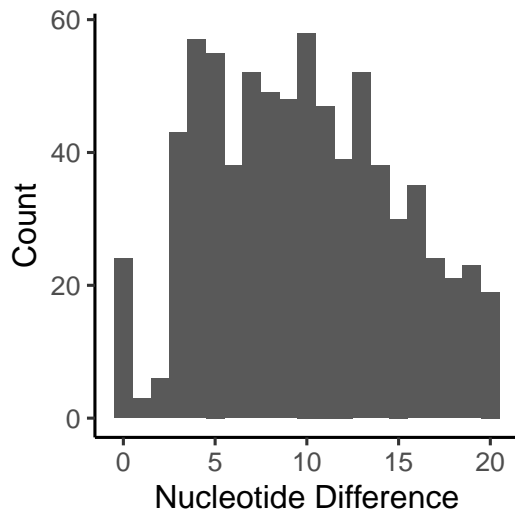


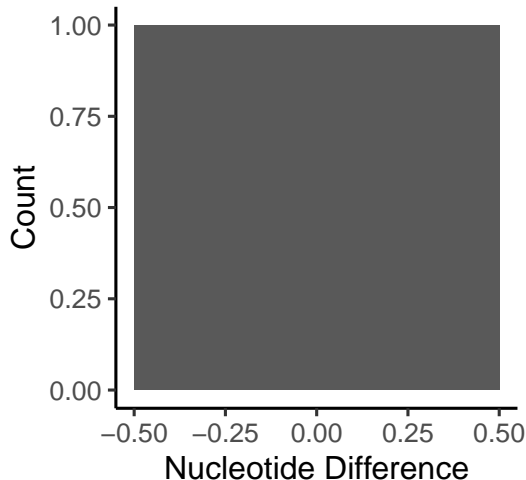
IGHV1-2*02

897 sequences assigned
24 (2.7%) exact matches, in which:
23 unique CDR3
3 unique J



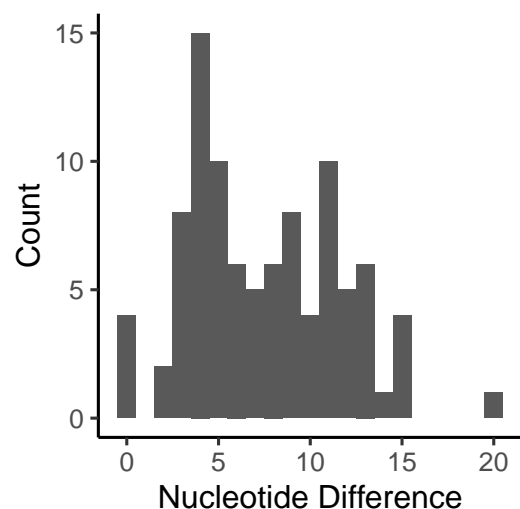
IGHV1-3*01_05

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



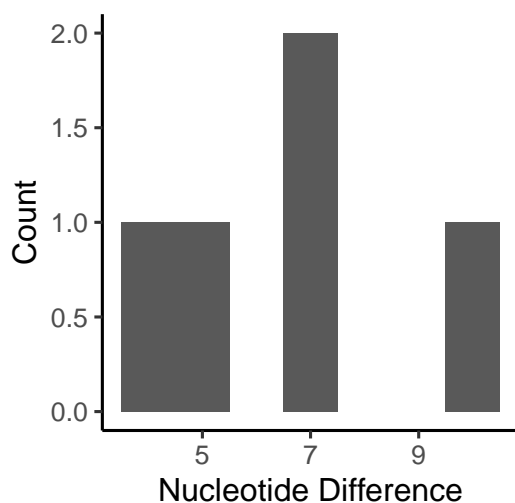
IGHV1-24*01

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



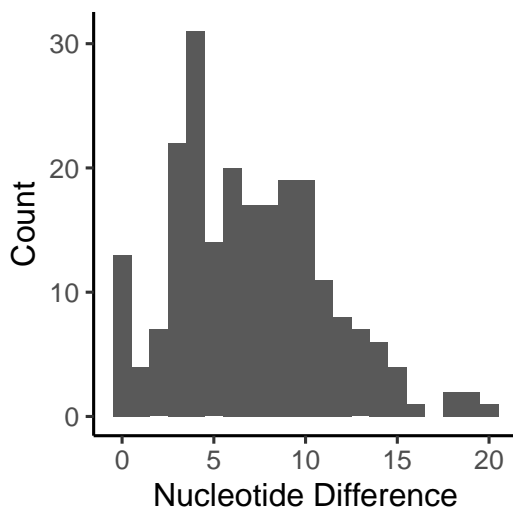
IGHV1-3*02

5 sequences assigned
No exact matches.



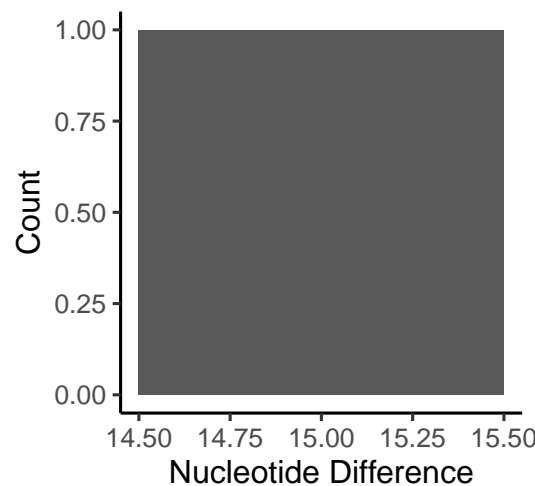
IGHV1-8*01

237 sequences assigned
13 (5.5%) exact matches, in which:
12 unique CDR3
5 unique J



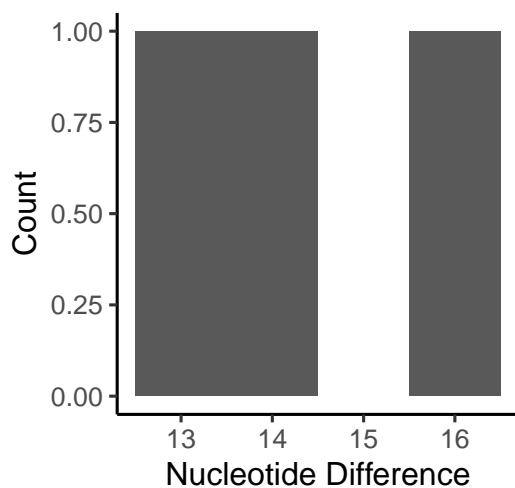
IGHV1-45*02

2 sequences assigned
No exact matches.



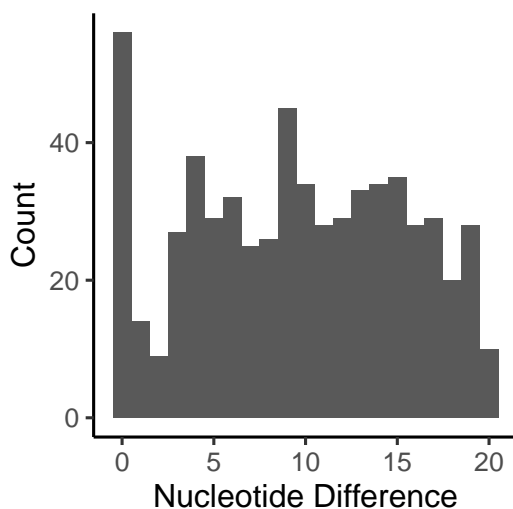
IGHV1-3*03

3 sequences assigned
No exact matches.



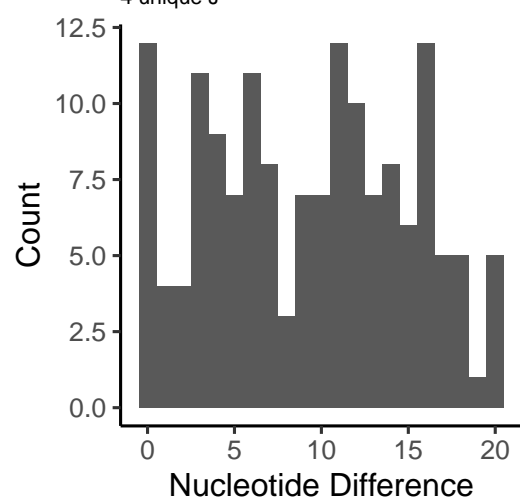
IGHV1-18*01

748 sequences assigned
56 (7.5%) exact matches, in which:
50 unique CDR3
6 unique J



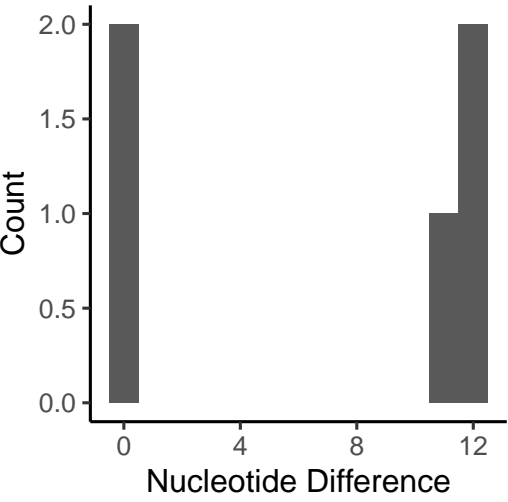
IGHV1-46*01

191 sequences assigned
12 (6.3%) exact matches, in which:
12 unique CDR3
4 unique J



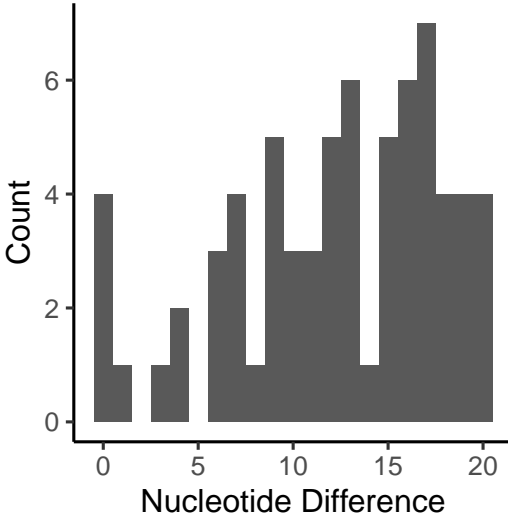
IGHV1-58*02

9 sequences assigned
2 (22.2%) exact matches, in which:
2 unique CDR3
1 unique J



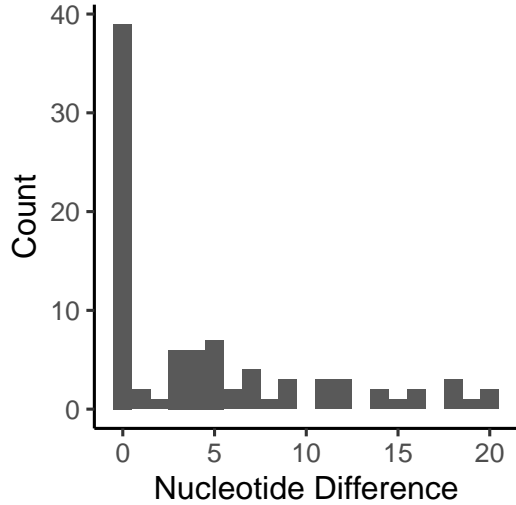
IGHV1-69*02

98 sequences assigned
4 (4.1%) exact matches, in which:
4 unique CDR3
2 unique J



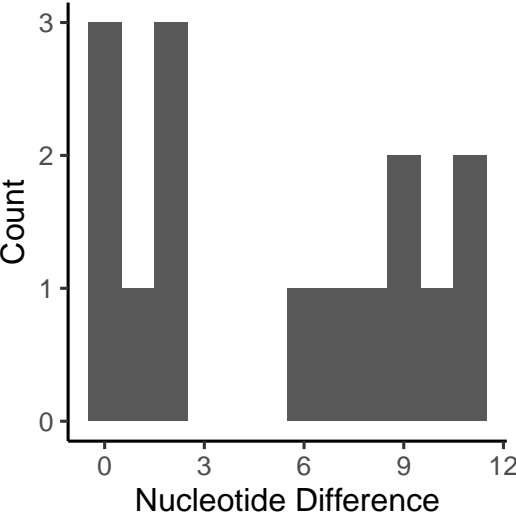
IGHV2-26*01

89 sequences assigned
39 (43.8%) exact matches, in which:
36 unique CDR3
5 unique J



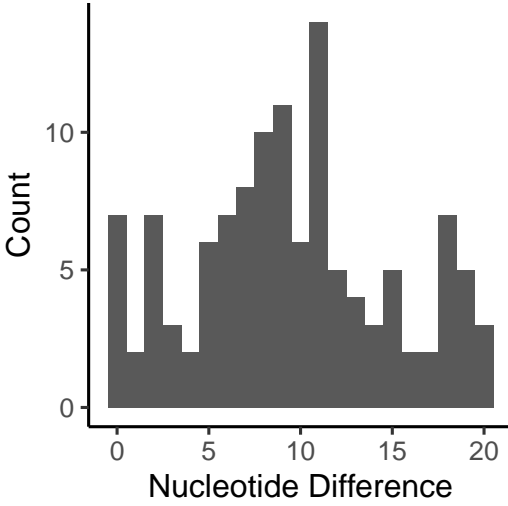
IGHV1-58*01_03

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



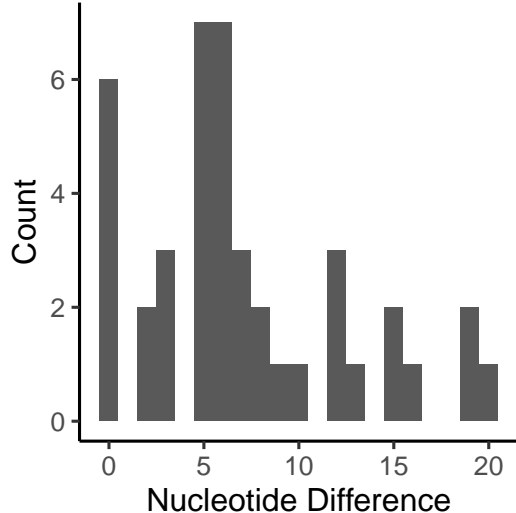
IGHV1-69*17

135 sequences assigned
7 (5.2%) exact matches, in which:
7 unique CDR3
3 unique J



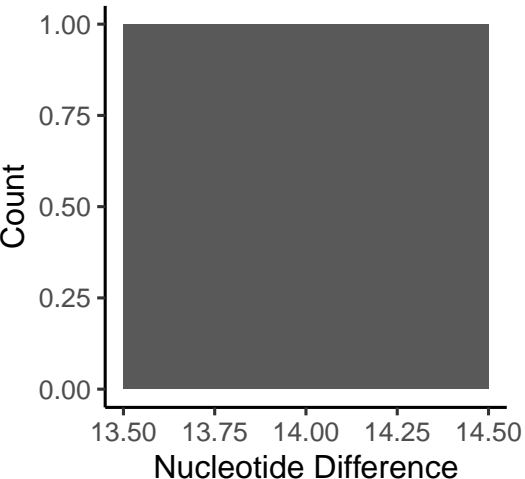
IGHV2-70*01

45 sequences assigned
6 (13.3%) exact matches, in which:
6 unique CDR3
3 unique J



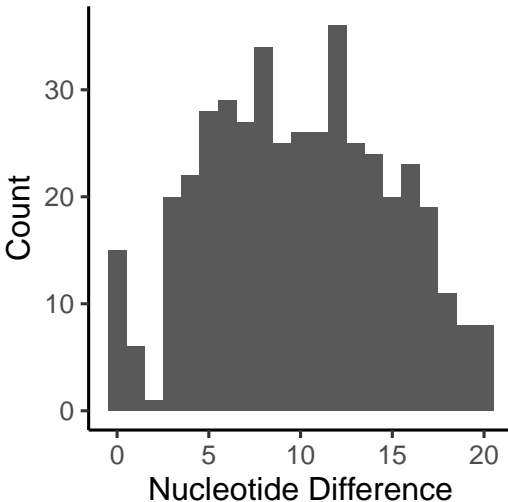
IGHV1-69-2*01

1 sequences assigned
No exact matches.



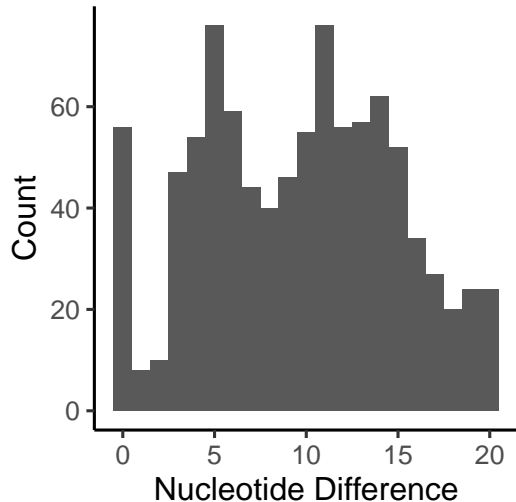
IGHV2-5*01

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



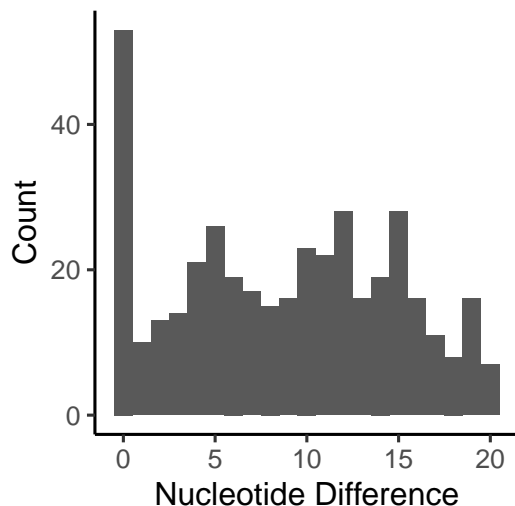
IGHV3-7*01

1000 sequences assigned
56 (5.6%) exact matches, in which:
31 unique CDR3
5 unique J



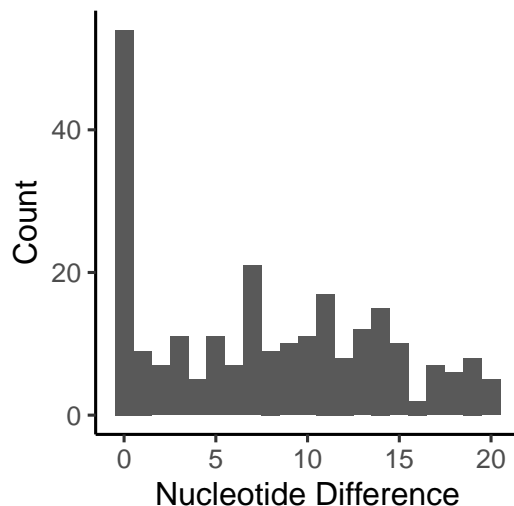
IGHV3-9*01

440 sequences assigned
53 (12%) exact matches, in which:
32 unique CDR3
3 unique J



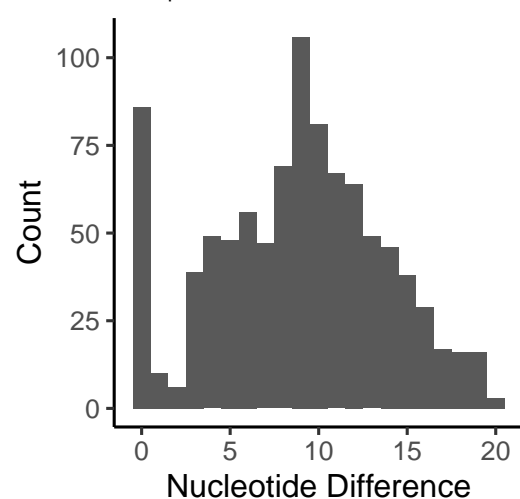
IGHV3-15*01_02

259 sequences assigned
54 (20.8%) exact matches, in which:
27 unique CDR3
5 unique J



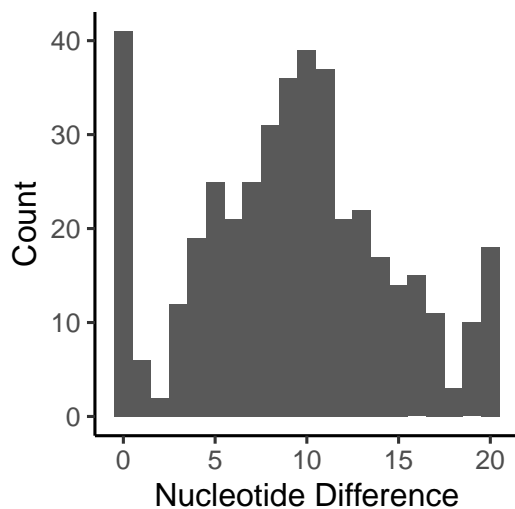
IGHV3-21*01_02

1043 sequences assigned
86 (8.2%) exact matches, in which:
44 unique CDR3
5 unique J



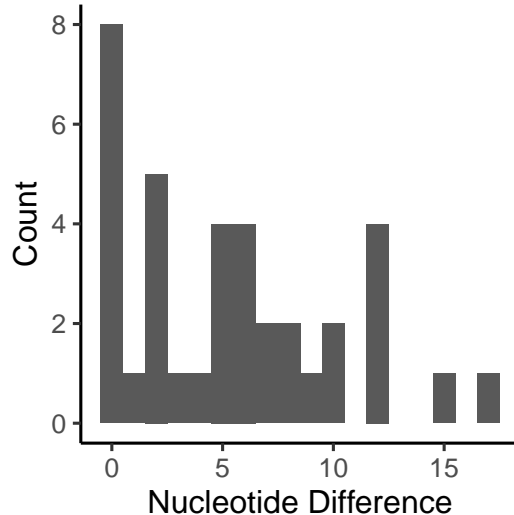
IGHV3-11*01

466 sequences assigned
41 (8.8%) exact matches, in which:
23 unique CDR3
5 unique J



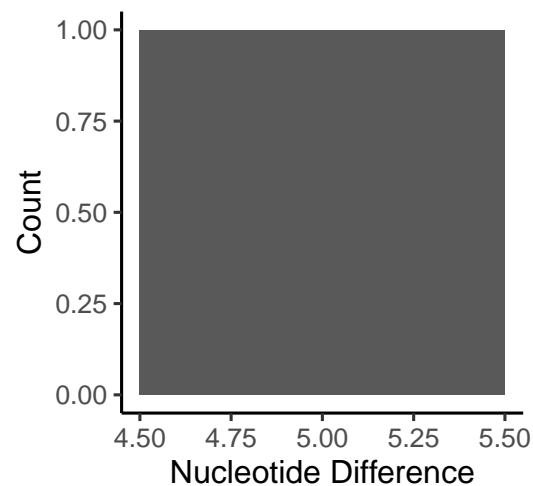
IGHV3-20*01_02

37 sequences assigned
8 (21.6%) exact matches, in which:
5 unique CDR3
3 unique J



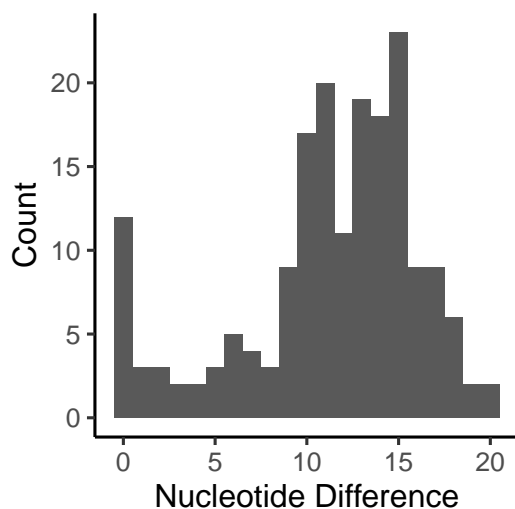
IGHV3-30-3*02

1 sequences assigned
No exact matches.



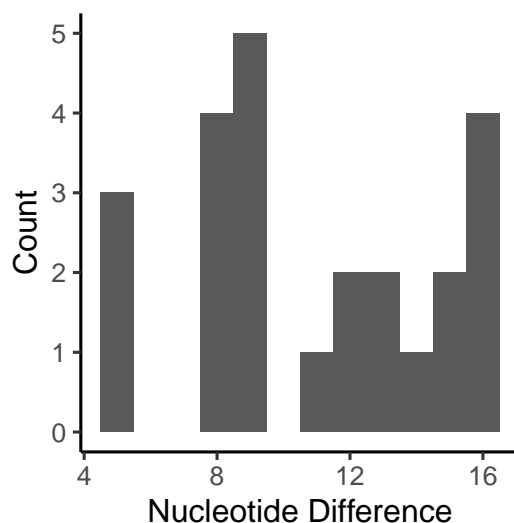
IGHV3-13*01

213 sequences assigned
12 (5.6%) exact matches, in which:
5 unique CDR3
2 unique J



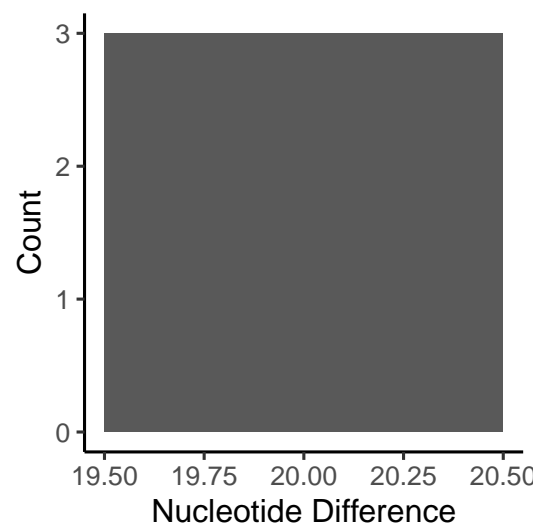
IGHV3-20*03_04

24 sequences assigned
No exact matches.



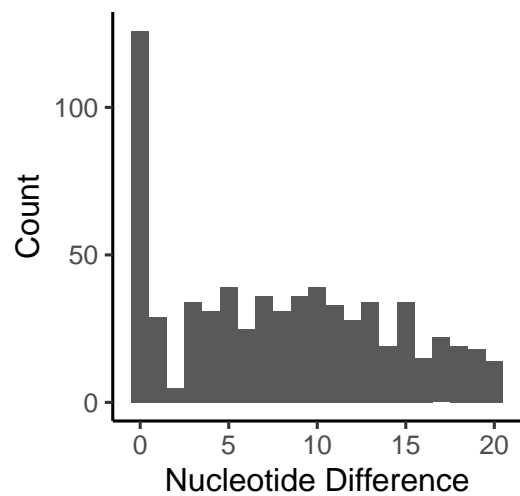
IGHV3-30-3*03

4 sequences assigned
No exact matches.



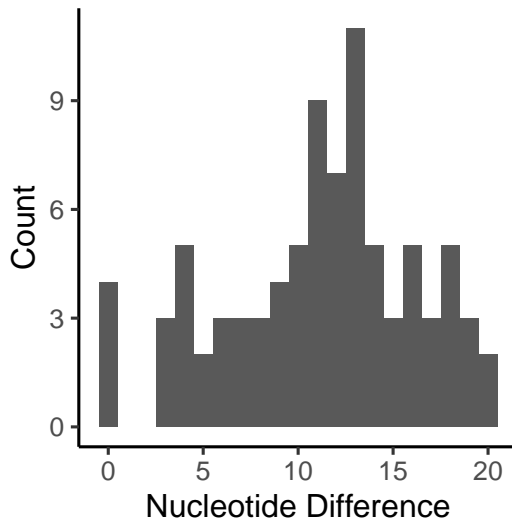
IGHV3-33*01

753 sequences assigned
126 (16.7%) exact matches, in which:
69 unique CDR3
5 unique J



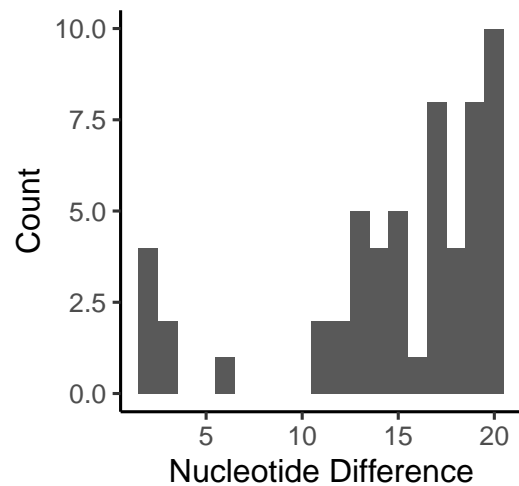
IGHV3-49*03_05

123 sequences assigned
4 (3.3%) exact matches, in which:
3 unique CDR3
2 unique J



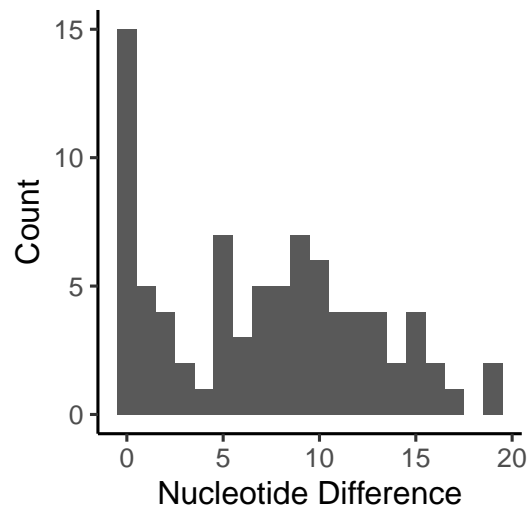
IGHV3-64*02_07

122 sequences assigned
No exact matches.



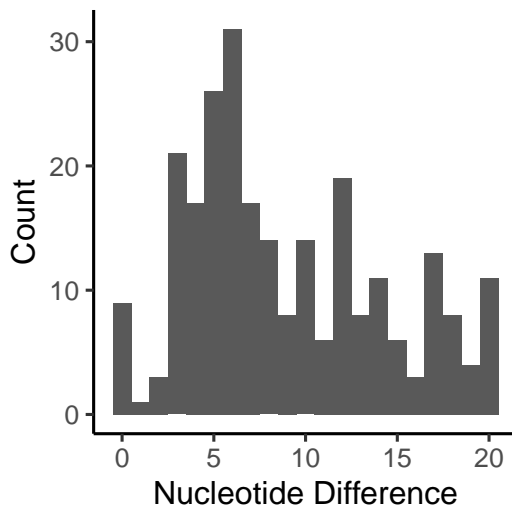
IGHV3-43*01

93 sequences assigned
15 (16.1%) exact matches, in which:
7 unique CDR3
2 unique J



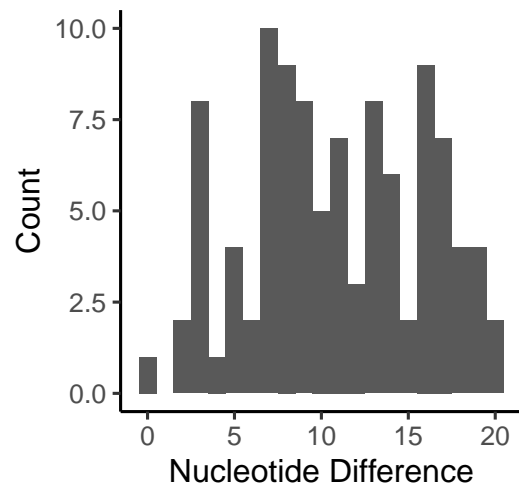
IGHV3-53*01_02

268 sequences assigned
9 (3.4%) exact matches, in which:
6 unique CDR3
3 unique J



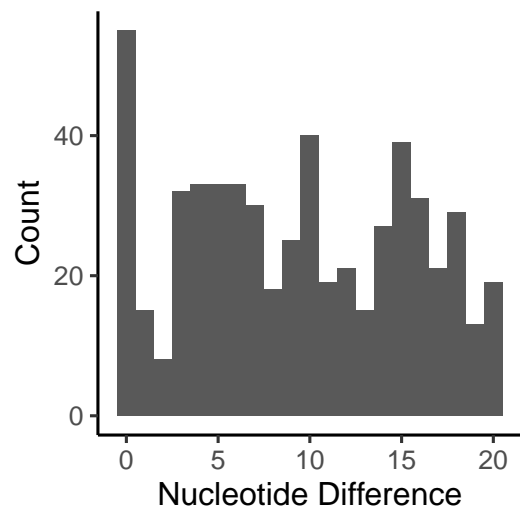
IGHV3-66*02

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



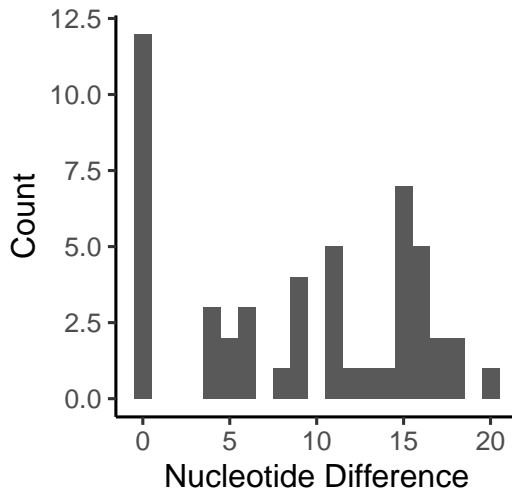
IGHV3-48*02

630 sequences assigned
55 (8.7%) exact matches, in which:
22 unique CDR3
4 unique J



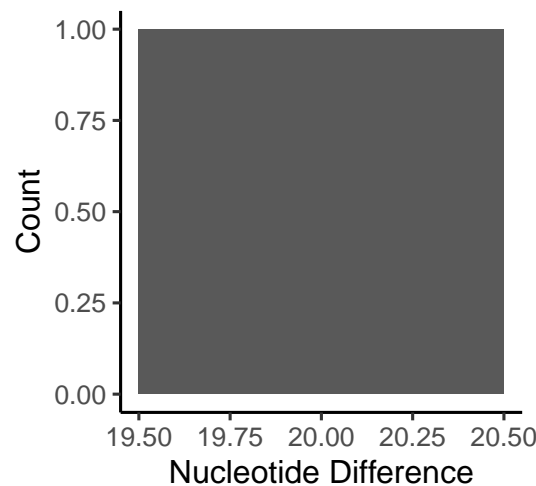
IGHV3-64*01

59 sequences assigned
12 (20.3%) exact matches, in which:
6 unique CDR3
4 unique J



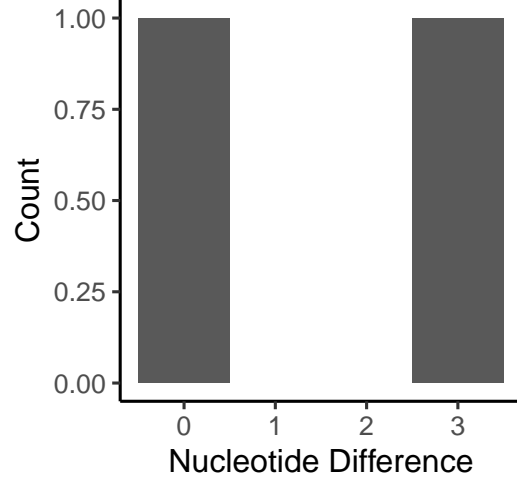
IGHV3-69-1*01

2 sequences assigned
No exact matches.



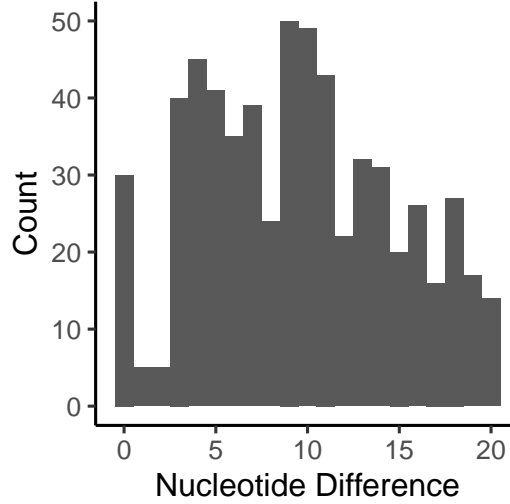
IGHV3-69-1*02

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



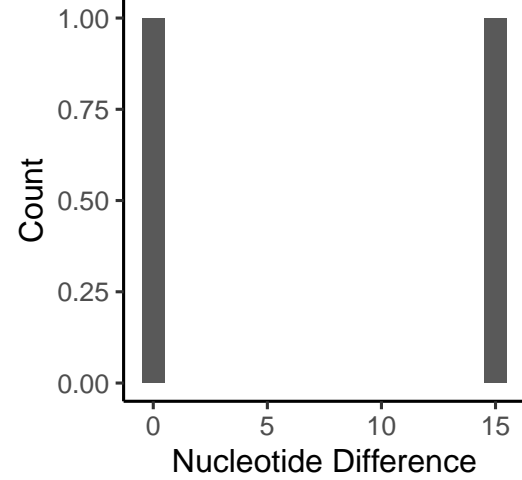
IGHV3-74*01_02

645 sequences assigned
30 (4.7%) exact matches, in which:
14 unique CDR3
4 unique J



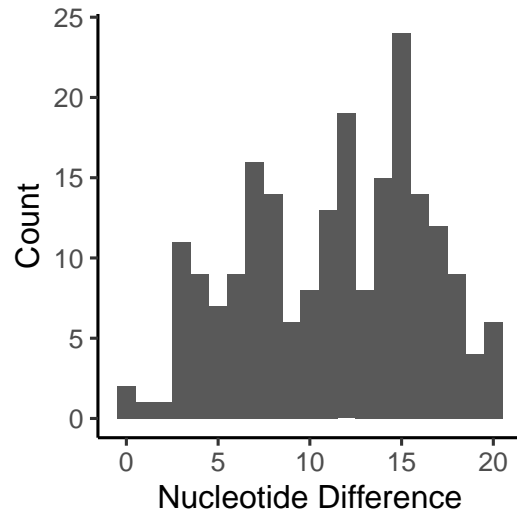
IGHV4-28*03

3 sequences assigned
1 (33.3%) exact matches, in which:
1 unique CDR3
1 unique J



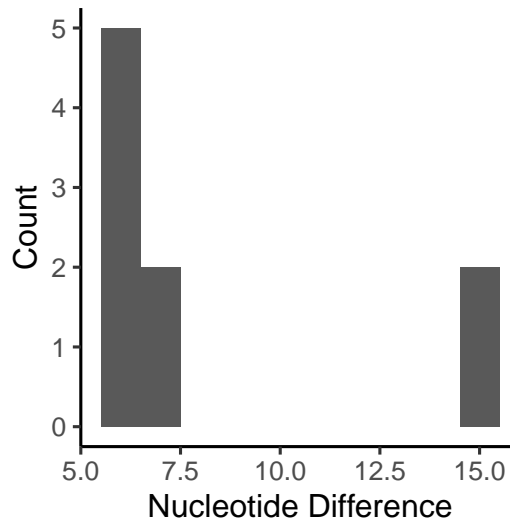
IGHV3-72*01

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



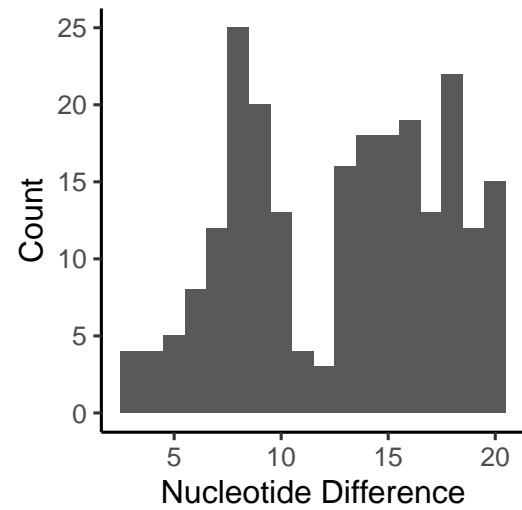
IGHV3-43D*04

9 sequences assigned
No exact matches.



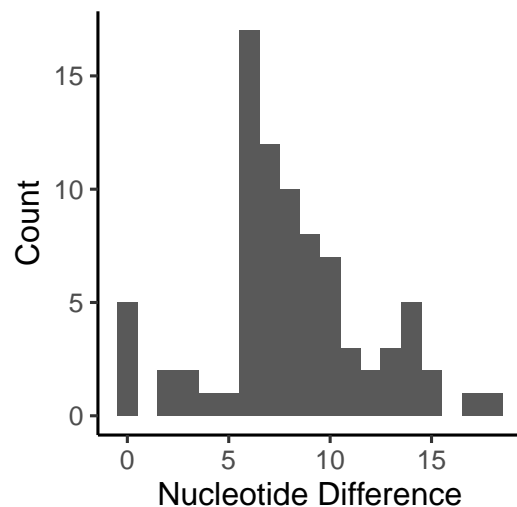
IGHV4-30-2*01

594 sequences assigned
No exact matches.



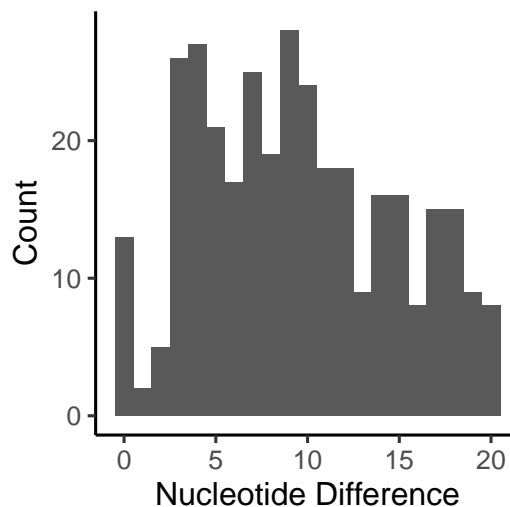
IGHV3-73*01_02

89 sequences assigned
5 (5.6%) exact matches, in which:
4 unique CDR3
4 unique J



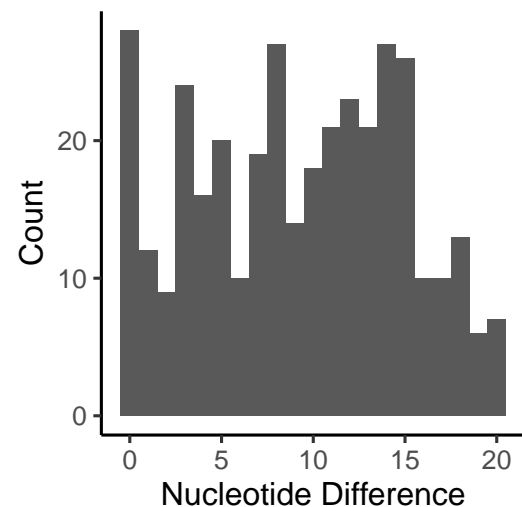
IGHV4-4*07

398 sequences assigned
13 (3.3%) exact matches, in which:
9 unique CDR3
4 unique J



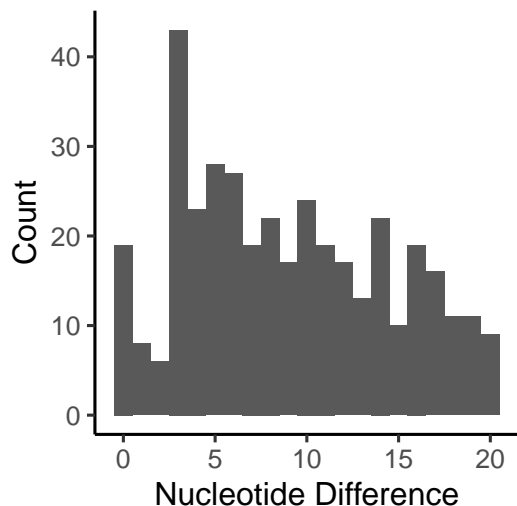
IGHV4-31*03_04

518 sequences assigned
28 (5.4%) exact matches, in which:
19 unique CDR3
4 unique J



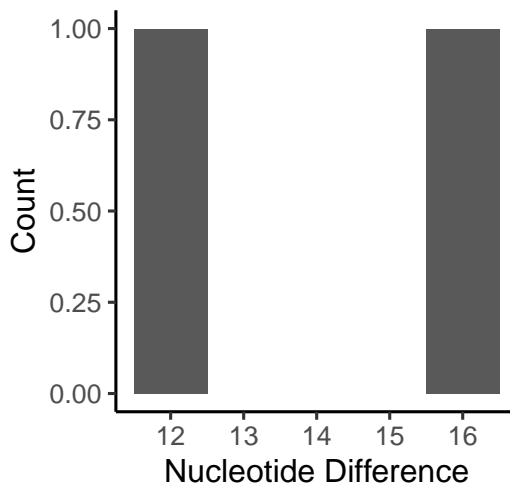
IGHV4-34*01_02

459 sequences assigned
19 (4.1%) exact matches, in which:
11 unique CDR3
4 unique J



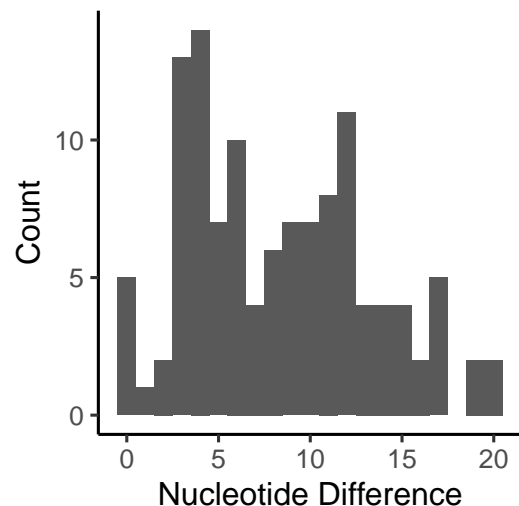
IGHV4-55*02_04_08

2 sequences assigned
No exact matches.



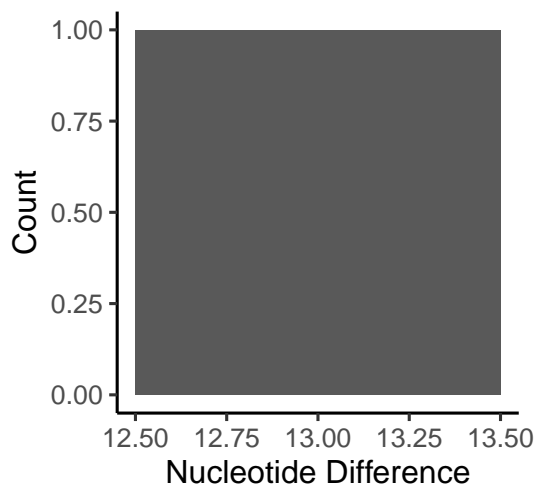
IGHV4-61*01

150 sequences assigned
5 (3.3%) exact matches, in which:
3 unique CDR3
3 unique J



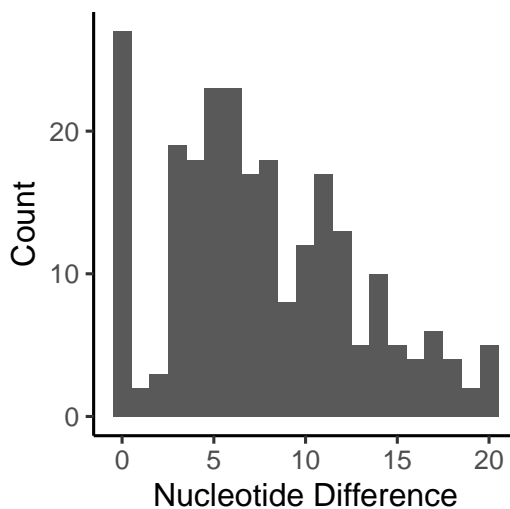
IGHV4-38-2*02

1 sequences assigned
No exact matches.



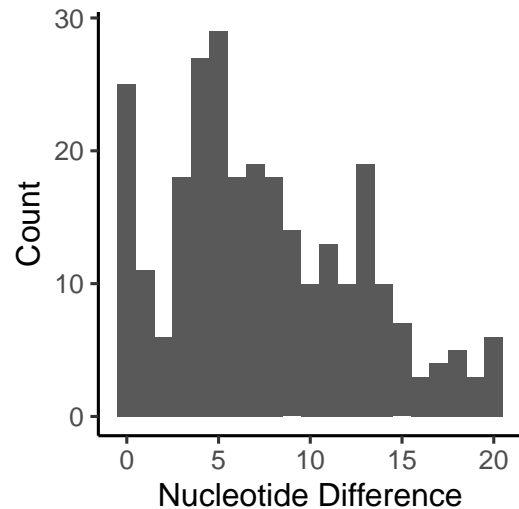
IGHV4-59*08

276 sequences assigned
27 (9.8%) exact matches, in which:
17 unique CDR3
3 unique J



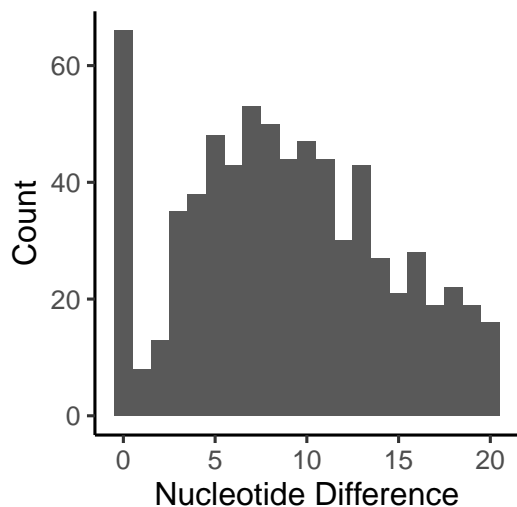
IGHV5-51*01_03

301 sequences assigned
25 (8.3%) exact matches, in which:
20 unique CDR3
5 unique J



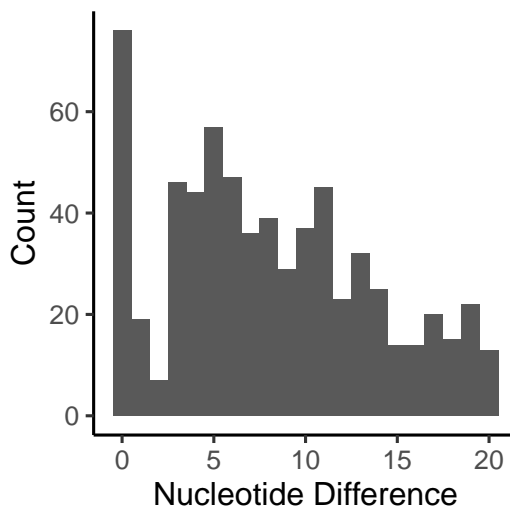
IGHV4-39*01_05

829 sequences assigned
66 (8%) exact matches, in which:
38 unique CDR3
6 unique J



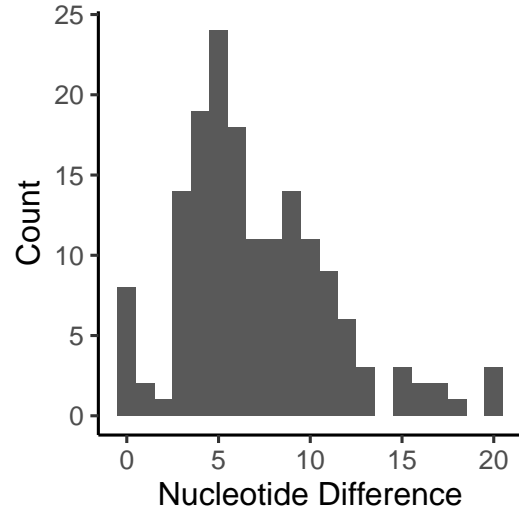
IGHV4-59*01_07

736 sequences assigned
76 (10.3%) exact matches, in which:
40 unique CDR3
5 unique J



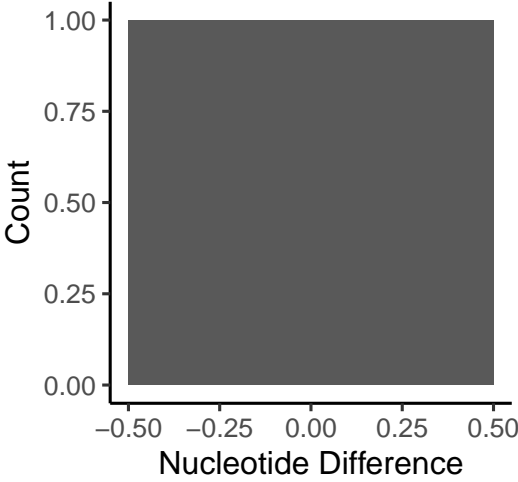
IGHV6-1*01_02

225 sequences assigned
8 (3.6%) exact matches, in which:
8 unique CDR3
4 unique J



IGHV7-4-1*01

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





Novel sequence(s)IGHV4-39 02_G88A IGHV5-51 07_A128G are not listed in the genotype and will be ignored.