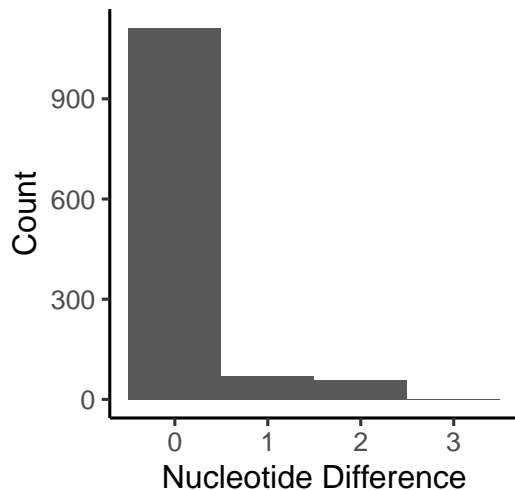


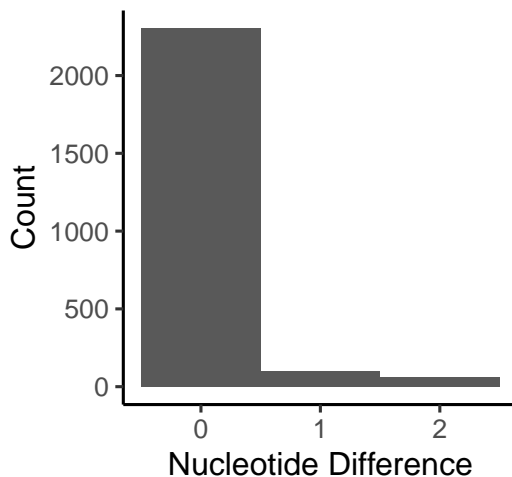
IGHV1-2*02

1240 sequences assigned
1113 (89.8%) exact matches, in which:
1106 unique CDR3
6 unique J



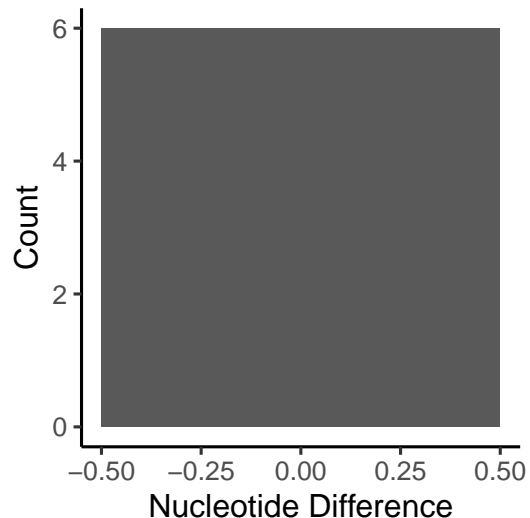
IGHV1-8*01

2459 sequences assigned
2303 (93.7%) exact matches, in which:
2284 unique CDR3
6 unique J



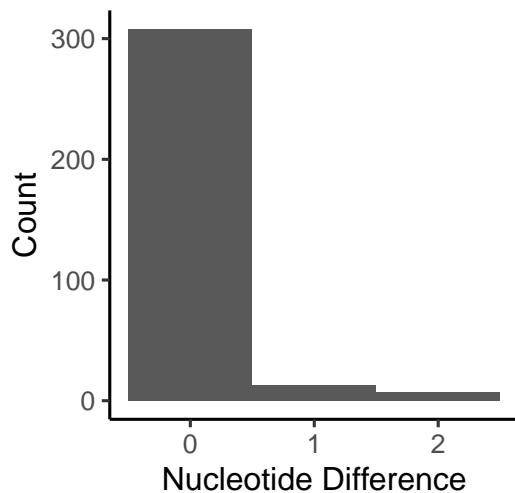
IGHV1-45*02

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



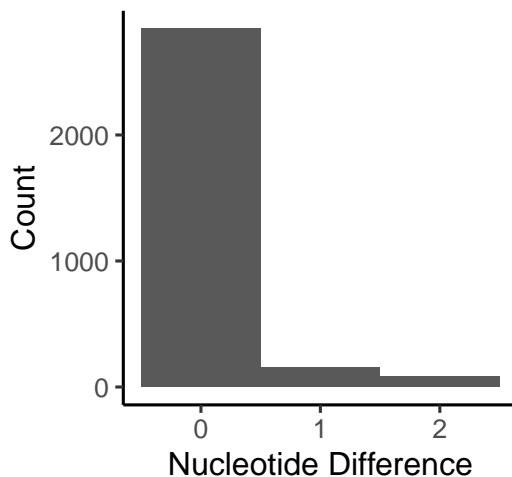
IGHV1-2*04

328 sequences assigned
308 (93.9%) exact matches, in which:
308 unique CDR3
6 unique J



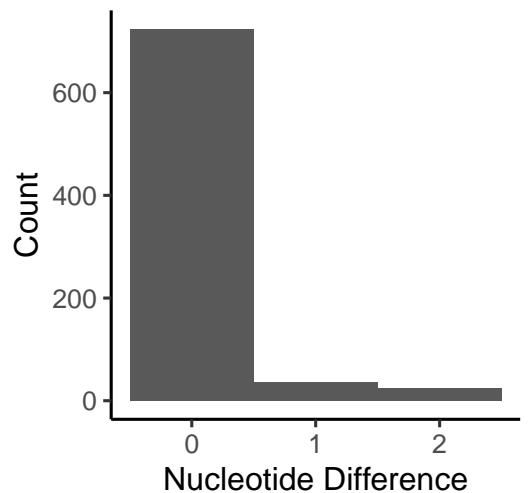
IGHV1-18*01

3082 sequences assigned
2843 (92.2%) exact matches, in which:
2808 unique CDR3
6 unique J



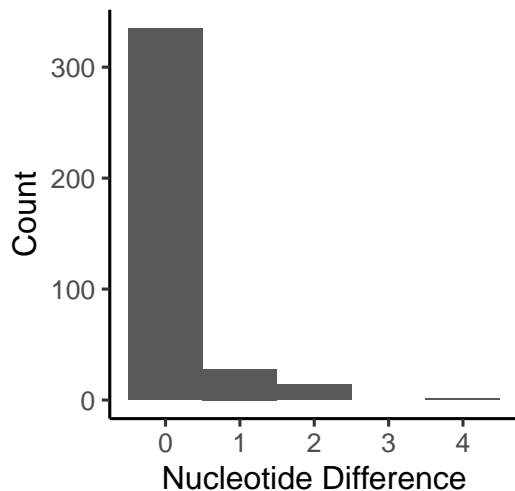
IGHV1-46*01

785 sequences assigned
724 (92.2%) exact matches, in which:
720 unique CDR3
6 unique J



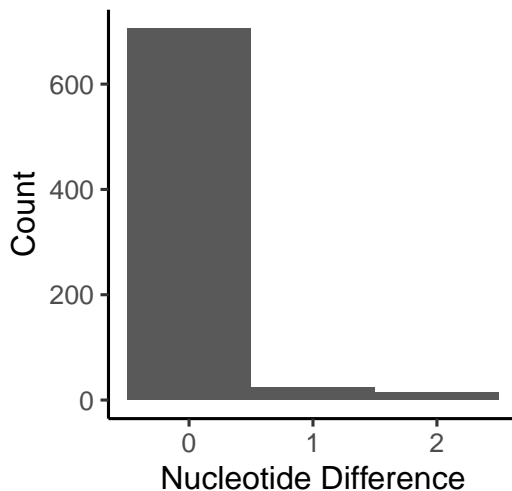
IGHV1-3*01_05

378 sequences assigned
335 (88.6%) exact matches, in which:
334 unique CDR3
6 unique J



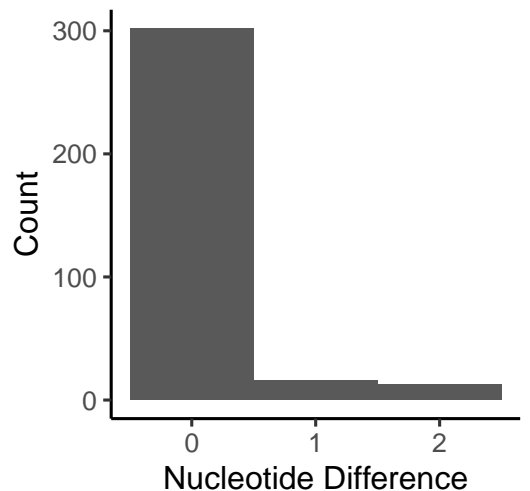
IGHV1-24*01

743 sequences assigned
706 (95%) exact matches, in which:
701 unique CDR3
6 unique J



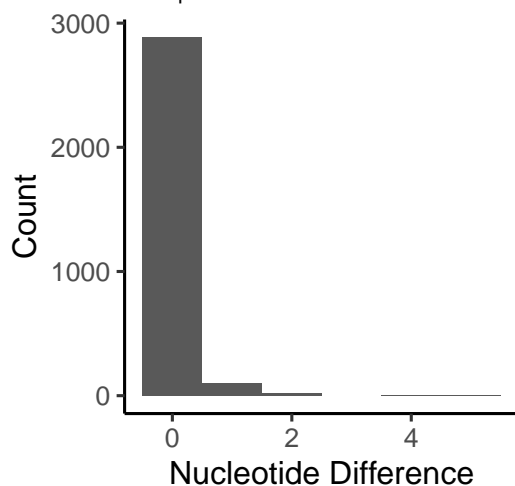
IGHV1-58*01_03

331 sequences assigned
302 (91.2%) exact matches, in which:
302 unique CDR3
6 unique J



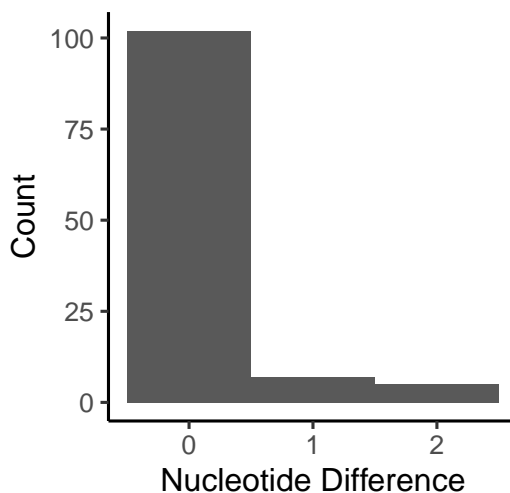
IGHV1-69*01_12_13

3010 sequences assigned
2885 (95.8%) exact matches, in which:
2872 unique CDR3
6 unique J



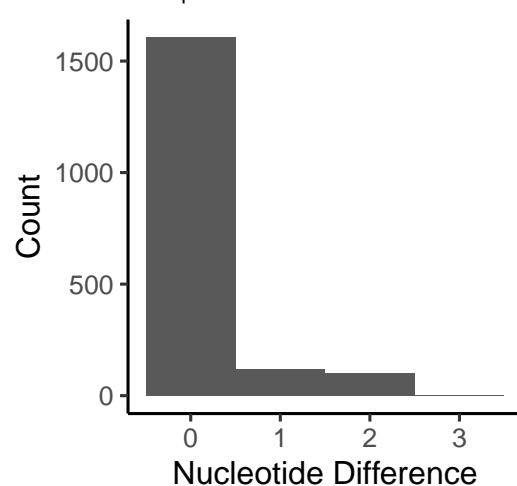
IGHV2-26*01

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



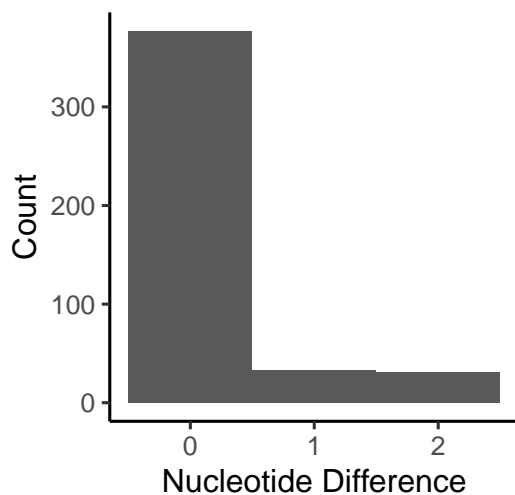
IGHV3-9*01

1828 sequences assigned
1606 (87.9%) exact matches, in which:
1558 unique CDR3
6 unique J



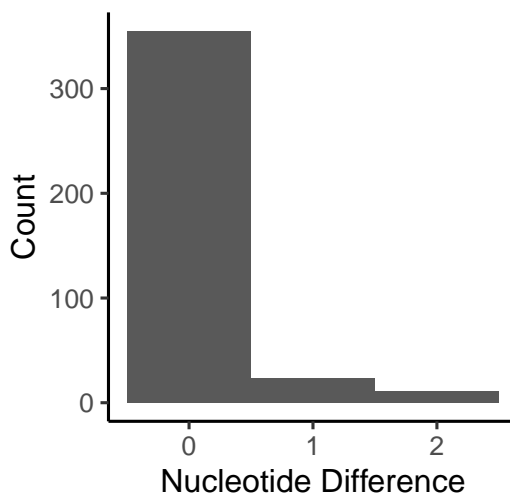
IGHV2-5*01

441 sequences assigned
377 (85.5%) exact matches, in which:
375 unique CDR3
6 unique J



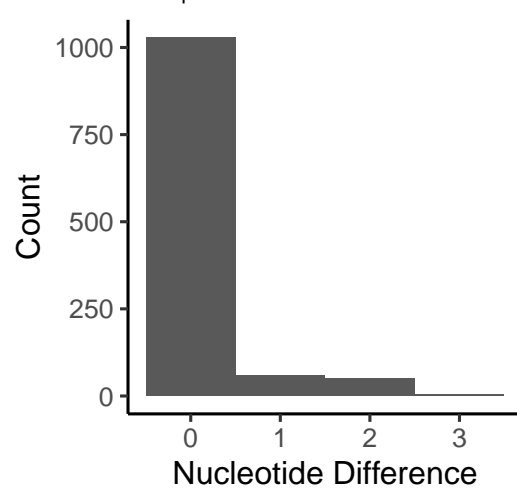
IGHV2-70*01

389 sequences assigned
355 (91.3%) exact matches, in which:
350 unique CDR3
6 unique J



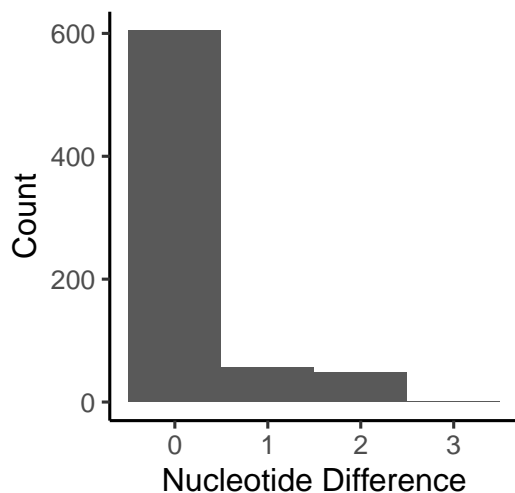
IGHV3-11*01

1140 sequences assigned
1028 (90.2%) exact matches, in which:
999 unique CDR3
6 unique J



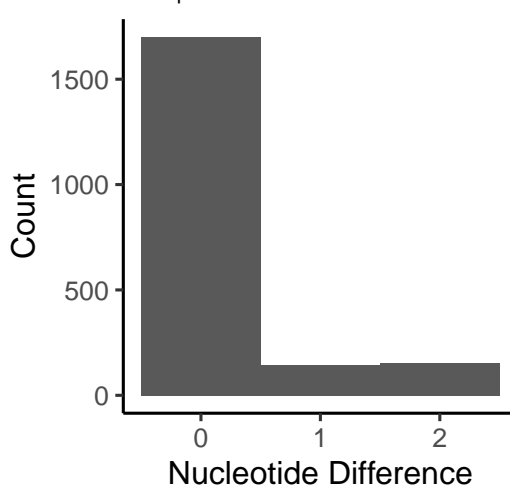
IGHV2-5*02

710 sequences assigned
605 (85.2%) exact matches, in which:
602 unique CDR3
6 unique J



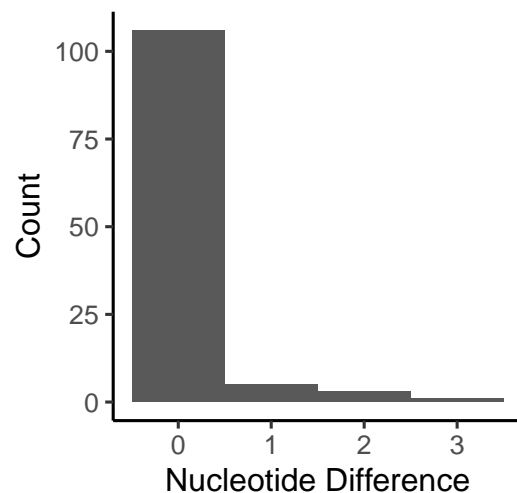
IGHV3-7*01

1996 sequences assigned
1700 (85.2%) exact matches, in which:
1615 unique CDR3
6 unique J



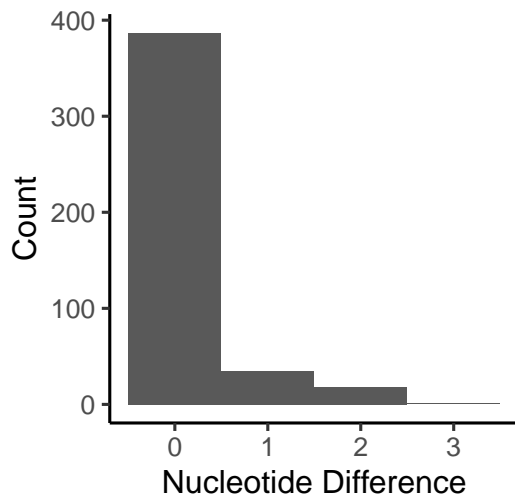
IGHV3-13*01

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



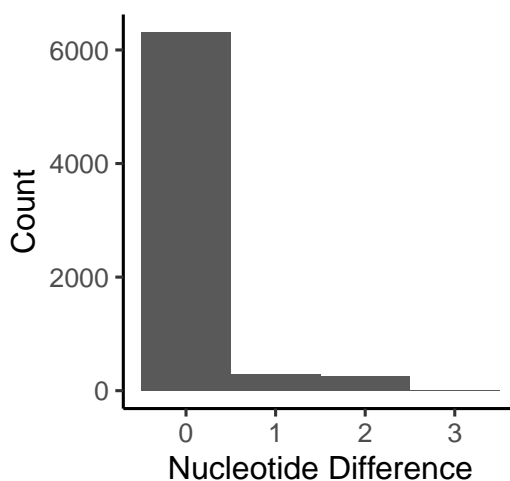
IGHV3-15*01_02

441 sequences assigned
387 (87.8%) exact matches, in which:
381 unique CDR3
6 unique J



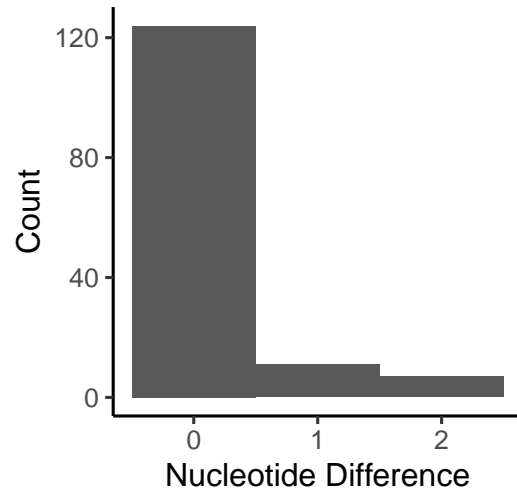
IGHV3-23*01_04

6856 sequences assigned
6309 (92%) exact matches, in which:
6076 unique CDR3
6 unique J



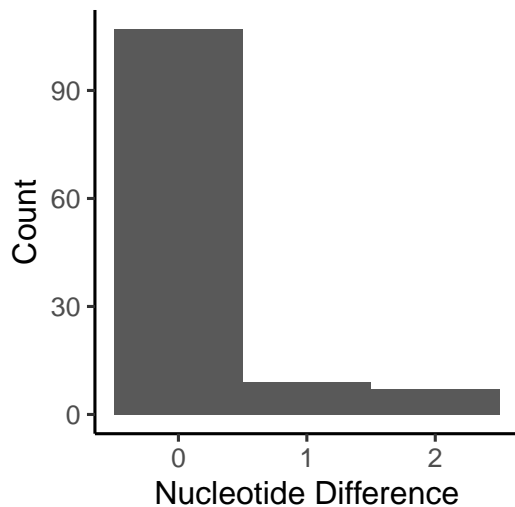
IGHV3-43*01

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



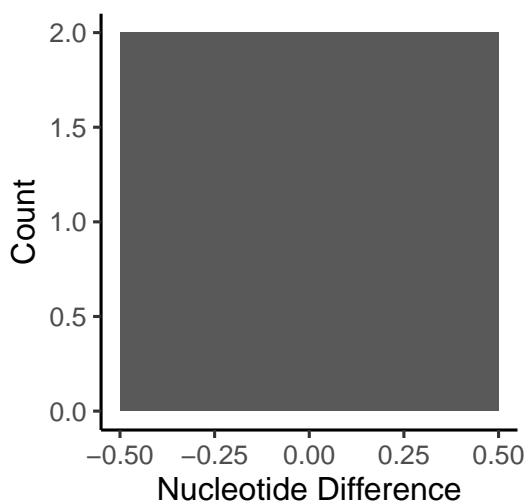
IGHV3-20*01_02

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



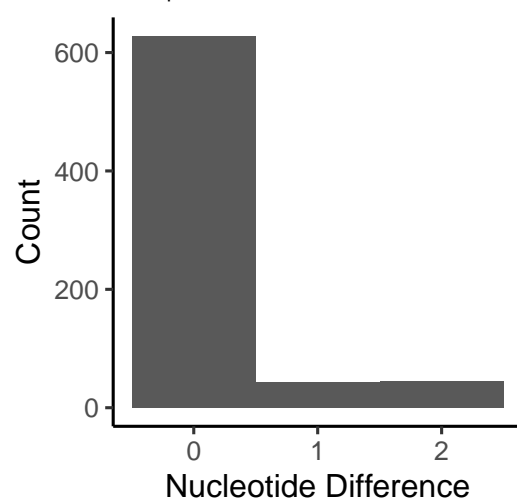
IGHV3-30-3*03

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



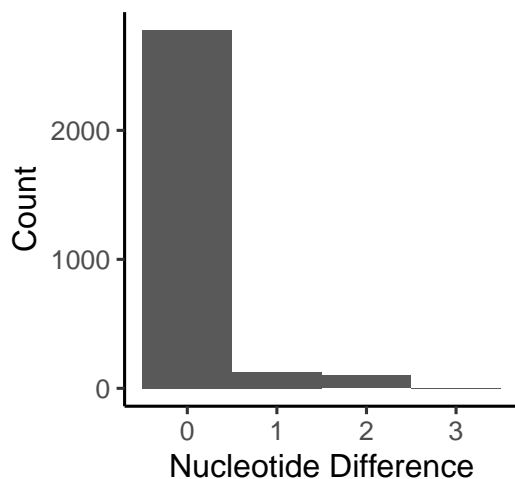
IGHV3-48*02

715 sequences assigned
628 (87.8%) exact matches, in which:
605 unique CDR3
6 unique J



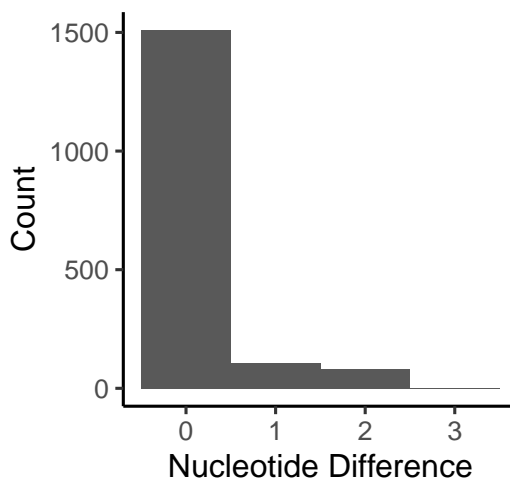
IGHV3-21*01_02

3005 sequences assigned
2778 (92.4%) exact matches, in which:
2656 unique CDR3
6 unique J



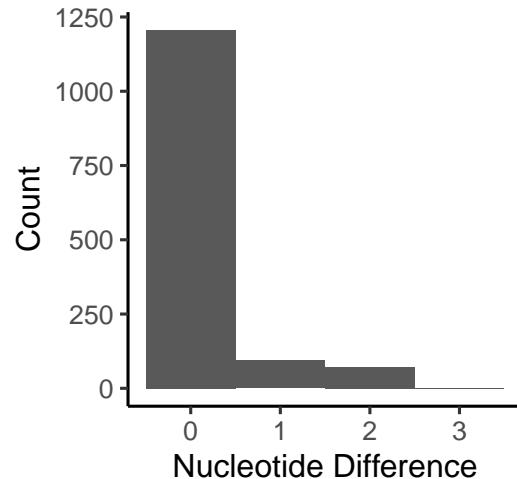
IGHV3-33*01

1701 sequences assigned
1510 (88.8%) exact matches, in which:
1476 unique CDR3
6 unique J



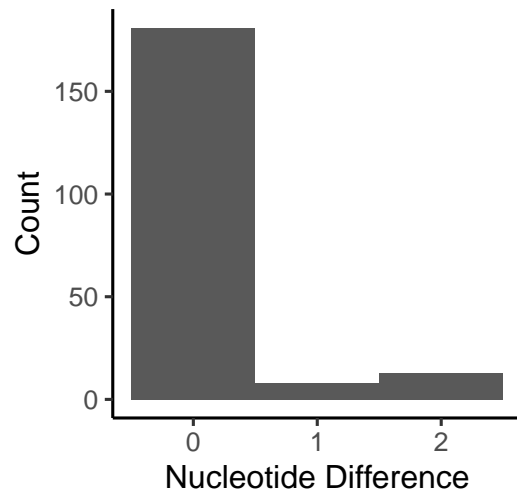
IGHV3-48*03

1372 sequences assigned
1206 (87.9%) exact matches, in which:
1167 unique CDR3
6 unique J



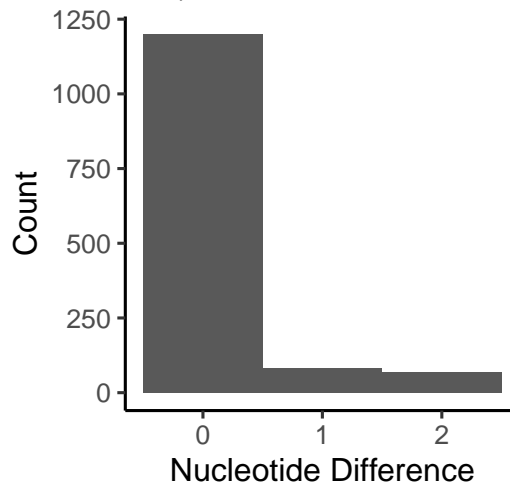
IGHV3-49*04

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



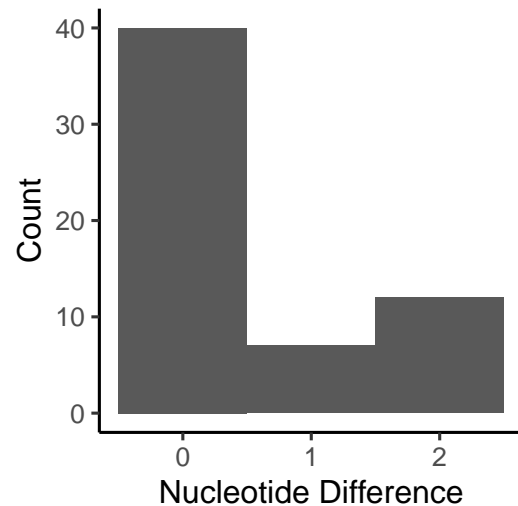
IGHV3-53*01_02

1348 sequences assigned
1199 (88.9%) exact matches, in which:
1147 unique CDR3
6 unique J



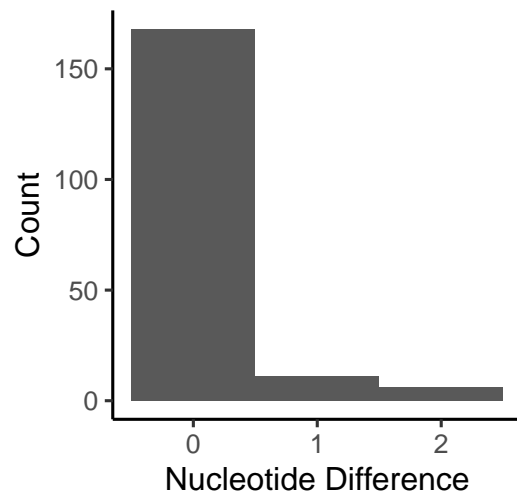
IGHV3-72*01

59 sequences assigned
40 (67.8%) exact matches, in which:
40 unique CDR3
5 unique J



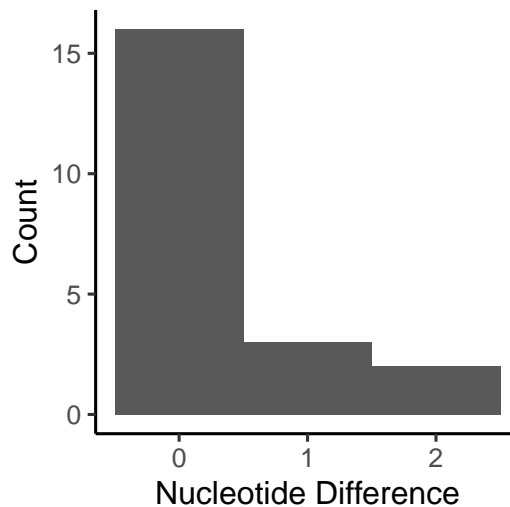
IGHV3-49*03_05

185 sequences assigned
168 (90.8%) exact matches, in which:
164 unique CDR3
6 unique J



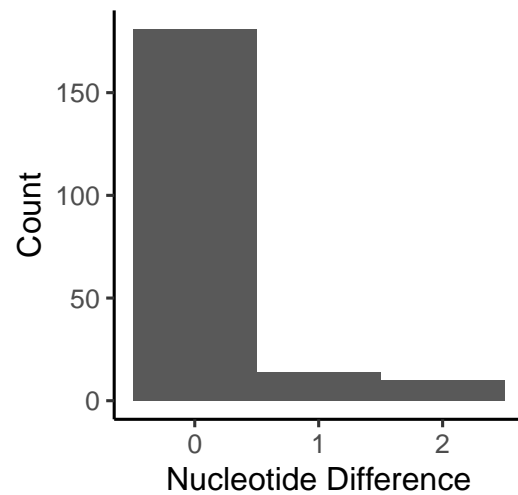
IGHV3-64*02_07

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



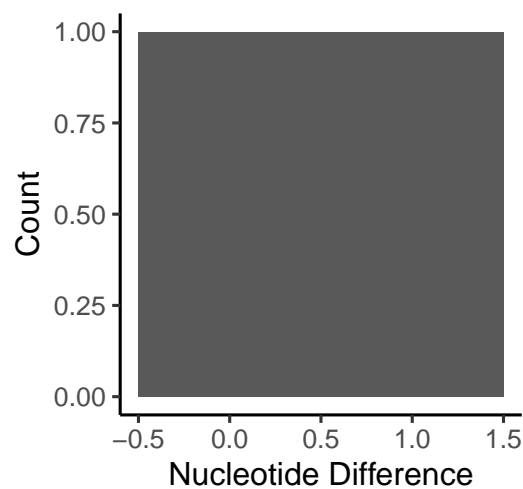
IGHV3-73*01_02

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



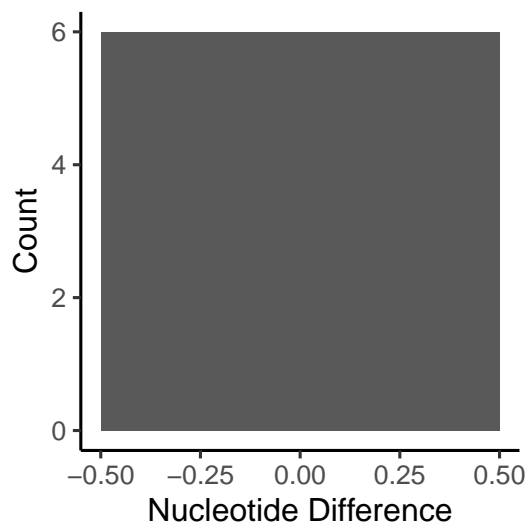
IGHV3-52*01_03

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



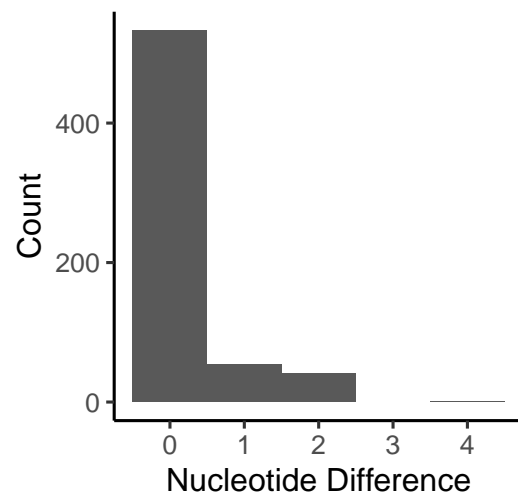
IGHV3-66*03

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



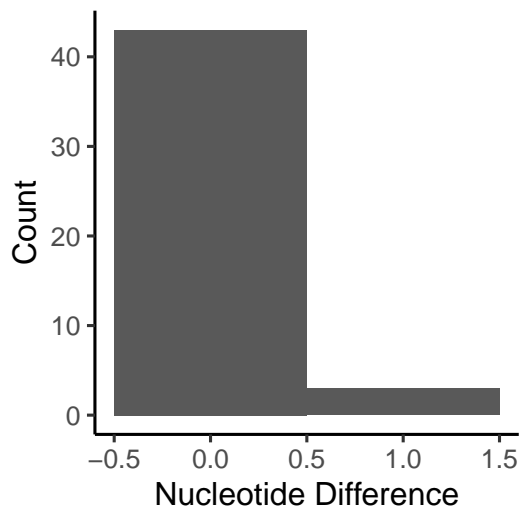
IGHV3-74*01_02

629 sequences assigned
533 (84.7%) exact matches, in which:
516 unique CDR3
6 unique J



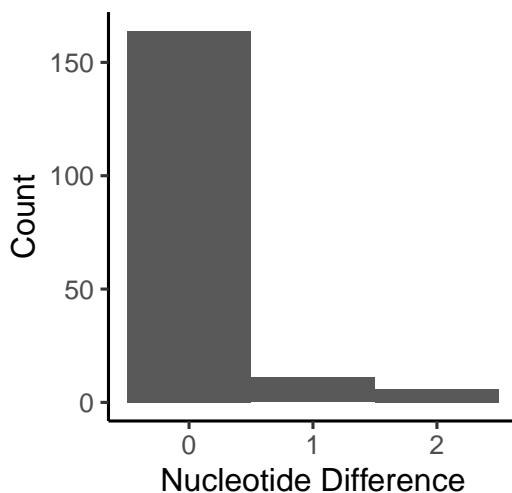
IGHV3-43D*04

46 sequences assigned
43 (93.5%) exact matches, in which:
42 unique CDR3
4 unique J



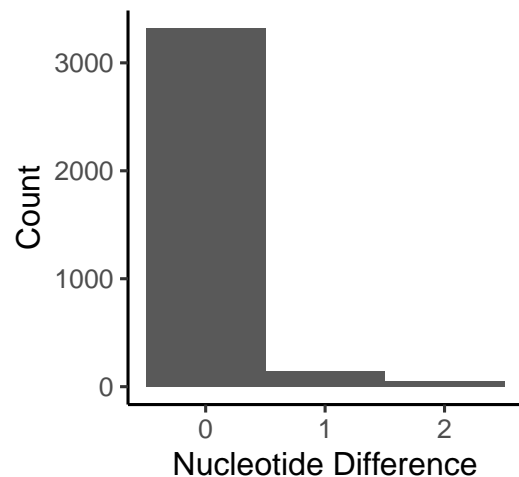
IGHV4-4*02_03

181 sequences assigned
164 (90.6%) exact matches, in which:
161 unique CDR3
6 unique J



IGHV4-34*01_02

3513 sequences assigned
3319 (94.5%) exact matches, in which:
3220 unique CDR3
6 unique J



IGHV3-64D*09

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



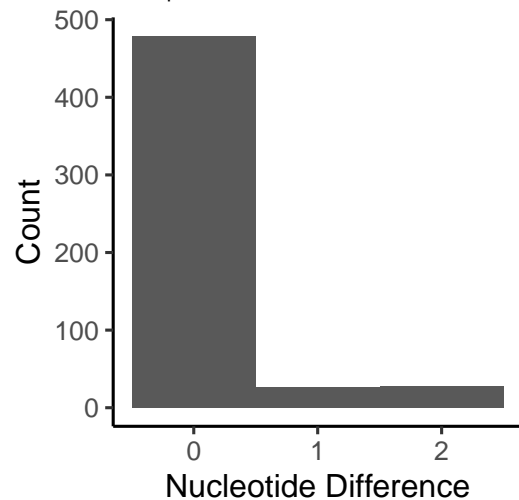
IGHV4-28*01_07

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



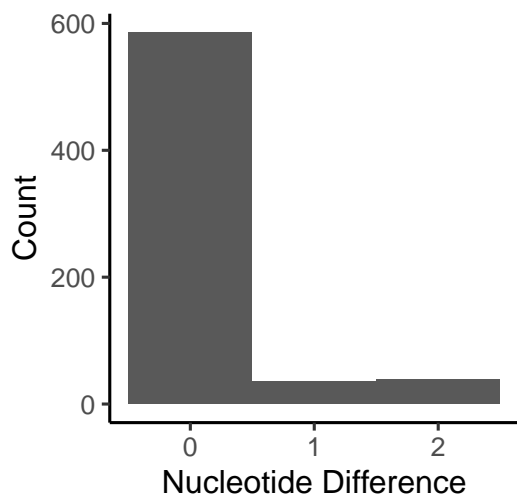
IGHV4-38-2*01

533 sequences assigned
479 (89.9%) exact matches, in which:
470 unique CDR3
6 unique J



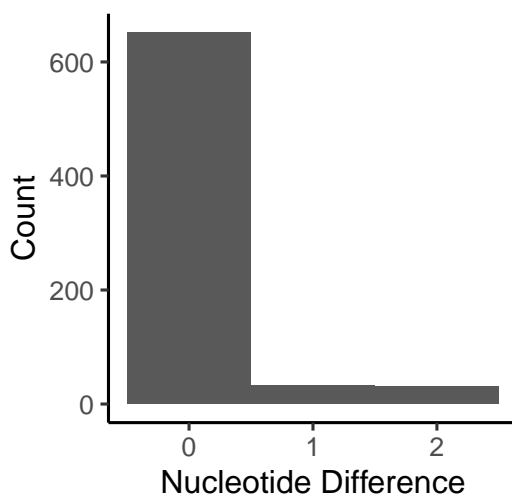
IGHV4-4*07

660 sequences assigned
586 (88.8%) exact matches, in which:
577 unique CDR3
6 unique J



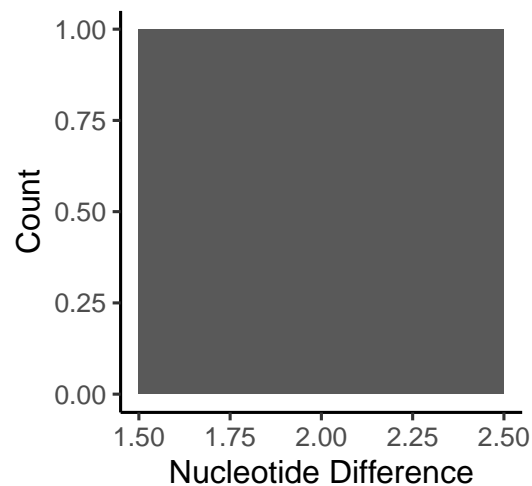
IGHV4-31*02

715 sequences assigned
652 (91.2%) exact matches, in which:
641 unique CDR3
6 unique J



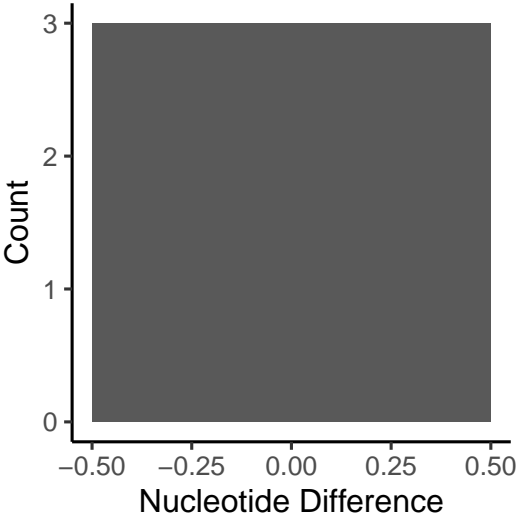
IGHV4-59*02

1 sequences assigned
No exact matches.



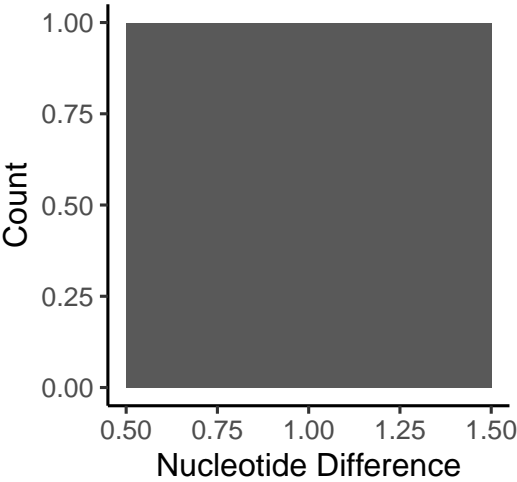
IGHV4-59*08

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



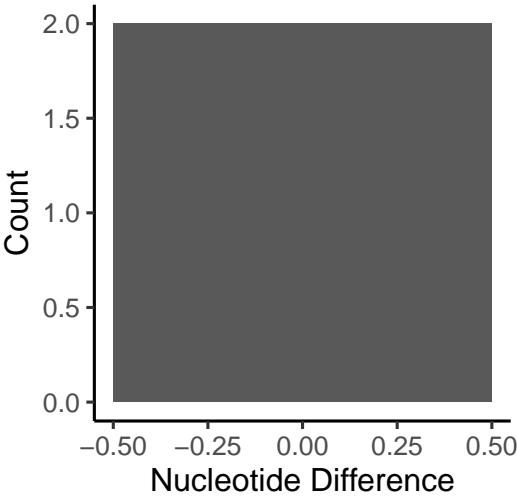
IGHV5-51*01_03

1 sequences assigned
No exact matches.



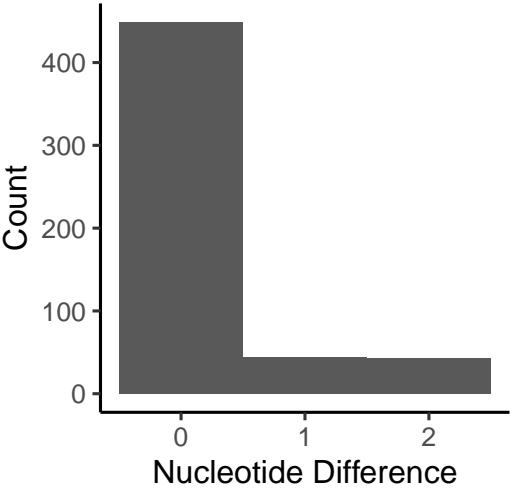
IGHV4-59*11

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



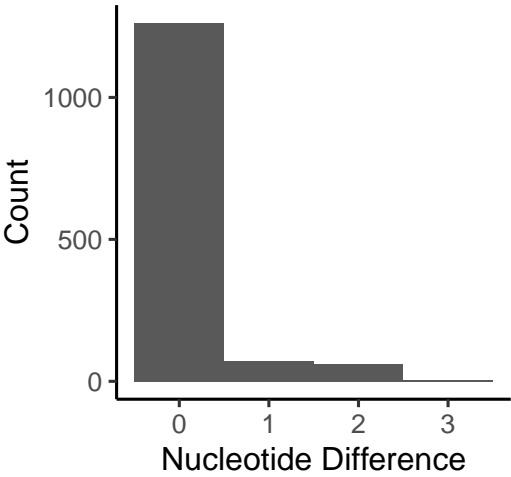
IGHV6-1*01_02

536 sequences assigned
449 (83.8%) exact matches, in which:
443 unique CDR3
6 unique J



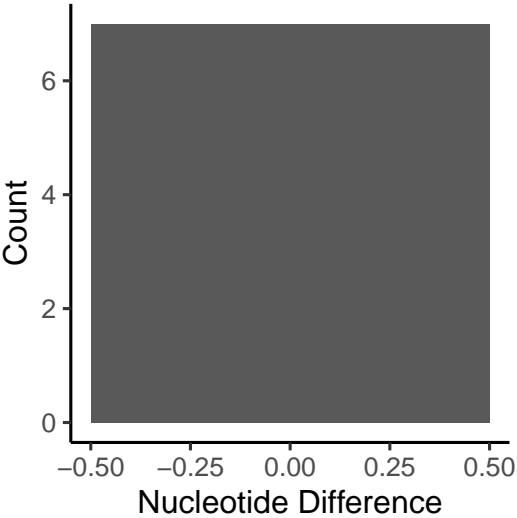
IGHV4-61*01

1399 sequences assigned
1262 (90.2%) exact matches, in which:
1214 unique CDR3
6 unique J



IGHV7-4-1*01

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





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