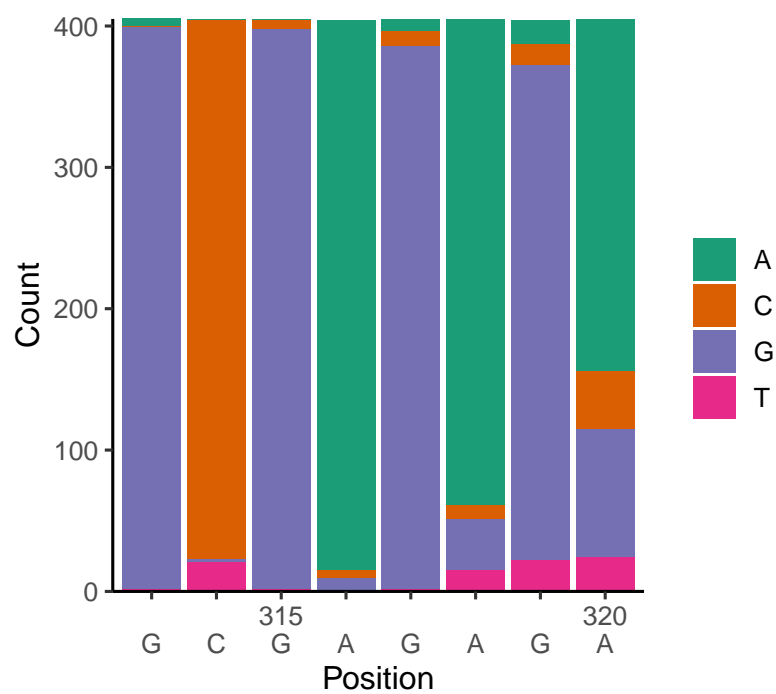
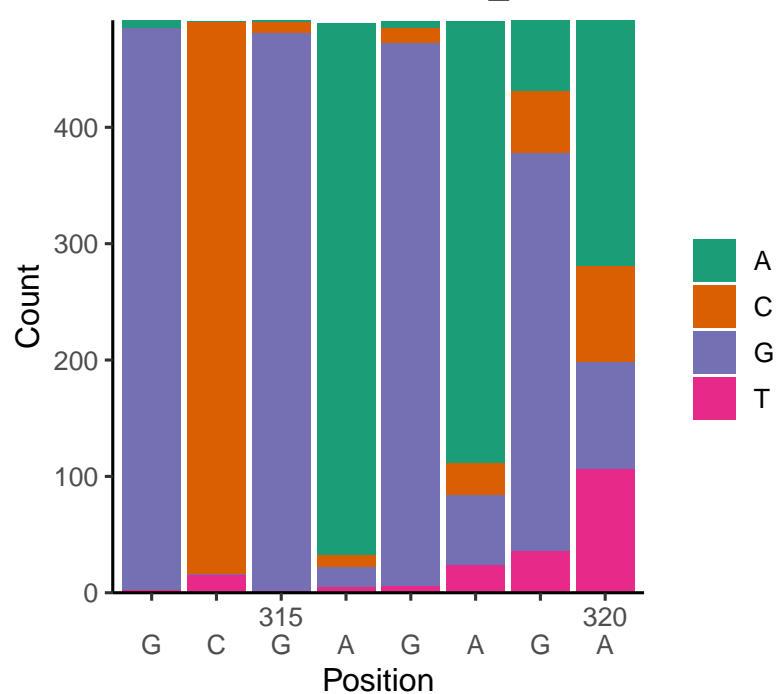


Gene IGHV3-33*01_G75C



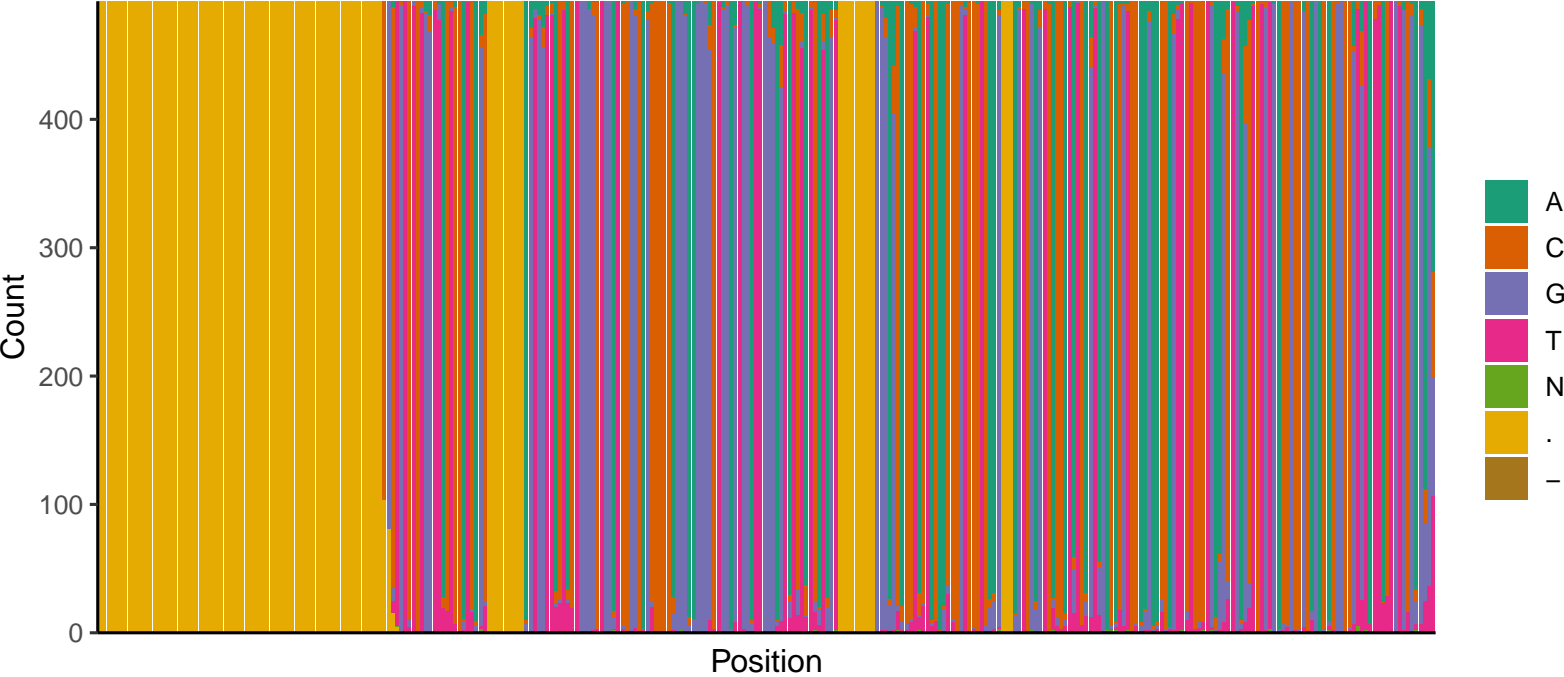
Gene IGHV4-38-2*02_A70G



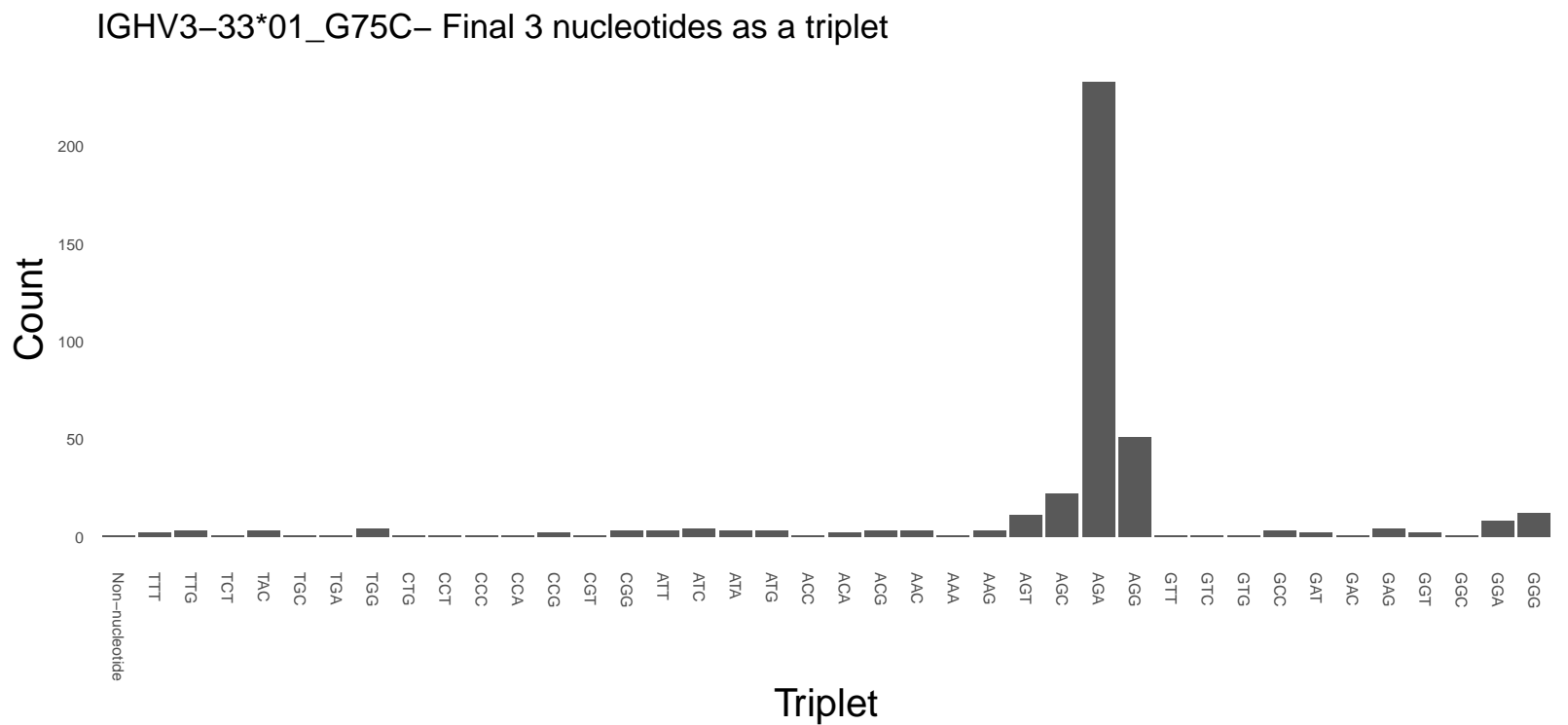
Gene IGHV3-33*01_G75C



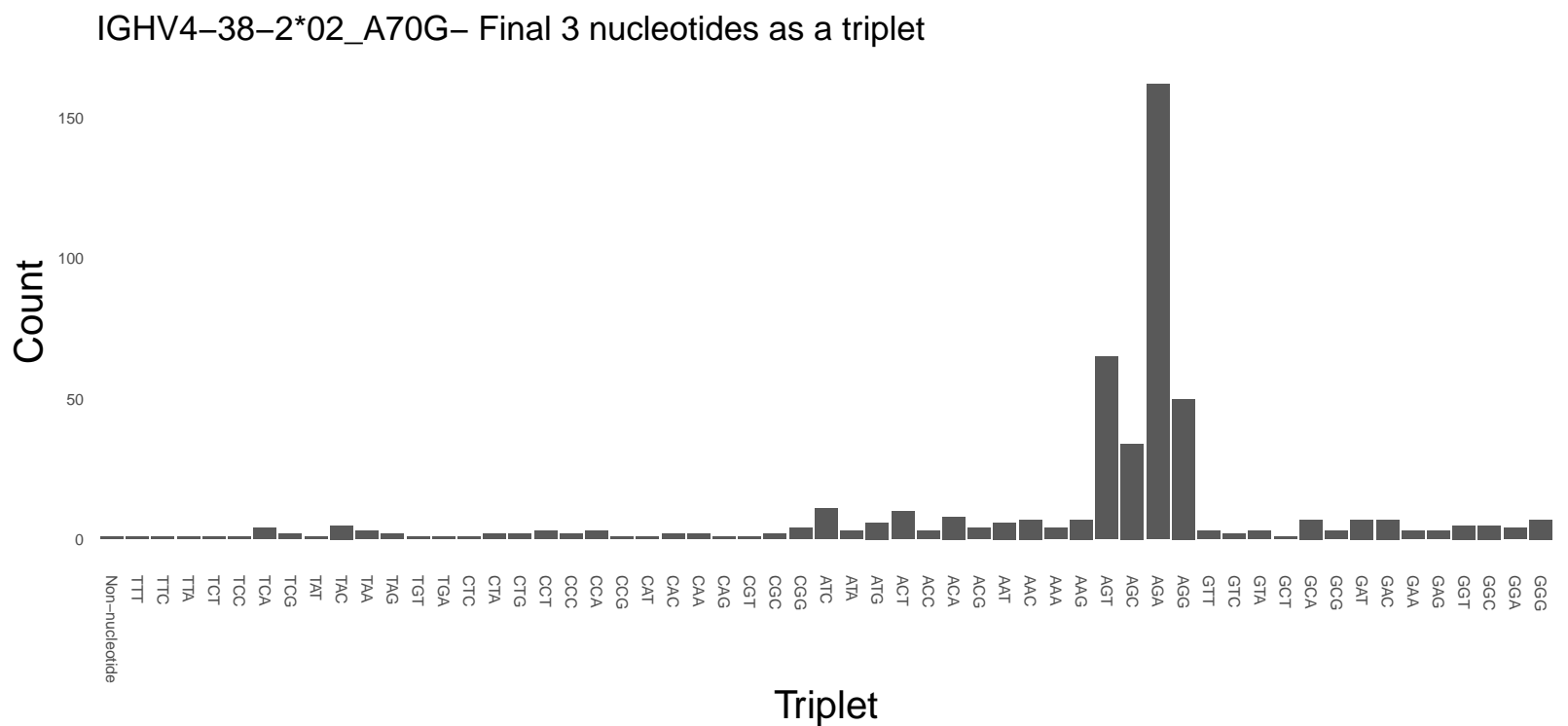
Gene IGHV4-38-2*02_A70G



IGHV3–33*01_G75C– Final 3 nucleotides as a triplet

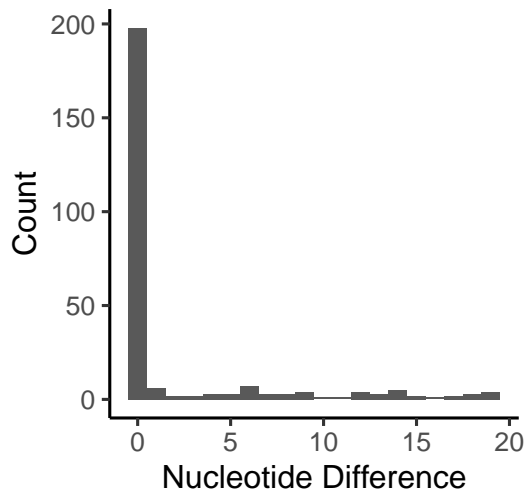


IGHV4–38–2*02_A70G– Final 3 nucleotides as a triplet



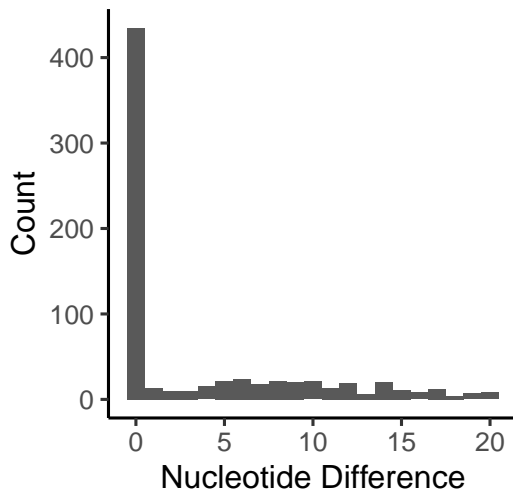
IGHV1–2*04

267 sequences assigned
198 (74.2%) exact matches, in which:
198 unique CDR3
7 unique J



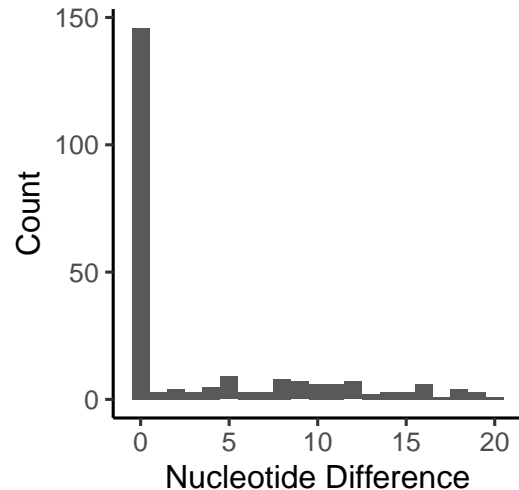
IGHV1–18*04

752 sequences assigned
435 (57.8%) exact matches, in which:
435 unique CDR3
7 unique J



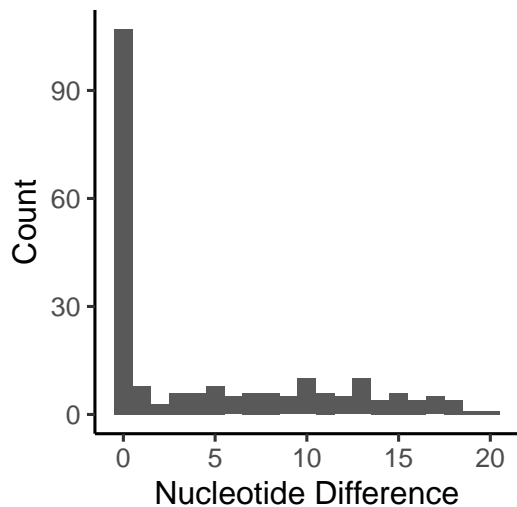
IGHV1–46*01

251 sequences assigned
146 (58.2%) exact matches, in which:
146 unique CDR3
5 unique J



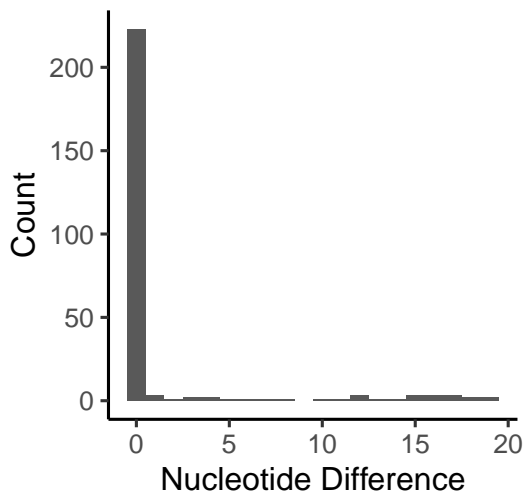
IGHV1–3*01_05

239 sequences assigned
107 (44.8%) exact matches, in which:
107 unique CDR3
6 unique J



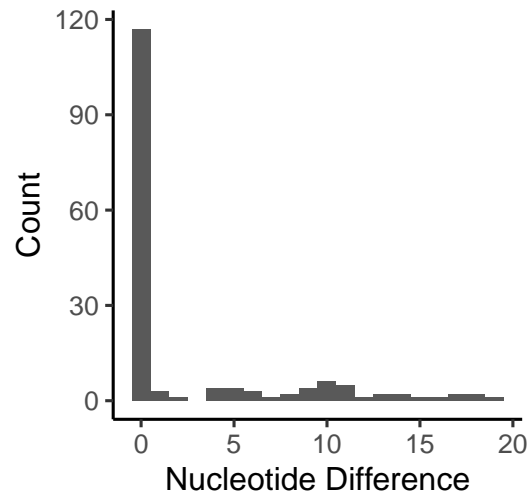
IGHV1–24*01

264 sequences assigned
223 (84.5%) exact matches, in which:
223 unique CDR3
7 unique J



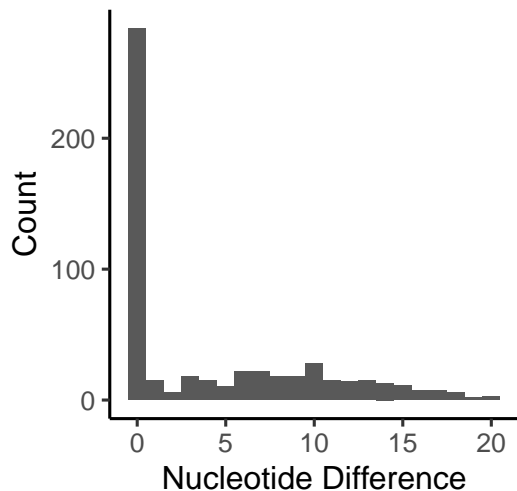
IGHV1–46*04

171 sequences assigned
117 (68.4%) exact matches, in which:
117 unique CDR3
4 unique J



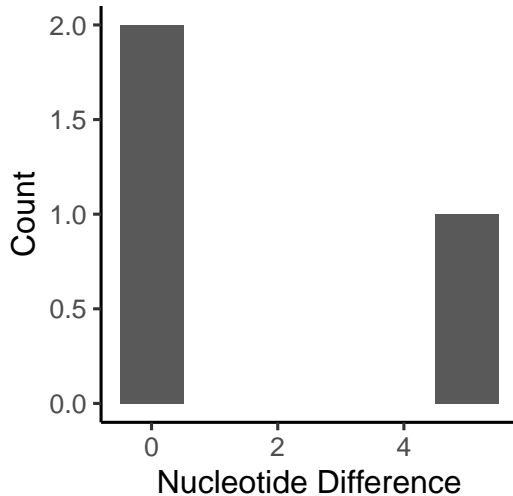
IGHV1–18*01

608 sequences assigned
284 (46.7%) exact matches, in which:
283 unique CDR3
6 unique J



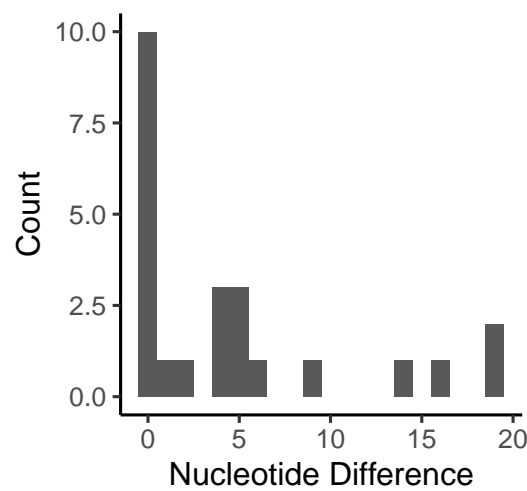
IGHV1–45*02

7 sequences assigned
2 (28.6%) exact matches, in which:
2 unique CDR3
1 unique J



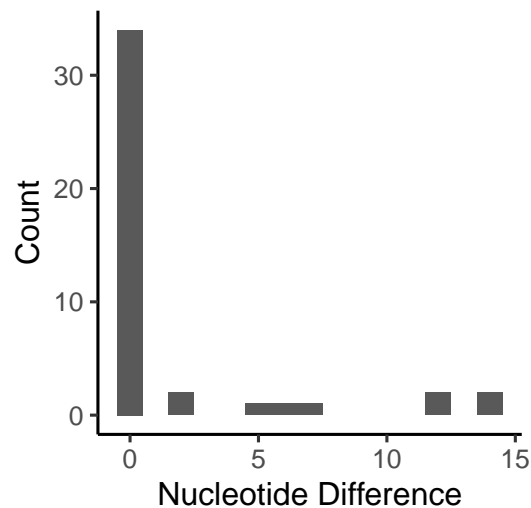
IGHV1–58*02

36 sequences assigned
10 (27.8%) exact matches, in which:
10 unique CDR3
3 unique J



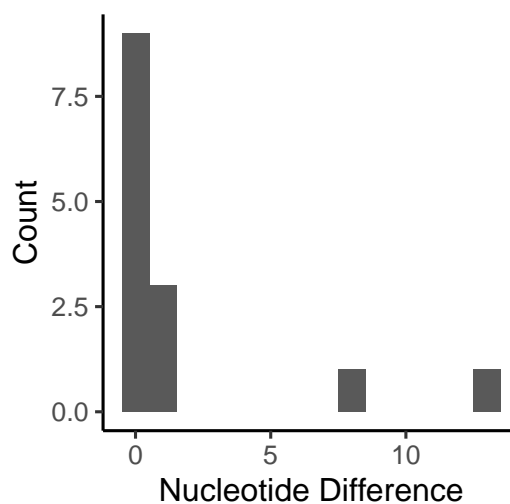
IGHV1-58*01_03

77 sequences assigned
34 (44.2%) exact matches, in which:
34 unique CDR3
5 unique J



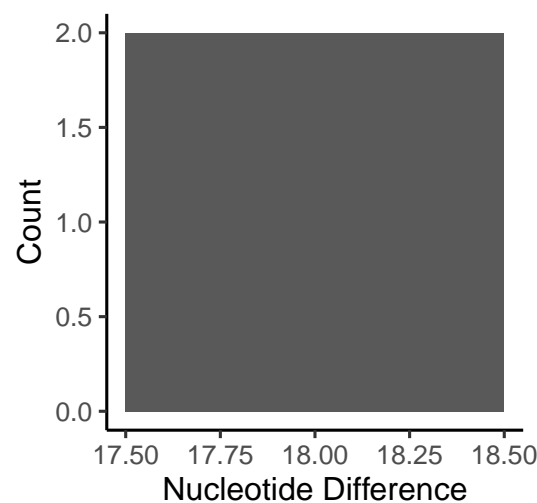
IGHV2-26*01

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



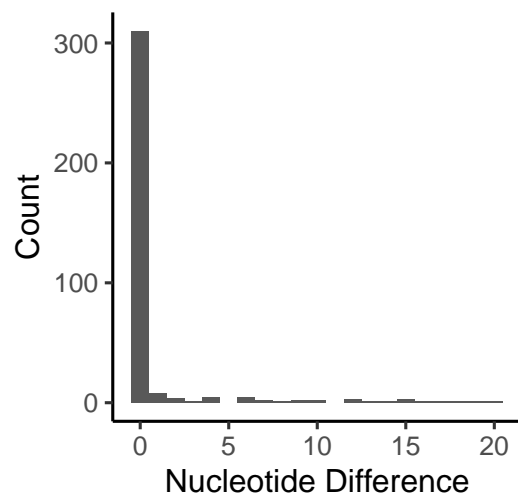
IGHV2-70D*04

2 sequences assigned
No exact matches.



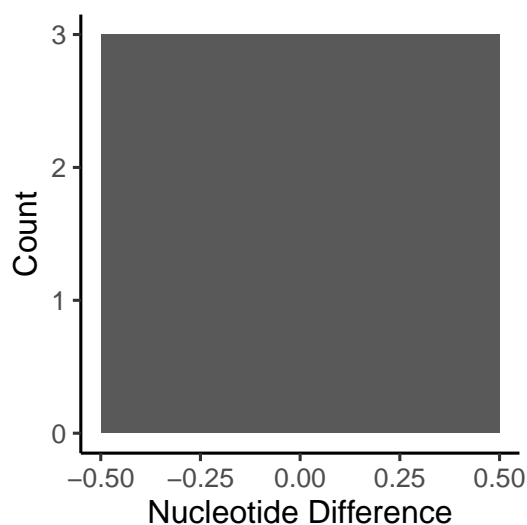
IGHV1-69*10

381 sequences assigned
310 (81.4%) exact matches, in which:
310 unique CDR3
7 unique J



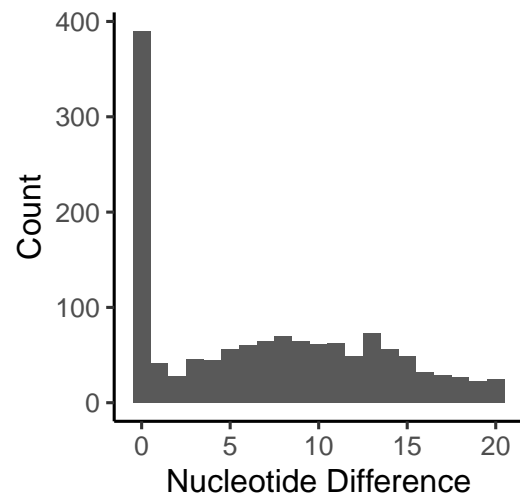
IGHV2-26*02

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



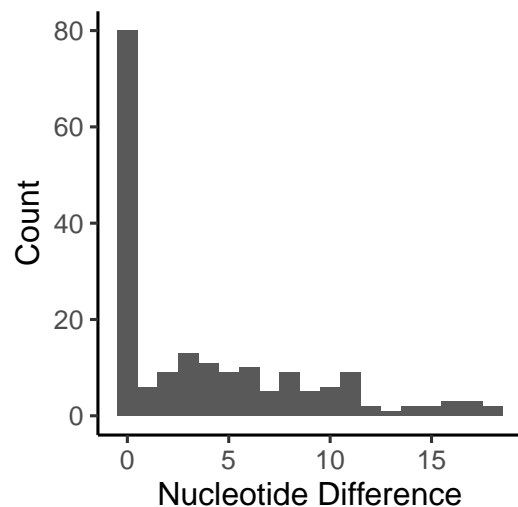
IGHV3-7*03

1402 sequences assigned
390 (27.8%) exact matches, in which:
385 unique CDR3
7 unique J



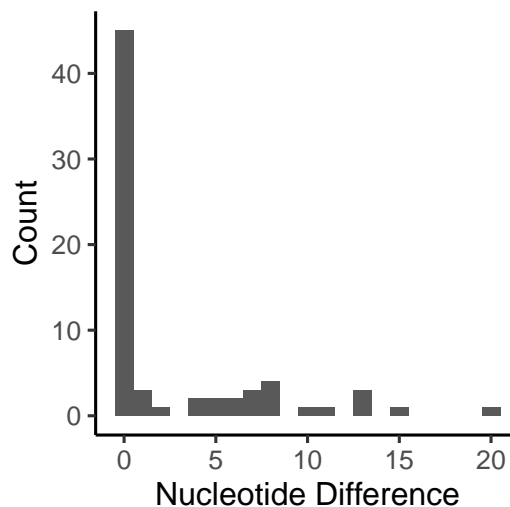
IGHV2-5*02

204 sequences assigned
80 (39.2%) exact matches, in which:
80 unique CDR3
7 unique J



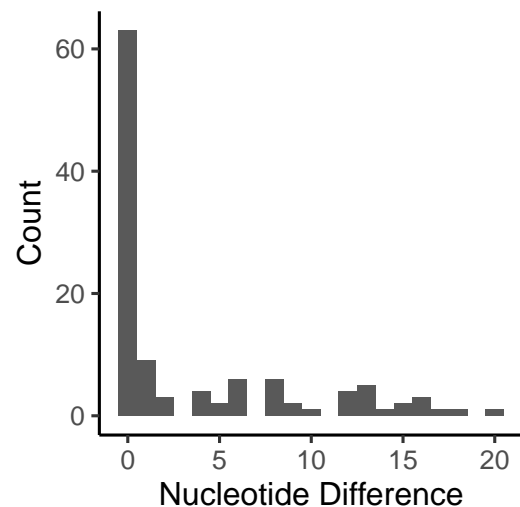
IGHV2-70*01

72 sequences assigned
45 (62.5%) exact matches, in which:
45 unique CDR3
5 unique J



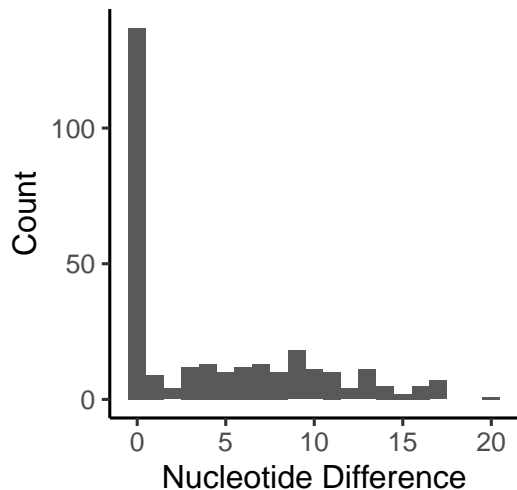
IGHV3-11*06

121 sequences assigned
63 (52.1%) exact matches, in which:
63 unique CDR3
5 unique J



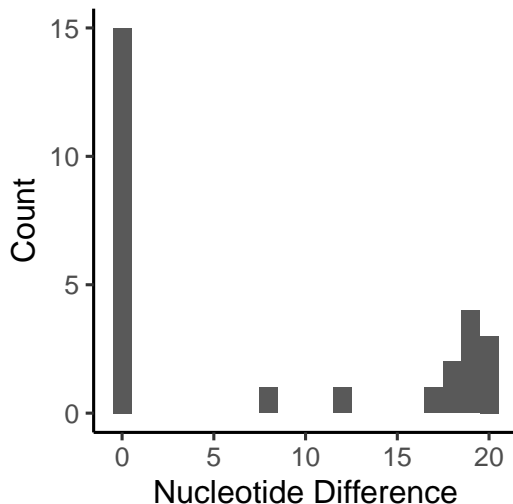
IGHV3-11*03_05

307 sequences assigned
137 (44.6%) exact matches, in which:
137 unique CDR3
6 unique J



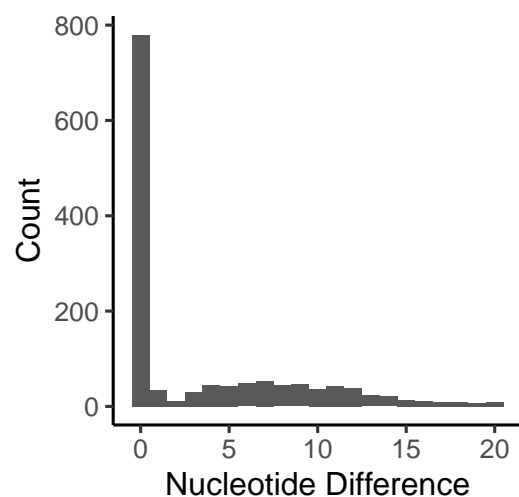
IGHV3-13*05

27 sequences assigned
15 (55.6%) exact matches, in which:
15 unique CDR3
5 unique J



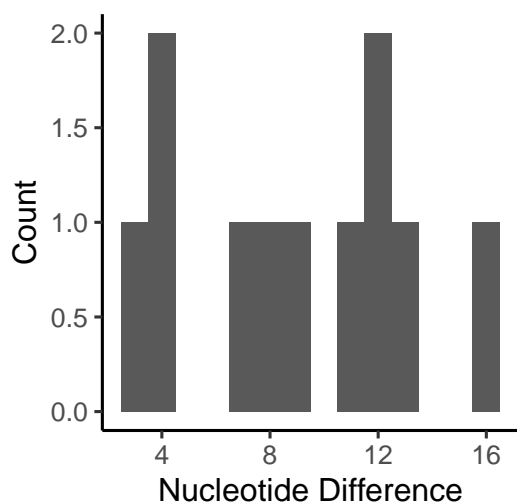
IGHV3-21*01_02

1397 sequences assigned
780 (55.8%) exact matches, in which:
767 unique CDR3
7 unique J



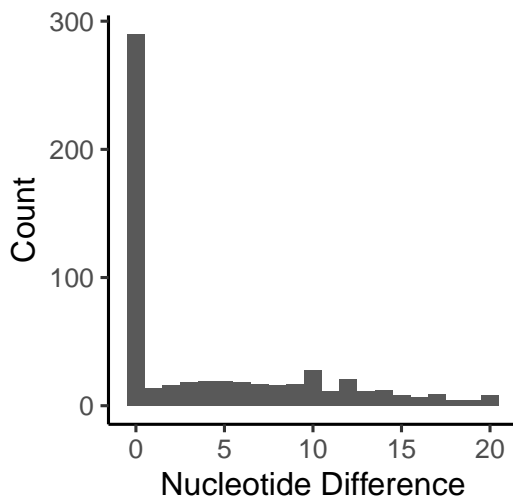
IGHV3-13*01

12 sequences assigned
No exact matches.



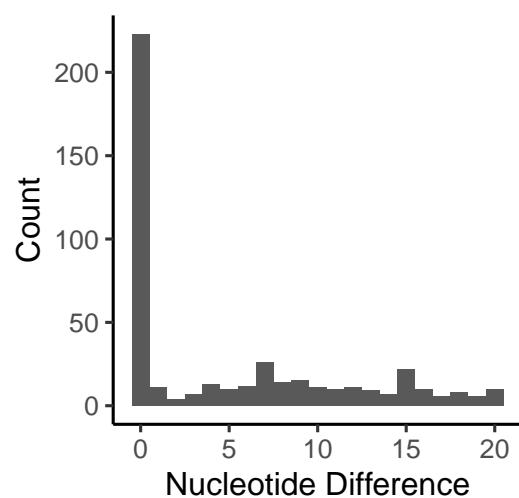
IGHV3-15*01_02

604 sequences assigned
290 (48%) exact matches, in which:
289 unique CDR3
7 unique J



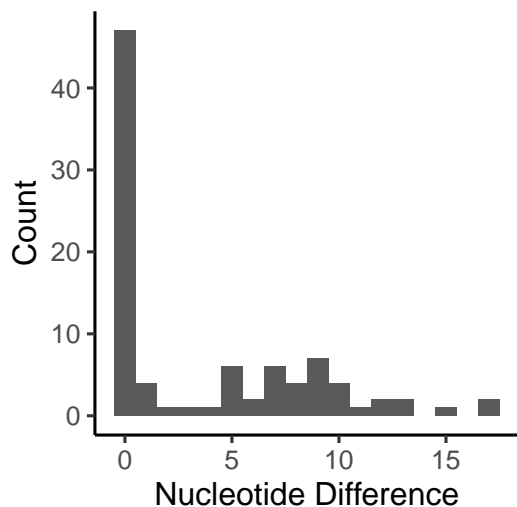
IGHV3-30*01

474 sequences assigned
223 (47%) exact matches, in which:
223 unique CDR3
6 unique J



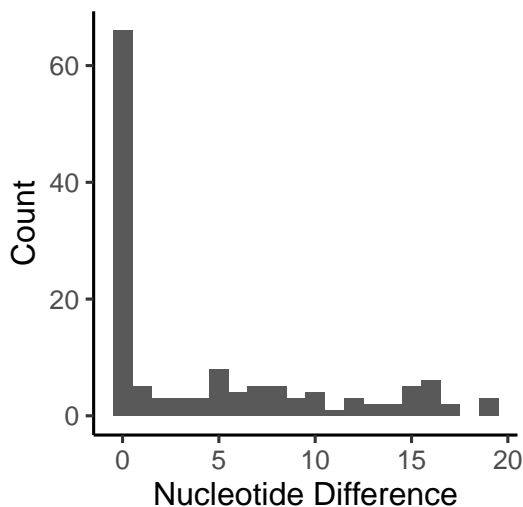
IGHV3-13*04

125 sequences assigned
47 (37.6%) exact matches, in which:
47 unique CDR3
5 unique J



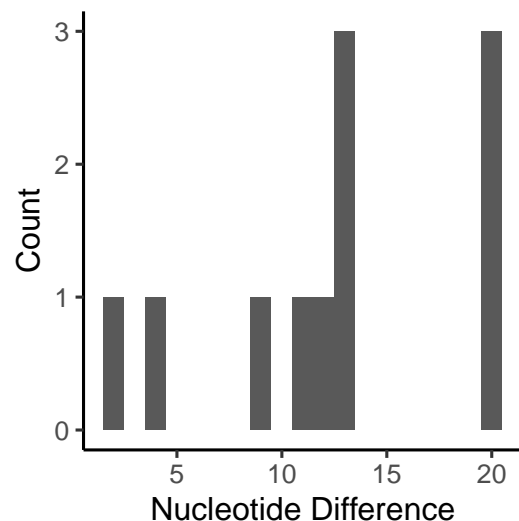
IGHV3-20*03_04

138 sequences assigned
66 (47.8%) exact matches, in which:
66 unique CDR3
6 unique J



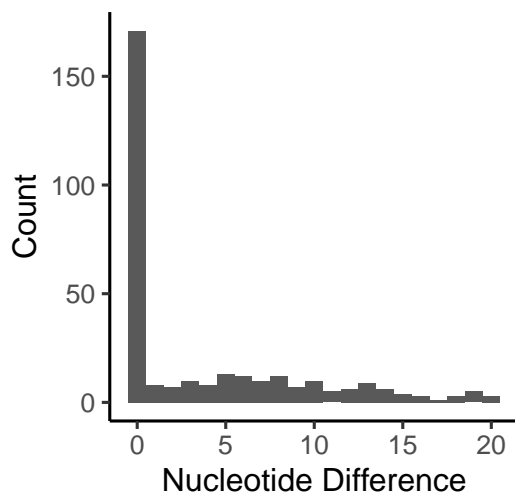
IGHV3-30-3*03

16 sequences assigned
No exact matches.



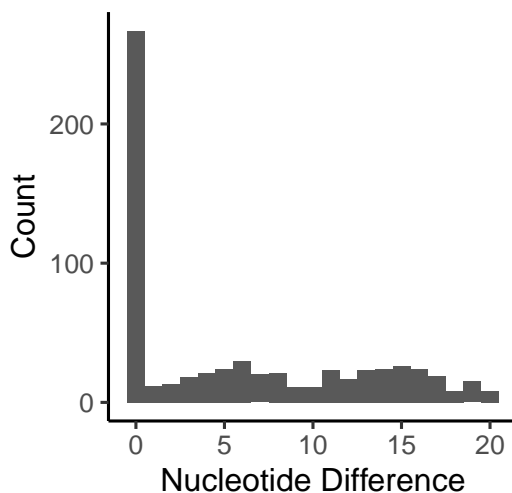
IGHV3–33*01

329 sequences assigned
171 (52%) exact matches, in which:
168 unique CDR3
6 unique J



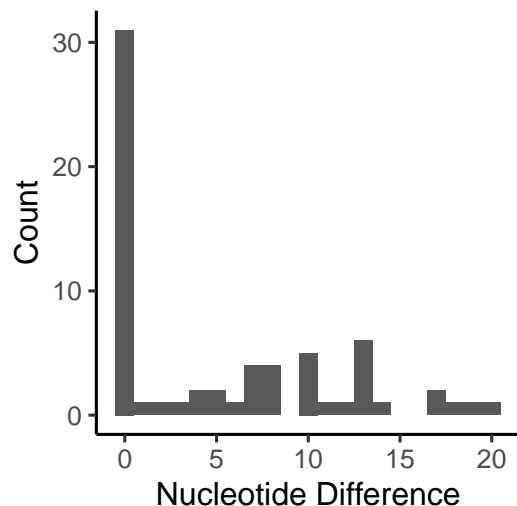
IGHV3–48*01

665 sequences assigned
267 (40.2%) exact matches, in which:
265 unique CDR3
6 unique J



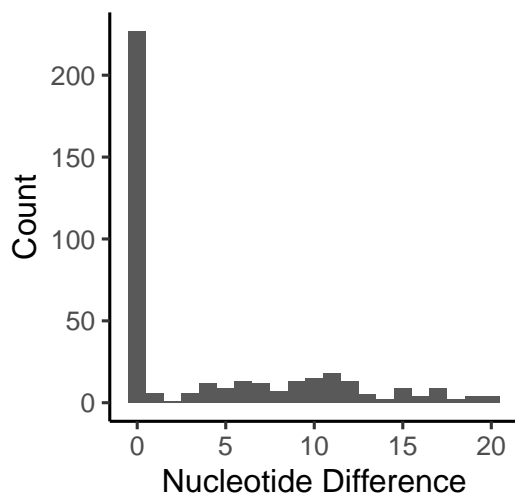
IGHV3–49*03_05

66 sequences assigned
31 (47%) exact matches, in which:
31 unique CDR3
5 unique J



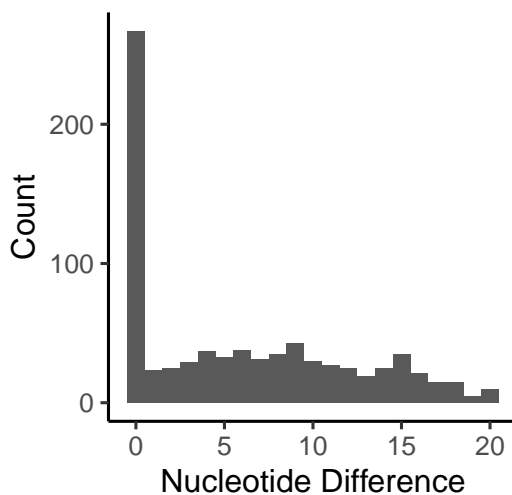
IGHV3–33*01_G75C

405 sequences assigned
227 (56%) exact matches, in which:
227 unique CDR3
6 unique J



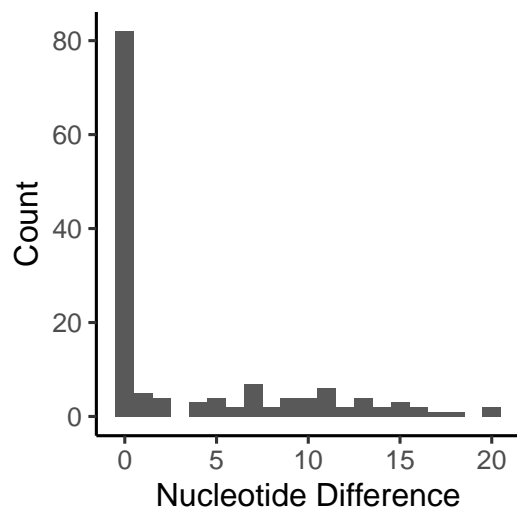
IGHV3–48*02

845 sequences assigned
267 (31.6%) exact matches, in which:
262 unique CDR3
6 unique J



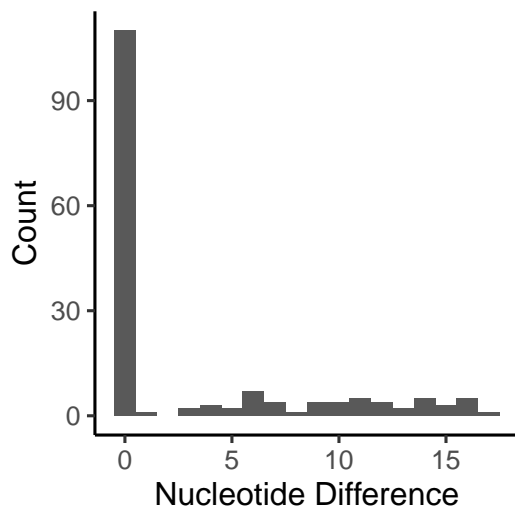
IGHV3–53*04

146 sequences assigned
82 (56.2%) exact matches, in which:
82 unique CDR3
5 unique J



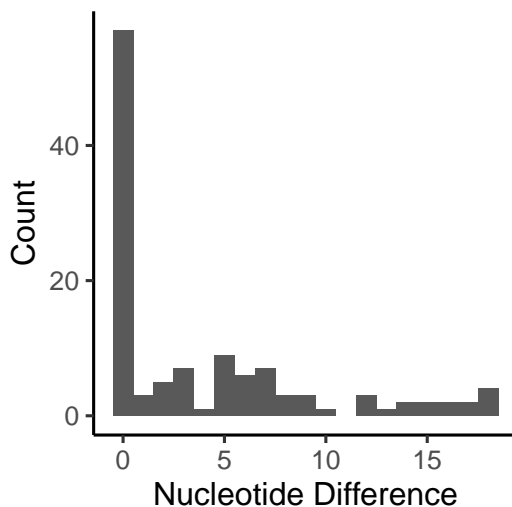
IGHV3–43*01

174 sequences assigned
110 (63.2%) exact matches, in which:
108 unique CDR3
6 unique J



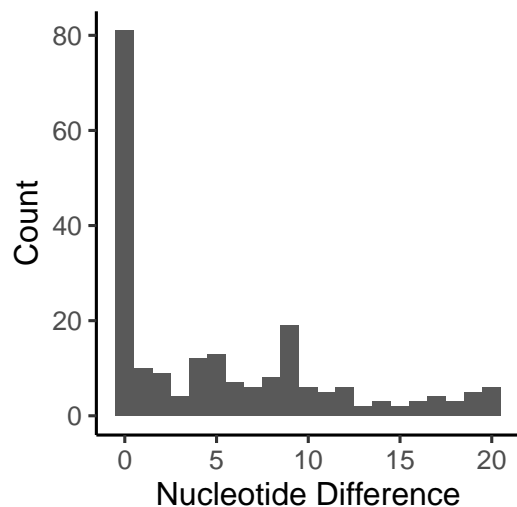
IGHV3–49*04

127 sequences assigned
57 (44.9%) exact matches, in which:
57 unique CDR3
5 unique J



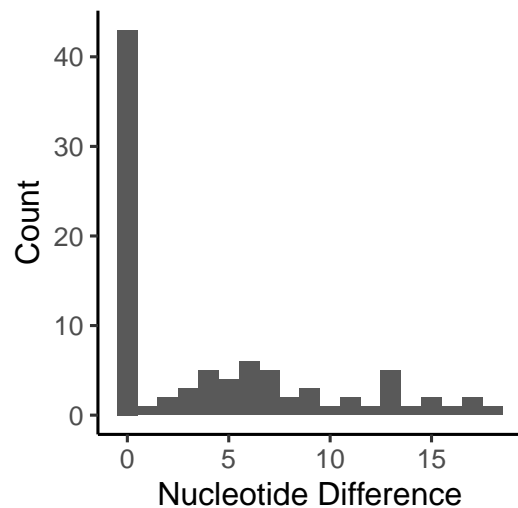
IGHV3–53*01_02

219 sequences assigned
81 (37%) exact matches, in which:
81 unique CDR3
6 unique J



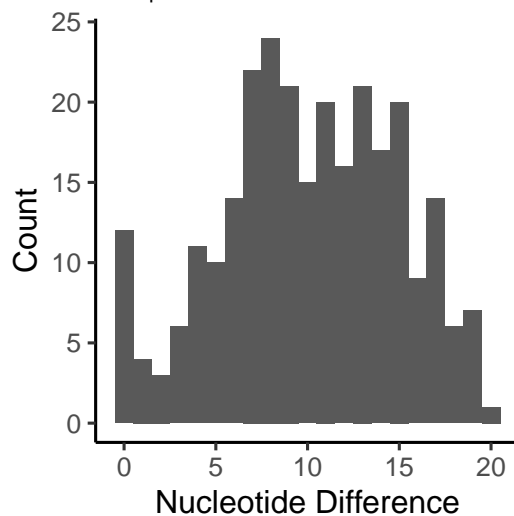
IGHV3-64*01

96 sequences assigned
43 (44.8%) exact matches, in which:
43 unique CDR3
6 unique J



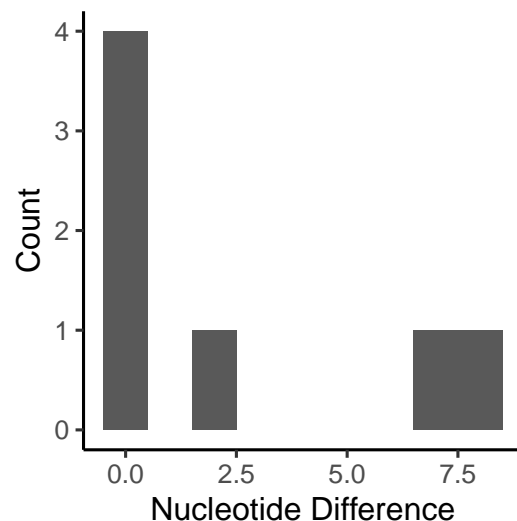
IGHV3-72*01

295 sequences assigned
12 (4.1%) exact matches, in which:
11 unique CDR3
5 unique J



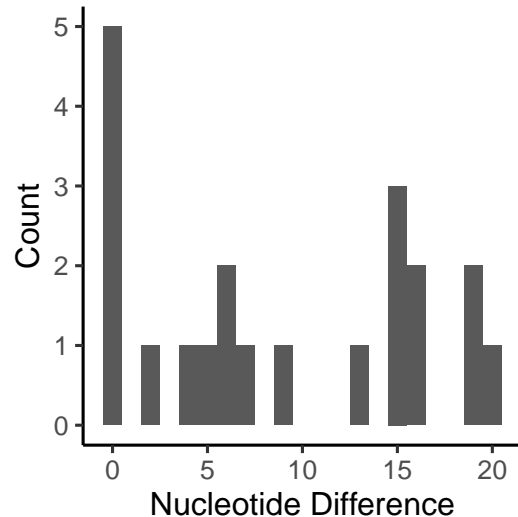
IGHV3-43D*04

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



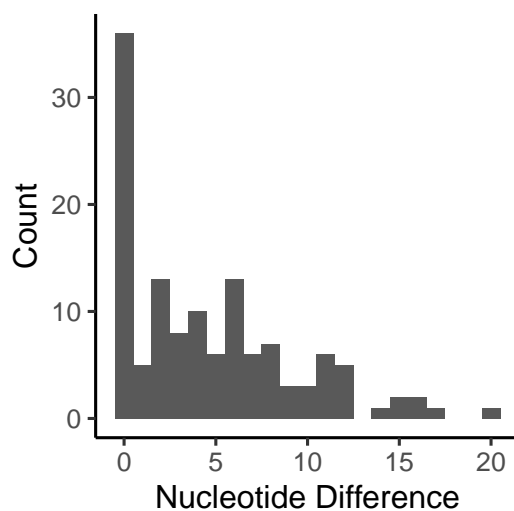
IGHV3-64*02_07

21 sequences assigned
5 (23.8%) exact matches, in which:
4 unique CDR3
2 unique J



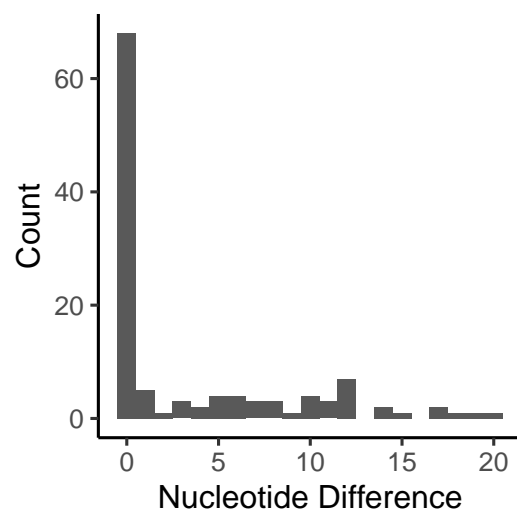
IGHV3-73*01_02

129 sequences assigned
36 (27.9%) exact matches, in which:
36 unique CDR3
6 unique J



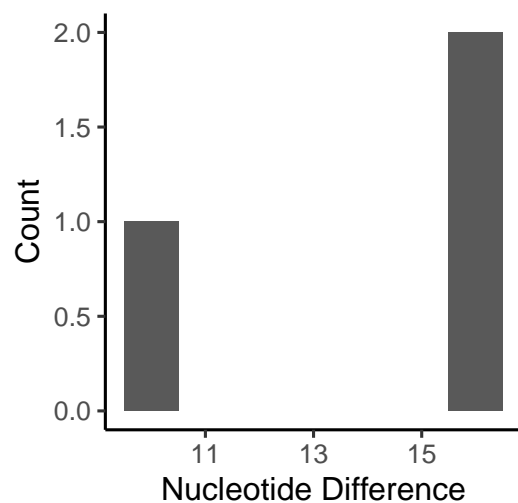
IGHV3-64D*06

122 sequences assigned
68 (55.7%) exact matches, in which:
68 unique CDR3
6 unique J



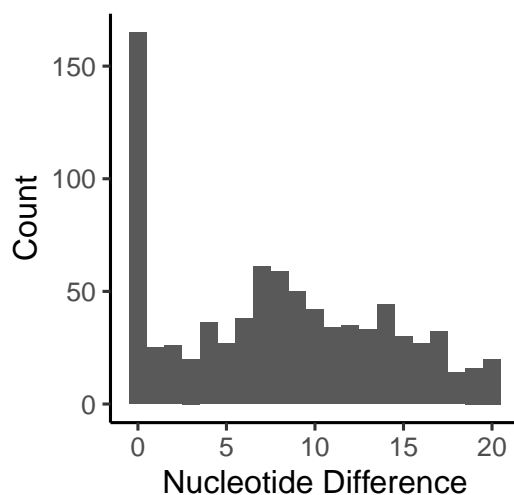
IGHV3-69-1*01

8 sequences assigned
No exact matches.



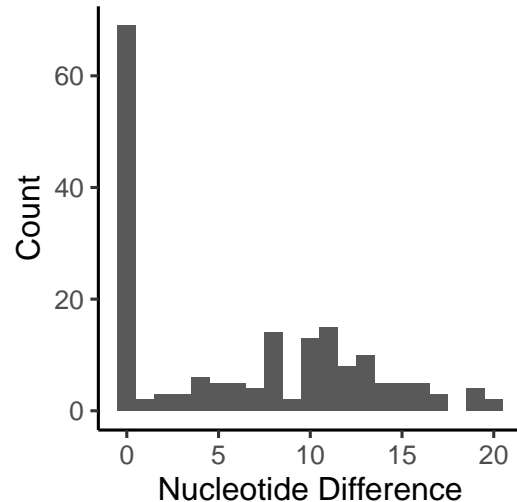
IGHV3-74*01_02

915 sequences assigned
165 (18%) exact matches, in which:
160 unique CDR3
6 unique J



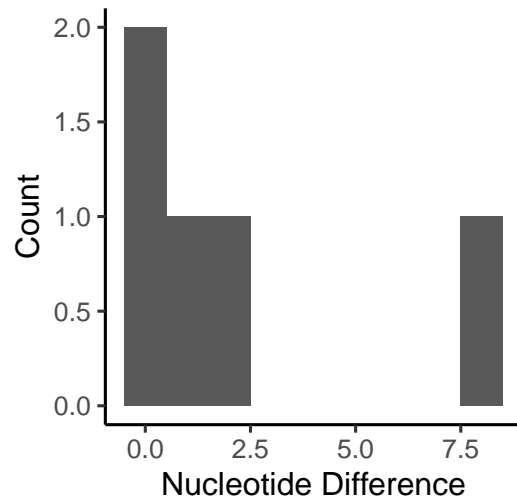
IGHV3-64D*09

192 sequences assigned
69 (35.9%) exact matches, in which:
67 unique CDR3
5 unique J



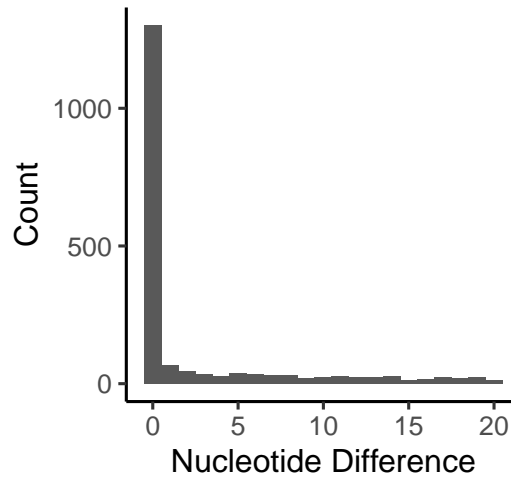
IGHV4-28*01_07

6 sequences assigned
2 (33.3%) exact matches, in which:
2 unique CDR3
1 unique J



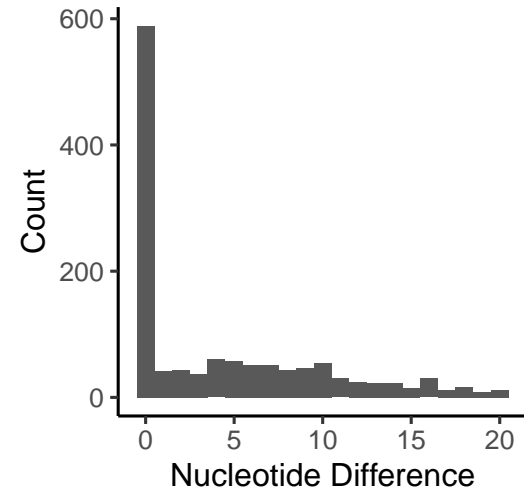
IGHV4-34*01_02

1931 sequences assigned
1301 (67.4%) exact matches, in which:
1287 unique CDR3
7 unique J



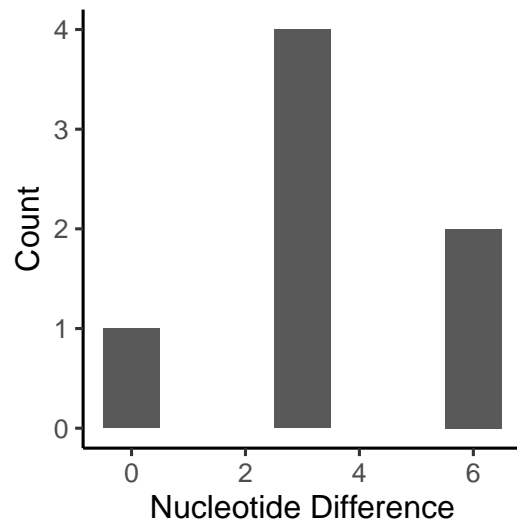
IGHV4-59*08

1363 sequences assigned
589 (43.2%) exact matches, in which:
585 unique CDR3
7 unique J



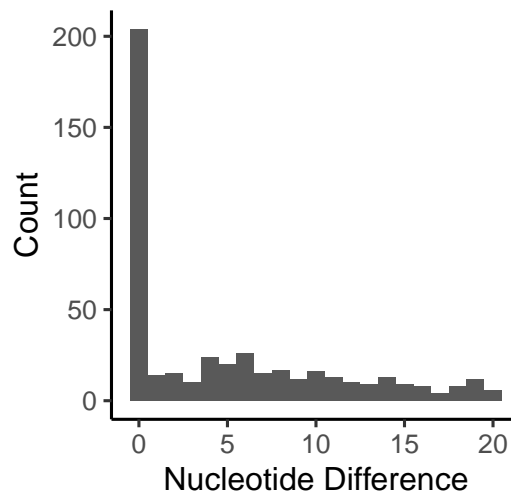
IGHV4-28*02_05

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



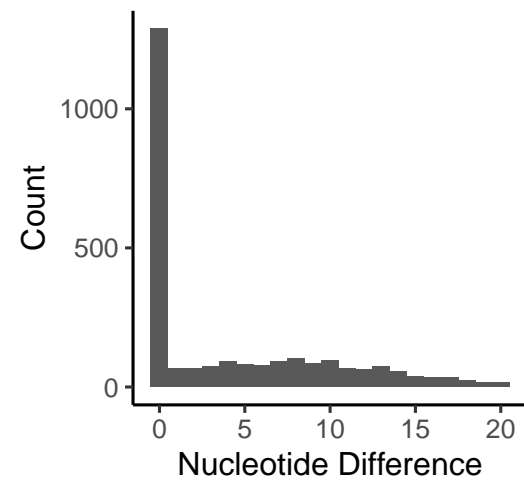
IGHV4-38-2*02_A70G

492 sequences assigned
204 (41.5%) exact matches, in which:
203 unique CDR3
6 unique J



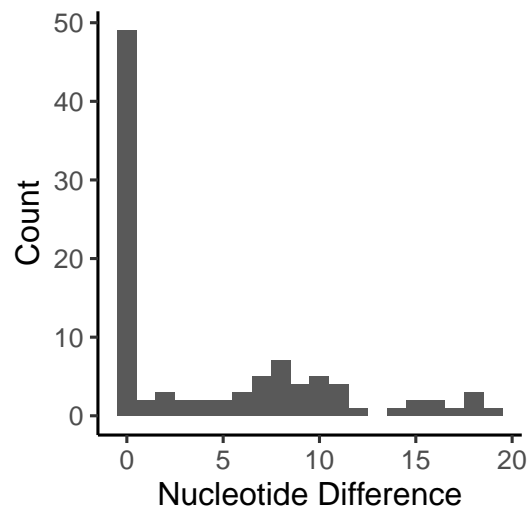
IGHV4-59*01_07

2666 sequences assigned
1288 (48.3%) exact matches, in which:
1277 unique CDR3
7 unique J



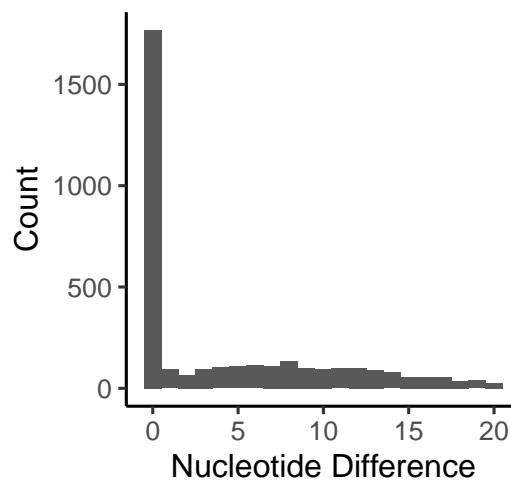
IGHV4-31*01

130 sequences assigned
49 (37.7%) exact matches, in which:
48 unique CDR3
5 unique J



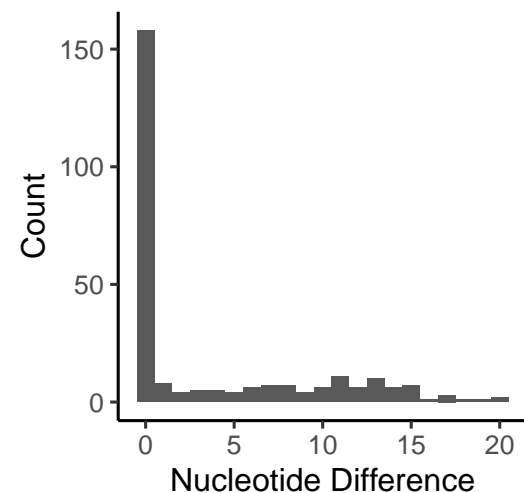
IGHV4-39*01_05

3637 sequences assigned
1768 (48.6%) exact matches, in which:
1747 unique CDR3
7 unique J



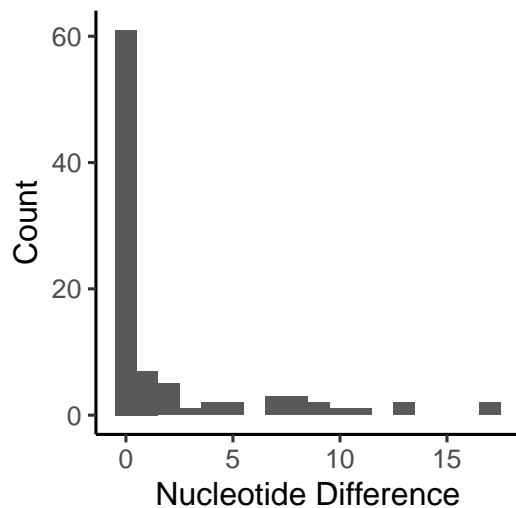
IGHV4-61*01

295 sequences assigned
158 (53.6%) exact matches, in which:
157 unique CDR3
6 unique J



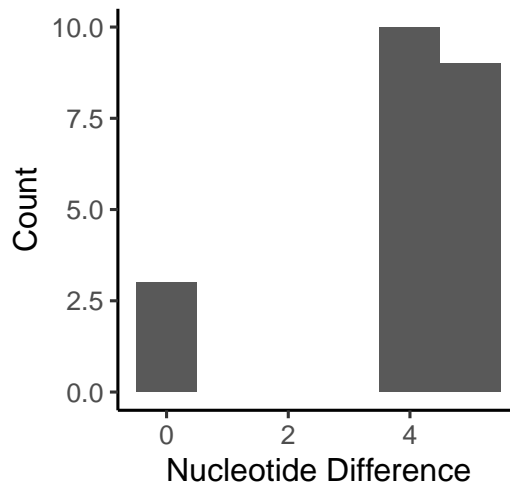
IGHV5-10-1*01_03

99 sequences assigned
61 (61.6%) exact matches, in which:
61 unique CDR3
6 unique J



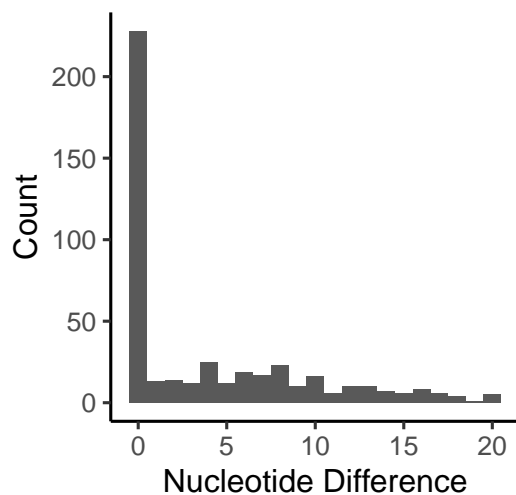
IGHV7-4-1*01

22 sequences assigned
3 (13.6%) exact matches, in which:
3 unique CDR3
3 unique J



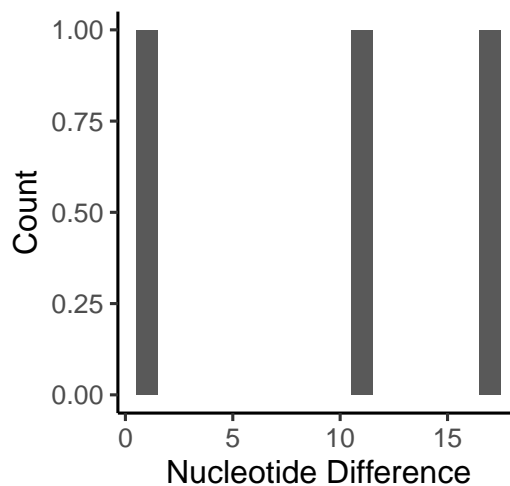
IGHV5-51*01_03

473 sequences assigned
228 (48.2%) exact matches, in which:
228 unique CDR3
7 unique J



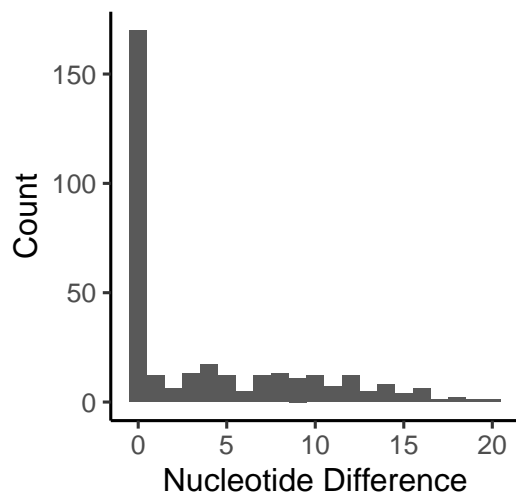
IGHV7-4-1*02

3 sequences assigned
No exact matches.

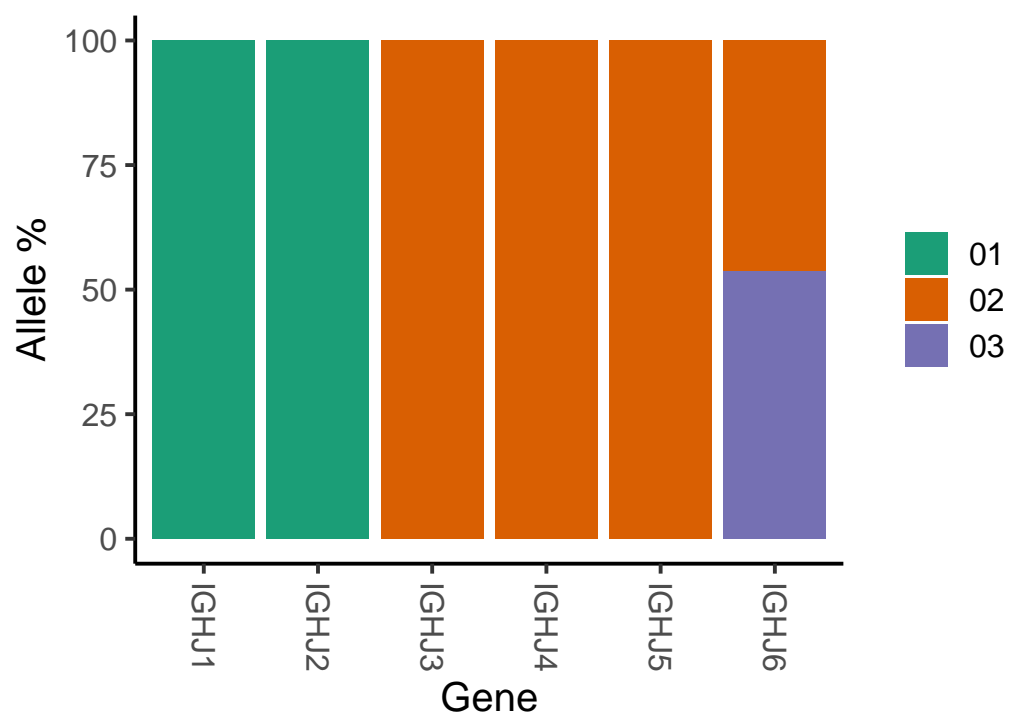


IGHV6-1*01_02

340 sequences assigned
170 (50%) exact matches, in which:
170 unique CDR3
7 unique J



Allele Usage



Sequence Count by IGHJ6 allele usage

