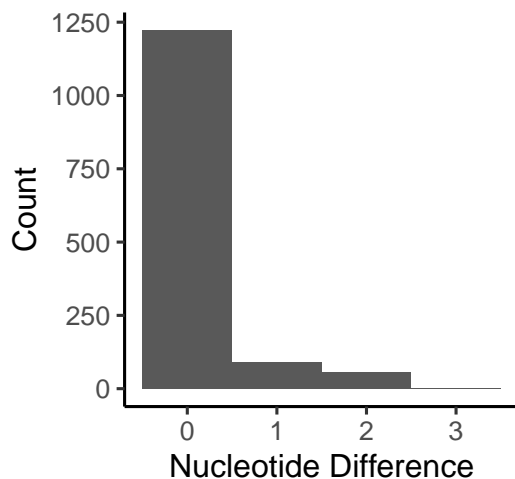


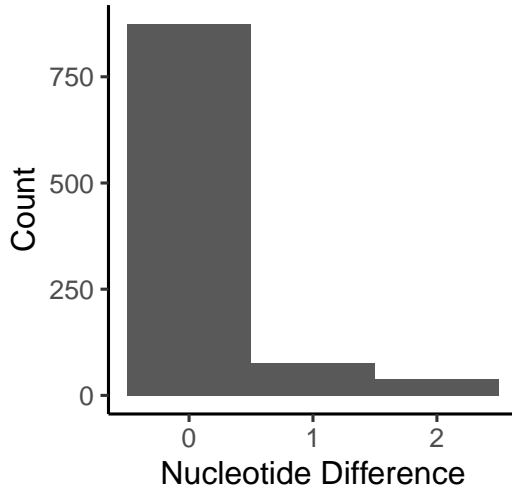
IGHV1-2*02

1369 sequences assigned
1222 (89.3%) exact matches, in which:
1217 unique CDR3
6 unique J



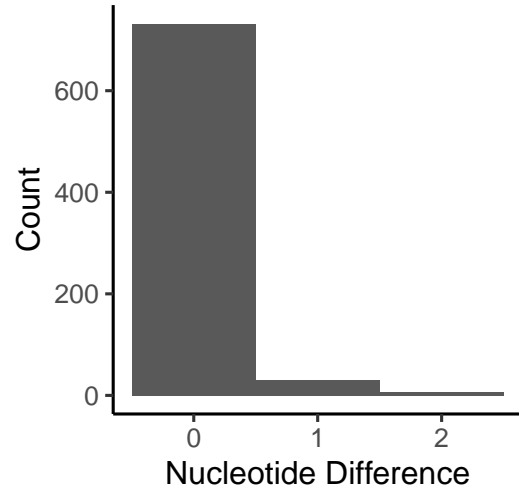
IGHV1-8*01

989 sequences assigned
875 (88.5%) exact matches, in which:
868 unique CDR3
6 unique J



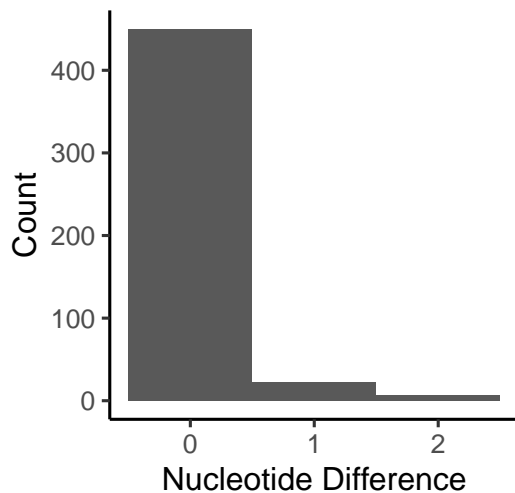
IGHV1-24*01

769 sequences assigned
732 (95.2%) exact matches, in which:
730 unique CDR3
6 unique J



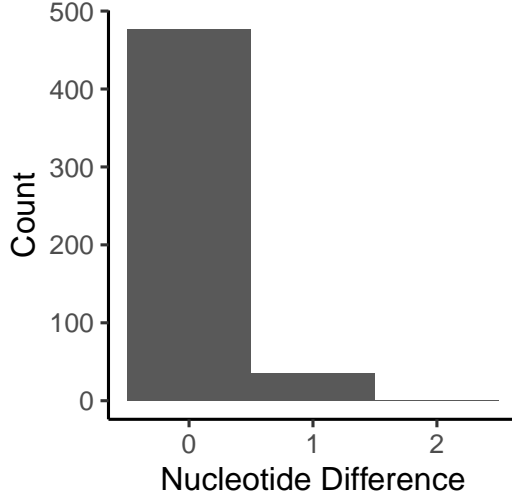
IGHV1-2*04

479 sequences assigned
450 (93.9%) exact matches, in which:
447 unique CDR3
6 unique J



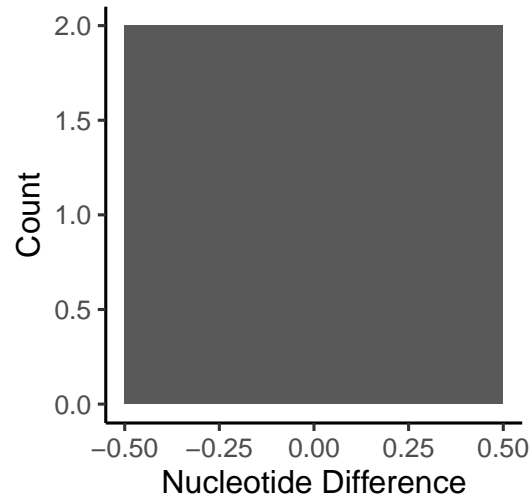
IGHV1-8*03

513 sequences assigned
477 (93%) exact matches, in which:
476 unique CDR3
6 unique J



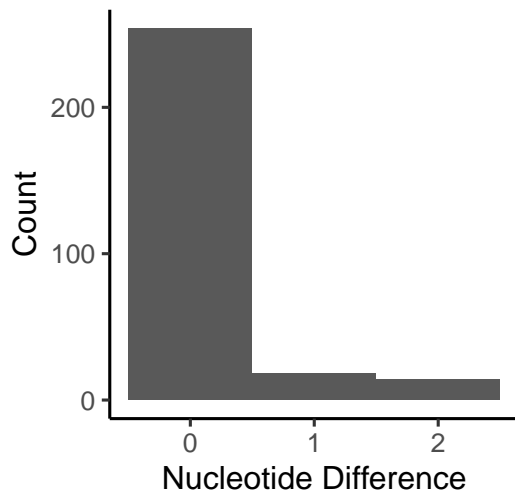
IGHV1-45*02

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



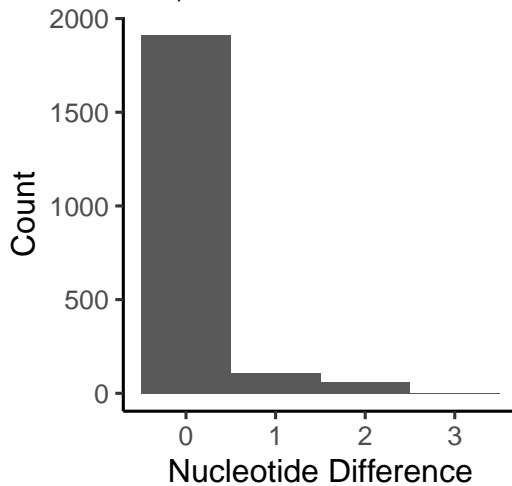
IGHV1-3*01_05

286 sequences assigned
254 (88.8%) exact matches, in which:
253 unique CDR3
6 unique J



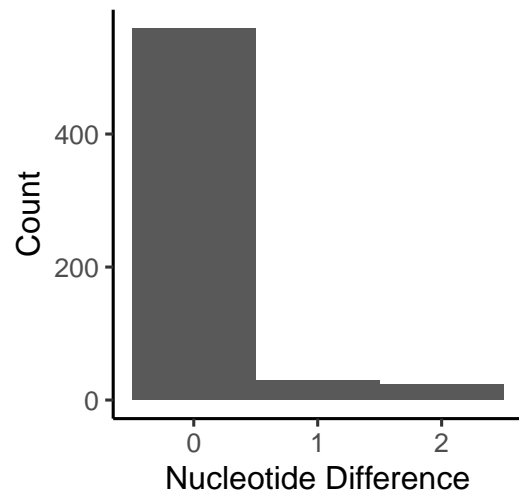
IGHV1-18*04

2082 sequences assigned
1912 (91.8%) exact matches, in which:
1906 unique CDR3
6 unique J



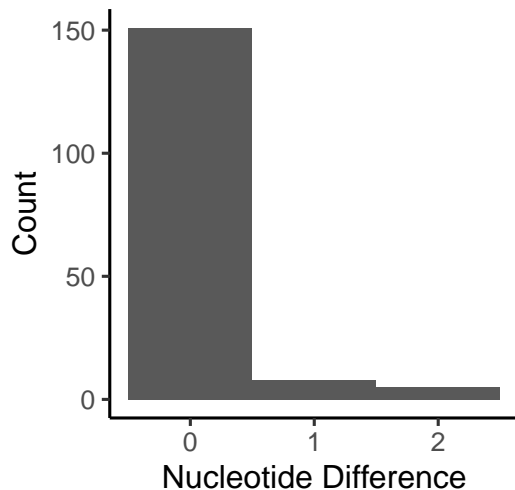
IGHV1-46*01

613 sequences assigned
559 (91.2%) exact matches, in which:
559 unique CDR3
6 unique J



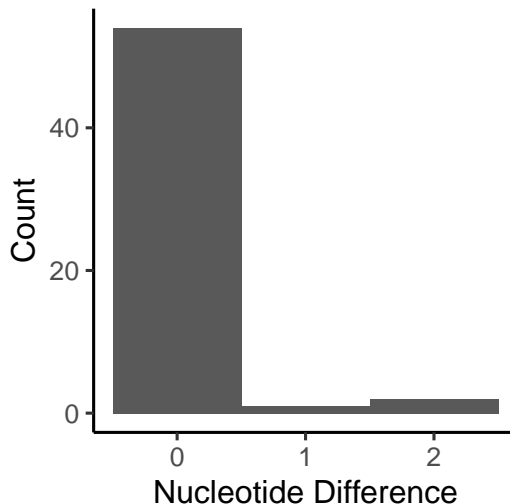
IGHV1–58*01_03

164 sequences assigned
151 (92.1%) exact matches, in which:
151 unique CDR3
6 unique J



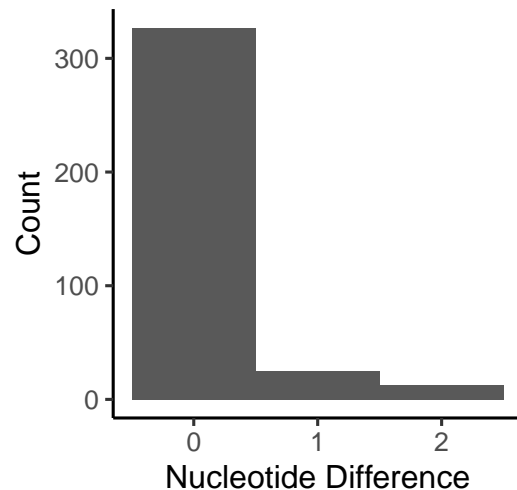
IGHV2–26*01

57 sequences assigned
54 (94.7%) exact matches, in which:
54 unique CDR3
6 unique J



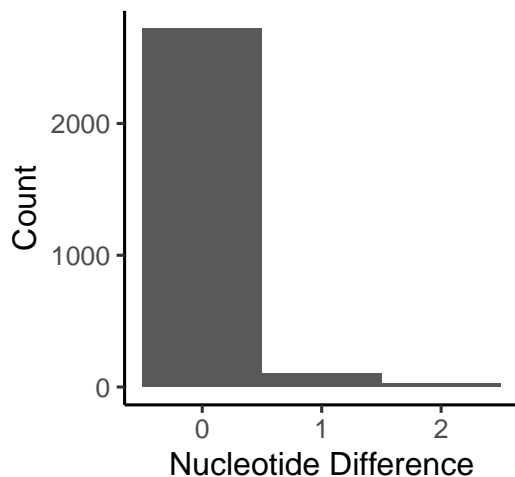
IGHV3–9*01

365 sequences assigned
327 (89.6%) exact matches, in which:
323 unique CDR3
6 unique J



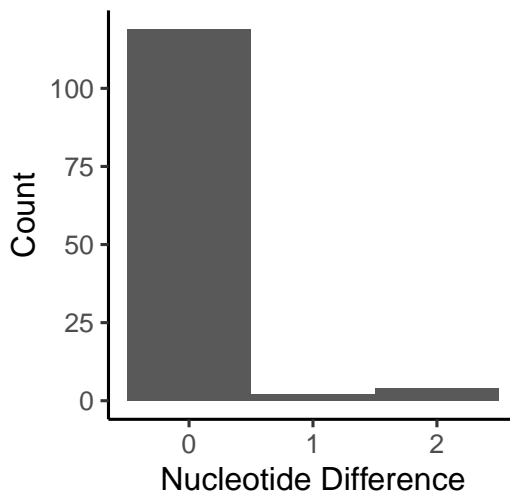
IGHV1–69*01_12_13

2849 sequences assigned
2719 (95.4%) exact matches, in which:
2712 unique CDR3
6 unique J



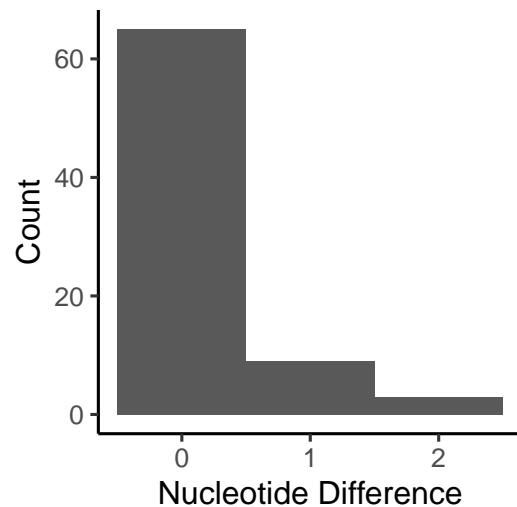
IGHV2–70*01

125 sequences assigned
119 (95.2%) exact matches, in which:
119 unique CDR3
5 unique J



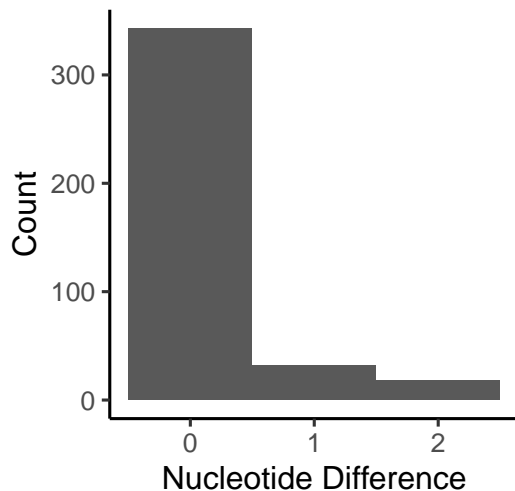
IGHV3–9*03

77 sequences assigned
65 (84.4%) exact matches, in which:
65 unique CDR3
6 unique J



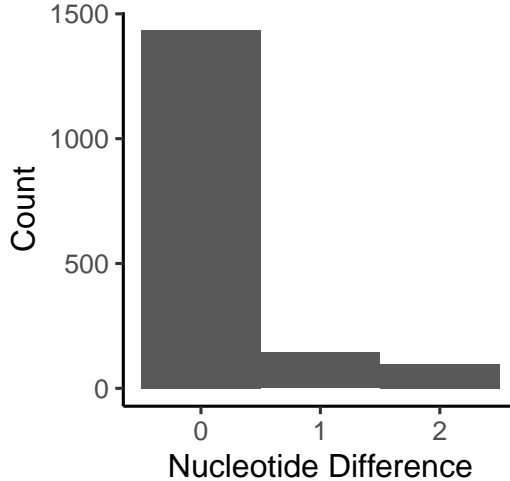
IGHV2–5*01

393 sequences assigned
343 (87.3%) exact matches, in which:
339 unique CDR3
6 unique J



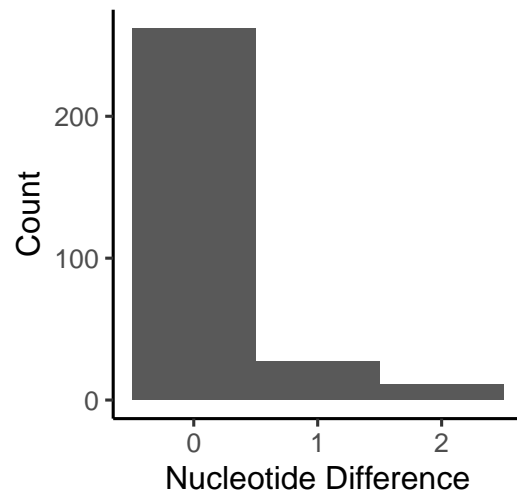
IGHV3–7*01

1677 sequences assigned
1435 (85.6%) exact matches, in which:
1398 unique CDR3
6 unique J



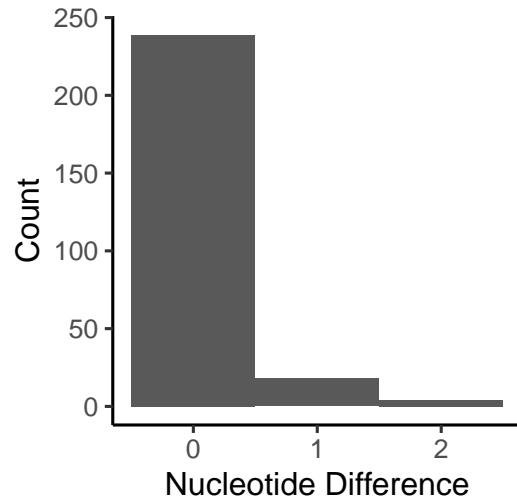
IGHV3–11*01

300 sequences assigned
262 (87.3%) exact matches, in which:
258 unique CDR3
6 unique J



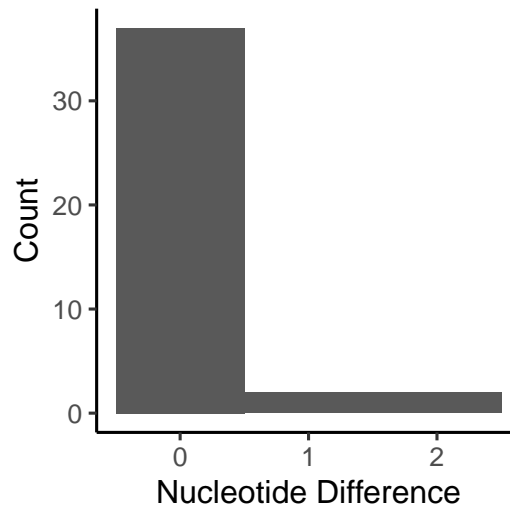
IGHV3-11*04

261 sequences assigned
239 (91.6%) exact matches, in which:
230 unique CDR3
6 unique J



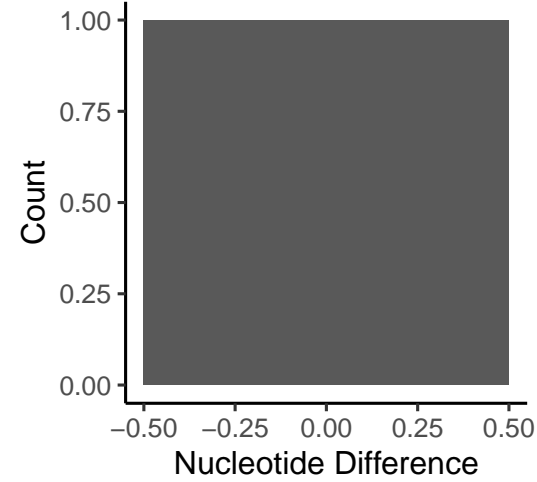
IGHV3-20*01_02

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



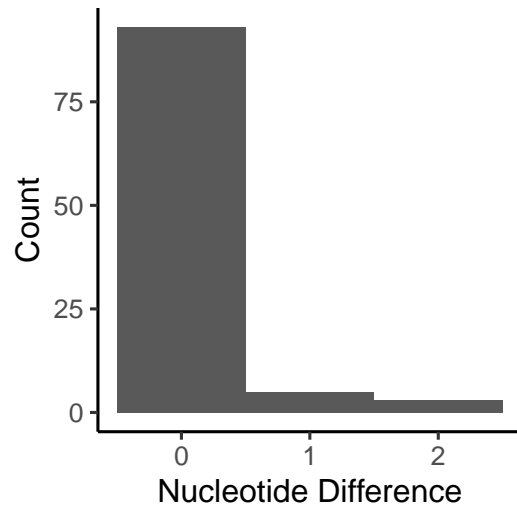
IGHV3-30-3*01

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



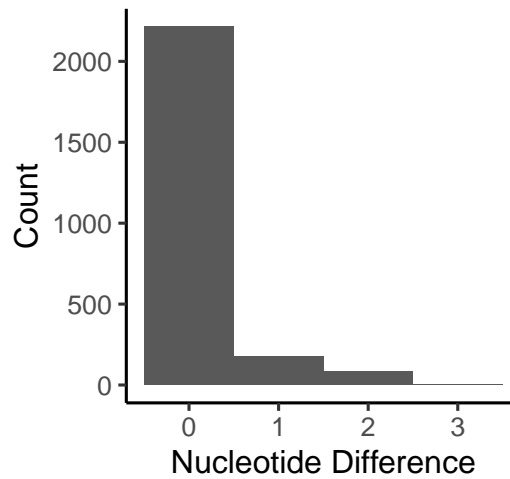
IGHV3-13*01

101 sequences assigned
93 (92.1%) exact matches, in which:
91 unique CDR3
5 unique J



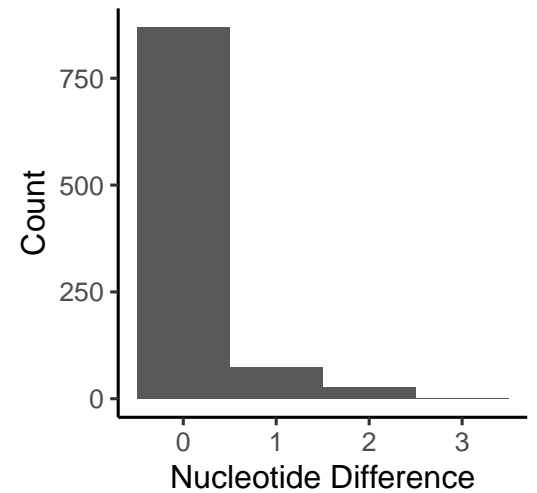
IGHV3-21*01_02

2473 sequences assigned
2214 (89.5%) exact matches, in which:
2173 unique CDR3
6 unique J



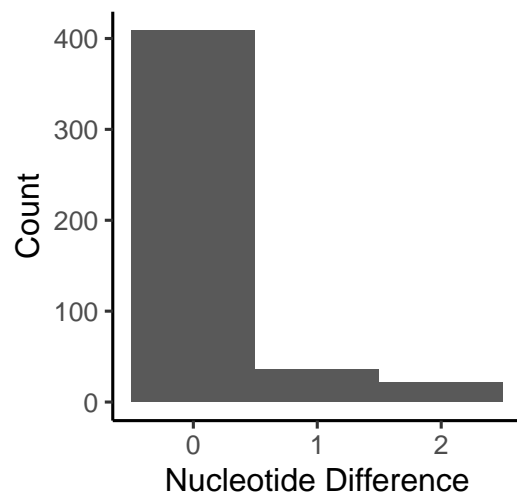
IGHV3-33*01

970 sequences assigned
870 (89.7%) exact matches, in which:
853 unique CDR3
6 unique J



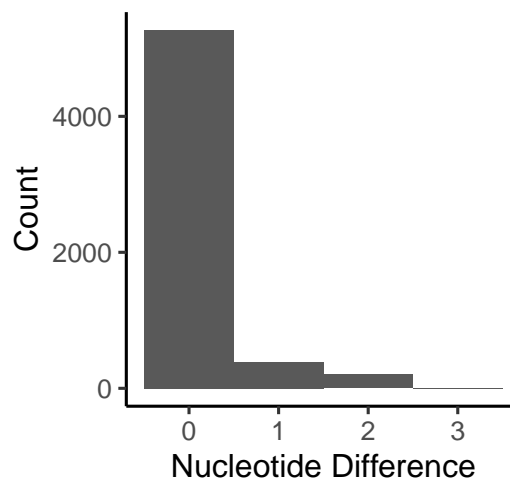
IGHV3-15*01_02

466 sequences assigned
409 (87.8%) exact matches, in which:
402 unique CDR3
6 unique J



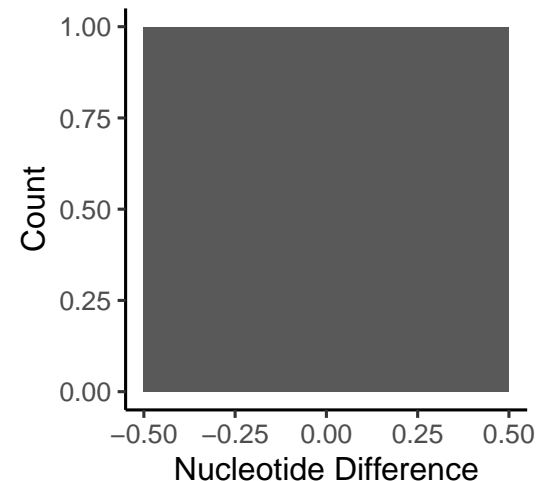
IGHV3-23*01_04

5856 sequences assigned
5269 (90%) exact matches, in which:
5153 unique CDR3
6 unique J



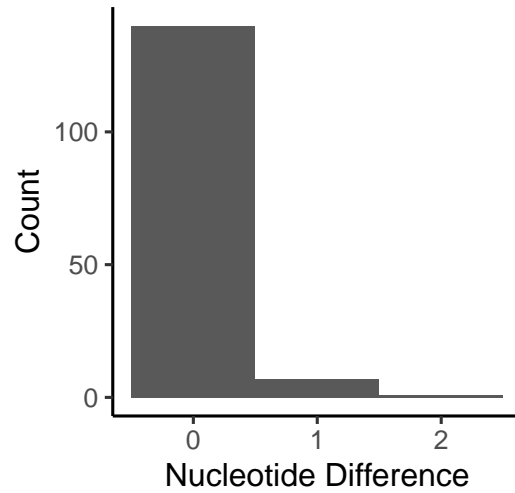
IGHV3-35*01

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



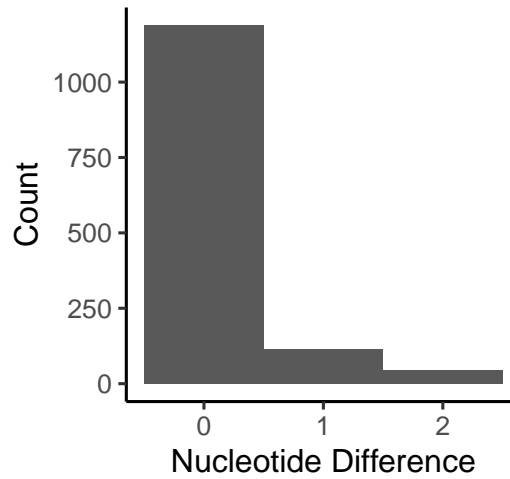
IGHV3-43*01

148 sequences assigned
140 (94.6%) exact matches, in which:
134 unique CDR3
6 unique J



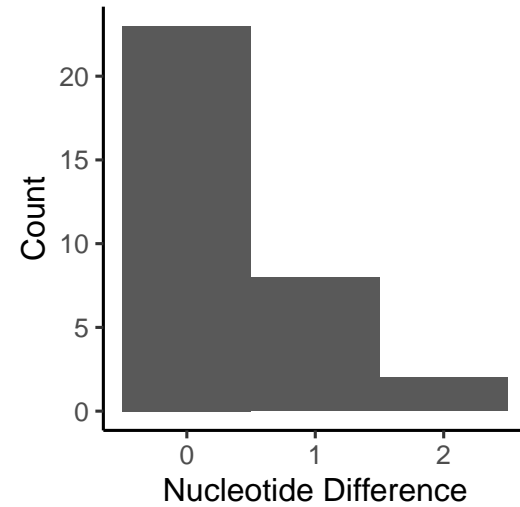
IGHV3-53*01_02

1349 sequences assigned
1188 (88.1%) exact matches, in which:
1157 unique CDR3
6 unique J



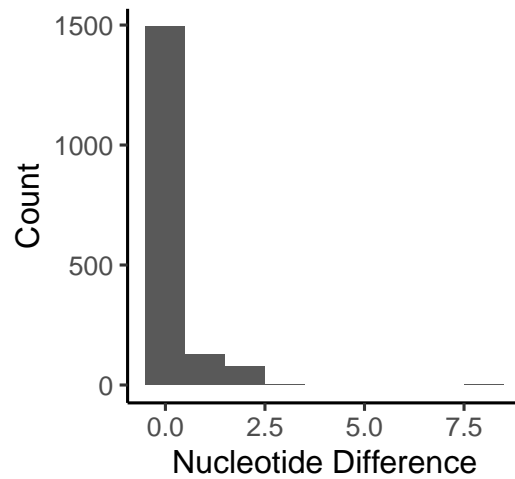
IGHV3-72*01

33 sequences assigned
23 (69.7%) exact matches, in which:
21 unique CDR3
5 unique J



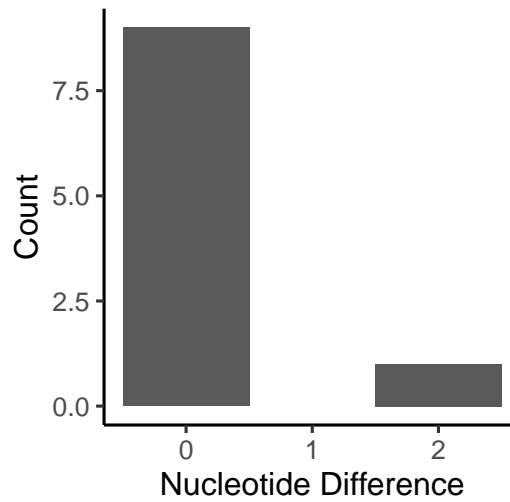
IGHV3-48*02

1701 sequences assigned
1493 (87.8%) exact matches, in which:
1427 unique CDR3
6 unique J



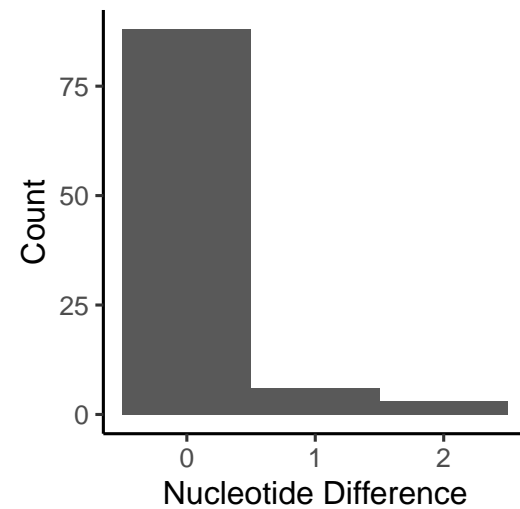
IGHV3-64*02_07

10 sequences assigned
9 (90%) exact matches, in which:
9 unique CDR3
3 unique J



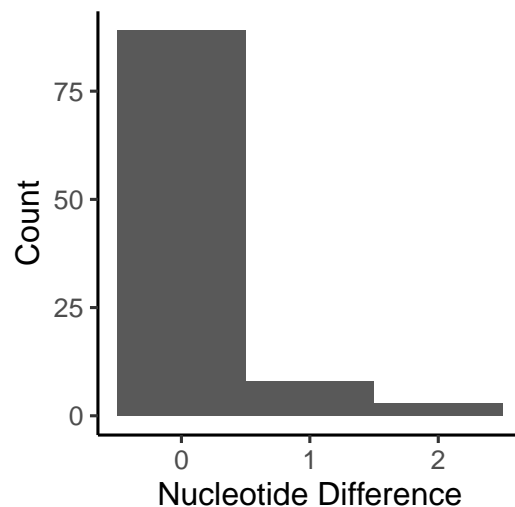
IGHV3-73*01_02

97 sequences assigned
88 (90.7%) exact matches, in which:
88 unique CDR3
6 unique J



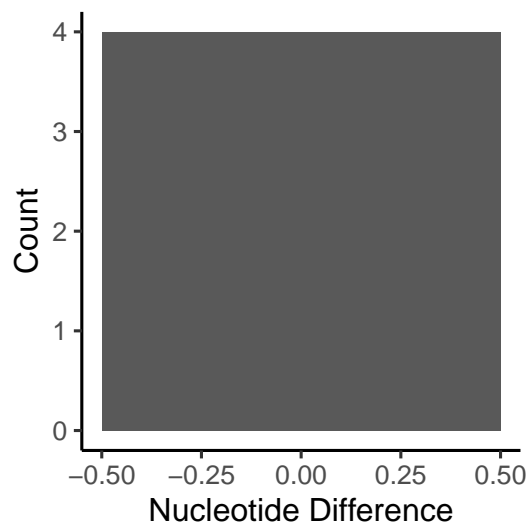
IGHV3-49*03_05

100 sequences assigned
89 (89%) exact matches, in which:
88 unique CDR3
5 unique J



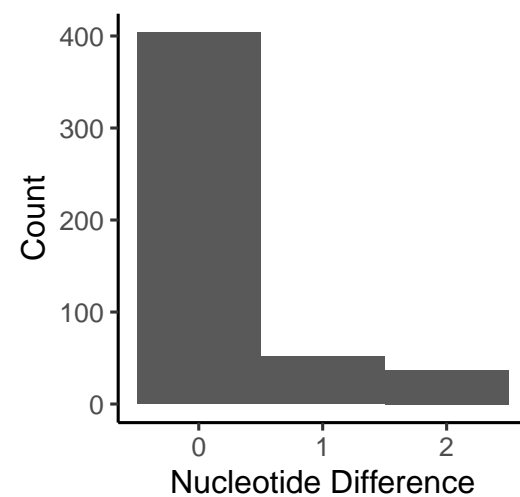
IGHV3-66*03

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



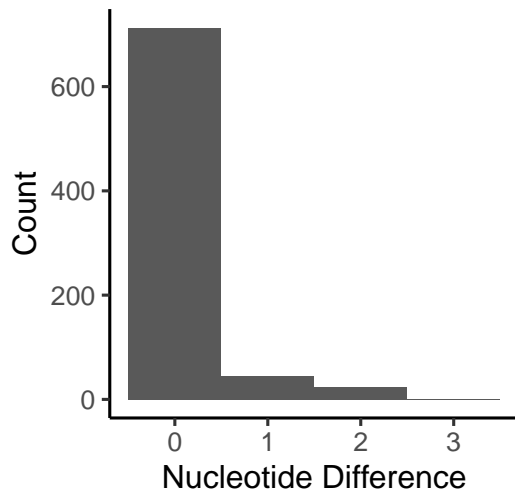
IGHV3-74*01_02

493 sequences assigned
404 (81.9%) exact matches, in which:
394 unique CDR3
6 unique J



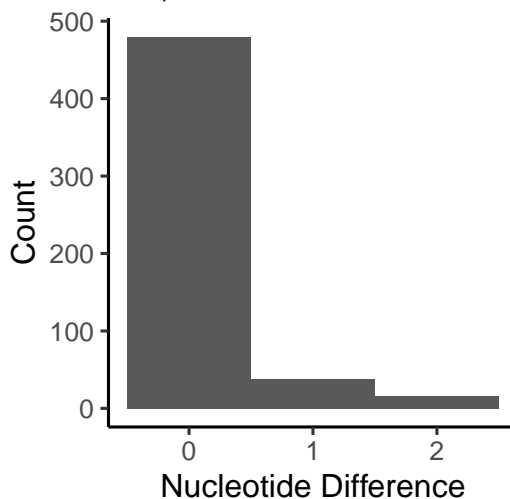
IGHV4-4*07

783 sequences assigned
713 (91.1%) exact matches, in which:
695 unique CDR3
6 unique J



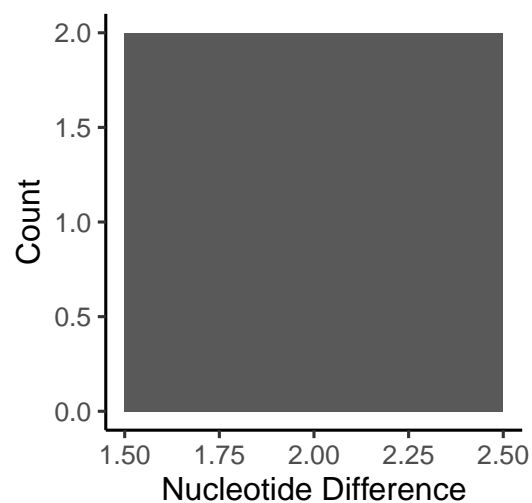
IGHV4-31*02

534 sequences assigned
480 (89.9%) exact matches, in which:
475 unique CDR3
6 unique J



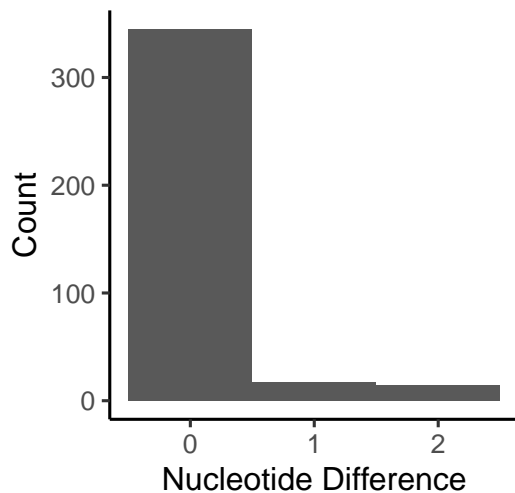
IGHV4-39*02

2 sequences assigned
No exact matches.



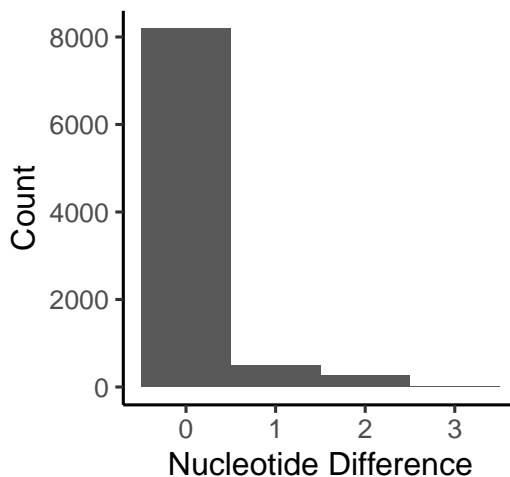
IGHV4-4*02_03

376 sequences assigned
345 (91.8%) exact matches, in which:
342 unique CDR3
6 unique J



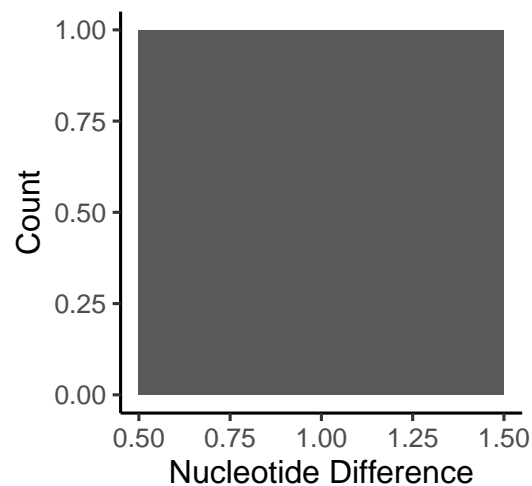
IGHV4-34*01_02

8930 sequences assigned
8188 (91.7%) exact matches, in which:
8064 unique CDR3
6 unique J



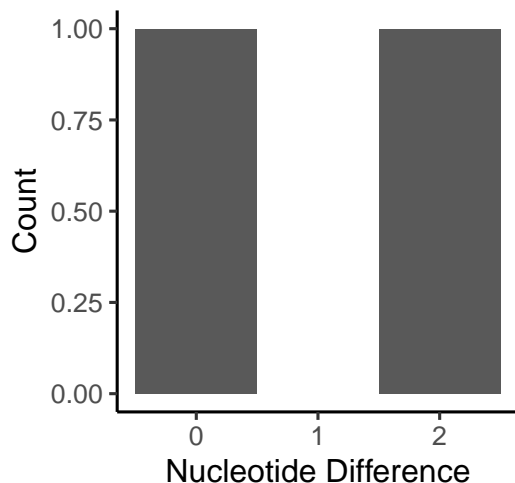
IGHV4-39*07

1 sequences assigned
No exact matches.



IGHV4-28*01_07

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



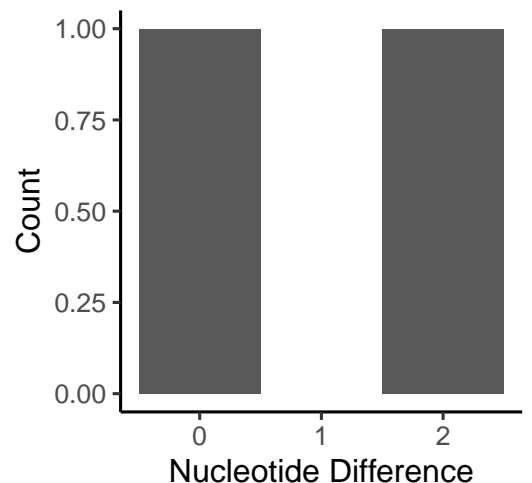
IGHV4-38-2*02

1 sequences assigned
No exact matches.



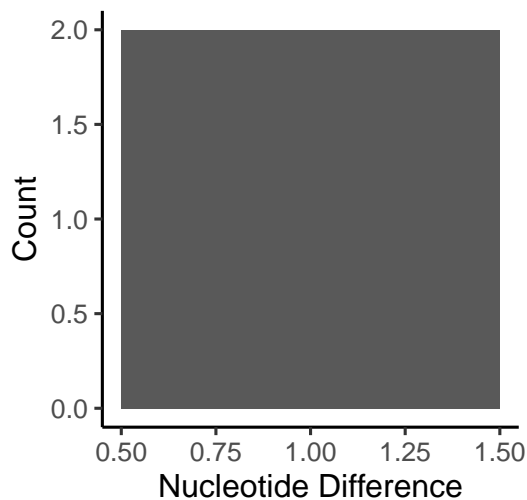
IGHV4-59*08

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



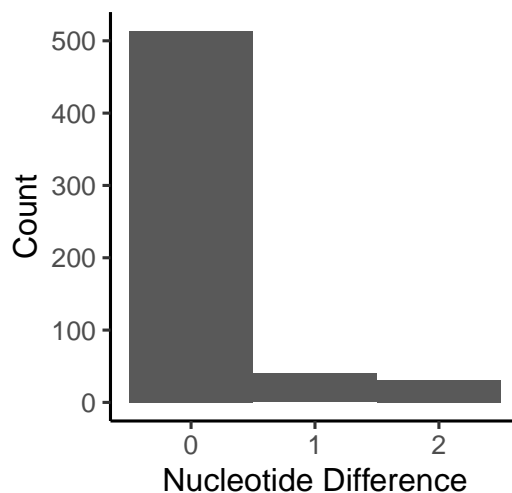
IGHV4-59*11

2 sequences assigned
No exact matches.



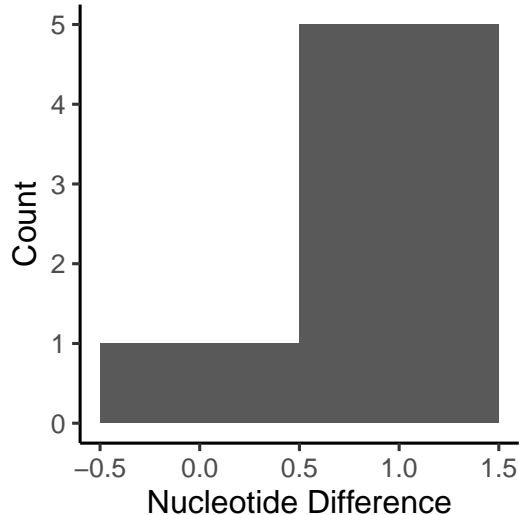
IGHV6-1*01_02

585 sequences assigned
514 (87.9%) exact matches, in which:
509 unique CDR3
6 unique J



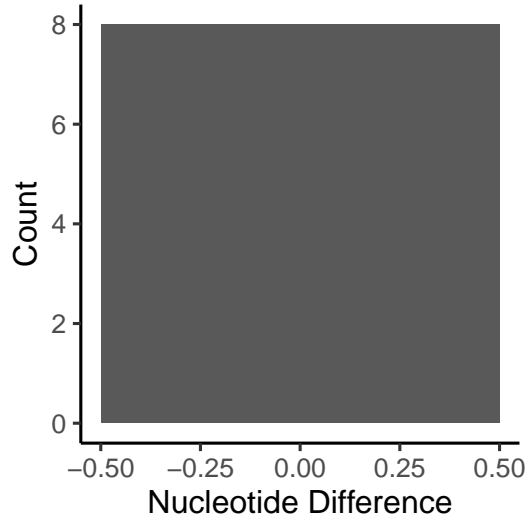
IGHV4-59*12

6 sequences assigned
1 (16.7%) exact matches, in which:
1 unique CDR3
1 unique J



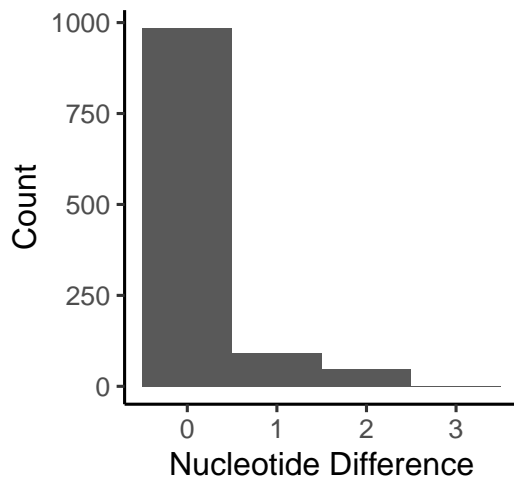
IGHV7-4-1*01

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



IGHV4-61*01

1125 sequences assigned
985 (87.6%) exact matches, in which:
961 unique CDR3
6 unique J





[illegible]