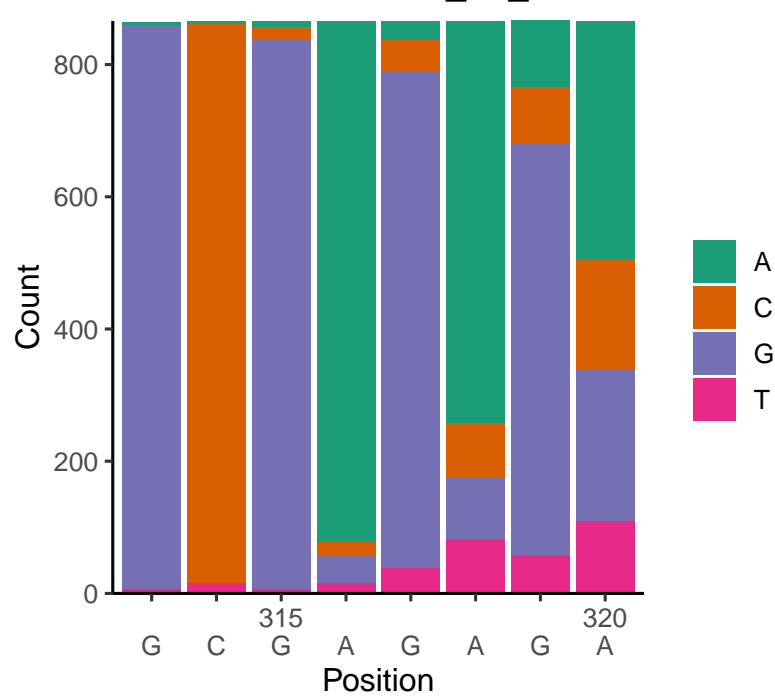
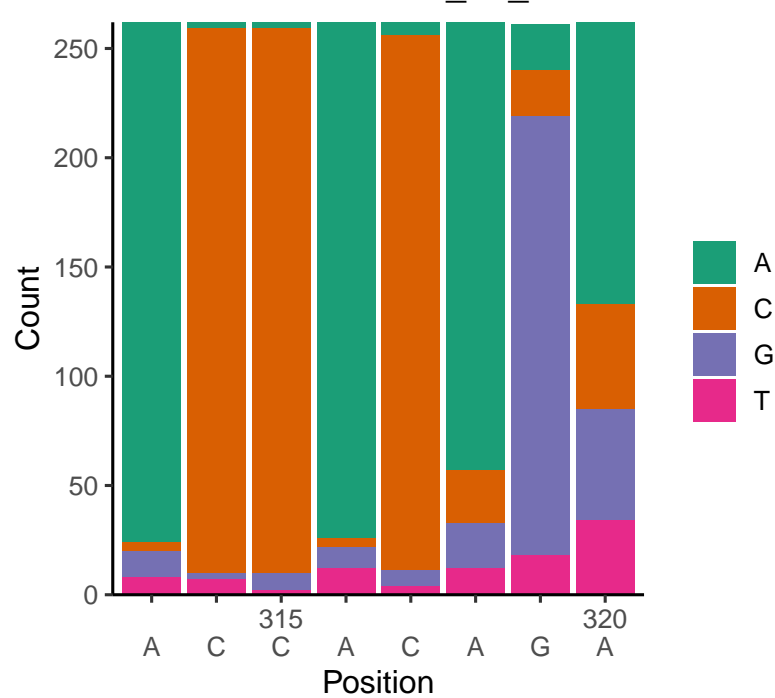


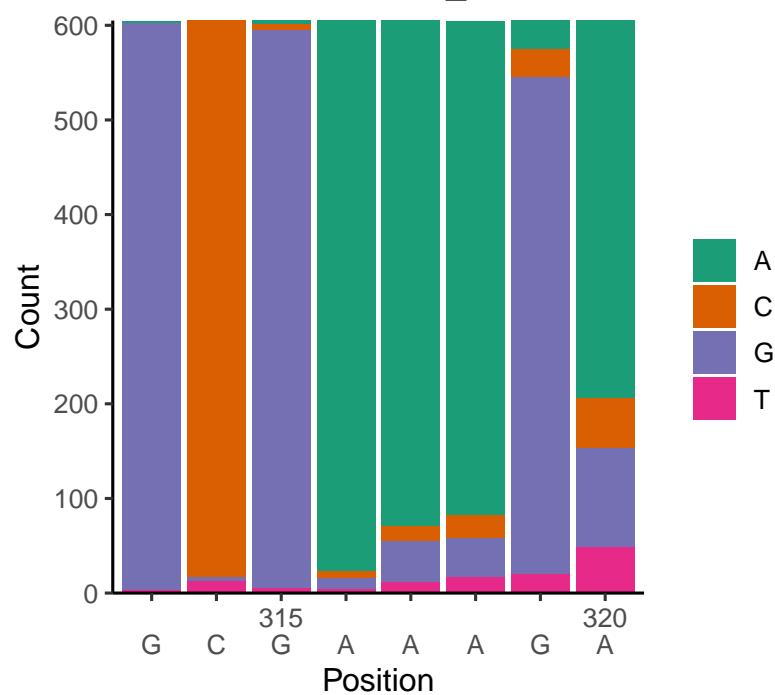
Gene IGHV1-69*04_09_G112A



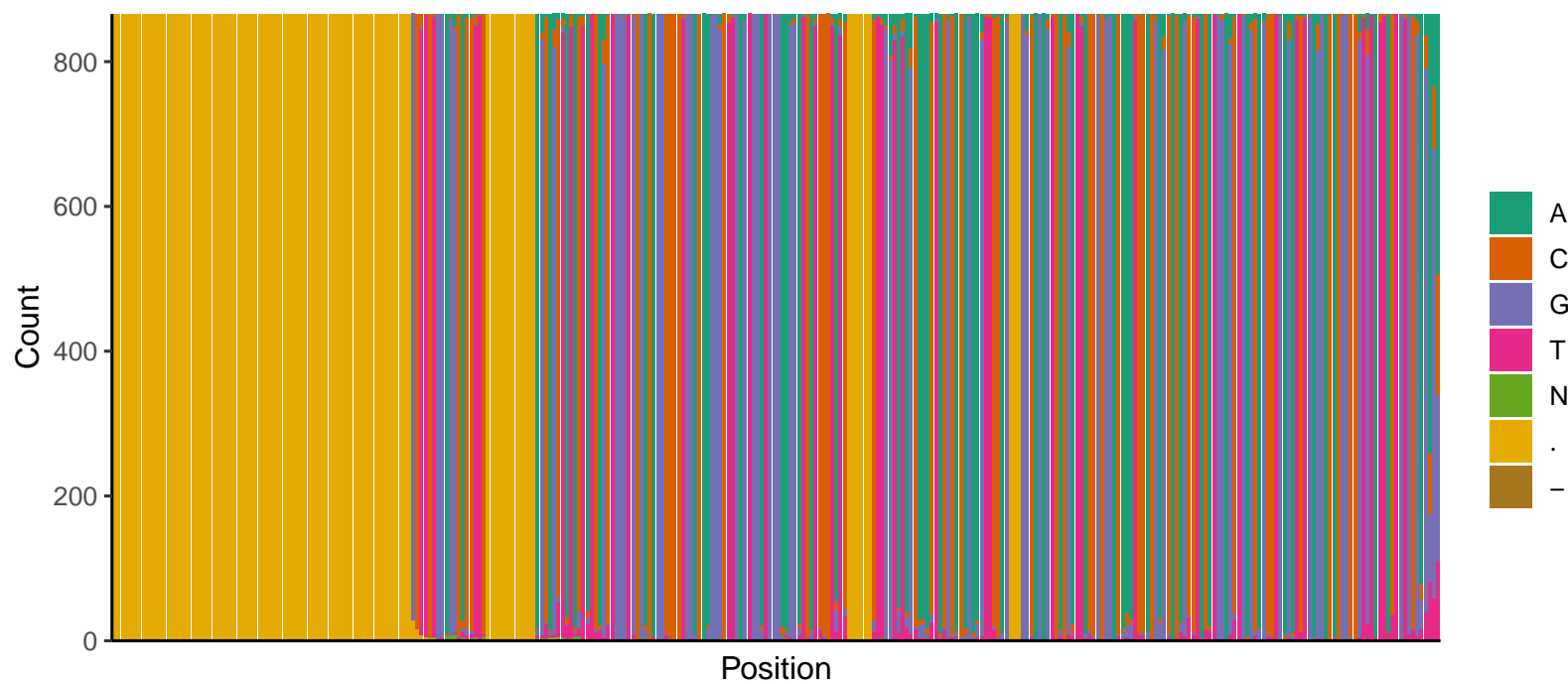
Gene IGHV3-15*01_02_G147A



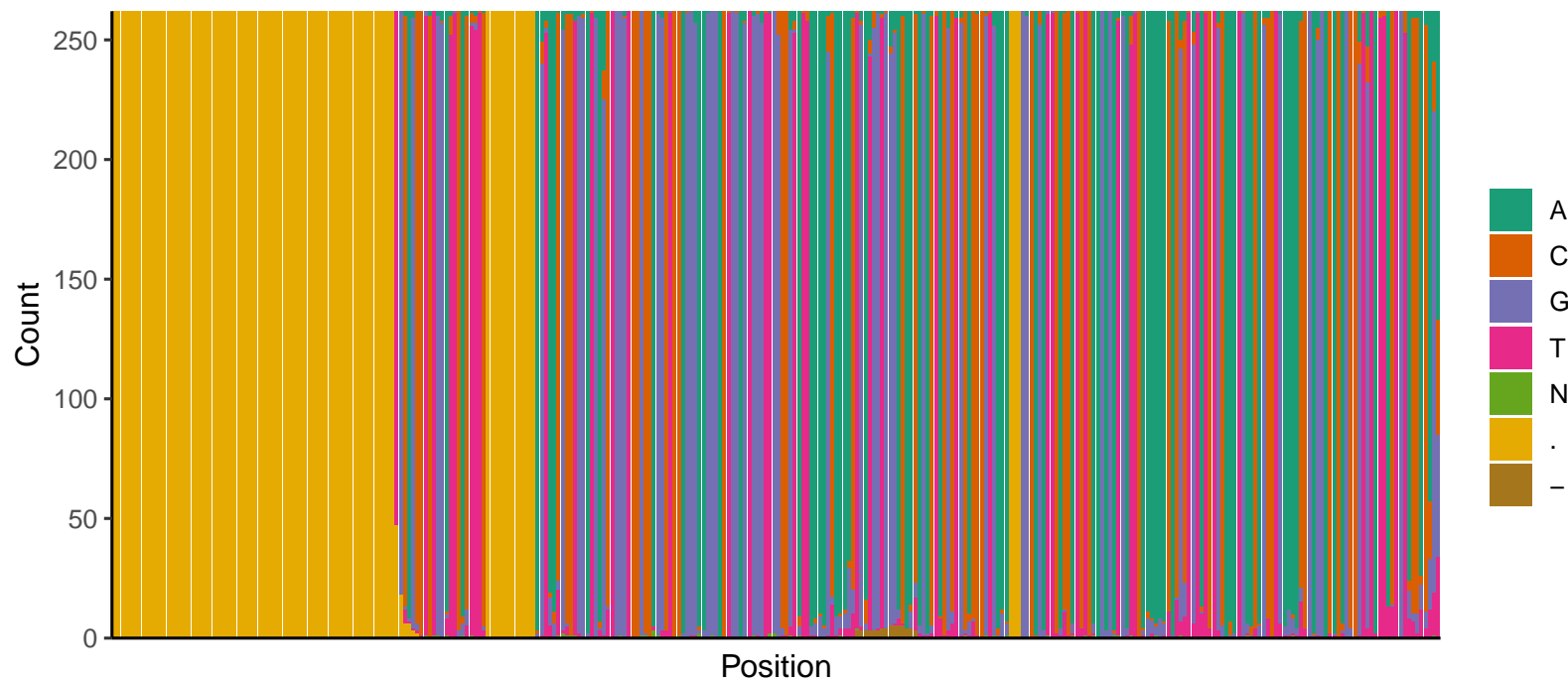
Gene IGHV3-30*02_A245G



Gene IGHV1-69*04_09_G112A



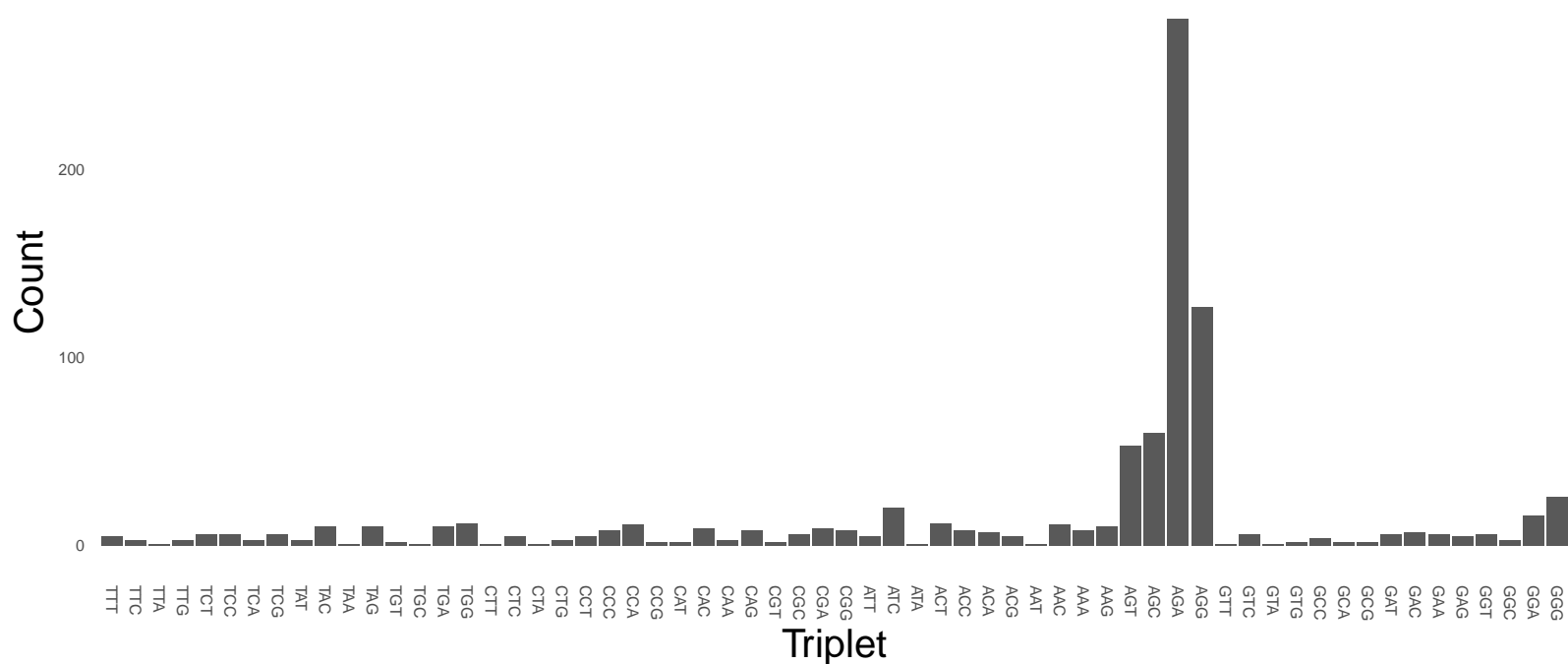
Gene IGHV3-15*01_02_G147A



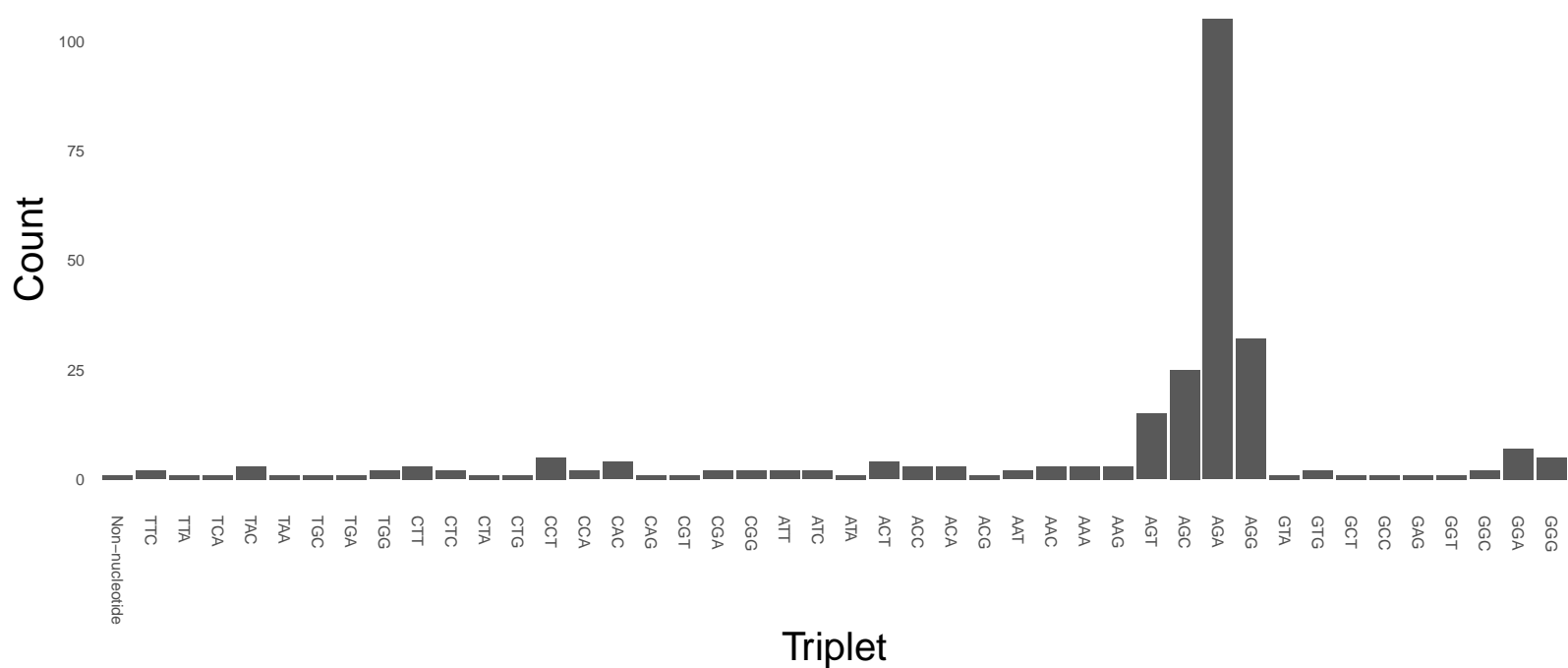
Gene IGHV3-30*02_A245G



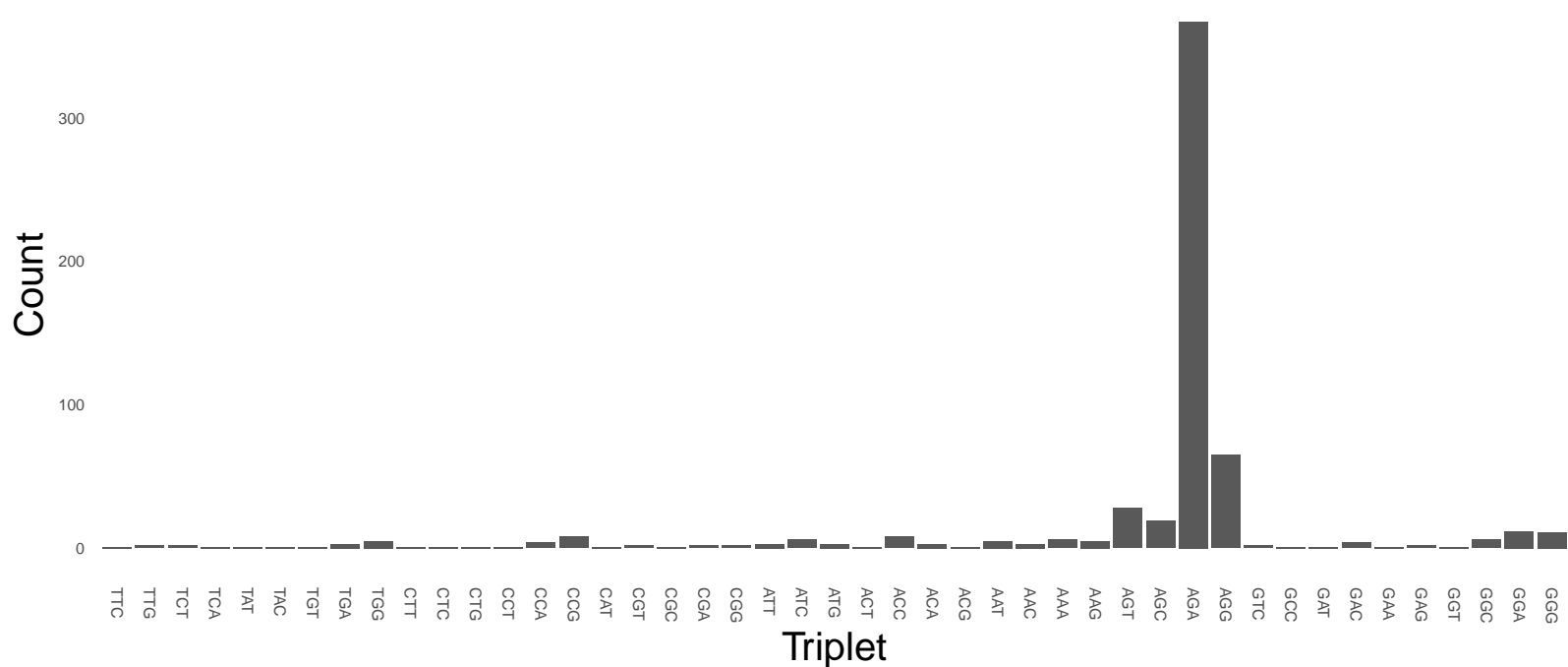
IGHV1-69*04_09_G112A- Final 3 nucleotides as a triplet



IGHV3-15*01_02_G147A- Final 3 nucleotides as a triplet

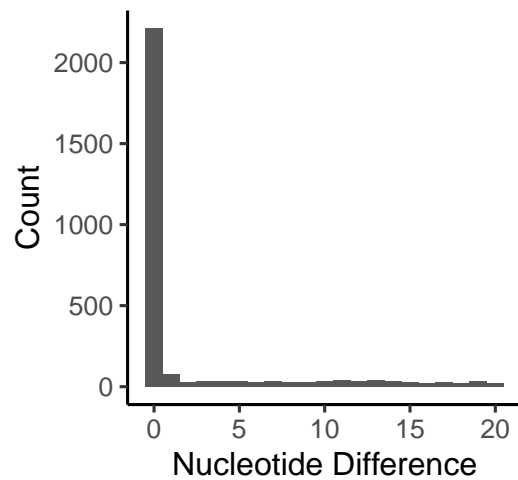


IGHV3-30*02_A245G- Final 3 nucleotides as a triplet



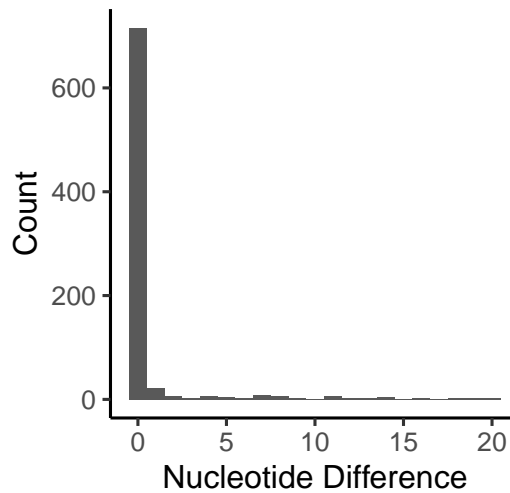
IGHV1-2*02

3077 sequences assigned
2211 (71.9%) exact matches, in which:
2207 unique CDR3
7 unique J



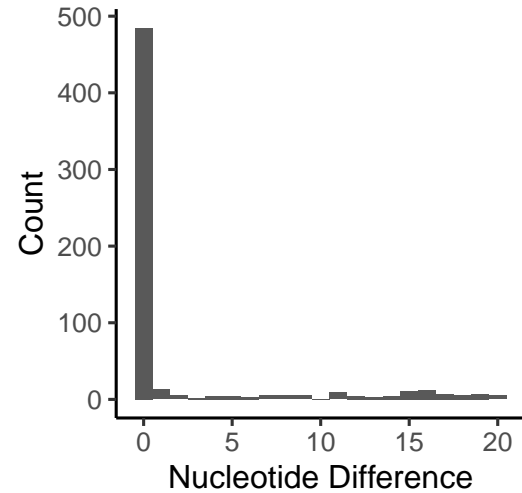
IGHV1-8*01

819 sequences assigned
716 (87.4%) exact matches, in which:
716 unique CDR3
6 unique J



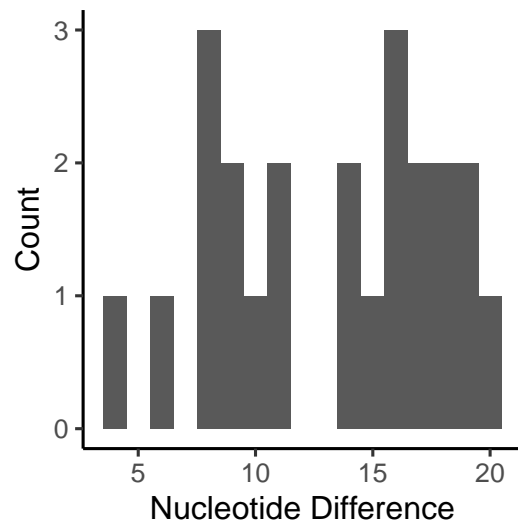
IGHV1-24*01

624 sequences assigned
485 (77.7%) exact matches, in which:
484 unique CDR3
7 unique J



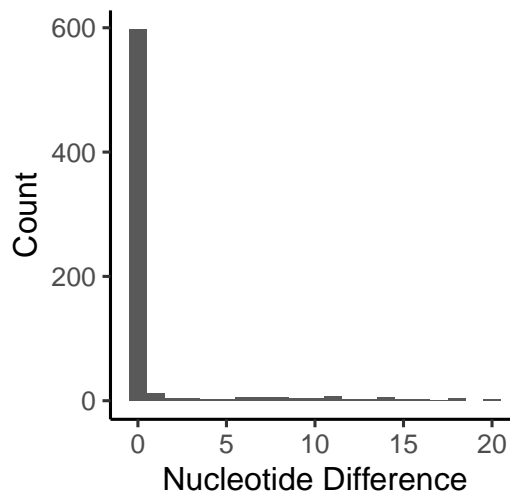
IGHV1-3*04

31 sequences assigned
No exact matches.



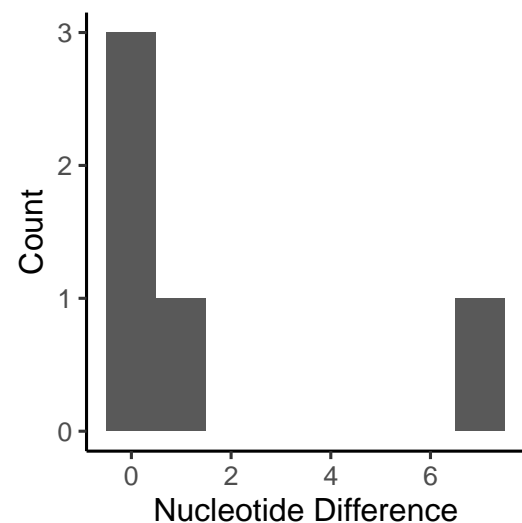
IGHV1-8*02

699 sequences assigned
598 (85.6%) exact matches, in which:
597 unique CDR3
7 unique J



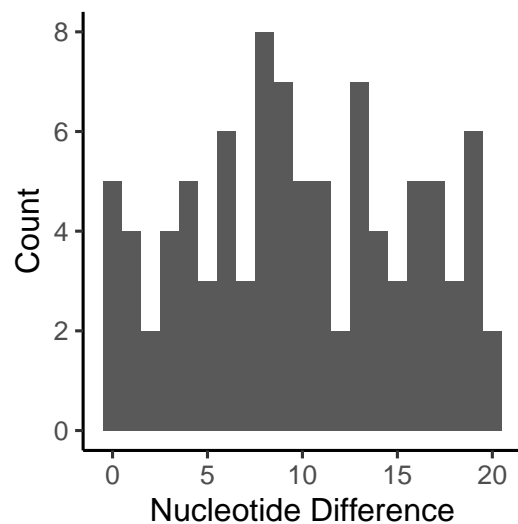
IGHV1-45*02

5 sequences assigned
3 (60%) exact matches, in which:
3 unique CDR3
3 unique J



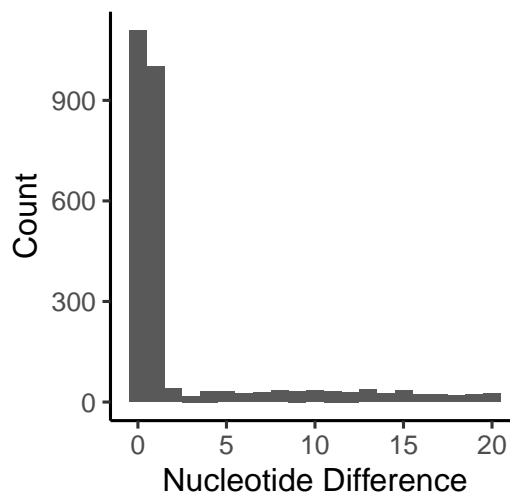
IGHV1-3*01_05

122 sequences assigned
5 (4.1%) exact matches, in which:
5 unique CDR3
2 unique J



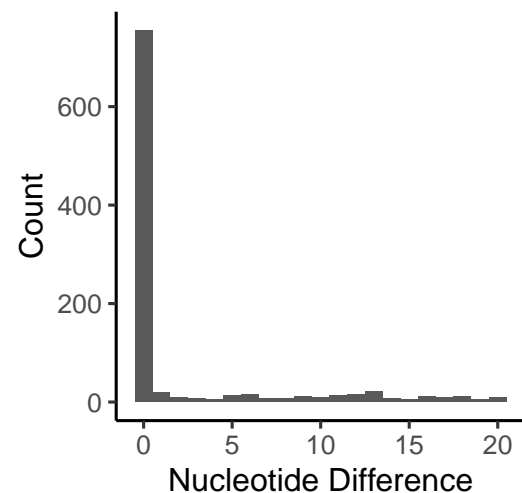
IGHV1-18*01

2891 sequences assigned
1109 (38.4%) exact matches, in which:
1108 unique CDR3
6 unique J



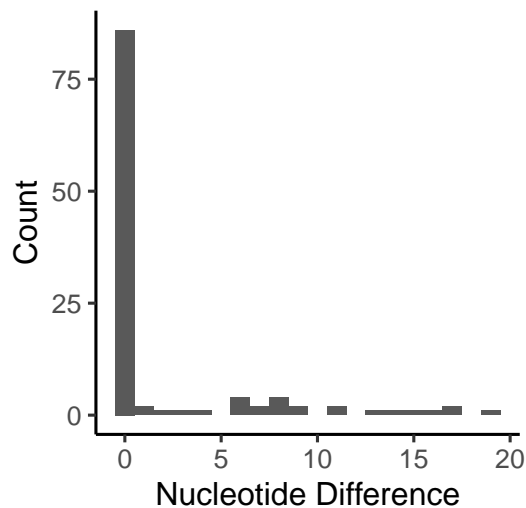
IGHV1-46*01

1041 sequences assigned
755 (72.5%) exact matches, in which:
755 unique CDR3
7 unique J



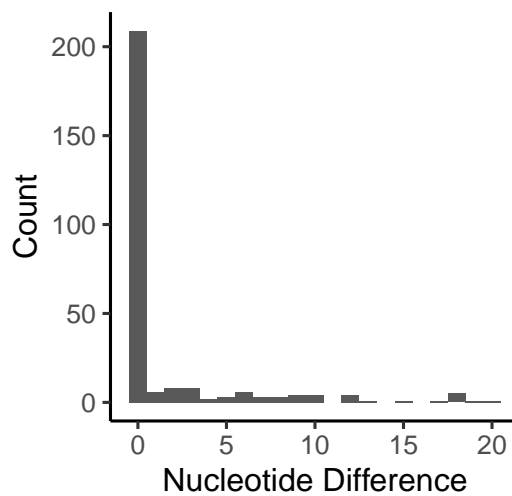
IGHV1-58*02

124 sequences assigned
86 (69.4%) exact matches, in which:
86 unique CDR3
7 unique J



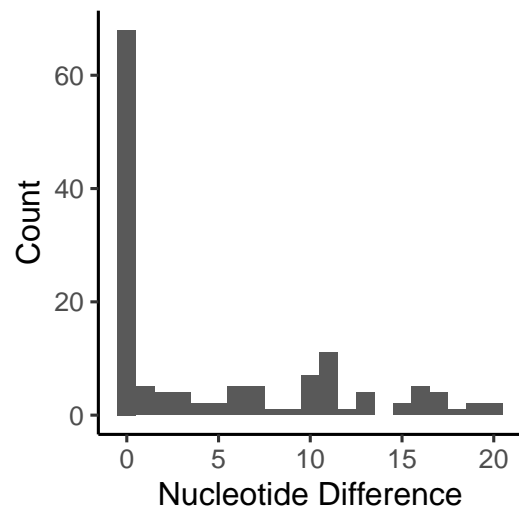
IGHV2-5*01

278 sequences assigned
209 (75.2%) exact matches, in which:
209 unique CDR3
6 unique J



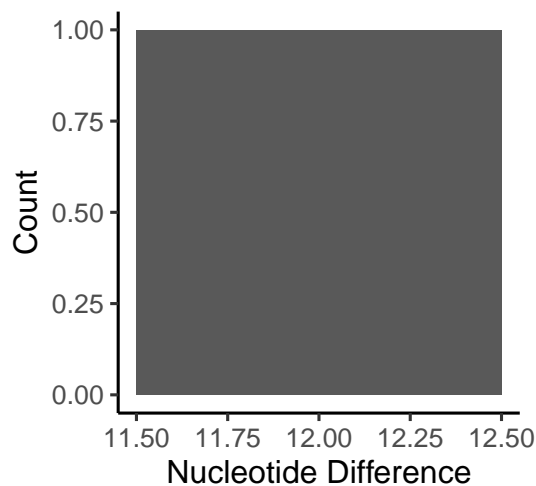
IGHV2-70*11_15

143 sequences assigned
68 (47.6%) exact matches, in which:
68 unique CDR3
5 unique J



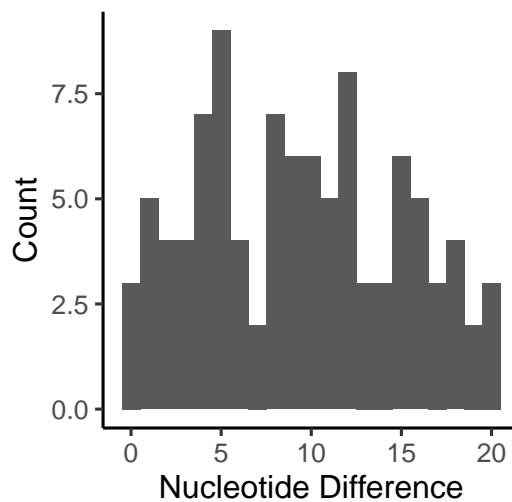
IGHV1-69-2*01

2 sequences assigned
No exact matches.



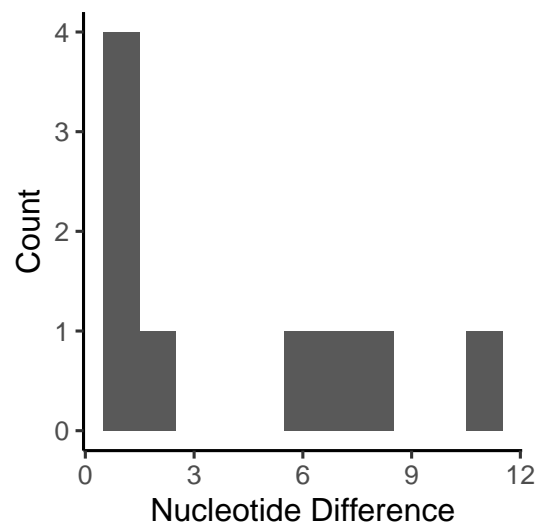
IGHV2-5*02

119 sequences assigned
3 (2.5%) exact matches, in which:
3 unique CDR3
2 unique J



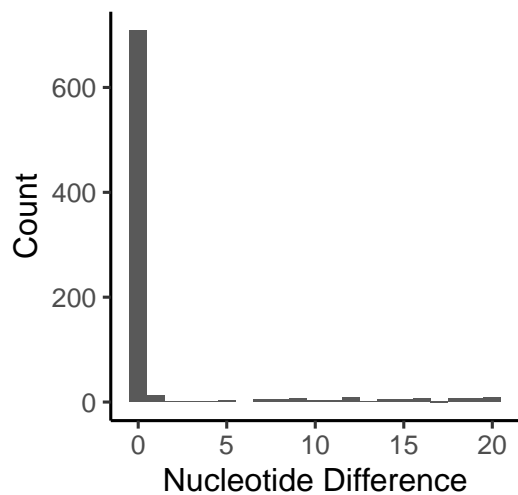
IGHV2-70D*04

11 sequences assigned
No exact matches.



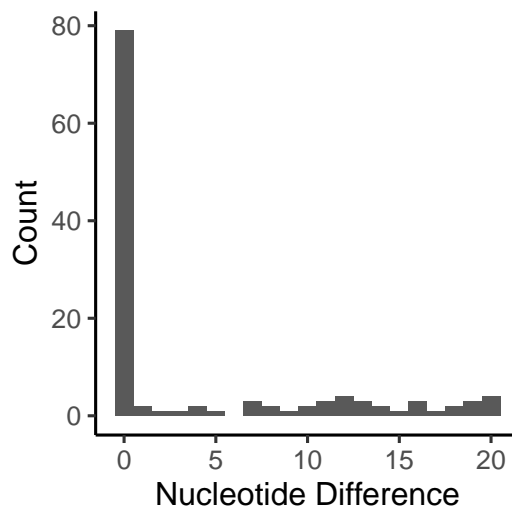
IGHV1-69*04_09_G112A

866 sequences assigned
709 (81.9%) exact matches, in which:
706 unique CDR3
7 unique J



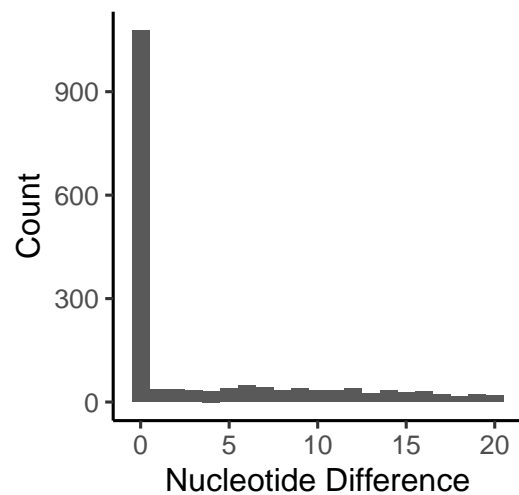
IGHV2-26*01

126 sequences assigned
79 (62.7%) exact matches, in which:
79 unique CDR3
7 unique J



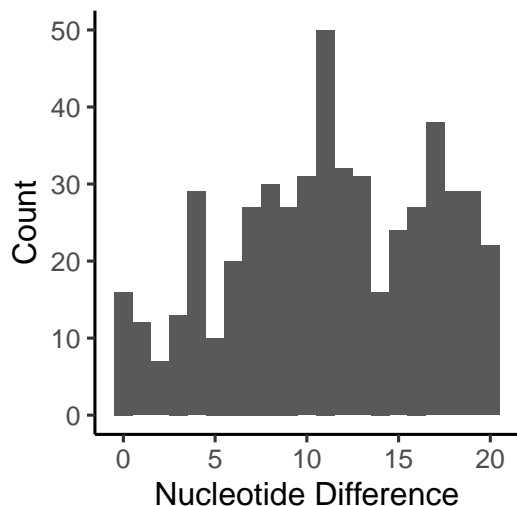
IGHV3-7*01

1863 sequences assigned
1078 (57.9%) exact matches, in which:
1051 unique CDR3
7 unique J



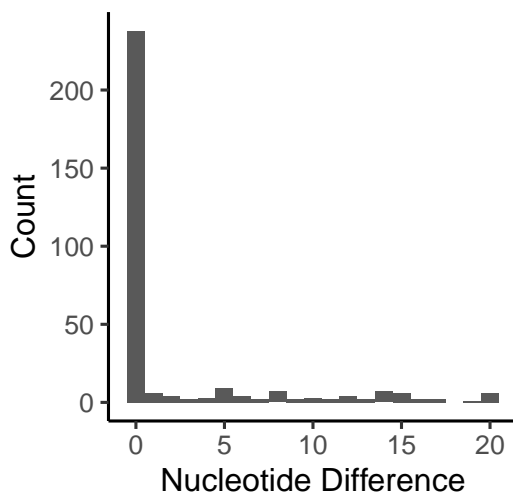
IGHV3-7*03

651 sequences assigned
16 (2.5%) exact matches, in which:
12 unique CDR3
5 unique J



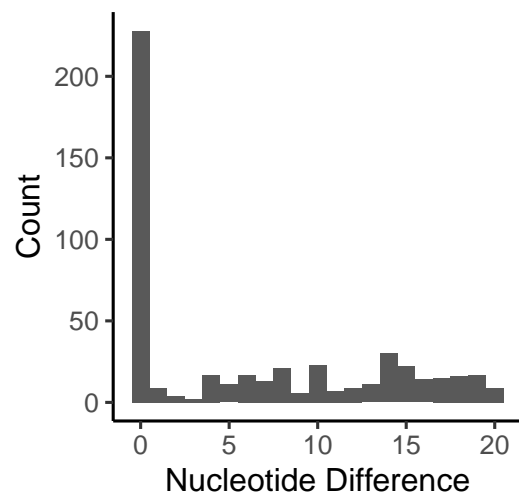
IGHV3-11*04

329 sequences assigned
238 (72.3%) exact matches, in which:
237 unique CDR3
6 unique J



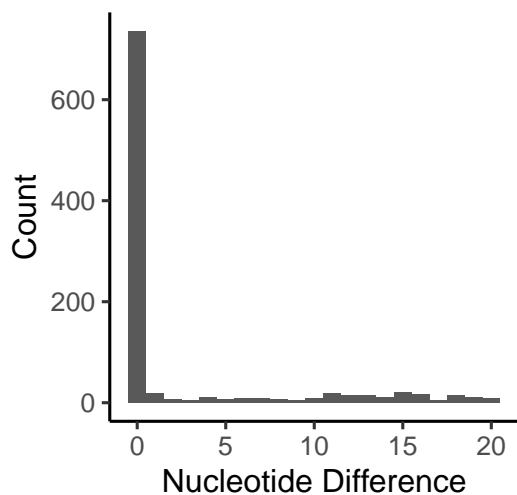
IGHV3-15*01_02

573 sequences assigned
228 (39.8%) exact matches, in which:
223 unique CDR3
6 unique J



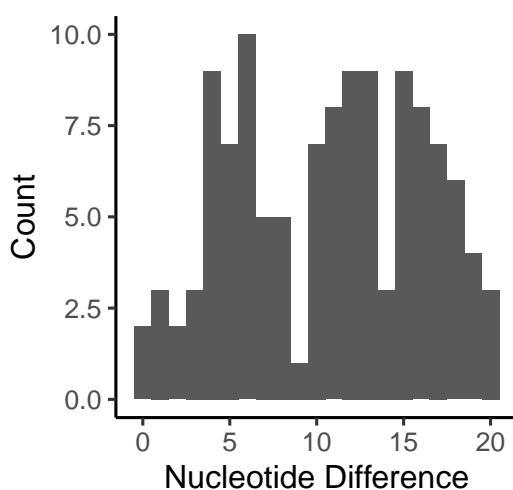
IGHV3-9*01

985 sequences assigned
736 (74.7%) exact matches, in which:
726 unique CDR3
7 unique J



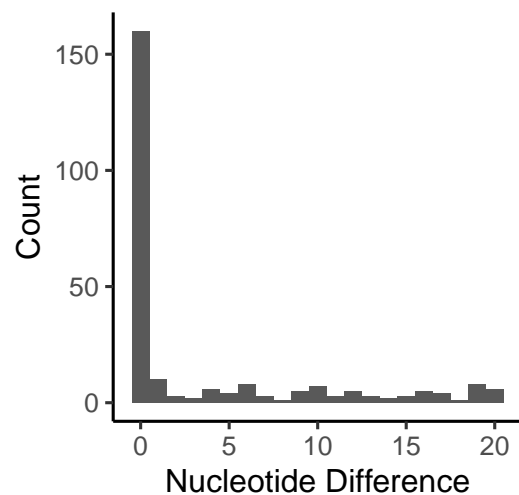
IGHV3-11*06

178 sequences assigned
2 (1.1%) exact matches, in which:
2 unique CDR3
2 unique J



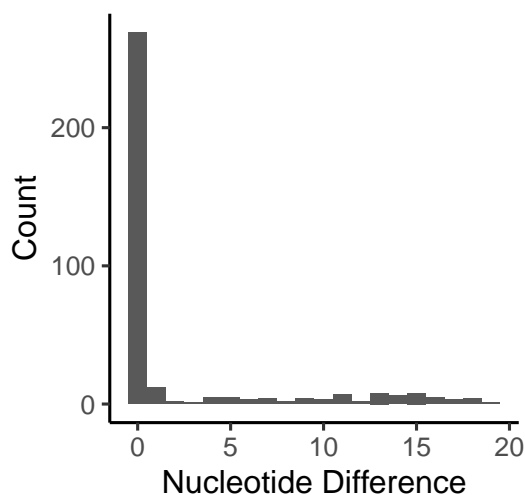
IGHV3-15*01_02_G147A

262 sequences assigned
160 (61.1%) exact matches, in which:
157 unique CDR3
6 unique J



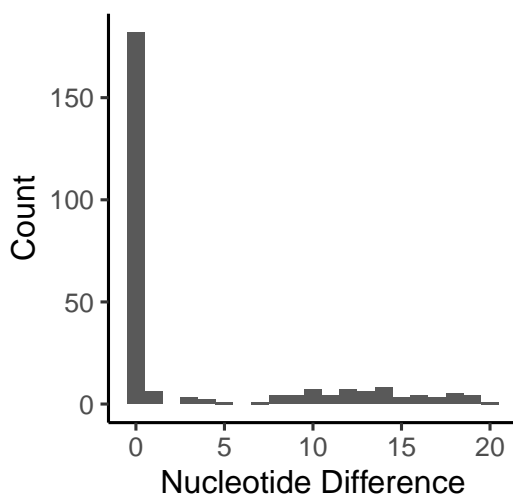
IGHV3-11*01

389 sequences assigned
269 (69.2%) exact matches, in which:
263 unique CDR3
6 unique J



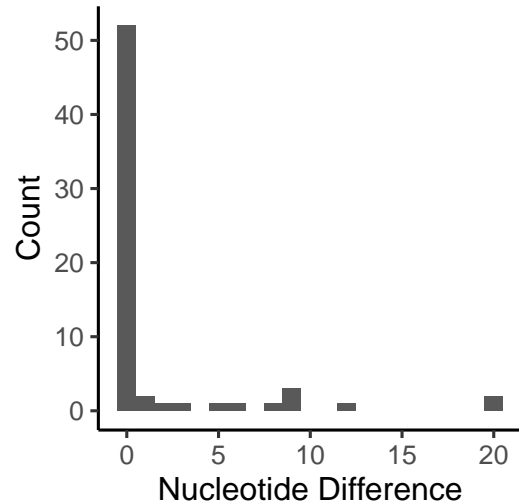
IGHV3-13*01

263 sequences assigned
182 (69.2%) exact matches, in which:
180 unique CDR3
7 unique J



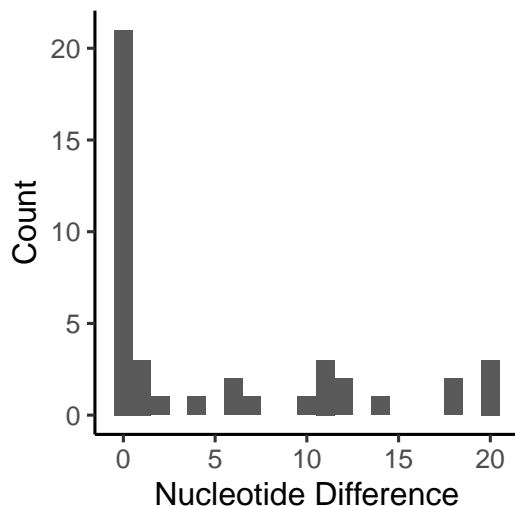
IGHV3-20*01_02

65 sequences assigned
52 (80%) exact matches, in which:
50 unique CDR3
6 unique J



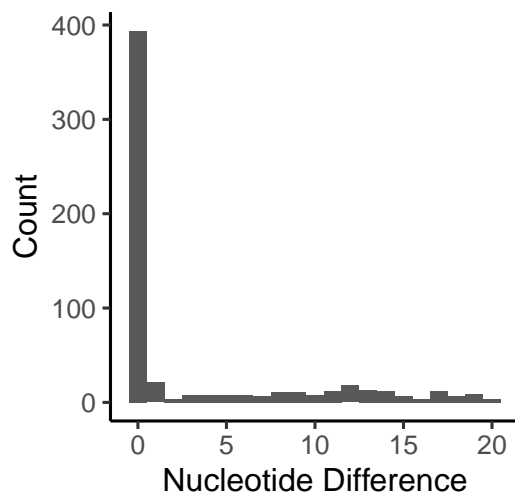
IGHV3-20*03_04

44 sequences assigned
21 (47.7%) exact matches, in which:
21 unique CDR3
4 unique J



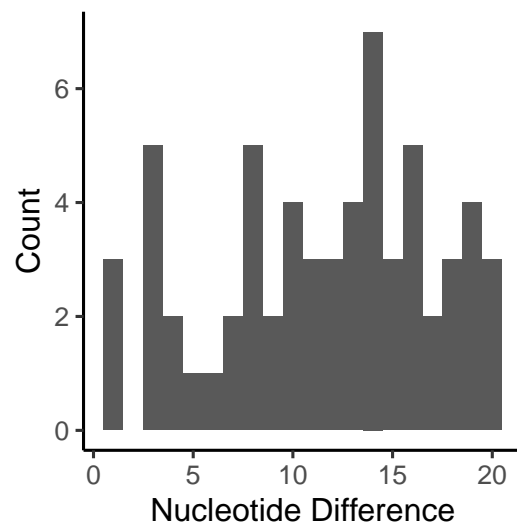
IGHV3-33*01

648 sequences assigned
394 (60.8%) exact matches, in which:
388 unique CDR3
6 unique J



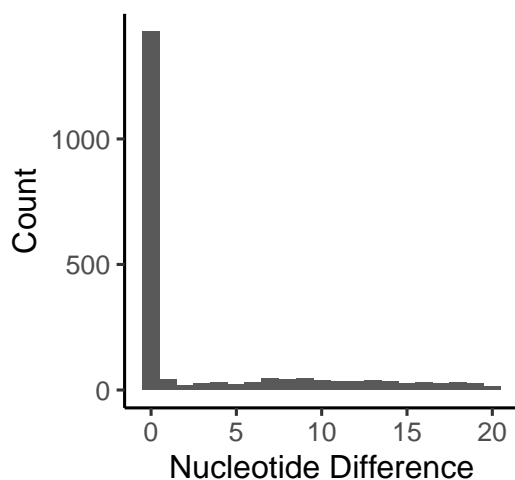
IGHV3-49*04

74 sequences assigned
No exact matches.



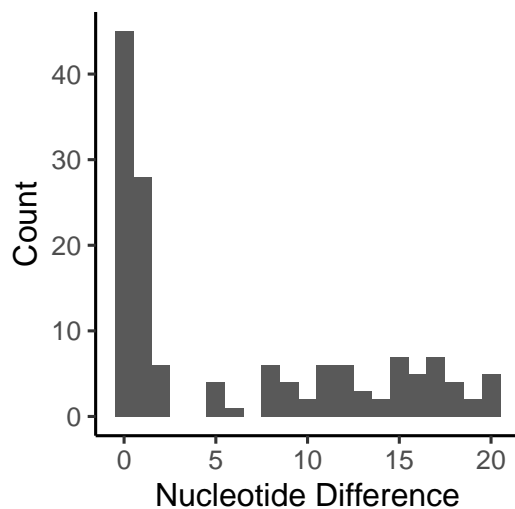
IGHV3-21*01_02

2267 sequences assigned
1427 (62.9%) exact matches, in which:
1390 unique CDR3
7 unique J



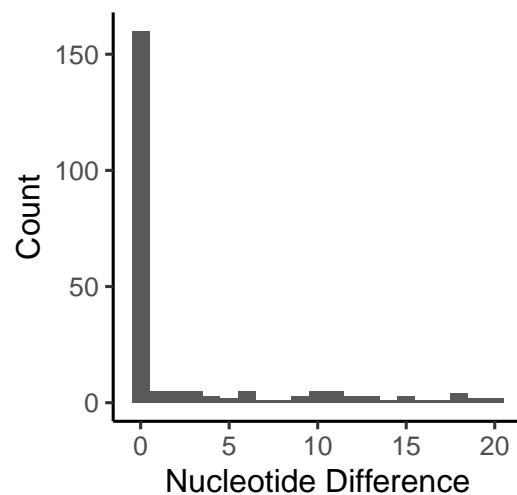
IGHV3-43*01

164 sequences assigned
45 (27.4%) exact matches, in which:
45 unique CDR3
6 unique J



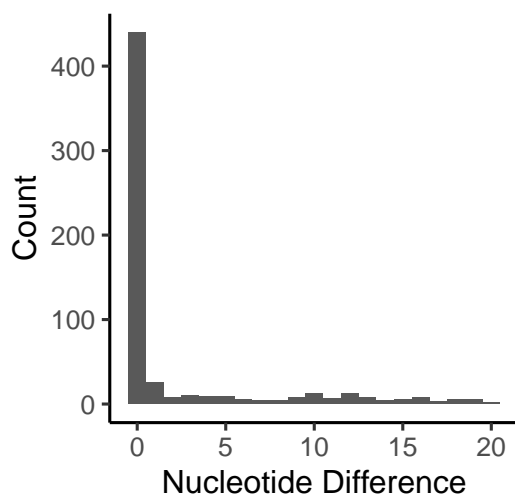
IGHV3-49*03_05

236 sequences assigned
160 (67.8%) exact matches, in which:
160 unique CDR3
7 unique J



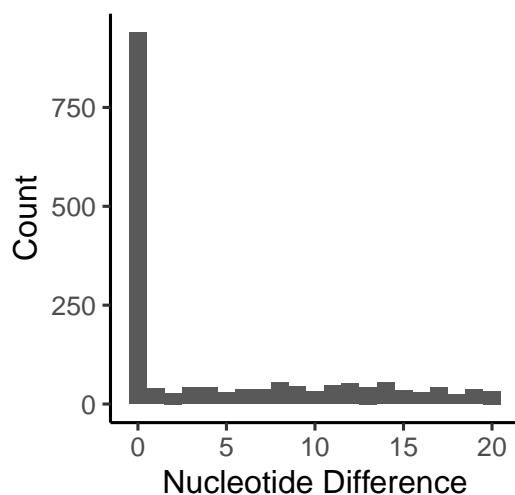
IGHV3-30*02_A245G

605 sequences assigned
440 (72.7%) exact matches, in which:
430 unique CDR3
6 unique J



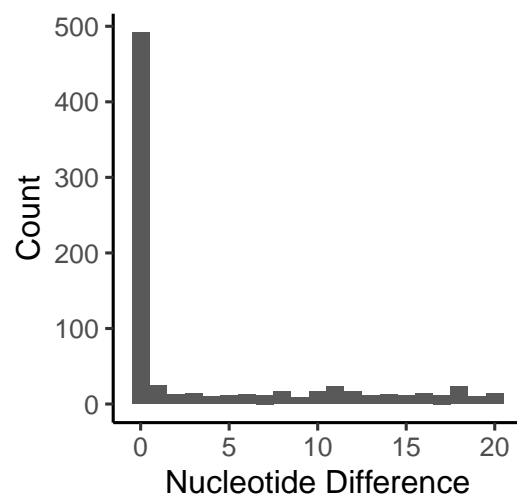
IGHV3-48*02

1921 sequences assigned
940 (48.9%) exact matches, in which:
924 unique CDR3
7 unique J



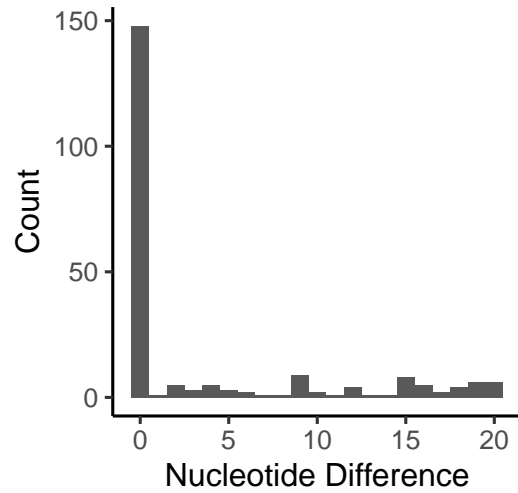
IGHV3-53*01_02

845 sequences assigned
492 (58.2%) exact matches, in which:
484 unique CDR3
7 unique J



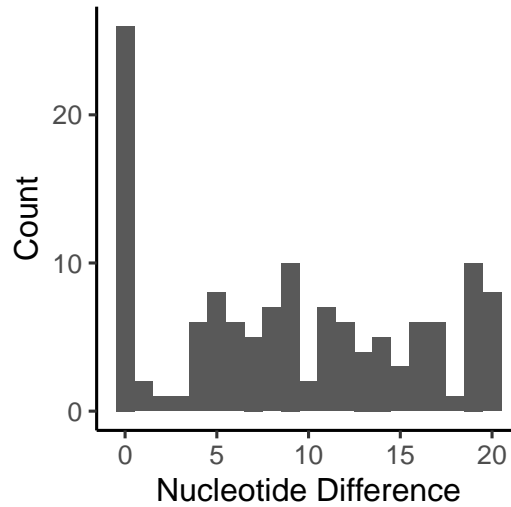
IGHV3-64*01

257 sequences assigned
148 (57.6%) exact matches, in which:
141 unique CDR3
7 unique J



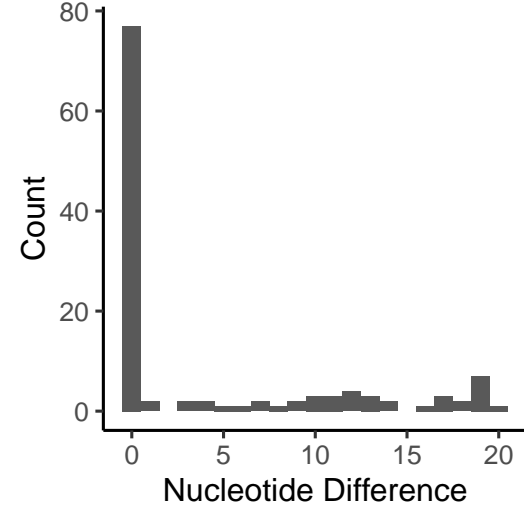
IGHV3-72*01

156 sequences assigned
26 (16.7%) exact matches, in which:
23 unique CDR3
5 unique J



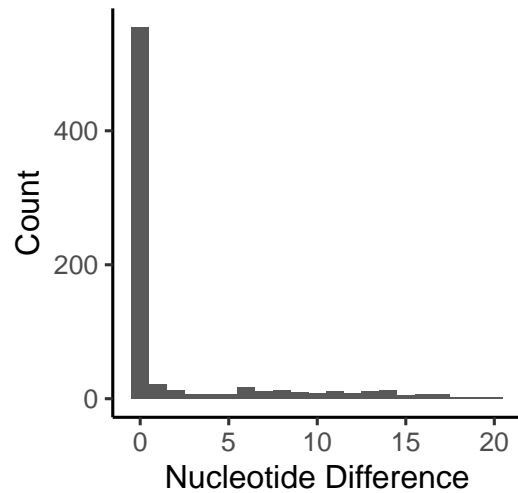
IGHV3-43D*03

126 sequences assigned
77 (61.1%) exact matches, in which:
77 unique CDR3
6 unique J



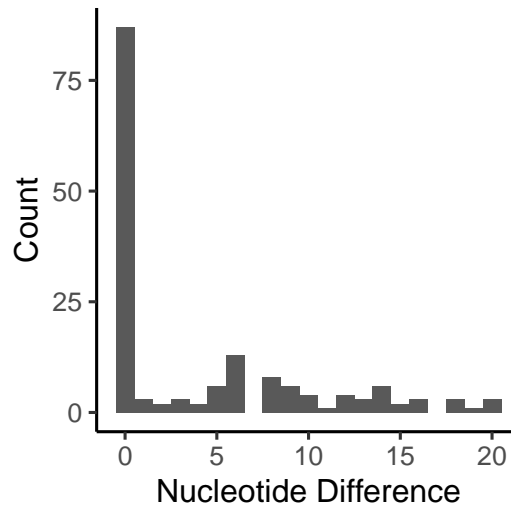
IGHV3-66*02

799 sequences assigned
555 (69.5%) exact matches, in which:
541 unique CDR3
7 unique J



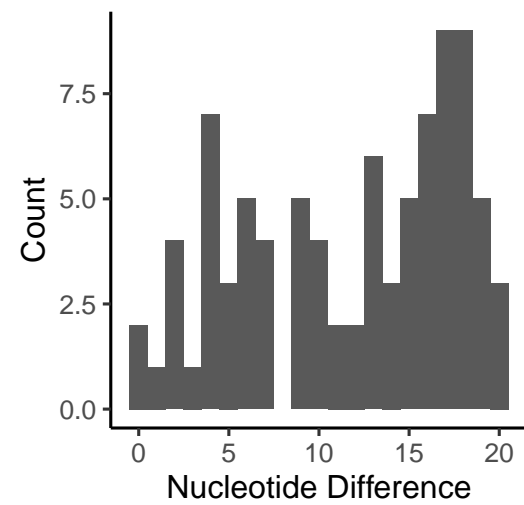
IGHV3-73*01_02

185 sequences assigned
87 (47%) exact matches, in which:
87 unique CDR3
6 unique J



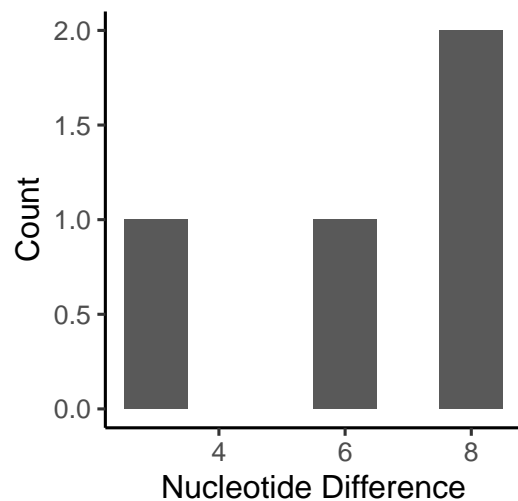
IGHV3-64D*06

143 sequences assigned
2 (1.4%) exact matches, in which:
2 unique CDR3
2 unique J



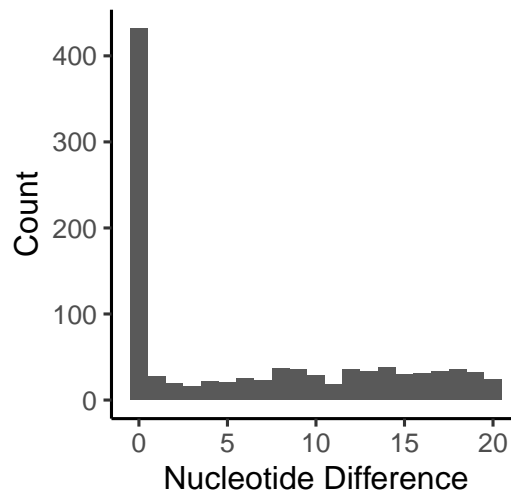
IGHV3-69-1*02

5 sequences assigned
No exact matches.



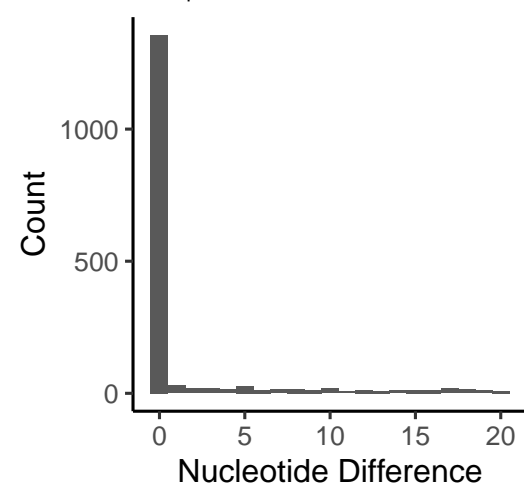
IGHV3-74*01_02

1141 sequences assigned
432 (37.9%) exact matches, in which:
422 unique CDR3
7 unique J



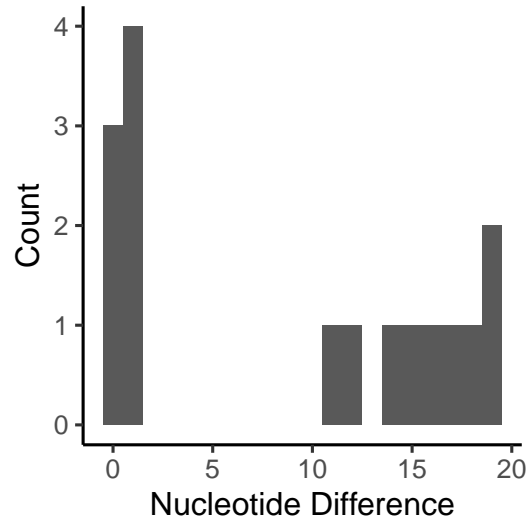
IGHV4-4*07

1739 sequences assigned
1356 (78%) exact matches, in which:
1338 unique CDR3
7 unique J



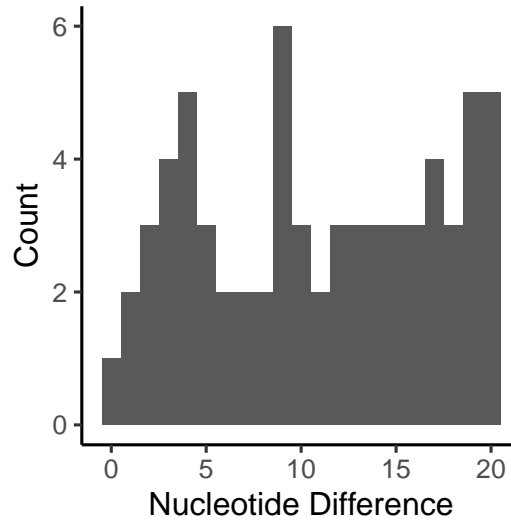
IGHV4-28*01_07

22 sequences assigned
3 (13.6%) exact matches, in which:
3 unique CDR3
2 unique J



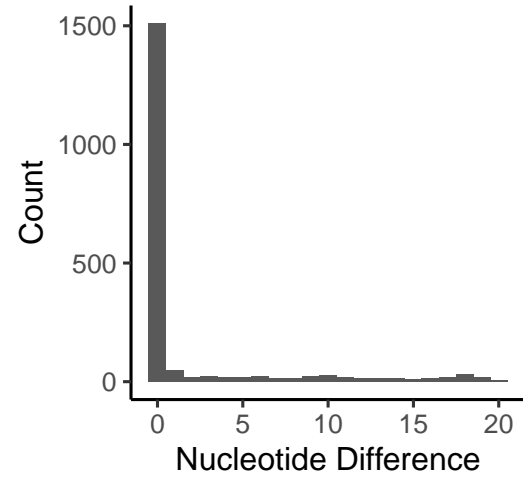
IGHV4-31*03_04

106 sequences assigned
1 (0.9%) exact matches, in which:
1 unique CDR3
1 unique J



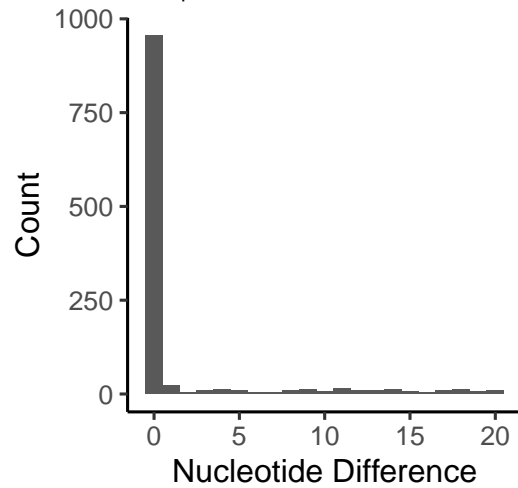
IGHV4-39*07

2037 sequences assigned
1510 (74.1%) exact matches, in which:
1492 unique CDR3
7 unique J



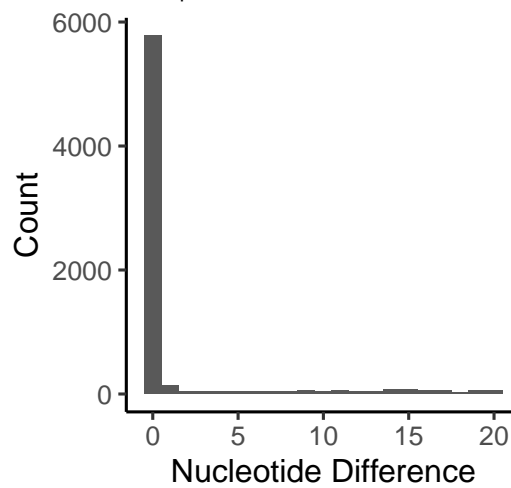
IGHV4-30-2*01

1224 sequences assigned
955 (78%) exact matches, in which:
932 unique CDR3
6 unique J



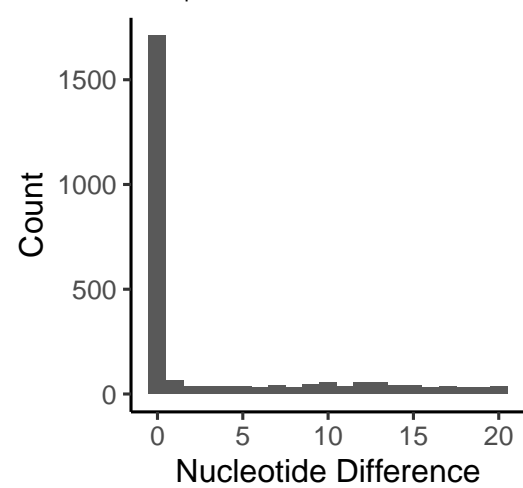
IGHV4-34*01_02

7120 sequences assigned
5779 (81.2%) exact matches, in which:
5616 unique CDR3
7 unique J



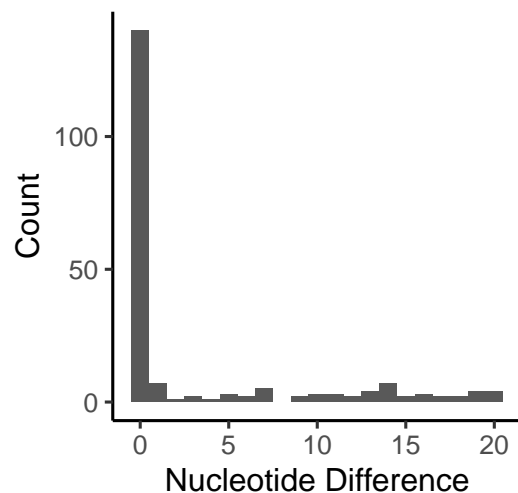
IGHV4-39*01_05

2919 sequences assigned
1710 (58.6%) exact matches, in which:
1674 unique CDR3
7 unique J



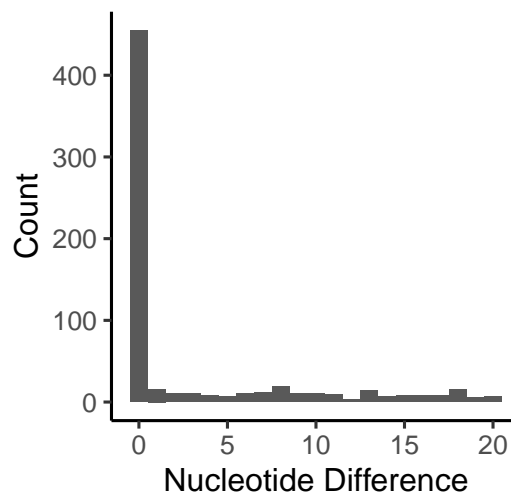
IGHV4-30-4*07

255 sequences assigned
140 (54.9%) exact matches, in which:
140 unique CDR3
6 unique J



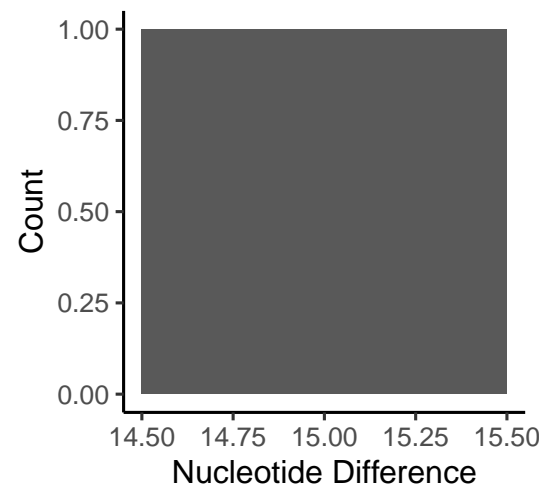
IGHV4-38-2*02

717 sequences assigned
455 (63.5%) exact matches, in which:
445 unique CDR3
6 unique J



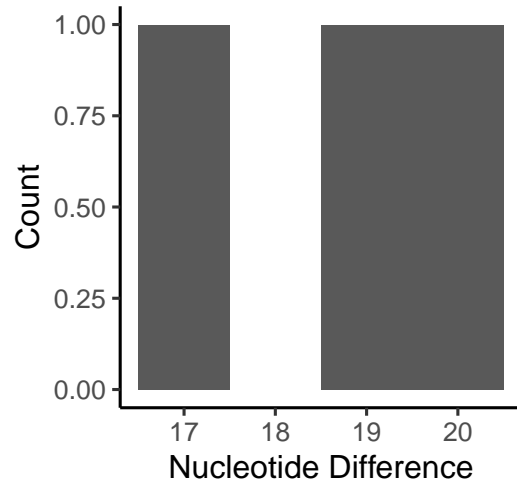
IGHV4-55*03

5 sequences assigned
No exact matches.



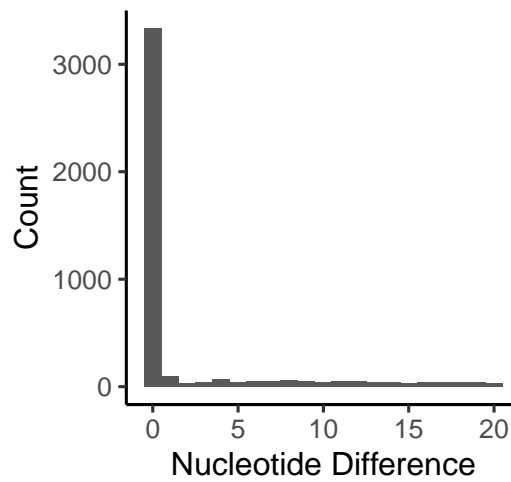
IGHV4-55*09

9 sequences assigned
No exact matches.



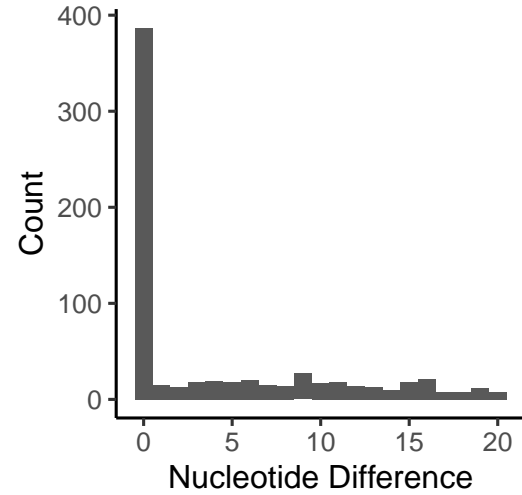
IGHV4-59*01_07

4606 sequences assigned
3334 (72.4%) exact matches, in which:
3270 unique CDR3
7 unique J



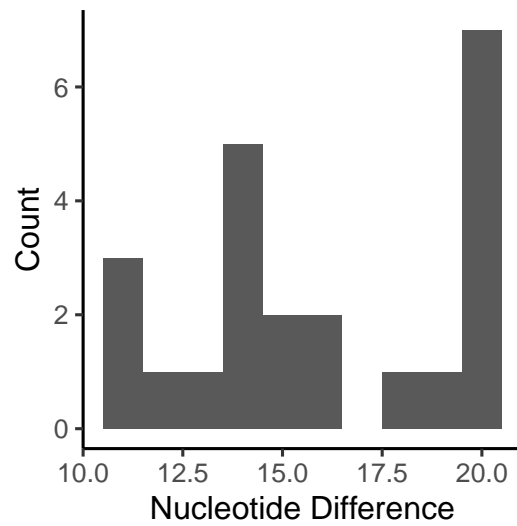
IGHV5-51*01_03

744 sequences assigned
387 (52%) exact matches, in which:
387 unique CDR3
7 unique J



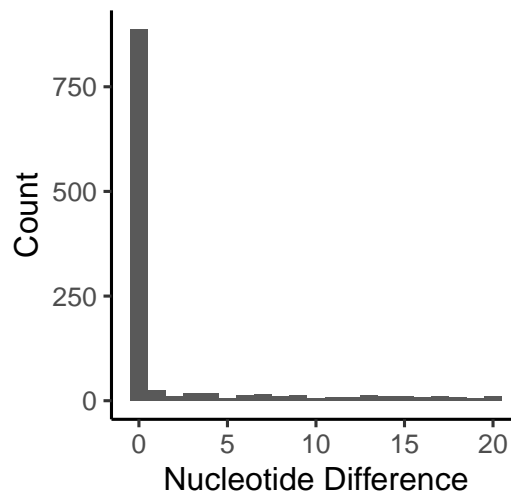
IGHV4-55*02_04_08

62 sequences assigned
No exact matches.



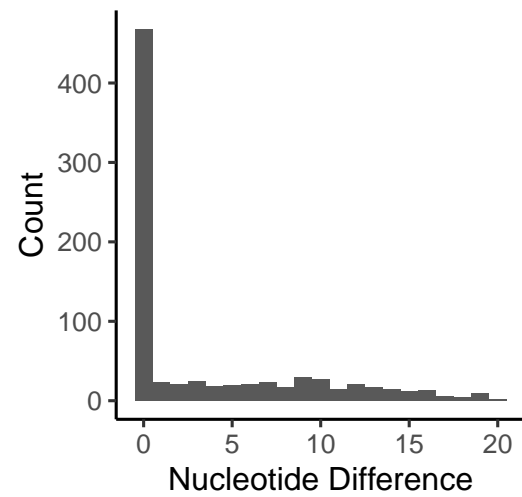
IGHV4-61*02

1168 sequences assigned
888 (76%) exact matches, in which:
880 unique CDR3
6 unique J



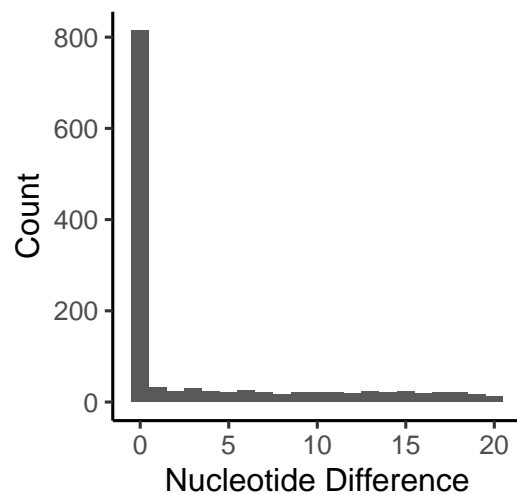
IGHV6-1*01_02

836 sequences assigned
468 (56%) exact matches, in which:
467 unique CDR3
7 unique J



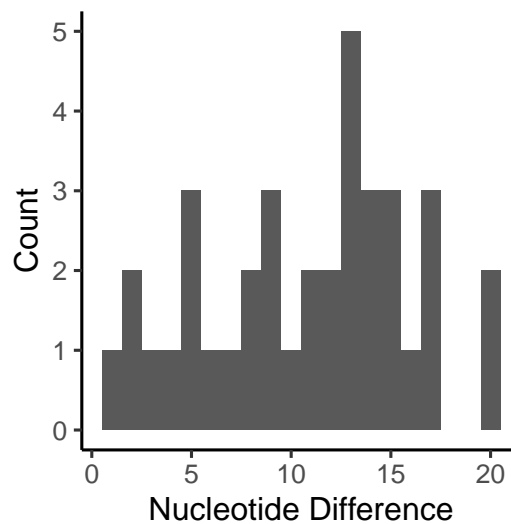
IGHV4-59*08

1353 sequences assigned
815 (60.2%) exact matches, in which:
797 unique CDR3
7 unique J



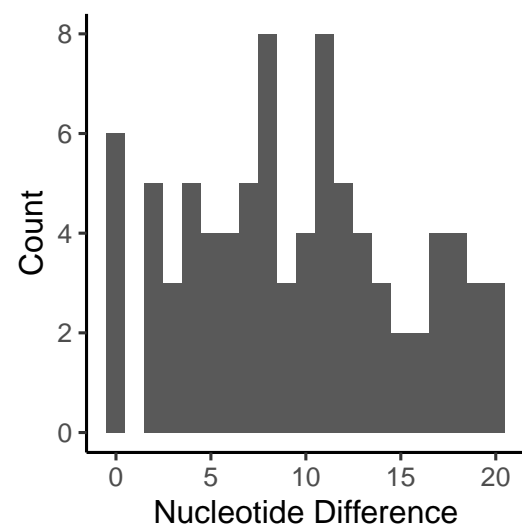
IGHV5-10-1*01_03

55 sequences assigned
No exact matches.

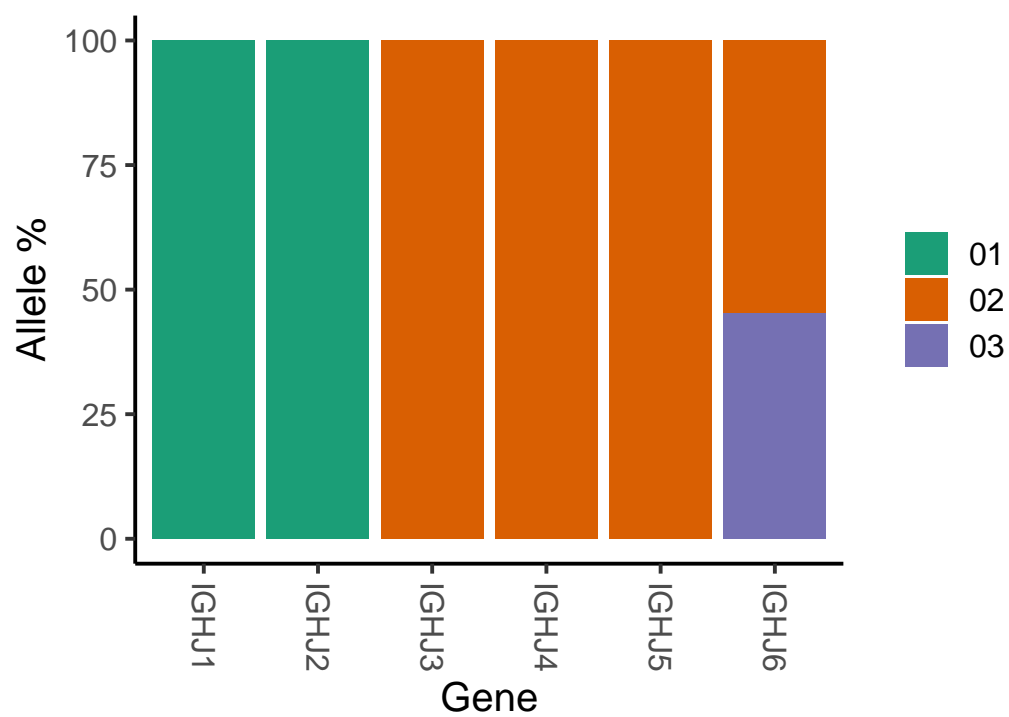


IGHV7-4-1*02

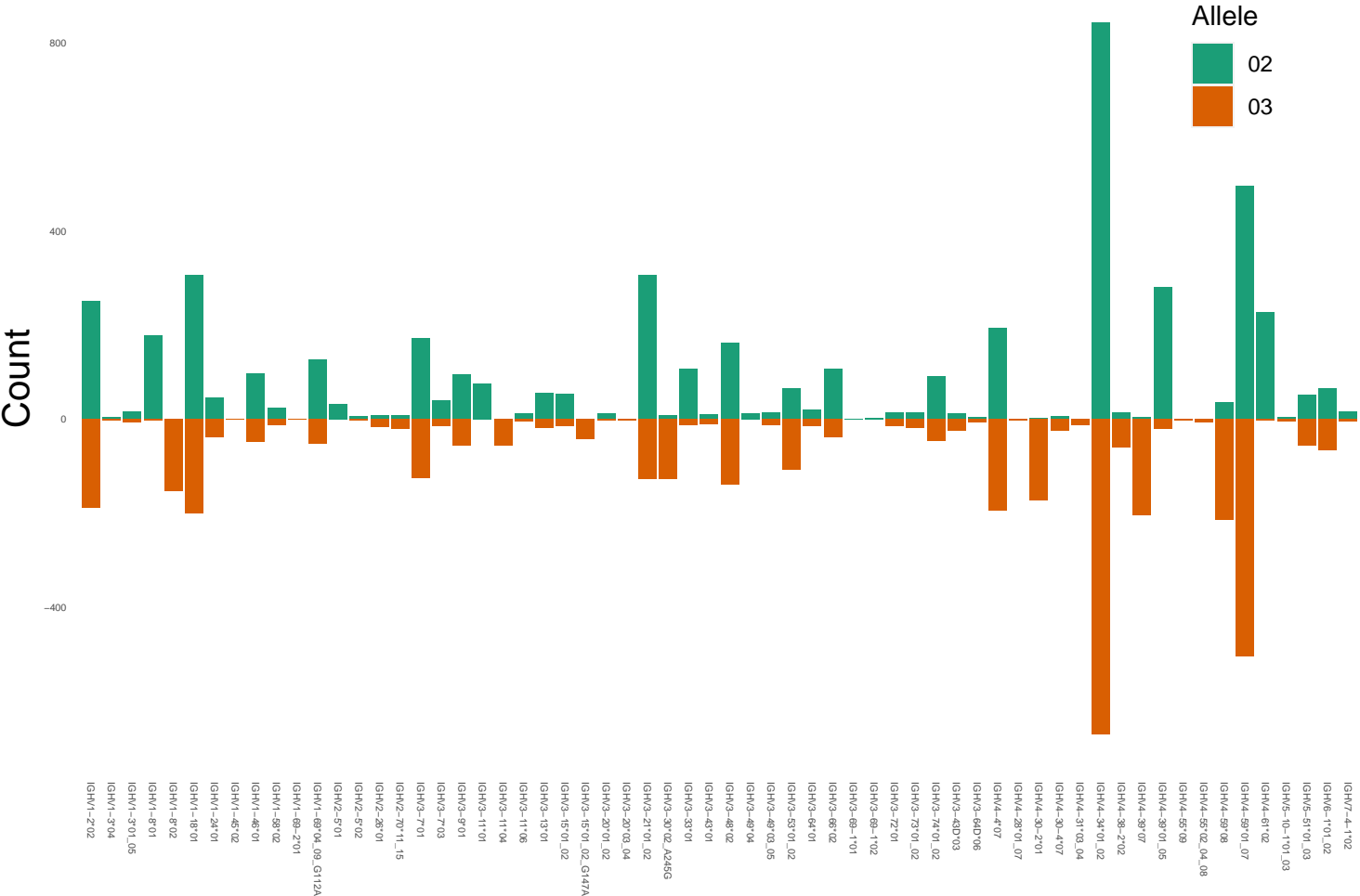
131 sequences assigned
6 (4.6%) exact matches, in which:
6 unique CDR3
1 unique J



Allele Usage



Sequence Count byIGHJ6 allele usage



Novel sequence(s)IGHV4–39*02_C258GIGHV4–59*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.

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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.

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

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

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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.