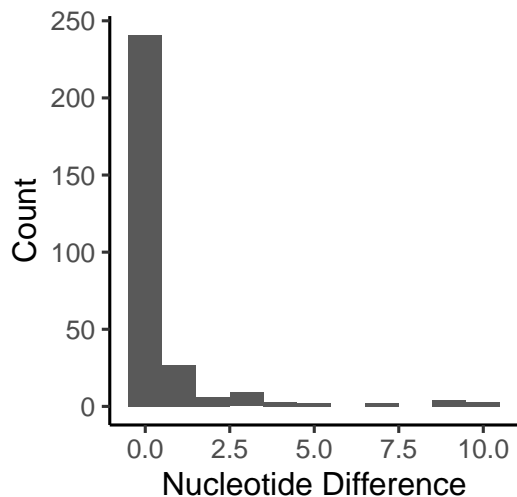


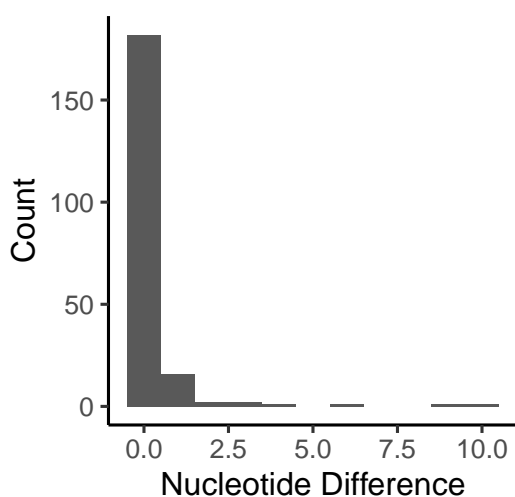
IGHV1-2*02

297 sequences assigned
241 (81.1%) exact matches, in which:
239 unique CDR3
6 unique J



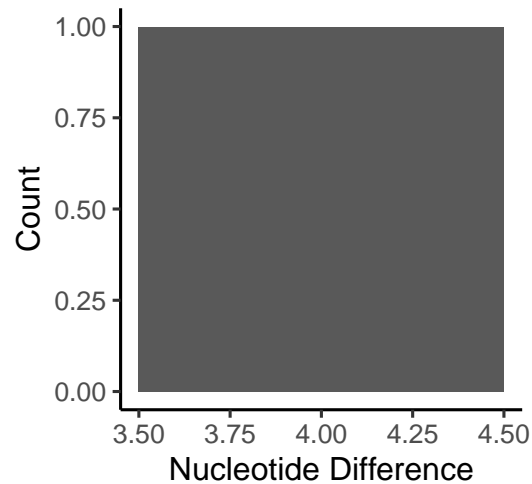
IGHV1-8*01

208 sequences assigned
182 (87.5%) exact matches, in which:
180 unique CDR3
5 unique J



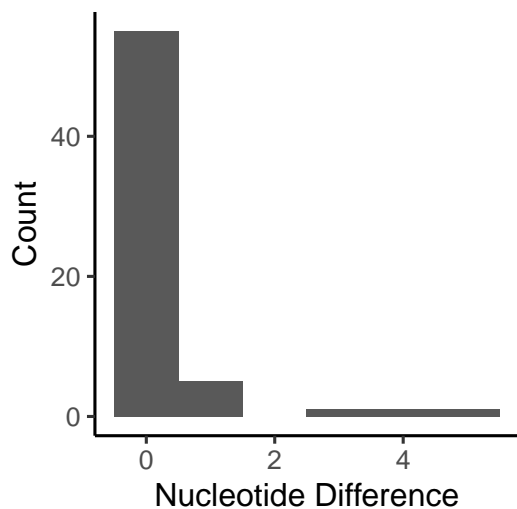
IGHV1-45*02

1 sequences assigned
No exact matches.



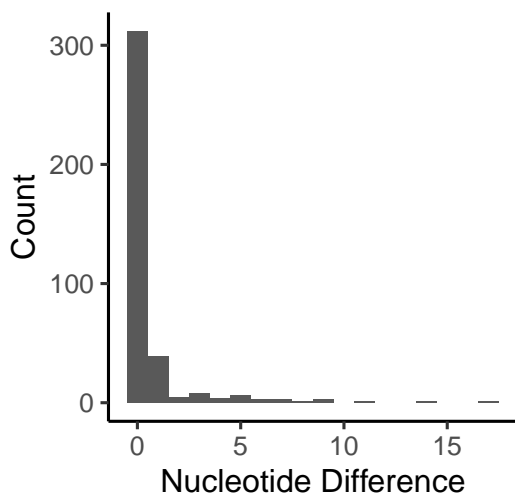
IGHV1-2*04

63 sequences assigned
55 (87.3%) exact matches, in which:
55 unique CDR3
5 unique J



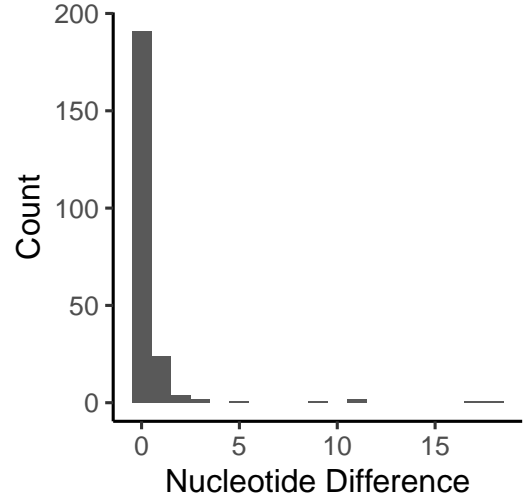
IGHV1-18*01

389 sequences assigned
312 (80.2%) exact matches, in which:
308 unique CDR3
7 unique J



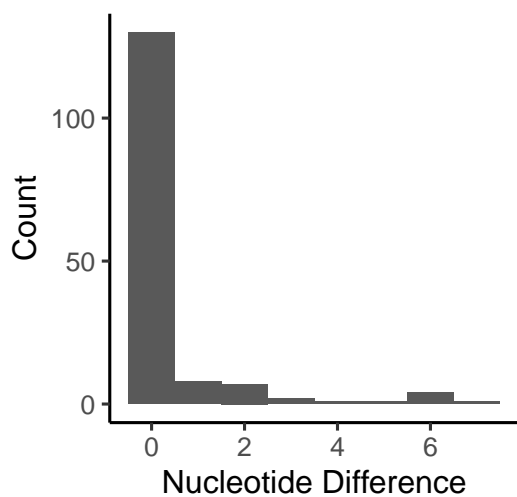
IGHV1-46*01

227 sequences assigned
191 (84.1%) exact matches, in which:
190 unique CDR3
6 unique J



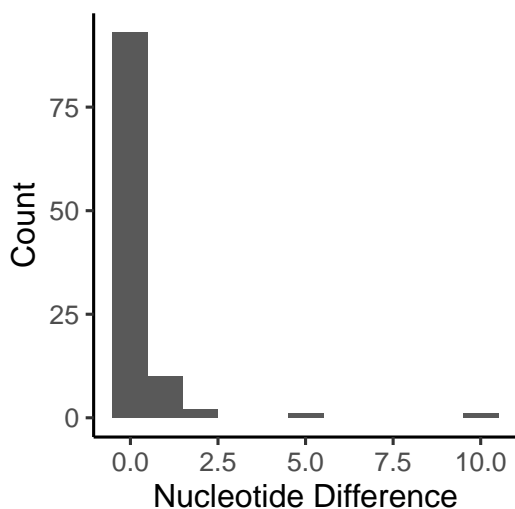
IGHV1-3*01

154 sequences assigned
130 (84.4%) exact matches, in which:
130 unique CDR3
6 unique J



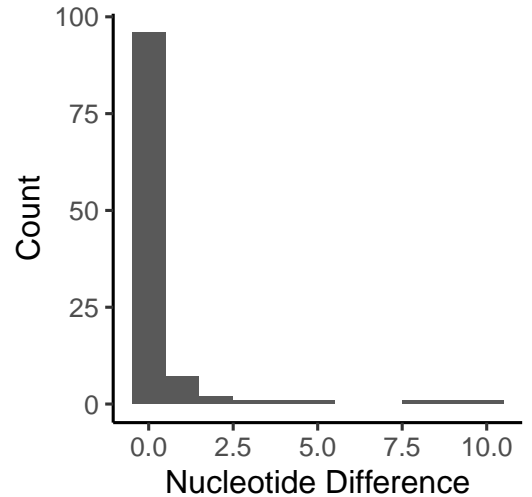
IGHV1-24*01

107 sequences assigned
93 (86.9%) exact matches, in which:
92 unique CDR3
7 unique J



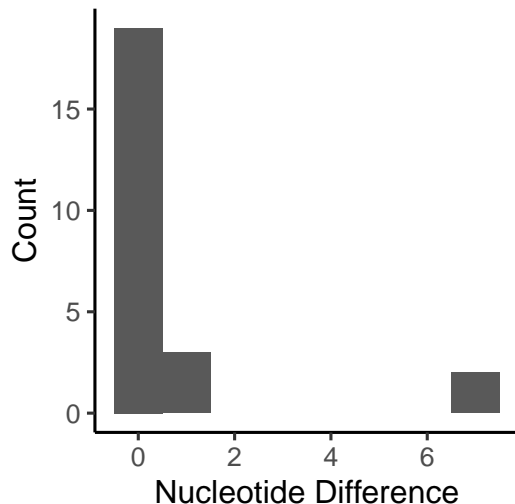
IGHV1-46*03

111 sequences assigned
96 (86.5%) exact matches, in which:
96 unique CDR3
6 unique J



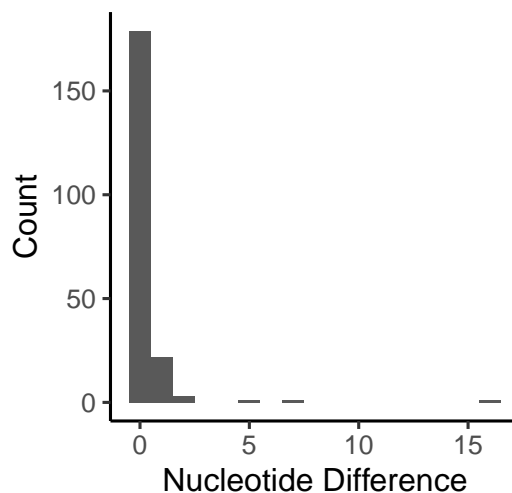
IGHV1-58*01

24 sequences assigned
19 (79.2%) exact matches, in which:
19 unique CDR3
5 unique J



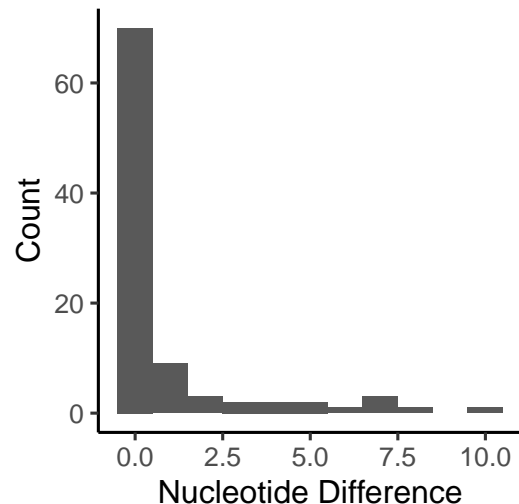
IGHV1-69*08_C191T

207 sequences assigned
179 (86.5%) exact matches, in which:
178 unique CDR3
6 unique J



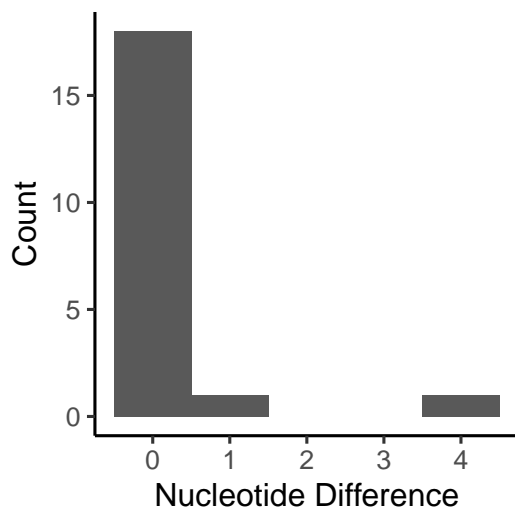
IGHV2-5*02

94 sequences assigned
70 (74.5%) exact matches, in which:
70 unique CDR3
6 unique J



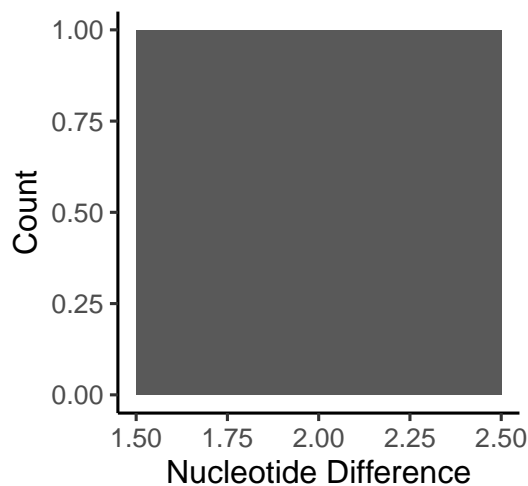
IGHV1-58*02

20 sequences assigned
18 (90%) exact matches, in which:
18 unique CDR3
5 unique J



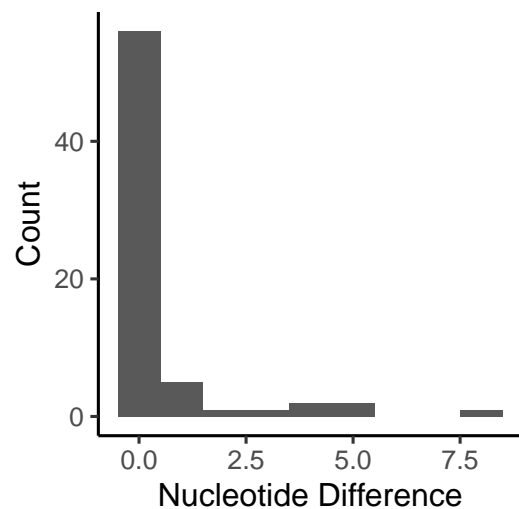
IGHV1-69D*01

1 sequences assigned
No exact matches.



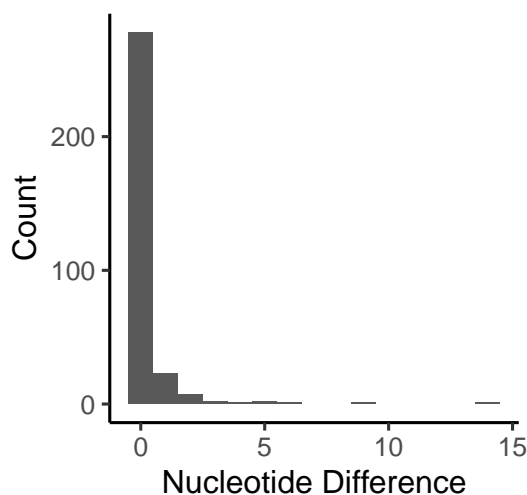
IGHV2-26*01

68 sequences assigned
56 (82.4%) exact matches, in which:
56 unique CDR3
7 unique J



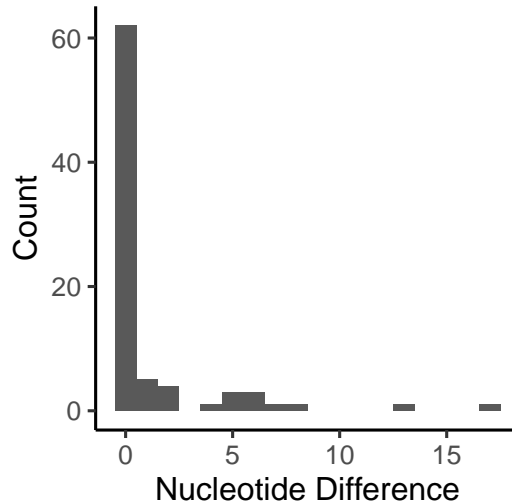
IGHV1-69*04

316 sequences assigned
278 (88%) exact matches, in which:
276 unique CDR3
6 unique J



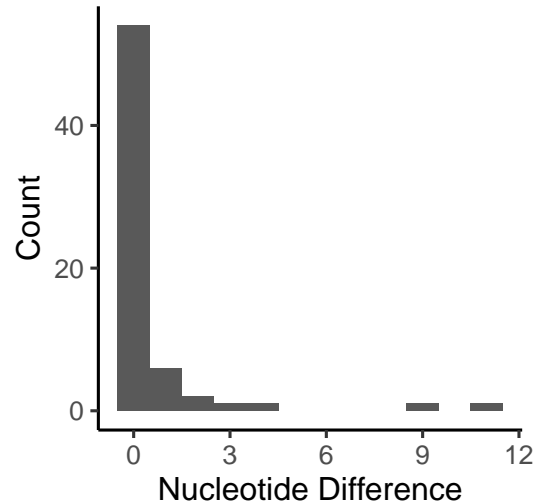
IGHV2-5*01

82 sequences assigned
62 (75.6%) exact matches, in which:
61 unique CDR3
5 unique J



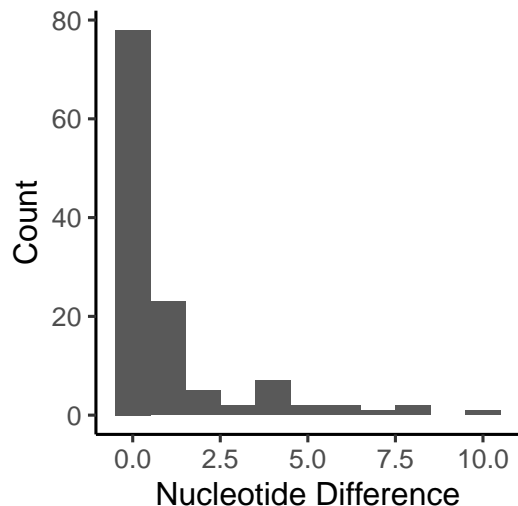
IGHV2-70*15

66 sequences assigned
54 (81.8%) exact matches, in which:
54 unique CDR3
5 unique J



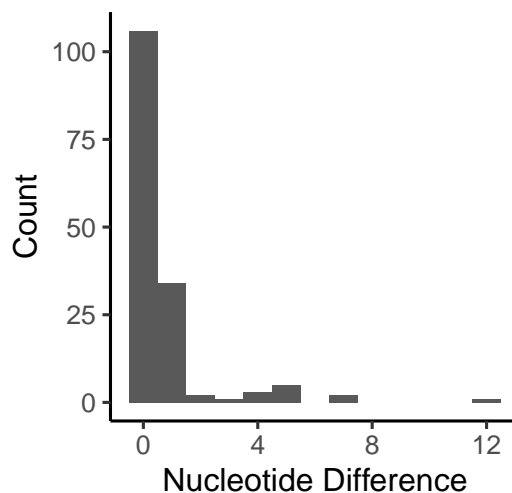
IGHV3-7*01

124 sequences assigned
78 (62.9%) exact matches, in which:
78 unique CDR3
5 unique J



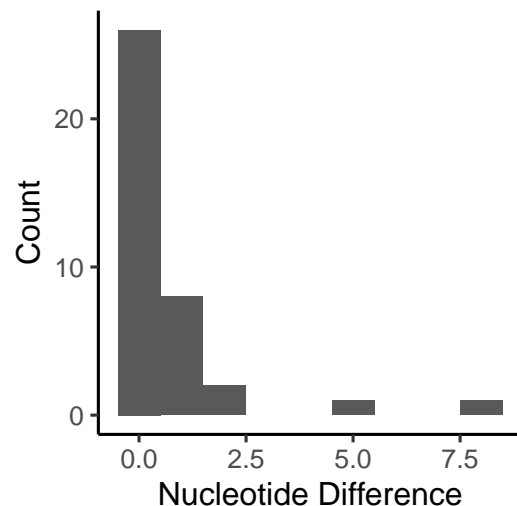
IGHV3-11*01

154 sequences assigned
106 (68.8%) exact matches, in which:
105 unique CDR3
5 unique J



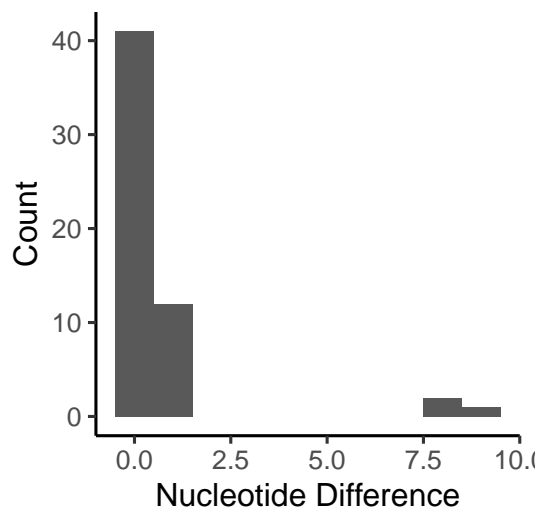
IGHV3-13*04

38 sequences assigned
26 (68.4%) exact matches, in which:
26 unique CDR3
5 unique J



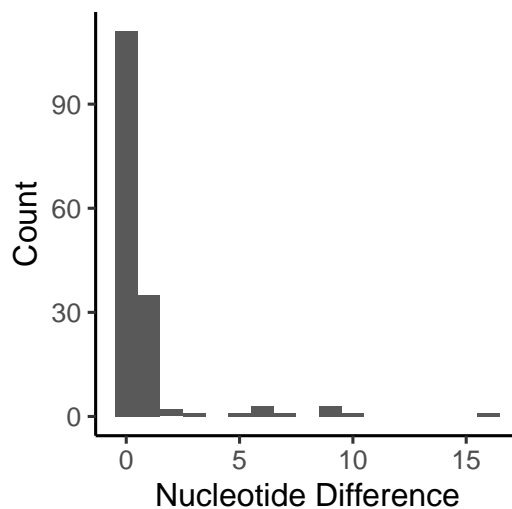
IGHV3-7*04

56 sequences assigned
41 (73.2%) exact matches, in which:
41 unique CDR3
5 unique J



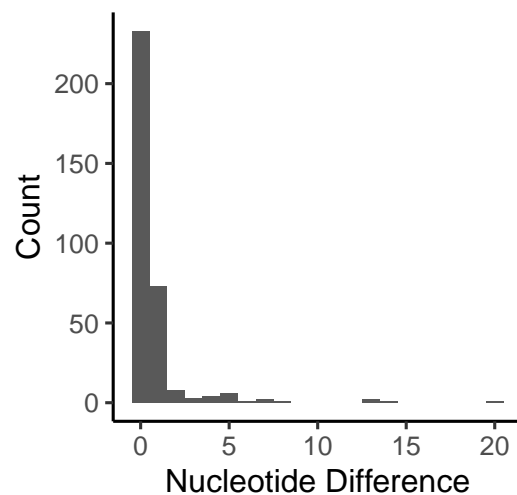
IGHV3-11*05

159 sequences assigned
111 (69.8%) exact matches, in which:
109 unique CDR3
7 unique J



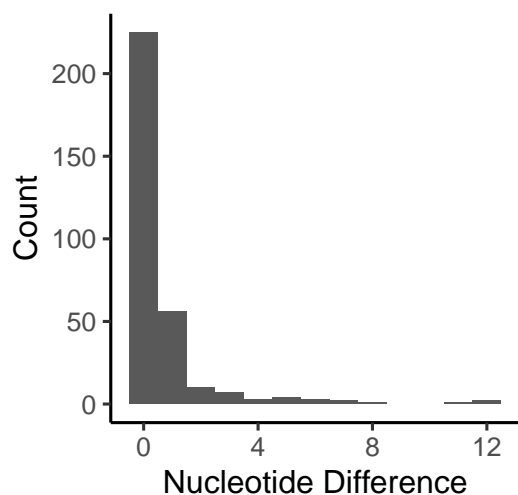
IGHV3-15*01

335 sequences assigned
233 (69.6%) exact matches, in which:
231 unique CDR3
7 unique J



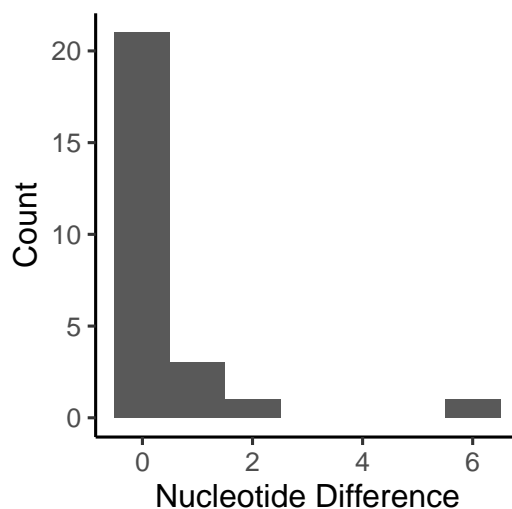
IGHV3-9*01

314 sequences assigned
225 (71.7%) exact matches, in which:
222 unique CDR3
6 unique J



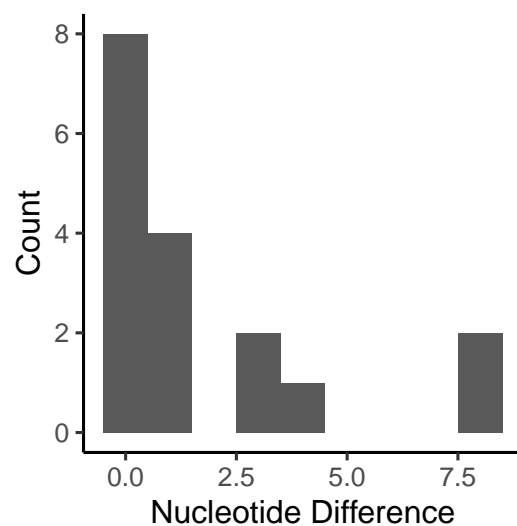
IGHV3-13*01

26 sequences assigned
21 (80.8%) exact matches, in which:
21 unique CDR3
4 unique J



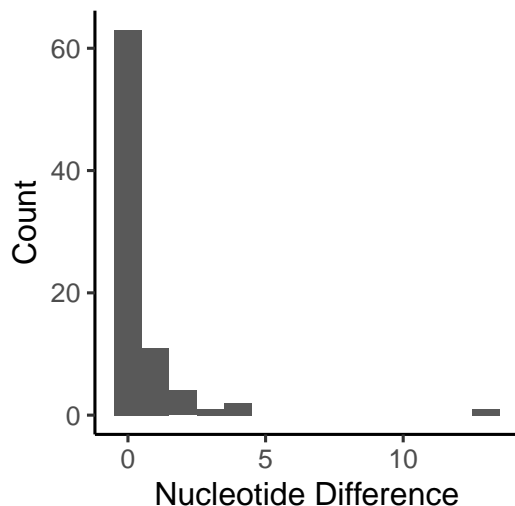
IGHV3-20*01

17 sequences assigned
8 (47.1%) exact matches, in which:
8 unique CDR3
4 unique J



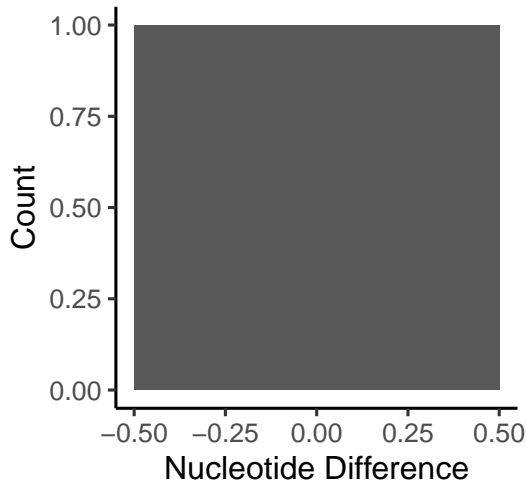
IGHV3-20*04

82 sequences assigned
63 (76.8%) exact matches, in which:
61 unique CDR3
5 unique J



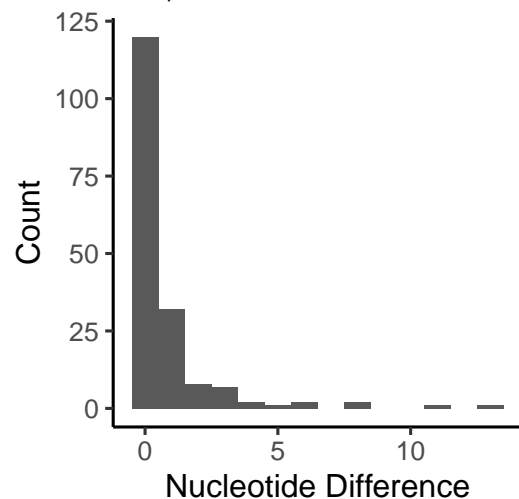
IGHV3-35*01

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



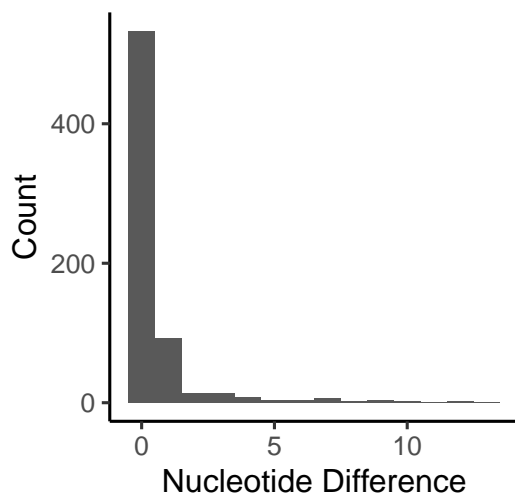
IGHV3-48*01

176 sequences assigned
120 (68.2%) exact matches, in which:
119 unique CDR3
6 unique J



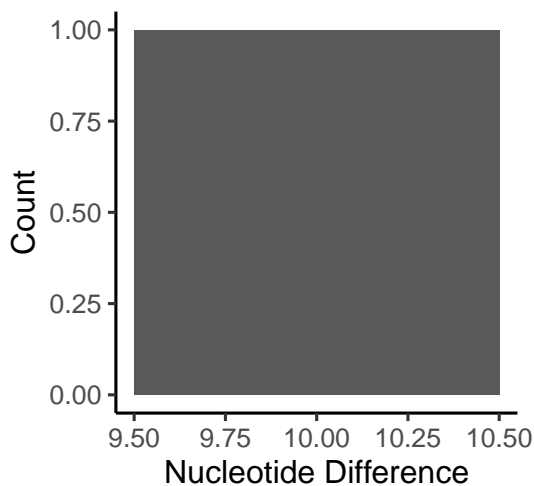
IGHV3-21*01

688 sequences assigned
533 (77.5%) exact matches, in which:
529 unique CDR3
7 unique J



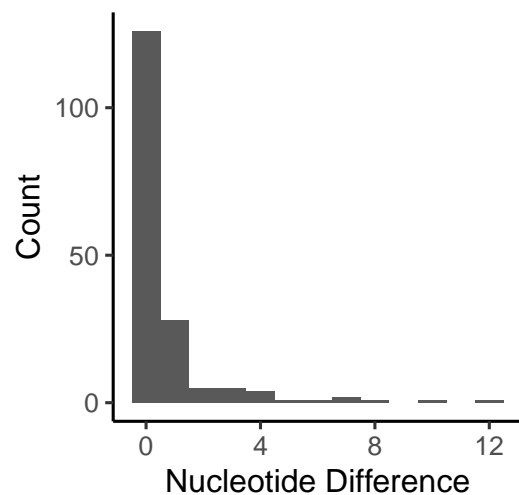
IGHV3-38-3*01

1 sequences assigned
No exact matches.



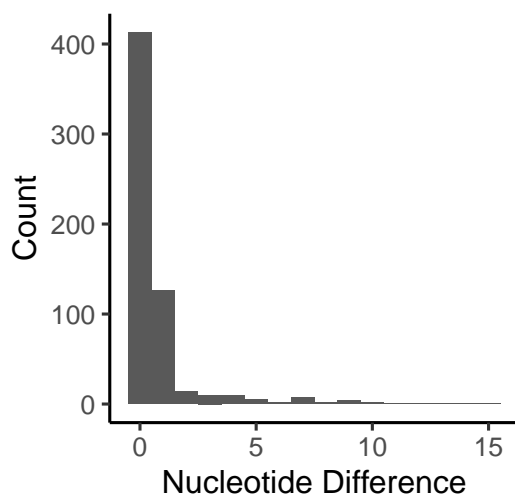
IGHV3-48*02

176 sequences assigned
126 (71.6%) exact matches, in which:
125 unique CDR3
5 unique J



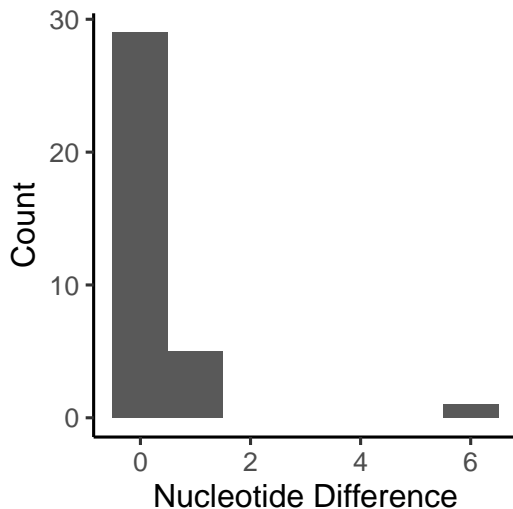
IGHV3-33*01

600 sequences assigned
413 (68.8%) exact matches, in which:
404 unique CDR3
7 unique J



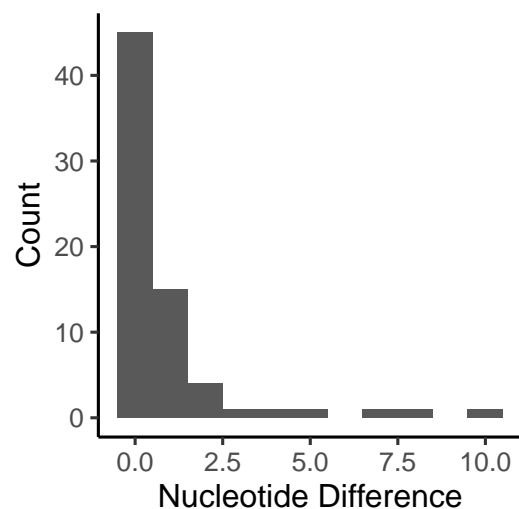
IGHV3-43*01

35 sequences assigned
29 (82.9%) exact matches, in which:
29 unique CDR3
6 unique J



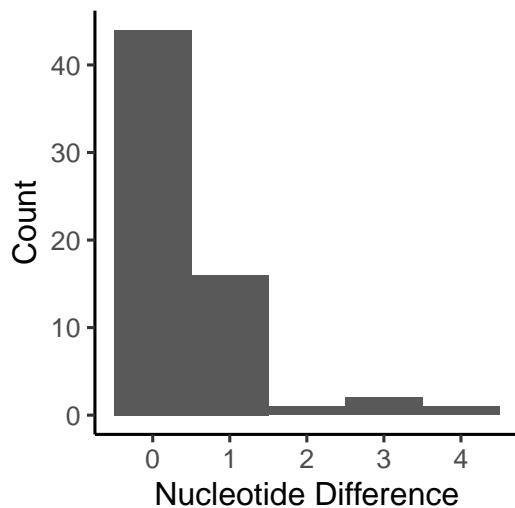
IGHV3-49*03

70 sequences assigned
45 (64.3%) exact matches, in which:
43 unique CDR3
4 unique J



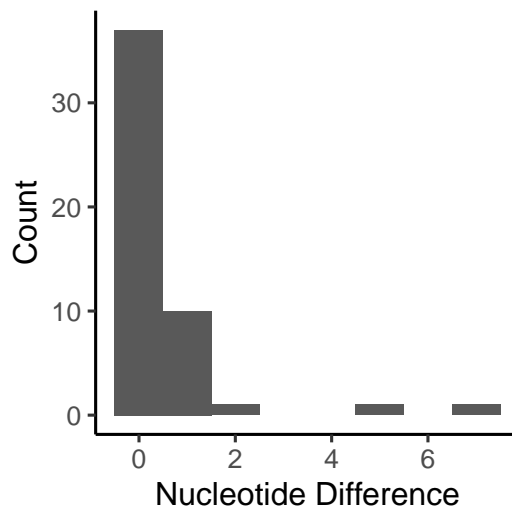
IGHV3-49*05

64 sequences assigned
44 (68.8%) exact matches, in which:
44 unique CDR3
4 unique J



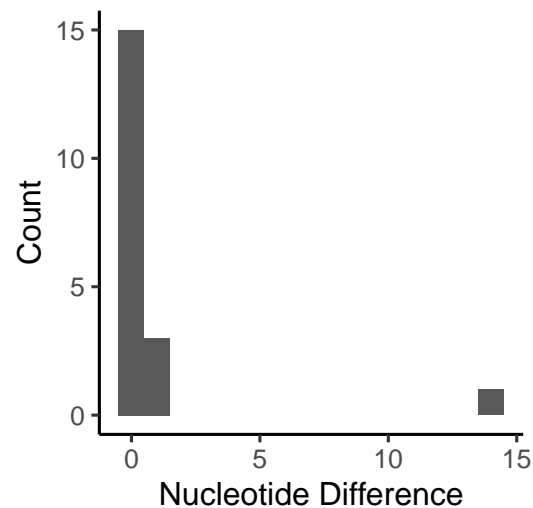
IGHV3-53*04

50 sequences assigned
37 (74%) exact matches, in which:
37 unique CDR3
5 unique J



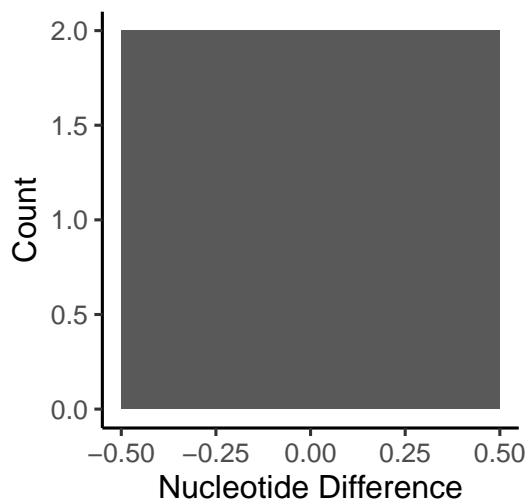
IGHV3-72*01

19 sequences assigned
15 (78.9%) exact matches, in which:
15 unique CDR3
5 unique J



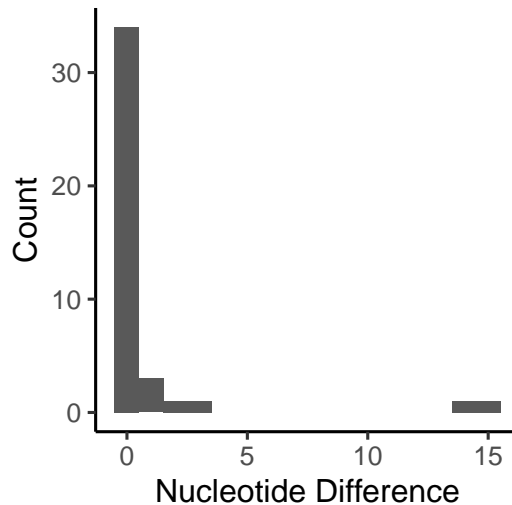
IGHV3-52*01

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



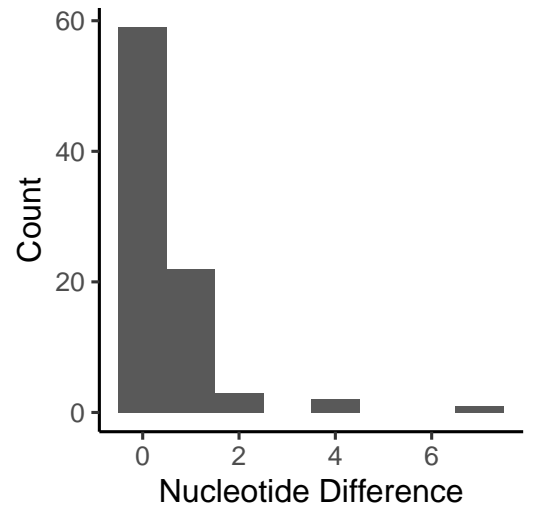
IGHV3-64*01

41 sequences assigned
34 (82.9%) exact matches, in which:
33 unique CDR3
4 unique J



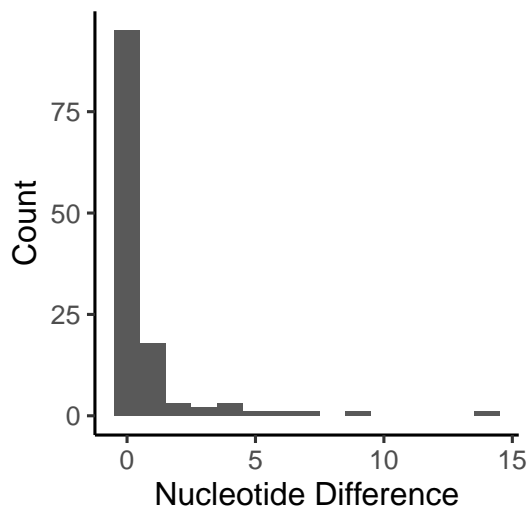
IGHV3-73*01

87 sequences assigned
59 (67.8%) exact matches, in which:
59 unique CDR3
5 unique J



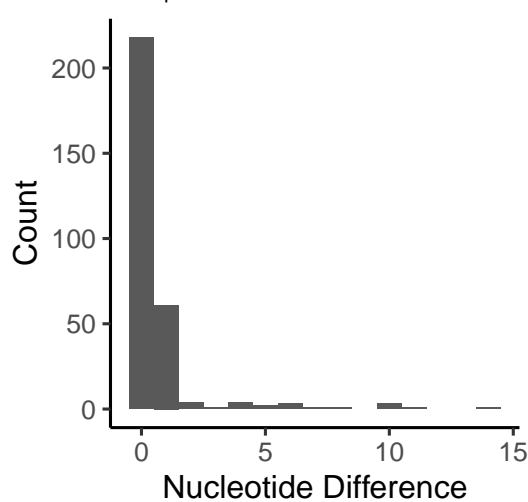
IGHV3-53*01

126 sequences assigned
95 (75.4%) exact matches, in which:
95 unique CDR3
7 unique J



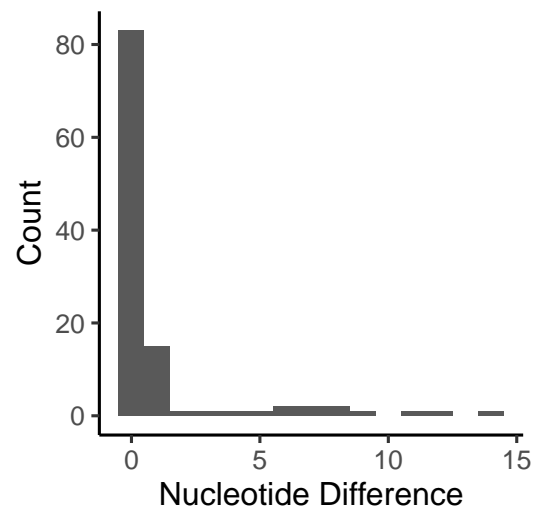
IGHV3-66*01

302 sequences assigned
218 (72.2%) exact matches, in which:
214 unique CDR3
7 unique J



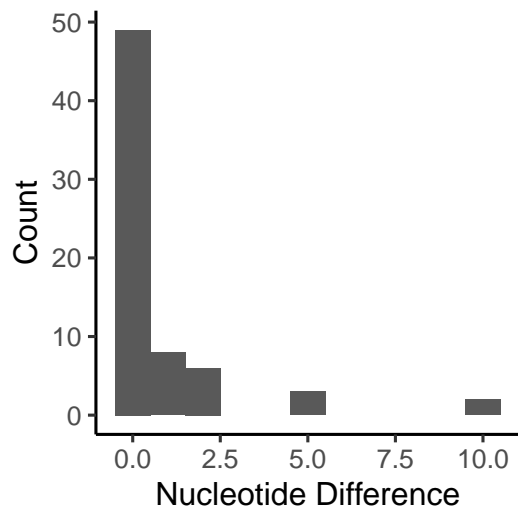
IGHV3-74*01

113 sequences assigned
83 (73.5%) exact matches, in which:
83 unique CDR3
6 unique J



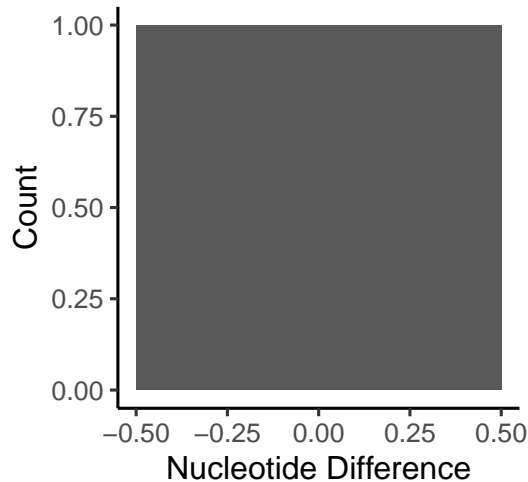
IGHV3-64D*06

68 sequences assigned
49 (72.1%) exact matches, in which:
48 unique CDR3
4 unique J



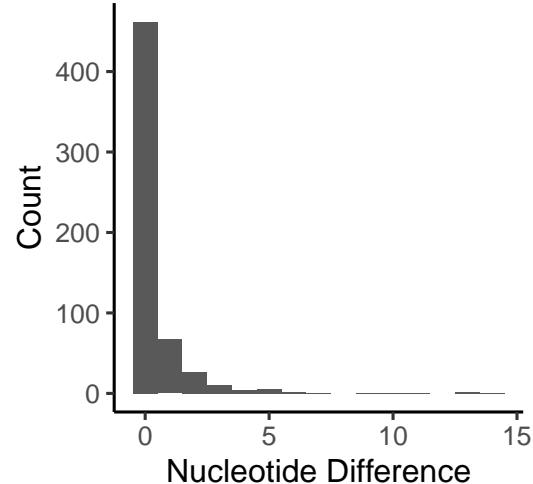
IGHV4-28*01

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



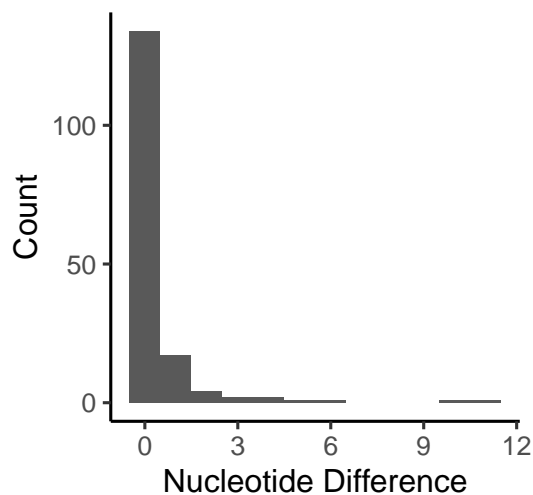
IGHV4-34*01

586 sequences assigned
462 (78.8%) exact matches, in which:
456 unique CDR3
7 unique J



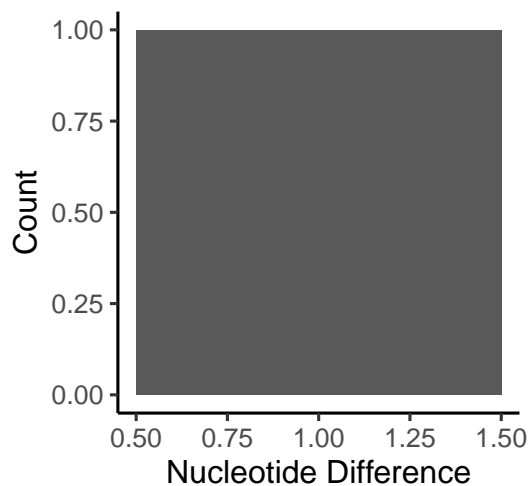
IGHV4-4*02

163 sequences assigned
134 (82.2%) exact matches, in which:
134 unique CDR3
6 unique J



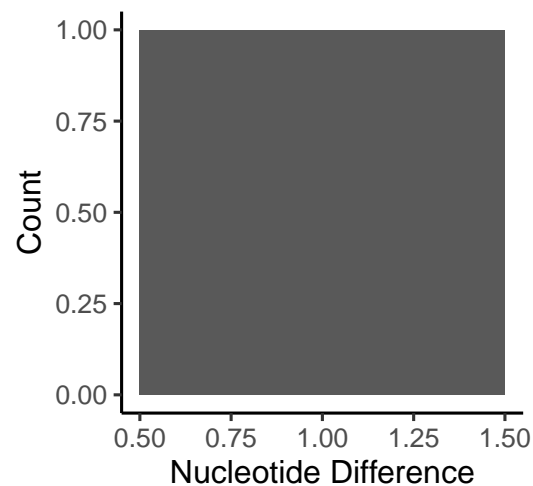
IGHV4-30-2*03

1 sequences assigned
No exact matches.



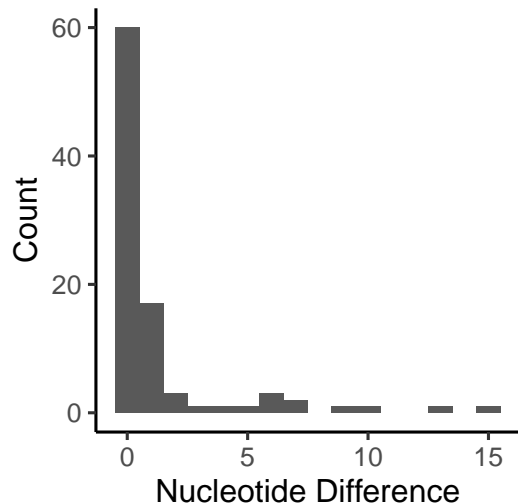
IGHV4-38-2*02

1 sequences assigned
No exact matches.



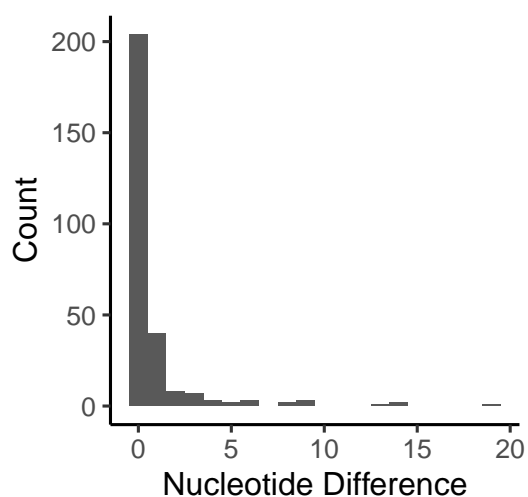
IGHV4-4*07

94 sequences assigned
60 (63.8%) exact matches, in which:
60 unique CDR3
6 unique J



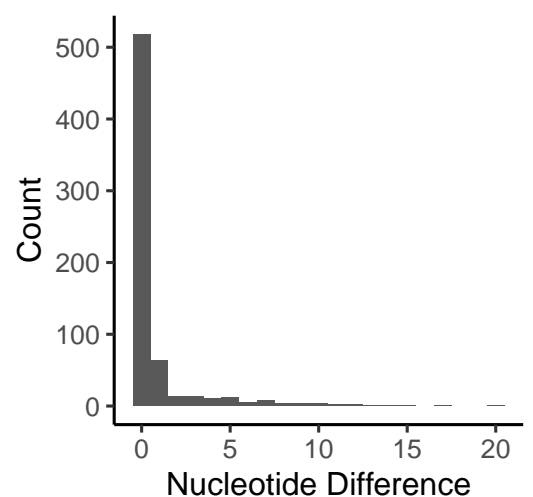
IGHV4-31*03

276 sequences assigned
204 (73.9%) exact matches, in which:
204 unique CDR3
7 unique J

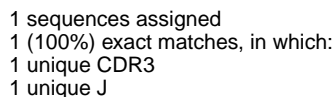


IGHV4-39*01

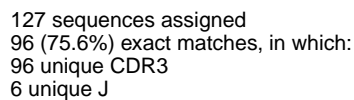
666 sequences assigned
518 (77.8%) exact matches, in which:
513 unique CDR3
7 unique J



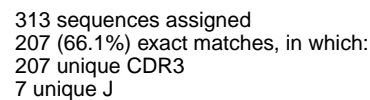
1 sequences assigned
1 (100%) exact matches, in which:
1 unique CDR3
1 unique J



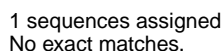
127 sequences assigned
96 (75.6%) exact matches, in which:
96 unique CDR3
6 unique J



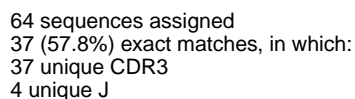
313 sequences assigned
207 (66.1%) exact matches, in which:
207 unique CDR3
7 unique J



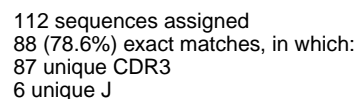
1 sequences assigned
No exact matches.



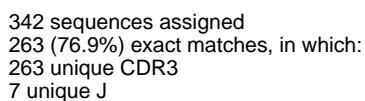
64 sequences assigned
37 (57.8%) exact matches, in which:
37 unique CDR3
4 unique J



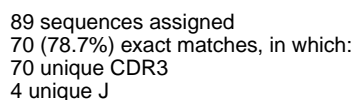
112 sequences assigned
88 (78.6%) exact matches, in which:
87 unique CDR3
6 unique J



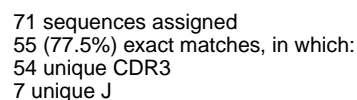
342 sequences assigned
263 (76.9%) exact matches, in which:
263 unique CDR3
7 unique J



89 sequences assigned
70 (78.7%) exact matches, in which:
70 unique CDR3
4 unique J

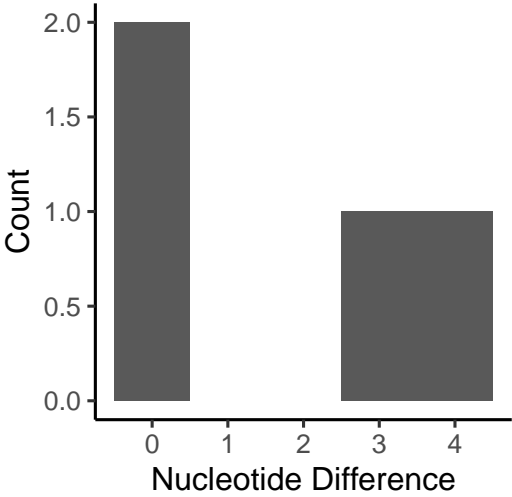


71 sequences assigned
55 (77.5%) exact matches, in which:
54 unique CDR3
7 unique J

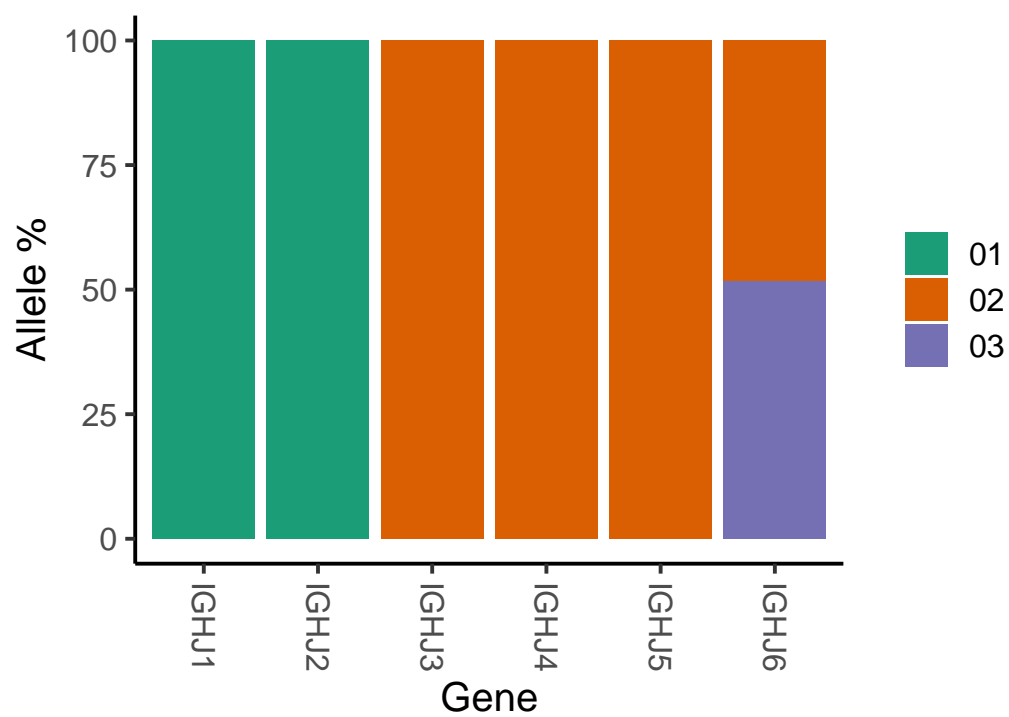


IGHV7-4-1*01

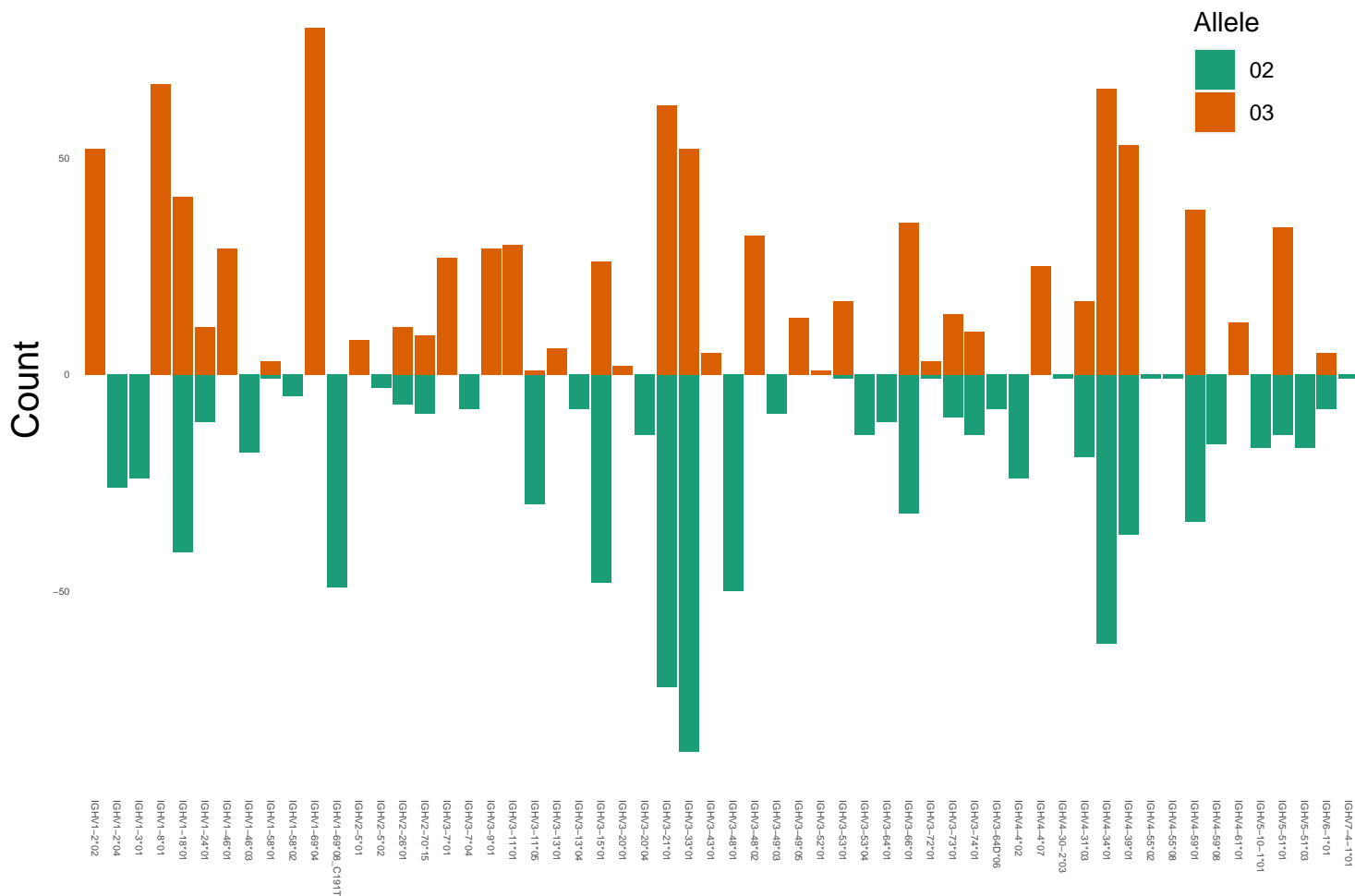
4 sequences assigned
2 (50%) exact matches, in which:
2 unique CDR3
2 unique J



Allele Usage



Sequence Count by IGHJ6 allele usage



Warning – no inferred sequences found.