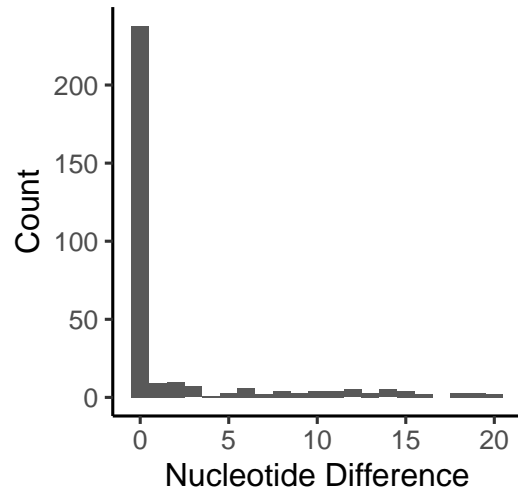


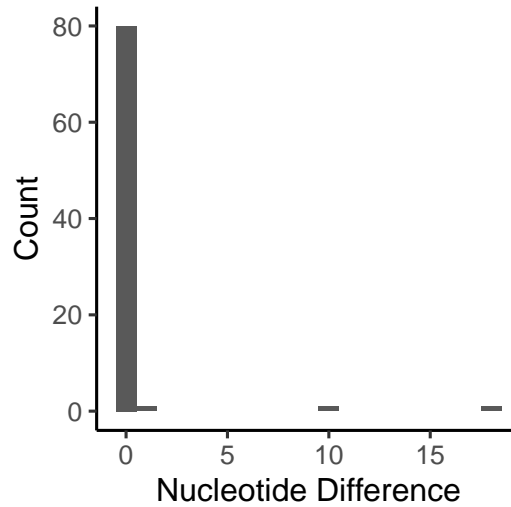
IGHV1–2*02

344 sequences assigned
238 (69.2%) exact matches, in which:
237 unique CDR3
6 unique J



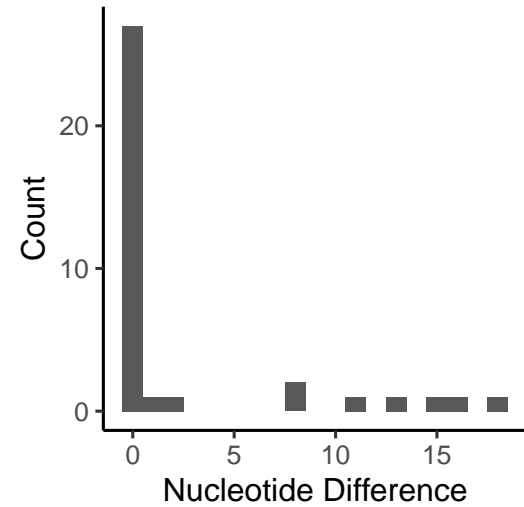
IGHV1–24*01

90 sequences assigned
80 (88.9%) exact matches, in which:
78 unique CDR3
5 unique J



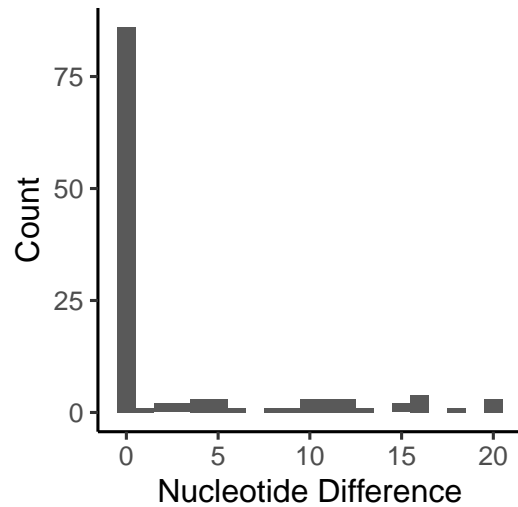
IGHV1–58*02

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



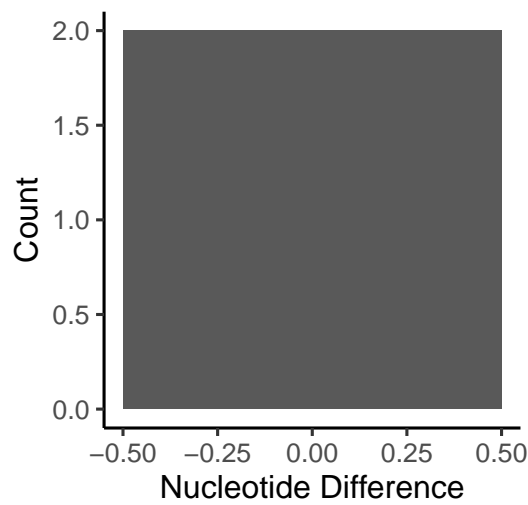
IGHV1–3*01_05

131 sequences assigned
86 (65.6%) exact matches, in which:
85 unique CDR3
6 unique J



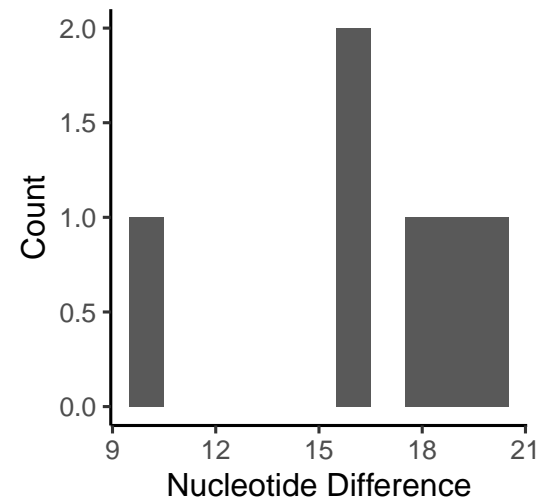
IGHV1–45*02

3 sequences assigned
2 (66.7%) exact matches, in which:
2 unique CDR3
2 unique J



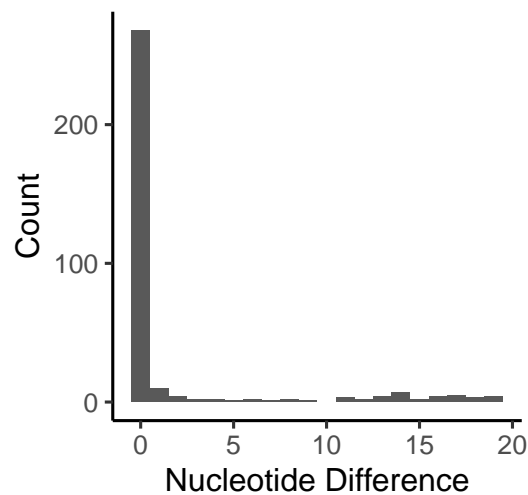
IGHV1–69*08

8 sequences assigned
No exact matches.



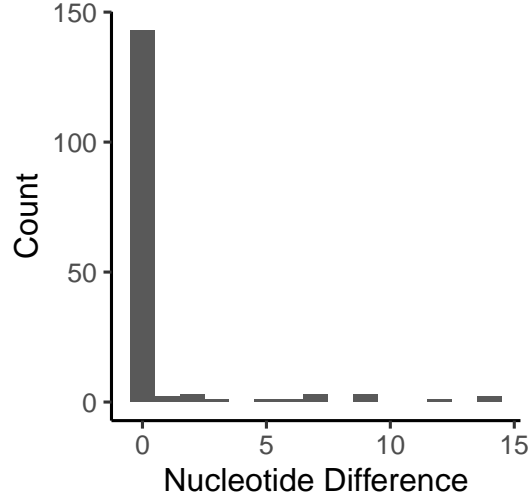
IGHV1–18*04

343 sequences assigned
268 (78.1%) exact matches, in which:
266 unique CDR3
6 unique J



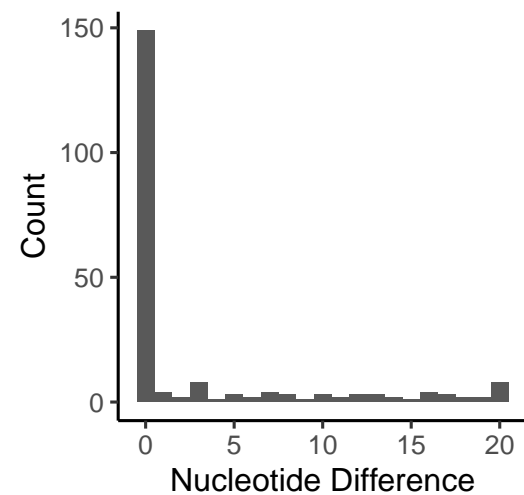
IGHV1–46*03

164 sequences assigned
143 (87.2%) exact matches, in which:
142 unique CDR3
7 unique J



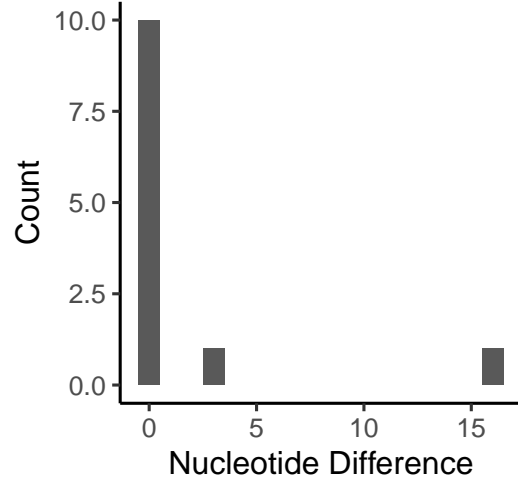
IGHV2–5*02

240 sequences assigned
149 (62.1%) exact matches, in which:
145 unique CDR3
7 unique J



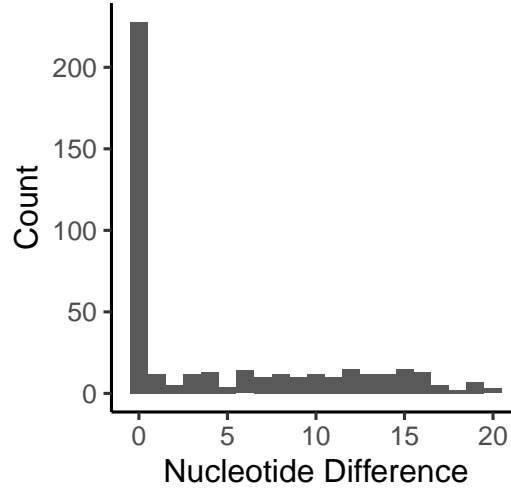
IGHV2-26*01

12 sequences assigned
10 (83.3%) exact matches, in which:
10 unique CDR3
3 unique J



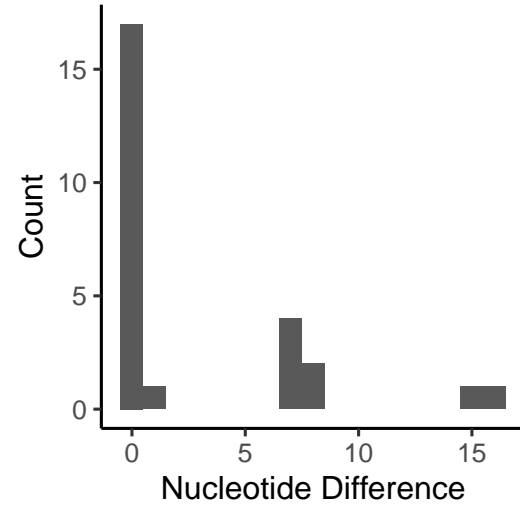
IGHV3-7*03

436 sequences assigned
228 (52.3%) exact matches, in which:
218 unique CDR3
6 unique J



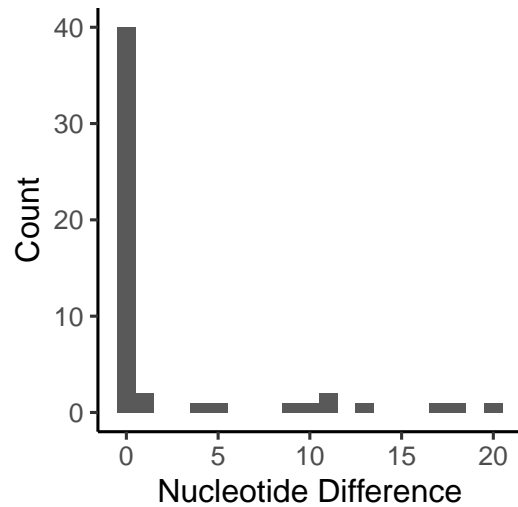
IGHV3-13*05

26 sequences assigned
17 (65.4%) exact matches, in which:
16 unique CDR3
5 unique J



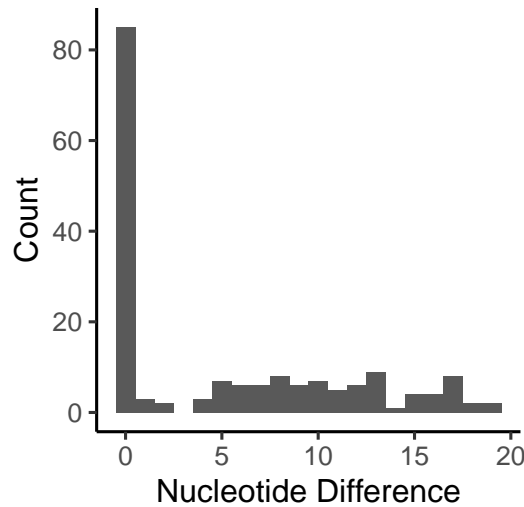
IGHV2-70*11_15

52 sequences assigned
40 (76.9%) exact matches, in which:
40 unique CDR3
4 unique J



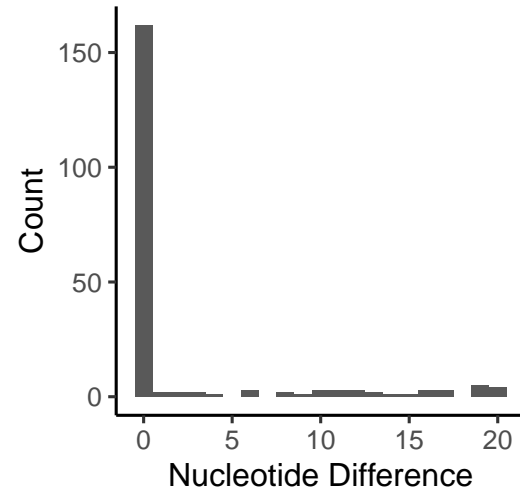
IGHV3-7*04

179 sequences assigned
85 (47.5%) exact matches, in which:
85 unique CDR3
6 unique J



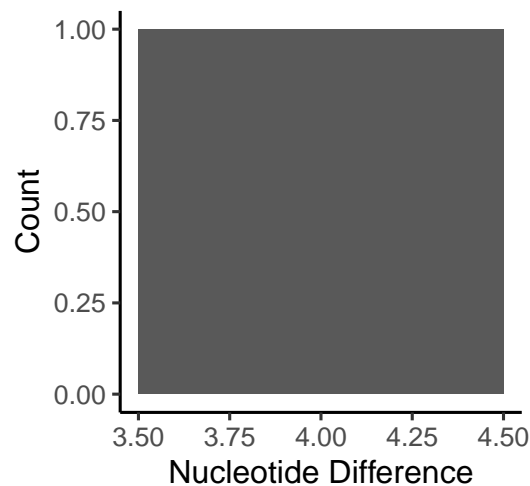
IGHV3-15*01_02

237 sequences assigned
162 (68.4%) exact matches, in which:
158 unique CDR3
6 unique J



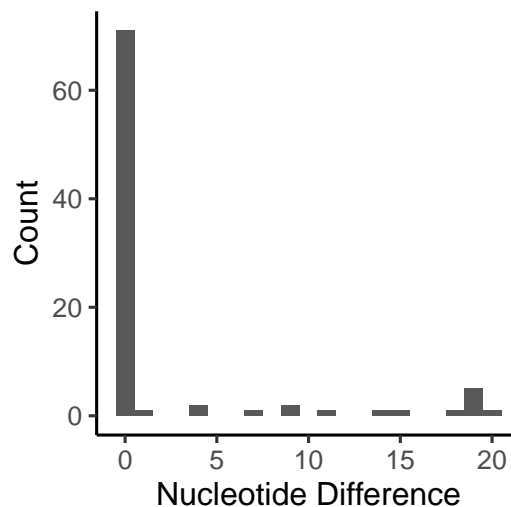
IGHV2-70D*04

1 sequences assigned
No exact matches.



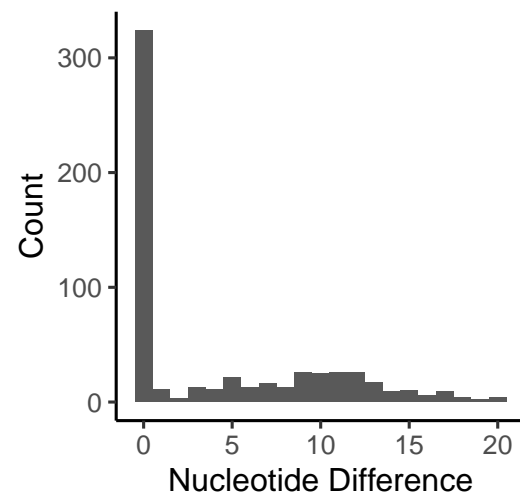
IGHV3-11*06

97 sequences assigned
71 (73.2%) exact matches, in which:
69 unique CDR3
6 unique J



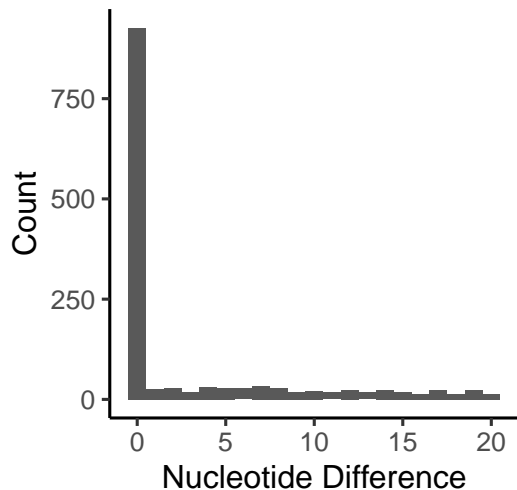
IGHV3-21*01_02

615 sequences assigned
324 (52.7%) exact matches, in which:
307 unique CDR3
7 unique J



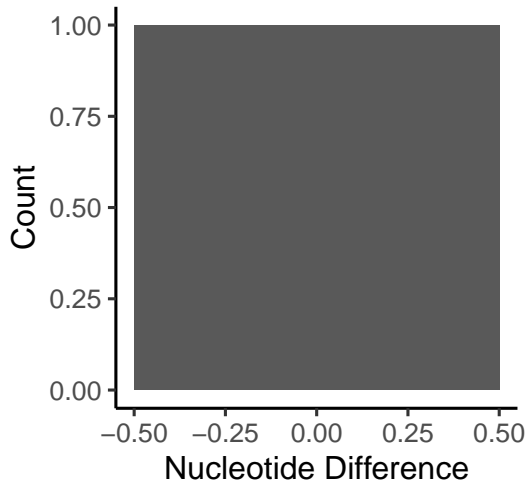
IGHV3-23*01_04

1458 sequences assigned
927 (63.6%) exact matches, in which:
886 unique CDR3
7 unique J



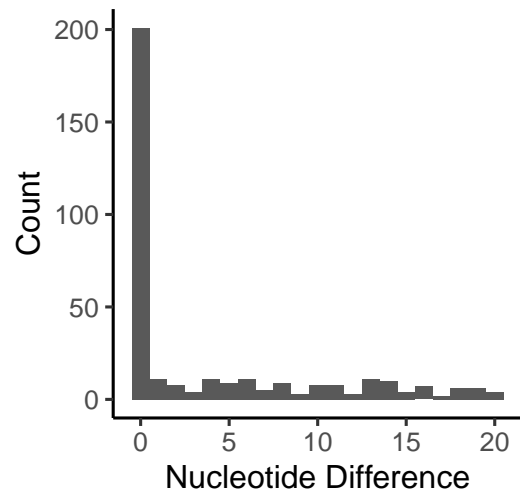
IGHV3-38-3*01

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



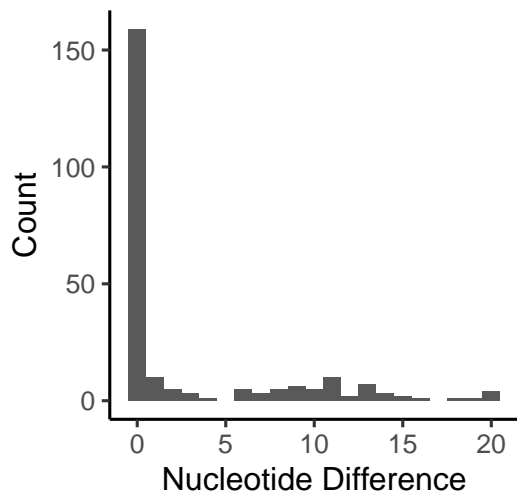
IGHV3-48*02

366 sequences assigned
201 (54.9%) exact matches, in which:
187 unique CDR3
6 unique J



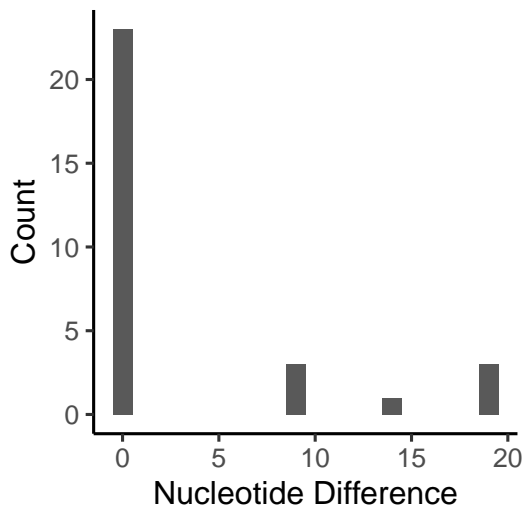
IGHV3-33*01

250 sequences assigned
159 (63.6%) exact matches, in which:
148 unique CDR3
7 unique J



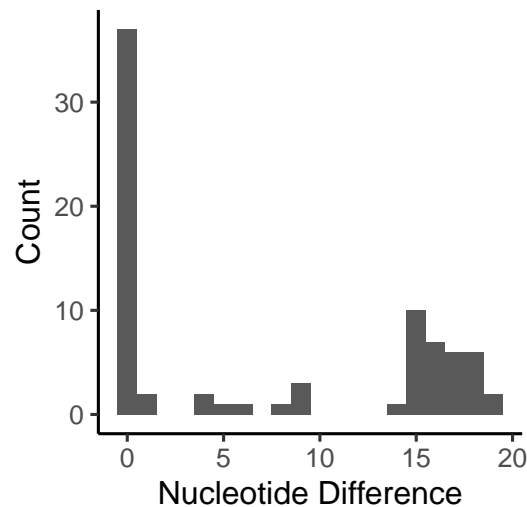
IGHV3-43*01

30 sequences assigned
23 (76.7%) exact matches, in which:
23 unique CDR3
5 unique J



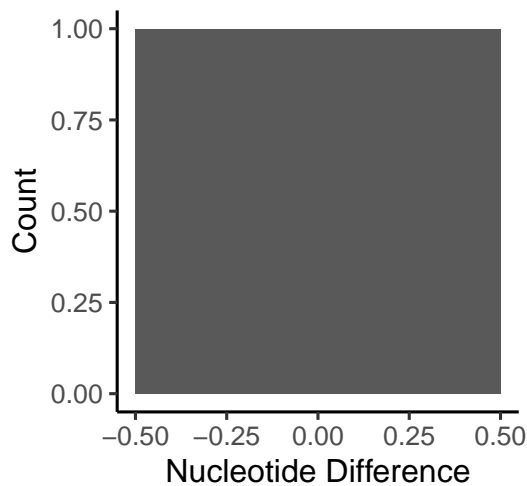
IGHV3-49*04

88 sequences assigned
37 (42%) exact matches, in which:
37 unique CDR3
4 unique J



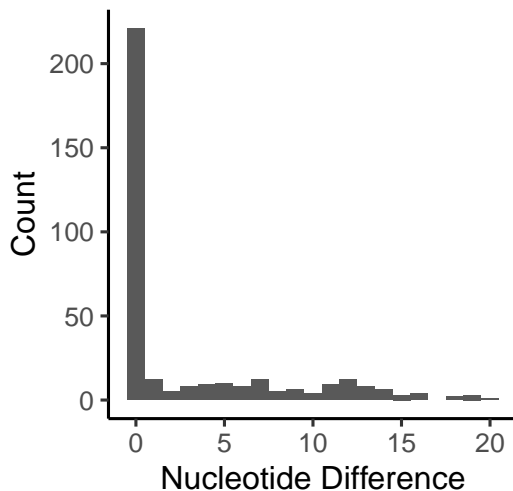
IGHV3-35*01

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



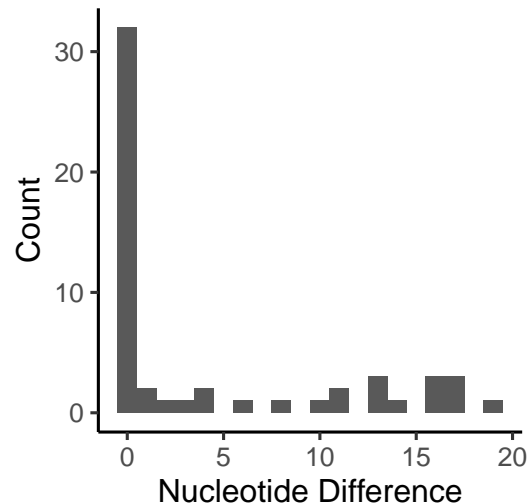
IGHV3-48*01

362 sequences assigned
221 (61%) exact matches, in which:
207 unique CDR3
7 unique J



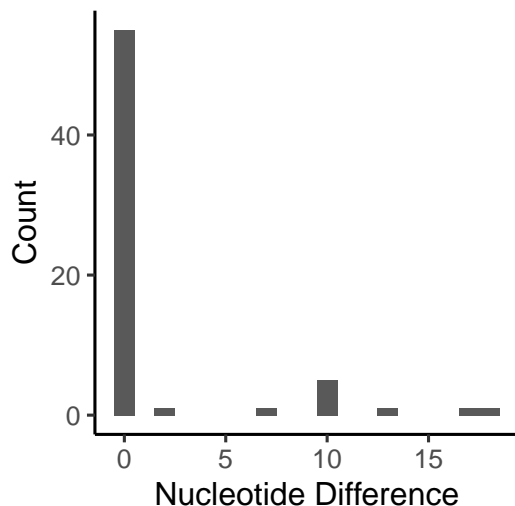
IGHV3-49*03_05

57 sequences assigned
32 (56.1%) exact matches, in which:
32 unique CDR3
5 unique J



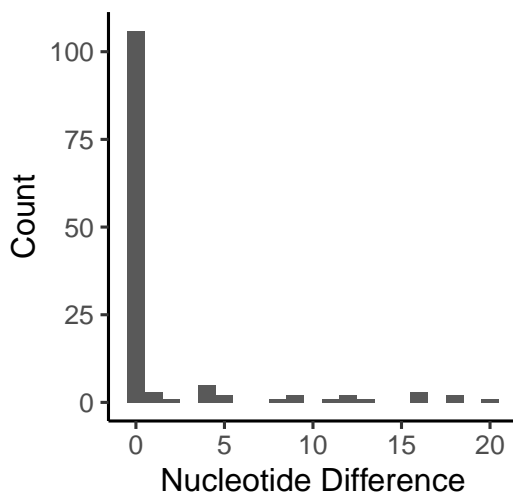
IGHV3-53*04

65 sequences assigned
55 (84.6%) exact matches, in which:
52 unique CDR3
6 unique J



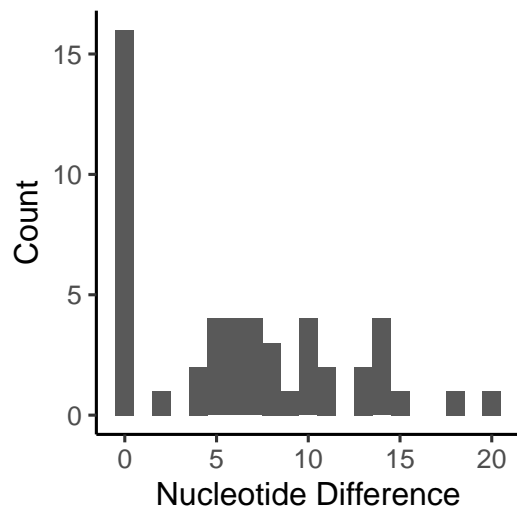
IGHV3-66*01

134 sequences assigned
106 (79.1%) exact matches, in which:
100 unique CDR3
5 unique J



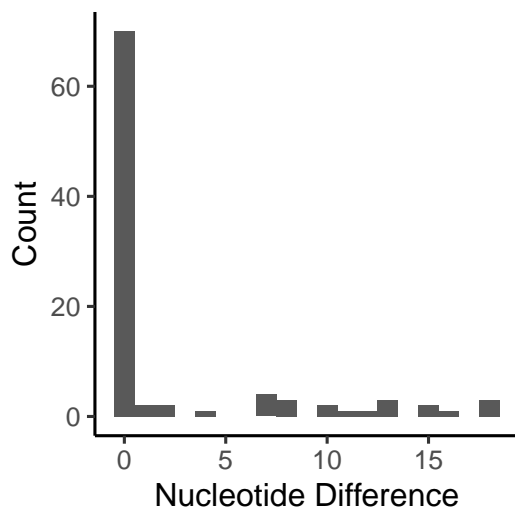
IGHV3-72*01

54 sequences assigned
16 (29.6%) exact matches, in which:
16 unique CDR3
6 unique J



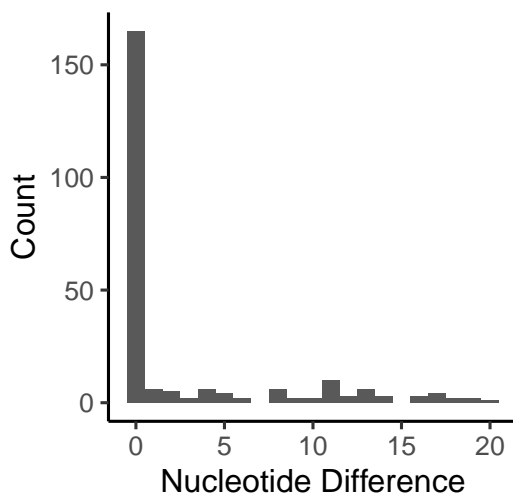
IGHV3-53*01_02

107 sequences assigned
70 (65.4%) exact matches, in which:
70 unique CDR3
5 unique J



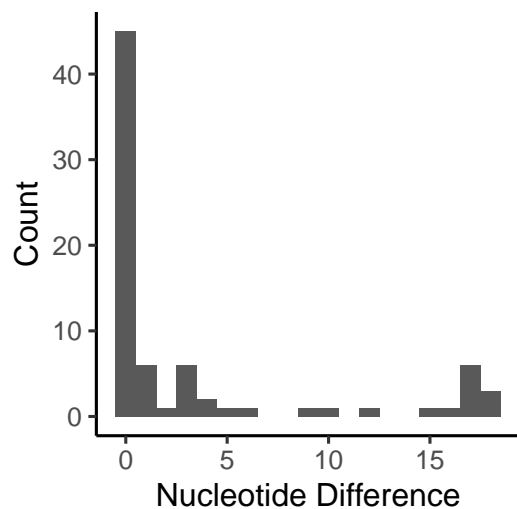
IGHV3-66*02

252 sequences assigned
165 (65.5%) exact matches, in which:
154 unique CDR3
6 unique J



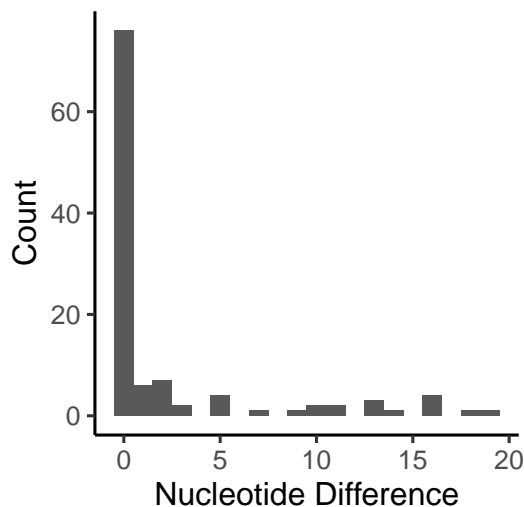
IGHV3-73*01_02

81 sequences assigned
45 (55.6%) exact matches, in which:
39 unique CDR3
7 unique J



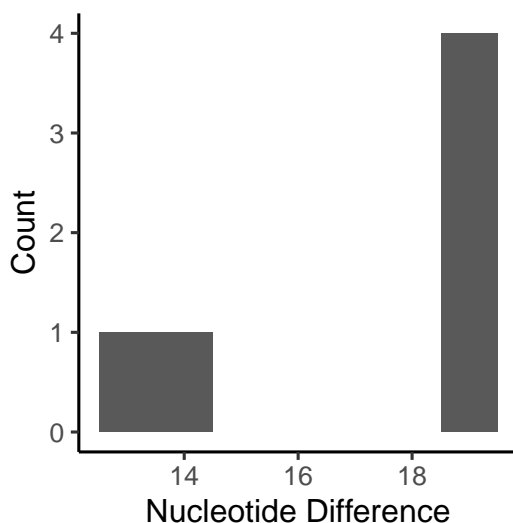
IGHV3-64*01

117 sequences assigned
76 (65%) exact matches, in which:
68 unique CDR3
5 unique J



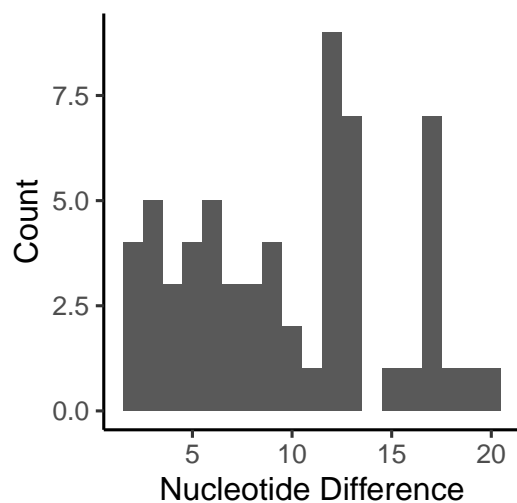
IGHV3-69-1*01

8 sequences assigned
No exact matches.



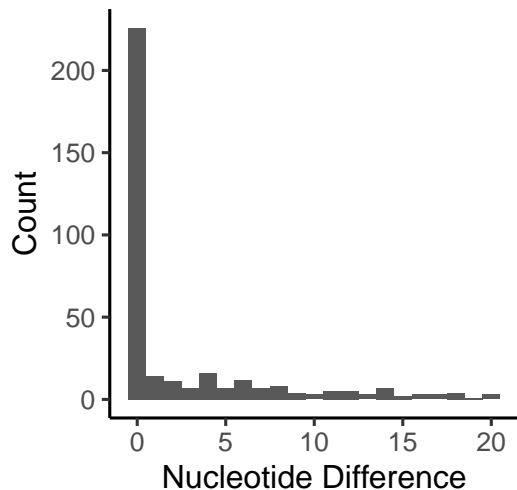
IGHV3-74*03

72 sequences assigned
No exact matches.



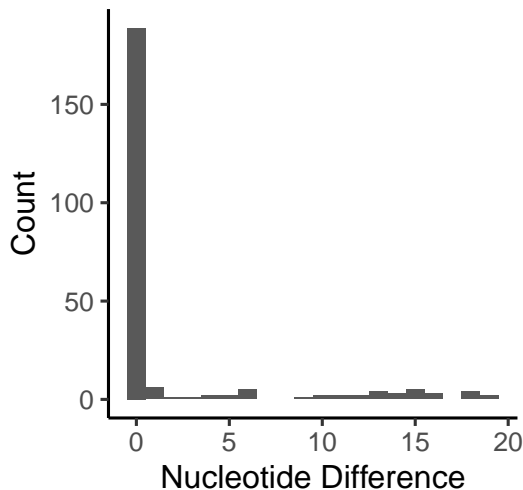
IGHV3-74*01_02

376 sequences assigned
226 (60.1%) exact matches, in which:
205 unique CDR3
7 unique J



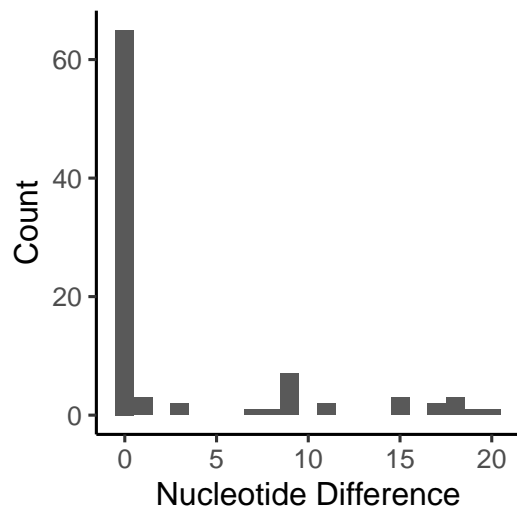
IGHV4-4*02_03

251 sequences assigned
189 (75.3%) exact matches, in which:
180 unique CDR3
6 unique J



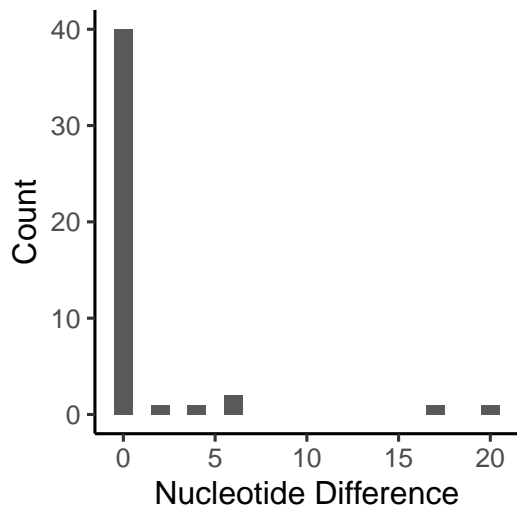
IGHV4-30-4*07

99 sequences assigned
65 (65.7%) exact matches, in which:
65 unique CDR3
5 unique J



IGHV3-43D*03

47 sequences assigned
40 (85.1%) exact matches, in which:
39 unique CDR3
5 unique J



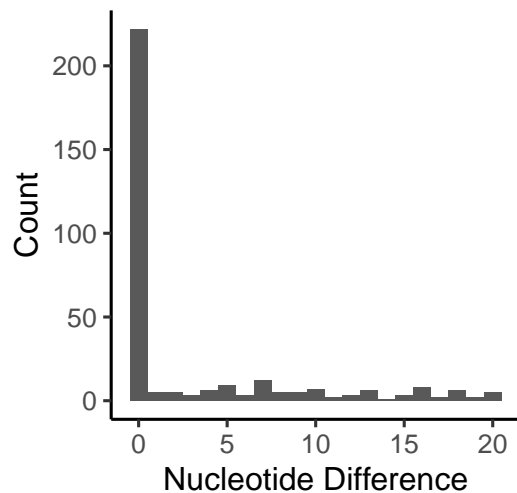
IGHV4-28*01_07

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



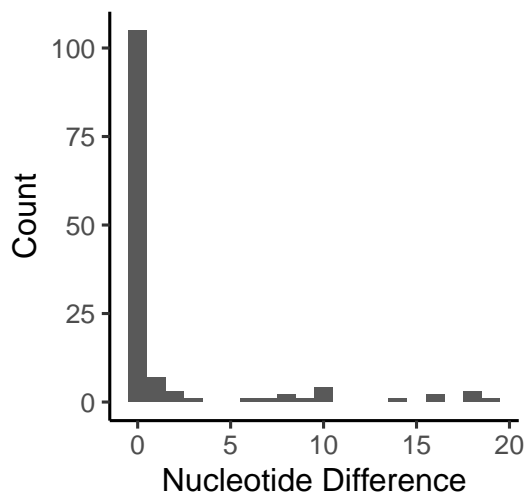
IGHV4-31*02

346 sequences assigned
222 (64.2%) exact matches, in which:
215 unique CDR3
5 unique J



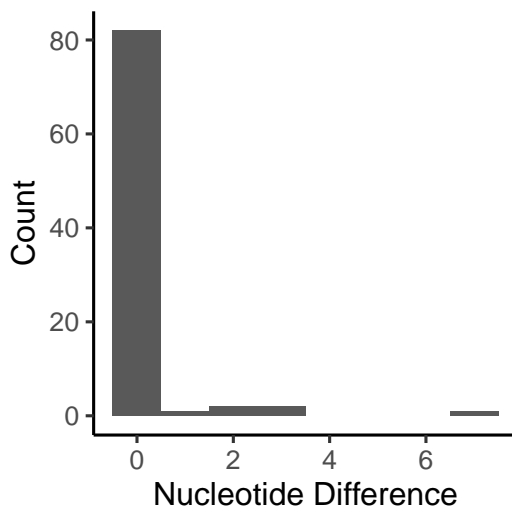
IGHV3-64D*06

144 sequences assigned
105 (72.9%) exact matches, in which:
103 unique CDR3
6 unique J



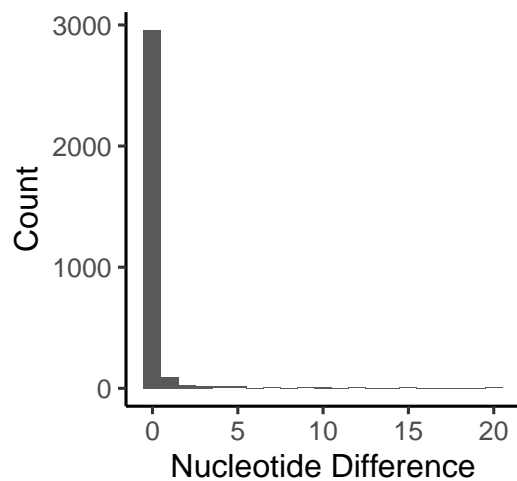
IGHV4-30-2*01

88 sequences assigned
82 (93.2%) exact matches, in which:
78 unique CDR3
6 unique J



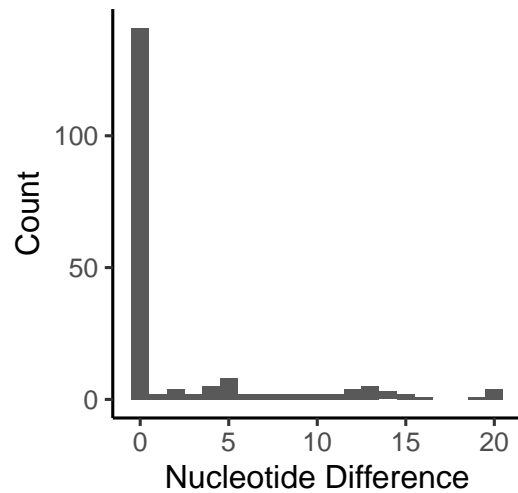
IGHV4-34*01_02

3239 sequences assigned
2958 (91.3%) exact matches, in which:
2814 unique CDR3
7 unique J



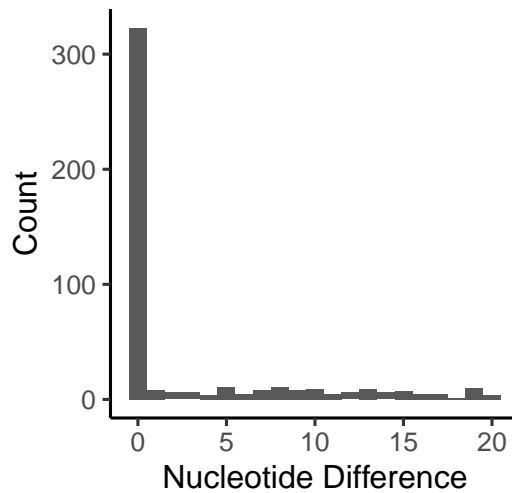
IGHV4-38-2*02

213 sequences assigned
141 (66.2%) exact matches, in which:
136 unique CDR3
6 unique J



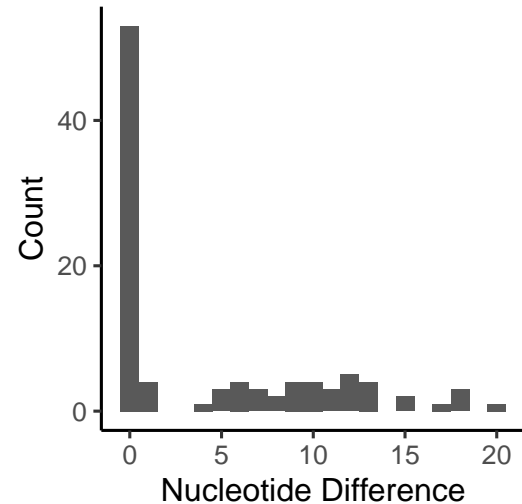
IGHV4-61*02

504 sequences assigned
323 (64.1%) exact matches, in which:
314 unique CDR3
6 unique J



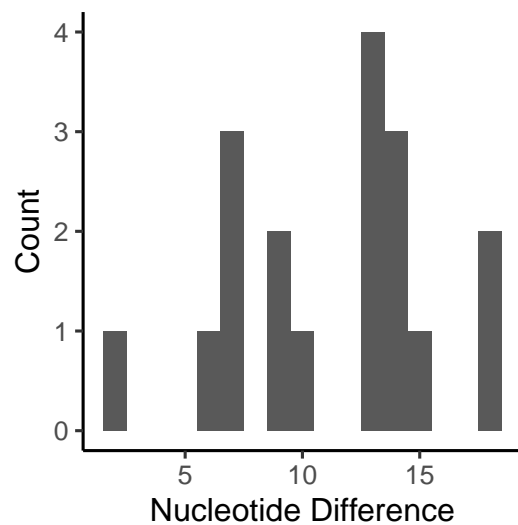
IGHV7-4-1*02

109 sequences assigned
53 (48.6%) exact matches, in which:
53 unique CDR3
5 unique J



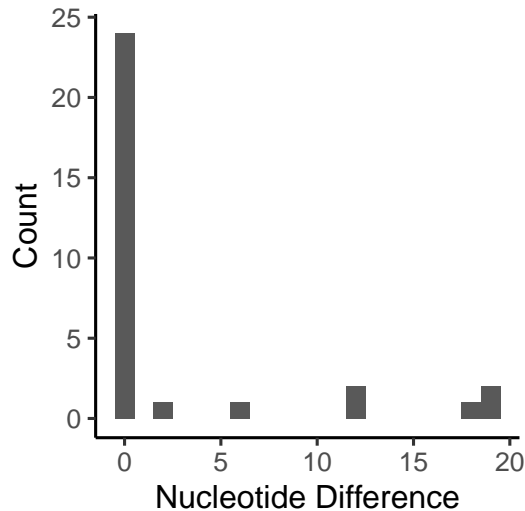
IGHV4-39*02

31 sequences assigned
No exact matches.



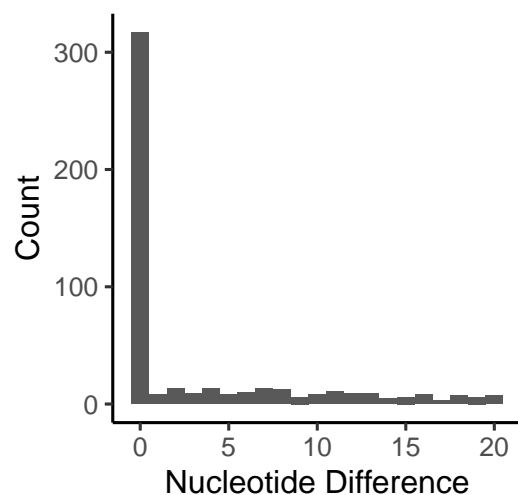
IGHV5-10-1*01_03

34 sequences assigned
24 (70.6%) exact matches, in which:
24 unique CDR3
4 unique J



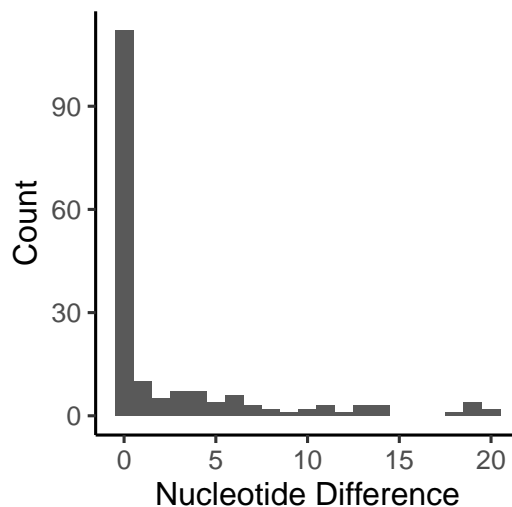
IGHV4-59*08

528 sequences assigned
317 (60%) exact matches, in which:
306 unique CDR3
6 unique J

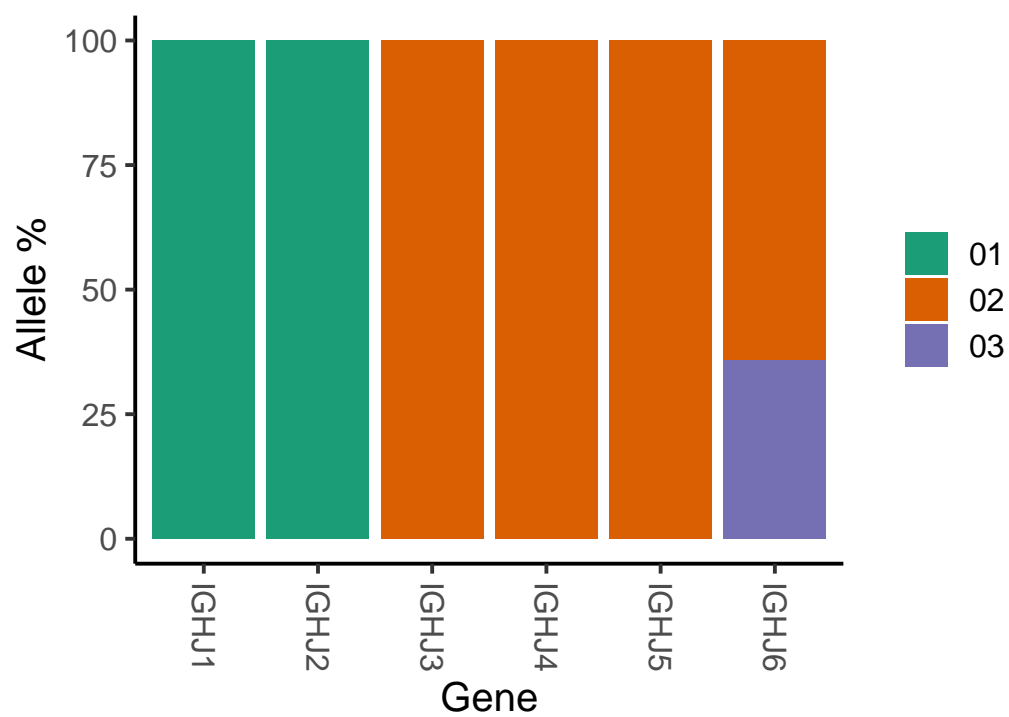


IGHV6-1*01_02

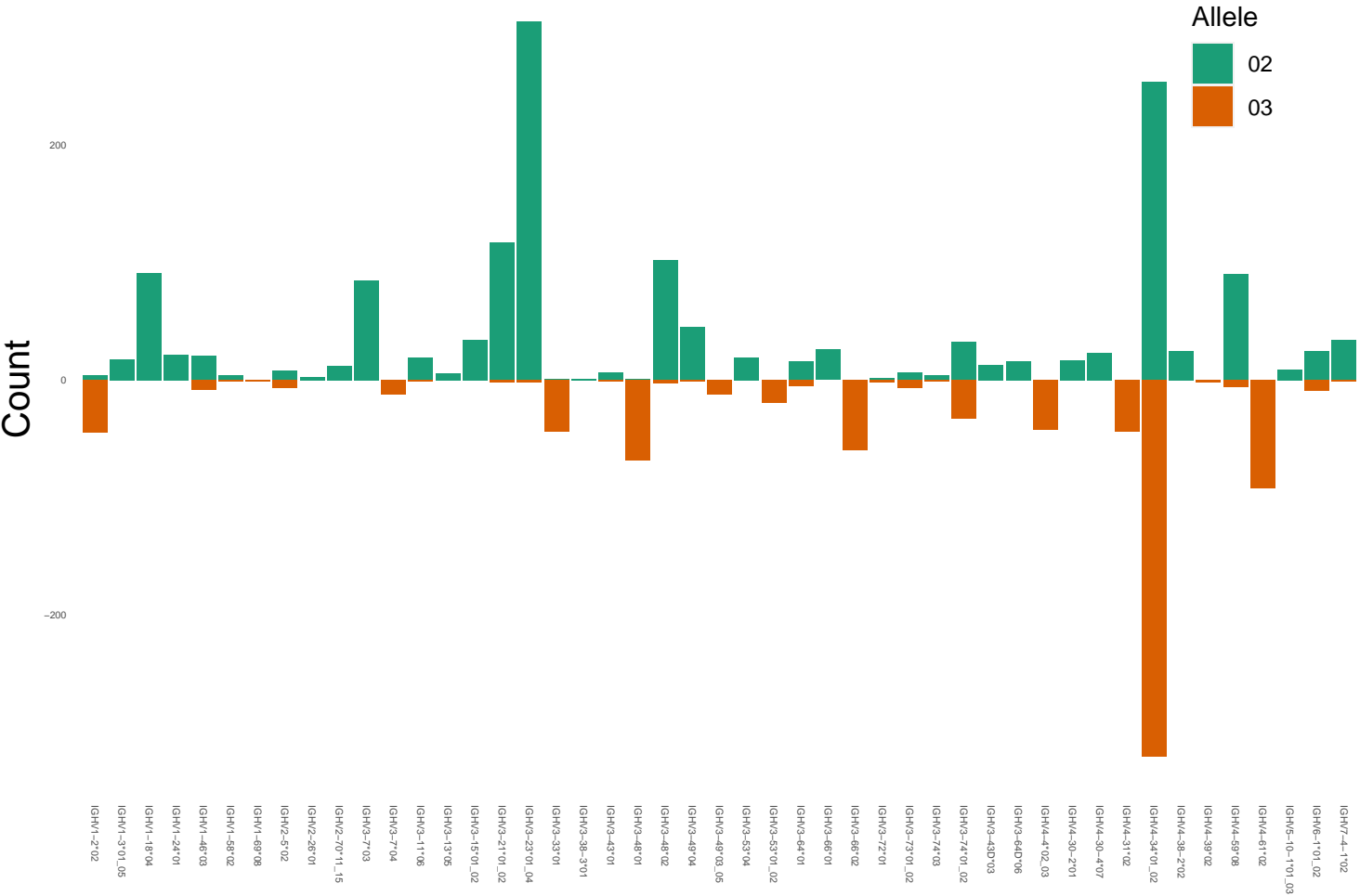
182 sequences assigned
112 (61.5%) exact matches, in which:
111 unique CDR3
6 unique J



Allele Usage



Sequence Count byIGHJ6 allele usage



[illegible]