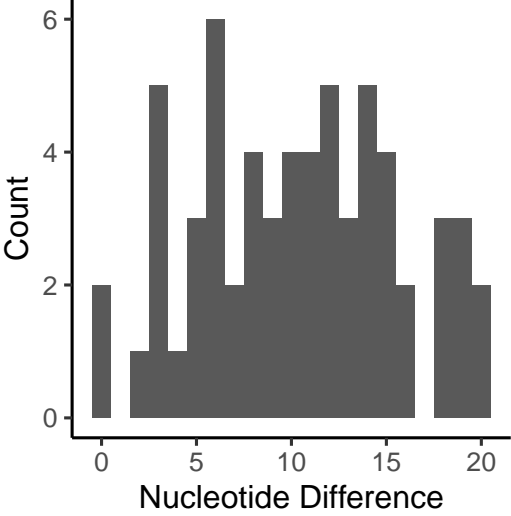


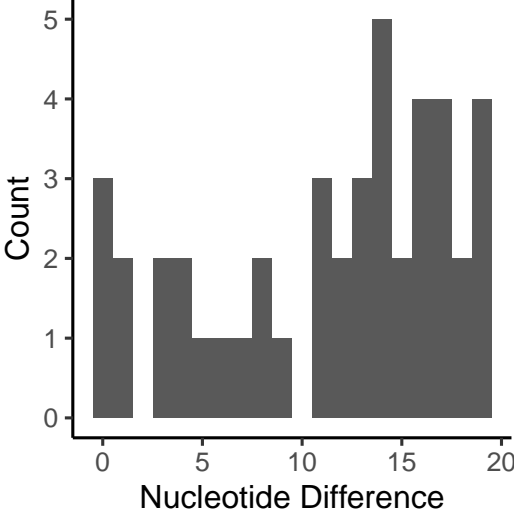
IGHV1-2*02

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



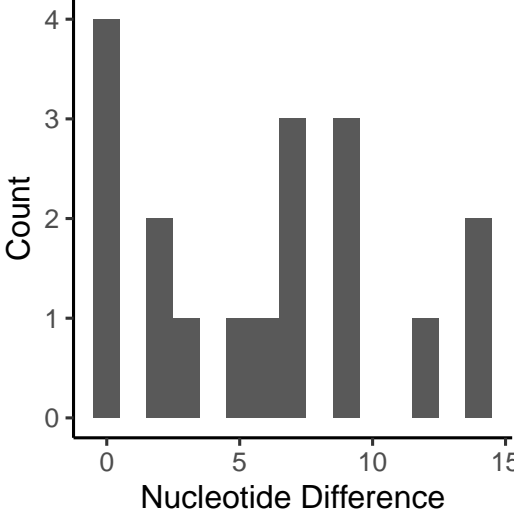
IGHV1-18*04

58 sequences assigned
3 (5.2%) exact matches, in which:
3 unique CDR3
3 unique J



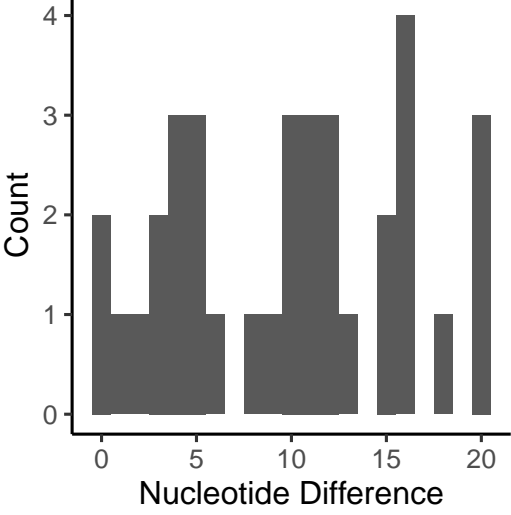
IGHV1-46*03

22 sequences assigned
4 (18.2%) exact matches, in which:
4 unique CDR3
3 unique J



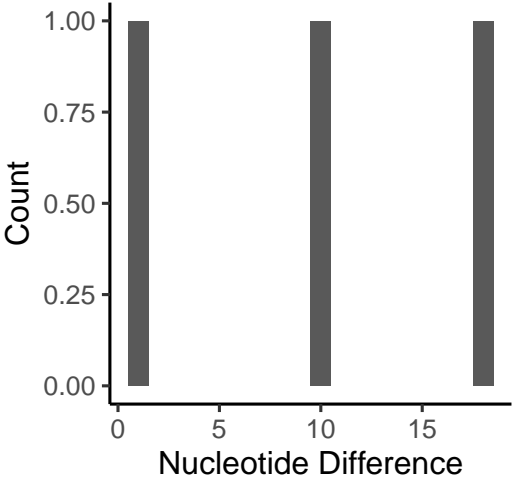
IGHV1-3*01_05

46 sequences assigned
2 (4.3%) exact matches, in which:
2 unique CDR3
2 unique J



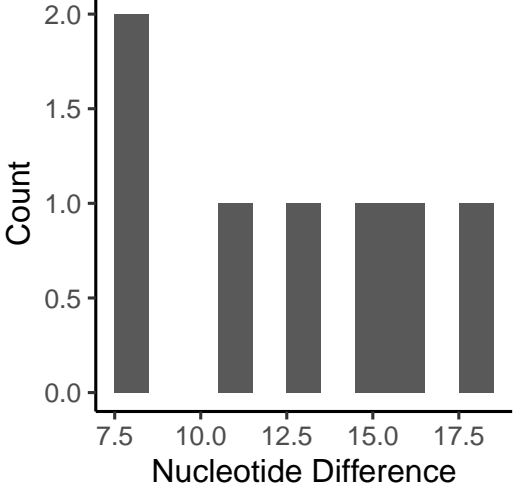
IGHV1-24*01

10 sequences assigned
No exact matches.



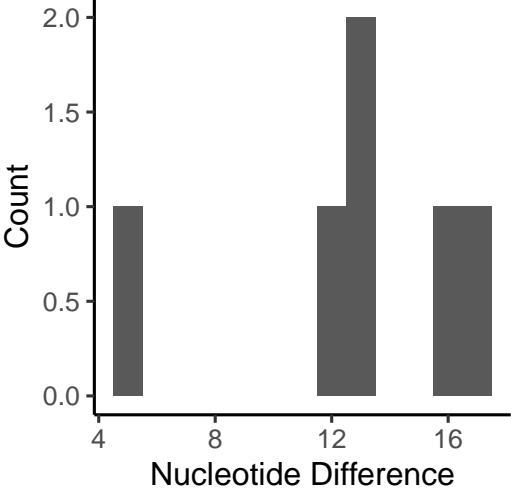
IGHV1-58*02

7 sequences assigned
No exact matches.



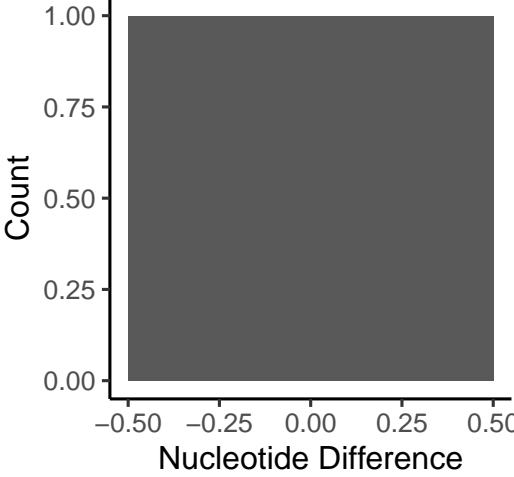
IGHV1-18*01

7 sequences assigned
No exact matches.



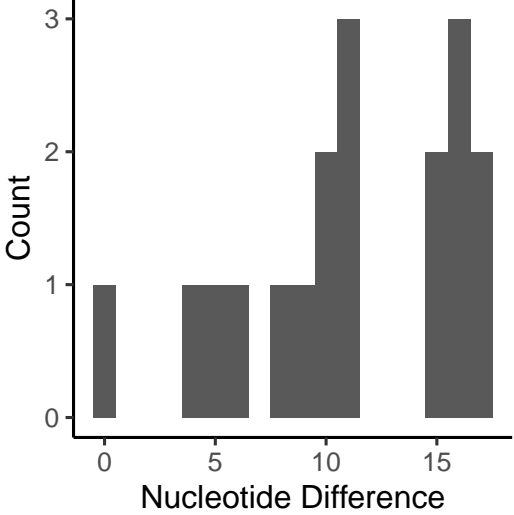
IGHV1-45*02

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



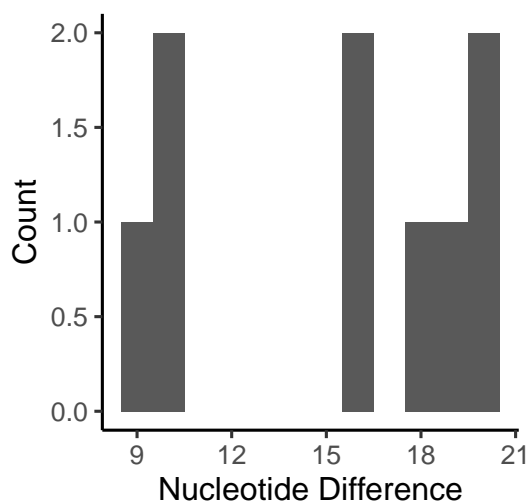
IGHV1-69*02

28 sequences assigned
1 (3.6%) exact matches, in which:
1 unique CDR3
1 unique J



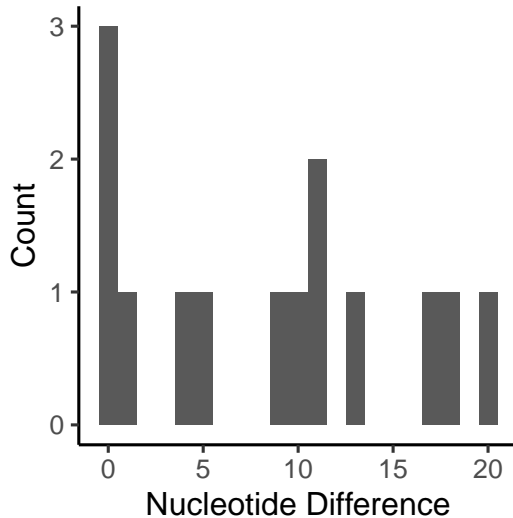
IGHV1-69*08

13 sequences assigned
No exact matches.



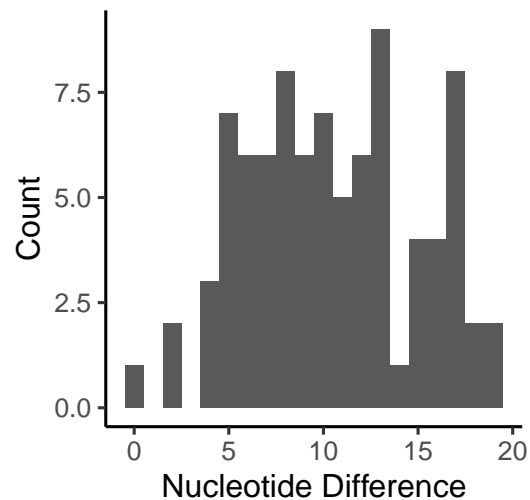
IGHV2-70*11_15

14 sequences assigned
3 (21.4%) exact matches, in which:
3 unique CDR3
2 unique J



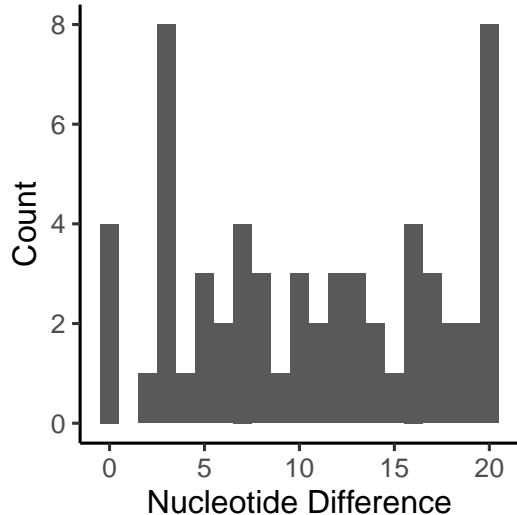
IGHV3-7*04

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



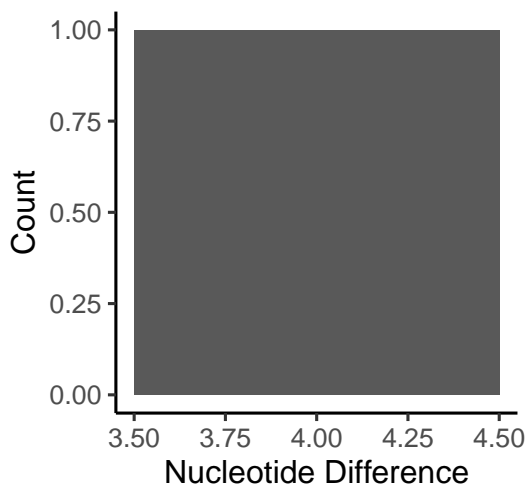
IGHV2-5*02

90 sequences assigned
4 (4.4%) exact matches, in which:
4 unique CDR3
2 unique J



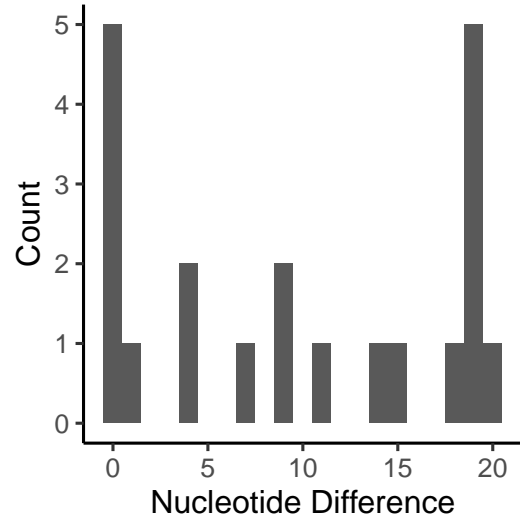
IGHV2-70D*04

1 sequences assigned
No exact matches.



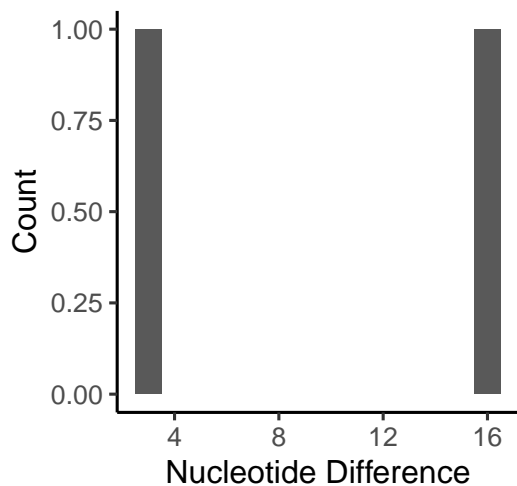
IGHV3-11*06

31 sequences assigned
5 (16.1%) exact matches, in which:
3 unique CDR3
2 unique J



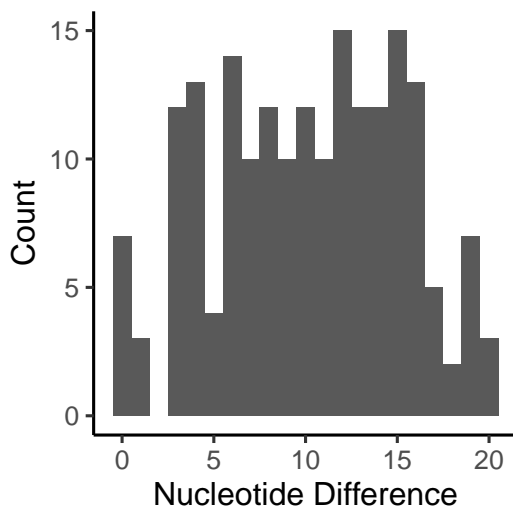
IGHV2-26*01

2 sequences assigned
No exact matches.



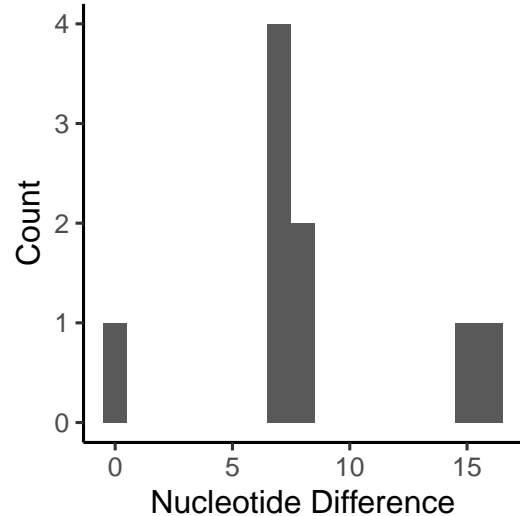
IGHV3-7*03

201 sequences assigned
7 (3.5%) exact matches, in which:
4 unique CDR3
2 unique J



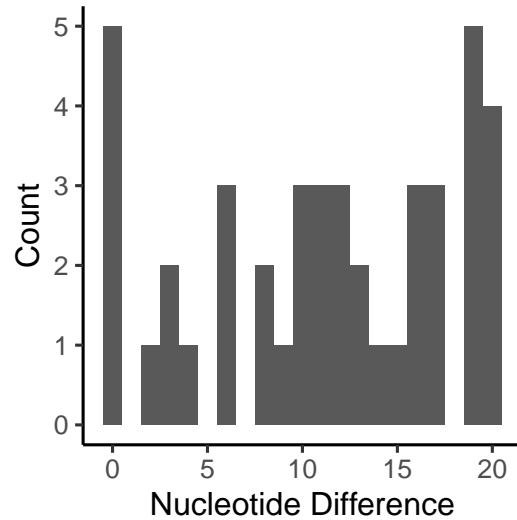
IGHV3-13*05

9 sequences assigned
1 (11.1%) exact matches, in which:
1 unique CDR3
1 unique J



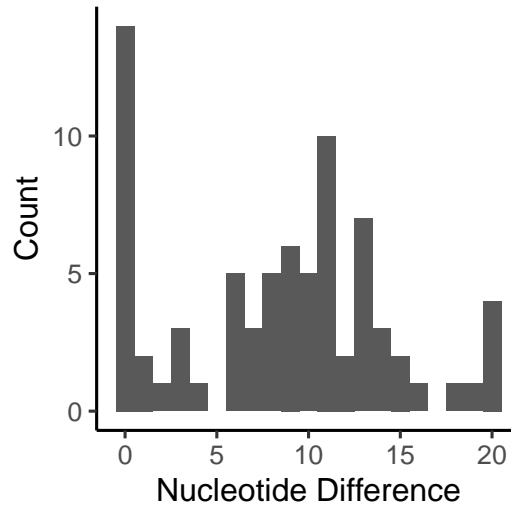
IGHV3-15*01_02

77 sequences assigned
5 (6.5%) exact matches, in which:
3 unique CDR3
3 unique J



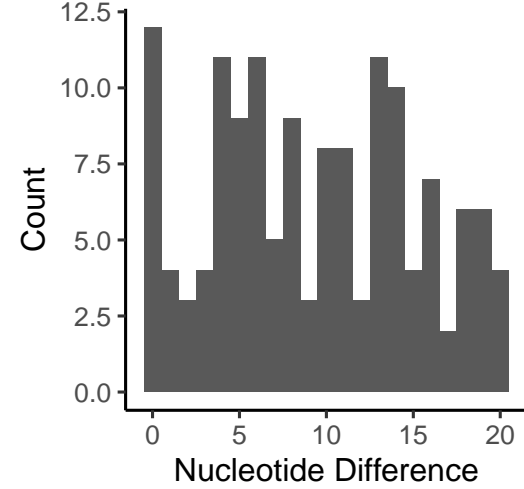
IGHV3-33*01

93 sequences assigned
14 (15.1%) exact matches, in which:
10 unique CDR3
5 unique J



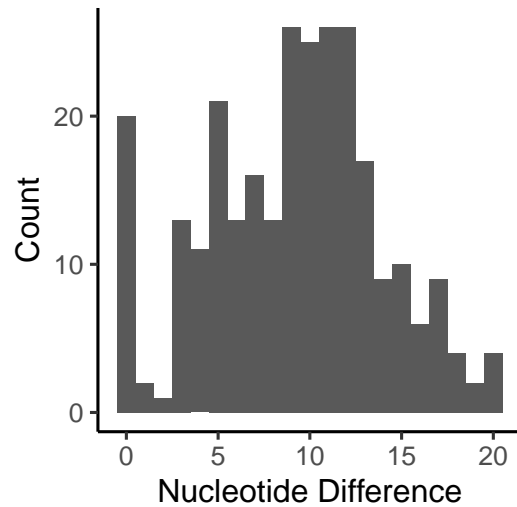
IGHV3-48*02

165 sequences assigned
12 (7.3%) exact matches, in which:
6 unique CDR3
3 unique J



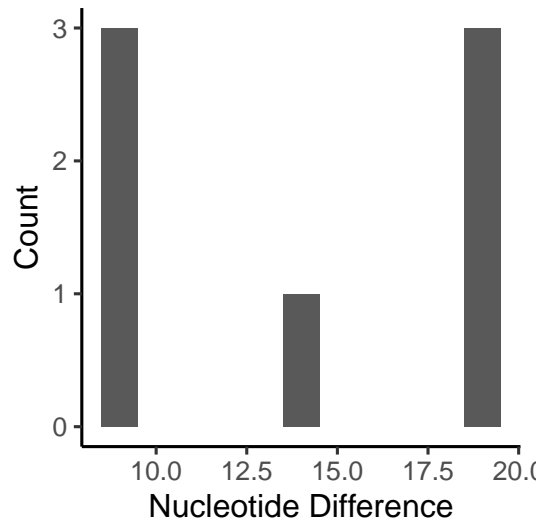
IGHV3-21*01_02

300 sequences assigned
20 (6.7%) exact matches, in which:
13 unique CDR3
2 unique J



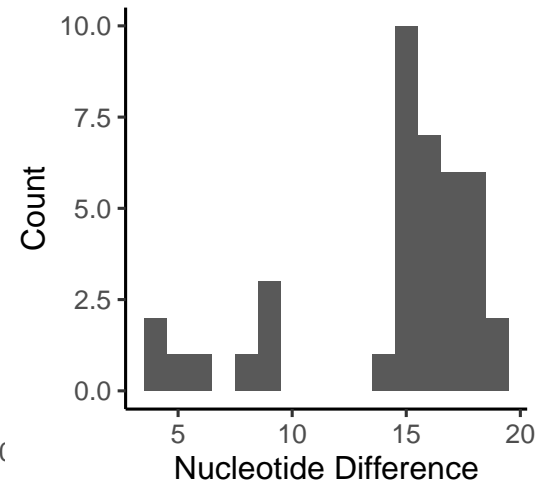
IGHV3-43*01

7 sequences assigned
No exact matches.



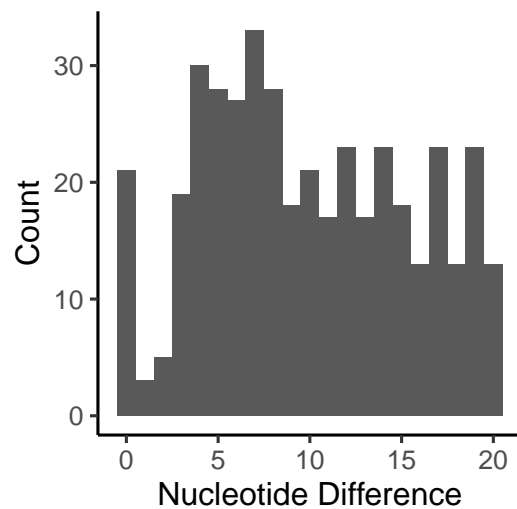
IGHV3-49*04

49 sequences assigned
No exact matches.



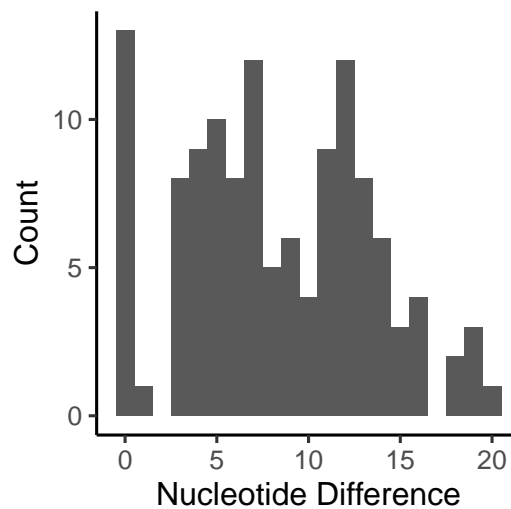
IGHV3-23*01_04

506 sequences assigned
21 (4.2%) exact matches, in which:
13 unique CDR3
4 unique J



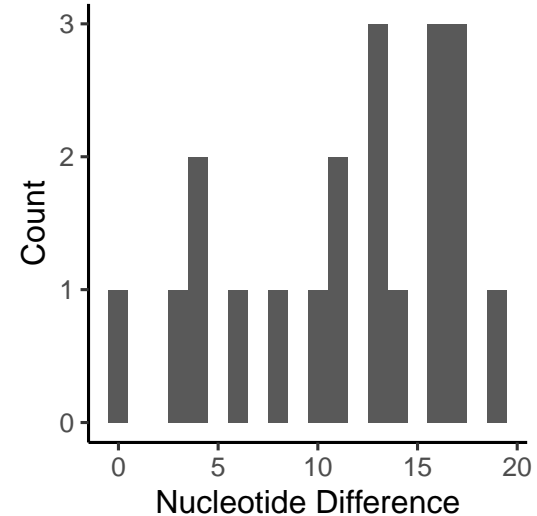
IGHV3-48*01

138 sequences assigned
13 (9.4%) exact matches, in which:
10 unique CDR3
3 unique J



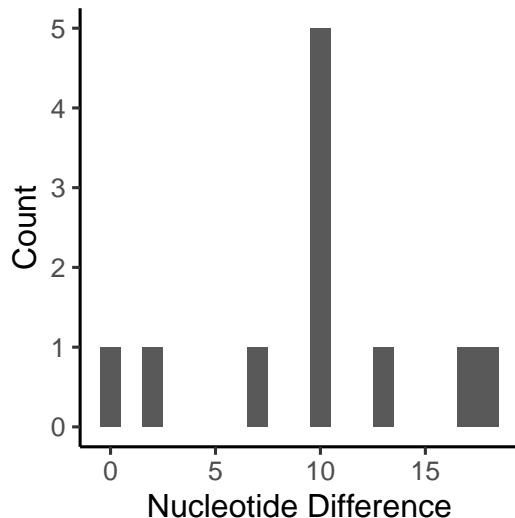
IGHV3-49*03_05

23 sequences assigned
1 (4.3%) exact matches, in which:
1 unique CDR3
1 unique J



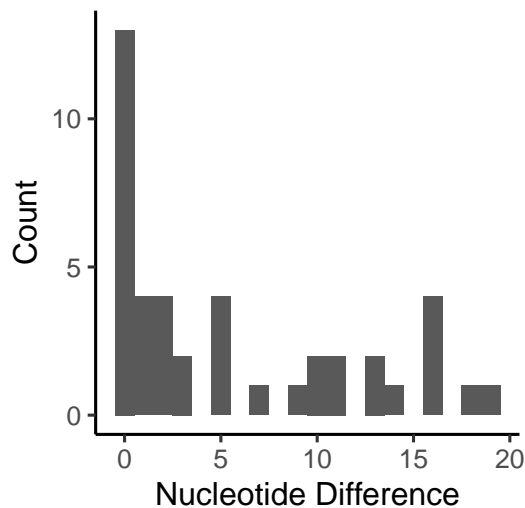
IGHV3-53*04

11 sequences assigned
1 (9.1%) exact matches, in which:
1 unique CDR3
1 unique J



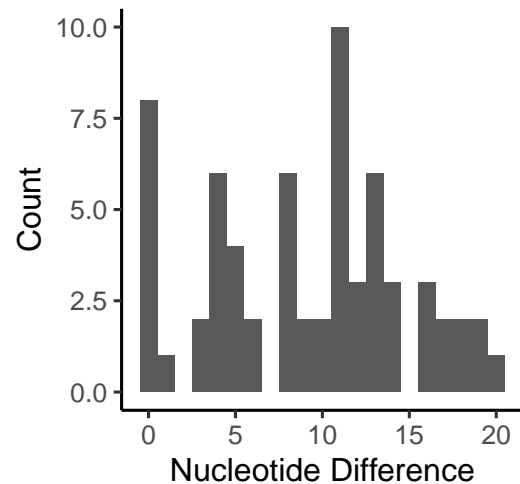
IGHV3-64*01

42 sequences assigned
13 (31%) exact matches, in which:
8 unique CDR3
3 unique J



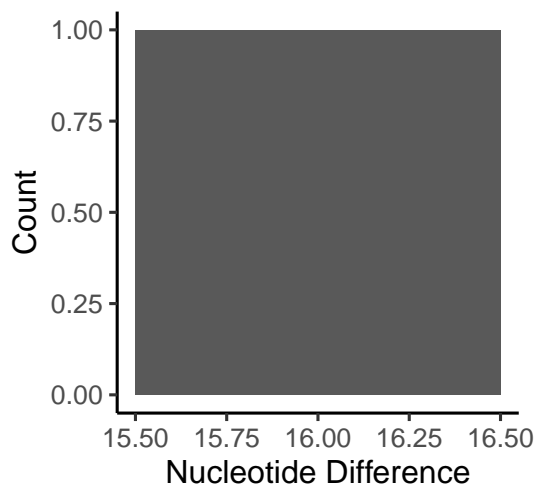
IGHV3-66*02

79 sequences assigned
8 (10.1%) exact matches, in which:
3 unique CDR3
2 unique J



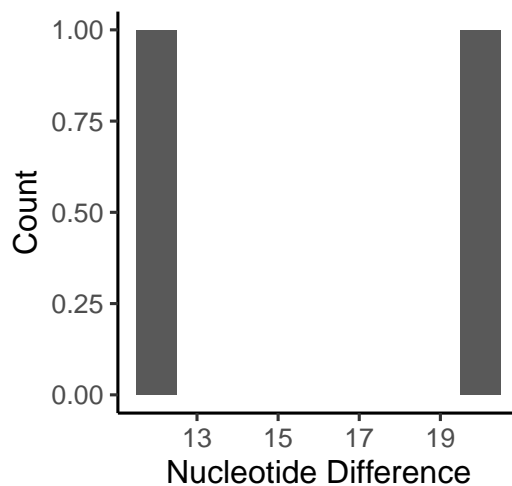
IGHV3-53*05

4 sequences assigned
No exact matches.



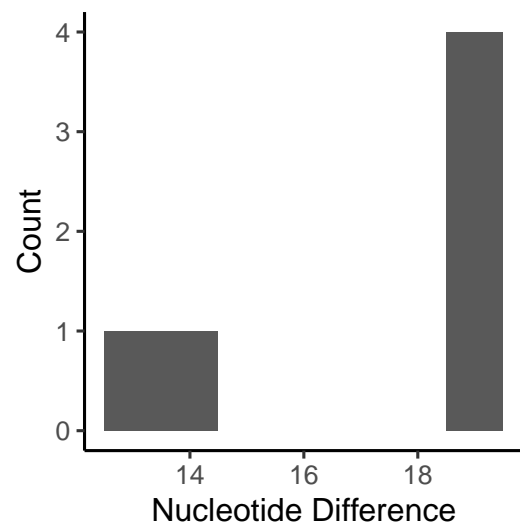
IGHV3-64*02_07

7 sequences assigned
No exact matches.



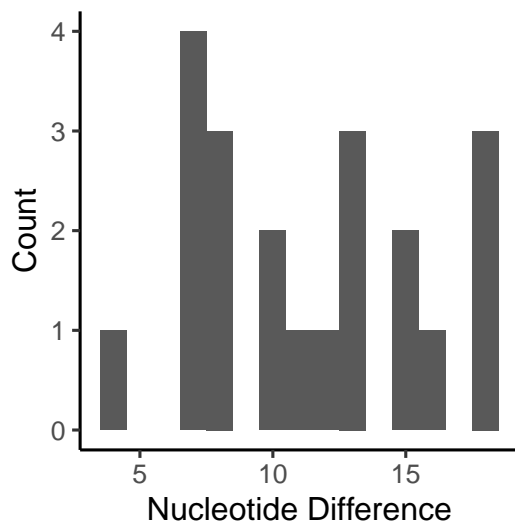
IGHV3-69-1*01

8 sequences assigned
No exact matches.



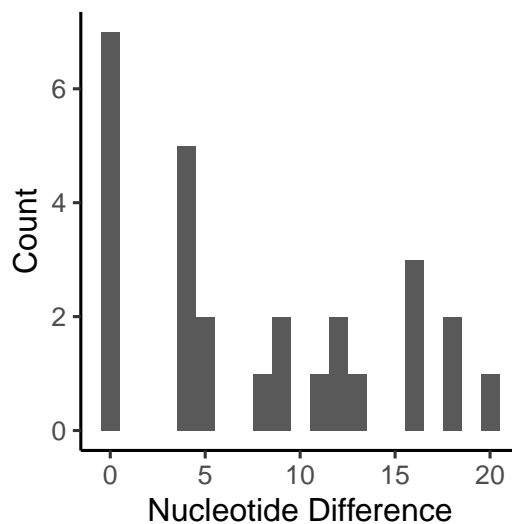
IGHV3-53*01_02

33 sequences assigned
No exact matches.



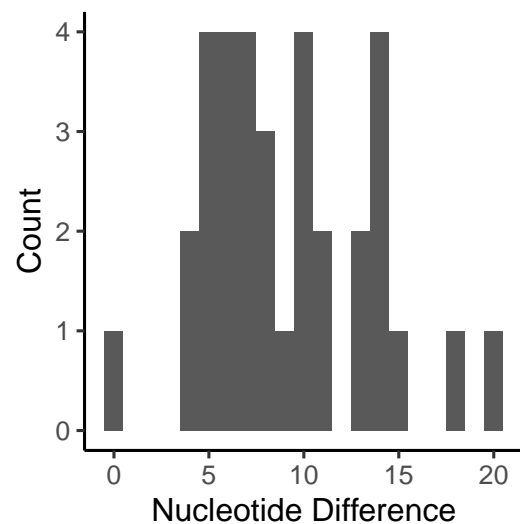
IGHV3-66*01

30 sequences assigned
7 (23.3%) exact matches, in which:
4 unique CDR3
1 unique J



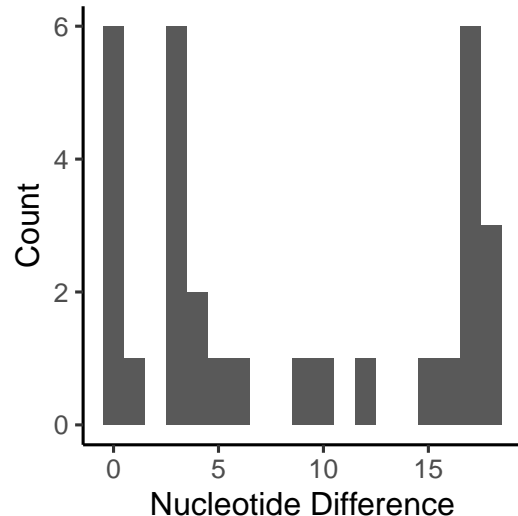
IGHV3-72*01

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



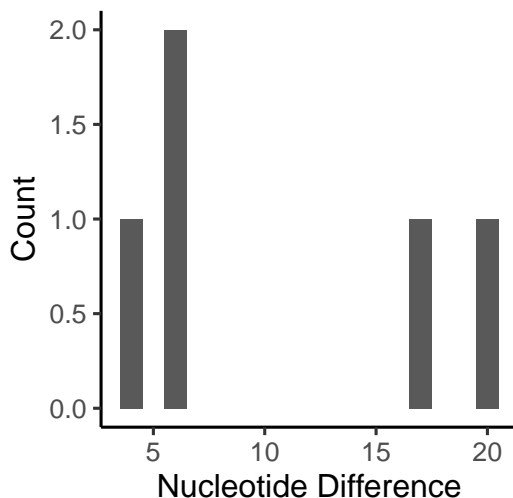
IGHV3-73*01_02

36 sequences assigned
6 (16.7%) exact matches, in which:
3 unique CDR3
2 unique J



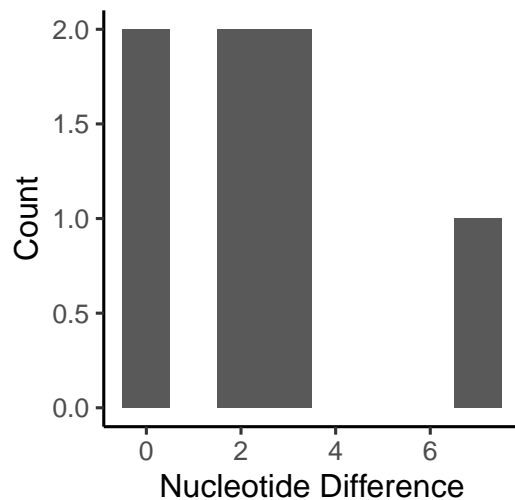
IGHV3-43D*03

5 sequences assigned
No exact matches.



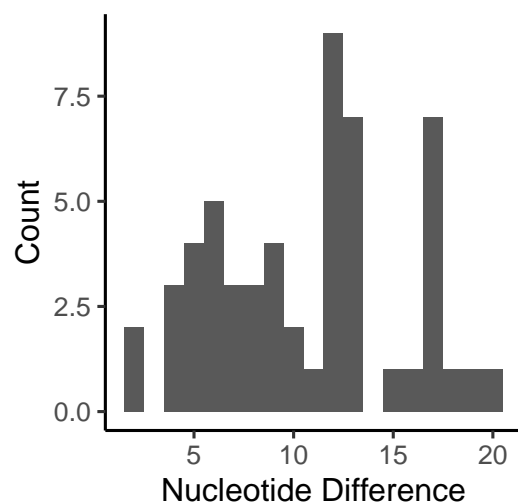
IGHV4-30-2*01

7 sequences assigned
2 (28.6%) exact matches, in which:
1 unique CDR3
1 unique J



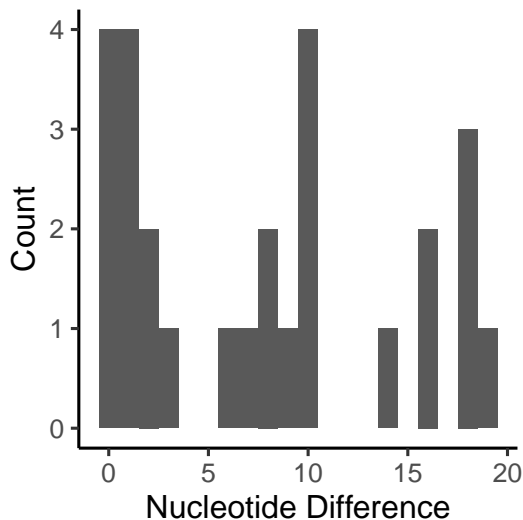
IGHV3-74*03

65 sequences assigned
No exact matches.



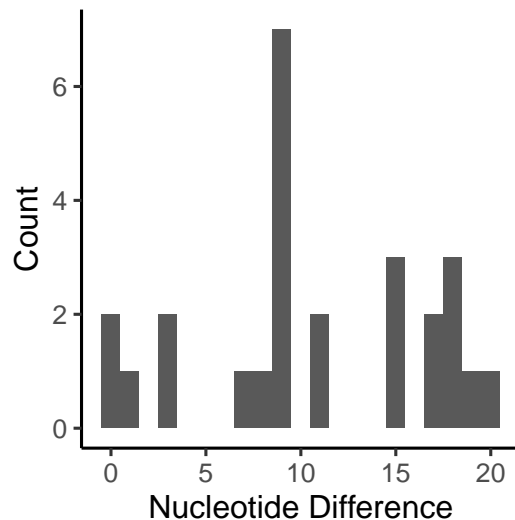
IGHV3-64D*06

39 sequences assigned
4 (10.3%) exact matches, in which:
3 unique CDR3
1 unique J



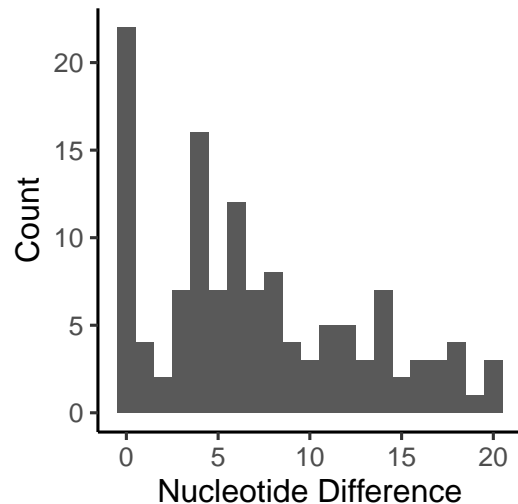
IGHV4-30-4*07

34 sequences assigned
2 (5.9%) exact matches, in which:
2 unique CDR3
2 unique J



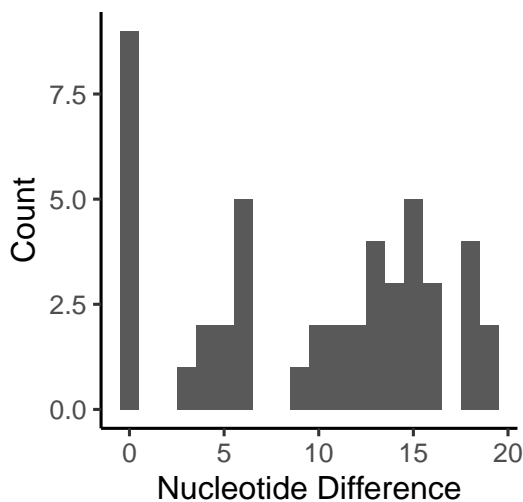
IGHV3-74*01_02

153 sequences assigned
22 (14.4%) exact matches, in which:
12 unique CDR3
5 unique J



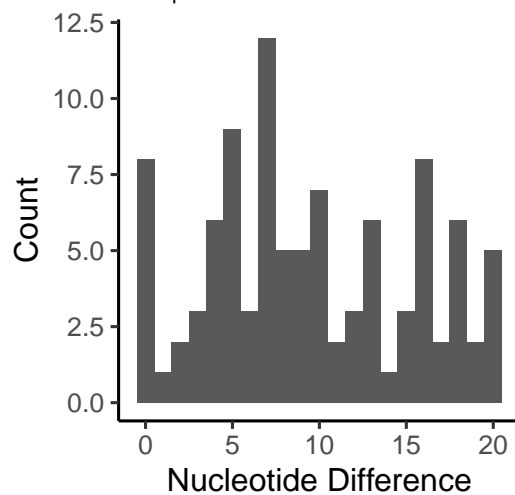
IGHV4-4*02_03

64 sequences assigned
9 (14.1%) exact matches, in which:
4 unique CDR3
2 unique J



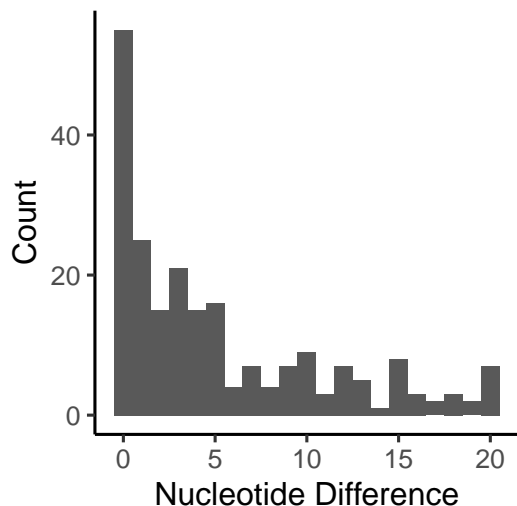
IGHV4-31*02

125 sequences assigned
8 (6.4%) exact matches, in which:
7 unique CDR3
2 unique J



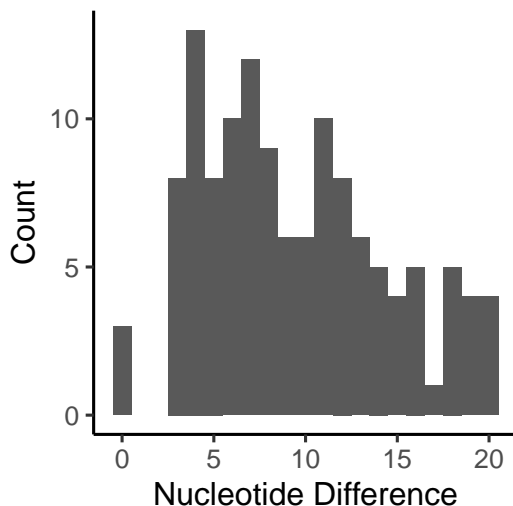
IGHV4-34*01_02

254 sequences assigned
55 (21.7%) exact matches, in which:
38 unique CDR3
4 unique J



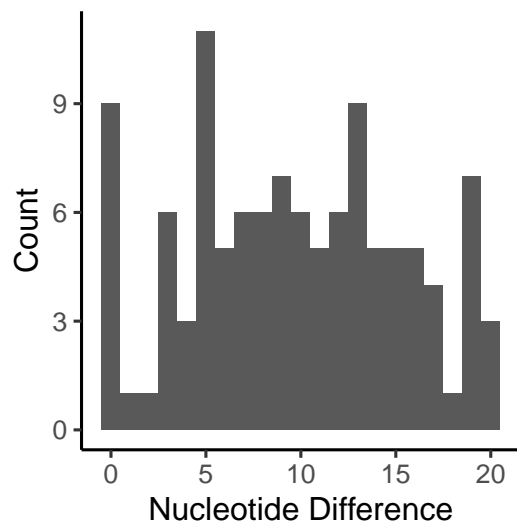
IGHV4-59*08

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



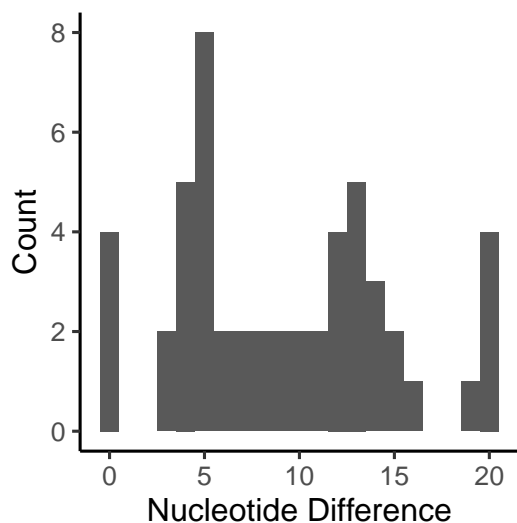
IGHV4-61*02

148 sequences assigned
9 (6.1%) exact matches, in which:
7 unique CDR3
4 unique J



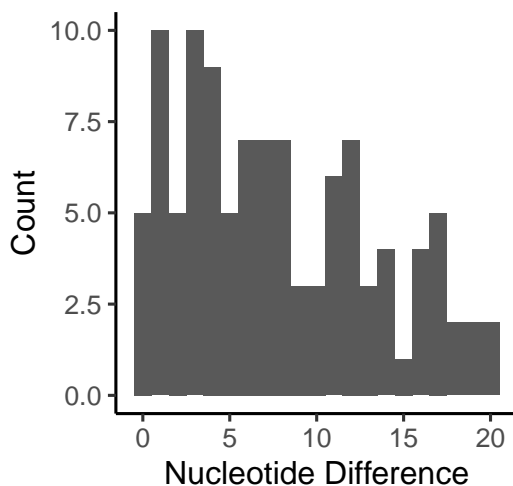
IGHV4-38-2*02

70 sequences assigned
4 (5.7%) exact matches, in which:
3 unique CDR3
1 unique J



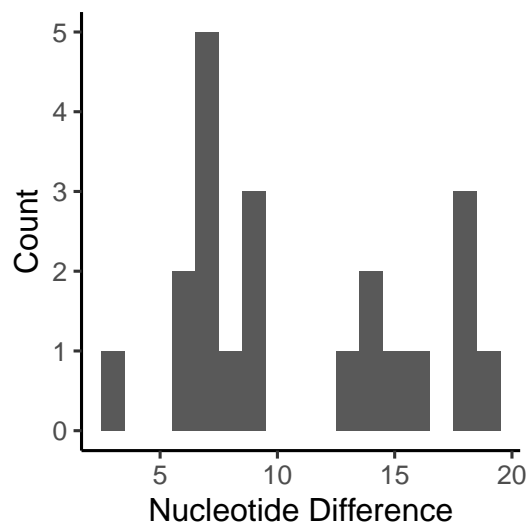
IGHV4-59*01_07

143 sequences assigned
5 (3.5%) exact matches, in which:
4 unique CDR3
3 unique J



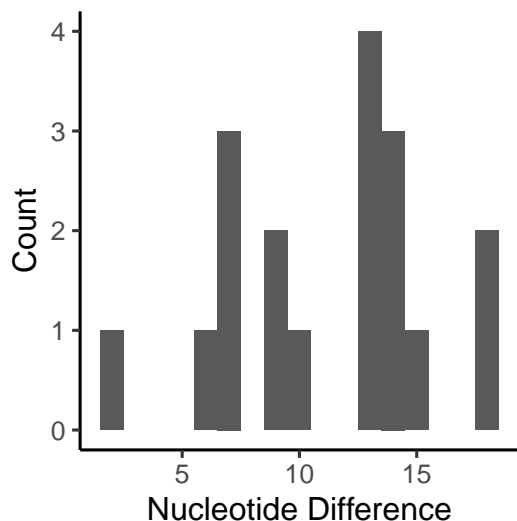
IGHV4-61*09

30 sequences assigned
No exact matches.



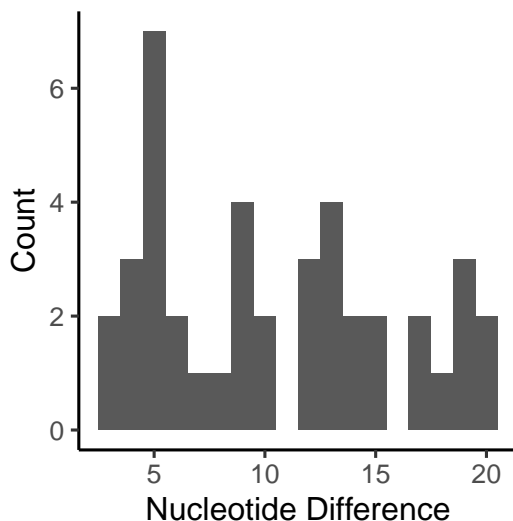
IGHV4-39*02

31 sequences assigned
No exact matches.



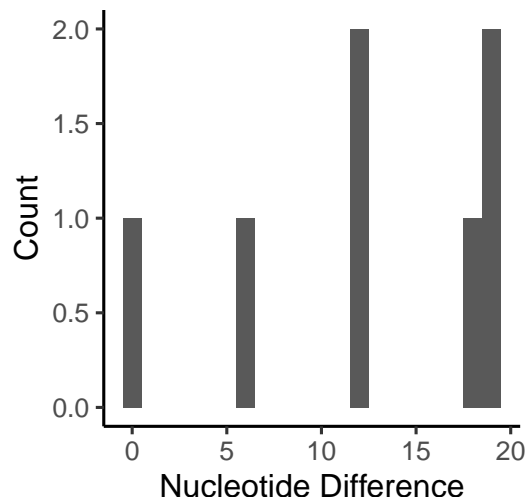
IGHV4-59*11

62 sequences assigned
No exact matches.



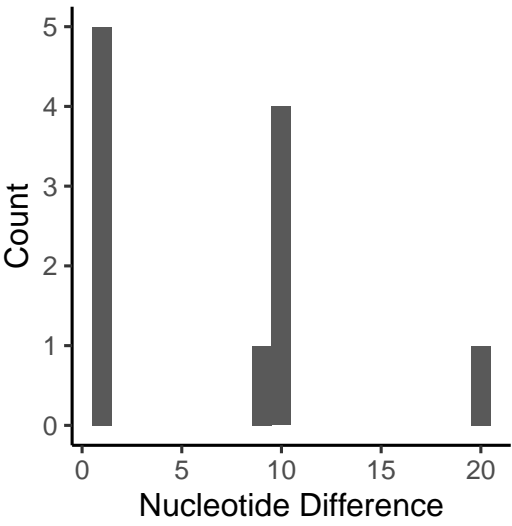
IGHV5-10-1*01_03

10 sequences assigned
1 (10%) exact matches, in which:
1 unique CDR3
1 unique J



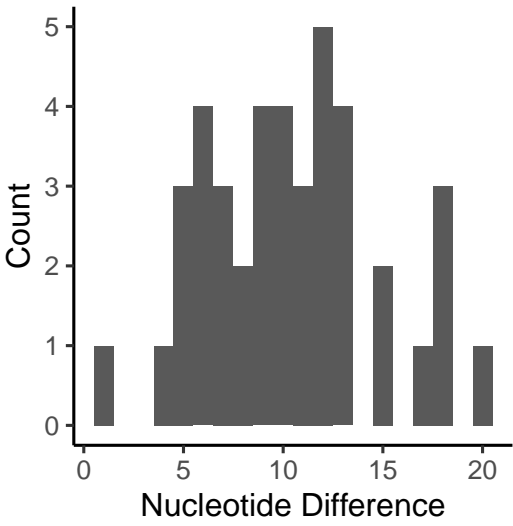
IGHV5-51*07

16 sequences assigned
No exact matches.



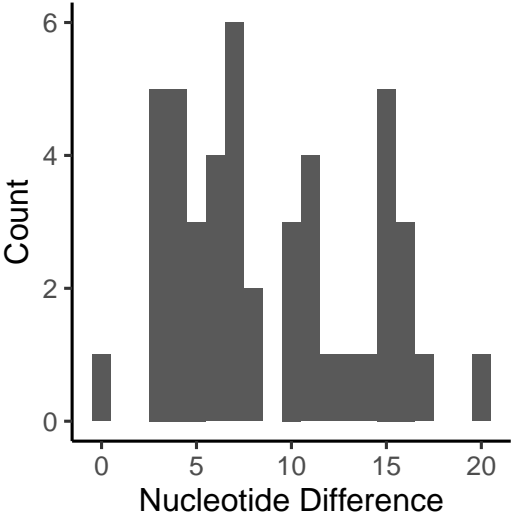
IGHV7-4-1*02

53 sequences assigned
No exact matches.



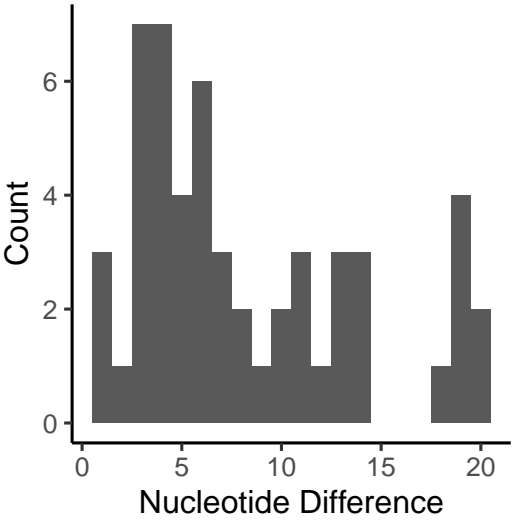
IGHV5-51*01_03

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

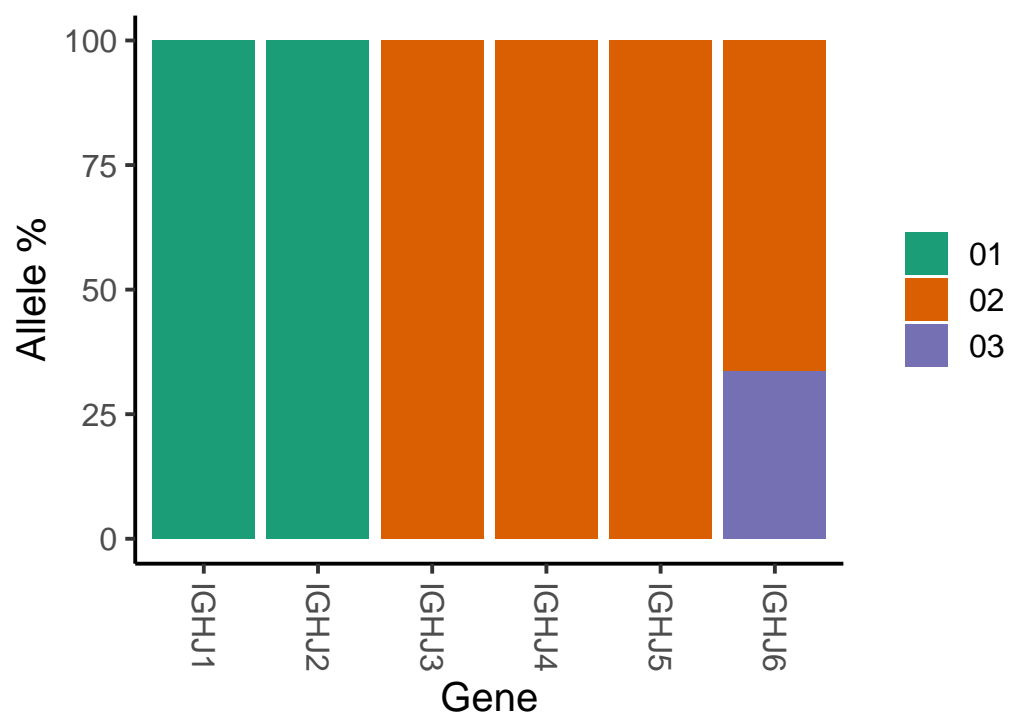


IGHV6-1*01_02

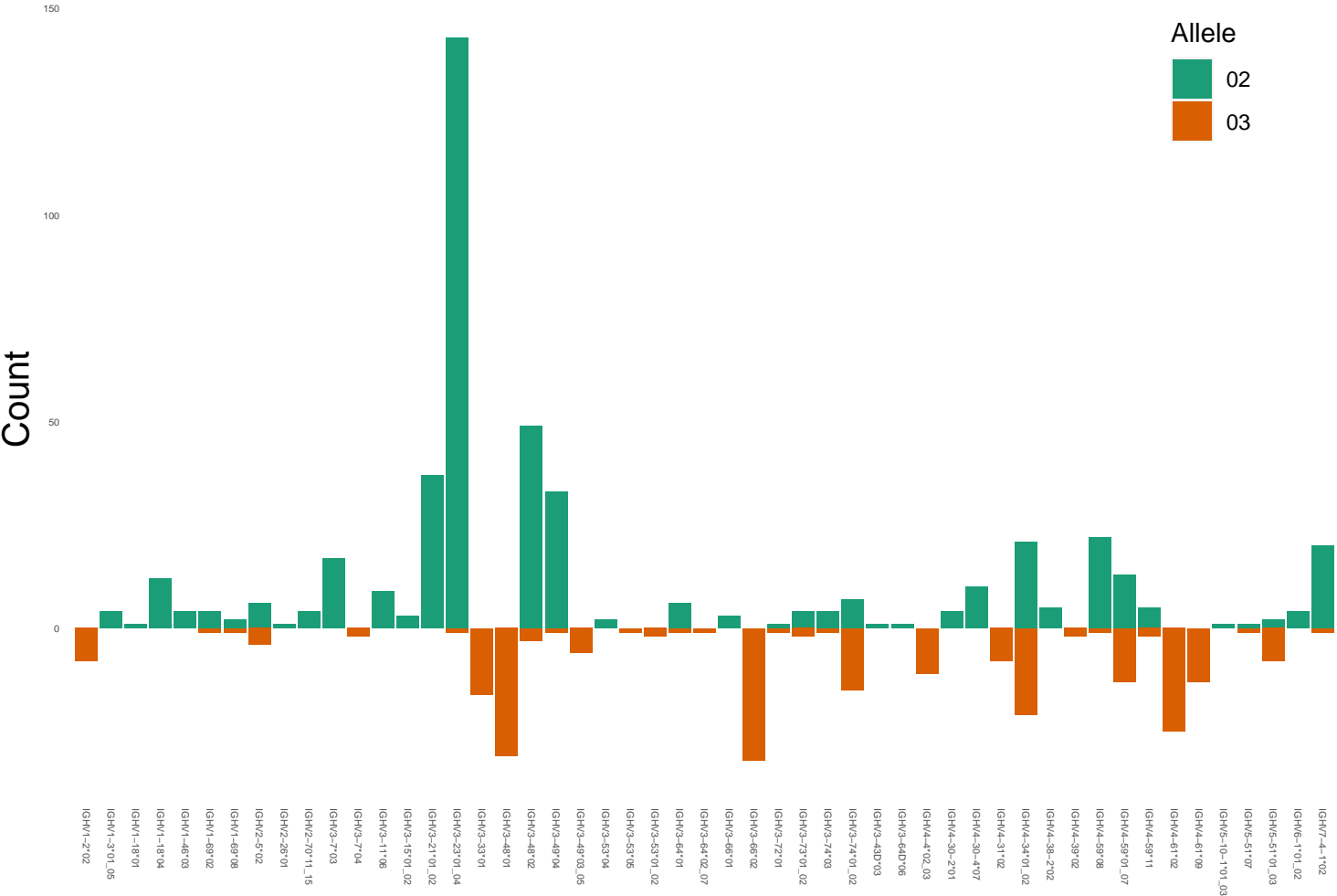
59 sequences assigned
No exact matches.



Allele Usage



Sequence Count by IGHJ6 allele usage



[illegible]