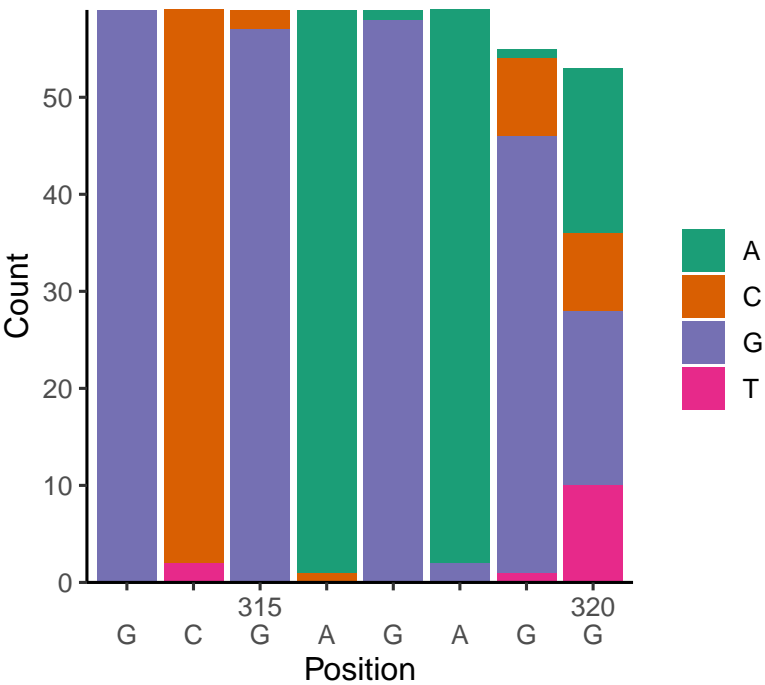


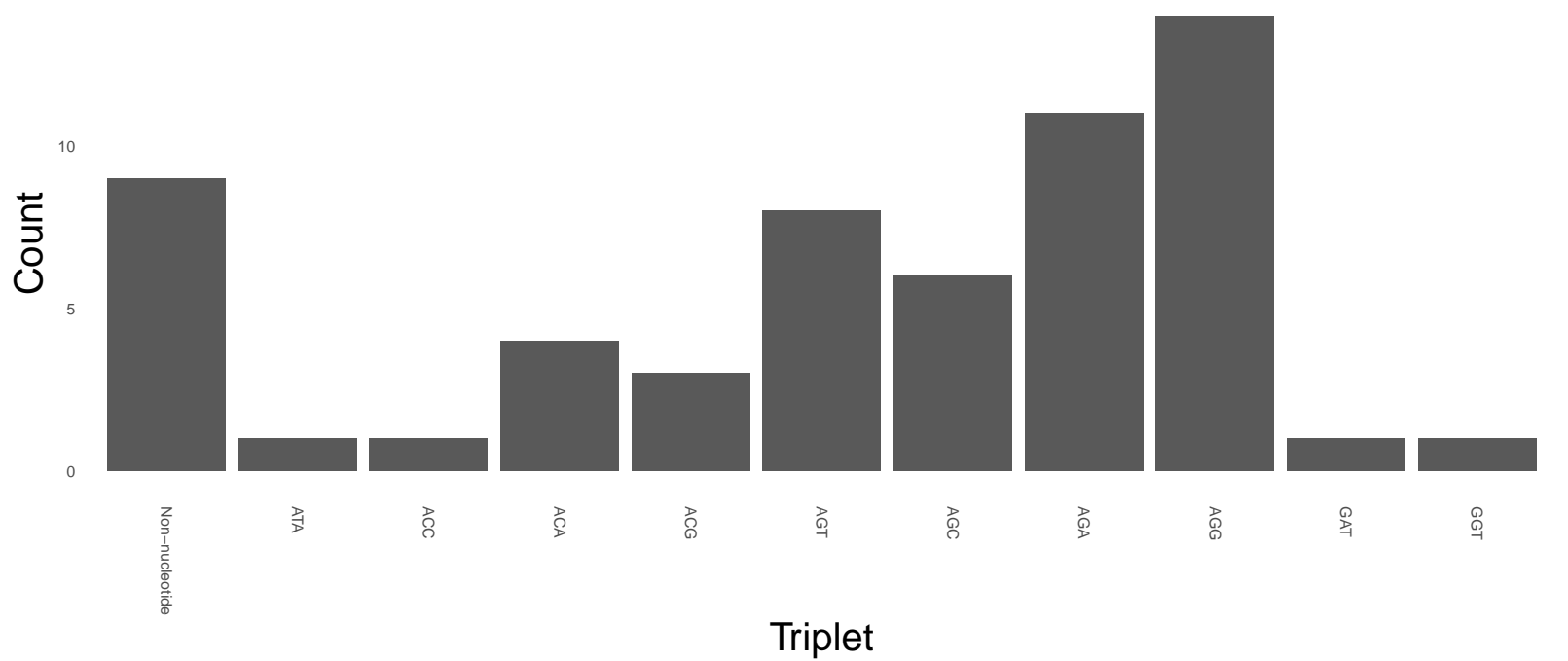
Gene IGHV4-34\*01\_T300C



Gene IGHV4-34\*01\_T300C

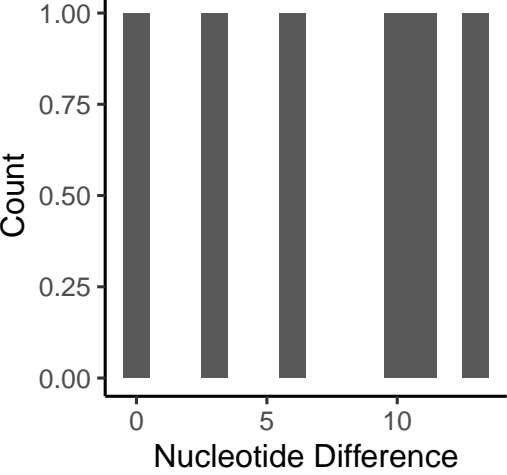


IGHV4-34\*01\_T300C- Final 3 nucleotides as a triplet



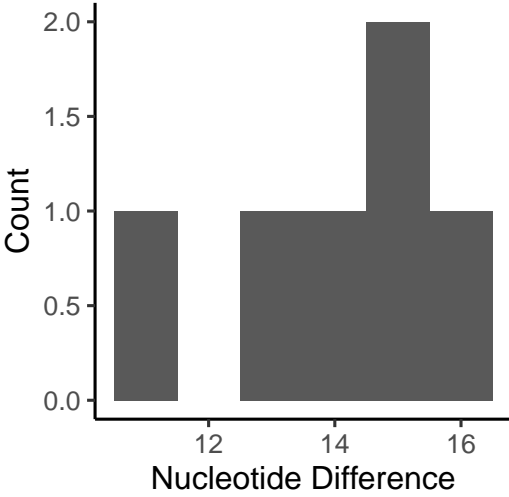
IGHV1-2\*02

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



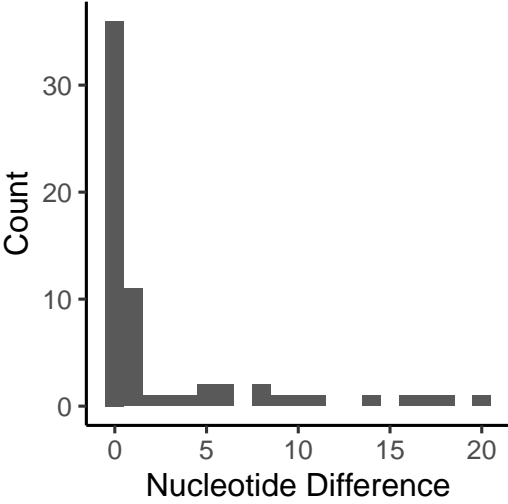
IGHV1-8\*02

6 sequences assigned  
No exact matches.



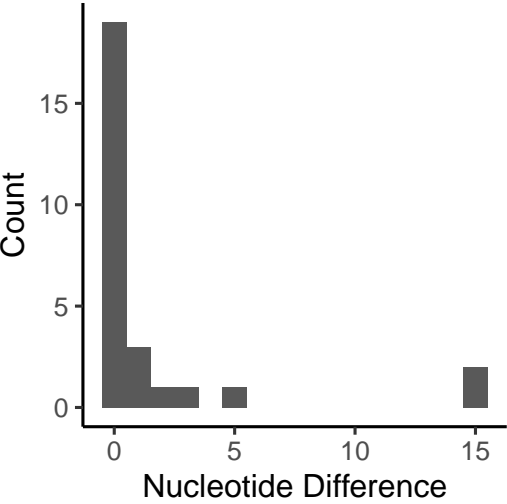
IGHV1-24\*01

64 sequences assigned  
36 (56.2%) exact matches, in which:  
29 unique CDR3  
4 unique J



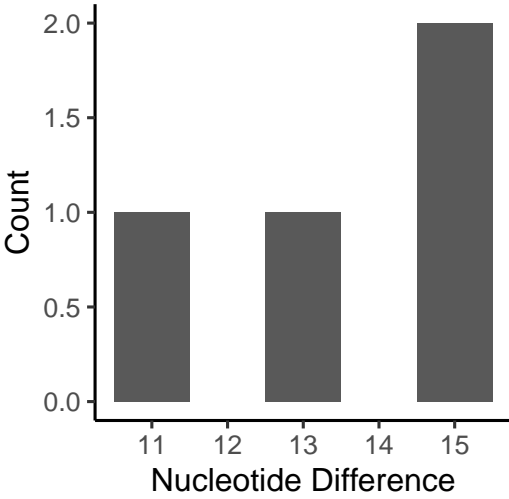
IGHV1-2\*04

27 sequences assigned  
19 (70.4%) exact matches, in which:  
19 unique CDR3  
5 unique J



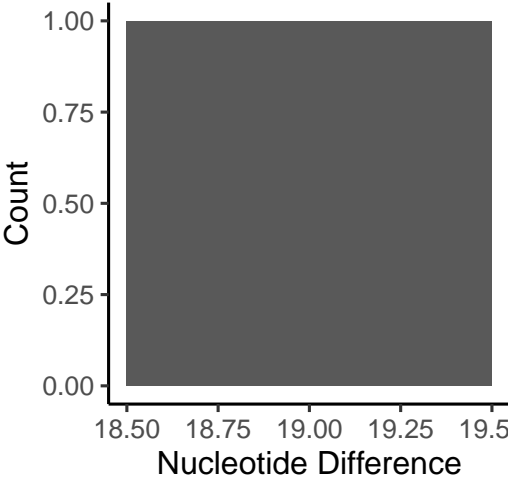
IGHV1-8\*03

4 sequences assigned  
No exact matches.



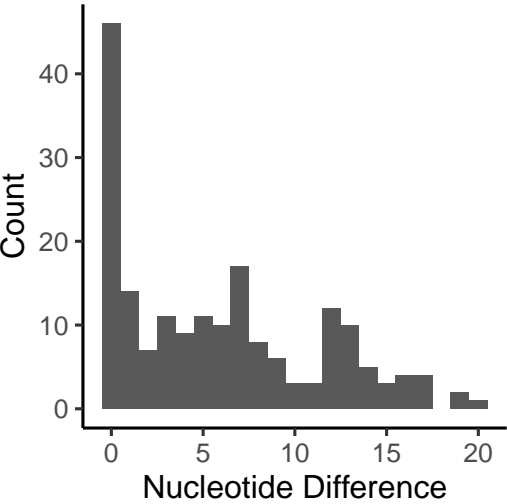
IGHV1-45\*02

1 sequences assigned  
No exact matches.



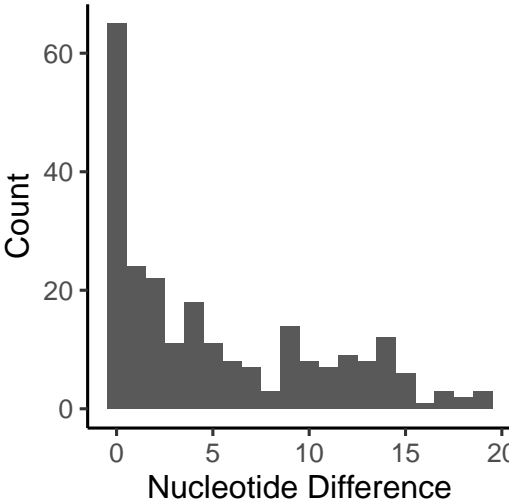
IGHV1-3\*01

196 sequences assigned  
46 (23.5%) exact matches, in which:  
44 unique CDR3  
4 unique J



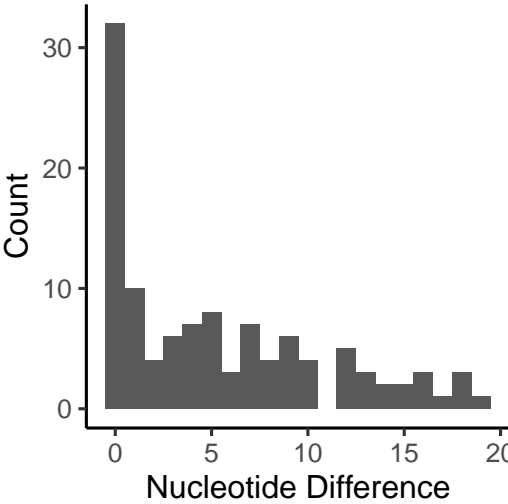
IGHV1-18\*01

258 sequences assigned  
65 (25.2%) exact matches, in which:  
64 unique CDR3  
5 unique J



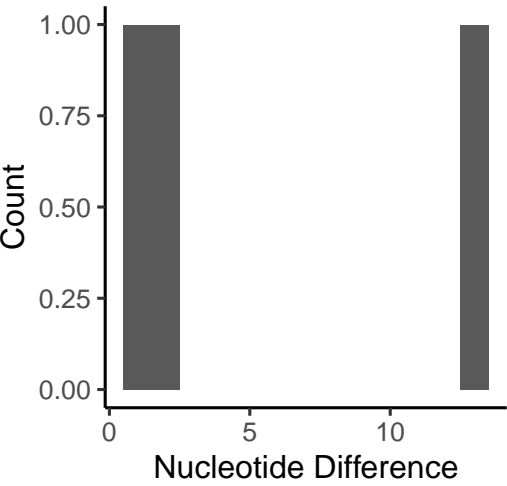
IGHV1-46\*01

117 sequences assigned  
32 (27.4%) exact matches, in which:  
32 unique CDR3  
5 unique J



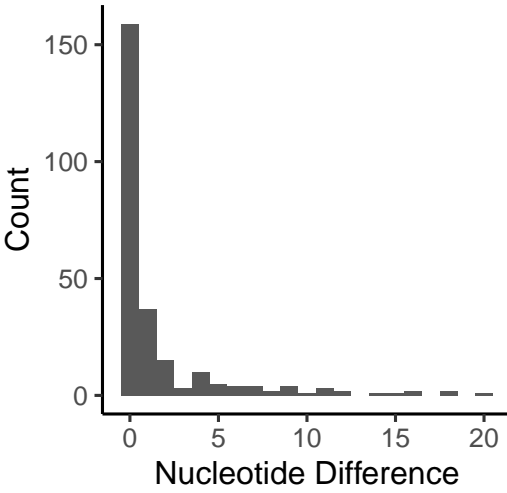
IGHV1-58\*01

3 sequences assigned  
No exact matches.



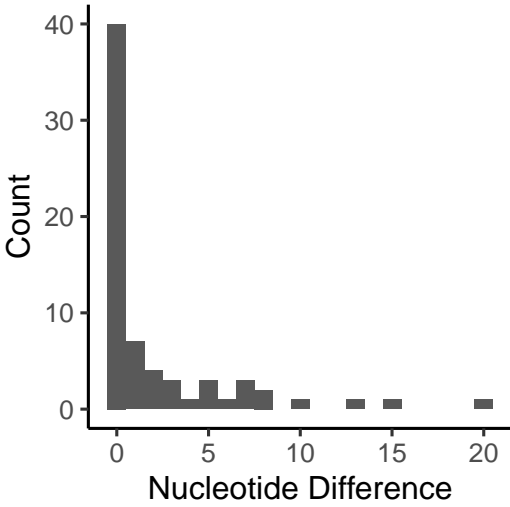
IGHV1-69\*01

261 sequences assigned  
159 (60.9%) exact matches, in which:  
158 unique CDR3  
6 unique J



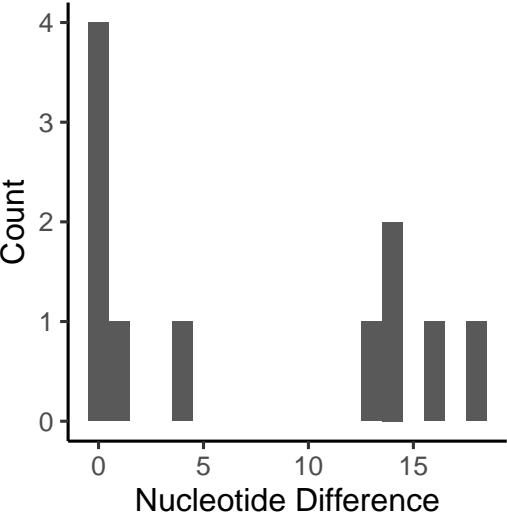
IGHV2-5\*01

70 sequences assigned  
40 (57.1%) exact matches, in which:  
40 unique CDR3  
5 unique J



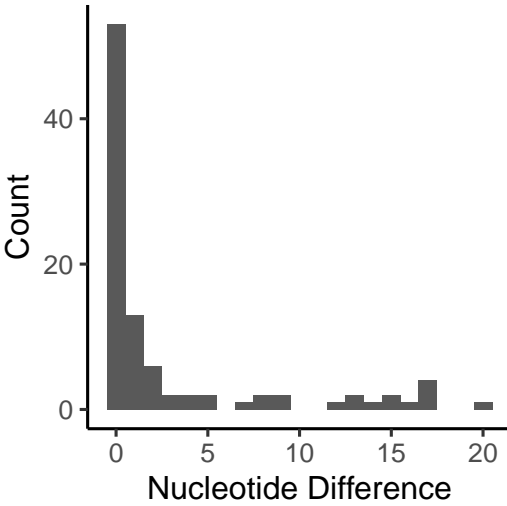
IGHV1-58\*02

11 sequences assigned  
4 (36.4%) exact matches, in which:  
4 unique CDR3  
3 unique J



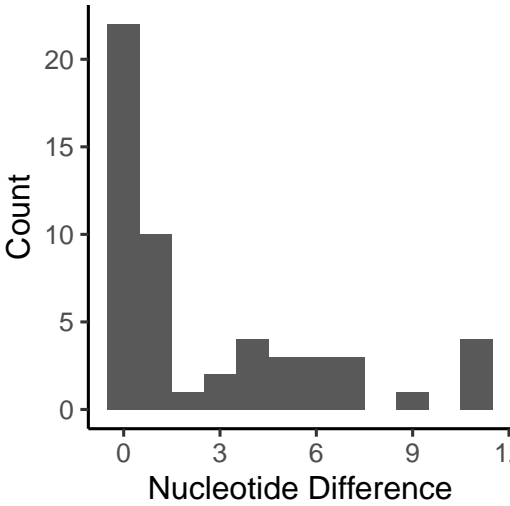
IGHV1-69\*04

102 sequences assigned  
53 (52%) exact matches, in which:  
51 unique CDR3  
4 unique J



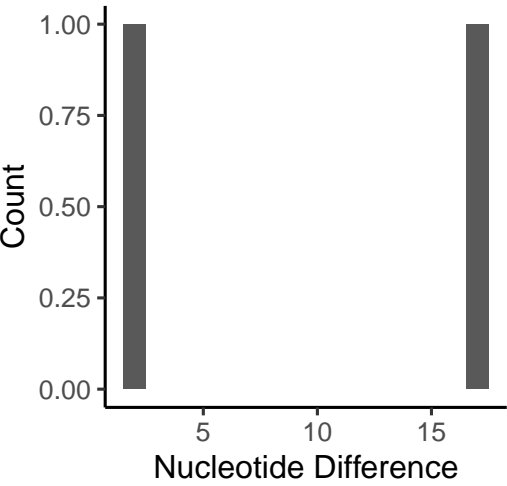
IGHV2-5\*02

54 sequences assigned  
22 (40.7%) exact matches, in which:  
21 unique CDR3  
4 unique J



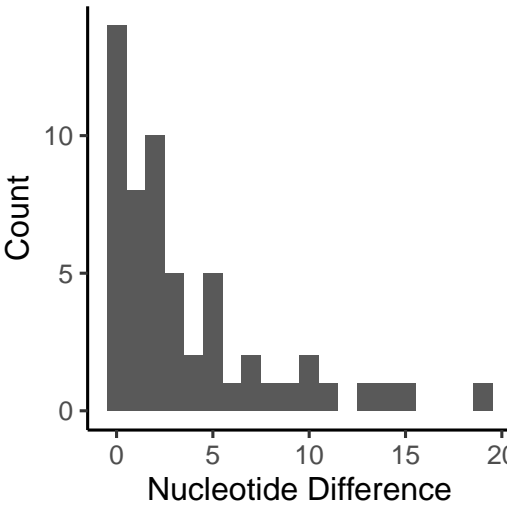
IGHV1-68\*02

2 sequences assigned  
No exact matches.



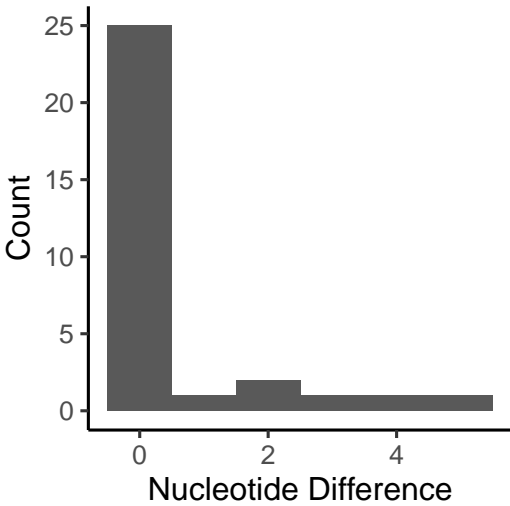
IGHV1-69\*06

61 sequences assigned  
14 (23%) exact matches, in which:  
14 unique CDR3  
3 unique J



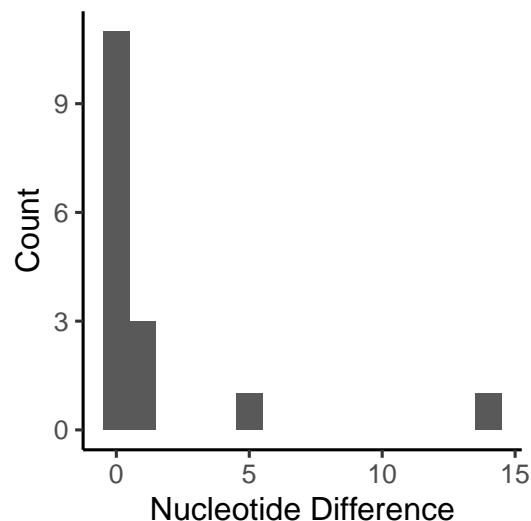
IGHV2-26\*01

31 sequences assigned  
25 (80.6%) exact matches, in which:  
24 unique CDR3  
5 unique J



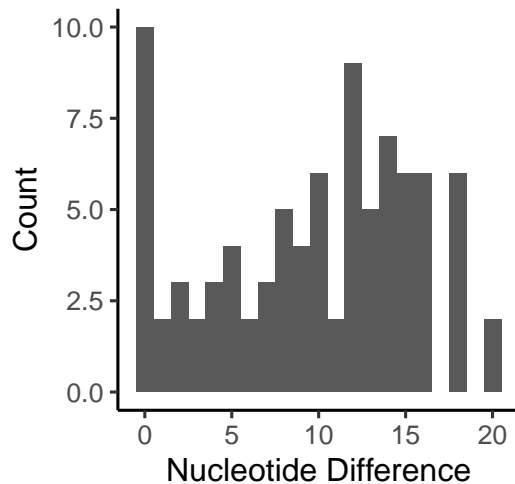
### IGHV2-70\*01

18 sequences assigned  
11 (61.1%) exact matches, in which:  
10 unique CDR3  
3 unique J



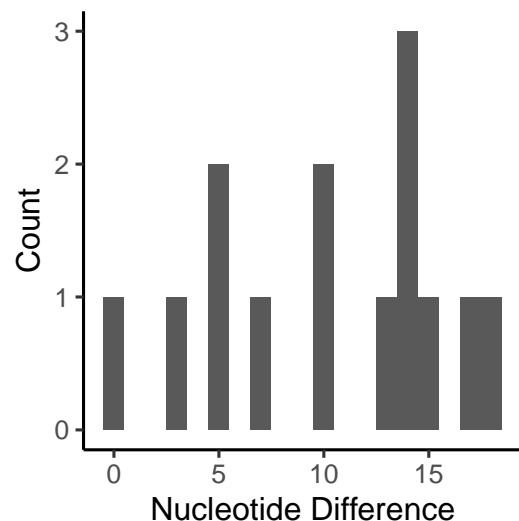
### IGHV3-7\*03

97 sequences assigned  
10 (10.3%) exact matches, in which:  
10 unique CDR3  
4 unique J



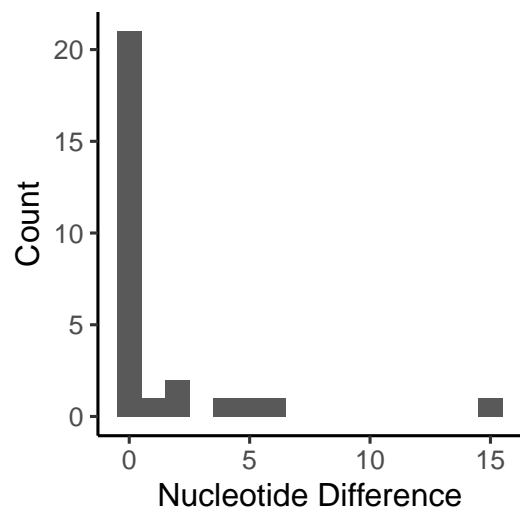
### IGHV3-11\*06

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



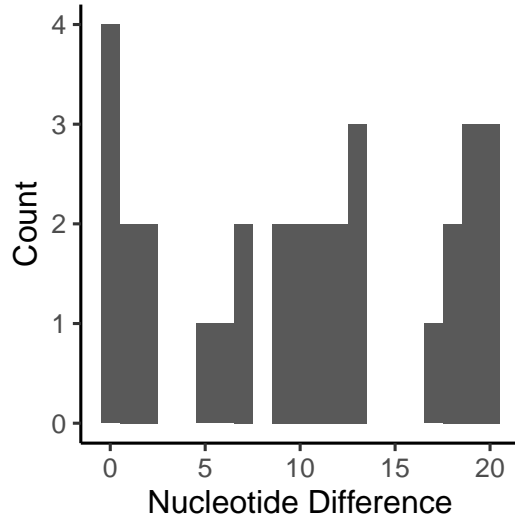
### IGHV2-70\*15

28 sequences assigned  
21 (75%) exact matches, in which:  
21 unique CDR3  
4 unique J



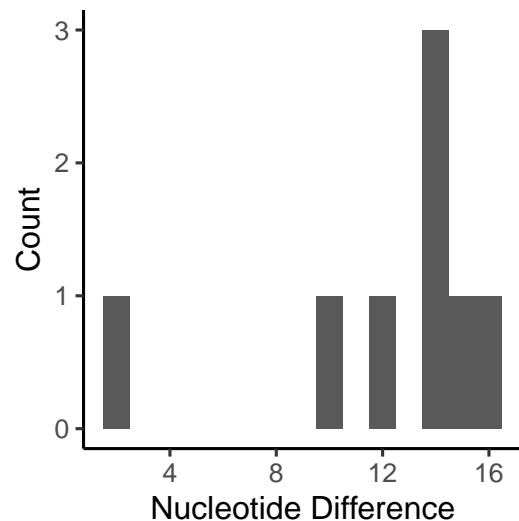
### IGHV3-7\*05

38 sequences assigned  
4 (10.5%) exact matches, in which:  
4 unique CDR3  
4 unique J



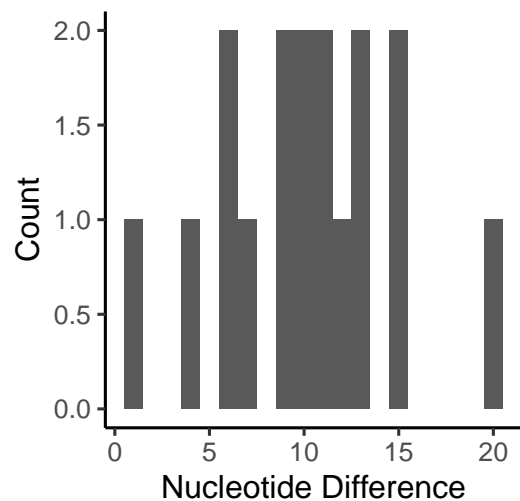
### IGHV3-13\*01

8 sequences assigned  
No exact matches.



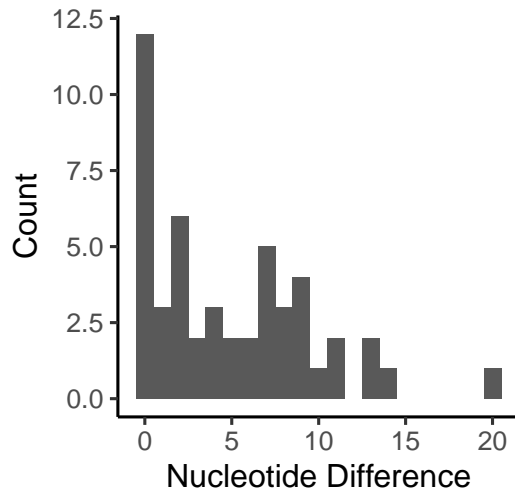
### IGHV3-7\*01

17 sequences assigned  
No exact matches.



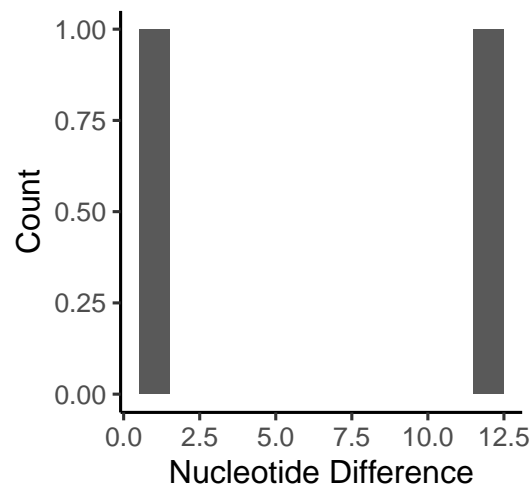
### IGHV3-11\*05

49 sequences assigned  
12 (24.5%) exact matches, in which:  
12 unique CDR3  
3 unique J



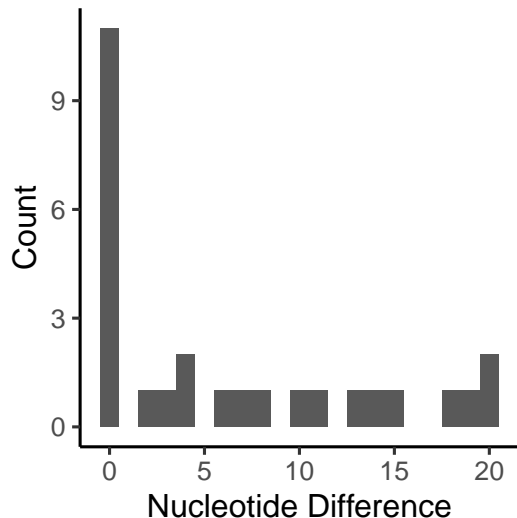
### IGHV3-13\*04

2 sequences assigned  
No exact matches.



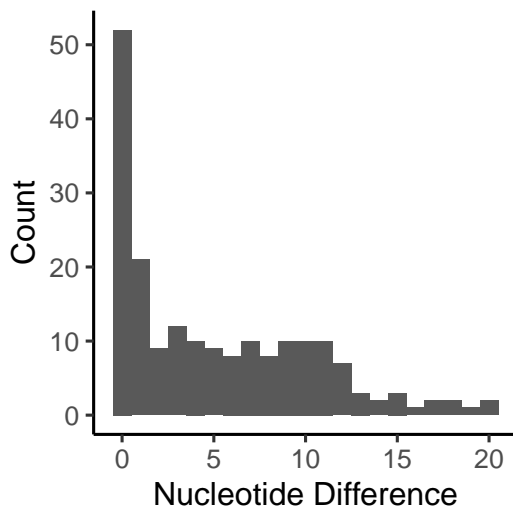
### IGHV3-15\*01

32 sequences assigned  
11 (34.4%) exact matches, in which:  
10 unique CDR3  
3 unique J



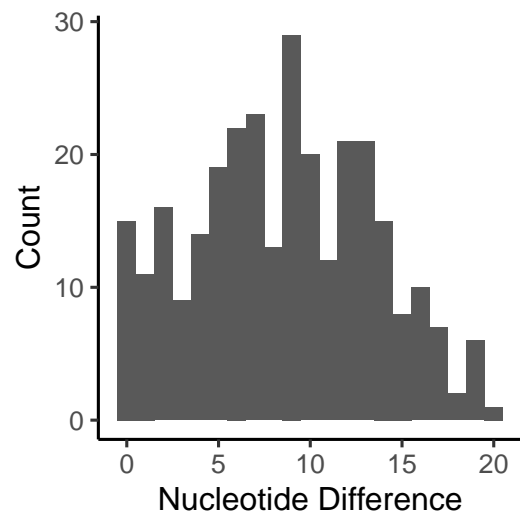
### IGHV3-21\*01

195 sequences assigned  
52 (26.7%) exact matches, in which:  
50 unique CDR3  
5 unique J



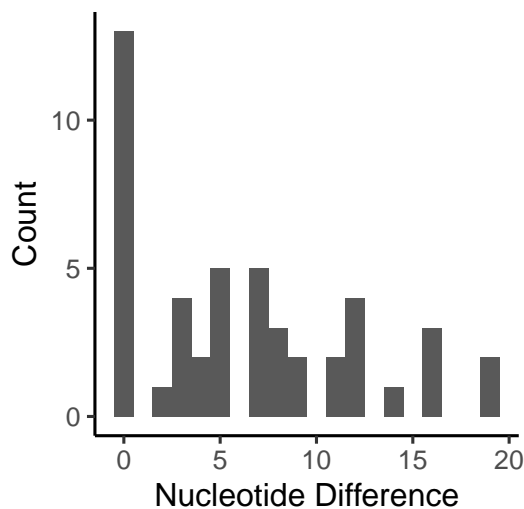
### IGHV3-23\*04

305 sequences assigned  
15 (4.9%) exact matches, in which:  
15 unique CDR3  
3 unique J



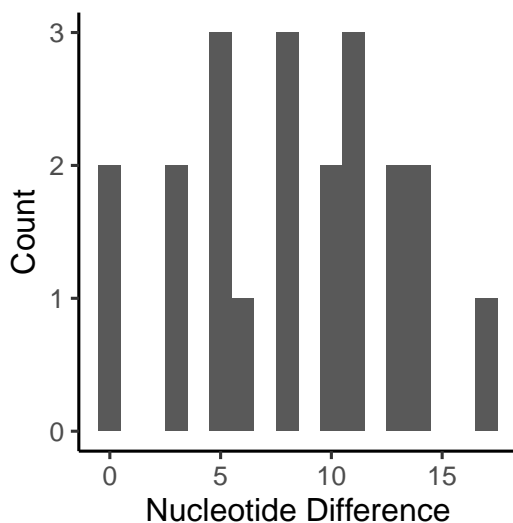
### IGHV3-15\*07

49 sequences assigned  
13 (26.5%) exact matches, in which:  
13 unique CDR3  
4 unique J



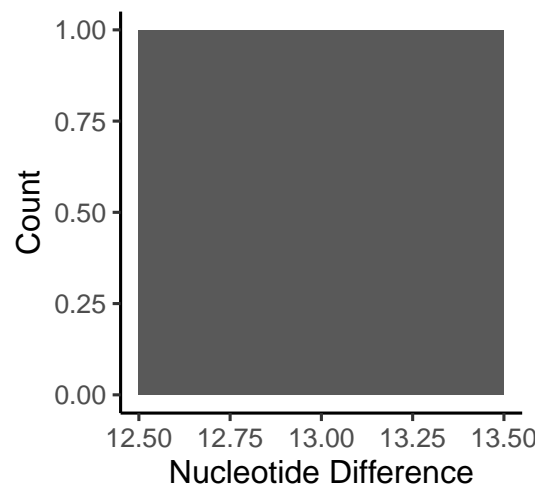
### IGHV3-21\*04

22 sequences assigned  
2 (9.1%) exact matches, in which:  
2 unique CDR3  
2 unique J



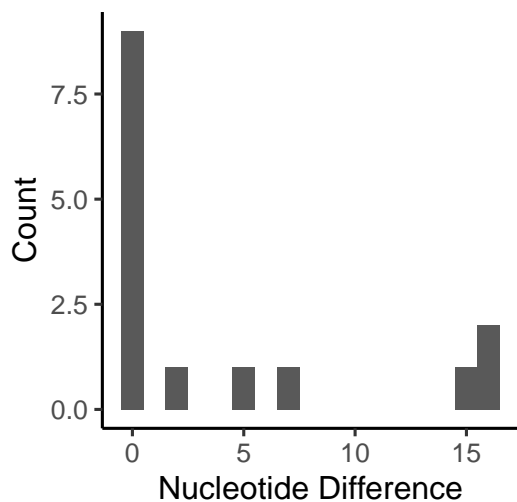
### IGHV3-30-3\*01

1 sequences assigned  
No exact matches.



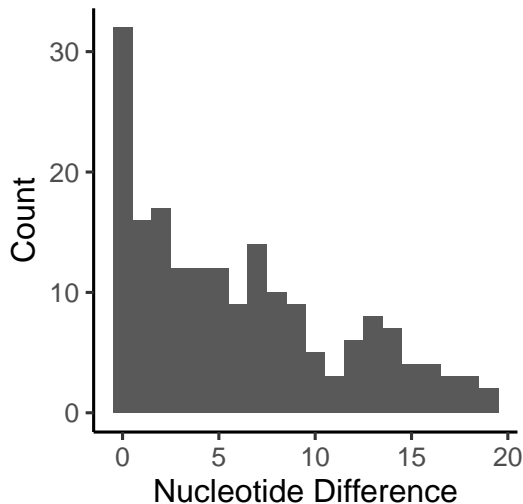
### IGHV3-20\*04

16 sequences assigned  
9 (56.2%) exact matches, in which:  
9 unique CDR3  
2 unique J



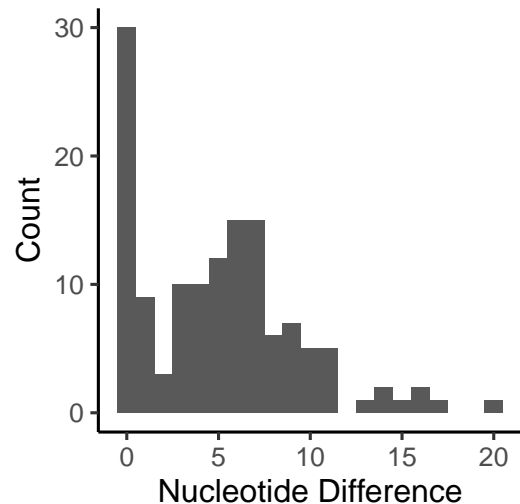
### IGHV3-23\*01

196 sequences assigned  
32 (16.3%) exact matches, in which:  
32 unique CDR3  
4 unique J



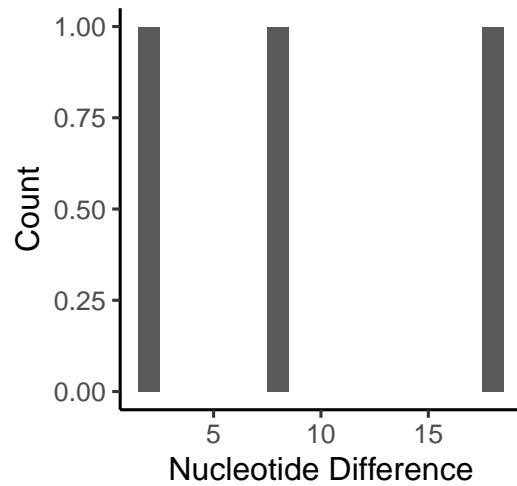
### IGHV3-30\*02

137 sequences assigned  
30 (21.9%) exact matches, in which:  
30 unique CDR3  
5 unique J



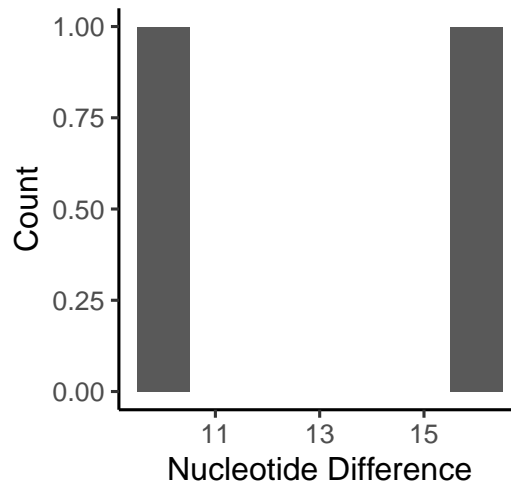
### IGHV3-30-3\*02

3 sequences assigned  
No exact matches.



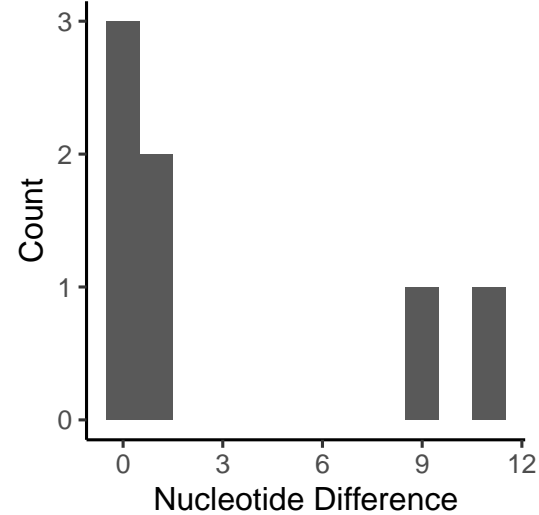
### IGHV3-33\*01

2 sequences assigned  
No exact matches.



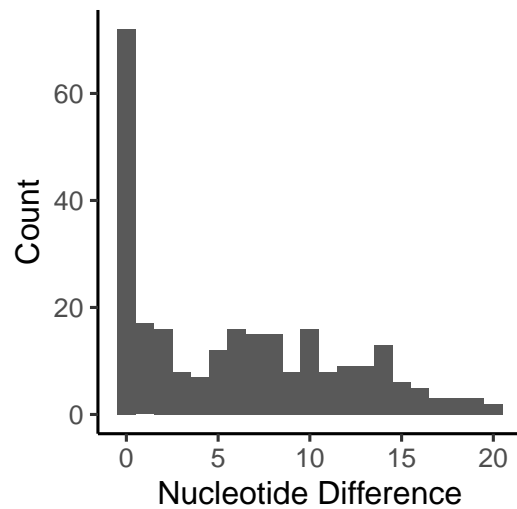
### IGHV3-43\*01

7 sequences assigned  
3 (42.9%) exact matches, in which:  
3 unique CDR3  
2 unique J



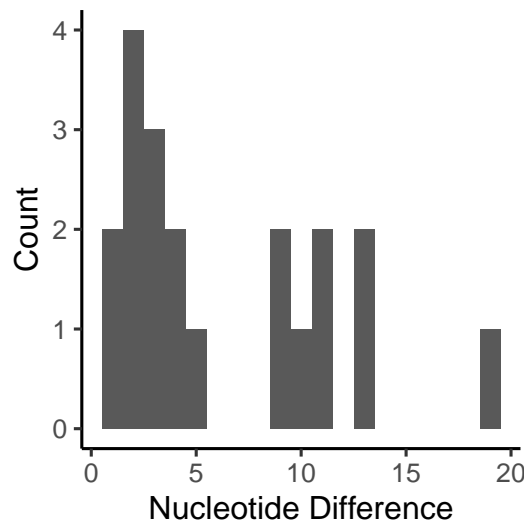
### IGHV3-30\*04

272 sequences assigned  
72 (26.5%) exact matches, in which:  
70 unique CDR3  
6 unique J



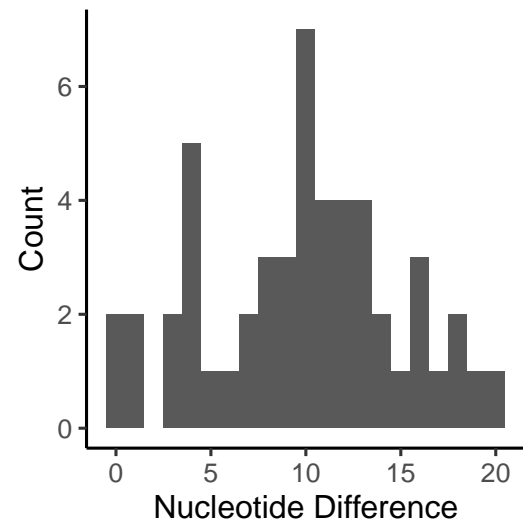
### IGHV3-33\*05

20 sequences assigned  
No exact matches.



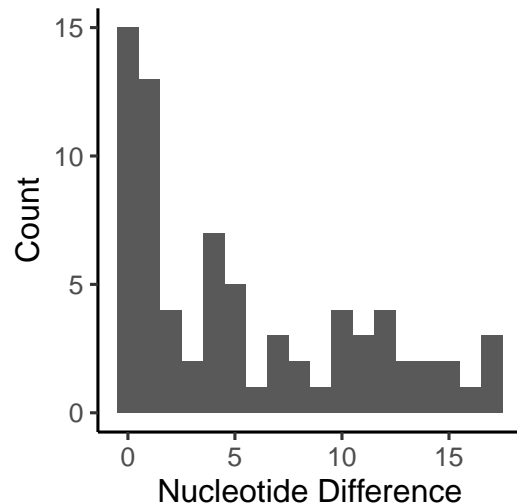
### IGHV3-48\*01

55 sequences assigned  
2 (3.6%) exact matches, in which:  
2 unique CDR3  
2 unique J



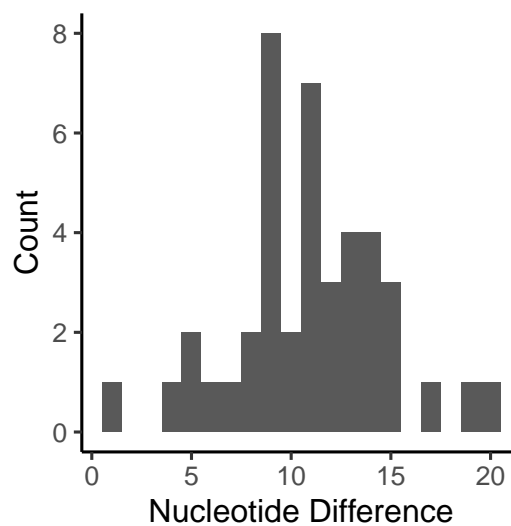
### IGHV3-30\*18

76 sequences assigned  
15 (19.7%) exact matches, in which:  
15 unique CDR3  
2 unique J



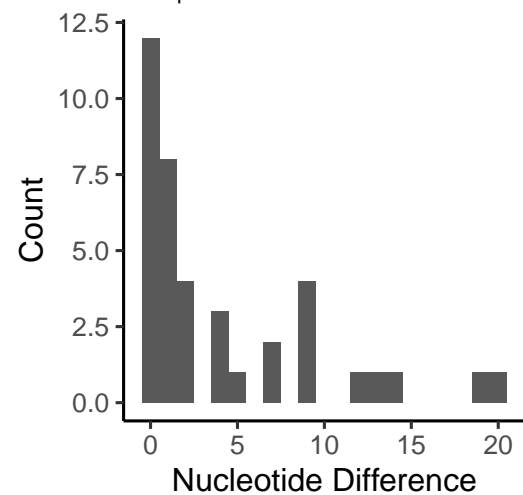
### IGHV3-33\*08

43 sequences assigned  
No exact matches.



### IGHV3-48\*02

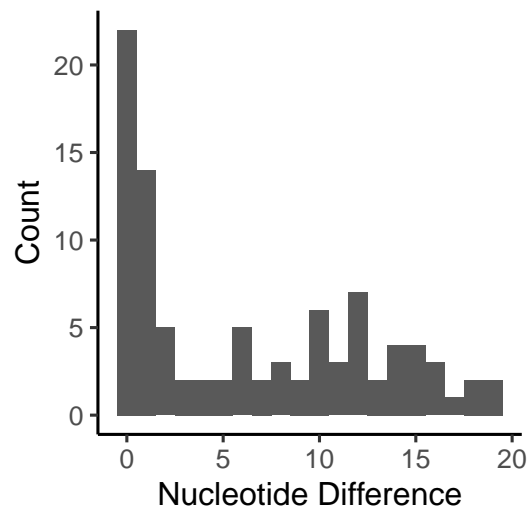
41 sequences assigned  
12 (29.3%) exact matches, in which:  
11 unique CDR3  
3 unique J





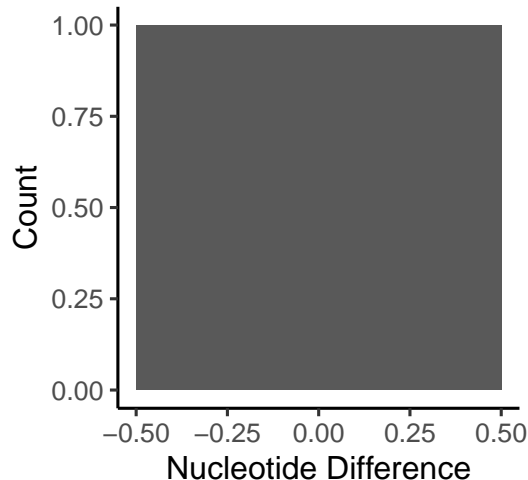
### IGHV3-48\*04

94 sequences assigned  
22 (23.4%) exact matches, in which:  
22 unique CDR3  
4 unique J



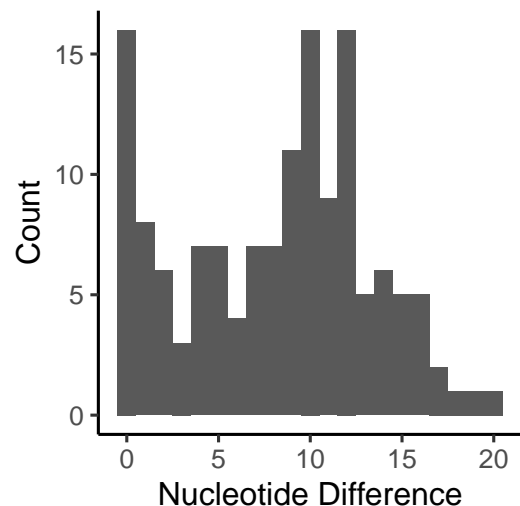
### IGHV3-52\*01

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



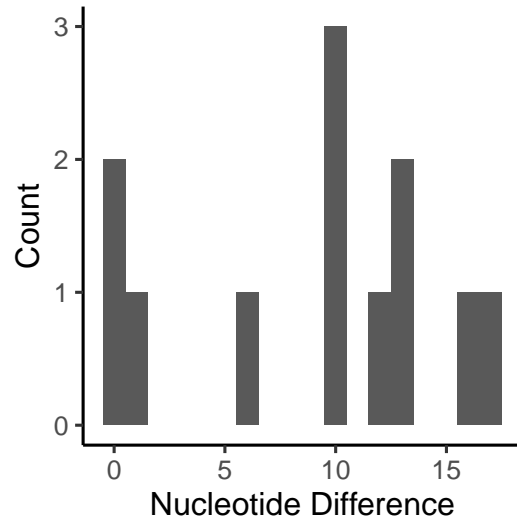
### IGHV3-66\*01

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



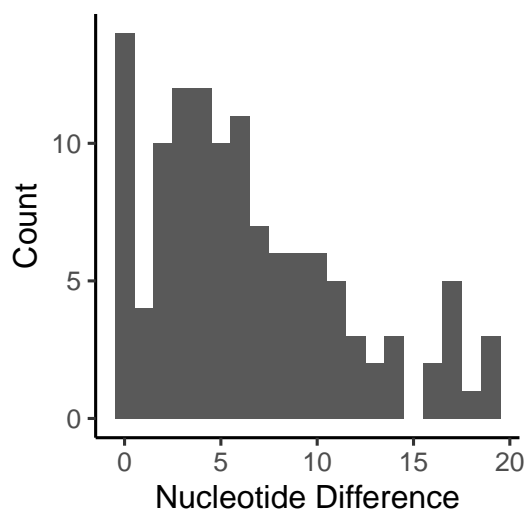
### IGHV3-49\*03

13 sequences assigned  
2 (15.4%) exact matches, in which:  
2 unique CDR3  
1 unique J



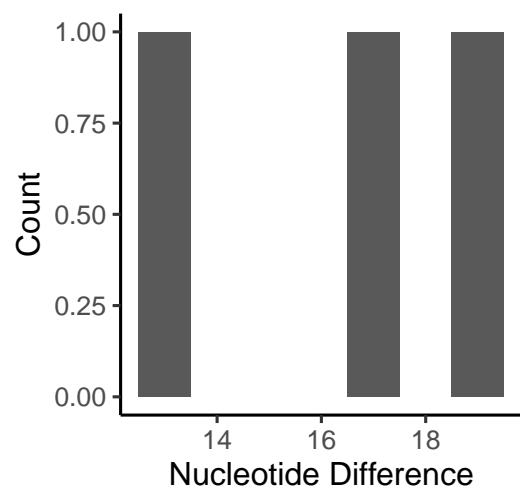
### IGHV3-53\*01

133 sequences assigned  
14 (10.5%) exact matches, in which:  
13 unique CDR3  
3 unique J



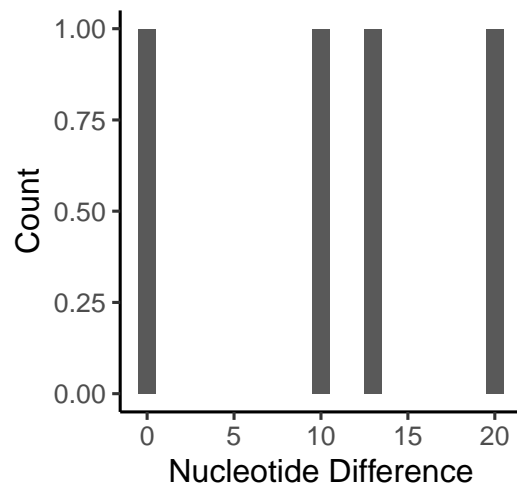
### IGHV3-69-1\*01

3 sequences assigned  
No exact matches.



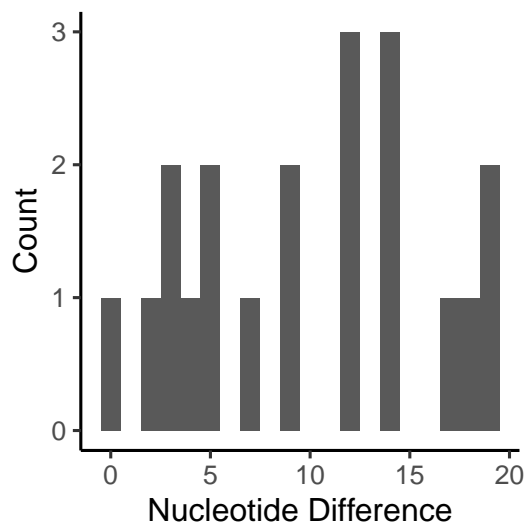
### IGHV3-49\*05

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



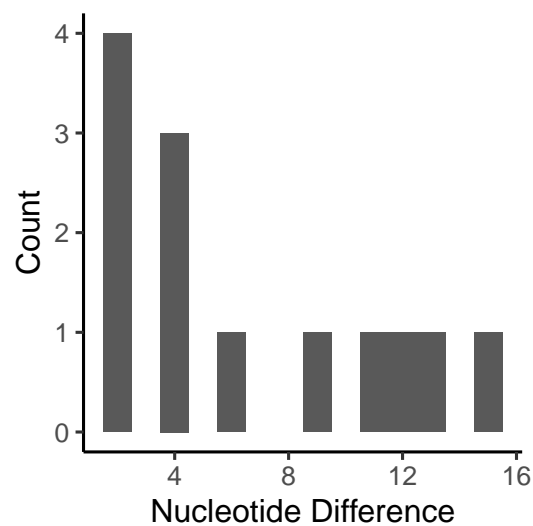
### IGHV3-64\*04

23 sequences assigned  
1 (4.3%) exact matches, in which:  
1 unique CDR3  
1 unique J



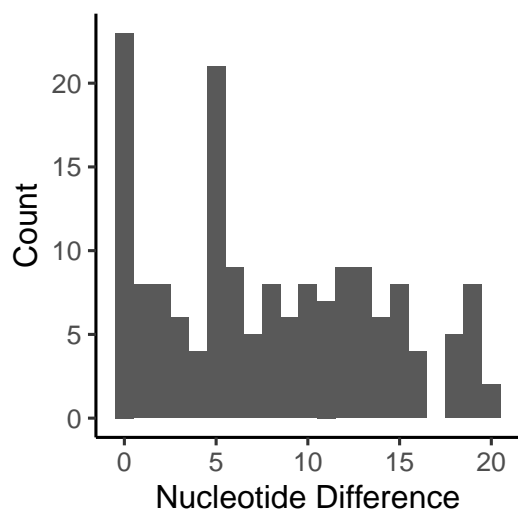
### IGHV3-72\*01

13 sequences assigned  
No exact matches.



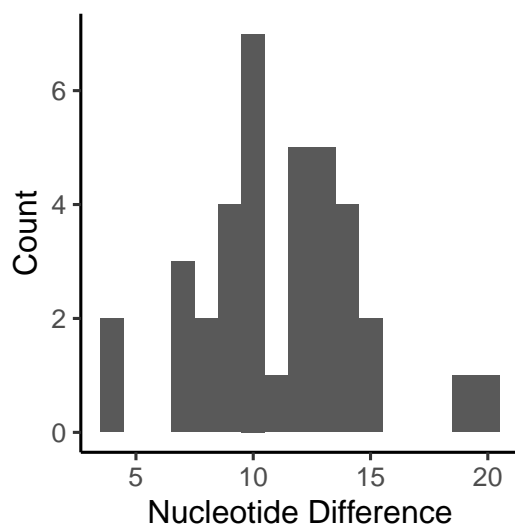
### IGHV3-74\*01

169 sequences assigned  
23 (13.6%) exact matches, in which:  
22 unique CDR3  
4 unique J



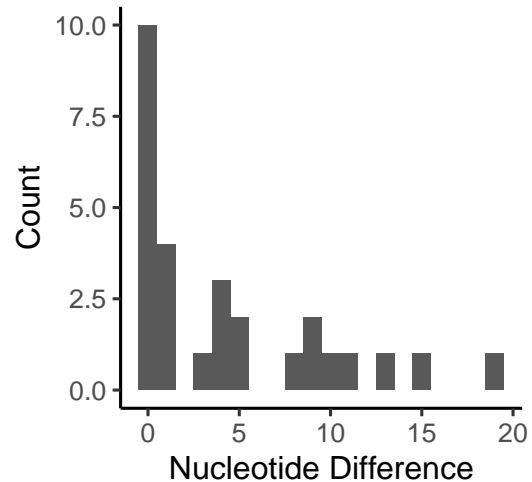
### IGHV3-NL1\*01

38 sequences assigned  
No exact matches.



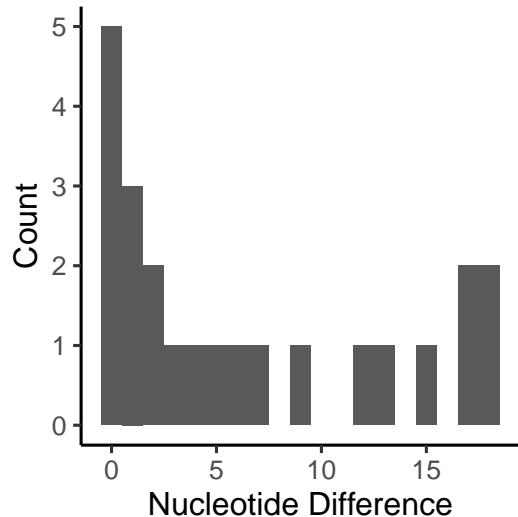
### IGHV4-30-4\*07

30 sequences assigned  
10 (33.3%) exact matches, in which:  
10 unique CDR3  
4 unique J



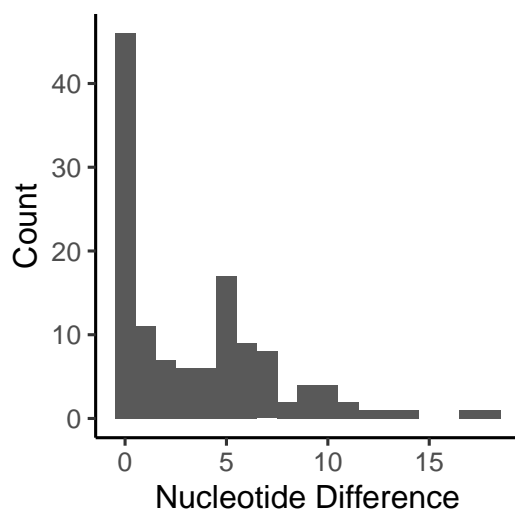
### IGHV3-64D\*06

23 sequences assigned  
5 (21.7%) exact matches, in which:  
4 unique CDR3  
3 unique J



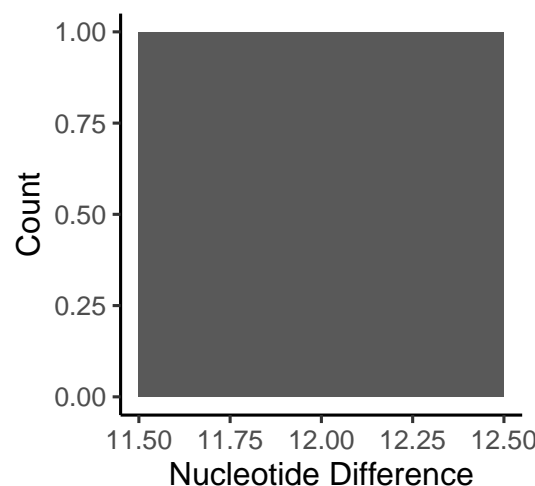
### IGHV4-4\*02

130 sequences assigned  
46 (35.4%) exact matches, in which:  
46 unique CDR3  
5 unique J



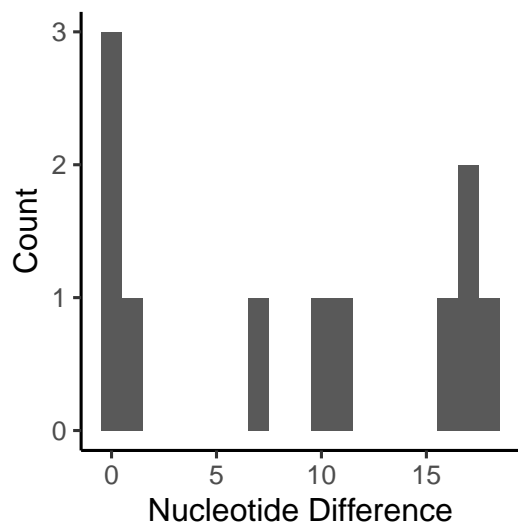
### IGHV4-31\*11

1 sequences assigned  
No exact matches.



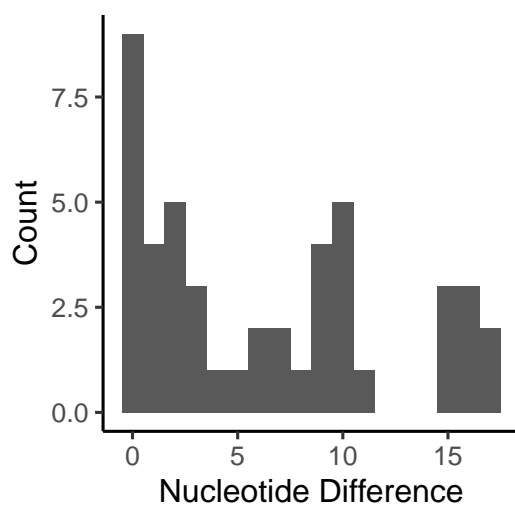
### IGHV3-64D\*09

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



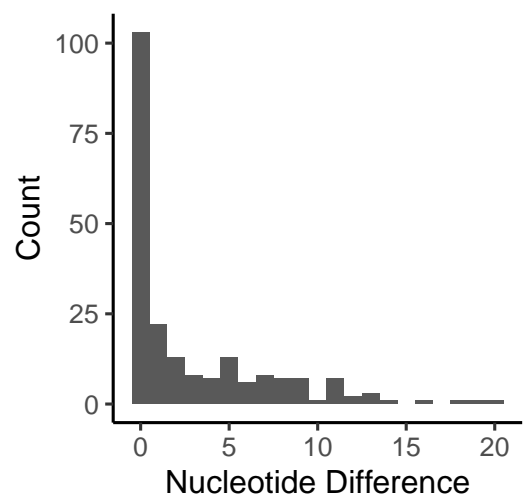
### IGHV4-30-2\*01

46 sequences assigned  
9 (19.6%) exact matches, in which:  
9 unique CDR3  
4 unique J



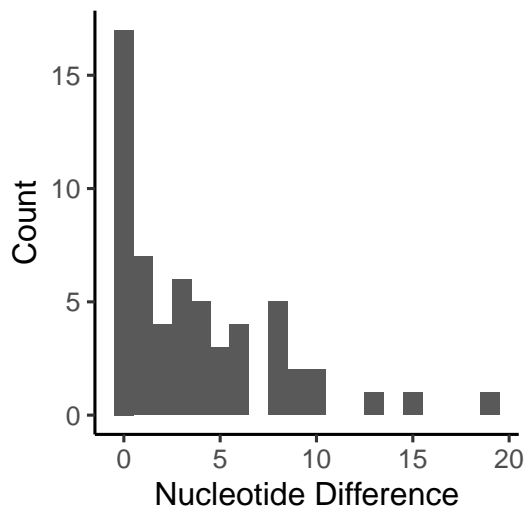
### IGHV4-34\*01

213 sequences assigned  
103 (48.4%) exact matches, in which:  
99 unique CDR3  
5 unique J



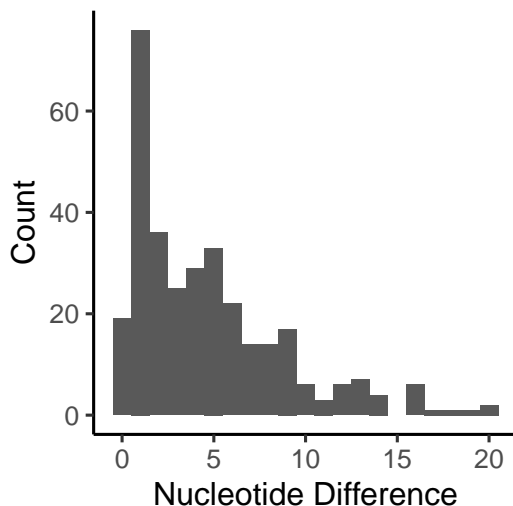
## IGHV4-34\*01\_T300C

59 sequences assigned  
17 (28.8%) exact matches, in which:  
17 unique CDR3  
4 unique J



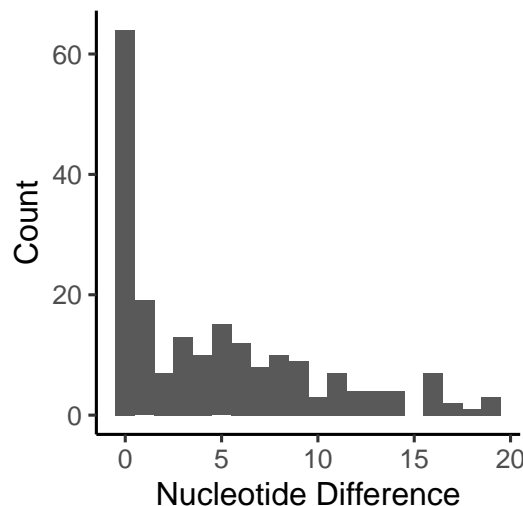
## IGHV4-39\*07

331 sequences assigned  
19 (5.7%) exact matches, in which:  
19 unique CDR3  
3 unique J



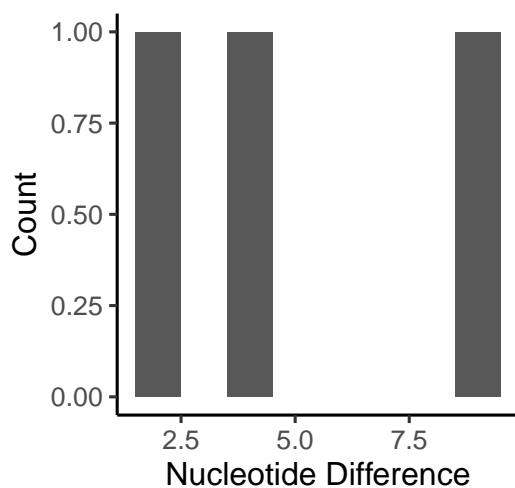
## IGHV4-59\*01

209 sequences assigned  
64 (30.6%) exact matches, in which:  
64 unique CDR3  
6 unique J



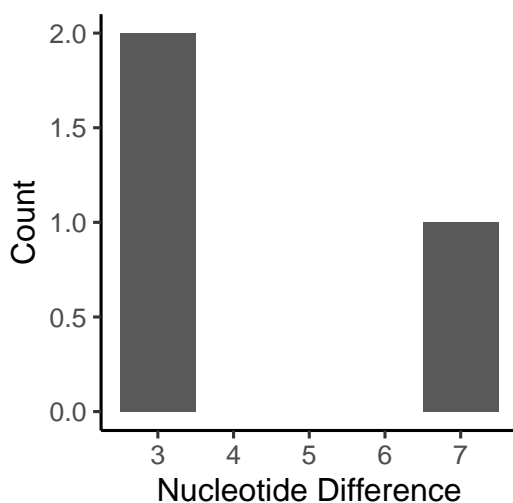
## IGHV4-38-2\*02

3 sequences assigned  
No exact matches.



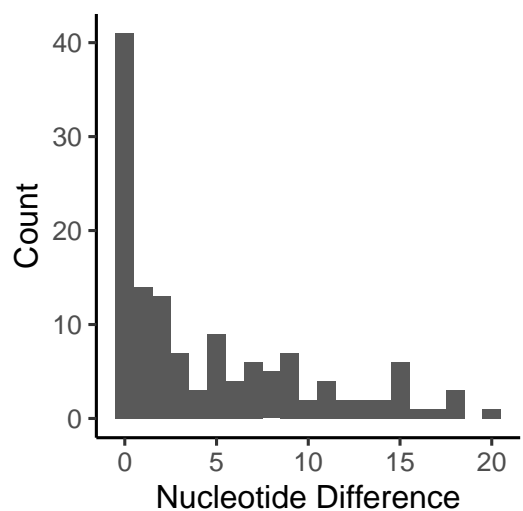
## IGHV4-55\*08

3 sequences assigned  
No exact matches.



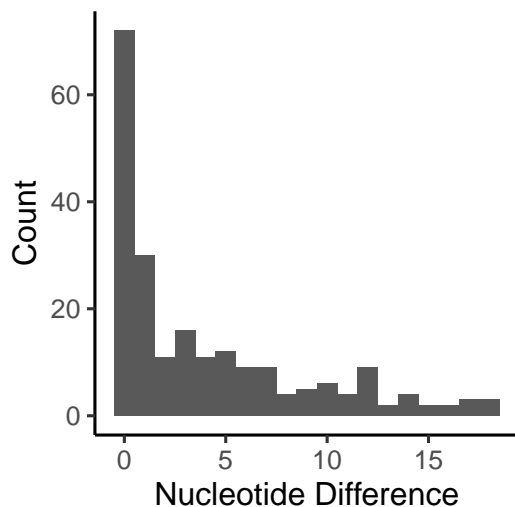
## IGHV4-59\*08

137 sequences assigned  
41 (29.9%) exact matches, in which:  
40 unique CDR3  
6 unique J



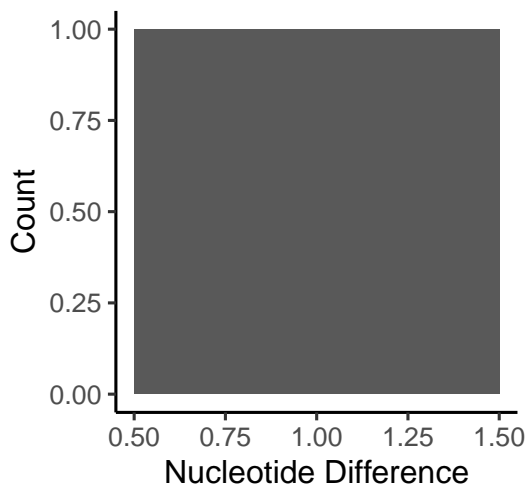
## IGHV4-39\*01

222 sequences assigned  
72 (32.4%) exact matches, in which:  
68 unique CDR3  
4 unique J



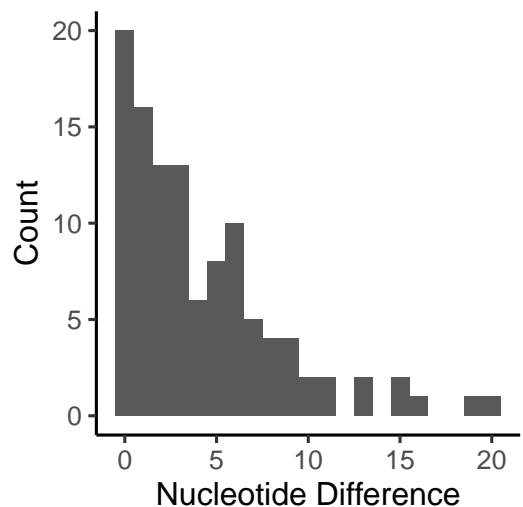
## IGHV4-55\*09

1 sequences assigned  
No exact matches.



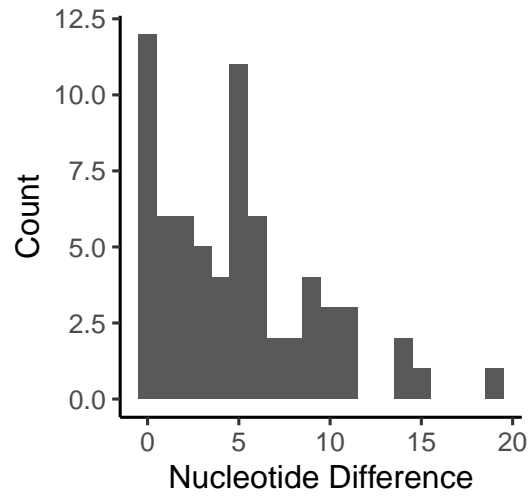
## IGHV4-59\*12

111 sequences assigned  
20 (18%) exact matches, in which:  
20 unique CDR3  
4 unique J



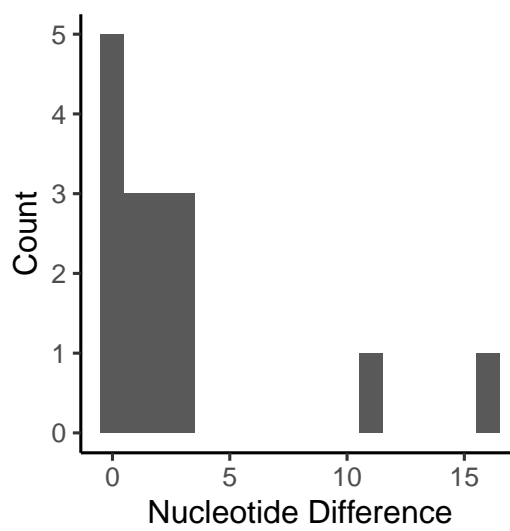
### IGHV4-61\*01

68 sequences assigned  
12 (17.6%) exact matches, in which:  
12 unique CDR3  
4 unique J



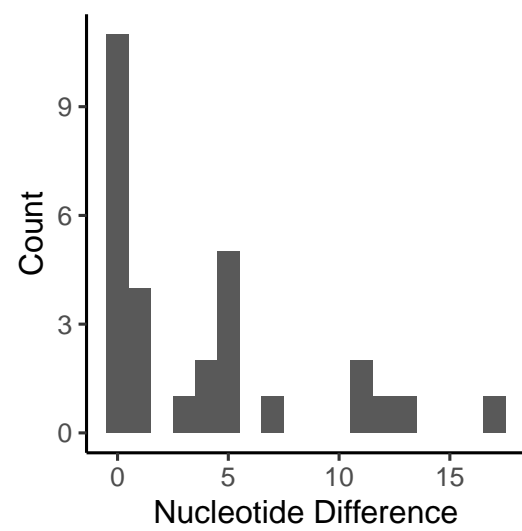
### IGHV5-10-1\*01

17 sequences assigned  
5 (29.4%) exact matches, in which:  
5 unique CDR3  
2 unique J



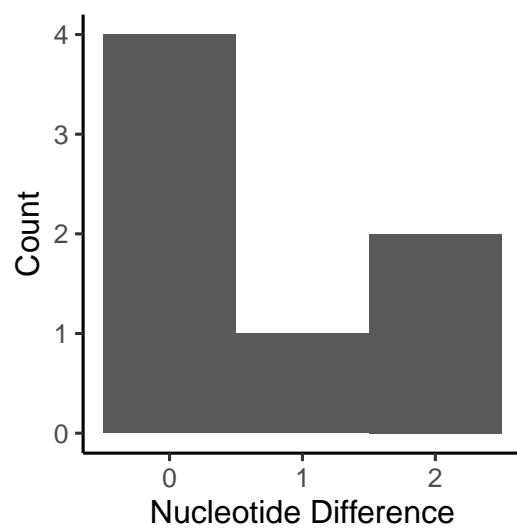
### IGHV6-1\*01

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



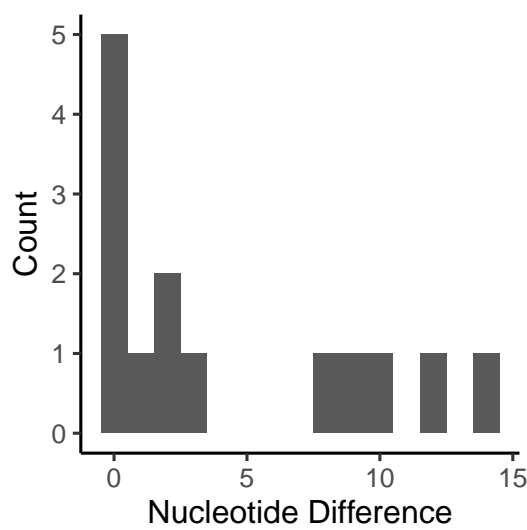
### IGHV4-61\*07

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



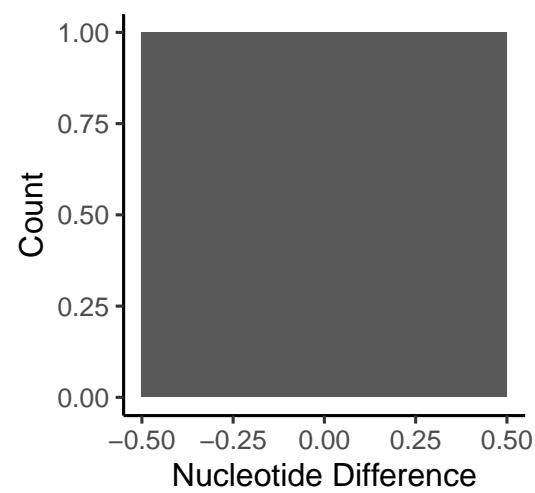
### IGHV5-10-1\*03

14 sequences assigned  
5 (35.7%) exact matches, in which:  
5 unique CDR3  
2 unique J



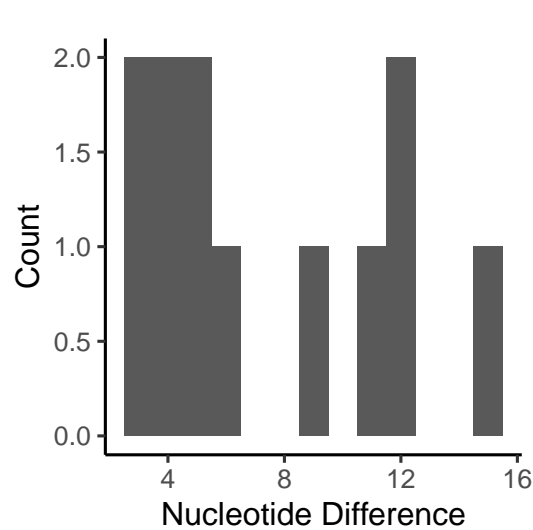
### IGHV7-4-1\*01

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



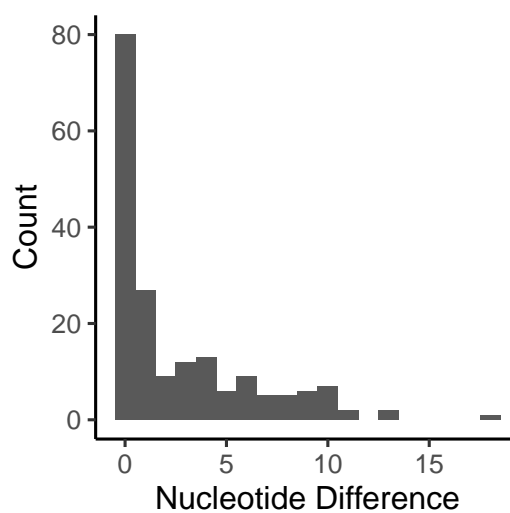
### IGHV4-61\*08

12 sequences assigned  
No exact matches.



### IGHV5-51\*01

186 sequences assigned  
80 (43%) exact matches, in which:  
79 unique CDR3  
6 unique J



IGHV4-34\*01\_T300C

