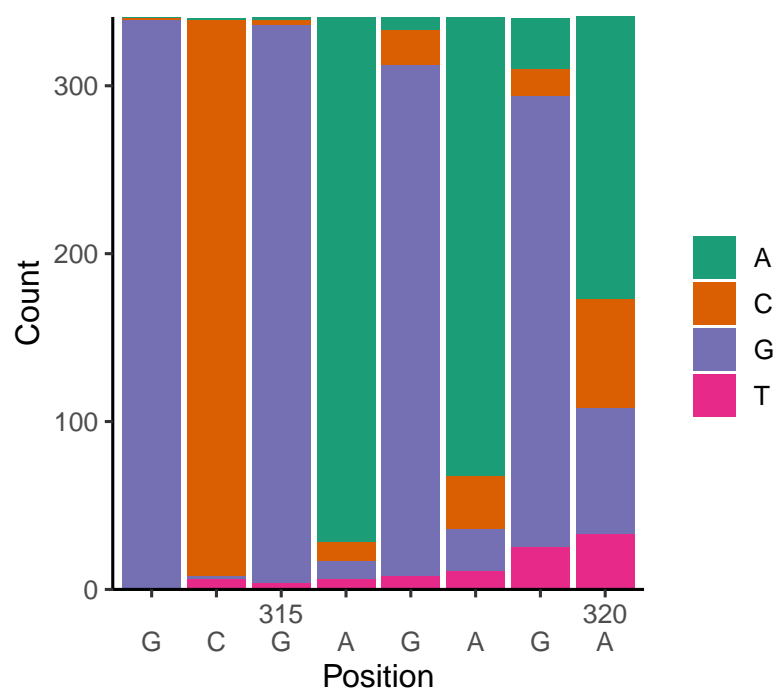
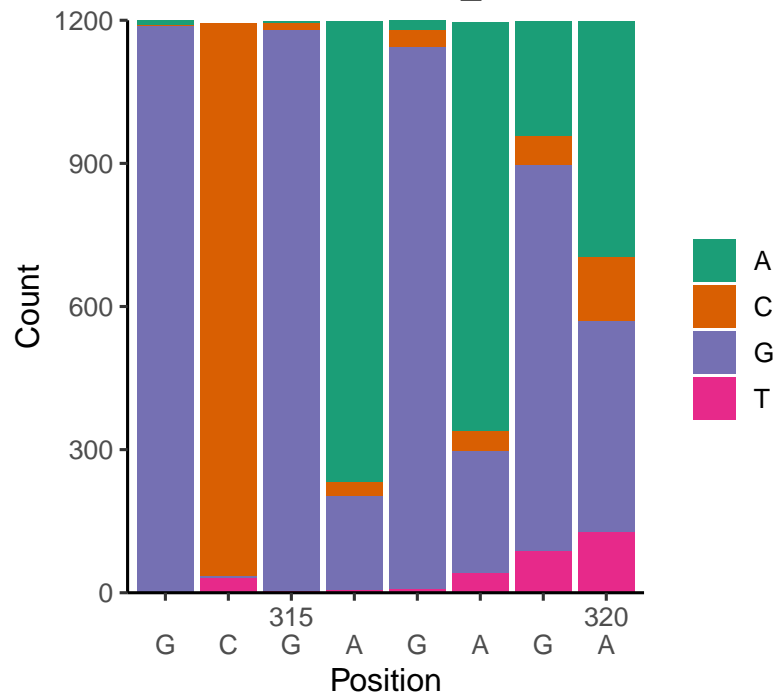


Gene IGHV1-69*17_G163A



Gene IGHV4-61*02_A234G



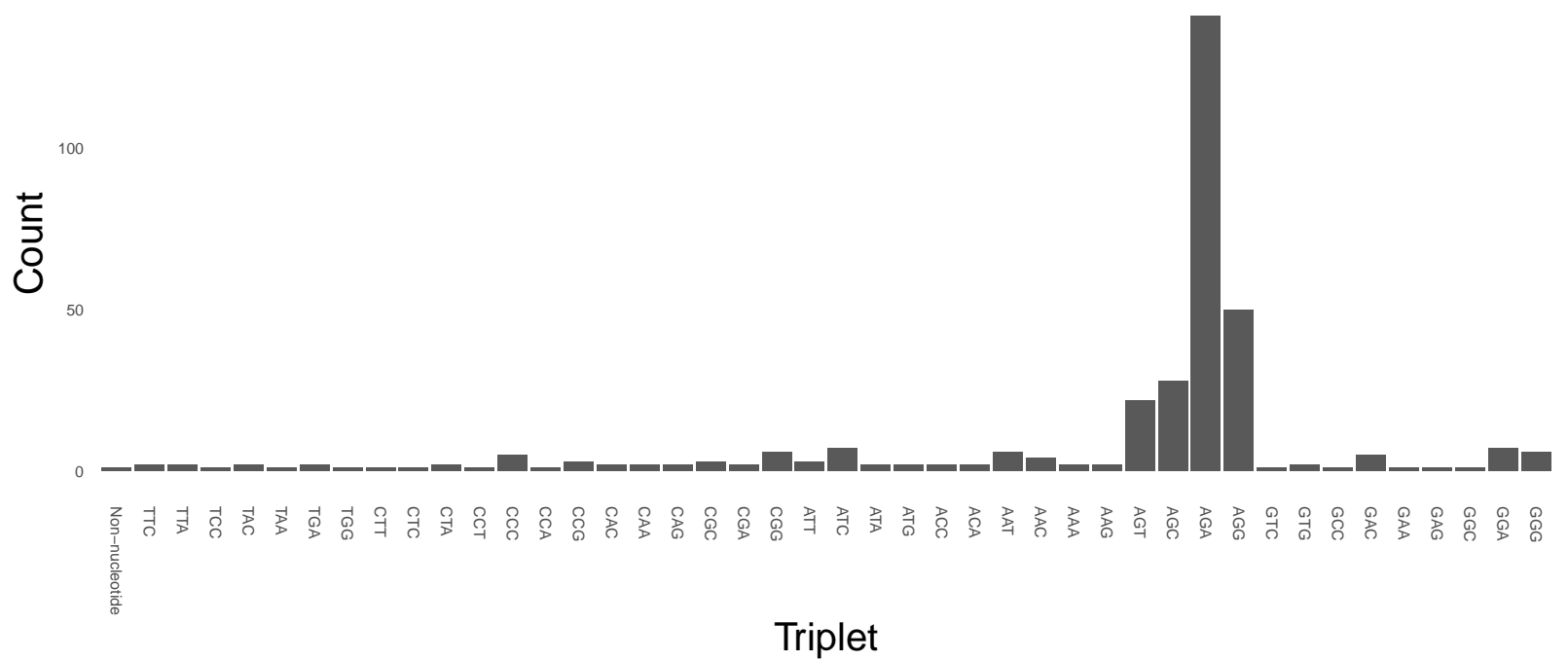
Gene IGHV1-69*17_G163A



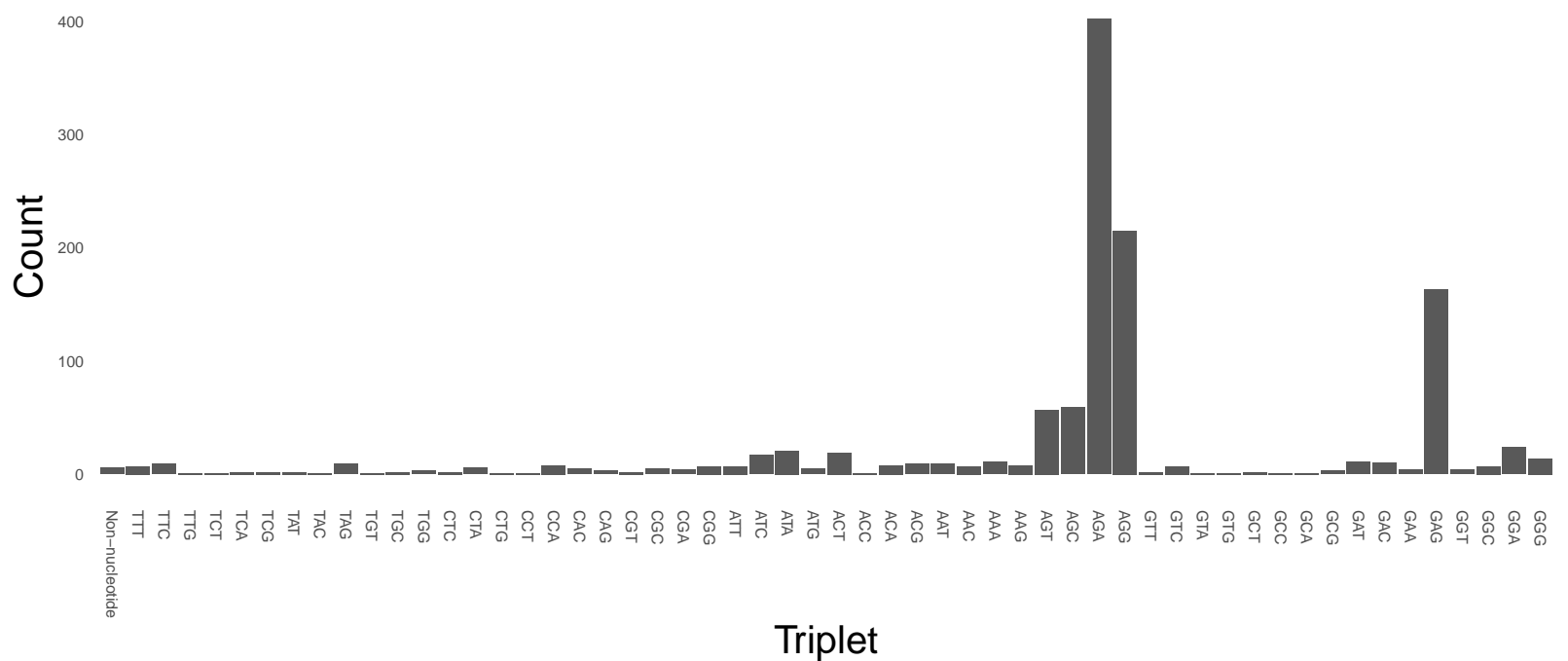
Gene IGHV4-61*02_A234G



IGHV1-69*17_G163A- Final 3 nucleotides as a triplet

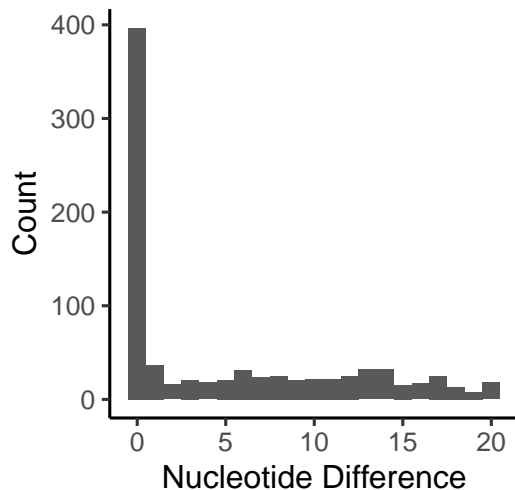


IGHV4-61*02_A234G- Final 3 nucleotides as a triplet



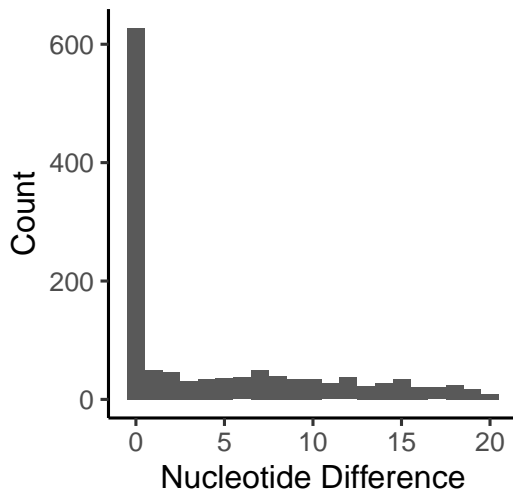
IGHV1-2*02

1008 sequences assigned
397 (39.4%) exact matches, in which:
396 unique CDR3
7 unique J



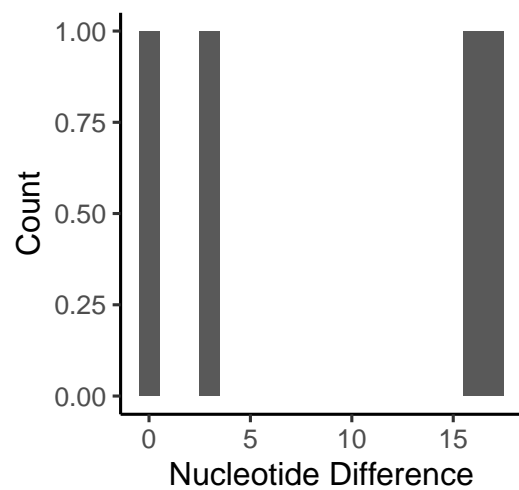
IGHV1-8*01

1372 sequences assigned
628 (45.8%) exact matches, in which:
628 unique CDR3
7 unique J



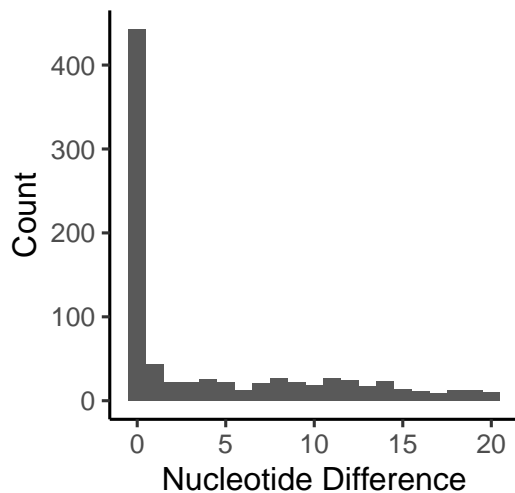
IGHV1-45*02

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



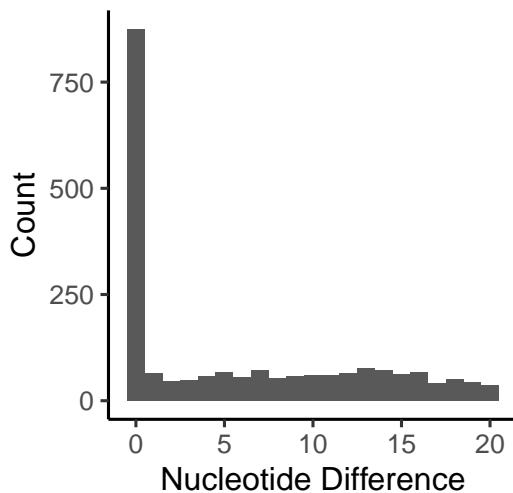
IGHV1-2*06

901 sequences assigned
443 (49.2%) exact matches, in which:
440 unique CDR3
7 unique J



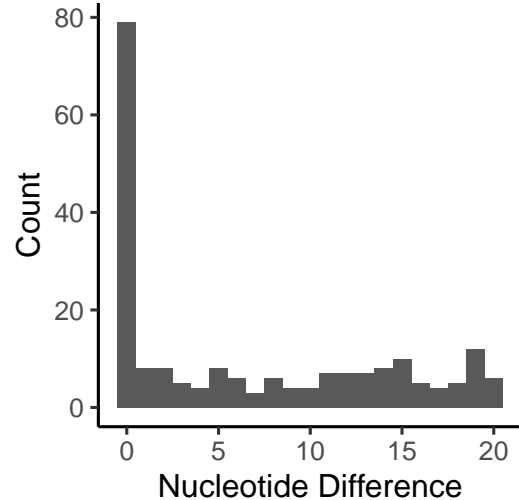
IGHV1-18*01

2409 sequences assigned
875 (36.3%) exact matches, in which:
872 unique CDR3
7 unique J



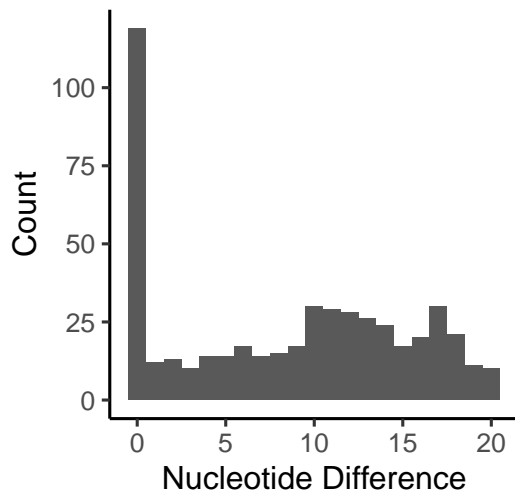
IGHV1-46*01

250 sequences assigned
79 (31.6%) exact matches, in which:
79 unique CDR3
6 unique J



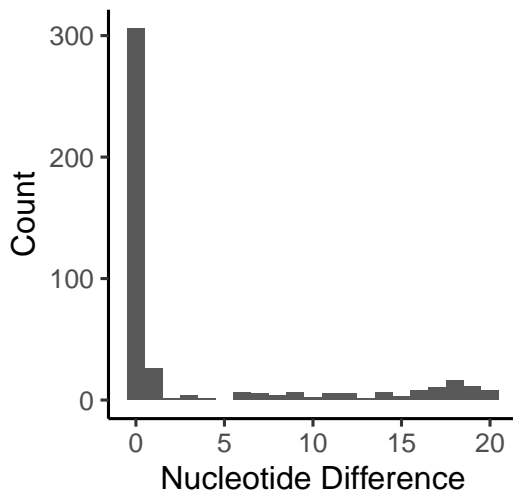
IGHV1-3*01_05

584 sequences assigned
119 (20.4%) exact matches, in which:
119 unique CDR3
6 unique J



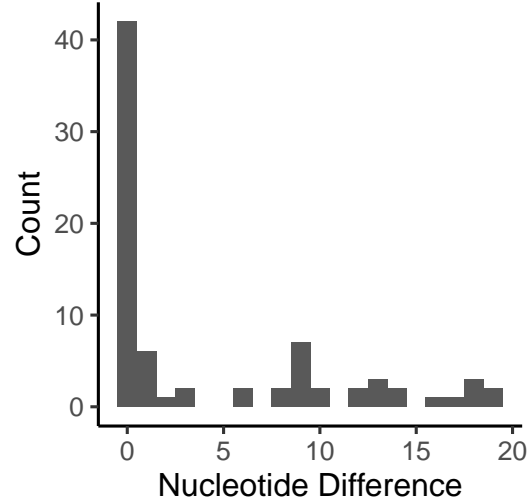
IGHV1-24*01

483 sequences assigned
306 (63.4%) exact matches, in which:
304 unique CDR3
7 unique J



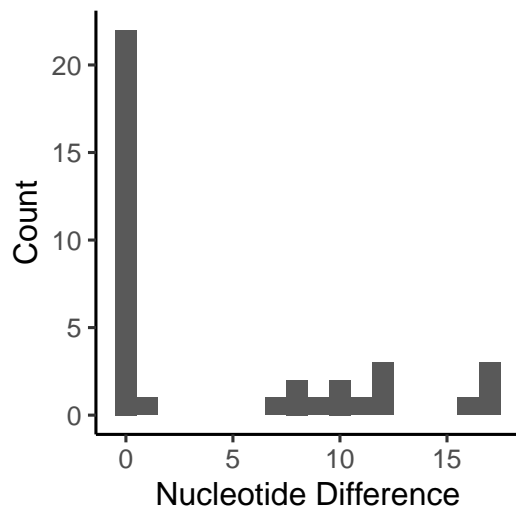
IGHV1-46*03

84 sequences assigned
42 (50%) exact matches, in which:
42 unique CDR3
7 unique J



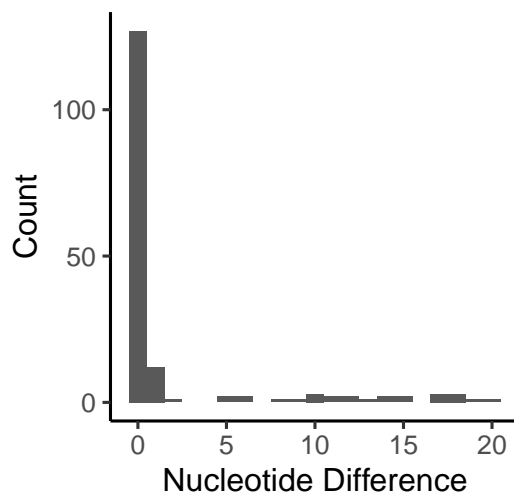
IGHV1-58*02

38 sequences assigned
22 (57.9%) exact matches, in which:
22 unique CDR3
7 unique J



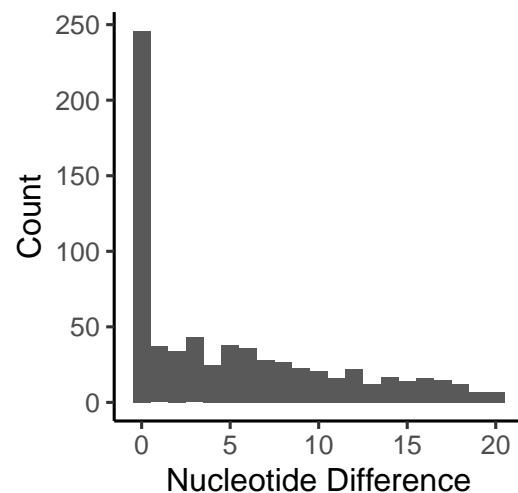
IGHV1-69*02

180 sequences assigned
127 (70.6%) exact matches, in which:
127 unique CDR3
6 unique J



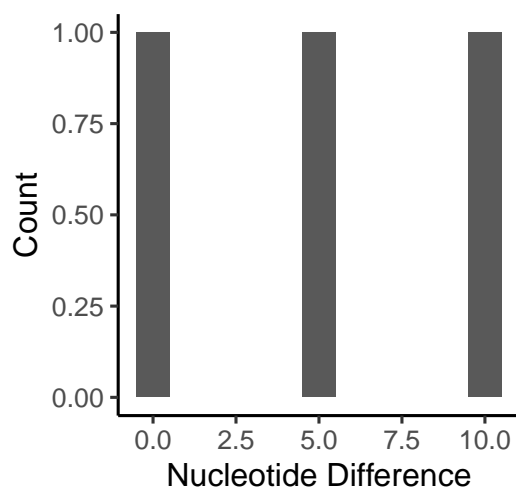
IGHV2-5*02

737 sequences assigned
246 (33.4%) exact matches, in which:
246 unique CDR3
6 unique J



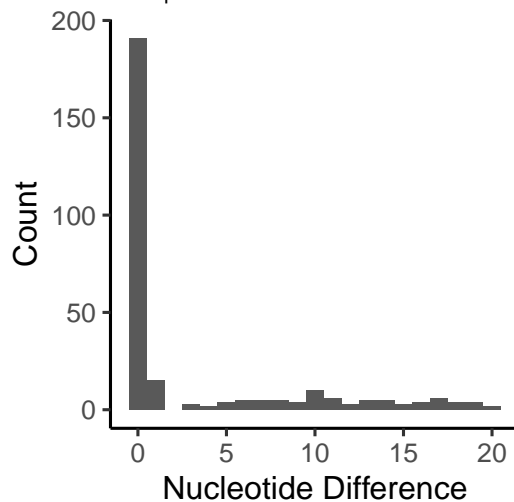
IGHV1-58*01_03

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



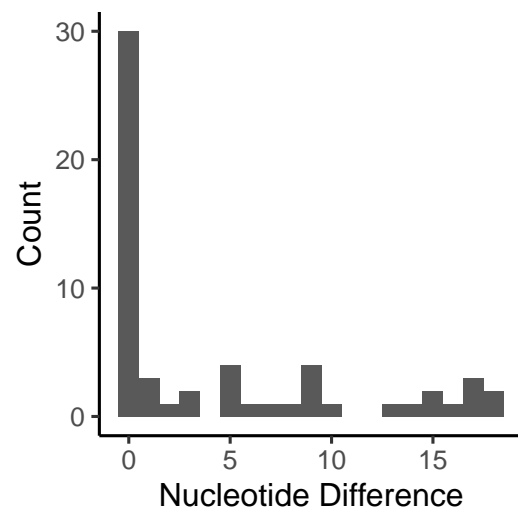
IGHV1-69*17_G163A

341 sequences assigned
191 (56%) exact matches, in which:
191 unique CDR3
7 unique J



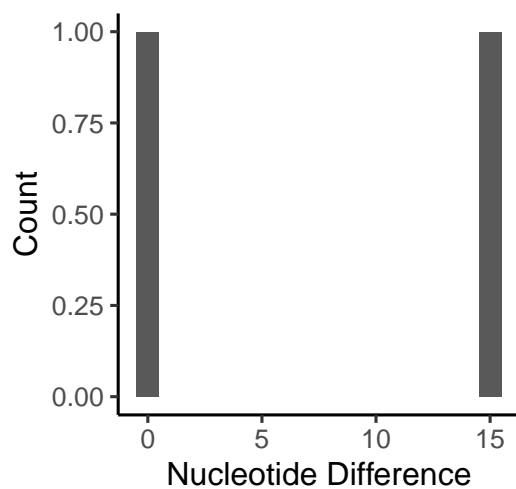
IGHV2-26*01

58 sequences assigned
30 (51.7%) exact matches, in which:
30 unique CDR3
6 unique J



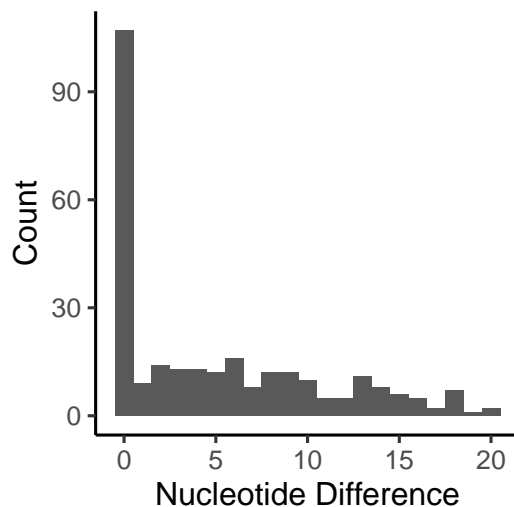
IGHV1-69-2*01

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



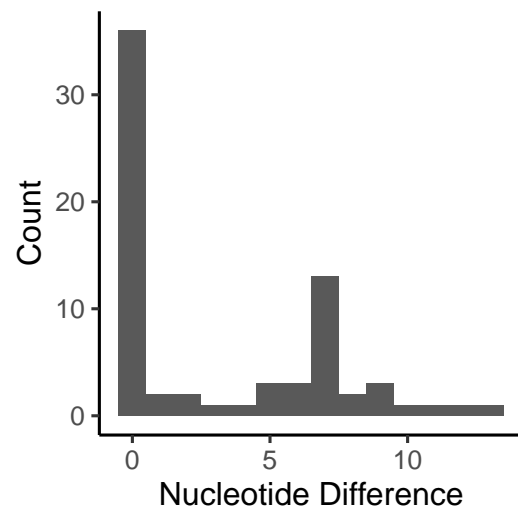
IGHV2-5*01

283 sequences assigned
107 (37.8%) exact matches, in which:
107 unique CDR3
6 unique J



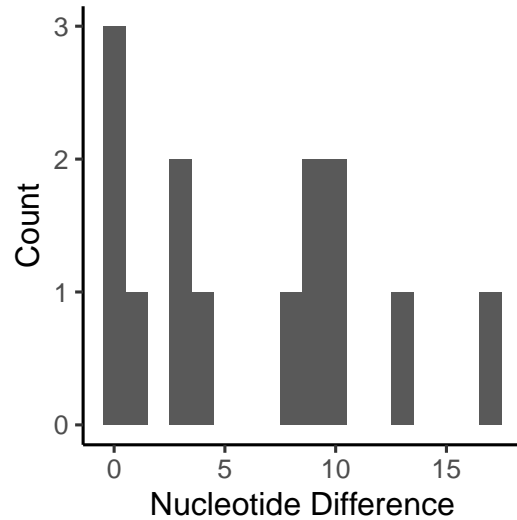
IGHV2-70*01

73 sequences assigned
36 (49.3%) exact matches, in which:
35 unique CDR3
4 unique J



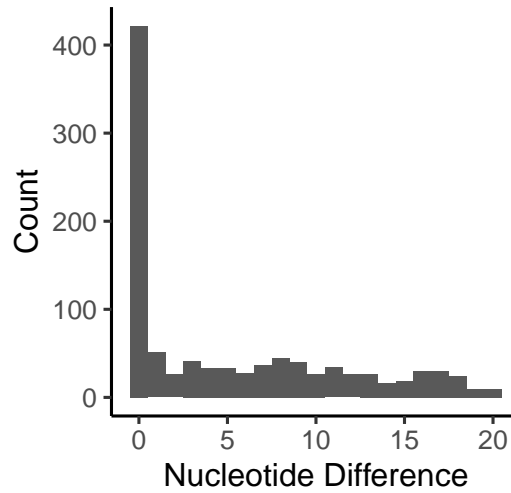
IGHV2-70*11_15

15 sequences assigned
3 (20%) exact matches, in which:
3 unique CDR3
1 unique J



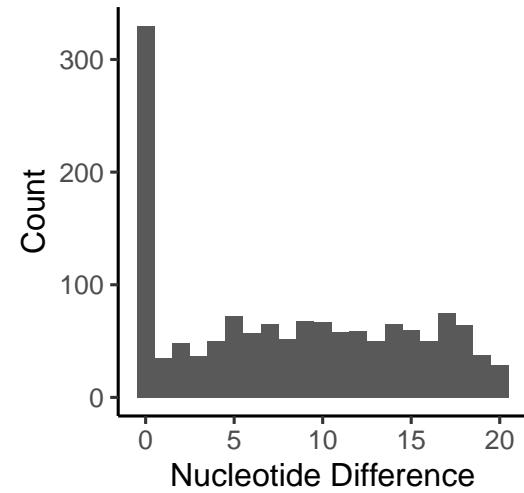
IGHV3-9*01

1092 sequences assigned
422 (38.6%) exact matches, in which:
399 unique CDR3
7 unique J



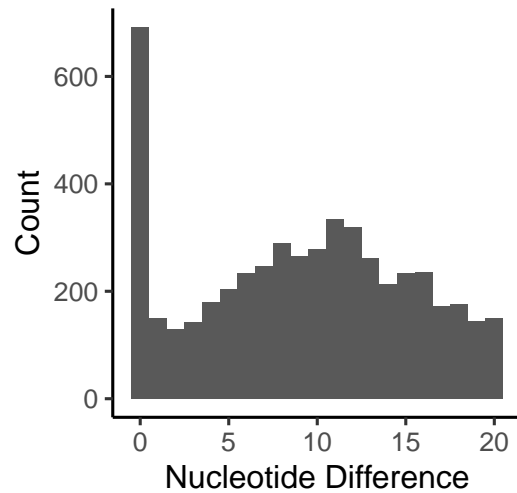
IGHV3-15*01_02

1672 sequences assigned
330 (19.7%) exact matches, in which:
300 unique CDR3
7 unique J



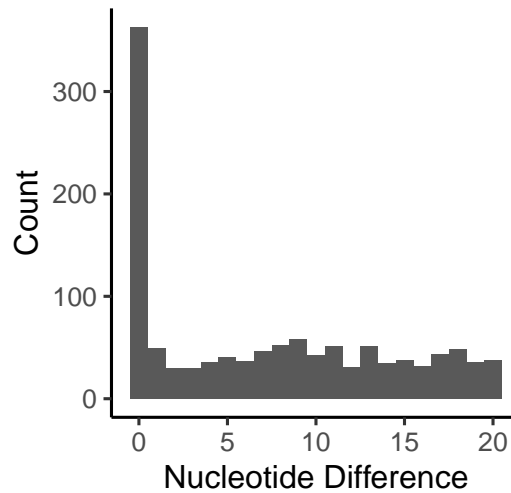
IGHV3-7*01

5687 sequences assigned
692 (12.2%) exact matches, in which:
603 unique CDR3
7 unique J



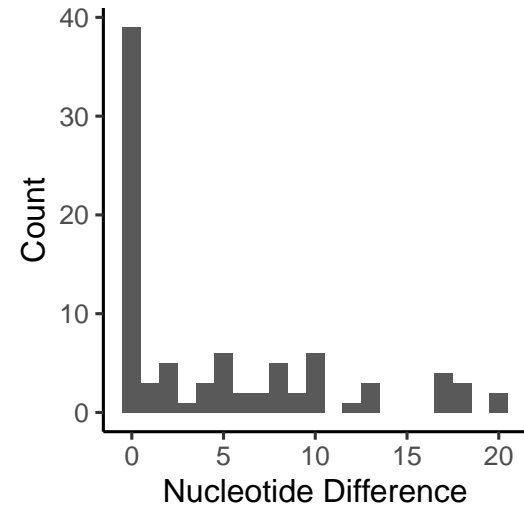
IGHV3-11*01

1434 sequences assigned
363 (25.3%) exact matches, in which:
336 unique CDR3
7 unique J



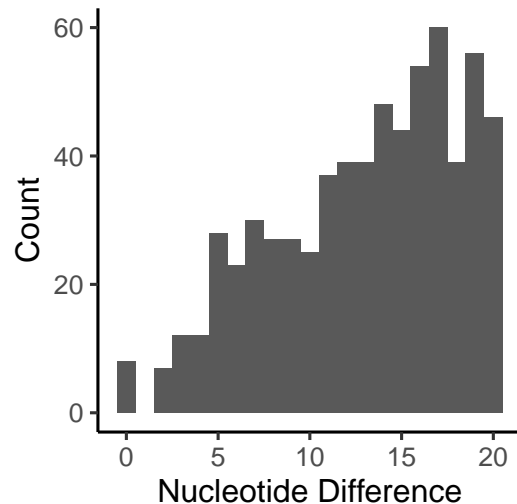
IGHV3-20*01_02

88 sequences assigned
39 (44.3%) exact matches, in which:
38 unique CDR3
6 unique J



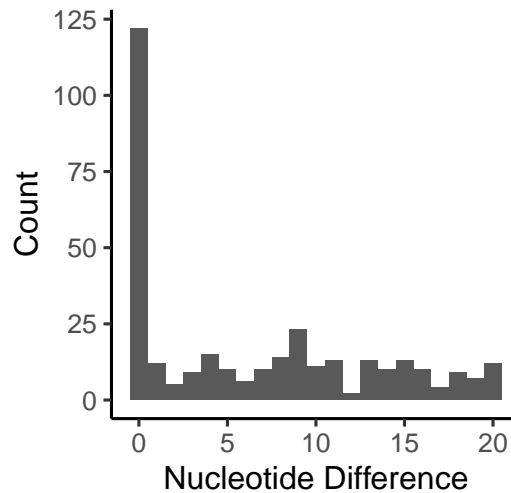
IGHV3-7*03

1028 sequences assigned
8 (0.8%) exact matches, in which:
4 unique CDR3
4 unique J



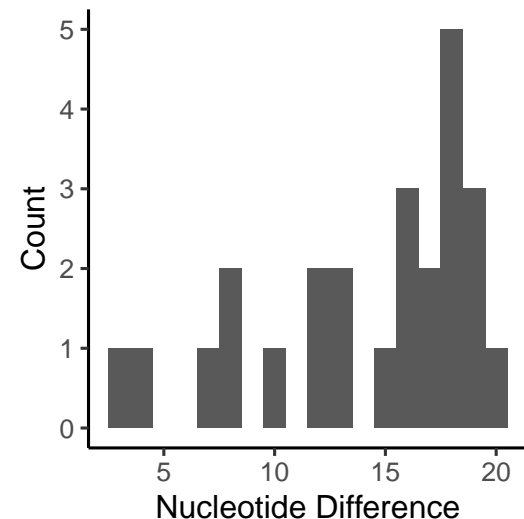
IGHV3-13*01

360 sequences assigned
122 (33.9%) exact matches, in which:
121 unique CDR3
6 unique J



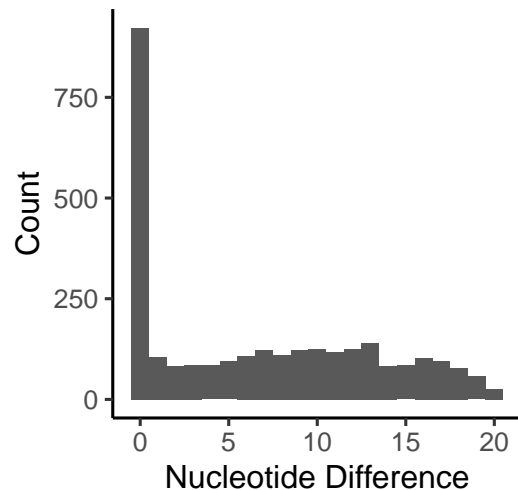
IGHV3-20*03_04

33 sequences assigned
No exact matches.



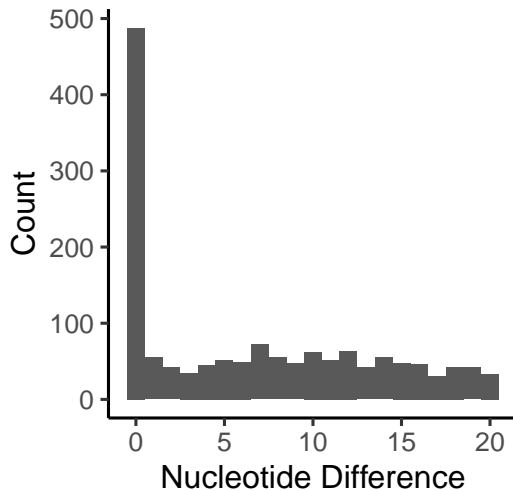
IGHV3-21*01_02

3154 sequences assigned
923 (29.3%) exact matches, in which:
839 unique CDR3
7 unique J



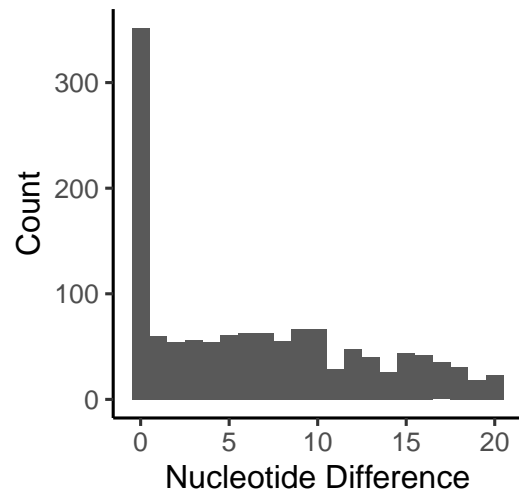
IGHV3-33*01

1715 sequences assigned
488 (28.5%) exact matches, in which:
471 unique CDR3
7 unique J



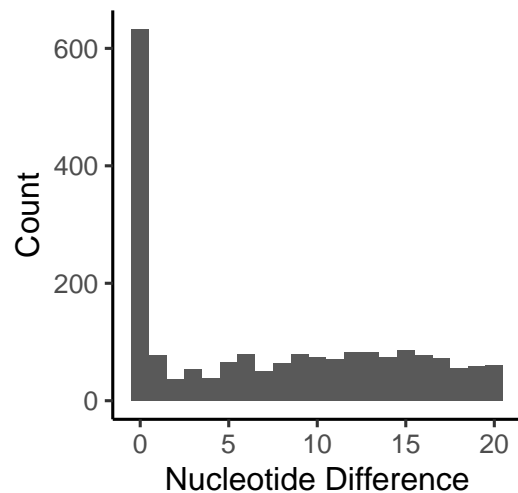
IGHV3-48*03

1458 sequences assigned
352 (24.1%) exact matches, in which:
322 unique CDR3
6 unique J



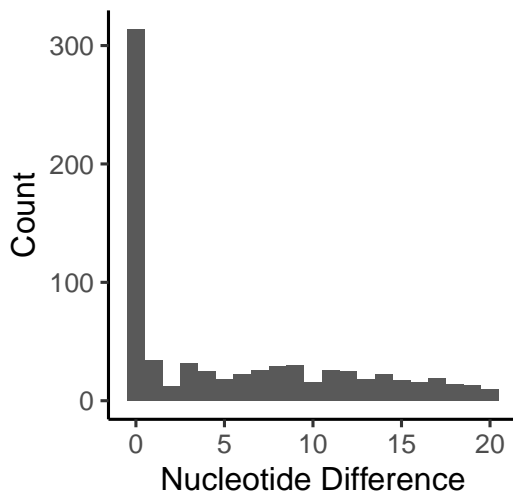
IGHV3-30-3*01

2251 sequences assigned
633 (28.1%) exact matches, in which:
602 unique CDR3
7 unique J



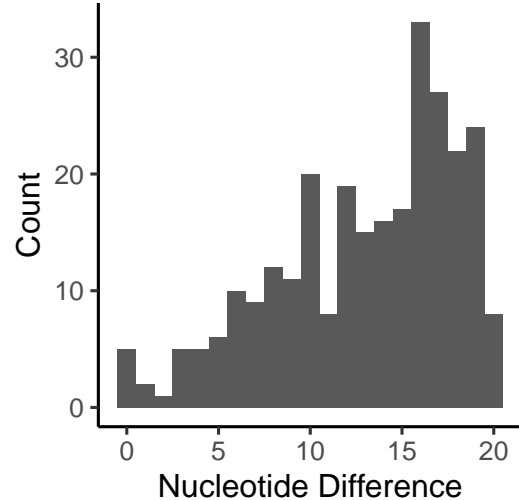
IGHV3-43*02

798 sequences assigned
314 (39.3%) exact matches, in which:
280 unique CDR3
7 unique J



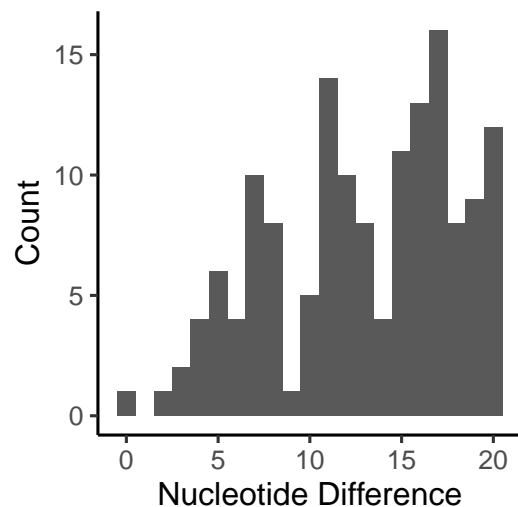
IGHV3-48*04

383 sequences assigned
5 (1.3%) exact matches, in which:
3 unique CDR3
1 unique J



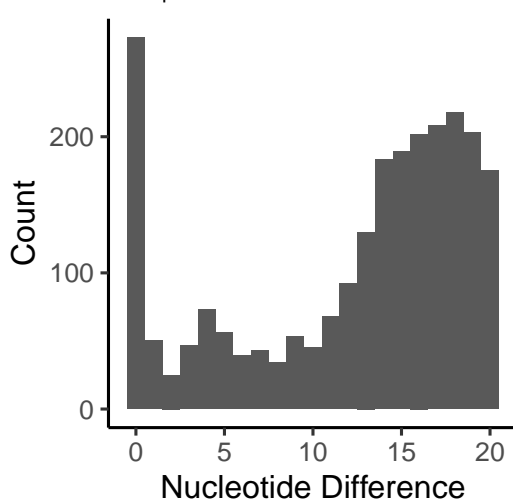
IGHV3-30*04

218 sequences assigned
1 (0.5%) exact matches, in which:
1 unique CDR3
1 unique J



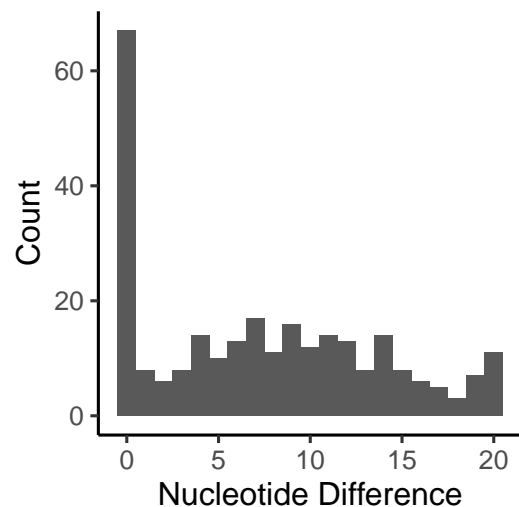
IGHV3-48*01

3252 sequences assigned
273 (8.4%) exact matches, in which:
239 unique CDR3
6 unique J



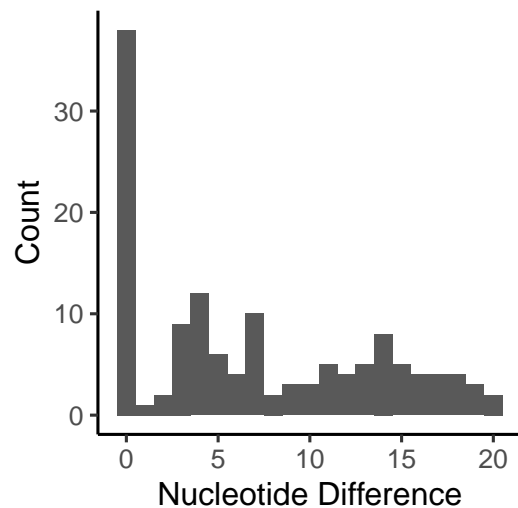
IGHV3-49*04

307 sequences assigned
67 (21.8%) exact matches, in which:
62 unique CDR3
5 unique J



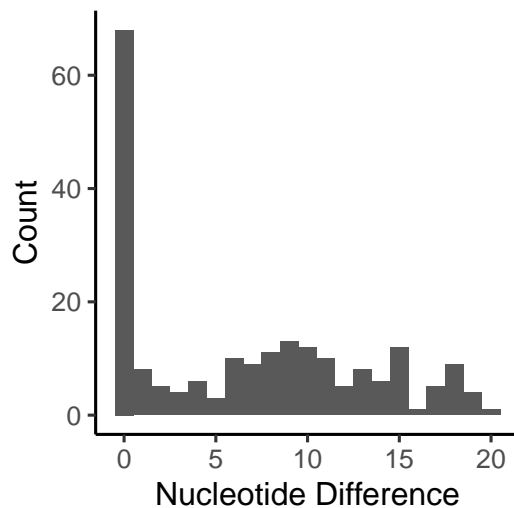
IGHV3-49*03_05

147 sequences assigned
38 (25.9%) exact matches, in which:
37 unique CDR3
5 unique J



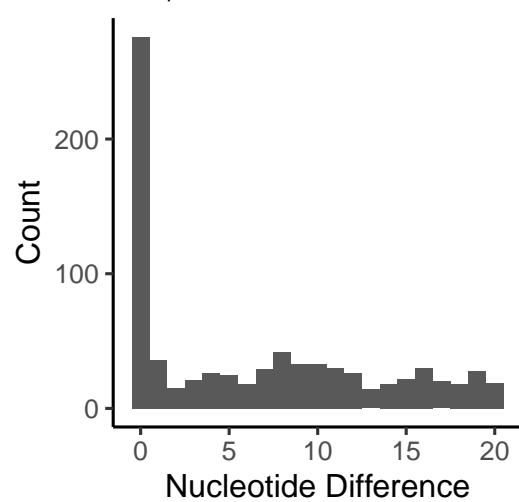
IGHV3-64*01

227 sequences assigned
68 (30%) exact matches, in which:
61 unique CDR3
5 unique J



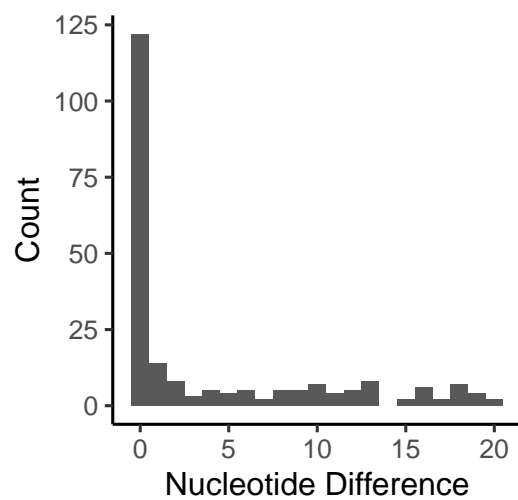
IGHV3-66*02

914 sequences assigned
276 (30.2%) exact matches, in which:
260 unique CDR3
6 unique J



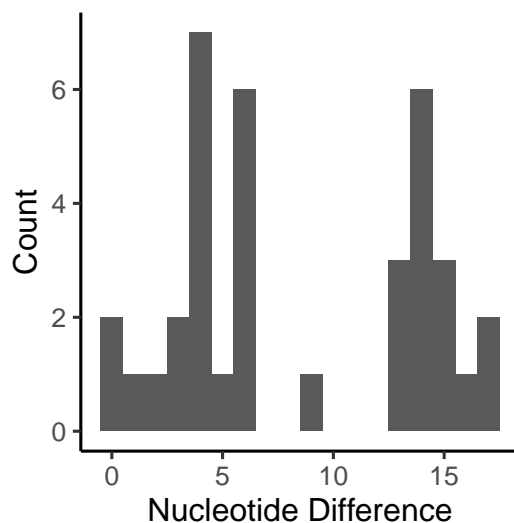
IGHV3-53*04

260 sequences assigned
122 (46.9%) exact matches, in which:
114 unique CDR3
6 unique J



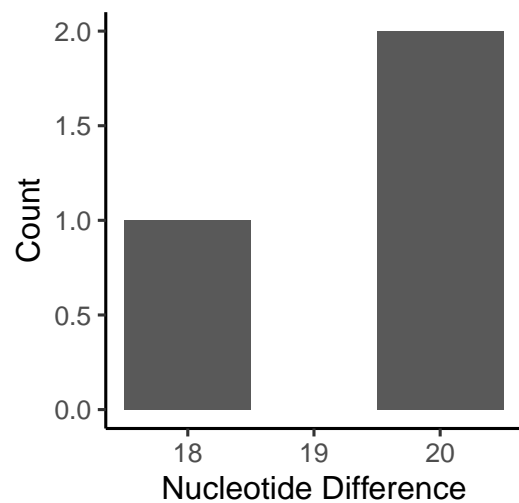
IGHV3-64*02_07

47 sequences assigned
2 (4.3%) exact matches, in which:
2 unique CDR3
2 unique J



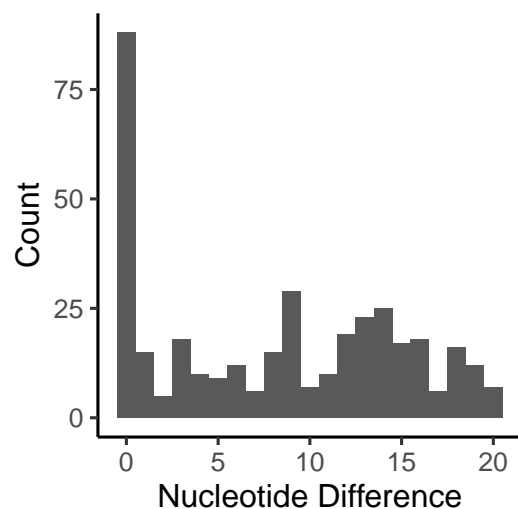
IGHV3-69-1*01

4 sequences assigned
No exact matches.



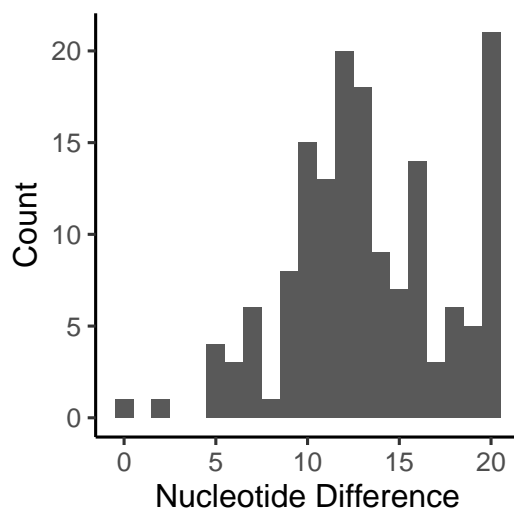
IGHV3-53*01_02

418 sequences assigned
88 (21.1%) exact matches, in which:
83 unique CDR3
6 unique J



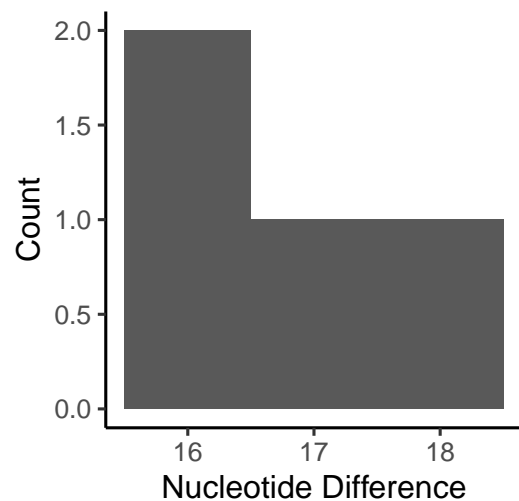
IGHV3-66*01

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



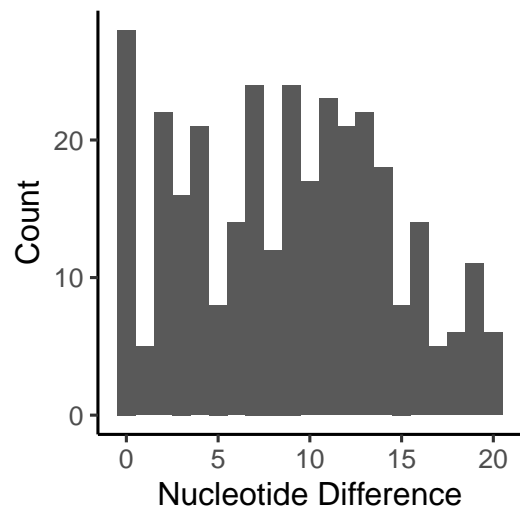
IGHV3-69-1*02

8 sequences assigned
No exact matches.



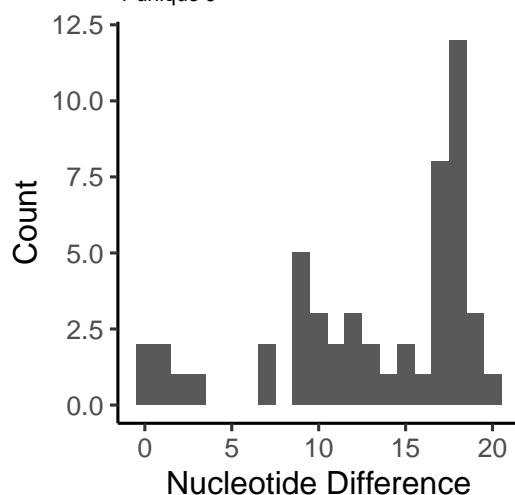
IGHV3-72*01

351 sequences assigned
28 (8%) exact matches, in which:
23 unique CDR3
5 unique J



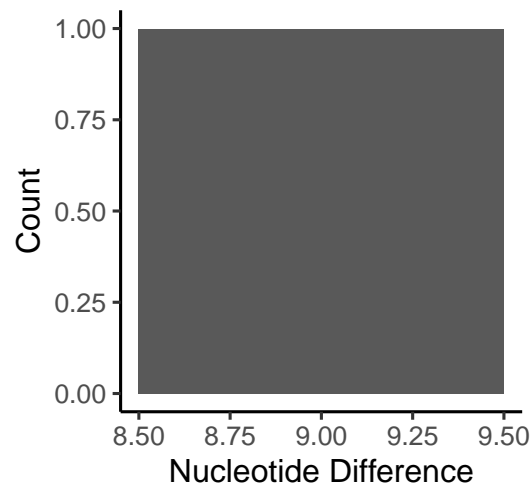
IGHV3-43D*03

57 sequences assigned
2 (3.5%) exact matches, in which:
2 unique CDR3
1 unique J



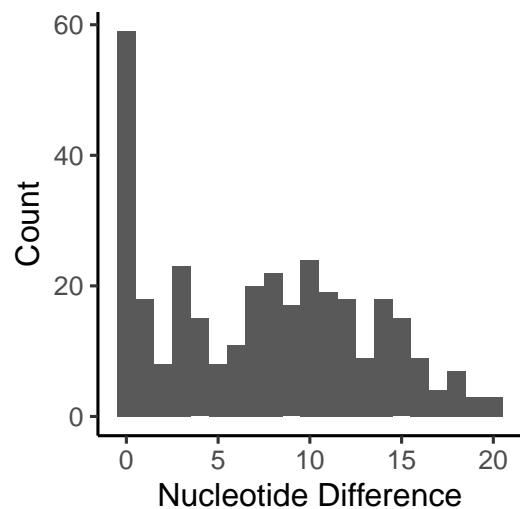
IGHV3-NL1*01

1 sequences assigned
No exact matches.



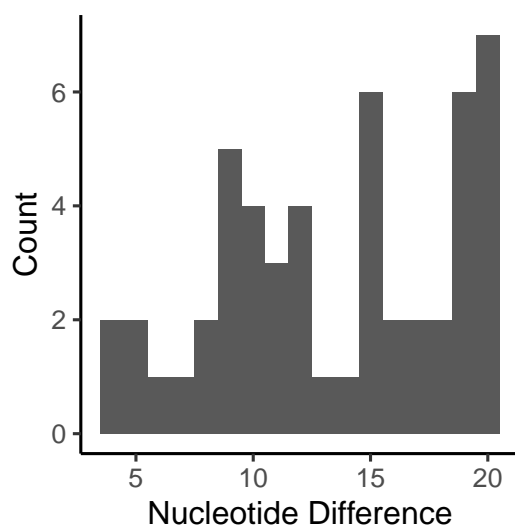
IGHV3-73*01_02

363 sequences assigned
59 (16.3%) exact matches, in which:
53 unique CDR3
5 unique J



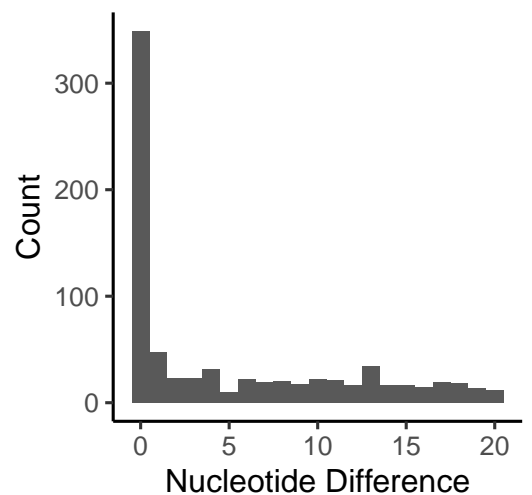
IGHV3-64D*06

158 sequences assigned
No exact matches.



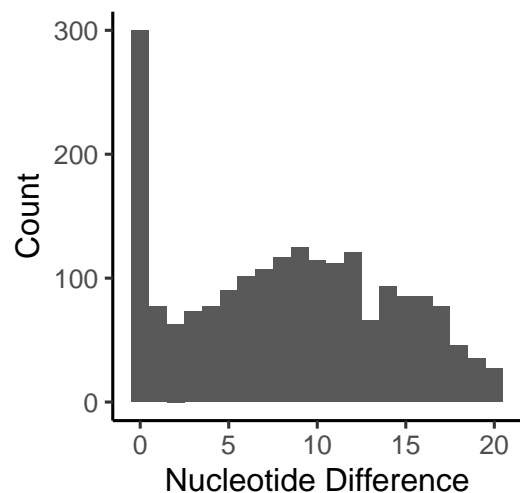
IGHV4-4*07

835 sequences assigned
349 (41.8%) exact matches, in which:
328 unique CDR3
6 unique J



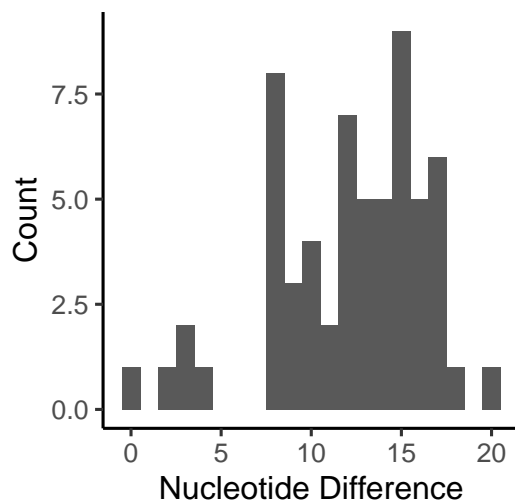
IGHV3-74*01_02

2142 sequences assigned
300 (14%) exact matches, in which:
266 unique CDR3
7 unique J



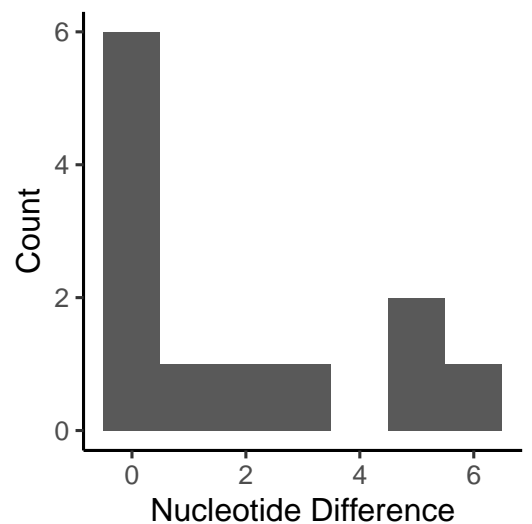
IGHV3-64D*09

78 sequences assigned
1 (1.3%) exact matches, in which:
1 unique CDR3
1 unique J



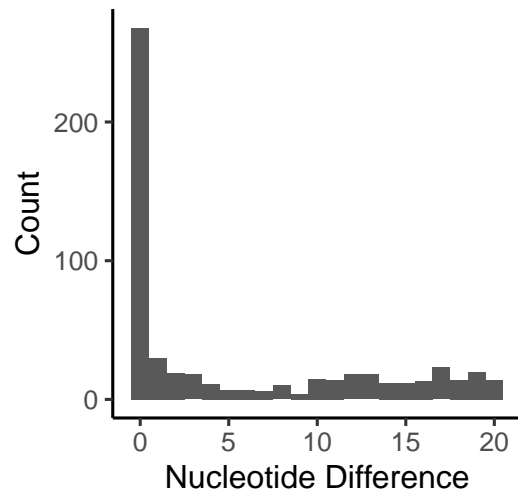
IGHV4-28*01_07

15 sequences assigned
6 (40%) exact matches, in which:
6 unique CDR3
3 unique J



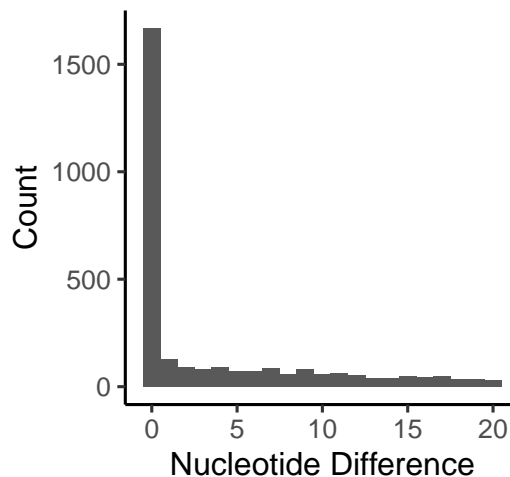
IGHV4-30-2*01

757 sequences assigned
268 (35.4%) exact matches, in which:
259 unique CDR3
7 unique J



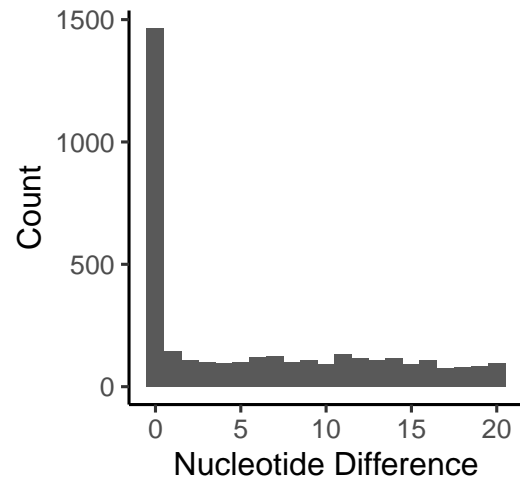
IGHV4-34*01_02

3200 sequences assigned
1667 (52.1%) exact matches, in which:
1629 unique CDR3
7 unique J



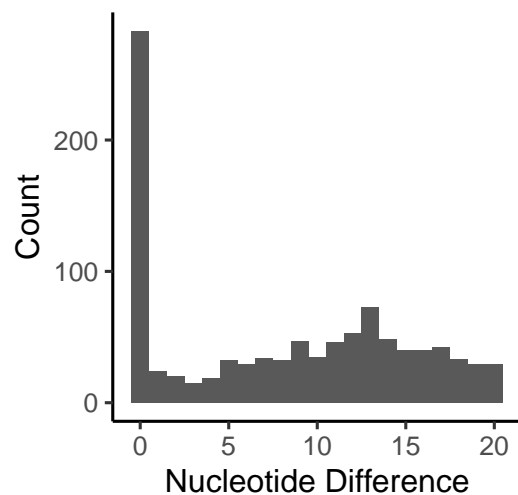
IGHV4-59*01_07

4604 sequences assigned
1464 (31.8%) exact matches, in which:
1404 unique CDR3
7 unique J



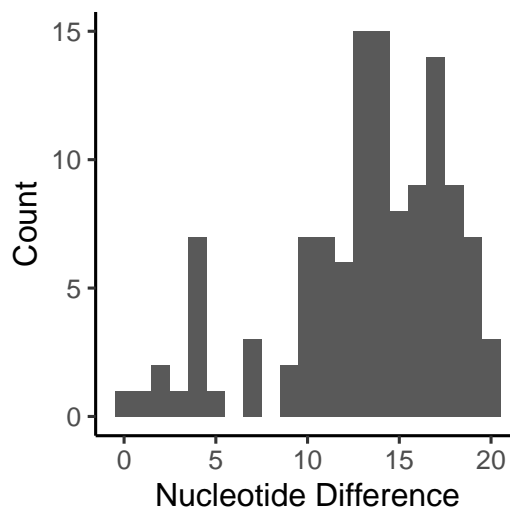
IGHV4-30-4*01

1179 sequences assigned
283 (24%) exact matches, in which:
271 unique CDR3
7 unique J



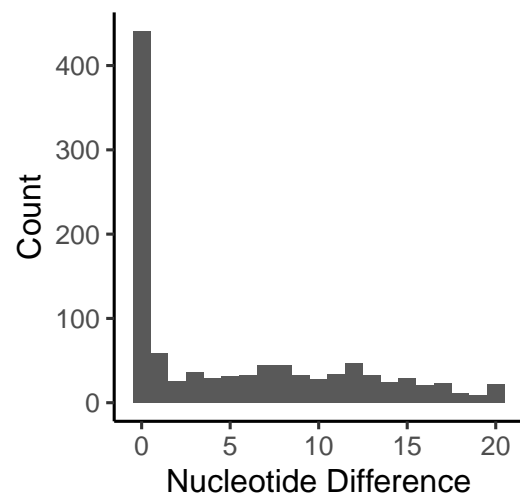
IGHV4-38-2*02

182 sequences assigned
1 (0.5%) exact matches, in which:
1 unique CDR3
1 unique J



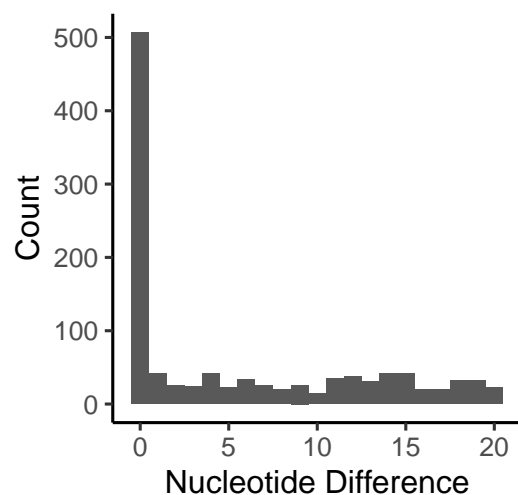
IGHV4-61*02

1126 sequences assigned
441 (39.2%) exact matches, in which:
412 unique CDR3
6 unique J



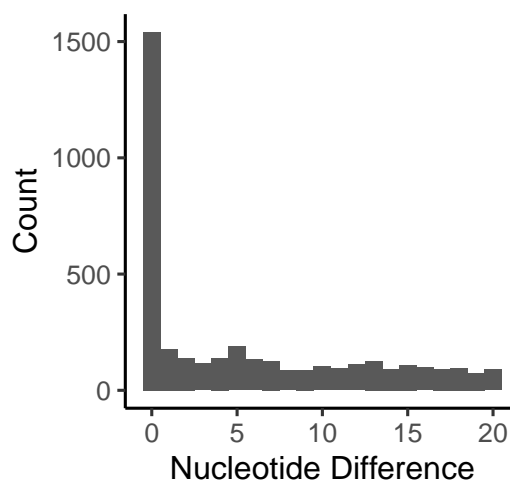
IGHV4-31*03_04

1382 sequences assigned
507 (36.7%) exact matches, in which:
491 unique CDR3
7 unique J



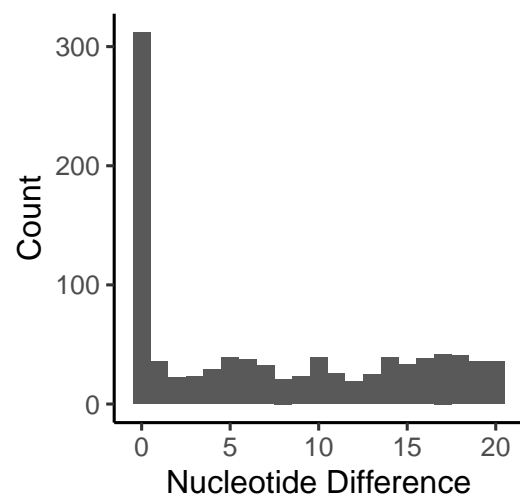
IGHV4-39*01_05

4607 sequences assigned
1541 (33.4%) exact matches, in which:
1464 unique CDR3
7 unique J



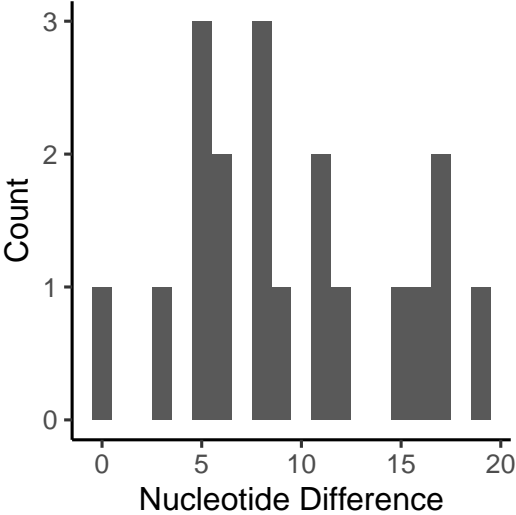
IGHV4-61*02_A234G

1200 sequences assigned
312 (26%) exact matches, in which:
305 unique CDR3
6 unique J



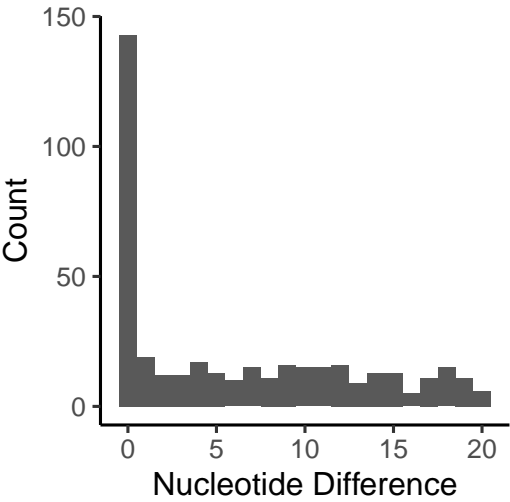
IGHV5-10-1*01_03

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



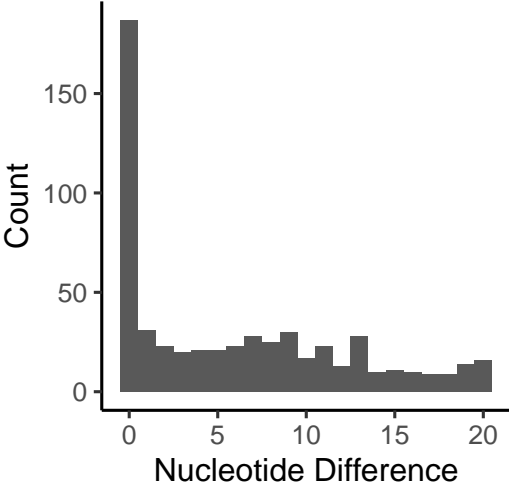
IGHV7-4-1*02

434 sequences assigned
143 (32.9%) exact matches, in which:
141 unique CDR3
7 unique J



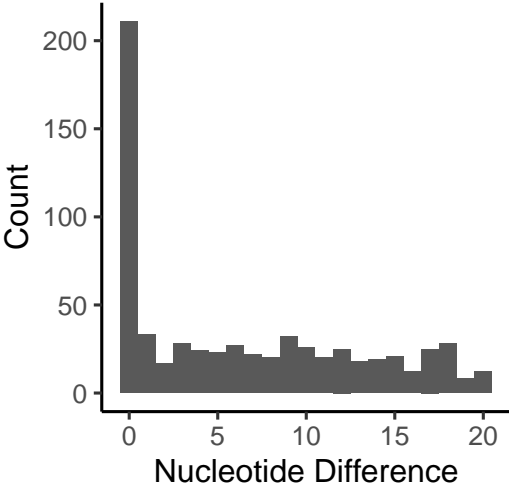
IGHV5-51*01_03

604 sequences assigned
187 (31%) exact matches, in which:
187 unique CDR3
7 unique J

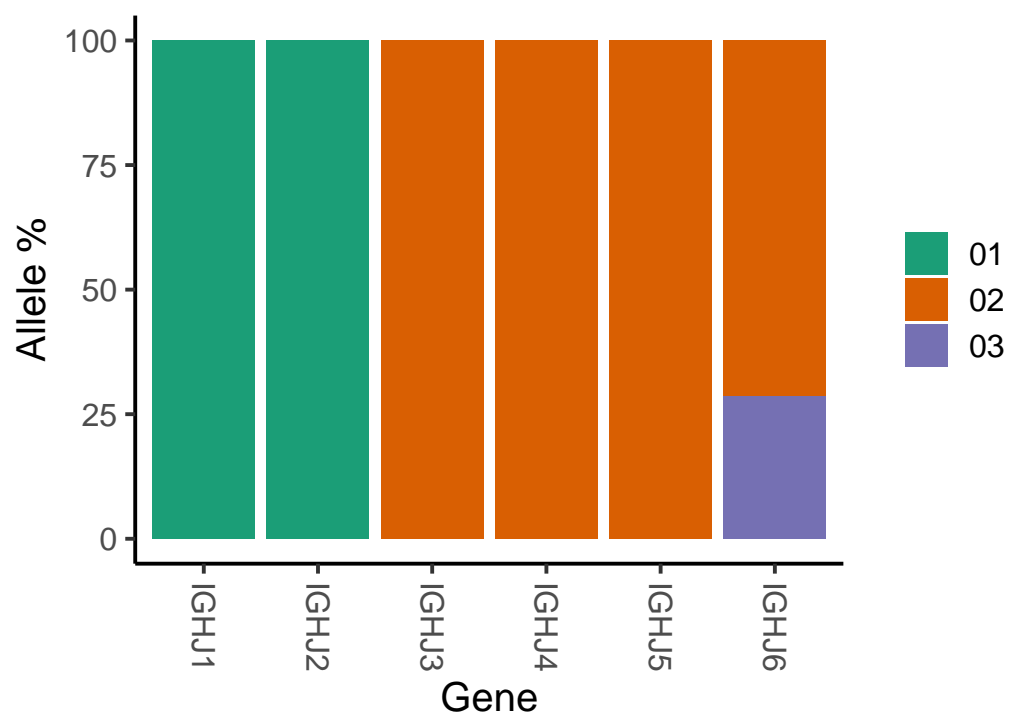


IGHV6-1*01_02

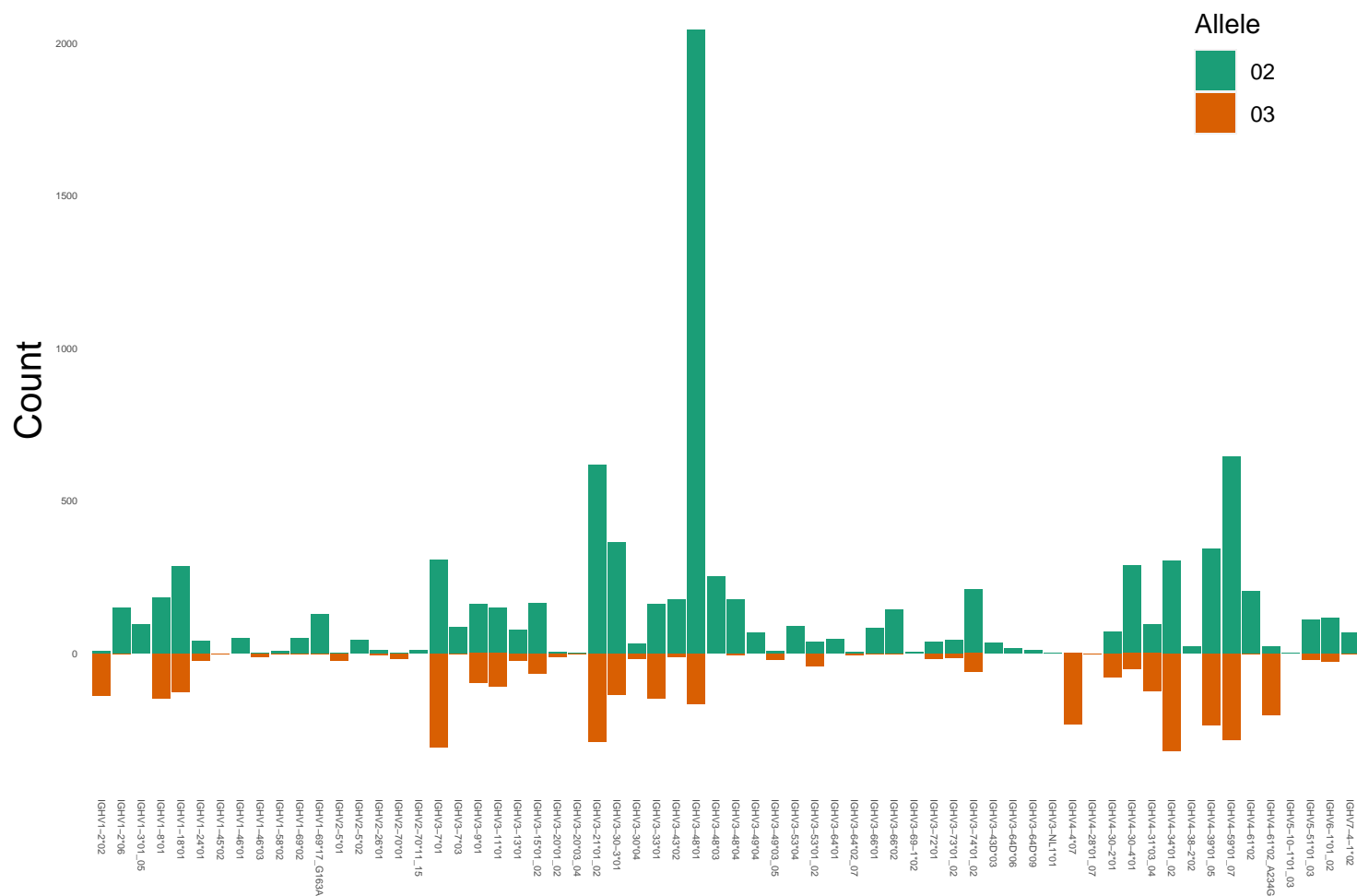
710 sequences assigned
211 (29.7%) exact matches, in which:
211 unique CDR3
6 unique J



Allele Usage



Sequence Count by IGHJ6 allele usage



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_G88A IGHV5–51*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_G88A IGHV5–51*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_C258G IGHV5–51*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_G88A 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_G88A 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_G88A IGHV5–51*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_G88A IGHV5–51*07_A128G are not listed in the genotype and will be ignored.

Warning – no inferred sequences found.