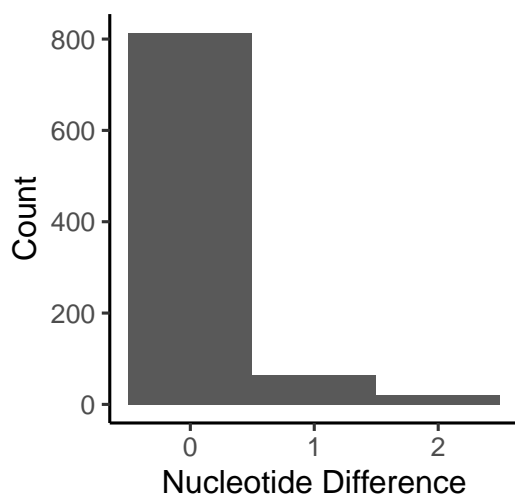


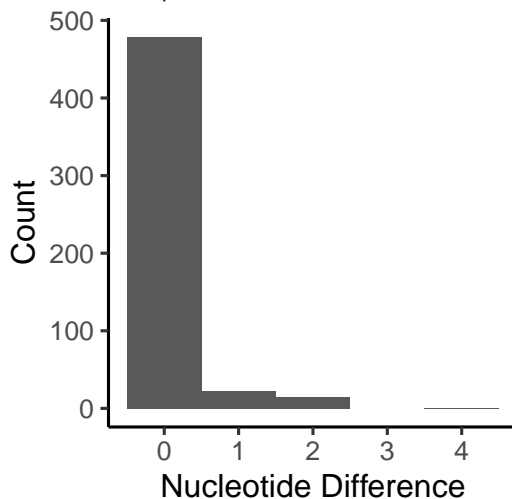
IGHV1-2*02

899 sequences assigned
814 (90.5%) exact matches, in which:
810 unique CDR3
6 unique J



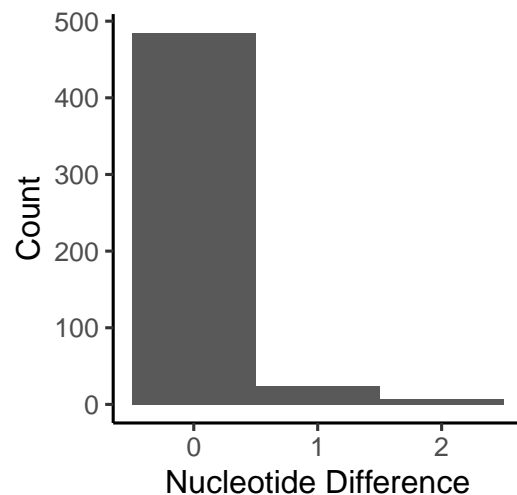
IGHV1-3*01_05

517 sequences assigned
479 (92.6%) exact matches, in which:
479 unique CDR3
7 unique J



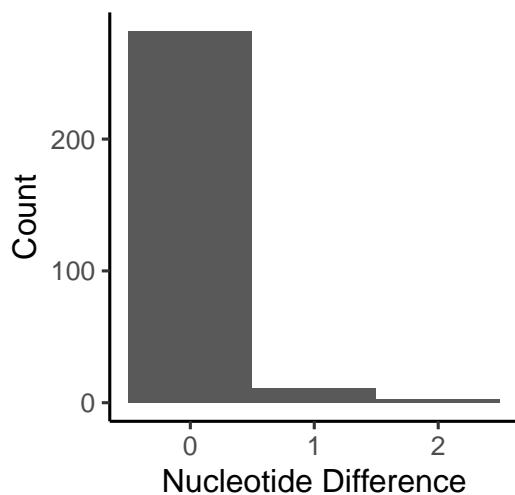
IGHV1-24*01

516 sequences assigned
485 (94%) exact matches, in which:
481 unique CDR3
7 unique J



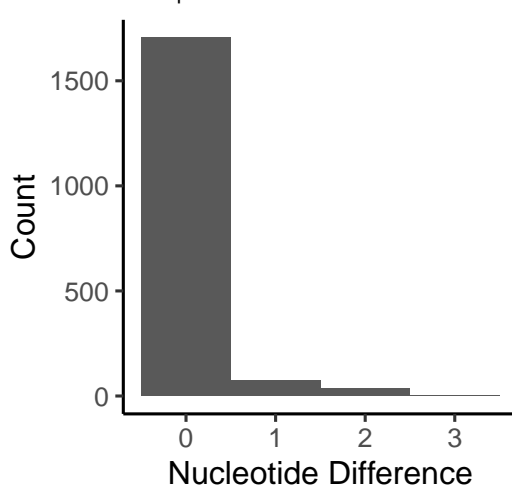
IGHV1-2*04

296 sequences assigned
282 (95.3%) exact matches, in which:
281 unique CDR3
7 unique J



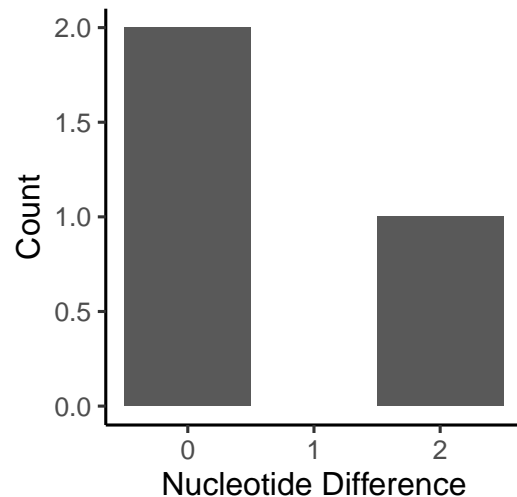
IGHV1-8*01

1815 sequences assigned
1705 (93.9%) exact matches, in which:
1700 unique CDR3
7 unique J



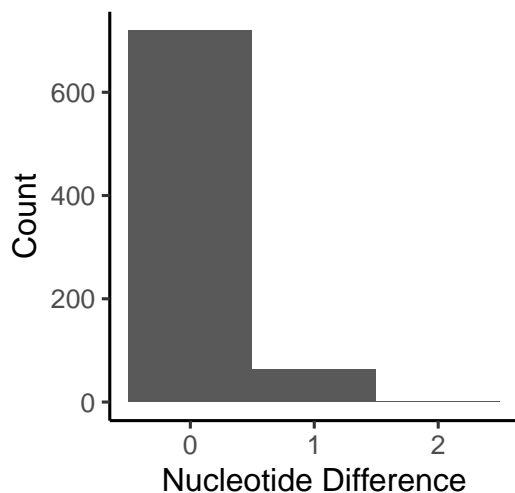
IGHV1-45*02

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



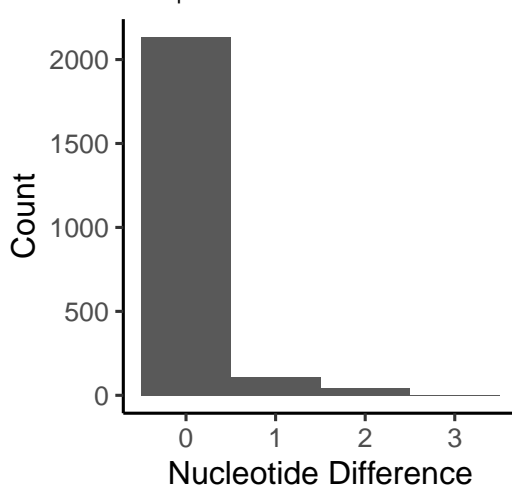
IGHV1-2*06

784 sequences assigned
720 (91.8%) exact matches, in which:
715 unique CDR3
7 unique J



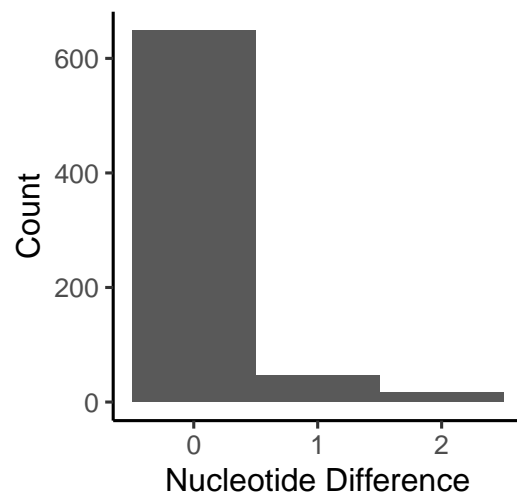
IGHV1-18*01

2286 sequences assigned
2134 (93.4%) exact matches, in which:
2127 unique CDR3
7 unique J



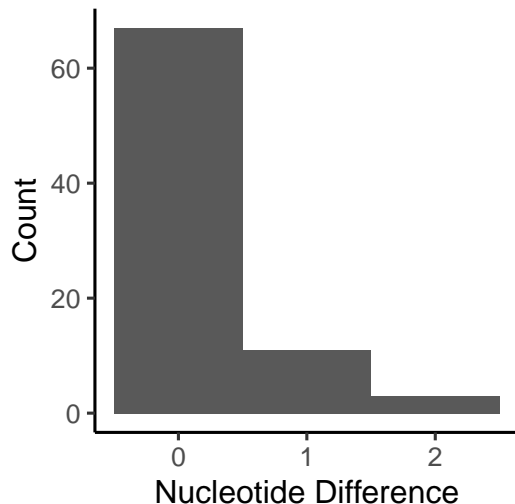
IGHV1-46*01

712 sequences assigned
649 (91.2%) exact matches, in which:
646 unique CDR3
7 unique J



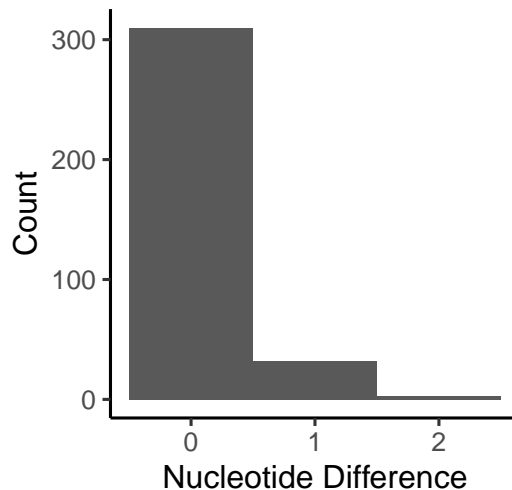
IGHV1-58*02

81 sequences assigned
67 (82.7%) exact matches, in which:
66 unique CDR3
5 unique J



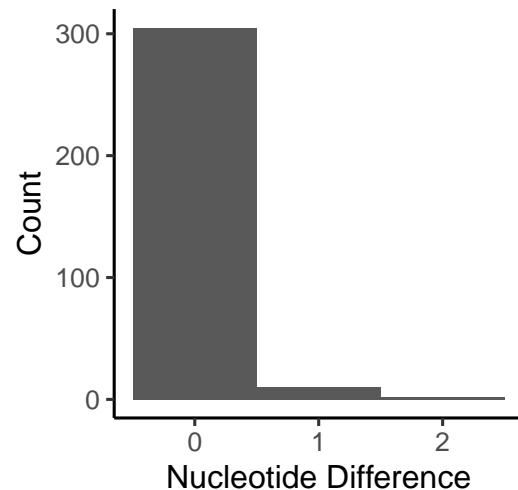
IGHV1-69*02

345 sequences assigned
310 (89.9%) exact matches, in which:
310 unique CDR3
6 unique J



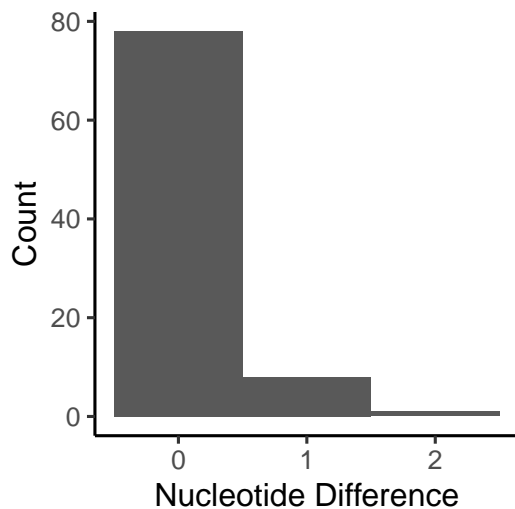
IGHV1-69*06_14

317 sequences assigned
305 (96.2%) exact matches, in which:
305 unique CDR3
6 unique J



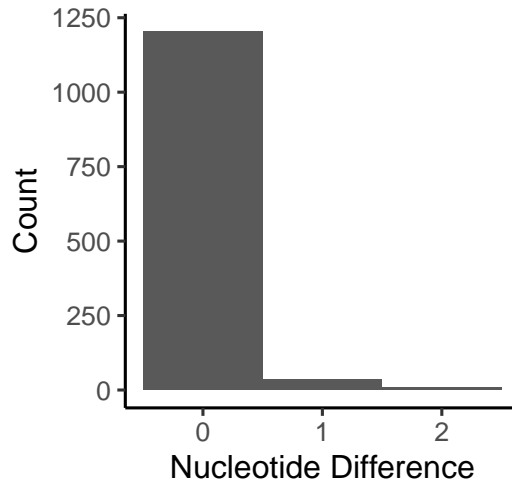
IGHV1-58*01_03

87 sequences assigned
78 (89.7%) exact matches, in which:
78 unique CDR3
7 unique J



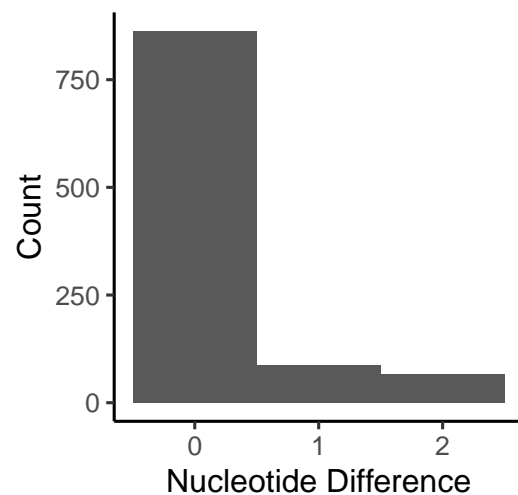
IGHV1-69*01_12_13

1244 sequences assigned
1203 (96.7%) exact matches, in which:
1203 unique CDR3
7 unique J



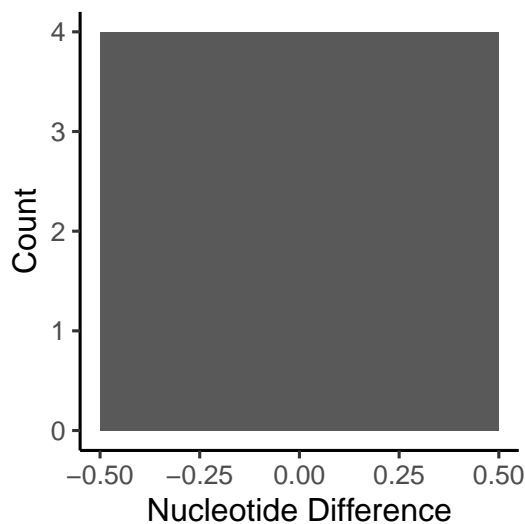
IGHV2-5*02

1016 sequences assigned
863 (84.9%) exact matches, in which:
859 unique CDR3
7 unique J



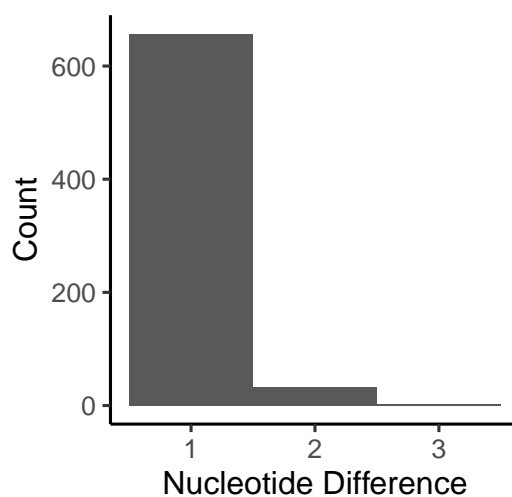
IGHV1-69-2*01

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



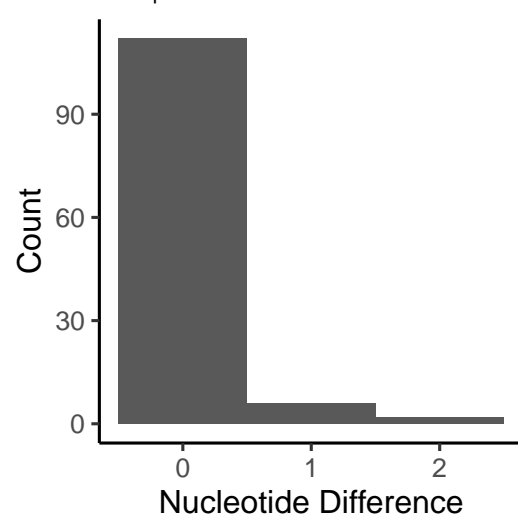
IGHV1-69*04_09

691 sequences assigned
No exact matches.



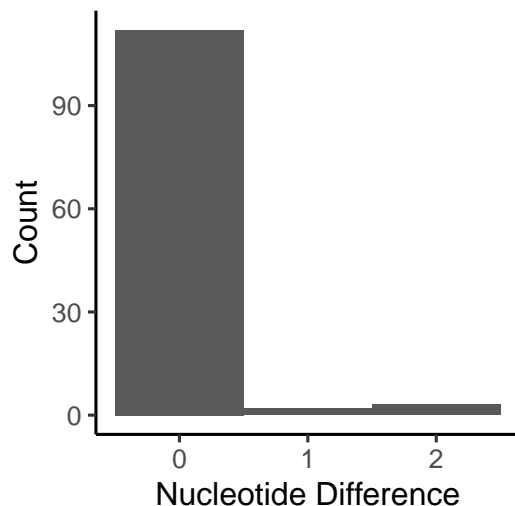
IGHV2-26*01

120 sequences assigned
112 (93.3%) exact matches, in which:
112 unique CDR3
6 unique J



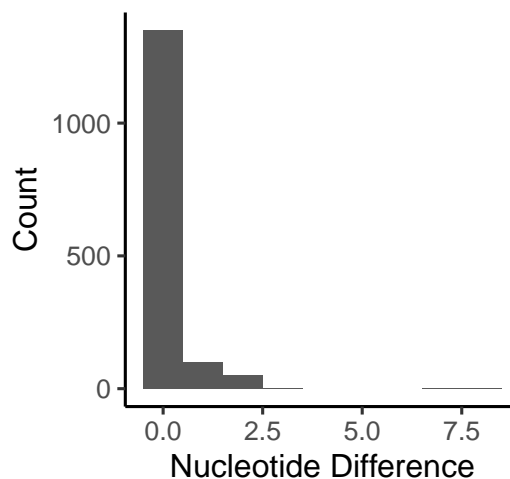
IGHV2-70*01

117 sequences assigned
112 (95.7%) exact matches, in which:
112 unique CDR3
6 unique J



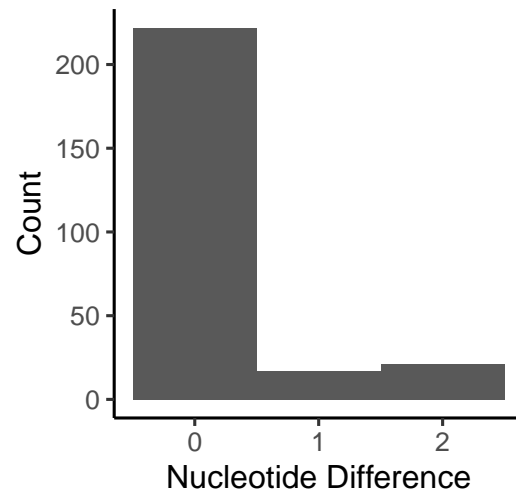
IGHV3-11*01

1501 sequences assigned
1349 (89.9%) exact matches, in which:
1309 unique CDR3
7 unique J



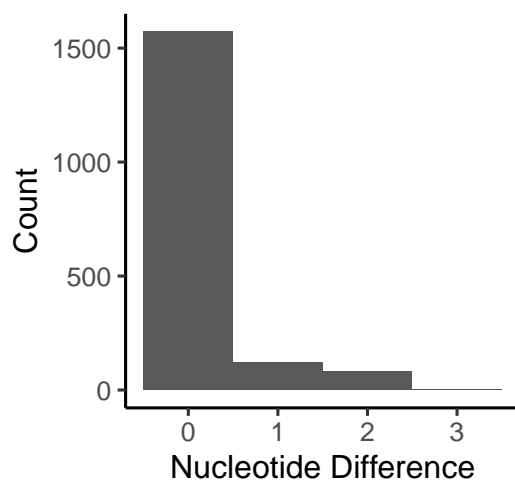
IGHV3-20*01_02

260 sequences assigned
222 (85.4%) exact matches, in which:
208 unique CDR3
7 unique J



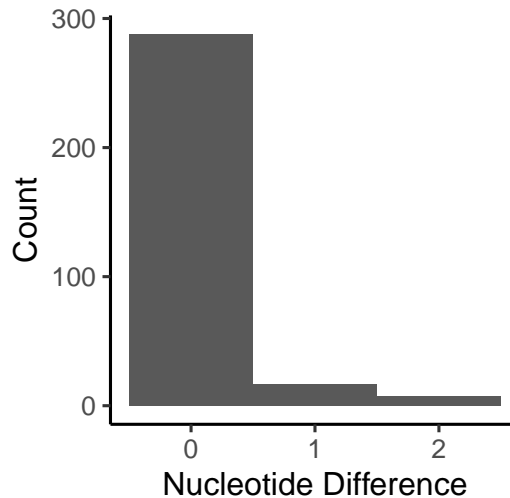
IGHV3-7*01

1778 sequences assigned
1572 (88.4%) exact matches, in which:
1525 unique CDR3
7 unique J



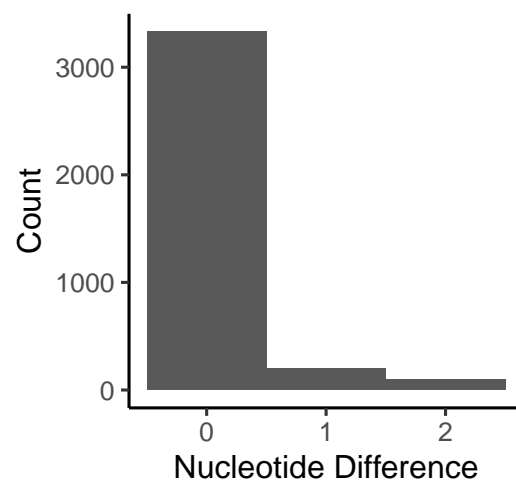
IGHV3-13*01

312 sequences assigned
288 (92.3%) exact matches, in which:
283 unique CDR3
6 unique J



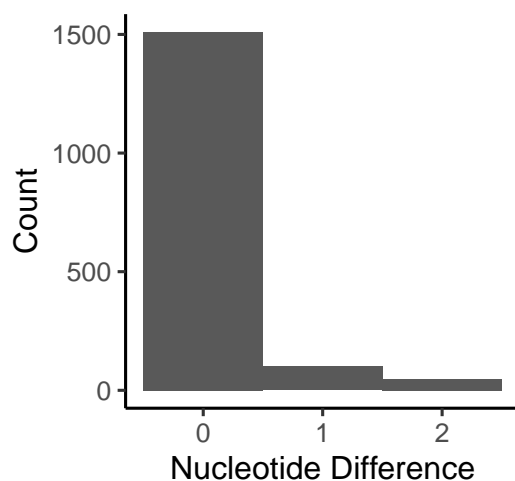
IGHV3-21*01_02

3635 sequences assigned
3330 (91.6%) exact matches, in which:
3192 unique CDR3
7 unique J



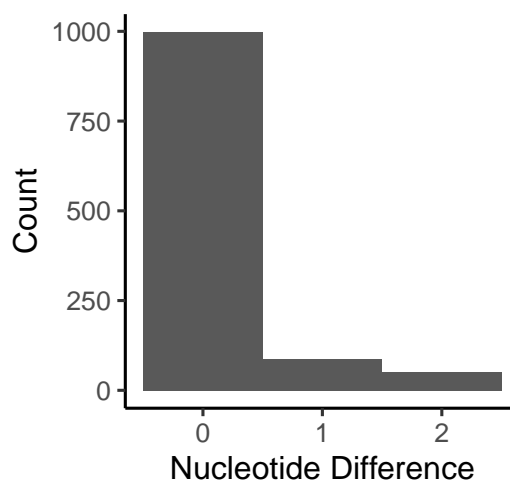
IGHV3-9*01

1660 sequences assigned
1510 (91%) exact matches, in which:
1477 unique CDR3
7 unique J



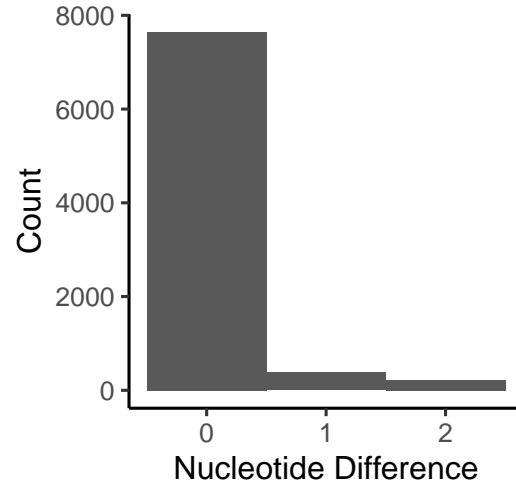
IGHV3-15*01_02

1137 sequences assigned
998 (87.8%) exact matches, in which:
966 unique CDR3
7 unique J



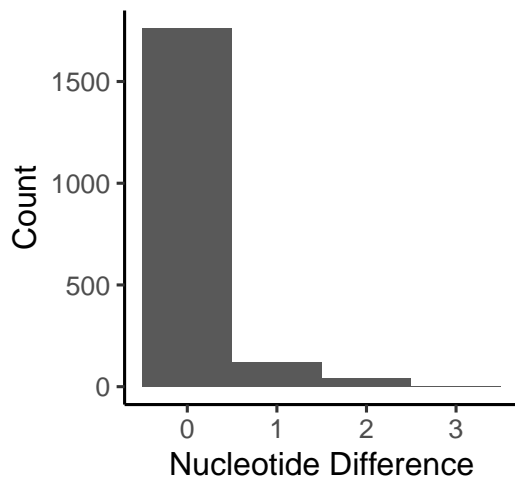
IGHV3-23*01_04

8243 sequences assigned
7643 (92.7%) exact matches, in which:
7359 unique CDR3
7 unique J



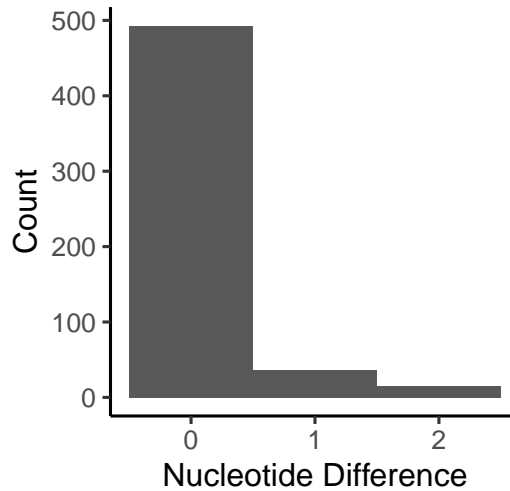
IGHV3-30-3*01

1923 sequences assigned
1761 (91.6%) exact matches, in which:
1719 unique CDR3
7 unique J



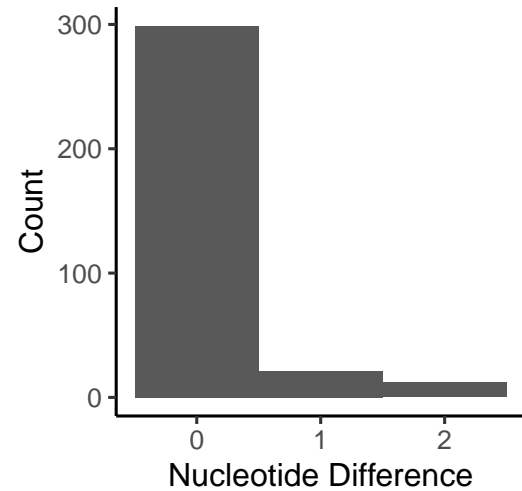
IGHV3-43*02

544 sequences assigned
493 (90.6%) exact matches, in which:
479 unique CDR3
7 unique J



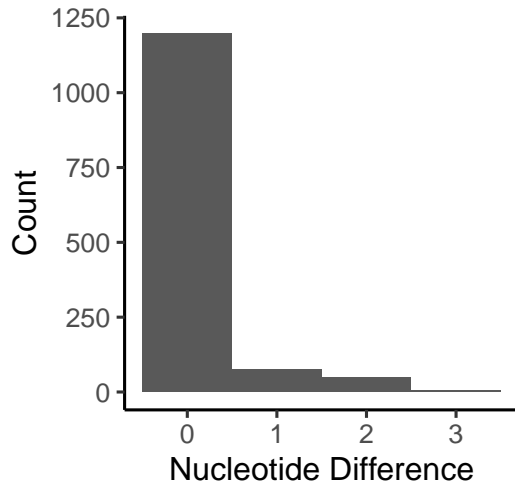
IGHV3-49*04

332 sequences assigned
299 (90.1%) exact matches, in which:
294 unique CDR3
7 unique J



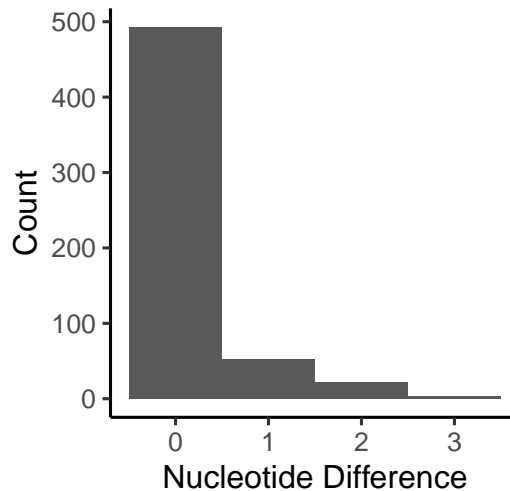
IGHV3-33*01

1324 sequences assigned
1197 (90.4%) exact matches, in which:
1163 unique CDR3
7 unique J



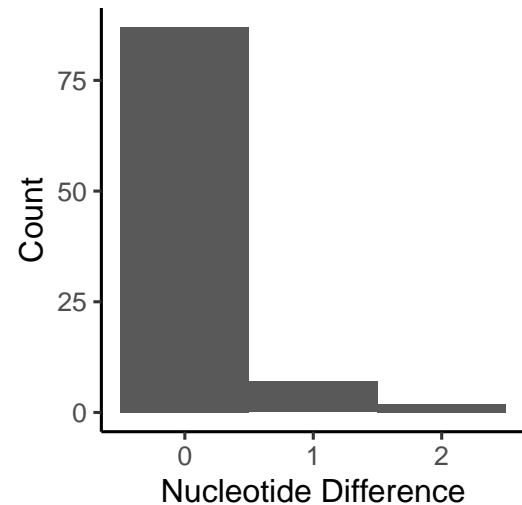
IGHV3-48*01

571 sequences assigned
493 (86.3%) exact matches, in which:
470 unique CDR3
6 unique J



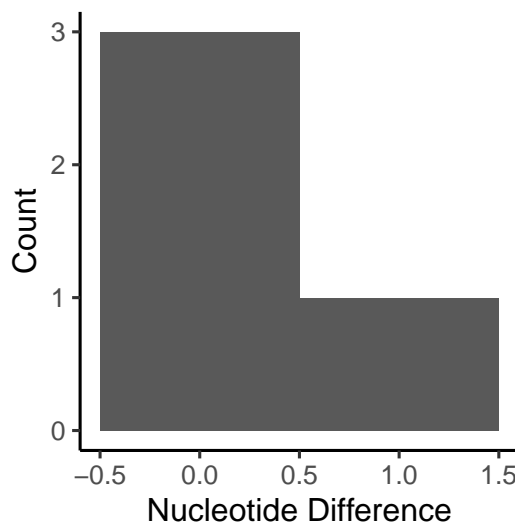
IGHV3-49*03_05

96 sequences assigned
87 (90.6%) exact matches, in which:
85 unique CDR3
5 unique J



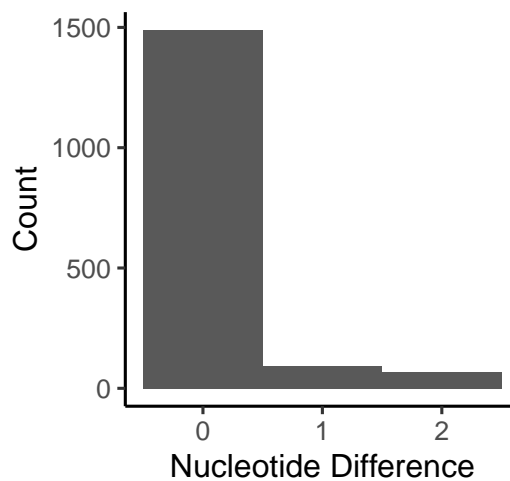
IGHV3-35*01

4 sequences assigned
3 (75%) exact matches, in which:
3 unique CDR3
2 unique J



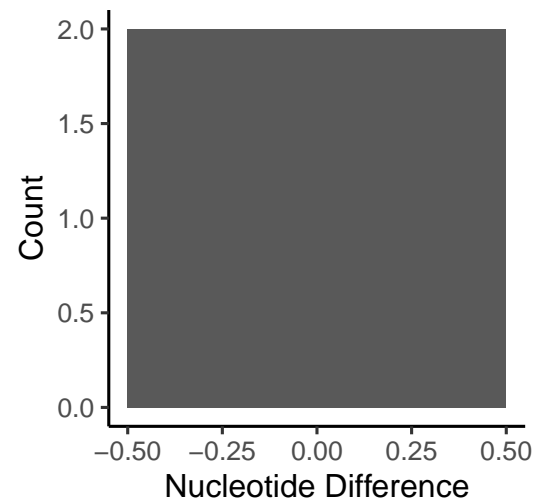
IGHV3-48*03

1651 sequences assigned
1489 (90.2%) exact matches, in which:
1456 unique CDR3
7 unique J



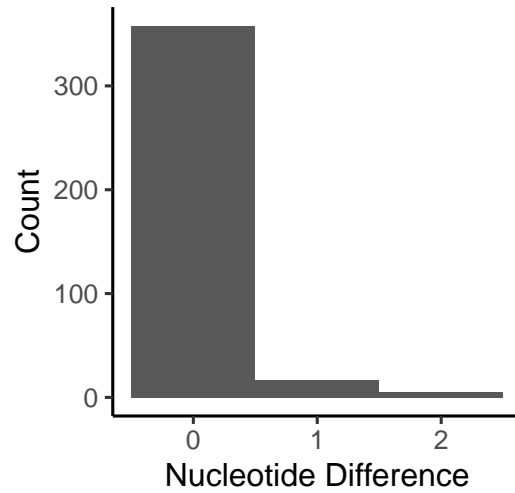
IGHV3-52*01_03

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



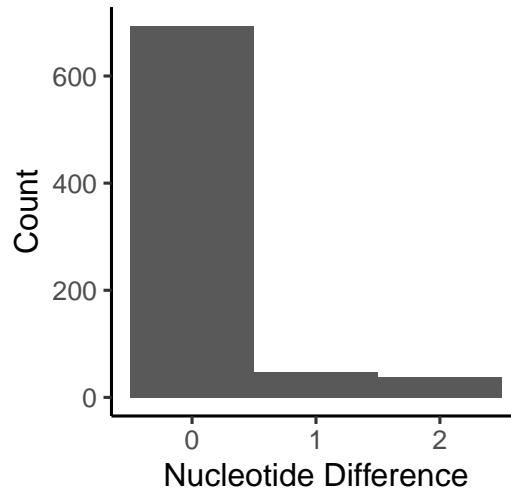
IGHV3-53*04

380 sequences assigned
358 (94.2%) exact matches, in which:
347 unique CDR3
7 unique J



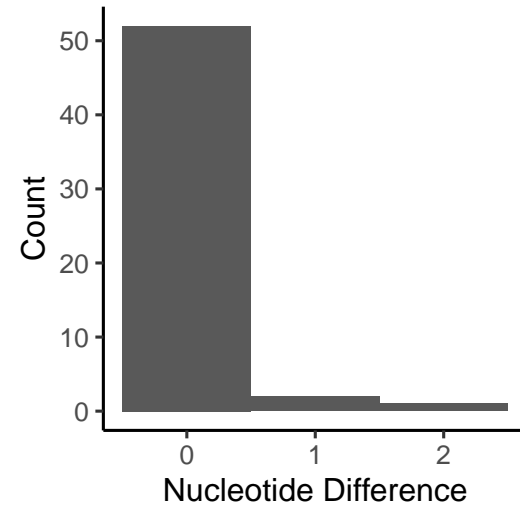
IGHV3-66*02

779 sequences assigned
694 (89.1%) exact matches, in which:
658 unique CDR3
6 unique J



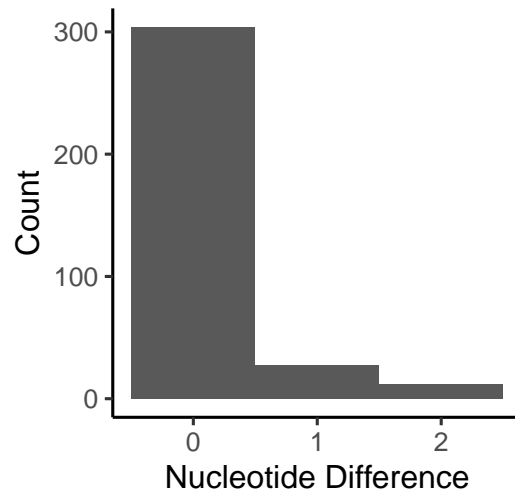
IGHV3-72*01

55 sequences assigned
52 (94.5%) exact matches, in which:
52 unique CDR3
6 unique J



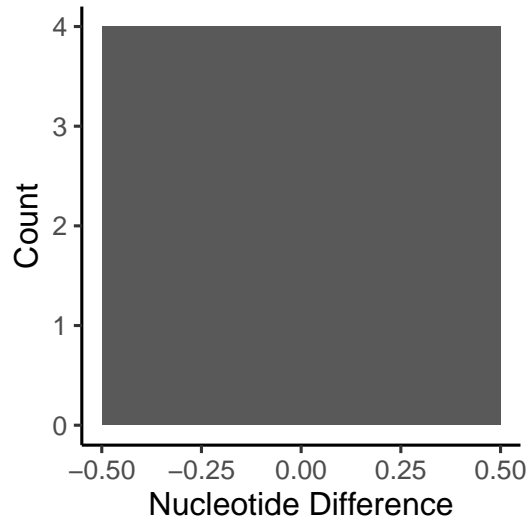
IGHV3-53*01_02

343 sequences assigned
304 (88.6%) exact matches, in which:
296 unique CDR3
6 unique J



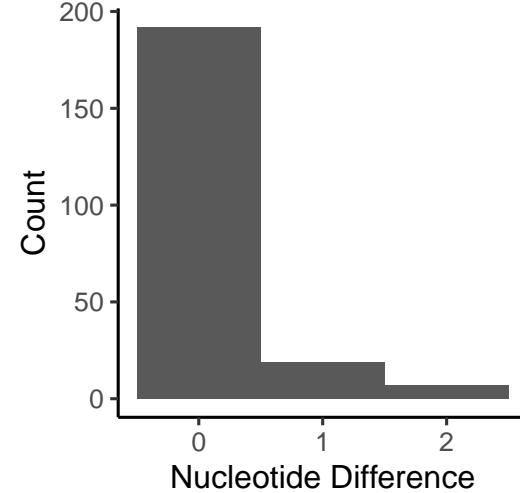
IGHV3-69-1*01

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



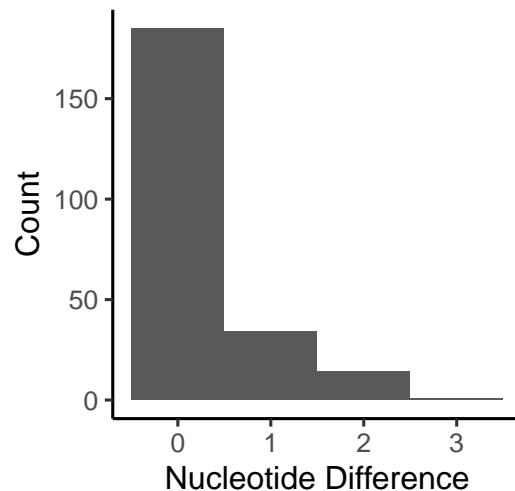
IGHV3-73*01_02

218 sequences assigned
192 (88.1%) exact matches, in which:
188 unique CDR3
7 unique J



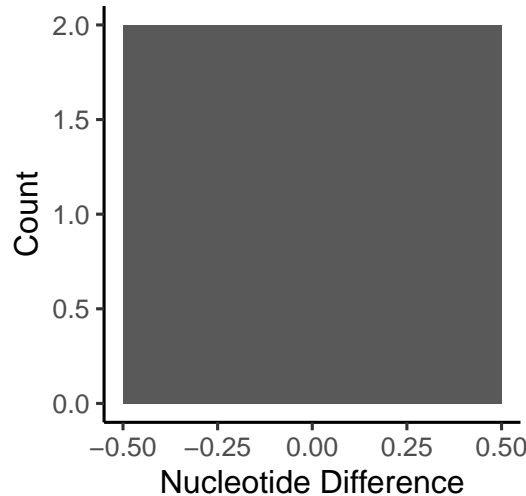
IGHV3-64*01

234 sequences assigned
185 (79.1%) exact matches, in which:
176 unique CDR3
5 unique J



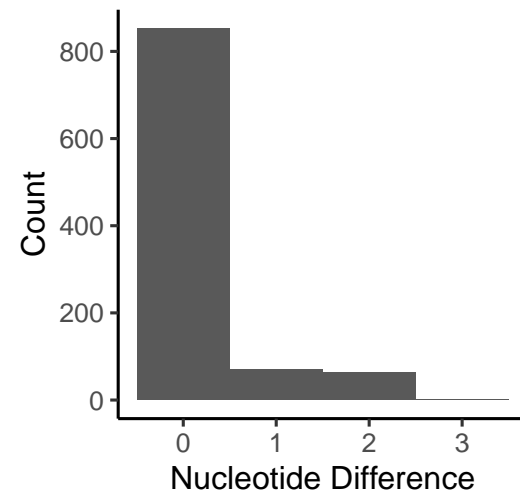
IGHV3-69-1*02

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



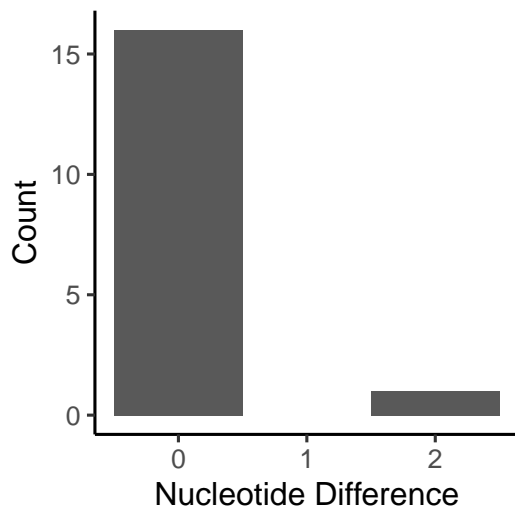
IGHV3-74*01_02

987 sequences assigned
853 (86.4%) exact matches, in which:
827 unique CDR3
7 unique J



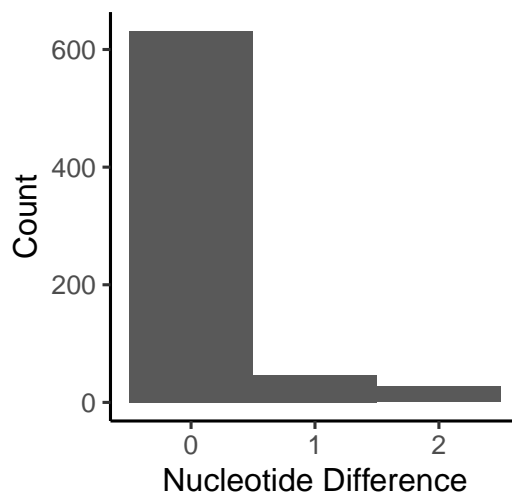
IGHV3-43D*04

17 sequences assigned
16 (94.1%) exact matches, in which:
16 unique CDR3
2 unique J



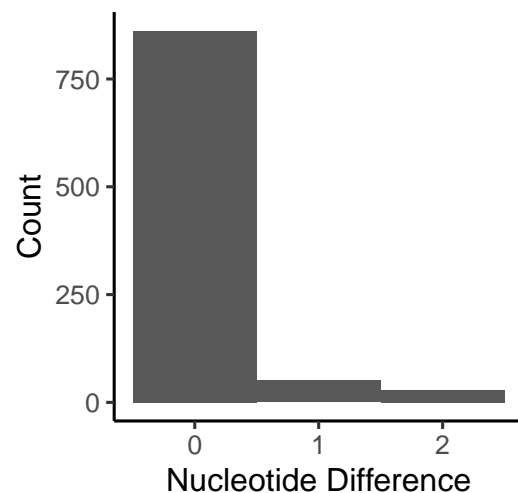
IGHV4-4*02_03

705 sequences assigned
632 (89.6%) exact matches, in which:
618 unique CDR3
7 unique J



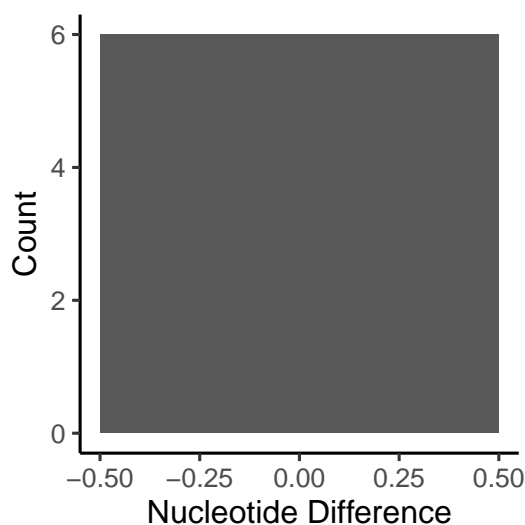
IGHV4-30-4*01

942 sequences assigned
862 (91.5%) exact matches, in which:
847 unique CDR3
7 unique J



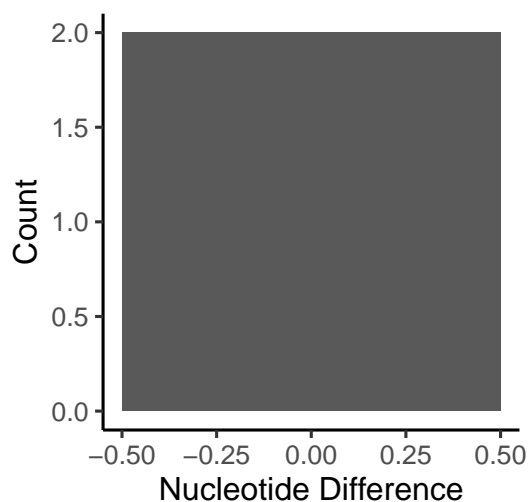
IGHV3-64D*06

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



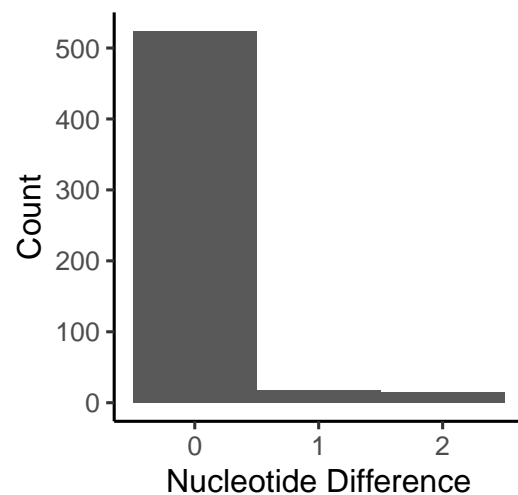
IGHV4-28*03

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



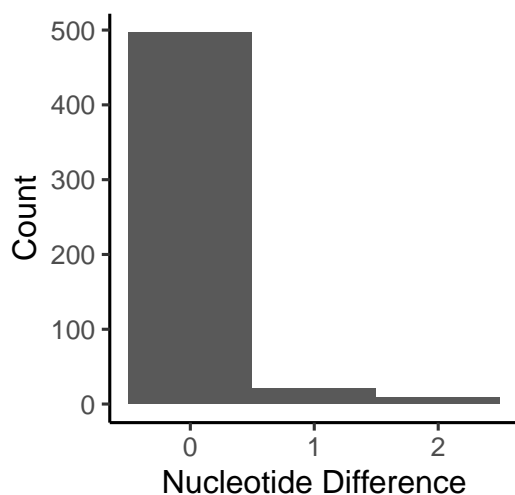
IGHV4-30-2*01

556 sequences assigned
524 (94.2%) exact matches, in which:
506 unique CDR3
7 unique J



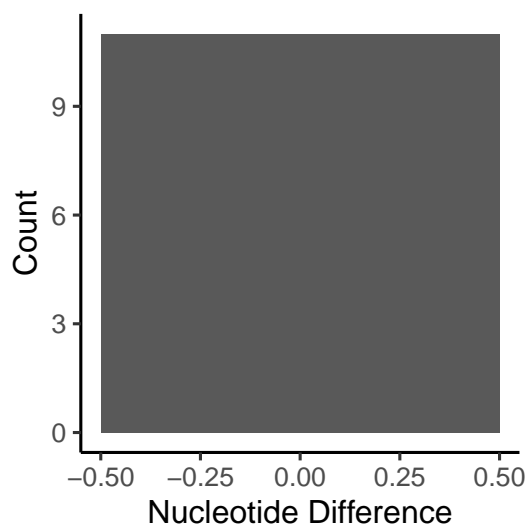
IGHV4-4*07

527 sequences assigned
497 (94.3%) exact matches, in which:
479 unique CDR3
6 unique J



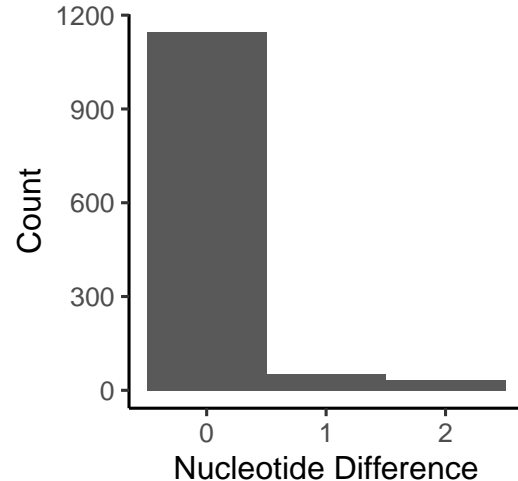
IGHV4-28*01_07

11 sequences assigned
11 (100%) exact matches, in which:
9 unique CDR3
3 unique J



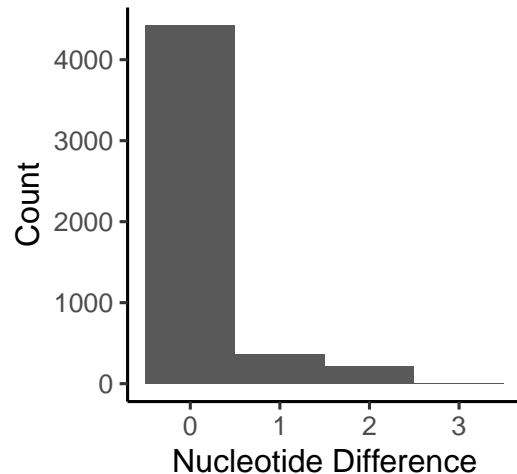
IGHV4-31*02

1232 sequences assigned
1146 (93%) exact matches, in which:
1123 unique CDR3
7 unique J



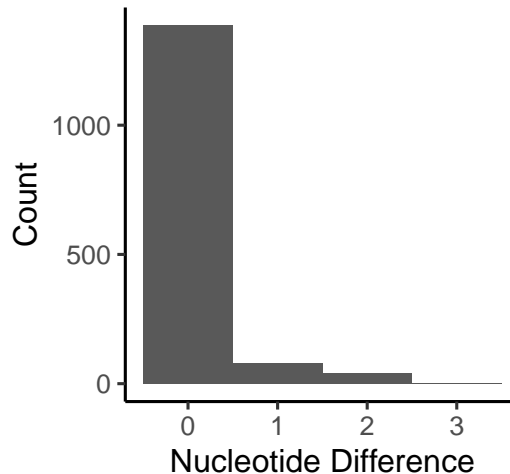
IGHV4-34*01_02

5016 sequences assigned
4423 (88.2%) exact matches, in which:
4253 unique CDR3
7 unique J



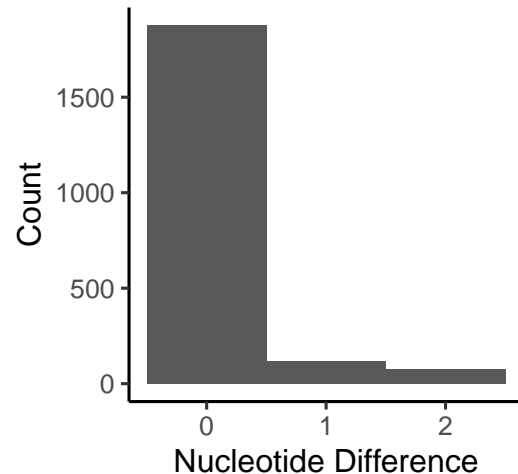
IGHV4-39*02_C258G

1505 sequences assigned
1386 (92.1%) exact matches, in which:
1350 unique CDR3
7 unique J



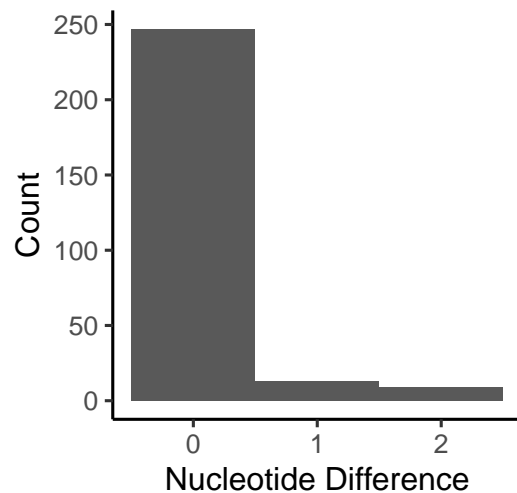
IGHV4-61*02

2072 sequences assigned
1876 (90.5%) exact matches, in which:
1822 unique CDR3
6 unique J



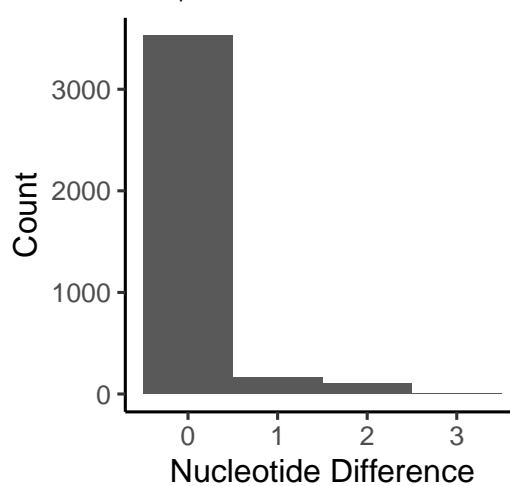
IGHV4-38-2*01

269 sequences assigned
247 (91.8%) exact matches, in which:
244 unique CDR3
5 unique J



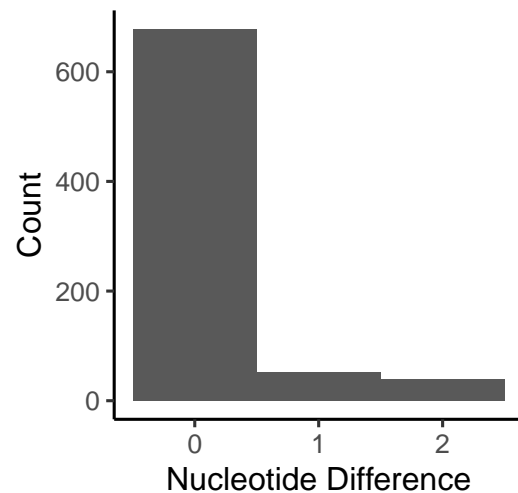
IGHV4-59*02_G88A

3792 sequences assigned
3527 (93%) exact matches, in which:
3413 unique CDR3
7 unique J



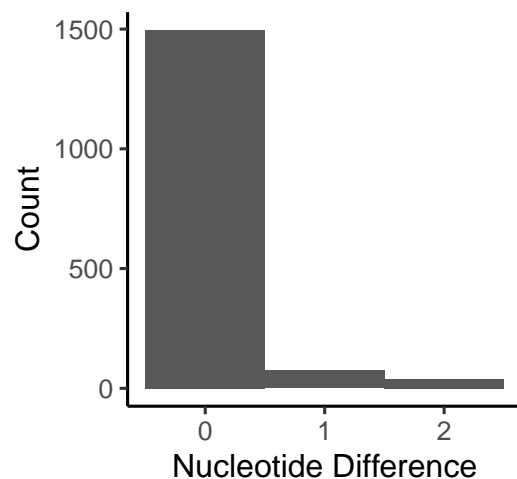
IGHV5-51*07_A128G

770 sequences assigned
678 (88.1%) exact matches, in which:
677 unique CDR3
7 unique J



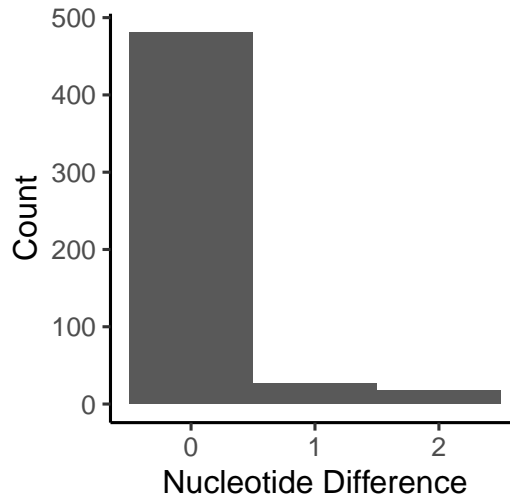
IGHV4-39*07

1610 sequences assigned
1496 (92.9%) exact matches, in which:
1442 unique CDR3
6 unique J



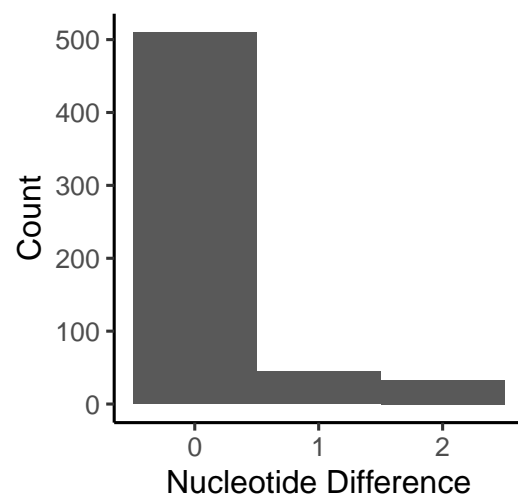
IGHV4-61*01

526 sequences assigned
481 (91.4%) exact matches, in which:
474 unique CDR3
7 unique J



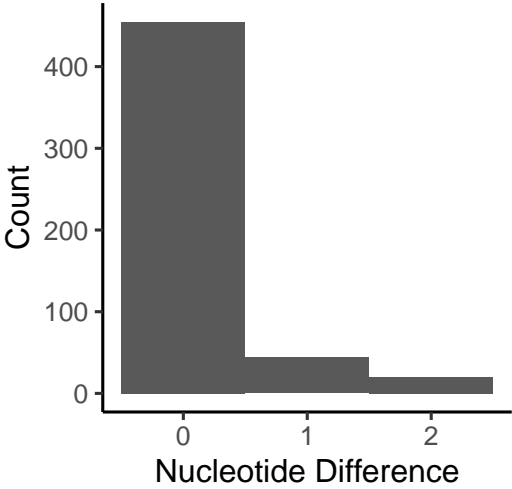
IGHV6-1*01_02

587 sequences assigned
510 (86.9%) exact matches, in which:
503 unique CDR3
7 unique J

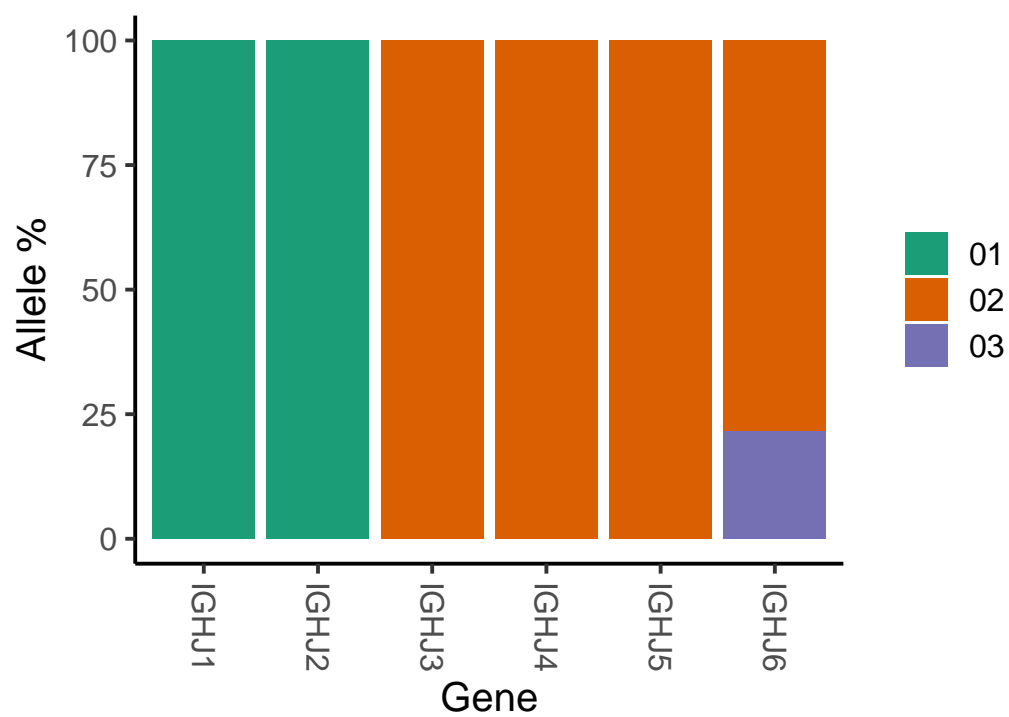


IGHV7-4-1*02

519 sequences assigned
455 (87.7%) exact matches, in which:
453 unique CDR3
7 unique J



Allele Usage



Warning – no inferred sequences found.