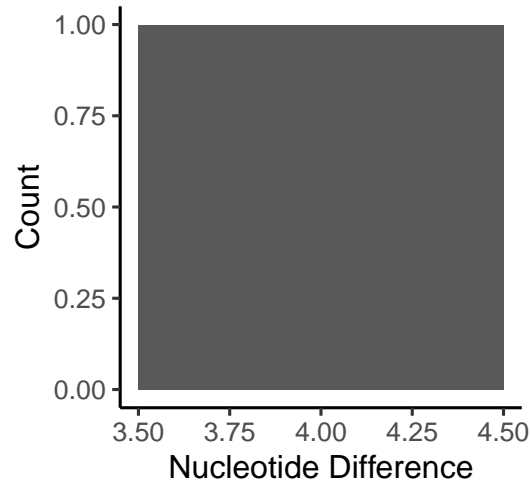


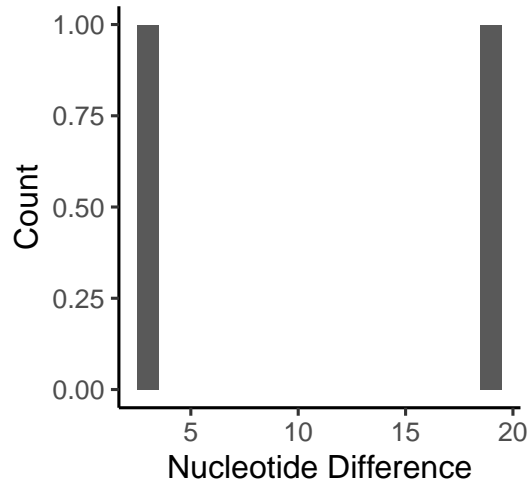
IGHV1/OR21-1*01

1 sequences assigned
No exact matches.



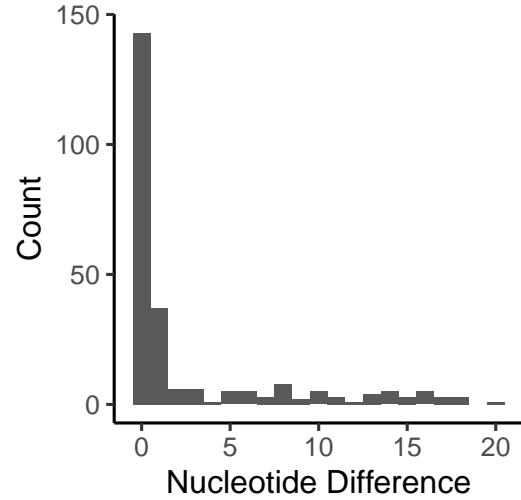
IGHV1-3*02

3 sequences assigned
No exact matches.



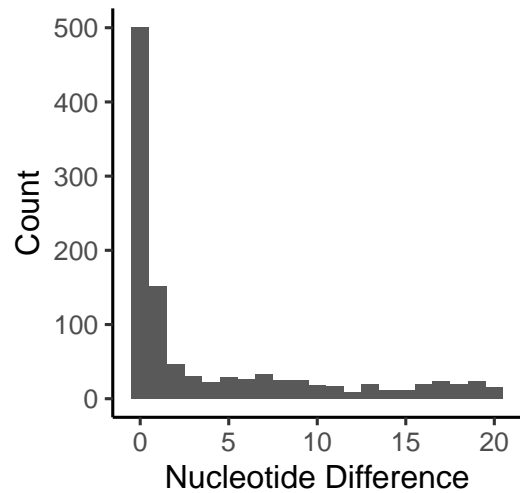
IGHV1-24*01

281 sequences assigned
143 (50.9%) exact matches, in which:
140 unique CDR3
7 unique J



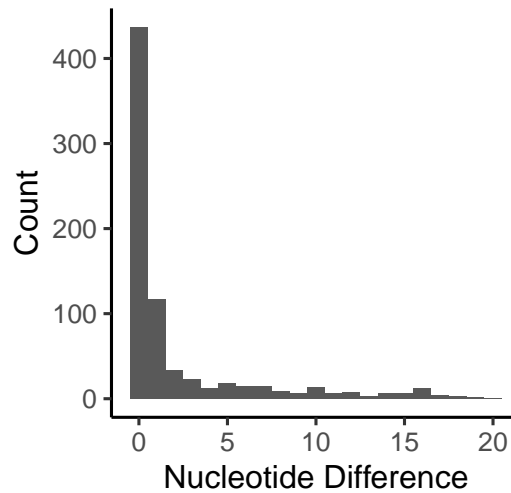
IGHV1-2*02

1263 sequences assigned
501 (39.7%) exact matches, in which:
496 unique CDR3
7 unique J



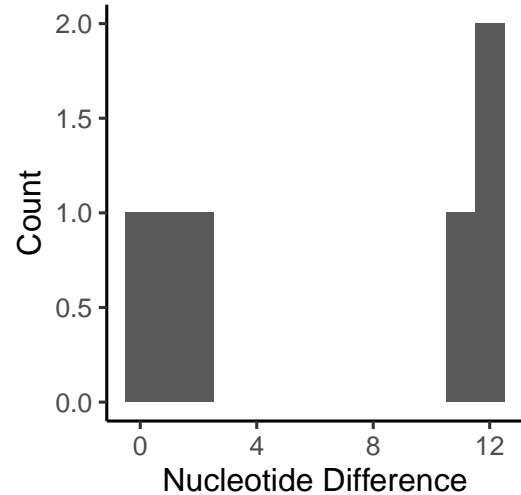
IGHV1-8*01

814 sequences assigned
437 (53.7%) exact matches, in which:
426 unique CDR3
7 unique J



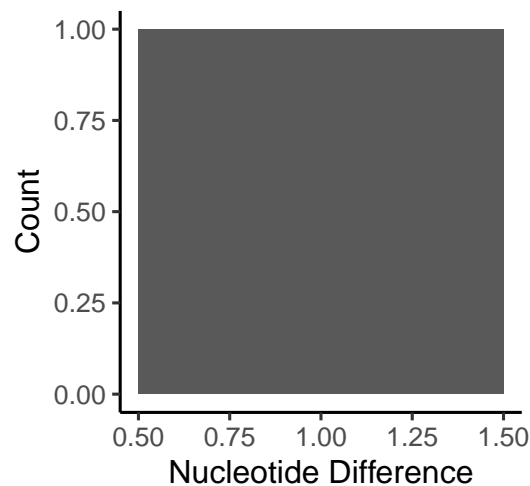
IGHV1-45*02

13 sequences assigned
1 (7.7%) exact matches, in which:
1 unique CDR3
1 unique J



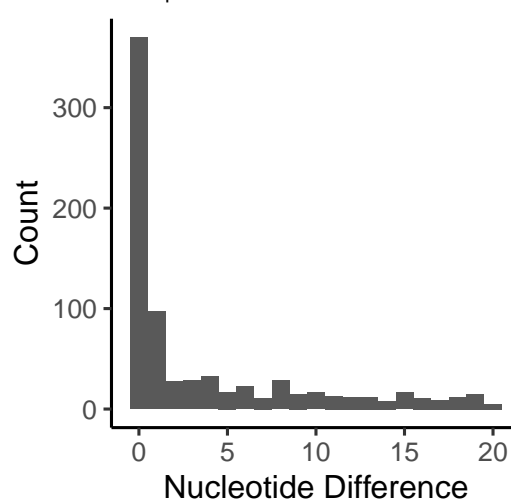
IGHV1-3*01

2 sequences assigned
No exact matches.



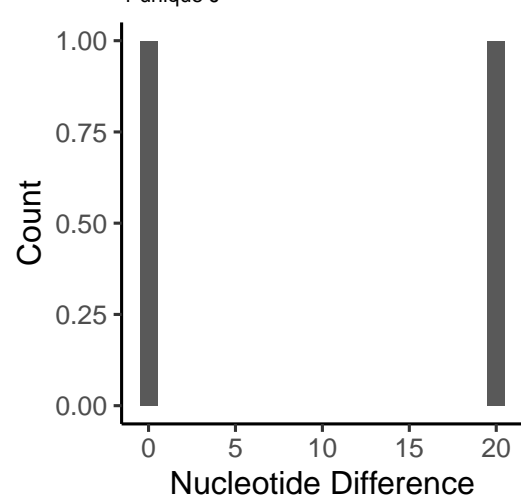
IGHV1-18*01

1018 sequences assigned
370 (36.3%) exact matches, in which:
365 unique CDR3
7 unique J



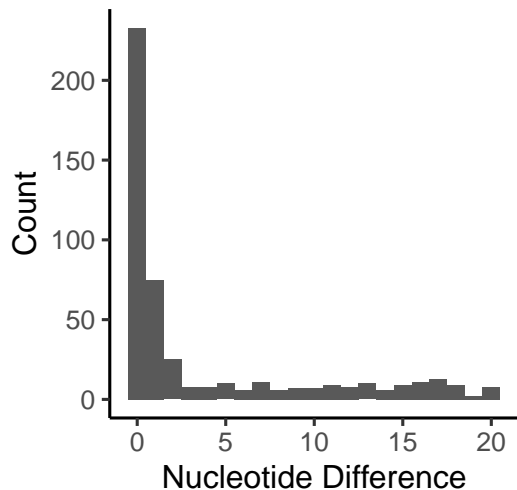
IGHV1-45*03

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



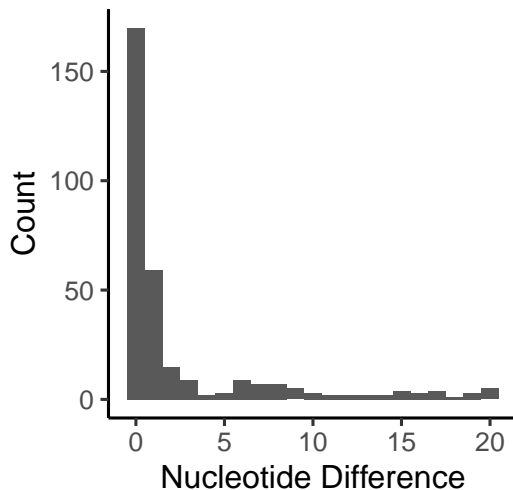
IGHV1-46*01

621 sequences assigned
233 (37.5%) exact matches, in which:
233 unique CDR3
7 unique J



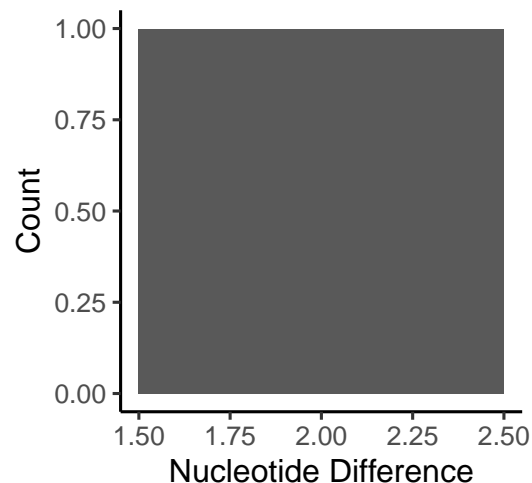
IGHV1-69*02

357 sequences assigned
170 (47.6%) exact matches, in which:
168 unique CDR3
6 unique J



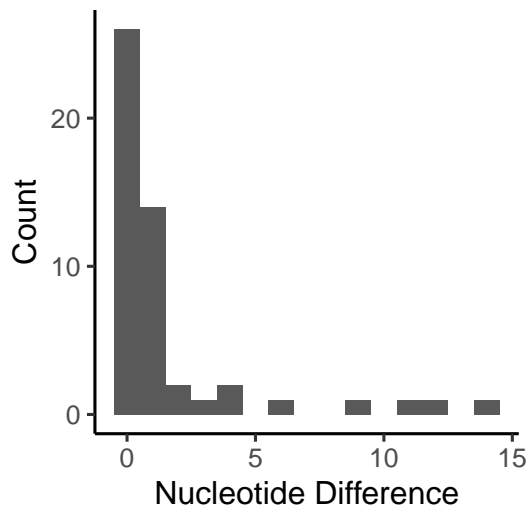
IGHV1-NL1*01

1 sequences assigned
No exact matches.



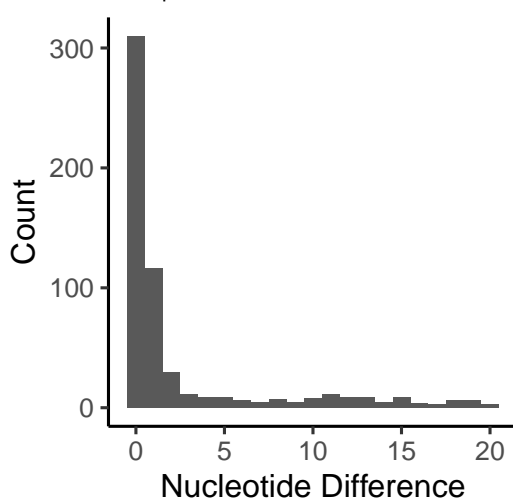
IGHV1-58*02

58 sequences assigned
26 (44.8%) exact matches, in which:
25 unique CDR3
6 unique J



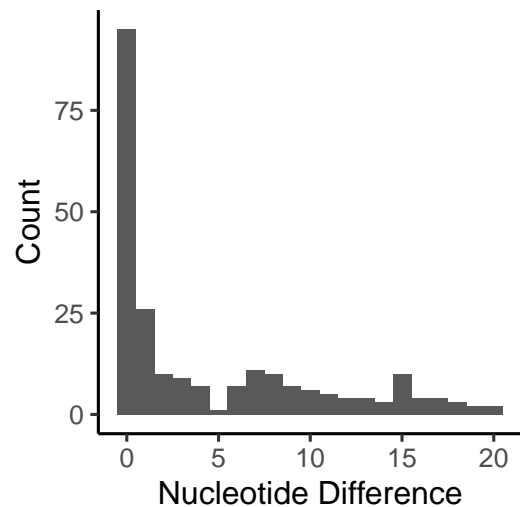
IGHV1-69*04

627 sequences assigned
310 (49.4%) exact matches, in which:
307 unique CDR3
7 unique J



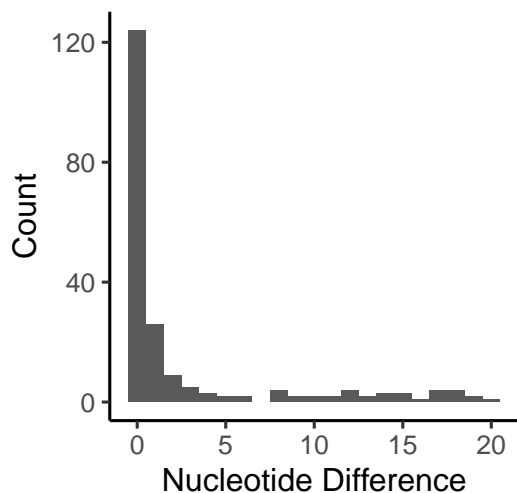
IGHV2-5*01

274 sequences assigned
95 (34.7%) exact matches, in which:
95 unique CDR3
5 unique J



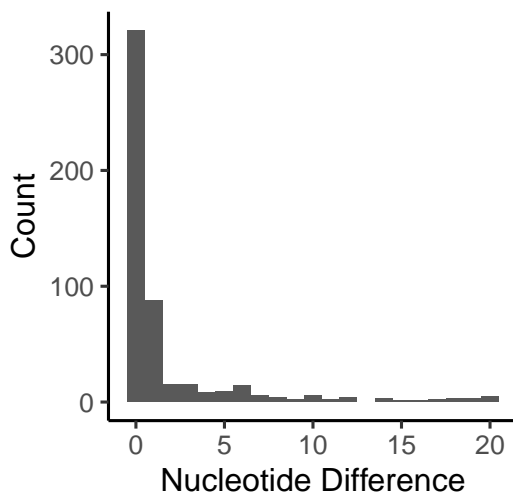
IGHV1-69-2*01

232 sequences assigned
124 (53.4%) exact matches, in which:
121 unique CDR3
6 unique J



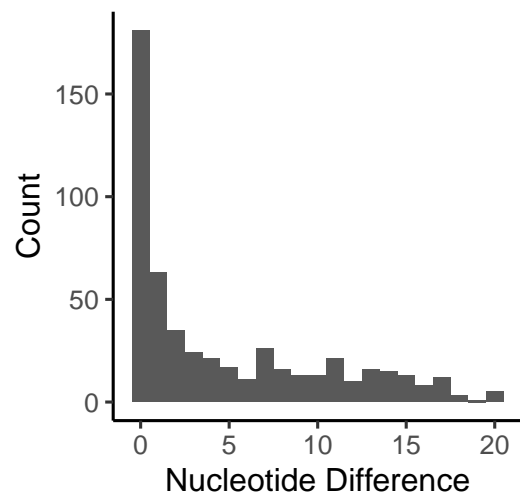
IGHV1-69*04_C184T

613 sequences assigned
321 (52.4%) exact matches, in which:
314 unique CDR3
6 unique J



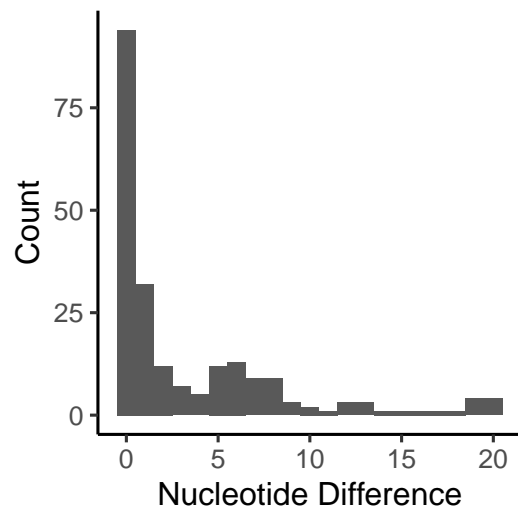
IGHV2-5*02

563 sequences assigned
181 (32.1%) exact matches, in which:
179 unique CDR3
6 unique J



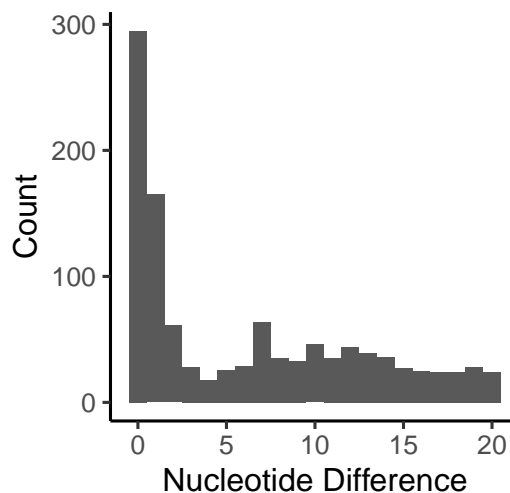
IGHV2-26*01

229 sequences assigned
94 (41%) exact matches, in which:
91 unique CDR3
7 unique J



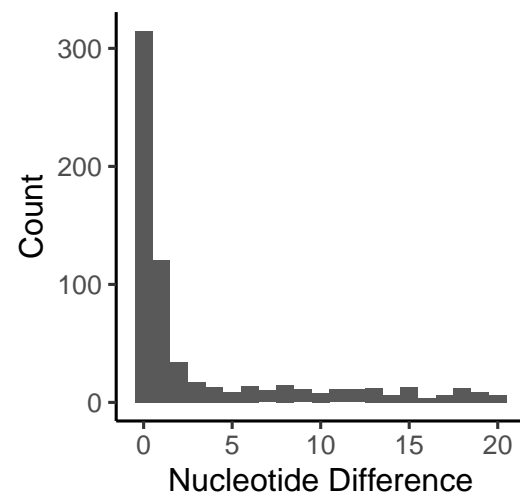
IGHV3-7*01

1322 sequences assigned
295 (22.3%) exact matches, in which:
293 unique CDR3
7 unique J



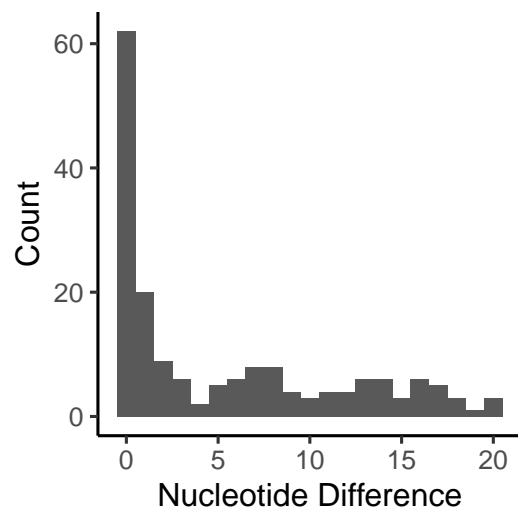
IGHV3-11*01

730 sequences assigned
315 (43.2%) exact matches, in which:
315 unique CDR3
7 unique J



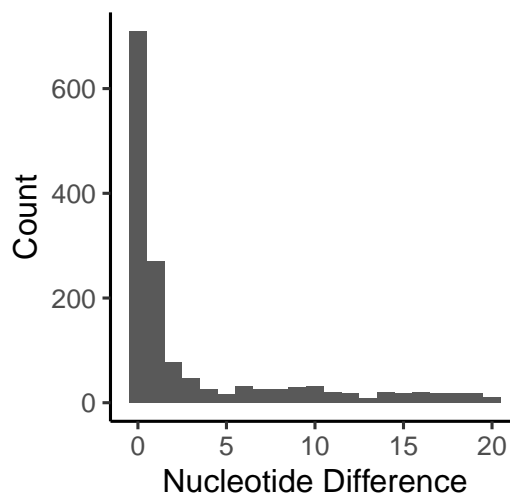
IGHV2-70*15

194 sequences assigned
62 (32%) exact matches, in which:
60 unique CDR3
5 unique J



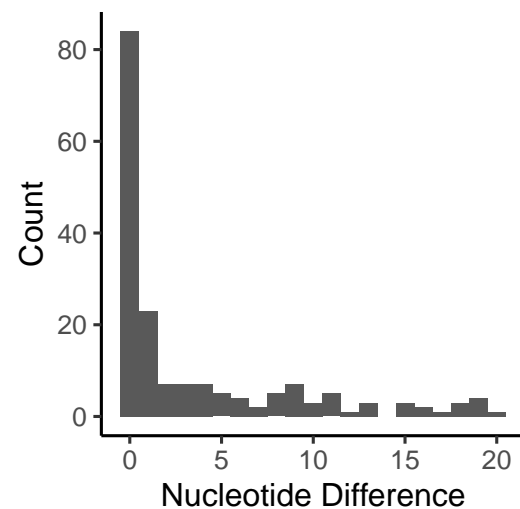
IGHV3-9*01

1564 sequences assigned
710 (45.4%) exact matches, in which:
704 unique CDR3
7 unique J



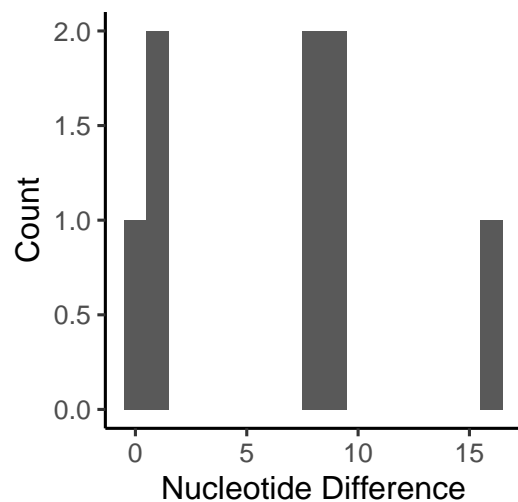
IGHV3-11*01_A152G

203 sequences assigned
84 (41.4%) exact matches, in which:
84 unique CDR3
7 unique J



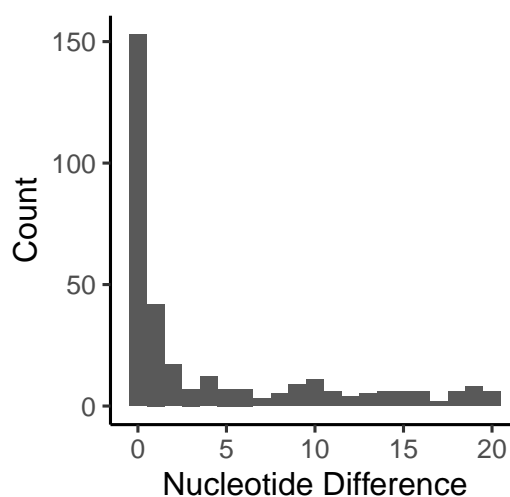
IGHV2-70D*04

8 sequences assigned
1 (12.5%) exact matches, in which:
1 unique CDR3
1 unique J



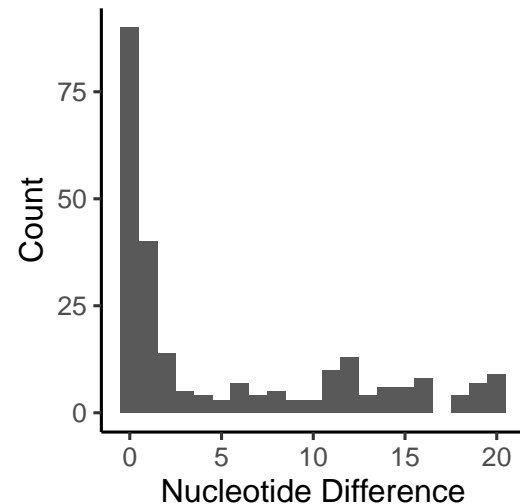
IGHV3-9*01_A152G

362 sequences assigned
153 (42.3%) exact matches, in which:
153 unique CDR3
7 unique J



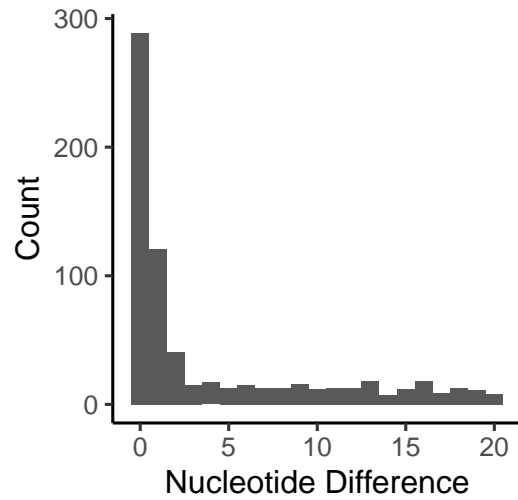
IGHV3-13*01

277 sequences assigned
90 (32.5%) exact matches, in which:
90 unique CDR3
6 unique J



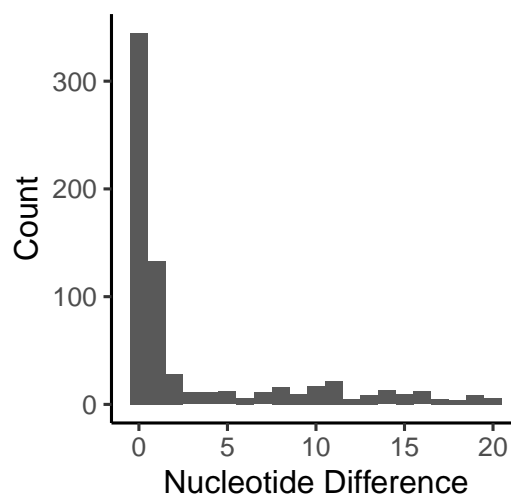
IGHV3-15*01

803 sequences assigned
289 (36%) exact matches, in which:
288 unique CDR3
6 unique J



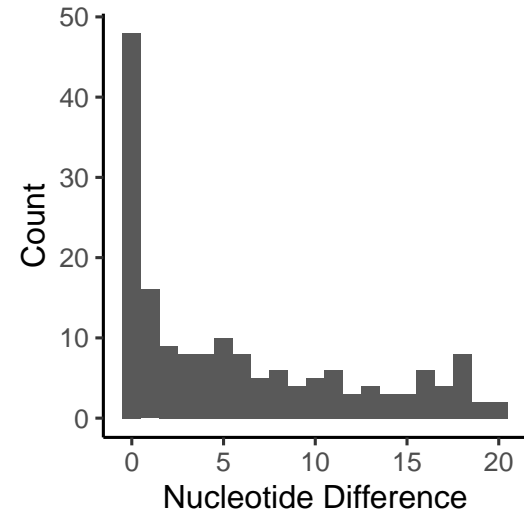
IGHV3-21*01

737 sequences assigned
345 (46.8%) exact matches, in which:
343 unique CDR3
7 unique J



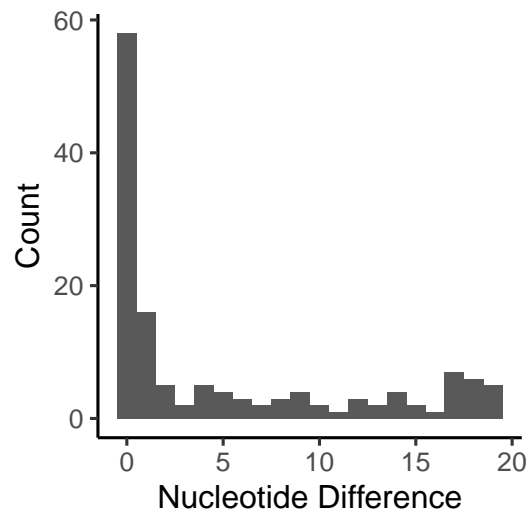
IGHV3-30*18_A152G

194 sequences assigned
48 (24.7%) exact matches, in which:
48 unique CDR3
6 unique J



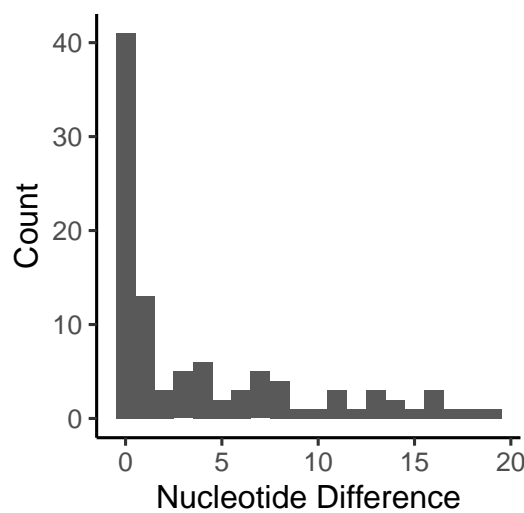
IGHV3-15*01_A152G

169 sequences assigned
58 (34.3%) exact matches, in which:
58 unique CDR3
6 unique J



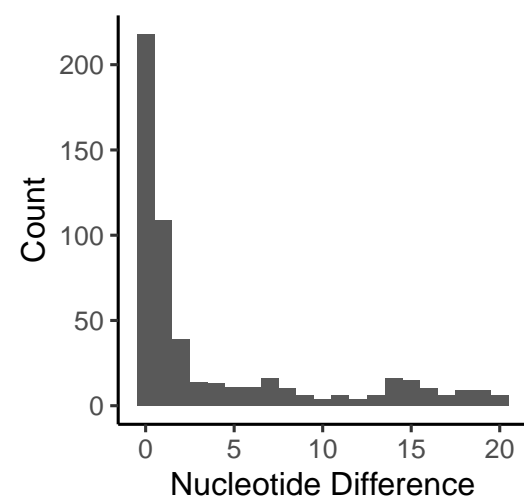
IGHV3-21*01_A152G_G2

108 sequences assigned
41 (38%) exact matches, in which:
41 unique CDR3
5 unique J



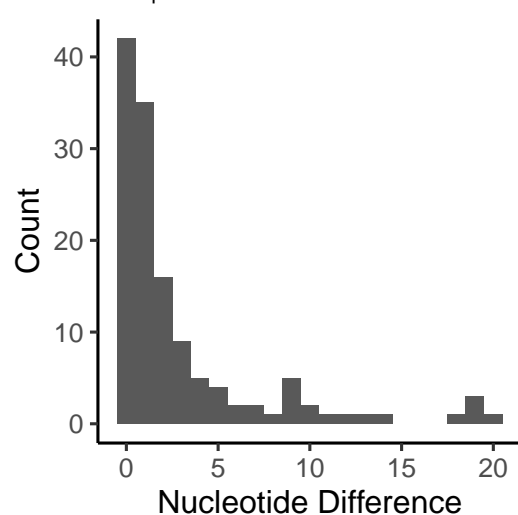
IGHV3-33*01

619 sequences assigned
218 (35.2%) exact matches, in which:
211 unique CDR3
6 unique J



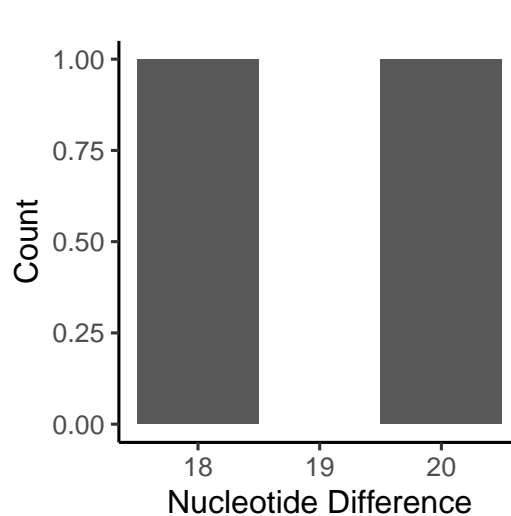
IGHV3-20*01

137 sequences assigned
42 (30.7%) exact matches, in which:
39 unique CDR3
5 unique J



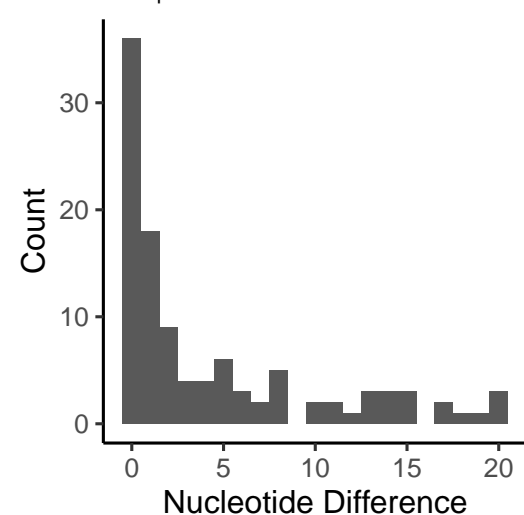
IGHV3-30-3*03

16 sequences assigned
No exact matches.



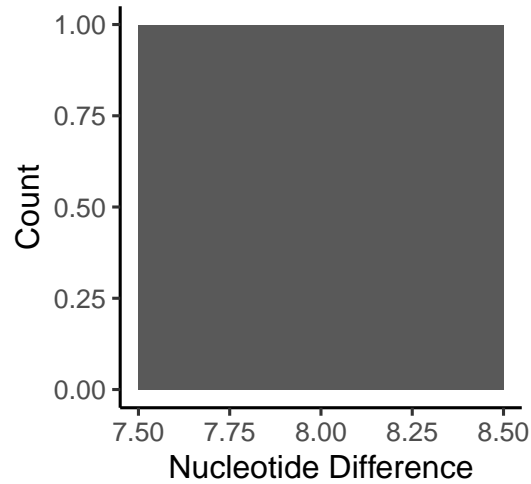
IGHV3-33*01_A152G

138 sequences assigned
36 (26.1%) exact matches, in which:
36 unique CDR3
4 unique J



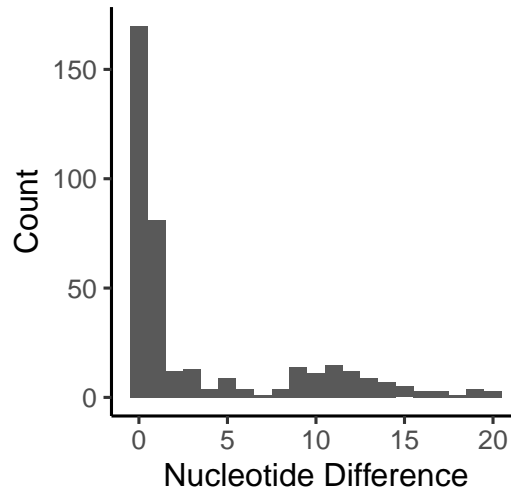
IGHV3-38*01

1 sequences assigned
No exact matches.



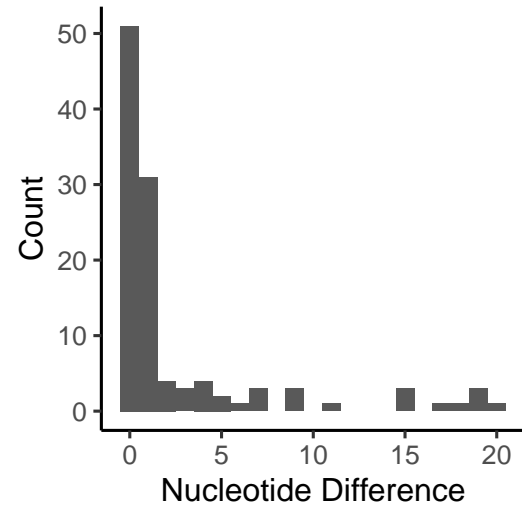
IGHV3-43*02

422 sequences assigned
170 (40.3%) exact matches, in which:
169 unique CDR3
6 unique J



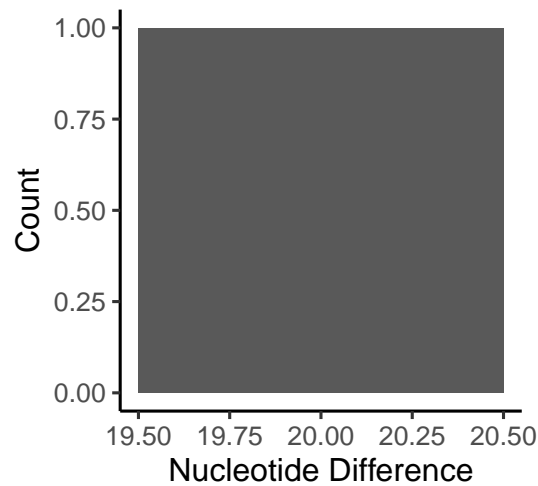
IGHV3-49*03

136 sequences assigned
51 (37.5%) exact matches, in which:
51 unique CDR3
5 unique J



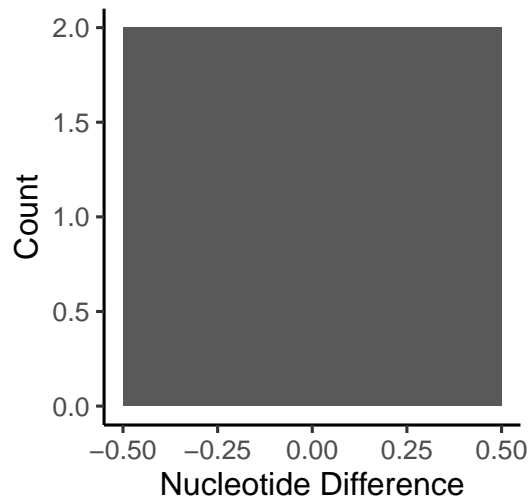
IGHV3-38-3*01

1 sequences assigned
No exact matches.



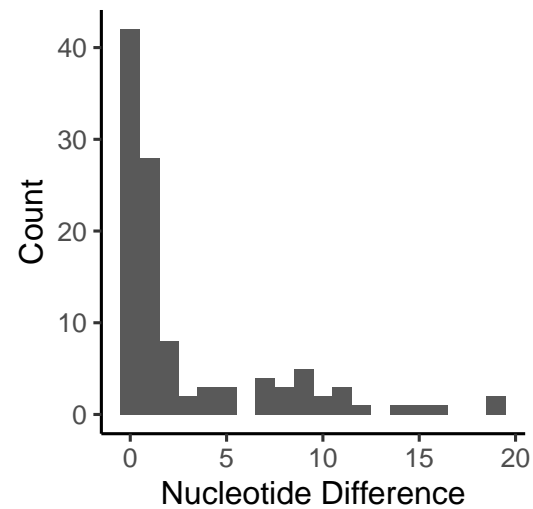
IGHV3-47*02

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



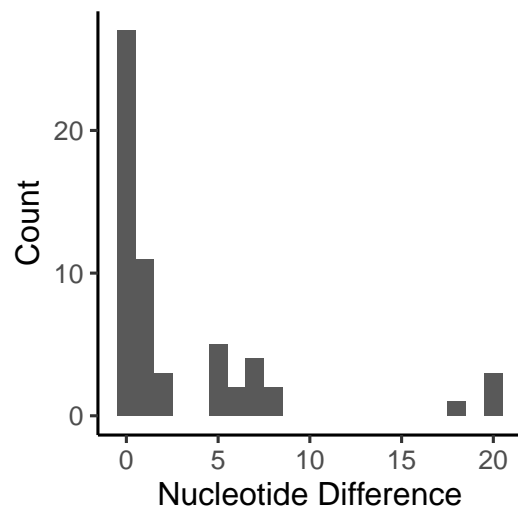
IGHV3-49*05

111 sequences assigned
42 (37.8%) exact matches, in which:
41 unique CDR3
5 unique J



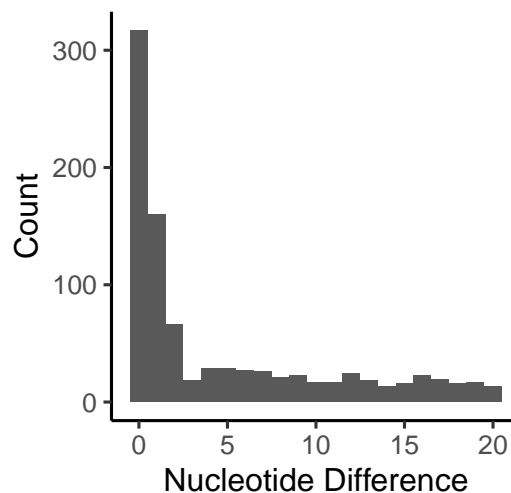
IGHV3-43*01

60 sequences assigned
27 (45%) exact matches, in which:
26 unique CDR3
5 unique J



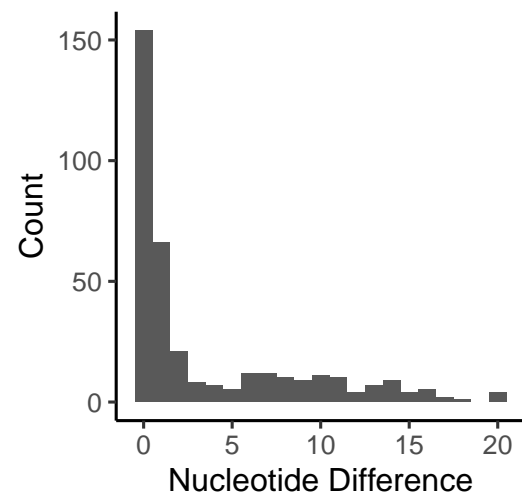
IGHV3-48*01

1072 sequences assigned
317 (29.6%) exact matches, in which:
315 unique CDR3
7 unique J



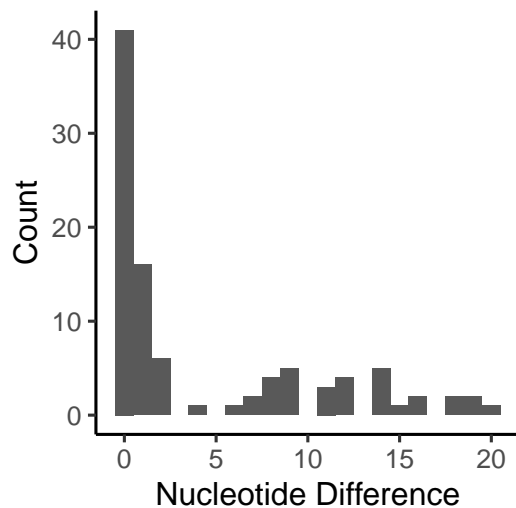
IGHV3-53*01

394 sequences assigned
154 (39.1%) exact matches, in which:
152 unique CDR3
6 unique J



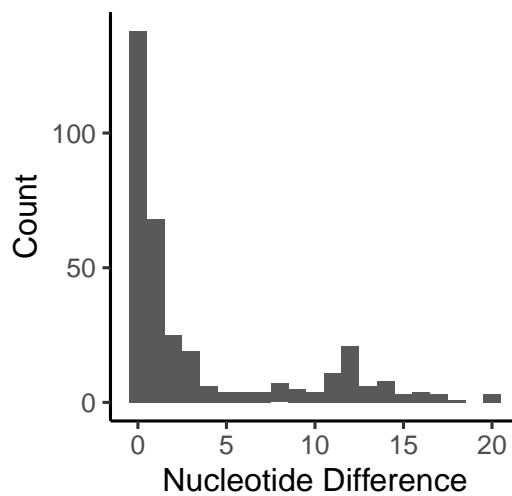
IGHV3-53*02

106 sequences assigned
41 (38.7%) exact matches, in which:
41 unique CDR3
7 unique J



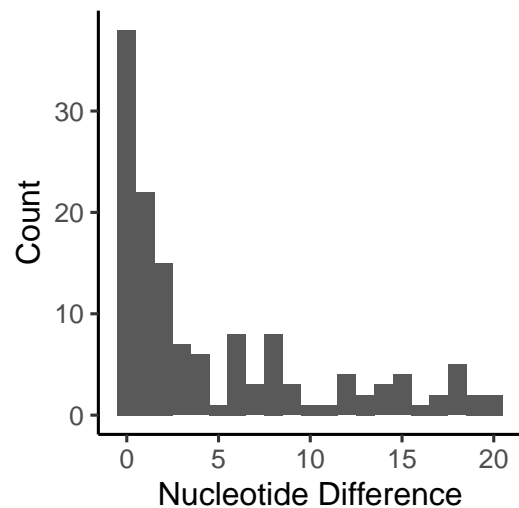
IGHV3-66*02

395 sequences assigned
138 (34.9%) exact matches, in which:
137 unique CDR3
5 unique J



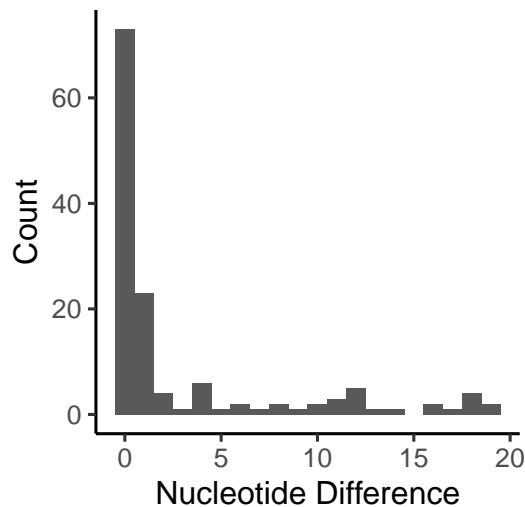
IGHV3-73*01

165 sequences assigned
38 (23%) exact matches, in which:
38 unique CDR3
6 unique J



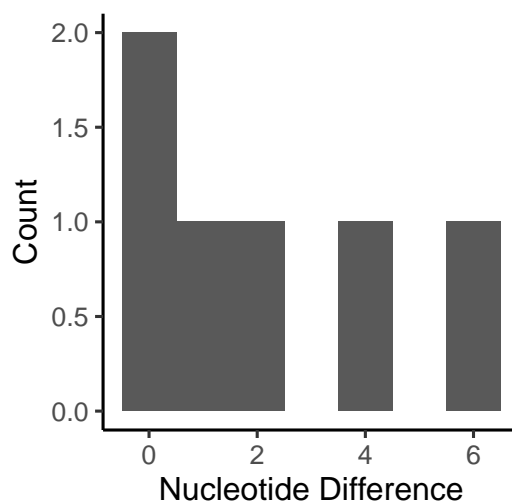
IGHV3-64*01

154 sequences assigned
73 (47.4%) exact matches, in which:
73 unique CDR3
7 unique J



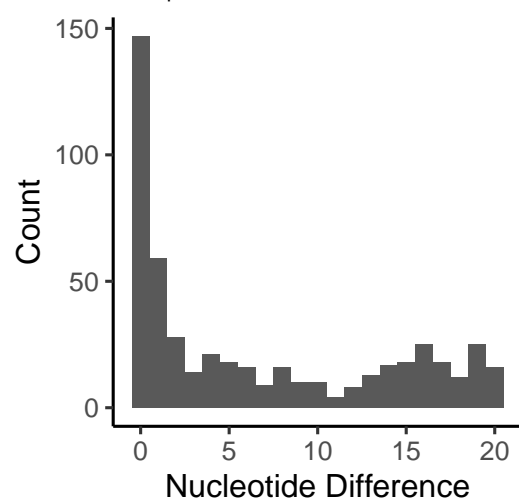
IGHV3-69-1*02

9 sequences assigned
2 (22.2%) exact matches, in which:
2 unique CDR3
1 unique J



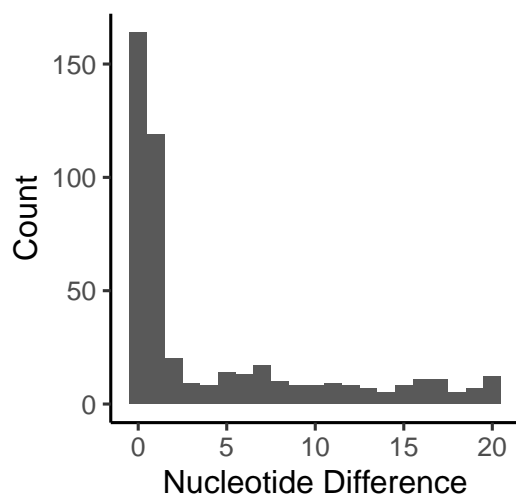
IGHV3-74*01

620 sequences assigned
147 (23.7%) exact matches, in which:
144 unique CDR3
7 unique J



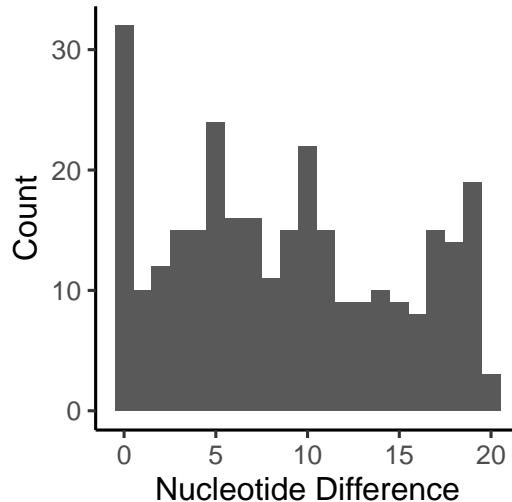
IGHV3-66*01

517 sequences assigned
164 (31.7%) exact matches, in which:
161 unique CDR3
7 unique J



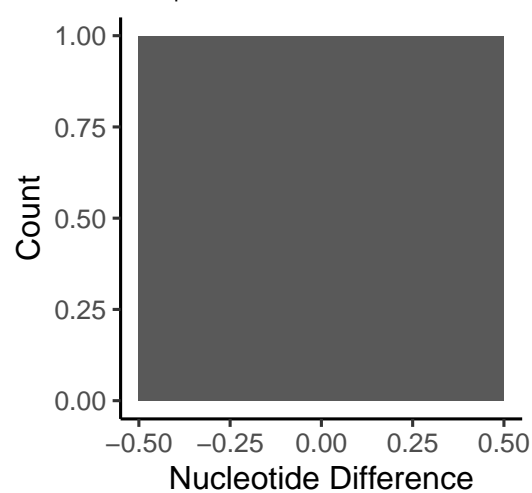
IGHV3-72*01

393 sequences assigned
32 (8.1%) exact matches, in which:
31 unique CDR3
5 unique J



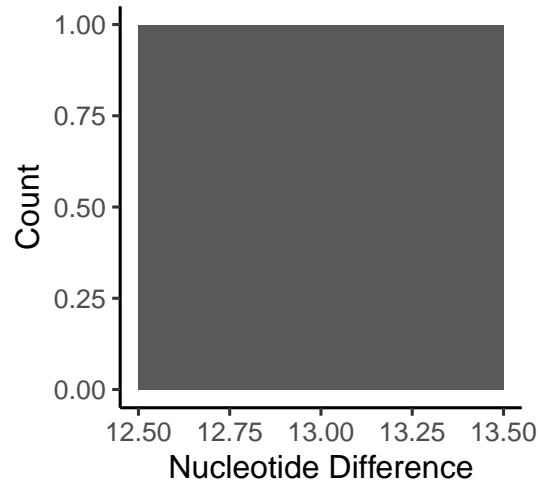
IGHV3-64D*06

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



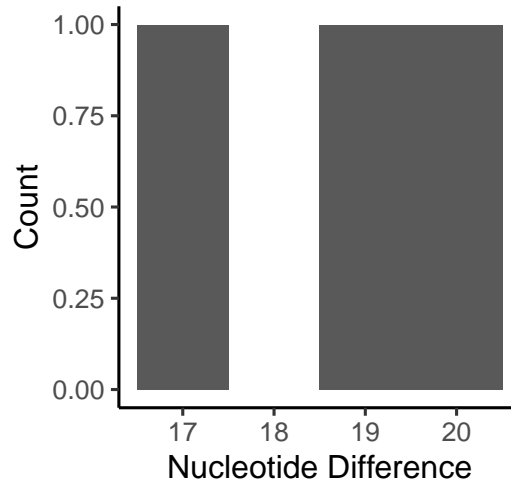
IGHV3–NL1*01

1 sequences assigned
No exact matches.



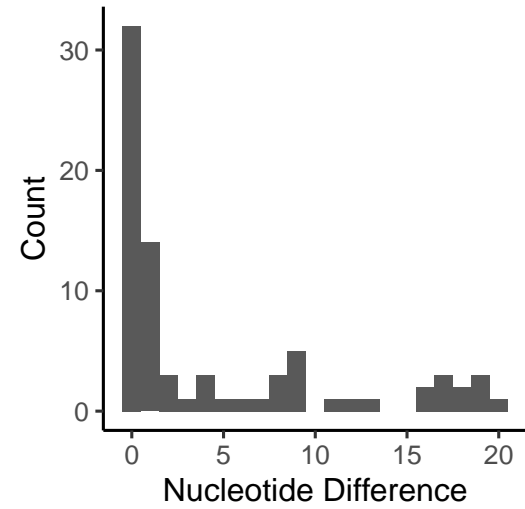
IGHV4–28*03

5 sequences assigned
No exact matches.



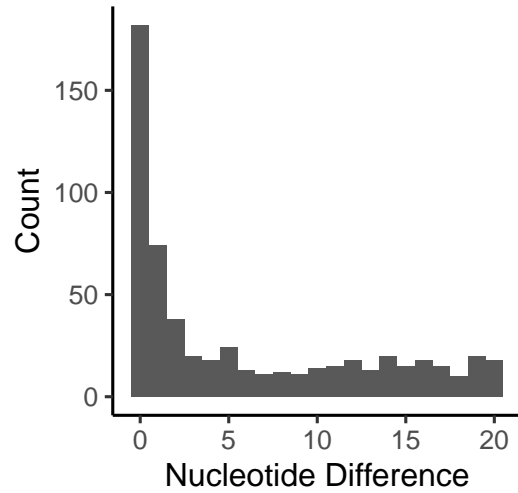
IGHV4–30–2*01

90 sequences assigned
32 (35.6%) exact matches, in which:
32 unique CDR3
5 unique J



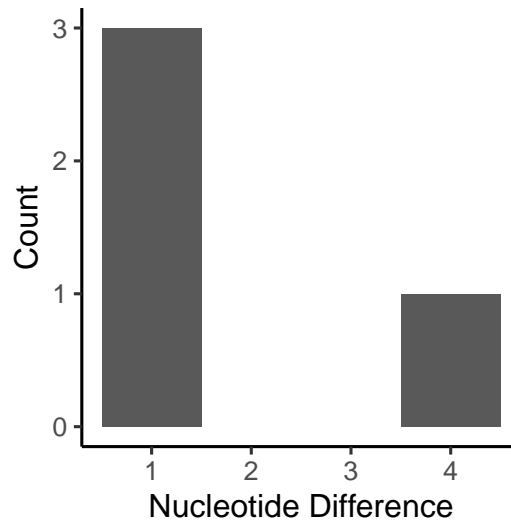
IGHV4–4*07

713 sequences assigned
182 (25.5%) exact matches, in which:
180 unique CDR3
7 unique J



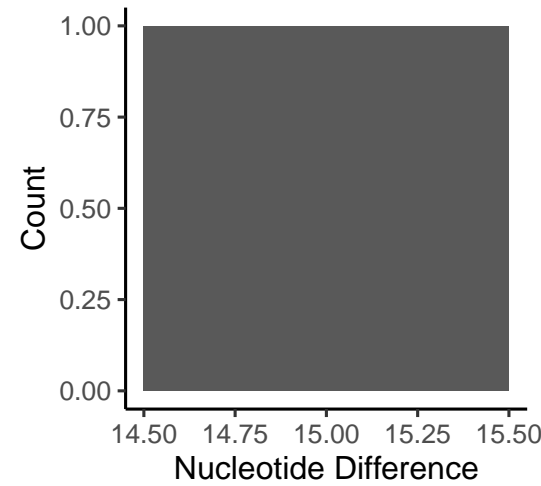
IGHV4–28*04

4 sequences assigned
No exact matches.



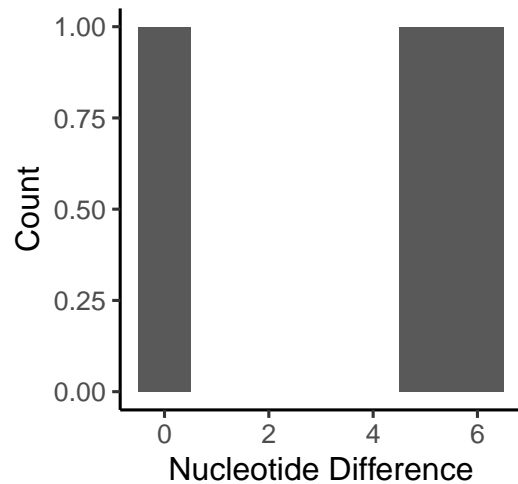
IGHV4–30–2*04

1 sequences assigned
No exact matches.



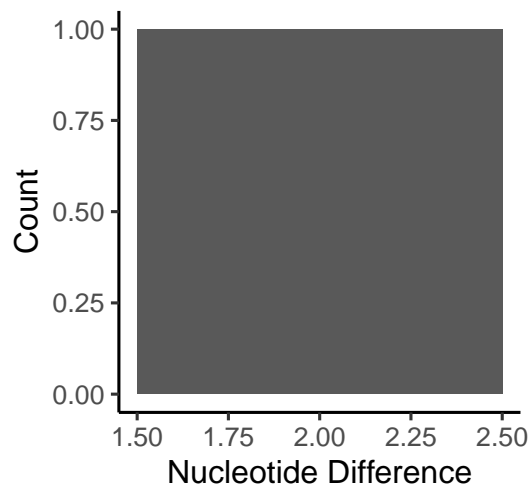
IGHV4–28*01

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



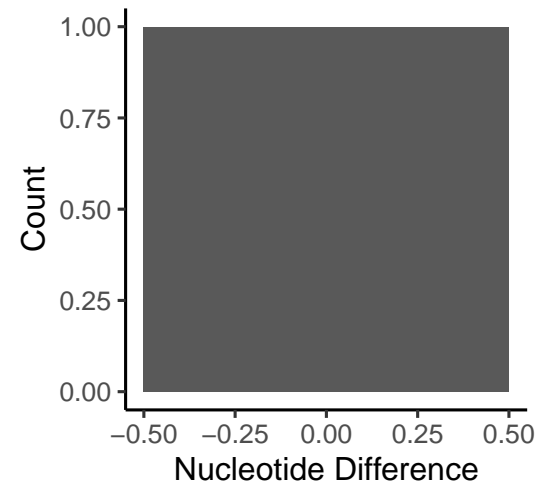
IGHV4–28*06

1 sequences assigned
No exact matches.



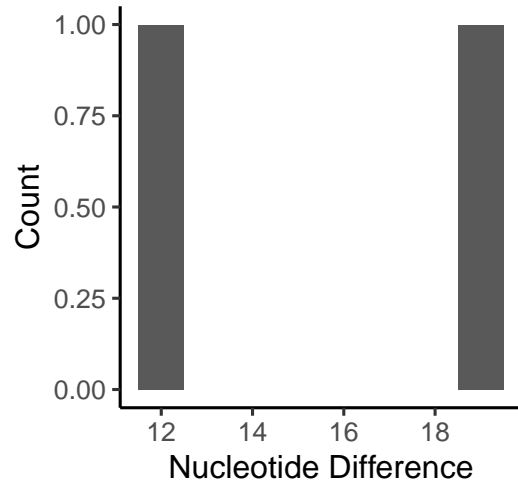
IGHV4–30–4*07

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



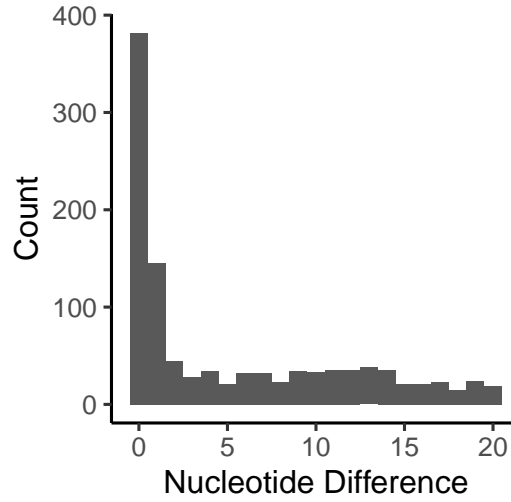
IGHV4-31*03

3 sequences assigned
No exact matches.



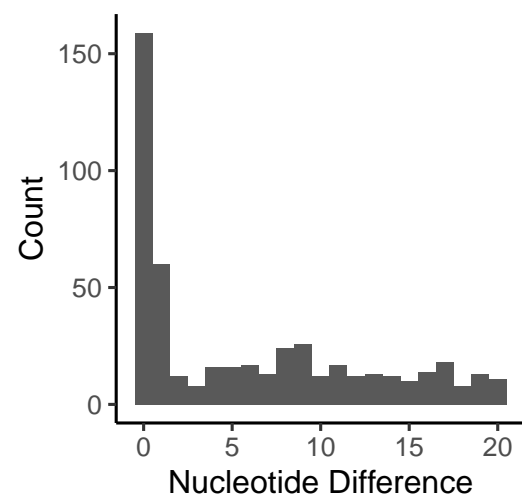
IGHV4-39*01

1306 sequences assigned
382 (29.2%) exact matches, in which:
372 unique CDR3
7 unique J



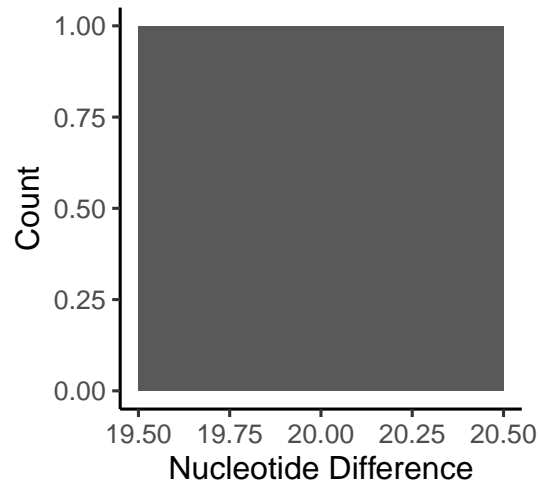
IGHV4-59*08

574 sequences assigned
159 (27.7%) exact matches, in which:
158 unique CDR3
6 unique J



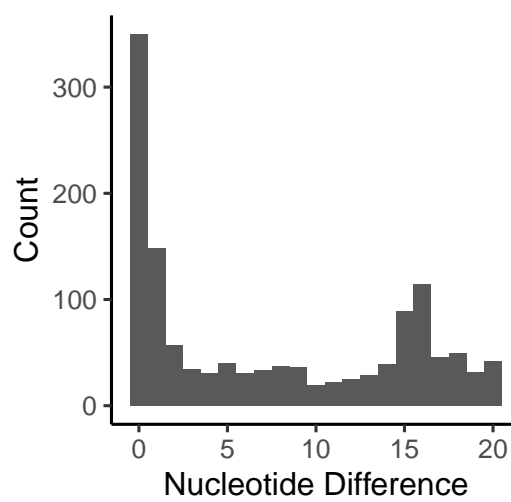
IGHV4-31*11

1 sequences assigned
No exact matches.



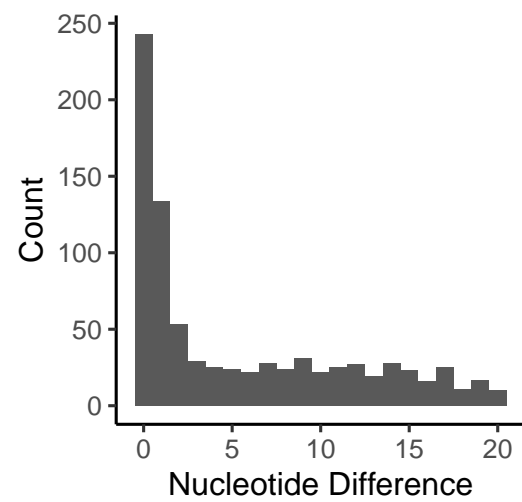
IGHV4-39*07

1669 sequences assigned
350 (21%) exact matches, in which:
349 unique CDR3
7 unique J



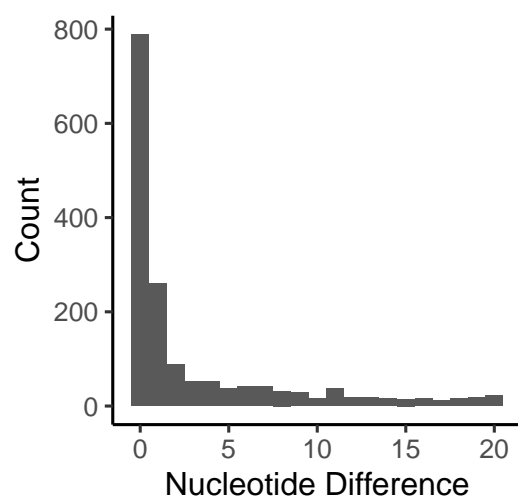
IGHV4-61*02

919 sequences assigned
243 (26.4%) exact matches, in which:
239 unique CDR3
7 unique J



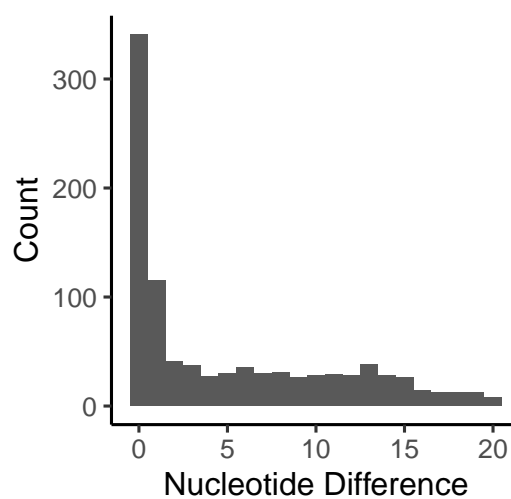
IGHV4-34*01

1892 sequences assigned
789 (41.7%) exact matches, in which:
772 unique CDR3
7 unique J



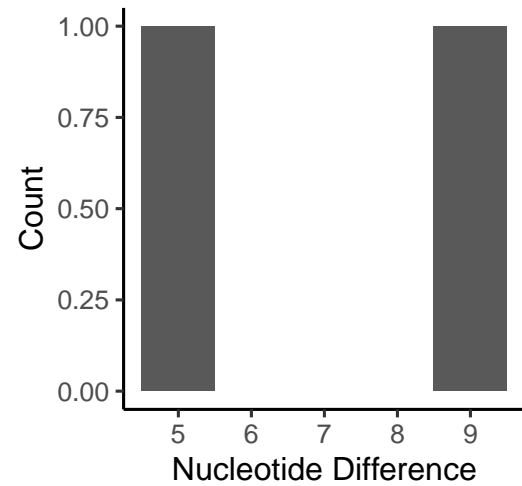
IGHV4-59*01

1074 sequences assigned
341 (31.8%) exact matches, in which:
335 unique CDR3
7 unique J



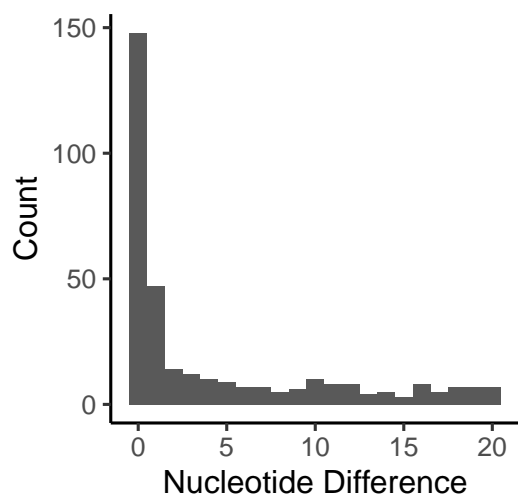
IGHV1/OR15-1*04

2 sequences assigned
No exact matches.



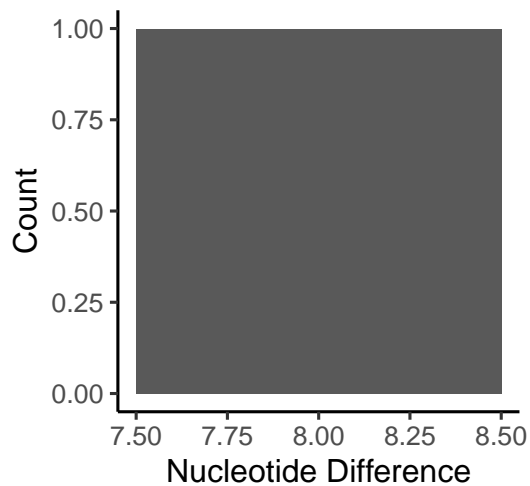
IGHV5–51*01

388 sequences assigned
148 (38.1%) exact matches, in which:
148 unique CDR3
5 unique J



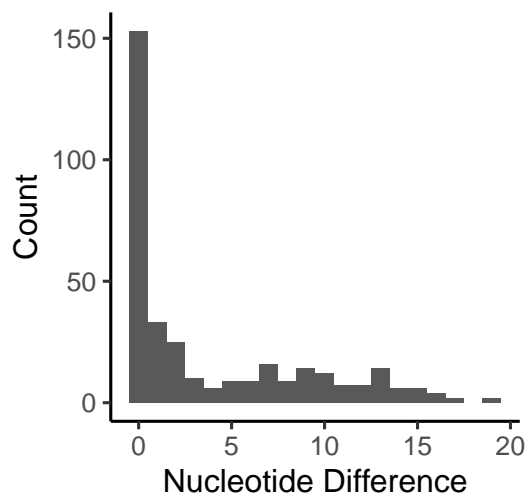
IGHV3/OR16–8*01

1 sequences assigned
No exact matches.



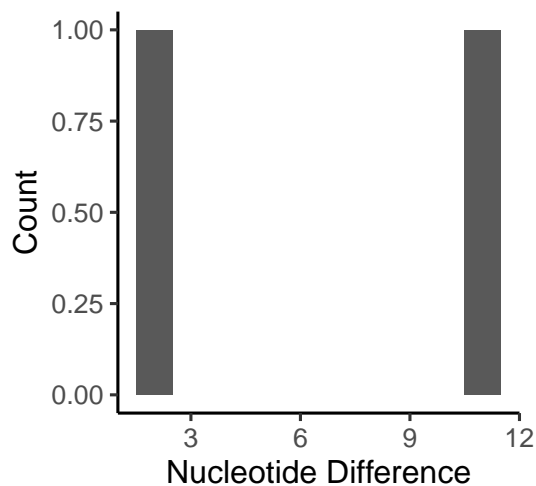
IGHV5–51*01_C45G

393 sequences assigned
153 (38.9%) exact matches, in which:
150 unique CDR3
6 unique J



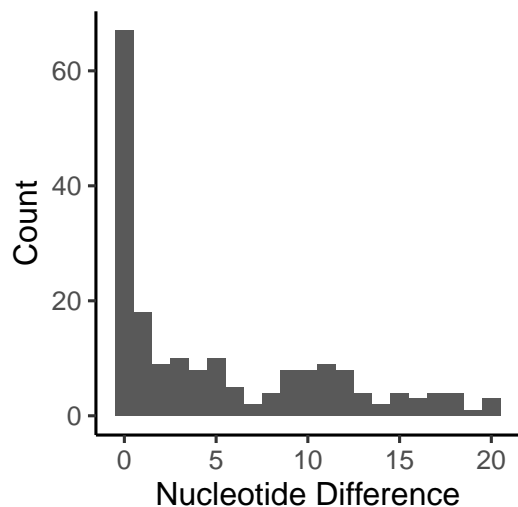
IGHV3/OR16–9*01

2 sequences assigned
No exact matches.

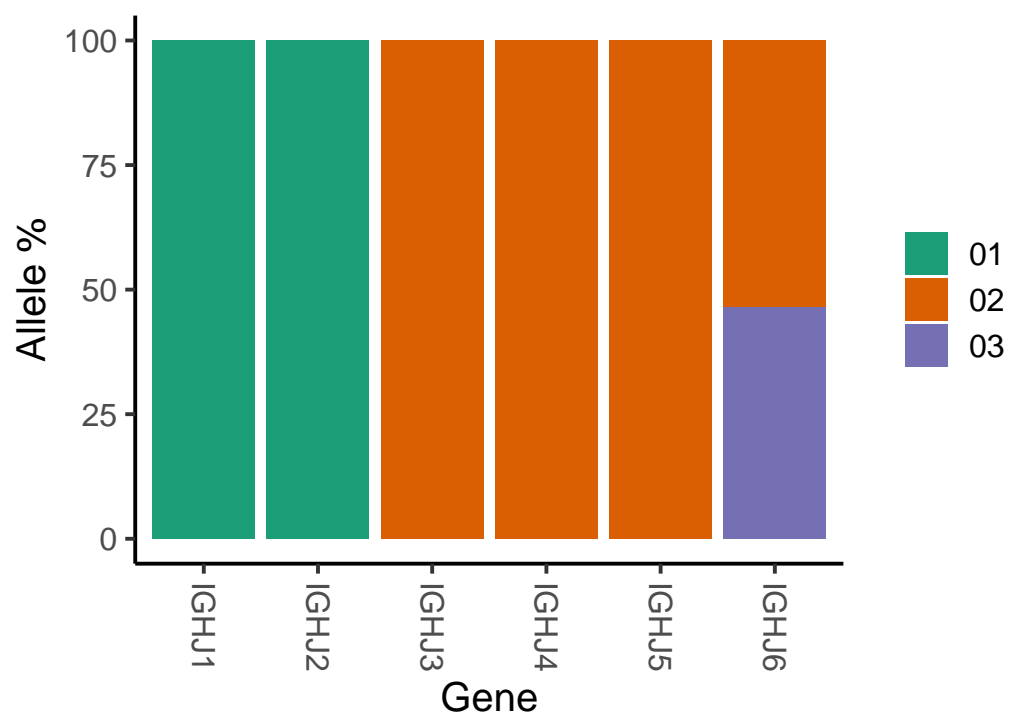


IGHV6–1*01

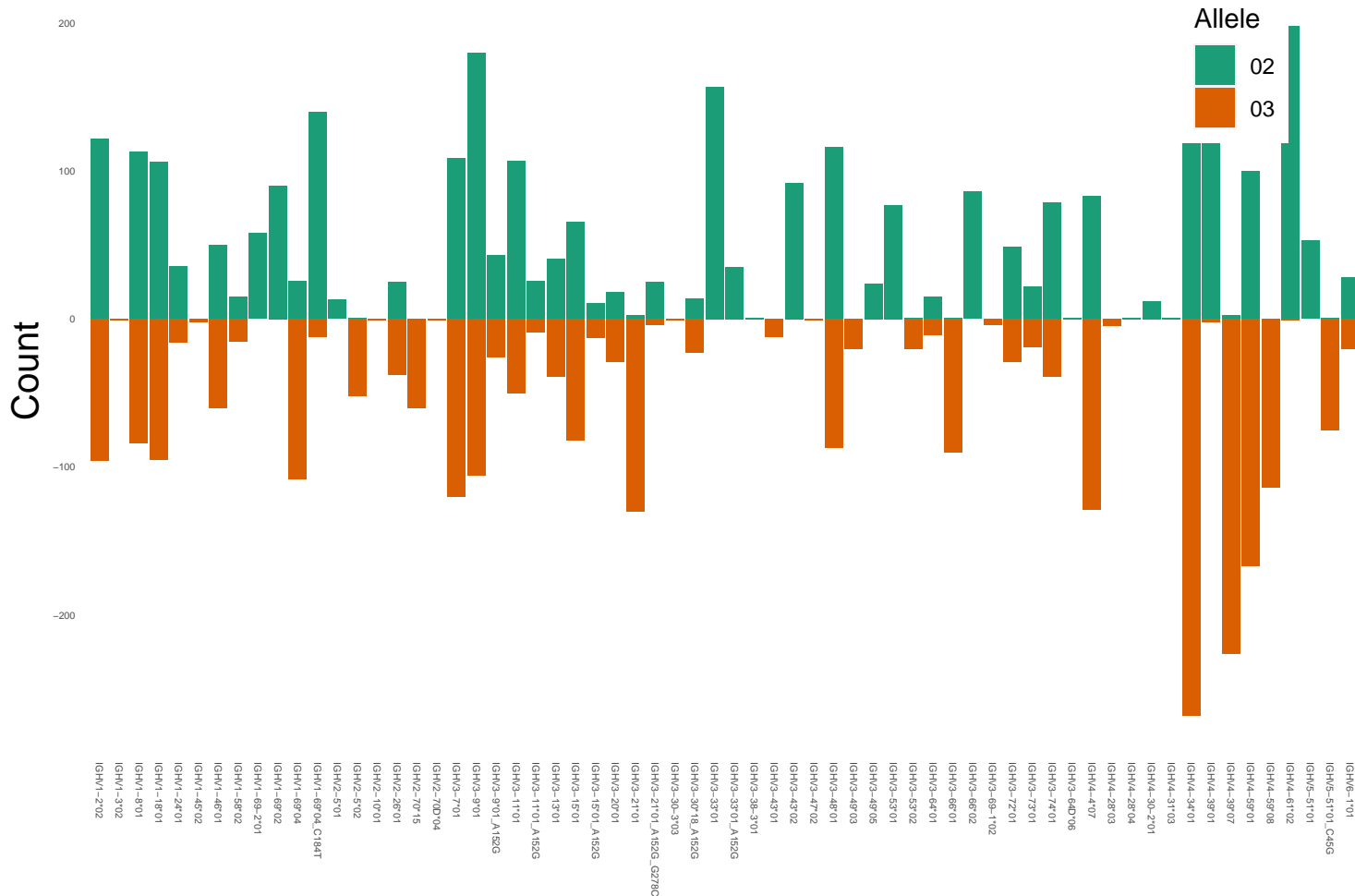
212 sequences assigned
67 (31.6%) exact matches, in which:
67 unique CDR3
7 unique J



Allele Usage



Sequence Count by IGHJ6 allele usage



Warning – no inferred sequences found.