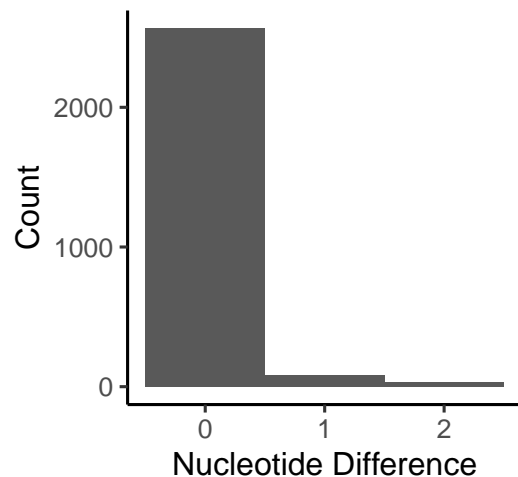


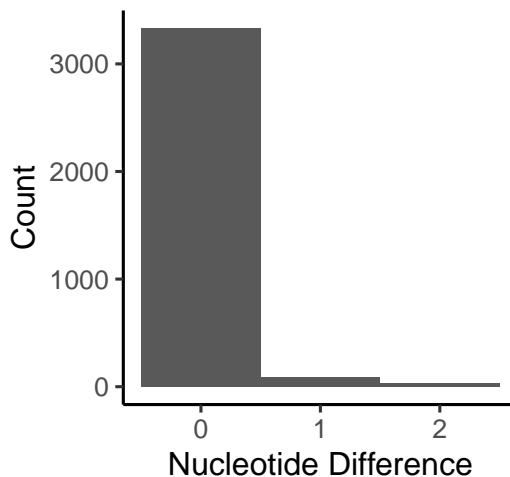
IGHV1-2*02

2676 sequences assigned
2565 (95.9%) exact matches, in which:
2554 unique CDR3
6 unique J



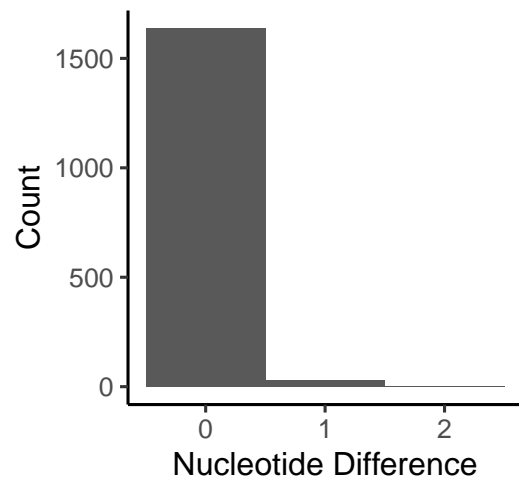
IGHV1-8*01

3443 sequences assigned
3330 (96.7%) exact matches, in which:
3309 unique CDR3
6 unique J



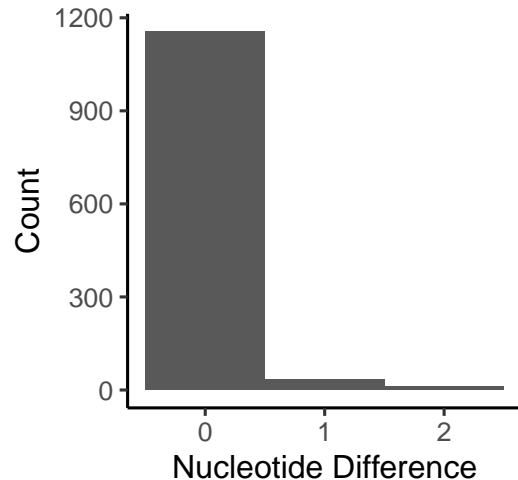
IGHV1-24*01

1671 sequences assigned
1637 (98%) exact matches, in which:
1633 unique CDR3
6 unique J



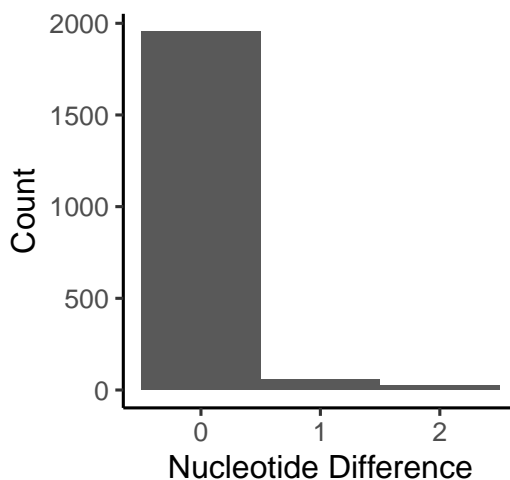
IGHV1-2*04

1200 sequences assigned
1155 (96.2%) exact matches, in which:
1154 unique CDR3
6 unique J



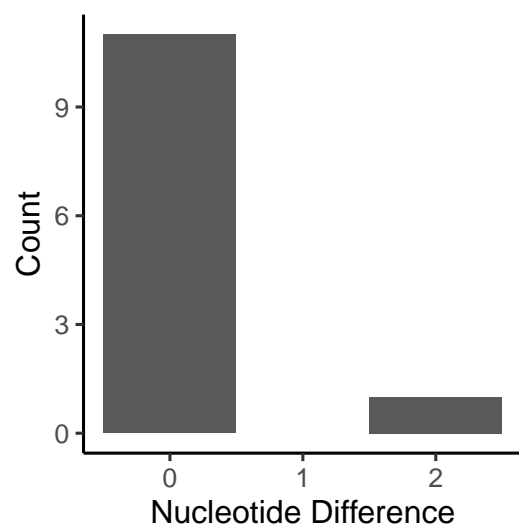
IGHV1-18*01

2034 sequences assigned
1954 (96.1%) exact matches, in which:
1951 unique CDR3
6 unique J



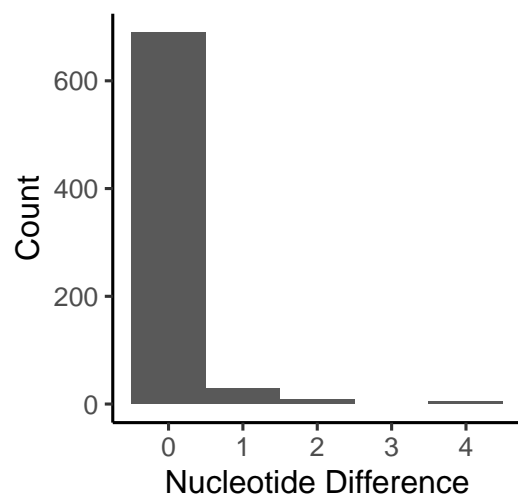
IGHV1-45*02

12 sequences assigned
11 (91.7%) exact matches, in which:
11 unique CDR3
3 unique J



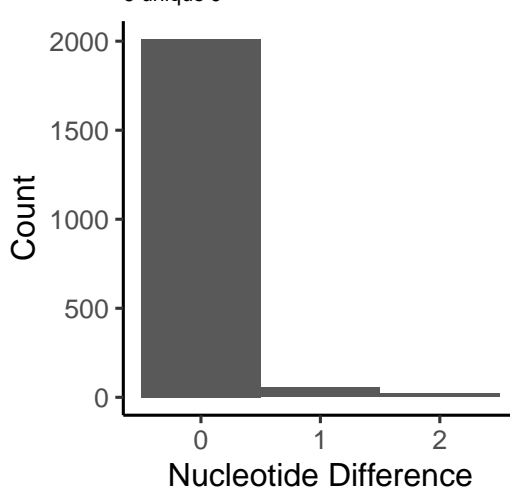
IGHV1-3*01_05

731 sequences assigned
690 (94.4%) exact matches, in which:
687 unique CDR3
6 unique J



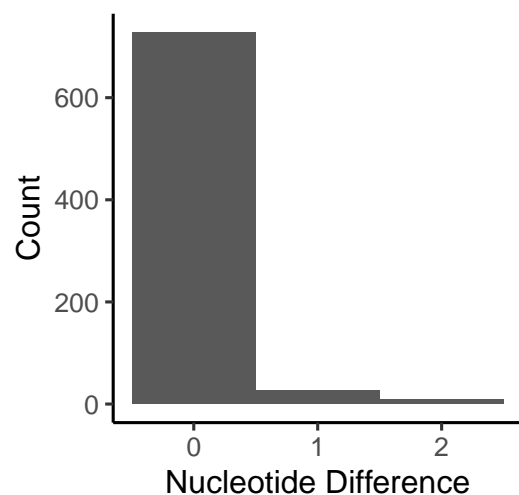
IGHV1-18*04

2088 sequences assigned
2012 (96.4%) exact matches, in which:
2007 unique CDR3
6 unique J



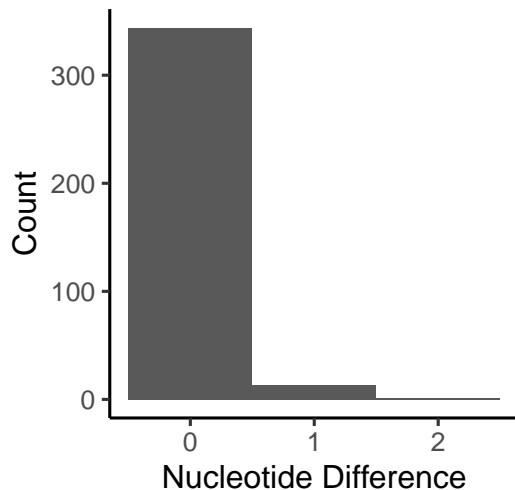
IGHV1-46*01

763 sequences assigned
728 (95.4%) exact matches, in which:
728 unique CDR3
6 unique J



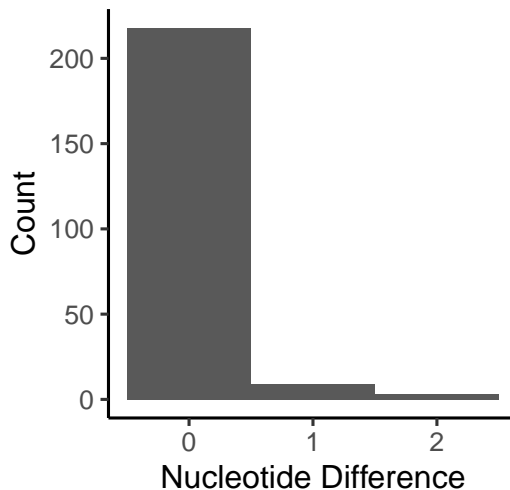
IGHV1–46*03

358 sequences assigned
344 (96.1%) exact matches, in which:
342 unique CDR3
6 unique J



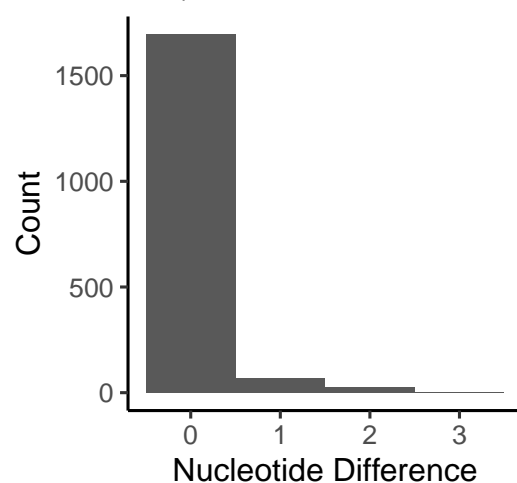
IGHV2–26*01

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



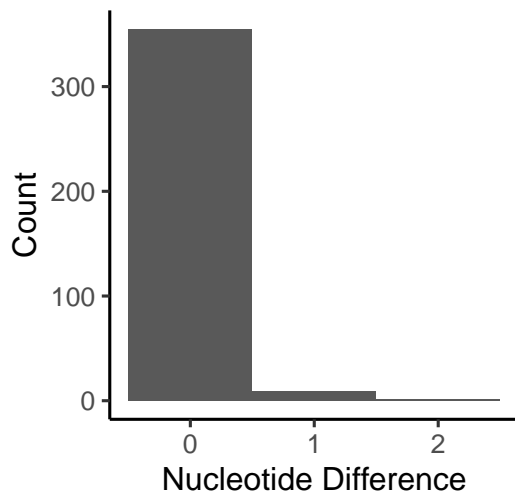
IGHV3–9*01

1791 sequences assigned
1695 (94.6%) exact matches, in which:
1651 unique CDR3
6 unique J



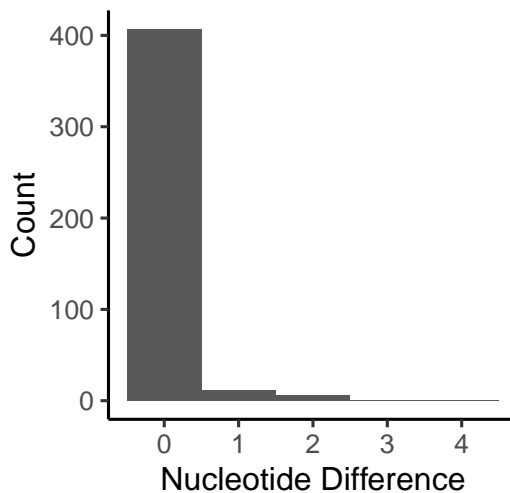
IGHV1–58*01_03

365 sequences assigned
355 (97.3%) exact matches, in which:
355 unique CDR3
6 unique J



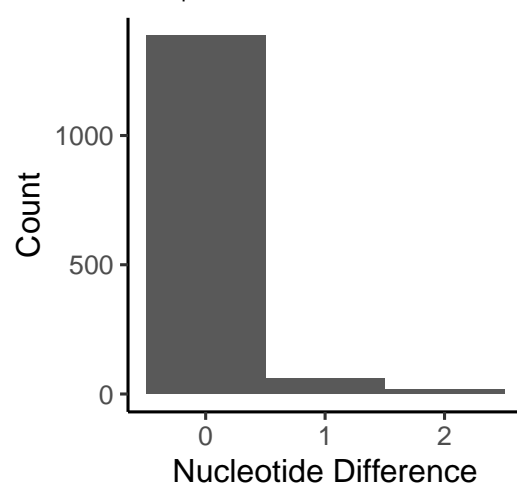
IGHV2–70*01

426 sequences assigned
407 (95.5%) exact matches, in which:
403 unique CDR3
5 unique J



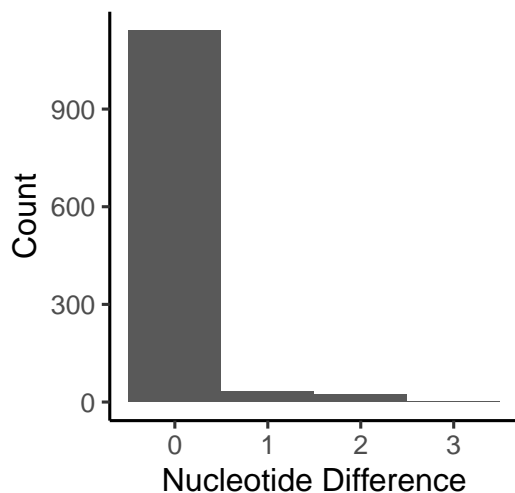
IGHV3–11*01

1462 sequences assigned
1386 (94.8%) exact matches, in which:
1329 unique CDR3
6 unique J



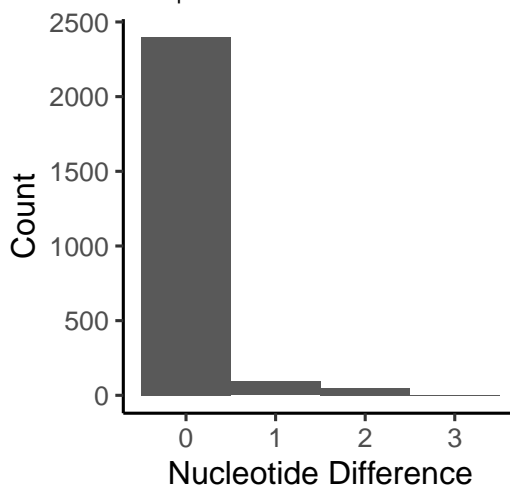
IGHV2–5*01

1197 sequences assigned
1142 (95.4%) exact matches, in which:
1136 unique CDR3
6 unique J



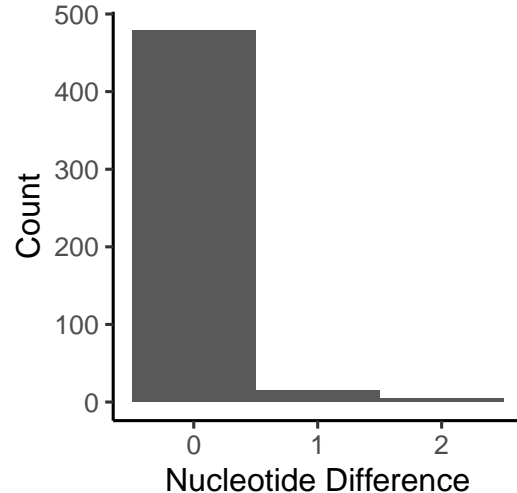
IGHV3–7*01

2542 sequences assigned
2399 (94.4%) exact matches, in which:
2264 unique CDR3
6 unique J



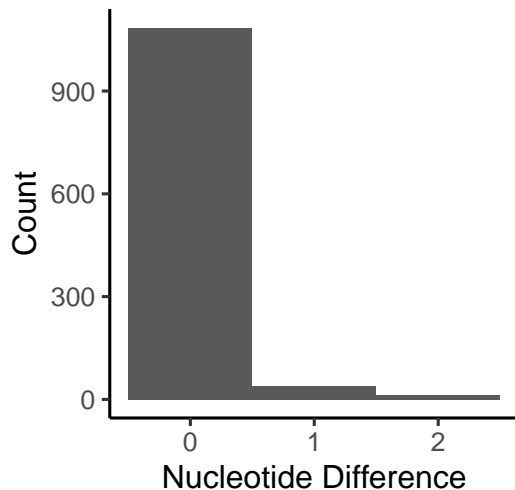
IGHV3–13*01

499 sequences assigned
479 (96%) exact matches, in which:
455 unique CDR3
5 unique J



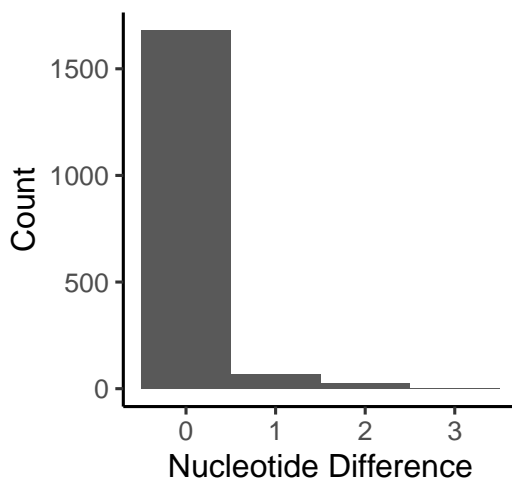
IGHV3-15*01_02

1137 sequences assigned
1085 (95.4%) exact matches, in which:
1048 unique CDR3
6 unique J



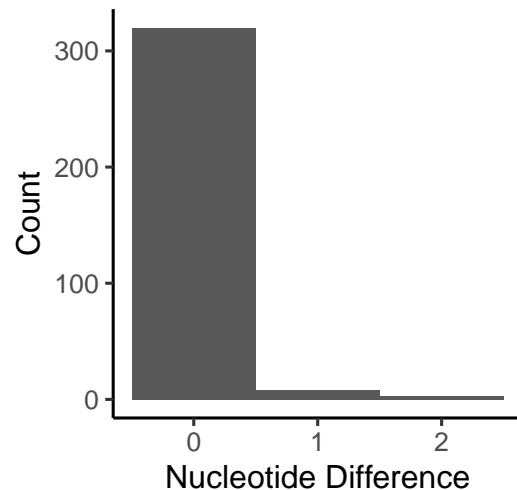
IGHV3-30-3*01

1773 sequences assigned
1680 (94.8%) exact matches, in which:
1630 unique CDR3
6 unique J



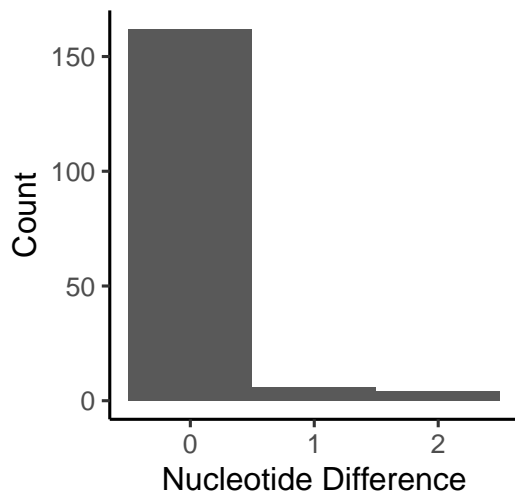
IGHV3-43*01

331 sequences assigned
320 (96.7%) exact matches, in which:
300 unique CDR3
6 unique J



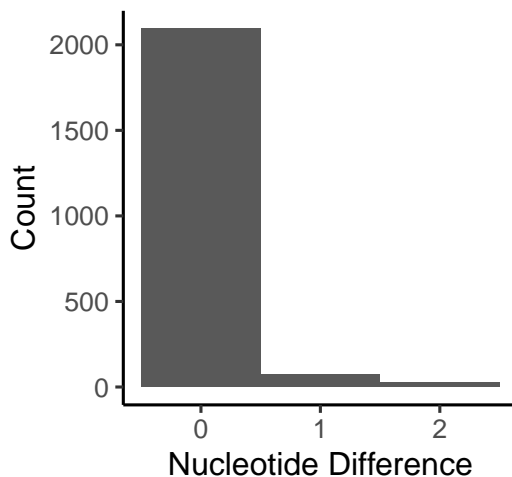
IGHV3-20*01_02

172 sequences assigned
162 (94.2%) exact matches, in which:
156 unique CDR3
5 unique J



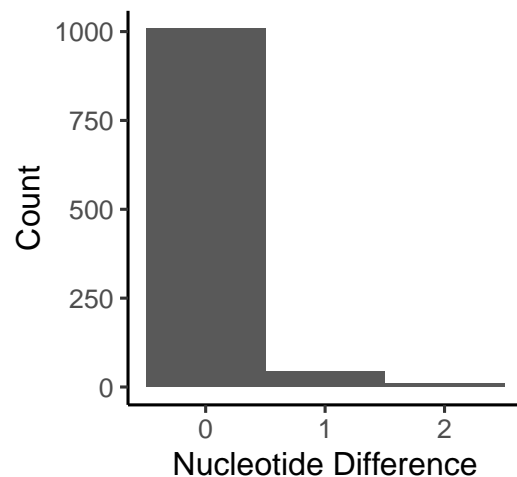
IGHV3-33*01

2191 sequences assigned
2094 (95.6%) exact matches, in which:
2038 unique CDR3
6 unique J



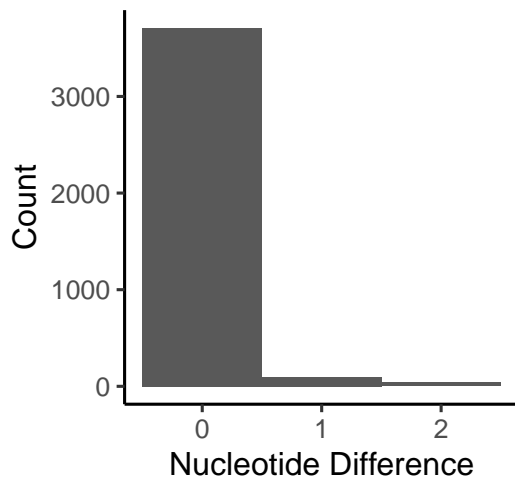
IGHV3-48*01

1060 sequences assigned
1008 (95.1%) exact matches, in which:
949 unique CDR3
6 unique J



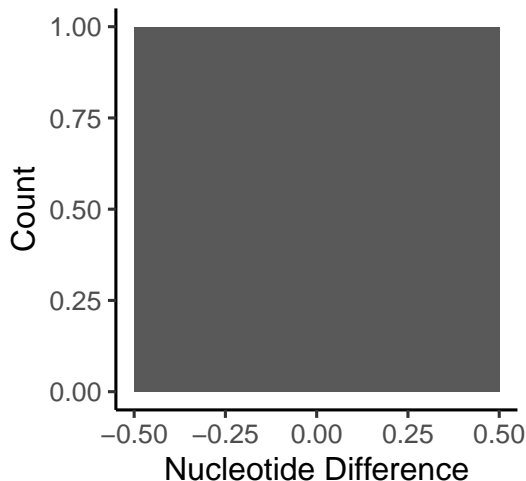
IGHV3-21*01_02

3844 sequences assigned
3708 (96.5%) exact matches, in which:
3485 unique CDR3
6 unique J



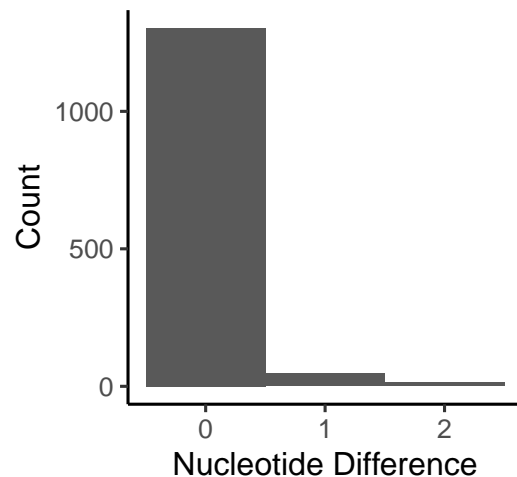
IGHV3-35*01

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



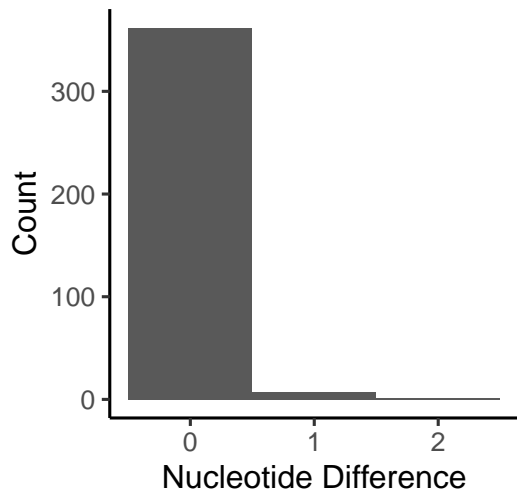
IGHV3-48*02

1363 sequences assigned
1303 (95.6%) exact matches, in which:
1215 unique CDR3
6 unique J



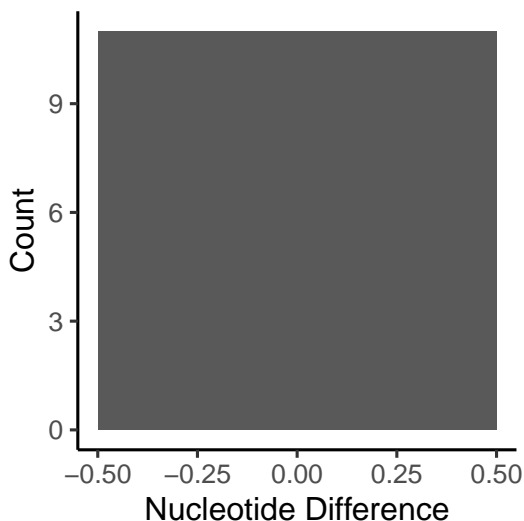
IGHV3-49*03_05

370 sequences assigned
362 (97.8%) exact matches, in which:
358 unique CDR3
6 unique J



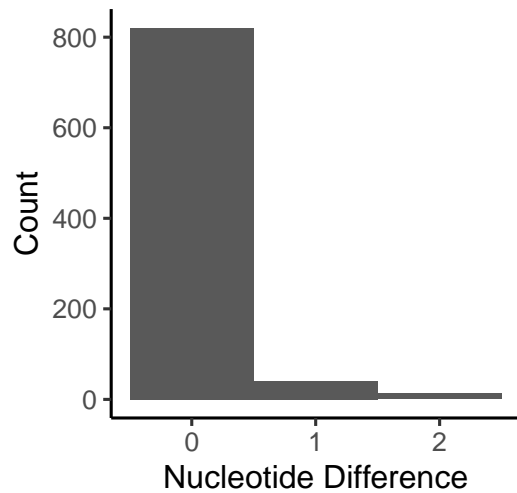
IGHV3-66*03

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



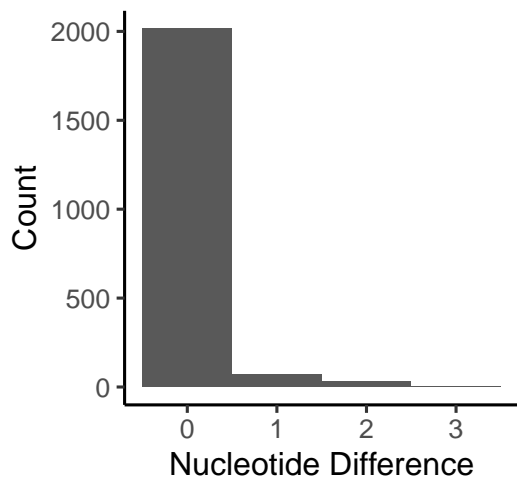
IGHV3-74*01_02

875 sequences assigned
821 (93.8%) exact matches, in which:
788 unique CDR3
6 unique J



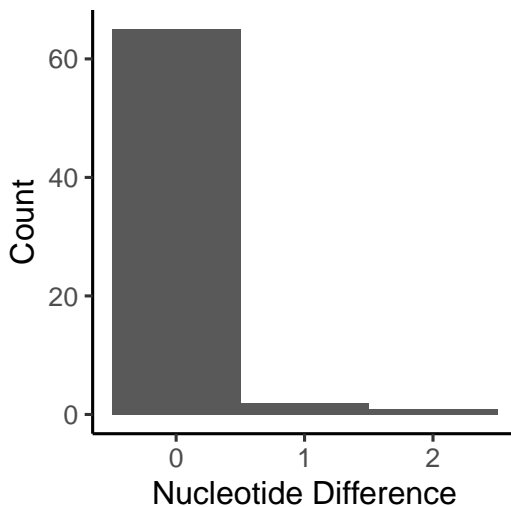
IGHV3-53*01_02

2118 sequences assigned
2015 (95.1%) exact matches, in which:
1892 unique CDR3
6 unique J



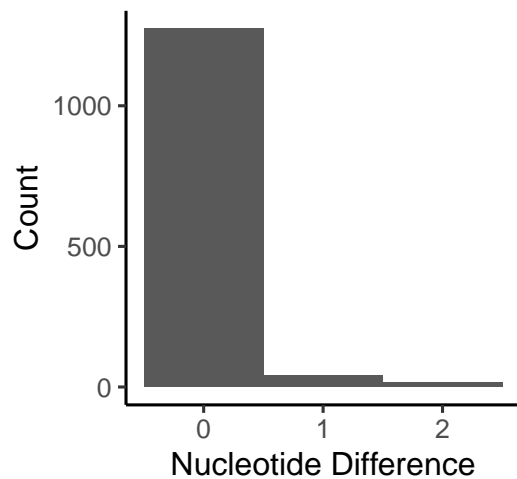
IGHV3-72*01

68 sequences assigned
65 (95.6%) exact matches, in which:
63 unique CDR3
6 unique J



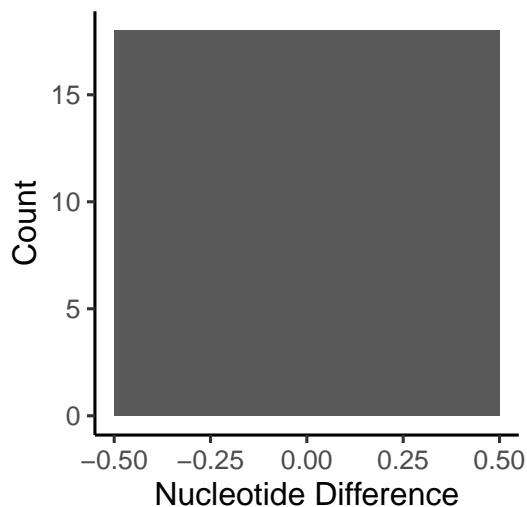
IGHV4-4*07

1332 sequences assigned
1274 (95.6%) exact matches, in which:
1201 unique CDR3
6 unique J



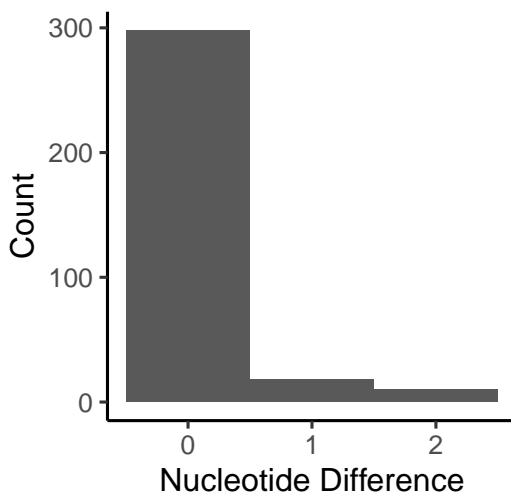
IGHV3-64*02_07

18 sequences assigned
18 (100%) exact matches, in which:
18 unique CDR3
5 unique J



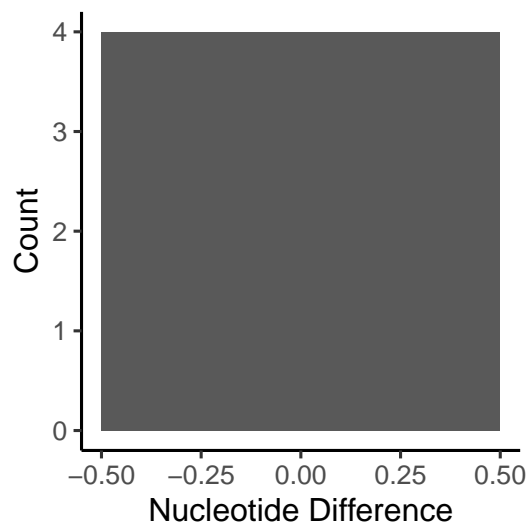
IGHV3-73*01_02

326 sequences assigned
298 (91.4%) exact matches, in which:
276 unique CDR3
6 unique J



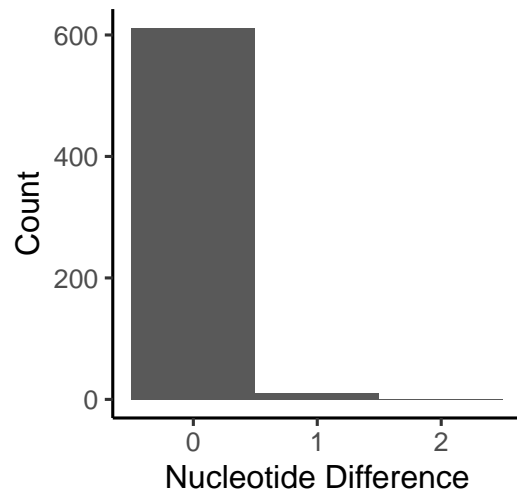
IGHV4-28*01_07

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



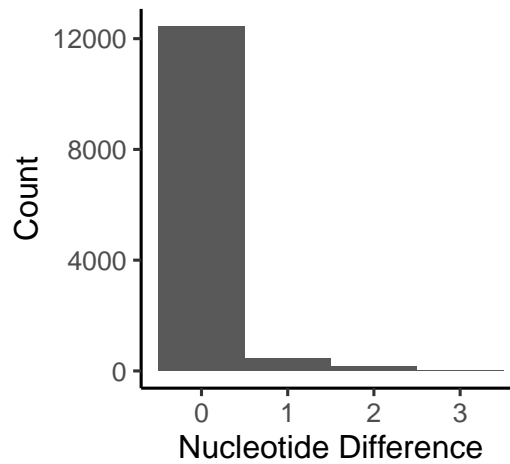
IGHV4-30-4*01

624 sequences assigned
612 (98.1%) exact matches, in which:
601 unique CDR3
6 unique J



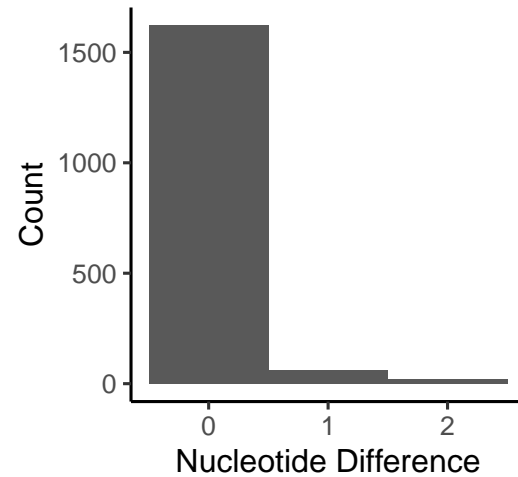
IGHV4-34*01_02

13053 sequences assigned
12451 (95.4%) exact matches, in which:
11614 unique CDR3
6 unique J



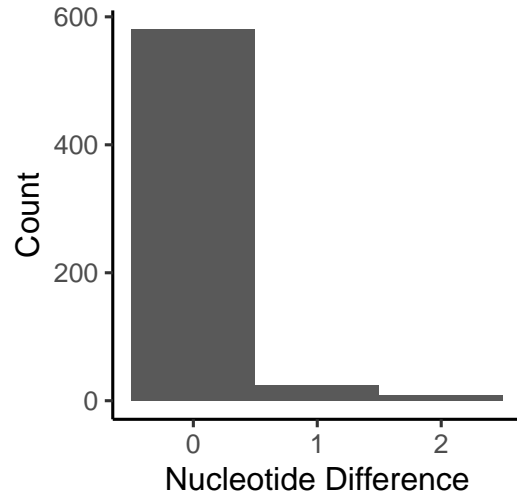
IGHV4-61*01

1702 sequences assigned
1622 (95.3%) exact matches, in which:
1542 unique CDR3
6 unique J



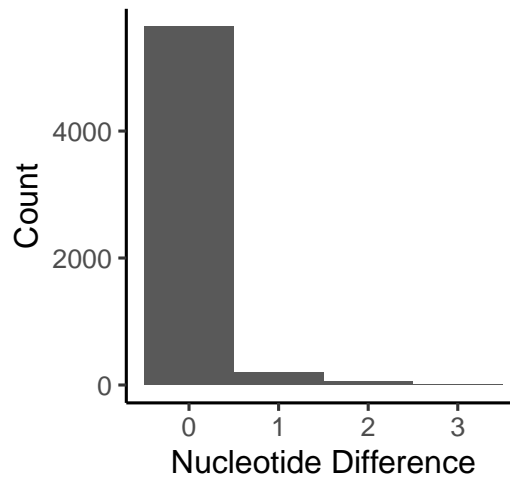
IGHV4-30-2*01

614 sequences assigned
581 (94.6%) exact matches, in which:
546 unique CDR3
6 unique J



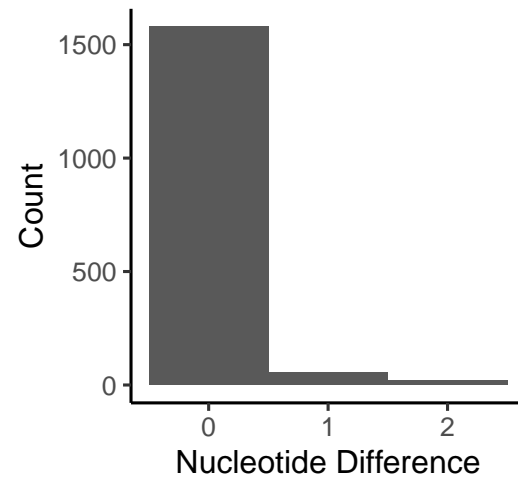
IGHV4-39*01_05

5899 sequences assigned
5643 (95.7%) exact matches, in which:
5408 unique CDR3
6 unique J



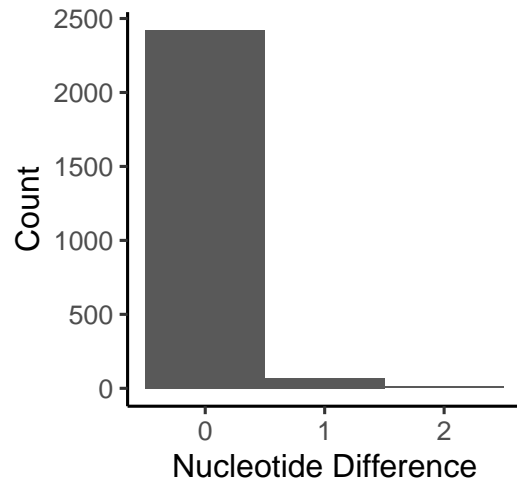
IGHV5-51*01_03

1656 sequences assigned
1579 (95.4%) exact matches, in which:
1576 unique CDR3
6 unique J



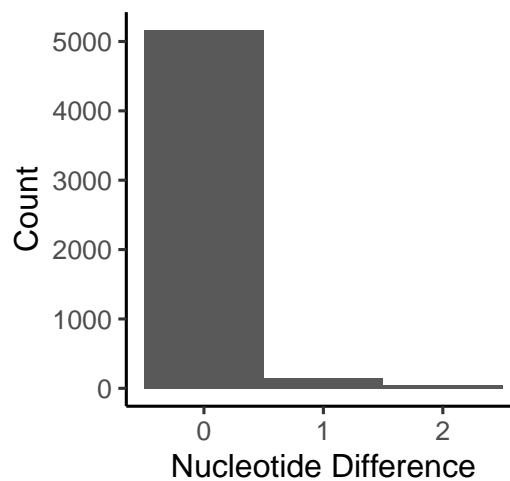
IGHV4-31*03_04

2505 sequences assigned
2422 (96.7%) exact matches, in which:
2348 unique CDR3
6 unique J



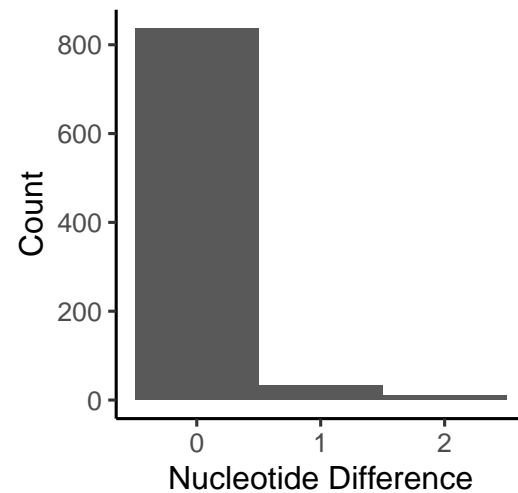
IGHV4-59*01_07

5360 sequences assigned
5165 (96.4%) exact matches, in which:
4846 unique CDR3
6 unique J



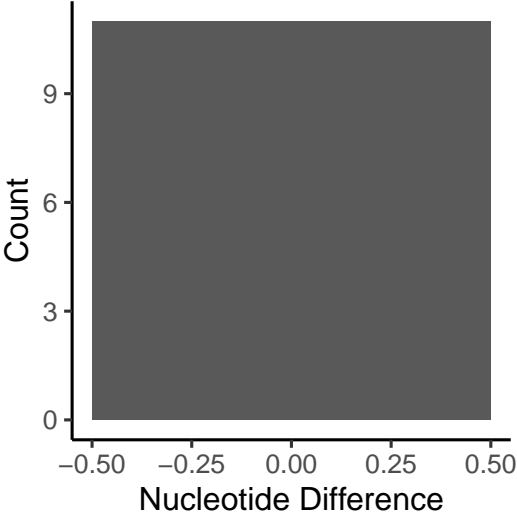
IGHV6-1*01_02

881 sequences assigned
837 (95%) exact matches, in which:
830 unique CDR3
6 unique J



IGHV7-4-1*01

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





Novel sequence(s)IGHV5-51*07_A128G are not listed in the genotype and will be ignored.

Novel sequence(s)IGHV4-59*02_G88AIGHV5-51*07_A128G are not listed in the genotype and will be ignored.

Novel sequence(s)IGHV5-51*07_A128G are not listed in the genotype and will be ignored.

Warning – no inferred sequences found.

Warning – no inferred sequences found.

Novel sequence(s)IGHV4-39*02_C258GIGHV5-51*07_A128G are not listed in the genotype and will be ignored.

Warning – no inferred sequences found.

Novel sequence(s)IGHV5-51*07_A128G are not listed in the genotype and will be ignored.

Warning – no inferred sequences found.

Novel sequence(s)IGHV4-59*02_G88AIGHV5-51*07_A128G are not listed in the genotype and will be ignored.

Warning – no inferred sequences found.

Novel sequence(s)IGHV4-59*02_G88AIGHV5-51*07_A128G are not listed in the genotype and will be ignored.

Warning – no inferred sequences found.

Novel sequence(s)IGHV4-59*02_G88AIGHV5-51*07_A128G are not listed in the genotype and will be ignored.

Novel sequence(s)IGHV4-59*02_G88A are not listed in the genotype and will be ignored.

Warning – no inferred sequences found.

Novel sequence(s)IGHV4-59*02_G88AIGHV5-51*07_A128G are not listed in the genotype and will be ignored.

Warning – no inferred sequences found.

Novel sequence(s)IGHV4-59*02_G88AIGHV5-51*07_A128G are not listed in the genotype and will be ignored.

Novel sequence(s)IGHV5-51*07_A128G are not listed in the genotype and will be ignored.

Novel sequence(s)IGHV5-51*07_A128G are not listed in the genotype and will be ignored.

Novel sequence(s)IGHV4-59*02_G88AIGHV5-51*07_A128G are not listed in the genotype and will be ignored.

Novel sequence(s)IGHV4-59*02_G88AIGHV5-51*07_A128G are not listed in the genotype and will be ignored.

Novel sequence(s)IGHV5-51*07_A128G are not listed in the genotype and will be ignored.

Warning – no inferred sequences found.

Novel sequence(s)IGHV1-69*04_09_G112AIGHV4-59*02_G88AIGHV5-51*07_A128G are not listed in the genotype and will be ignored.

Novel sequence(s)IGHV4-59*02_G88AIGHV5-51*07_A128G are not listed in the genotype and will be ignored.