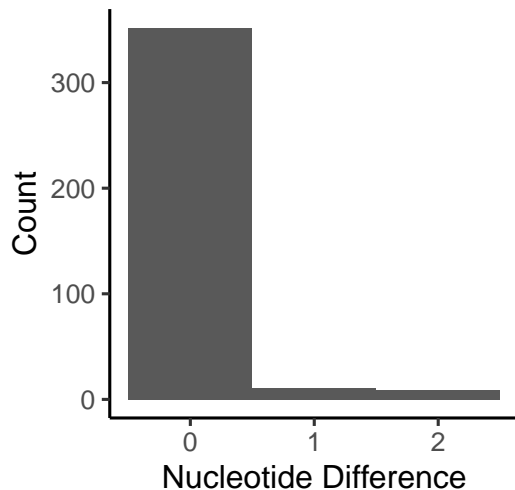


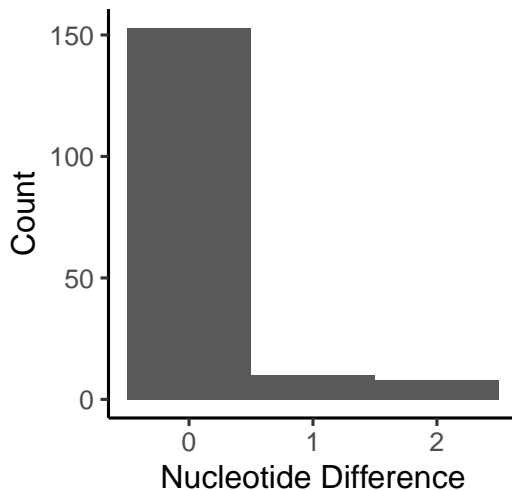
IGHV1-2*02

372 sequences assigned
352 (94.6%) exact matches, in which:
352 unique CDR3
7 unique J



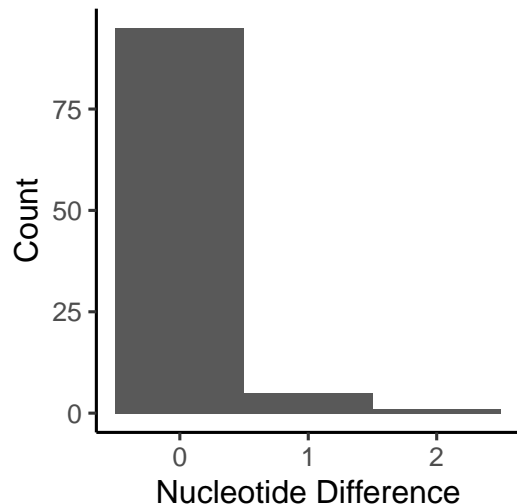
IGHV1-8*01

171 sequences assigned
153 (89.5%) exact matches, in which:
153 unique CDR3
6 unique J



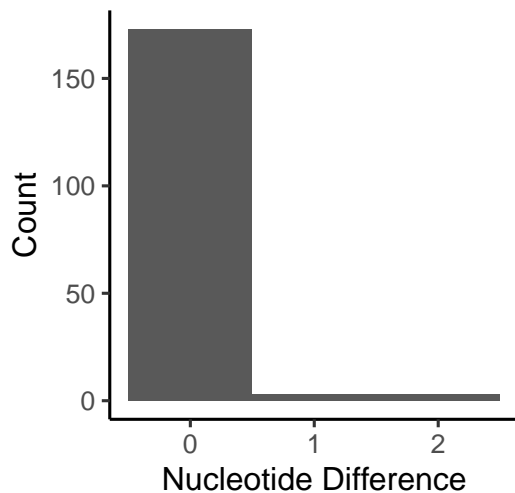
IGHV1-46*01

101 sequences assigned
95 (94.1%) exact matches, in which:
95 unique CDR3
6 unique J



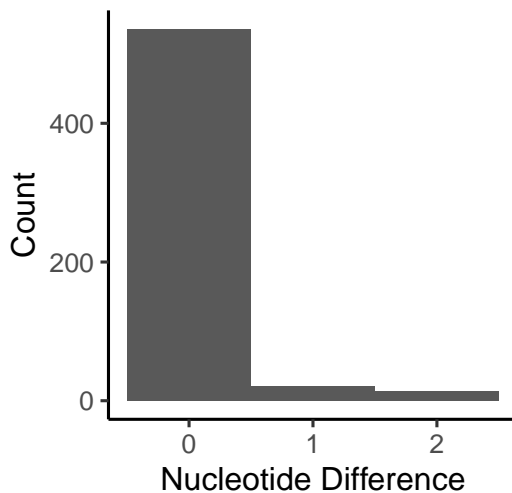
IGHV1-2*04

179 sequences assigned
173 (96.6%) exact matches, in which:
173 unique CDR3
5 unique J



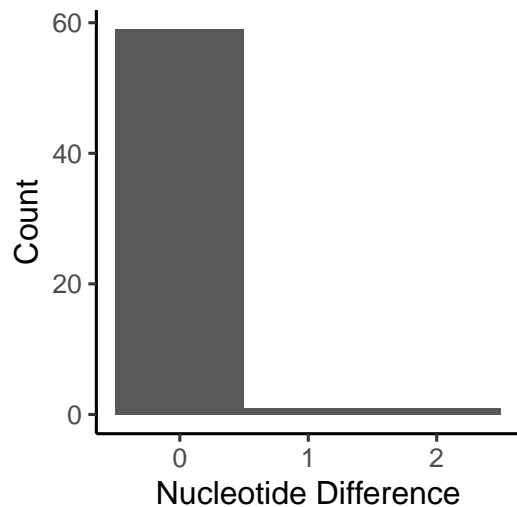
IGHV1-18*01

570 sequences assigned
536 (94%) exact matches, in which:
535 unique CDR3
7 unique J



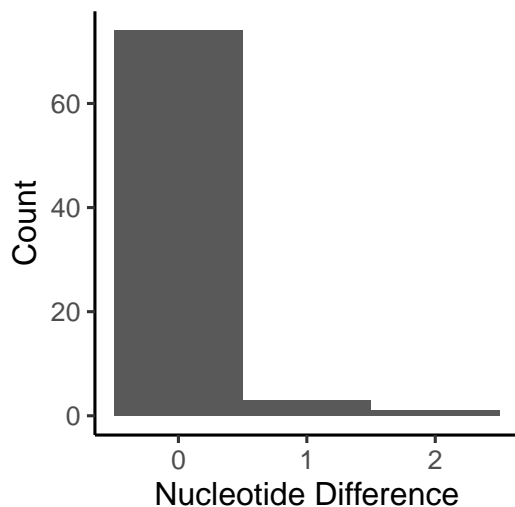
IGHV1-46*03

61 sequences assigned
59 (96.7%) exact matches, in which:
59 unique CDR3
5 unique J



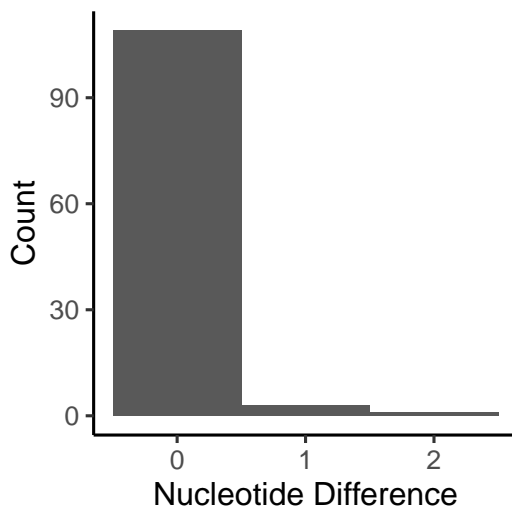
IGHV1-3*01_05

78 sequences assigned
74 (94.9%) exact matches, in which:
74 unique CDR3
4 unique J



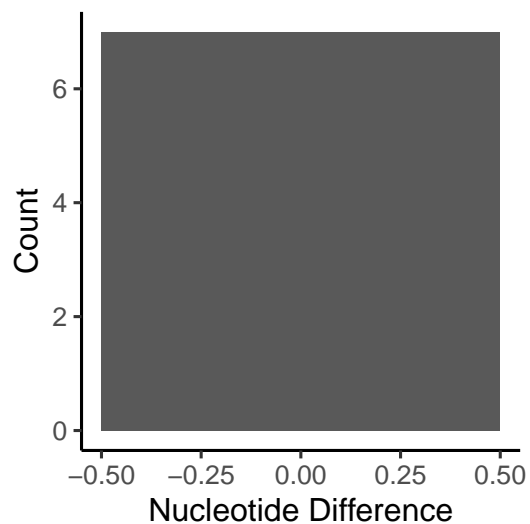
IGHV1-24*01

113 sequences assigned
109 (96.5%) exact matches, in which:
109 unique CDR3
7 unique J



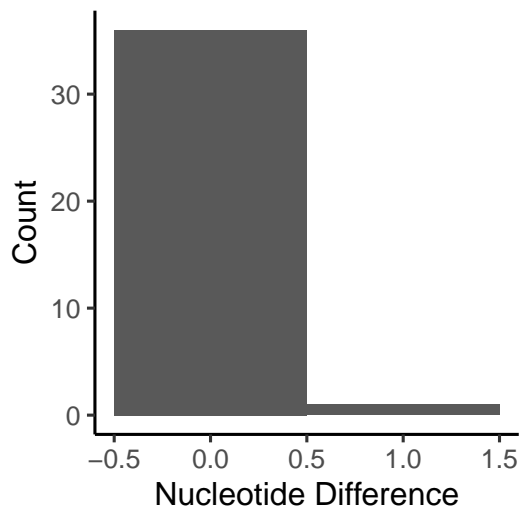
IGHV1-58*02

7 sequences assigned
7 (100%) exact matches, in which:
7 unique CDR3
3 unique J



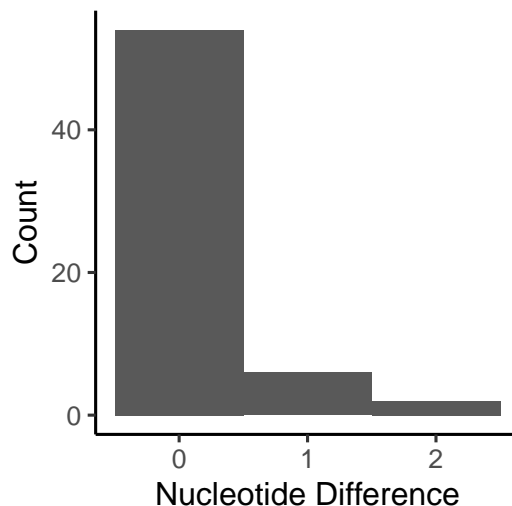
IGHV1–58*01_03

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



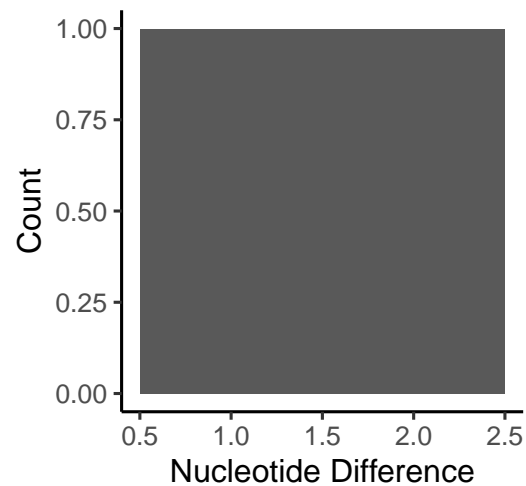
IGHV2–5*02

62 sequences assigned
54 (87.1%) exact matches, in which:
54 unique CDR3
5 unique J



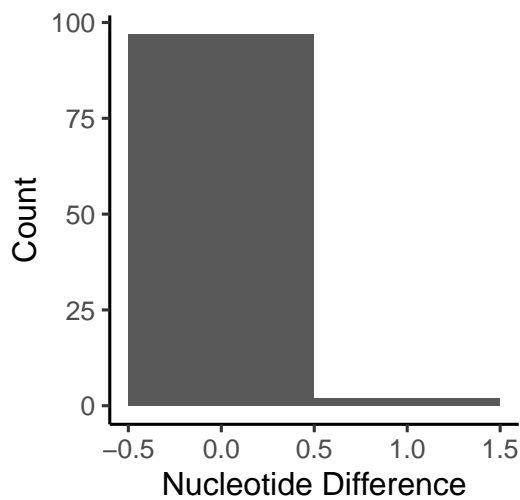
IGHV2–70D*04

2 sequences assigned
No exact matches.



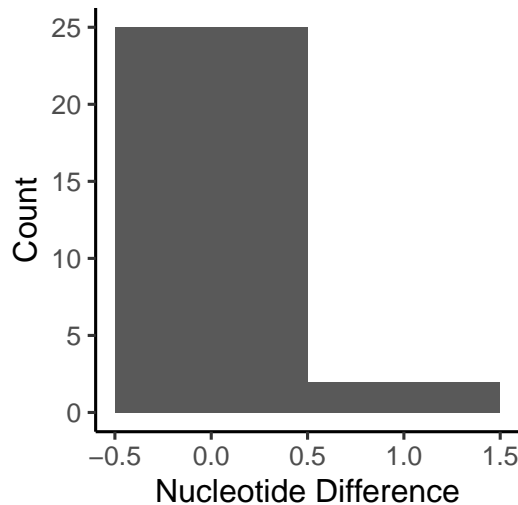
IGHV1–69*02

99 sequences assigned
97 (98%) exact matches, in which:
97 unique CDR3
5 unique J



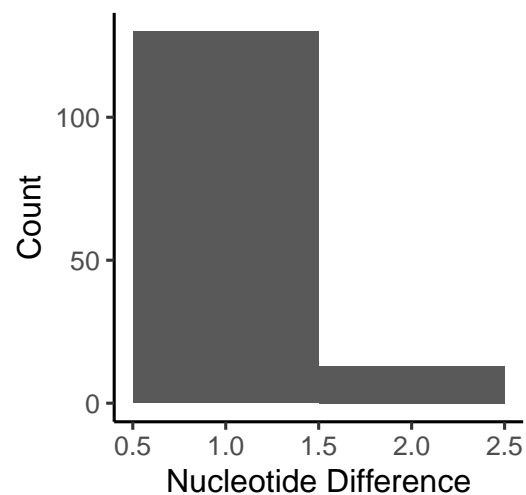
IGHV2–26*01

27 sequences assigned
25 (92.6%) exact matches, in which:
25 unique CDR3
6 unique J



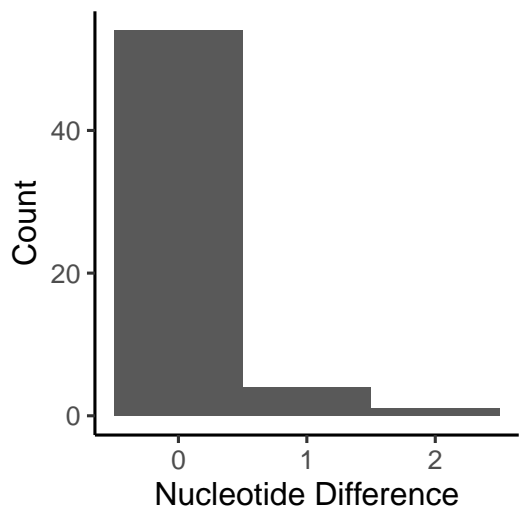
IGHV3–7*01

143 sequences assigned
No exact matches.



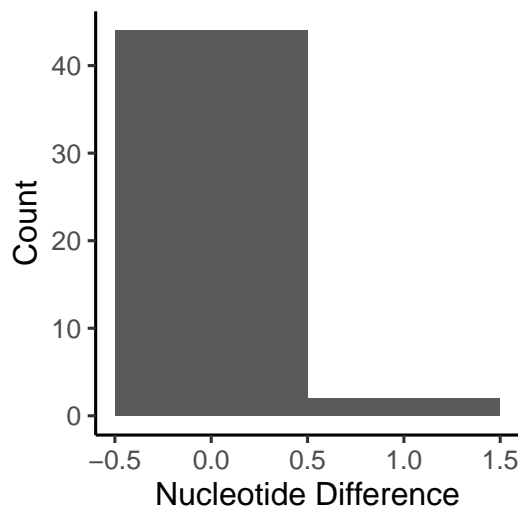
IGHV2–5*01

59 sequences assigned
54 (91.5%) exact matches, in which:
54 unique CDR3
5 unique J



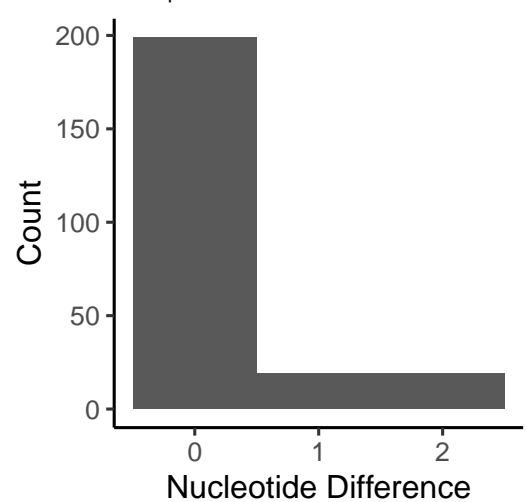
IGHV2–70*01

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



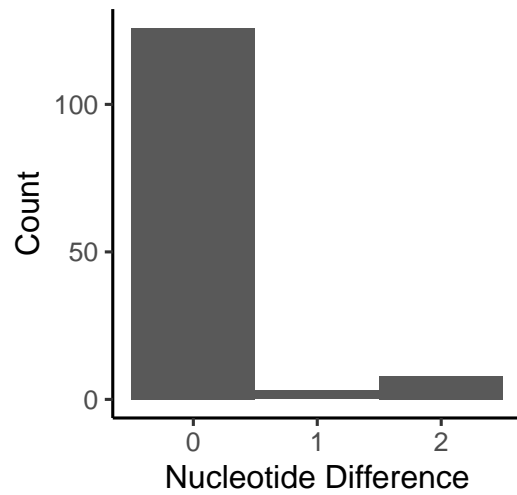
IGHV3–7*03

237 sequences assigned
199 (84%) exact matches, in which:
193 unique CDR3
6 unique J



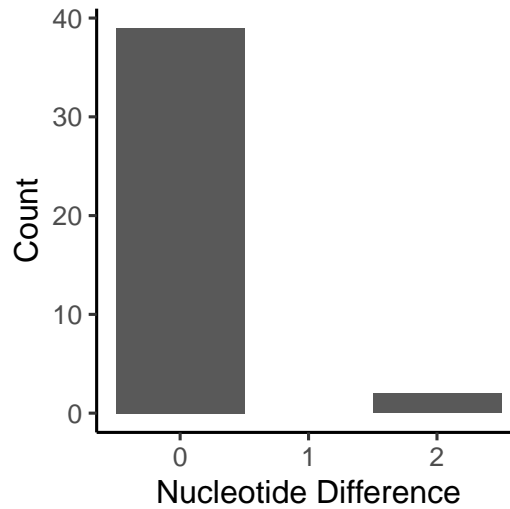
IGHV3-9*01

137 sequences assigned
126 (92%) exact matches, in which:
126 unique CDR3
6 unique J



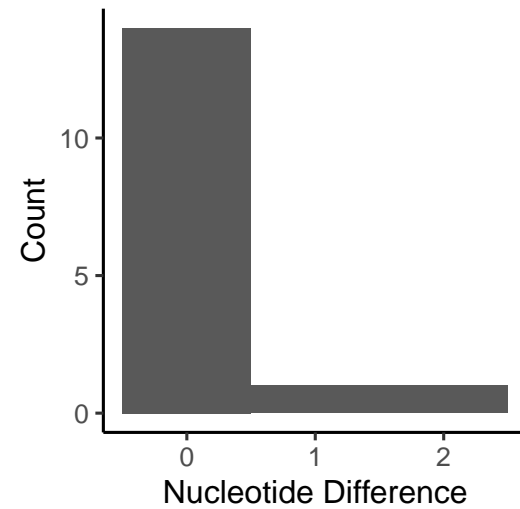
IGHV3-13*01

41 sequences assigned
39 (95.1%) exact matches, in which:
39 unique CDR3
5 unique J



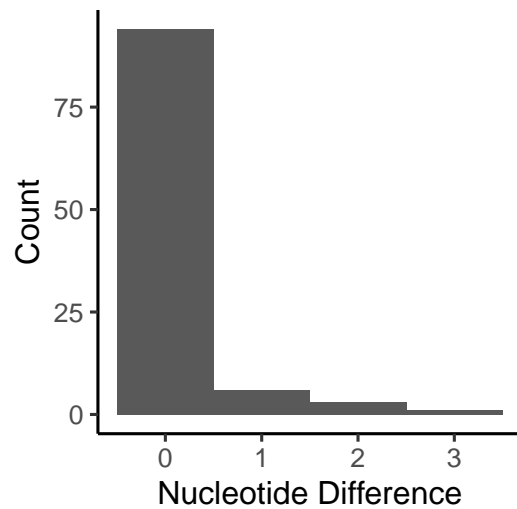
IGHV3-20*01_02

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



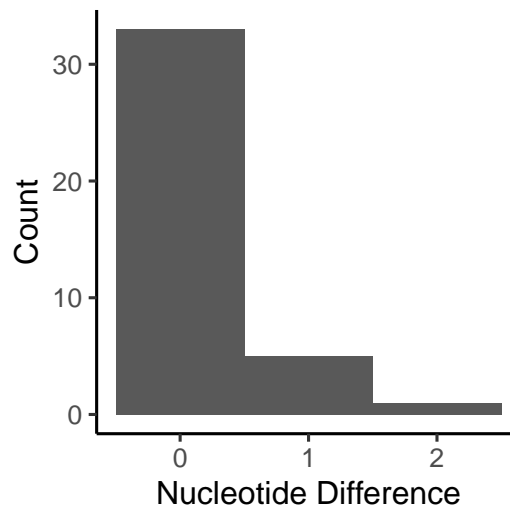
IGHV3-11*01

104 sequences assigned
94 (90.4%) exact matches, in which:
92 unique CDR3
5 unique J



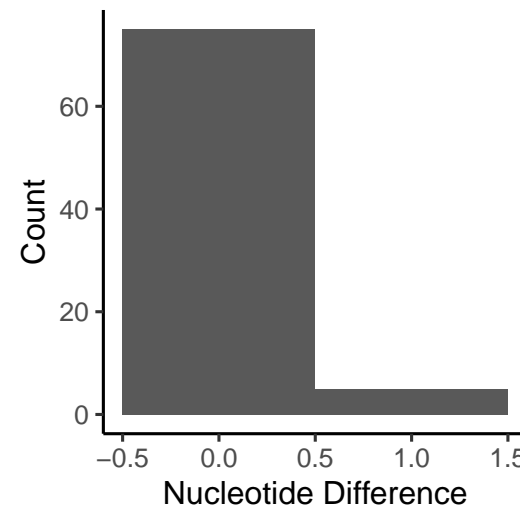
IGHV3-13*04

39 sequences assigned
33 (84.6%) exact matches, in which:
33 unique CDR3
4 unique J



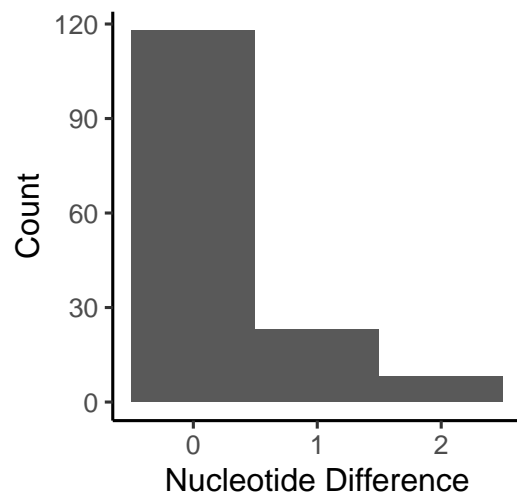
IGHV3-20*03_04

80 sequences assigned
75 (93.8%) exact matches, in which:
74 unique CDR3
5 unique J



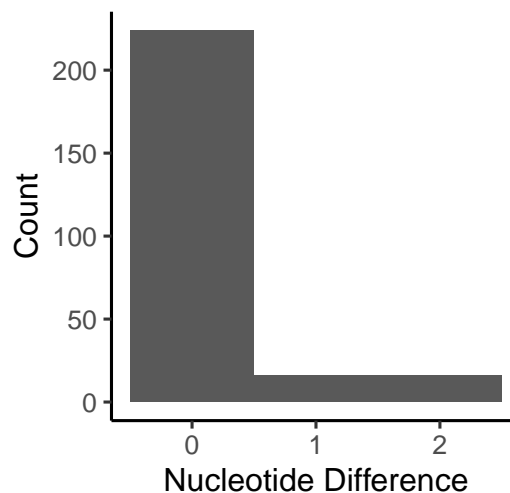
IGHV3-11*03_05

149 sequences assigned
118 (79.2%) exact matches, in which:
116 unique CDR3
6 unique J



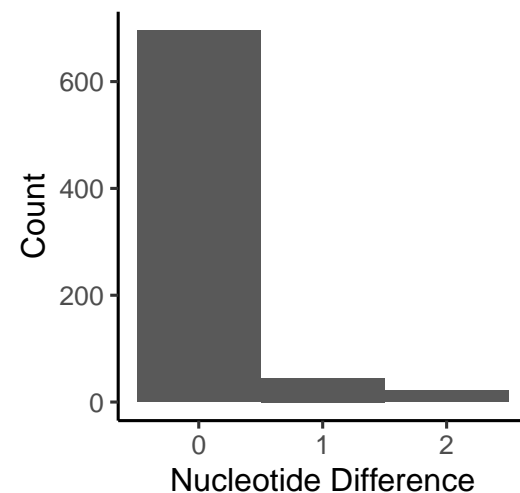
IGHV3-15*01_02

256 sequences assigned
224 (87.5%) exact matches, in which:
221 unique CDR3
7 unique J



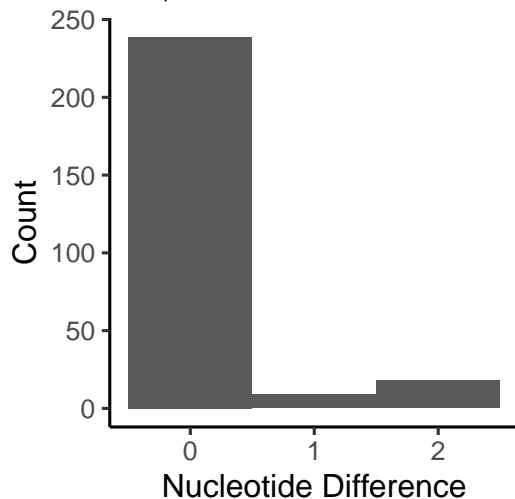
IGHV3-21*01_02

763 sequences assigned
696 (91.2%) exact matches, in which:
692 unique CDR3
7 unique J



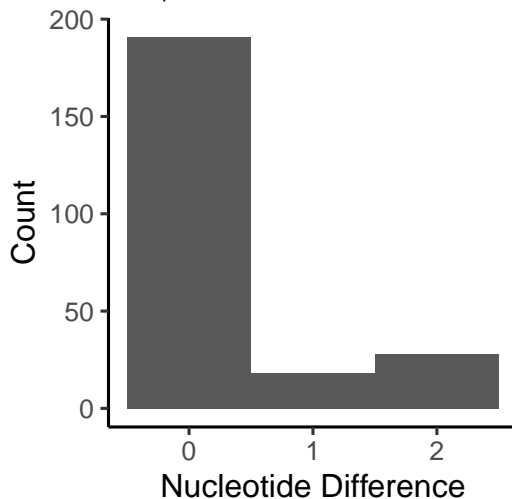
IGHV3–33*01

266 sequences assigned
239 (89.8%) exact matches, in which:
228 unique CDR3
6 unique J



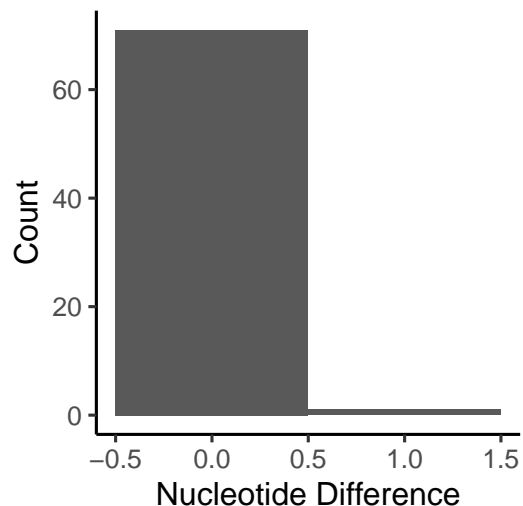
IGHV3–48*03

237 sequences assigned
191 (80.6%) exact matches, in which:
187 unique CDR3
6 unique J



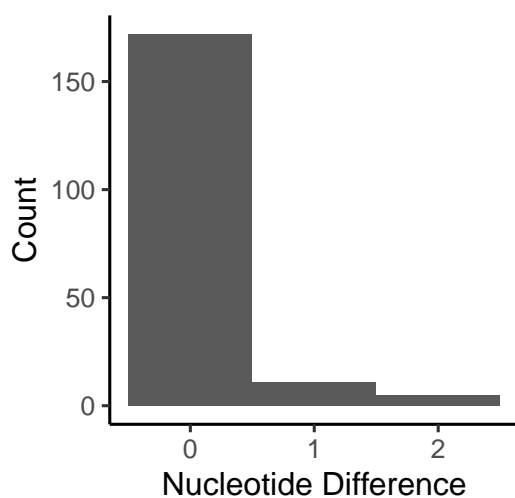
IGHV3–53*04

72 sequences assigned
71 (98.6%) exact matches, in which:
70 unique CDR3
6 unique J



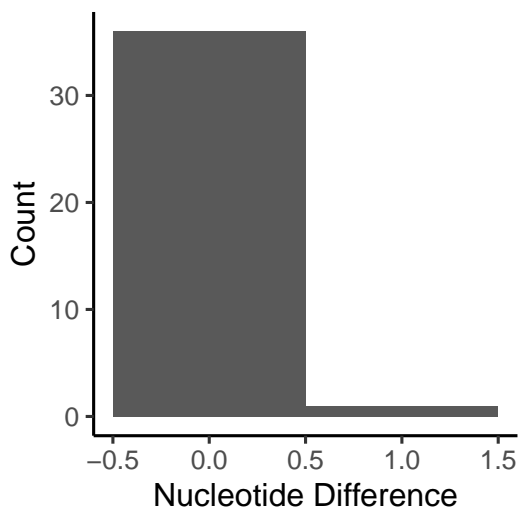
IGHV3–43*02

188 sequences assigned
172 (91.5%) exact matches, in which:
169 unique CDR3
6 unique J



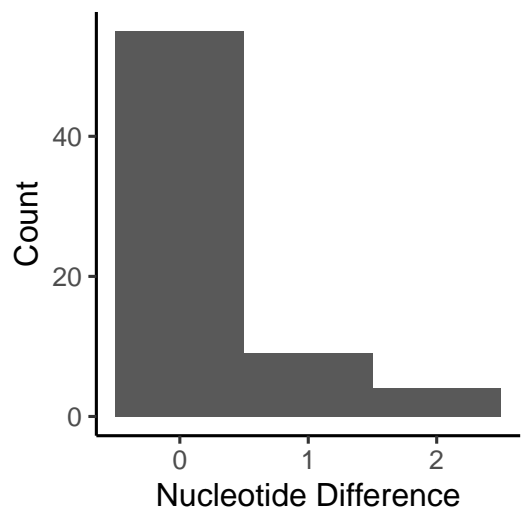
IGHV3–49*04

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



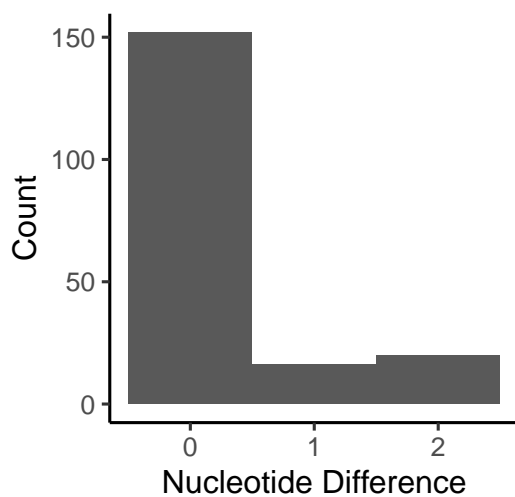
IGHV3–53*01_02

68 sequences assigned
55 (80.9%) exact matches, in which:
54 unique CDR3
5 unique J



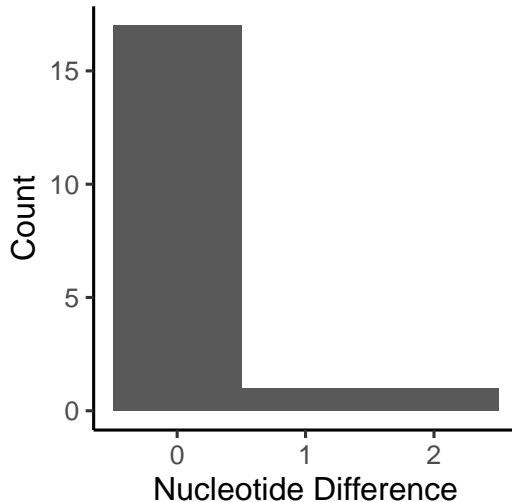
IGHV3–48*01

188 sequences assigned
152 (80.9%) exact matches, in which:
148 unique CDR3
6 unique J



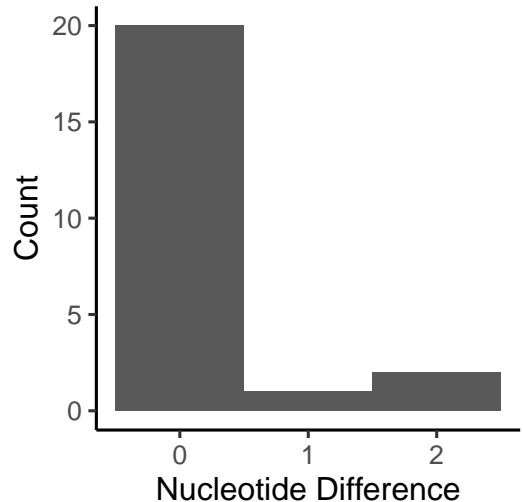
IGHV3–49*03_05

19 sequences assigned
17 (89.5%) exact matches, in which:
17 unique CDR3
4 unique J



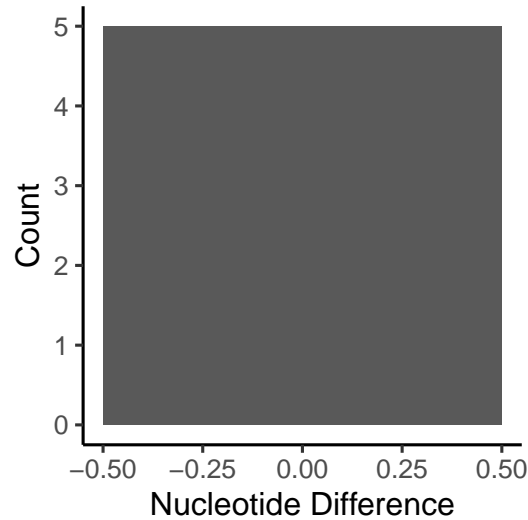
IGHV3–64*01

23 sequences assigned
20 (87%) exact matches, in which:
20 unique CDR3
5 unique J



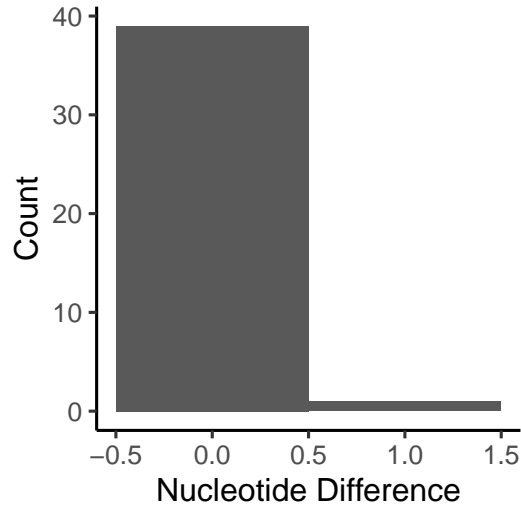
IGHV3-64*02_07

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



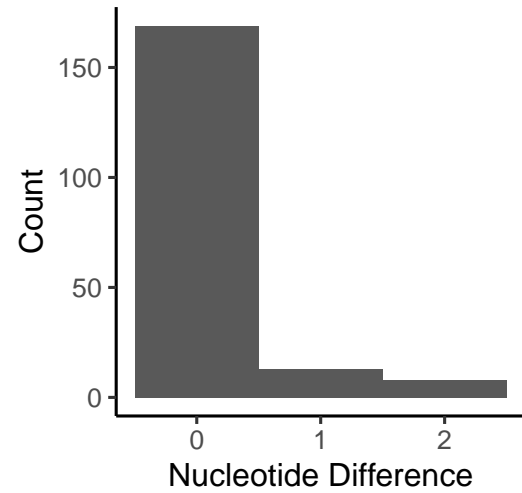
IGHV3-73*01_02

40 sequences assigned
39 (97.5%) exact matches, in which:
38 unique CDR3
5 unique J



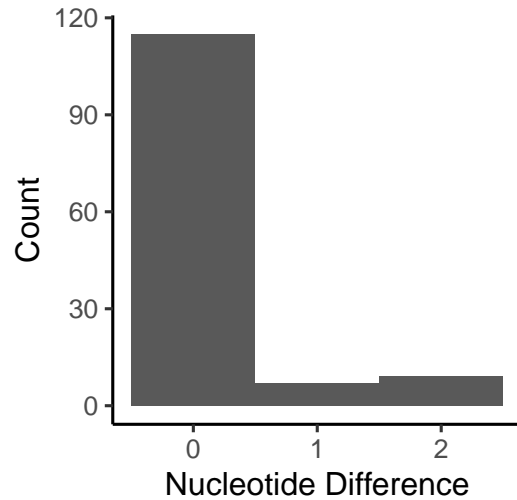
IGHV4-4*07

190 sequences assigned
169 (88.9%) exact matches, in which:
169 unique CDR3
7 unique J



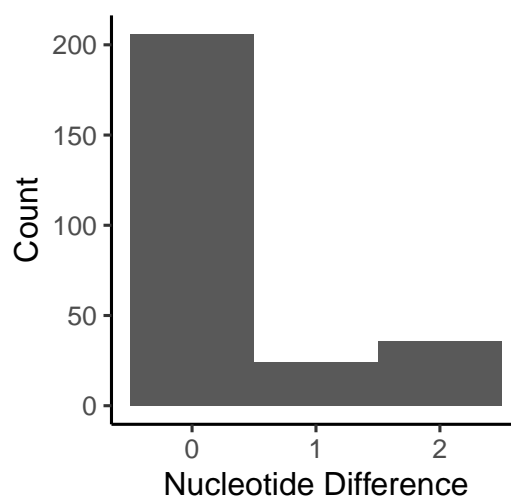
IGHV3-66*02

131 sequences assigned
115 (87.8%) exact matches, in which:
111 unique CDR3
7 unique J



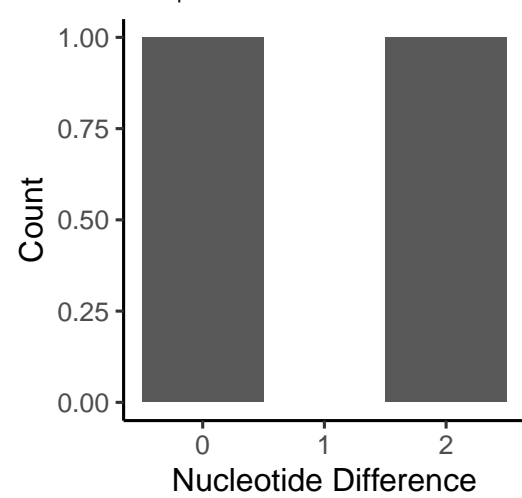
IGHV3-74*01_02

266 sequences assigned
206 (77.4%) exact matches, in which:
199 unique CDR3
7 unique J



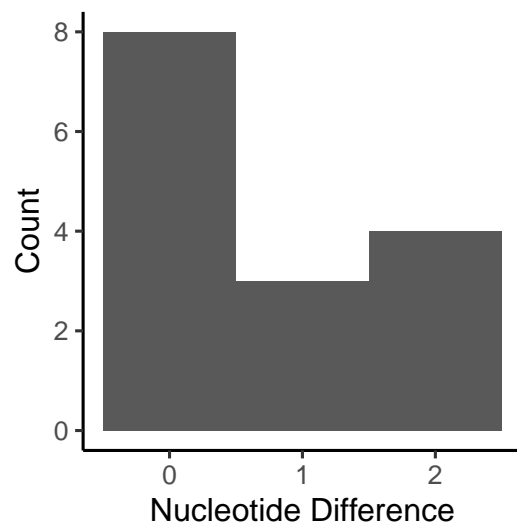
IGHV4-28*01_07

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



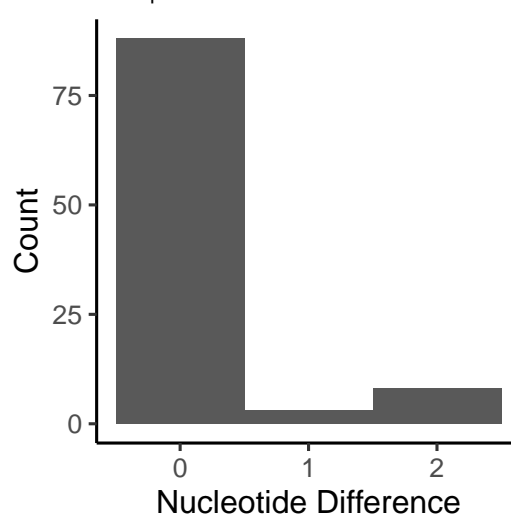
IGHV3-72*01

15 sequences assigned
8 (53.3%) exact matches, in which:
8 unique CDR3
4 unique J



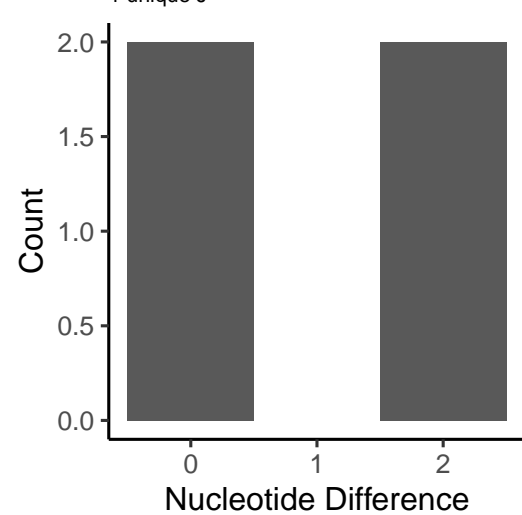
IGHV3-64D*06

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



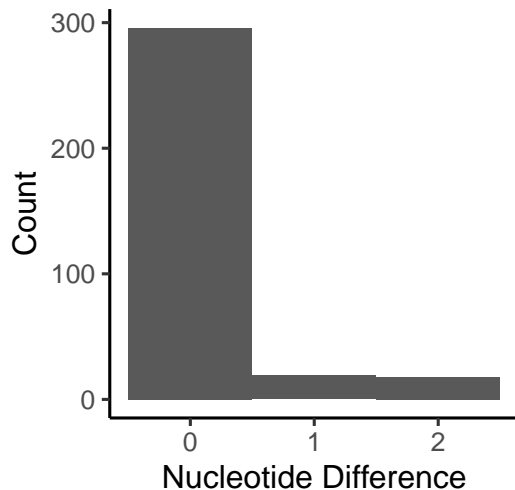
IGHV4-28*02_05

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



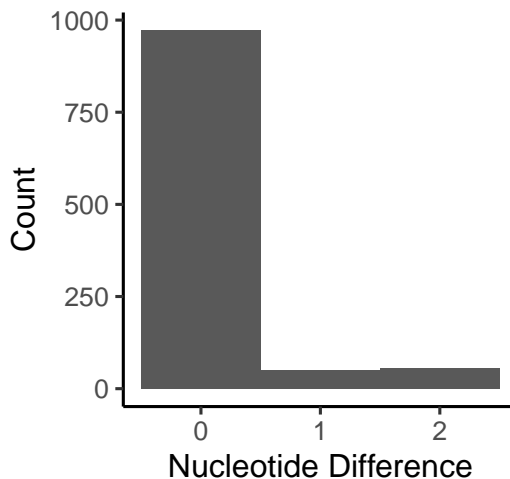
IGHV4-31*03_04

333 sequences assigned
296 (88.9%) exact matches, in which:
295 unique CDR3
6 unique J



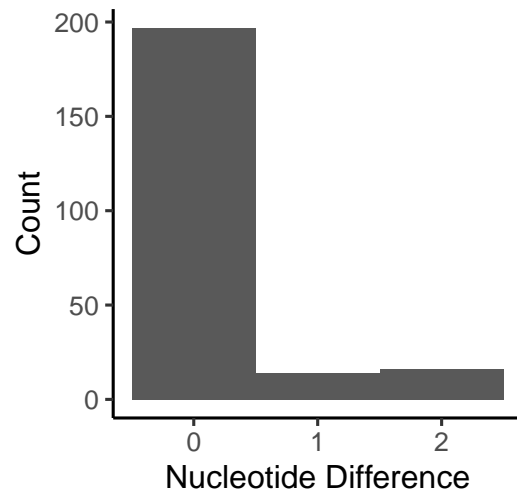
IGHV4-39*01_05

1079 sequences assigned
972 (90.1%) exact matches, in which:
962 unique CDR3
7 unique J



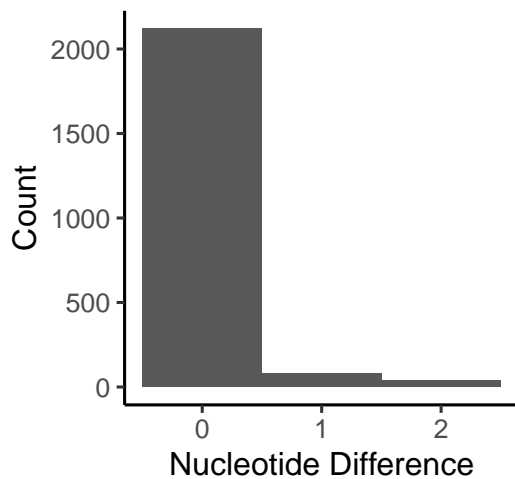
IGHV4-61*02

227 sequences assigned
197 (86.8%) exact matches, in which:
194 unique CDR3
5 unique J



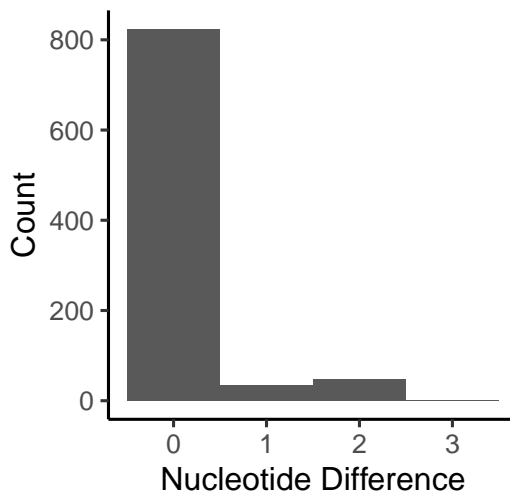
IGHV4-34*01_02

2239 sequences assigned
2120 (94.7%) exact matches, in which:
2101 unique CDR3
7 unique J



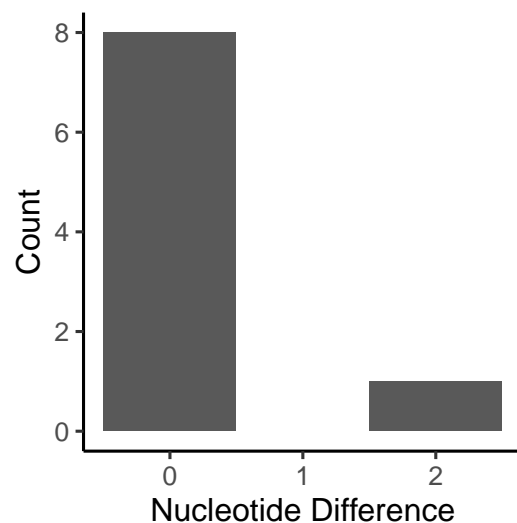
IGHV4-59*01_07

909 sequences assigned
824 (90.6%) exact matches, in which:
819 unique CDR3
7 unique J



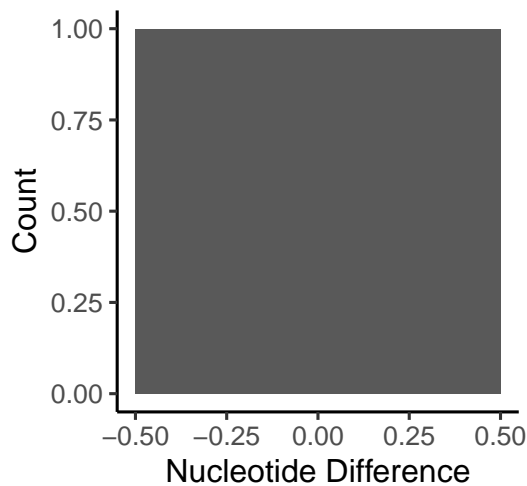
IGHV5-10-1*01_03

9 sequences assigned
8 (88.9%) exact matches, in which:
8 unique CDR3
4 unique J



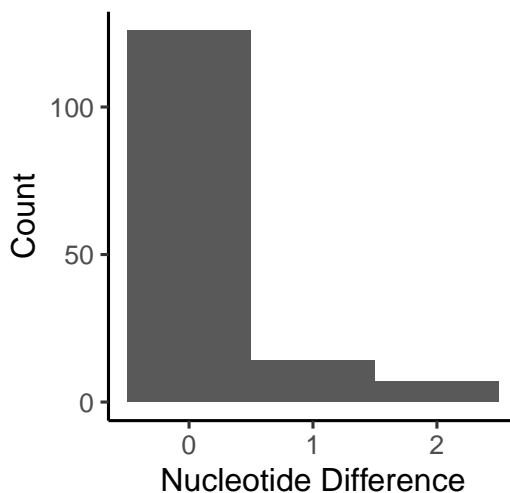
IGHV4-38-2*02

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



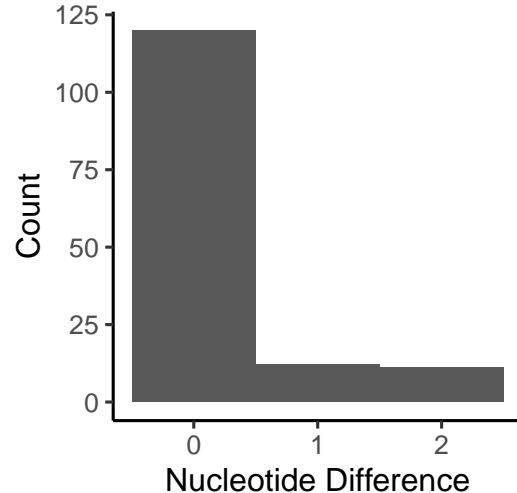
IGHV4-61*01

147 sequences assigned
126 (85.7%) exact matches, in which:
125 unique CDR3
6 unique J



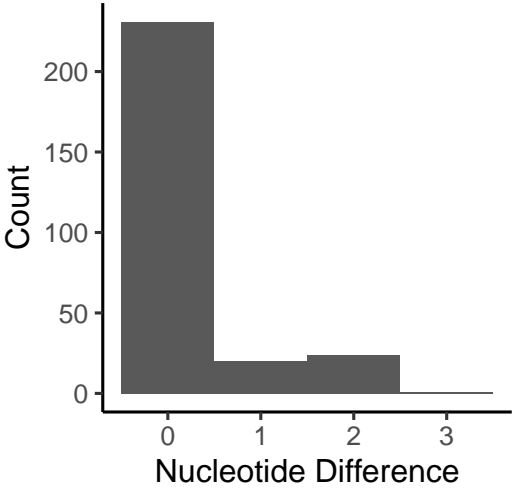
IGHV5-51*01_03

143 sequences assigned
120 (83.9%) exact matches, in which:
120 unique CDR3
6 unique J



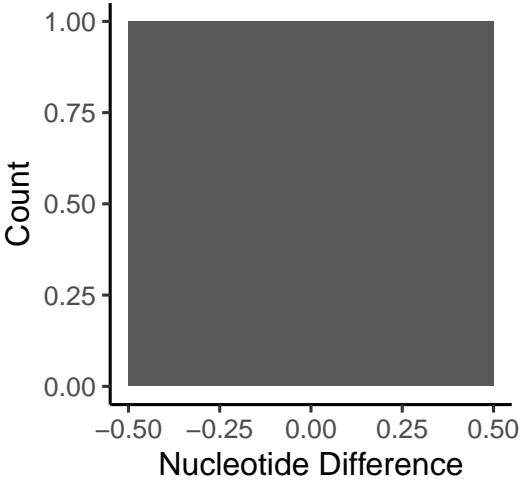
IGHV6-1*01_02

276 sequences assigned
231 (83.7%) exact matches, in which:
231 unique CDR3
6 unique J

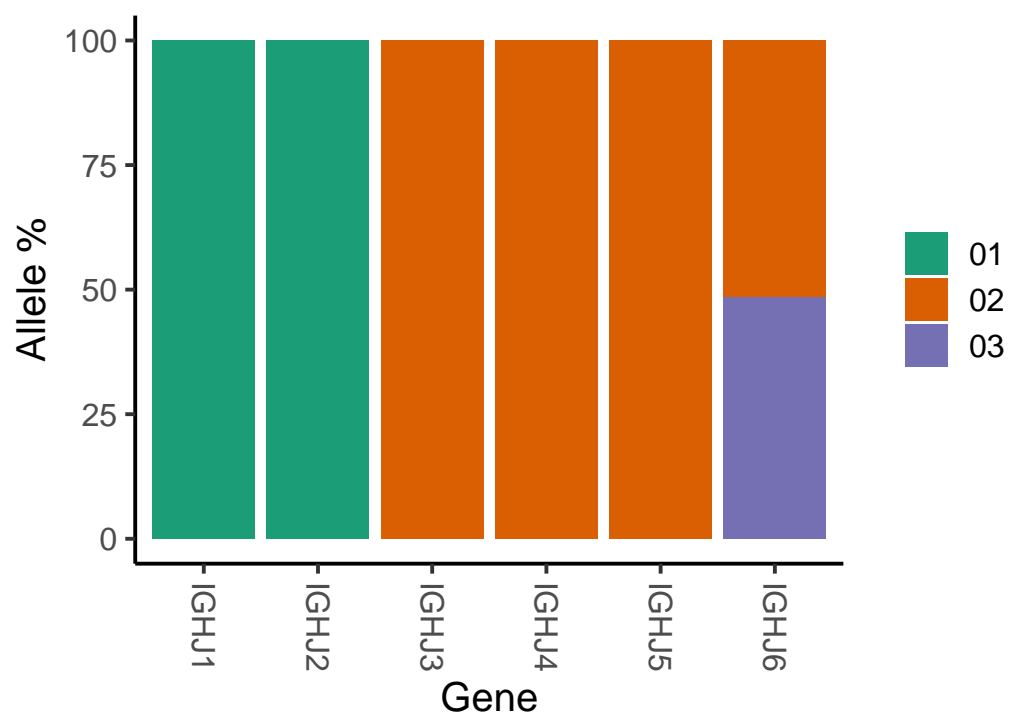


IGHV7-4-1*01

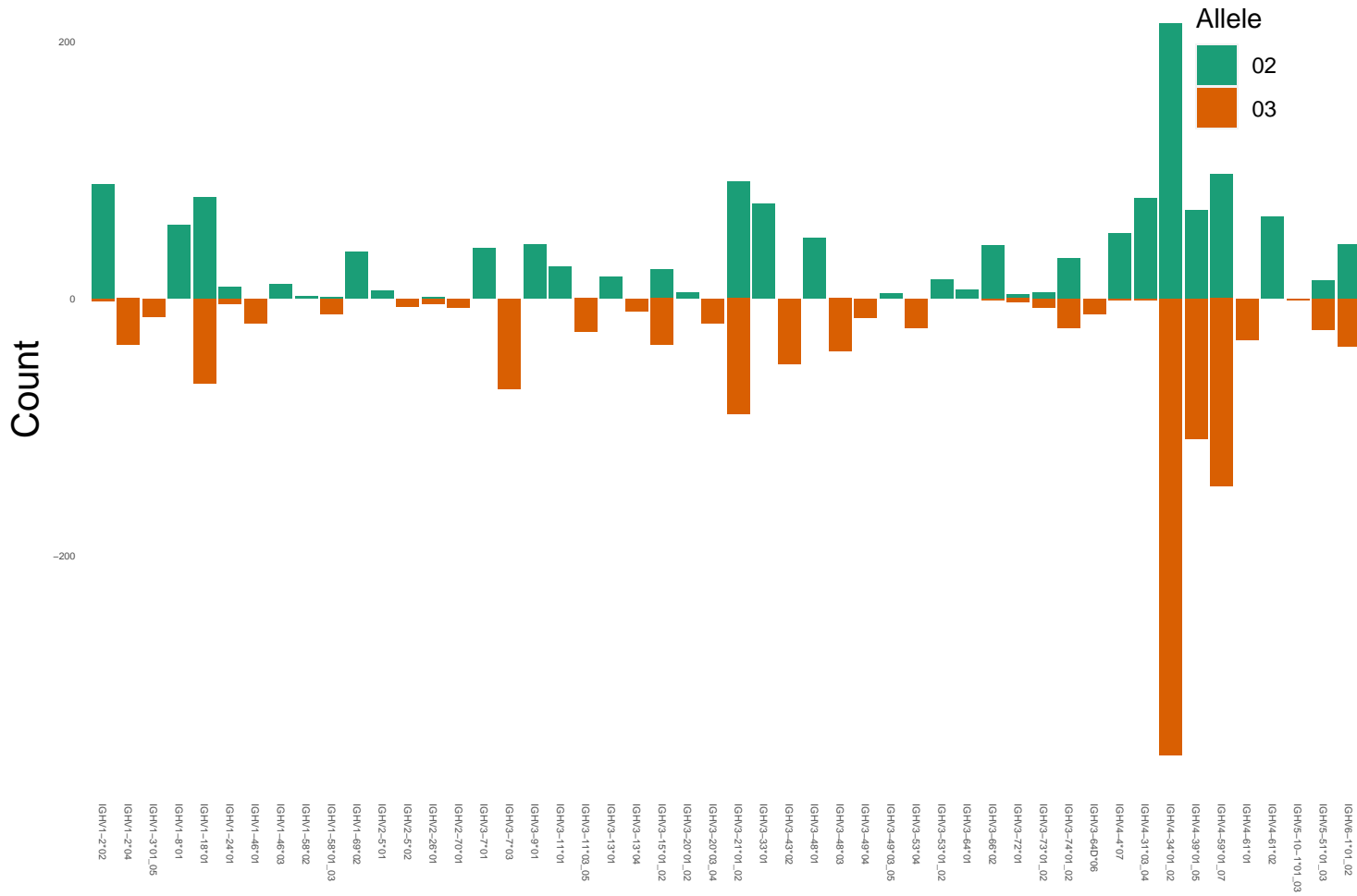
1 sequences assigned
1 (100%) exact matches, in which:
1 unique CDR3
1 unique J



Allele Usage



Sequence Count by IGHJ6 allele usage



However, sequence(s) for IV5-11 55_5500 for IV4-55 52_5500 for IV5-51 51_11200 are not listed in the genotype and will be ignored.