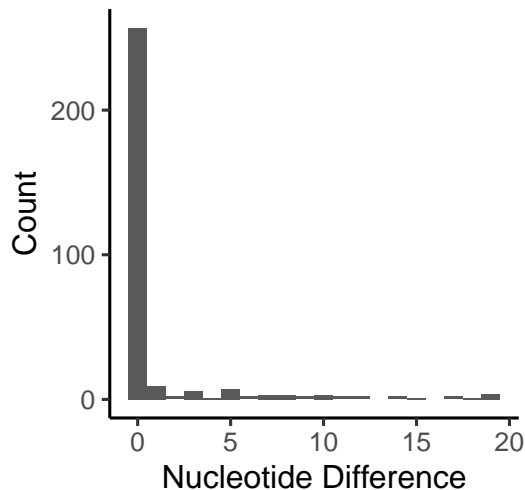


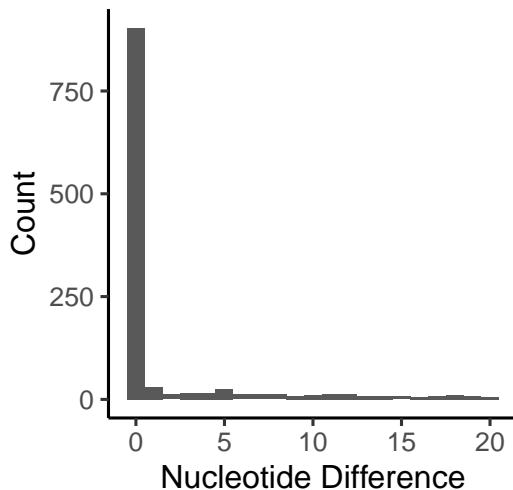
IGHV1–2*04

315 sequences assigned
257 (81.6%) exact matches, in which:
255 unique CDR3
7 unique J



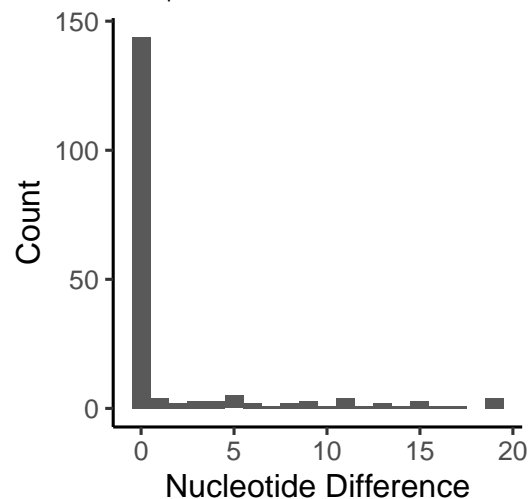
IGHV1–18*01

1170 sequences assigned
904 (77.3%) exact matches, in which:
900 unique CDR3
7 unique J



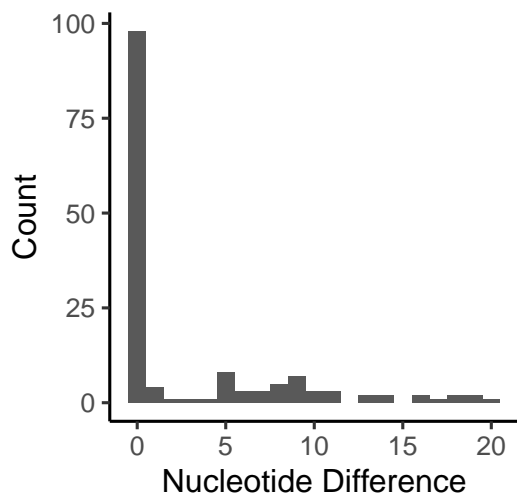
IGHV1–46*01

190 sequences assigned
144 (75.8%) exact matches, in which:
144 unique CDR3
6 unique J



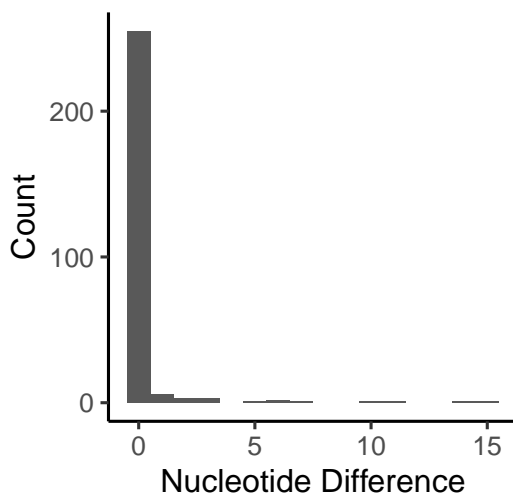
IGHV1–3*01_05

150 sequences assigned
98 (65.3%) exact matches, in which:
98 unique CDR3
4 unique J



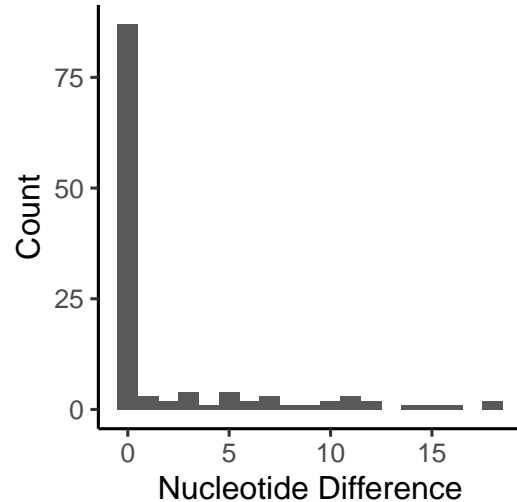
IGHV1–24*01

277 sequences assigned
255 (92.1%) exact matches, in which:
253 unique CDR3
6 unique J



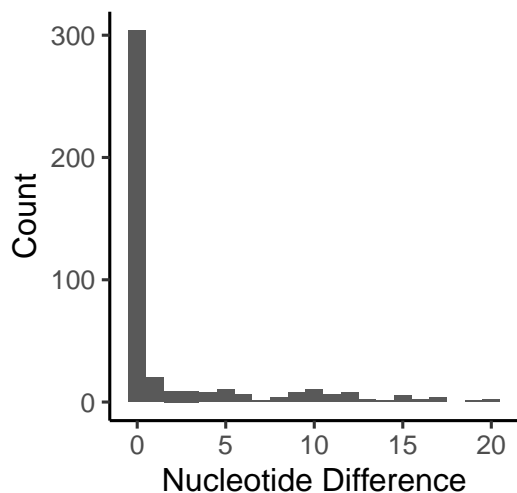
IGHV1–46*03

121 sequences assigned
87 (71.9%) exact matches, in which:
87 unique CDR3
4 unique J



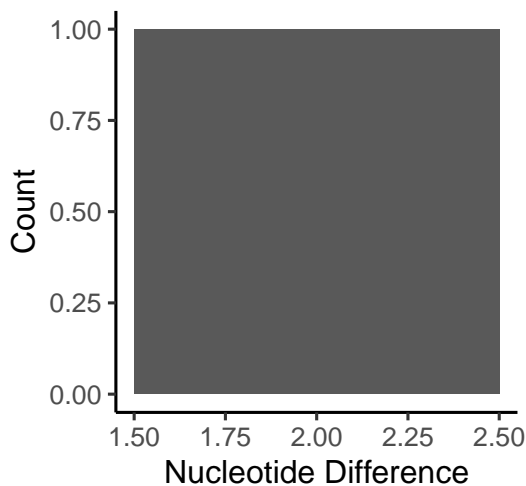
IGHV1–8*01

421 sequences assigned
304 (72.2%) exact matches, in which:
303 unique CDR3
7 unique J



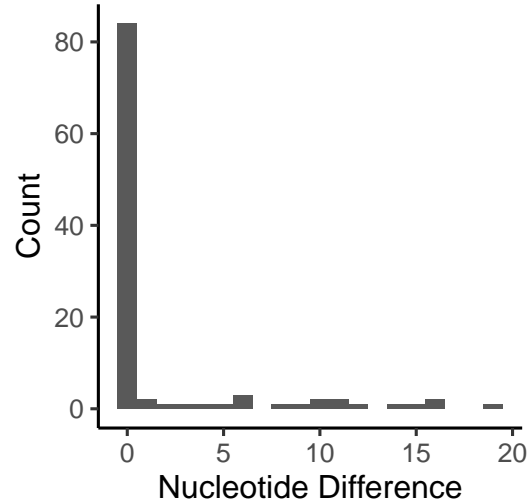
IGHV1–45*02

1 sequences assigned
No exact matches.



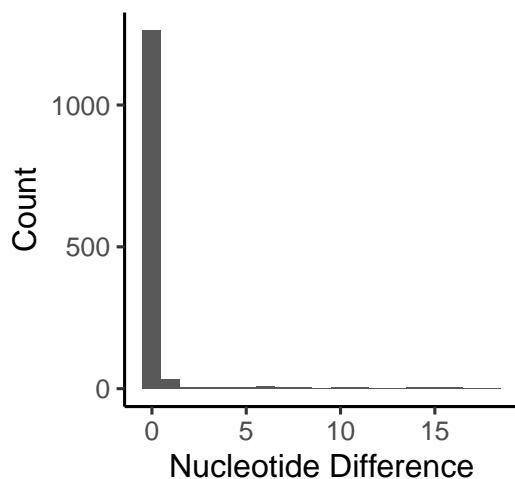
IGHV1–58*01_03

109 sequences assigned
84 (77.1%) exact matches, in which:
84 unique CDR3
6 unique J



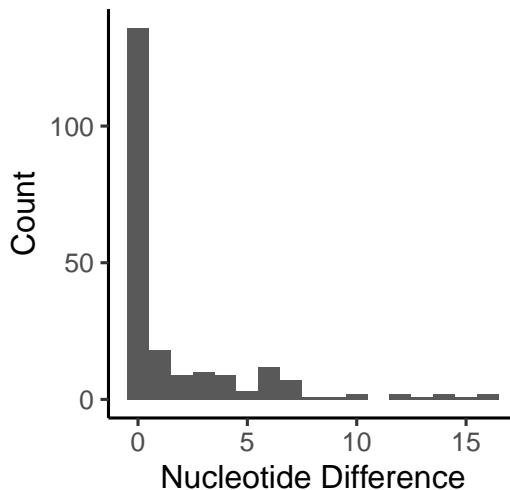
IGHV1-69*01_12_13

1383 sequences assigned
1263 (91.3%) exact matches, in which:
1256 unique CDR3
7 unique J



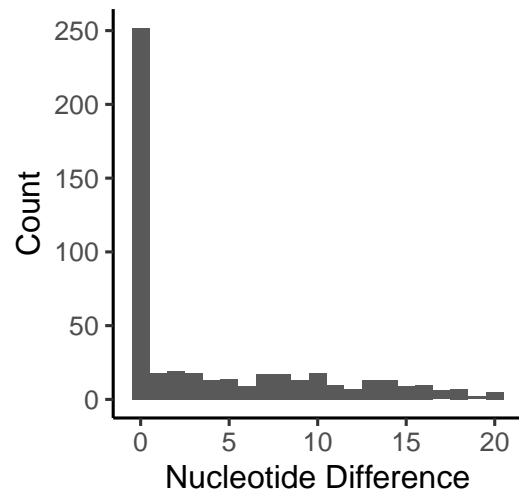
IGHV2-5*02

217 sequences assigned
136 (62.7%) exact matches, in which:
133 unique CDR3
6 unique J



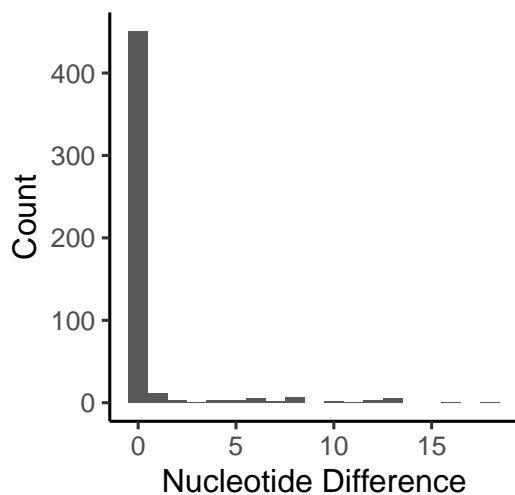
IGHV3-7*01

502 sequences assigned
252 (50.2%) exact matches, in which:
248 unique CDR3
6 unique J



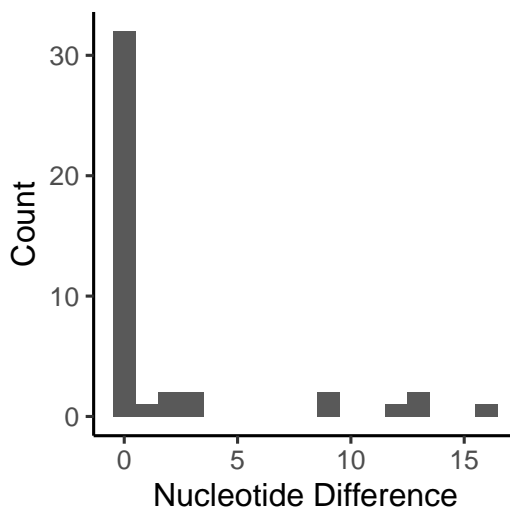
IGHV1-69*06_14

506 sequences assigned
451 (89.1%) exact matches, in which:
450 unique CDR3
6 unique J



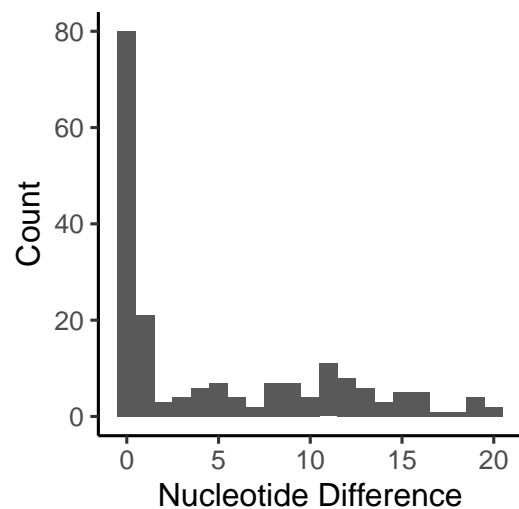
IGHV2-26*01

43 sequences assigned
32 (74.4%) exact matches, in which:
32 unique CDR3
6 unique J



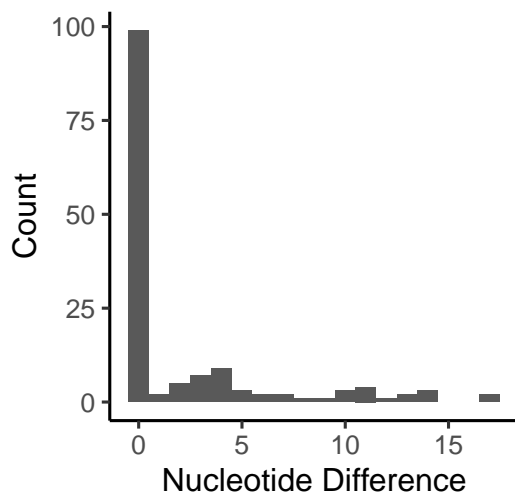
IGHV3-7*04

199 sequences assigned
80 (40.2%) exact matches, in which:
78 unique CDR3
6 unique J



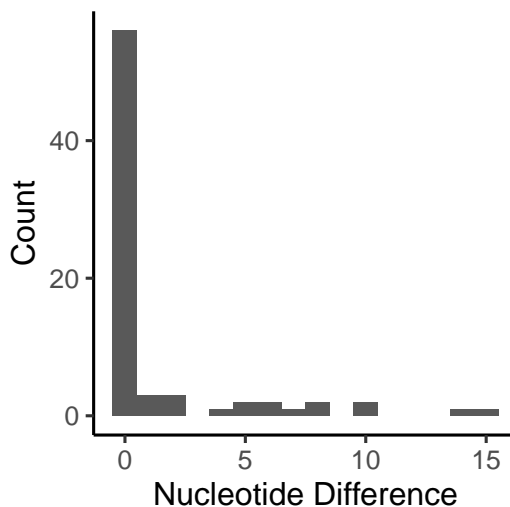
IGHV2-5*01

150 sequences assigned
99 (66%) exact matches, in which:
97 unique CDR3
6 unique J



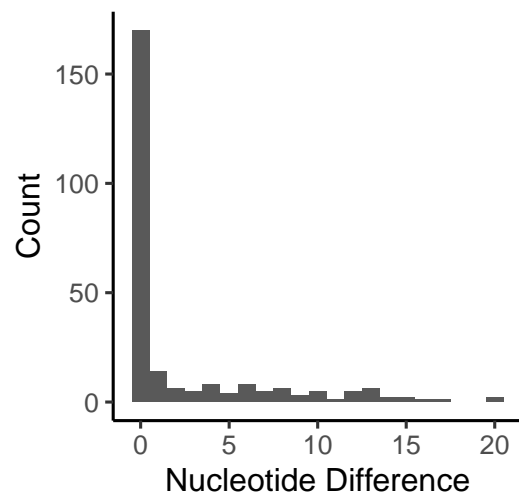
IGHV2-70*01

74 sequences assigned
56 (75.7%) exact matches, in which:
55 unique CDR3
6 unique J



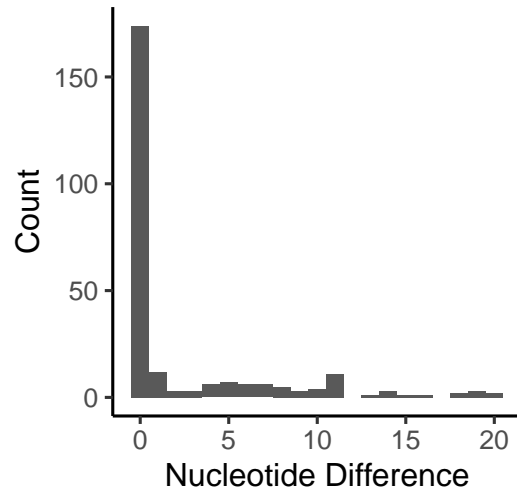
IGHV3-9*01

260 sequences assigned
170 (65.4%) exact matches, in which:
169 unique CDR3
6 unique J



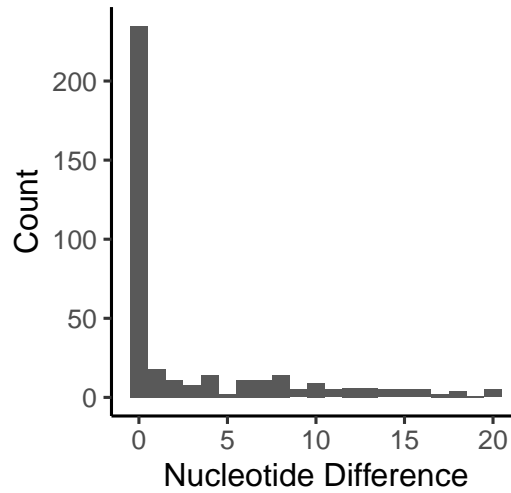
IGHV3-11*01

253 sequences assigned
174 (68.8%) exact matches, in which:
169 unique CDR3
6 unique J



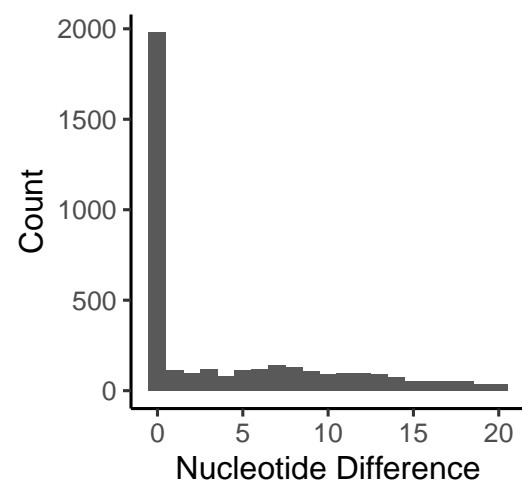
IGHV3-15*01_02

406 sequences assigned
235 (57.9%) exact matches, in which:
231 unique CDR3
7 unique J



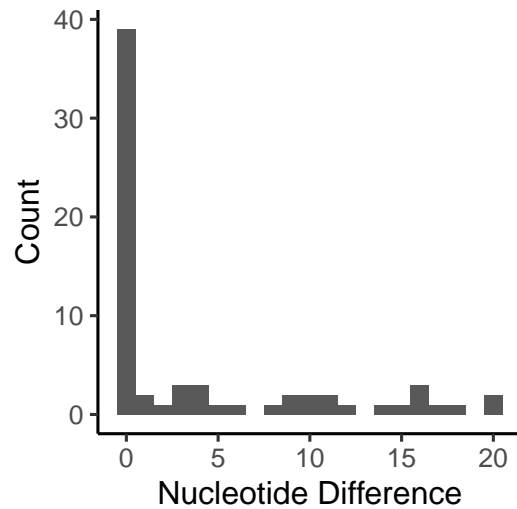
IGHV3-23*01_04

3917 sequences assigned
1980 (50.5%) exact matches, in which:
1914 unique CDR3
7 unique J



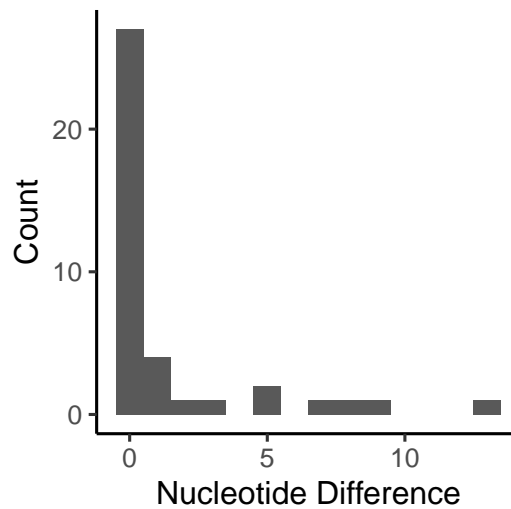
IGHV3-11*06

70 sequences assigned
39 (55.7%) exact matches, in which:
39 unique CDR3
5 unique J



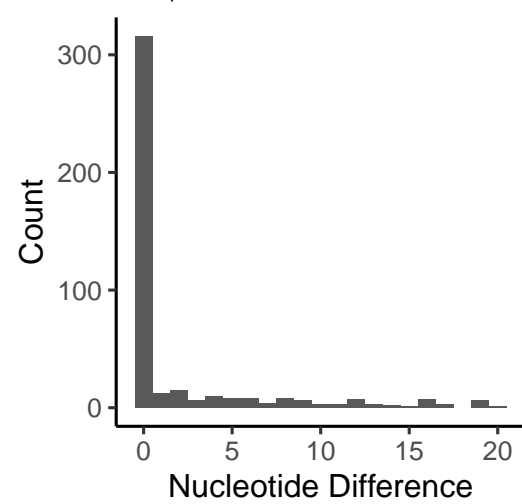
IGHV3-20*01_02

39 sequences assigned
27 (69.2%) exact matches, in which:
25 unique CDR3
5 unique J



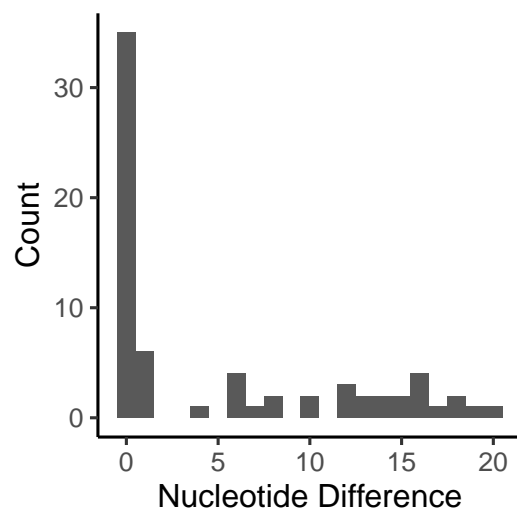
IGHV3-30*03

445 sequences assigned
316 (71%) exact matches, in which:
312 unique CDR3
7 unique J



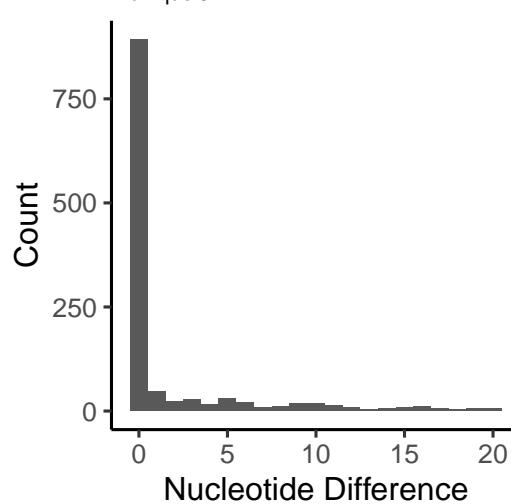
IGHV3-13*01

71 sequences assigned
35 (49.3%) exact matches, in which:
33 unique CDR3
4 unique J



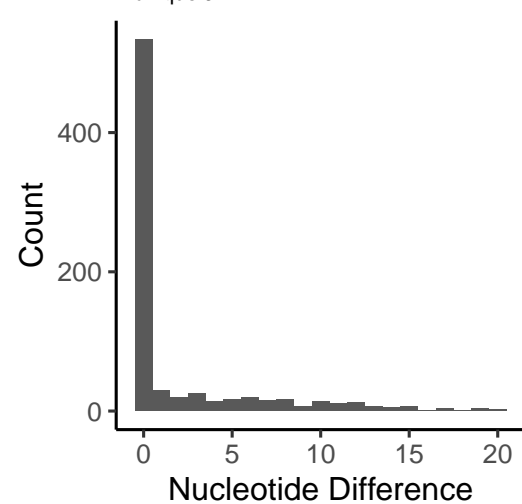
IGHV3-21*01_02

1190 sequences assigned
893 (75%) exact matches, in which:
864 unique CDR3
7 unique J



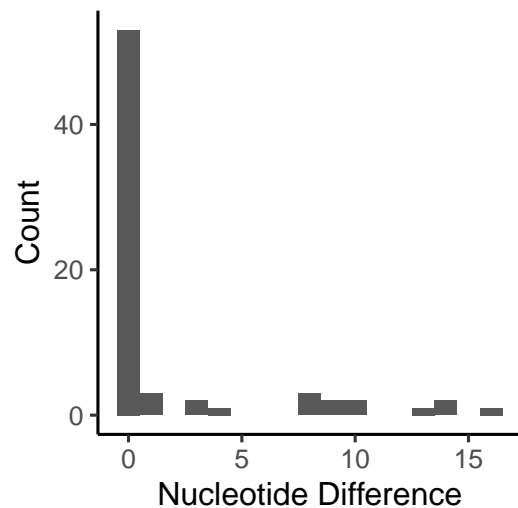
IGHV3-33*01

779 sequences assigned
534 (68.5%) exact matches, in which:
524 unique CDR3
7 unique J



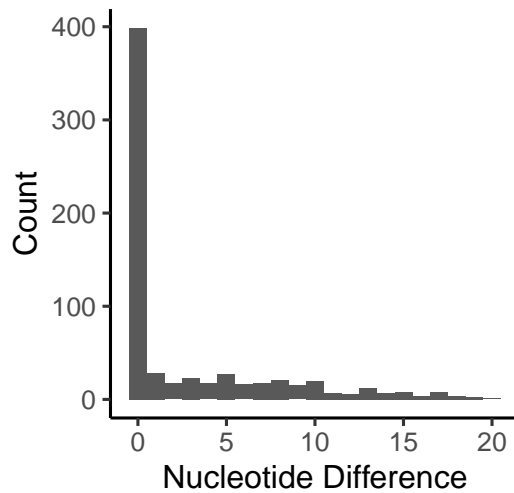
IGHV3-43*01

72 sequences assigned
53 (73.6%) exact matches, in which:
51 unique CDR3
6 unique J



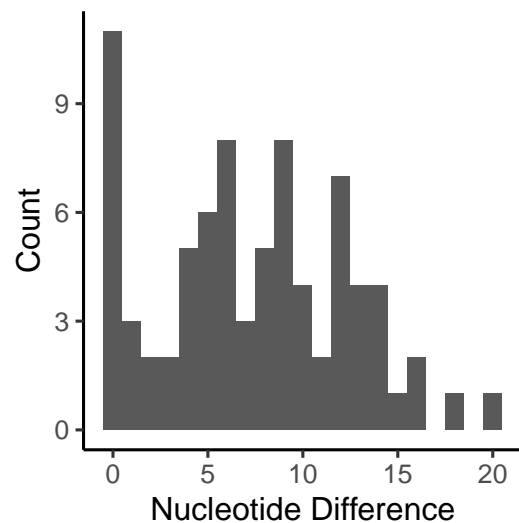
IGHV3-53*01_02

673 sequences assigned
399 (59.3%) exact matches, in which:
390 unique CDR3
7 unique J



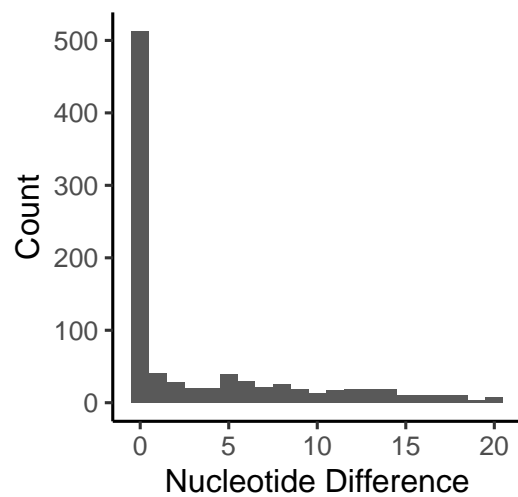
IGHV3-72*01

84 sequences assigned
11 (13.1%) exact matches, in which:
11 unique CDR3
3 unique J



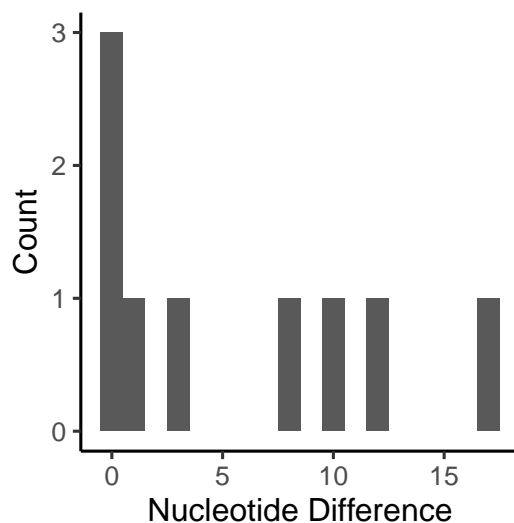
IGHV3-48*02

925 sequences assigned
513 (55.5%) exact matches, in which:
501 unique CDR3
7 unique J



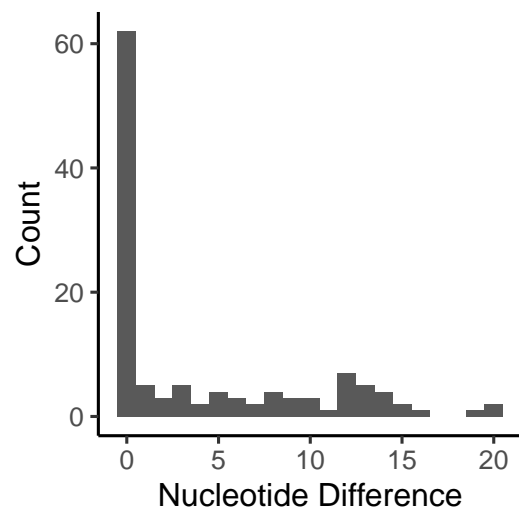
IGHV3-64*02_07

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



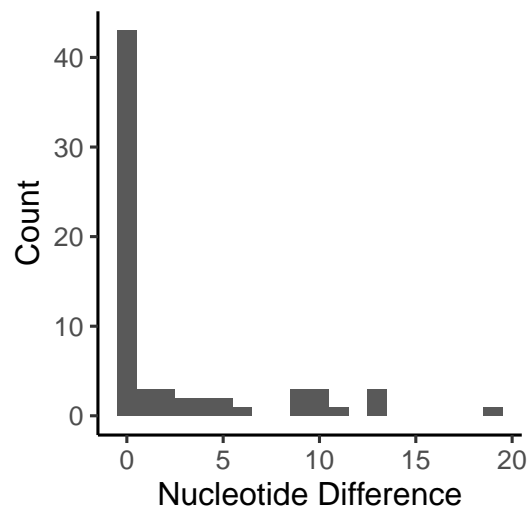
IGHV3-73*01_02

129 sequences assigned
62 (48.1%) exact matches, in which:
61 unique CDR3
6 unique J



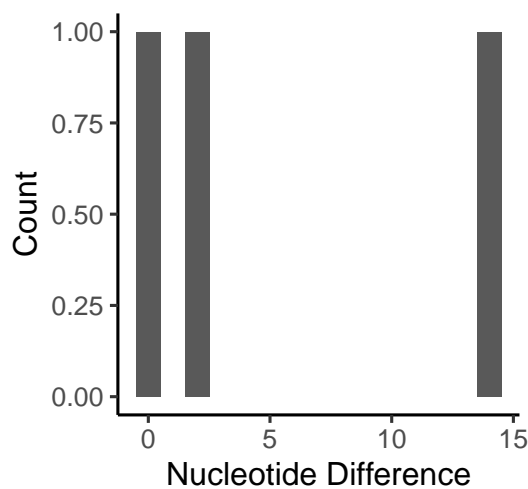
IGHV3-49*03_05

69 sequences assigned
43 (62.3%) exact matches, in which:
43 unique CDR3
6 unique J



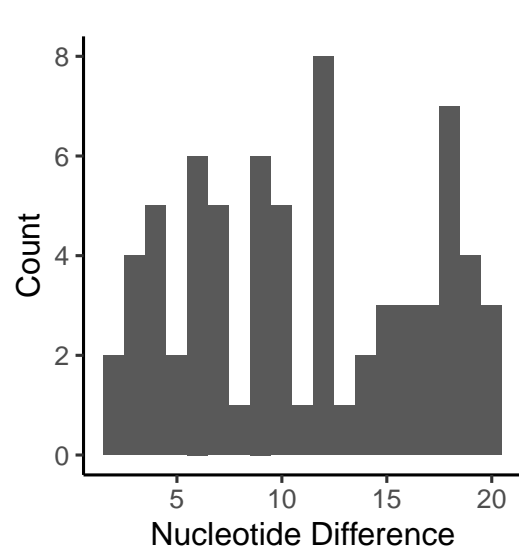
IGHV3-69-1*01

4 sequences assigned
1 (25%) exact matches, in which:
1 unique CDR3
1 unique J



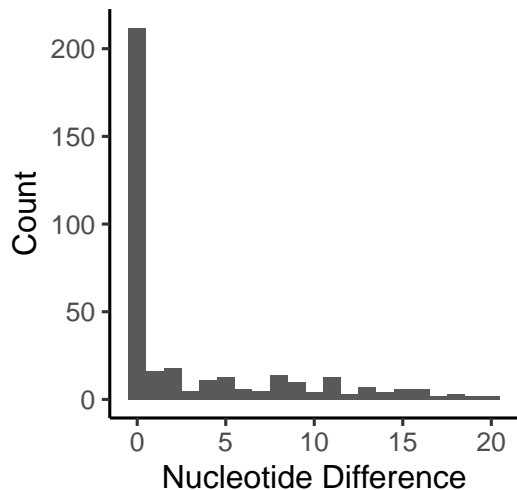
IGHV3-74*03

79 sequences assigned
No exact matches.



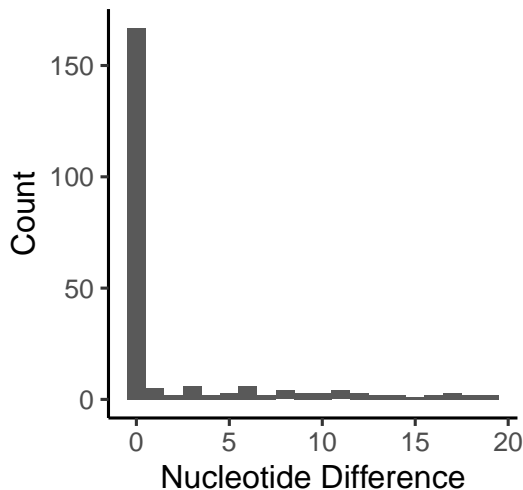
IGHV3-74*01_02

368 sequences assigned
212 (57.6%) exact matches, in which:
202 unique CDR3
7 unique J



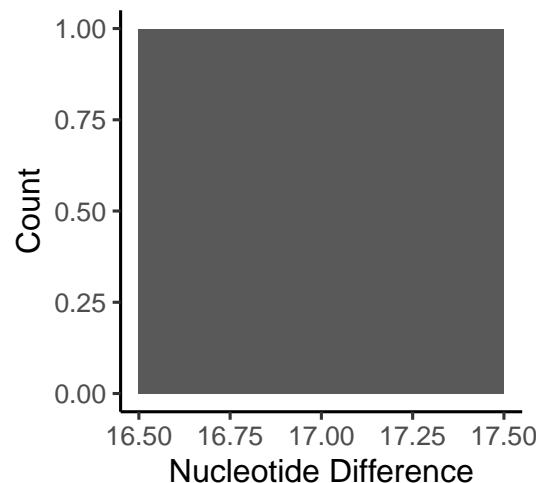
IGHV4-4*02_03

231 sequences assigned
167 (72.3%) exact matches, in which:
161 unique CDR3
6 unique J



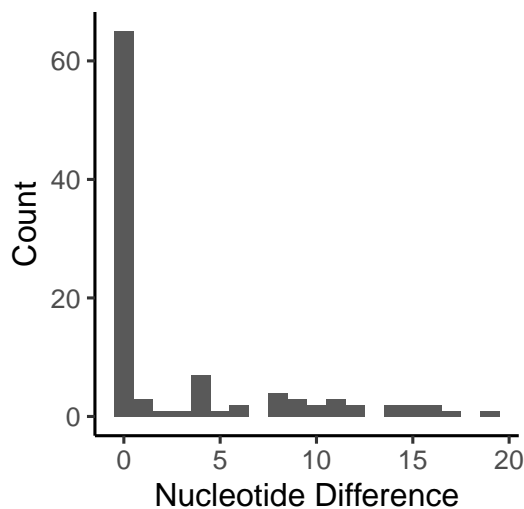
IGHV4-30-4*01

2 sequences assigned
No exact matches.



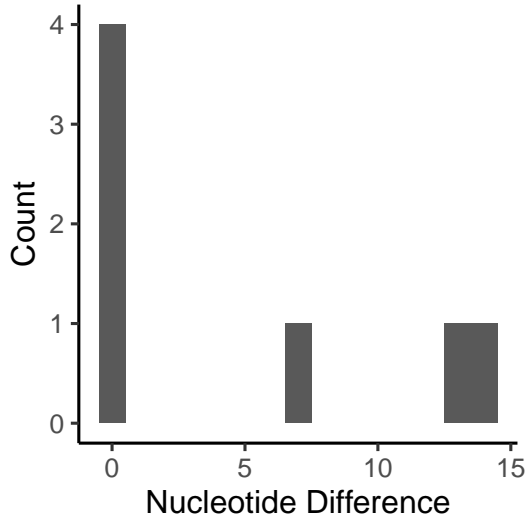
IGHV3-64D*06

107 sequences assigned
65 (60.7%) exact matches, in which:
63 unique CDR3
5 unique J



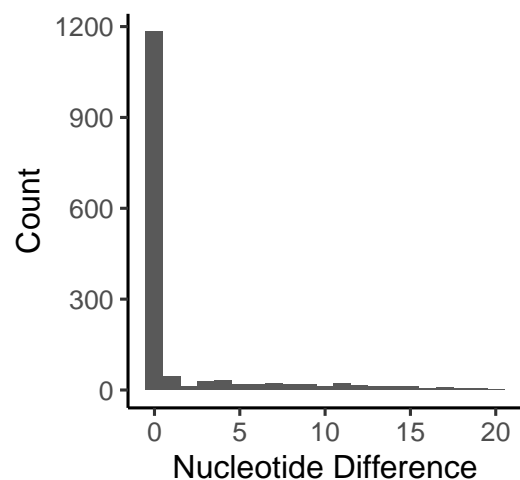
IGHV4-28*01_07

7 sequences assigned
4 (57.1%) exact matches, in which:
4 unique CDR3
3 unique J



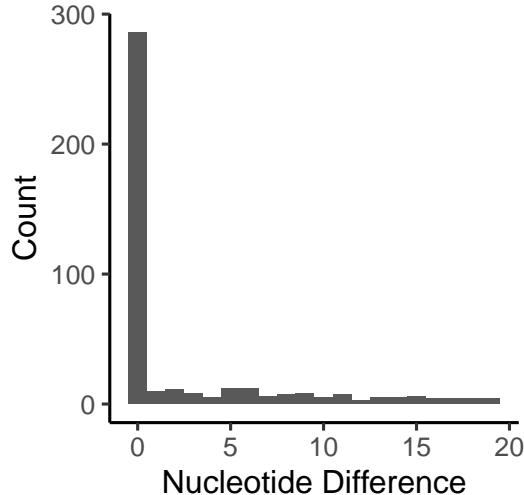
IGHV4-31*02

1521 sequences assigned
1183 (77.8%) exact matches, in which:
1160 unique CDR3
7 unique J



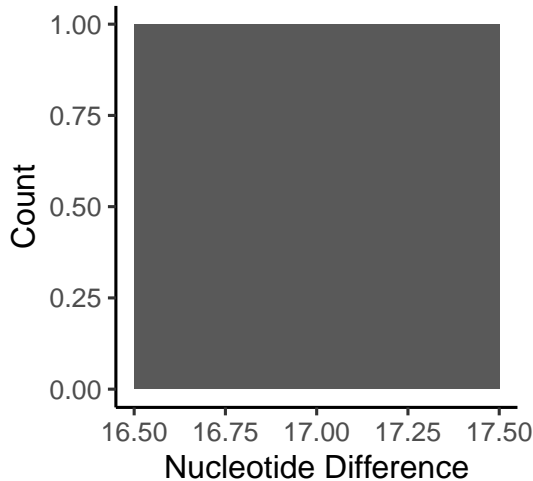
IGHV4-4*07

416 sequences assigned
286 (68.8%) exact matches, in which:
282 unique CDR3
5 unique J



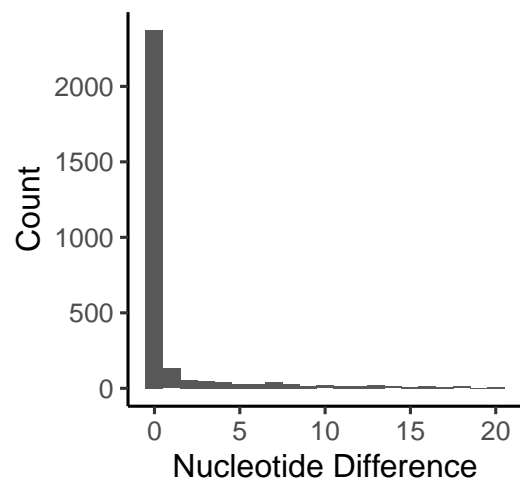
IGHV4-30-2*01

1 sequences assigned
No exact matches.



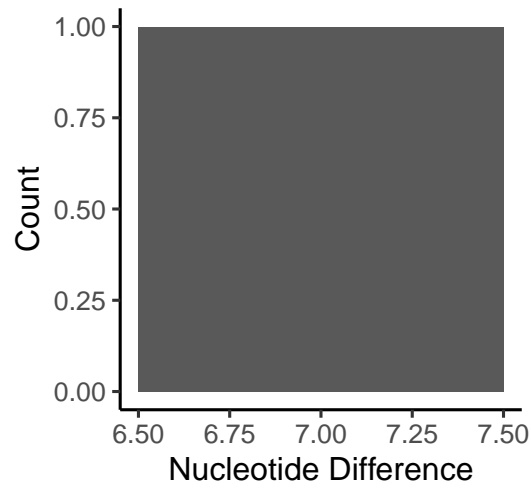
IGHV4-34*01_02

2950 sequences assigned
2373 (80.4%) exact matches, in which:
2291 unique CDR3
7 unique J



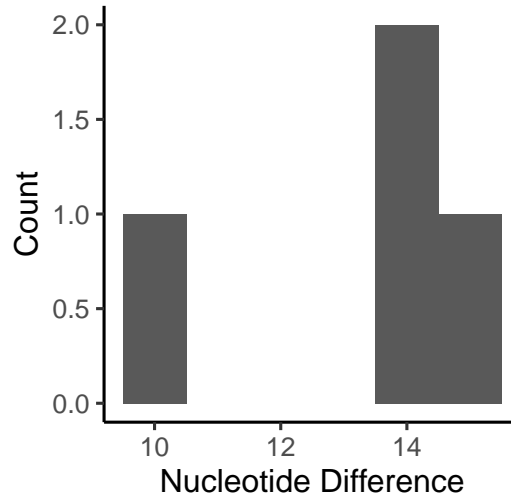
IGHV4-38-2*02

1 sequences assigned
No exact matches.



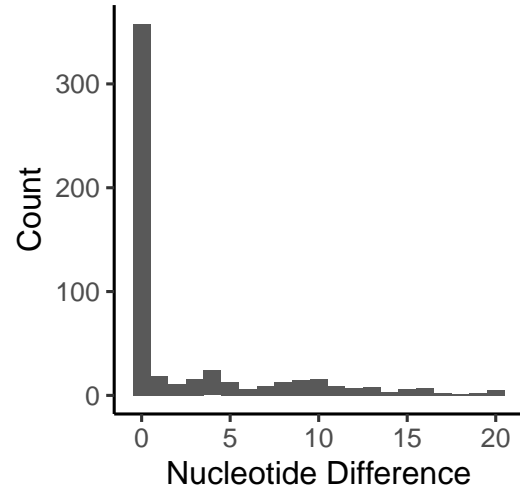
IGHV4-59*03

4 sequences assigned
No exact matches.



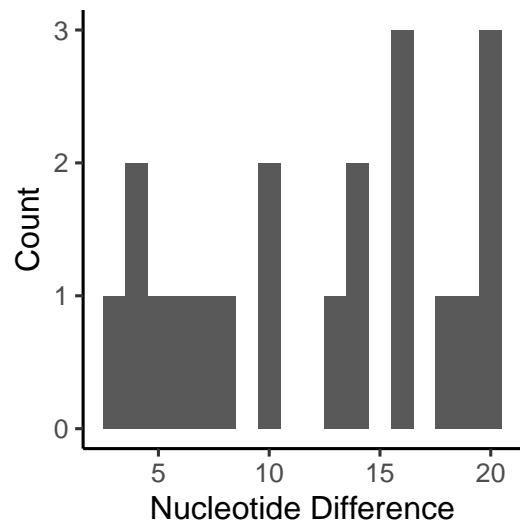
IGHV4-61*01

566 sequences assigned
358 (63.3%) exact matches, in which:
349 unique CDR3
7 unique J



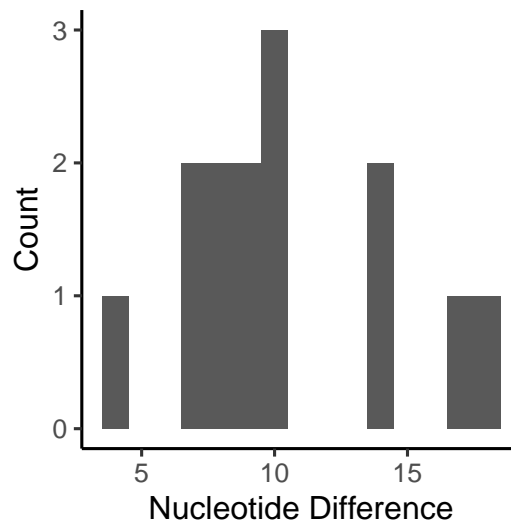
IGHV4-39*02

25 sequences assigned
No exact matches.



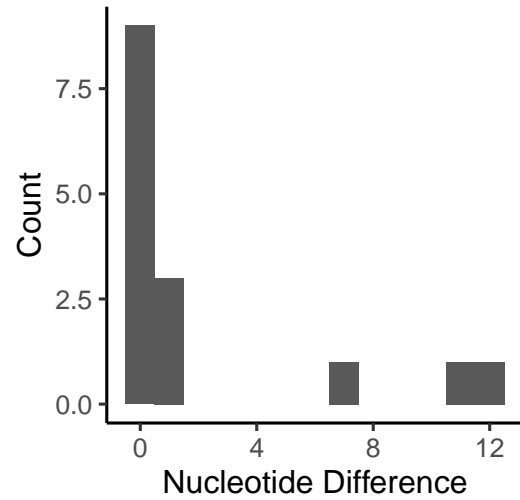
IGHV4-59*11

17 sequences assigned
No exact matches.



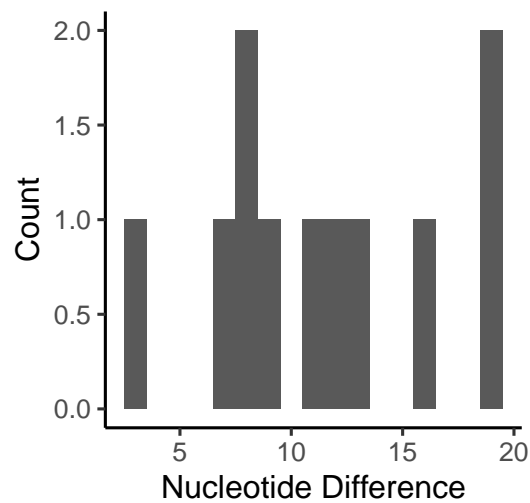
IGHV5-10-1*01_03

16 sequences assigned
9 (56.2%) exact matches, in which:
9 unique CDR3
4 unique J



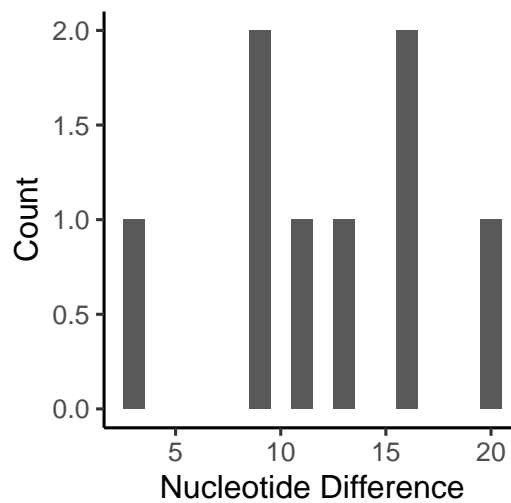
IGHV4-59*02

16 sequences assigned
No exact matches.



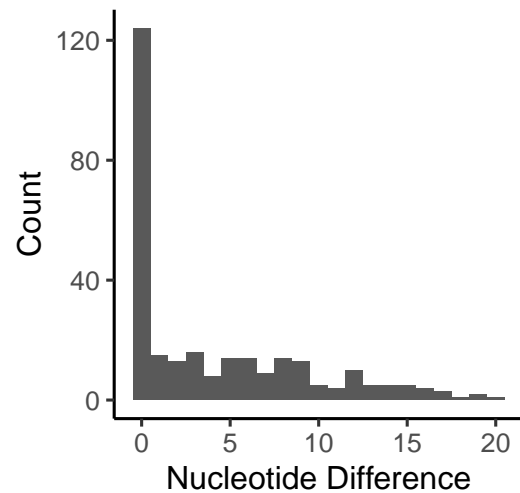
IGHV4-59*12

8 sequences assigned
No exact matches.

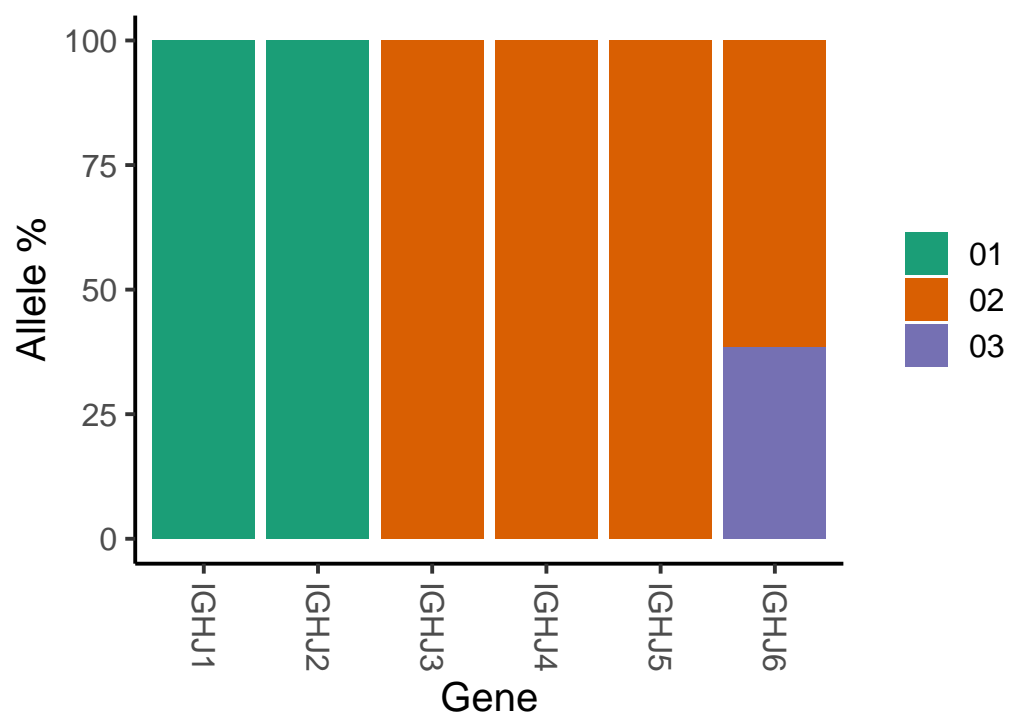


IGHV6-1*01_02

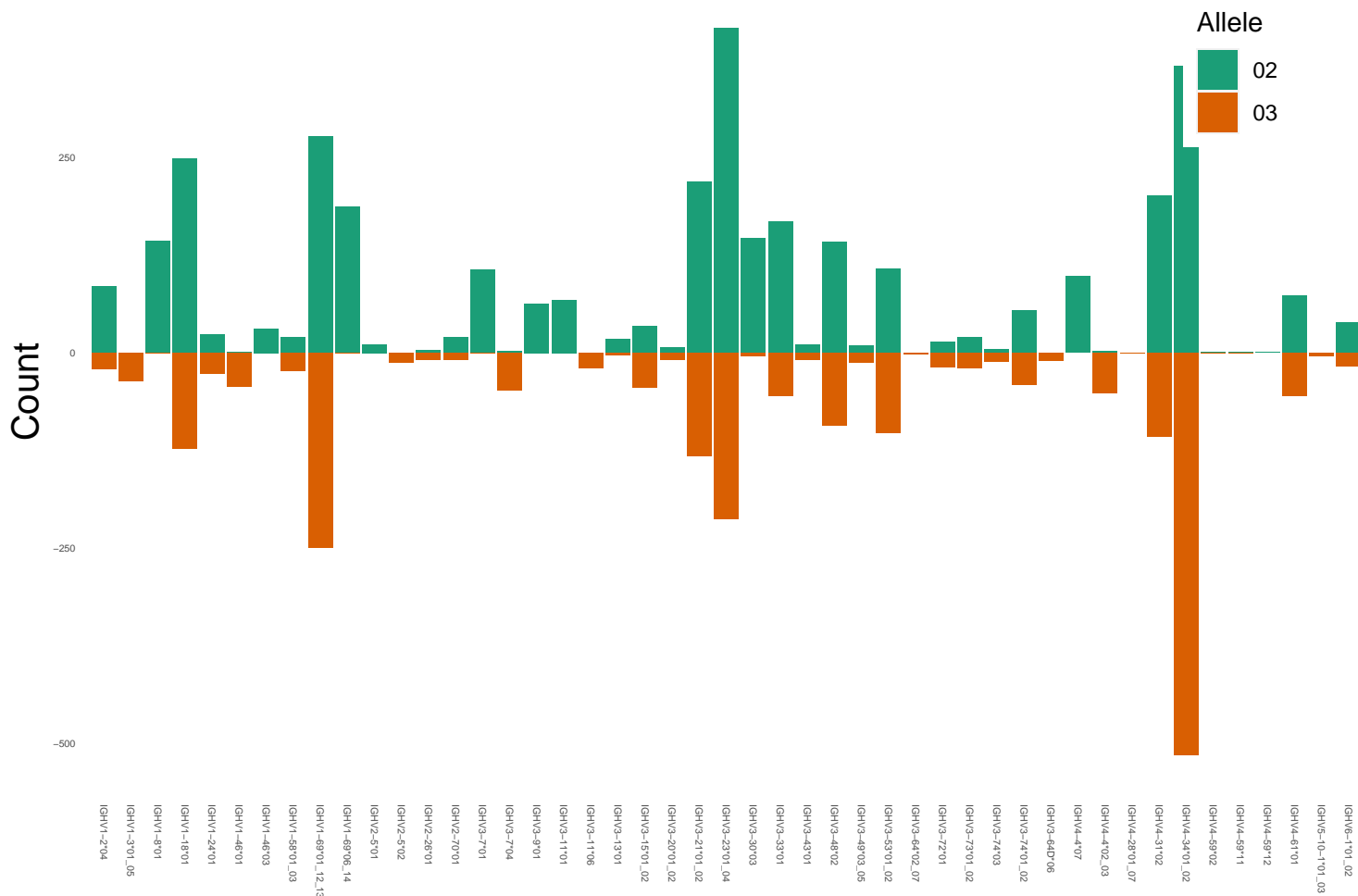
287 sequences assigned
124 (43.2%) exact matches, in which:
124 unique CDR3
7 unique J



Allele Usage



Sequence Count by IGHJ6 allele usage



[illegible]