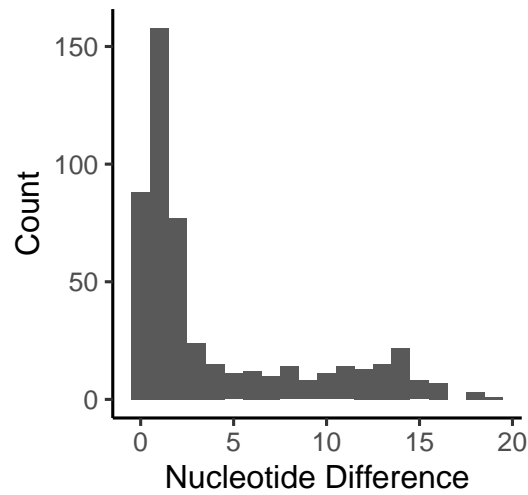


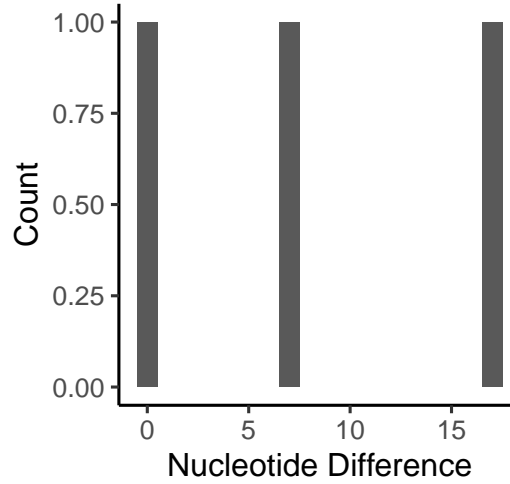
IGHV1-2*04

515 sequences assigned
88 (17.1%) exact matches, in which:
76 unique CDR3
5 unique J



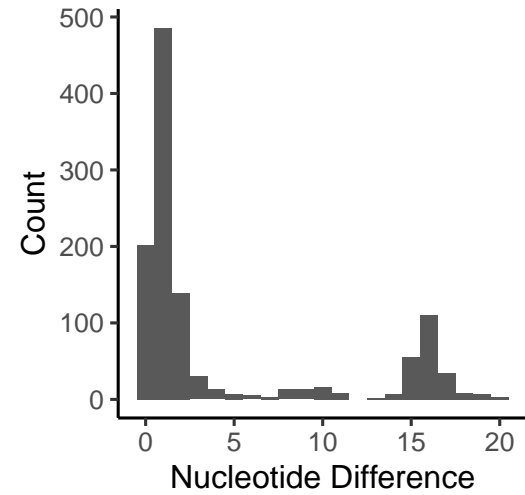
IGHV1-8*02

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



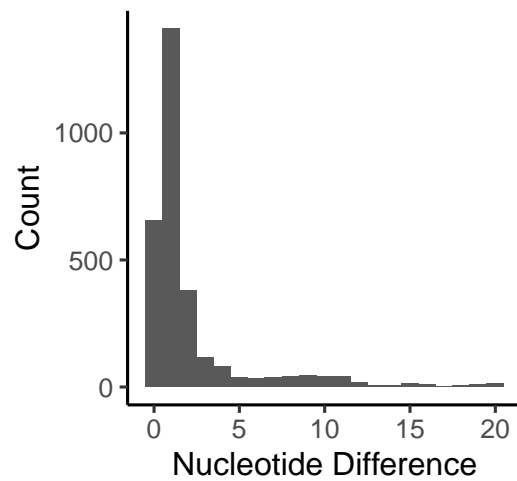
IGHV1-24*01

1167 sequences assigned
202 (17.3%) exact matches, in which:
119 unique CDR3
6 unique J



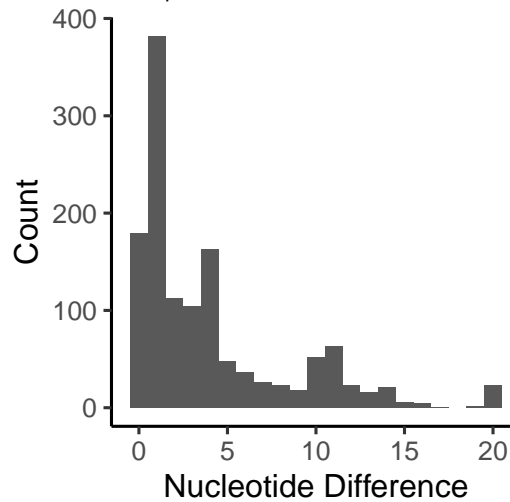
IGHV1-3*01_05

3629 sequences assigned
654 (18%) exact matches, in which:
412 unique CDR3
6 unique J



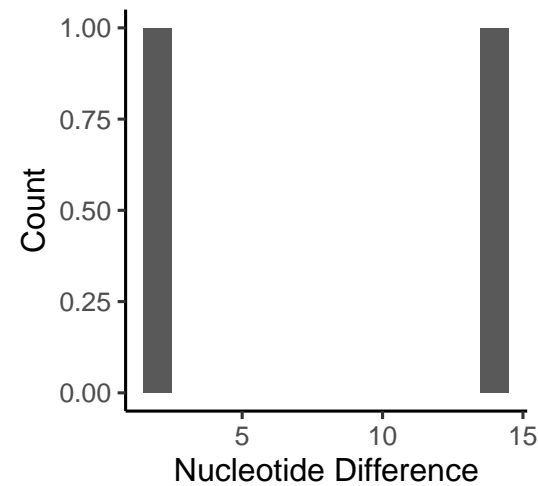
IGHV1-18*01

1440 sequences assigned
179 (12.4%) exact matches, in which:
137 unique CDR3
6 unique J



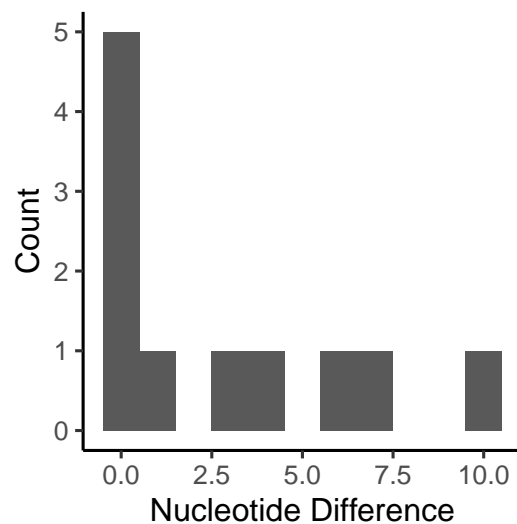
IGHV1-45*02

4 sequences assigned
No exact matches.



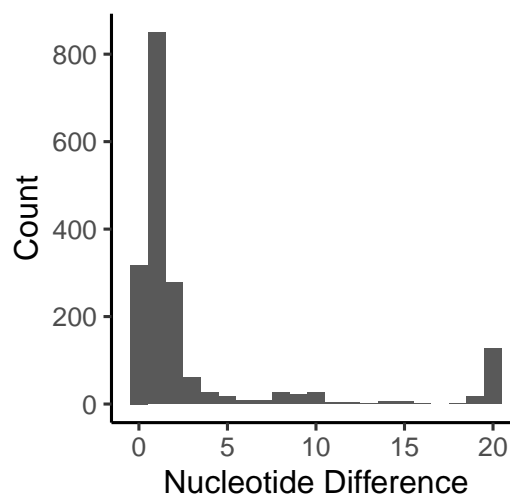
IGHV1-8*01

12 sequences assigned
5 (41.7%) exact matches, in which:
5 unique CDR3
3 unique J



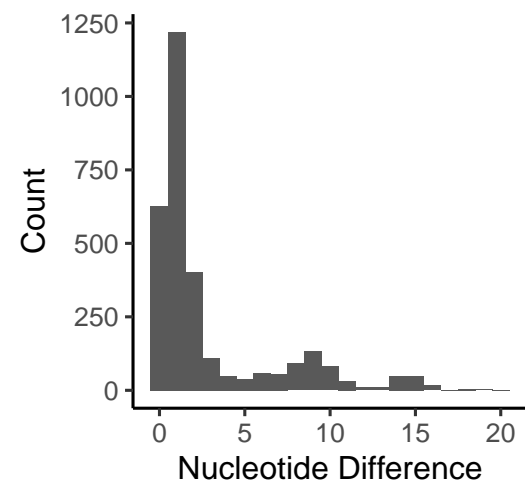
IGHV1-18*04

2237 sequences assigned
318 (14.2%) exact matches, in which:
226 unique CDR3
4 unique J



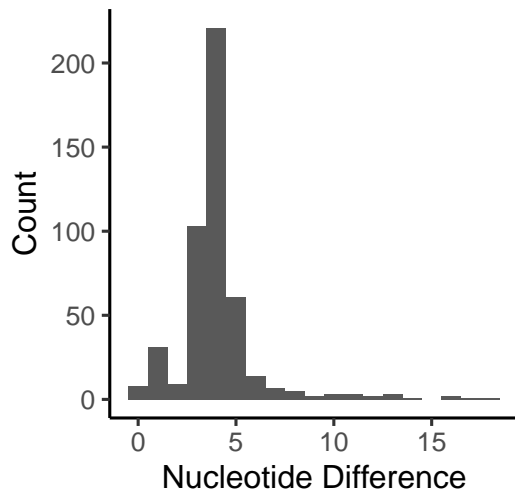
IGHV1-46*01

3085 sequences assigned
628 (20.4%) exact matches, in which:
474 unique CDR3
6 unique J



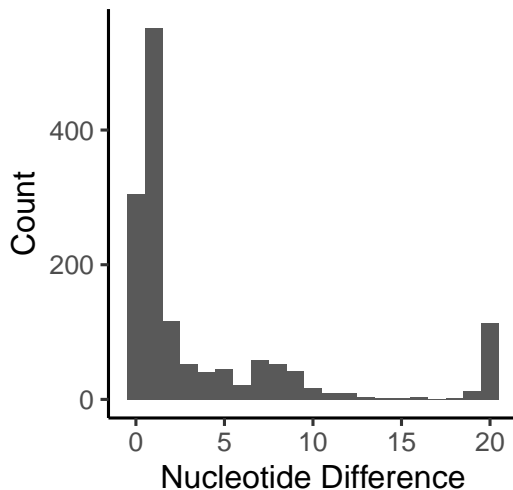
IGHV1-58*01_03

477 sequences assigned
8 (1.7%) exact matches, in which:
5 unique CDR3
2 unique J



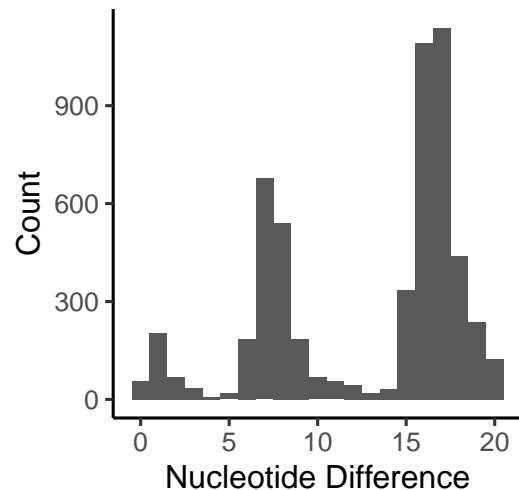
IGHV1-69*06_14

1886 sequences assigned
305 (16.2%) exact matches, in which:
228 unique CDR3
6 unique J



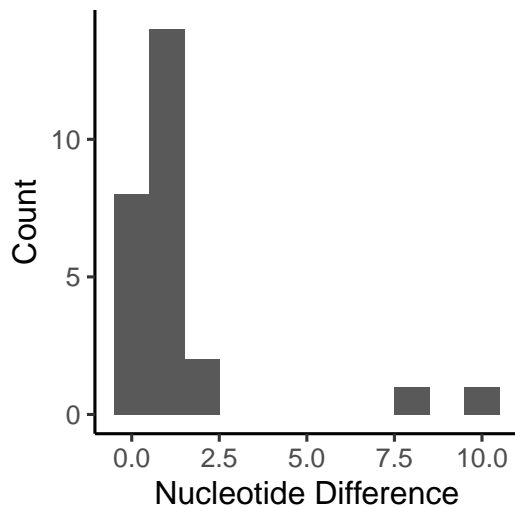
IGHV2-5*02

5808 sequences assigned
57 (1%) exact matches, in which:
33 unique CDR3
2 unique J



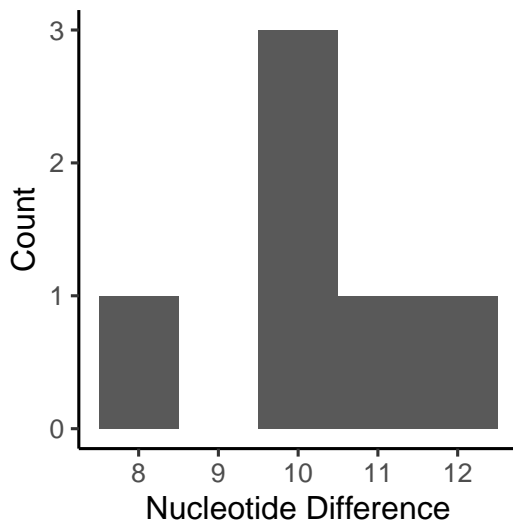
IGHV1-69-2*01

26 sequences assigned
8 (30.8%) exact matches, in which:
7 unique CDR3
1 unique J



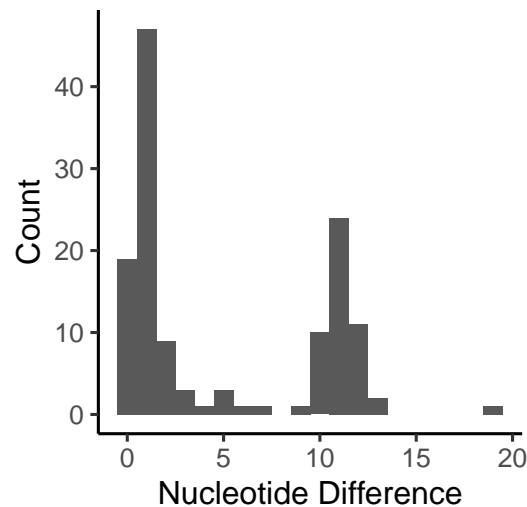
IGHV1-NL1*01

6 sequences assigned
No exact matches.



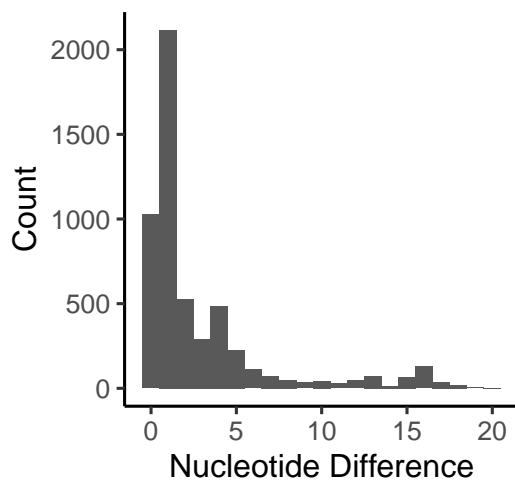
IGHV2-26*01

133 sequences assigned
19 (14.3%) exact matches, in which:
12 unique CDR3
3 unique J



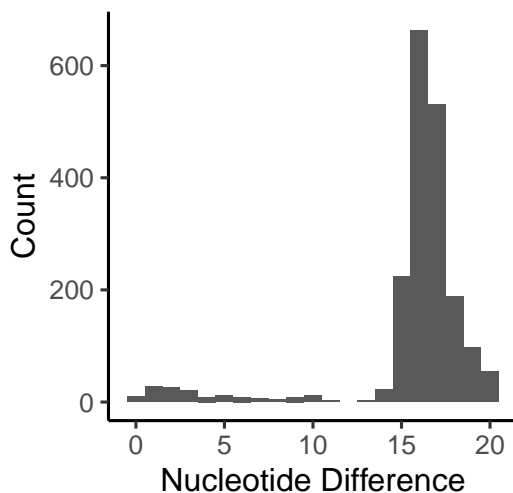
IGHV1-69*01_12_13

5456 sequences assigned
1026 (18.8%) exact matches, in which:
741 unique CDR3
6 unique J



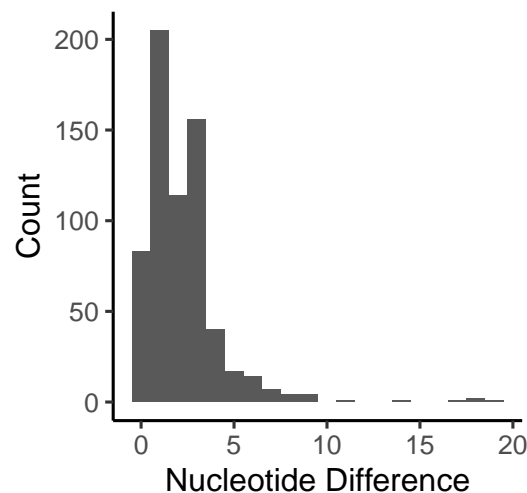
IGHV2-5*01

2049 sequences assigned
10 (0.5%) exact matches, in which:
9 unique CDR3
4 unique J



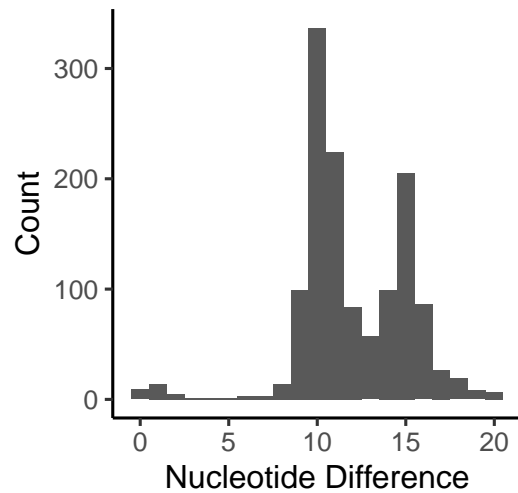
IGHV2-70*01

650 sequences assigned
83 (12.8%) exact matches, in which:
56 unique CDR3
3 unique J



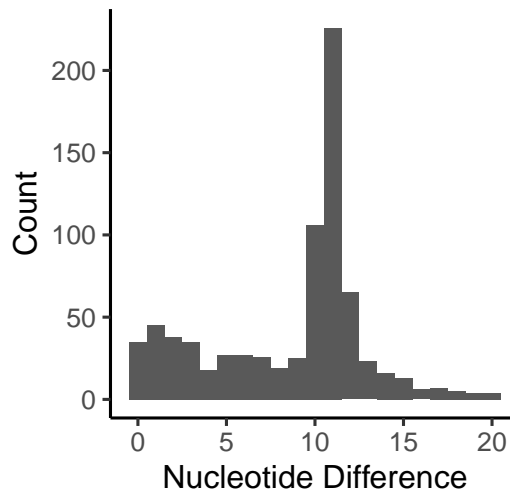
IGHV2-70*04

1323 sequences assigned
9 (0.7%) exact matches, in which:
6 unique CDR3
3 unique J



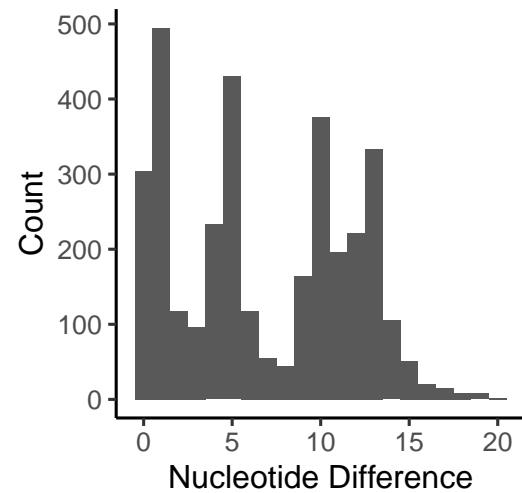
IGHV3-7*01

773 sequences assigned
35 (4.5%) exact matches, in which:
31 unique CDR3
4 unique J



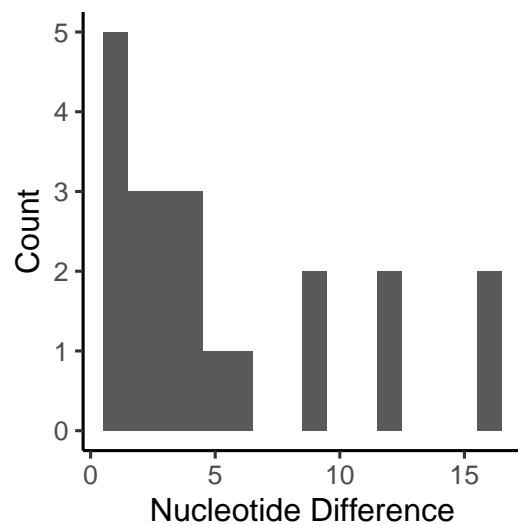
IGHV3-11*06

3770 sequences assigned
304 (8.1%) exact matches, in which:
198 unique CDR3
5 unique J



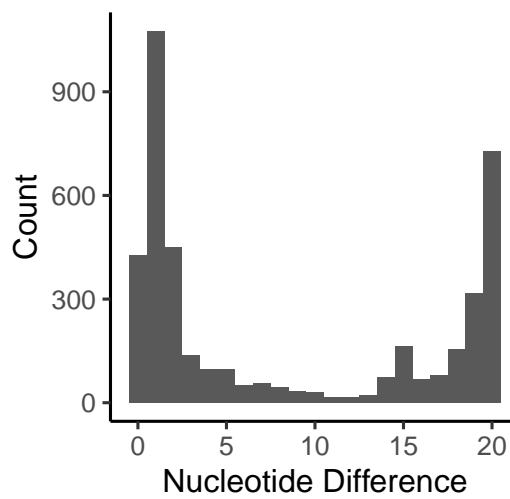
IGHV2-70*12

22 sequences assigned
No exact matches.



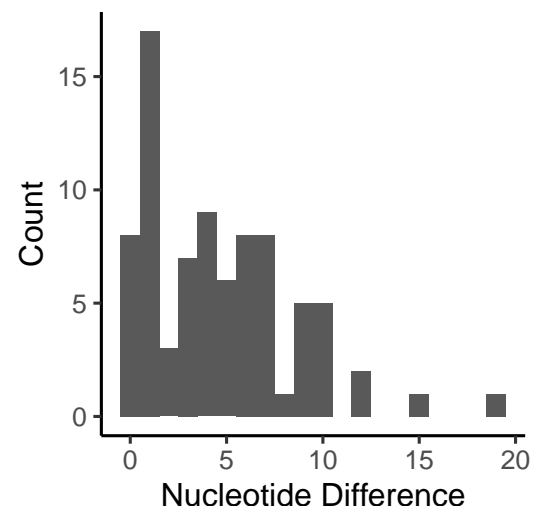
IGHV3-7*03

5010 sequences assigned
428 (8.5%) exact matches, in which:
236 unique CDR3
5 unique J



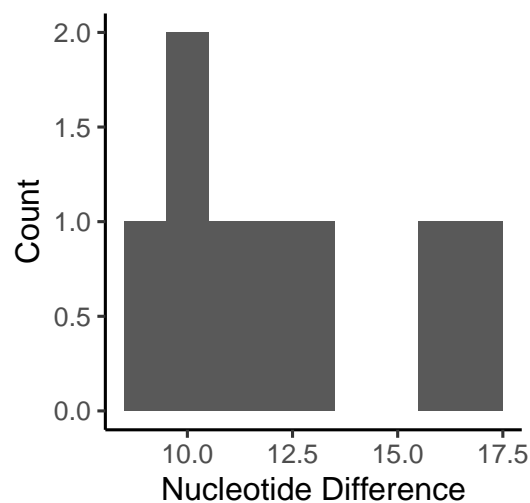
IGHV3-11*03_05

82 sequences assigned
8 (9.8%) exact matches, in which:
6 unique CDR3
3 unique J



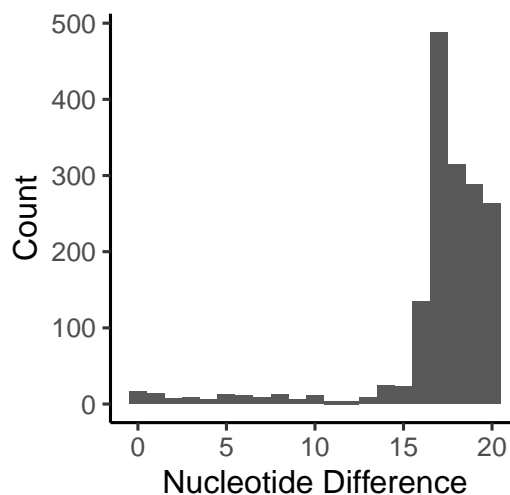
IGHV2-70D*14

8 sequences assigned
No exact matches.



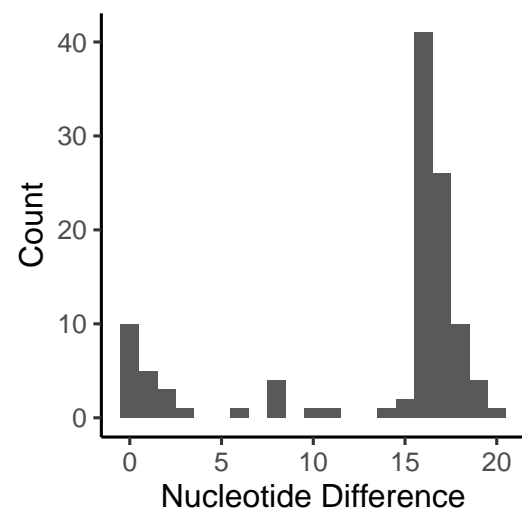
IGHV3-7*05

1801 sequences assigned
16 (0.9%) exact matches, in which:
14 unique CDR3
3 unique J



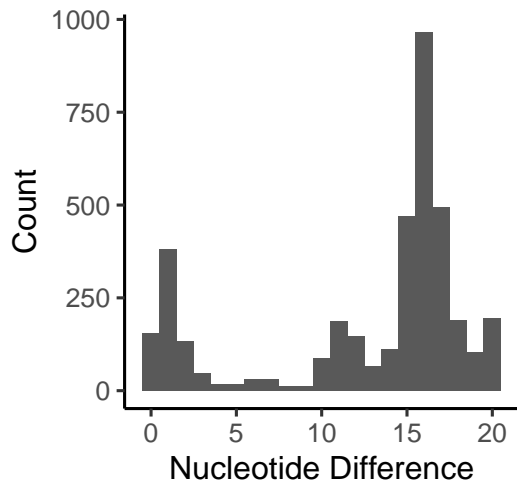
IGHV3-13*05

118 sequences assigned
10 (8.5%) exact matches, in which:
9 unique CDR3
3 unique J



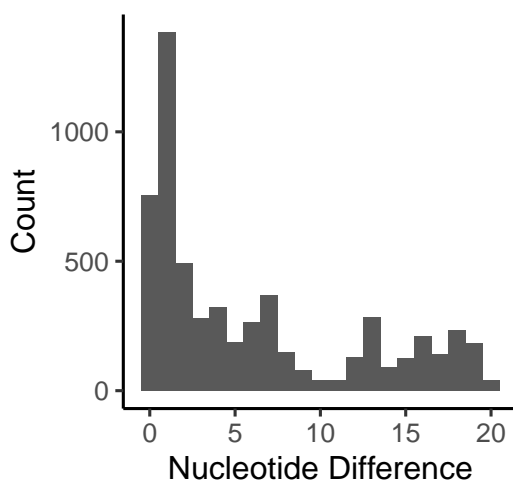
IGHV3-15*01_02

5950 sequences assigned
156 (2.6%) exact matches, in which:
90 unique CDR3
4 unique J



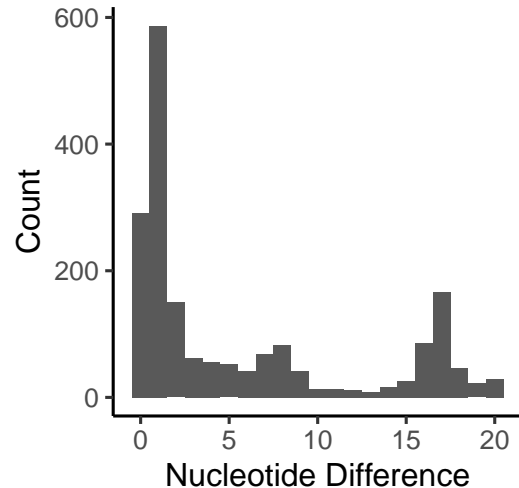
IGHV3-21*01_02

5860 sequences assigned
754 (12.9%) exact matches, in which:
456 unique CDR3
6 unique J



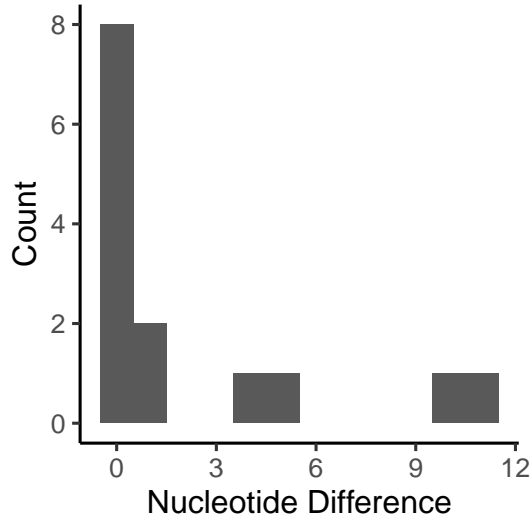
IGHV3-30-3*01

3454 sequences assigned
291 (8.4%) exact matches, in which:
163 unique CDR3
6 unique J



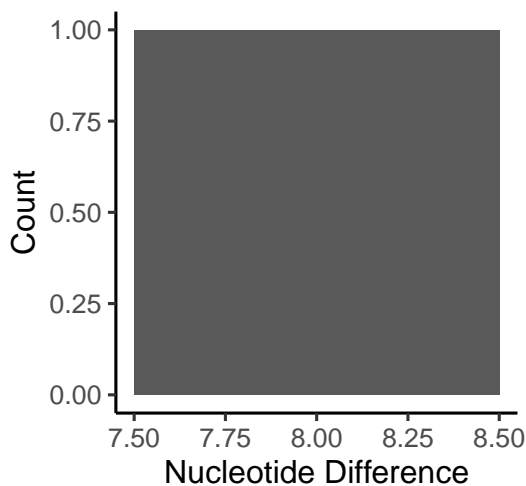
IGHV3-19*01

14 sequences assigned
8 (57.1%) exact matches, in which:
8 unique CDR3
3 unique J



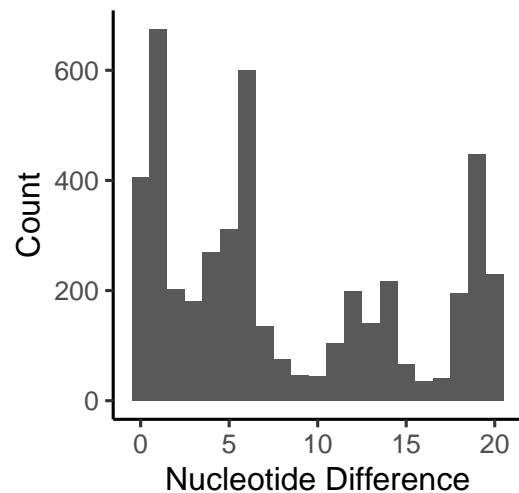
IGHV3-22*01_02

1 sequences assigned
No exact matches.



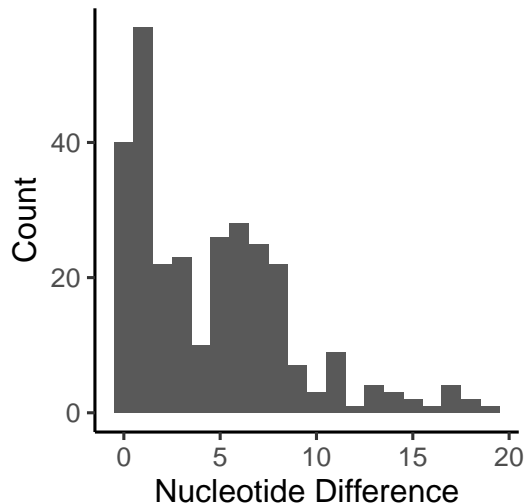
IGHV3-30*03

6918 sequences assigned
405 (5.9%) exact matches, in which:
271 unique CDR3
6 unique J



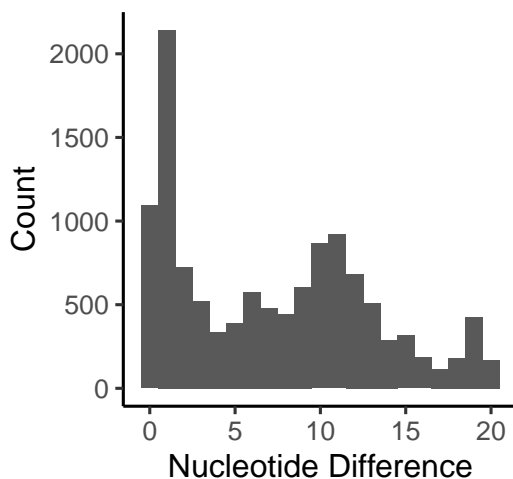
IGHV3-21*04

296 sequences assigned
40 (13.5%) exact matches, in which:
29 unique CDR3
4 unique J



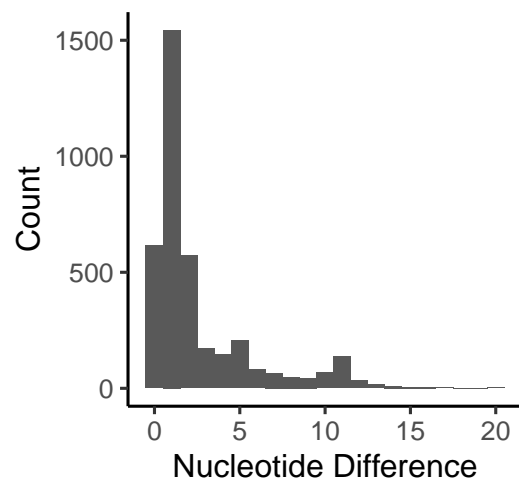
IGHV3-23*01_04

15670 sequences assigned
1094 (7%) exact matches, in which:
602 unique CDR3
6 unique J



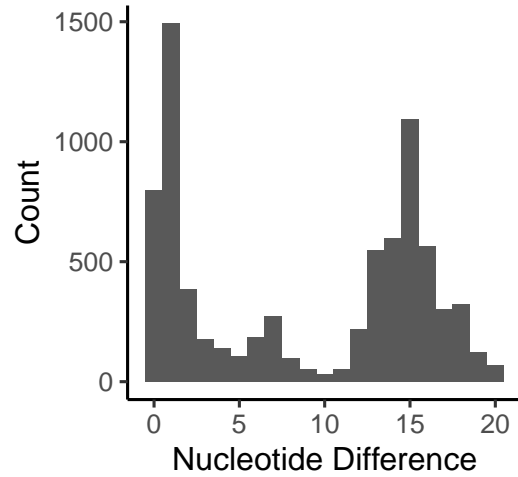
IGHV3-30*18

4025 sequences assigned
616 (15.3%) exact matches, in which:
308 unique CDR3
5 unique J



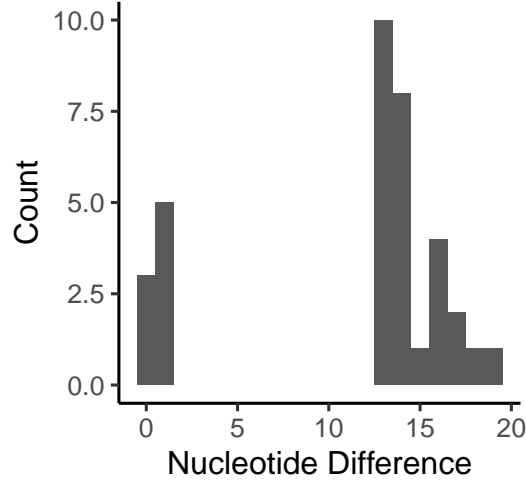
IGHV3-33*01

7756 sequences assigned
798 (10.3%) exact matches, in which:
450 unique CDR3
6 unique J



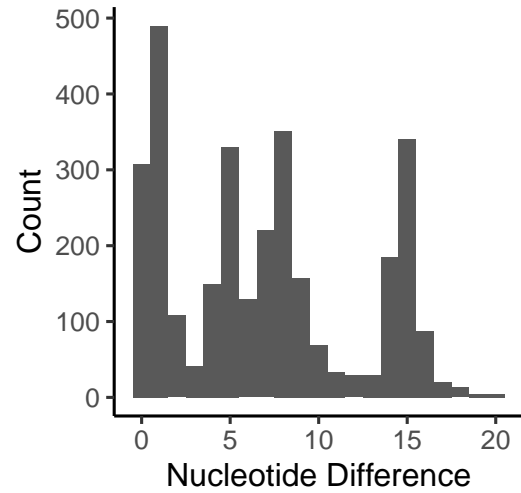
IGHV3-43*01

36 sequences assigned
3 (8.3%) exact matches, in which:
1 unique CDR3
1 unique J



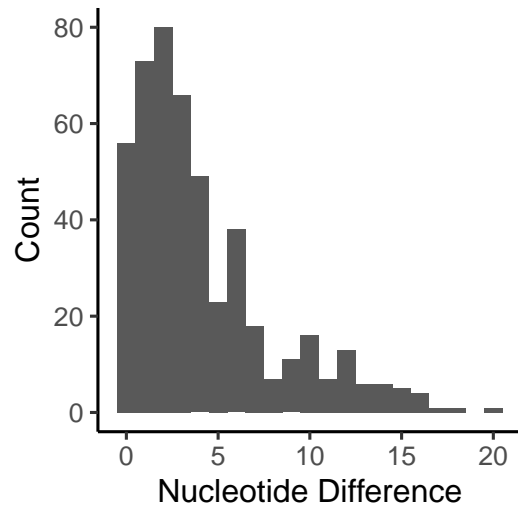
IGHV3-48*02

3107 sequences assigned
308 (9.9%) exact matches, in which:
179 unique CDR3
5 unique J



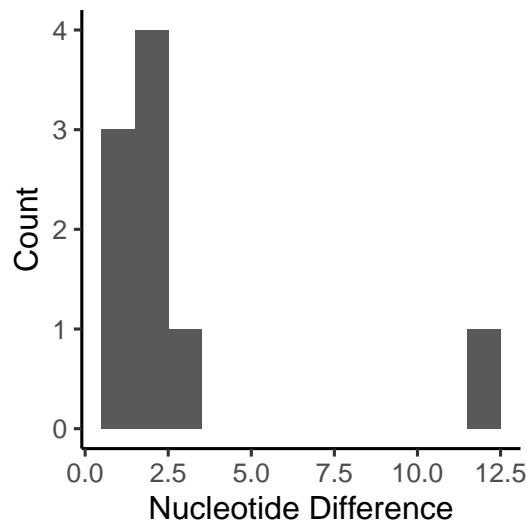
IGHV3-33*06

507 sequences assigned
56 (11%) exact matches, in which:
42 unique CDR3
4 unique J



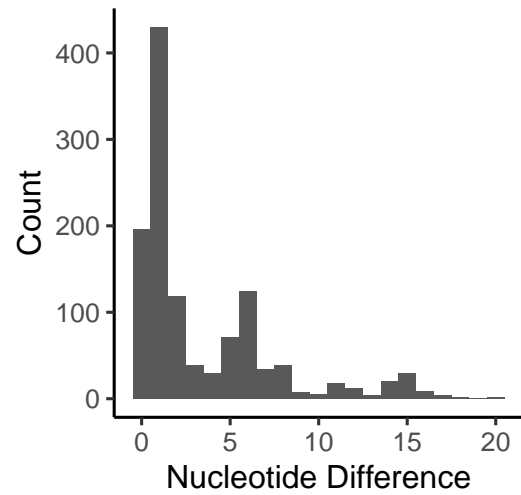
IGHV3-47*02

9 sequences assigned
No exact matches.



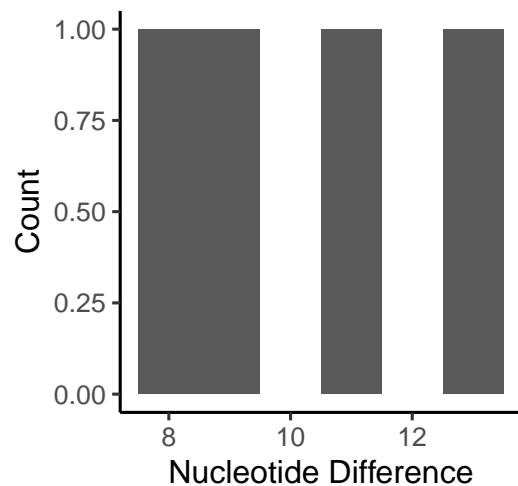
IGHV3-49*03_05

1196 sequences assigned
196 (16.4%) exact matches, in which:
107 unique CDR3
4 unique J



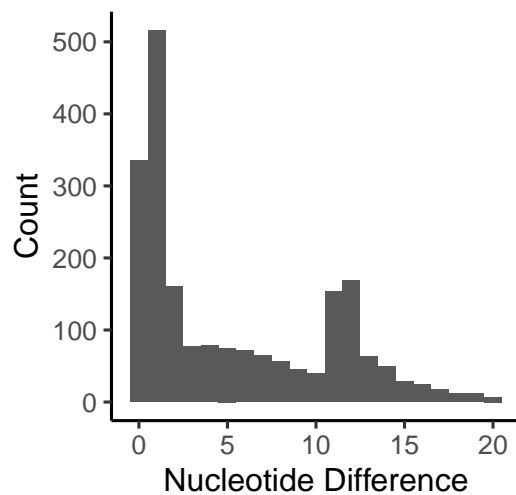
IGHV3-35*01

4 sequences assigned
No exact matches.



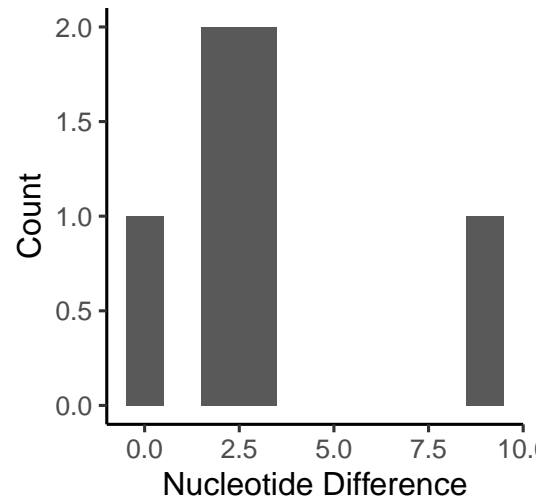
IGHV3-48*01

3952 sequences assigned
335 (8.5%) exact matches, in which:
206 unique CDR3
6 unique J



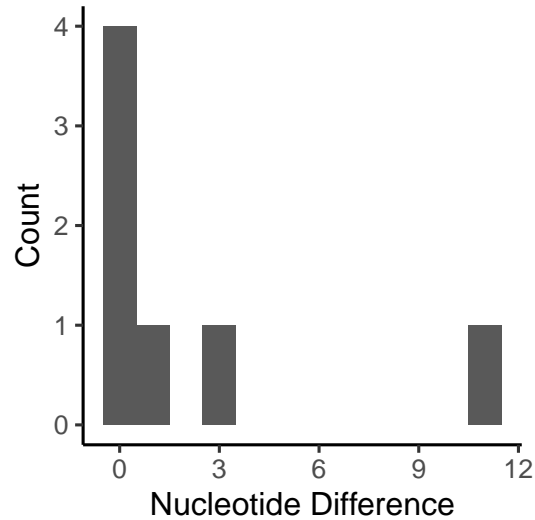
IGHV3-52*01_03

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



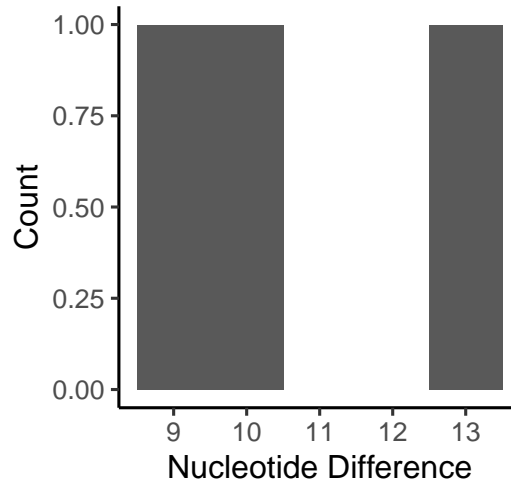
IGHV3-53*05

7 sequences assigned
4 (57.1%) exact matches, in which:
3 unique CDR3
1 unique J



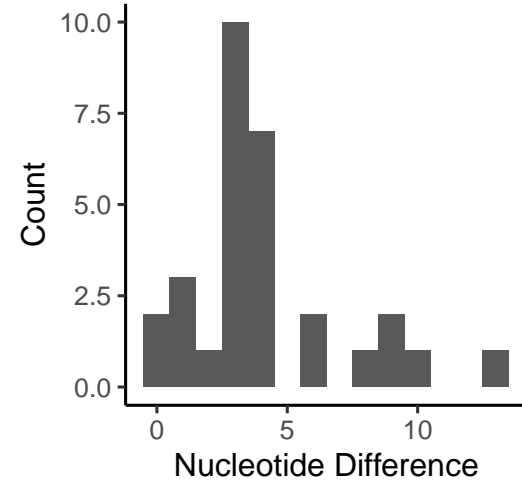
IGHV3-66*01

4 sequences assigned
No exact matches.



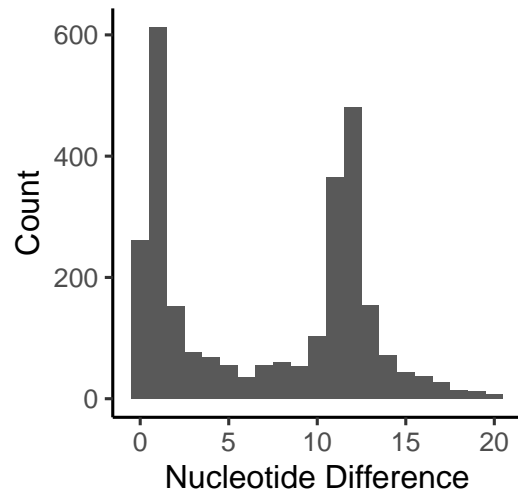
IGHV3-69-1*01

30 sequences assigned
2 (6.7%) exact matches, in which:
1 unique CDR3
1 unique J



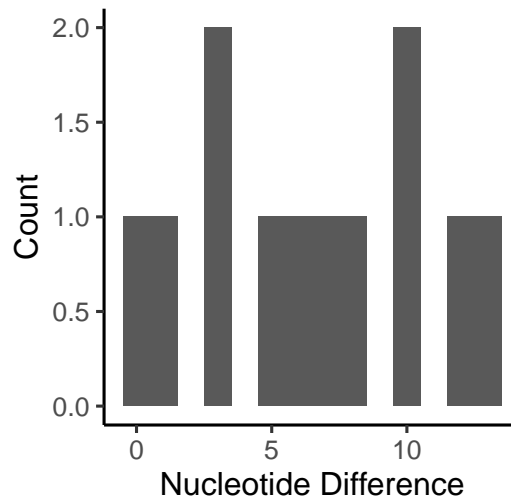
IGHV3-53*01_02

2765 sequences assigned
261 (9.4%) exact matches, in which:
150 unique CDR3
4 unique J



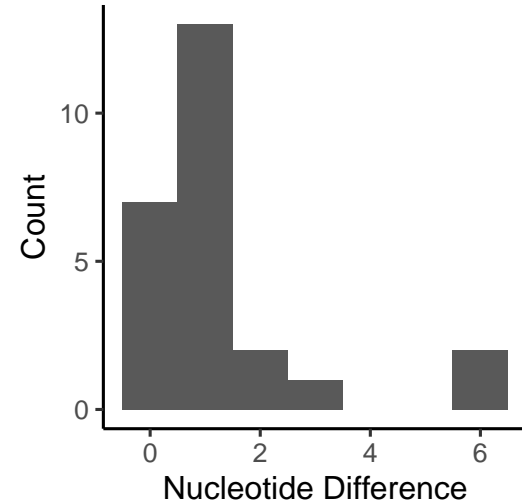
IGHV3-66*02

13 sequences assigned
1 (7.7%) exact matches, in which:
1 unique CDR3
1 unique J



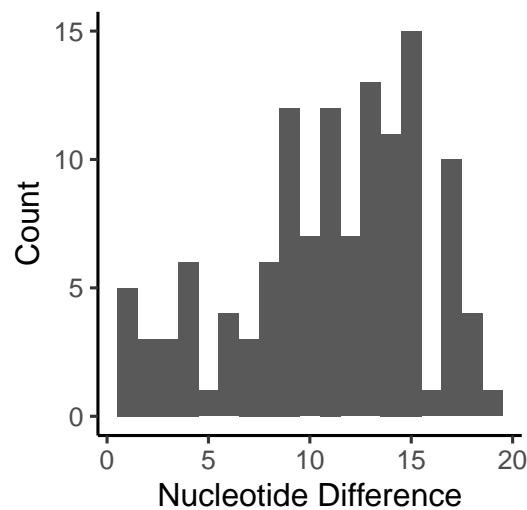
IGHV3-69-1*02

25 sequences assigned
7 (28%) exact matches, in which:
4 unique CDR3
3 unique J



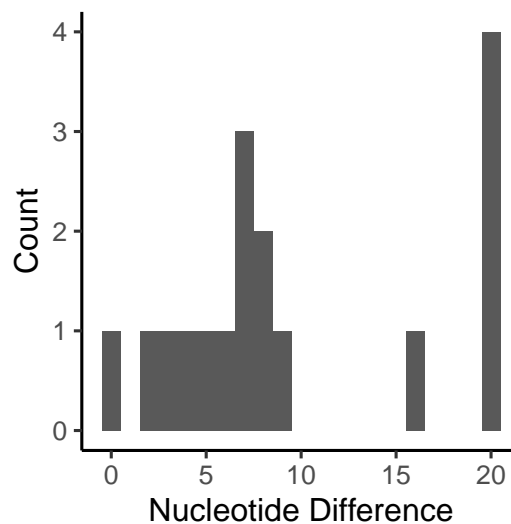
IGHV3-64*04

125 sequences assigned
No exact matches.



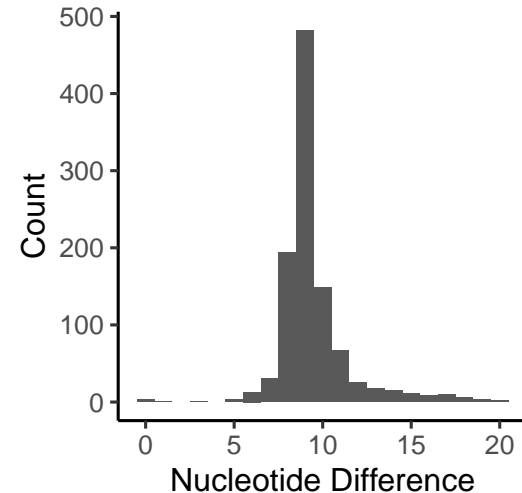
IGHV3-66*03

18 sequences assigned
1 (5.6%) exact matches, in which:
1 unique CDR3
1 unique J



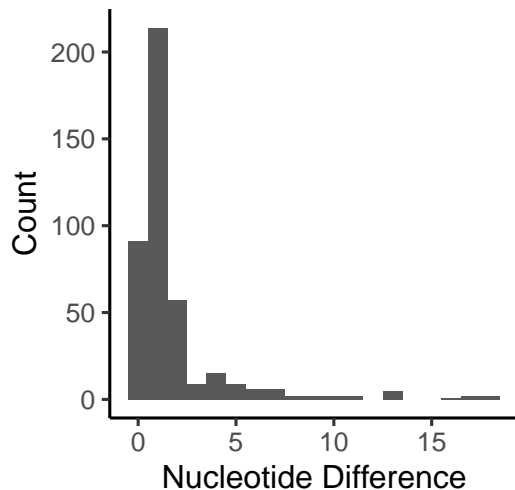
IGHV3-72*01

1052 sequences assigned
3 (0.3%) exact matches, in which:
2 unique CDR3
2 unique J



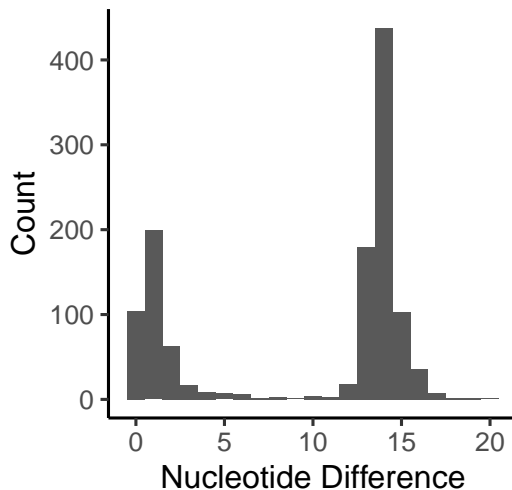
IGHV3–73*01_02

427 sequences assigned
91 (21.3%) exact matches, in which:
45 unique CDR3
2 unique J



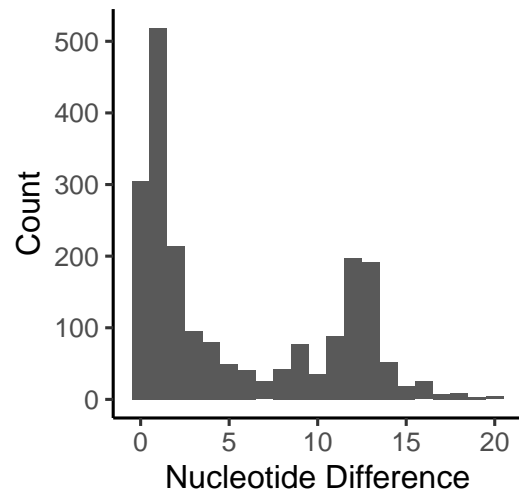
IGHV3–64D*06

1222 sequences assigned
104 (8.5%) exact matches, in which:
68 unique CDR3
2 unique J



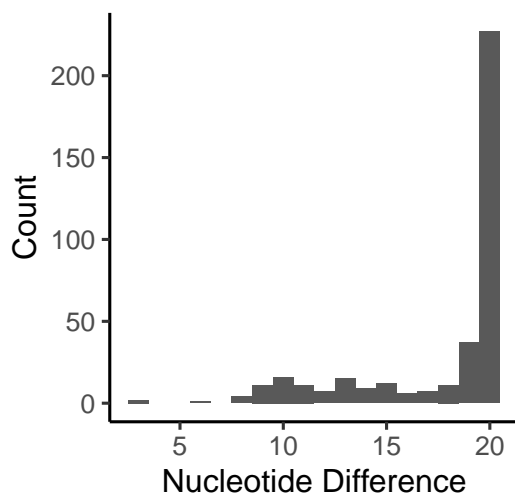
IGHV4–4*02_03

3020 sequences assigned
305 (10.1%) exact matches, in which:
197 unique CDR3
5 unique J



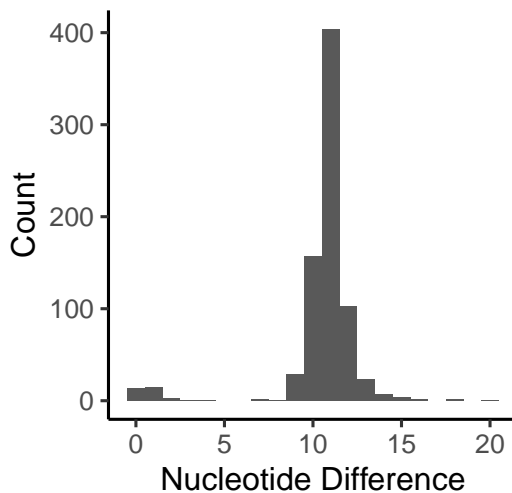
IGHV3–74*03

1455 sequences assigned
No exact matches.



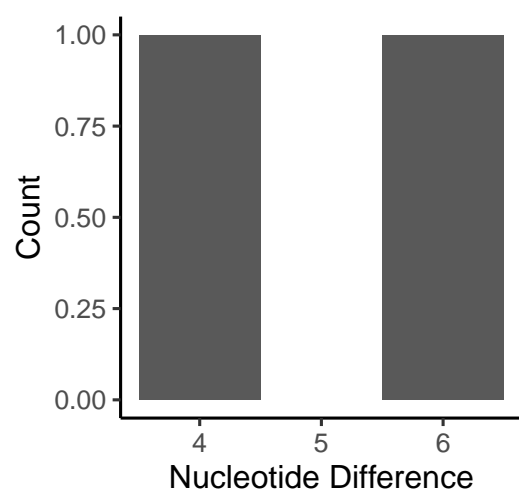
IGHV3–64D*08

773 sequences assigned
14 (1.8%) exact matches, in which:
10 unique CDR3
3 unique J



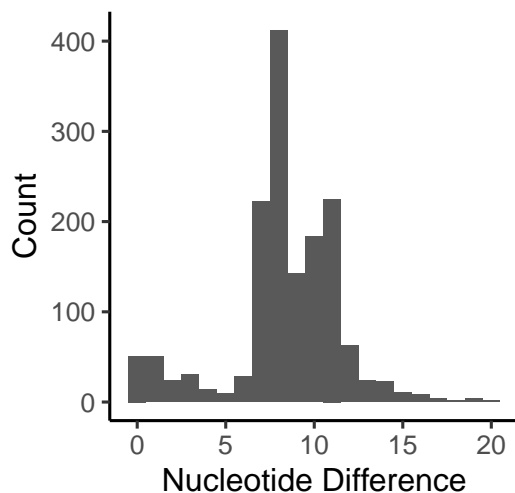
IGHV4–28*03

2 sequences assigned
No exact matches.



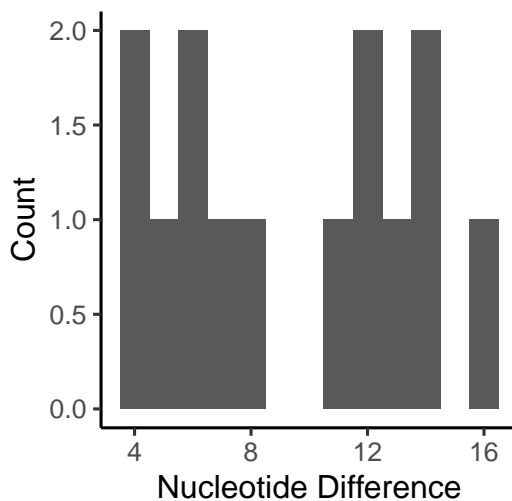
IGHV3–74*01_02

1538 sequences assigned
51 (3.3%) exact matches, in which:
34 unique CDR3
4 unique J



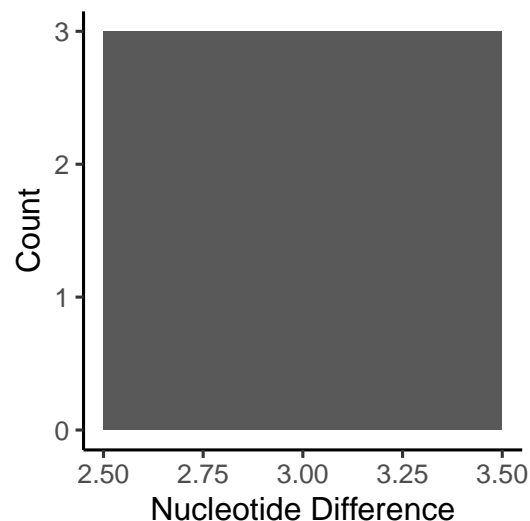
IGHV3–NL1*01

19 sequences assigned
No exact matches.



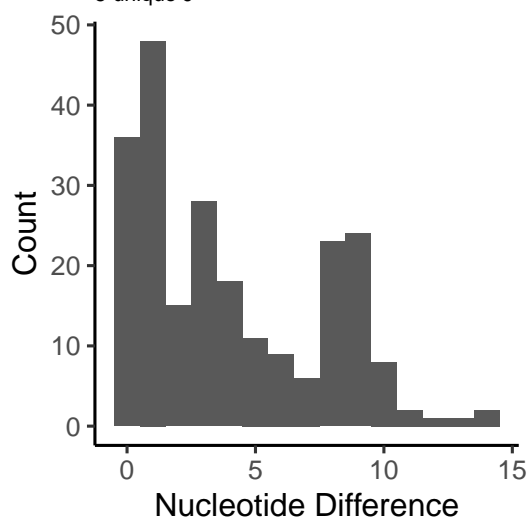
IGHV4–28*01_07

3 sequences assigned
No exact matches.



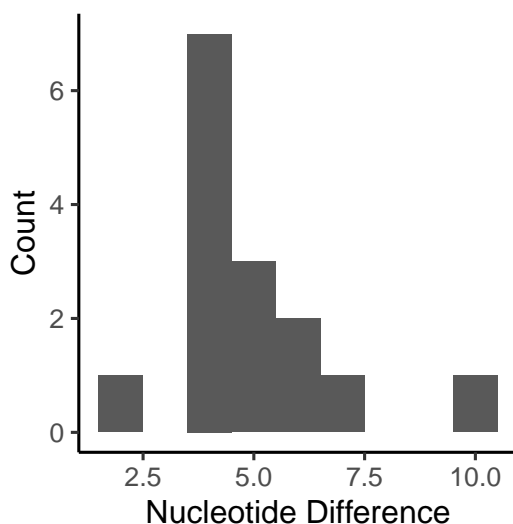
IGHV4-30-4*01

1486 sequences assigned
36 (2.4%) exact matches, in which:
27 unique CDR3
5 unique J



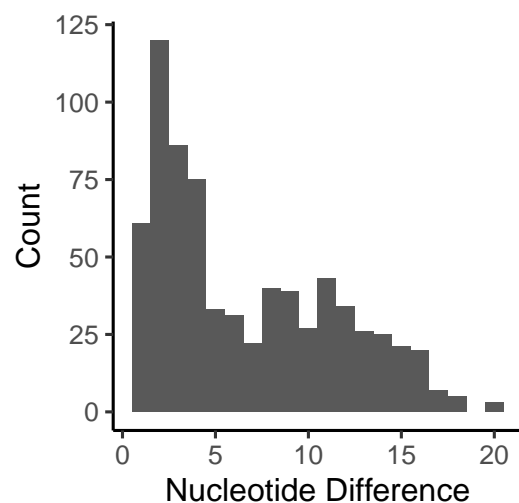
IGHV4-30-2*04

15 sequences assigned
No exact matches.



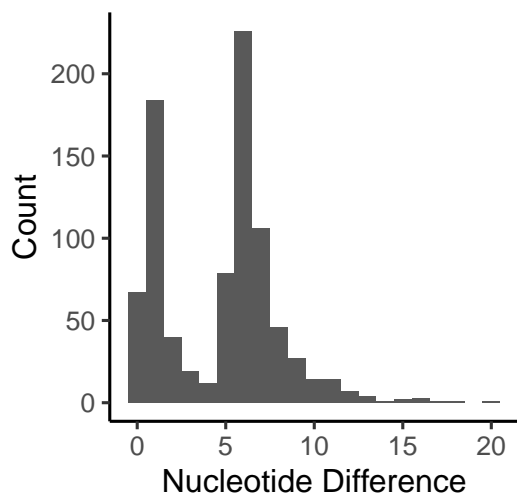
IGHV4-39*07

779 sequences assigned
No exact matches.



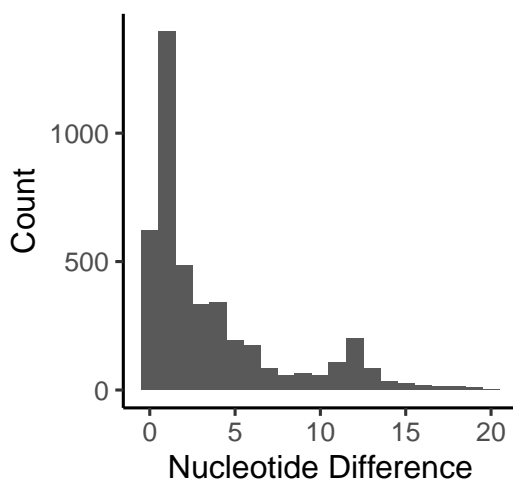
IGHV4-30-2*01

864 sequences assigned
67 (7.8%) exact matches, in which:
33 unique CDR3
5 unique J



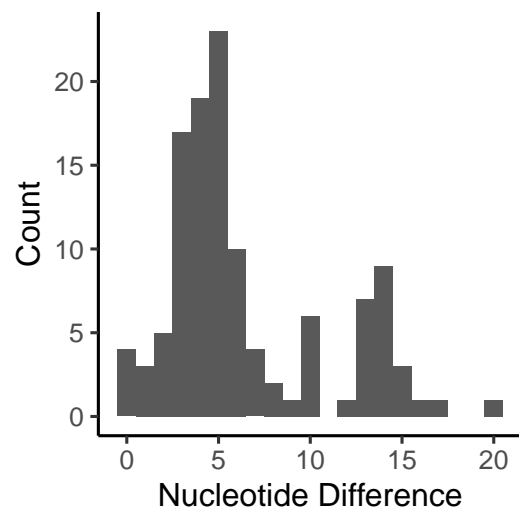
IGHV4-31*02

4915 sequences assigned
620 (12.6%) exact matches, in which:
412 unique CDR3
6 unique J



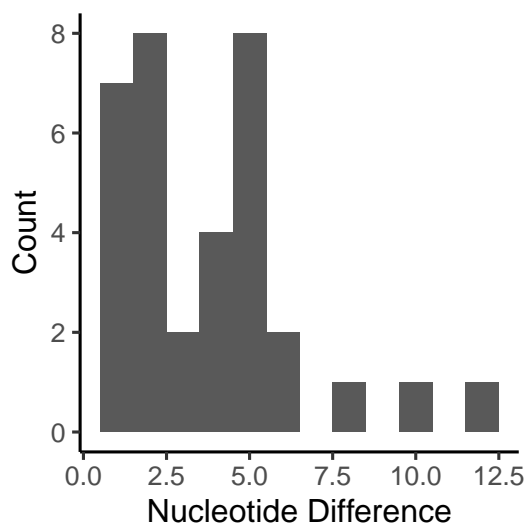
IGHV4-59*02

3686 sequences assigned
4 (0.1%) exact matches, in which:
4 unique CDR3
3 unique J



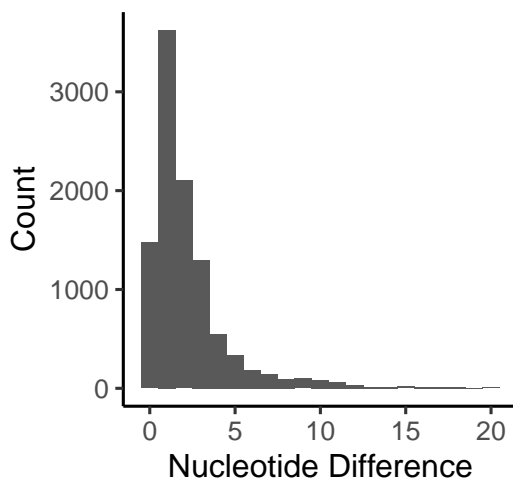
IGHV4-30-2*03

36 sequences assigned
No exact matches.



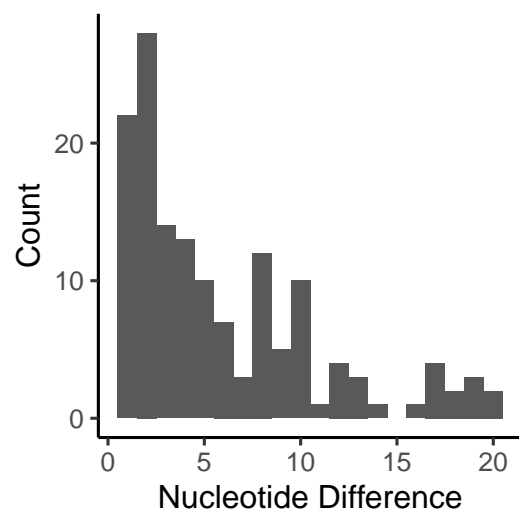
IGHV4-34*01_02

10270 sequences assigned
1474 (14.4%) exact matches, in which:
920 unique CDR3
6 unique J



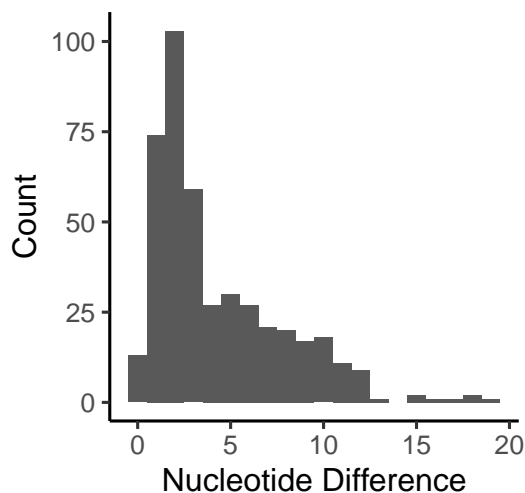
IGHV4-59*08

162 sequences assigned
No exact matches.



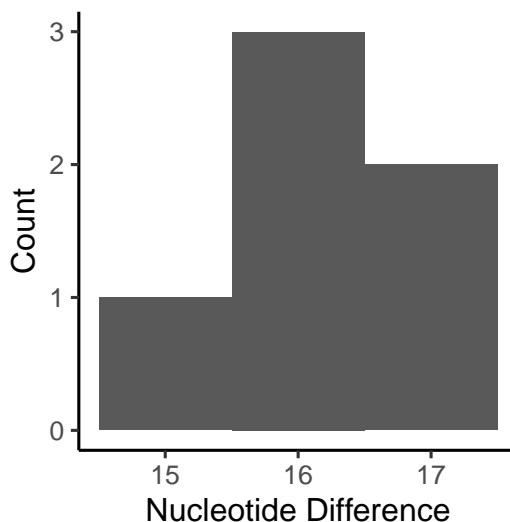
IGHV4-59*12

450 sequences assigned
13 (2.9%) exact matches, in which:
13 unique CDR3
4 unique J



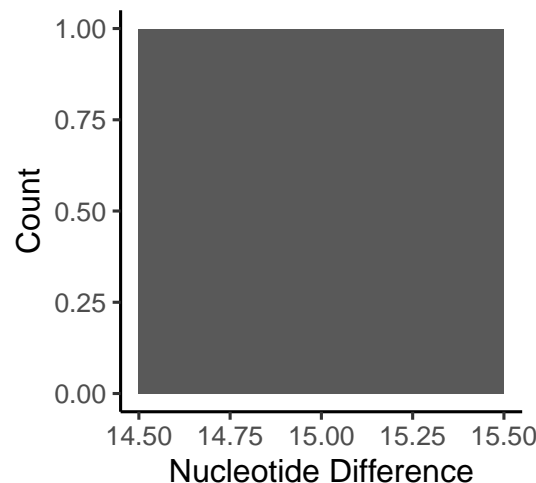
IGHV1/OR15-2*02_03

6 sequences assigned
No exact matches.



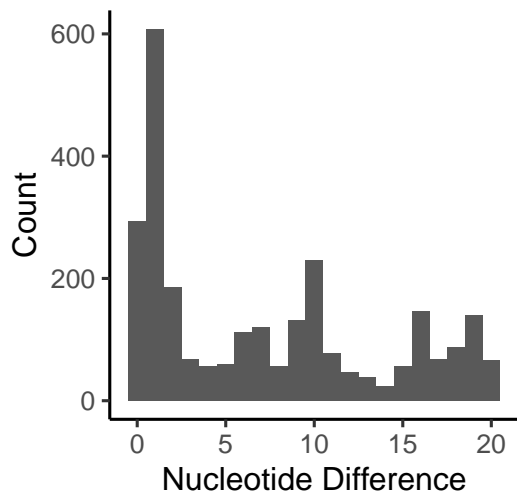
IGHV4/OR15-8*02

2 sequences assigned
No exact matches.



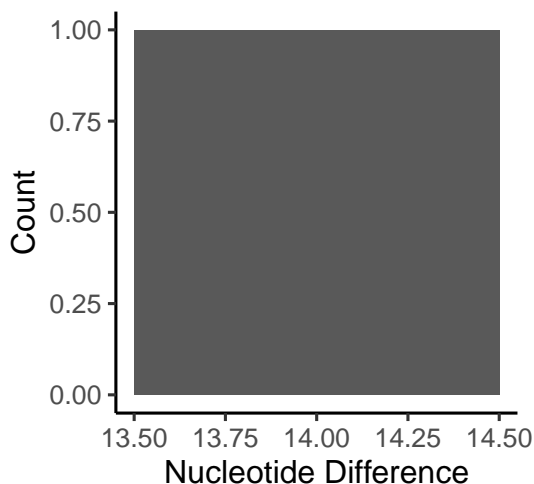
IGHV4-59*01_07

3655 sequences assigned
294 (8%) exact matches, in which:
210 unique CDR3
6 unique J



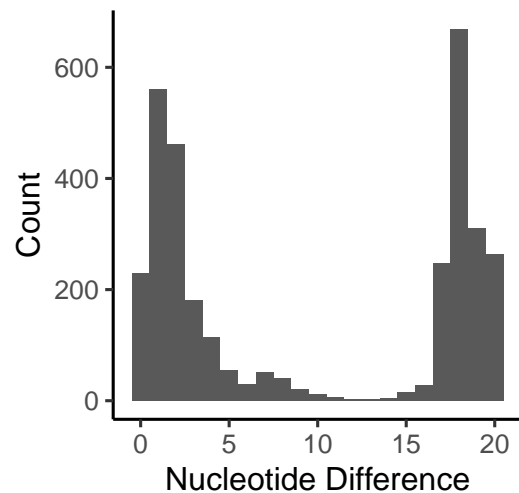
IGHV1/OR15-3*02

1 sequences assigned
No exact matches.



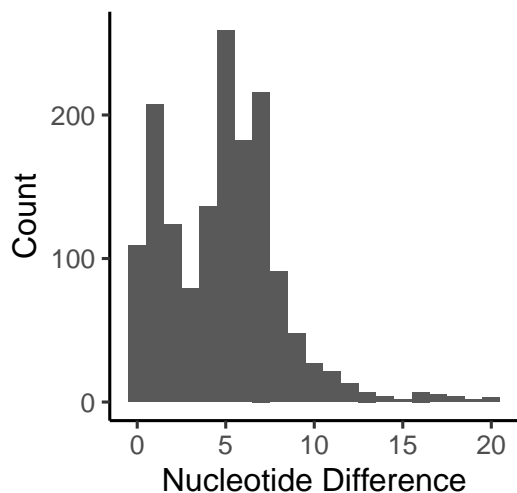
IGHV5-10-1*01_03

5724 sequences assigned
230 (4%) exact matches, in which:
145 unique CDR3
4 unique J



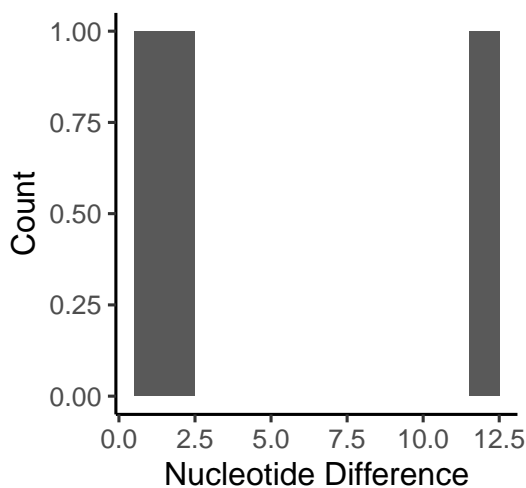
IGHV4-61*01

1590 sequences assigned
109 (6.9%) exact matches, in which:
87 unique CDR3
5 unique J



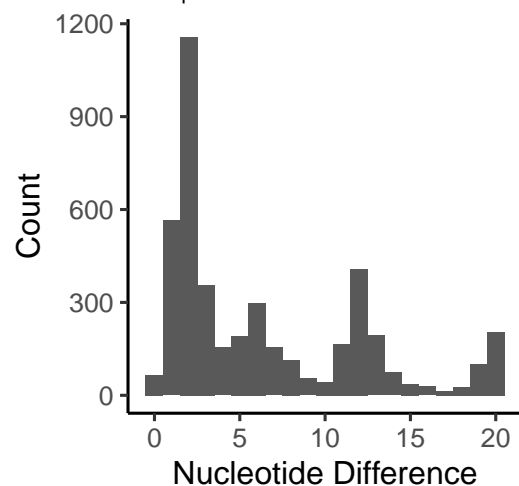
IGHV4/OR15-8*01

7 sequences assigned
No exact matches.



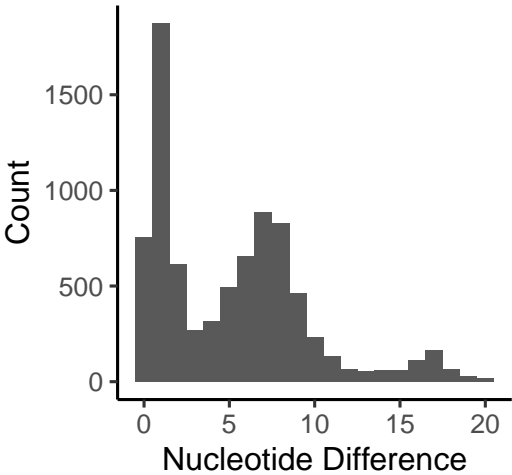
IGHV5-51*07

4548 sequences assigned
66 (1.5%) exact matches, in which:
45 unique CDR3
4 unique J



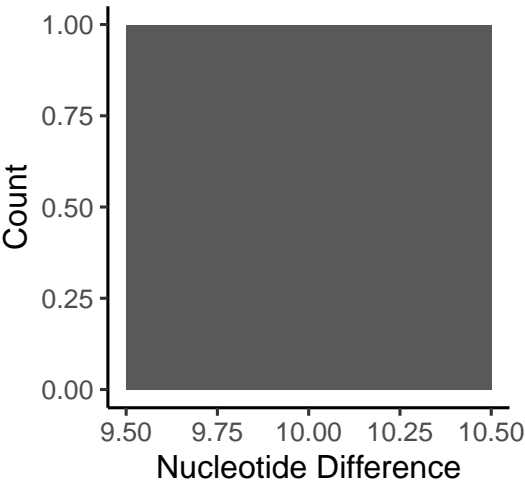
IGHV5-51*01_03

8184 sequences assigned
755 (9.2%) exact matches, in which:
410 unique CDR3
5 unique J



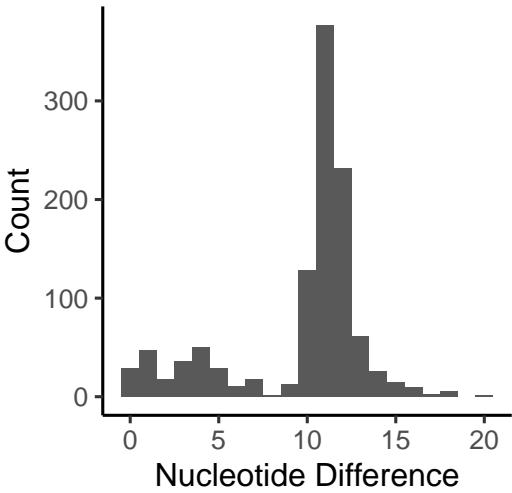
IGHV7-4-1*02

1 sequences assigned
No exact matches.



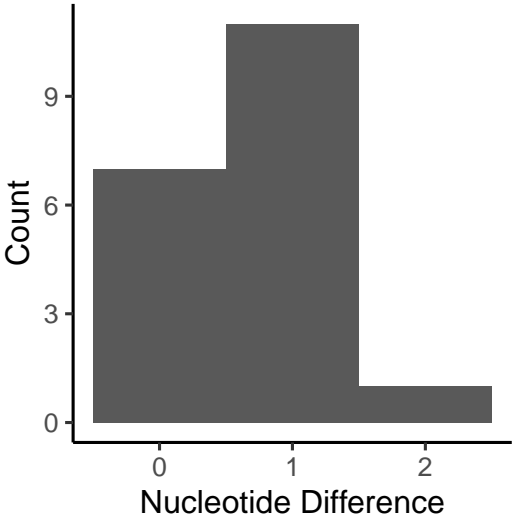
IGHV6-1*01_02

1120 sequences assigned
29 (2.6%) exact matches, in which:
25 unique CDR3
6 unique J



IGHV7-4-1*01

19 sequences assigned
7 (36.8%) exact matches, in which:
6 unique CDR3
1 unique J





Warning – no inferred sequences found.