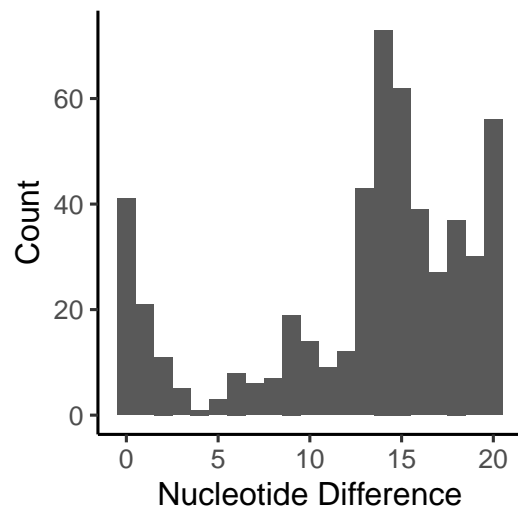


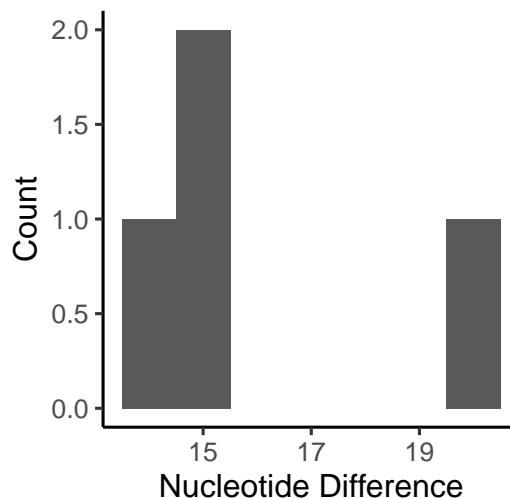
IGHV1-2*02

843 sequences assigned
41 (4.9%) exact matches, in which:
37 unique CDR3
6 unique J



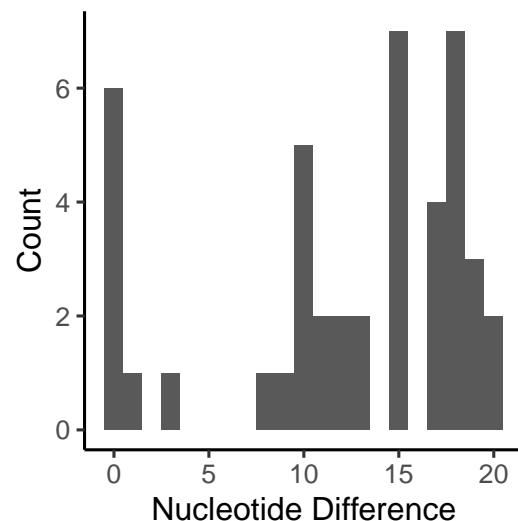
IGHV1-3*04

49 sequences assigned
No exact matches.



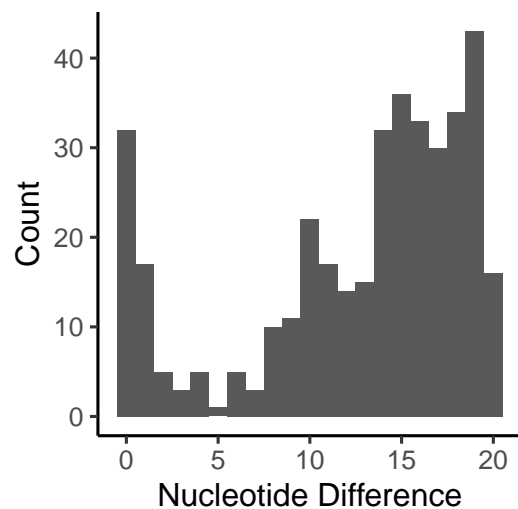
IGHV1-24*01

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



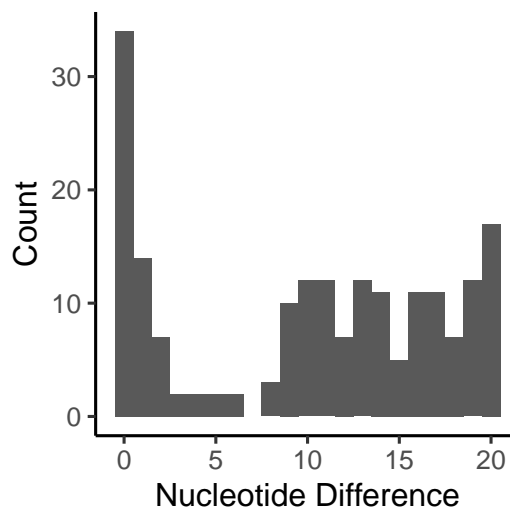
IGHV1-2*06

915 sequences assigned
32 (3.5%) exact matches, in which:
32 unique CDR3
5 unique J



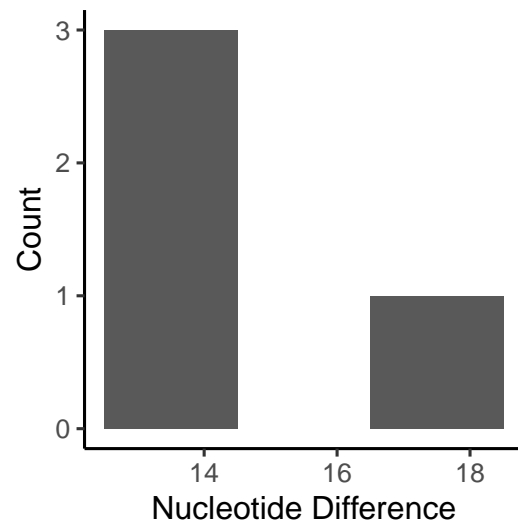
IGHV1-8*01

732 sequences assigned
34 (4.6%) exact matches, in which:
34 unique CDR3
7 unique J



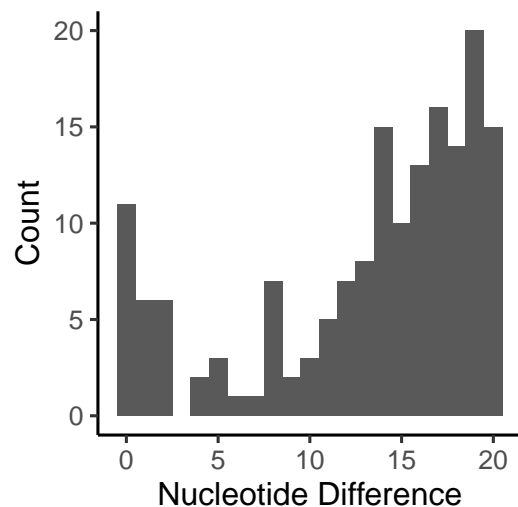
IGHV1-45*02

32 sequences assigned
No exact matches.



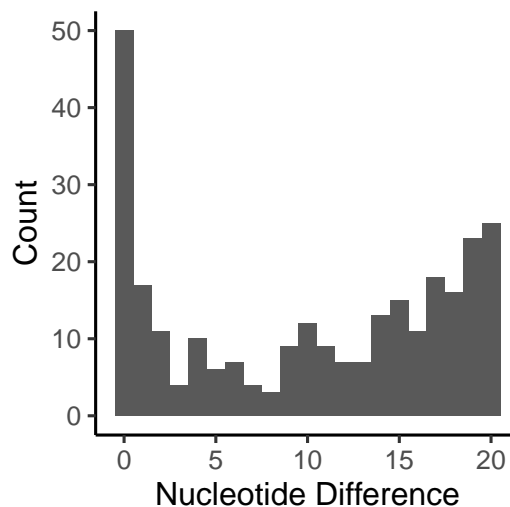
IGHV1-3*01

376 sequences assigned
11 (2.9%) exact matches, in which:
9 unique CDR3
3 unique J



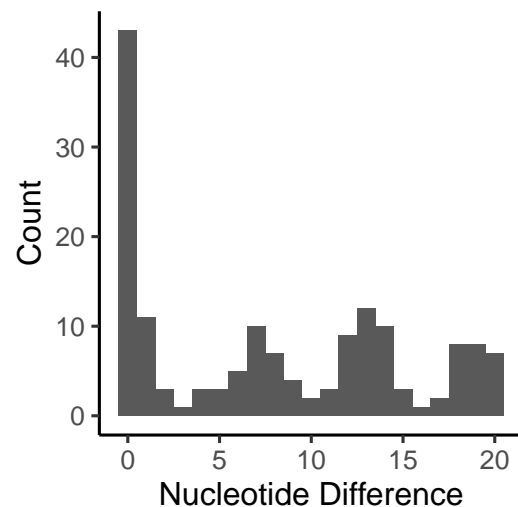
IGHV1-18*01

846 sequences assigned
50 (5.9%) exact matches, in which:
49 unique CDR3
6 unique J



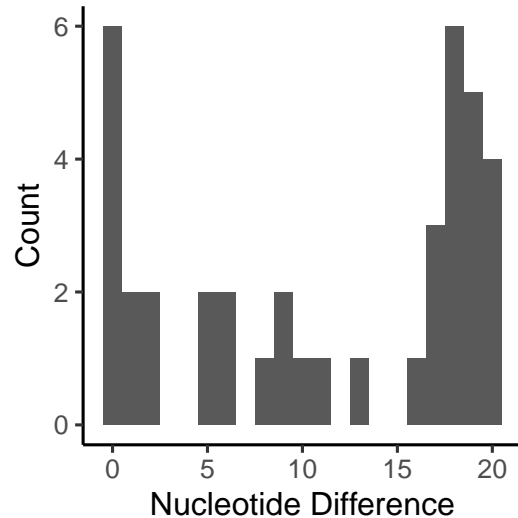
IGHV1-46*01

564 sequences assigned
43 (7.6%) exact matches, in which:
41 unique CDR3
5 unique J



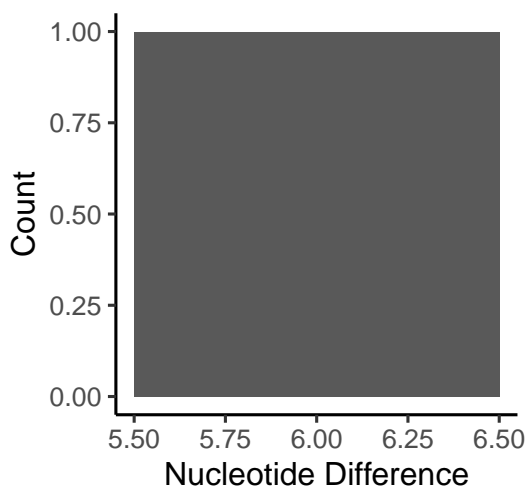
IGHV1-58*01

92 sequences assigned
6 (6.5%) exact matches, in which:
6 unique CDR3
4 unique J



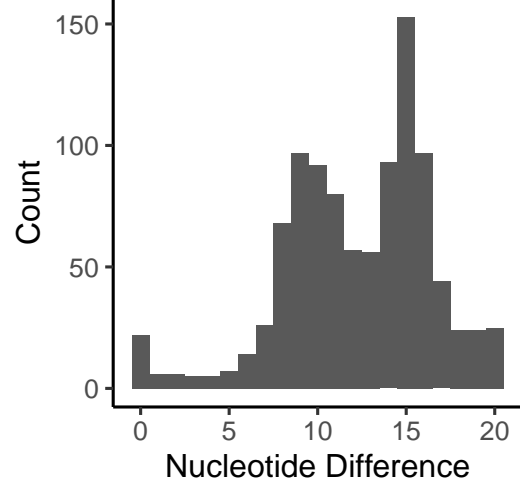
IGHV1-NL1*01

1 sequences assigned
No exact matches.



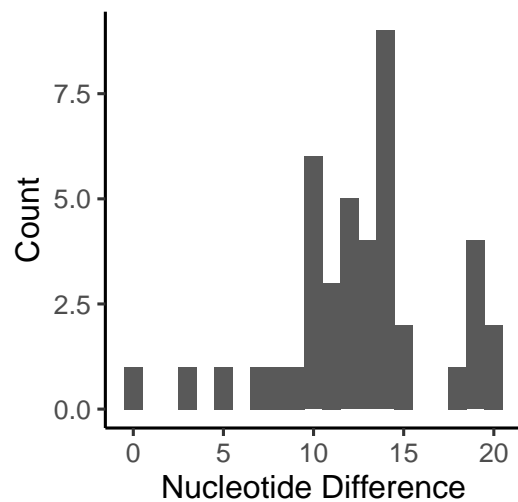
IGHV2-26*01

1111 sequences assigned
22 (2%) exact matches, in which:
22 unique CDR3
6 unique J



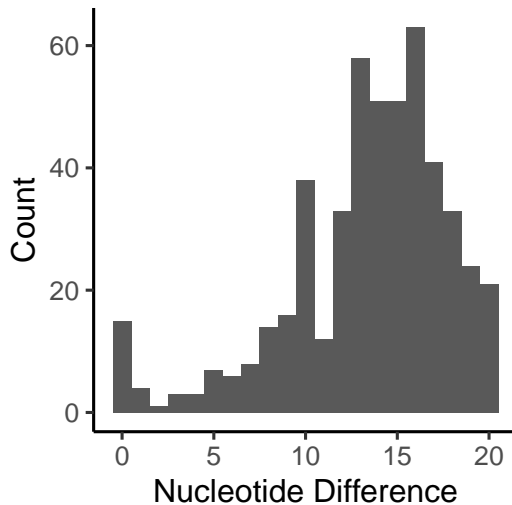
IGHV1-69-2*01

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



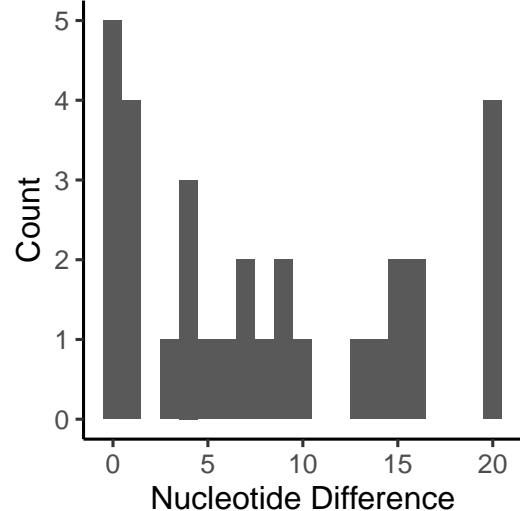
IGHV2-5*01

669 sequences assigned
15 (2.2%) exact matches, in which:
14 unique CDR3
3 unique J



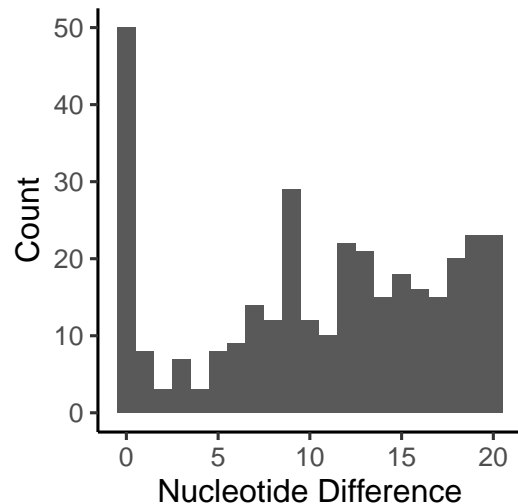
IGHV2-70*01

42 sequences assigned
5 (11.9%) exact matches, in which:
5 unique CDR3
2 unique J



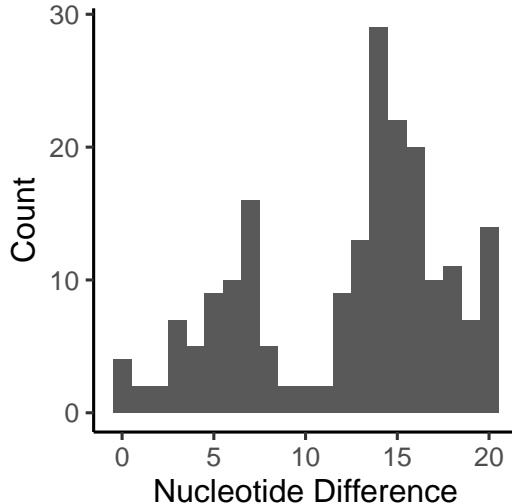
IGHV1-69*06

652 sequences assigned
50 (7.7%) exact matches, in which:
47 unique CDR3
5 unique J



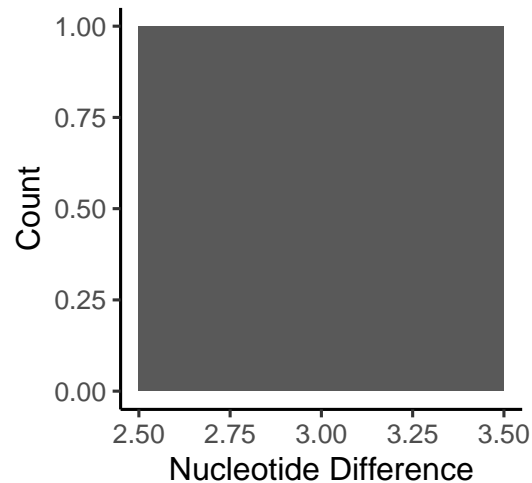
IGHV2-5*02

299 sequences assigned
4 (1.3%) exact matches, in which:
4 unique CDR3
2 unique J



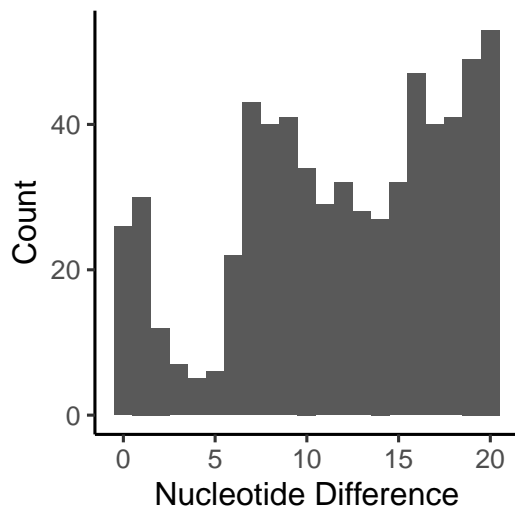
IGHV2-70*12

1 sequences assigned
No exact matches.



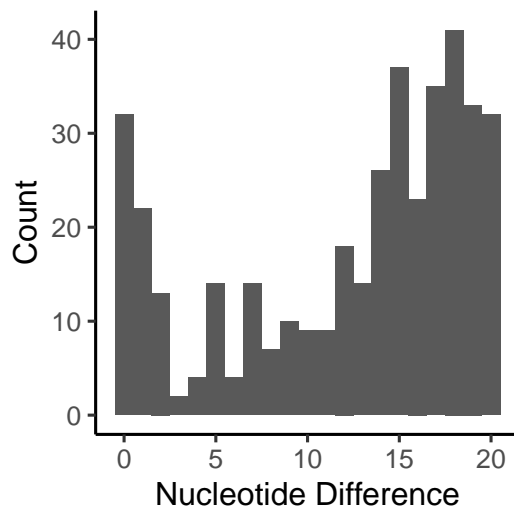
IGHV3-7*01

1020 sequences assigned
26 (2.5%) exact matches, in which:
18 unique CDR3
4 unique J



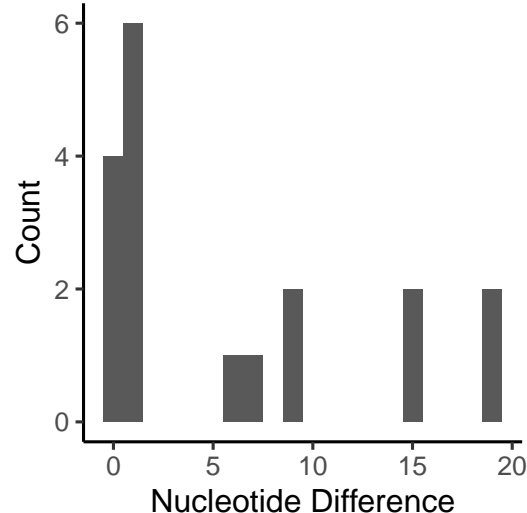
IGHV3-11*01

969 sequences assigned
32 (3.3%) exact matches, in which:
31 unique CDR3
6 unique J



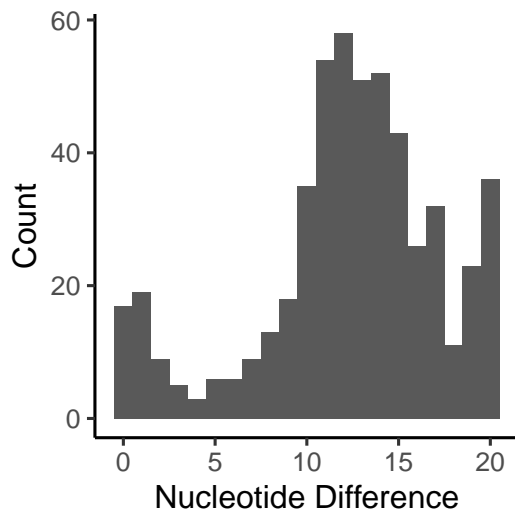
IGHV3-20*01

29 sequences assigned
4 (13.8%) exact matches, in which:
4 unique CDR3
3 unique J



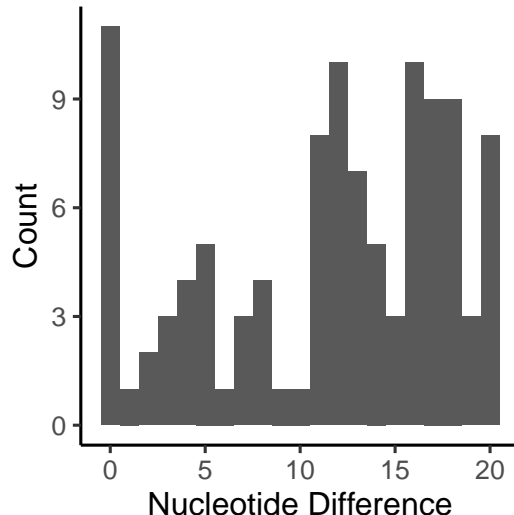
IGHV3-7*03

1231 sequences assigned
17 (1.4%) exact matches, in which:
17 unique CDR3
6 unique J



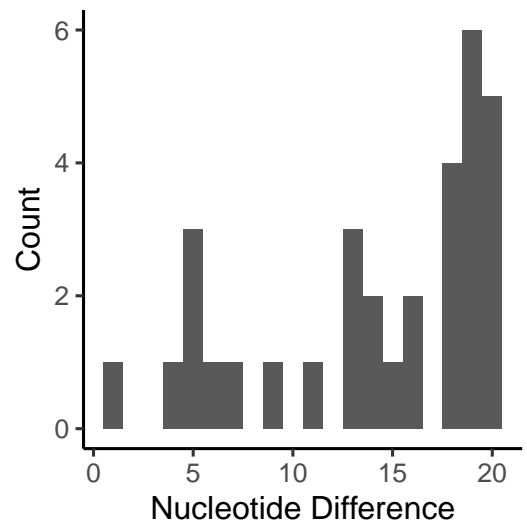
IGHV3-13*01

643 sequences assigned
11 (1.7%) exact matches, in which:
11 unique CDR3
5 unique J



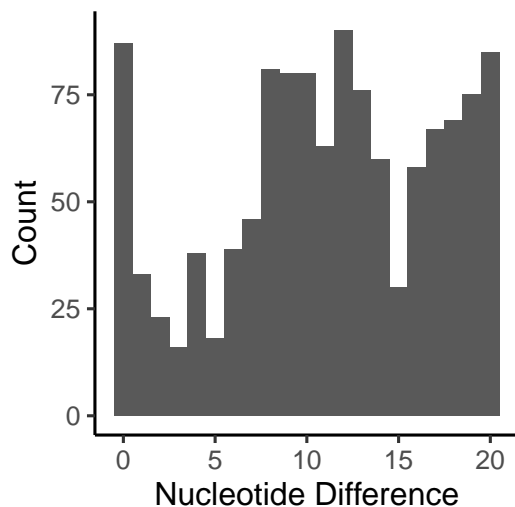
IGHV3-20*04

63 sequences assigned
No exact matches.



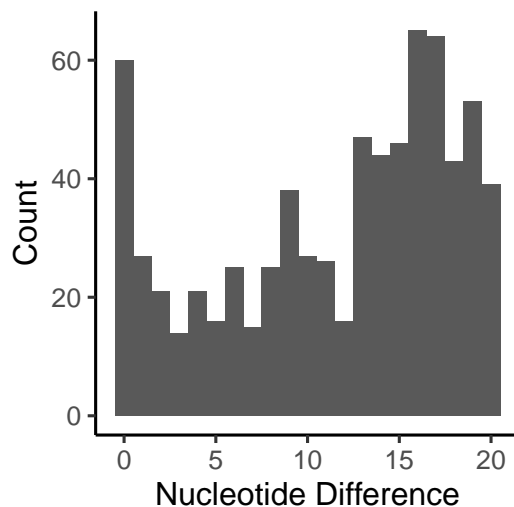
IGHV3-9*01

3448 sequences assigned
87 (2.5%) exact matches, in which:
74 unique CDR3
6 unique J



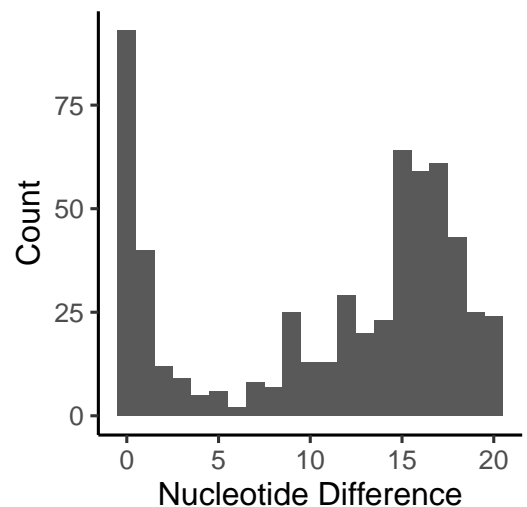
IGHV3-15*01

1527 sequences assigned
60 (3.9%) exact matches, in which:
49 unique CDR3
5 unique J



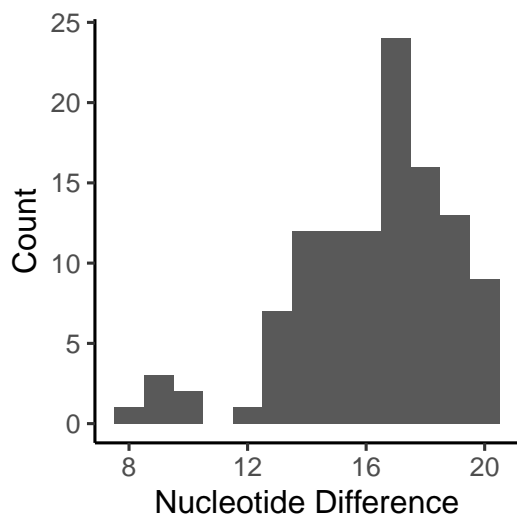
IGHV3-21*01

1063 sequences assigned
93 (8.7%) exact matches, in which:
88 unique CDR3
6 unique J



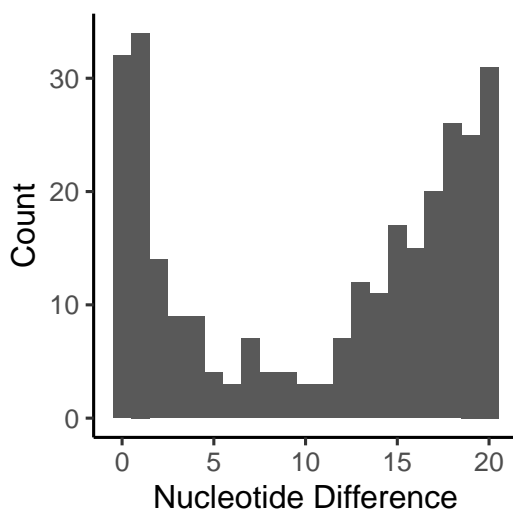
IGHV3-21*02

237 sequences assigned
No exact matches.



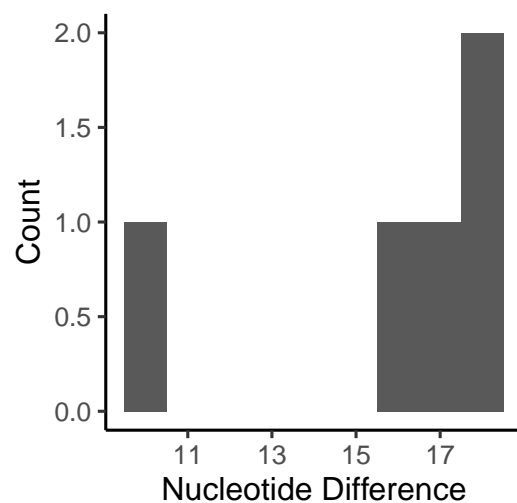
IGHV3-23*03

509 sequences assigned
32 (6.3%) exact matches, in which:
25 unique CDR3
6 unique J



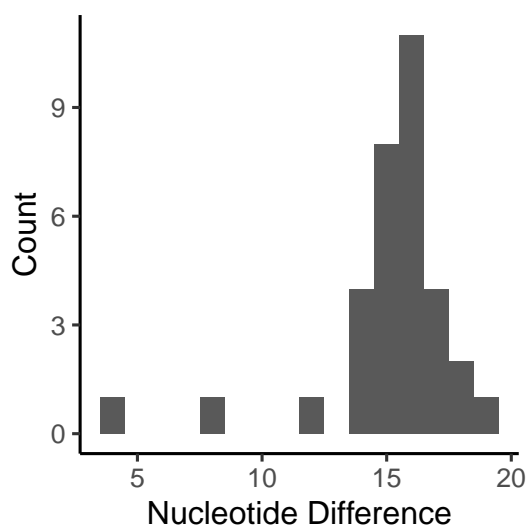
IGHV3-30-3*02

35 sequences assigned
No exact matches.



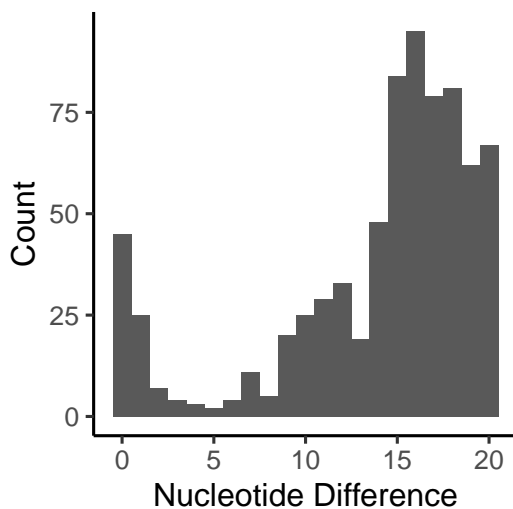
IGHV3-21*04

34 sequences assigned
No exact matches.



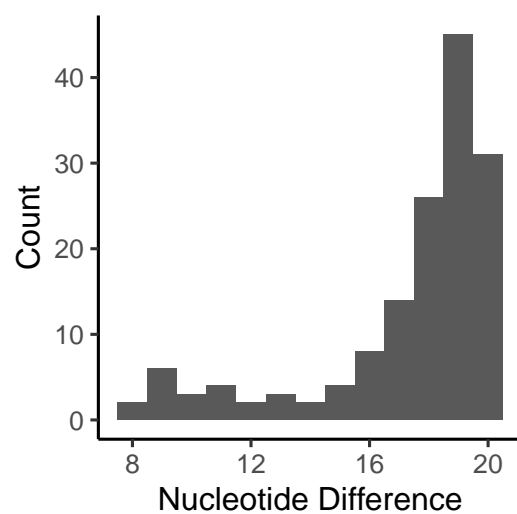
IGHV3-23*04

1461 sequences assigned
45 (3.1%) exact matches, in which:
43 unique CDR3
5 unique J



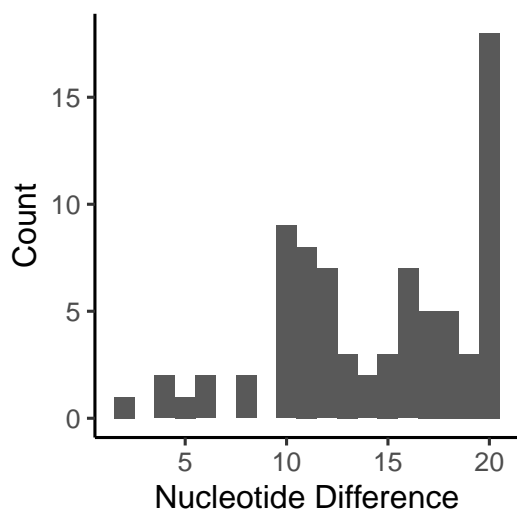
IGHV3-30*03

810 sequences assigned
No exact matches.



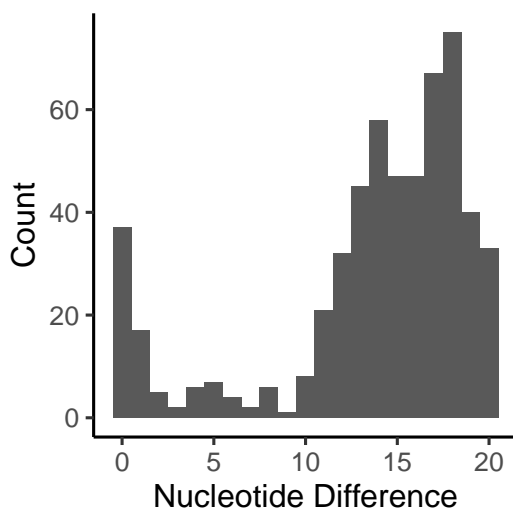
IGHV3-21*06

233 sequences assigned
No exact matches.



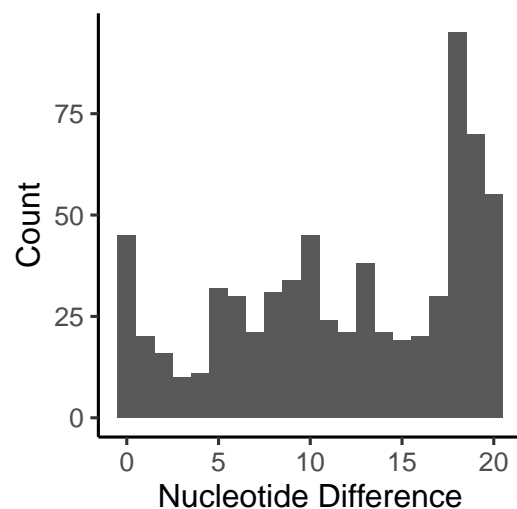
IGHV3-30-3*01

1256 sequences assigned
37 (2.9%) exact matches, in which:
36 unique CDR3
5 unique J



IGHV3-33*08

1644 sequences assigned
45 (2.7%) exact matches, in which:
40 unique CDR3
5 unique J



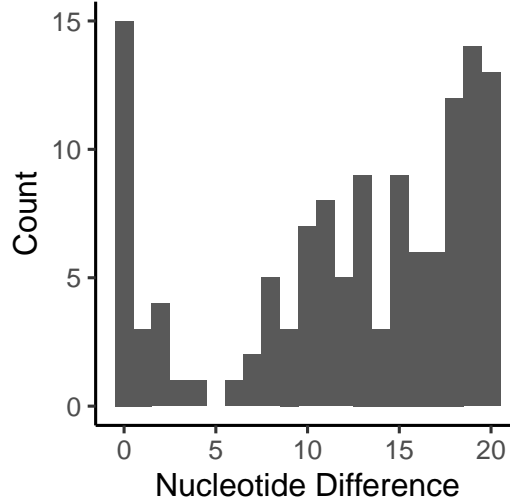
IGHV3-35*01

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



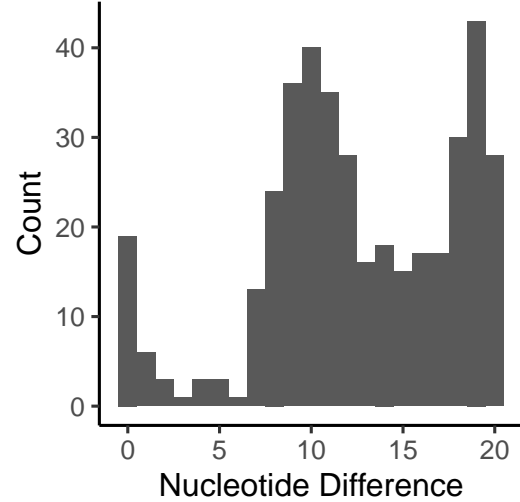
IGHV3-48*01

146 sequences assigned
15 (10.3%) exact matches, in which:
15 unique CDR3
5 unique J



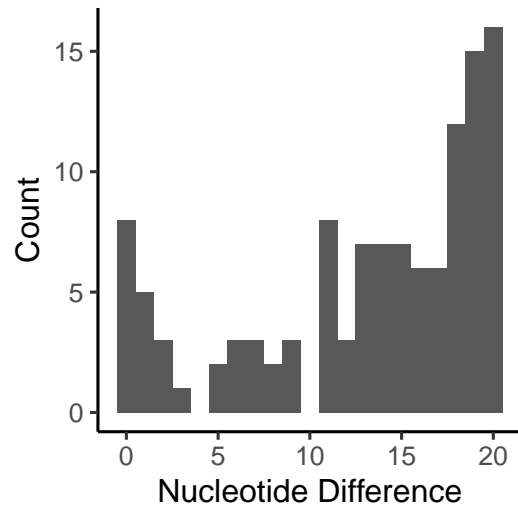
IGHV3-49*05

1104 sequences assigned
19 (1.7%) exact matches, in which:
18 unique CDR3
6 unique J



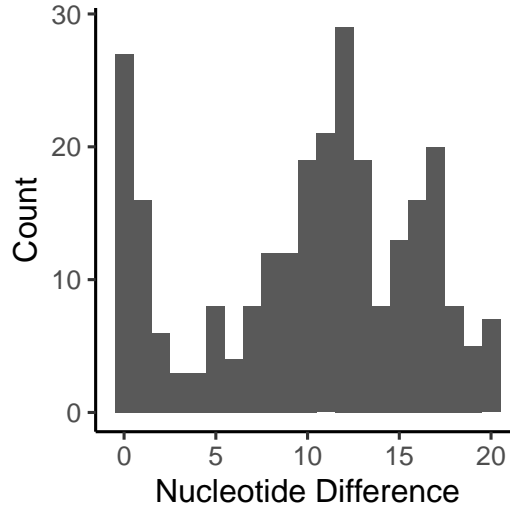
IGHV3-43*02

300 sequences assigned
8 (2.7%) exact matches, in which:
8 unique CDR3
3 unique J



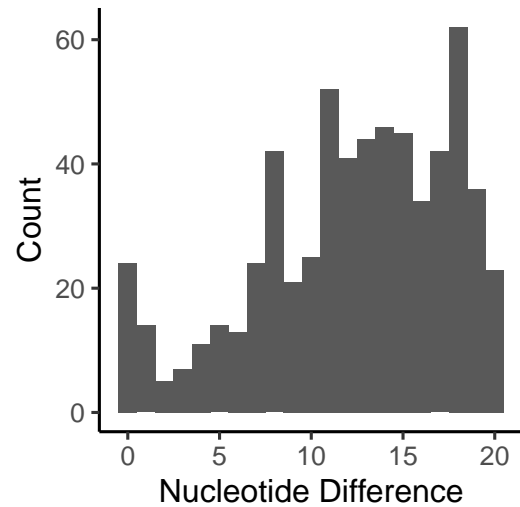
IGHV3-48*02

403 sequences assigned
27 (6.7%) exact matches, in which:
20 unique CDR3
5 unique J



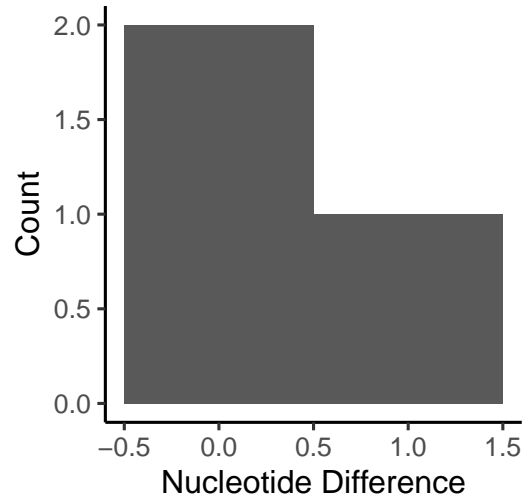
IGHV3-53*01

1143 sequences assigned
24 (2.1%) exact matches, in which:
24 unique CDR3
6 unique J



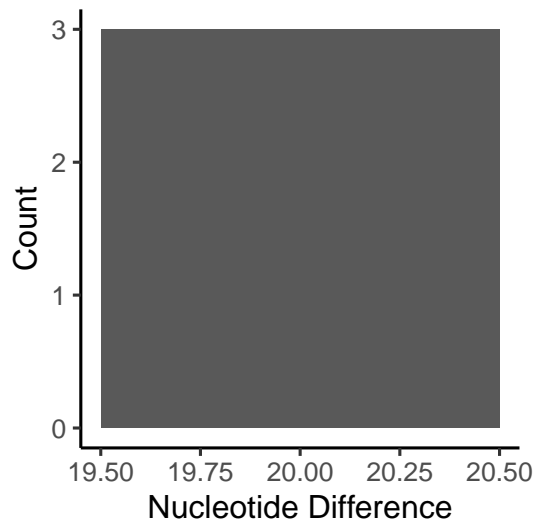
IGHV3-47*02

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



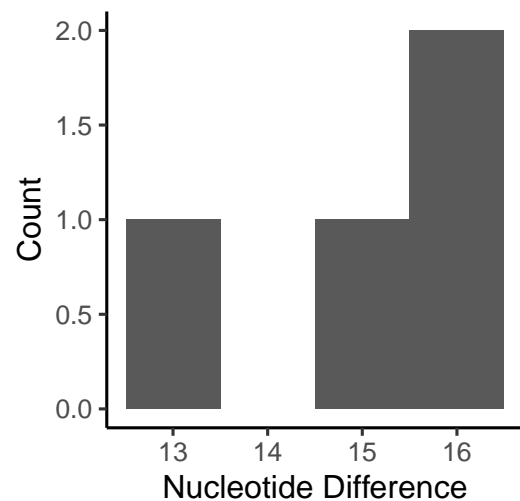
IGHV3-48*04

11 sequences assigned
No exact matches.



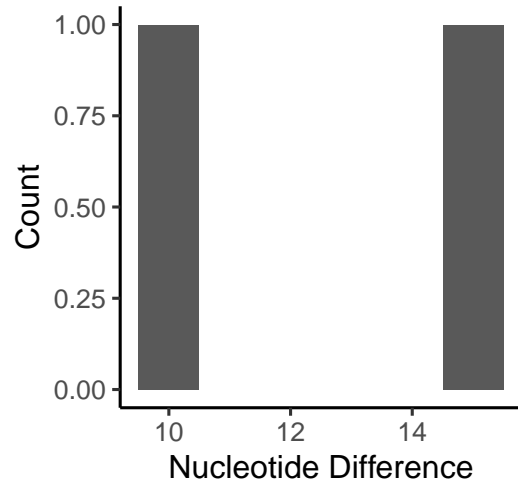
IGHV3-64*02

5 sequences assigned
No exact matches.



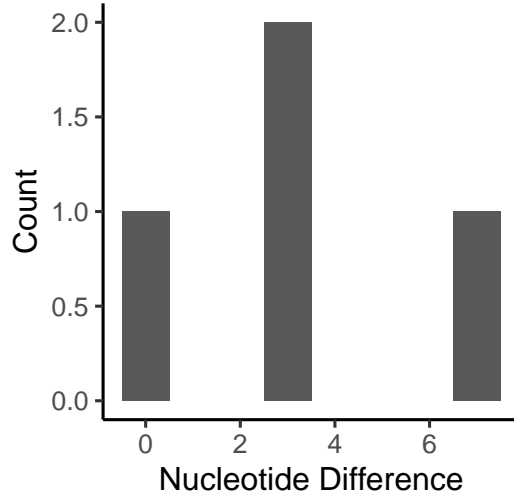
IGHV3-64*04

2 sequences assigned
No exact matches.



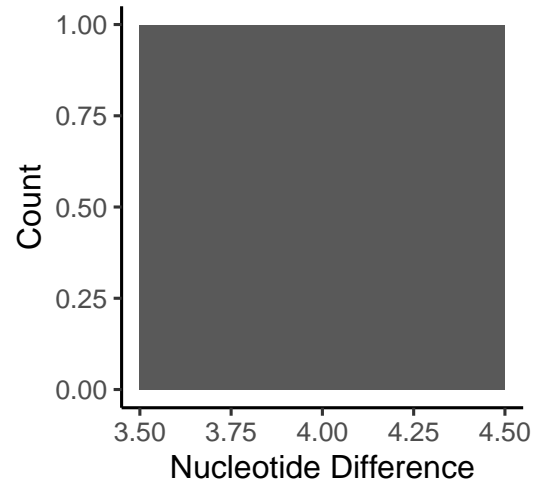
IGHV3-66*04

4 sequences assigned
1 (25%) exact matches, in which:
1 unique CDR3
1 unique J



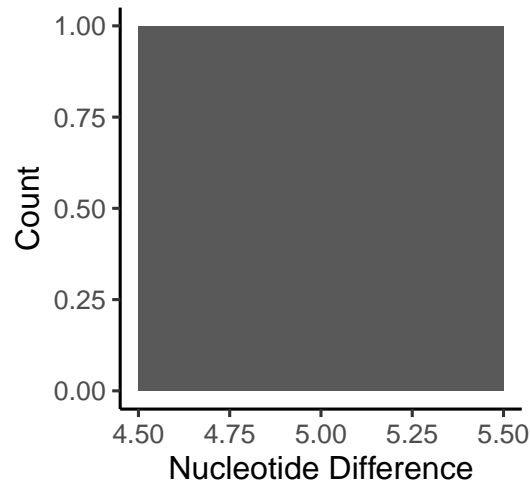
IGHV3-71*01

1 sequences assigned
No exact matches.



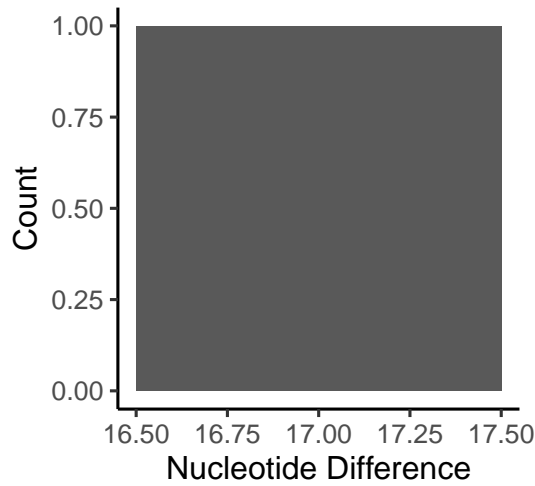
IGHV3-66*01

33 sequences assigned
No exact matches.



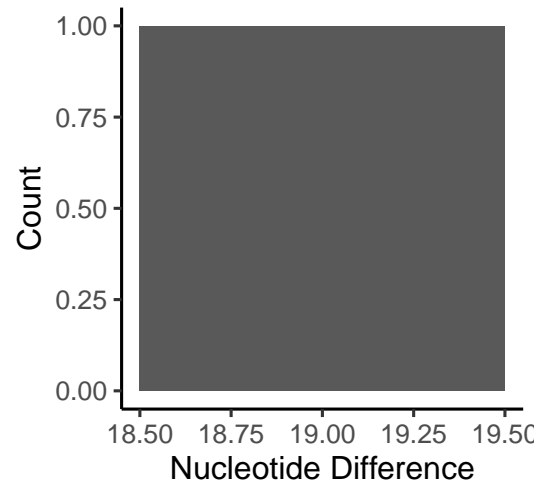
IGHV3-69-1*01

1 sequences assigned
No exact matches.



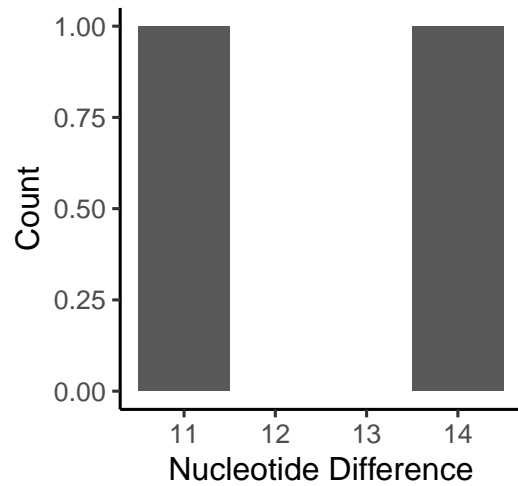
IGHV3-71*02

1 sequences assigned
No exact matches.



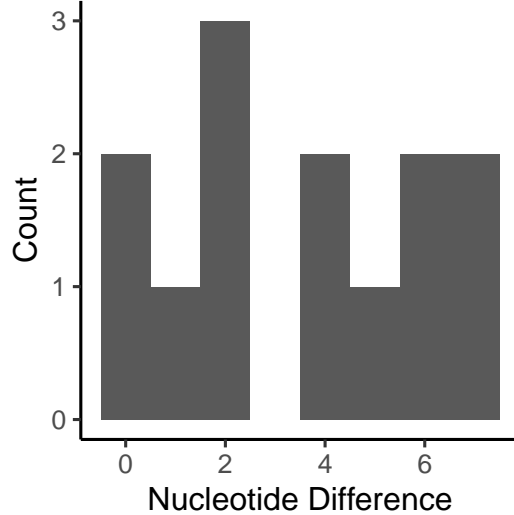
IGHV3-66*03

2 sequences assigned
No exact matches.



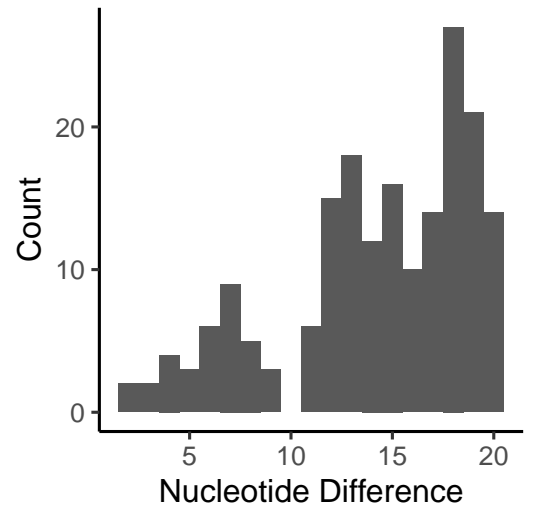
IGHV3-69-1*02

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



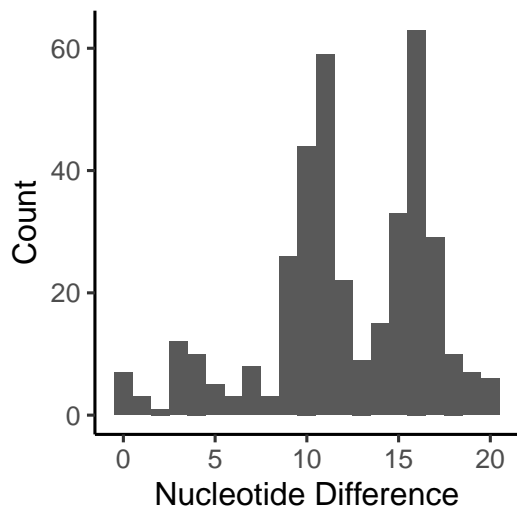
IGHV3-72*01

232 sequences assigned
No exact matches.



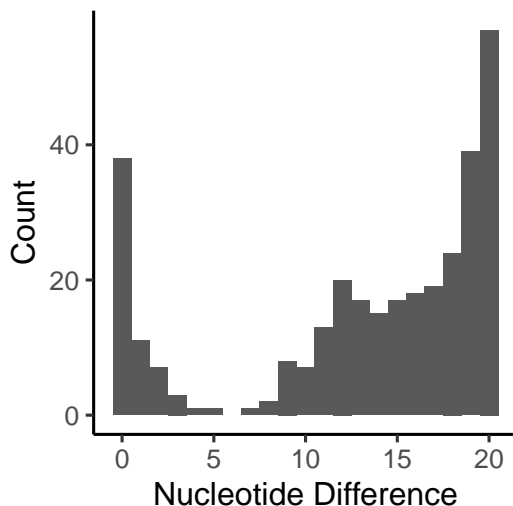
IGHV3-73*02

494 sequences assigned
7 (1.4%) exact matches, in which:
7 unique CDR3
4 unique J



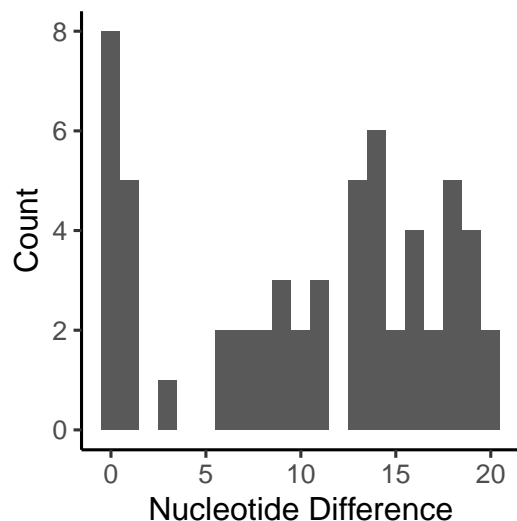
IGHV4-4*07

724 sequences assigned
38 (5.2%) exact matches, in which:
37 unique CDR3
6 unique J



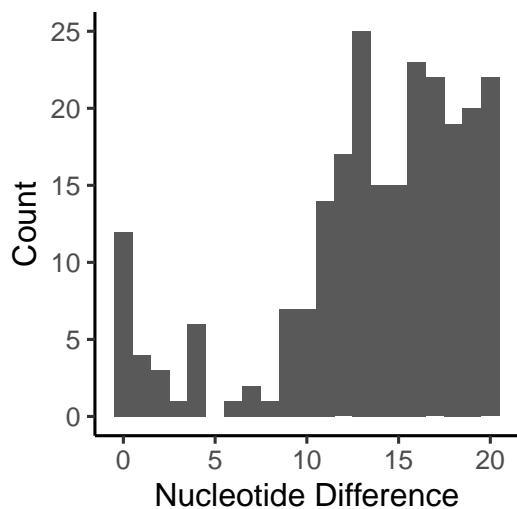
IGHV4-30-2*01

277 sequences assigned
8 (2.9%) exact matches, in which:
8 unique CDR3
4 unique J



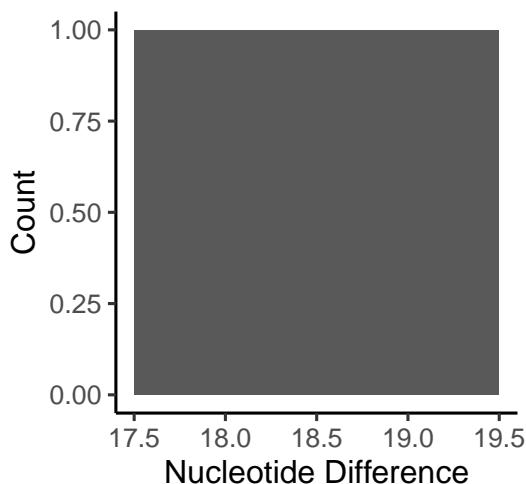
IGHV3-74*01

575 sequences assigned
12 (2.1%) exact matches, in which:
10 unique CDR3
5 unique J



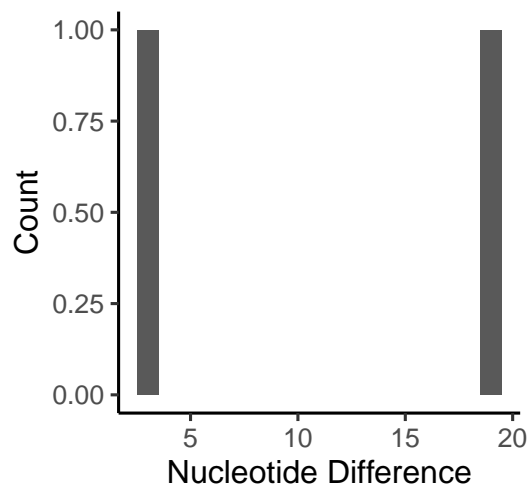
IGHV4-28*01

4 sequences assigned
No exact matches.



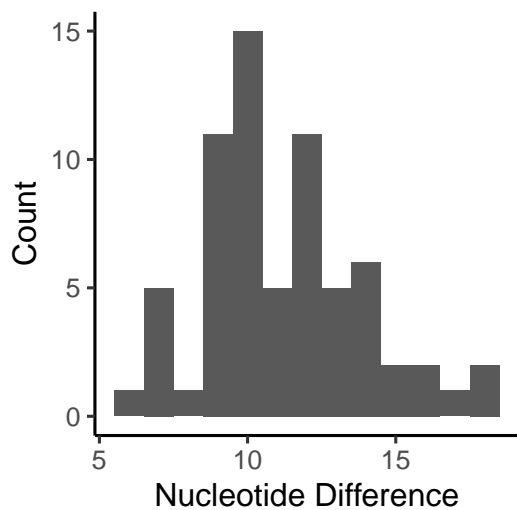
IGHV4-30-2*03

3 sequences assigned
No exact matches.



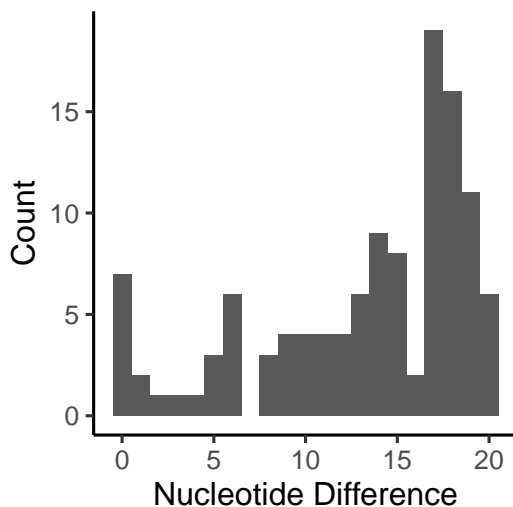
IGHV3-74*03

139 sequences assigned
No exact matches.



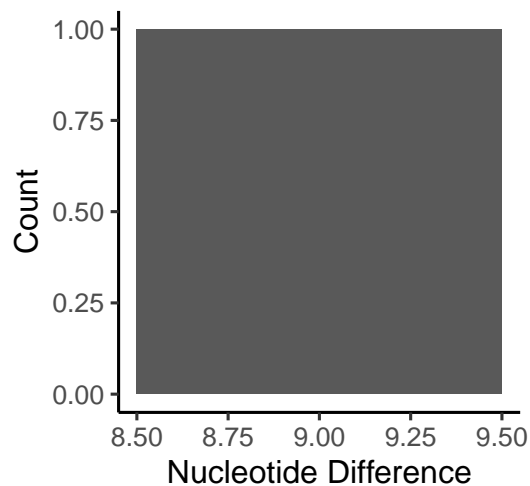
IGHV4-30-4*01

493 sequences assigned
7 (1.4%) exact matches, in which:
7 unique CDR3
4 unique J



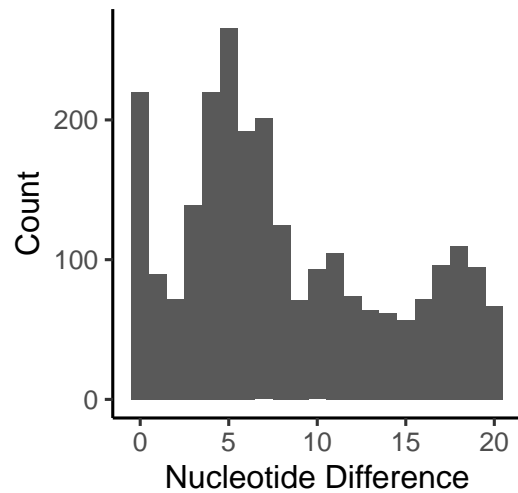
IGHV4-30-2*05

1 sequences assigned
No exact matches.



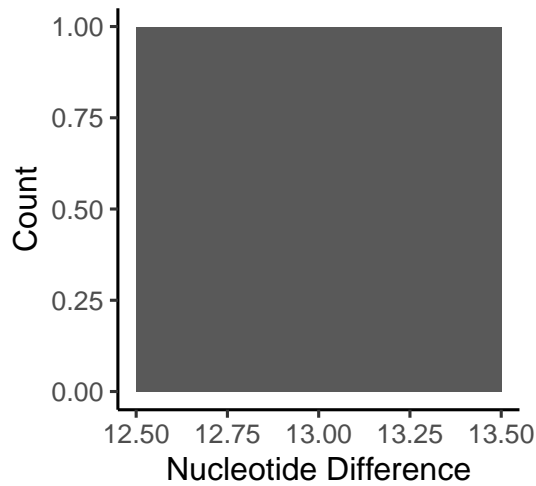
IGHV4-34*01

4041 sequences assigned
220 (5.4%) exact matches, in which:
194 unique CDR3
7 unique J



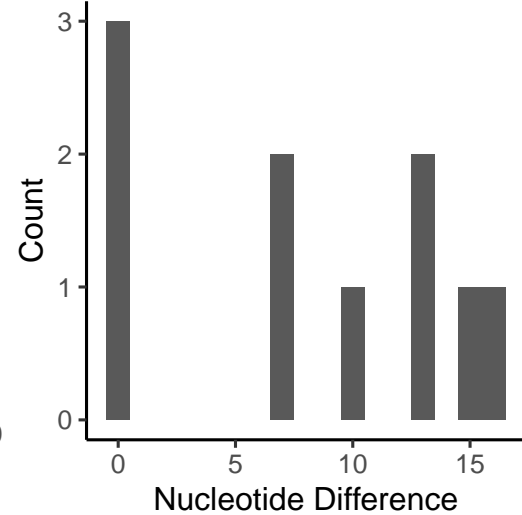
IGHV4-55*08

1 sequences assigned
No exact matches.



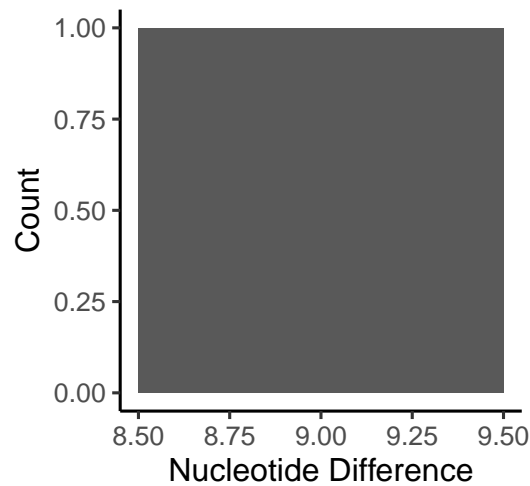
IGHV4-61*07

16 sequences assigned
3 (18.8%) exact matches, in which:
3 unique CDR3
2 unique J



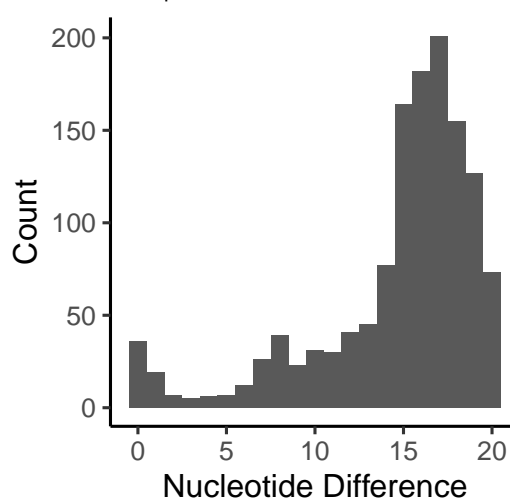
IGHV4-38-2*02

12 sequences assigned
No exact matches.



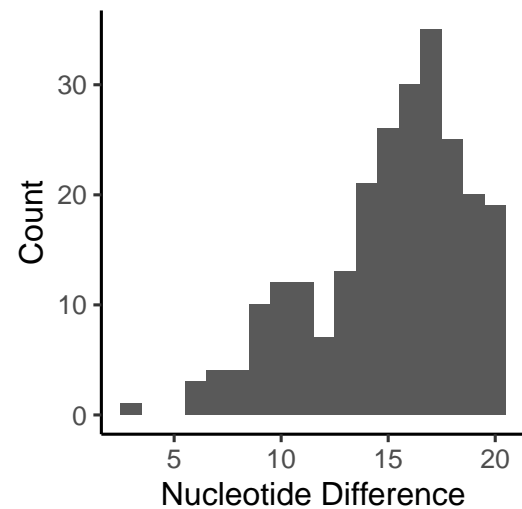
IGHV4-59*01

2012 sequences assigned
36 (1.8%) exact matches, in which:
31 unique CDR3
6 unique J



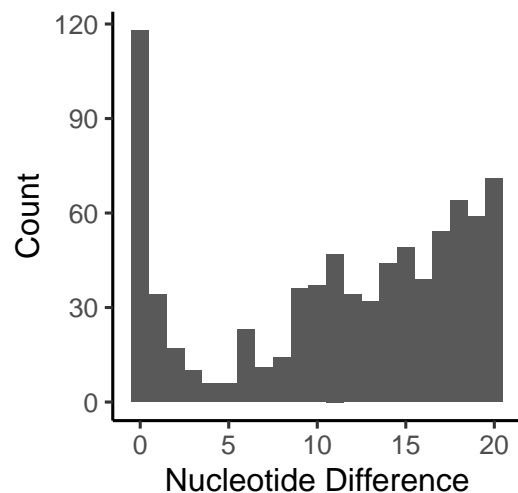
IGHV4-61*08

278 sequences assigned
No exact matches.



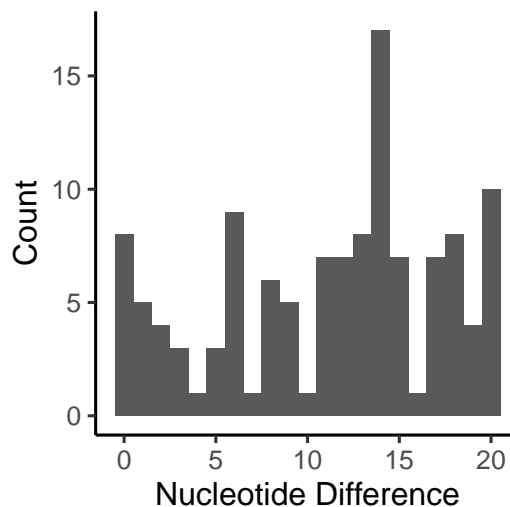
IGHV4-39*01

2233 sequences assigned
118 (5.3%) exact matches, in which:
109 unique CDR3
7 unique J



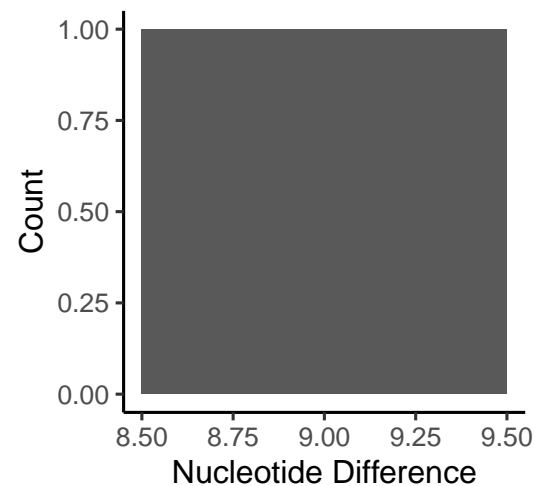
IGHV4-61*01

305 sequences assigned
8 (2.6%) exact matches, in which:
8 unique CDR3
4 unique J



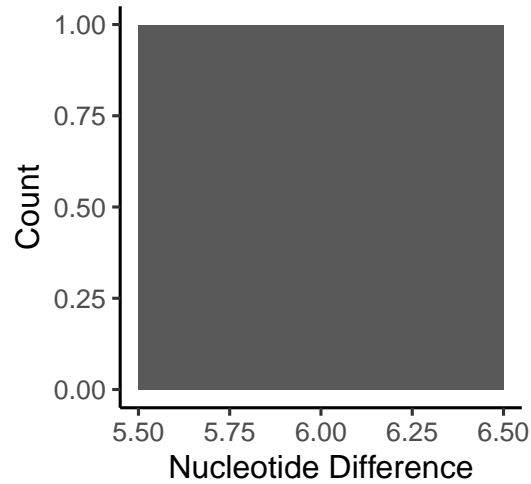
IGHV1/OR15-1*02

1 sequences assigned
No exact matches.



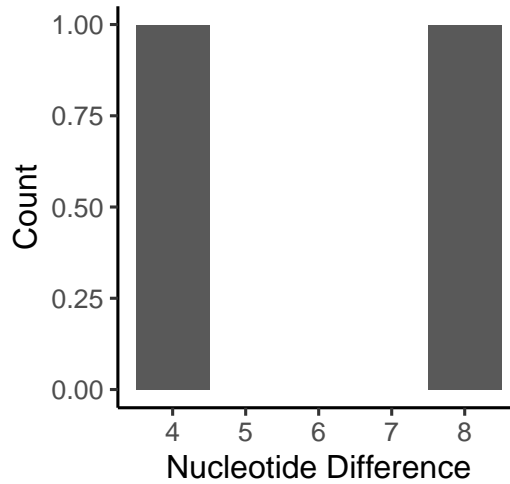
IGHV1/OR15-1*03

1 sequences assigned
No exact matches.



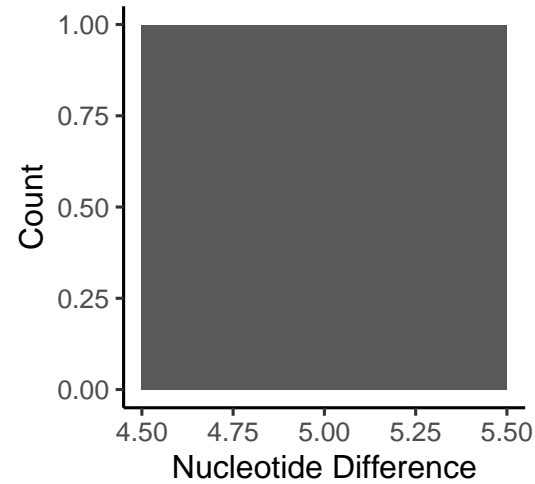
IGHV5-10-1*03

2 sequences assigned
No exact matches.



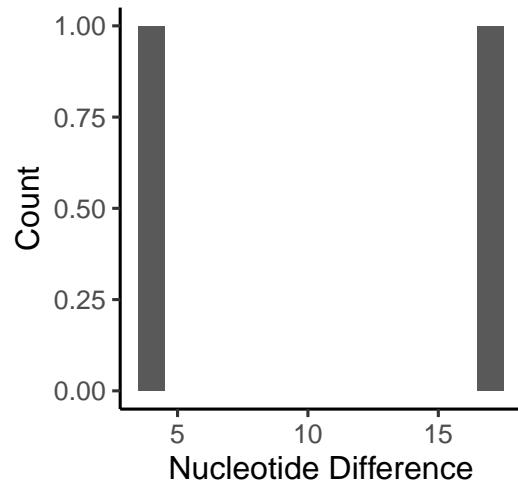
IGHV3/OR16-8*01

1 sequences assigned
No exact matches.



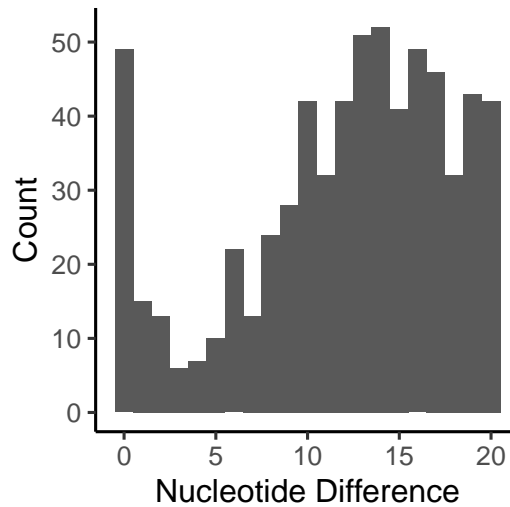
IGHV1/OR15-1*04

6 sequences assigned
No exact matches.



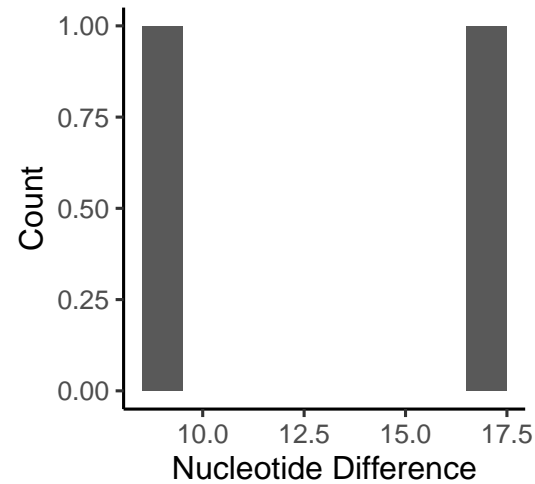
IGHV5-51*01

1088 sequences assigned
49 (4.5%) exact matches, in which:
48 unique CDR3
6 unique J



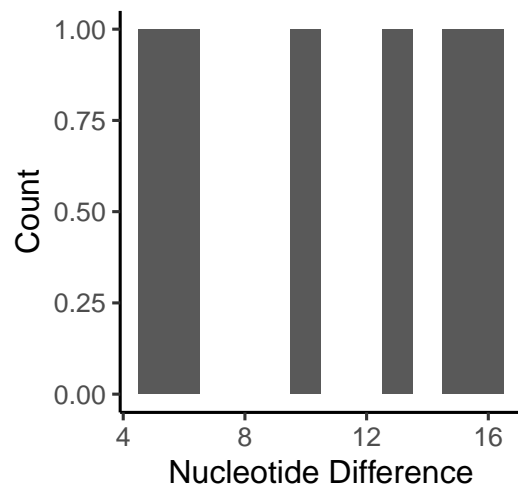
IGHV3/OR16-9*01

2 sequences assigned
No exact matches.



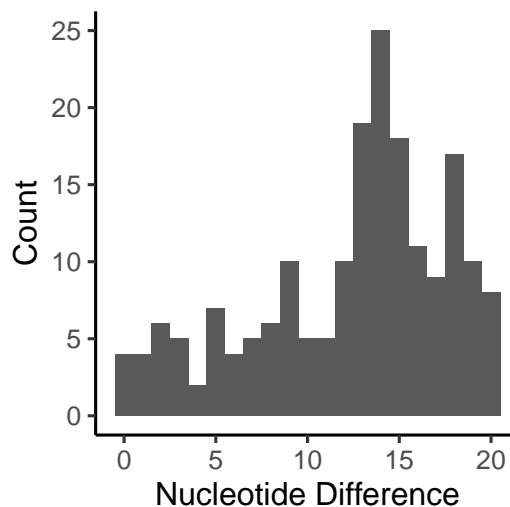
IGHV4/OR15-8*02

8 sequences assigned
No exact matches.



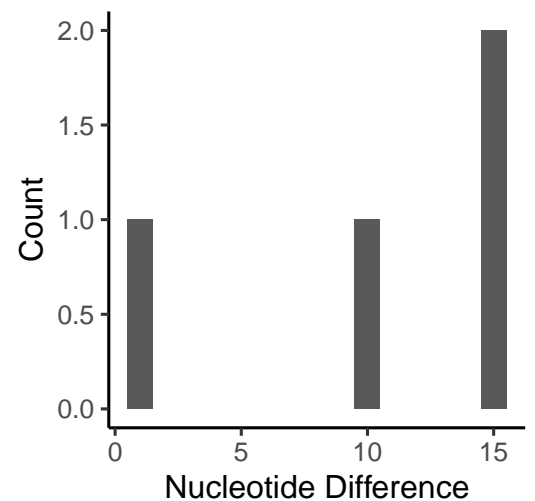
IGHV6-1*01

287 sequences assigned
4 (1.4%) exact matches, in which:
4 unique CDR3
3 unique J

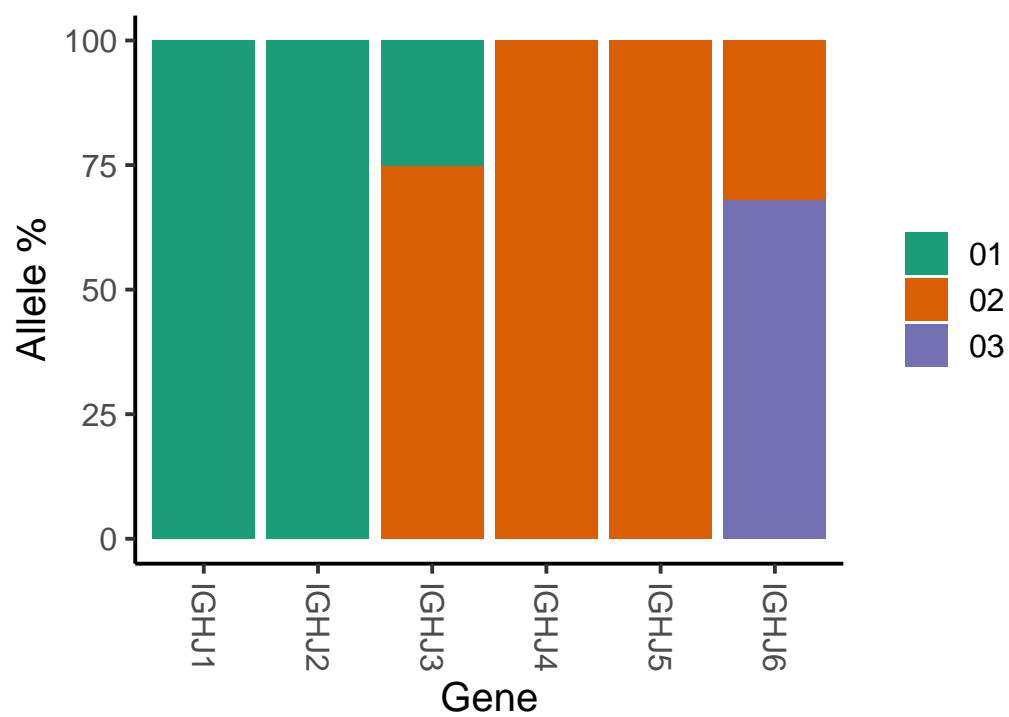


IGHV3/OR16-12*01

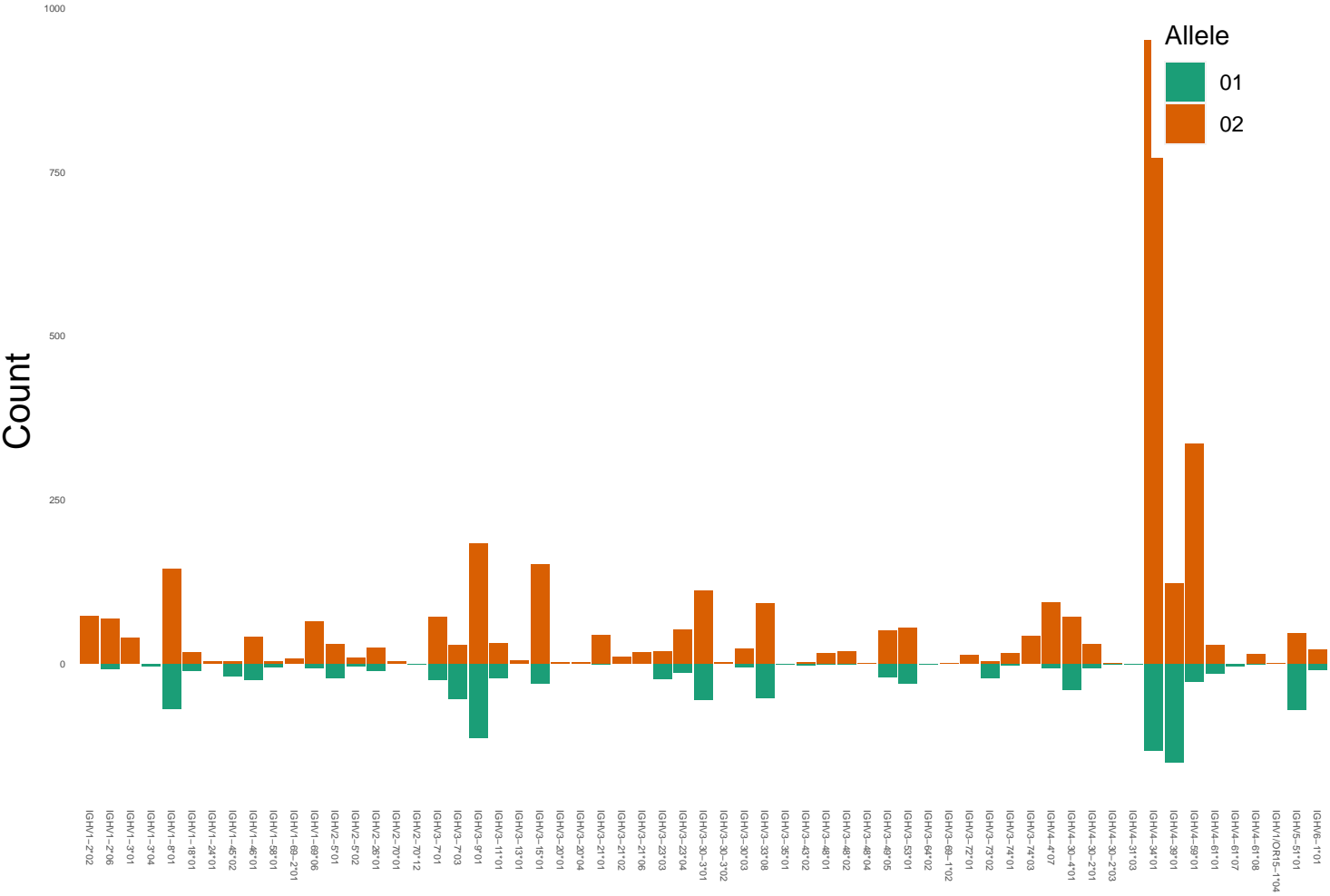
4 sequences assigned
No exact matches.



Allele Usage



Sequence Count by IGHJ3 allele usage



Sequence Count byIGHJ6 allele usage

