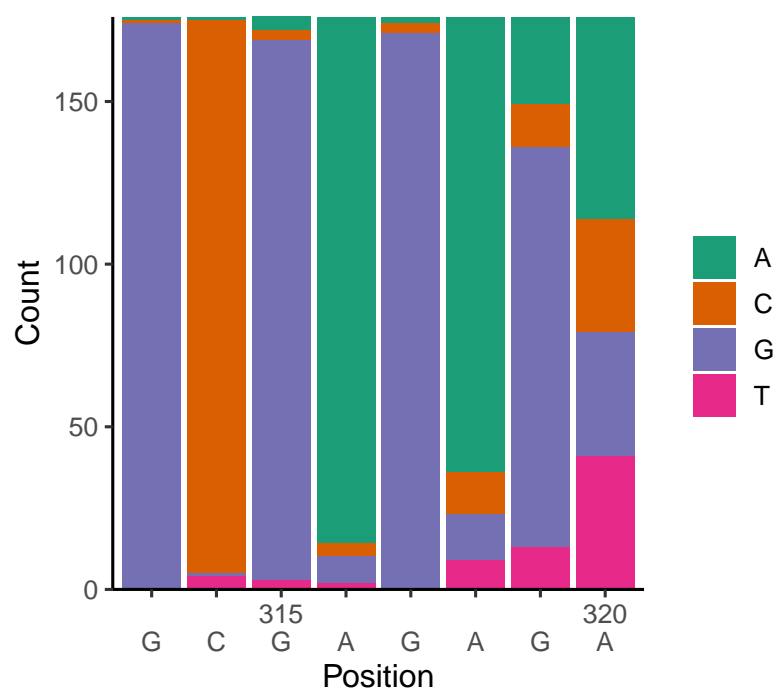
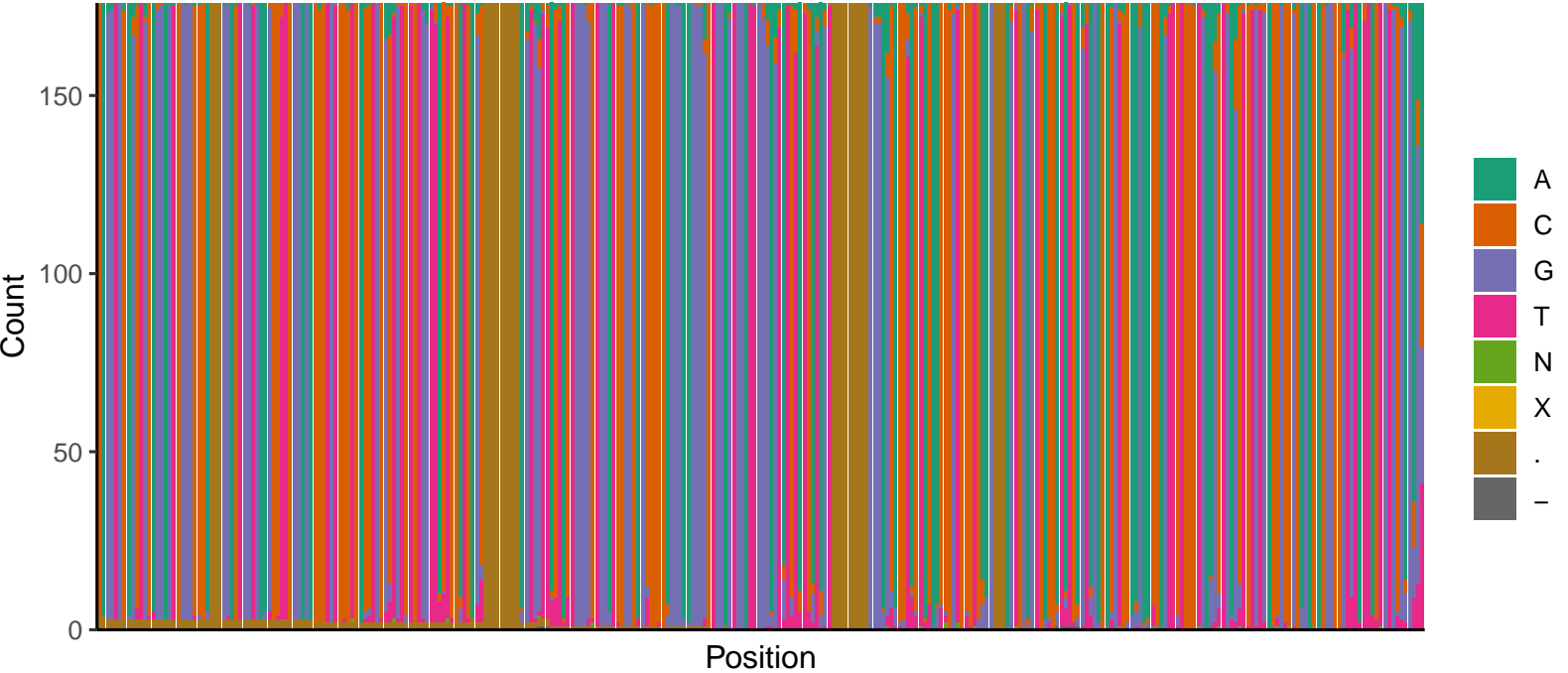


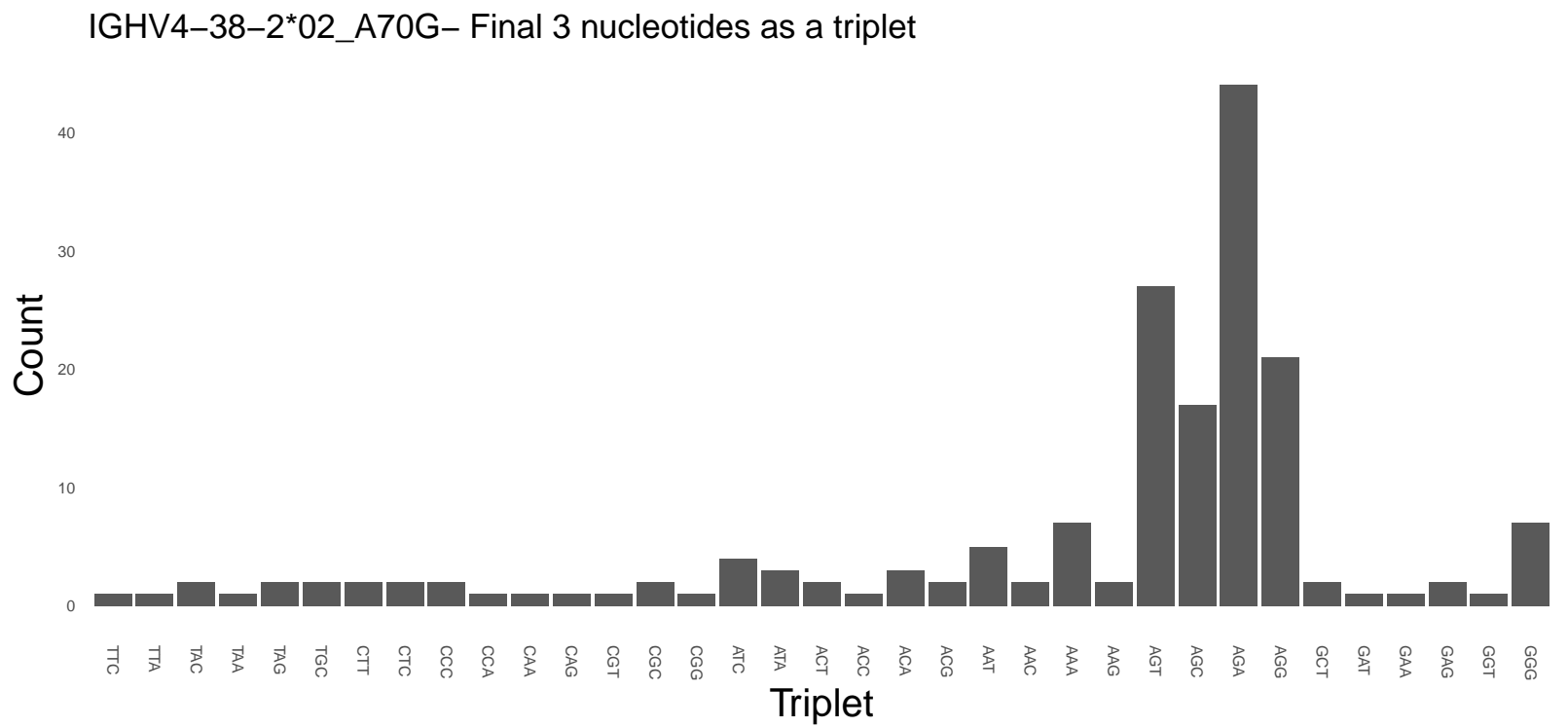
Gene IGHV4-38-2*02_A70G



Gene IGHV4-38-2*02_A70G

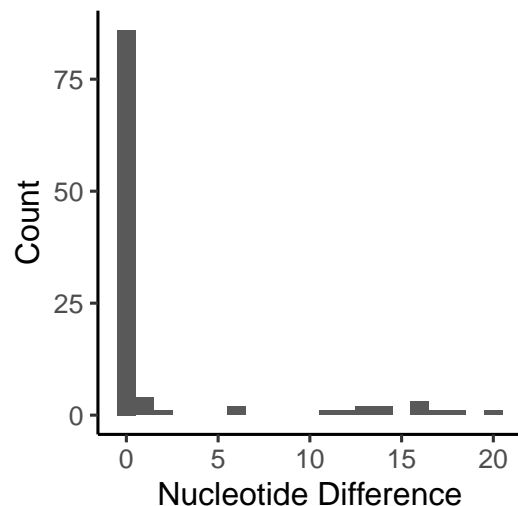


IGHV4-38-2*02_A70G- Final 3 nucleotides as a triplet



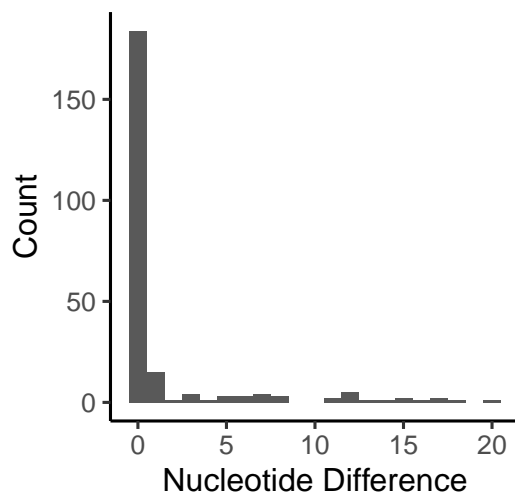
IGHV1-2*04

109 sequences assigned
86 (78.9%) exact matches, in which:
85 unique CDR3
6 unique J



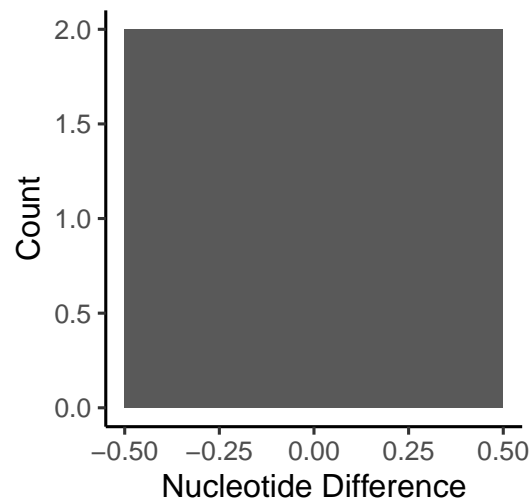
IGHV1-8*01

244 sequences assigned
184 (75.4%) exact matches, in which:
182 unique CDR3
5 unique J



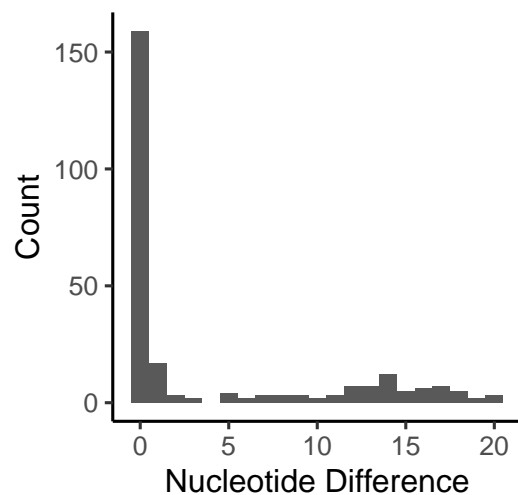
IGHV1-45*02

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



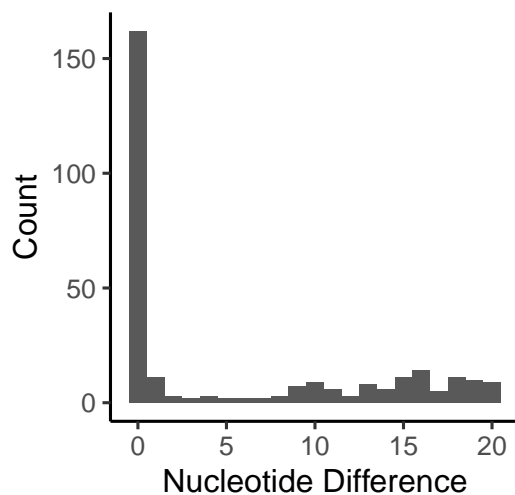
IGHV1-2*06

295 sequences assigned
159 (53.9%) exact matches, in which:
157 unique CDR3
6 unique J



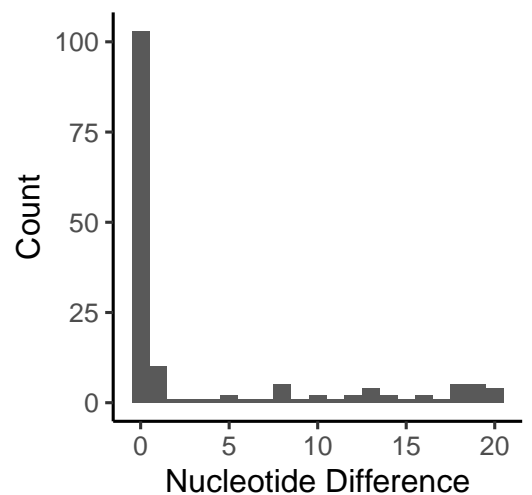
IGHV1-18*01

346 sequences assigned
162 (46.8%) exact matches, in which:
162 unique CDR3
6 unique J



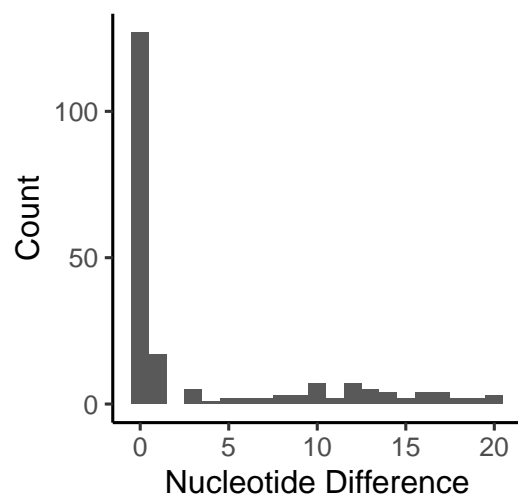
IGHV1-46*01

181 sequences assigned
103 (56.9%) exact matches, in which:
102 unique CDR3
6 unique J



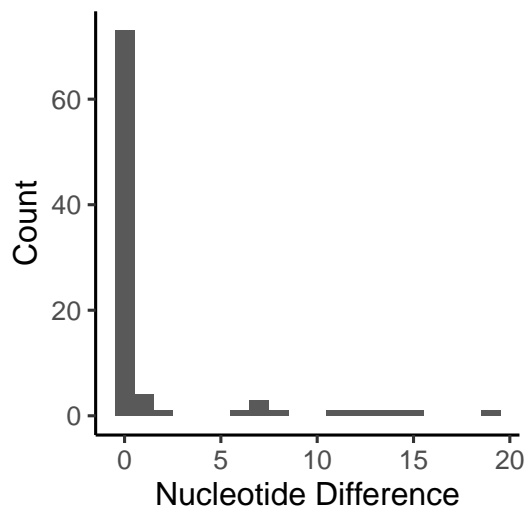
IGHV1-3*01

225 sequences assigned
127 (56.4%) exact matches, in which:
127 unique CDR3
6 unique J



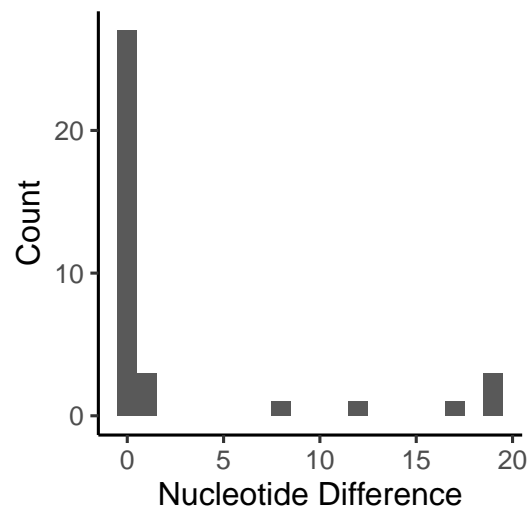
IGHV1-24*01

95 sequences assigned
73 (76.8%) exact matches, in which:
73 unique CDR3
5 unique J



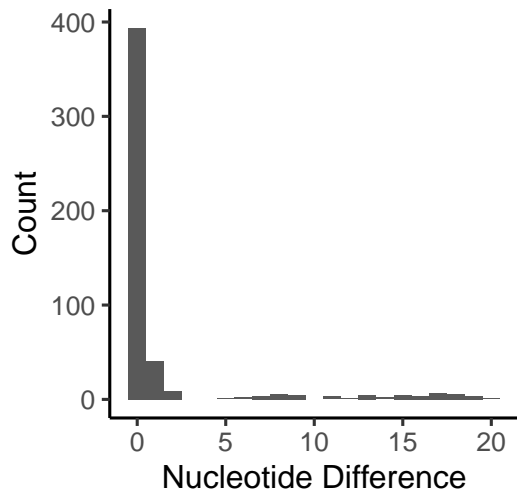
IGHV1-58*01

36 sequences assigned
27 (75%) exact matches, in which:
27 unique CDR3
4 unique J



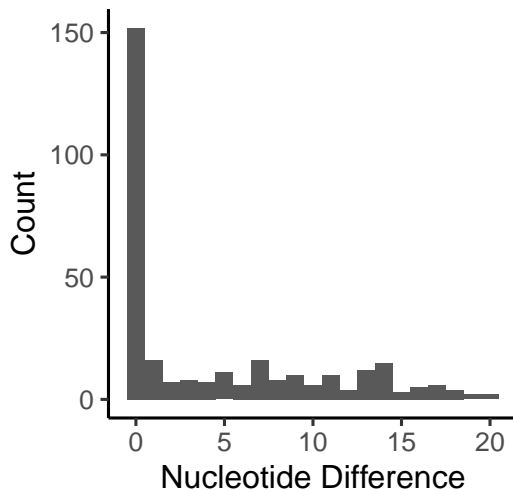
IGHV1–69*01

570 sequences assigned
394 (69.1%) exact matches, in which:
391 unique CDR3
6 unique J



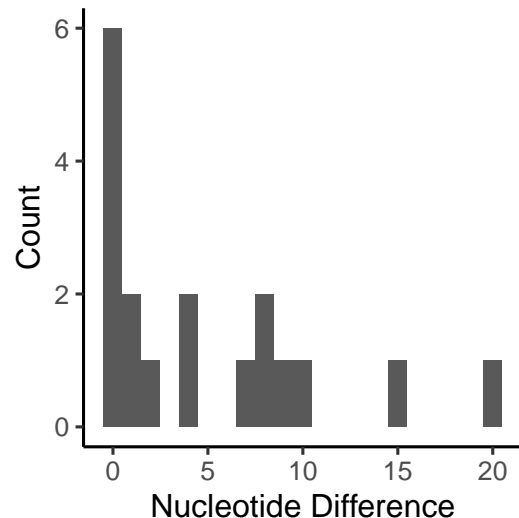
IGHV2–5*02

345 sequences assigned
152 (44.1%) exact matches, in which:
151 unique CDR3
5 unique J



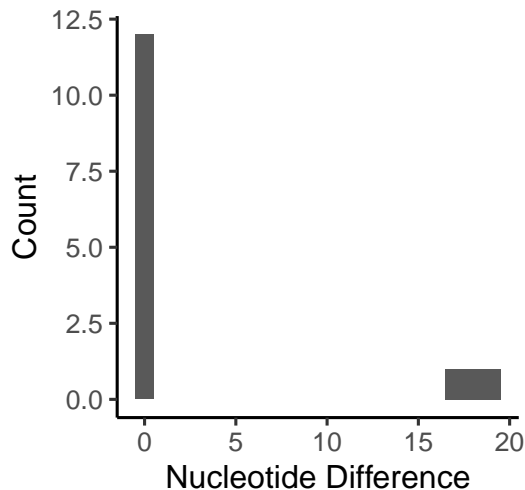
IGHV2–70*04

18 sequences assigned
6 (33.3%) exact matches, in which:
6 unique CDR3
3 unique J



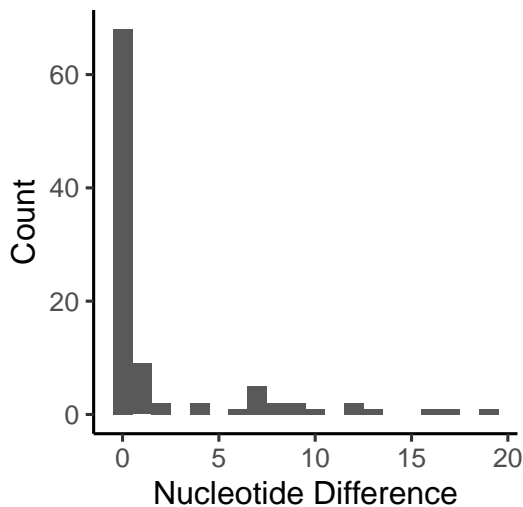
IGHV1–69–2*01

15 sequences assigned
12 (80%) exact matches, in which:
12 unique CDR3
3 unique J



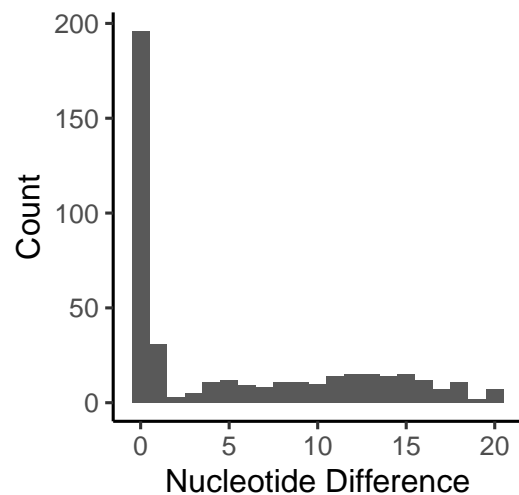
IGHV2–26*01

101 sequences assigned
68 (67.3%) exact matches, in which:
68 unique CDR3
6 unique J



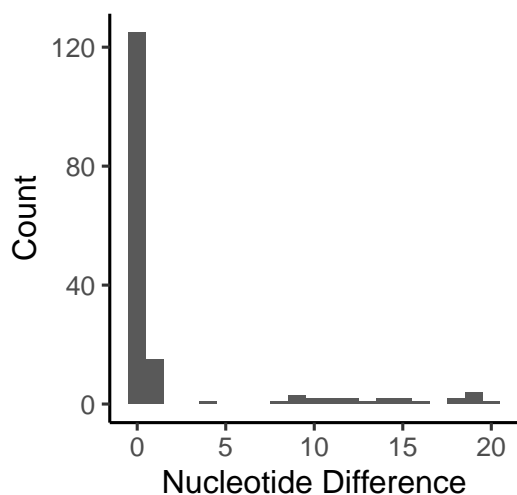
IGHV3–7*01

452 sequences assigned
196 (43.4%) exact matches, in which:
192 unique CDR3
6 unique J



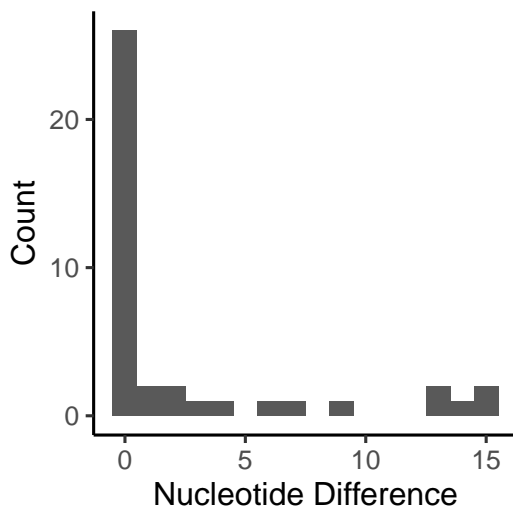
IGHV1–69*06

201 sequences assigned
125 (62.2%) exact matches, in which:
124 unique CDR3
5 unique J



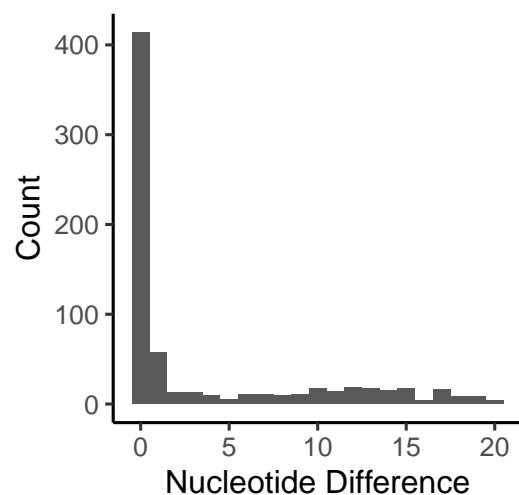
IGHV2–70*01

43 sequences assigned
26 (60.5%) exact matches, in which:
26 unique CDR3
5 unique J



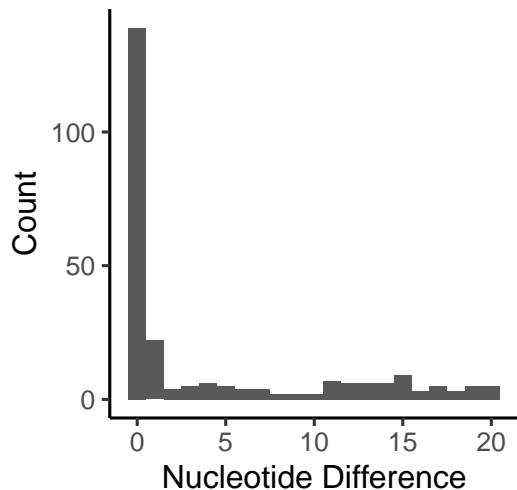
IGHV3–9*01

737 sequences assigned
414 (56.2%) exact matches, in which:
409 unique CDR3
6 unique J



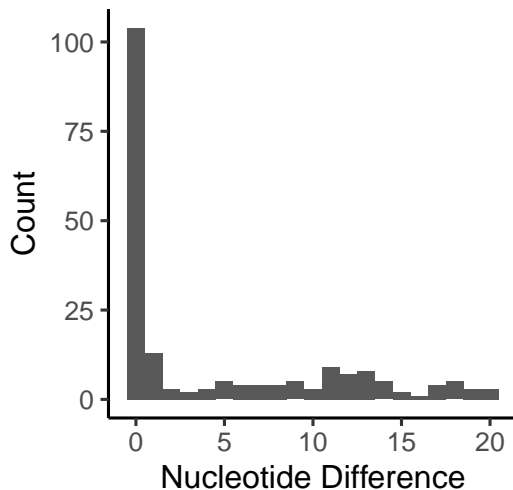
IGHV3-11*01

275 sequences assigned
139 (50.5%) exact matches, in which:
138 unique CDR3
6 unique J



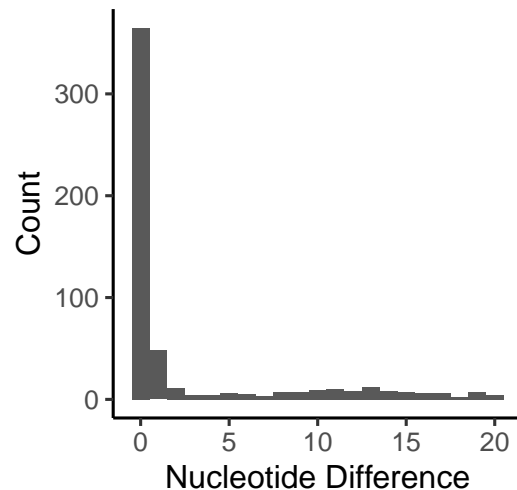
IGHV3-15*07

219 sequences assigned
104 (47.5%) exact matches, in which:
102 unique CDR3
6 unique J



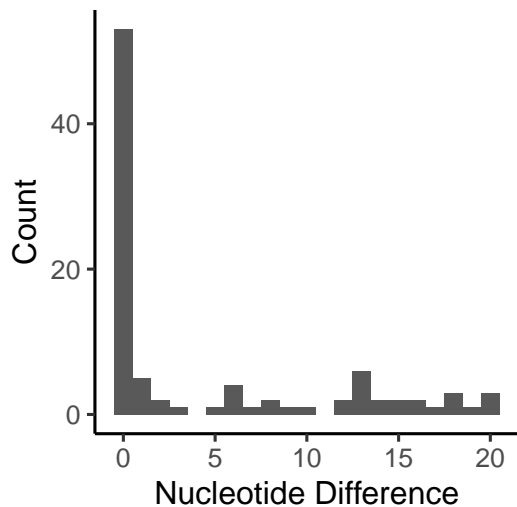
IGHV3-21*01

565 sequences assigned
365 (64.6%) exact matches, in which:
359 unique CDR3
6 unique J



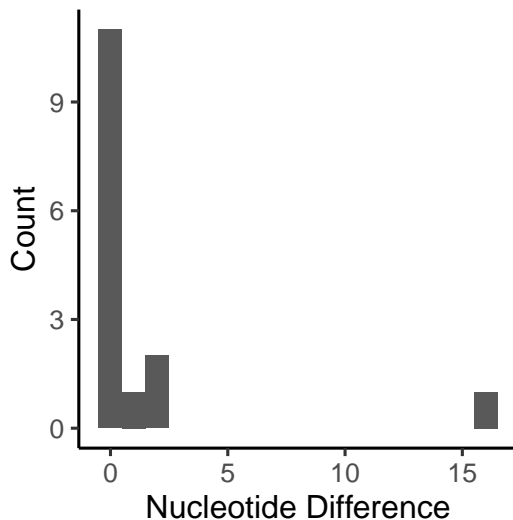
IGHV3-13*01

100 sequences assigned
53 (53%) exact matches, in which:
53 unique CDR3
5 unique J



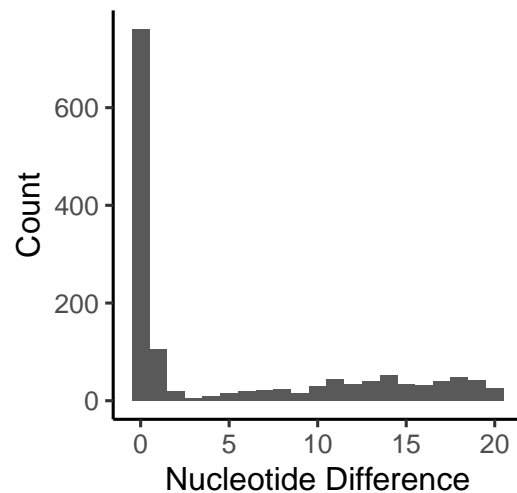
IGHV3-20*01

16 sequences assigned
11 (68.8%) exact matches, in which:
11 unique CDR3
3 unique J



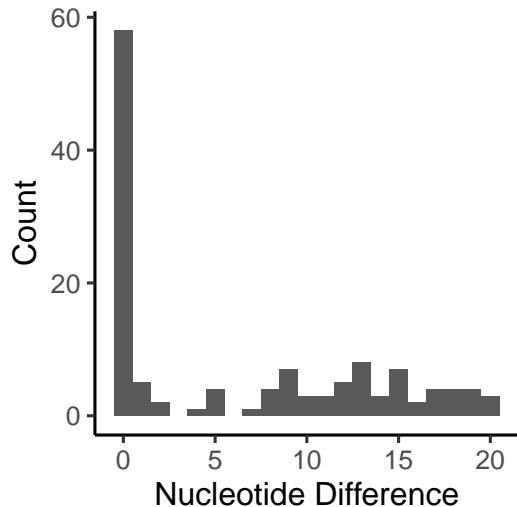
IGHV3-23*01

1634 sequences assigned
761 (46.6%) exact matches, in which:
747 unique CDR3
6 unique J



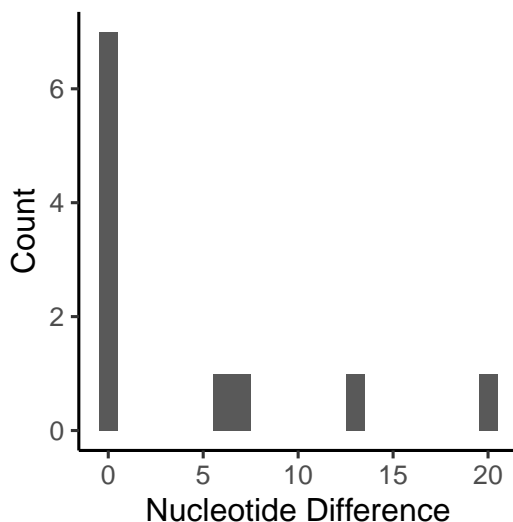
IGHV3-15*01

145 sequences assigned
58 (40%) exact matches, in which:
57 unique CDR3
5 unique J



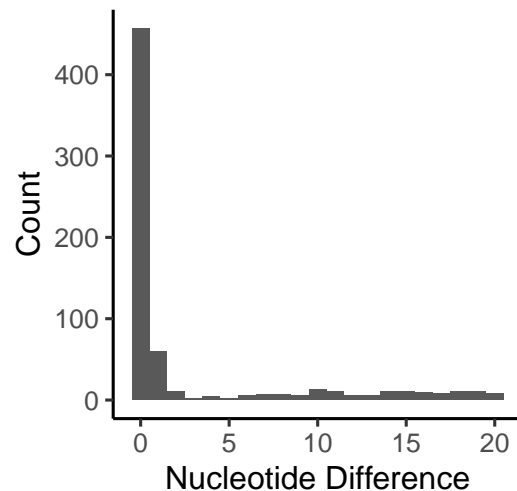
IGHV3-20*04

12 sequences assigned
7 (58.3%) exact matches, in which:
7 unique CDR3
3 unique J



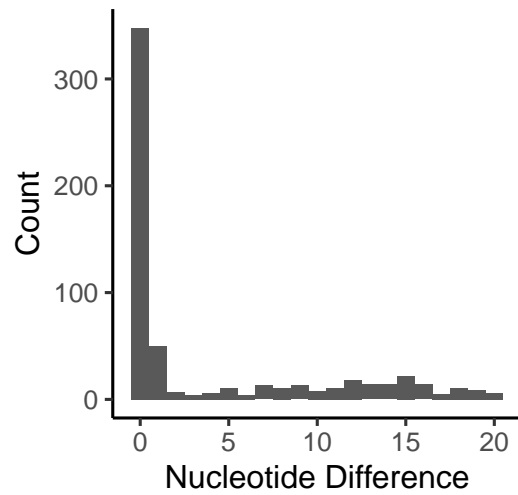
IGHV3-30-3*01

722 sequences assigned
457 (63.3%) exact matches, in which:
448 unique CDR3
6 unique J



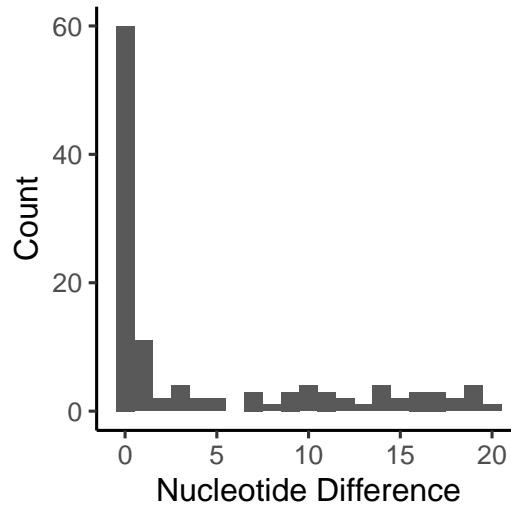
IGHV3-30*18

659 sequences assigned
348 (52.8%) exact matches, in which:
344 unique CDR3
6 unique J



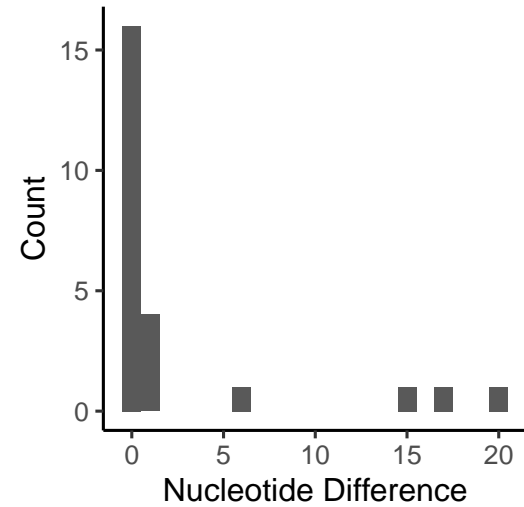
IGHV3-48*02

123 sequences assigned
60 (48.8%) exact matches, in which:
59 unique CDR3
4 unique J



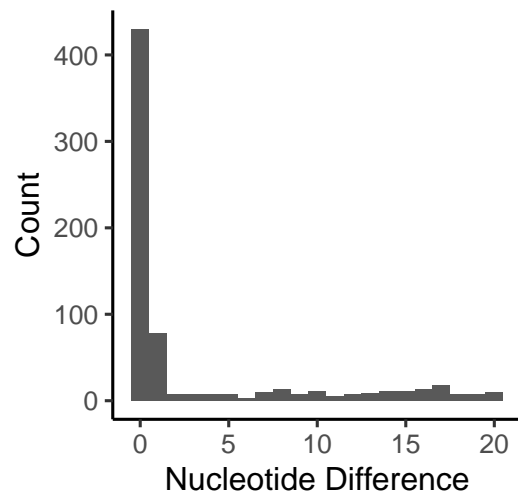
IGHV3-49*05

28 sequences assigned
16 (57.1%) exact matches, in which:
15 unique CDR3
3 unique J



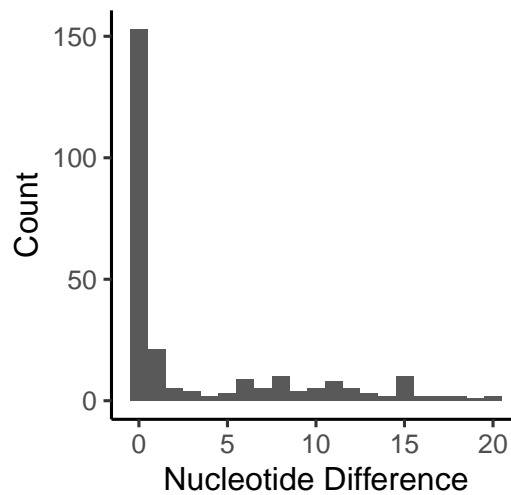
IGHV3-33*01

734 sequences assigned
430 (58.6%) exact matches, in which:
423 unique CDR3
6 unique J



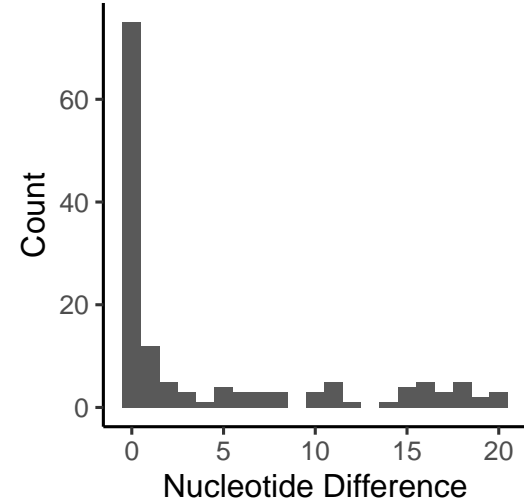
IGHV3-48*03

278 sequences assigned
153 (55%) exact matches, in which:
152 unique CDR3
6 unique J



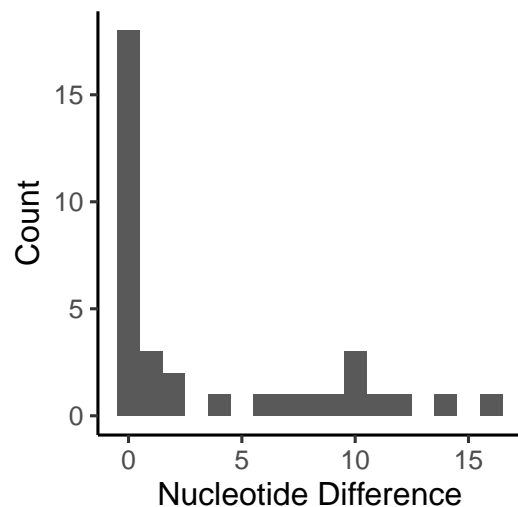
IGHV3-53*01

155 sequences assigned
75 (48.4%) exact matches, in which:
75 unique CDR3
5 unique J



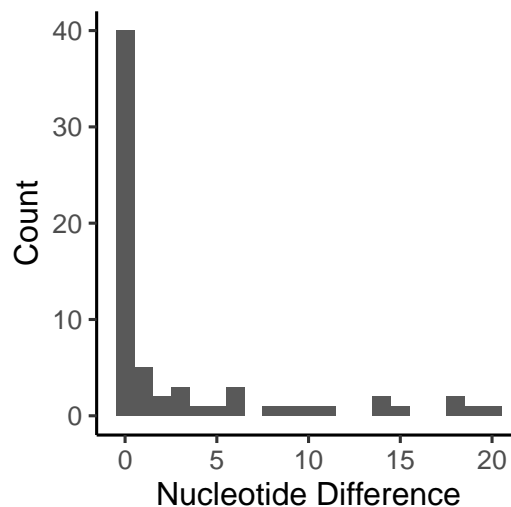
IGHV3-43*01

36 sequences assigned
18 (50%) exact matches, in which:
18 unique CDR3
3 unique J



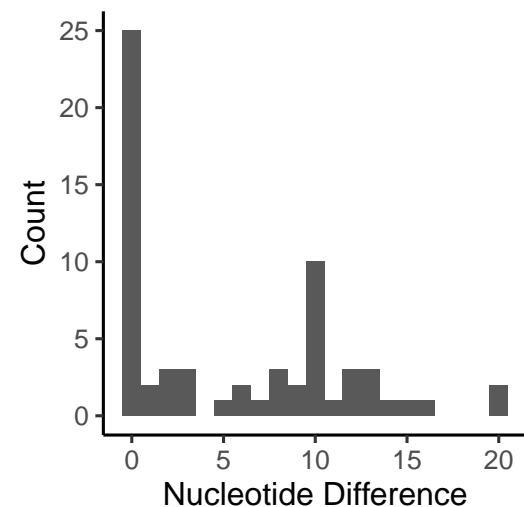
IGHV3-49*04

73 sequences assigned
40 (54.8%) exact matches, in which:
40 unique CDR3
5 unique J



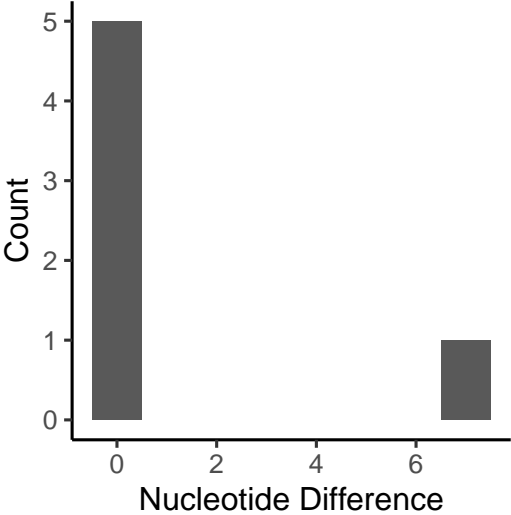
IGHV3-53*02

77 sequences assigned
25 (32.5%) exact matches, in which:
25 unique CDR3
5 unique J



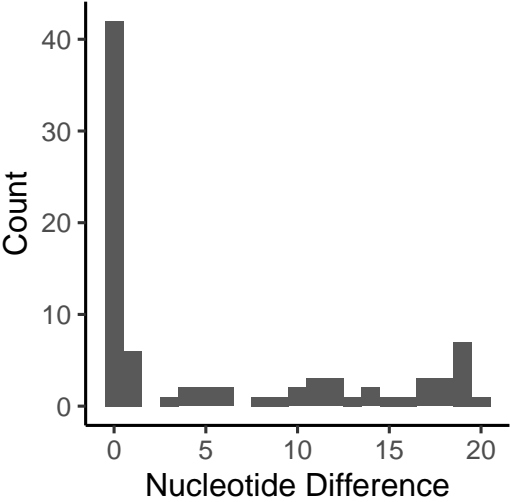
IGHV3-64*02

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



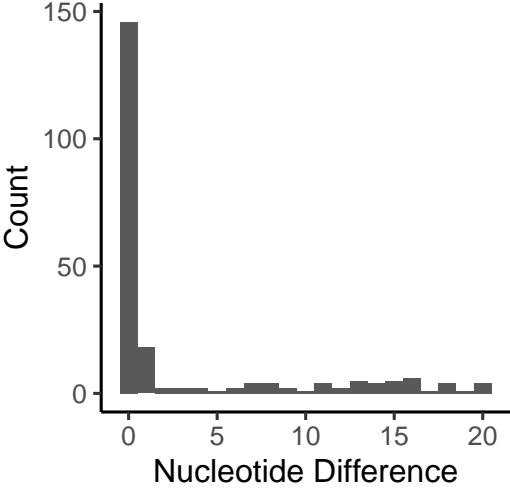
IGHV3-73*02

87 sequences assigned
42 (48.3%) exact matches, in which:
42 unique CDR3
5 unique J



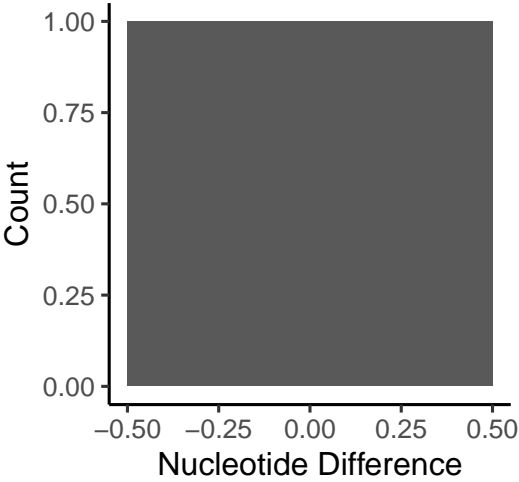
IGHV4-4*02

232 sequences assigned
146 (62.9%) exact matches, in which:
145 unique CDR3
6 unique J



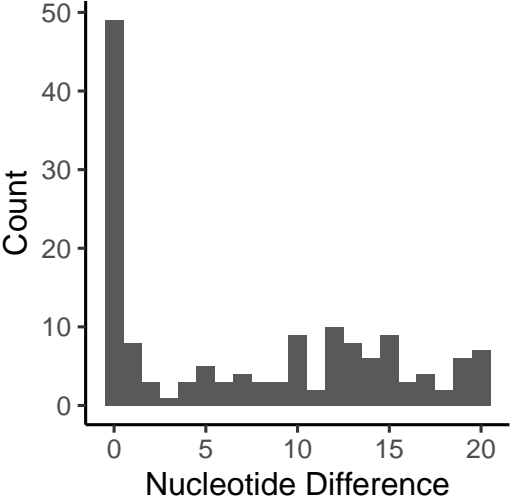
IGHV3-69-1*02

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



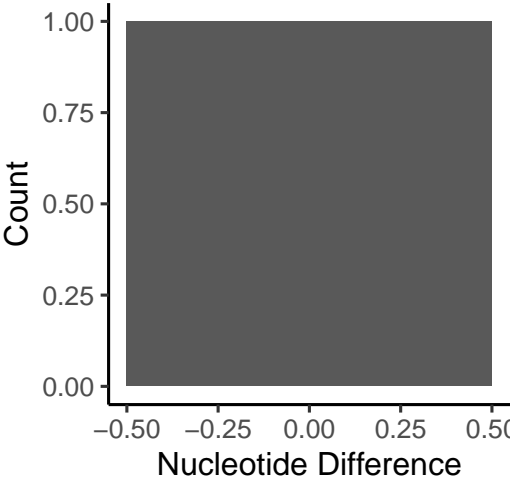
IGHV3-74*01

168 sequences assigned
49 (29.2%) exact matches, in which:
49 unique CDR3
4 unique J



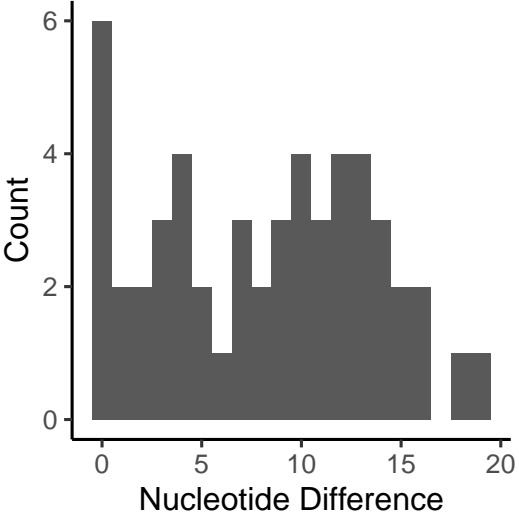
IGHV4-28*01

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



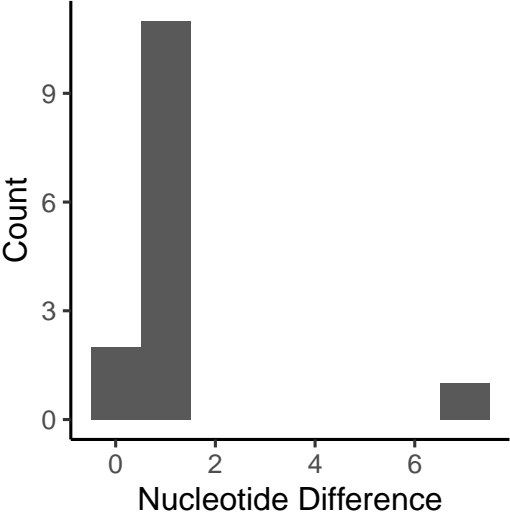
IGHV3-72*01

60 sequences assigned
6 (10%) exact matches, in which:
6 unique CDR3
3 unique J



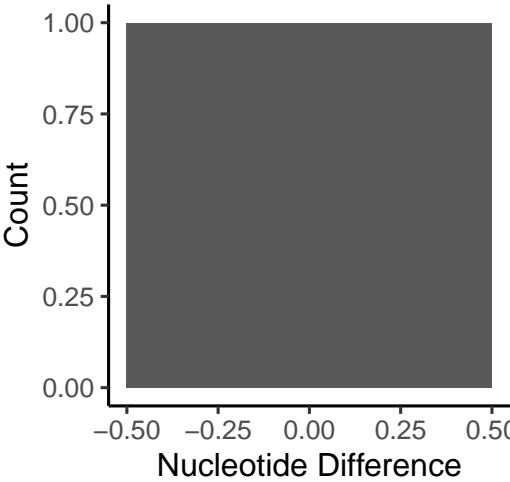
IGHV3-43D*04

14 sequences assigned
2 (14.3%) exact matches, in which:
2 unique CDR3
1 unique J



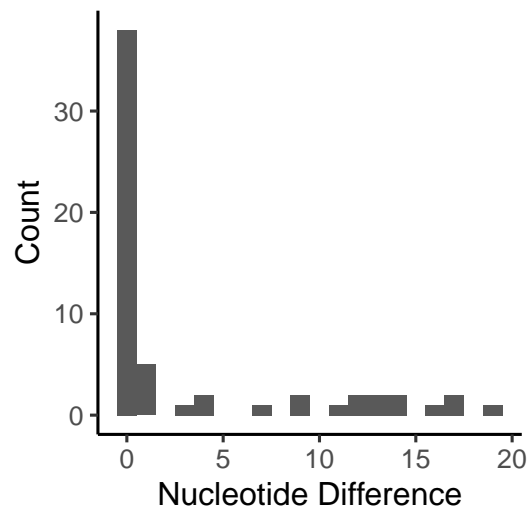
IGHV4-28*03

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



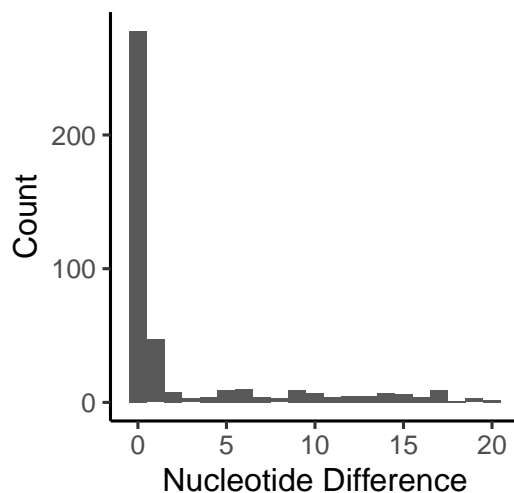
IGHV4-30-4*01

69 sequences assigned
38 (55.1%) exact matches, in which:
38 unique CDR3
4 unique J



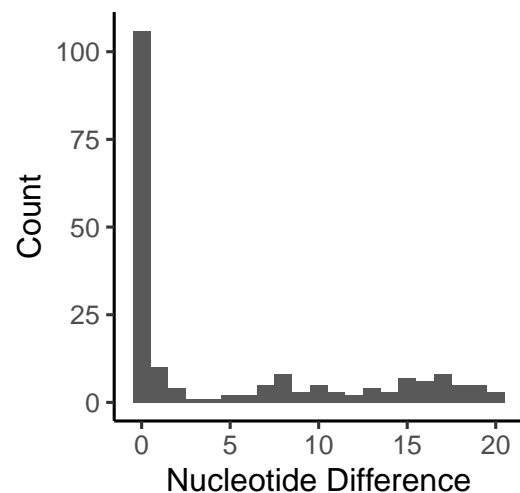
IGHV4-34*01

454 sequences assigned
278 (61.2%) exact matches, in which:
276 unique CDR3
6 unique J



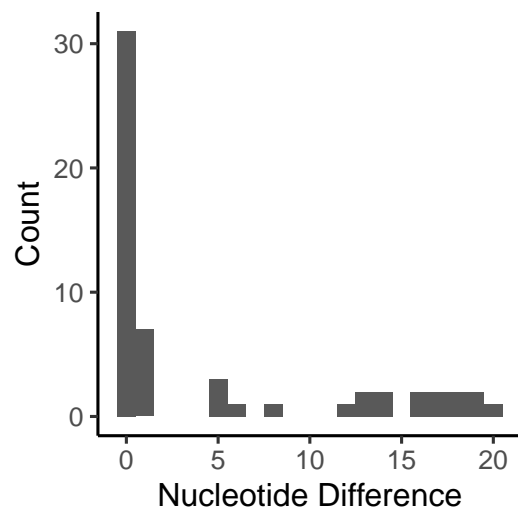
IGHV4-59*01

231 sequences assigned
106 (45.9%) exact matches, in which:
105 unique CDR3
6 unique J



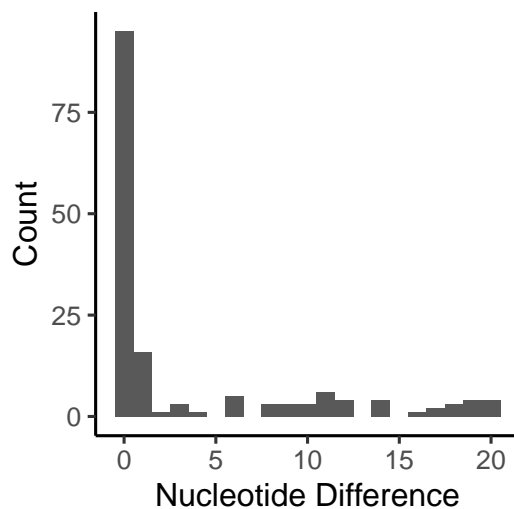
IGHV4-30-2*01

61 sequences assigned
31 (50.8%) exact matches, in which:
31 unique CDR3
5 unique J



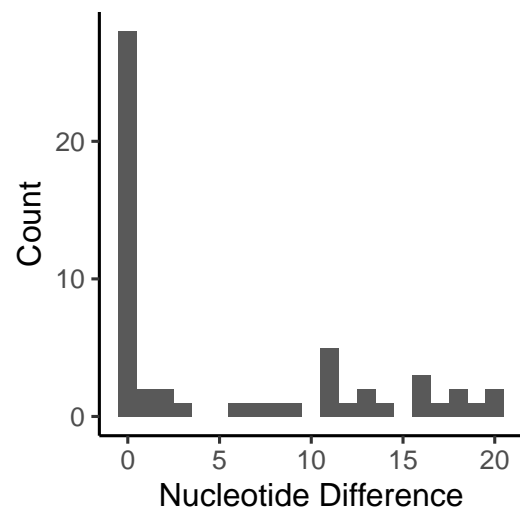
IGHV4-38-2*02_A70G

176 sequences assigned
95 (54%) exact matches, in which:
95 unique CDR3
6 unique J



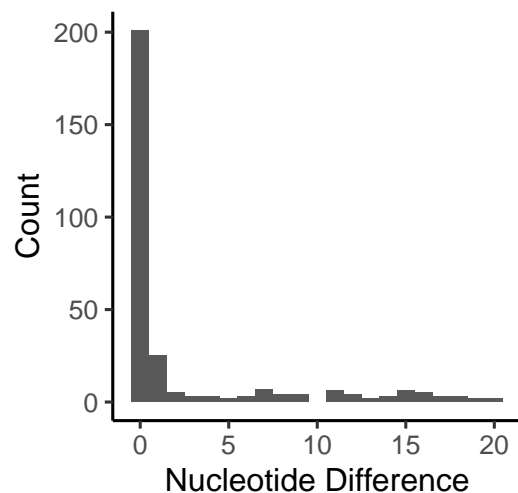
IGHV4-61*01

62 sequences assigned
28 (45.2%) exact matches, in which:
28 unique CDR3
5 unique J



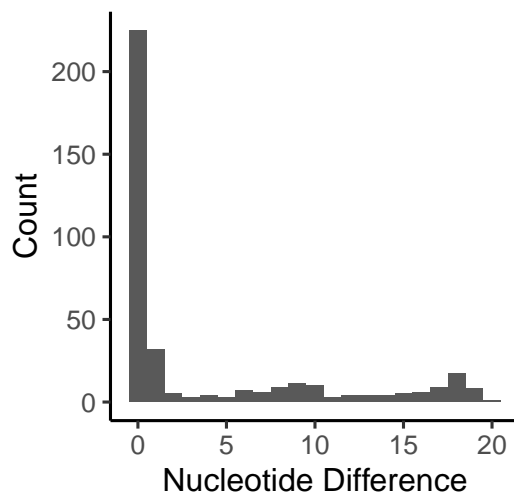
IGHV4-31*03

324 sequences assigned
201 (62%) exact matches, in which:
199 unique CDR3
6 unique J



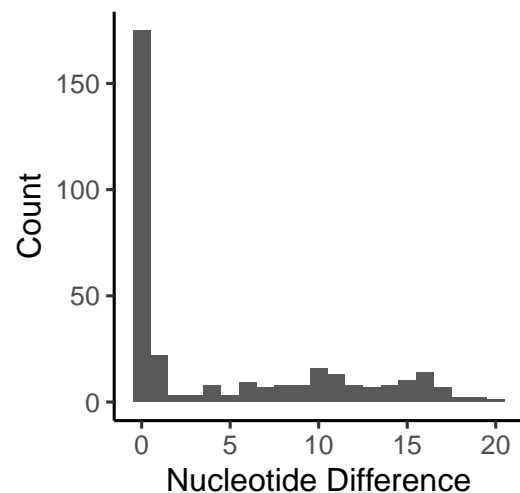
IGHV4-39*01

458 sequences assigned
225 (49.1%) exact matches, in which:
223 unique CDR3
6 unique J



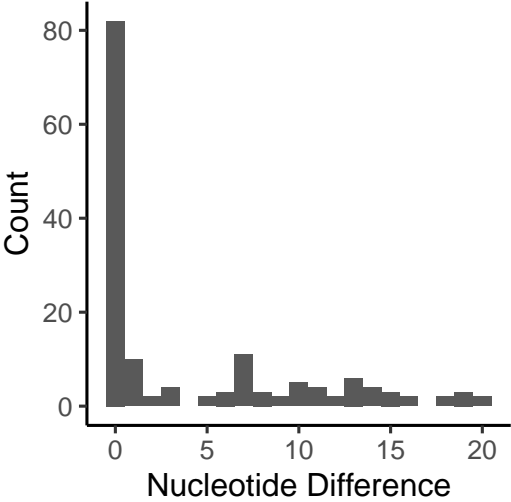
IGHV5-51*01

365 sequences assigned
175 (47.9%) exact matches, in which:
174 unique CDR3
6 unique J



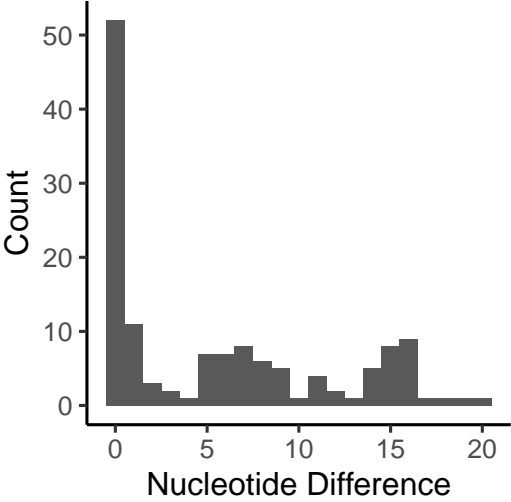
IGHV6-1*01

159 sequences assigned
82 (51.6%) exact matches, in which:
81 unique CDR3
5 unique J



IGHV7-4-1*02

142 sequences assigned
52 (36.6%) exact matches, in which:
52 unique CDR3
5 unique J



IGHV4-38-2*02_A70G

