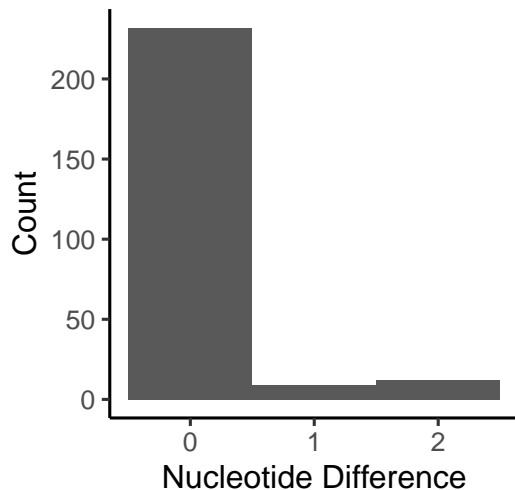


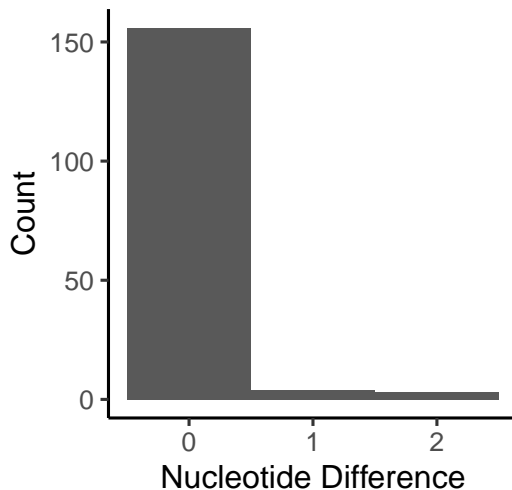
IGHV1-2*02

253 sequences assigned
232 (91.7%) exact matches, in which:
232 unique CDR3
6 unique J



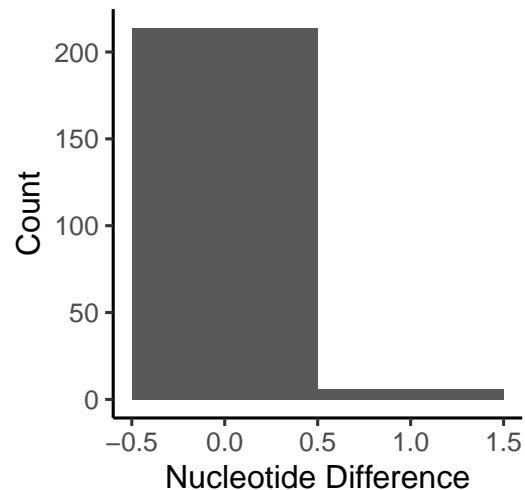
IGHV1-8*01

163 sequences assigned
156 (95.7%) exact matches, in which:
154 unique CDR3
5 unique J



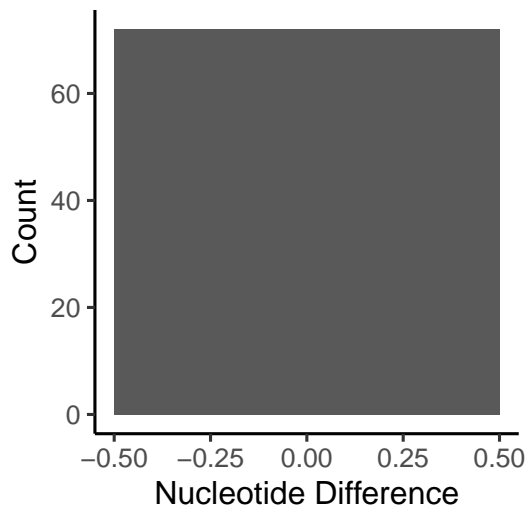
IGHV1-24*01

220 sequences assigned
214 (97.3%) exact matches, in which:
213 unique CDR3
6 unique J



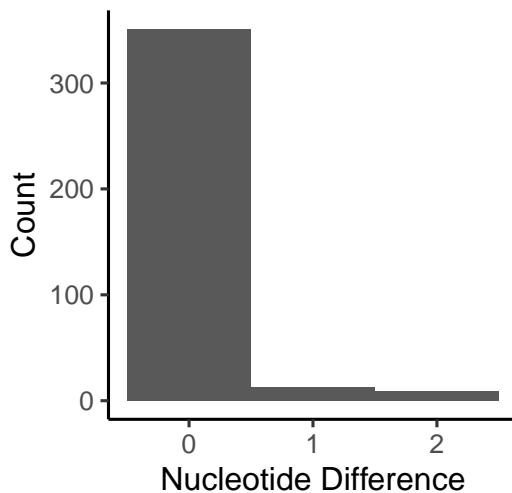
IGHV1-2*04

72 sequences assigned
72 (100%) exact matches, in which:
72 unique CDR3
5 unique J



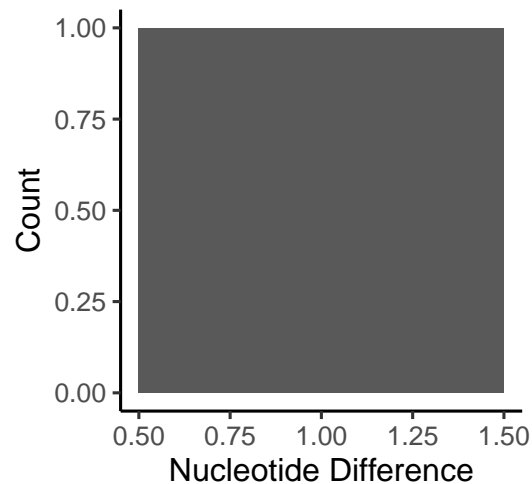
IGHV1-18*01

373 sequences assigned
351 (94.1%) exact matches, in which:
351 unique CDR3
6 unique J



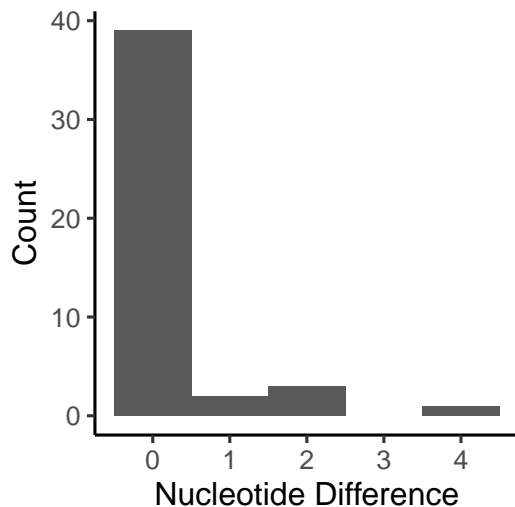
IGHV1-45*02

1 sequences assigned
No exact matches.



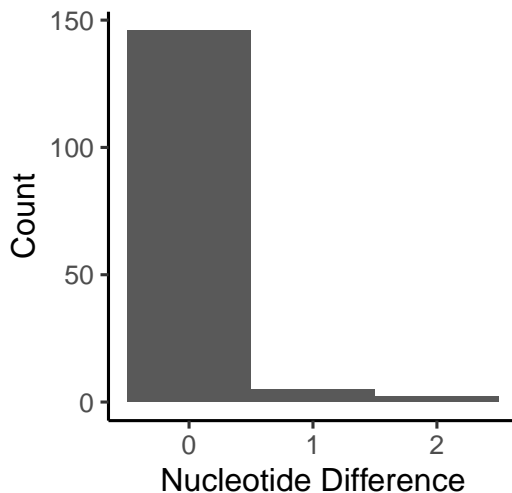
IGHV1-3*01_05

45 sequences assigned
39 (86.7%) exact matches, in which:
39 unique CDR3
6 unique J



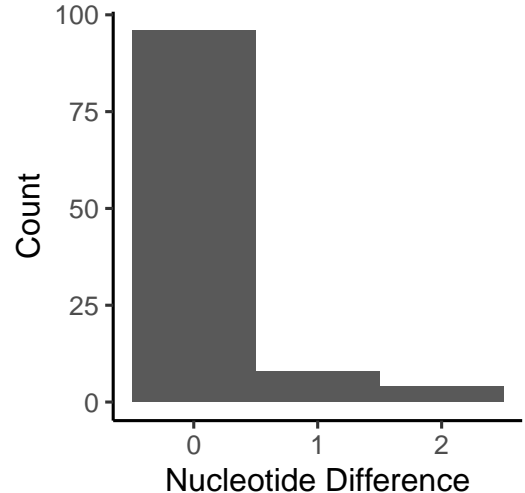
IGHV1-18*04

153 sequences assigned
146 (95.4%) exact matches, in which:
146 unique CDR3
6 unique J



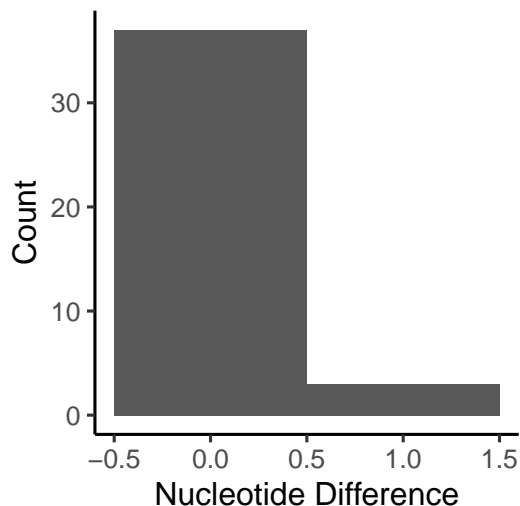
IGHV1-46*01

108 sequences assigned
96 (88.9%) exact matches, in which:
96 unique CDR3
6 unique J



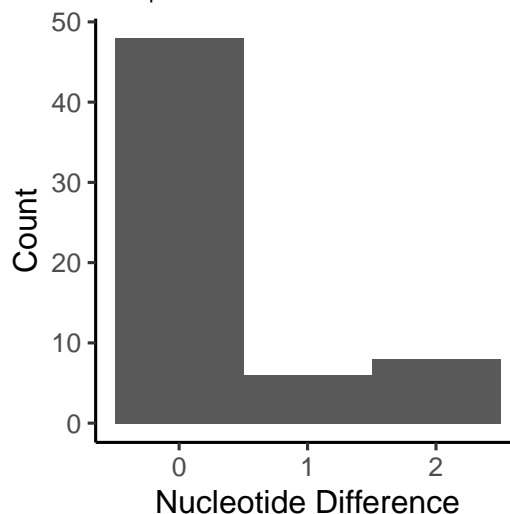
IGHV1-58*01_03

40 sequences assigned
37 (92.5%) exact matches, in which:
37 unique CDR3
6 unique J



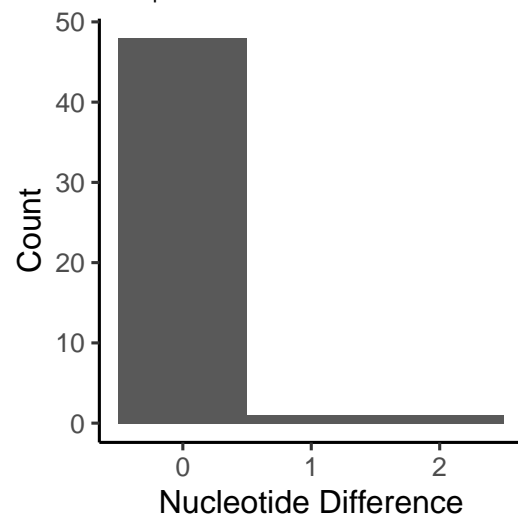
IGHV2-5*01

62 sequences assigned
48 (77.4%) exact matches, in which:
48 unique CDR3
5 unique J



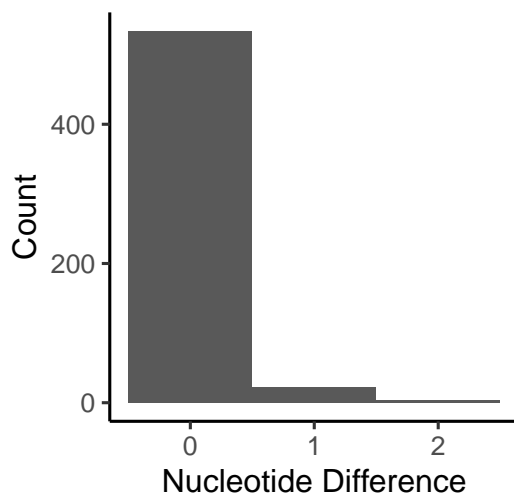
IGHV2-70*01

50 sequences assigned
48 (96%) exact matches, in which:
47 unique CDR3
4 unique J



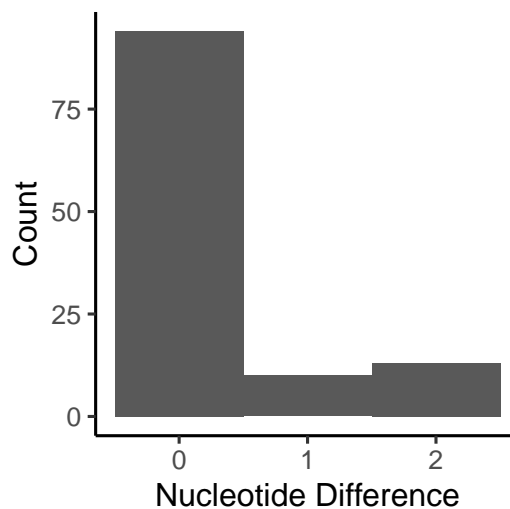
IGHV1-69*01_12_13

559 sequences assigned
534 (95.5%) exact matches, in which:
530 unique CDR3
6 unique J



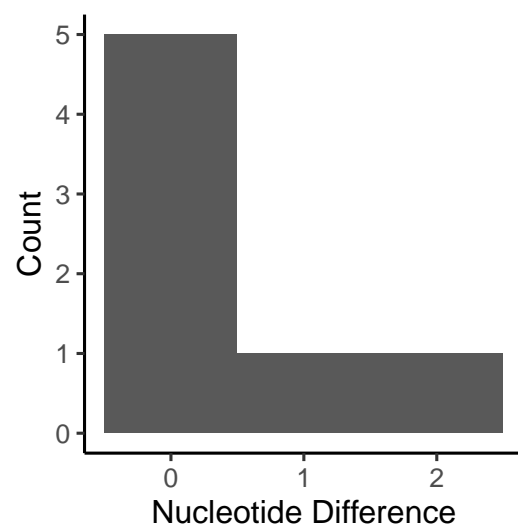
IGHV2-5*02

117 sequences assigned
94 (80.3%) exact matches, in which:
93 unique CDR3
6 unique J



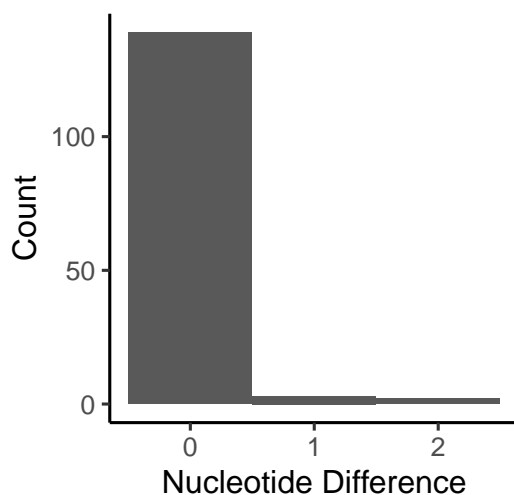
IGHV2-70*04

7 sequences assigned
5 (71.4%) exact matches, in which:
5 unique CDR3
2 unique J



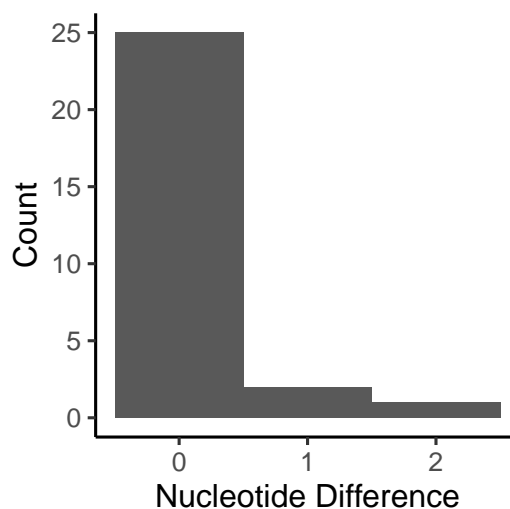
IGHV1-69*06_14

144 sequences assigned
139 (96.5%) exact matches, in which:
139 unique CDR3
6 unique J



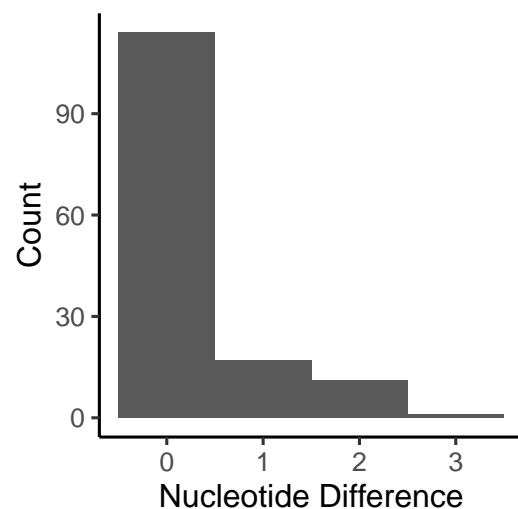
IGHV2-26*01

28 sequences assigned
25 (89.3%) exact matches, in which:
25 unique CDR3
4 unique J



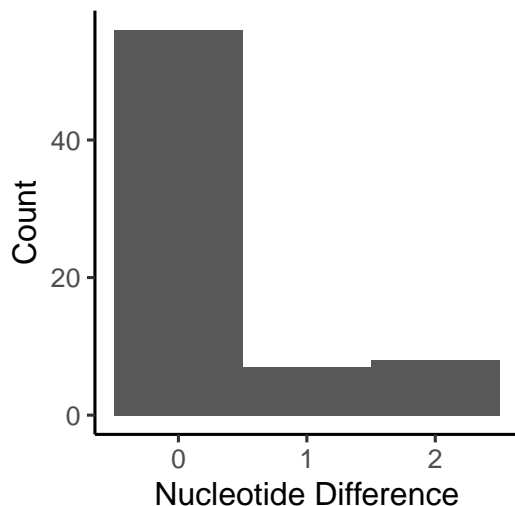
IGHV3-7*01

143 sequences assigned
114 (79.7%) exact matches, in which:
112 unique CDR3
6 unique J



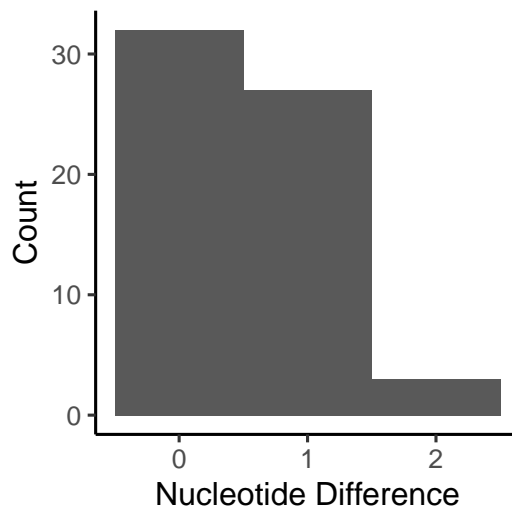
IGHV3-7*04

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



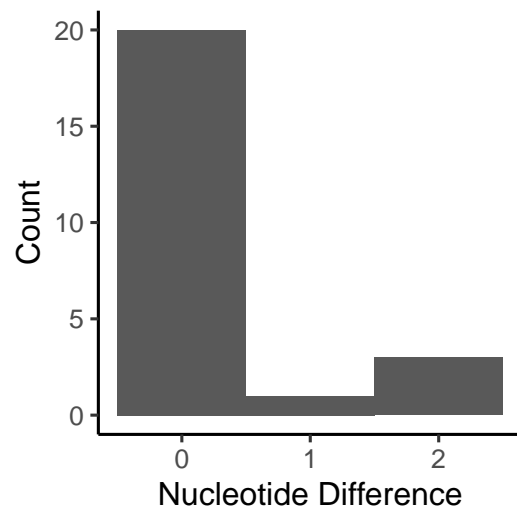
IGHV3-11*06

62 sequences assigned
32 (51.6%) exact matches, in which:
30 unique CDR3
5 unique J



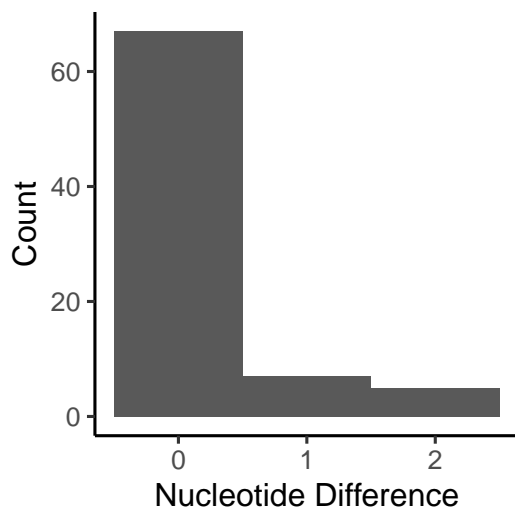
IGHV3-13*04

24 sequences assigned
20 (83.3%) exact matches, in which:
20 unique CDR3
5 unique J



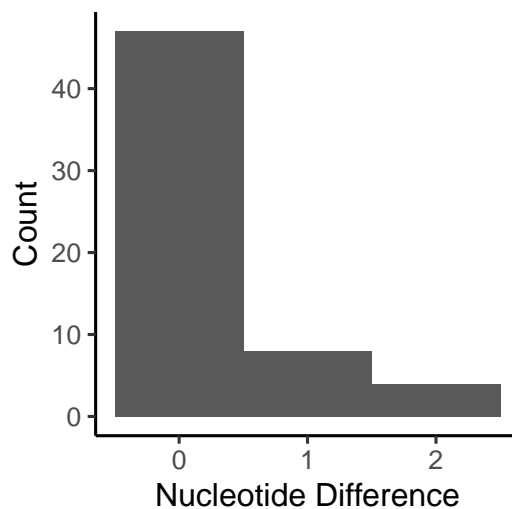
IGHV3-9*01

79 sequences assigned
67 (84.8%) exact matches, in which:
67 unique CDR3
5 unique J



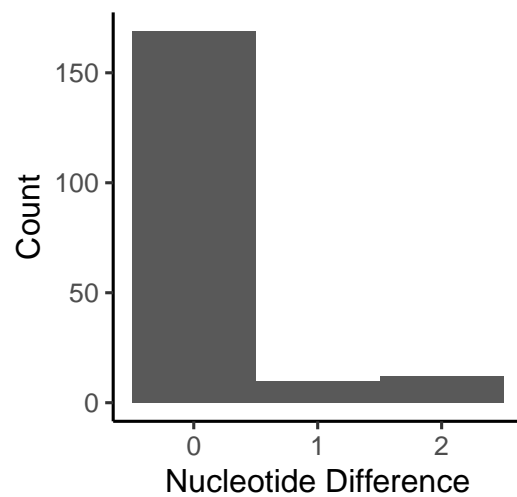
IGHV3-11*03_05

59 sequences assigned
47 (79.7%) exact matches, in which:
46 unique CDR3
5 unique J



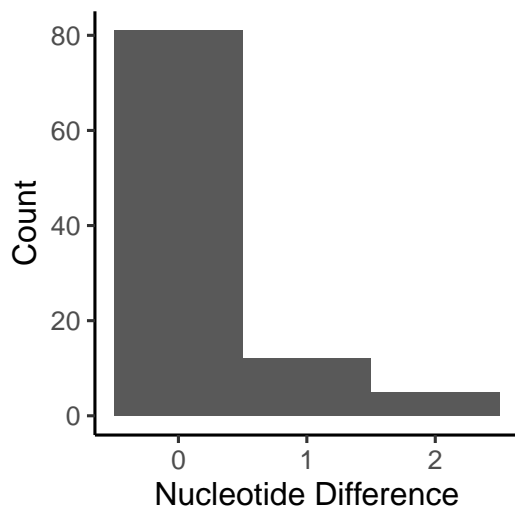
IGHV3-15*01_02

191 sequences assigned
169 (88.5%) exact matches, in which:
166 unique CDR3
6 unique J



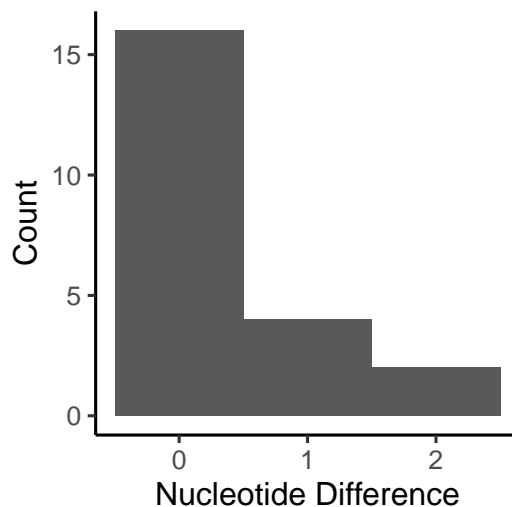
IGHV3-11*01

98 sequences assigned
81 (82.7%) exact matches, in which:
79 unique CDR3
5 unique J



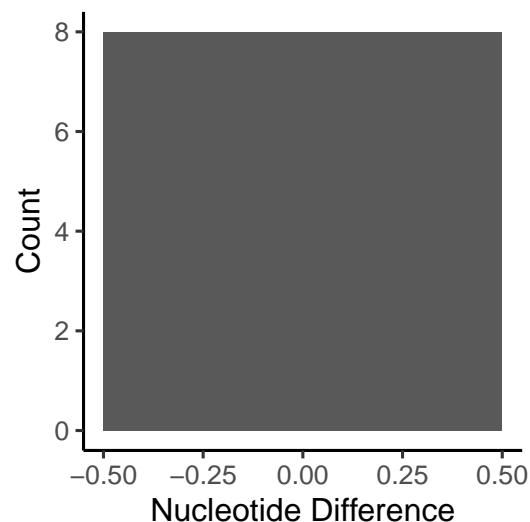
IGHV3-13*01

22 sequences assigned
16 (72.7%) exact matches, in which:
15 unique CDR3
3 unique J



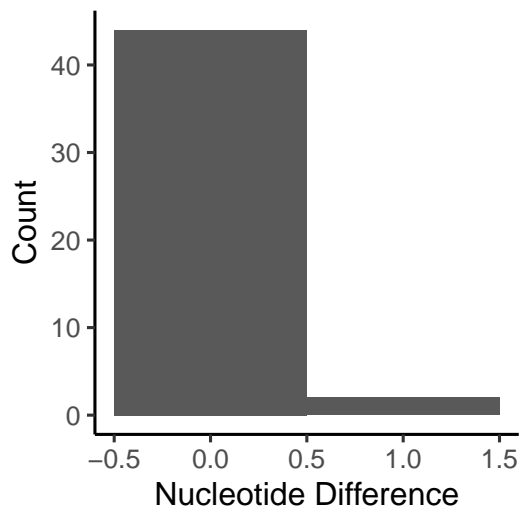
IGHV3-20*01_02

8 sequences assigned
8 (100%) exact matches, in which:
8 unique CDR3
3 unique J



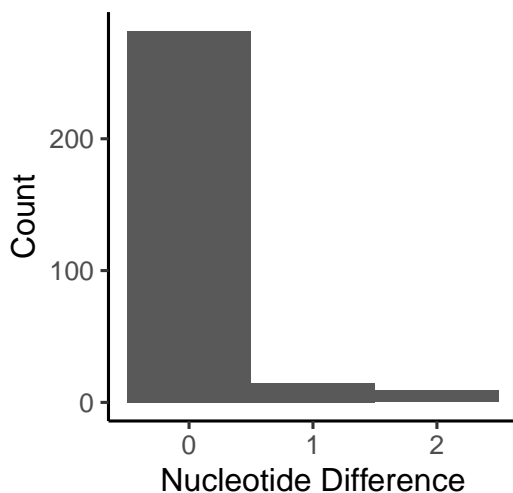
IGHV3-20*03_04

46 sequences assigned
44 (95.7%) exact matches, in which:
44 unique CDR3
5 unique J



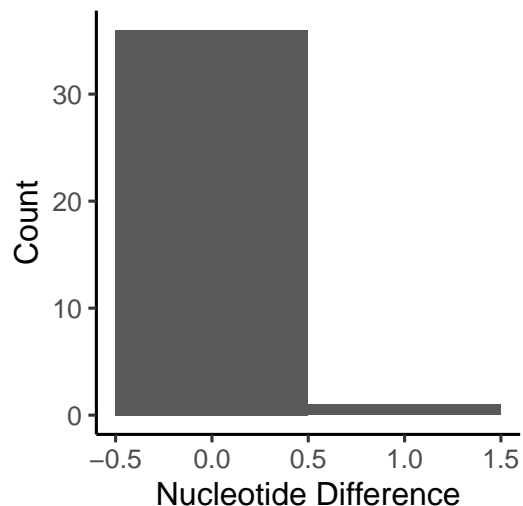
IGHV3-30-3*01

306 sequences assigned
282 (92.2%) exact matches, in which:
277 unique CDR3
6 unique J



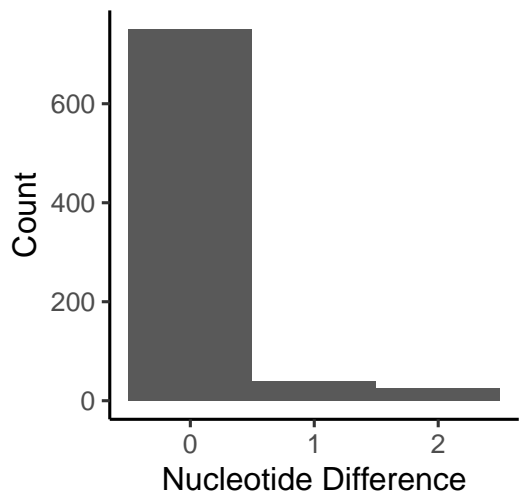
IGHV3-43*01

37 sequences assigned
36 (97.3%) exact matches, in which:
35 unique CDR3
4 unique J



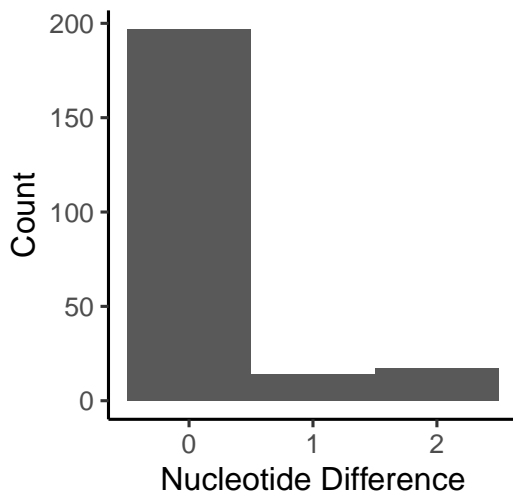
IGHV3-21*01_02

816 sequences assigned
751 (92%) exact matches, in which:
733 unique CDR3
6 unique J



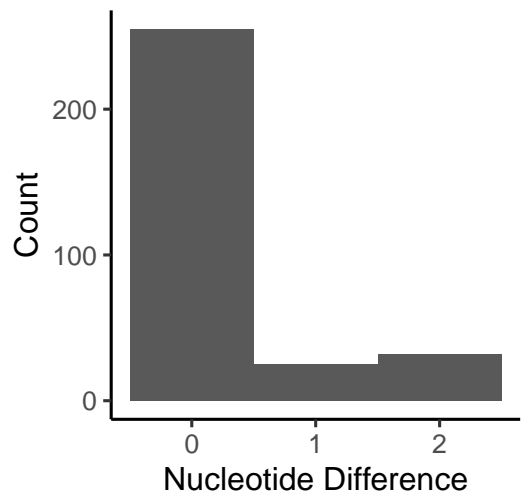
IGHV3-30*18

228 sequences assigned
197 (86.4%) exact matches, in which:
191 unique CDR3
4 unique J



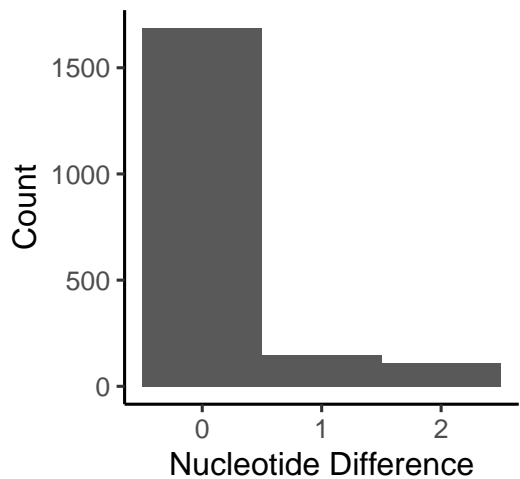
IGHV3-48*02

312 sequences assigned
255 (81.7%) exact matches, in which:
250 unique CDR3
6 unique J



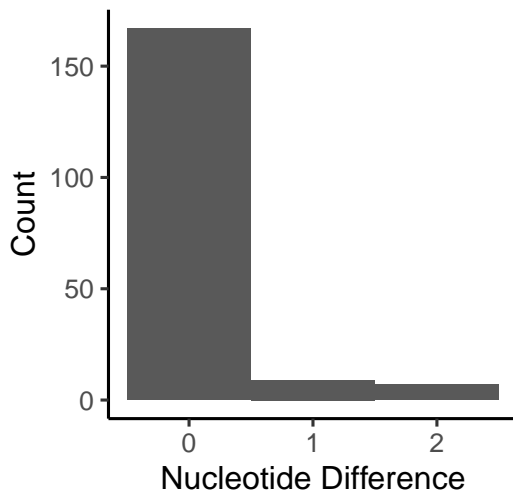
IGHV3-23*01_04

1944 sequences assigned
1687 (86.8%) exact matches, in which:
1621 unique CDR3
6 unique J



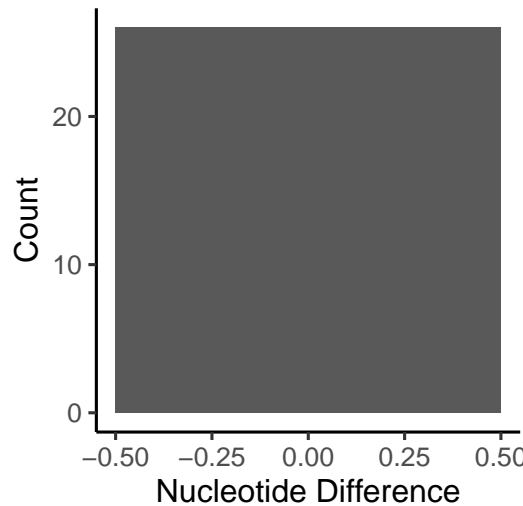
IGHV3-33*01

183 sequences assigned
167 (91.3%) exact matches, in which:
165 unique CDR3
6 unique J



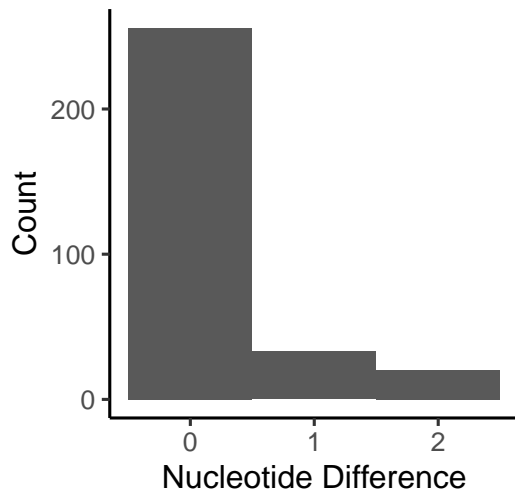
IGHV3-49*03_05

26 sequences assigned
26 (100%) exact matches, in which:
26 unique CDR3
5 unique J



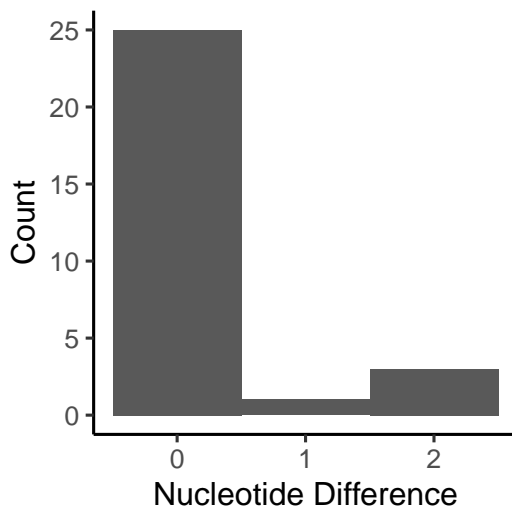
IGHV3-53*01_02

309 sequences assigned
256 (82.8%) exact matches, in which:
247 unique CDR3
6 unique J



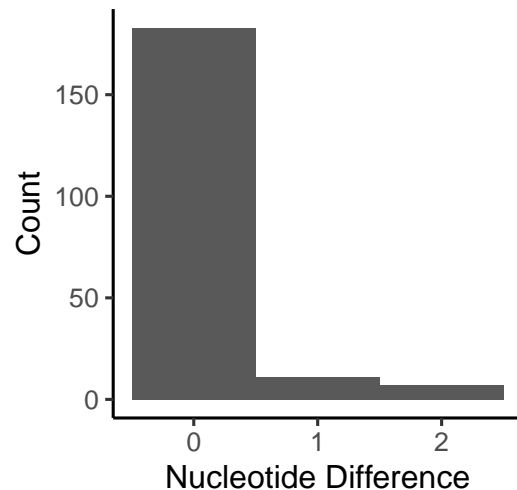
IGHV3-73*01_02

29 sequences assigned
25 (86.2%) exact matches, in which:
25 unique CDR3
4 unique J



IGHV4-4*02_03

201 sequences assigned
183 (91%) exact matches, in which:
181 unique CDR3
6 unique J



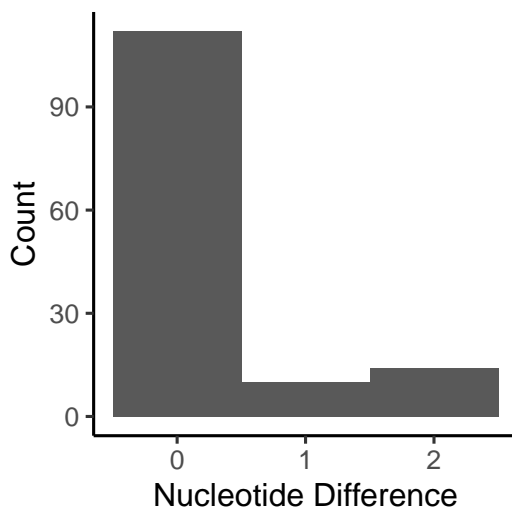
IGHV3-64*02_07

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



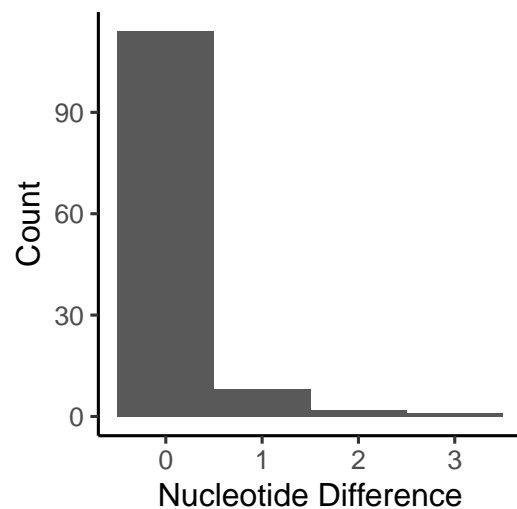
IGHV3-74*01_02

136 sequences assigned
112 (82.4%) exact matches, in which:
108 unique CDR3
6 unique J



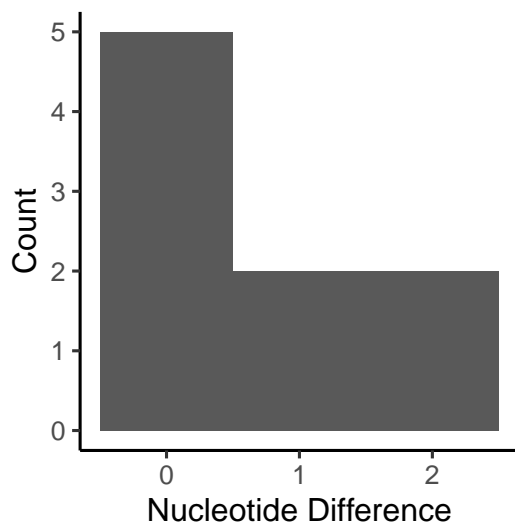
IGHV4-30-2*01

125 sequences assigned
114 (91.2%) exact matches, in which:
109 unique CDR3
6 unique J



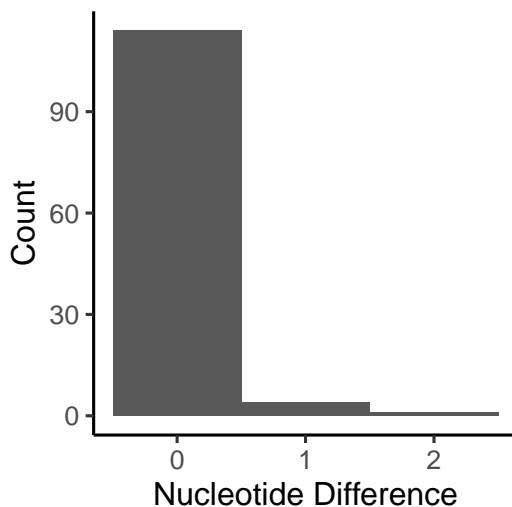
IGHV3-72*01

9 sequences assigned
5 (55.6%) exact matches, in which:
5 unique CDR3
2 unique J



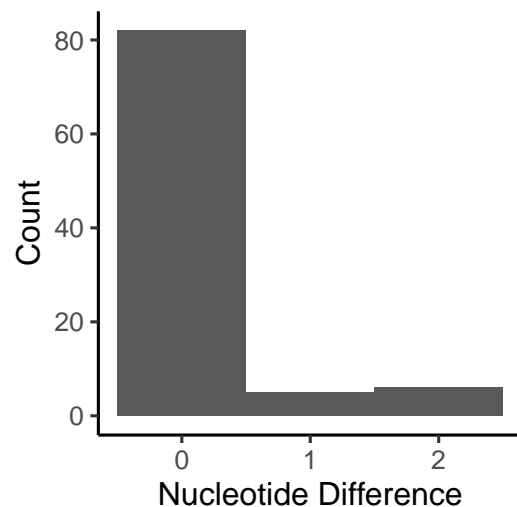
IGHV3-64D*06

119 sequences assigned
114 (95.8%) exact matches, in which:
113 unique CDR3
6 unique J



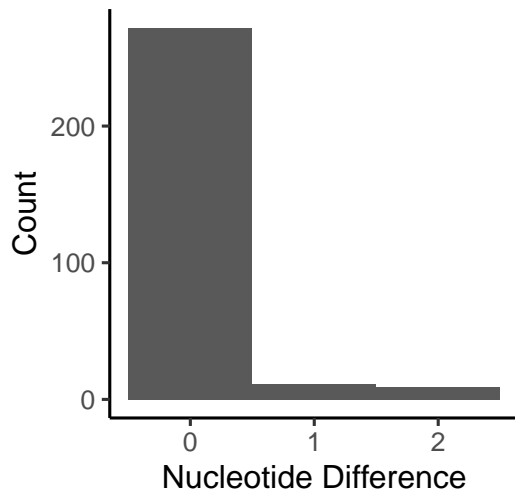
IGHV4-30-4*01

93 sequences assigned
82 (88.2%) exact matches, in which:
81 unique CDR3
6 unique J



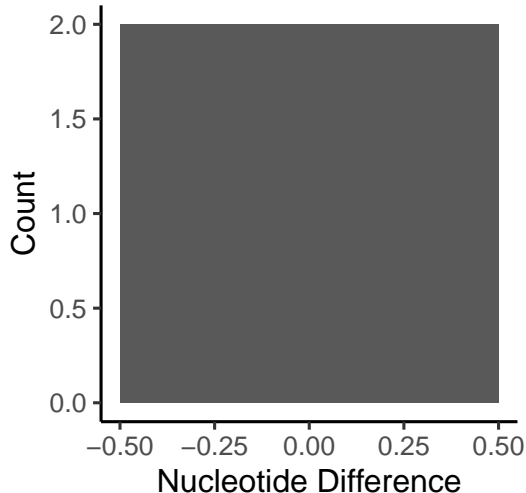
IGHV4-31*02

292 sequences assigned
272 (93.2%) exact matches, in which:
269 unique CDR3
6 unique J



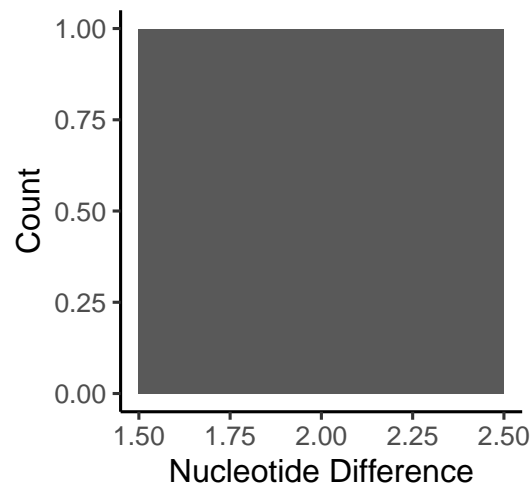
IGHV4-59*01_07

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



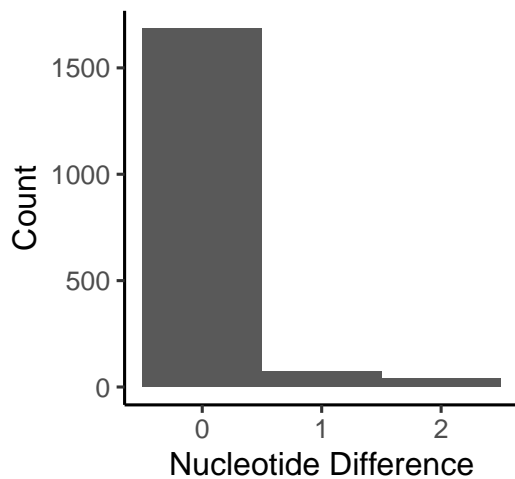
IGHV5-51*04

1 sequences assigned
No exact matches.



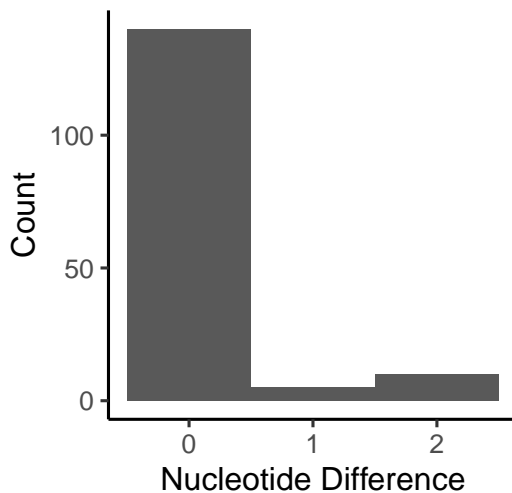
IGHV4-34*01_02

1800 sequences assigned
1684 (93.6%) exact matches, in which:
1630 unique CDR3
6 unique J



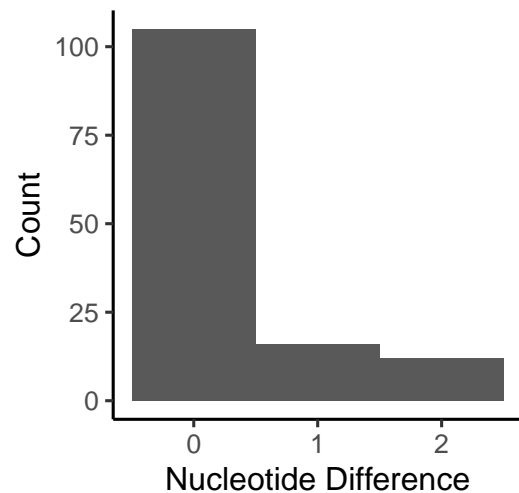
IGHV4-61*01

155 sequences assigned
140 (90.3%) exact matches, in which:
137 unique CDR3
6 unique J



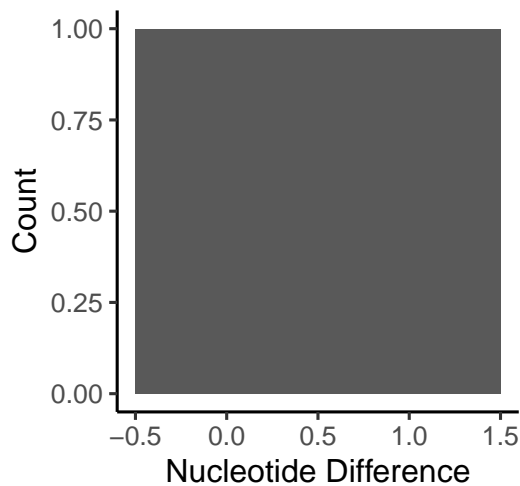
IGHV6-1*01_02

133 sequences assigned
105 (78.9%) exact matches, in which:
104 unique CDR3
5 unique J



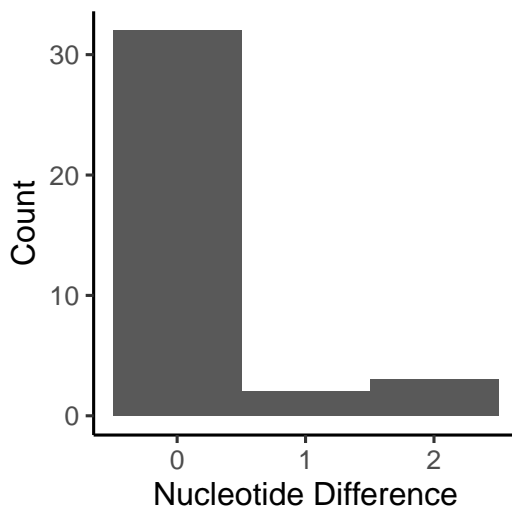
IGHV4-39*02

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



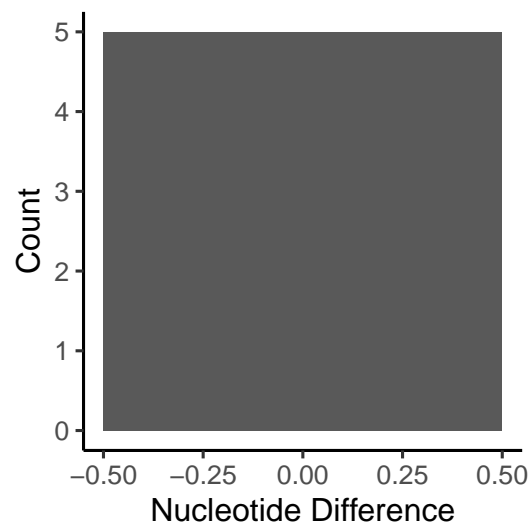
IGHV5-10-1*01_03

37 sequences assigned
32 (86.5%) exact matches, in which:
32 unique CDR3
5 unique J



IGHV7-4-1*01

5 sequences assigned
5 (100%) exact matches, in which:
5 unique CDR3
1 unique J





Warning – no inferred sequences found.