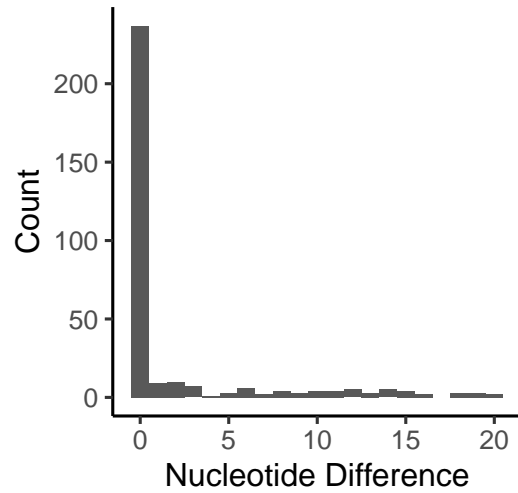


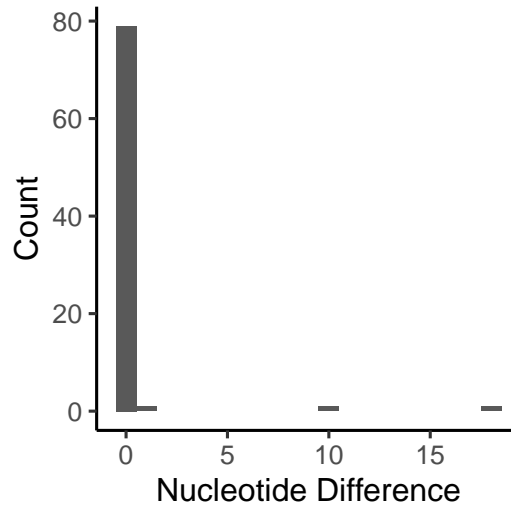
IGHV1–2*02

343 sequences assigned
237 (69.1%) exact matches, in which:
237 unique CDR3
6 unique J



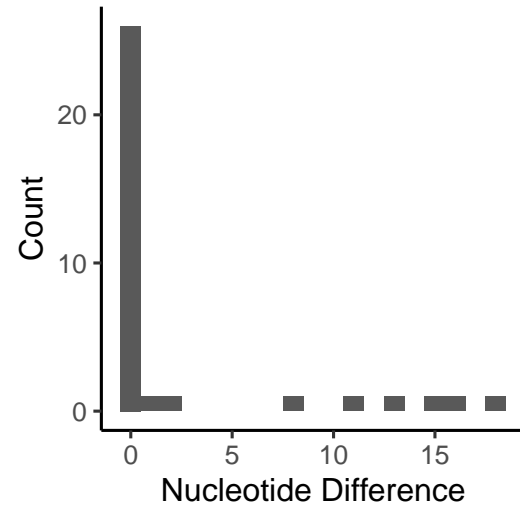
IGHV1–24*01

89 sequences assigned
79 (88.8%) exact matches, in which:
78 unique CDR3
5 unique J



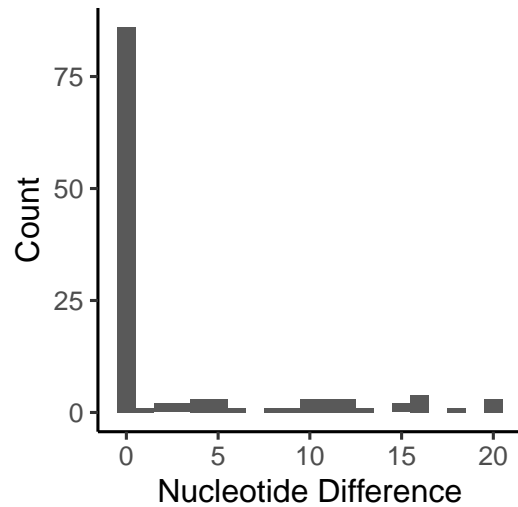
IGHV1–58*02

34 sequences assigned
26 (76.5%) exact matches, in which:
26 unique CDR3
6 unique J



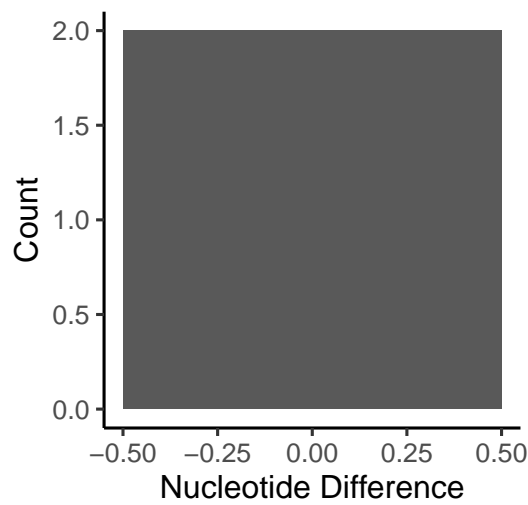
IGHV1–3*01_05

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



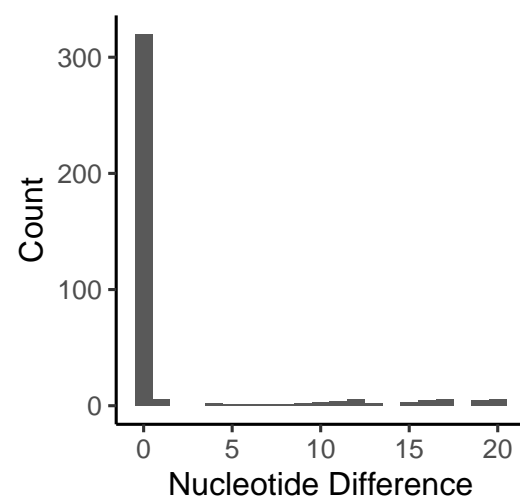
IGHV1–45*02

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



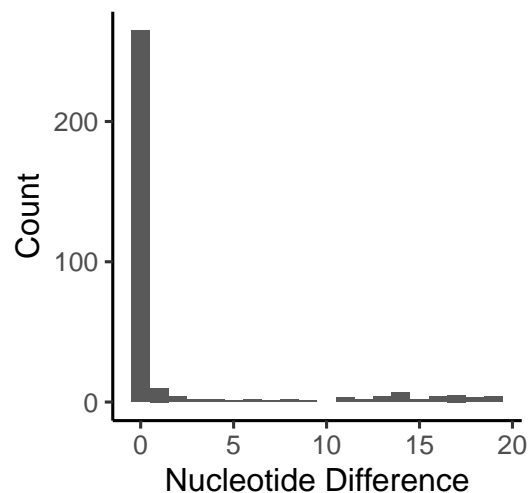
IGHV1–69*04_09_G112A

403 sequences assigned
320 (79.4%) exact matches, in which:
317 unique CDR3
7 unique J



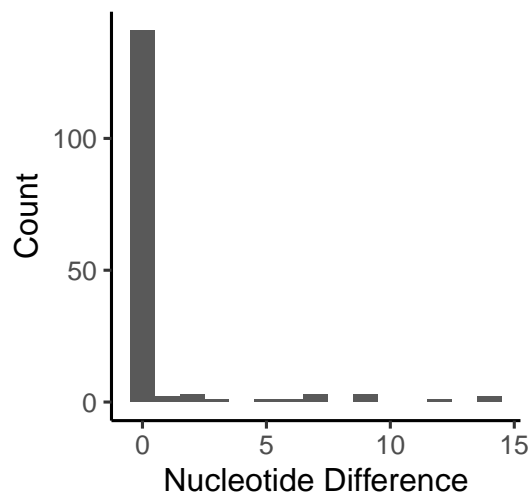
IGHV1–18*04

339 sequences assigned
265 (78.2%) exact matches, in which:
263 unique CDR3
6 unique J



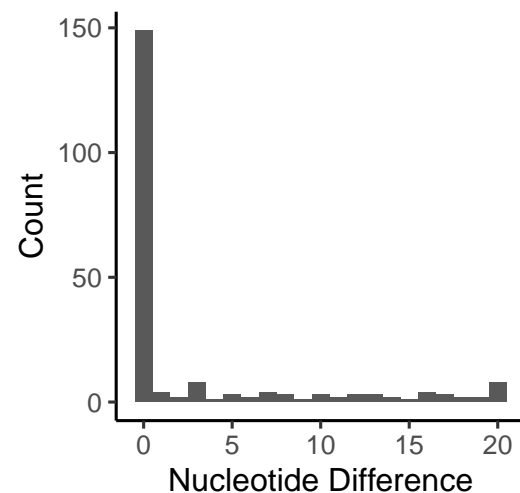
IGHV1–46*03

162 sequences assigned
141 (87%) exact matches, in which:
141 unique CDR3
7 unique J



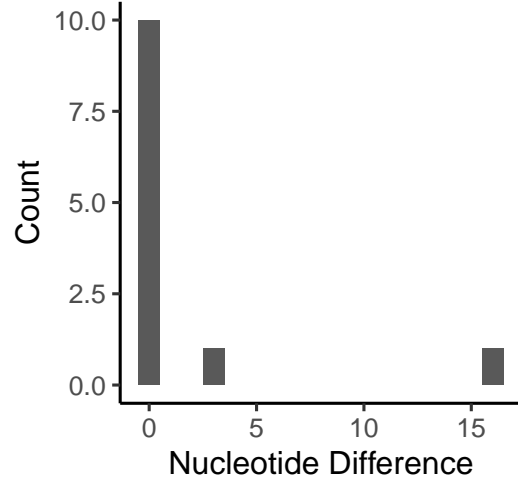
IGHV2–5*02

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



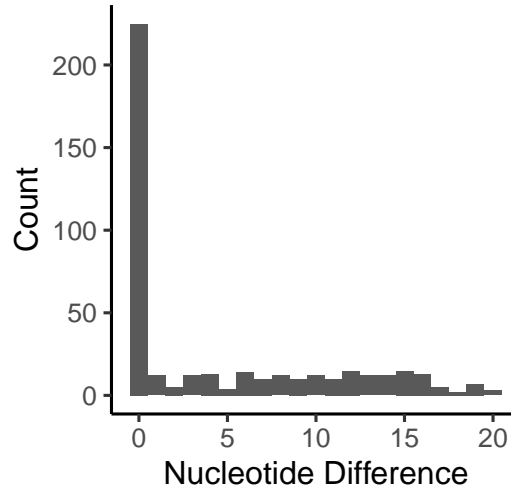
IGHV2-26*01

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



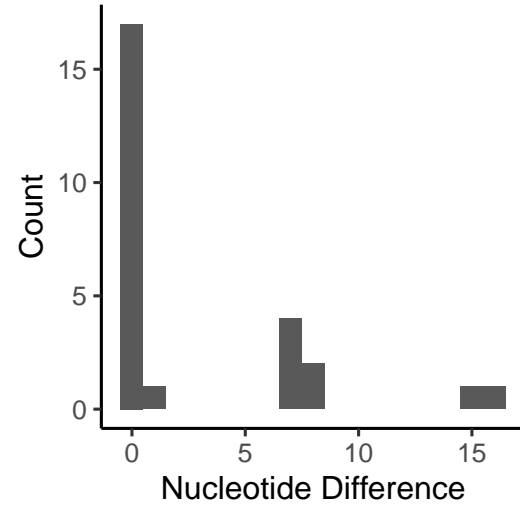
IGHV3-7*03

433 sequences assigned
225 (52%) exact matches, in which:
218 unique CDR3
6 unique J



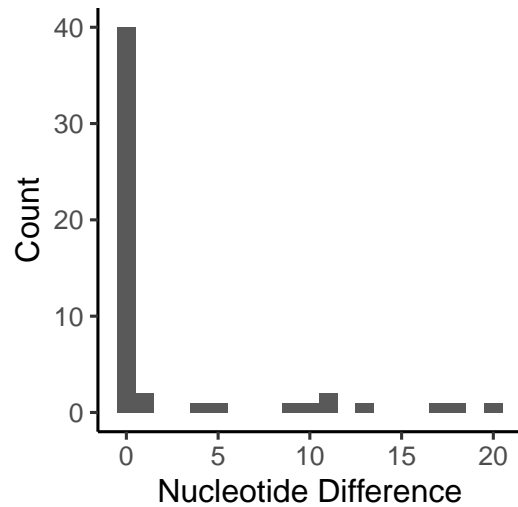
IGHV3-13*05

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



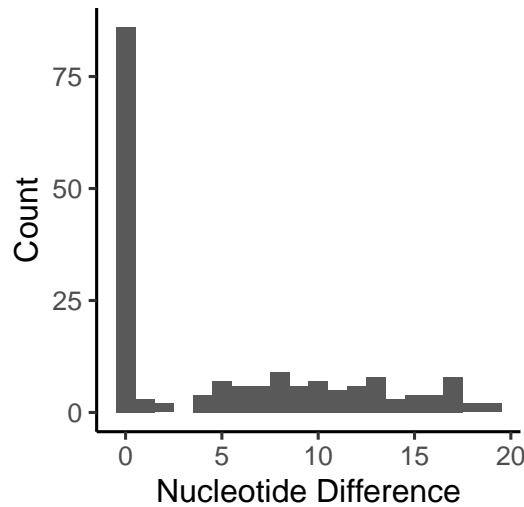
IGHV2-70*11_15

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



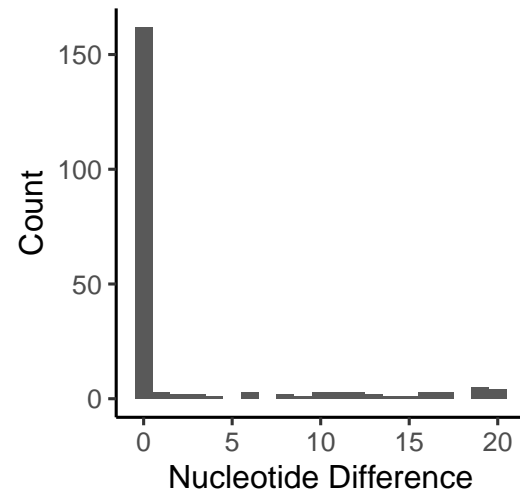
IGHV3-7*04

183 sequences assigned
86 (47%) exact matches, in which:
86 unique CDR3
6 unique J



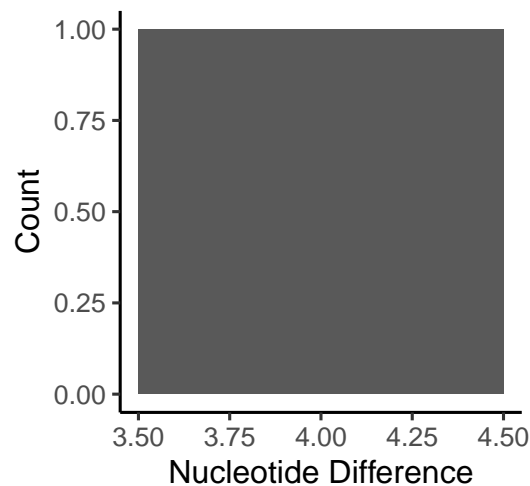
IGHV3-15*01_02

238 sequences assigned
162 (68.1%) exact matches, in which:
158 unique CDR3
6 unique J



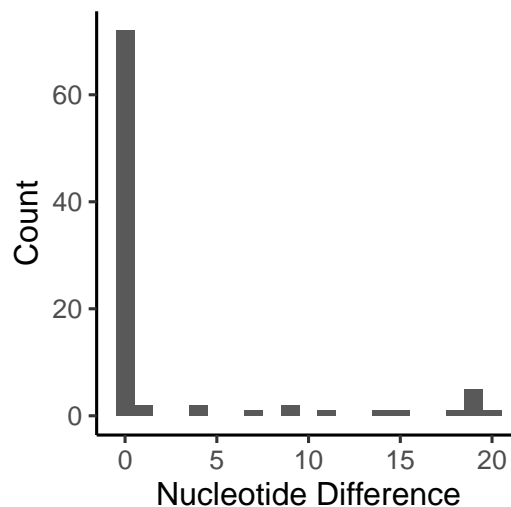
IGHV2-70D*04

1 sequences assigned
No exact matches.



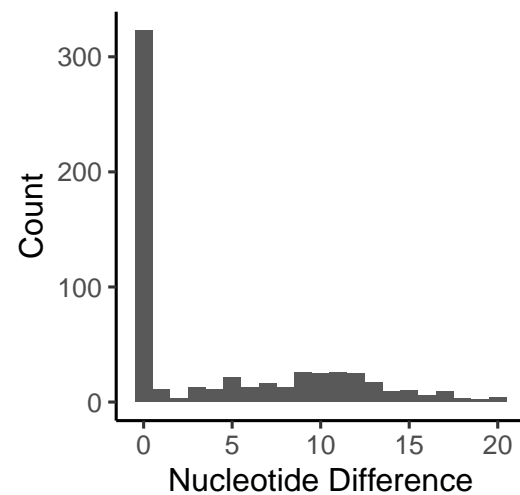
IGHV3-11*06

99 sequences assigned
72 (72.7%) exact matches, in which:
70 unique CDR3
6 unique J



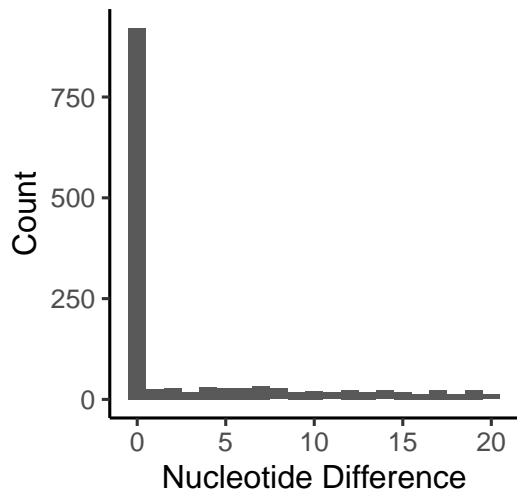
IGHV3-21*01_02

612 sequences assigned
323 (52.8%) exact matches, in which:
308 unique CDR3
7 unique J



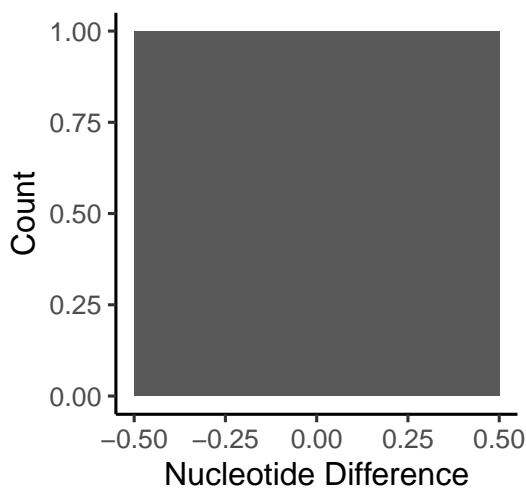
IGHV3-23*01_04

1453 sequences assigned
922 (63.5%) exact matches, in which:
888 unique CDR3
7 unique J



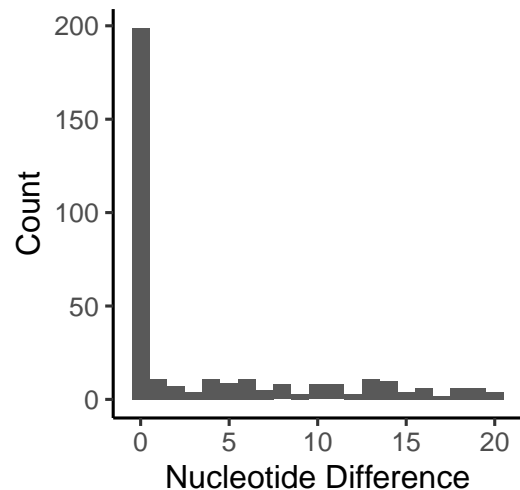
IGHV3-38-3*01

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



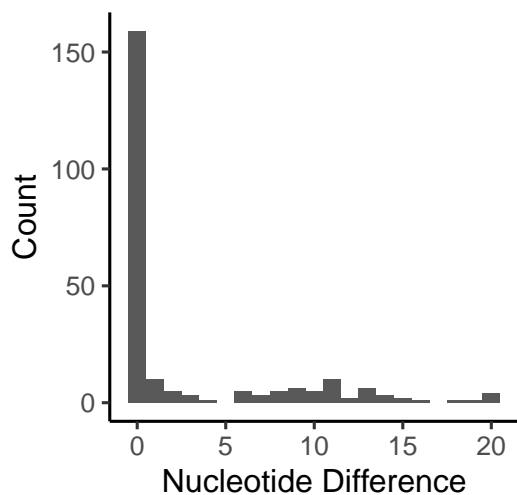
IGHV3-48*02

360 sequences assigned
199 (55.3%) exact matches, in which:
187 unique CDR3
6 unique J



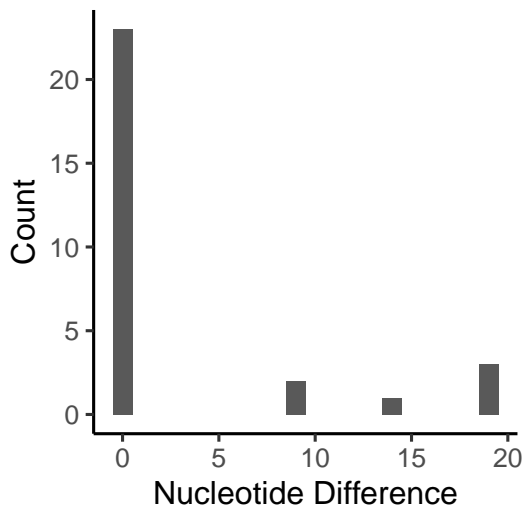
IGHV3-33*01

248 sequences assigned
159 (64.1%) exact matches, in which:
148 unique CDR3
7 unique J



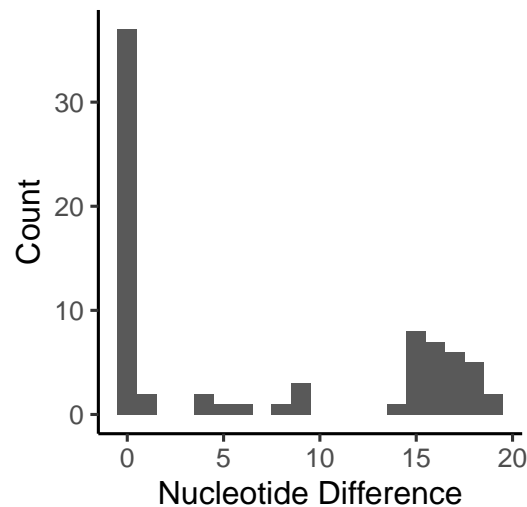
IGHV3-43*01

29 sequences assigned
23 (79.3%) exact matches, in which:
23 unique CDR3
5 unique J



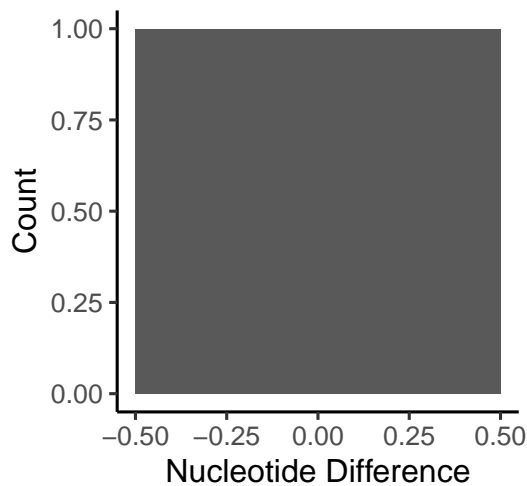
IGHV3-49*04

84 sequences assigned
37 (44%) exact matches, in which:
37 unique CDR3
4 unique J



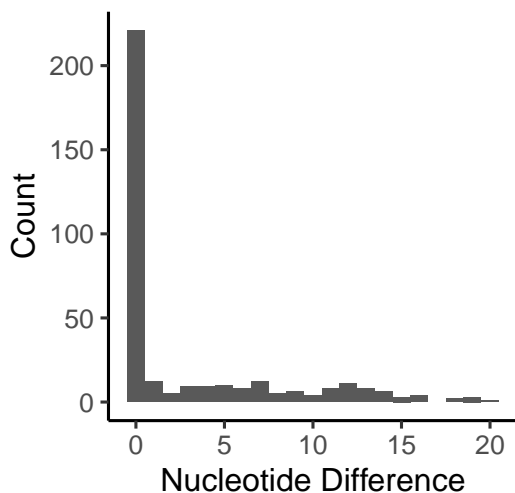
IGHV3-35*01

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



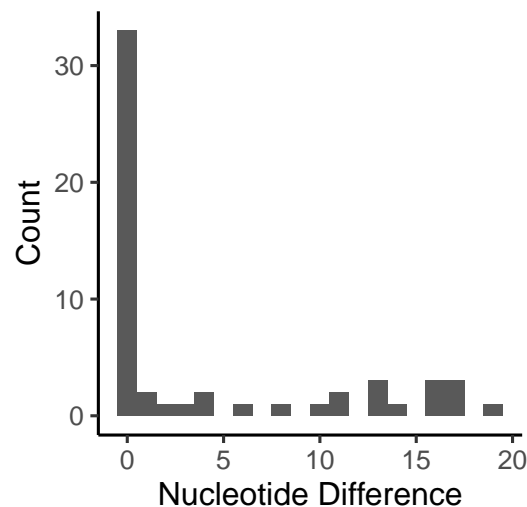
IGHV3-48*01

361 sequences assigned
221 (61.2%) exact matches, in which:
208 unique CDR3
7 unique J



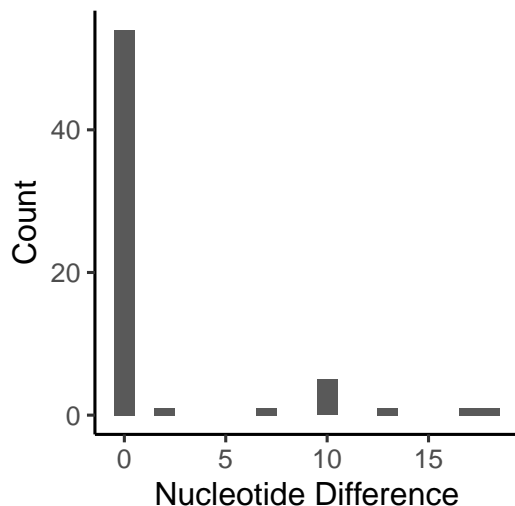
IGHV3-49*03_05

58 sequences assigned
33 (56.9%) exact matches, in which:
33 unique CDR3
5 unique J



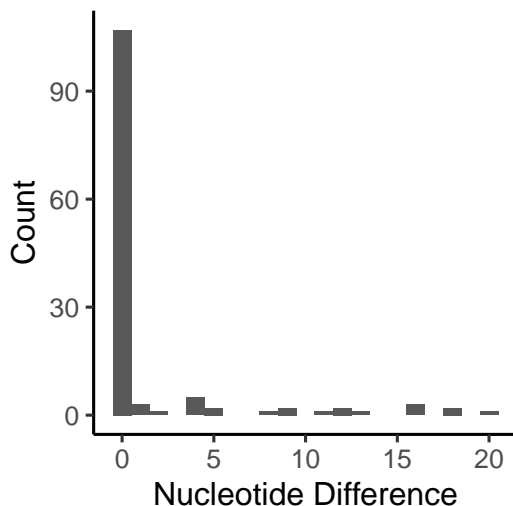
IGHV3-53*04

64 sequences assigned
54 (84.4%) exact matches, in which:
52 unique CDR3
6 unique J



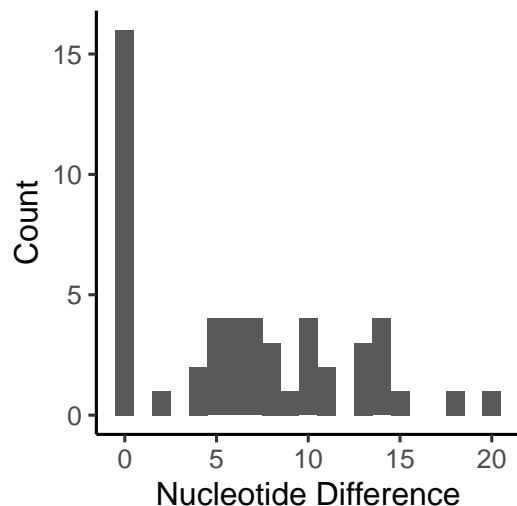
IGHV3-66*01

135 sequences assigned
107 (79.3%) exact matches, in which:
101 unique CDR3
5 unique J



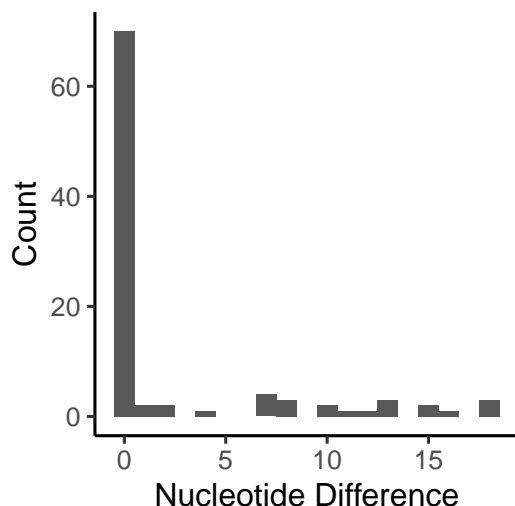
IGHV3-72*01

55 sequences assigned
16 (29.1%) exact matches, in which:
16 unique CDR3
6 unique J



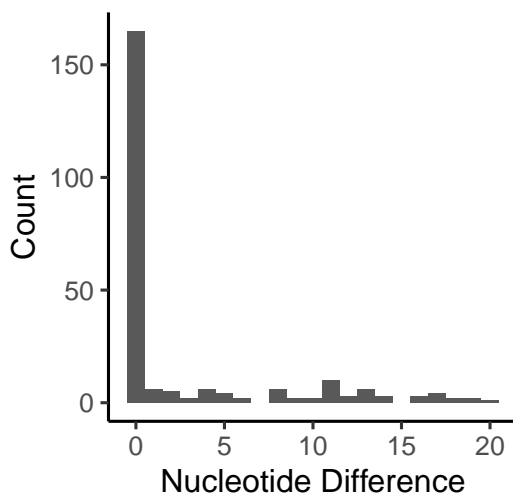
IGHV3-53*01_02

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



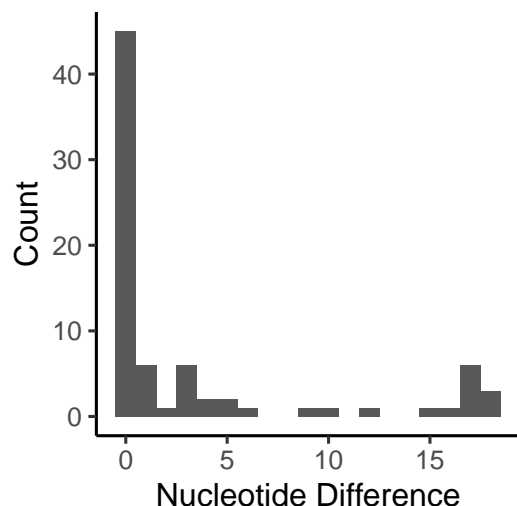
IGHV3-66*02

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



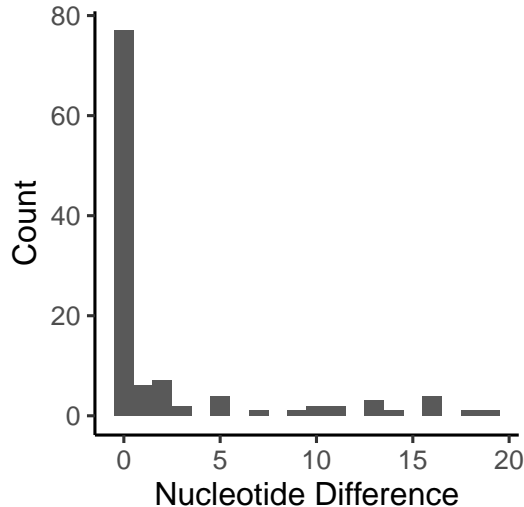
IGHV3-73*01_02

82 sequences assigned
45 (54.9%) exact matches, in which:
39 unique CDR3
7 unique J



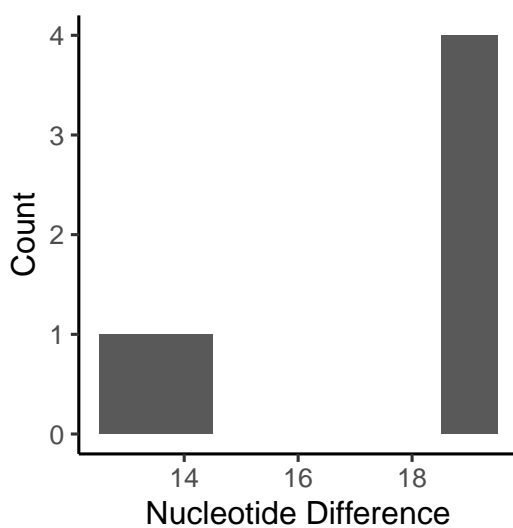
IGHV3-64*01

118 sequences assigned
77 (65.3%) exact matches, in which:
69 unique CDR3
5 unique J



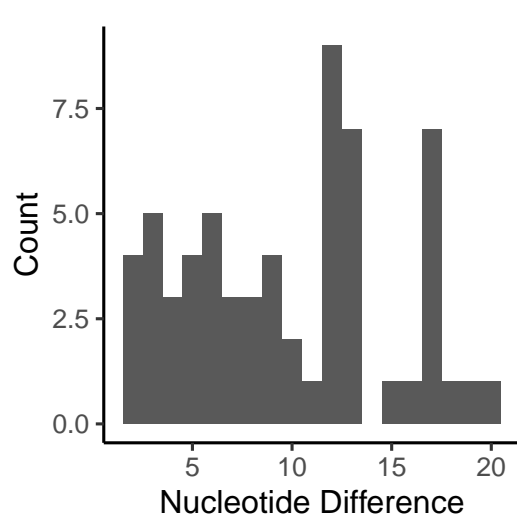
IGHV3-69-1*01

8 sequences assigned
No exact matches.



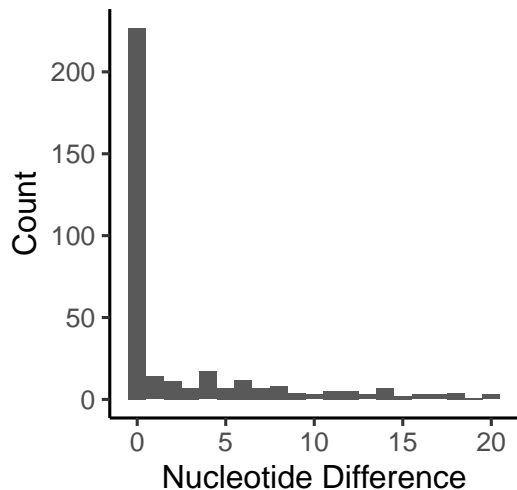
IGHV3-74*03

71 sequences assigned
No exact matches.



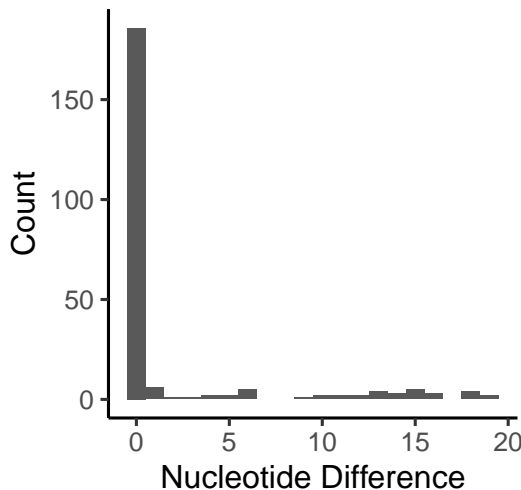
IGHV3-74*01_02

378 sequences assigned
227 (60.1%) exact matches, in which:
209 unique CDR3
7 unique J



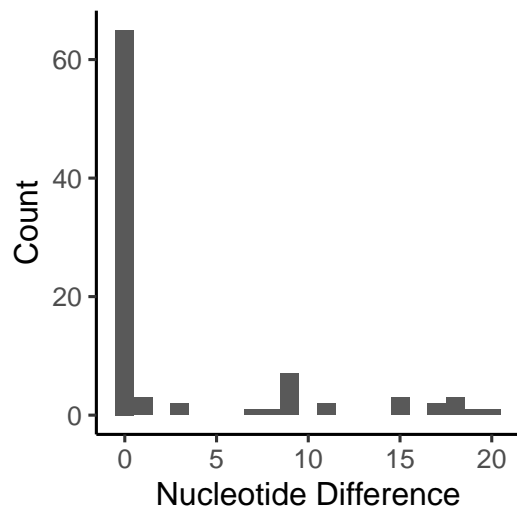
IGHV4-4*02_03

248 sequences assigned
186 (75%) exact matches, in which:
179 unique CDR3
6 unique J



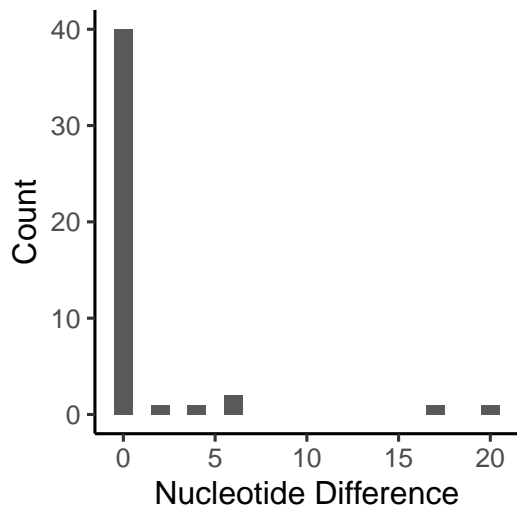
IGHV4-30-4*07

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



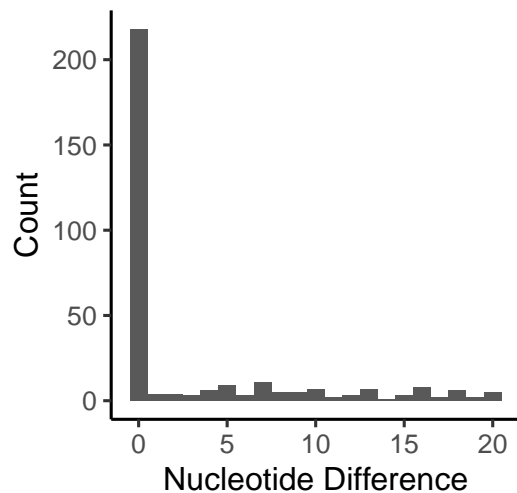
IGHV4-28*01_07

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



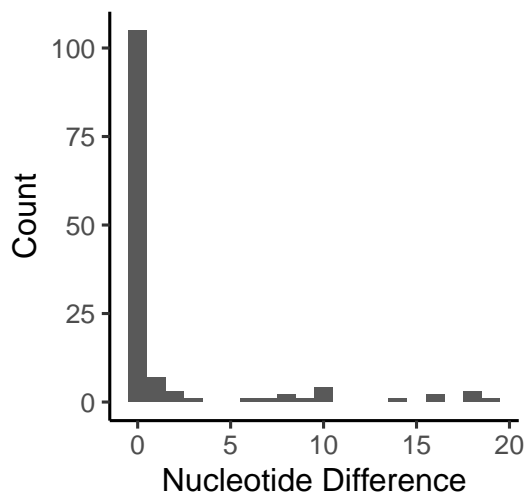
IGHV4-31*02

340 sequences assigned
218 (64.1%) exact matches, in which:
213 unique CDR3
5 unique J



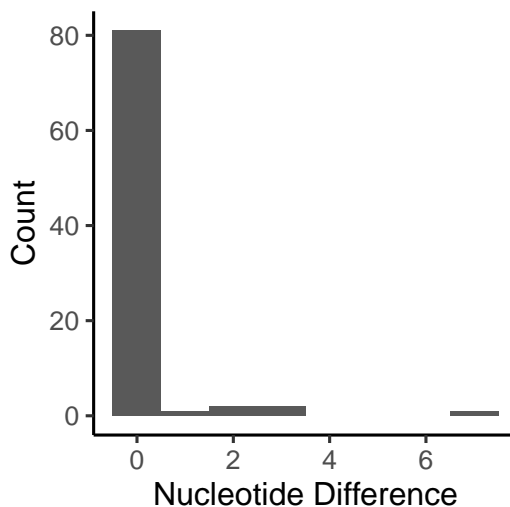
IGHV3-64D*06

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



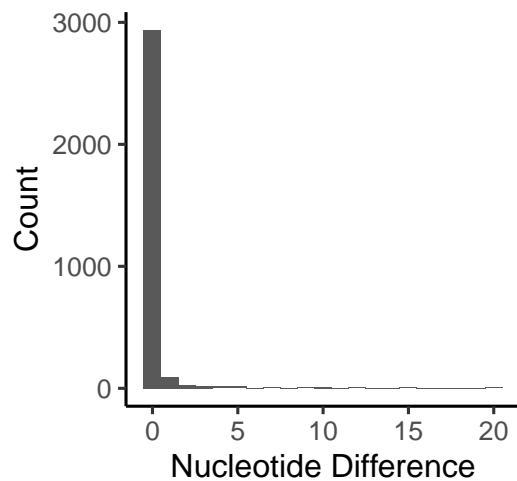
IGHV4-30-2*01

87 sequences assigned
81 (93.1%) exact matches, in which:
78 unique CDR3
6 unique J



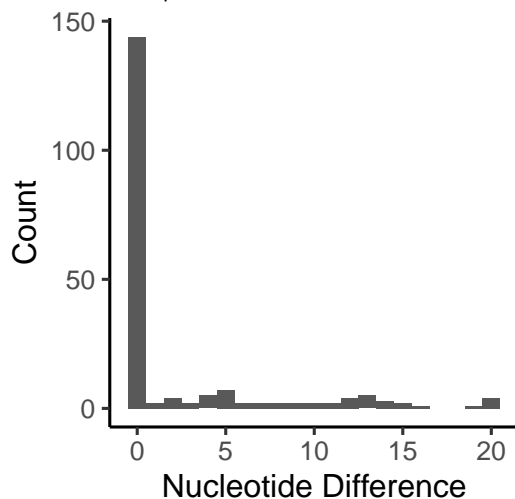
IGHV4-34*01_02

3214 sequences assigned
2937 (91.4%) exact matches, in which:
2814 unique CDR3
7 unique J



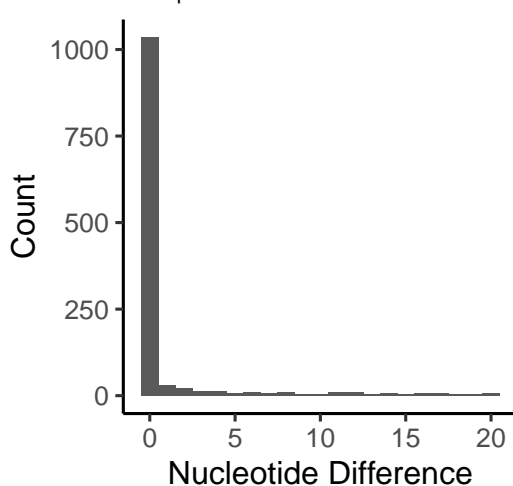
IGHV4-38-2*02

214 sequences assigned
144 (67.3%) exact matches, in which:
139 unique CDR3
6 unique J



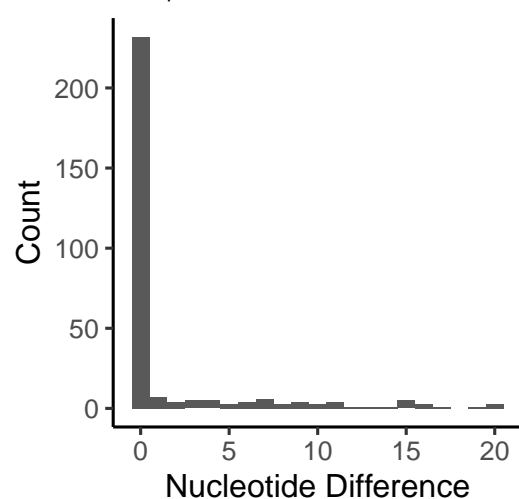
IGHV4-59*02_G88A

1285 sequences assigned
1035 (80.5%) exact matches, in which:
997 unique CDR3
7 unique J



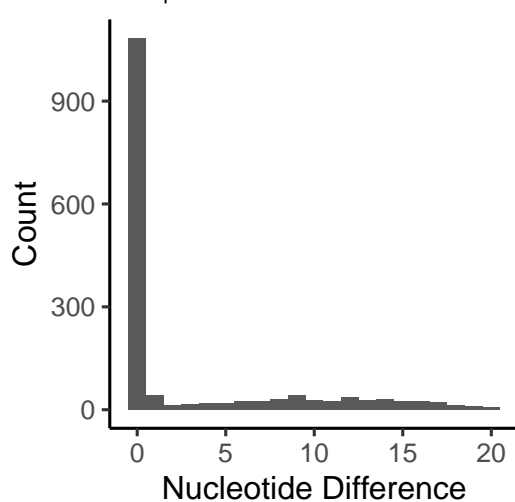
IGHV5-51*07_A128G

304 sequences assigned
232 (76.3%) exact matches, in which:
232 unique CDR3
7 unique J



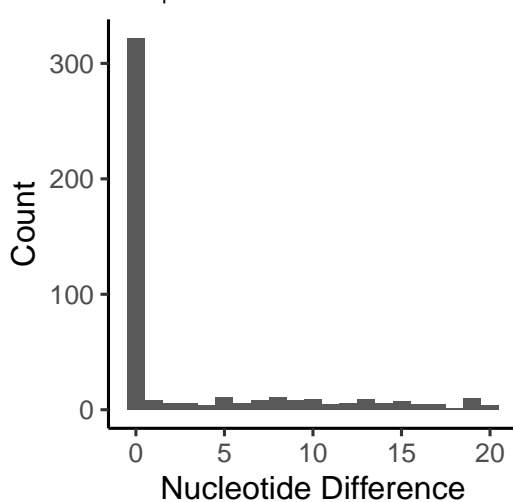
IGHV4-39*02_C258G

1641 sequences assigned
1084 (66.1%) exact matches, in which:
1039 unique CDR3
7 unique J



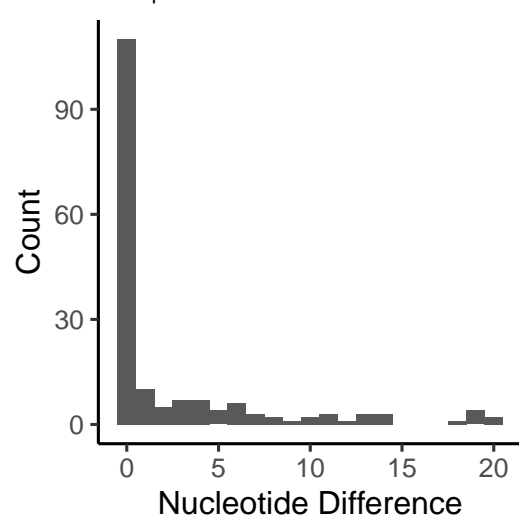
IGHV4-61*02

504 sequences assigned
322 (63.9%) exact matches, in which:
314 unique CDR3
6 unique J



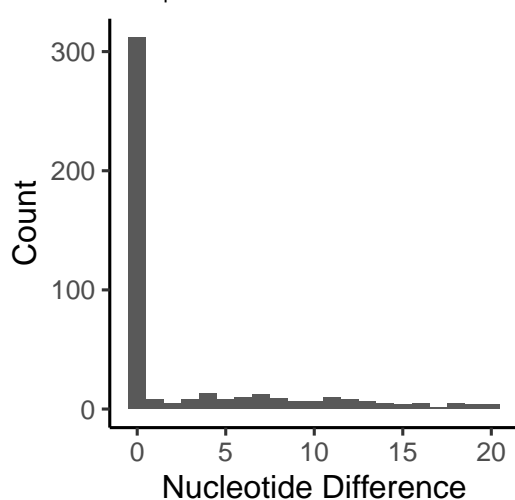
IGHV6-1*01_02

180 sequences assigned
110 (61.1%) exact matches, in which:
110 unique CDR3
6 unique J



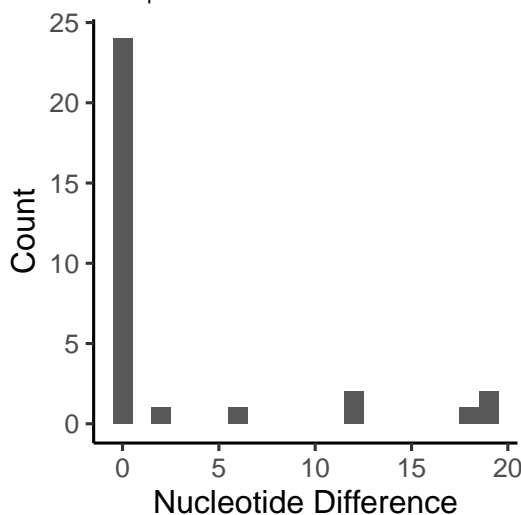
IGHV4-59*08

465 sequences assigned
312 (67.1%) exact matches, in which:
306 unique CDR3
6 unique J



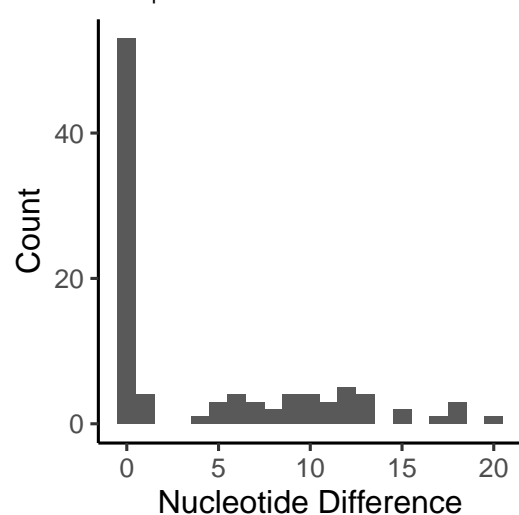
IGHV5-10-1*01_03

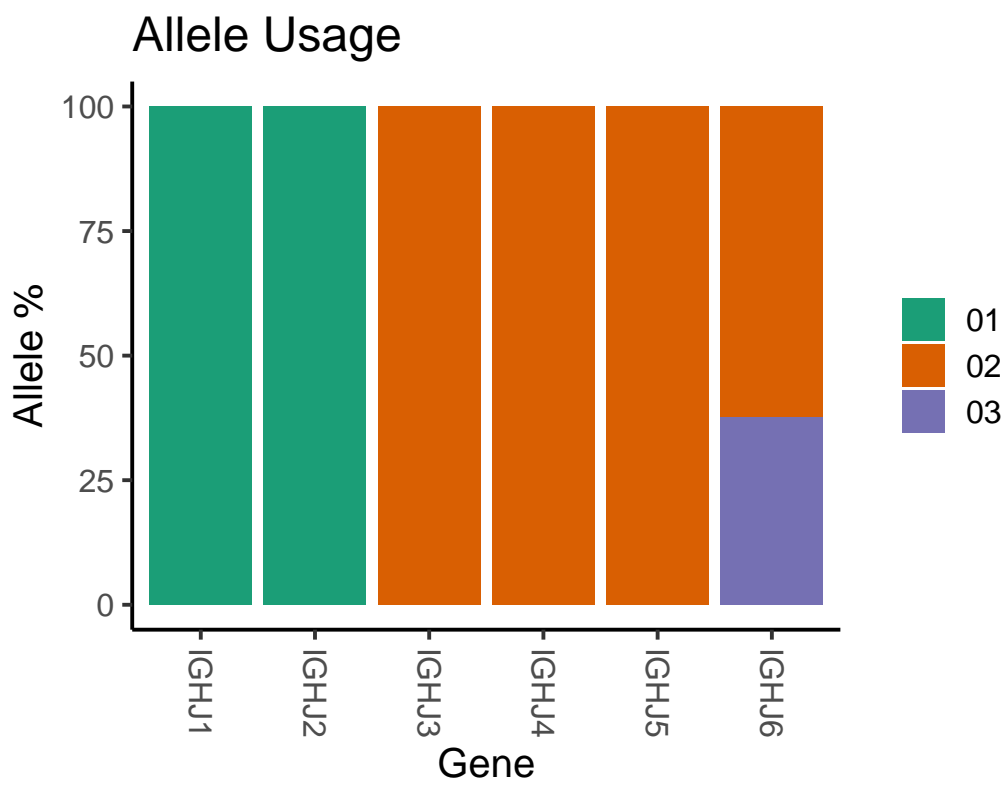
34 sequences assigned
24 (70.6%) exact matches, in which:
24 unique CDR3
4 unique J



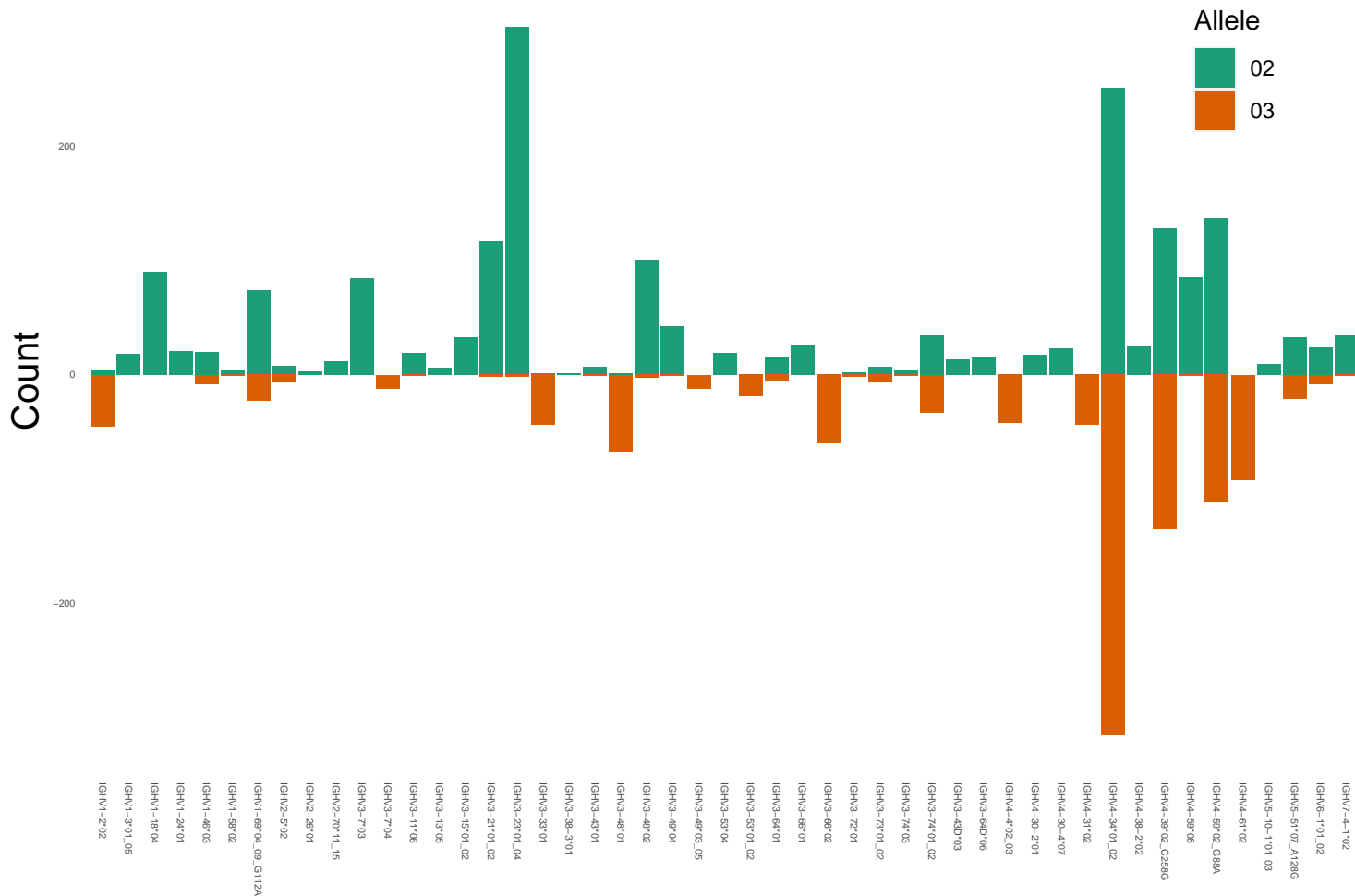
IGHV7-4-1*02

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





Sequence Count by IGHJ6 allele usage



Warning – no inferred sequences found.