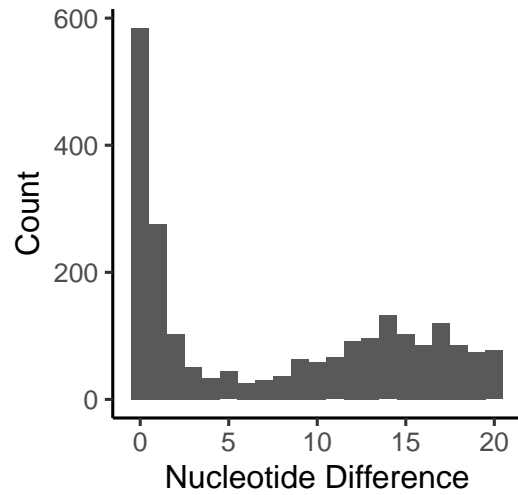


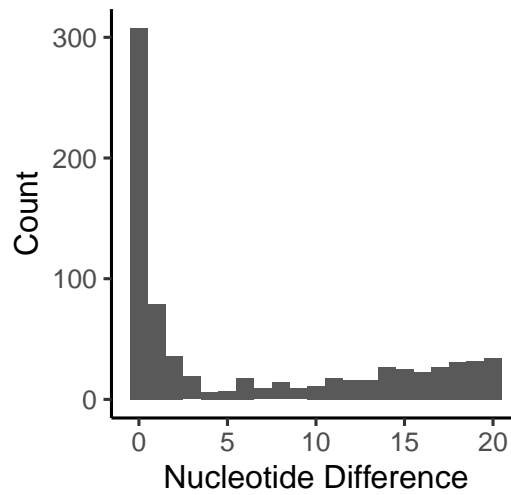
IGHV1-2*02

3345 sequences assigned
585 (17.5%) exact matches, in which:
583 unique CDR3
7 unique J



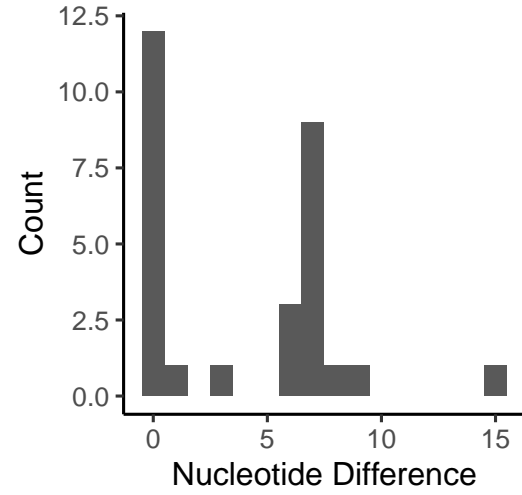
IGHV1-18*01

1195 sequences assigned
308 (25.8%) exact matches, in which:
306 unique CDR3
6 unique J



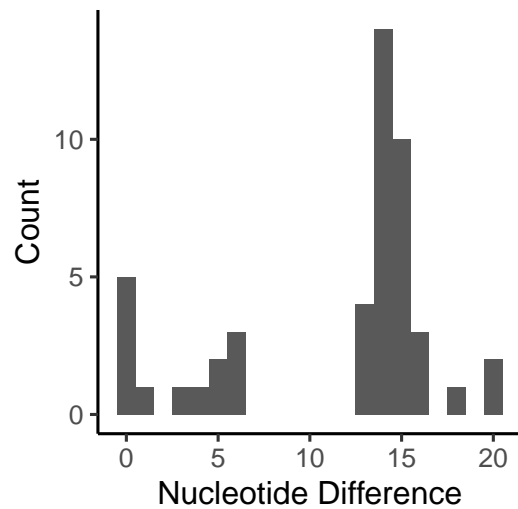
IGHV1-45*02

29 sequences assigned
12 (41.4%) exact matches, in which:
11 unique CDR3
4 unique J



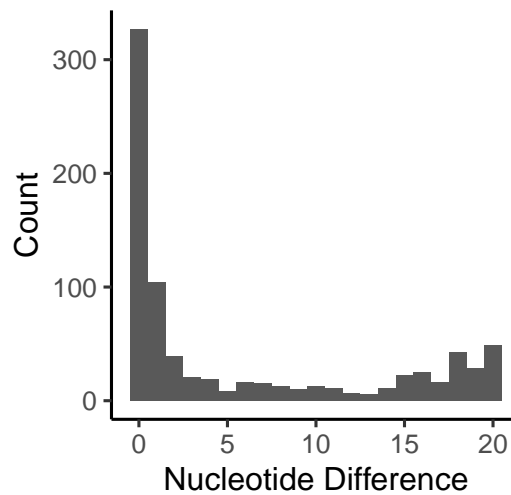
IGHV1-3*02

49 sequences assigned
5 (10.2%) exact matches, in which:
5 unique CDR3
3 unique J



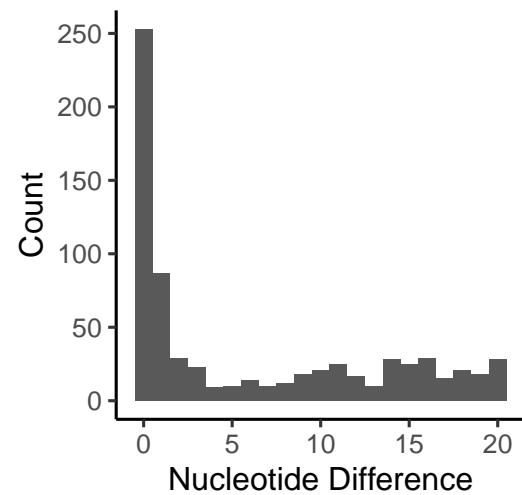
IGHV1-18*04

1353 sequences assigned
327 (24.2%) exact matches, in which:
326 unique CDR3
6 unique J



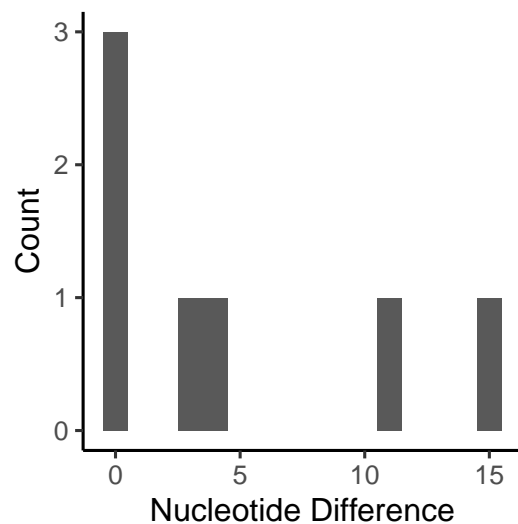
IGHV1-46*01

1100 sequences assigned
253 (23%) exact matches, in which:
253 unique CDR3
5 unique J



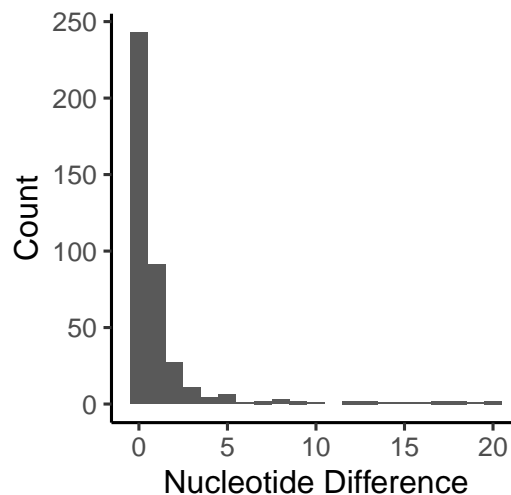
IGHV1-8*01

8 sequences assigned
3 (37.5%) exact matches, in which:
3 unique CDR3
3 unique J



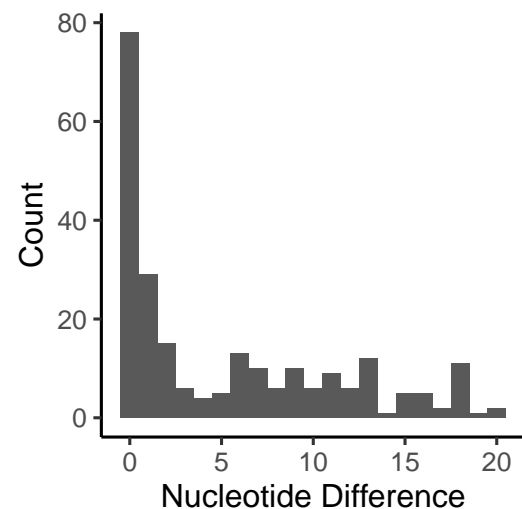
IGHV1-24*01

454 sequences assigned
243 (53.5%) exact matches, in which:
243 unique CDR3
7 unique J



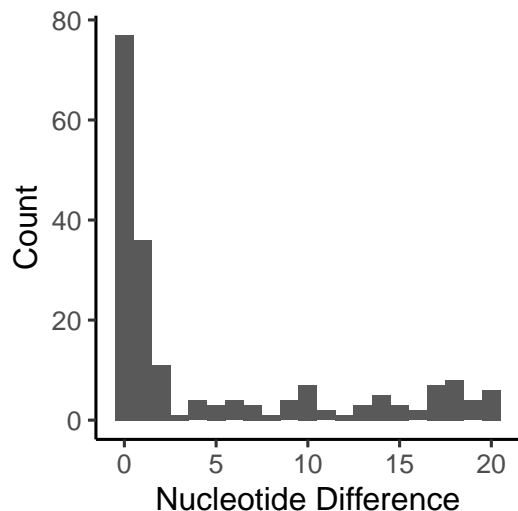
IGHV1-46*03

338 sequences assigned
78 (23.1%) exact matches, in which:
78 unique CDR3
6 unique J



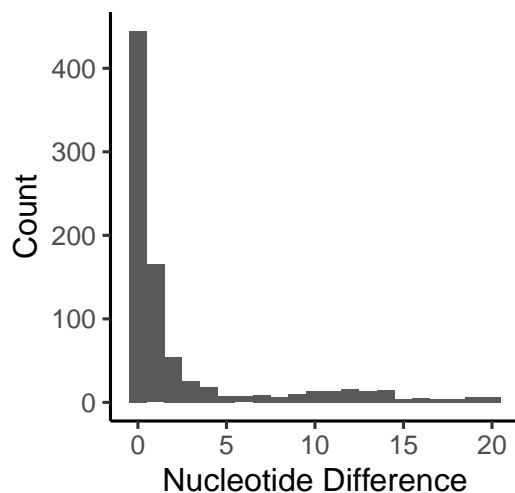
IGHV1-58*01

210 sequences assigned
77 (36.7%) exact matches, in which:
76 unique CDR3
6 unique J



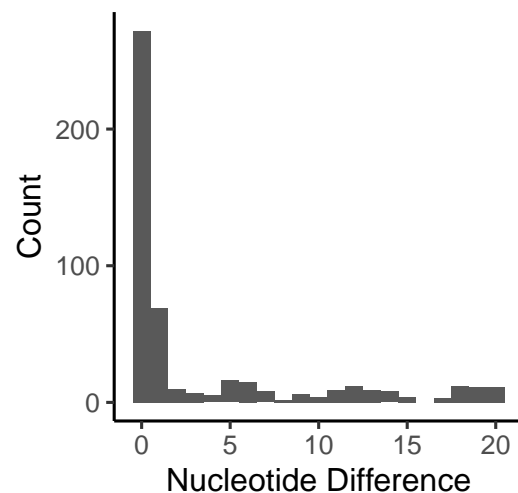
IGHV1-69*06

966 sequences assigned
445 (46.1%) exact matches, in which:
436 unique CDR3
7 unique J



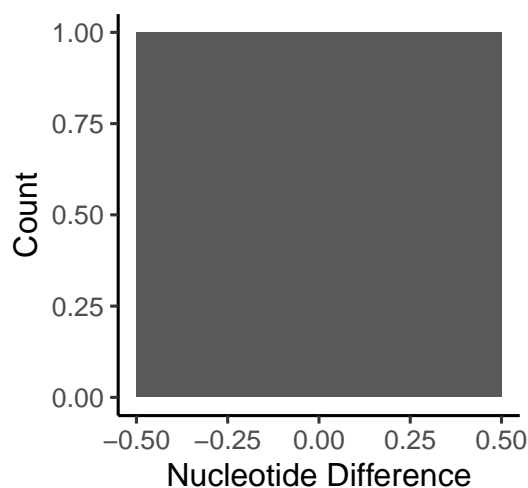
IGHV2-70*01

561 sequences assigned
272 (48.5%) exact matches, in which:
270 unique CDR3
6 unique J



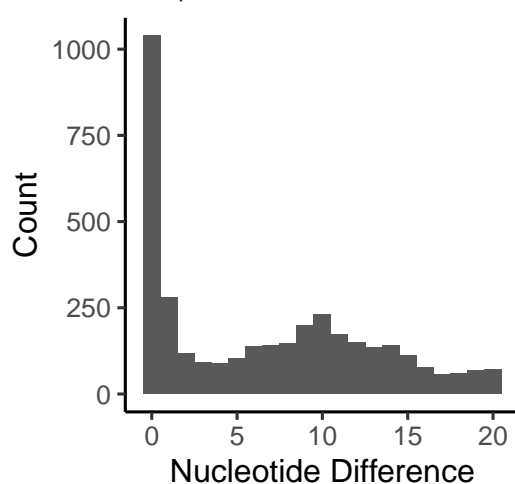
IGHV1-68*02

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



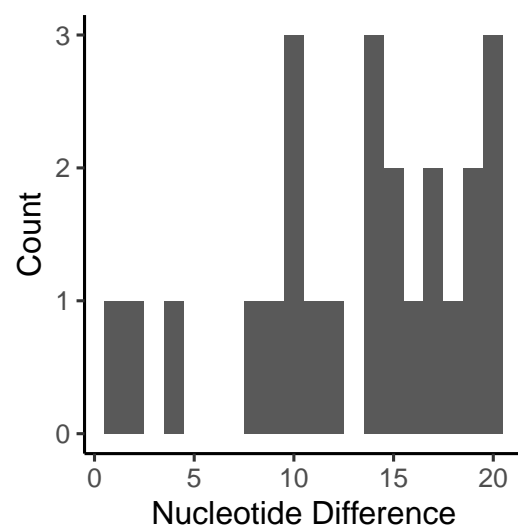
IGHV2-5*02

4535 sequences assigned
1039 (22.9%) exact matches, in which:
1026 unique CDR3
7 unique J



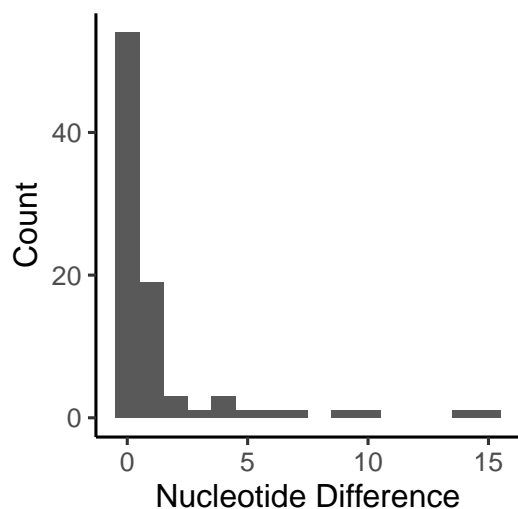
IGHV3-7*01

49 sequences assigned
No exact matches.



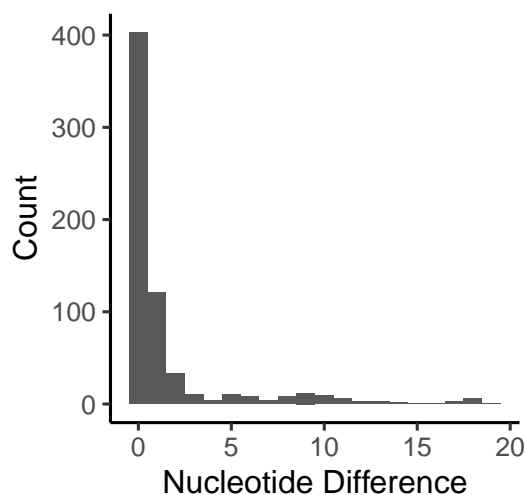
IGHV1-69-2*01

102 sequences assigned
54 (52.9%) exact matches, in which:
54 unique CDR3
4 unique J



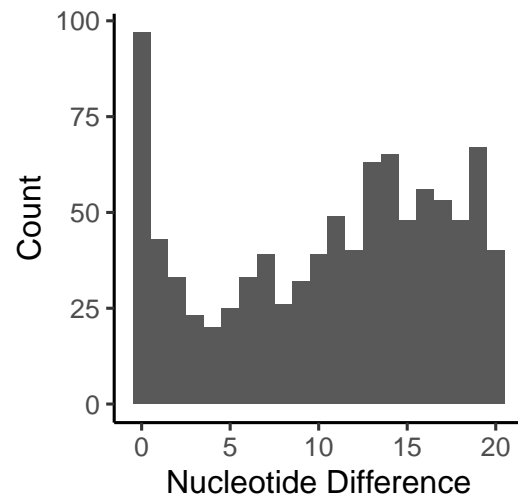
IGHV2-26*01

669 sequences assigned
403 (60.2%) exact matches, in which:
400 unique CDR3
7 unique J



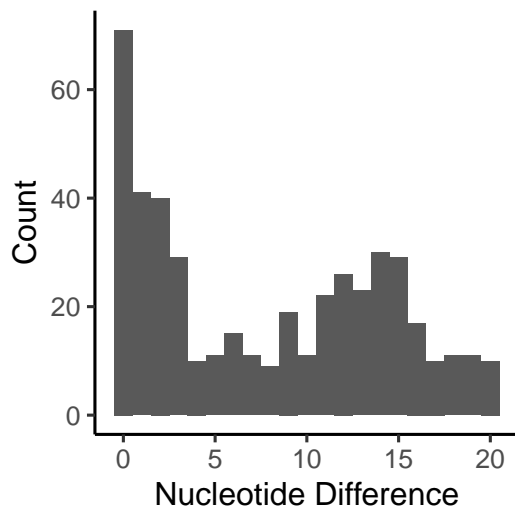
IGHV3-7*04

1316 sequences assigned
97 (7.4%) exact matches, in which:
96 unique CDR3
7 unique J



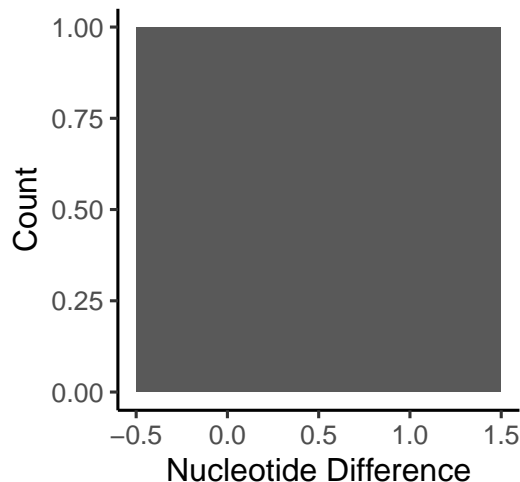
IGHV3-11*06

699 sequences assigned
71 (10.2%) exact matches, in which:
70 unique CDR3
6 unique J



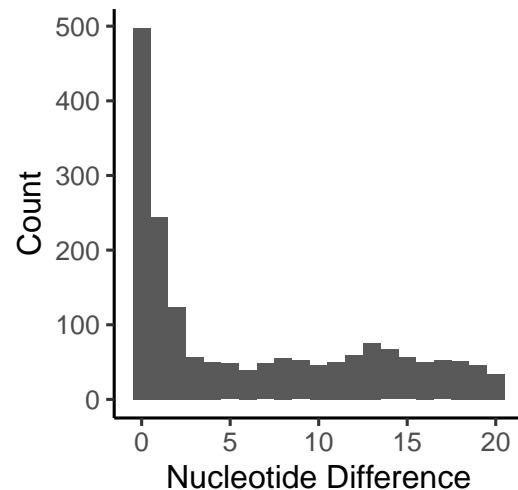
IGHV3-19*01

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



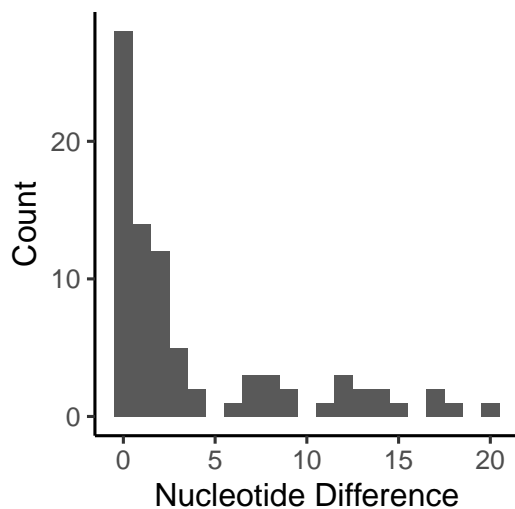
IGHV3-21*01

2466 sequences assigned
498 (20.2%) exact matches, in which:
490 unique CDR3
7 unique J



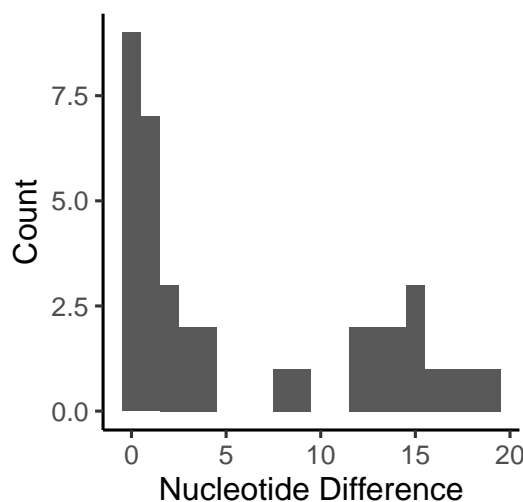
IGHV3-13*05

108 sequences assigned
28 (25.9%) exact matches, in which:
27 unique CDR3
5 unique J



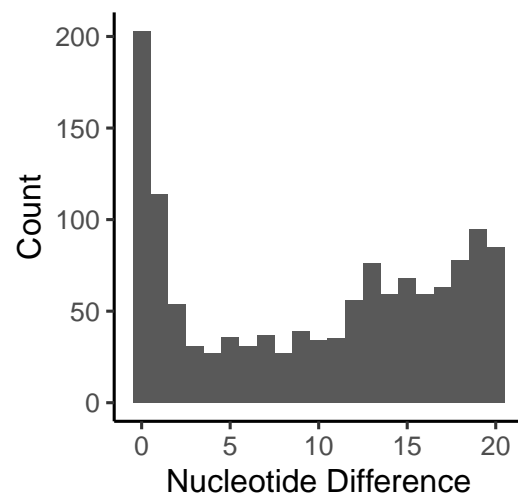
IGHV3-20*01

39 sequences assigned
9 (23.1%) exact matches, in which:
9 unique CDR3
4 unique J



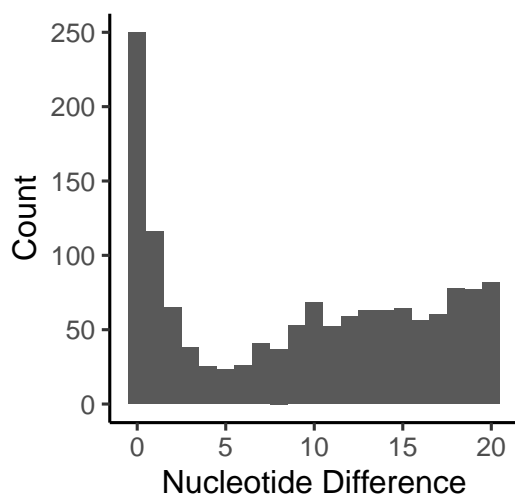
IGHV3-23*04

2102 sequences assigned
203 (9.7%) exact matches, in which:
201 unique CDR3
6 unique J



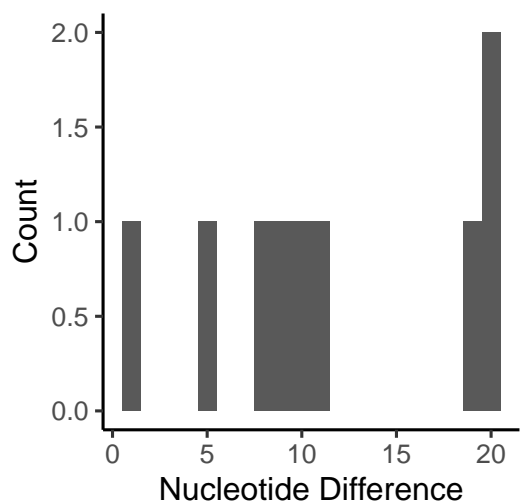
IGHV3-15*01

2063 sequences assigned
250 (12.1%) exact matches, in which:
245 unique CDR3
7 unique J



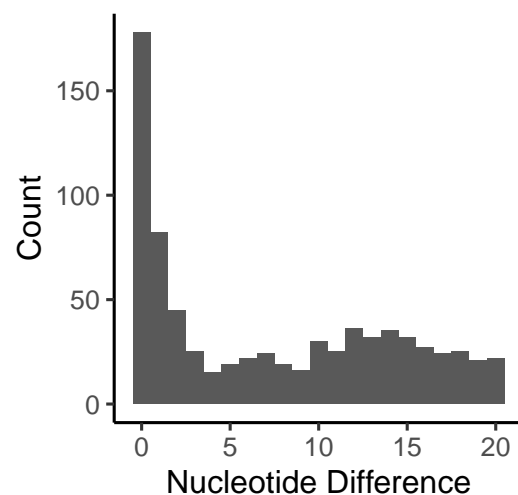
IGHV3-20*04

18 sequences assigned
No exact matches.



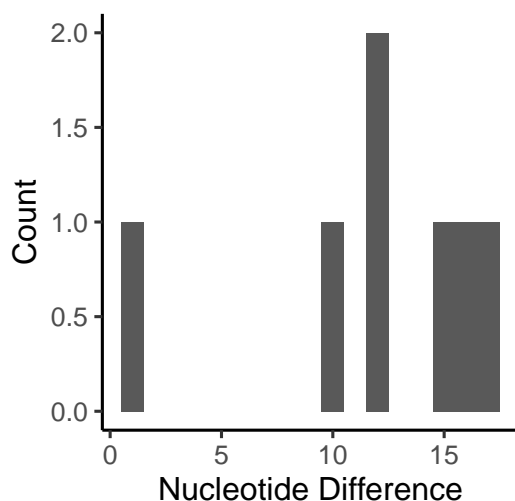
IGHV3-30-3*01

1029 sequences assigned
178 (17.3%) exact matches, in which:
177 unique CDR3
6 unique J



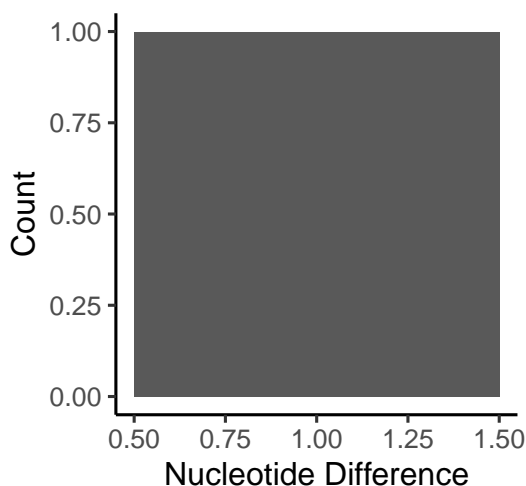
IGHV3-30-3*02

14 sequences assigned
No exact matches.



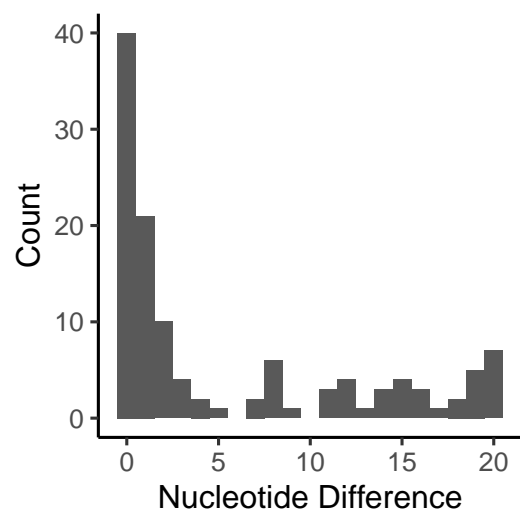
IGHV3-35*01

1 sequences assigned
No exact matches.



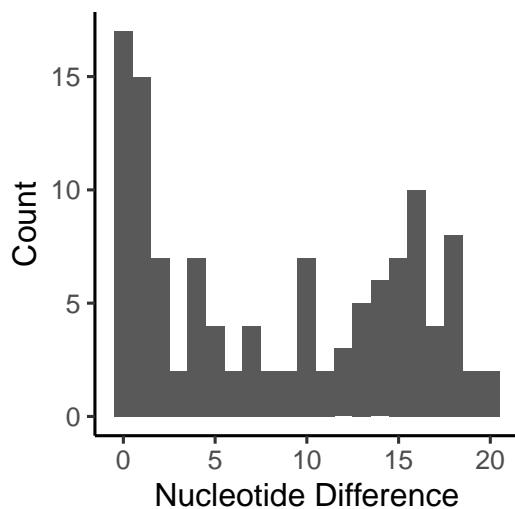
IGHV3-43*01

167 sequences assigned
40 (24%) exact matches, in which:
40 unique CDR3
6 unique J



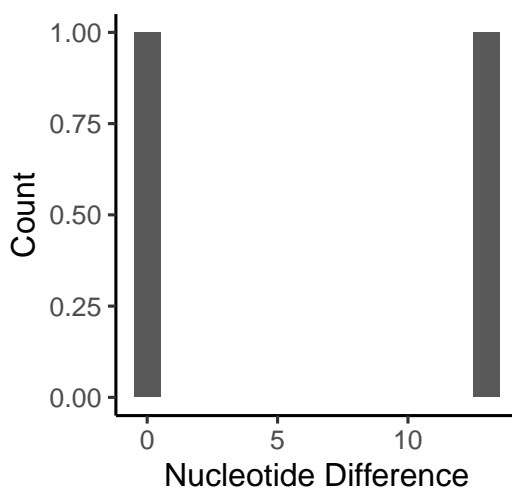
IGHV3-30-3*01_A119C

175 sequences assigned
17 (9.7%) exact matches, in which:
17 unique CDR3
4 unique J



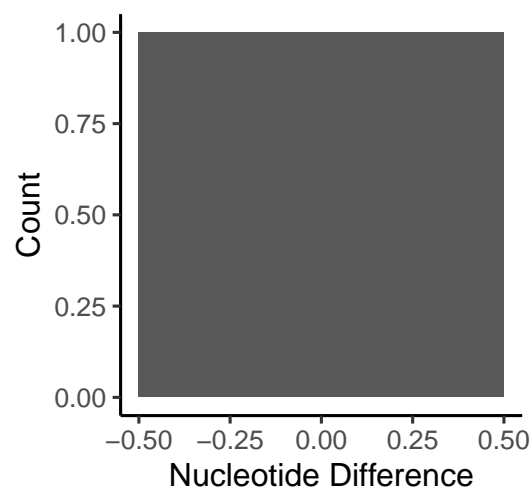
IGHV3-38-3*01

2 sequences assigned
1 (50%) exact matches, in which:
1 unique CDR3
1 unique J



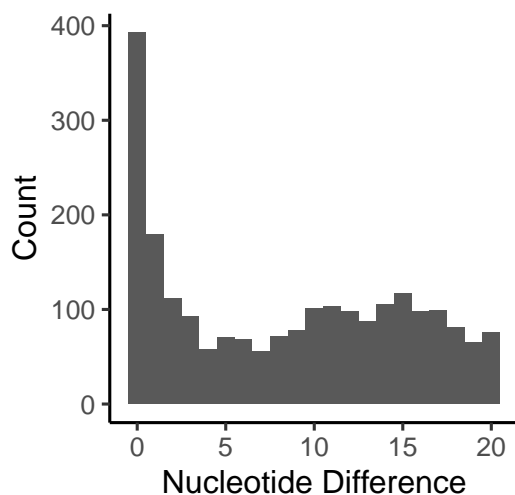
IGHV3-47*02

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



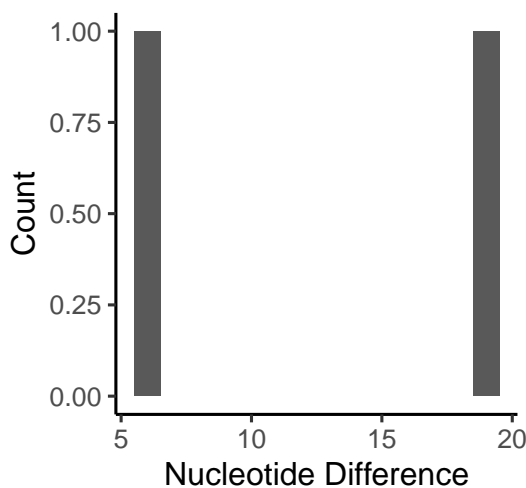
IGHV3-33*01

2927 sequences assigned
393 (13.4%) exact matches, in which:
386 unique CDR3
7 unique J



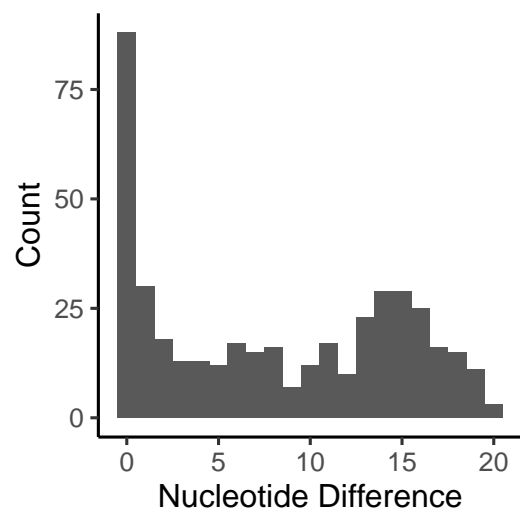
IGHV3-41*02

2 sequences assigned
No exact matches.



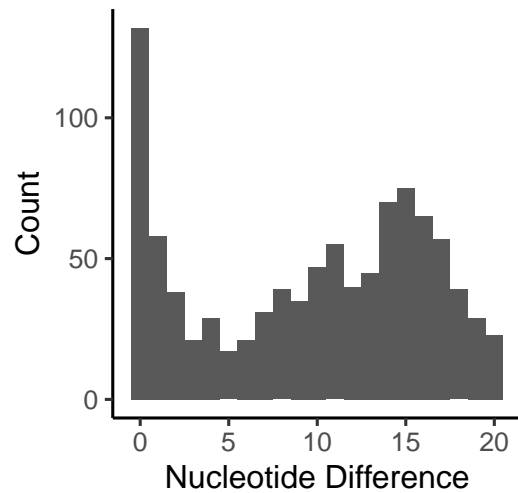
IGHV3-48*01

517 sequences assigned
88 (17%) exact matches, in which:
87 unique CDR3
6 unique J



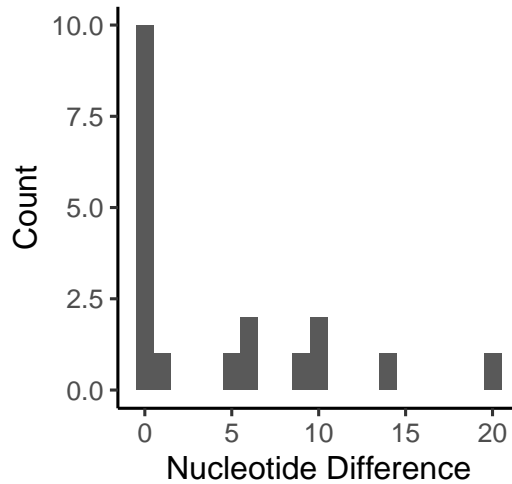
IGHV3-48*02

1268 sequences assigned
132 (10.4%) exact matches, in which:
127 unique CDR3
6 unique J



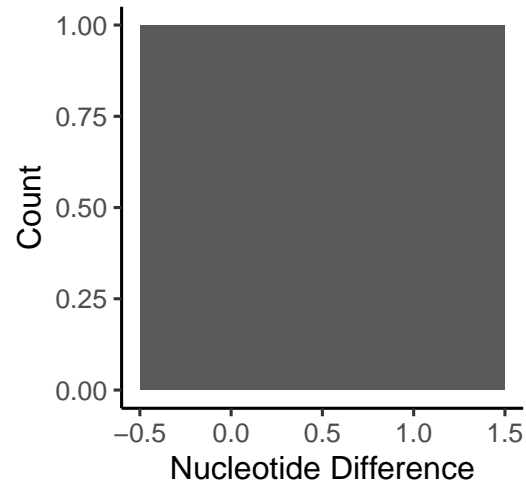
IGHV3-64*02

23 sequences assigned
10 (43.5%) exact matches, in which:
10 unique CDR3
4 unique J



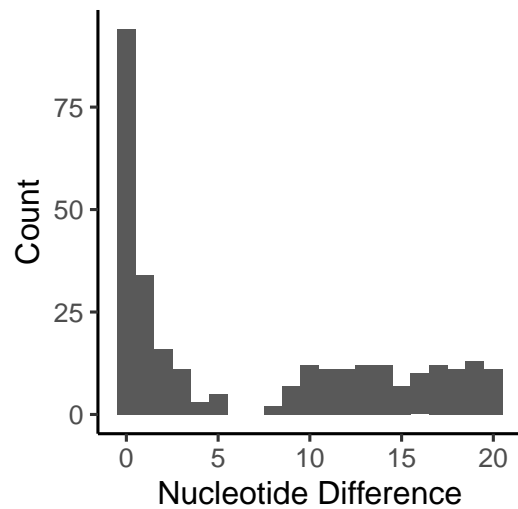
IGHV3-66*04

2 sequences assigned
1 (50%) exact matches, in which:
1 unique CDR3
1 unique J



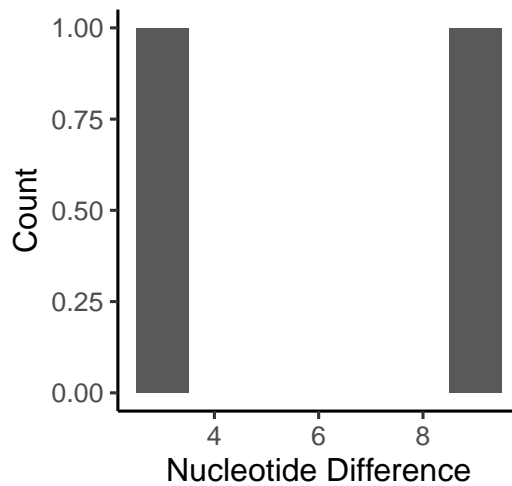
IGHV3-49*05

345 sequences assigned
94 (27.2%) exact matches, in which:
91 unique CDR3
7 unique J



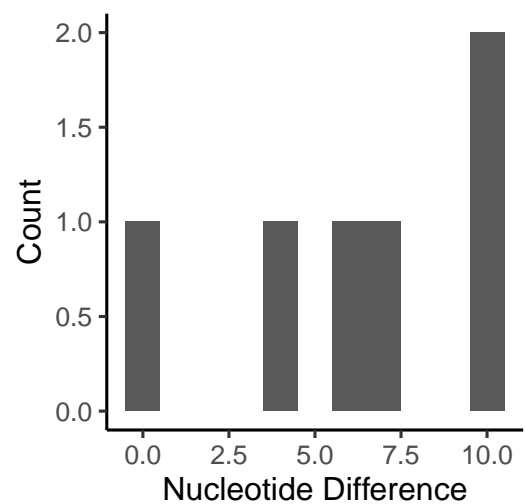
IGHV3-66*01

2 sequences assigned
No exact matches.



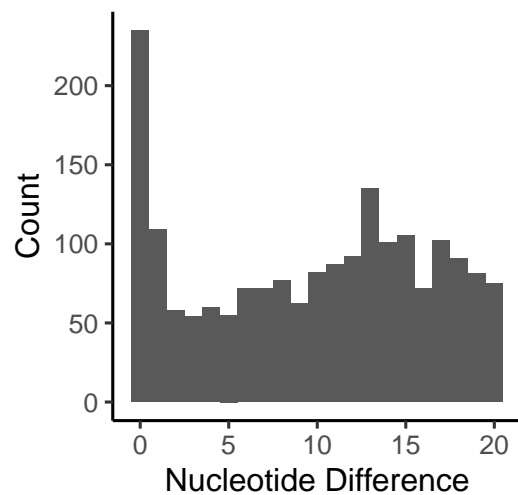
IGHV3-69-1*02

12 sequences assigned
1 (8.3%) exact matches, in which:
1 unique CDR3
1 unique J



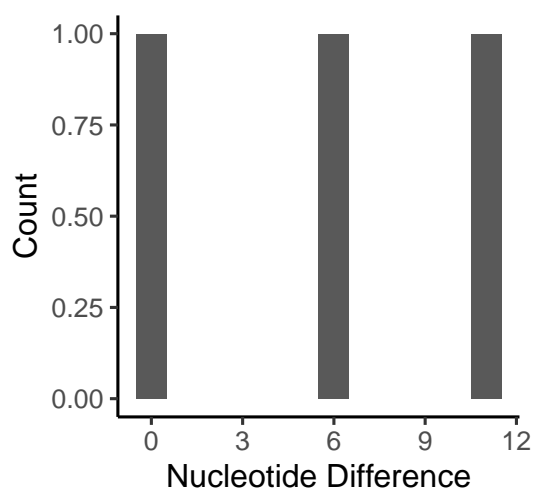
IGHV3-53*01

2656 sequences assigned
235 (8.8%) exact matches, in which:
231 unique CDR3
7 unique J



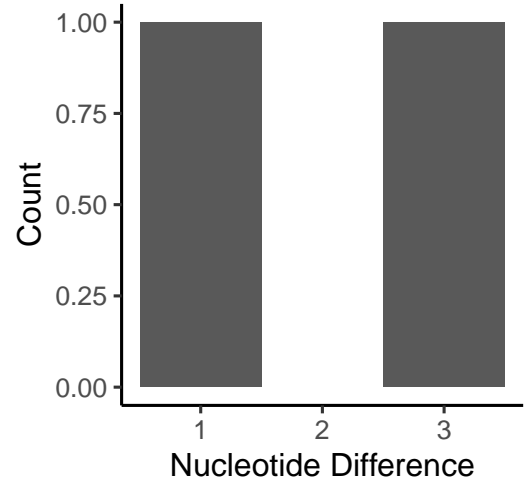
IGHV3-66*03

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



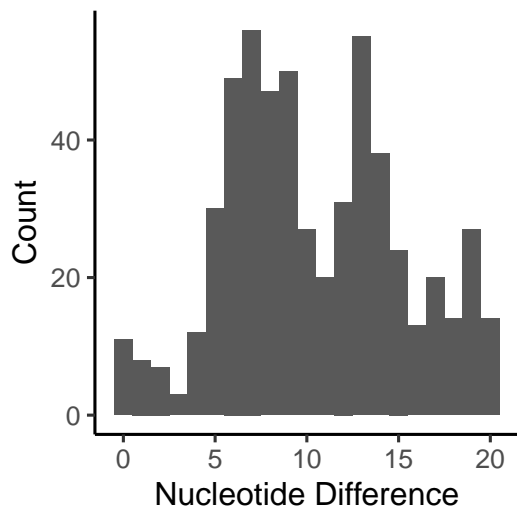
IGHV3-71*03

2 sequences assigned
No exact matches.



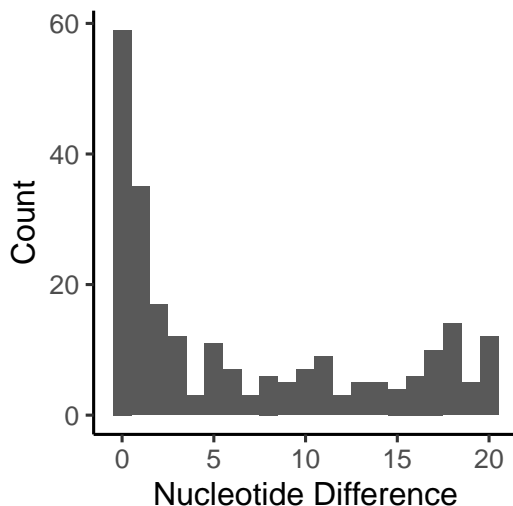
IGHV3-72*01

609 sequences assigned
11 (1.8%) exact matches, in which:
11 unique CDR3
4 unique J



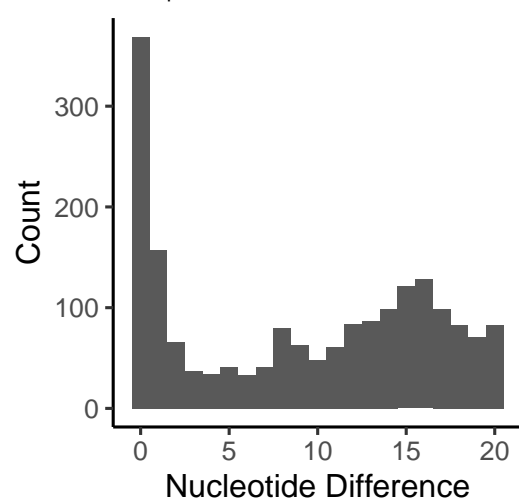
IGHV3-64D*06

397 sequences assigned
59 (14.9%) exact matches, in which:
56 unique CDR3
5 unique J



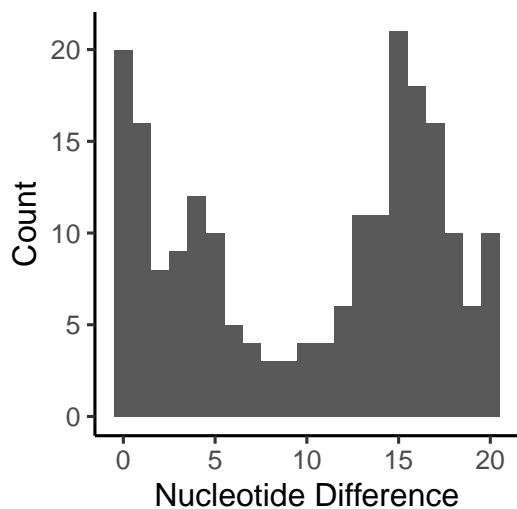
IGHV4-4*07

2734 sequences assigned
369 (13.5%) exact matches, in which:
362 unique CDR3
7 unique J



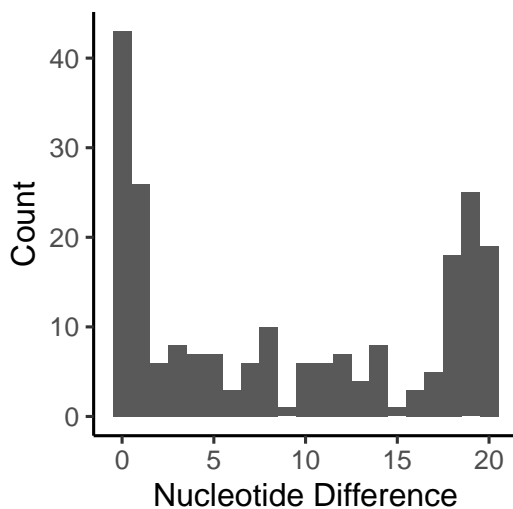
IGHV3-73*02

265 sequences assigned
20 (7.5%) exact matches, in which:
20 unique CDR3
5 unique J



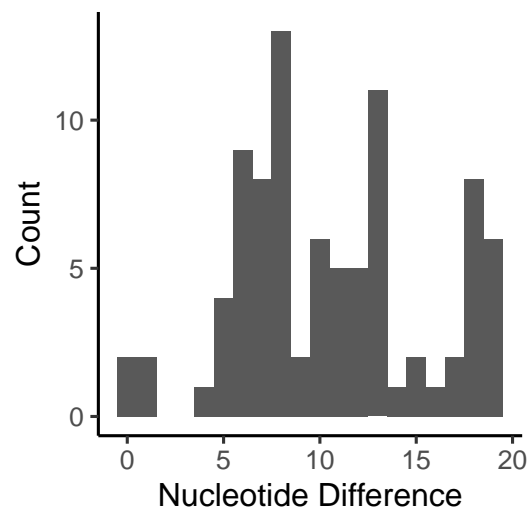
IGHV3-64D*08

374 sequences assigned
43 (11.5%) exact matches, in which:
43 unique CDR3
5 unique J



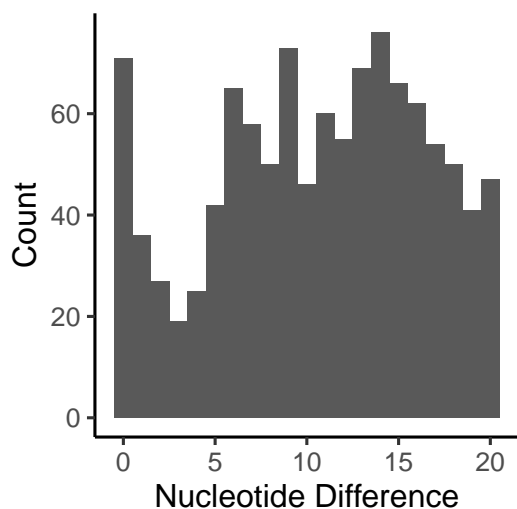
IGHV4-28*01

92 sequences assigned
2 (2.2%) exact matches, in which:
2 unique CDR3
1 unique J



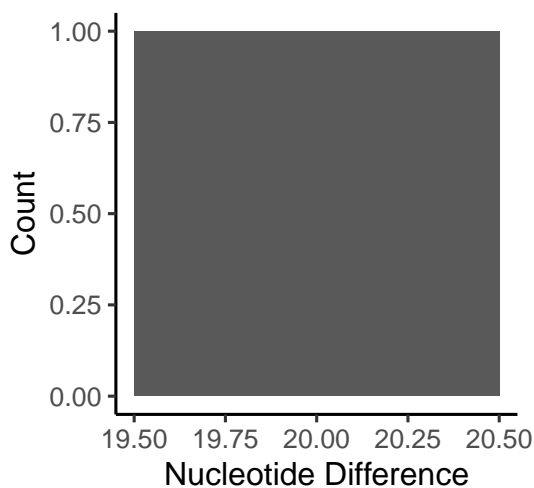
IGHV3-74*01

1643 sequences assigned
71 (4.3%) exact matches, in which:
71 unique CDR3
6 unique J



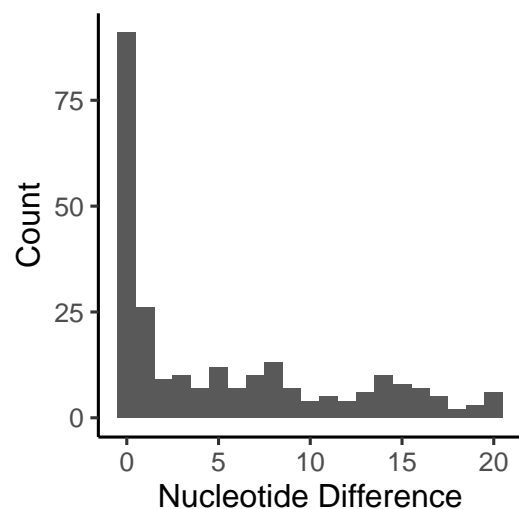
IGHV3-NL1*01

1 sequences assigned
No exact matches.



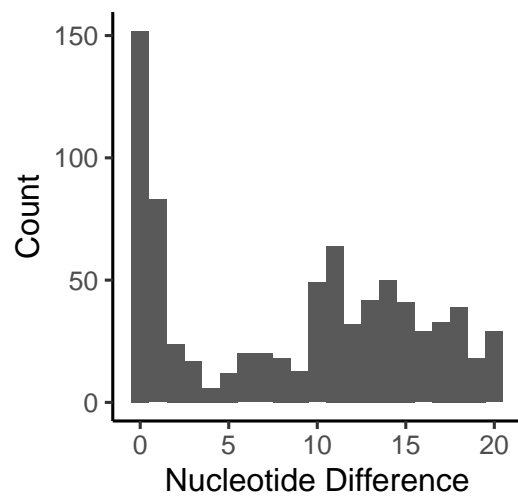
IGHV4-30-2*01

377 sequences assigned
91 (24.1%) exact matches, in which:
89 unique CDR3
5 unique J



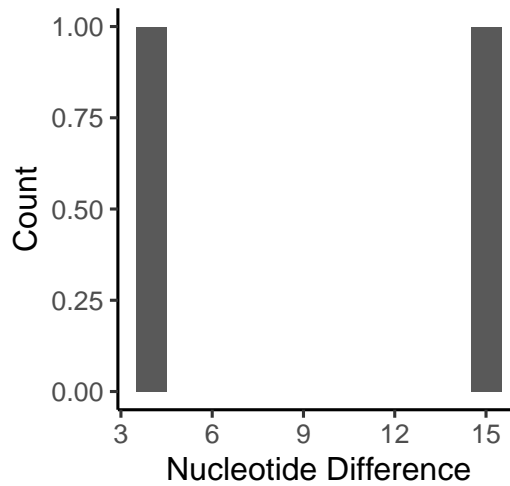
IGHV4-30-4*01

1125 sequences assigned
152 (13.5%) exact matches, in which:
149 unique CDR3
7 unique J



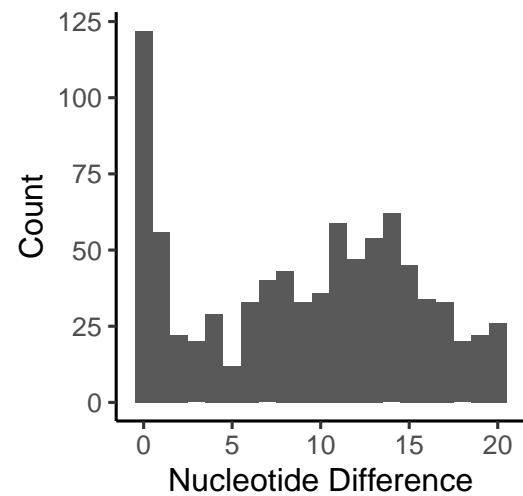
IGHV4-38-2*02

41 sequences assigned
No exact matches.



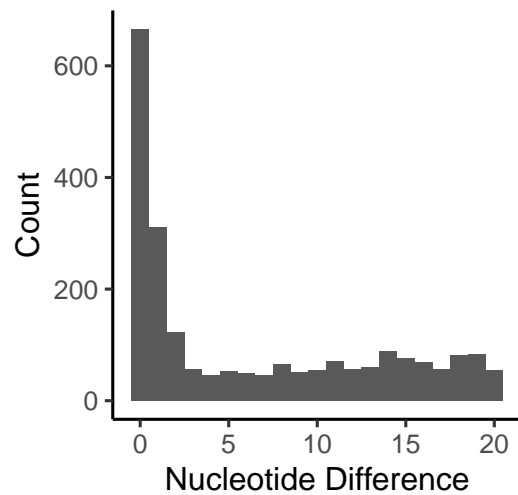
IGHV4-61*01

1438 sequences assigned
122 (8.5%) exact matches, in which:
122 unique CDR3
7 unique J



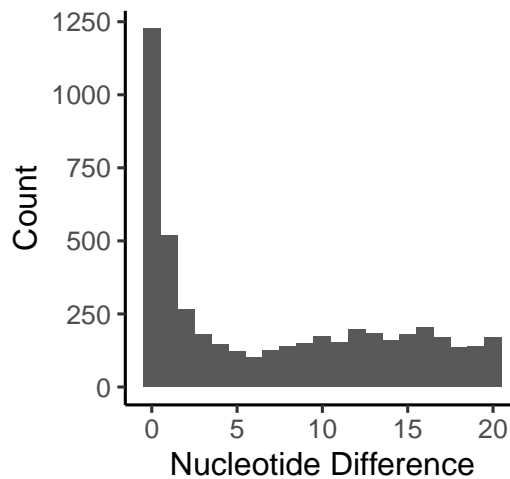
IGHV4-31*03

2787 sequences assigned
666 (23.9%) exact matches, in which:
660 unique CDR3
7 unique J



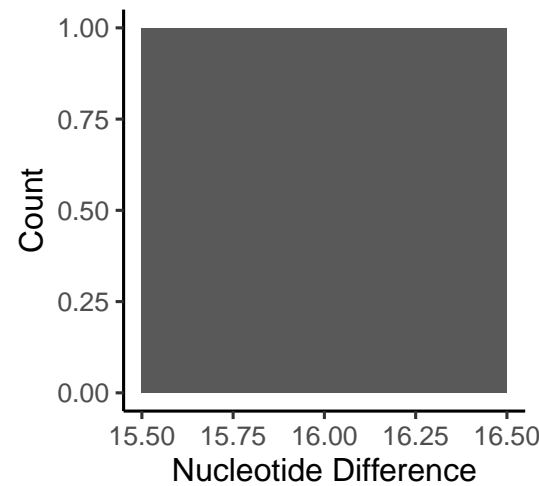
IGHV4-39*01

7072 sequences assigned
1226 (17.3%) exact matches, in which:
1204 unique CDR3
7 unique J



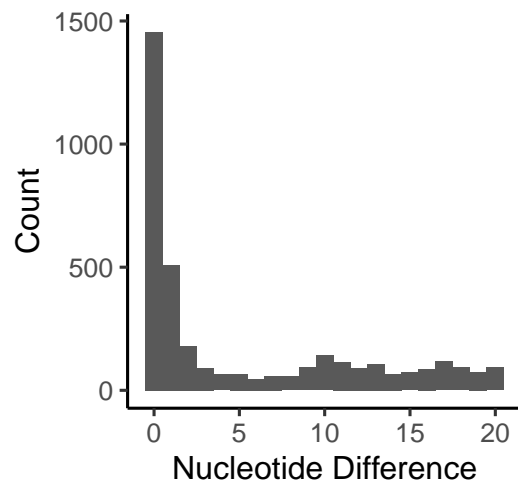
IGHV4/OR15-8*02

1 sequences assigned
No exact matches.



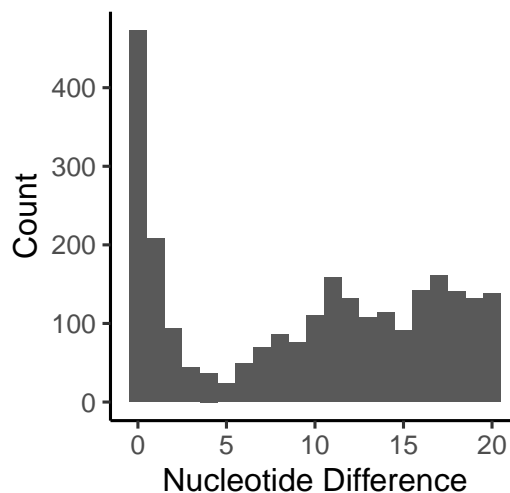
IGHV4-34*01

4715 sequences assigned
1455 (30.9%) exact matches, in which:
1443 unique CDR3
7 unique J



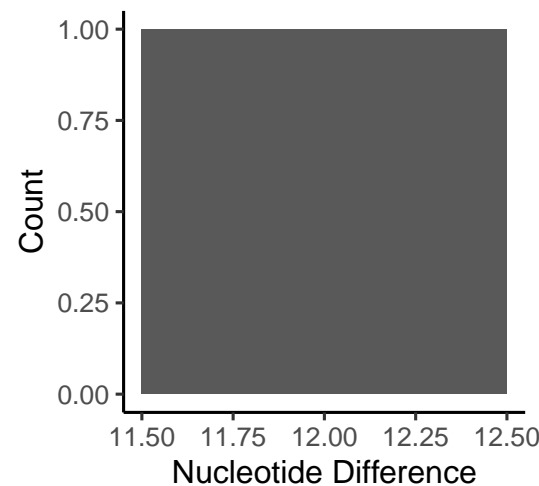
IGHV4-59*01

3912 sequences assigned
473 (12.1%) exact matches, in which:
465 unique CDR3
7 unique J



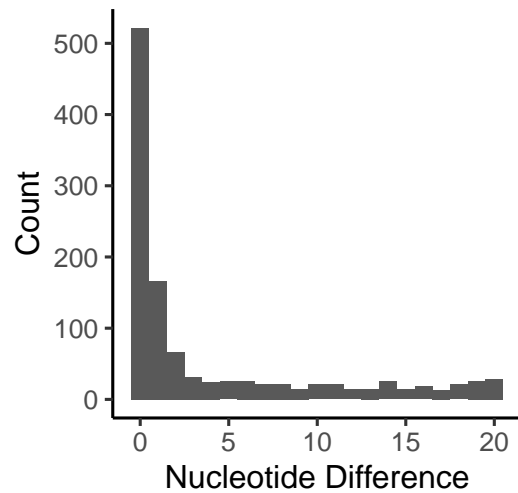
IGHV1/OR15-9*01

1 sequences assigned
No exact matches.



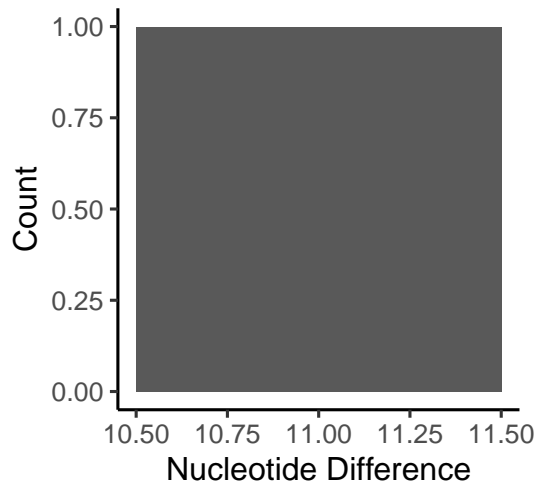
IGHV5–10–1*03

1402 sequences assigned
522 (37.2%) exact matches, in which:
505 unique CDR3
7 unique J



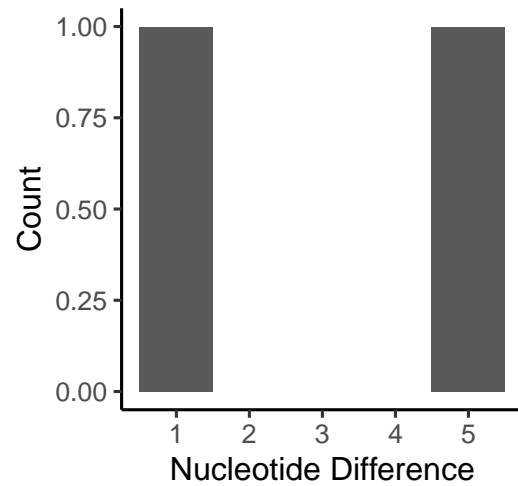
IGHV3/OR16–6*02

1 sequences assigned
No exact matches.



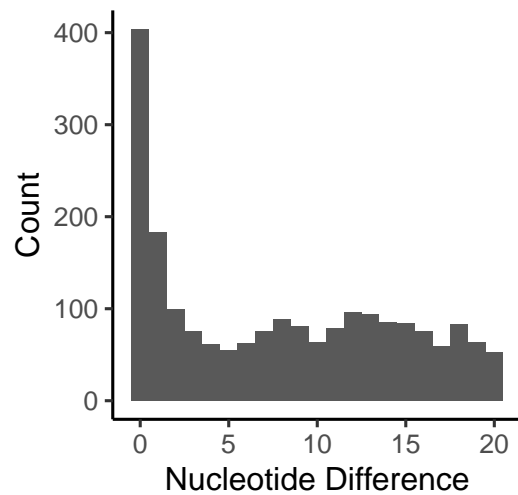
IGHV7–81*01

2 sequences assigned
No exact matches.



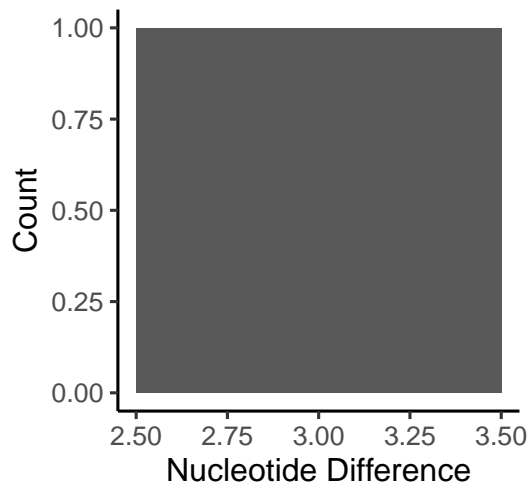
IGHV5–51*01

2464 sequences assigned
404 (16.4%) exact matches, in which:
400 unique CDR3
7 unique J



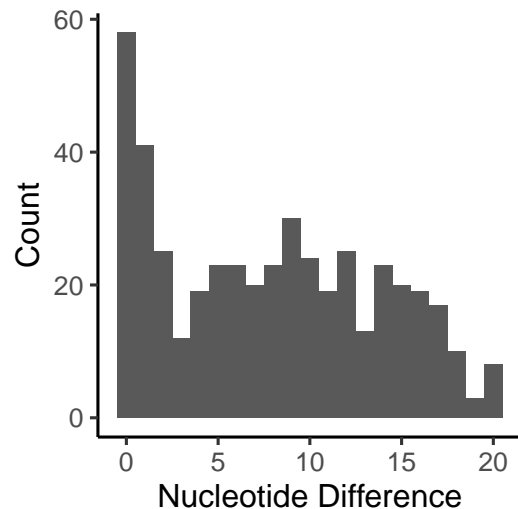
IGHV3/OR16–9*01

1 sequences assigned
No exact matches.



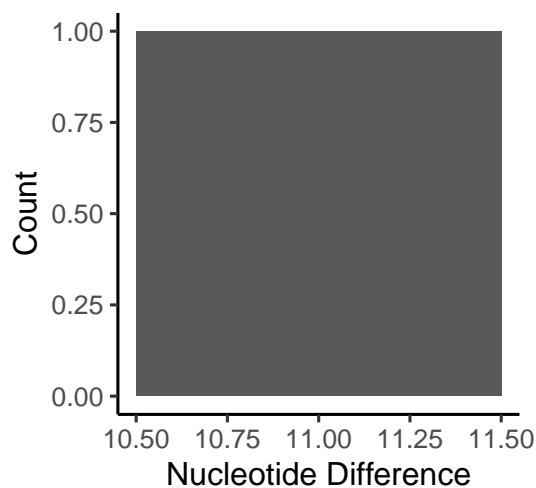
IGHV6–1*01

560 sequences assigned
58 (10.4%) exact matches, in which:
57 unique CDR3
6 unique J

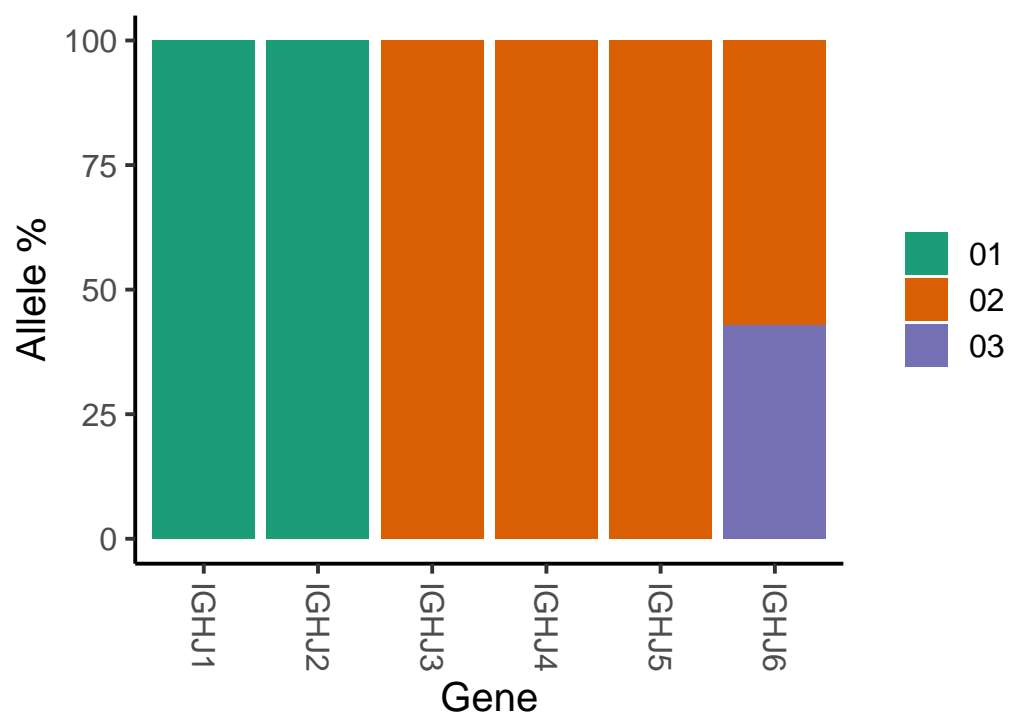


IGHV3/OR16–12*01

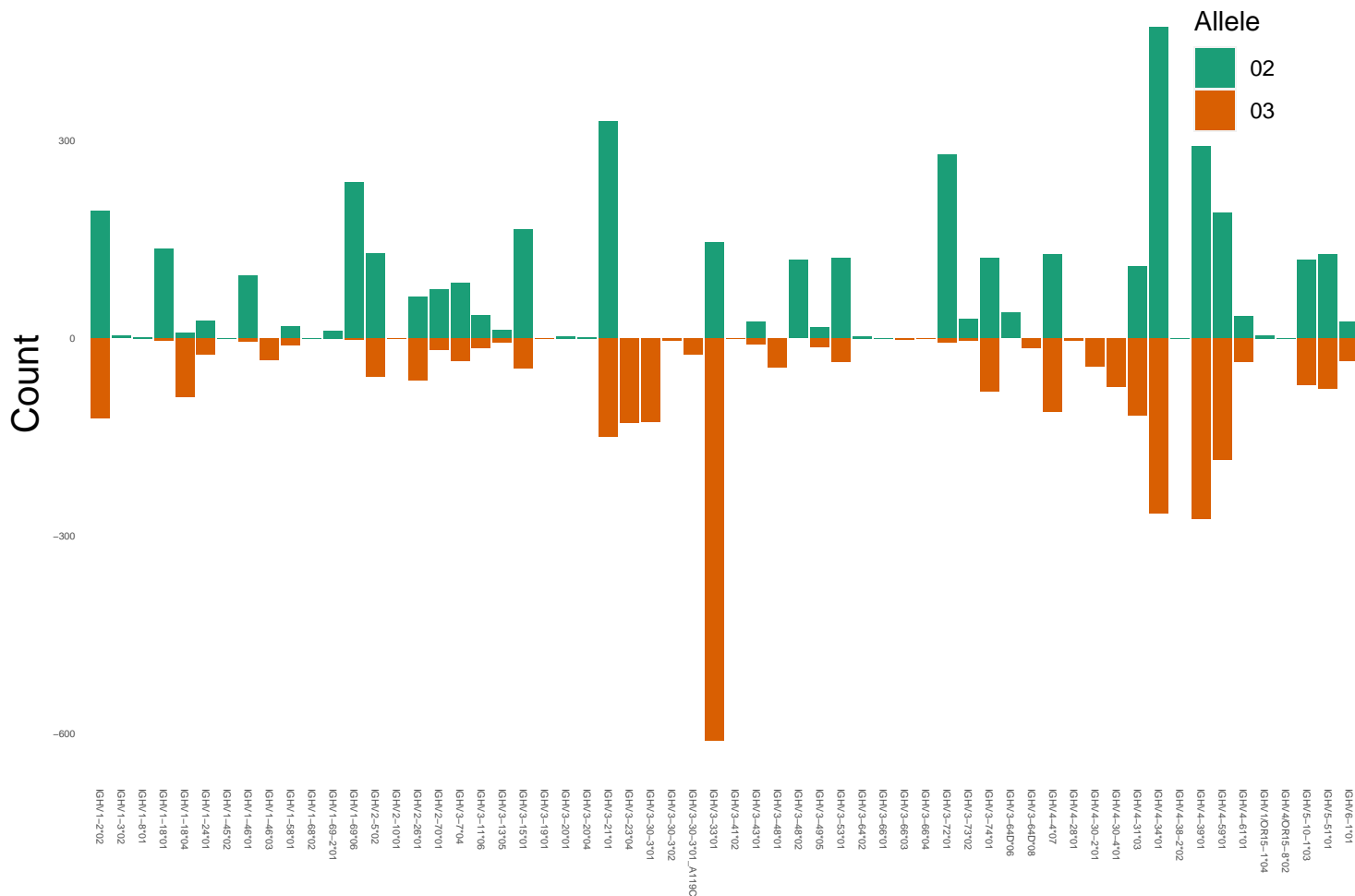
2 sequences assigned
No exact matches.



Allele Usage



Sequence Count by IGHJ6 allele usage



Warning – no inferred sequences found.