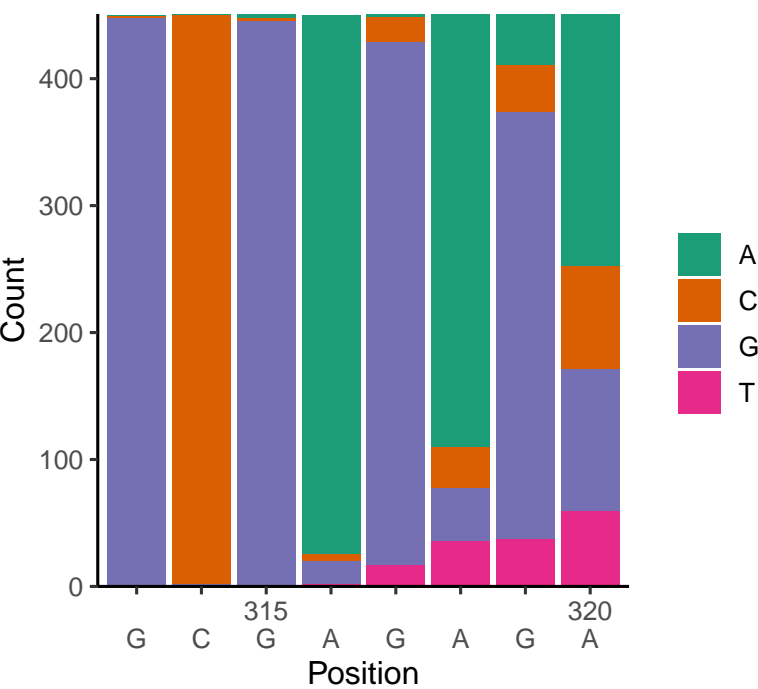
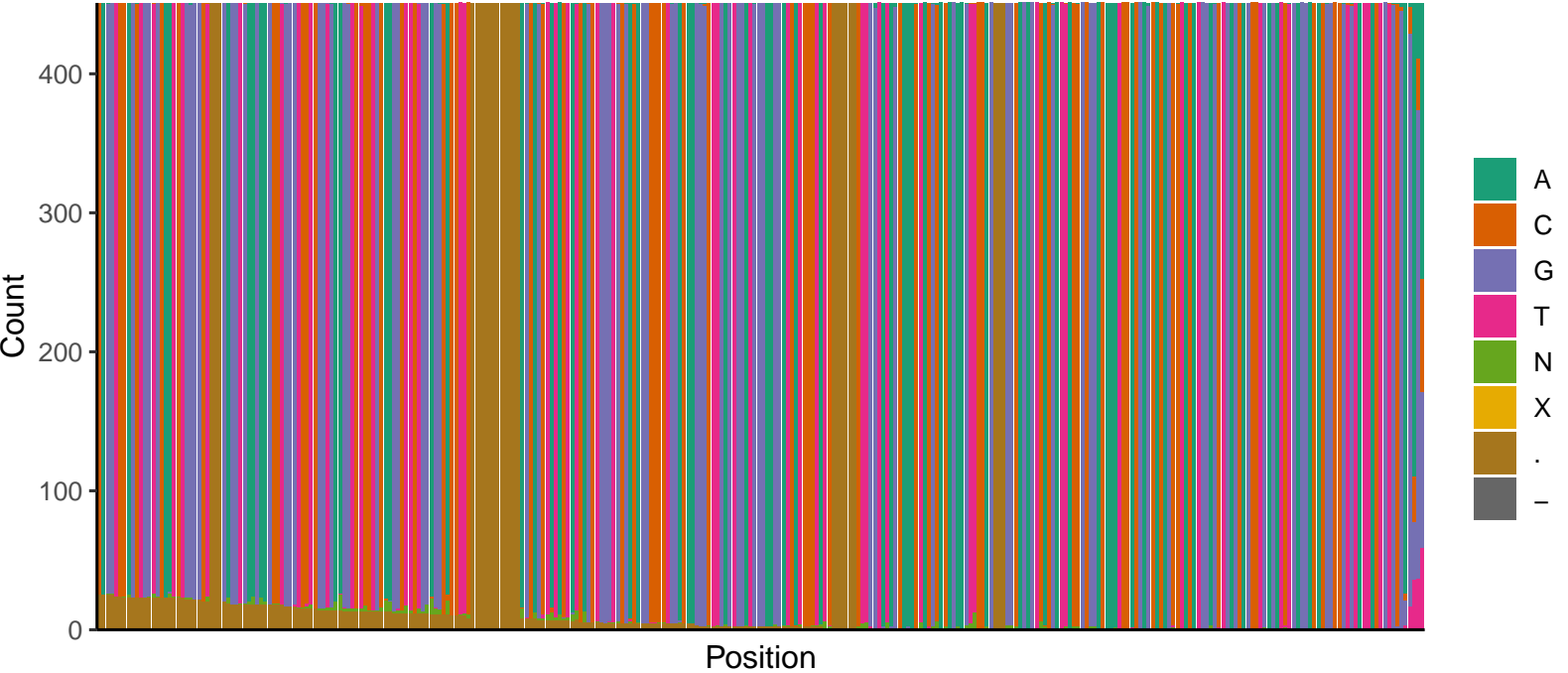


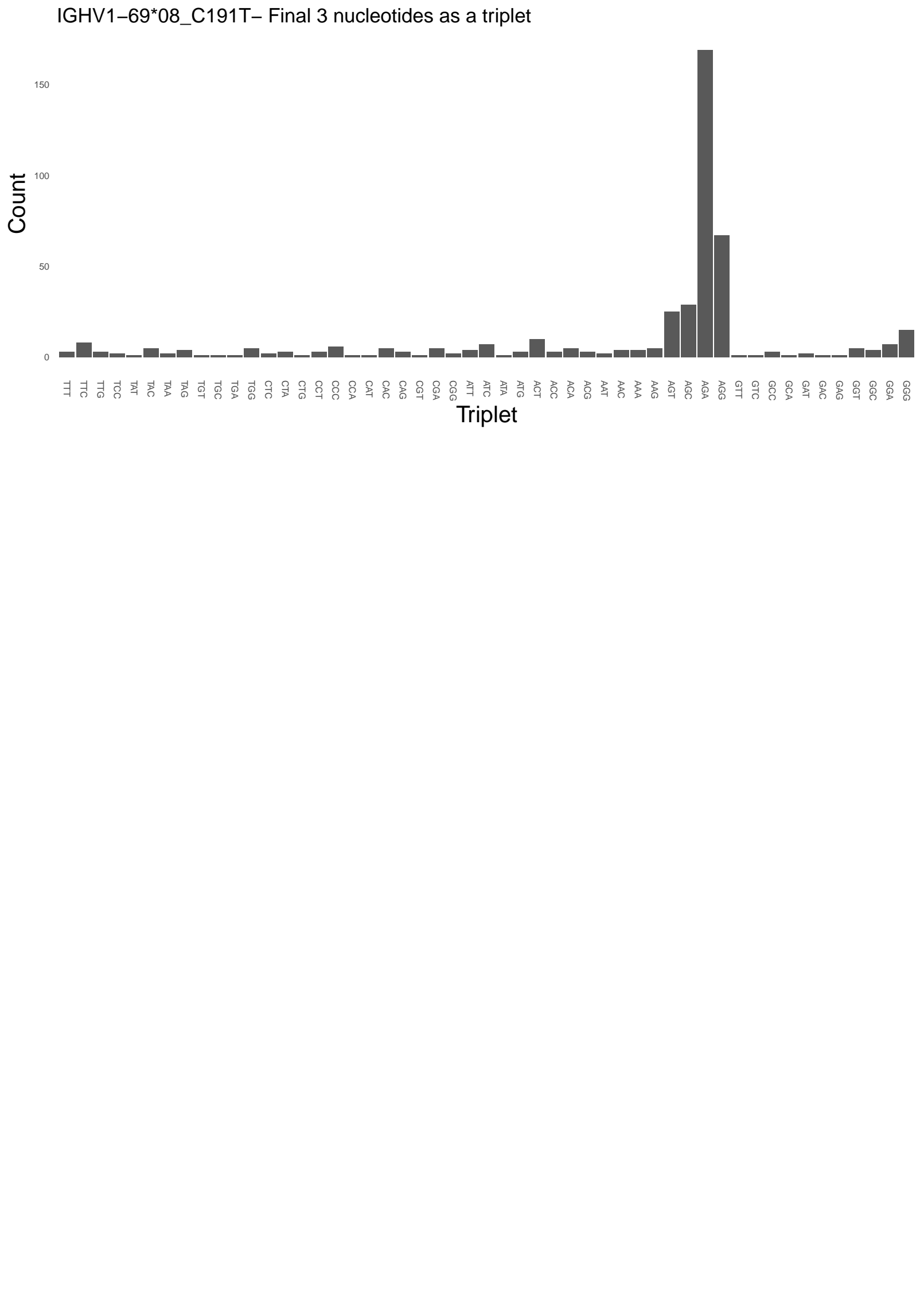
Gene IGHV1-69*08_C191T



Gene IGHV1-69*08_C191T

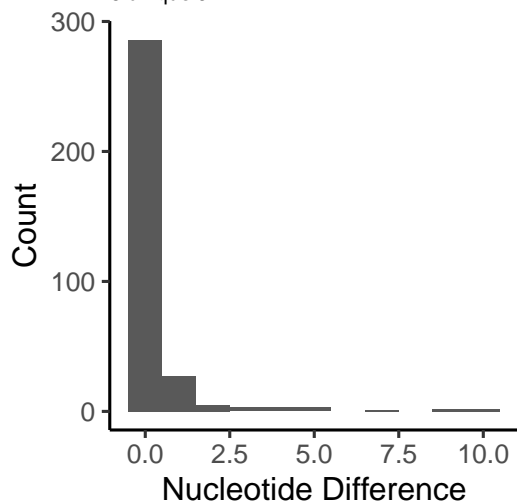


IGHV1-69*08_C191T- Final 3 nucleotides as a triplet



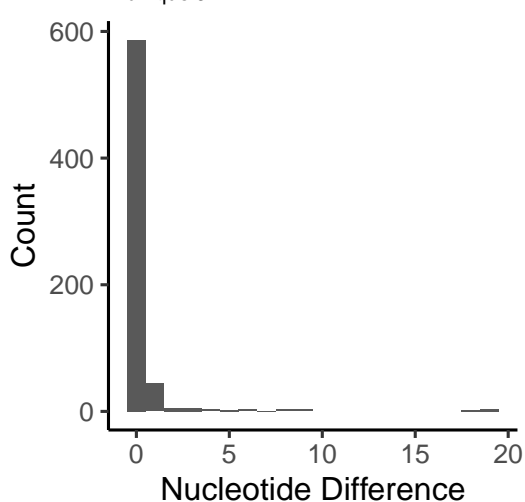
IGHV1-2*04

332 sequences assigned
286 (86.1%) exact matches, in which:
260 unique CDR3
6 unique J



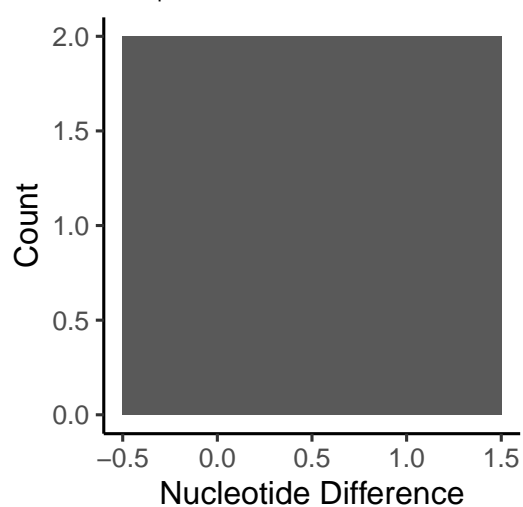
IGHV1-18*01

668 sequences assigned
587 (87.9%) exact matches, in which:
559 unique CDR3
7 unique J



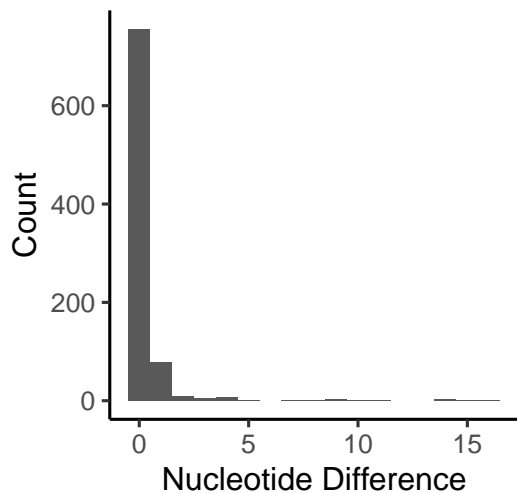
IGHV1-45*02

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



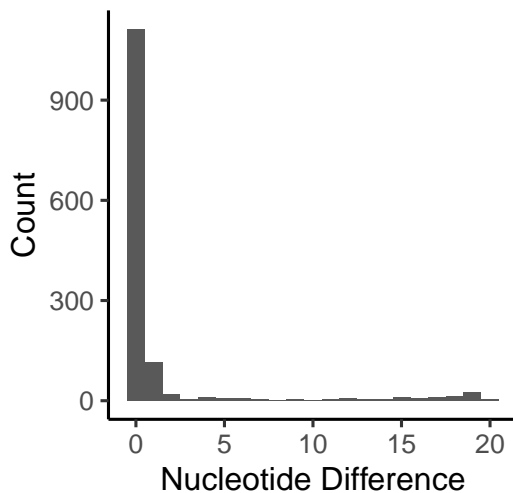
IGHV1-2*06

872 sequences assigned
756 (86.7%) exact matches, in which:
692 unique CDR3
7 unique J



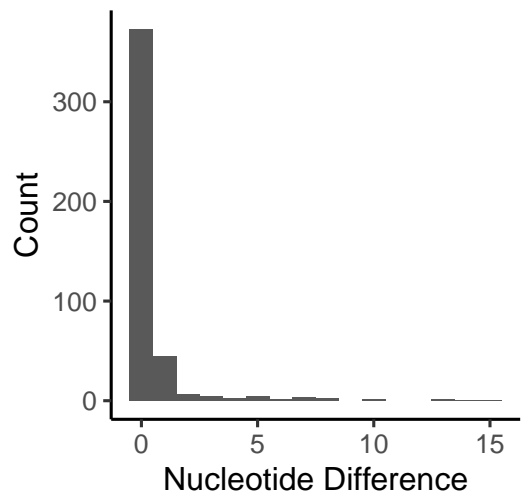
IGHV1-18*04

1430 sequences assigned
1113 (77.8%) exact matches, in which:
1056 unique CDR3
6 unique J



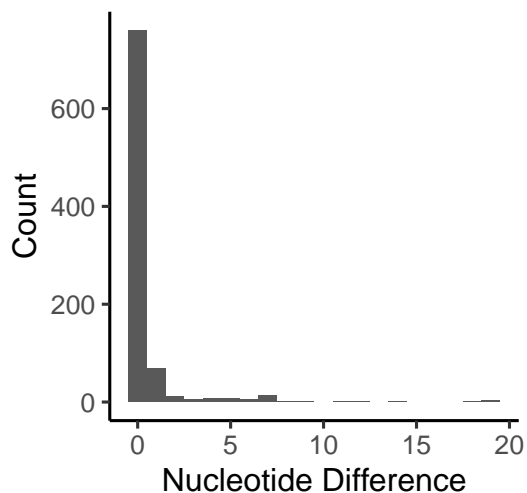
IGHV1-46*01

453 sequences assigned
373 (82.3%) exact matches, in which:
349 unique CDR3
7 unique J



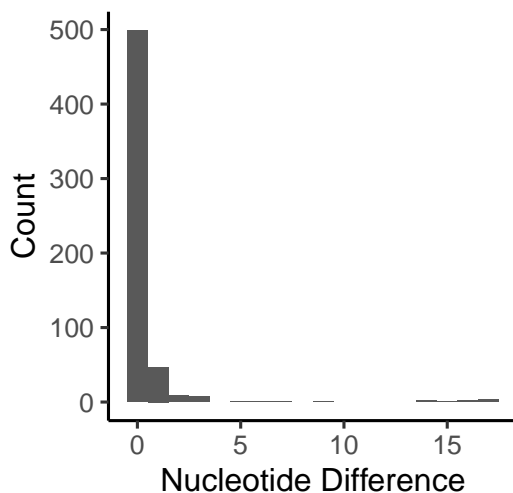
IGHV1-3*01

891 sequences assigned
760 (85.3%) exact matches, in which:
714 unique CDR3
7 unique J



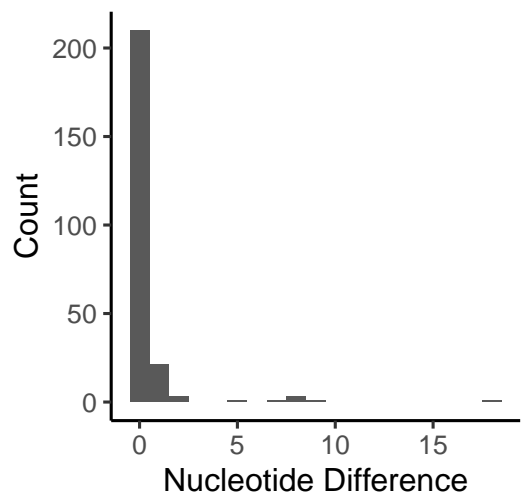
IGHV1-24*01

575 sequences assigned
499 (86.8%) exact matches, in which:
458 unique CDR3
7 unique J



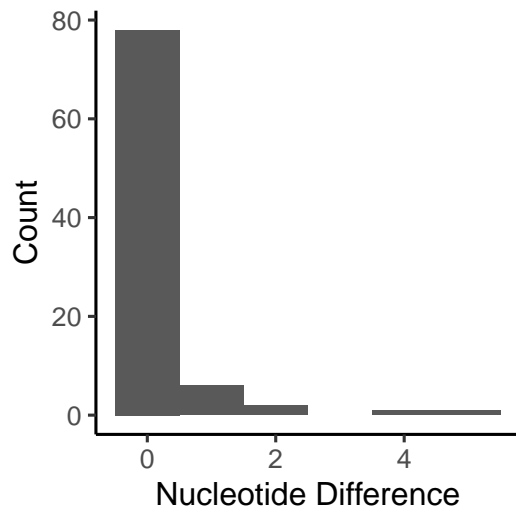
IGHV1-46*03

241 sequences assigned
210 (87.1%) exact matches, in which:
198 unique CDR3
5 unique J



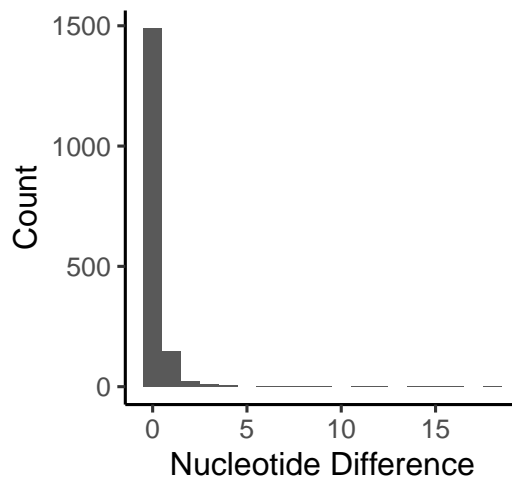
IGHV1-58*01

88 sequences assigned
78 (88.6%) exact matches, in which:
74 unique CDR3
6 unique J



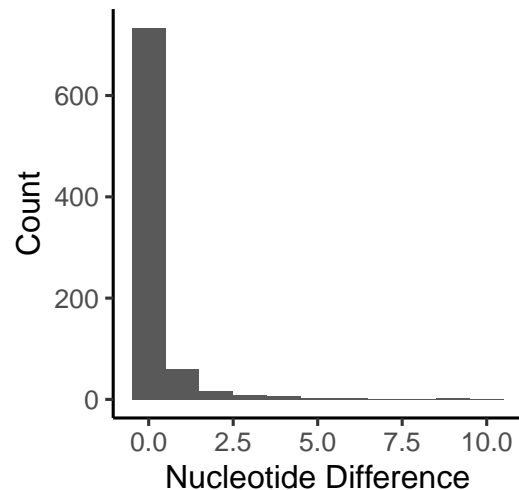
IGHV1-69*01

1694 sequences assigned
1489 (87.9%) exact matches, in which:
1356 unique CDR3
7 unique J



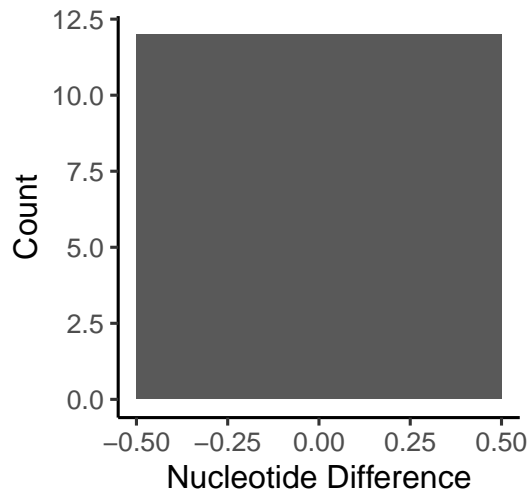
IGHV2-5*02

835 sequences assigned
734 (87.9%) exact matches, in which:
696 unique CDR3
7 unique J



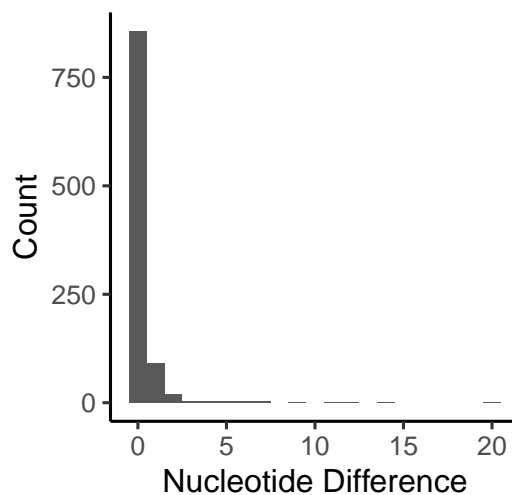
IGHV1-58*02

12 sequences assigned
12 (100%) exact matches, in which:
12 unique CDR3
4 unique J



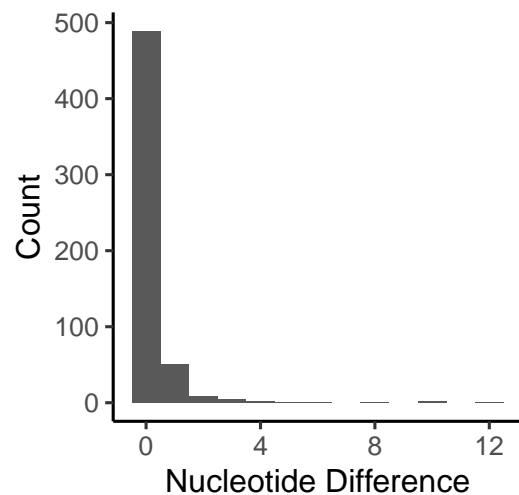
IGHV1-69*06

994 sequences assigned
857 (86.2%) exact matches, in which:
777 unique CDR3
6 unique J



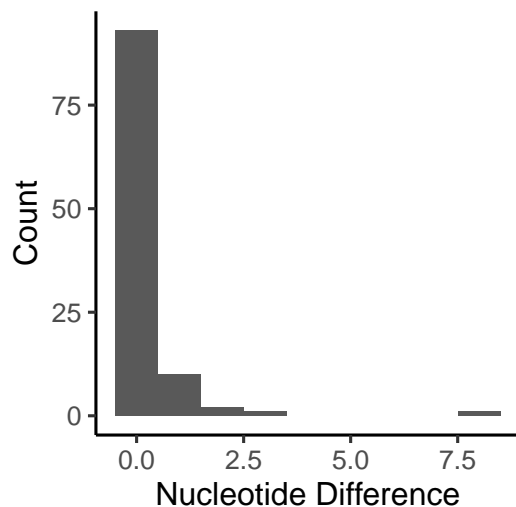
IGHV2-26*01

561 sequences assigned
489 (87.2%) exact matches, in which:
466 unique CDR3
7 unique J



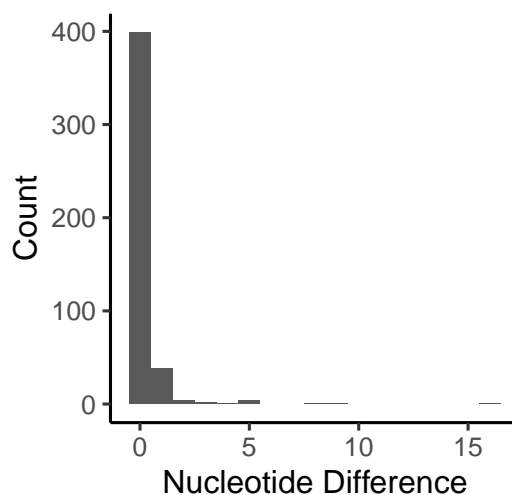
IGHV1-69-2*01

109 sequences assigned
93 (85.3%) exact matches, in which:
85 unique CDR3
6 unique J



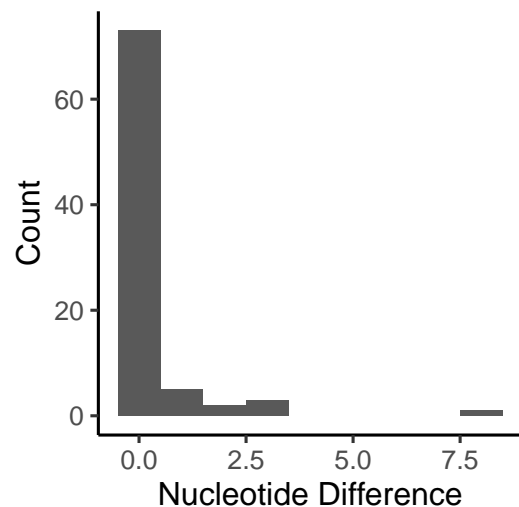
IGHV1-69*08_C191T

451 sequences assigned
399 (88.5%) exact matches, in which:
368 unique CDR3
6 unique J



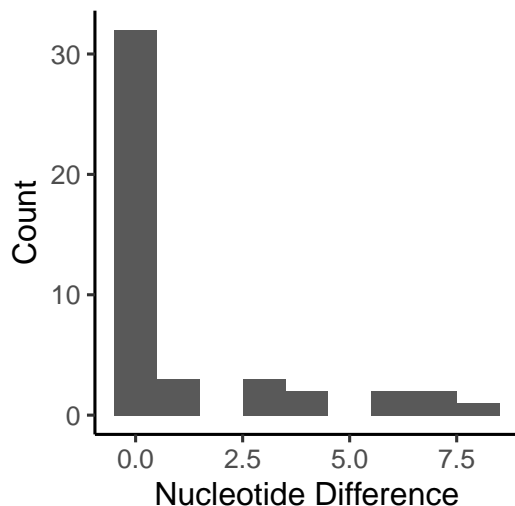
IGHV2-70*01

84 sequences assigned
73 (86.9%) exact matches, in which:
71 unique CDR3
5 unique J



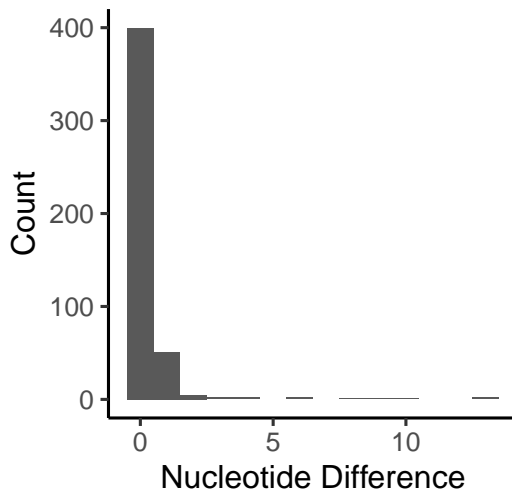
IGHV2-70*04

45 sequences assigned
32 (71.1%) exact matches, in which:
31 unique CDR3
4 unique J



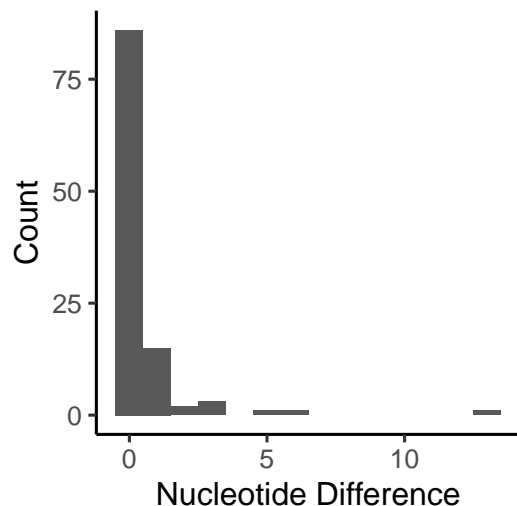
IGHV3-11*05

467 sequences assigned
400 (85.7%) exact matches, in which:
366 unique CDR3
6 unique J



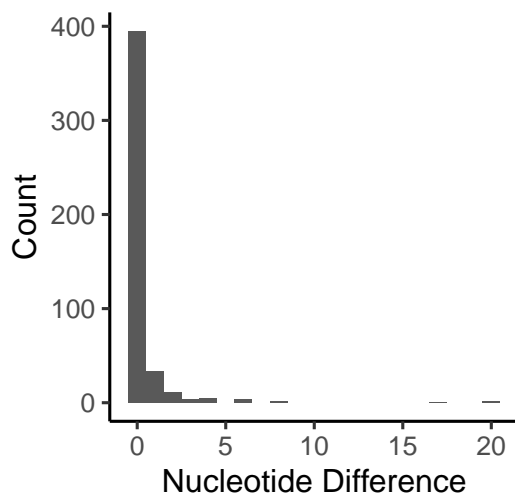
IGHV3-13*05

109 sequences assigned
86 (78.9%) exact matches, in which:
80 unique CDR3
5 unique J



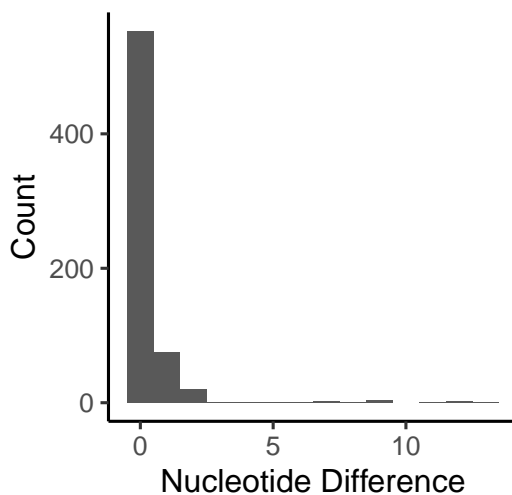
IGHV3-7*03

457 sequences assigned
395 (86.4%) exact matches, in which:
367 unique CDR3
7 unique J



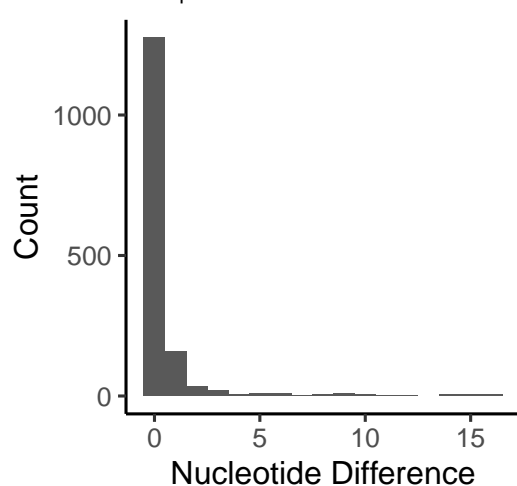
IGHV3-11*06

662 sequences assigned
553 (83.5%) exact matches, in which:
506 unique CDR3
6 unique J



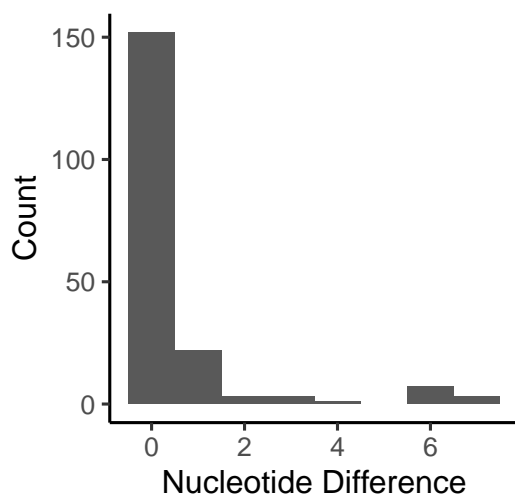
IGHV3-15*01

1553 sequences assigned
1275 (82.1%) exact matches, in which:
1172 unique CDR3
7 unique J



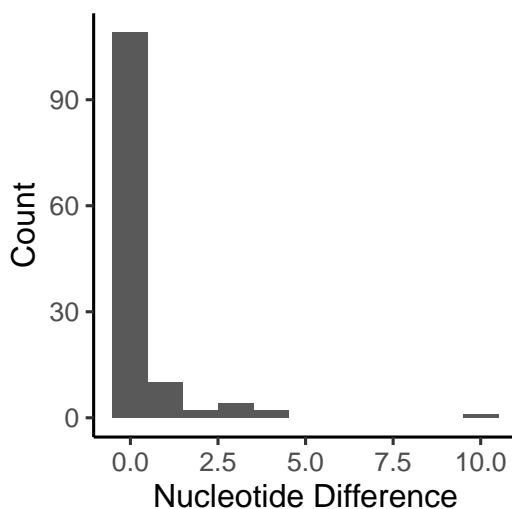
IGHV3-7*04

191 sequences assigned
152 (79.6%) exact matches, in which:
141 unique CDR3
7 unique J



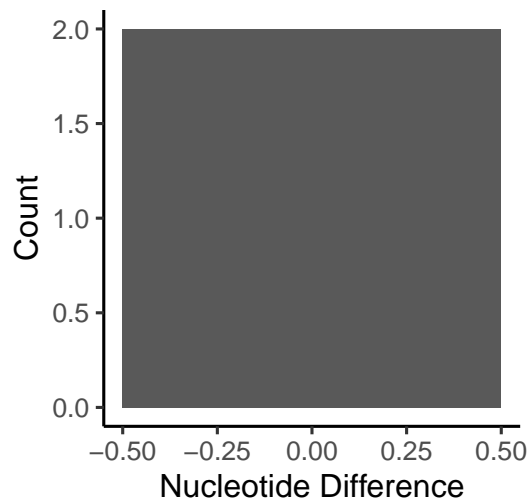
IGHV3-13*04

128 sequences assigned
109 (85.2%) exact matches, in which:
98 unique CDR3
5 unique J



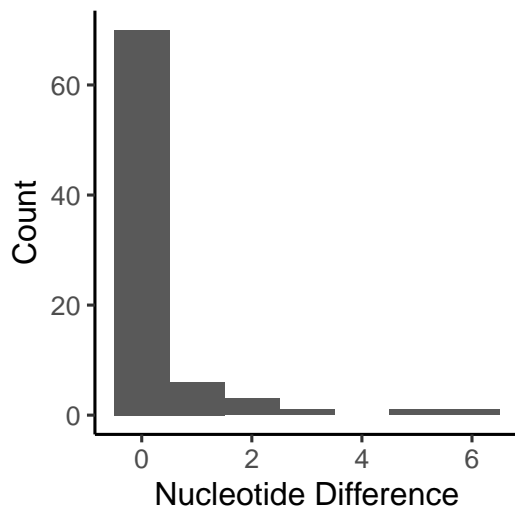
IGHV3-19*01

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



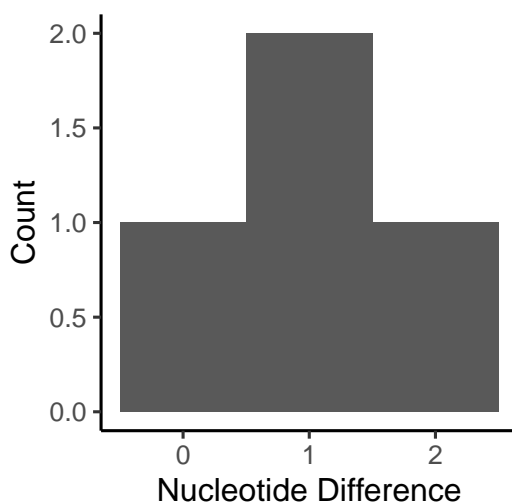
IGHV3-20*01

83 sequences assigned
70 (84.3%) exact matches, in which:
62 unique CDR3
5 unique J



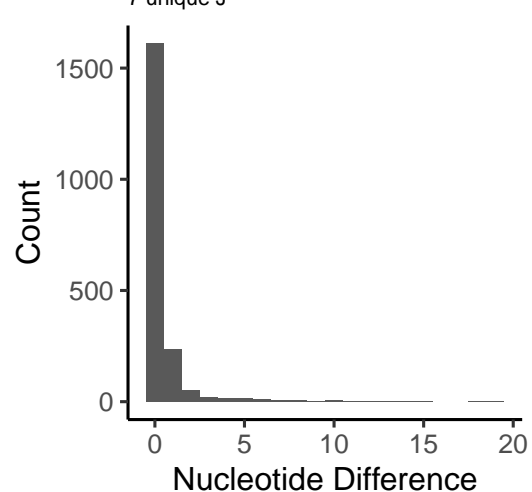
IGHV3-30-3*01

4 sequences assigned
1 (25%) exact matches, in which:
1 unique CDR3
1 unique J



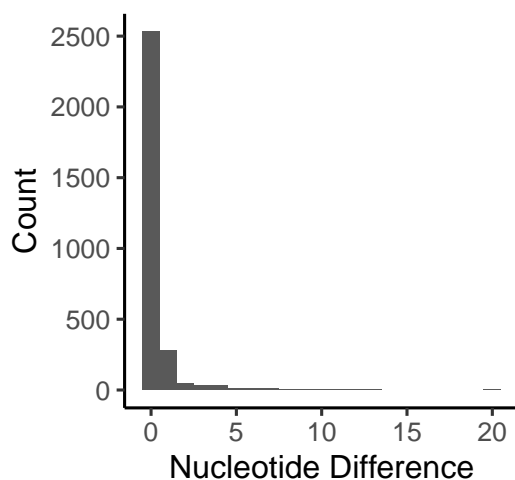
IGHV3-33*01

1994 sequences assigned
1611 (80.8%) exact matches, in which:
1484 unique CDR3
7 unique J



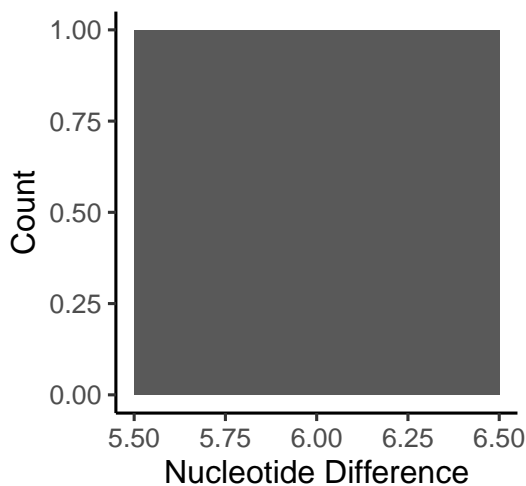
IGHV3-21*01

2970 sequences assigned
2531 (85.2%) exact matches, in which:
2294 unique CDR3
7 unique J



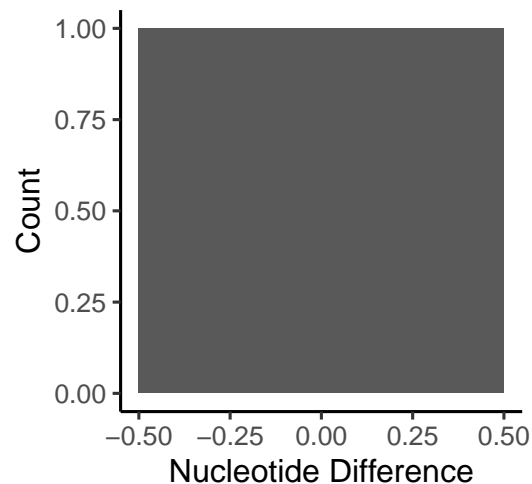
IGHV3-30-3*02

1 sequences assigned
No exact matches.



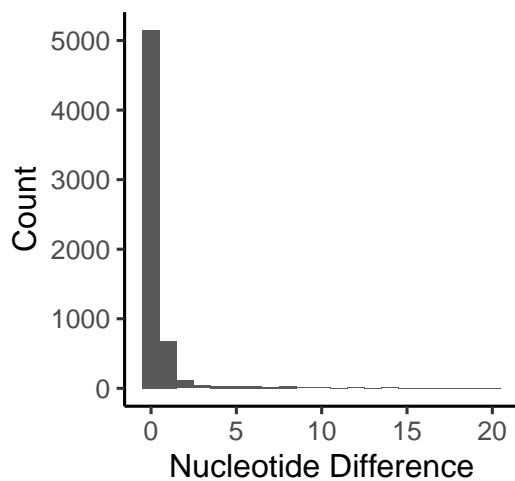
IGHV3-35*01

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



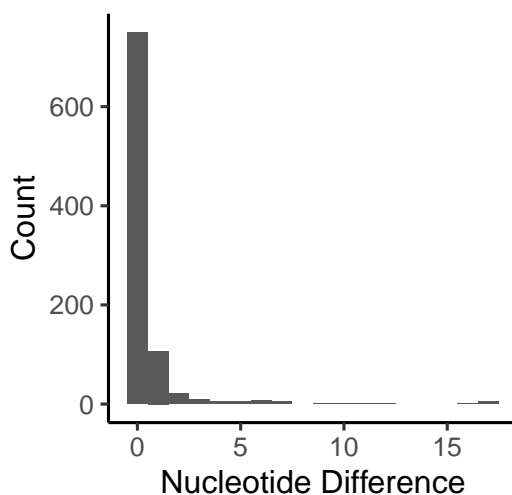
IGHV3-23*01

6238 sequences assigned
5151 (82.6%) exact matches, in which:
4623 unique CDR3
7 unique J



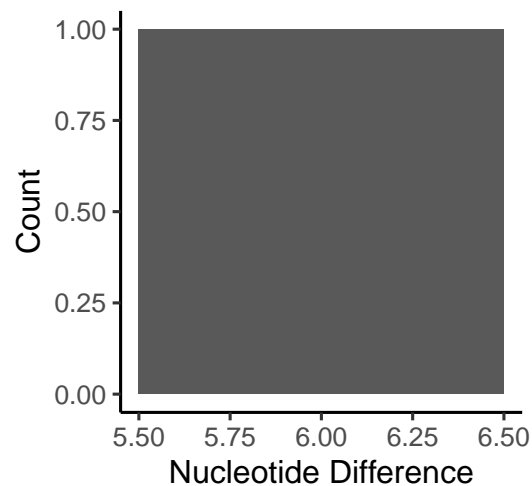
IGHV3-30*18

922 sequences assigned
750 (81.3%) exact matches, in which:
687 unique CDR3
7 unique J



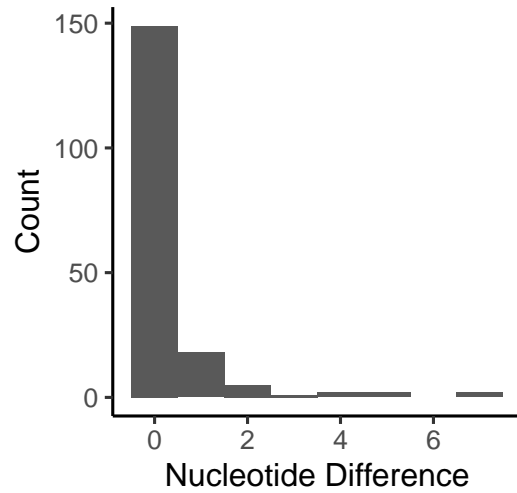
IGHV3-41*02

1 sequences assigned
No exact matches.



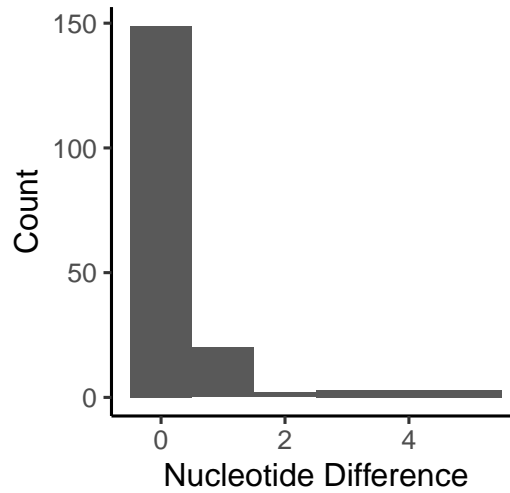
IGHV3-43*01

179 sequences assigned
149 (83.2%) exact matches, in which:
141 unique CDR3
7 unique J



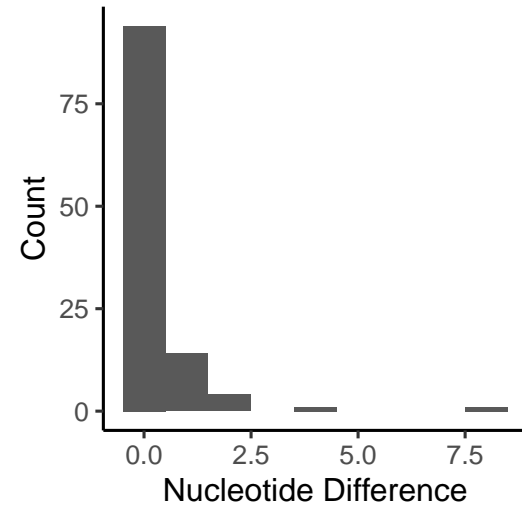
IGHV3-49*03

180 sequences assigned
149 (82.8%) exact matches, in which:
138 unique CDR3
5 unique J



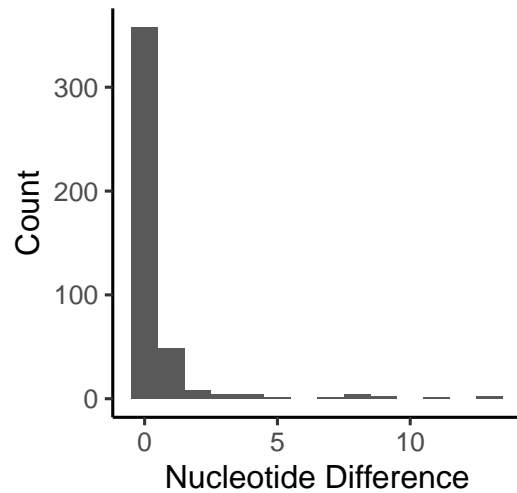
IGHV3-53*02

114 sequences assigned
94 (82.5%) exact matches, in which:
88 unique CDR3
6 unique J



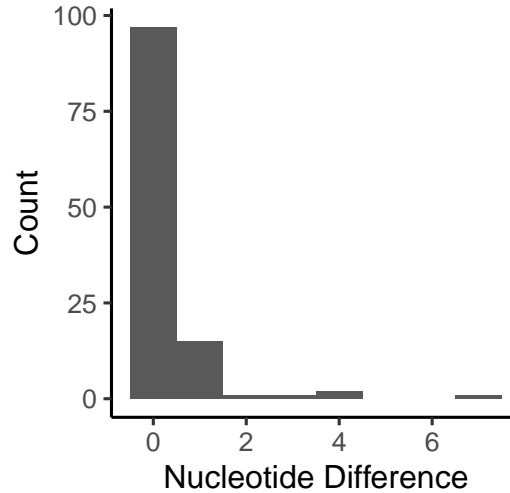
IGHV3-48*01

434 sequences assigned
358 (82.5%) exact matches, in which:
335 unique CDR3
6 unique J



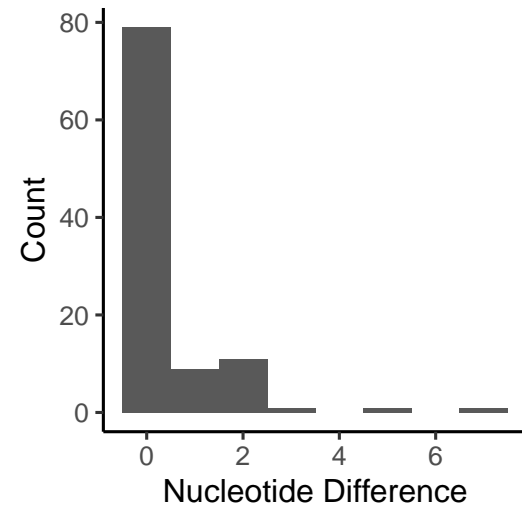
IGHV3-49*05

118 sequences assigned
97 (82.2%) exact matches, in which:
89 unique CDR3
6 unique J



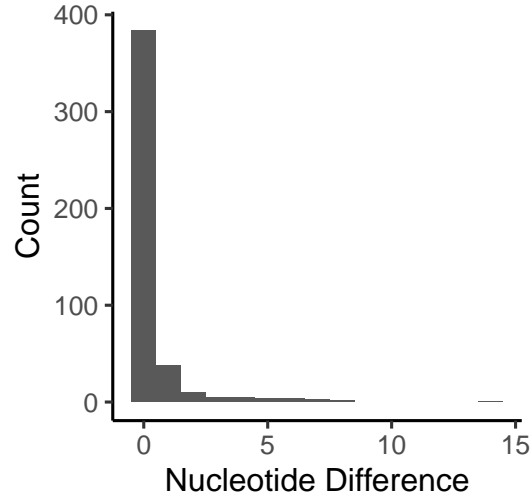
IGHV3-64*01

102 sequences assigned
79 (77.5%) exact matches, in which:
68 unique CDR3
6 unique J



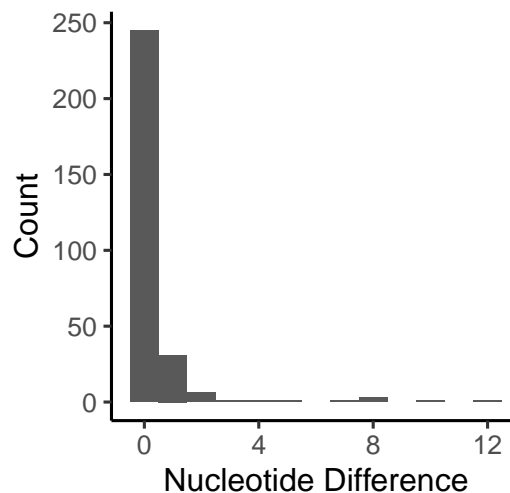
IGHV3-48*02

456 sequences assigned
384 (84.2%) exact matches, in which:
361 unique CDR3
6 unique J



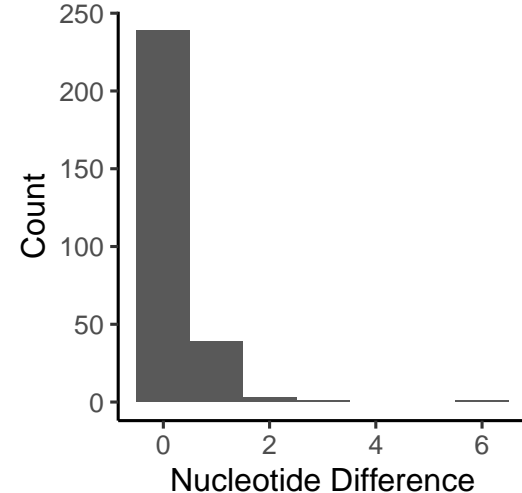
IGHV3-53*01

291 sequences assigned
245 (84.2%) exact matches, in which:
234 unique CDR3
6 unique J



IGHV3-66*02

283 sequences assigned
239 (84.5%) exact matches, in which:
217 unique CDR3
6 unique J



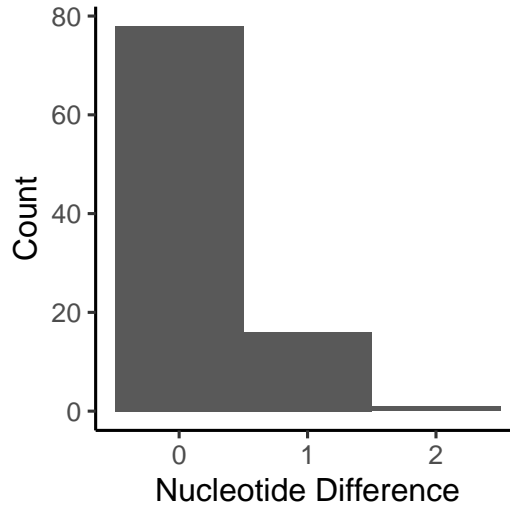
IGHV3-69-1*01

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



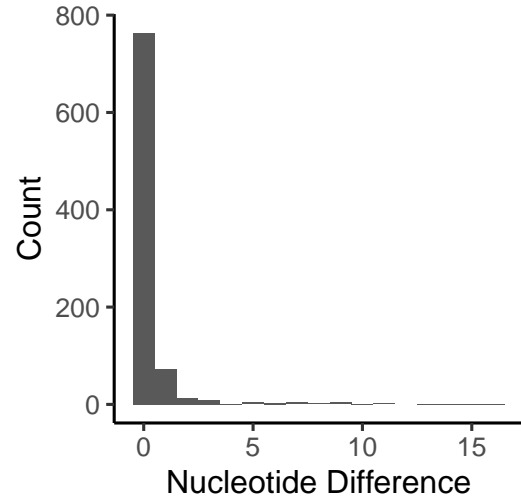
IGHV3-73*02

95 sequences assigned
78 (82.1%) exact matches, in which:
74 unique CDR3
6 unique J



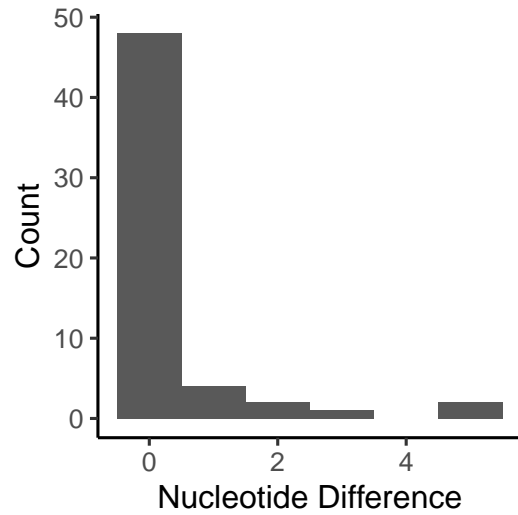
IGHV4-4*02

884 sequences assigned
764 (86.4%) exact matches, in which:
725 unique CDR3
7 unique J



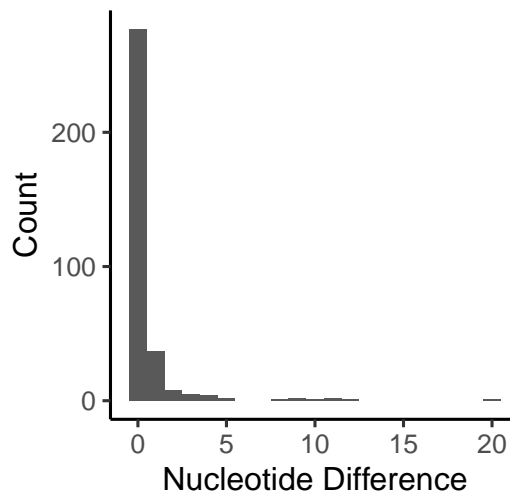
IGHV3-72*01

57 sequences assigned
48 (84.2%) exact matches, in which:
45 unique CDR3
6 unique J



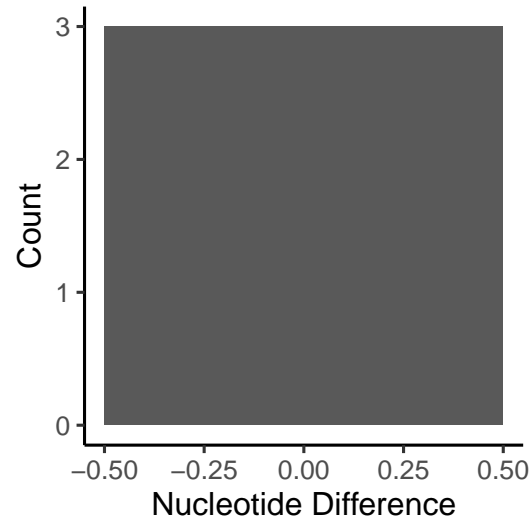
IGHV3-74*01

344 sequences assigned
277 (80.5%) exact matches, in which:
259 unique CDR3
7 unique J



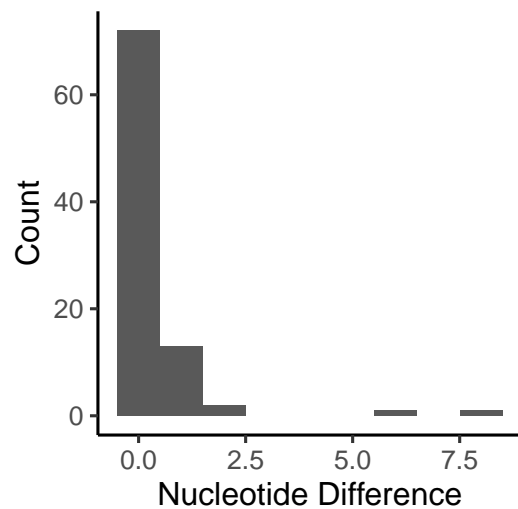
IGHV4-28*01

3 sequences assigned
3 (100%) exact matches, in which:
3 unique CDR3
3 unique J



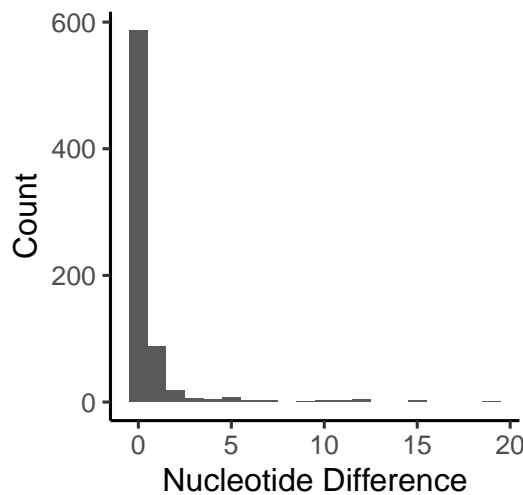
IGHV3-73*01

90 sequences assigned
72 (80%) exact matches, in which:
64 unique CDR3
6 unique J



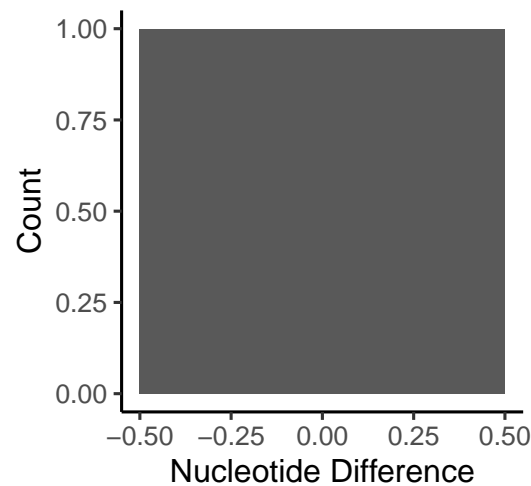
IGHV3-64D*06

733 sequences assigned
587 (80.1%) exact matches, in which:
530 unique CDR3
7 unique J



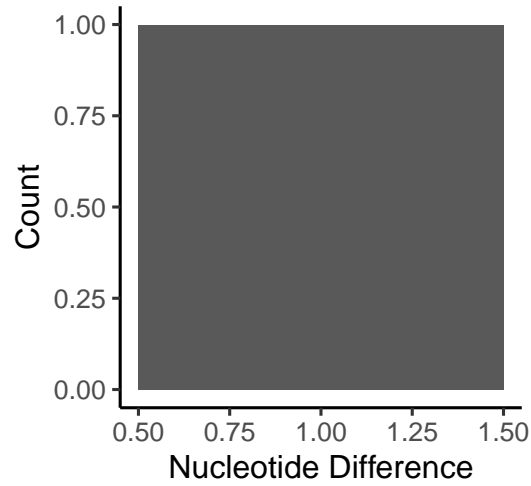
IGHV4-28*03

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



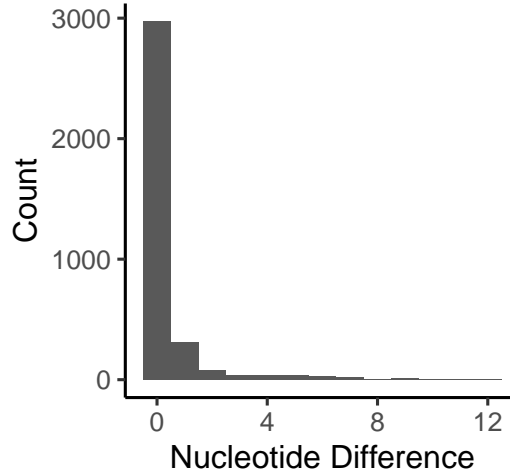
IGHV4-28*04

1 sequences assigned
No exact matches.



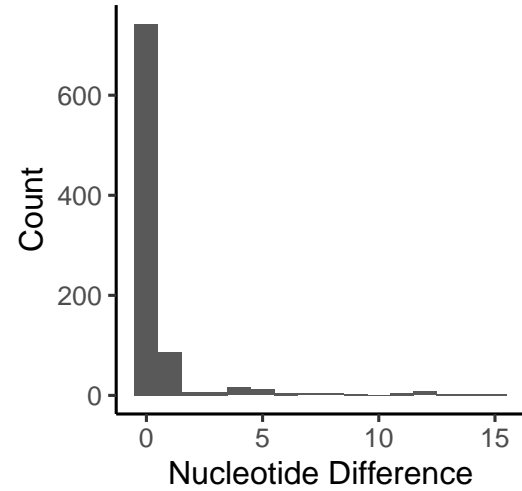
IGHV4-34*01

3550 sequences assigned
2973 (83.7%) exact matches, in which:
2677 unique CDR3
7 unique J



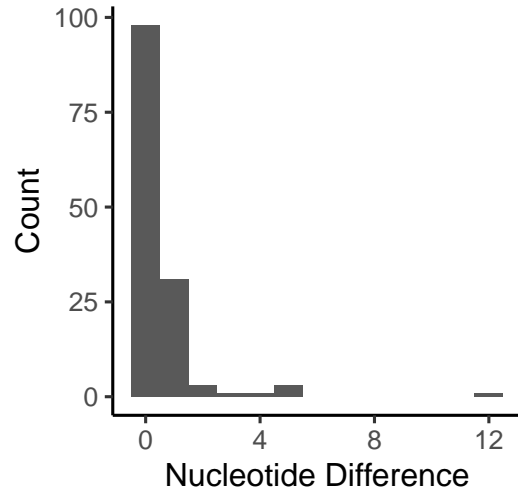
IGHV4-59*01

908 sequences assigned
743 (81.8%) exact matches, in which:
711 unique CDR3
7 unique J



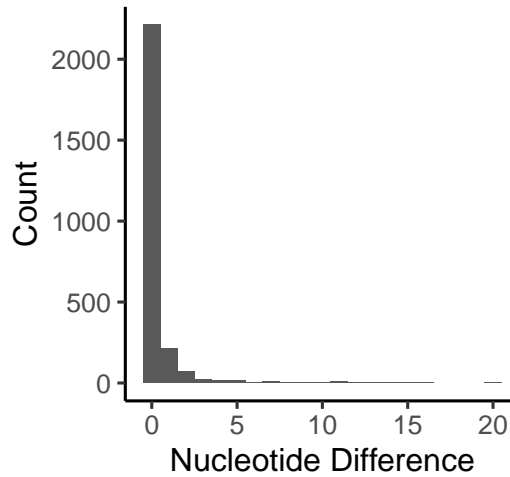
IGHV4-30-2*01

138 sequences assigned
98 (71%) exact matches, in which:
96 unique CDR3
6 unique J



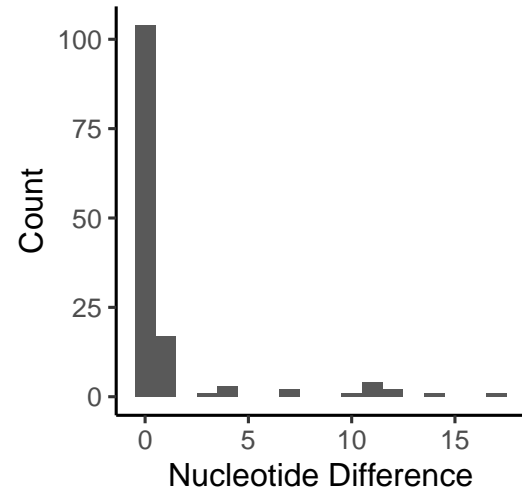
IGHV4-39*01

2615 sequences assigned
2213 (84.6%) exact matches, in which:
2026 unique CDR3
7 unique J



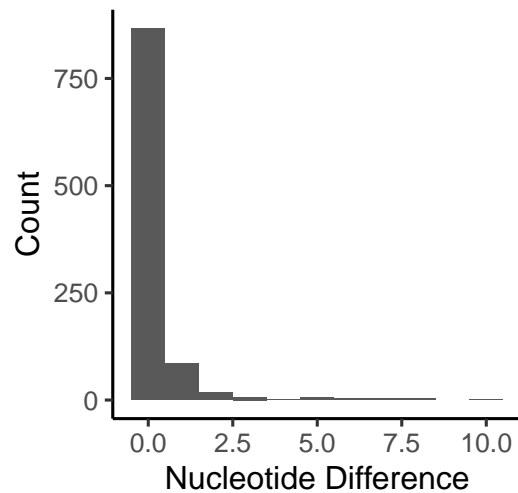
IGHV4-61*01

137 sequences assigned
104 (75.9%) exact matches, in which:
98 unique CDR3
5 unique J



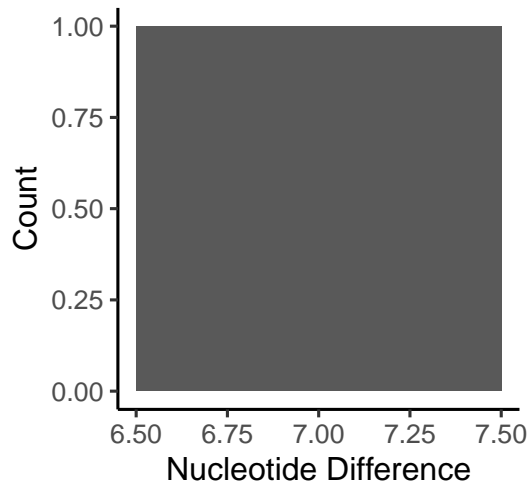
IGHV4-31*03

997 sequences assigned
867 (87%) exact matches, in which:
822 unique CDR3
7 unique J



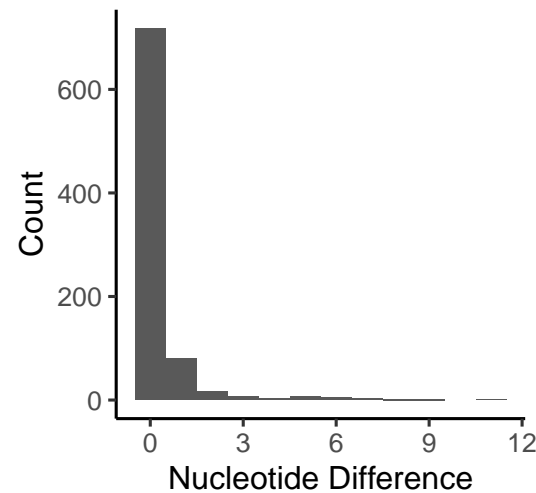
IGHV4-55*08

1 sequences assigned
No exact matches.



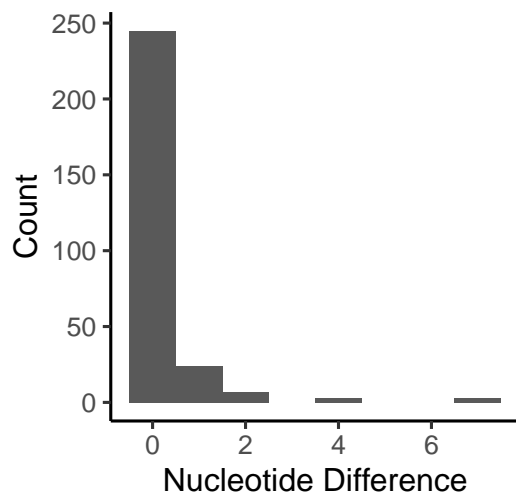
IGHV4-61*02

842 sequences assigned
718 (85.3%) exact matches, in which:
678 unique CDR3
7 unique J



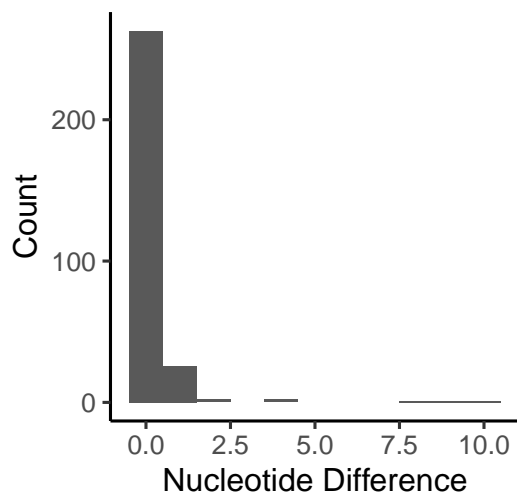
IGHV5-10-1*01

282 sequences assigned
245 (86.9%) exact matches, in which:
229 unique CDR3
7 unique J



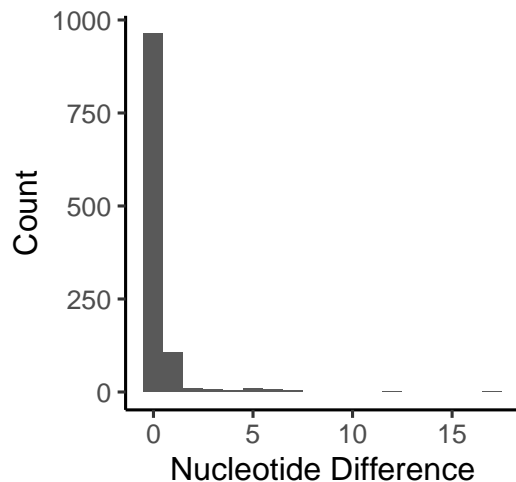
IGHV5-51*03

297 sequences assigned
263 (88.6%) exact matches, in which:
238 unique CDR3
6 unique J



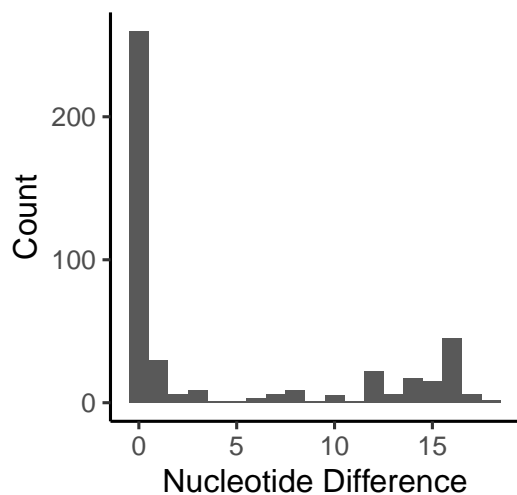
IGHV5-10-1*03

1114 sequences assigned
963 (86.4%) exact matches, in which:
909 unique CDR3
6 unique J



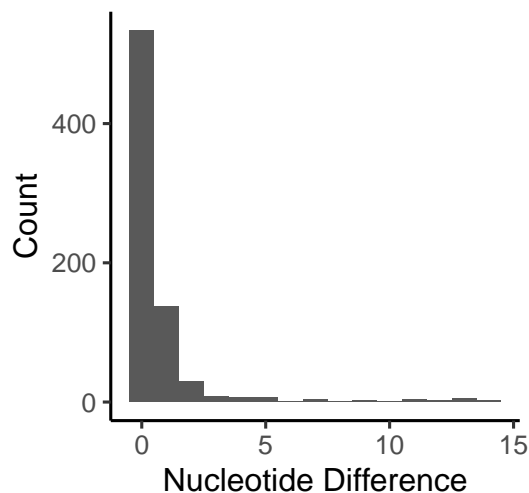
IGHV6-1*01

447 sequences assigned
260 (58.2%) exact matches, in which:
245 unique CDR3
6 unique J



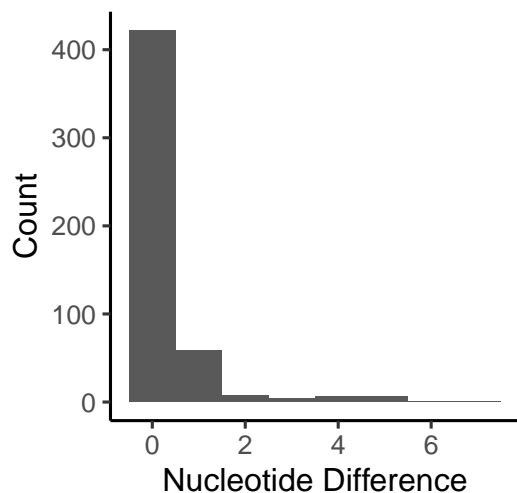
IGHV5-51*01

743 sequences assigned
534 (71.9%) exact matches, in which:
501 unique CDR3
7 unique J

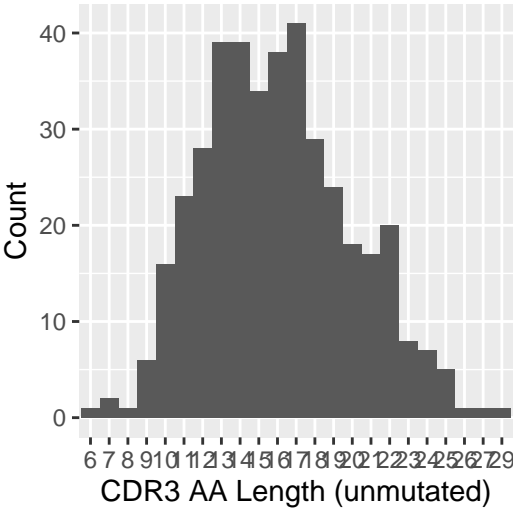


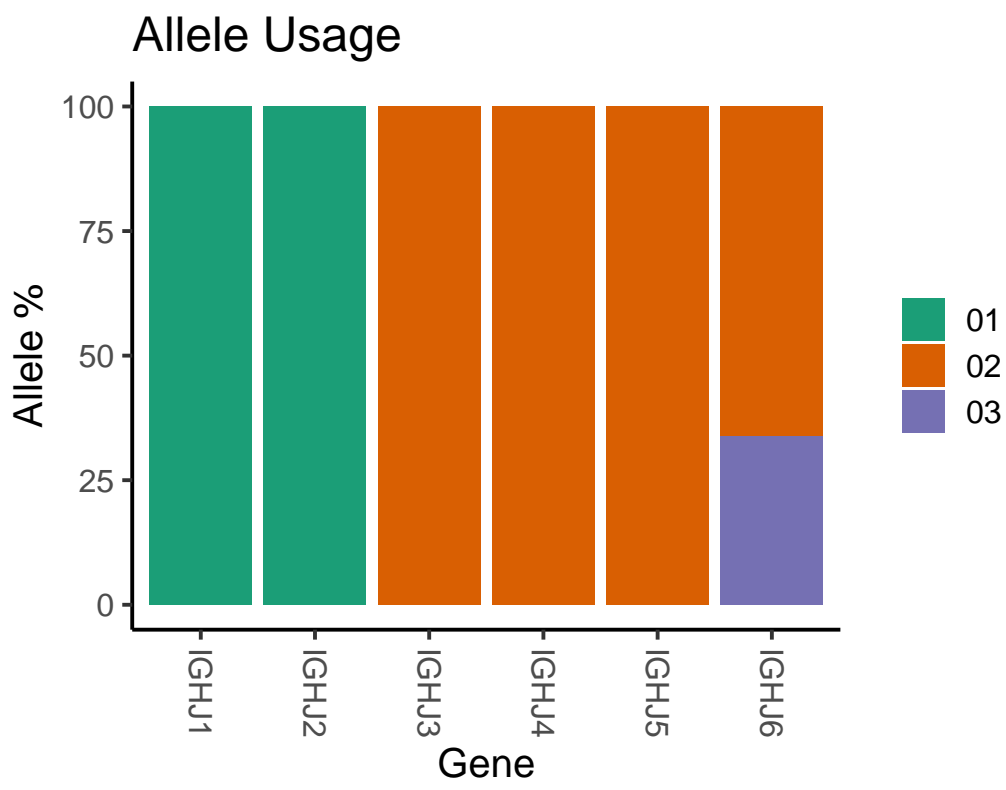
IGHV7-4-1*02

506 sequences assigned
422 (83.4%) exact matches, in which:
399 unique CDR3
7 unique J



IGHV1-69*08_C191T





Sequence Count by IGHJ6 allele usage

