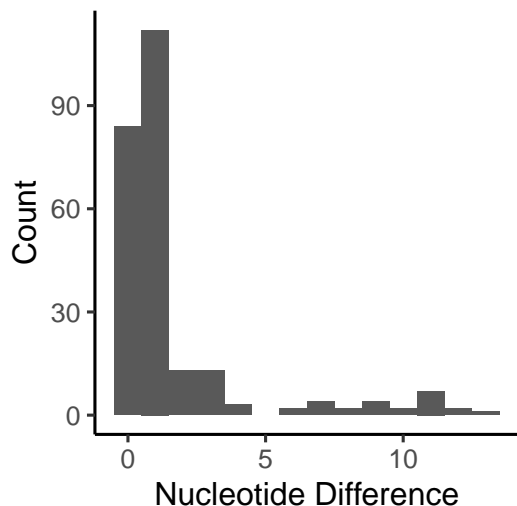


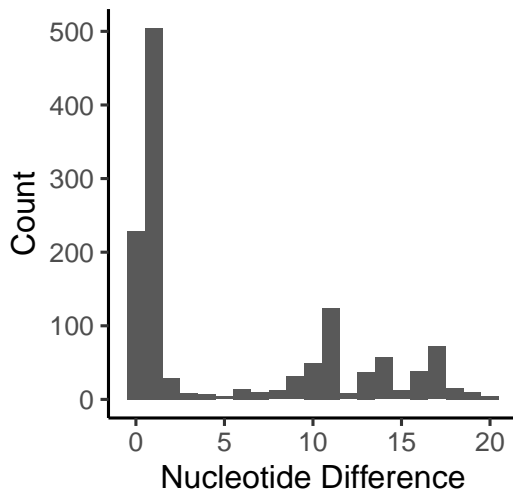
IGHV1-2*04

249 sequences assigned
84 (33.7%) exact matches, in which:
57 unique CDR3
5 unique J



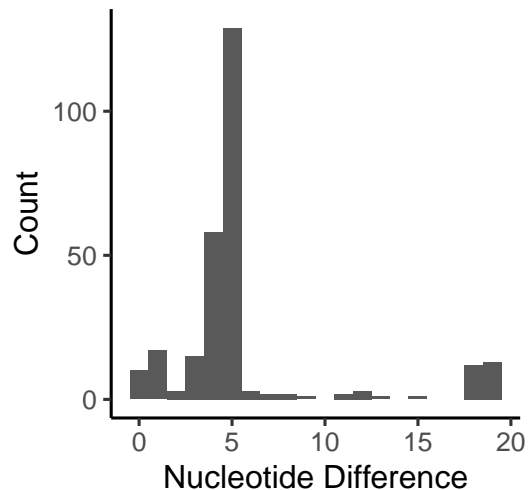
IGHV1-18*01

2279 sequences assigned
229 (10%) exact matches, in which:
139 unique CDR3
6 unique J



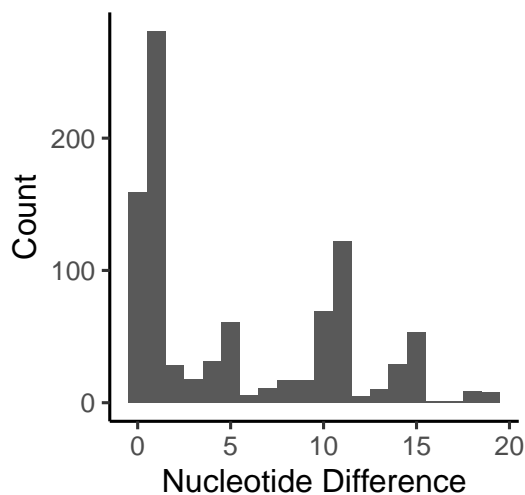
IGHV1-46*03

284 sequences assigned
10 (3.5%) exact matches, in which:
6 unique CDR3
2 unique J



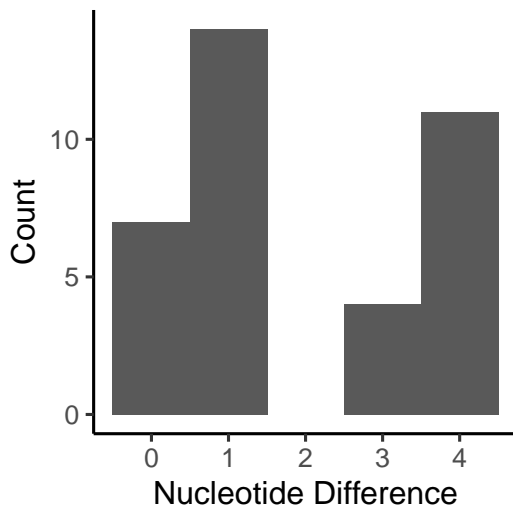
IGHV1-3*01_05

953 sequences assigned
159 (16.7%) exact matches, in which:
65 unique CDR3
5 unique J



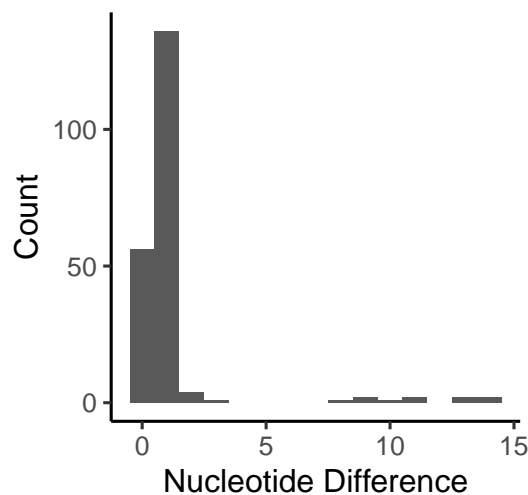
IGHV1-24*01

39 sequences assigned
7 (17.9%) exact matches, in which:
3 unique CDR3
2 unique J



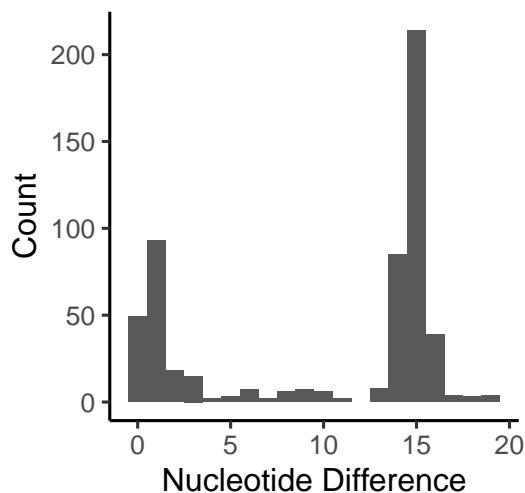
IGHV1-58*02

229 sequences assigned
56 (24.5%) exact matches, in which:
36 unique CDR3
5 unique J



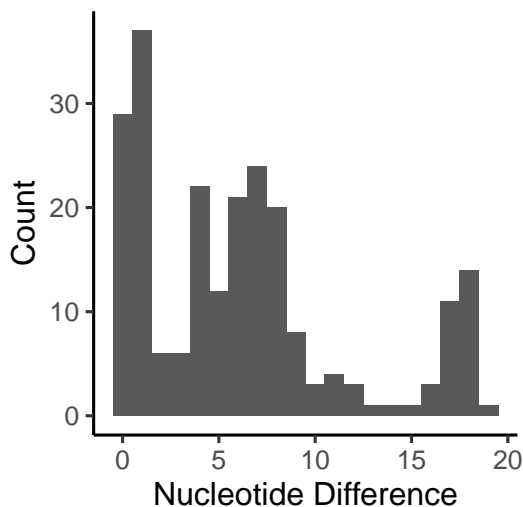
IGHV1-8*01

570 sequences assigned
49 (8.6%) exact matches, in which:
32 unique CDR3
5 unique J



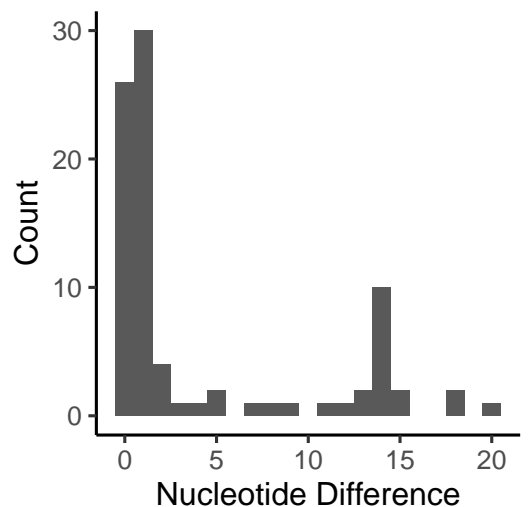
IGHV1-46*01

228 sequences assigned
29 (12.7%) exact matches, in which:
21 unique CDR3
4 unique J



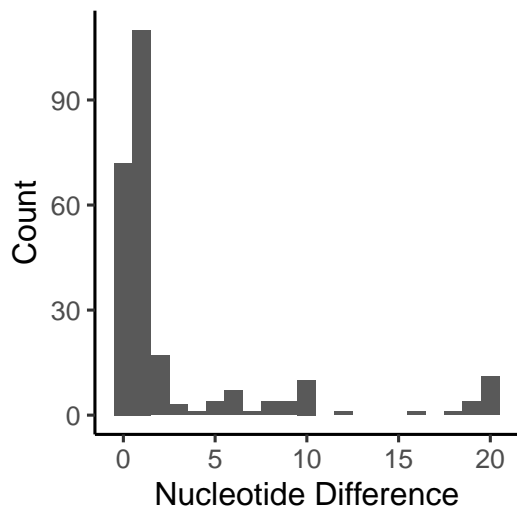
IGHV1-69*02

86 sequences assigned
26 (30.2%) exact matches, in which:
19 unique CDR3
6 unique J



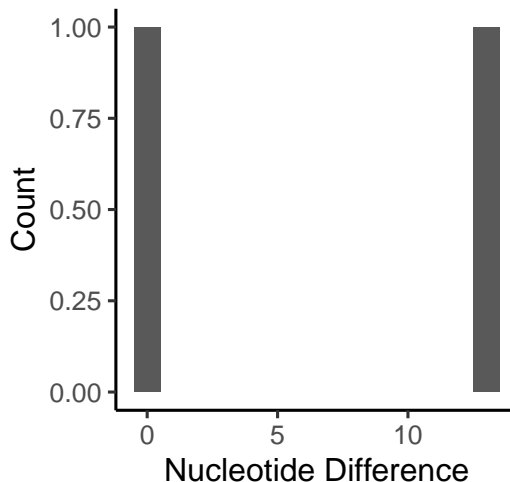
IGHV1-69*01_12_13

262 sequences assigned
72 (27.5%) exact matches, in which:
47 unique CDR3
6 unique J



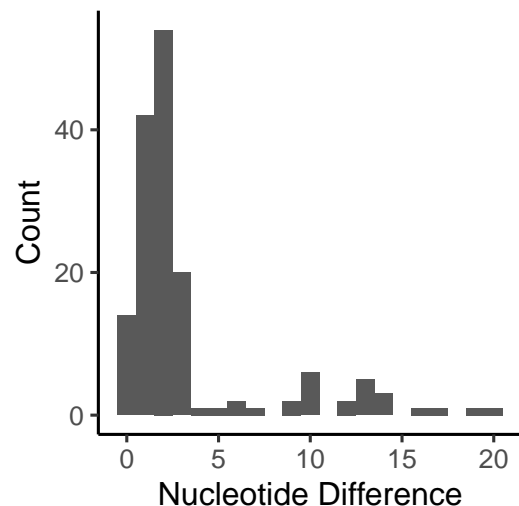
IGHV2-26*01

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



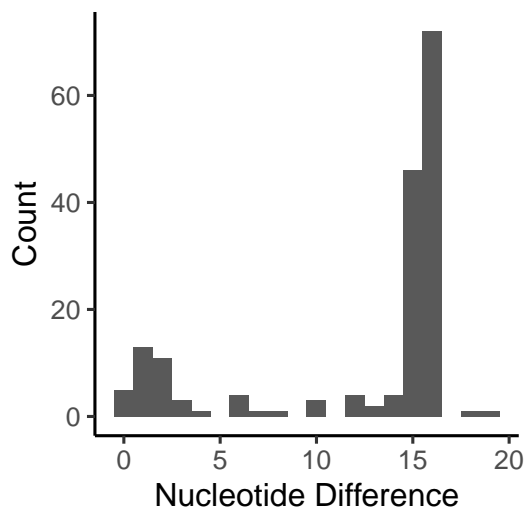
IGHV2-70*11_15

157 sequences assigned
14 (8.9%) exact matches, in which:
6 unique CDR3
3 unique J



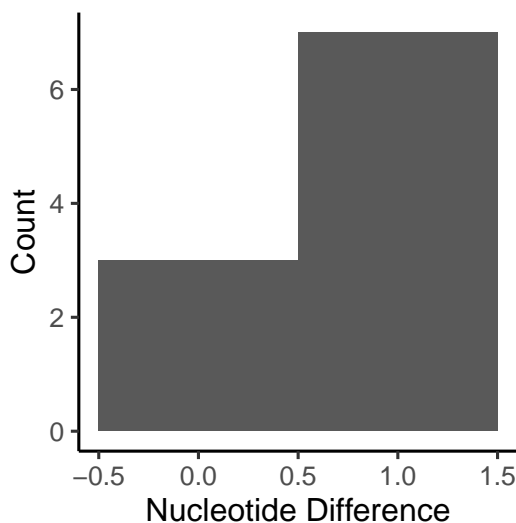
IGHV1-69*04_09

172 sequences assigned
5 (2.9%) exact matches, in which:
4 unique CDR3
2 unique J



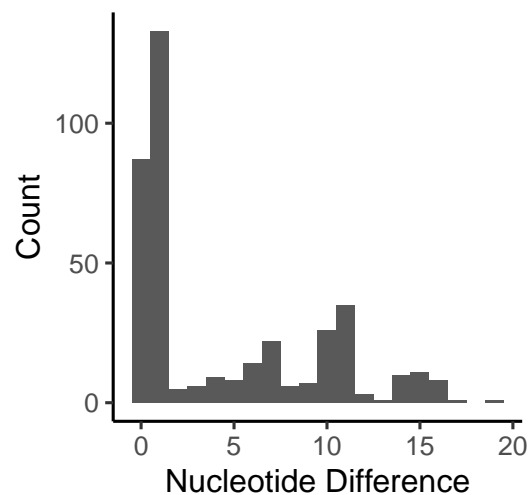
IGHV2-70*01

10 sequences assigned
3 (30%) exact matches, in which:
3 unique CDR3
1 unique J



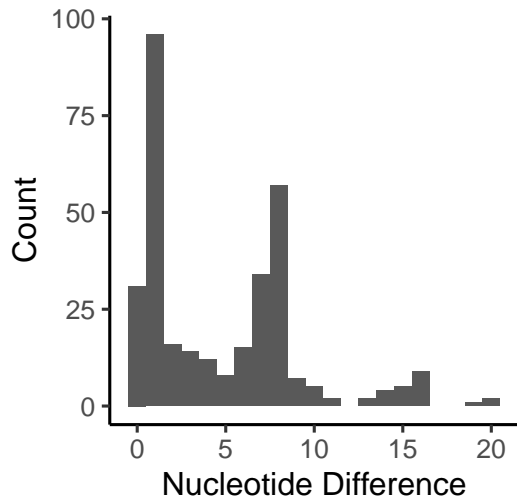
IGHV3-7*01

393 sequences assigned
87 (22.1%) exact matches, in which:
48 unique CDR3
5 unique J



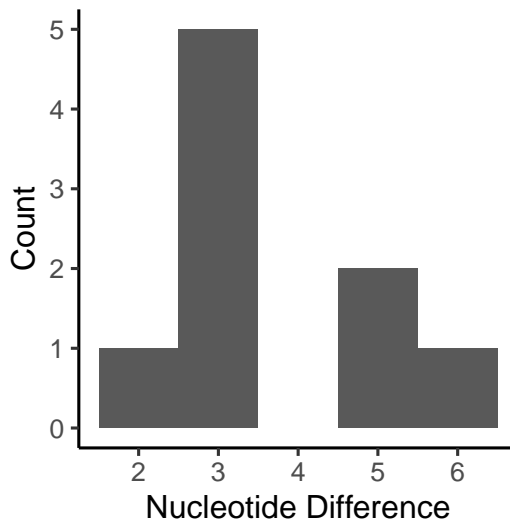
IGHV2-5*02

1362 sequences assigned
31 (2.3%) exact matches, in which:
18 unique CDR3
3 unique J



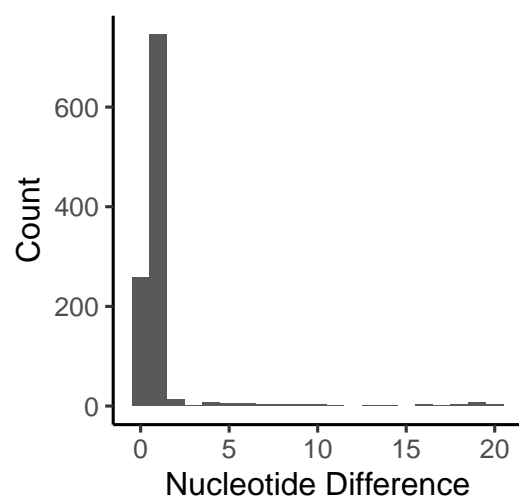
IGHV2-70*12

9 sequences assigned
No exact matches.



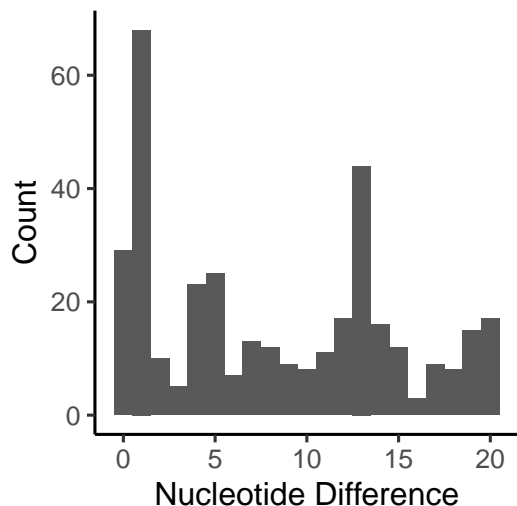
IGHV3-7*03

1306 sequences assigned
258 (19.8%) exact matches, in which:
93 unique CDR3
4 unique J



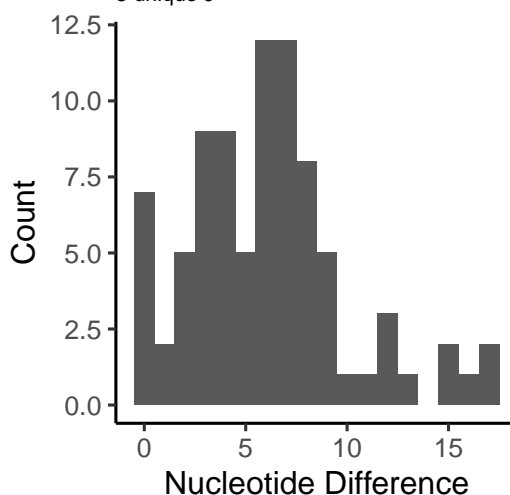
IGHV3-7*04

382 sequences assigned
29 (7.6%) exact matches, in which:
13 unique CDR3
4 unique J



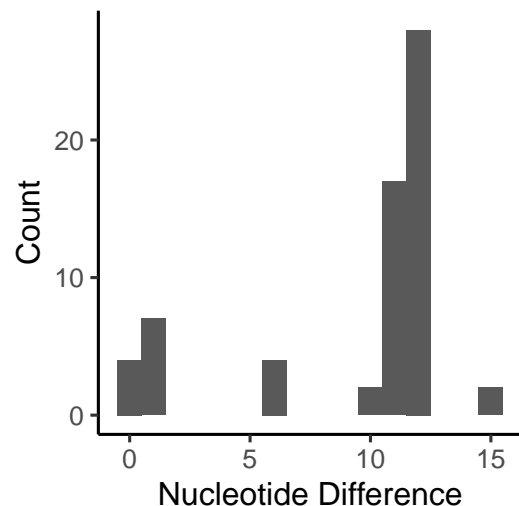
IGHV3-11*04

85 sequences assigned
7 (8.2%) exact matches, in which:
6 unique CDR3
3 unique J



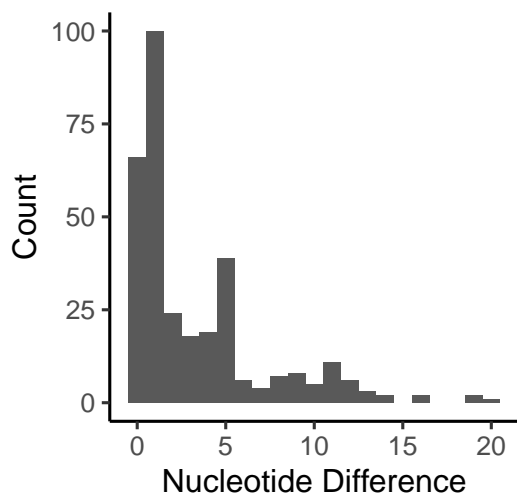
IGHV3-13*04

65 sequences assigned
4 (6.2%) exact matches, in which:
2 unique CDR3
1 unique J



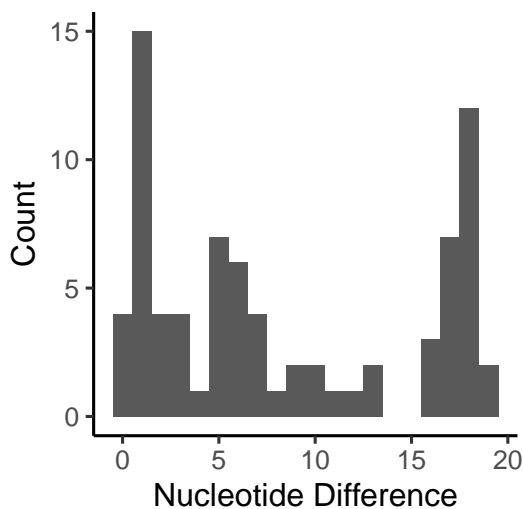
IGHV3-9*01

324 sequences assigned
66 (20.4%) exact matches, in which:
26 unique CDR3
3 unique J



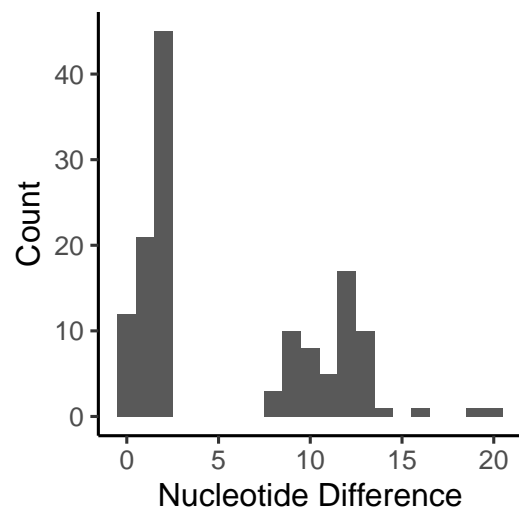
IGHV3-11*06

79 sequences assigned
4 (5.1%) exact matches, in which:
3 unique CDR3
2 unique J



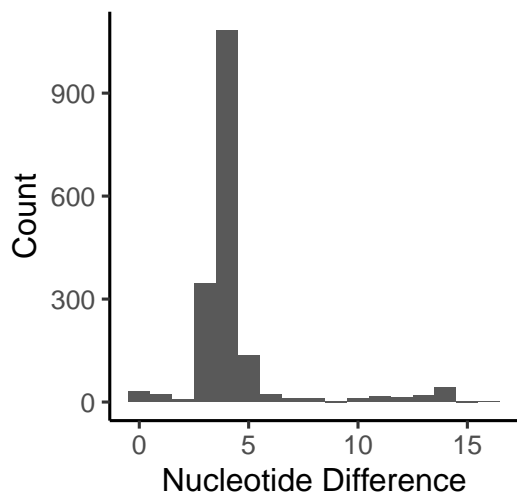
IGHV3-15*01_02

192 sequences assigned
12 (6.2%) exact matches, in which:
6 unique CDR3
2 unique J



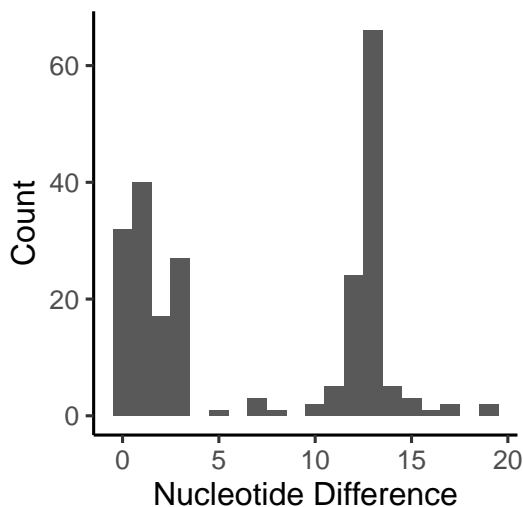
IGHV3-11*01

1779 sequences assigned
30 (1.7%) exact matches, in which:
14 unique CDR3
6 unique J



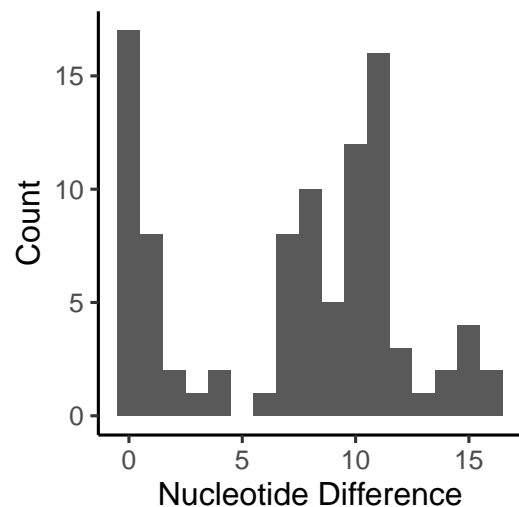
IGHV3-11*03_05

245 sequences assigned
32 (13.1%) exact matches, in which:
15 unique CDR3
4 unique J



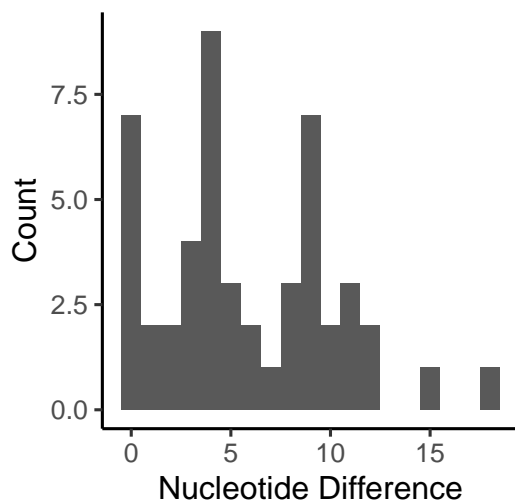
IGHV3-20*03_04

94 sequences assigned
17 (18.1%) exact matches, in which:
10 unique CDR3
2 unique J



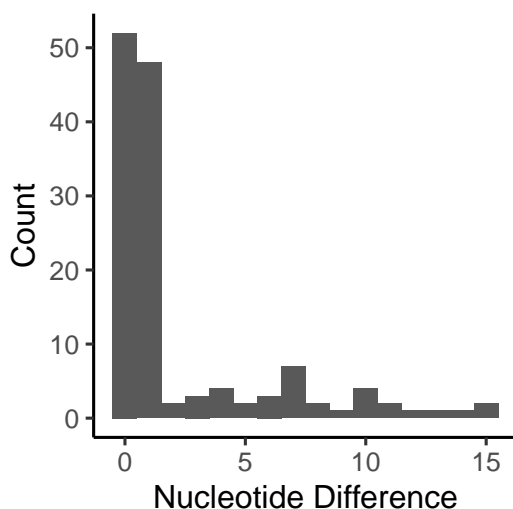
IGHV3-21*04

51 sequences assigned
7 (13.7%) exact matches, in which:
7 unique CDR3
5 unique J



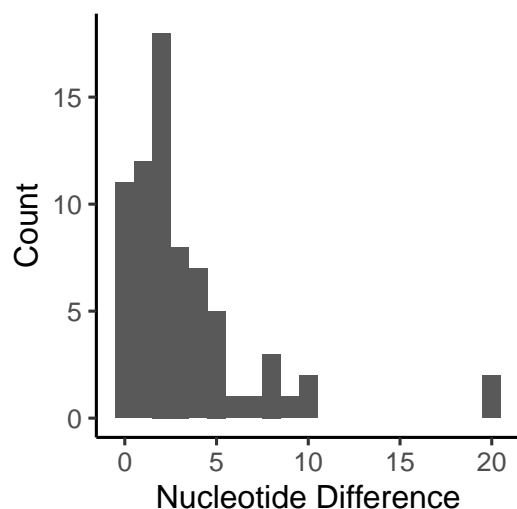
IGHV3-30-3*01

145 sequences assigned
52 (35.9%) exact matches, in which:
24 unique CDR3
4 unique J



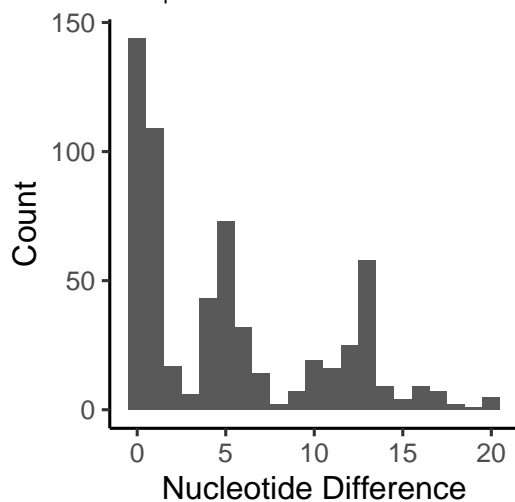
IGHV3-33*06

73 sequences assigned
11 (15.1%) exact matches, in which:
10 unique CDR3
4 unique J



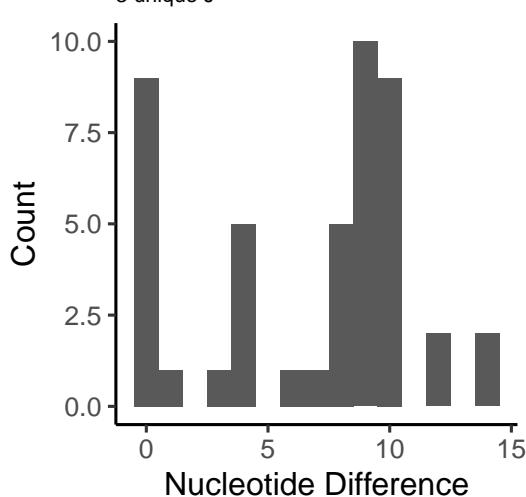
IGHV3-21*01_02

610 sequences assigned
144 (23.6%) exact matches, in which:
75 unique CDR3
5 unique J



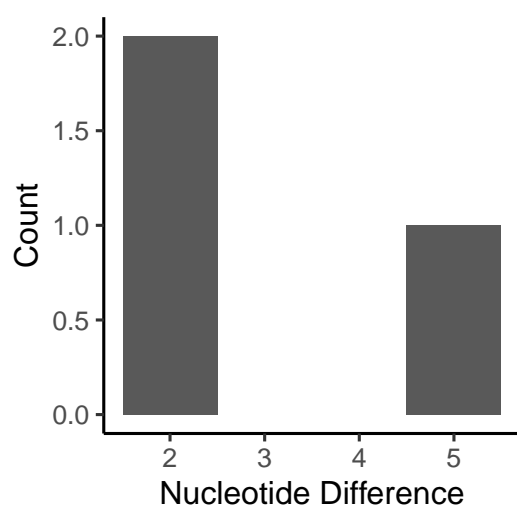
IGHV3-30*03

49 sequences assigned
9 (18.4%) exact matches, in which:
9 unique CDR3
3 unique J



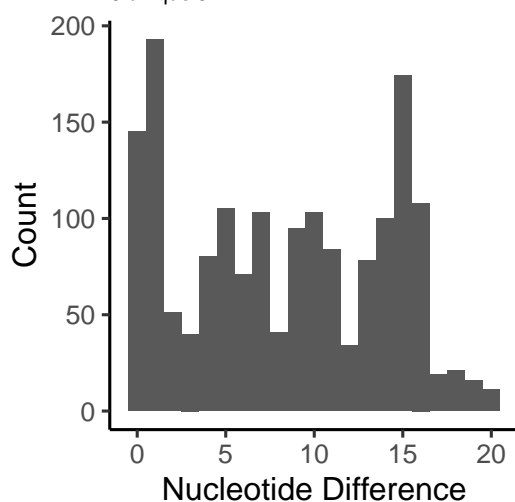
IGHV3-43*01

3 sequences assigned
No exact matches.



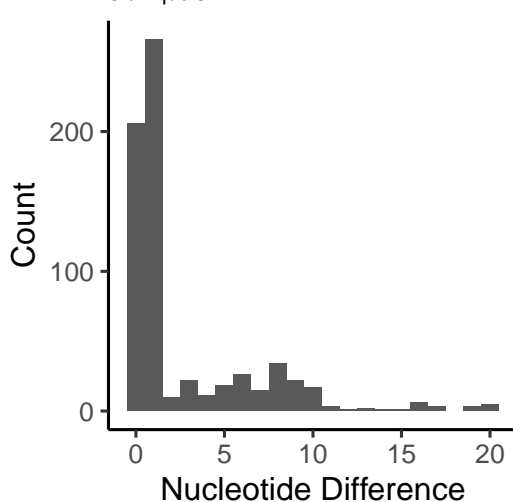
IGHV3-23*01_04

3353 sequences assigned
145 (4.3%) exact matches, in which:
66 unique CDR3
6 unique J



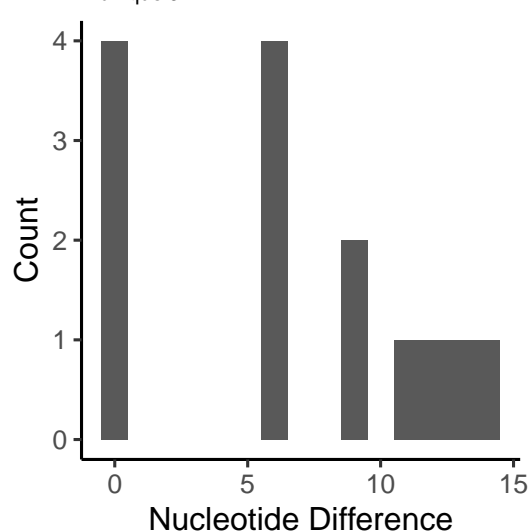
IGHV3-33*01

706 sequences assigned
206 (29.2%) exact matches, in which:
101 unique CDR3
6 unique J



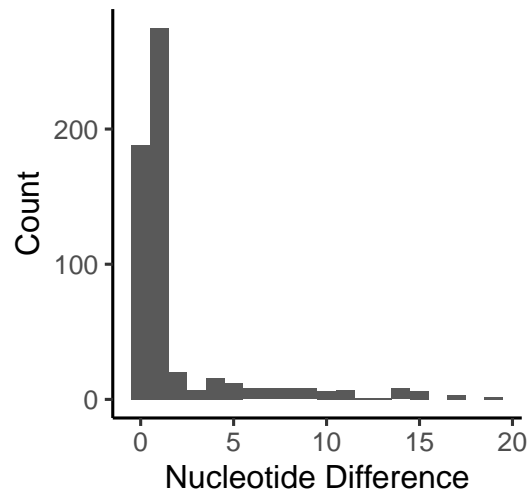
IGHV3-43*02

14 sequences assigned
4 (28.6%) exact matches, in which:
2 unique CDR3
1 unique J



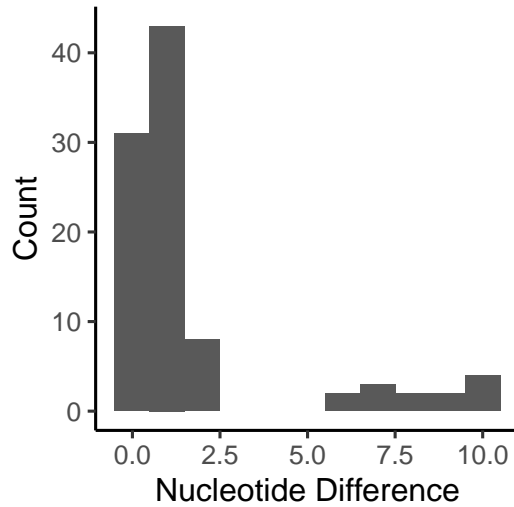
IGHV3-48*01

604 sequences assigned
188 (31.1%) exact matches, in which:
100 unique CDR3
5 unique J



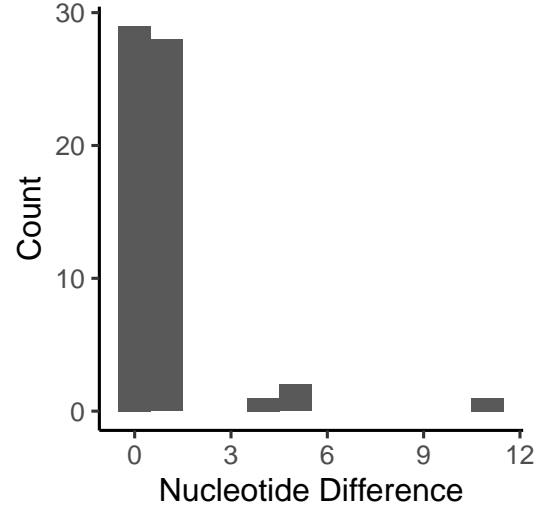
IGHV3-49*04

95 sequences assigned
31 (32.6%) exact matches, in which:
12 unique CDR3
3 unique J



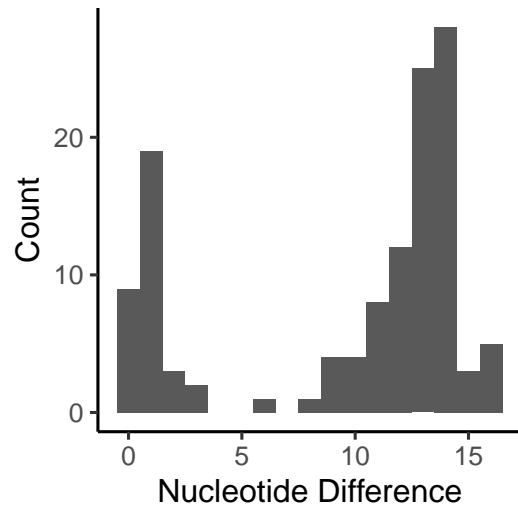
IGHV3-64*01

61 sequences assigned
29 (47.5%) exact matches, in which:
15 unique CDR3
3 unique J



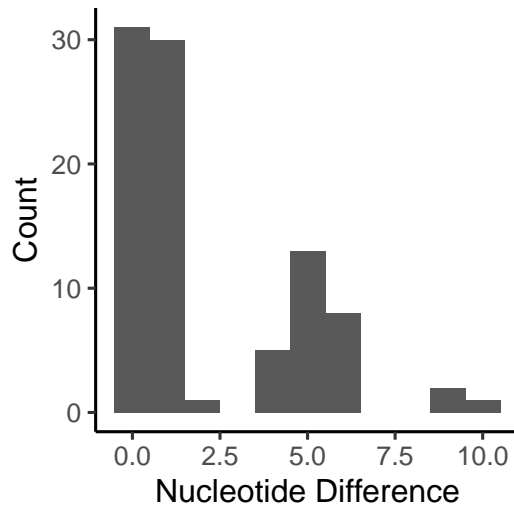
IGHV3-48*03

126 sequences assigned
9 (7.1%) exact matches, in which:
3 unique CDR3
3 unique J



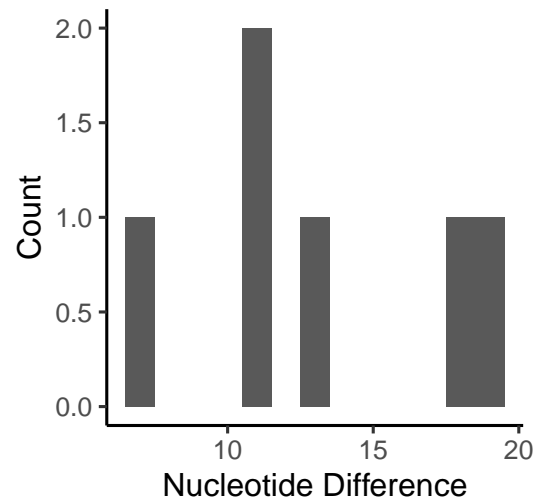
IGHV3-49*03_05

91 sequences assigned
31 (34.1%) exact matches, in which:
12 unique CDR3
3 unique J



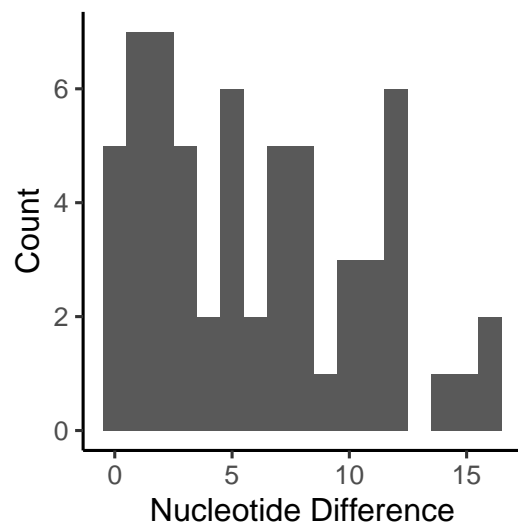
IGHV3-64*04

10 sequences assigned
No exact matches.



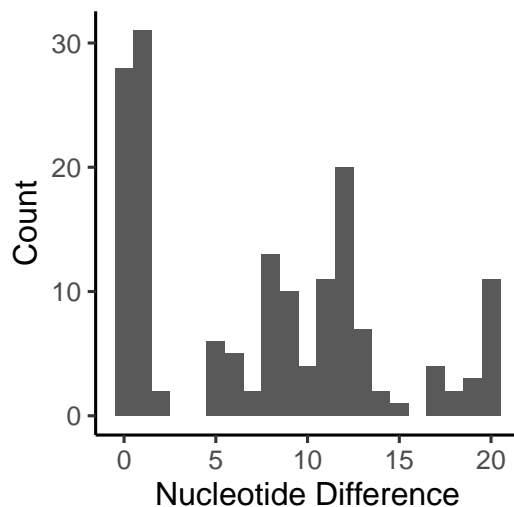
IGHV3-48*04

61 sequences assigned
5 (8.2%) exact matches, in which:
4 unique CDR3
2 unique J



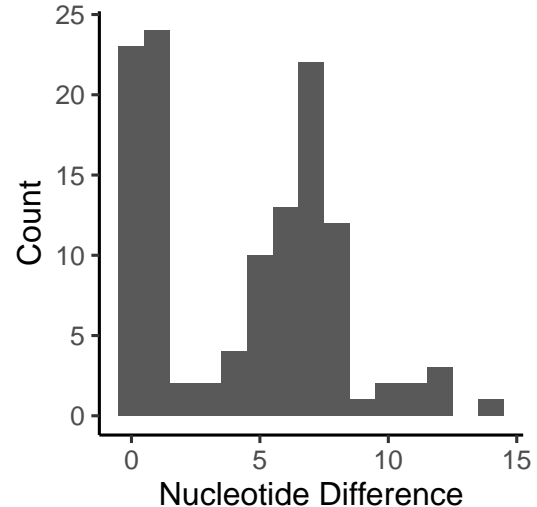
IGHV3-53*01_02

198 sequences assigned
28 (14.1%) exact matches, in which:
15 unique CDR3
4 unique J



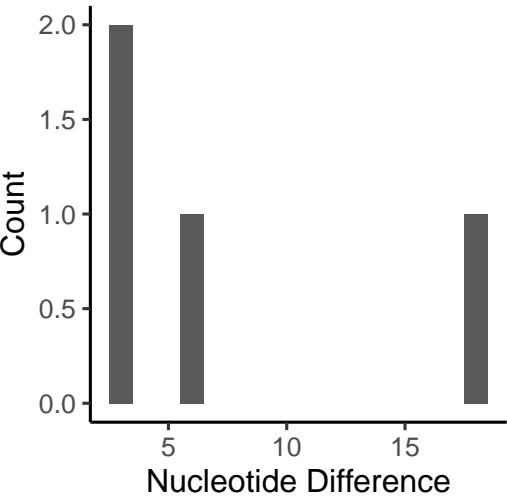
IGHV3-66*01

126 sequences assigned
23 (18.3%) exact matches, in which:
17 unique CDR3
6 unique J



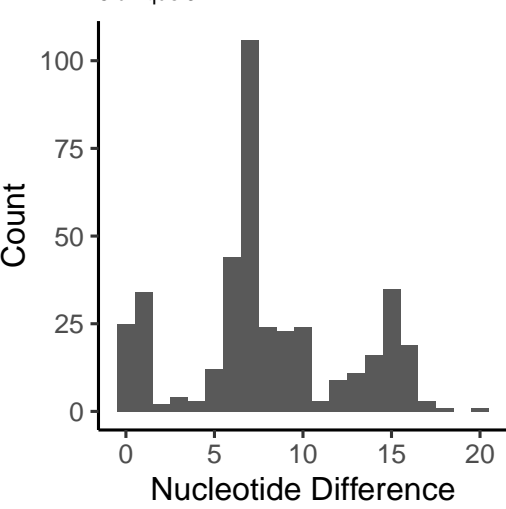
IGHV3-69-1*01

4 sequences assigned
No exact matches.



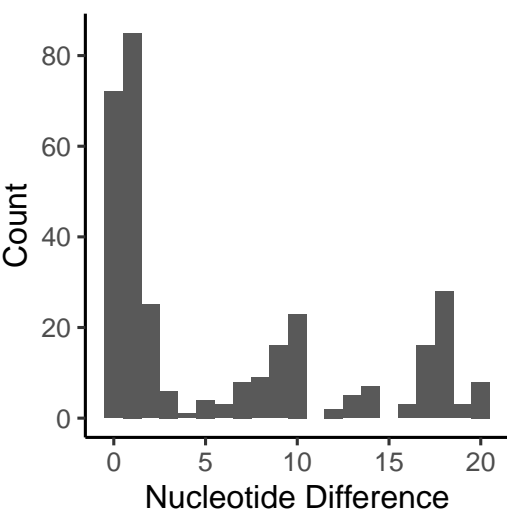
IGHV3-74*01_02

421 sequences assigned
25 (5.9%) exact matches, in which:
14 unique CDR3
5 unique J



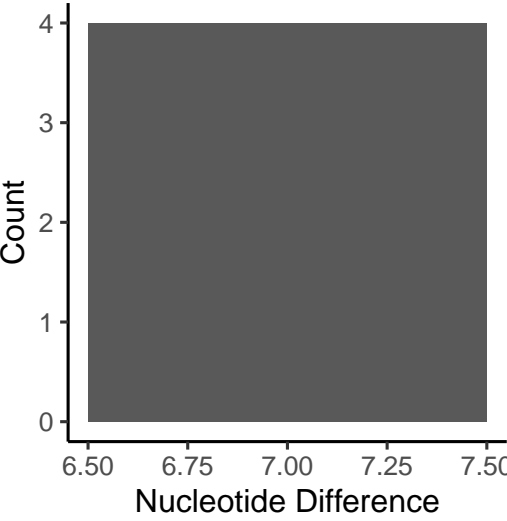
IGHV4-4*02_03

390 sequences assigned
72 (18.5%) exact matches, in which:
35 unique CDR3
6 unique J



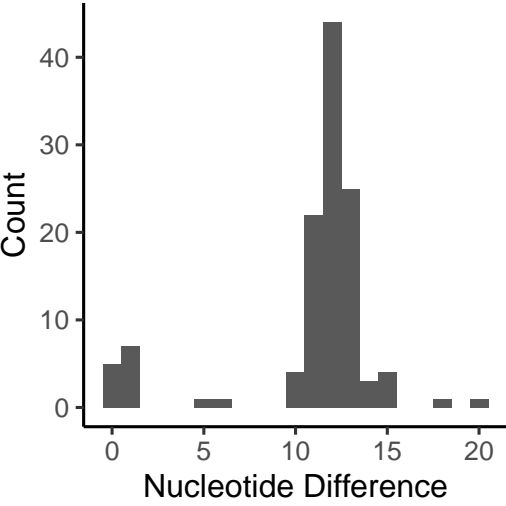
IGHV3-72*01

14 sequences assigned
No exact matches.



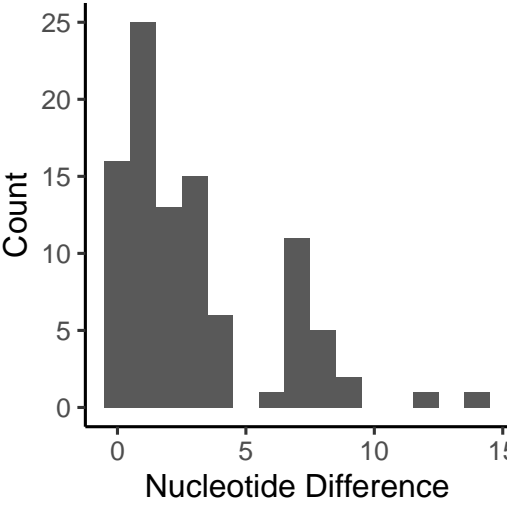
IGHV3-64D*06

356 sequences assigned
5 (1.4%) exact matches, in which:
2 unique CDR3
2 unique J



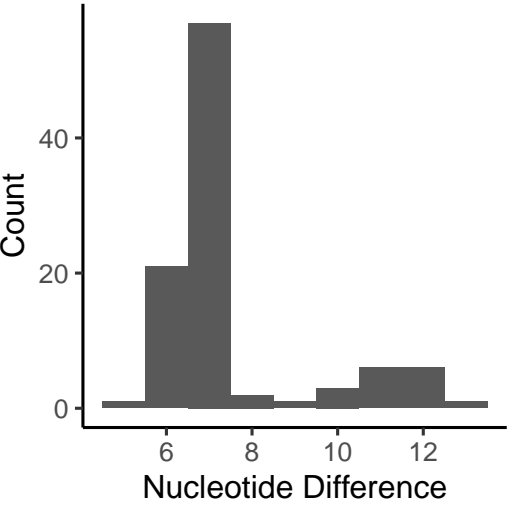
IGHV4-4*02_03_C300T

97 sequences assigned
16 (16.5%) exact matches, in which:
15 unique CDR3
5 unique J



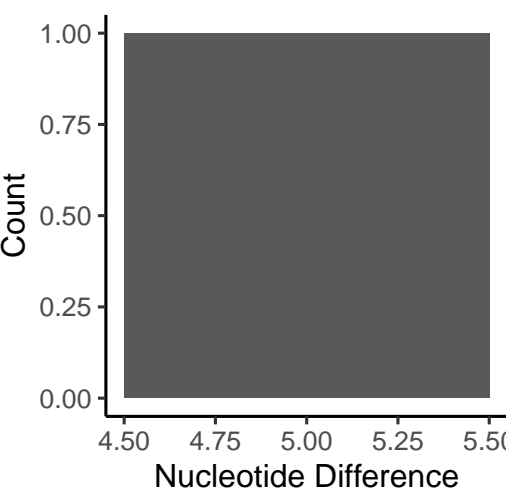
IGHV3-73*01_02

100 sequences assigned
No exact matches.



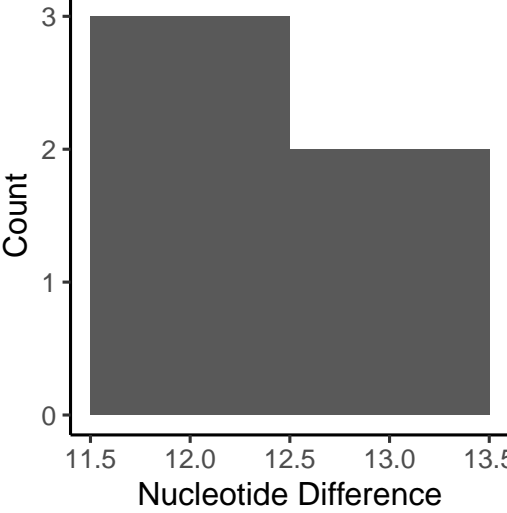
IGHV3-NL1*01

1 sequences assigned
No exact matches.



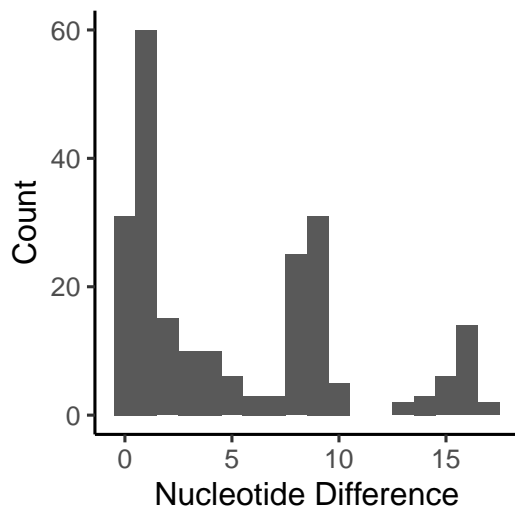
IGHV4-28*03

5 sequences assigned
No exact matches.



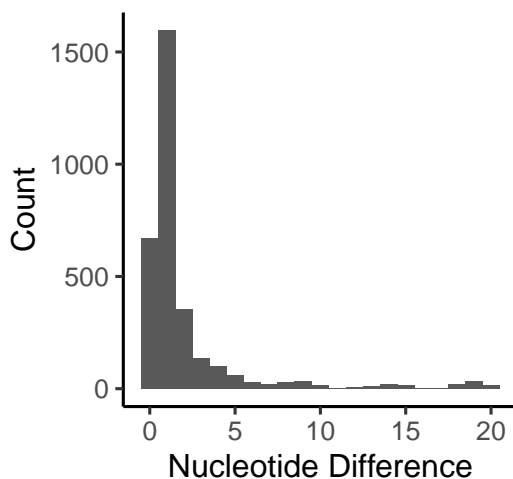
IGHV4-30-4*01

228 sequences assigned
31 (13.6%) exact matches, in which:
17 unique CDR3
4 unique J



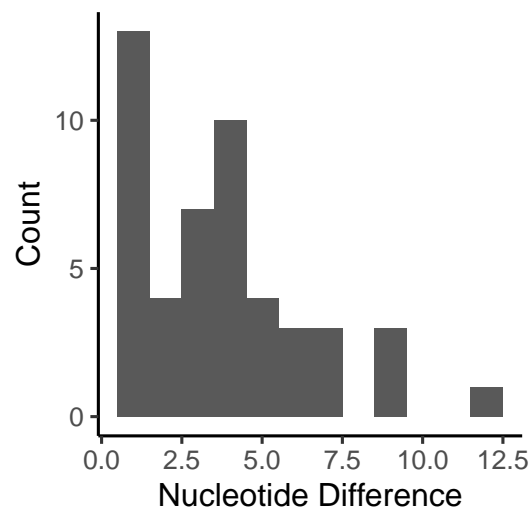
IGHV4-34*01_02

3173 sequences assigned
672 (21.2%) exact matches, in which:
379 unique CDR3
7 unique J



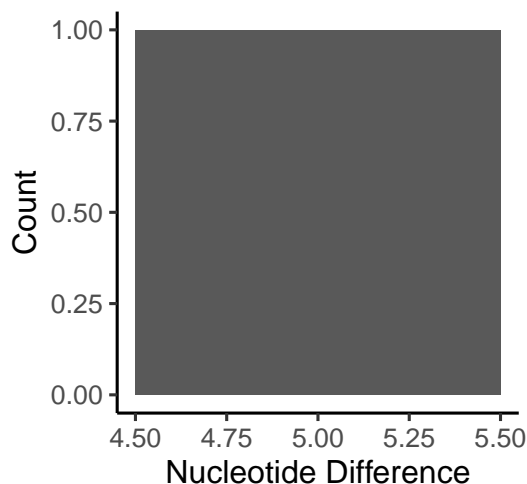
IGHV4-39*07

48 sequences assigned
No exact matches.



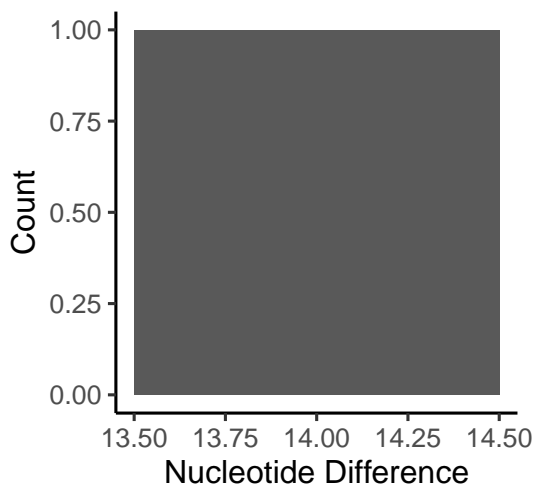
IGHV4-30-2*03

2 sequences assigned
No exact matches.



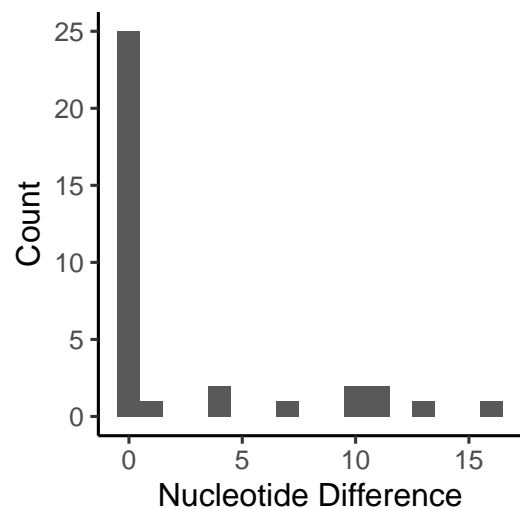
IGHV4-38-2*02

1 sequences assigned
No exact matches.



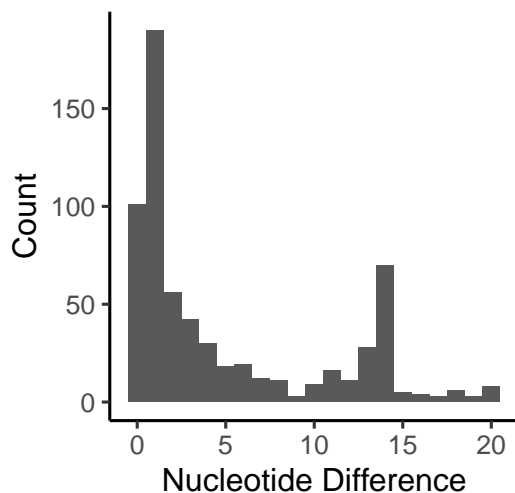
IGHV4-39*02_C258G_A2

36 sequences assigned
25 (69.4%) exact matches, in which:
25 unique CDR3
6 unique J



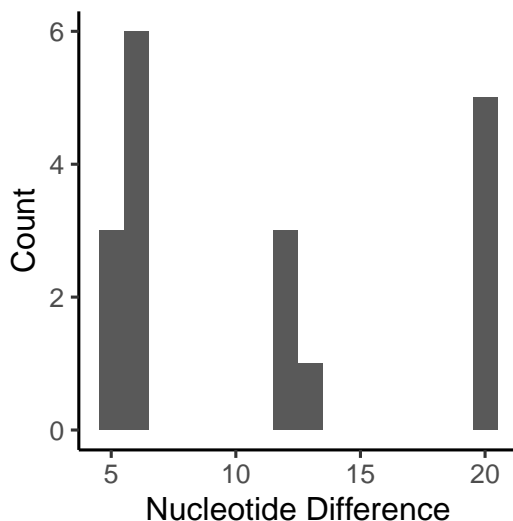
IGHV4-31*02

1435 sequences assigned
101 (7%) exact matches, in which:
73 unique CDR3
7 unique J



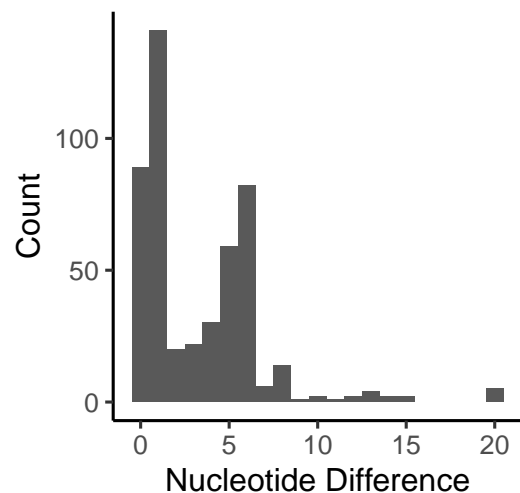
IGHV4-39*02

72 sequences assigned
No exact matches.



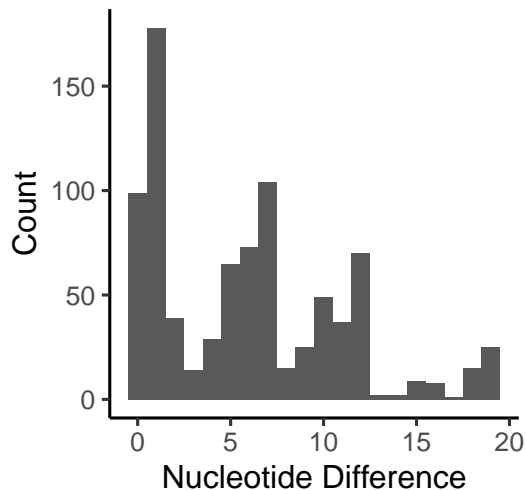
IGHV4-59*08

628 sequences assigned
89 (14.2%) exact matches, in which:
56 unique CDR3
6 unique J



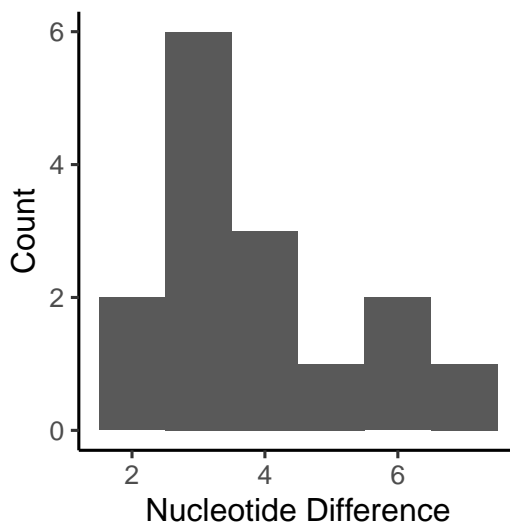
IGHV4-59*01_07

878 sequences assigned
99 (11.3%) exact matches, in which:
68 unique CDR3
7 unique J



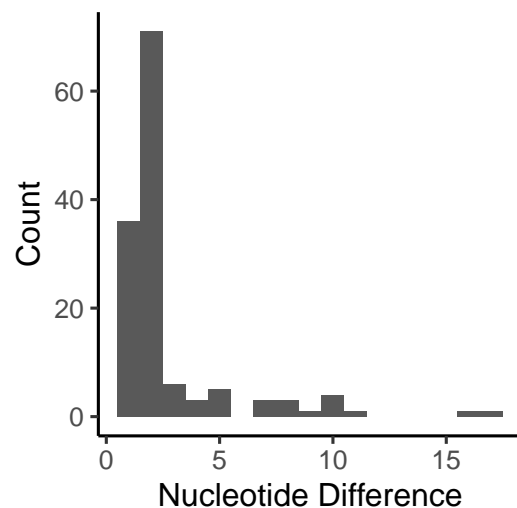
IGHV4-61*05

15 sequences assigned
No exact matches.



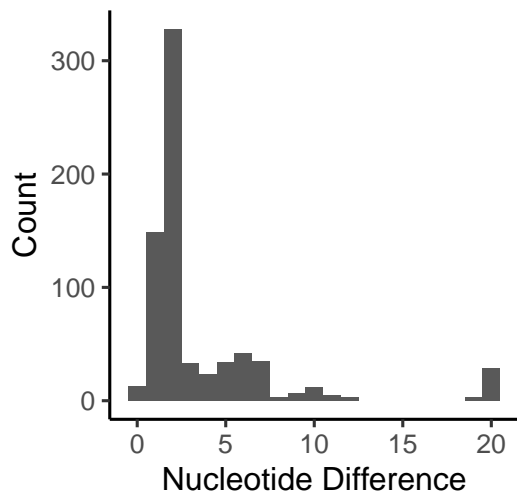
IGHV5-51*07

138 sequences assigned
No exact matches.



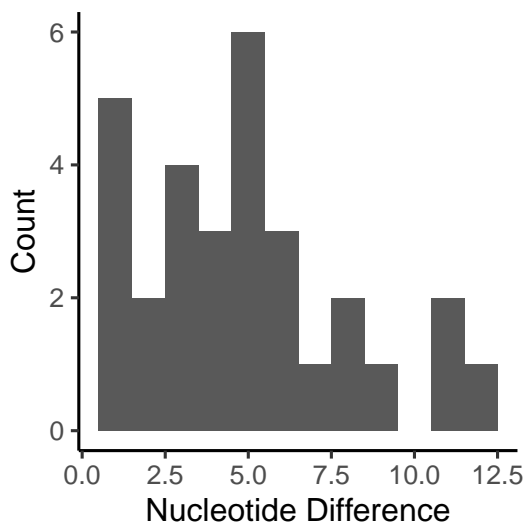
IGHV4-59*12

808 sequences assigned
13 (1.6%) exact matches, in which:
13 unique CDR3
6 unique J



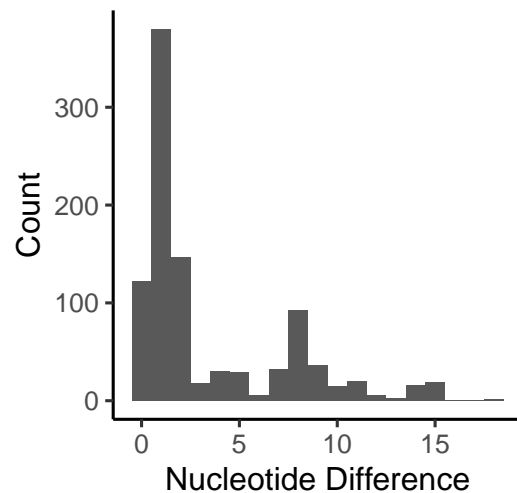
IGHV4-61*08

31 sequences assigned
No exact matches.



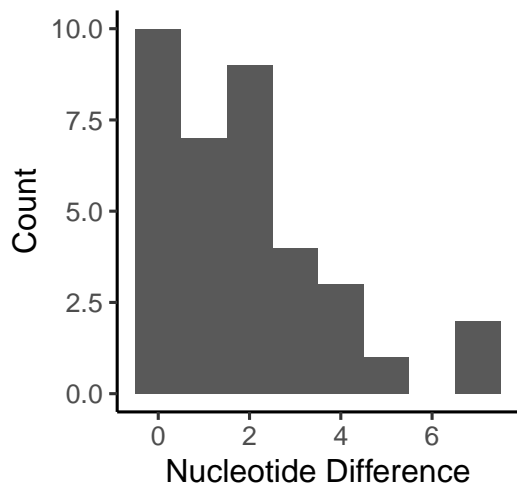
IGHV5-51*01_03

1150 sequences assigned
122 (10.6%) exact matches, in which:
49 unique CDR3
5 unique J



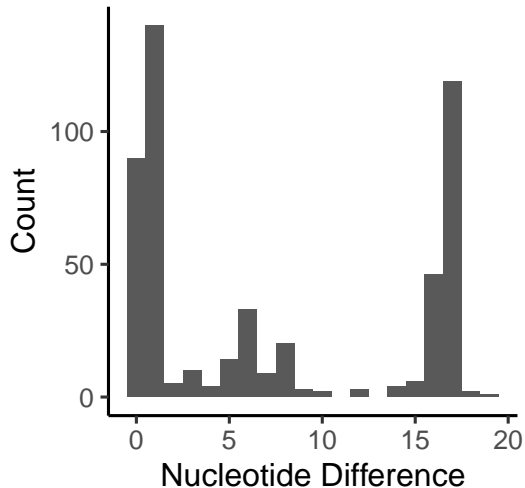
IGHV4-61*01

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



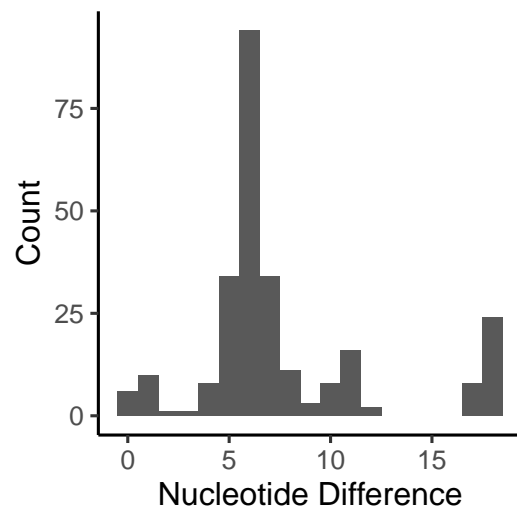
IGHV5-10-1*01_03

517 sequences assigned
90 (17.4%) exact matches, in which:
42 unique CDR3
6 unique J

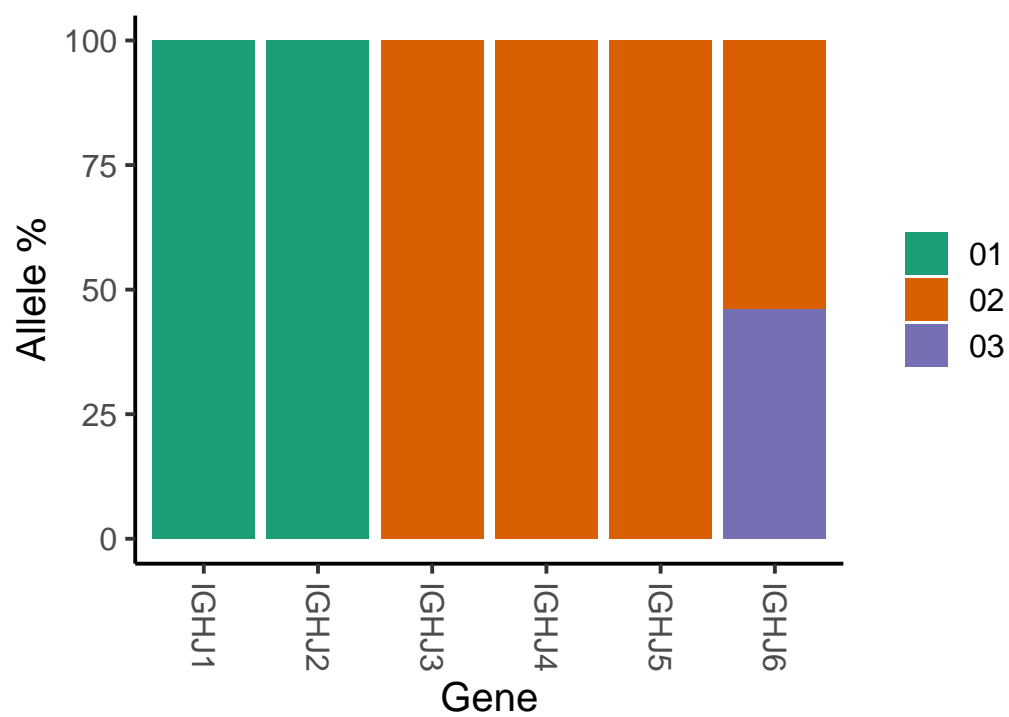


IGHV6-1*01_02

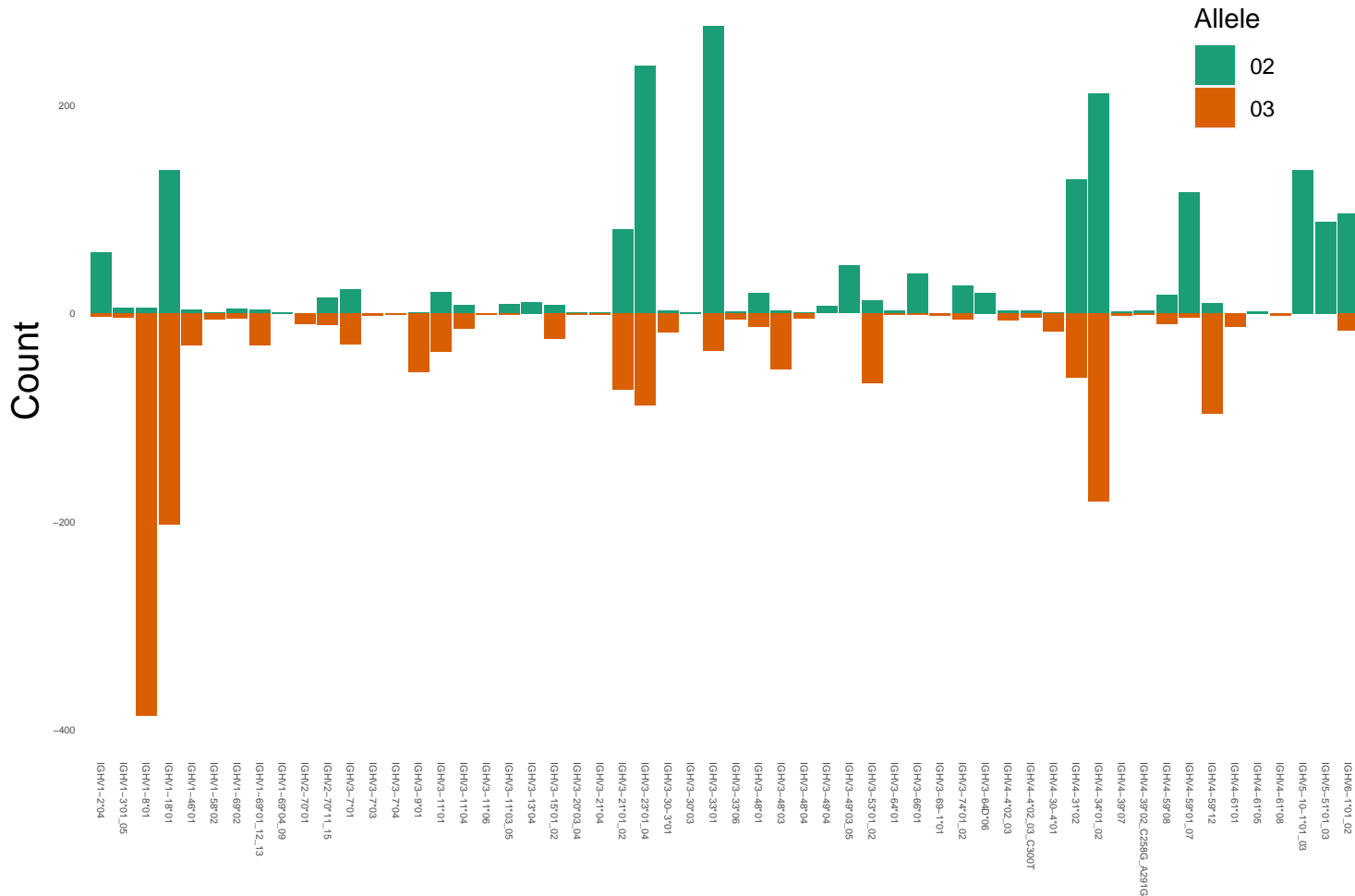
260 sequences assigned
6 (2.3%) exact matches, in which:
4 unique CDR3
3 unique J



Allele Usage



Sequence Count by IGHJ6 allele usage



Warning – no inferred sequences found.