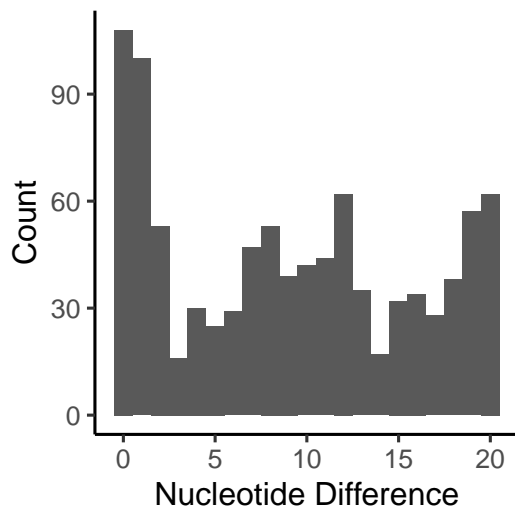


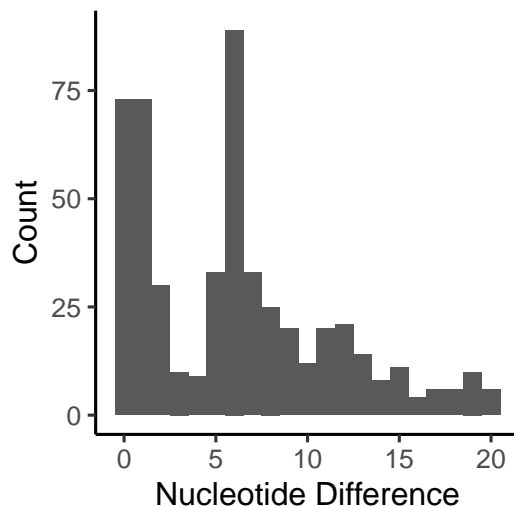
IGHV1-2*02

1426 sequences assigned
108 (7.6%) exact matches, in which:
91 unique CDR3
5 unique J



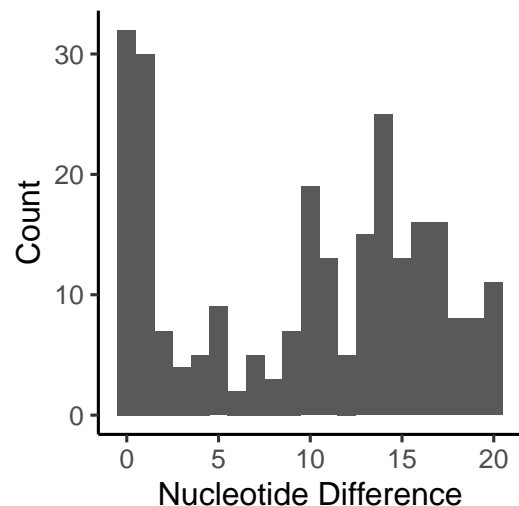
IGHV1-8*03

578 sequences assigned
73 (12.6%) exact matches, in which:
57 unique CDR3
6 unique J



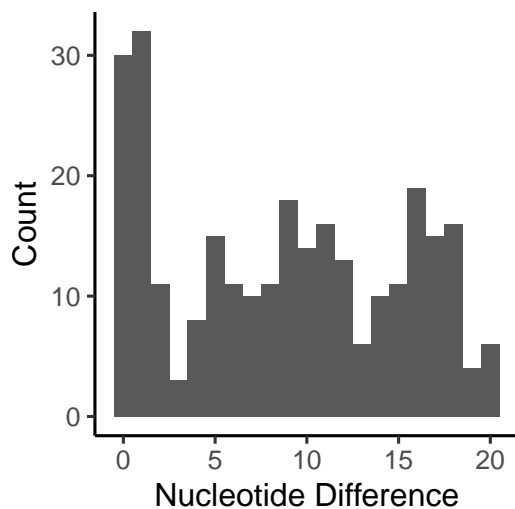
IGHV1-24*01

375 sequences assigned
32 (8.5%) exact matches, in which:
30 unique CDR3
4 unique J



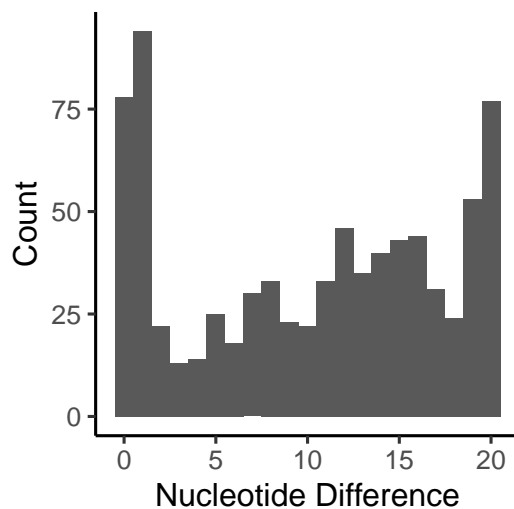
IGHV1-3*01

531 sequences assigned
30 (5.6%) exact matches, in which:
20 unique CDR3
4 unique J



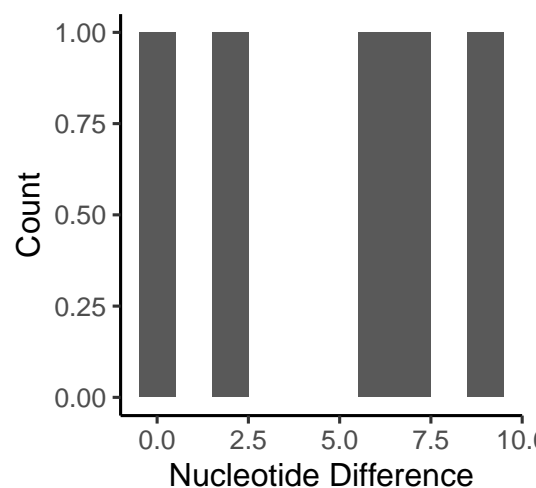
IGHV1-18*01

1289 sequences assigned
78 (6.1%) exact matches, in which:
68 unique CDR3
6 unique J



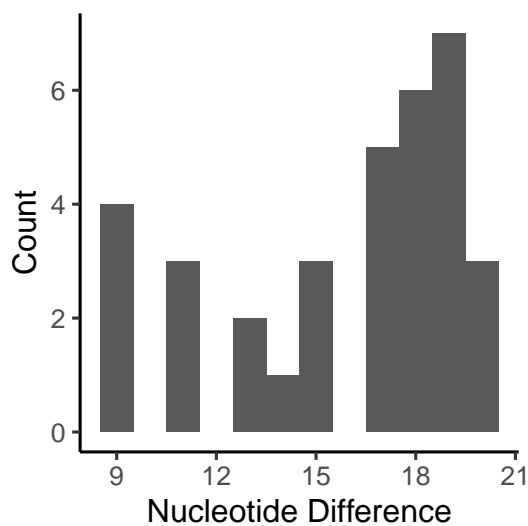
IGHV1-45*02

5 sequences assigned
1 (20%) exact matches, in which:
1 unique CDR3
1 unique J



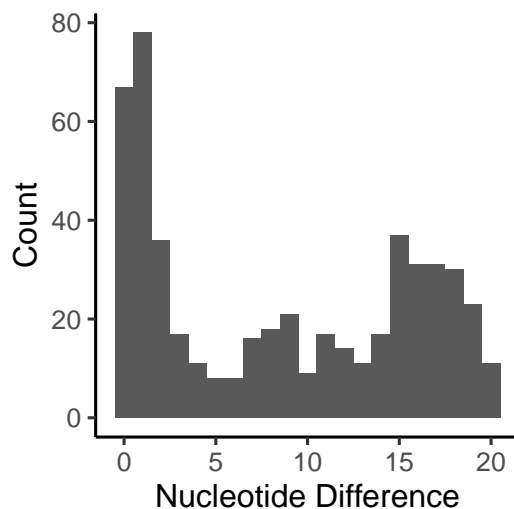
IGHV1-3*04

95 sequences assigned
No exact matches.



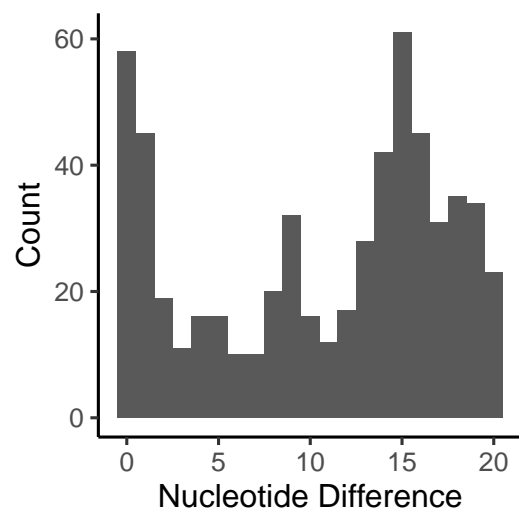
IGHV1-18*04

912 sequences assigned
67 (7.3%) exact matches, in which:
50 unique CDR3
6 unique J



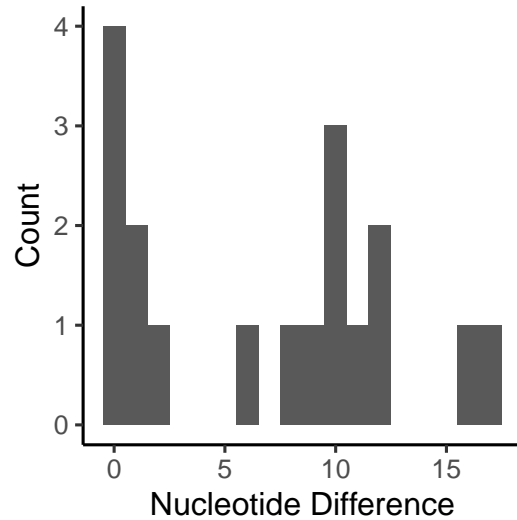
IGHV1-46*01

810 sequences assigned
58 (7.2%) exact matches, in which:
49 unique CDR3
6 unique J



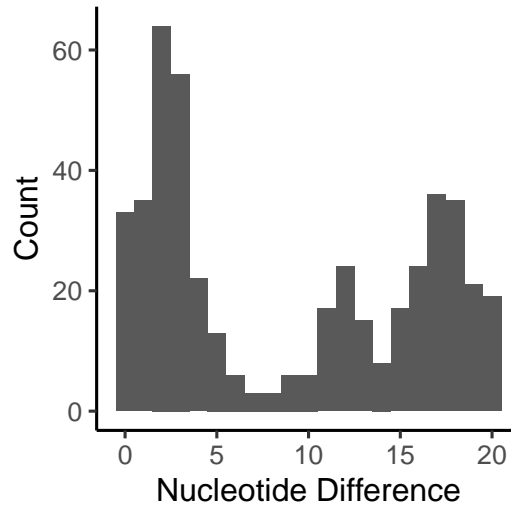
IGHV1-58*02

45 sequences assigned
4 (8.9%) exact matches, in which:
3 unique CDR3
2 unique J



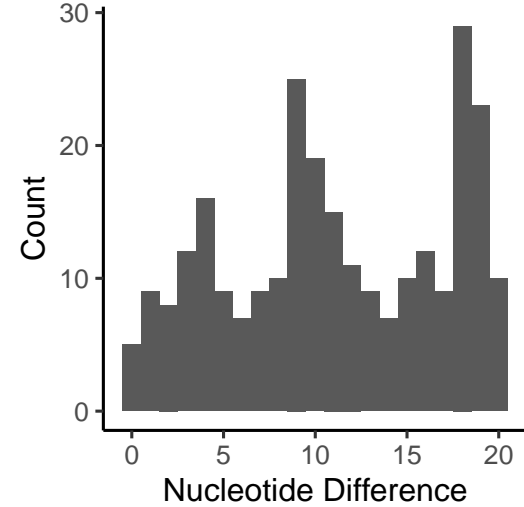
IGHV1-69*10

860 sequences assigned
33 (3.8%) exact matches, in which:
26 unique CDR3
5 unique J



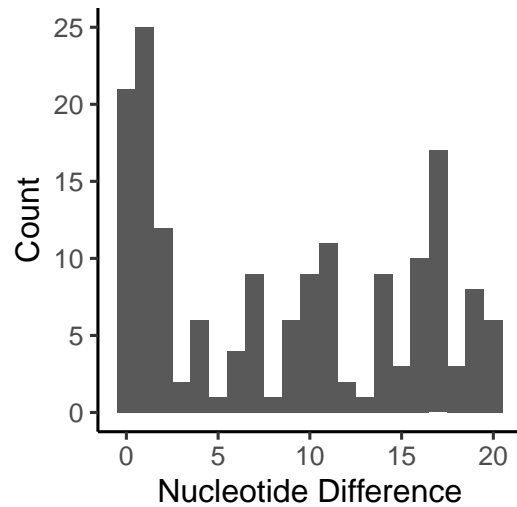
IGHV2-5*02

378 sequences assigned
5 (1.3%) exact matches, in which:
5 unique CDR3
3 unique J



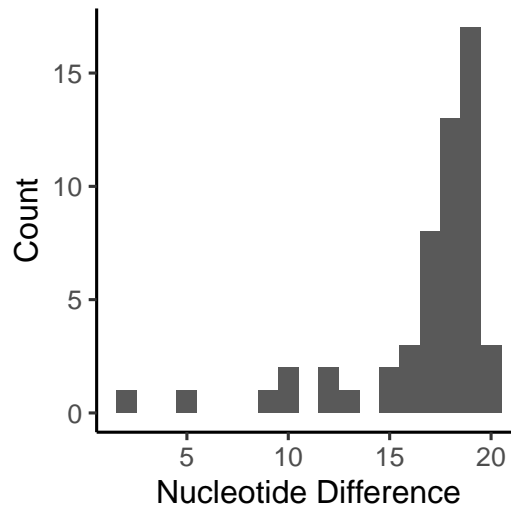
IGHV1-69-2*01

356 sequences assigned
21 (5.9%) exact matches, in which:
20 unique CDR3
5 unique J



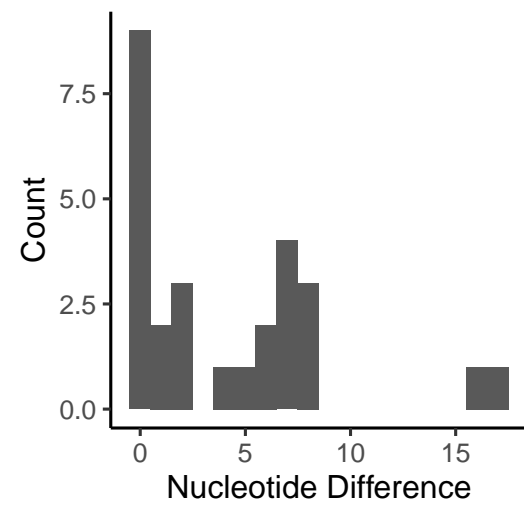
IGHV1-69*13

108 sequences assigned
No exact matches.



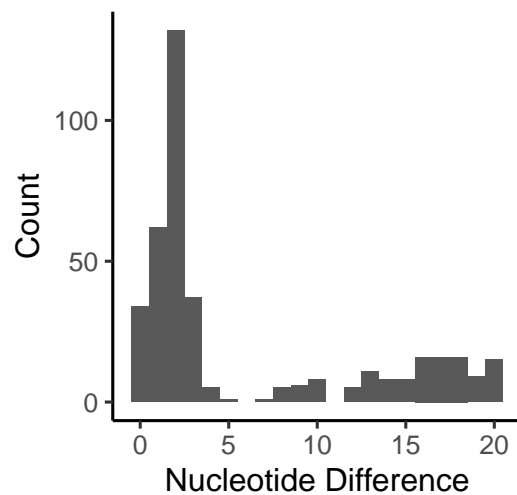
IGHV2-26*01

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



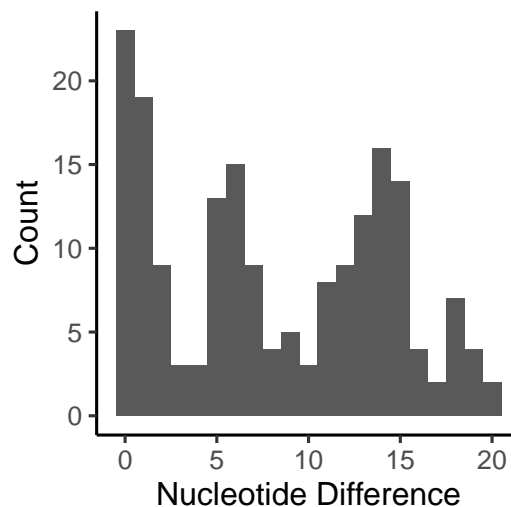
IGHV1-69*09

758 sequences assigned
34 (4.5%) exact matches, in which:
34 unique CDR3
4 unique J



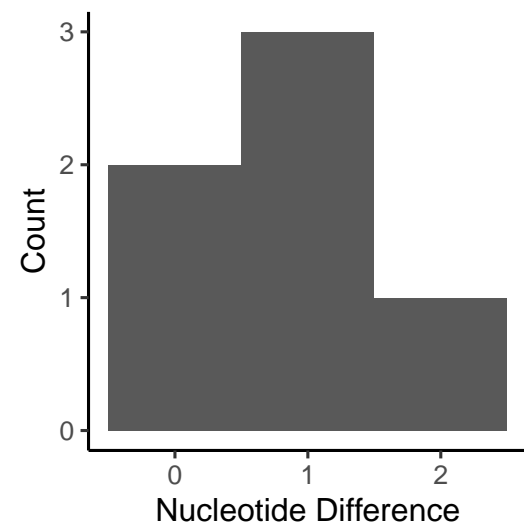
IGHV2-5*01

217 sequences assigned
23 (10.6%) exact matches, in which:
21 unique CDR3
5 unique J



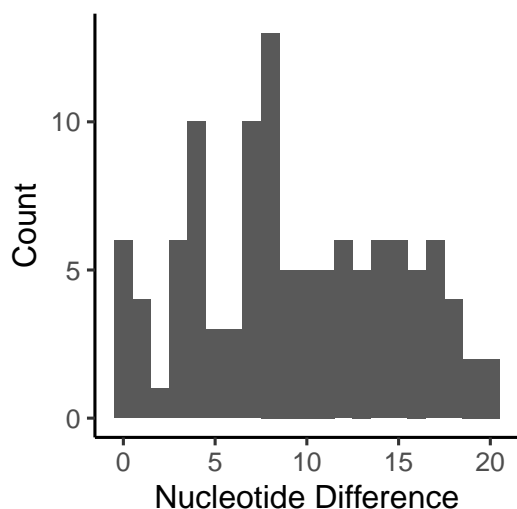
IGHV2-26*04

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



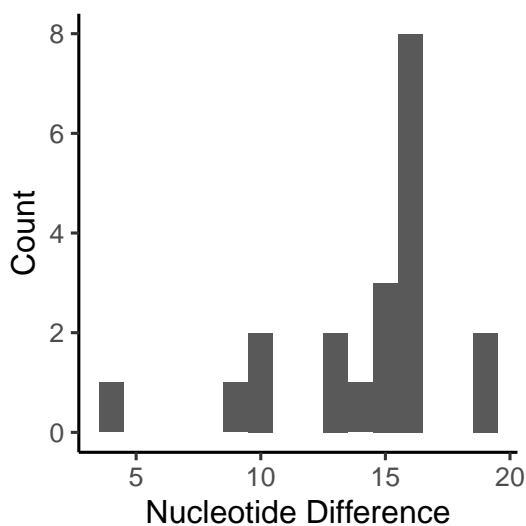
IGHV2-70*15

131 sequences assigned
6 (4.6%) exact matches, in which:
6 unique CDR3
2 unique J



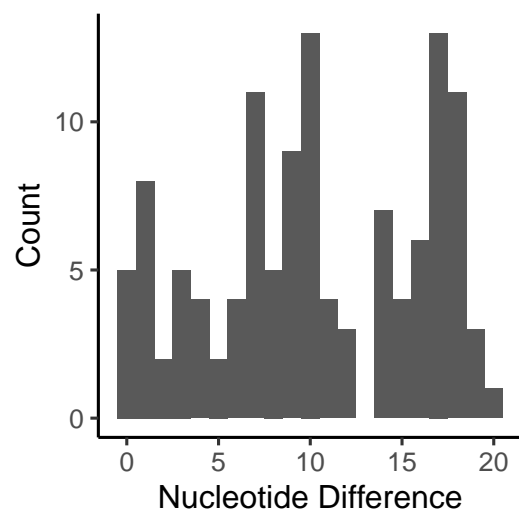
IGHV3-9*01

43 sequences assigned
No exact matches.



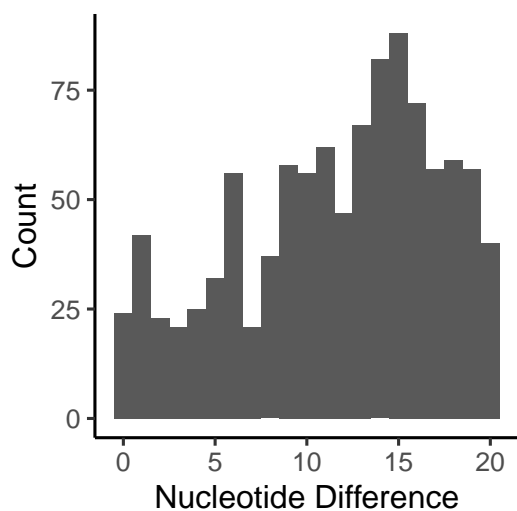
IGHV3-11*06

191 sequences assigned
5 (2.6%) exact matches, in which:
5 unique CDR3
1 unique J



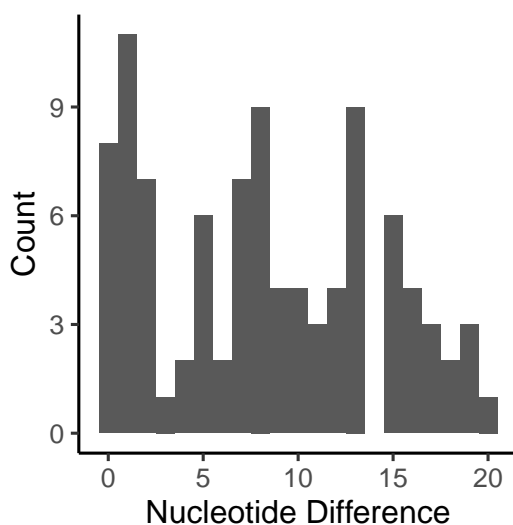
IGHV3-7*01

1271 sequences assigned
24 (1.9%) exact matches, in which:
21 unique CDR3
4 unique J



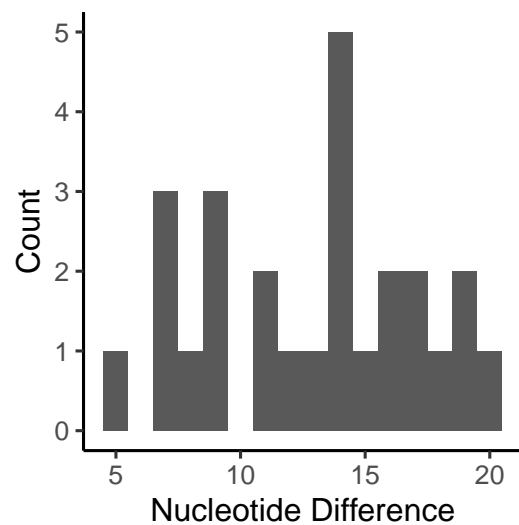
IGHV3-9*03

104 sequences assigned
8 (7.7%) exact matches, in which:
6 unique CDR3
4 unique J



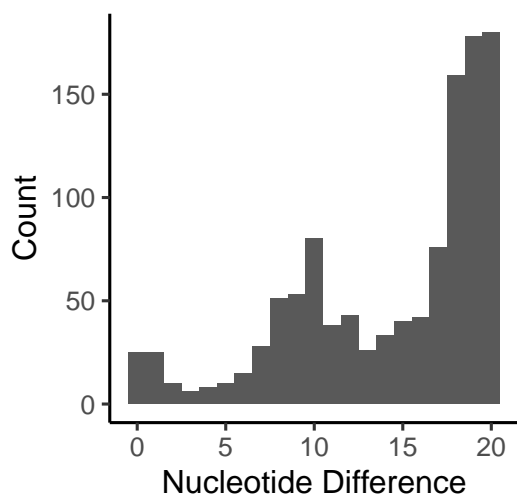
IGHV3-13*01

28 sequences assigned
No exact matches.



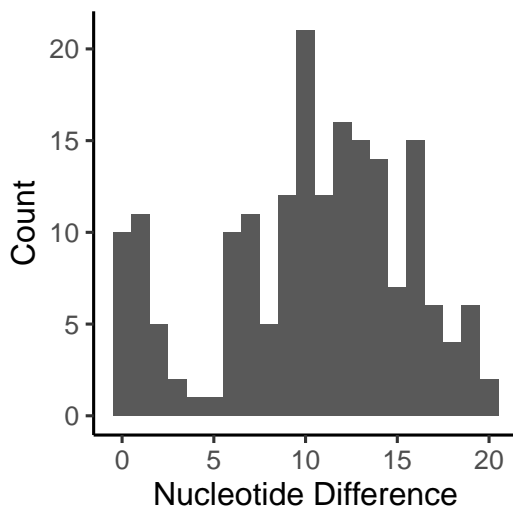
IGHV3-7*03

1724 sequences assigned
25 (1.5%) exact matches, in which:
18 unique CDR3
5 unique J



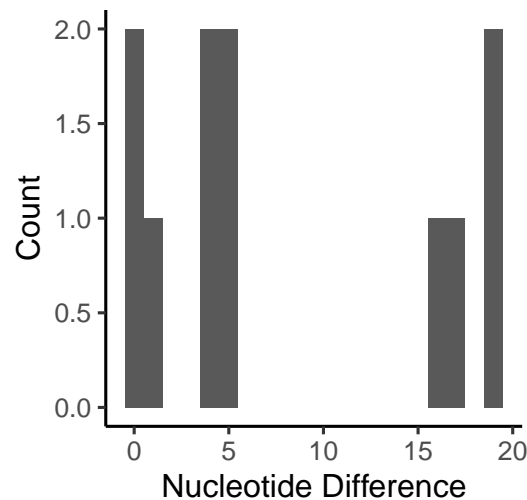
IGHV3-11*04

236 sequences assigned
10 (4.2%) exact matches, in which:
10 unique CDR3
3 unique J



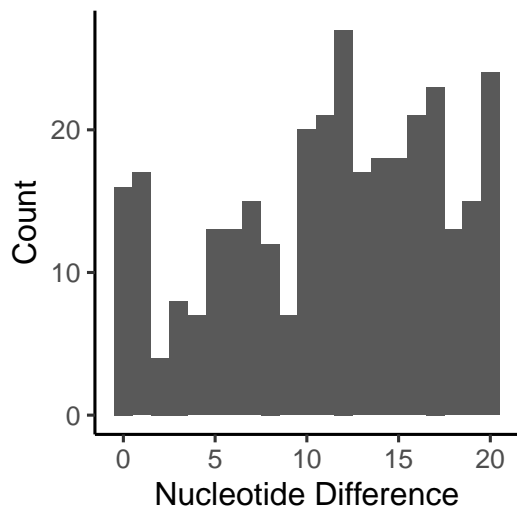
IGHV3-13*05

17 sequences assigned
2 (11.8%) exact matches, in which:
2 unique CDR3
2 unique J



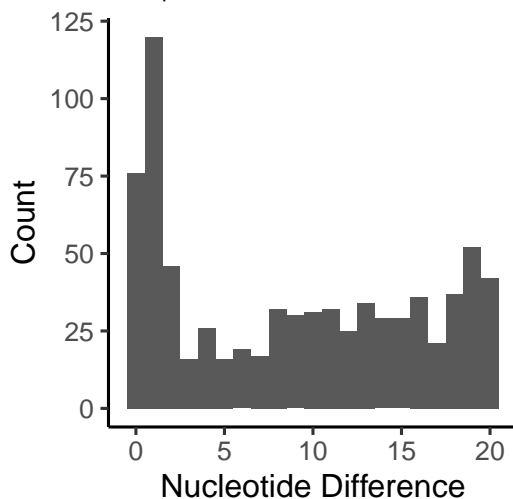
IGHV3-15*01

512 sequences assigned
16 (3.1%) exact matches, in which:
15 unique CDR3
5 unique J



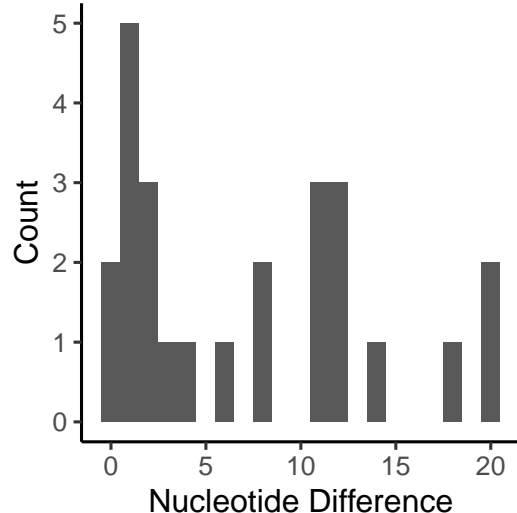
IGHV3-23*04

1265 sequences assigned
76 (6%) exact matches, in which:
57 unique CDR3
4 unique J



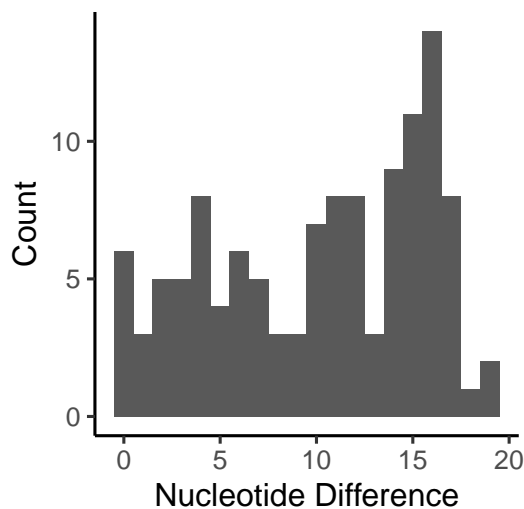
IGHV3-43*01

63 sequences assigned
2 (3.2%) exact matches, in which:
2 unique CDR3
2 unique J



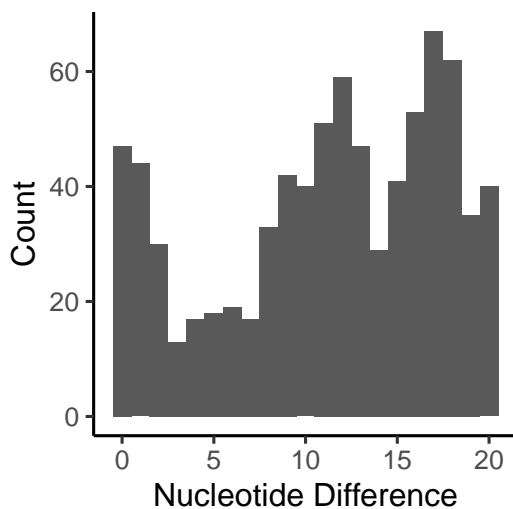
IGHV3-20*04

153 sequences assigned
6 (3.9%) exact matches, in which:
6 unique CDR3
3 unique J



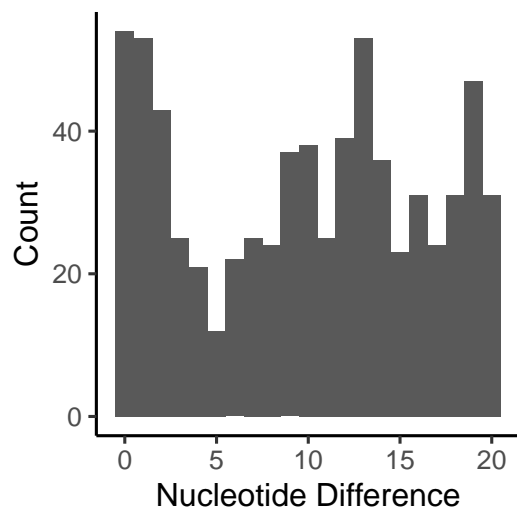
IGHV3-30-3*01

1236 sequences assigned
47 (3.8%) exact matches, in which:
39 unique CDR3
4 unique J



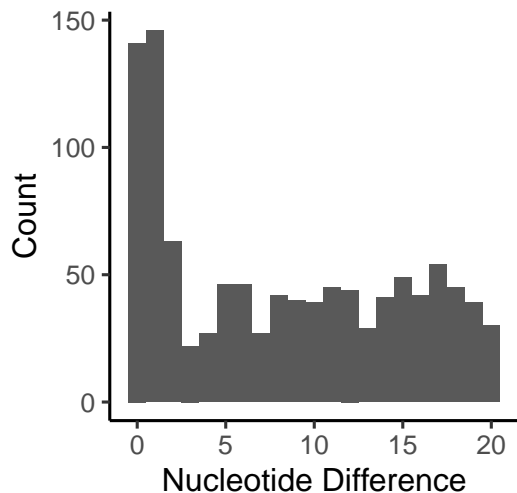
IGHV3-48*03

1021 sequences assigned
54 (5.3%) exact matches, in which:
42 unique CDR3
5 unique J



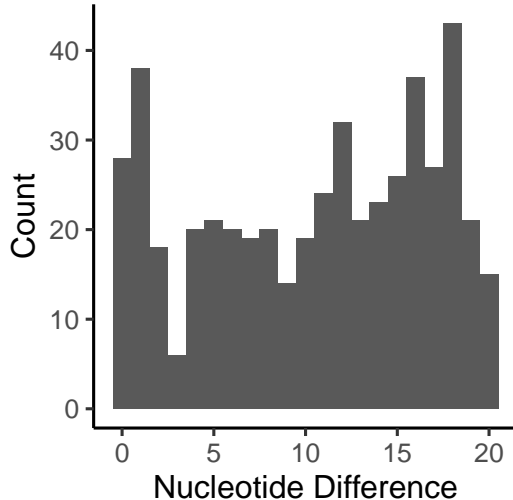
IGHV3-21*01

1363 sequences assigned
141 (10.3%) exact matches, in which:
95 unique CDR3
7 unique J



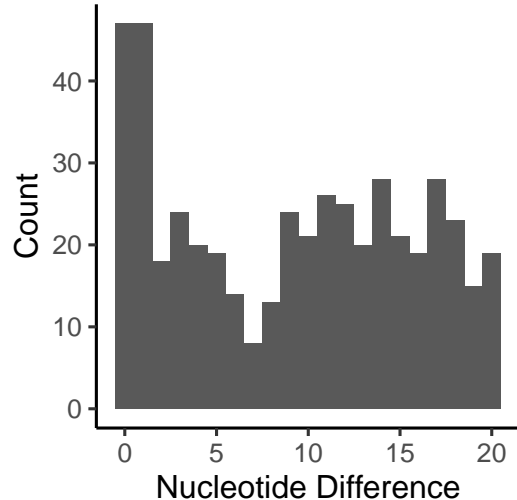
IGHV3-33*08

724 sequences assigned
28 (3.9%) exact matches, in which:
23 unique CDR3
5 unique J



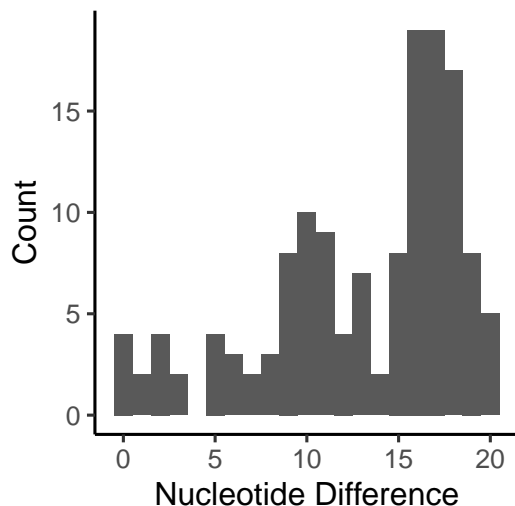
IGHV3-48*04

758 sequences assigned
47 (6.2%) exact matches, in which:
39 unique CDR3
7 unique J



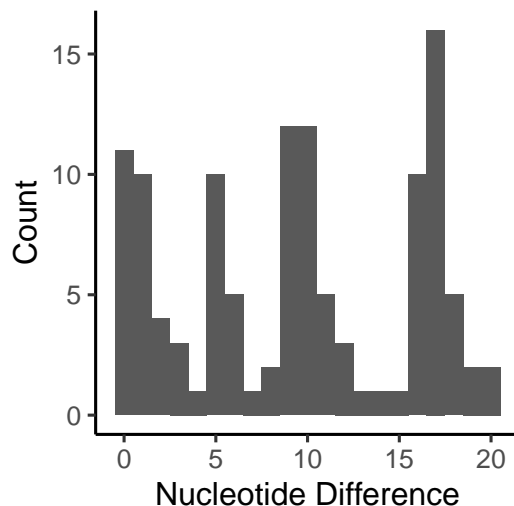
IGHV3-49*03

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



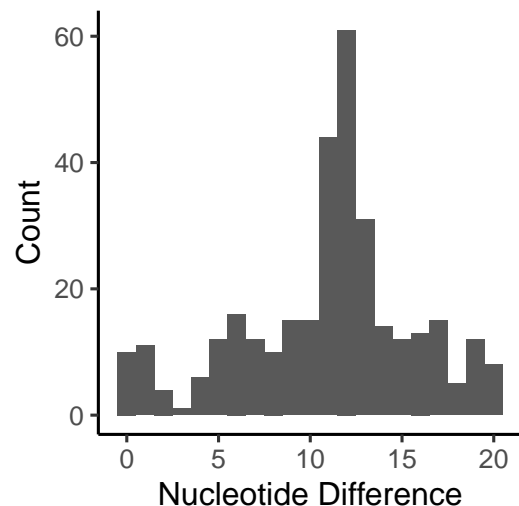
IGHV3-53*04

147 sequences assigned
11 (7.5%) exact matches, in which:
11 unique CDR3
5 unique J



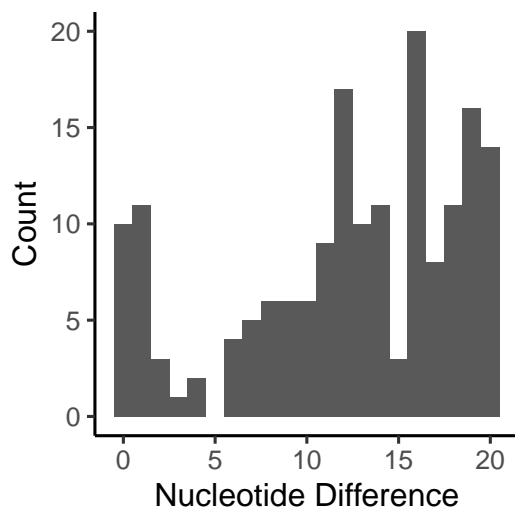
IGHV3-66*01

502 sequences assigned
10 (2%) exact matches, in which:
8 unique CDR3
3 unique J



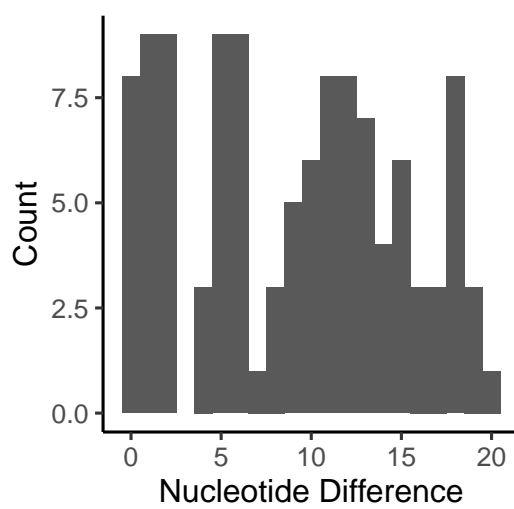
IGHV3-49*04

220 sequences assigned
10 (4.5%) exact matches, in which:
7 unique CDR3
4 unique J



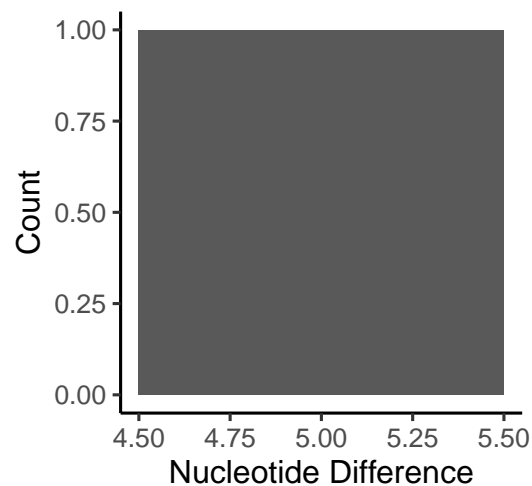
IGHV3-64*01

153 sequences assigned
8 (5.2%) exact matches, in which:
6 unique CDR3
1 unique J



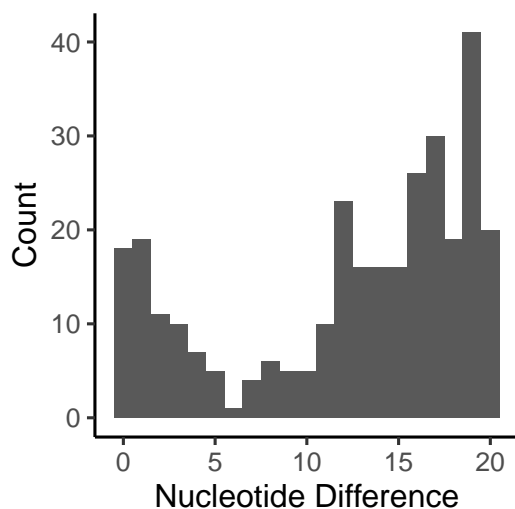
IGHV3-69-1*01

5 sequences assigned
No exact matches.



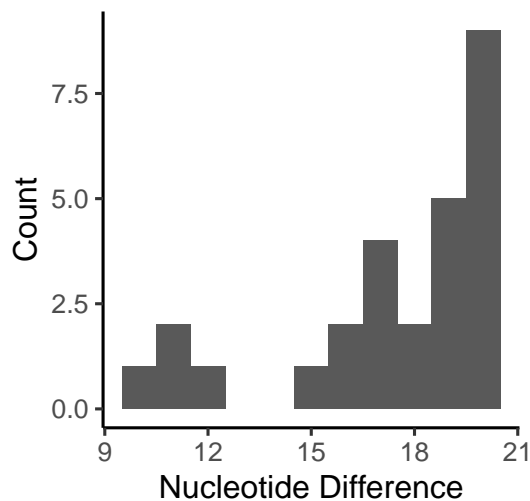
IGHV3-53*02

513 sequences assigned
18 (3.5%) exact matches, in which:
18 unique CDR3
3 unique J



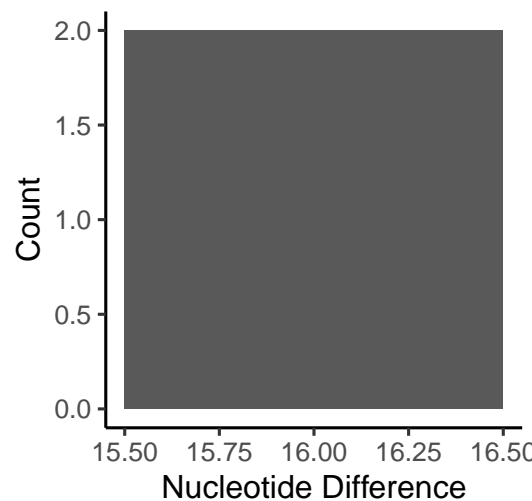
IGHV3-64*07

38 sequences assigned
No exact matches.



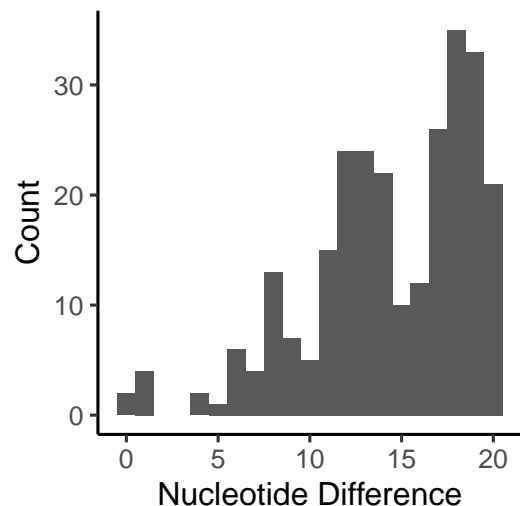
IGHV3-69-1*02

2 sequences assigned
No exact matches.



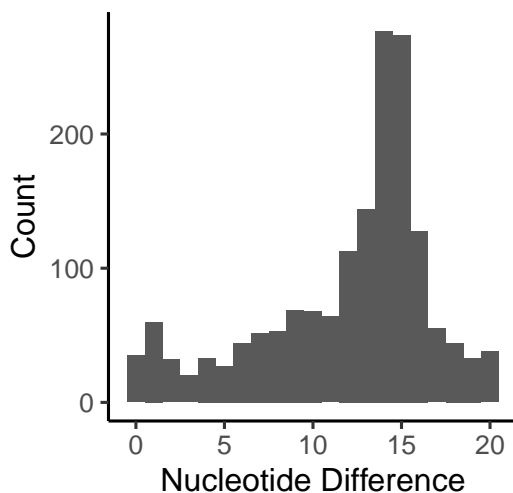
IGHV3-72*01

402 sequences assigned
2 (0.5%) exact matches, in which:
2 unique CDR3
1 unique J



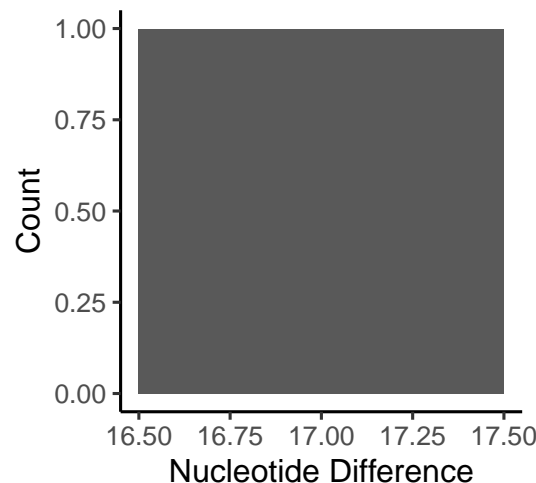
IGHV3-74*01

2192 sequences assigned
35 (1.6%) exact matches, in which:
26 unique CDR3
3 unique J



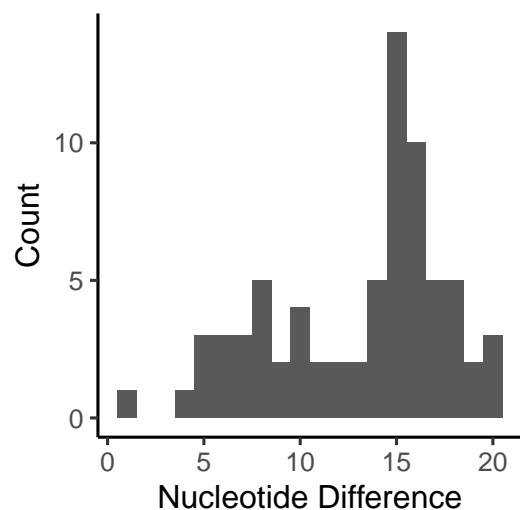
IGHV3-NL1*01

2 sequences assigned
No exact matches.



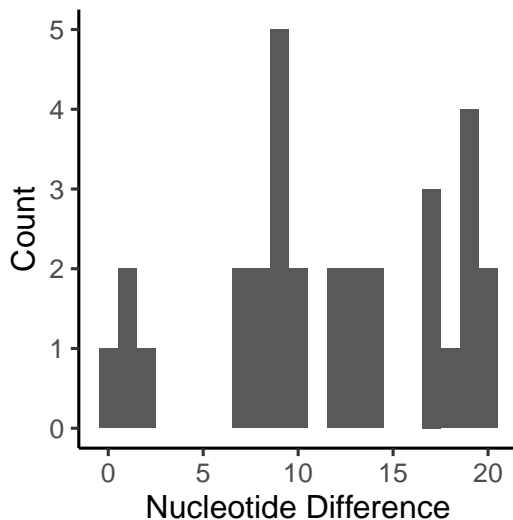
IGHV3-73*01

109 sequences assigned
No exact matches.



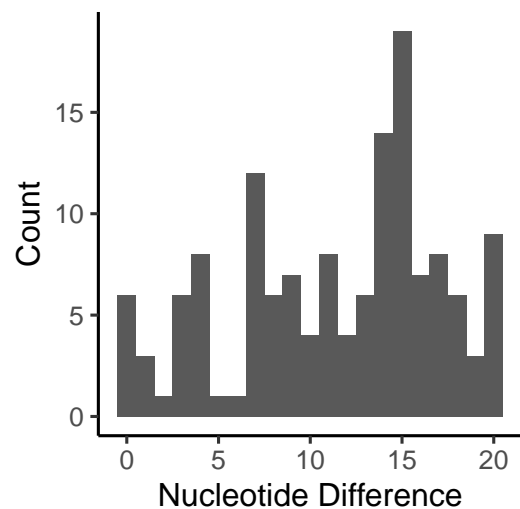
IGHV3-43D*04

59 sequences assigned
1 (1.7%) exact matches, in which:
1 unique CDR3
1 unique J



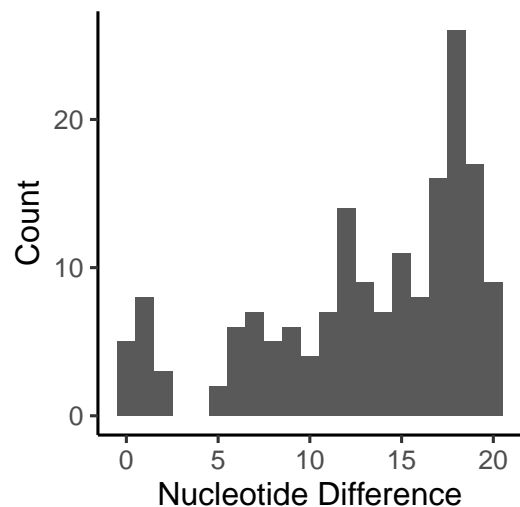
IGHV4-4*02

274 sequences assigned
6 (2.2%) exact matches, in which:
5 unique CDR3
4 unique J



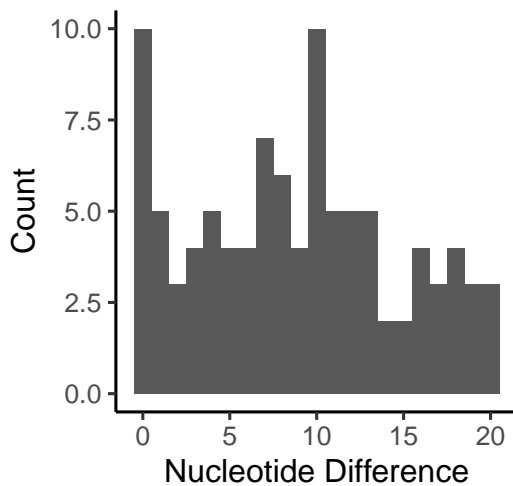
IGHV3-73*02

231 sequences assigned
5 (2.2%) exact matches, in which:
5 unique CDR3
3 unique J



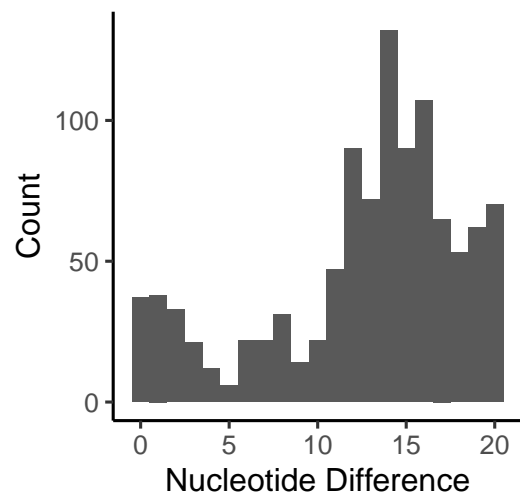
IGHV3-64D*06

131 sequences assigned
10 (7.6%) exact matches, in which:
9 unique CDR3
2 unique J



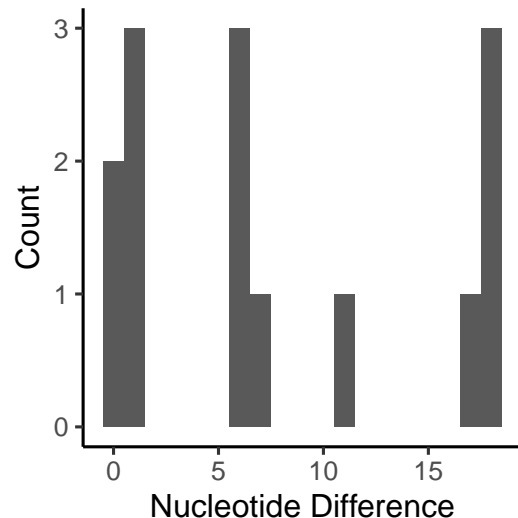
IGHV4-4*07

1498 sequences assigned
37 (2.5%) exact matches, in which:
32 unique CDR3
5 unique J



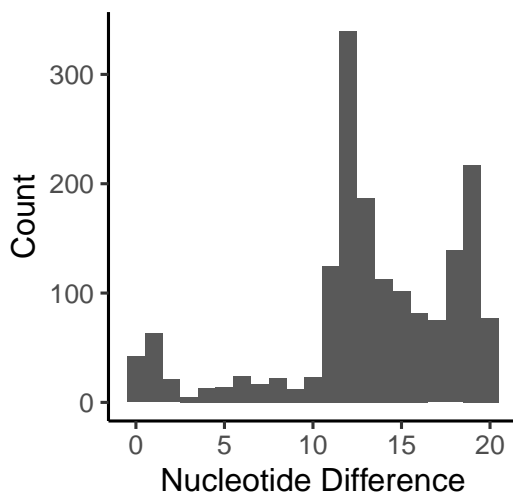
IGHV4-28*07

14 sequences assigned
2 (14.3%) exact matches, in which:
1 unique CDR3
1 unique J



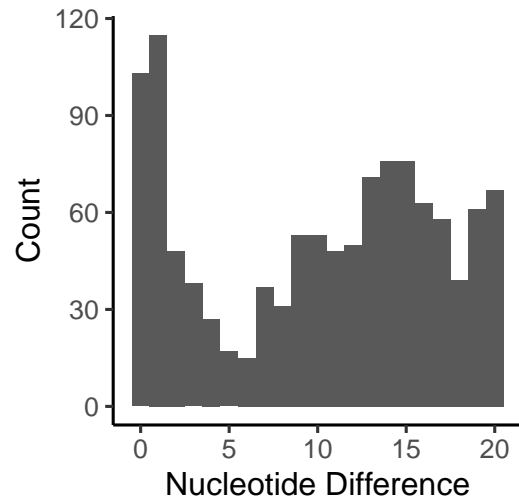
IGHV4-34*01

2700 sequences assigned
42 (1.6%) exact matches, in which:
36 unique CDR3
6 unique J



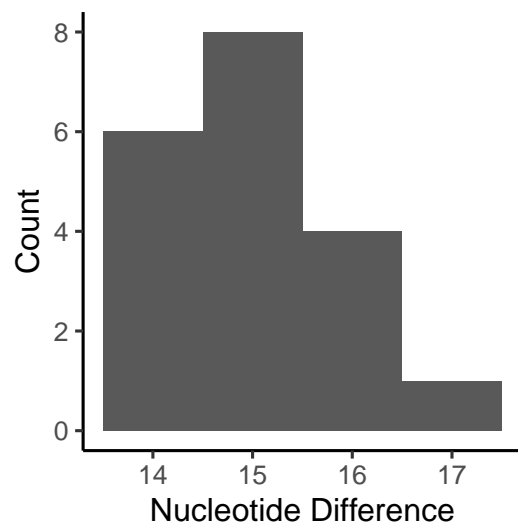
IGHV4-39*01

1957 sequences assigned
103 (5.3%) exact matches, in which:
83 unique CDR3
5 unique J



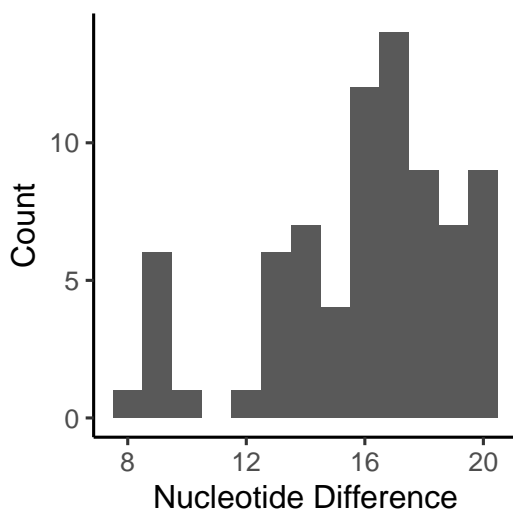
IGHV4-30-4*01

53 sequences assigned
No exact matches.



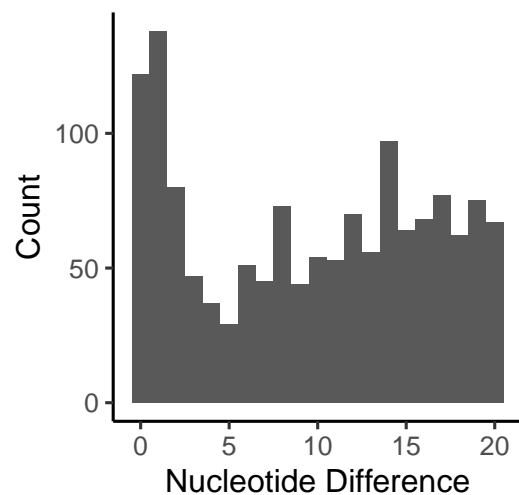
IGHV4-34*02

264 sequences assigned
No exact matches.



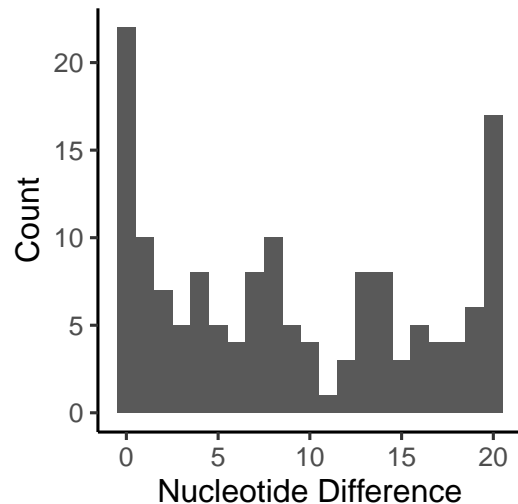
IGHV4-39*07

2243 sequences assigned
122 (5.4%) exact matches, in which:
104 unique CDR3
6 unique J



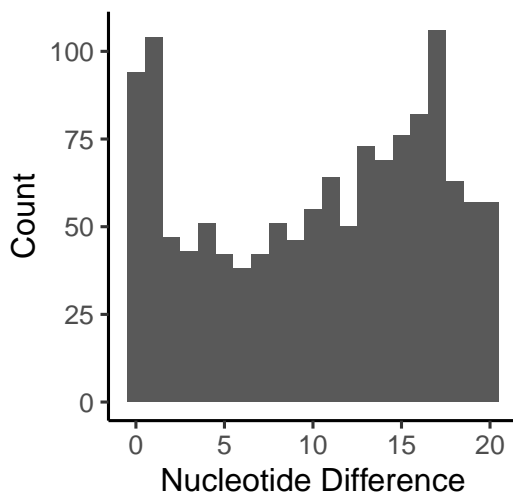
IGHV4-30-4*08

244 sequences assigned
22 (9%) exact matches, in which:
21 unique CDR3
3 unique J



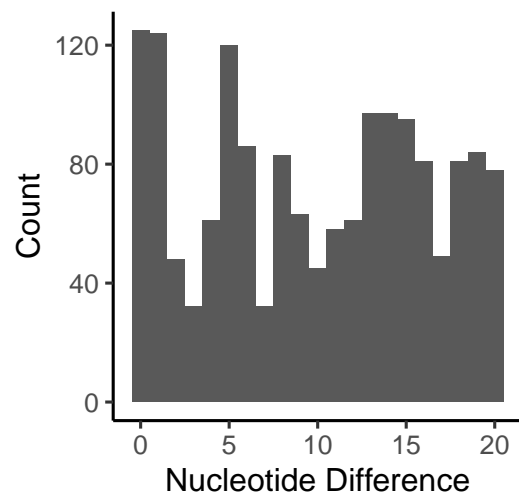
IGHV4-38-2*01

2159 sequences assigned
94 (4.4%) exact matches, in which:
72 unique CDR3
5 unique J



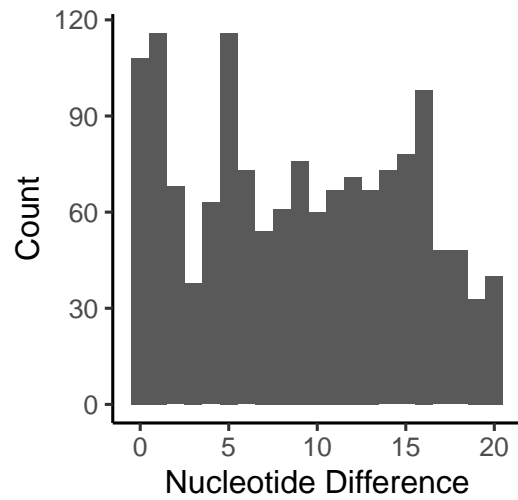
IGHV4-59*01

2255 sequences assigned
125 (5.5%) exact matches, in which:
93 unique CDR3
7 unique J



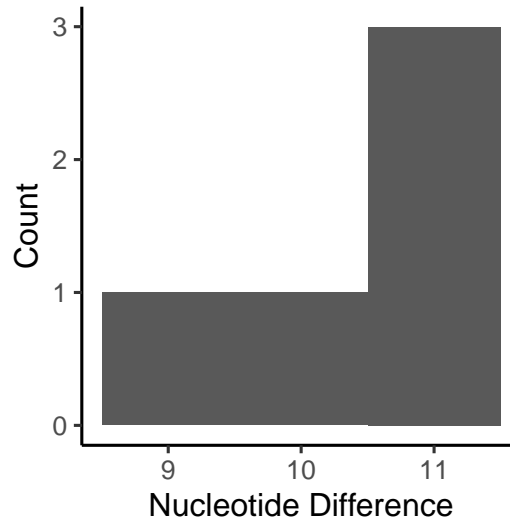
IGHV4–59*08

2118 sequences assigned
108 (5.1%) exact matches, in which:
81 unique CDR3
7 unique J



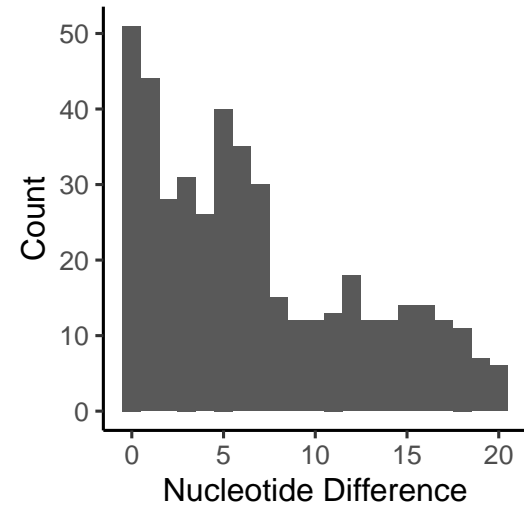
IGHV4–61*08

9 sequences assigned
No exact matches.



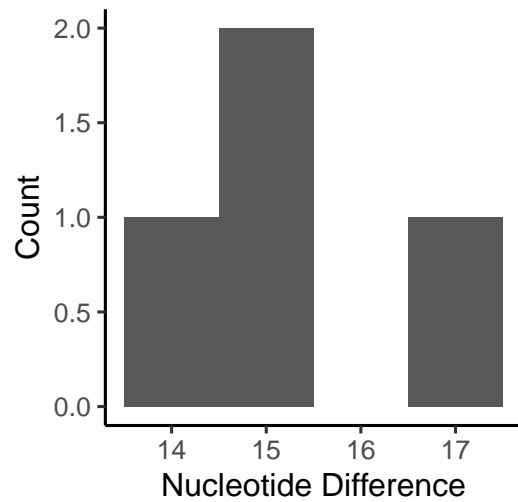
IGHV6–1*01

609 sequences assigned
51 (8.4%) exact matches, in which:
40 unique CDR3
6 unique J



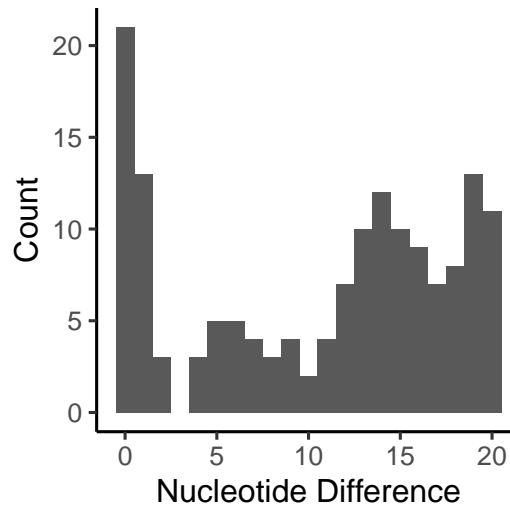
IGHV4–61*01

8 sequences assigned
No exact matches.



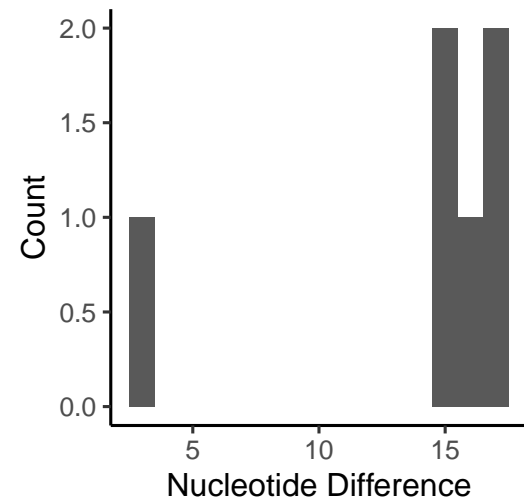
IGHV5–10–1*03

233 sequences assigned
21 (9%) exact matches, in which:
17 unique CDR3
5 unique J



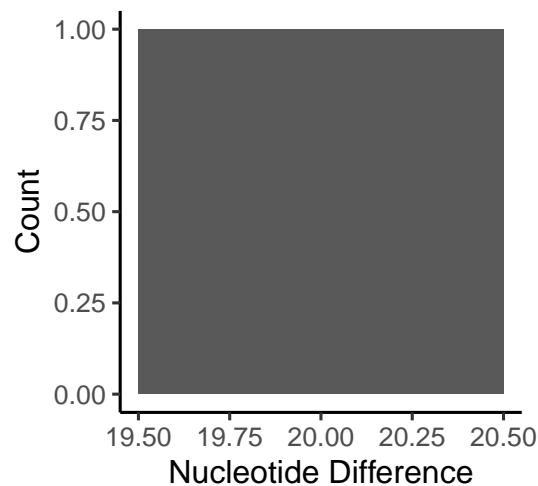
IGHV7–4–1*01

7 sequences assigned
No exact matches.



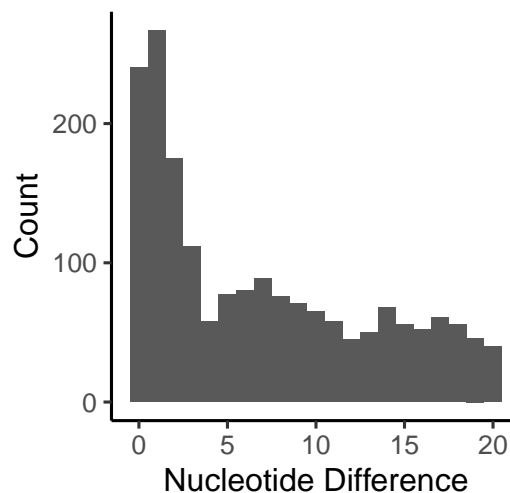
IGHV4–61*05

4 sequences assigned
No exact matches.

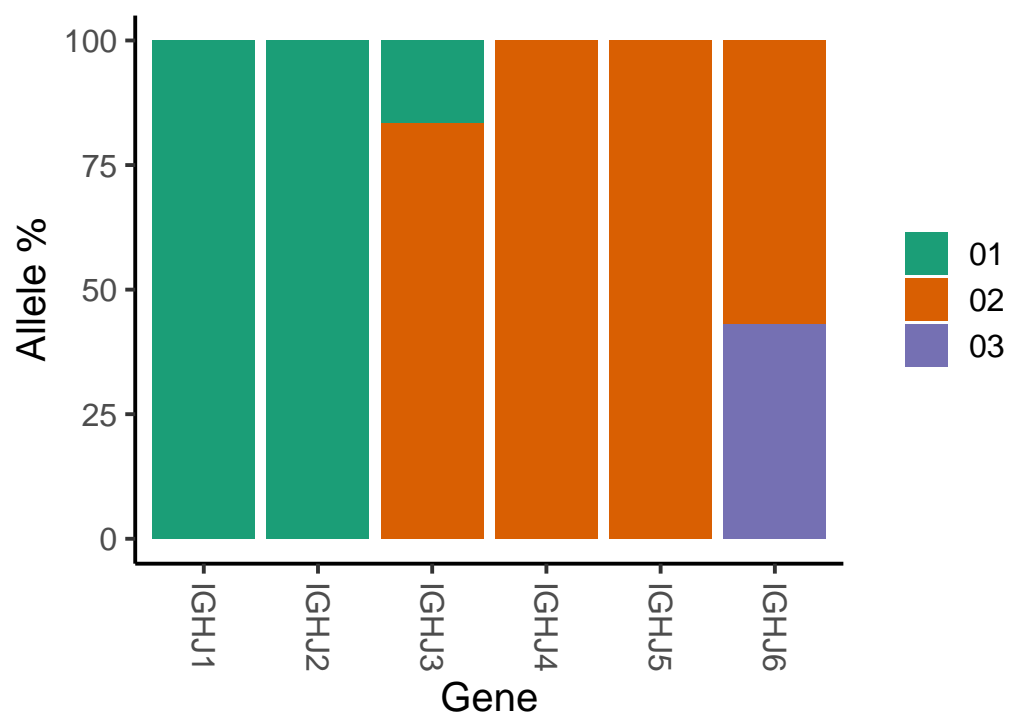


IGHV5–51*01

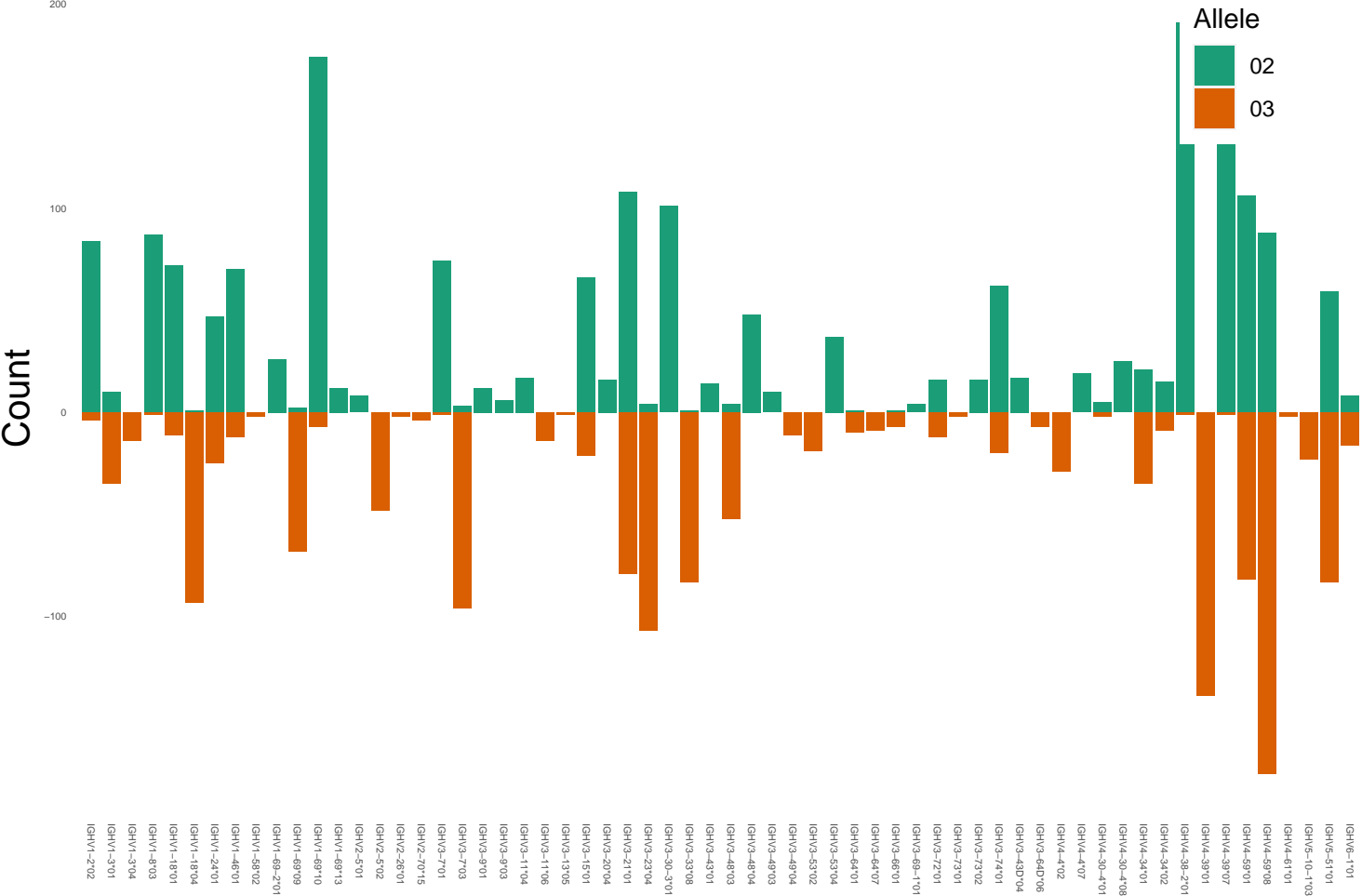
2272 sequences assigned
240 (10.6%) exact matches, in which:
177 unique CDR3
7 unique J



Allele Usage



Sequence Count by IGHJ6 allele usage



[illegible]