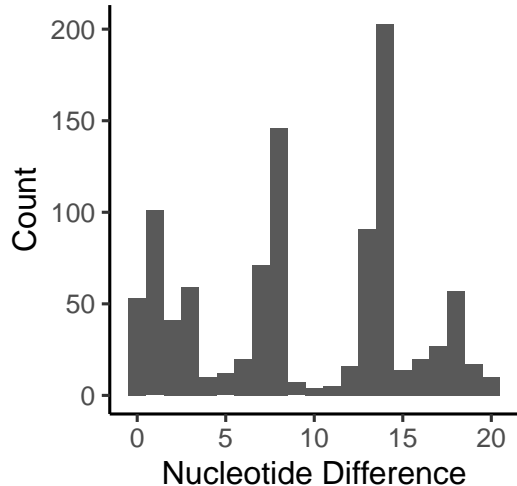


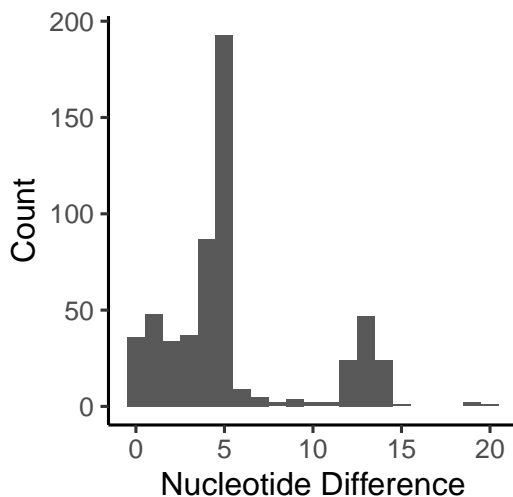
IGHV1-2*06

1215 sequences assigned
53 (4.4%) exact matches, in which:
35 unique CDR3
5 unique J



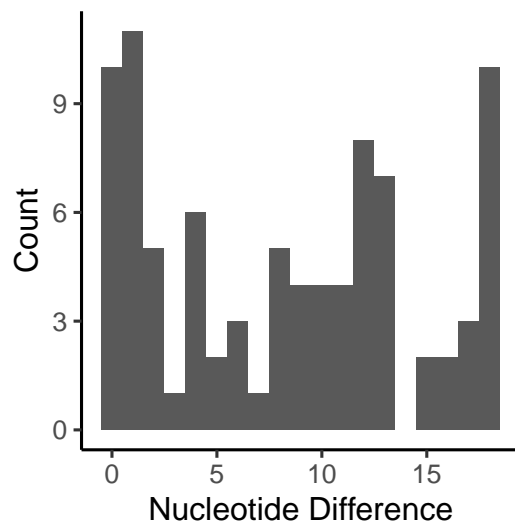
IGHV1-18*01

582 sequences assigned
36 (6.2%) exact matches, in which:
26 unique CDR3
5 unique J



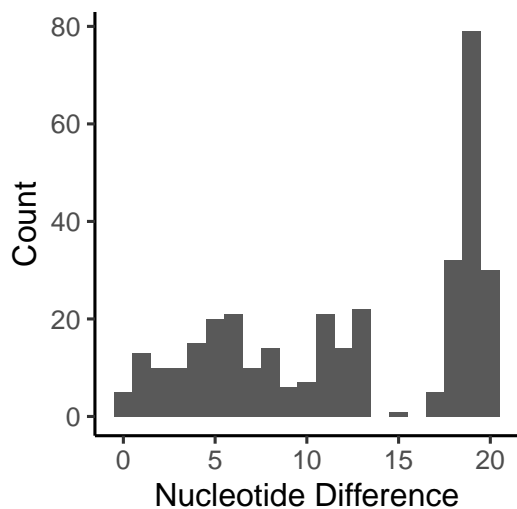
IGHV1-46*01

89 sequences assigned
10 (11.2%) exact matches, in which:
7 unique CDR3
3 unique J



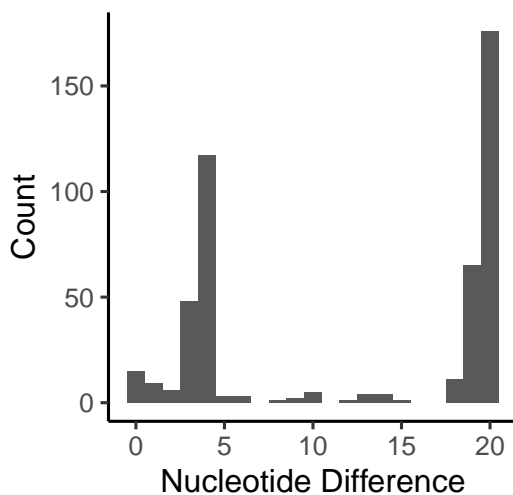
IGHV1-3*01_05

477 sequences assigned
5 (1%) exact matches, in which:
3 unique CDR3
3 unique J



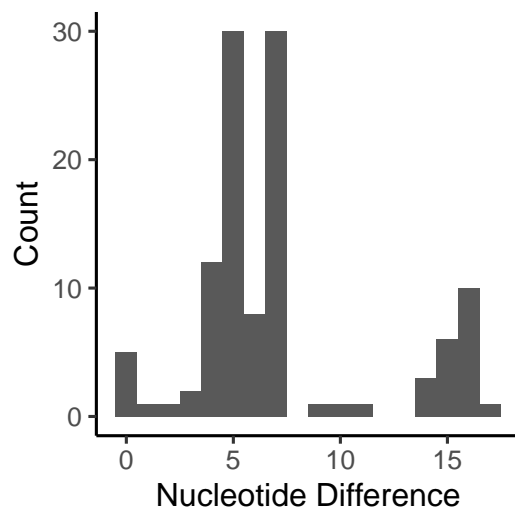
IGHV1-18*04

603 sequences assigned
15 (2.5%) exact matches, in which:
13 unique CDR3
5 unique J



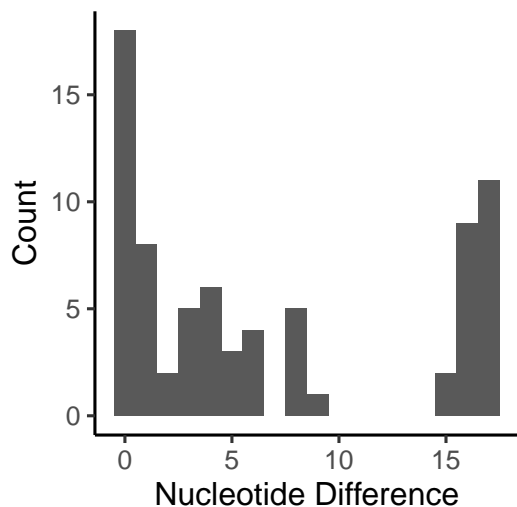
IGHV1-46*03

182 sequences assigned
5 (2.7%) exact matches, in which:
5 unique CDR3
4 unique J



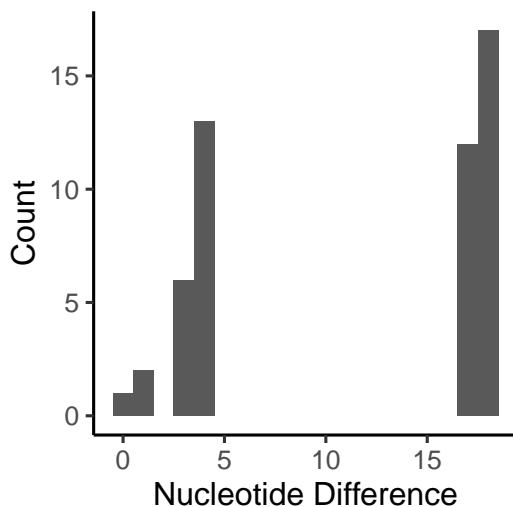
IGHV1-8*01

89 sequences assigned
18 (20.2%) exact matches, in which:
13 unique CDR3
6 unique J



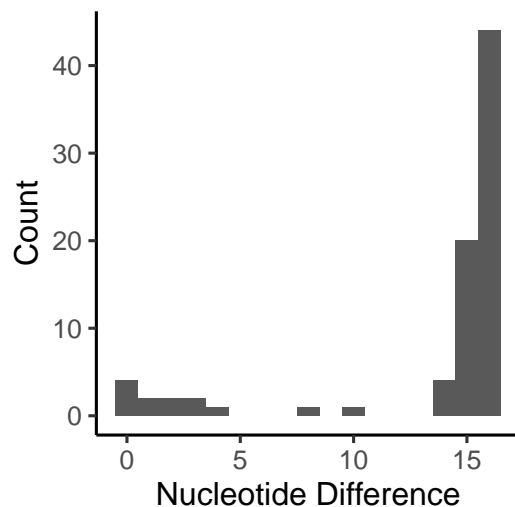
IGHV1-24*01

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



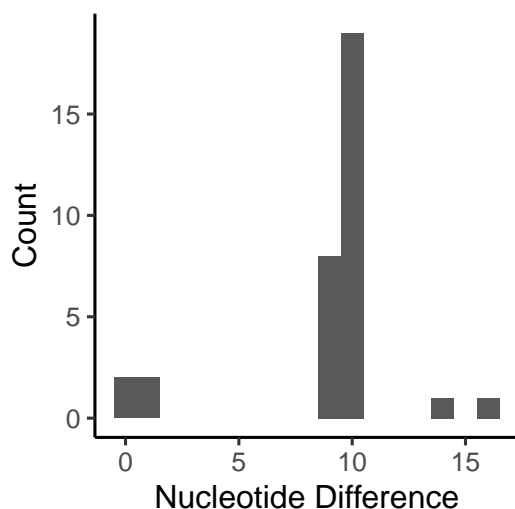
IGHV1-58*02

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



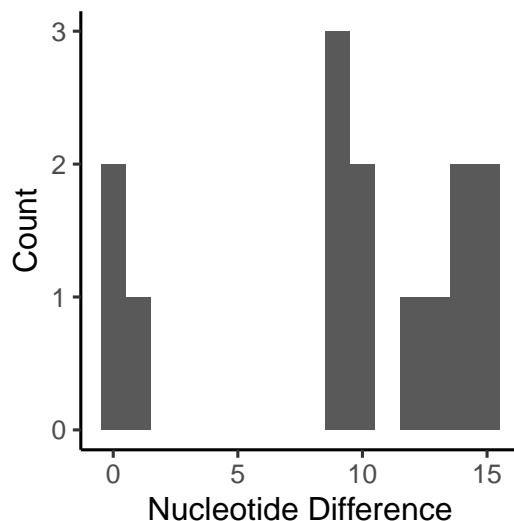
IGHV1-58*01_03

33 sequences assigned
2 (6.1%) exact matches, in which:
1 unique CDR3
1 unique J



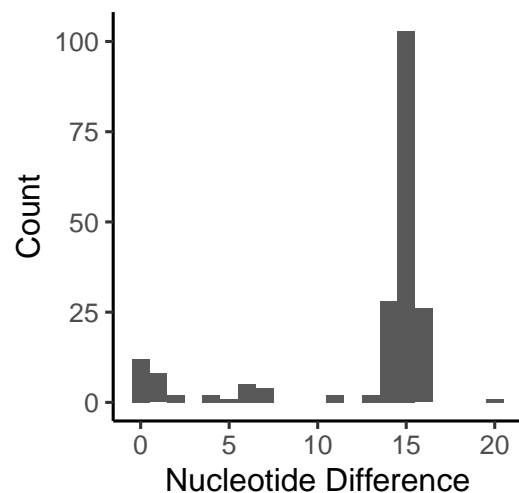
IGHV1-69*04_09

15 sequences assigned
2 (13.3%) exact matches, in which:
2 unique CDR3
2 unique J



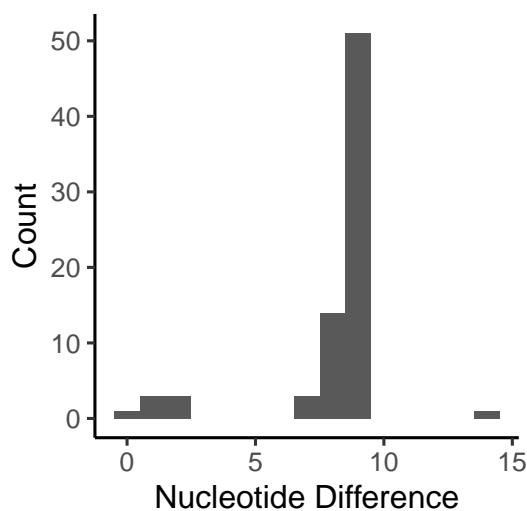
IGHV2-5*02

224 sequences assigned
12 (5.4%) exact matches, in which:
8 unique CDR3
4 unique J



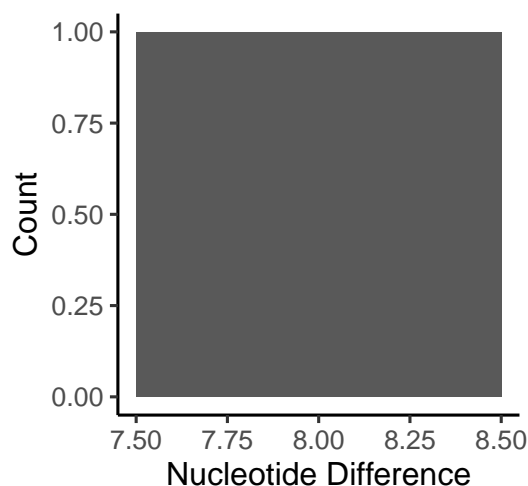
IGHV1-69*02

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



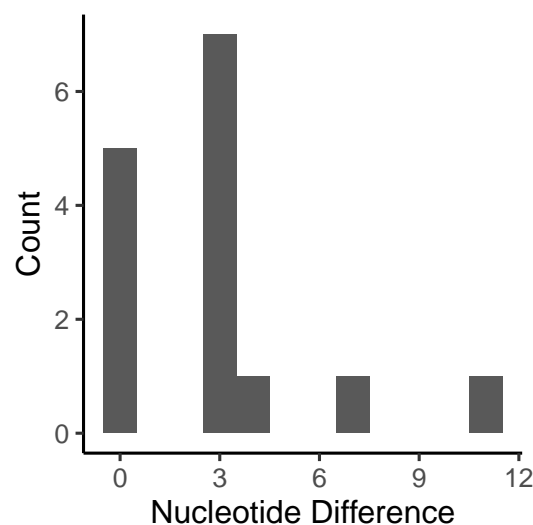
IGHV1-NL1*01

1 sequences assigned
No exact matches.



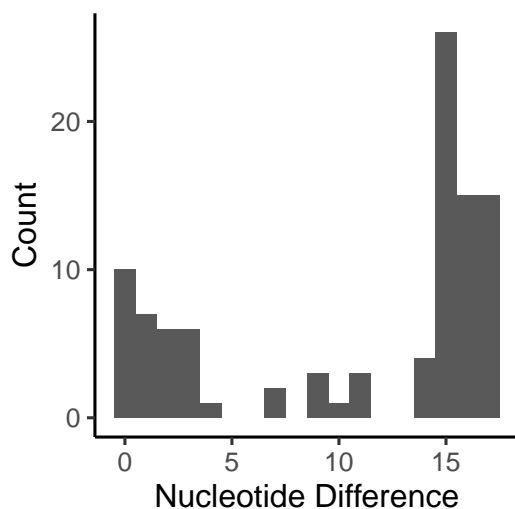
IGHV2-26*01

15 sequences assigned
5 (33.3%) exact matches, in which:
4 unique CDR3
2 unique J



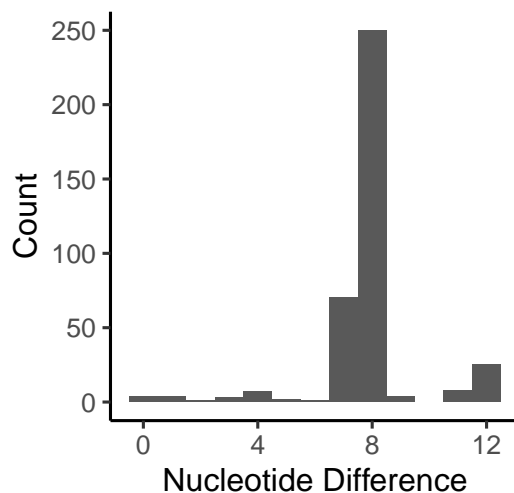
IGHV1-69*01_12_13

127 sequences assigned
10 (7.9%) exact matches, in which:
9 unique CDR3
4 unique J



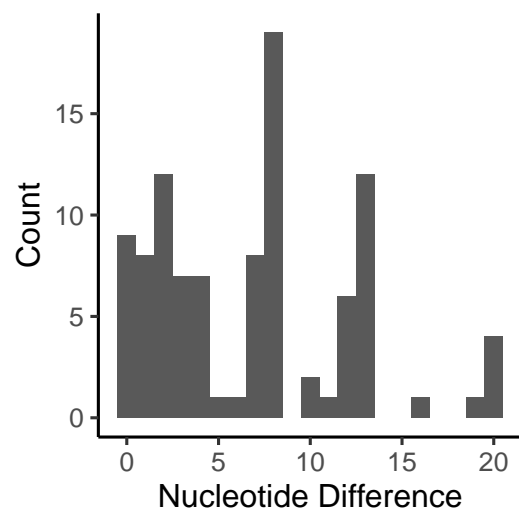
IGHV2-5*01

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



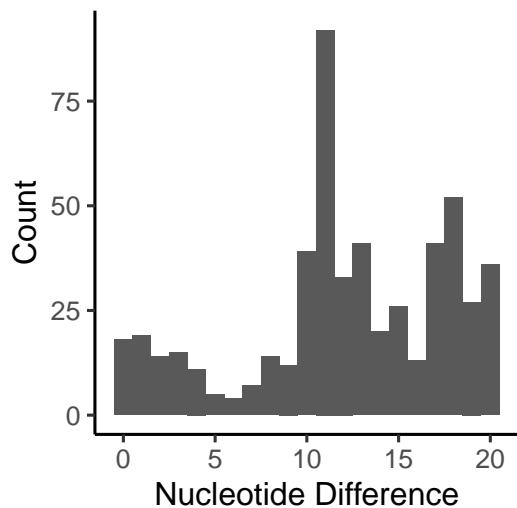
IGHV2-70*11_15

99 sequences assigned
9 (9.1%) exact matches, in which:
6 unique CDR3
2 unique J



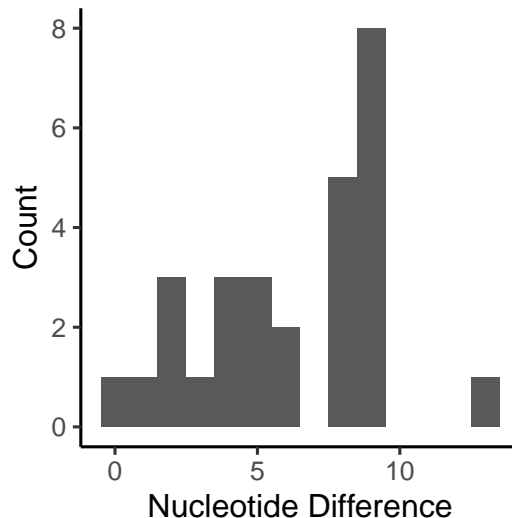
IGHV3-7*01

617 sequences assigned
18 (2.9%) exact matches, in which:
11 unique CDR3
5 unique J



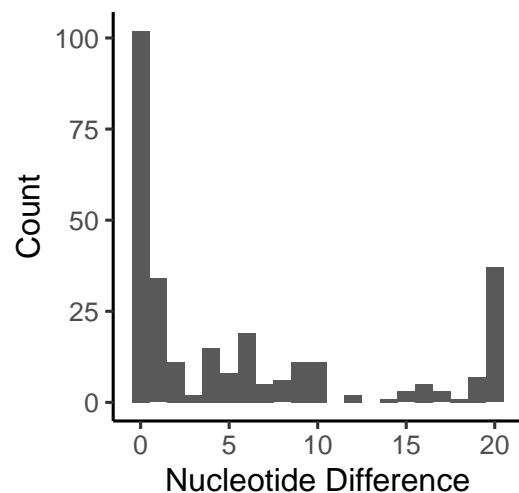
IGHV3-13*01

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



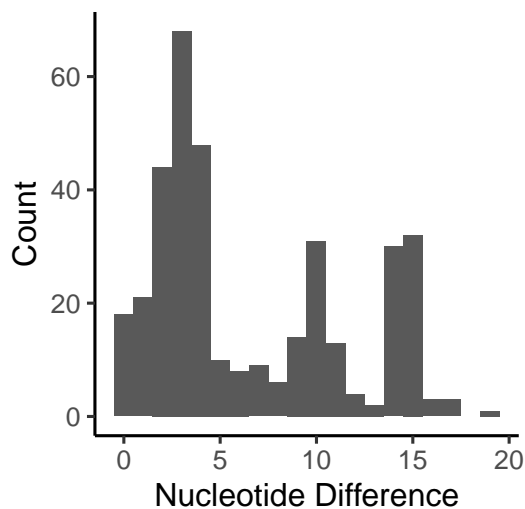
IGHV3-21*01_02

405 sequences assigned
102 (25.2%) exact matches, in which:
46 unique CDR3
6 unique J



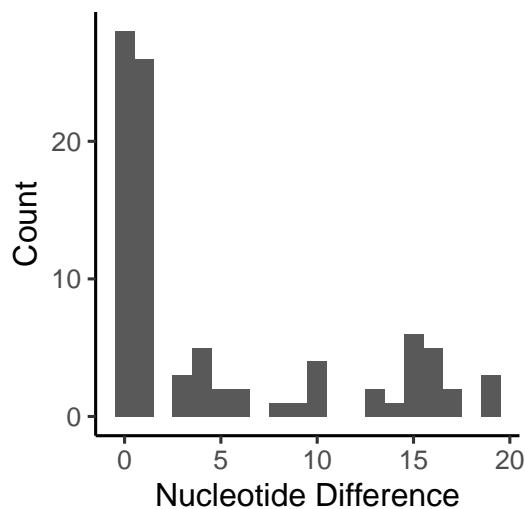
IGHV3-9*01

369 sequences assigned
18 (4.9%) exact matches, in which:
11 unique CDR3
5 unique J



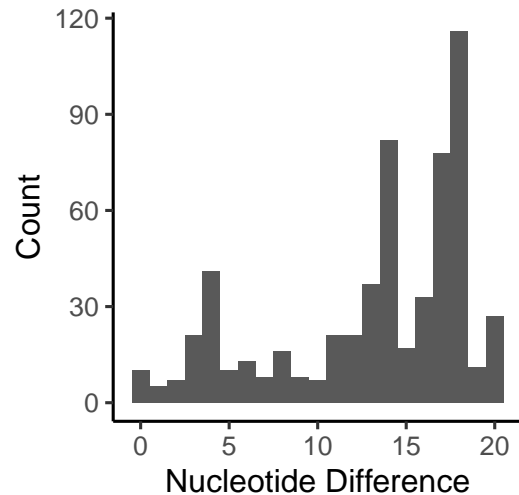
IGHV3-15*01_02

97 sequences assigned
28 (28.9%) exact matches, in which:
15 unique CDR3
5 unique J



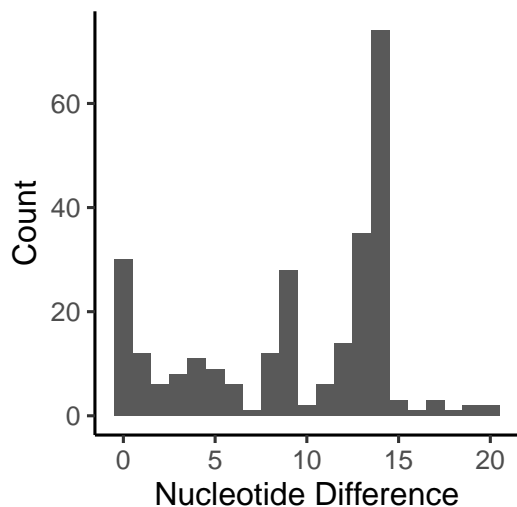
IGHV3-23*01_04

755 sequences assigned
10 (1.3%) exact matches, in which:
5 unique CDR3
2 unique J



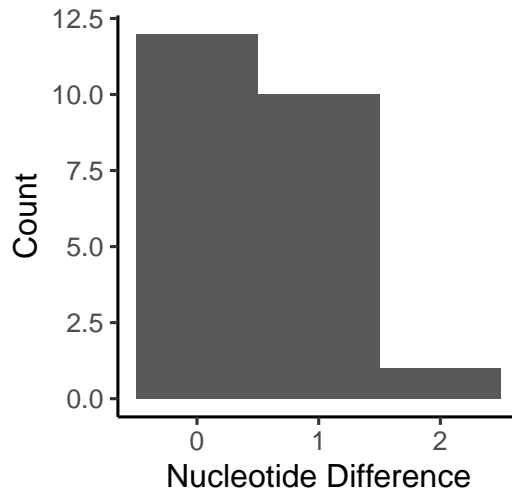
IGHV3-11*01

293 sequences assigned
30 (10.2%) exact matches, in which:
14 unique CDR3
6 unique J



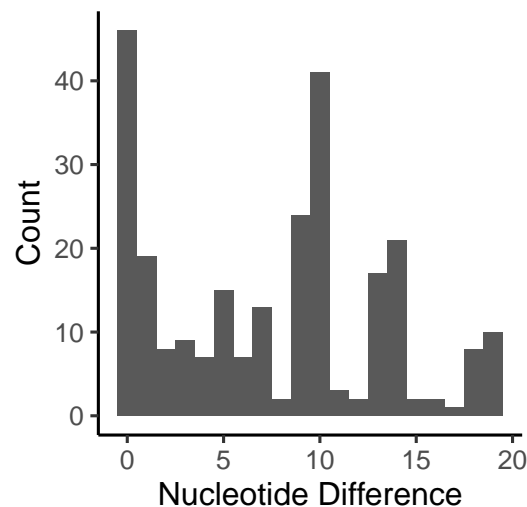
IGHV3-20*01_02

23 sequences assigned
12 (52.2%) exact matches, in which:
5 unique CDR3
2 unique J



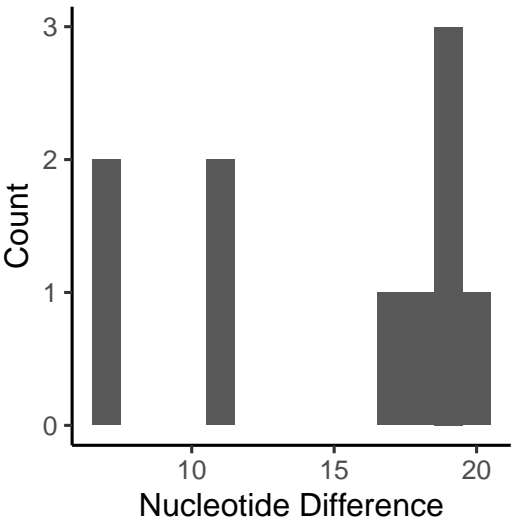
IGHV3-30-3*01

324 sequences assigned
46 (14.2%) exact matches, in which:
27 unique CDR3
5 unique J



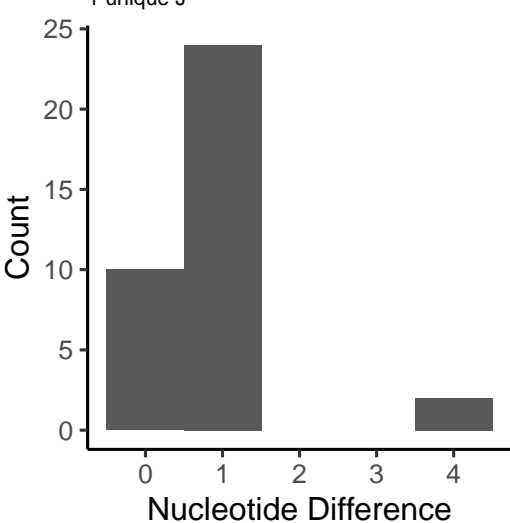
IGHV3-30*04

253 sequences assigned
No exact matches.



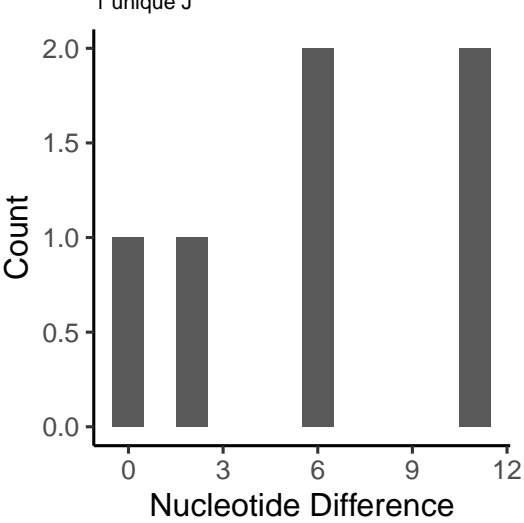
IGHV3-43*01

36 sequences assigned
10 (27.8%) exact matches, in which:
4 unique CDR3
1 unique J



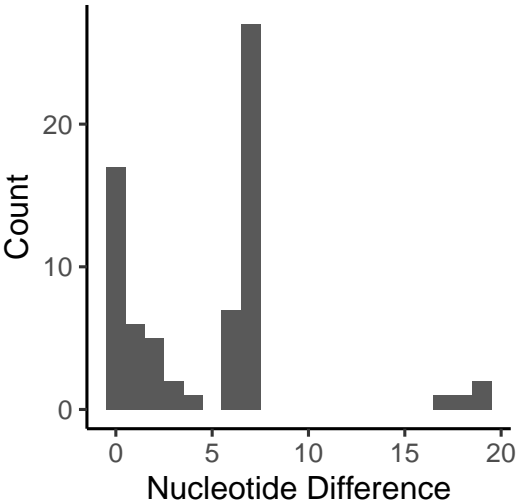
IGHV3-49*03_05

6 sequences assigned
1 (16.7%) exact matches, in which:
1 unique CDR3
1 unique J



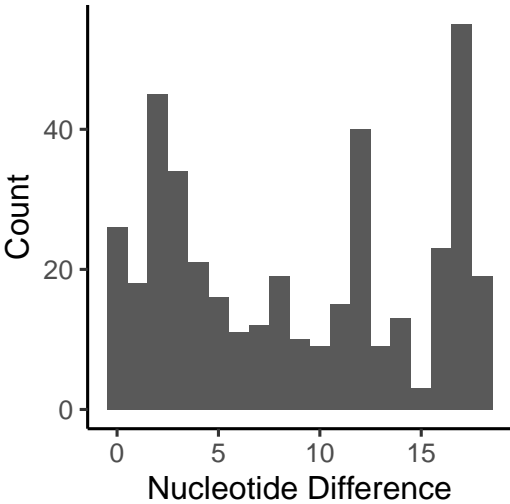
IGHV3-33*01

71 sequences assigned
17 (23.9%) exact matches, in which:
9 unique CDR3
4 unique J



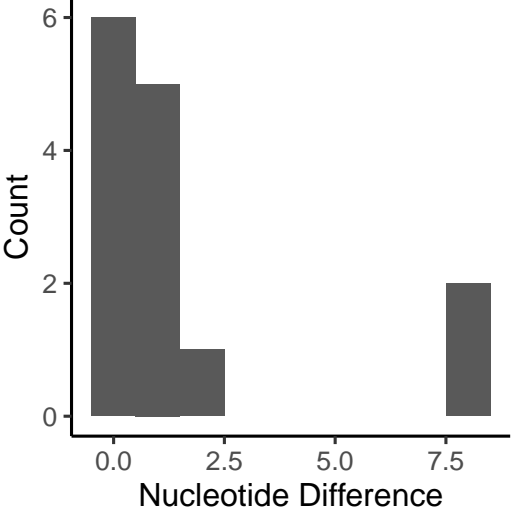
IGHV3-48*02

470 sequences assigned
26 (5.5%) exact matches, in which:
14 unique CDR3
5 unique J



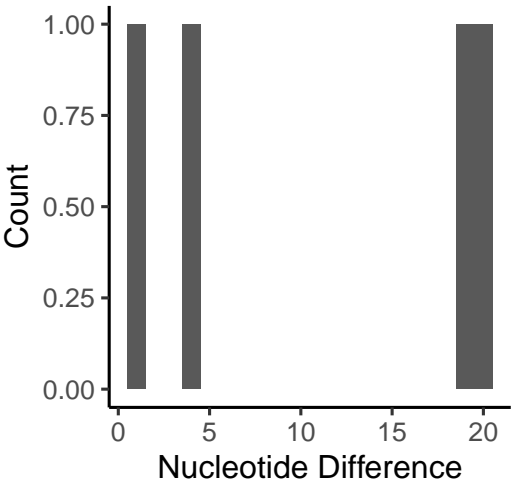
IGHV3-53*04

14 sequences assigned
6 (42.9%) exact matches, in which:
2 unique CDR3
1 unique J



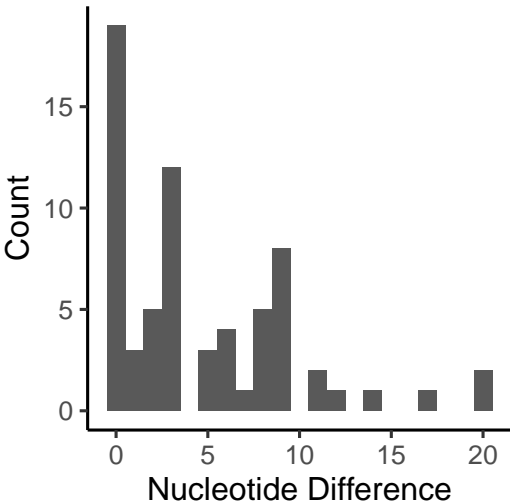
IGHV3-33*05

13 sequences assigned
No exact matches.



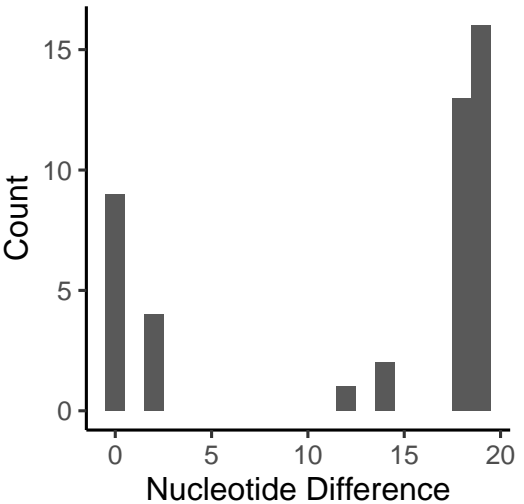
IGHV3-49*04

68 sequences assigned
19 (27.9%) exact matches, in which:
7 unique CDR3
3 unique J



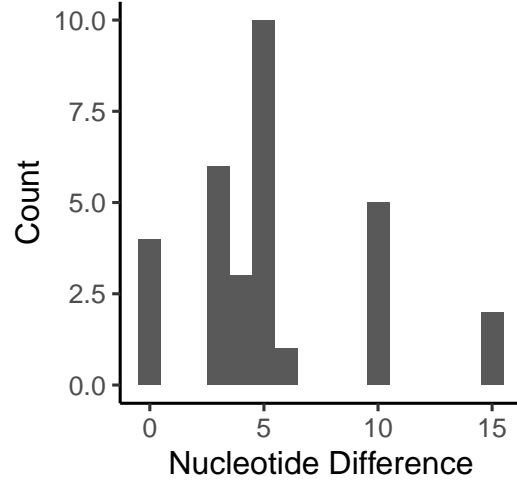
IGHV3-53*01_02

47 sequences assigned
9 (19.1%) exact matches, in which:
4 unique CDR3
3 unique J



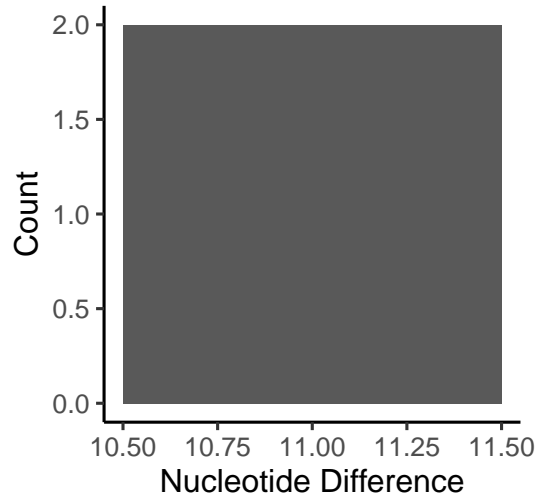
IGHV3-64*01

31 sequences assigned
4 (12.9%) exact matches, in which:
3 unique CDR3
2 unique J



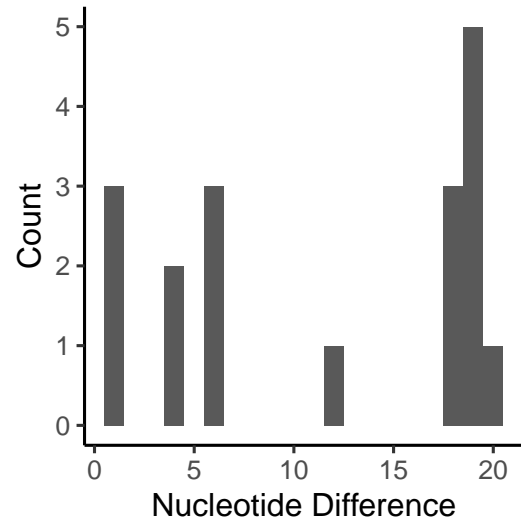
IGHV3-71*03

2 sequences assigned
No exact matches.



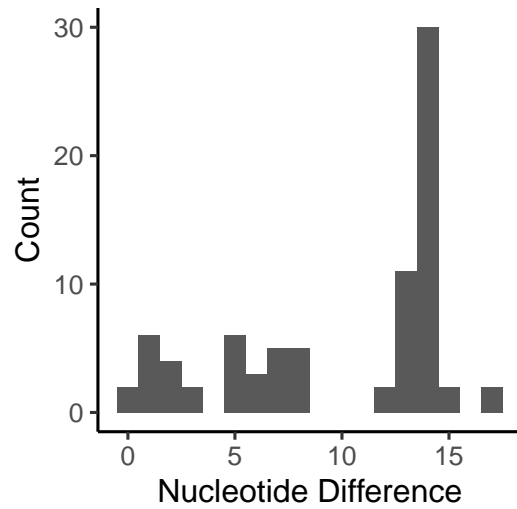
IGHV3-74*03

155 sequences assigned
No exact matches.



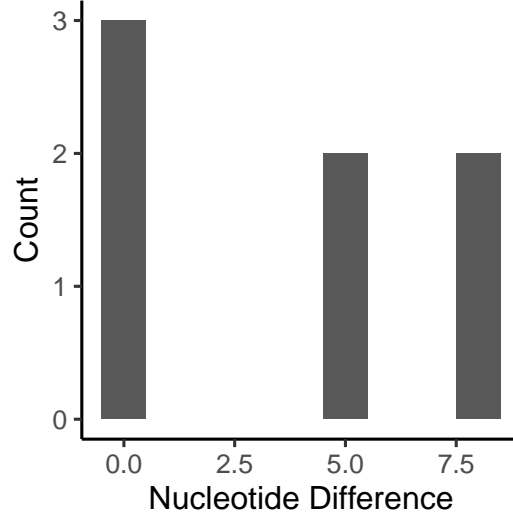
IGHV3-66*01

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



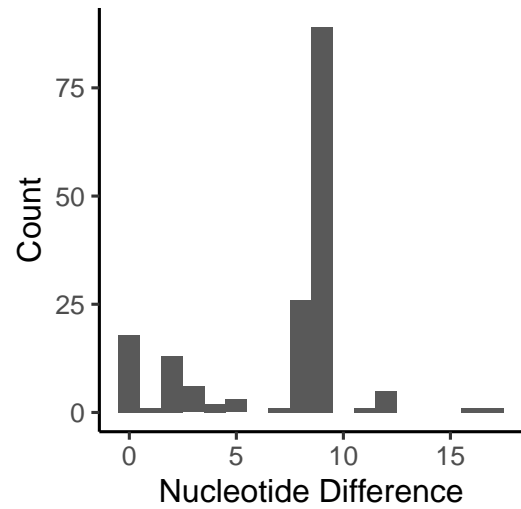
IGHV3-72*01

13 sequences assigned
3 (23.1%) exact matches, in which:
1 unique CDR3
1 unique J



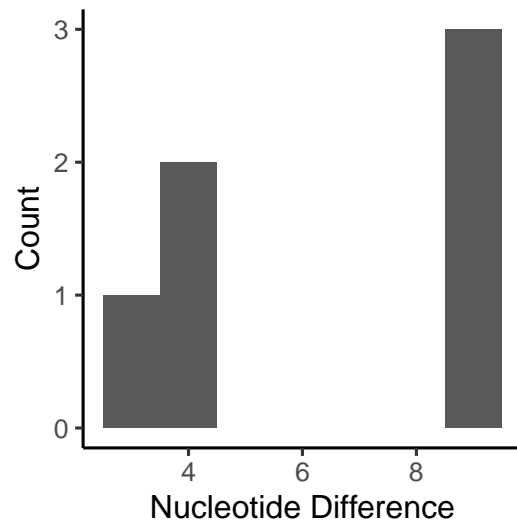
IGHV3-74*01_02

172 sequences assigned
18 (10.5%) exact matches, in which:
9 unique CDR3
5 unique J



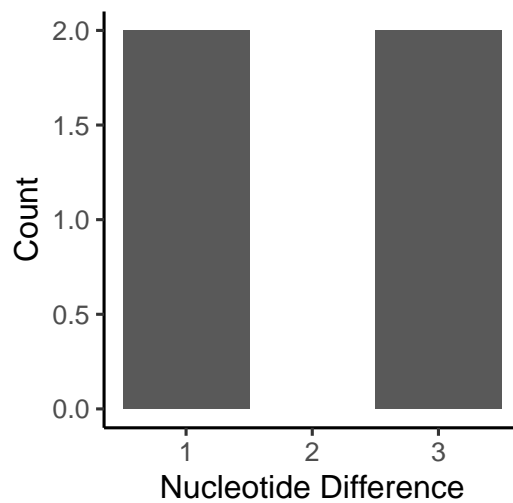
IGHV3-69-1*01

6 sequences assigned
No exact matches.



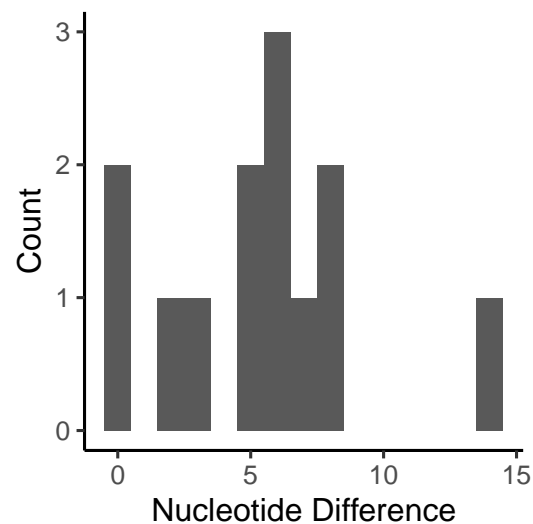
IGHV3-73*01_02

12 sequences assigned
No exact matches.



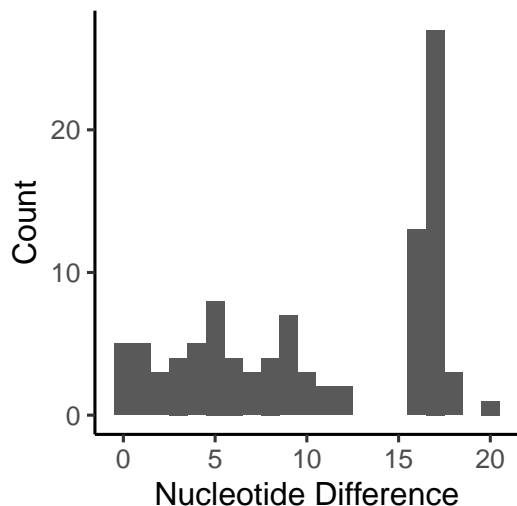
IGHV3-43D*03

24 sequences assigned
2 (8.3%) exact matches, in which:
1 unique CDR3
1 unique J



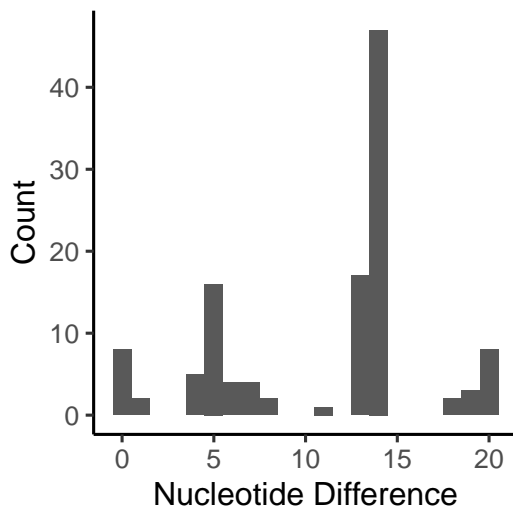
IGHV4-4*07

106 sequences assigned
5 (4.7%) exact matches, in which:
4 unique CDR3
2 unique J



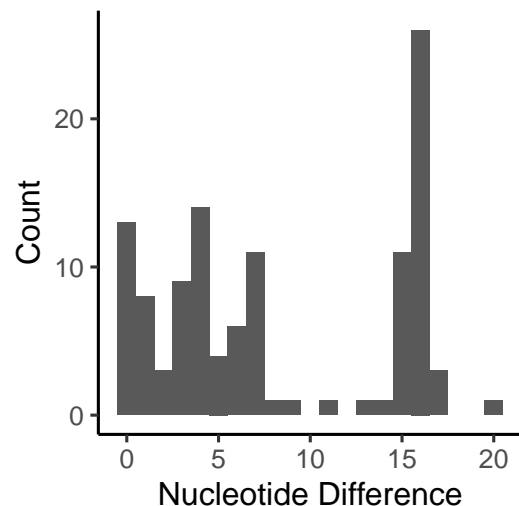
IGHV4-30-2*01

139 sequences assigned
8 (5.8%) exact matches, in which:
5 unique CDR3
2 unique J



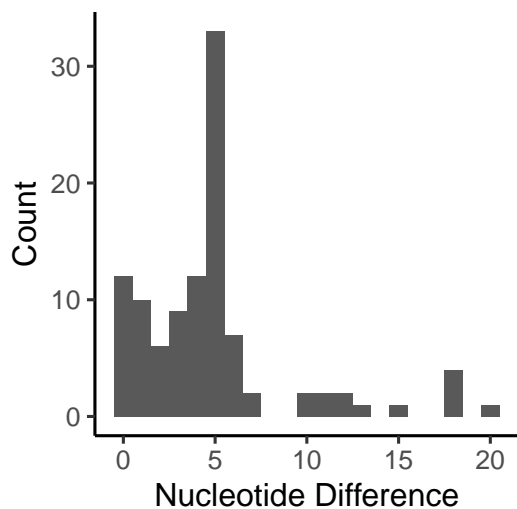
IGHV4-38-2*02

322 sequences assigned
13 (4%) exact matches, in which:
9 unique CDR3
3 unique J



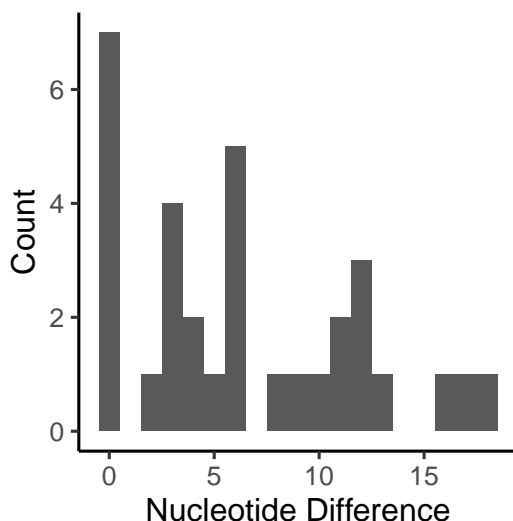
IGHV4-4*02_03

111 sequences assigned
12 (10.8%) exact matches, in which:
8 unique CDR3
4 unique J



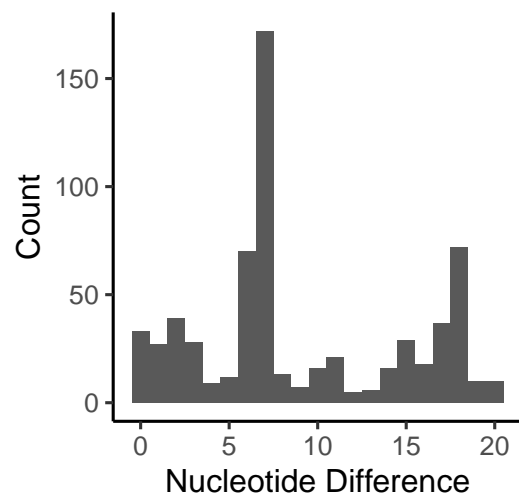
IGHV4-31*02

36 sequences assigned
7 (19.4%) exact matches, in which:
7 unique CDR3
4 unique J



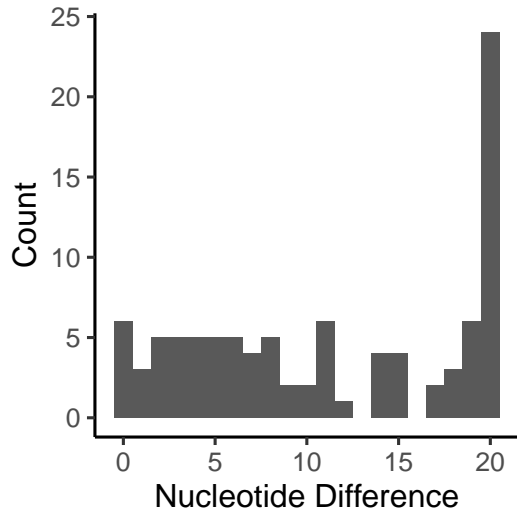
IGHV4-39*02_C258G

713 sequences assigned
33 (4.6%) exact matches, in which:
24 unique CDR3
4 unique J



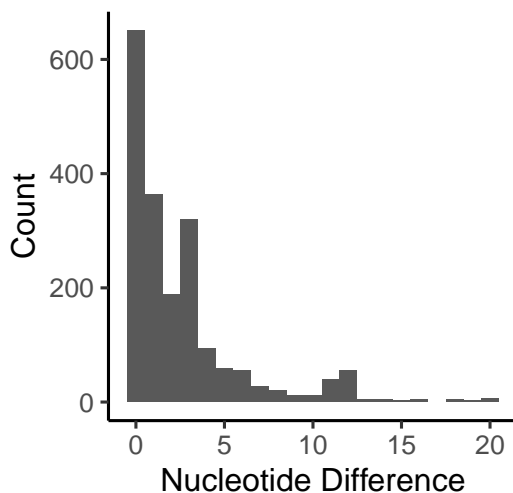
IGHV4-30-4*01

116 sequences assigned
6 (5.2%) exact matches, in which:
6 unique CDR3
3 unique J



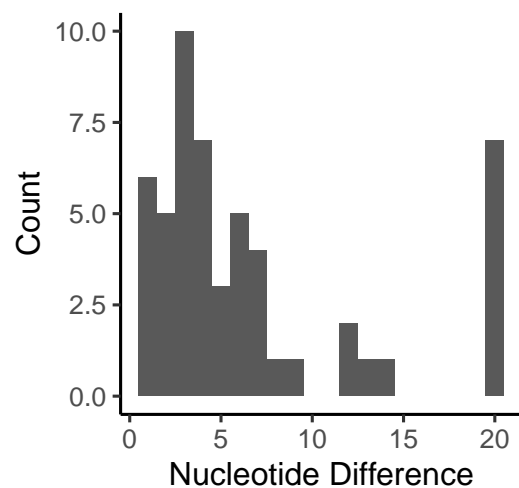
IGHV4-34*01_02

1985 sequences assigned
651 (32.8%) exact matches, in which:
422 unique CDR3
7 unique J



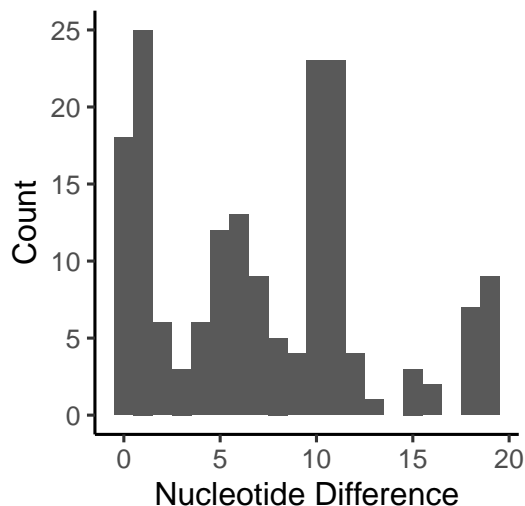
IGHV4-59*02

70 sequences assigned
No exact matches.



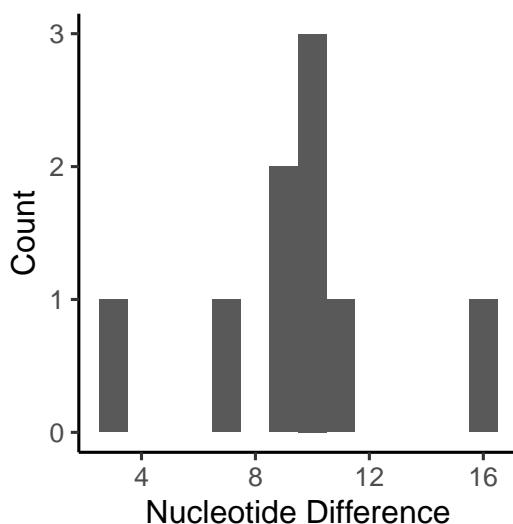
IGHV4-59*08

198 sequences assigned
18 (9.1%) exact matches, in which:
16 unique CDR3
5 unique J



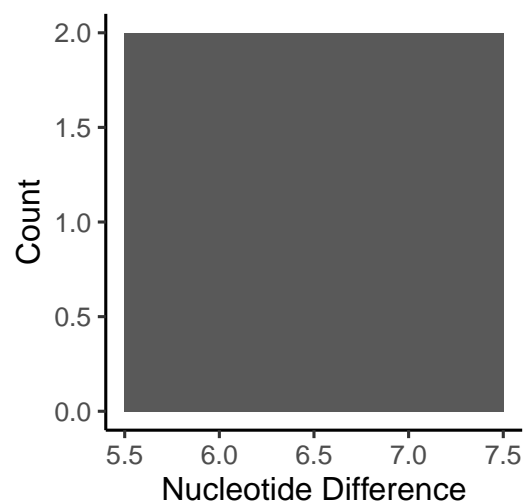
IGHV4-61*01

28 sequences assigned
No exact matches.



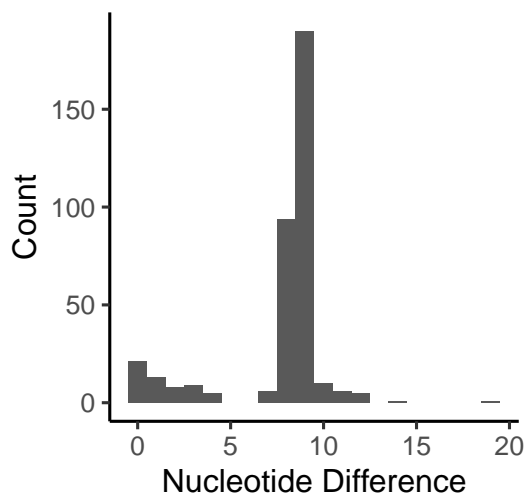
IGHV5-10-1*01_03

4 sequences assigned
No exact matches.



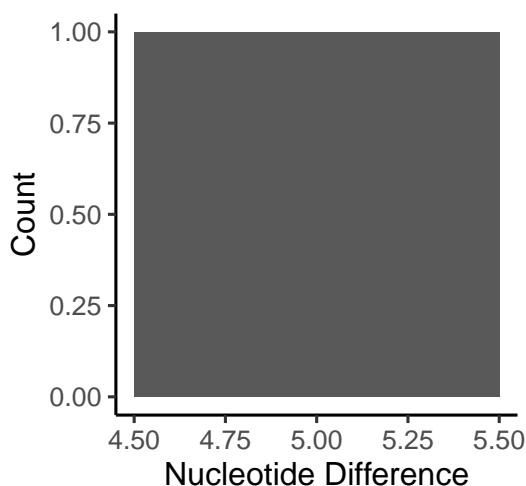
IGHV4-59*01_07

463 sequences assigned
21 (4.5%) exact matches, in which:
17 unique CDR3
5 unique J



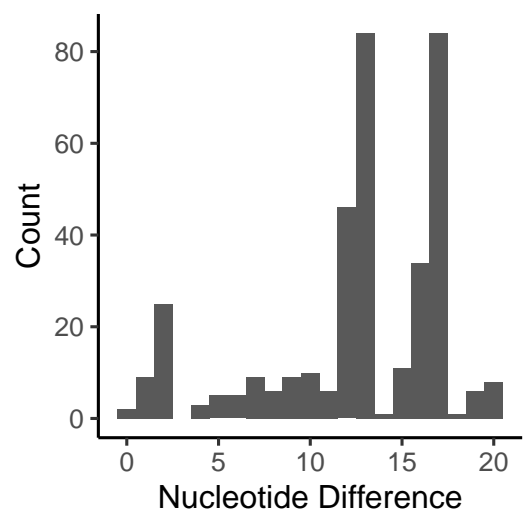
IGHV4-61*03

2 sequences assigned
No exact matches.



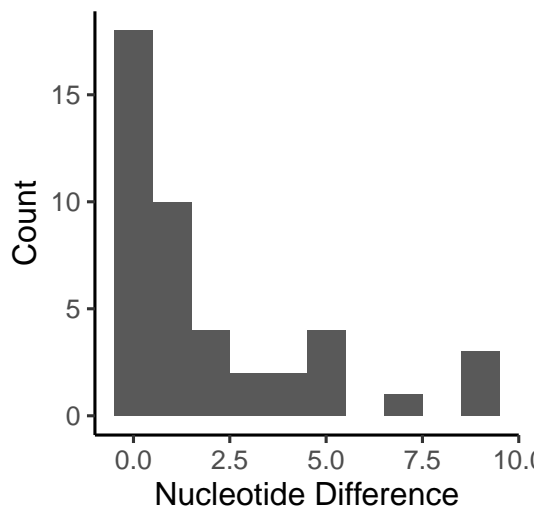
IGHV5-51*07

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



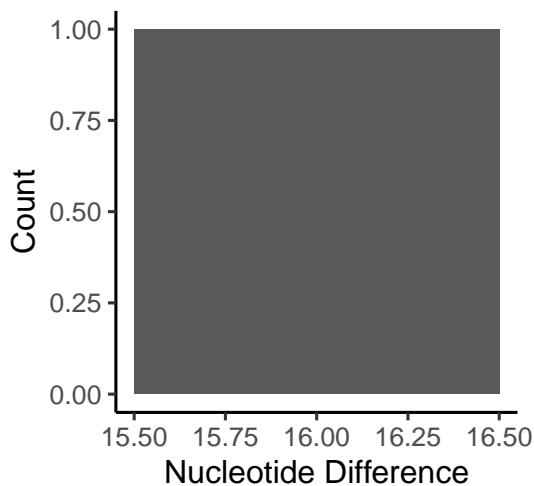
IGHV4-59*12_C300T

44 sequences assigned
18 (40.9%) exact matches, in which:
18 unique CDR3
5 unique J



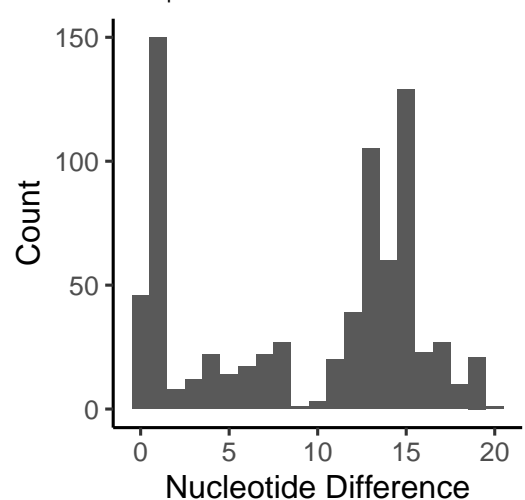
IGHV4-61*08

2 sequences assigned
No exact matches.



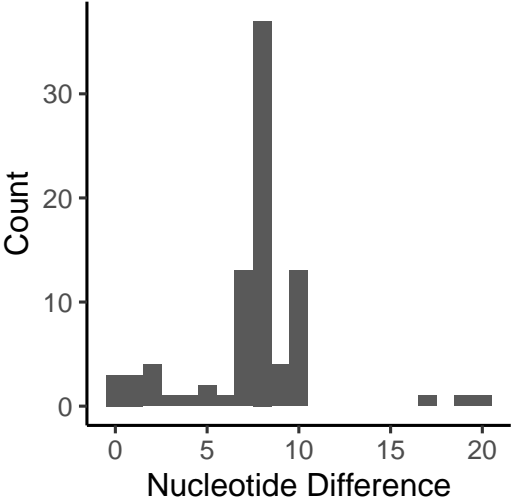
IGHV5-51*01_03

913 sequences assigned
46 (5%) exact matches, in which:
19 unique CDR3
2 unique J



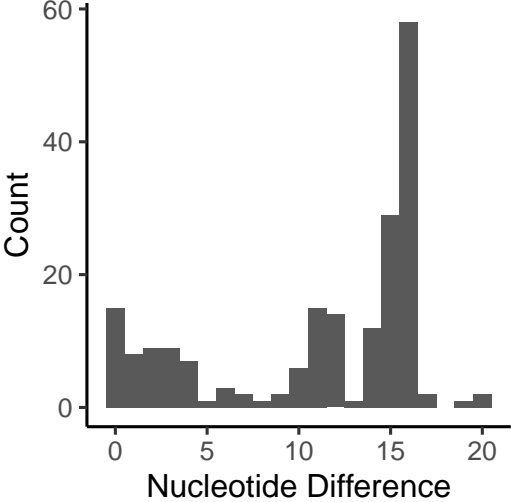
IGHV6-1*01_02

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

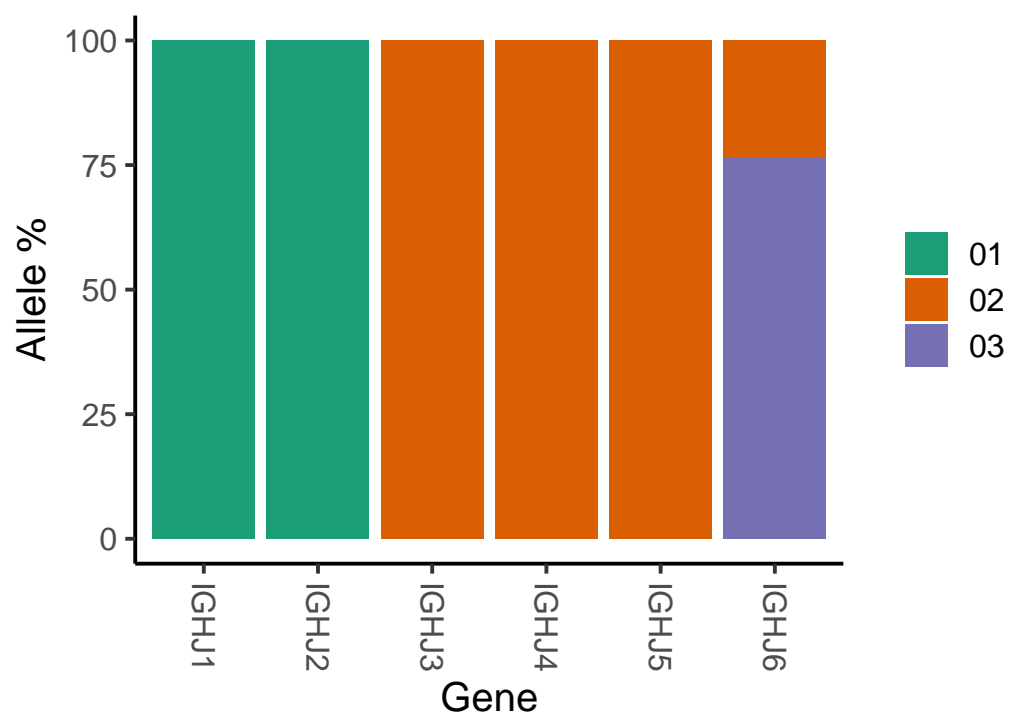


IGHV7-4-1*02

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



Allele Usage



Warning – no inferred sequences found.