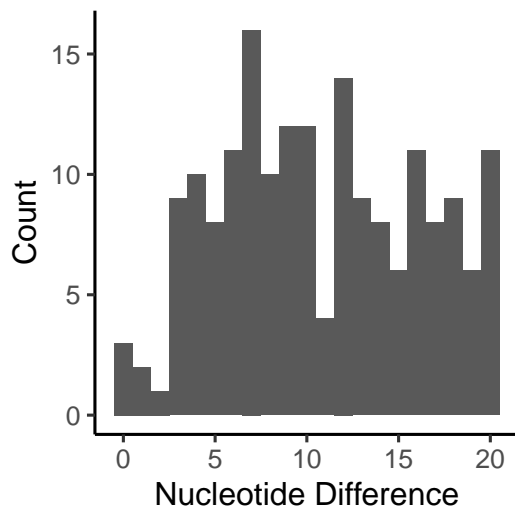


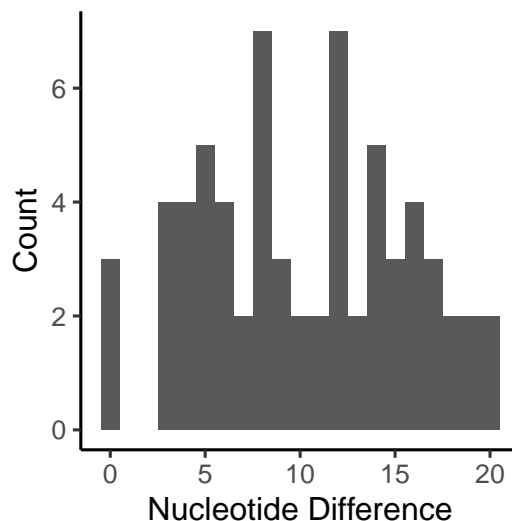
IGHV1-2*02

209 sequences assigned
3 (1.4%) exact matches, in which:
3 unique CDR3
2 unique J



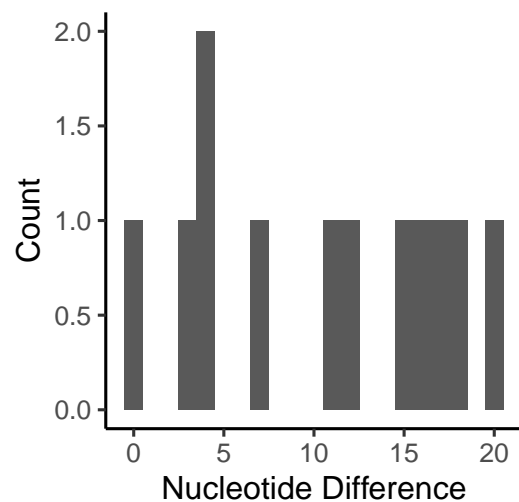
IGHV1-3*01_05

76 sequences assigned
3 (3.9%) exact matches, in which:
3 unique CDR3
2 unique J



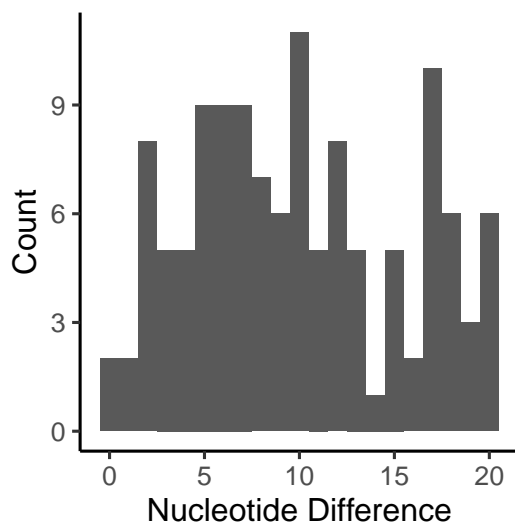
IGHV1-24*01

15 sequences assigned
1 (6.7%) exact matches, in which:
1 unique CDR3
1 unique J



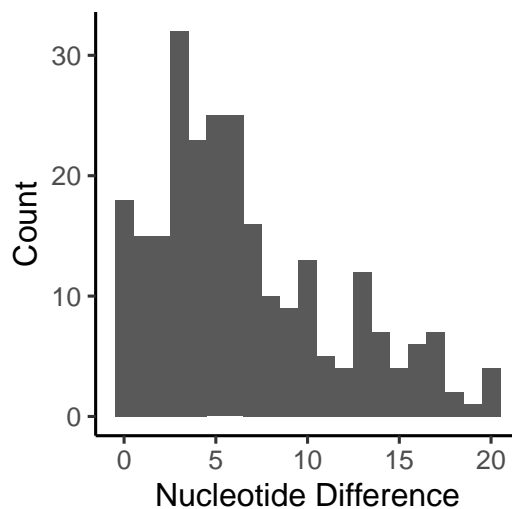
IGHV1-2*06

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



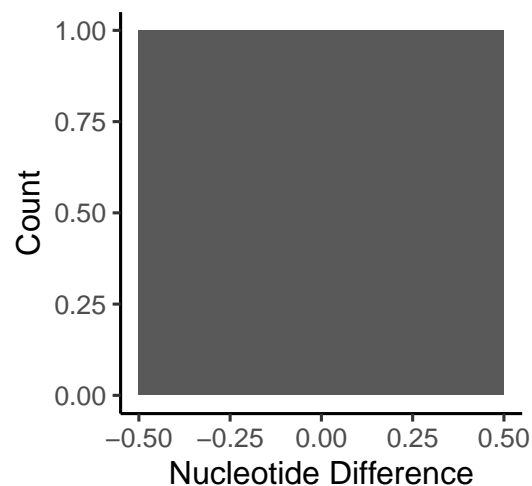
IGHV1-8*01

285 sequences assigned
18 (6.3%) exact matches, in which:
18 unique CDR3
5 unique J



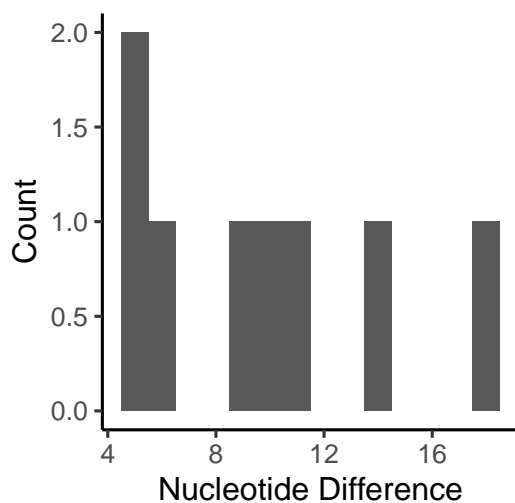
IGHV1-45*02

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



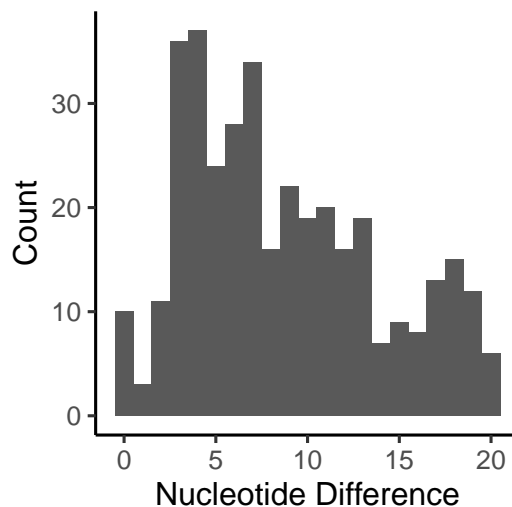
IGHV1-3*04

10 sequences assigned
No exact matches.



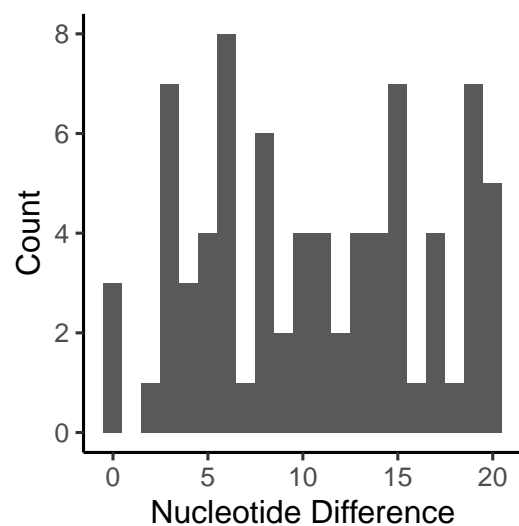
IGHV1-18*01

448 sequences assigned
10 (2.2%) exact matches, in which:
10 unique CDR3
3 unique J



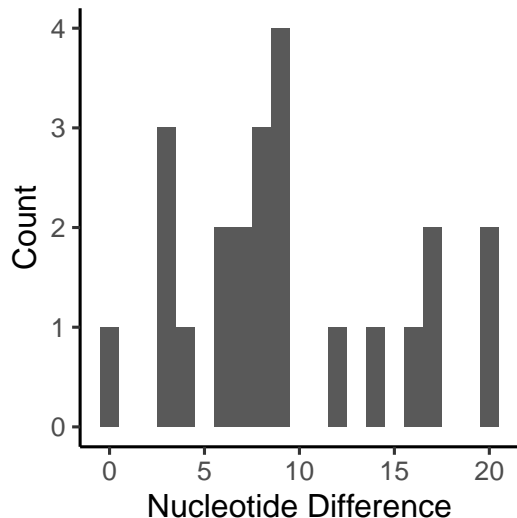
IGHV1-46*01

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



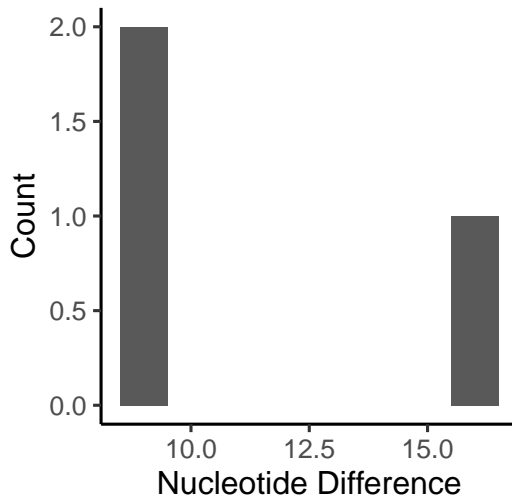
IGHV1-46*03

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



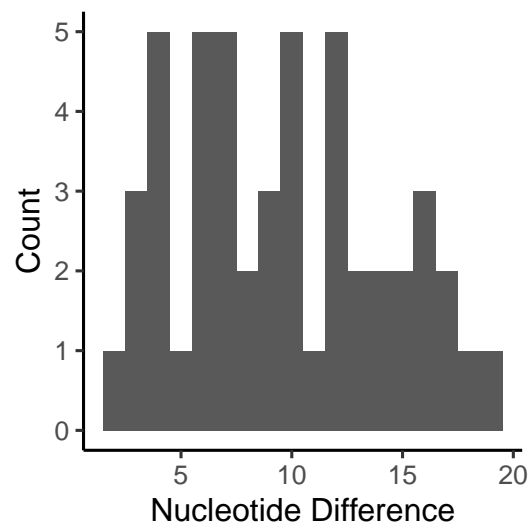
IGHV1-69*02

8 sequences assigned
No exact matches.



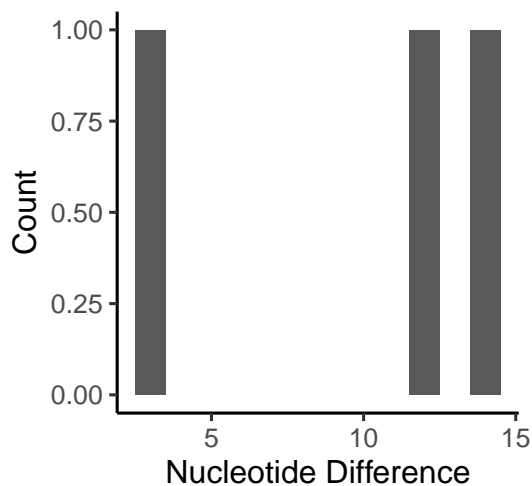
IGHV2-5*01

64 sequences assigned
No exact matches.



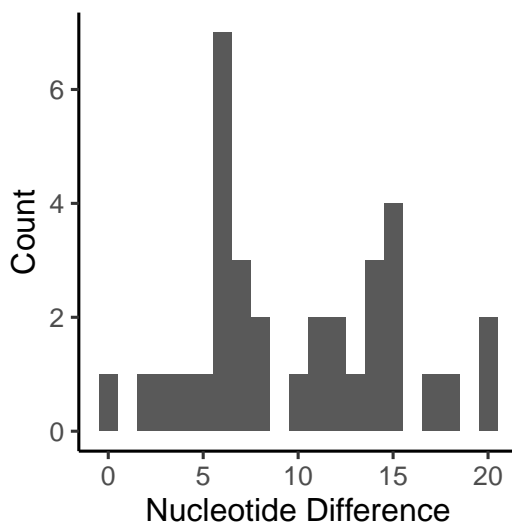
IGHV1-58*02

3 sequences assigned
No exact matches.



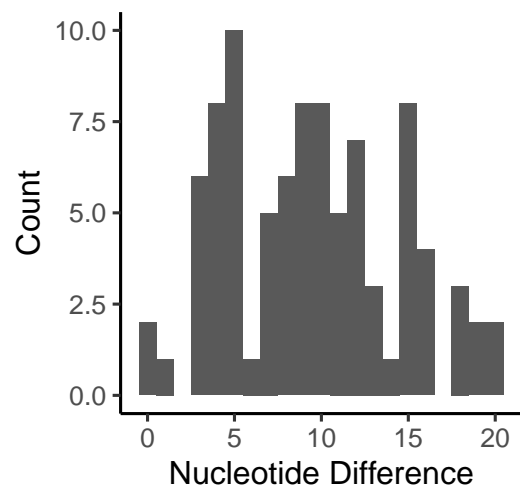
IGHV1-69*01_12_13

46 sequences assigned
1 (2.2%) exact matches, in which:
1 unique CDR3
1 unique J



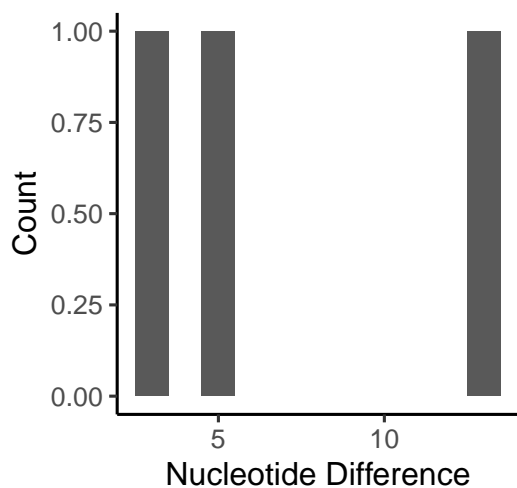
IGHV2-5*02

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



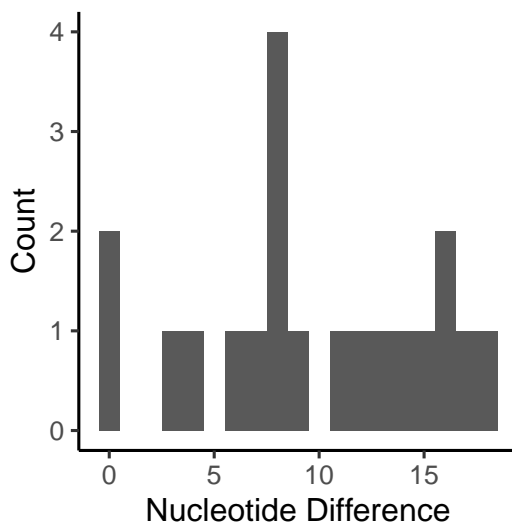
IGHV1-58*01_03

3 sequences assigned
No exact matches.



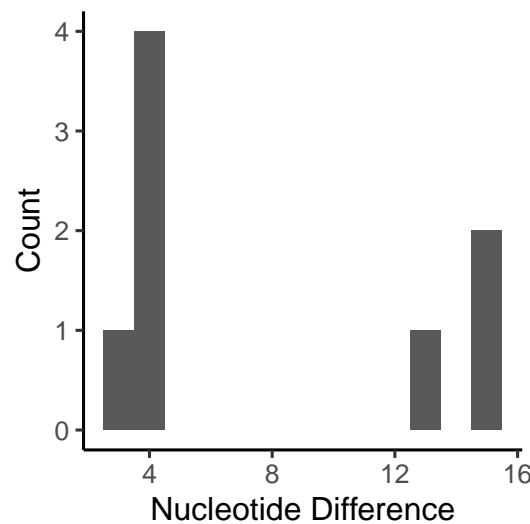
IGHV1-69*04_09

27 sequences assigned
2 (7.4%) exact matches, in which:
2 unique CDR3
1 unique J



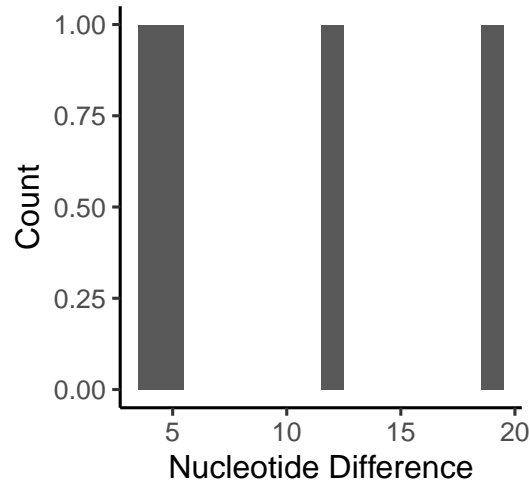
IGHV2-26*01

10 sequences assigned
No exact matches.



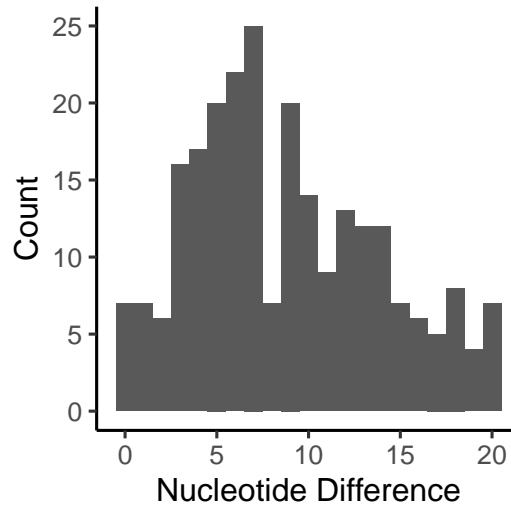
IGHV2-70*01

5 sequences assigned
No exact matches.



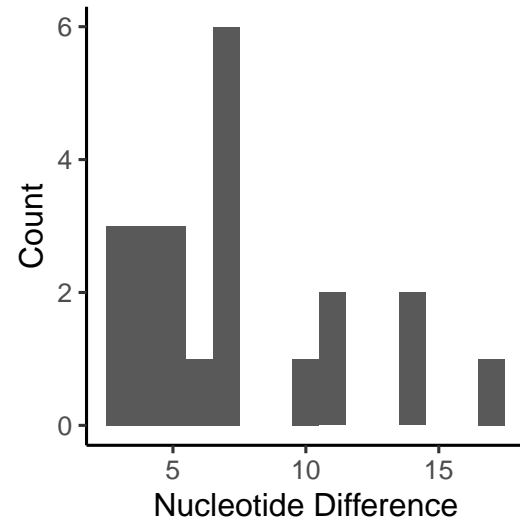
IGHV3-11*01

304 sequences assigned
7 (2.3%) exact matches, in which:
6 unique CDR3
3 unique J



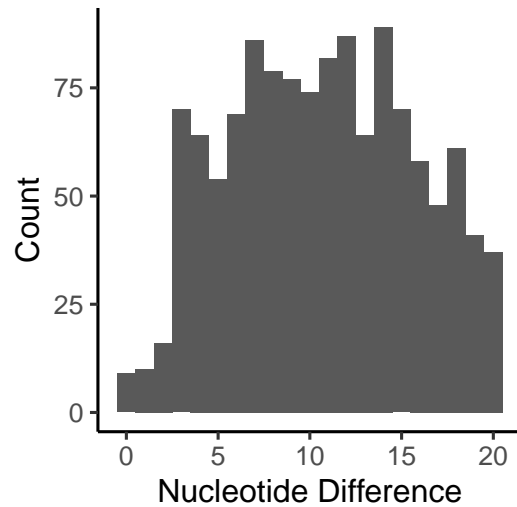
IGHV3-20*01_02

22 sequences assigned
No exact matches.



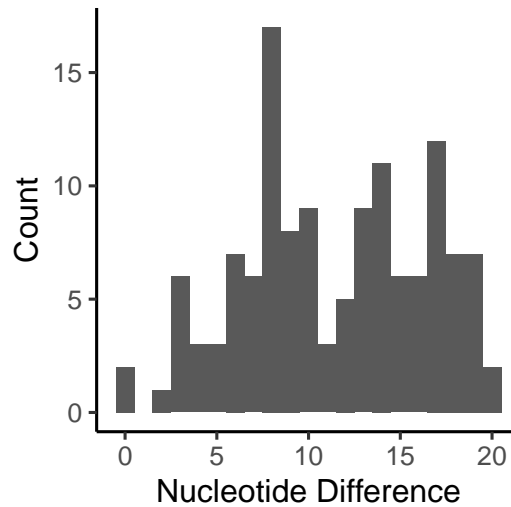
IGHV3-7*01

1428 sequences assigned
9 (0.6%) exact matches, in which:
7 unique CDR3
4 unique J



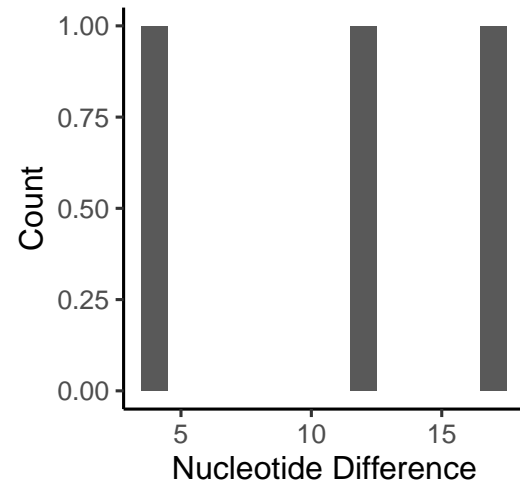
IGHV3-13*01

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



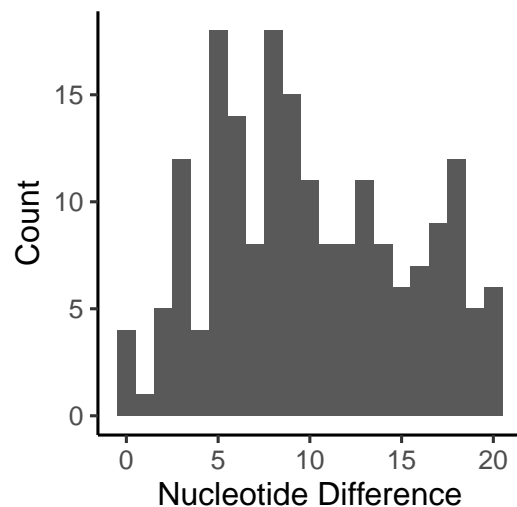
IGHV3-20*03_04

5 sequences assigned
No exact matches.



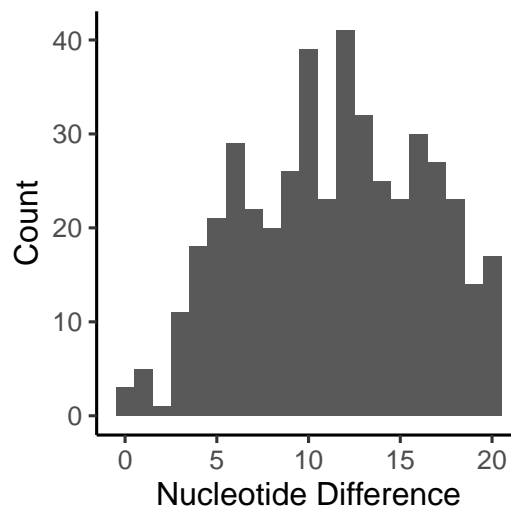
IGHV3-9*01

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



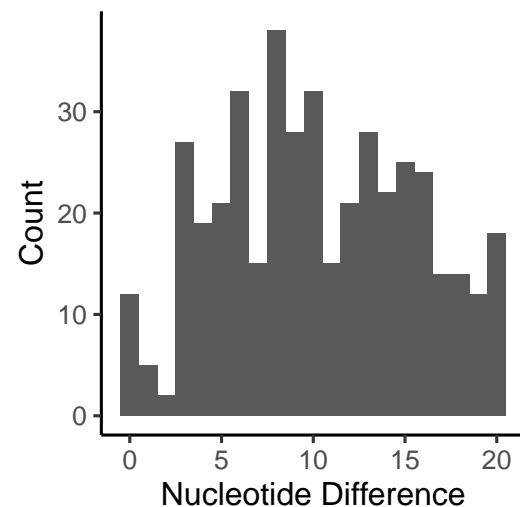
IGHV3-15*01_02

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



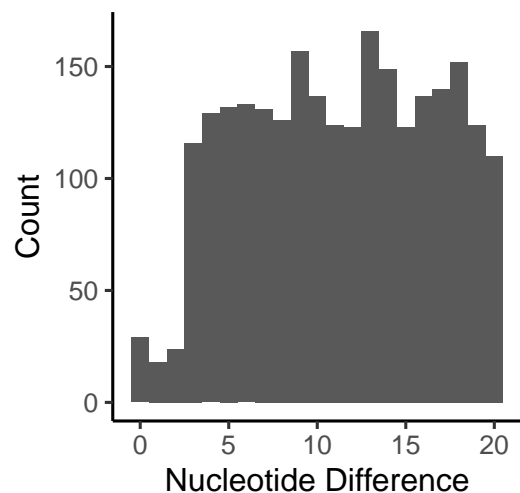
IGHV3-21*01_02

502 sequences assigned
12 (2.4%) exact matches, in which:
10 unique CDR3
3 unique J



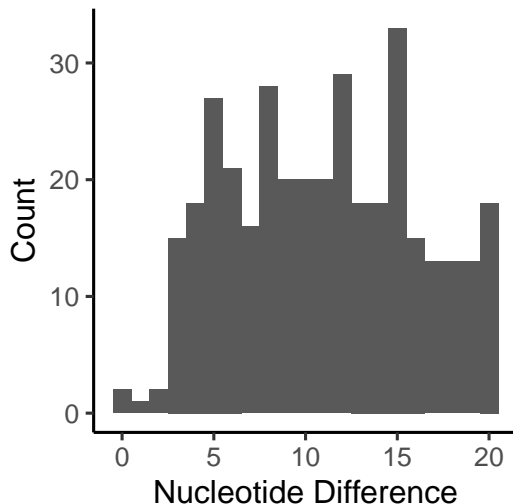
IGHV3-23*01_04

3242 sequences assigned
29 (0.9%) exact matches, in which:
26 unique CDR3
5 unique J



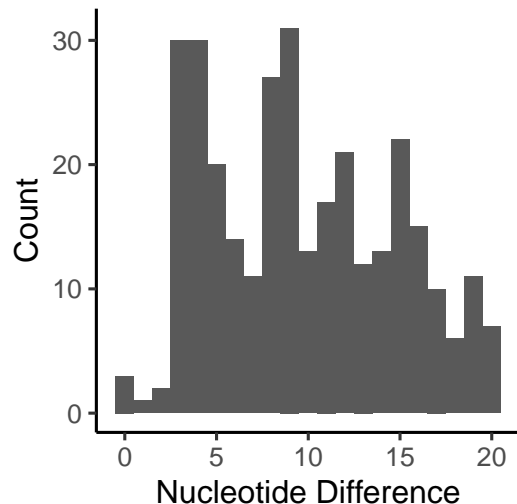
IGHV3-33*01

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



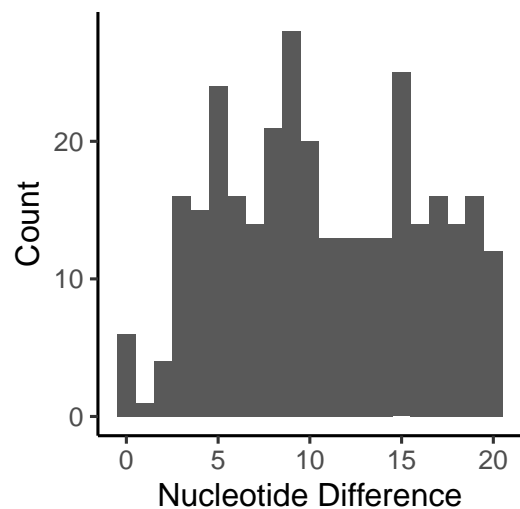
IGHV3-48*02

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



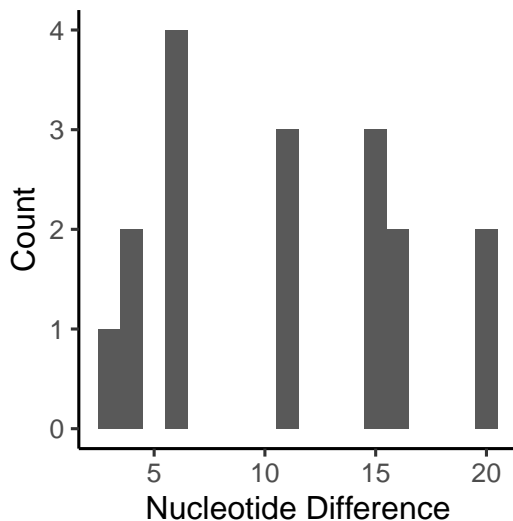
IGHV3-30-3*01

409 sequences assigned
6 (1.5%) exact matches, in which:
6 unique CDR3
3 unique J



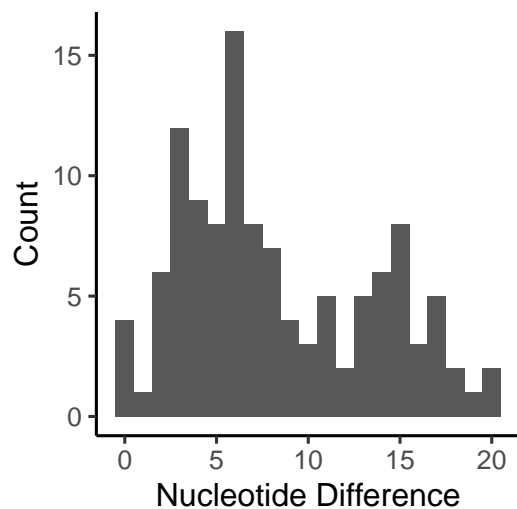
IGHV3-43*01

27 sequences assigned
No exact matches.



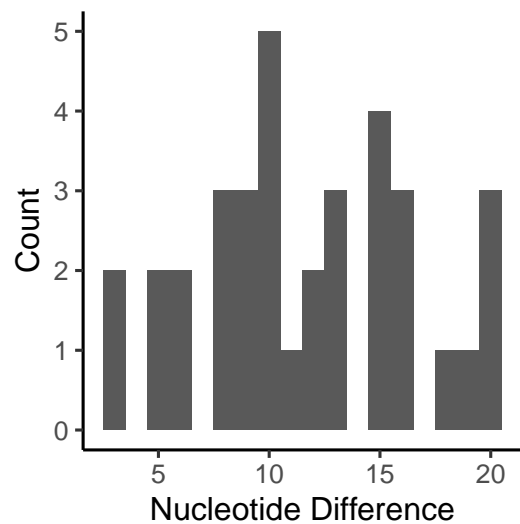
IGHV3-49*03_05

140 sequences assigned
4 (2.9%) exact matches, in which:
4 unique CDR3
2 unique J



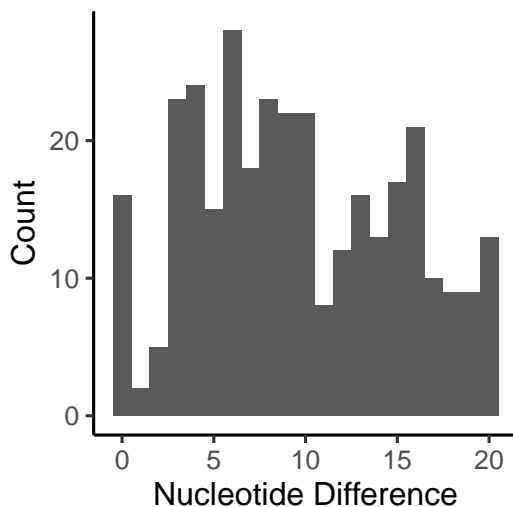
IGHV3-30*03

57 sequences assigned
No exact matches.



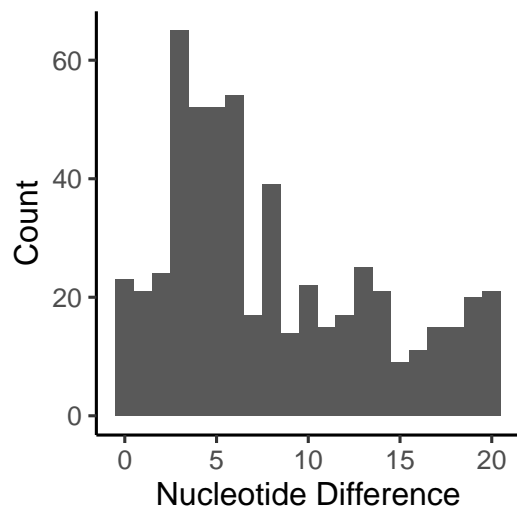
IGHV3-48*01

376 sequences assigned
16 (4.3%) exact matches, in which:
9 unique CDR3
3 unique J



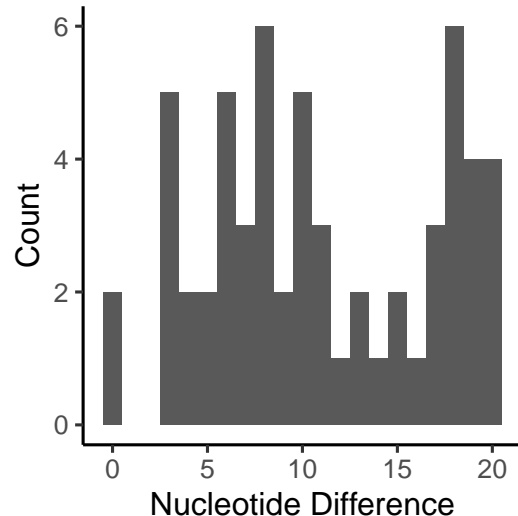
IGHV3-53*01_02

637 sequences assigned
23 (3.6%) exact matches, in which:
18 unique CDR3
6 unique J



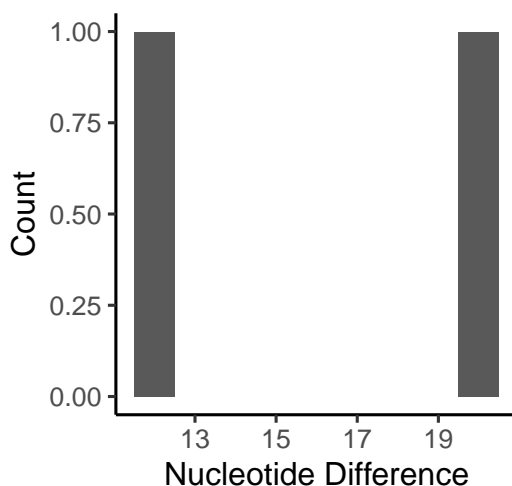
IGHV3-64*01

60 sequences assigned
2 (3.3%) exact matches, in which:
1 unique CDR3
1 unique J



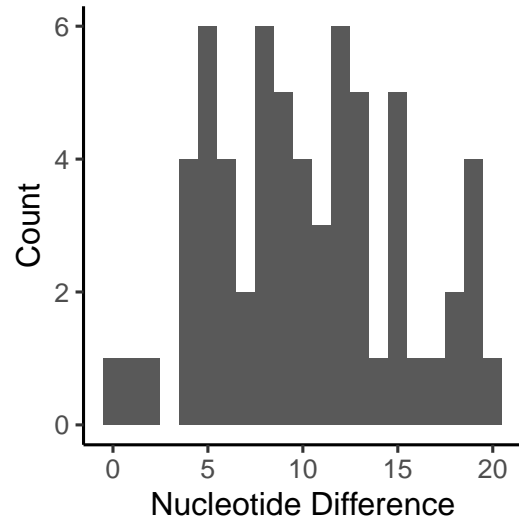
IGHV3-69-1*01

2 sequences assigned
No exact matches.



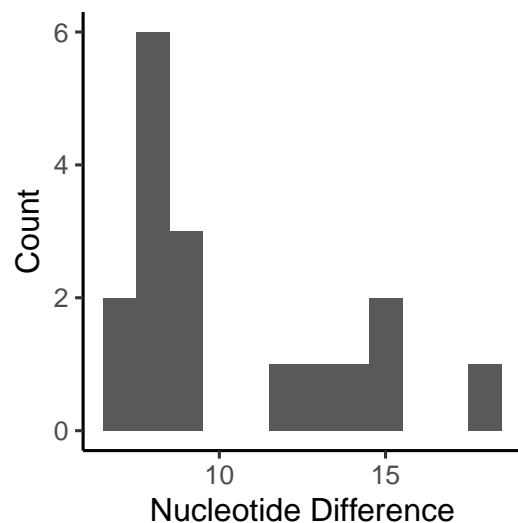
IGHV3-73*01_02

71 sequences assigned
1 (1.4%) exact matches, in which:
1 unique CDR3
1 unique J



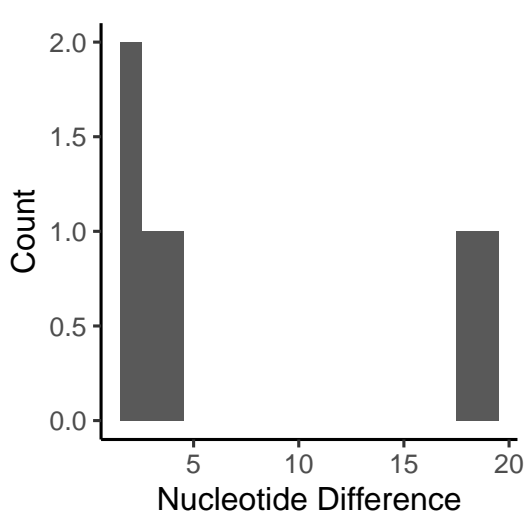
IGHV3-64*02_07

19 sequences assigned
No exact matches.



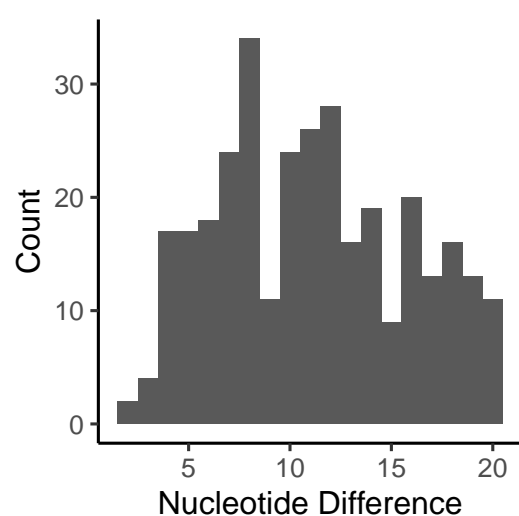
IGHV3-69-1*02

10 sequences assigned
No exact matches.



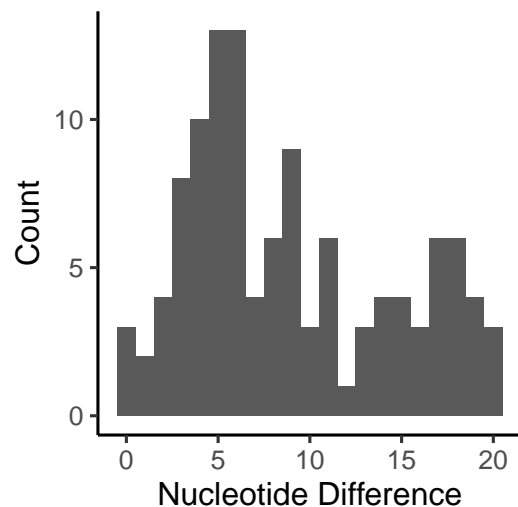
IGHV3-74*03

371 sequences assigned
No exact matches.



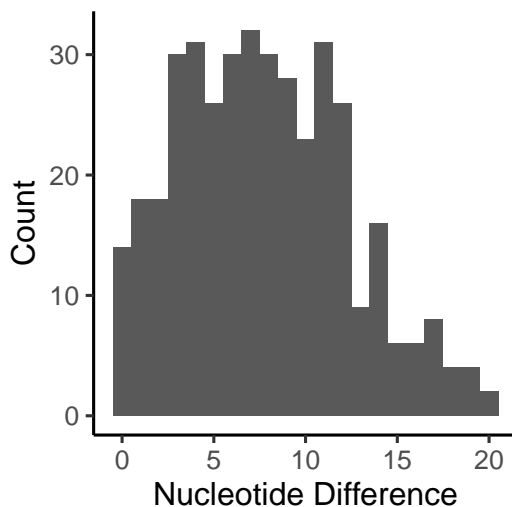
IGHV3-66*02

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



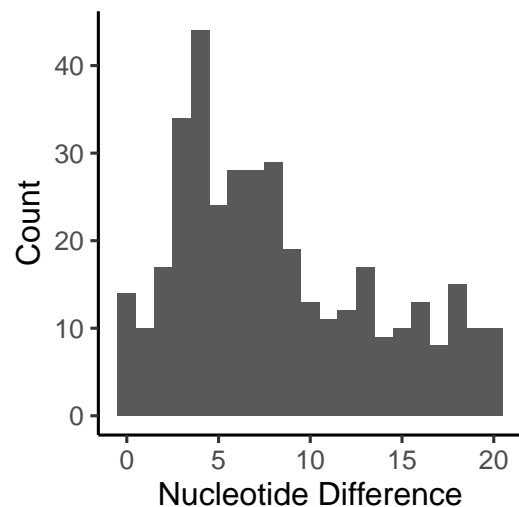
IGHV3-72*01

404 sequences assigned
14 (3.5%) exact matches, in which:
10 unique CDR3
4 unique J



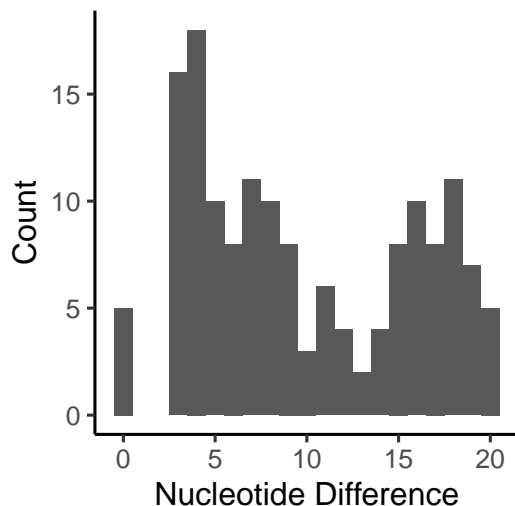
IGHV3-74*01_02

425 sequences assigned
14 (3.3%) exact matches, in which:
10 unique CDR3
3 unique J



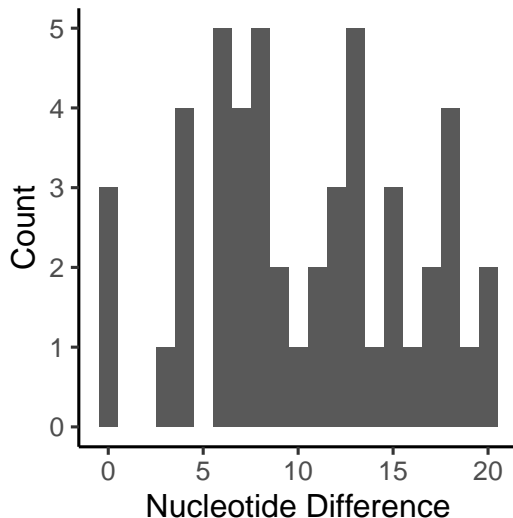
IGHV4-4*07

202 sequences assigned
5 (2.5%) exact matches, in which:
4 unique CDR3
2 unique J



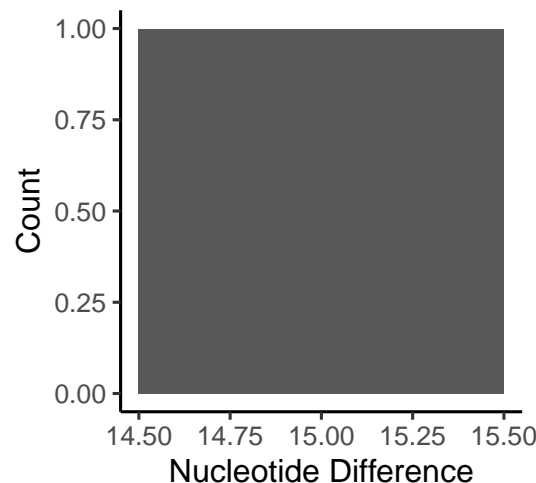
IGHV4-30-2*01

66 sequences assigned
3 (4.5%) exact matches, in which:
2 unique CDR3
1 unique J



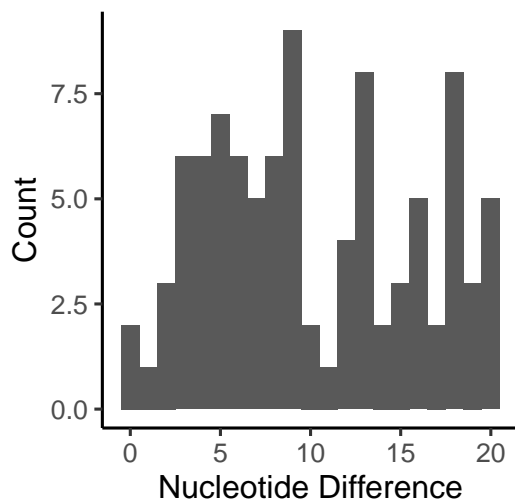
IGHV4-38-2*02

1 sequences assigned
No exact matches.



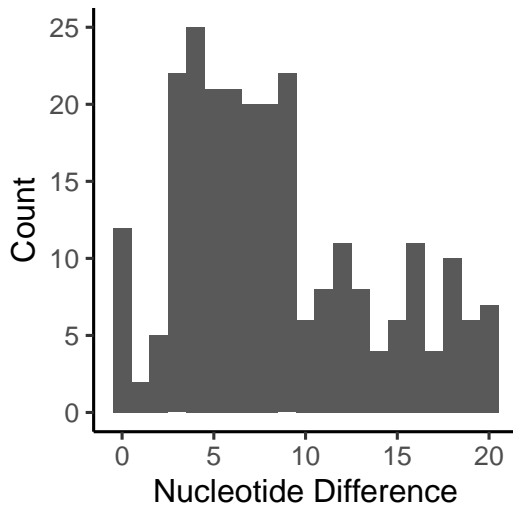
IGHV4-4*02_03

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



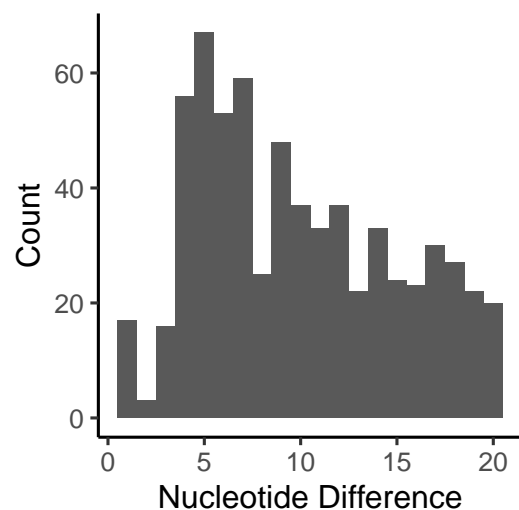
IGHV4-31*02

309 sequences assigned
12 (3.9%) exact matches, in which:
10 unique CDR3
5 unique J



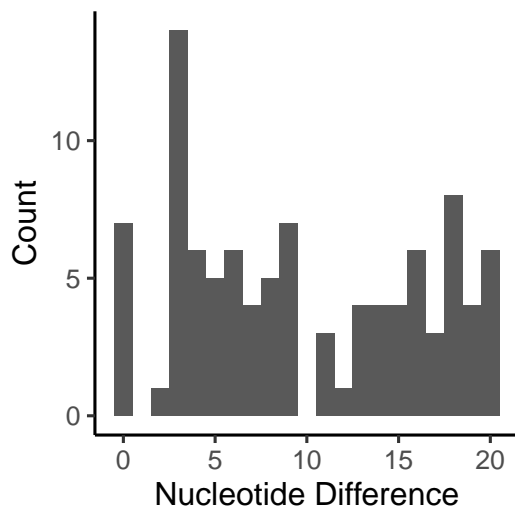
IGHV4-39*02

819 sequences assigned
No exact matches.



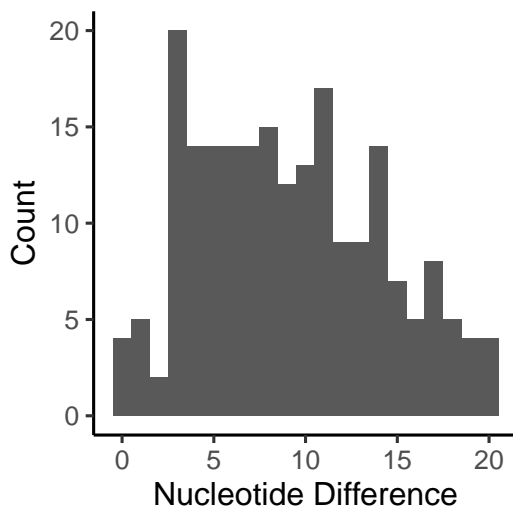
IGHV4-30-4*01

143 sequences assigned
7 (4.9%) exact matches, in which:
6 unique CDR3
4 unique J



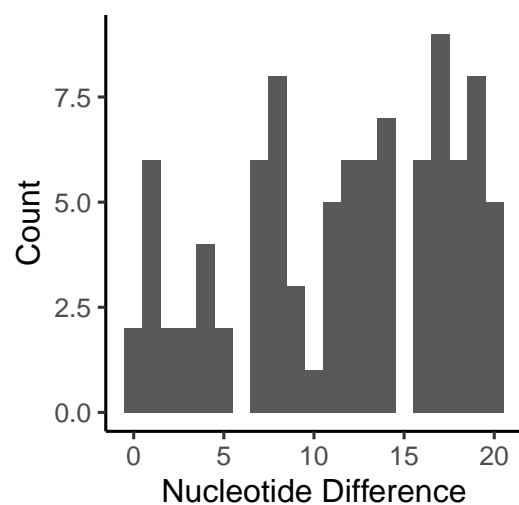
IGHV4-34*01_02

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



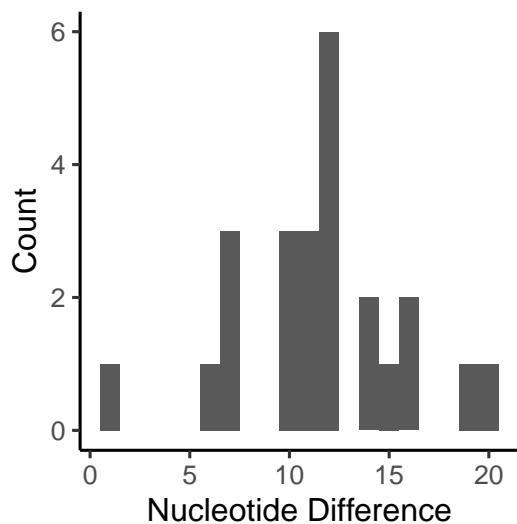
IGHV4-39*01_05

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



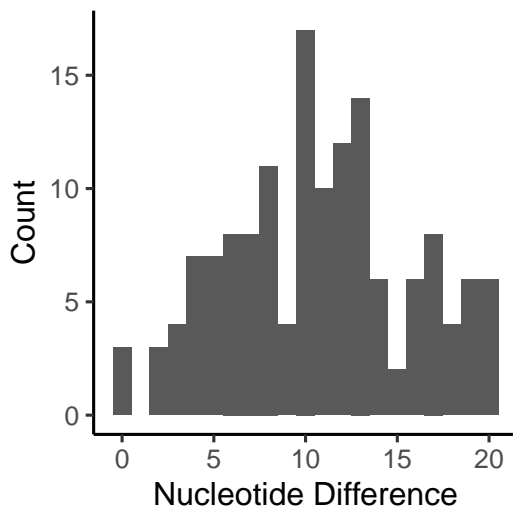
IGHV4-59*02

37 sequences assigned
No exact matches.



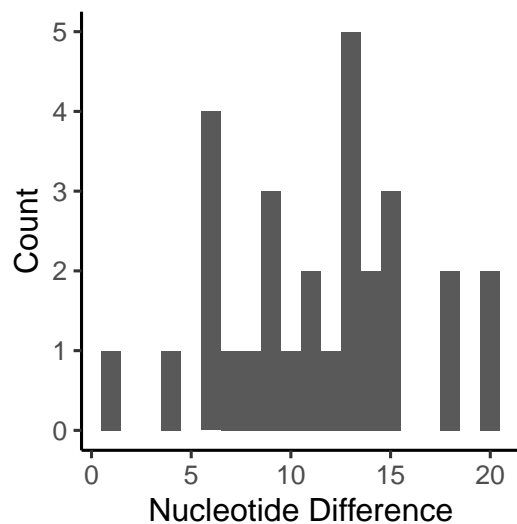
IGHV4-61*01

179 sequences assigned
3 (1.7%) exact matches, in which:
3 unique CDR3
1 unique J



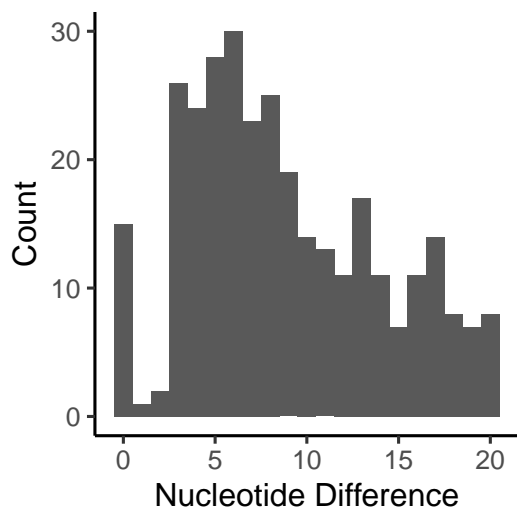
IGHV5-51*07

34 sequences assigned
No exact matches.



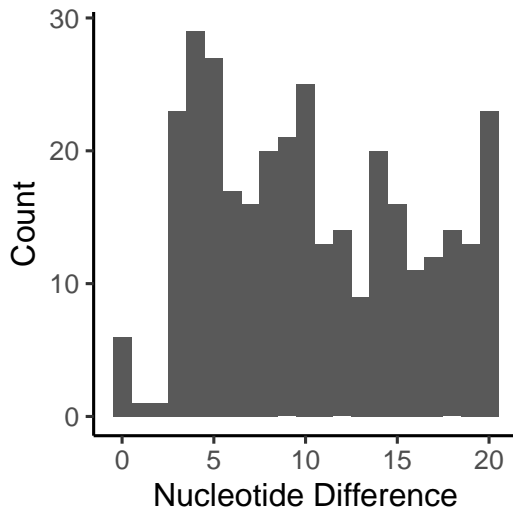
IGHV4-59*01_07

377 sequences assigned
15 (4%) exact matches, in which:
12 unique CDR3
5 unique J



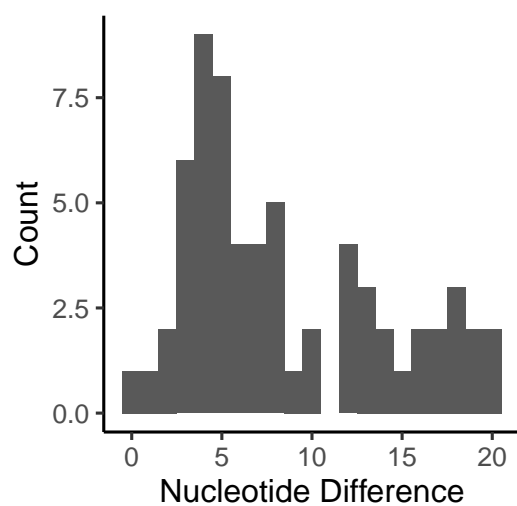
IGHV4-61*02

420 sequences assigned
6 (1.4%) exact matches, in which:
6 unique CDR3
4 unique J



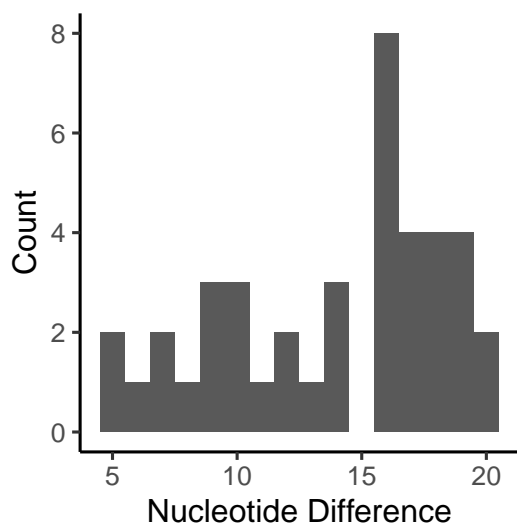
IGHV5-51*01_03

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



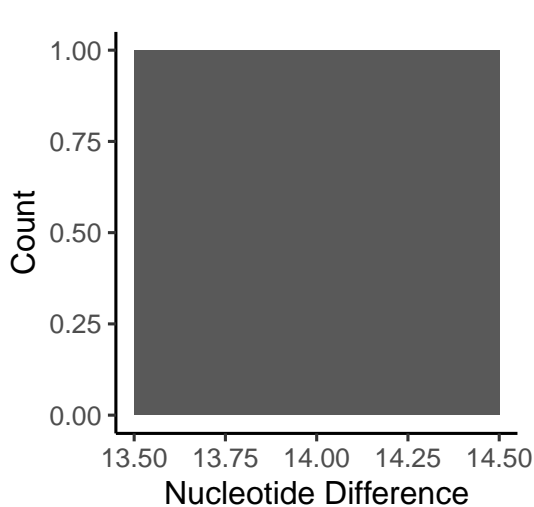
IGHV4-59*11

56 sequences assigned
No exact matches.



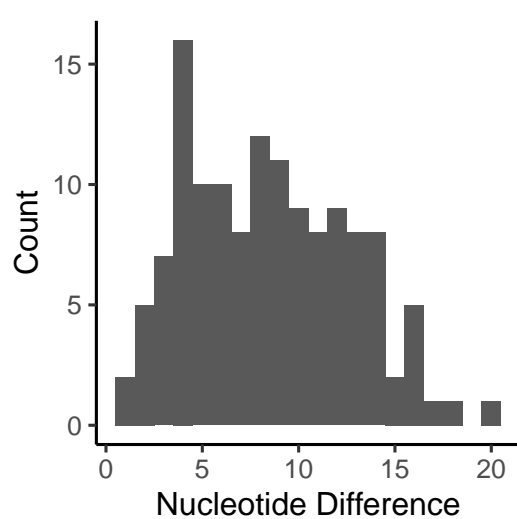
IGHV4/OR15-8*02

3 sequences assigned
No exact matches.



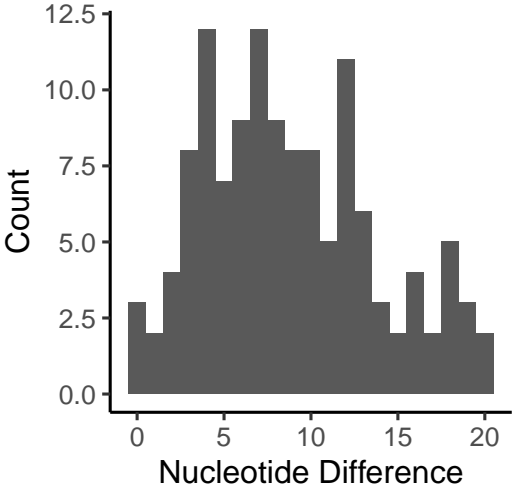
IGHV6-1*01_02

147 sequences assigned
No exact matches.

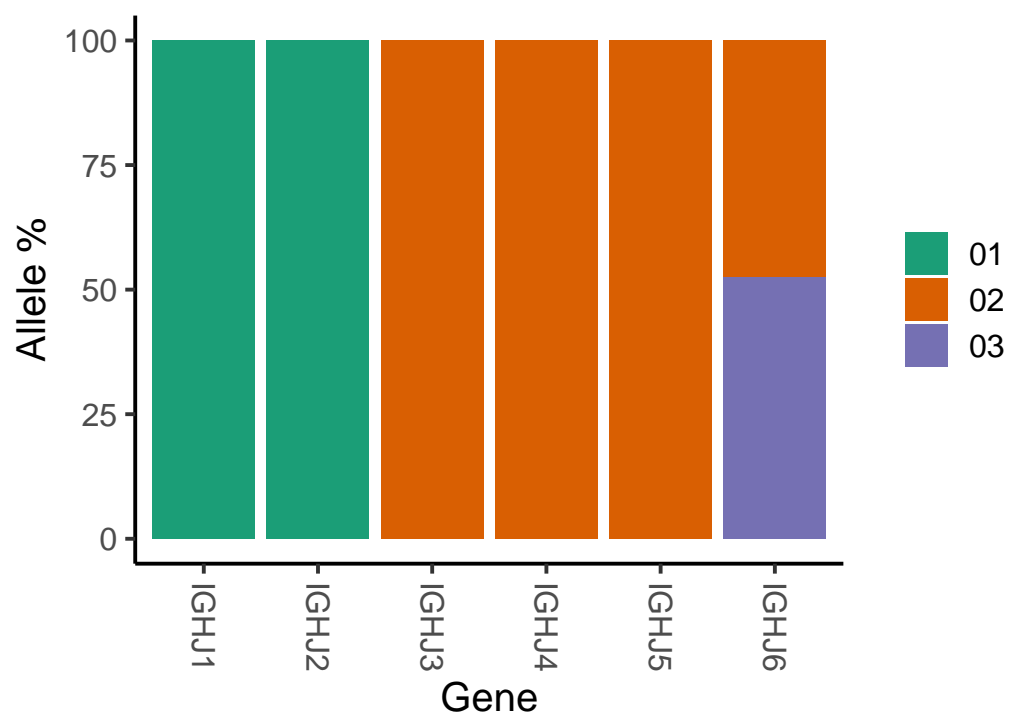


IGHV7-4-1*02

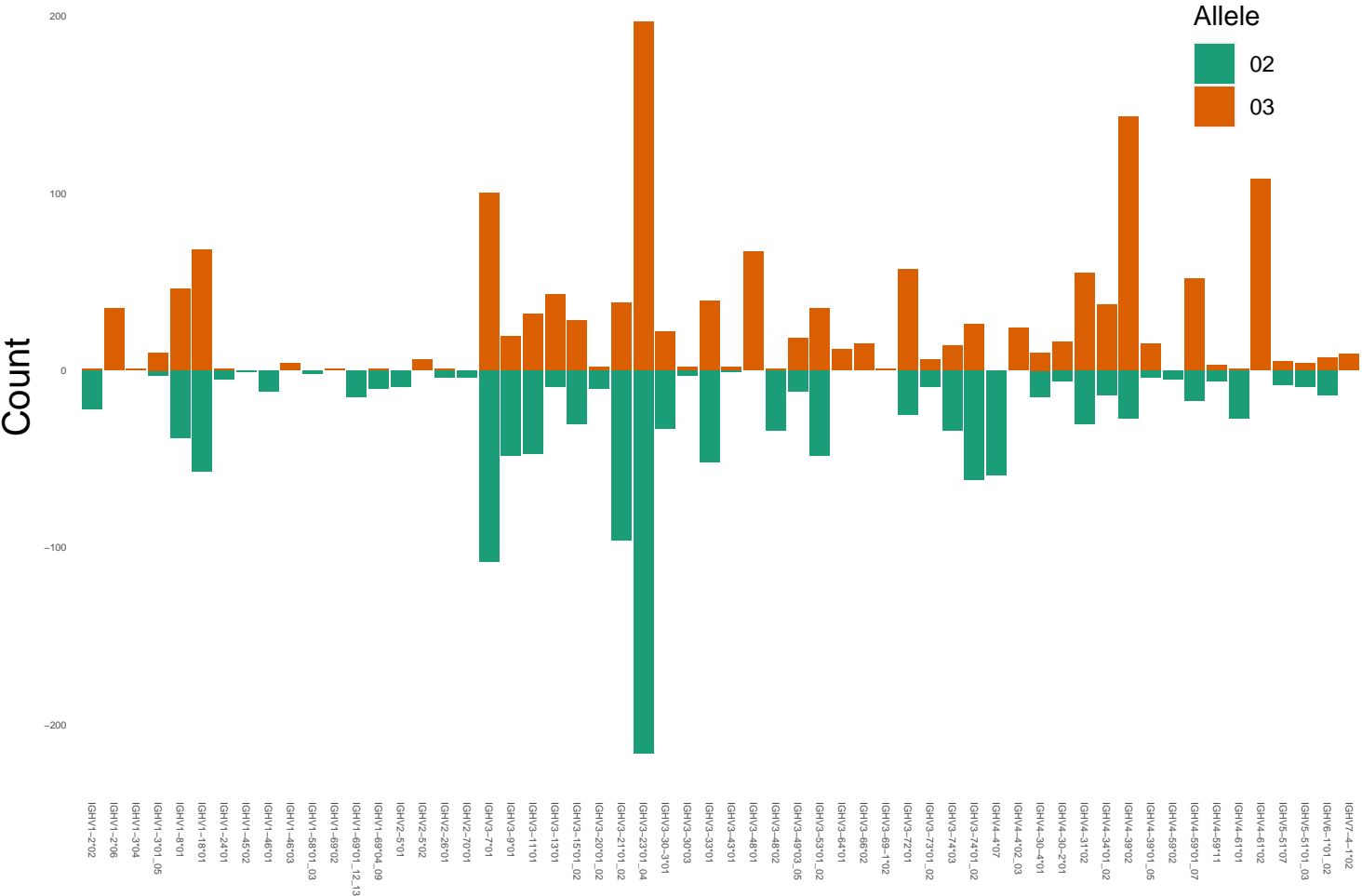
133 sequences assigned
3 (2.3%) exact matches, in which:
3 unique CDR3
1 unique J



Allele Usage



Sequence Count by IGHJ6 allele usage



[illegible]