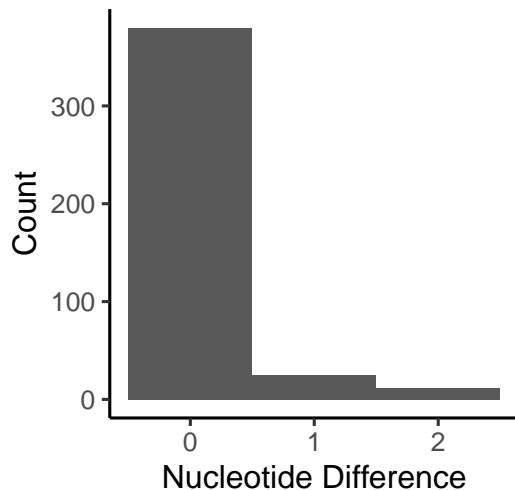


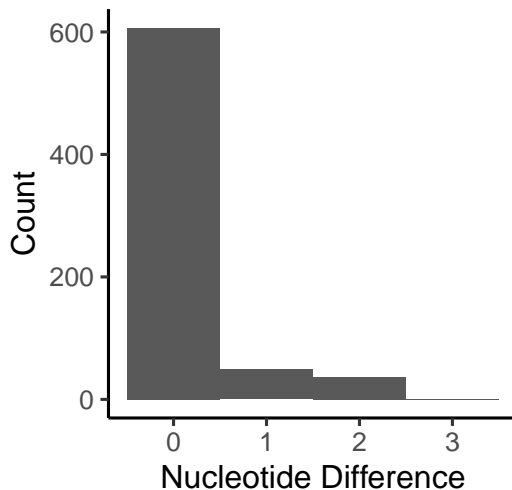
IGHV1-2*02

417 sequences assigned
380 (91.1%) exact matches, in which:
380 unique CDR3
7 unique J



IGHV1-8*01

694 sequences assigned
607 (87.5%) exact matches, in which:
607 unique CDR3
7 unique J



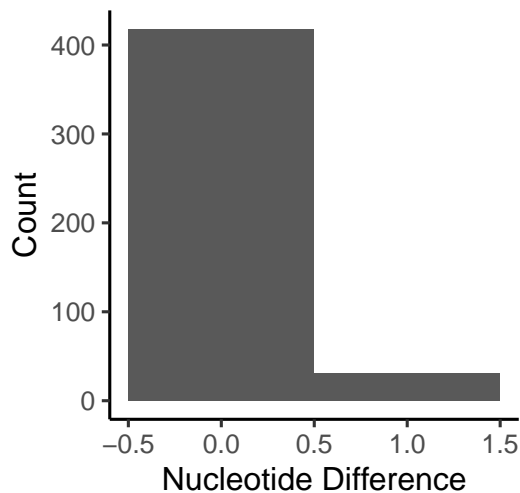
IGHV1-45*02

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



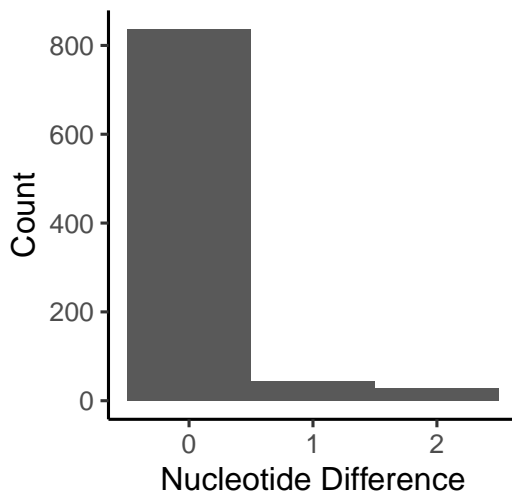
IGHV1-2*06

449 sequences assigned
418 (93.1%) exact matches, in which:
417 unique CDR3
7 unique J



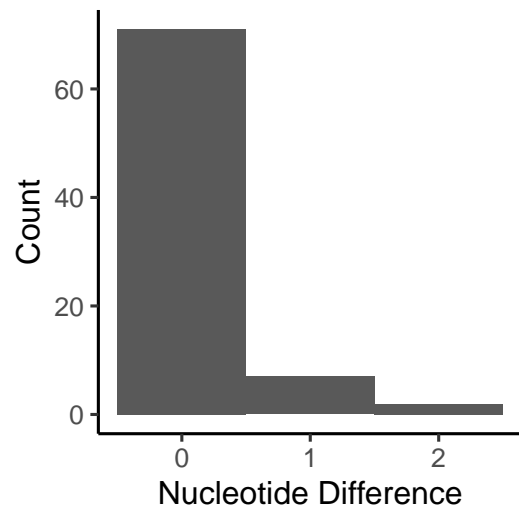
IGHV1-18*01

911 sequences assigned
837 (91.9%) exact matches, in which:
836 unique CDR3
7 unique J



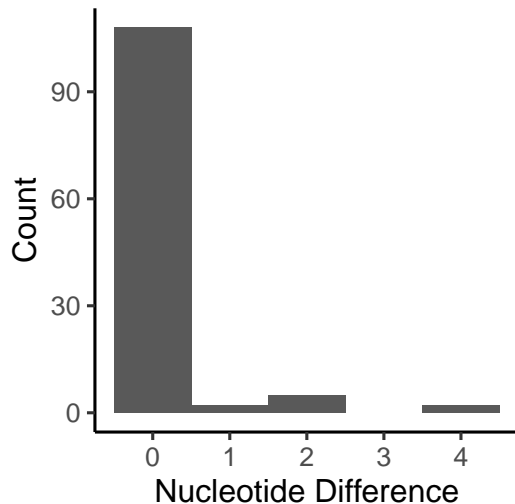
IGHV1-46*01

80 sequences assigned
71 (88.8%) exact matches, in which:
71 unique CDR3
6 unique J



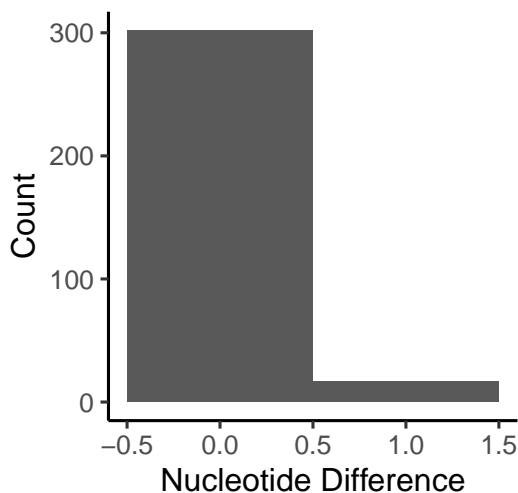
IGHV1-3*01_05

117 sequences assigned
108 (92.3%) exact matches, in which:
108 unique CDR3
6 unique J



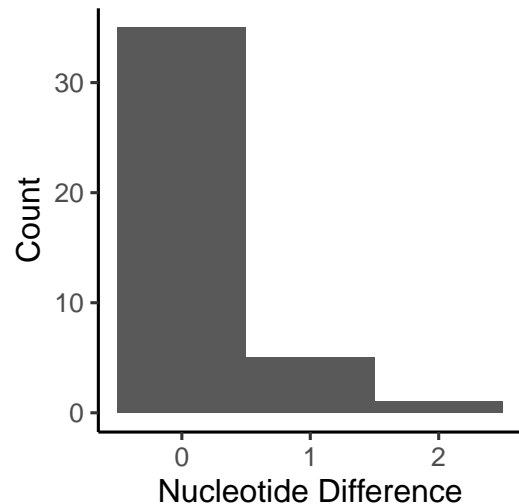
IGHV1-24*01

319 sequences assigned
302 (94.7%) exact matches, in which:
302 unique CDR3
7 unique J



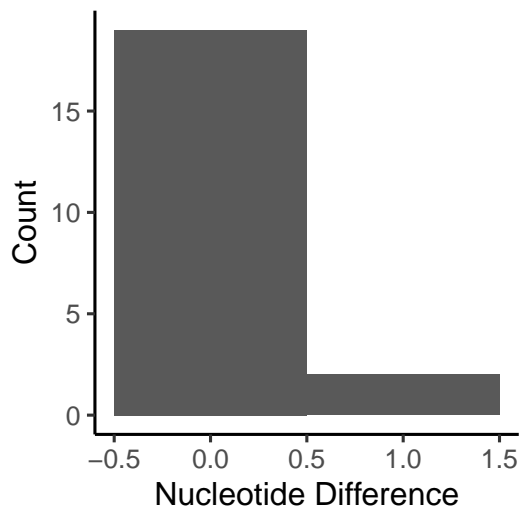
IGHV1-46*03

41 sequences assigned
35 (85.4%) exact matches, in which:
35 unique CDR3
5 unique J



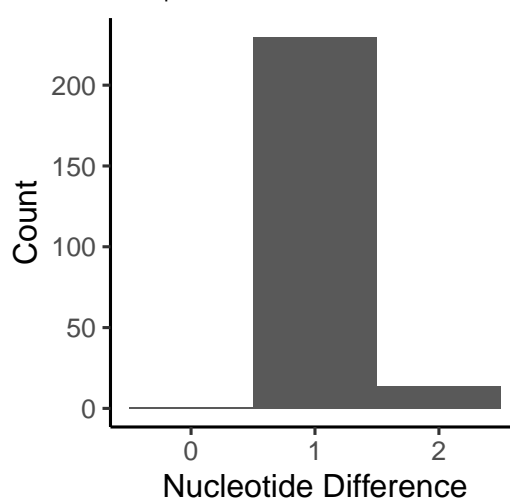
IGHV1-58*02

21 sequences assigned
19 (90.5%) exact matches, in which:
19 unique CDR3
6 unique J



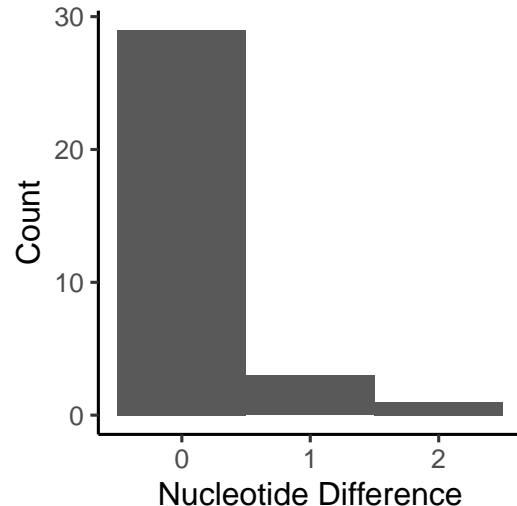
IGHV1-69*04_09

245 sequences assigned
1 (0.4%) exact matches, in which:
1 unique CDR3
1 unique J



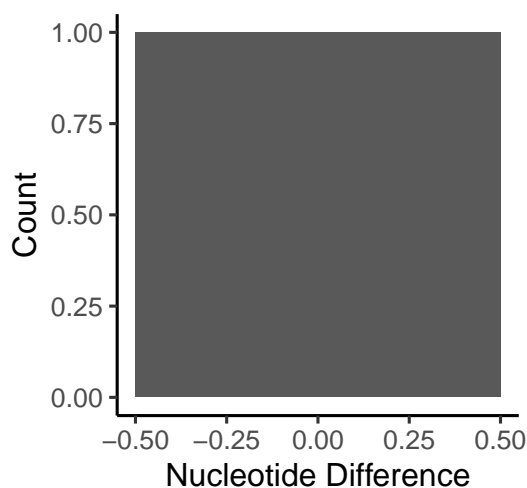
IGHV2-26*01

33 sequences assigned
29 (87.9%) exact matches, in which:
29 unique CDR3
6 unique J



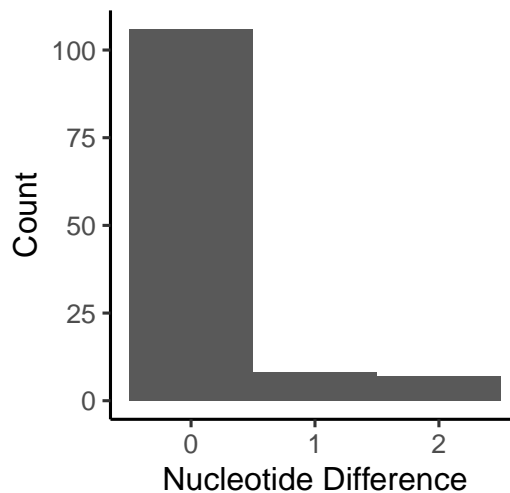
IGHV1-69-2*01

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



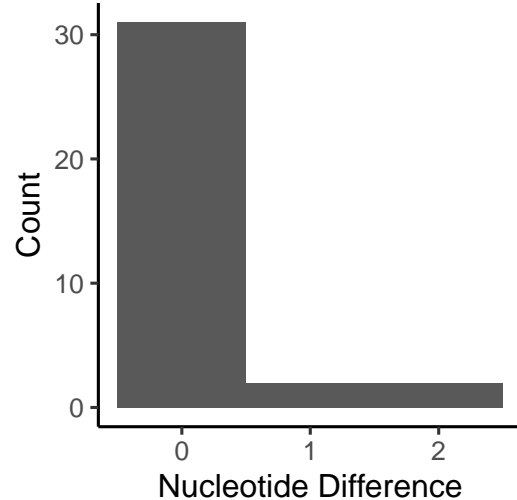
IGHV2-5*01

121 sequences assigned
106 (87.6%) exact matches, in which:
105 unique CDR3
6 unique J



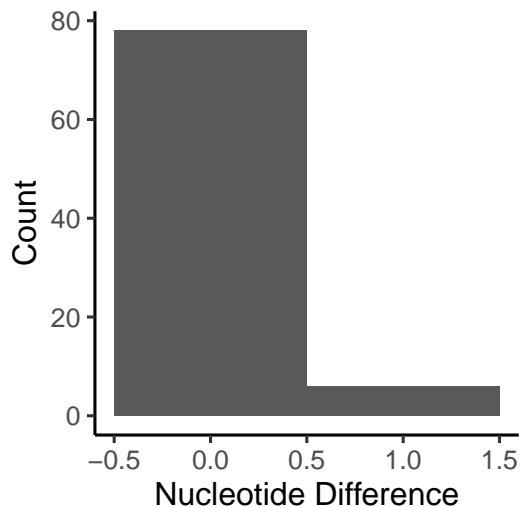
IGHV2-70*01

35 sequences assigned
31 (88.6%) exact matches, in which:
31 unique CDR3
4 unique J



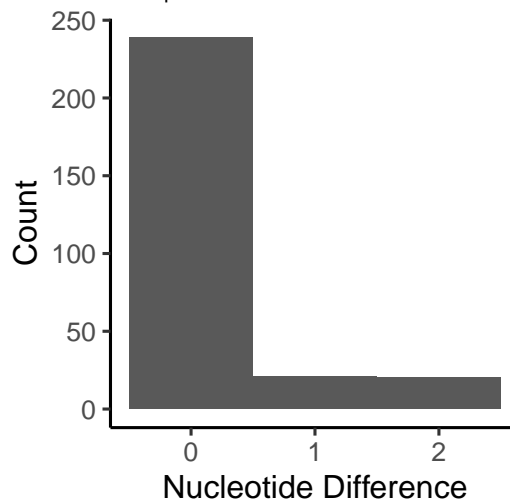
IGHV1-69*02

84 sequences assigned
78 (92.9%) exact matches, in which:
78 unique CDR3
6 unique J



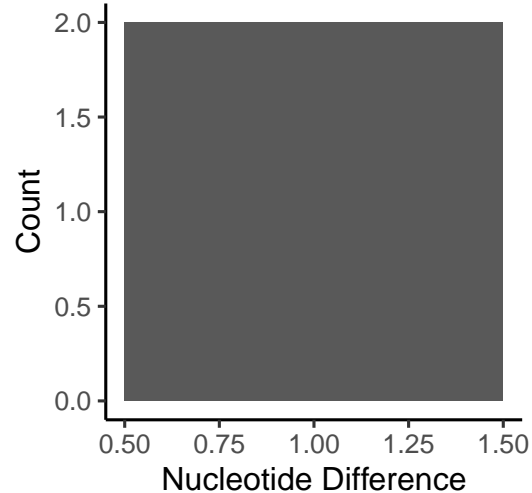
IGHV2-5*02

280 sequences assigned
239 (85.4%) exact matches, in which:
239 unique CDR3
6 unique J



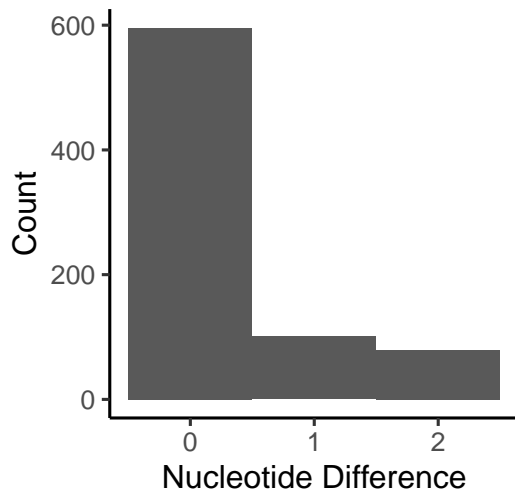
IGHV2-70D*04

2 sequences assigned
No exact matches.



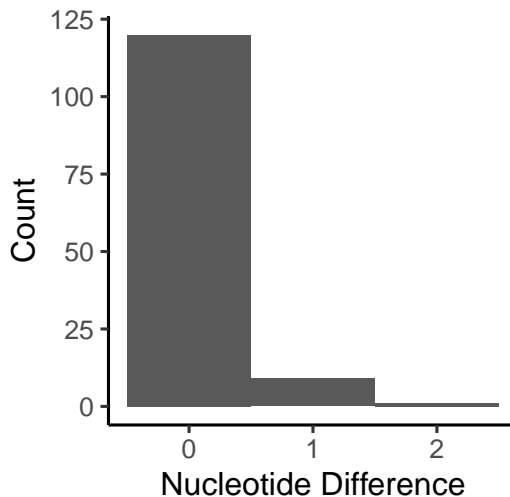
IGHV3-7*01

776 sequences assigned
596 (76.8%) exact matches, in which:
554 unique CDR3
7 unique J



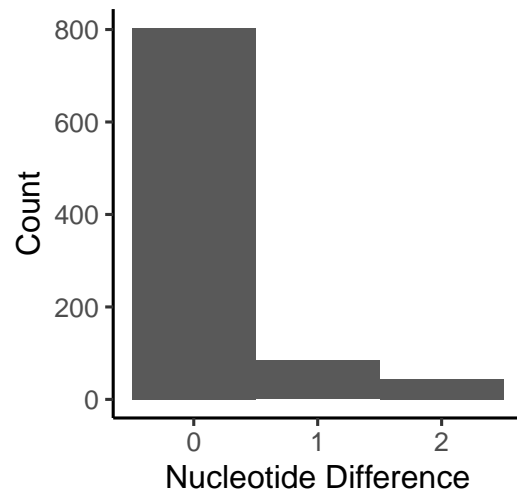
IGHV3-13*01

130 sequences assigned
120 (92.3%) exact matches, in which:
120 unique CDR3
6 unique J



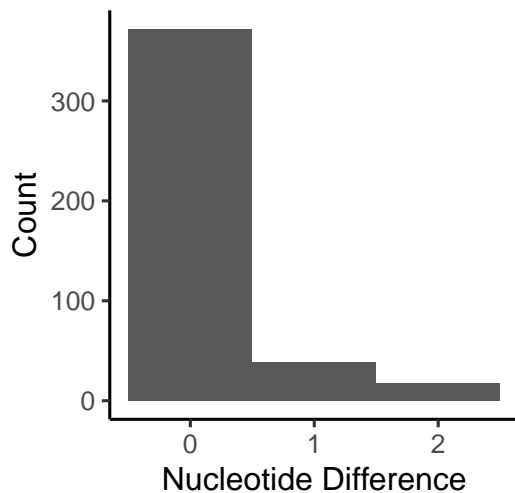
IGHV3-21*01_02

933 sequences assigned
804 (86.2%) exact matches, in which:
774 unique CDR3
7 unique J



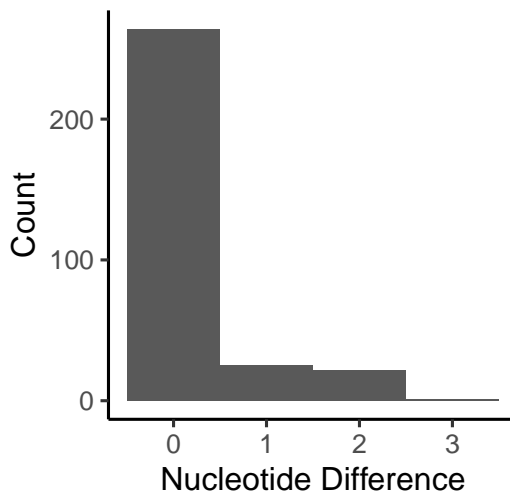
IGHV3-9*01

429 sequences assigned
372 (86.7%) exact matches, in which:
363 unique CDR3
7 unique J



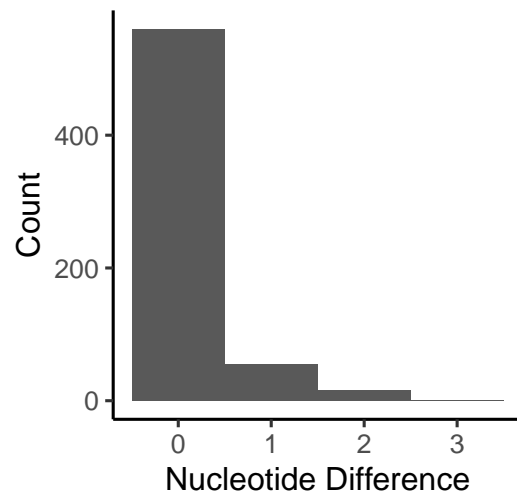
IGHV3-15*01_02

312 sequences assigned
264 (84.6%) exact matches, in which:
254 unique CDR3
7 unique J



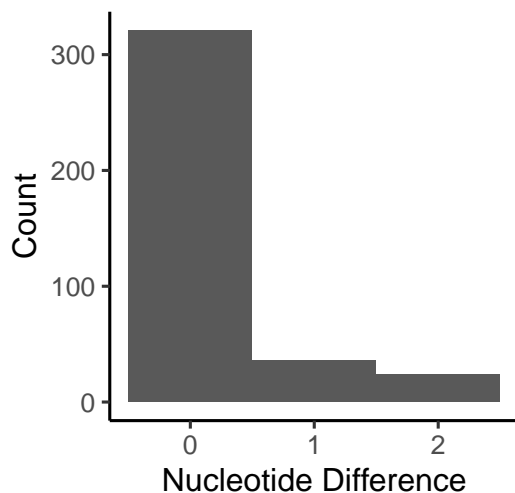
IGHV3-30-3*01

632 sequences assigned
560 (88.6%) exact matches, in which:
550 unique CDR3
7 unique J



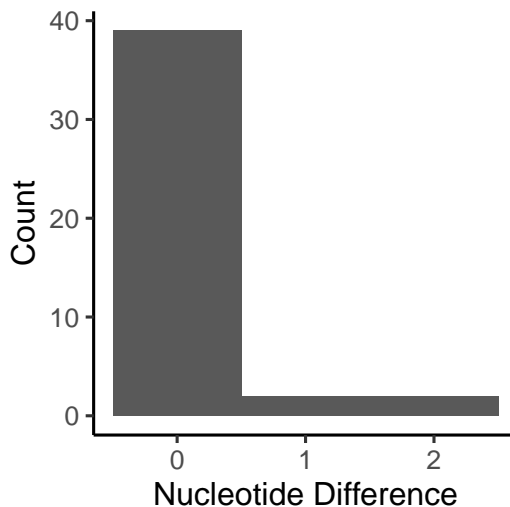
IGHV3-11*01

381 sequences assigned
321 (84.3%) exact matches, in which:
316 unique CDR3
7 unique J



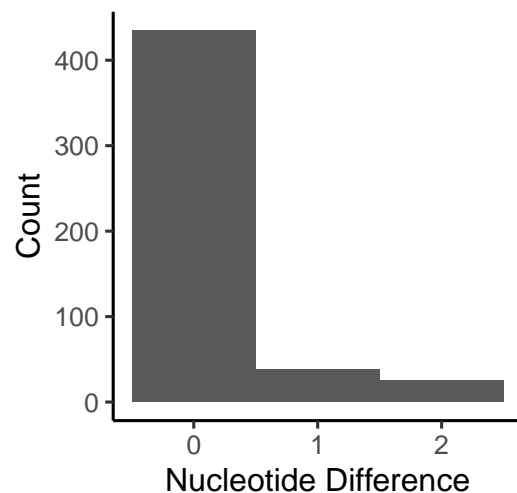
IGHV3-20*01_02

43 sequences assigned
39 (90.7%) exact matches, in which:
38 unique CDR3
6 unique J



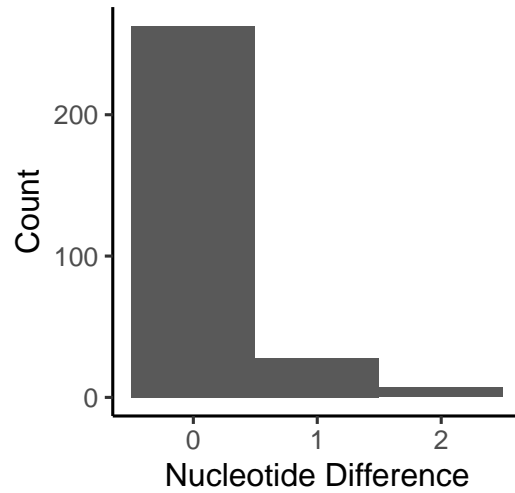
IGHV3-33*01

498 sequences assigned
435 (87.3%) exact matches, in which:
431 unique CDR3
7 unique J



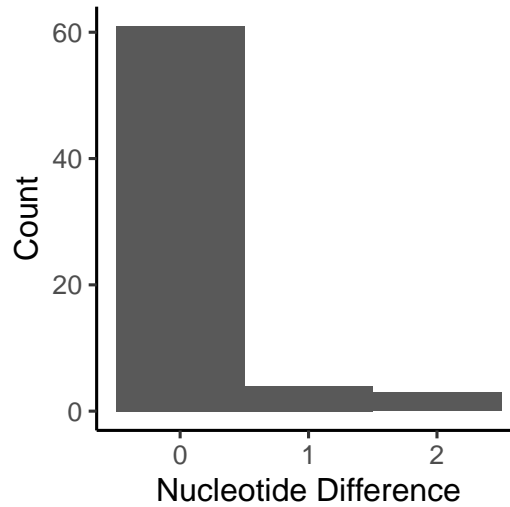
IGHV3-43*02

298 sequences assigned
263 (88.3%) exact matches, in which:
253 unique CDR3
7 unique J



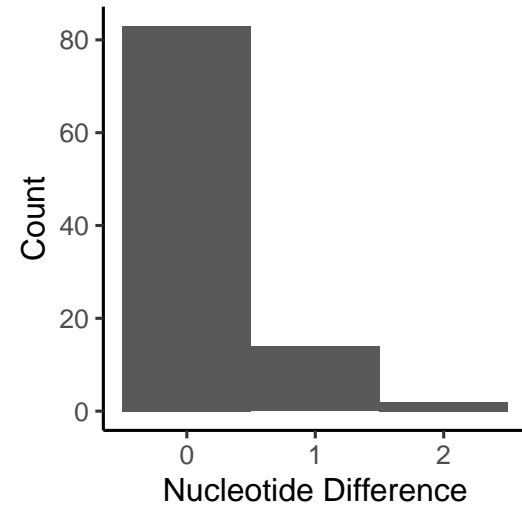
IGHV3-49*04

68 sequences assigned
61 (89.7%) exact matches, in which:
59 unique CDR3
5 unique J



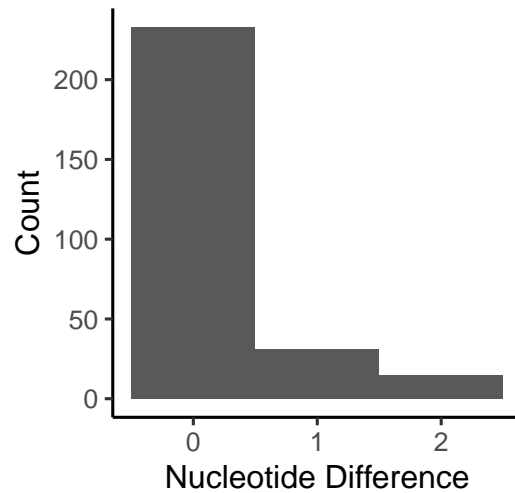
IGHV3-53*01_02

99 sequences assigned
83 (83.8%) exact matches, in which:
81 unique CDR3
6 unique J



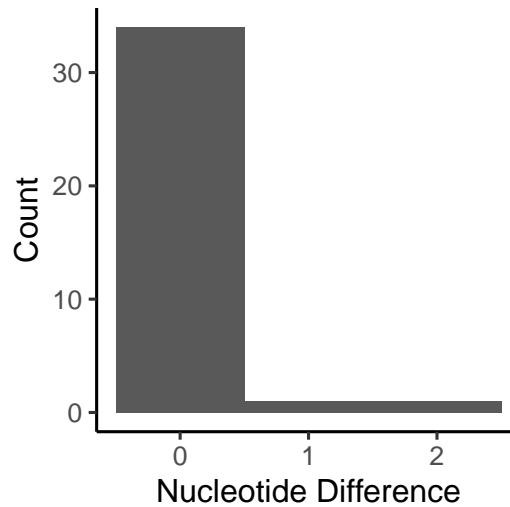
IGHV3-48*01

279 sequences assigned
233 (83.5%) exact matches, in which:
221 unique CDR3
6 unique J



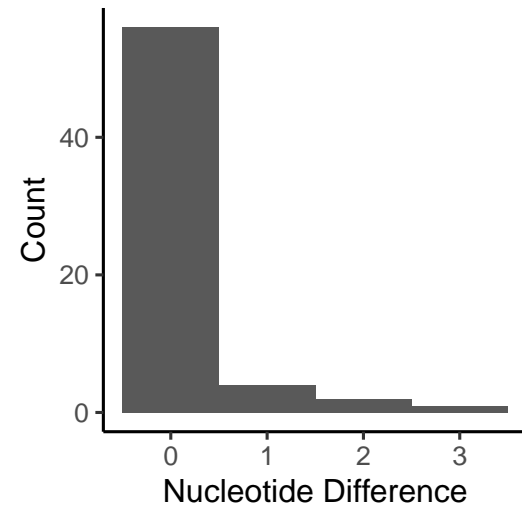
IGHV3-49*03_05

36 sequences assigned
34 (94.4%) exact matches, in which:
34 unique CDR3
5 unique J



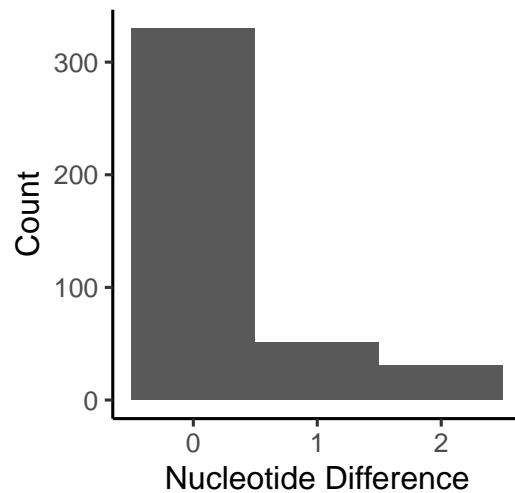
IGHV3-64*01

63 sequences assigned
56 (88.9%) exact matches, in which:
55 unique CDR3
5 unique J



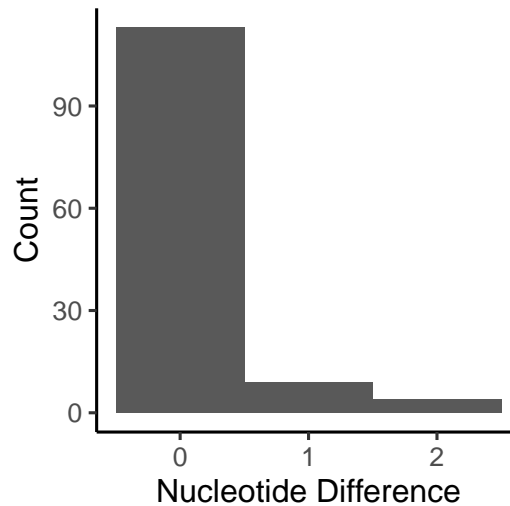
IGHV3-48*03

412 sequences assigned
330 (80.1%) exact matches, in which:
310 unique CDR3
6 unique J



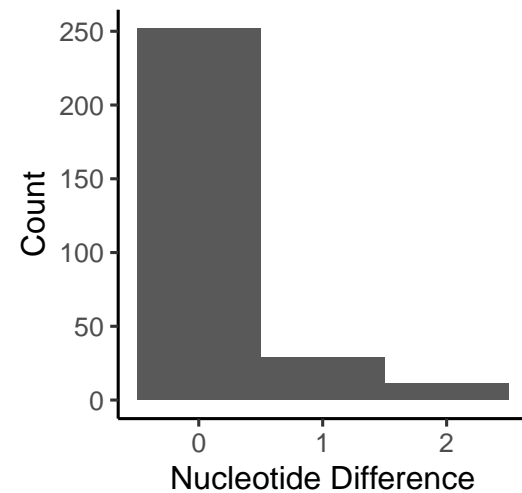
IGHV3-53*04

126 sequences assigned
113 (89.7%) exact matches, in which:
109 unique CDR3
5 unique J



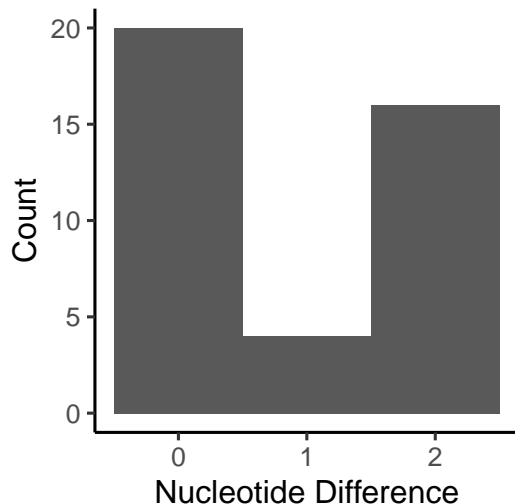
IGHV3-66*02

292 sequences assigned
252 (86.3%) exact matches, in which:
245 unique CDR3
6 unique J



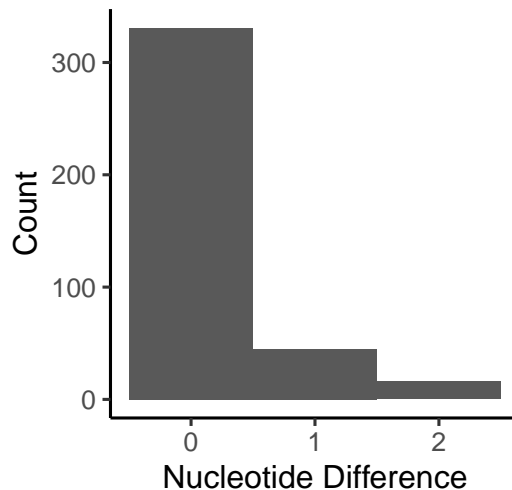
IGHV3-72*01

40 sequences assigned
20 (50%) exact matches, in which:
18 unique CDR3
5 unique J



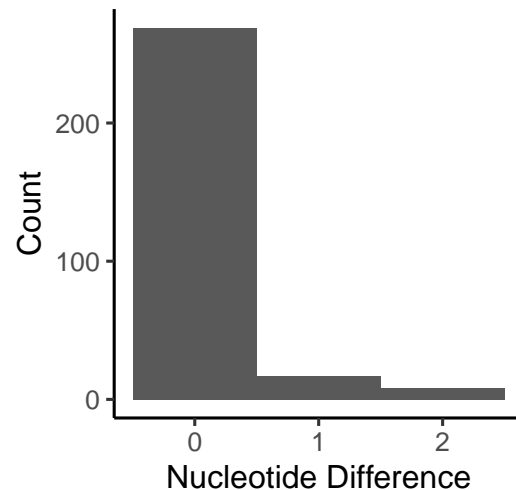
IGHV4-4*07

392 sequences assigned
331 (84.4%) exact matches, in which:
320 unique CDR3
6 unique J



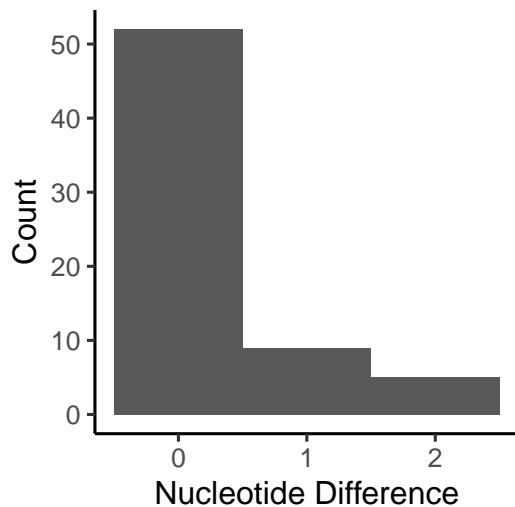
IGHV4-30-4*01

294 sequences assigned
269 (91.5%) exact matches, in which:
261 unique CDR3
7 unique J



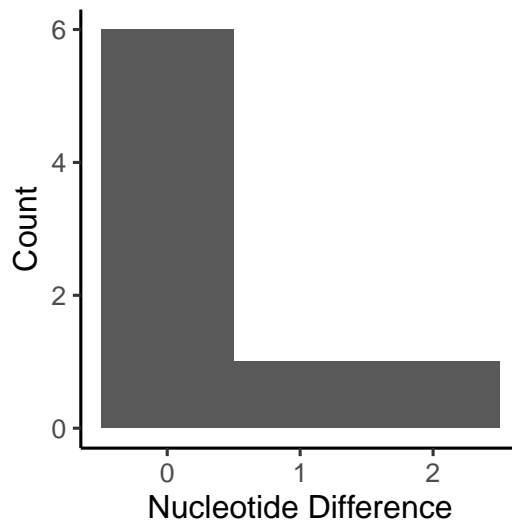
IGHV3-73*01_02

66 sequences assigned
52 (78.8%) exact matches, in which:
49 unique CDR3
5 unique J



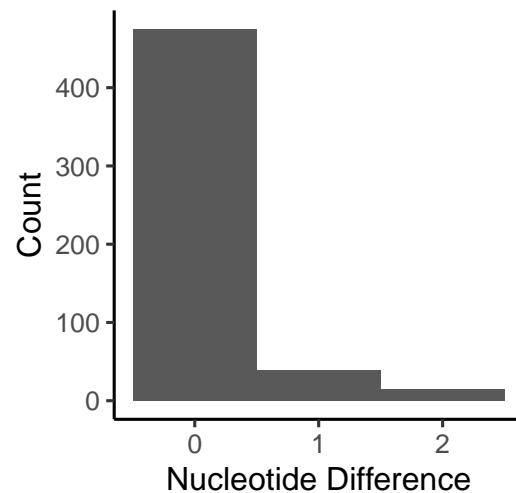
IGHV4-28*01_07

8 sequences assigned
6 (75%) exact matches, in which:
6 unique CDR3
3 unique J



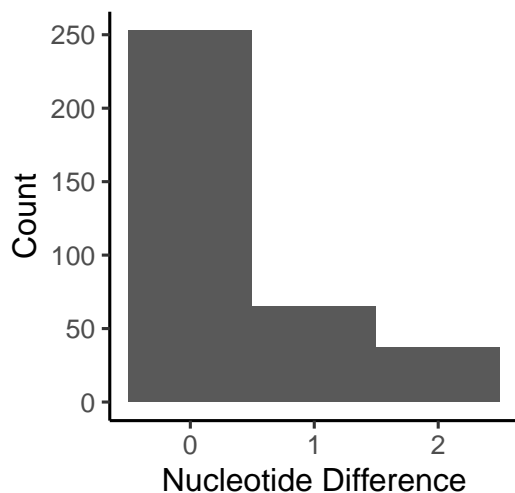
IGHV4-31*03_04

529 sequences assigned
475 (89.8%) exact matches, in which:
467 unique CDR3
7 unique J



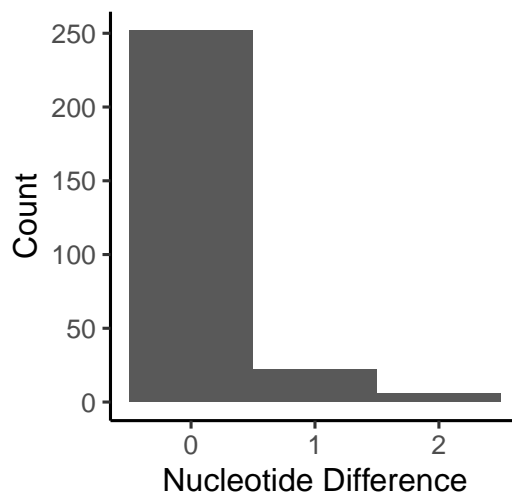
IGHV3-74*01_02

355 sequences assigned
253 (71.3%) exact matches, in which:
240 unique CDR3
7 unique J



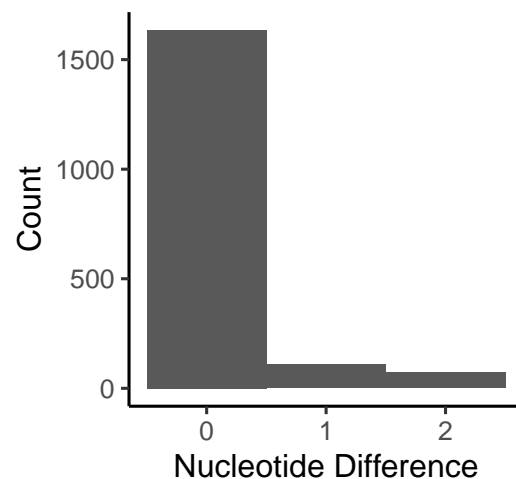
IGHV4-30-2*01

280 sequences assigned
252 (90%) exact matches, in which:
250 unique CDR3
7 unique J



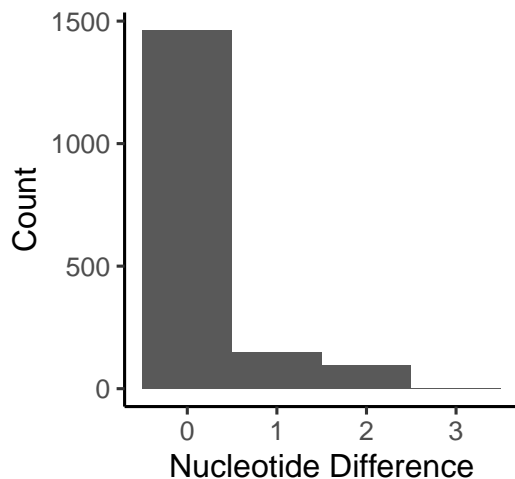
IGHV4-34*01_02

1817 sequences assigned
1635 (90%) exact matches, in which:
1618 unique CDR3
7 unique J



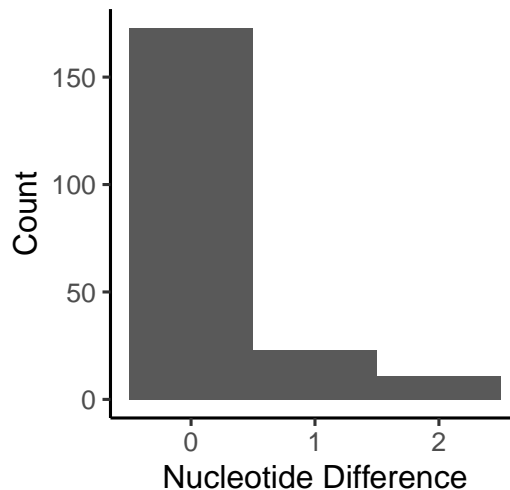
IGHV4-39*01_05

1709 sequences assigned
1462 (85.5%) exact matches, in which:
1412 unique CDR3
7 unique J



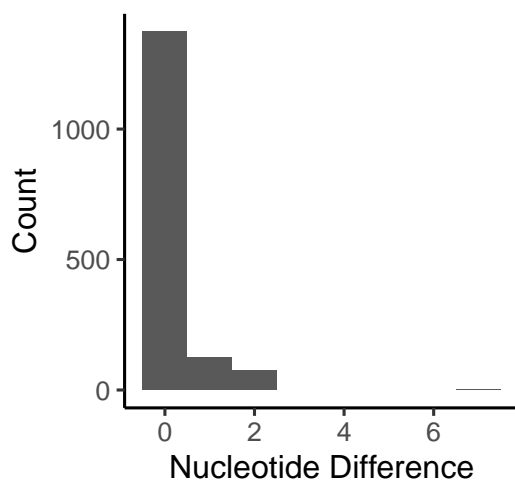
IGHV5-51*01_03

207 sequences assigned
173 (83.6%) exact matches, in which:
173 unique CDR3
7 unique J



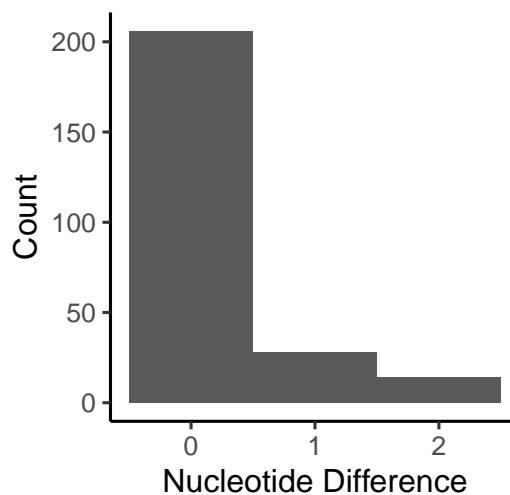
IGHV4-59*01_07

1574 sequences assigned
1373 (87.2%) exact matches, in which:
1351 unique CDR3
7 unique J



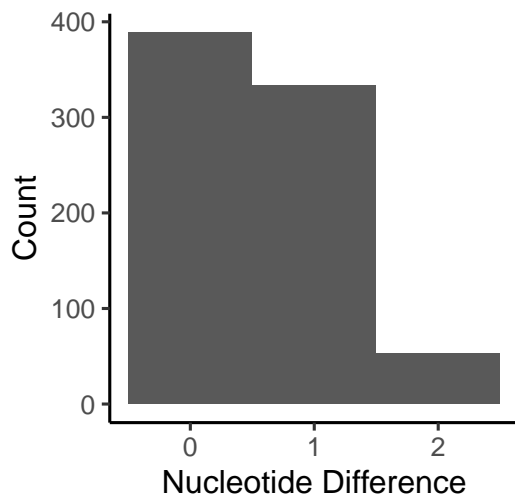
IGHV6-1*01_02

248 sequences assigned
206 (83.1%) exact matches, in which:
206 unique CDR3
6 unique J



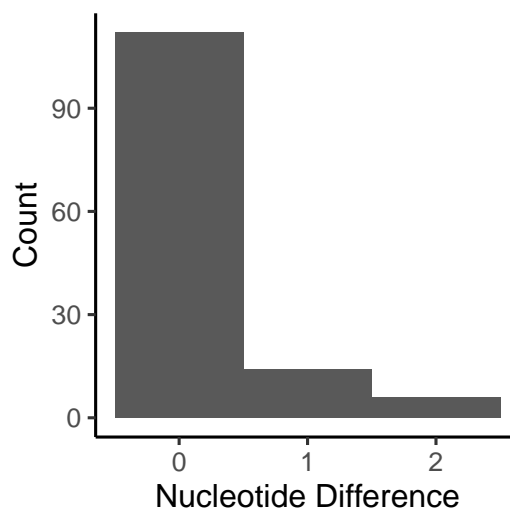
IGHV4-61*02

775 sequences assigned
389 (50.2%) exact matches, in which:
373 unique CDR3
6 unique J

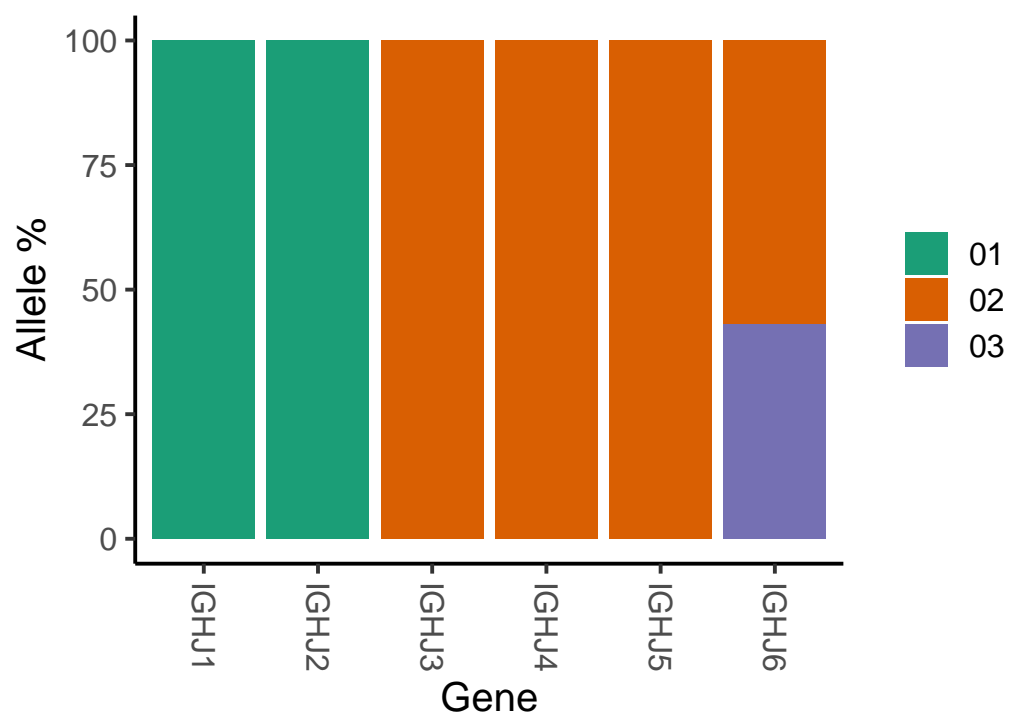


IGHV7-4-1*02

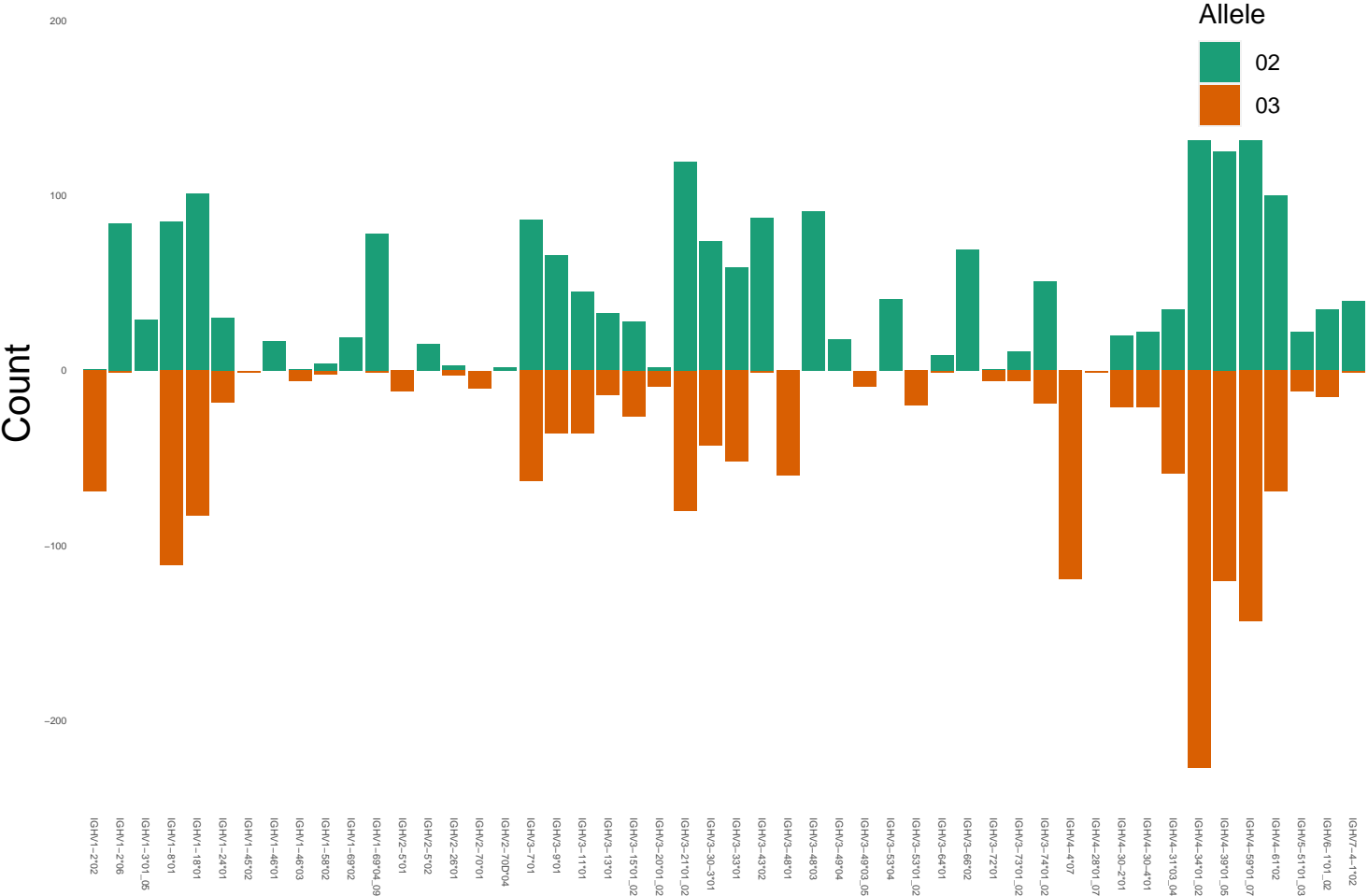
132 sequences assigned
112 (84.8%) exact matches, in which:
112 unique CDR3
7 unique J



Allele Usage



Sequence Count by IGHJ6 allele usage



Novel sequence(s)IGHV4-59*02_G88AIGHV5-51*07_A128G are not listed in the genotype and will be ignored.

Warning – no inferred sequences found.

Novel sequence(s)IGHV5-51*07_A128G are not listed in the genotype and will be ignored.

Warning – no inferred sequences found.

Novel sequence(s)IGHV4-59*02_G88AIGHV5-51*07_A128G are not listed in the genotype and will be ignored.

Novel sequence(s)IGHV5-51*07_A128G are not listed in the genotype and will be ignored.

Novel sequence(s)IGHV4-59*02_G88AIGHV5-51*07_A128G are not listed in the genotype and will be ignored.

Novel sequence(s)IGHV5-51*07_A128G are not listed in the genotype and will be ignored.

Warning – no inferred sequences found.

Warning – no inferred sequences found.

Novel sequence(s)IGHV4-39*02_C258GIGHV5-51*07_A128G are not listed in the genotype and will be ignored.

Warning – no inferred sequences found.

Novel sequence(s)IGHV5-51*07_A128G are not listed in the genotype and will be ignored.

Warning – no inferred sequences found.

Novel sequence(s)IGHV4-59*02_G88AIGHV5-51*07_A128G are not listed in the genotype and will be ignored.

Warning – no inferred sequences found.

Novel sequence(s)IGHV4-59*02_G88AIGHV5-51*07_A128G are not listed in the genotype and will be ignored.

Warning – no inferred sequences found.

Novel sequence(s)IGHV4-59*02_G88AIGHV5-51*07_A128G are not listed in the genotype and will be ignored.

Novel sequence(s)IGHV4-59*02_G88A are not listed in the genotype and will be ignored.

Warning – no inferred sequences found.

Novel sequence(s)IGHV4-59*02_G88AIGHV5-51*07_A128G are not listed in the genotype and will be ignored.