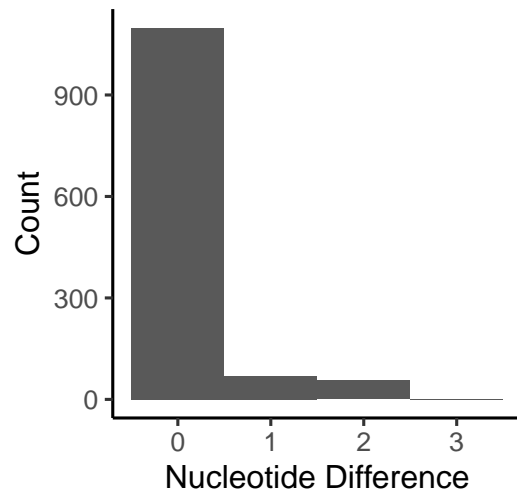


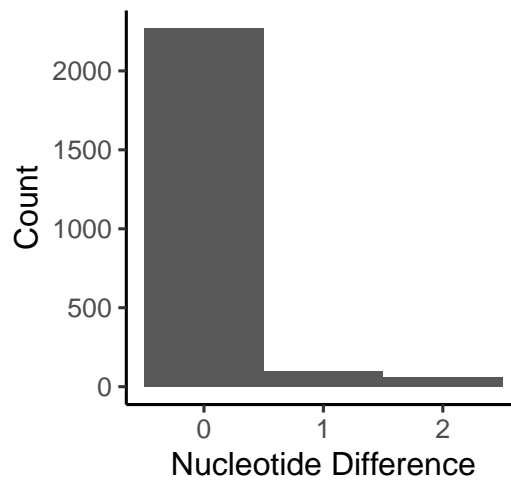
IGHV1-2*02

1225 sequences assigned
1099 (89.7%) exact matches, in which:
1098 unique CDR3
6 unique J



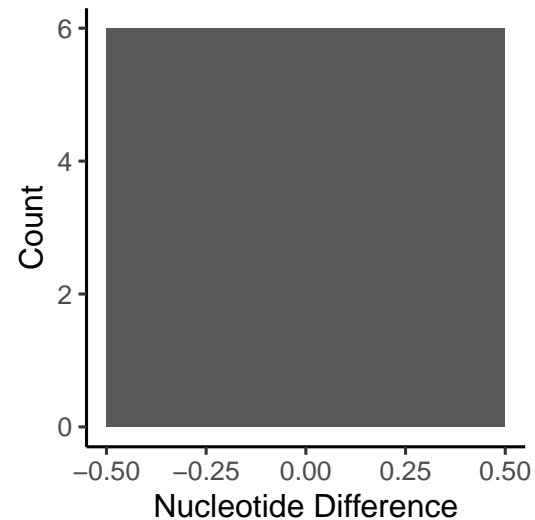
IGHV1-8*01

2423 sequences assigned
2269 (93.6%) exact matches, in which:
2264 unique CDR3
6 unique J



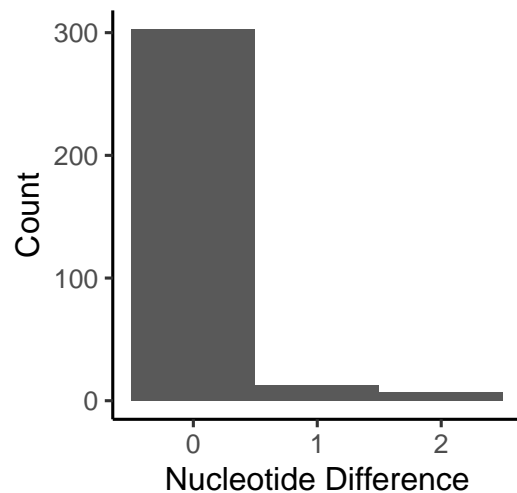
IGHV1-45*02

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



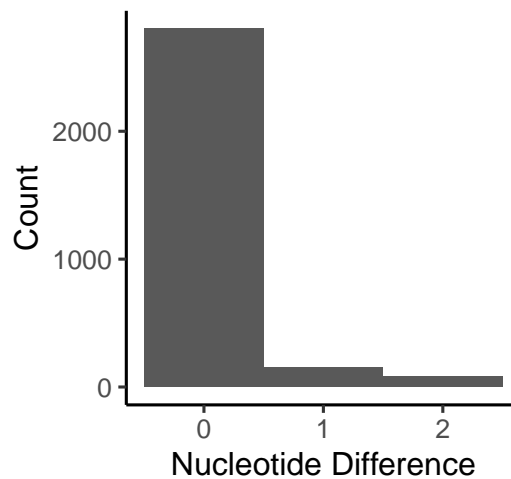
IGHV1-2*04

323 sequences assigned
303 (93.8%) exact matches, in which:
303 unique CDR3
6 unique J



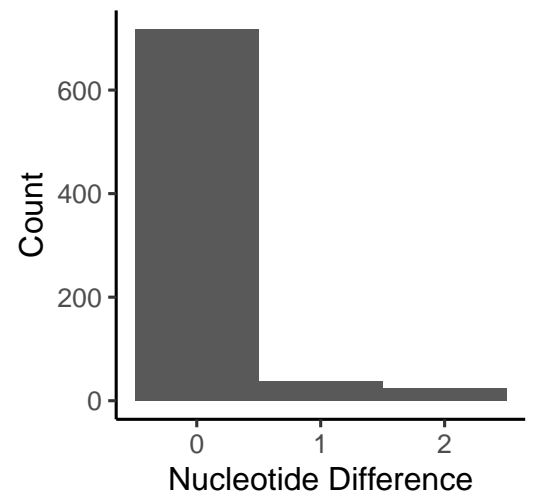
IGHV1-18*01

3038 sequences assigned
2802 (92.2%) exact matches, in which:
2784 unique CDR3
6 unique J



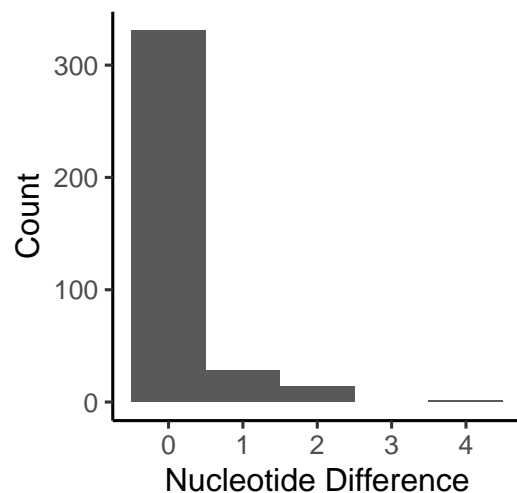
IGHV1-46*01

779 sequences assigned
718 (92.2%) exact matches, in which:
716 unique CDR3
6 unique J



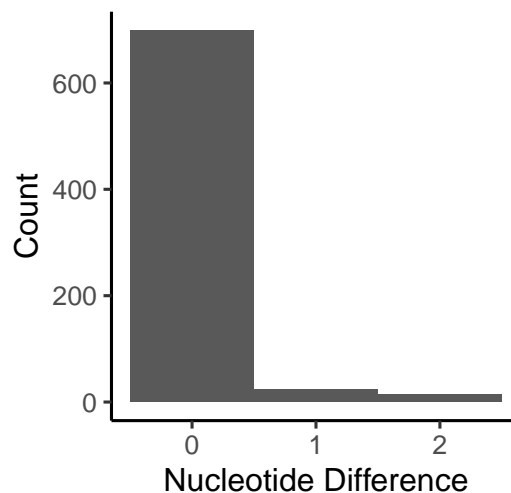
IGHV1-3*01_05

374 sequences assigned
331 (88.5%) exact matches, in which:
331 unique CDR3
6 unique J



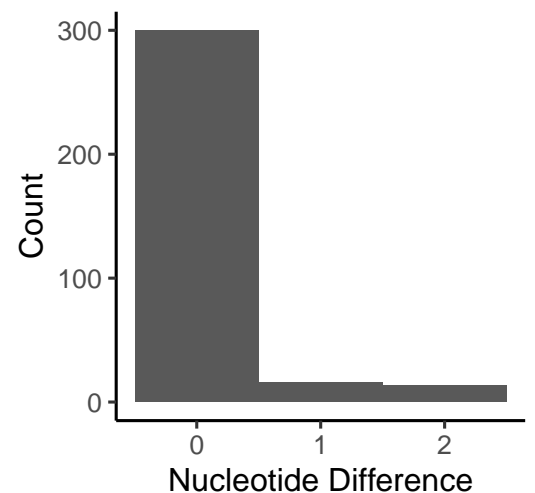
IGHV1-24*01

737 sequences assigned
699 (94.8%) exact matches, in which:
698 unique CDR3
6 unique J



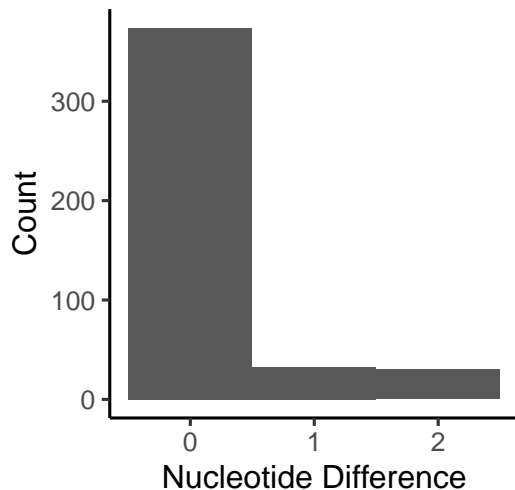
IGHV1-58*01_03

329 sequences assigned
300 (91.2%) exact matches, in which:
300 unique CDR3
6 unique J



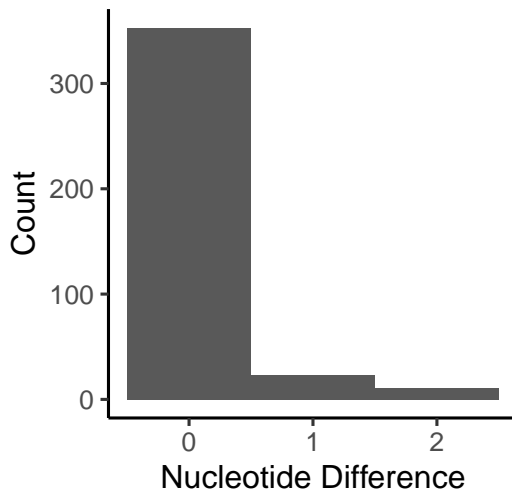
IGHV2-5*01

437 sequences assigned
374 (85.6%) exact matches, in which:
373 unique CDR3
6 unique J



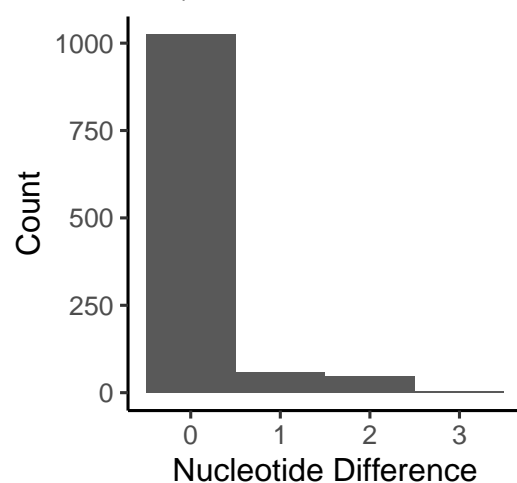
IGHV2-70*01

387 sequences assigned
353 (91.2%) exact matches, in which:
349 unique CDR3
6 unique J



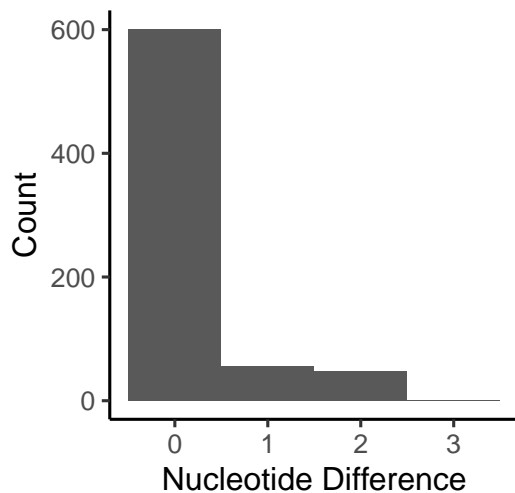
IGHV3-11*01

1137 sequences assigned
1025 (90.1%) exact matches, in which:
996 unique CDR3
6 unique J



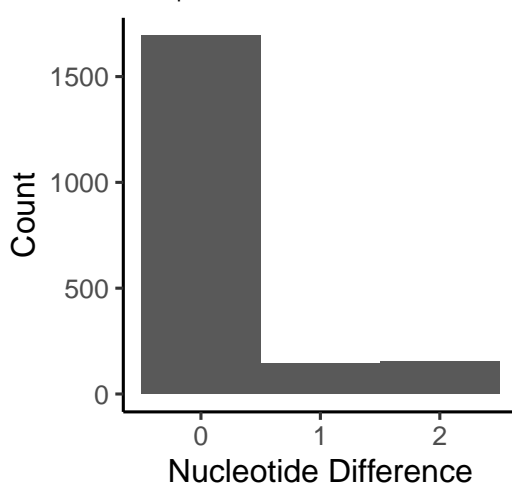
IGHV2-5*02

705 sequences assigned
601 (85.2%) exact matches, in which:
598 unique CDR3
6 unique J



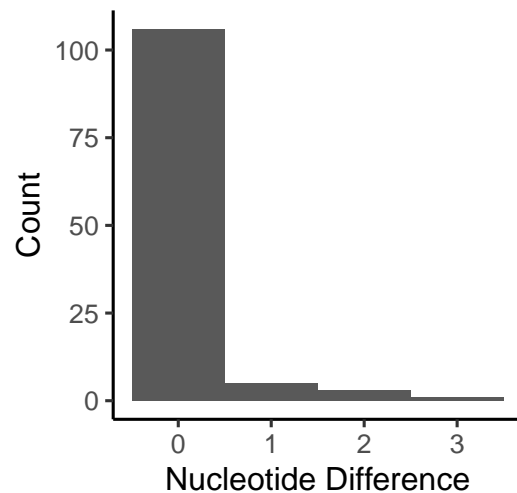
IGHV3-7*01

1989 sequences assigned
1693 (85.1%) exact matches, in which:
1611 unique CDR3
6 unique J



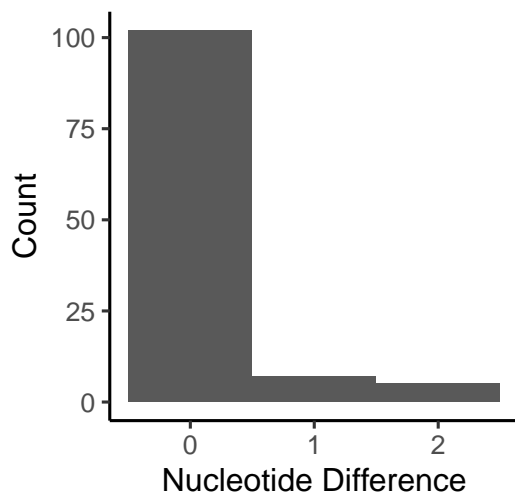
IGHV3-13*01

115 sequences assigned
106 (92.2%) exact matches, in which:
103 unique CDR3
5 unique J



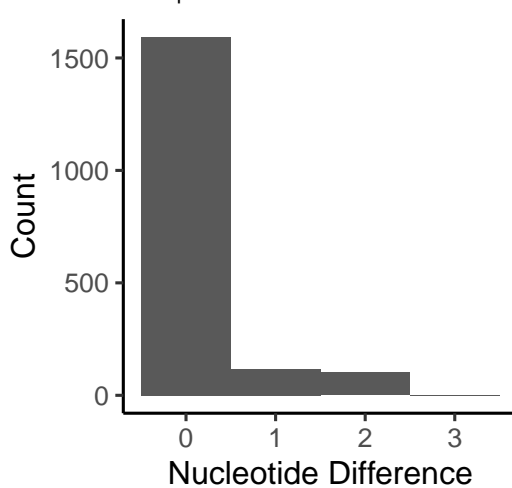
IGHV2-26*01

114 sequences assigned
102 (89.5%) exact matches, in which:
102 unique CDR3
5 unique J



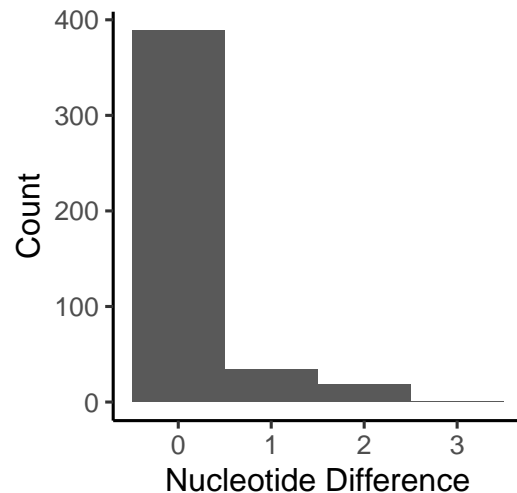
IGHV3-9*01

1813 sequences assigned
1593 (87.9%) exact matches, in which:
1550 unique CDR3
6 unique J



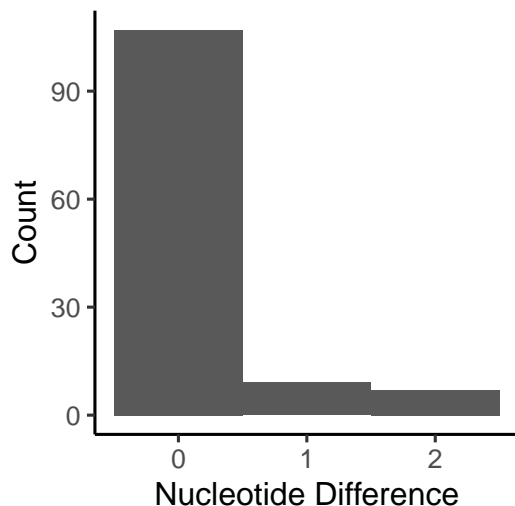
IGHV3-15*01_02

442 sequences assigned
389 (88%) exact matches, in which:
383 unique CDR3
6 unique J



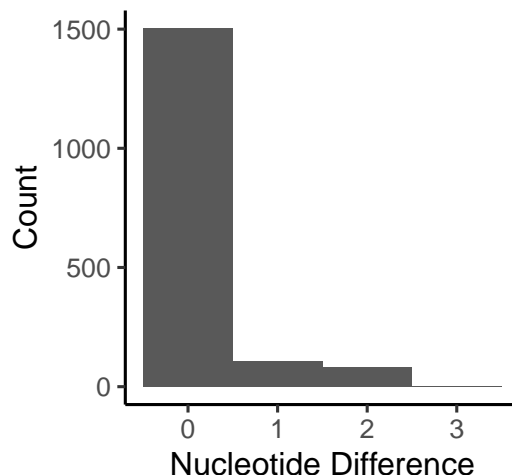
IGHV3-20*01_02

123 sequences assigned
107 (87%) exact matches, in which:
101 unique CDR3
5 unique J



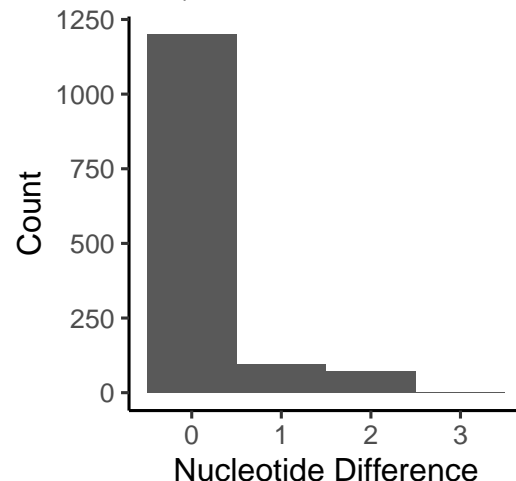
IGHV3-33*01

1693 sequences assigned
1503 (88.8%) exact matches, in which:
1472 unique CDR3
6 unique J



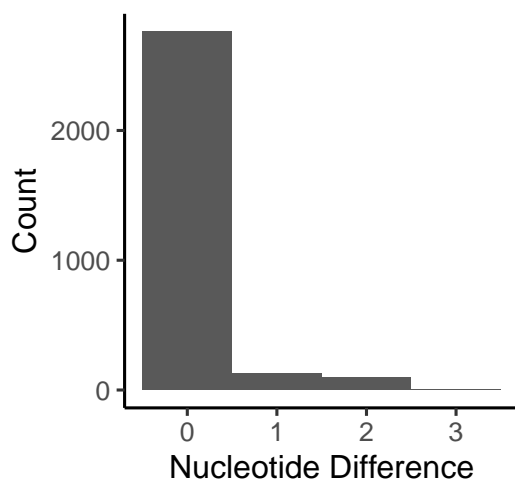
IGHV3-48*03

1366 sequences assigned
1200 (87.8%) exact matches, in which:
1166 unique CDR3
6 unique J



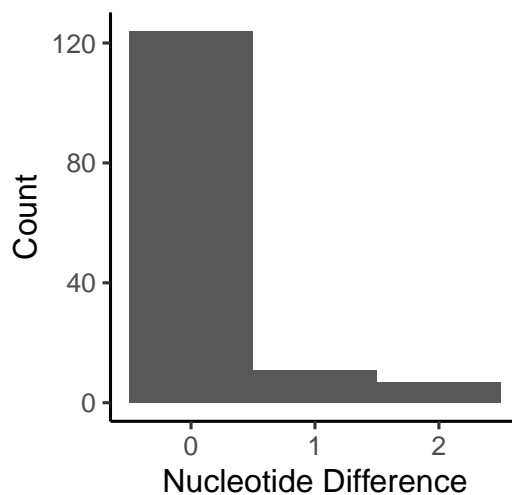
IGHV3-21*01_02

2987 sequences assigned
2761 (92.4%) exact matches, in which:
2645 unique CDR3
6 unique J



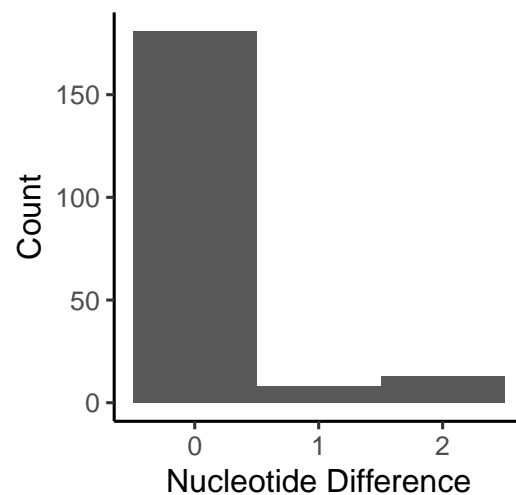
IGHV3-43*01

142 sequences assigned
124 (87.3%) exact matches, in which:
118 unique CDR3
6 unique J



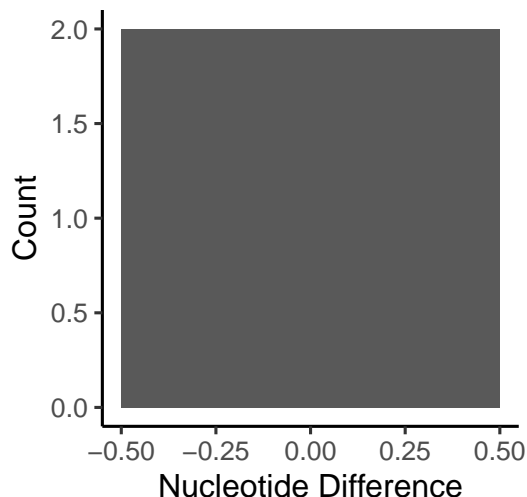
IGHV3-49*04

202 sequences assigned
181 (89.6%) exact matches, in which:
180 unique CDR3
5 unique J



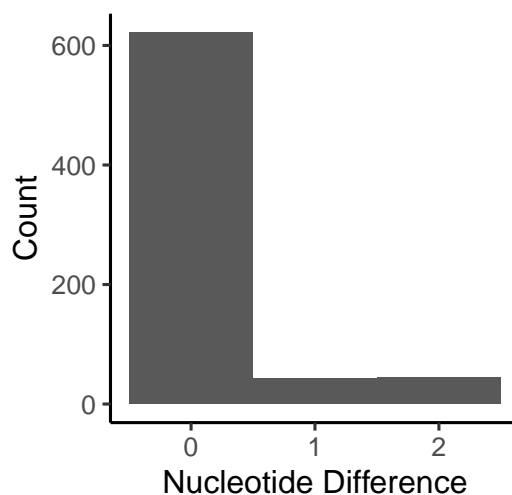
IGHV3-30-3*03

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



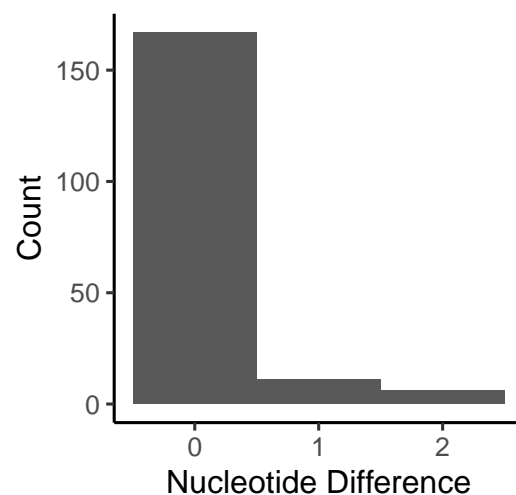
IGHV3-48*02

709 sequences assigned
622 (87.7%) exact matches, in which:
603 unique CDR3
6 unique J



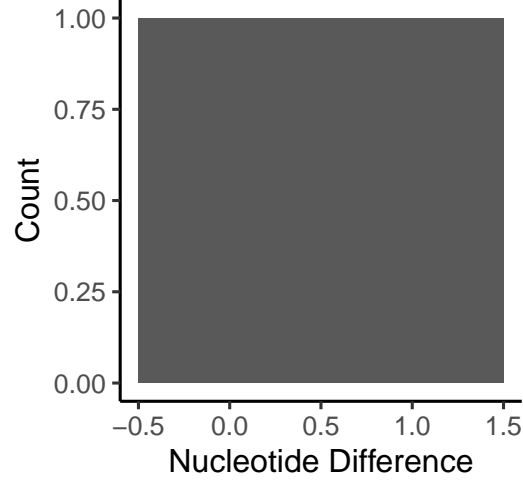
IGHV3-49*03_05

184 sequences assigned
167 (90.8%) exact matches, in which:
163 unique CDR3
6 unique J



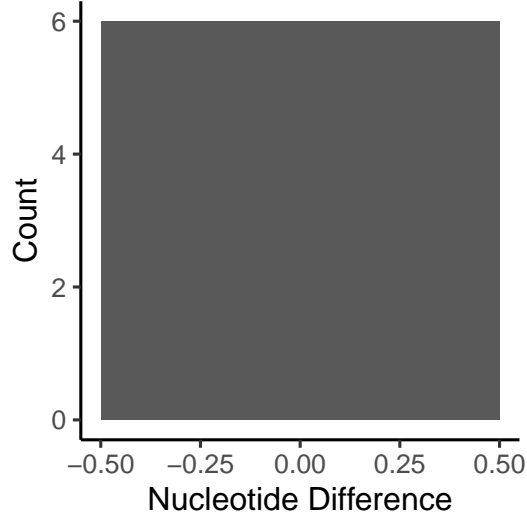
IGHV3–52*01_03

2 sequences assigned
1 (50%) exact matches, in which:
1 unique CDR3
1 unique J



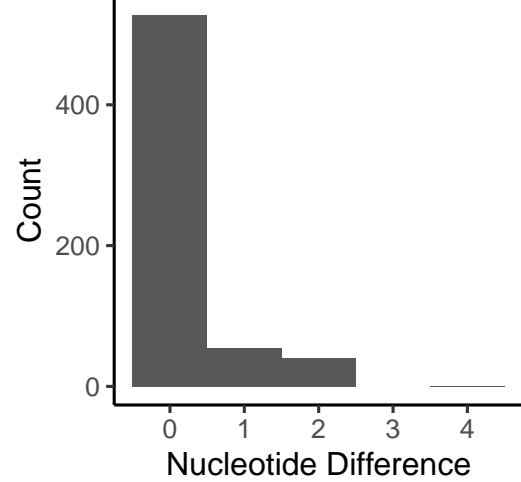
IGHV3–66*03

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



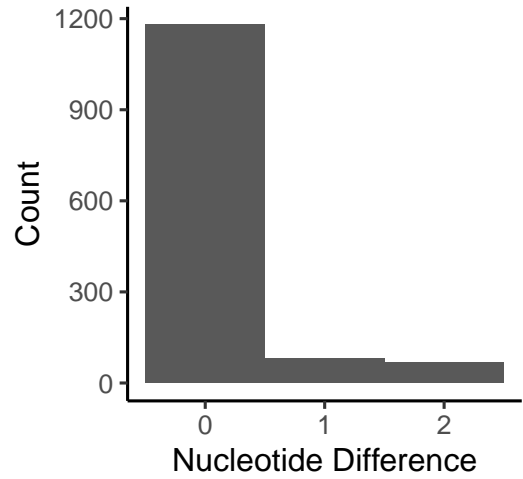
IGHV3–74*01_02

624 sequences assigned
528 (84.6%) exact matches, in which:
514 unique CDR3
6 unique J



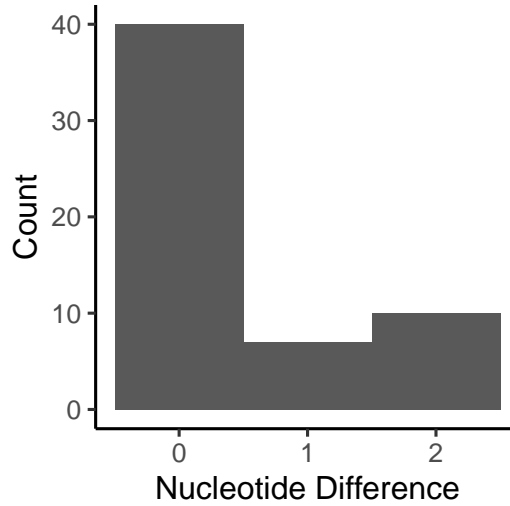
IGHV3–53*01_02

1326 sequences assigned
1180 (89%) exact matches, in which:
1133 unique CDR3
6 unique J



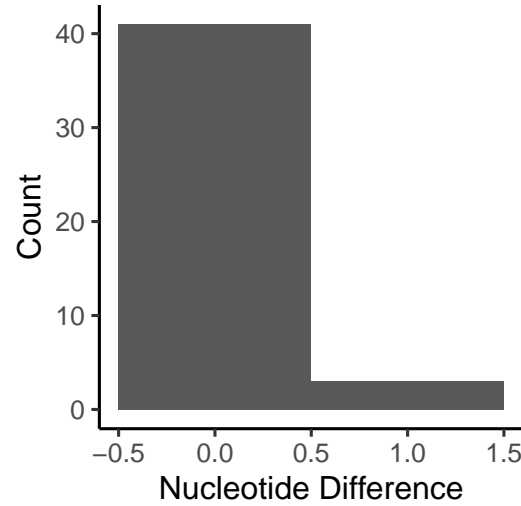
IGHV3–72*01

57 sequences assigned
40 (70.2%) exact matches, in which:
40 unique CDR3
5 unique J



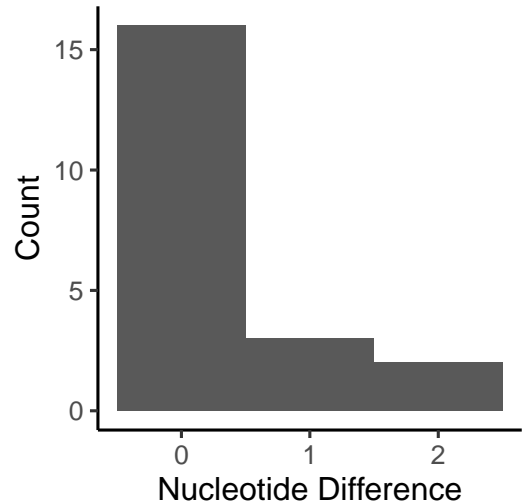
IGHV3–43D*04

44 sequences assigned
41 (93.2%) exact matches, in which:
41 unique CDR3
4 unique J



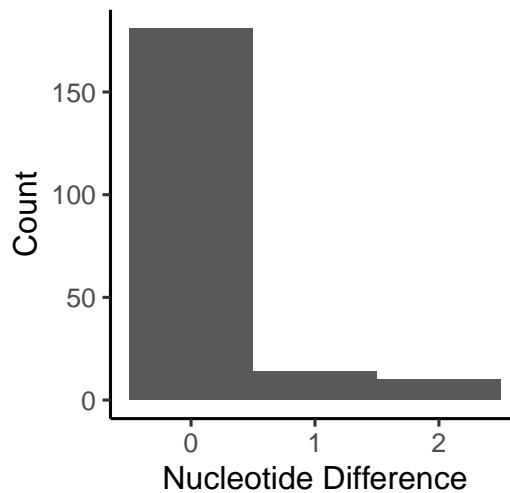
IGHV3–64*02_07

21 sequences assigned
16 (76.2%) exact matches, in which:
16 unique CDR3
4 unique J



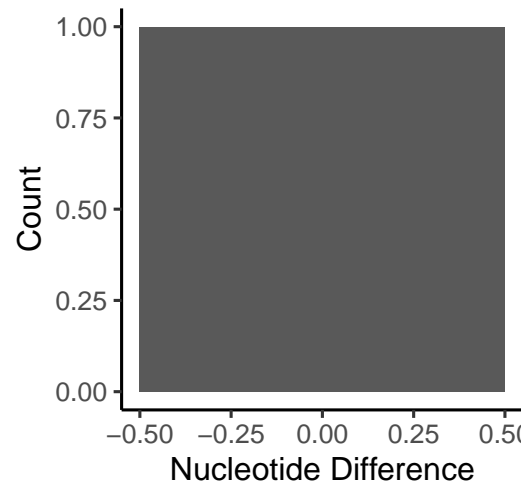
IGHV3–73*01_02

205 sequences assigned
181 (88.3%) exact matches, in which:
178 unique CDR3
6 unique J



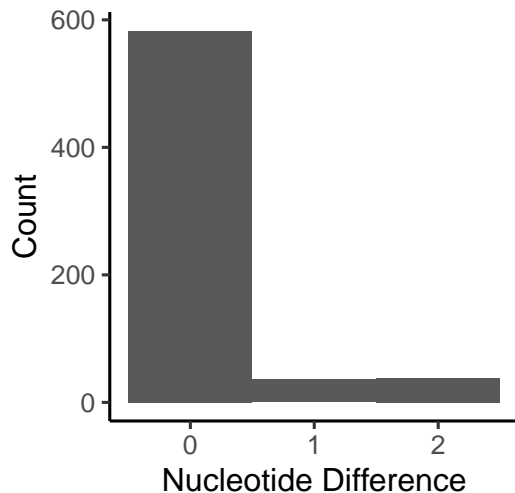
IGHV3–64D*09

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



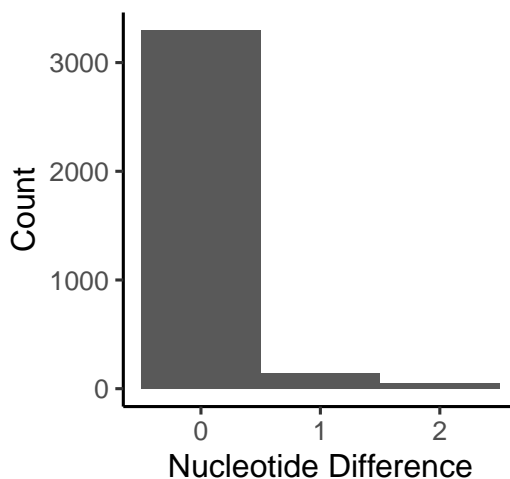
IGHV4-4*07

657 sequences assigned
583 (88.7%) exact matches, in which:
577 unique CDR3
6 unique J



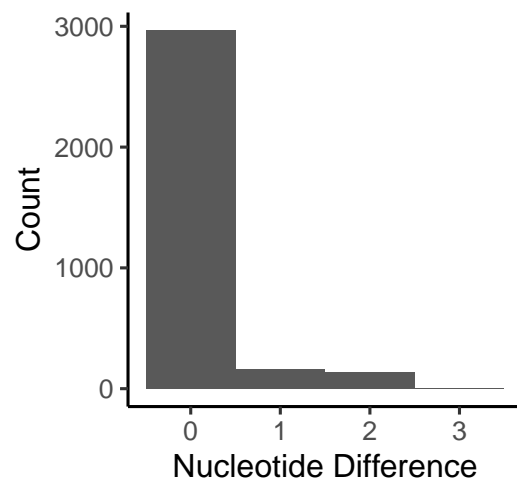
IGHV4-34*01_02

3491 sequences assigned
3296 (94.4%) exact matches, in which:
3212 unique CDR3
6 unique J



IGHV4-59*01_07

3267 sequences assigned
2966 (90.8%) exact matches, in which:
2878 unique CDR3
6 unique J



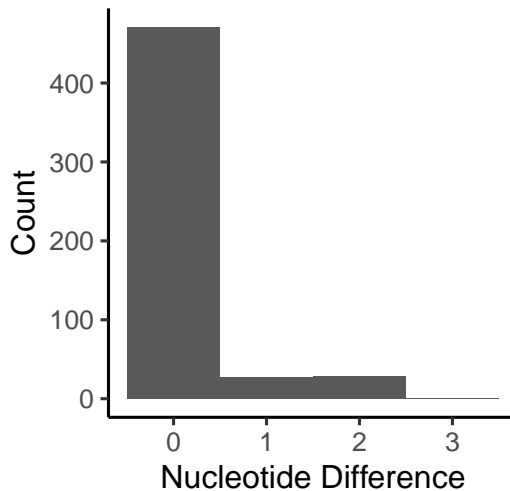
IGHV4-28*01_07

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



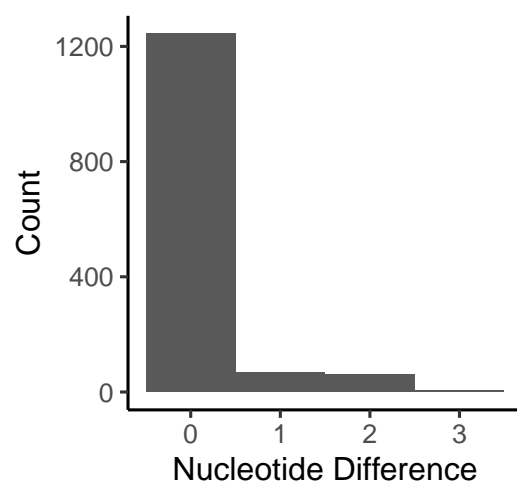
IGHV4-38-2*01

527 sequences assigned
471 (89.4%) exact matches, in which:
464 unique CDR3
6 unique J



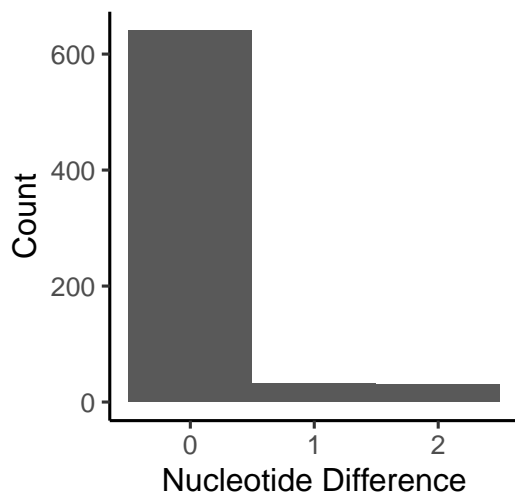
IGHV4-61*01

1379 sequences assigned
1244 (90.2%) exact matches, in which:
1206 unique CDR3
6 unique J



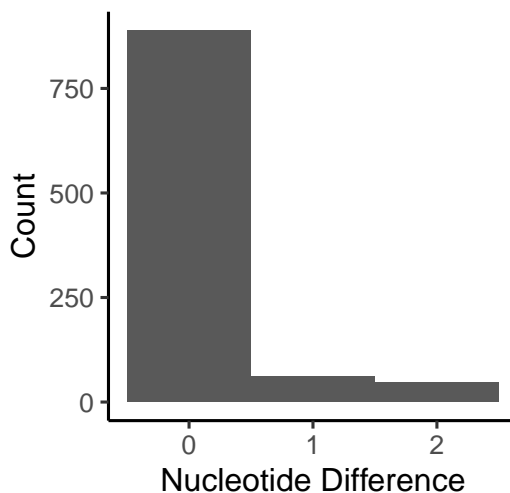
IGHV4-31*03_04

703 sequences assigned
641 (91.2%) exact matches, in which:
634 unique CDR3
6 unique J



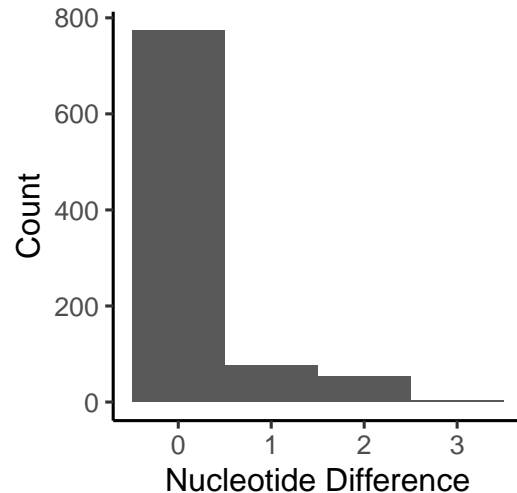
IGHV4-39*01_05

996 sequences assigned
889 (89.3%) exact matches, in which:
877 unique CDR3
6 unique J



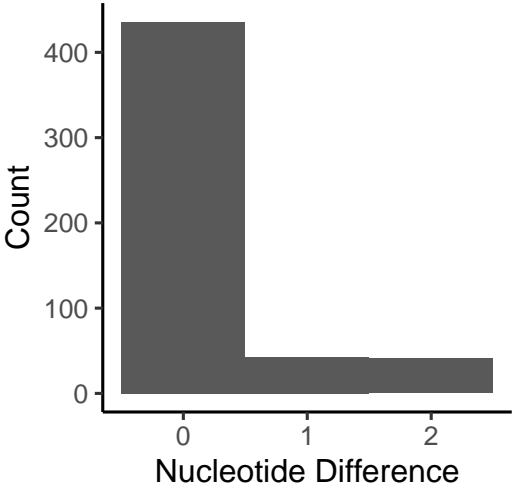
IGHV5-51*01_03

907 sequences assigned
774 (85.3%) exact matches, in which:
774 unique CDR3
6 unique J



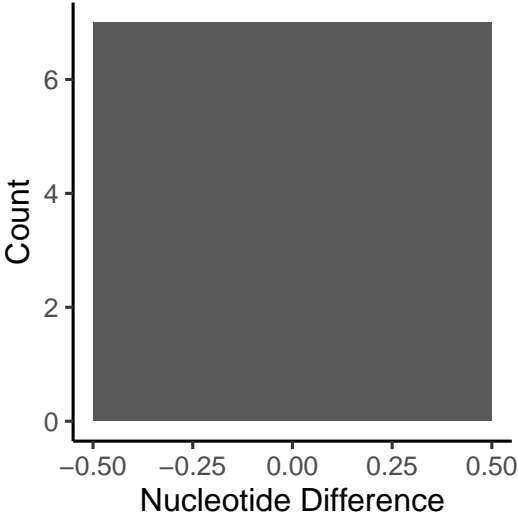
IGHV6-1*01_02

520 sequences assigned
436 (83.8%) exact matches, in which:
436 unique CDR3
6 unique J



IGHV7-4-1*01

7 sequences assigned
7 (100%) exact matches, in which:
7 unique CDR3
3 unique J





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_G88A are not listed in the genotype and will be ignored.

Warning – no inferred sequences found.

Novel sequence(s)IGHV3–11*06_T300CIGHV4–38–2*02_A70GIGHV4–39*02_C258GIGHV5–51*07_A128G are not listed in the genotype and will be ignored.

Warning – no inferred sequences found.

Novel sequence(s)IGHV4–39*02_C258GIGHV4–59*02_G88AIGHV5–51*07_A128G are not listed in the genotype and will be ignored.