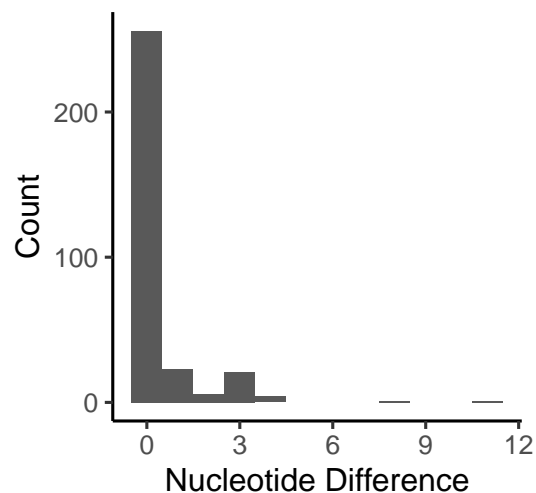


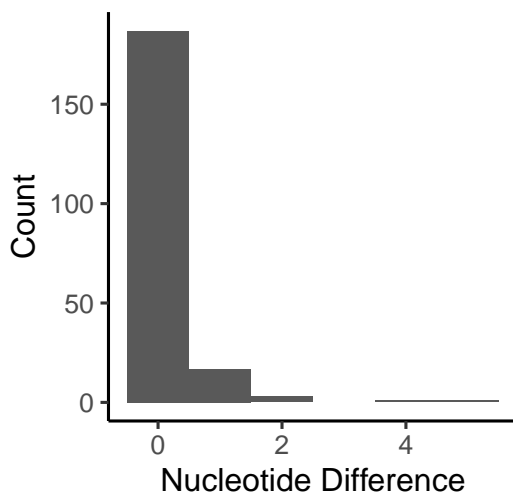
IGHV1-2*04

319 sequences assigned
256 (80.3%) exact matches, in which:
248 unique CDR3
7 unique J



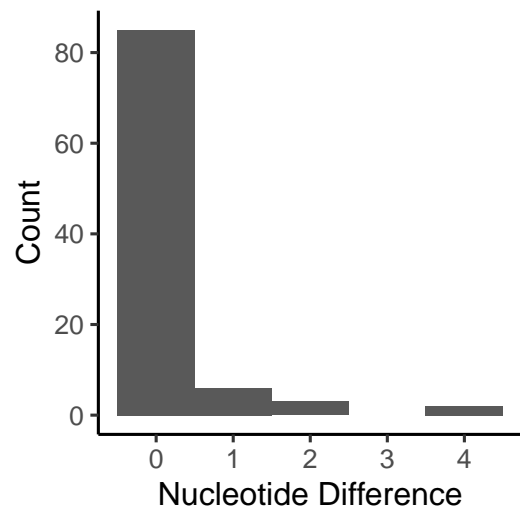
IGHV1-24*01

209 sequences assigned
187 (89.5%) exact matches, in which:
185 unique CDR3
6 unique J



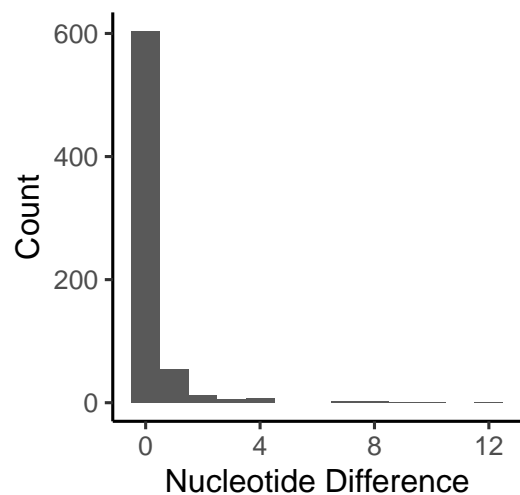
IGHV1-58*02

96 sequences assigned
85 (88.5%) exact matches, in which:
83 unique CDR3
7 unique J



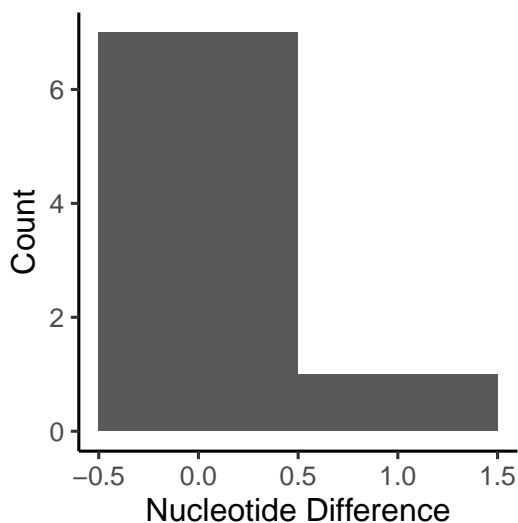
IGHV1-3*01

694 sequences assigned
604 (87%) exact matches, in which:
587 unique CDR3
7 unique J



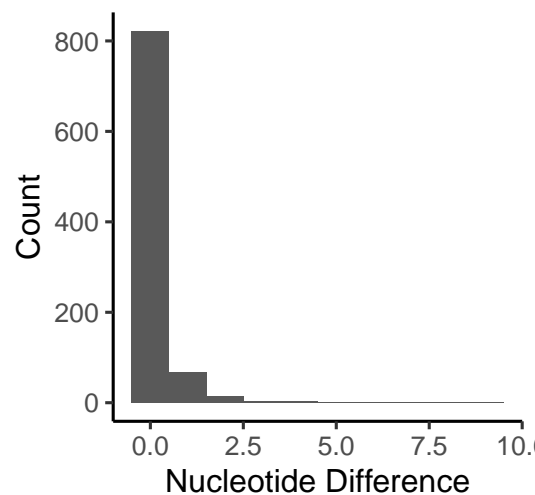
IGHV1-45*02

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



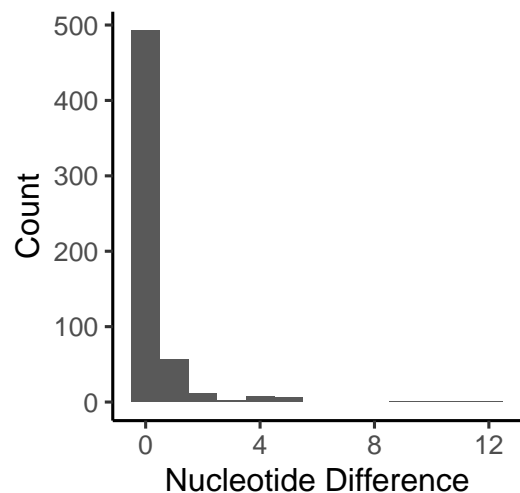
IGHV1-69*04

922 sequences assigned
822 (89.2%) exact matches, in which:
792 unique CDR3
7 unique J



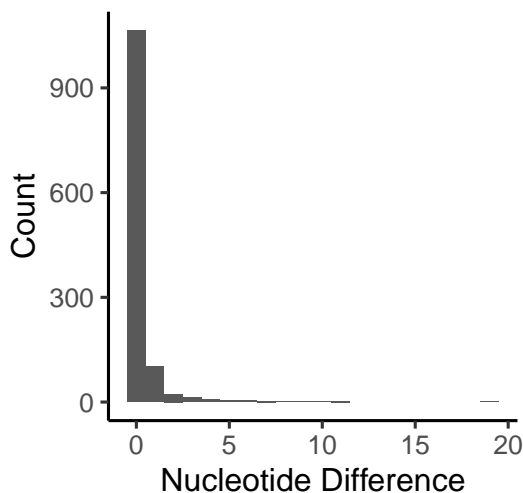
IGHV1-18*01

584 sequences assigned
493 (84.4%) exact matches, in which:
478 unique CDR3
6 unique J



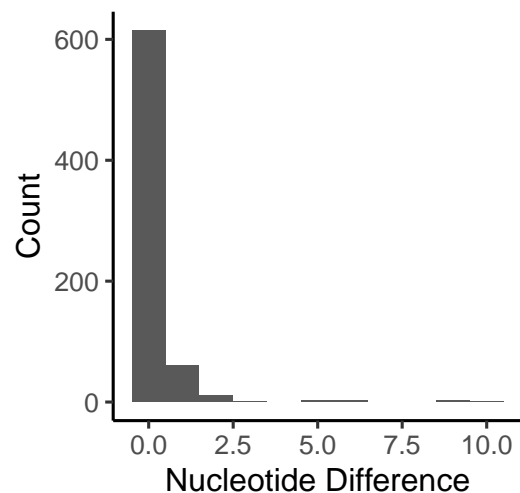
IGHV1-46*01

1232 sequences assigned
1065 (86.4%) exact matches, in which:
1019 unique CDR3
7 unique J



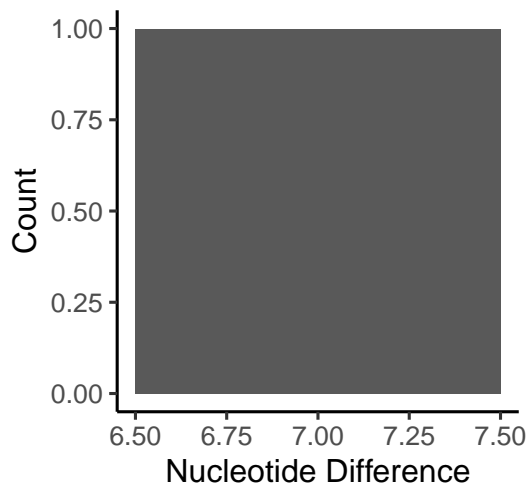
IGHV1-69*08_C191T

696 sequences assigned
615 (88.4%) exact matches, in which:
590 unique CDR3
7 unique J



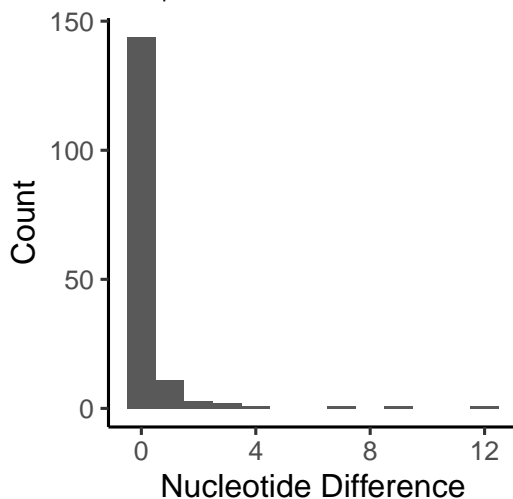
IGHV1-69D*01

1 sequences assigned
No exact matches.



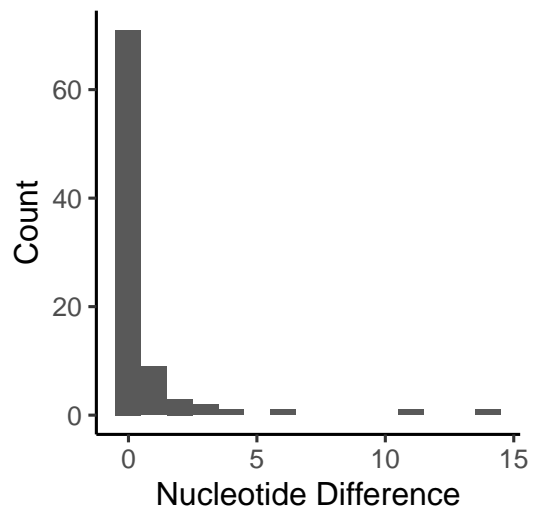
IGHV2-70*15

165 sequences assigned
144 (87.3%) exact matches, in which:
144 unique CDR3
6 unique J



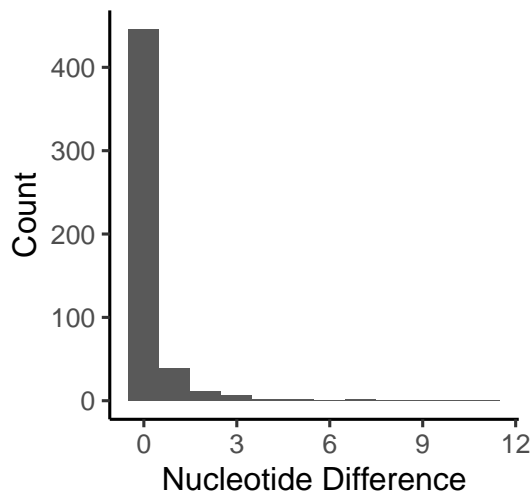
IGHV3-13*01_G290A_T3

89 sequences assigned
71 (79.8%) exact matches, in which:
68 unique CDR3
5 unique J



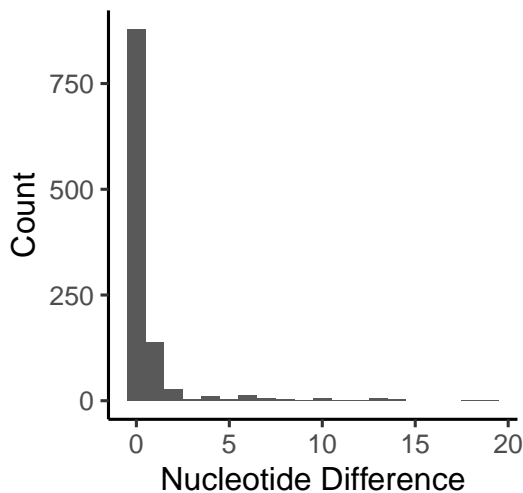
IGHV2-5*02

513 sequences assigned
446 (86.9%) exact matches, in which:
432 unique CDR3
7 unique J



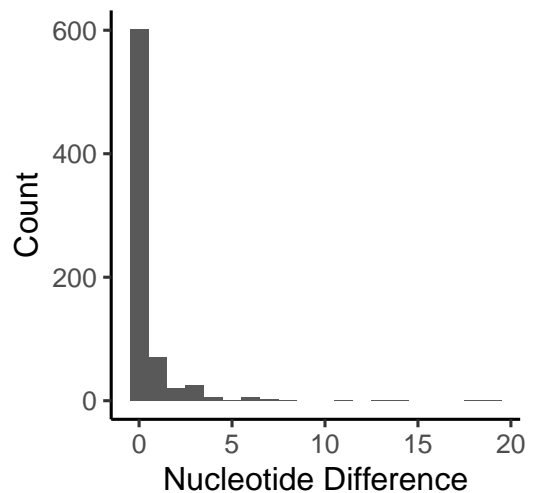
IGHV3-7*03

1127 sequences assigned
879 (78%) exact matches, in which:
838 unique CDR3
7 unique J



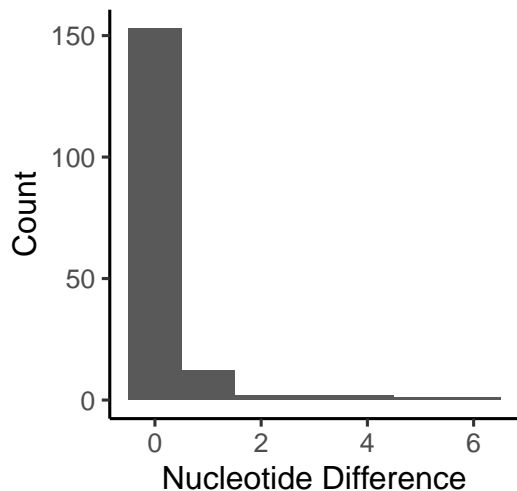
IGHV3-15*07

740 sequences assigned
602 (81.4%) exact matches, in which:
575 unique CDR3
6 unique J



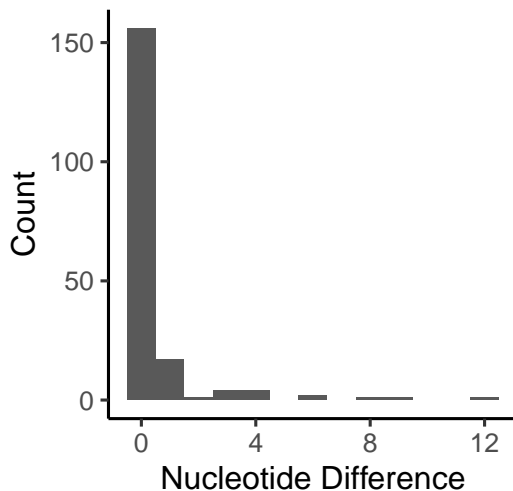
IGHV2-26*01

173 sequences assigned
153 (88.4%) exact matches, in which:
151 unique CDR3
5 unique J



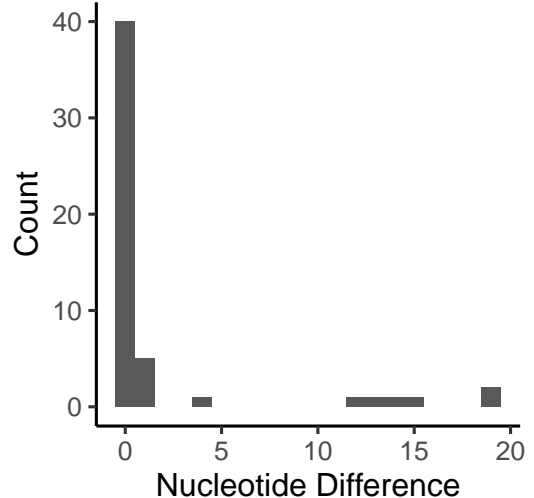
IGHV3-11*06

187 sequences assigned
156 (83.4%) exact matches, in which:
151 unique CDR3
6 unique J



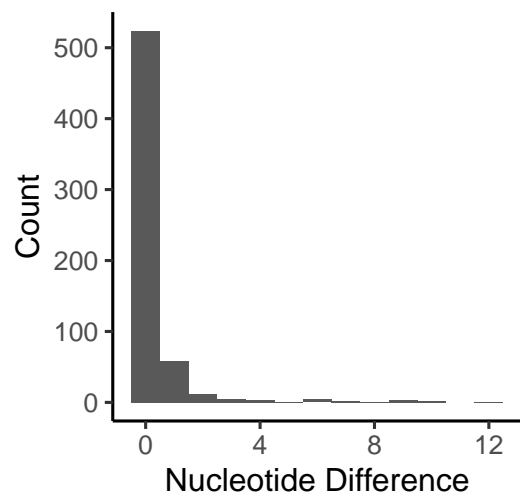
IGHV3-20*04

54 sequences assigned
40 (74.1%) exact matches, in which:
40 unique CDR3
5 unique J



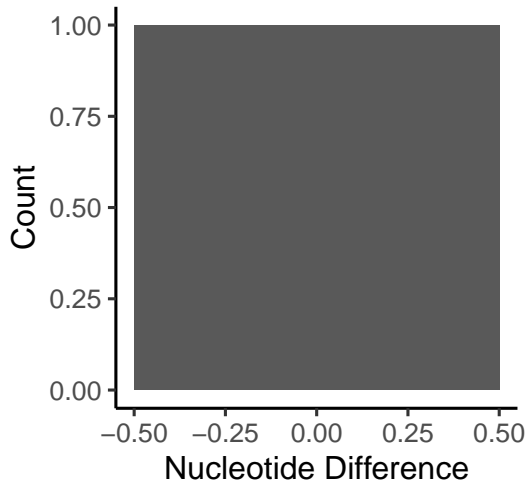
IGHV3-21*01

621 sequences assigned
524 (84.4%) exact matches, in which:
493 unique CDR3
6 unique J



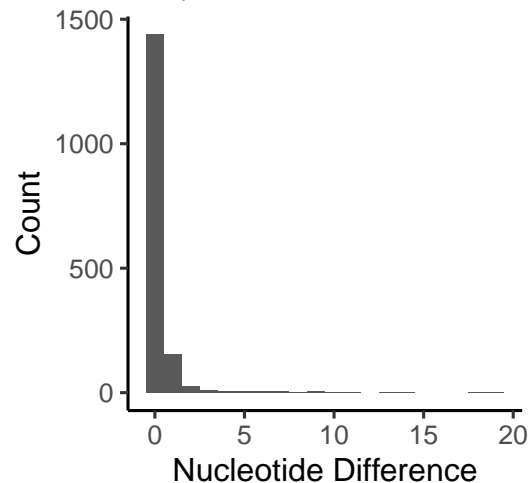
IGHV3-35*01

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



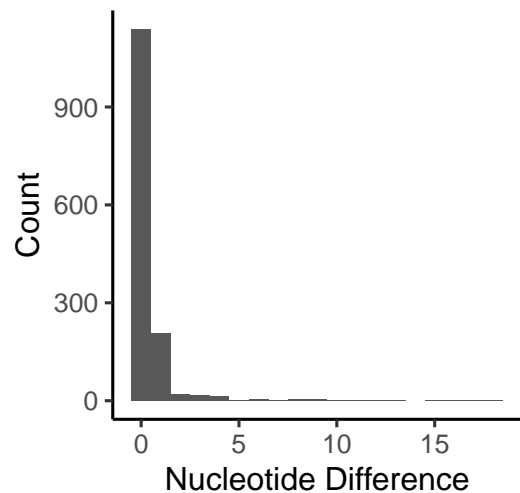
IGHV3-48*03

1680 sequences assigned
1439 (85.7%) exact matches, in which:
1375 unique CDR3
7 unique J



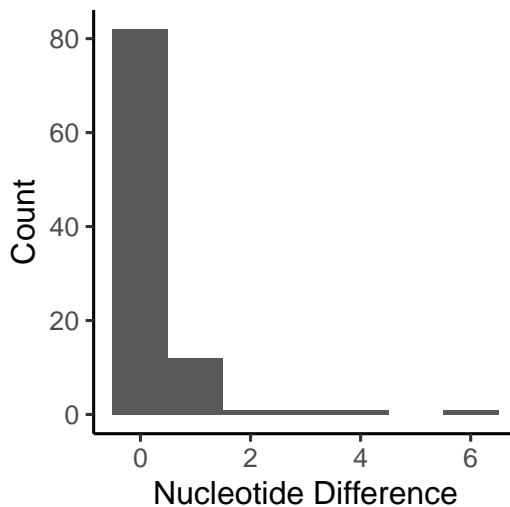
IGHV3-30-3*01

1429 sequences assigned
1139 (79.7%) exact matches, in which:
1097 unique CDR3
7 unique J



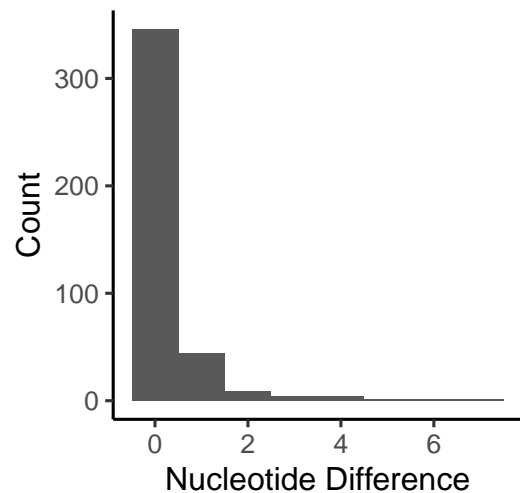
IGHV3-43*01

98 sequences assigned
82 (83.7%) exact matches, in which:
78 unique CDR3
6 unique J



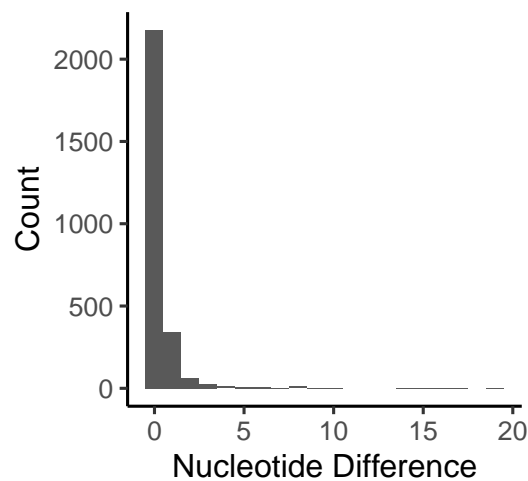
IGHV3-49*04

412 sequences assigned
346 (84%) exact matches, in which:
325 unique CDR3
7 unique J



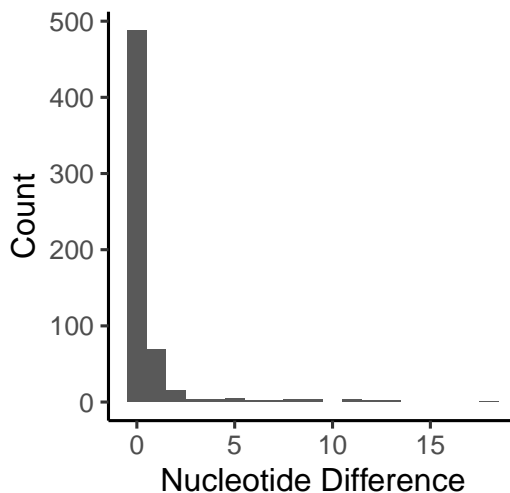
IGHV3-33*01

2679 sequences assigned
2177 (81.3%) exact matches, in which:
2059 unique CDR3
7 unique J



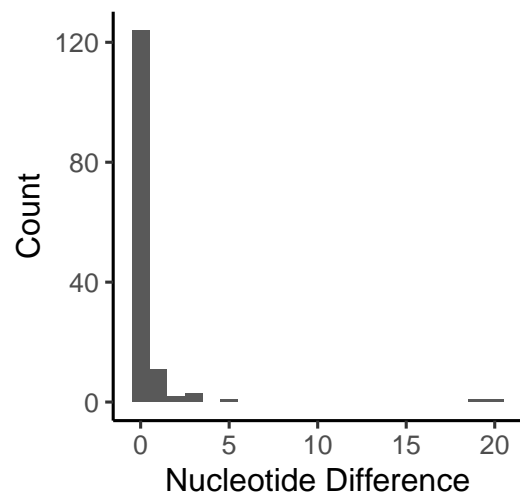
IGHV3-48*02

601 sequences assigned
488 (81.2%) exact matches, in which:
464 unique CDR3
6 unique J



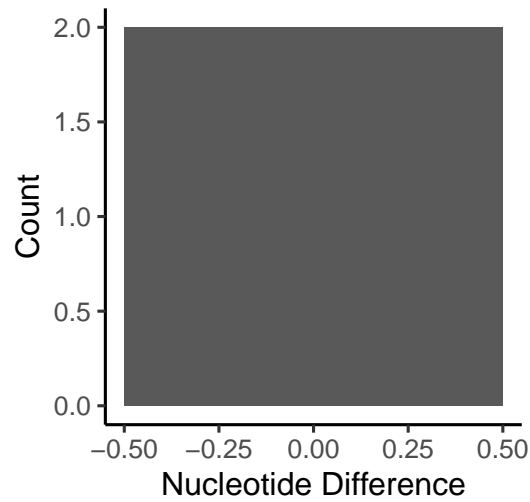
IGHV3-49*05

143 sequences assigned
124 (86.7%) exact matches, in which:
121 unique CDR3
6 unique J



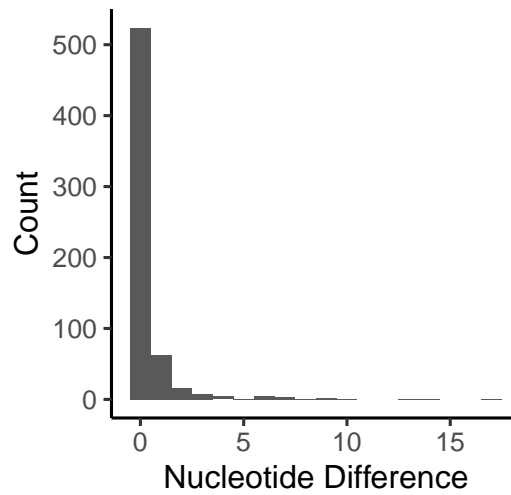
IGHV3-52*01

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



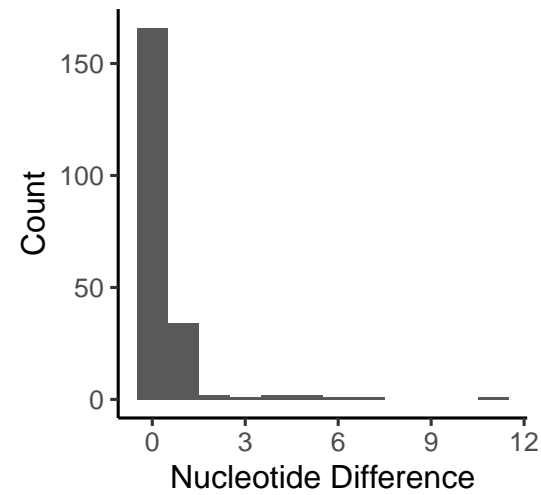
IGHV3-66*01

632 sequences assigned
524 (82.9%) exact matches, in which:
485 unique CDR3
7 unique J



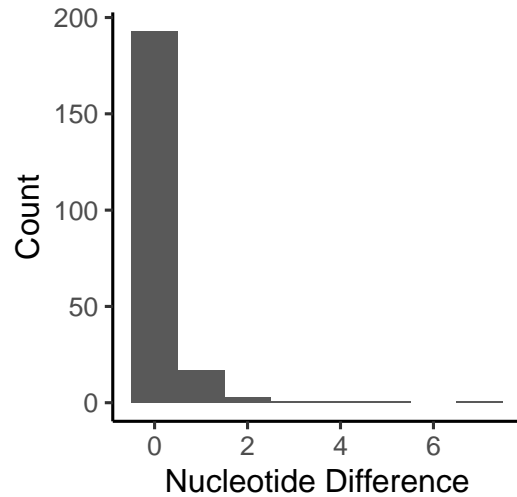
IGHV3-73*01

210 sequences assigned
166 (79%) exact matches, in which:
160 unique CDR3
6 unique J



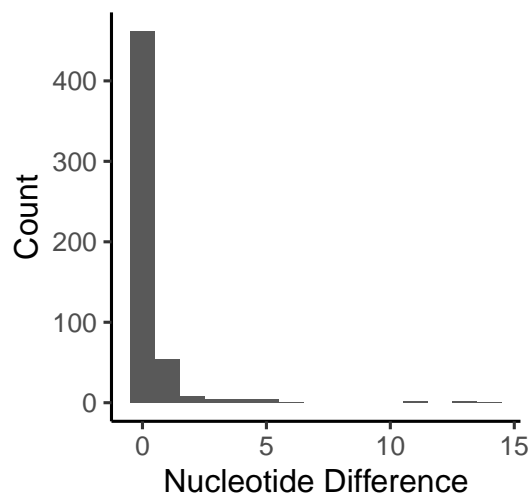
IGHV3-53*02

217 sequences assigned
193 (88.9%) exact matches, in which:
183 unique CDR3
6 unique J



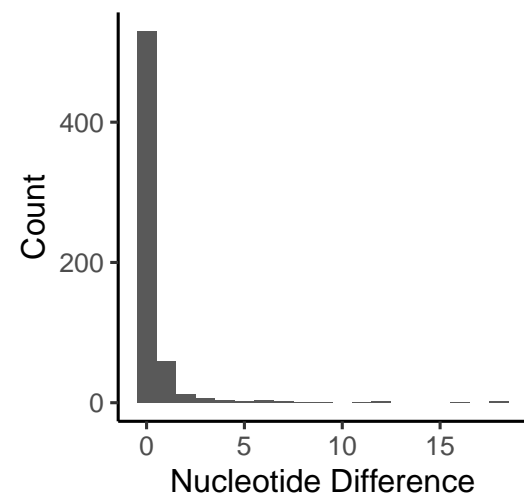
IGHV3-66*02

544 sequences assigned
462 (84.9%) exact matches, in which:
427 unique CDR3
7 unique J



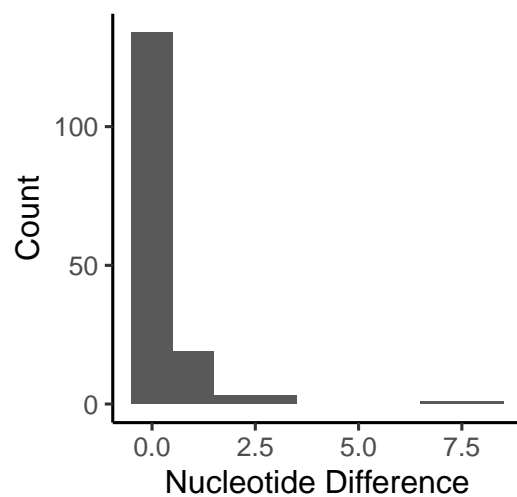
IGHV3-74*01

635 sequences assigned
530 (83.5%) exact matches, in which:
505 unique CDR3
7 unique J



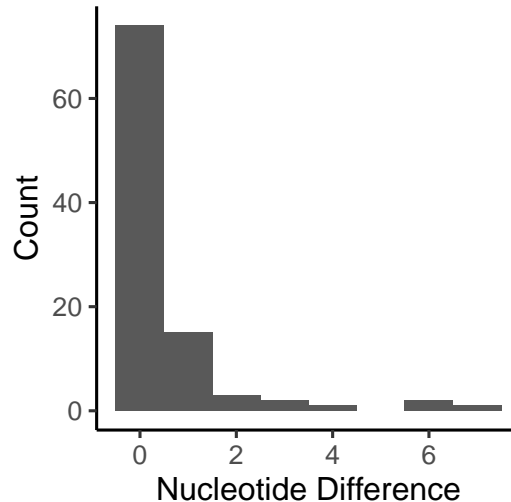
IGHV3-64*01

162 sequences assigned
134 (82.7%) exact matches, in which:
131 unique CDR3
7 unique J



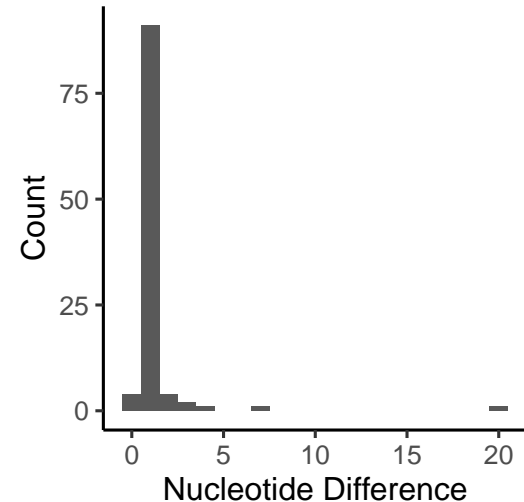
IGHV3-72*01

98 sequences assigned
74 (75.5%) exact matches, in which:
69 unique CDR3
6 unique J



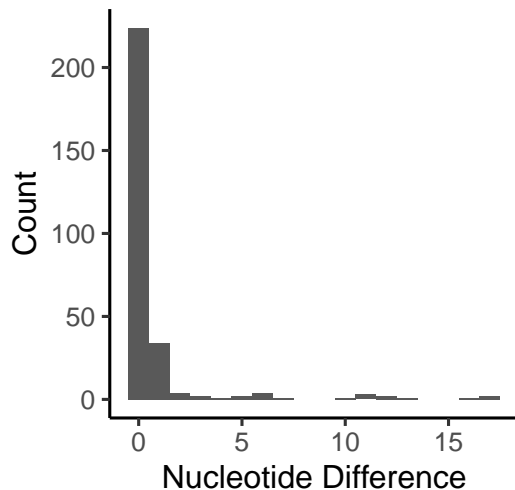
IGHV3-43D*04

104 sequences assigned
4 (3.8%) exact matches, in which:
4 unique CDR3
2 unique J



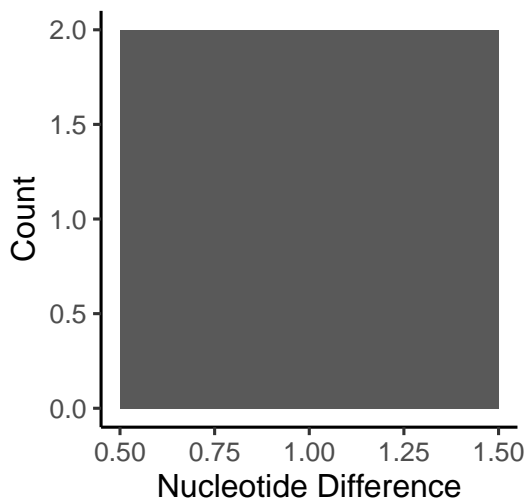
IGHV3-64D*06

284 sequences assigned
224 (78.9%) exact matches, in which:
212 unique CDR3
7 unique J



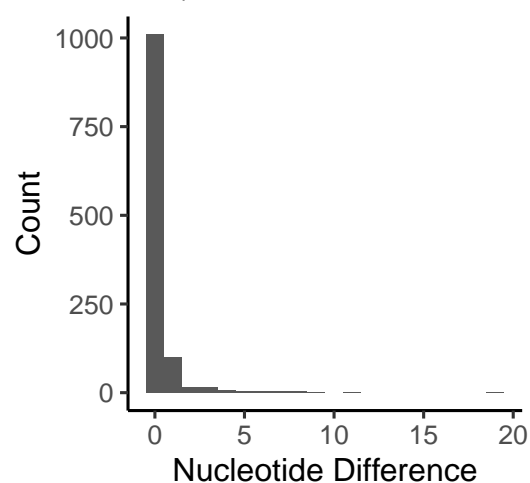
IGHV4-28*04

2 sequences assigned
No exact matches.



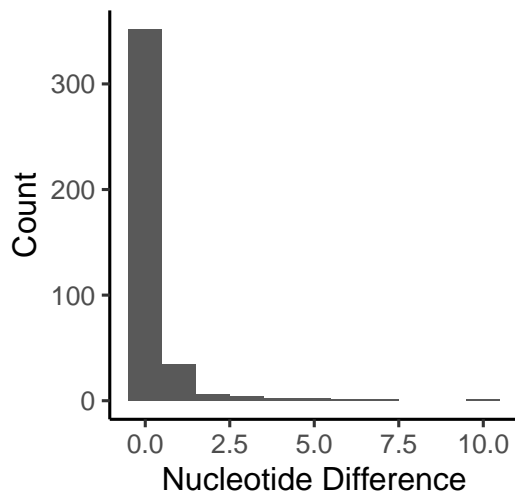
IGHV4-31*03

1171 sequences assigned
1010 (86.3%) exact matches, in which:
974 unique CDR3
7 unique J



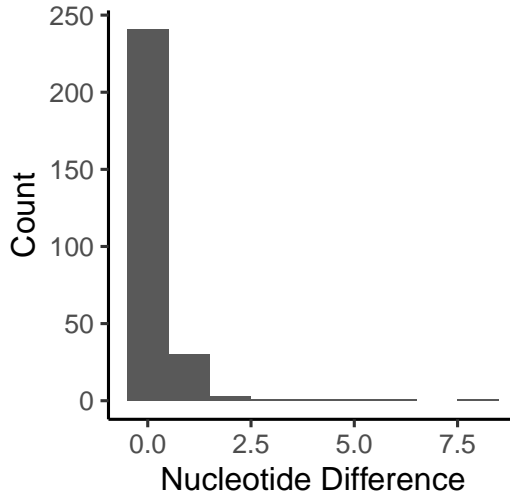
IGHV4-4*02

405 sequences assigned
352 (86.9%) exact matches, in which:
343 unique CDR3
6 unique J



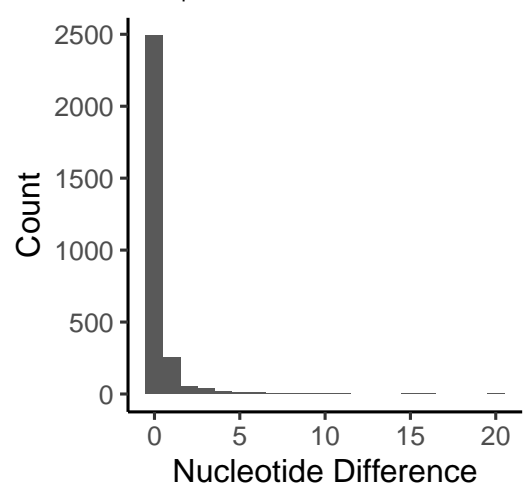
IGHV4-30-2*01

284 sequences assigned
241 (84.9%) exact matches, in which:
230 unique CDR3
7 unique J



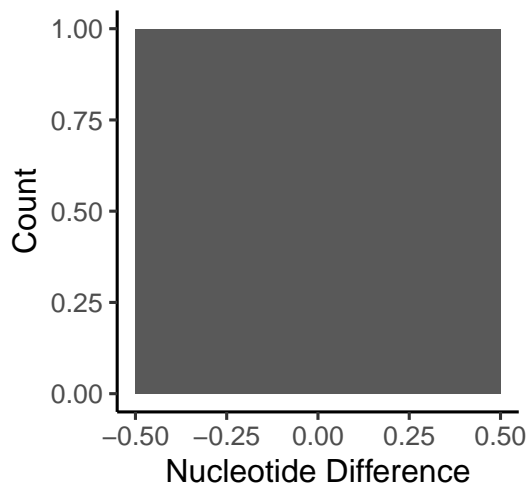
IGHV4-34*01

2893 sequences assigned
2490 (86.1%) exact matches, in which:
2357 unique CDR3
7 unique J



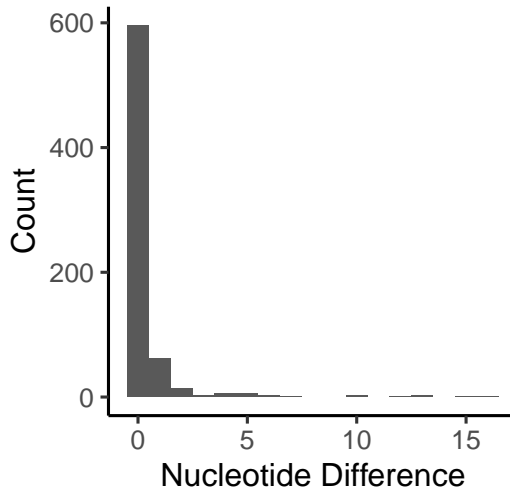
IGHV4-28*01

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



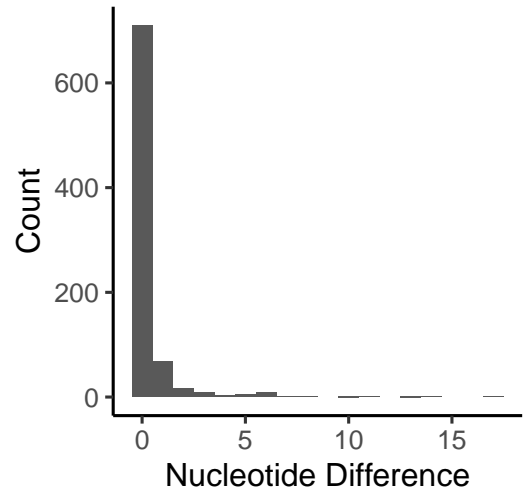
IGHV4-30-4*01

702 sequences assigned
596 (84.9%) exact matches, in which:
576 unique CDR3
7 unique J



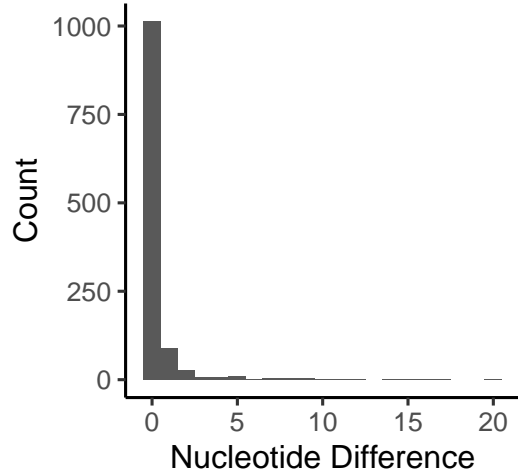
IGHV4-38-2*02_A70G

826 sequences assigned
710 (86%) exact matches, in which:
669 unique CDR3
6 unique J



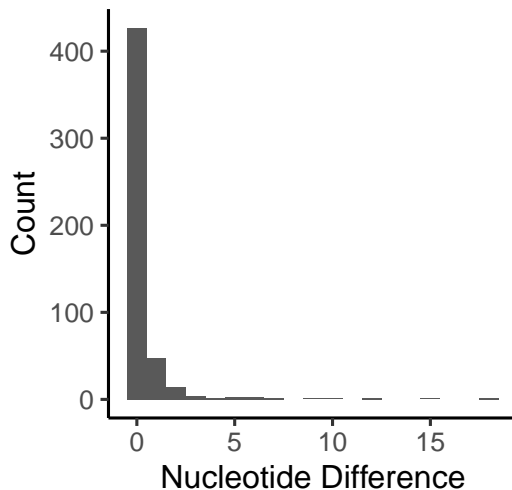
IGHV4–39*01

1195 sequences assigned
1013 (84.8%) exact matches, in which:
969 unique CDR3
7 unique J



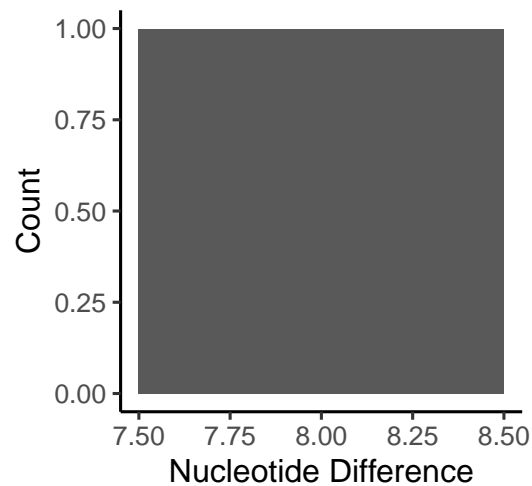
IGHV4–59*08

516 sequences assigned
427 (82.8%) exact matches, in which:
423 unique CDR3
6 unique J



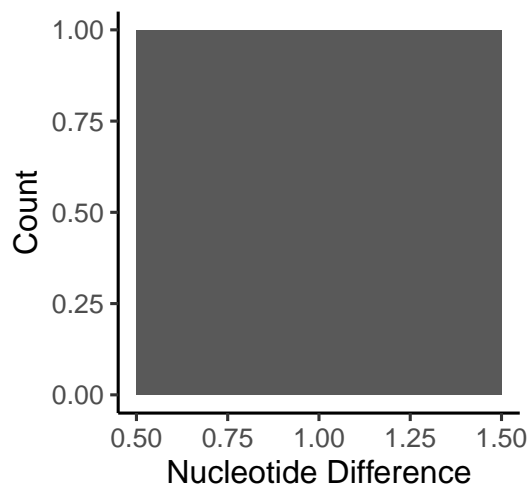
IGHV4/OR15–8*02

1 sequences assigned
No exact matches.



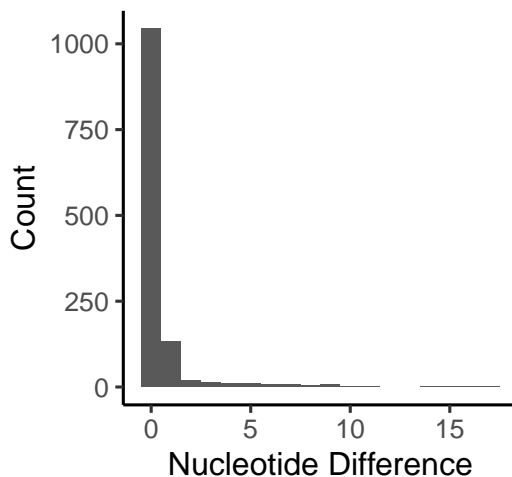
IGHV4–55*08

1 sequences assigned
No exact matches.



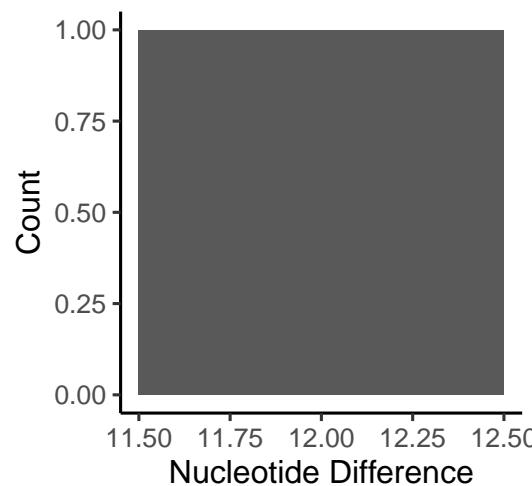
IGHV4–61*02

1269 sequences assigned
1044 (82.3%) exact matches, in which:
1021 unique CDR3
6 unique J



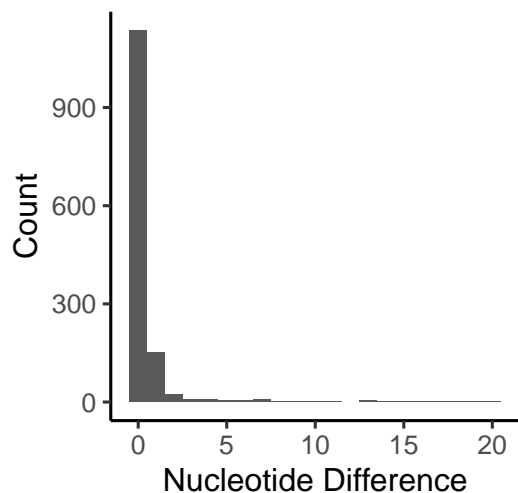
IGHV1/OR15–9*01

1 sequences assigned
No exact matches.



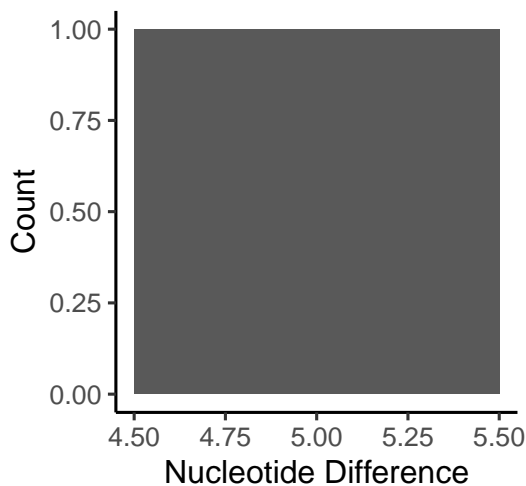
IGHV4–59*01

1378 sequences assigned
1136 (82.4%) exact matches, in which:
1114 unique CDR3
7 unique J



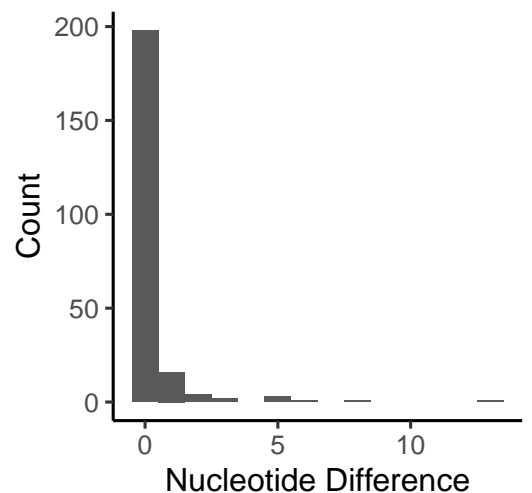
IGHV1/OR15–4*01

1 sequences assigned
No exact matches.



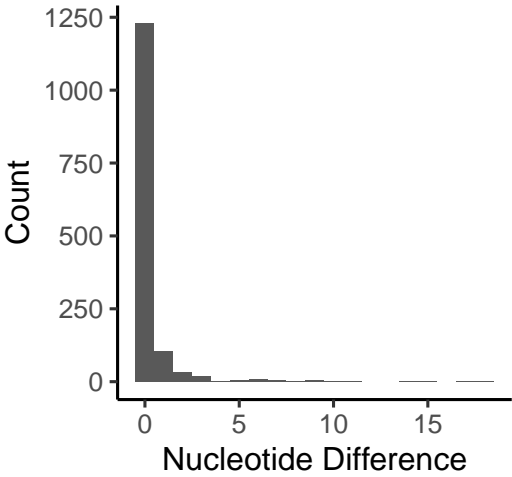
IGHV5–10–1*03

226 sequences assigned
198 (87.6%) exact matches, in which:
194 unique CDR3
7 unique J



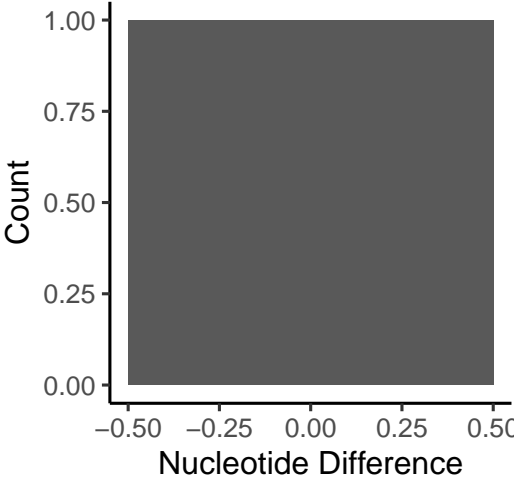
IGHV5-51*01

1422 sequences assigned
1229 (86.4%) exact matches, in which:
1190 unique CDR3
7 unique J



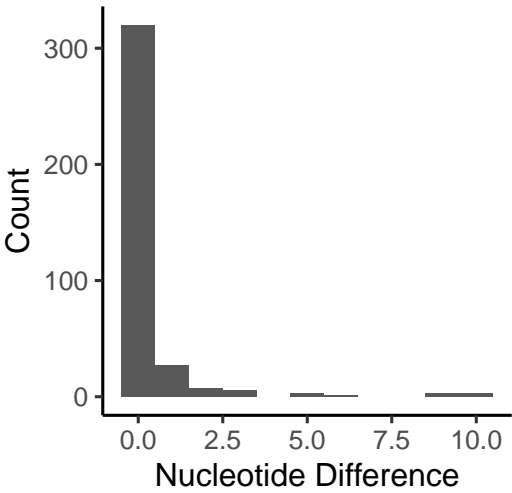
IGHV7-81*01

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



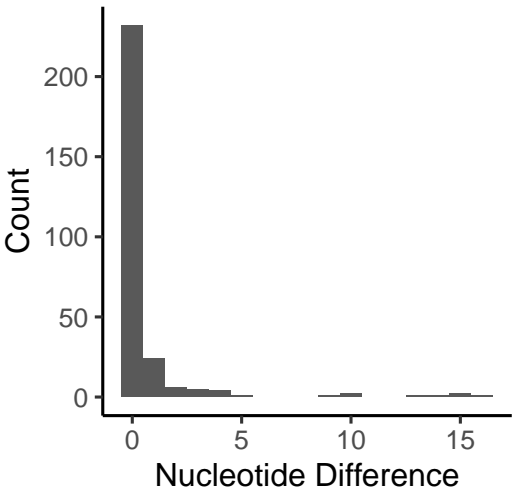
IGHV6-1*01

372 sequences assigned
320 (86%) exact matches, in which:
312 unique CDR3
7 unique J

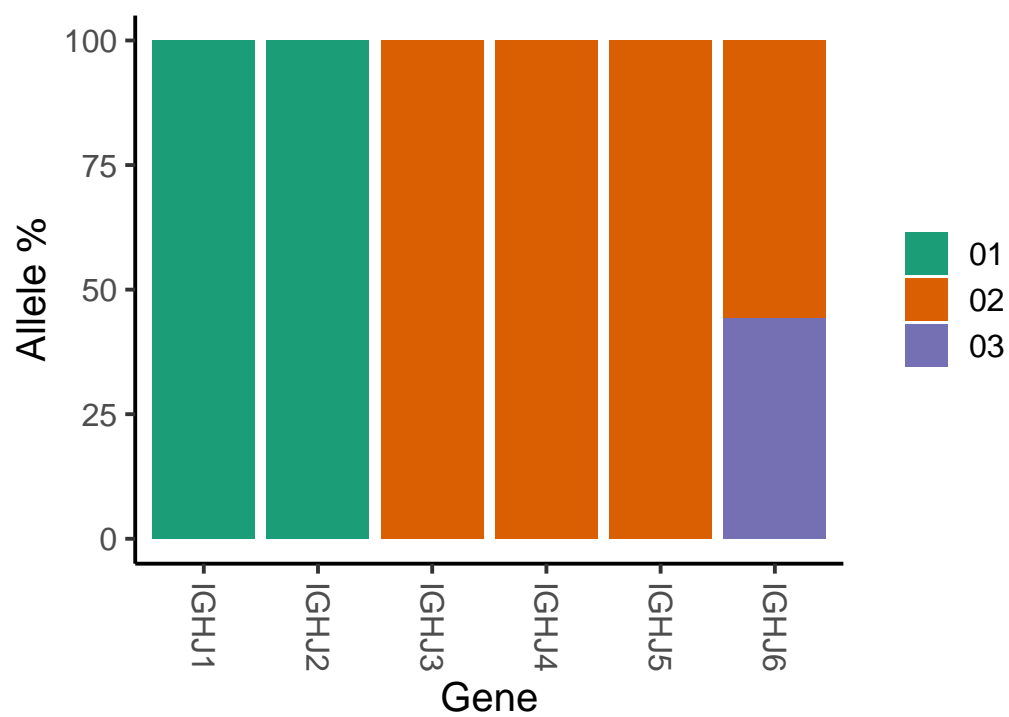


IGHV7-4-1*02

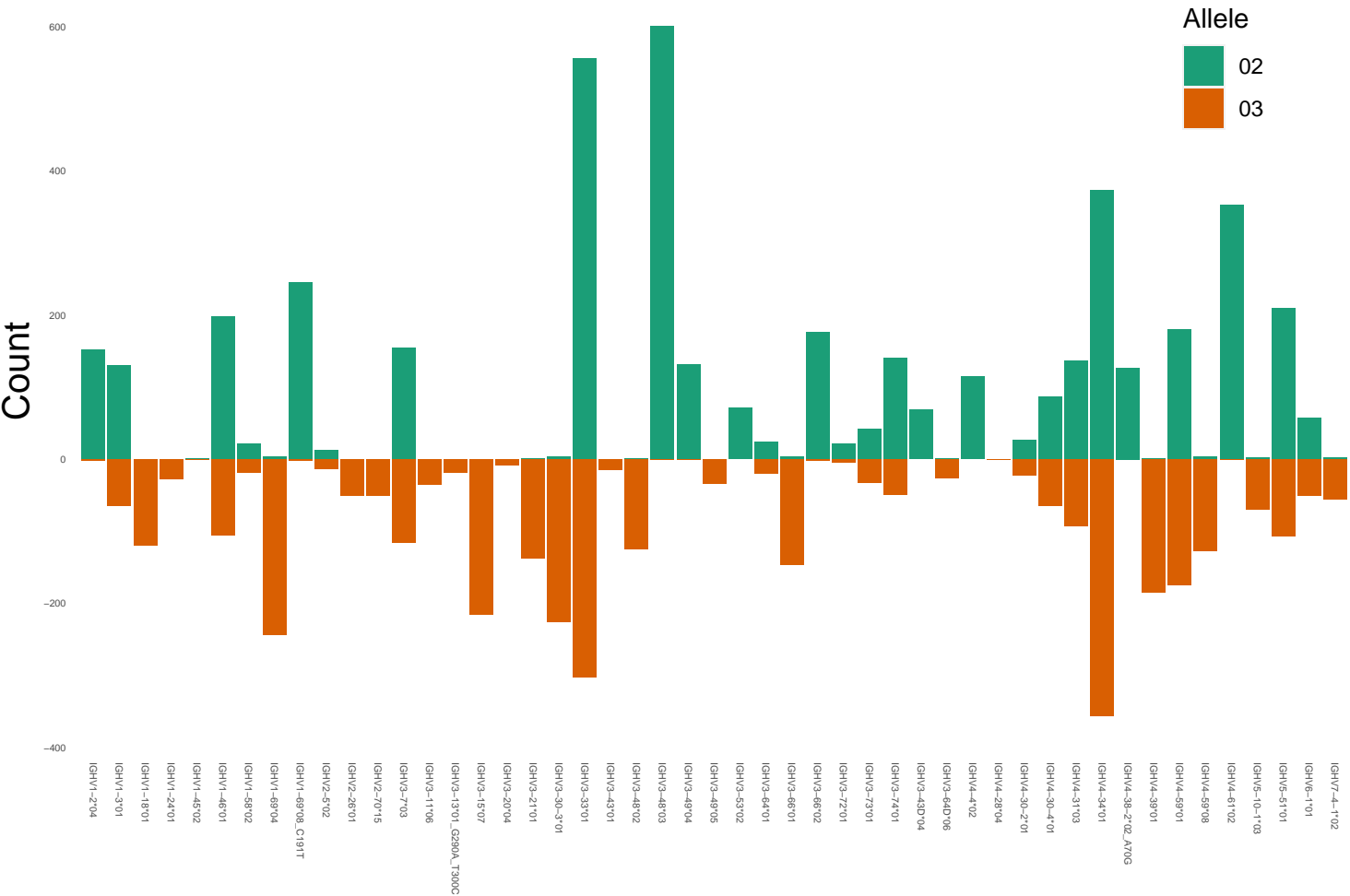
280 sequences assigned
232 (82.9%) exact matches, in which:
220 unique CDR3
6 unique J



Allele Usage



Sequence Count by IGHJ6 allele usage



Warning – no inferred sequences found.