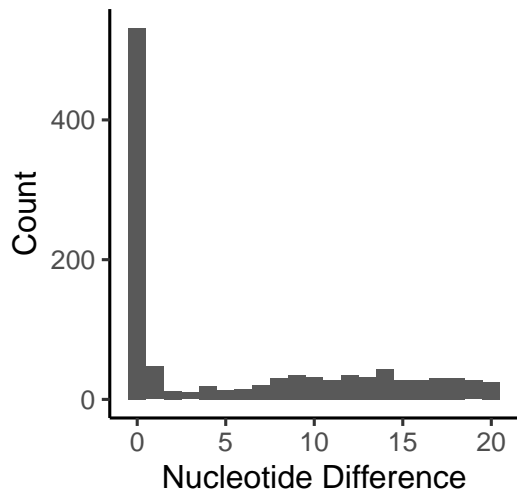


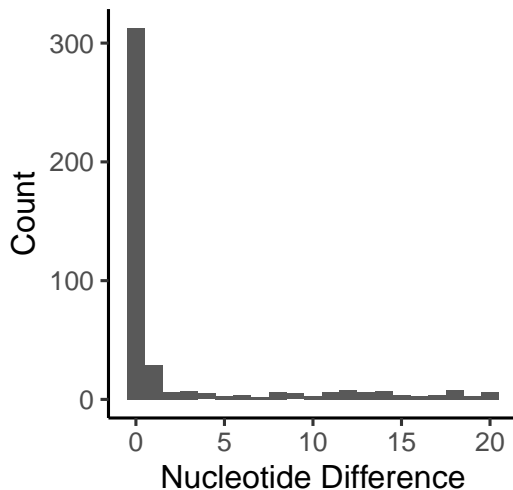
IGHV1-2*02

1348 sequences assigned
532 (39.5%) exact matches, in which:
526 unique CDR3
7 unique J



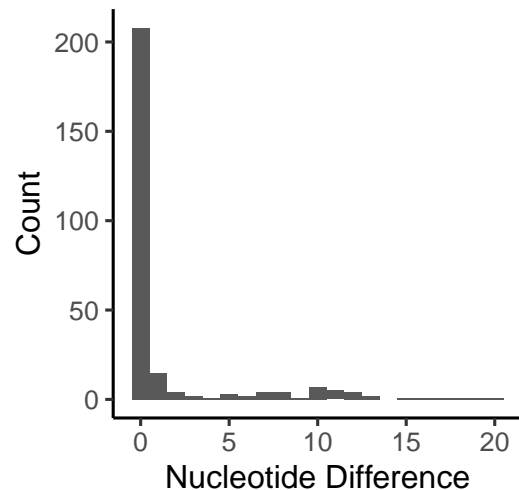
IGHV1-8*01

522 sequences assigned
313 (60%) exact matches, in which:
310 unique CDR3
7 unique J



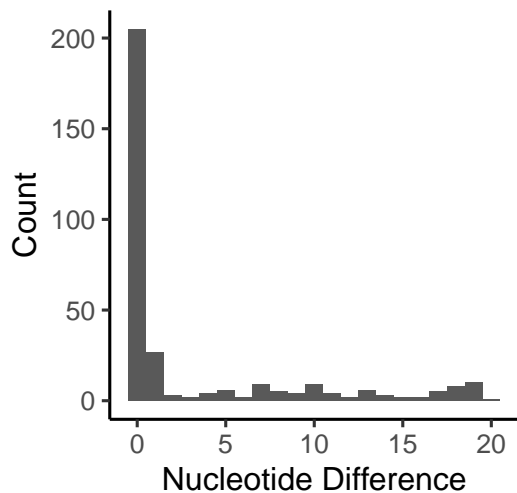
IGHV1-24*01

285 sequences assigned
208 (73%) exact matches, in which:
206 unique CDR3
7 unique J



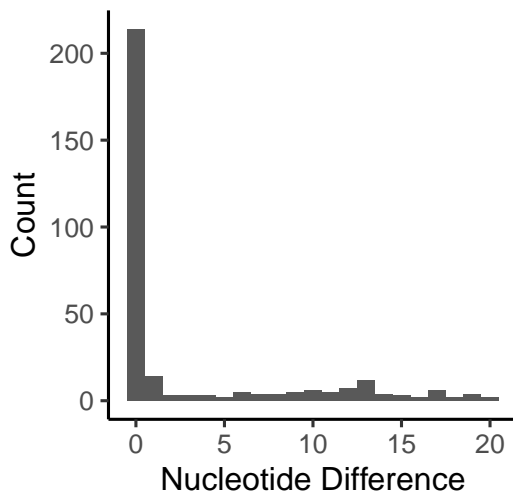
IGHV1-2*04

356 sequences assigned
205 (57.6%) exact matches, in which:
202 unique CDR3
5 unique J



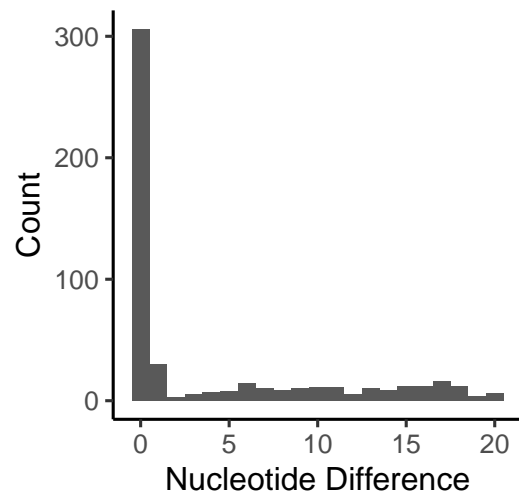
IGHV1-8*03

322 sequences assigned
214 (66.5%) exact matches, in which:
211 unique CDR3
5 unique J



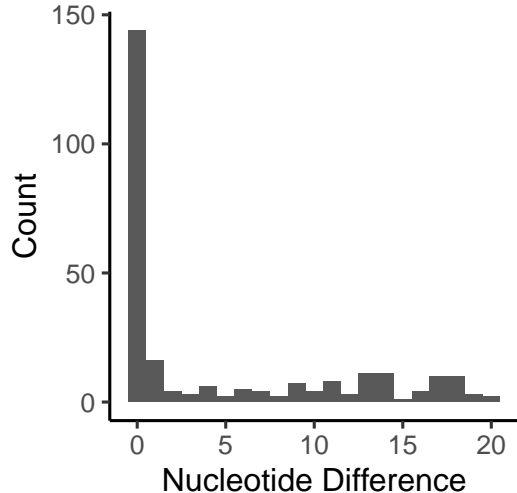
IGHV1-46*01

703 sequences assigned
306 (43.5%) exact matches, in which:
302 unique CDR3
7 unique J



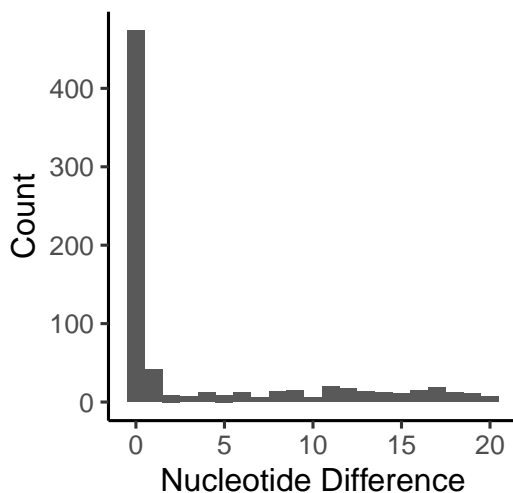
IGHV1-3*01

359 sequences assigned
144 (40.1%) exact matches, in which:
143 unique CDR3
6 unique J



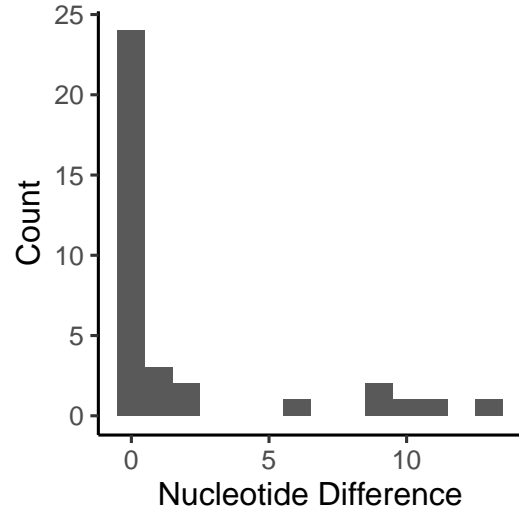
IGHV1-18*01

901 sequences assigned
474 (52.6%) exact matches, in which:
472 unique CDR3
7 unique J



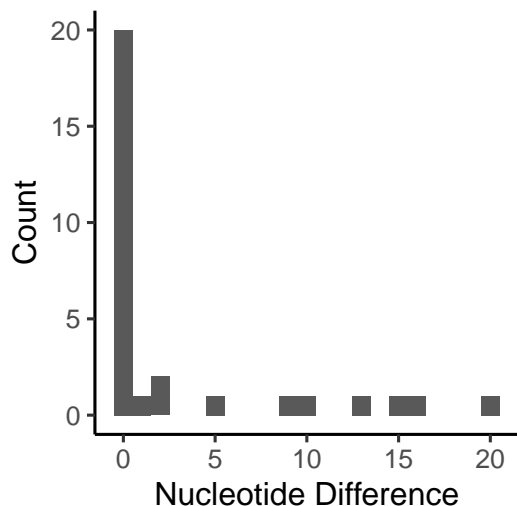
IGHV1-58*01

35 sequences assigned
24 (68.6%) exact matches, in which:
24 unique CDR3
5 unique J



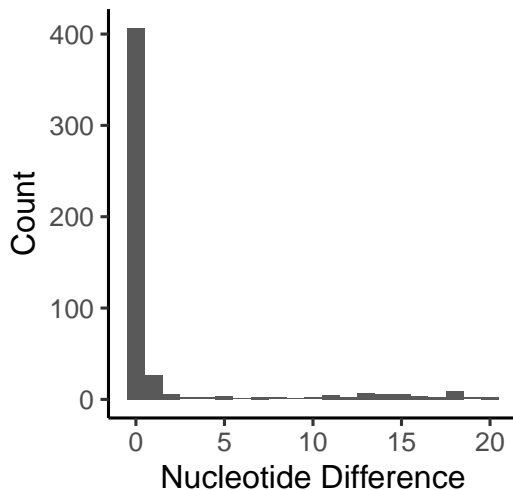
IGHV1-58*02

37 sequences assigned
20 (54.1%) exact matches, in which:
20 unique CDR3
4 unique J



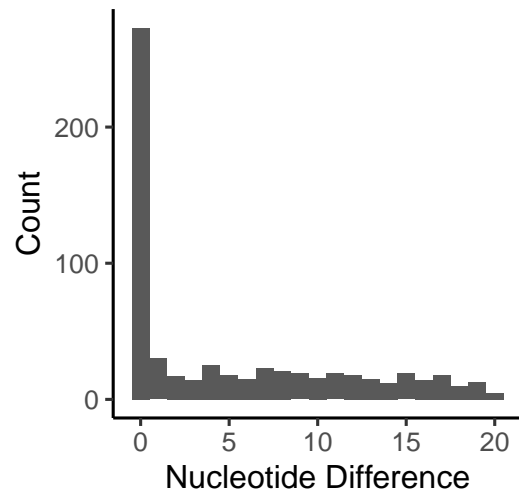
IGHV1-69*04

578 sequences assigned
407 (70.4%) exact matches, in which:
404 unique CDR3
6 unique J



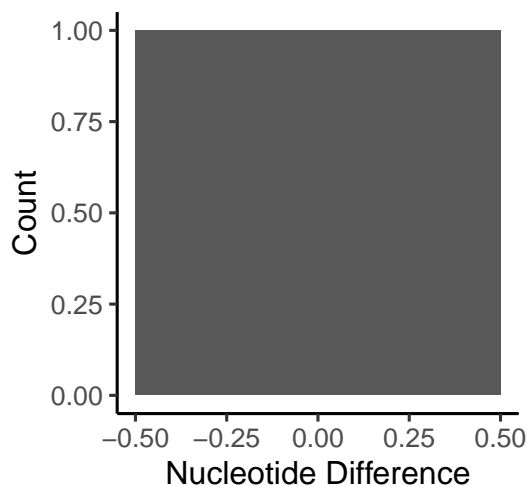
IGHV2-5*02

687 sequences assigned
273 (39.7%) exact matches, in which:
270 unique CDR3
6 unique J



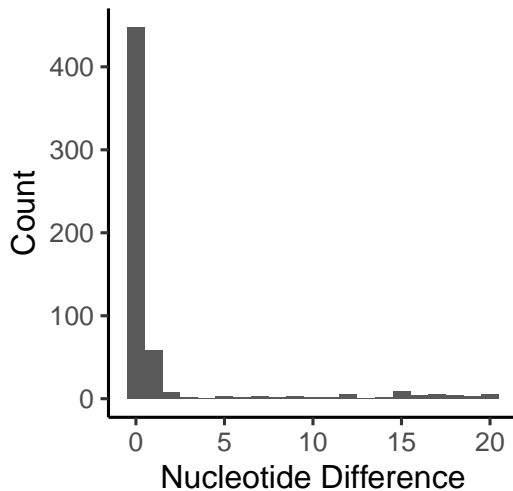
IGHV1-68*02

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



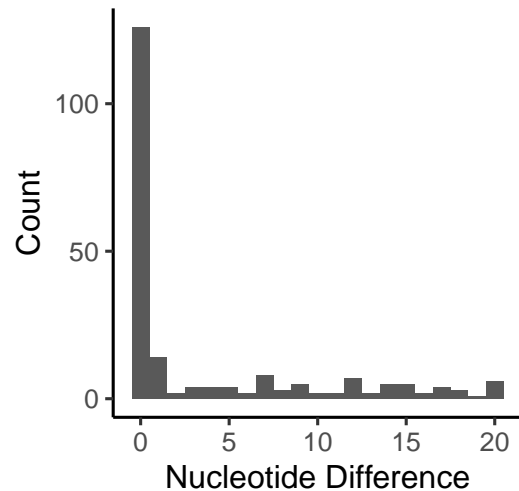
IGHV1-69*06

669 sequences assigned
448 (67%) exact matches, in which:
445 unique CDR3
7 unique J



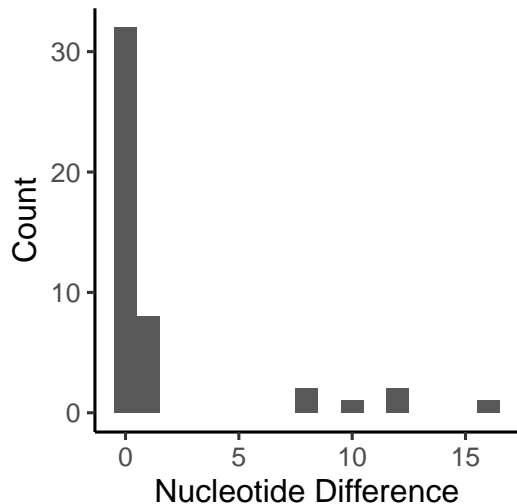
IGHV2-26*01

230 sequences assigned
126 (54.8%) exact matches, in which:
125 unique CDR3
6 unique J



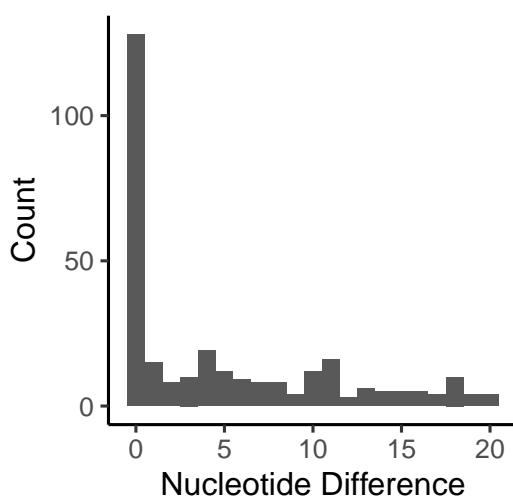
IGHV1-69-2*01

53 sequences assigned
32 (60.4%) exact matches, in which:
31 unique CDR3
5 unique J



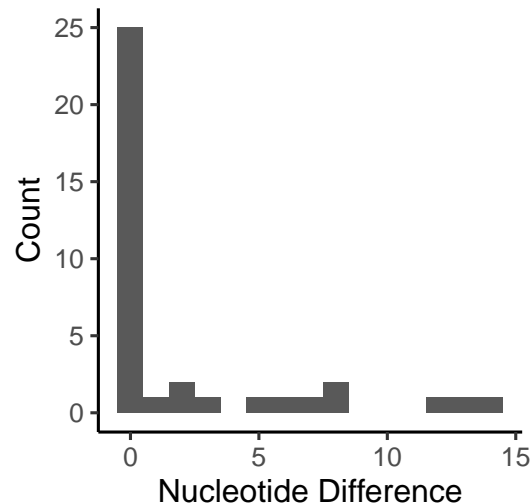
IGHV2-5*01

322 sequences assigned
128 (39.8%) exact matches, in which:
128 unique CDR3
6 unique J



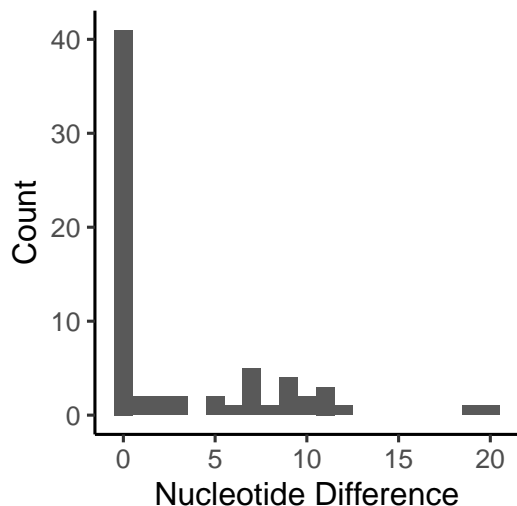
IGHV2-70*01

41 sequences assigned
25 (61%) exact matches, in which:
25 unique CDR3
4 unique J



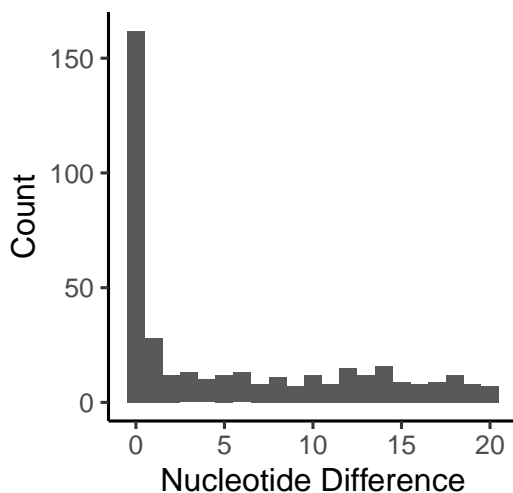
IGHV2-70*15

75 sequences assigned
41 (54.7%) exact matches, in which:
41 unique CDR3
5 unique J



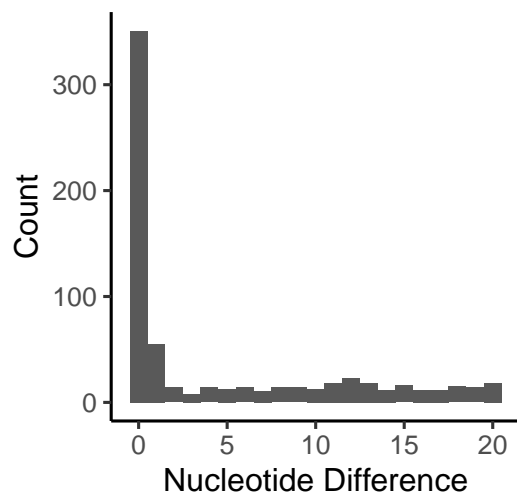
IGHV3-11*01

483 sequences assigned
162 (33.5%) exact matches, in which:
162 unique CDR3
5 unique J



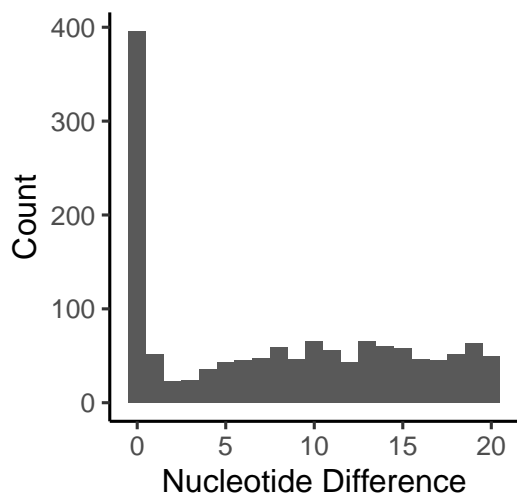
IGHV3-15*01

846 sequences assigned
351 (41.5%) exact matches, in which:
345 unique CDR3
7 unique J



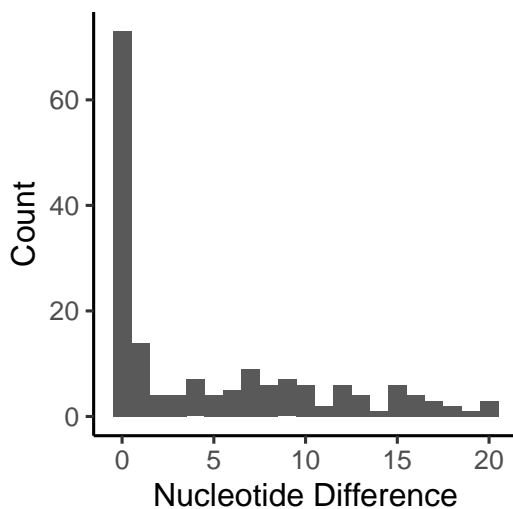
IGHV3-7*01

1798 sequences assigned
396 (22%) exact matches, in which:
393 unique CDR3
7 unique J



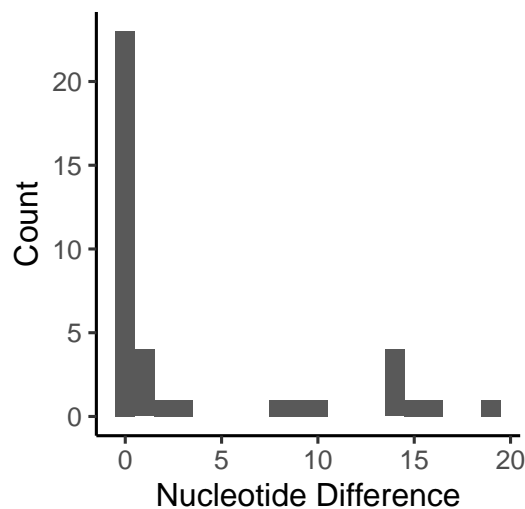
IGHV3-11*04

236 sequences assigned
73 (30.9%) exact matches, in which:
73 unique CDR3
5 unique J



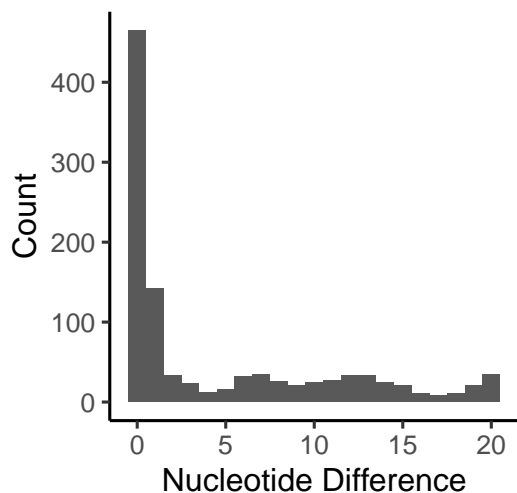
IGHV3-20*01

48 sequences assigned
23 (47.9%) exact matches, in which:
23 unique CDR3
5 unique J



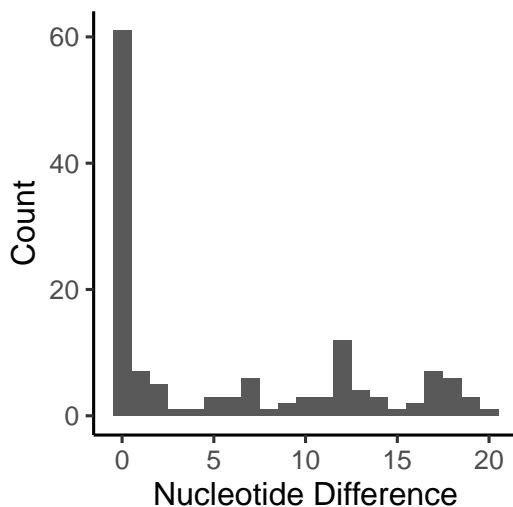
IGHV3-9*01

1211 sequences assigned
465 (38.4%) exact matches, in which:
455 unique CDR3
6 unique J



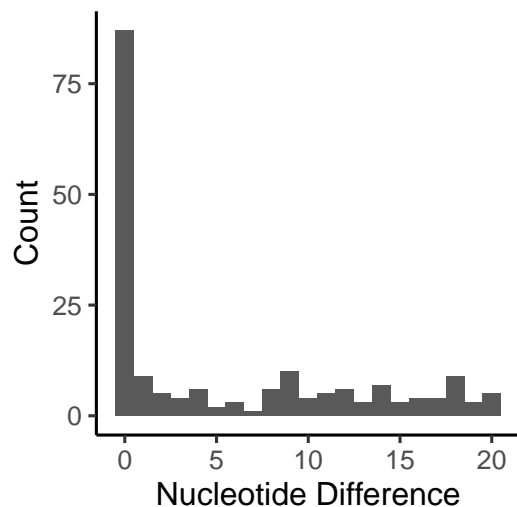
IGHV3-13*01

165 sequences assigned
61 (37%) exact matches, in which:
60 unique CDR3
5 unique J



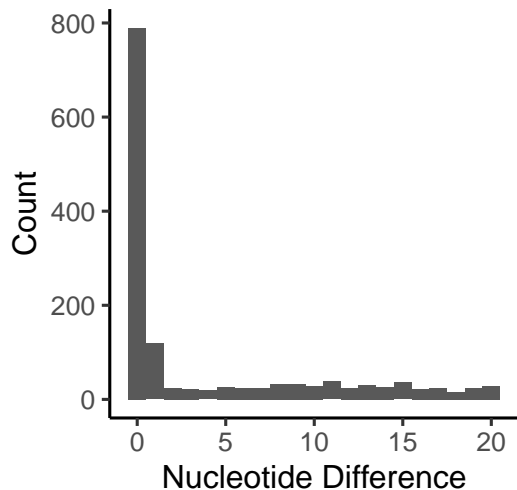
IGHV3-20*04

224 sequences assigned
87 (38.8%) exact matches, in which:
84 unique CDR3
5 unique J



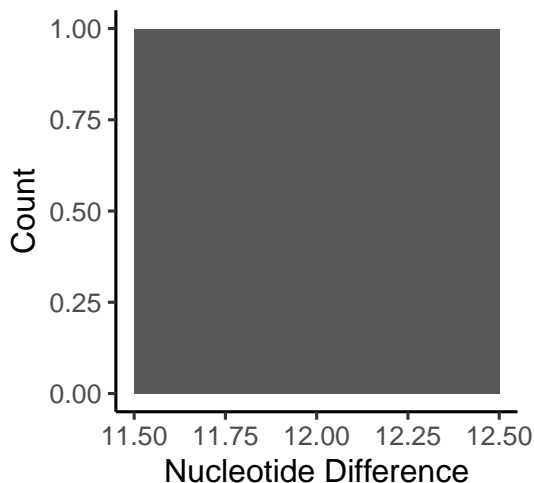
IGHV3-21*01

1649 sequences assigned
790 (47.9%) exact matches, in which:
780 unique CDR3
7 unique J



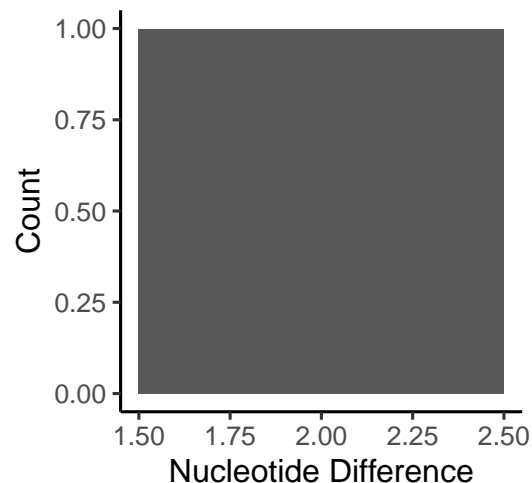
IGHV3-41*02

1 sequences assigned
No exact matches.



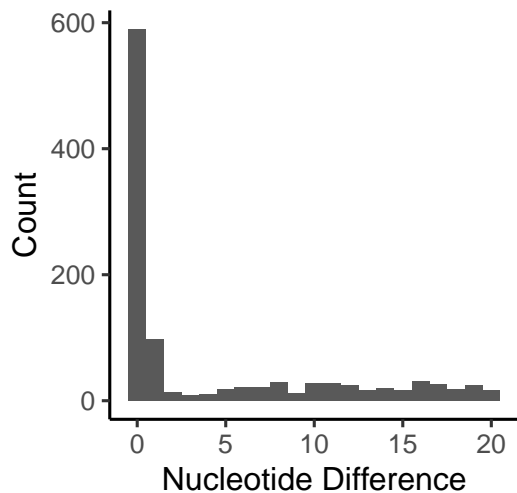
IGHV3-47*02

1 sequences assigned
No exact matches.



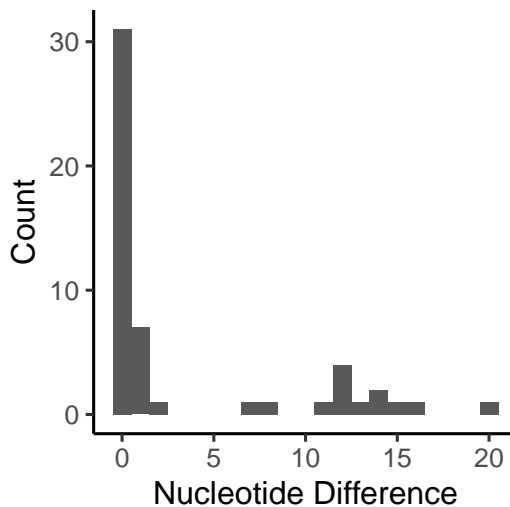
IGHV3-30-3*01

1275 sequences assigned
590 (46.3%) exact matches, in which:
582 unique CDR3
6 unique J



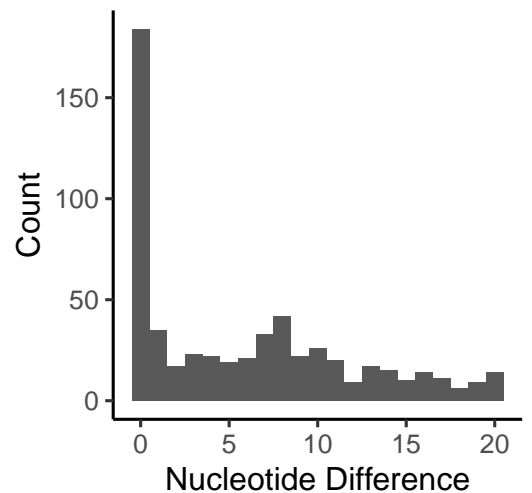
IGHV3-43*01

59 sequences assigned
31 (52.5%) exact matches, in which:
28 unique CDR3
4 unique J



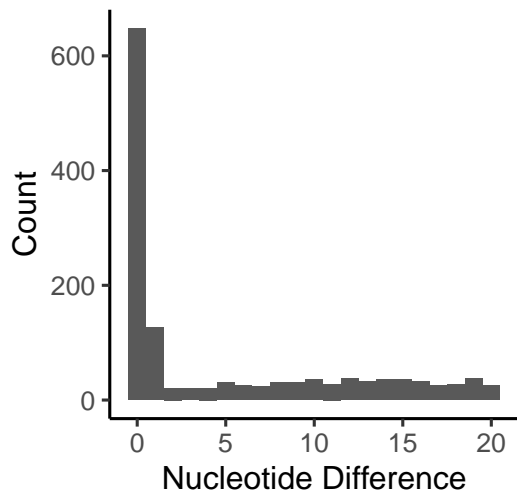
IGHV3-48*02

724 sequences assigned
184 (25.4%) exact matches, in which:
182 unique CDR3
6 unique J



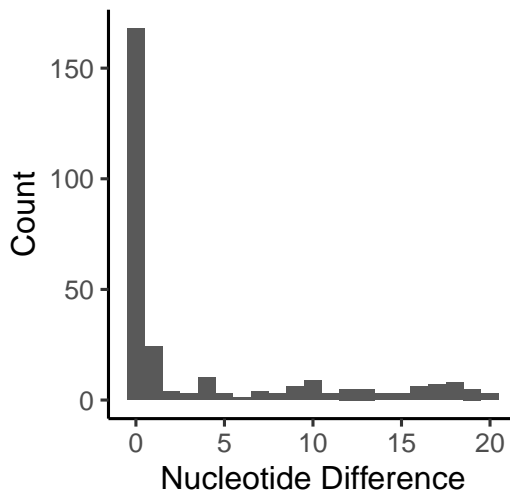
IGHV3-33*01

1608 sequences assigned
648 (40.3%) exact matches, in which:
643 unique CDR3
7 unique J



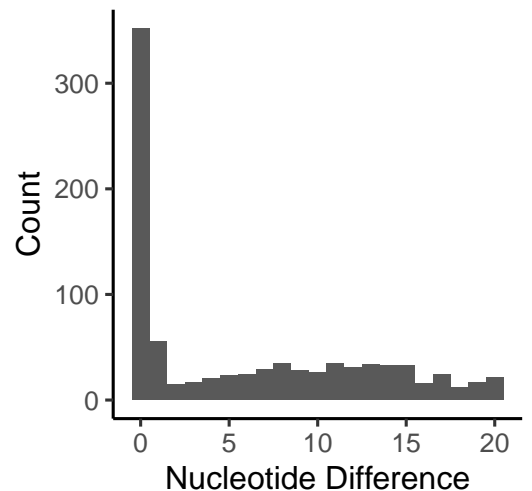
IGHV3-43*02

354 sequences assigned
168 (47.5%) exact matches, in which:
167 unique CDR3
5 unique J



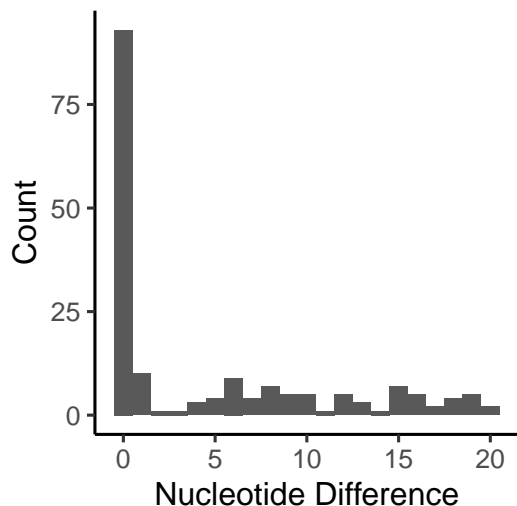
IGHV3-48*03

1027 sequences assigned
352 (34.3%) exact matches, in which:
351 unique CDR3
6 unique J



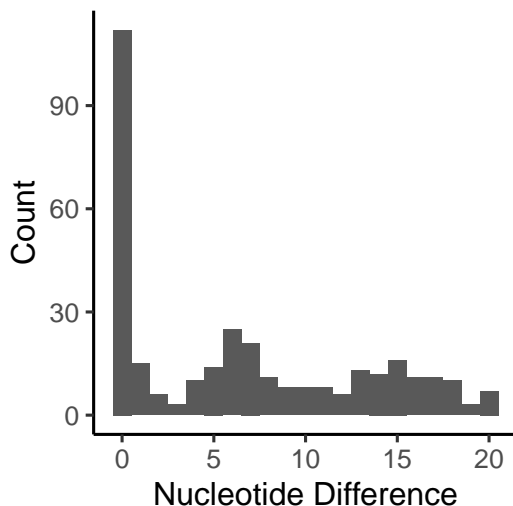
IGHV3-49*04

204 sequences assigned
93 (45.6%) exact matches, in which:
91 unique CDR3
5 unique J



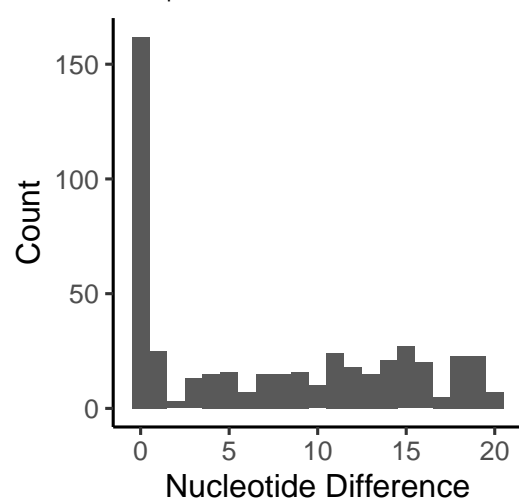
IGHV3-53*01

469 sequences assigned
112 (23.9%) exact matches, in which:
111 unique CDR3
6 unique J



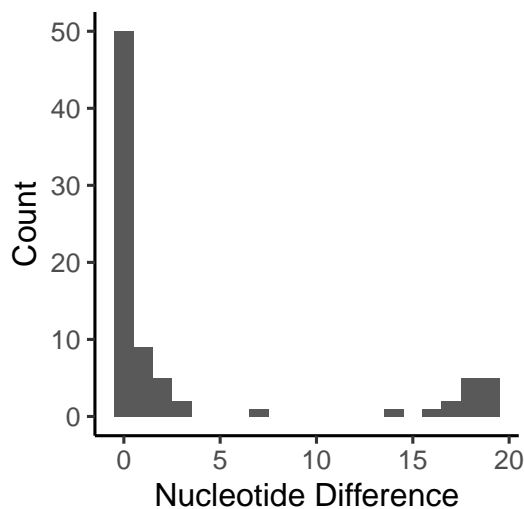
IGHV3-66*01

641 sequences assigned
162 (25.3%) exact matches, in which:
159 unique CDR3
6 unique J



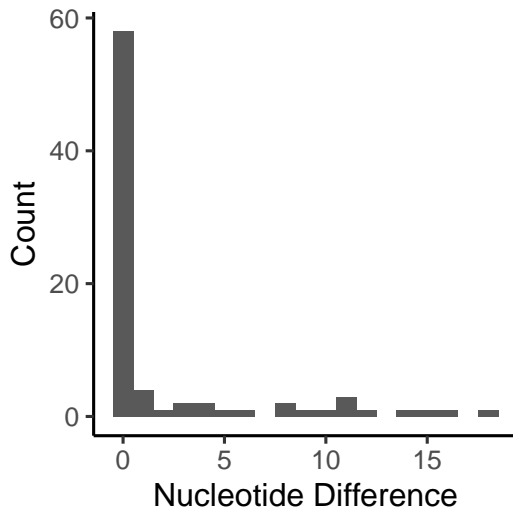
IGHV3-49*05

110 sequences assigned
50 (45.5%) exact matches, in which:
50 unique CDR3
6 unique J



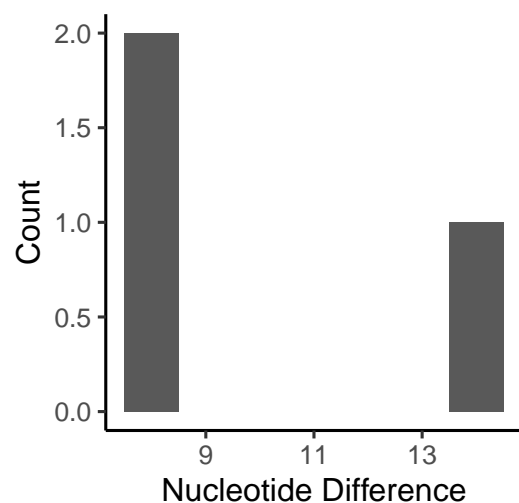
IGHV3-53*04

88 sequences assigned
58 (65.9%) exact matches, in which:
58 unique CDR3
5 unique J



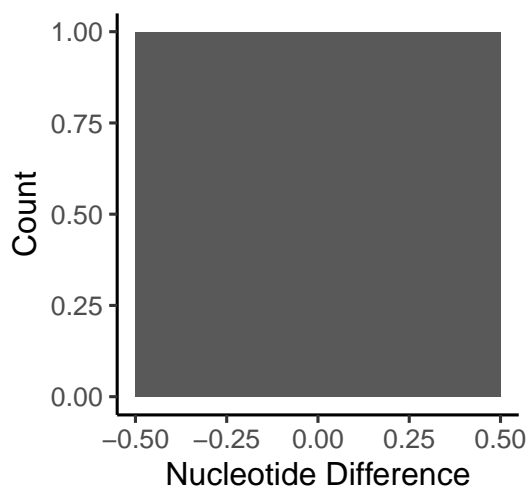
IGHV3-69-1*01

6 sequences assigned
No exact matches.



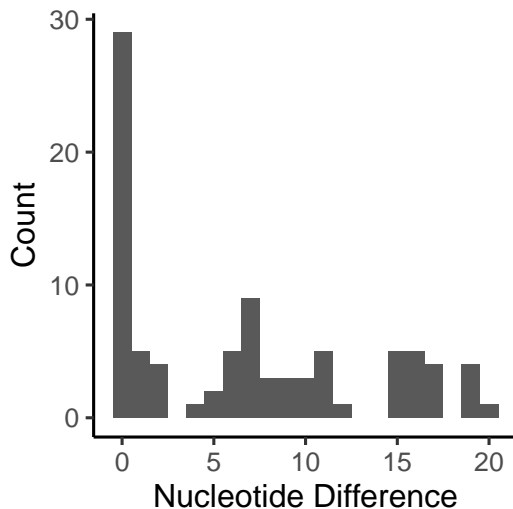
IGHV3-52*01

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



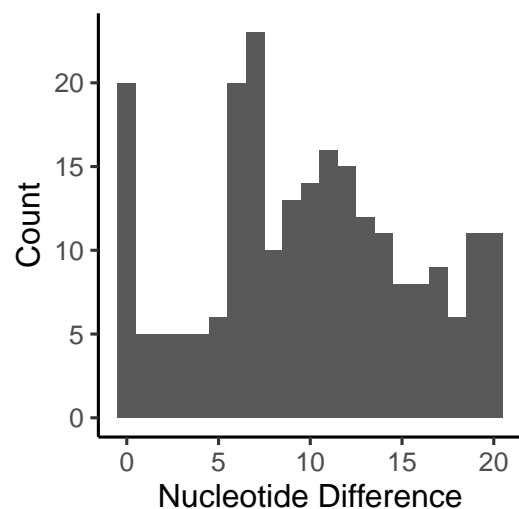
IGHV3-64*01

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



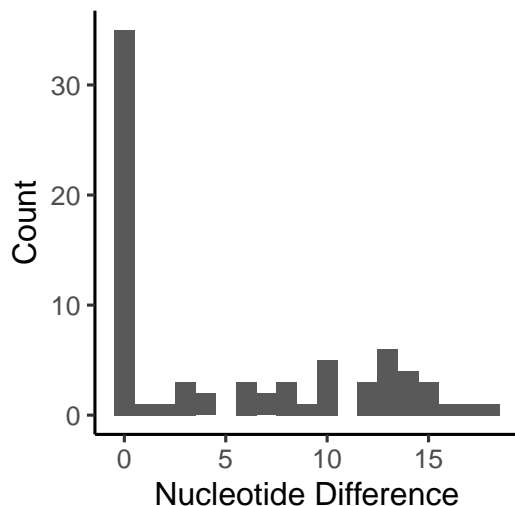
IGHV3-72*01

312 sequences assigned
20 (6.4%) exact matches, in which:
20 unique CDR3
6 unique J



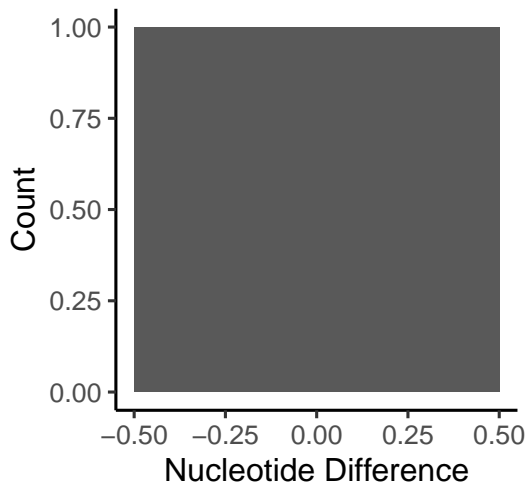
IGHV3-73*01

92 sequences assigned
35 (38%) exact matches, in which:
33 unique CDR3
4 unique J



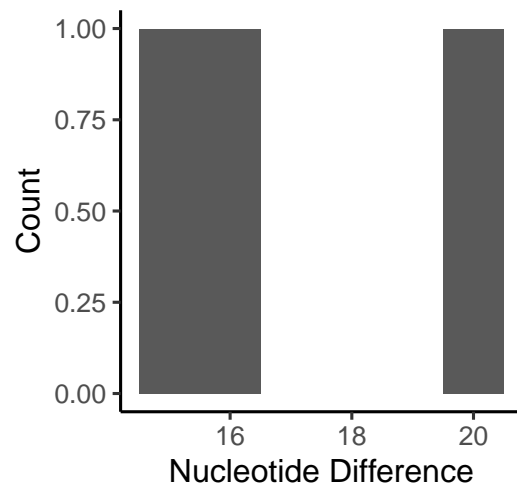
IGHV3-64D*06

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



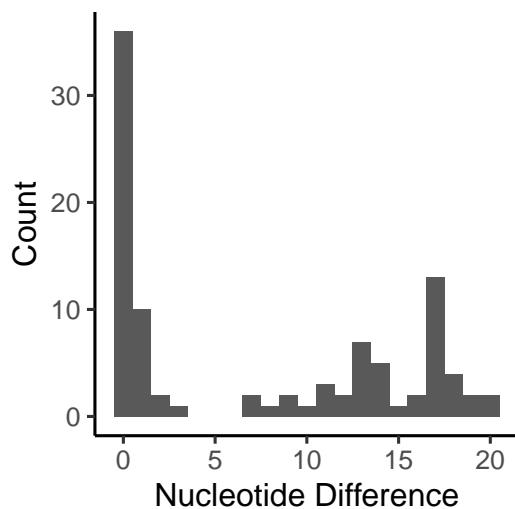
IGHV4-28*01

3 sequences assigned
No exact matches.



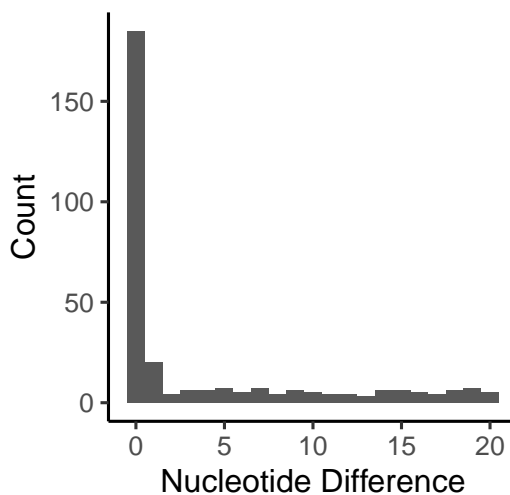
IGHV3-73*02

118 sequences assigned
36 (30.5%) exact matches, in which:
36 unique CDR3
5 unique J



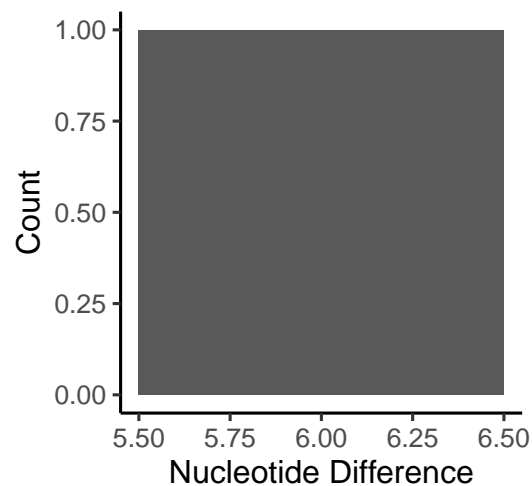
IGHV4-4*02

371 sequences assigned
185 (49.9%) exact matches, in which:
183 unique CDR3
6 unique J



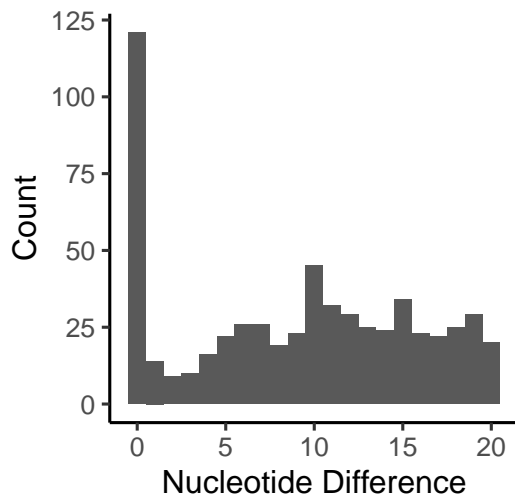
IGHV4-28*07

1 sequences assigned
No exact matches.



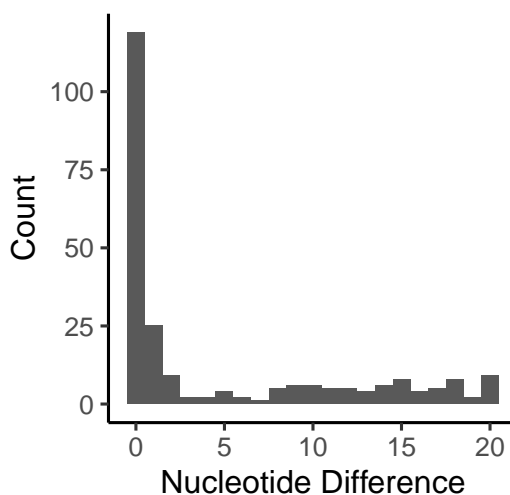
IGHV3-74*01

791 sequences assigned
121 (15.3%) exact matches, in which:
119 unique CDR3
7 unique J



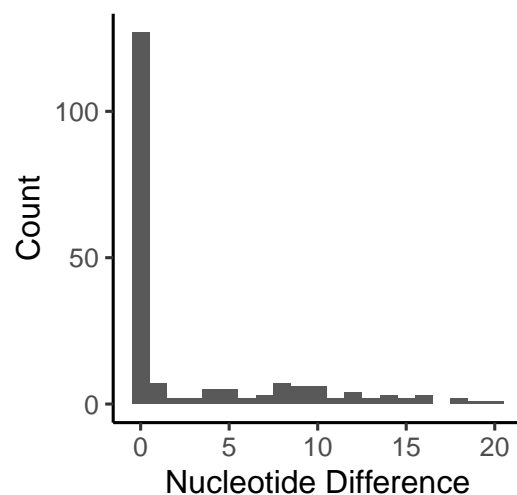
IGHV4-4*07

296 sequences assigned
119 (40.2%) exact matches, in which:
116 unique CDR3
6 unique J



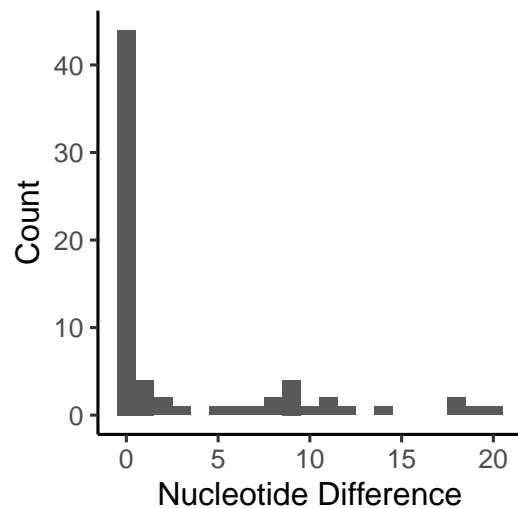
IGHV4-30-4*01

242 sequences assigned
127 (52.5%) exact matches, in which:
125 unique CDR3
6 unique J



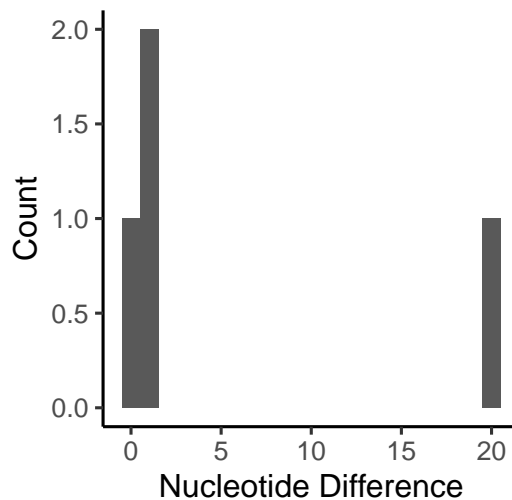
IGHV4-30-2*01

74 sequences assigned
44 (59.5%) exact matches, in which:
44 unique CDR3
5 unique J



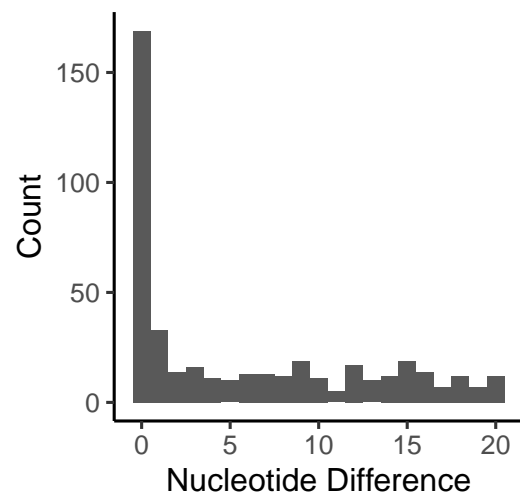
IGHV4-38-2*02

6 sequences assigned
1 (16.7%) exact matches, in which:
1 unique CDR3
1 unique J



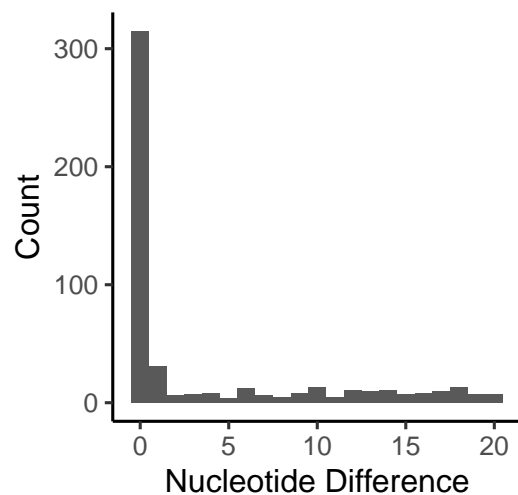
IGHV4-59*08

510 sequences assigned
169 (33.1%) exact matches, in which:
167 unique CDR3
6 unique J



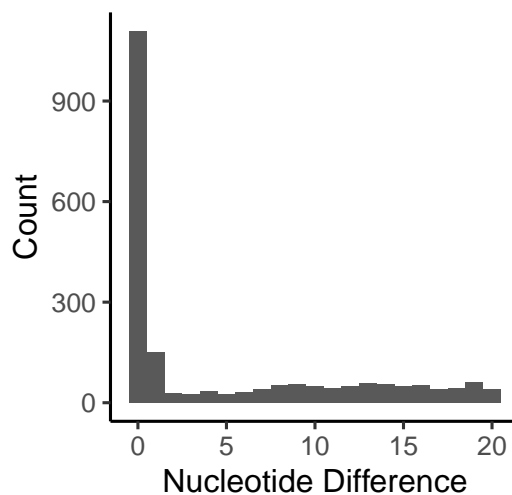
IGHV4-31*03

597 sequences assigned
315 (52.8%) exact matches, in which:
314 unique CDR3
7 unique J



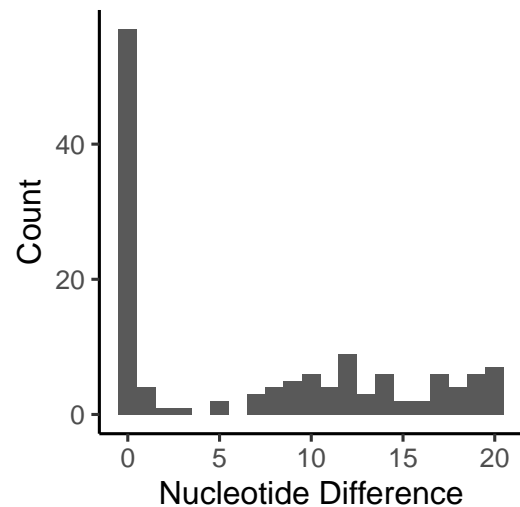
IGHV4-39*01

2532 sequences assigned
1109 (43.8%) exact matches, in which:
1102 unique CDR3
7 unique J



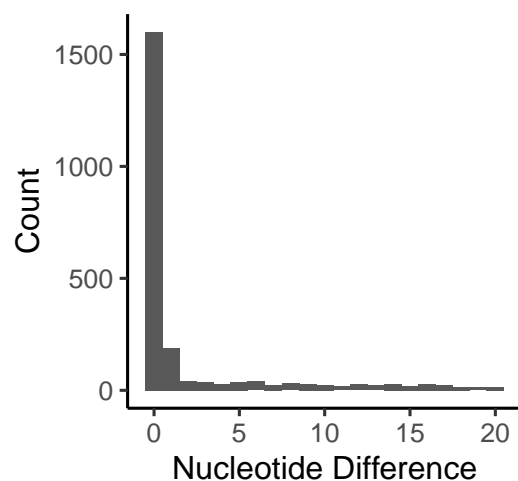
IGHV4-61*01

155 sequences assigned
57 (36.8%) exact matches, in which:
57 unique CDR3
6 unique J



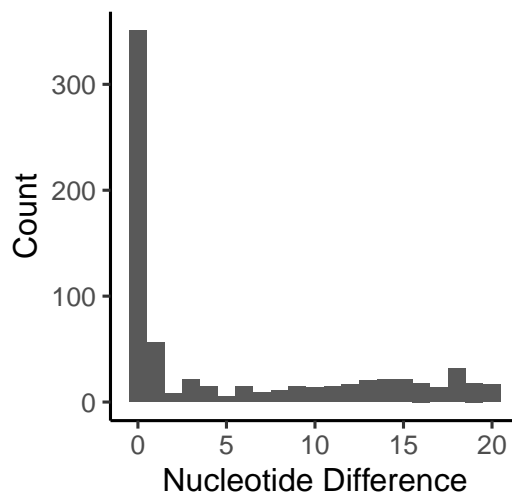
IGHV4-34*01

2458 sequences assigned
1600 (65.1%) exact matches, in which:
1576 unique CDR3
7 unique J



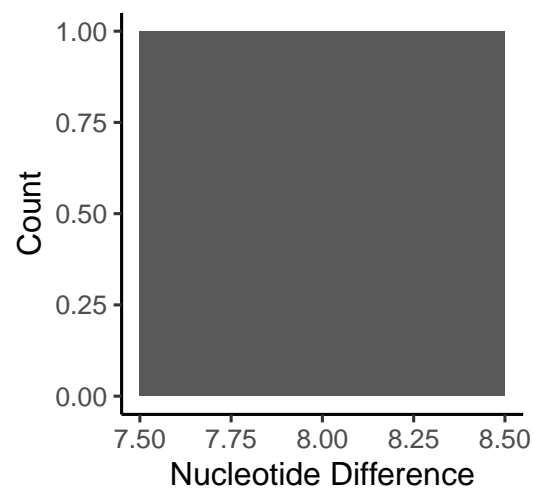
IGHV4-59*01

898 sequences assigned
351 (39.1%) exact matches, in which:
351 unique CDR3
7 unique J



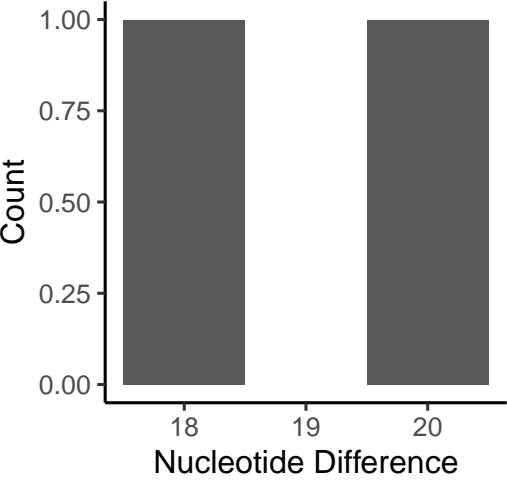
IGHV1/OR15-1*04

1 sequences assigned
No exact matches.



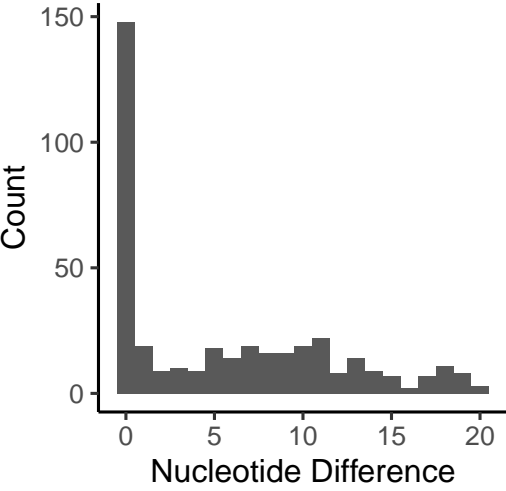
IGHV4/OR15-8*02

4 sequences assigned
No exact matches.



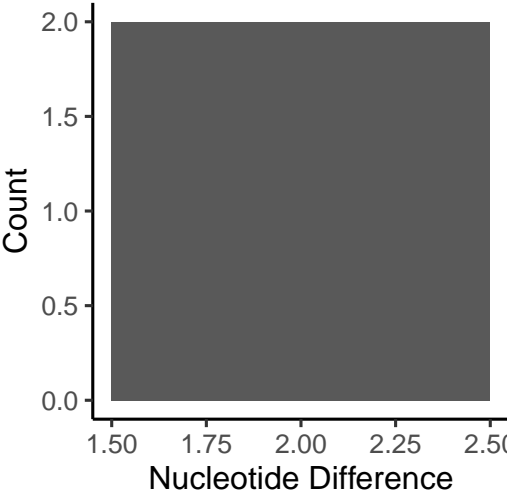
IGHV6-1*01

420 sequences assigned
148 (35.2%) exact matches, in which:
147 unique CDR3
7 unique J



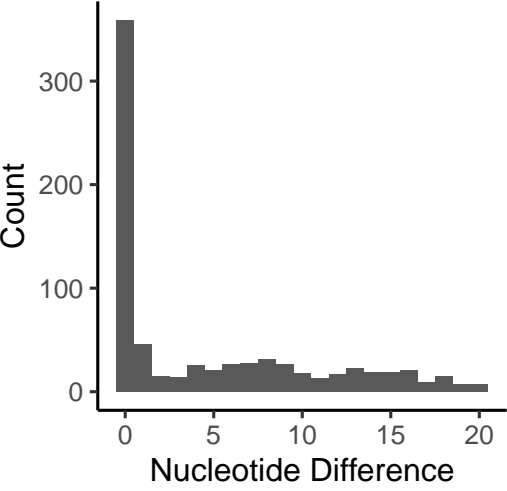
IGHV3/OR16-12*01

2 sequences assigned
No exact matches.



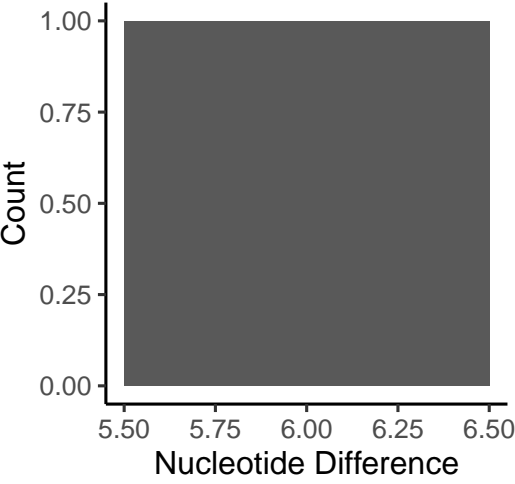
IGHV5-51*01

891 sequences assigned
359 (40.3%) exact matches, in which:
353 unique CDR3
7 unique J



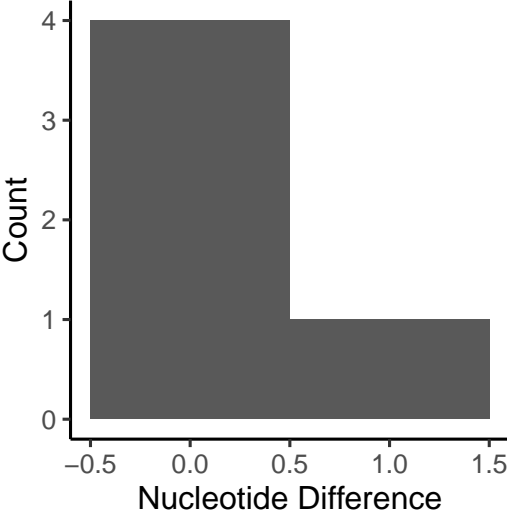
IGHV3/OR16-8*01

1 sequences assigned
No exact matches.



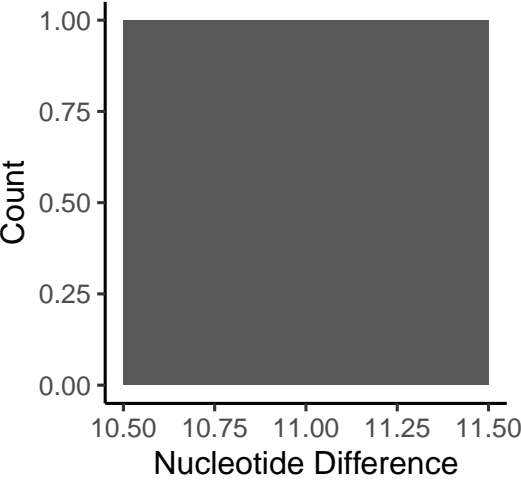
IGHV7-4-1*01

5 sequences assigned
4 (80%) exact matches, in which:
4 unique CDR3
3 unique J



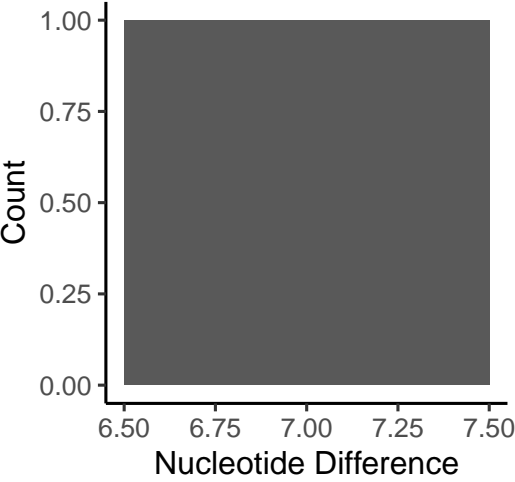
IGHV5-78*01

1 sequences assigned
No exact matches.



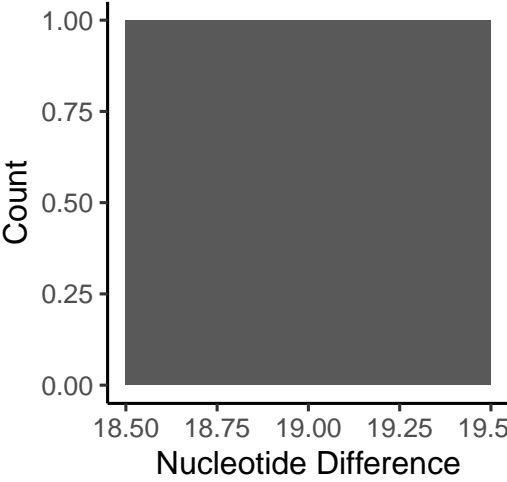
IGHV3/OR16-9*01

1 sequences assigned
No exact matches.

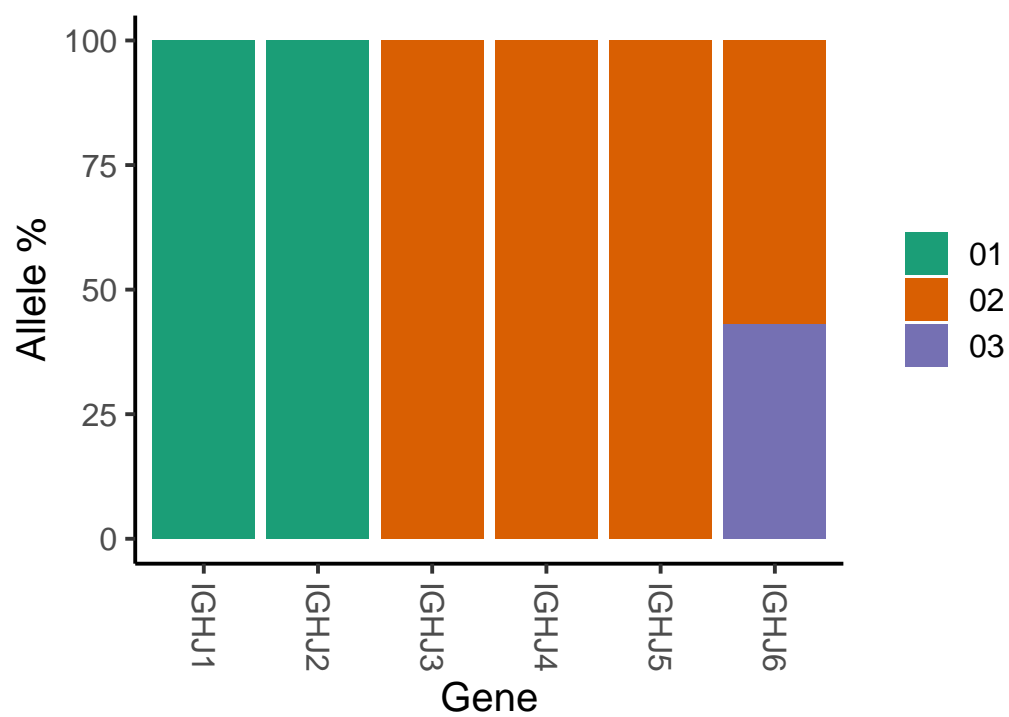


IGHV7-4-1*02

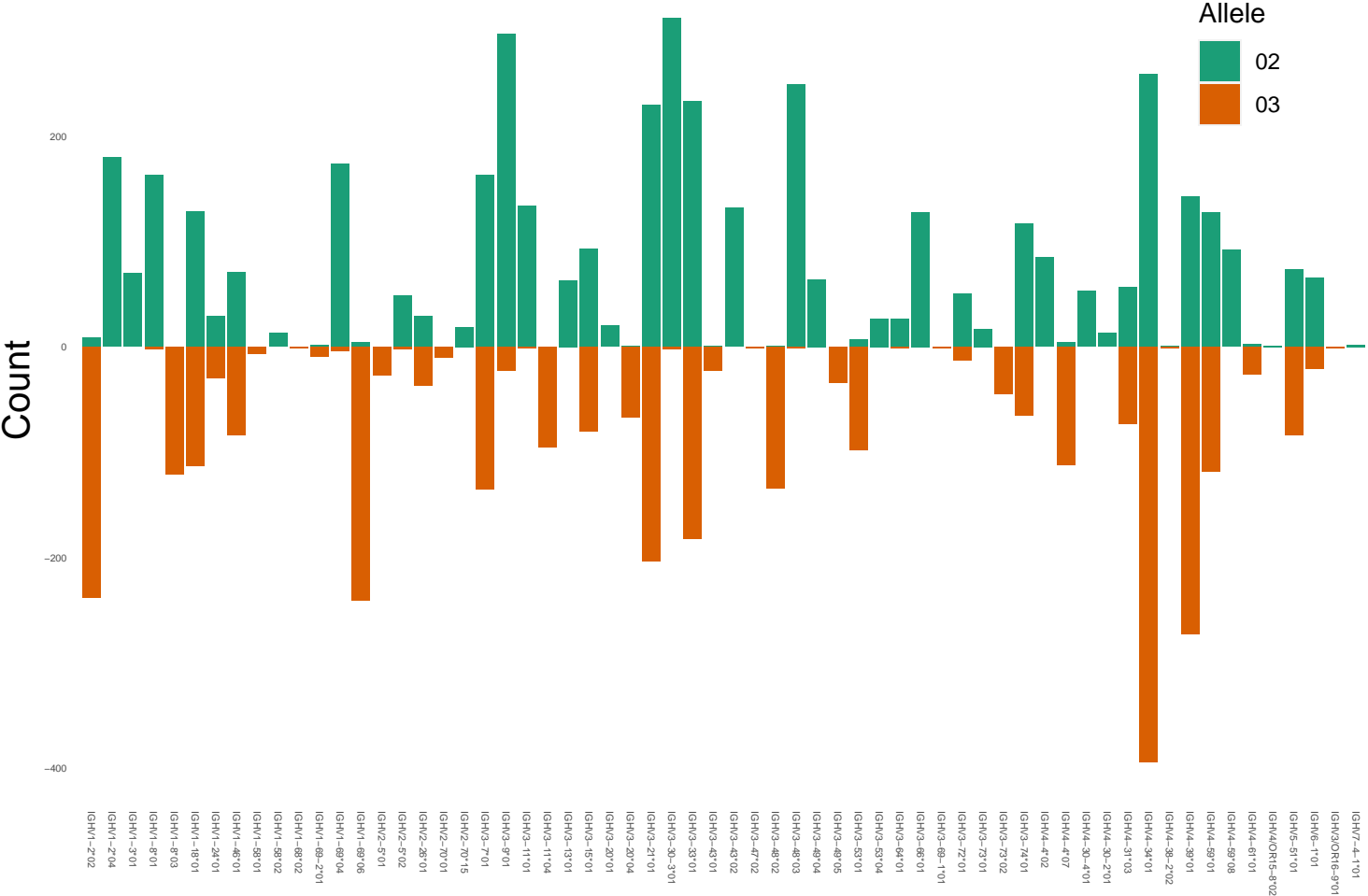
1 sequences assigned
No exact matches.



Allele Usage



Sequence Count by IGHJ6 allele usage



[illegible]