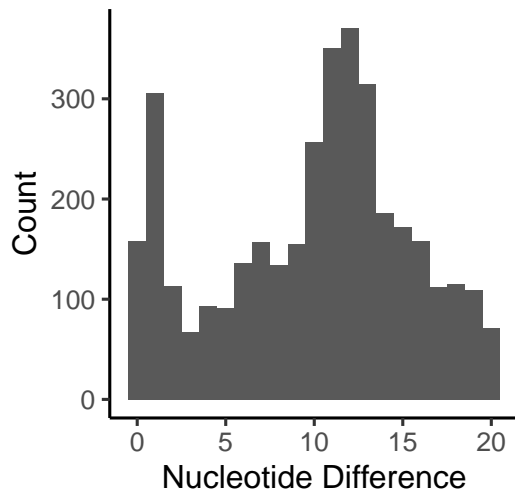


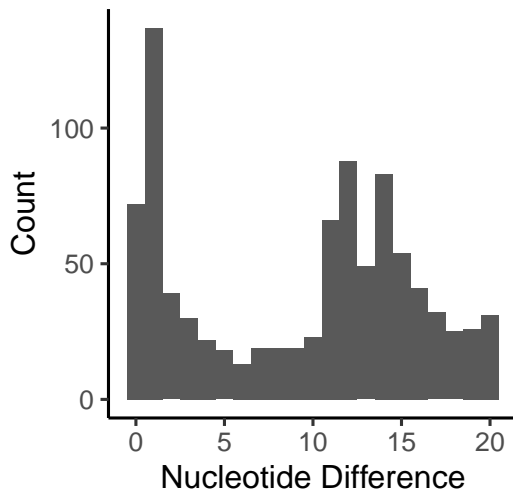
IGHV1-2*02

4278 sequences assigned
158 (3.7%) exact matches, in which:
121 unique CDR3
5 unique J



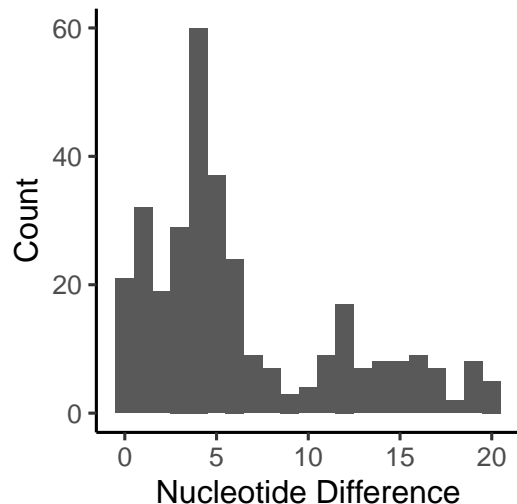
IGHV1-8*01

1098 sequences assigned
72 (6.6%) exact matches, in which:
52 unique CDR3
5 unique J



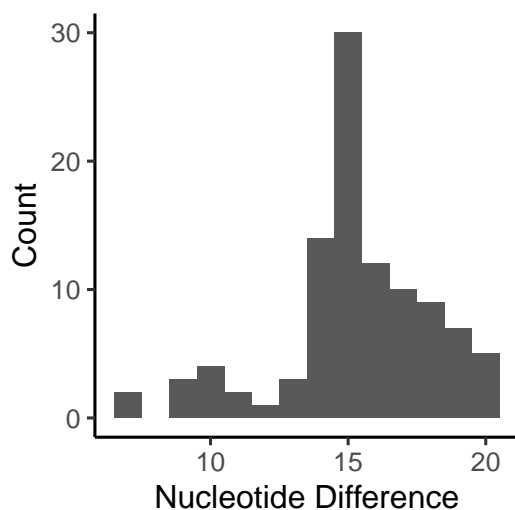
IGHV1-24*01

433 sequences assigned
21 (4.8%) exact matches, in which:
16 unique CDR3
4 unique J



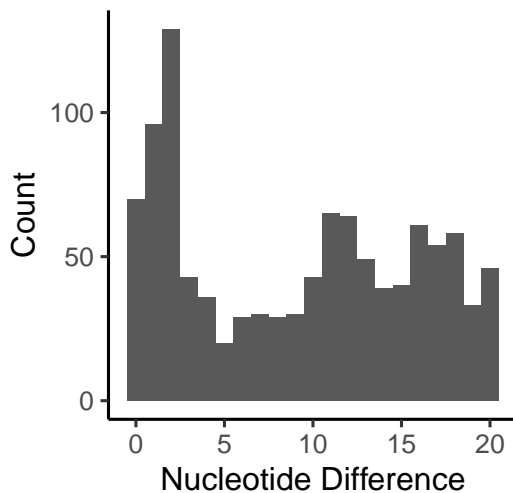
IGHV1-3*04

174 sequences assigned
No exact matches.



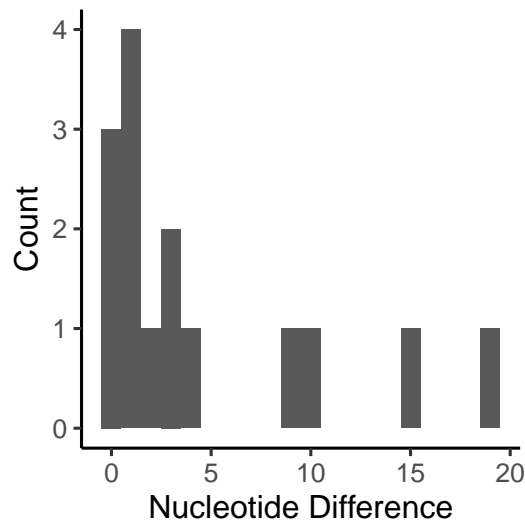
IGHV1-18*01

1245 sequences assigned
70 (5.6%) exact matches, in which:
55 unique CDR3
4 unique J



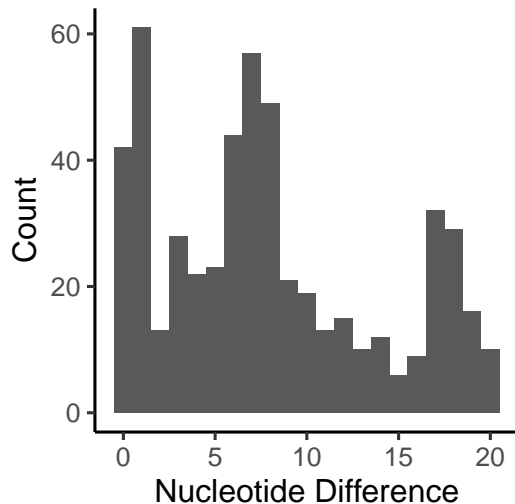
IGHV1-45*02

15 sequences assigned
3 (20%) exact matches, in which:
2 unique CDR3
1 unique J



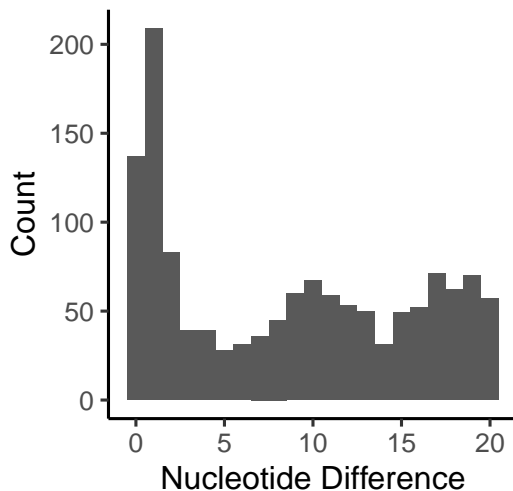
IGHV1-3*01_05

1140 sequences assigned
42 (3.7%) exact matches, in which:
31 unique CDR3
5 unique J



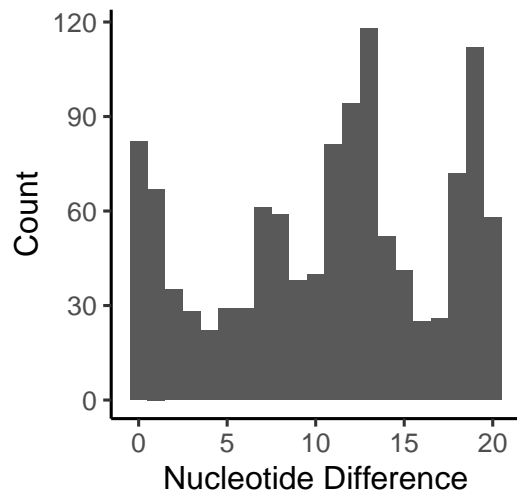
IGHV1-18*04

1745 sequences assigned
137 (7.9%) exact matches, in which:
105 unique CDR3
5 unique J



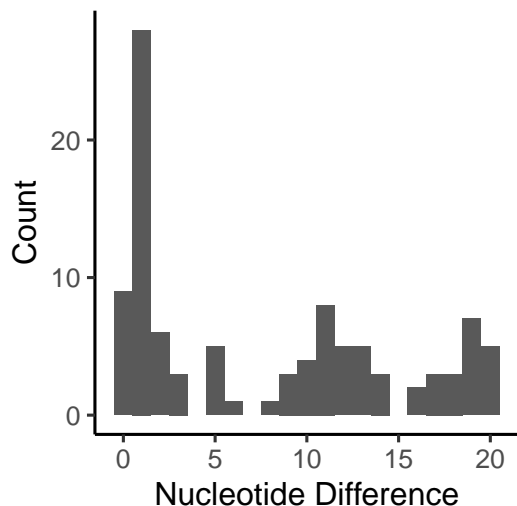
IGHV1-46*01

1480 sequences assigned
82 (5.5%) exact matches, in which:
73 unique CDR3
6 unique J



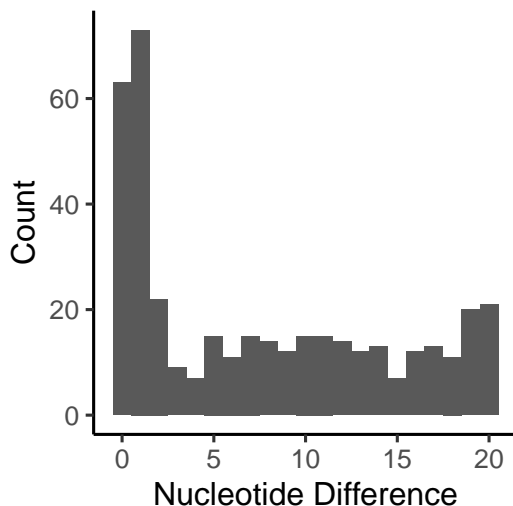
IGHV1-58*01_03

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



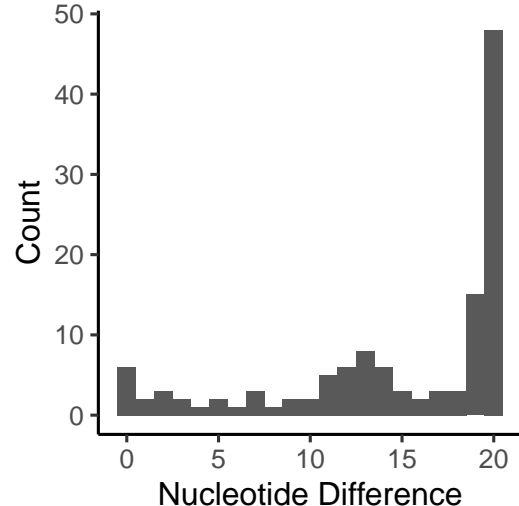
IGHV1-69*06_14

545 sequences assigned
63 (11.6%) exact matches, in which:
55 unique CDR3
5 unique J



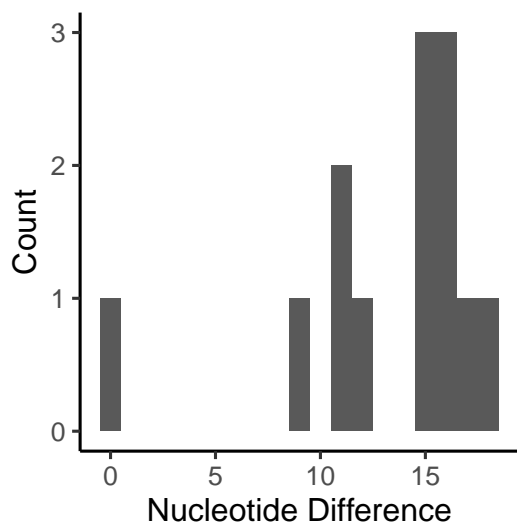
IGHV2-26*01

162 sequences assigned
6 (3.7%) exact matches, in which:
6 unique CDR3
4 unique J



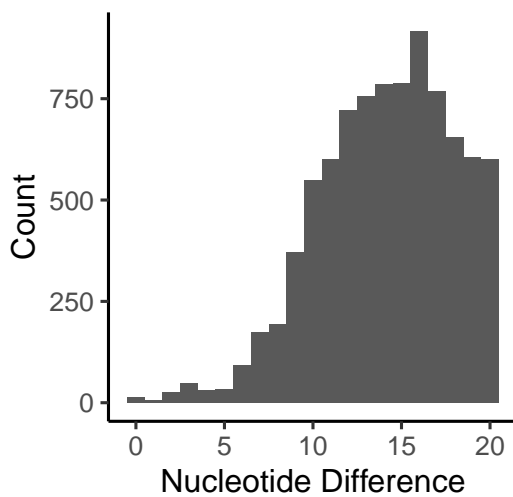
IGHV1-69-2*01

14 sequences assigned
1 (7.1%) exact matches, in which:
1 unique CDR3
1 unique J



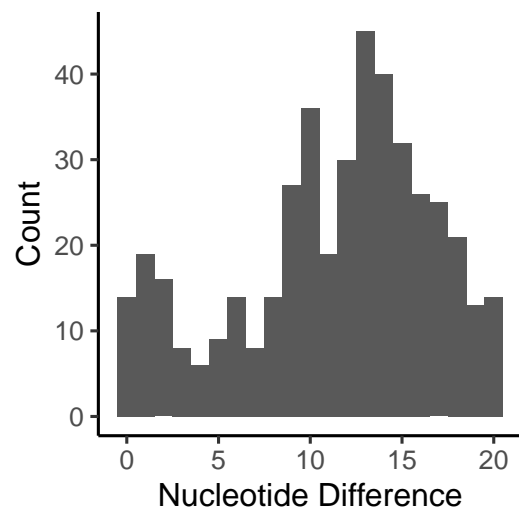
IGHV2-5*01

9998 sequences assigned
13 (0.1%) exact matches, in which:
11 unique CDR3
3 unique J



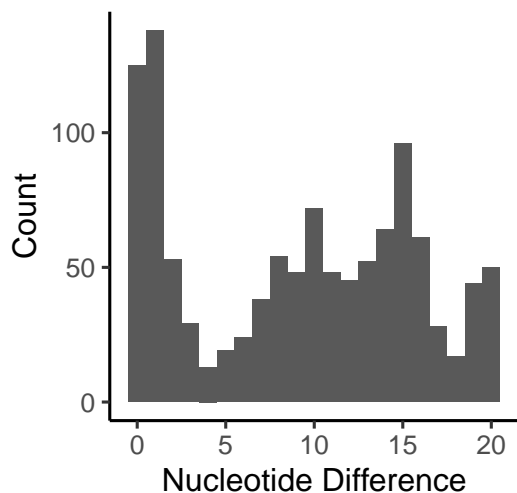
IGHV2-70*11_15

615 sequences assigned
14 (2.3%) exact matches, in which:
14 unique CDR3
3 unique J



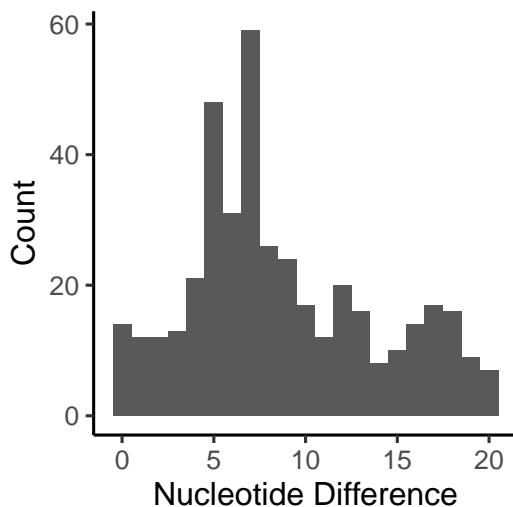
IGHV1-69*01_12_13

1446 sequences assigned
125 (8.6%) exact matches, in which:
110 unique CDR3
5 unique J



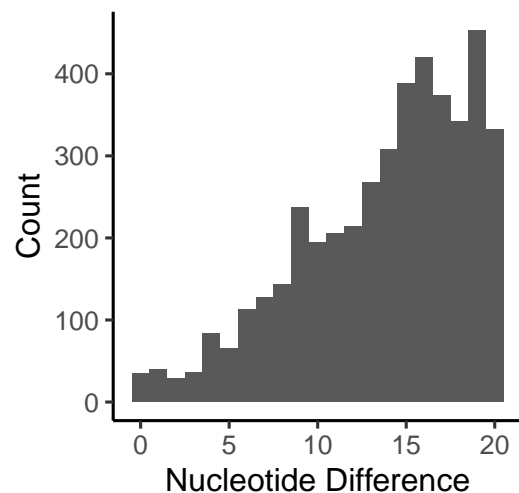
IGHV2-5*02

452 sequences assigned
14 (3.1%) exact matches, in which:
13 unique CDR3
3 unique J



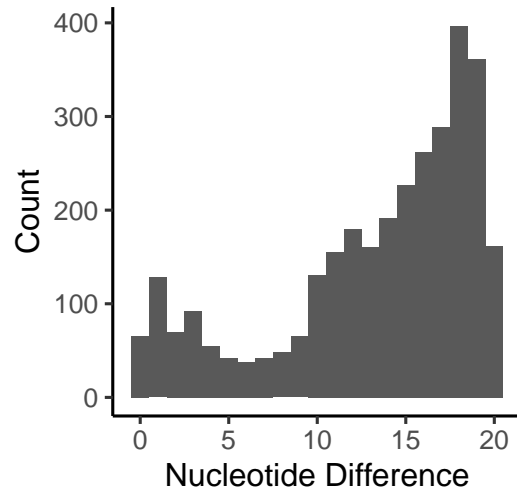
IGHV3-7*01

5708 sequences assigned
35 (0.6%) exact matches, in which:
32 unique CDR3
4 unique J



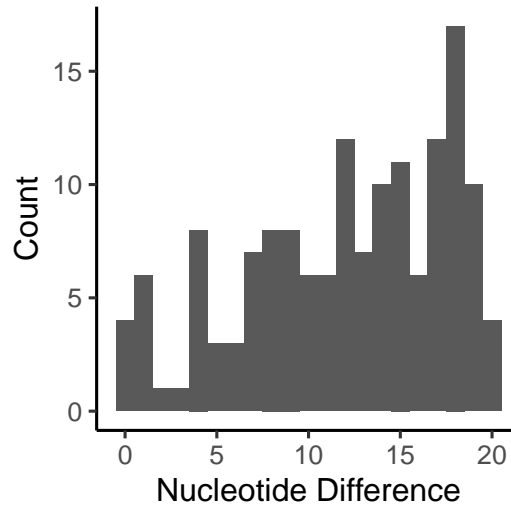
IGHV3-7*03

3693 sequences assigned
66 (1.8%) exact matches, in which:
46 unique CDR3
4 unique J



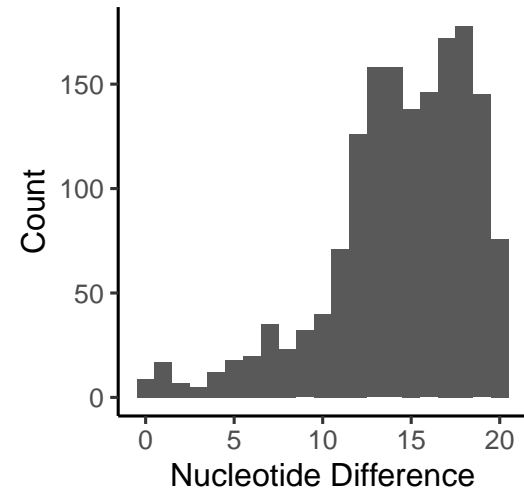
IGHV3-11*04

193 sequences assigned
4 (2.1%) exact matches, in which:
4 unique CDR3
1 unique J



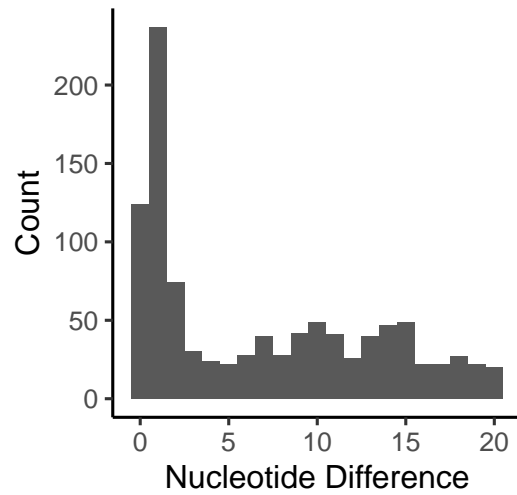
IGHV3-15*07

1912 sequences assigned
9 (0.5%) exact matches, in which:
8 unique CDR3
2 unique J



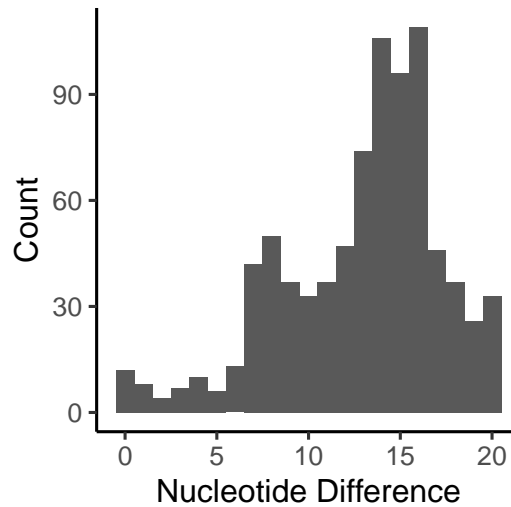
IGHV3-9*01

1125 sequences assigned
124 (11%) exact matches, in which:
87 unique CDR3
5 unique J



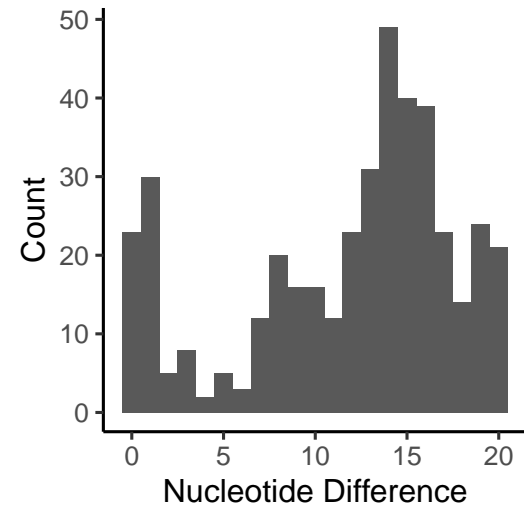
IGHV3-11*06

911 sequences assigned
12 (1.3%) exact matches, in which:
11 unique CDR3
4 unique J



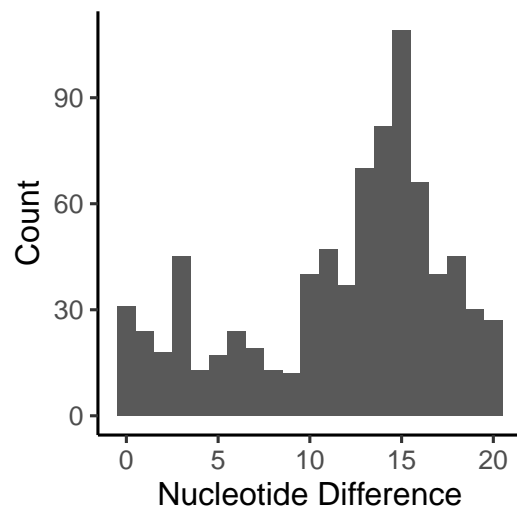
IGHV3-15*01_02

649 sequences assigned
23 (3.5%) exact matches, in which:
20 unique CDR3
4 unique J



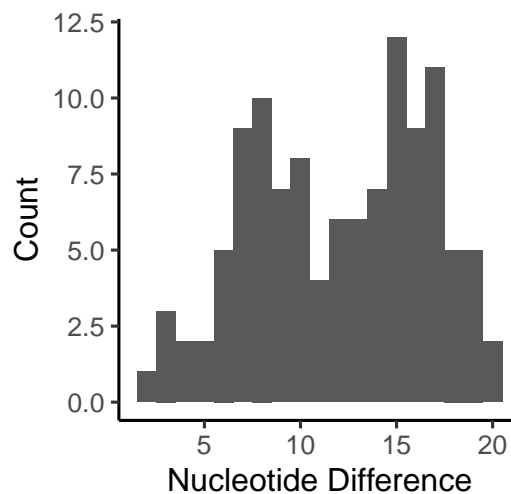
IGHV3-11*01

1024 sequences assigned
31 (3%) exact matches, in which:
30 unique CDR3
5 unique J



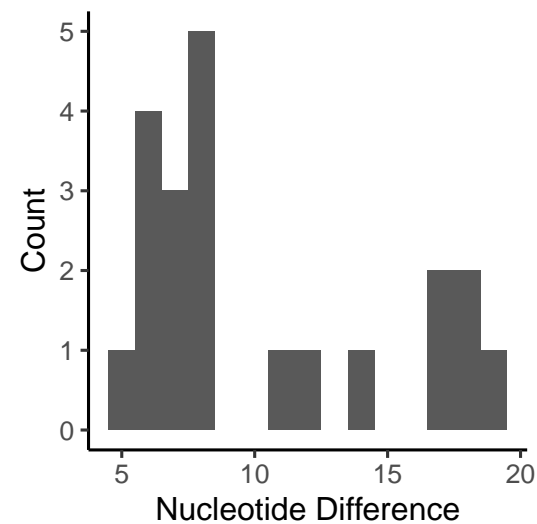
IGHV3-13*01

129 sequences assigned
No exact matches.



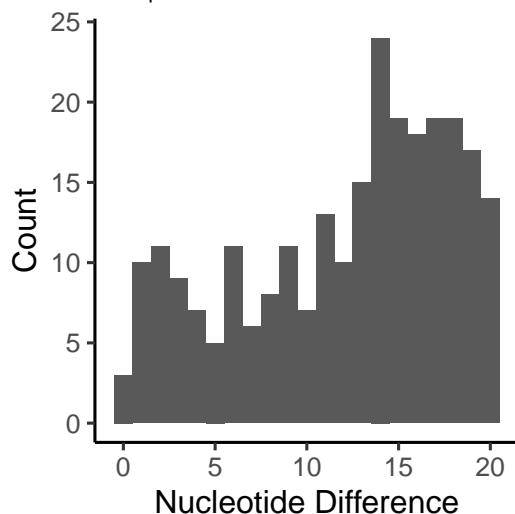
IGHV3-20*03_04

29 sequences assigned
No exact matches.



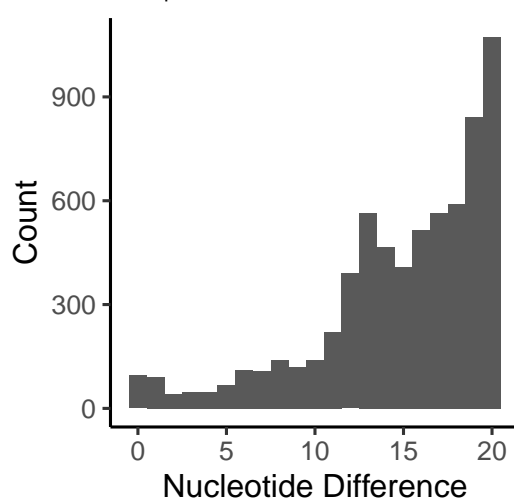
IGHV3-21*04

342 sequences assigned
3 (0.9%) exact matches, in which:
3 unique CDR3
1 unique J



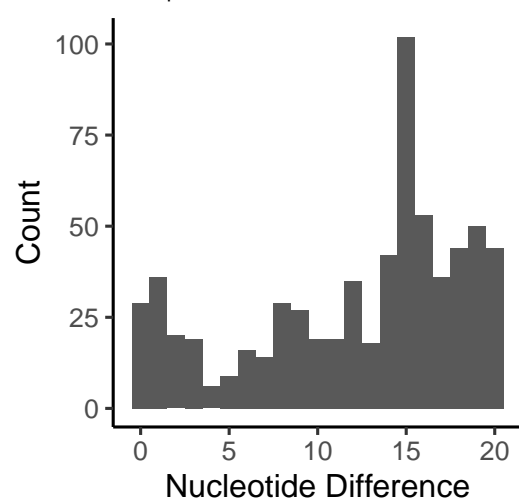
IGHV3-23*01_04

12319 sequences assigned
95 (0.8%) exact matches, in which:
88 unique CDR3
6 unique J



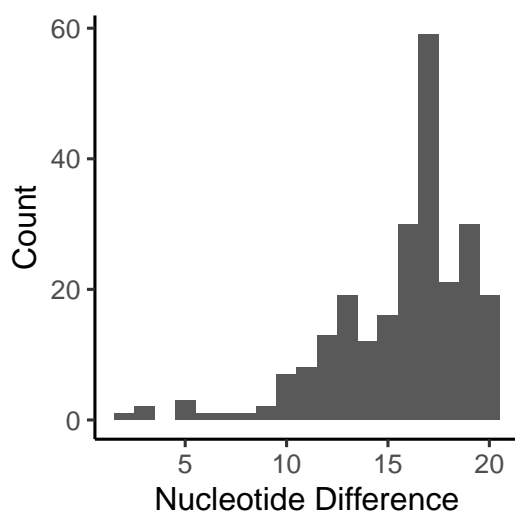
IGHV3-33*01

1081 sequences assigned
29 (2.7%) exact matches, in which:
28 unique CDR3
4 unique J



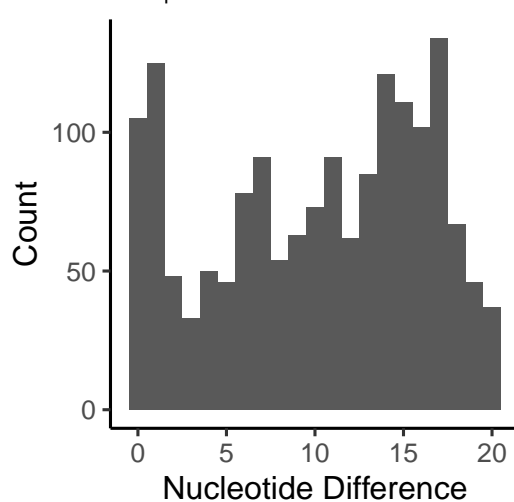
IGHV3-21*06

437 sequences assigned
No exact matches.



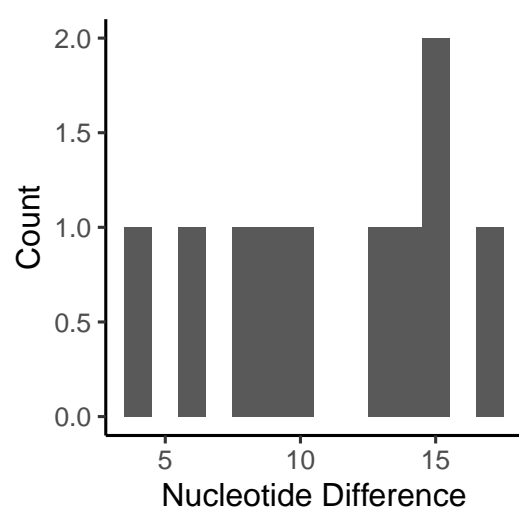
IGHV3-30-3*01

1973 sequences assigned
105 (5.3%) exact matches, in which:
87 unique CDR3
4 unique J



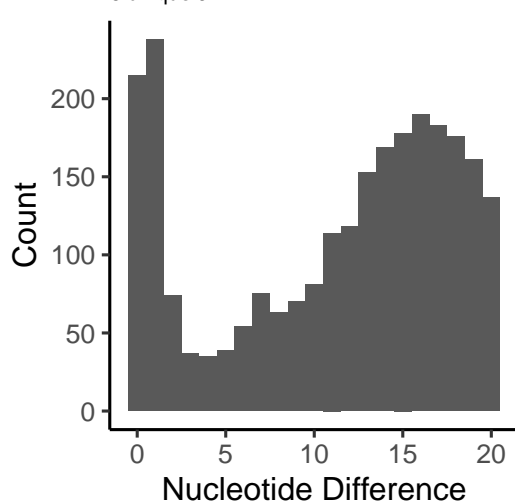
IGHV3-33*05

23 sequences assigned
No exact matches.



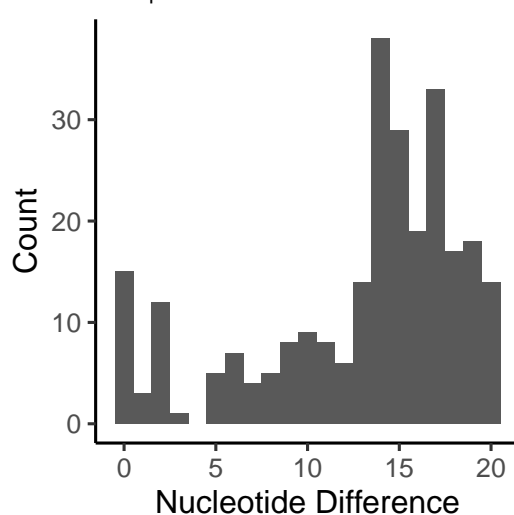
IGHV3-21*01_02

3037 sequences assigned
215 (7.1%) exact matches, in which:
178 unique CDR3
6 unique J



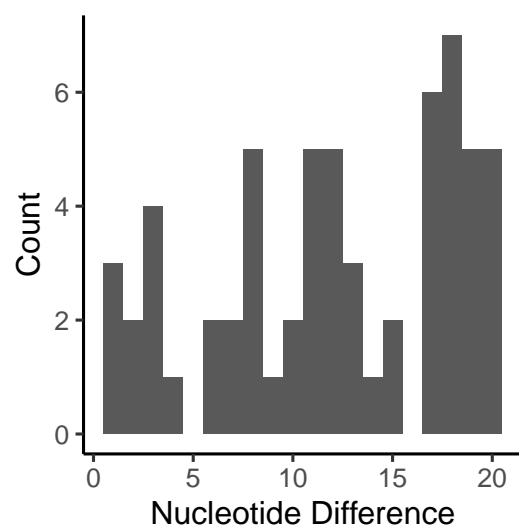
IGHV3-30*03

398 sequences assigned
15 (3.8%) exact matches, in which:
15 unique CDR3
3 unique J



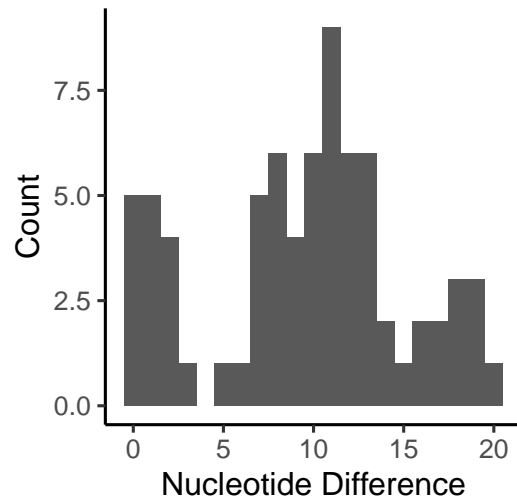
IGHV3-33*06

100 sequences assigned
No exact matches.



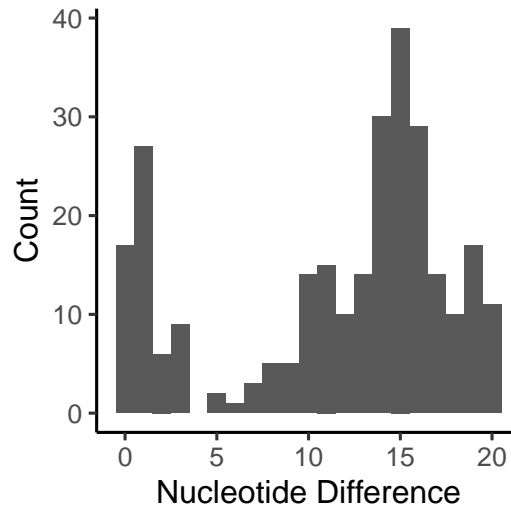
IGHV3-43*01

92 sequences assigned
5 (5.4%) exact matches, in which:
4 unique CDR3
1 unique J



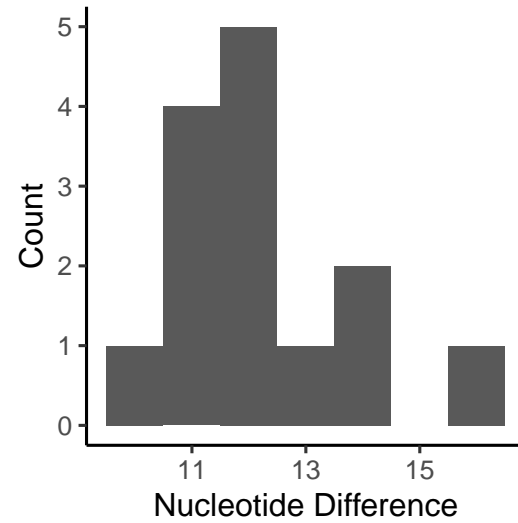
IGHV3-49*03_05

430 sequences assigned
17 (4%) exact matches, in which:
14 unique CDR3
3 unique J



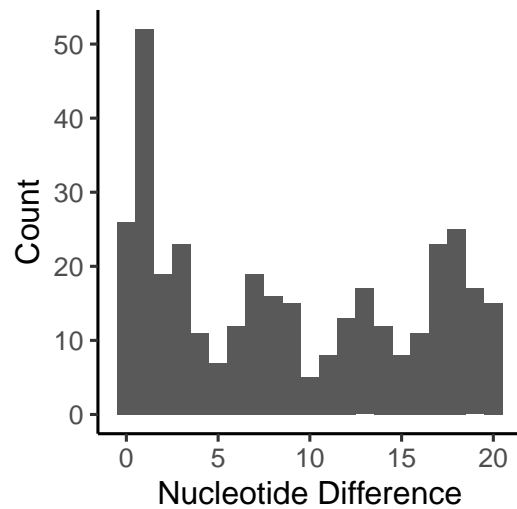
IGHV3-64*02_07

16 sequences assigned
No exact matches.



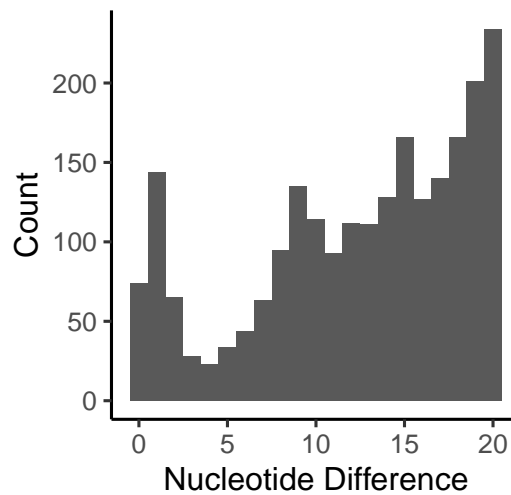
IGHV3-48*02

760 sequences assigned
26 (3.4%) exact matches, in which:
18 unique CDR3
3 unique J



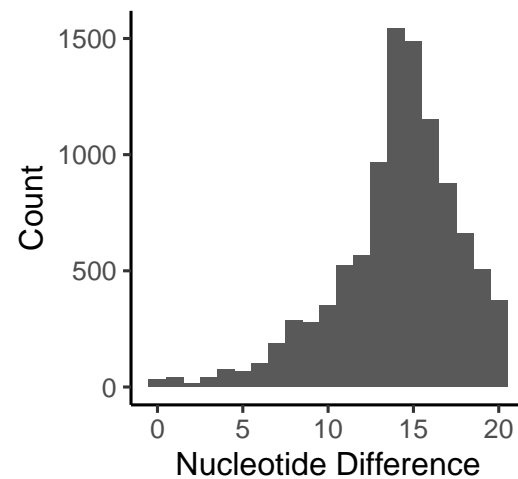
IGHV3-53*01_02

6651 sequences assigned
74 (1.1%) exact matches, in which:
59 unique CDR3
5 unique J



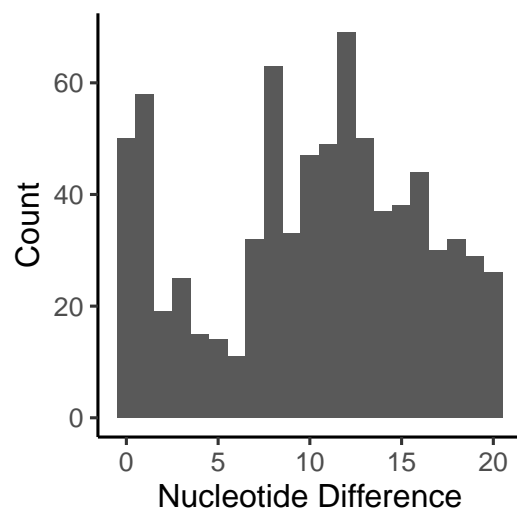
IGHV3-66*01

11294 sequences assigned
31 (0.3%) exact matches, in which:
27 unique CDR3
4 unique J



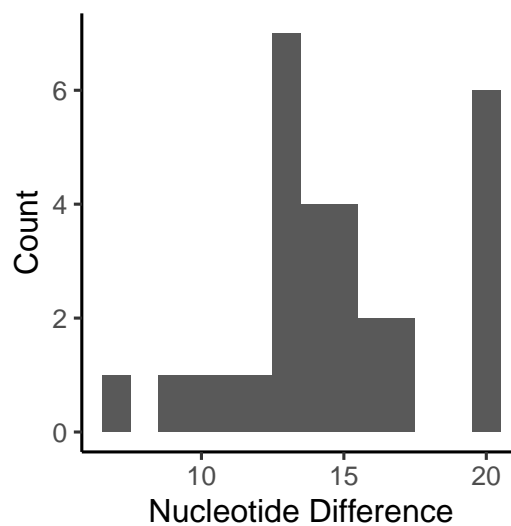
IGHV3-48*04

1020 sequences assigned
50 (4.9%) exact matches, in which:
34 unique CDR3
5 unique J



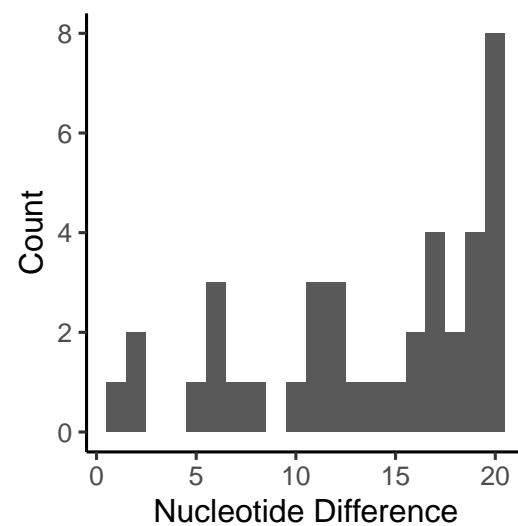
IGHV3-64*04

37 sequences assigned
No exact matches.



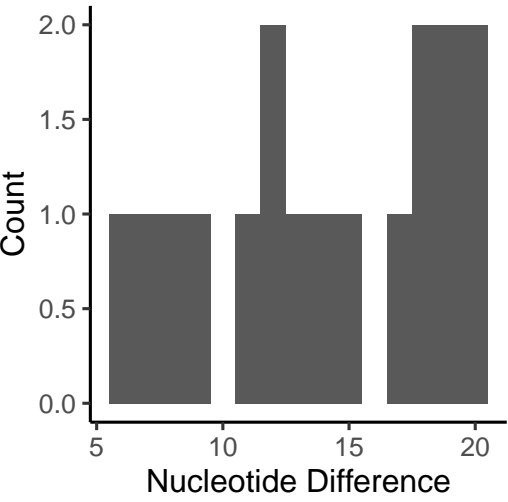
IGHV3-66*03

58 sequences assigned
No exact matches.



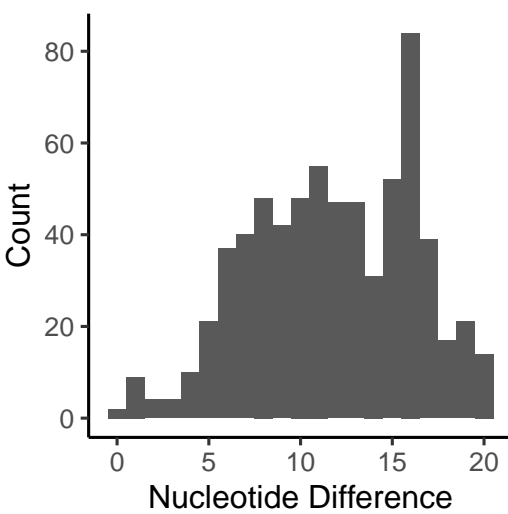
IGHV3-69-1*01

33 sequences assigned
No exact matches.



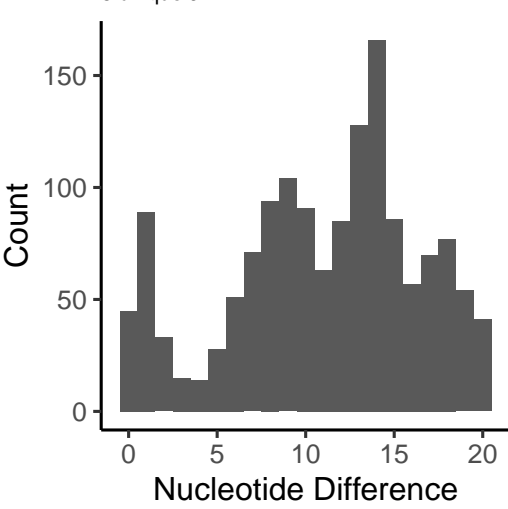
IGHV3-72*01

718 sequences assigned
2 (0.3%) exact matches, in which:
2 unique CDR3
2 unique J



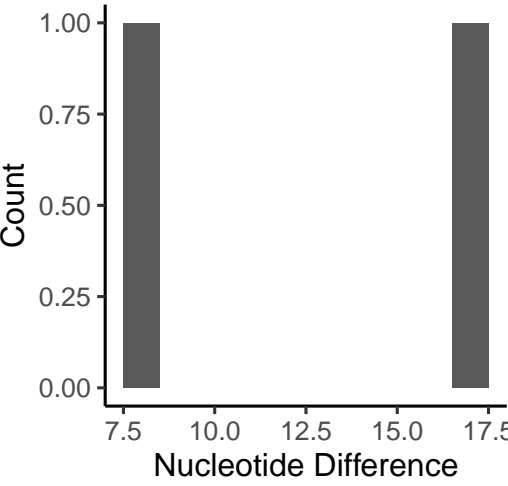
IGHV3-74*01_02

1634 sequences assigned
45 (2.8%) exact matches, in which:
38 unique CDR3
5 unique J



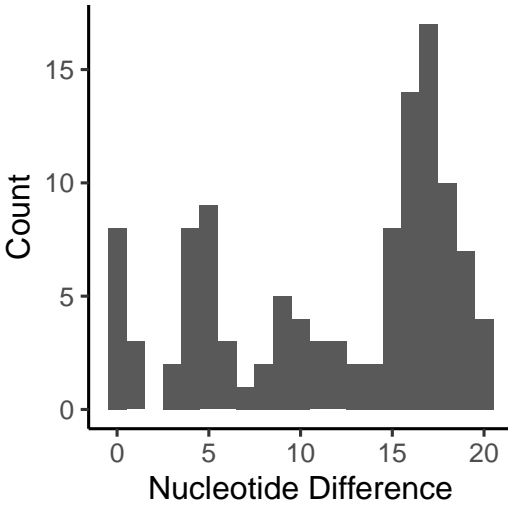
IGHV3-69-1*02

17 sequences assigned
No exact matches.



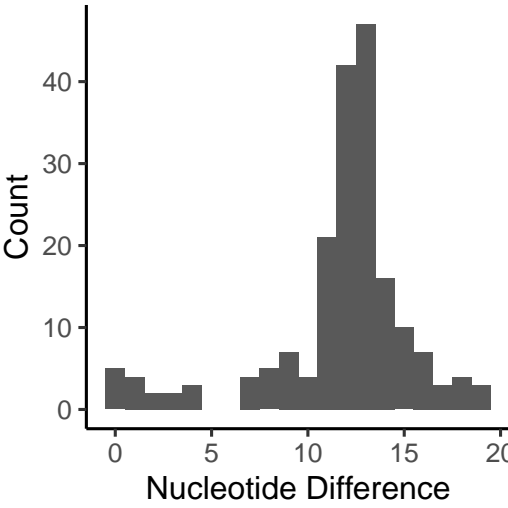
IGHV3-73*01_02

154 sequences assigned
8 (5.2%) exact matches, in which:
8 unique CDR3
2 unique J



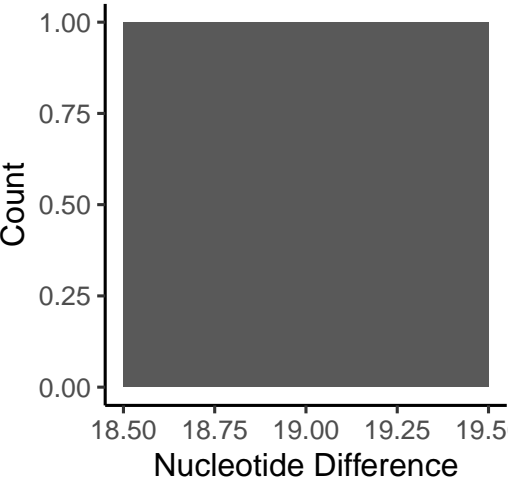
IGHV3-43D*03

210 sequences assigned
5 (2.4%) exact matches, in which:
5 unique CDR3
2 unique J



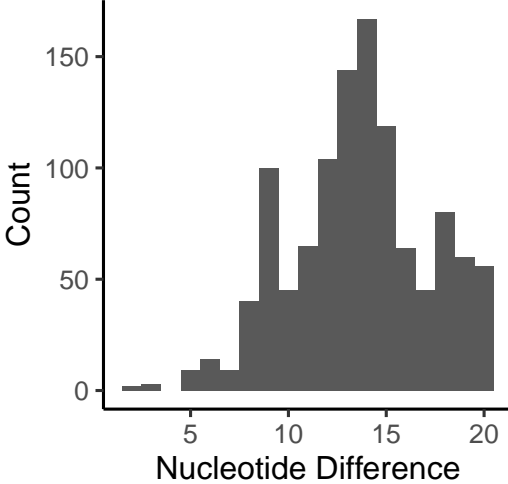
IGHV3-71*01_04

6 sequences assigned
No exact matches.



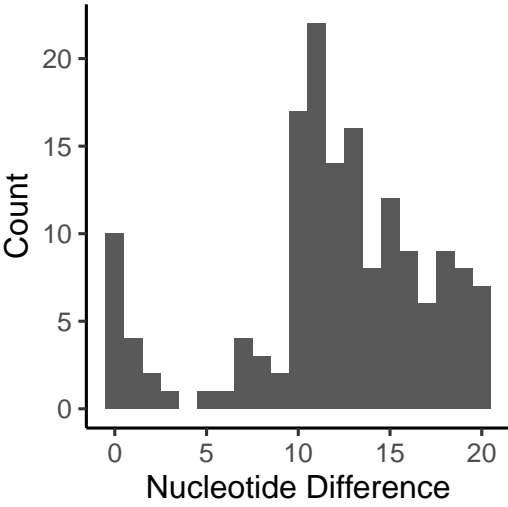
IGHV3-74*03

1381 sequences assigned
No exact matches.



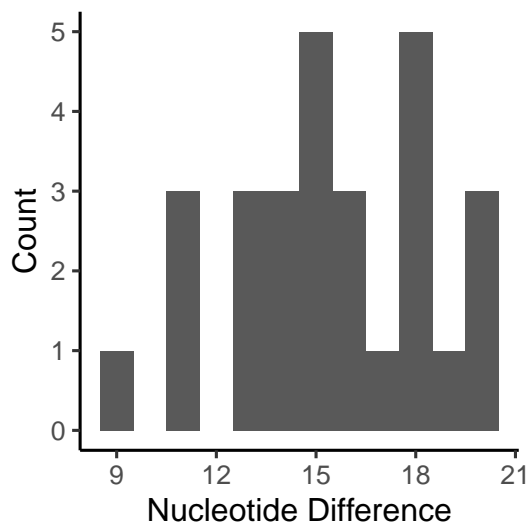
IGHV3-64D*09

216 sequences assigned
10 (4.6%) exact matches, in which:
9 unique CDR3
3 unique J



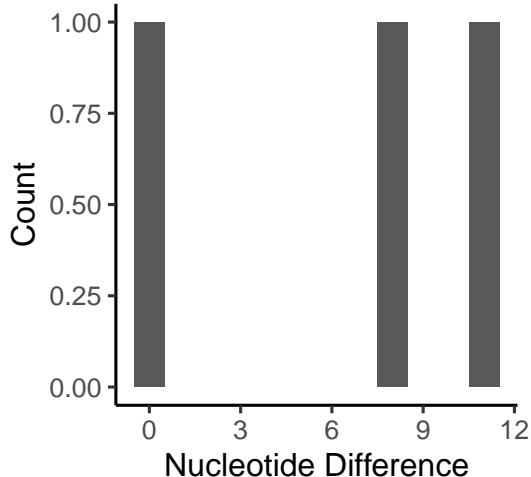
IGHV3–NL1*01

49 sequences assigned
No exact matches.



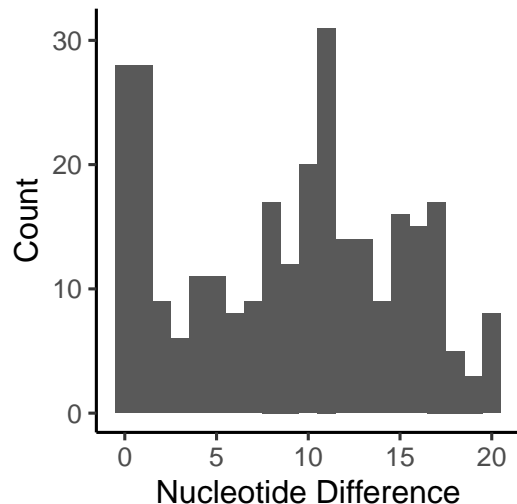
IGHV4–28*03

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



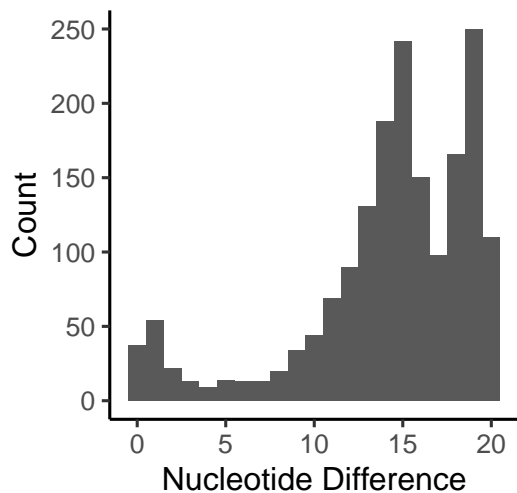
IGHV4–31*02

373 sequences assigned
28 (7.5%) exact matches, in which:
24 unique CDR3
6 unique J



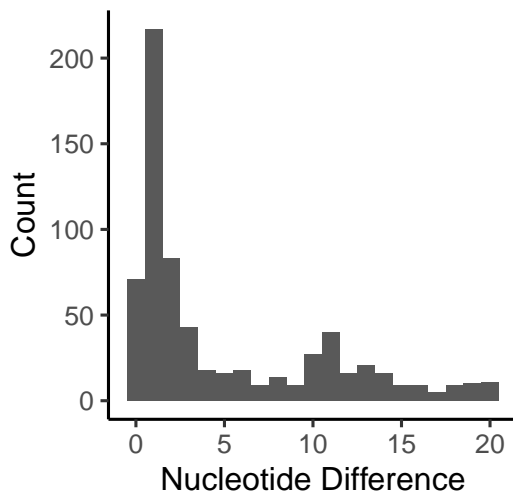
IGHV4–4*07

2054 sequences assigned
37 (1.8%) exact matches, in which:
26 unique CDR3
3 unique J



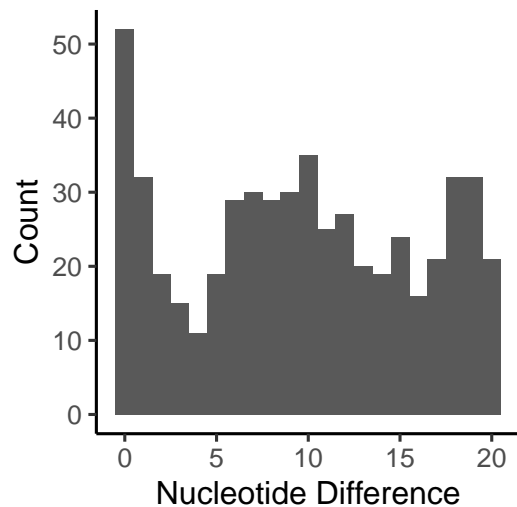
IGHV4–30–2*01

802 sequences assigned
71 (8.9%) exact matches, in which:
51 unique CDR3
6 unique J



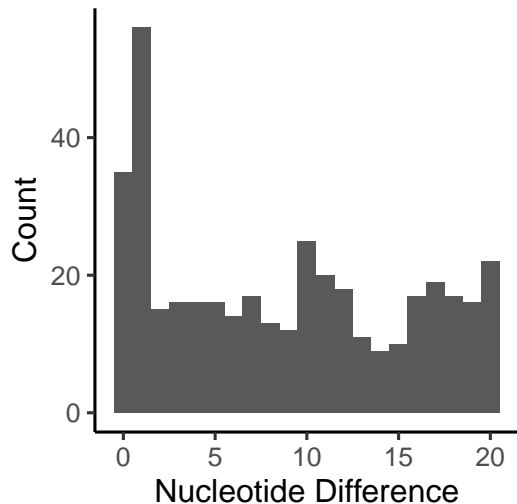
IGHV4–34*01_02

749 sequences assigned
52 (6.9%) exact matches, in which:
49 unique CDR3
6 unique J



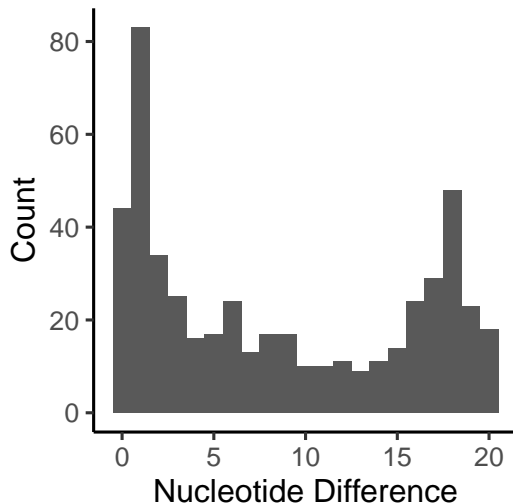
IGHV4–4*02_03

514 sequences assigned
35 (6.8%) exact matches, in which:
25 unique CDR3
5 unique J



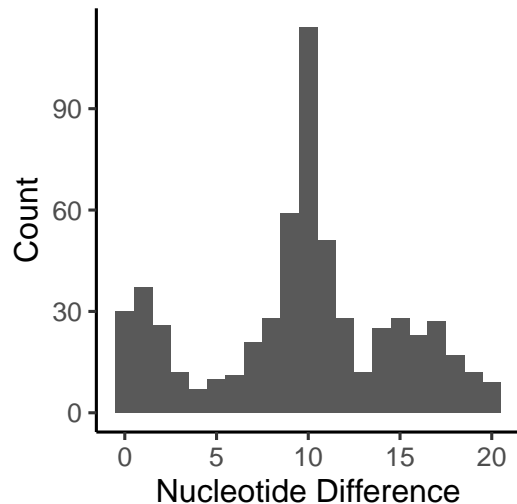
IGHV4–30–4*01

553 sequences assigned
44 (8%) exact matches, in which:
38 unique CDR3
5 unique J



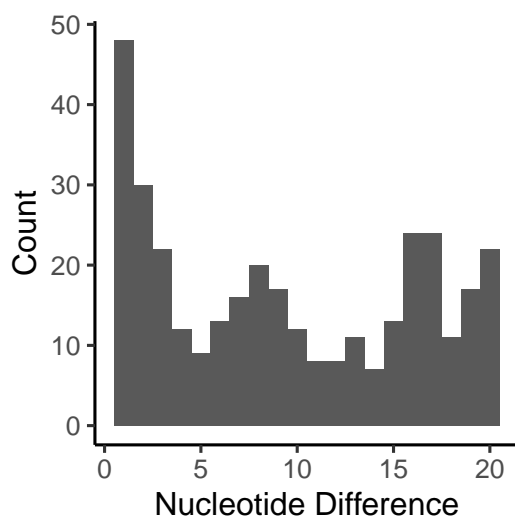
IGHV4–38–2*02

690 sequences assigned
30 (4.3%) exact matches, in which:
26 unique CDR3
6 unique J



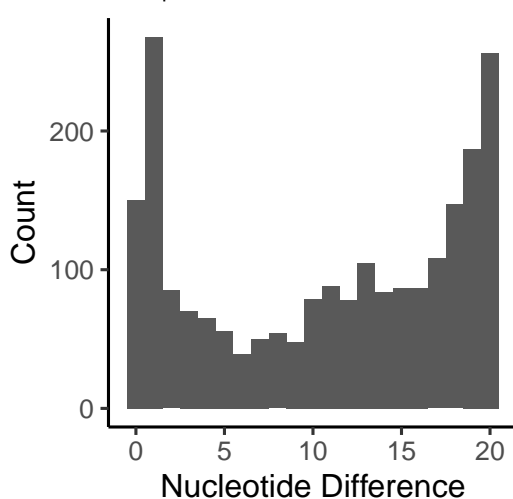
IGHV4-39*02

539 sequences assigned
No exact matches.



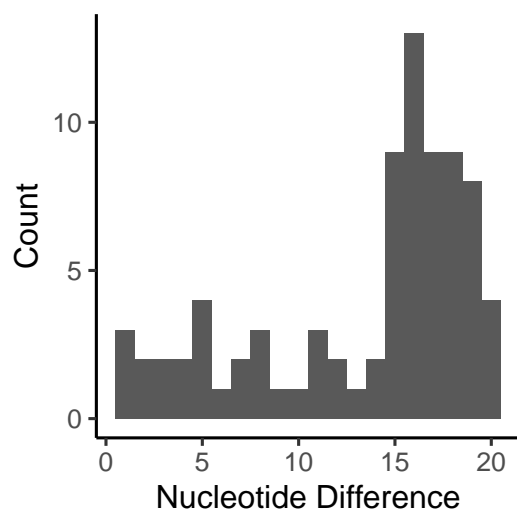
IGHV4-59*01_07

3802 sequences assigned
150 (3.9%) exact matches, in which:
109 unique CDR3
6 unique J



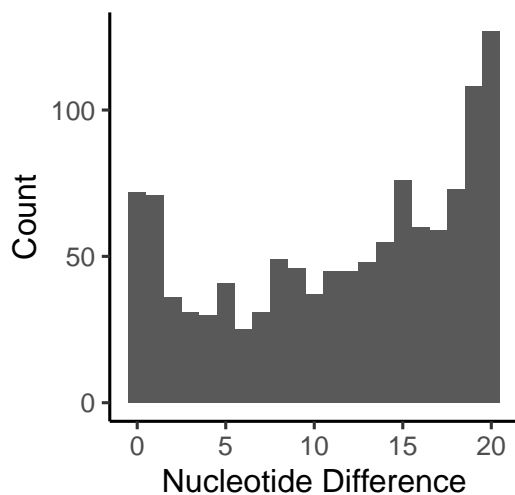
IGHV4-61*08

155 sequences assigned
No exact matches.



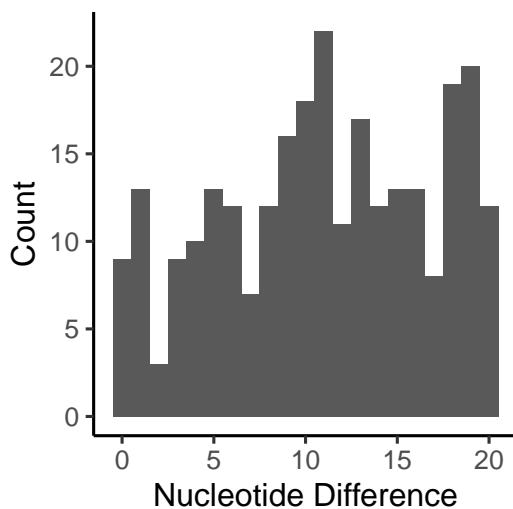
IGHV4-39*07

1834 sequences assigned
72 (3.9%) exact matches, in which:
60 unique CDR3
5 unique J



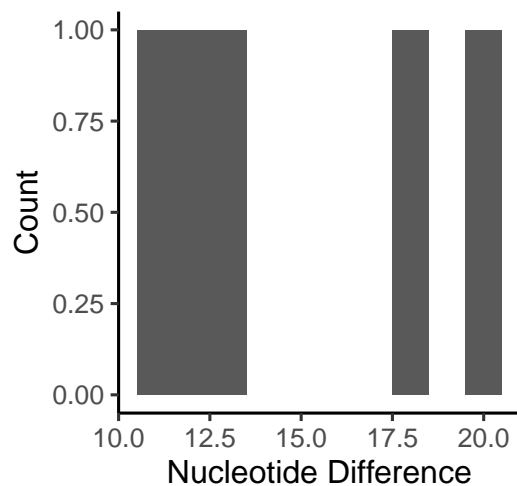
IGHV4-59*12

400 sequences assigned
9 (2.2%) exact matches, in which:
9 unique CDR3
3 unique J



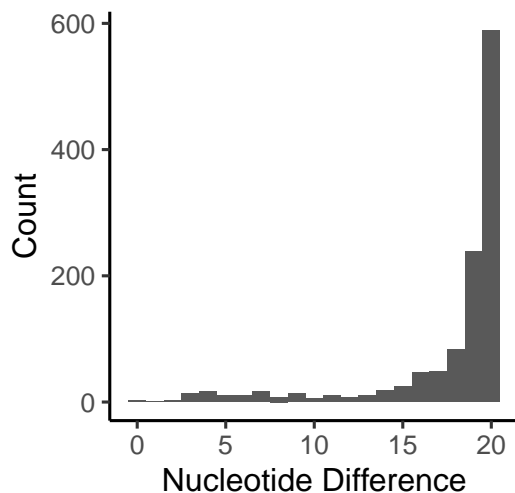
IGHV1/OR15-3*02

11 sequences assigned
No exact matches.



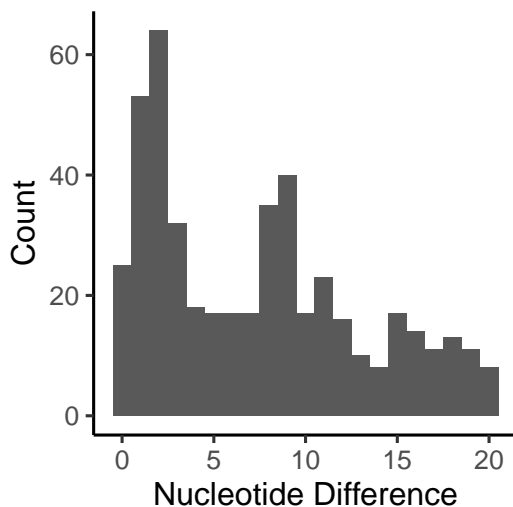
IGHV4-59*02

15663 sequences assigned
2 (0%) exact matches, in which:
2 unique CDR3
2 unique J



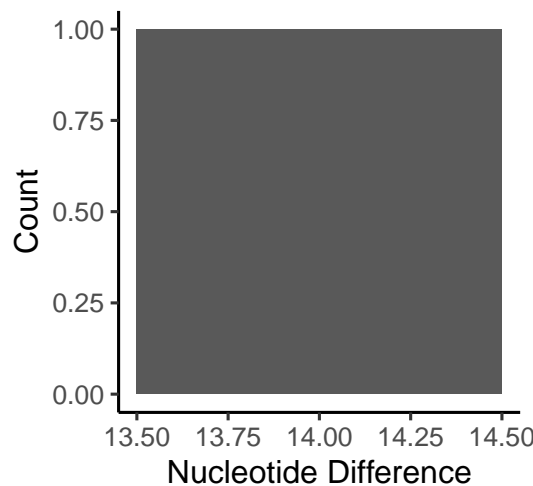
IGHV4-61*01

697 sequences assigned
25 (3.6%) exact matches, in which:
25 unique CDR3
4 unique J



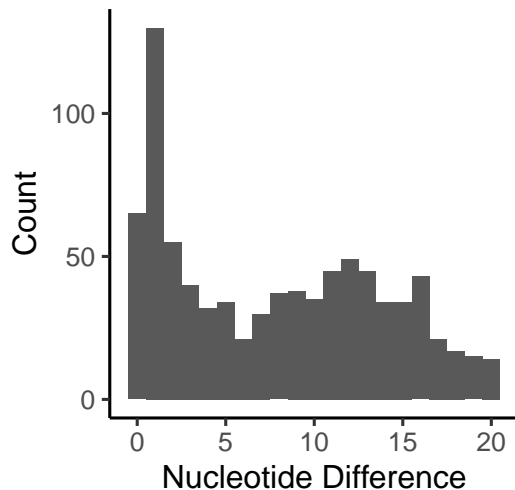
IGHV4/OR15-8*01

6 sequences assigned
No exact matches.



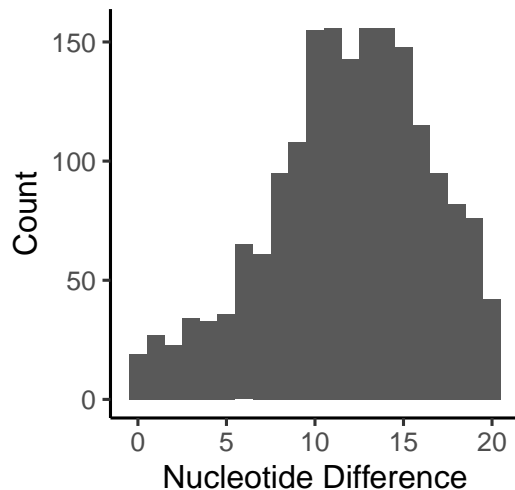
IGHV5-10-1*01_03

1096 sequences assigned
65 (5.9%) exact matches, in which:
52 unique CDR3
5 unique J



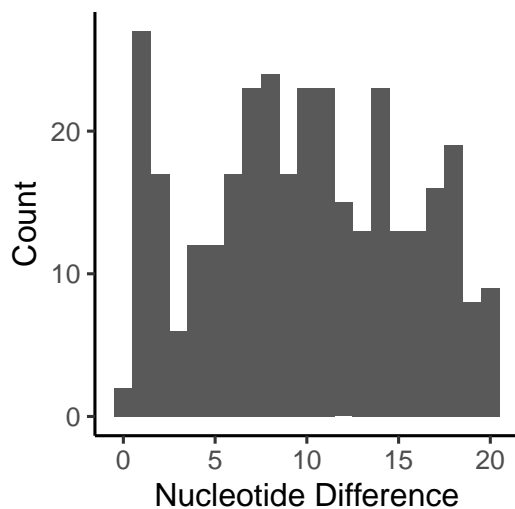
IGHV6-1*01_02

2103 sequences assigned
19 (0.9%) exact matches, in which:
17 unique CDR3
3 unique J



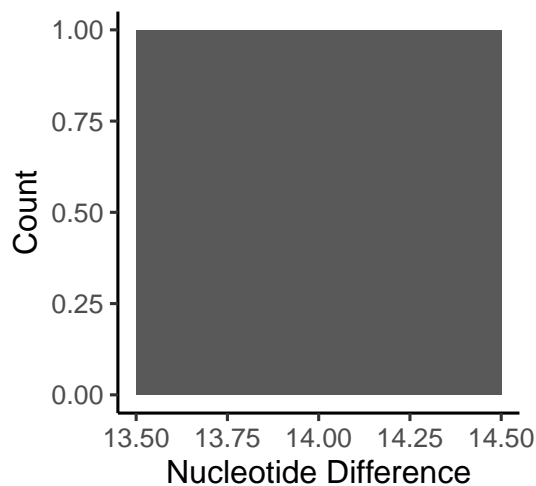
IGHV5-51*07

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



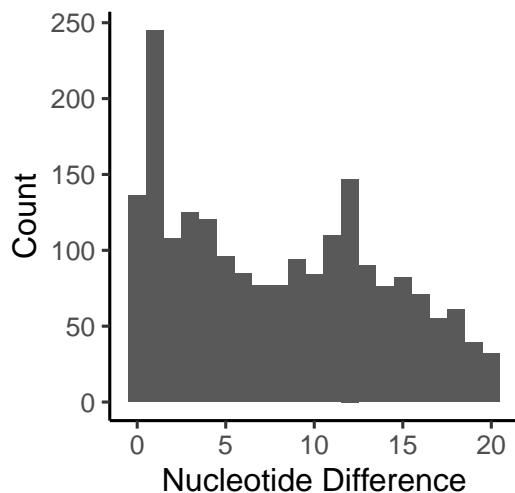
IGHV3/OR16-9*01

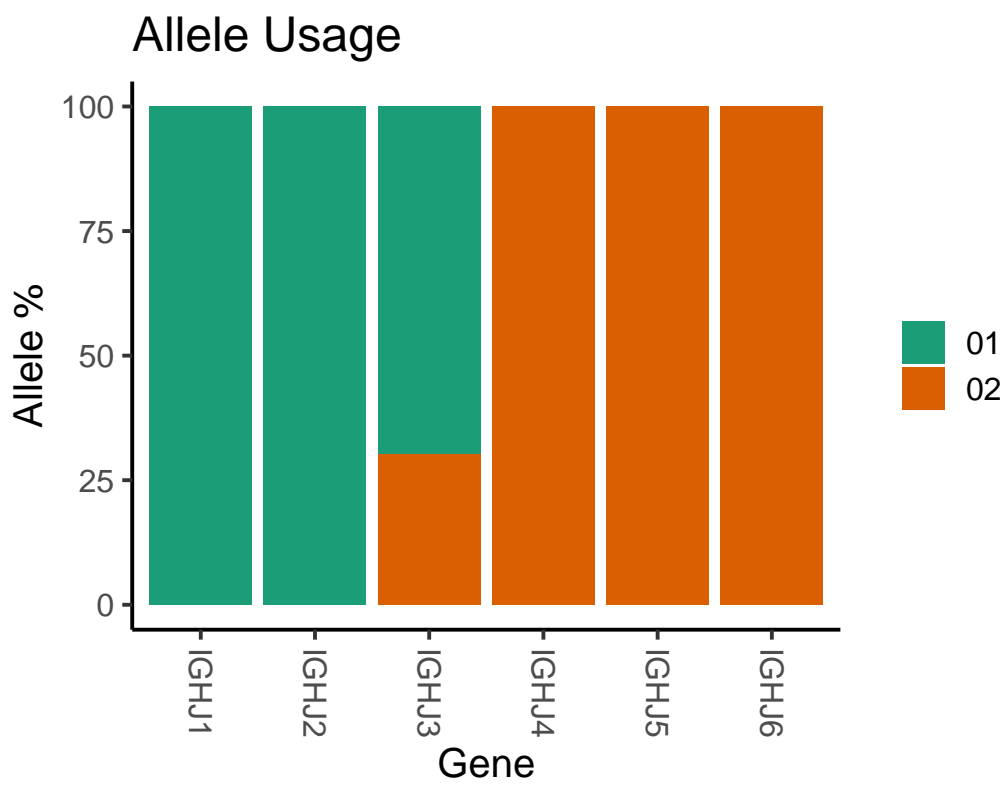
1 sequences assigned
No exact matches.



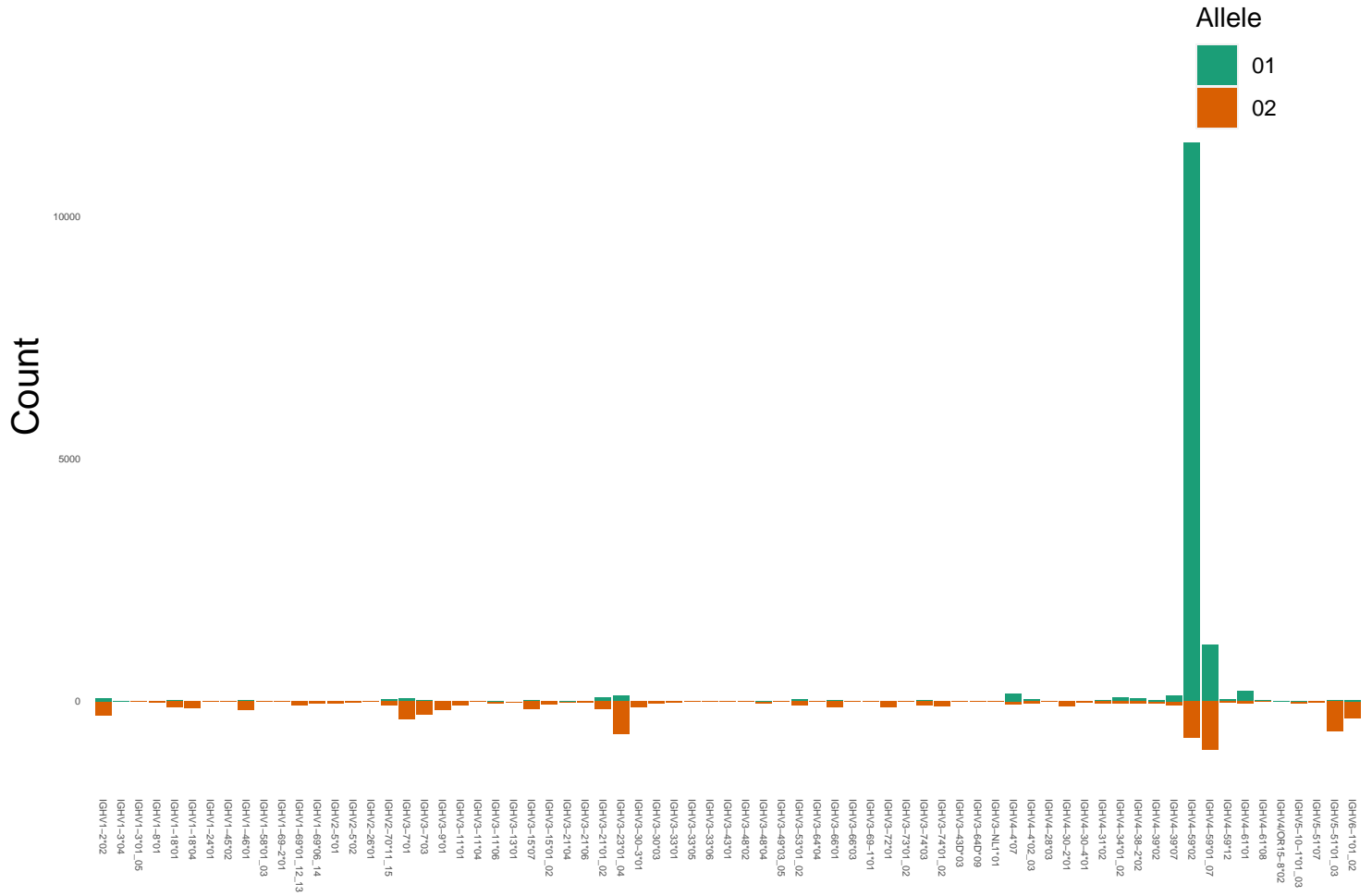
IGHV5-51*01_03

2220 sequences assigned
136 (6.1%) exact matches, in which:
102 unique CDR3
6 unique J





Sequence Count by IGHJ3 allele usage



Warning – no inferred sequences found.