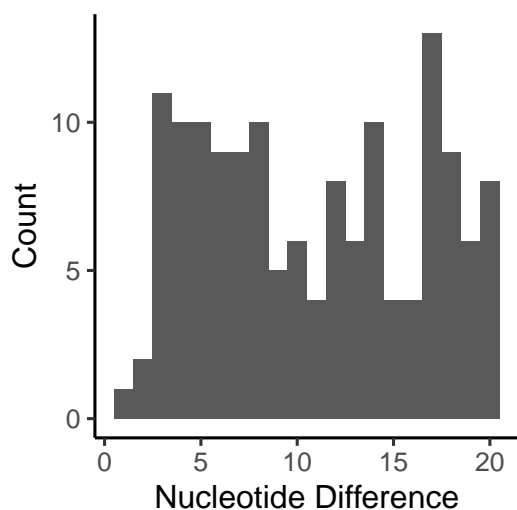


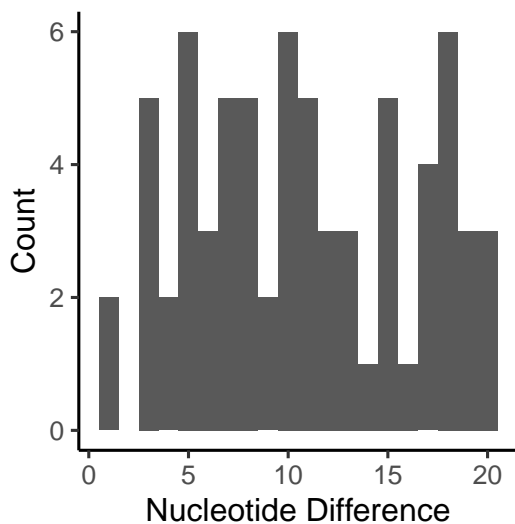
IGHV1-2*02

191 sequences assigned
No exact matches.



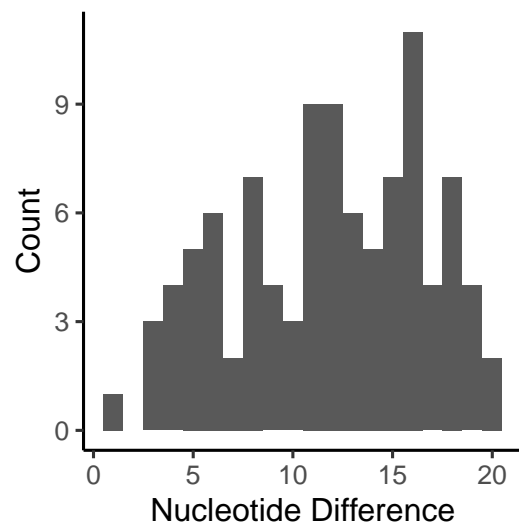
IGHV1-8*01

79 sequences assigned
No exact matches.



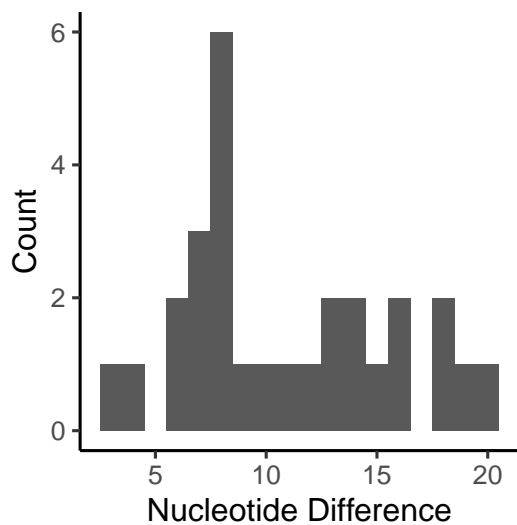
IGHV1-46*01

125 sequences assigned
No exact matches.



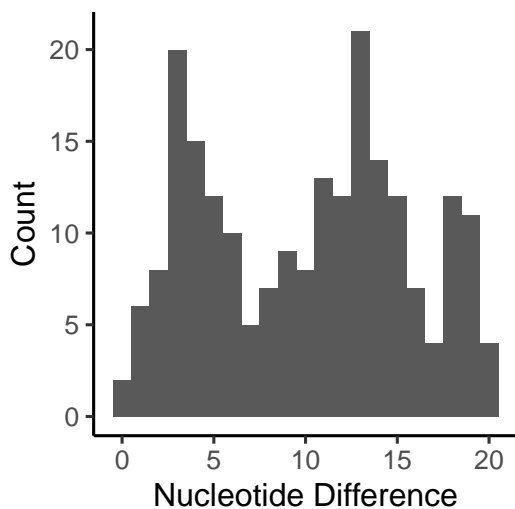
IGHV1-3*03

36 sequences assigned
No exact matches.



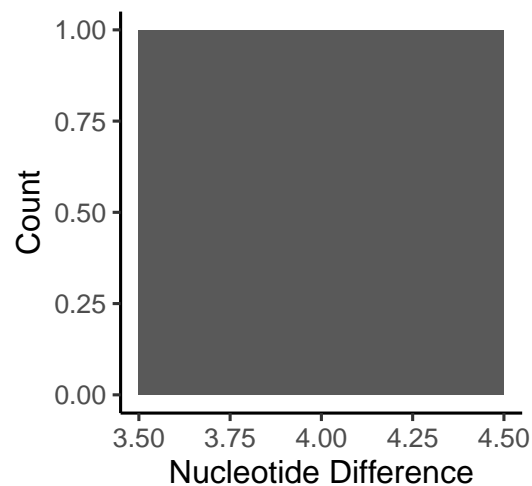
IGHV1-18*01

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



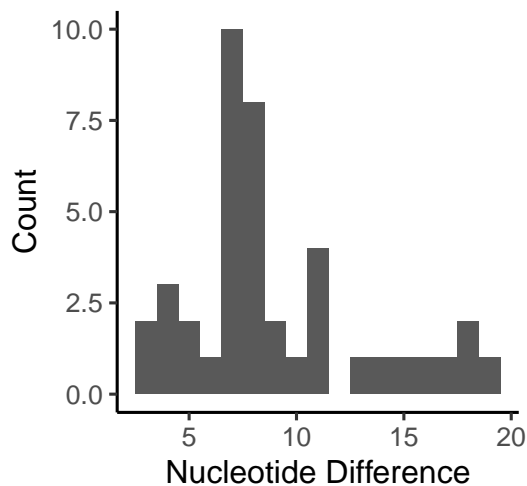
IGHV1-58*02

1 sequences assigned
No exact matches.



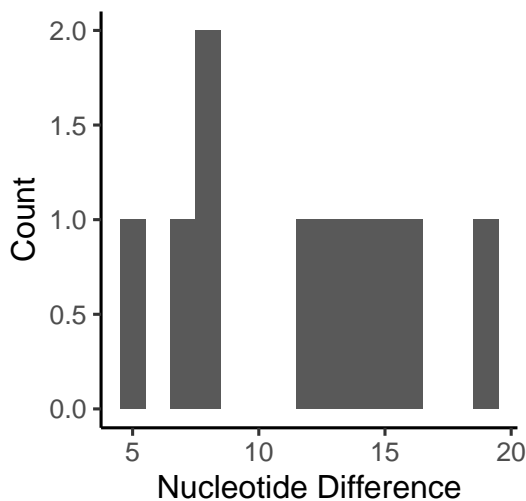
IGHV1-3*01_05

47 sequences assigned
No exact matches.



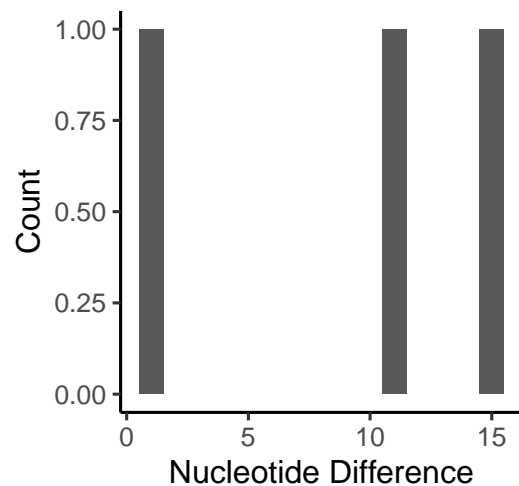
IGHV1-24*01

16 sequences assigned
No exact matches.



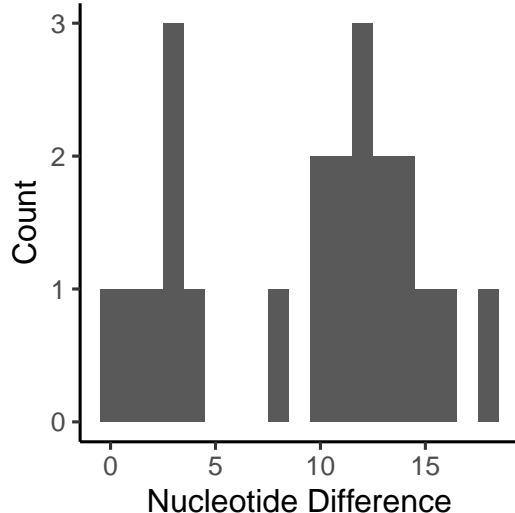
IGHV1-69-2*01

4 sequences assigned
No exact matches.



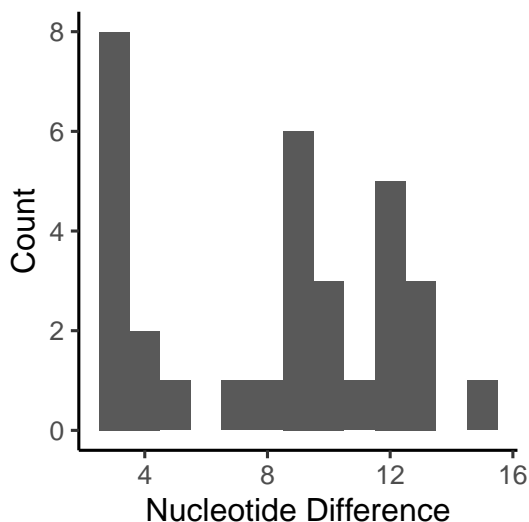
IGHV1-69*05

30 sequences assigned
1 (3.3%) exact matches, in which:
1 unique CDR3
1 unique J



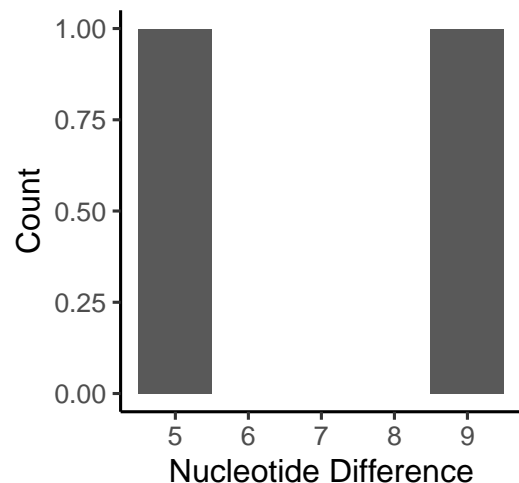
IGHV2-5*01

32 sequences assigned
No exact matches.



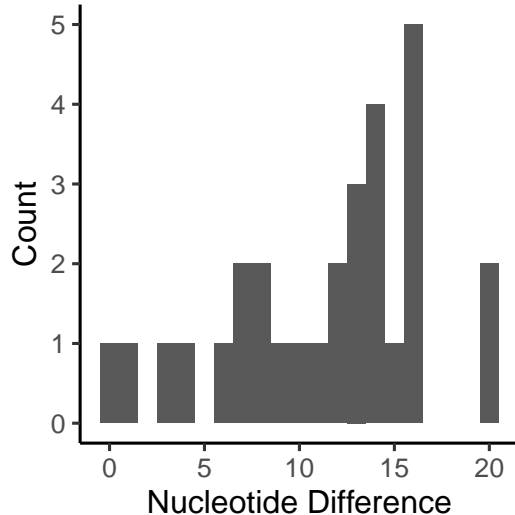
IGHV2-70*20

3 sequences assigned
No exact matches.



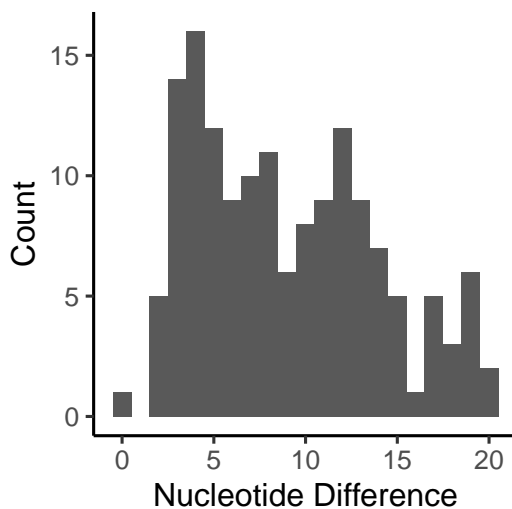
IGHV1-69*01_12_13

44 sequences assigned
1 (2.3%) exact matches, in which:
1 unique CDR3
1 unique J



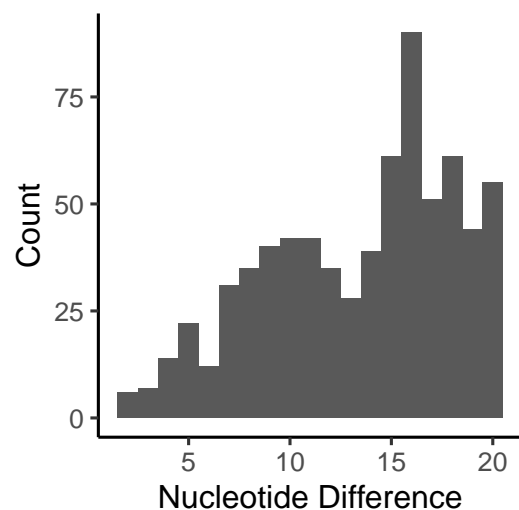
IGHV2-5*02

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



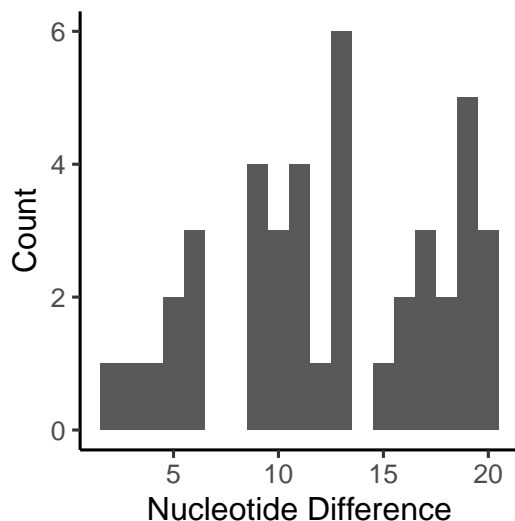
IGHV3-7*01

801 sequences assigned
No exact matches.



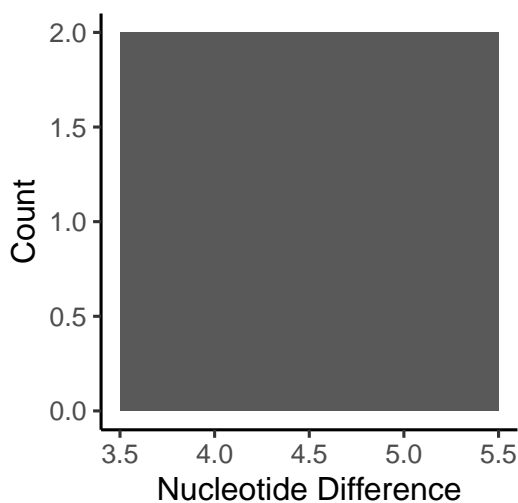
IGHV1-69*15_18

82 sequences assigned
No exact matches.



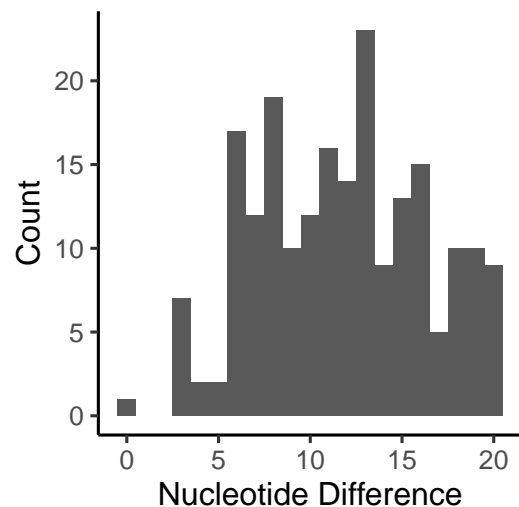
IGHV2-26*01

4 sequences assigned
No exact matches.



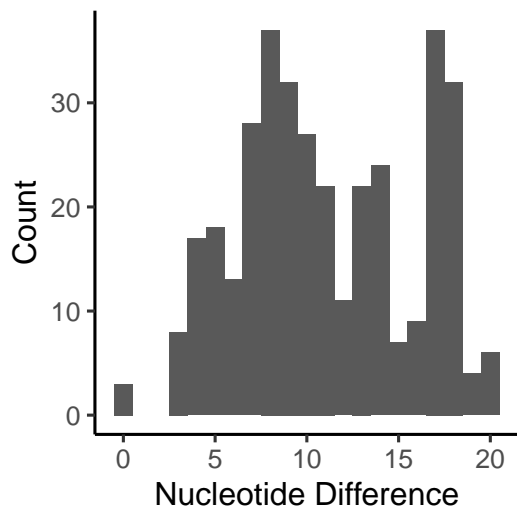
IGHV3-7*03

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



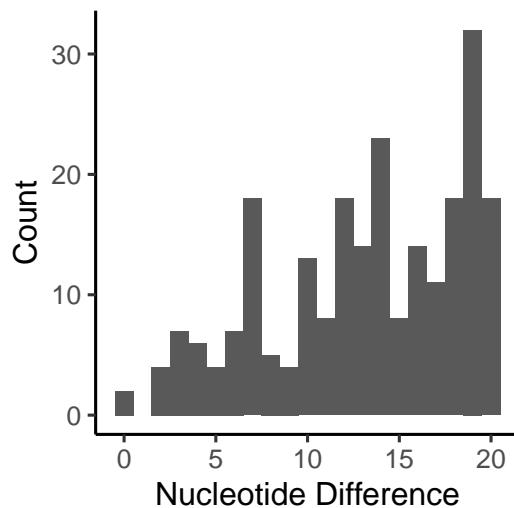
IGHV3-9*01

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



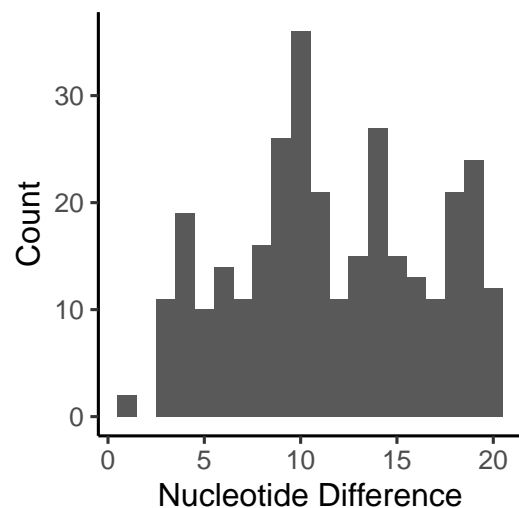
IGHV3-15*01_02

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



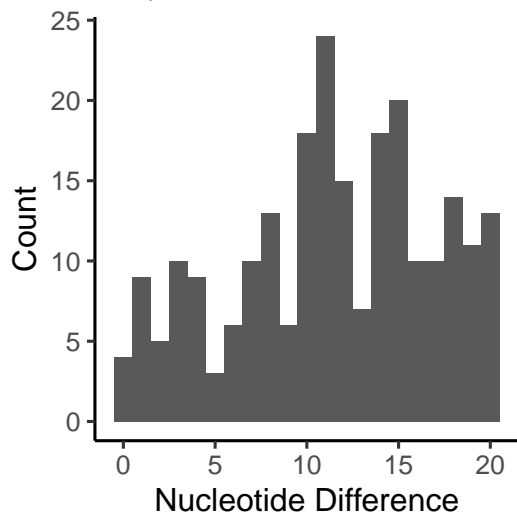
IGHV3-23*03

379 sequences assigned
No exact matches.



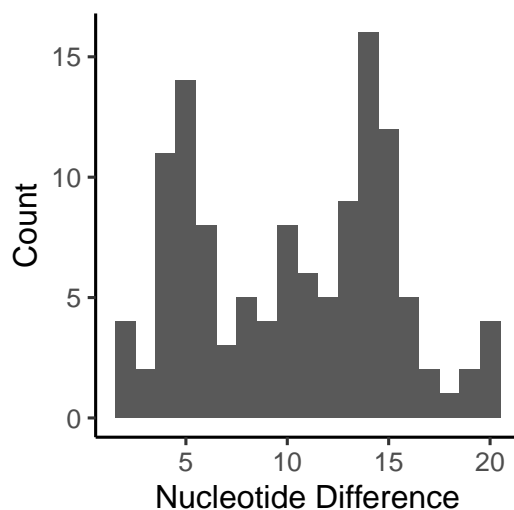
IGHV3-11*01

262 sequences assigned
4 (1.5%) exact matches, in which:
2 unique CDR3
2 unique J



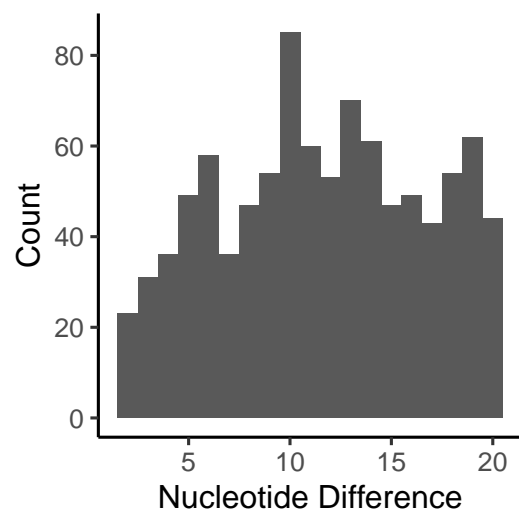
IGHV3-20*03_04

133 sequences assigned
No exact matches.



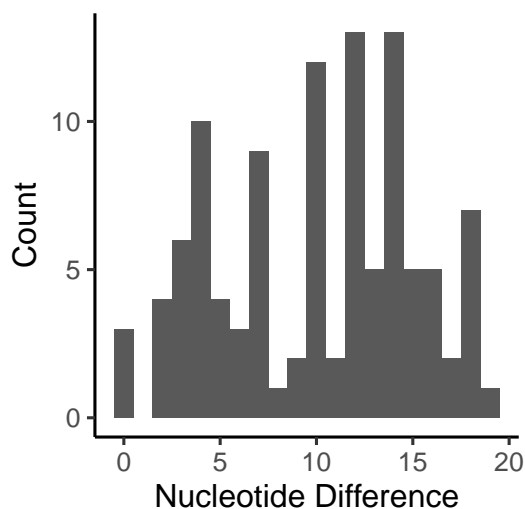
IGHV3-23*01_04

1185 sequences assigned
No exact matches.



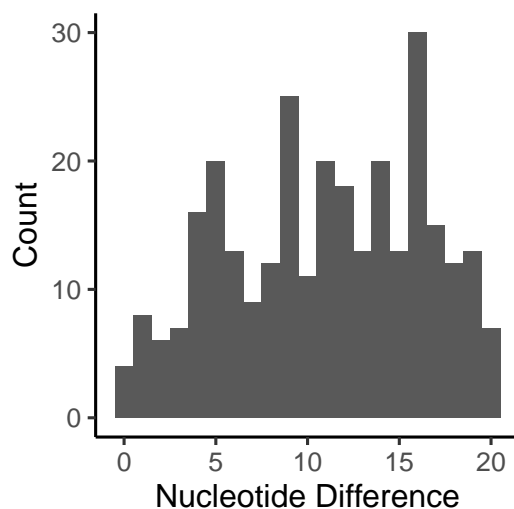
IGHV3-11*04

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



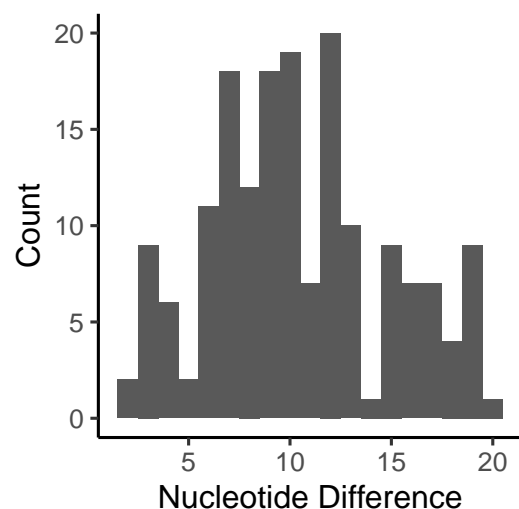
IGHV3-21*03

329 sequences assigned
4 (1.2%) exact matches, in which:
1 unique CDR3
1 unique J



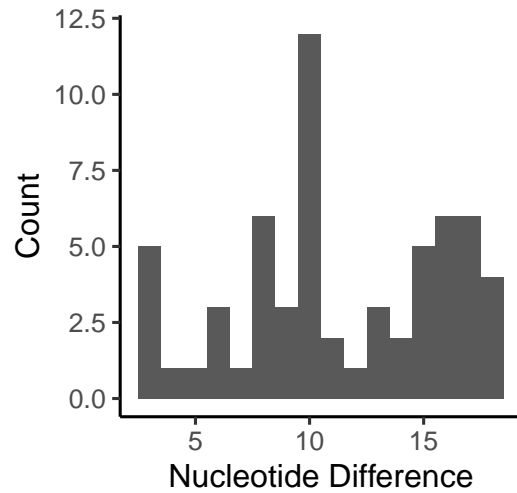
IGHV3-33*01

192 sequences assigned
No exact matches.



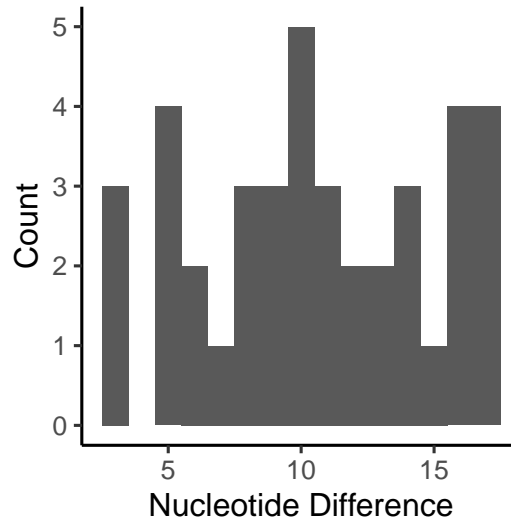
IGHV3-33*06

68 sequences assigned
No exact matches.



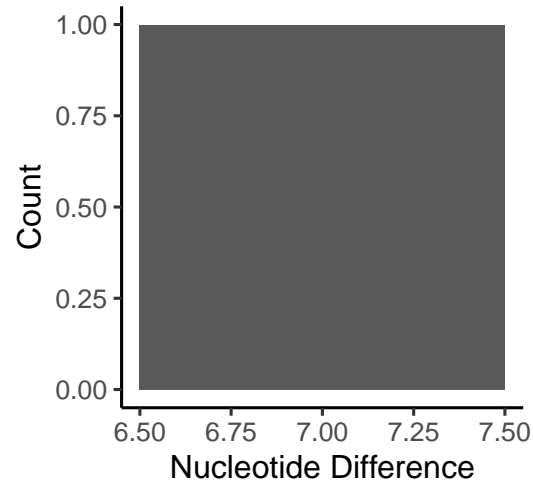
IGHV3-49*04

51 sequences assigned
No exact matches.



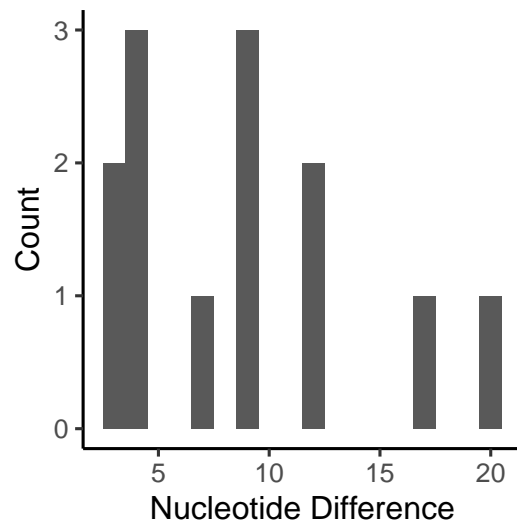
IGHV3-53*05

9 sequences assigned
No exact matches.



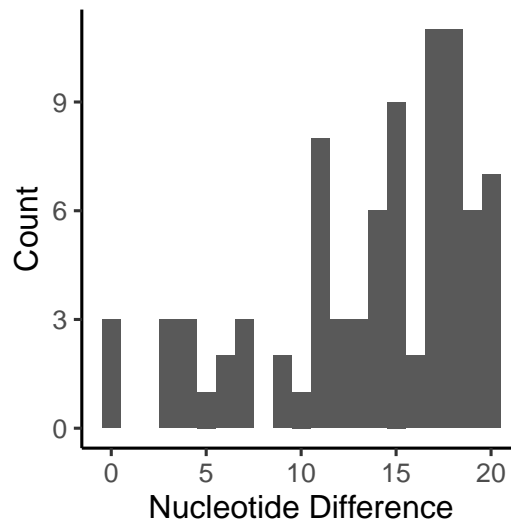
IGHV3-43*01

23 sequences assigned
No exact matches.



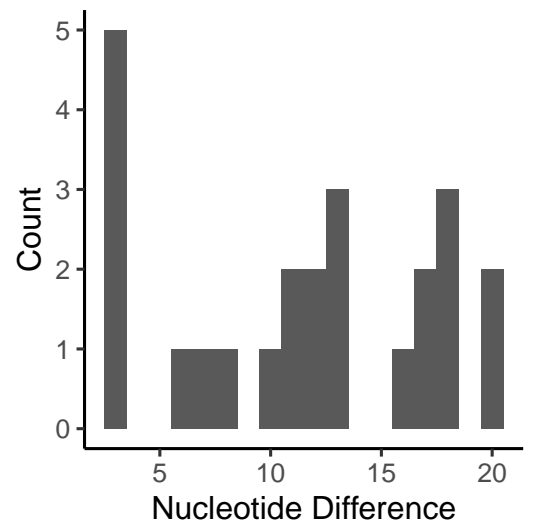
IGHV3-49*03_05

109 sequences assigned
3 (2.8%) exact matches, in which:
1 unique CDR3
1 unique J



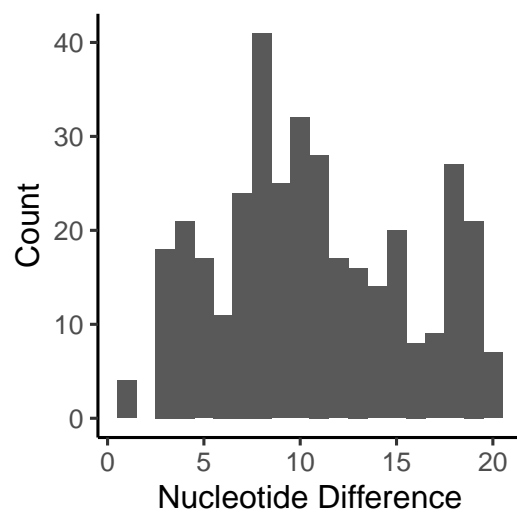
IGHV3-53*01_02

30 sequences assigned
No exact matches.



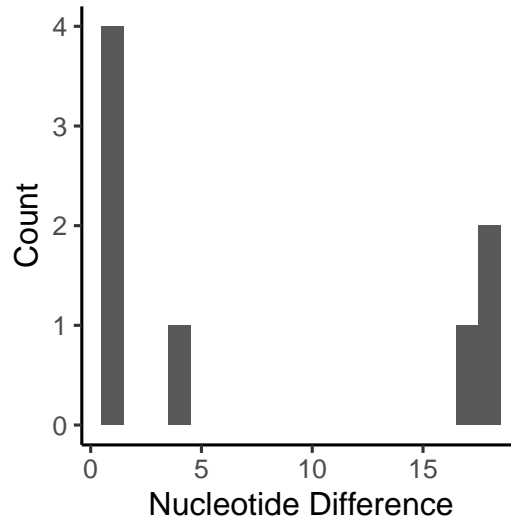
IGHV3-48*04

453 sequences assigned
No exact matches.



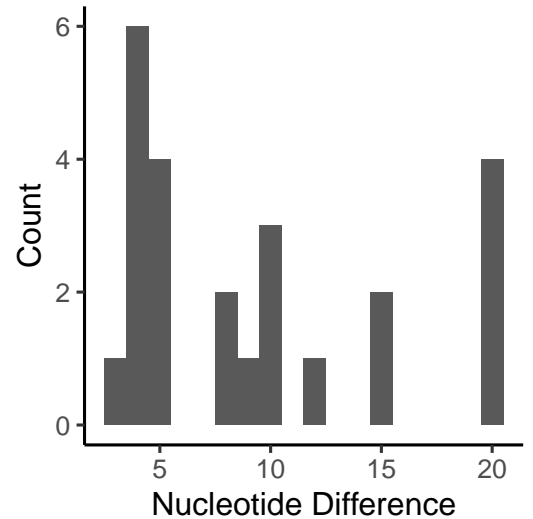
IGHV3-53*04

8 sequences assigned
No exact matches.



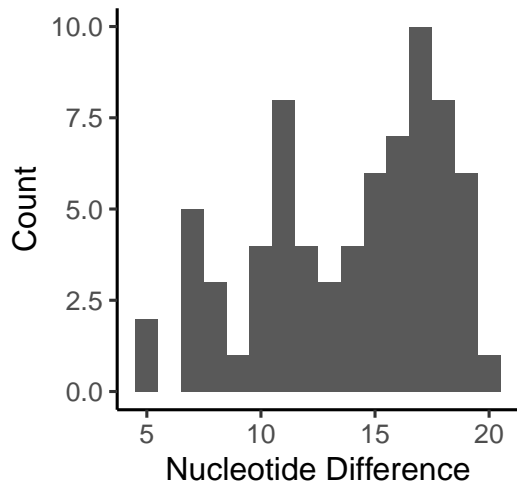
IGHV3-64*01

25 sequences assigned
No exact matches.



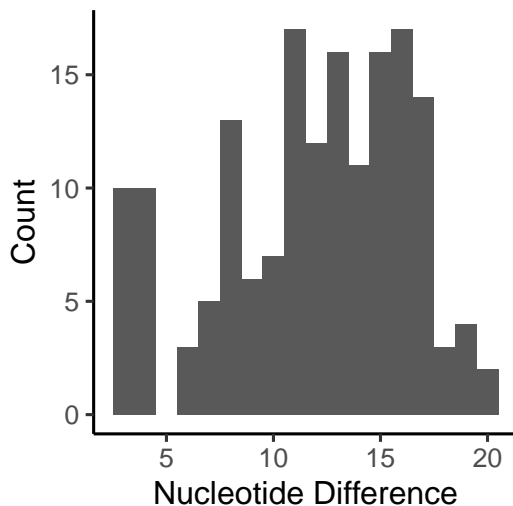
IGHV3-64*02_07

93 sequences assigned
No exact matches.



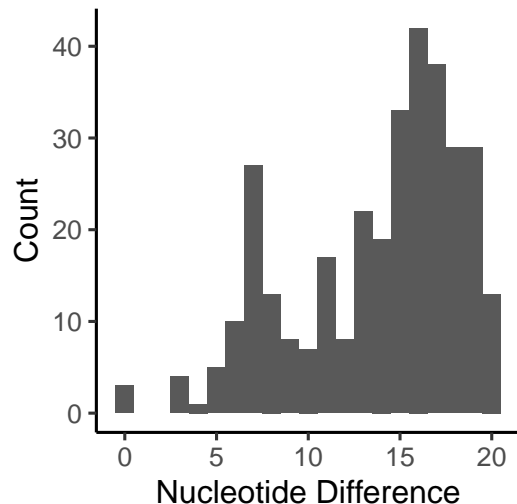
IGHV3-72*01

195 sequences assigned
No exact matches.



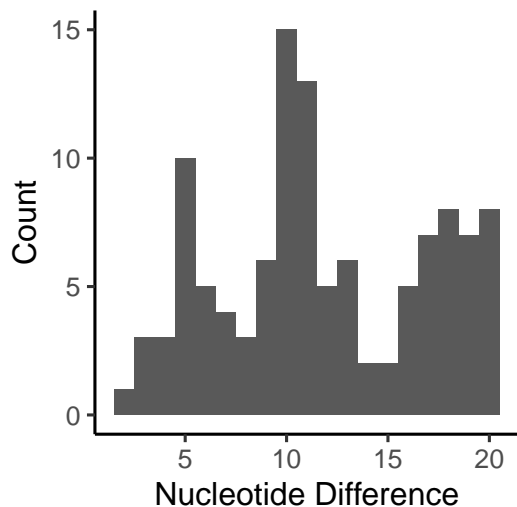
IGHV3-74*01_02

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



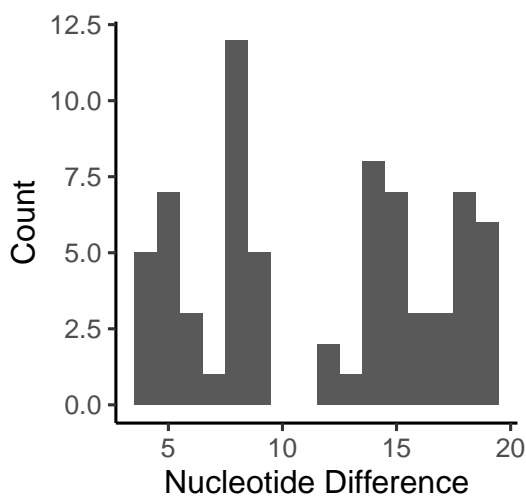
IGHV3-66*02

154 sequences assigned
No exact matches.



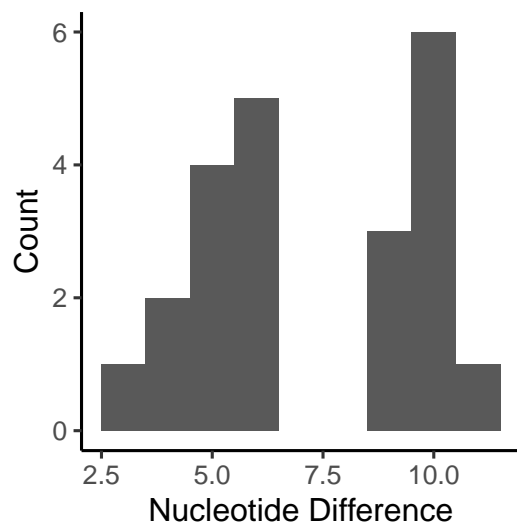
IGHV3-73*01_02

75 sequences assigned
No exact matches.



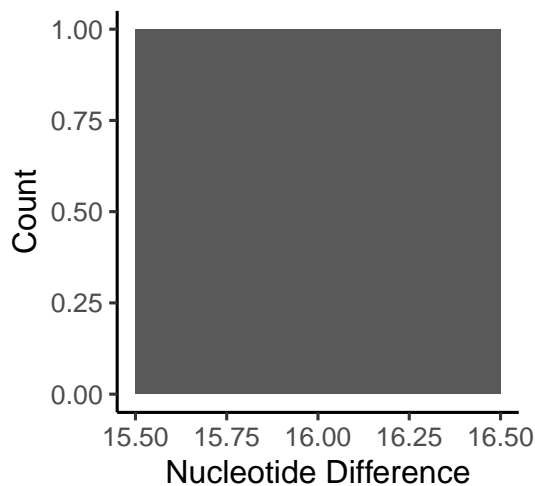
IGHV3-43D*03

24 sequences assigned
No exact matches.



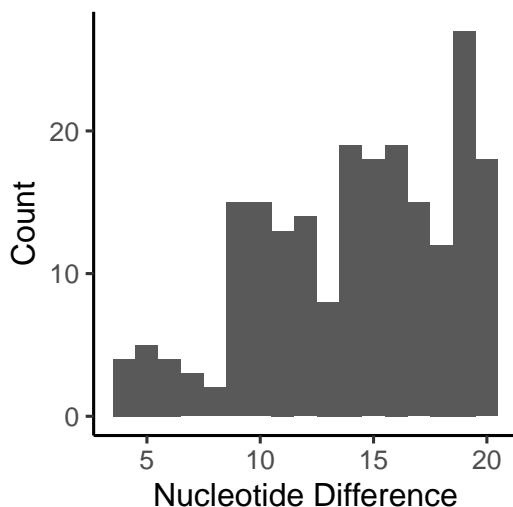
IGHV3-69-1*01

4 sequences assigned
No exact matches.



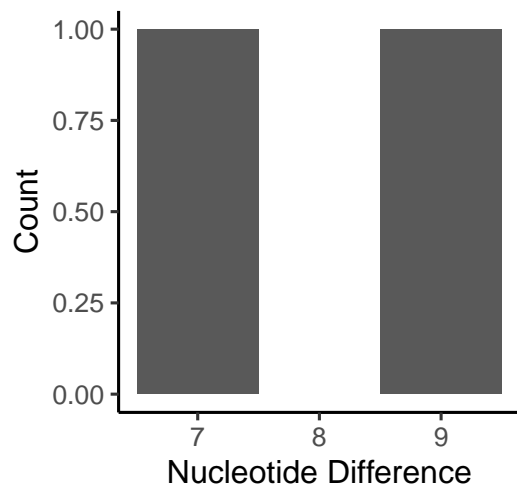
IGHV3-74*03

283 sequences assigned
No exact matches.



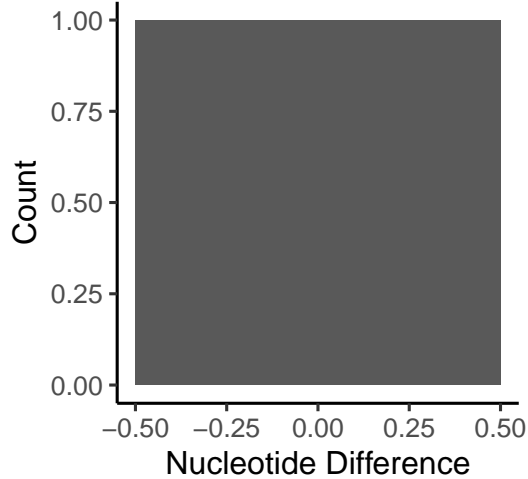
IGHV3-43D*04

2 sequences assigned
No exact matches.



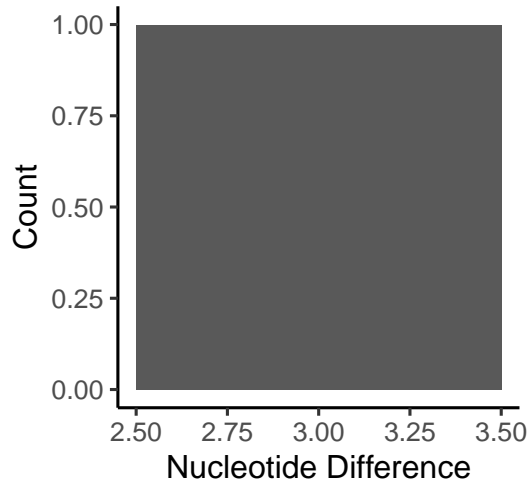
IGHV3-64D*09

1 sequences assigned
1 (100%) exact matches, in which:
1 unique CDR3
1 unique J



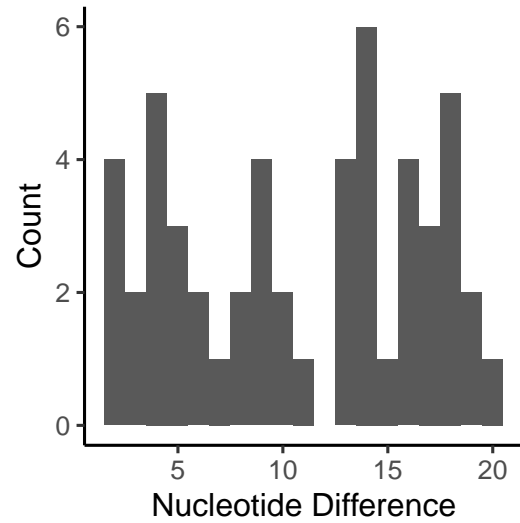
IGHV4-28*03

1 sequences assigned
No exact matches.



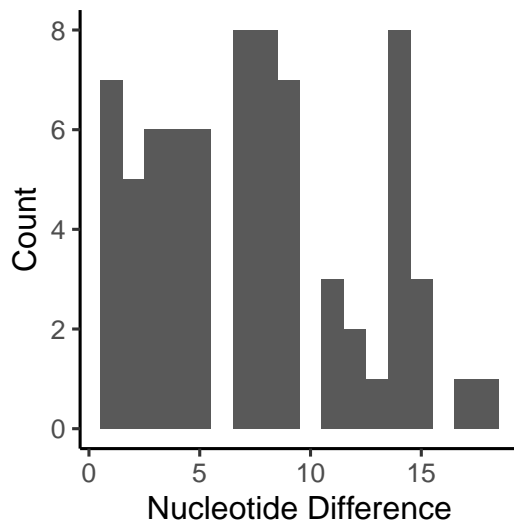
IGHV4-30-4*08

68 sequences assigned
No exact matches.



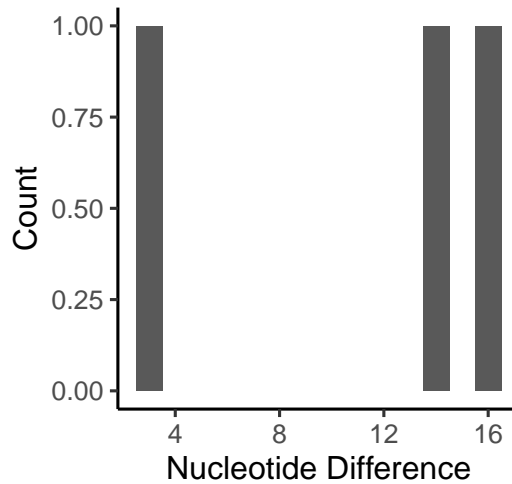
IGHV4-4*09

80 sequences assigned
No exact matches.



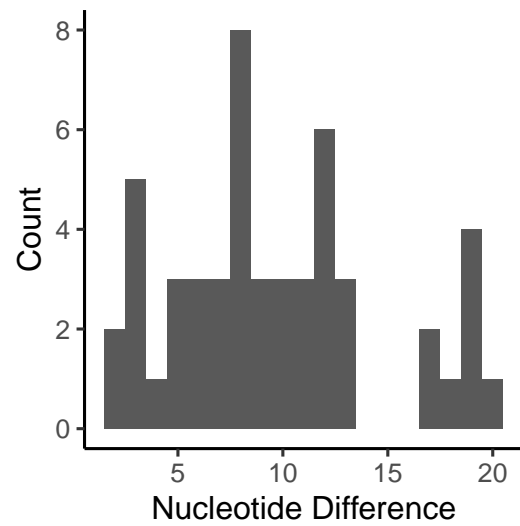
IGHV4-28*01_07

16 sequences assigned
No exact matches.



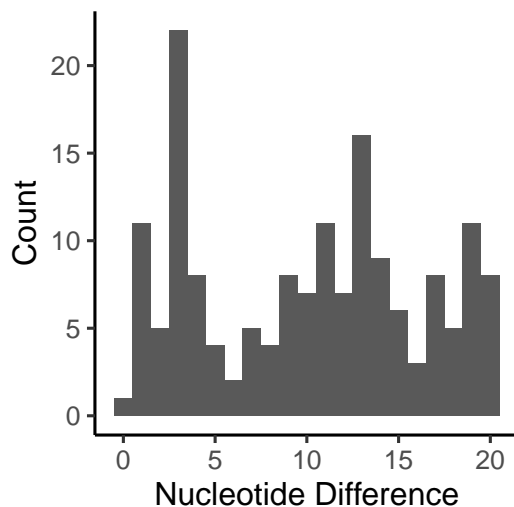
IGHV4-31*02

62 sequences assigned
No exact matches.



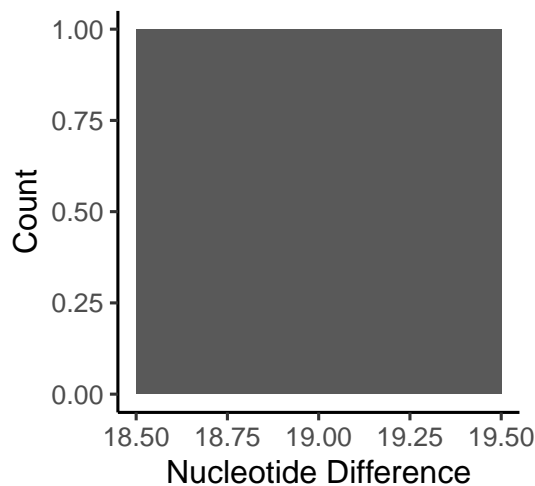
IGHV4-4*02_03

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



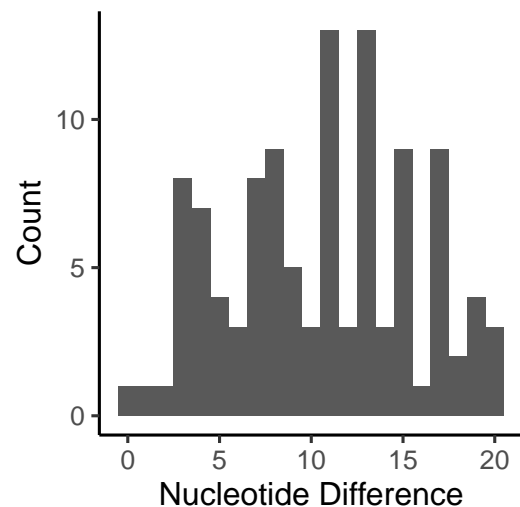
IGHV4-28*02_05

1 sequences assigned
No exact matches.



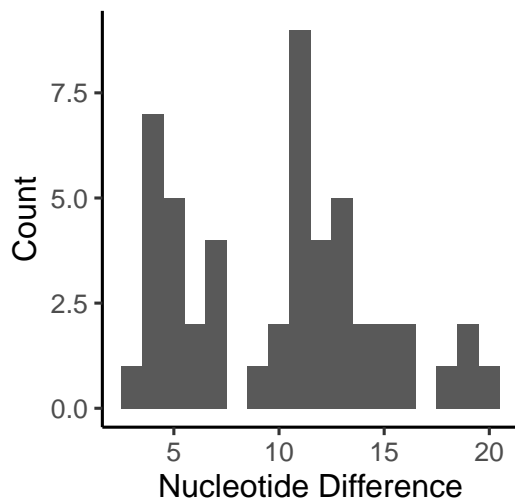
IGHV4-34*01_02

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



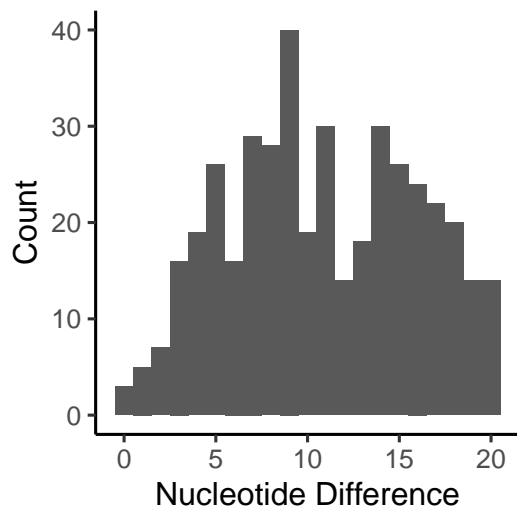
IGHV4-38-2*01

59 sequences assigned
No exact matches.



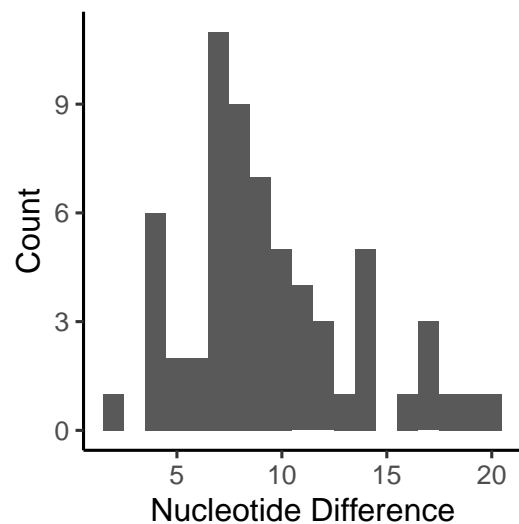
IGHV4-59*11

482 sequences assigned
3 (0.6%) exact matches, in which:
2 unique CDR3
1 unique J



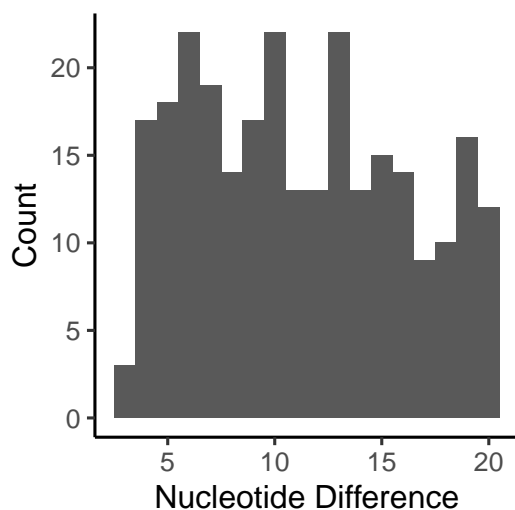
IGHV5-51*07

65 sequences assigned
No exact matches.



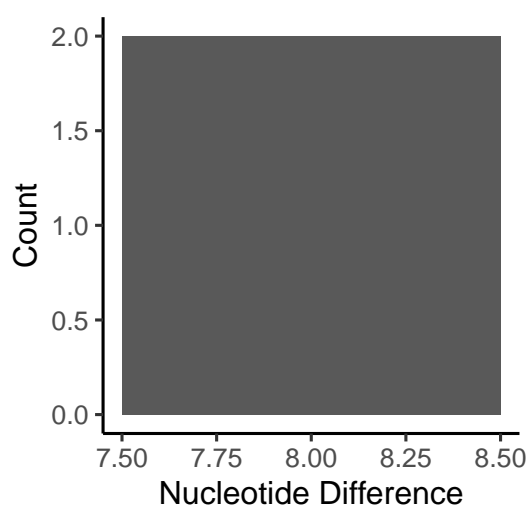
IGHV4-38-2*02

300 sequences assigned
No exact matches.



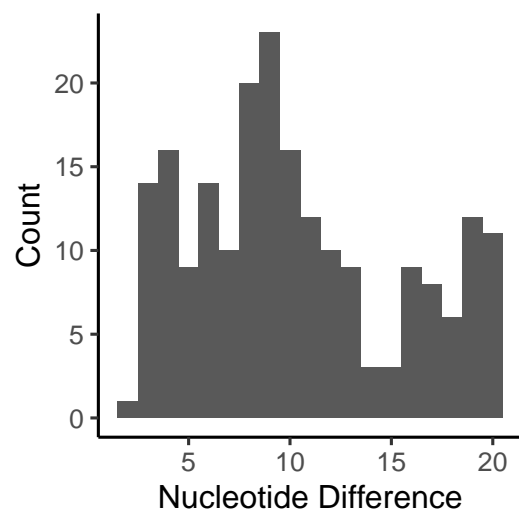
IGHV4-61*03

2 sequences assigned
No exact matches.



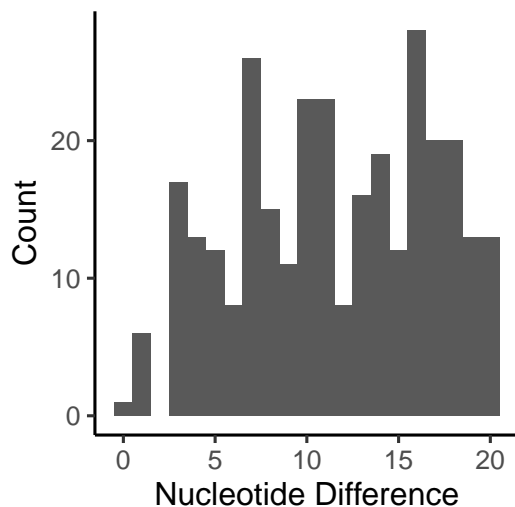
IGHV5-51*01_03

257 sequences assigned
No exact matches.



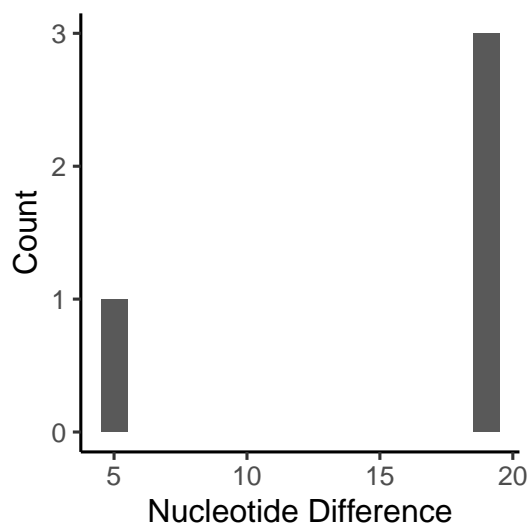
IGHV4-39*07

462 sequences assigned
1 (0.2%) exact matches, in which:
1 unique CDR3
1 unique J



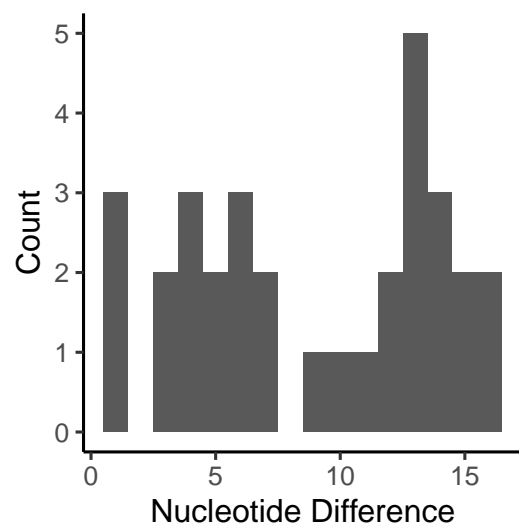
IGHV4-61*09

4 sequences assigned
No exact matches.



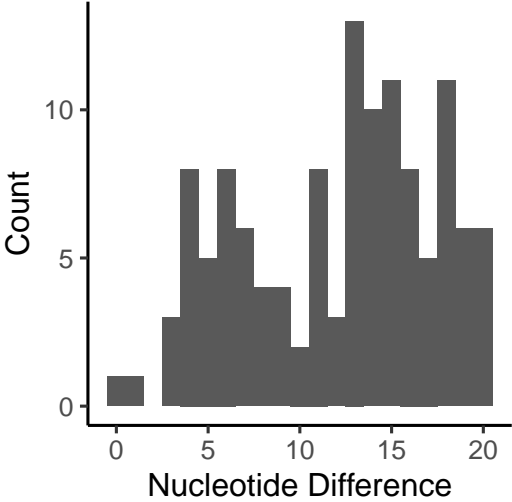
IGHV6-1*01_02

34 sequences assigned
No exact matches.

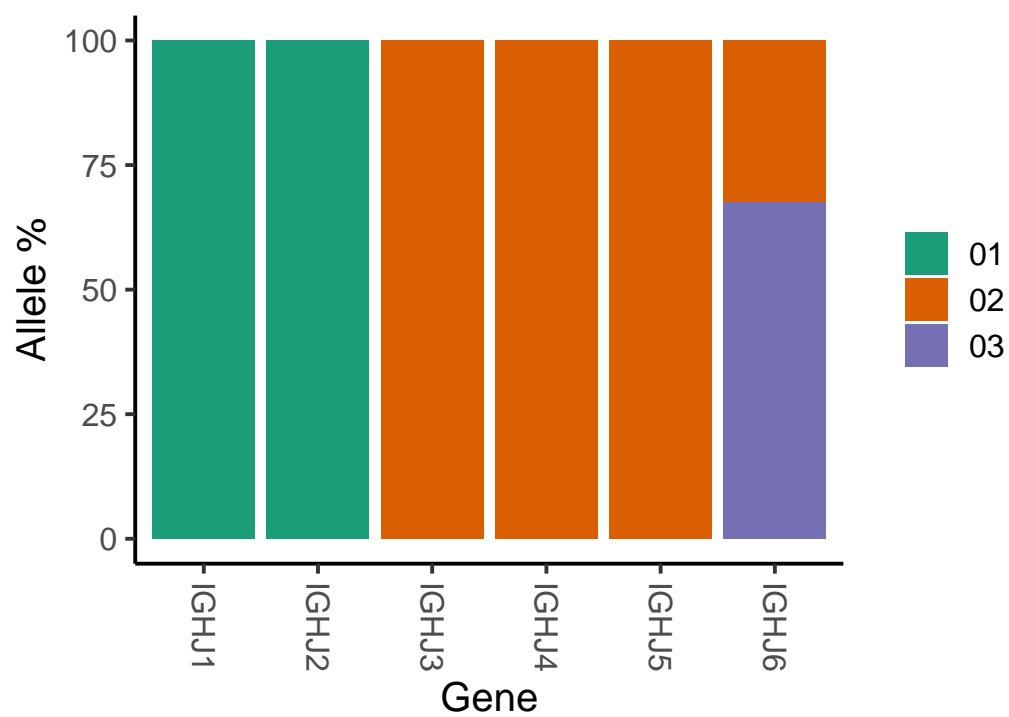


IGHV7-4-1*02

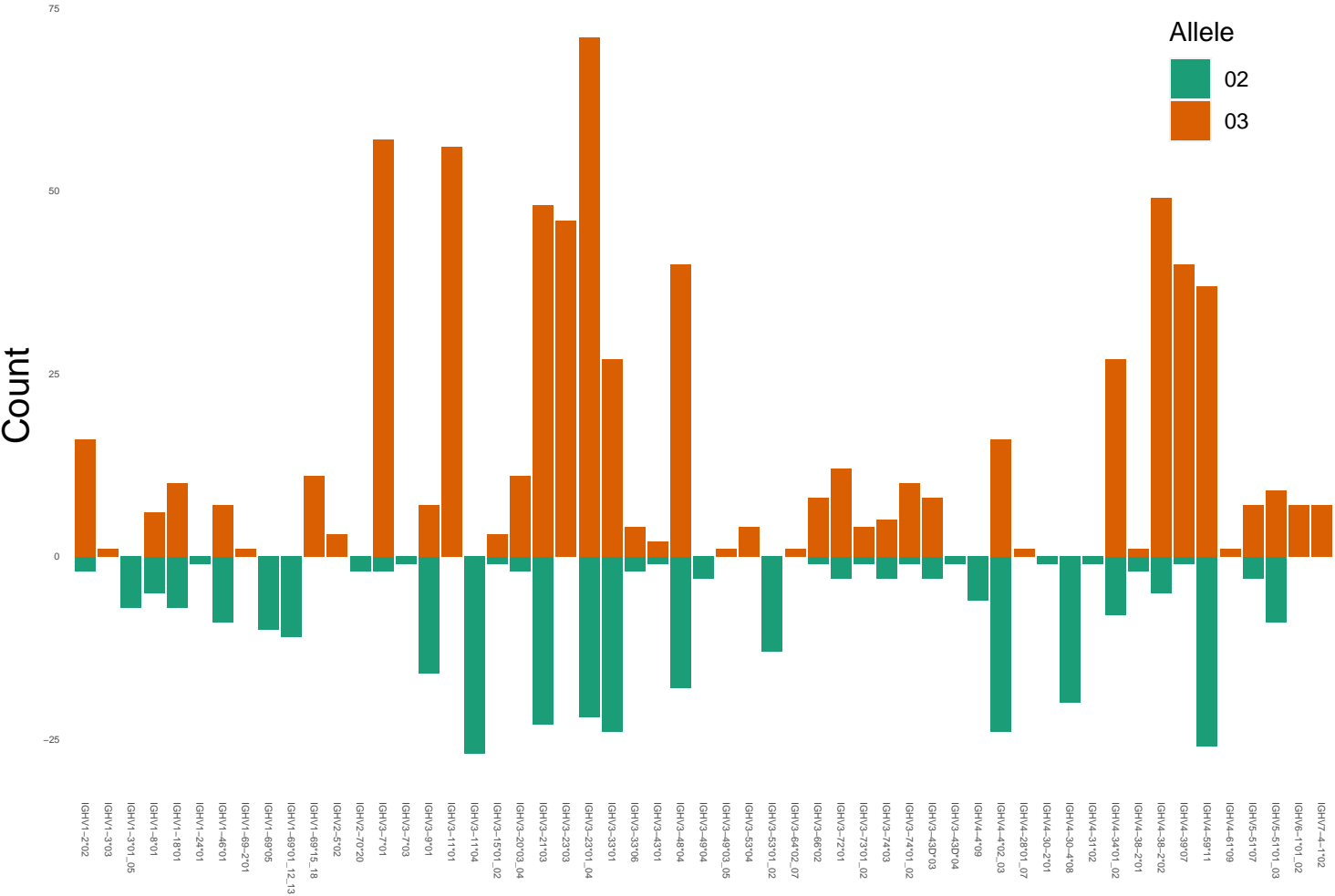
151 sequences assigned
1 (0.7%) exact matches, in which:
1 unique CDR3
1 unique J



Allele Usage



Sequence Count by IGHJ6 allele usage



[illegible]