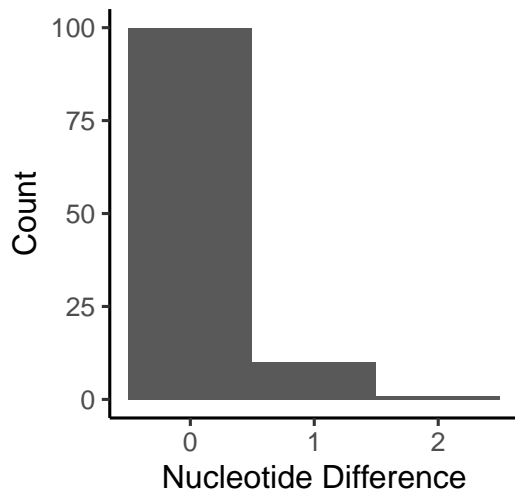


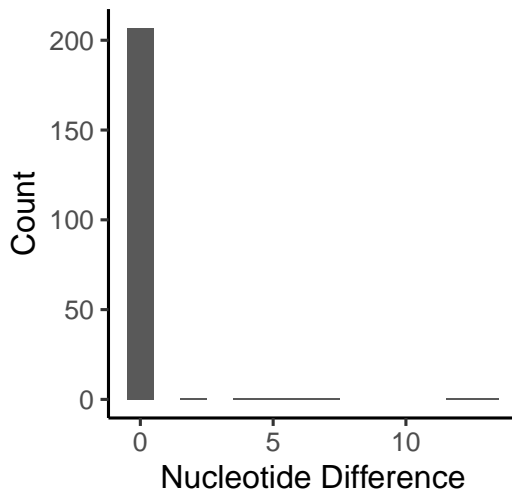
IGHV1–2*04

112 sequences assigned
100 (89.3%) exact matches, in which:
99 unique CDR3
6 unique J



IGHV1–18*01

214 sequences assigned
207 (96.7%) exact matches, in which:
207 unique CDR3
6 unique J



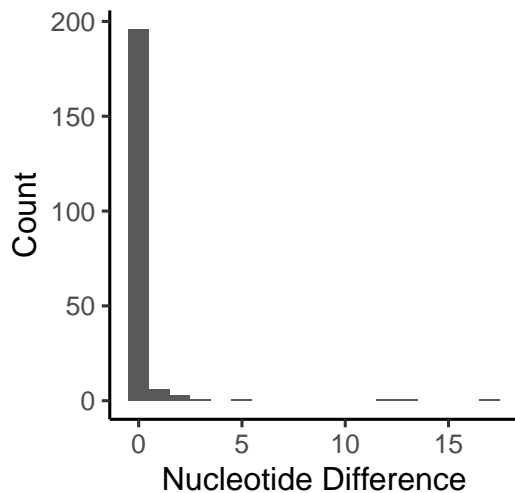
IGHV1–45*02

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



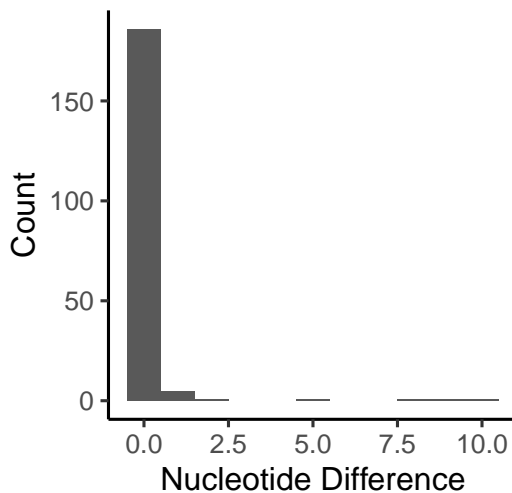
IGHV1–3*01

211 sequences assigned
196 (92.9%) exact matches, in which:
196 unique CDR3
6 unique J



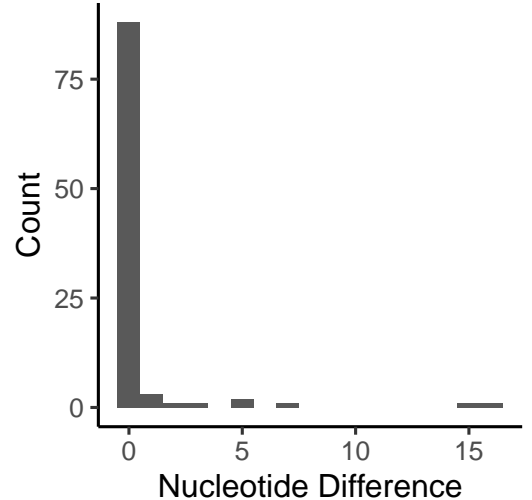
IGHV1–18*04

196 sequences assigned
186 (94.9%) exact matches, in which:
186 unique CDR3
6 unique J



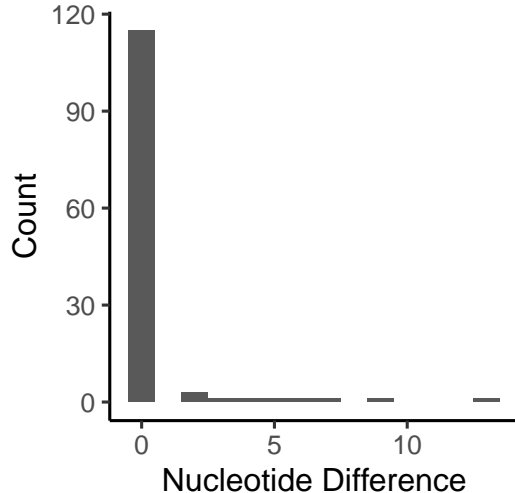
IGHV1–46*01

98 sequences assigned
88 (89.8%) exact matches, in which:
88 unique CDR3
6 unique J



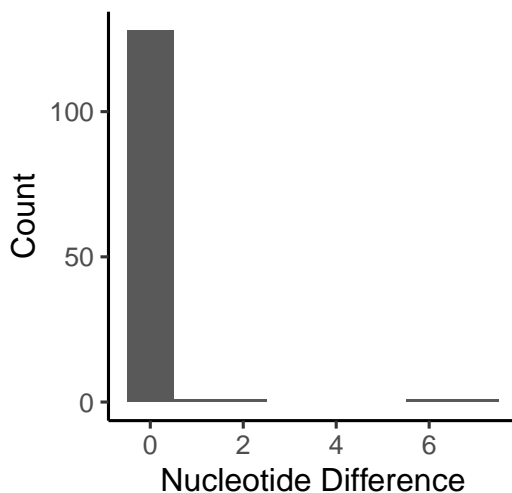
IGHV1–8*01

125 sequences assigned
115 (92%) exact matches, in which:
115 unique CDR3
4 unique J



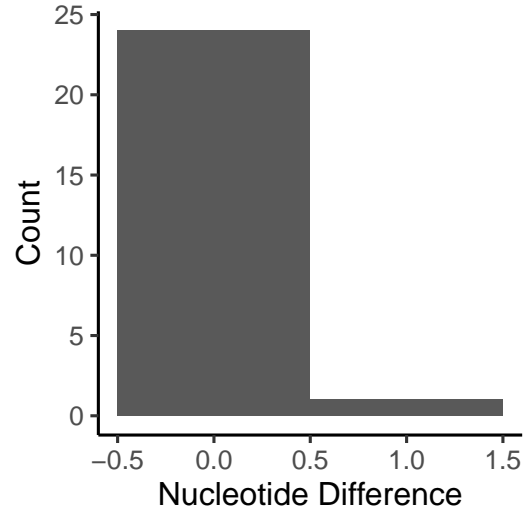
IGHV1–24*01

133 sequences assigned
128 (96.2%) exact matches, in which:
128 unique CDR3
6 unique J



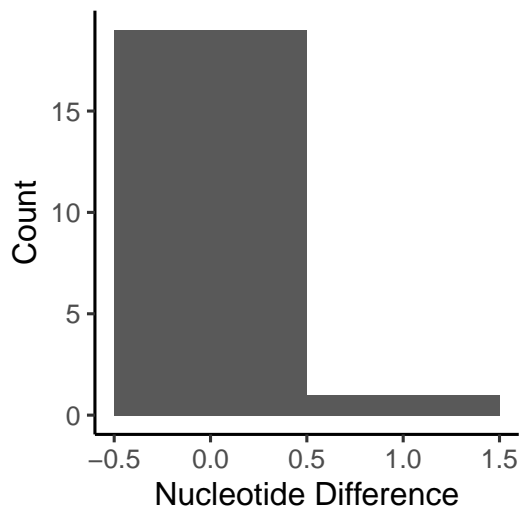
IGHV1–58*01

26 sequences assigned
24 (92.3%) exact matches, in which:
24 unique CDR3
5 unique J



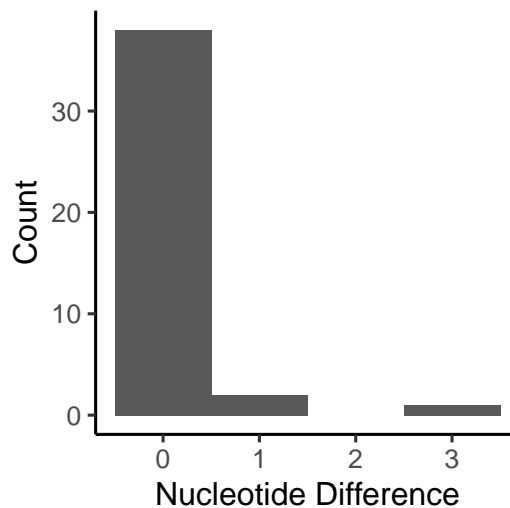
IGHV1-69-2*01

20 sequences assigned
19 (95%) exact matches, in which:
19 unique CDR3
4 unique J



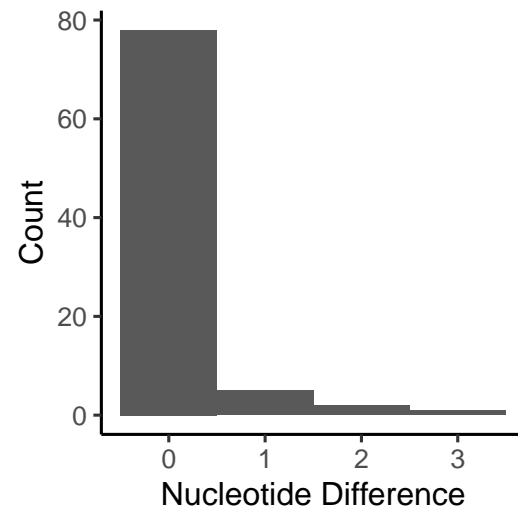
IGHV2-26*01

41 sequences assigned
38 (92.7%) exact matches, in which:
38 unique CDR3
5 unique J



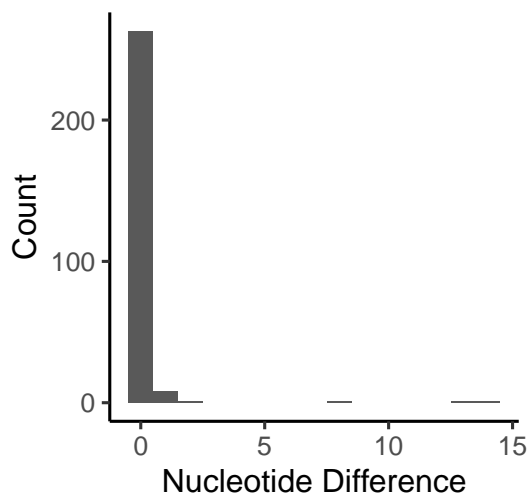
IGHV3-7*03

87 sequences assigned
78 (89.7%) exact matches, in which:
78 unique CDR3
5 unique J



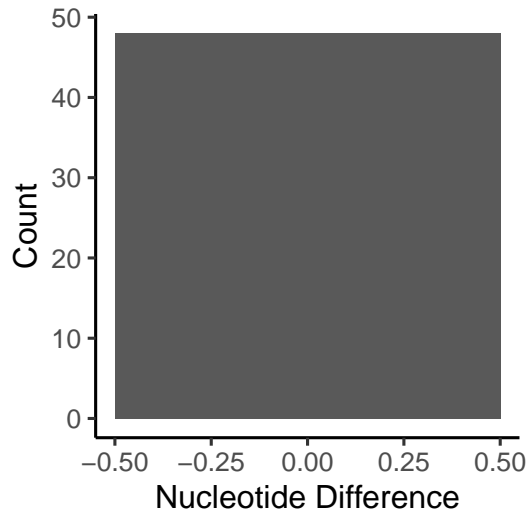
IGHV1-69*06

275 sequences assigned
263 (95.6%) exact matches, in which:
263 unique CDR3
6 unique J



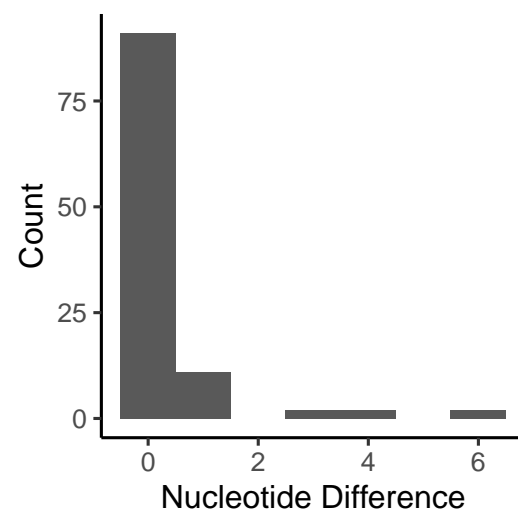
IGHV2-70*01

48 sequences assigned
48 (100%) exact matches, in which:
48 unique CDR3
4 unique J



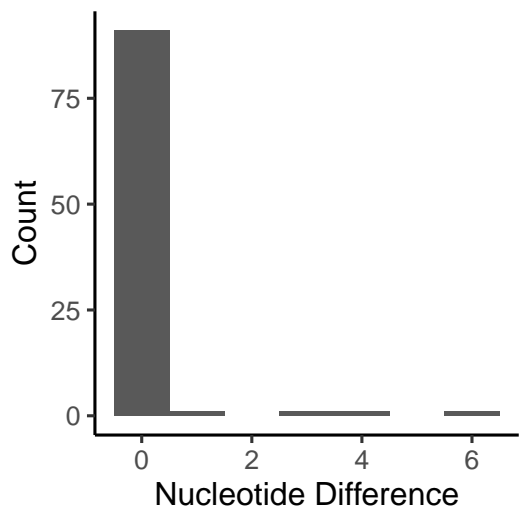
IGHV3-9*01

108 sequences assigned
91 (84.3%) exact matches, in which:
91 unique CDR3
5 unique J



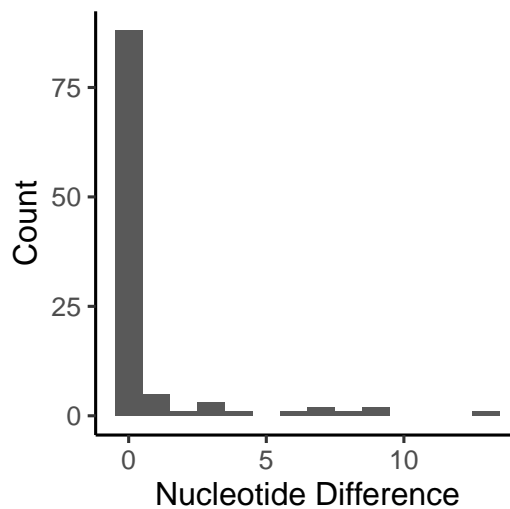
IGHV2-5*02

95 sequences assigned
91 (95.8%) exact matches, in which:
90 unique CDR3
6 unique J



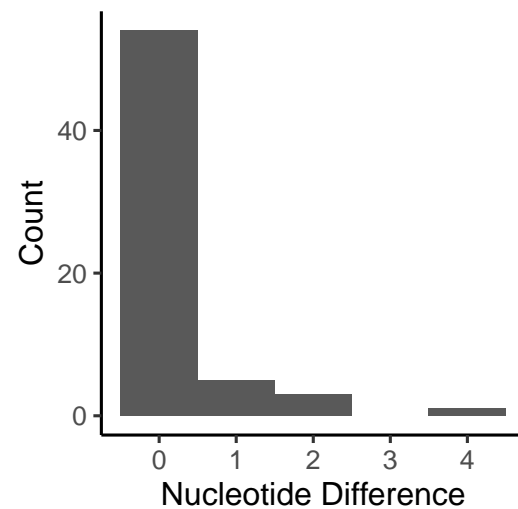
IGHV3-7*01

105 sequences assigned
88 (83.8%) exact matches, in which:
88 unique CDR3
6 unique J



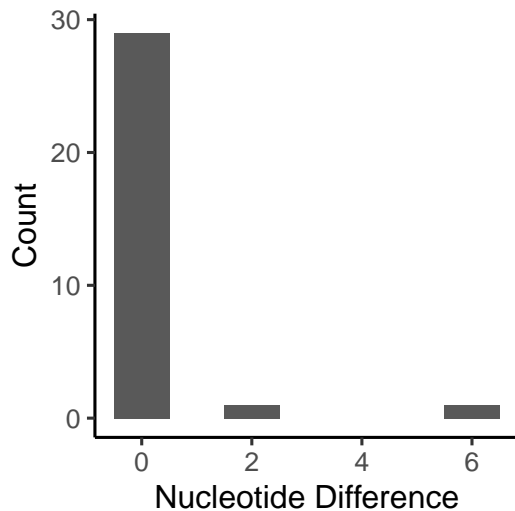
IGHV3-11*01

63 sequences assigned
54 (85.7%) exact matches, in which:
54 unique CDR3
5 unique J



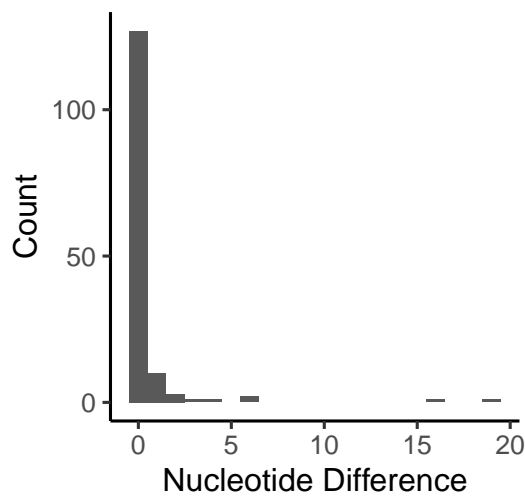
IGHV3-11*06

31 sequences assigned
29 (93.5%) exact matches, in which:
29 unique CDR3
5 unique J



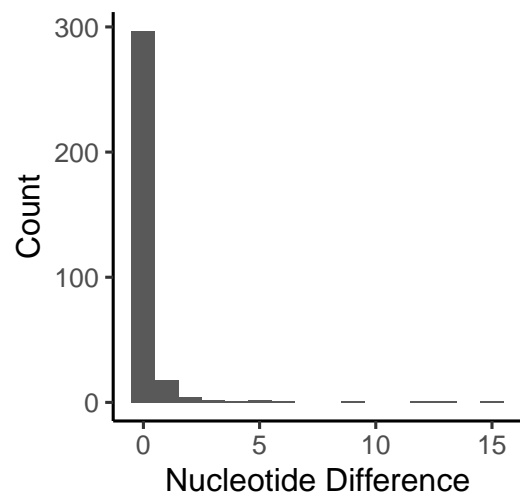
IGHV3-15*01

146 sequences assigned
127 (87%) exact matches, in which:
126 unique CDR3
5 unique J



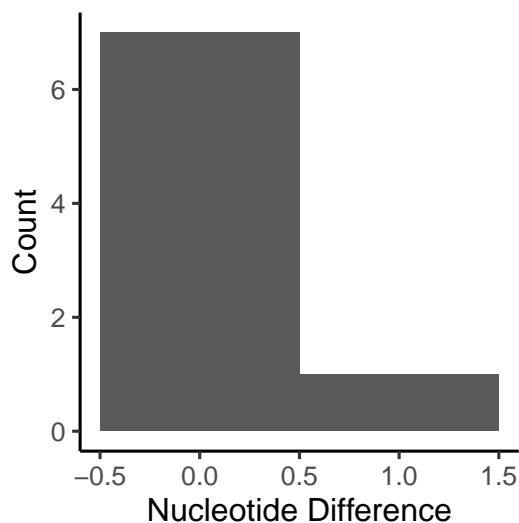
IGHV3-30-3*01

330 sequences assigned
297 (90%) exact matches, in which:
297 unique CDR3
6 unique J



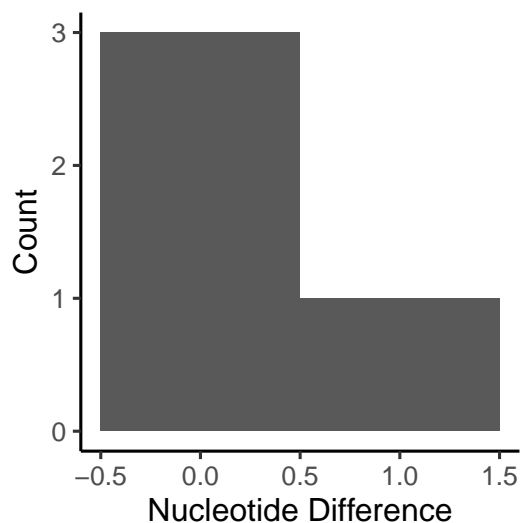
IGHV3-13*01

8 sequences assigned
7 (87.5%) exact matches, in which:
7 unique CDR3
3 unique J



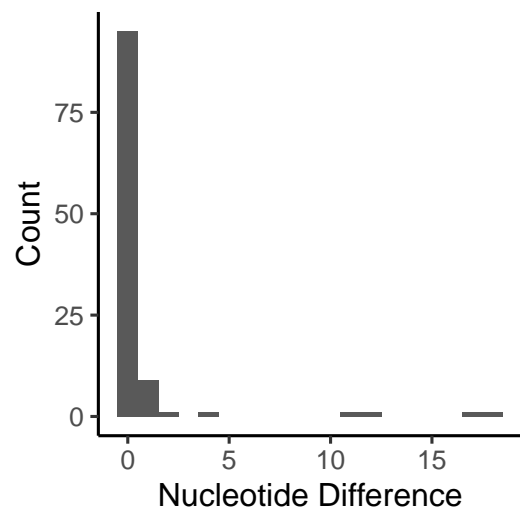
IGHV3-20*01

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



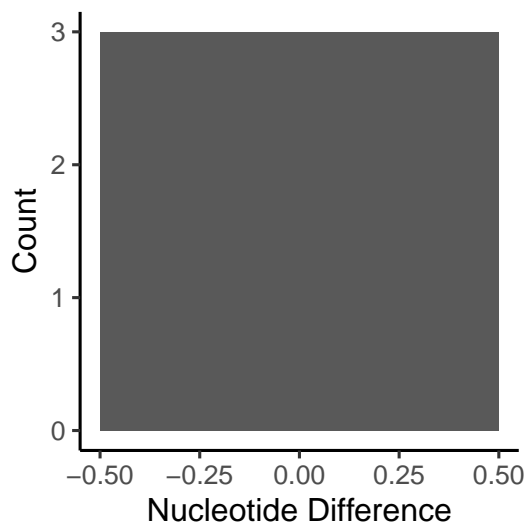
IGHV3-33*01

110 sequences assigned
95 (86.4%) exact matches, in which:
95 unique CDR3
6 unique J



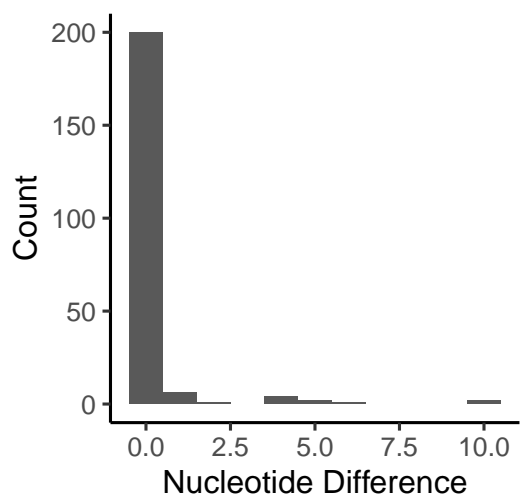
IGHV3-13*05

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



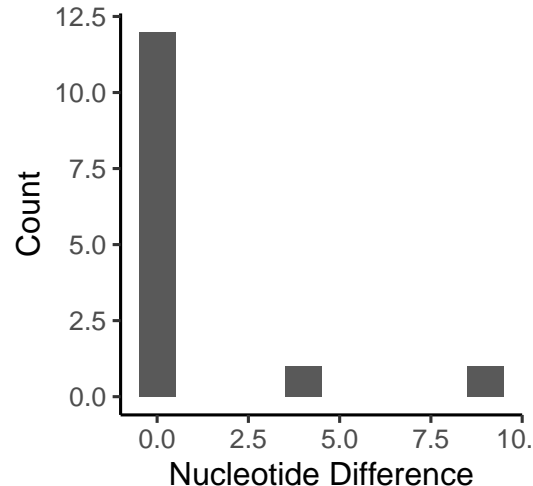
IGHV3-21*01

216 sequences assigned
200 (92.6%) exact matches, in which:
200 unique CDR3
5 unique J



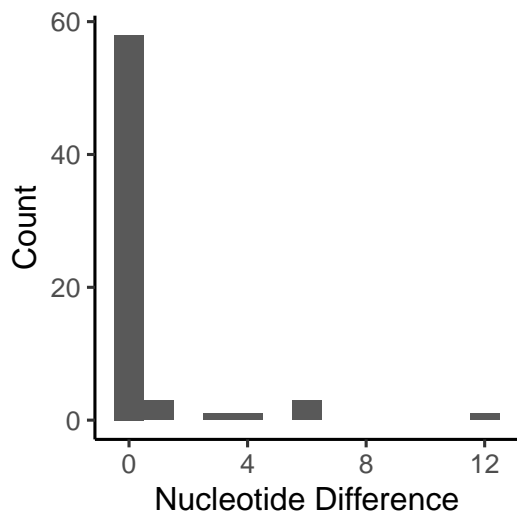
IGHV3-43*01

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



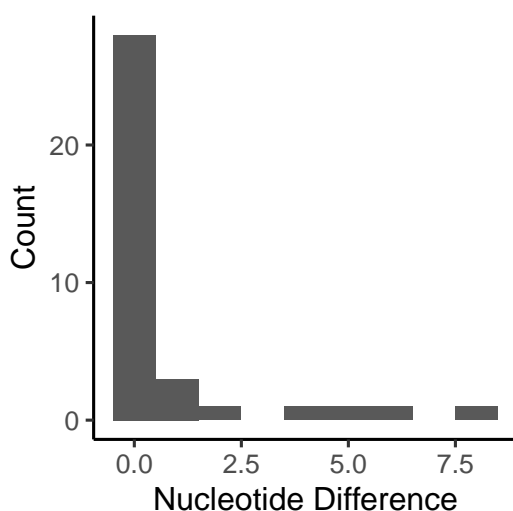
IGHV3-48*02

67 sequences assigned
58 (86.6%) exact matches, in which:
58 unique CDR3
5 unique J



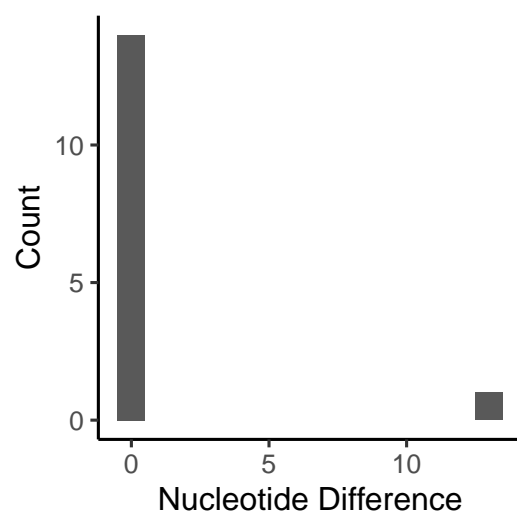
IGHV3-49*05

36 sequences assigned
28 (77.8%) exact matches, in which:
28 unique CDR3
4 unique J



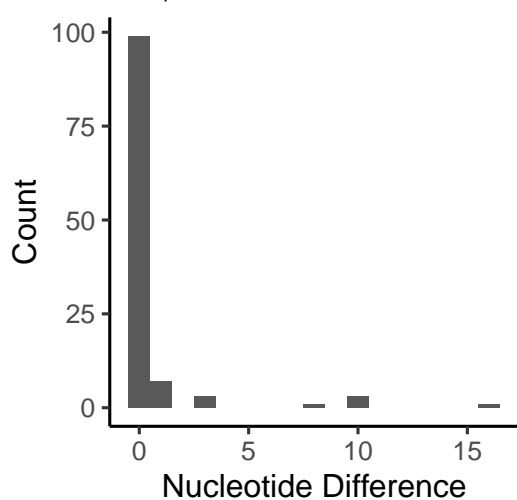
IGHV3-72*01

15 sequences assigned
14 (93.3%) exact matches, in which:
14 unique CDR3
3 unique J



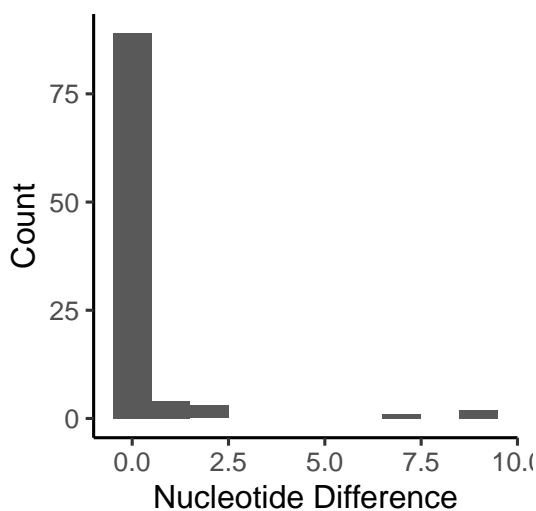
IGHV3-48*03

114 sequences assigned
99 (86.8%) exact matches, in which:
99 unique CDR3
5 unique J



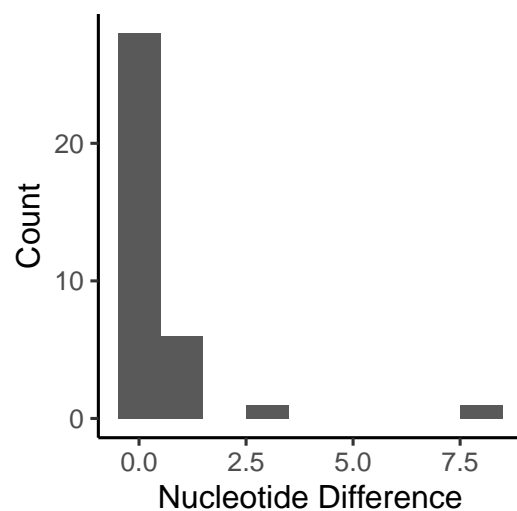
IGHV3-53*01

99 sequences assigned
89 (89.9%) exact matches, in which:
89 unique CDR3
6 unique J



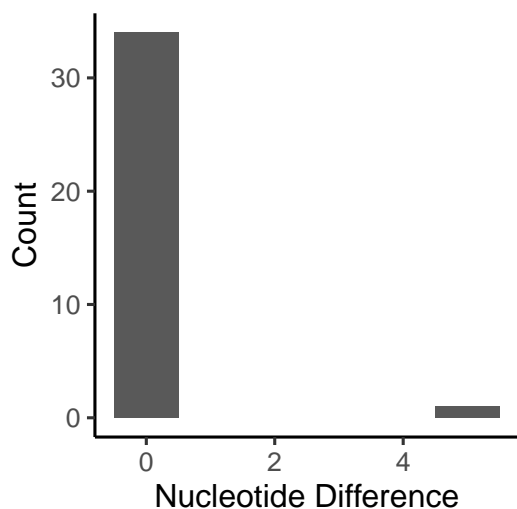
IGHV3-73*02

36 sequences assigned
28 (77.8%) exact matches, in which:
27 unique CDR3
4 unique J



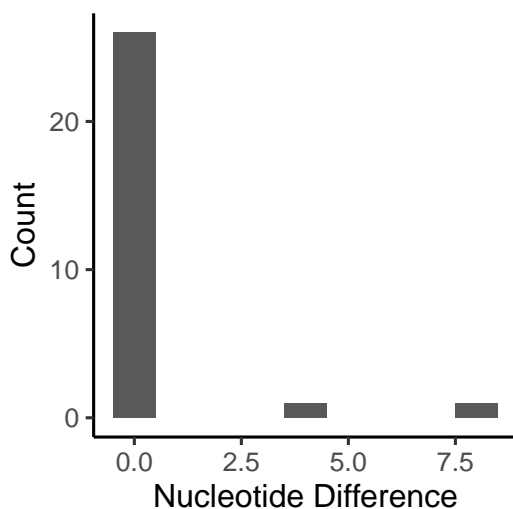
IGHV3-49*04

35 sequences assigned
34 (97.1%) exact matches, in which:
34 unique CDR3
5 unique J



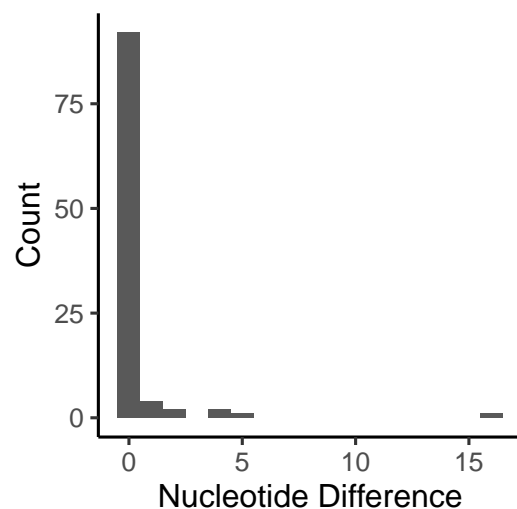
IGHV3-53*02

28 sequences assigned
26 (92.9%) exact matches, in which:
26 unique CDR3
6 unique J



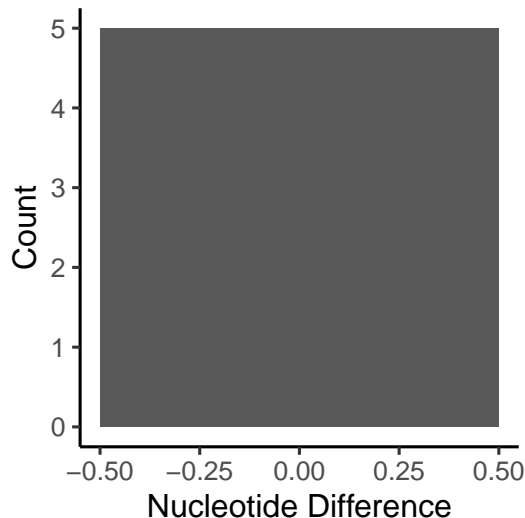
IGHV3-74*01

102 sequences assigned
92 (90.2%) exact matches, in which:
92 unique CDR3
5 unique J



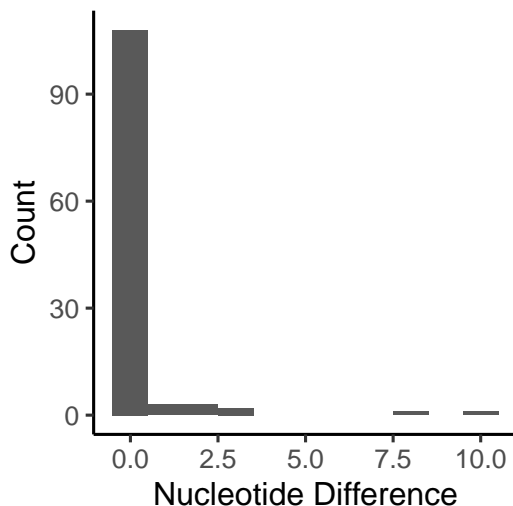
IGHV3-43D*04

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



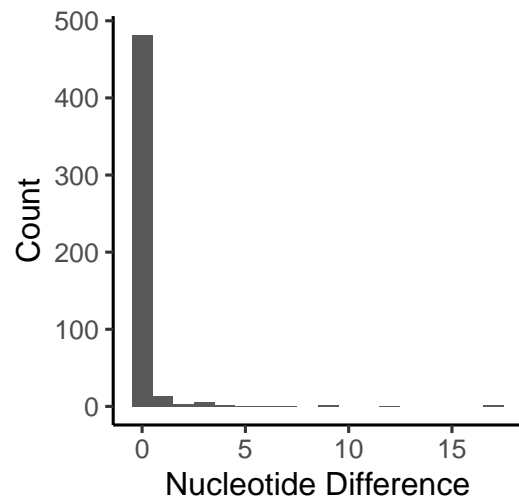
IGHV4-30-4*01

118 sequences assigned
108 (91.5%) exact matches, in which:
108 unique CDR3
5 unique J



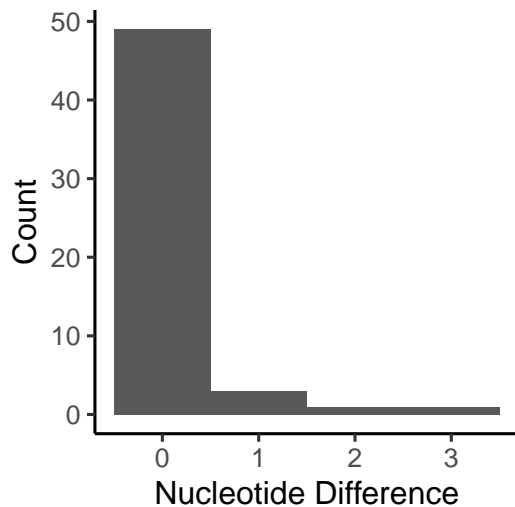
IGHV4-34*01

515 sequences assigned
482 (93.6%) exact matches, in which:
482 unique CDR3
6 unique J



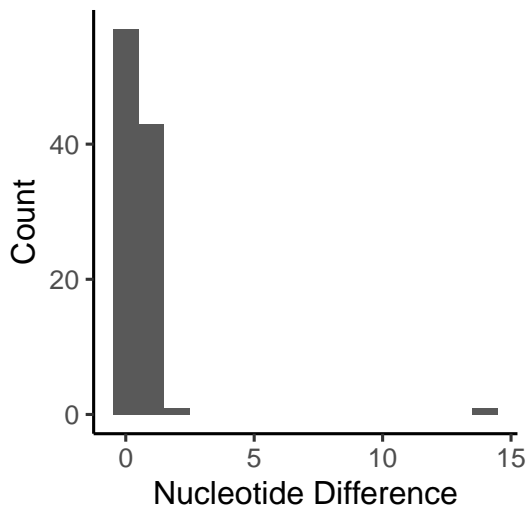
IGHV3-64D*09

54 sequences assigned
49 (90.7%) exact matches, in which:
49 unique CDR3
4 unique J



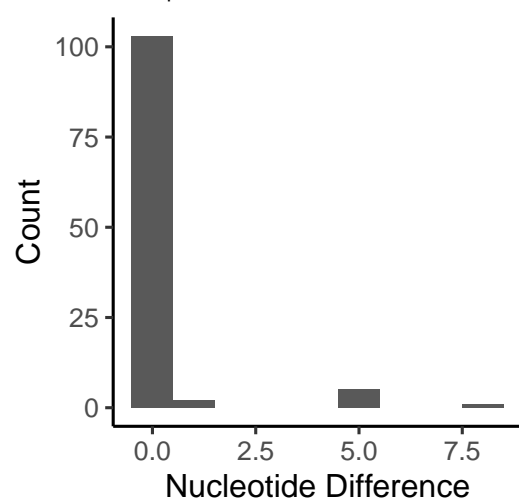
IGHV4-30-2*01

102 sequences assigned
57 (55.9%) exact matches, in which:
57 unique CDR3
4 unique J



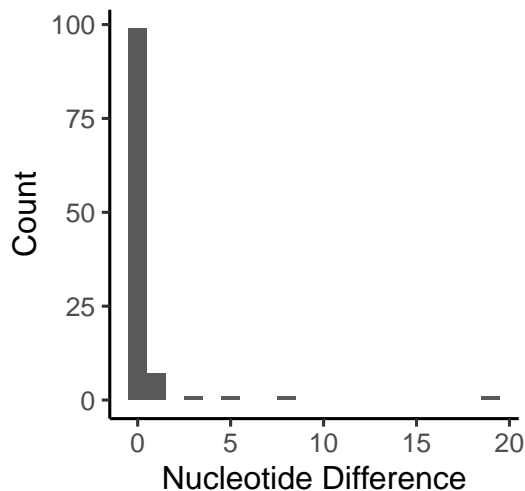
IGHV4-38-2*02_A70G

112 sequences assigned
103 (92%) exact matches, in which:
103 unique CDR3
5 unique J



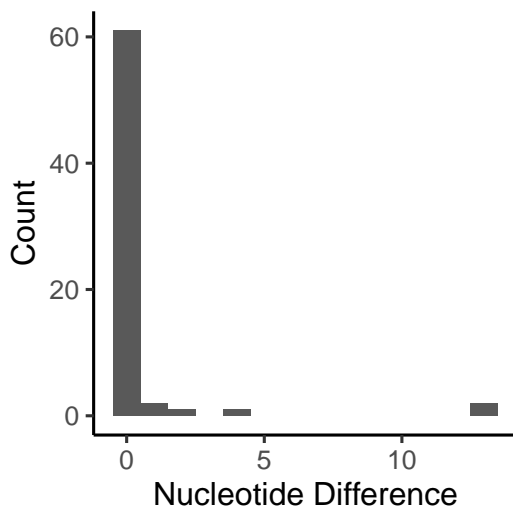
IGHV4-4*02

110 sequences assigned
99 (90%) exact matches, in which:
99 unique CDR3
5 unique J



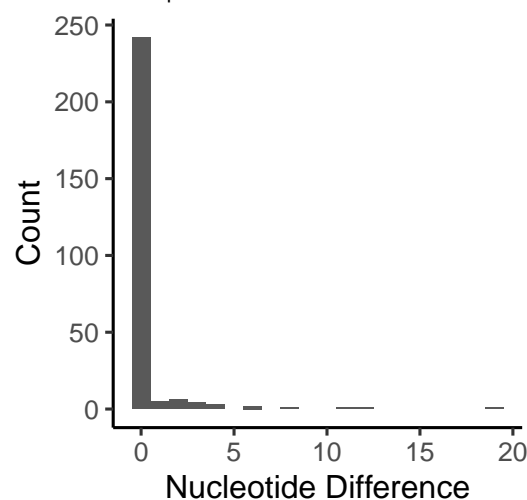
IGHV4-31*03

67 sequences assigned
61 (91%) exact matches, in which:
61 unique CDR3
6 unique J



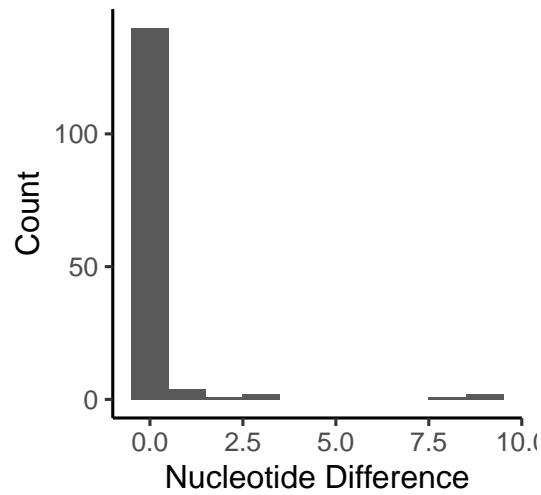
IGHV4-39*07

267 sequences assigned
242 (90.6%) exact matches, in which:
242 unique CDR3
6 unique J



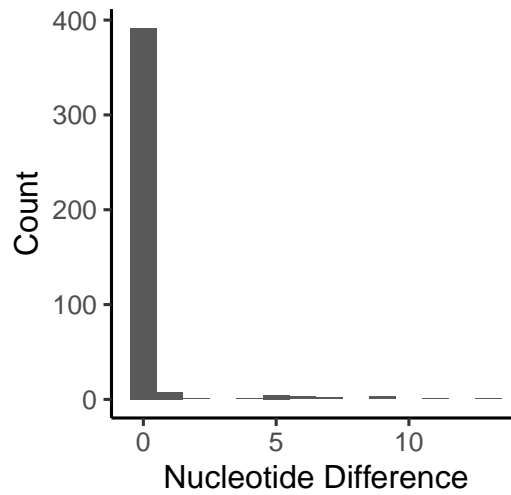
IGHV4–59*01

150 sequences assigned
140 (93.3%) exact matches, in which:
140 unique CDR3
6 unique J



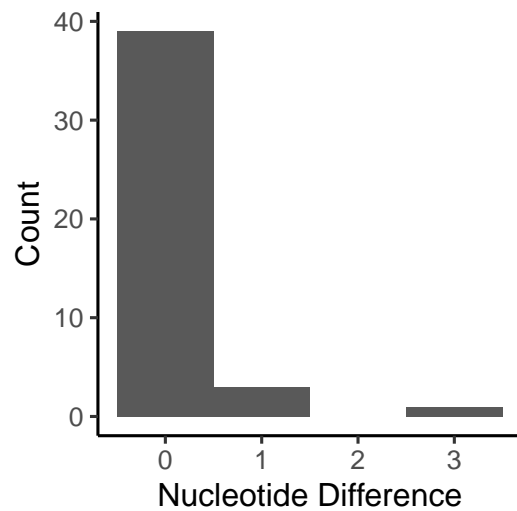
IGHV5–51*01

417 sequences assigned
392 (94%) exact matches, in which:
392 unique CDR3
5 unique J



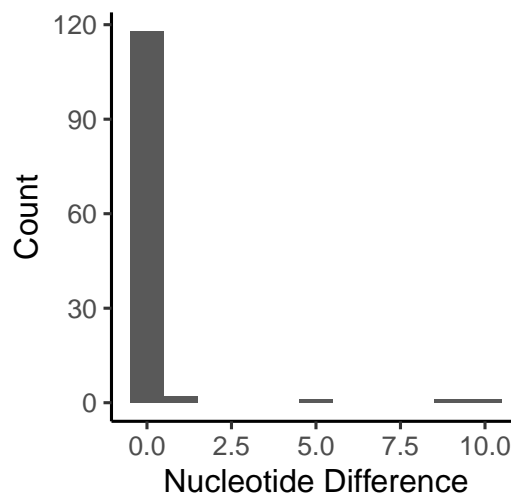
IGHV4–61*01

43 sequences assigned
39 (90.7%) exact matches, in which:
39 unique CDR3
6 unique J



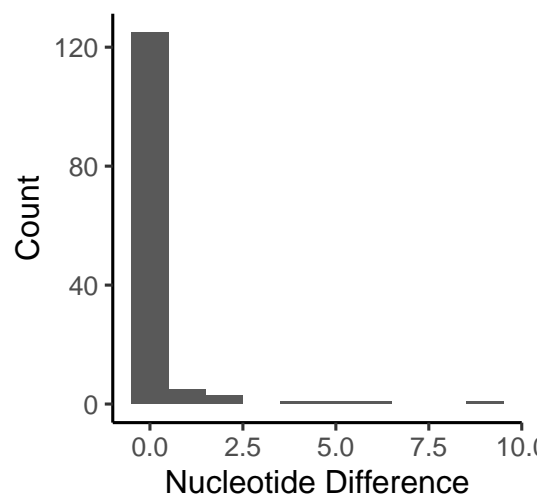
IGHV6–1*01

123 sequences assigned
118 (95.9%) exact matches, in which:
118 unique CDR3
5 unique J



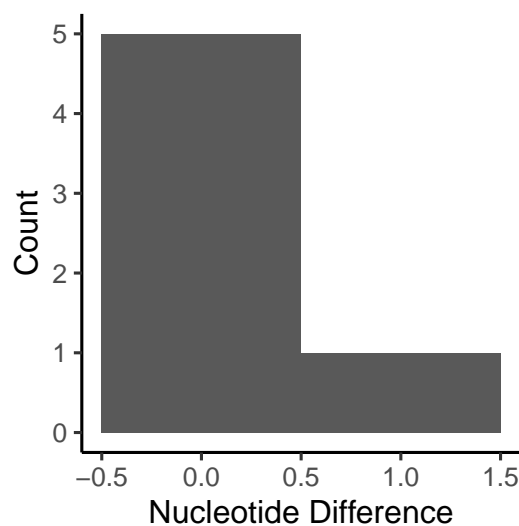
IGHV5–10–1*03

137 sequences assigned
125 (91.2%) exact matches, in which:
125 unique CDR3
5 unique J

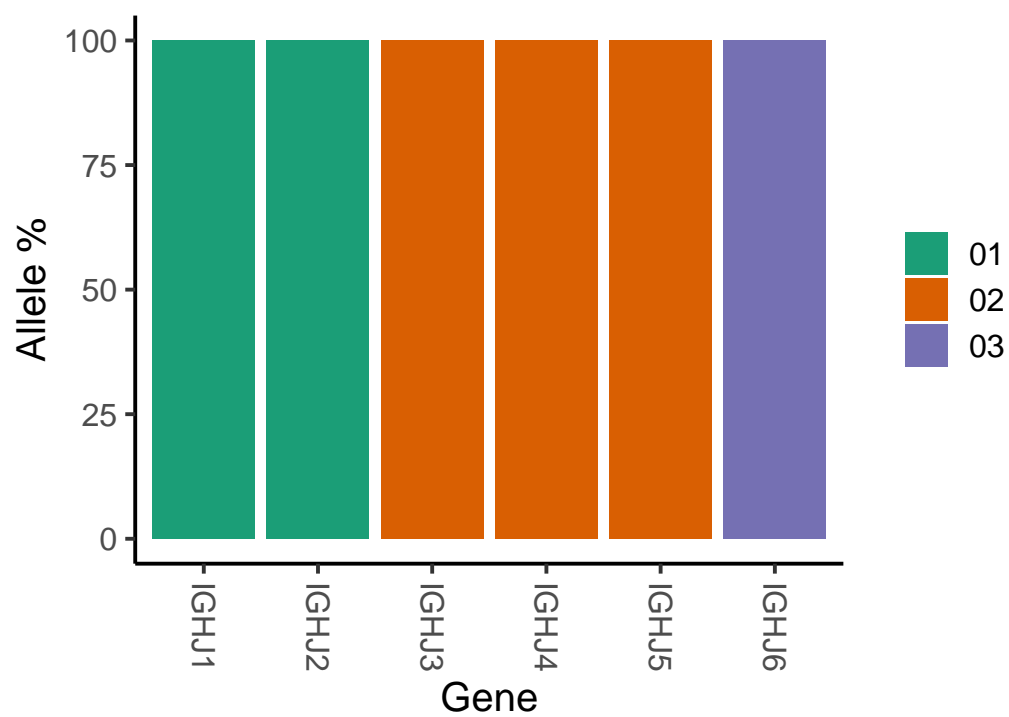


IGHV7–4–1*01

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



Allele Usage



Warning – no inferred sequences found.