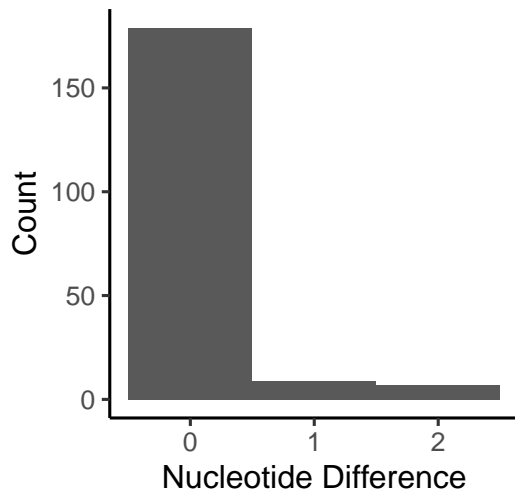


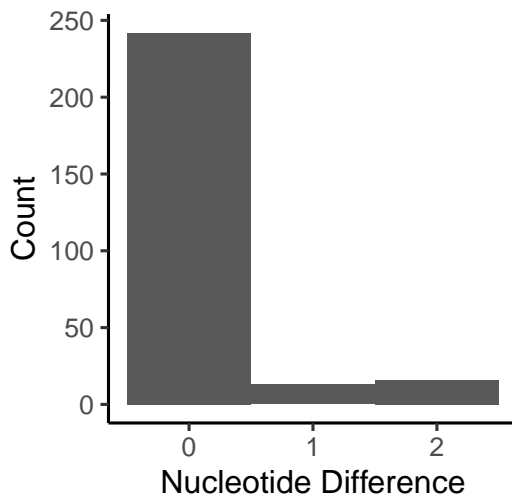
IGHV1-2*02

195 sequences assigned
179 (91.8%) exact matches, in which:
179 unique CDR3
6 unique J



IGHV1-8*01

271 sequences assigned
242 (89.3%) exact matches, in which:
241 unique CDR3
6 unique J



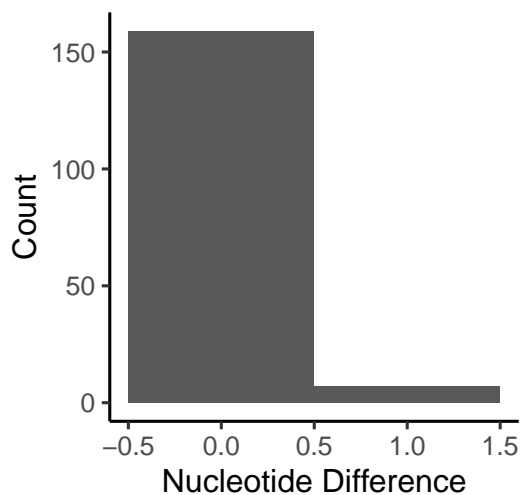
IGHV1-45*02

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



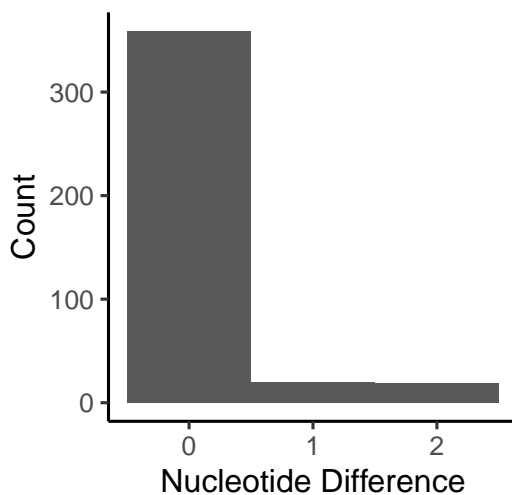
IGHV1-2*06

166 sequences assigned
159 (95.8%) exact matches, in which:
159 unique CDR3
6 unique J



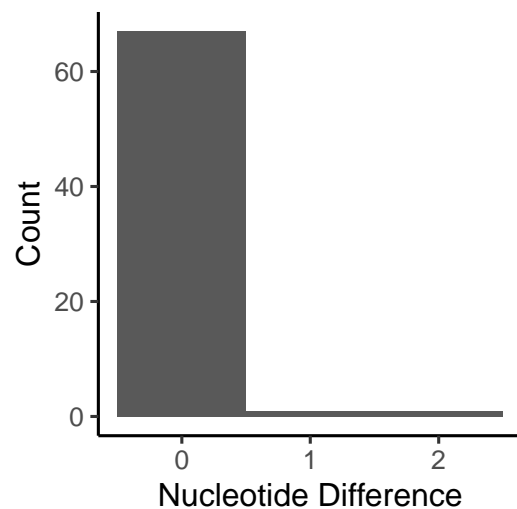
IGHV1-18*01

398 sequences assigned
359 (90.2%) exact matches, in which:
358 unique CDR3
7 unique J



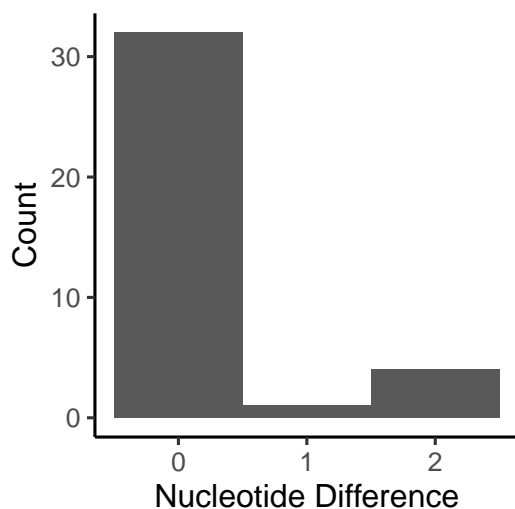
IGHV1-46*01

69 sequences assigned
67 (97.1%) exact matches, in which:
66 unique CDR3
6 unique J



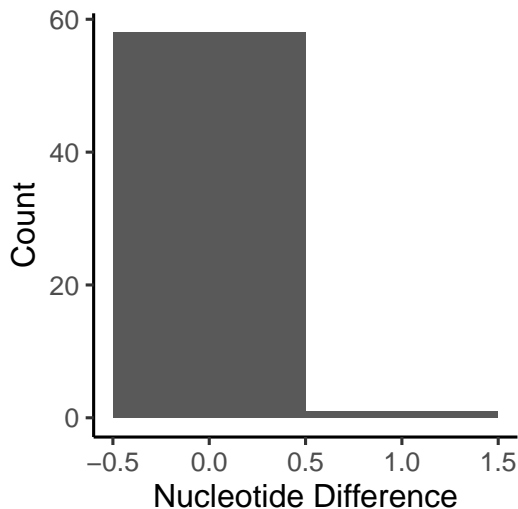
IGHV1-3*01_05

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



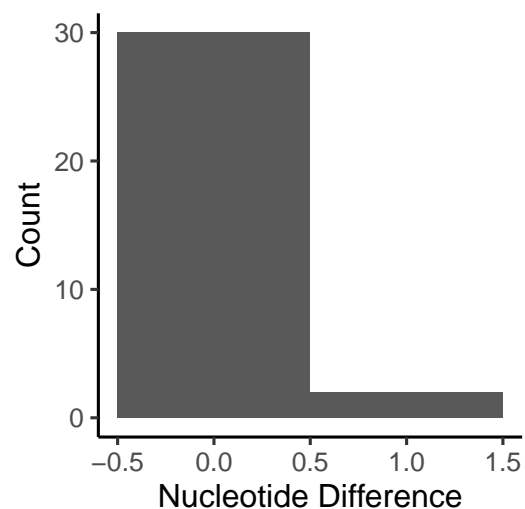
IGHV1-24*01

59 sequences assigned
58 (98.3%) exact matches, in which:
58 unique CDR3
7 unique J



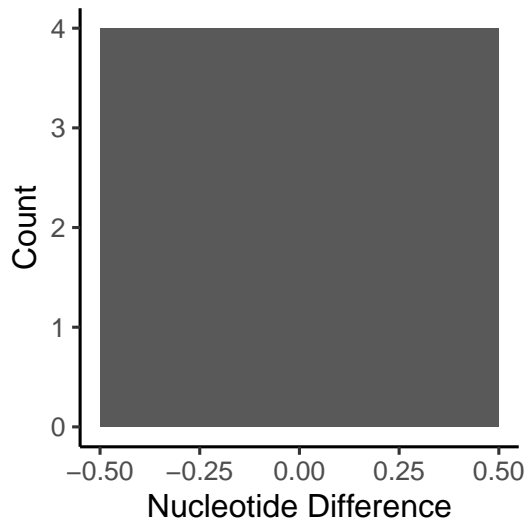
IGHV1-46*03

32 sequences assigned
30 (93.8%) exact matches, in which:
30 unique CDR3
5 unique J



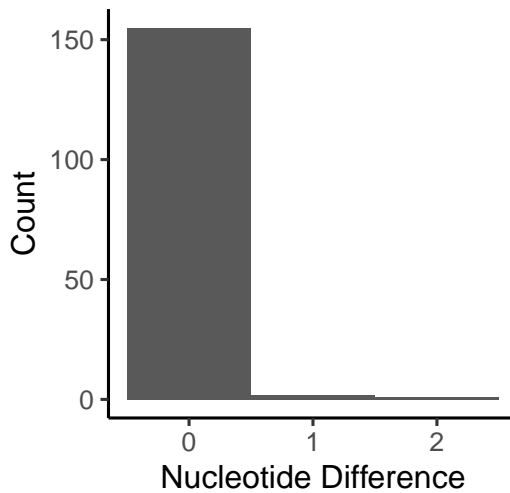
IGHV1-58*02

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



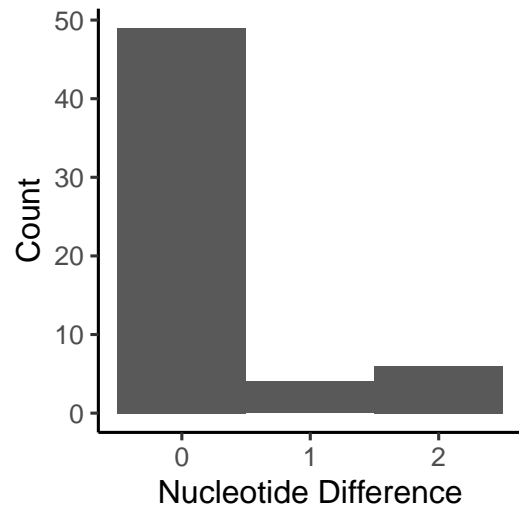
IGHV1-69*01_12_13

158 sequences assigned
155 (98.1%) exact matches, in which:
154 unique CDR3
6 unique J



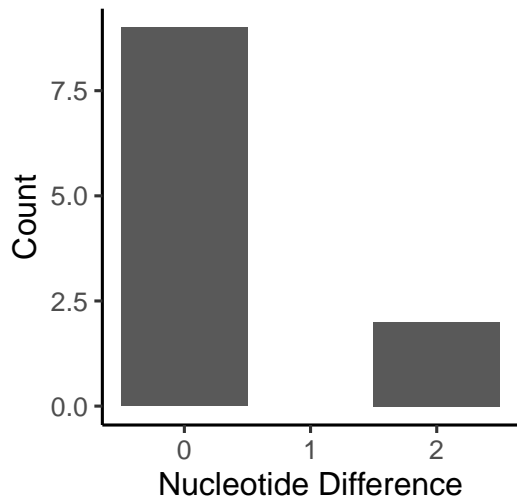
IGHV2-5*02

59 sequences assigned
49 (83.1%) exact matches, in which:
49 unique CDR3
6 unique J



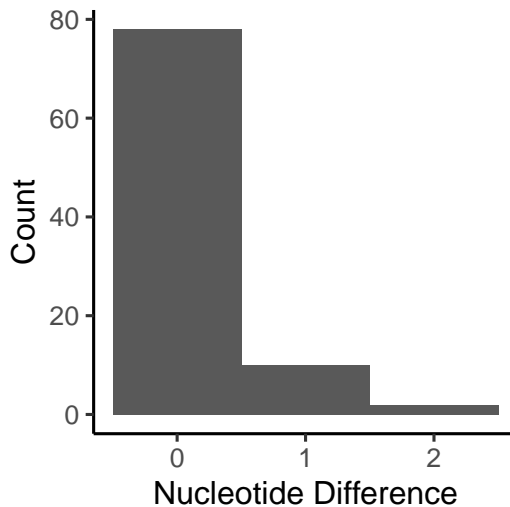
IGHV1-58*01_03

11 sequences assigned
9 (81.8%) exact matches, in which:
9 unique CDR3
3 unique J



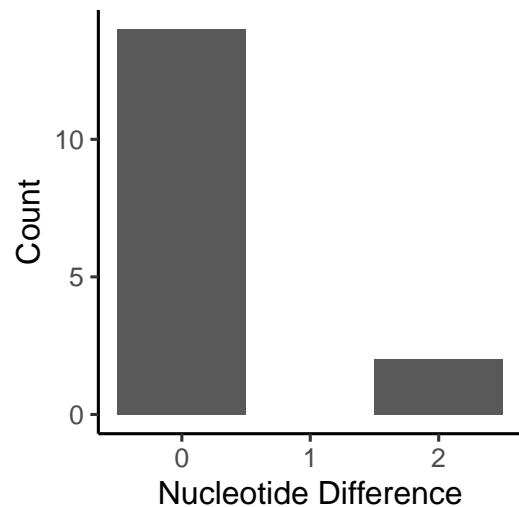
IGHV1-69*04_09

90 sequences assigned
78 (86.7%) exact matches, in which:
78 unique CDR3
6 unique J



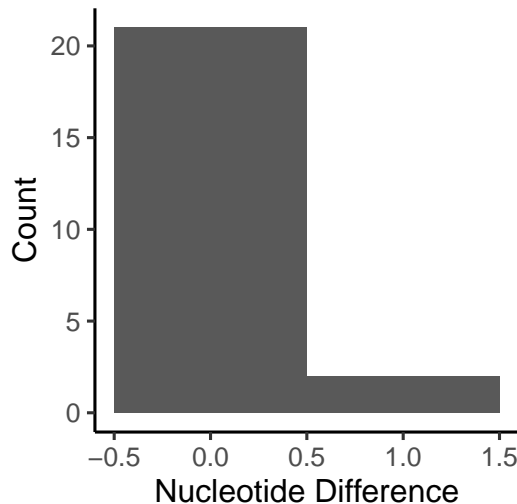
IGHV2-26*01

16 sequences assigned
14 (87.5%) exact matches, in which:
14 unique CDR3
5 unique J



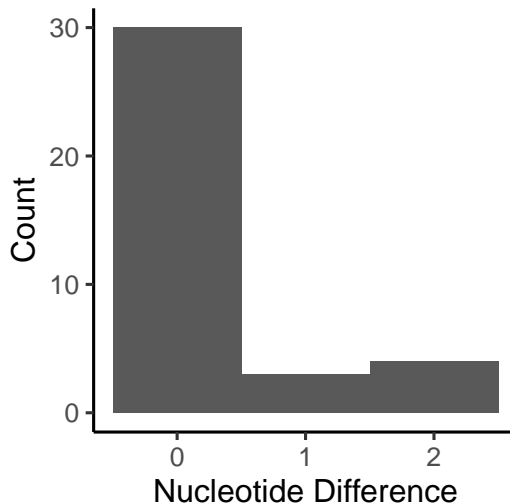
IGHV1-69*02

23 sequences assigned
21 (91.3%) exact matches, in which:
21 unique CDR3
6 unique J



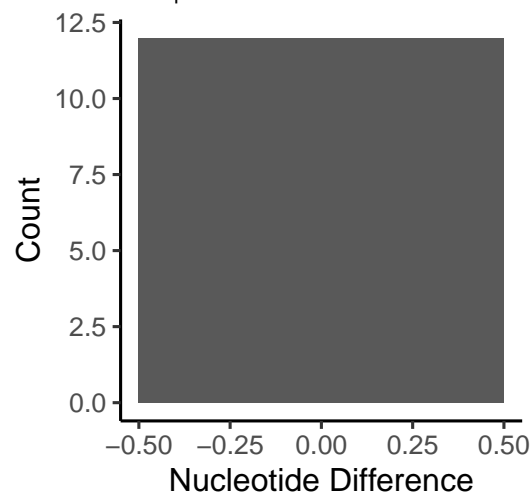
IGHV2-5*01

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



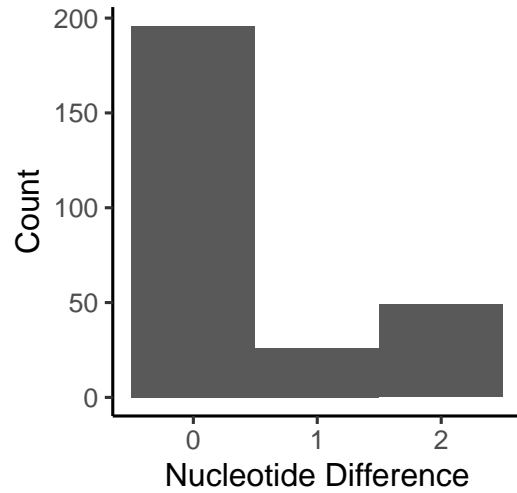
IGHV2-70*01

12 sequences assigned
12 (100%) exact matches, in which:
11 unique CDR3
3 unique J



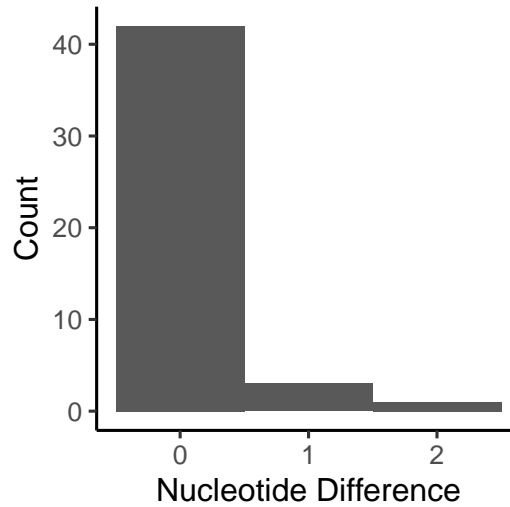
IGHV3-7*01

271 sequences assigned
196 (72.3%) exact matches, in which:
191 unique CDR3
7 unique J



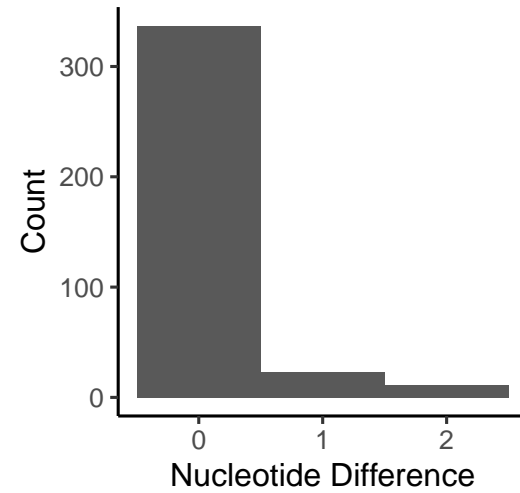
IGHV3-13*01

46 sequences assigned
42 (91.3%) exact matches, in which:
41 unique CDR3
6 unique J



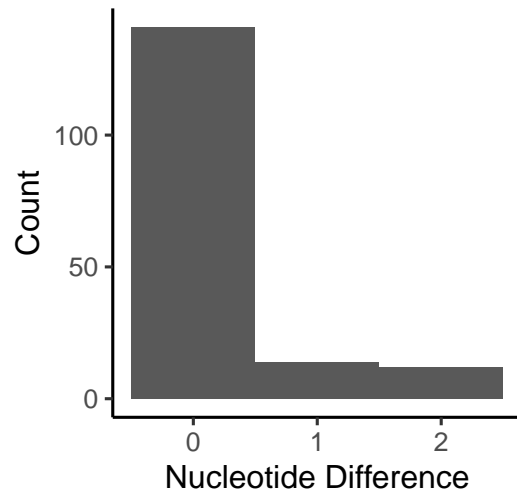
IGHV3-21*01_02

371 sequences assigned
337 (90.8%) exact matches, in which:
332 unique CDR3
7 unique J



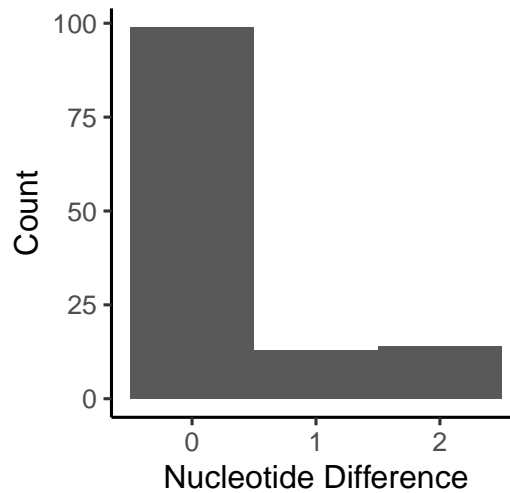
IGHV3-9*01

167 sequences assigned
141 (84.4%) exact matches, in which:
138 unique CDR3
7 unique J



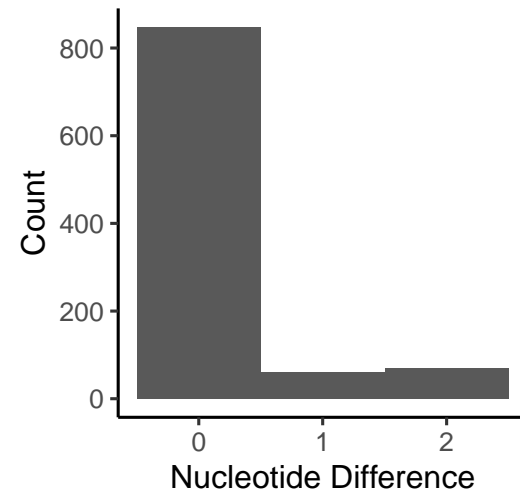
IGHV3-15*01_02

126 sequences assigned
99 (78.6%) exact matches, in which:
97 unique CDR3
7 unique J



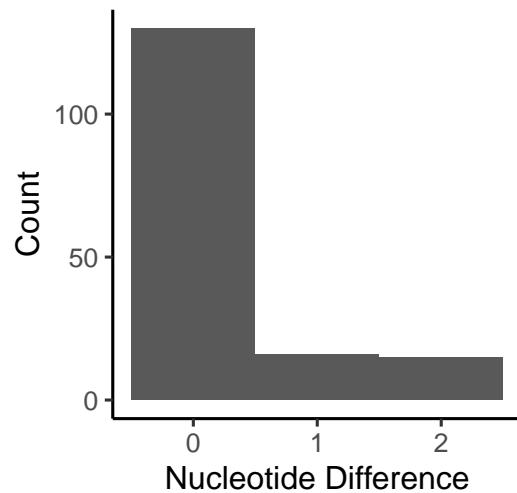
IGHV3-23*01_04

978 sequences assigned
848 (86.7%) exact matches, in which:
819 unique CDR3
7 unique J



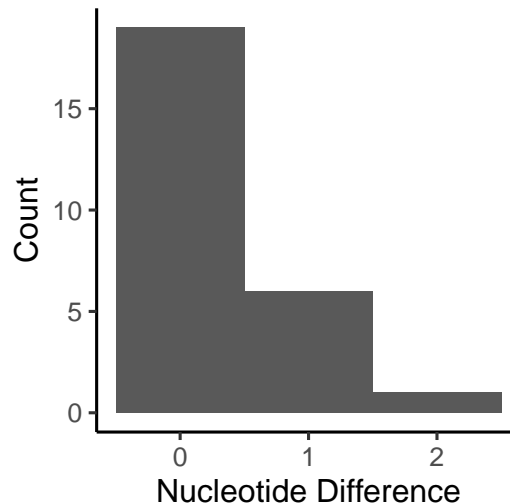
IGHV3-11*01

161 sequences assigned
130 (80.7%) exact matches, in which:
129 unique CDR3
7 unique J



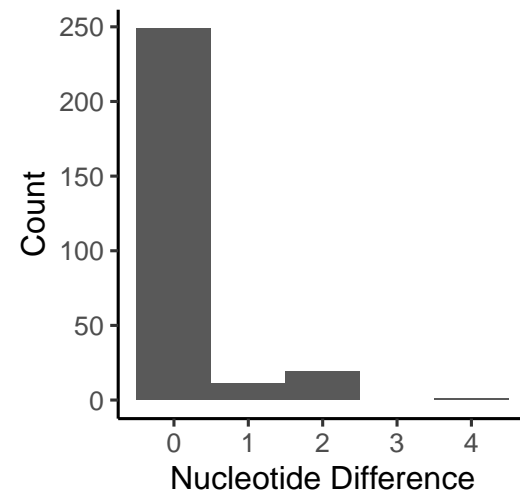
IGHV3-20*01_02

26 sequences assigned
19 (73.1%) exact matches, in which:
19 unique CDR3
6 unique J



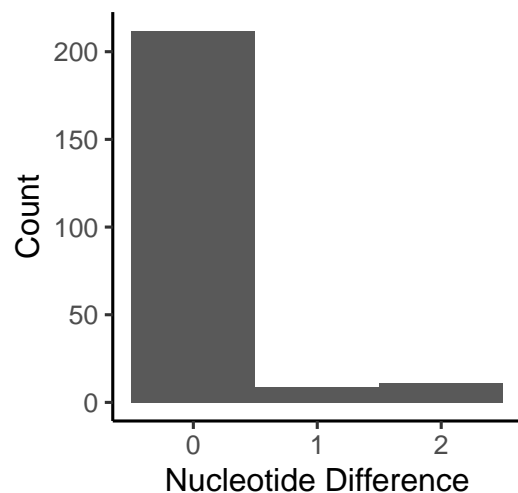
IGHV3-30-3*01

280 sequences assigned
249 (88.9%) exact matches, in which:
249 unique CDR3
7 unique J



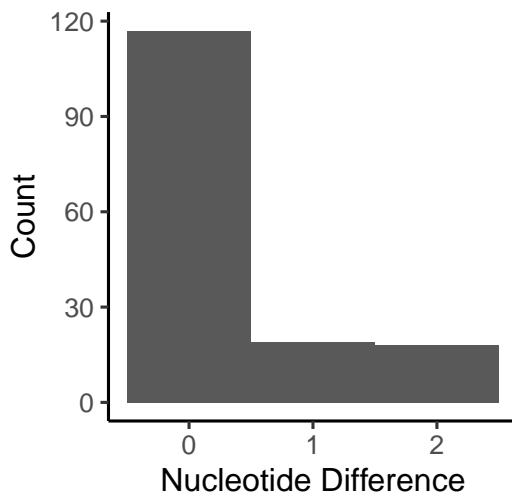
IGHV3–33*01

232 sequences assigned
212 (91.4%) exact matches, in which:
208 unique CDR3
7 unique J



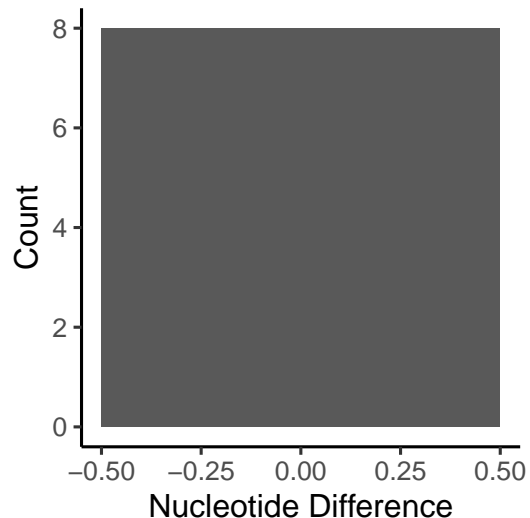
IGHV3–48*02

154 sequences assigned
117 (76%) exact matches, in which:
109 unique CDR3
5 unique J



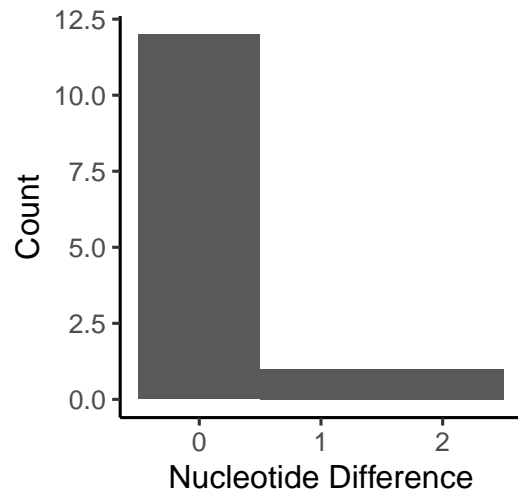
IGHV3–64*01

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



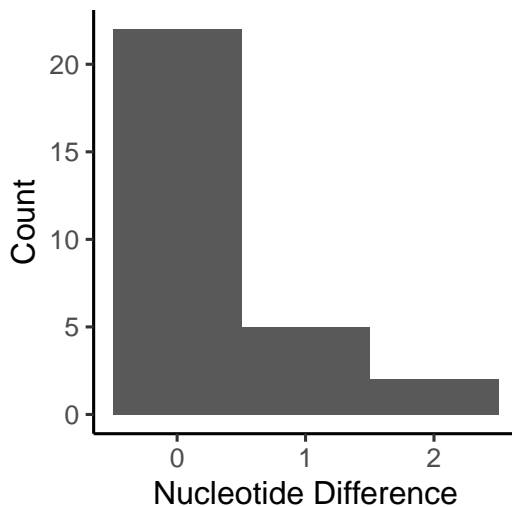
IGHV3–43*01

14 sequences assigned
12 (85.7%) exact matches, in which:
12 unique CDR3
4 unique J



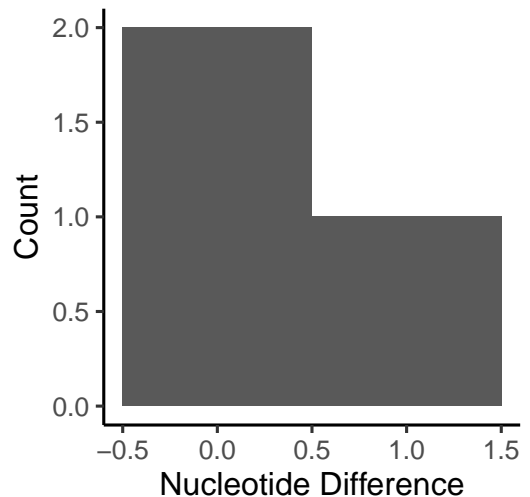
IGHV3–49*03_05

29 sequences assigned
22 (75.9%) exact matches, in which:
22 unique CDR3
4 unique J



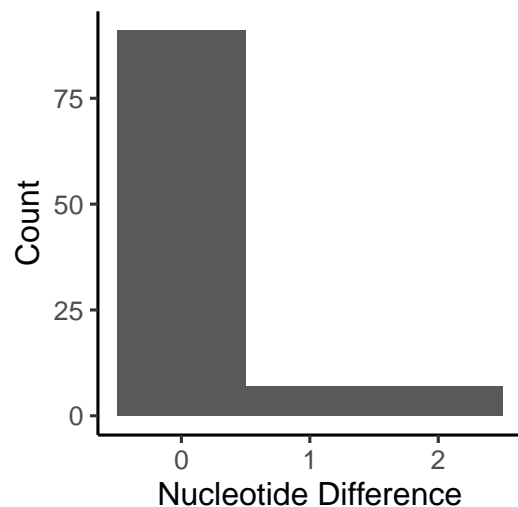
IGHV3–64*02_07

3 sequences assigned
2 (66.7%) exact matches, in which:
2 unique CDR3
1 unique J



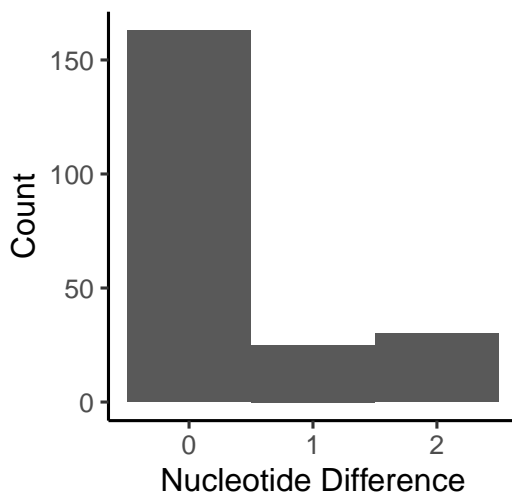
IGHV3–48*01

105 sequences assigned
91 (86.7%) exact matches, in which:
89 unique CDR3
6 unique J



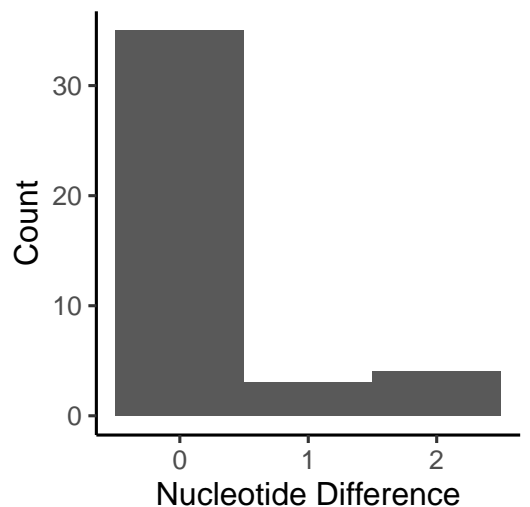
IGHV3–53*01_02

218 sequences assigned
163 (74.8%) exact matches, in which:
158 unique CDR3
6 unique J



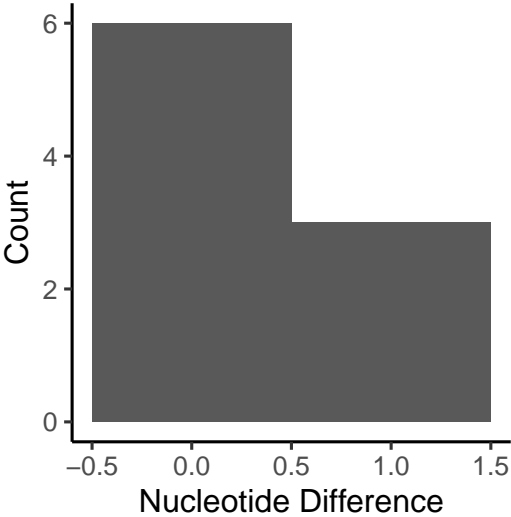
IGHV3–66*02

42 sequences assigned
35 (83.3%) exact matches, in which:
34 unique CDR3
4 unique J



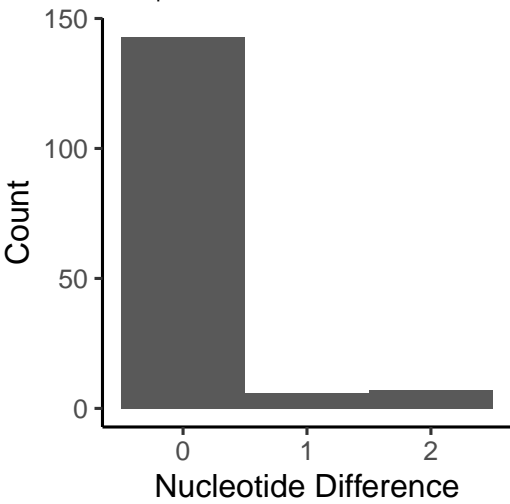
IGHV3-72*01

9 sequences assigned
6 (66.7%) exact matches, in which:
6 unique CDR3
3 unique J



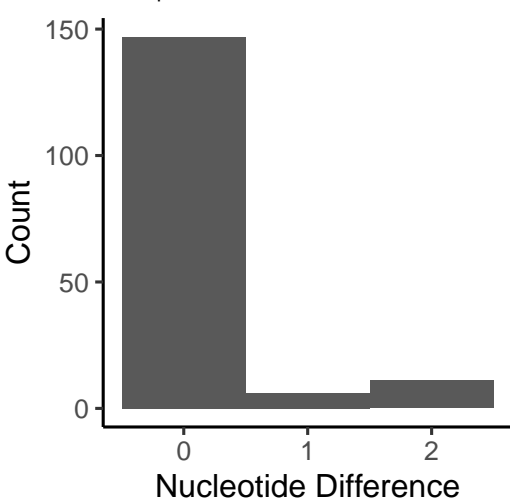
IGHV4-4*07

156 sequences assigned
143 (91.7%) exact matches, in which:
141 unique CDR3
6 unique J



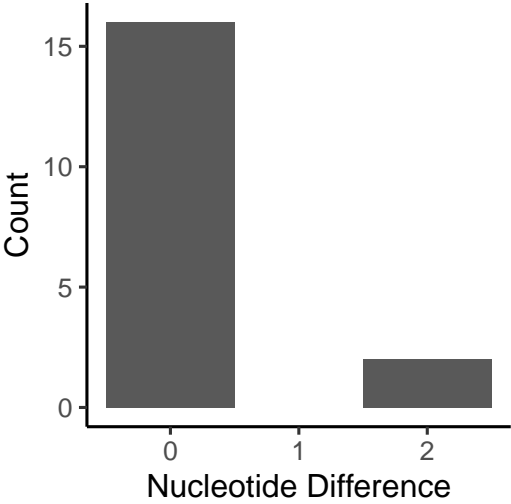
IGHV4-30-4*01

164 sequences assigned
147 (89.6%) exact matches, in which:
145 unique CDR3
7 unique J



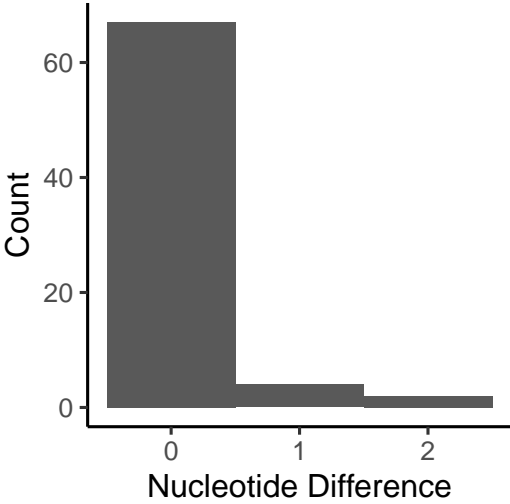
IGHV3-73*01_02

18 sequences assigned
16 (88.9%) exact matches, in which:
16 unique CDR3
3 unique J



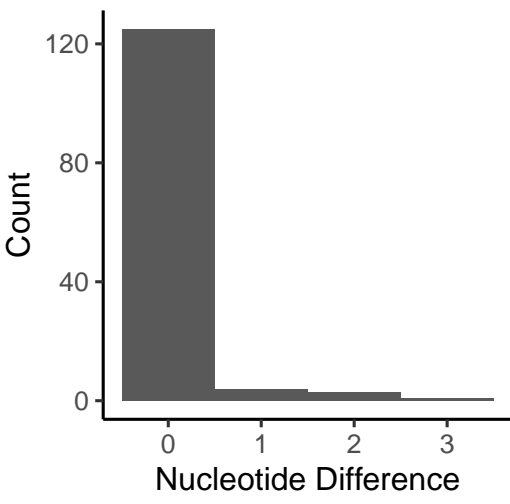
IGHV4-4*02_03

73 sequences assigned
67 (91.8%) exact matches, in which:
67 unique CDR3
4 unique J



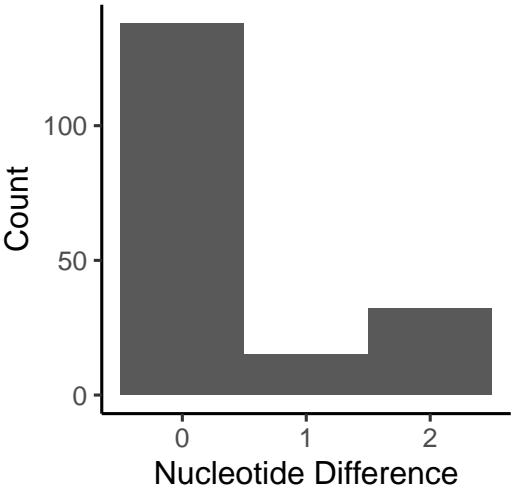
IGHV4-30-2*01

133 sequences assigned
125 (94%) exact matches, in which:
123 unique CDR3
6 unique J



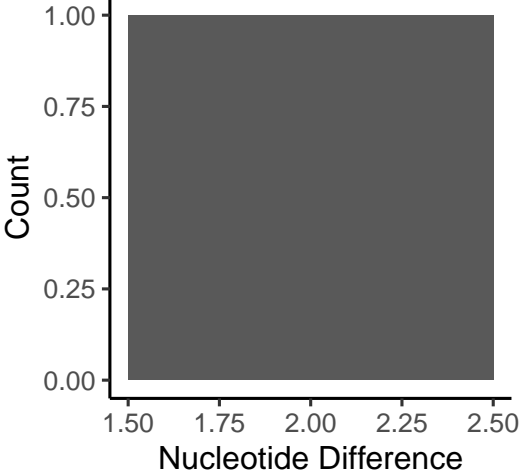
IGHV3-74*01_02

185 sequences assigned
138 (74.6%) exact matches, in which:
132 unique CDR3
7 unique J



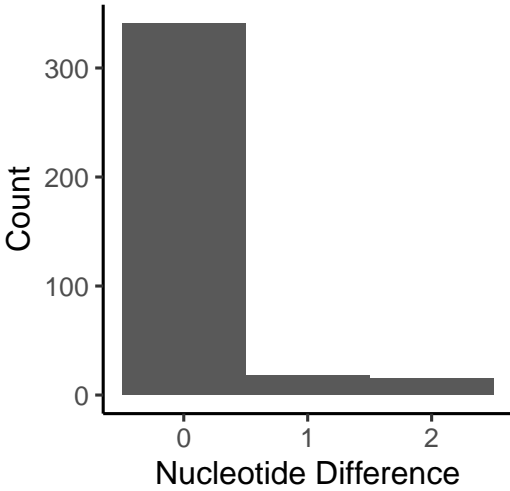
IGHV4-28*01_07

1 sequences assigned
No exact matches.



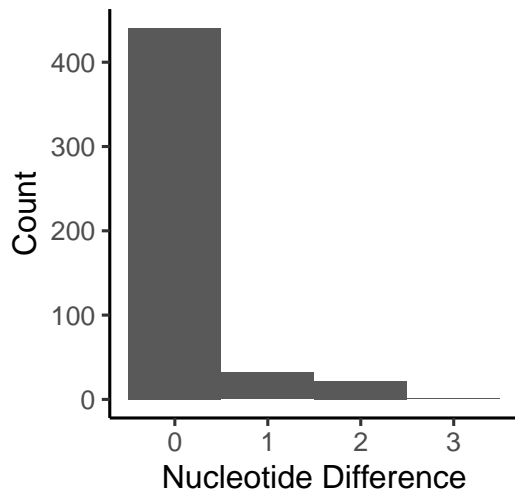
IGHV4-31*02

374 sequences assigned
341 (91.2%) exact matches, in which:
339 unique CDR3
7 unique J



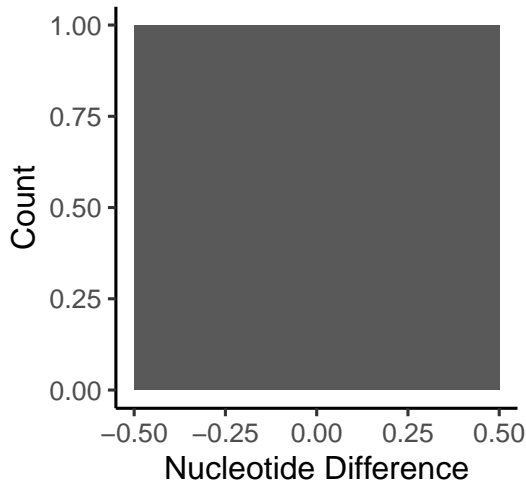
IGHV4-34*01_02

496 sequences assigned
441 (88.9%) exact matches, in which:
440 unique CDR3
7 unique J



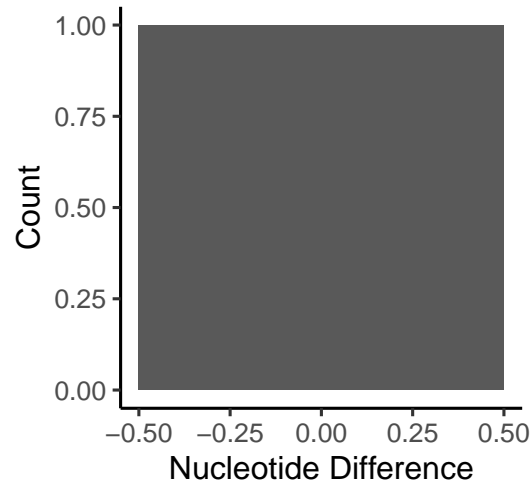
IGHV4-59*11

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



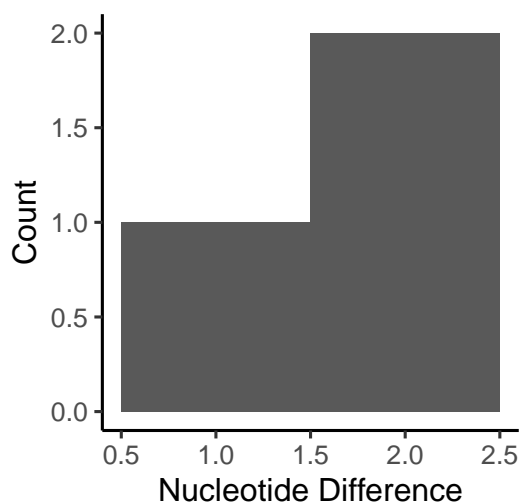
IGHV5-51*07

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



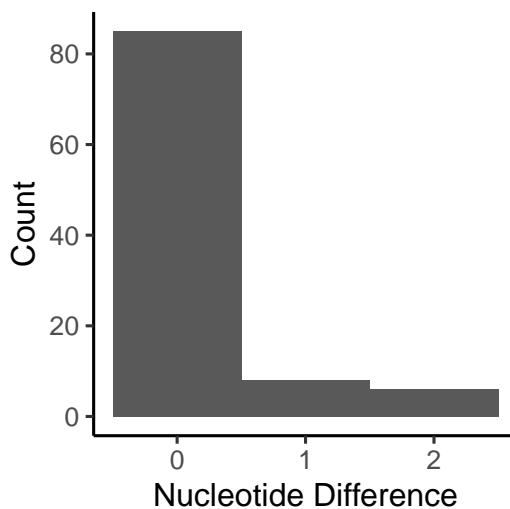
IGHV4-39*02

3 sequences assigned
No exact matches.



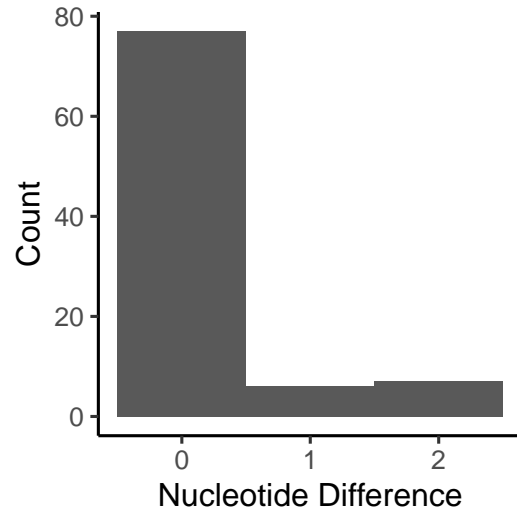
IGHV4-61*01

99 sequences assigned
85 (85.9%) exact matches, in which:
82 unique CDR3
5 unique J



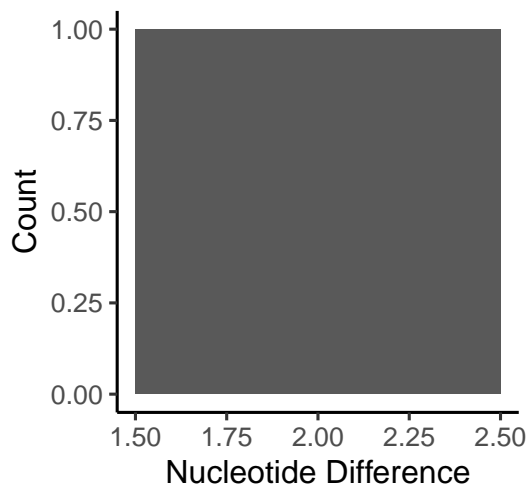
IGHV6-1*01_02

90 sequences assigned
77 (85.6%) exact matches, in which:
77 unique CDR3
6 unique J



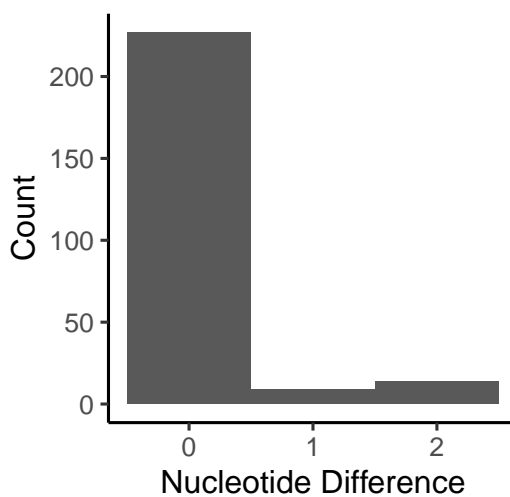
IGHV4-59*02

1 sequences assigned
No exact matches.



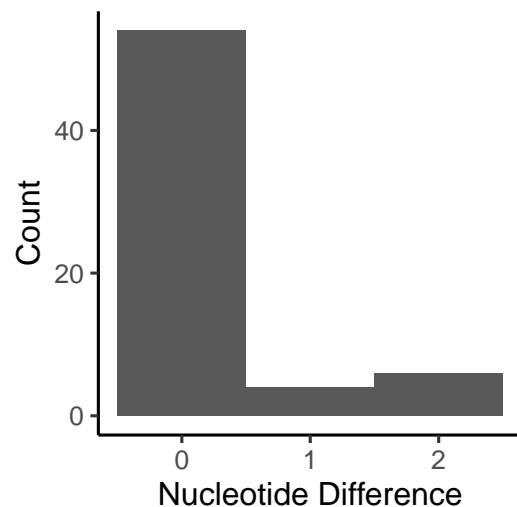
IGHV4-61*02

250 sequences assigned
227 (90.8%) exact matches, in which:
221 unique CDR3
6 unique J

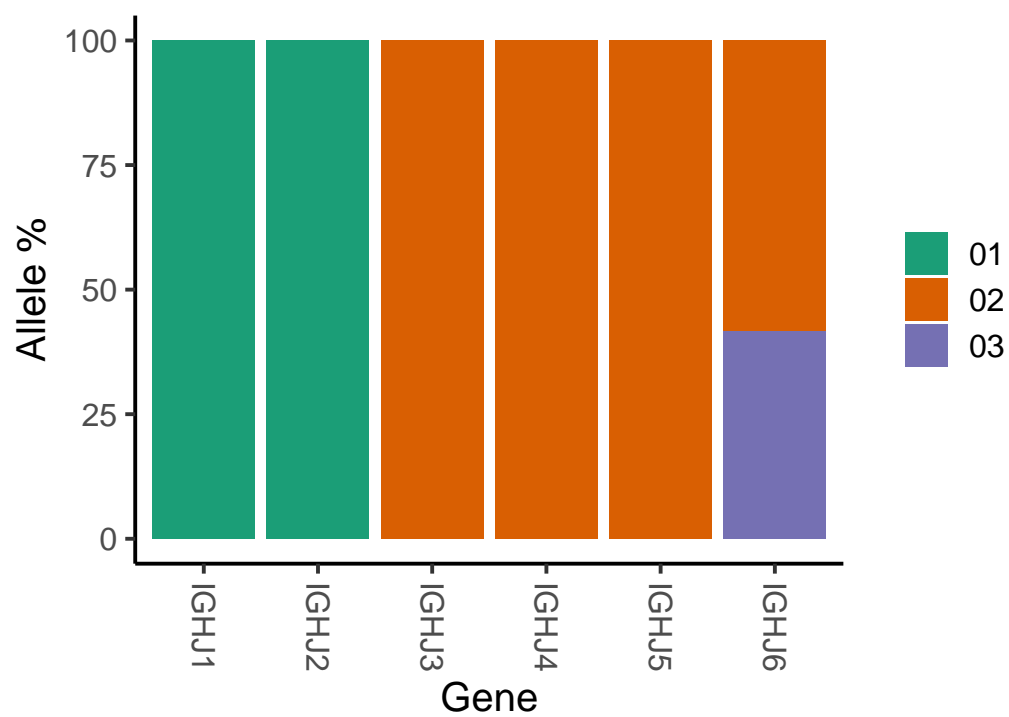


IGHV7-4-1*02

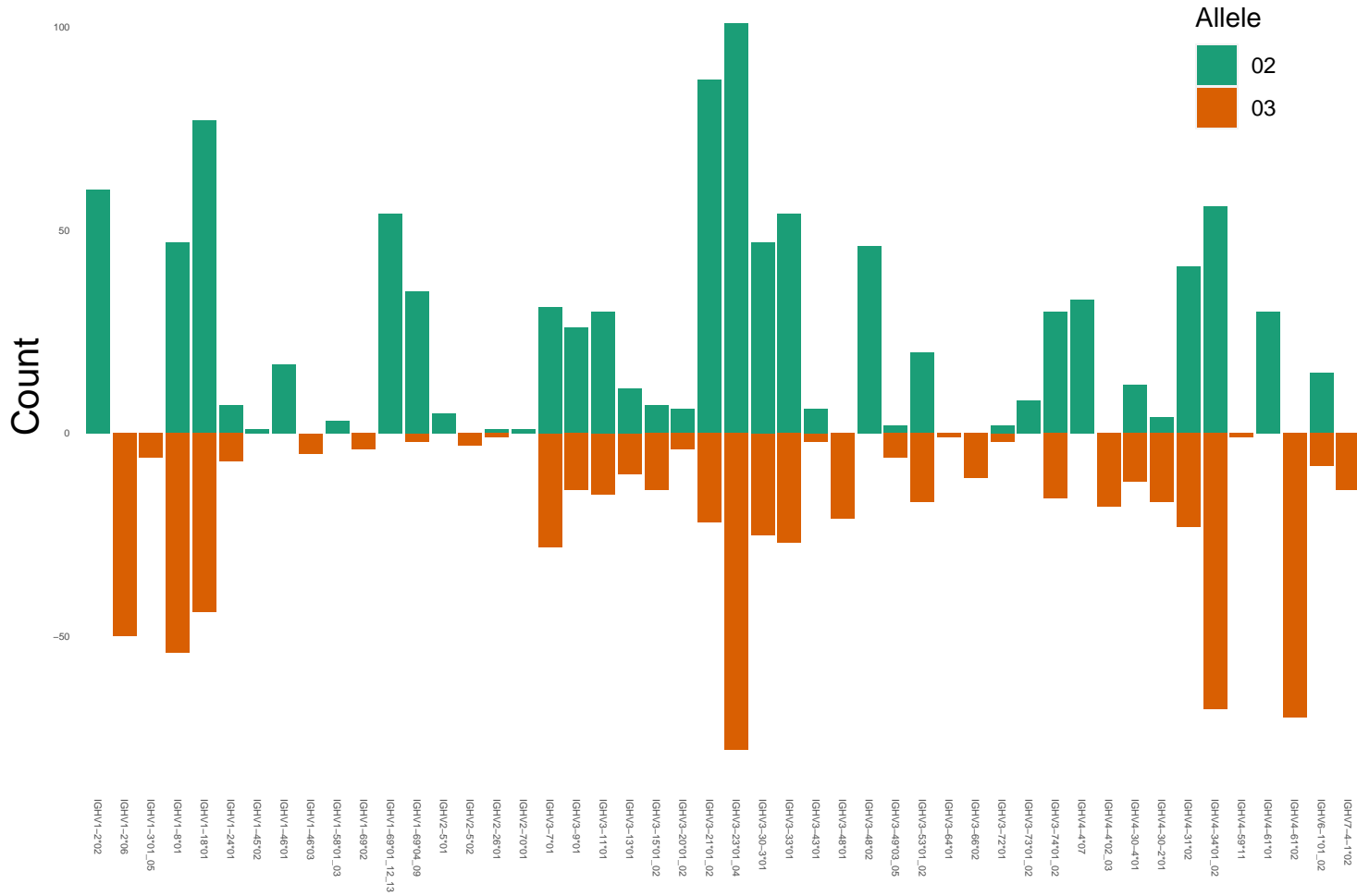
64 sequences assigned
54 (84.4%) exact matches, in which:
54 unique CDR3
6 unique J



Allele Usage



Sequence Count by IGHJ6 allele usage



[illegible]