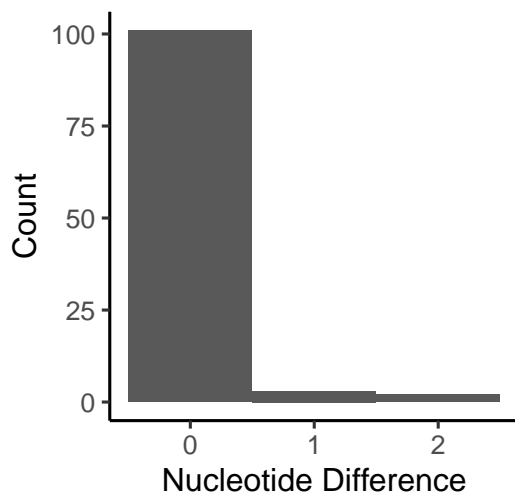
IGHV2-70*01

100 sequences assigned
93 (93%) exact matches, in which:
92 unique CDR3
5 unique J



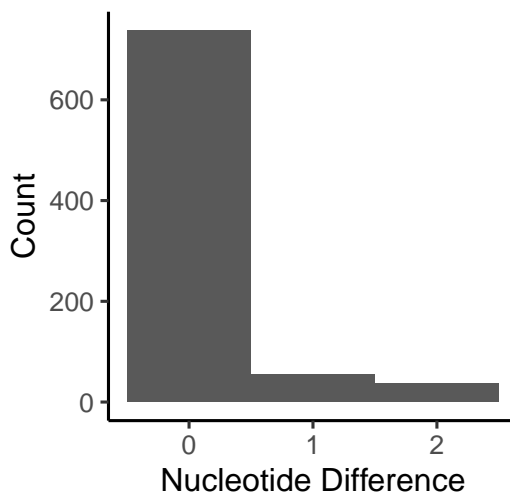
IGHV1-58*01_03

106 sequences assigned
101 (95.3%) exact matches, in which:
100 unique CDR3
6 unique J



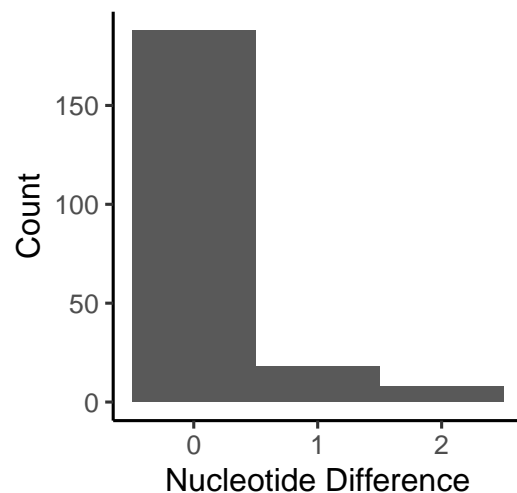
IGHV2-5*02

830 sequences assigned
738 (88.9%) exact matches, in which:
732 unique CDR3
7 unique J



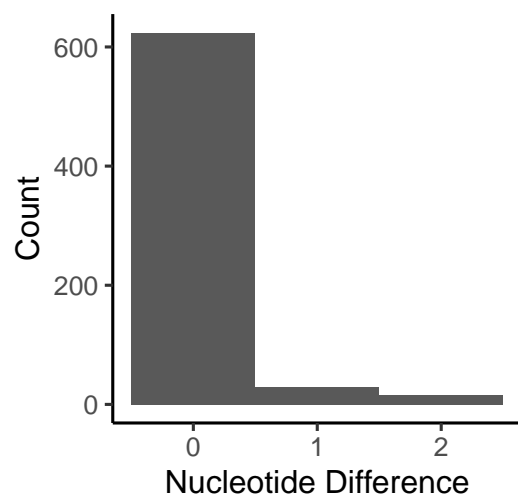
IGHV2-70*11_15

214 sequences assigned
188 (87.9%) exact matches, in which:
186 unique CDR3
6 unique J



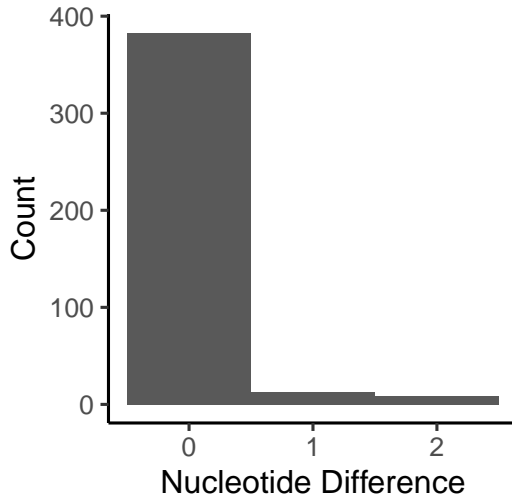
IGHV3-7*01

669 sequences assigned
624 (93.3%) exact matches, in which:
594 unique CDR3
7 unique J



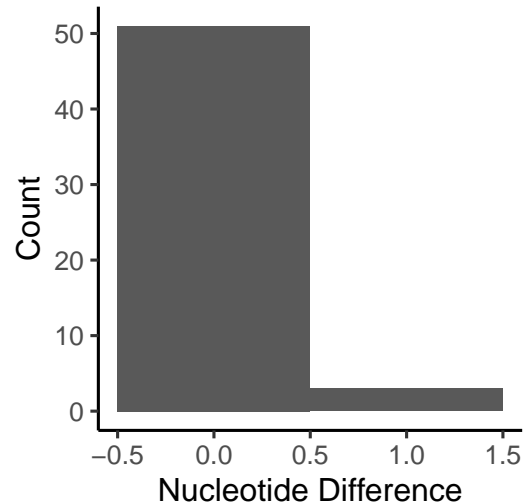
IGHV3-11*01

405 sequences assigned
383 (94.6%) exact matches, in which:
374 unique CDR3
6 unique J



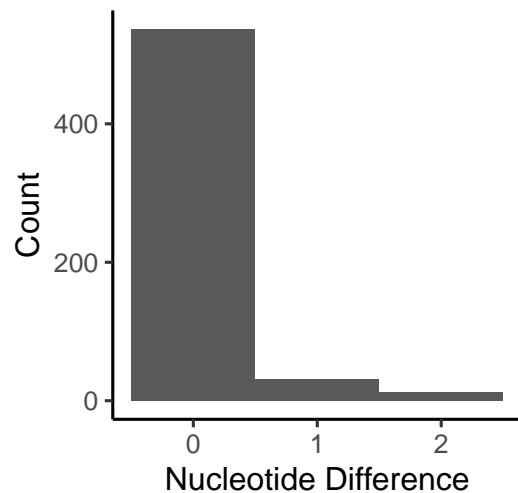
IGHV3-13*05

54 sequences assigned
51 (94.4%) exact matches, in which:
49 unique CDR3
4 unique J



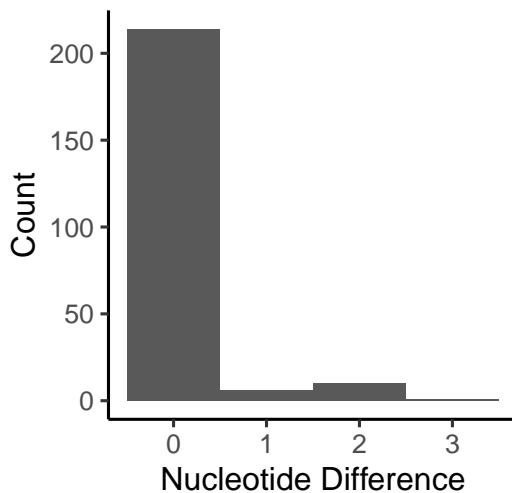
IGHV3-7*03

581 sequences assigned
537 (92.4%) exact matches, in which:
516 unique CDR3
7 unique J



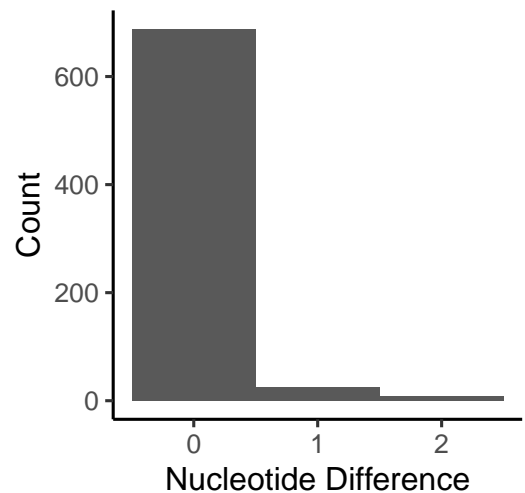
IGHV3-11*06

231 sequences assigned
214 (92.6%) exact matches, in which:
209 unique CDR3
7 unique J



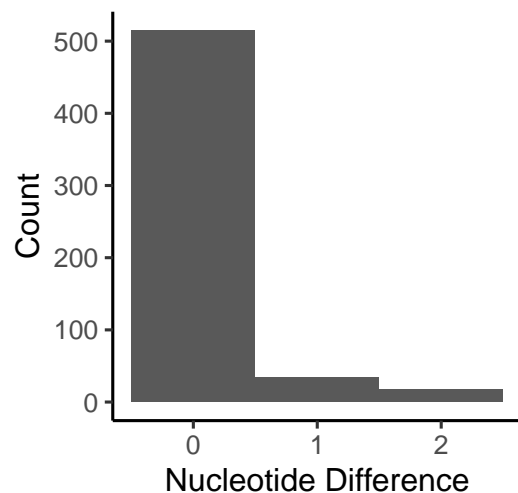
IGHV3-15*01_02

722 sequences assigned
688 (95.3%) exact matches, in which:
671 unique CDR3
7 unique J



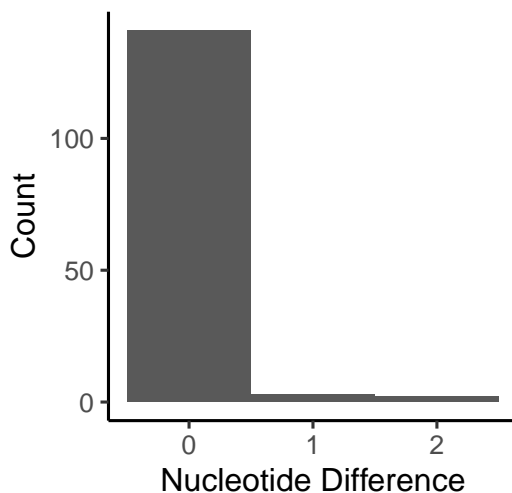
IGHV3-9*01

566 sequences assigned
515 (91%) exact matches, in which:
506 unique CDR3
7 unique J



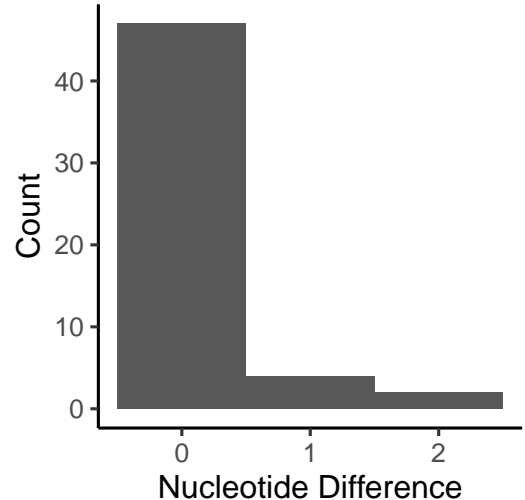
IGHV3-13*01

146 sequences assigned
141 (96.6%) exact matches, in which:
140 unique CDR3
7 unique J



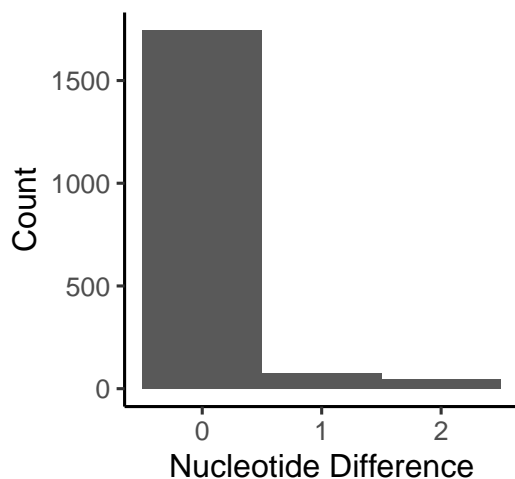
IGHV3-20*01_02

53 sequences assigned
47 (88.7%) exact matches, in which:
47 unique CDR3
5 unique J



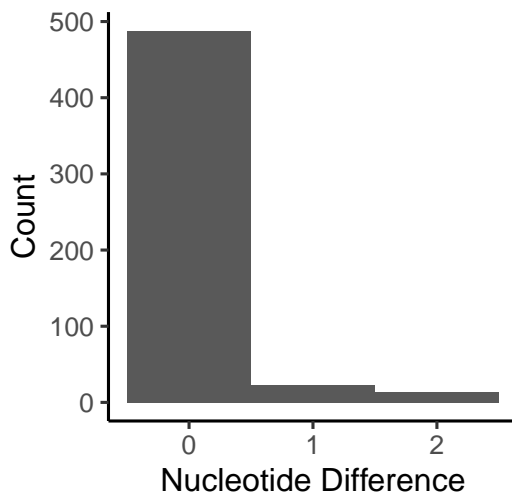
IGHV3-21*01_02

1865 sequences assigned
1744 (93.5%) exact matches, in which:
1664 unique CDR3
7 unique J



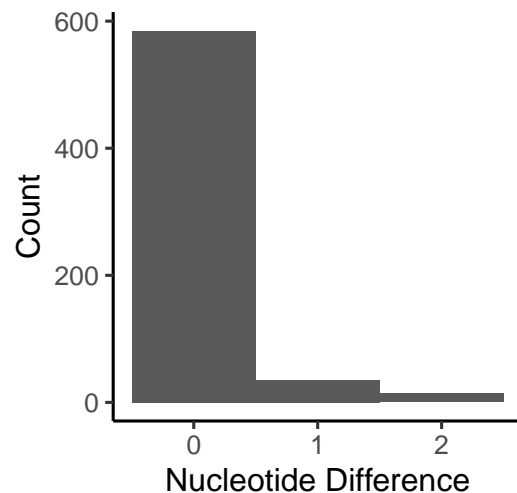
IGHV3-33*01

525 sequences assigned
488 (93%) exact matches, in which:
472 unique CDR3
6 unique J



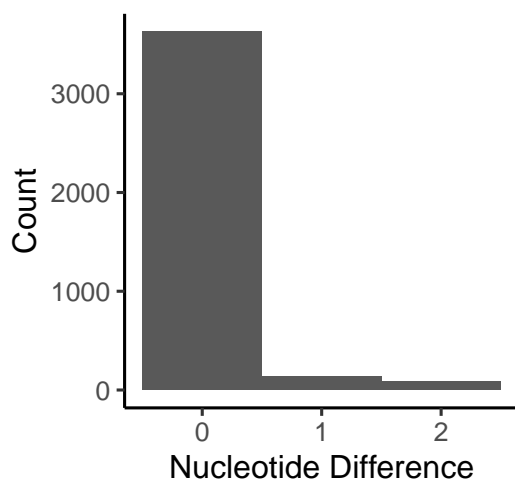
IGHV3-48*02

634 sequences assigned
585 (92.3%) exact matches, in which:
556 unique CDR3
6 unique J



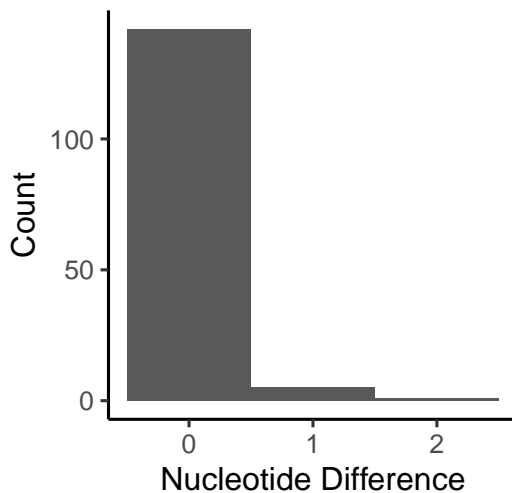
IGHV3-23*01_04

3846 sequences assigned
3628 (94.3%) exact matches, in which:
3453 unique CDR3
7 unique J



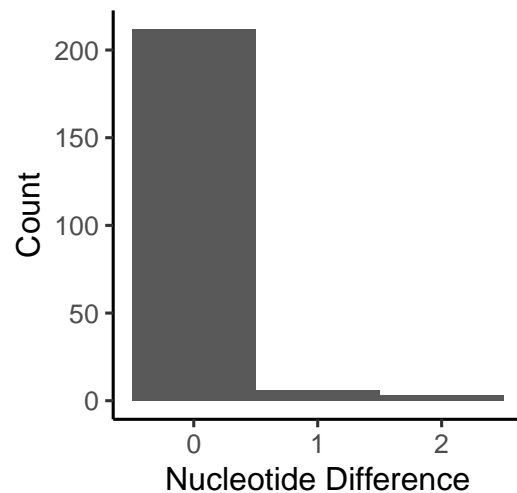
IGHV3-43*01

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



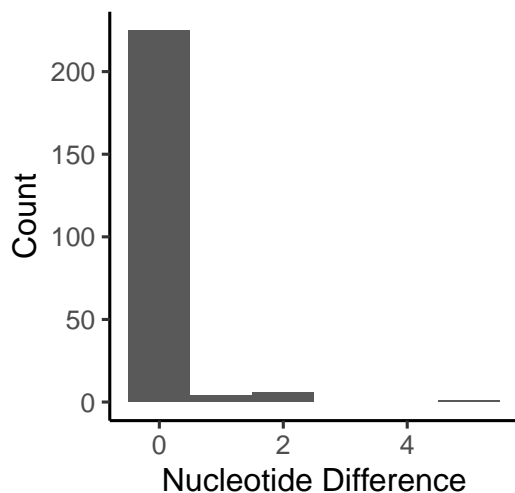
IGHV3-49*03_05

221 sequences assigned
212 (95.9%) exact matches, in which:
204 unique CDR3
7 unique J



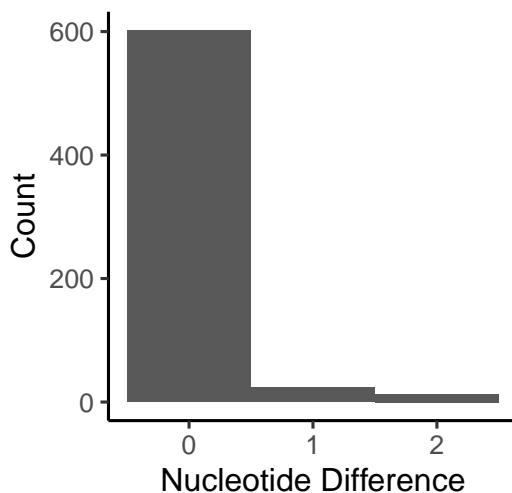
IGHV3-30-5*01

236 sequences assigned
225 (95.3%) exact matches, in which:
221 unique CDR3
6 unique J



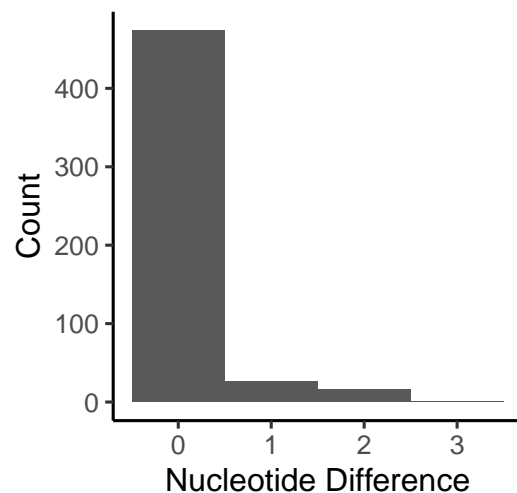
IGHV3-48*01

638 sequences assigned
602 (94.4%) exact matches, in which:
576 unique CDR3
6 unique J



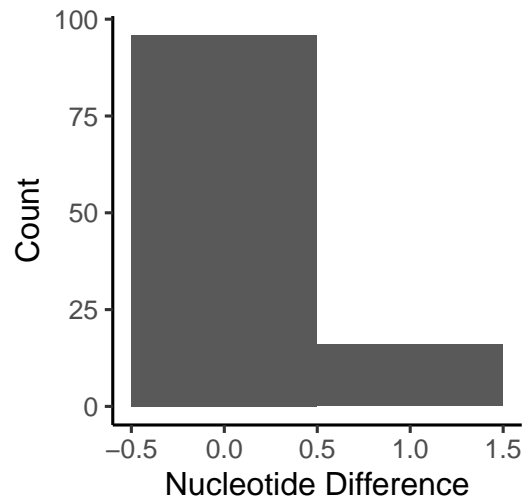
IGHV3-53*01_02

517 sequences assigned
474 (91.7%) exact matches, in which:
442 unique CDR3
7 unique J



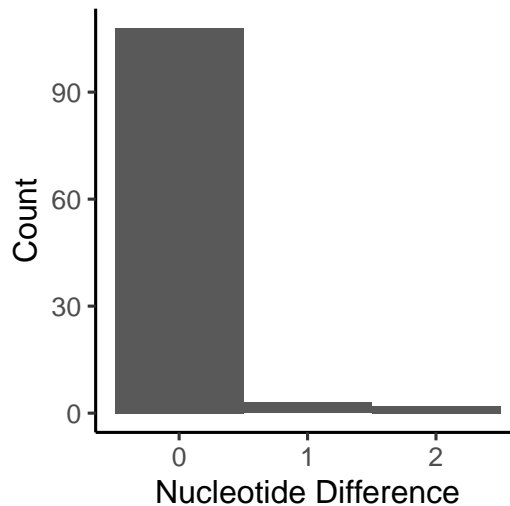
IGHV3-64*01

112 sequences assigned
96 (85.7%) exact matches, in which:
94 unique CDR3
6 unique J



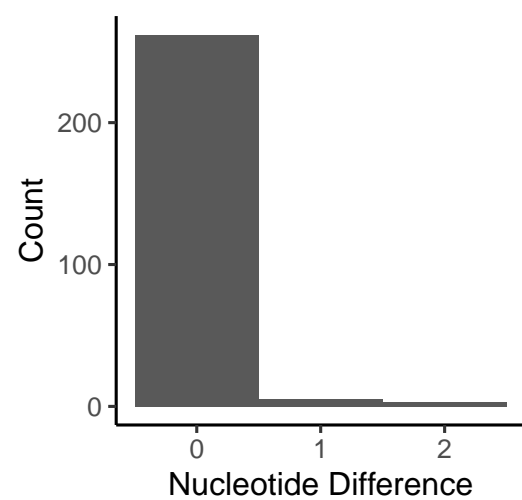
IGHV3-73*01_02

113 sequences assigned
108 (95.6%) exact matches, in which:
106 unique CDR3
6 unique J



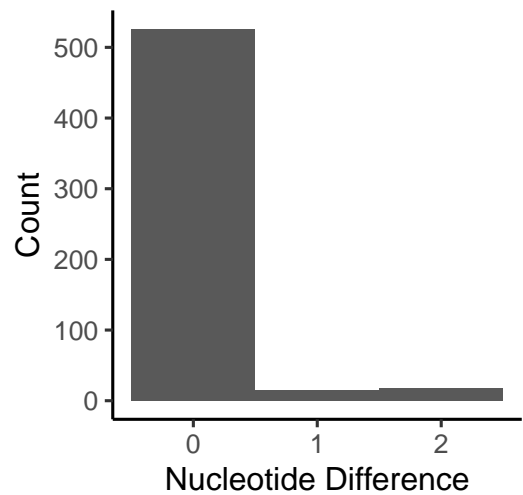
IGHV3-64D*06

270 sequences assigned
262 (97%) exact matches, in which:
256 unique CDR3
7 unique J



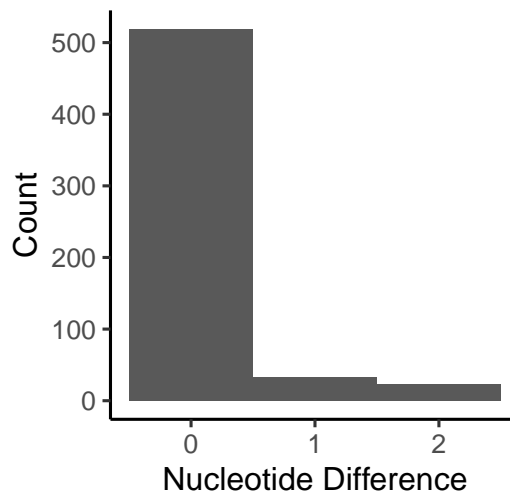
IGHV3-66*01

559 sequences assigned
526 (94.1%) exact matches, in which:
501 unique CDR3
6 unique J



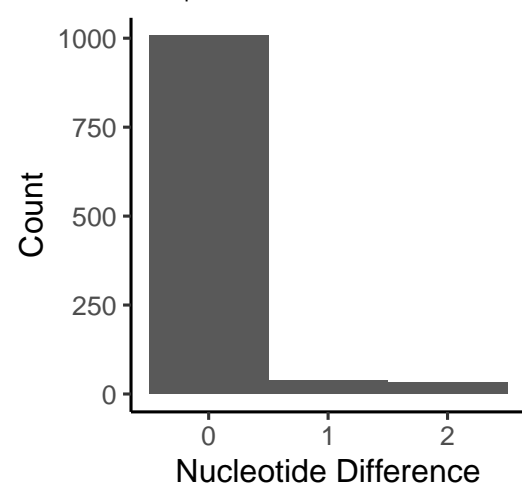
IGHV3-74*01_02

575 sequences assigned
519 (90.3%) exact matches, in which:
492 unique CDR3
7 unique J



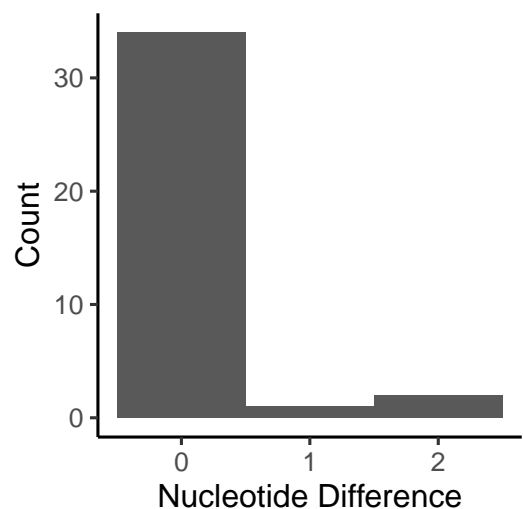
IGHV4-4*02_03

1076 sequences assigned
1007 (93.6%) exact matches, in which:
979 unique CDR3
7 unique J



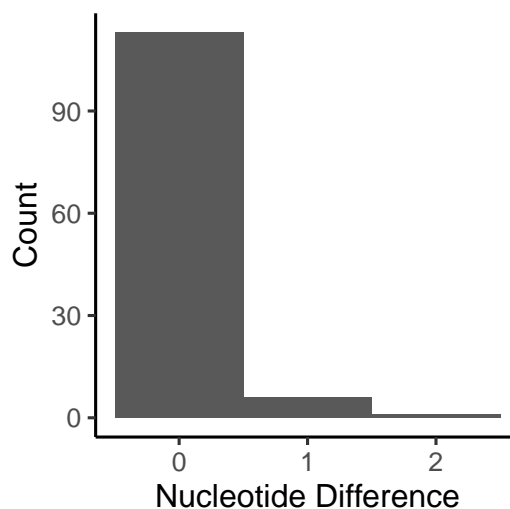
IGHV3-72*01

37 sequences assigned
34 (91.9%) exact matches, in which:
34 unique CDR3
6 unique J



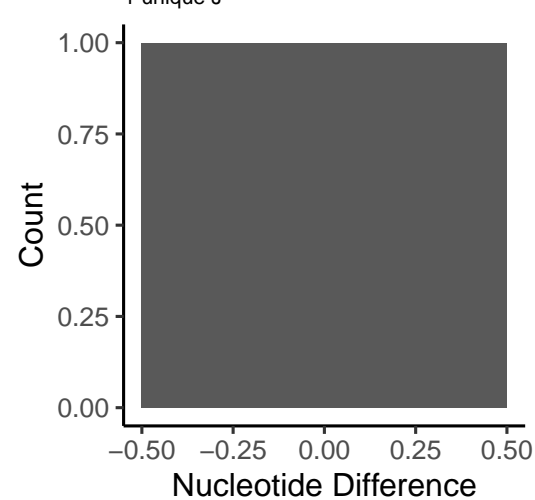
IGHV3-43D*03

120 sequences assigned
113 (94.2%) exact matches, in which:
106 unique CDR3
6 unique J



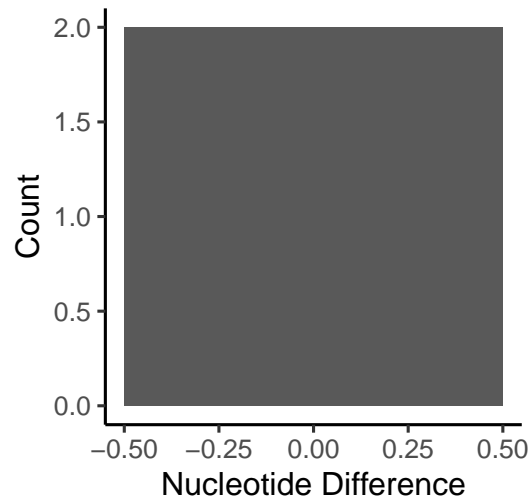
IGHV4-28*01_07

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



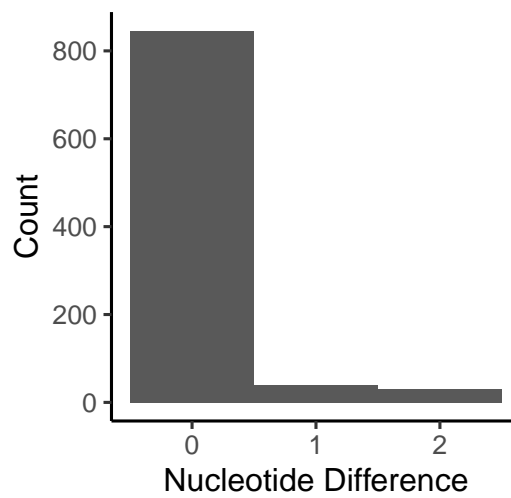
IGHV4-28*02_05

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



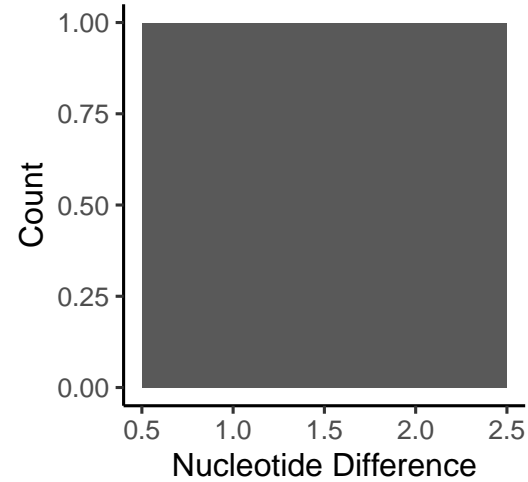
IGHV4-31*02

915 sequences assigned
846 (92.5%) exact matches, in which:
822 unique CDR3
7 unique J



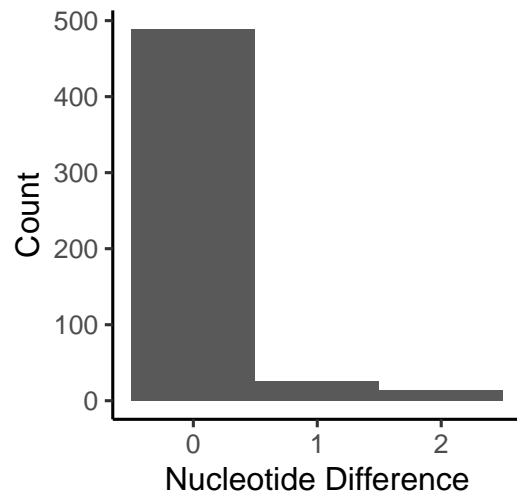
IGHV4-39*02

2 sequences assigned
No exact matches.



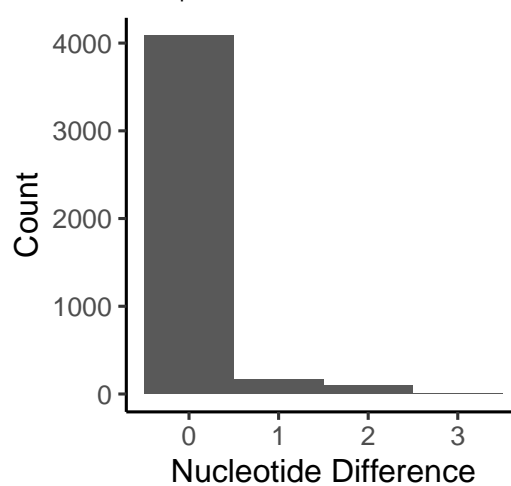
IGHV4-30-2*01

528 sequences assigned
489 (92.6%) exact matches, in which:
463 unique CDR3
6 unique J



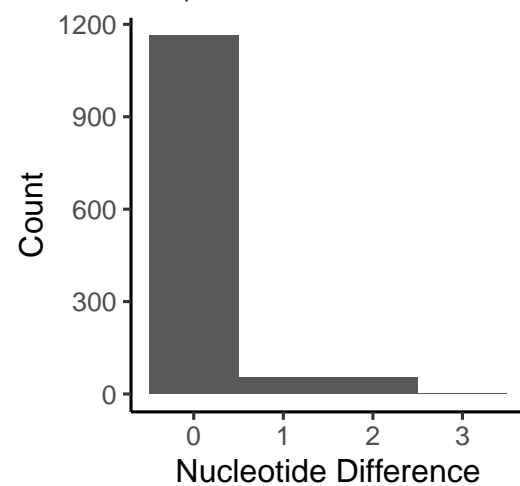
IGHV4-34*01_02

4345 sequences assigned
4084 (94%) exact matches, in which:
3890 unique CDR3
7 unique J



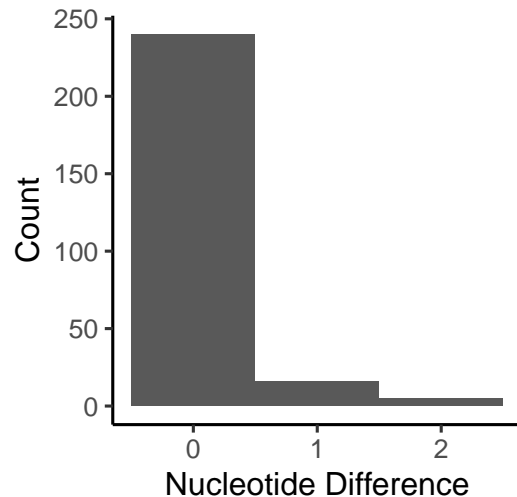
IGHV4-59*08

1273 sequences assigned
1163 (91.4%) exact matches, in which:
1107 unique CDR3
7 unique J



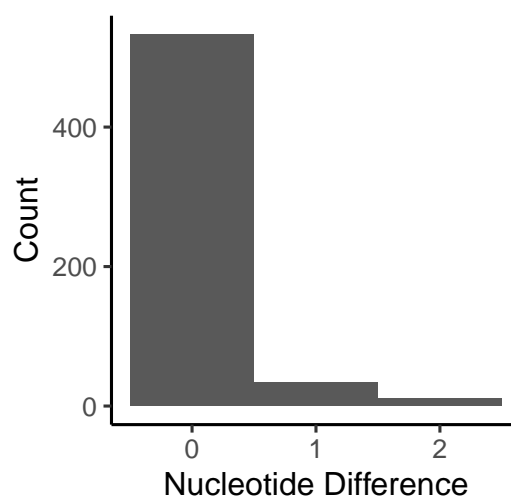
IGHV4-30-4*07

261 sequences assigned
240 (92%) exact matches, in which:
235 unique CDR3
5 unique J



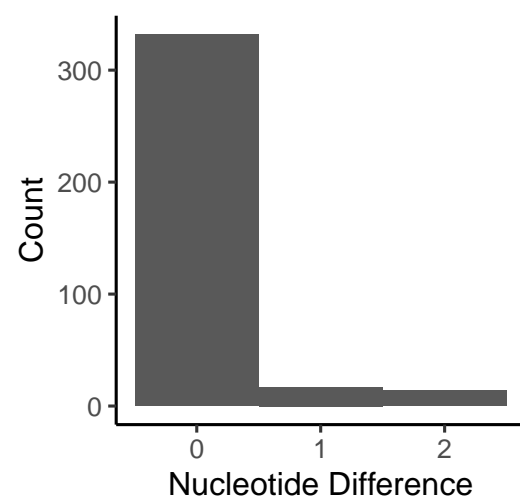
IGHV4-38-2*02

578 sequences assigned
533 (92.2%) exact matches, in which:
520 unique CDR3
6 unique J



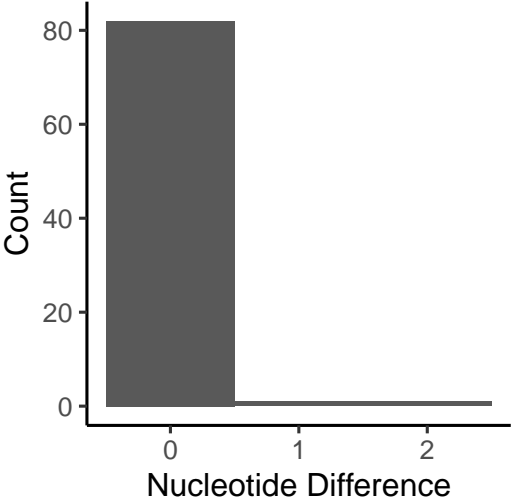
IGHV4-61*01

363 sequences assigned
332 (91.5%) exact matches, in which:
314 unique CDR3
7 unique J



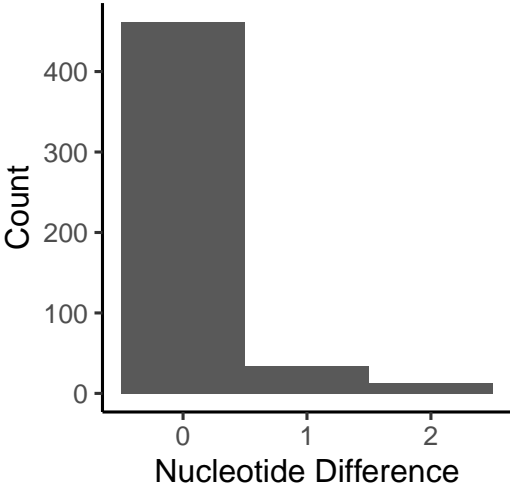
IGHV5-10-1*01_03

84 sequences assigned
82 (97.6%) exact matches, in which:
82 unique CDR3
5 unique J



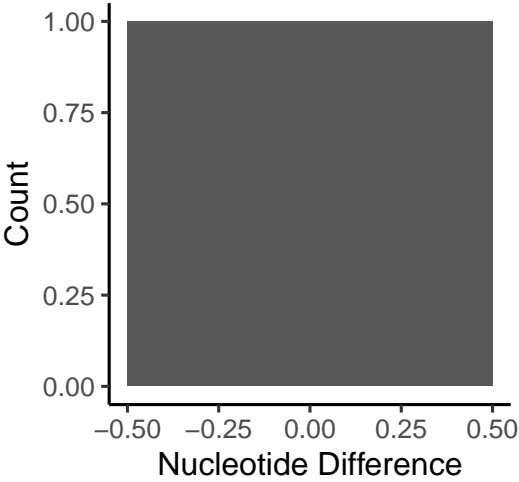
IGHV7-4-1*02

509 sequences assigned
462 (90.8%) exact matches, in which:
460 unique CDR3
7 unique J



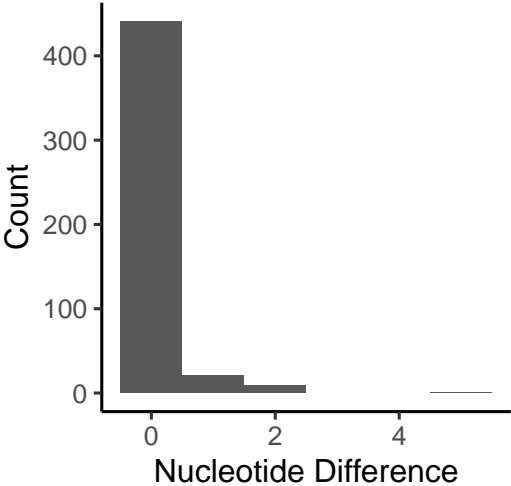
IGHV5-51*01_03

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

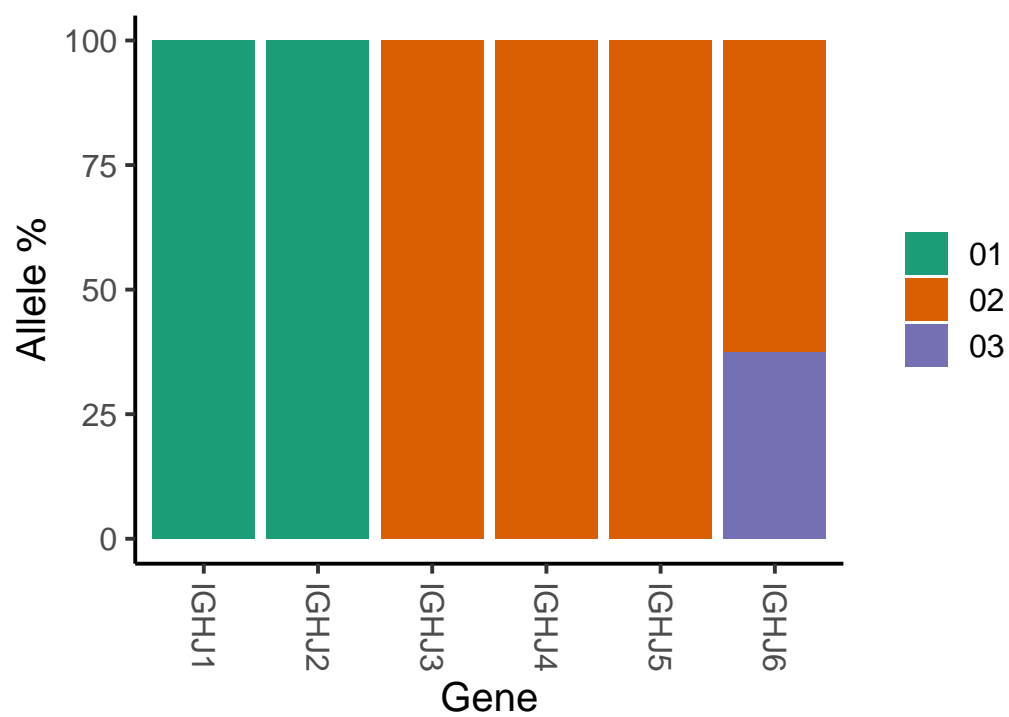


IGHV6-1*01_02

472 sequences assigned
441 (93.4%) exact matches, in which:
433 unique CDR3
7 unique J



Allele Usage



Sequence Count by IGHJ6 allele usage

