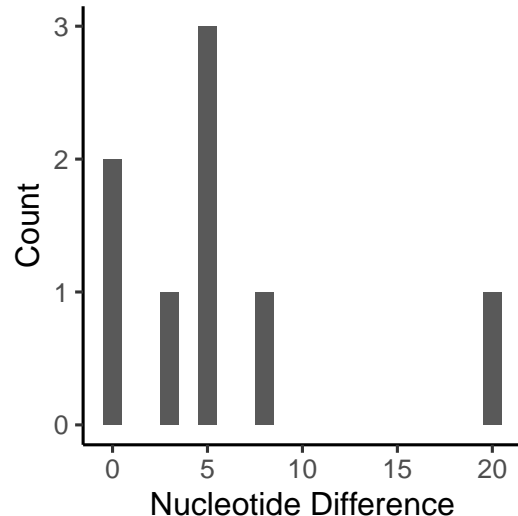


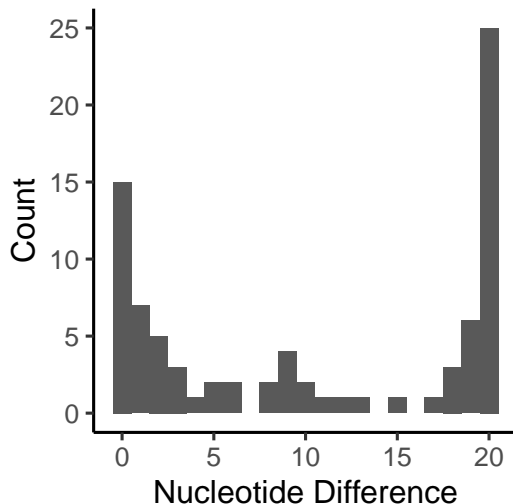
IGHV1-2*02

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



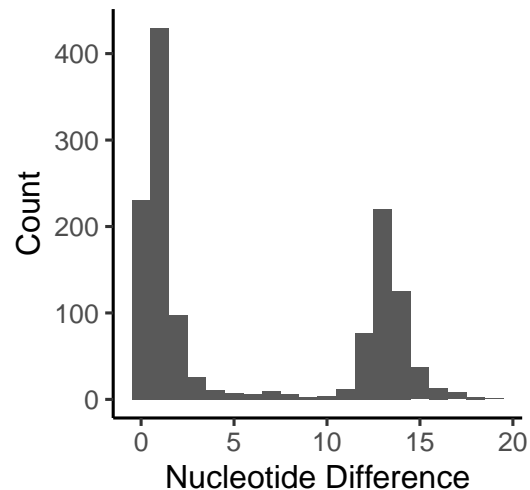
IGHV1-8*01

92 sequences assigned
15 (16.3%) exact matches, in which:
15 unique CDR3
5 unique J



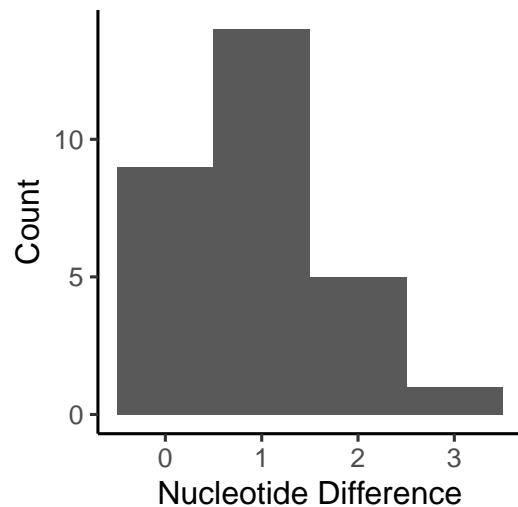
IGHV1-46*01

1330 sequences assigned
231 (17.4%) exact matches, in which:
159 unique CDR3
4 unique J



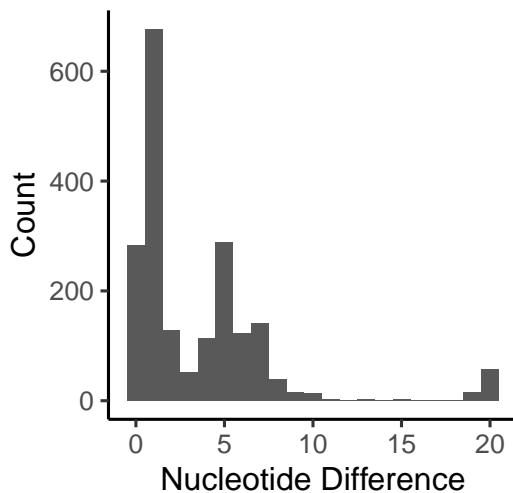
IGHV1-2*04

29 sequences assigned
9 (31%) exact matches, in which:
7 unique CDR3
3 unique J



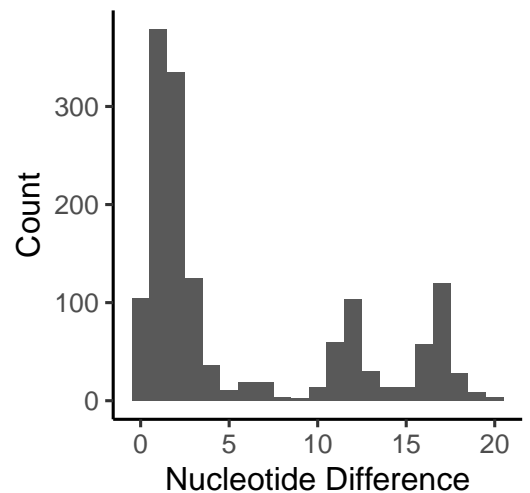
IGHV1-18*01

2421 sequences assigned
283 (11.7%) exact matches, in which:
184 unique CDR3
4 unique J



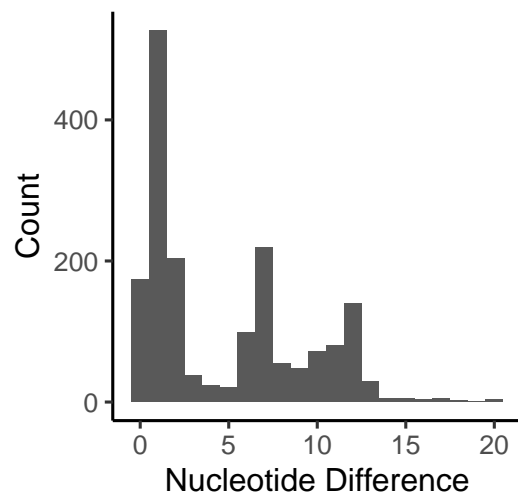
IGHV1-69*01_12_13

1586 sequences assigned
105 (6.6%) exact matches, in which:
66 unique CDR3
5 unique J



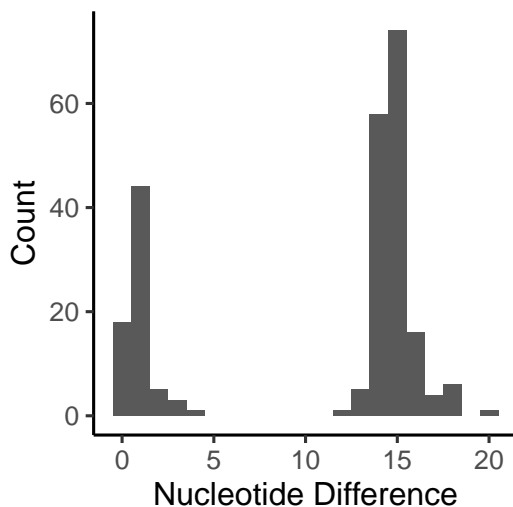
IGHV1-3*01_05

1748 sequences assigned
174 (10%) exact matches, in which:
108 unique CDR3
4 unique J



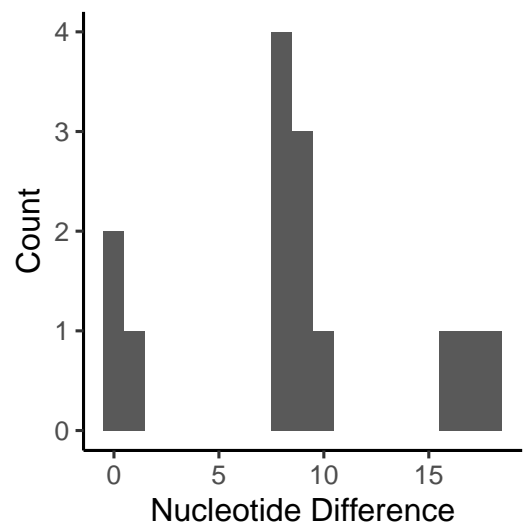
IGHV1-24*01

362 sequences assigned
18 (5%) exact matches, in which:
10 unique CDR3
2 unique J



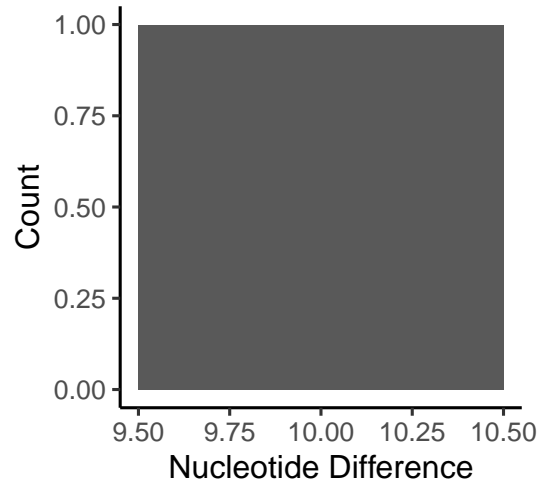
IGHV1-69*06_14

15 sequences assigned
2 (13.3%) exact matches, in which:
2 unique CDR3
2 unique J



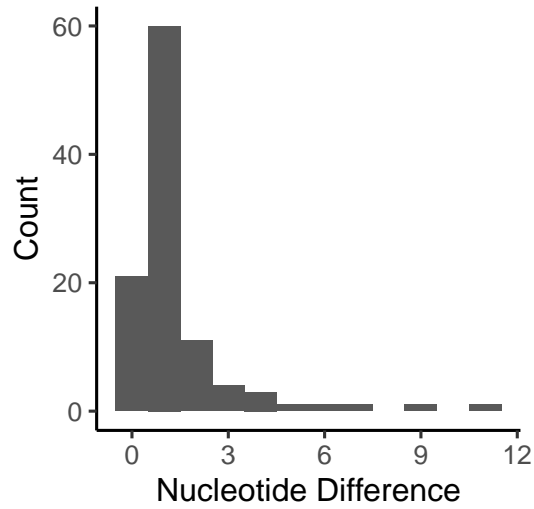
IGHV2-5*01

119 sequences assigned
No exact matches.



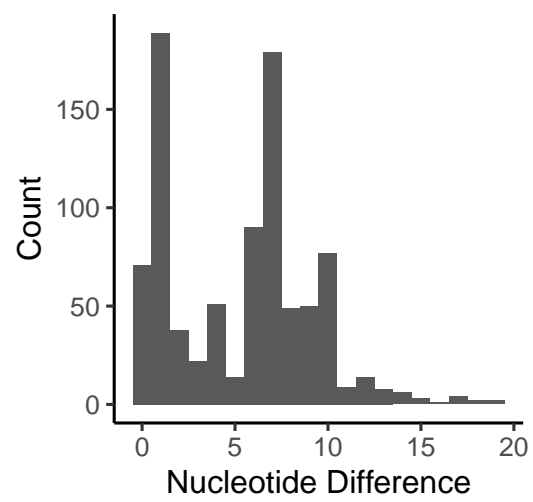
IGHV2-70*01

104 sequences assigned
21 (20.2%) exact matches, in which:
12 unique CDR3
2 unique J



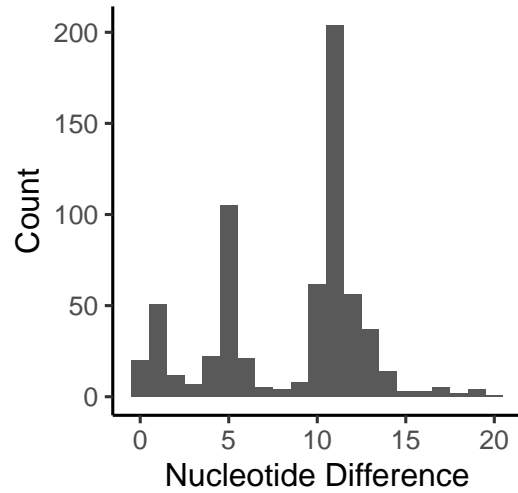
IGHV3-7*01

883 sequences assigned
71 (8%) exact matches, in which:
42 unique CDR3
2 unique J



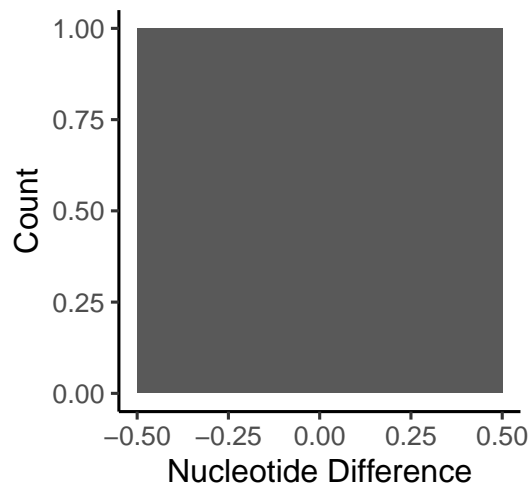
IGHV2-5*02

649 sequences assigned
20 (3.1%) exact matches, in which:
15 unique CDR3
2 unique J



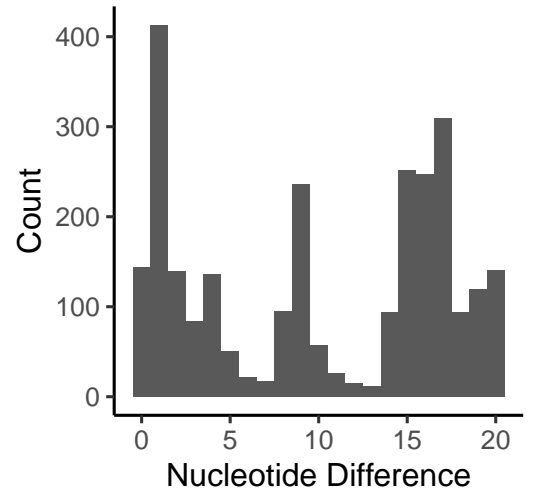
IGHV2-70*02

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



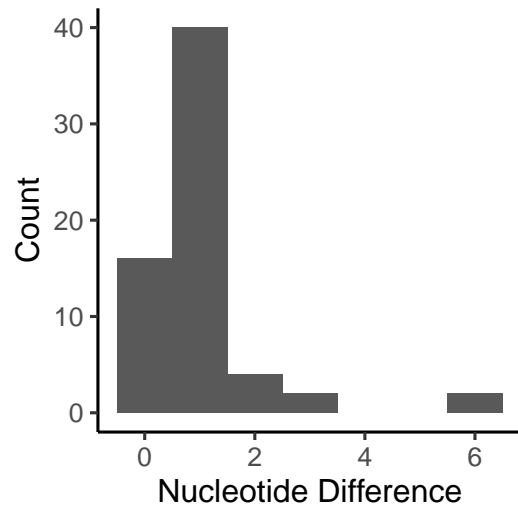
IGHV3-7*03

2953 sequences assigned
144 (4.9%) exact matches, in which:
68 unique CDR3
4 unique J



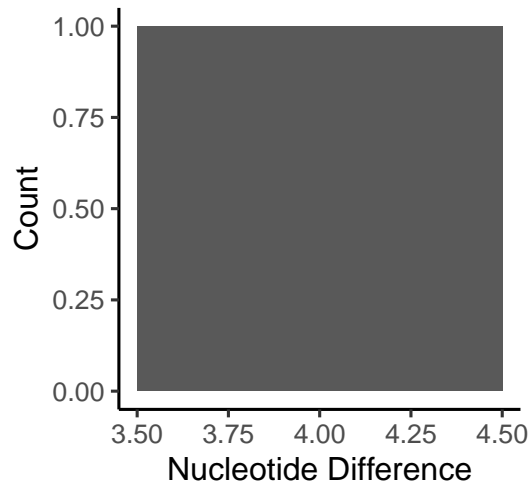
IGHV2-26*01

64 sequences assigned
16 (25%) exact matches, in which:
7 unique CDR3
2 unique J



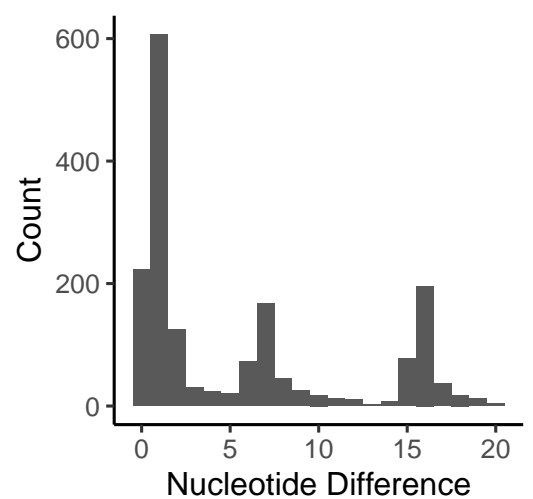
IGHV2-70*12

1 sequences assigned
No exact matches.



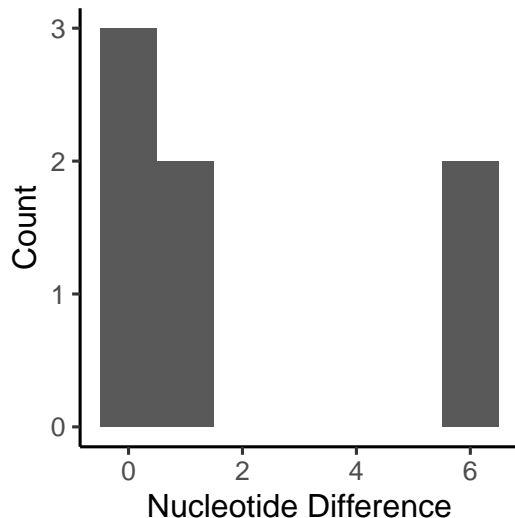
IGHV3-9*01

1745 sequences assigned
223 (12.8%) exact matches, in which:
102 unique CDR3
4 unique J



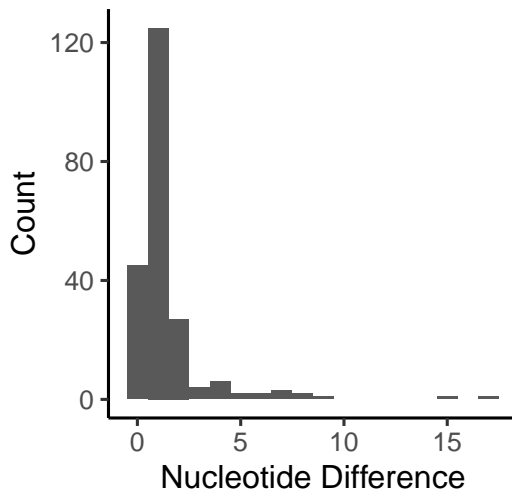
IGHV3-11*01

141 sequences assigned
3 (2.1%) exact matches, in which:
2 unique CDR3
2 unique J



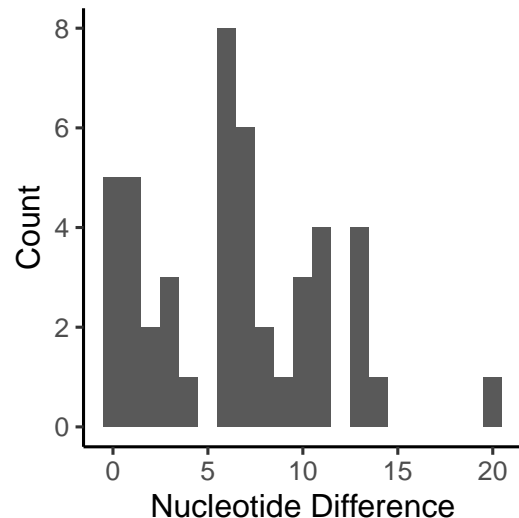
IGHV3-13*01

596 sequences assigned
45 (7.6%) exact matches, in which:
19 unique CDR3
2 unique J



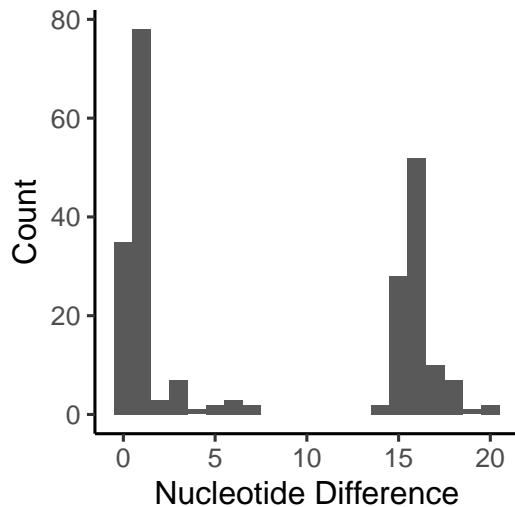
IGHV3-21*04

48 sequences assigned
5 (10.4%) exact matches, in which:
4 unique CDR3
4 unique J



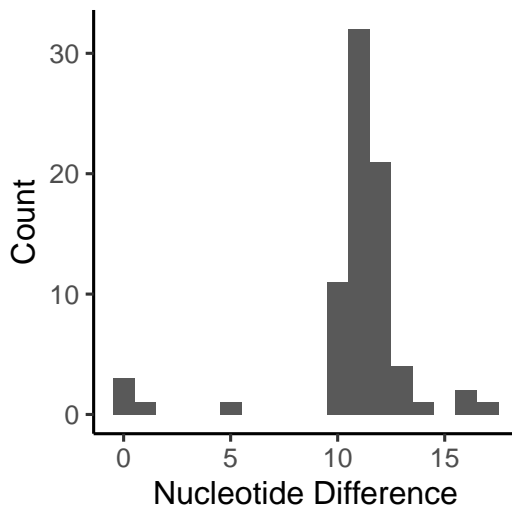
IGHV3-11*06

235 sequences assigned
35 (14.9%) exact matches, in which:
13 unique CDR3
1 unique J



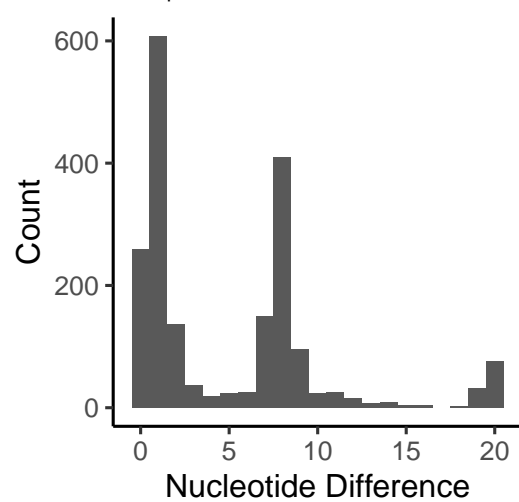
IGHV3-15*07

81 sequences assigned
3 (3.7%) exact matches, in which:
2 unique CDR3
1 unique J



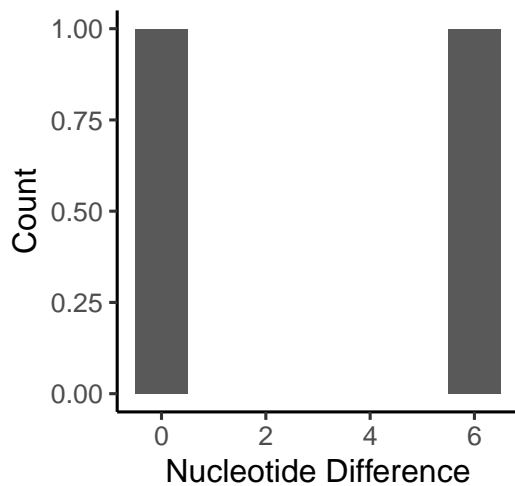
IGHV3-21*01_02

2092 sequences assigned
259 (12.4%) exact matches, in which:
141 unique CDR3
4 unique J



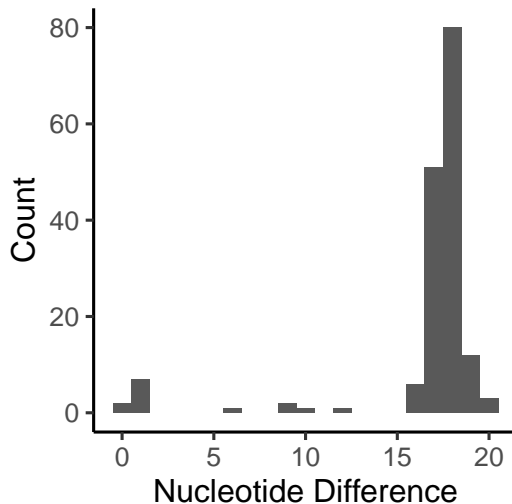
IGHV3-11*03_05

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



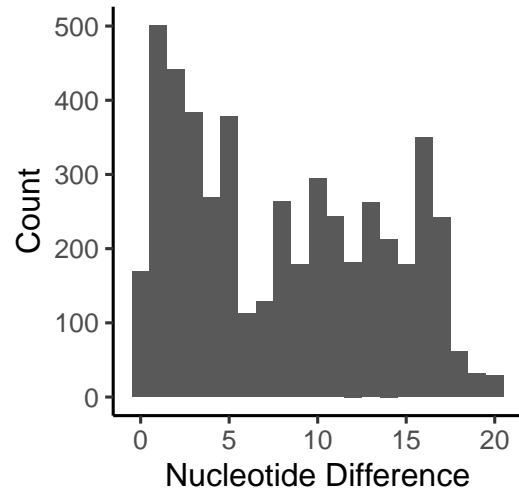
IGHV3-15*01_02

168 sequences assigned
2 (1.2%) exact matches, in which:
1 unique CDR3
1 unique J



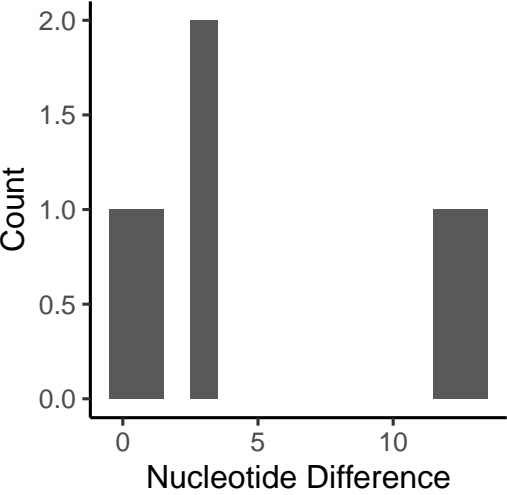
IGHV3-23*01_04

5710 sequences assigned
169 (3%) exact matches, in which:
89 unique CDR3
4 unique J



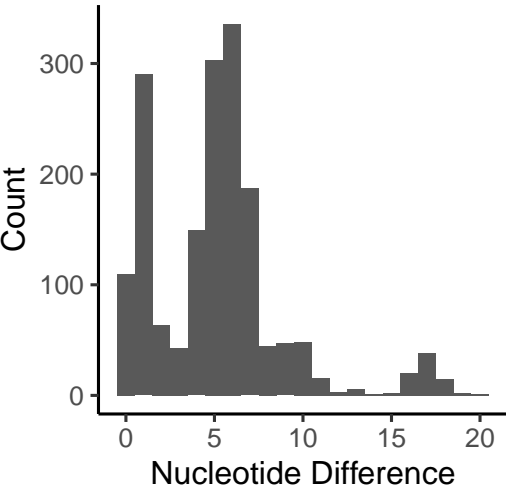
IGHV3-30-3*01

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



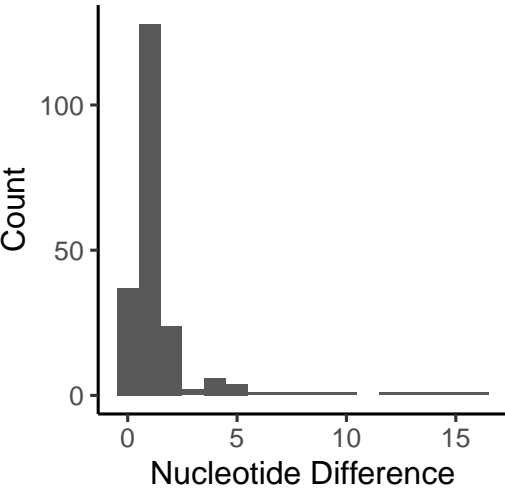
IGHV3-33*01

1729 sequences assigned
110 (6.4%) exact matches, in which:
60 unique CDR3
4 unique J



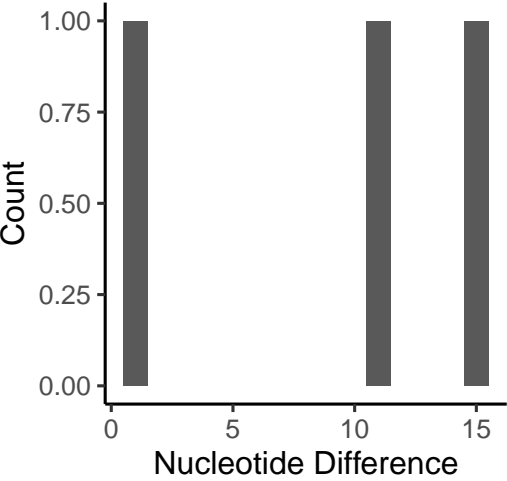
IGHV3-43*01

211 sequences assigned
37 (17.5%) exact matches, in which:
17 unique CDR3
3 unique J



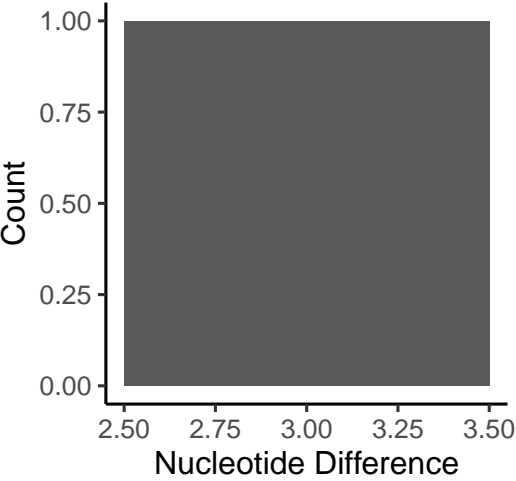
IGHV3-30-5*02

4 sequences assigned
No exact matches.



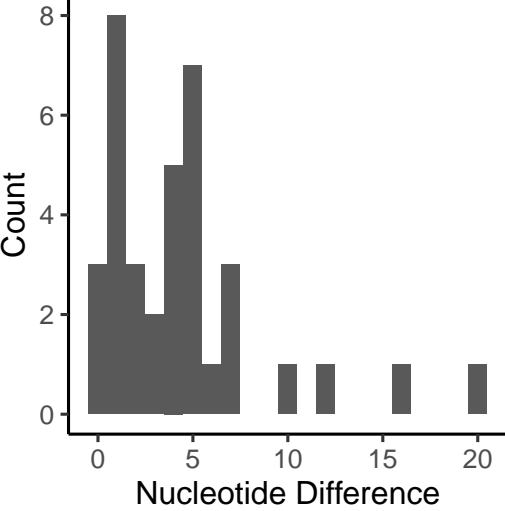
IGHV3-33*05

1 sequences assigned
No exact matches.



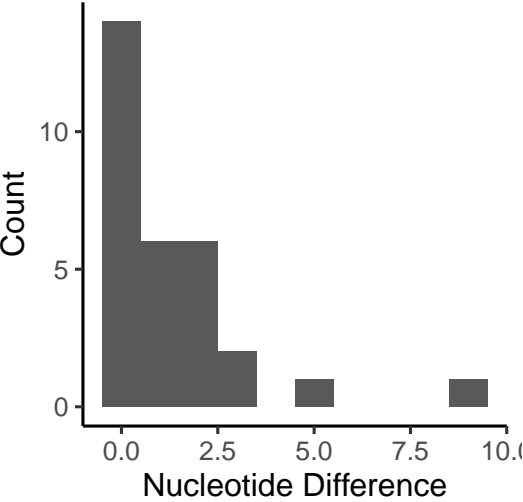
IGHV3-48*01

38 sequences assigned
3 (7.9%) exact matches, in which:
3 unique CDR3
2 unique J



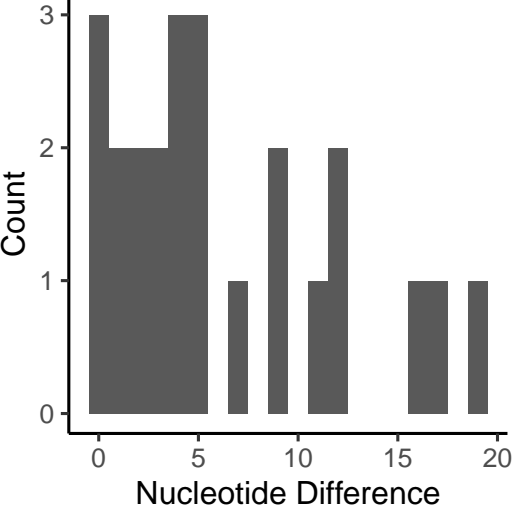
IGHV3-30*03

85 sequences assigned
14 (16.5%) exact matches, in which:
14 unique CDR3
4 unique J



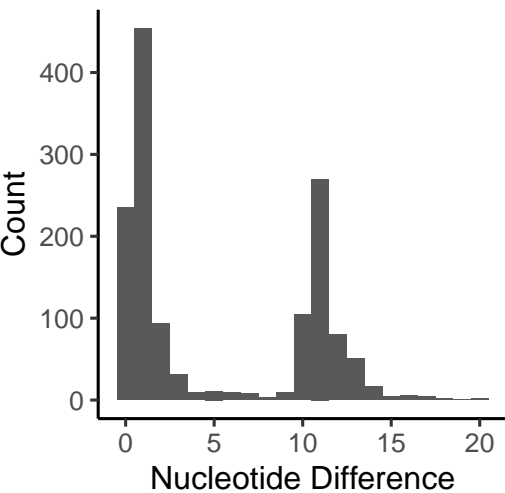
IGHV3-33*06

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



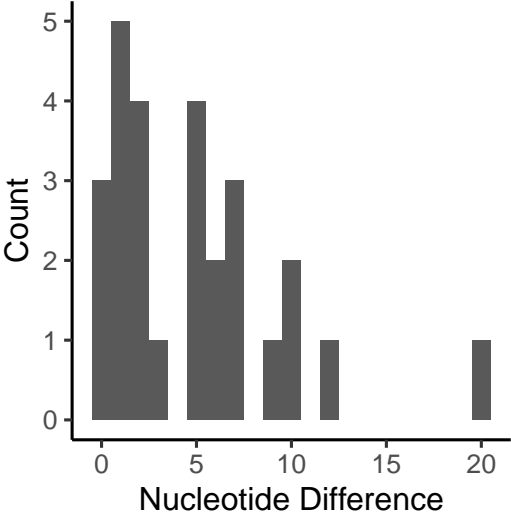
IGHV3-48*02

1628 sequences assigned
235 (14.4%) exact matches, in which:
118 unique CDR3
5 unique J



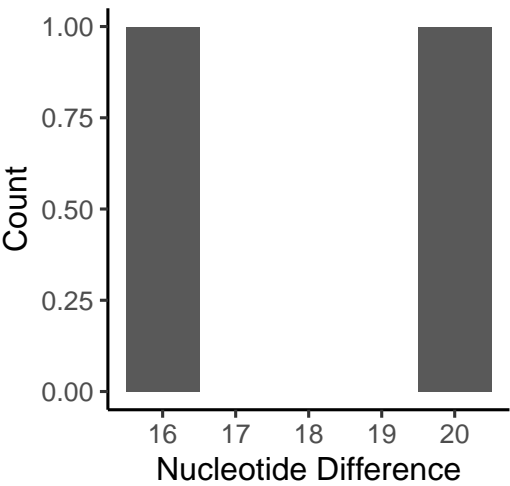
IGHV3-48*04

28 sequences assigned
3 (10.7%) exact matches, in which:
3 unique CDR3
2 unique J



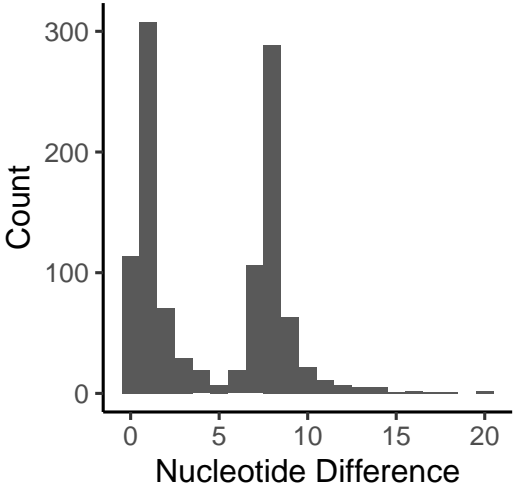
IGHV3-69-1*01

2 sequences assigned
No exact matches.



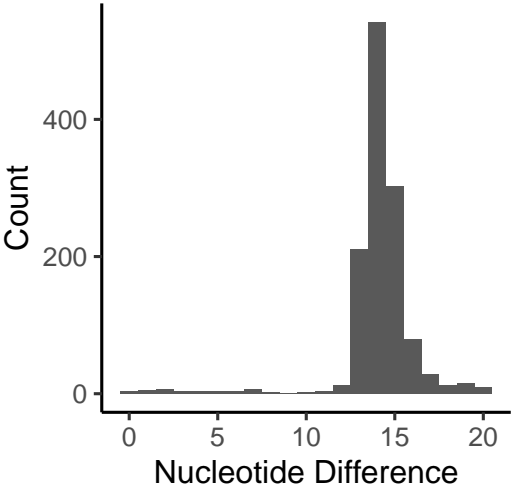
IGHV3-74*01_02

1150 sequences assigned
114 (9.9%) exact matches, in which:
56 unique CDR3
3 unique J



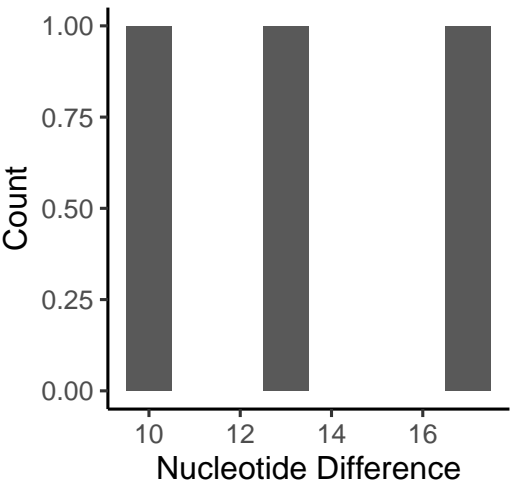
IGHV3-53*01_02

1287 sequences assigned
3 (0.2%) exact matches, in which:
3 unique CDR3
2 unique J



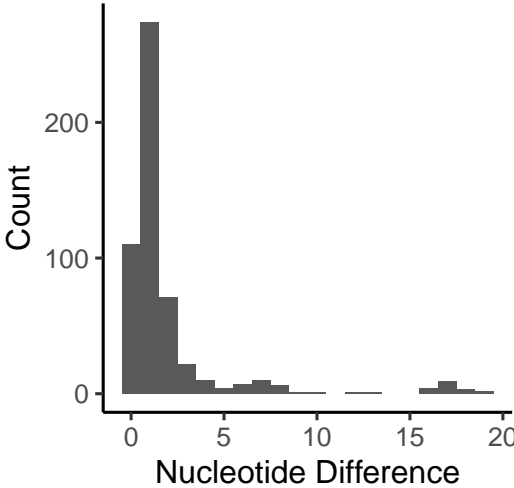
IGHV3-72*01

3 sequences assigned
No exact matches.



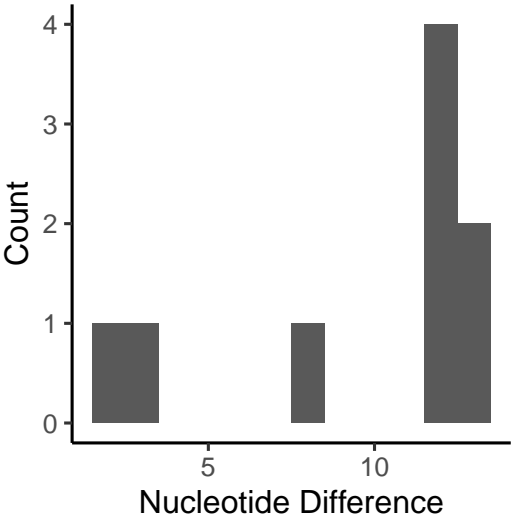
IGHV4-4*02_03

540 sequences assigned
110 (20.4%) exact matches, in which:
66 unique CDR3
4 unique J



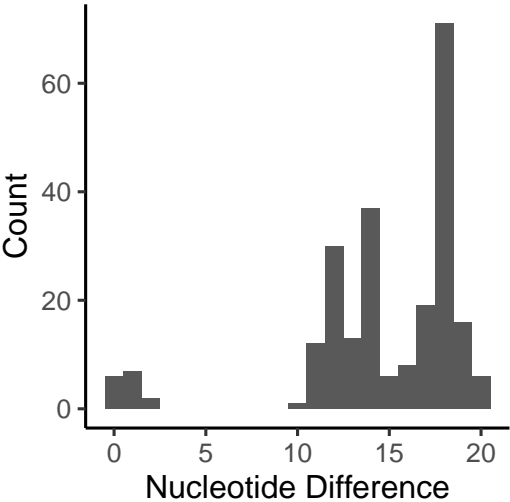
IGHV3-66*03

10 sequences assigned
No exact matches.



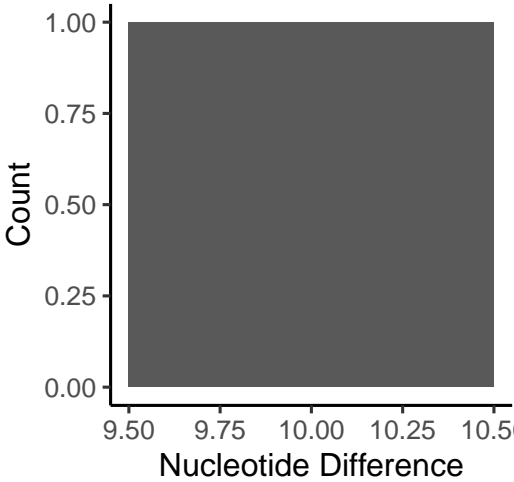
IGHV3-73*01_02

239 sequences assigned
6 (2.5%) exact matches, in which:
4 unique CDR3
2 unique J



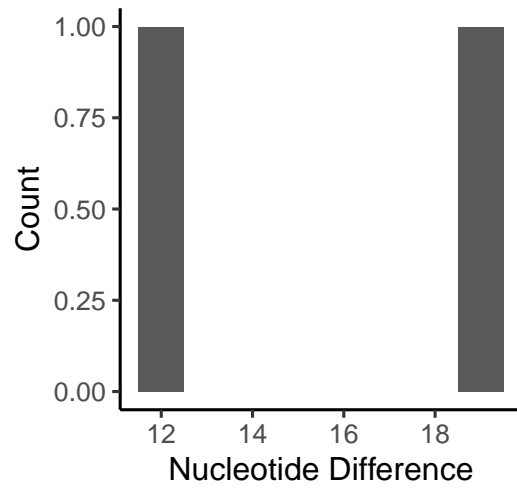
IGHV4-30-2*03

1 sequences assigned
No exact matches.



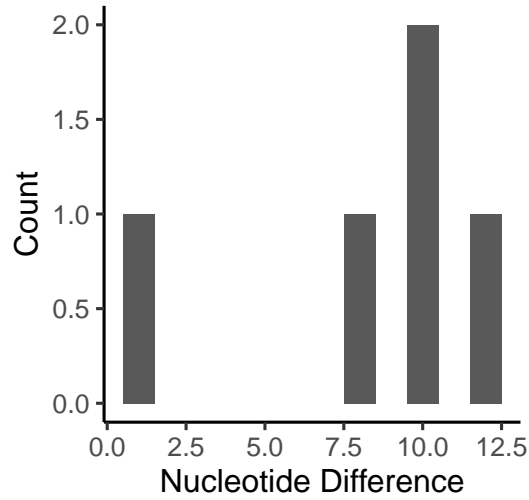
IGHV4-30-4*08

2 sequences assigned
No exact matches.



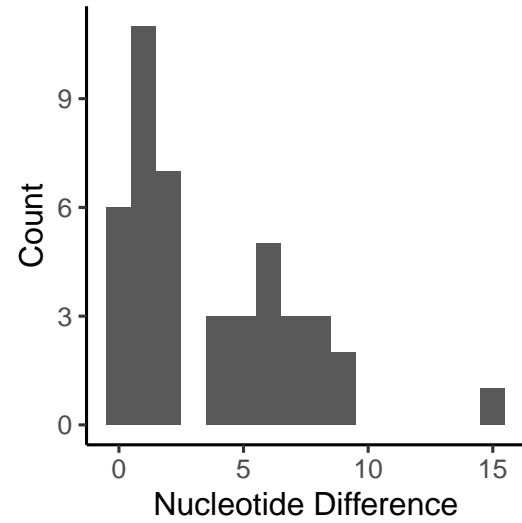
IGHV4-38-2*02

5 sequences assigned
No exact matches.



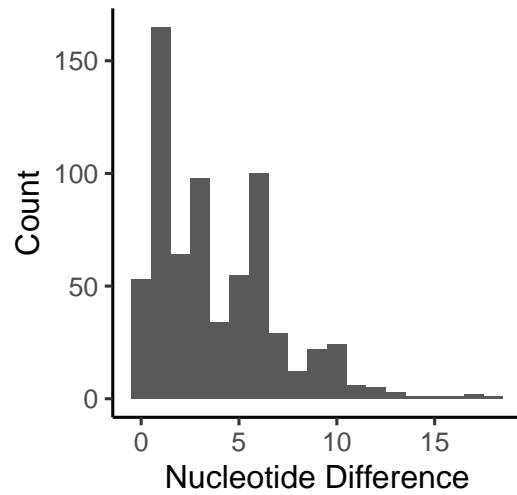
IGHV4-59*12

44 sequences assigned
6 (13.6%) exact matches, in which:
6 unique CDR3
3 unique J



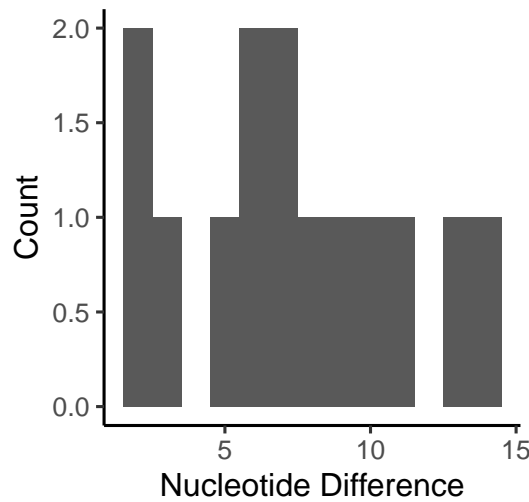
IGHV4-31*02

685 sequences assigned
53 (7.7%) exact matches, in which:
33 unique CDR3
3 unique J



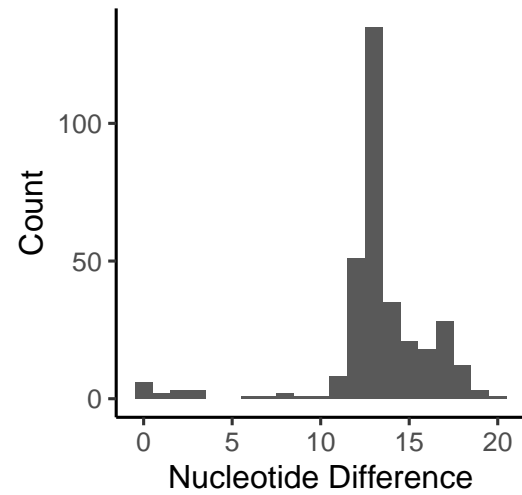
IGHV4-39*07

15 sequences assigned
No exact matches.



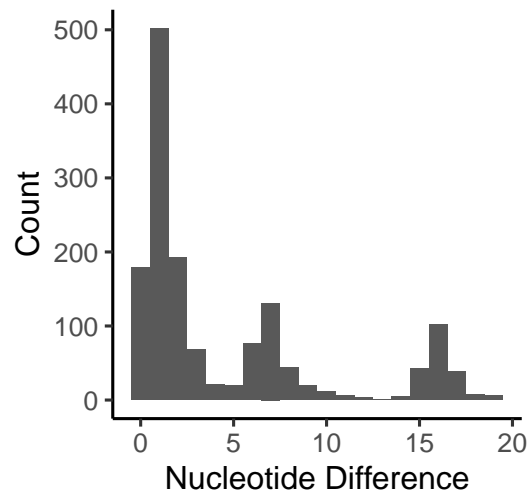
IGHV4-59*13

1014 sequences assigned
6 (0.6%) exact matches, in which:
6 unique CDR3
3 unique J



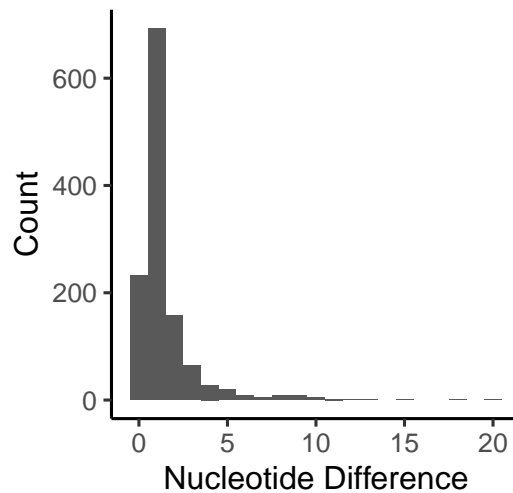
IGHV4-34*01_02

1488 sequences assigned
179 (12%) exact matches, in which:
117 unique CDR3
6 unique J



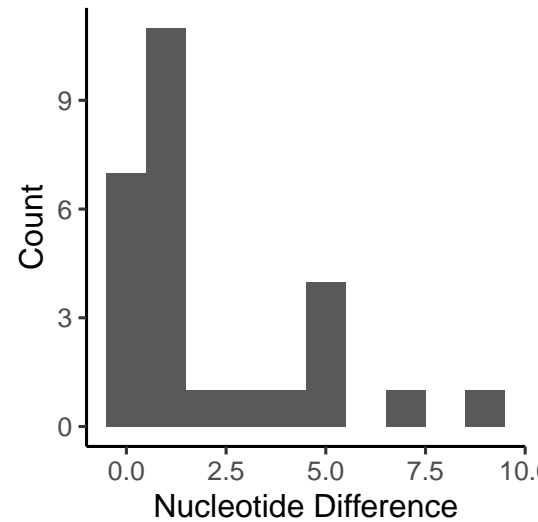
IGHV4-59*01_07

1245 sequences assigned
233 (18.7%) exact matches, in which:
143 unique CDR3
4 unique J



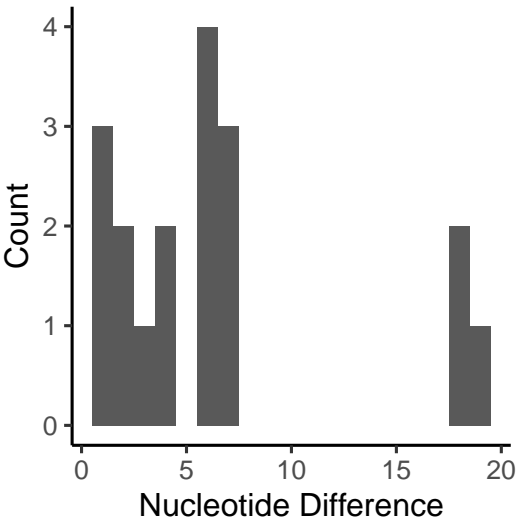
IGHV4-61*01

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



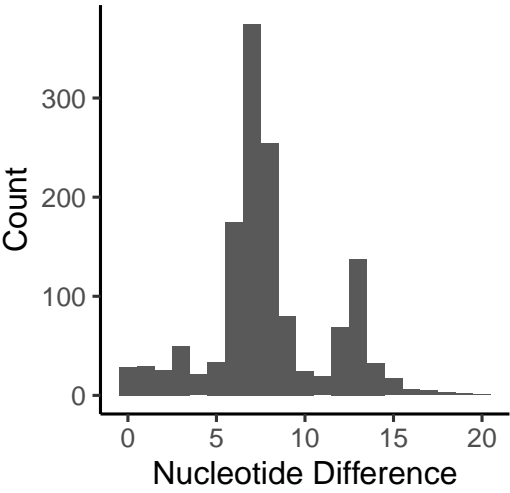
IGHV4–61*08

309 sequences assigned
No exact matches.



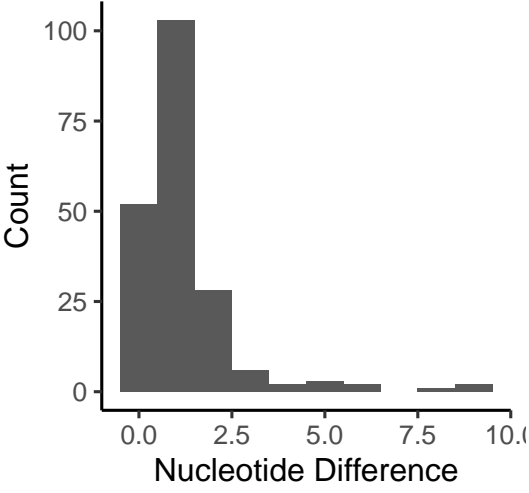
IGHV5–51*01_03

1776 sequences assigned
29 (1.6%) exact matches, in which:
16 unique CDR3
4 unique J



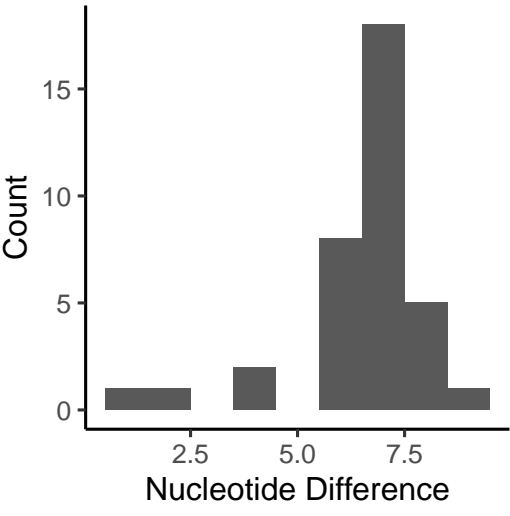
IGHV5–10–1*01_03

442 sequences assigned
52 (11.8%) exact matches, in which:
29 unique CDR3
3 unique J



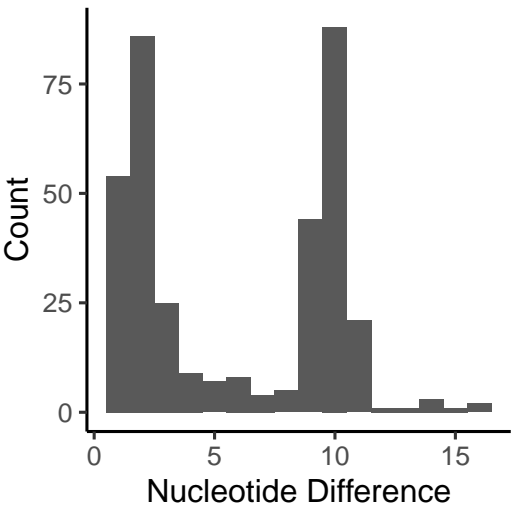
IGHV6–1*01_02

36 sequences assigned
No exact matches.



IGHV5–51*07

363 sequences assigned
No exact matches.





[illegible]