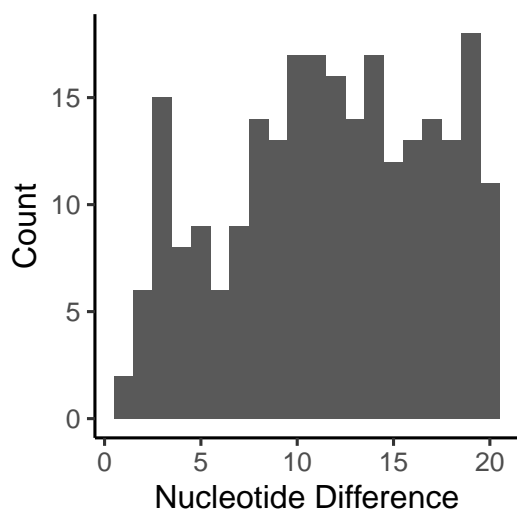


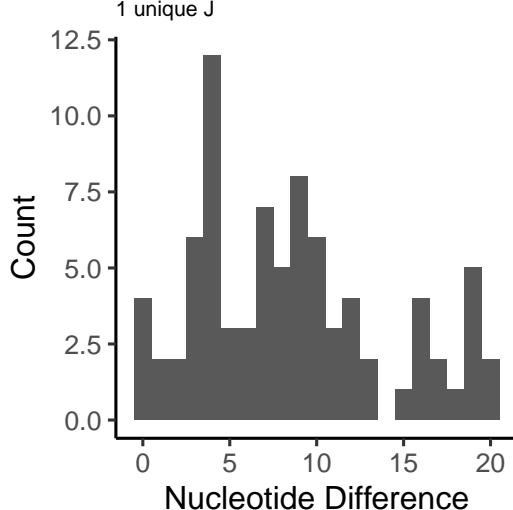
IGHV1-2*02

317 sequences assigned
No exact matches.



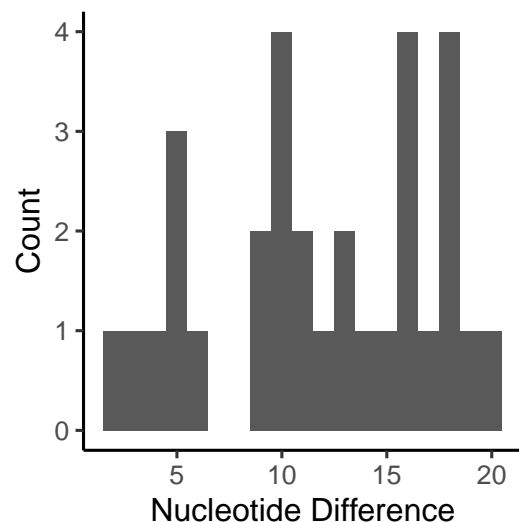
IGHV1-8*01

102 sequences assigned
4 (3.9%) exact matches, in which:
2 unique CDR3
1 unique J



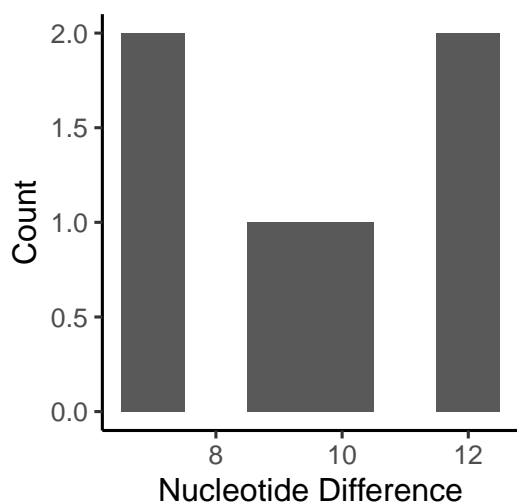
IGHV1-24*01

48 sequences assigned
No exact matches.



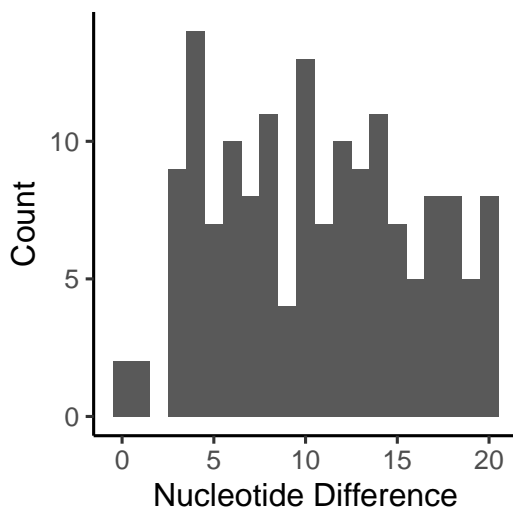
IGHV1-3*04

8 sequences assigned
No exact matches.



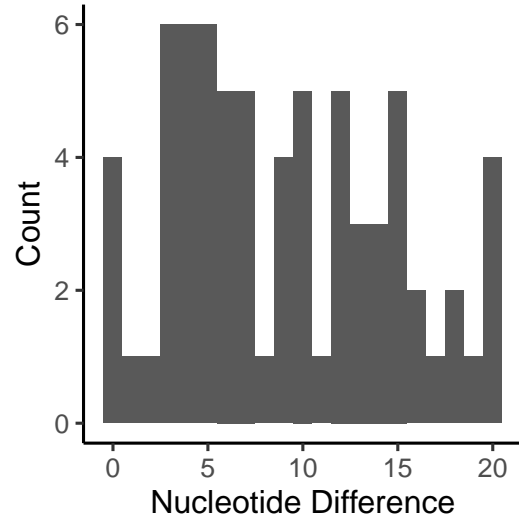
IGHV1-18*01

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



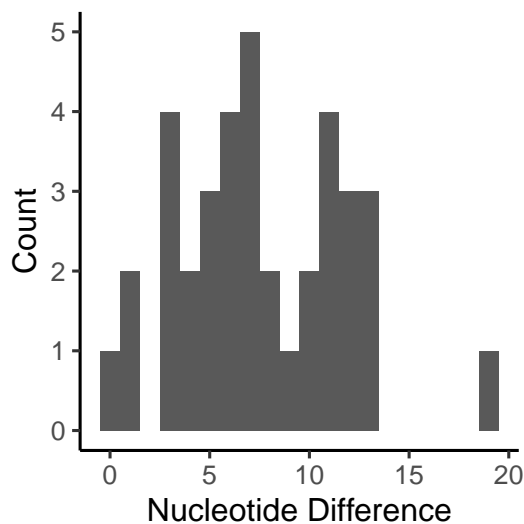
IGHV1-46*01

96 sequences assigned
4 (4.2%) exact matches, in which:
4 unique CDR3
3 unique J



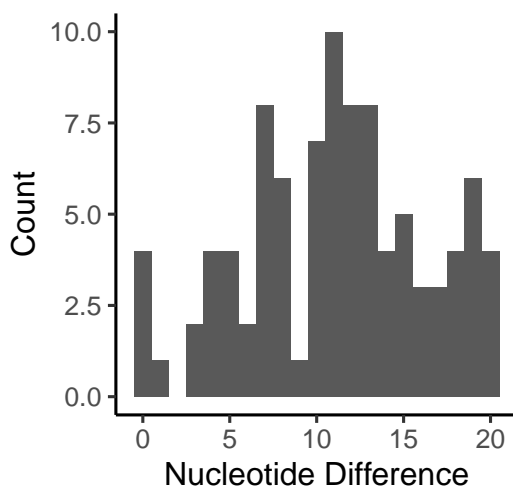
IGHV1-3*01_05

54 sequences assigned
1 (1.9%) exact matches, in which:
1 unique CDR3
1 unique J



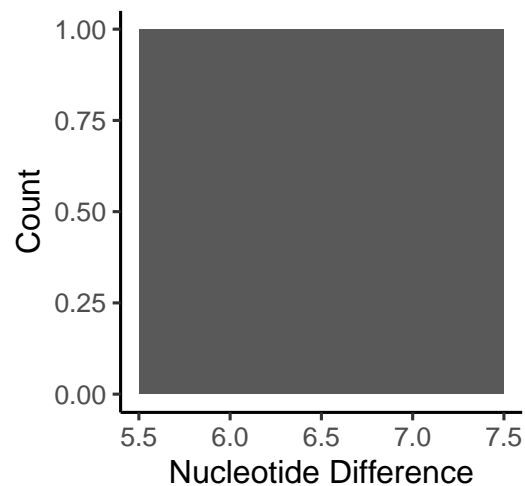
IGHV1-18*04

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



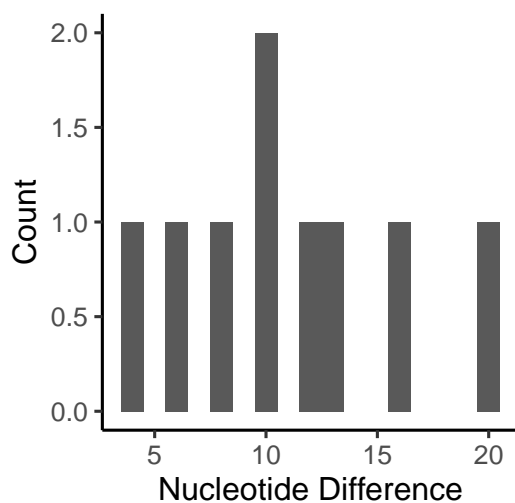
IGHV1-58*02

5 sequences assigned
No exact matches.



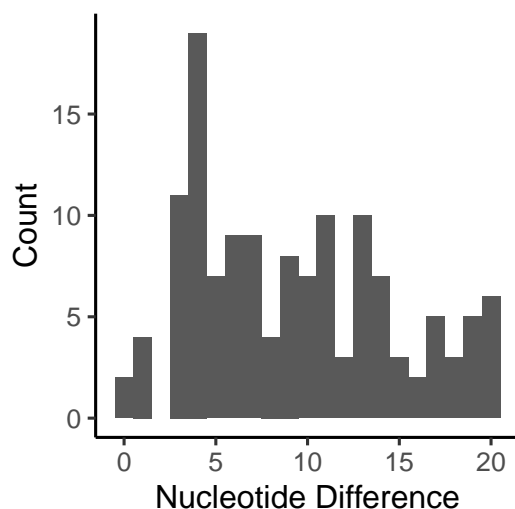
IGHV1-58*01_03

13 sequences assigned
No exact matches.



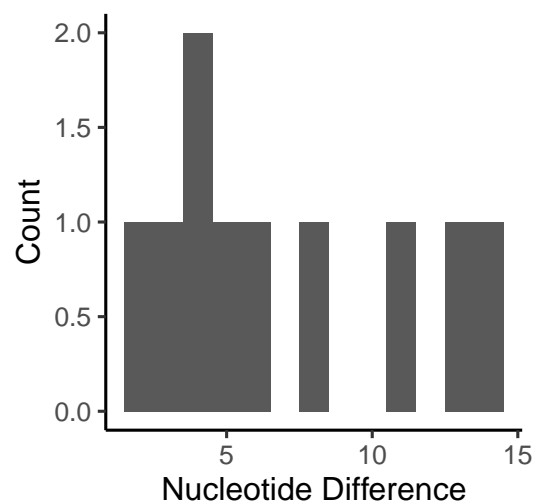
IGHV2-5*01

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



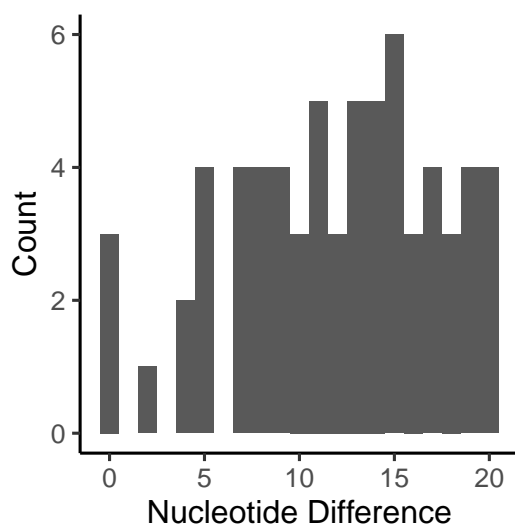
IGHV2-70*01

13 sequences assigned
No exact matches.



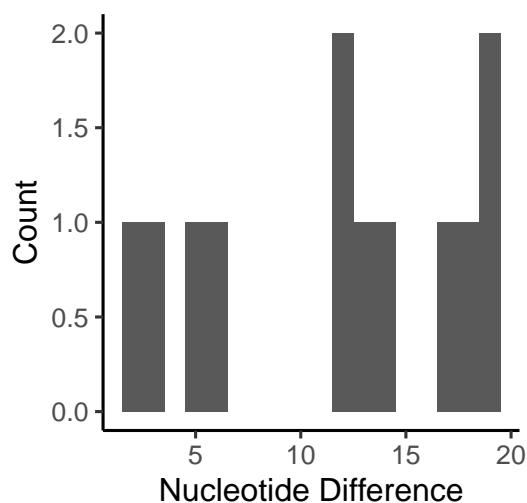
IGHV1-69*01_12_13

118 sequences assigned
3 (2.5%) exact matches, in which:
3 unique CDR3
3 unique J



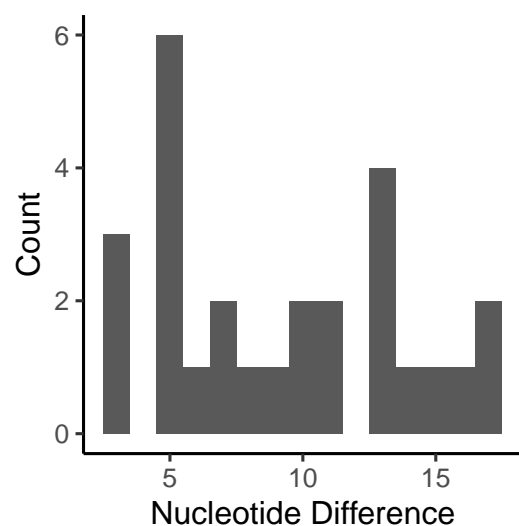
IGHV2-26*01

16 sequences assigned
No exact matches.



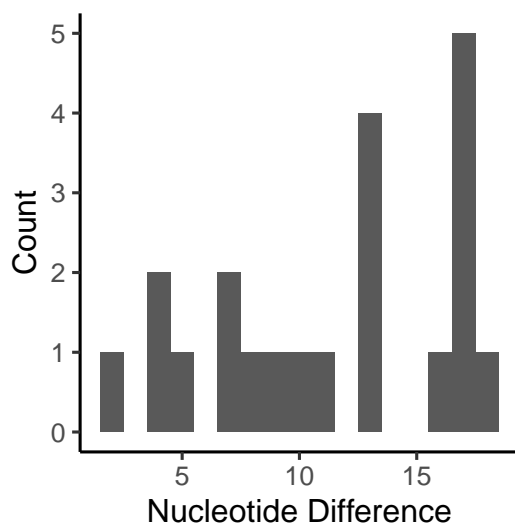
IGHV2-70*11_15

28 sequences assigned
No exact matches.



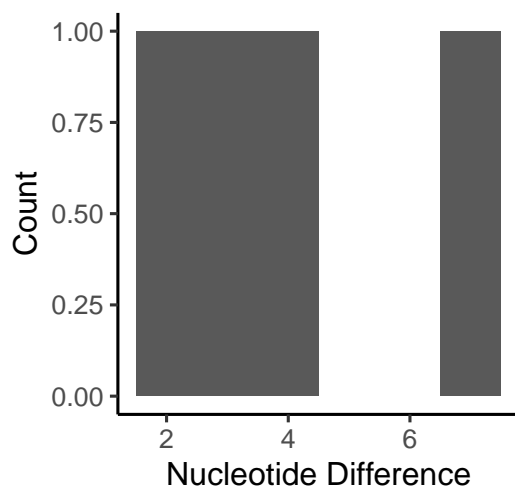
IGHV1-69*04_09

29 sequences assigned
No exact matches.



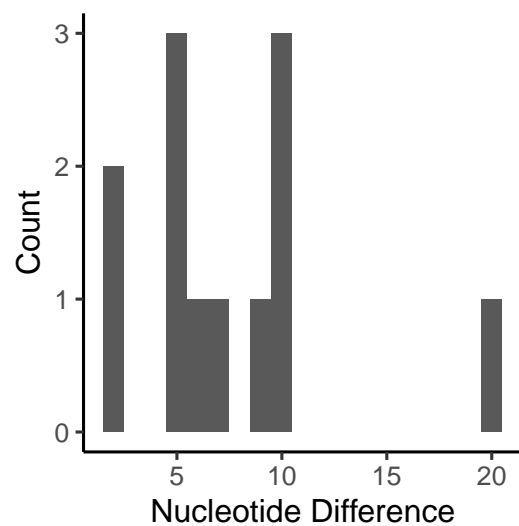
IGHV2-26*04

4 sequences assigned
No exact matches.



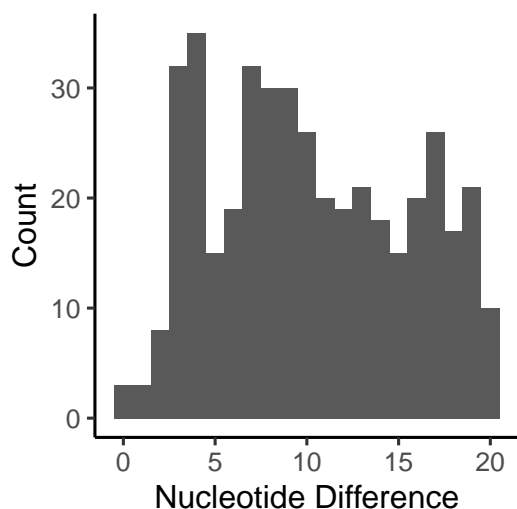
IGHV2-70*16_17

12 sequences assigned
No exact matches.



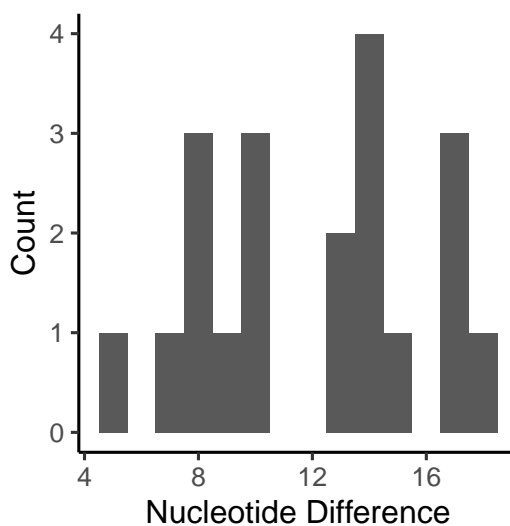
IGHV3-7*01

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



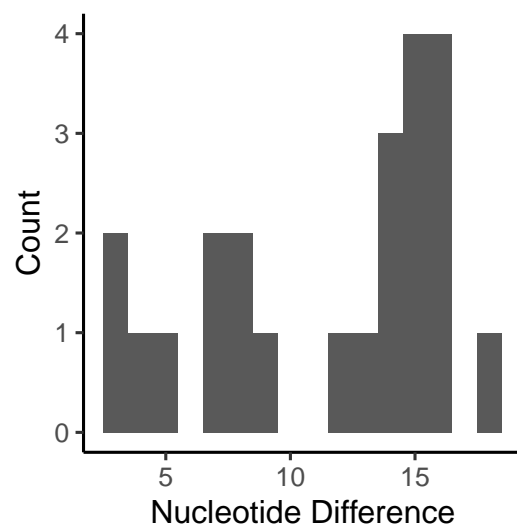
IGHV3-11*06

25 sequences assigned
No exact matches.



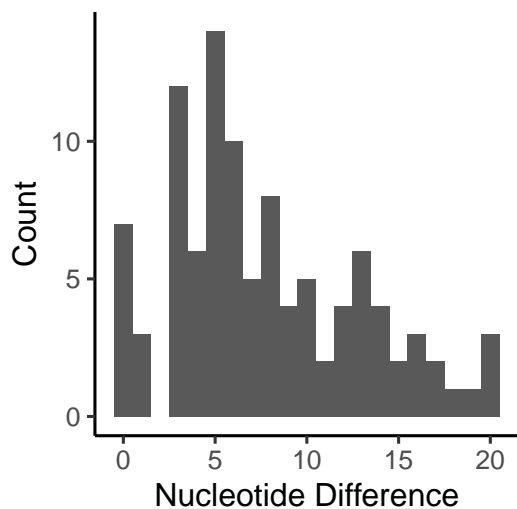
IGHV3-13*04

28 sequences assigned
No exact matches.



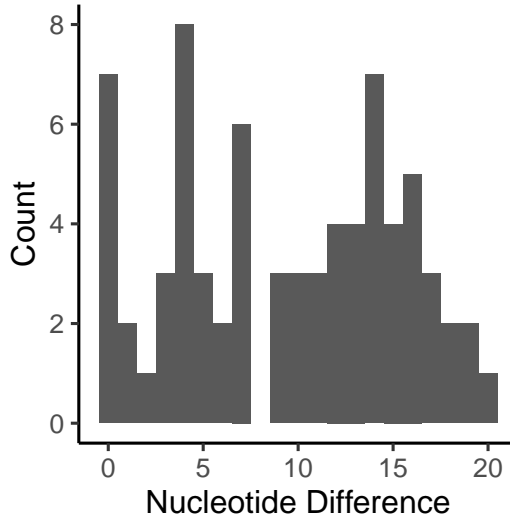
IGHV3-9*01

113 sequences assigned
7 (6.2%) exact matches, in which:
4 unique CDR3
4 unique J



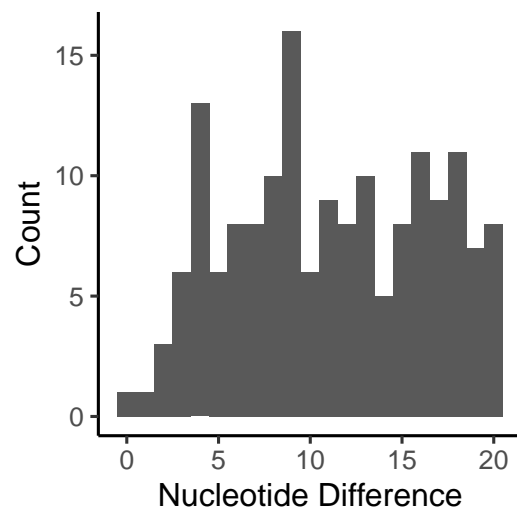
IGHV3-11*03_05

88 sequences assigned
7 (8%) exact matches, in which:
4 unique CDR3
2 unique J



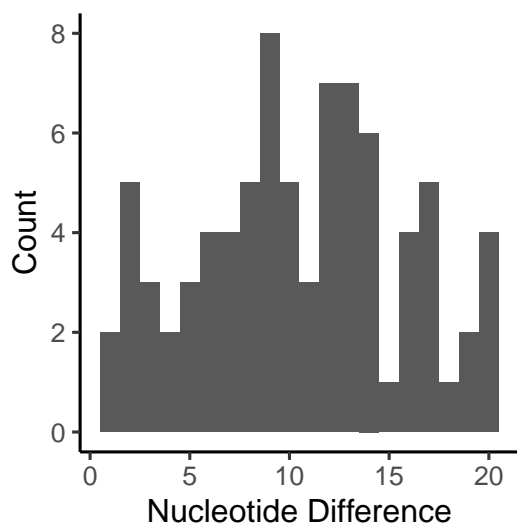
IGHV3-15*01_02

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



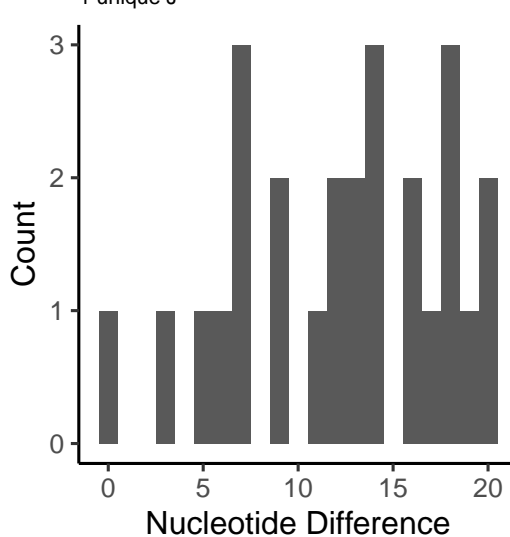
IGHV3-11*01

97 sequences assigned
No exact matches.



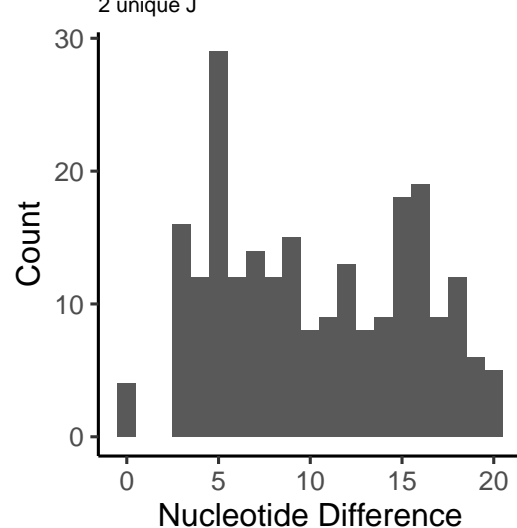
IGHV3-13*01

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



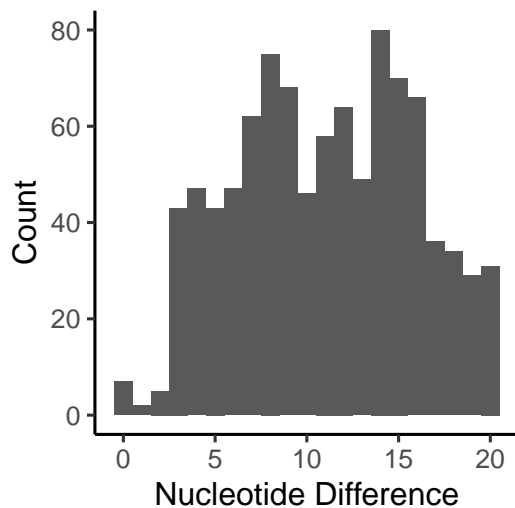
IGHV3-21*01_02

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



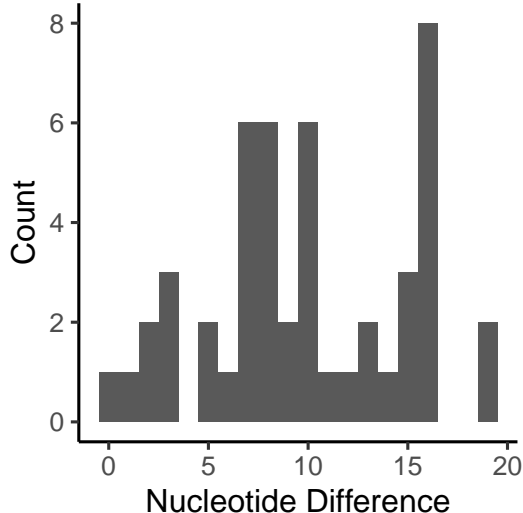
IGHV3-23*01_04

1172 sequences assigned
7 (0.6%) exact matches, in which:
5 unique CDR3
2 unique J



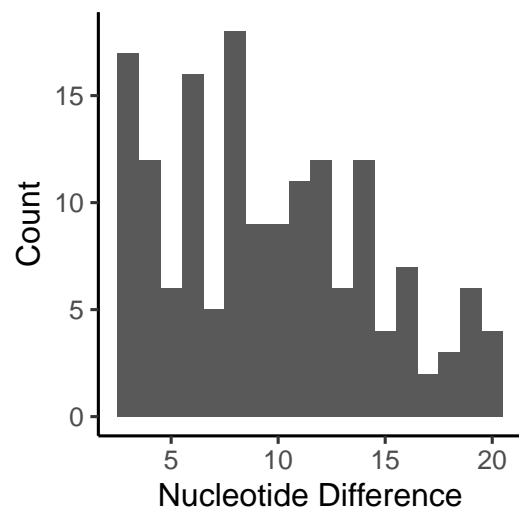
IGHV3-33*01

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



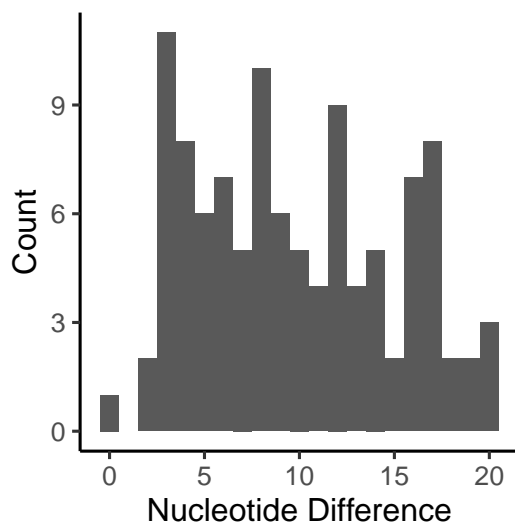
IGHV3-48*02

191 sequences assigned
No exact matches.



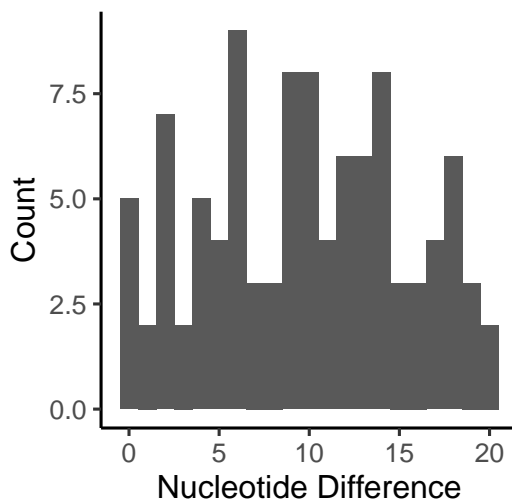
IGHV3-30-3*01

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



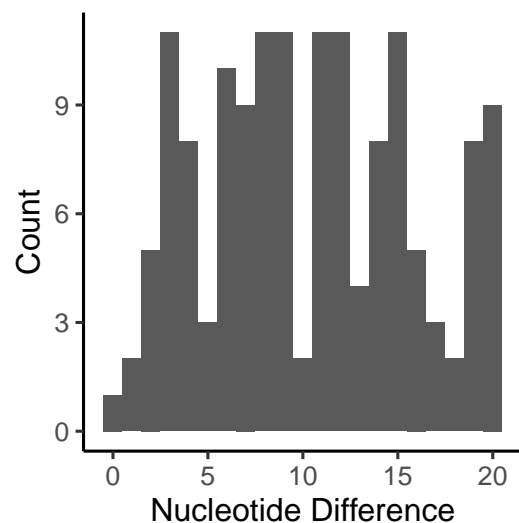
IGHV3-33*08

118 sequences assigned
5 (4.2%) exact matches, in which:
2 unique CDR3
1 unique J



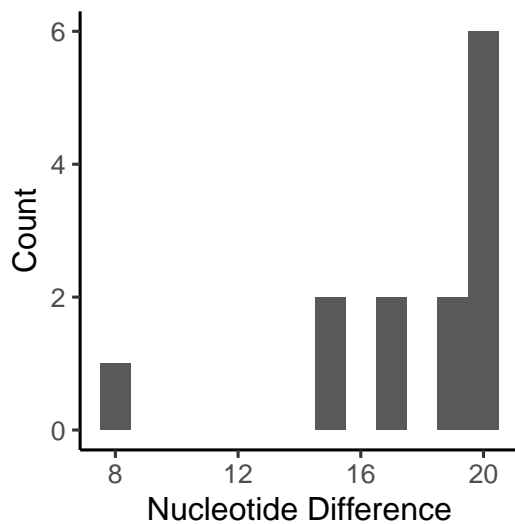
IGHV3-48*03

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



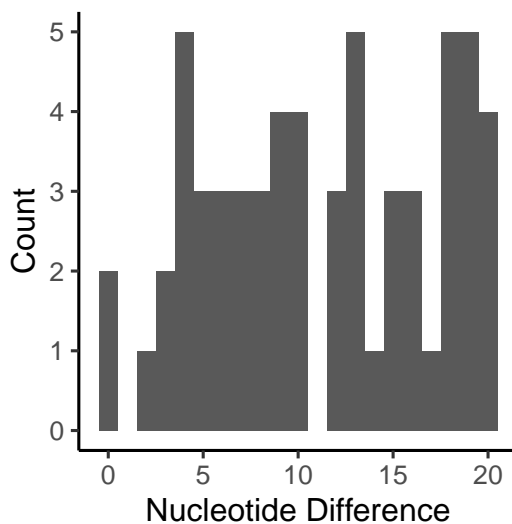
IGHV3-30*04

21 sequences assigned
No exact matches.



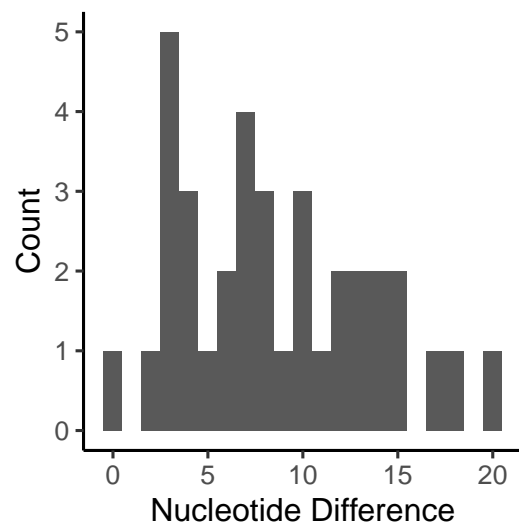
IGHV3-43*02

80 sequences assigned
2 (2.5%) exact matches, in which:
1 unique CDR3
1 unique J



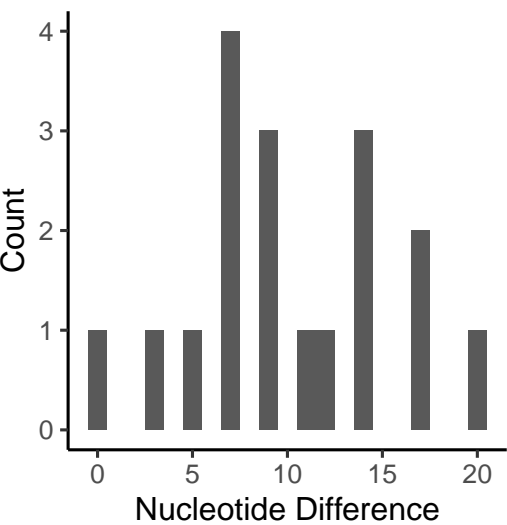
IGHV3-49*04

52 sequences assigned
1 (1.9%) exact matches, in which:
1 unique CDR3
1 unique J



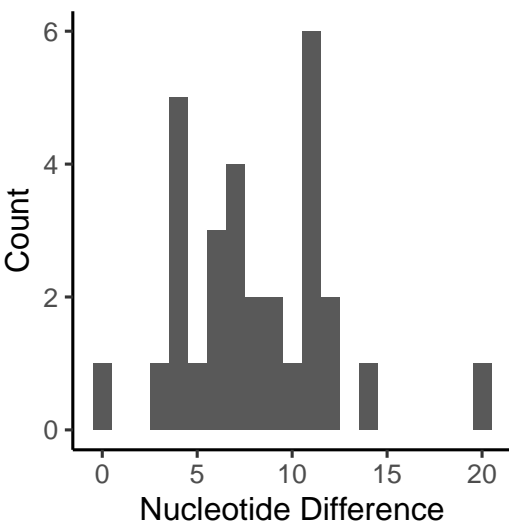
IGHV3-49*03_05

24 sequences assigned
1 (4.2%) exact matches, in which:
1 unique CDR3
1 unique J



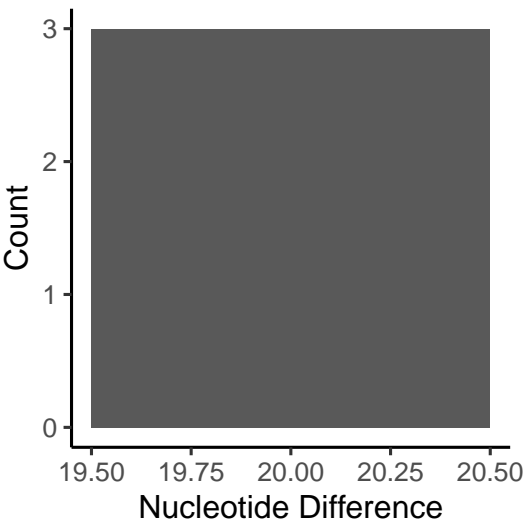
IGHV3-64*01

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



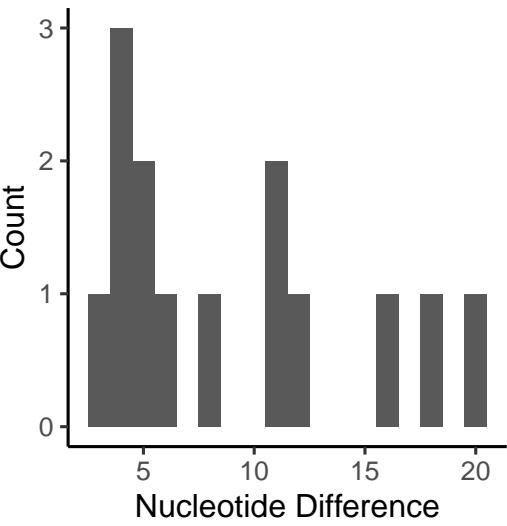
IGHV3-69-1*01

10 sequences assigned
No exact matches.



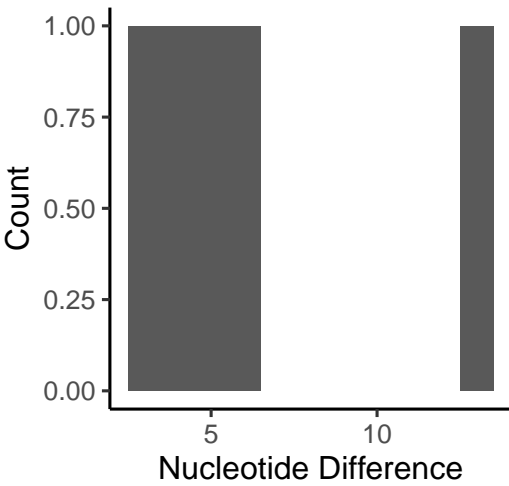
IGHV3-53*04

19 sequences assigned
No exact matches.



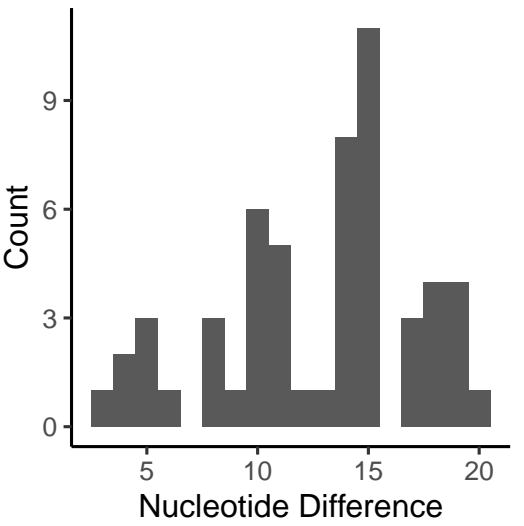
IGHV3-64*02_07

9 sequences assigned
No exact matches.



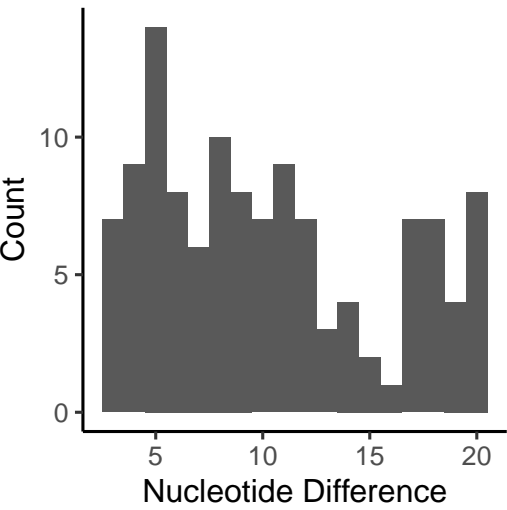
IGHV3-72*01

61 sequences assigned
No exact matches.



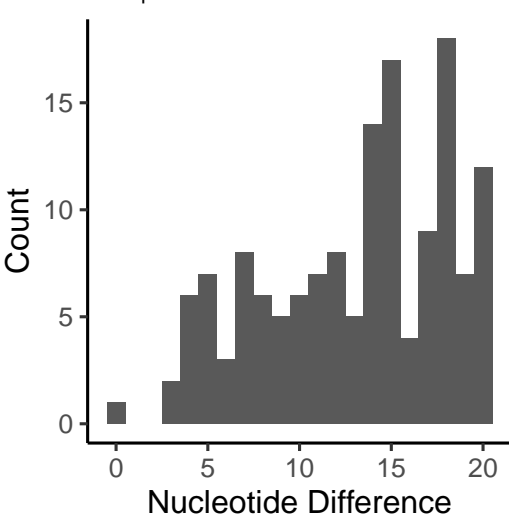
IGHV3-53*01_02

144 sequences assigned
No exact matches.



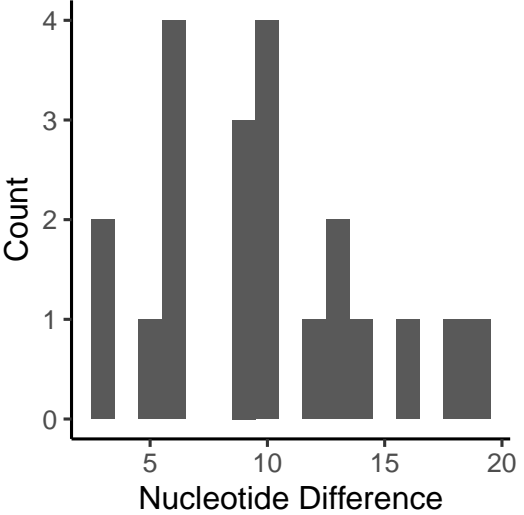
IGHV3-66*01

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



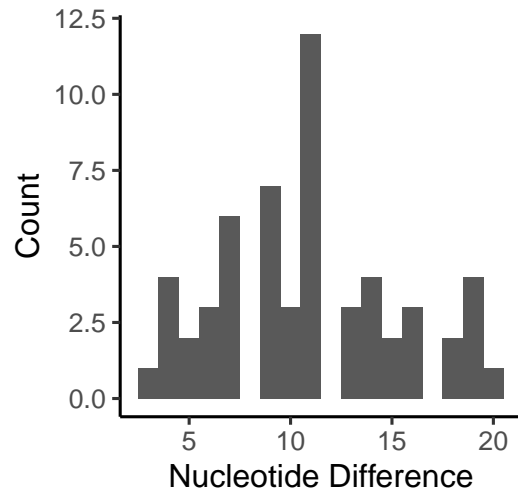
IGHV3-73*01_02

27 sequences assigned
No exact matches.



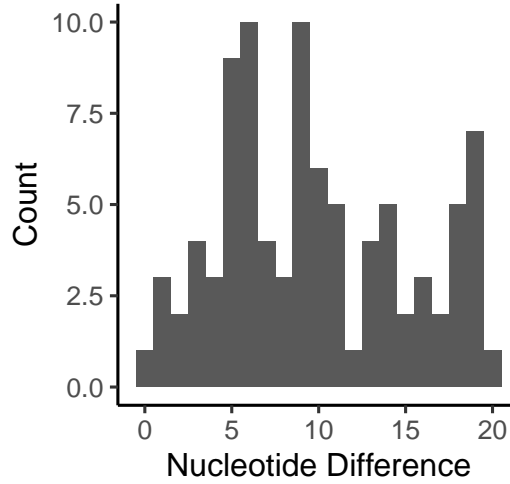
IGHV3-74*03

84 sequences assigned
No exact matches.



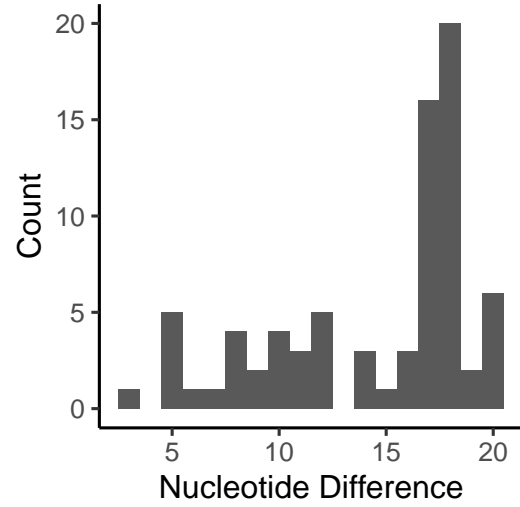
IGHV4-4*07

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



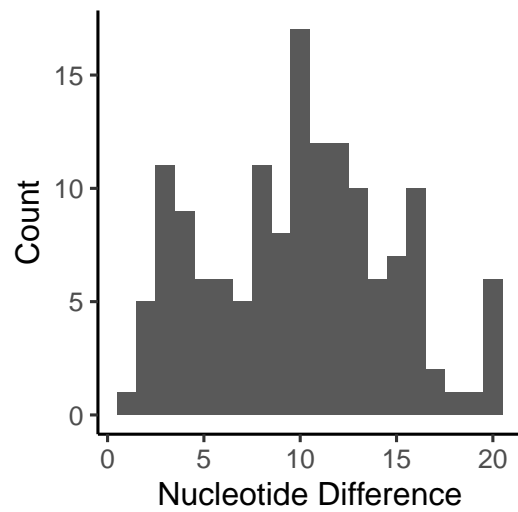
IGHV4-30-2*01

90 sequences assigned
No exact matches.



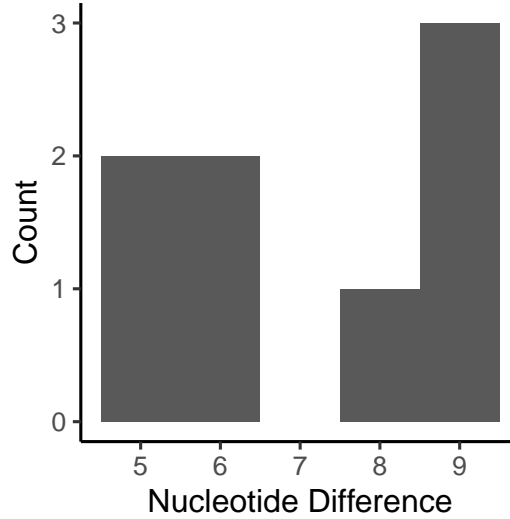
IGHV3-74*01_02

171 sequences assigned
No exact matches.



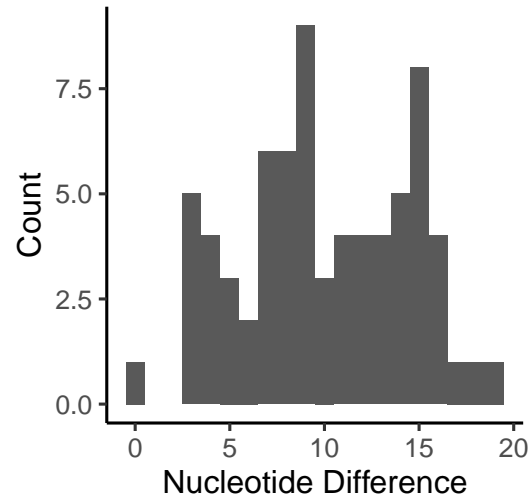
IGHV4-28*01_07

8 sequences assigned
No exact matches.



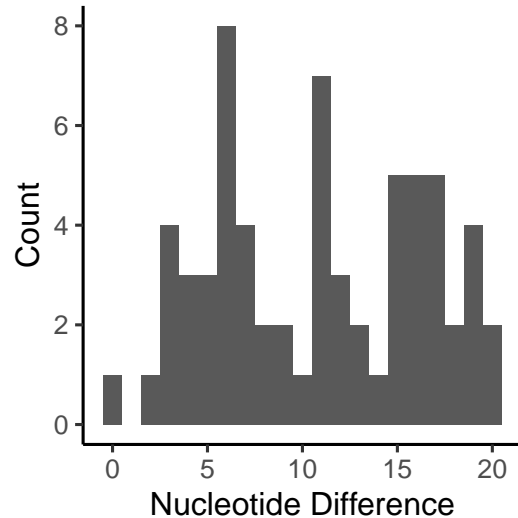
IGHV4-31*02

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



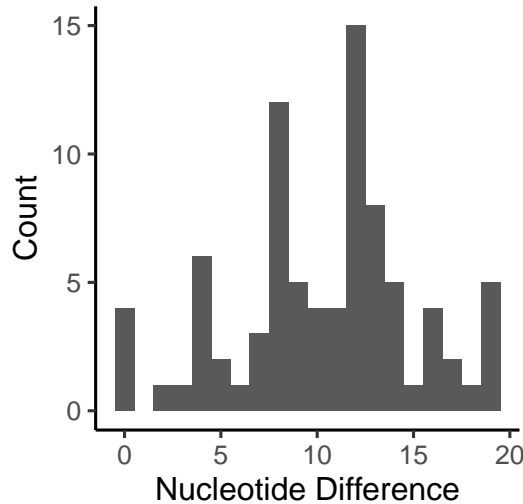
IGHV3-64D*09

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



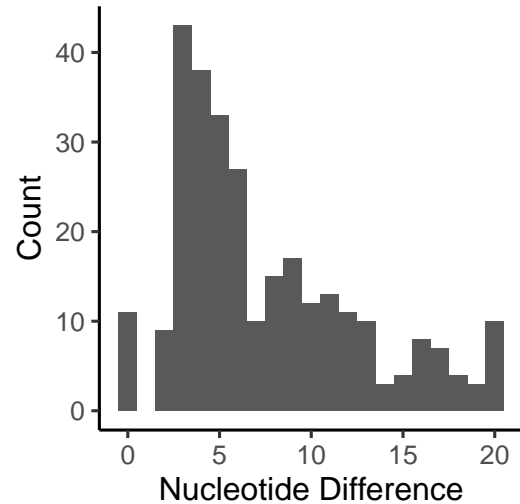
IGHV4-30-4*01

108 sequences assigned
4 (3.7%) exact matches, in which:
2 unique CDR3
2 unique J



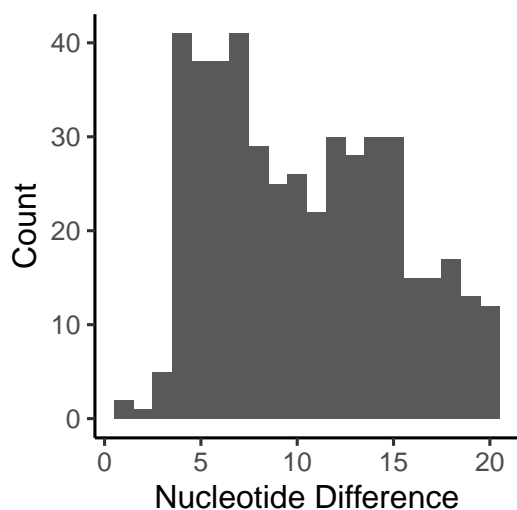
IGHV4-34*01_02

334 sequences assigned
11 (3.3%) exact matches, in which:
7 unique CDR3
4 unique J



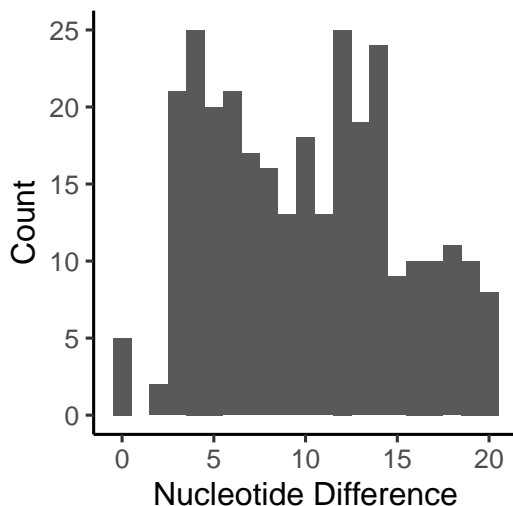
IGHV4–39*02

573 sequences assigned
No exact matches.



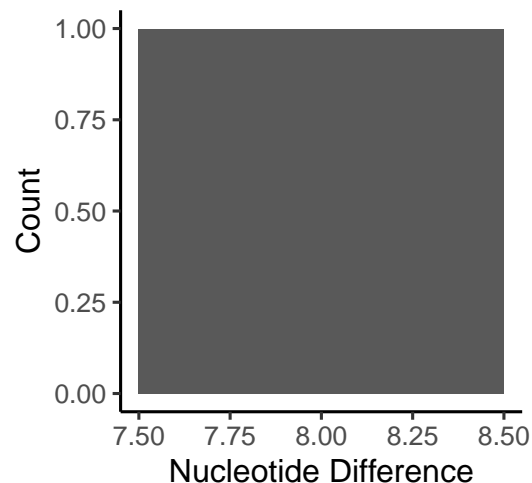
IGHV4–59*01_07

343 sequences assigned
5 (1.5%) exact matches, in which:
3 unique CDR3
3 unique J



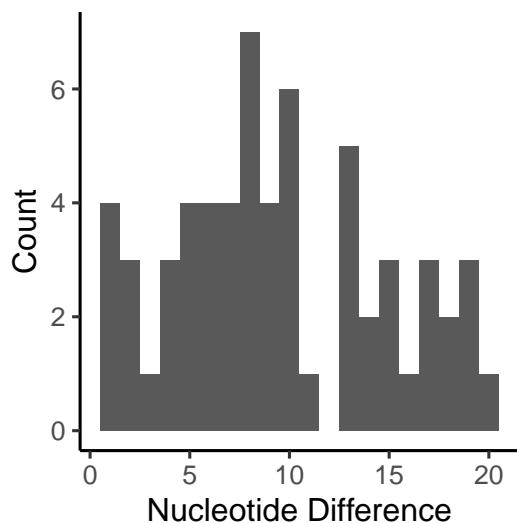
IGHV4/OR15–8*01

2 sequences assigned
No exact matches.



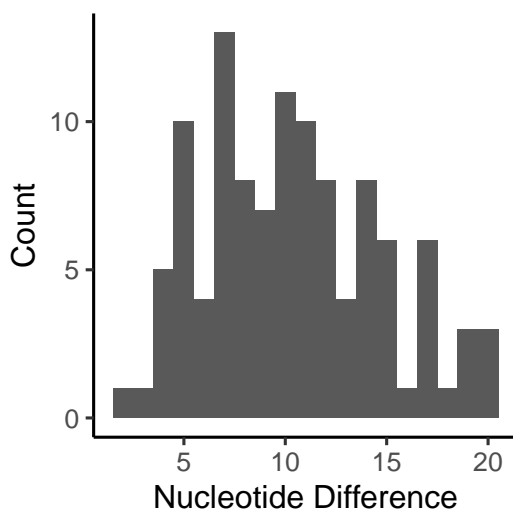
IGHV4–39*01_05

82 sequences assigned
No exact matches.



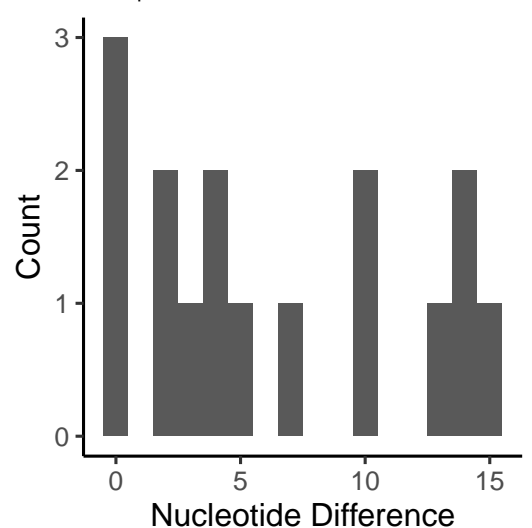
IGHV4–59*11

147 sequences assigned
No exact matches.



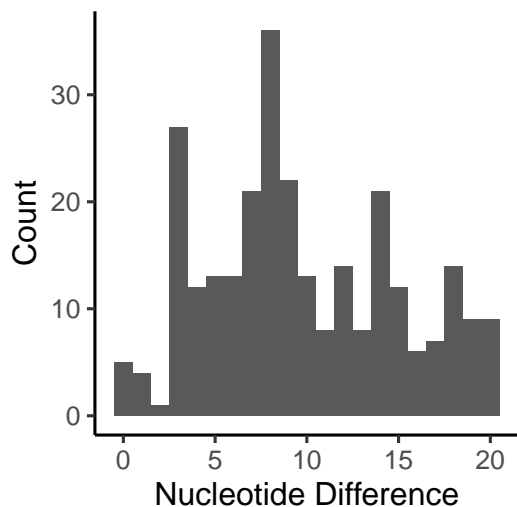
IGHV5–10–1*01_03

23 sequences assigned
3 (13%) exact matches, in which:
2 unique CDR3
1 unique J



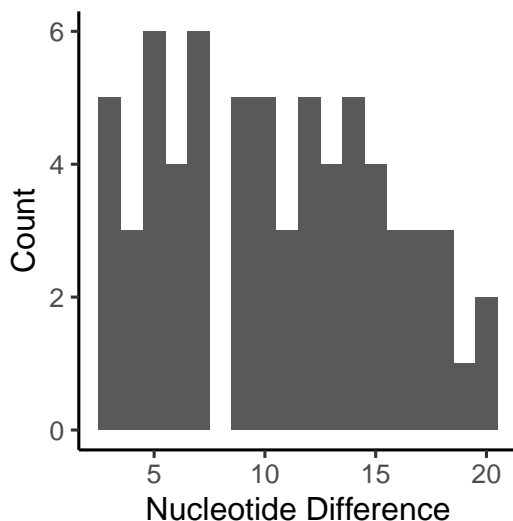
IGHV4–59*08

326 sequences assigned
5 (1.5%) exact matches, in which:
4 unique CDR3
3 unique J



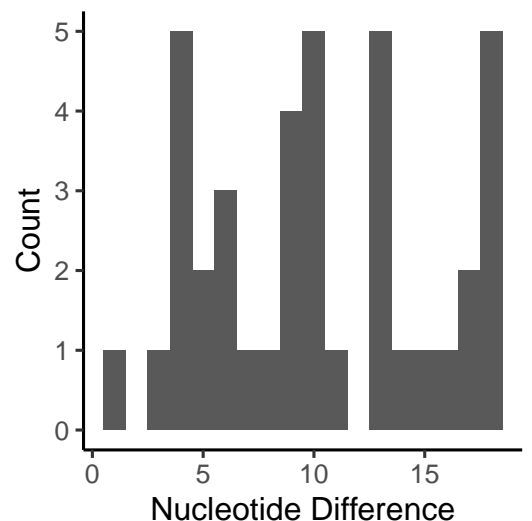
IGHV4–61*01

91 sequences assigned
No exact matches.



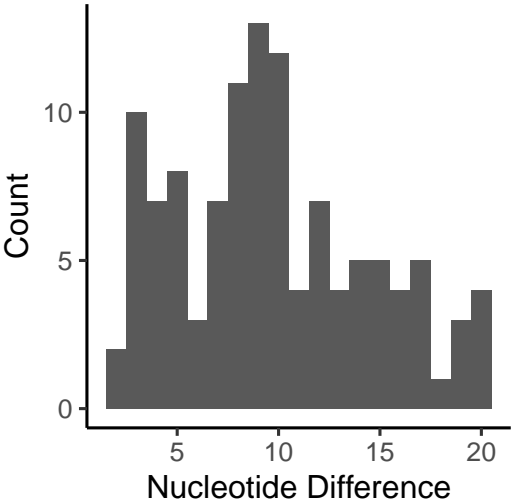
IGHV5–51*07

45 sequences assigned
No exact matches.



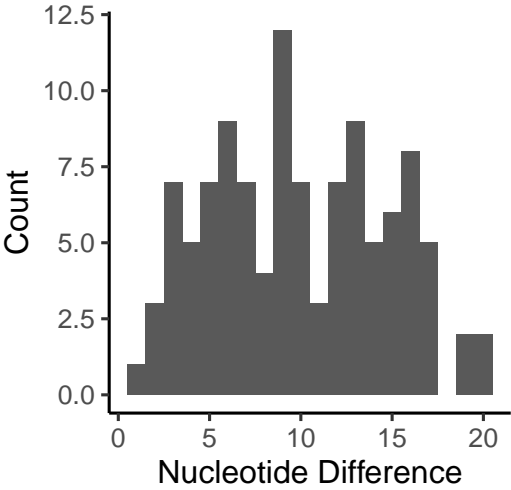
IGHV5-51*01_03

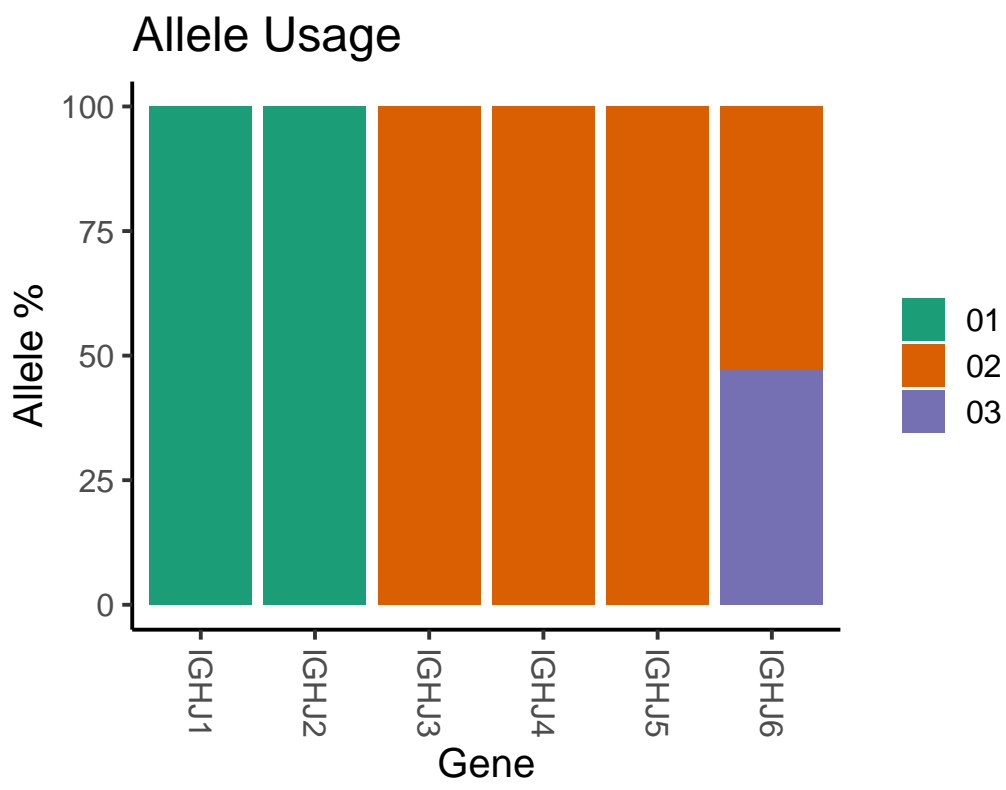
126 sequences assigned
No exact matches.



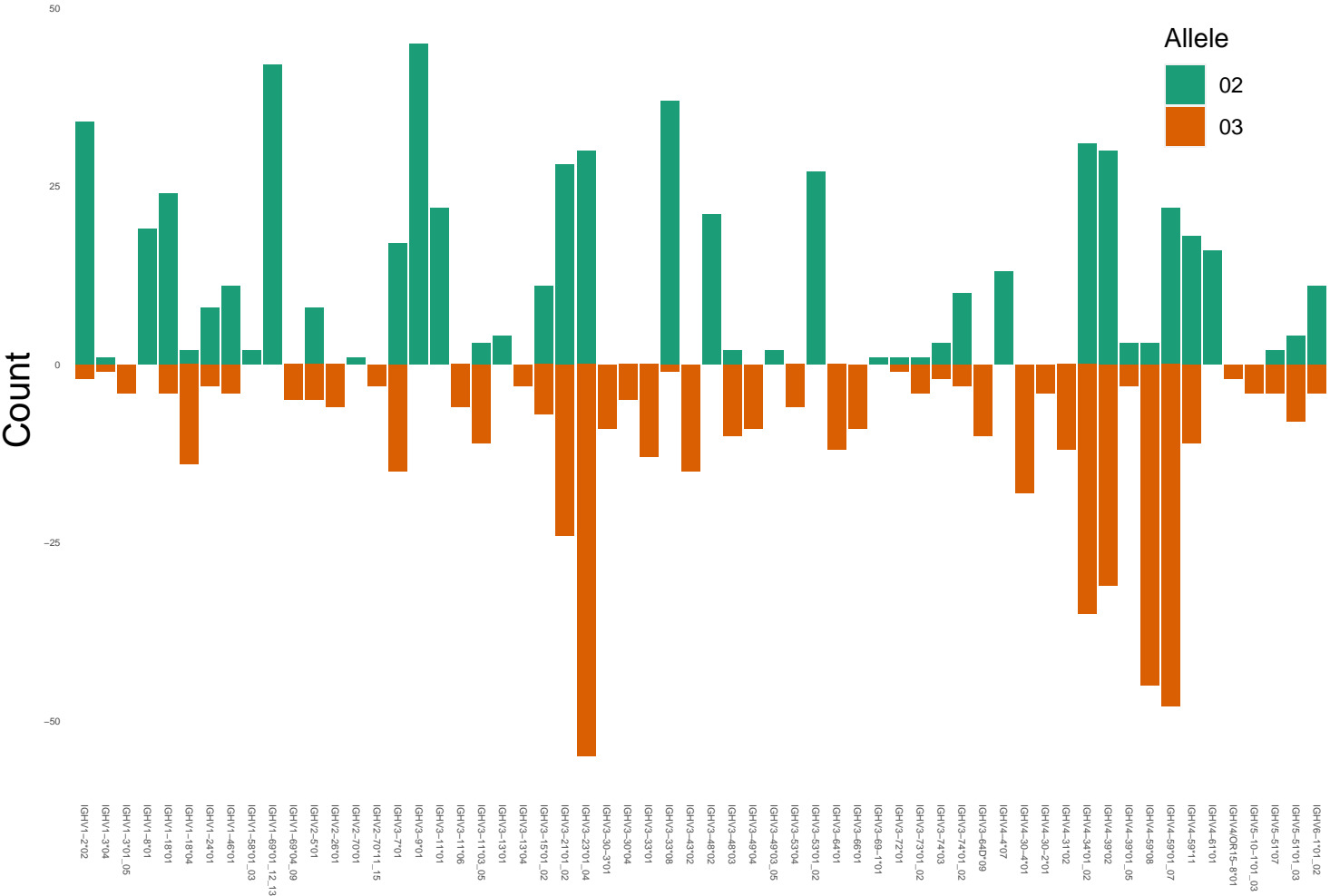
IGHV6-1*01_02

122 sequences assigned
No exact matches.





Sequence Count by IGHJ6 allele usage



[illegible]