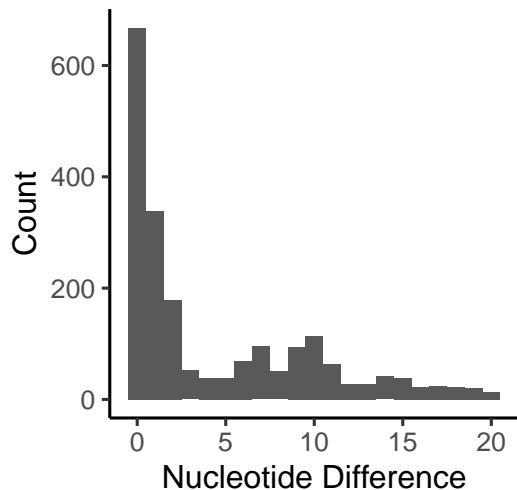


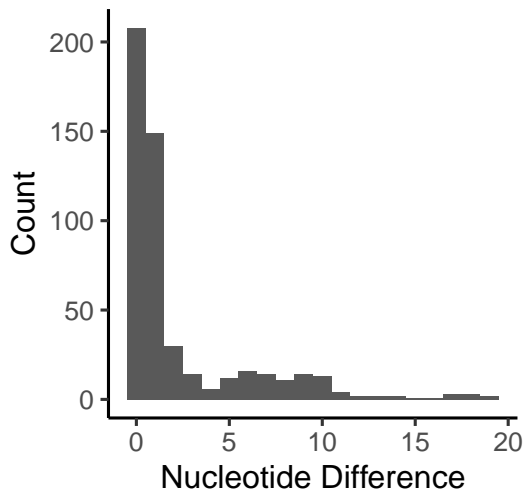
IGHV1-2*02

2266 sequences assigned
668 (29.5%) exact matches, in which:
649 unique CDR3
6 unique J



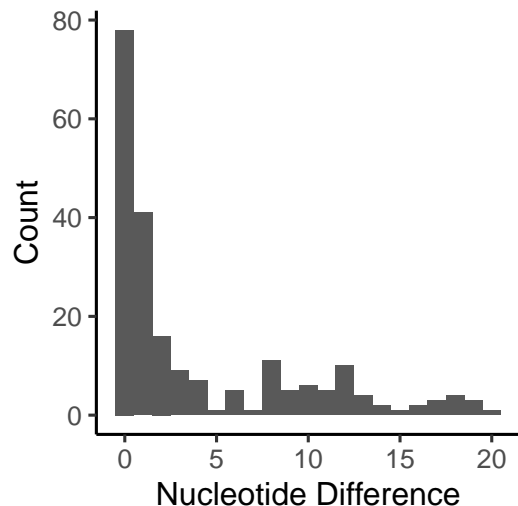
IGHV1-8*01

519 sequences assigned
208 (40.1%) exact matches, in which:
200 unique CDR3
5 unique J



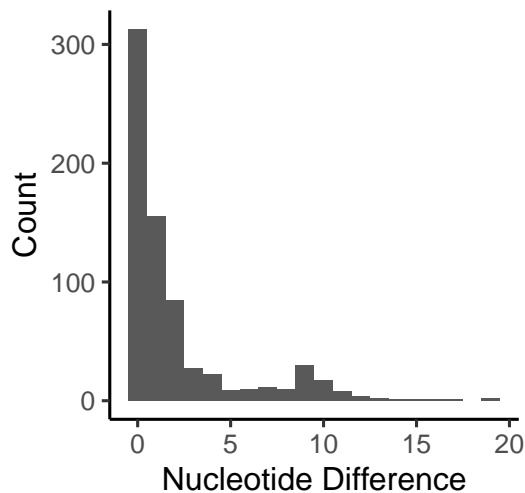
IGHV1-24*01

302 sequences assigned
78 (25.8%) exact matches, in which:
74 unique CDR3
6 unique J



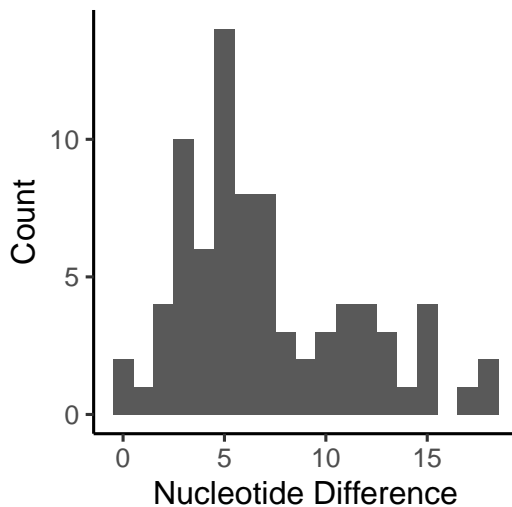
IGHV1-2*04

780 sequences assigned
313 (40.1%) exact matches, in which:
297 unique CDR3
6 unique J



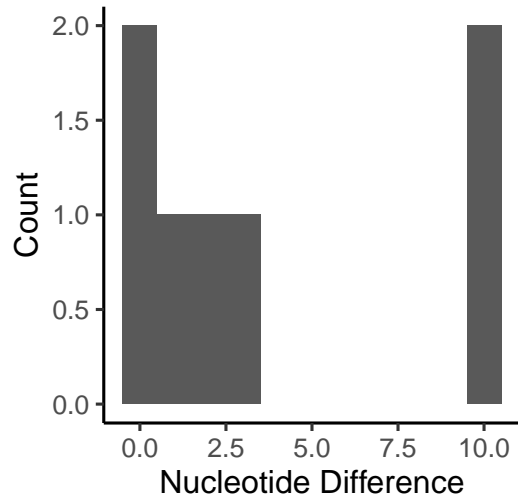
IGHV1-8*02

82 sequences assigned
2 (2.4%) exact matches, in which:
2 unique CDR3
1 unique J



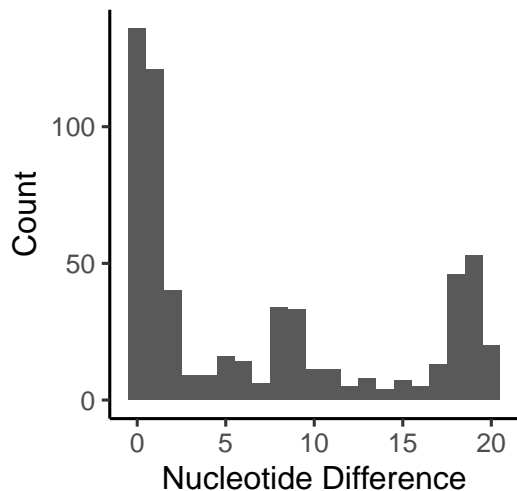
IGHV1-45*02

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



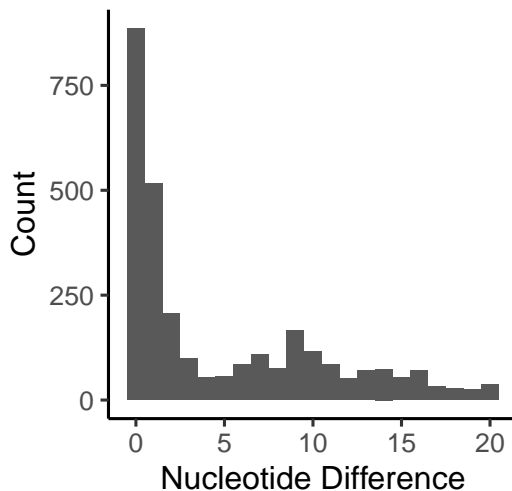
IGHV1-3*01_05

651 sequences assigned
136 (20.9%) exact matches, in which:
123 unique CDR3
6 unique J



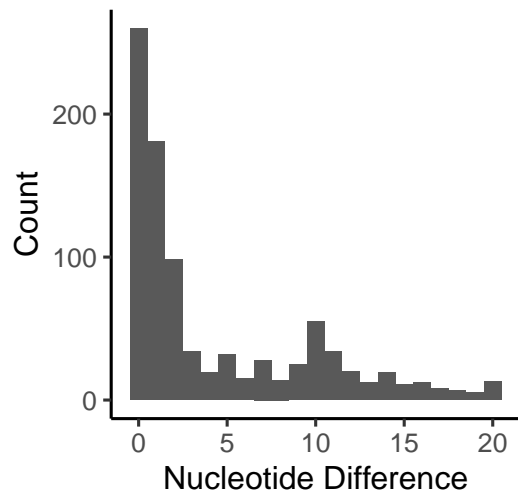
IGHV1-18*01

3340 sequences assigned
886 (26.5%) exact matches, in which:
843 unique CDR3
6 unique J



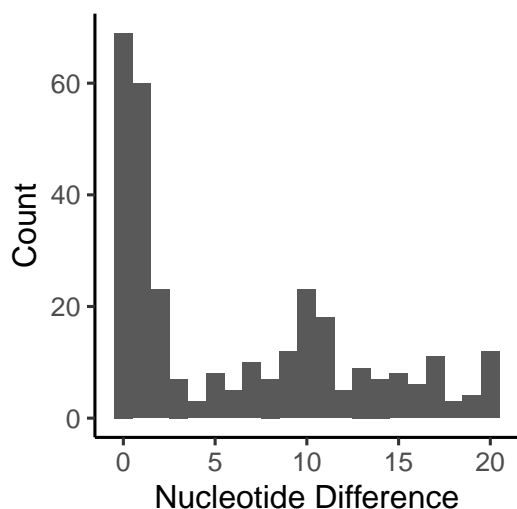
IGHV1-46*01

1086 sequences assigned
260 (23.9%) exact matches, in which:
255 unique CDR3
6 unique J



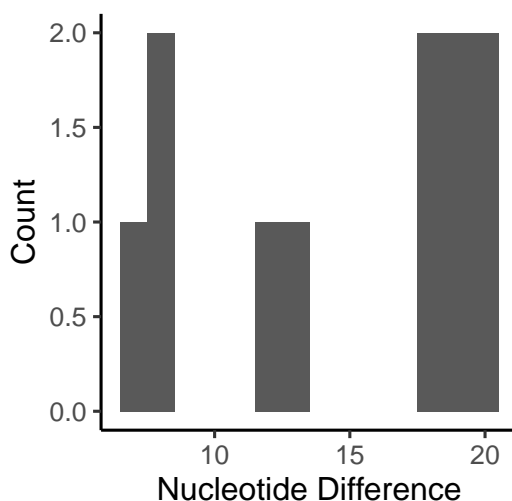
IGHV1-46*03

414 sequences assigned
69 (16.7%) exact matches, in which:
68 unique CDR3
4 unique J



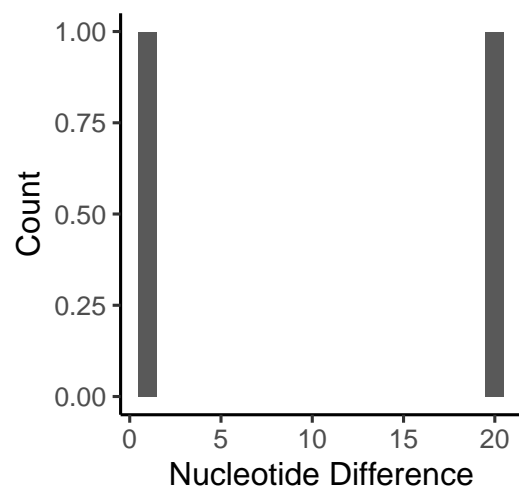
IGHV1-69*08

117 sequences assigned
No exact matches.



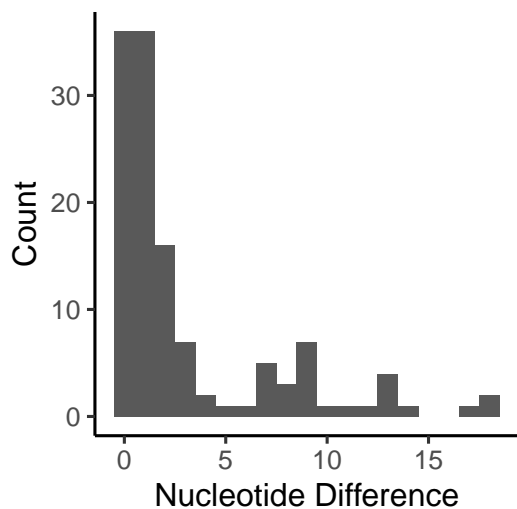
IGHV1-69*06_14

19 sequences assigned
No exact matches.



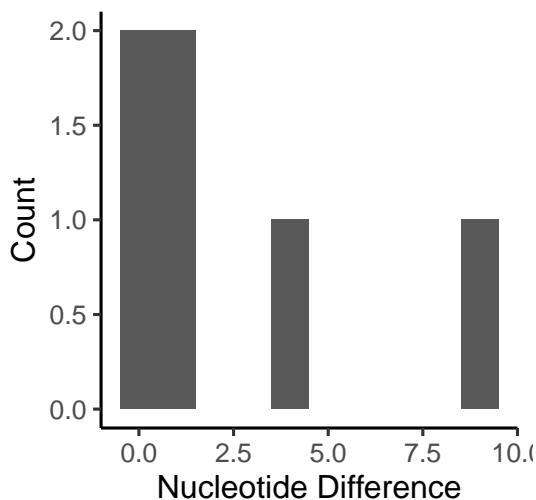
IGHV1-58*02

137 sequences assigned
36 (26.3%) exact matches, in which:
34 unique CDR3
3 unique J



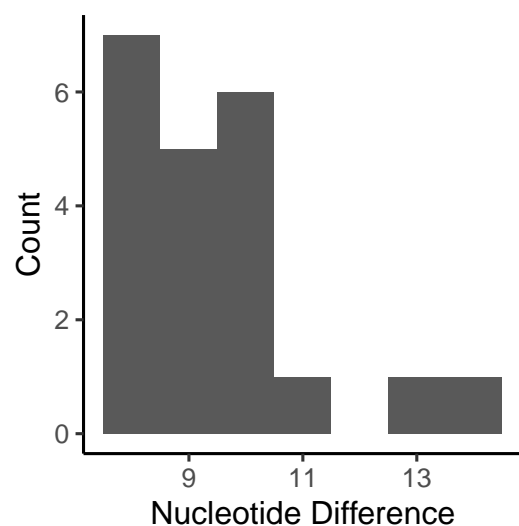
IGHV1-69*01_12_13

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



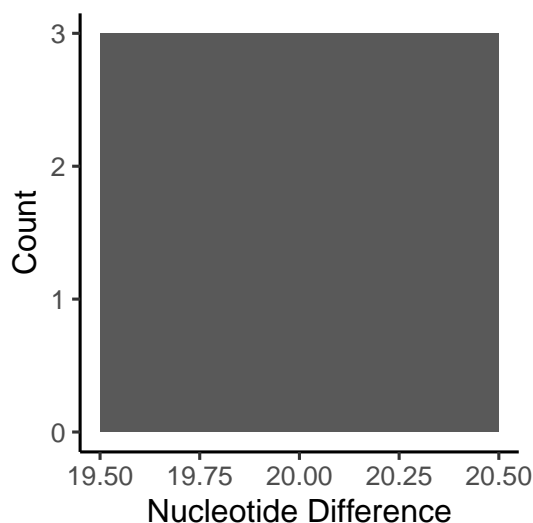
IGHV1-NL1*01

21 sequences assigned
No exact matches.



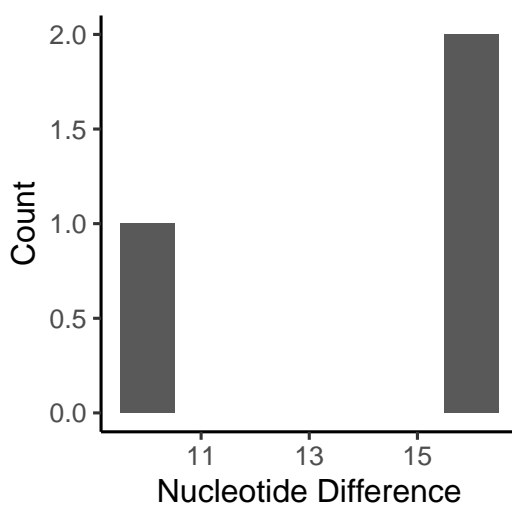
IGHV1-69-2*01

3 sequences assigned
No exact matches.



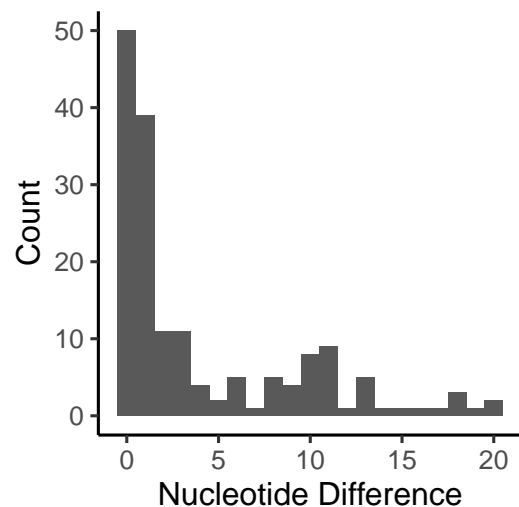
IGHV1-69*04_09

9 sequences assigned
No exact matches.



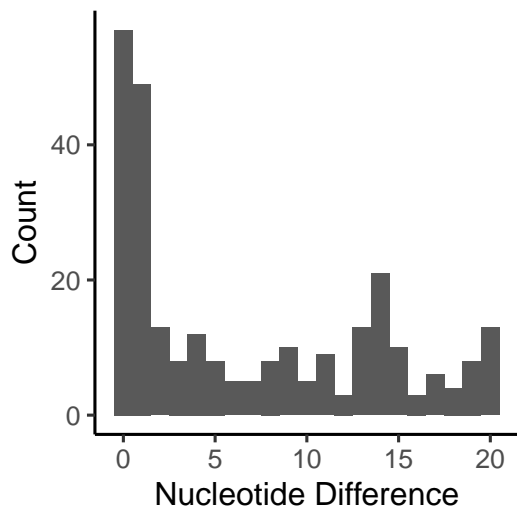
IGHV2-5*01

266 sequences assigned
50 (18.8%) exact matches, in which:
47 unique CDR3
6 unique J



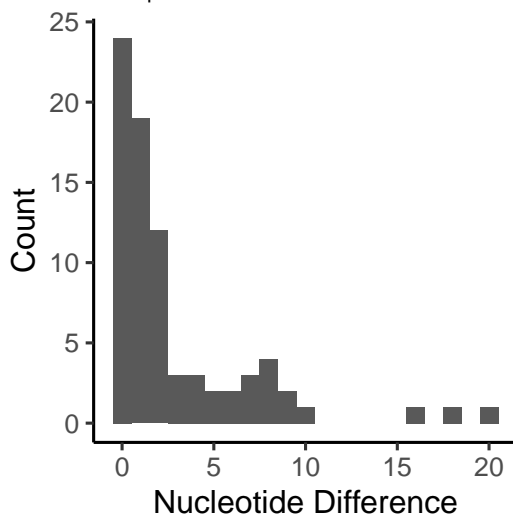
IGHV2-5*02

472 sequences assigned
57 (12.1%) exact matches, in which:
50 unique CDR3
6 unique J



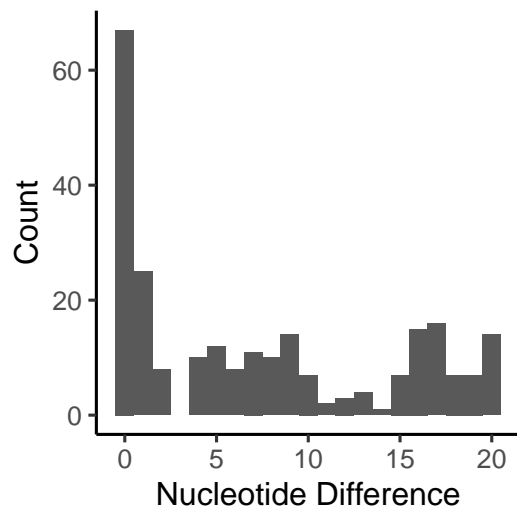
IGHV2-70*11_15

89 sequences assigned
24 (27%) exact matches, in which:
20 unique CDR3
5 unique J



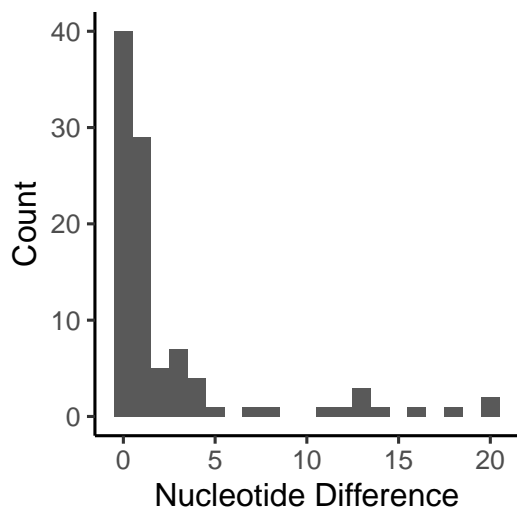
IGHV3-7*04

329 sequences assigned
67 (20.4%) exact matches, in which:
44 unique CDR3
4 unique J



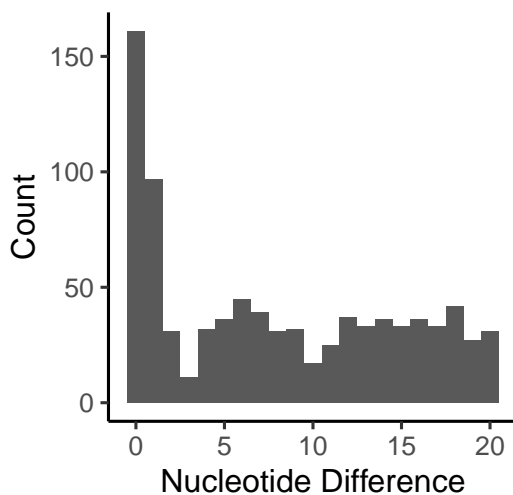
IGHV2-26*01

103 sequences assigned
40 (38.8%) exact matches, in which:
37 unique CDR3
5 unique J



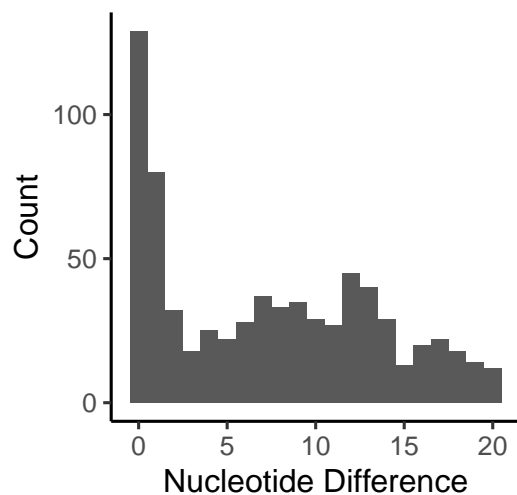
IGHV3-7*01

994 sequences assigned
161 (16.2%) exact matches, in which:
125 unique CDR3
5 unique J



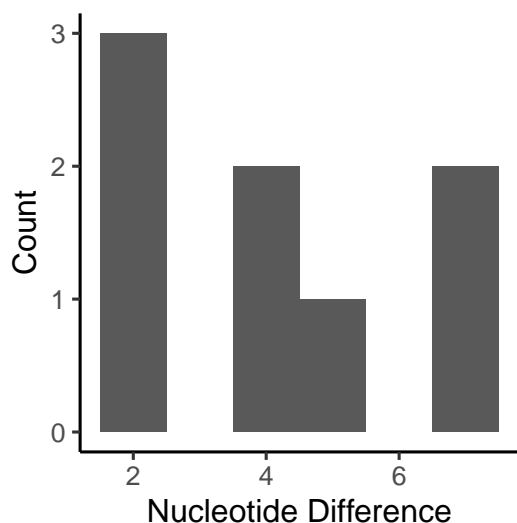
IGHV3-9*01

841 sequences assigned
129 (15.3%) exact matches, in which:
95 unique CDR3
6 unique J



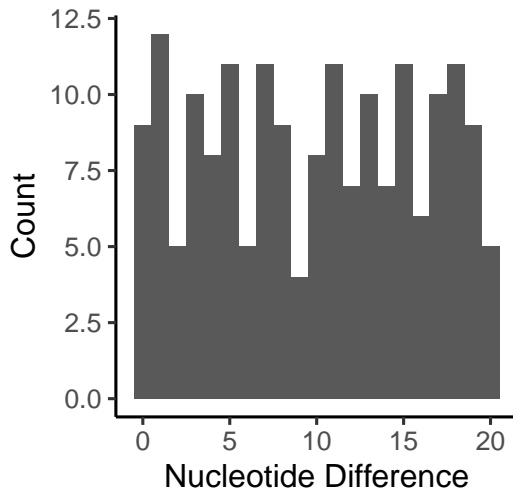
IGHV2-70*12

8 sequences assigned
No exact matches.



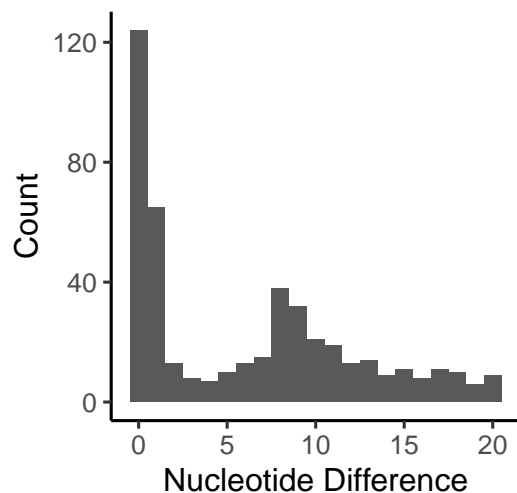
IGHV3-7*03

233 sequences assigned
9 (3.9%) exact matches, in which:
7 unique CDR3
3 unique J



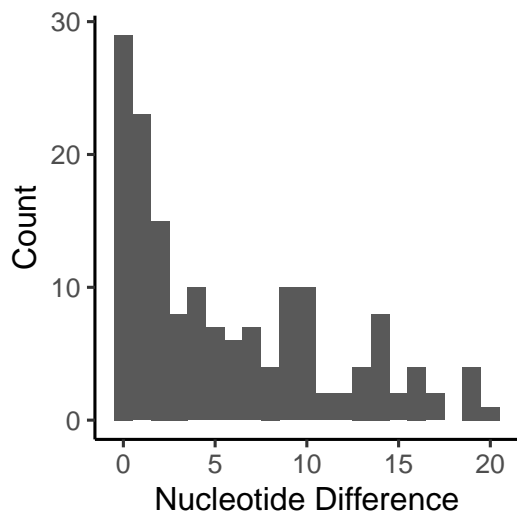
IGHV3-11*01

551 sequences assigned
124 (22.5%) exact matches, in which:
96 unique CDR3
5 unique J



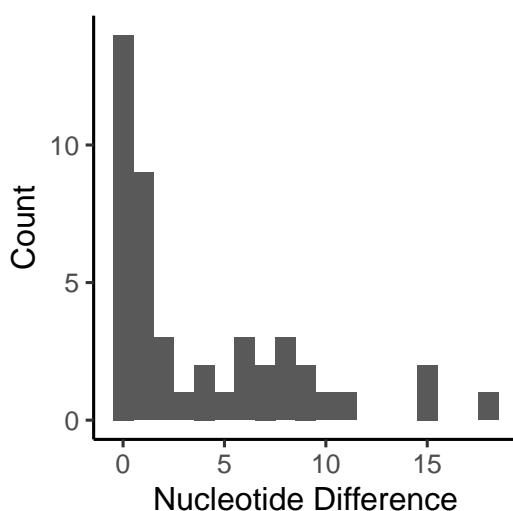
IGHV3-11*04

177 sequences assigned
29 (16.4%) exact matches, in which:
29 unique CDR3
5 unique J



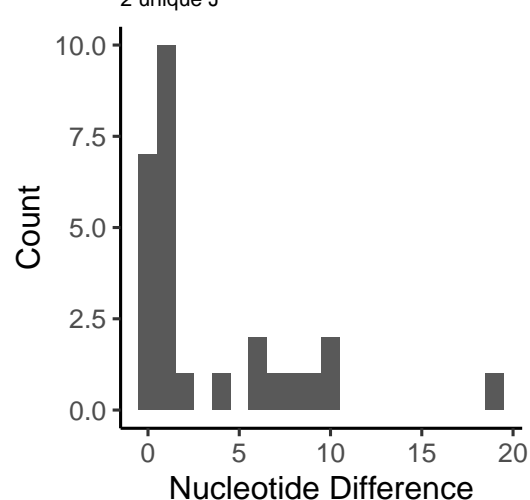
IGHV3-13*05

46 sequences assigned
14 (30.4%) exact matches, in which:
11 unique CDR3
5 unique J



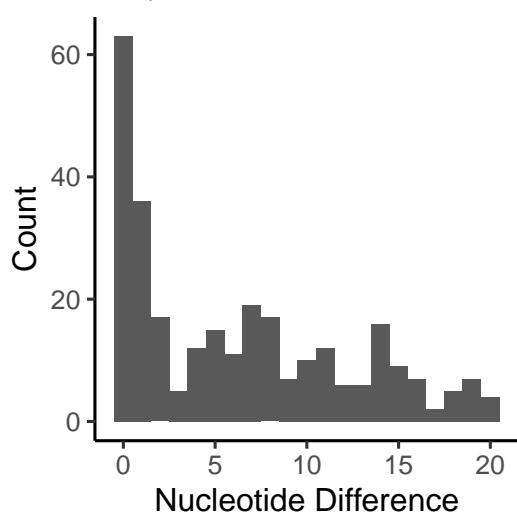
IGHV3-20*01_02

27 sequences assigned
7 (25.9%) exact matches, in which:
5 unique CDR3
2 unique J



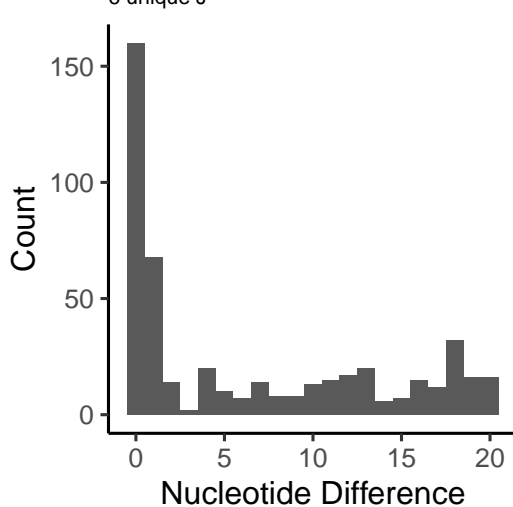
IGHV3-11*06

427 sequences assigned
63 (14.8%) exact matches, in which:
52 unique CDR3
5 unique J



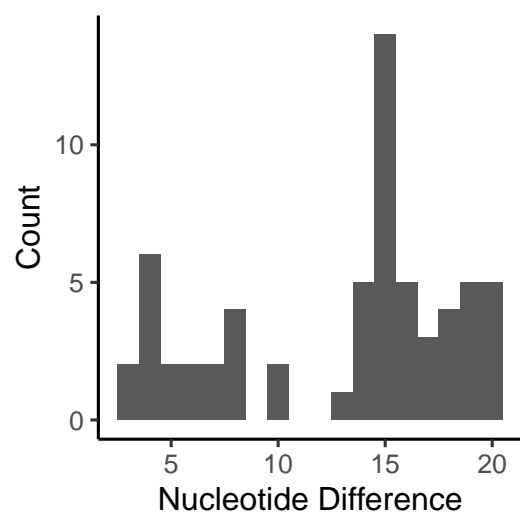
IGHV3-15*01_02

737 sequences assigned
160 (21.7%) exact matches, in which:
110 unique CDR3
6 unique J



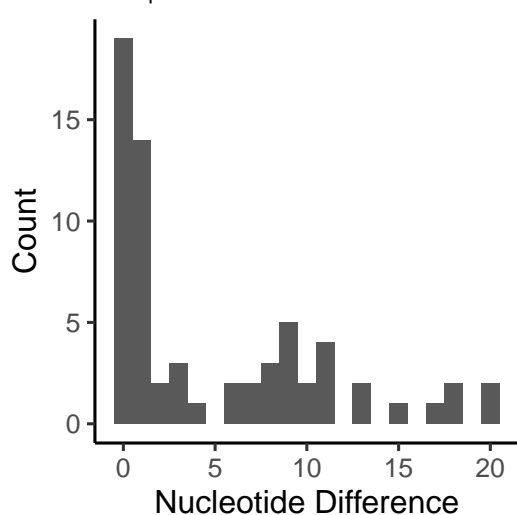
IGHV3-20*03_04

102 sequences assigned
No exact matches.



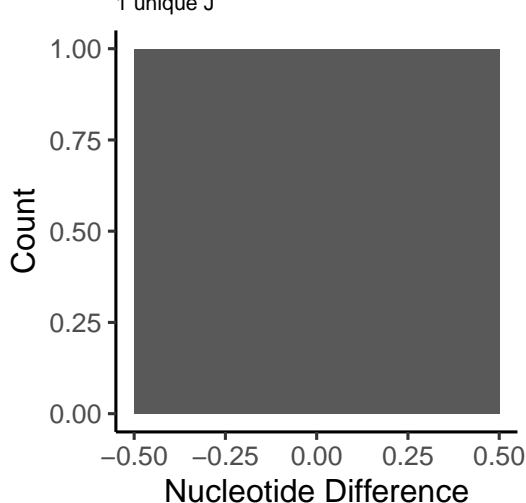
IGHV3-13*01

66 sequences assigned
19 (28.8%) exact matches, in which:
15 unique CDR3
2 unique J



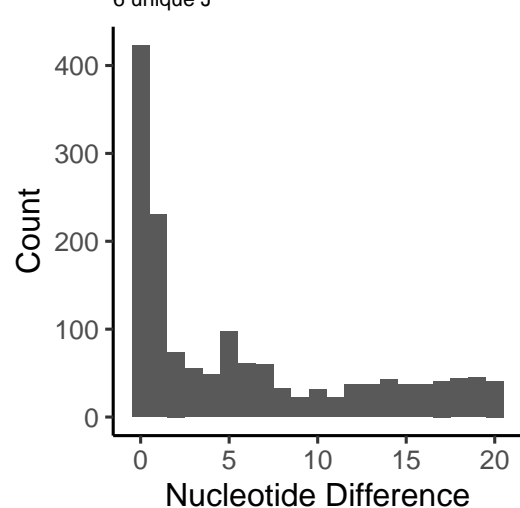
IGHV3-19*01

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



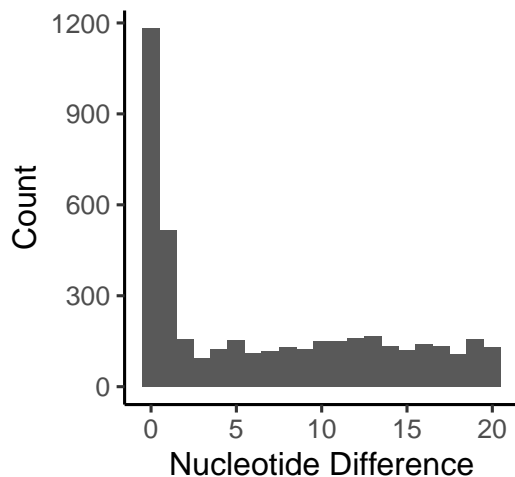
IGHV3-21*01_02

1904 sequences assigned
423 (22.2%) exact matches, in which:
337 unique CDR3
6 unique J



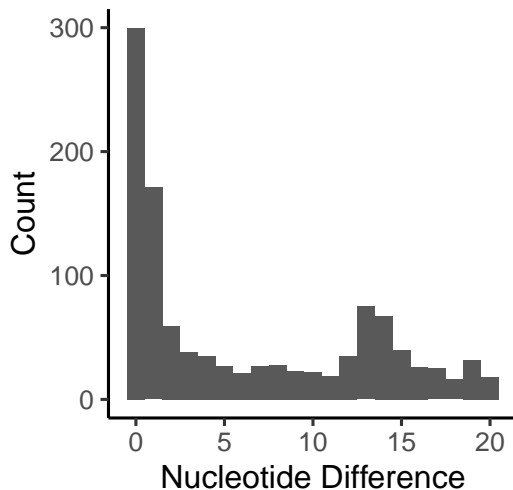
IGHV3-23*01_04

5075 sequences assigned
1182 (23.3%) exact matches, in which:
948 unique CDR3
6 unique J



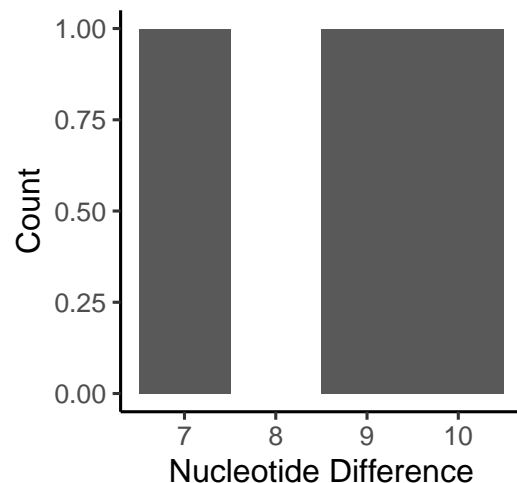
IGHV3-33*01

1262 sequences assigned
300 (23.8%) exact matches, in which:
233 unique CDR3
6 unique J



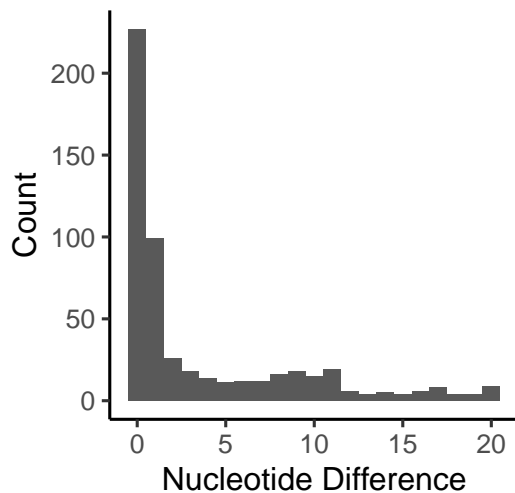
IGHV3-35*01

3 sequences assigned
No exact matches.



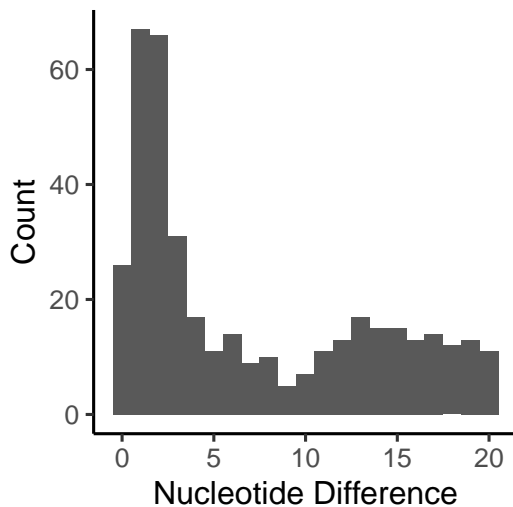
IGHV3-30-3*01

679 sequences assigned
227 (33.4%) exact matches, in which:
182 unique CDR3
5 unique J



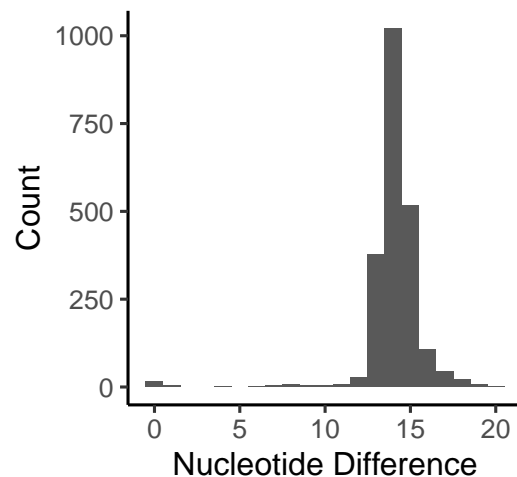
IGHV3-33*06

444 sequences assigned
26 (5.9%) exact matches, in which:
24 unique CDR3
4 unique J



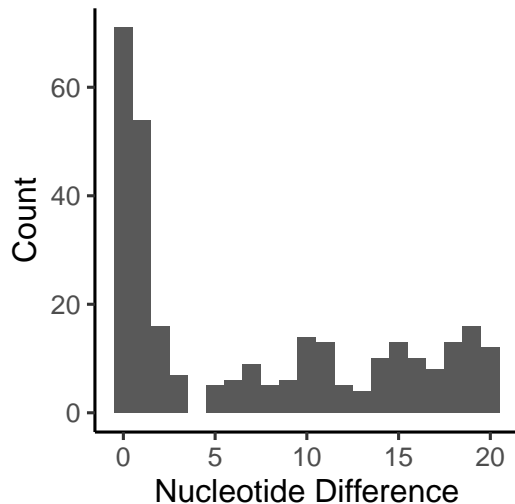
IGHV3-43*01

2218 sequences assigned
17 (0.8%) exact matches, in which:
13 unique CDR3
4 unique J



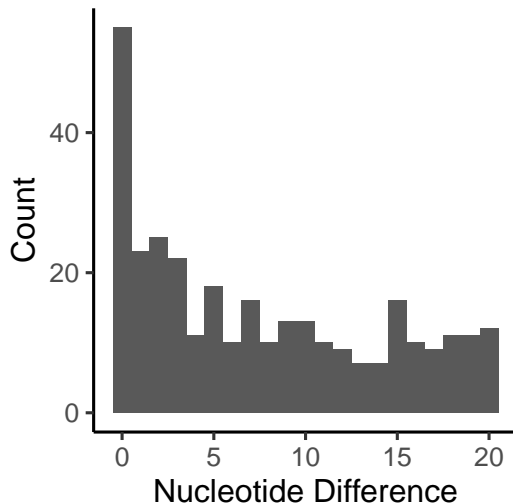
IGHV3-30*03

357 sequences assigned
71 (19.9%) exact matches, in which:
68 unique CDR3
4 unique J



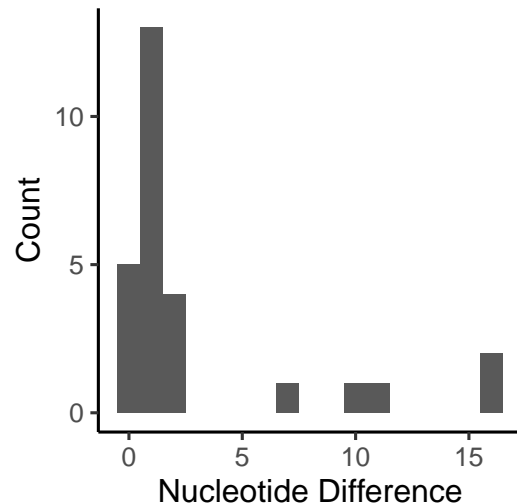
IGHV3-33*08

425 sequences assigned
55 (12.9%) exact matches, in which:
54 unique CDR3
4 unique J



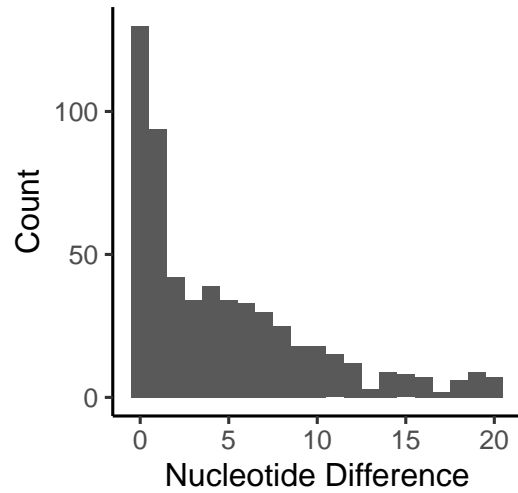
IGHV3-47*02

27 sequences assigned
5 (18.5%) exact matches, in which:
4 unique CDR3
1 unique J



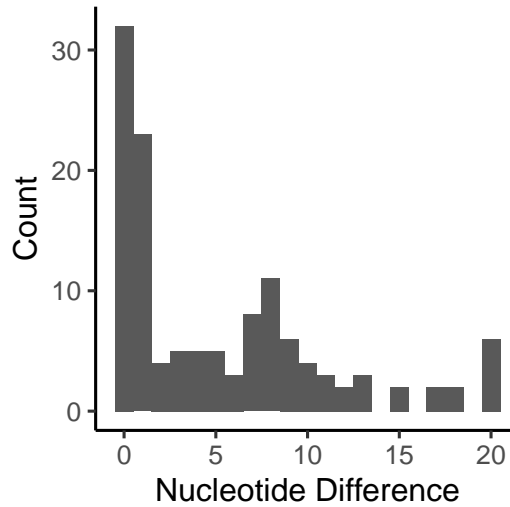
IGHV3-48*01

677 sequences assigned
130 (19.2%) exact matches, in which:
99 unique CDR3
6 unique J



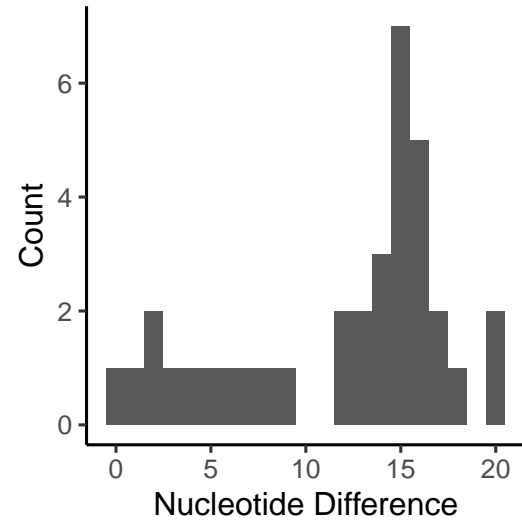
IGHV3-49*03_05

151 sequences assigned
32 (21.2%) exact matches, in which:
25 unique CDR3
5 unique J



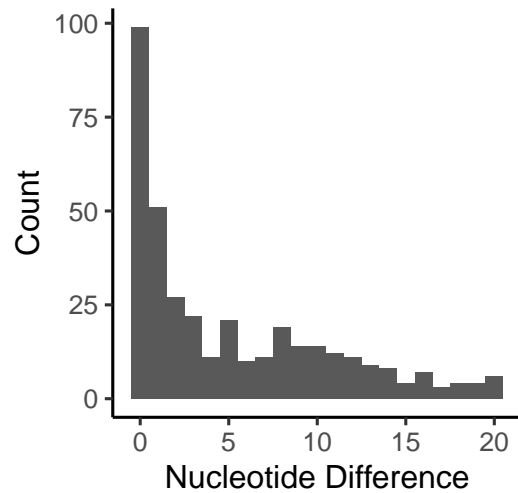
IGHV3-53*05

37 sequences assigned
1 (2.7%) exact matches, in which:
1 unique CDR3
1 unique J



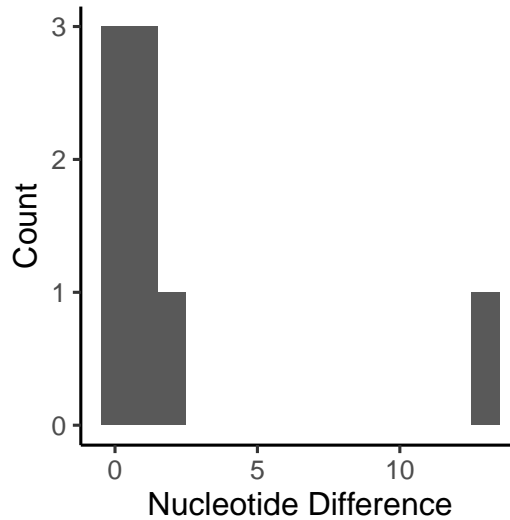
IGHV3-48*02

422 sequences assigned
99 (23.5%) exact matches, in which:
74 unique CDR3
5 unique J



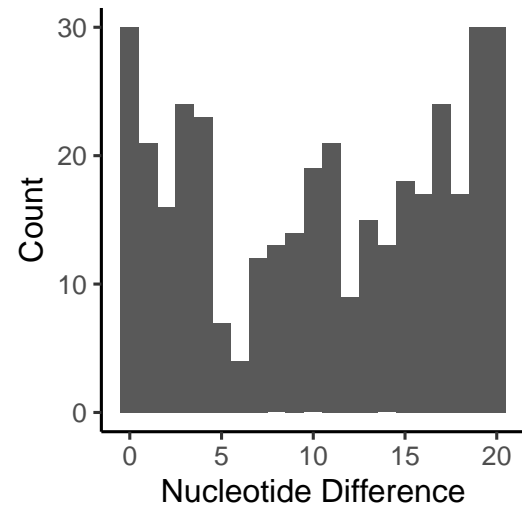
IGHV3-52*02

8 sequences assigned
3 (37.5%) exact matches, in which:
2 unique CDR3
1 unique J



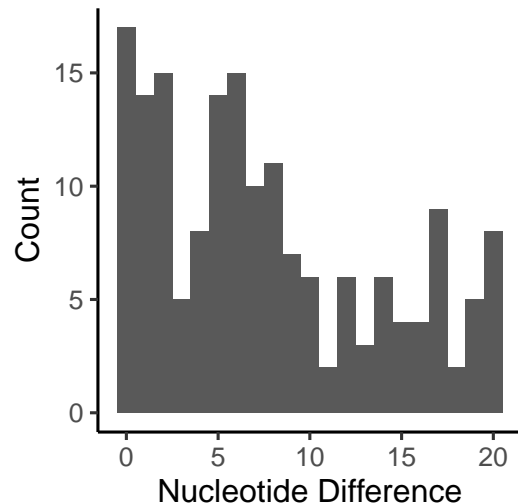
IGHV3-53*01_02

487 sequences assigned
30 (6.2%) exact matches, in which:
25 unique CDR3
3 unique J



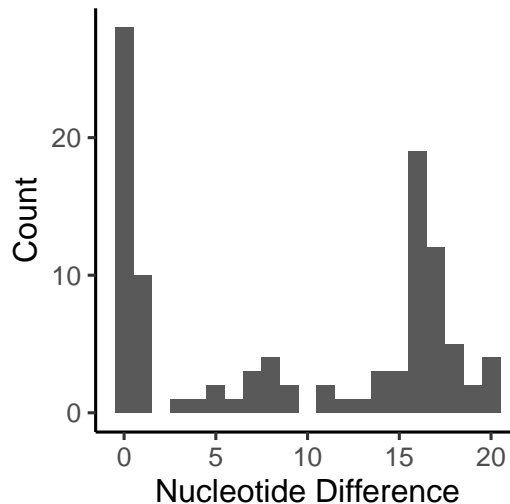
IGHV3-48*04

239 sequences assigned
17 (7.1%) exact matches, in which:
17 unique CDR3
3 unique J



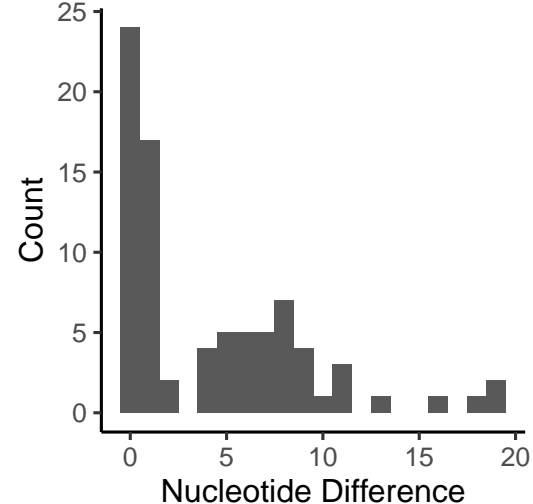
IGHV3-53*04

123 sequences assigned
28 (22.8%) exact matches, in which:
20 unique CDR3
4 unique J



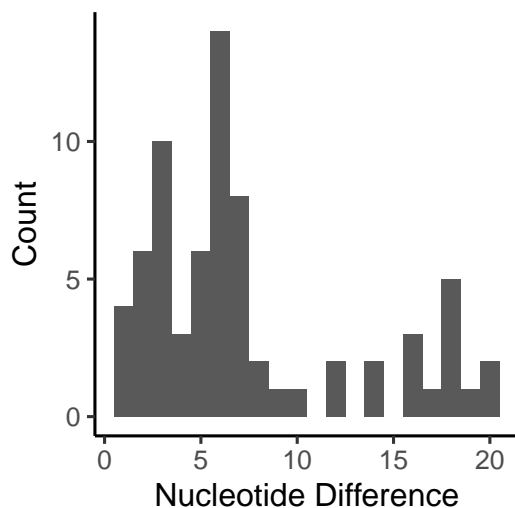
IGHV3-64*01

86 sequences assigned
24 (27.9%) exact matches, in which:
18 unique CDR3
5 unique J



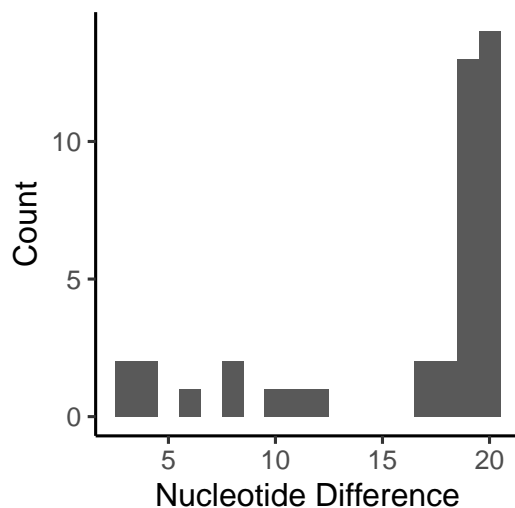
IGHV3-64*04

86 sequences assigned
No exact matches.



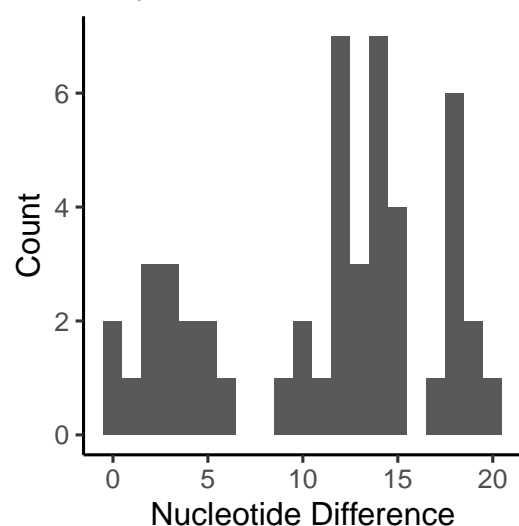
IGHV3-69-1*01

61 sequences assigned
No exact matches.



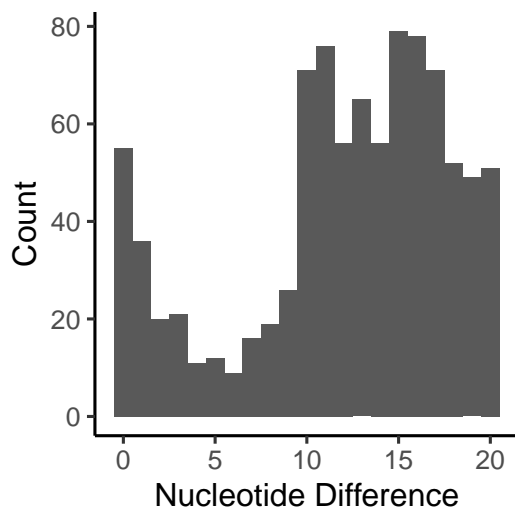
IGHV3-72*01

104 sequences assigned
2 (1.9%) exact matches, in which:
1 unique CDR3
1 unique J



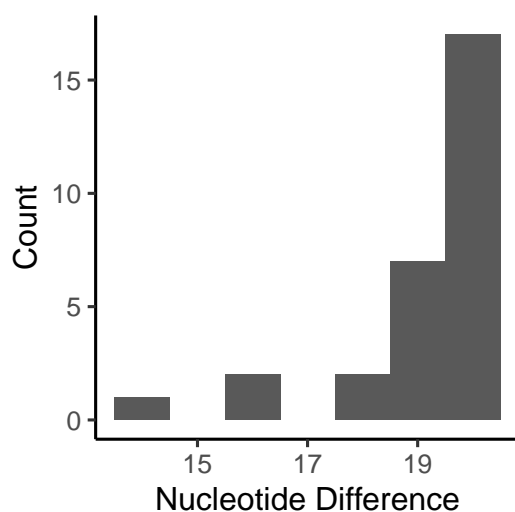
IGHV3-66*01

1134 sequences assigned
55 (4.9%) exact matches, in which:
46 unique CDR3
5 unique J



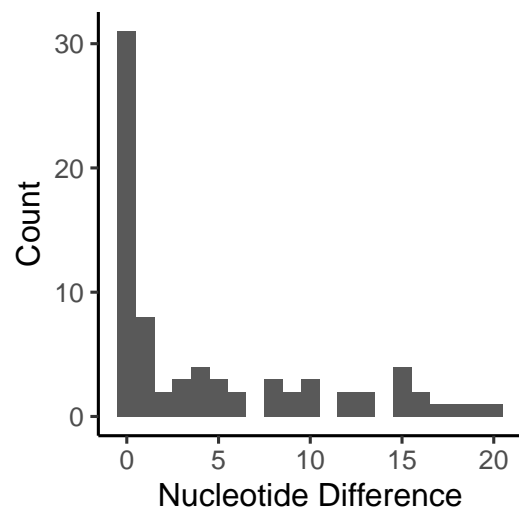
IGHV3-69-1*02

83 sequences assigned
No exact matches.



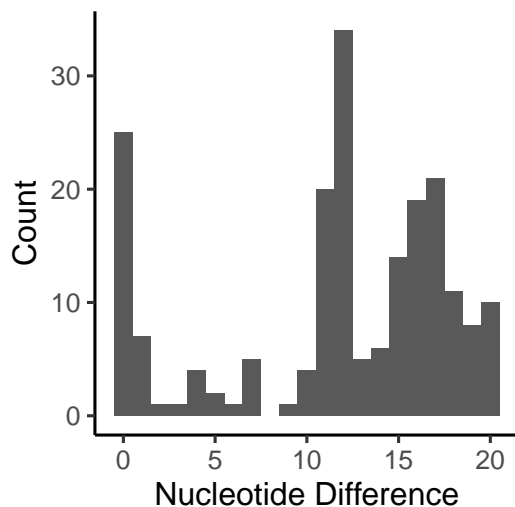
IGHV3-73*01_02

89 sequences assigned
31 (34.8%) exact matches, in which:
23 unique CDR3
4 unique J



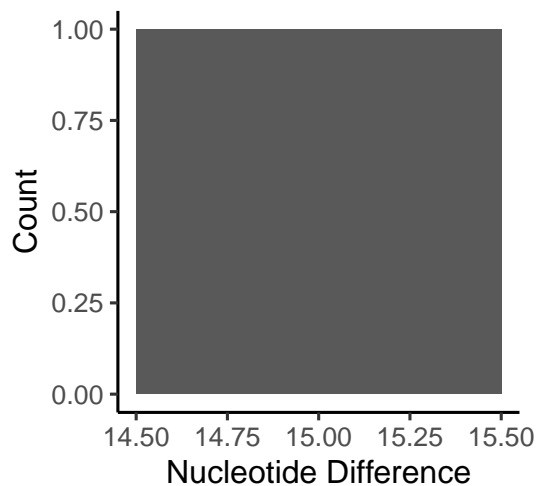
IGHV3-66*02

292 sequences assigned
25 (8.6%) exact matches, in which:
22 unique CDR3
5 unique J



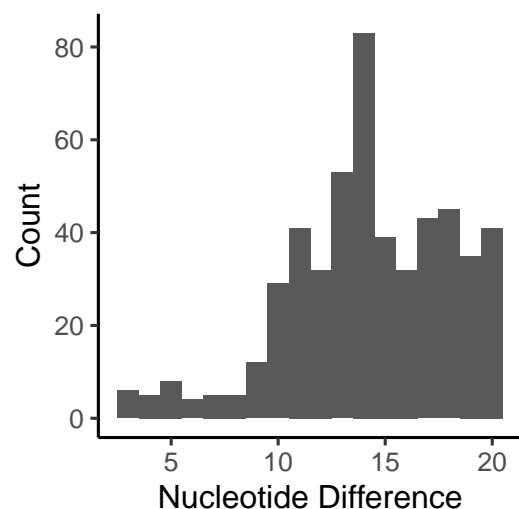
IGHV3-71*01_04

2 sequences assigned
No exact matches.



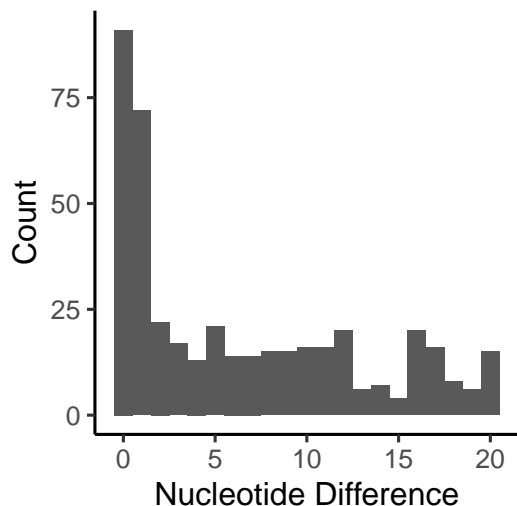
IGHV3-74*03

778 sequences assigned
No exact matches.



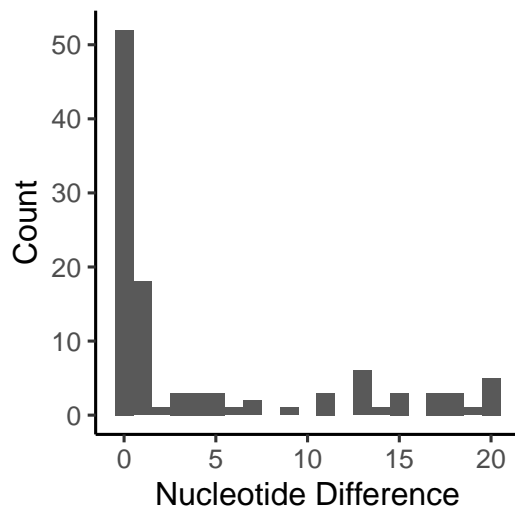
IGHV3-74*01_02

542 sequences assigned
91 (16.8%) exact matches, in which:
70 unique CDR3
4 unique J



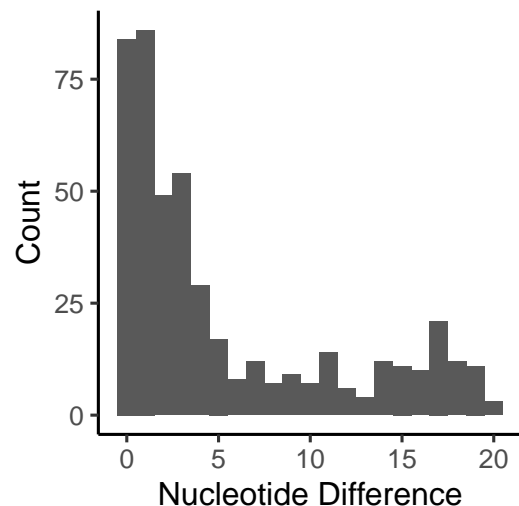
IGHV3-64D*06

276 sequences assigned
52 (18.8%) exact matches, in which:
41 unique CDR3
6 unique J



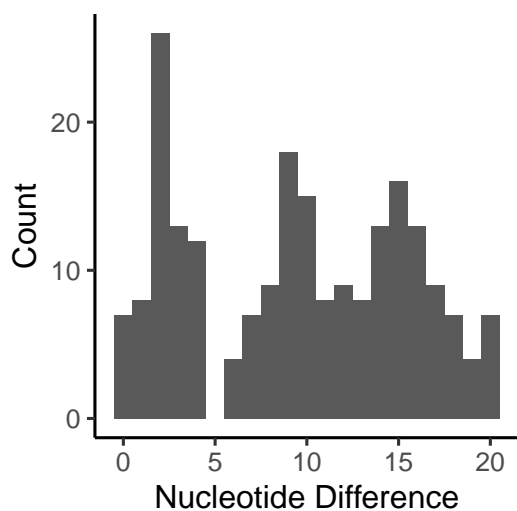
IGHV4-4*02_03

602 sequences assigned
84 (14%) exact matches, in which:
73 unique CDR3
5 unique J



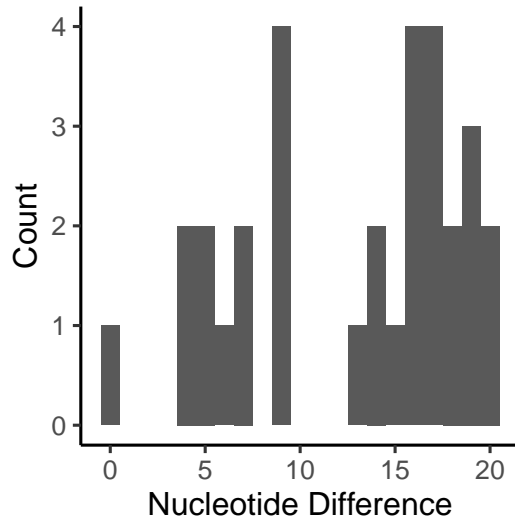
IGHV3-74*01_02_C246T_

278 sequences assigned
7 (2.5%) exact matches, in which:
7 unique CDR3
3 unique J



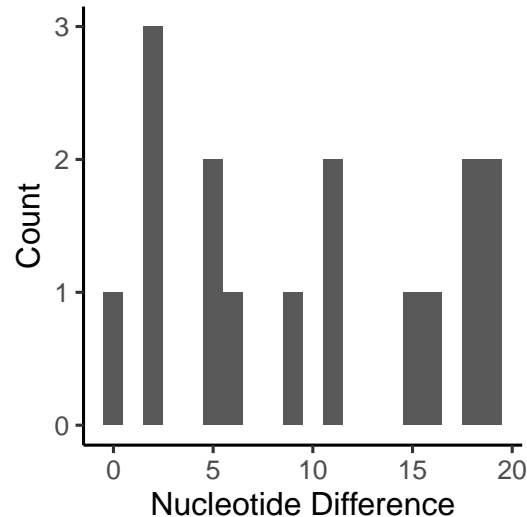
IGHV3-NL1*01

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



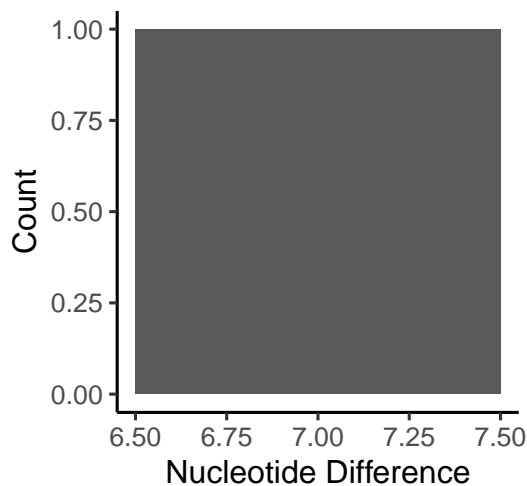
IGHV4-28*03

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



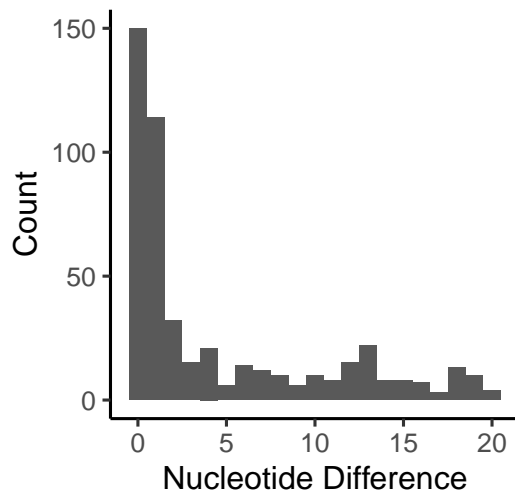
IGHV3-43D*04

2 sequences assigned
No exact matches.



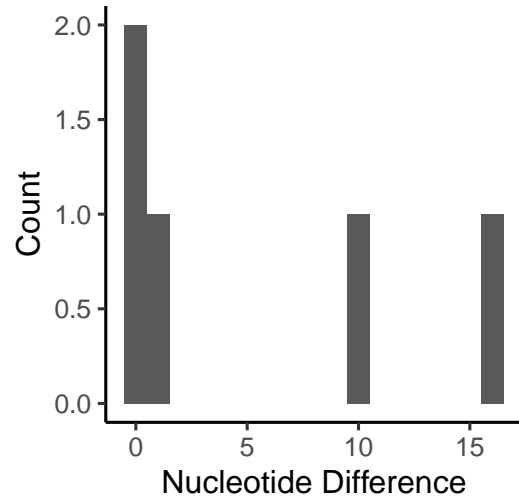
IGHV4-4*07

591 sequences assigned
150 (25.4%) exact matches, in which:
144 unique CDR3
5 unique J



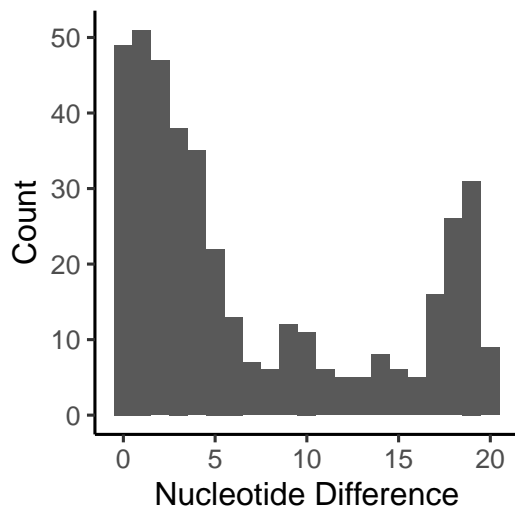
IGHV4-28*01_07

11 sequences assigned
2 (18.2%) exact matches, in which:
2 unique CDR3
1 unique J



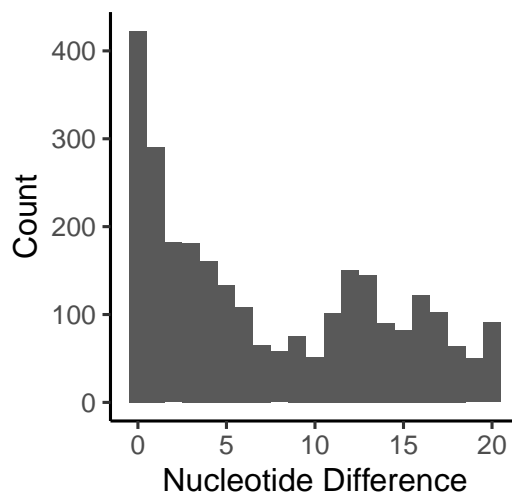
IGHV4-30-4*01

561 sequences assigned
49 (8.7%) exact matches, in which:
47 unique CDR3
5 unique J



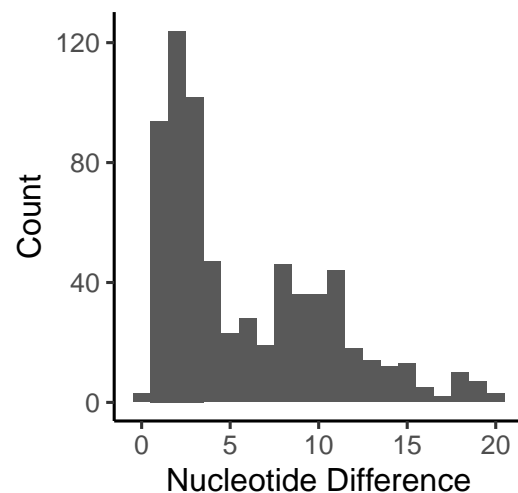
IGHV4-31*02

3192 sequences assigned
423 (13.3%) exact matches, in which:
381 unique CDR3
6 unique J



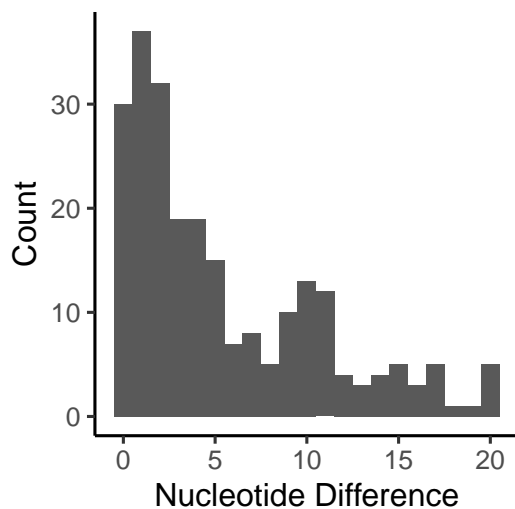
IGHV4-39*07

823 sequences assigned
3 (0.4%) exact matches, in which:
3 unique CDR3
2 unique J



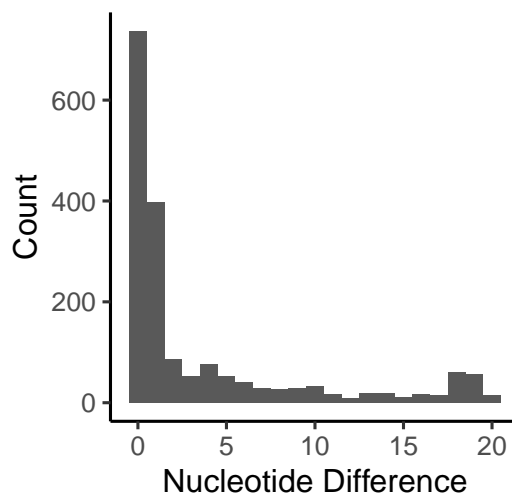
IGHV4-30-2*01

249 sequences assigned
30 (12%) exact matches, in which:
27 unique CDR3
5 unique J



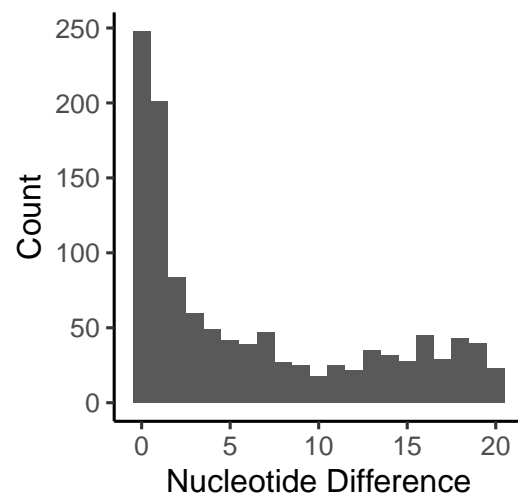
IGHV4-34*01_02

1977 sequences assigned
737 (37.3%) exact matches, in which:
680 unique CDR3
6 unique J



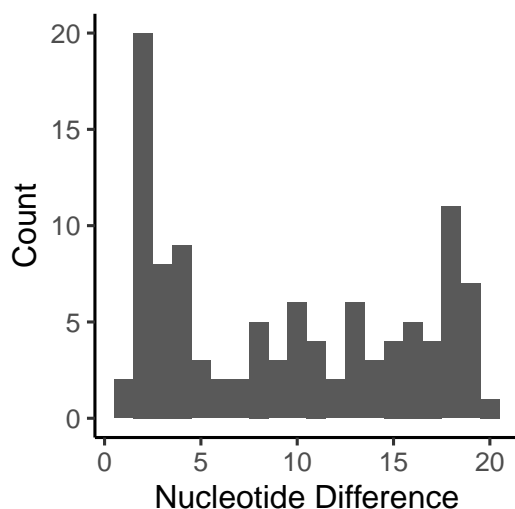
IGHV4-59*08

1581 sequences assigned
248 (15.7%) exact matches, in which:
230 unique CDR3
6 unique J



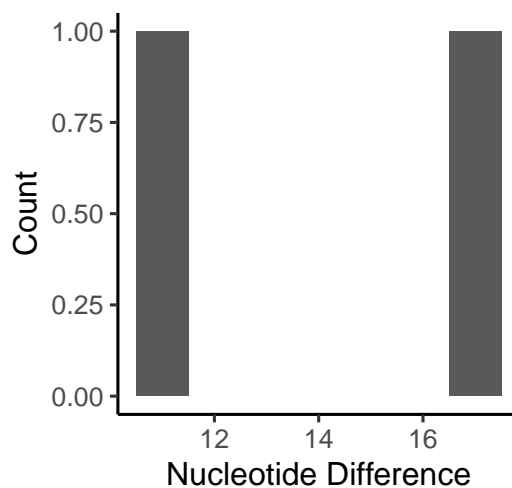
IGHV4-30-4*08

133 sequences assigned
No exact matches.



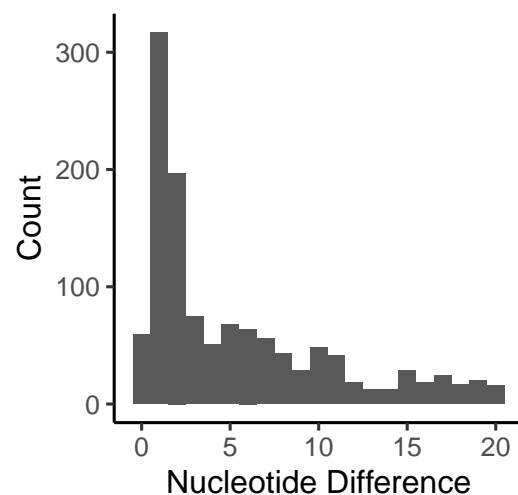
IGHV4-38-2*02

2 sequences assigned
No exact matches.



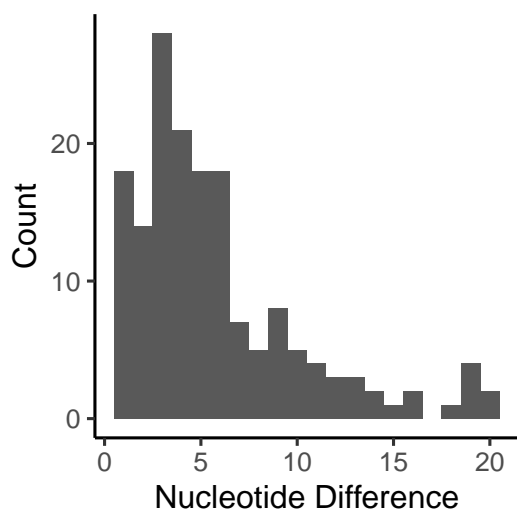
IGHV4-59*12

1388 sequences assigned
59 (4.3%) exact matches, in which:
59 unique CDR3
6 unique J



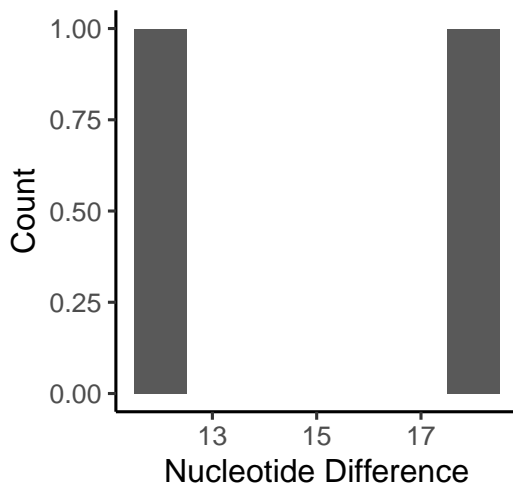
IGHV4-61*01

194 sequences assigned
No exact matches.



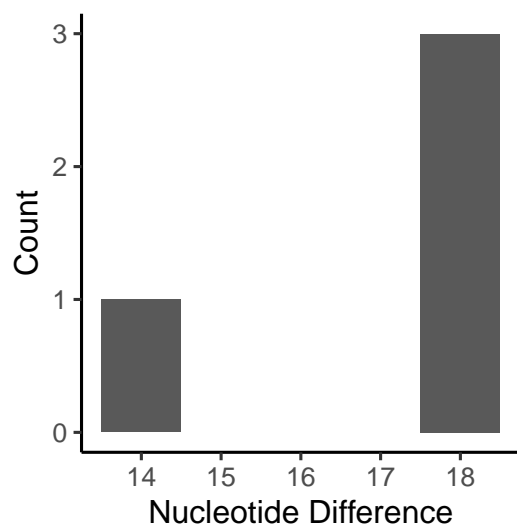
IGHV1/OR15-2*02_03

2 sequences assigned
No exact matches.



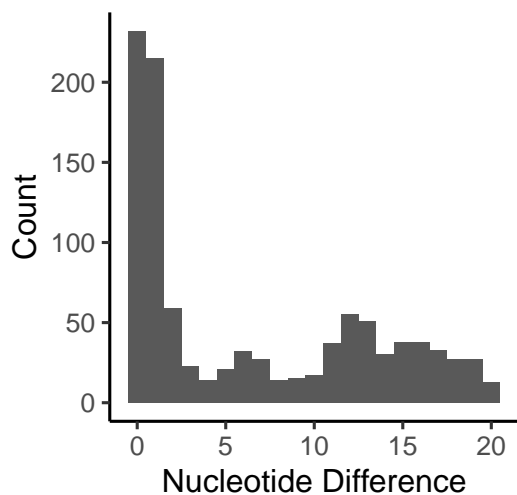
IGHV4/OR15-8*02

37 sequences assigned
No exact matches.



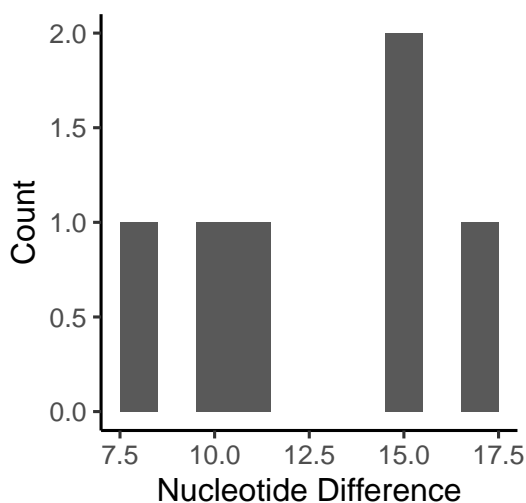
IGHV4-61*02

1224 sequences assigned
232 (19%) exact matches, in which:
213 unique CDR3
6 unique J



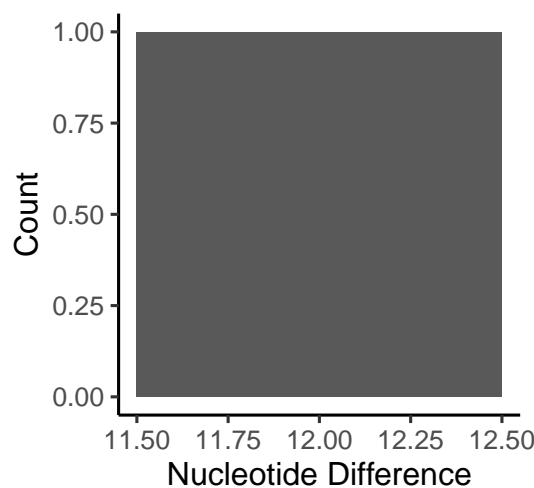
IGHV1/OR15-3*02

6 sequences assigned
No exact matches.



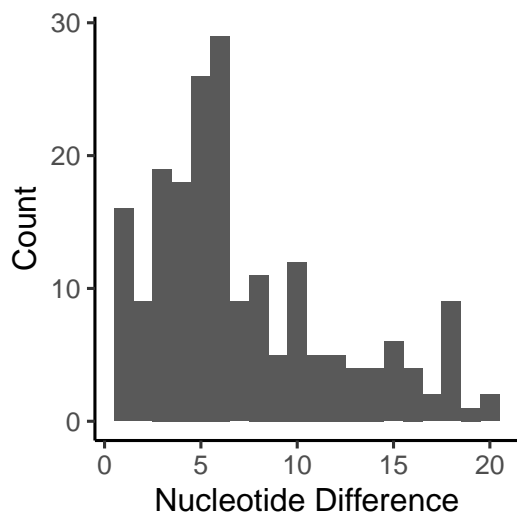
IGHV1/OR15-9*01

1 sequences assigned
No exact matches.



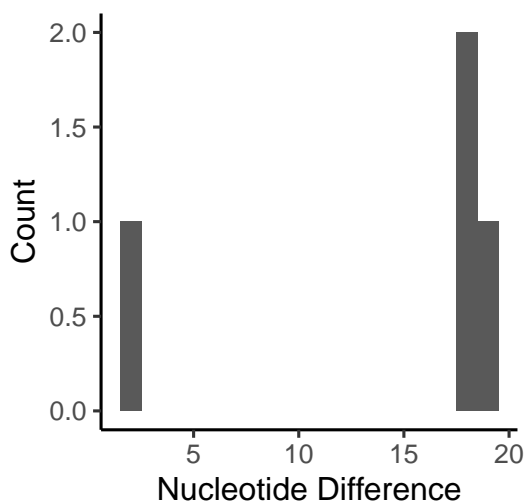
IGHV4-61*08

219 sequences assigned
No exact matches.



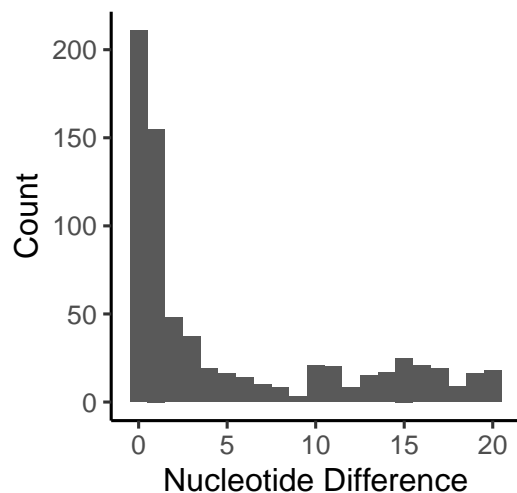
IGHV4/OR15-8*01

6 sequences assigned
No exact matches.



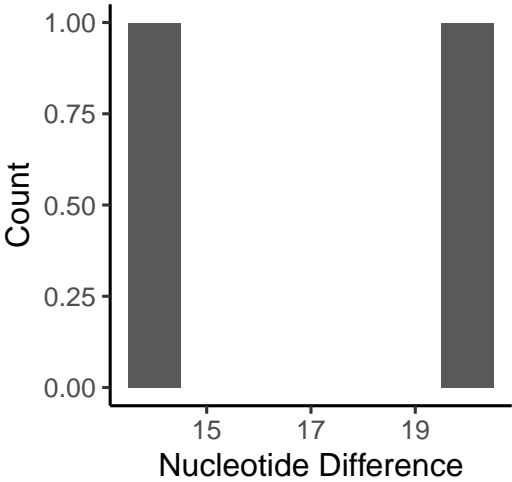
IGHV5-10-1*01_03

844 sequences assigned
211 (25%) exact matches, in which:
188 unique CDR3
6 unique J



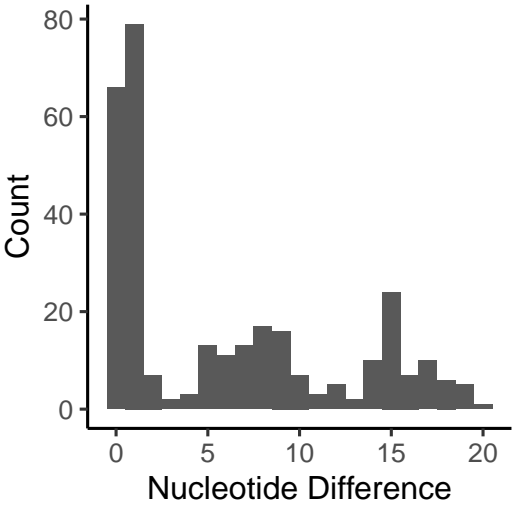
IGHV5-51*04

3 sequences assigned
No exact matches.



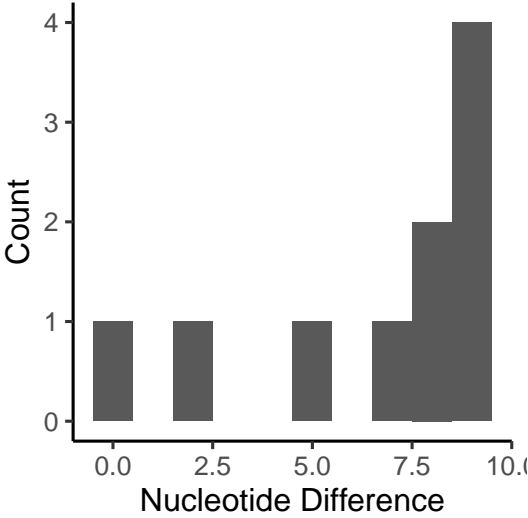
IGHV6-1*01_02

393 sequences assigned
66 (16.8%) exact matches, in which:
61 unique CDR3
5 unique J



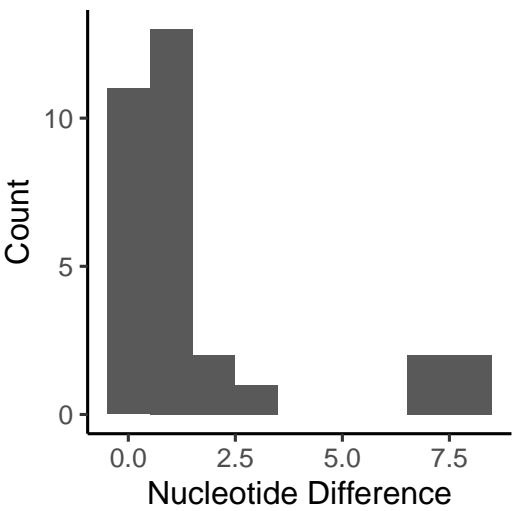
IGHV5-51*06

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



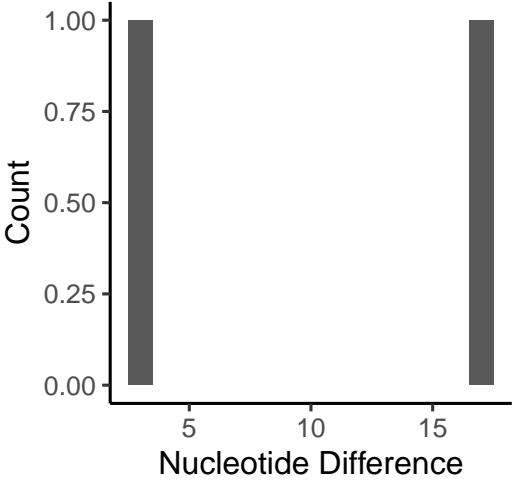
IGHV7-4-1*01

31 sequences assigned
11 (35.5%) exact matches, in which:
11 unique CDR3
2 unique J



IGHV5-51*07

3 sequences assigned
No exact matches.





Warning – no inferred sequences found.