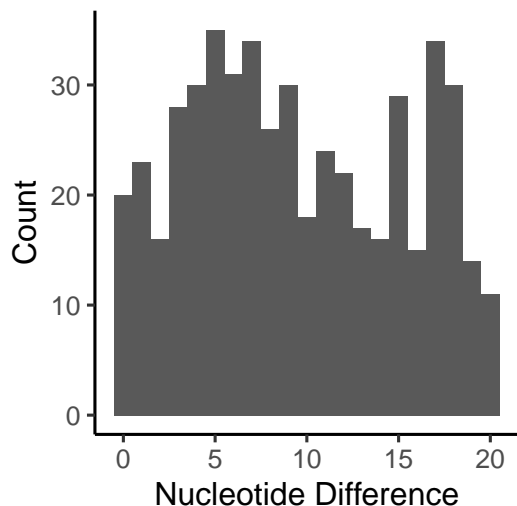


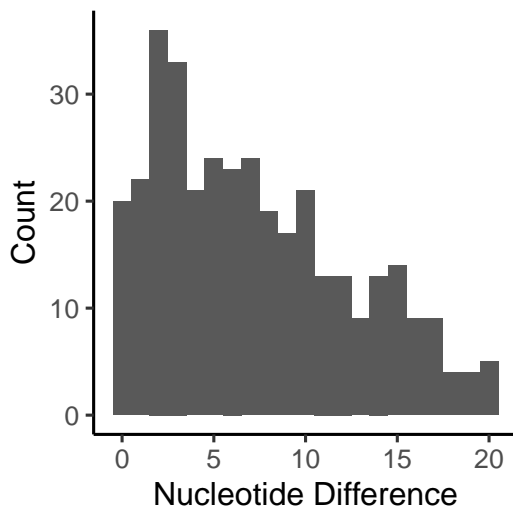
IGHV1-2*02

584 sequences assigned
20 (3.4%) exact matches, in which:
20 unique CDR3
4 unique J



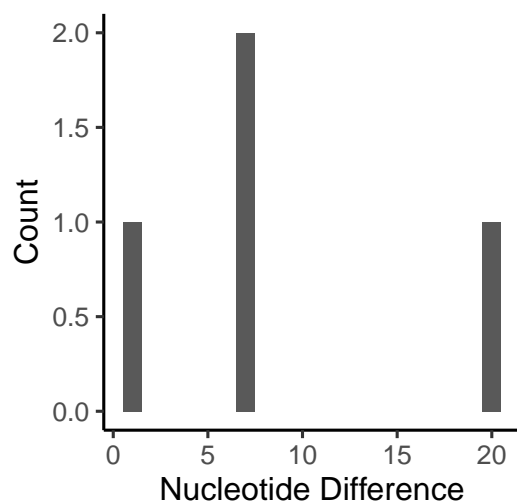
IGHV1-8*01

384 sequences assigned
20 (5.2%) exact matches, in which:
20 unique CDR3
4 unique J



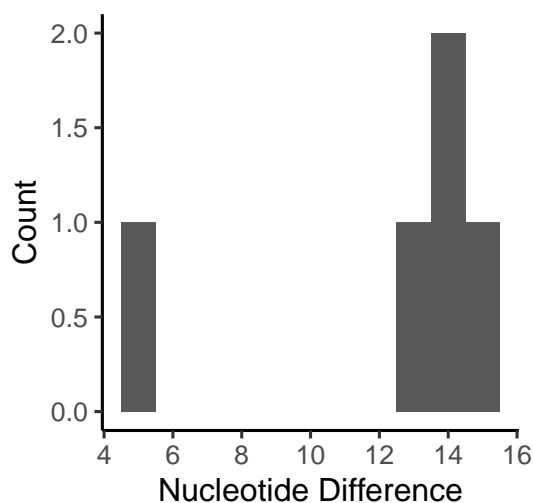
IGHV1-45*02

5 sequences assigned
No exact matches.



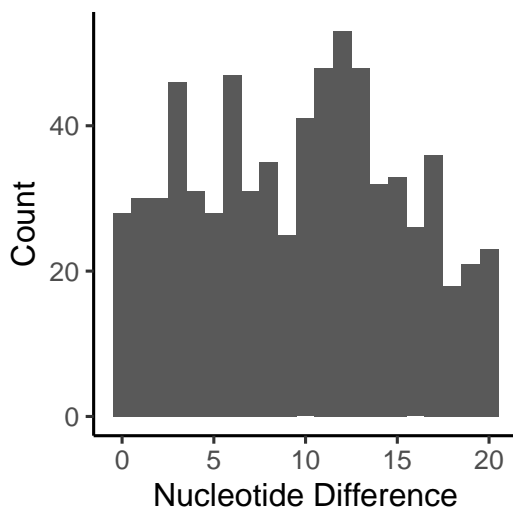
IGHV1-3*04

6 sequences assigned
No exact matches.



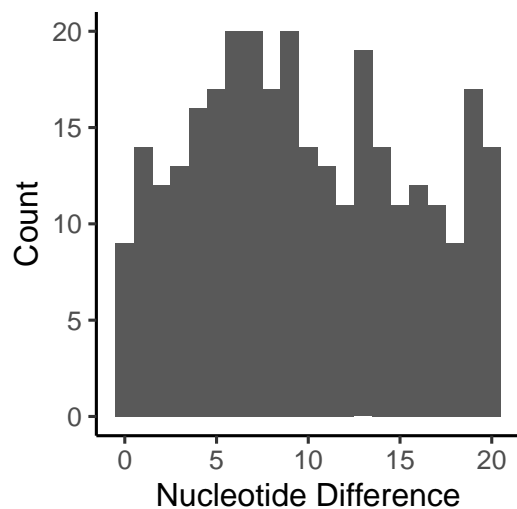
IGHV1-18*01

865 sequences assigned
28 (3.2%) exact matches, in which:
28 unique CDR3
5 unique J



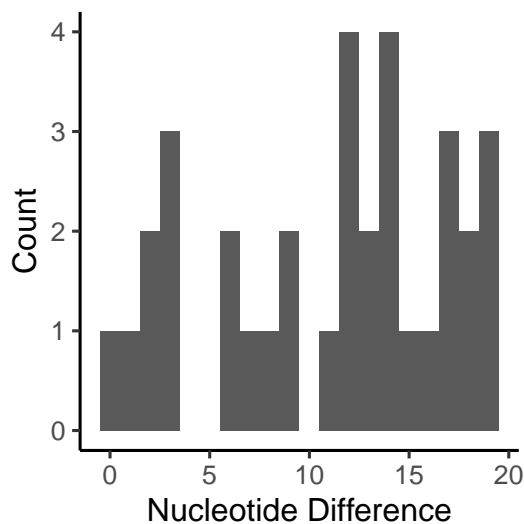
IGHV1-46*01

381 sequences assigned
9 (2.4%) exact matches, in which:
9 unique CDR3
4 unique J



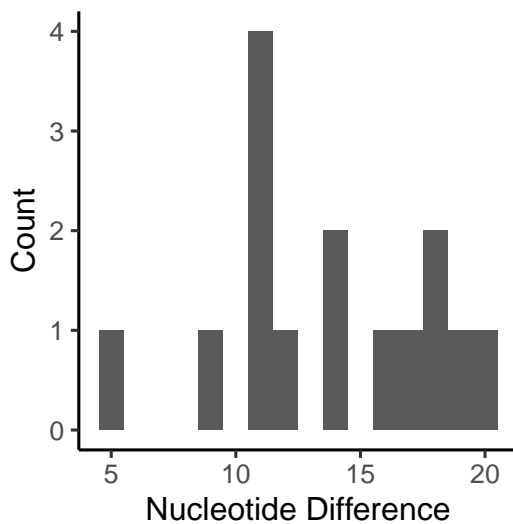
IGHV1-3*01_05

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



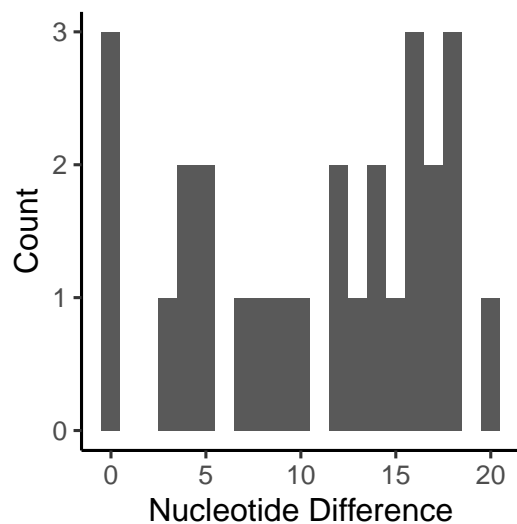
IGHV1-24*01

16 sequences assigned
No exact matches.



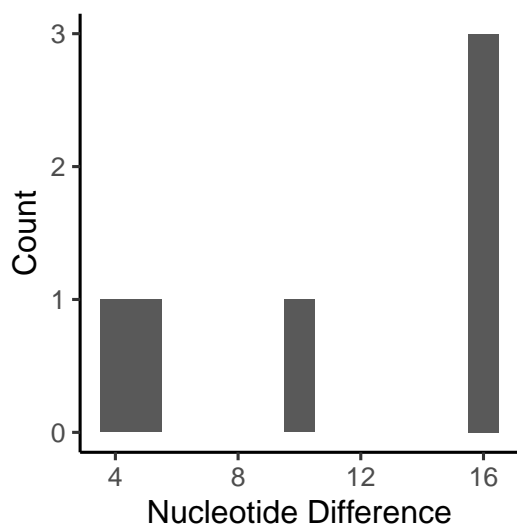
IGHV1-58*01_03

36 sequences assigned
3 (8.3%) exact matches, in which:
3 unique CDR3
2 unique J



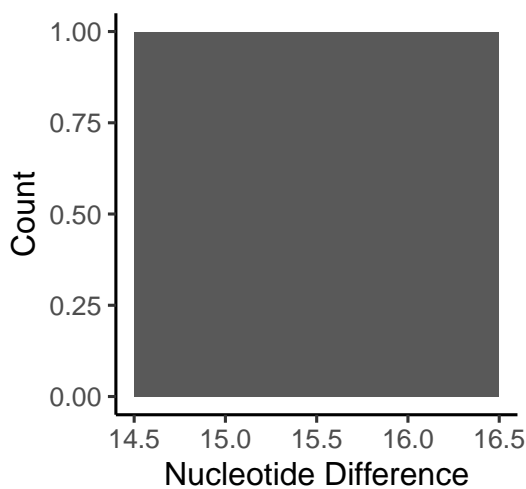
IGHV1-69-2*01

11 sequences assigned
No exact matches.



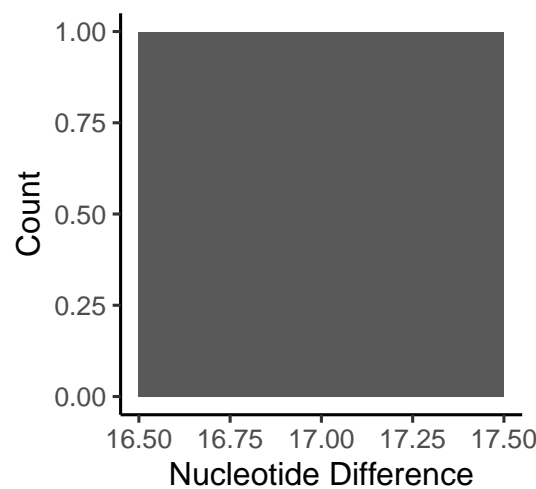
IGHV2-5*01

2 sequences assigned
No exact matches.



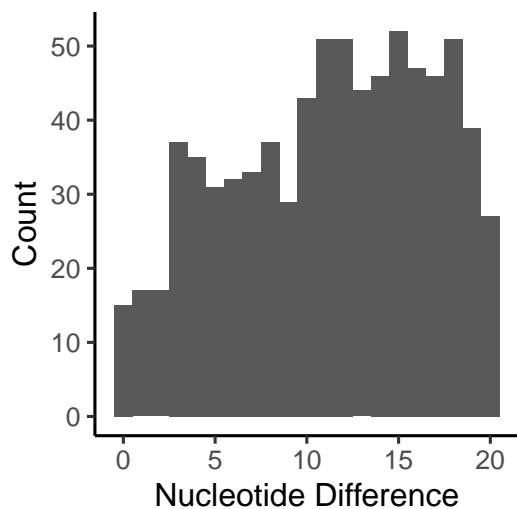
IGHV2-70*13

1 sequences assigned
No exact matches.



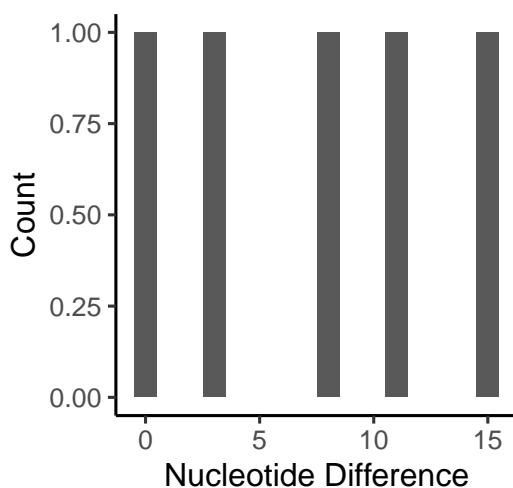
IGHV1-69*01_12_13

1321 sequences assigned
15 (1.1%) exact matches, in which:
15 unique CDR3
3 unique J



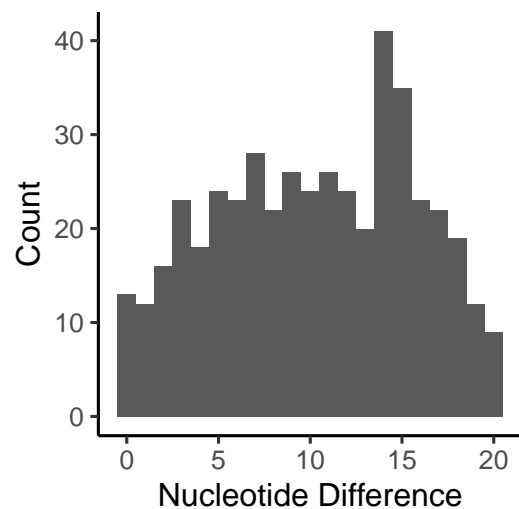
IGHV2-5*02

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



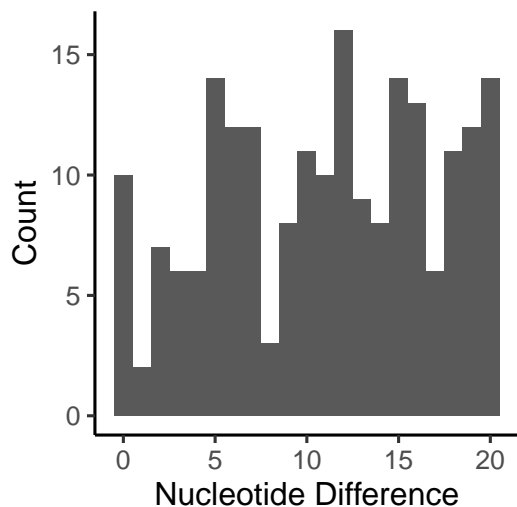
IGHV3-7*01

501 sequences assigned
13 (2.6%) exact matches, in which:
13 unique CDR3
3 unique J



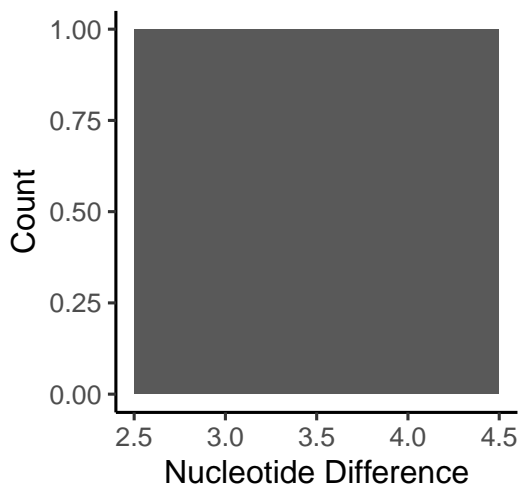
IGHV1-69*06_14

450 sequences assigned
10 (2.2%) exact matches, in which:
10 unique CDR3
4 unique J



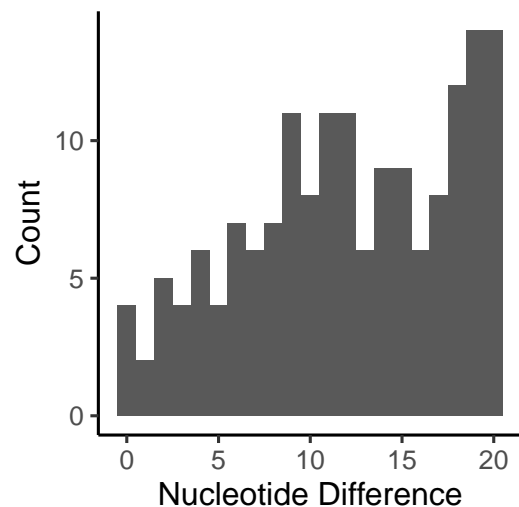
IGHV2-70*01

3 sequences assigned
No exact matches.



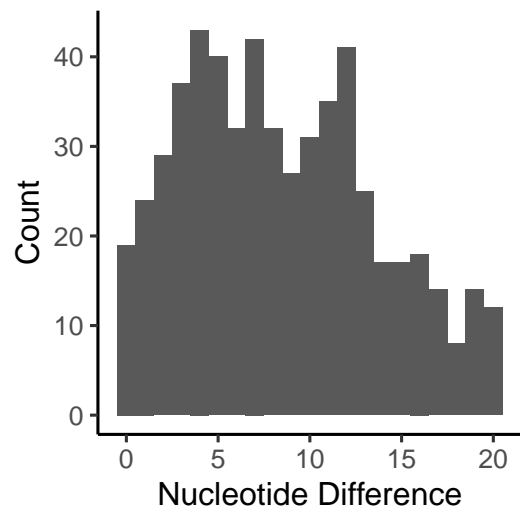
IGHV3-7*05

220 sequences assigned
4 (1.8%) exact matches, in which:
4 unique CDR3
2 unique J



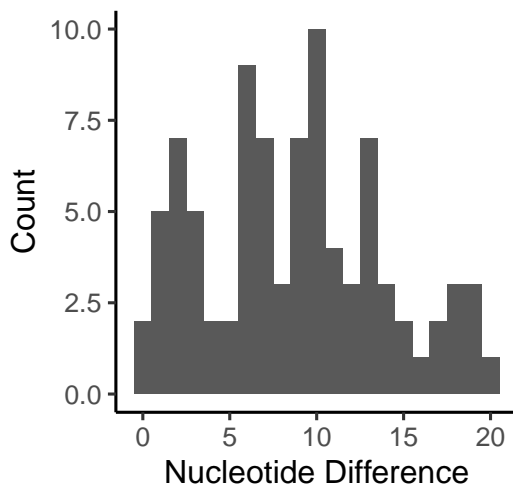
IGHV3-9*01

677 sequences assigned
19 (2.8%) exact matches, in which:
19 unique CDR3
5 unique J



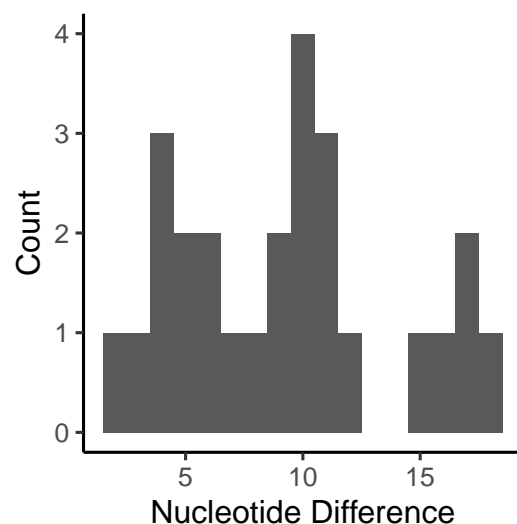
IGHV3-13*01

103 sequences assigned
2 (1.9%) exact matches, in which:
2 unique CDR3
2 unique J



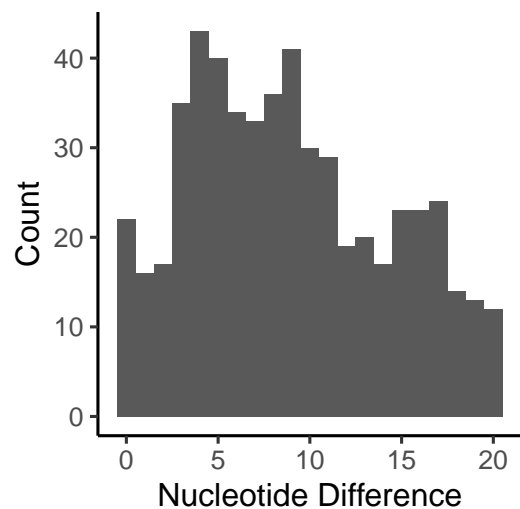
IGHV3-20*01_02

26 sequences assigned
No exact matches.



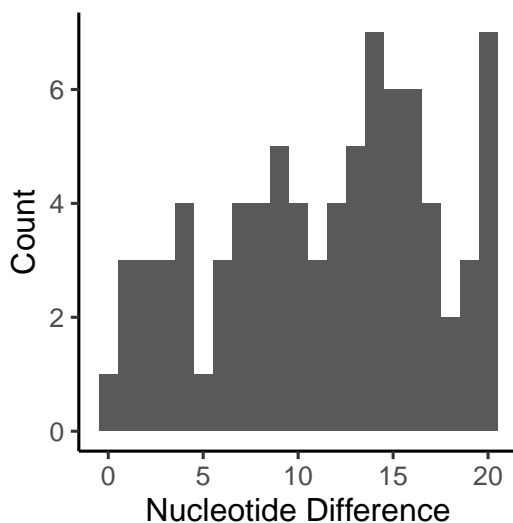
IGHV3-11*01

659 sequences assigned
22 (3.3%) exact matches, in which:
22 unique CDR3
3 unique J



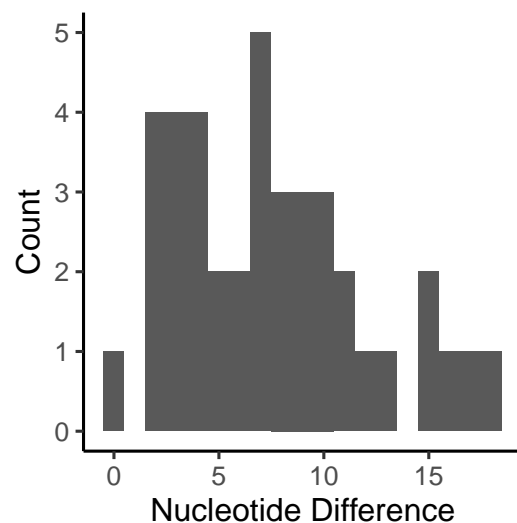
IGHV3-15*07

95 sequences assigned
1 (1.1%) exact matches, in which:
1 unique CDR3
1 unique J



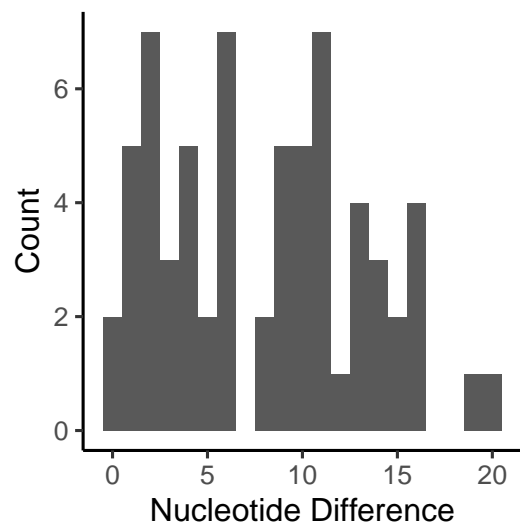
IGHV3-20*03_04

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



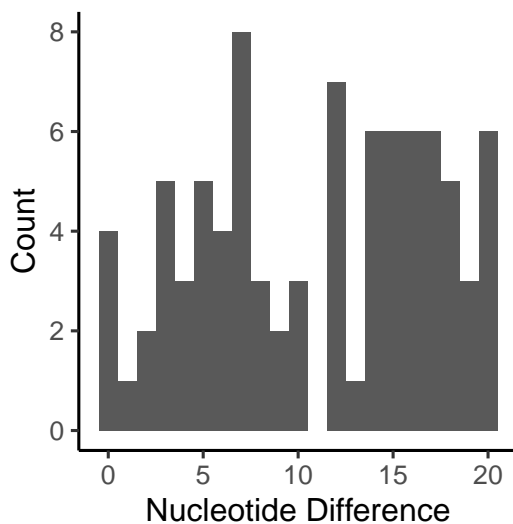
IGHV3-11*06

75 sequences assigned
2 (2.7%) exact matches, in which:
2 unique CDR3
2 unique J



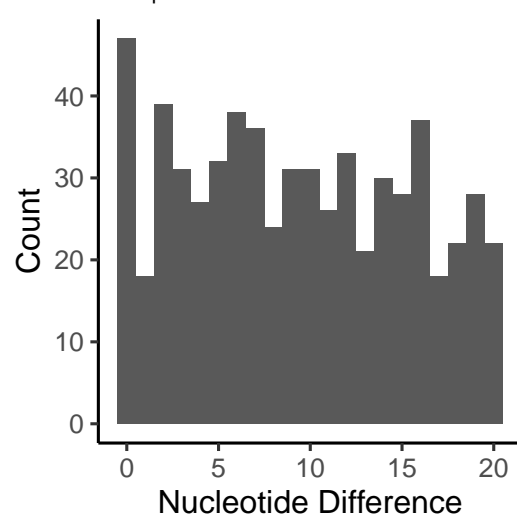
IGHV3-15*01_02

119 sequences assigned
4 (3.4%) exact matches, in which:
4 unique CDR3
2 unique J



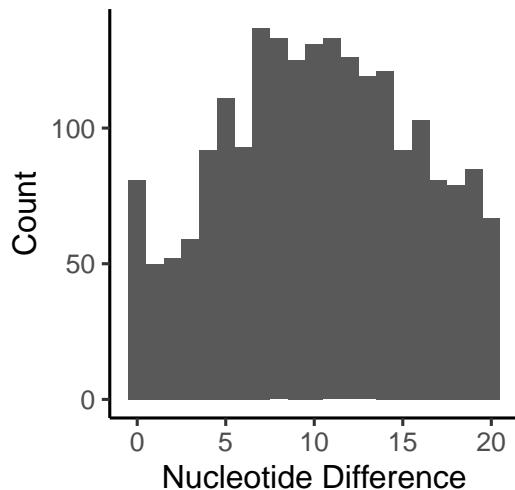
IGHV3-21*01_02

742 sequences assigned
47 (6.3%) exact matches, in which:
47 unique CDR3
4 unique J



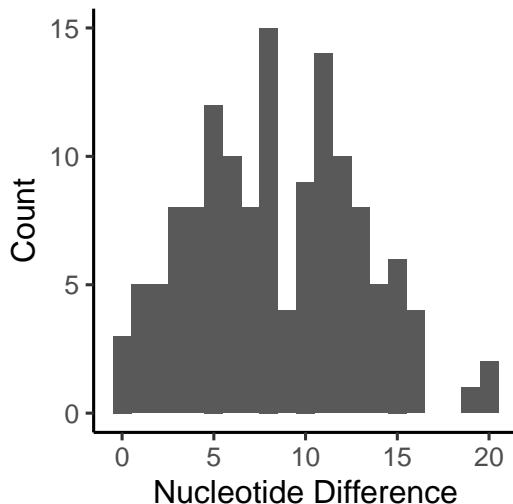
IGHV3-23*01_04

2651 sequences assigned
81 (3.1%) exact matches, in which:
77 unique CDR3
6 unique J



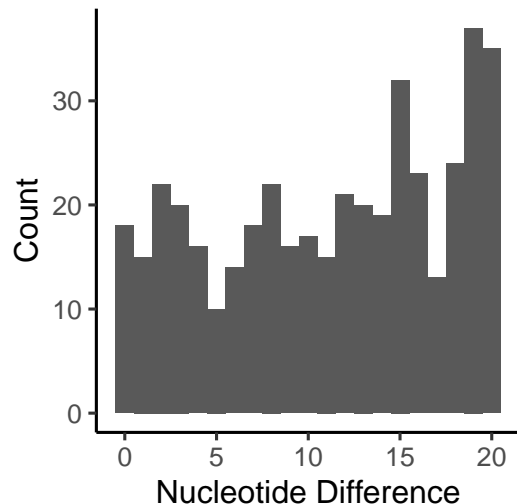
IGHV3-43*01

164 sequences assigned
3 (1.8%) exact matches, in which:
3 unique CDR3
1 unique J



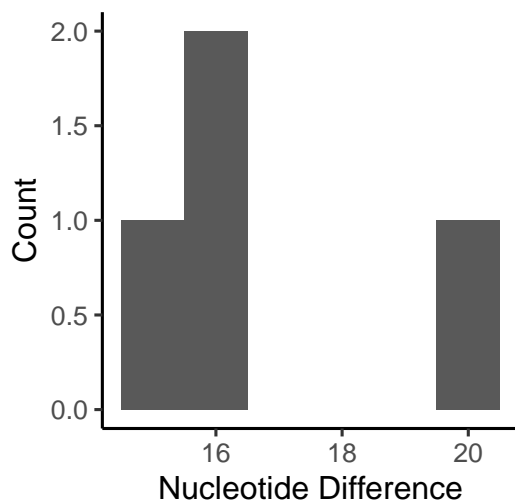
IGHV3-53*01_02

579 sequences assigned
18 (3.1%) exact matches, in which:
16 unique CDR3
4 unique J



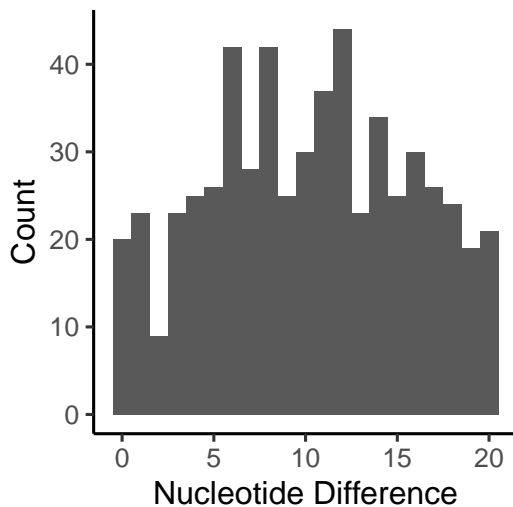
IGHV3-30-3*03

7 sequences assigned
No exact matches.



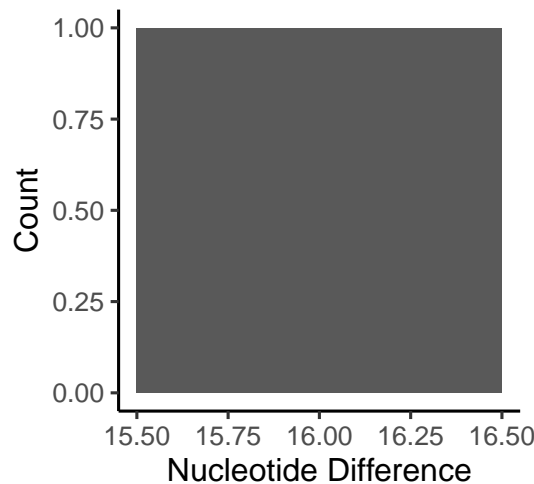
IGHV3-48*02

699 sequences assigned
20 (2.9%) exact matches, in which:
20 unique CDR3
3 unique J



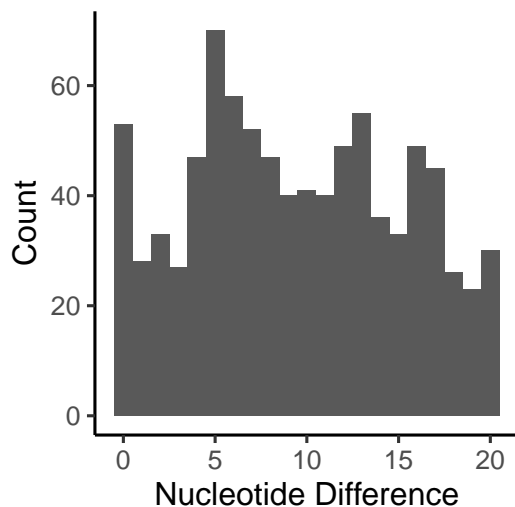
IGHV3-64*04

2 sequences assigned
No exact matches.



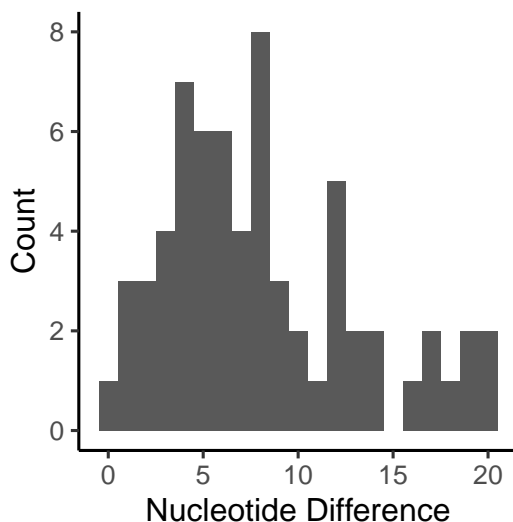
IGHV3-33*01

1129 sequences assigned
53 (4.7%) exact matches, in which:
44 unique CDR3
6 unique J



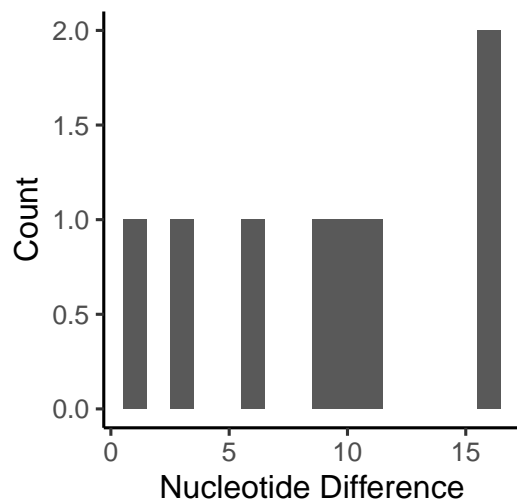
IGHV3-49*03_05

77 sequences assigned
1 (1.3%) exact matches, in which:
1 unique CDR3
1 unique J



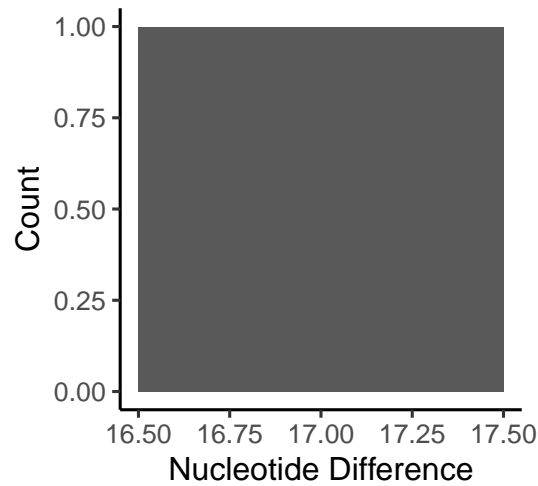
IGHV3-64*02_07

9 sequences assigned
No exact matches.



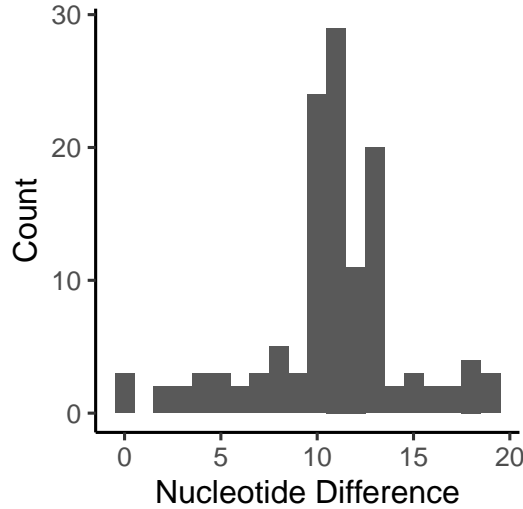
IGHV3-66*02

2 sequences assigned
No exact matches.



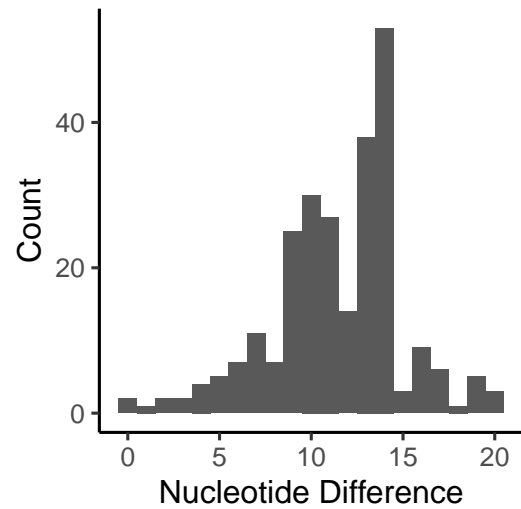
IGHV3-73*01_02

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



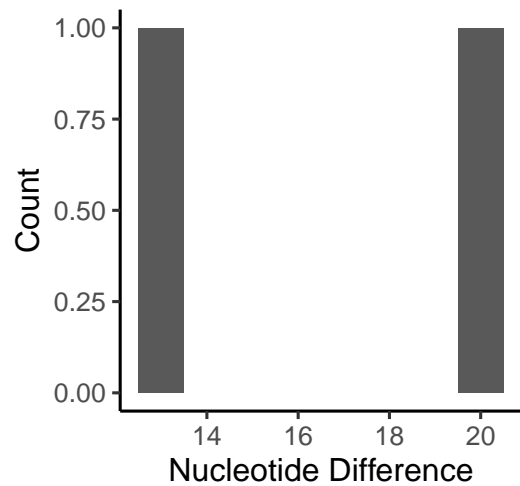
IGHV3-64D*08

271 sequences assigned
2 (0.7%) exact matches, in which:
2 unique CDR3
1 unique J



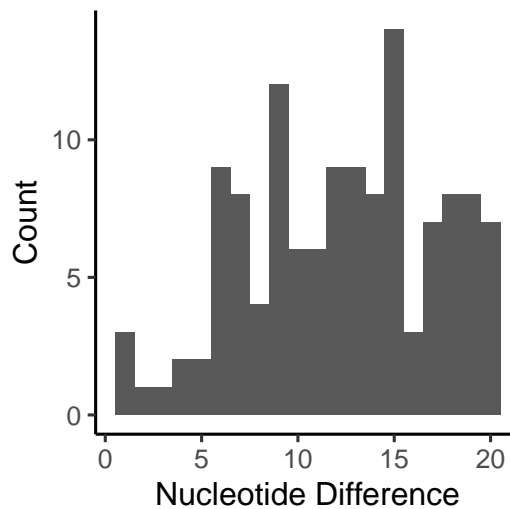
IGHV3-66*03

2 sequences assigned
No exact matches.



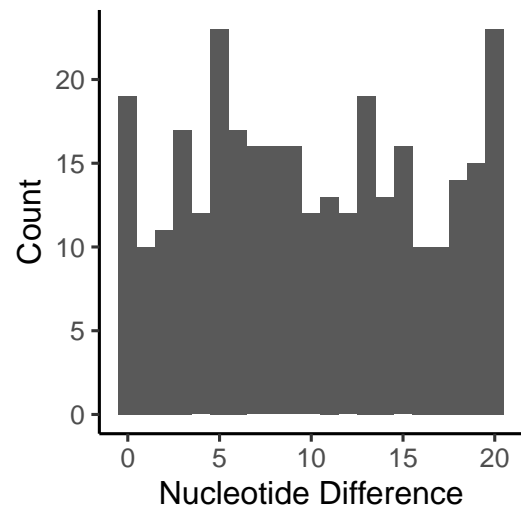
IGHV3-74*03

180 sequences assigned
No exact matches.



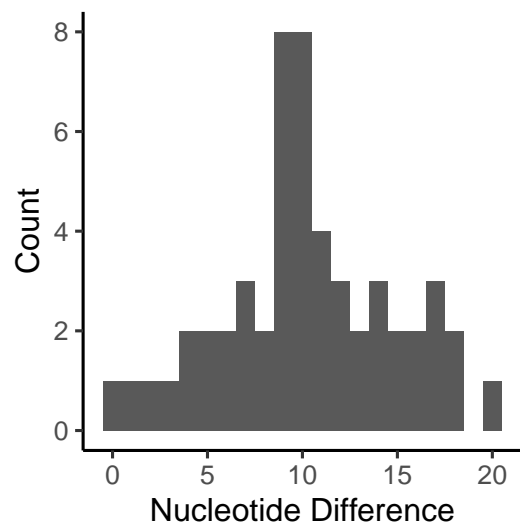
IGHV4-4*07

533 sequences assigned
19 (3.6%) exact matches, in which:
16 unique CDR3
3 unique J



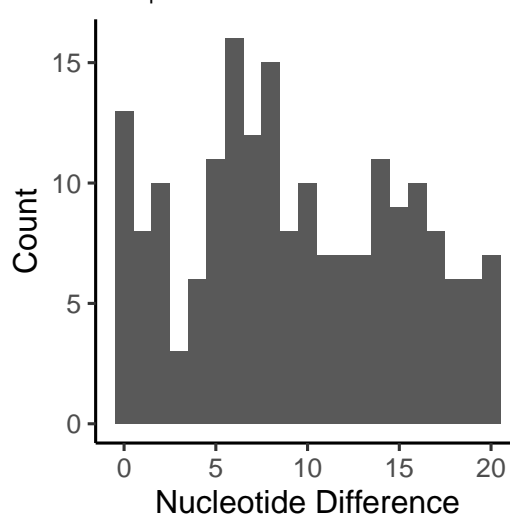
IGHV3-72*01

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



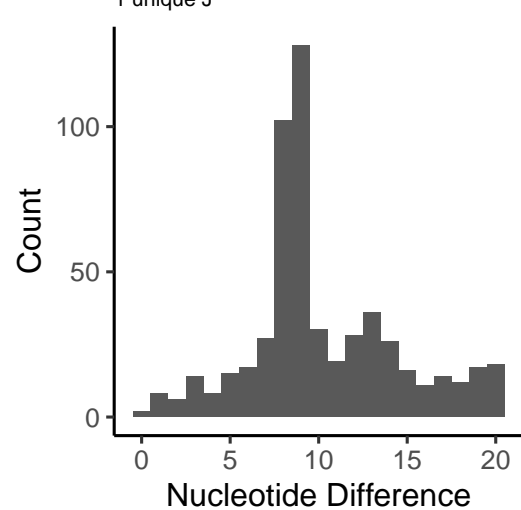
IGHV3-74*01_02

221 sequences assigned
13 (5.9%) exact matches, in which:
13 unique CDR3
4 unique J



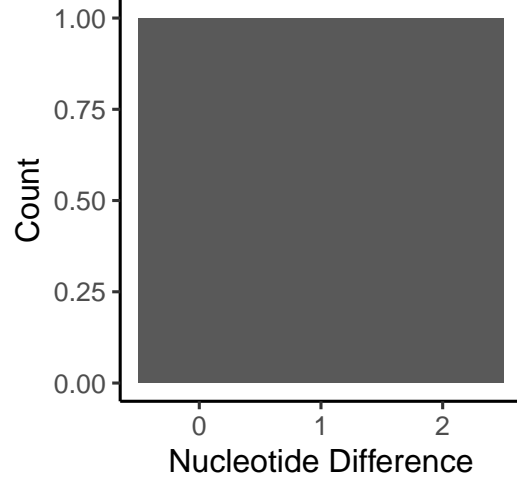
IGHV4-4*02_03

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



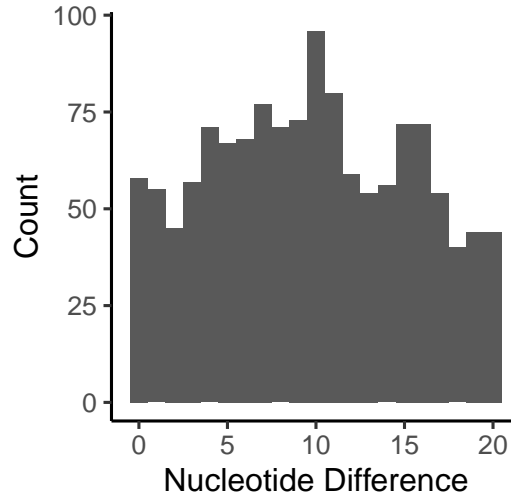
IGHV4-28*01_07

3 sequences assigned
1 (33.3%) exact matches, in which:
1 unique CDR3
1 unique J



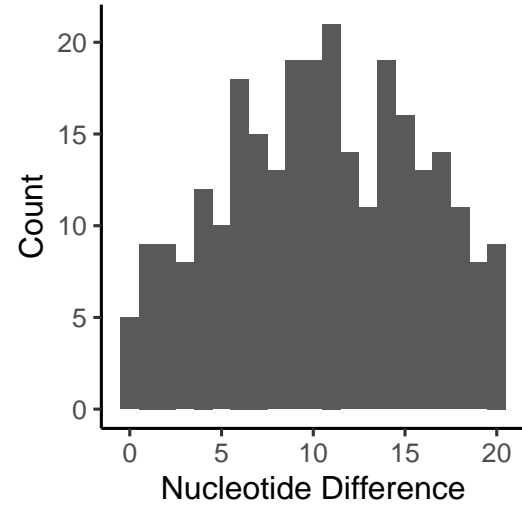
IGHV4-31*02

1800 sequences assigned
58 (3.2%) exact matches, in which:
49 unique CDR3
5 unique J



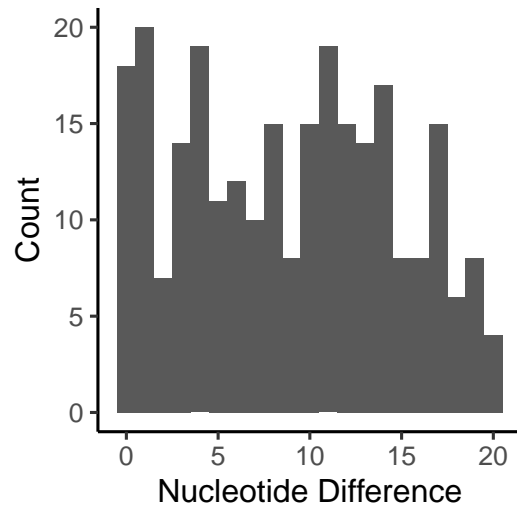
IGHV4-39*01_05

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



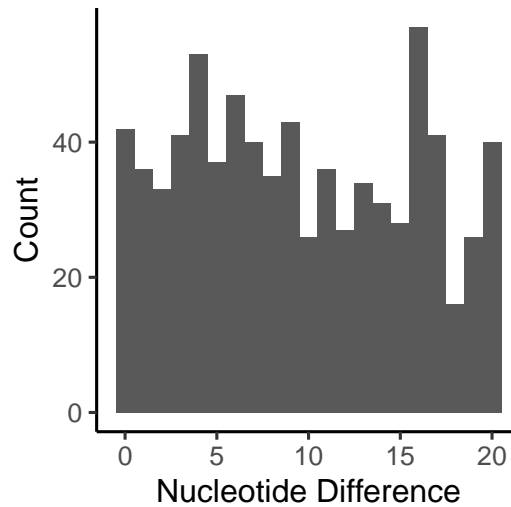
IGHV4-30-4*01

483 sequences assigned
18 (3.7%) exact matches, in which:
16 unique CDR3
4 unique J



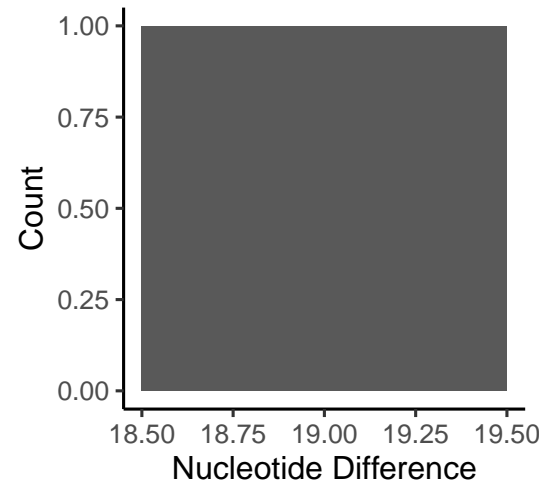
IGHV4-34*01_02

861 sequences assigned
42 (4.9%) exact matches, in which:
39 unique CDR3
5 unique J



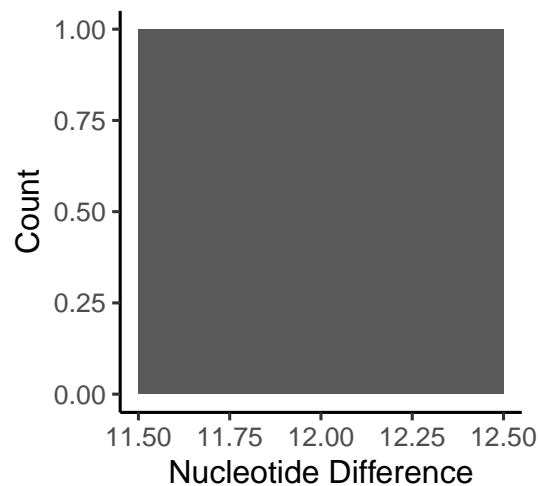
IGHV4-55*09

9 sequences assigned
No exact matches.



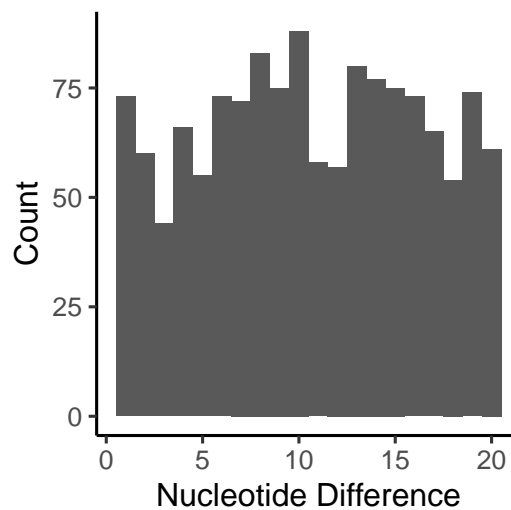
IGHV4-30-2*03

3 sequences assigned
No exact matches.



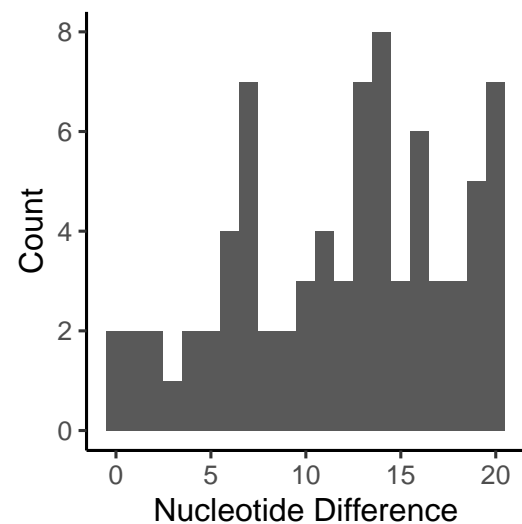
IGHV4-39*02

1993 sequences assigned
No exact matches.



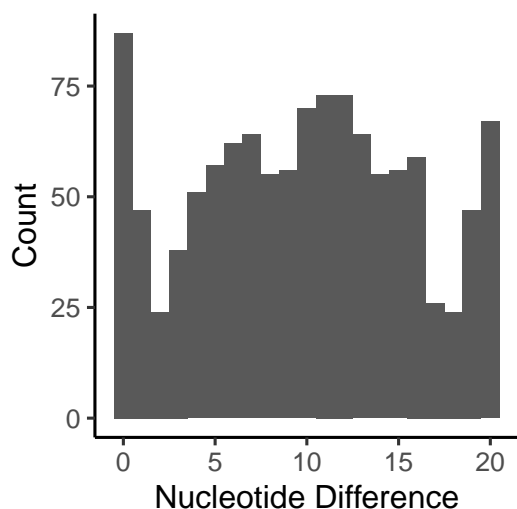
IGHV4-59*02

132 sequences assigned
2 (1.5%) exact matches, in which:
2 unique CDR3
2 unique J



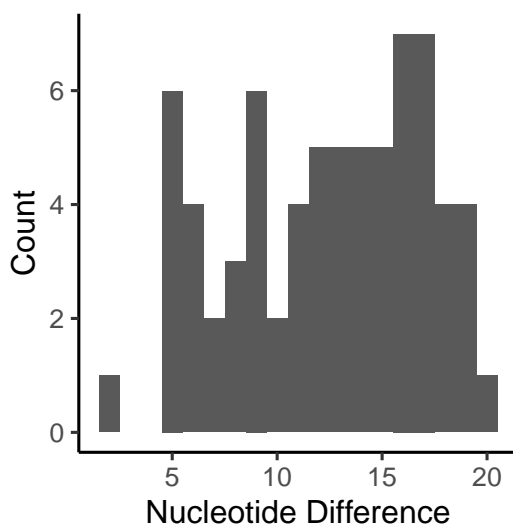
IGHV4-59*01_07

1324 sequences assigned
87 (6.6%) exact matches, in which:
70 unique CDR3
6 unique J



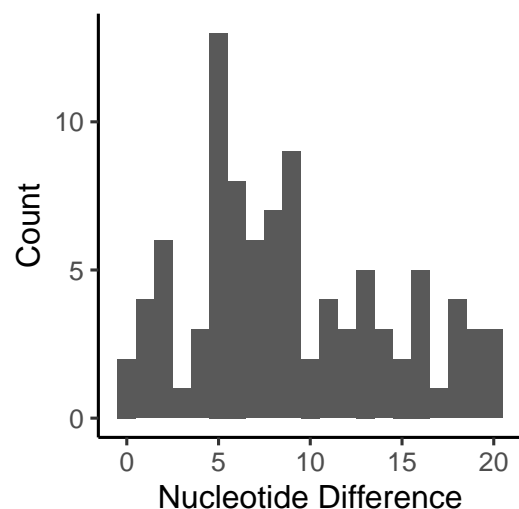
IGHV4-61*08

99 sequences assigned
No exact matches.



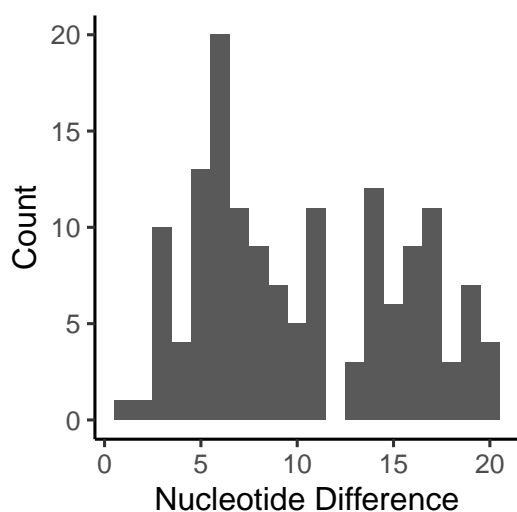
IGHV5-10-1*01_03

105 sequences assigned
2 (1.9%) exact matches, in which:
2 unique CDR3
2 unique J



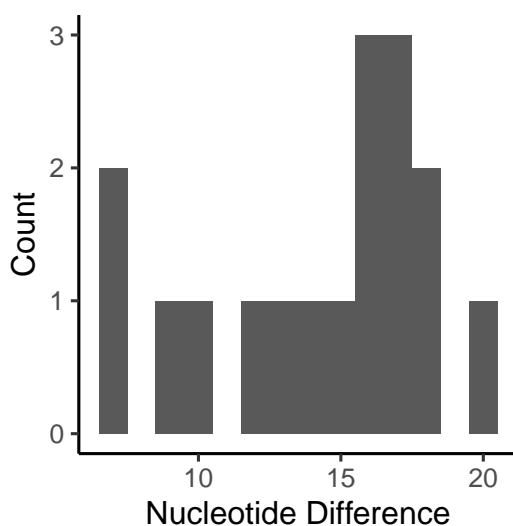
IGHV4-59*11

240 sequences assigned
No exact matches.



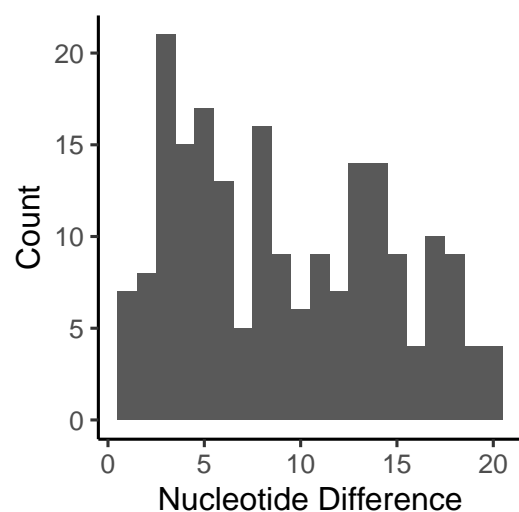
IGHV4/OR15-8*01

21 sequences assigned
No exact matches.



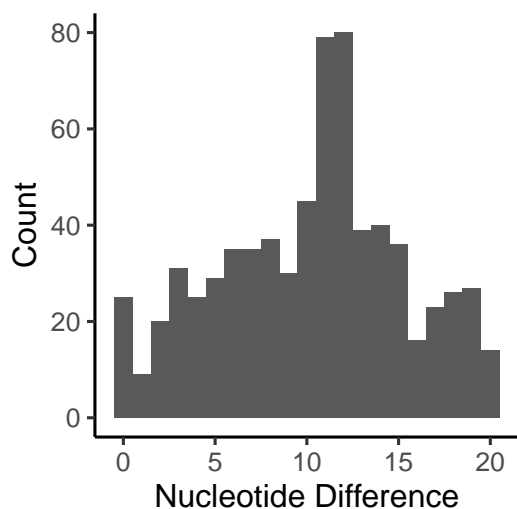
IGHV5-51*07

231 sequences assigned
No exact matches.



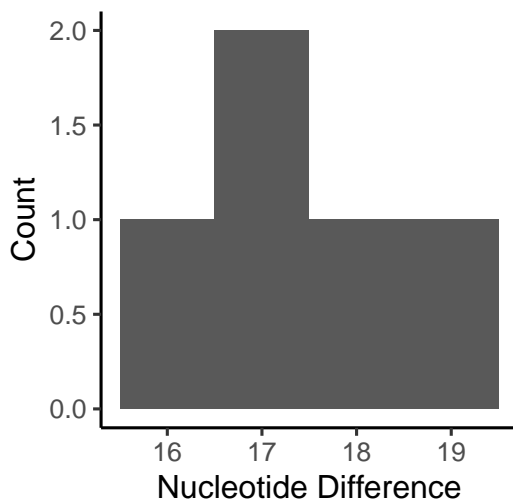
IGHV4-61*01

852 sequences assigned
25 (2.9%) exact matches, in which:
22 unique CDR3
5 unique J



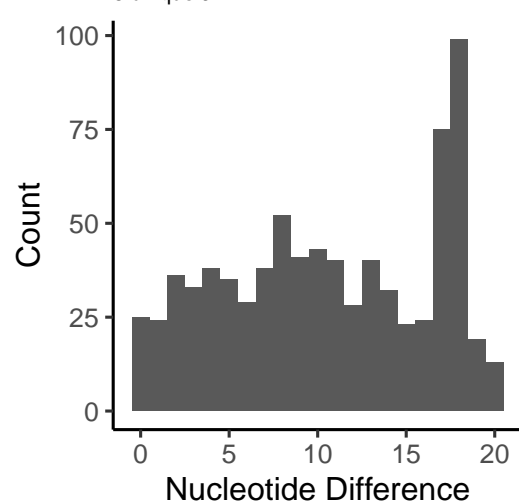
IGHV4/OR15-8*02

8 sequences assigned
No exact matches.



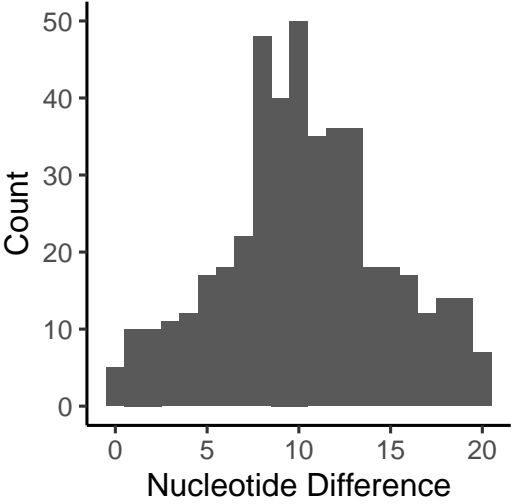
IGHV5-51*01_03

858 sequences assigned
25 (2.9%) exact matches, in which:
25 unique CDR3
5 unique J



IGHV6-1*01_02

562 sequences assigned
5 (0.9%) exact matches, in which:
5 unique CDR3
3 unique J





Warning – no inferred sequences found.