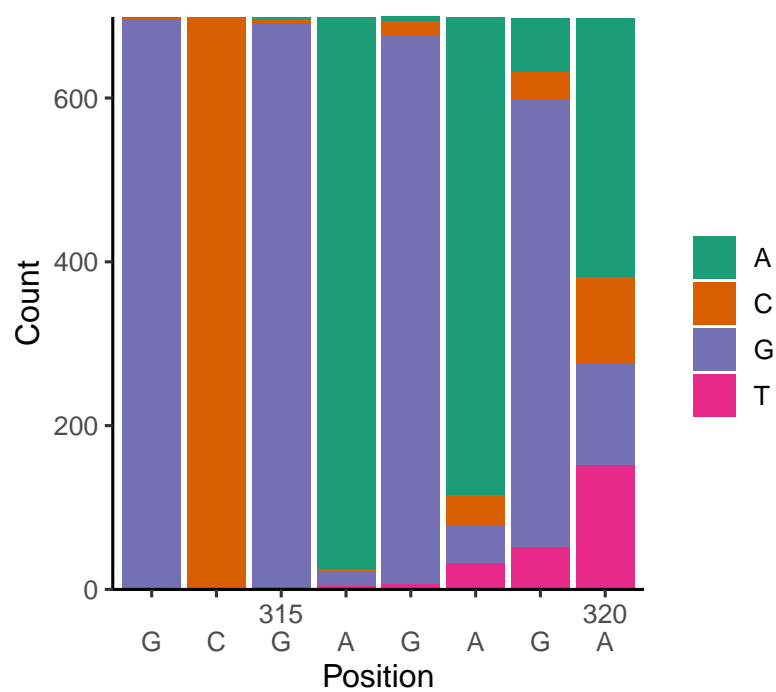
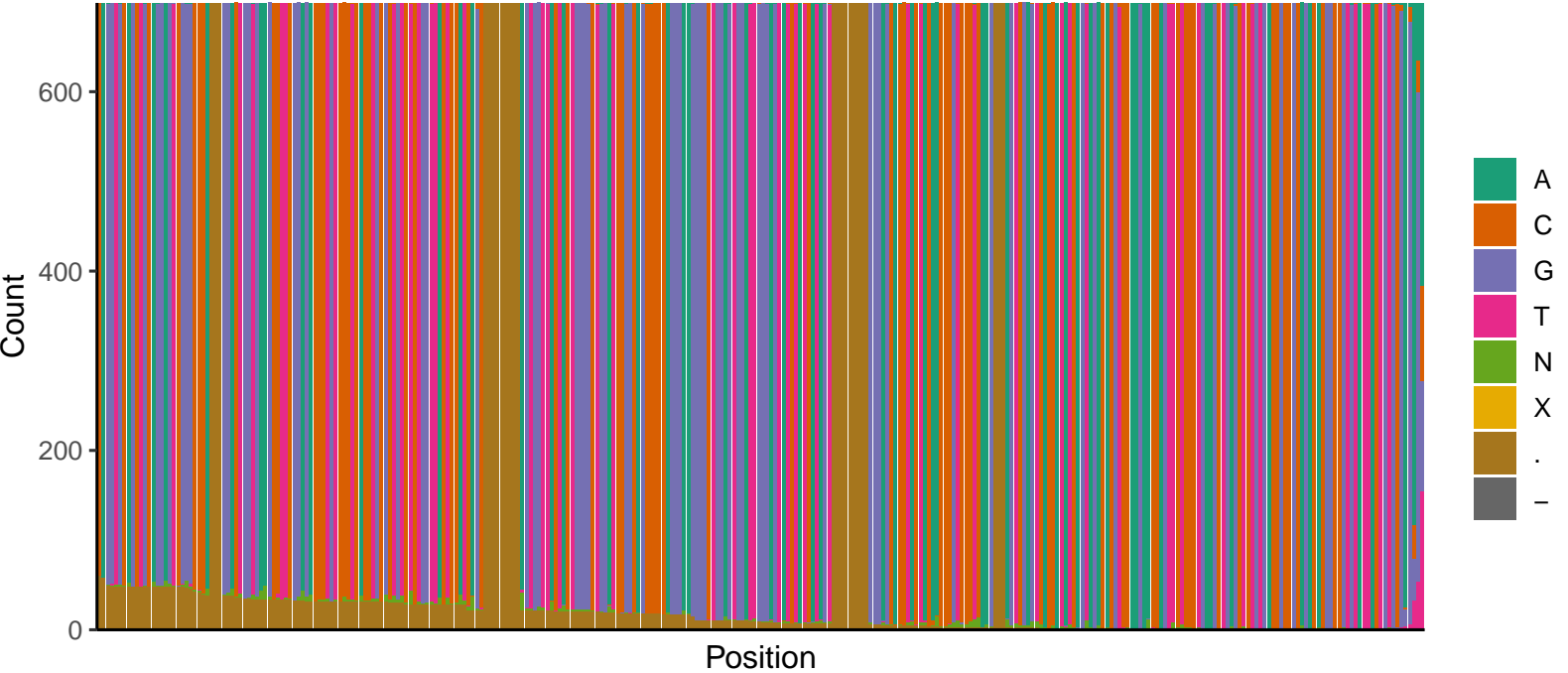


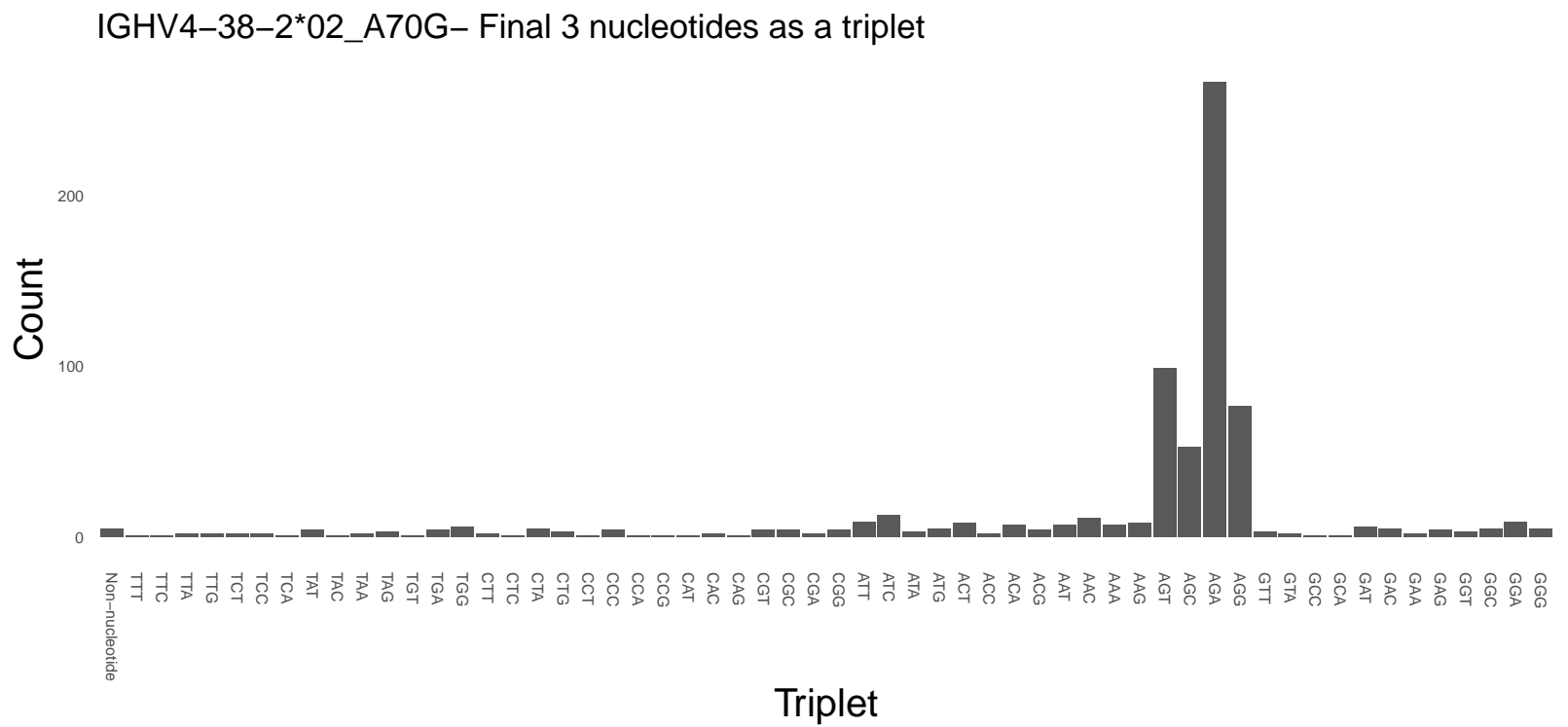
Gene IGHV4-38-2*02_A70G



Gene IGHV4-38-2*02_A70G

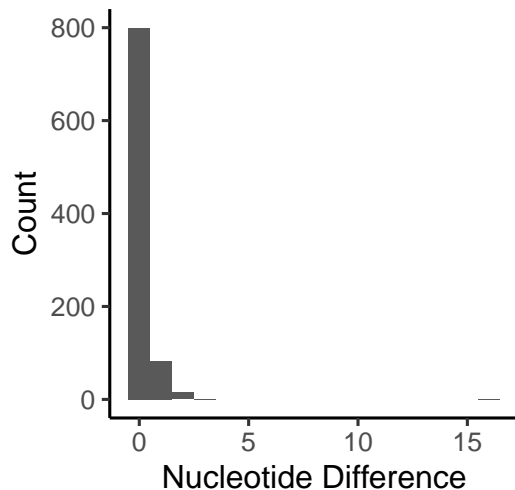


IGHV4-38-2*02_A70G- Final 3 nucleotides as a triplet



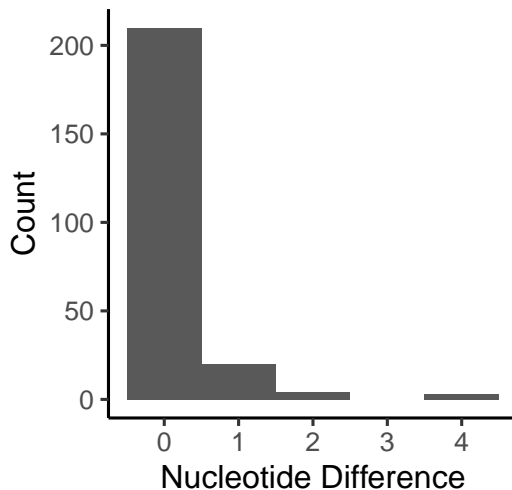
IGHV1-2*04

900 sequences assigned
800 (88.9%) exact matches, in which:
773 unique CDR3
6 unique J



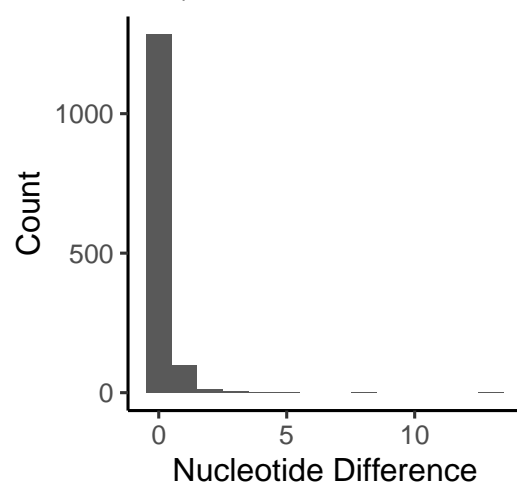
IGHV1-24*01

237 sequences assigned
210 (88.6%) exact matches, in which:
203 unique CDR3
6 unique J



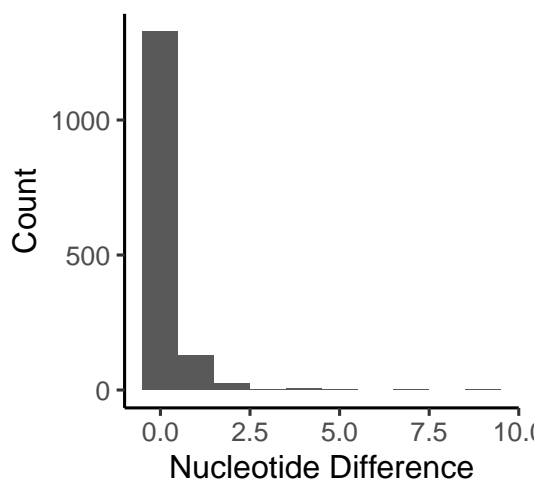
IGHV1-46*01

1408 sequences assigned
1284 (91.2%) exact matches, in which:
1213 unique CDR3
6 unique J



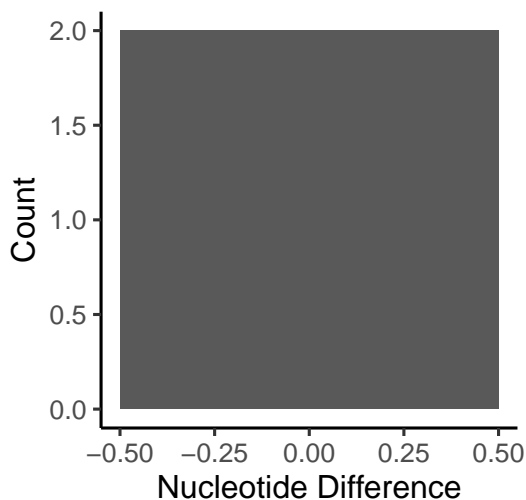
IGHV1-3*01

1493 sequences assigned
1327 (88.9%) exact matches, in which:
1265 unique CDR3
6 unique J



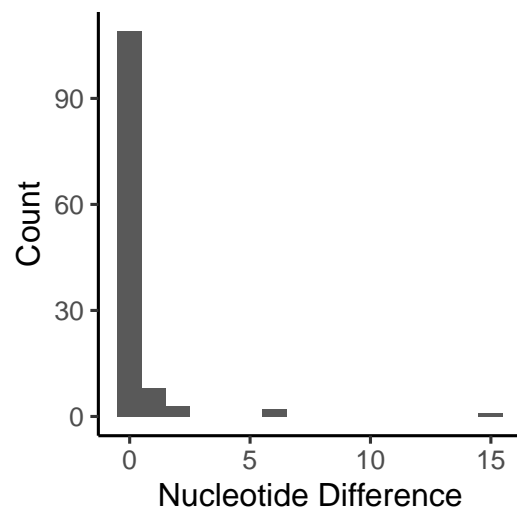
IGHV1-45*02

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



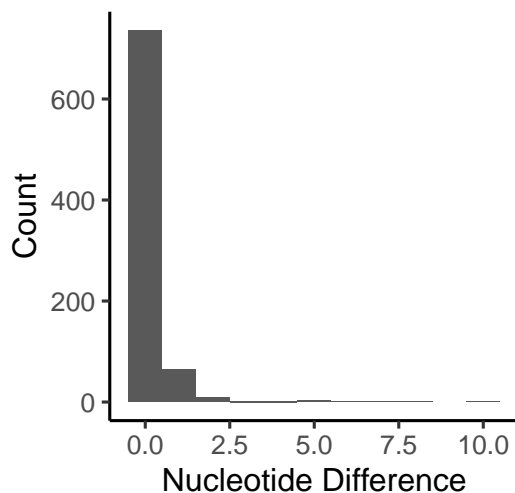
IGHV1-58*01

123 sequences assigned
109 (88.6%) exact matches, in which:
107 unique CDR3
6 unique J



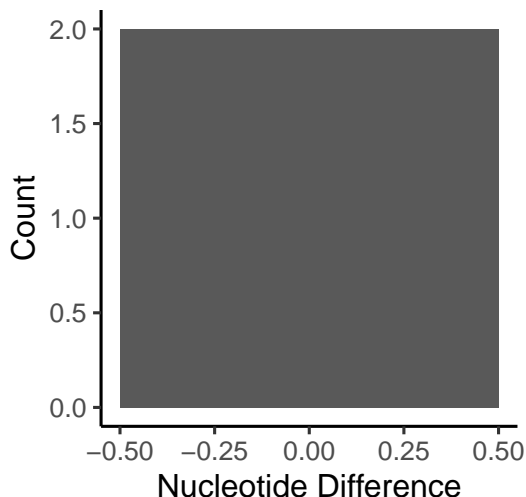
IGHV1-18*01

821 sequences assigned
736 (89.6%) exact matches, in which:
710 unique CDR3
6 unique J



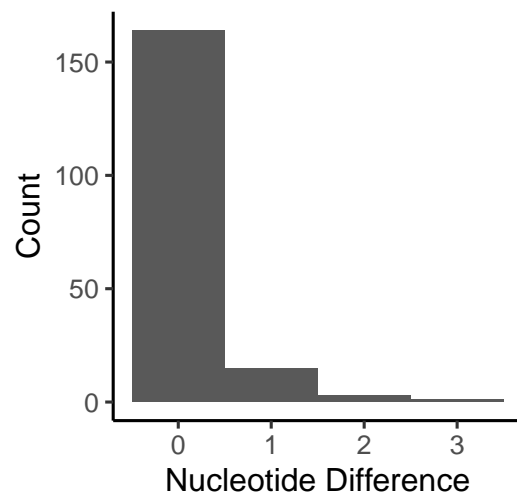
IGHV1-45*03

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



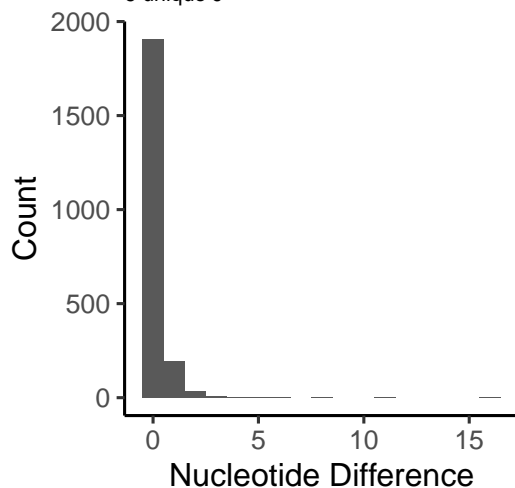
IGHV1-58*02

183 sequences assigned
164 (89.6%) exact matches, in which:
158 unique CDR3
5 unique J



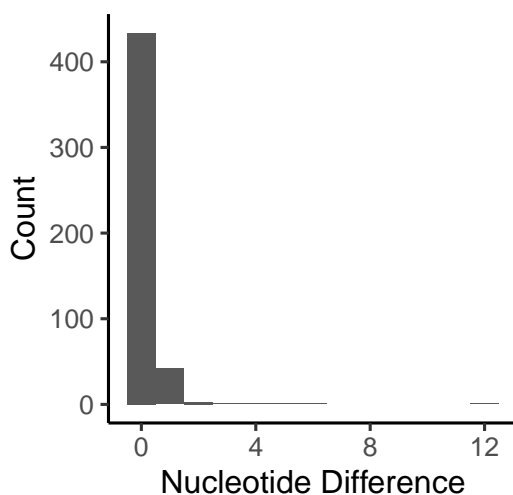
IGHV1–69*01

2147 sequences assigned
1905 (88.7%) exact matches, in which:
1802 unique CDR3
6 unique J



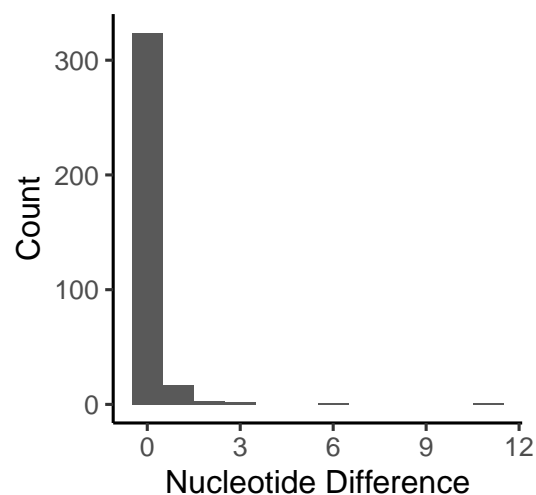
IGHV2–5*02

484 sequences assigned
434 (89.7%) exact matches, in which:
411 unique CDR3
6 unique J



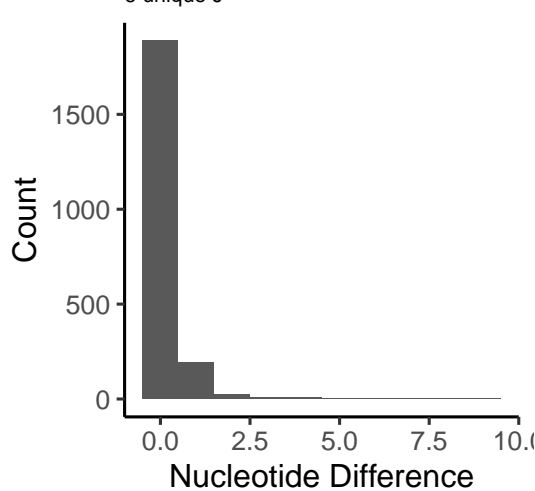
IGHV2–70*15

348 sequences assigned
324 (93.1%) exact matches, in which:
313 unique CDR3
5 unique J



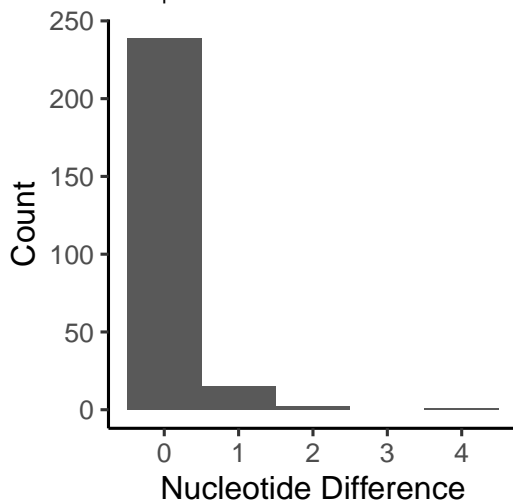
IGHV1–69*04

2125 sequences assigned
1888 (88.8%) exact matches, in which:
1752 unique CDR3
6 unique J



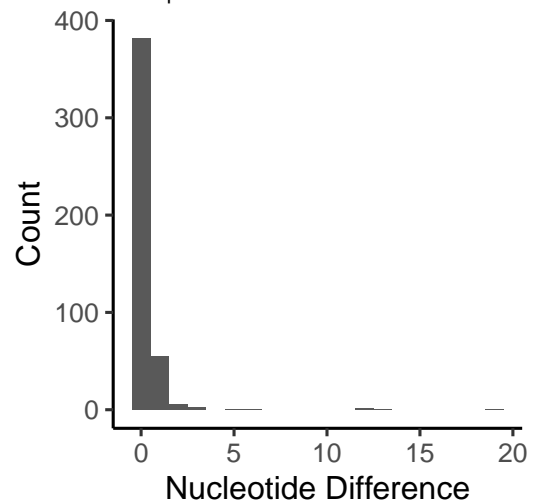
IGHV2–26*01

257 sequences assigned
239 (93%) exact matches, in which:
232 unique CDR3
6 unique J



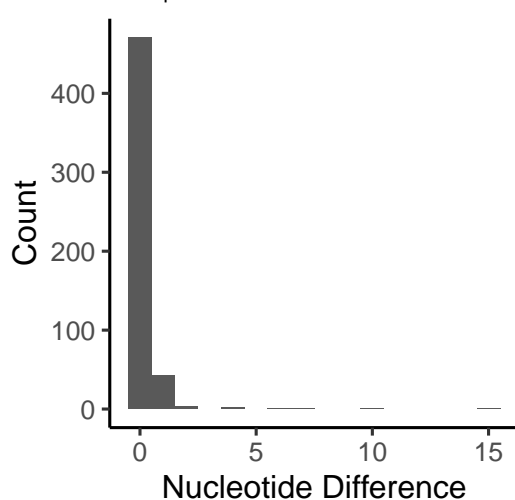
IGHV3–7*03

452 sequences assigned
382 (84.5%) exact matches, in which:
358 unique CDR3
6 unique J



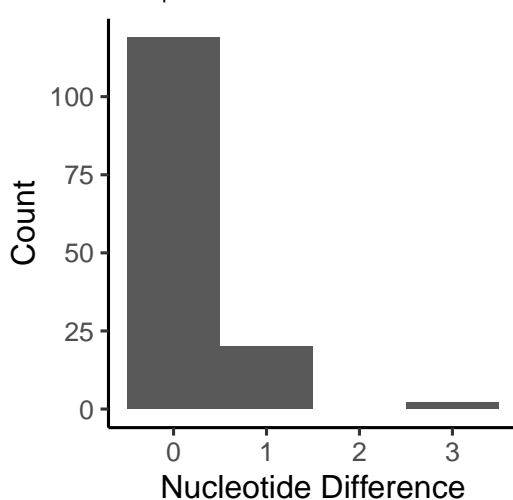
IGHV2–5*01

524 sequences assigned
471 (89.9%) exact matches, in which:
457 unique CDR3
6 unique J



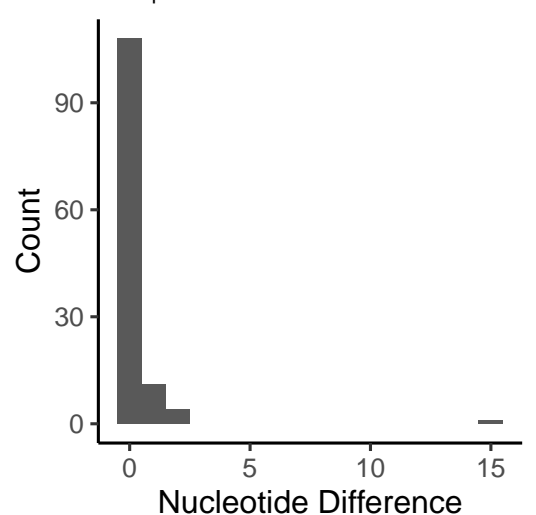
IGHV2–70*01

141 sequences assigned
119 (84.4%) exact matches, in which:
118 unique CDR3
5 unique J



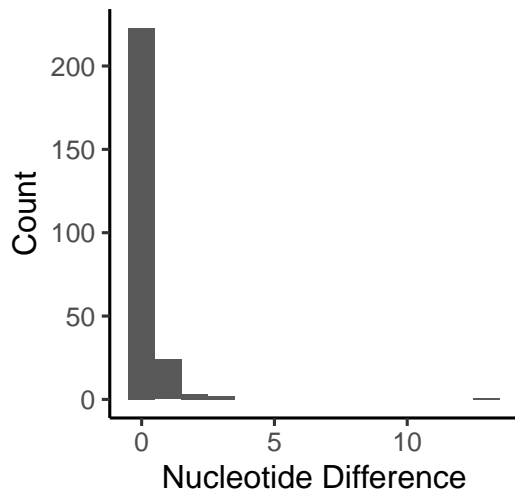
IGHV3–7*05

124 sequences assigned
108 (87.1%) exact matches, in which:
105 unique CDR3
6 unique J



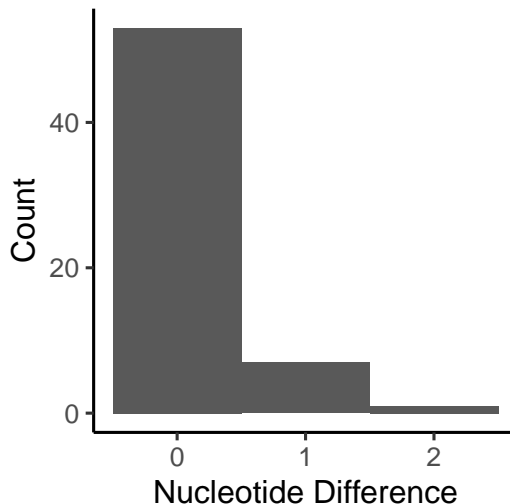
IGHV3-11*06

253 sequences assigned
223 (88.1%) exact matches, in which:
210 unique CDR3
6 unique J



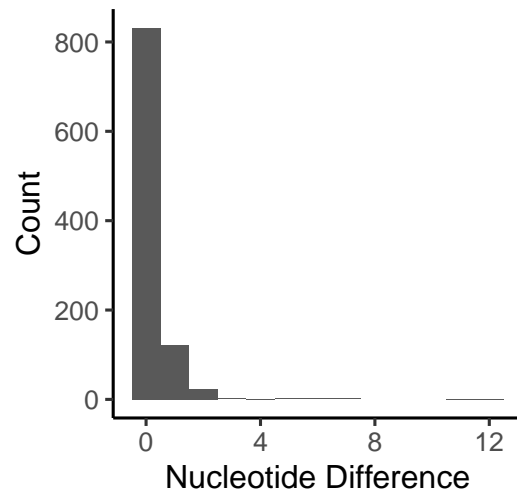
IGHV3-20*01

61 sequences assigned
53 (86.9%) exact matches, in which:
50 unique CDR3
5 unique J



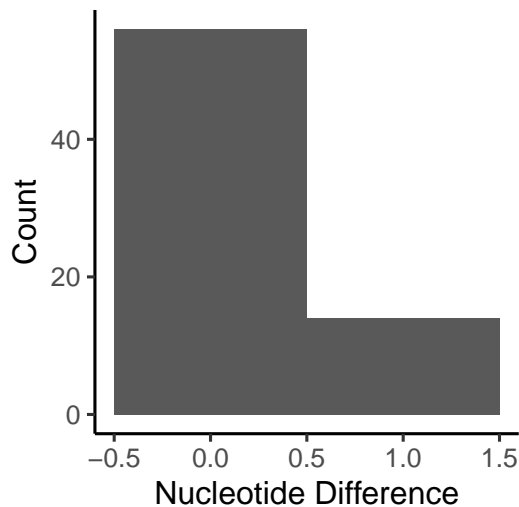
IGHV3-30-3*01

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



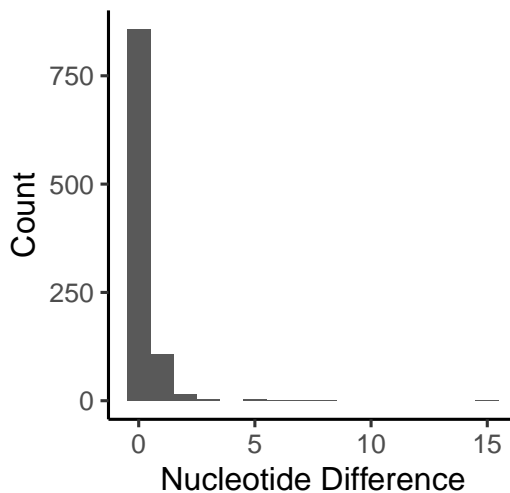
IGHV3-13*05

71 sequences assigned
56 (78.9%) exact matches, in which:
53 unique CDR3
4 unique J



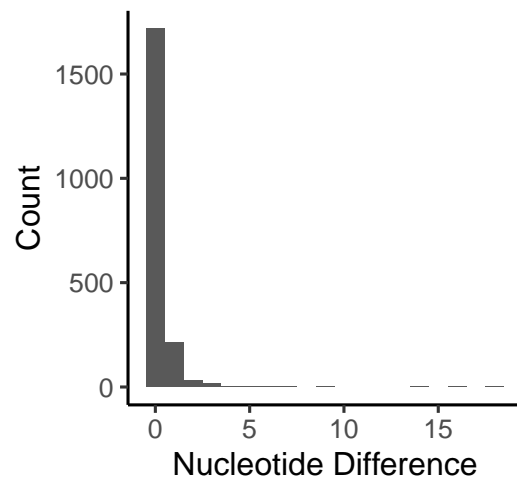
IGHV3-21*01

992 sequences assigned
858 (86.5%) exact matches, in which:
821 unique CDR3
6 unique J



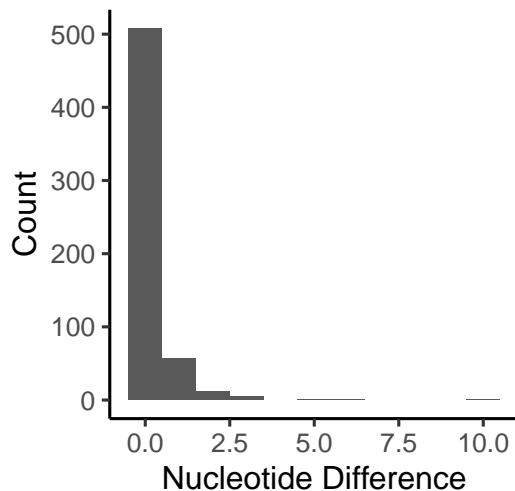
IGHV3-30*18

1992 sequences assigned
1717 (86.2%) exact matches, in which:
1644 unique CDR3
6 unique J



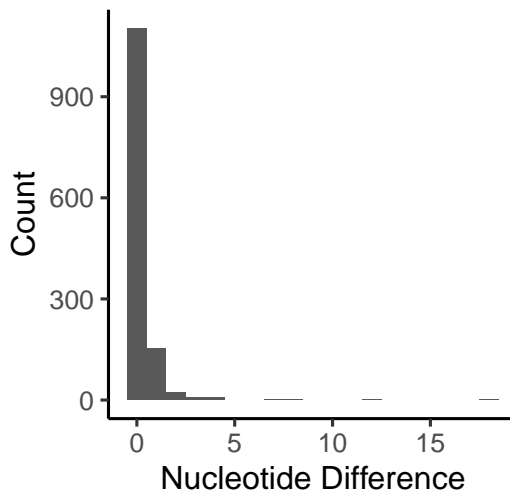
IGHV3-15*01

586 sequences assigned
508 (86.7%) exact matches, in which:
489 unique CDR3
6 unique J



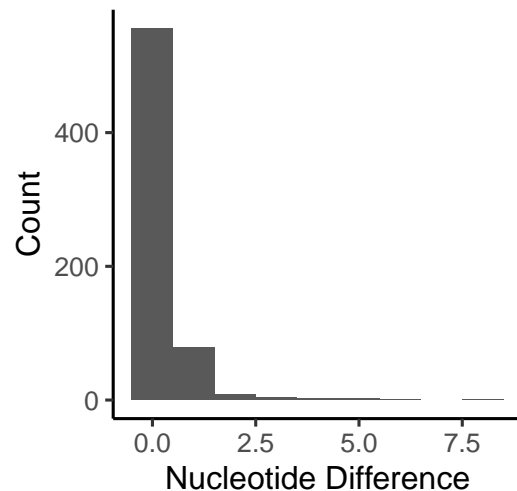
IGHV3-23*01

1299 sequences assigned
1103 (84.9%) exact matches, in which:
1043 unique CDR3
6 unique J



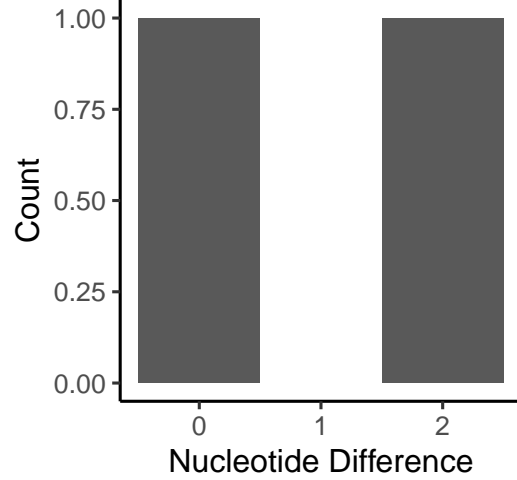
IGHV3-33*01

653 sequences assigned
556 (85.1%) exact matches, in which:
541 unique CDR3
6 unique J



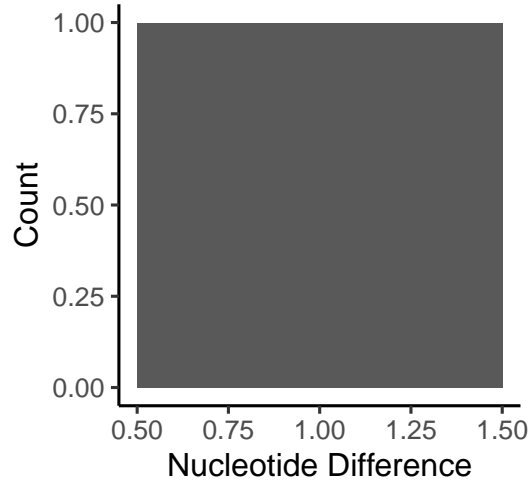
IGHV3-35*02

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



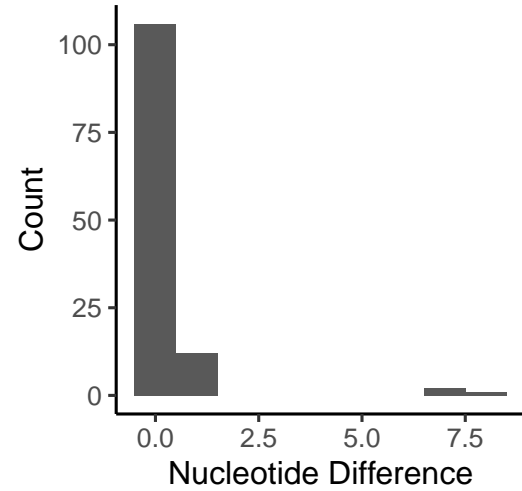
IGHV3-47*01

1 sequences assigned
No exact matches.



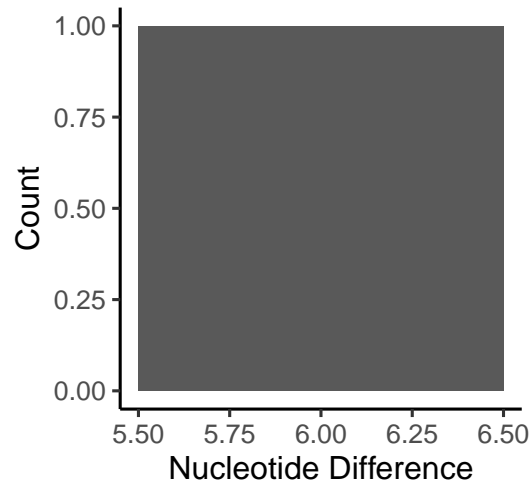
IGHV3-53*02

121 sequences assigned
106 (87.6%) exact matches, in which:
100 unique CDR3
6 unique J



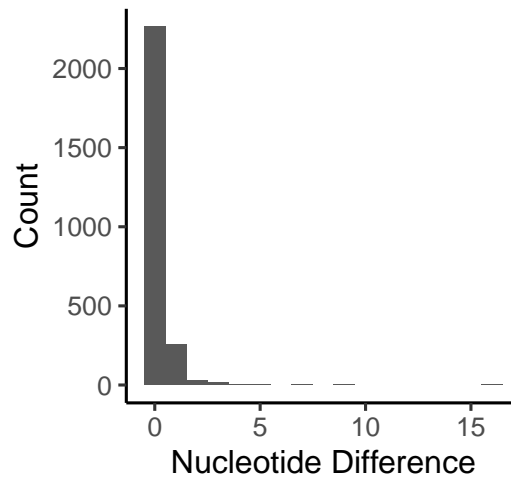
IGHV3-41*02

1 sequences assigned
No exact matches.



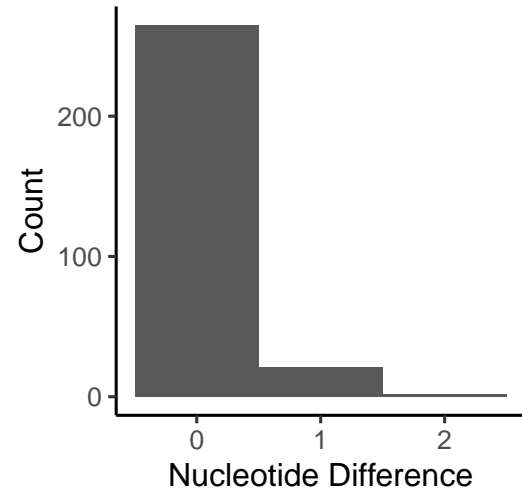
IGHV3-48*03

2572 sequences assigned
2264 (88%) exact matches, in which:
2163 unique CDR3
6 unique J



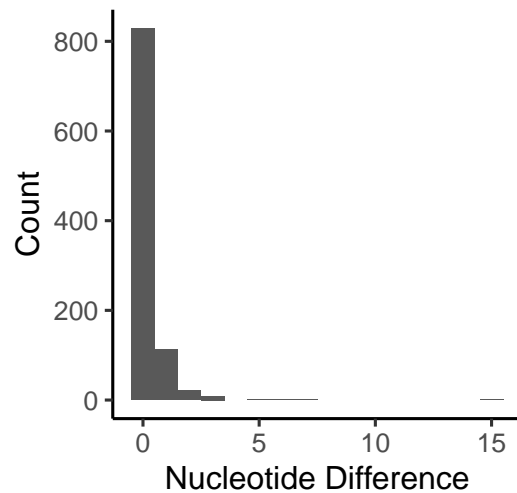
IGHV3-53*04

288 sequences assigned
265 (92%) exact matches, in which:
250 unique CDR3
6 unique J



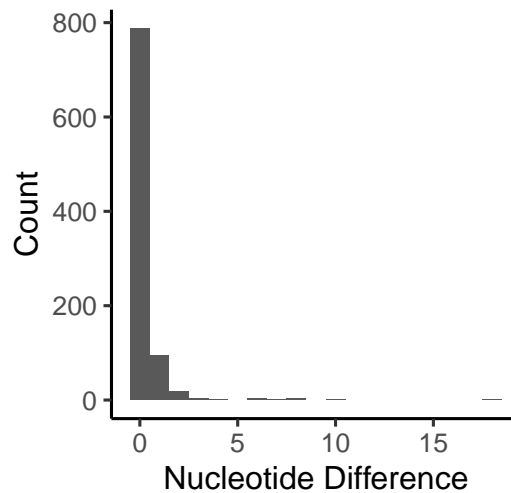
IGHV3-43*02

977 sequences assigned
829 (84.9%) exact matches, in which:
782 unique CDR3
6 unique J



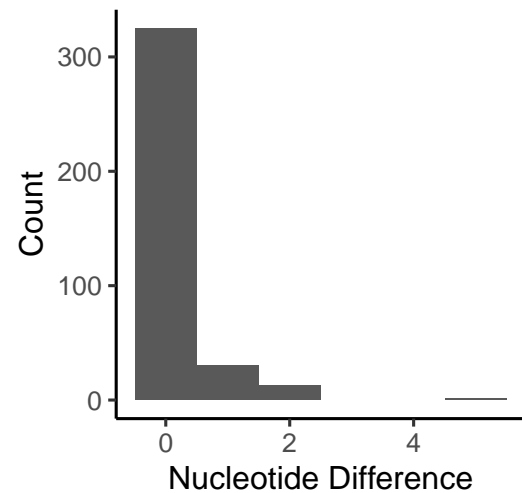
IGHV3-49*04

915 sequences assigned
788 (86.1%) exact matches, in which:
755 unique CDR3
6 unique J



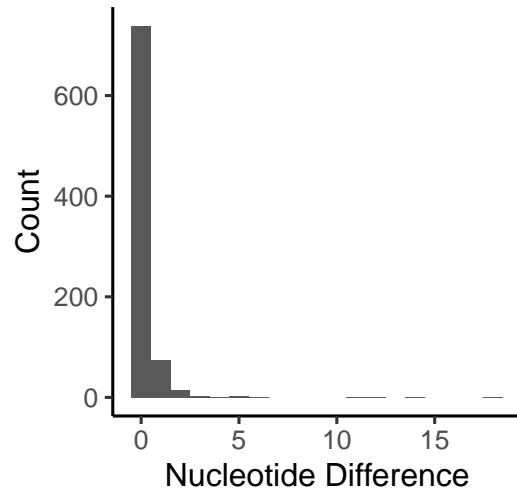
IGHV3-64*01

369 sequences assigned
325 (88.1%) exact matches, in which:
303 unique CDR3
6 unique J



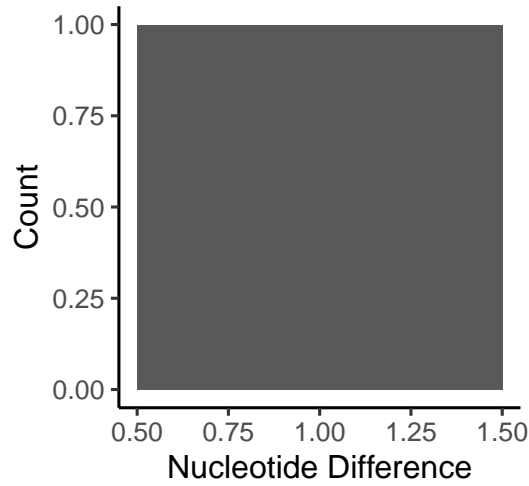
IGHV3–66*01

838 sequences assigned
739 (88.2%) exact matches, in which:
687 unique CDR3
6 unique J



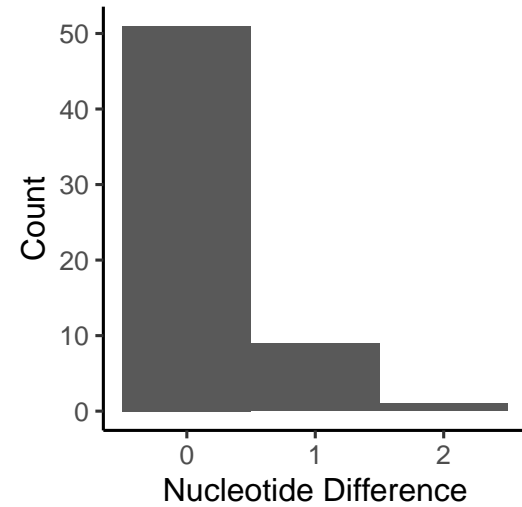
IGHV3–71*03

1 sequences assigned
No exact matches.



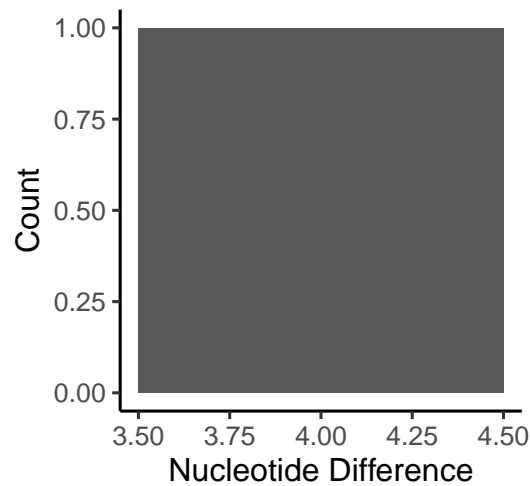
IGHV3–73*02

61 sequences assigned
51 (83.6%) exact matches, in which:
51 unique CDR3
4 unique J



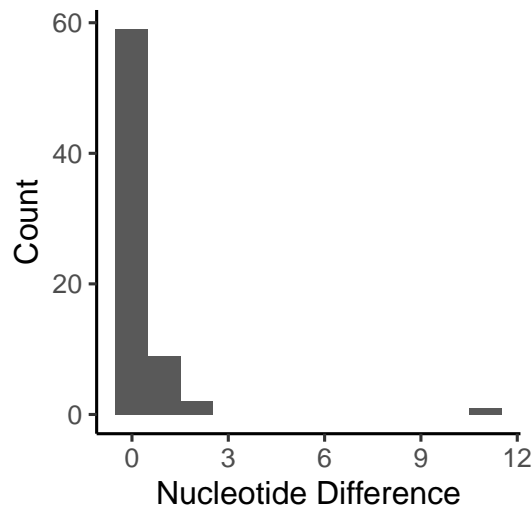
IGHV3–69–1*02

1 sequences assigned
No exact matches.



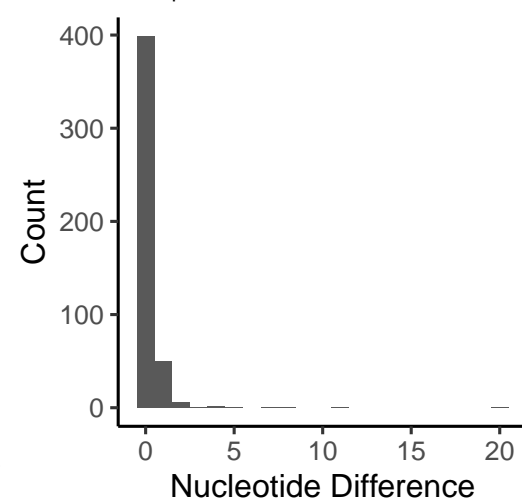
IGHV3–72*01

72 sequences assigned
59 (81.9%) exact matches, in which:
57 unique CDR3
6 unique J



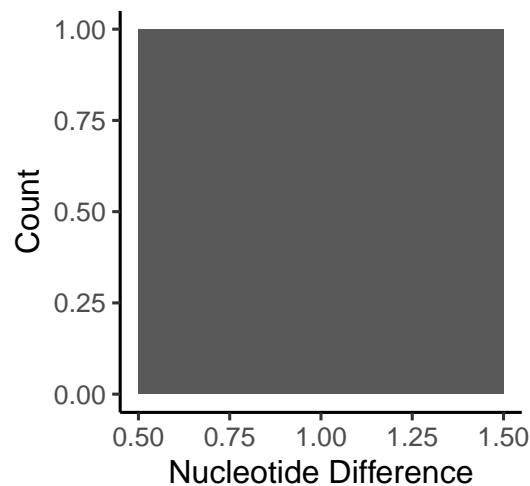
IGHV3–74*01

463 sequences assigned
399 (86.2%) exact matches, in which:
381 unique CDR3
6 unique J



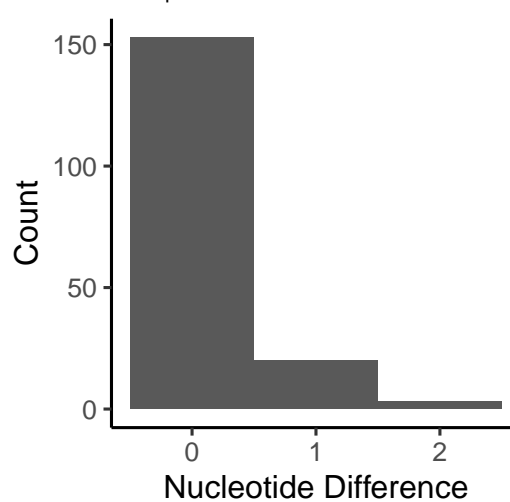
IGHV3–71*02

1 sequences assigned
No exact matches.



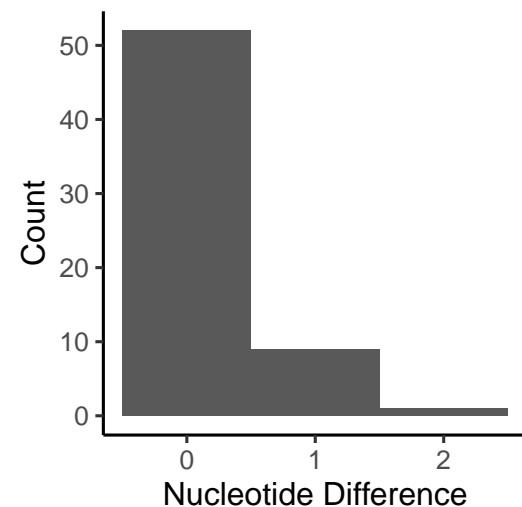
IGHV3–73*01

176 sequences assigned
153 (86.9%) exact matches, in which:
147 unique CDR3
5 unique J



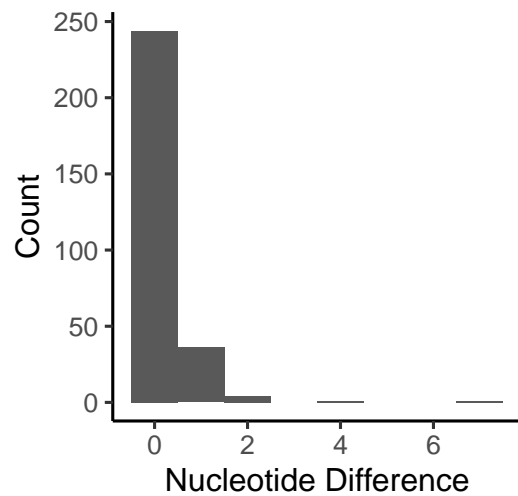
IGHV3–43D*04

62 sequences assigned
52 (83.9%) exact matches, in which:
49 unique CDR3
5 unique J



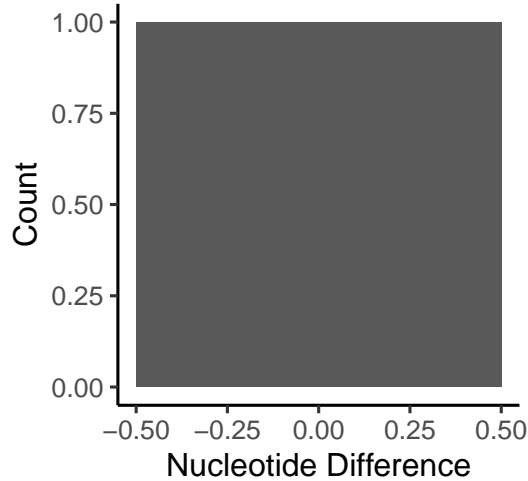
IGHV3–64D*08

287 sequences assigned
244 (85%) exact matches, in which:
227 unique CDR3
6 unique J



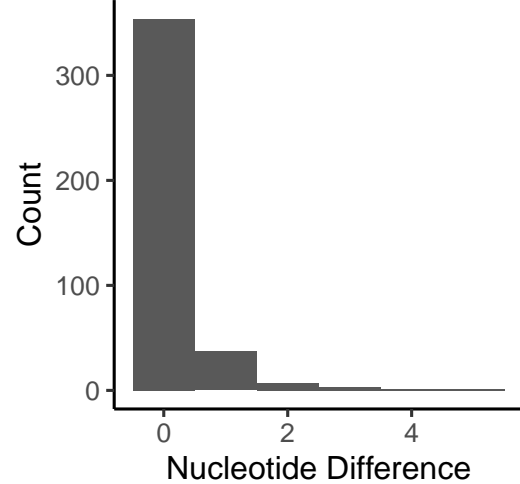
IGHV4–28*03

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



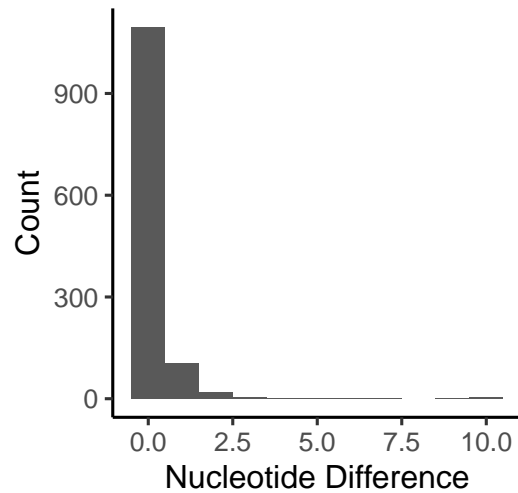
IGHV4–30–4*01

404 sequences assigned
354 (87.6%) exact matches, in which:
347 unique CDR3
6 unique J



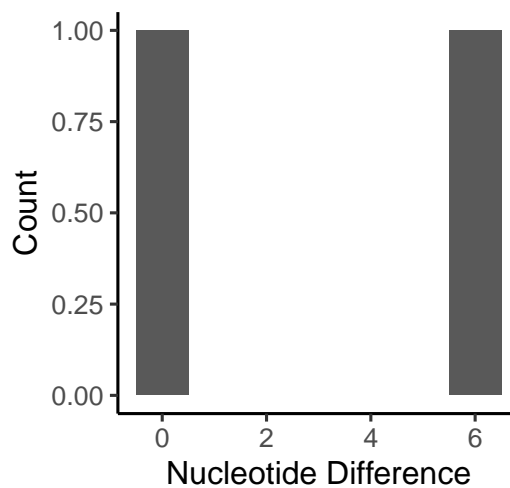
IGHV4–4*02

1235 sequences assigned
1096 (88.7%) exact matches, in which:
1057 unique CDR3
6 unique J



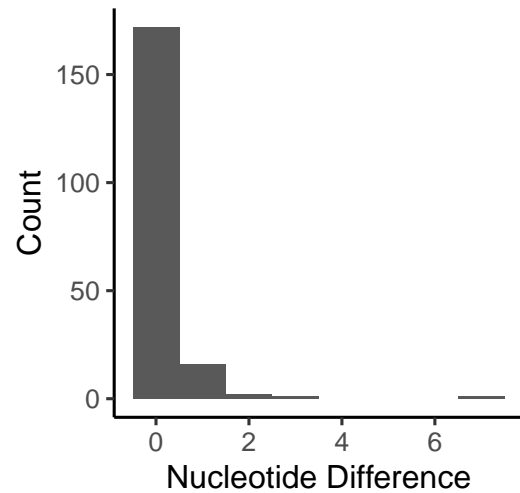
IGHV4–28*04

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



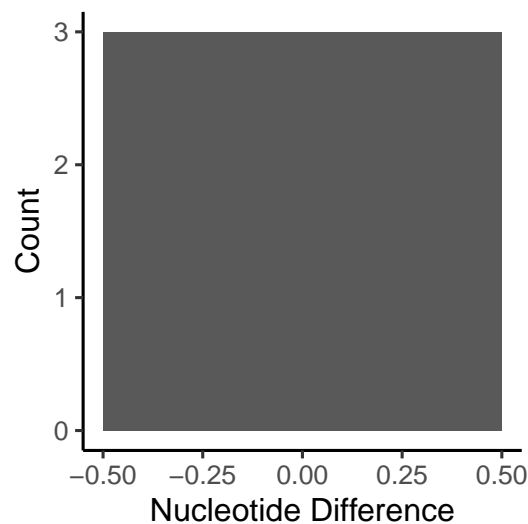
IGHV4–30–2*01

192 sequences assigned
172 (89.6%) exact matches, in which:
168 unique CDR3
6 unique J



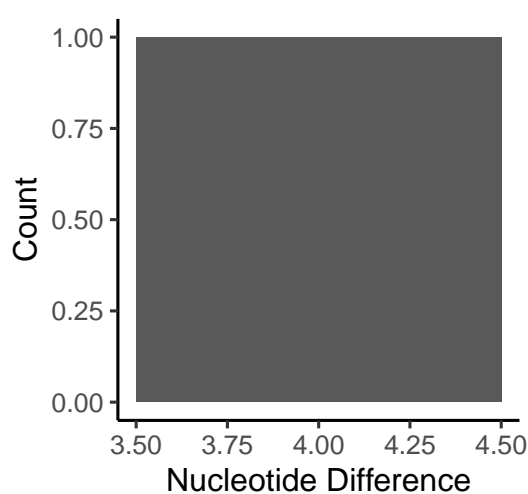
IGHV4–28*01

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



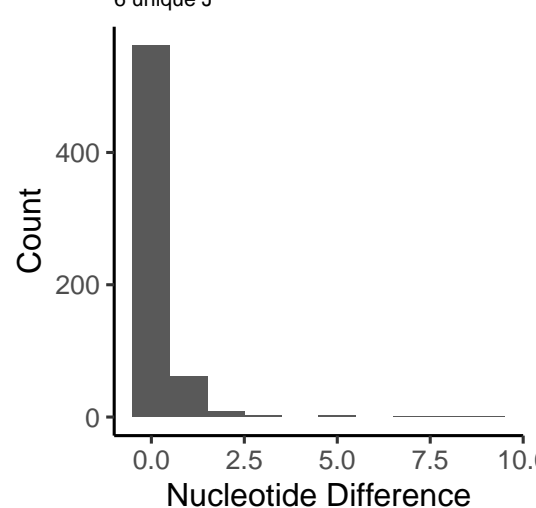
IGHV4–28*06

1 sequences assigned
No exact matches.



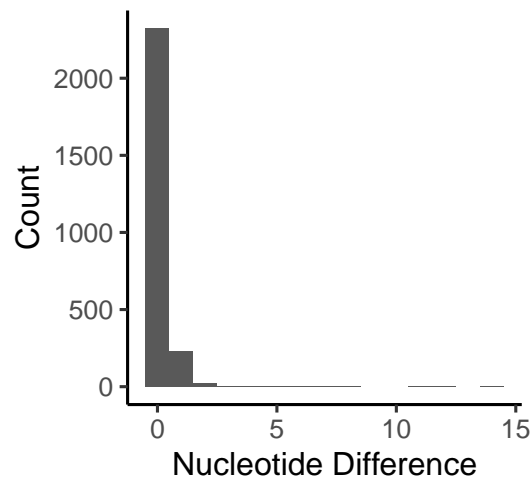
IGHV4–31*03

640 sequences assigned
562 (87.8%) exact matches, in which:
540 unique CDR3
6 unique J



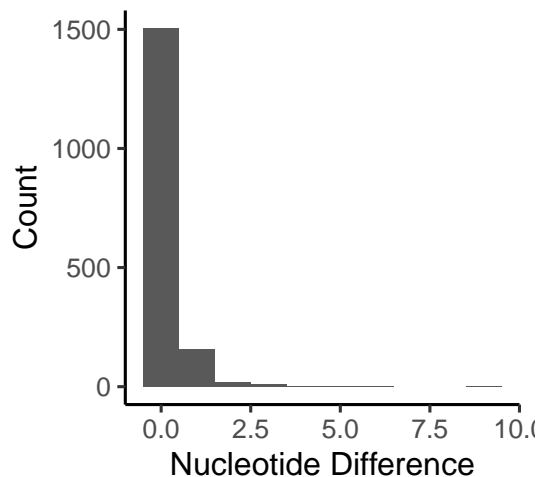
IGHV4-34*01

2608 sequences assigned
2323 (89.1%) exact matches, in which:
2162 unique CDR3
6 unique J



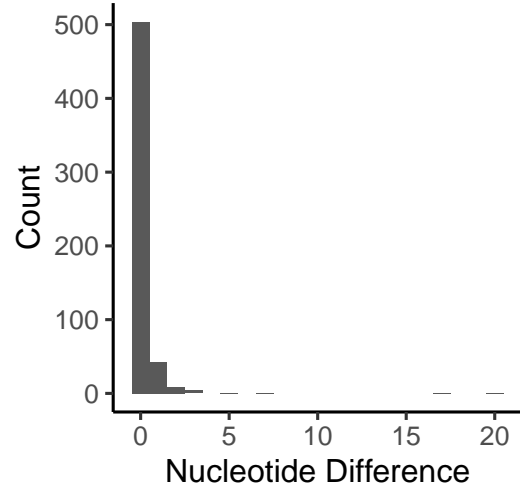
IGHV4-59*01

1696 sequences assigned
1504 (88.7%) exact matches, in which:
1454 unique CDR3
6 unique J



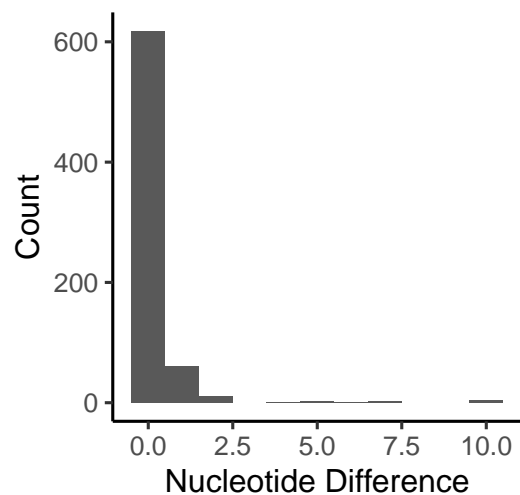
IGHV5-10-1*03

564 sequences assigned
504 (89.4%) exact matches, in which:
480 unique CDR3
6 unique J



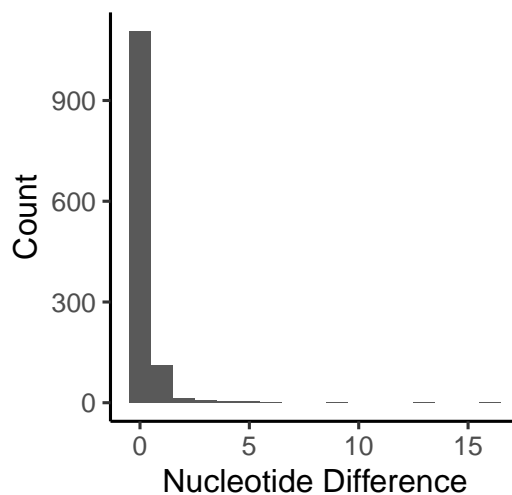
IGHV4-38-2*02_A70G

699 sequences assigned
618 (88.4%) exact matches, in which:
574 unique CDR3
6 unique J



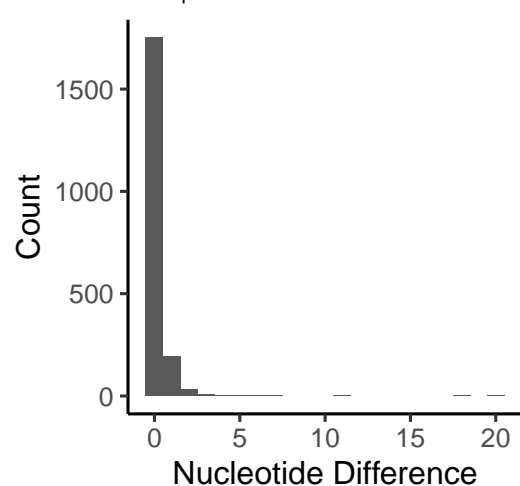
IGHV4-59*08

1252 sequences assigned
1107 (88.4%) exact matches, in which:
1059 unique CDR3
6 unique J



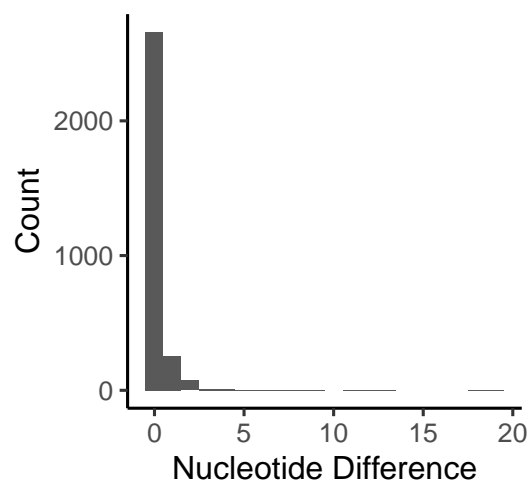
IGHV5-51*01

2000 sequences assigned
1751 (87.6%) exact matches, in which:
1665 unique CDR3
6 unique J



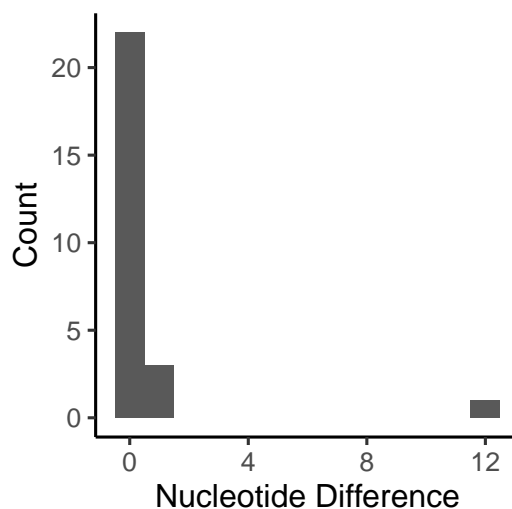
IGHV4-39*01

3023 sequences assigned
2659 (88%) exact matches, in which:
2455 unique CDR3
6 unique J



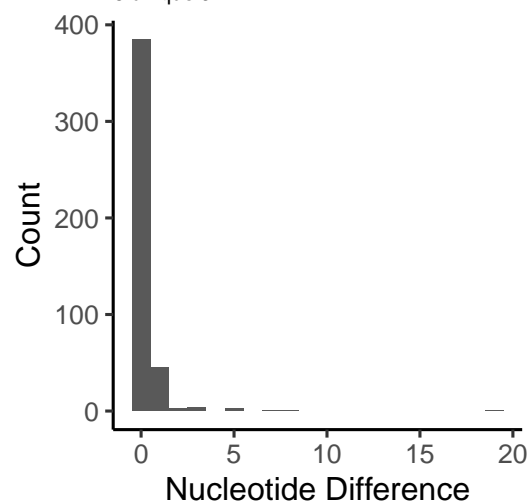
IGHV4-61*01

26 sequences assigned
22 (84.6%) exact matches, in which:
20 unique CDR3
4 unique J



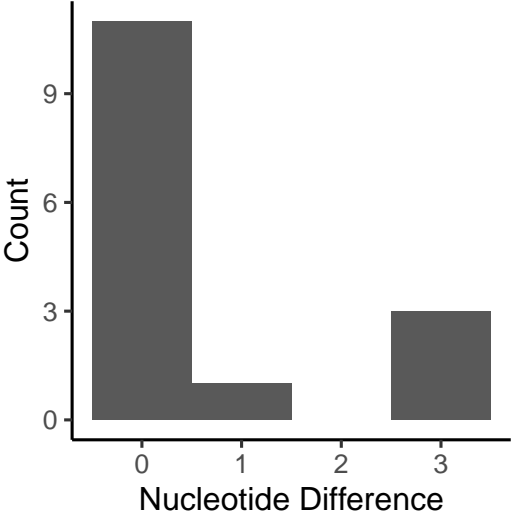
IGHV6-1*01

443 sequences assigned
385 (86.9%) exact matches, in which:
371 unique CDR3
6 unique J



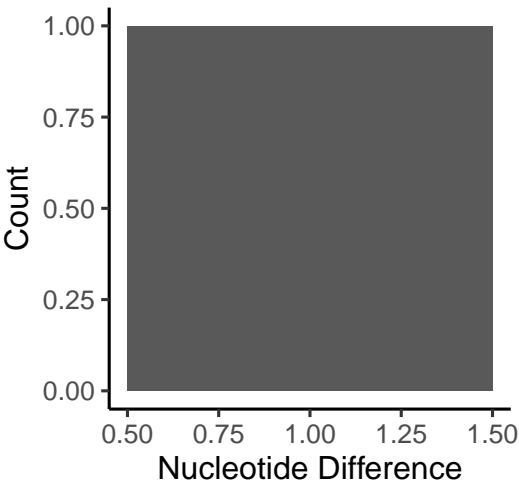
IGHV7-4-1*01

15 sequences assigned
11 (73.3%) exact matches, in which:
10 unique CDR3
5 unique J



IGHV7-81*01

1 sequences assigned
No exact matches.



IGHV4-38-2*02_A70G

