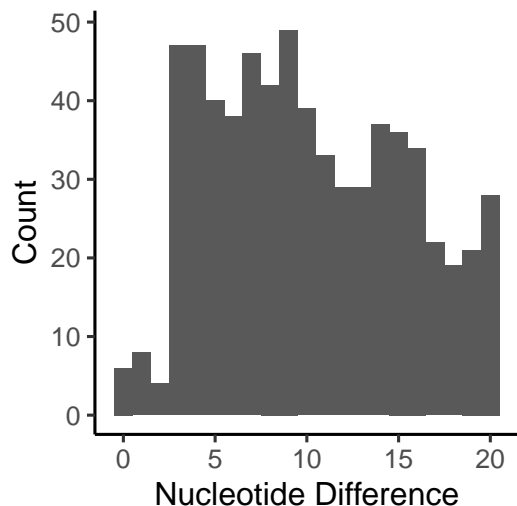


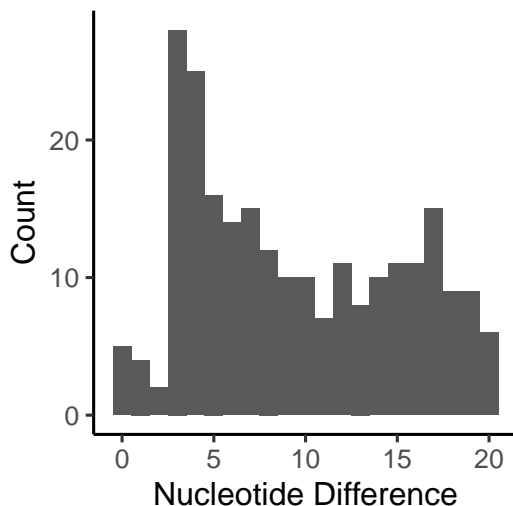
IGHV1-2*02

932 sequences assigned
6 (0.6%) exact matches, in which:
6 unique CDR3
2 unique J



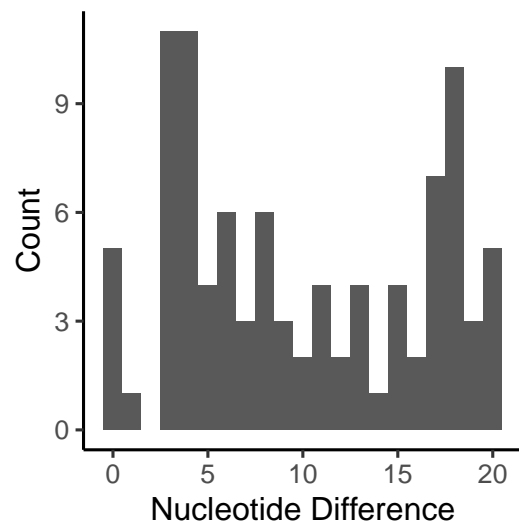
IGHV1-8*01

306 sequences assigned
5 (1.6%) exact matches, in which:
5 unique CDR3
3 unique J



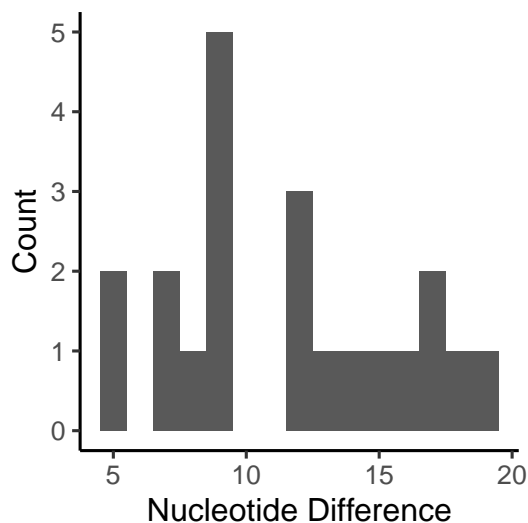
IGHV1-24*01

130 sequences assigned
5 (3.8%) exact matches, in which:
5 unique CDR3
3 unique J



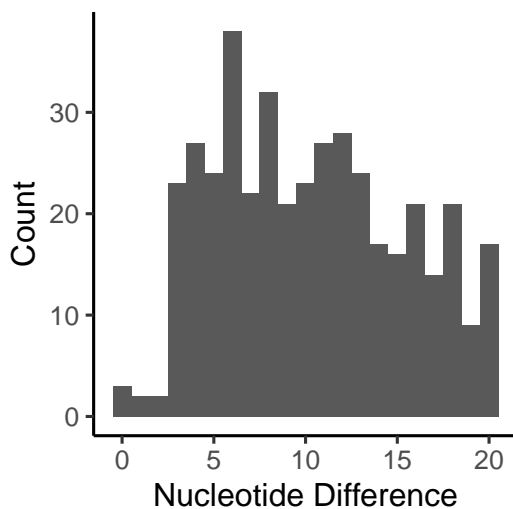
IGHV1-3*04

37 sequences assigned
No exact matches.



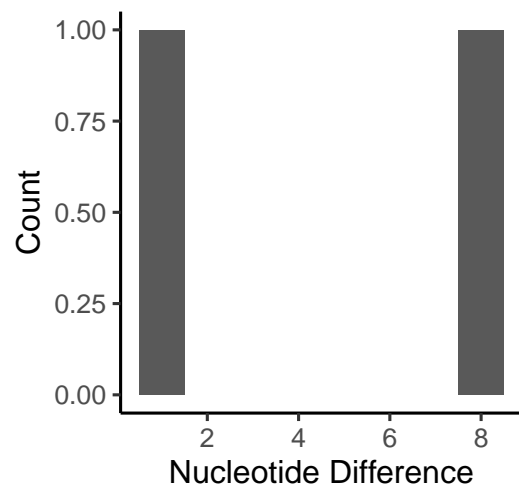
IGHV1-18*01

576 sequences assigned
3 (0.5%) exact matches, in which:
3 unique CDR3
2 unique J



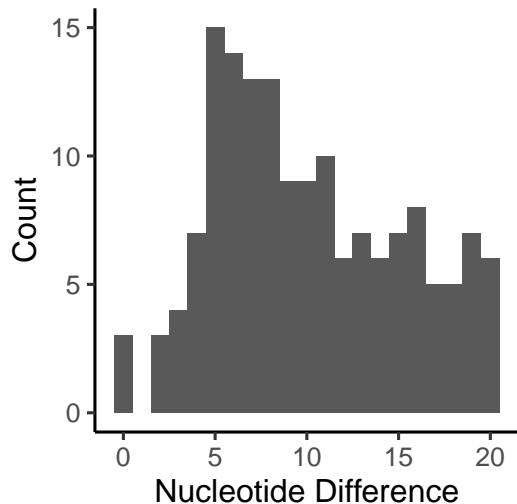
IGHV1-45*02

4 sequences assigned
No exact matches.



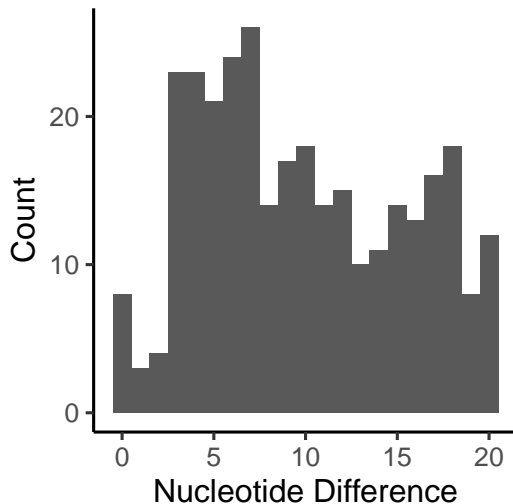
IGHV1-3*01_05

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



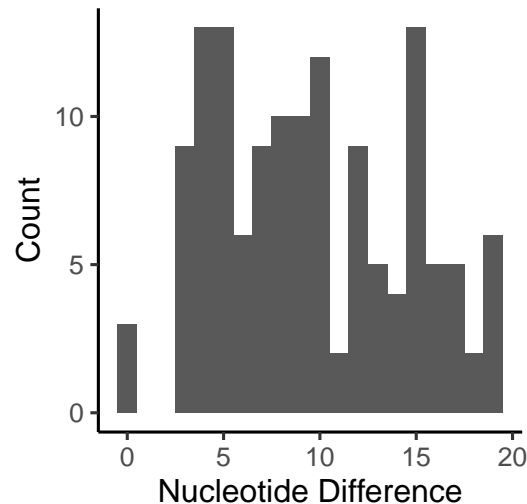
IGHV1-18*04

425 sequences assigned
8 (1.9%) exact matches, in which:
7 unique CDR3
3 unique J



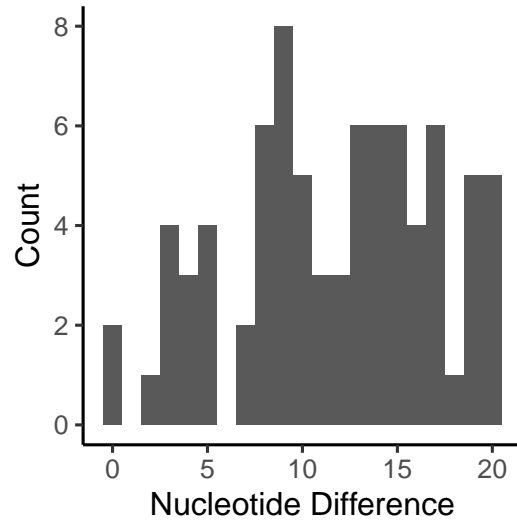
IGHV1-46*01

195 sequences assigned
3 (1.5%) exact matches, in which:
2 unique CDR3
1 unique J



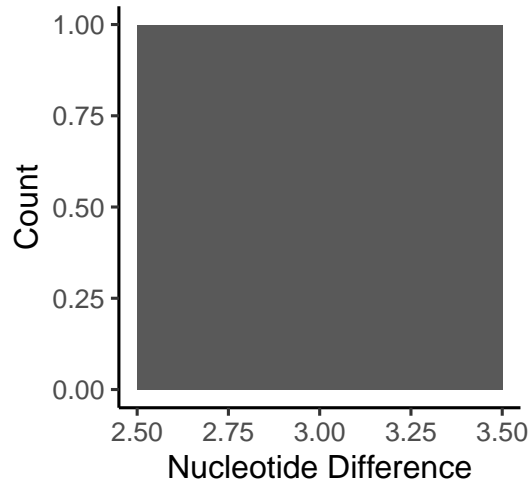
IGHV1-46*03

124 sequences assigned
2 (1.6%) exact matches, in which:
2 unique CDR3
2 unique J



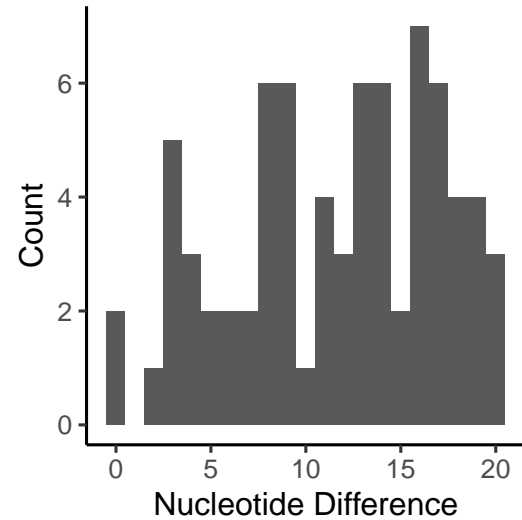
IGHV1-68*02_03

2 sequences assigned
No exact matches.



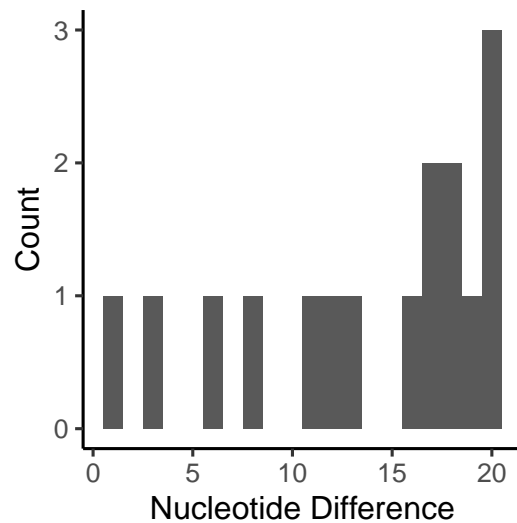
IGHV1-69*06_14

147 sequences assigned
2 (1.4%) exact matches, in which:
2 unique CDR3
2 unique J



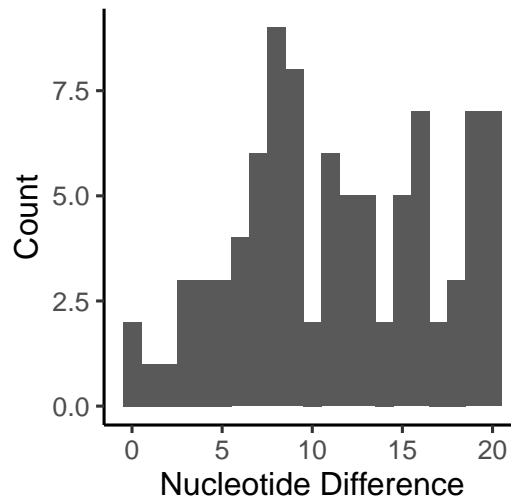
IGHV1-58*02

43 sequences assigned
No exact matches.



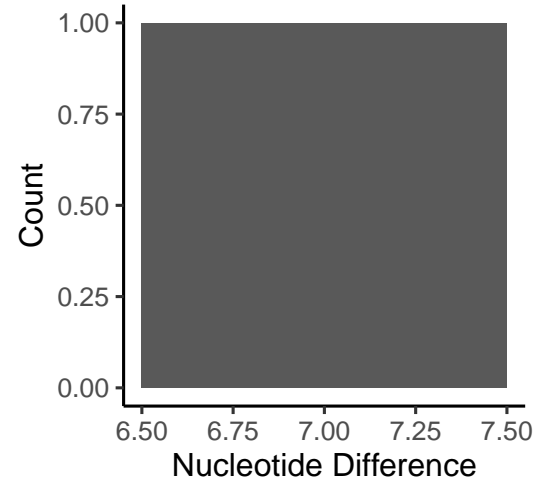
IGHV1-69*01_12_13

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



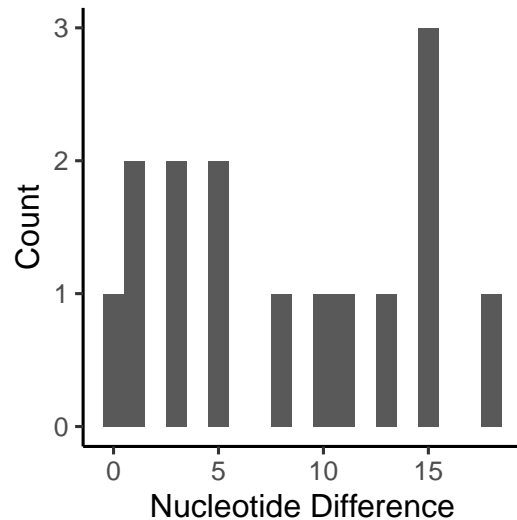
IGHV1-NL1*01

1 sequences assigned
No exact matches.



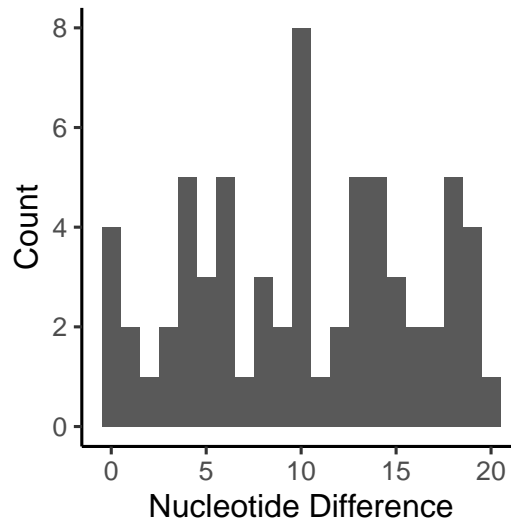
IGHV1-58*01_03

21 sequences assigned
1 (4.8%) exact matches, in which:
1 unique CDR3
1 unique J



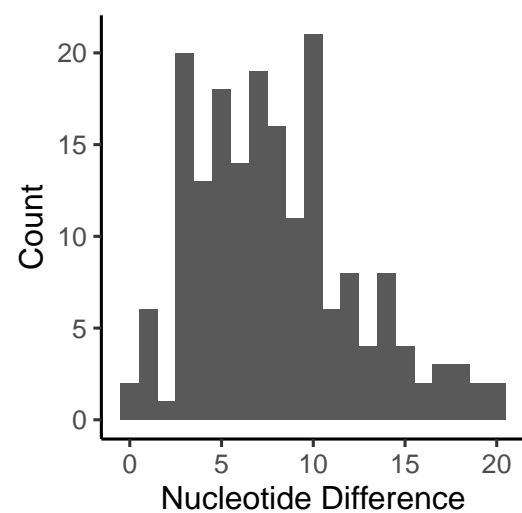
IGHV1-69*04_09

124 sequences assigned
4 (3.2%) exact matches, in which:
3 unique CDR3
2 unique J



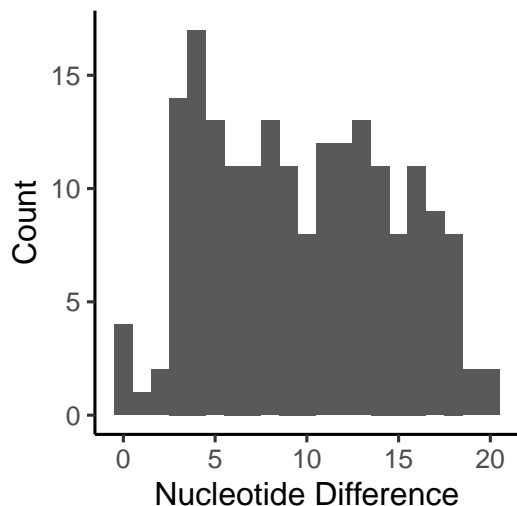
IGHV2-5*01

226 sequences assigned
2 (0.9%) exact matches, in which:
2 unique CDR3
2 unique J



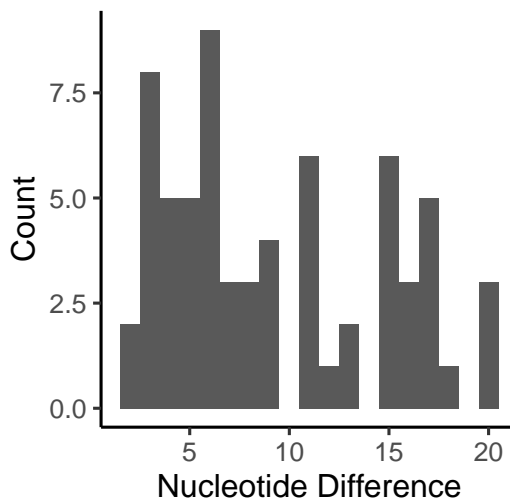
IGHV2-5*02

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



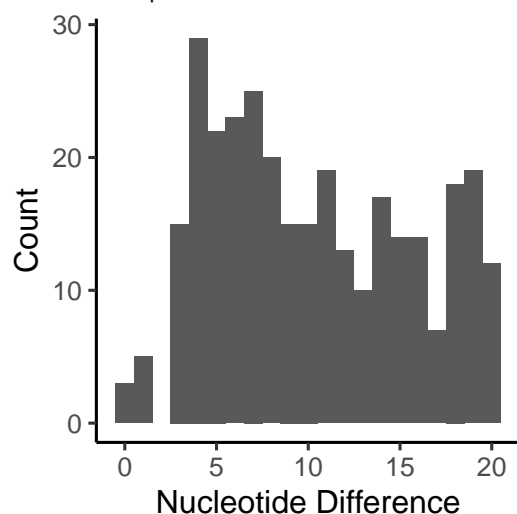
IGHV2-70*11_15

73 sequences assigned
No exact matches.



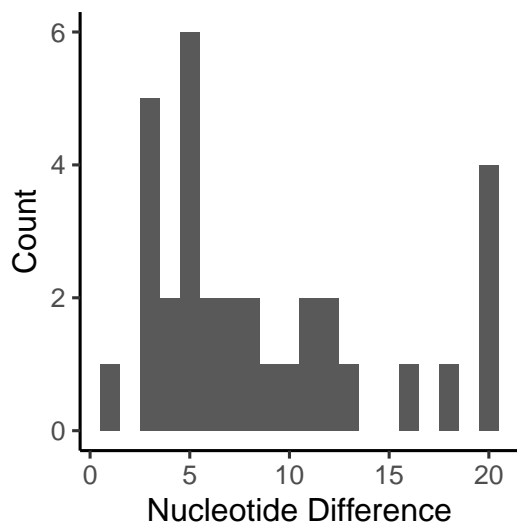
IGHV3-9*01

445 sequences assigned
3 (0.7%) exact matches, in which:
1 unique CDR3
1 unique J



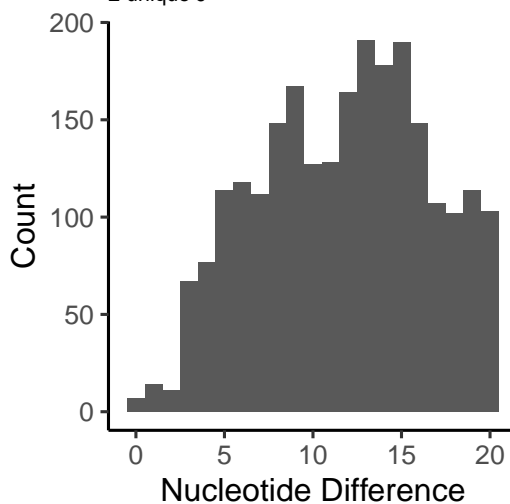
IGHV2-26*01

54 sequences assigned
No exact matches.



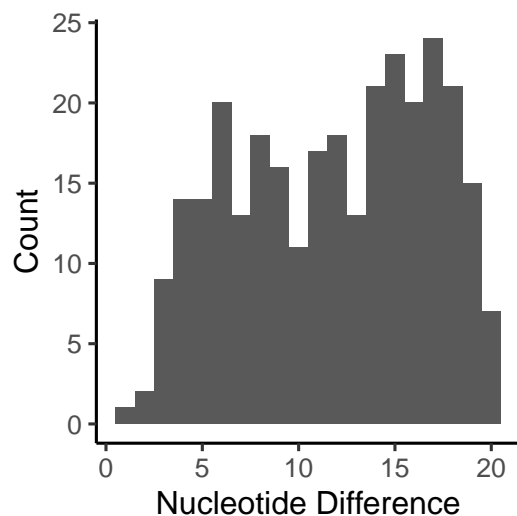
IGHV3-7*01

2865 sequences assigned
7 (0.2%) exact matches, in which:
5 unique CDR3
2 unique J



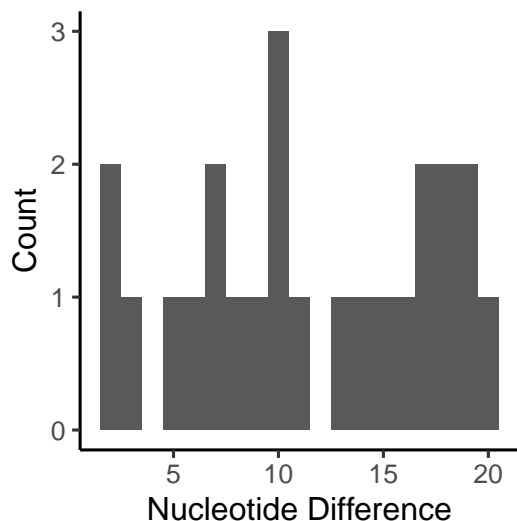
IGHV3-11*01

403 sequences assigned
No exact matches.



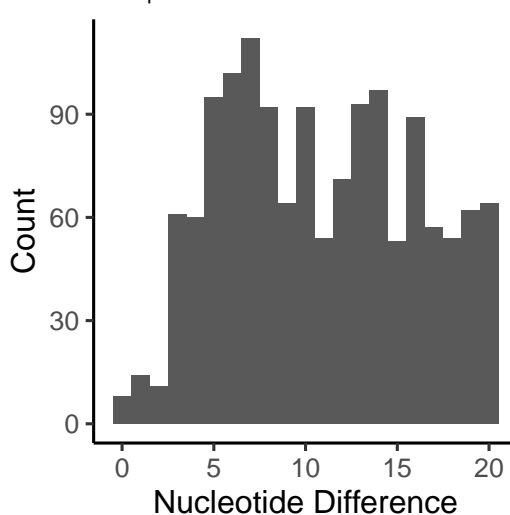
IGHV2-70*01

27 sequences assigned
No exact matches.



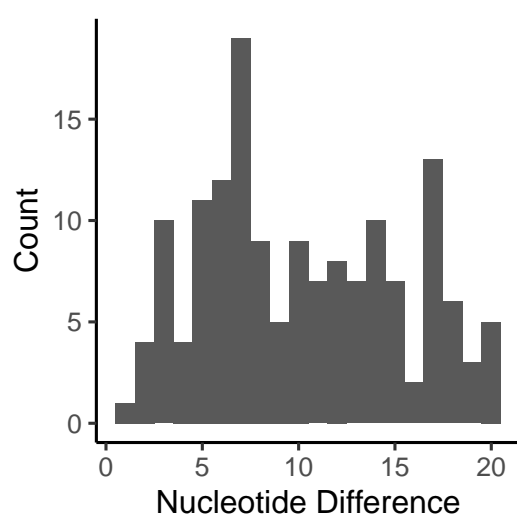
IGHV3-7*03

1642 sequences assigned
8 (0.5%) exact matches, in which:
4 unique CDR3
2 unique J



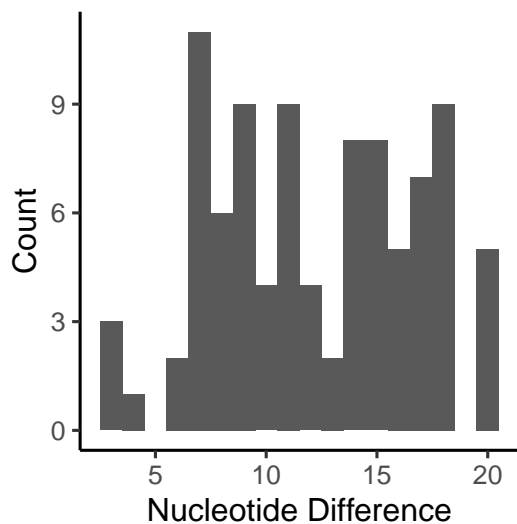
IGHV3-11*06

212 sequences assigned
No exact matches.



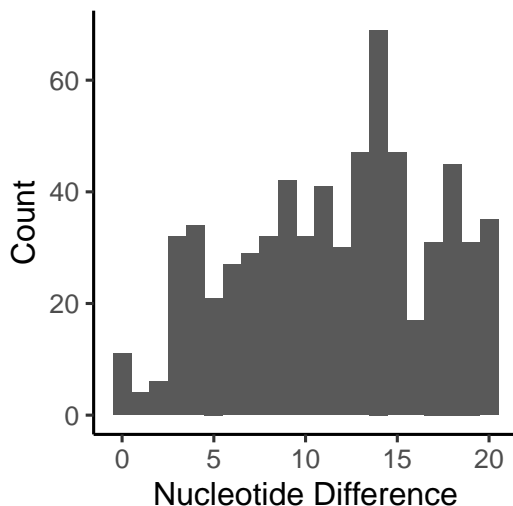
IGHV3-13*01

111 sequences assigned
No exact matches.



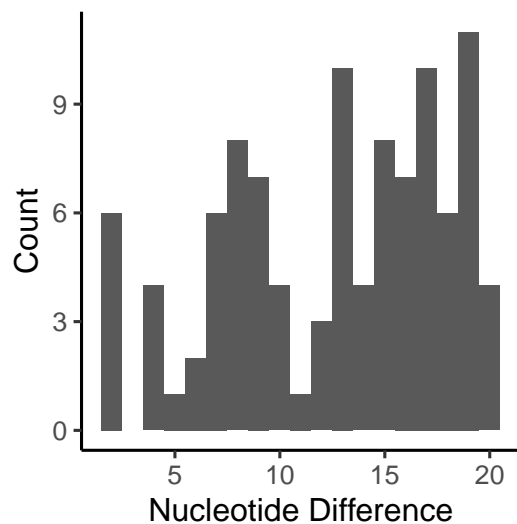
IGHV3-15*01_02

881 sequences assigned
11 (1.2%) exact matches, in which:
7 unique CDR3
2 unique J



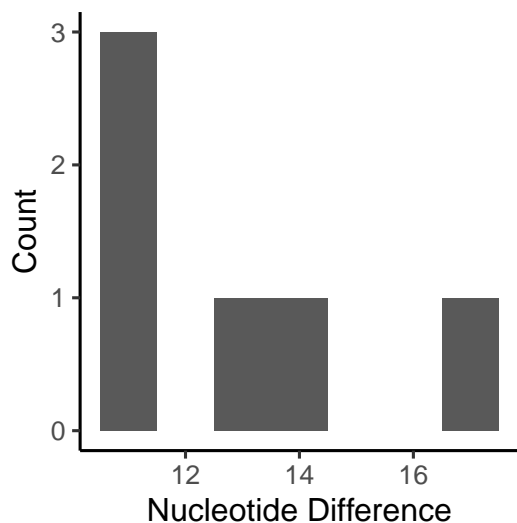
IGHV3-21*06

190 sequences assigned
No exact matches.



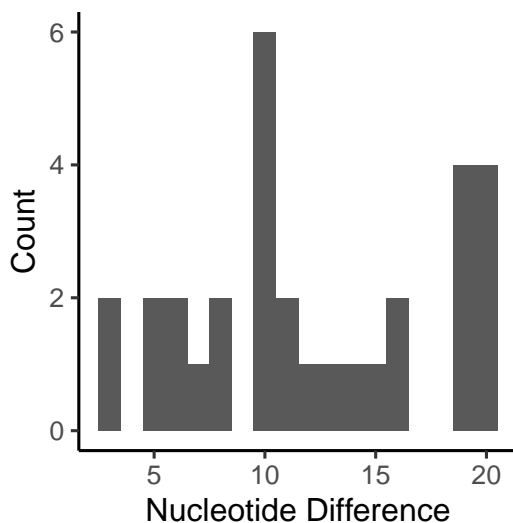
IGHV3-13*04

12 sequences assigned
No exact matches.



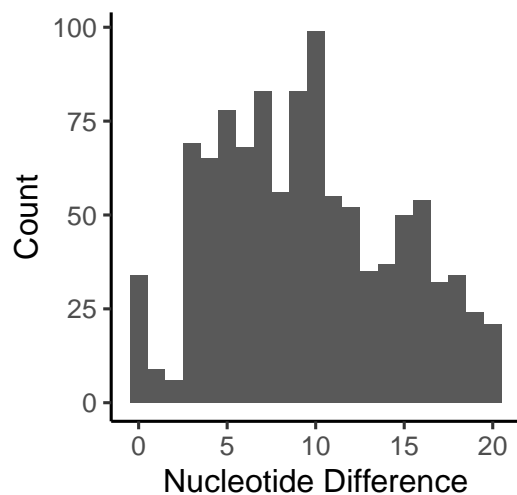
IGHV3-20*01_02

39 sequences assigned
No exact matches.



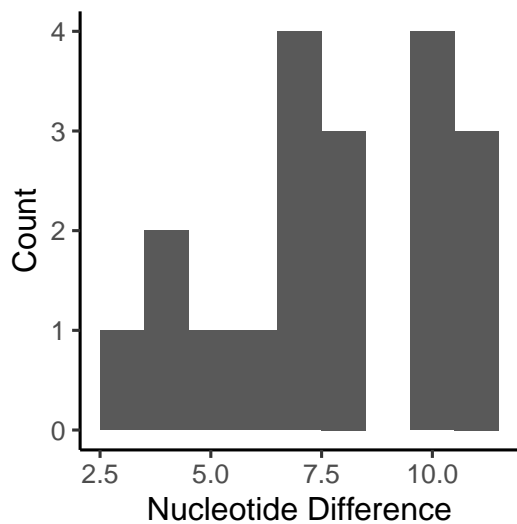
IGHV3-21*01_02

1306 sequences assigned
34 (2.6%) exact matches, in which:
14 unique CDR3
4 unique J



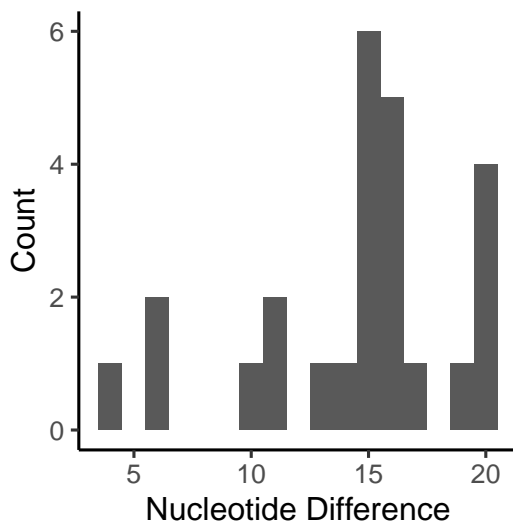
IGHV3-13*05

21 sequences assigned
No exact matches.



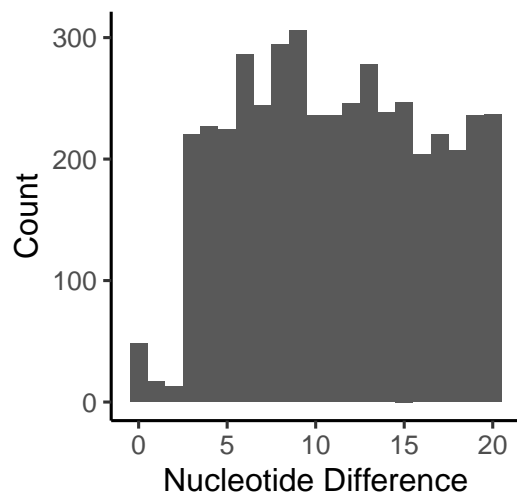
IGHV3-20*03_04

54 sequences assigned
No exact matches.



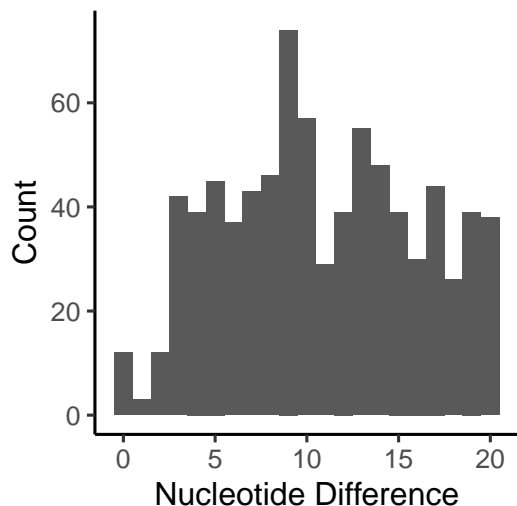
IGHV3-23*01_04

6395 sequences assigned
48 (0.8%) exact matches, in which:
25 unique CDR3
5 unique J



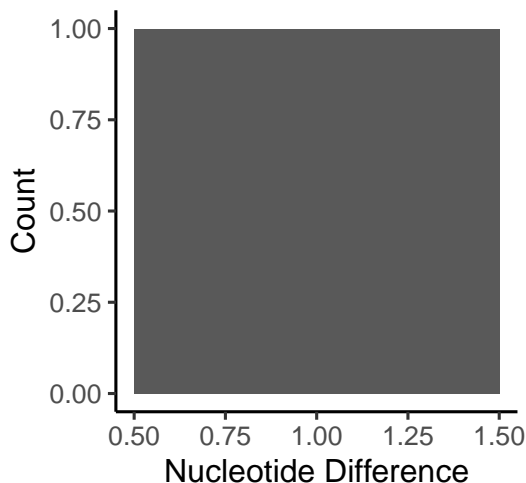
IGHV3-30-3*01

1050 sequences assigned
12 (1.1%) exact matches, in which:
6 unique CDR3
2 unique J



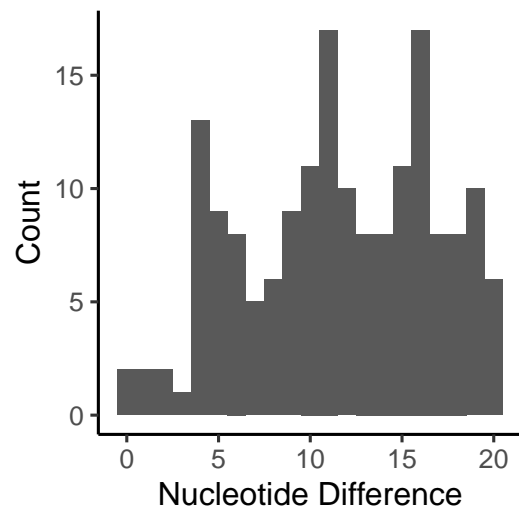
IGHV3-47*02

1 sequences assigned
No exact matches.



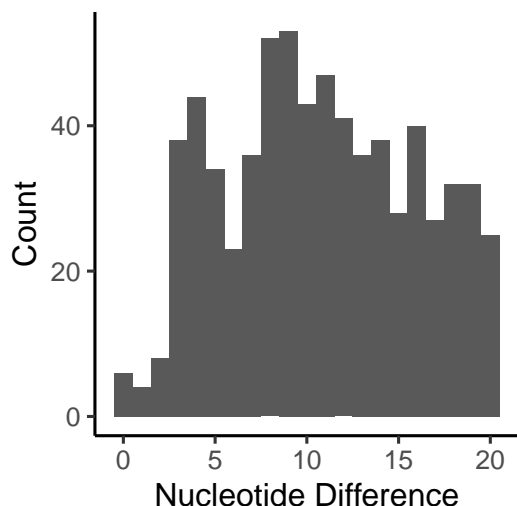
IGHV3-49*03_05

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



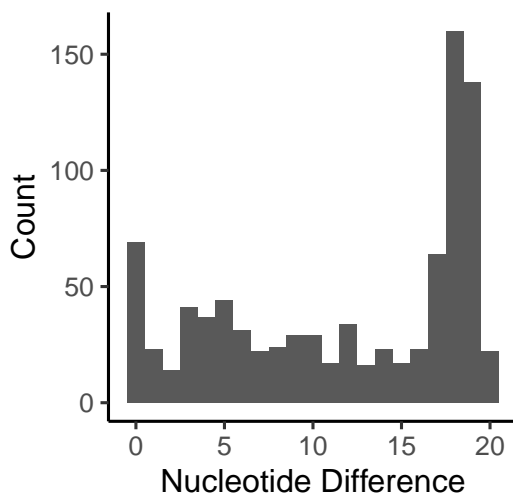
IGHV3-33*01

992 sequences assigned
6 (0.6%) exact matches, in which:
4 unique CDR3
3 unique J



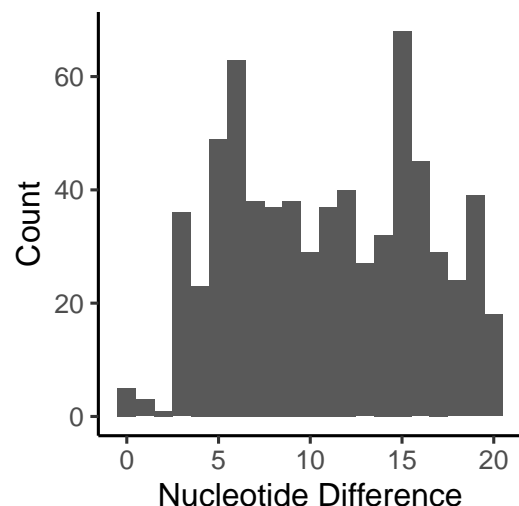
IGHV3-48*01

1024 sequences assigned
69 (6.7%) exact matches, in which:
28 unique CDR3
4 unique J



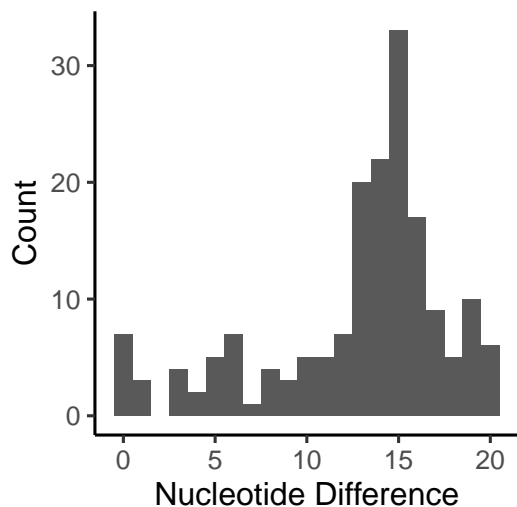
IGHV3-53*01_02

869 sequences assigned
5 (0.6%) exact matches, in which:
4 unique CDR3
3 unique J



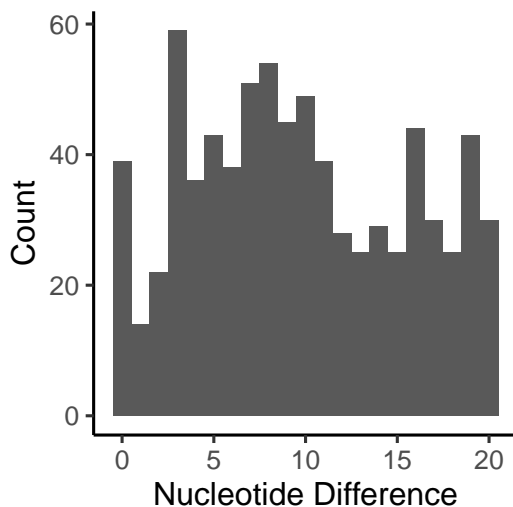
IGHV3-43*01

244 sequences assigned
7 (2.9%) exact matches, in which:
3 unique CDR3
3 unique J



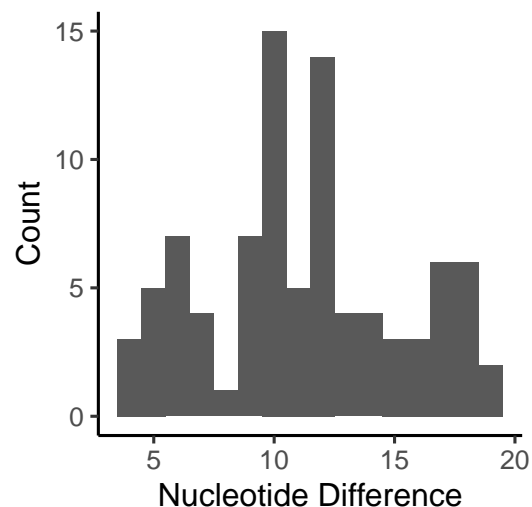
IGHV3-48*02

948 sequences assigned
39 (4.1%) exact matches, in which:
17 unique CDR3
4 unique J



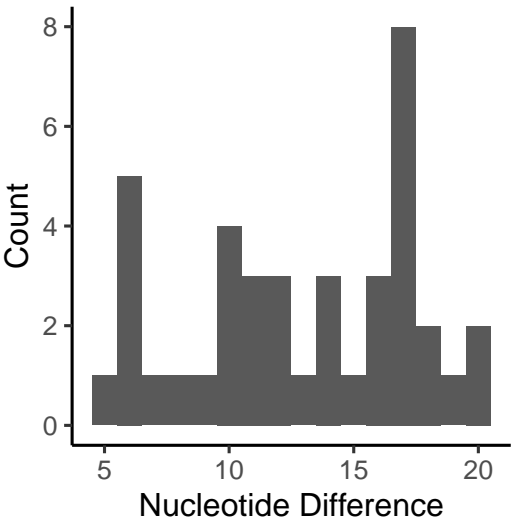
IGHV3-64*01

103 sequences assigned
No exact matches.



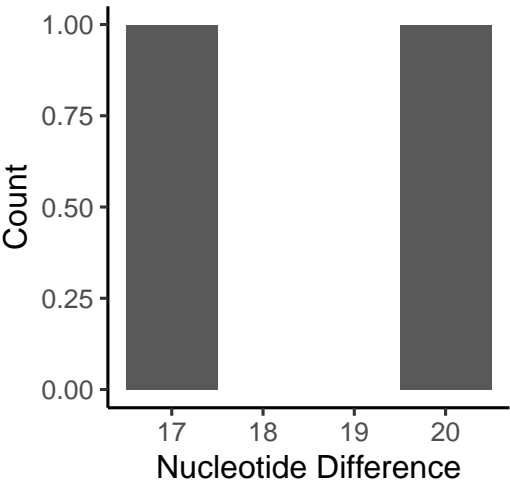
IGHV3-64*02_07

56 sequences assigned
No exact matches.



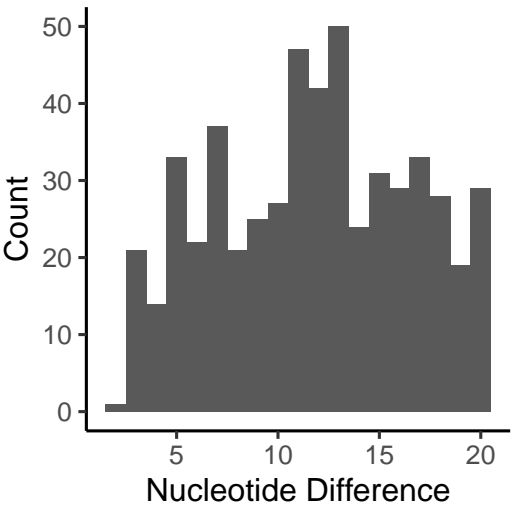
IGHV3-69-1*02

14 sequences assigned
No exact matches.



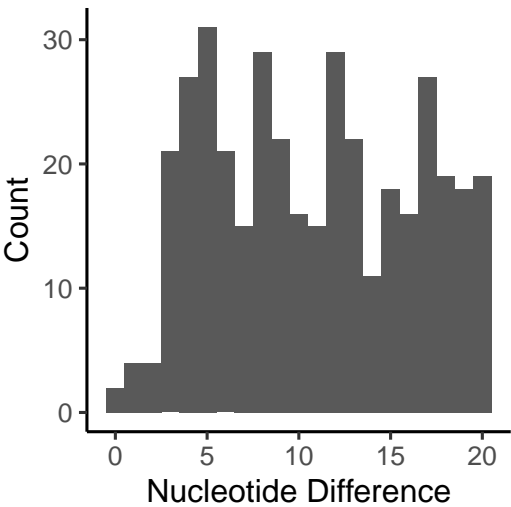
IGHV3-74*03

712 sequences assigned
No exact matches.



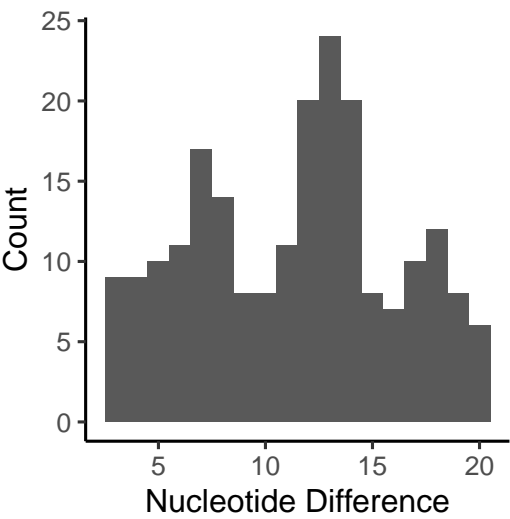
IGHV3-66*01

529 sequences assigned
2 (0.4%) exact matches, in which:
2 unique CDR3
1 unique J



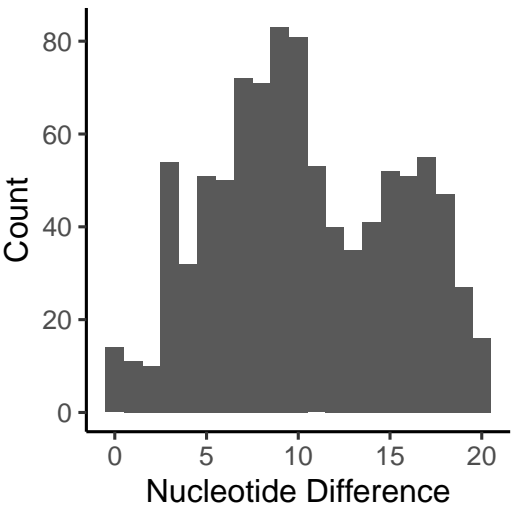
IGHV3-72*01

317 sequences assigned
No exact matches.



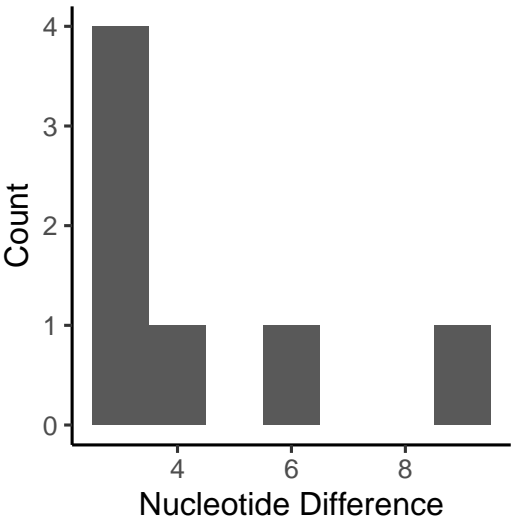
IGHV3-74*01_02

1106 sequences assigned
14 (1.3%) exact matches, in which:
7 unique CDR3
2 unique J



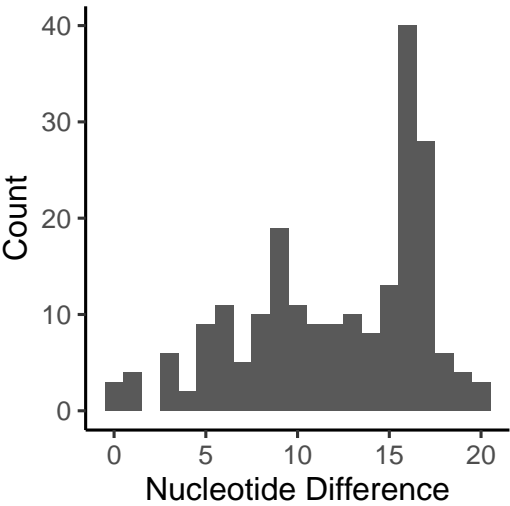
IGHV3-69-1*01

13 sequences assigned
No exact matches.



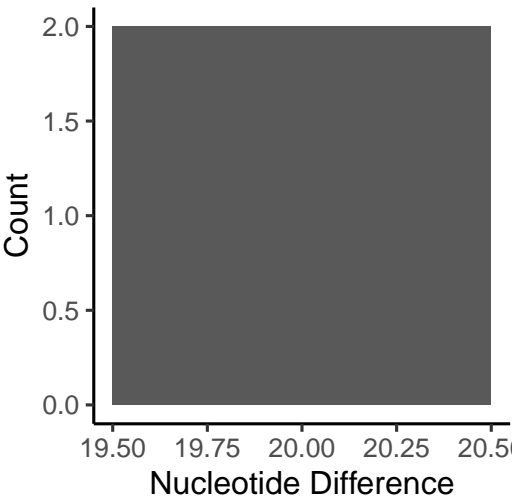
IGHV3-73*01_02

257 sequences assigned
3 (1.2%) exact matches, in which:
3 unique CDR3
2 unique J



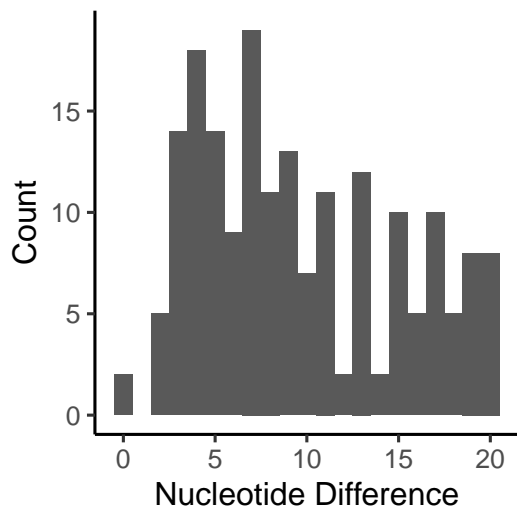
IGHV3-43D*04

3 sequences assigned
No exact matches.



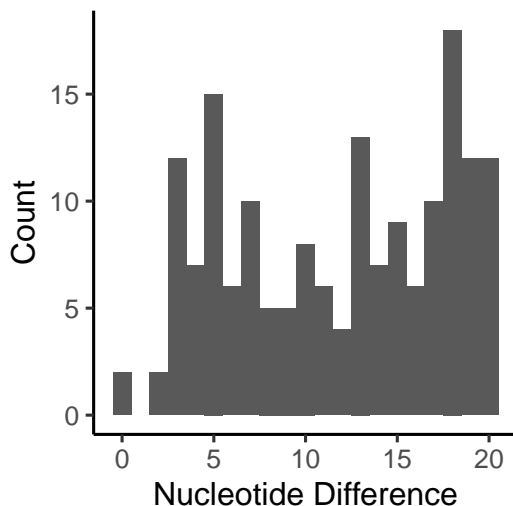
IGHV3-64D*06

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



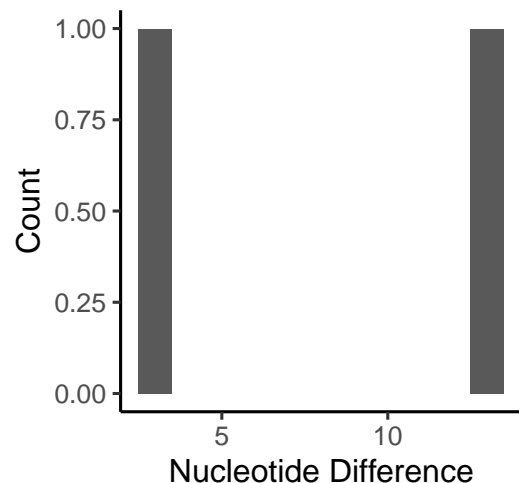
IGHV4-4*02_03

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



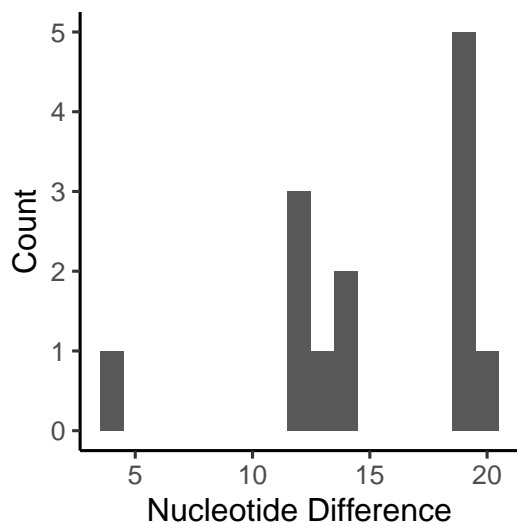
IGHV4-28*02_05

2 sequences assigned
No exact matches.



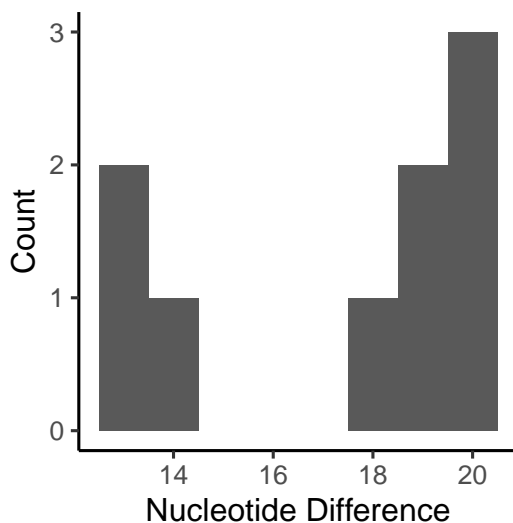
IGHV3-64D*08

33 sequences assigned
No exact matches.



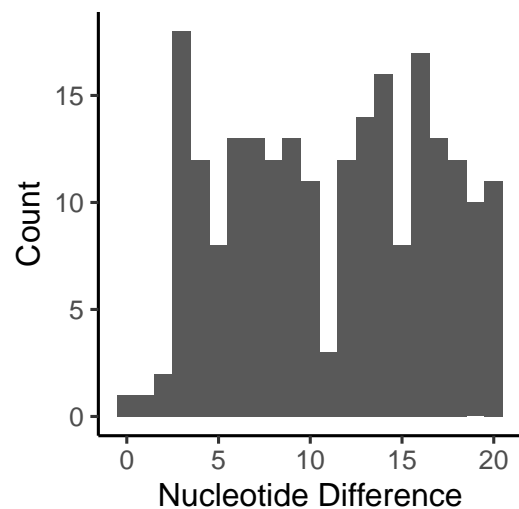
IGHV4-28*03

14 sequences assigned
No exact matches.



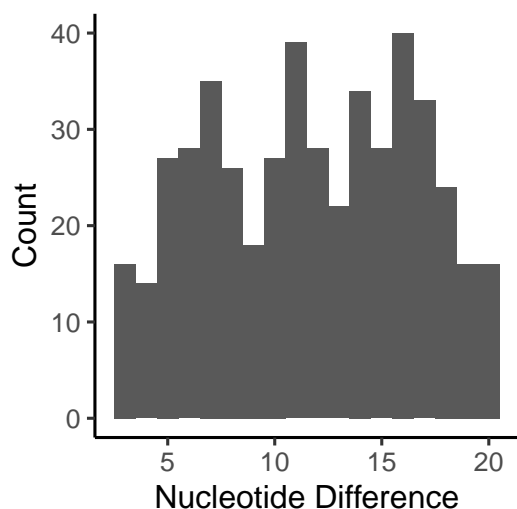
IGHV4-30-4*01

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



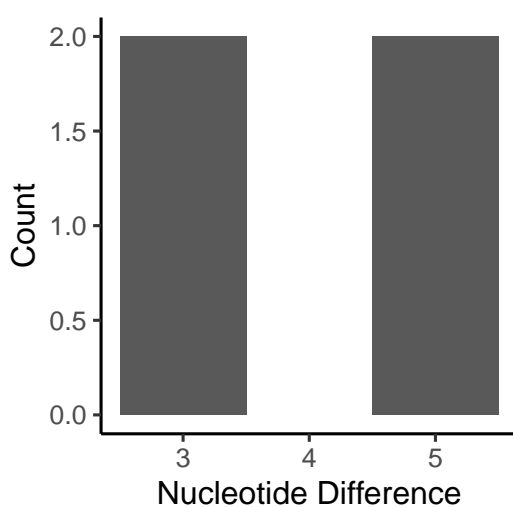
IGHV4-4*07

632 sequences assigned
No exact matches.



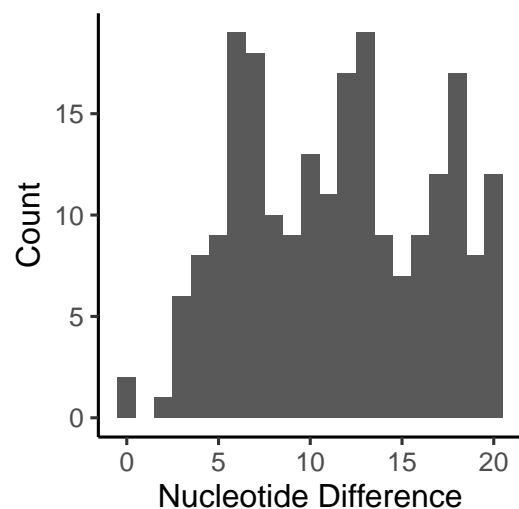
IGHV4-28*01_07

6 sequences assigned
No exact matches.



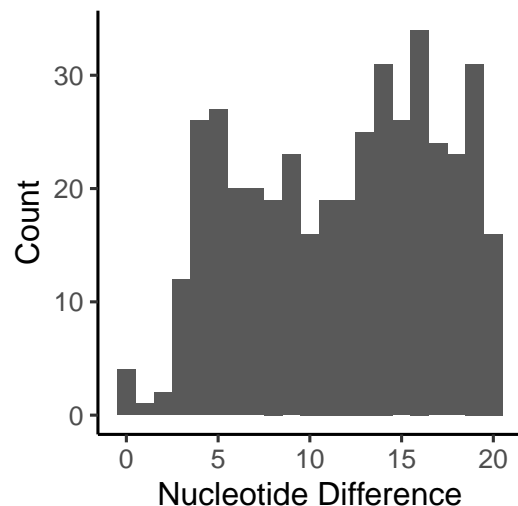
IGHV4-30-2*01

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



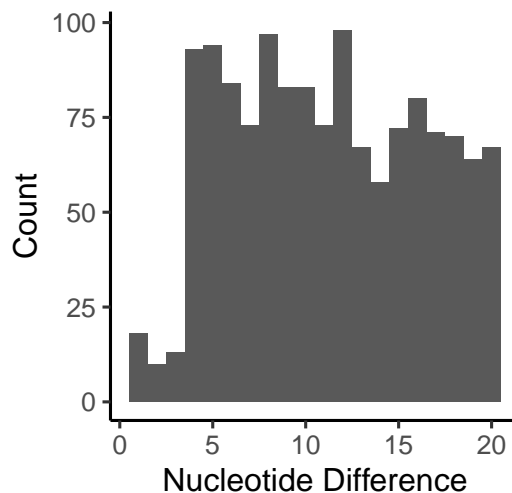
IGHV4-31*02

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



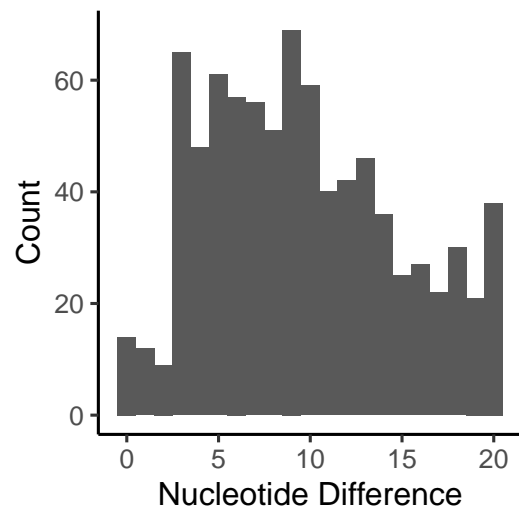
IGHV4-39*02

2033 sequences assigned
No exact matches.



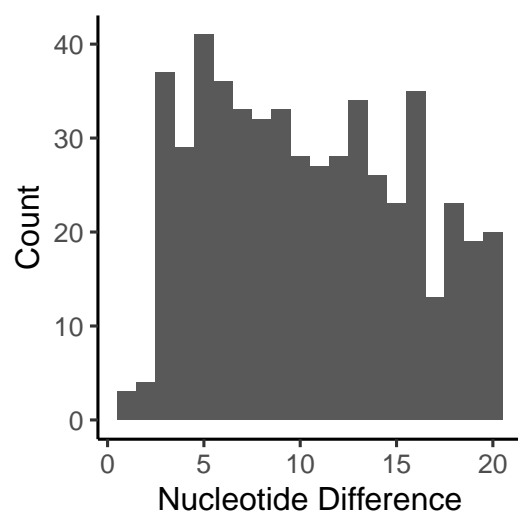
IGHV4-59*01_07

1159 sequences assigned
14 (1.2%) exact matches, in which:
9 unique CDR3
3 unique J



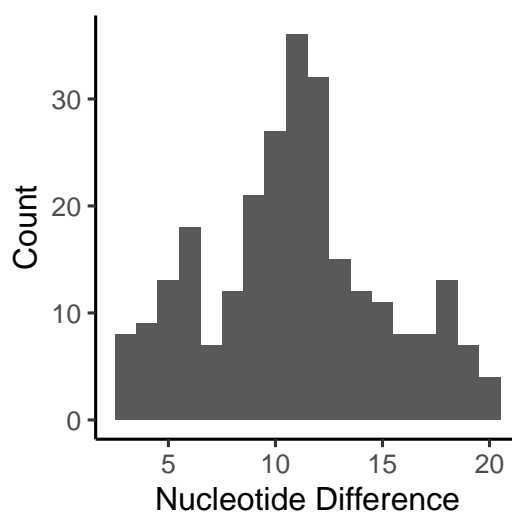
IGHV4-34*01_02

734 sequences assigned
No exact matches.



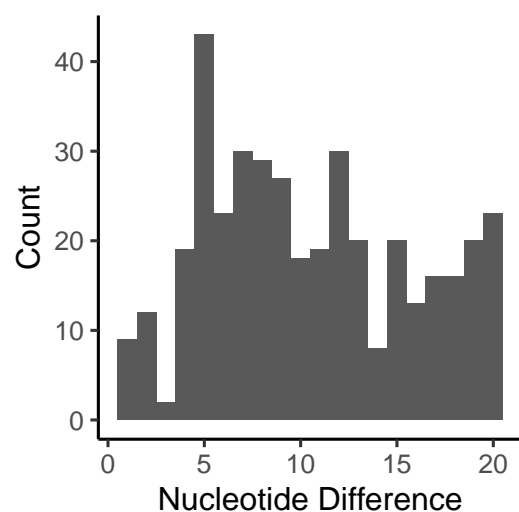
IGHV4-39*01_05

339 sequences assigned
No exact matches.



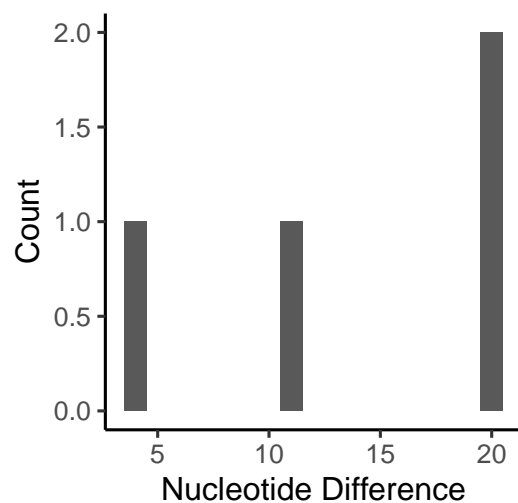
IGHV4-59*11

537 sequences assigned
No exact matches.



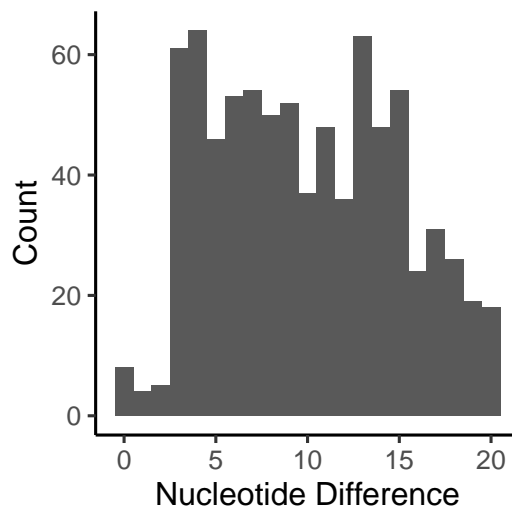
IGHV4-38-2*02

10 sequences assigned
No exact matches.



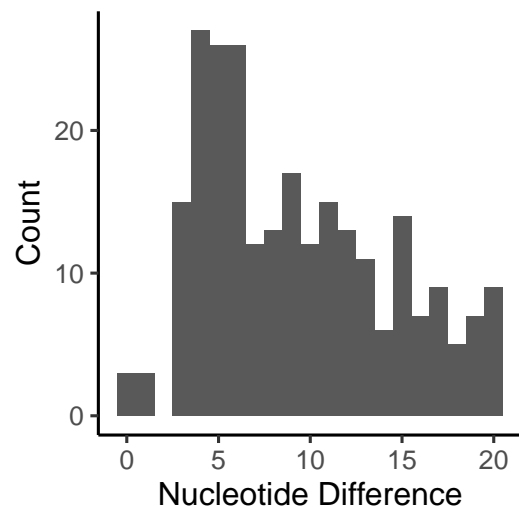
IGHV4-59*08

1008 sequences assigned
8 (0.8%) exact matches, in which:
5 unique CDR3
2 unique J



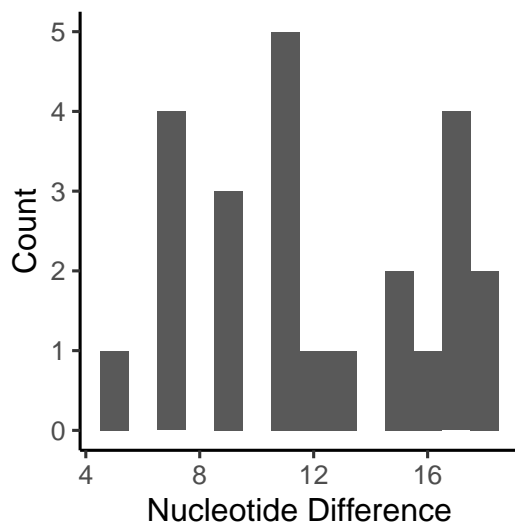
IGHV4-61*01

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



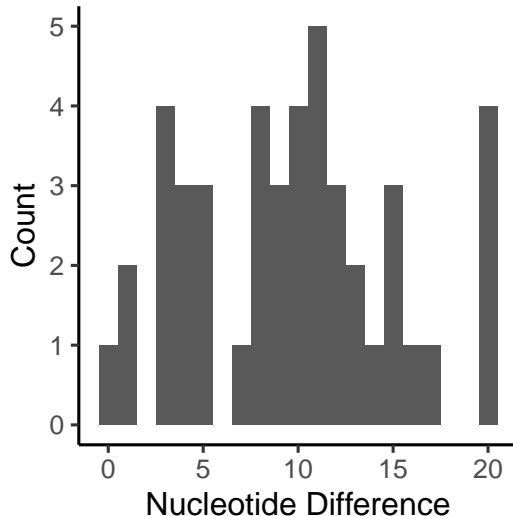
IGHV4-61*08

56 sequences assigned
No exact matches.



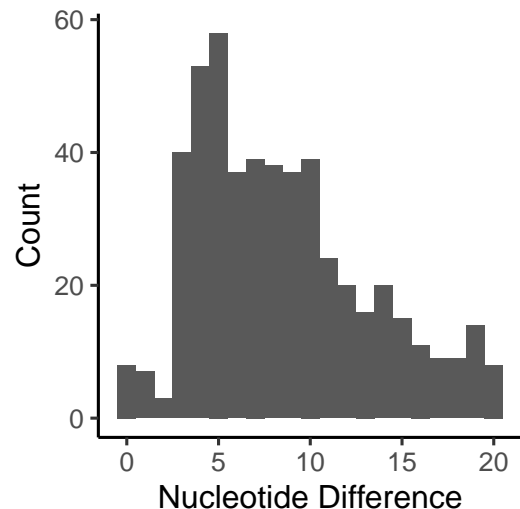
IGHV5-10-1*01_03

61 sequences assigned
1 (1.6%) exact matches, in which:
1 unique CDR3
1 unique J



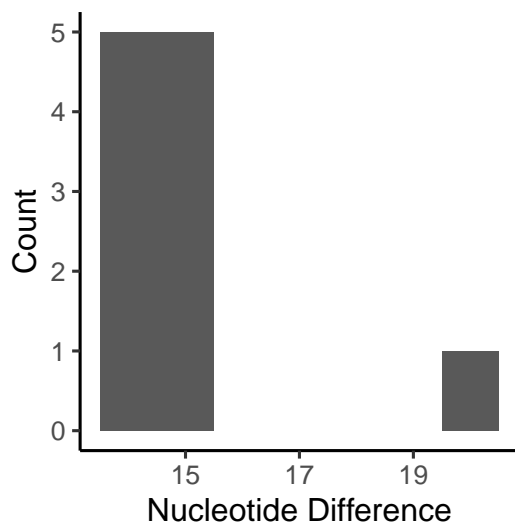
IGHV6-1*01_02

545 sequences assigned
8 (1.5%) exact matches, in which:
8 unique CDR3
3 unique J



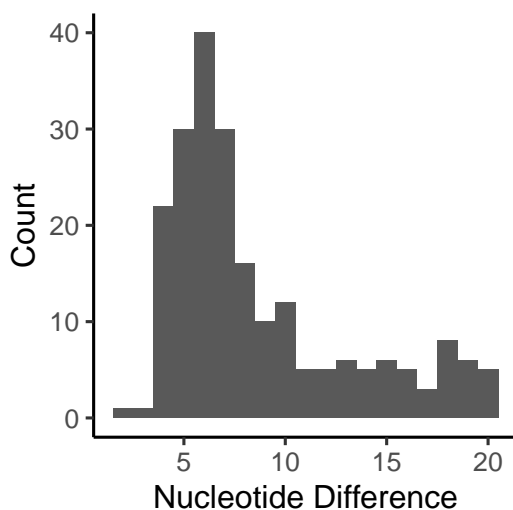
IGHV4/OR15-8*01

12 sequences assigned
No exact matches.



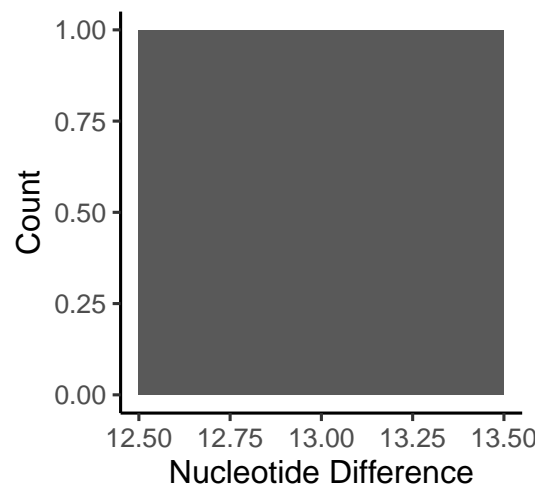
IGHV5-51*07

253 sequences assigned
No exact matches.



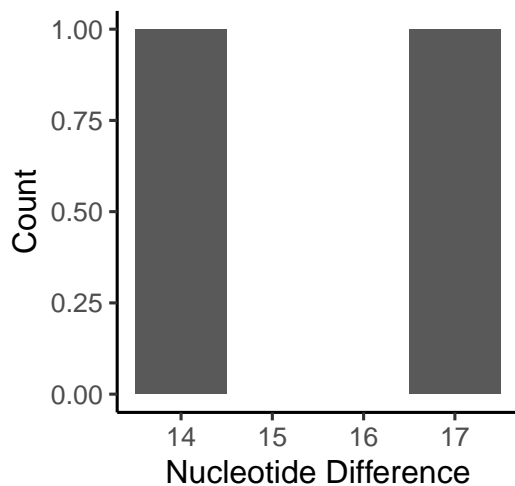
IGHV7-4-1*01

1 sequences assigned
No exact matches.



IGHV4/OR15-8*02

24 sequences assigned
No exact matches.



IGHV5-51*01_03

269 sequences assigned
5 (1.9%) exact matches, in which:
5 unique CDR3
2 unique J

