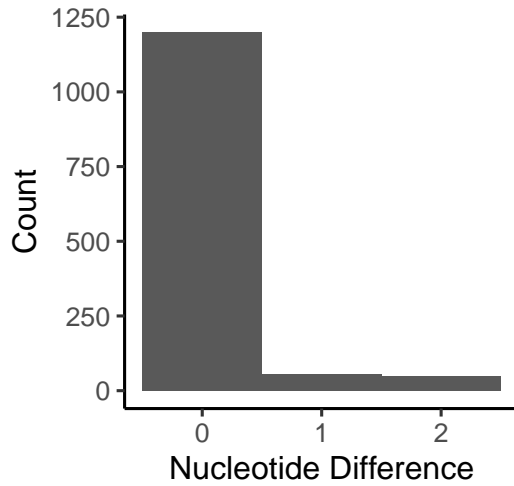


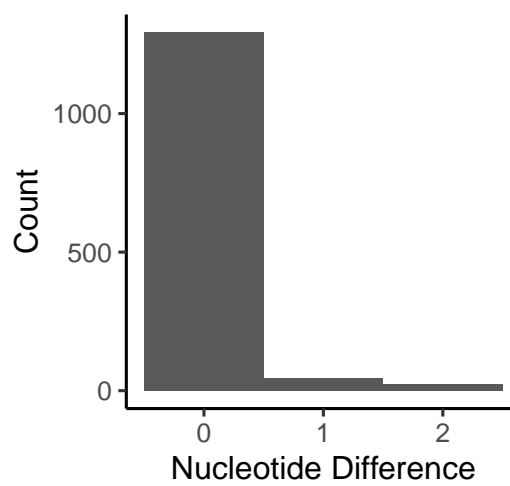
IGHV1-2*02

1302 sequences assigned
1199 (92.1%) exact matches, in which:
1189 unique CDR3
6 unique J



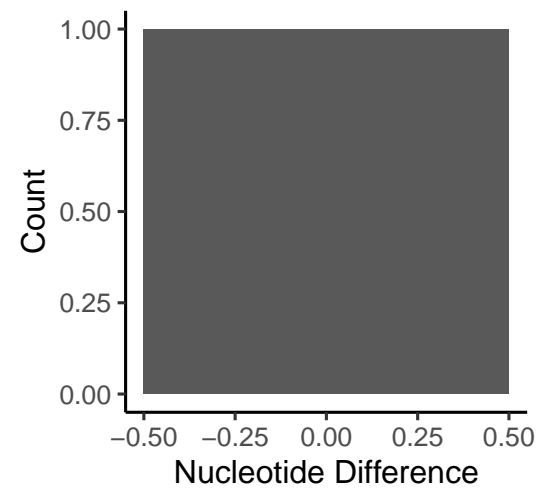
IGHV1-8*01

1361 sequences assigned
1293 (95%) exact matches, in which:
1291 unique CDR3
6 unique J



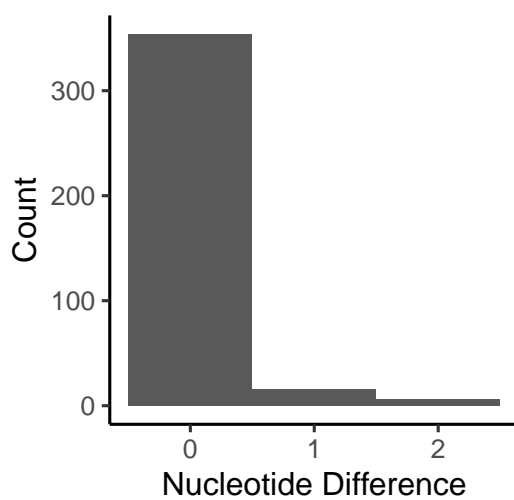
IGHV1-45*02

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



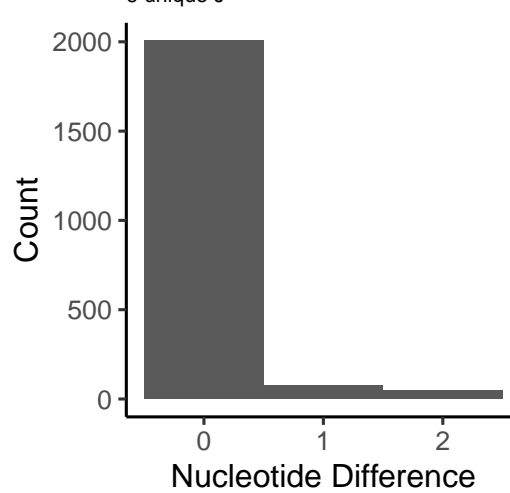
IGHV1-2*04

376 sequences assigned
354 (94.1%) exact matches, in which:
354 unique CDR3
6 unique J



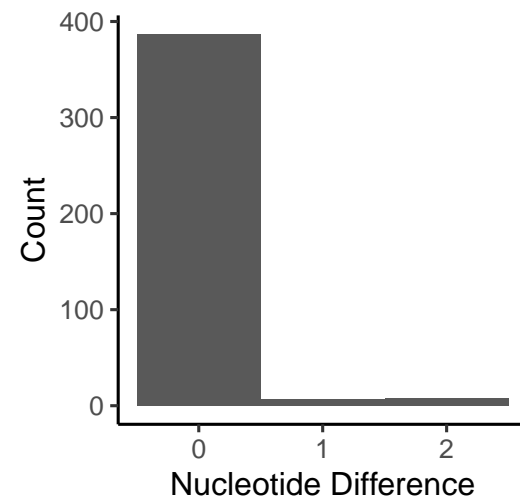
IGHV1-18*01

2132 sequences assigned
2006 (94.1%) exact matches, in which:
1998 unique CDR3
6 unique J



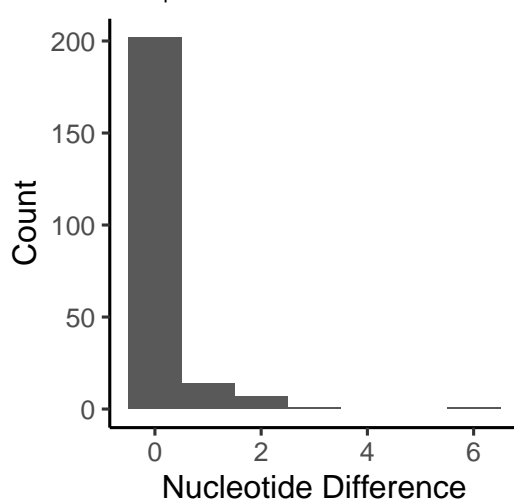
IGHV1-46*01

402 sequences assigned
387 (96.3%) exact matches, in which:
386 unique CDR3
6 unique J



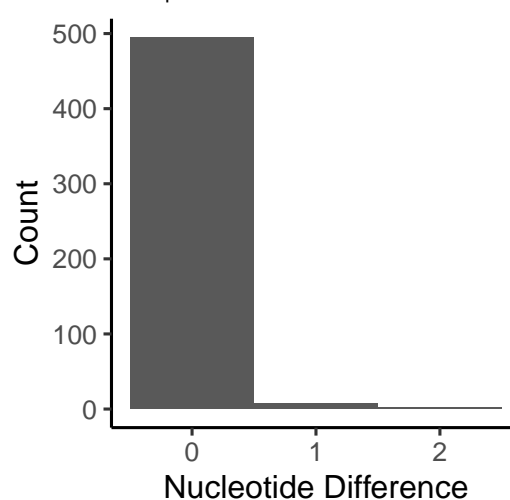
IGHV1-3*01_05

225 sequences assigned
202 (89.8%) exact matches, in which:
202 unique CDR3
6 unique J



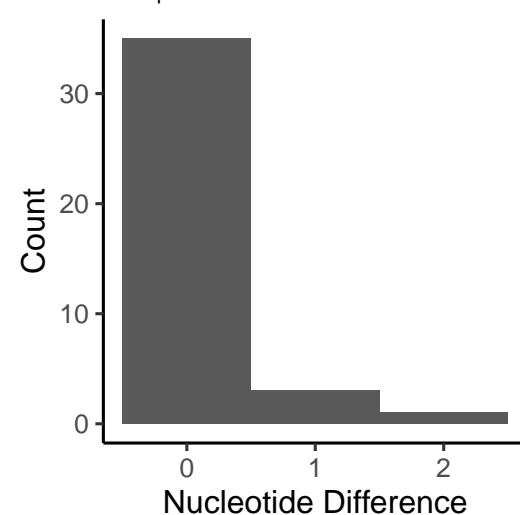
IGHV1-24*01

505 sequences assigned
495 (98%) exact matches, in which:
493 unique CDR3
6 unique J



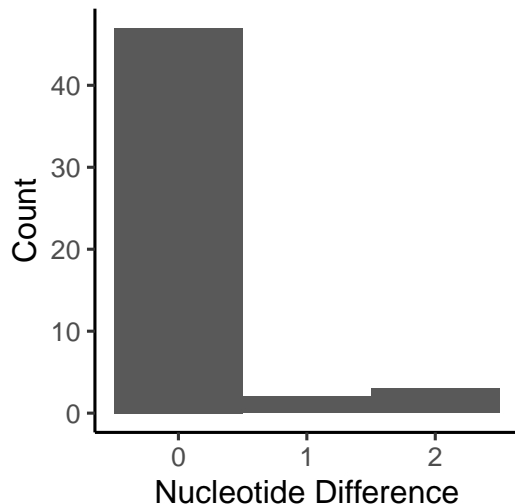
IGHV1-58*02

39 sequences assigned
35 (89.7%) exact matches, in which:
35 unique CDR3
5 unique J



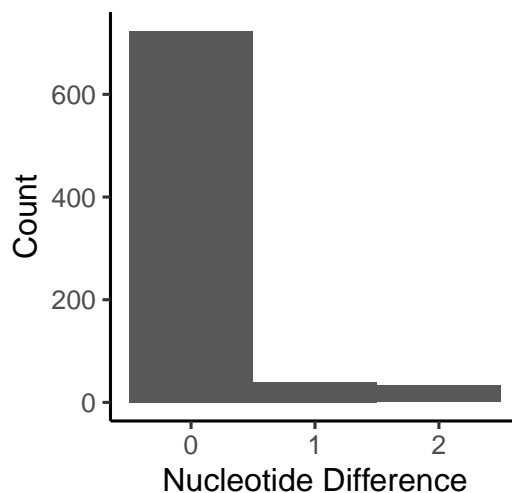
IGHV1–58*01_03

52 sequences assigned
47 (90.4%) exact matches, in which:
47 unique CDR3
5 unique J



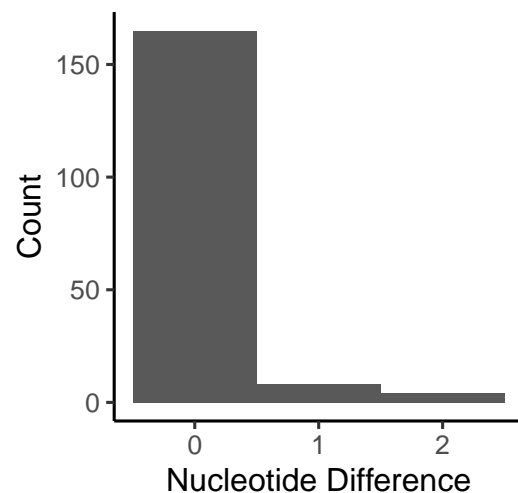
IGHV2–5*01

797 sequences assigned
724 (90.8%) exact matches, in which:
721 unique CDR3
6 unique J



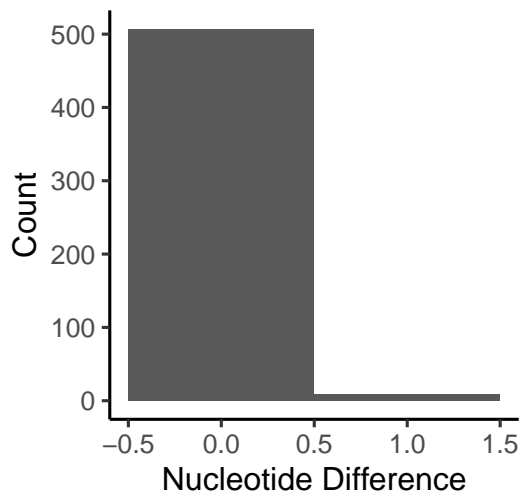
IGHV2–70*01

177 sequences assigned
165 (93.2%) exact matches, in which:
164 unique CDR3
6 unique J



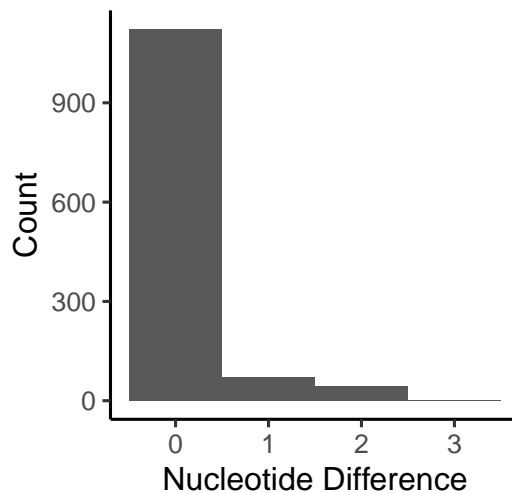
IGHV1–69*01_12_13

516 sequences assigned
507 (98.3%) exact matches, in which:
507 unique CDR3
6 unique J



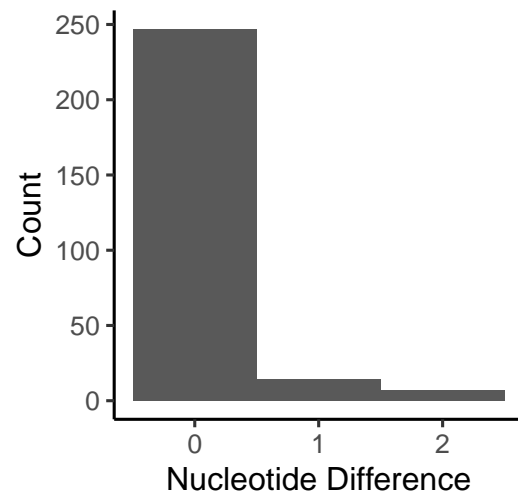
IGHV2–5*02

1239 sequences assigned
1123 (90.6%) exact matches, in which:
1116 unique CDR3
6 unique J



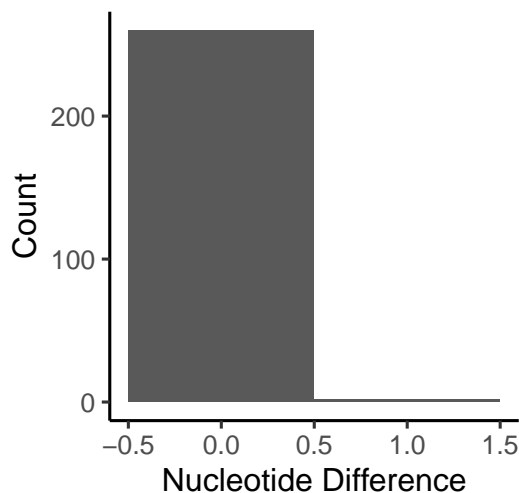
IGHV2–70*11_15

268 sequences assigned
247 (92.2%) exact matches, in which:
246 unique CDR3
5 unique J



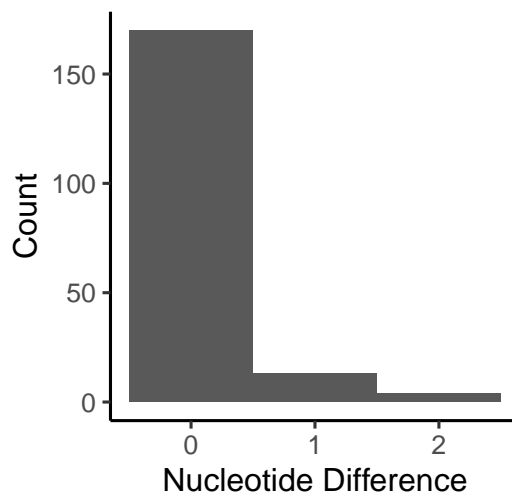
IGHV1–69*04_09

262 sequences assigned
260 (99.2%) exact matches, in which:
260 unique CDR3
6 unique J



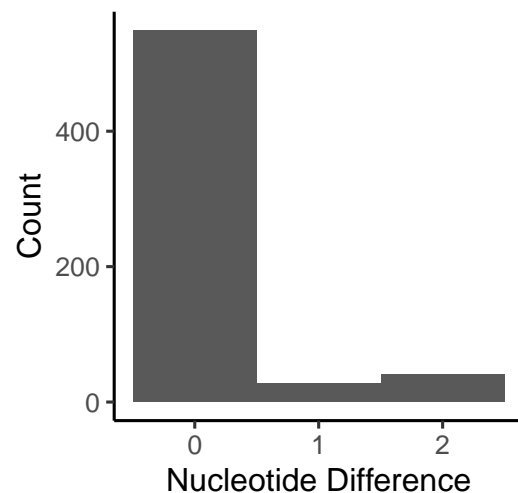
IGHV2–26*01

187 sequences assigned
170 (90.9%) exact matches, in which:
170 unique CDR3
6 unique J



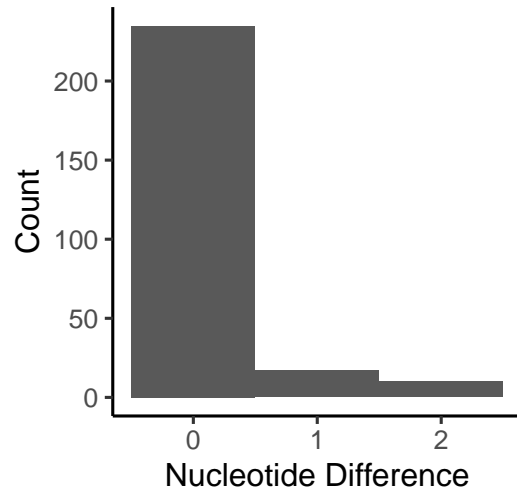
IGHV3–7*01

616 sequences assigned
549 (89.1%) exact matches, in which:
548 unique CDR3
6 unique J



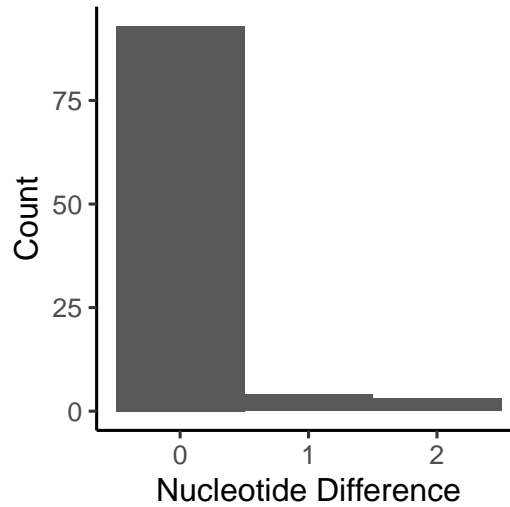
IGHV3-9*01

262 sequences assigned
235 (89.7%) exact matches, in which:
234 unique CDR3
6 unique J



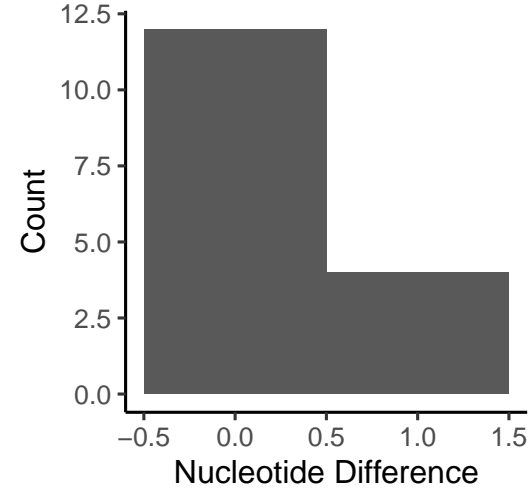
IGHV3-15*07

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



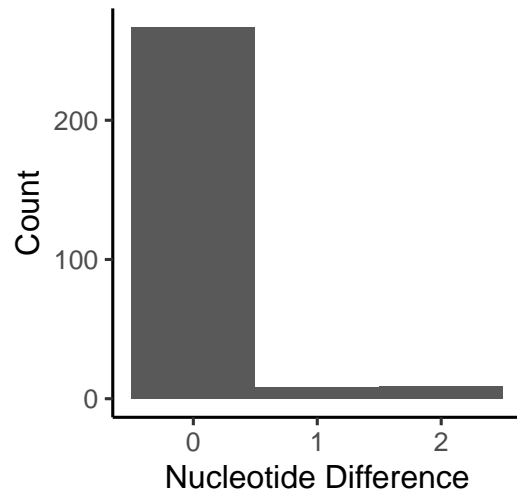
IGHV3-20*03_04

16 sequences assigned
12 (75%) exact matches, in which:
12 unique CDR3
5 unique J



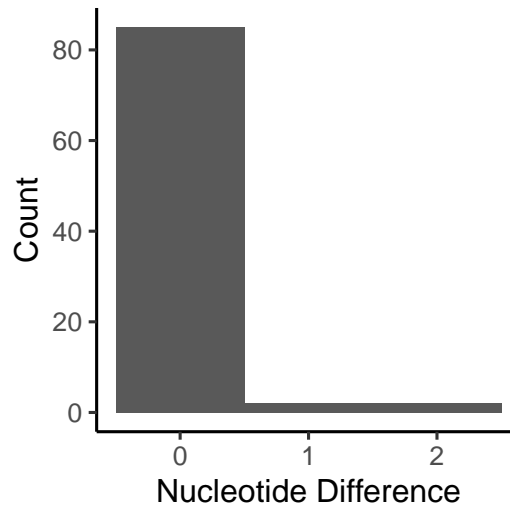
IGHV3-11*01

284 sequences assigned
267 (94%) exact matches, in which:
267 unique CDR3
6 unique J



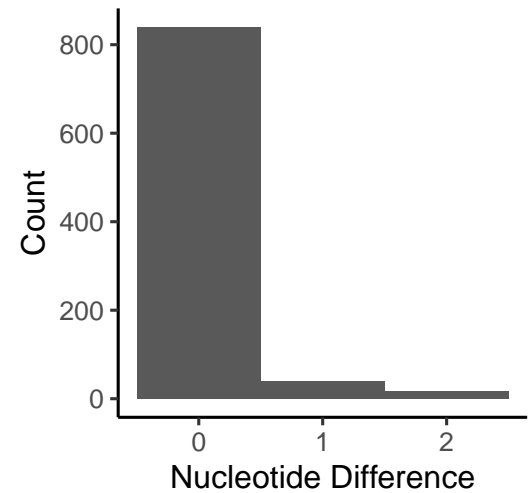
IGHV3-15*01_02

89 sequences assigned
85 (95.5%) exact matches, in which:
85 unique CDR3
5 unique J



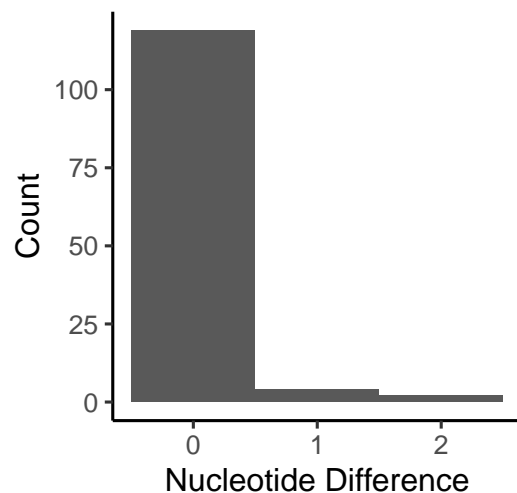
IGHV3-21*01_02

896 sequences assigned
840 (93.8%) exact matches, in which:
838 unique CDR3
6 unique J



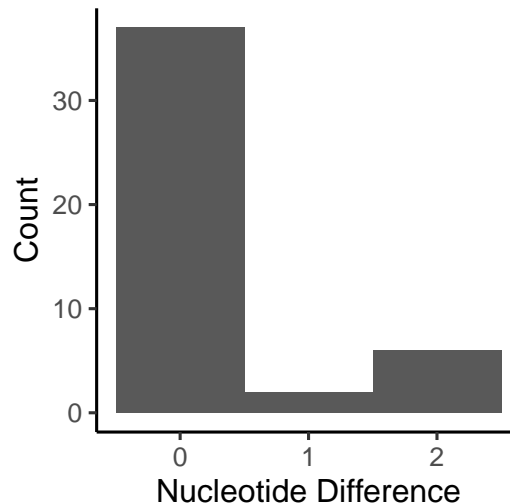
IGHV3-13*01

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



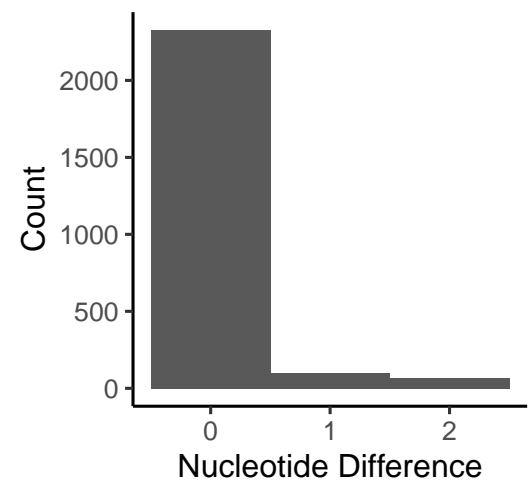
IGHV3-20*01_02

45 sequences assigned
37 (82.2%) exact matches, in which:
37 unique CDR3
5 unique J



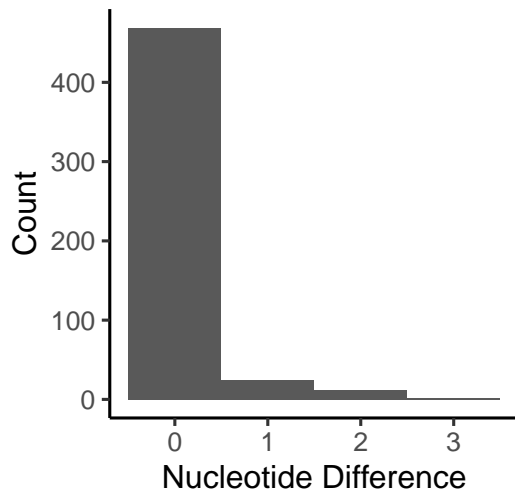
IGHV3-23*01_04

2495 sequences assigned
2327 (93.3%) exact matches, in which:
2309 unique CDR3
6 unique J



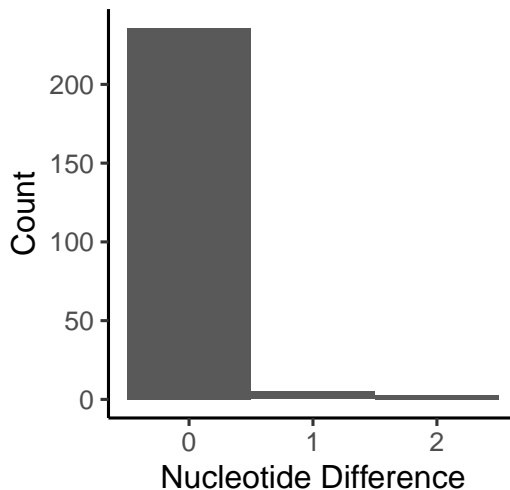
IGHV3-30-3*01

507 sequences assigned
469 (92.5%) exact matches, in which:
468 unique CDR3
6 unique J



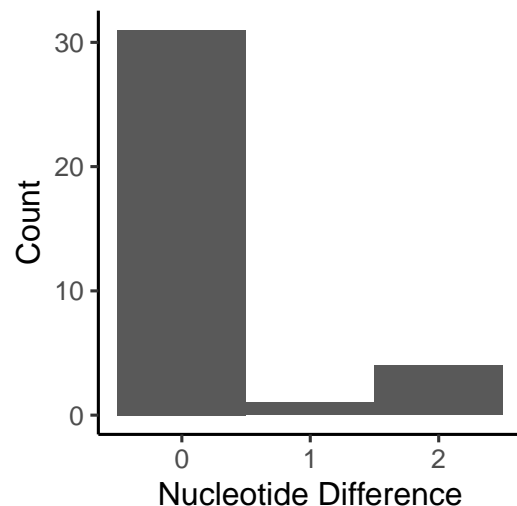
IGHV3-43*02

244 sequences assigned
236 (96.7%) exact matches, in which:
235 unique CDR3
6 unique J



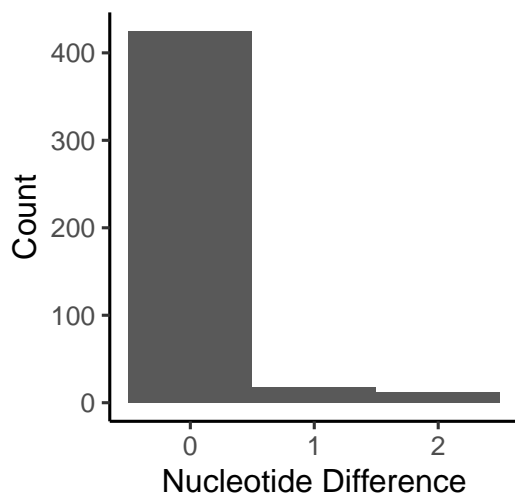
IGHV3-49*04

36 sequences assigned
31 (86.1%) exact matches, in which:
31 unique CDR3
4 unique J



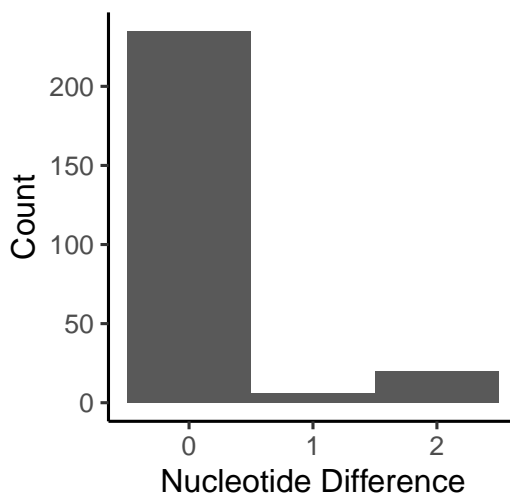
IGHV3-33*01

455 sequences assigned
425 (93.4%) exact matches, in which:
423 unique CDR3
6 unique J



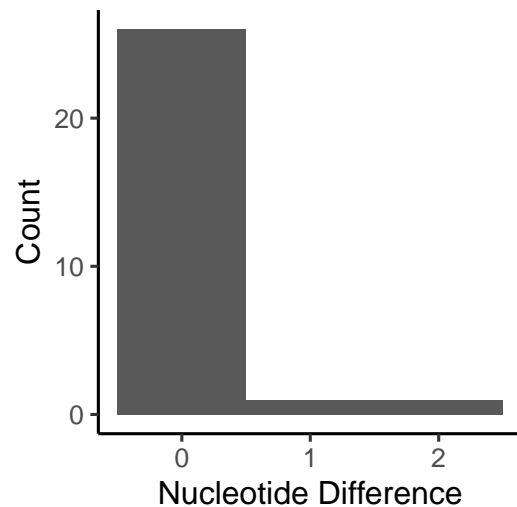
IGHV3-48*02

261 sequences assigned
235 (90%) exact matches, in which:
233 unique CDR3
6 unique J



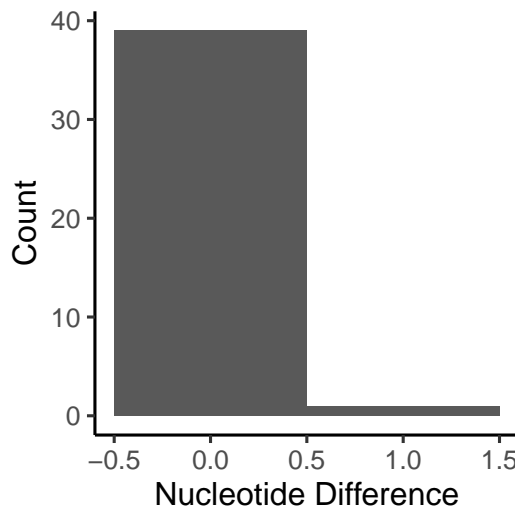
IGHV3-49*03_05

28 sequences assigned
26 (92.9%) exact matches, in which:
26 unique CDR3
5 unique J



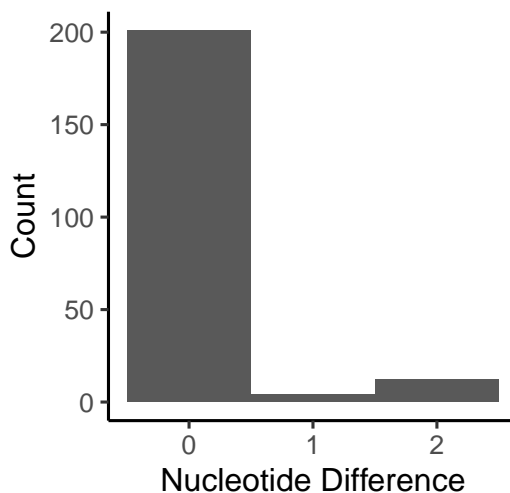
IGHV3-43*01

40 sequences assigned
39 (97.5%) exact matches, in which:
39 unique CDR3
5 unique J



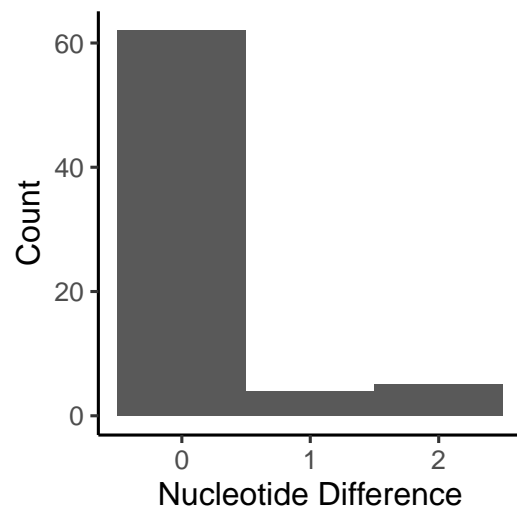
IGHV3-48*03

217 sequences assigned
201 (92.6%) exact matches, in which:
201 unique CDR3
6 unique J



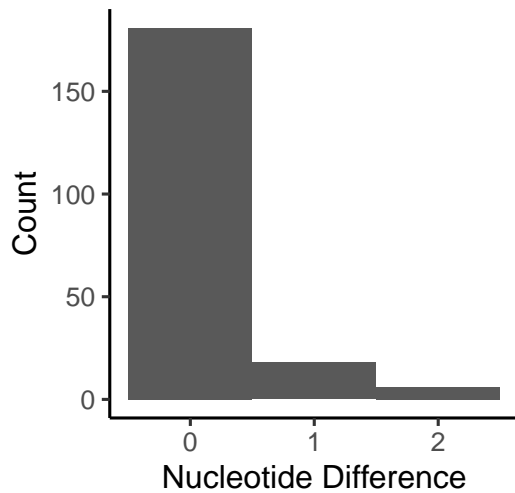
IGHV3-53*04

71 sequences assigned
62 (87.3%) exact matches, in which:
62 unique CDR3
5 unique J



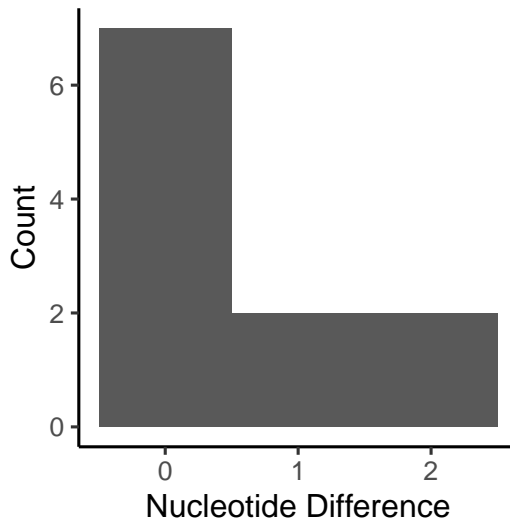
IGHV3-53*01_02

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



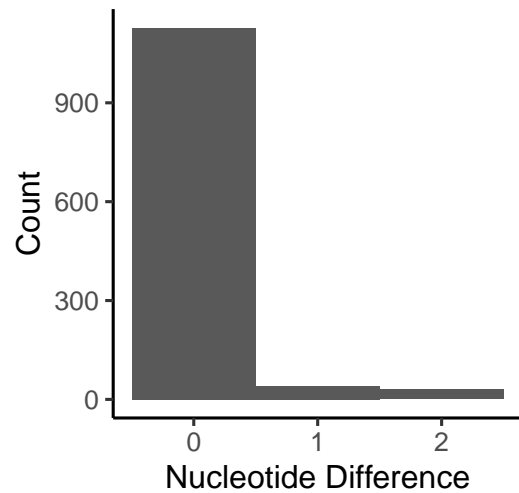
IGHV3-72*01

11 sequences assigned
7 (63.6%) exact matches, in which:
7 unique CDR3
3 unique J



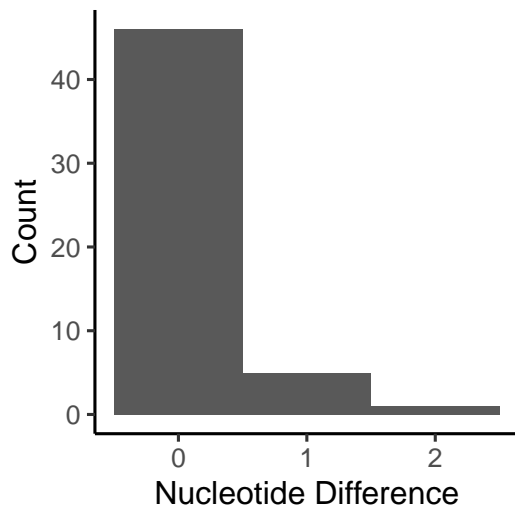
IGHV4-4*07

1199 sequences assigned
1128 (94.1%) exact matches, in which:
1110 unique CDR3
6 unique J



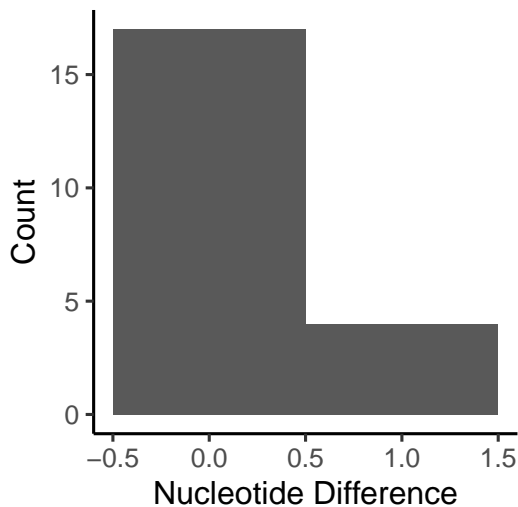
IGHV3-64*01

52 sequences assigned
46 (88.5%) exact matches, in which:
46 unique CDR3
5 unique J



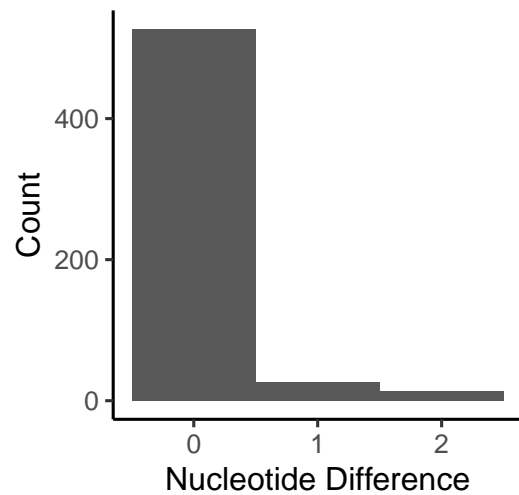
IGHV3-73*01_02

21 sequences assigned
17 (81%) exact matches, in which:
17 unique CDR3
4 unique J



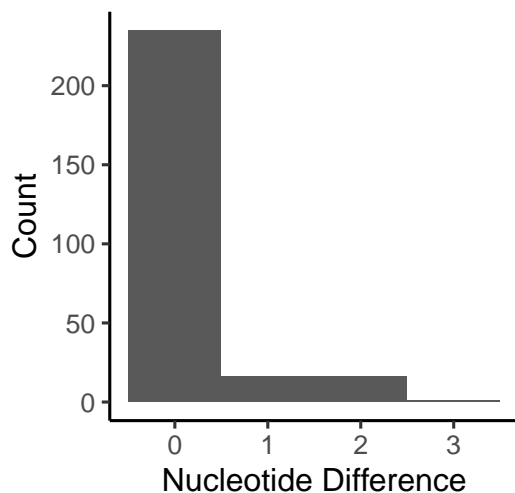
IGHV4-4*02_03

566 sequences assigned
527 (93.1%) exact matches, in which:
525 unique CDR3
6 unique J



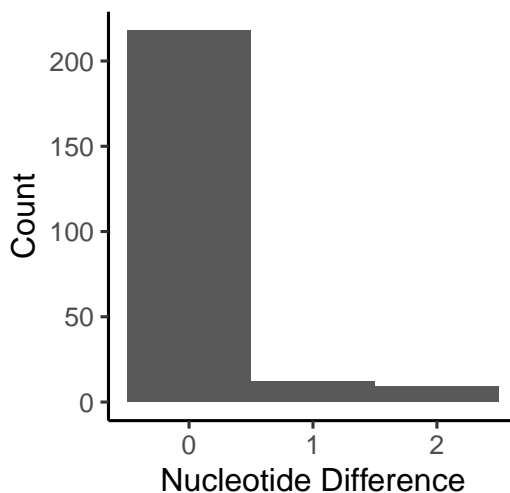
IGHV3-66*01

268 sequences assigned
235 (87.7%) exact matches, in which:
232 unique CDR3
6 unique J



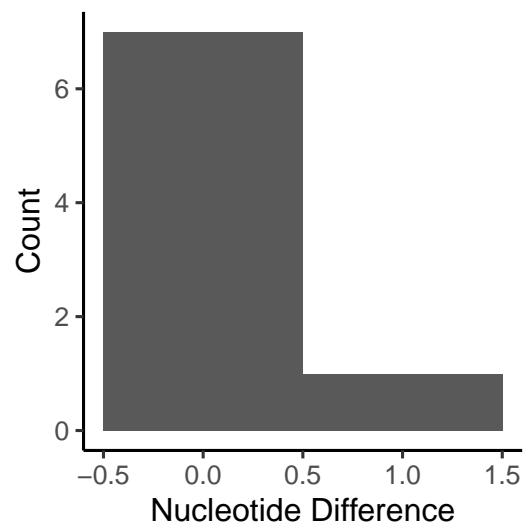
IGHV3-74*01_02

239 sequences assigned
218 (91.2%) exact matches, in which:
213 unique CDR3
5 unique J



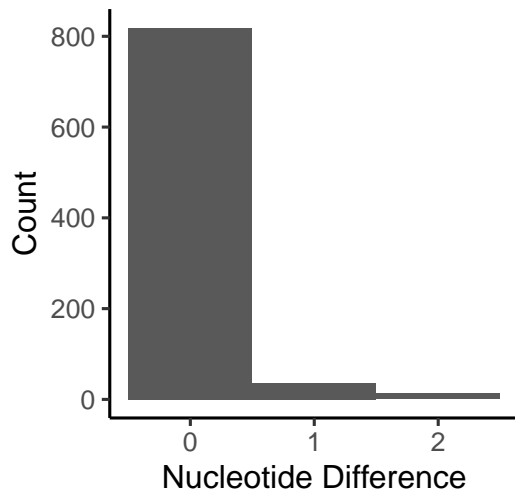
IGHV4-28*01_07

8 sequences assigned
7 (87.5%) exact matches, in which:
7 unique CDR3
5 unique J



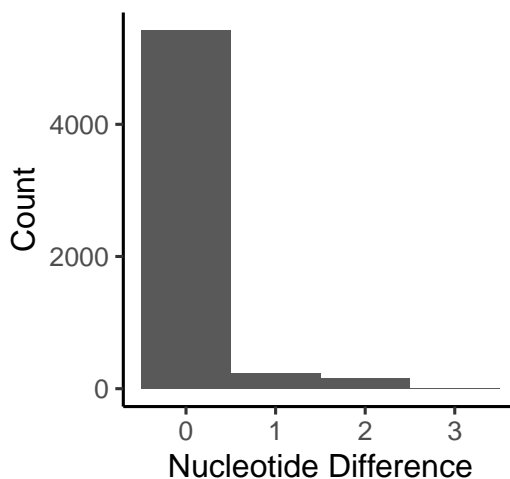
IGHV4-30-2*01

868 sequences assigned
819 (94.4%) exact matches, in which:
786 unique CDR3
6 unique J



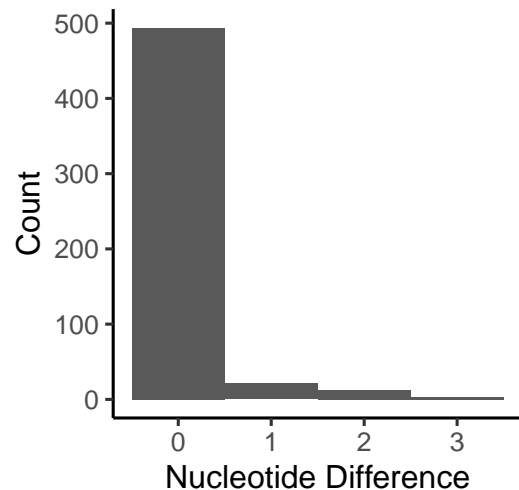
IGHV4-34*01_02

5826 sequences assigned
5421 (93%) exact matches, in which:
5304 unique CDR3
6 unique J



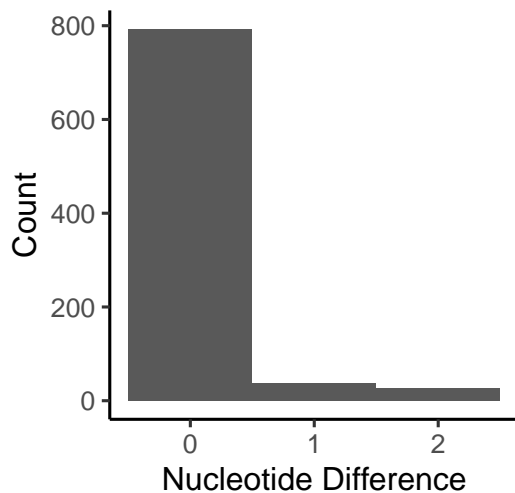
IGHV4-61*01

531 sequences assigned
494 (93%) exact matches, in which:
485 unique CDR3
6 unique J



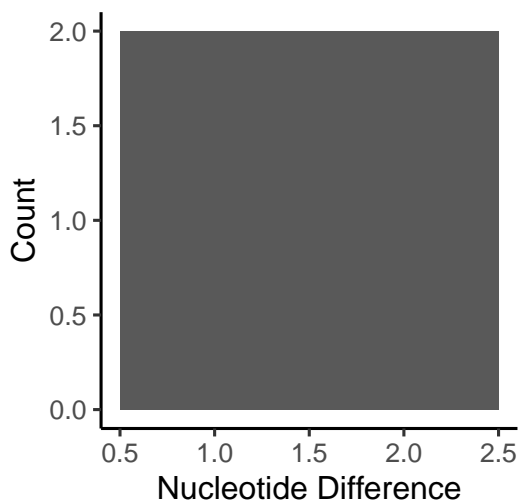
IGHV4-30-4*01

857 sequences assigned
793 (92.5%) exact matches, in which:
785 unique CDR3
6 unique J



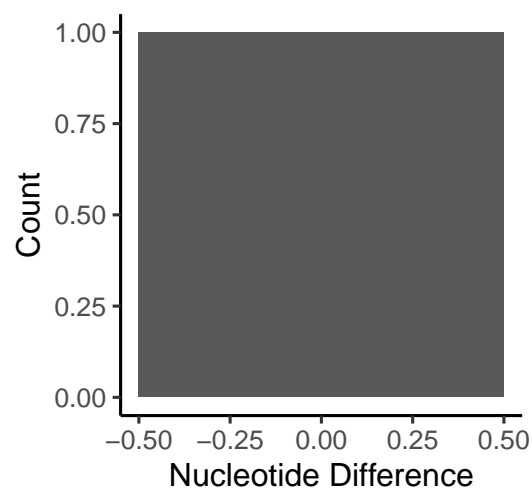
IGHV4-39*02

4 sequences assigned
No exact matches.



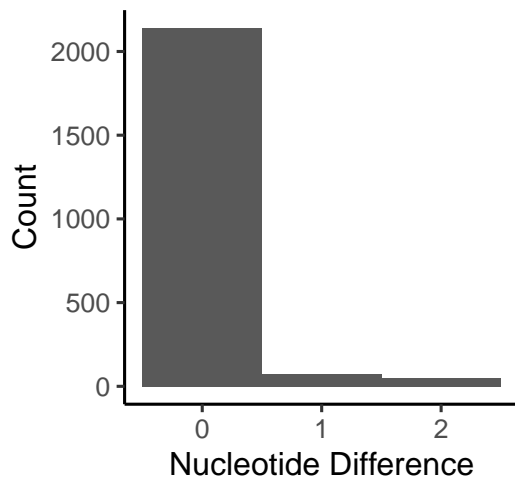
IGHV5-51*01_03

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



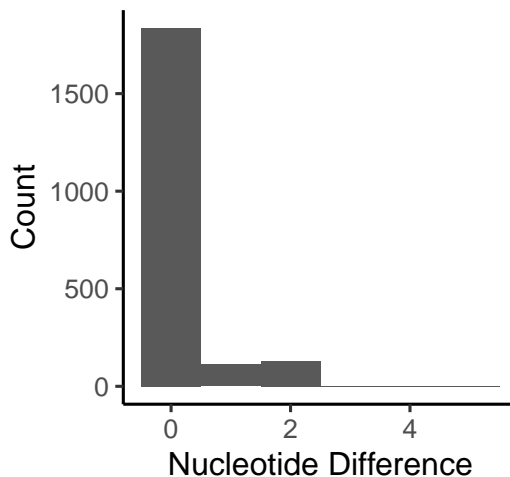
IGHV4-31*02

2262 sequences assigned
2140 (94.6%) exact matches, in which:
2119 unique CDR3
6 unique J



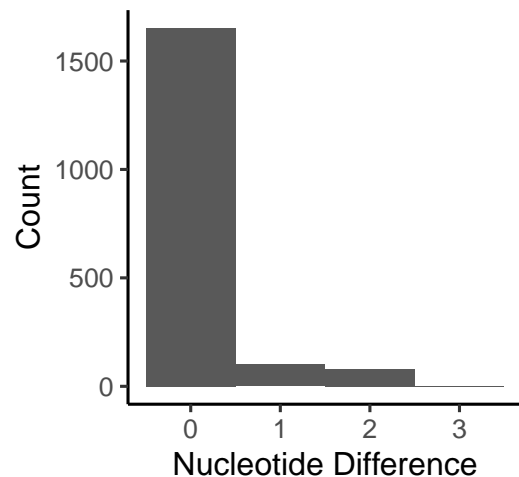
IGHV4-59*08

2085 sequences assigned
1836 (88.1%) exact matches, in which:
1799 unique CDR3
6 unique J



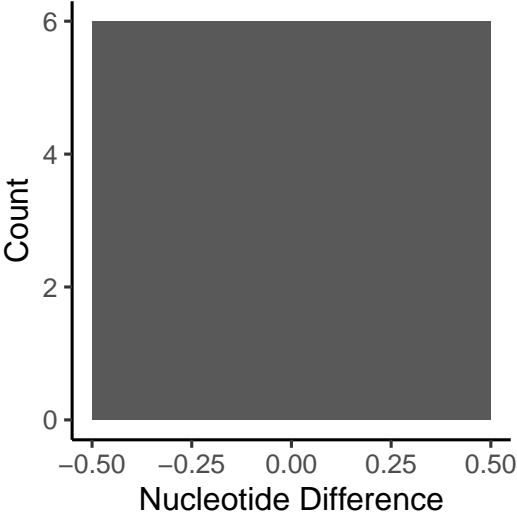
IGHV6-1*01_02

1834 sequences assigned
1652 (90.1%) exact matches, in which:
1626 unique CDR3
6 unique J



IGHV7-4-1*01

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





Warning – no inferred sequences found.