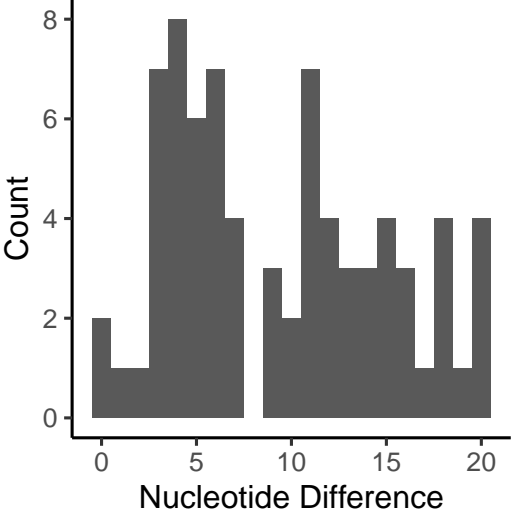


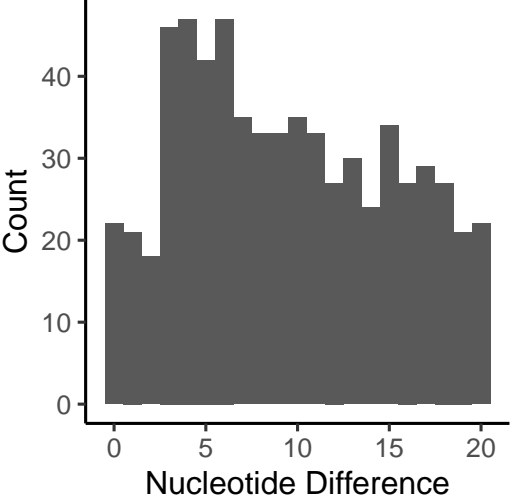
IGHV1-2*04

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



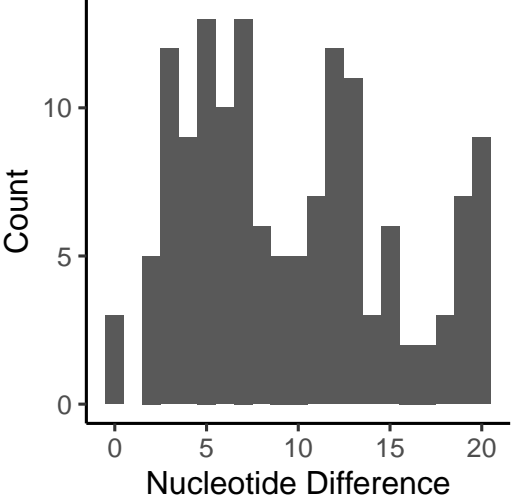
IGHV1-18*04

1001 sequences assigned
22 (2.2%) exact matches, in which:
22 unique CDR3
5 unique J



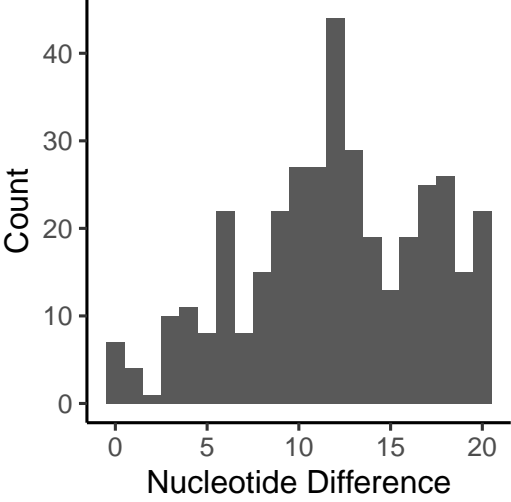
IGHV1-46*01

233 sequences assigned
3 (1.3%) exact matches, in which:
3 unique CDR3
2 unique J



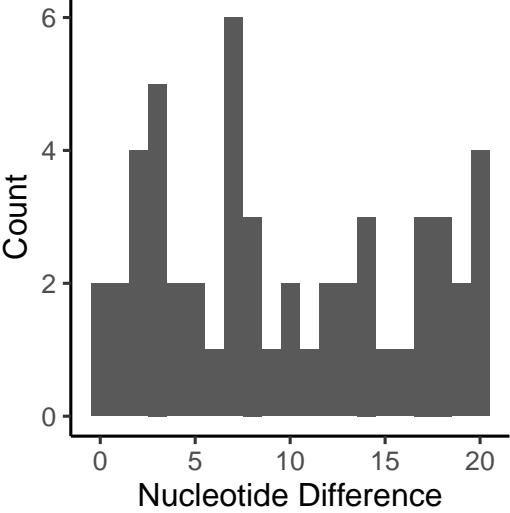
IGHV1-3*01_05

475 sequences assigned
7 (1.5%) exact matches, in which:
7 unique CDR3
2 unique J



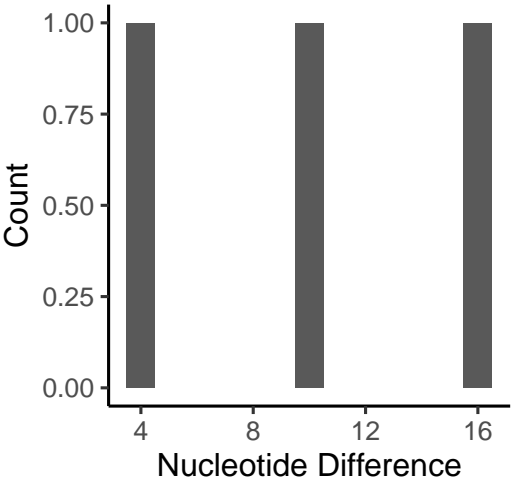
IGHV1-24*01

62 sequences assigned
2 (3.2%) exact matches, in which:
2 unique CDR3
2 unique J



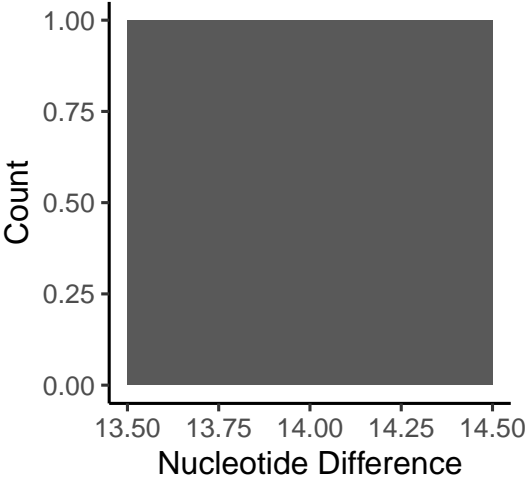
IGHV1-58*02

3 sequences assigned
No exact matches.



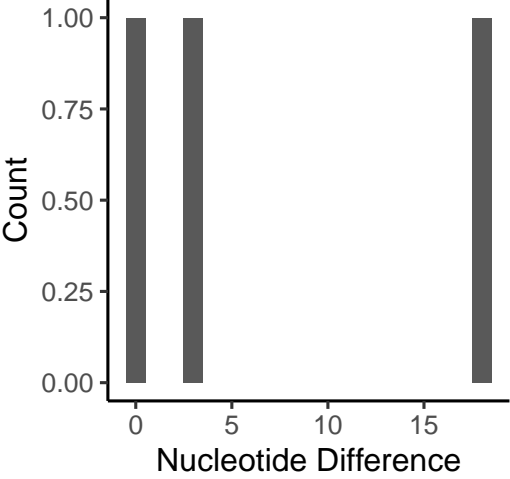
IGHV1-8*01

1 sequences assigned
No exact matches.



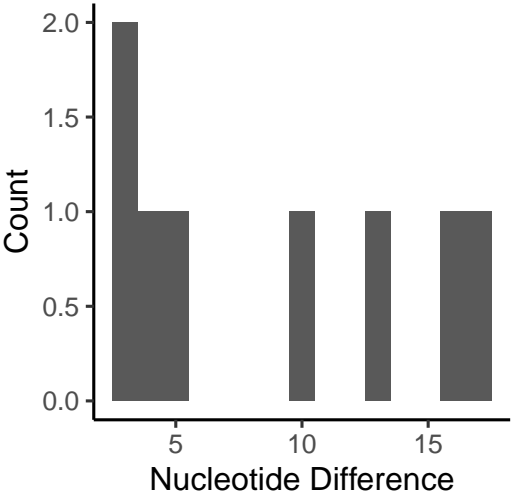
IGHV1-45*02

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



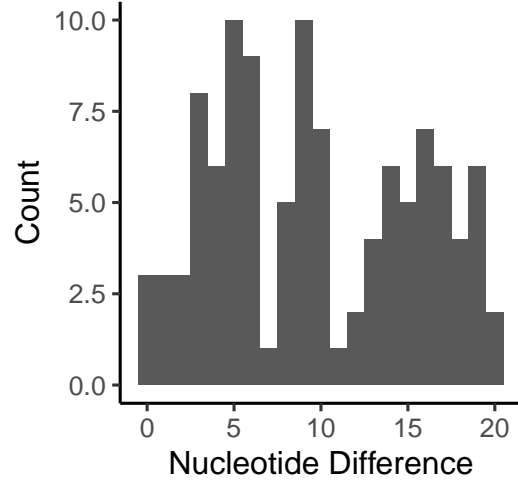
IGHV1-58*01_03

11 sequences assigned
No exact matches.



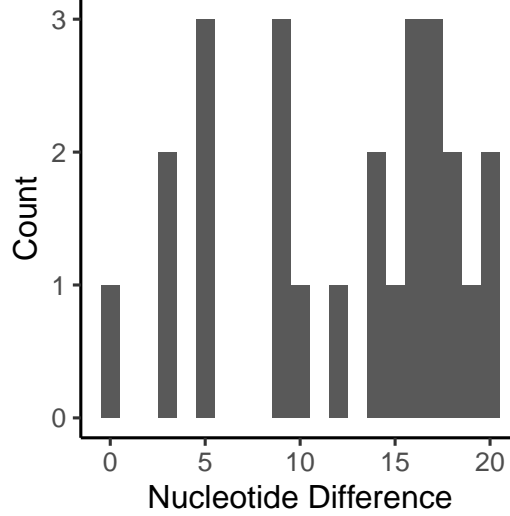
IGHV1-69*01_12_13

146 sequences assigned
3 (2.1%) exact matches, in which:
3 unique CDR3
3 unique J



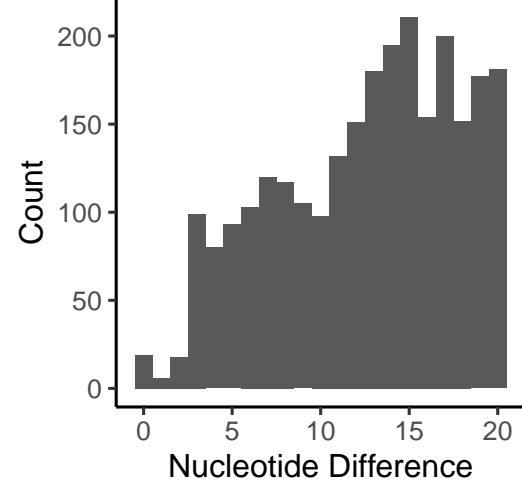
IGHV2-26*01

26 sequences assigned
1 (3.8%) exact matches, in which:
1 unique CDR3
1 unique J



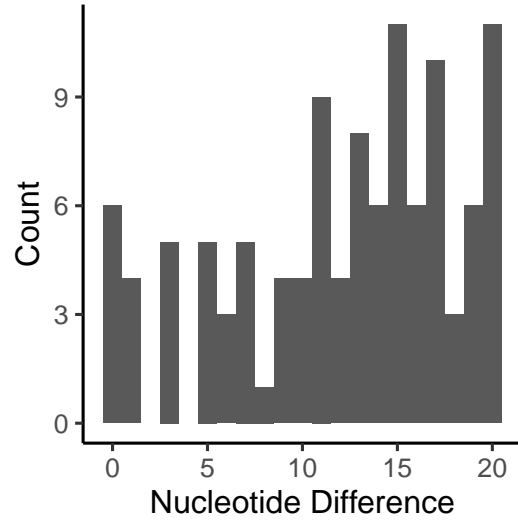
IGHV3-7*03

3705 sequences assigned
19 (0.5%) exact matches, in which:
16 unique CDR3
5 unique J



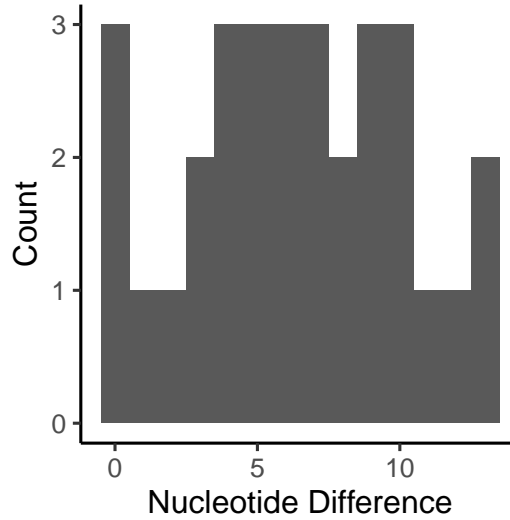
IGHV1-69*04_09

186 sequences assigned
6 (3.2%) exact matches, in which:
5 unique CDR3
2 unique J



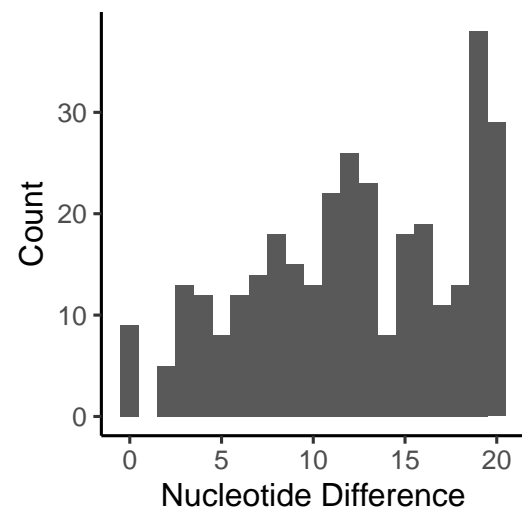
IGHV2-70*01

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



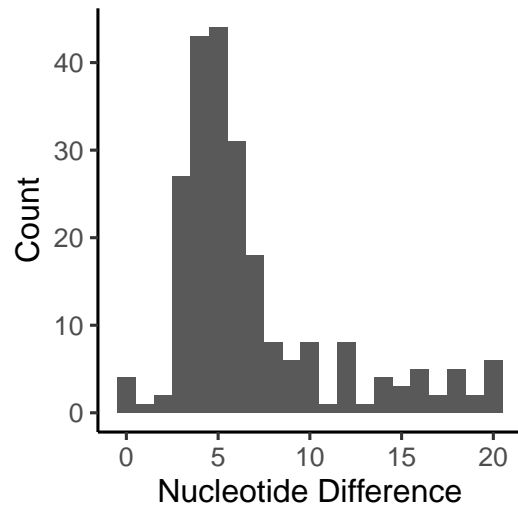
IGHV3-11*06

502 sequences assigned
9 (1.8%) exact matches, in which:
4 unique CDR3
2 unique J



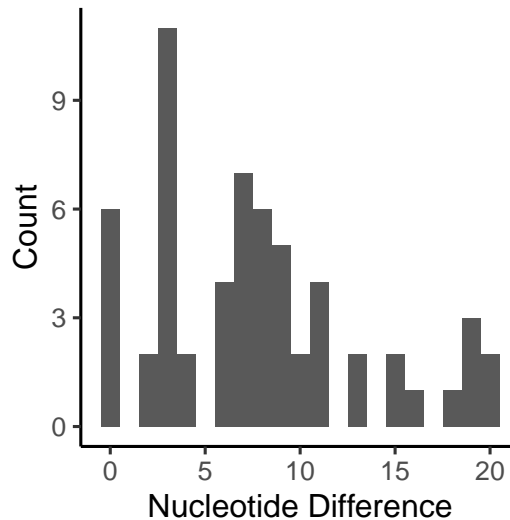
IGHV2-5*02

245 sequences assigned
4 (1.6%) exact matches, in which:
4 unique CDR3
3 unique J



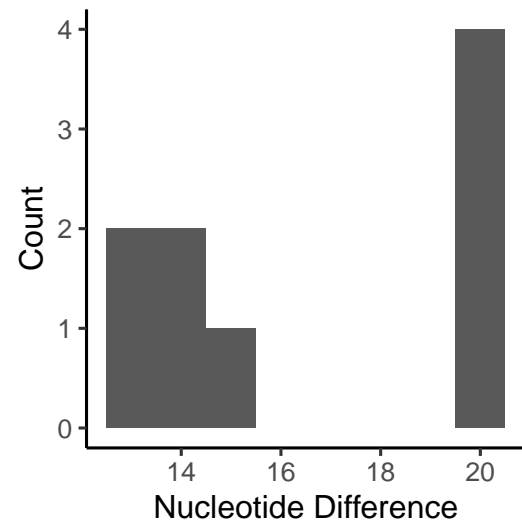
IGHV2-70*11_15

68 sequences assigned
6 (8.8%) exact matches, in which:
5 unique CDR3
2 unique J



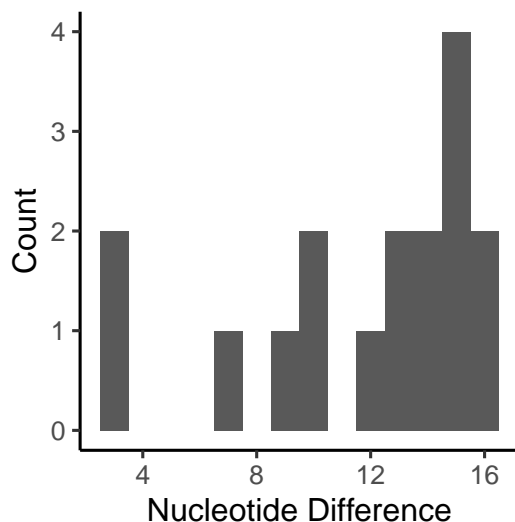
IGHV3-13*01

17 sequences assigned
No exact matches.



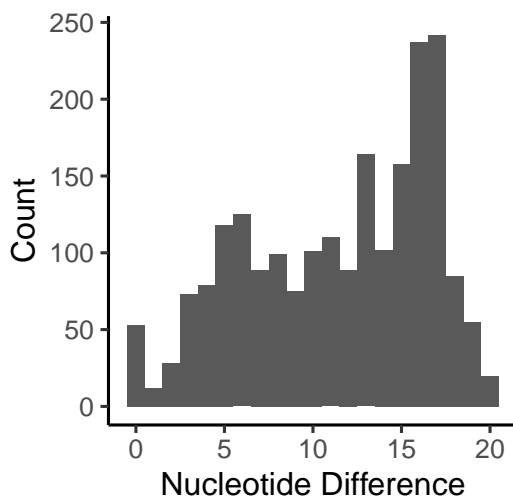
IGHV3-13*05

23 sequences assigned
No exact matches.



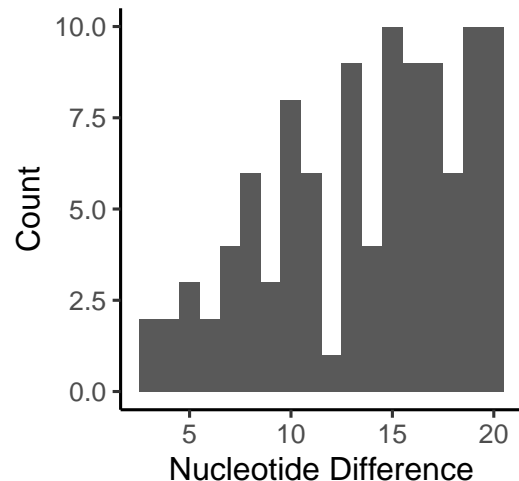
IGHV3-21*01_02

2292 sequences assigned
53 (2.3%) exact matches, in which:
28 unique CDR3
4 unique J



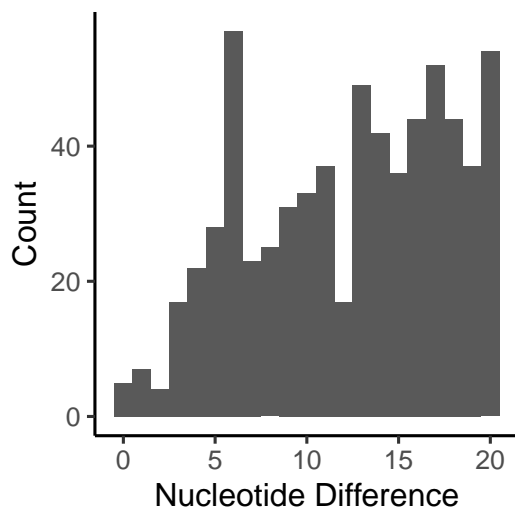
IGHV3-30*04

139 sequences assigned
No exact matches.



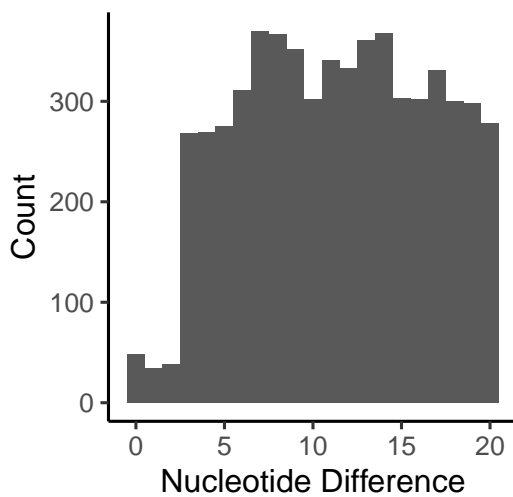
IGHV3-15*01_02

1049 sequences assigned
5 (0.5%) exact matches, in which:
4 unique CDR3
1 unique J



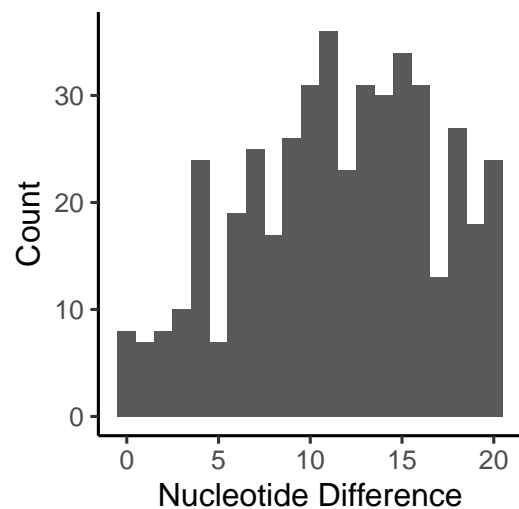
IGHV3-23*01_04

8139 sequences assigned
48 (0.6%) exact matches, in which:
40 unique CDR3
5 unique J



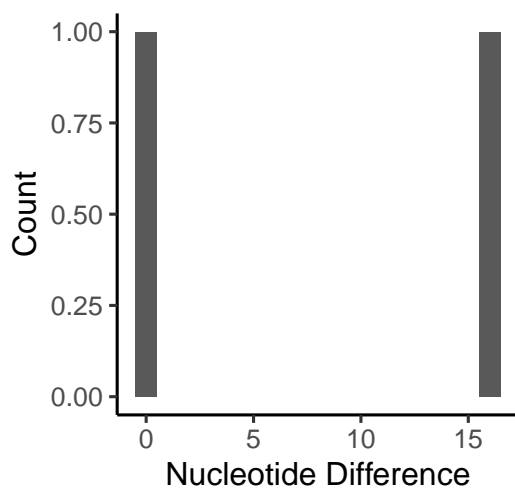
IGHV3-33*01

606 sequences assigned
8 (1.3%) exact matches, in which:
5 unique CDR3
2 unique J



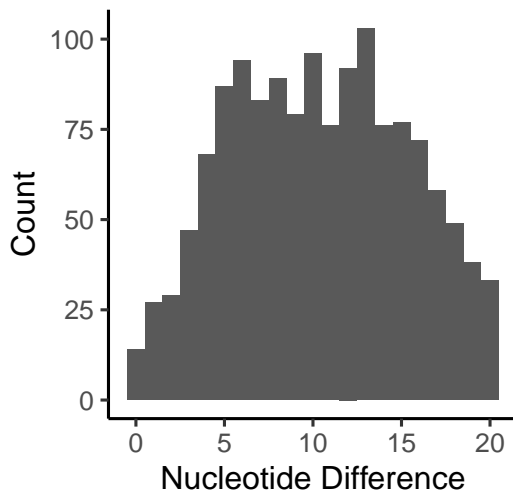
IGHV3-20*01_02

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



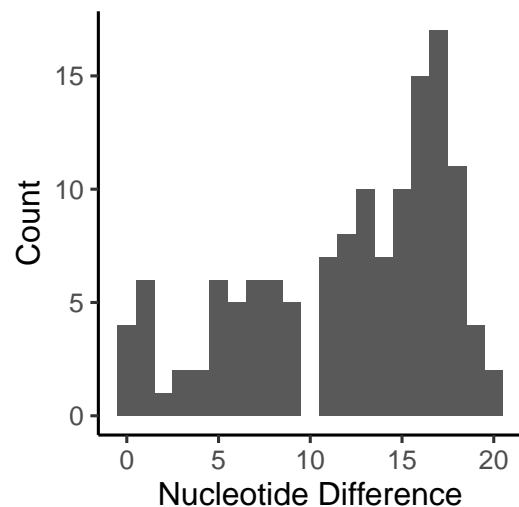
IGHV3-30-3*01

1576 sequences assigned
14 (0.9%) exact matches, in which:
11 unique CDR3
4 unique J



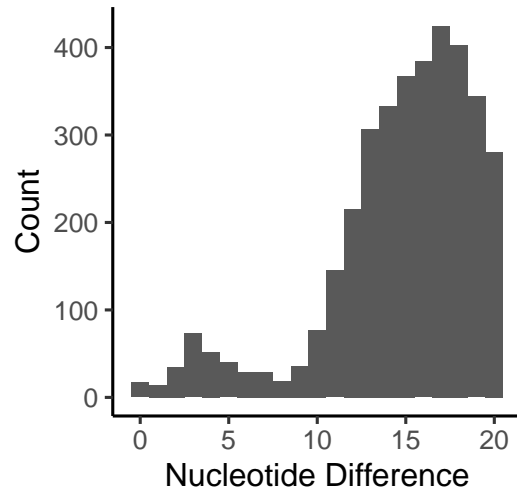
IGHV3-43*01

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



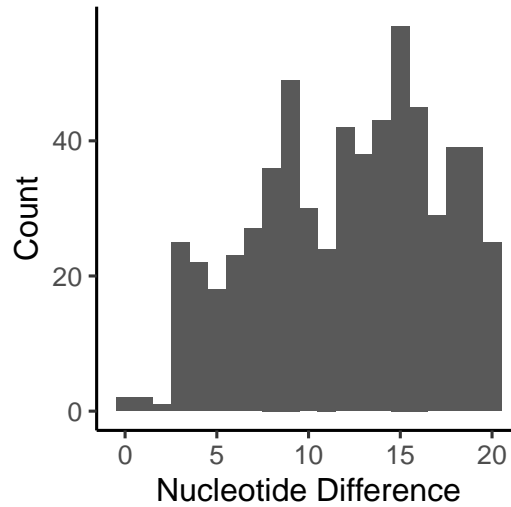
IGHV3-48*02

4950 sequences assigned
17 (0.3%) exact matches, in which:
9 unique CDR3
2 unique J



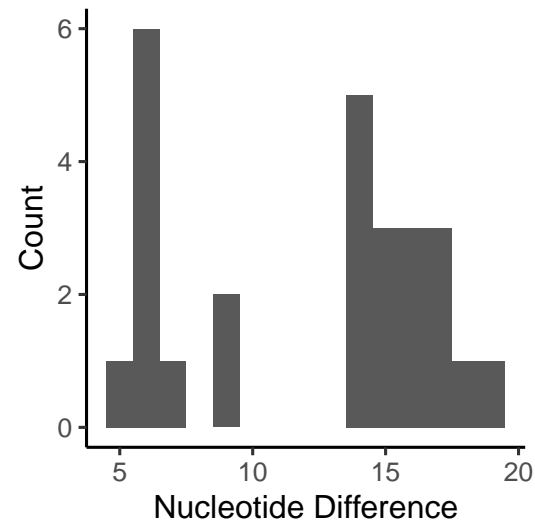
IGHV3-53*01_02

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



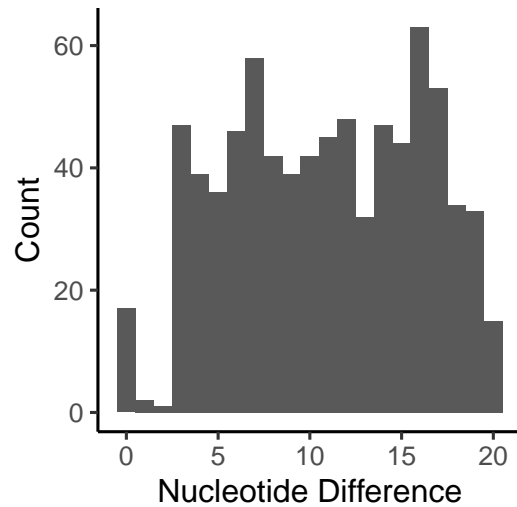
IGHV3-64*02_07

31 sequences assigned
No exact matches.



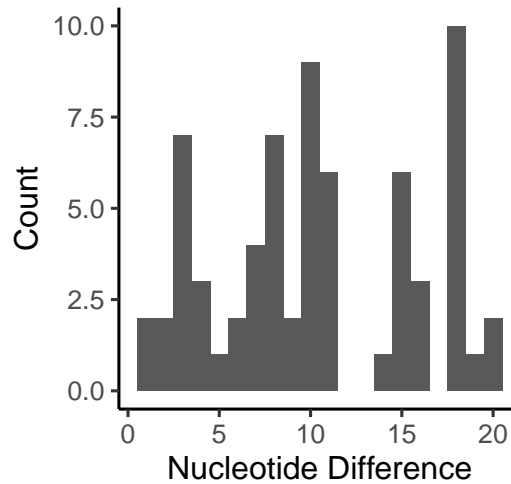
IGHV3-48*04

966 sequences assigned
17 (1.8%) exact matches, in which:
9 unique CDR3
2 unique J



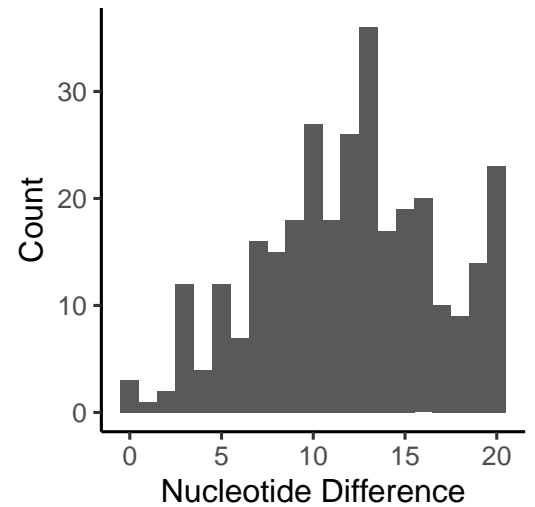
IGHV3-64*01

96 sequences assigned
No exact matches.



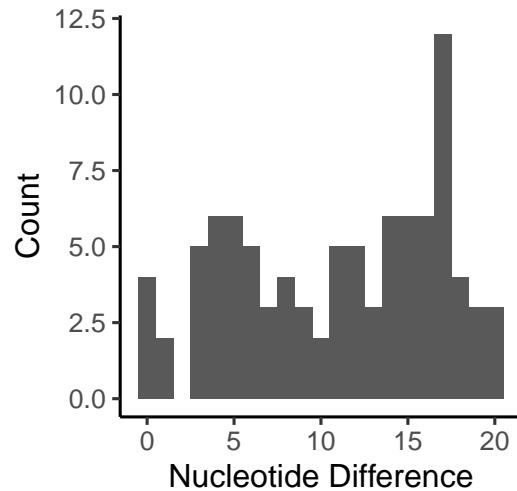
IGHV3-66*01

391 sequences assigned
3 (0.8%) exact matches, in which:
1 unique CDR3
1 unique J



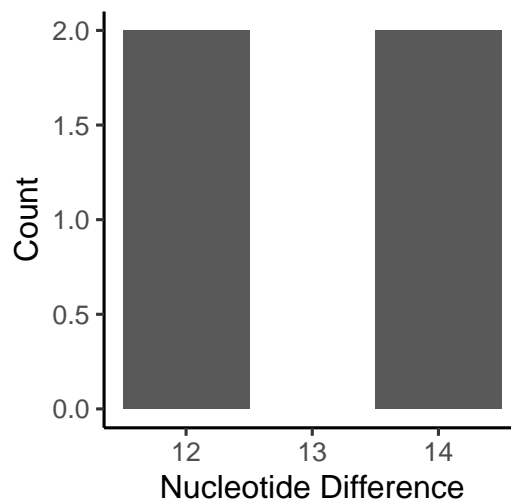
IGHV3-49*03_05

115 sequences assigned
4 (3.5%) exact matches, in which:
3 unique CDR3
1 unique J



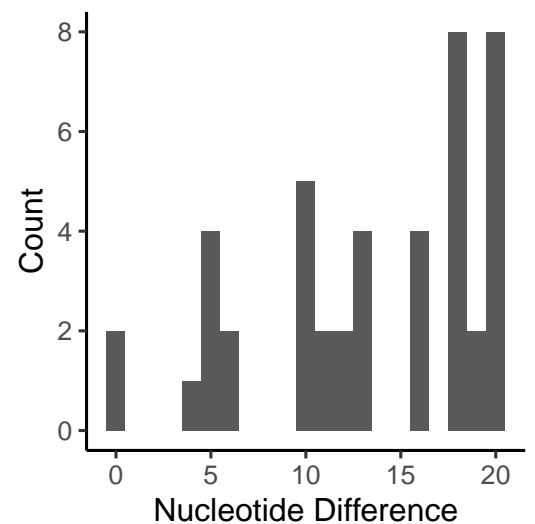
IGHV3-64*05

4 sequences assigned
No exact matches.



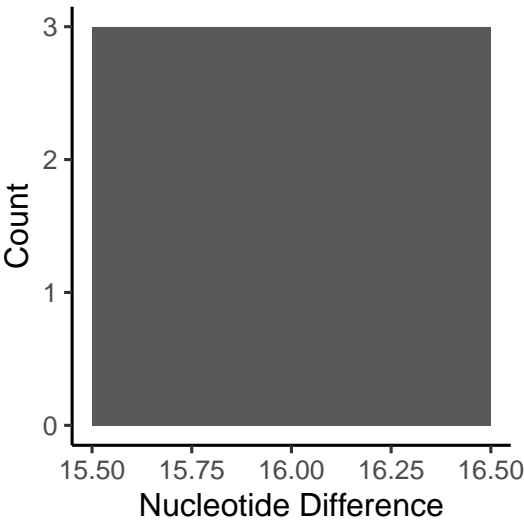
IGHV3-66*04

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



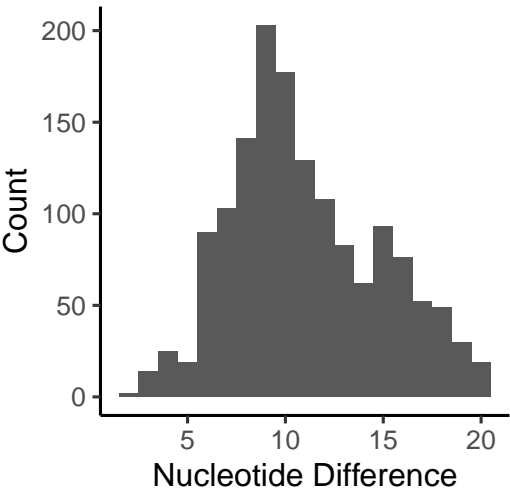
IGHV3-69-1*02

6 sequences assigned
No exact matches.



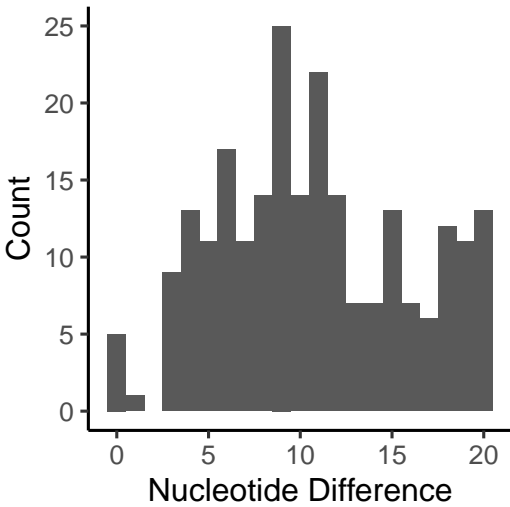
IGHV3-74*03

1553 sequences assigned
No exact matches.



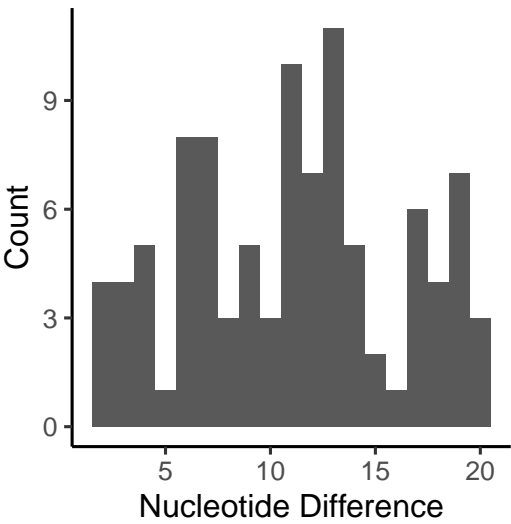
IGHV3-64D*06

473 sequences assigned
5 (1.1%) exact matches, in which:
5 unique CDR3
3 unique J



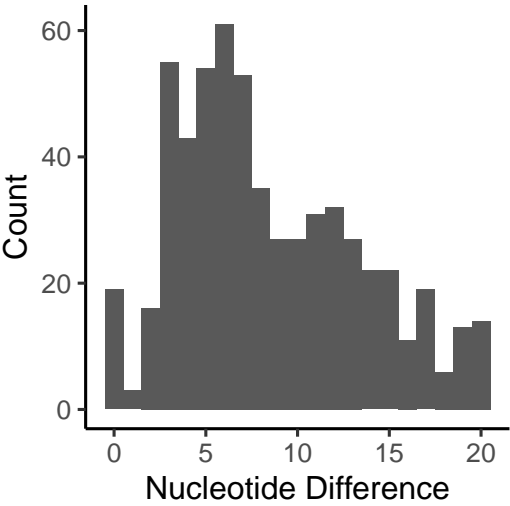
IGHV3-72*01

124 sequences assigned
No exact matches.



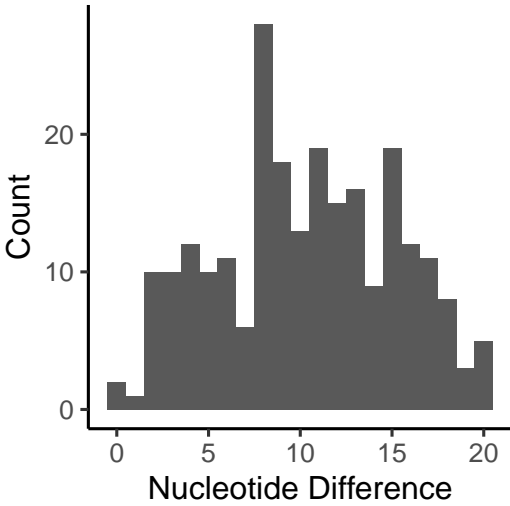
IGHV3-74*01_02

635 sequences assigned
19 (3%) exact matches, in which:
11 unique CDR3
4 unique J



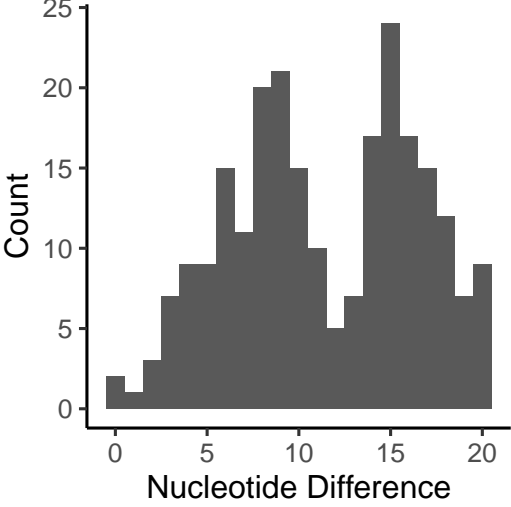
IGHV3-64D*09

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



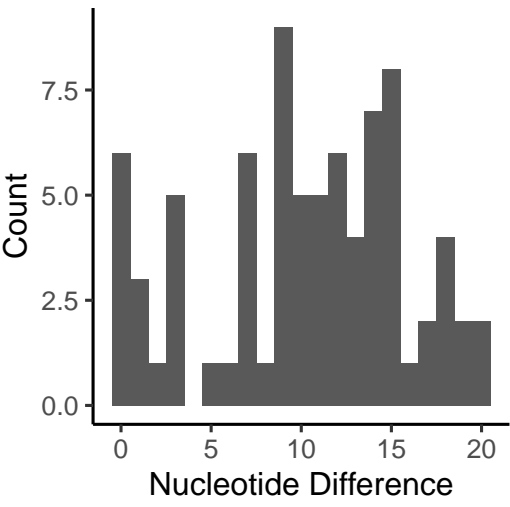
IGHV3-73*01_02

243 sequences assigned
2 (0.8%) exact matches, in which:
2 unique CDR3
2 unique J



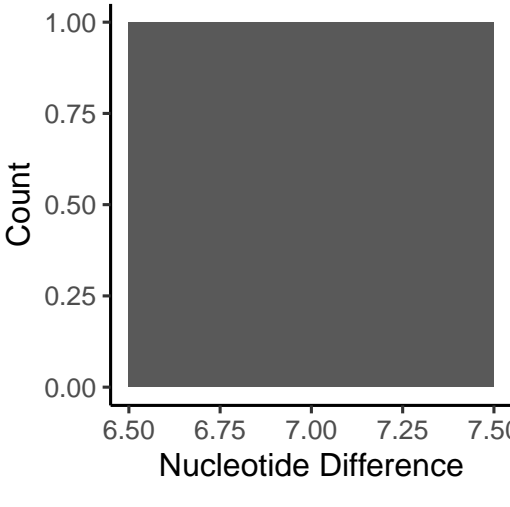
IGHV3-43D*03

88 sequences assigned
6 (6.8%) exact matches, in which:
3 unique CDR3
1 unique J



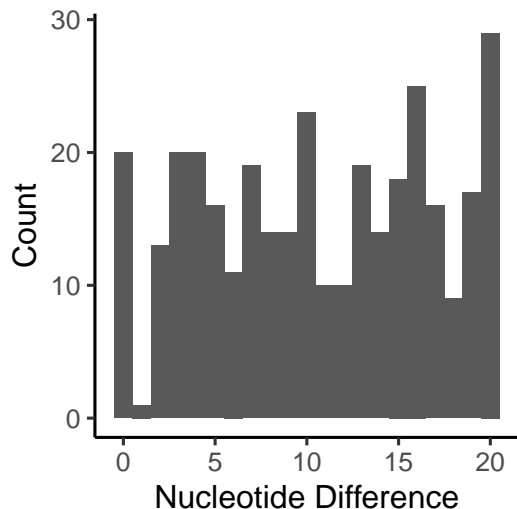
IGHV3-NL1*01

3 sequences assigned
No exact matches.



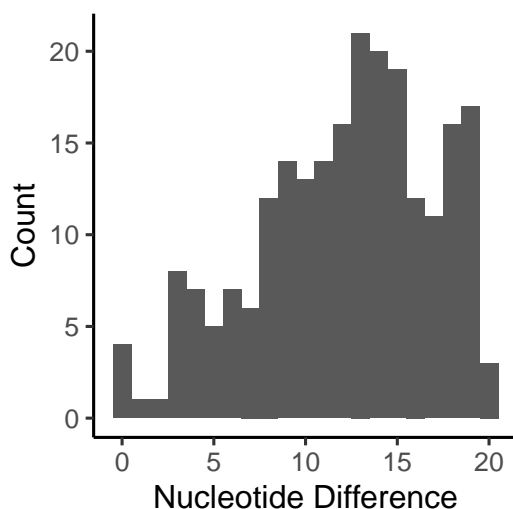
IGHV4-4*02_03

463 sequences assigned
20 (4.3%) exact matches, in which:
13 unique CDR3
5 unique J



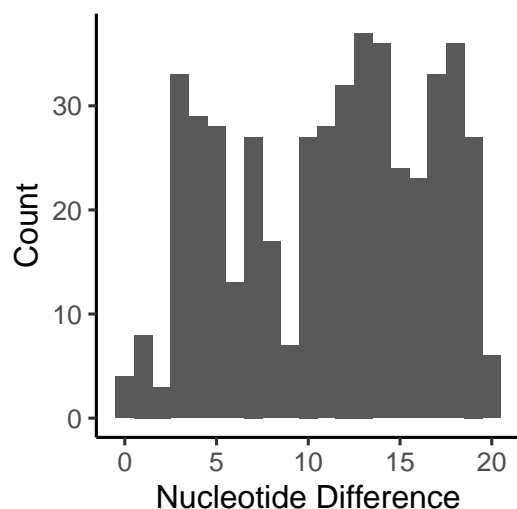
IGHV4-30-2*01

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



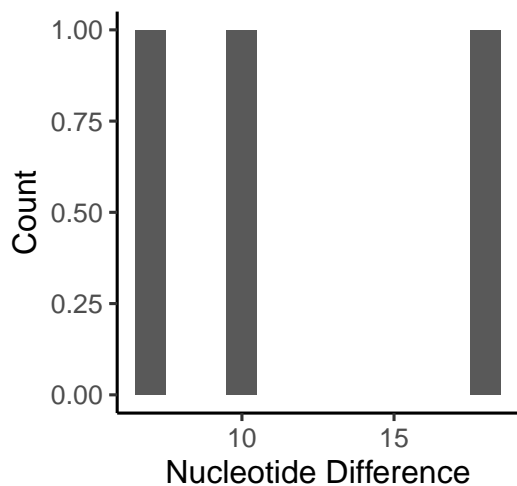
IGHV4-38-2*02

622 sequences assigned
4 (0.6%) exact matches, in which:
2 unique CDR3
2 unique J



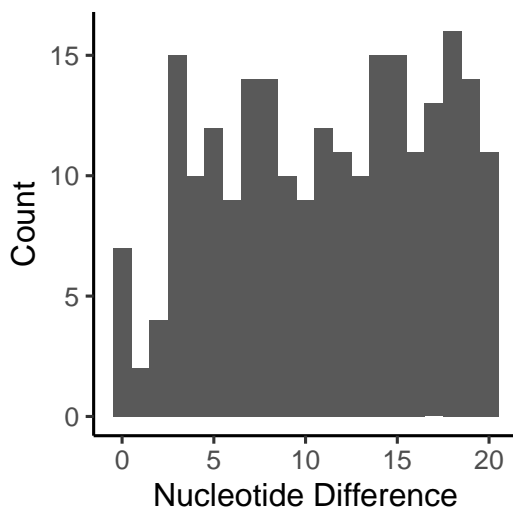
IGHV4-28*03

3 sequences assigned
No exact matches.



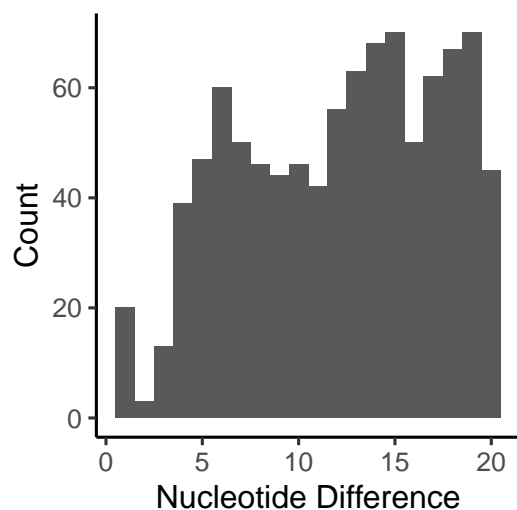
IGHV4-31*02

324 sequences assigned
7 (2.2%) exact matches, in which:
5 unique CDR3
3 unique J



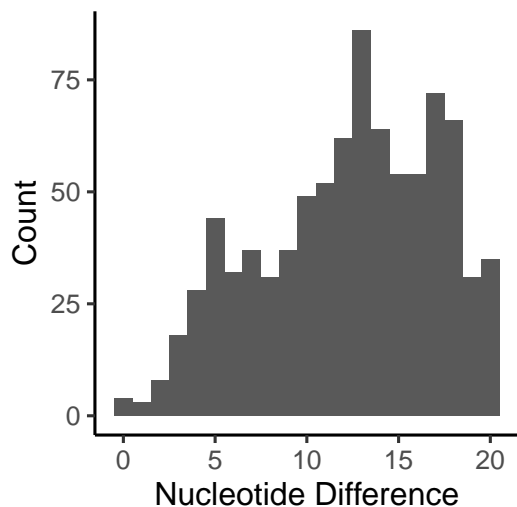
IGHV4-39*02

1432 sequences assigned
No exact matches.



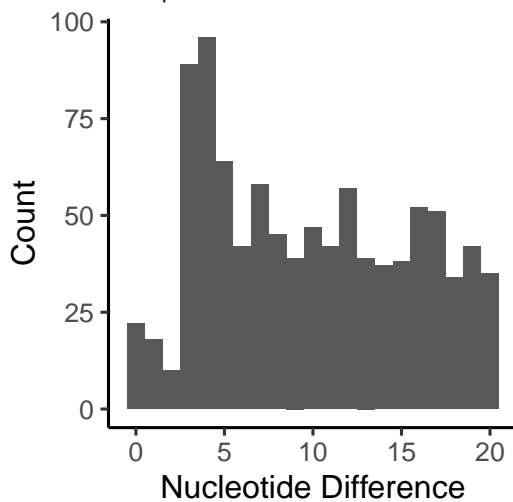
IGHV4-30-4*01

965 sequences assigned
4 (0.4%) exact matches, in which:
3 unique CDR3
1 unique J



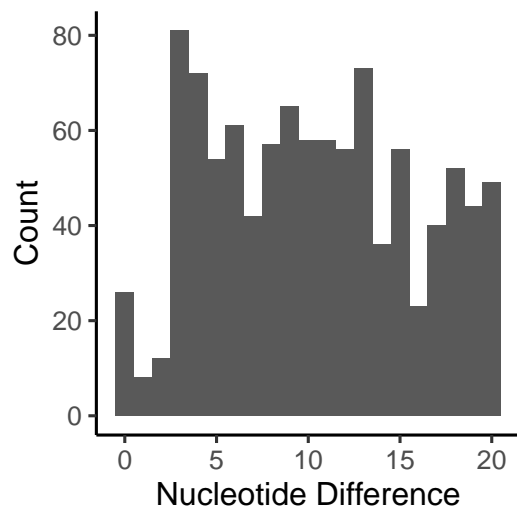
IGHV4-34*01_02

1438 sequences assigned
22 (1.5%) exact matches, in which:
19 unique CDR3
4 unique J



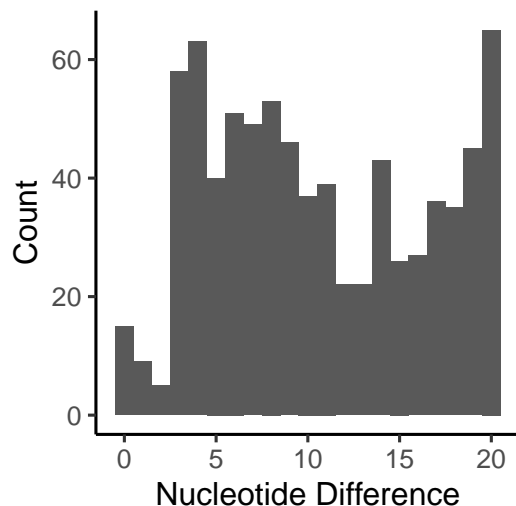
IGHV4-39*07

1429 sequences assigned
26 (1.8%) exact matches, in which:
17 unique CDR3
4 unique J



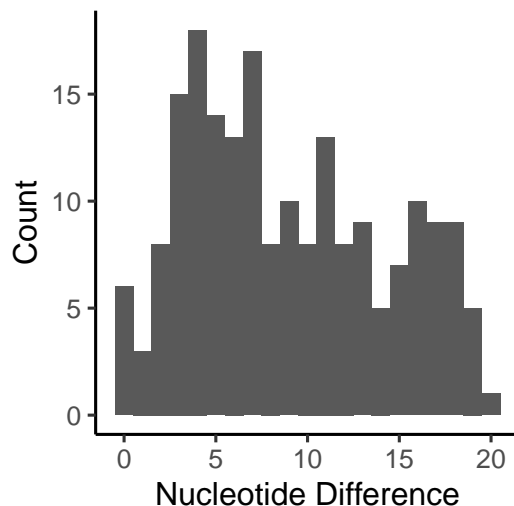
IGHV4-59*08

1245 sequences assigned
15 (1.2%) exact matches, in which:
7 unique CDR3
4 unique J



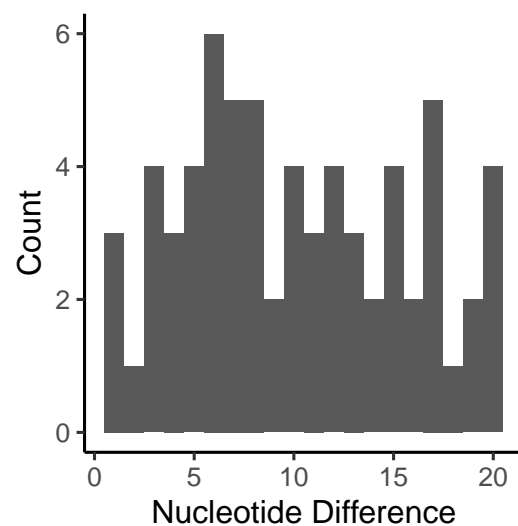
IGHV4-61*01

269 sequences assigned
6 (2.2%) exact matches, in which:
5 unique CDR3
2 unique J



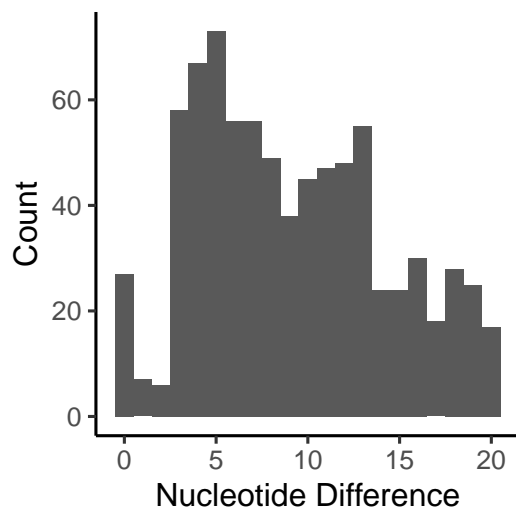
IGHV5-10-1*01_03

81 sequences assigned
No exact matches.



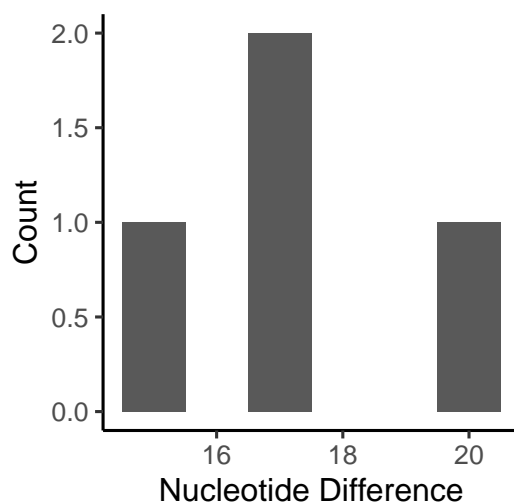
IGHV4-59*01_07

958 sequences assigned
27 (2.8%) exact matches, in which:
19 unique CDR3
5 unique J



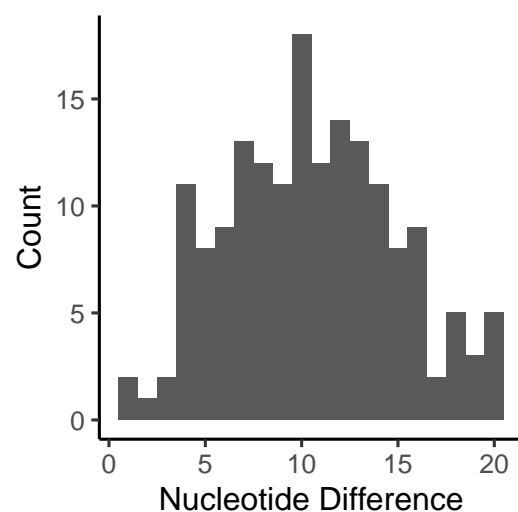
IGHV4/OR15-8*01

8 sequences assigned
No exact matches.



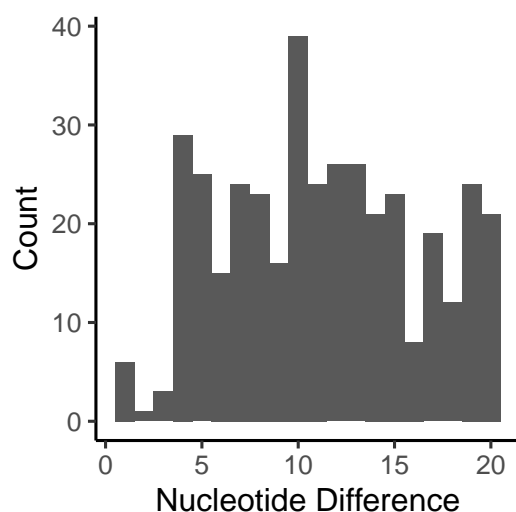
IGHV5-51*07

179 sequences assigned
No exact matches.



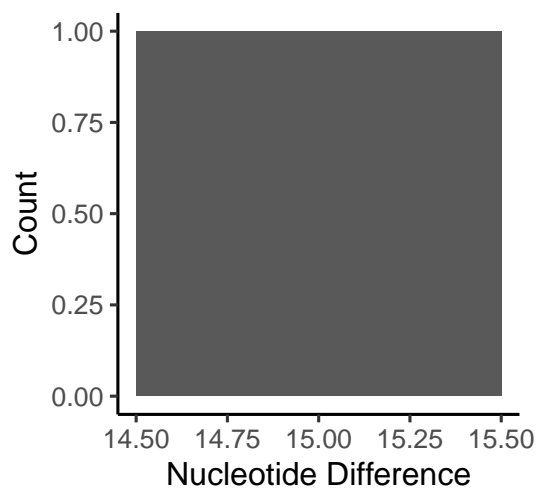
IGHV4-59*11

511 sequences assigned
No exact matches.



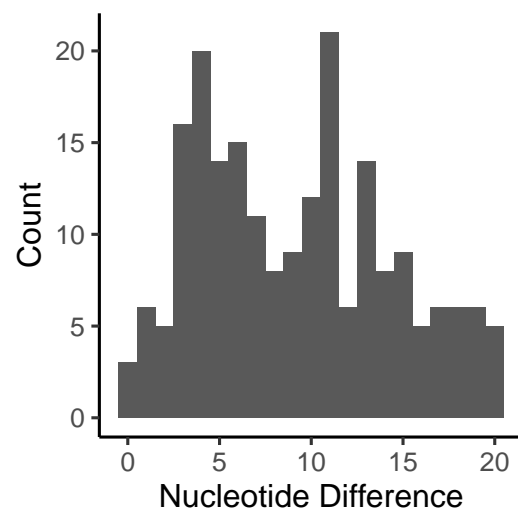
IGHV4/OR15-8*02

14 sequences assigned
No exact matches.



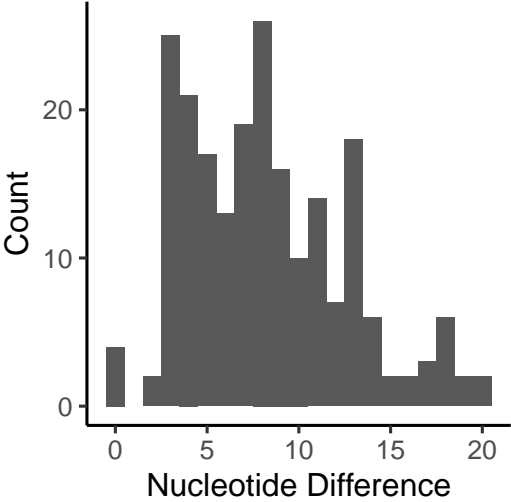
IGHV5-51*01_03

225 sequences assigned
3 (1.3%) exact matches, in which:
3 unique CDR3
3 unique J



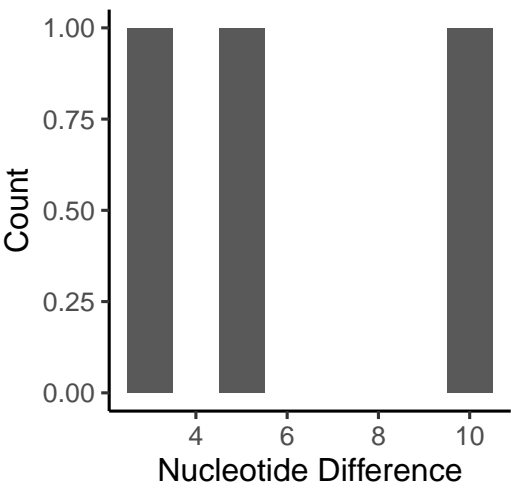
IGHV6-1*01_02

230 sequences assigned
4 (1.7%) exact matches, in which:
4 unique CDR3
2 unique J



IGHV7-4-1*02

3 sequences assigned
No exact matches.





Warning – no inferred sequences found.