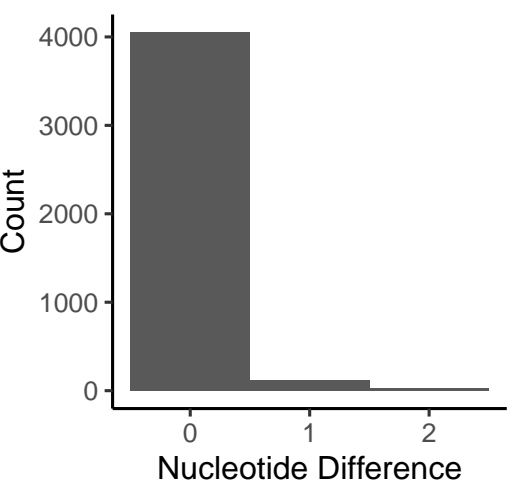


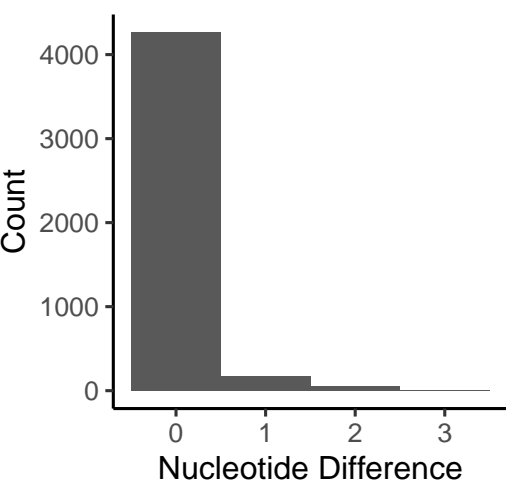
IGHV1-2*02

4205 sequences assigned
4051 (96.3%) exact matches, in which:
4032 unique CDR3
6 unique J



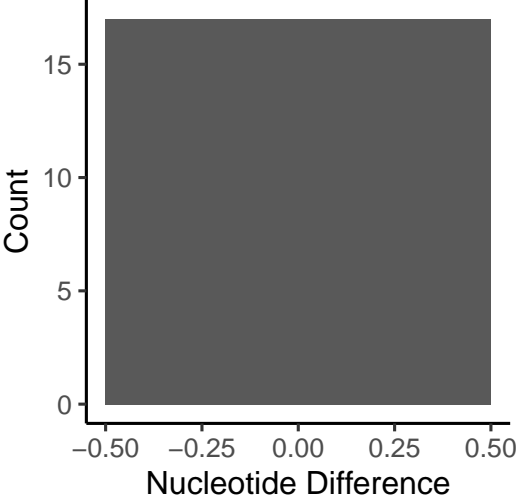
IGHV1-8*01

4488 sequences assigned
4264 (95%) exact matches, in which:
4248 unique CDR3
6 unique J



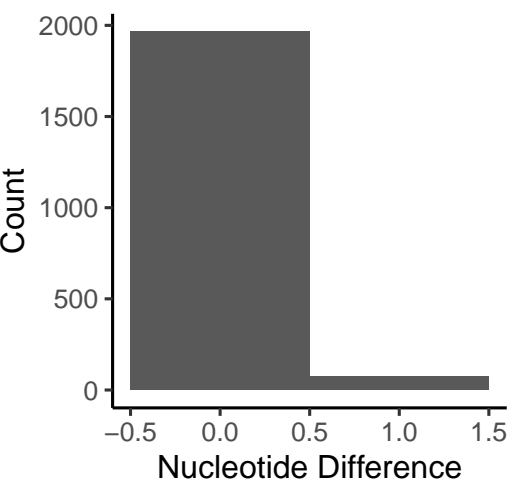
IGHV1-45*02

17 sequences assigned
17 (100%) exact matches, in which:
17 unique CDR3
3 unique J



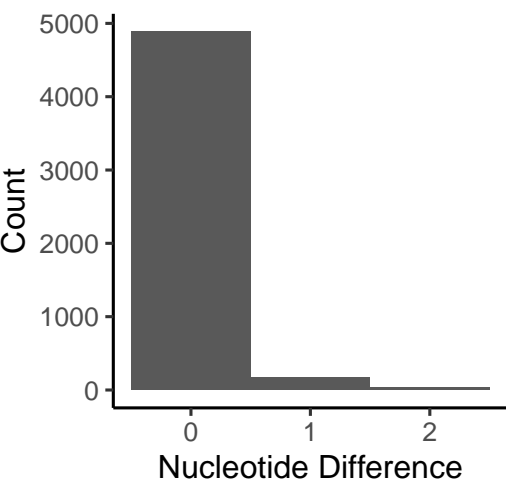
IGHV1-2*06

2038 sequences assigned
1965 (96.4%) exact matches, in which:
1959 unique CDR3
6 unique J



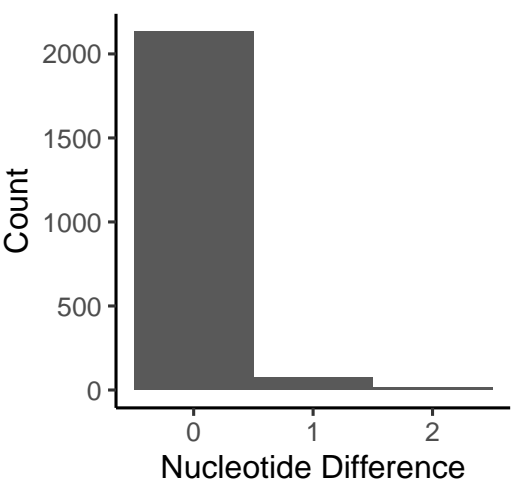
IGHV1-18*01

5090 sequences assigned
4886 (96%) exact matches, in which:
4869 unique CDR3
6 unique J



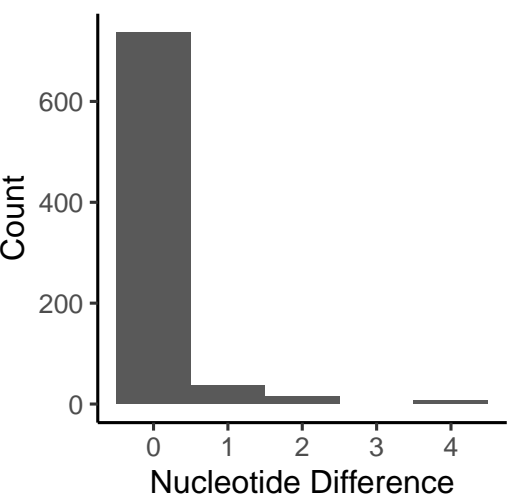
IGHV1-46*01

2219 sequences assigned
2132 (96.1%) exact matches, in which:
2123 unique CDR3
6 unique J



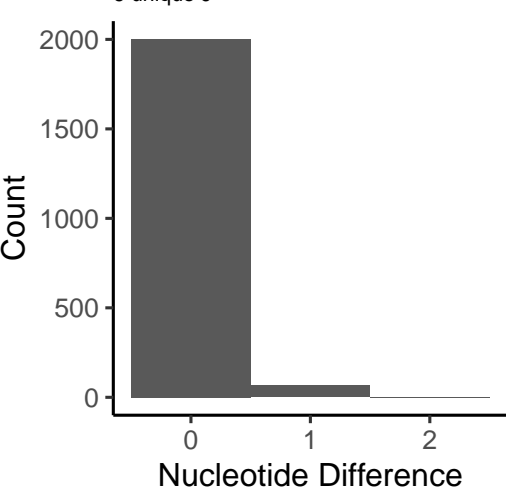
IGHV1-3*01_05

795 sequences assigned
737 (92.7%) exact matches, in which:
733 unique CDR3
6 unique J



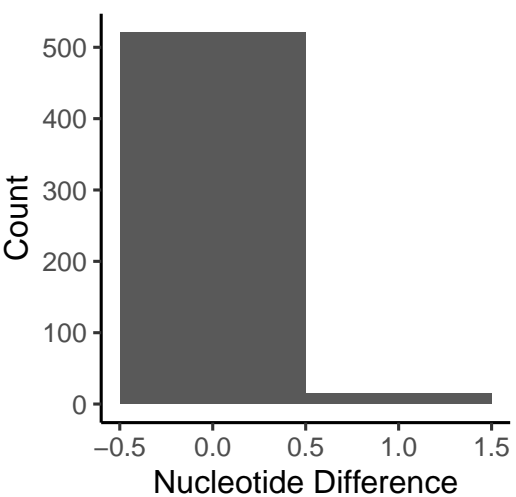
IGHV1-24*01

2070 sequences assigned
2002 (96.7%) exact matches, in which:
1993 unique CDR3
6 unique J



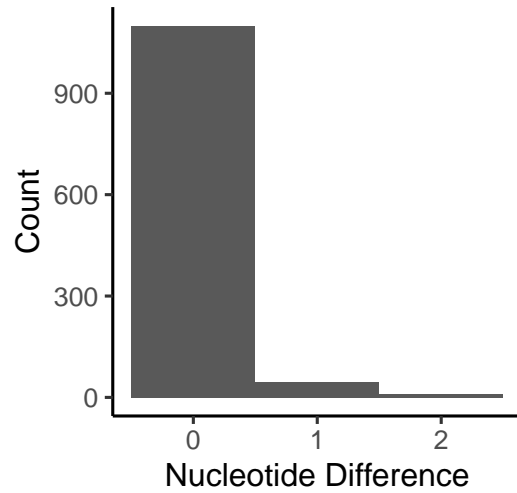
IGHV1-58*01_03

536 sequences assigned
521 (97.2%) exact matches, in which:
520 unique CDR3
6 unique J



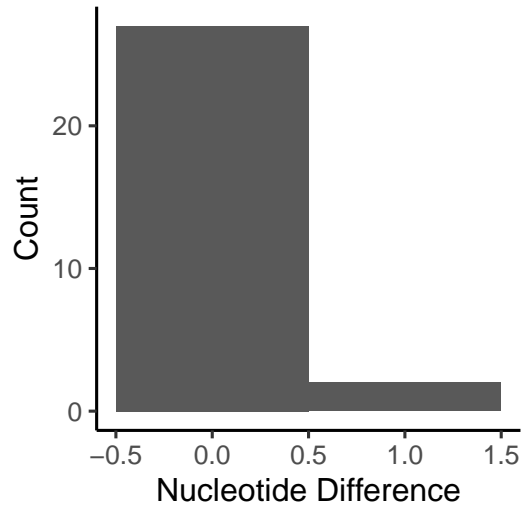
IGHV2-5*01

1156 sequences assigned
1100 (95.2%) exact matches, in which:
1091 unique CDR3
6 unique J



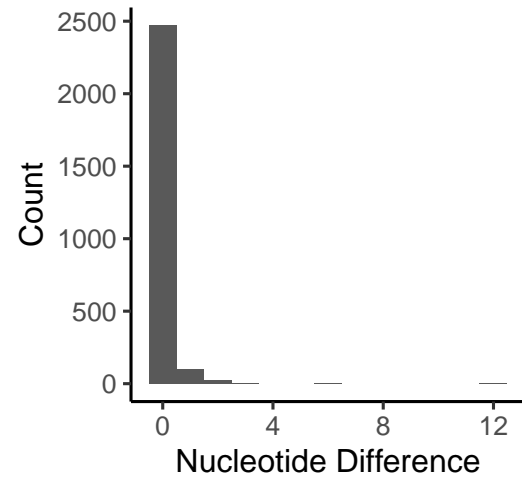
IGHV2-26*02

29 sequences assigned
27 (93.1%) exact matches, in which:
27 unique CDR3
4 unique J



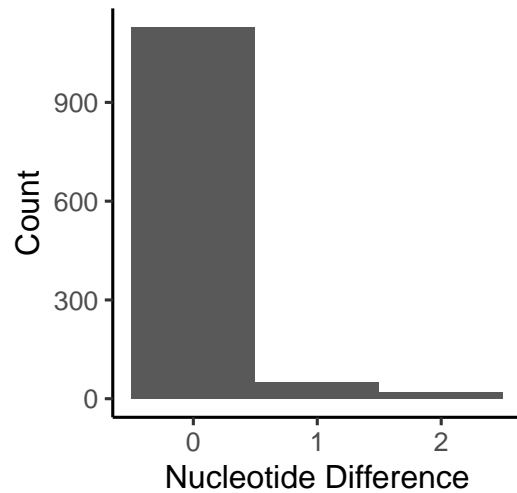
IGHV3-9*01

2598 sequences assigned
2471 (95.1%) exact matches, in which:
2396 unique CDR3
6 unique J



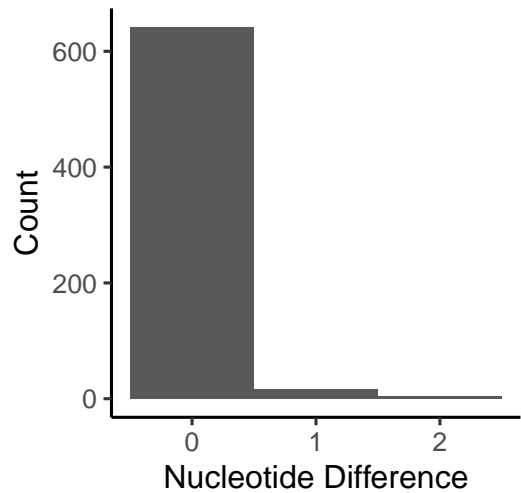
IGHV2-5*02

1199 sequences assigned
1129 (94.2%) exact matches, in which:
1122 unique CDR3
6 unique J



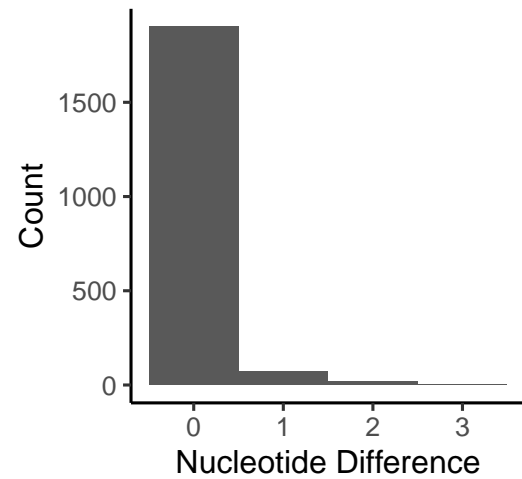
IGHV2-70*01

662 sequences assigned
642 (97%) exact matches, in which:
637 unique CDR3
6 unique J



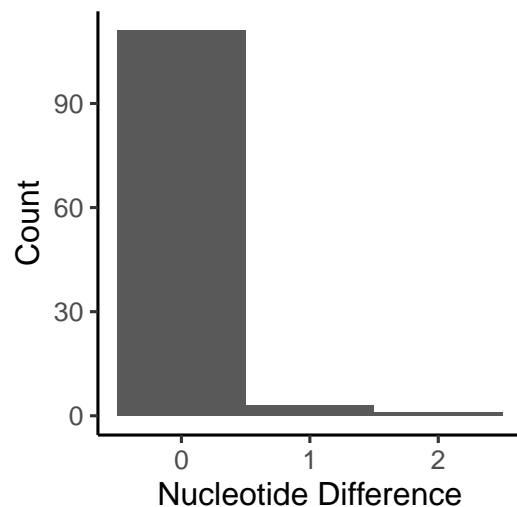
IGHV3-11*01

1997 sequences assigned
1901 (95.2%) exact matches, in which:
1815 unique CDR3
6 unique J



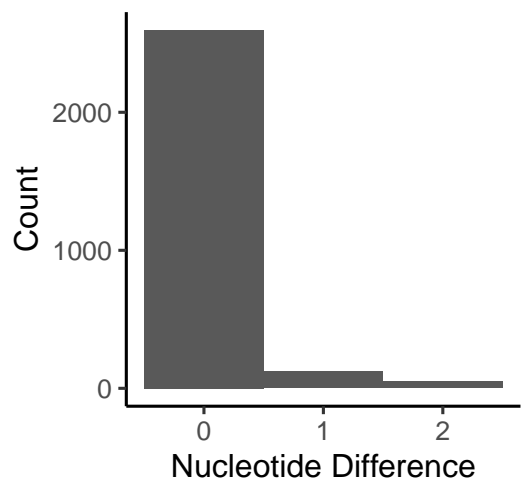
IGHV2-26*01

115 sequences assigned
111 (96.5%) exact matches, in which:
111 unique CDR3
5 unique J



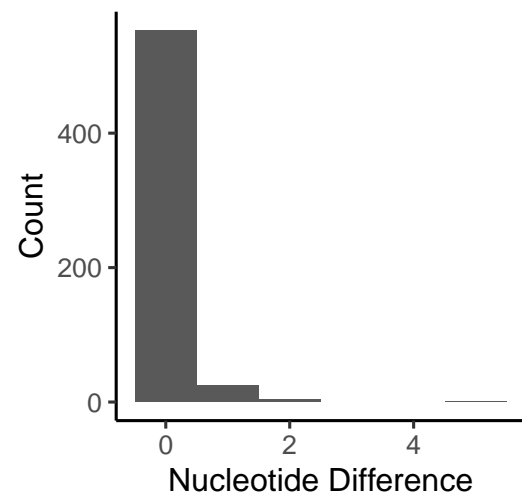
IGHV3-7*01

2767 sequences assigned
2596 (93.8%) exact matches, in which:
2479 unique CDR3
6 unique J



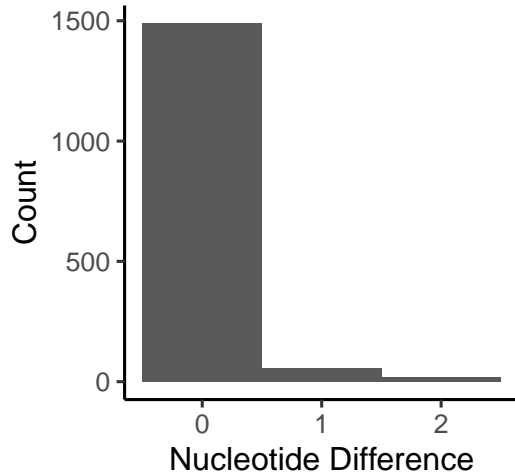
IGHV3-13*01

582 sequences assigned
553 (95%) exact matches, in which:
525 unique CDR3
5 unique J



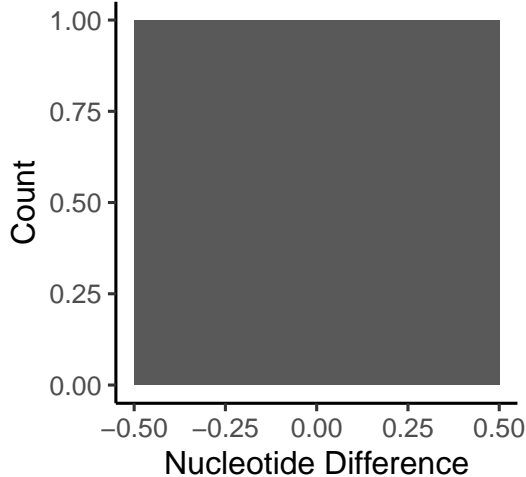
IGHV3-15*01_02

1561 sequences assigned
1489 (95.4%) exact matches, in which:
1447 unique CDR3
6 unique J



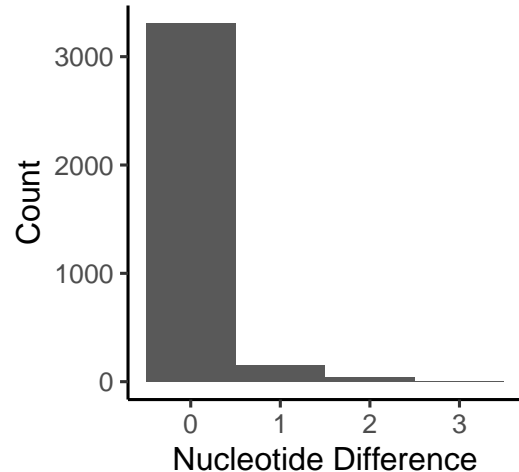
IGHV3-30-3*01

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



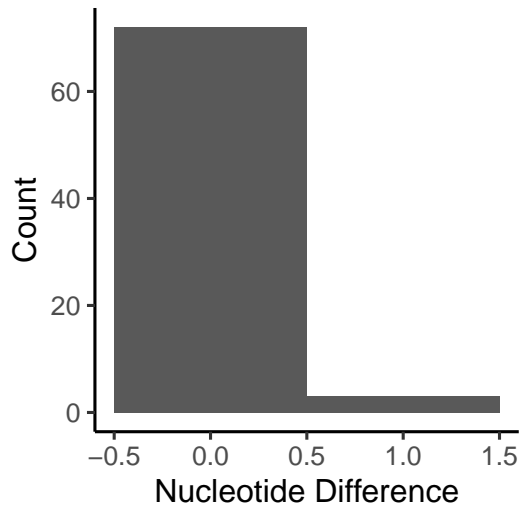
IGHV3-48*02

3498 sequences assigned
3307 (94.5%) exact matches, in which:
3117 unique CDR3
6 unique J



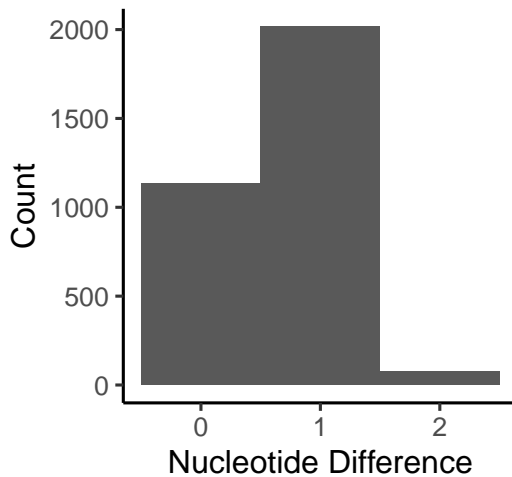
IGHV3-20*01_02

75 sequences assigned
72 (96%) exact matches, in which:
72 unique CDR3
6 unique J



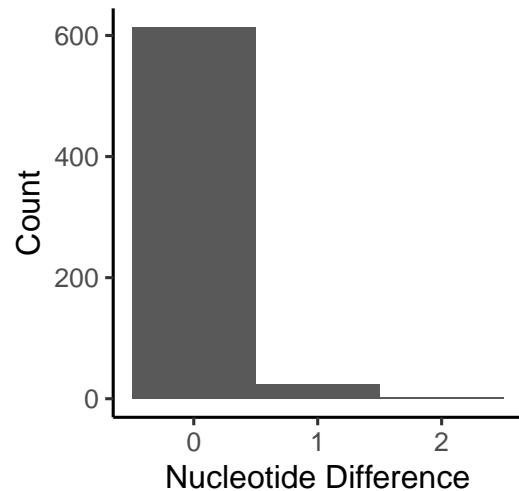
IGHV3-33*01

3223 sequences assigned
1133 (35.2%) exact matches, in which:
1101 unique CDR3
6 unique J



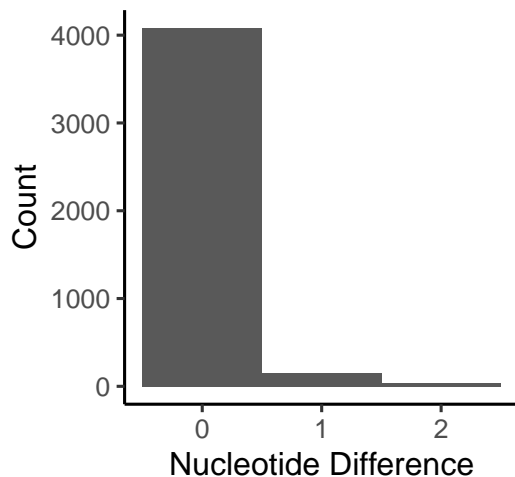
IGHV3-49*03_05

641 sequences assigned
614 (95.8%) exact matches, in which:
600 unique CDR3
6 unique J



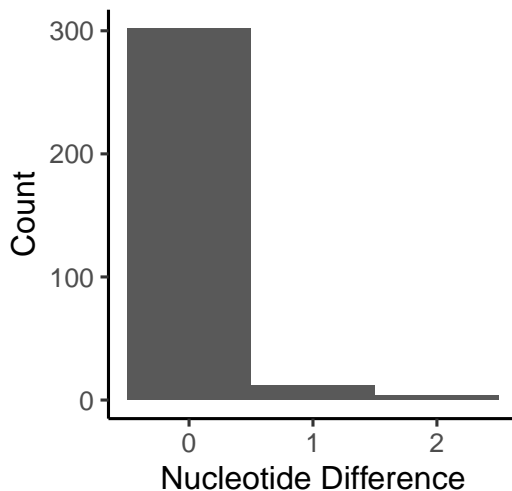
IGHV3-21*01_02

4273 sequences assigned
4081 (95.5%) exact matches, in which:
3853 unique CDR3
6 unique J



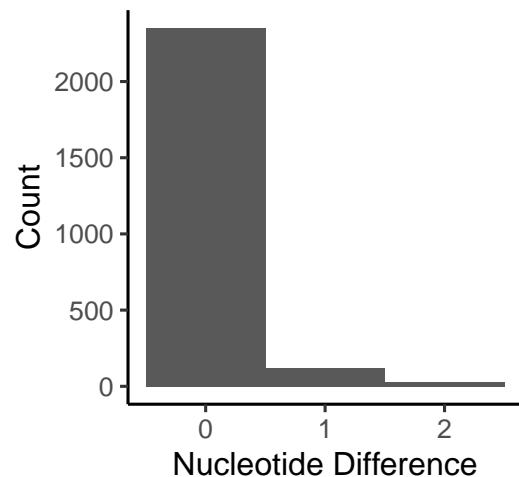
IGHV3-43*01

318 sequences assigned
302 (95%) exact matches, in which:
291 unique CDR3
6 unique J



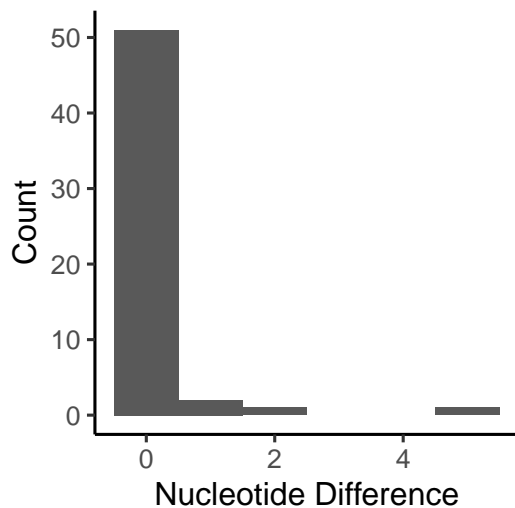
IGHV3-53*01_02

2499 sequences assigned
2351 (94.1%) exact matches, in which:
2197 unique CDR3
6 unique J



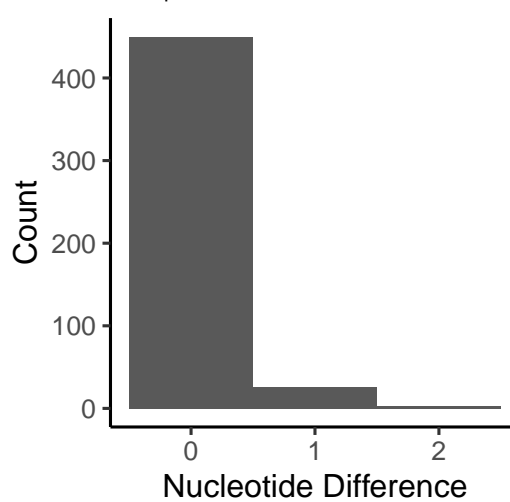
IGHV3-64*02_07

55 sequences assigned
51 (92.7%) exact matches, in which:
46 unique CDR3
5 unique J



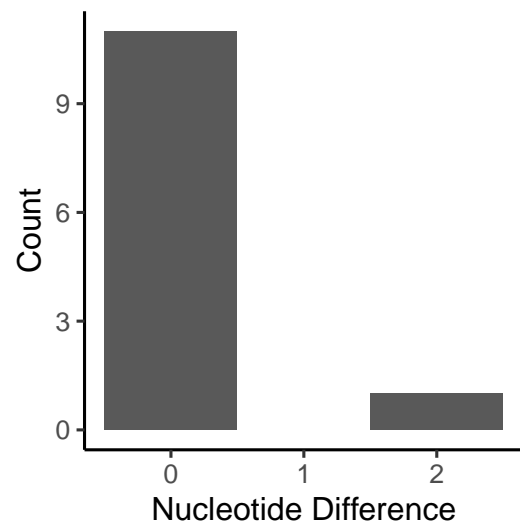
IGHV3-73*01_02

479 sequences assigned
450 (93.9%) exact matches, in which:
421 unique CDR3
6 unique J



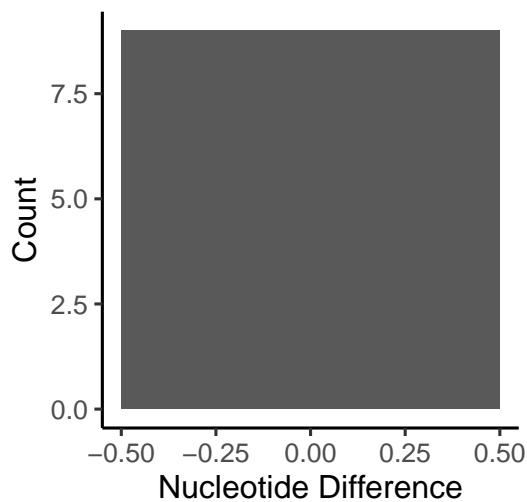
IGHV4-28*01_07

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



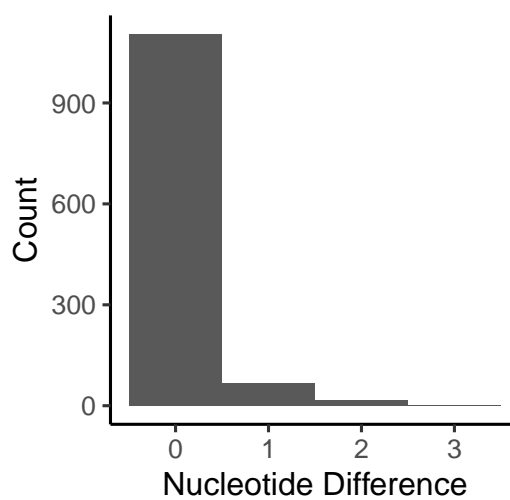
IGHV3-66*03

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



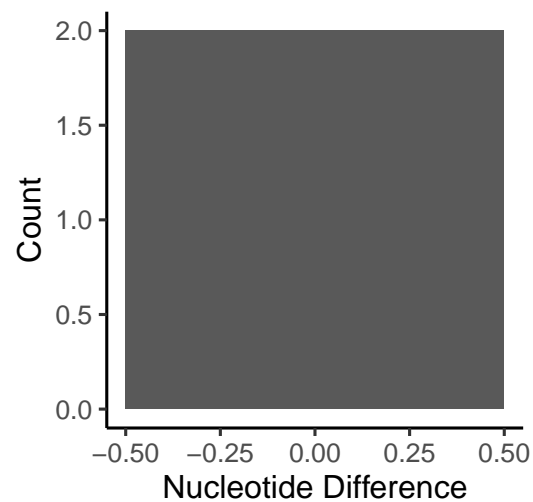
IGHV3-74*01_02

1188 sequences assigned
1105 (93%) exact matches, in which:
1036 unique CDR3
6 unique J



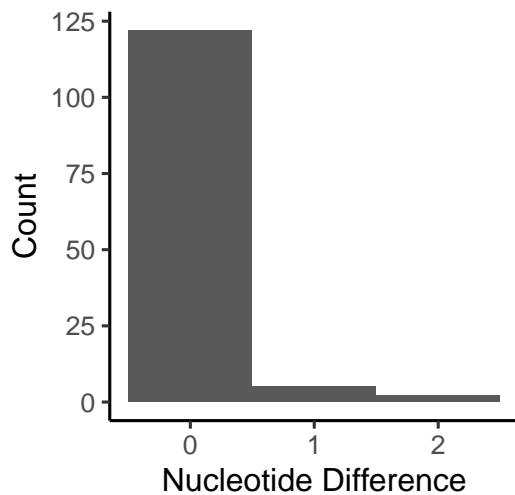
IGHV4-28*02_05

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



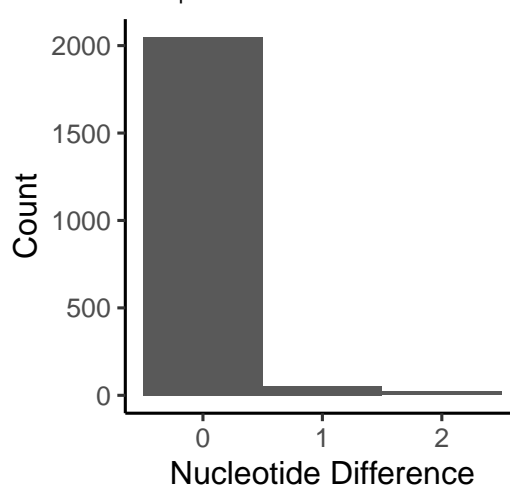
IGHV3-72*01

129 sequences assigned
122 (94.6%) exact matches, in which:
117 unique CDR3
5 unique J



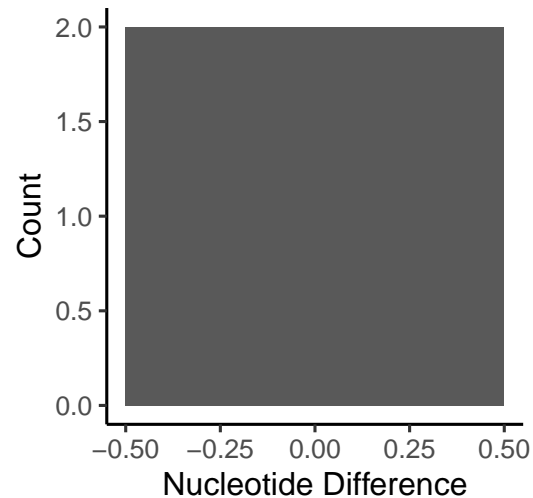
IGHV4-4*07

2125 sequences assigned
2049 (96.4%) exact matches, in which:
1918 unique CDR3
6 unique J



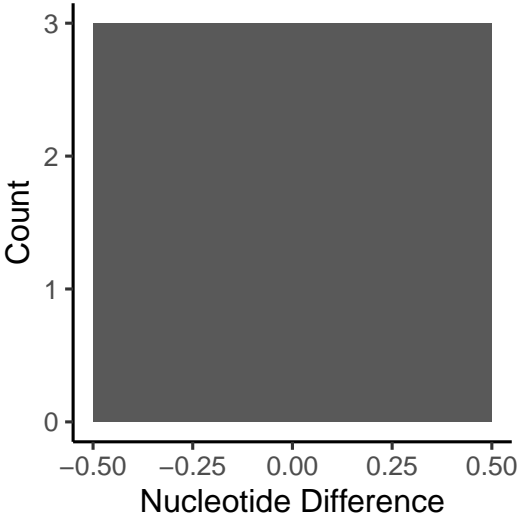
IGHV4-30-4*01

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



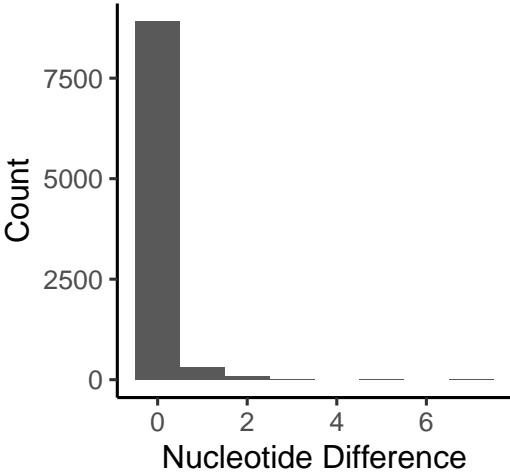
IGHV4-30-2*01

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



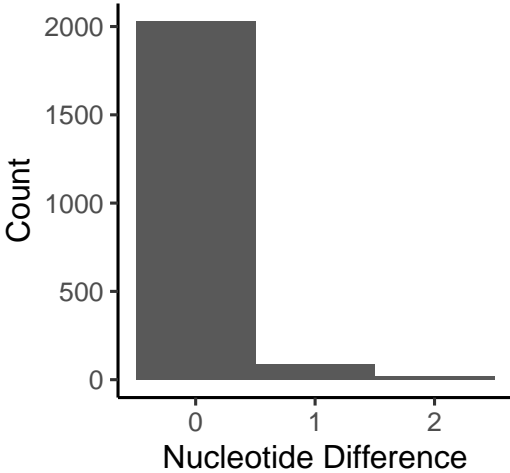
IGHV4-39*01_05

9305 sequences assigned
8912 (95.8%) exact matches, in which:
8545 unique CDR3
6 unique J



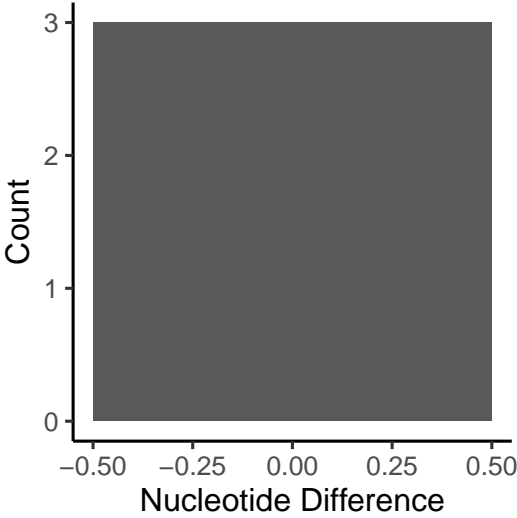
IGHV5-51*01_03

2135 sequences assigned
2029 (95%) exact matches, in which:
2023 unique CDR3
6 unique J



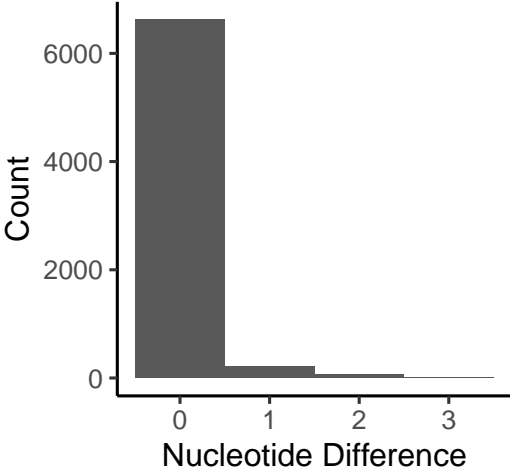
IGHV4-31*03_04

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



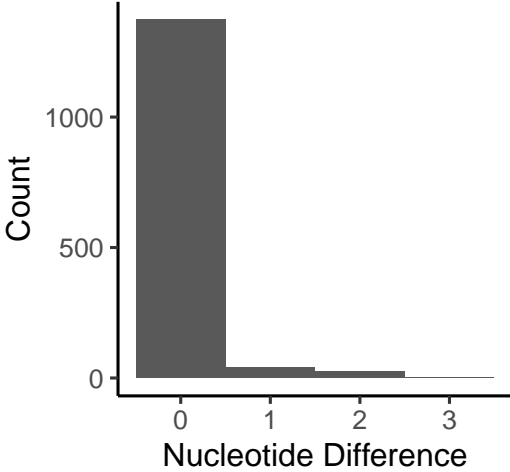
IGHV4-59*01_07

6910 sequences assigned
6622 (95.8%) exact matches, in which:
6269 unique CDR3
6 unique J



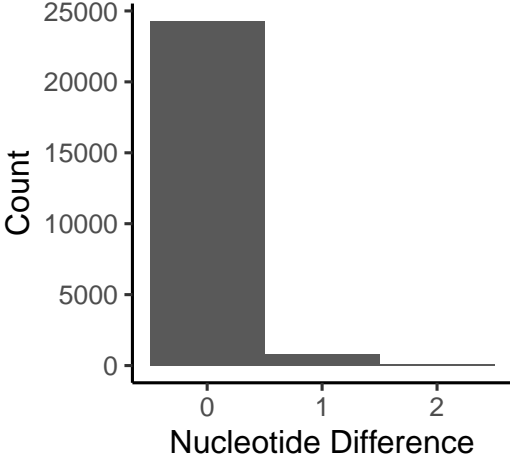
IGHV6-1*01_02

1439 sequences assigned
1373 (95.4%) exact matches, in which:
1367 unique CDR3
6 unique J



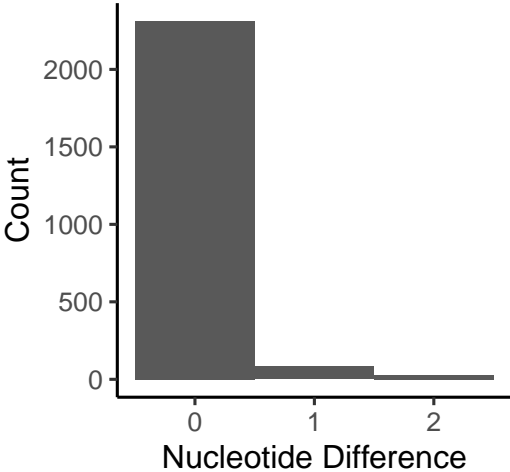
IGHV4-34*01_02

25206 sequences assigned
24305 (96.4%) exact matches, in which:
22450 unique CDR3
6 unique J



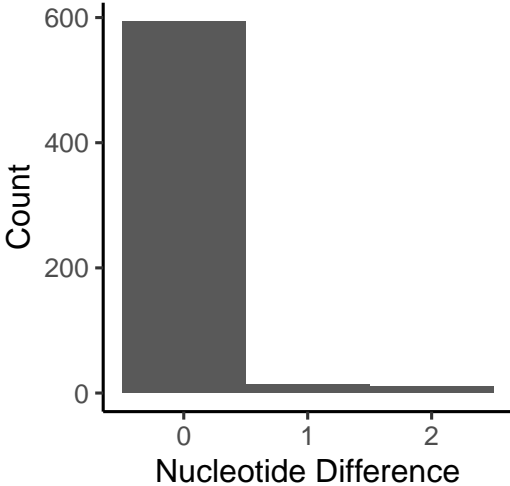
IGHV4-61*01

2424 sequences assigned
2312 (95.4%) exact matches, in which:
2208 unique CDR3
6 unique J



IGHV7-4-1*02

618 sequences assigned
594 (96.1%) exact matches, in which:
593 unique CDR3
6 unique J





Warning – no inferred sequences found.

Novel sequence(s) IGHV3–11*06_T300C IGHV4–38–2*02_A70G IGHV4–39*02_C258G IGHV5–51*07_A128G are not listed in the genotype and will be ignored.

Warning – no inferred sequences found.

Novel sequence(s) IGHV4–39*02_C258G IGHV4–59*02_G88A IGHV5–51*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_G88A 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_G88A 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.

Warning – no inferred sequences found.

Warning – no inferred sequences found.

Novel sequence(s) IGHV4–39*02_C258G IGHV5–51*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_G88A IGHV5–51*07_A128G are not listed in the genotype and will be ignored.