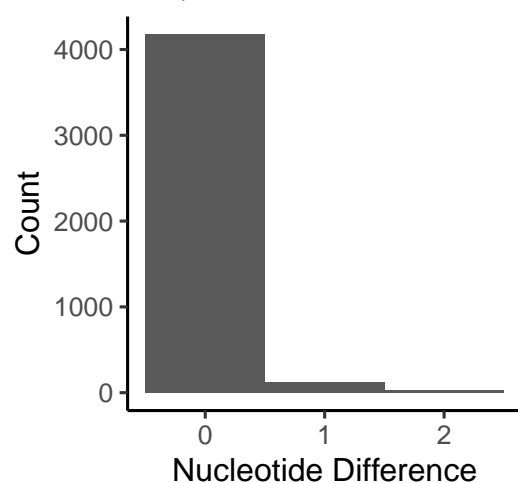


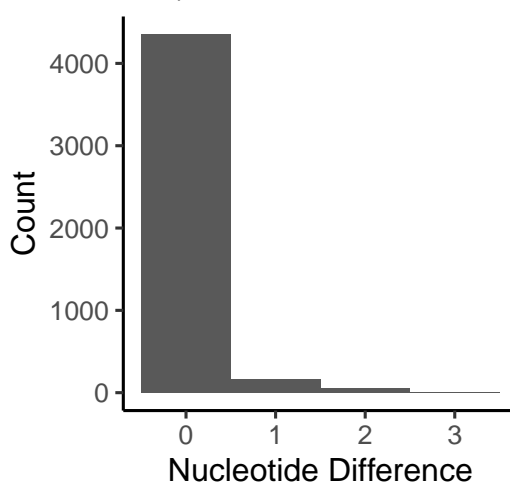
IGHV1-2*02

4331 sequences assigned
4176 (96.4%) exact matches, in which:
4112 unique CDR3
6 unique J



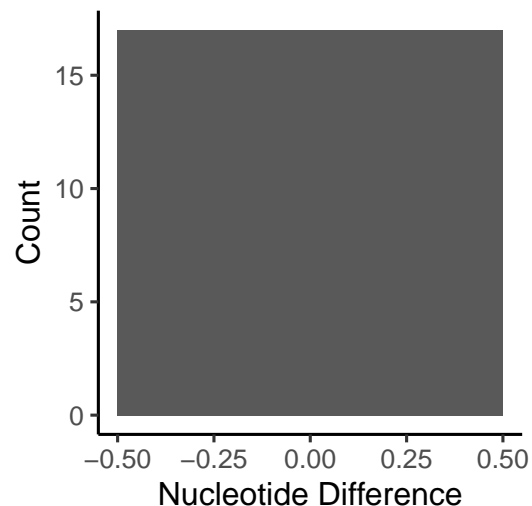
IGHV1-8*01

4575 sequences assigned
4352 (95.1%) exact matches, in which:
4297 unique CDR3
6 unique J



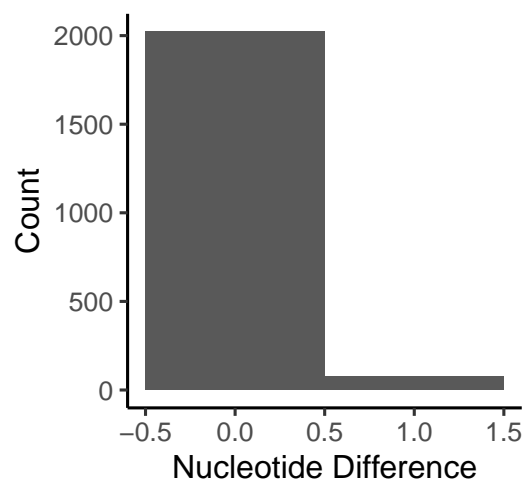
IGHV1-45*02

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



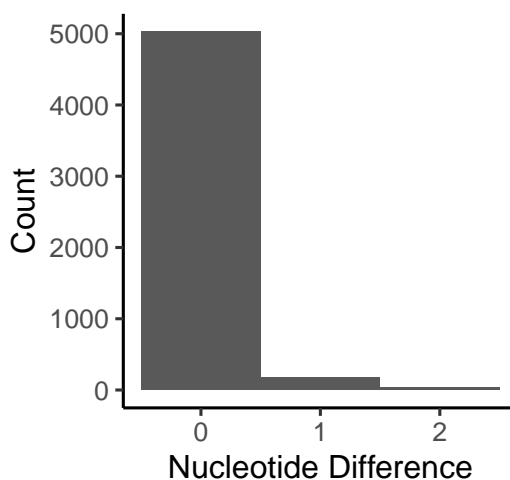
IGHV1-2*06

2097 sequences assigned
2022 (96.4%) exact matches, in which:
2003 unique CDR3
6 unique J



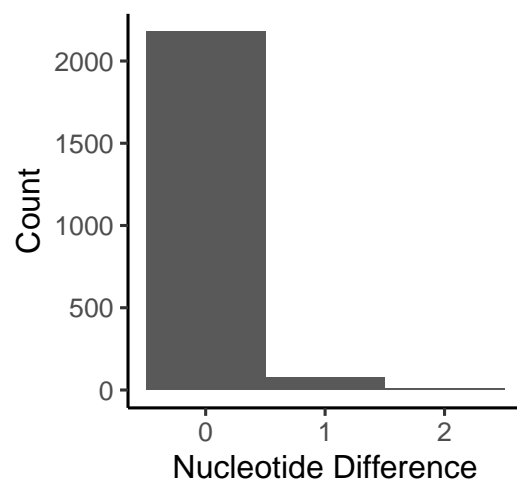
IGHV1-18*01

5236 sequences assigned
5028 (96%) exact matches, in which:
4962 unique CDR3
6 unique J



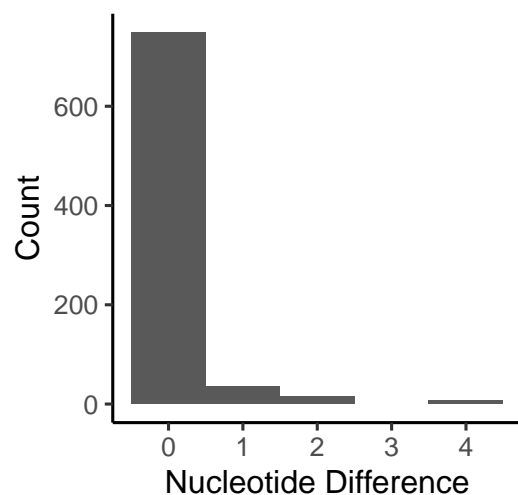
IGHV1-46*01

2265 sequences assigned
2178 (96.2%) exact matches, in which:
2156 unique CDR3
6 unique J



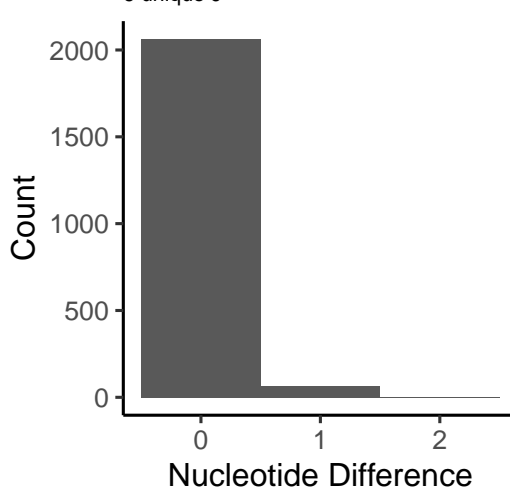
IGHV1-3*01_05

808 sequences assigned
749 (92.7%) exact matches, in which:
743 unique CDR3
6 unique J



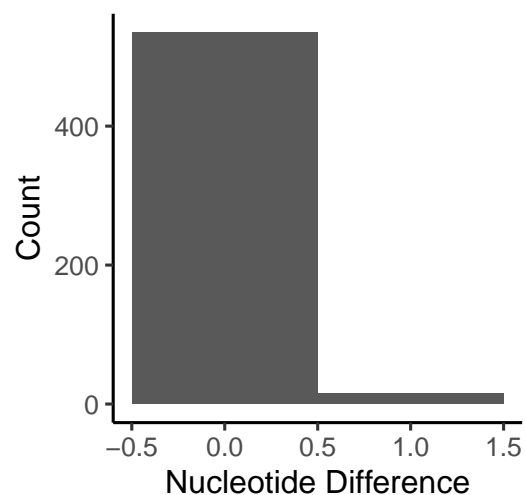
IGHV1-24*01

2131 sequences assigned
2063 (96.8%) exact matches, in which:
2029 unique CDR3
6 unique J



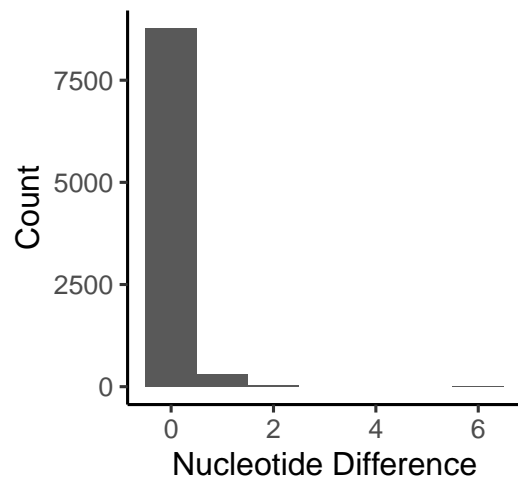
IGHV1-58*01_03

550 sequences assigned
535 (97.3%) exact matches, in which:
530 unique CDR3
6 unique J



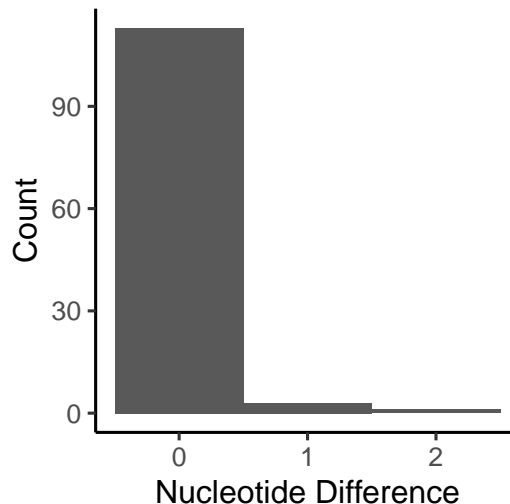
IGHV1-69*01_12_13

9108 sequences assigned
8768 (96.3%) exact matches, in which:
8686 unique CDR3
6 unique J



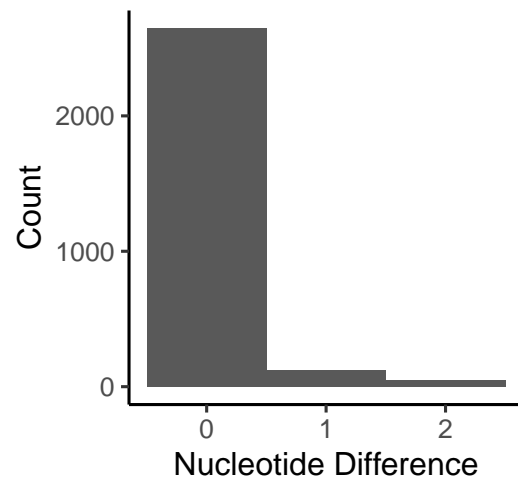
IGHV2-26*01

117 sequences assigned
113 (96.6%) exact matches, in which:
113 unique CDR3
5 unique J



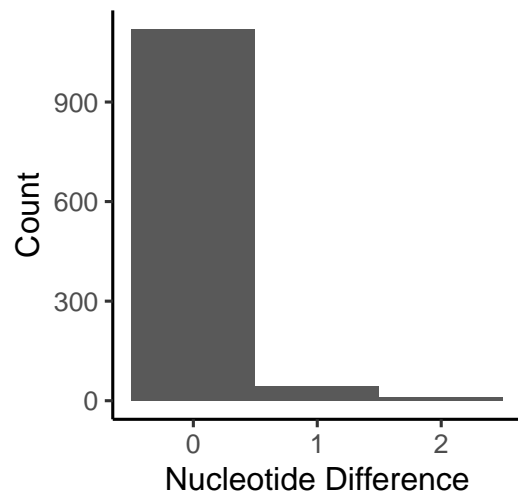
IGHV3-7*01

2819 sequences assigned
2646 (93.9%) exact matches, in which:
2506 unique CDR3
6 unique J



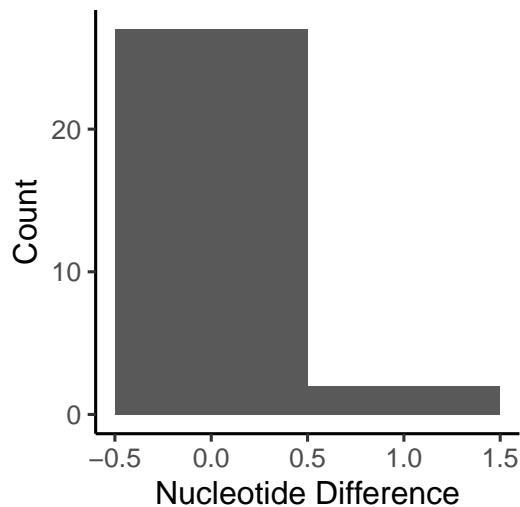
IGHV2-5*01

1177 sequences assigned
1120 (95.2%) exact matches, in which:
1105 unique CDR3
6 unique J



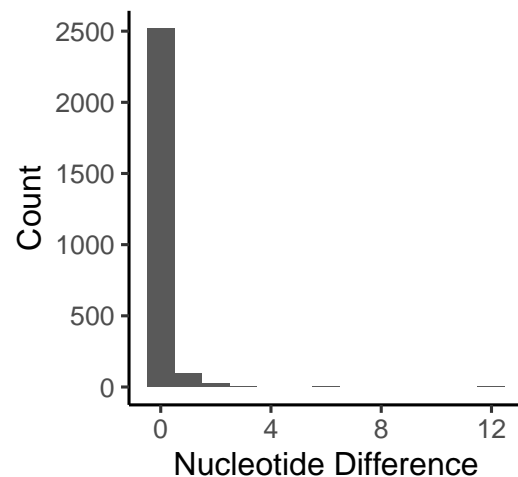
IGHV2-26*04

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



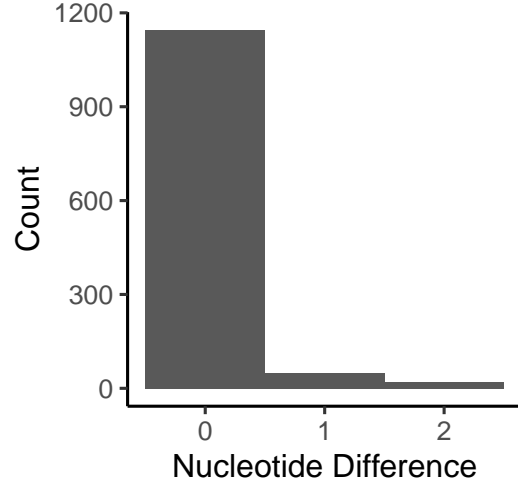
IGHV3-9*01

2644 sequences assigned
2517 (95.2%) exact matches, in which:
2419 unique CDR3
6 unique J



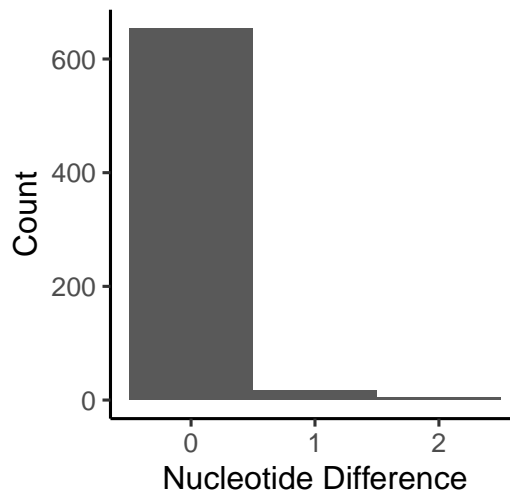
IGHV2-5*02

1215 sequences assigned
1145 (94.2%) exact matches, in which:
1127 unique CDR3
6 unique J



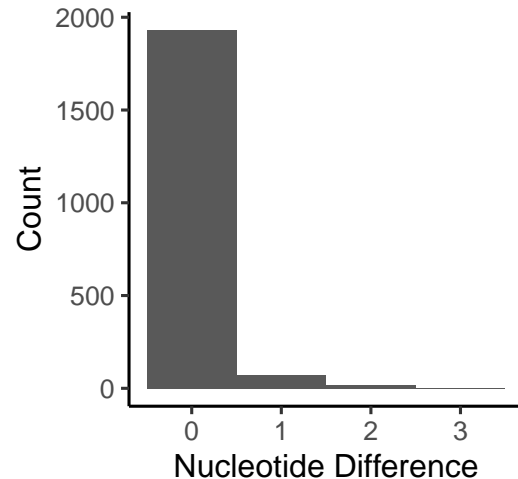
IGHV2-70*01

675 sequences assigned
654 (96.9%) exact matches, in which:
646 unique CDR3
6 unique J



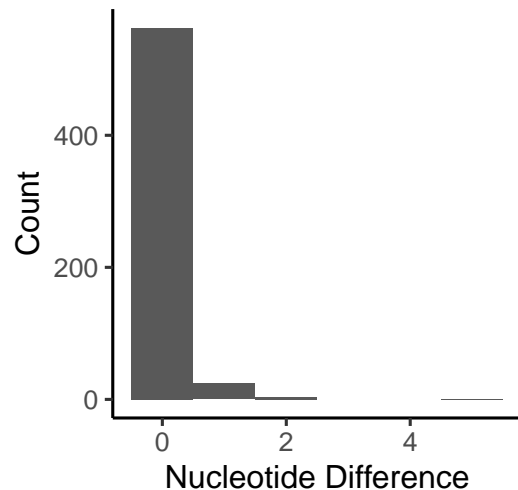
IGHV3-11*01

2023 sequences assigned
1931 (95.5%) exact matches, in which:
1834 unique CDR3
6 unique J



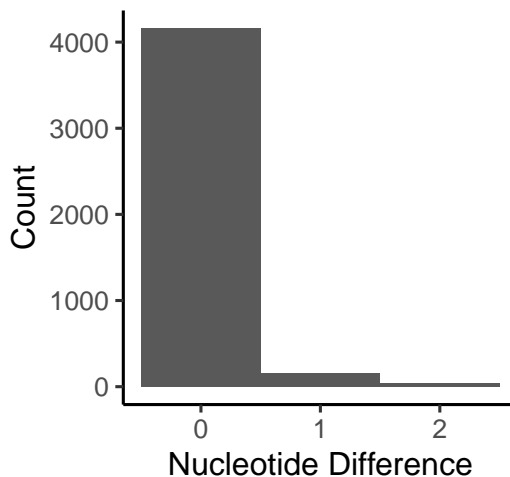
IGHV3-13*01

592 sequences assigned
563 (95.1%) exact matches, in which:
531 unique CDR3
5 unique J



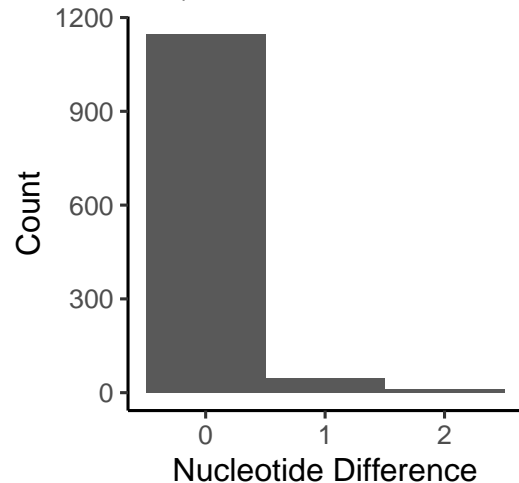
IGHV3-21*01_02

4351 sequences assigned
4159 (95.6%) exact matches, in which:
3890 unique CDR3
6 unique J



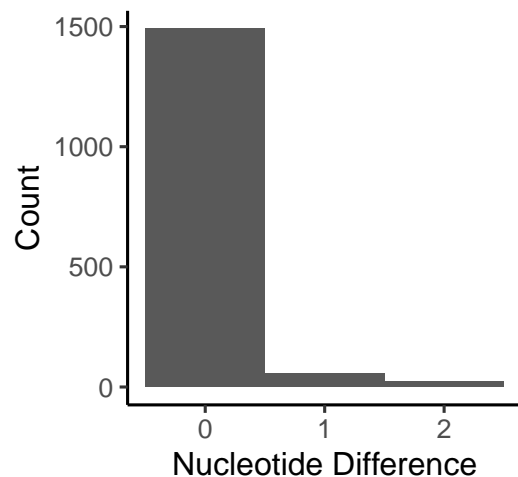
IGHV3-33*01

1202 sequences assigned
1146 (95.3%) exact matches, in which:
1113 unique CDR3
6 unique J



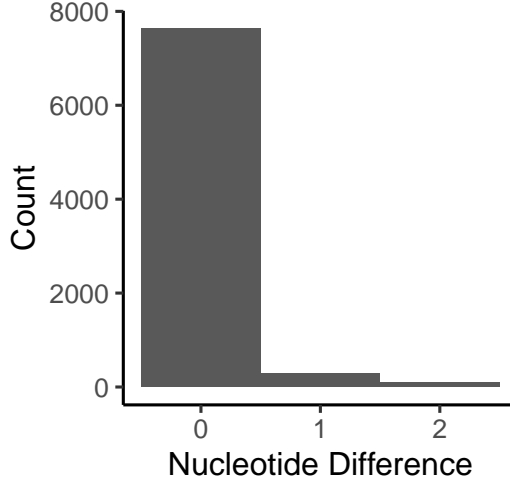
IGHV3-15*01_02

1569 sequences assigned
1491 (95%) exact matches, in which:
1445 unique CDR3
6 unique J



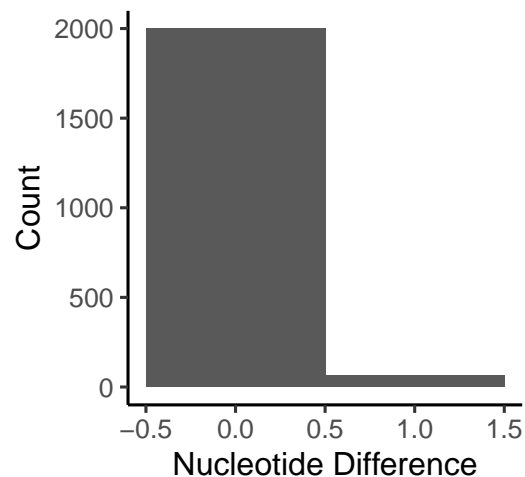
IGHV3-23*01_04

8014 sequences assigned
7630 (95.2%) exact matches, in which:
6985 unique CDR3
6 unique J



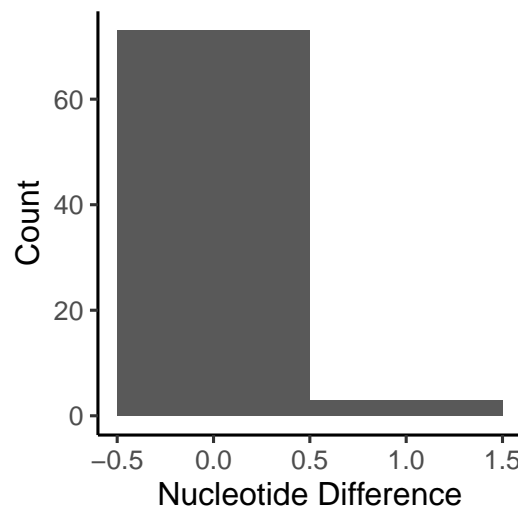
IGHV3-33*08

2063 sequences assigned
1999 (96.9%) exact matches, in which:
1909 unique CDR3
6 unique J



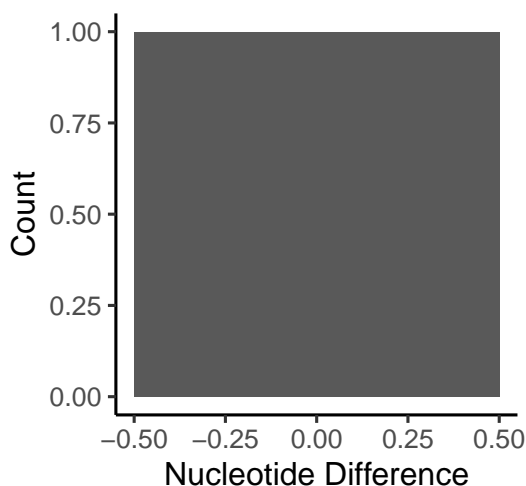
IGHV3-20*01_02

76 sequences assigned
73 (96.1%) exact matches, in which:
73 unique CDR3
6 unique J



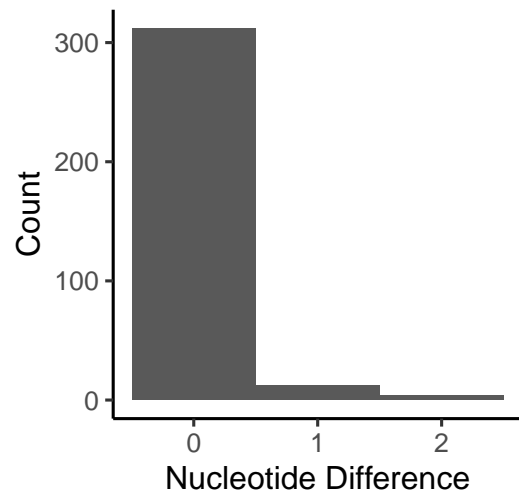
IGHV3-30-3*01

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



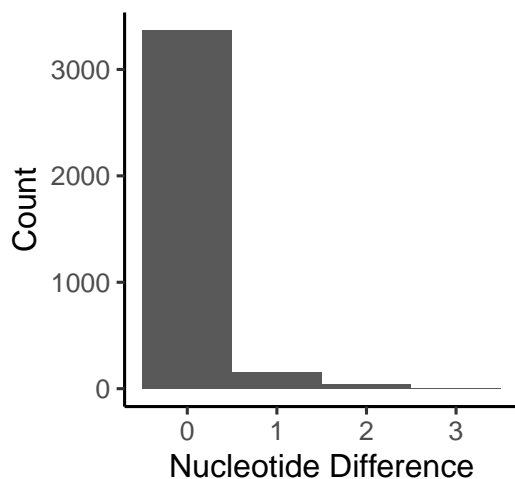
IGHV3-43*01

328 sequences assigned
312 (95.1%) exact matches, in which:
294 unique CDR3
6 unique J



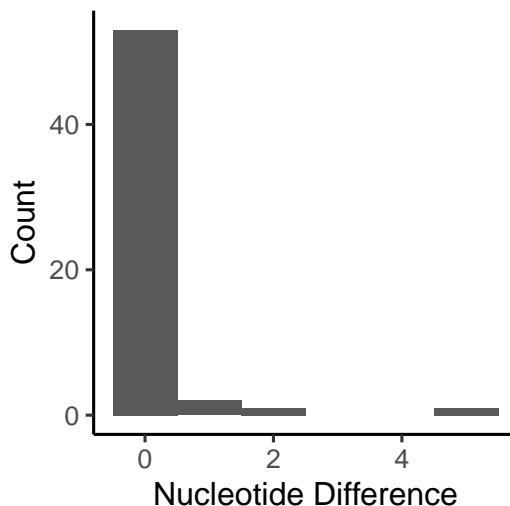
IGHV3-48*02

3559 sequences assigned
3367 (94.6%) exact matches, in which:
3151 unique CDR3
6 unique J



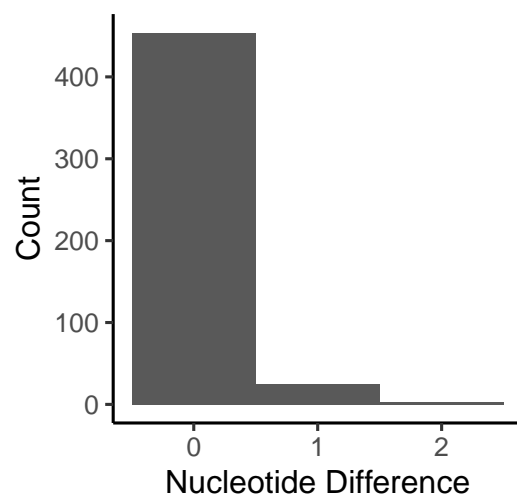
IGHV3-64*02_07

57 sequences assigned
53 (93%) exact matches, in which:
47 unique CDR3
5 unique J



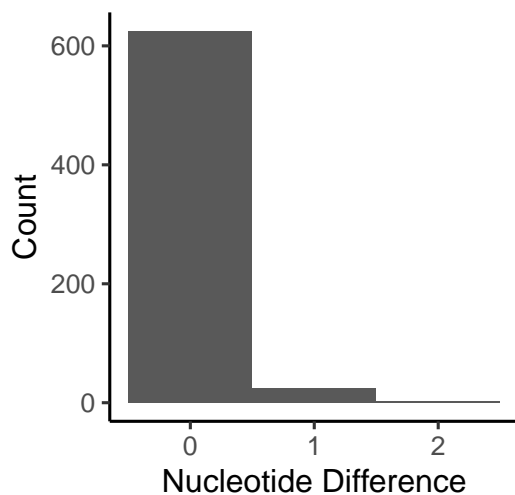
IGHV3-73*01_02

482 sequences assigned
454 (94.2%) exact matches, in which:
422 unique CDR3
6 unique J



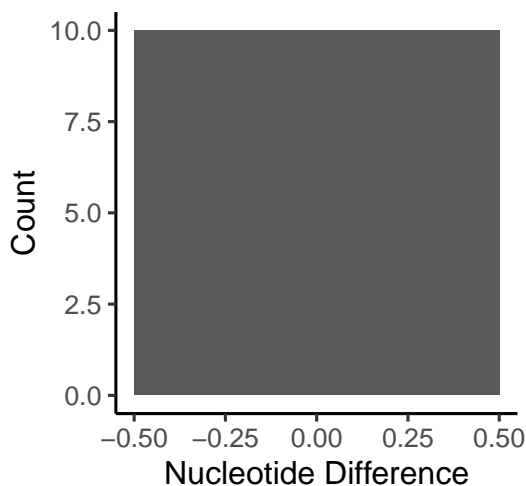
IGHV3-49*03_05

653 sequences assigned
625 (95.7%) exact matches, in which:
607 unique CDR3
6 unique J



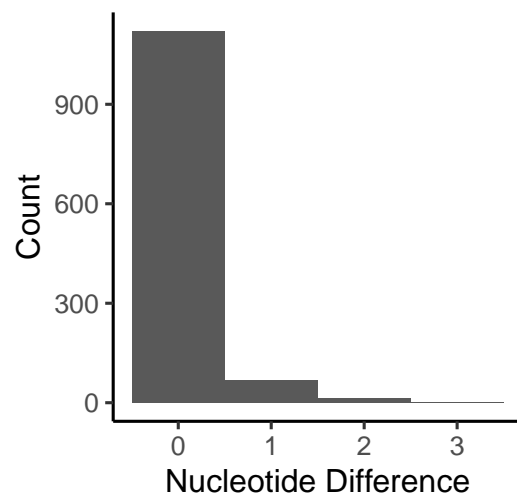
IGHV3-66*03

10 sequences assigned
10 (100%) exact matches, in which:
10 unique CDR3
4 unique J



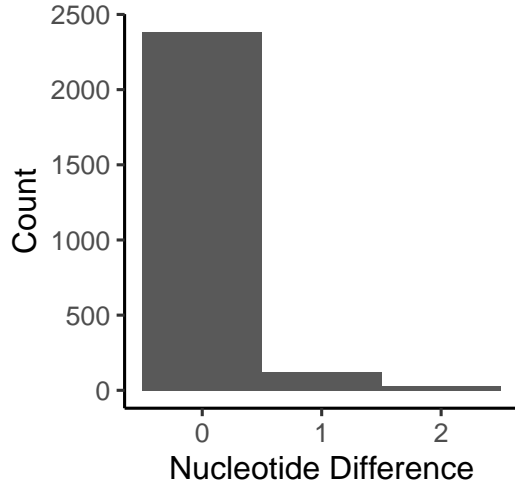
IGHV3-74*01_02

1205 sequences assigned
1121 (93%) exact matches, in which:
1043 unique CDR3
6 unique J



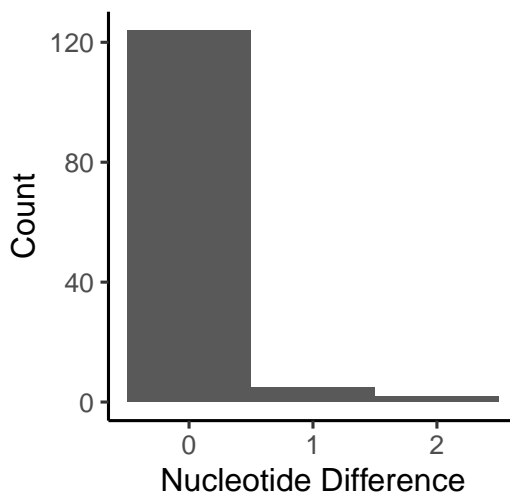
IGHV3-53*01_02

2530 sequences assigned
2383 (94.2%) exact matches, in which:
2216 unique CDR3
6 unique J



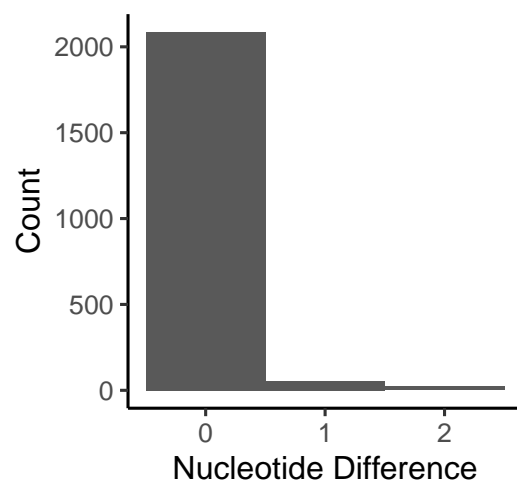
IGHV3-72*01

131 sequences assigned
124 (94.7%) exact matches, in which:
118 unique CDR3
5 unique J



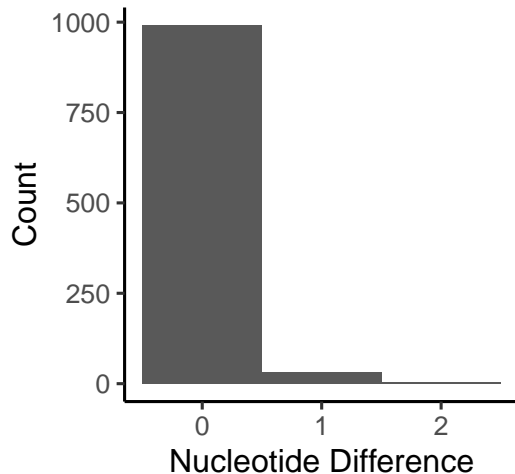
IGHV4-4*07

2163 sequences assigned
2086 (96.4%) exact matches, in which:
1932 unique CDR3
6 unique J



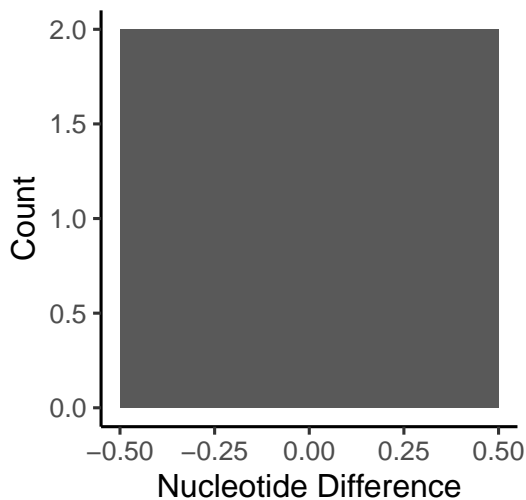
IGHV4-4*02_03

1026 sequences assigned
991 (96.6%) exact matches, in which:
956 unique CDR3
6 unique J



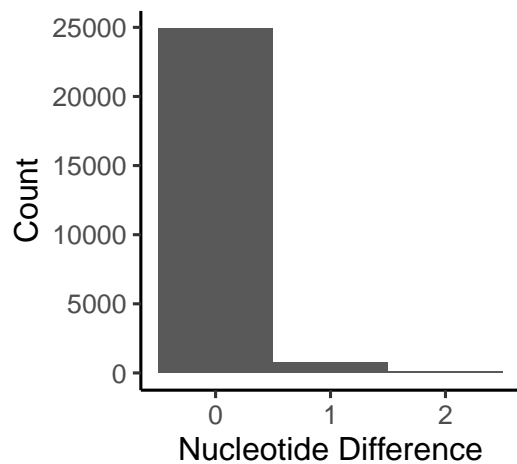
IGHV4-30-4*01

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



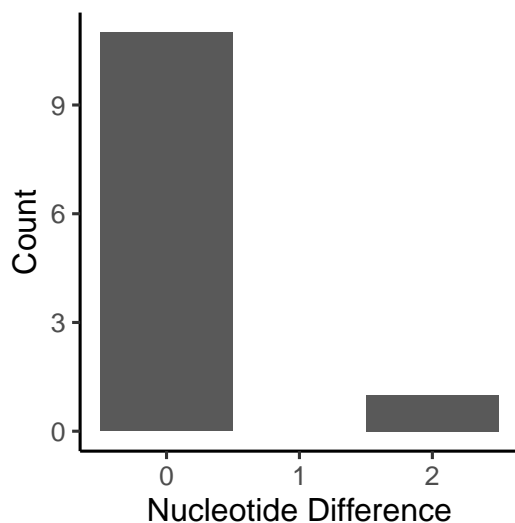
IGHV4-34*01_02

25844 sequences assigned
24942 (96.5%) exact matches, in which:
22720 unique CDR3
6 unique J



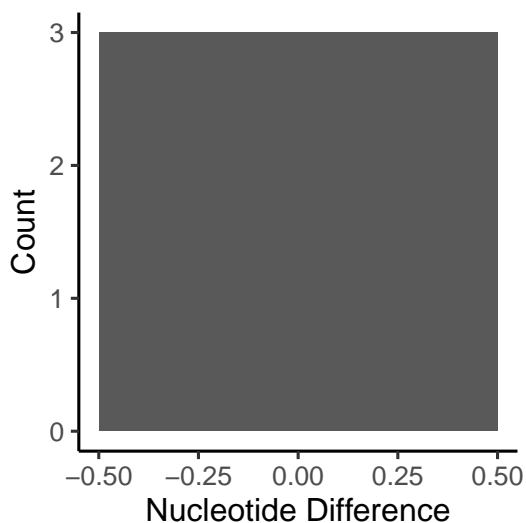
IGHV4-28*01_07

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



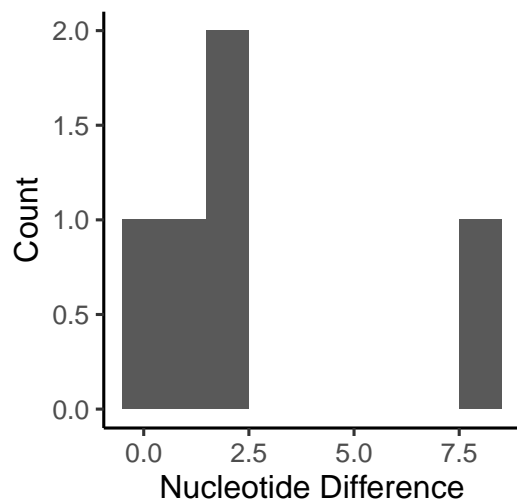
IGHV4-30-2*01

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



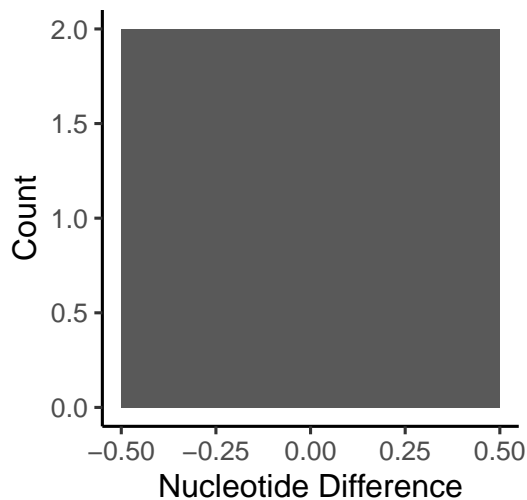
IGHV4-39*02

5 sequences assigned
1 (20%) exact matches, in which:
1 unique CDR3
1 unique J



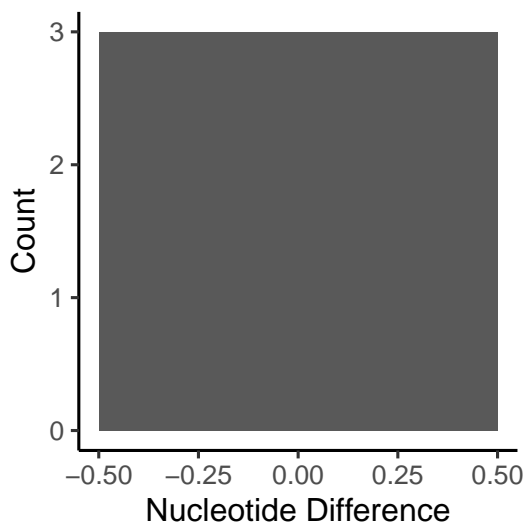
IGHV4-28*02_05

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



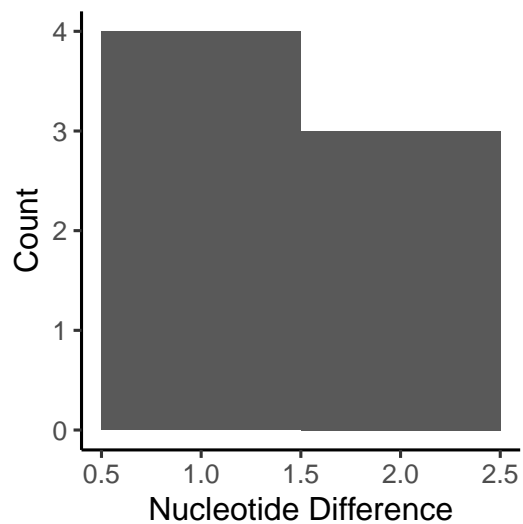
IGHV4-31*02

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



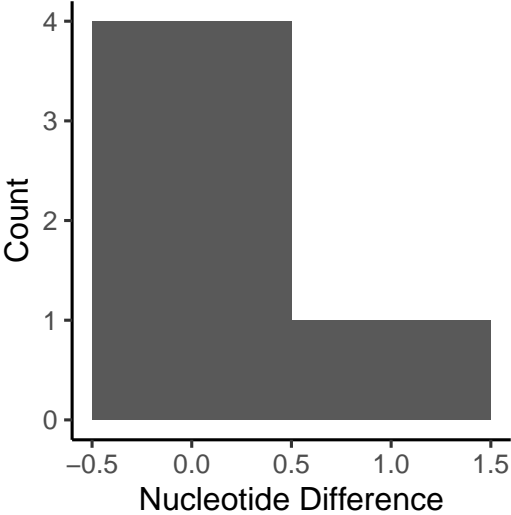
IGHV4-39*07

7 sequences assigned
No exact matches.



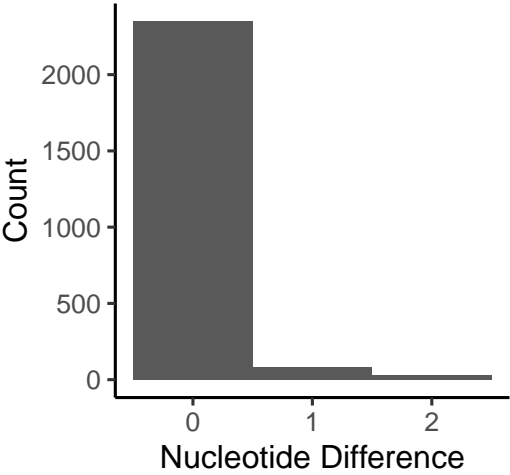
IGHV4-59*08

5 sequences assigned
4 (80%) exact matches, in which:
4 unique CDR3
3 unique J



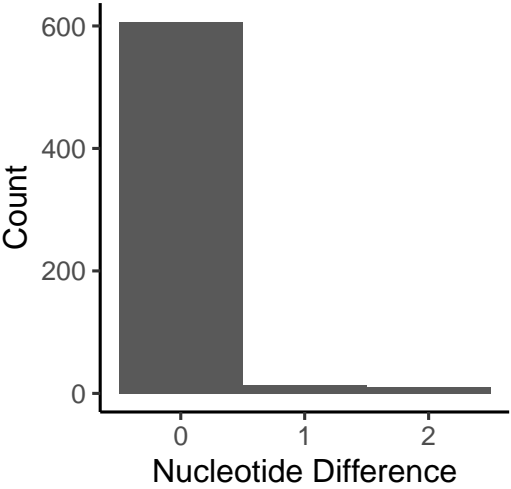
IGHV4-61*01

2461 sequences assigned
2349 (95.4%) exact matches, in which:
2224 unique CDR3
6 unique J



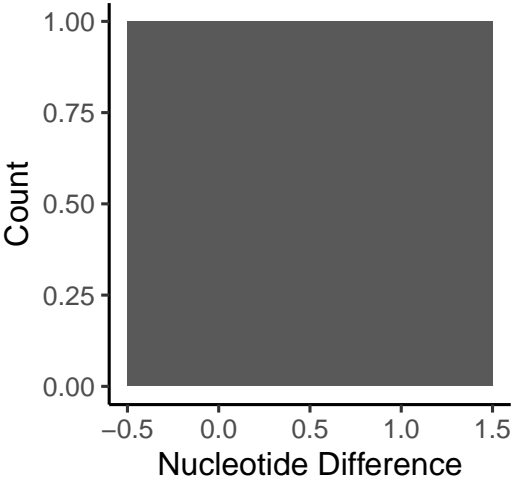
IGHV7-4-1*02

631 sequences assigned
607 (96.2%) exact matches, in which:
604 unique CDR3
6 unique J



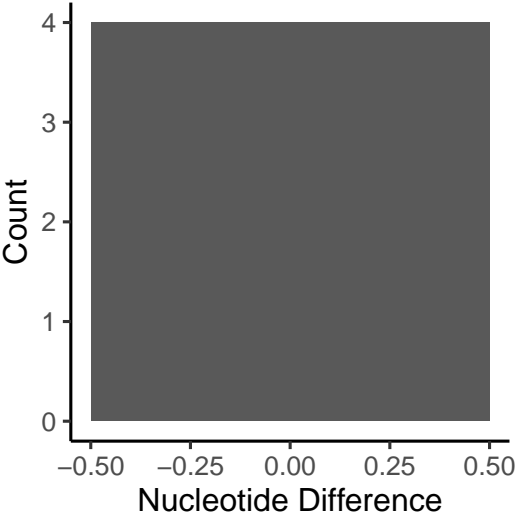
IGHV4-59*11

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



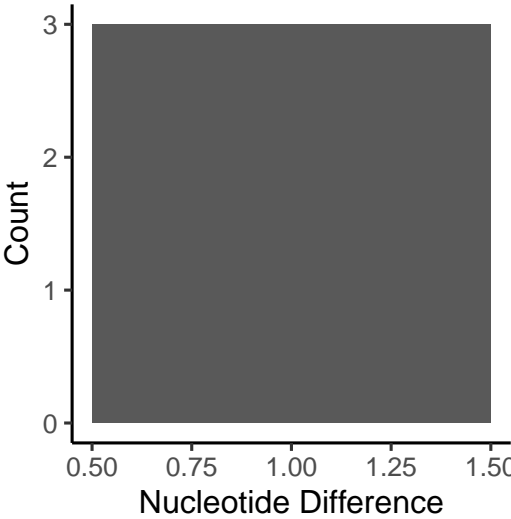
IGHV5-51*01_03

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



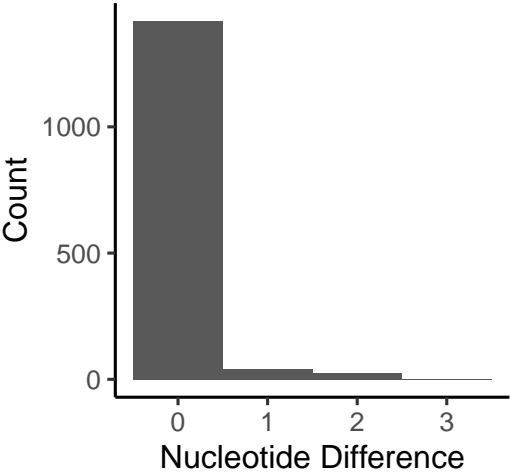
IGHV4-59*12

3 sequences assigned
No exact matches.



IGHV6-1*01_02

1485 sequences assigned
1419 (95.6%) exact matches, in which:
1386 unique CDR3
6 unique J





[illegible]