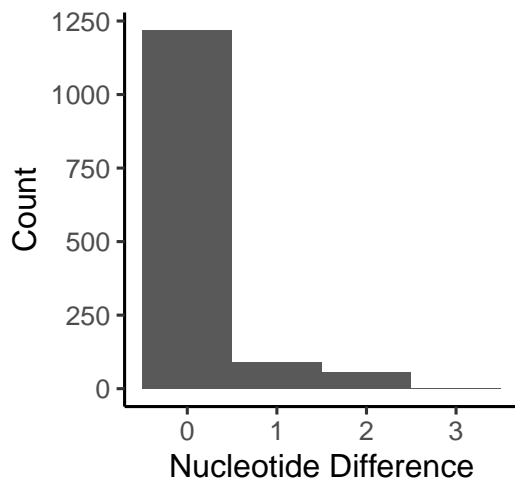


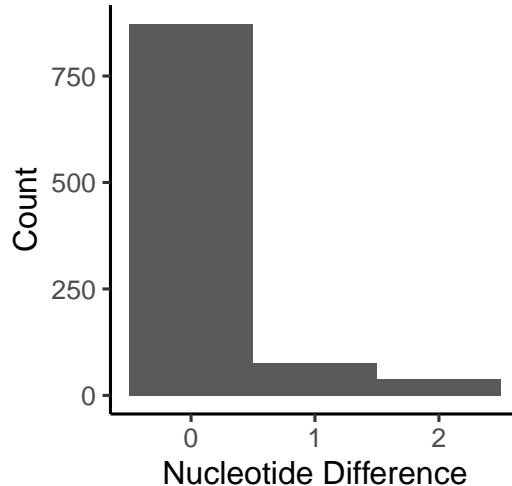
IGHV1-2*02

1365 sequences assigned
1218 (89.2%) exact matches, in which:
1217 unique CDR3
6 unique J



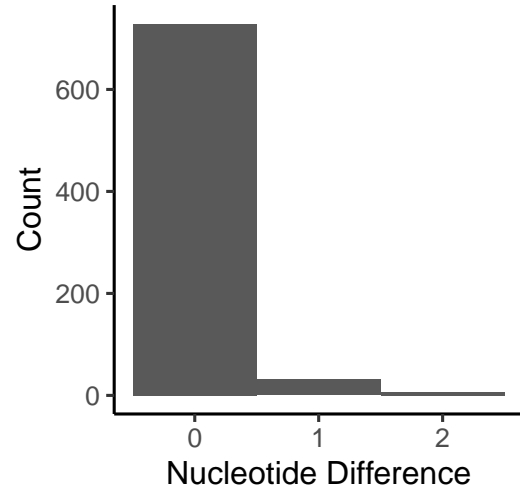
IGHV1-8*01

987 sequences assigned
873 (88.4%) exact matches, in which:
870 unique CDR3
6 unique J



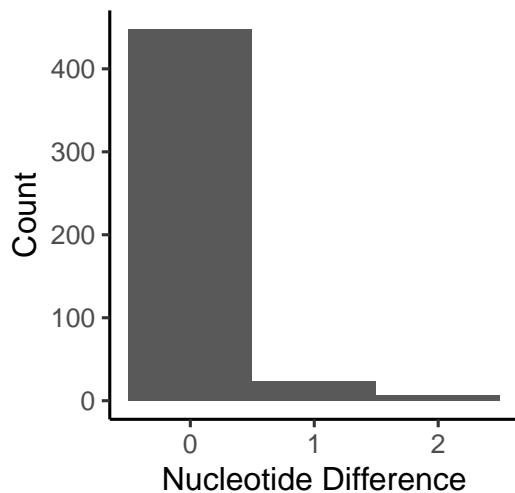
IGHV1-24*01

766 sequences assigned
729 (95.2%) exact matches, in which:
729 unique CDR3
6 unique J



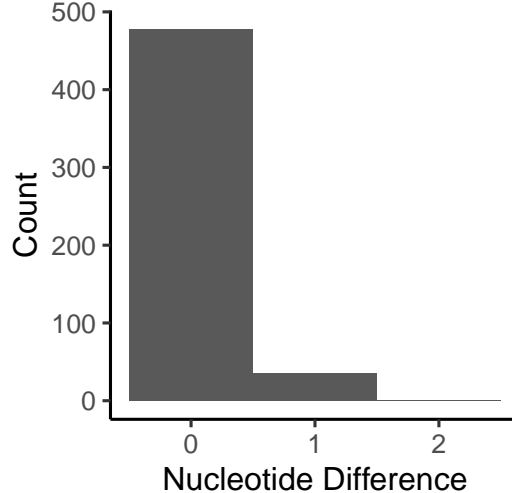
IGHV1-2*04

478 sequences assigned
448 (93.7%) exact matches, in which:
447 unique CDR3
6 unique J



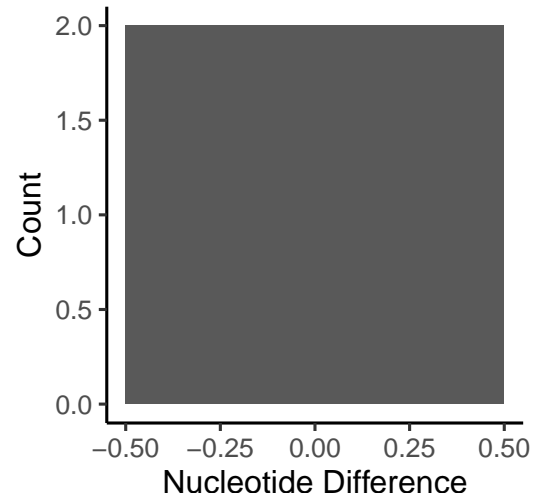
IGHV1-8*03

514 sequences assigned
478 (93%) exact matches, in which:
477 unique CDR3
6 unique J



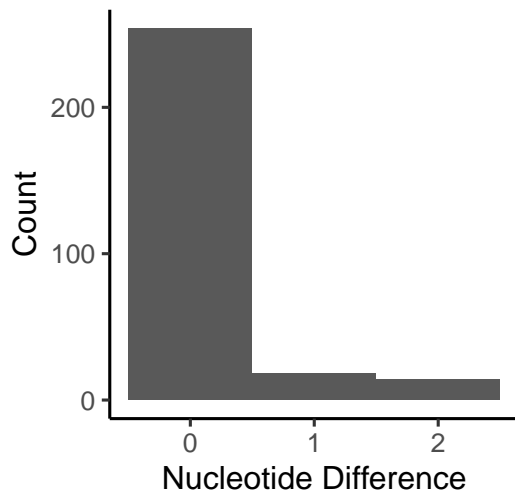
IGHV1-45*02

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



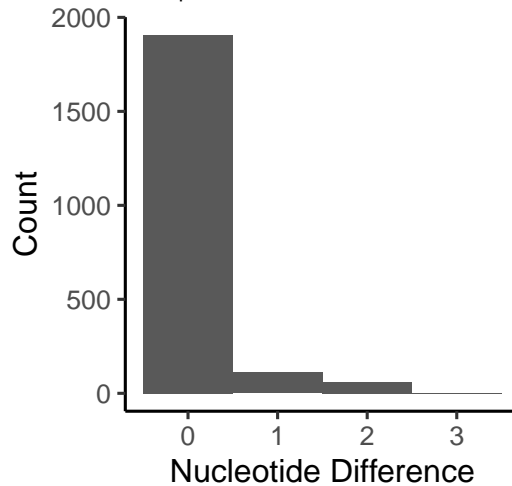
IGHV1-3*01_05

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



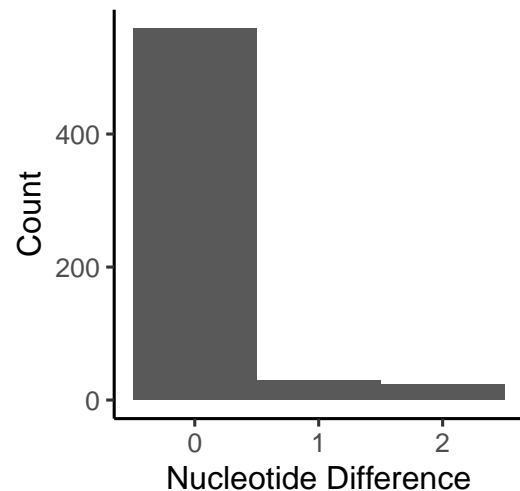
IGHV1-18*04

2076 sequences assigned
1906 (91.8%) exact matches, in which:
1906 unique CDR3
6 unique J



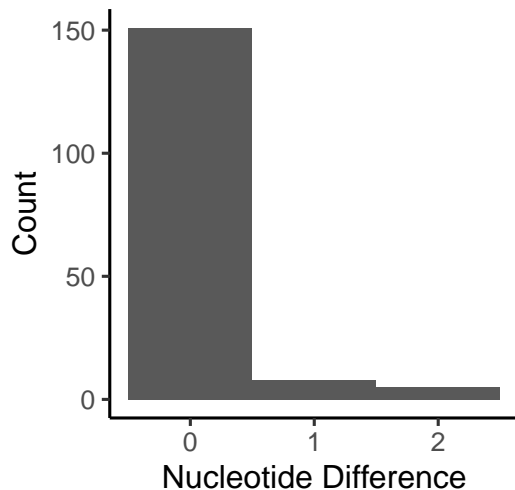
IGHV1-46*01

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



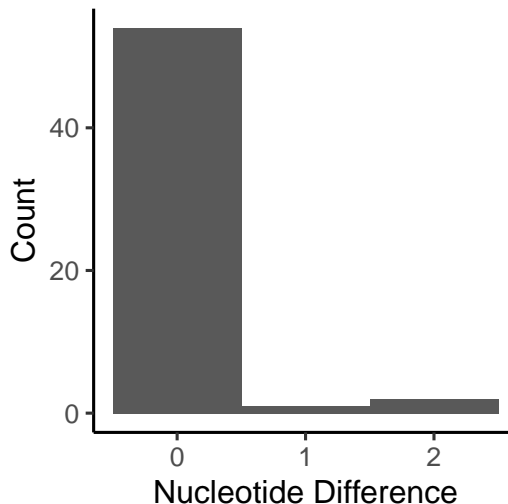
IGHV1–58*01_03

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



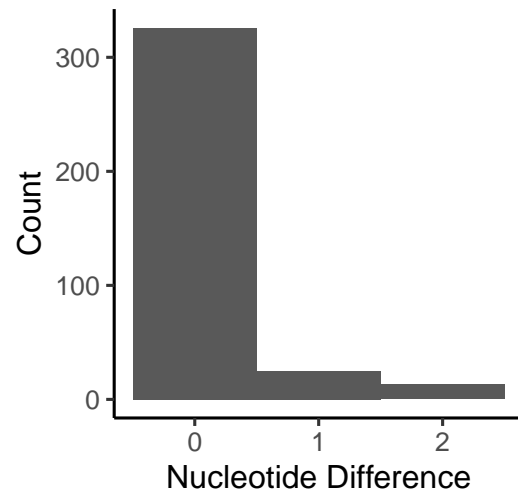
IGHV2–26*01

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



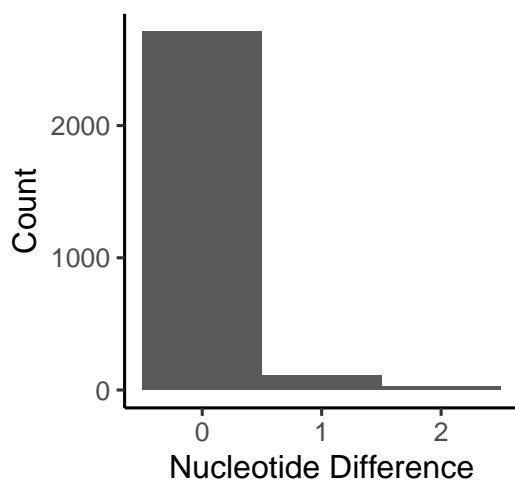
IGHV3–9*01

364 sequences assigned
326 (89.6%) exact matches, in which:
323 unique CDR3
6 unique J



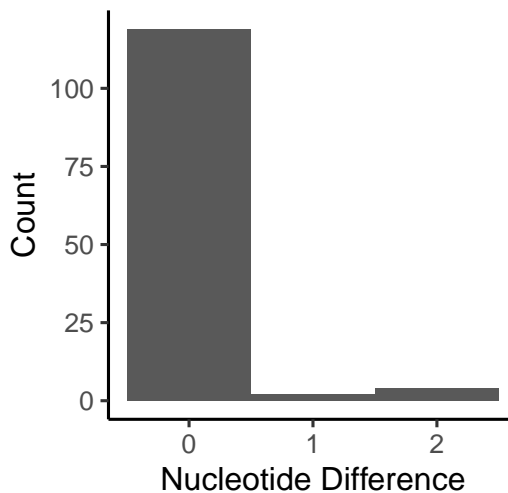
IGHV1–69*01_12_13

2841 sequences assigned
2710 (95.4%) exact matches, in which:
2709 unique CDR3
6 unique J



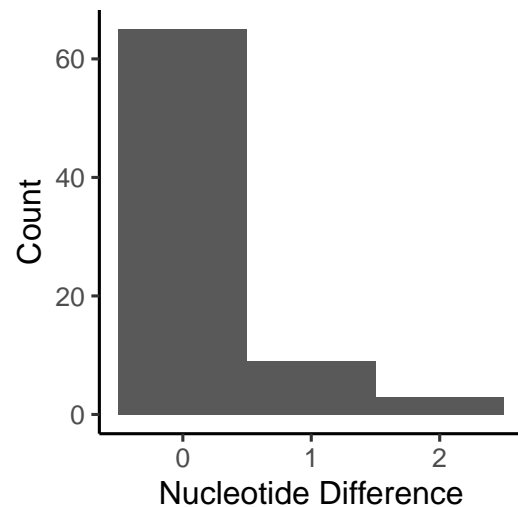
IGHV2–70*01

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



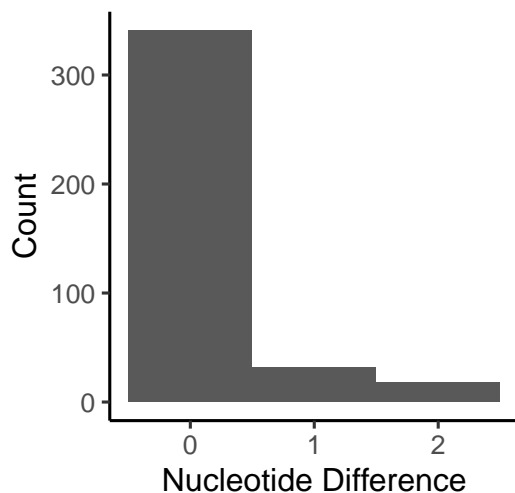
IGHV3–9*03

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



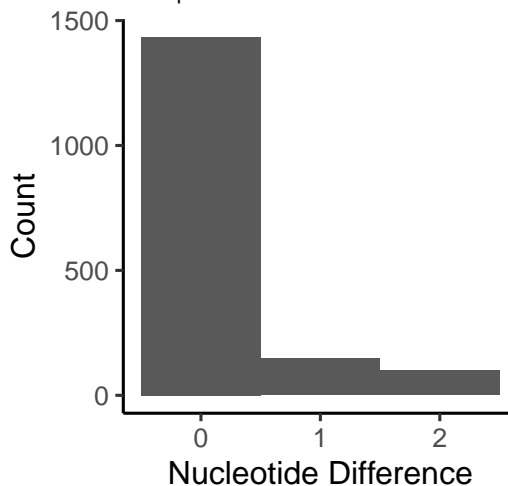
IGHV2–5*01

391 sequences assigned
341 (87.2%) exact matches, in which:
339 unique CDR3
6 unique J



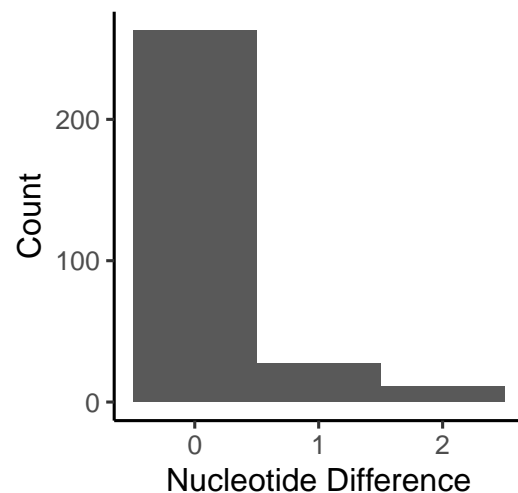
IGHV3–7*01

1681 sequences assigned
1434 (85.3%) exact matches, in which:
1400 unique CDR3
6 unique J



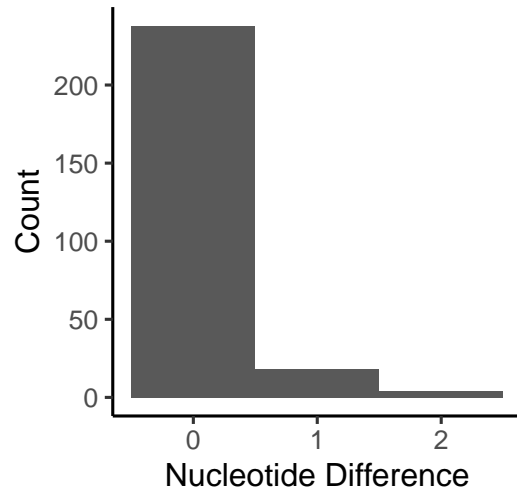
IGHV3–11*01

301 sequences assigned
263 (87.4%) exact matches, in which:
260 unique CDR3
6 unique J



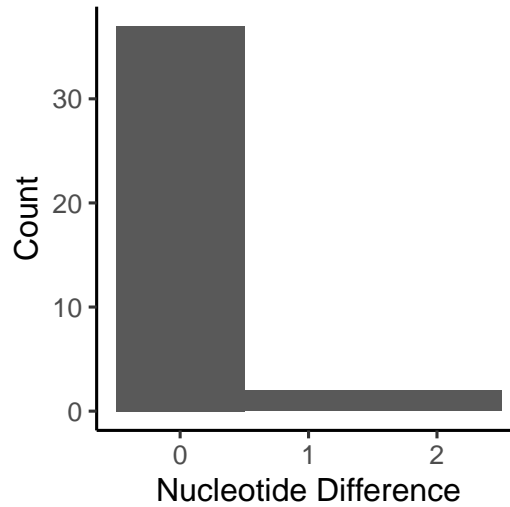
IGHV3-11*04

260 sequences assigned
238 (91.5%) exact matches, in which:
229 unique CDR3
6 unique J



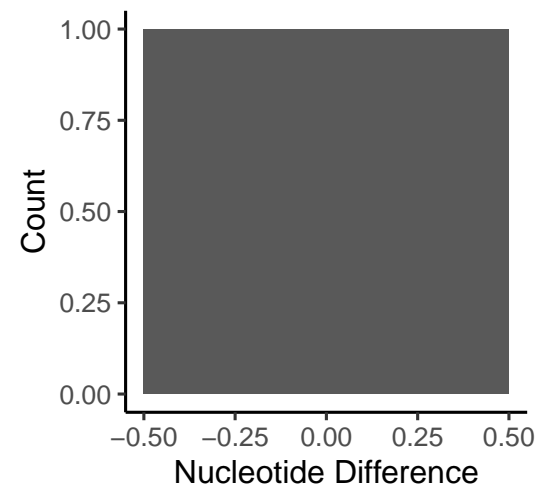
IGHV3-20*01_02

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



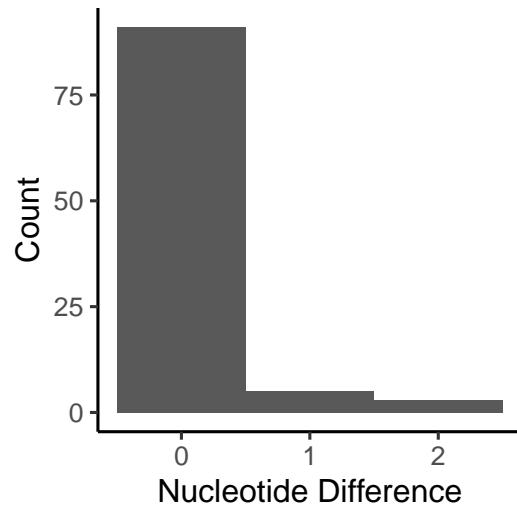
IGHV3-30-3*01

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



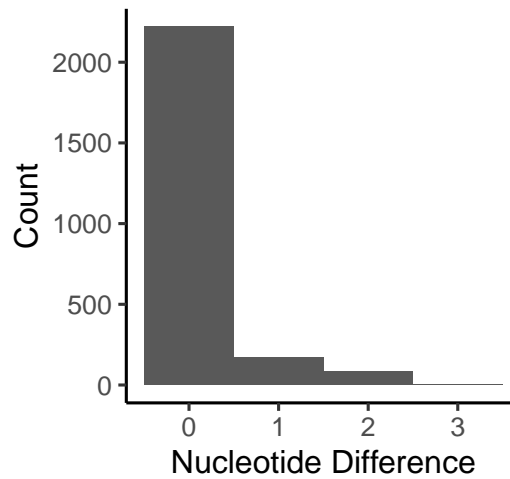
IGHV3-13*01

99 sequences assigned
91 (91.9%) exact matches, in which:
91 unique CDR3
5 unique J



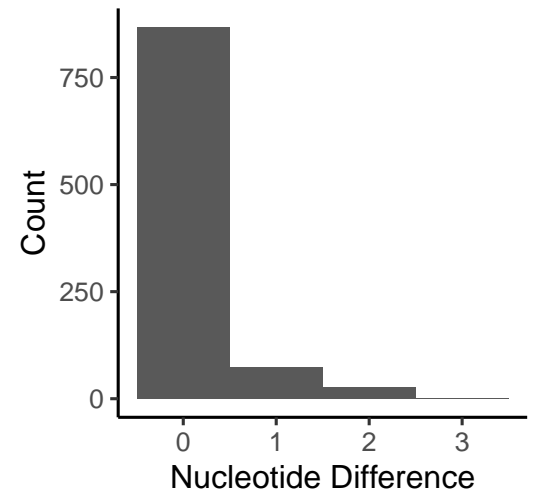
IGHV3-21*01_02

2478 sequences assigned
2220 (89.6%) exact matches, in which:
2185 unique CDR3
6 unique J



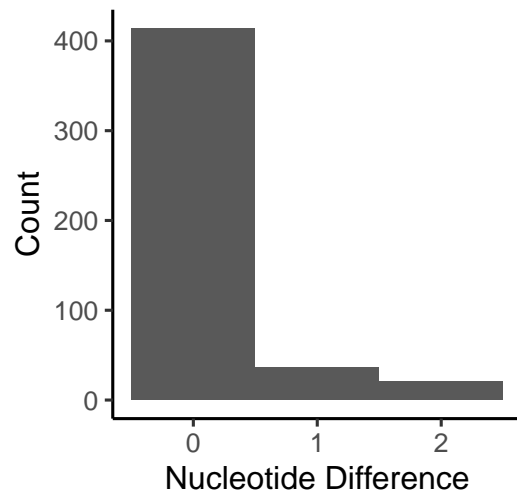
IGHV3-33*01

968 sequences assigned
868 (89.7%) exact matches, in which:
853 unique CDR3
6 unique J



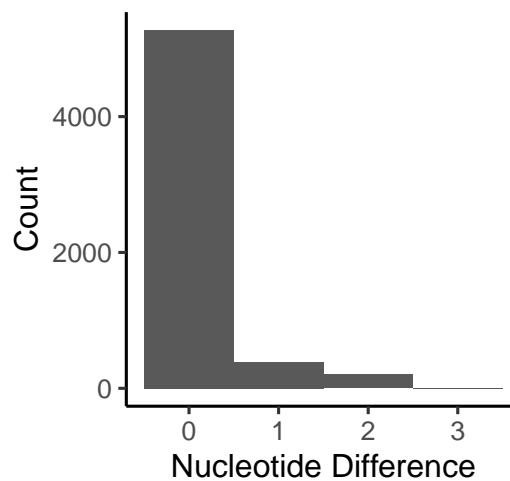
IGHV3-15*01_02

471 sequences assigned
414 (87.9%) exact matches, in which:
407 unique CDR3
6 unique J



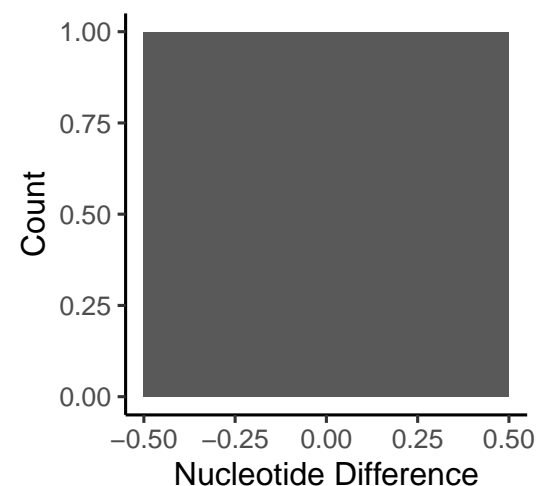
IGHV3-23*01_04

5861 sequences assigned
5274 (90%) exact matches, in which:
5175 unique CDR3
6 unique J



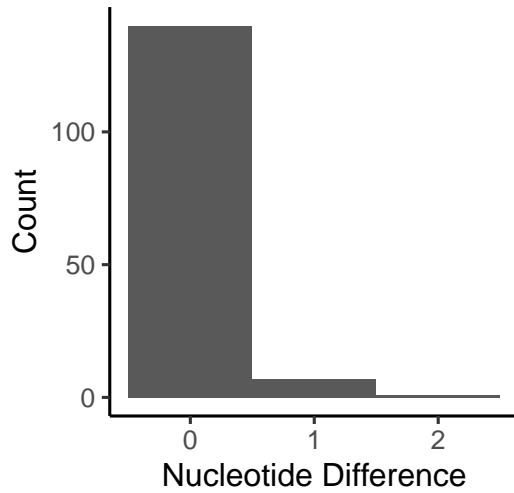
IGHV3-35*01

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



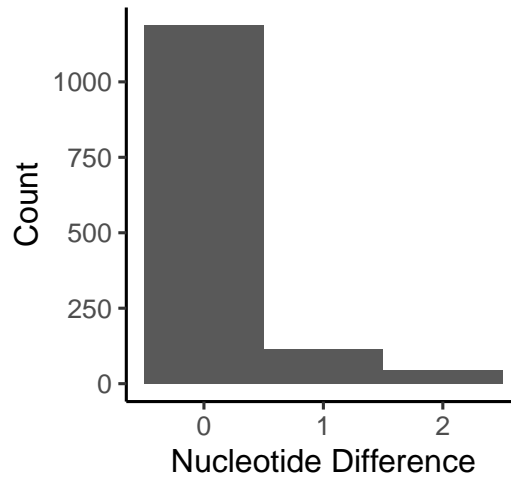
IGHV3-43*01

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



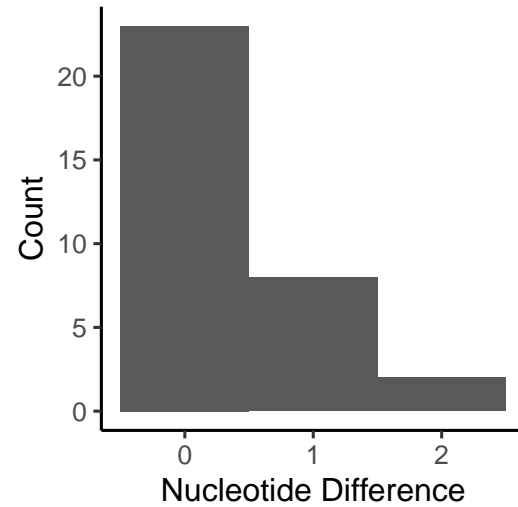
IGHV3-53*01_02

1348 sequences assigned
1187 (88.1%) exact matches, in which:
1160 unique CDR3
6 unique J



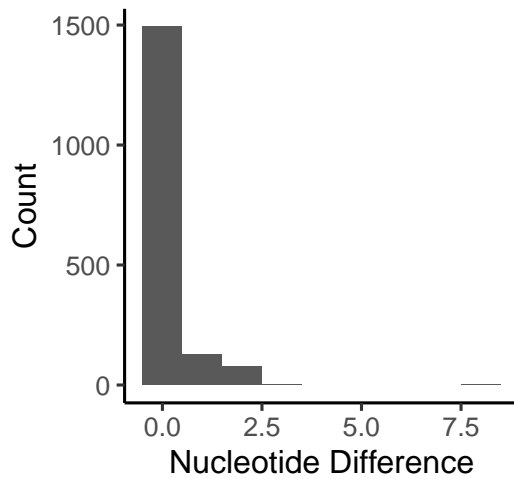
IGHV3-72*01

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



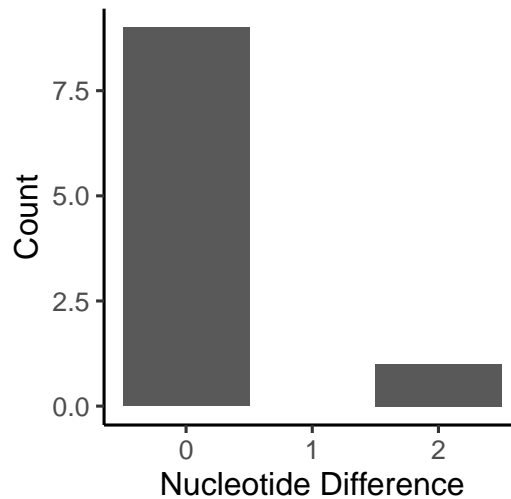
IGHV3-48*02

1703 sequences assigned
1493 (87.7%) exact matches, in which:
1430 unique CDR3
6 unique J



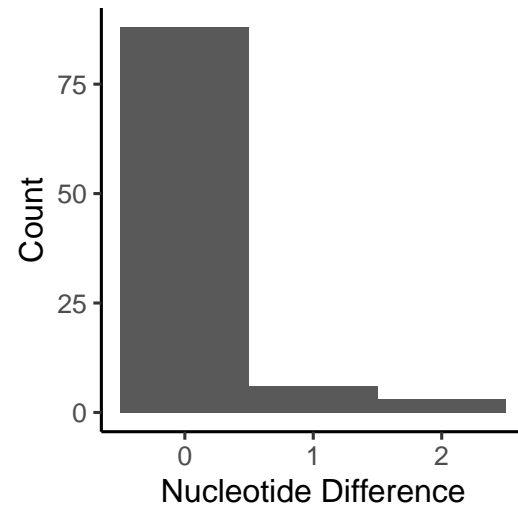
IGHV3-64*02_07

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



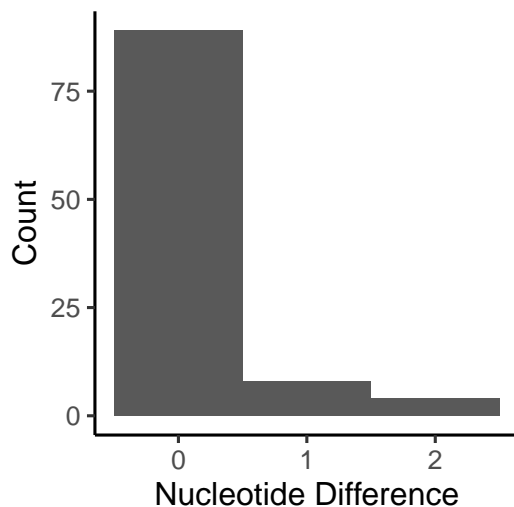
IGHV3-73*01_02

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



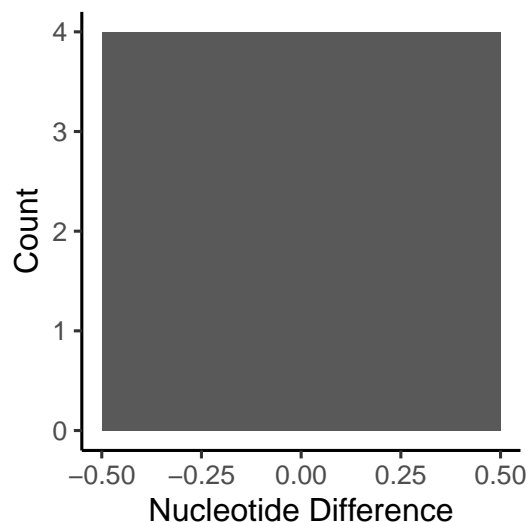
IGHV3-49*03_05

101 sequences assigned
89 (88.1%) exact matches, in which:
88 unique CDR3
5 unique J



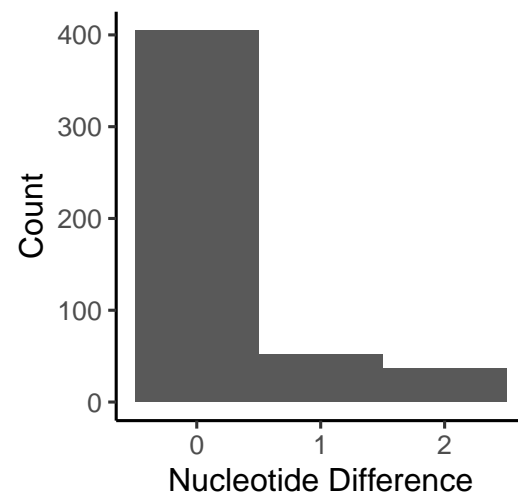
IGHV3-66*03

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



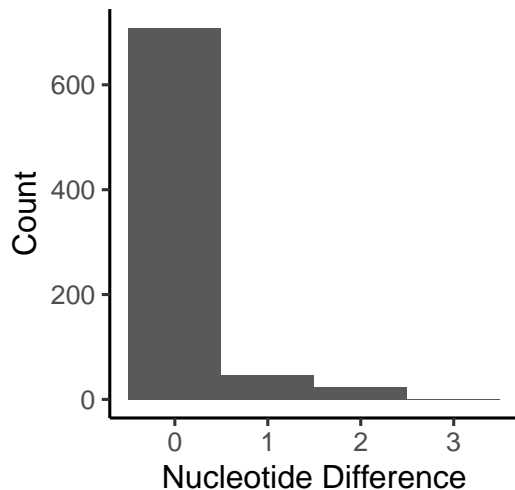
IGHV3-74*01_02

494 sequences assigned
405 (82%) exact matches, in which:
395 unique CDR3
6 unique J



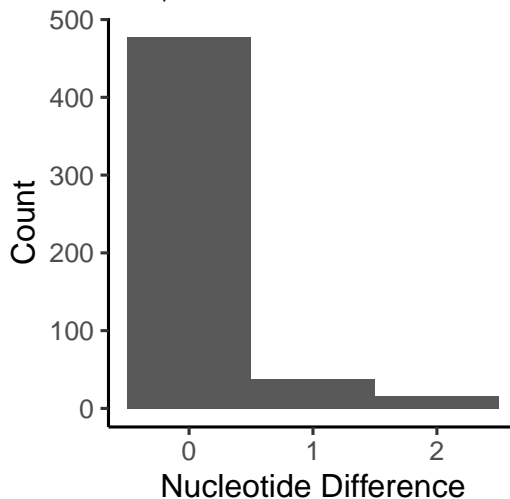
IGHV4-4*07

780 sequences assigned
709 (90.9%) exact matches, in which:
695 unique CDR3
6 unique J



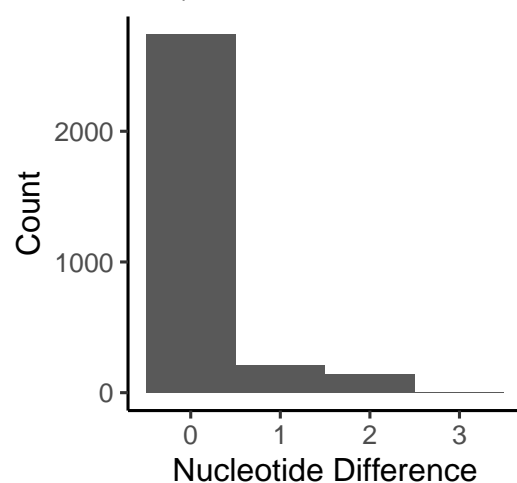
IGHV4-31*02

532 sequences assigned
478 (89.8%) exact matches, in which:
474 unique CDR3
6 unique J



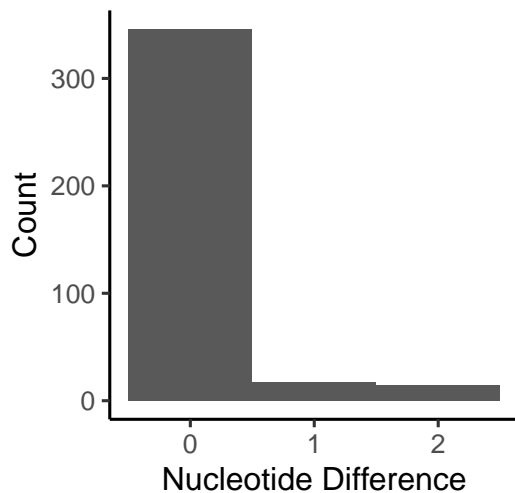
IGHV4-39*02_C258G

3098 sequences assigned
2741 (88.5%) exact matches, in which:
2710 unique CDR3
6 unique J



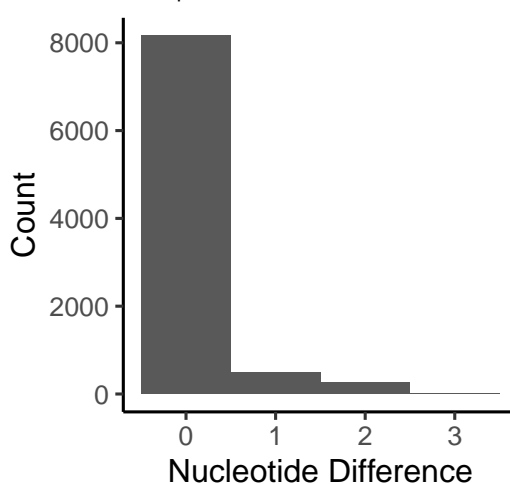
IGHV4-4*02_03

377 sequences assigned
346 (91.8%) exact matches, in which:
343 unique CDR3
6 unique J



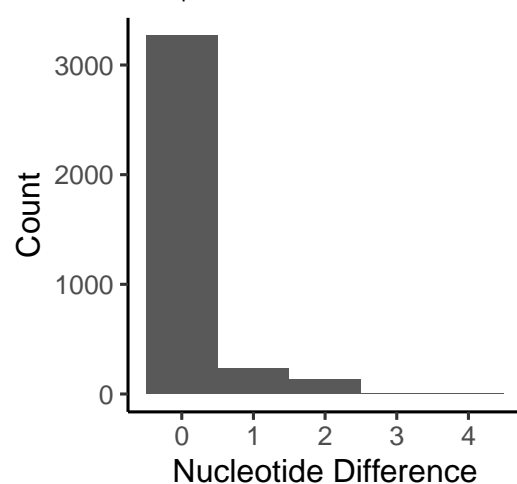
IGHV4-34*01_02

8899 sequences assigned
8161 (91.7%) exact matches, in which:
8076 unique CDR3
6 unique J



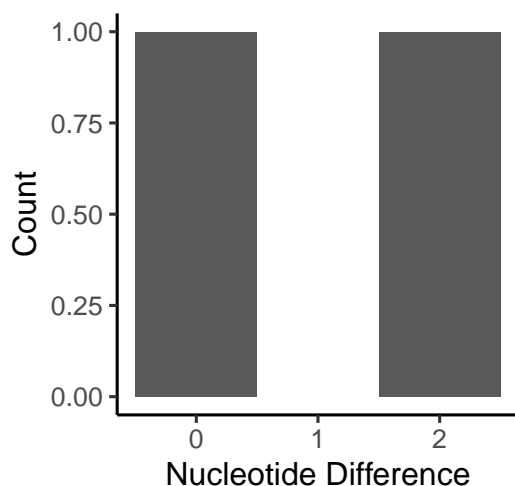
IGHV4-59*02_G88A

3635 sequences assigned
3267 (89.9%) exact matches, in which:
3223 unique CDR3
6 unique J



IGHV4-28*01_07

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



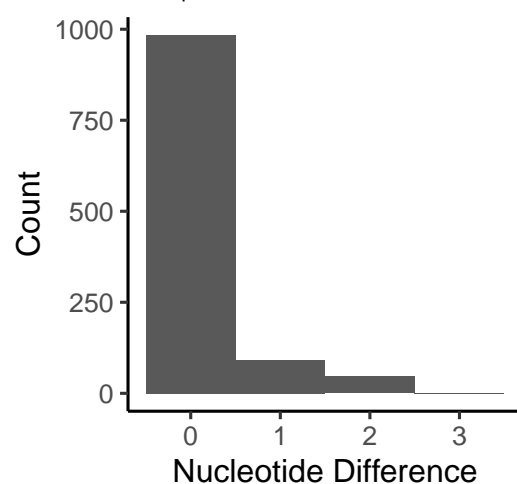
IGHV4-38-2*02

1 sequences assigned
No exact matches.



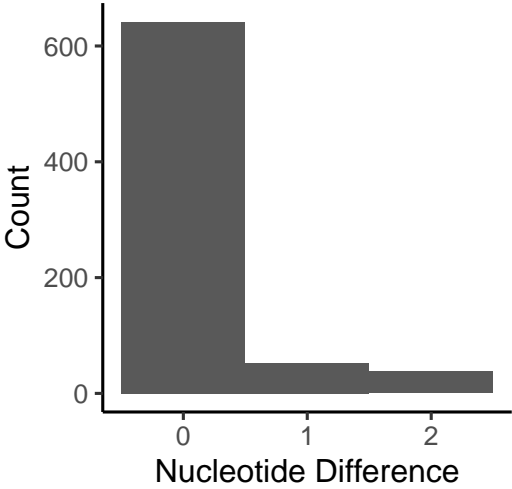
IGHV4-61*01

1123 sequences assigned
984 (87.6%) exact matches, in which:
964 unique CDR3
6 unique J



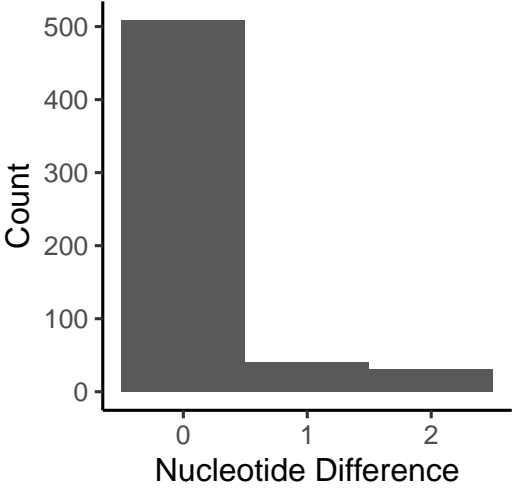
IGHV5–51*07_A128G

732 sequences assigned
642 (87.7%) exact matches, in which:
642 unique CDR3
6 unique J



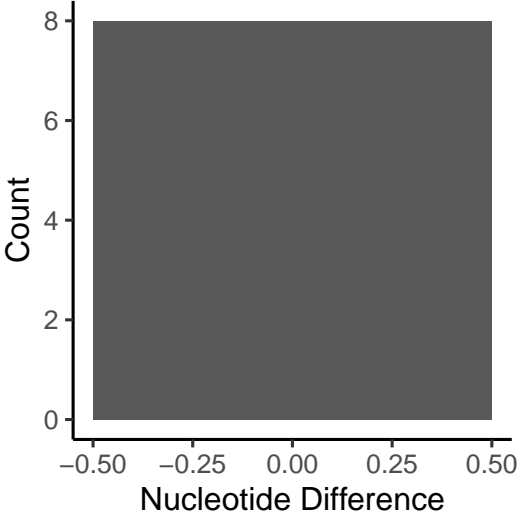
IGHV6–1*01_02

580 sequences assigned
509 (87.8%) exact matches, in which:
507 unique CDR3
6 unique J



IGHV7–4–1*01

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





Warning – no inferred sequences found.