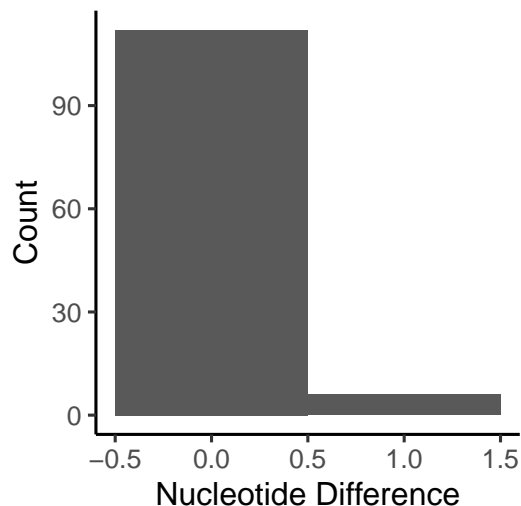


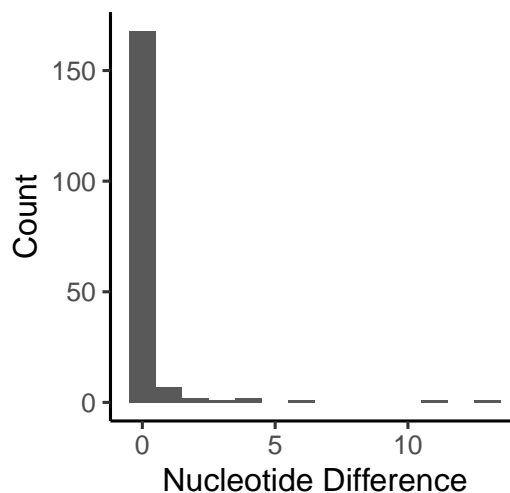
IGHV1-2*04

118 sequences assigned
112 (94.9%) exact matches, in which:
112 unique CDR3
6 unique J



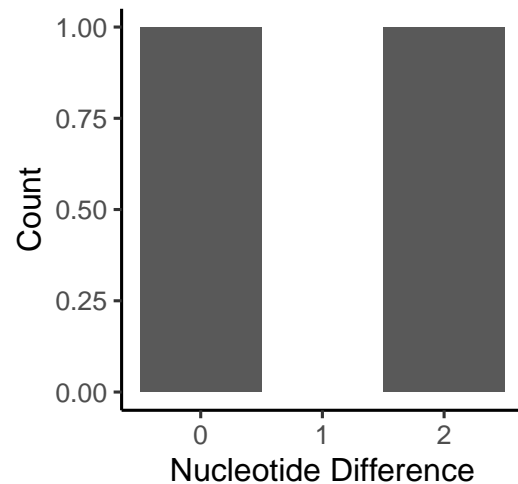
IGHV1-18*01

183 sequences assigned
168 (91.8%) exact matches, in which:
168 unique CDR3
6 unique J



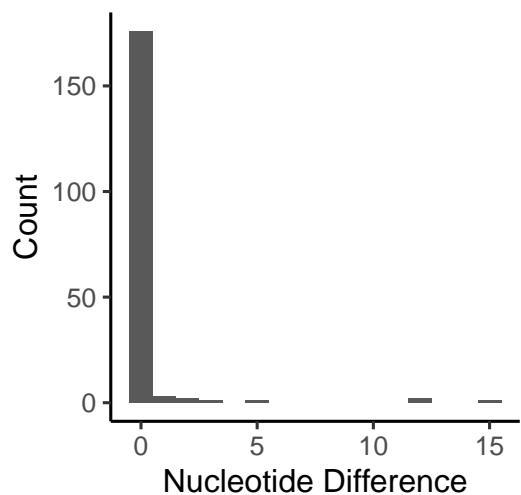
IGHV1-45*02

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



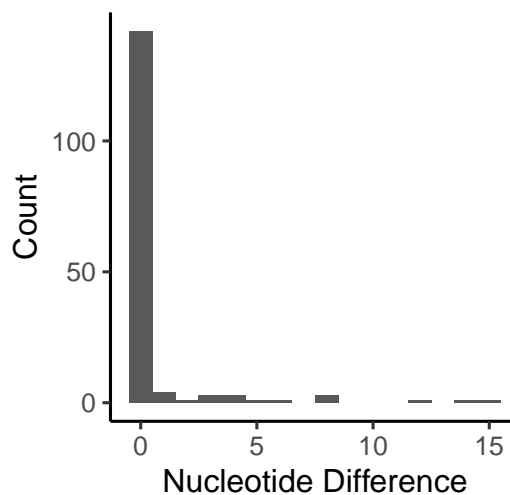
IGHV1-3*01

187 sequences assigned
176 (94.1%) exact matches, in which:
176 unique CDR3
7 unique J



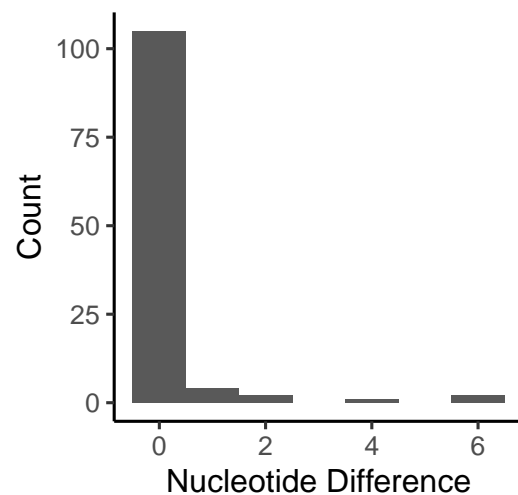
IGHV1-18*04

162 sequences assigned
142 (87.7%) exact matches, in which:
142 unique CDR3
7 unique J



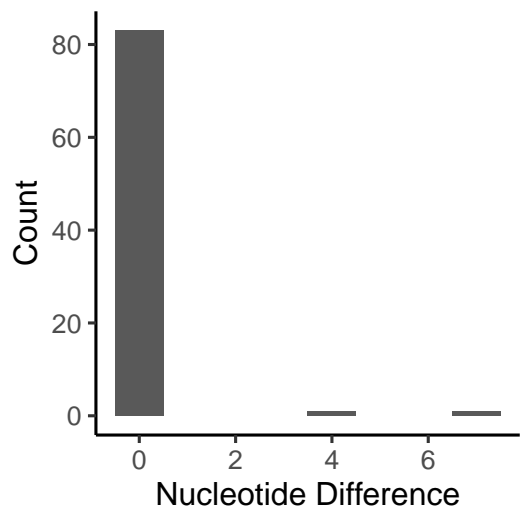
IGHV1-46*01

115 sequences assigned
105 (91.3%) exact matches, in which:
105 unique CDR3
7 unique J



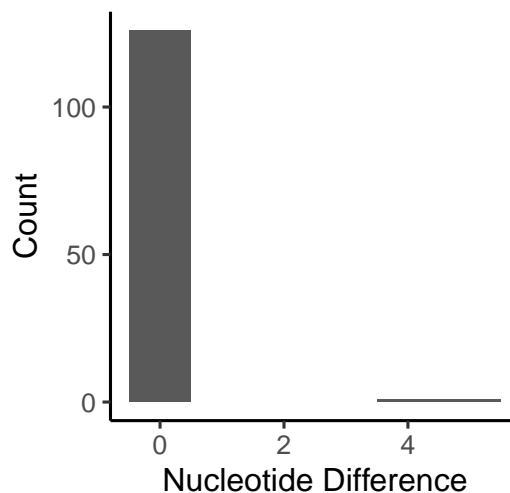
IGHV1-8*01

85 sequences assigned
83 (97.6%) exact matches, in which:
83 unique CDR3
5 unique J



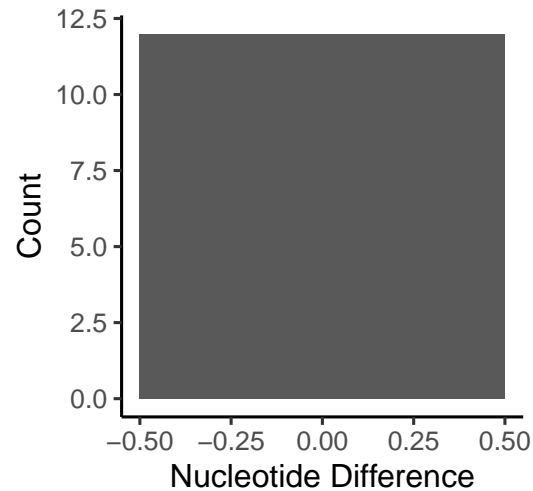
IGHV1-24*01

128 sequences assigned
126 (98.4%) exact matches, in which:
126 unique CDR3
7 unique J



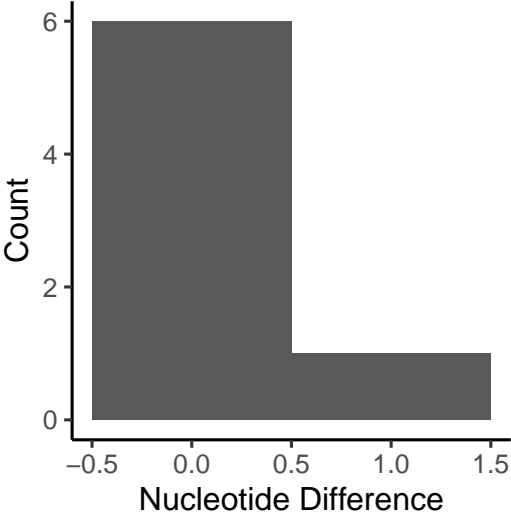
IGHV1-58*01

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



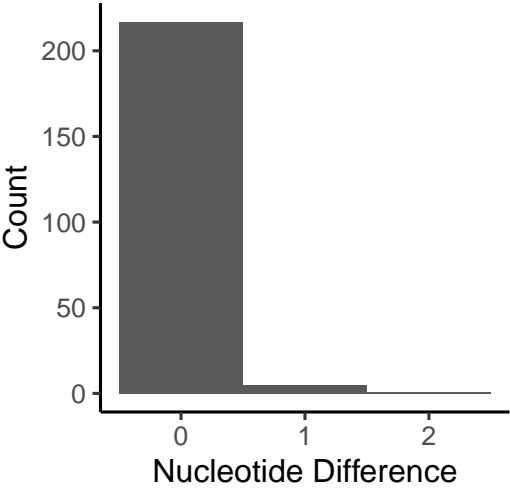
IGHV1-58*02

7 sequences assigned
6 (85.7%) exact matches, in which:
6 unique CDR3
4 unique J



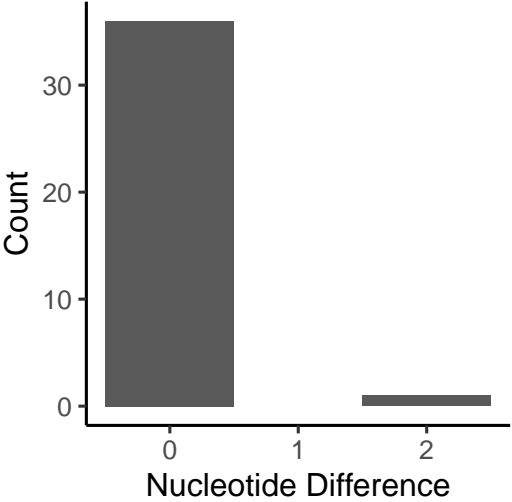
IGHV1-69*04

223 sequences assigned
217 (97.3%) exact matches, in which:
217 unique CDR3
6 unique J



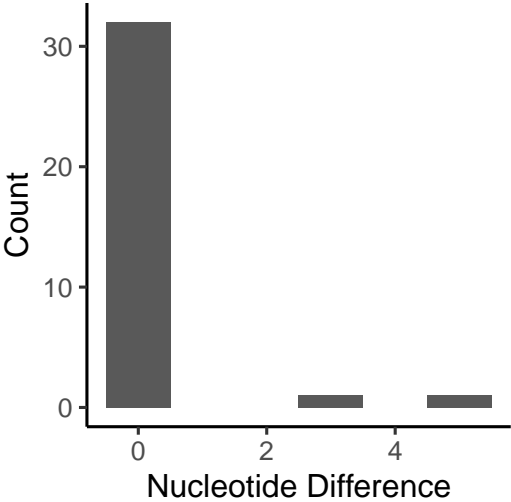
IGHV2-26*01

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



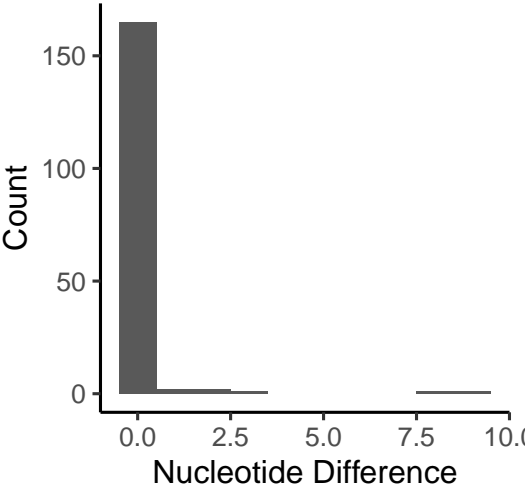
IGHV1-69-2*01

34 sequences assigned
32 (94.1%) exact matches, in which:
32 unique CDR3
4 unique J



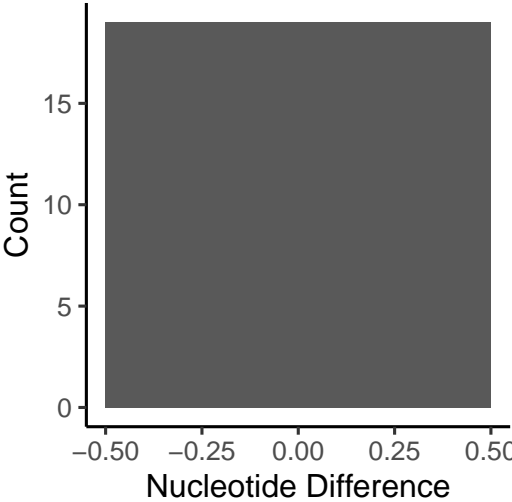
IGHV1-69*17

172 sequences assigned
165 (95.9%) exact matches, in which:
165 unique CDR3
7 unique J



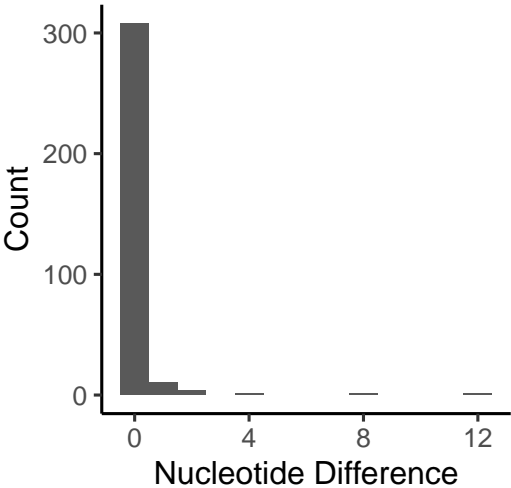
IGHV2-70*01

19 sequences assigned
19 (100%) exact matches, in which:
19 unique CDR3
4 unique J



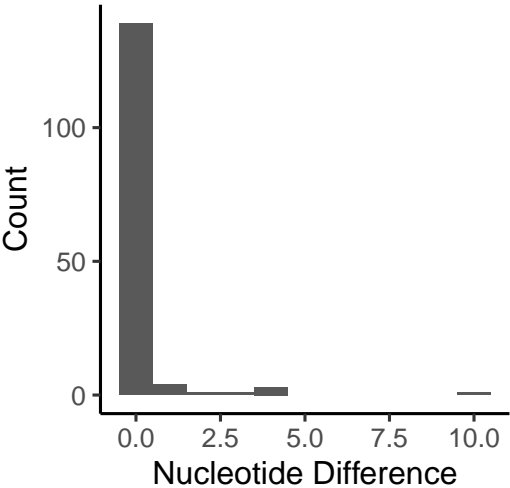
IGHV1-69*01

325 sequences assigned
308 (94.8%) exact matches, in which:
308 unique CDR3
7 unique J



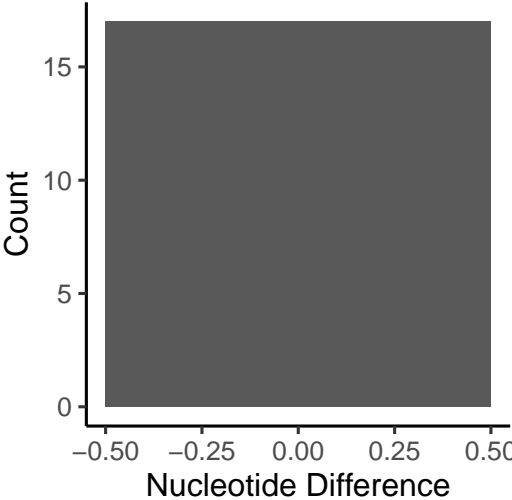
IGHV2-5*02

149 sequences assigned
139 (93.3%) exact matches, in which:
139 unique CDR3
7 unique J



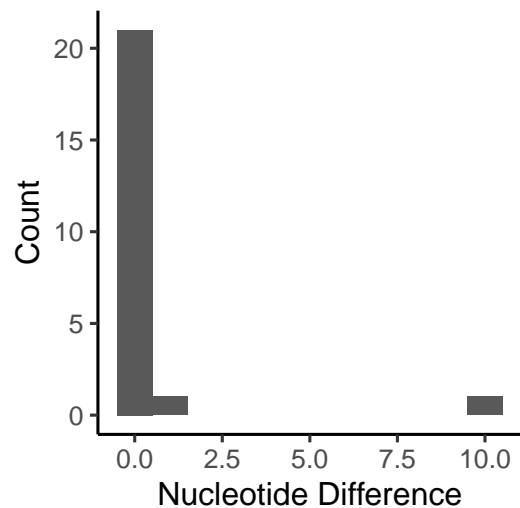
IGHV2-70*04

17 sequences assigned
17 (100%) exact matches, in which:
17 unique CDR3
5 unique J



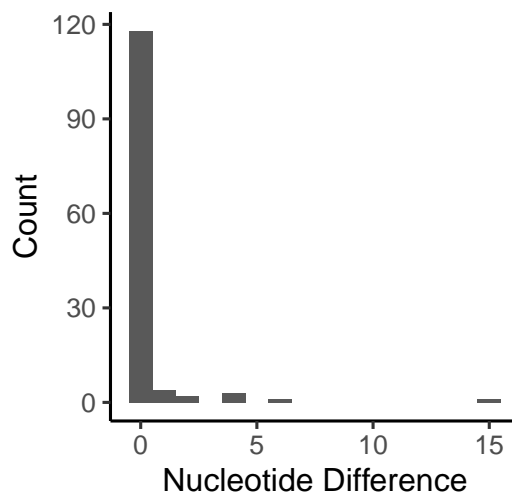
IGHV2-70*15

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



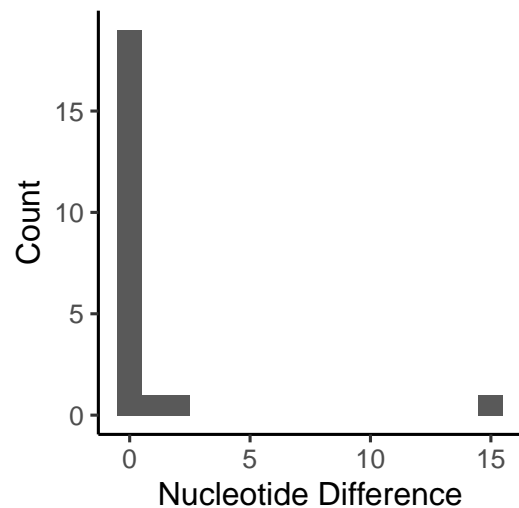
IGHV3-9*01

129 sequences assigned
118 (91.5%) exact matches, in which:
118 unique CDR3
6 unique J



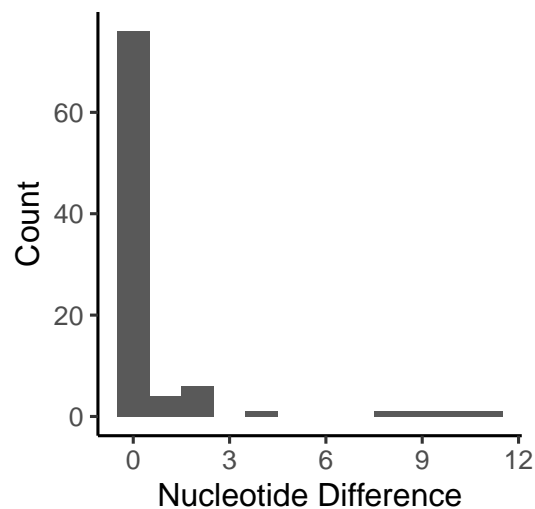
IGHV3-13*01

22 sequences assigned
19 (86.4%) exact matches, in which:
19 unique CDR3
4 unique J



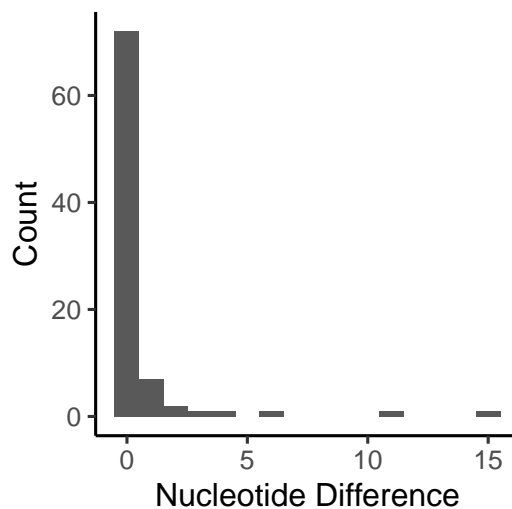
IGHV3-7*01

91 sequences assigned
76 (83.5%) exact matches, in which:
76 unique CDR3
4 unique J



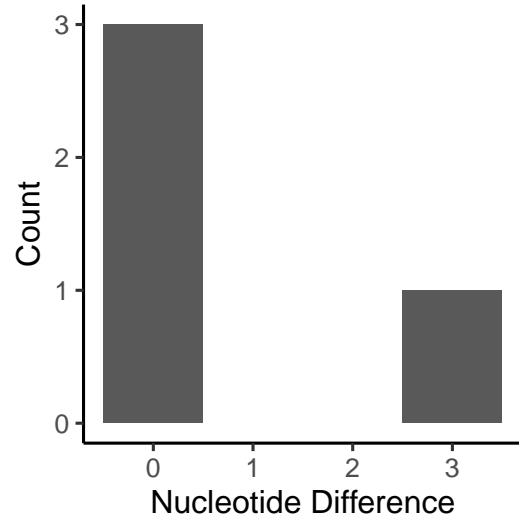
IGHV3-11*01

86 sequences assigned
72 (83.7%) exact matches, in which:
72 unique CDR3
5 unique J



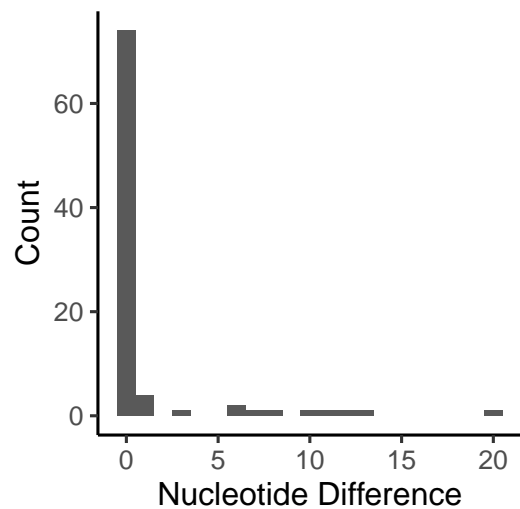
IGHV3-13*05

4 sequences assigned
3 (75%) exact matches, in which:
3 unique CDR3
2 unique J



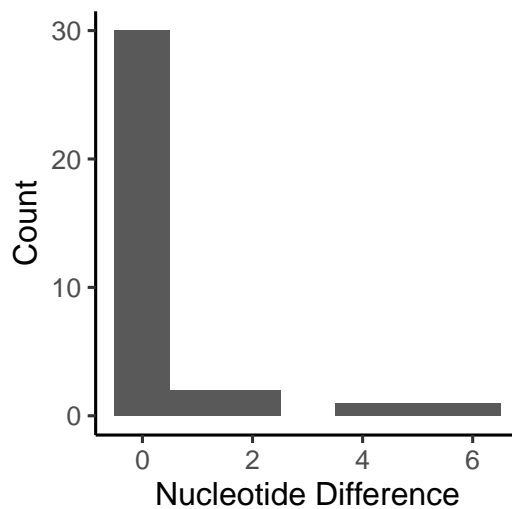
IGHV3-7*03

88 sequences assigned
74 (84.1%) exact matches, in which:
74 unique CDR3
6 unique J



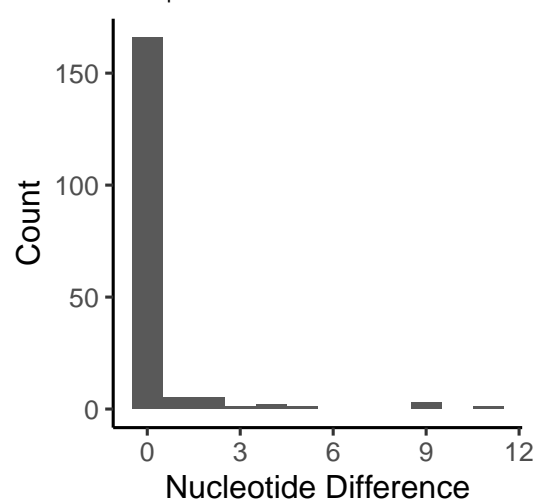
IGHV3-11*06

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



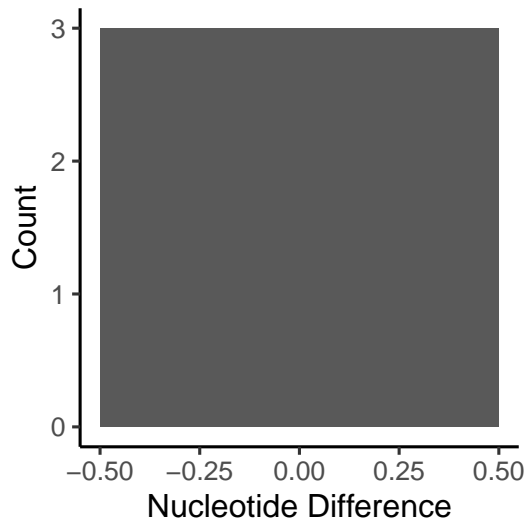
IGHV3-15*01

184 sequences assigned
166 (90.2%) exact matches, in which:
166 unique CDR3
6 unique J



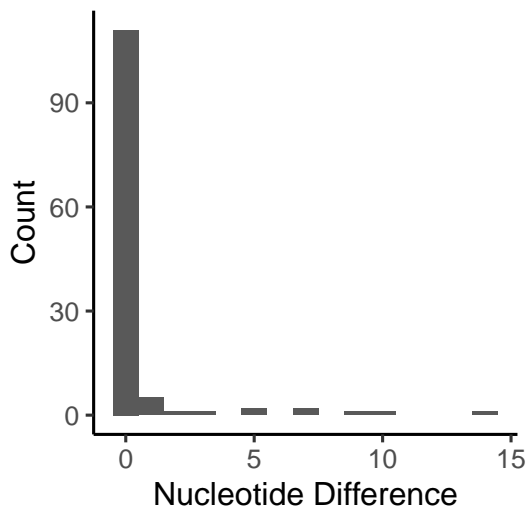
IGHV3–20*01

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



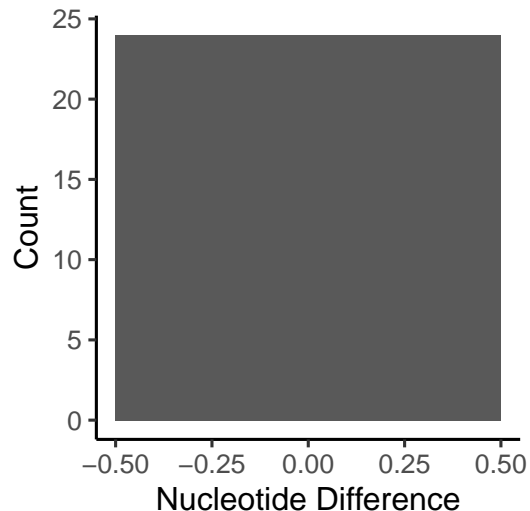
IGHV3–23*04

125 sequences assigned
111 (88.8%) exact matches, in which:
111 unique CDR3
5 unique J



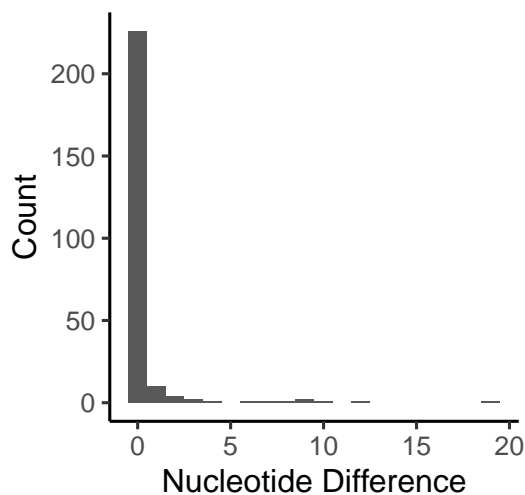
IGHV3–43*01

24 sequences assigned
24 (100%) exact matches, in which:
24 unique CDR3
4 unique J



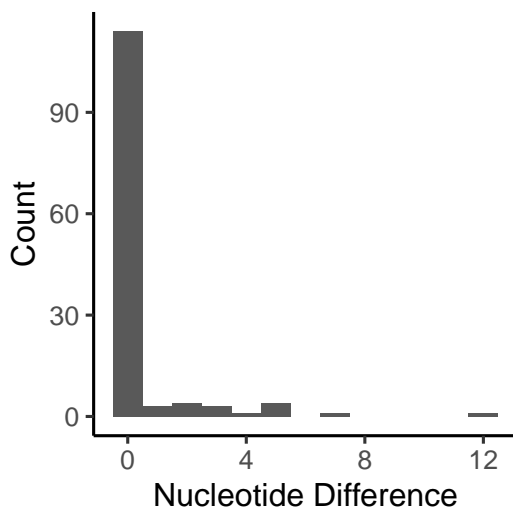
IGHV3–21*01

251 sequences assigned
226 (90%) exact matches, in which:
226 unique CDR3
6 unique J



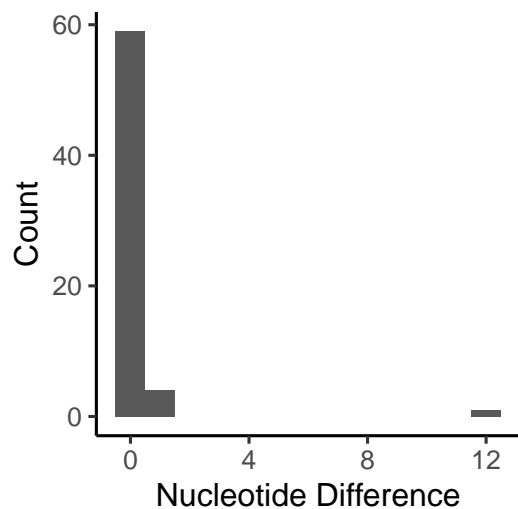
IGHV3–30*18

132 sequences assigned
114 (86.4%) exact matches, in which:
114 unique CDR3
7 unique J



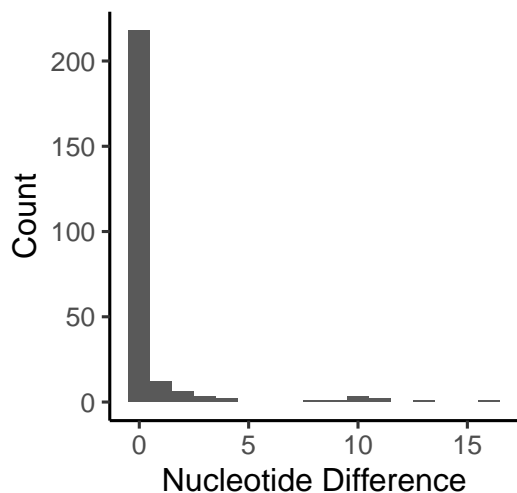
IGHV3–48*02

64 sequences assigned
59 (92.2%) exact matches, in which:
59 unique CDR3
5 unique J



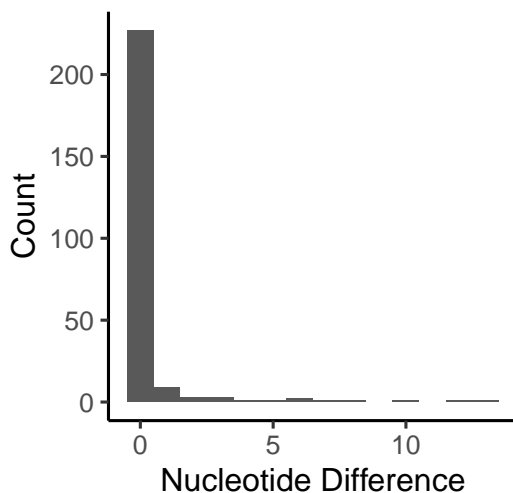
IGHV3–23*01

252 sequences assigned
218 (86.5%) exact matches, in which:
218 unique CDR3
7 unique J



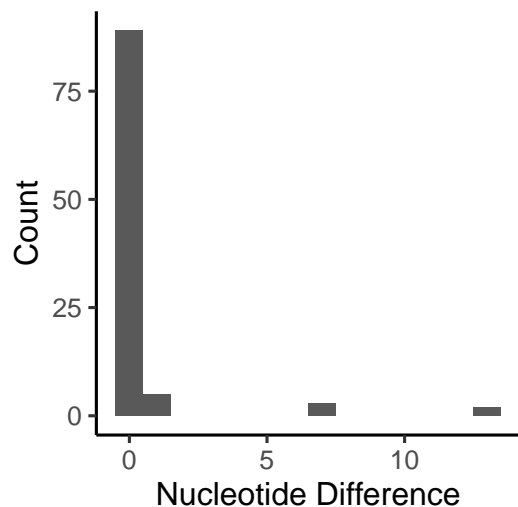
IGHV3–33*01

252 sequences assigned
227 (90.1%) exact matches, in which:
227 unique CDR3
7 unique J



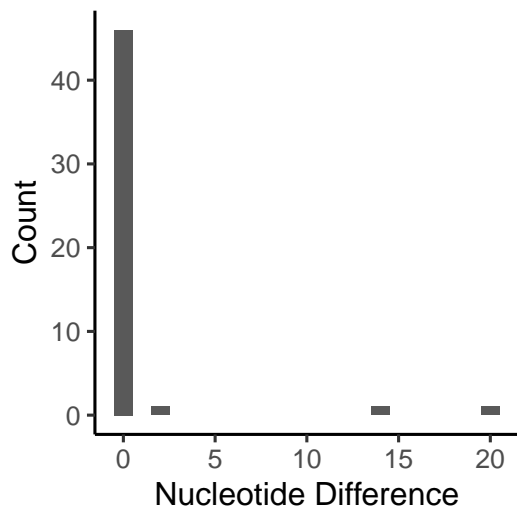
IGHV3–48*04

101 sequences assigned
89 (88.1%) exact matches, in which:
89 unique CDR3
5 unique J



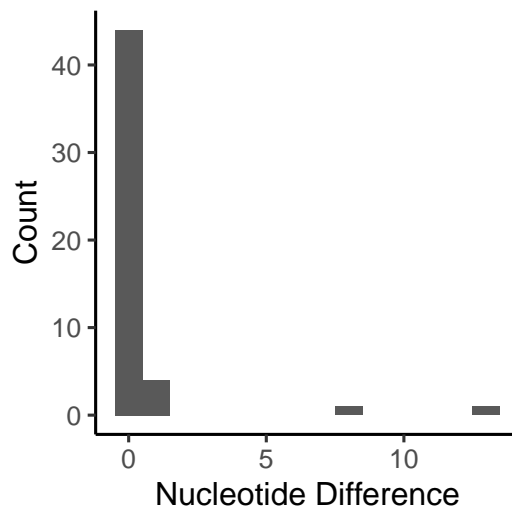
IGHV3-49*03

49 sequences assigned
46 (93.9%) exact matches, in which:
46 unique CDR3
5 unique J



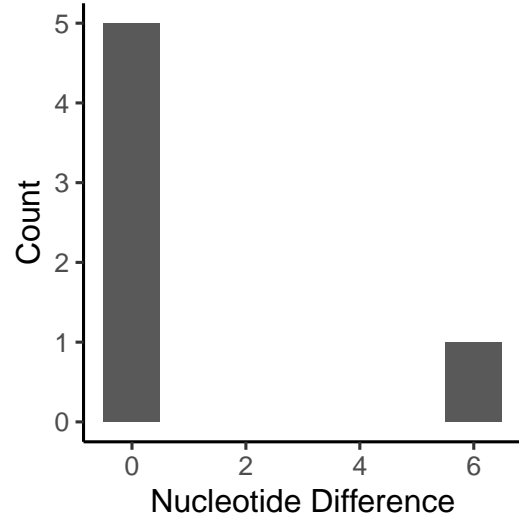
IGHV3-53*04

50 sequences assigned
44 (88%) exact matches, in which:
44 unique CDR3
5 unique J



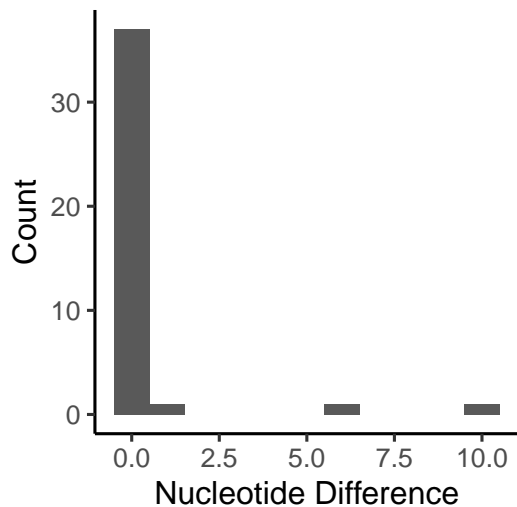
IGHV3-72*01

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



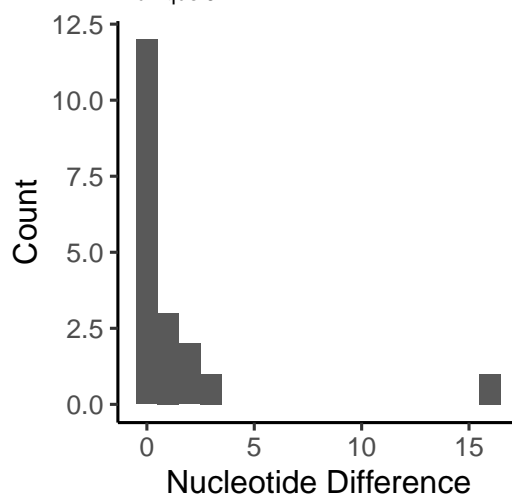
IGHV3-49*05

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



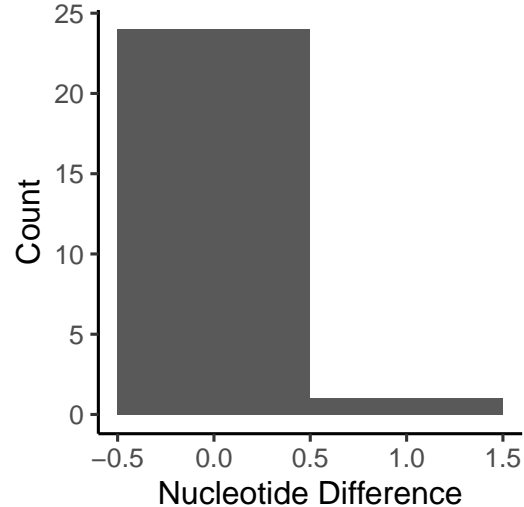
IGHV3-64*01

19 sequences assigned
12 (63.2%) exact matches, in which:
12 unique CDR3
4 unique J



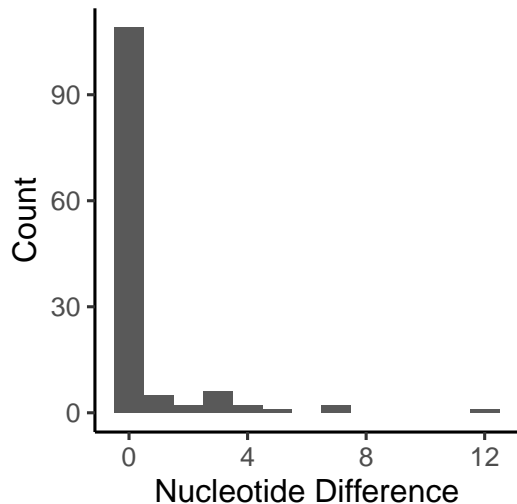
IGHV3-73*01

25 sequences assigned
24 (96%) exact matches, in which:
24 unique CDR3
4 unique J



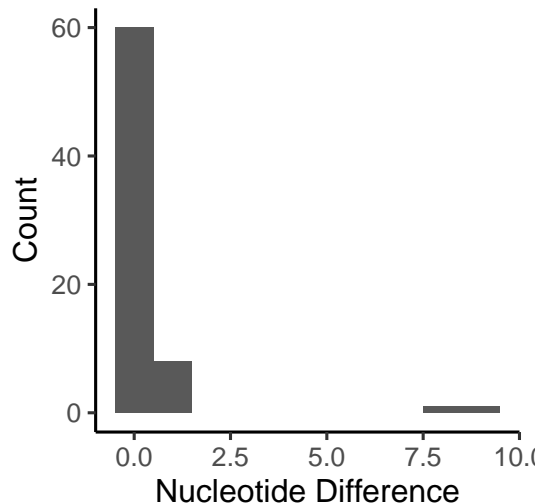
IGHV3-53*01

130 sequences assigned
109 (83.8%) exact matches, in which:
109 unique CDR3
7 unique J



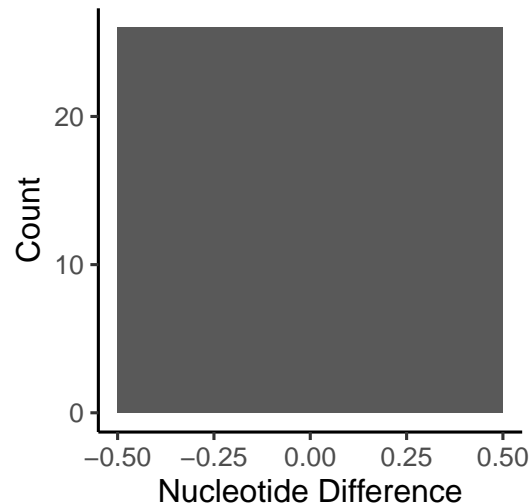
IGHV3-66*01

70 sequences assigned
60 (85.7%) exact matches, in which:
60 unique CDR3
6 unique J



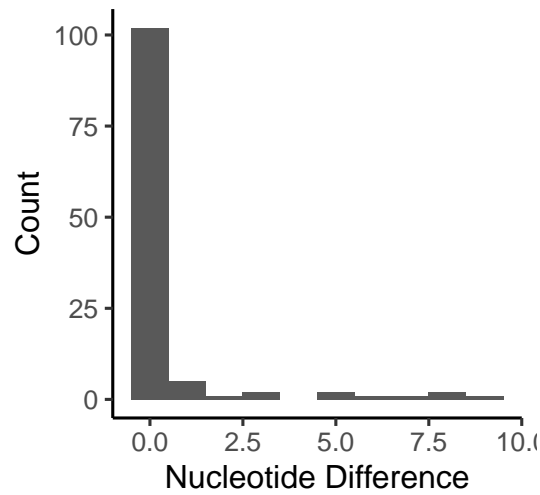
IGHV3-73*02

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



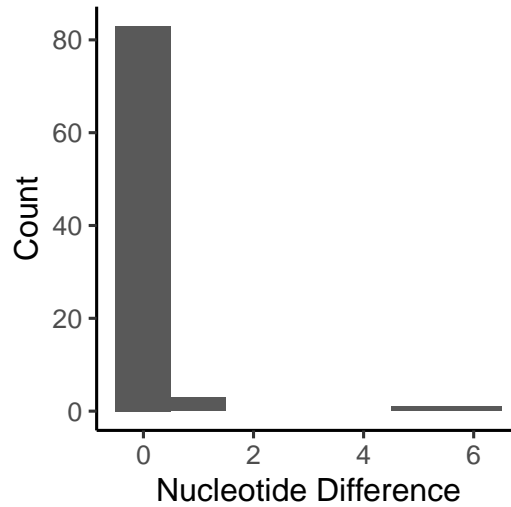
IGHV3-74*01

117 sequences assigned
102 (87.2%) exact matches, in which:
102 unique CDR3
7 unique J



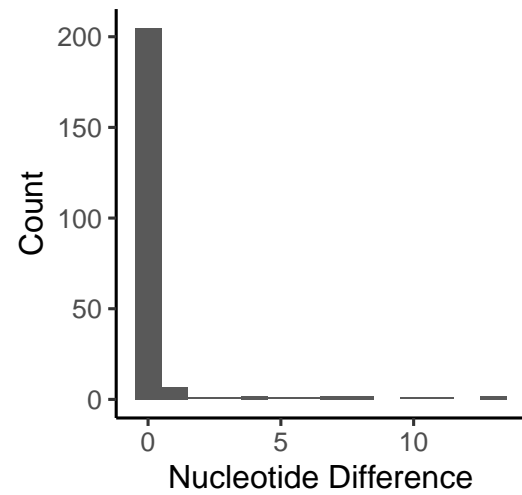
IGHV4-30-2*01

88 sequences assigned
83 (94.3%) exact matches, in which:
83 unique CDR3
7 unique J



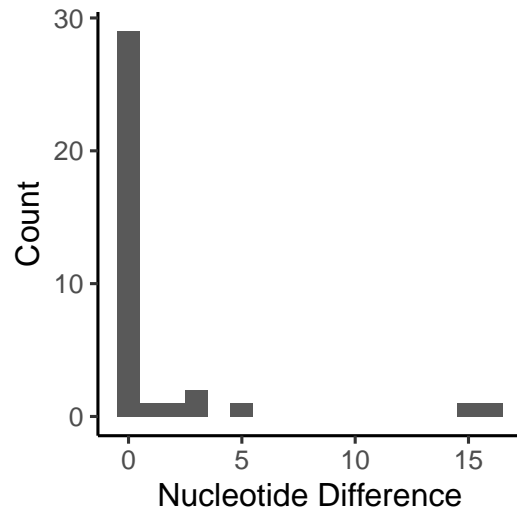
IGHV4-39*07

226 sequences assigned
205 (90.7%) exact matches, in which:
205 unique CDR3
7 unique J



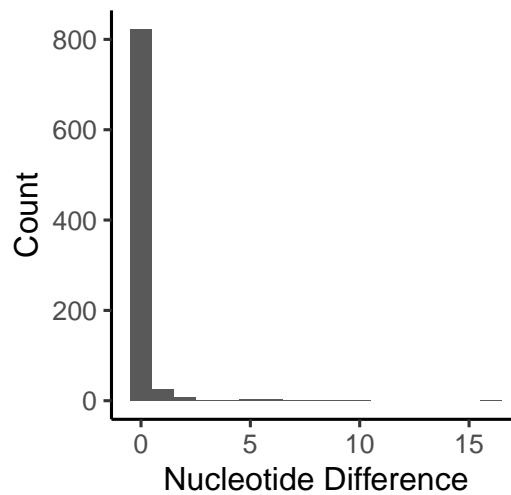
IGHV3-64D*06

37 sequences assigned
29 (78.4%) exact matches, in which:
29 unique CDR3
3 unique J



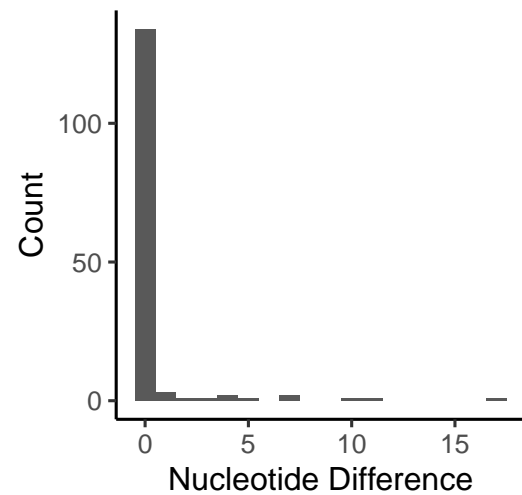
IGHV4-34*01

874 sequences assigned
823 (94.2%) exact matches, in which:
822 unique CDR3
7 unique J



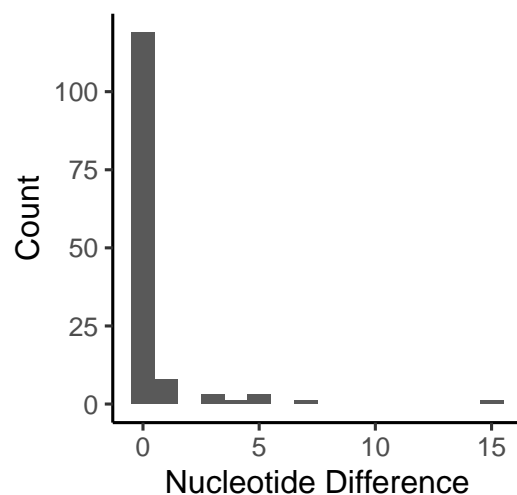
IGHV4-59*01

149 sequences assigned
134 (89.9%) exact matches, in which:
134 unique CDR3
7 unique J



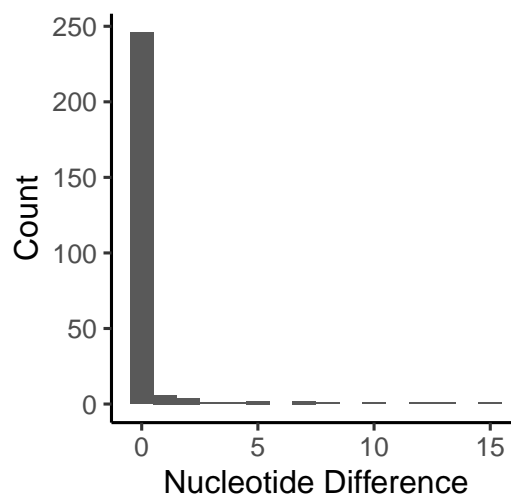
IGHV4-4*02

136 sequences assigned
119 (87.5%) exact matches, in which:
119 unique CDR3
6 unique J



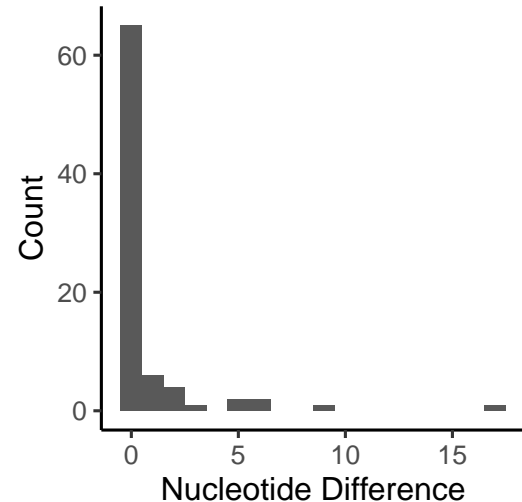
IGHV4-39*01

267 sequences assigned
246 (92.1%) exact matches, in which:
246 unique CDR3
7 unique J



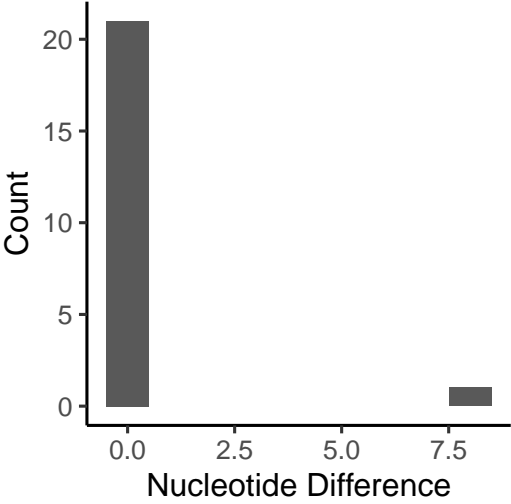
IGHV4-59*08

82 sequences assigned
65 (79.3%) exact matches, in which:
65 unique CDR3
6 unique J



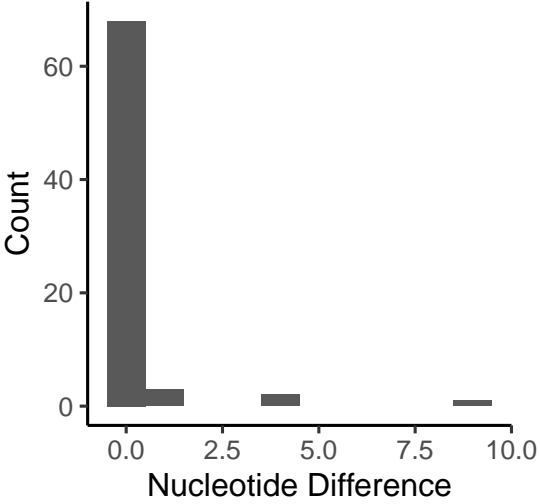
IGHV4-61*01

22 sequences assigned
21 (95.5%) exact matches, in which:
21 unique CDR3
5 unique J



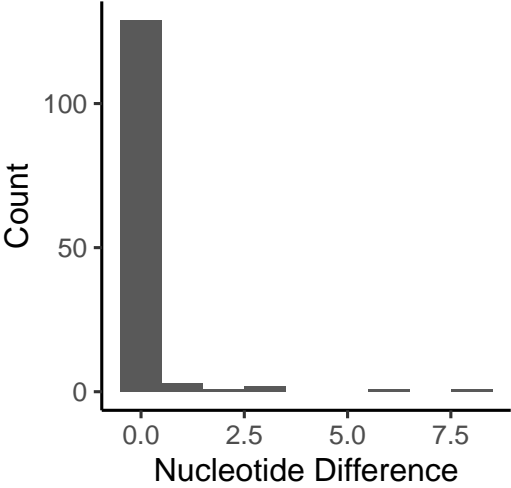
IGHV6-1*01

74 sequences assigned
68 (91.9%) exact matches, in which:
68 unique CDR3
6 unique J



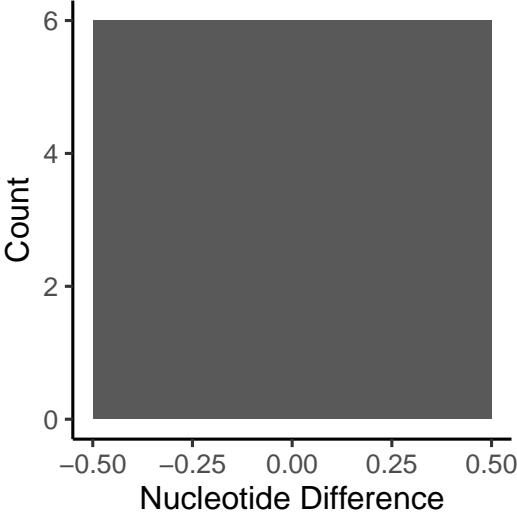
IGHV5-10-1*03

137 sequences assigned
129 (94.2%) exact matches, in which:
129 unique CDR3
6 unique J



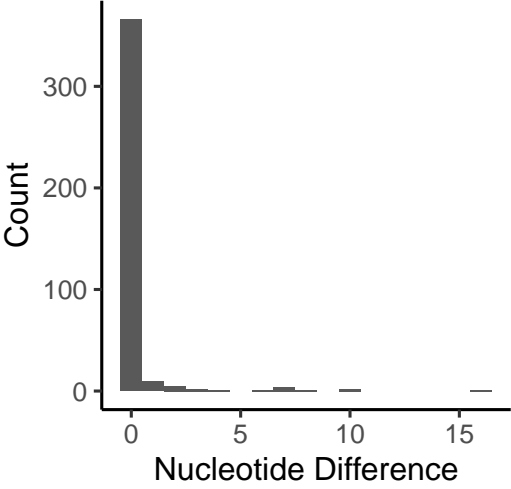
IGHV7-4-1*01

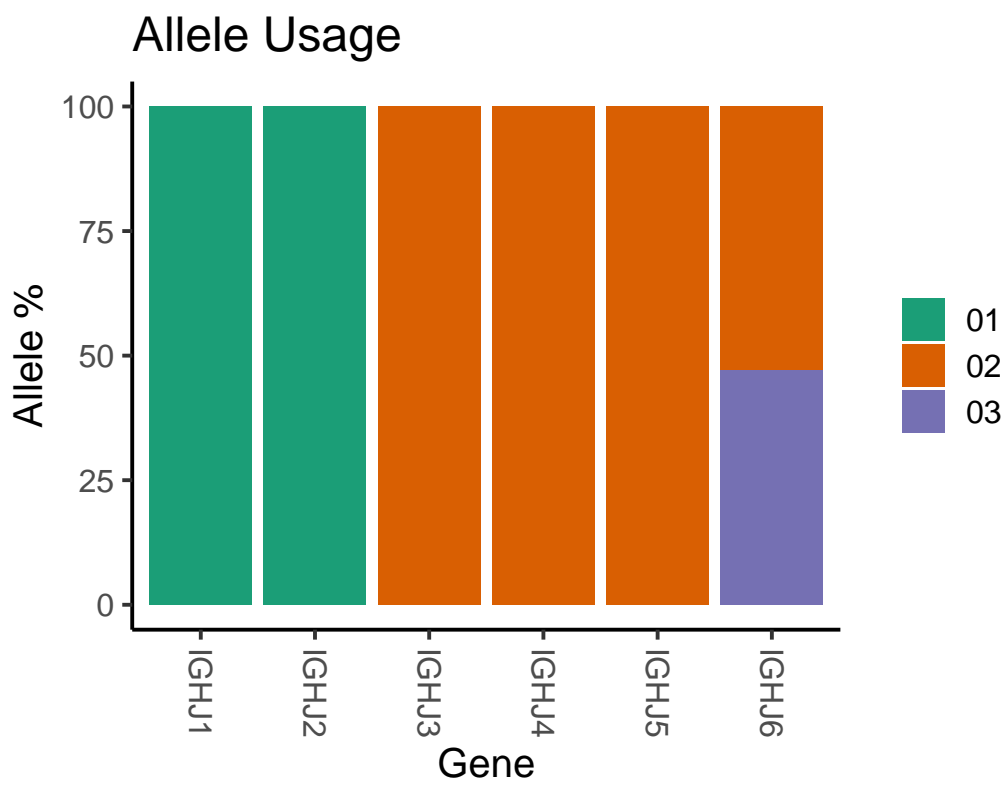
6 sequences assigned
6 (100%) exact matches, in which:
6 unique CDR3
4 unique J



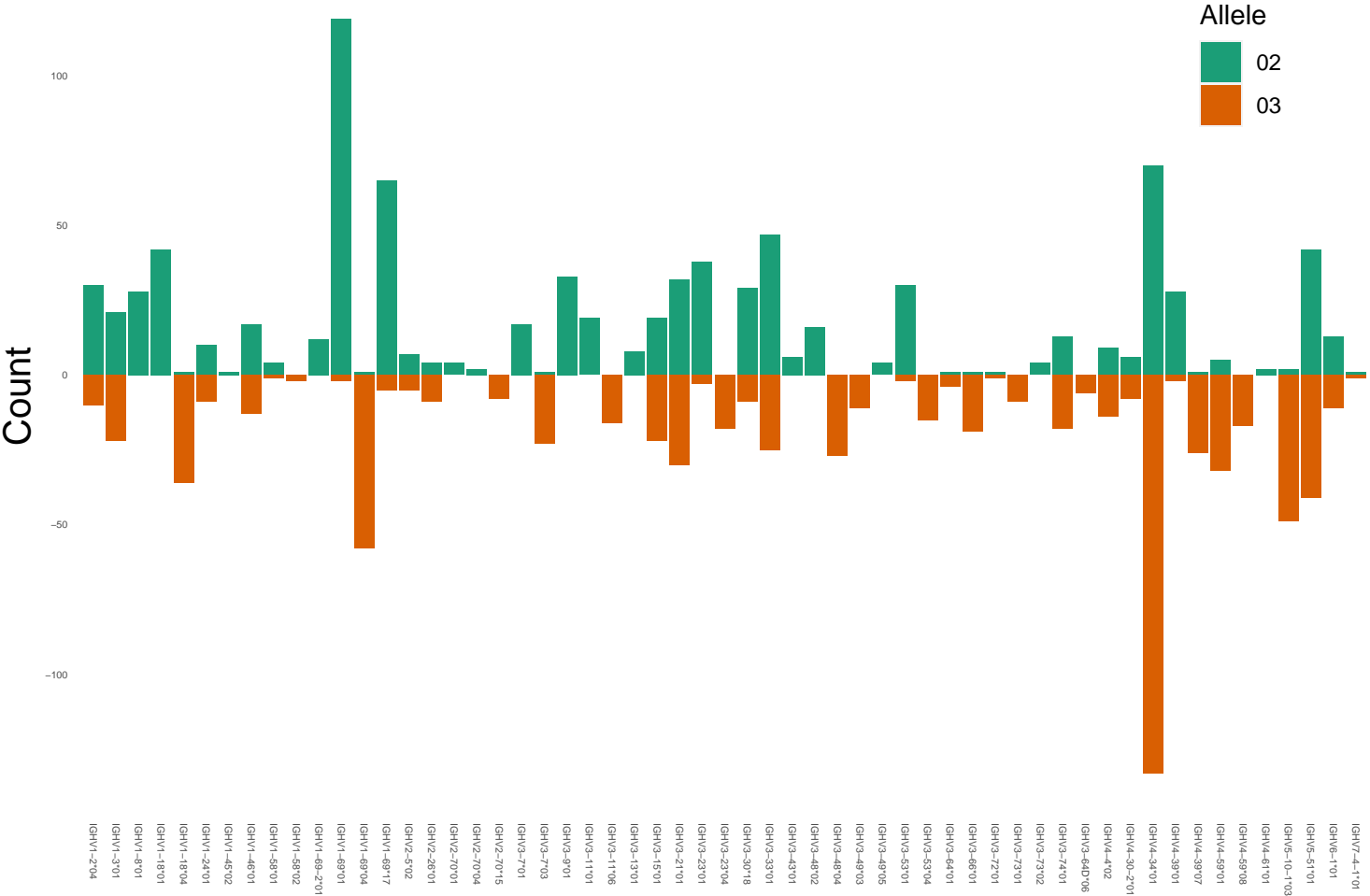
IGHV5-51*01

392 sequences assigned
366 (93.4%) exact matches, in which:
366 unique CDR3
7 unique J





Sequence Count by IGHJ6 allele usage



Warning – no inferred sequences found.