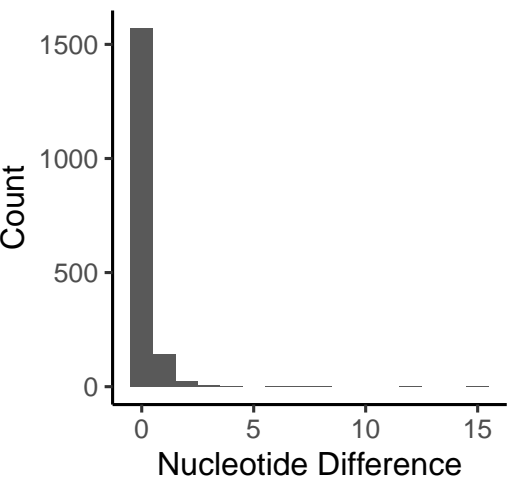


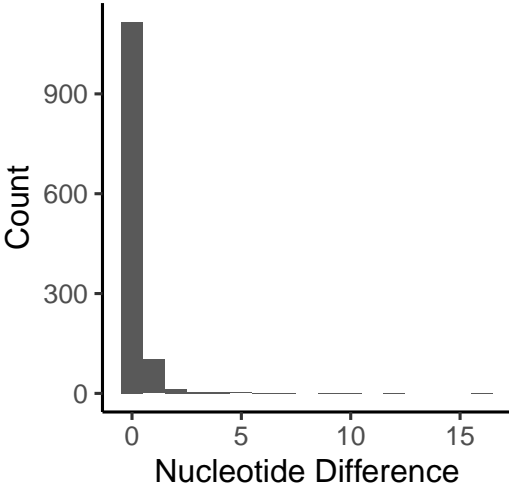
IGHV1-2*02

1746 sequences assigned
1570 (89.9%) exact matches, in which:
1489 unique CDR3
6 unique J



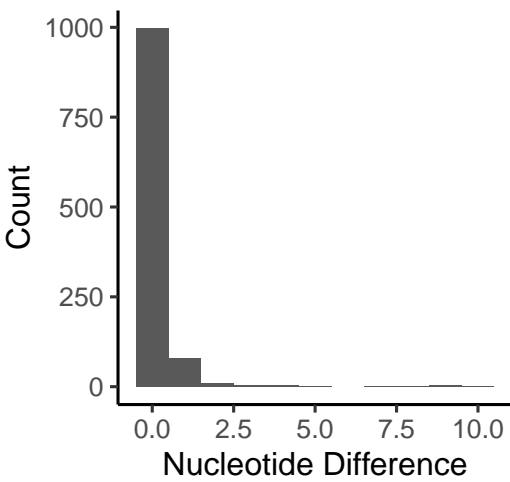
IGHV1-18*01

1255 sequences assigned
1117 (89%) exact matches, in which:
1076 unique CDR3
6 unique J



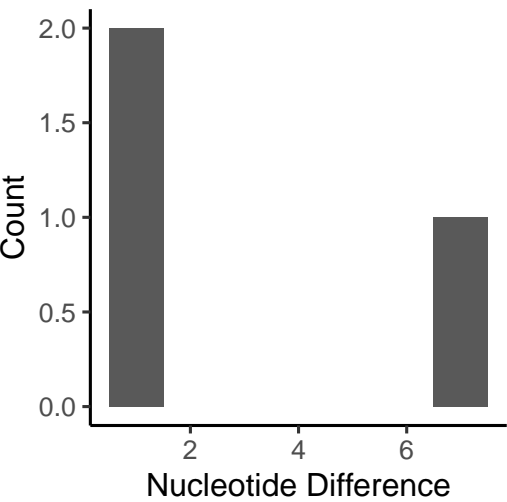
IGHV1-46*01

1102 sequences assigned
997 (90.5%) exact matches, in which:
947 unique CDR3
6 unique J



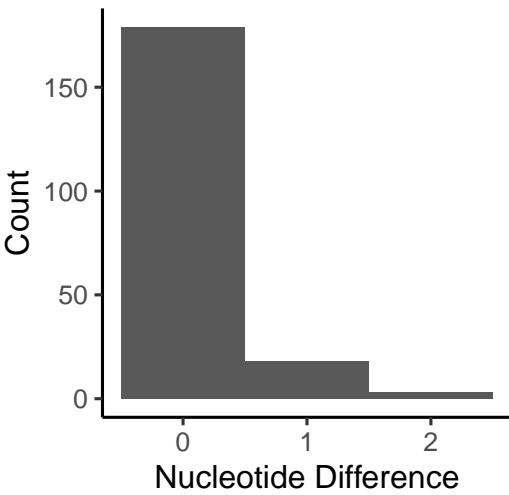
IGHV1-3*02

3 sequences assigned
No exact matches.



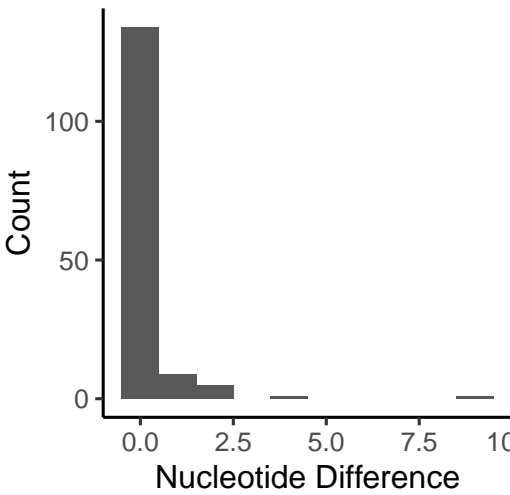
IGHV1-24*01

200 sequences assigned
179 (89.5%) exact matches, in which:
174 unique CDR3
5 unique J



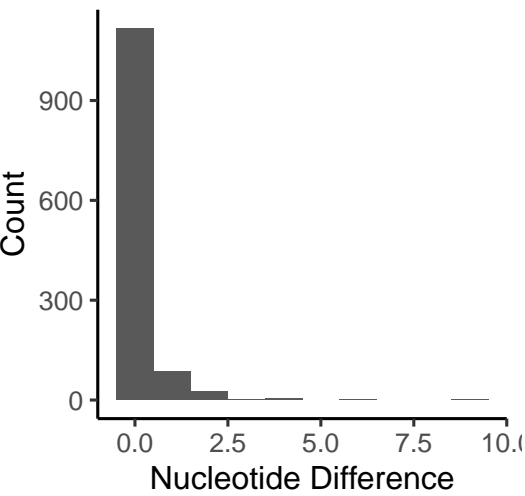
IGHV1-58*01

150 sequences assigned
134 (89.3%) exact matches, in which:
132 unique CDR3
5 unique J



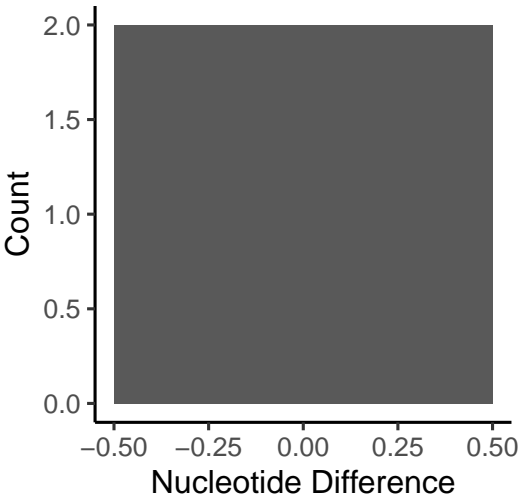
IGHV1-8*01

1239 sequences assigned
1117 (90.2%) exact matches, in which:
1077 unique CDR3
6 unique J



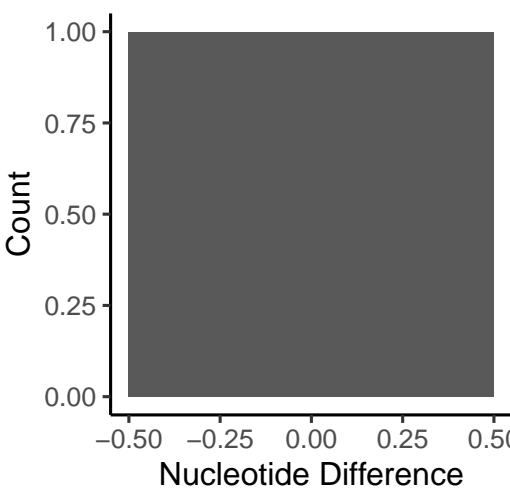
IGHV1-45*02

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



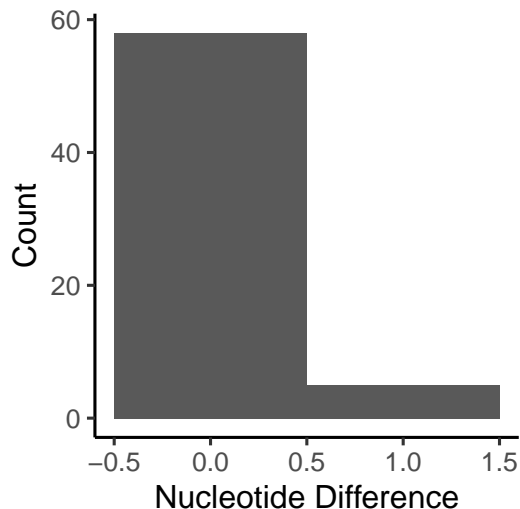
IGHV1-68*02

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



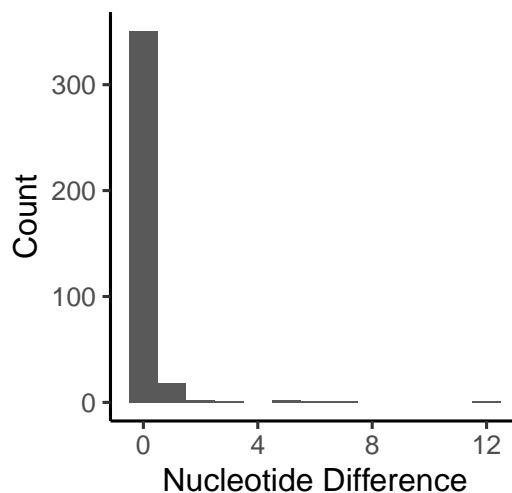
IGHV1-69-2*01

63 sequences assigned
58 (92.1%) exact matches, in which:
56 unique CDR3
5 unique J



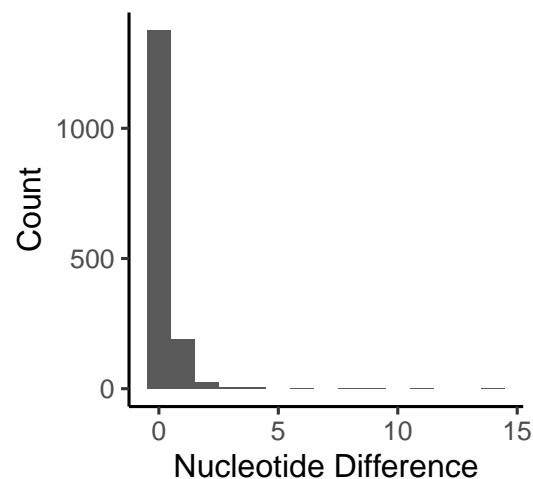
IGHV2-26*01

377 sequences assigned
351 (93.1%) exact matches, in which:
335 unique CDR3
5 unique J



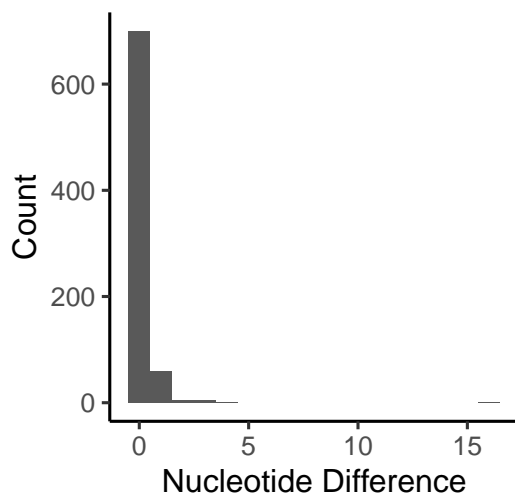
IGHV3-9*01

1609 sequences assigned
1376 (85.5%) exact matches, in which:
1291 unique CDR3
6 unique J



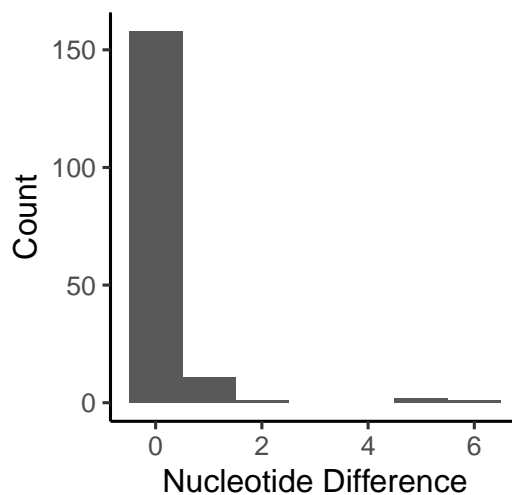
IGHV1-69*17

770 sequences assigned
700 (90.9%) exact matches, in which:
667 unique CDR3
6 unique J



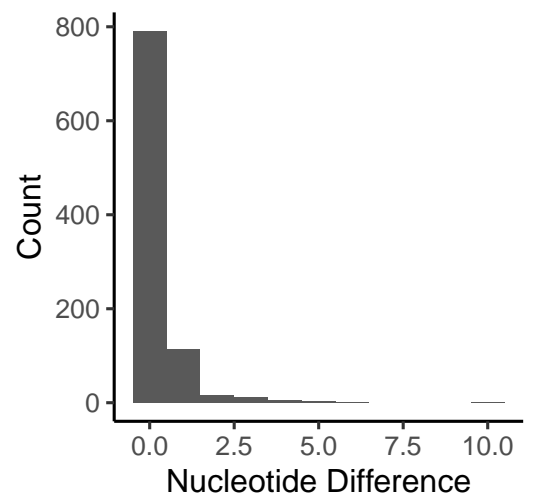
IGHV2-70*01

173 sequences assigned
158 (91.3%) exact matches, in which:
156 unique CDR3
5 unique J



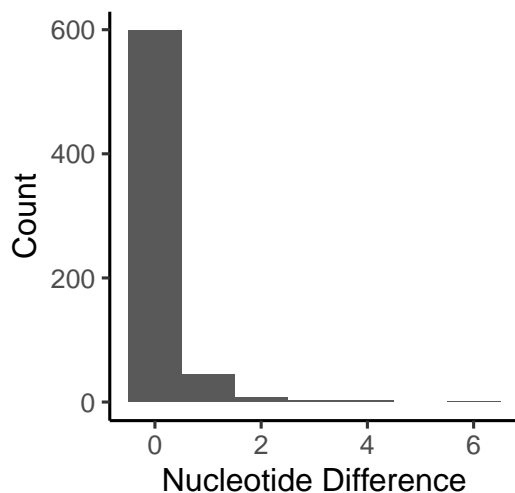
IGHV3-11*01

944 sequences assigned
791 (83.8%) exact matches, in which:
764 unique CDR3
6 unique J



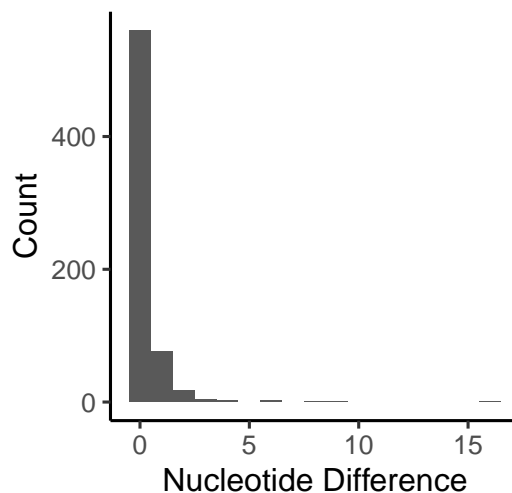
IGHV2-5*01

656 sequences assigned
599 (91.3%) exact matches, in which:
575 unique CDR3
6 unique J



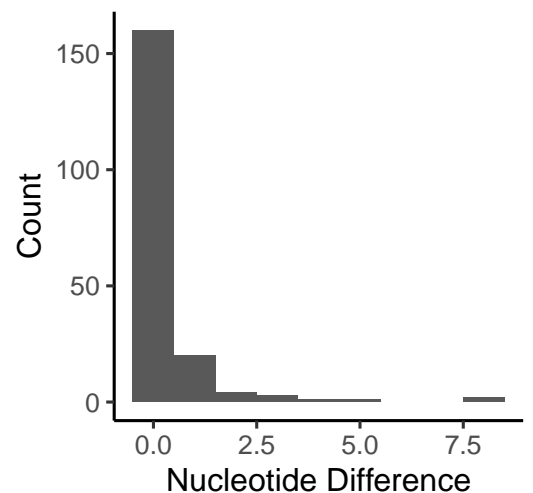
IGHV3-7*01

664 sequences assigned
560 (84.3%) exact matches, in which:
540 unique CDR3
6 unique J



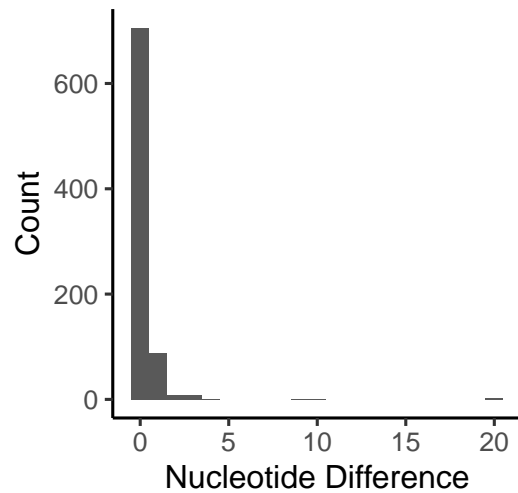
IGHV3-13*01

191 sequences assigned
160 (83.8%) exact matches, in which:
154 unique CDR3
5 unique J



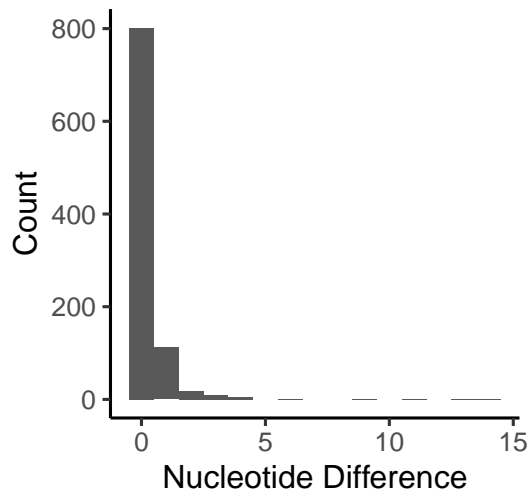
IGHV3-15*01

819 sequences assigned
706 (86.2%) exact matches, in which:
677 unique CDR3
6 unique J



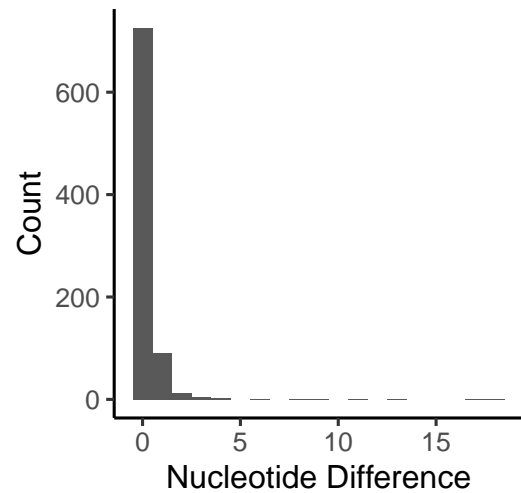
IGHV3-30-3*01

951 sequences assigned
802 (84.3%) exact matches, in which:
757 unique CDR3
6 unique J



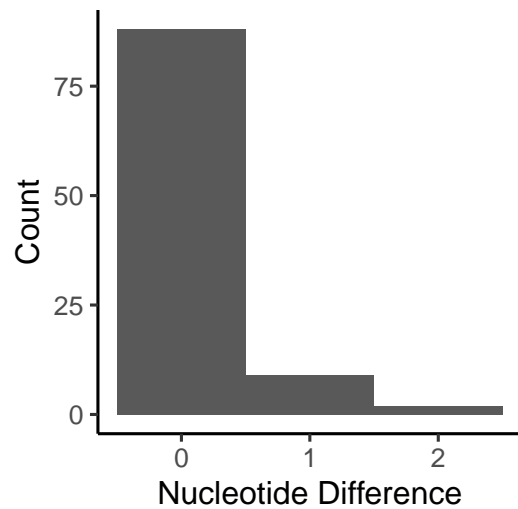
IGHV3-48*02

844 sequences assigned
726 (86%) exact matches, in which:
693 unique CDR3
6 unique J



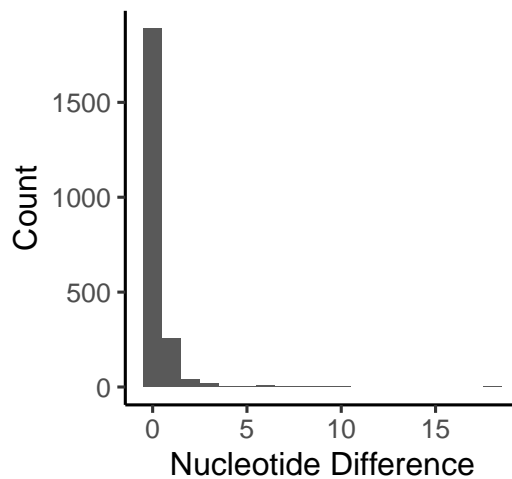
IGHV3-20*01

99 sequences assigned
88 (88.9%) exact matches, in which:
80 unique CDR3
5 unique J



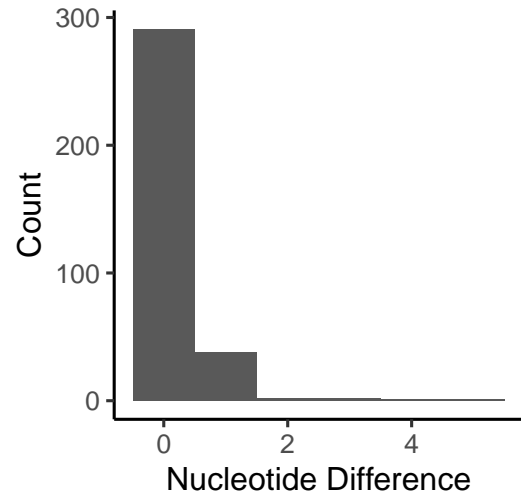
IGHV3-33*01

2227 sequences assigned
1888 (84.8%) exact matches, in which:
1802 unique CDR3
6 unique J



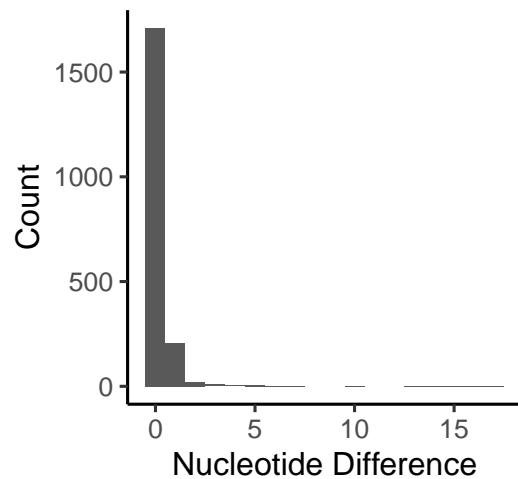
IGHV3-49*05

335 sequences assigned
291 (86.9%) exact matches, in which:
270 unique CDR3
6 unique J



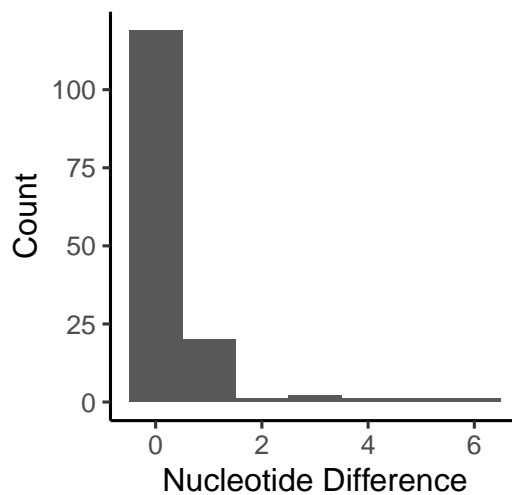
IGHV3-21*01

1964 sequences assigned
1710 (87.1%) exact matches, in which:
1612 unique CDR3
6 unique J



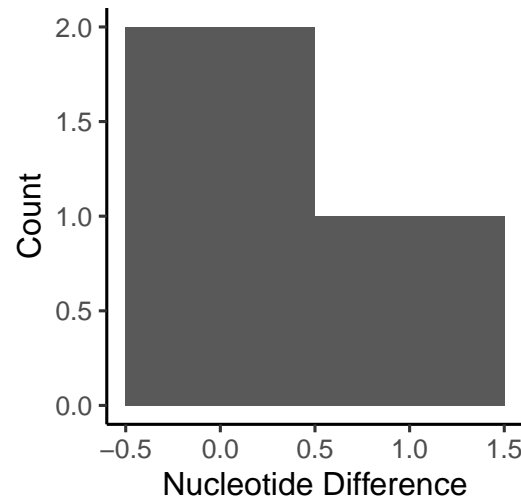
IGHV3-43*01

145 sequences assigned
119 (82.1%) exact matches, in which:
114 unique CDR3
5 unique J



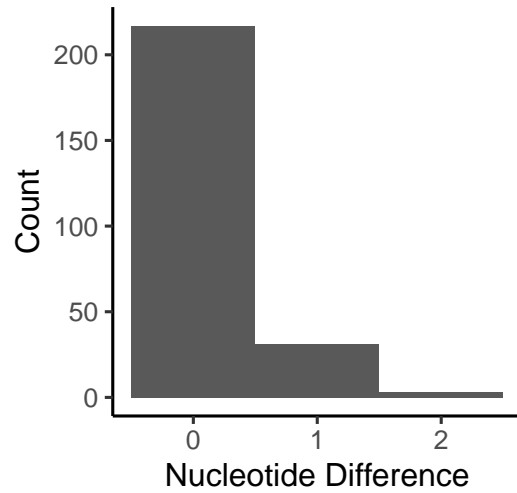
IGHV3-52*01

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



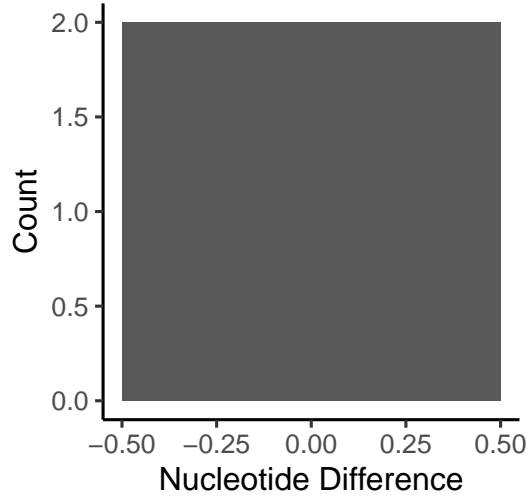
IGHV3-53*01

251 sequences assigned
217 (86.5%) exact matches, in which:
208 unique CDR3
5 unique J



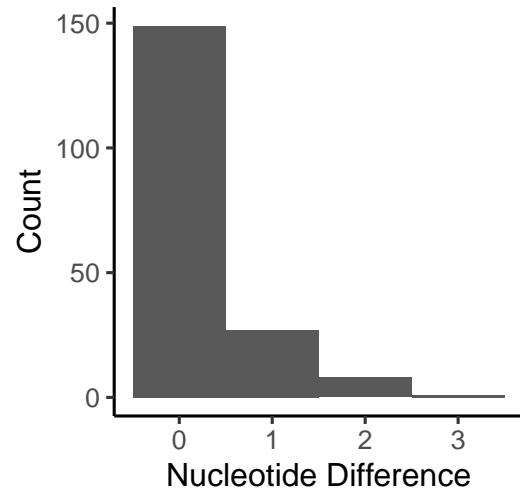
IGHV3-66*03

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



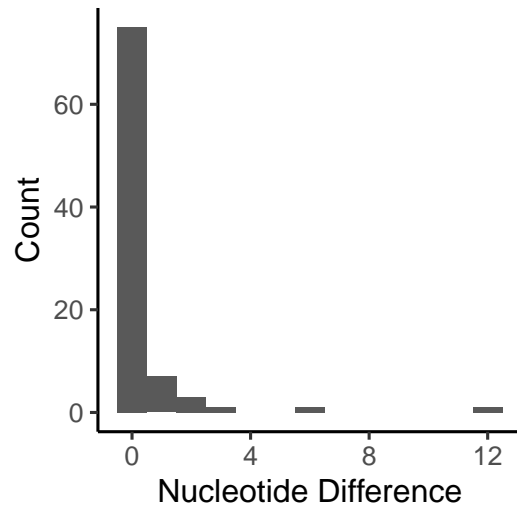
IGHV3-73*02

185 sequences assigned
149 (80.5%) exact matches, in which:
141 unique CDR3
5 unique J



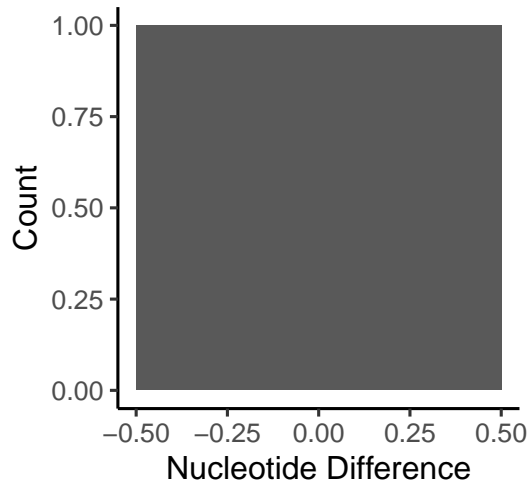
IGHV3-53*02

88 sequences assigned
75 (85.2%) exact matches, in which:
74 unique CDR3
5 unique J



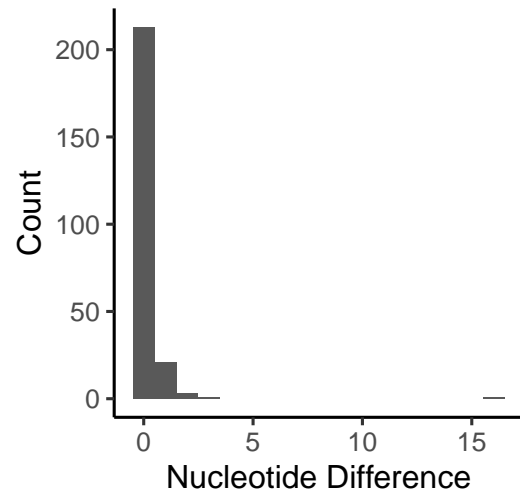
IGHV3-69-1*01

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



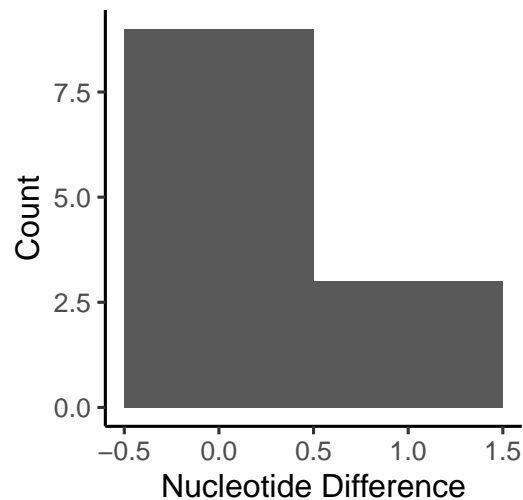
IGHV3-74*01

239 sequences assigned
213 (89.1%) exact matches, in which:
204 unique CDR3
6 unique J



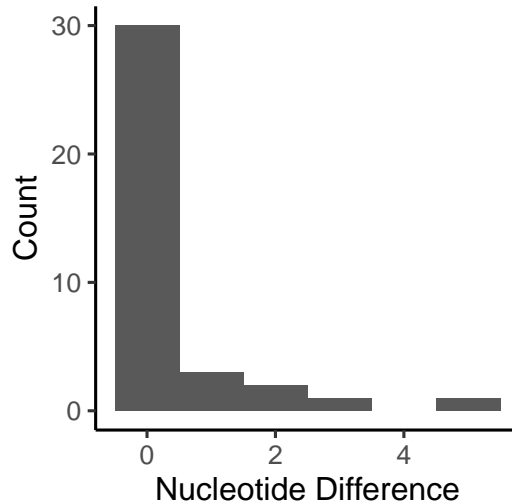
IGHV3-64*02

12 sequences assigned
9 (75%) exact matches, in which:
8 unique CDR3
3 unique J



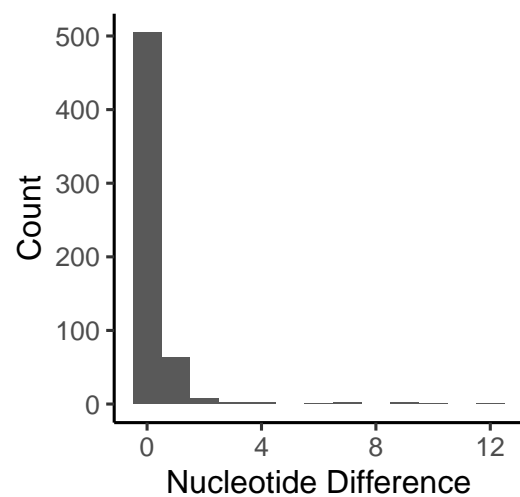
IGHV3-72*01

37 sequences assigned
30 (81.1%) exact matches, in which:
29 unique CDR3
4 unique J



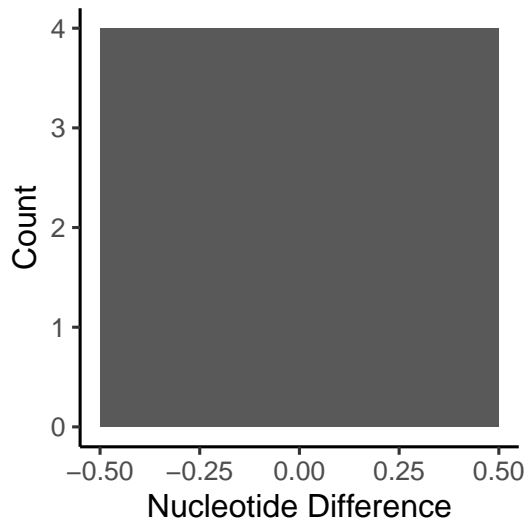
IGHV4-4*07

587 sequences assigned
505 (86%) exact matches, in which:
490 unique CDR3
6 unique J



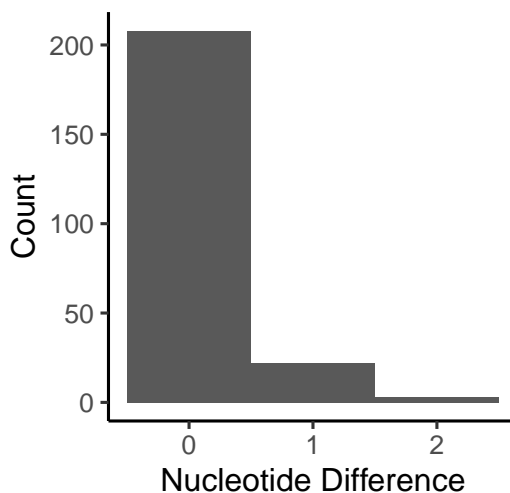
IGHV4-28*01

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



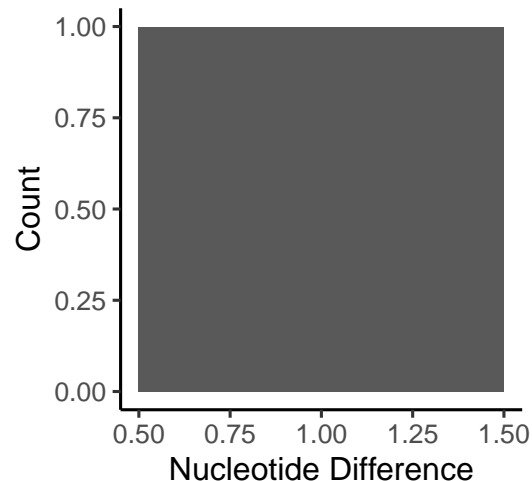
IGHV4-30-2*01

233 sequences assigned
208 (89.3%) exact matches, in which:
202 unique CDR3
6 unique J



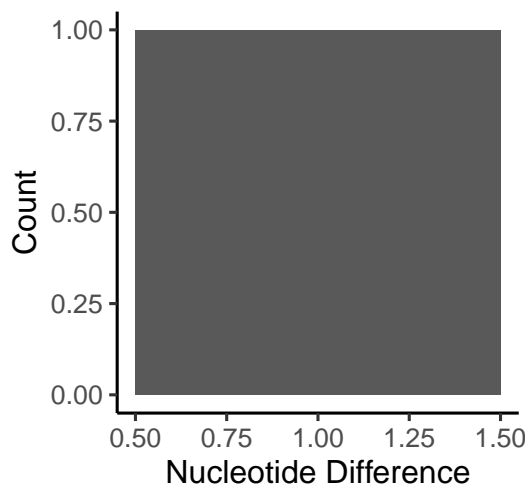
IGHV4-38-2*02

1 sequences assigned
No exact matches.



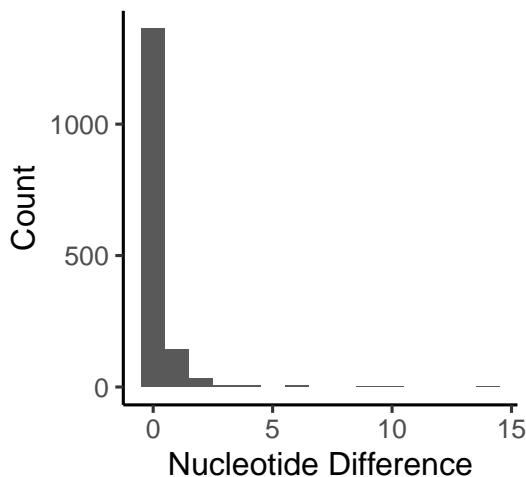
IGHV4-28*04

1 sequences assigned
No exact matches.



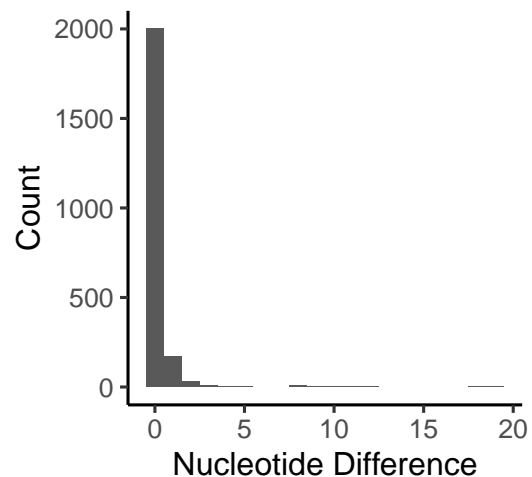
IGHV4-31*03

1561 sequences assigned
1363 (87.3%) exact matches, in which:
1322 unique CDR3
6 unique J



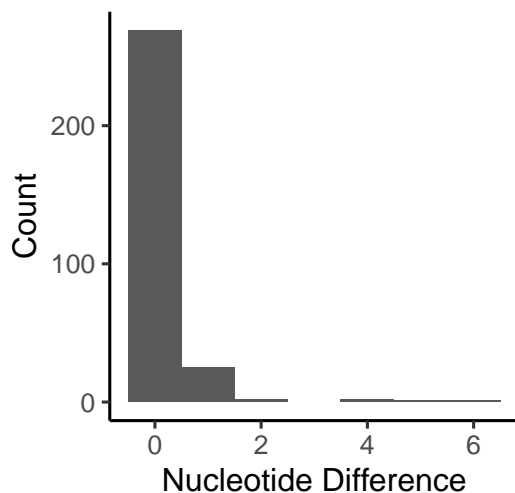
IGHV4-39*01

2241 sequences assigned
2001 (89.3%) exact matches, in which:
1885 unique CDR3
6 unique J



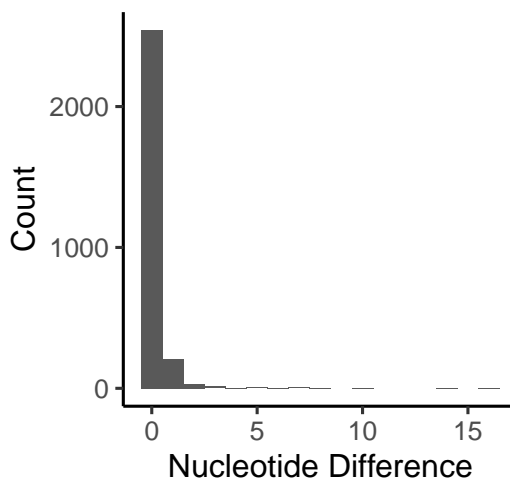
IGHV4-30-4*01

300 sequences assigned
269 (89.7%) exact matches, in which:
256 unique CDR3
5 unique J



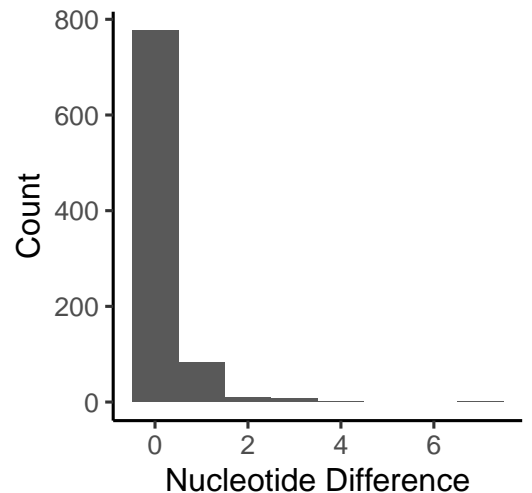
IGHV4-34*01

2818 sequences assigned
2543 (90.2%) exact matches, in which:
2396 unique CDR3
6 unique J



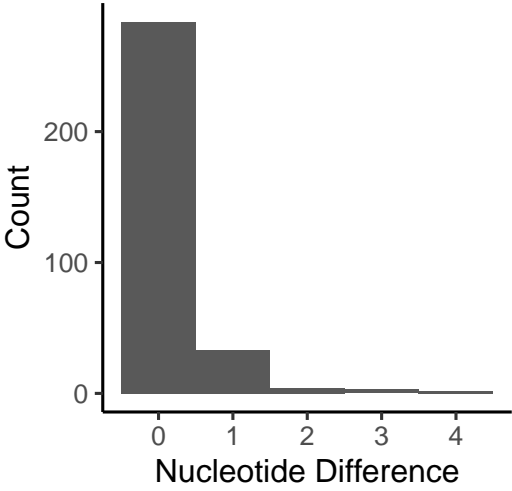
IGHV4-59*01

878 sequences assigned
777 (88.5%) exact matches, in which:
757 unique CDR3
6 unique J



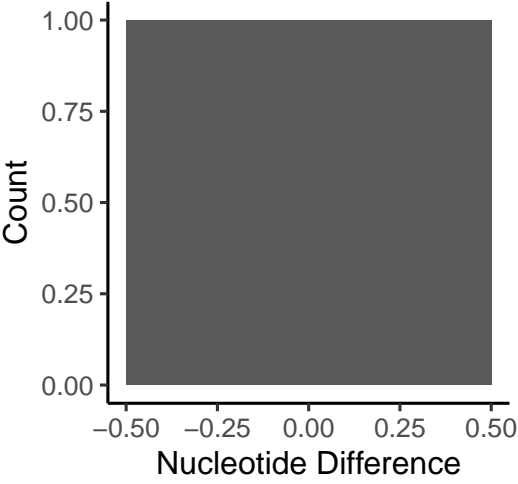
IGHV4–61*01

326 sequences assigned
284 (87.1%) exact matches, in which:
273 unique CDR3
6 unique J



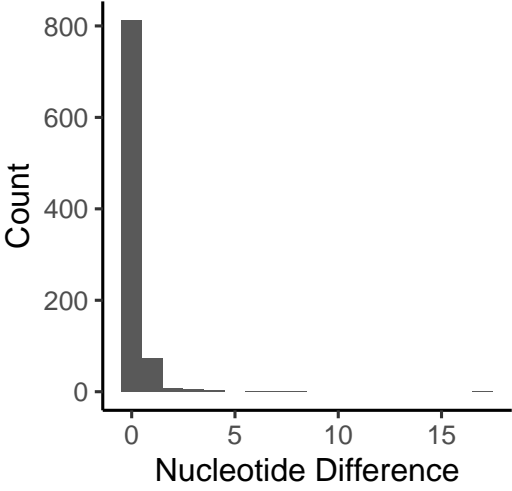
IGHV7–81*01

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



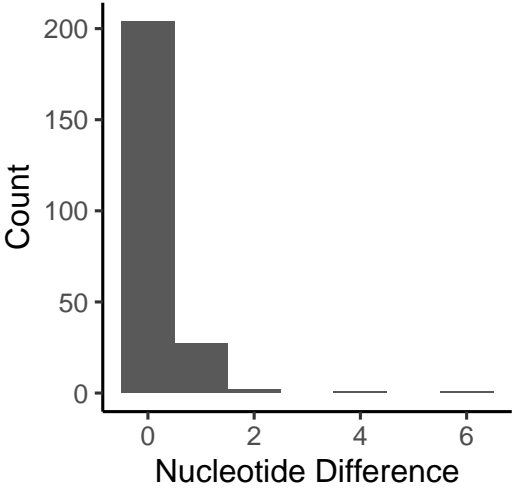
IGHV5–51*01

911 sequences assigned
813 (89.2%) exact matches, in which:
785 unique CDR3
6 unique J



IGHV6–1*01

235 sequences assigned
204 (86.8%) exact matches, in which:
197 unique CDR3
6 unique J





Warning – no inferred sequences found.