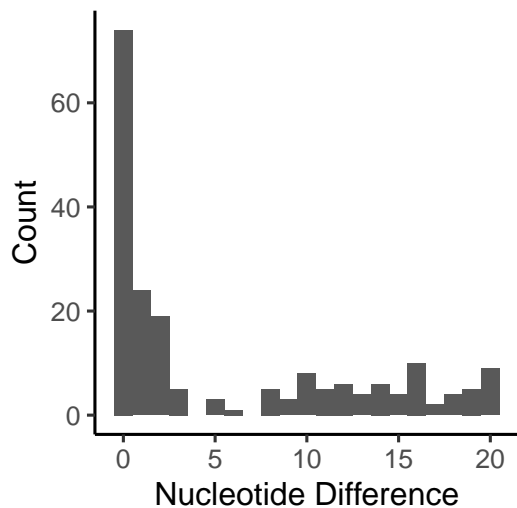


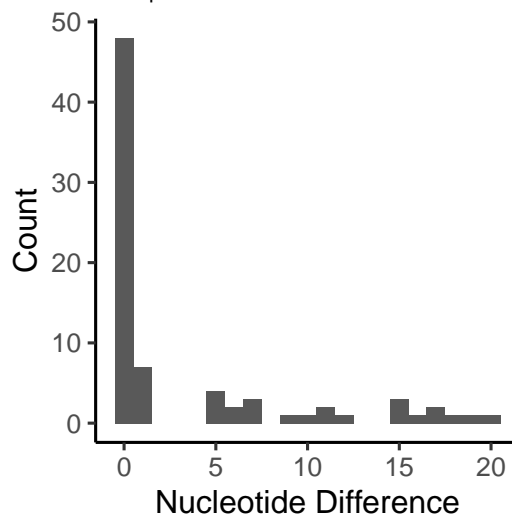
IGHV1-2*06

446 sequences assigned
74 (16.6%) exact matches, in which:
72 unique CDR3
6 unique J



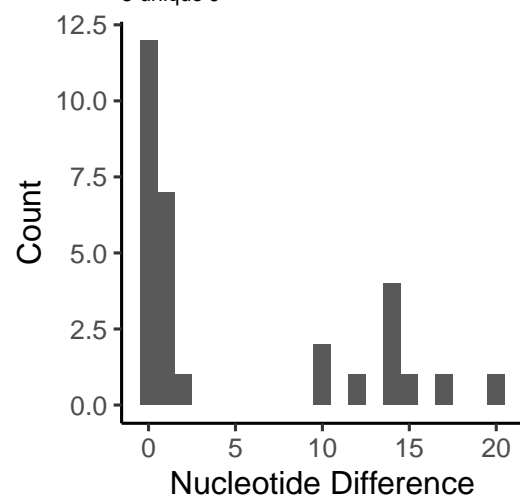
IGHV1-8*01

122 sequences assigned
48 (39.3%) exact matches, in which:
48 unique CDR3
6 unique J



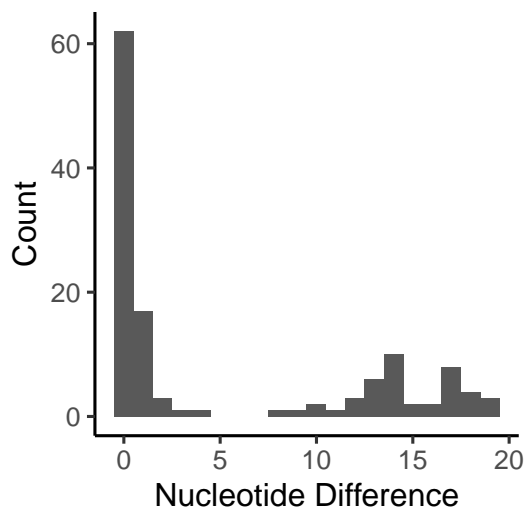
IGHV1-24*01

45 sequences assigned
12 (26.7%) exact matches, in which:
12 unique CDR3
5 unique J



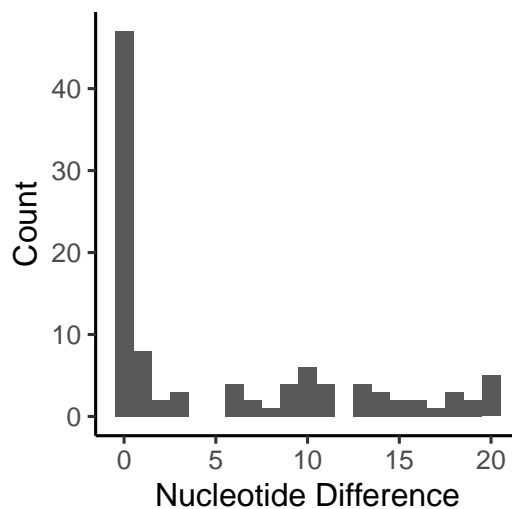
IGHV1-3*01

289 sequences assigned
62 (21.5%) exact matches, in which:
62 unique CDR3
6 unique J



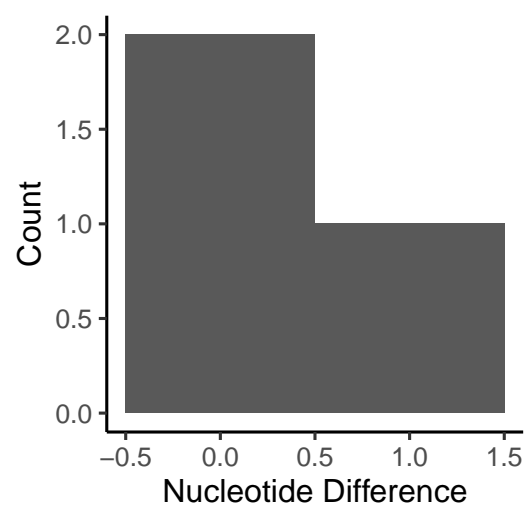
IGHV1-18*01

284 sequences assigned
47 (16.5%) exact matches, in which:
47 unique CDR3
6 unique J



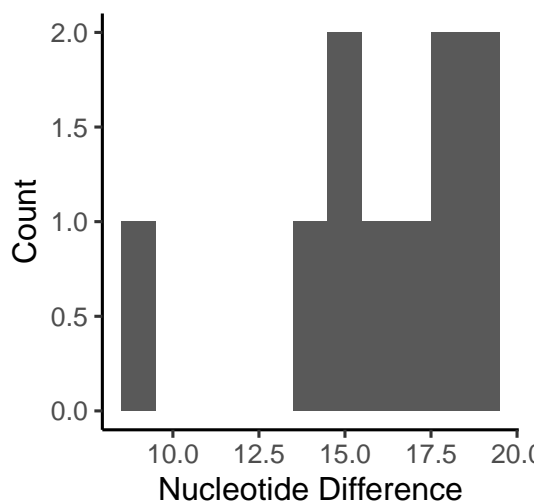
IGHV1-45*02

18 sequences assigned
2 (11.1%) exact matches, in which:
1 unique CDR3
1 unique J



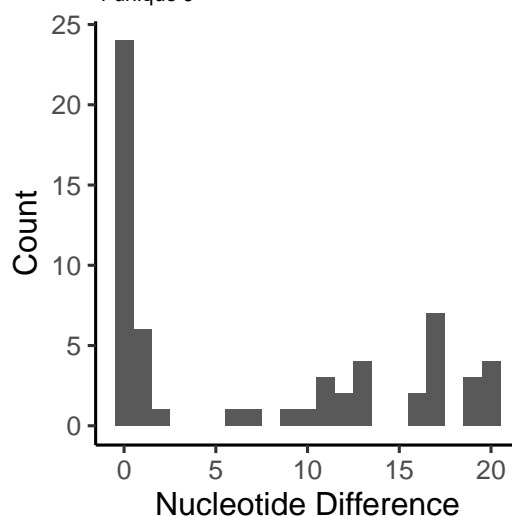
IGHV1-3*04

72 sequences assigned
No exact matches.



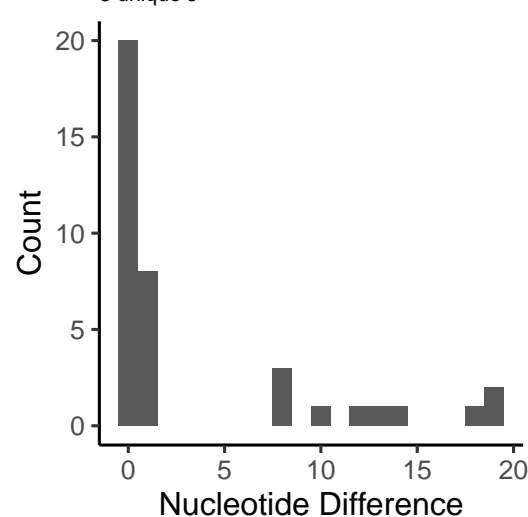
IGHV1-18*04

165 sequences assigned
24 (14.5%) exact matches, in which:
24 unique CDR3
4 unique J



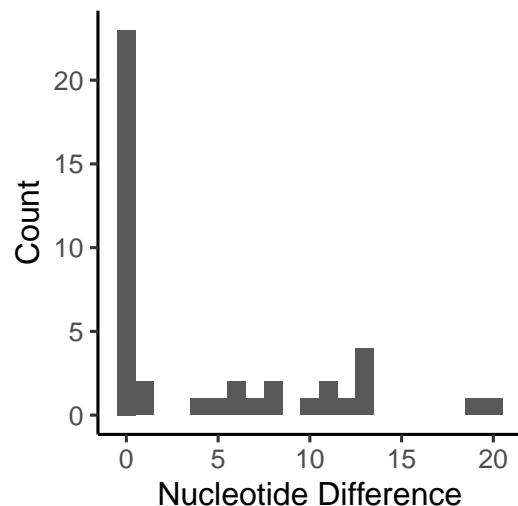
IGHV1-46*01

114 sequences assigned
20 (17.5%) exact matches, in which:
20 unique CDR3
3 unique J



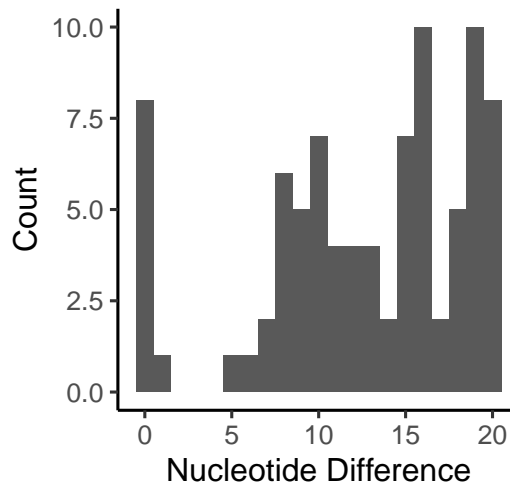
IGHV1-46*03

127 sequences assigned
23 (18.1%) exact matches, in which:
23 unique CDR3
4 unique J



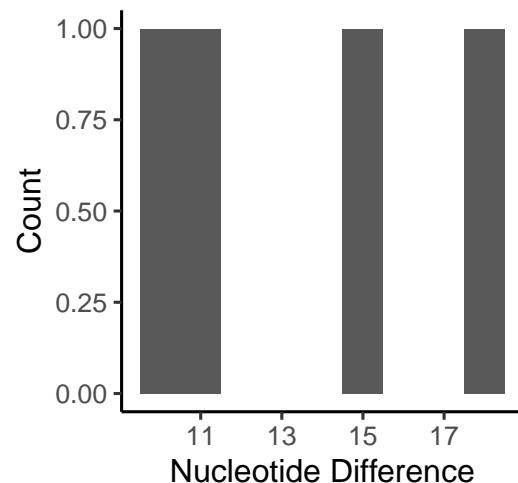
IGHV2-5*02

119 sequences assigned
8 (6.7%) exact matches, in which:
8 unique CDR3
2 unique J



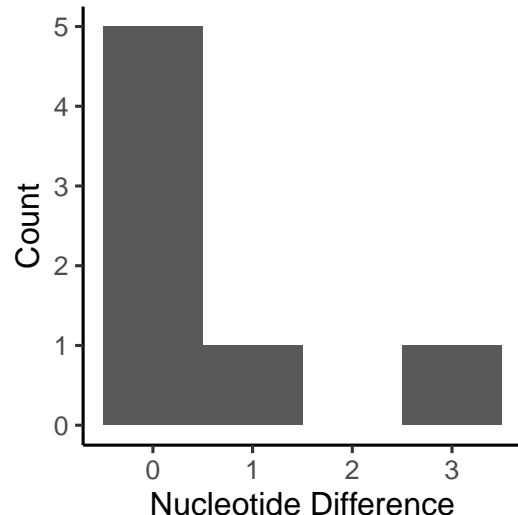
IGHV2-70*13

10 sequences assigned
No exact matches.



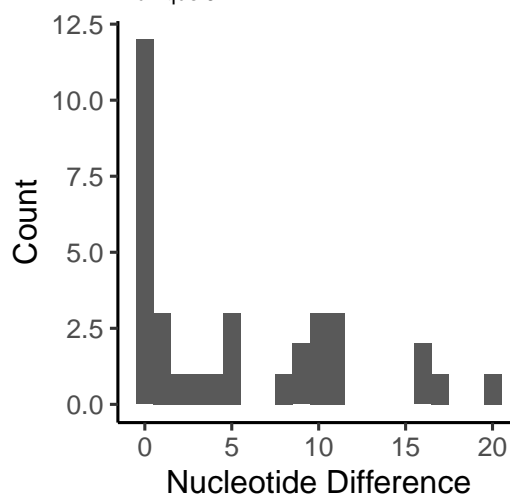
IGHV1-58*01

18 sequences assigned
5 (27.8%) exact matches, in which:
5 unique CDR3
3 unique J



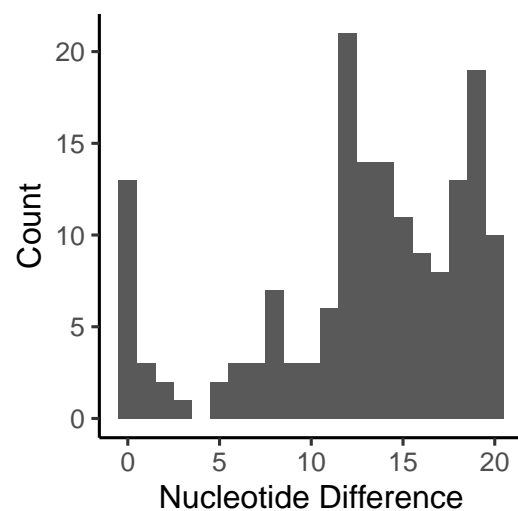
IGHV2-26*01

49 sequences assigned
12 (24.5%) exact matches, in which:
12 unique CDR3
4 unique J



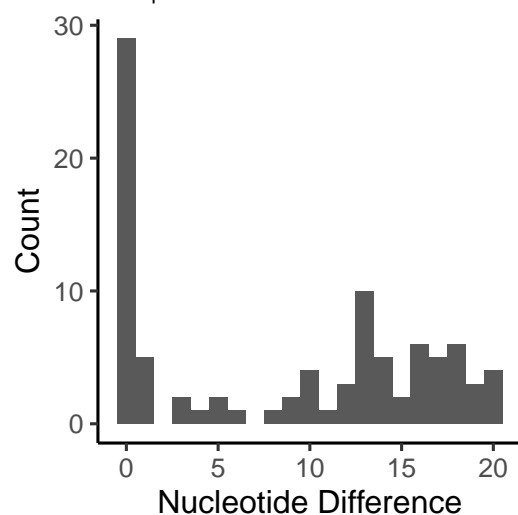
IGHV3-7*01

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



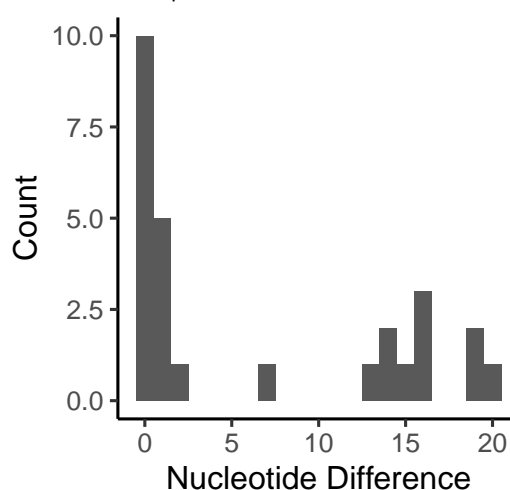
IGHV2-5*01

133 sequences assigned
29 (21.8%) exact matches, in which:
29 unique CDR3
6 unique J



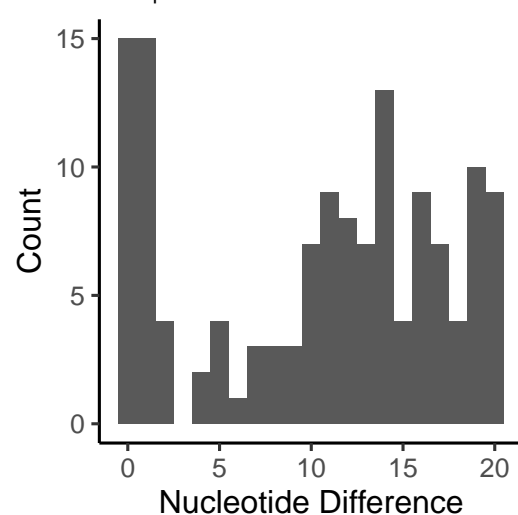
IGHV2-70*01

43 sequences assigned
10 (23.3%) exact matches, in which:
10 unique CDR3
5 unique J



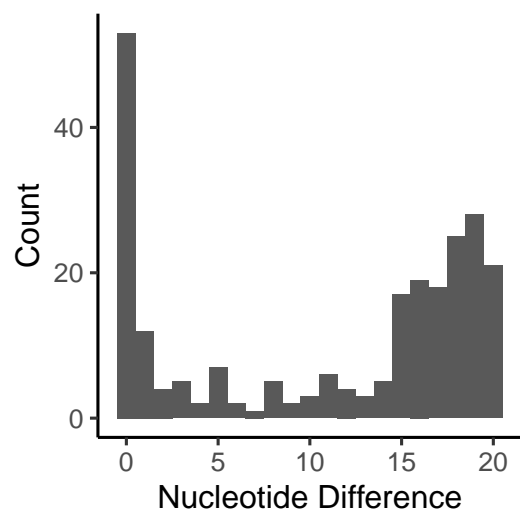
IGHV3-7*03

320 sequences assigned
15 (4.7%) exact matches, in which:
12 unique CDR3
3 unique J



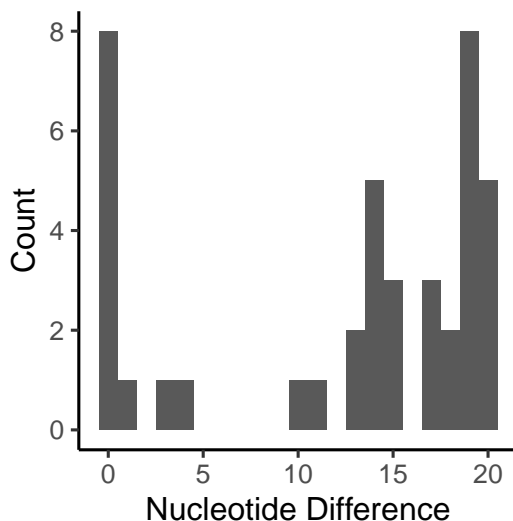
IGHV3-9*01

553 sequences assigned
53 (9.6%) exact matches, in which:
53 unique CDR3
6 unique J



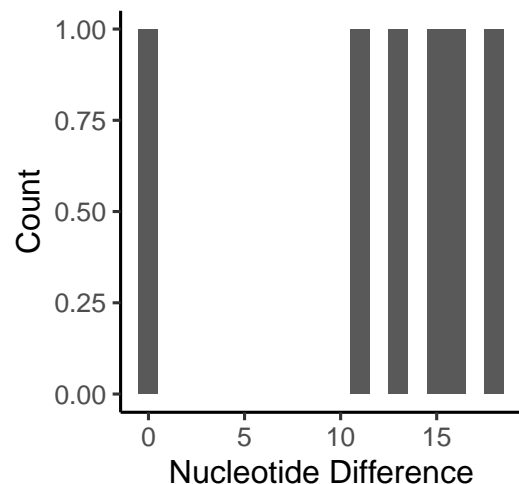
IGHV3-13*01

97 sequences assigned
8 (8.2%) exact matches, in which:
8 unique CDR3
3 unique J



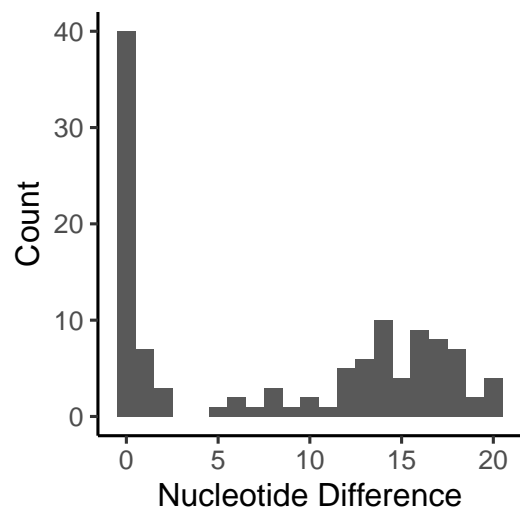
IGHV3-20*01

9 sequences assigned
1 (11.1%) exact matches, in which:
1 unique CDR3
1 unique J



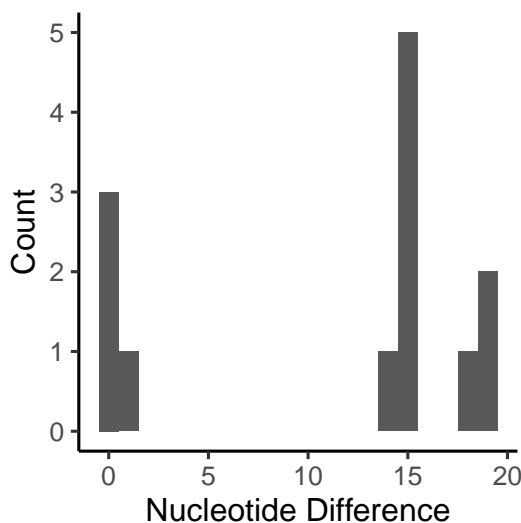
IGHV3-11*01

276 sequences assigned
40 (14.5%) exact matches, in which:
40 unique CDR3
5 unique J



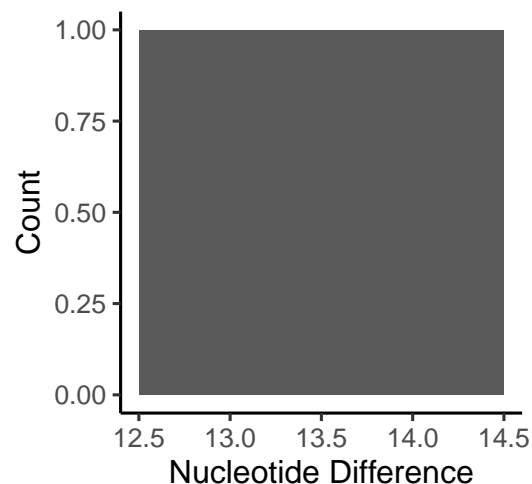
IGHV3-13*05

17 sequences assigned
3 (17.6%) exact matches, in which:
3 unique CDR3
2 unique J



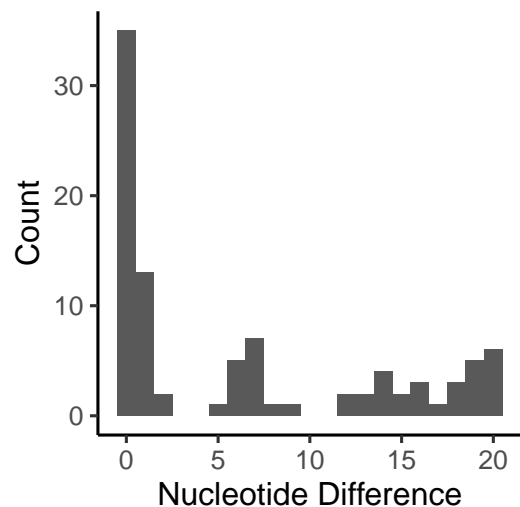
IGHV3-20*04

6 sequences assigned
No exact matches.



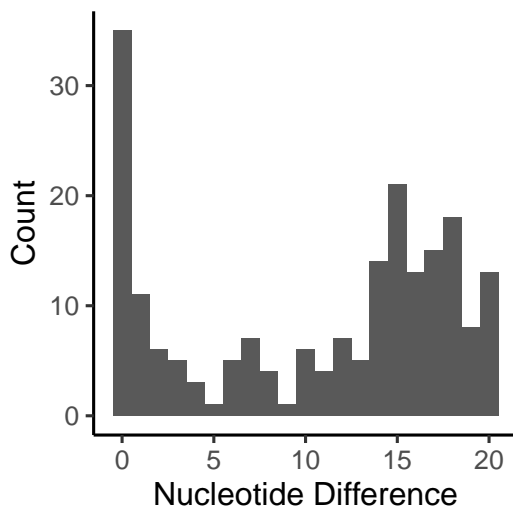
IGHV3-11*06

240 sequences assigned
35 (14.6%) exact matches, in which:
35 unique CDR3
7 unique J



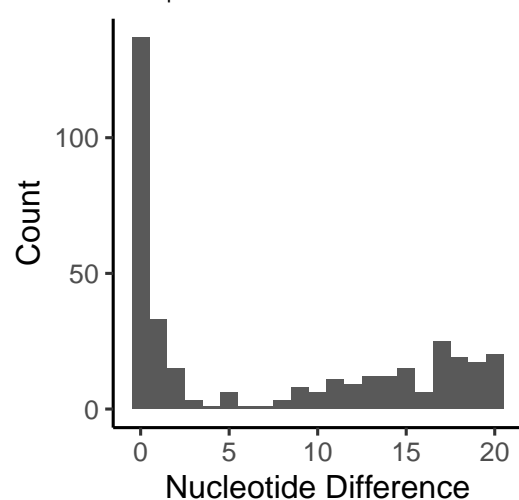
IGHV3-15*01

420 sequences assigned
35 (8.3%) exact matches, in which:
35 unique CDR3
6 unique J



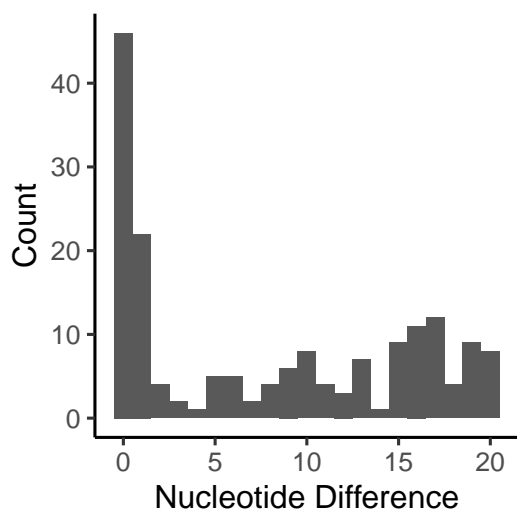
IGHV3-21*01

713 sequences assigned
137 (19.2%) exact matches, in which:
134 unique CDR3
7 unique J



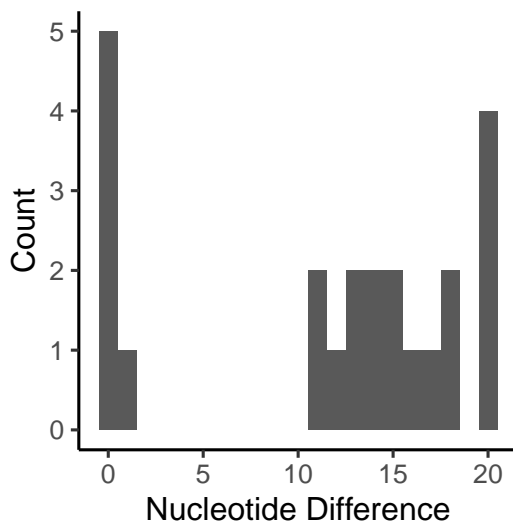
IGHV3-30-3*01

328 sequences assigned
46 (14%) exact matches, in which:
46 unique CDR3
5 unique J



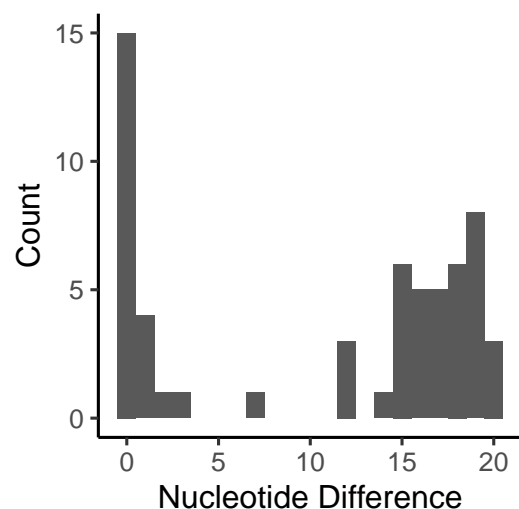
IGHV3-43*01

97 sequences assigned
5 (5.2%) exact matches, in which:
5 unique CDR3
4 unique J



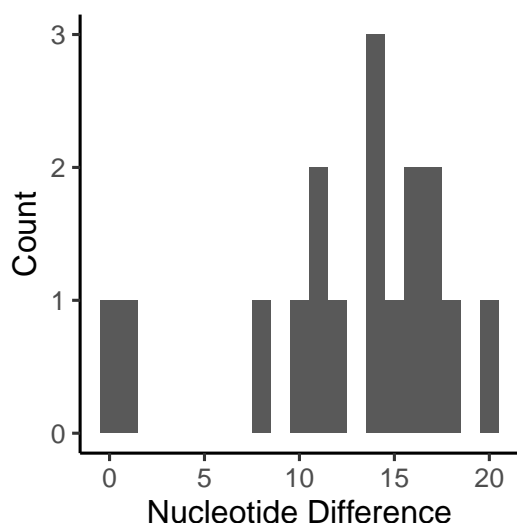
IGHV3-49*05

112 sequences assigned
15 (13.4%) exact matches, in which:
15 unique CDR3
5 unique J



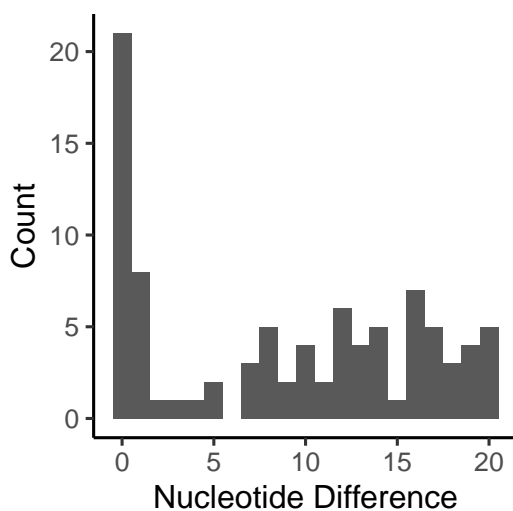
IGHV3-30*03

124 sequences assigned
1 (0.8%) exact matches, in which:
1 unique CDR3
1 unique J



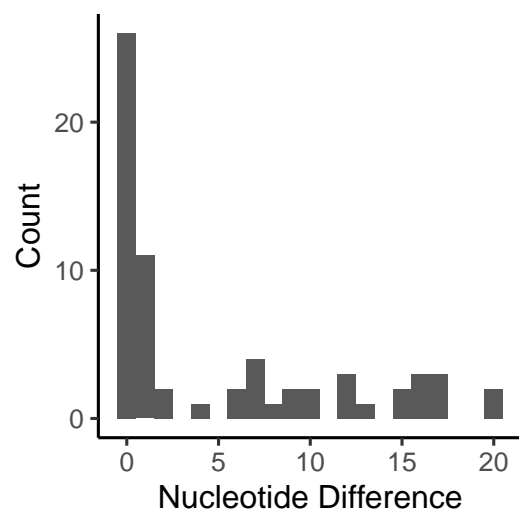
IGHV3-48*01

144 sequences assigned
21 (14.6%) exact matches, in which:
21 unique CDR3
4 unique J



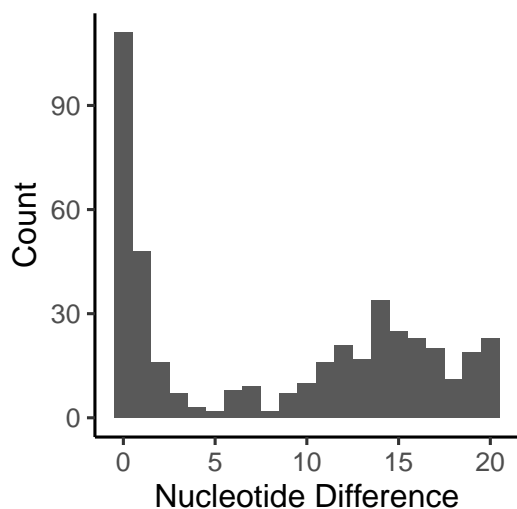
IGHV3-53*01

142 sequences assigned
26 (18.3%) exact matches, in which:
26 unique CDR3
5 unique J



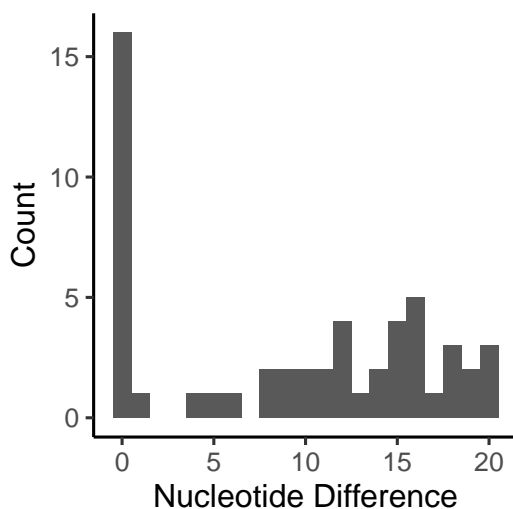
IGHV3-33*01

1069 sequences assigned
111 (10.4%) exact matches, in which:
109 unique CDR3
7 unique J



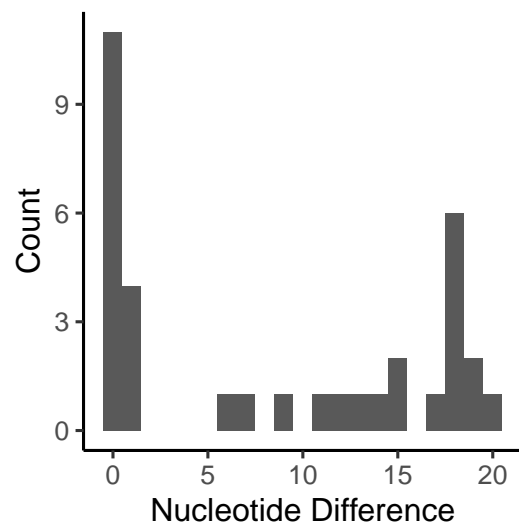
IGHV3-48*02

103 sequences assigned
16 (15.5%) exact matches, in which:
16 unique CDR3
4 unique J



IGHV3-53*02

91 sequences assigned
11 (12.1%) exact matches, in which:
11 unique CDR3
5 unique J



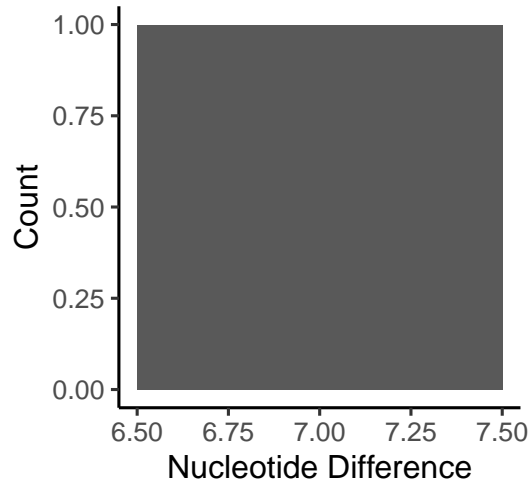
IGHV3-64*02

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



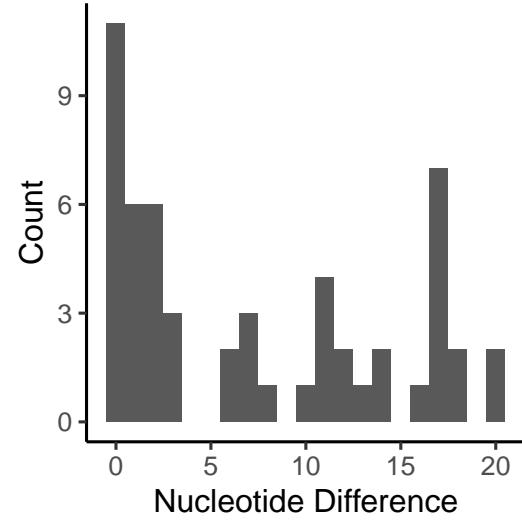
IGHV3-66*04

1 sequences assigned
No exact matches.



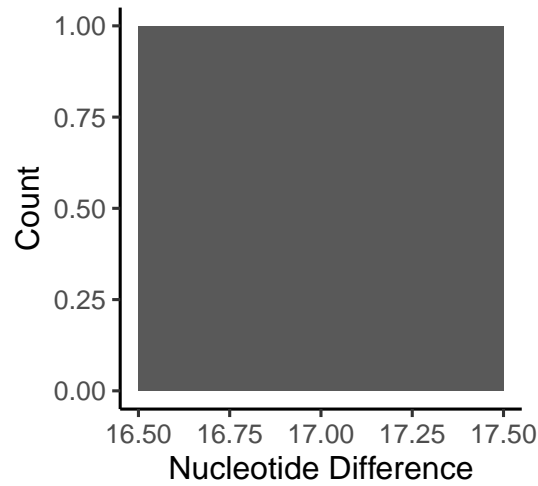
IGHV3-73*02

94 sequences assigned
11 (11.7%) exact matches, in which:
11 unique CDR3
4 unique J



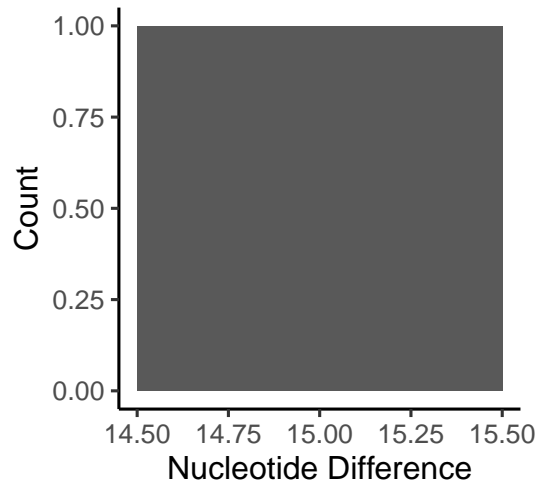
IGHV3-64*07

4 sequences assigned
No exact matches.



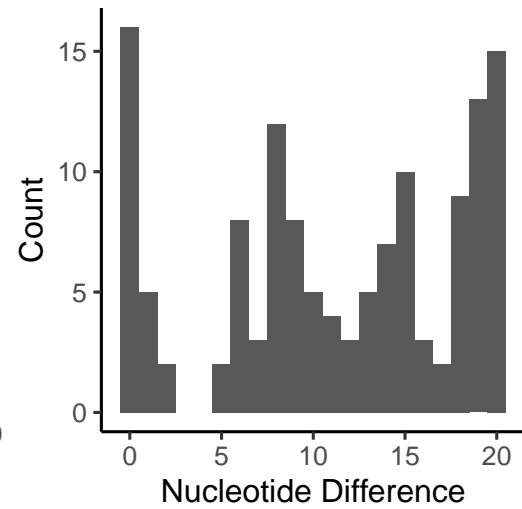
IGHV3-69-1*02

6 sequences assigned
No exact matches.



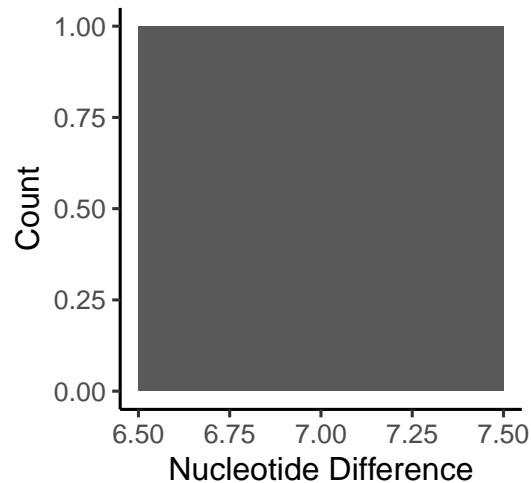
IGHV3-74*01

398 sequences assigned
16 (4%) exact matches, in which:
16 unique CDR3
5 unique J



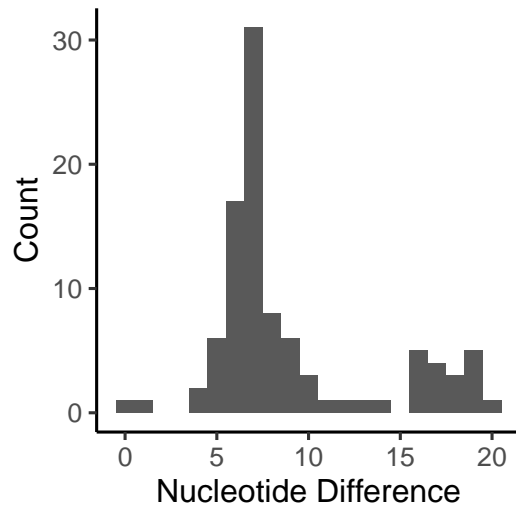
IGHV3-66*03

1 sequences assigned
No exact matches.



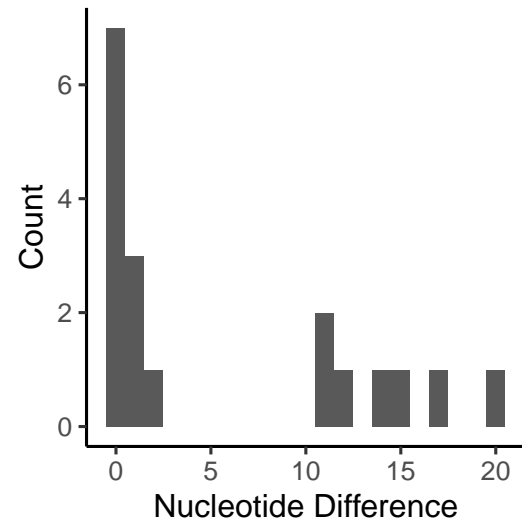
IGHV3-72*01

166 sequences assigned
1 (0.6%) exact matches, in which:
1 unique CDR3
1 unique J



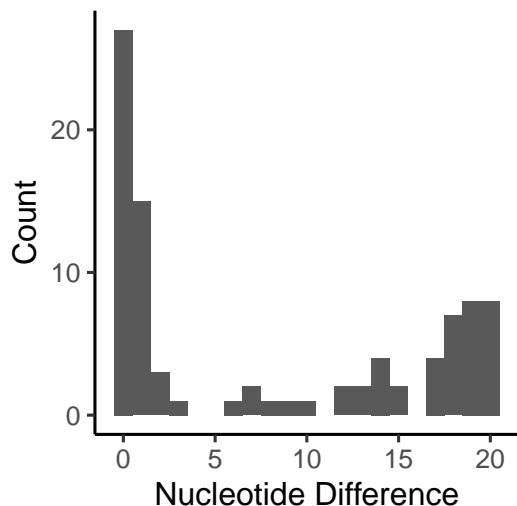
IGHV3-64D*06

77 sequences assigned
7 (9.1%) exact matches, in which:
7 unique CDR3
2 unique J



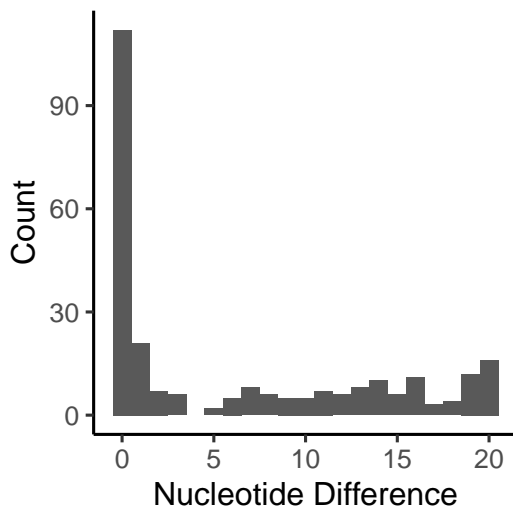
IGHV4-4*02

206 sequences assigned
27 (13.1%) exact matches, in which:
27 unique CDR3
6 unique J



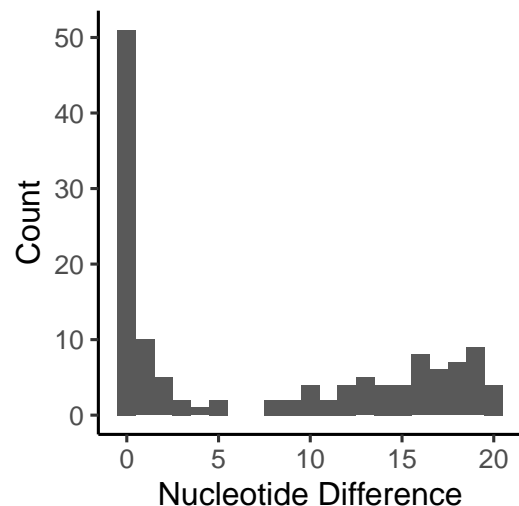
IGHV4-31*03

577 sequences assigned
112 (19.4%) exact matches, in which:
112 unique CDR3
7 unique J



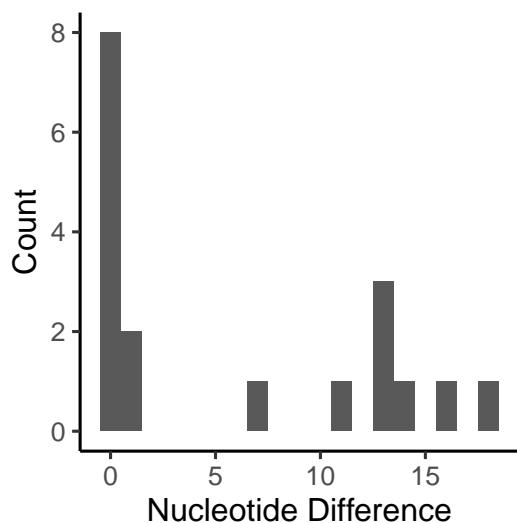
IGHV4-59*01

334 sequences assigned
51 (15.3%) exact matches, in which:
51 unique CDR3
6 unique J



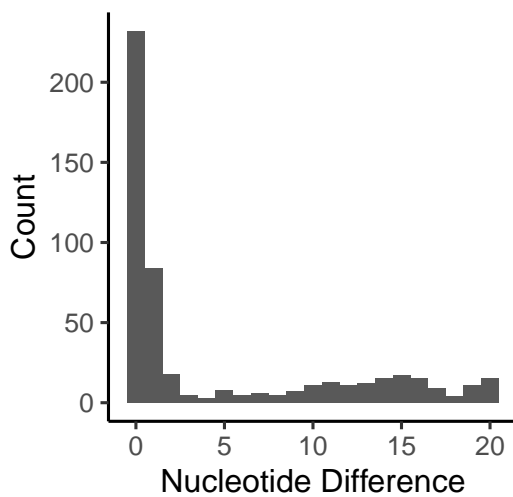
IGHV4-30-2*01

29 sequences assigned
8 (27.6%) exact matches, in which:
8 unique CDR3
4 unique J



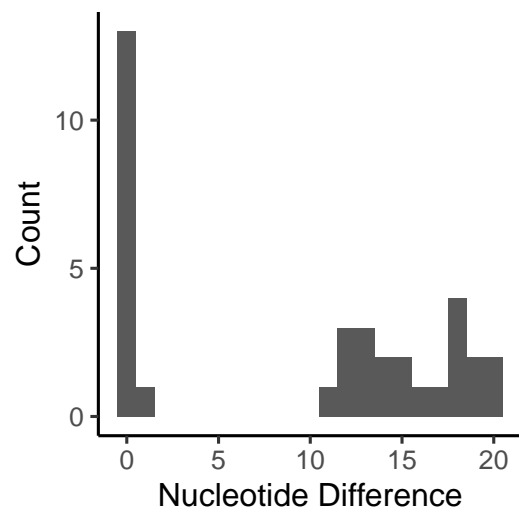
IGHV4-34*01

747 sequences assigned
232 (31.1%) exact matches, in which:
232 unique CDR3
7 unique J



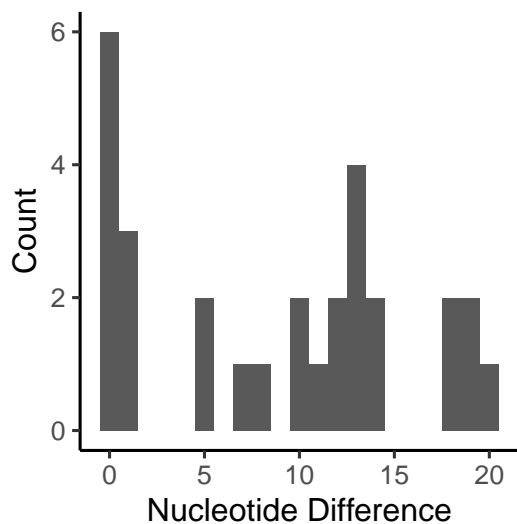
IGHV4-61*01

66 sequences assigned
13 (19.7%) exact matches, in which:
13 unique CDR3
5 unique J



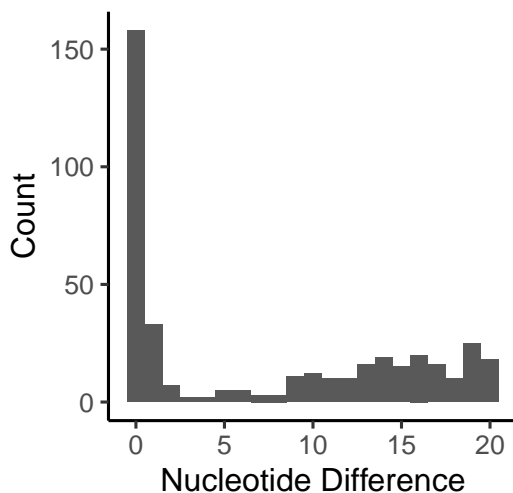
IGHV4-30-4*01

56 sequences assigned
6 (10.7%) exact matches, in which:
6 unique CDR3
4 unique J



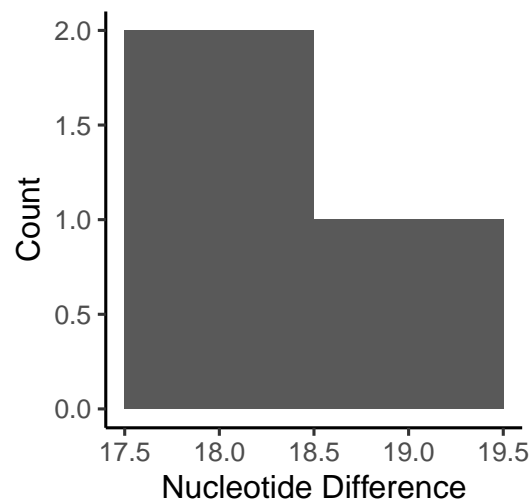
IGHV4-39*01

943 sequences assigned
158 (16.8%) exact matches, in which:
157 unique CDR3
7 unique J



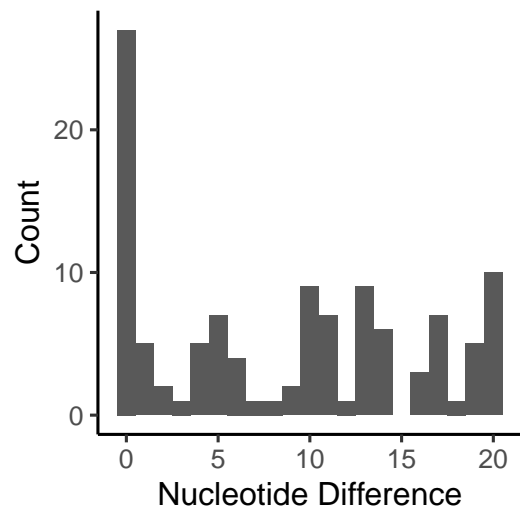
IGHV4-61*08

13 sequences assigned
No exact matches.



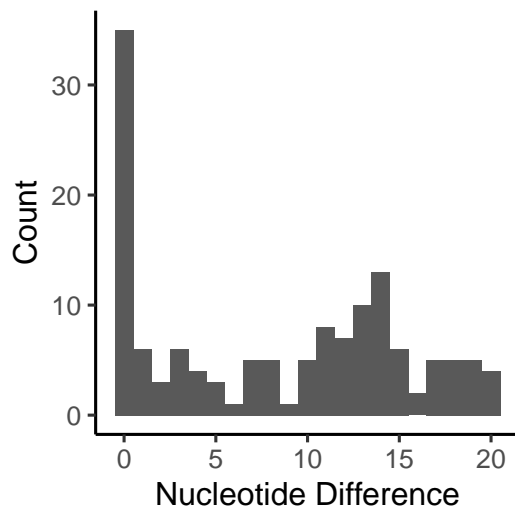
IGHV5-10-1*03

194 sequences assigned
27 (13.9%) exact matches, in which:
27 unique CDR3
6 unique J



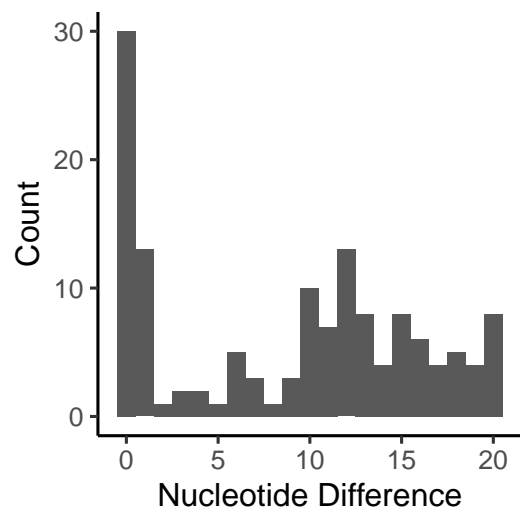
IGHV6-1*01

206 sequences assigned
35 (17%) exact matches, in which:
35 unique CDR3
6 unique J



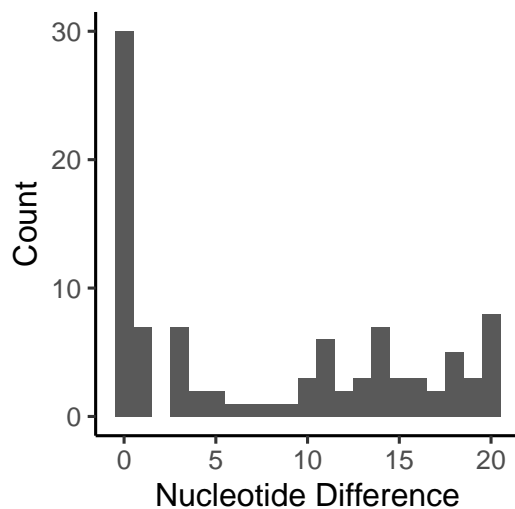
IGHV5-51*01

254 sequences assigned
30 (11.8%) exact matches, in which:
30 unique CDR3
5 unique J



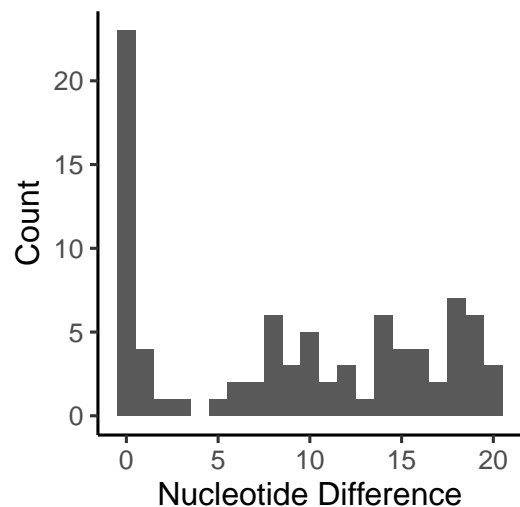
IGHV7-4-1*02

203 sequences assigned
30 (14.8%) exact matches, in which:
30 unique CDR3
5 unique J

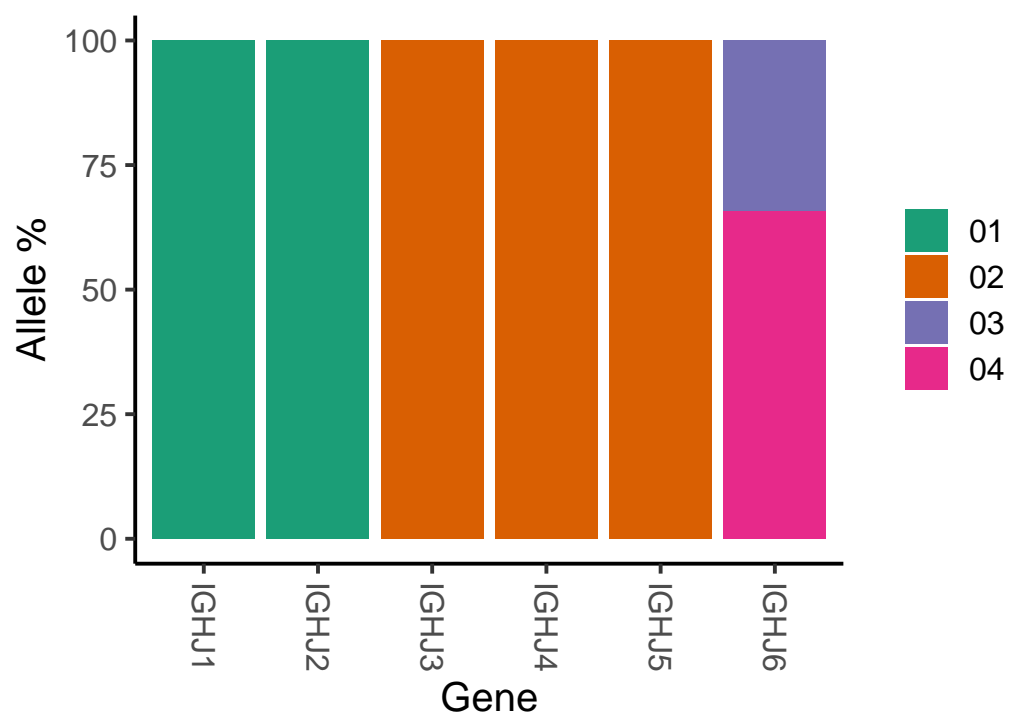


IGHV5-51*03

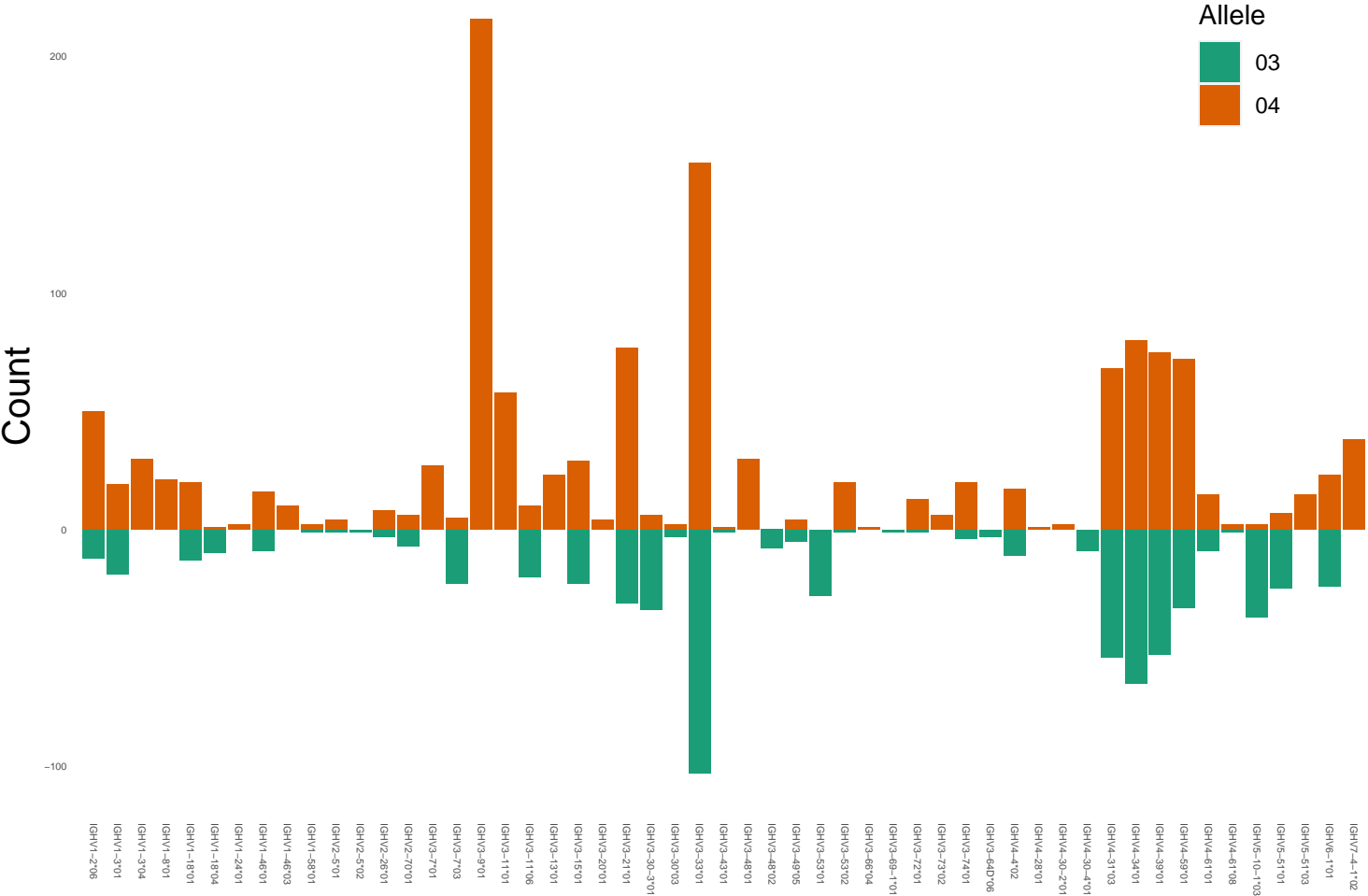
144 sequences assigned
23 (16%) exact matches, in which:
23 unique CDR3
6 unique J



Allele Usage



Sequence Count by IGHJ6 allele usage



Warning – no inferred sequences found.