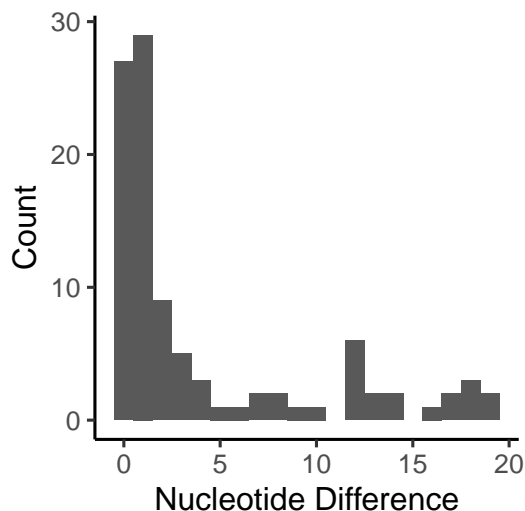


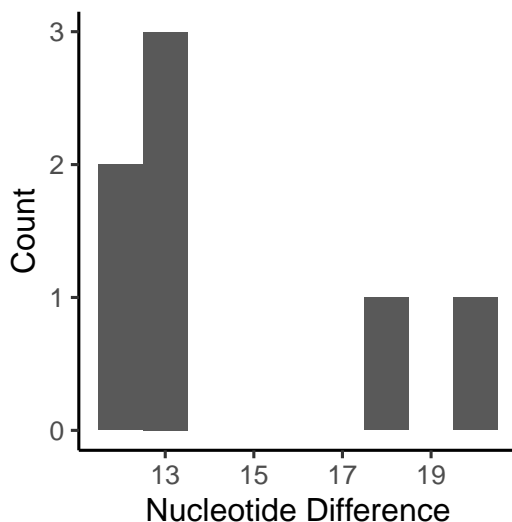
IGHV1-2*02

101 sequences assigned
27 (26.7%) exact matches, in which:
25 unique CDR3
4 unique J



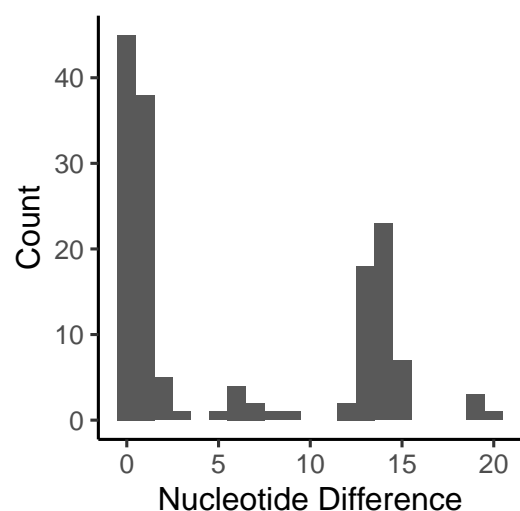
IGHV1-3*04

7 sequences assigned
No exact matches.



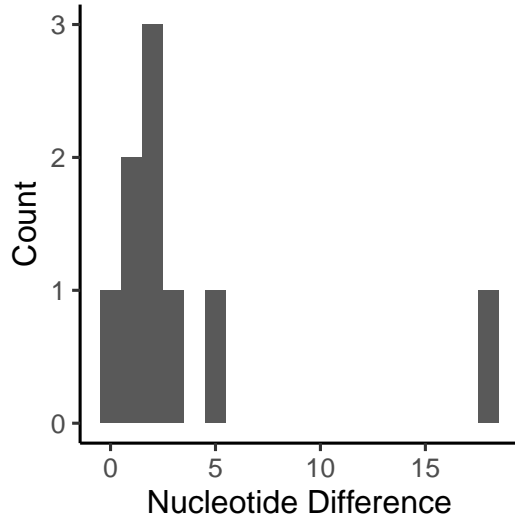
IGHV1-18*01

159 sequences assigned
45 (28.3%) exact matches, in which:
42 unique CDR3
4 unique J



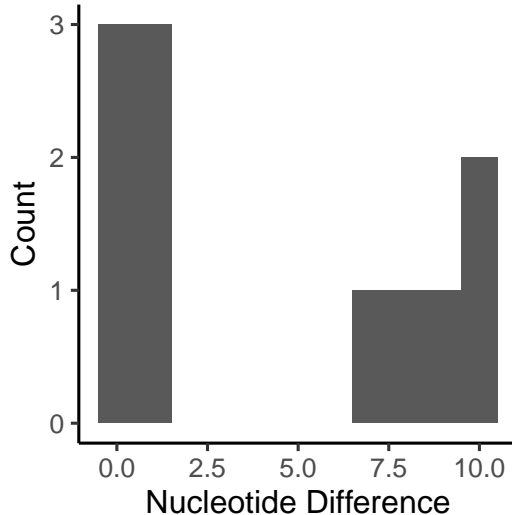
IGHV1-2*06

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



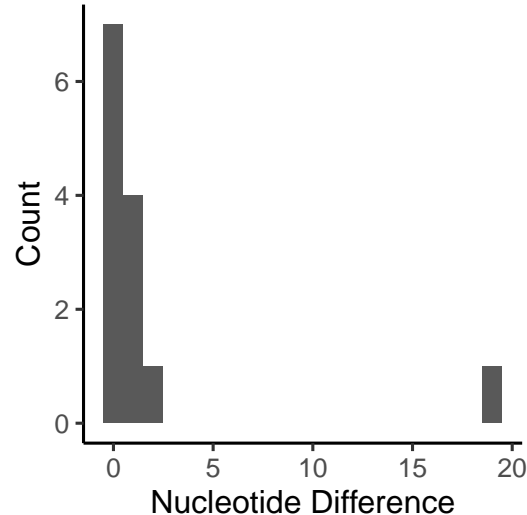
IGHV1-3*01_05

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



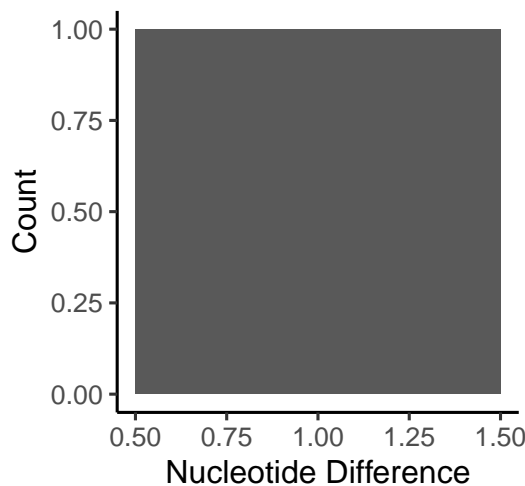
IGHV1-24*01

13 sequences assigned
7 (53.8%) exact matches, in which:
7 unique CDR3
2 unique J



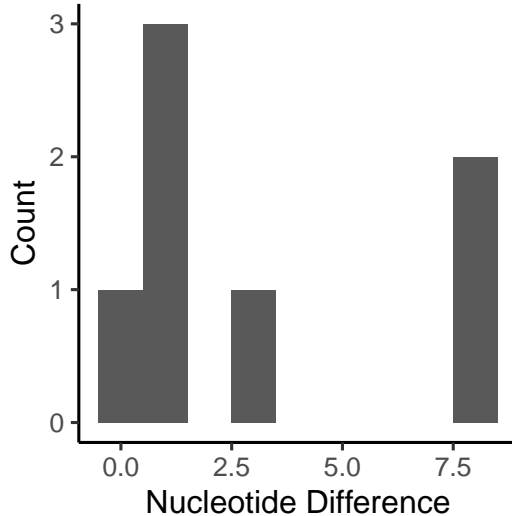
IGHV1-3*02

1 sequences assigned
No exact matches.



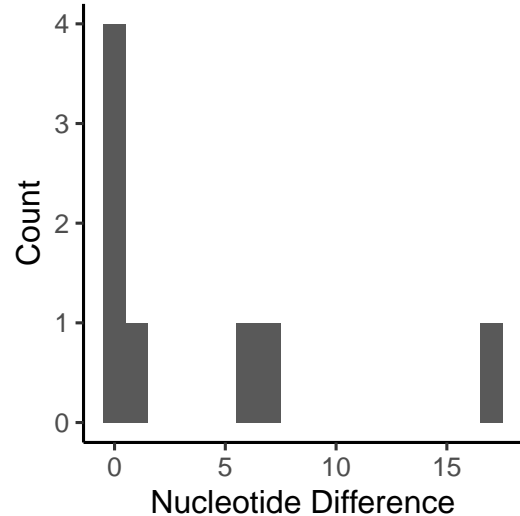
IGHV1-8*01

8 sequences assigned
1 (12.5%) exact matches, in which:
1 unique CDR3
1 unique J



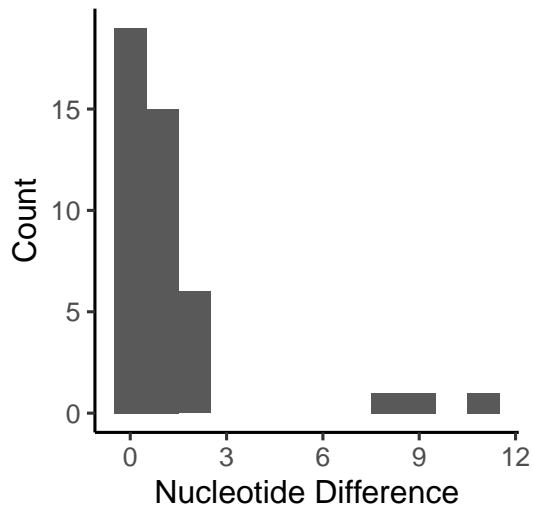
IGHV1-46*01

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



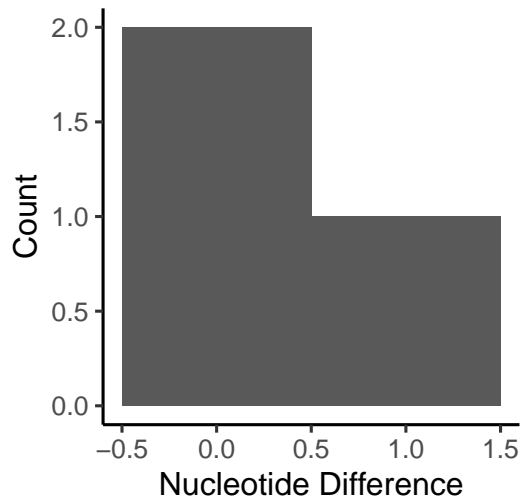
IGHV1-46*03

43 sequences assigned
19 (44.2%) exact matches, in which:
17 unique CDR3
4 unique J



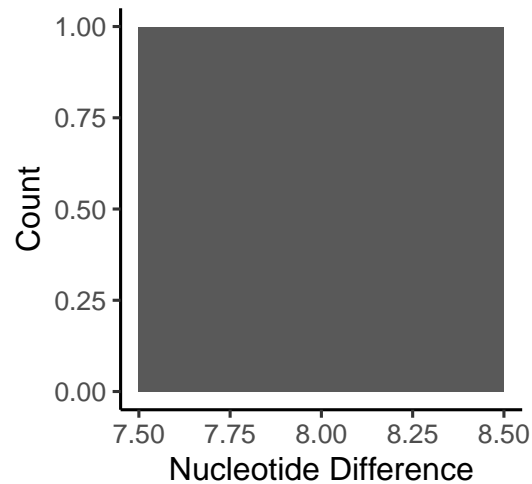
IGHV1-69-2*01

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



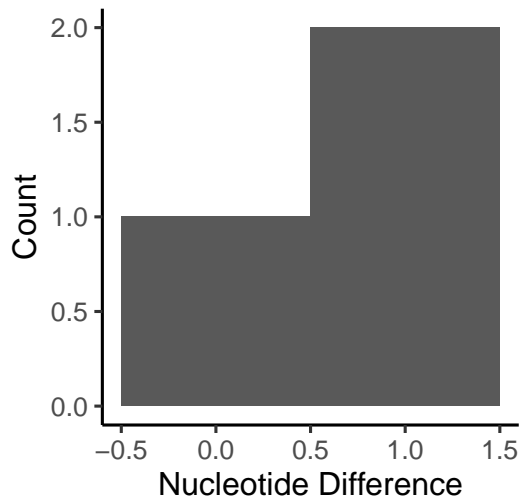
IGHV1-NL1*01

1 sequences assigned
No exact matches.



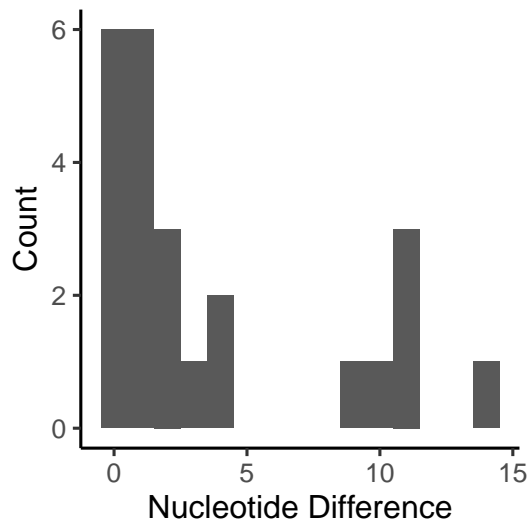
IGHV1-58*02

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



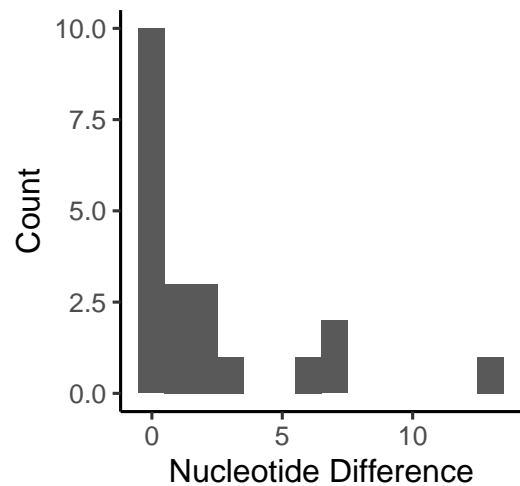
IGHV1-69*02

24 sequences assigned
6 (25%) exact matches, in which:
6 unique CDR3
3 unique J



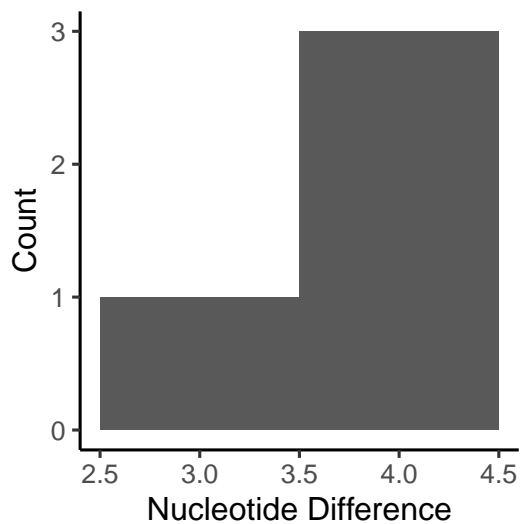
IGHV2-5*02

21 sequences assigned
10 (47.6%) exact matches, in which:
9 unique CDR3
3 unique J



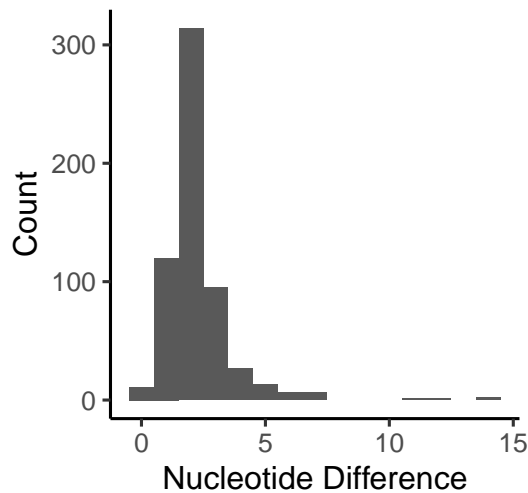
IGHV1-58*01_03

4 sequences assigned
No exact matches.



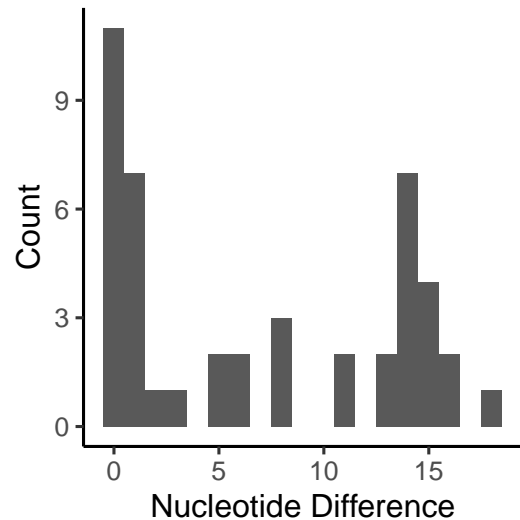
IGHV1-69*04_09

596 sequences assigned
11 (1.8%) exact matches, in which:
11 unique CDR3
4 unique J



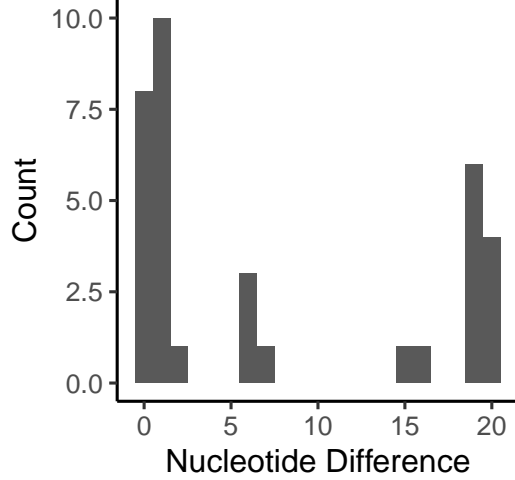
IGHV3-7*01

45 sequences assigned
11 (24.4%) exact matches, in which:
9 unique CDR3
3 unique J



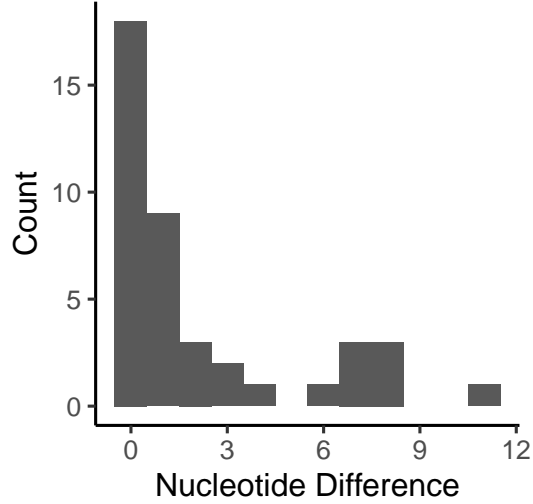
IGHV3-7*03

96 sequences assigned
8 (8.3%) exact matches, in which:
7 unique CDR3
2 unique J



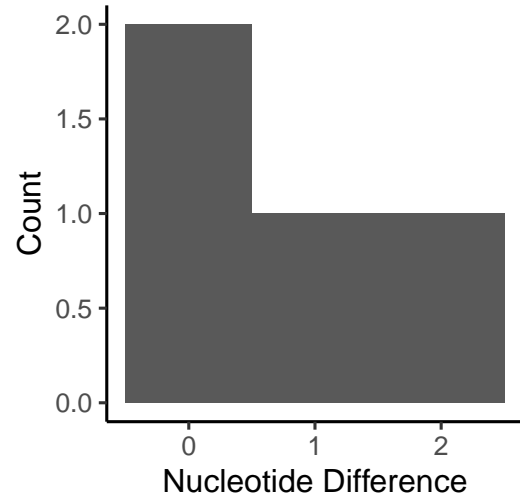
IGHV3-11*01

42 sequences assigned
18 (42.9%) exact matches, in which:
10 unique CDR3
3 unique J



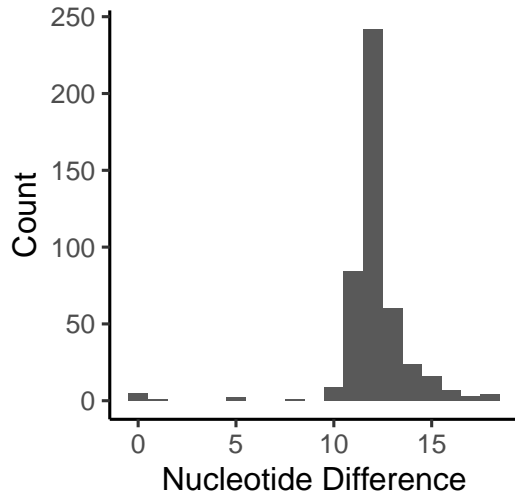
IGHV3-13*01

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



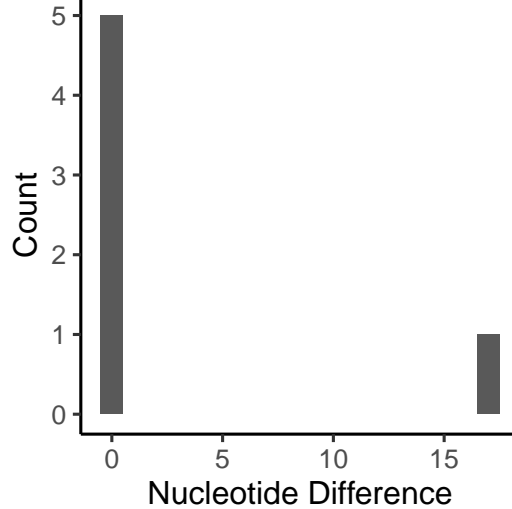
IGHV3-7*04

459 sequences assigned
5 (1.1%) exact matches, in which:
3 unique CDR3
2 unique J



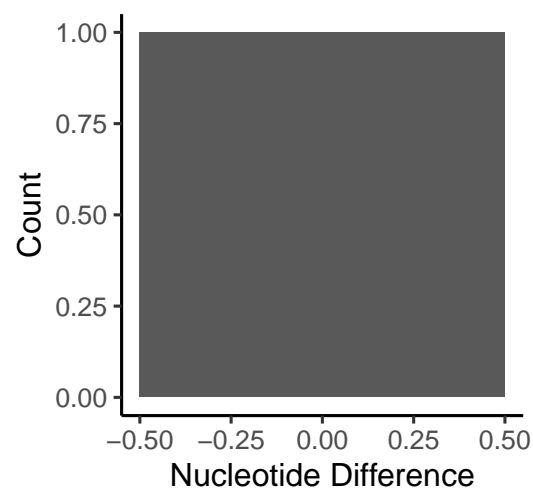
IGHV3-11*04

6 sequences assigned
5 (83.3%) exact matches, in which:
4 unique CDR3
2 unique J



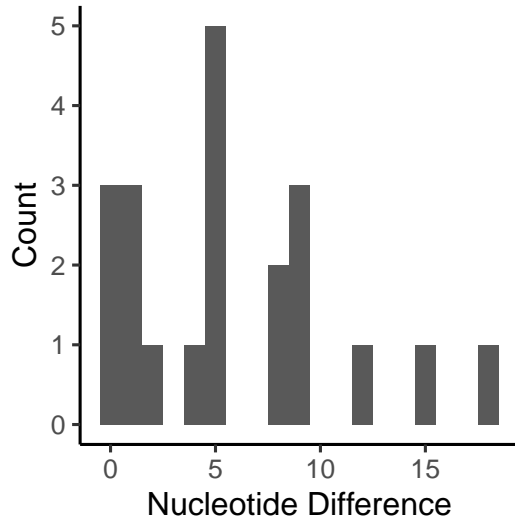
IGHV3-13*05

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



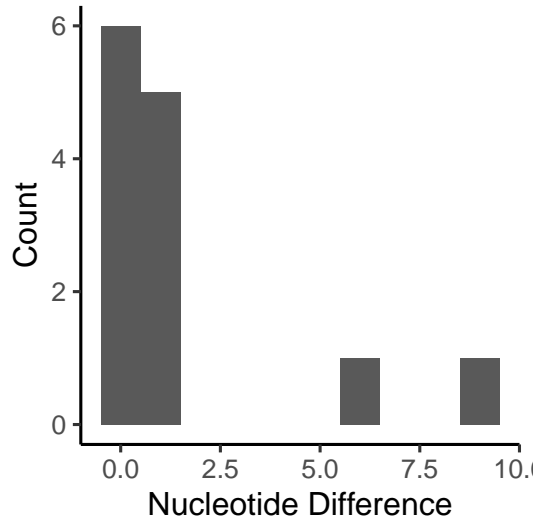
IGHV3-9*01

22 sequences assigned
3 (13.6%) exact matches, in which:
2 unique CDR3
2 unique J



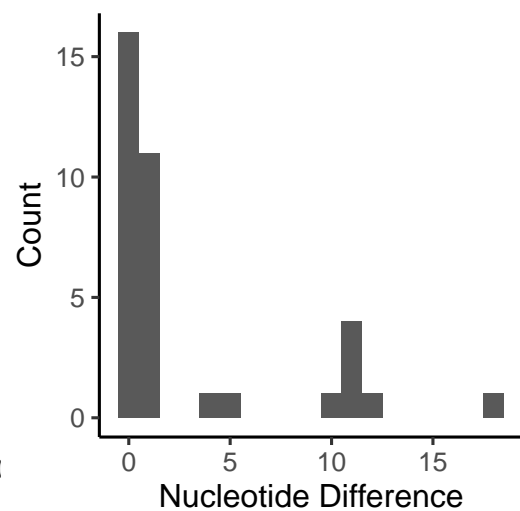
IGHV3-11*06

13 sequences assigned
6 (46.2%) exact matches, in which:
5 unique CDR3
2 unique J



IGHV3-15*01_02

40 sequences assigned
16 (40%) exact matches, in which:
12 unique CDR3
3 unique J



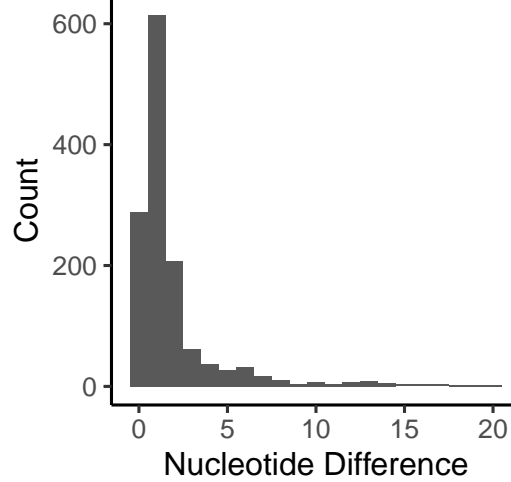
IGHV3-19*01

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



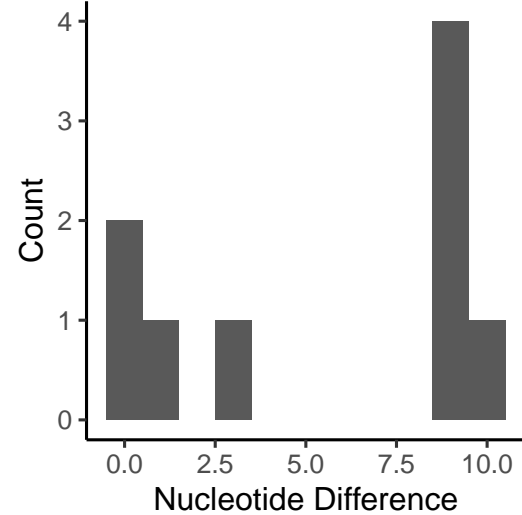
IGHV3-23*01_04

1543 sequences assigned
288 (18.7%) exact matches, in which:
142 unique CDR3
6 unique J



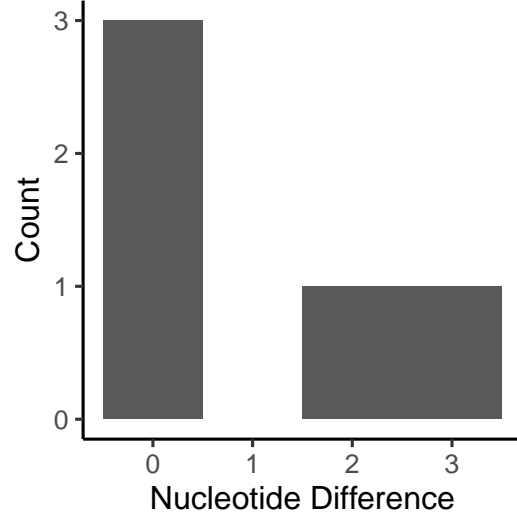
IGHV3-30*03

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



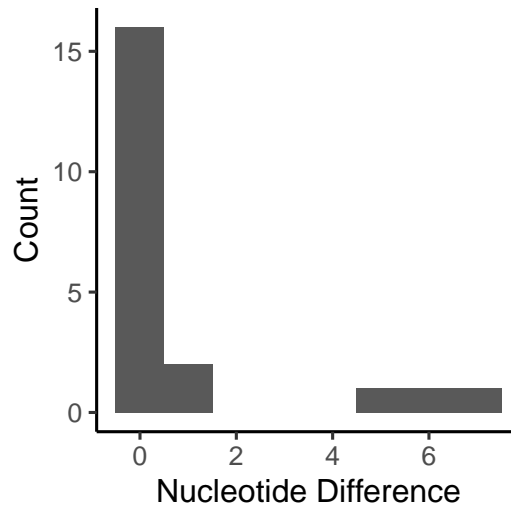
IGHV3-20*01_02

5 sequences assigned
3 (60%) exact matches, in which:
2 unique CDR3
2 unique J



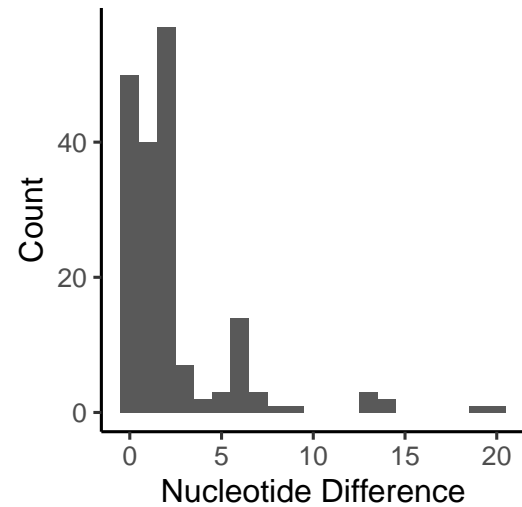
IGHV3-30-3*01

22 sequences assigned
16 (72.7%) exact matches, in which:
11 unique CDR3
4 unique J



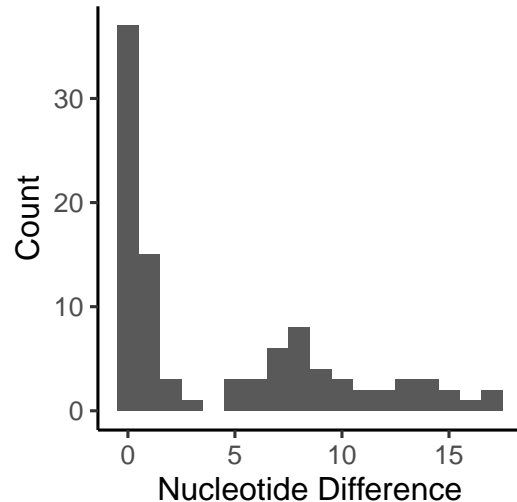
IGHV3-33*01

191 sequences assigned
50 (26.2%) exact matches, in which:
35 unique CDR3
4 unique J



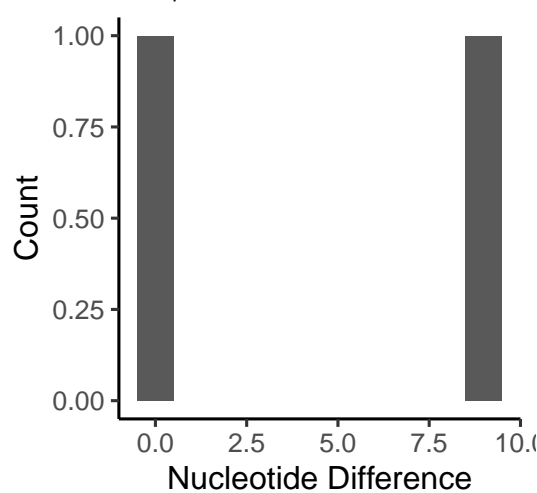
IGHV3-21*01_02

101 sequences assigned
37 (36.6%) exact matches, in which:
23 unique CDR3
4 unique J



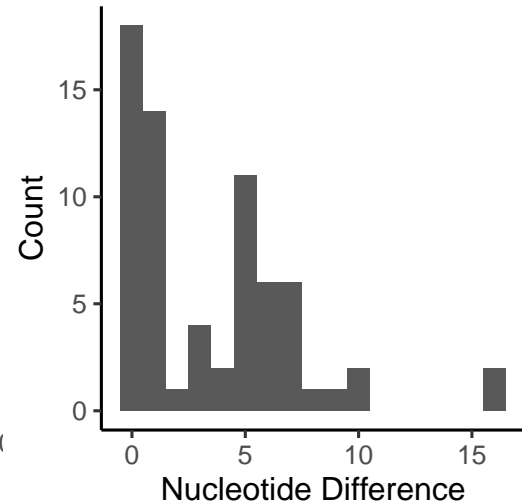
IGHV3-30-3*02

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



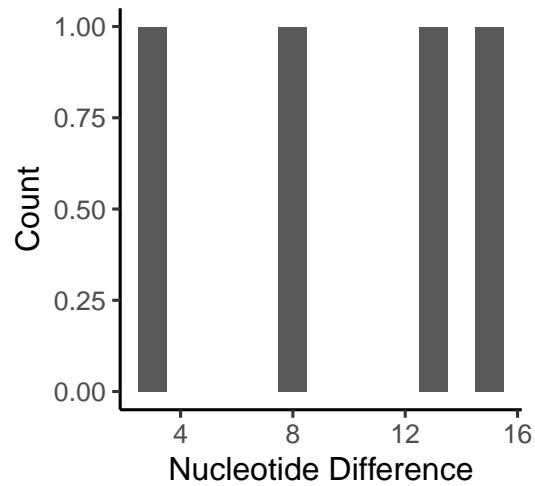
IGHV3-48*01

69 sequences assigned
18 (26.1%) exact matches, in which:
13 unique CDR3
5 unique J



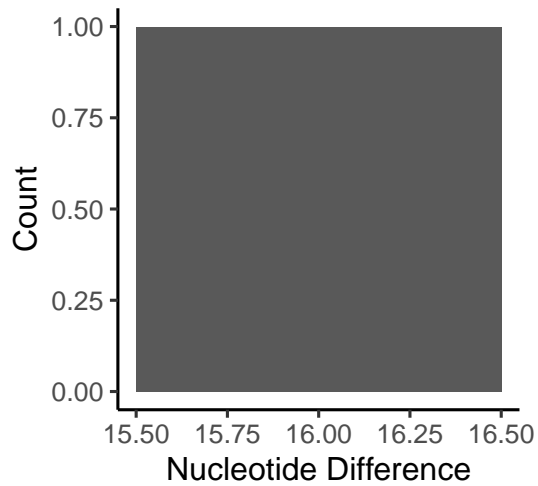
IGHV3-48*04

5 sequences assigned
No exact matches.



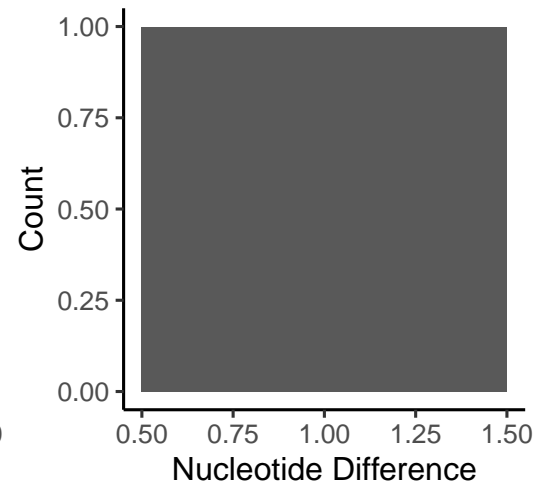
IGHV3-53*05

1 sequences assigned
No exact matches.



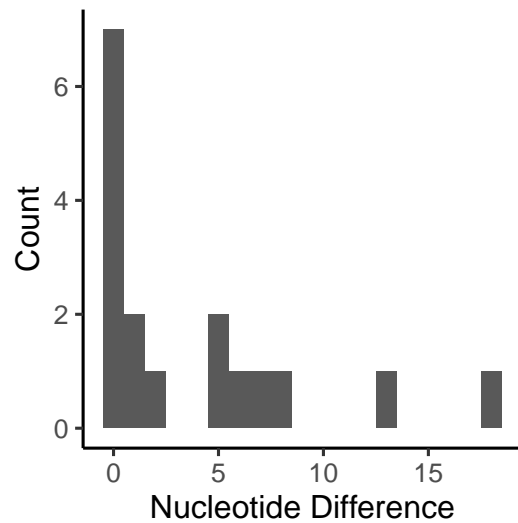
IGHV3-66*01

2 sequences assigned
No exact matches.



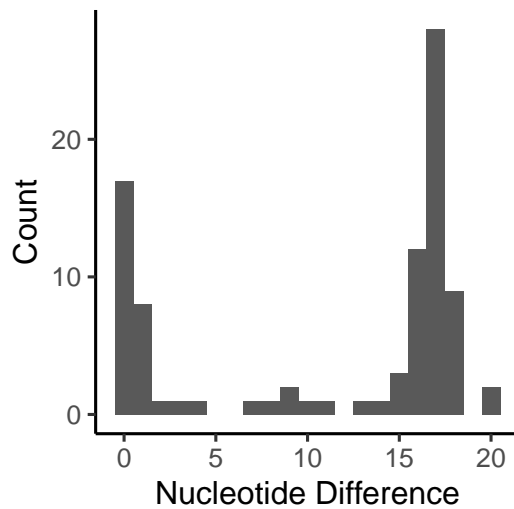
IGHV3-49*03_05

17 sequences assigned
7 (41.2%) exact matches, in which:
5 unique CDR3
2 unique J



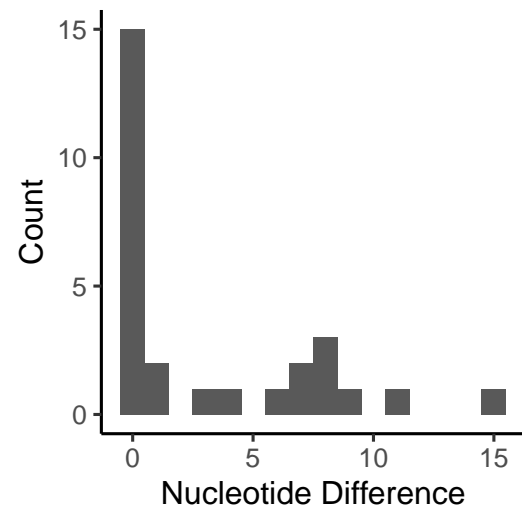
IGHV3-53*01_02

93 sequences assigned
17 (18.3%) exact matches, in which:
11 unique CDR3
4 unique J



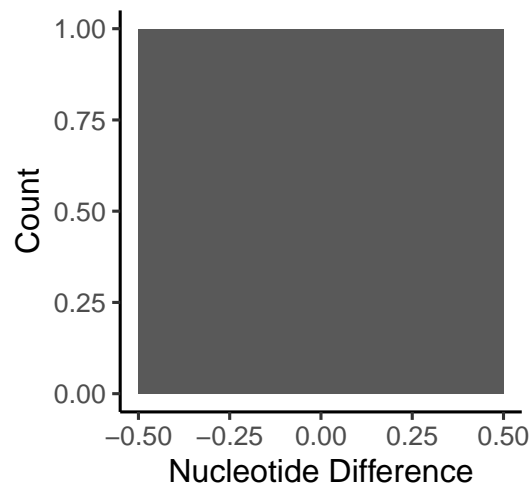
IGHV3-66*02

28 sequences assigned
15 (53.6%) exact matches, in which:
10 unique CDR3
2 unique J



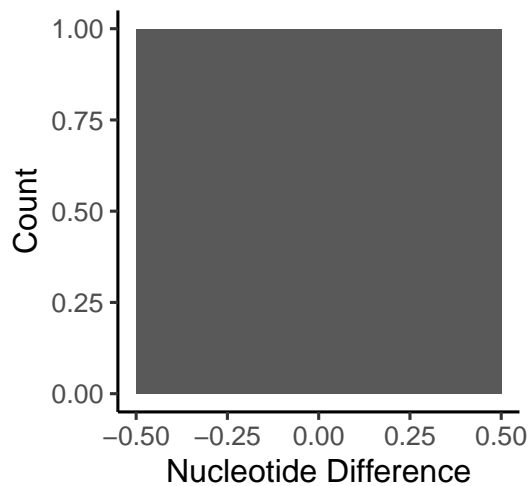
IGHV3-52*02

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



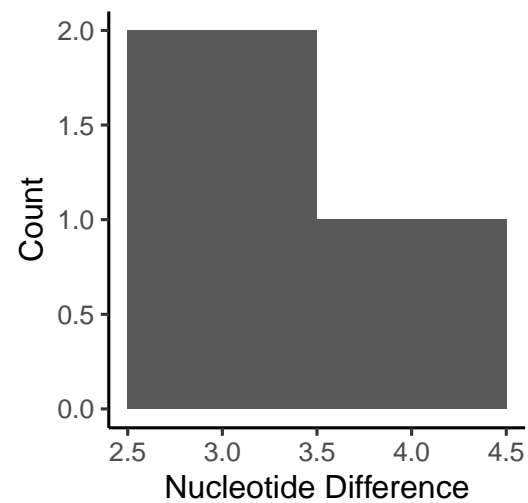
IGHV3-64*01

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



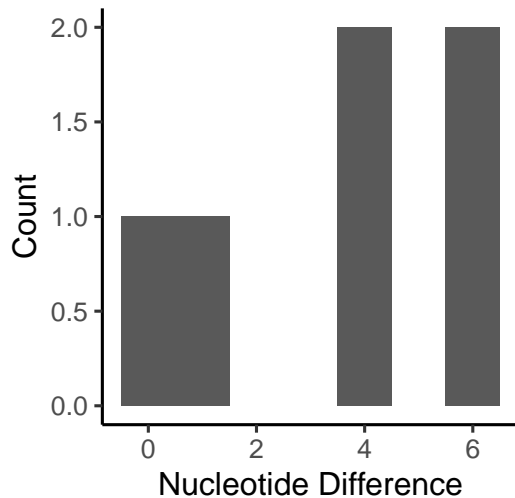
IGHV3-69-1*01

3 sequences assigned
No exact matches.



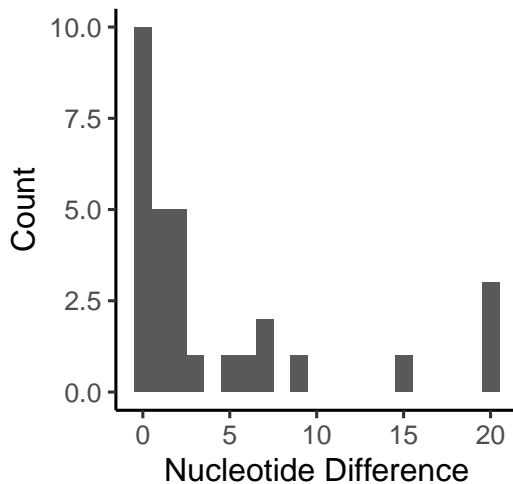
IGHV3-72*01

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



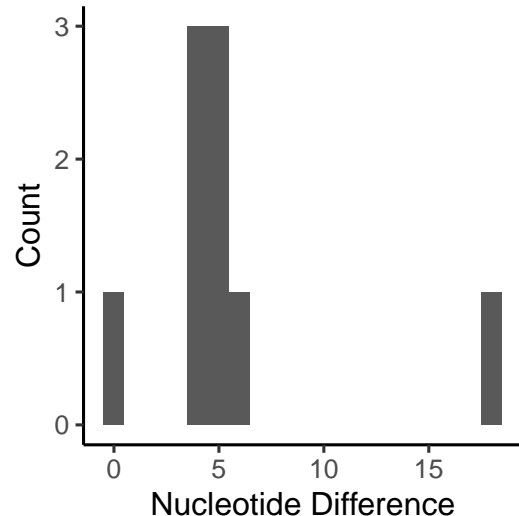
IGHV3-74*01_02

34 sequences assigned
10 (29.4%) exact matches, in which:
8 unique CDR3
3 unique J



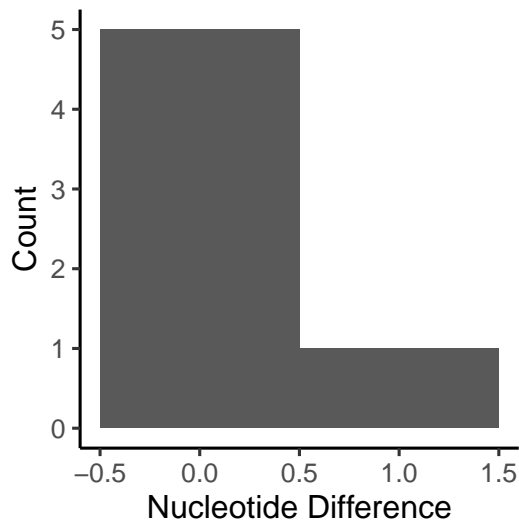
IGHV4-30-4*01

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



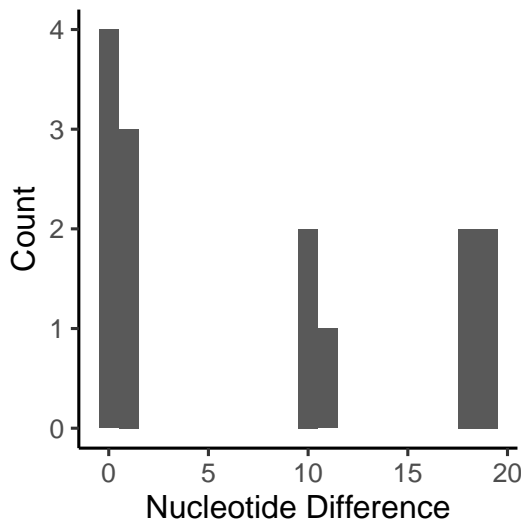
IGHV3-73*01_02

6 sequences assigned
5 (83.3%) exact matches, in which:
3 unique CDR3
2 unique J



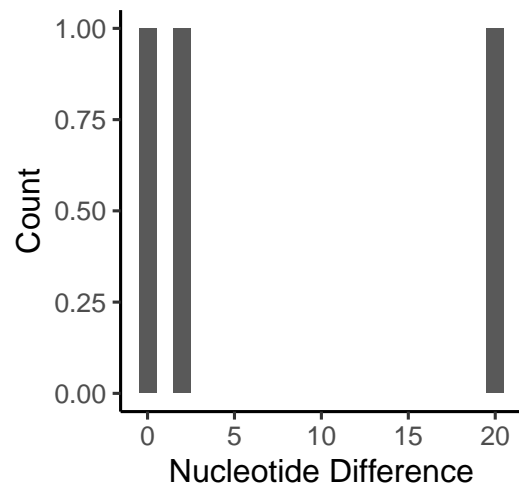
IGHV3-64D*09

14 sequences assigned
4 (28.6%) exact matches, in which:
4 unique CDR3
2 unique J



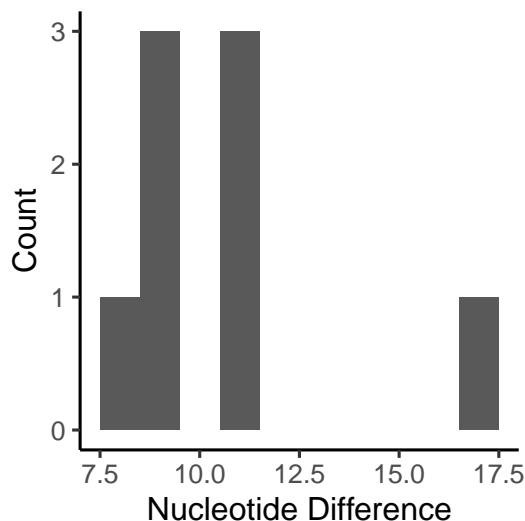
IGHV4-30-2*01

4 sequences assigned
1 (25%) exact matches, in which:
1 unique CDR3
1 unique J



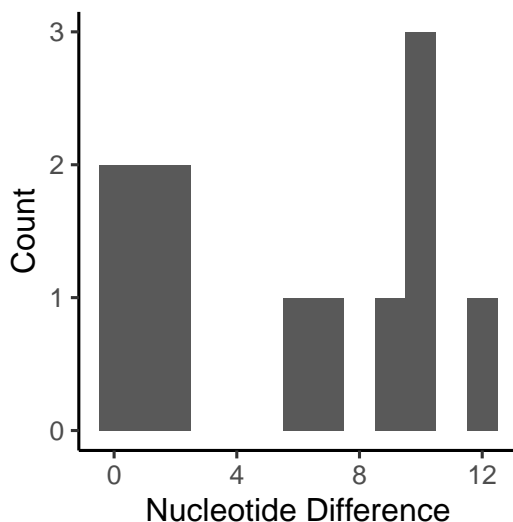
IGHV3-74*03

8 sequences assigned
No exact matches.



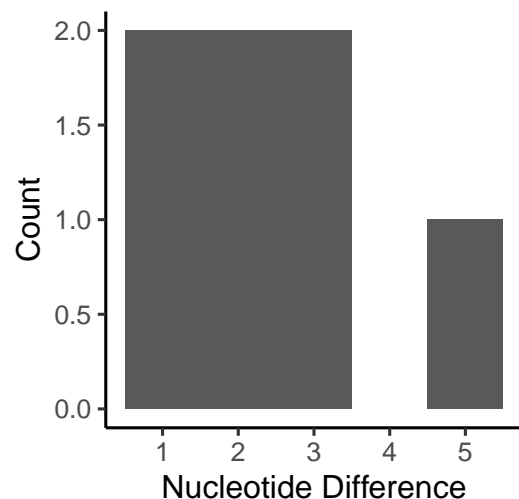
IGHV4-4*07

21 sequences assigned
2 (9.5%) exact matches, in which:
2 unique CDR3
0 unique J



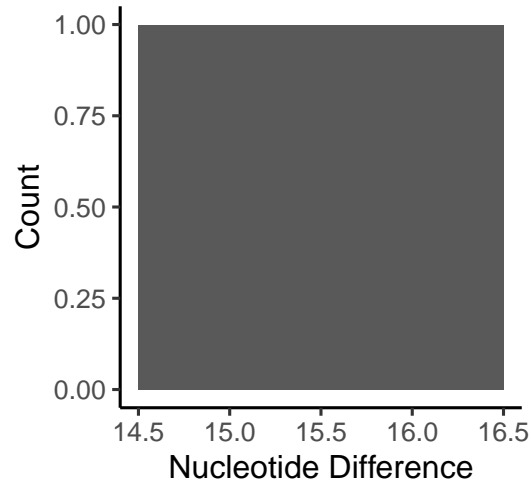
IGHV4-30-2*03

7 sequences assigned
No exact matches.



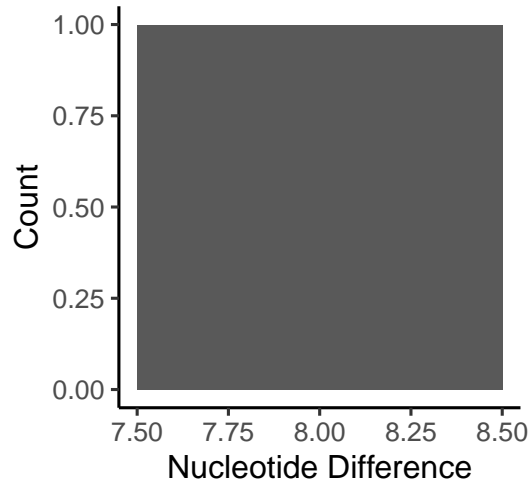
IGHV4-30-2*06

2 sequences assigned
No exact matches.



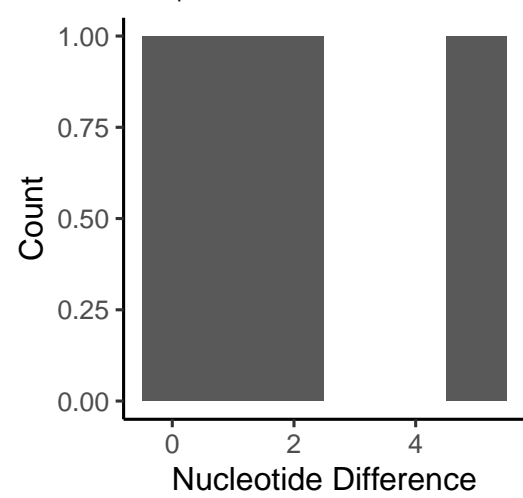
IGHV4-39*02

1 sequences assigned
No exact matches.



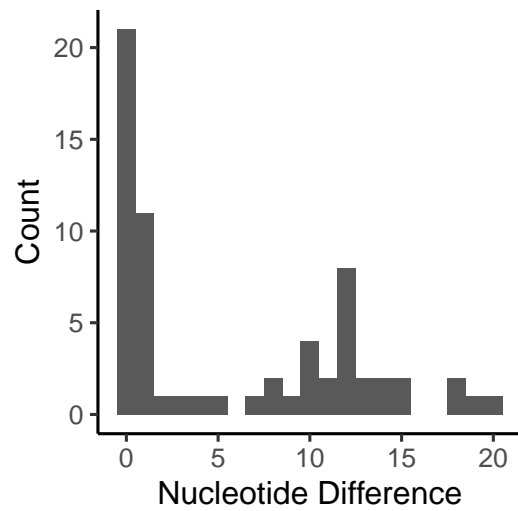
IGHV4-59*08

5 sequences assigned
1 (20%) exact matches, in which:
1 unique CDR3
1 unique J



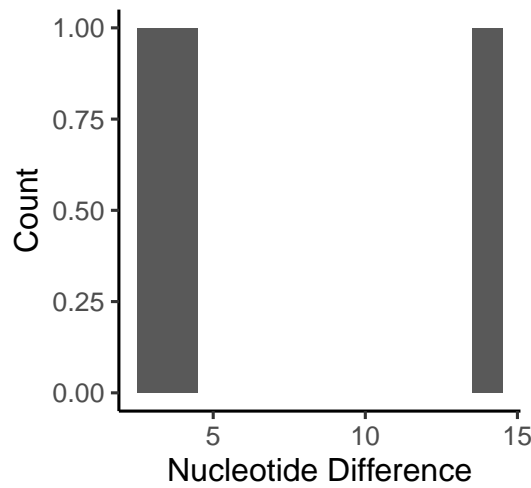
IGHV4-31*02

67 sequences assigned
21 (31.3%) exact matches, in which:
17 unique CDR3
5 unique J



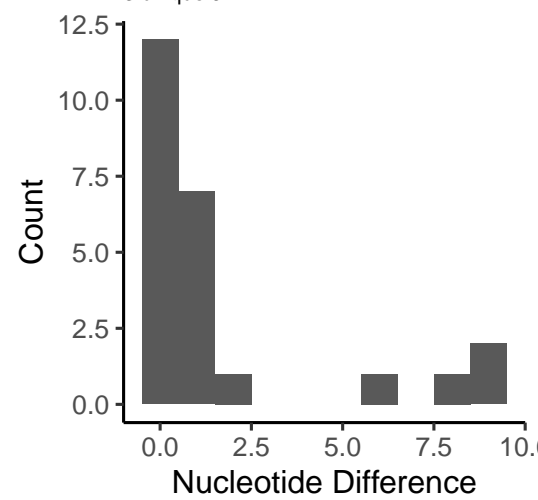
IGHV4-39*07

4 sequences assigned
No exact matches.



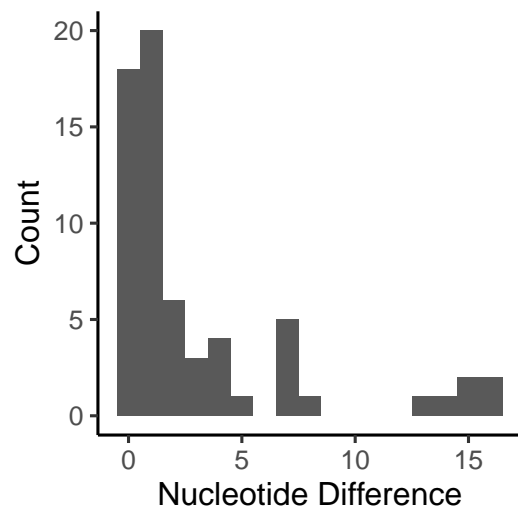
IGHV4-59*01_07

25 sequences assigned
12 (48%) exact matches, in which:
9 unique CDR3
3 unique J



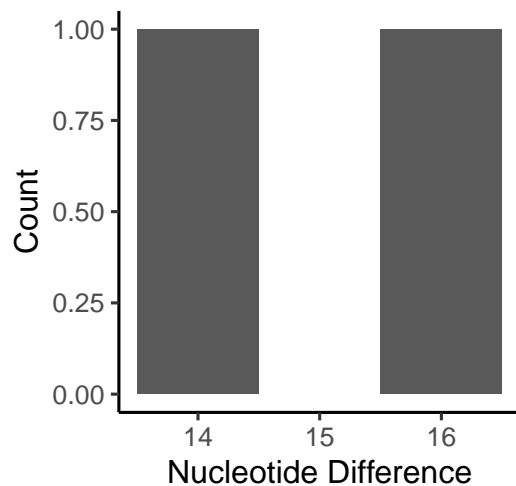
IGHV4-34*01_02

69 sequences assigned
18 (26.1%) exact matches, in which:
17 unique CDR3
4 unique J



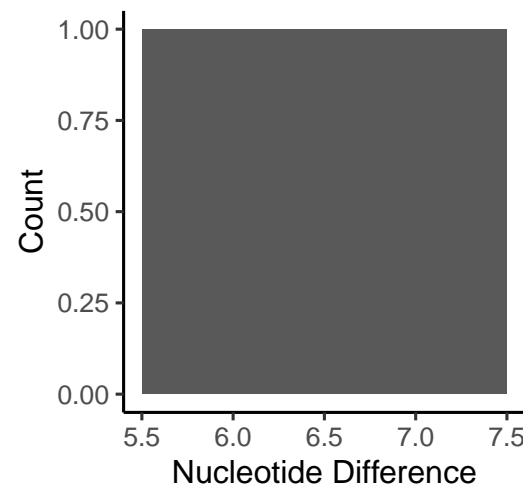
IGHV4-59*02

286 sequences assigned
No exact matches.



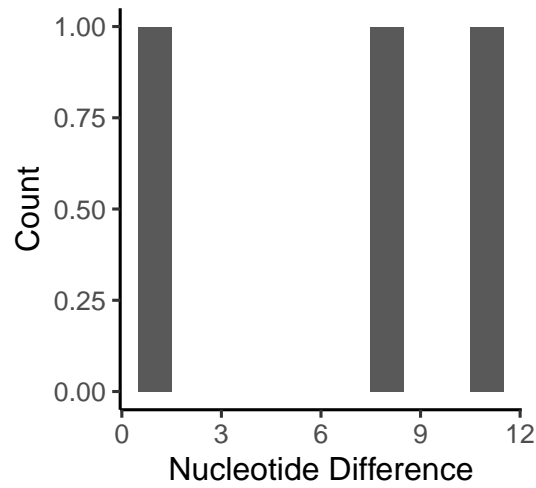
IGHV4-59*11

3 sequences assigned
No exact matches.



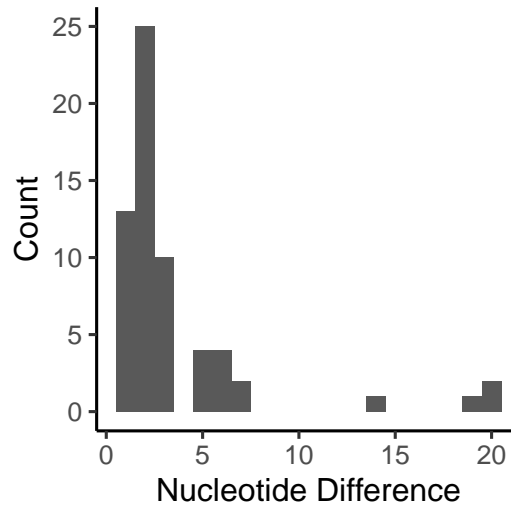
IGHV4-61*01

3 sequences assigned
No exact matches.



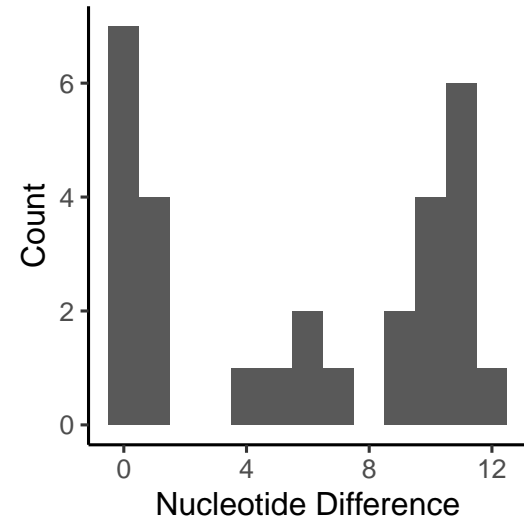
IGHV5-51*07

62 sequences assigned
No exact matches.



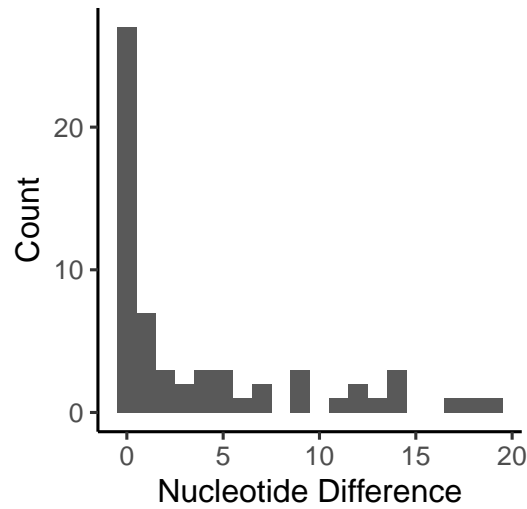
IGHV7-4-1*02

29 sequences assigned
7 (24.1%) exact matches, in which:
7 unique CDR3
3 unique J



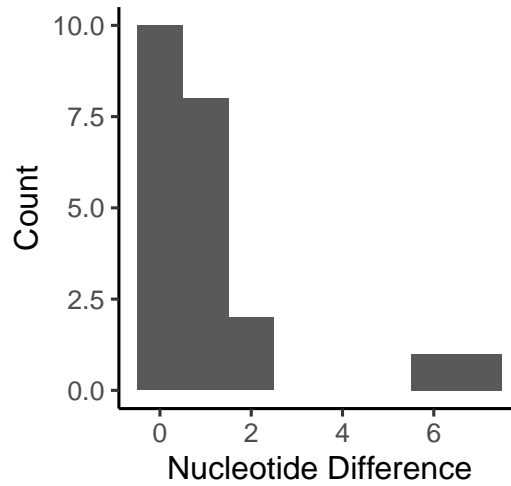
IGHV4-61*02

939 sequences assigned
27 (2.9%) exact matches, in which:
27 unique CDR3
4 unique J



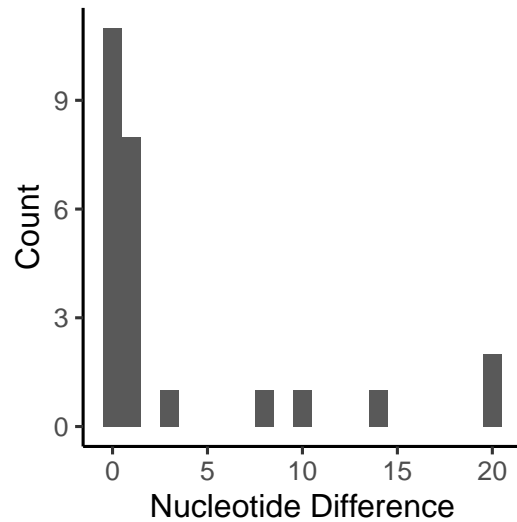
IGHV5-51*01_03

25 sequences assigned
10 (40%) exact matches, in which:
10 unique CDR3
4 unique J



IGHV5-10-1*01_03

27 sequences assigned
11 (40.7%) exact matches, in which:
11 unique CDR3
3 unique J



IGHV6-1*01_02

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

