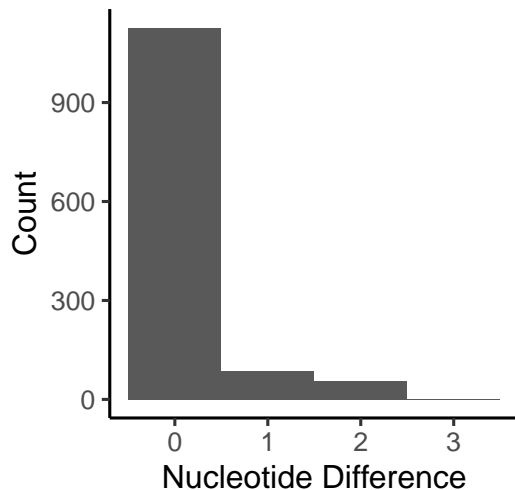


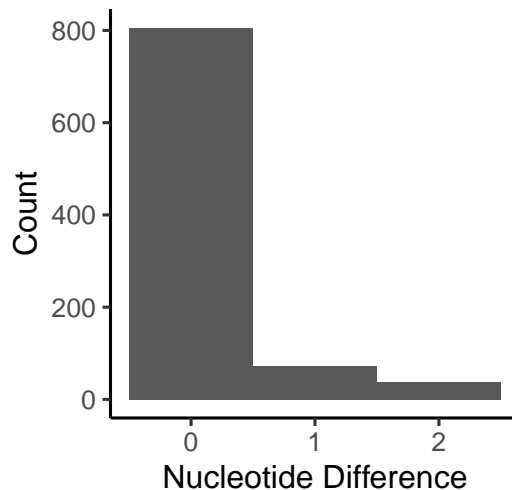
IGHV1-2*02

1270 sequences assigned
1127 (88.7%) exact matches, in which:
1126 unique CDR3
6 unique J



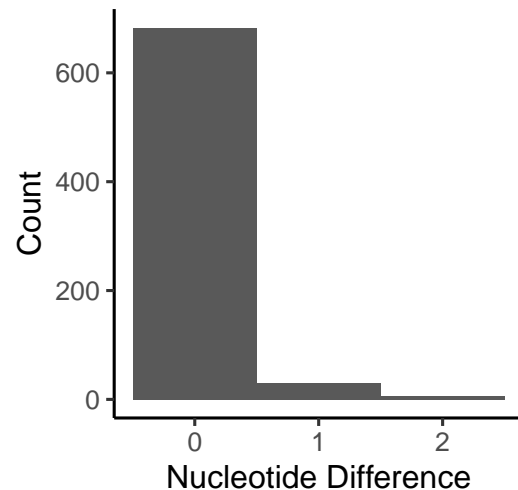
IGHV1-8*01

917 sequences assigned
806 (87.9%) exact matches, in which:
804 unique CDR3
6 unique J



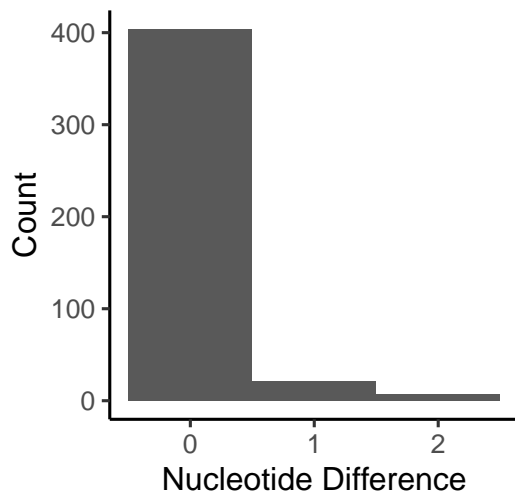
IGHV1-24*01

719 sequences assigned
683 (95%) exact matches, in which:
683 unique CDR3
6 unique J



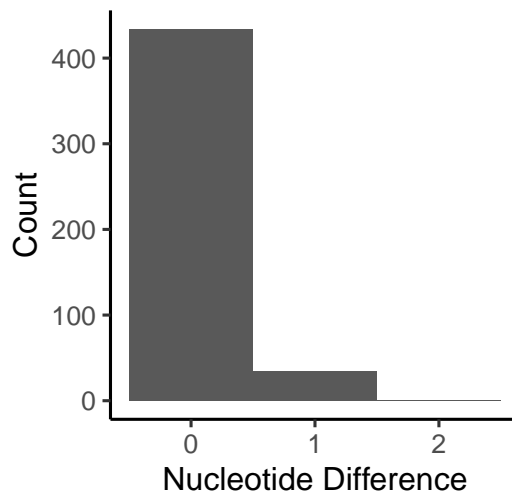
IGHV1-2*04

432 sequences assigned
404 (93.5%) exact matches, in which:
403 unique CDR3
6 unique J



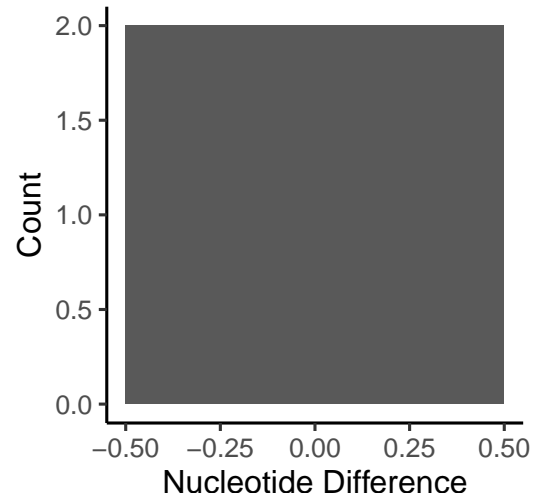
IGHV1-8*03

469 sequences assigned
434 (92.5%) exact matches, in which:
433 unique CDR3
6 unique J



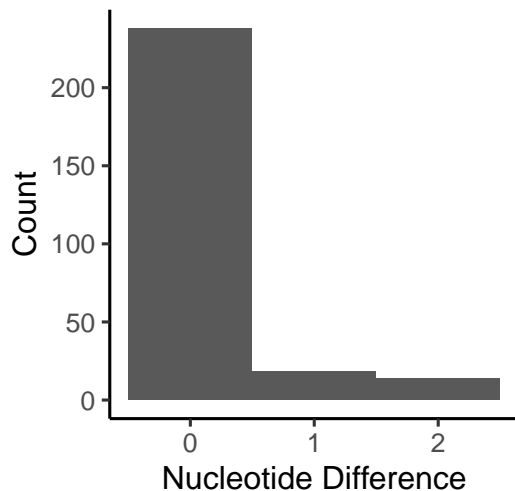
IGHV1-45*02

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



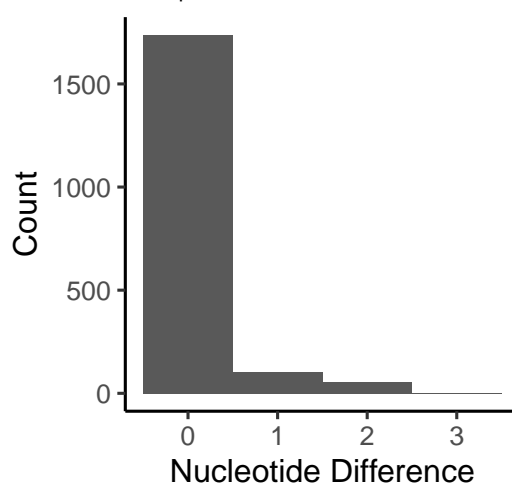
IGHV1-3*01_05

270 sequences assigned
238 (88.1%) exact matches, in which:
237 unique CDR3
6 unique J



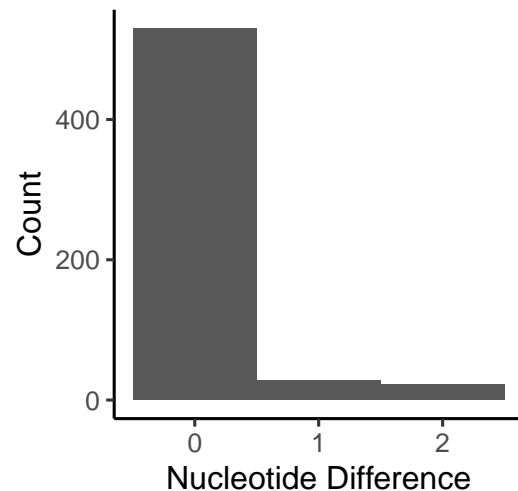
IGHV1-18*04

1896 sequences assigned
1737 (91.6%) exact matches, in which:
1737 unique CDR3
6 unique J



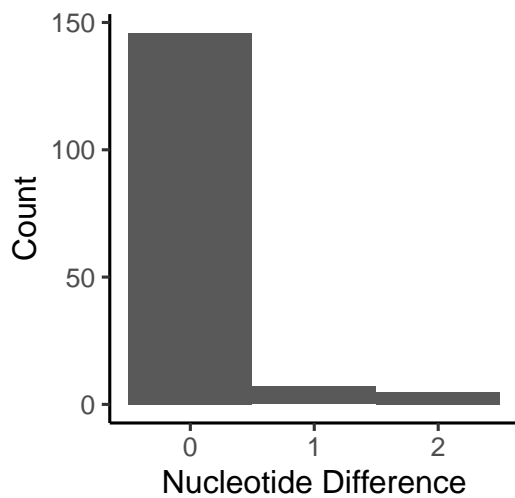
IGHV1-46*01

580 sequences assigned
530 (91.4%) exact matches, in which:
530 unique CDR3
6 unique J



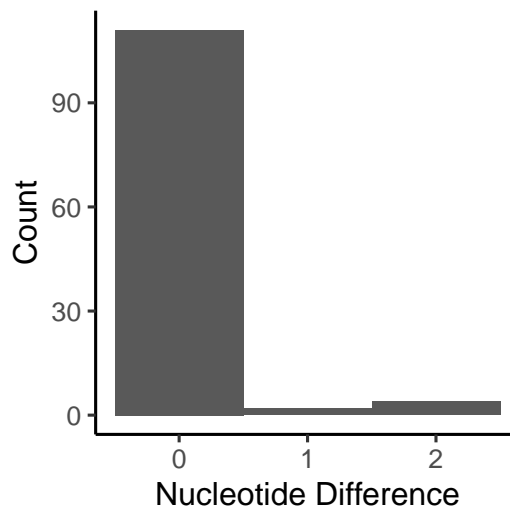
IGHV1–58*01_03

158 sequences assigned
146 (92.4%) exact matches, in which:
146 unique CDR3
6 unique J



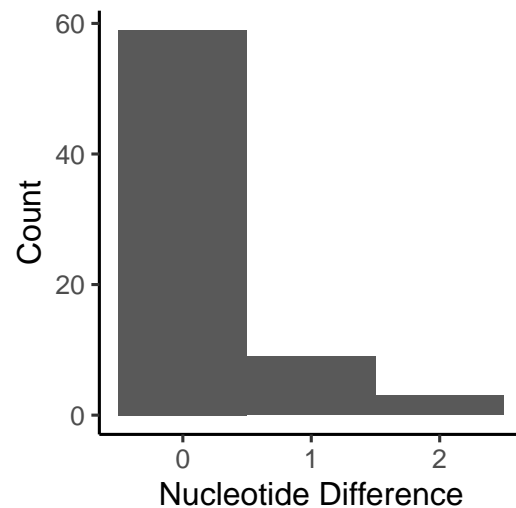
IGHV2–70*01

117 sequences assigned
111 (94.9%) exact matches, in which:
111 unique CDR3
5 unique J



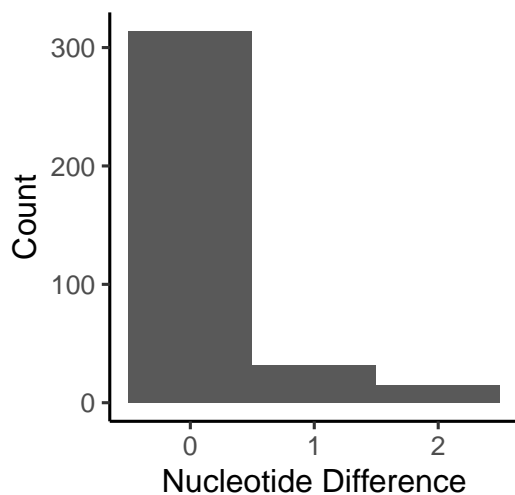
IGHV3–9*03

71 sequences assigned
59 (83.1%) exact matches, in which:
59 unique CDR3
6 unique J



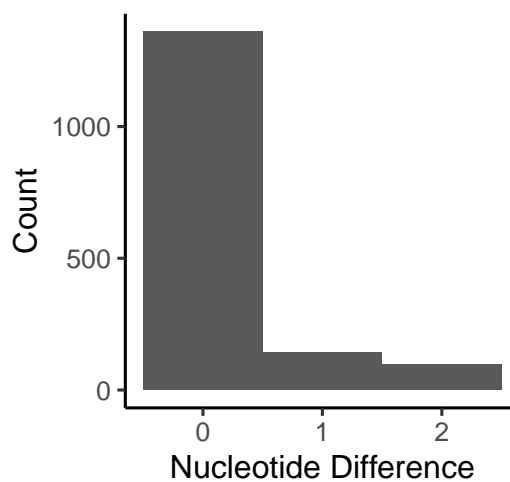
IGHV2–5*01

361 sequences assigned
314 (87%) exact matches, in which:
312 unique CDR3
6 unique J



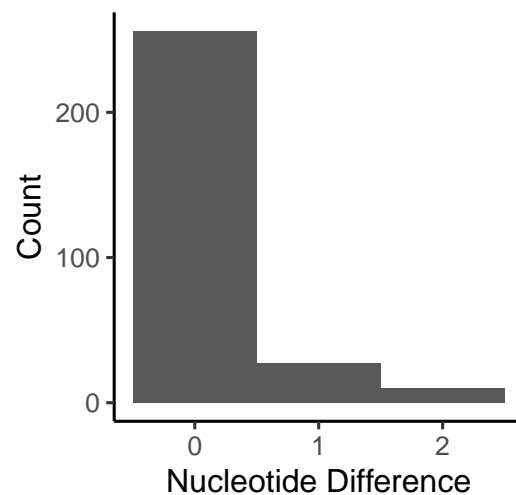
IGHV3–7*01

1599 sequences assigned
1360 (85.1%) exact matches, in which:
1327 unique CDR3
6 unique J



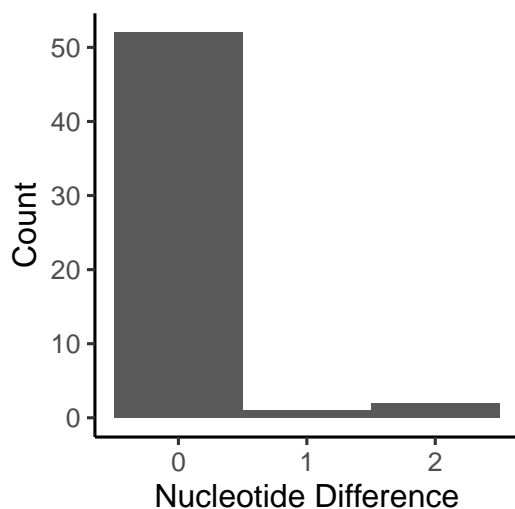
IGHV3–11*01

293 sequences assigned
256 (87.4%) exact matches, in which:
253 unique CDR3
6 unique J



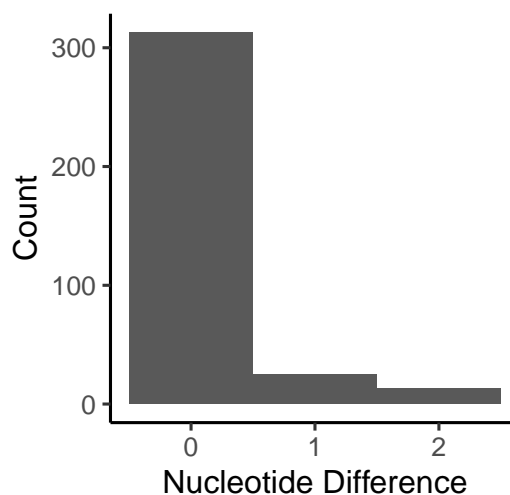
IGHV2–26*01

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



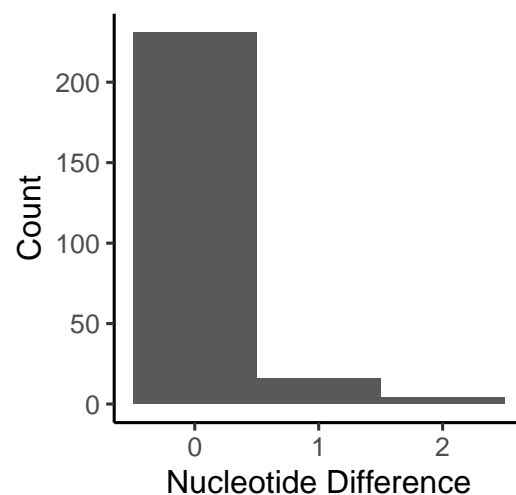
IGHV3–9*01

351 sequences assigned
313 (89.2%) exact matches, in which:
310 unique CDR3
6 unique J



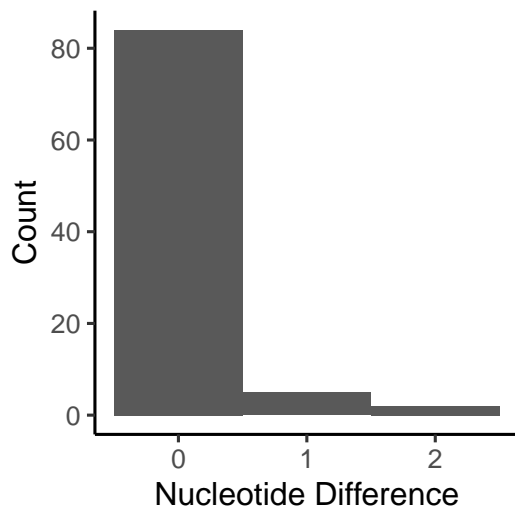
IGHV3–11*04

251 sequences assigned
231 (92%) exact matches, in which:
222 unique CDR3
6 unique J



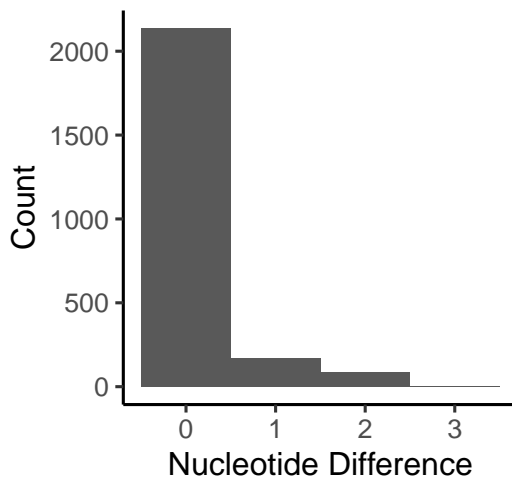
IGHV3-13*01

91 sequences assigned
84 (92.3%) exact matches, in which:
84 unique CDR3
5 unique J



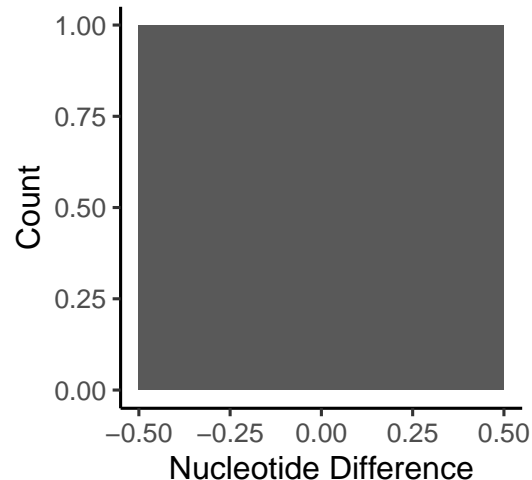
IGHV3-21*01_02

2389 sequences assigned
2136 (89.4%) exact matches, in which:
2103 unique CDR3
6 unique J



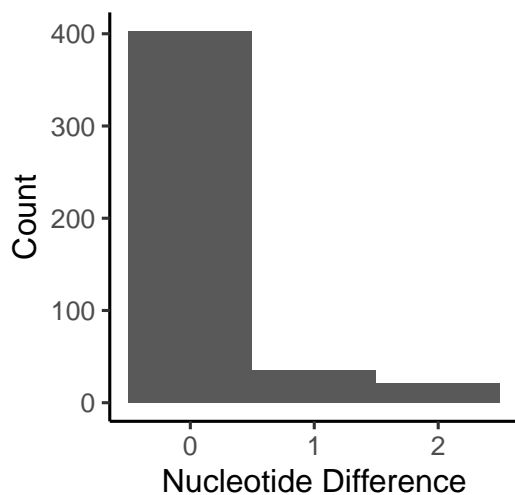
IGHV3-35*01

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



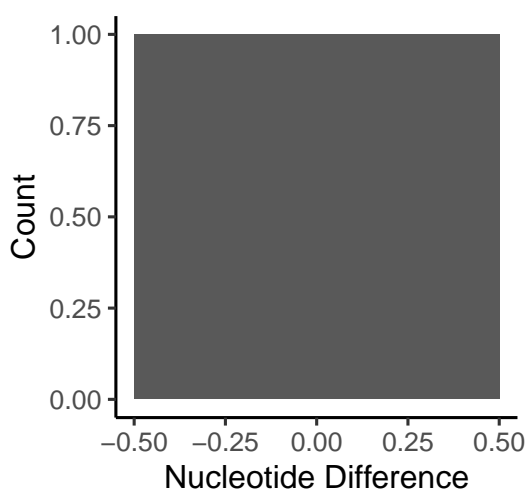
IGHV3-15*01_02

459 sequences assigned
403 (87.8%) exact matches, in which:
396 unique CDR3
6 unique J



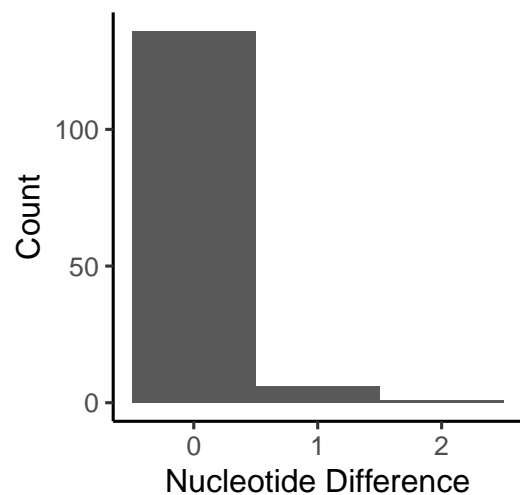
IGHV3-30-3*01

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



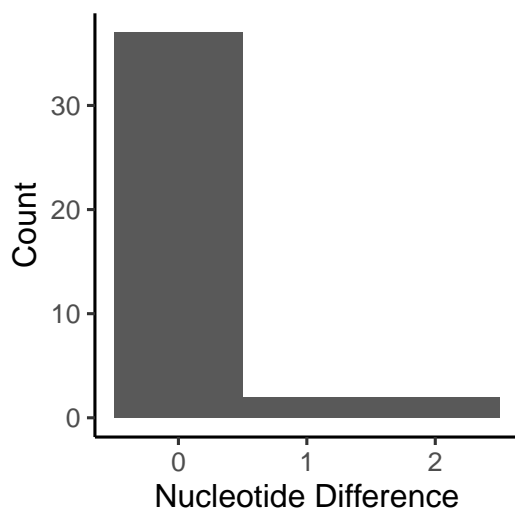
IGHV3-43*01

143 sequences assigned
136 (95.1%) exact matches, in which:
130 unique CDR3
6 unique J



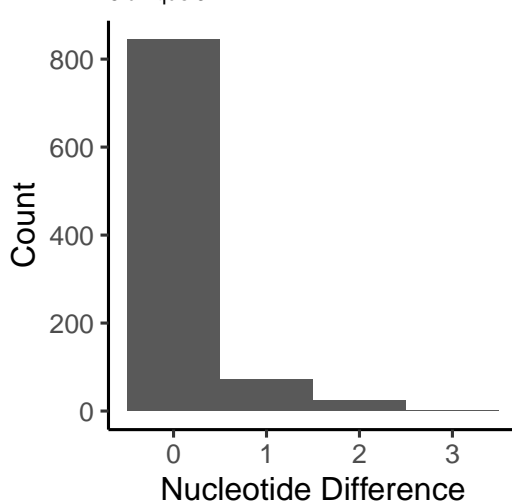
IGHV3-20*01_02

41 sequences assigned
37 (90.2%) exact matches, in which:
36 unique CDR3
5 unique J



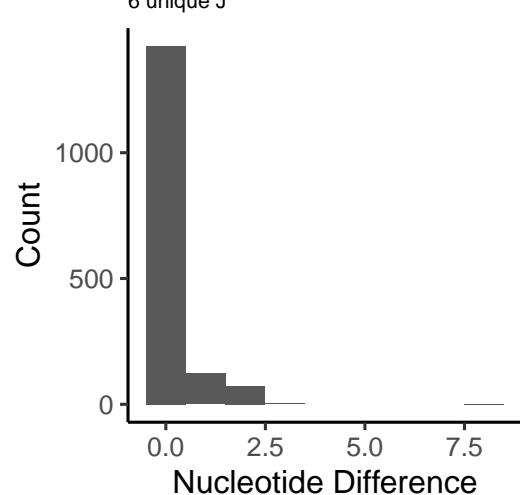
IGHV3-33*01

943 sequences assigned
845 (89.6%) exact matches, in which:
831 unique CDR3
6 unique J



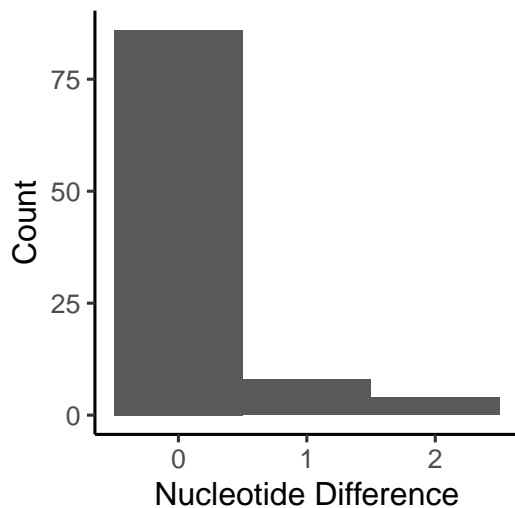
IGHV3-48*02

1625 sequences assigned
1424 (87.6%) exact matches, in which:
1365 unique CDR3
6 unique J



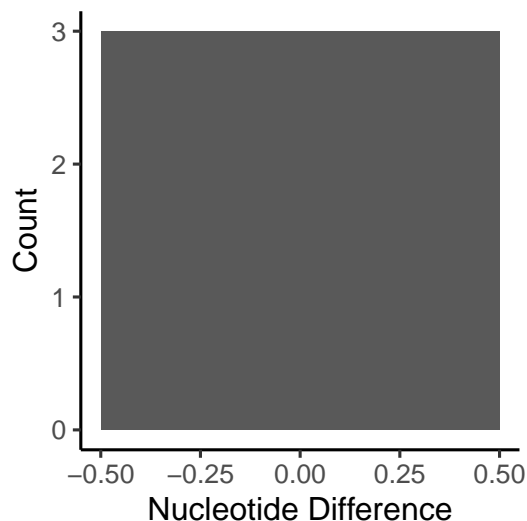
IGHV3-49*03_05

98 sequences assigned
86 (87.8%) exact matches, in which:
85 unique CDR3
5 unique J



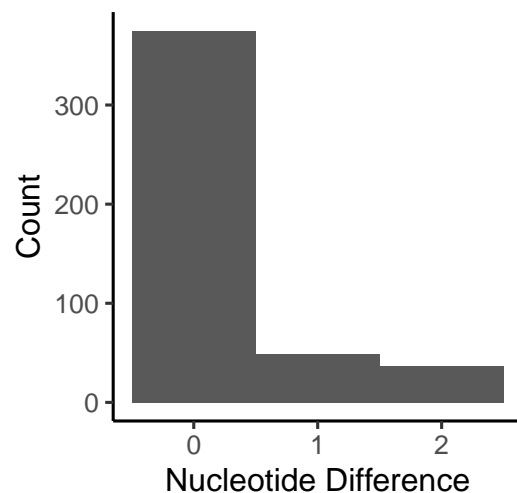
IGHV3-66*03

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



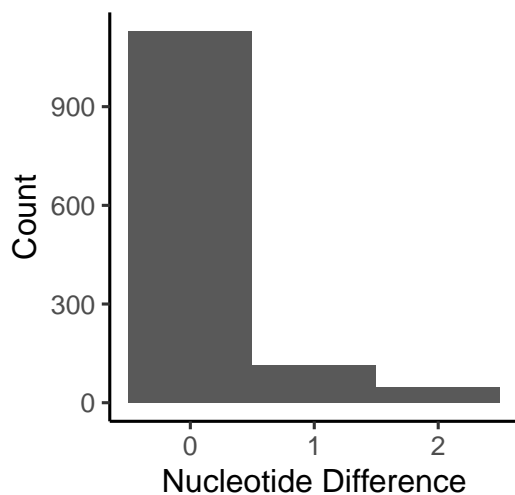
IGHV3-74*01_02

461 sequences assigned
375 (81.3%) exact matches, in which:
366 unique CDR3
6 unique J



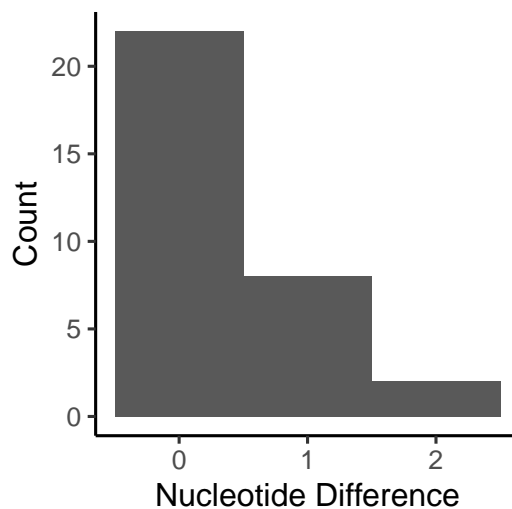
IGHV3-53*01_02

1289 sequences assigned
1130 (87.7%) exact matches, in which:
1103 unique CDR3
6 unique J



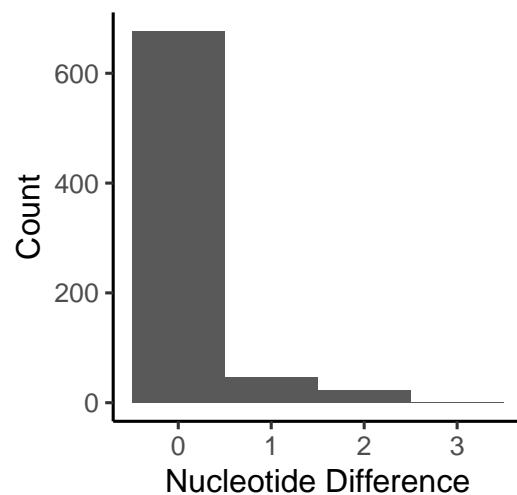
IGHV3-72*01

32 sequences assigned
22 (68.8%) exact matches, in which:
20 unique CDR3
5 unique J



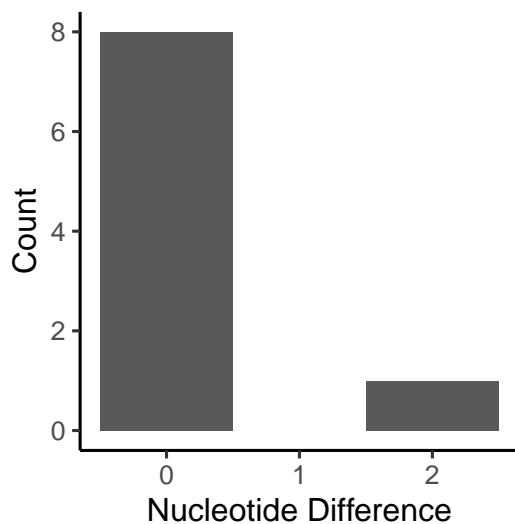
IGHV4-4*07

746 sequences assigned
677 (90.8%) exact matches, in which:
663 unique CDR3
6 unique J



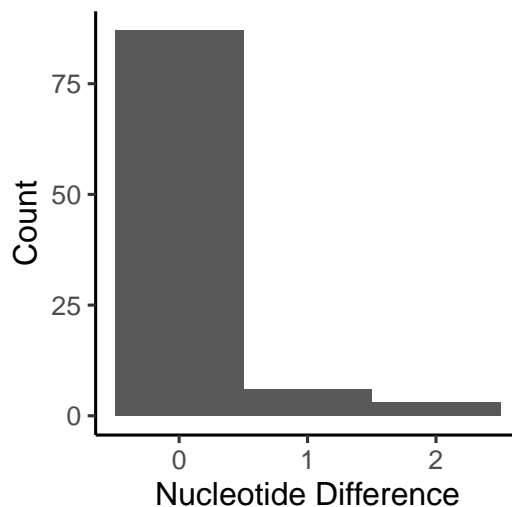
IGHV3-64*02_07

9 sequences assigned
8 (88.9%) exact matches, in which:
8 unique CDR3
3 unique J



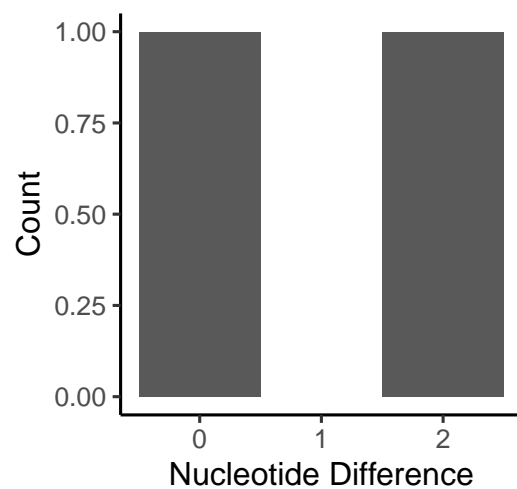
IGHV3-73*01_02

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



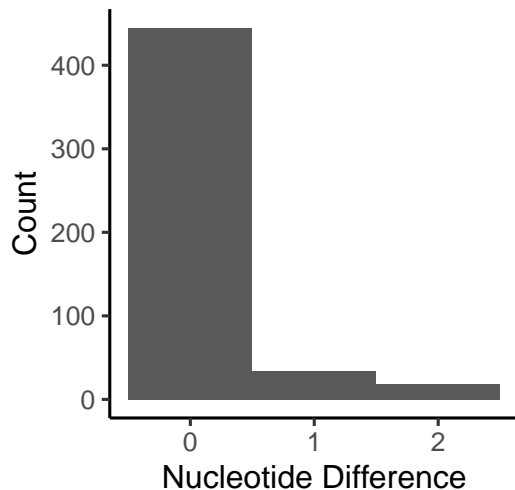
IGHV4-28*01_07

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



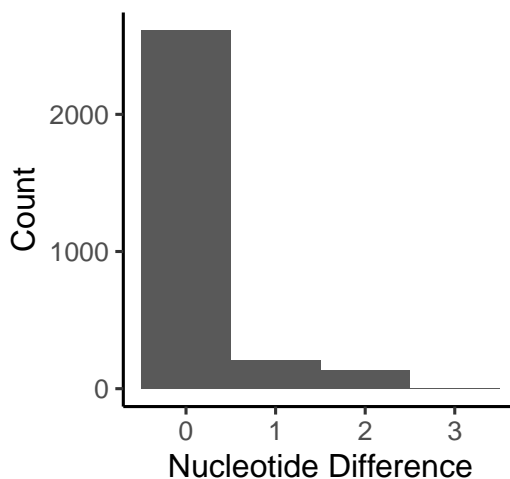
IGHV4-31*03_04

497 sequences assigned
445 (89.5%) exact matches, in which:
441 unique CDR3
6 unique J



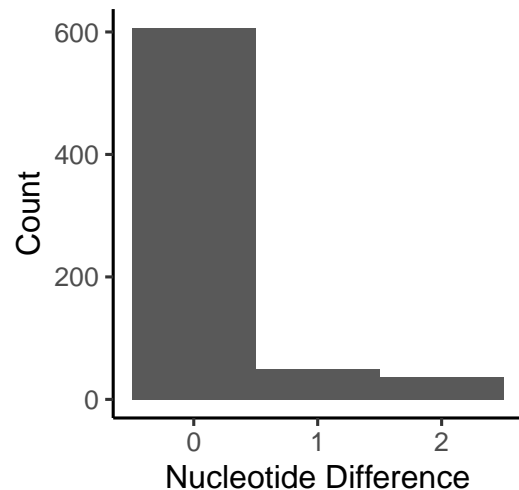
IGHV4-39*01_05

2955 sequences assigned
2612 (88.4%) exact matches, in which:
2582 unique CDR3
6 unique J



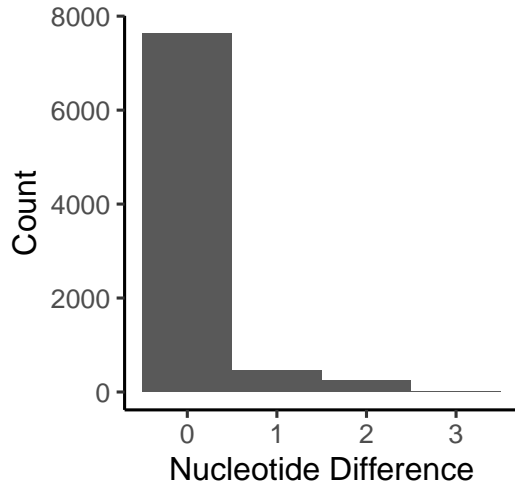
IGHV5-51*01_03

694 sequences assigned
607 (87.5%) exact matches, in which:
607 unique CDR3
6 unique J



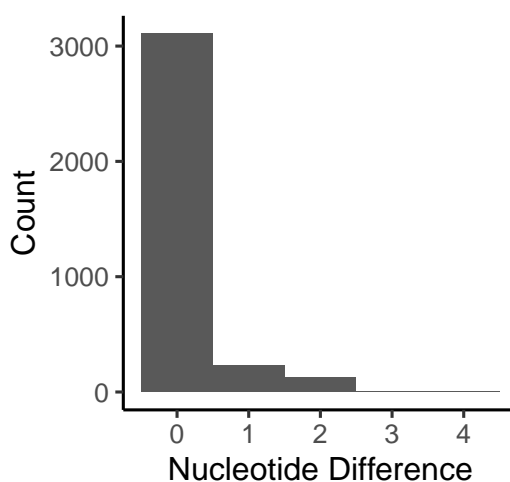
IGHV4-34*01_02

8332 sequences assigned
7626 (91.5%) exact matches, in which:
7554 unique CDR3
6 unique J



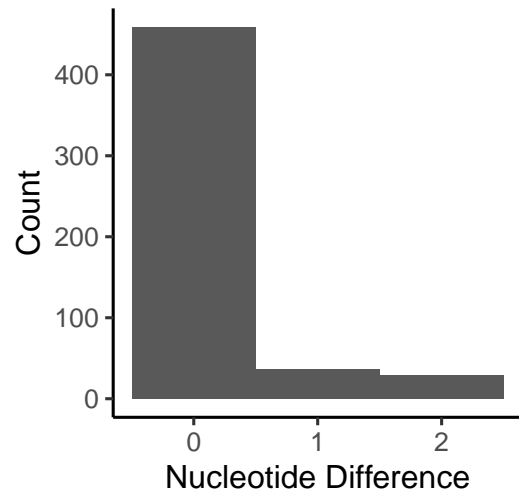
IGHV4-59*01_07

3462 sequences assigned
3107 (89.7%) exact matches, in which:
3065 unique CDR3
6 unique J



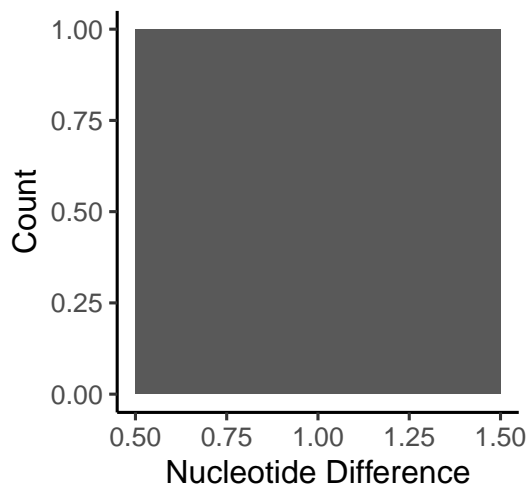
IGHV6-1*01_02

525 sequences assigned
459 (87.4%) exact matches, in which:
457 unique CDR3
6 unique J



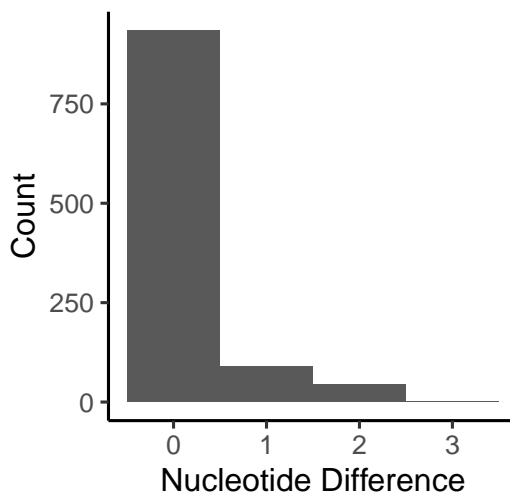
IGHV4-38-2*02

1 sequences assigned
No exact matches.



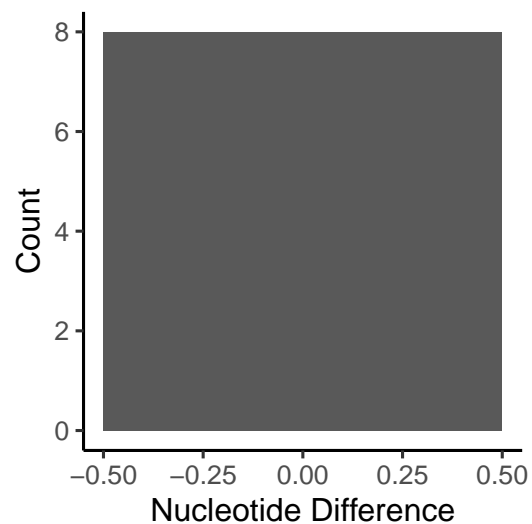
IGHV4-61*01

1071 sequences assigned
935 (87.3%) exact matches, in which:
915 unique CDR3
6 unique J



IGHV7-4-1*01

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





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.

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.