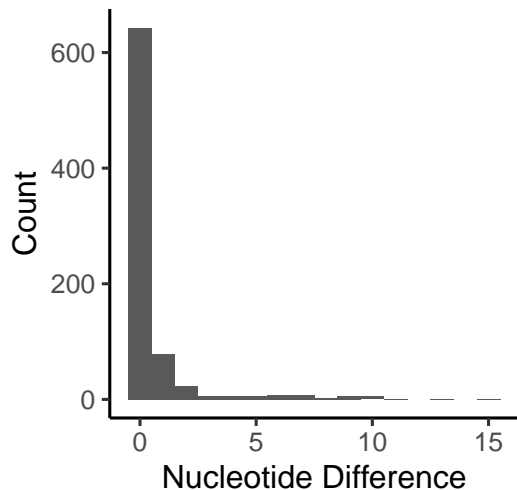


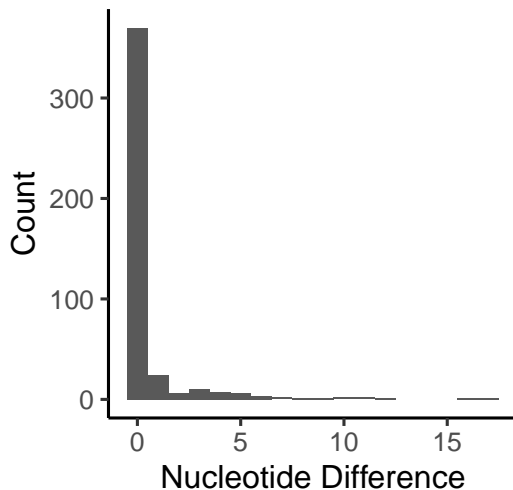
IGHV1-2*02

795 sequences assigned
643 (80.9%) exact matches, in which:
636 unique CDR3
7 unique J



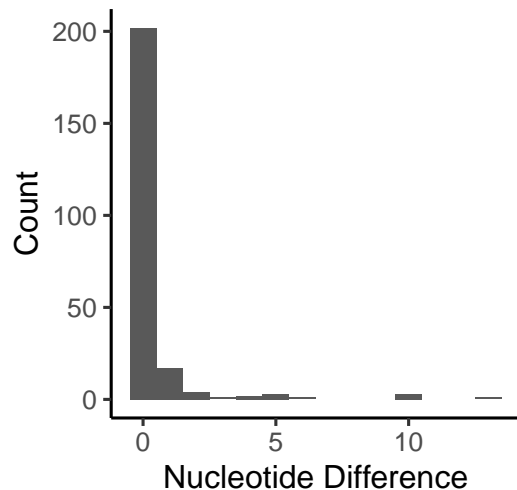
IGHV1-18*01

438 sequences assigned
370 (84.5%) exact matches, in which:
369 unique CDR3
7 unique J



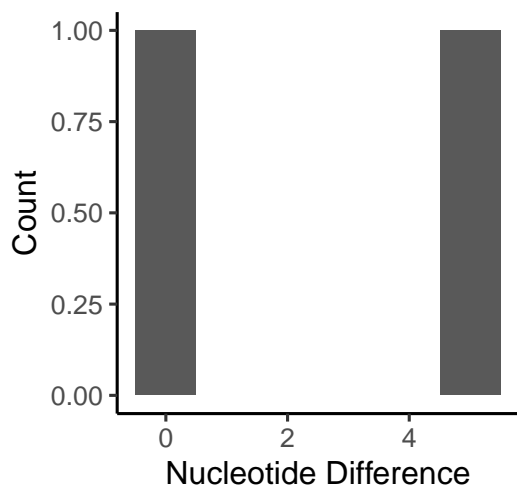
IGHV1-46*01

234 sequences assigned
202 (86.3%) exact matches, in which:
200 unique CDR3
6 unique J



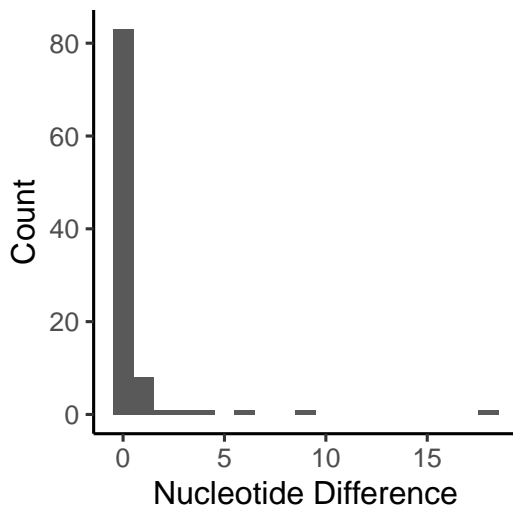
IGHV1-3*02

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



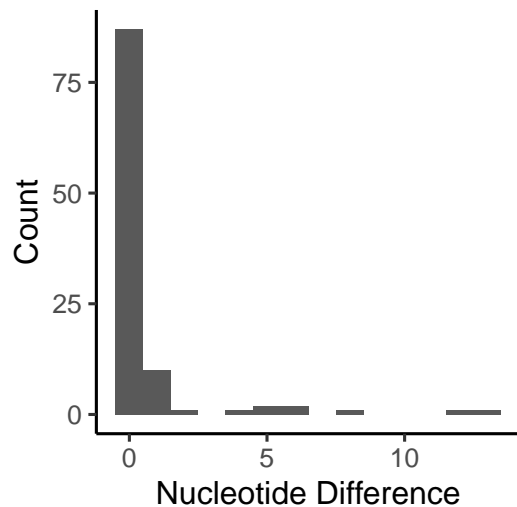
IGHV1-24*01

97 sequences assigned
83 (85.6%) exact matches, in which:
83 unique CDR3
6 unique J



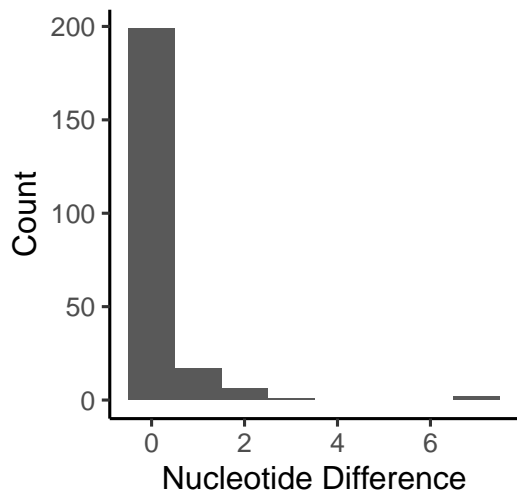
IGHV1-46*03

106 sequences assigned
87 (82.1%) exact matches, in which:
85 unique CDR3
6 unique J



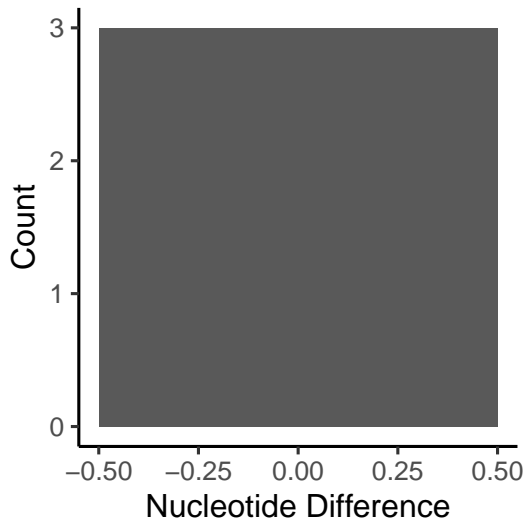
IGHV1-8*01

225 sequences assigned
199 (88.4%) exact matches, in which:
196 unique CDR3
5 unique J



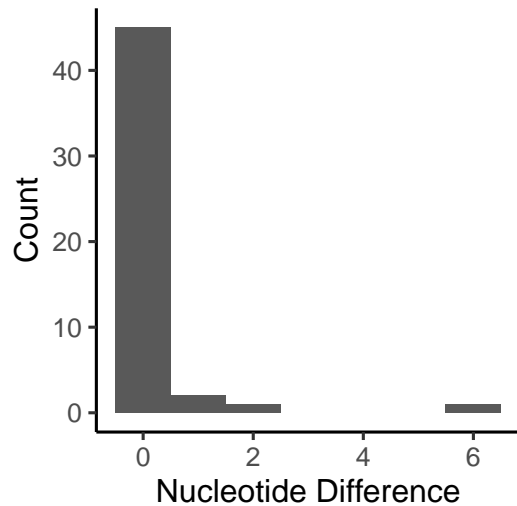
IGHV1-45*02

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



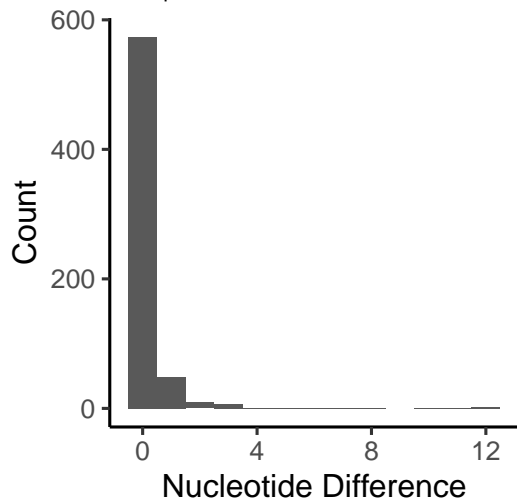
IGHV1-58*01

49 sequences assigned
45 (91.8%) exact matches, in which:
44 unique CDR3
6 unique J



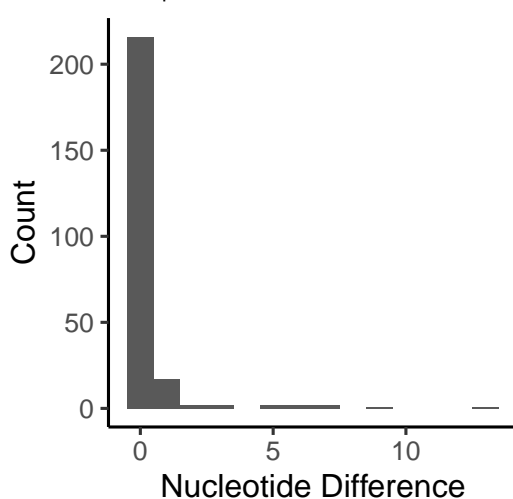
IGHV1–69*01

647 sequences assigned
574 (88.7%) exact matches, in which:
571 unique CDR3
7 unique J



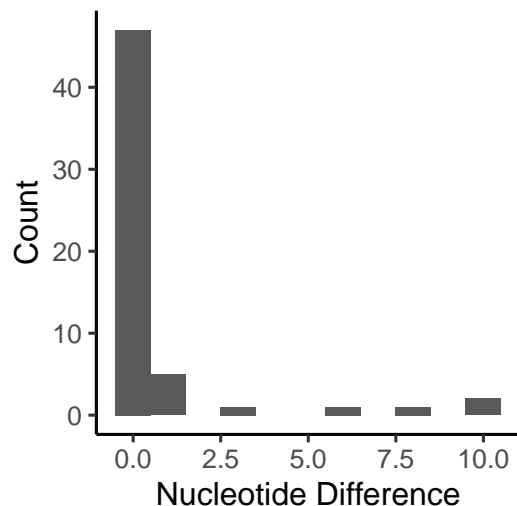
IGHV1–69*17

245 sequences assigned
216 (88.2%) exact matches, in which:
213 unique CDR3
6 unique J



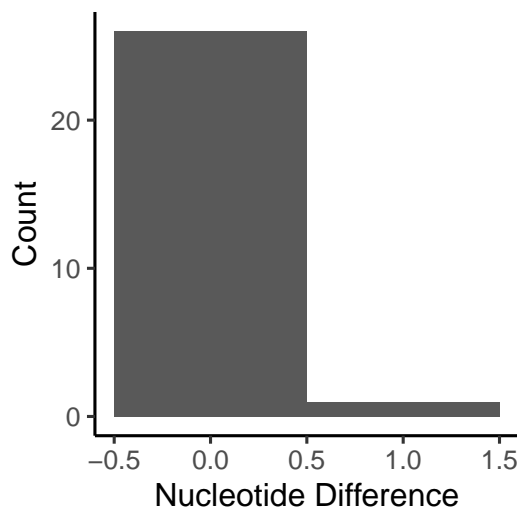
IGHV2–70*01

57 sequences assigned
47 (82.5%) exact matches, in which:
47 unique CDR3
6 unique J



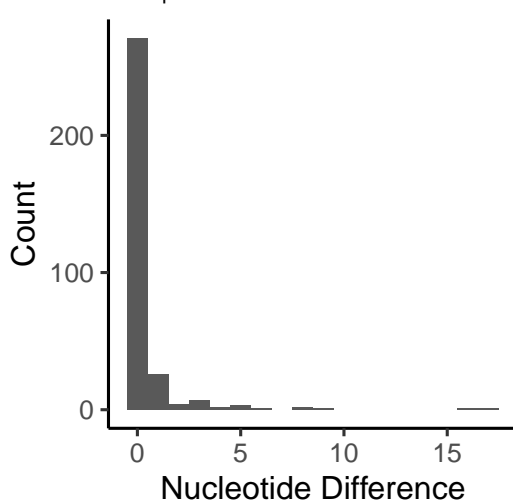
IGHV1–69–2*01

27 sequences assigned
26 (96.3%) exact matches, in which:
26 unique CDR3
7 unique J



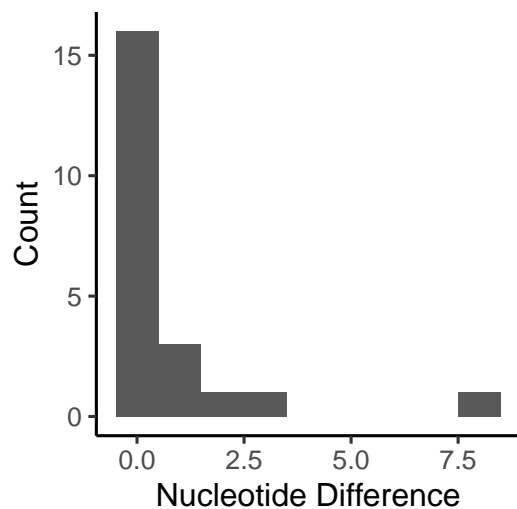
IGHV2–5*01

319 sequences assigned
271 (85%) exact matches, in which:
271 unique CDR3
7 unique J



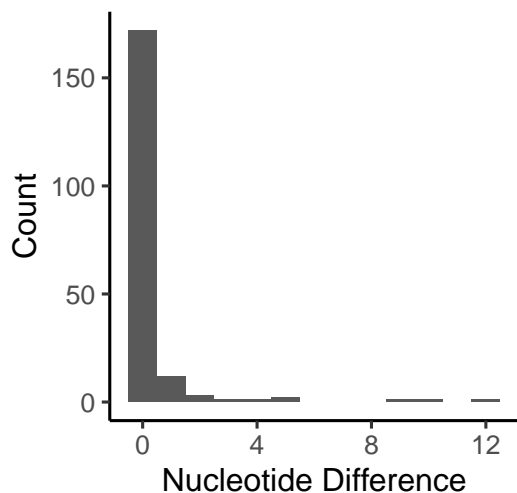
IGHV2–70*04

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



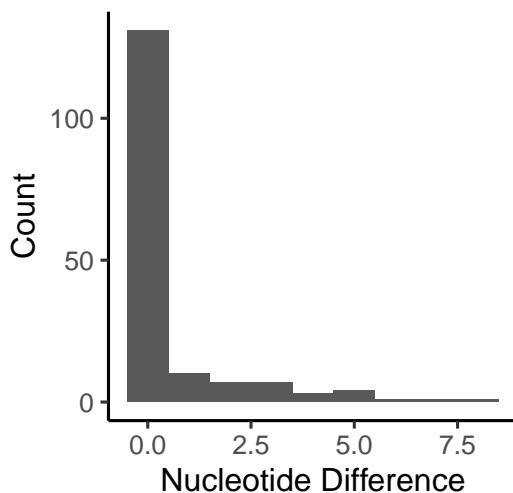
IGHV1–69*06

194 sequences assigned
172 (88.7%) exact matches, in which:
170 unique CDR3
7 unique J



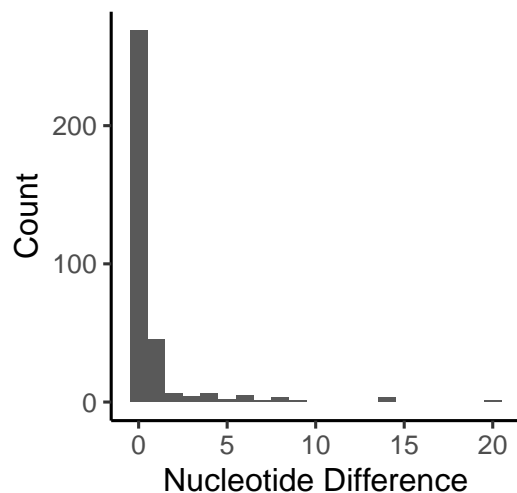
IGHV2–26*01

165 sequences assigned
131 (79.4%) exact matches, in which:
130 unique CDR3
6 unique J



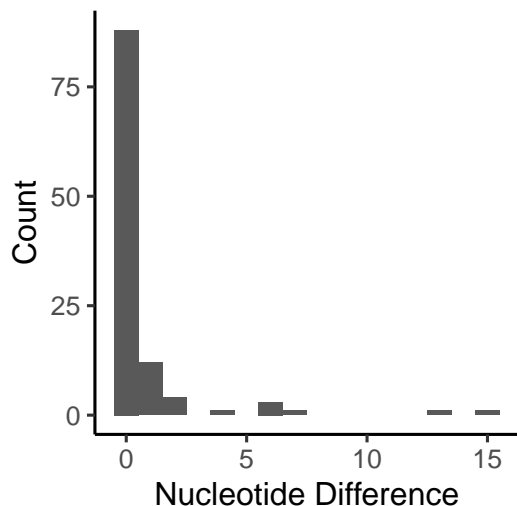
IGHV3–7*01

346 sequences assigned
269 (77.7%) exact matches, in which:
261 unique CDR3
6 unique J



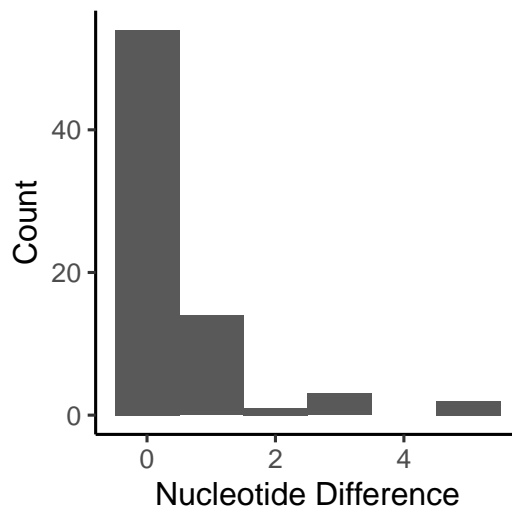
IGHV3-7*05

111 sequences assigned
88 (79.3%) exact matches, in which:
88 unique CDR3
5 unique J



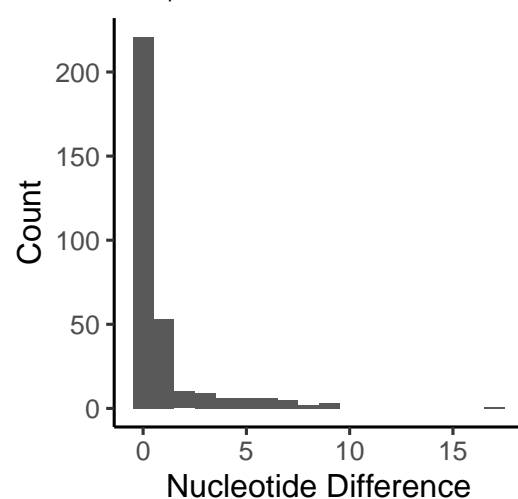
IGHV3-11*06

75 sequences assigned
54 (72%) exact matches, in which:
54 unique CDR3
5 unique J



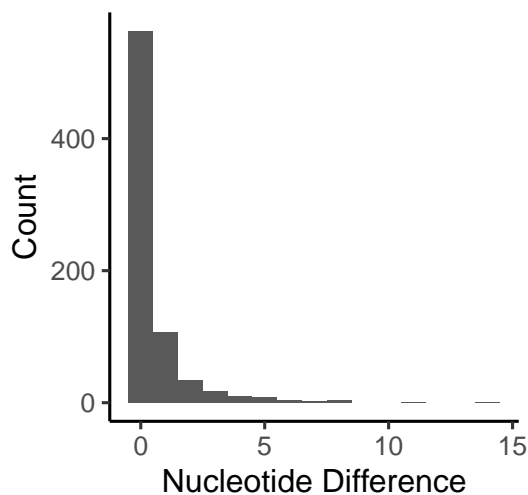
IGHV3-15*07

322 sequences assigned
221 (68.6%) exact matches, in which:
220 unique CDR3
5 unique J



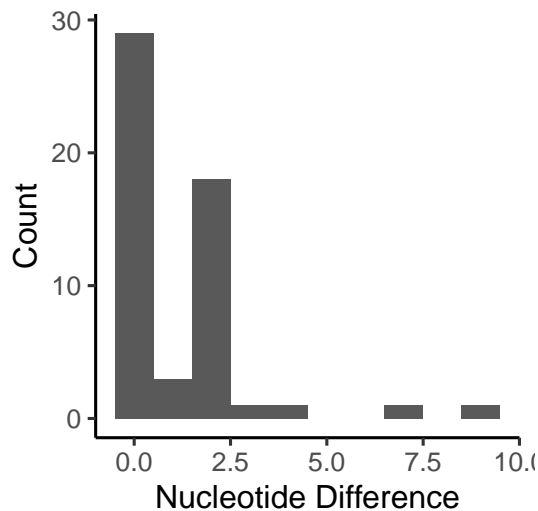
IGHV3-9*01

753 sequences assigned
563 (74.8%) exact matches, in which:
552 unique CDR3
7 unique J



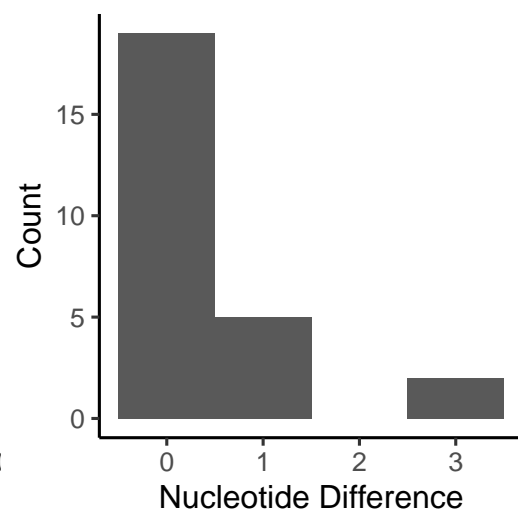
IGHV3-13*01

54 sequences assigned
29 (53.7%) exact matches, in which:
28 unique CDR3
5 unique J



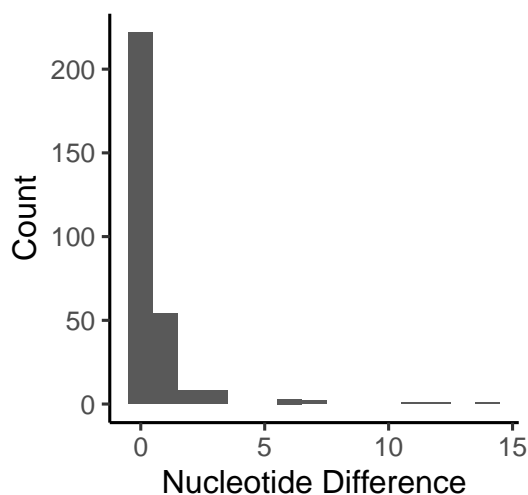
IGHV3-20*01

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



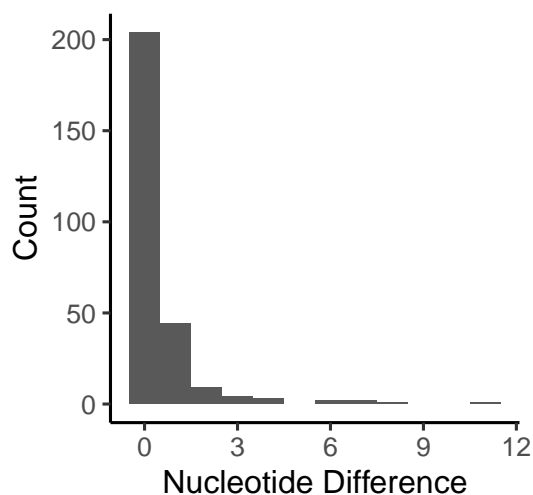
IGHV3-11*01

300 sequences assigned
222 (74%) exact matches, in which:
217 unique CDR3
6 unique J



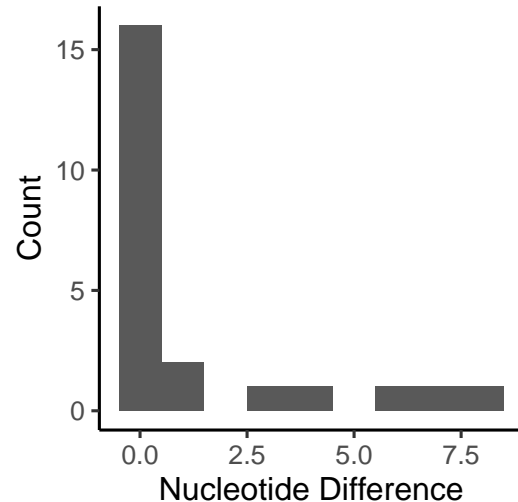
IGHV3-15*01

270 sequences assigned
204 (75.6%) exact matches, in which:
200 unique CDR3
6 unique J



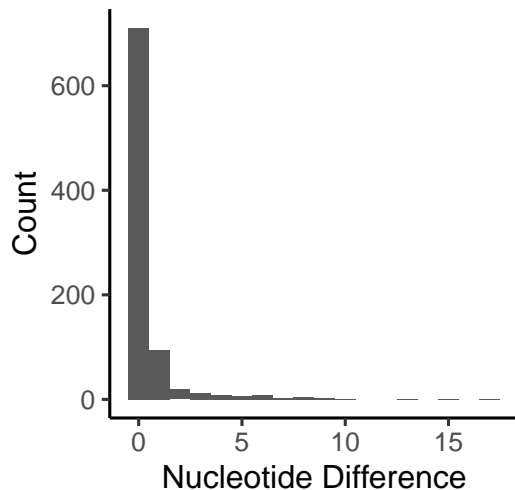
IGHV3-20*04

23 sequences assigned
16 (69.6%) exact matches, in which:
14 unique CDR3
4 unique J



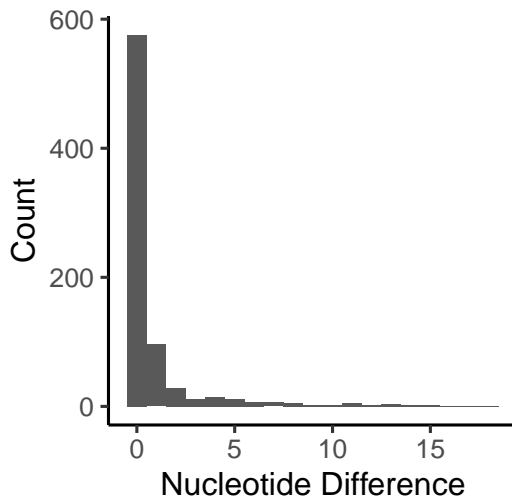
IGHV3–21*01

874 sequences assigned
711 (81.4%) exact matches, in which:
689 unique CDR3
7 unique J



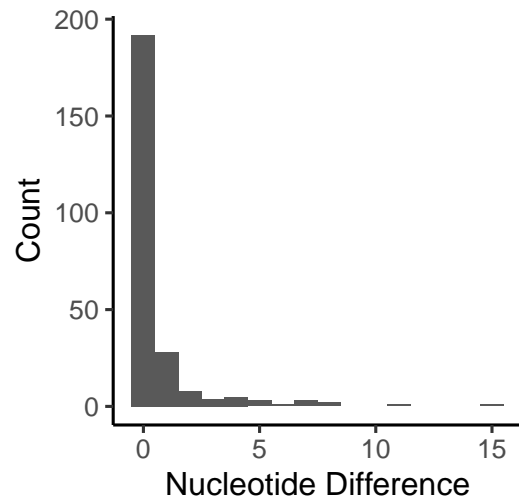
IGHV3–30*18

782 sequences assigned
576 (73.7%) exact matches, in which:
568 unique CDR3
7 unique J



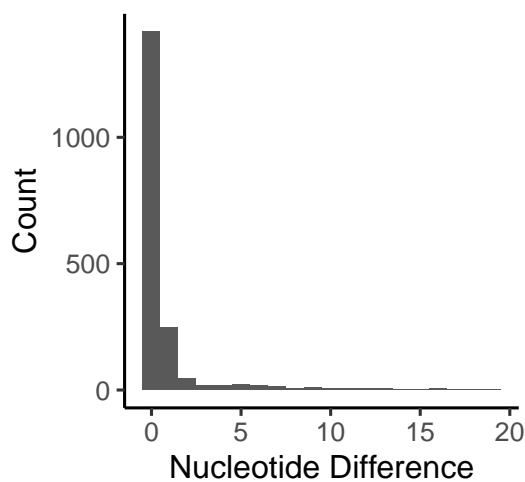
IGHV3–48*01

248 sequences assigned
192 (77.4%) exact matches, in which:
190 unique CDR3
7 unique J



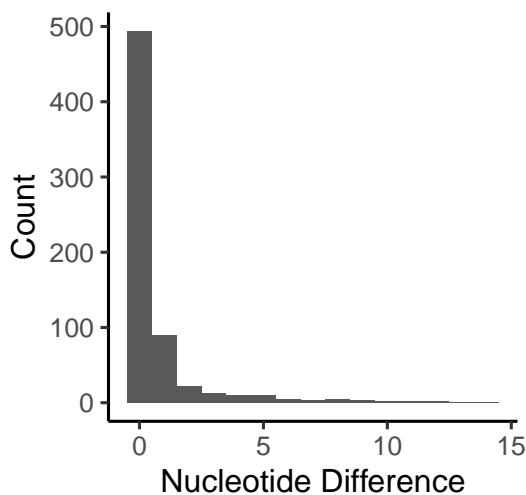
IGHV3–23*01

1860 sequences assigned
1418 (76.2%) exact matches, in which:
1399 unique CDR3
7 unique J



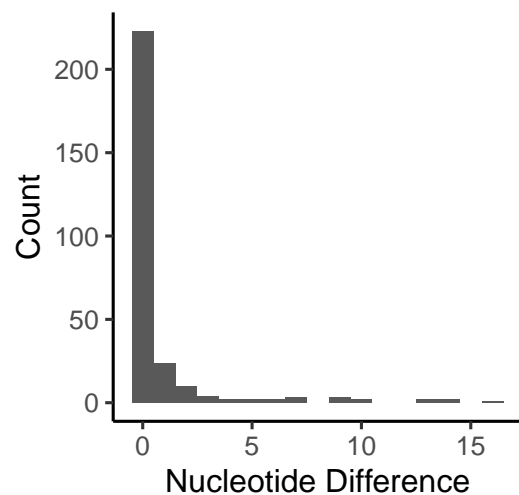
IGHV3–33*01

666 sequences assigned
494 (74.2%) exact matches, in which:
484 unique CDR3
6 unique J



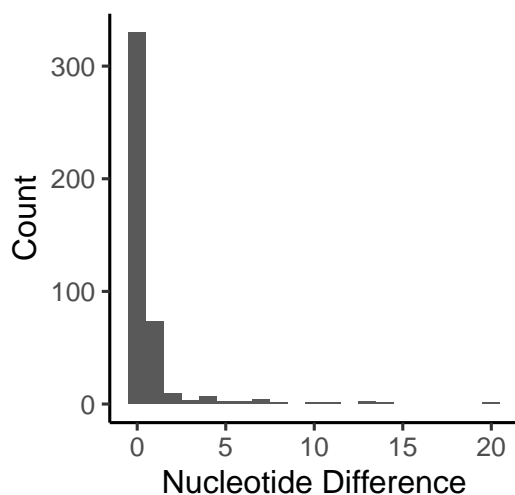
IGHV3–48*02

280 sequences assigned
223 (79.6%) exact matches, in which:
222 unique CDR3
6 unique J



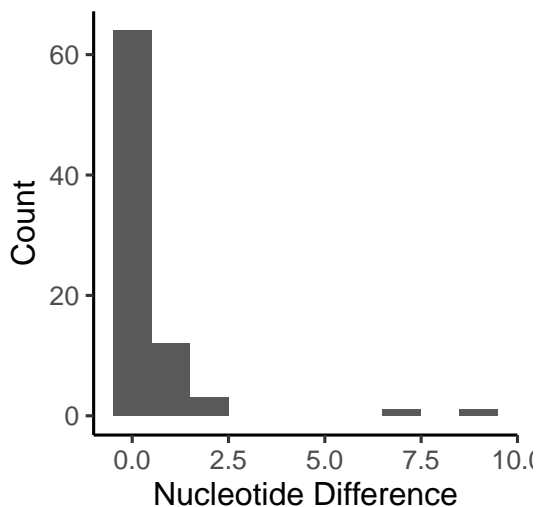
IGHV3–30–3*01

437 sequences assigned
330 (75.5%) exact matches, in which:
328 unique CDR3
6 unique J



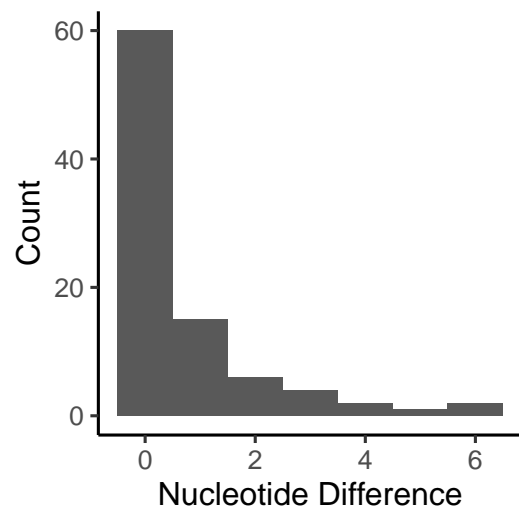
IGHV3–43*01

81 sequences assigned
64 (79%) exact matches, in which:
64 unique CDR3
7 unique J



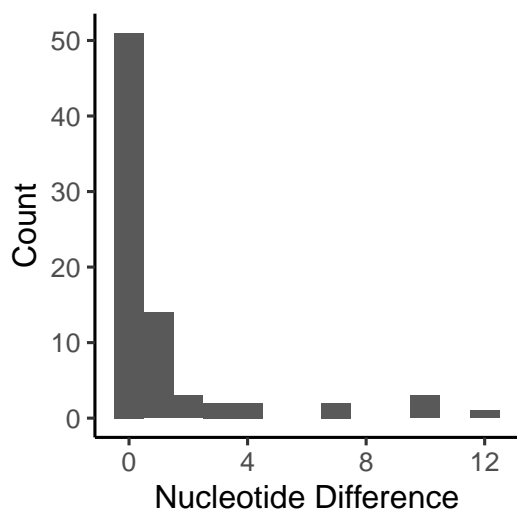
IGHV3–49*03

90 sequences assigned
60 (66.7%) exact matches, in which:
59 unique CDR3
5 unique J



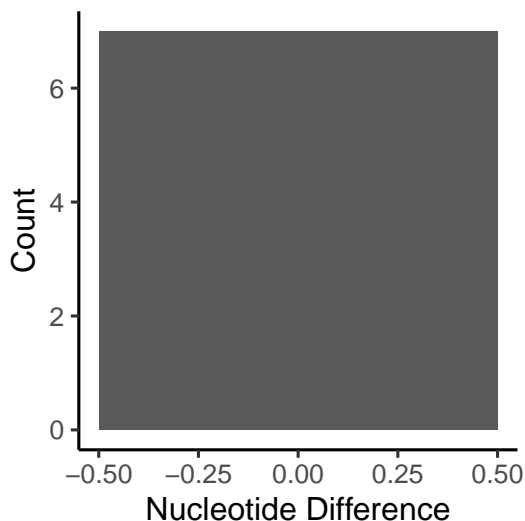
IGHV3-49*05

78 sequences assigned
51 (65.4%) exact matches, in which:
50 unique CDR3
5 unique J



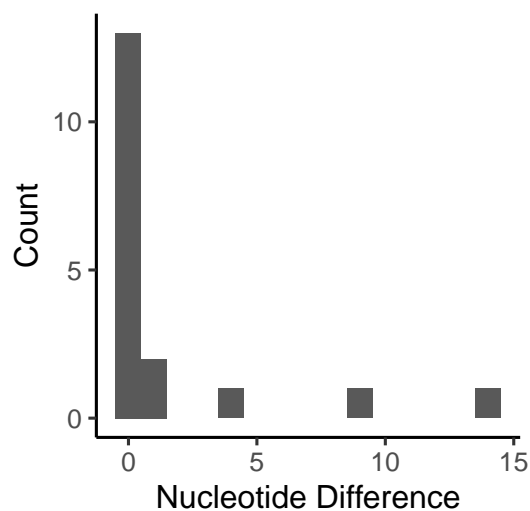
IGHV3-64*02

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



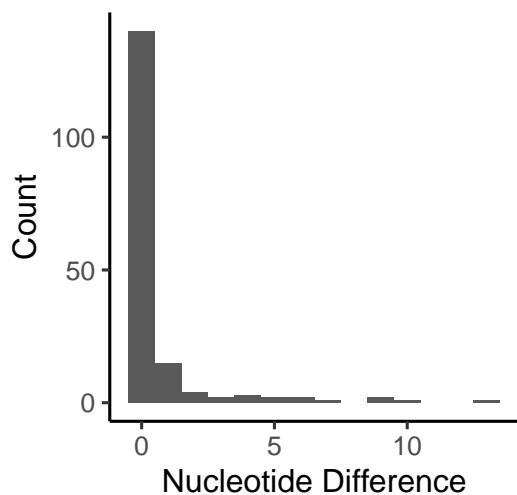
IGHV3-72*01

18 sequences assigned
13 (72.2%) exact matches, in which:
13 unique CDR3
5 unique J



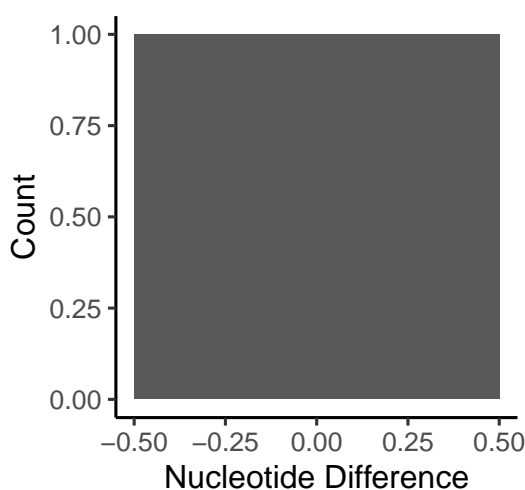
IGHV3-53*01

173 sequences assigned
140 (80.9%) exact matches, in which:
138 unique CDR3
6 unique J



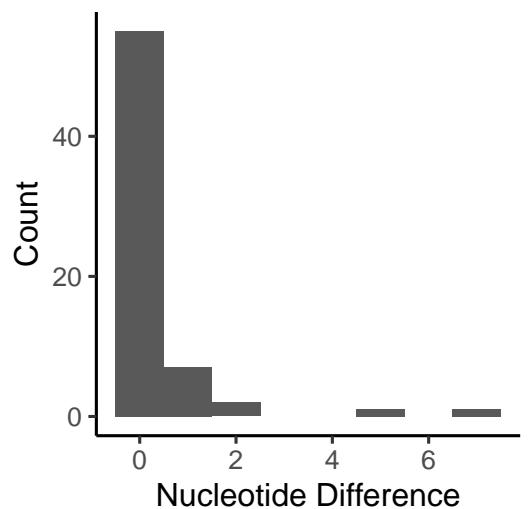
IGHV3-66*03

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



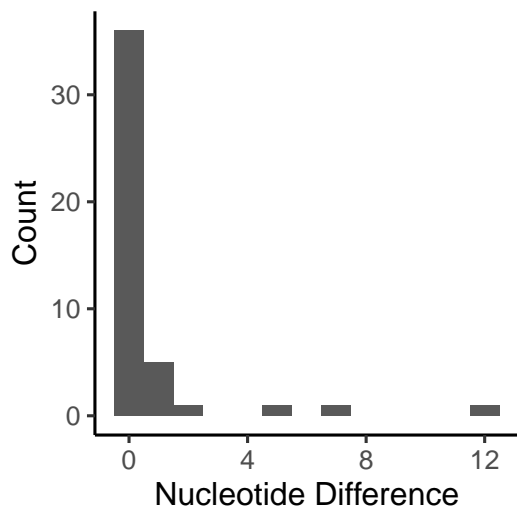
IGHV3-73*02

66 sequences assigned
55 (83.3%) exact matches, in which:
55 unique CDR3
6 unique J



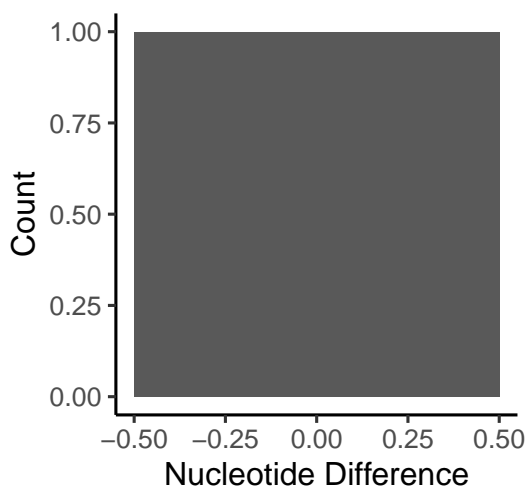
IGHV3-53*02

45 sequences assigned
36 (80%) exact matches, in which:
36 unique CDR3
5 unique J



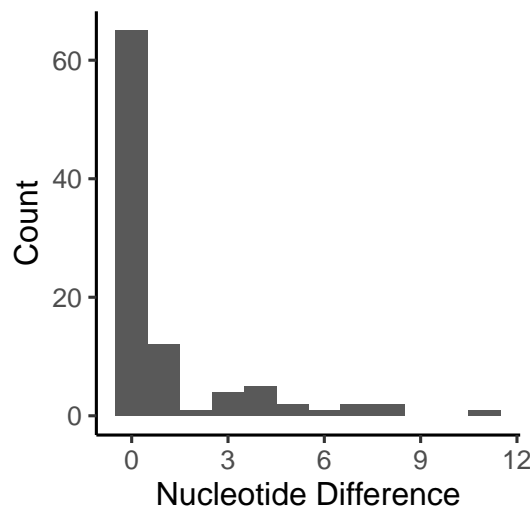
IGHV3-69-1*01

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



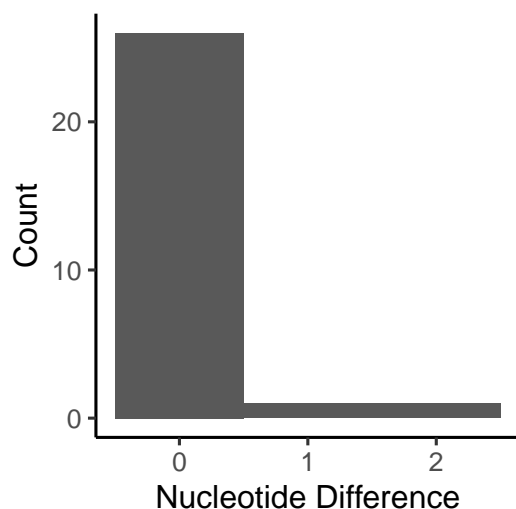
IGHV3-74*01

95 sequences assigned
65 (68.4%) exact matches, in which:
64 unique CDR3
6 unique J



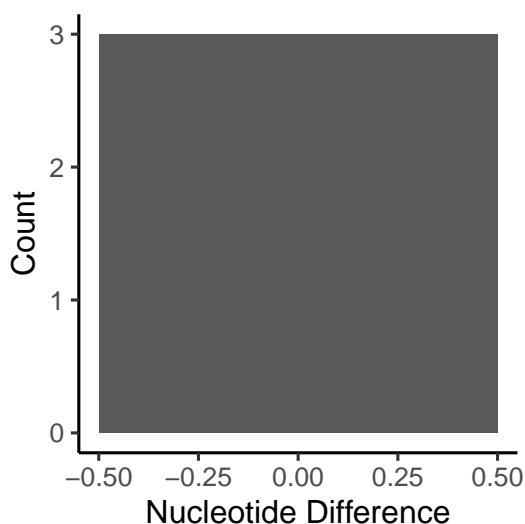
IGHV3-43D*03

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



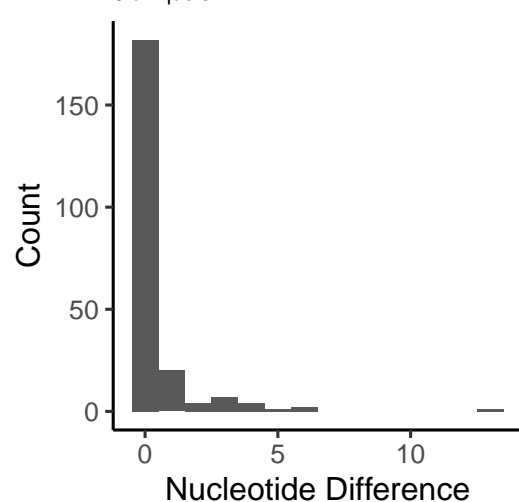
IGHV4-28*01

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



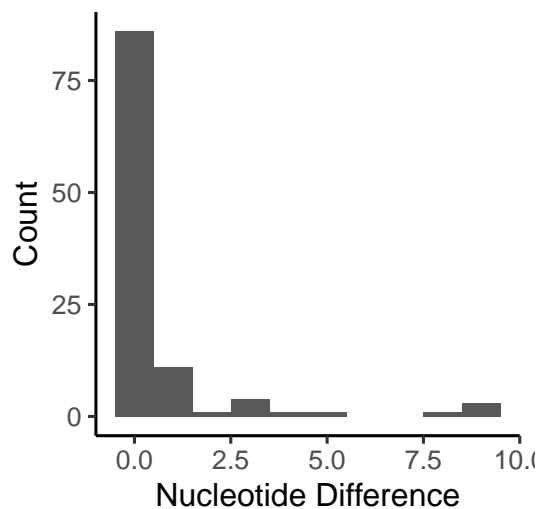
IGHV4-31*03

221 sequences assigned
182 (82.4%) exact matches, in which:
182 unique CDR3
6 unique J



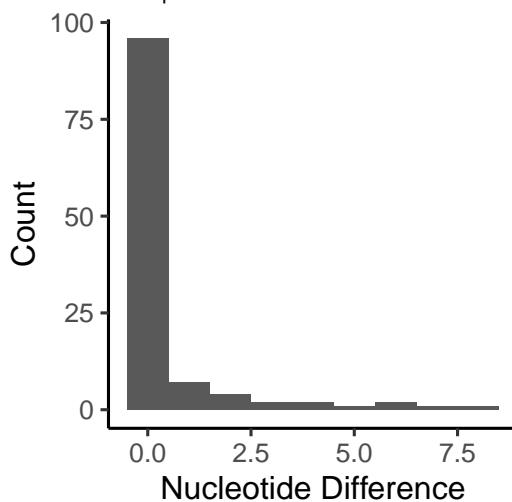
IGHV3-64D*08

108 sequences assigned
86 (79.6%) exact matches, in which:
85 unique CDR3
5 unique J



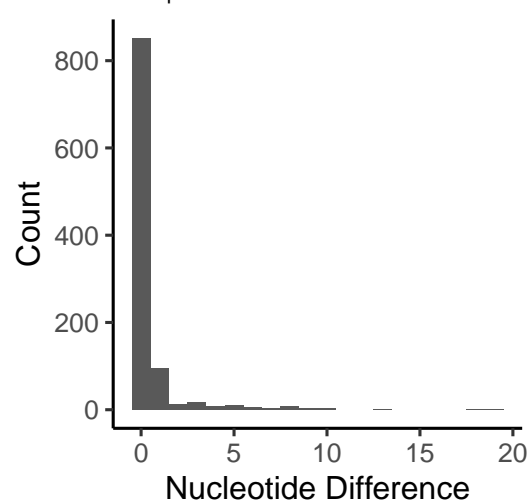
IGHV4-30-2*01

116 sequences assigned
96 (82.8%) exact matches, in which:
96 unique CDR3
7 unique J



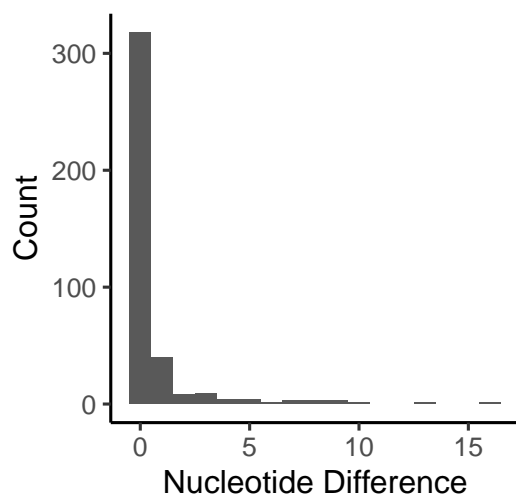
IGHV4-34*01

1024 sequences assigned
852 (83.2%) exact matches, in which:
843 unique CDR3
7 unique J



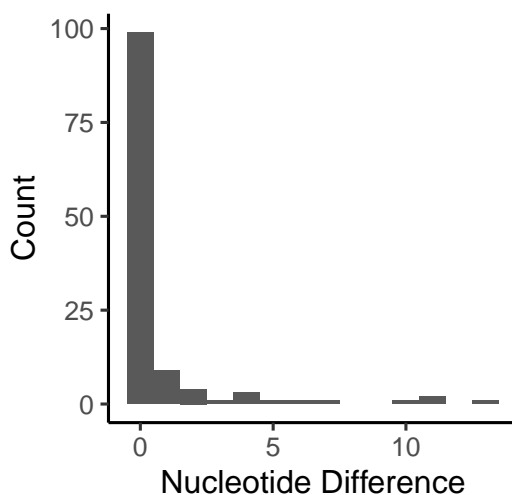
IGHV4-4*07

396 sequences assigned
318 (80.3%) exact matches, in which:
317 unique CDR3
6 unique J



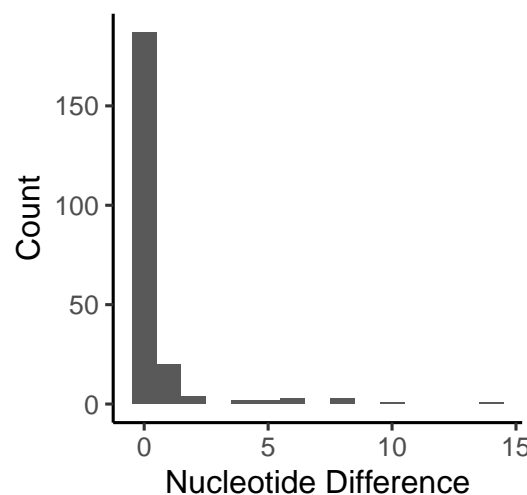
IGHV4-30-4*01

123 sequences assigned
99 (80.5%) exact matches, in which:
99 unique CDR3
5 unique J



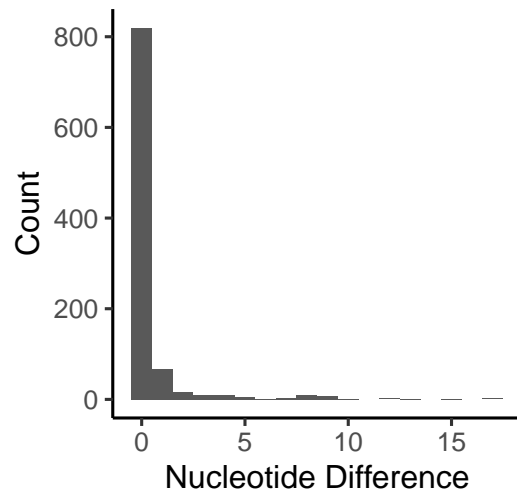
IGHV4-38-2*02

223 sequences assigned
187 (83.9%) exact matches, in which:
187 unique CDR3
6 unique J



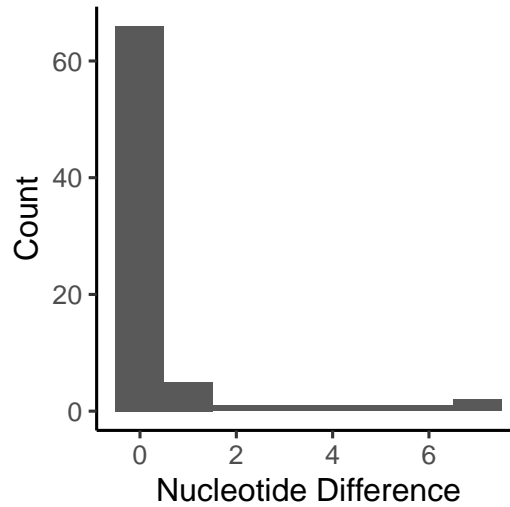
IGHV4-39*01

959 sequences assigned
820 (85.5%) exact matches, in which:
812 unique CDR3
7 unique J



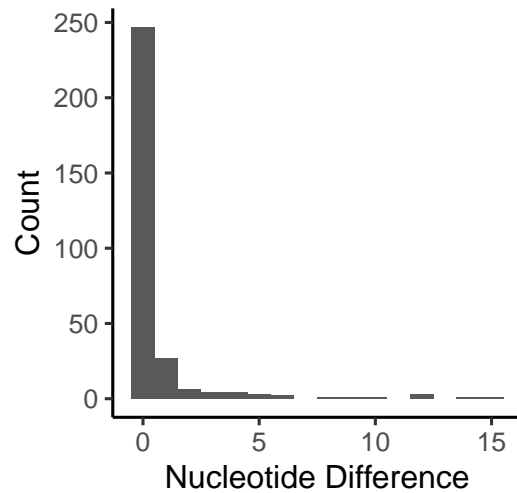
IGHV5-10-1*03

78 sequences assigned
66 (84.6%) exact matches, in which:
66 unique CDR3
5 unique J



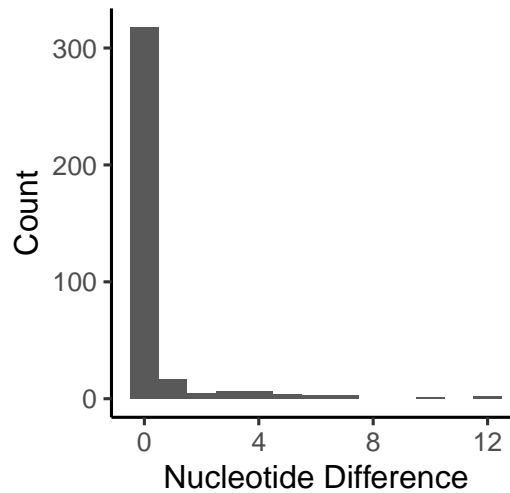
IGHV4-59*01

301 sequences assigned
247 (82.1%) exact matches, in which:
247 unique CDR3
7 unique J



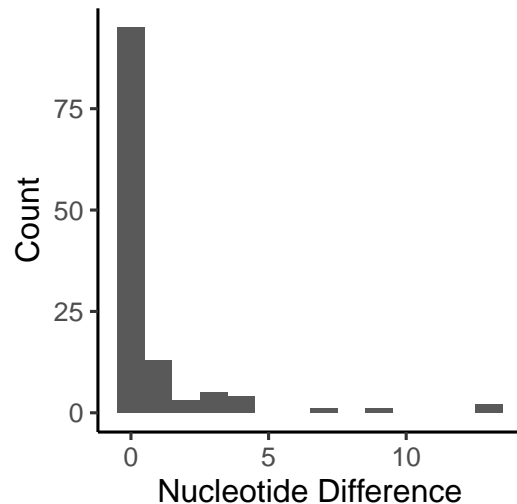
IGHV5-51*01

365 sequences assigned
318 (87.1%) exact matches, in which:
316 unique CDR3
7 unique J



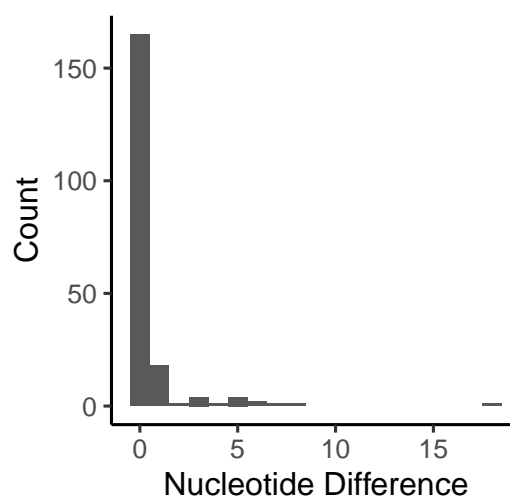
IGHV4-61*01

124 sequences assigned
95 (76.6%) exact matches, in which:
95 unique CDR3
6 unique J

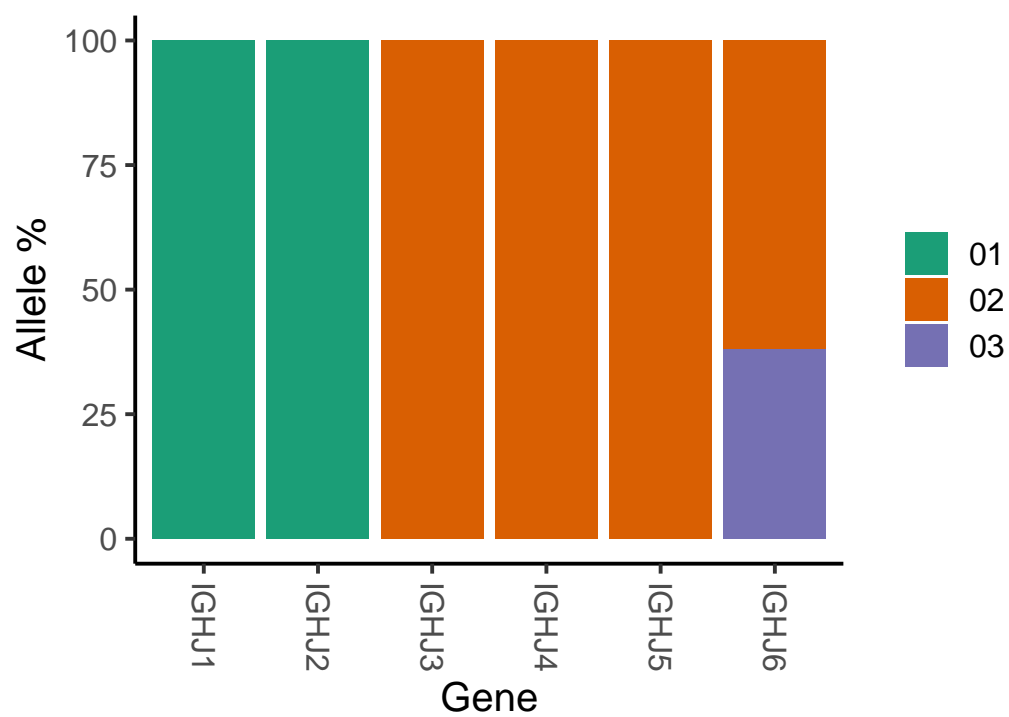


IGHV6-1*01

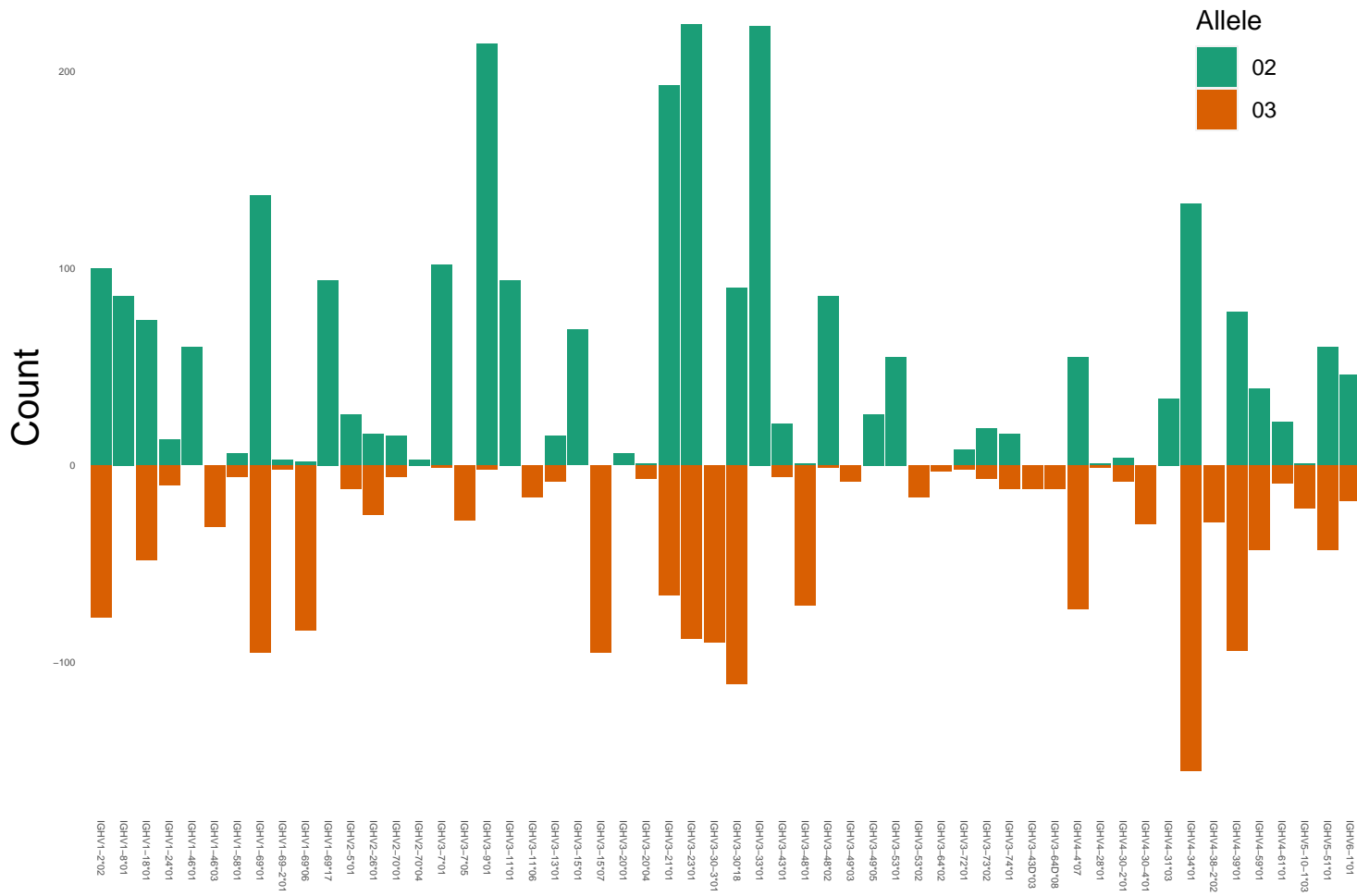
198 sequences assigned
165 (83.3%) exact matches, in which:
160 unique CDR3
6 unique J



Allele Usage



Sequence Count by IGHJ6 allele usage



Warning – no inferred sequences found.