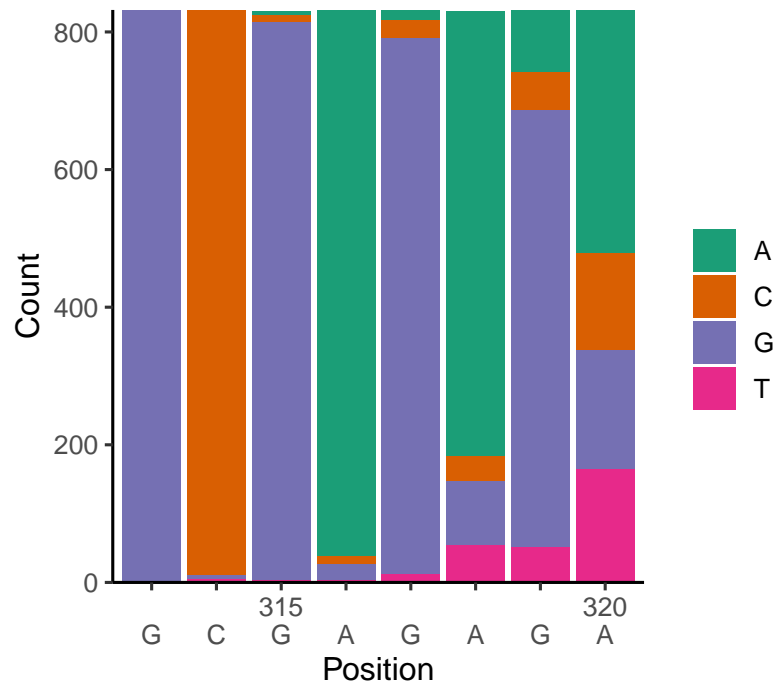


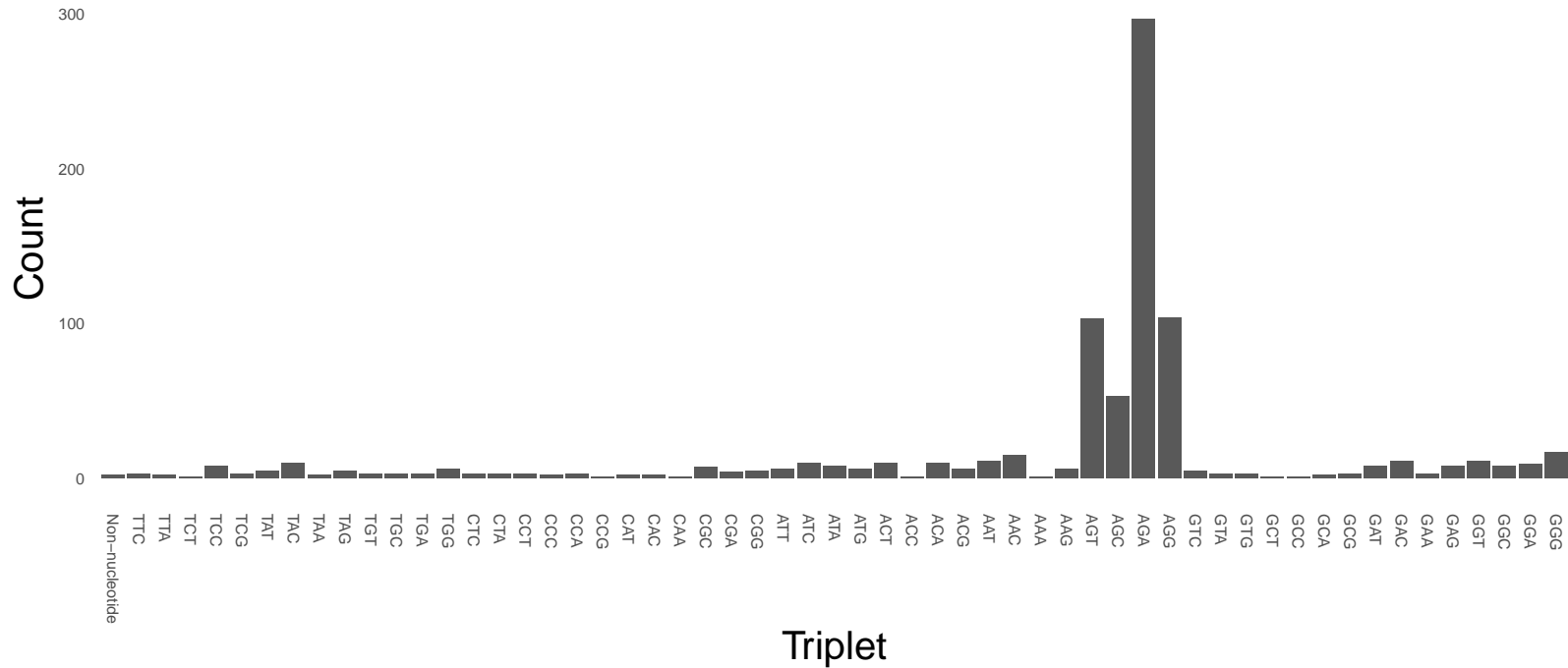
Gene IGHV4-38-2*02_A70G



Gene IGHV4-38-2*02_A70G

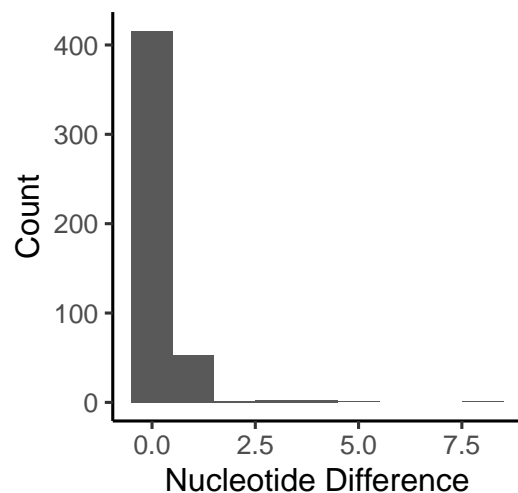


IGHV4-38-2*02_A70G- Final 3 nucleotides as a triplet



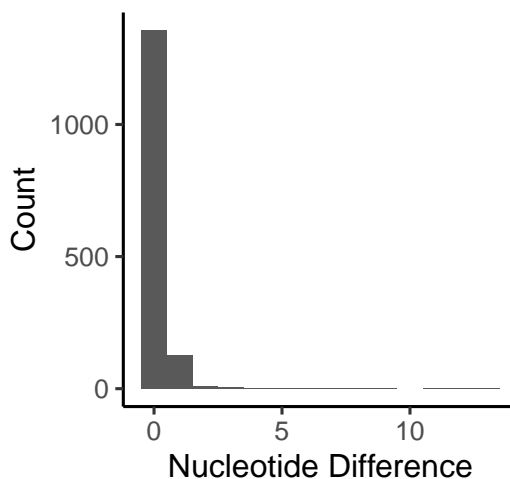
IGHV1-2*04

479 sequences assigned
416 (86.8%) exact matches, in which:
387 unique CDR3
6 unique J



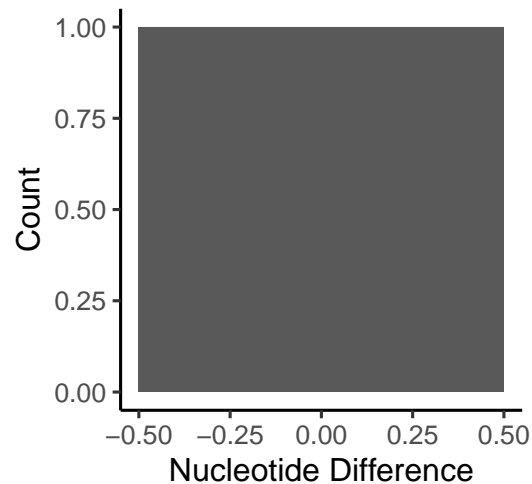
IGHV1-8*01

1515 sequences assigned
1356 (89.5%) exact matches, in which:
1238 unique CDR3
6 unique J



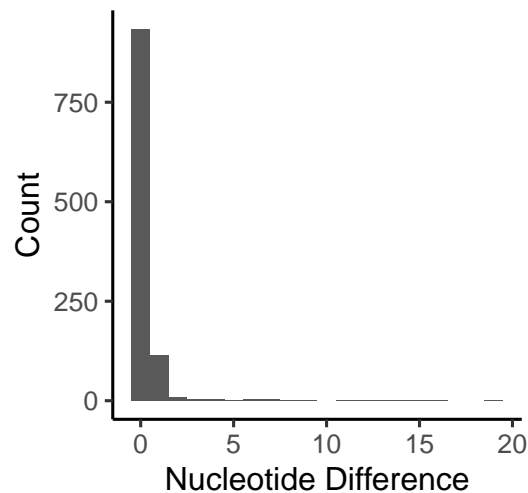
IGHV1-45*03

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



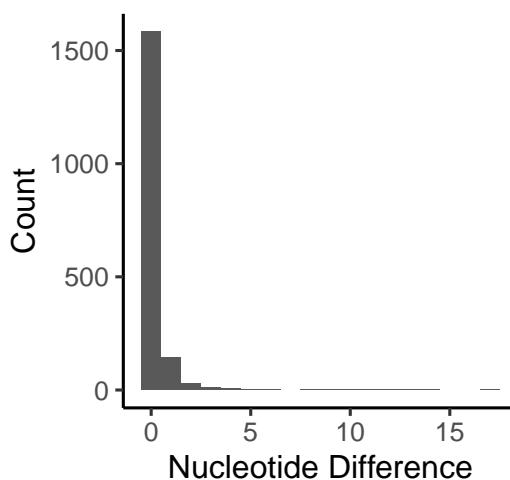
IGHV1-2*06

1090 sequences assigned
934 (85.7%) exact matches, in which:
851 unique CDR3
6 unique J



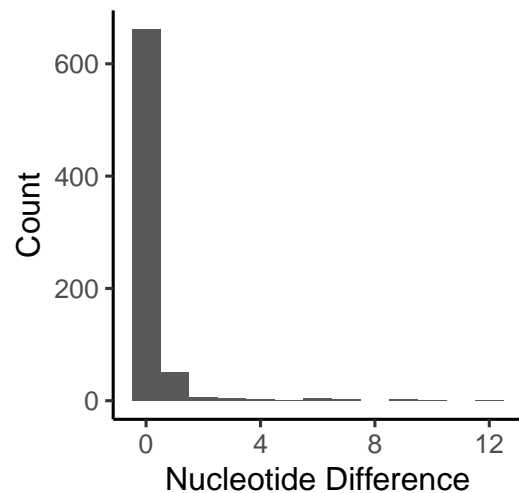
IGHV1-18*01

1799 sequences assigned
1583 (88%) exact matches, in which:
1476 unique CDR3
6 unique J



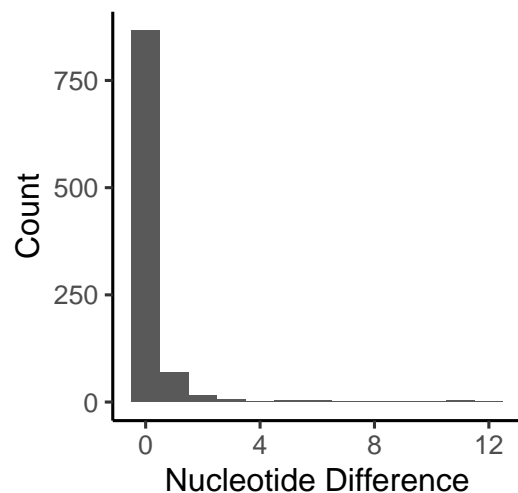
IGHV1-46*01

739 sequences assigned
662 (89.6%) exact matches, in which:
603 unique CDR3
6 unique J



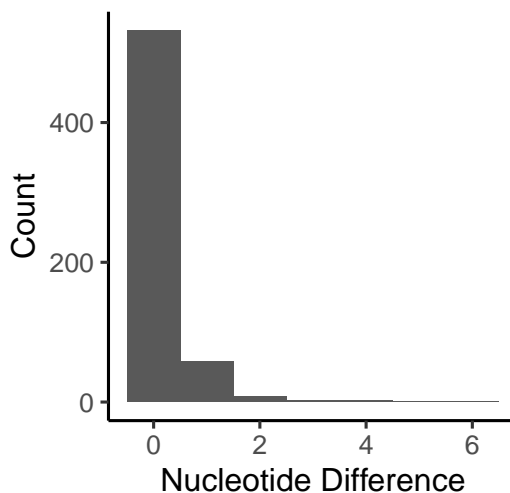
IGHV1-3*01

979 sequences assigned
867 (88.6%) exact matches, in which:
813 unique CDR3
6 unique J



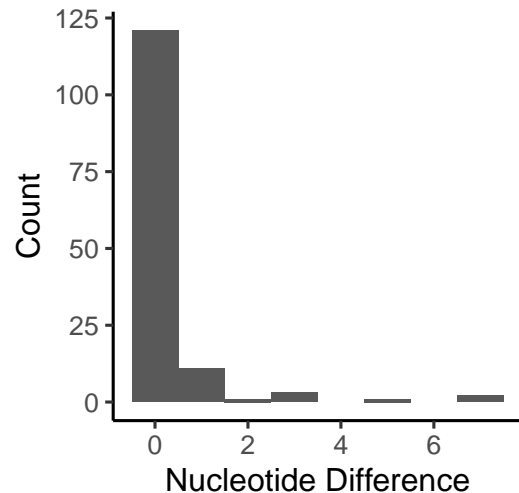
IGHV1-24*01

605 sequences assigned
532 (87.9%) exact matches, in which:
494 unique CDR3
6 unique J



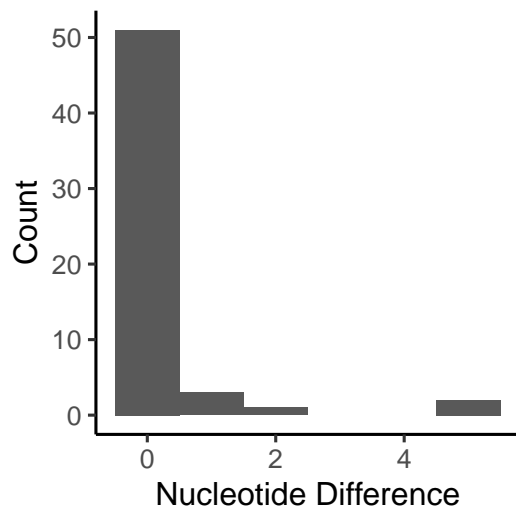
IGHV1-58*01

139 sequences assigned
121 (87.1%) exact matches, in which:
112 unique CDR3
5 unique J



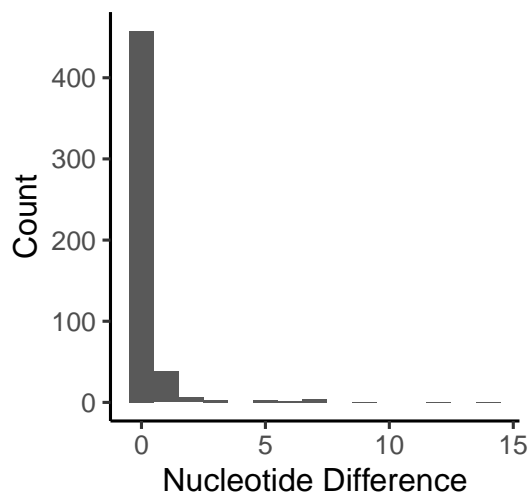
IGHV1-58*02

57 sequences assigned
51 (89.5%) exact matches, in which:
47 unique CDR3
4 unique J



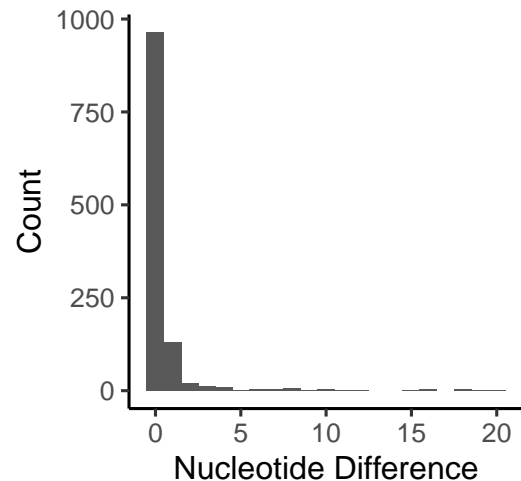
IGHV2-26*01

518 sequences assigned
458 (88.4%) exact matches, in which:
430 unique CDR3
6 unique J



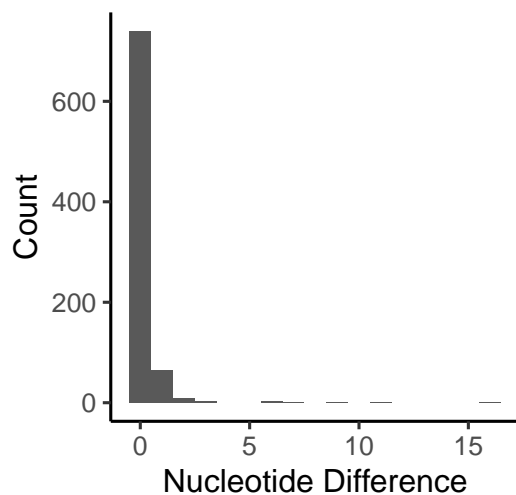
IGHV3-7*01

1177 sequences assigned
964 (81.9%) exact matches, in which:
884 unique CDR3
6 unique J



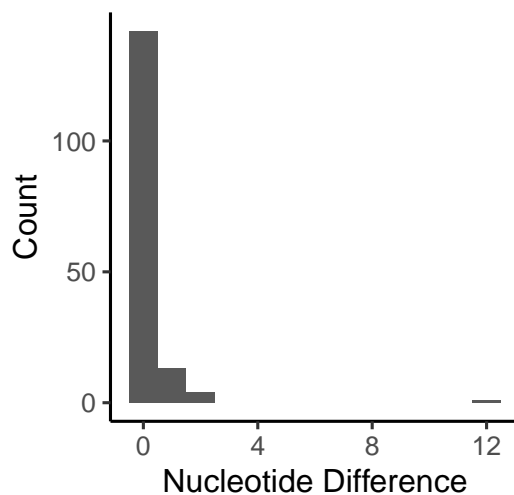
IGHV1-69*04

822 sequences assigned
740 (90%) exact matches, in which:
676 unique CDR3
6 unique J



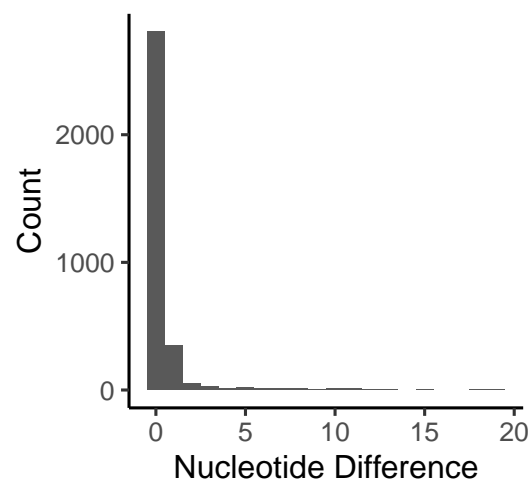
IGHV2-70*01

160 sequences assigned
142 (88.8%) exact matches, in which:
138 unique CDR3
5 unique J



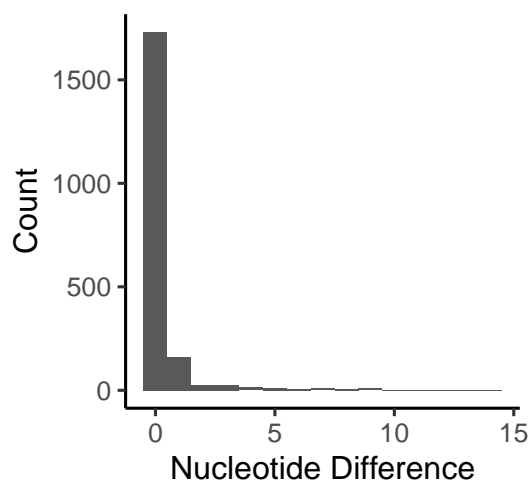
IGHV3-9*01

3331 sequences assigned
2807 (84.3%) exact matches, in which:
2452 unique CDR3
6 unique J



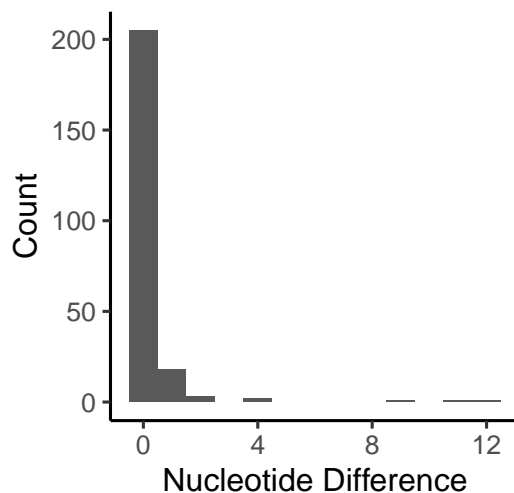
IGHV2-5*02

2010 sequences assigned
1731 (86.1%) exact matches, in which:
1615 unique CDR3
6 unique J



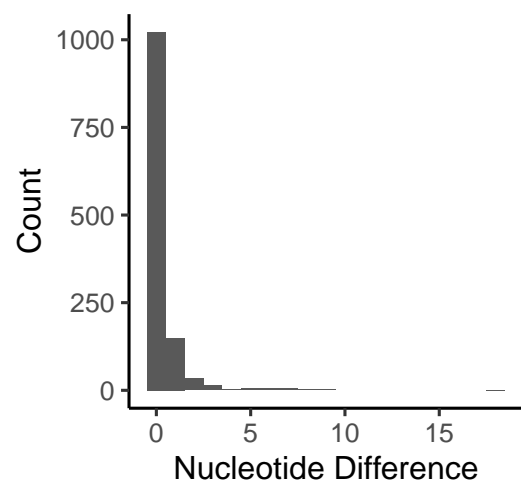
IGHV2-70*15

231 sequences assigned
205 (88.7%) exact matches, in which:
198 unique CDR3
6 unique J



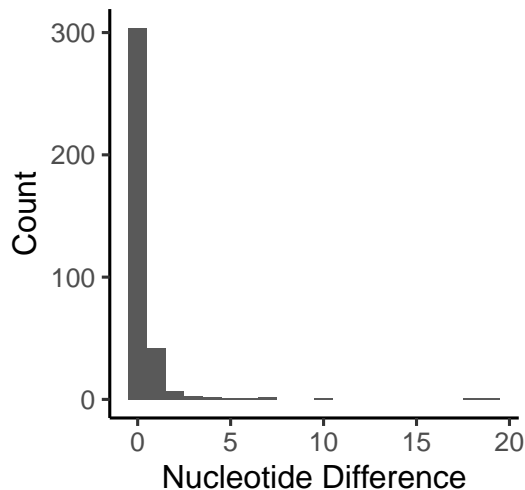
IGHV3-11*01

1243 sequences assigned
1022 (82.2%) exact matches, in which:
928 unique CDR3
6 unique J



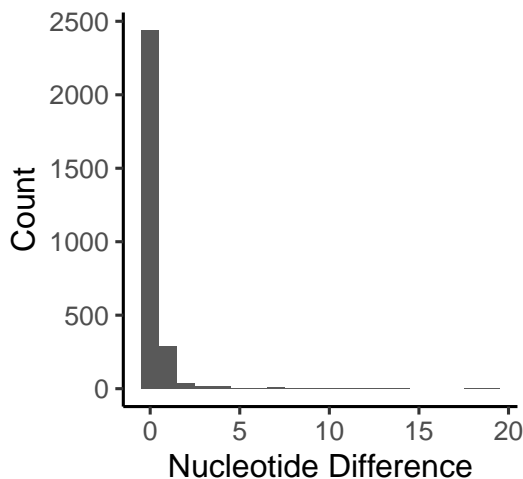
IGHV3-13*01

365 sequences assigned
304 (83.3%) exact matches, in which:
265 unique CDR3
6 unique J



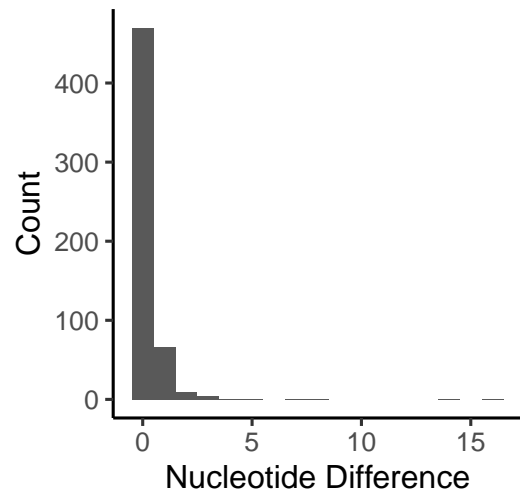
IGHV3-21*01

2836 sequences assigned
2438 (86%) exact matches, in which:
2156 unique CDR3
6 unique J



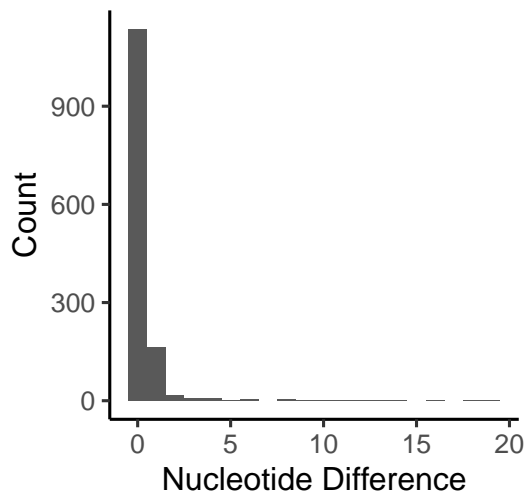
IGHV3-43*02

555 sequences assigned
470 (84.7%) exact matches, in which:
412 unique CDR3
6 unique J



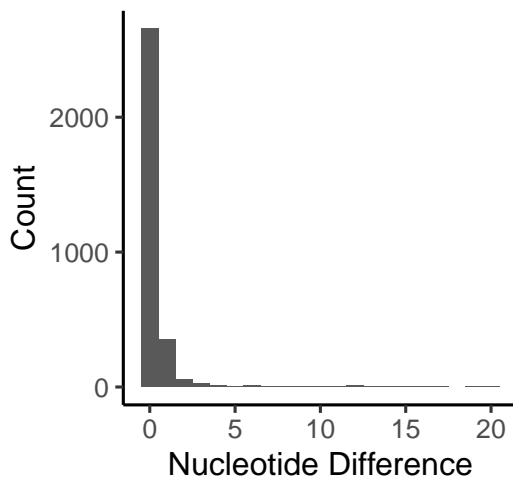
IGHV3-15*01

1355 sequences assigned
1136 (83.8%) exact matches, in which:
1020 unique CDR3
6 unique J



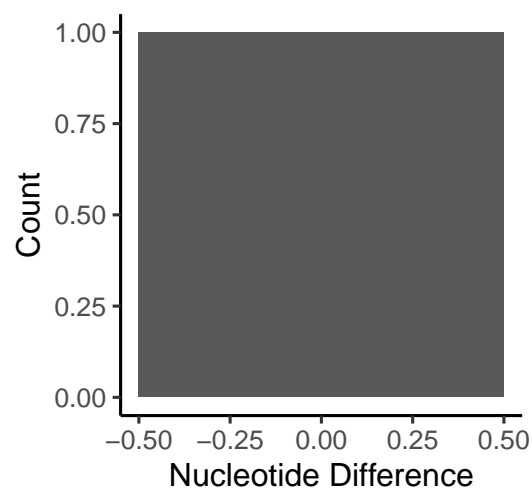
IGHV3-30-3*01

3164 sequences assigned
2656 (83.9%) exact matches, in which:
2342 unique CDR3
6 unique J



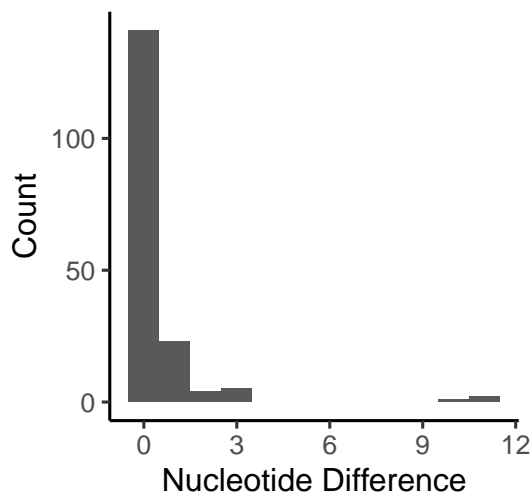
IGHV3-47*01

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



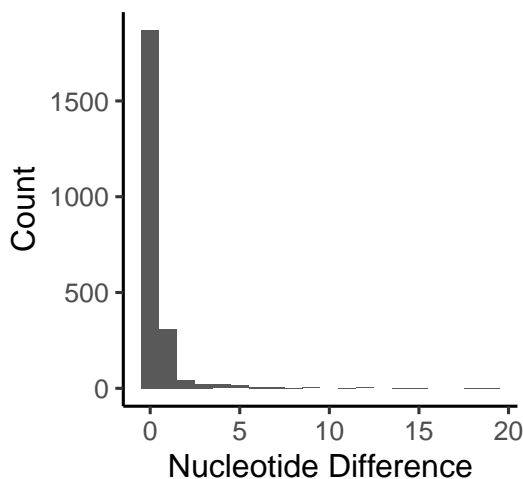
IGHV3-20*01

176 sequences assigned
141 (80.1%) exact matches, in which:
128 unique CDR3
6 unique J



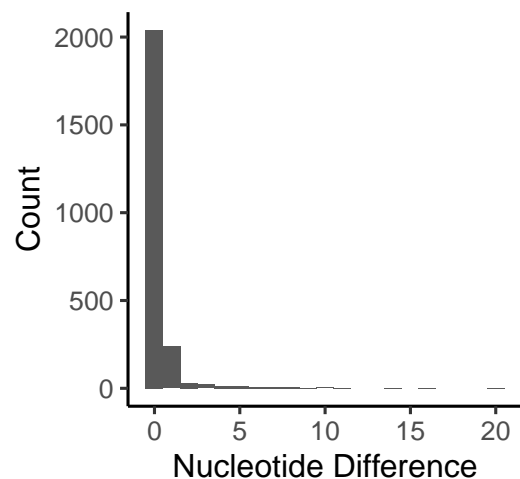
IGHV3-33*01

2322 sequences assigned
1870 (80.5%) exact matches, in which:
1670 unique CDR3
6 unique J



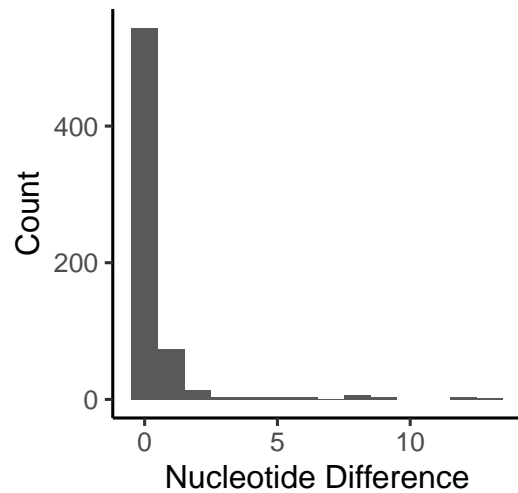
IGHV3-48*03

2390 sequences assigned
2040 (85.4%) exact matches, in which:
1833 unique CDR3
6 unique J



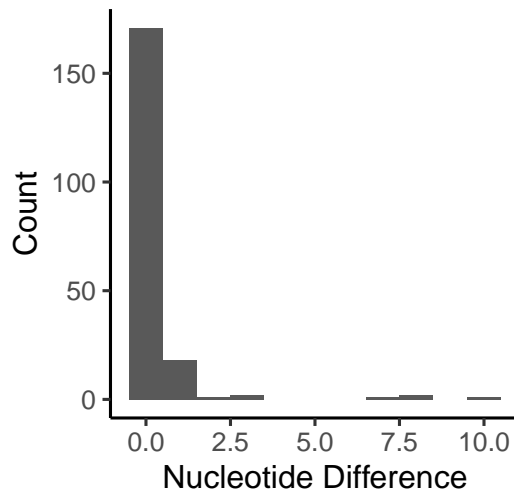
IGHV3–49*04

664 sequences assigned
544 (81.9%) exact matches, in which:
488 unique CDR3
6 unique J



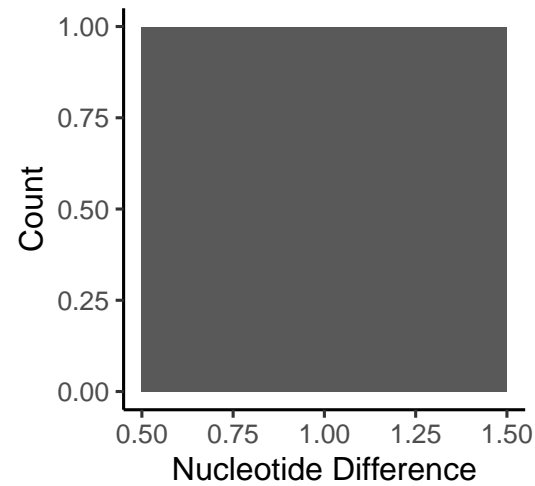
IGHV3–53*04

196 sequences assigned
171 (87.2%) exact matches, in which:
157 unique CDR3
6 unique J



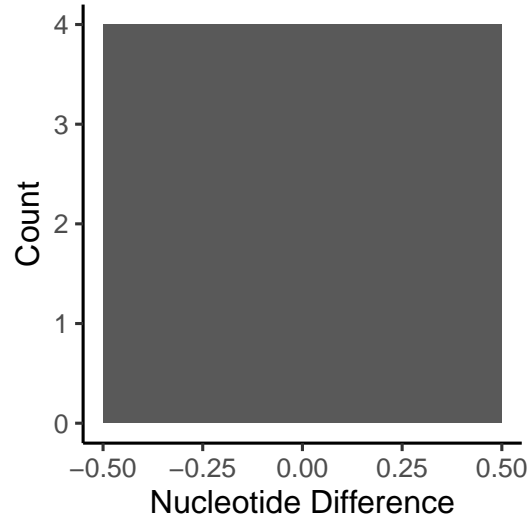
IGHV3–69–1*02

1 sequences assigned
No exact matches.



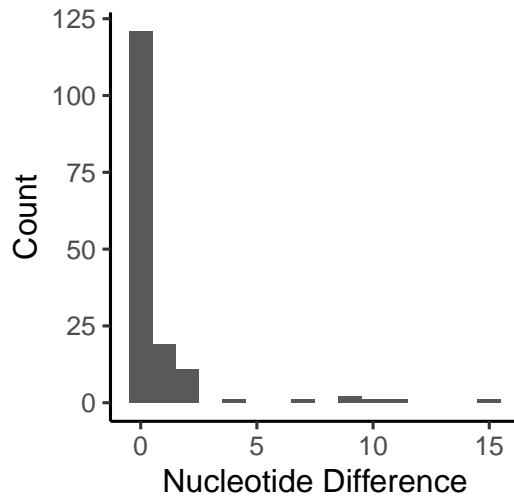
IGHV3–52*01

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



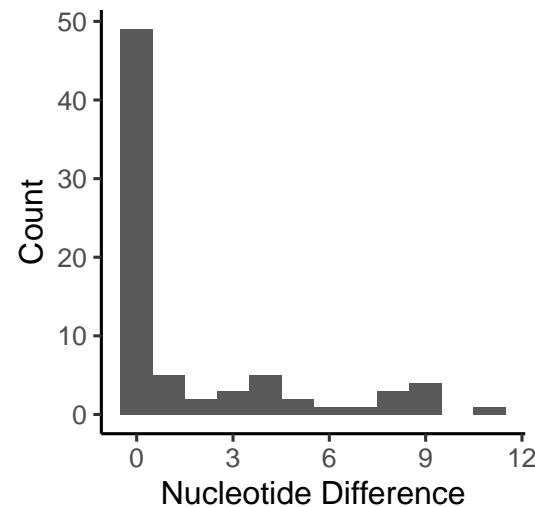
IGHV3–64*01

158 sequences assigned
121 (76.6%) exact matches, in which:
109 unique CDR3
6 unique J



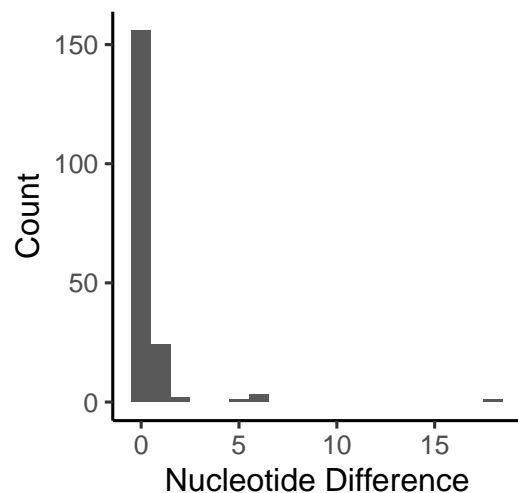
IGHV3–72*01

78 sequences assigned
49 (62.8%) exact matches, in which:
46 unique CDR3
5 unique J



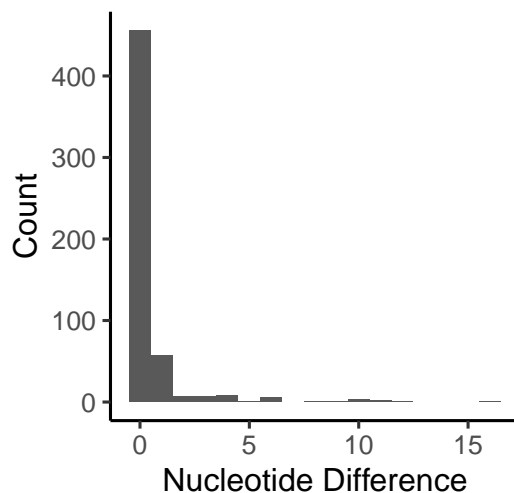
IGHV3–53*02

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



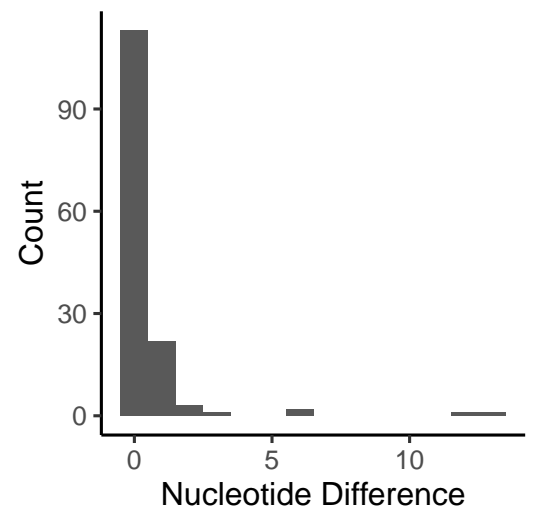
IGHV3–66*01

550 sequences assigned
456 (82.9%) exact matches, in which:
402 unique CDR3
6 unique J



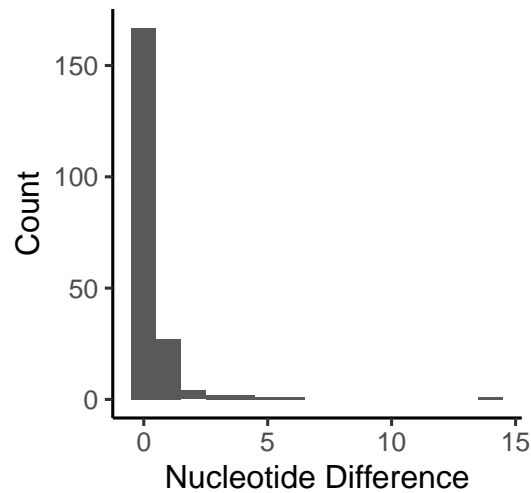
IGHV3–73*01

143 sequences assigned
113 (79%) exact matches, in which:
100 unique CDR3
4 unique J



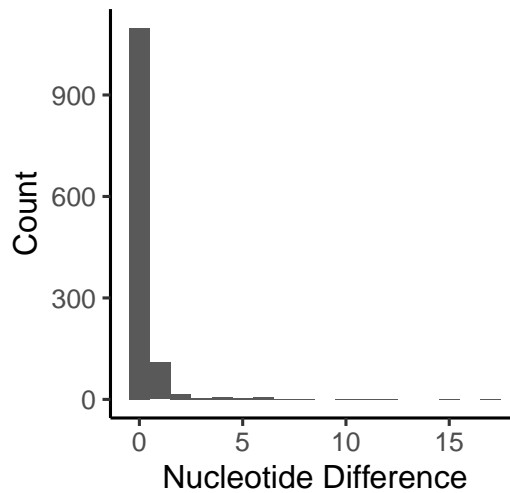
IGHV3-73*02

205 sequences assigned
167 (81.5%) exact matches, in which:
155 unique CDR3
6 unique J



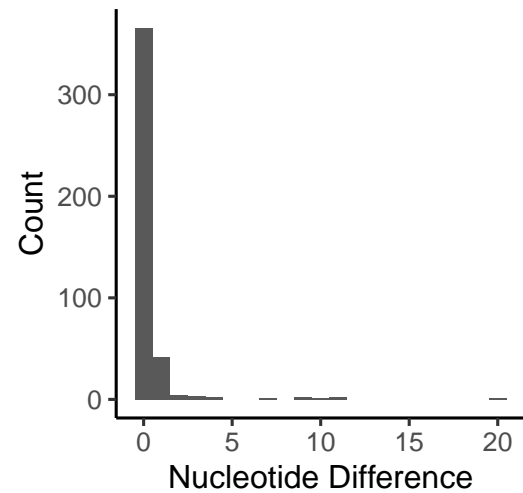
IGHV4-4*02

1258 sequences assigned
1099 (87.4%) exact matches, in which:
999 unique CDR3
6 unique J



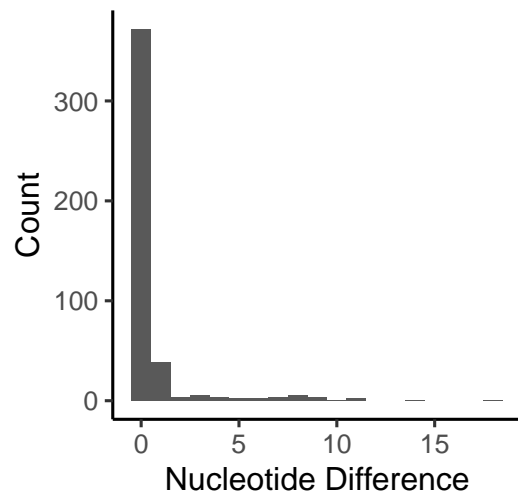
IGHV4-30-2*01

424 sequences assigned
366 (86.3%) exact matches, in which:
340 unique CDR3
6 unique J



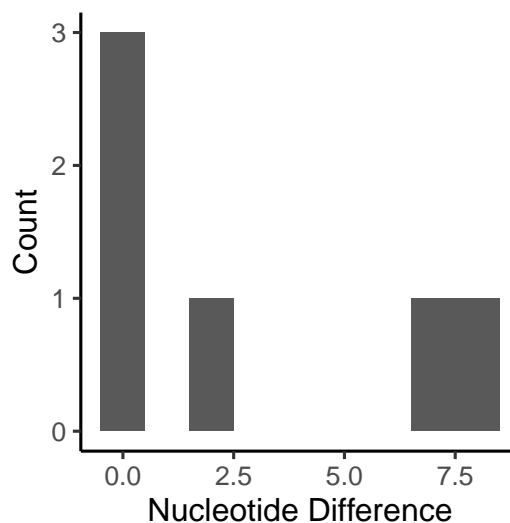
IGHV3-74*01

451 sequences assigned
372 (82.5%) exact matches, in which:
344 unique CDR3
6 unique J



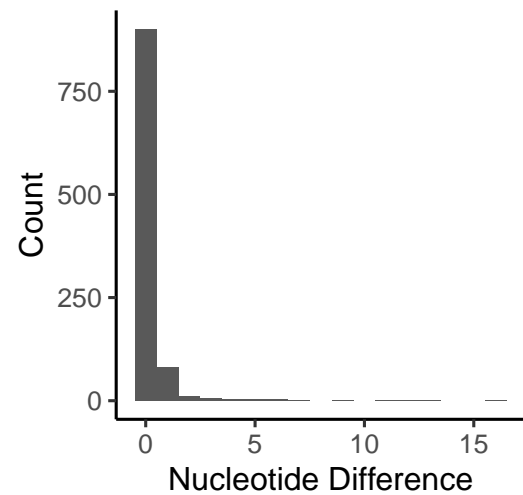
IGHV4-28*01

6 sequences assigned
3 (50%) exact matches, in which:
3 unique CDR3
2 unique J



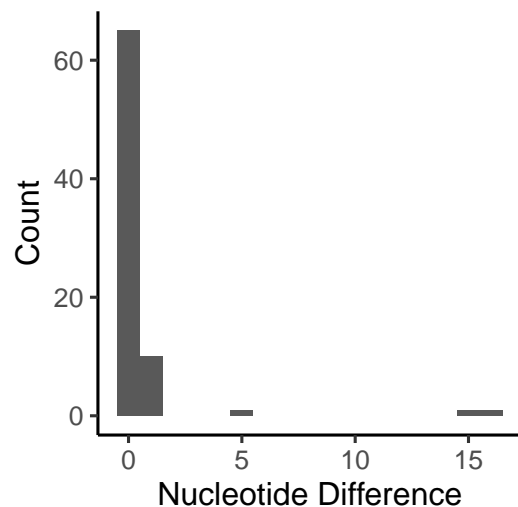
IGHV4-30-4*01

1016 sequences assigned
901 (88.7%) exact matches, in which:
840 unique CDR3
6 unique J



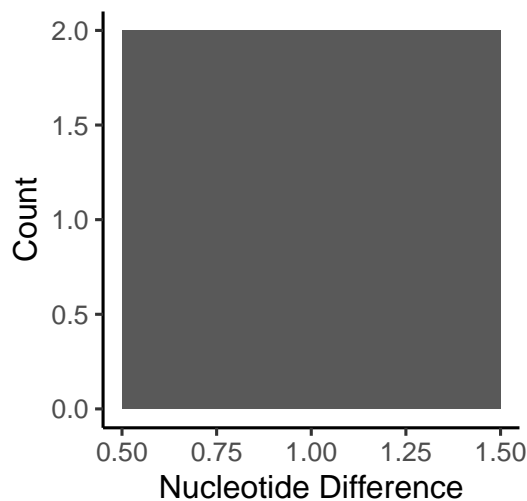
IGHV3-43D*04

78 sequences assigned
65 (83.3%) exact matches, in which:
58 unique CDR3
4 unique J



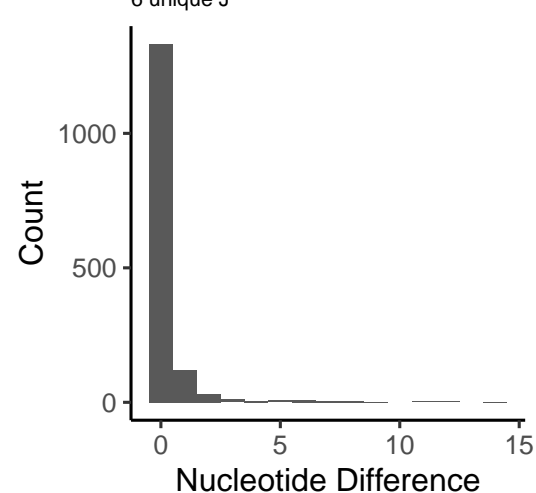
IGHV4-28*04

2 sequences assigned
No exact matches.



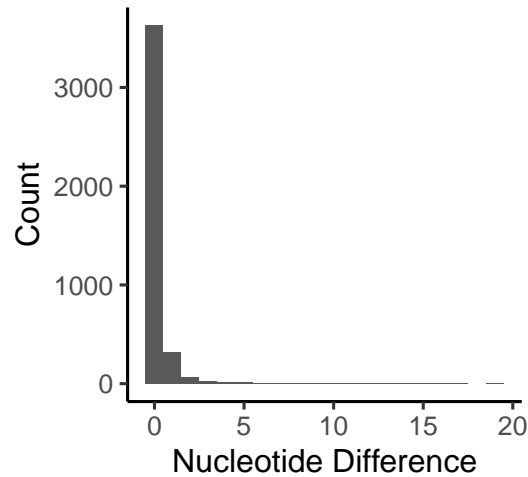
IGHV4-31*03

1530 sequences assigned
1332 (87.1%) exact matches, in which:
1228 unique CDR3
6 unique J



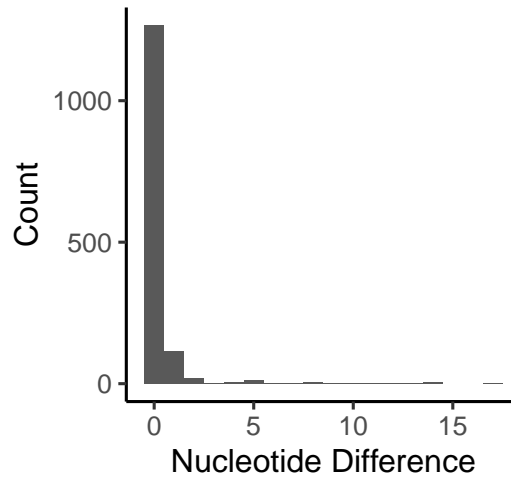
IGHV4–34*01

4111 sequences assigned
3628 (88.3%) exact matches, in which:
3248 unique CDR3
6 unique J



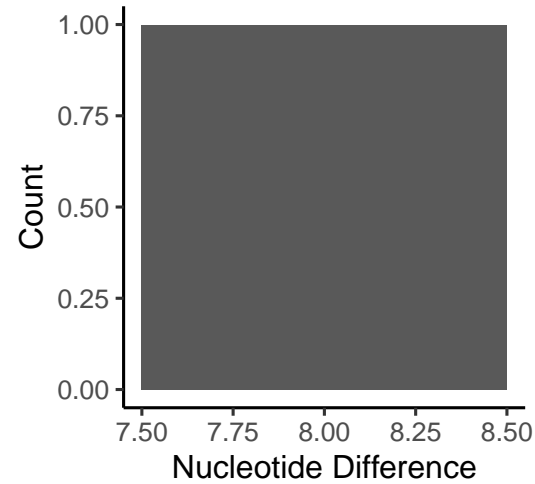
IGHV4–59*01

1445 sequences assigned
1266 (87.6%) exact matches, in which:
1190 unique CDR3
6 unique J



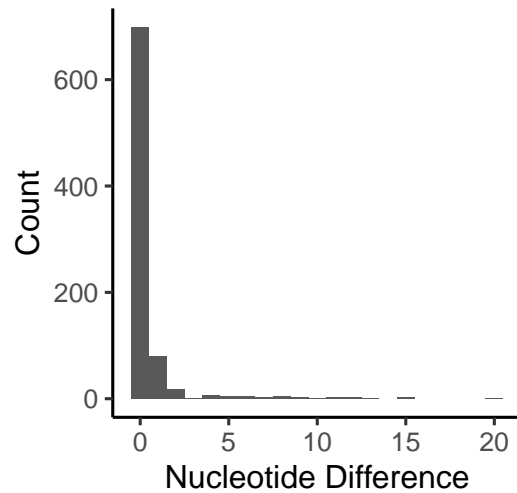
IGHV1/OR15–2*01

1 sequences assigned
No exact matches.



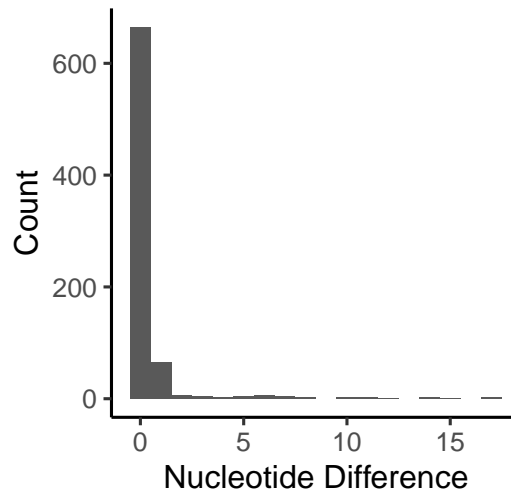
IGHV4–38–2*02_A70G

832 sequences assigned
699 (84%) exact matches, in which:
624 unique CDR3
6 unique J



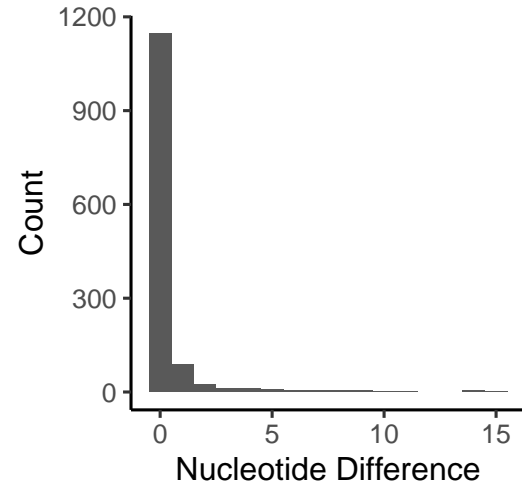
IGHV4–59*08

775 sequences assigned
665 (85.8%) exact matches, in which:
617 unique CDR3
6 unique J



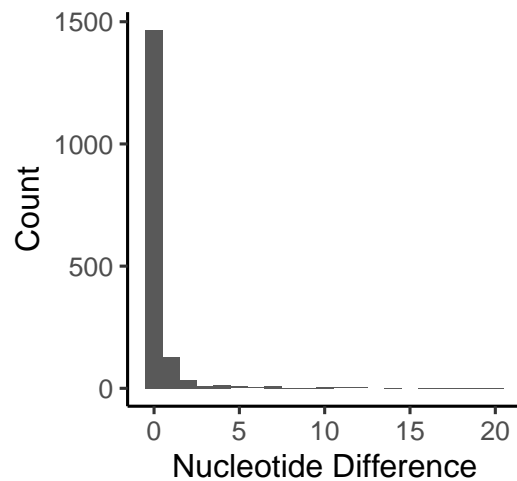
IGHV5–51*01

1318 sequences assigned
1146 (86.9%) exact matches, in which:
1044 unique CDR3
6 unique J



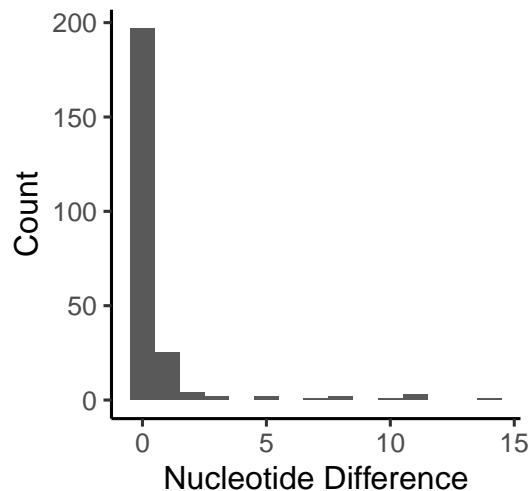
IGHV4–39*01

1694 sequences assigned
1466 (86.5%) exact matches, in which:
1315 unique CDR3
6 unique J



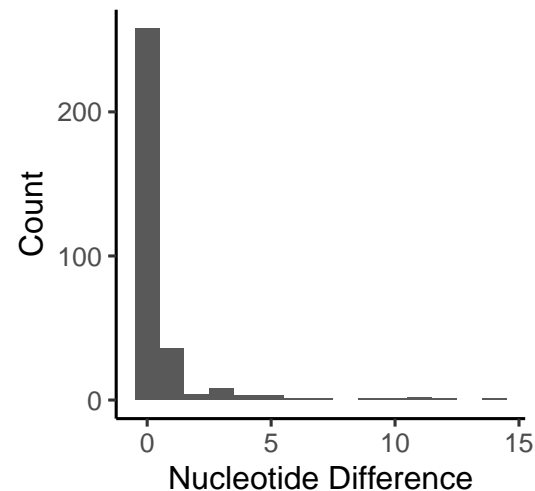
IGHV4–61*01

238 sequences assigned
197 (82.8%) exact matches, in which:
190 unique CDR3
6 unique J



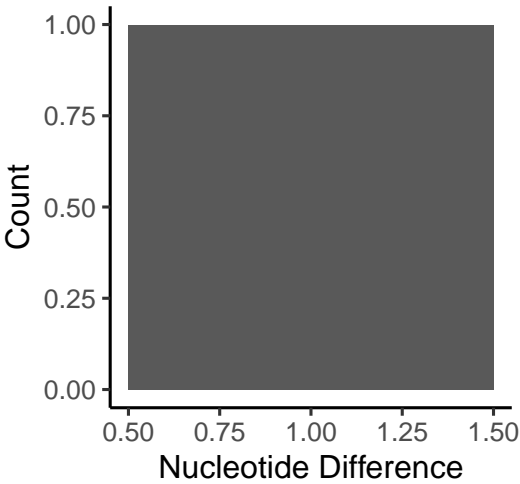
IGHV6–1*01

320 sequences assigned
258 (80.6%) exact matches, in which:
236 unique CDR3
6 unique J



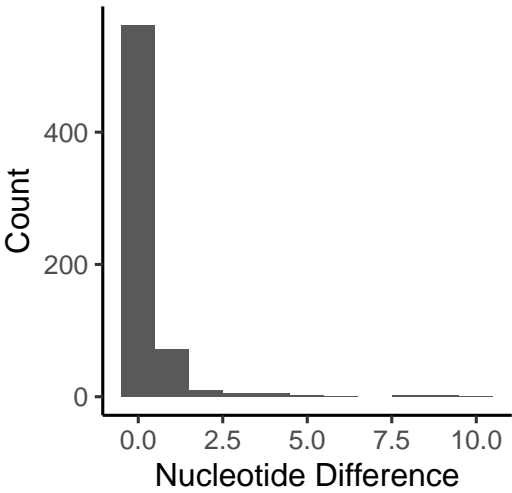
IGHV3/OR16-12*01

1 sequences assigned
No exact matches.



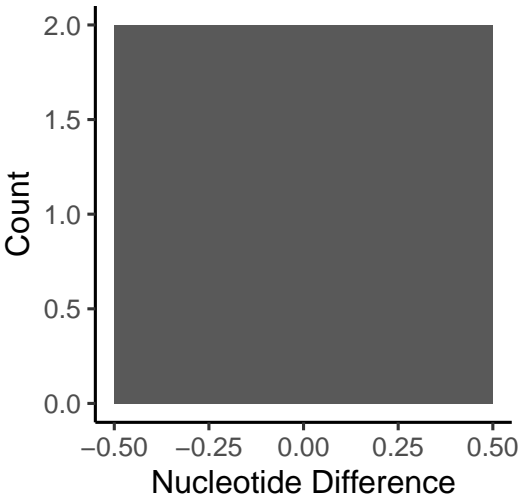
IGHV7-4-1*02

663 sequences assigned
562 (84.8%) exact matches, in which:
524 unique CDR3
6 unique J

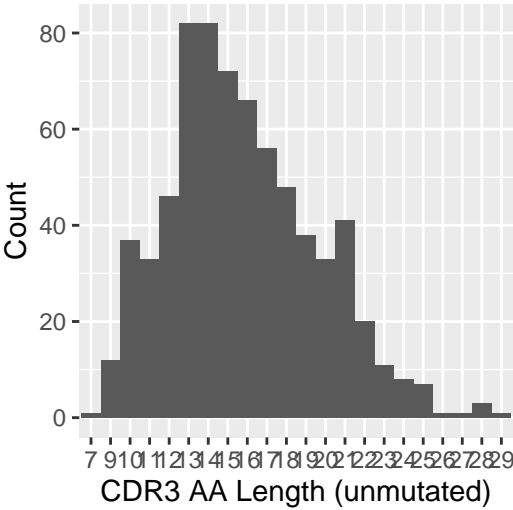


IGHV7-81*01

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



IGHV4-38-2*02_A70G





[illegible]