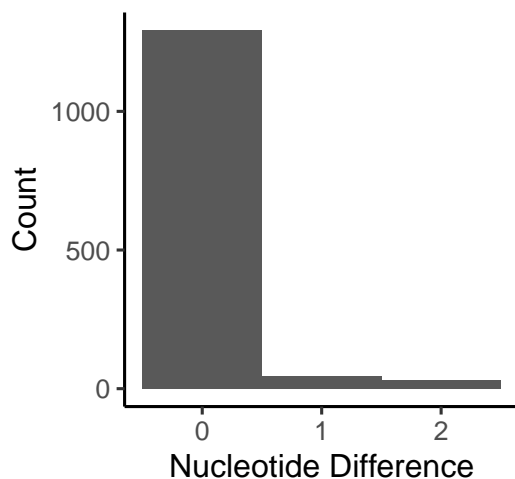


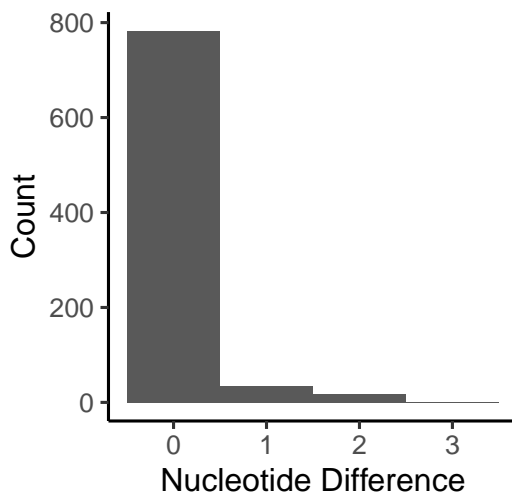
IGHV1-2*02

1368 sequences assigned
1292 (94.4%) exact matches, in which:
1277 unique CDR3
6 unique J



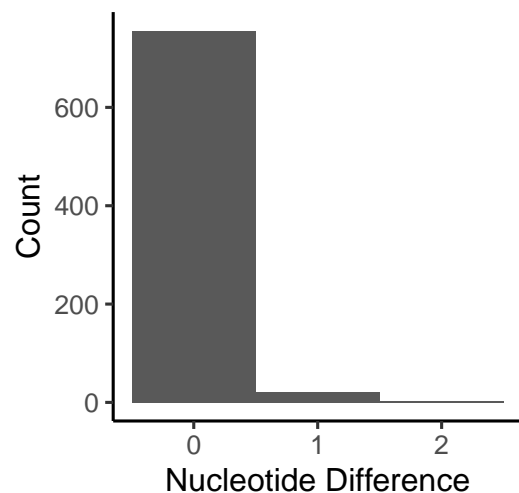
IGHV1-8*01

835 sequences assigned
783 (93.8%) exact matches, in which:
774 unique CDR3
6 unique J



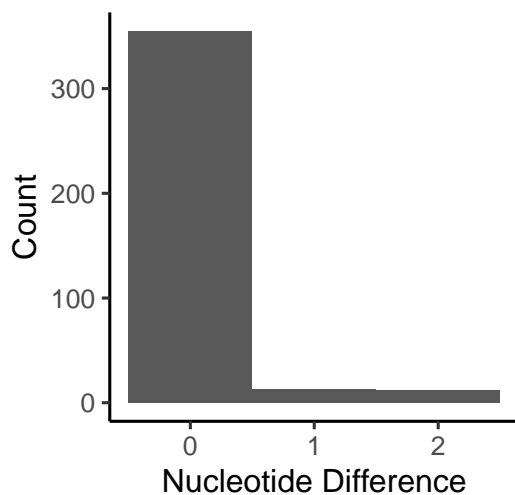
IGHV1-24*01

780 sequences assigned
756 (96.9%) exact matches, in which:
750 unique CDR3
6 unique J



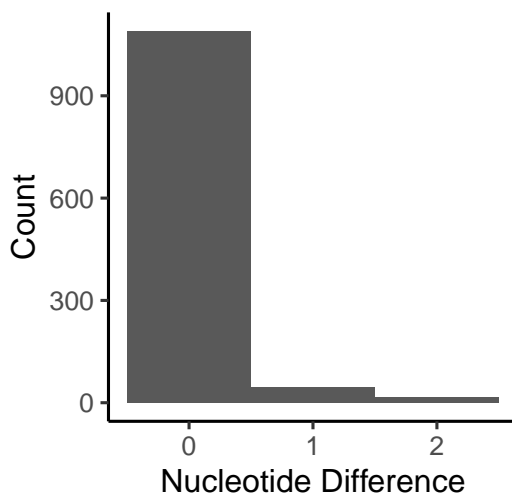
IGHV1-2*04

380 sequences assigned
355 (93.4%) exact matches, in which:
353 unique CDR3
6 unique J



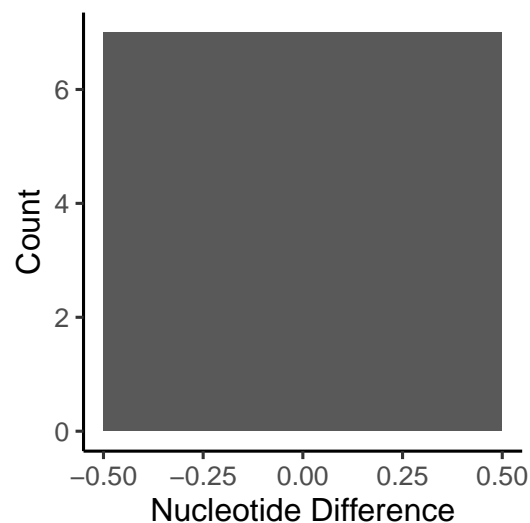
IGHV1-18*01

1149 sequences assigned
1090 (94.9%) exact matches, in which:
1074 unique CDR3
6 unique J



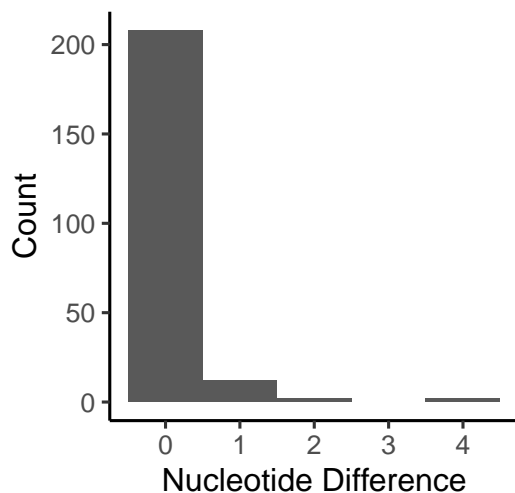
IGHV1-45*02

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



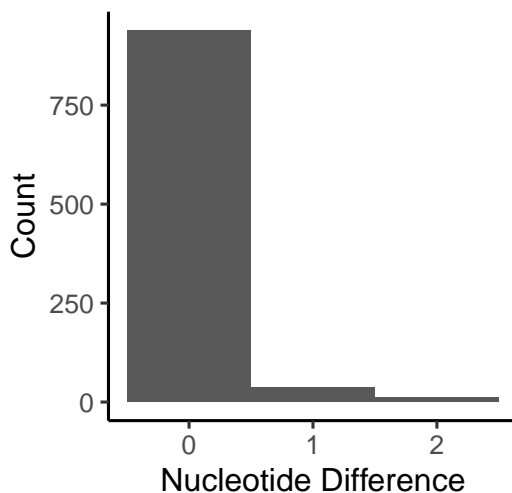
IGHV1-3*01_05

224 sequences assigned
208 (92.9%) exact matches, in which:
207 unique CDR3
6 unique J



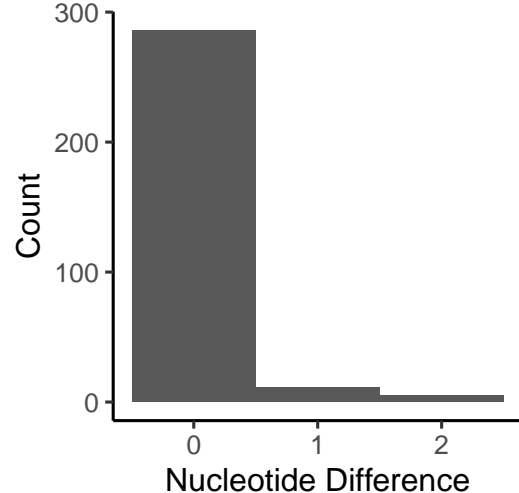
IGHV1-18*04

987 sequences assigned
939 (95.1%) exact matches, in which:
928 unique CDR3
6 unique J



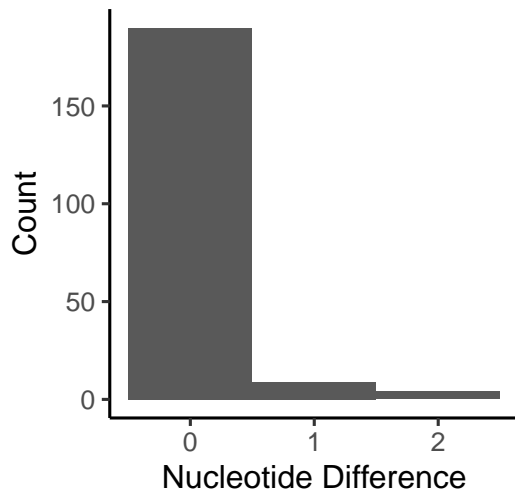
IGHV1-46*01

302 sequences assigned
286 (94.7%) exact matches, in which:
285 unique CDR3
6 unique J



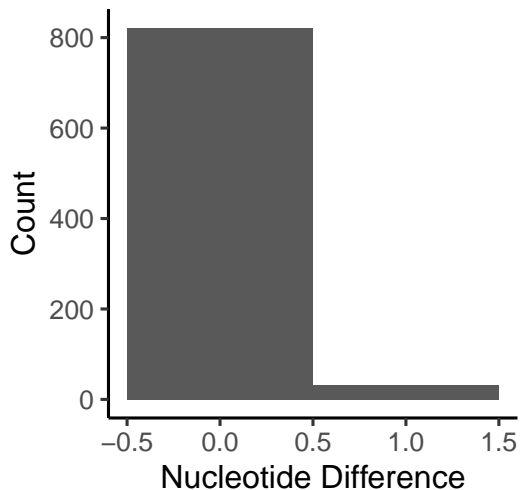
IGHV1-46*03

203 sequences assigned
190 (93.6%) exact matches, in which:
190 unique CDR3
6 unique J



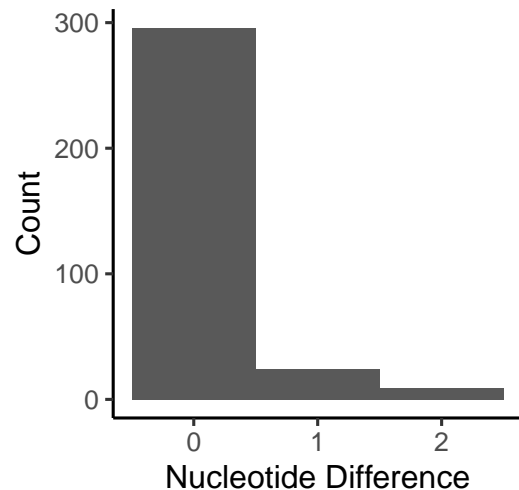
IGHV1-69*01_12_13

854 sequences assigned
822 (96.3%) exact matches, in which:
821 unique CDR3
6 unique J



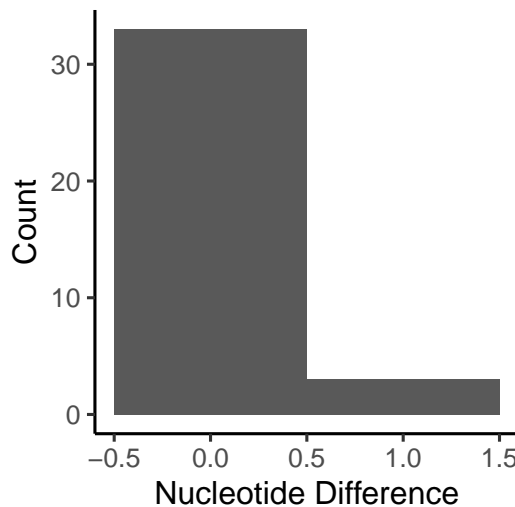
IGHV2-5*01

329 sequences assigned
296 (90%) exact matches, in which:
294 unique CDR3
6 unique J



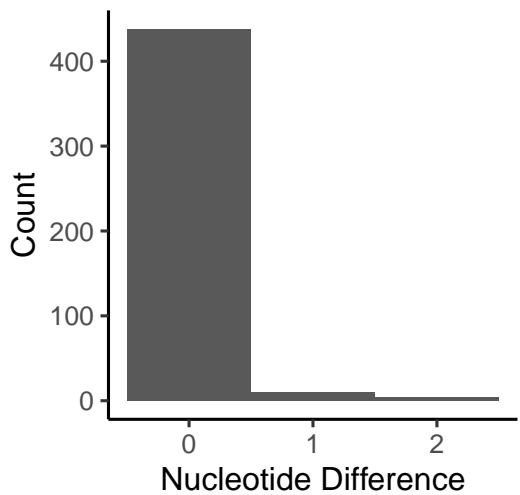
IGHV1-58*02

36 sequences assigned
33 (91.7%) exact matches, in which:
33 unique CDR3
5 unique J



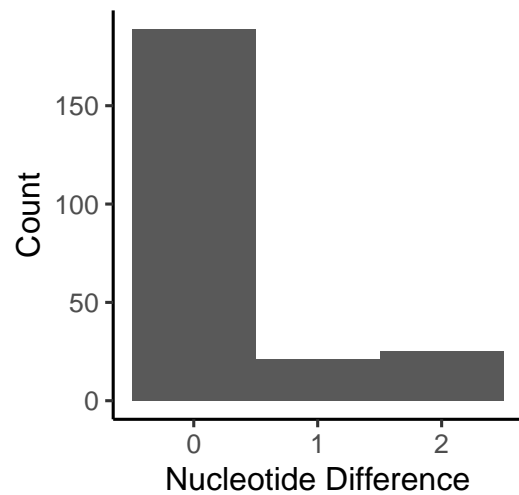
IGHV1-69*04_09

452 sequences assigned
438 (96.9%) exact matches, in which:
437 unique CDR3
6 unique J



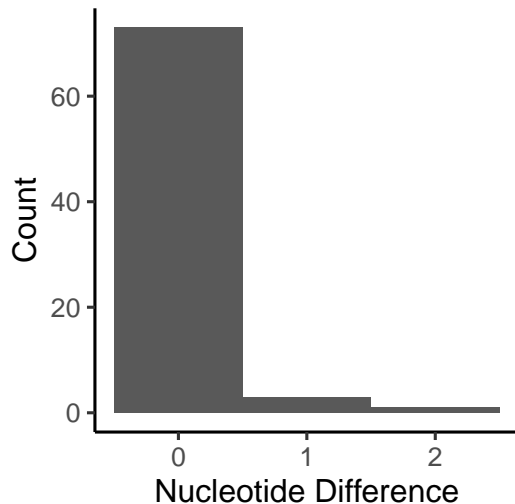
IGHV2-5*02

235 sequences assigned
189 (80.4%) exact matches, in which:
189 unique CDR3
6 unique J



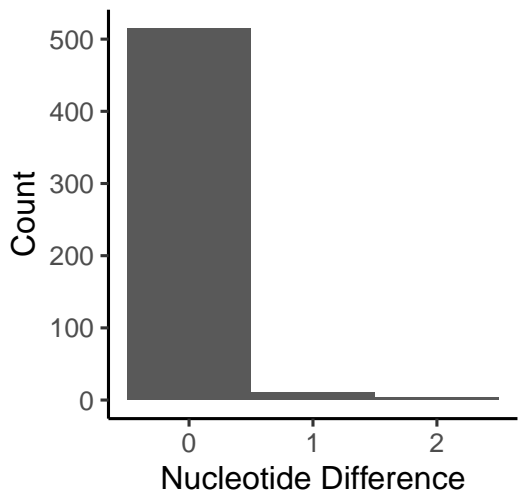
IGHV1-58*01_03

77 sequences assigned
73 (94.8%) exact matches, in which:
73 unique CDR3
5 unique J



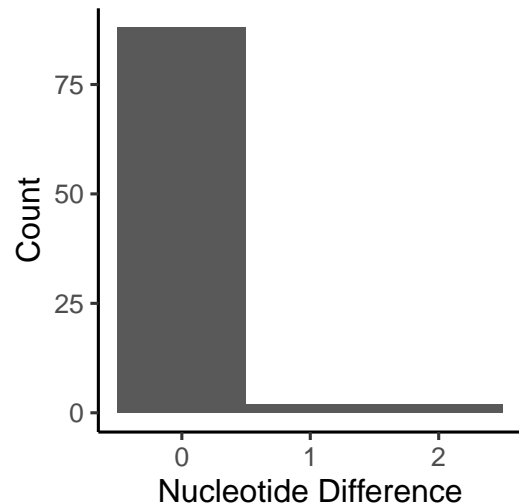
IGHV1-69*06_14

529 sequences assigned
515 (97.4%) exact matches, in which:
513 unique CDR3
6 unique J



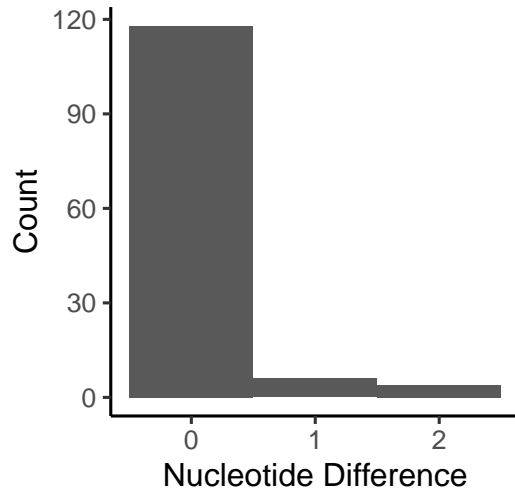
IGHV2-26*01

92 sequences assigned
88 (95.7%) exact matches, in which:
88 unique CDR3
6 unique J



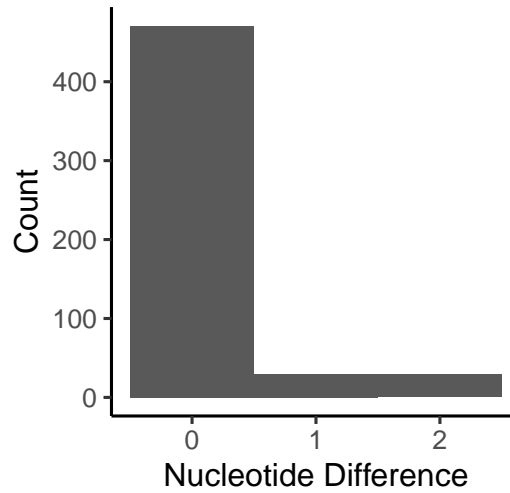
IGHV2–70*01

128 sequences assigned
118 (92.2%) exact matches, in which:
117 unique CDR3
6 unique J



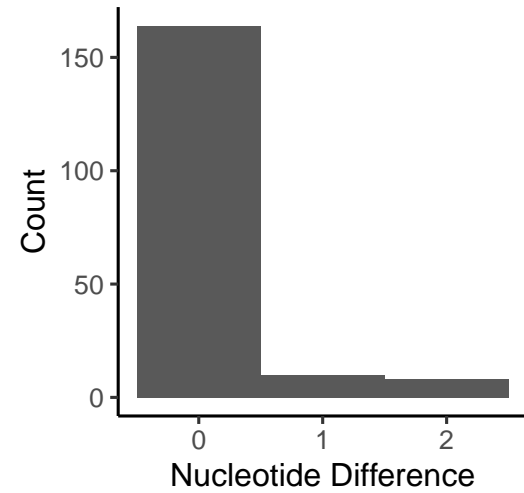
IGHV3–7*03

530 sequences assigned
471 (88.9%) exact matches, in which:
447 unique CDR3
6 unique J



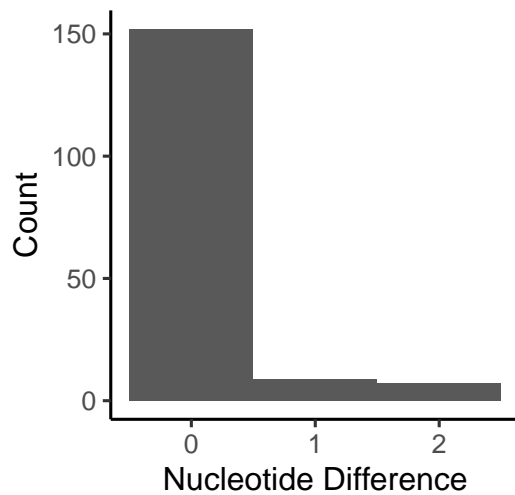
IGHV3–11*06

182 sequences assigned
164 (90.1%) exact matches, in which:
158 unique CDR3
6 unique J



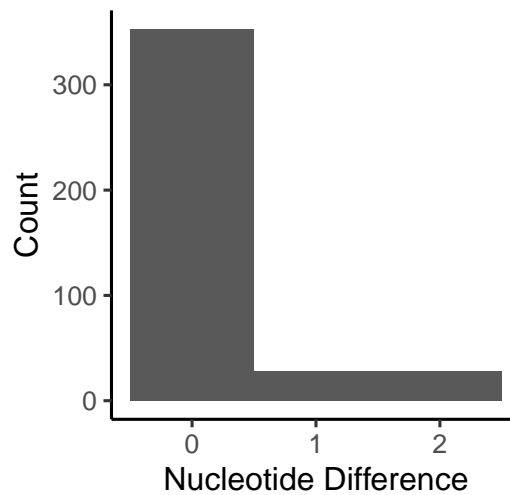
IGHV2–70*11_15

168 sequences assigned
152 (90.5%) exact matches, in which:
149 unique CDR3
5 unique J



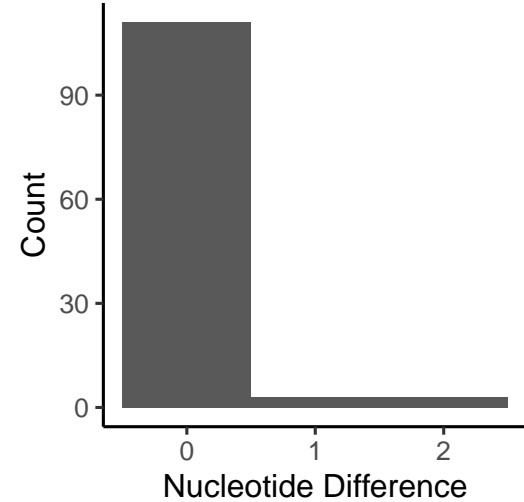
IGHV3–9*01

409 sequences assigned
353 (86.3%) exact matches, in which:
349 unique CDR3
6 unique J



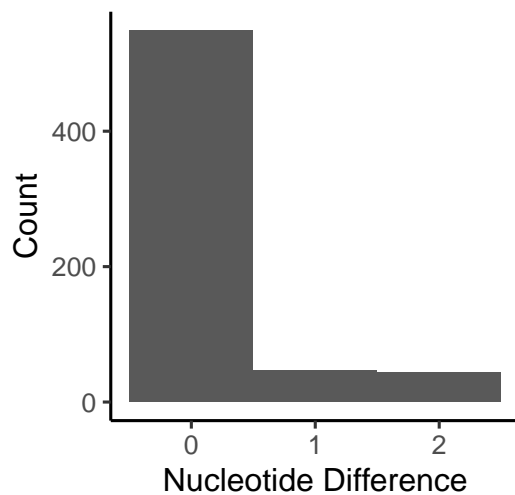
IGHV3–13*01

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



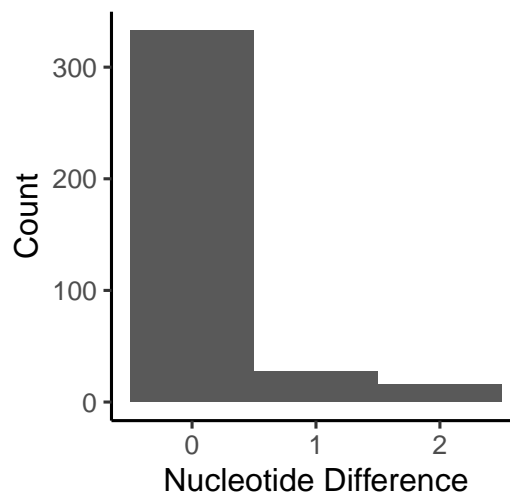
IGHV3–7*01

640 sequences assigned
549 (85.8%) exact matches, in which:
530 unique CDR3
6 unique J



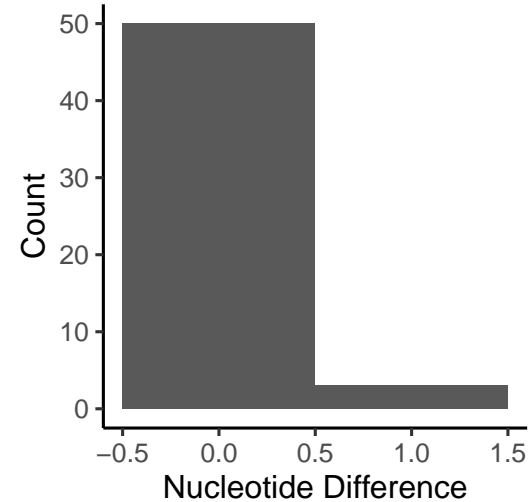
IGHV3–11*01

376 sequences assigned
333 (88.6%) exact matches, in which:
329 unique CDR3
6 unique J



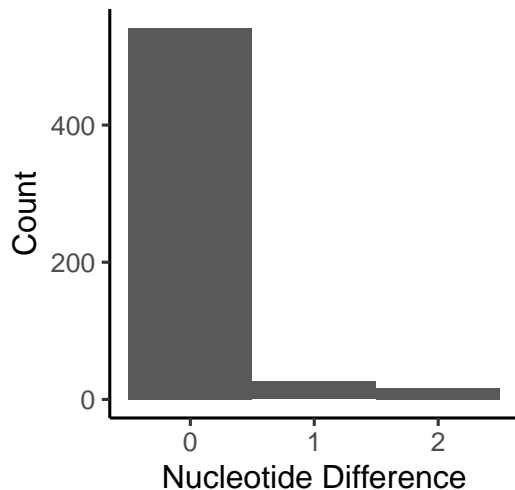
IGHV3–13*05

53 sequences assigned
50 (94.3%) exact matches, in which:
48 unique CDR3
4 unique J



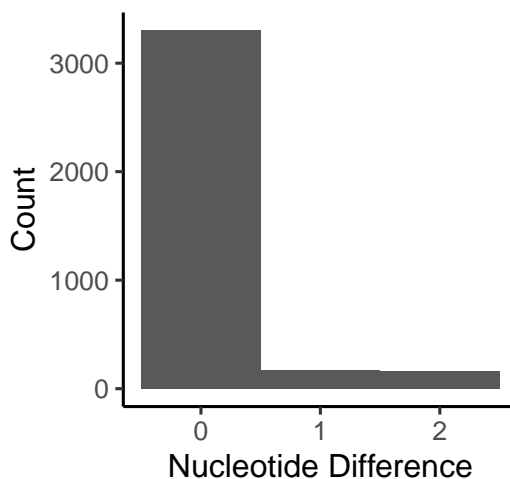
IGHV3-15*01_02

585 sequences assigned
542 (92.6%) exact matches, in which:
529 unique CDR3
6 unique J



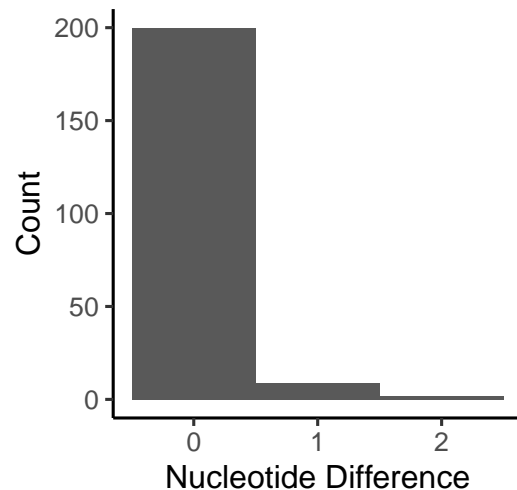
IGHV3-23*01_04

3641 sequences assigned
3302 (90.7%) exact matches, in which:
3202 unique CDR3
6 unique J



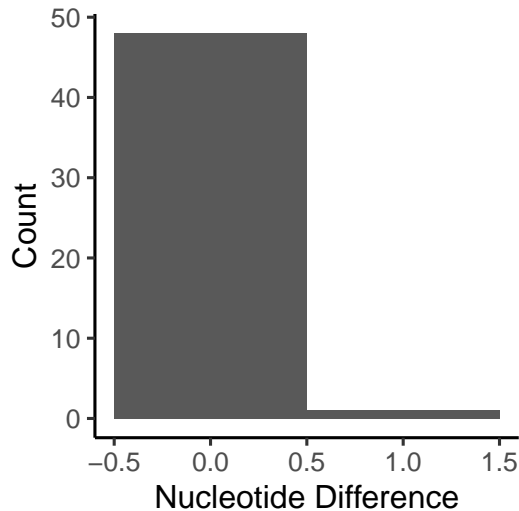
IGHV3-43*01

211 sequences assigned
200 (94.8%) exact matches, in which:
198 unique CDR3
6 unique J



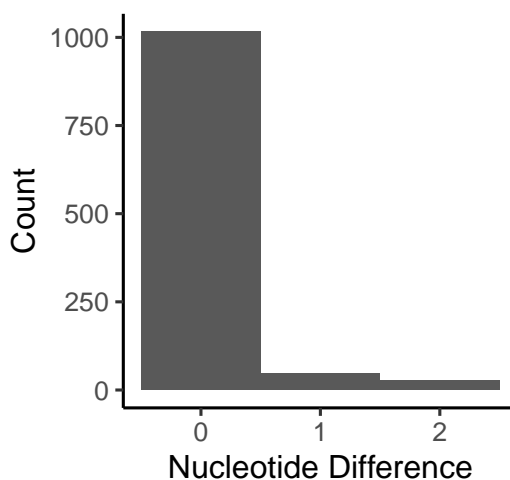
IGHV3-20*01_02

49 sequences assigned
48 (98%) exact matches, in which:
46 unique CDR3
5 unique J



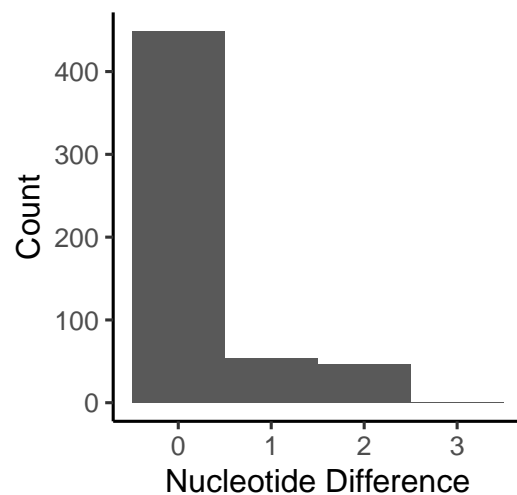
IGHV3-30-3*01

1088 sequences assigned
1016 (93.4%) exact matches, in which:
1000 unique CDR3
6 unique J



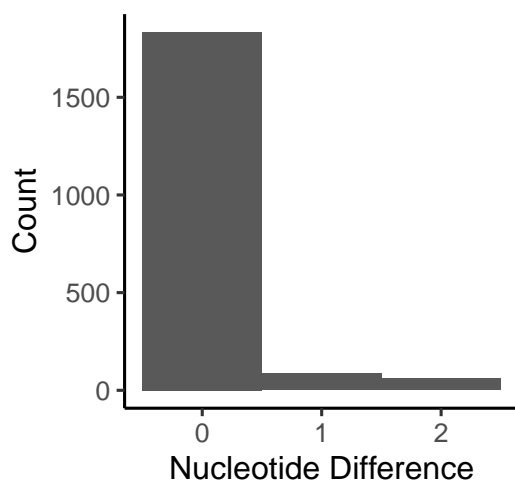
IGHV3-48*01

551 sequences assigned
449 (81.5%) exact matches, in which:
437 unique CDR3
6 unique J



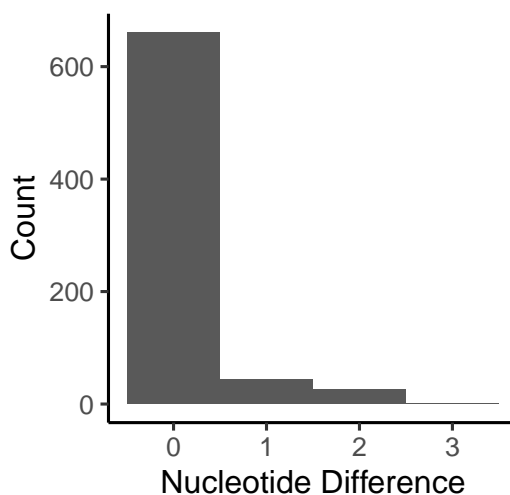
IGHV3-21*01_02

1981 sequences assigned
1834 (92.6%) exact matches, in which:
1766 unique CDR3
6 unique J



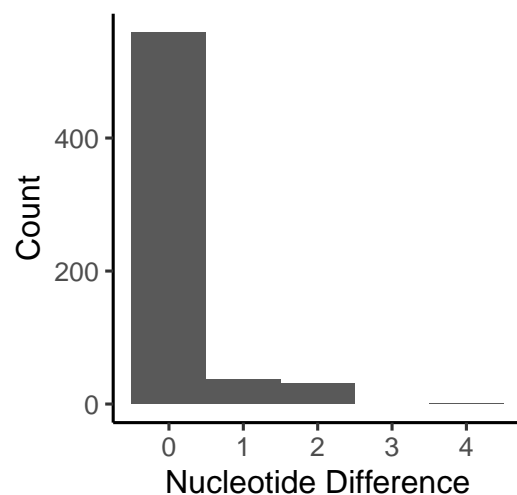
IGHV3-33*01

731 sequences assigned
661 (90.4%) exact matches, in which:
653 unique CDR3
6 unique J



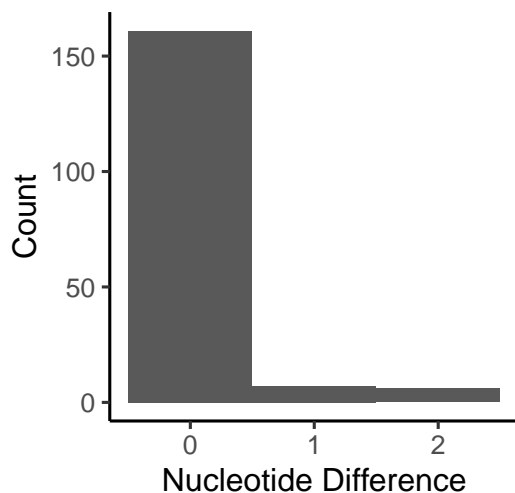
IGHV3-48*02

628 sequences assigned
559 (89%) exact matches, in which:
538 unique CDR3
6 unique J



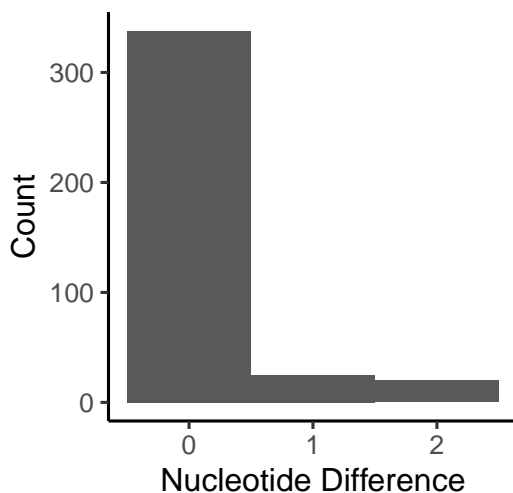
IGHV3-49*03_05

174 sequences assigned
161 (92.5%) exact matches, in which:
160 unique CDR3
6 unique J



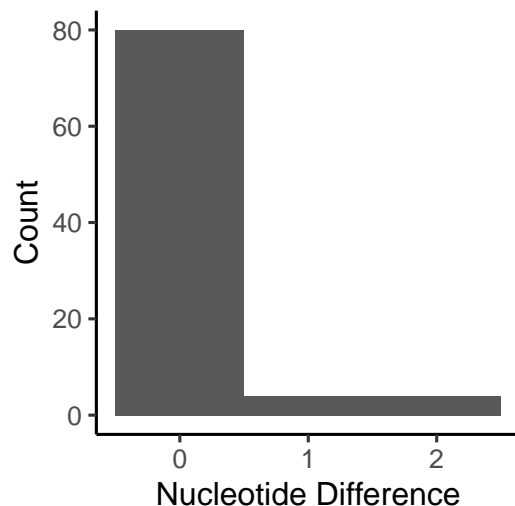
IGHV3-66*01

383 sequences assigned
338 (88.3%) exact matches, in which:
326 unique CDR3
6 unique J



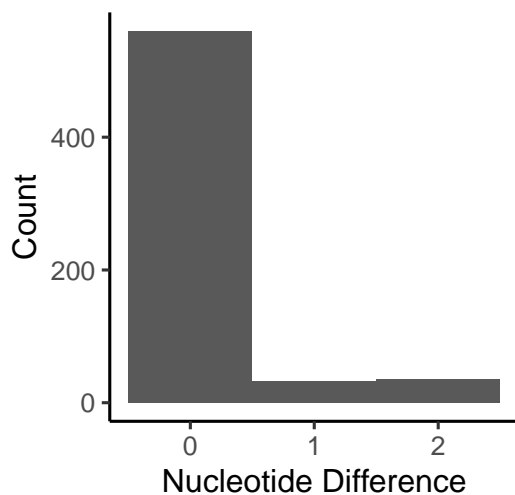
IGHV3-73*01_02

88 sequences assigned
80 (90.9%) exact matches, in which:
79 unique CDR3
6 unique J



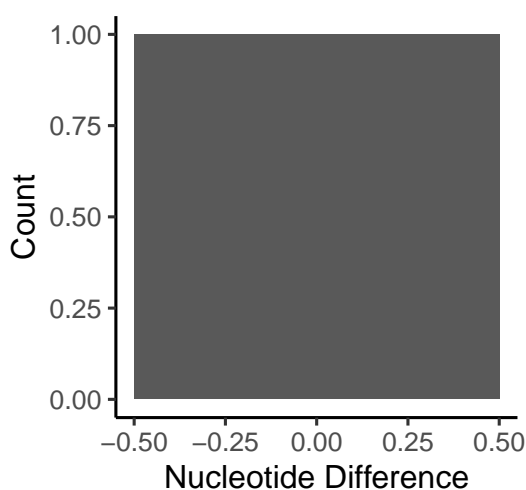
IGHV3-53*01_02

627 sequences assigned
560 (89.3%) exact matches, in which:
547 unique CDR3
6 unique J



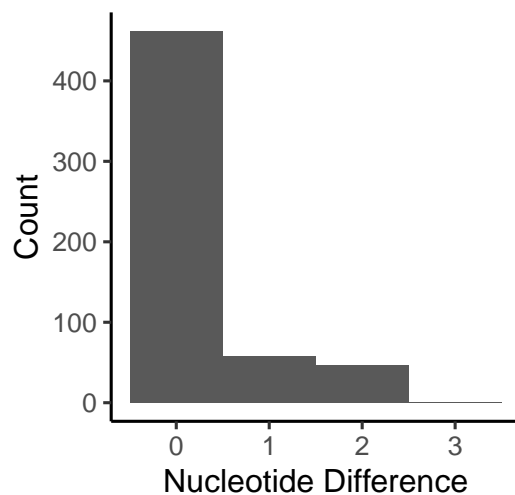
IGHV3-69-1*01

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



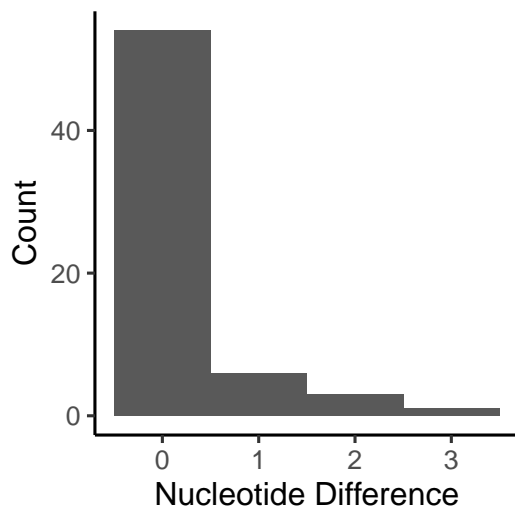
IGHV3-74*01_02

568 sequences assigned
462 (81.3%) exact matches, in which:
441 unique CDR3
6 unique J



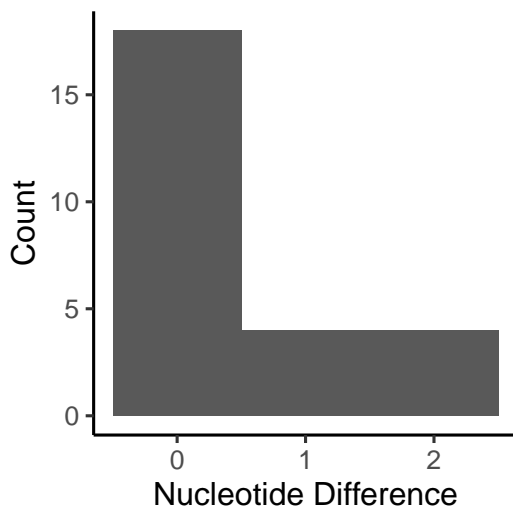
IGHV3-64*01

64 sequences assigned
54 (84.4%) exact matches, in which:
53 unique CDR3
6 unique J



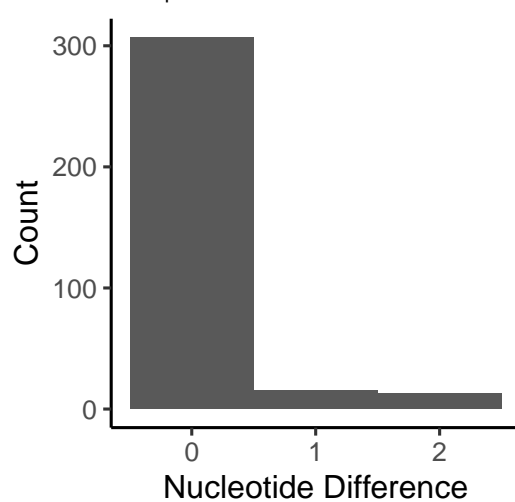
IGHV3-72*01

26 sequences assigned
18 (69.2%) exact matches, in which:
18 unique CDR3
5 unique J



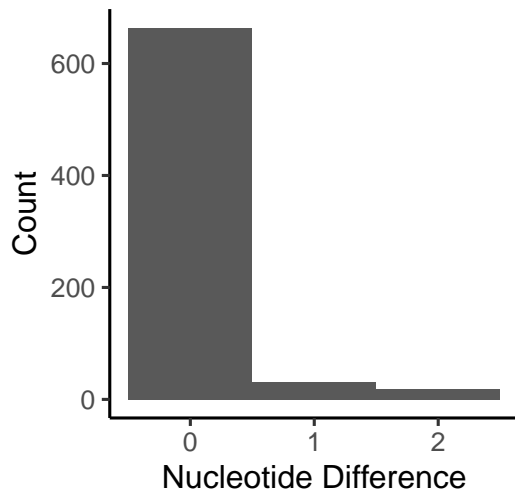
IGHV3-64D*06

335 sequences assigned
307 (91.6%) exact matches, in which:
302 unique CDR3
6 unique J



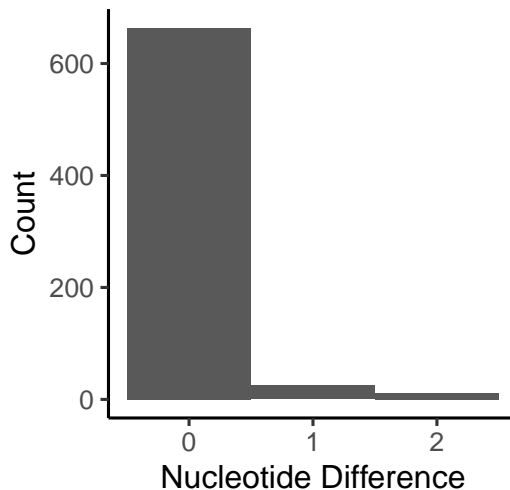
IGHV4-4*07

714 sequences assigned
664 (93%) exact matches, in which:
636 unique CDR3
6 unique J



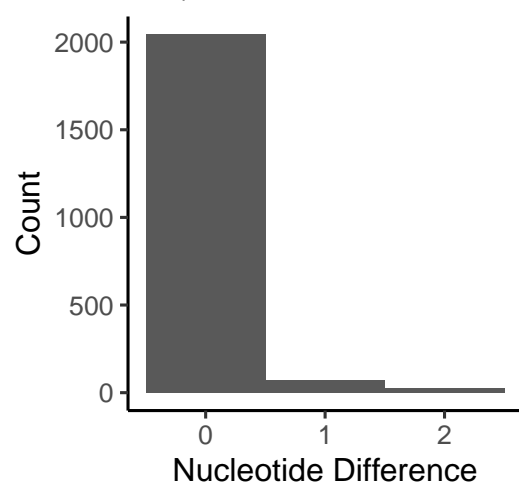
IGHV4-30-2*01

700 sequences assigned
664 (94.9%) exact matches, in which:
649 unique CDR3
6 unique J



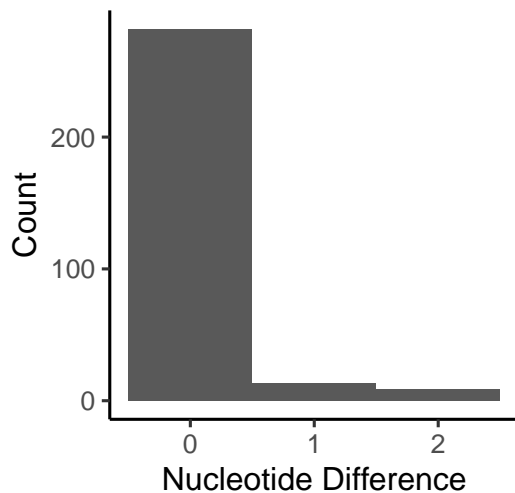
IGHV4-34*01_02

2142 sequences assigned
2044 (95.4%) exact matches, in which:
1998 unique CDR3
6 unique J



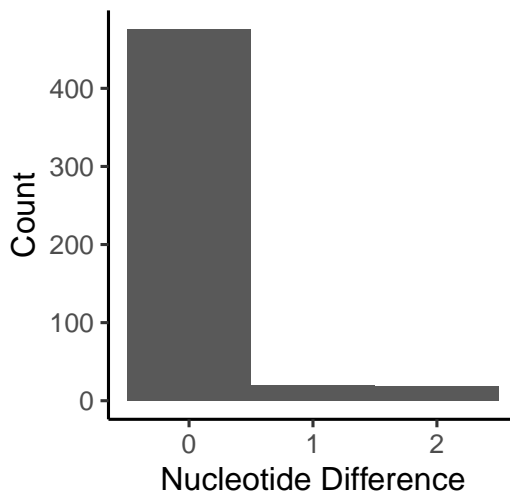
IGHV4-4*02_03

304 sequences assigned
282 (92.8%) exact matches, in which:
277 unique CDR3
6 unique J



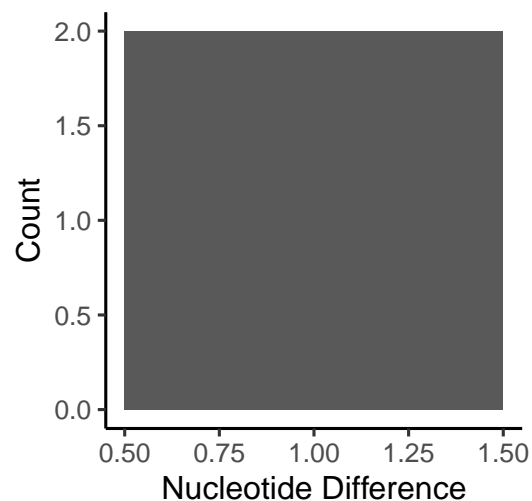
IGHV4-30-4*01

514 sequences assigned
476 (92.6%) exact matches, in which:
469 unique CDR3
6 unique J



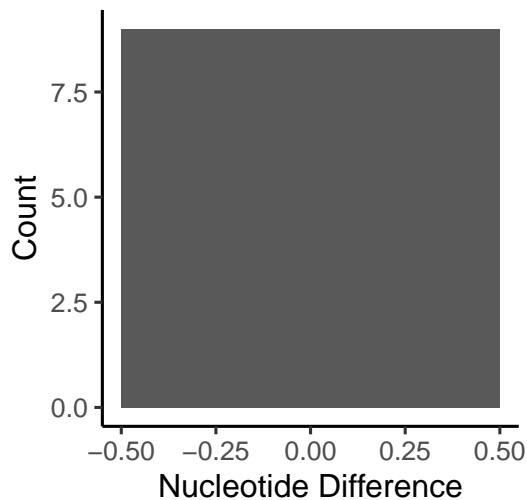
IGHV4-39*02

2 sequences assigned
No exact matches.



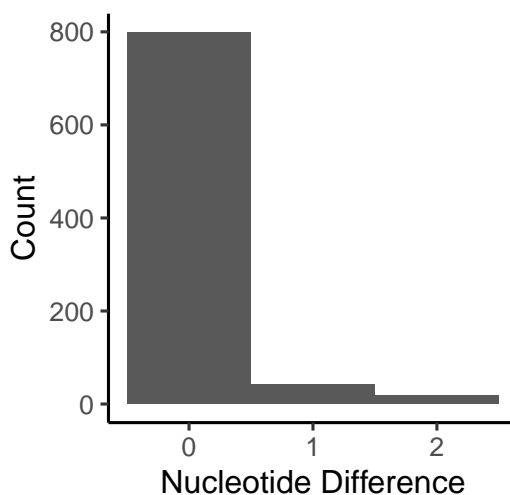
IGHV4-28*01_07

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



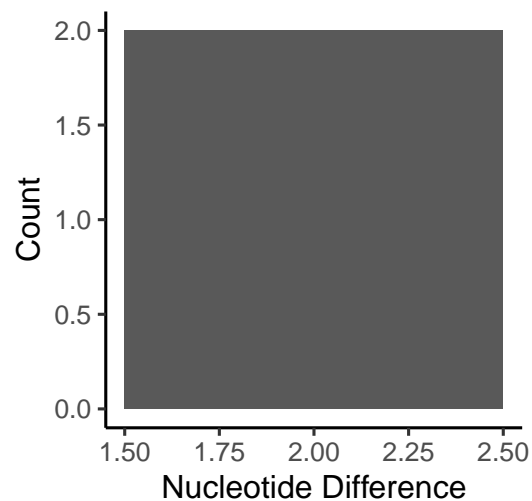
IGHV4-31*02

859 sequences assigned
799 (93%) exact matches, in which:
787 unique CDR3
6 unique J



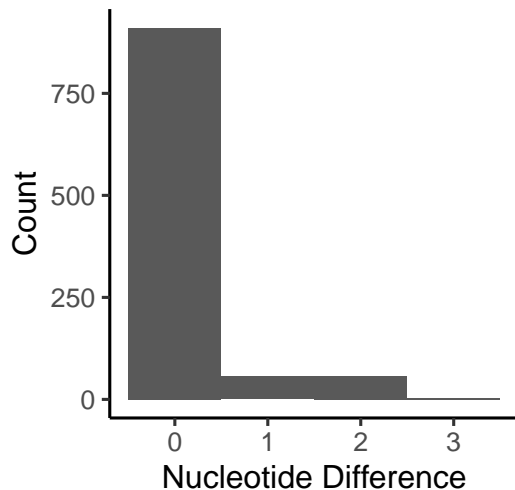
IGHV4-39*07

2 sequences assigned
No exact matches.



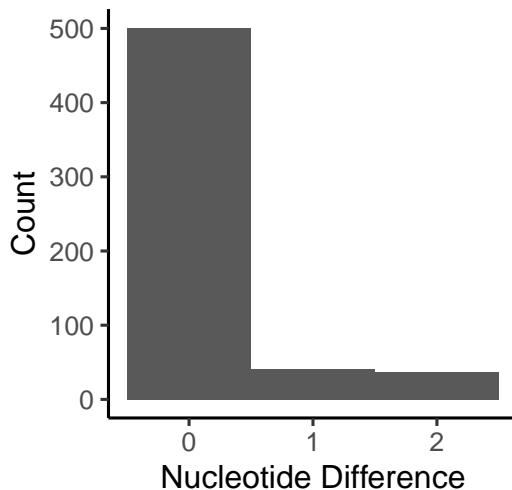
IGHV4–59*08

1028 sequences assigned
911 (88.6%) exact matches, in which:
892 unique CDR3
6 unique J



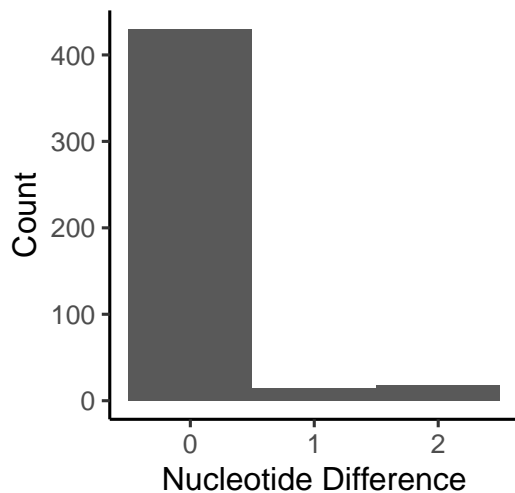
IGHV6–1*01_02

579 sequences assigned
501 (86.5%) exact matches, in which:
486 unique CDR3
6 unique J



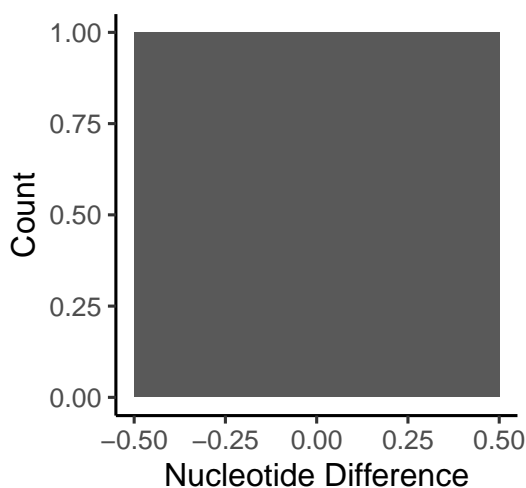
IGHV4–61*01

462 sequences assigned
430 (93.1%) exact matches, in which:
421 unique CDR3
6 unique J



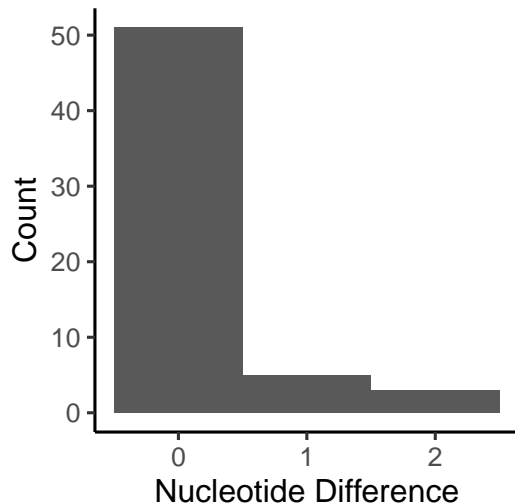
IGHV7–4–1*01

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



IGHV5–10–1*01_03

59 sequences assigned
51 (86.4%) exact matches, in which:
50 unique CDR3
5 unique J



IGHV7–81*01

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

