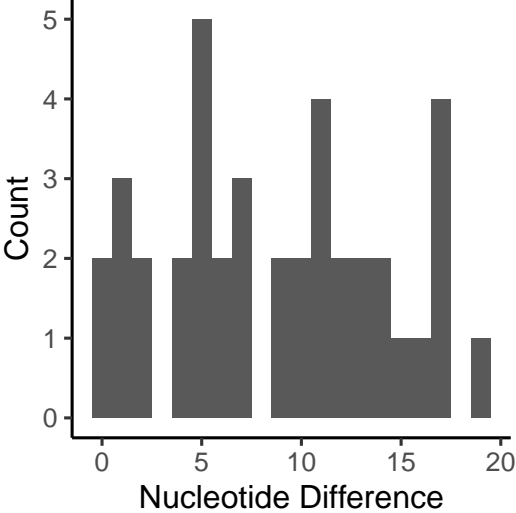


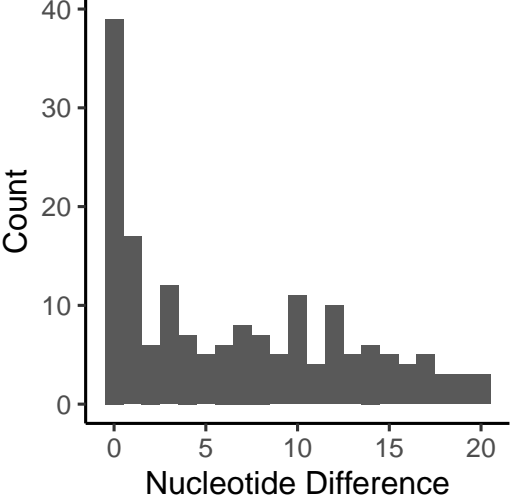
IGHV1-2*02

41 sequences assigned
2 (4.9%) exact matches, in which:
2 unique CDR3
2 unique J



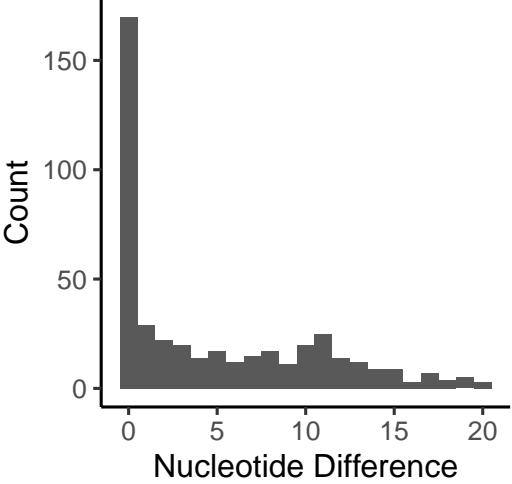
IGHV1-3*01

198 sequences assigned
39 (19.7%) exact matches, in which:
38 unique CDR3
6 unique J



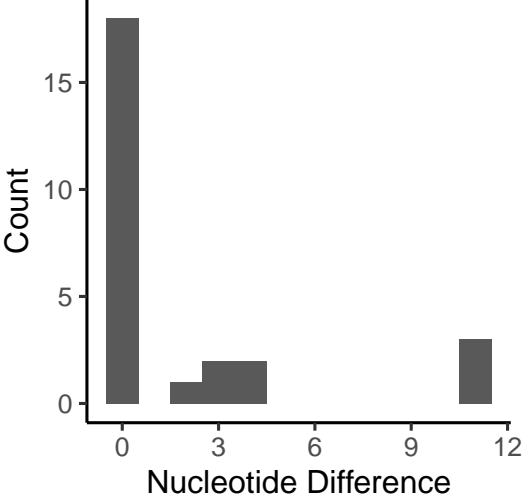
IGHV1-18*01

465 sequences assigned
170 (36.6%) exact matches, in which:
167 unique CDR3
6 unique J



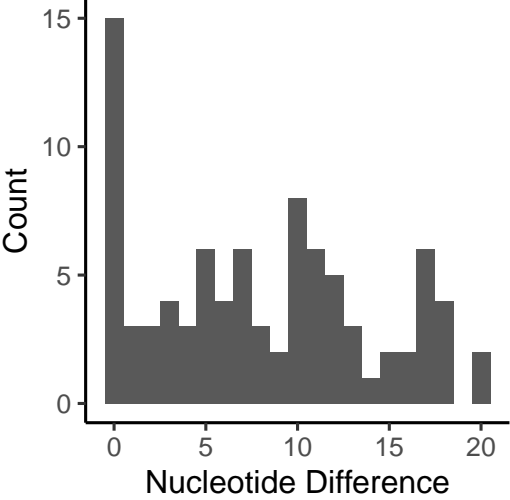
IGHV1-2*04

26 sequences assigned
18 (69.2%) exact matches, in which:
18 unique CDR3
5 unique J



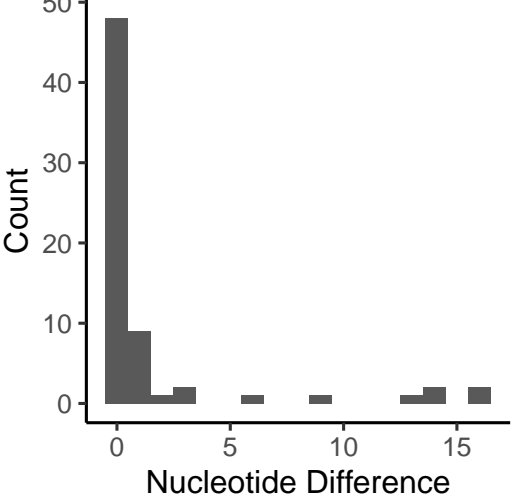
IGHV1-8*01

88 sequences assigned
15 (17%) exact matches, in which:
15 unique CDR3
4 unique J



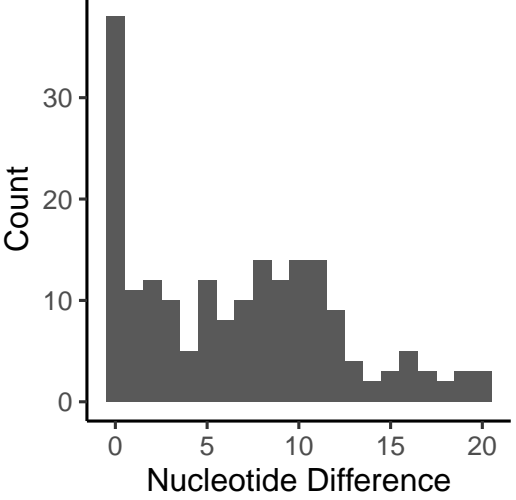
IGHV1-24*01

70 sequences assigned
48 (68.6%) exact matches, in which:
47 unique CDR3
5 unique J



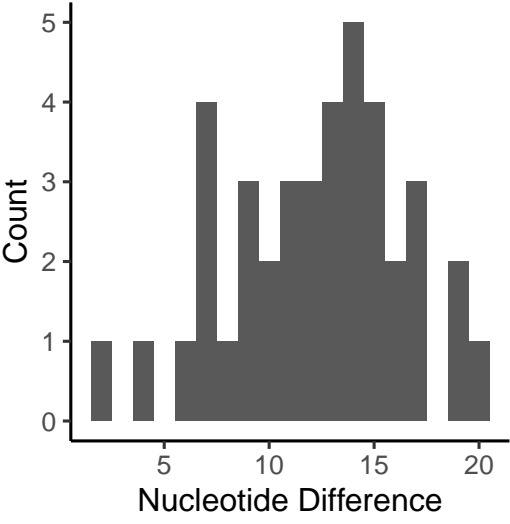
IGHV1-2*06

202 sequences assigned
38 (18.8%) exact matches, in which:
37 unique CDR3
4 unique J



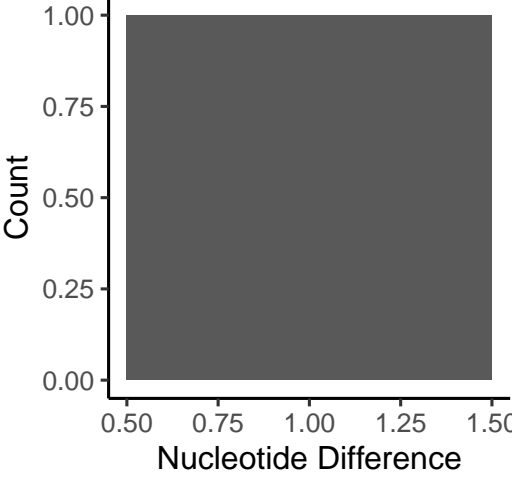
IGHV1-8*02

41 sequences assigned
No exact matches.



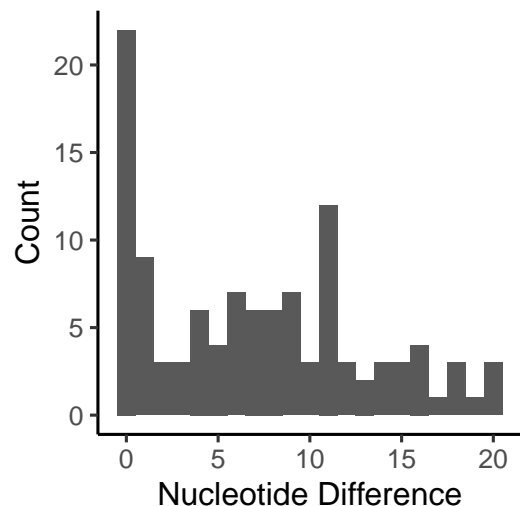
IGHV1-45*02

1 sequences assigned
No exact matches.



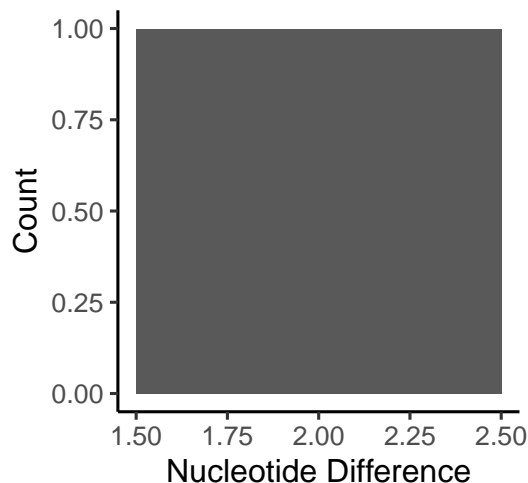
IGHV1-46*01

125 sequences assigned
22 (17.6%) exact matches, in which:
22 unique CDR3
6 unique J



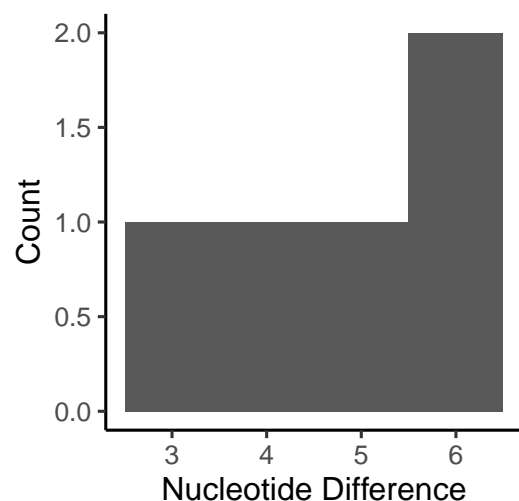
IGHV1-69-2*01

1 sequences assigned
No exact matches.



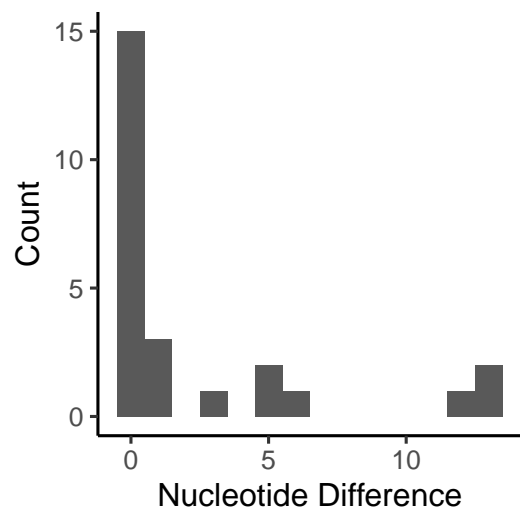
IGHV1-69D*01

5 sequences assigned
No exact matches.



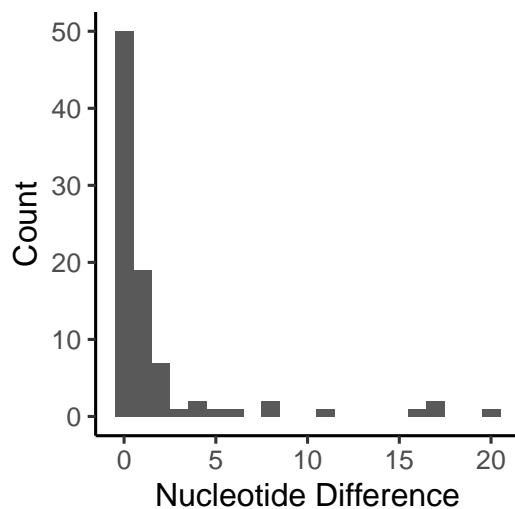
IGHV1-46*03

26 sequences assigned
15 (57.7%) exact matches, in which:
14 unique CDR3
2 unique J



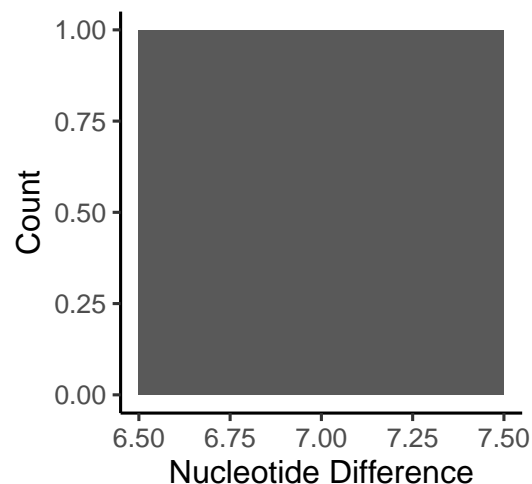
IGHV1-69*04

90 sequences assigned
50 (55.6%) exact matches, in which:
46 unique CDR3
4 unique J



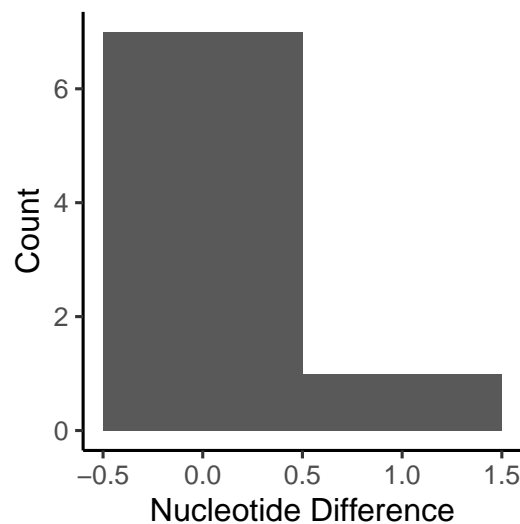
IGHV1-NL1*01

1 sequences assigned
No exact matches.



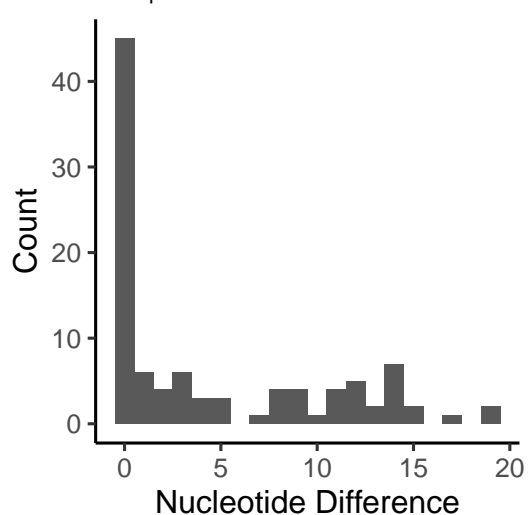
IGHV1-58*02

9 sequences assigned
7 (77.8%) exact matches, in which:
7 unique CDR3
3 unique J



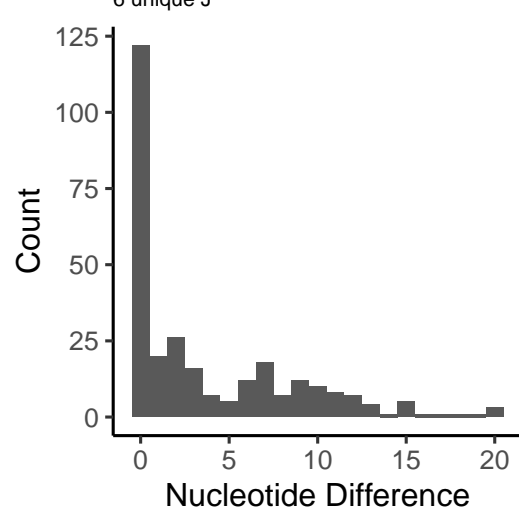
IGHV1-69*10

104 sequences assigned
45 (43.3%) exact matches, in which:
44 unique CDR3
5 unique J



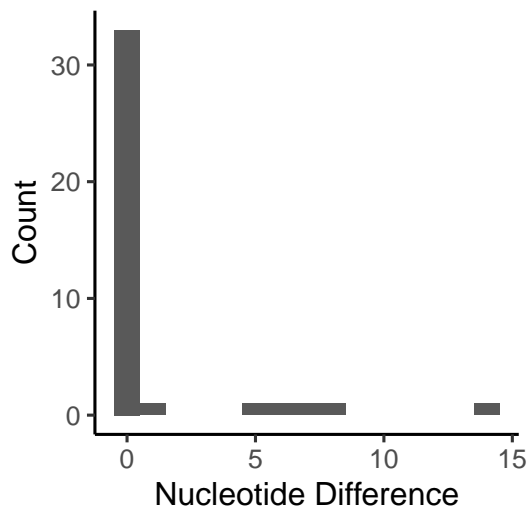
IGHV2-5*02

293 sequences assigned
122 (41.6%) exact matches, in which:
122 unique CDR3
6 unique J



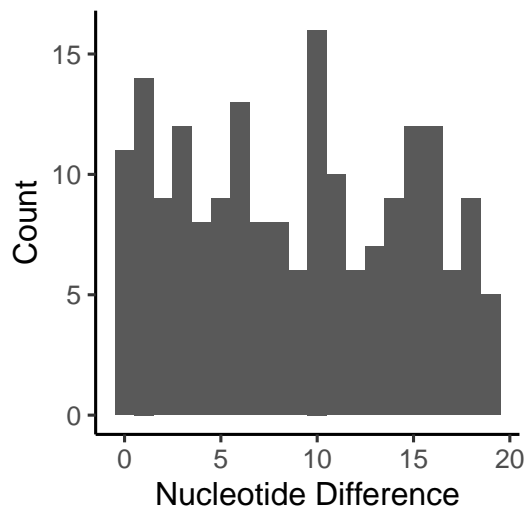
IGHV2-26*01

39 sequences assigned
33 (84.6%) exact matches, in which:
33 unique CDR3
6 unique J



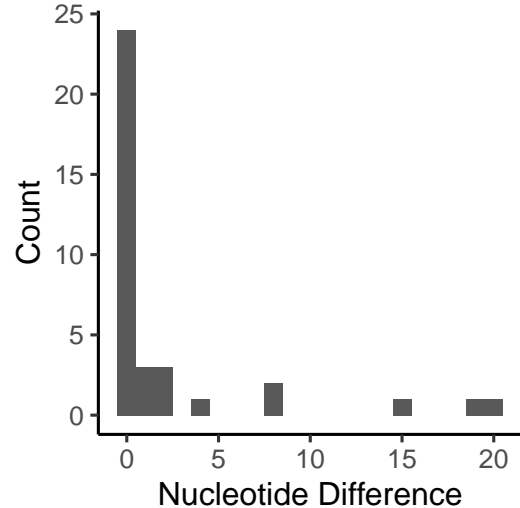
IGHV3-7*01

201 sequences assigned
11 (5.5%) exact matches, in which:
11 unique CDR3
3 unique J



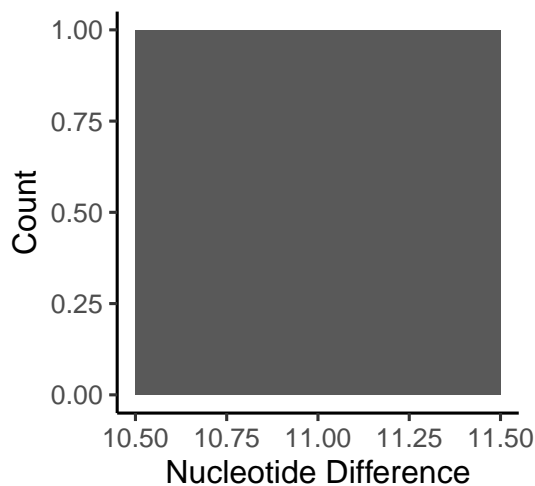
IGHV3-11*01

37 sequences assigned
24 (64.9%) exact matches, in which:
24 unique CDR3
5 unique J



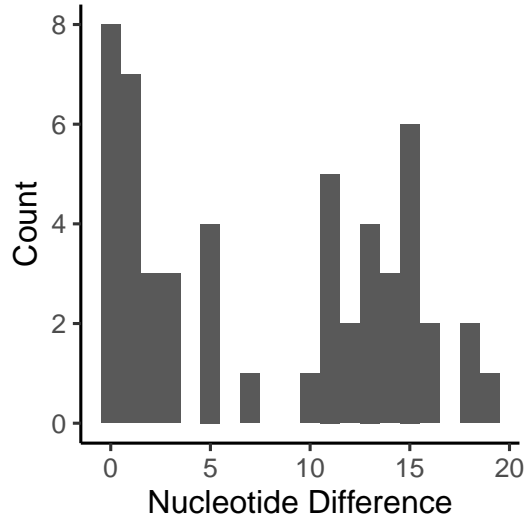
IGHV2-70*12

1 sequences assigned
No exact matches.



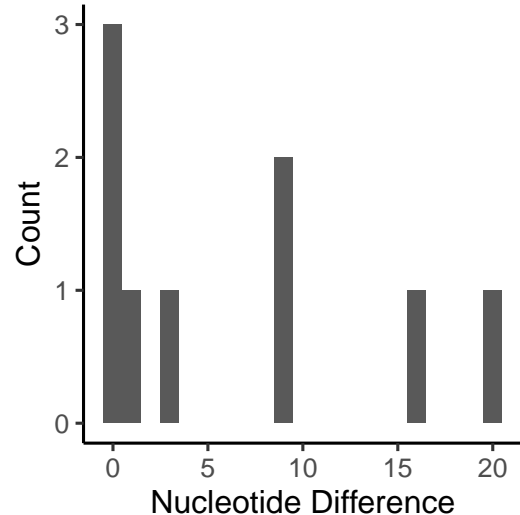
IGHV3-7*04

57 sequences assigned
8 (14%) exact matches, in which:
8 unique CDR3
2 unique J



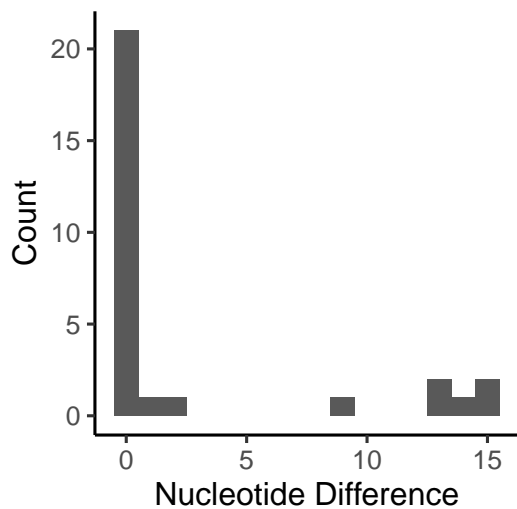
IGHV3-11*04

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



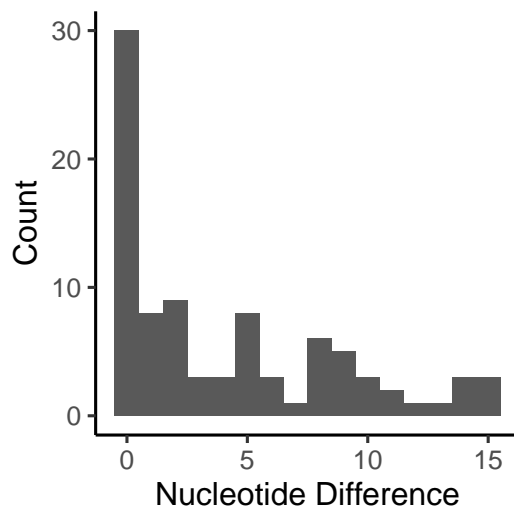
IGHV2-70*15

29 sequences assigned
21 (72.4%) exact matches, in which:
21 unique CDR3
5 unique J



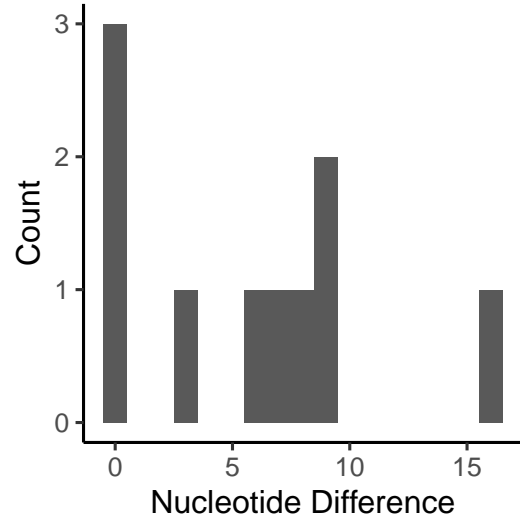
IGHV3-9*01

90 sequences assigned
30 (33.3%) exact matches, in which:
30 unique CDR3
5 unique J



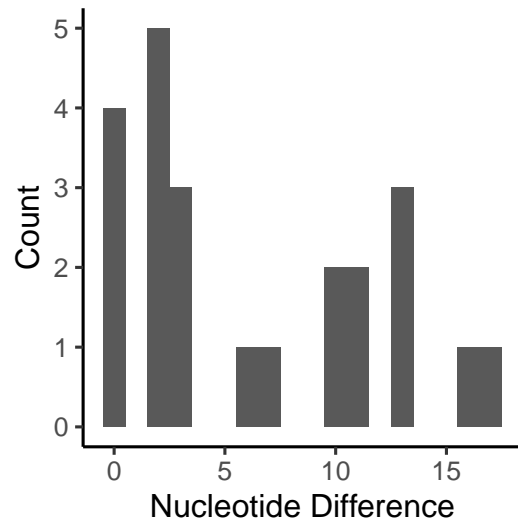
IGHV3-11*06

11 sequences assigned
3 (27.3%) exact matches, in which:
3 unique CDR3
1 unique J



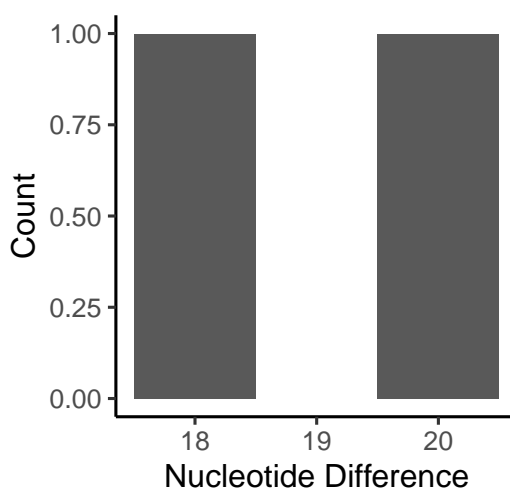
IGHV3-13*01

24 sequences assigned
4 (16.7%) exact matches, in which:
4 unique CDR3
1 unique J



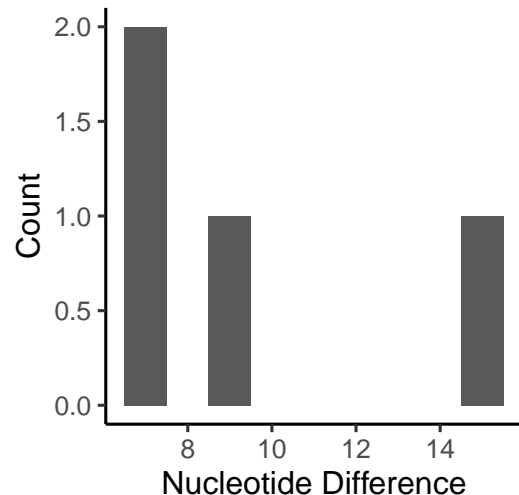
IGHV3-20*04

2 sequences assigned
No exact matches.



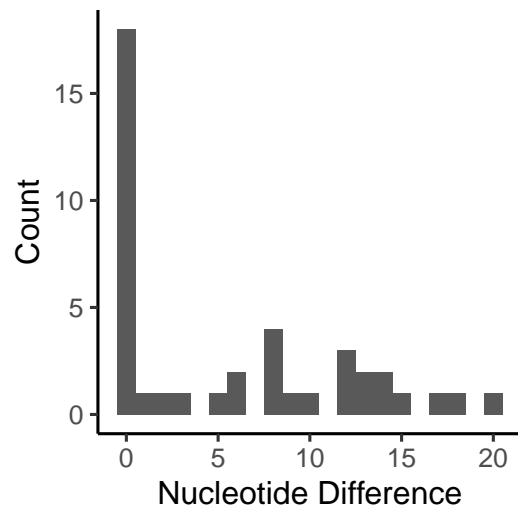
IGHV3-30-5*01

4 sequences assigned
No exact matches.



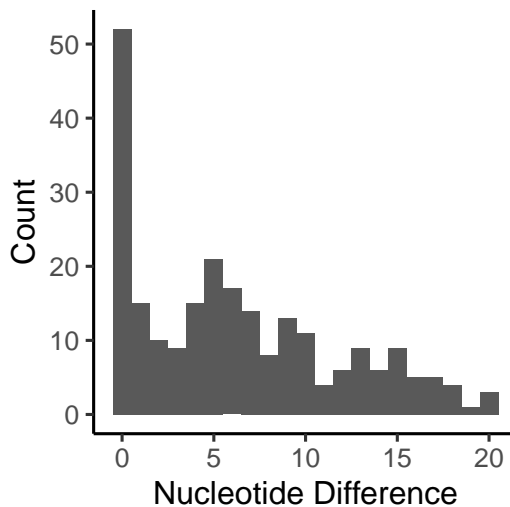
IGHV3-15*01

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



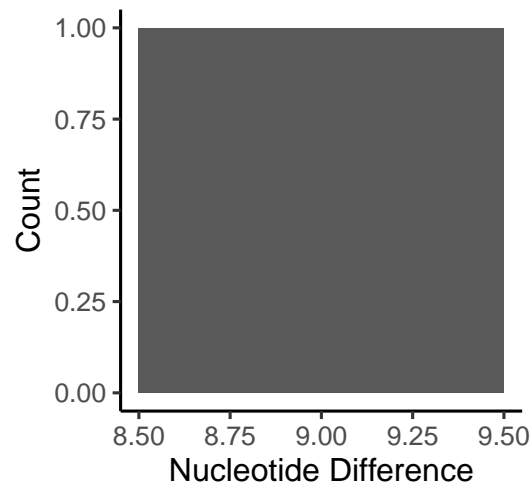
IGHV3-21*01

250 sequences assigned
52 (20.8%) exact matches, in which:
50 unique CDR3
6 unique J



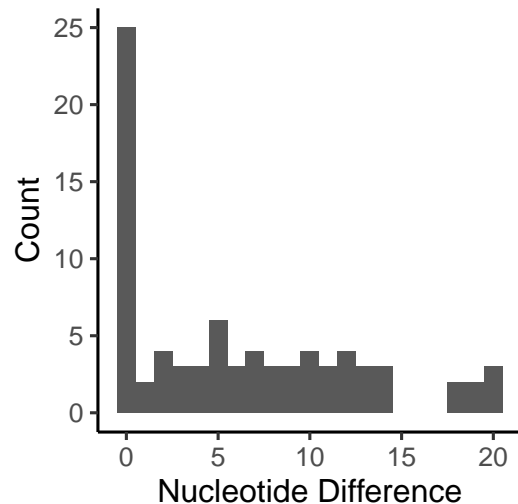
IGHV3-30-5*02

2 sequences assigned
No exact matches.



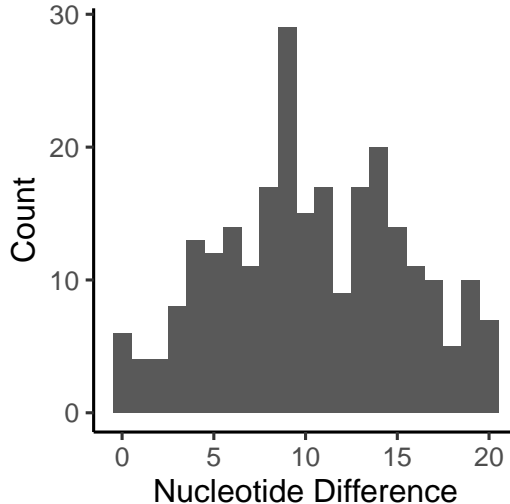
IGHV3-15*07

88 sequences assigned
25 (28.4%) exact matches, in which:
25 unique CDR3
5 unique J



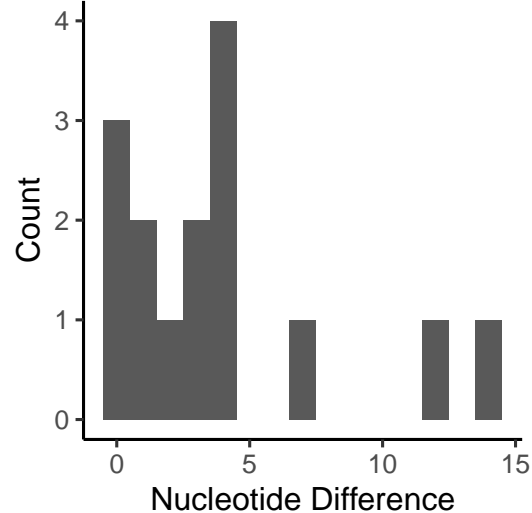
IGHV3-23*04

272 sequences assigned
6 (2.2%) exact matches, in which:
6 unique CDR3
2 unique J



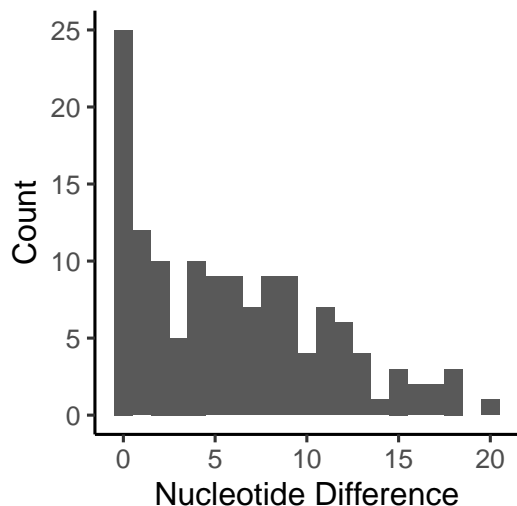
IGHV3-30*07

16 sequences assigned
3 (18.8%) exact matches, in which:
3 unique CDR3
2 unique J



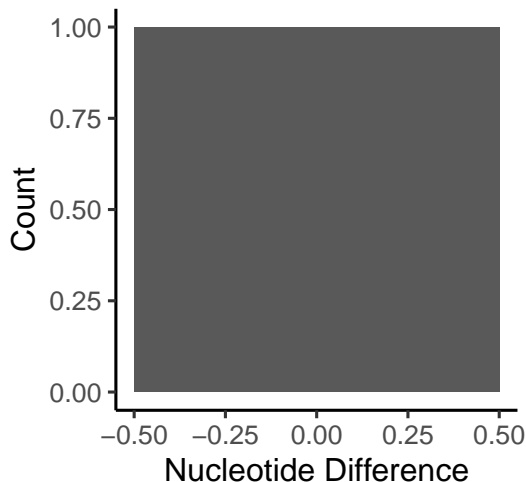
IGHV3-33*01

144 sequences assigned
25 (17.4%) exact matches, in which:
25 unique CDR3
4 unique J



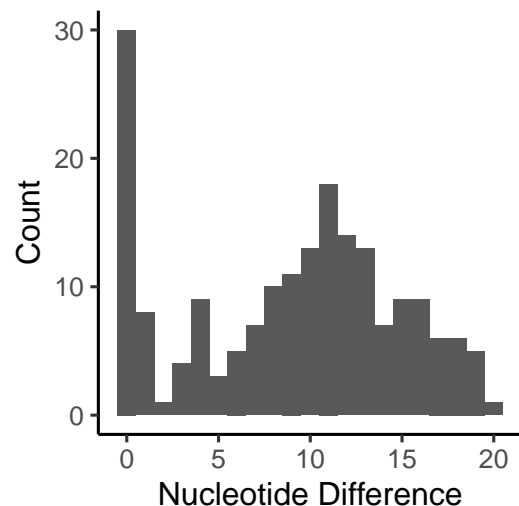
IGHV3-38-3*01

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



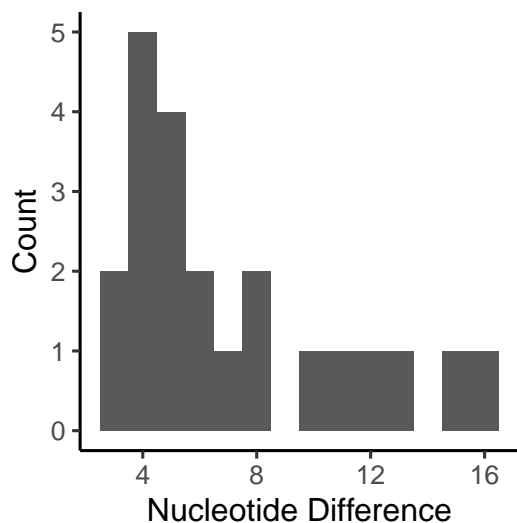
IGHV3-48*01

203 sequences assigned
30 (14.8%) exact matches, in which:
30 unique CDR3
6 unique J



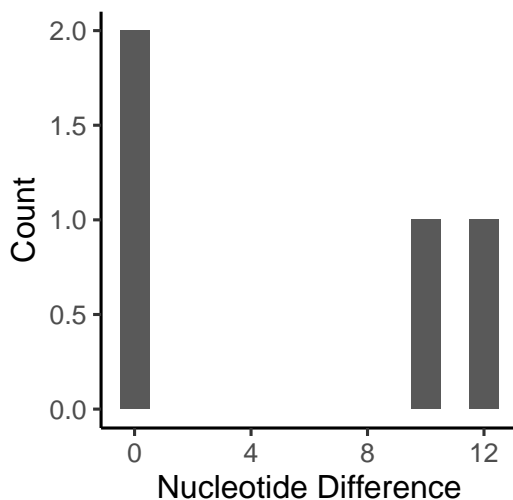
IGHV3-33*05

23 sequences assigned
No exact matches.



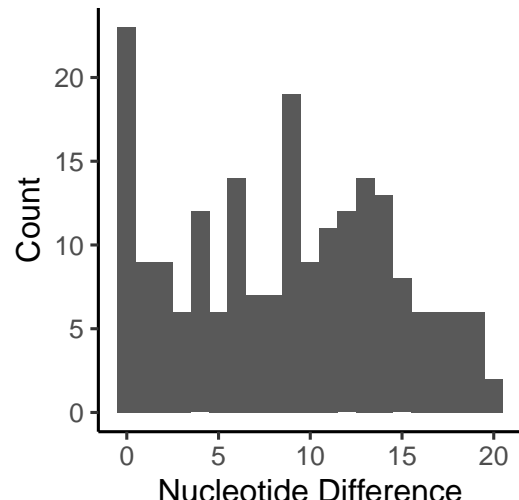
IGHV3-43*01

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



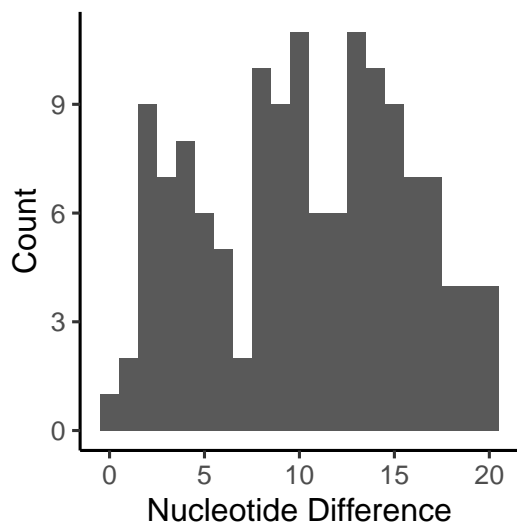
IGHV3-48*04

212 sequences assigned
23 (10.8%) exact matches, in which:
23 unique CDR3
4 unique J



IGHV3-33*08

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



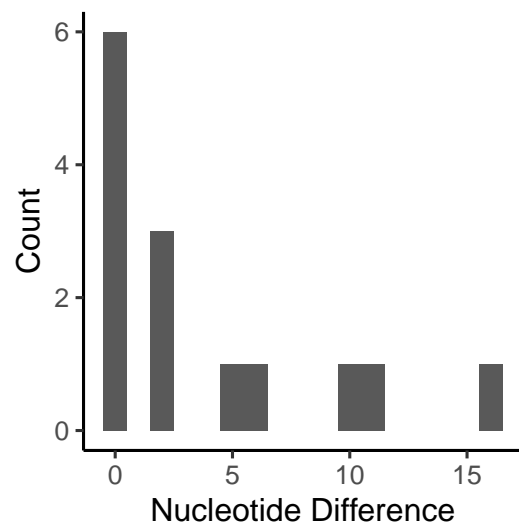
IGHV3-43*02

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



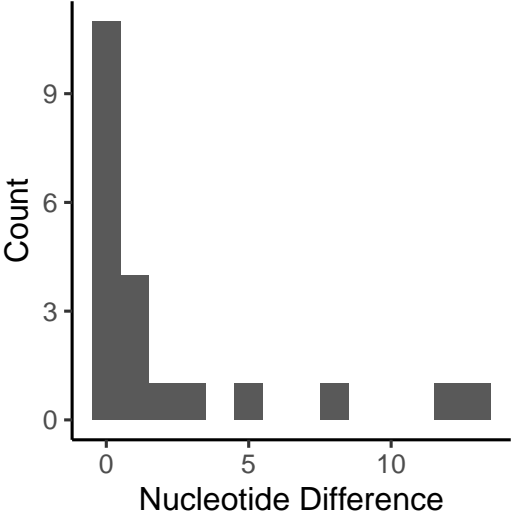
IGHV3-49*03

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



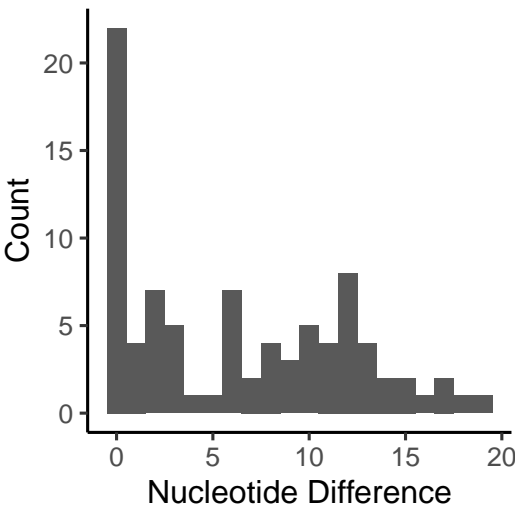
IGHV3-53*04

21 sequences assigned
11 (52.4%) exact matches, in which:
10 unique CDR3
3 unique J



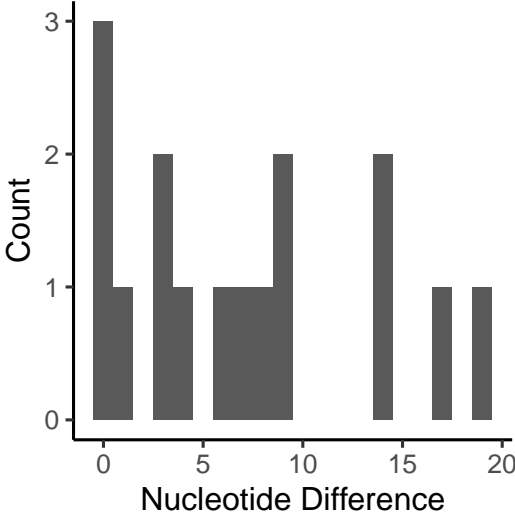
IGHV3-66*01

90 sequences assigned
22 (24.4%) exact matches, in which:
20 unique CDR3
4 unique J



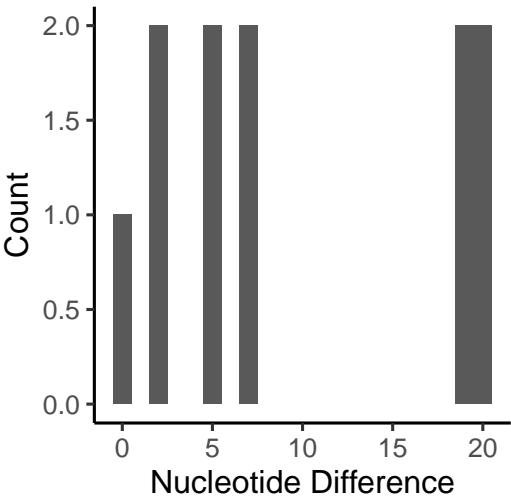
IGHV3-72*01

21 sequences assigned
3 (14.3%) exact matches, in which:
3 unique CDR3
2 unique J



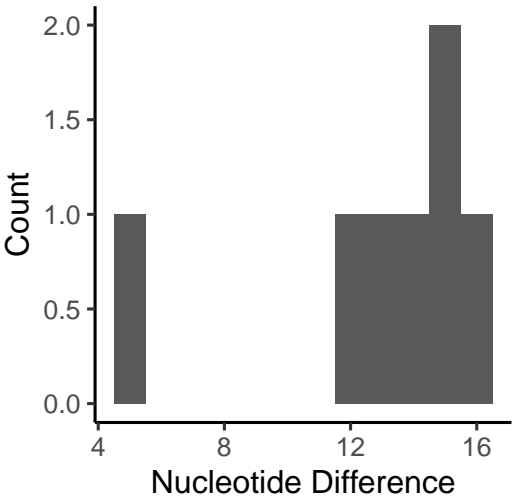
IGHV3-64*01

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



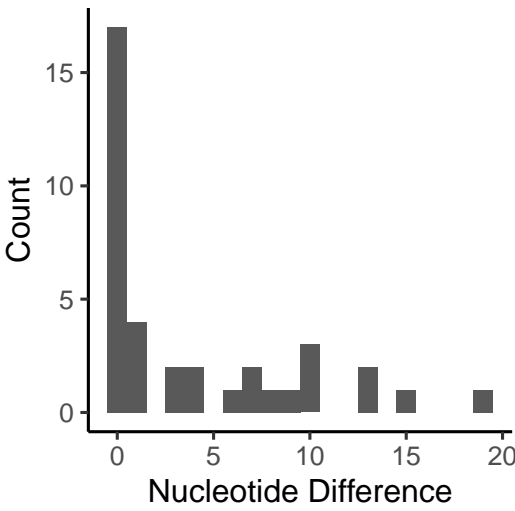
IGHV3-69-1*01

10 sequences assigned
No exact matches.



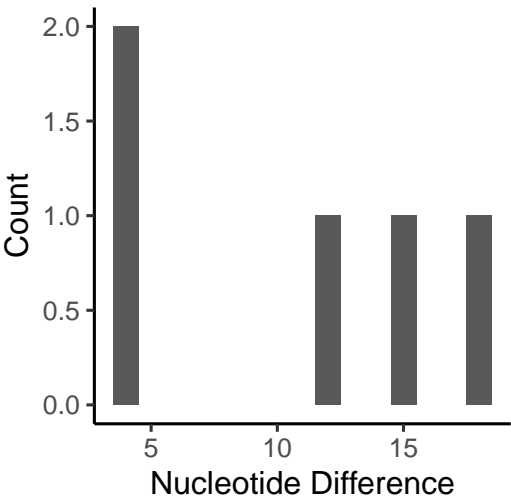
IGHV3-73*01

37 sequences assigned
17 (45.9%) exact matches, in which:
16 unique CDR3
3 unique J



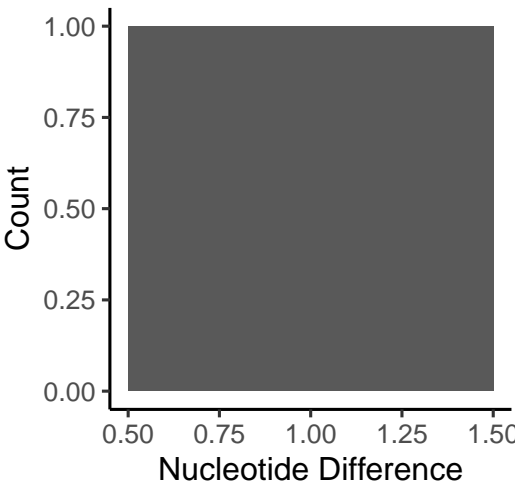
IGHV3-64*07

5 sequences assigned
No exact matches.



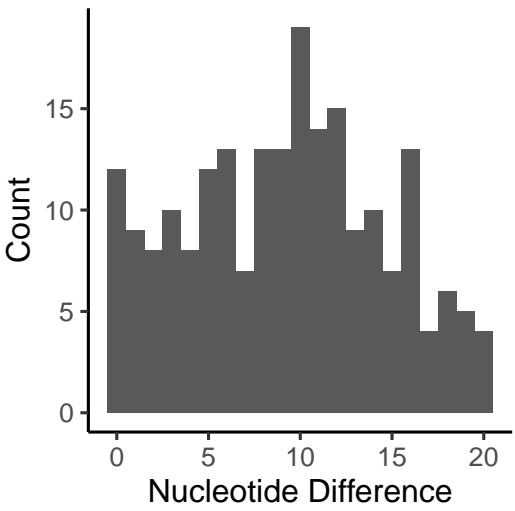
IGHV3-71*02

1 sequences assigned
No exact matches.



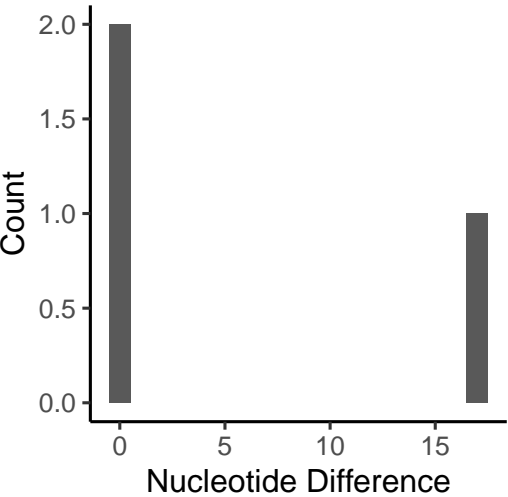
IGHV3-74*01

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



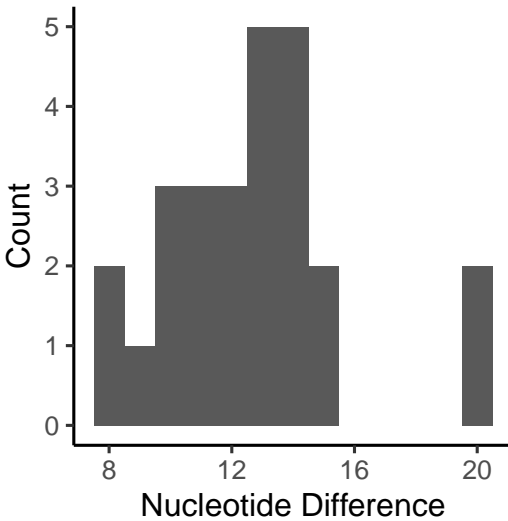
IGHV3-43D*03

3 sequences assigned
2 (66.7%) exact matches, in which:
2 unique CDR3
2 unique J



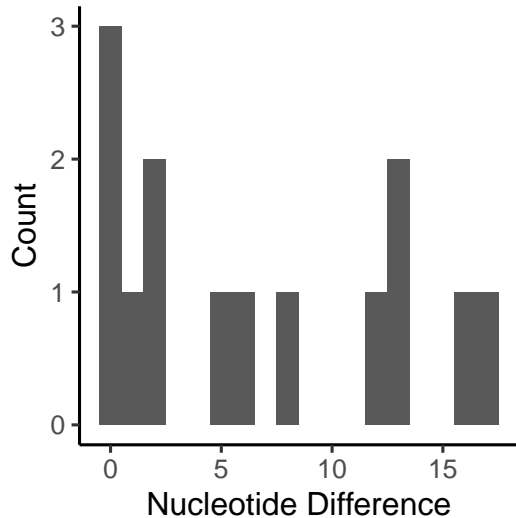
IGHV3-NL1*01

28 sequences assigned
No exact matches.



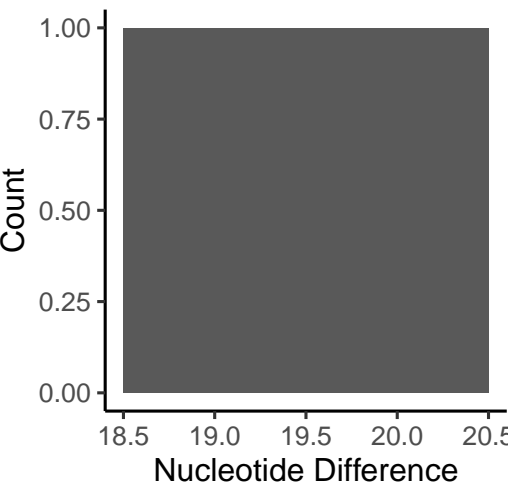
IGHV4-30-2*01

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



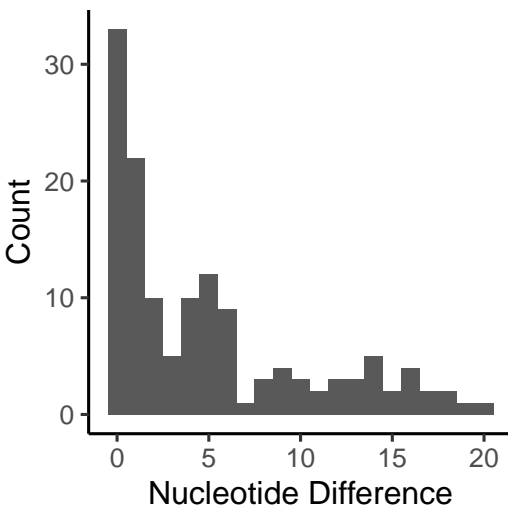
IGHV3-43D*04

3 sequences assigned
No exact matches.



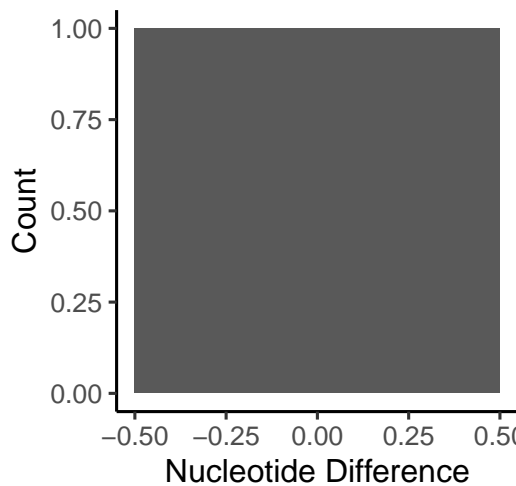
IGHV4-4*02

146 sequences assigned
33 (22.6%) exact matches, in which:
33 unique CDR3
4 unique J



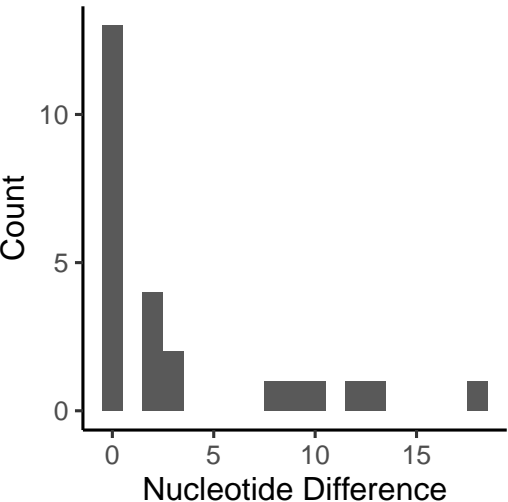
IGHV4-30-4*07

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



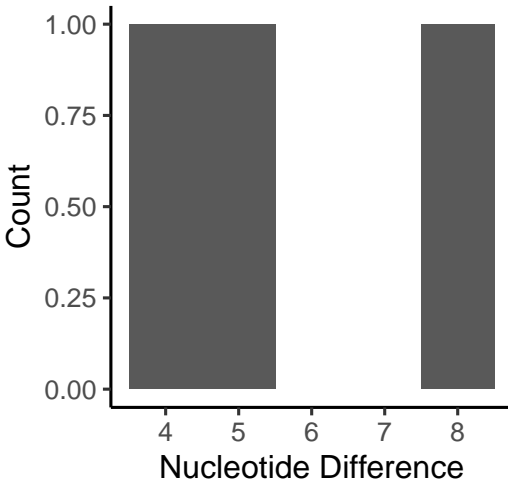
IGHV3-64D*06

26 sequences assigned
13 (50%) exact matches, in which:
13 unique CDR3
4 unique J



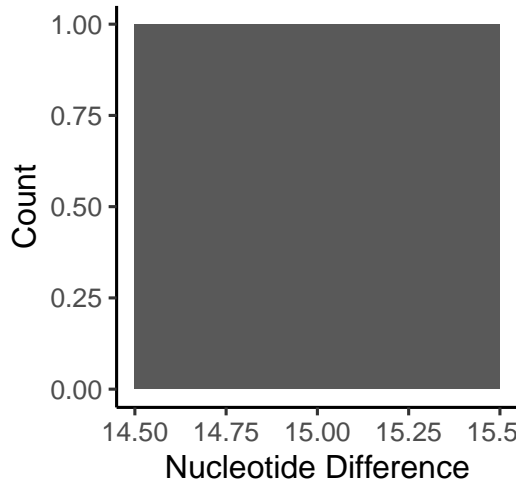
IGHV4-28*01

3 sequences assigned
No exact matches.



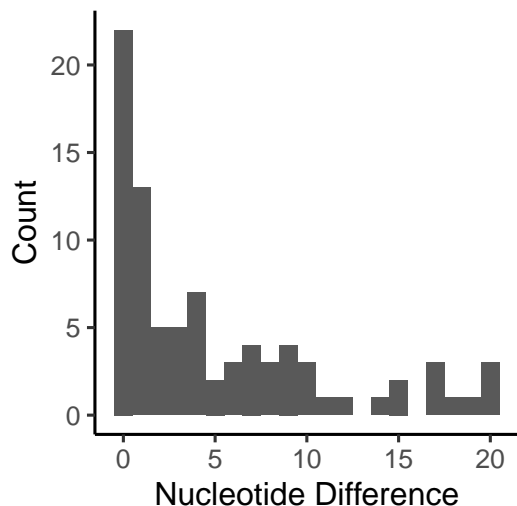
IGHV4-30-4*08

1 sequences assigned
No exact matches.



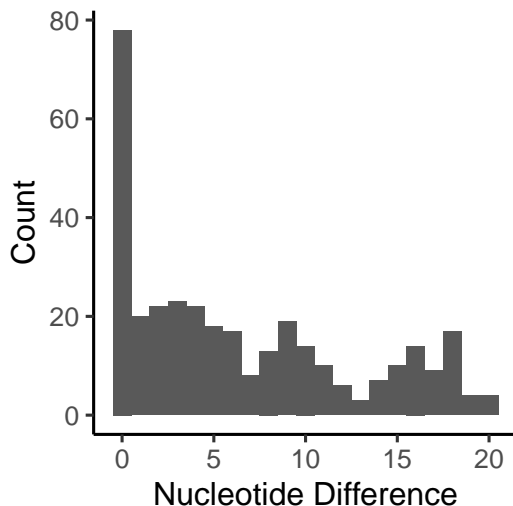
IGHV4-31*03

87 sequences assigned
22 (25.3%) exact matches, in which:
22 unique CDR3
4 unique J



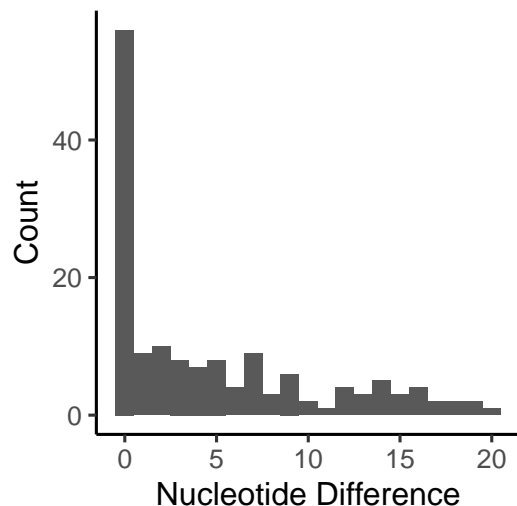
IGHV4-39*01

356 sequences assigned
78 (21.9%) exact matches, in which:
78 unique CDR3
5 unique J



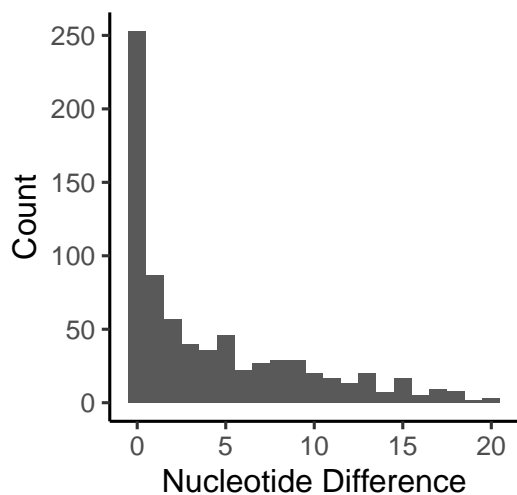
IGHV4-59*08

151 sequences assigned
56 (37.1%) exact matches, in which:
56 unique CDR3
6 unique J



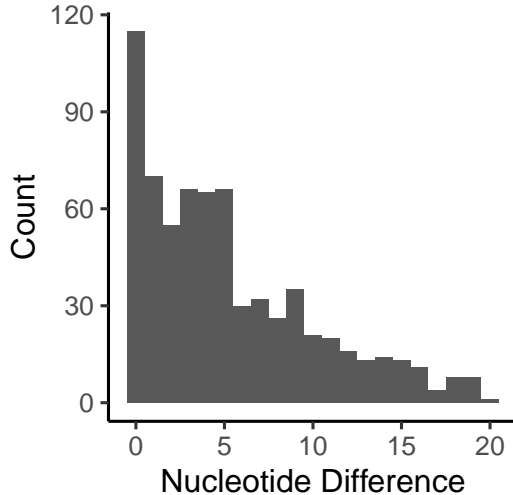
IGHV4-34*01

785 sequences assigned
253 (32.2%) exact matches, in which:
253 unique CDR3
6 unique J



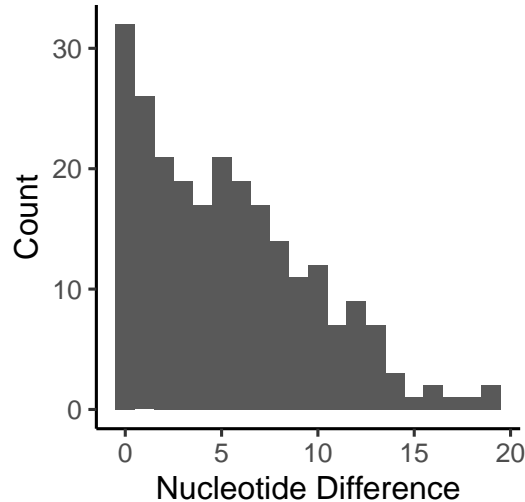
IGHV4-39*07

706 sequences assigned
115 (16.3%) exact matches, in which:
114 unique CDR3
6 unique J



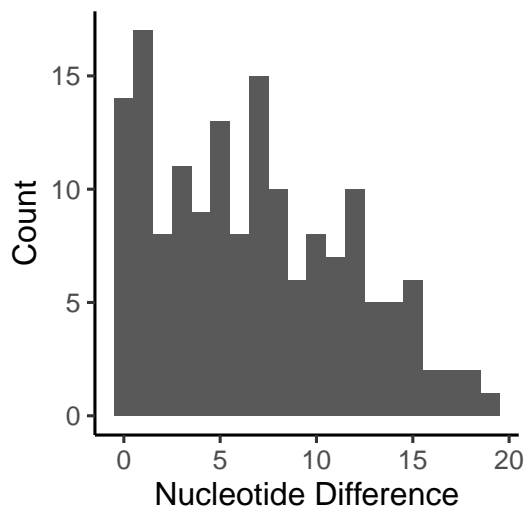
IGHV4-59*12

246 sequences assigned
32 (13%) exact matches, in which:
32 unique CDR3
4 unique J



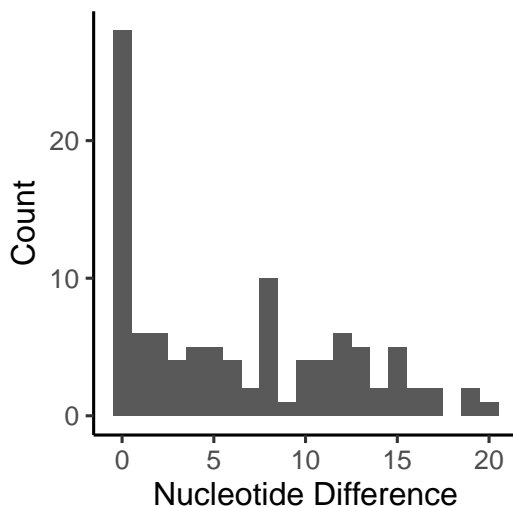
IGHV4-38-2*02

163 sequences assigned
14 (8.6%) exact matches, in which:
14 unique CDR3
4 unique J



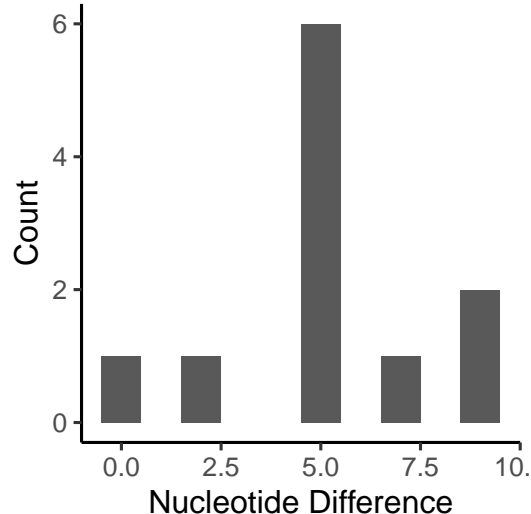
IGHV4-59*01

107 sequences assigned
28 (26.2%) exact matches, in which:
28 unique CDR3
4 unique J



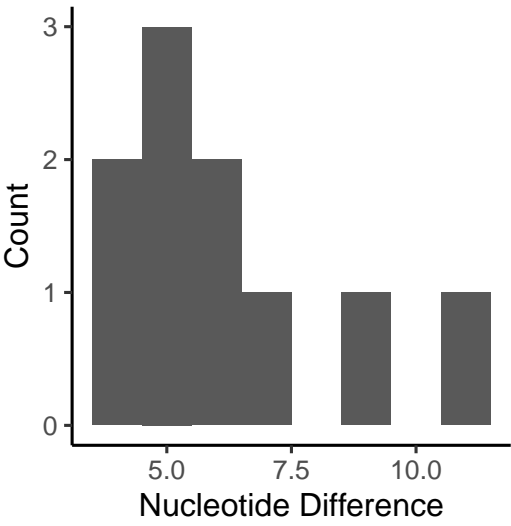
IGHV4-61*01

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



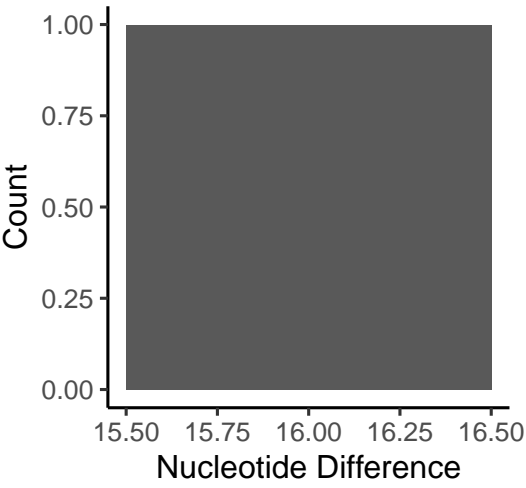
IGHV4-61*05

10 sequences assigned
No exact matches.



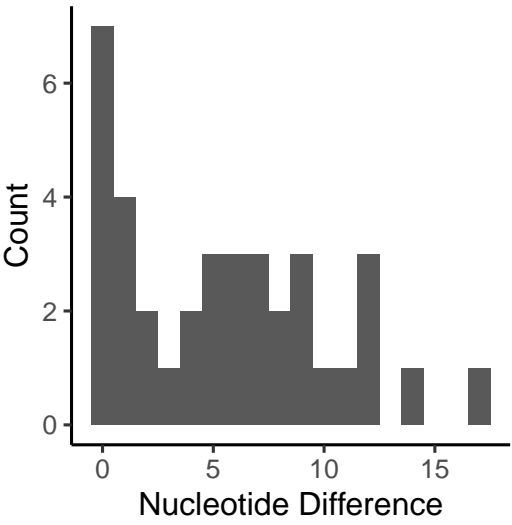
IGHV4/OR15-8*01

1 sequences assigned
No exact matches.



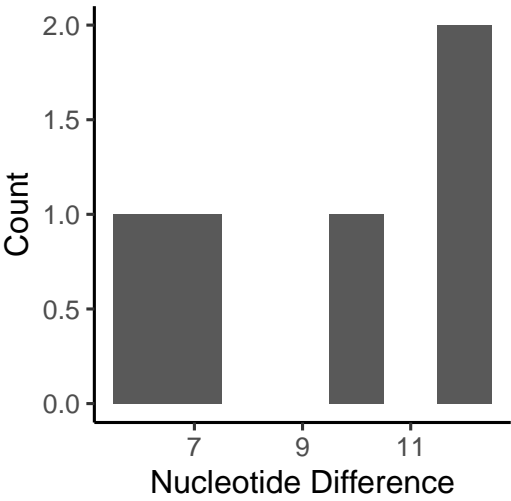
IGHV5-51*03

39 sequences assigned
7 (17.9%) exact matches, in which:
7 unique CDR3
6 unique J



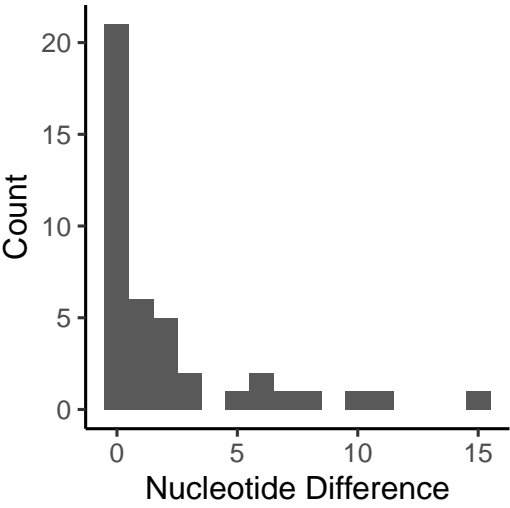
IGHV4-61*08

5 sequences assigned
No exact matches.



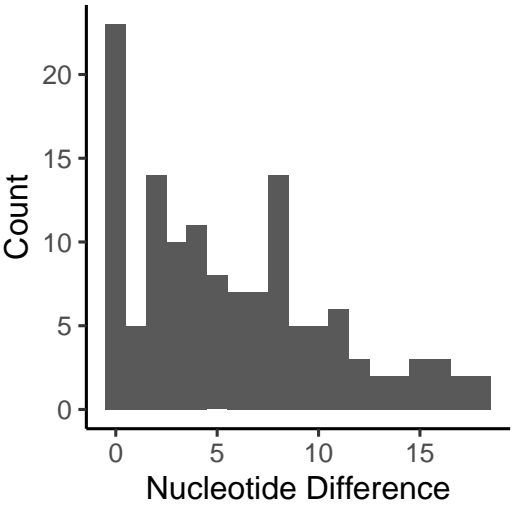
IGHV5-10-1*03

42 sequences assigned
21 (50%) exact matches, in which:
21 unique CDR3
5 unique J



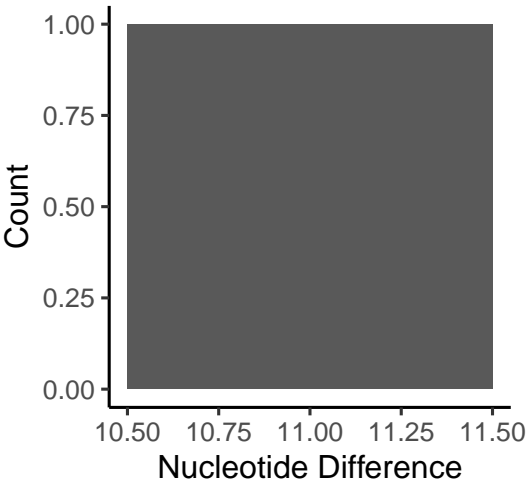
IGHV6-1*01

135 sequences assigned
23 (17%) exact matches, in which:
22 unique CDR3
4 unique J



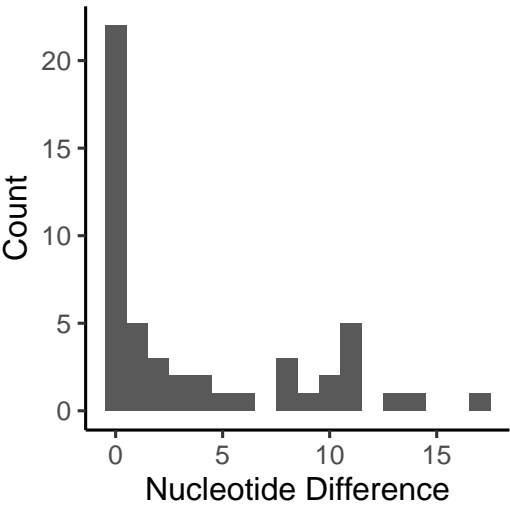
IGHV1/OR15-1*04

1 sequences assigned
No exact matches.



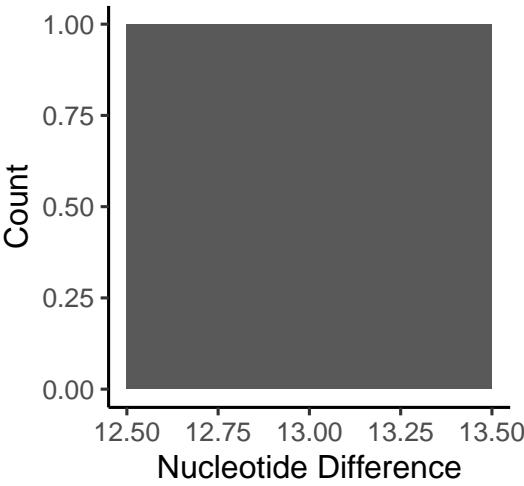
IGHV5-51*01

52 sequences assigned
22 (42.3%) exact matches, in which:
22 unique CDR3
4 unique J



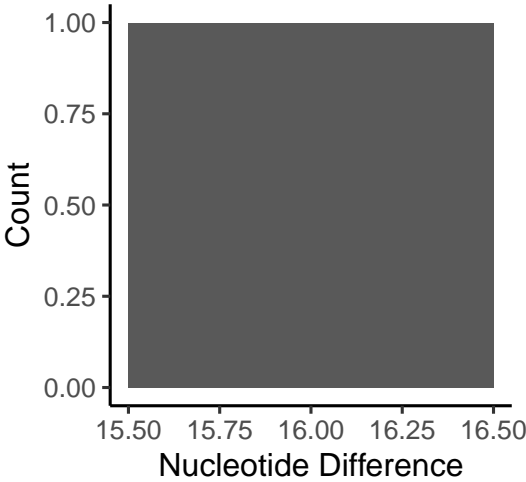
IGHV3/OR16-6*02

1 sequences assigned
No exact matches.



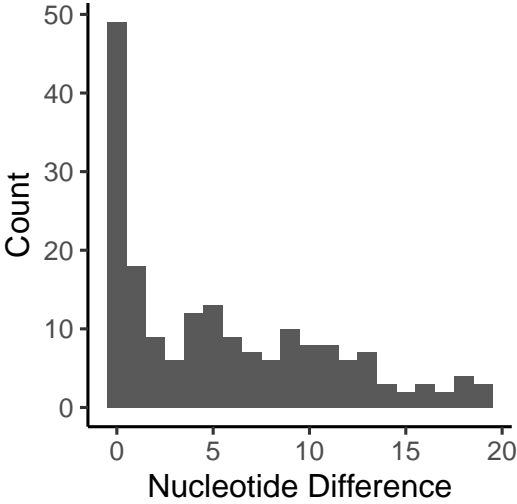
IGHV3/OR16-10*03

1 sequences assigned
No exact matches.



IGHV7-4-1*02

191 sequences assigned
49 (25.7%) exact matches, in which:
46 unique CDR3
6 unique J





[illegible]