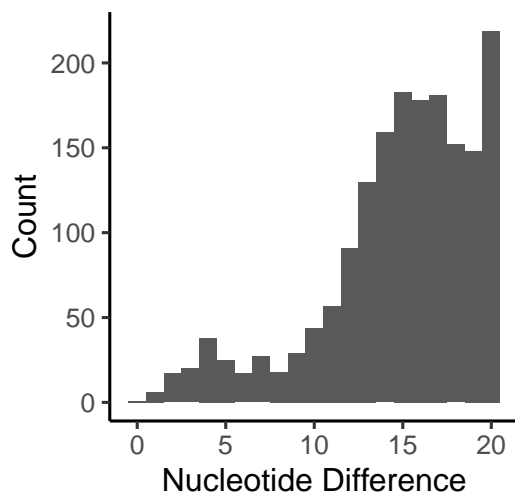


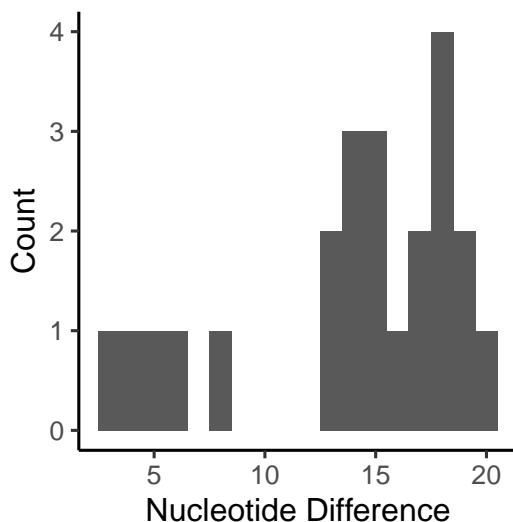
### IGHV1-2\*02

4118 sequences assigned  
1 (0%) exact matches, in which:  
1 unique CDR3  
1 unique J



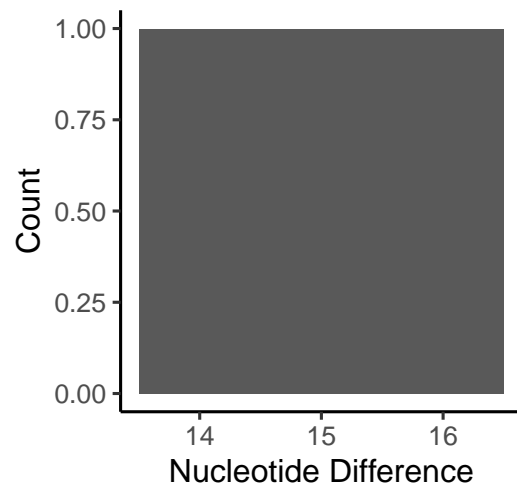
### IGHV1-24\*01

32 sequences assigned  
No exact matches.



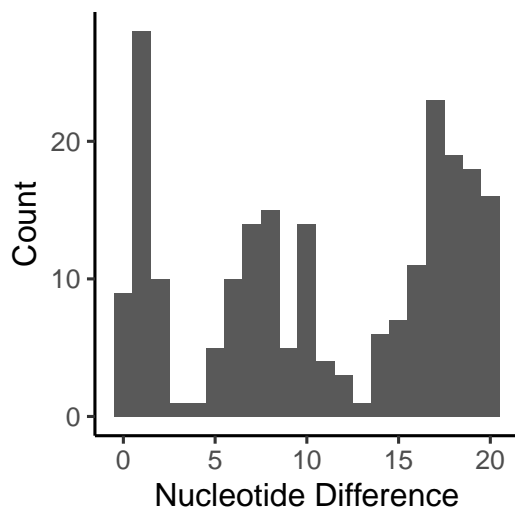
### IGHV1-58\*01\_03

10 sequences assigned  
No exact matches.



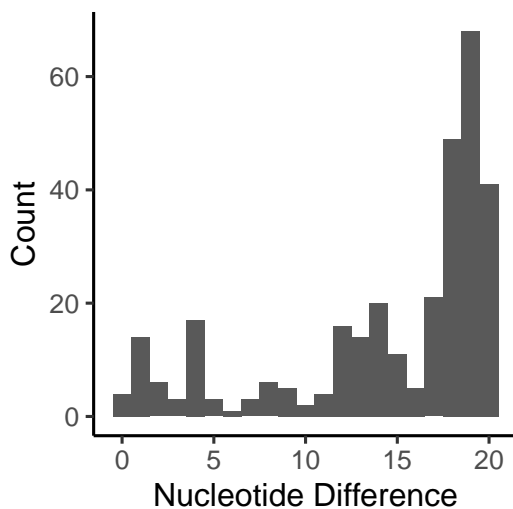
### IGHV1-8\*01

387 sequences assigned  
9 (2.3%) exact matches, in which:  
4 unique CDR3  
1 unique J



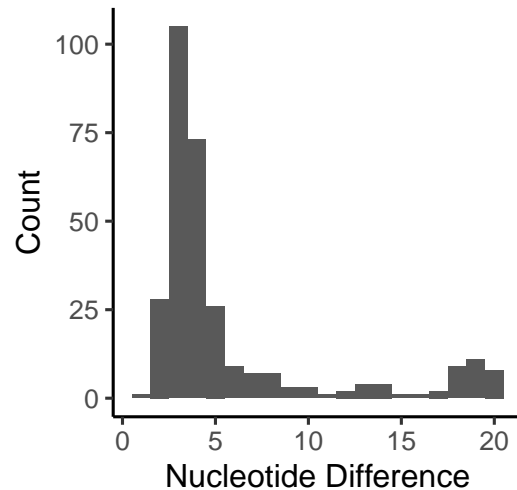
### IGHV1-46\*01

698 sequences assigned  
4 (0.6%) exact matches, in which:  
3 unique CDR3  
3 unique J



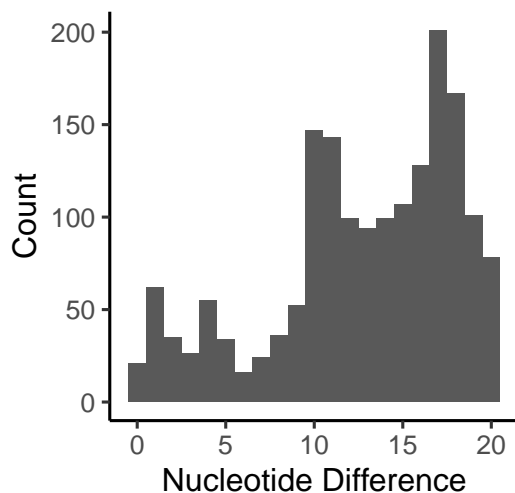
### IGHV1-69\*10

536 sequences assigned  
No exact matches.



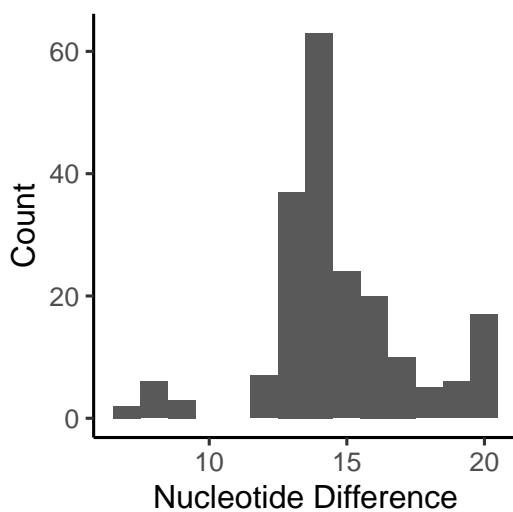
### IGHV1-18\*01

4316 sequences assigned  
21 (0.5%) exact matches, in which:  
18 unique CDR3  
4 unique J



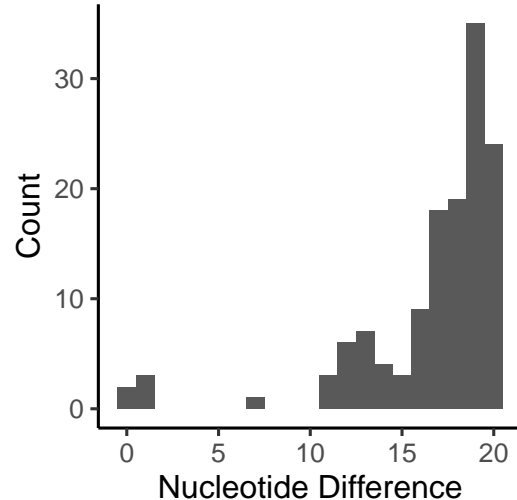
### IGHV1-46\*03

1084 sequences assigned  
No exact matches.



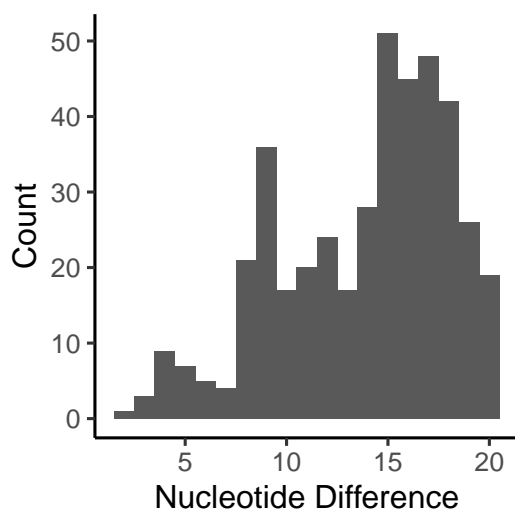
### IGHV1-69\*17

373 sequences assigned  
2 (0.5%) exact matches, in which:  
2 unique CDR3  
1 unique J



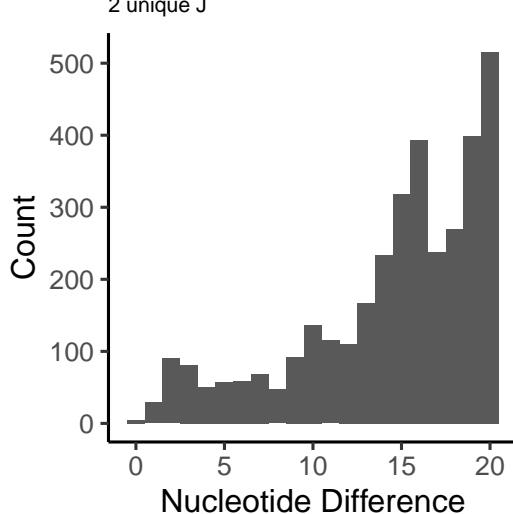
### IGHV1-69\*01\_12\_13

1002 sequences assigned  
No exact matches.



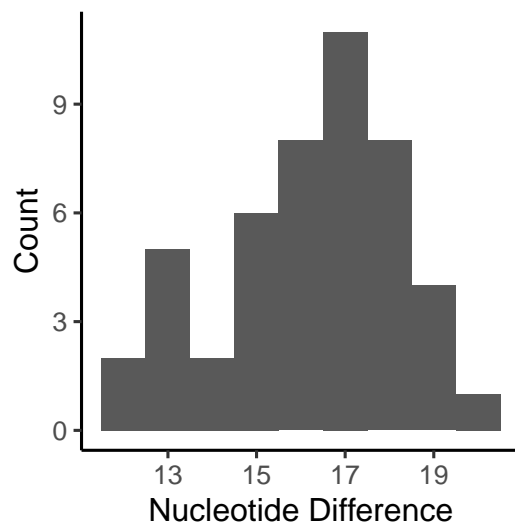
### IGHV3-7\*01

7993 sequences assigned  
5 (0.1%) exact matches, in which:  
4 unique CDR3  
2 unique J



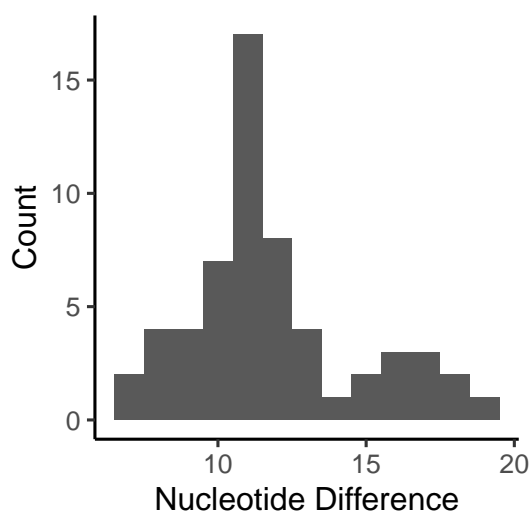
### IGHV3-13\*01

88 sequences assigned  
No exact matches.



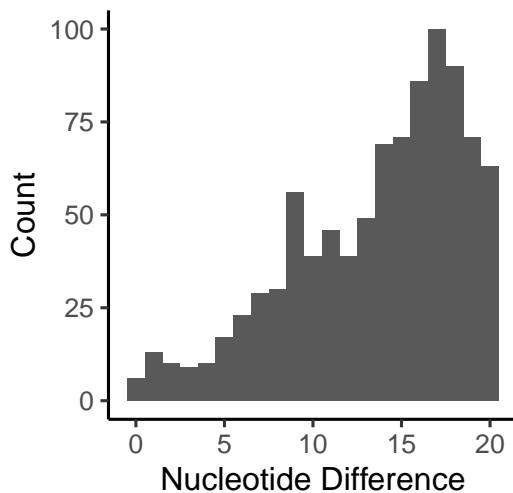
### IGHV2-5\*01

79 sequences assigned  
No exact matches.



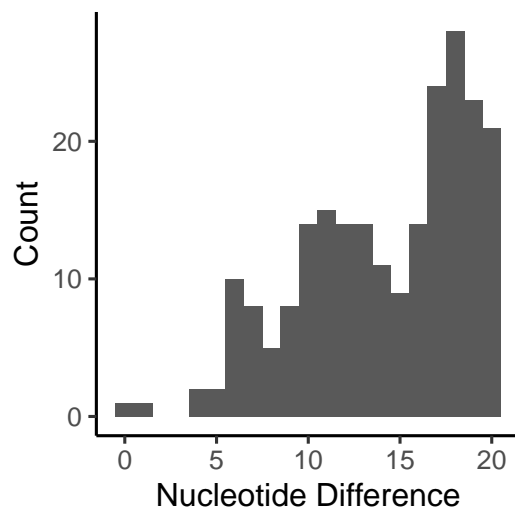
### IGHV3-9\*01

1624 sequences assigned  
6 (0.4%) exact matches, in which:  
5 unique CDR3  
2 unique J



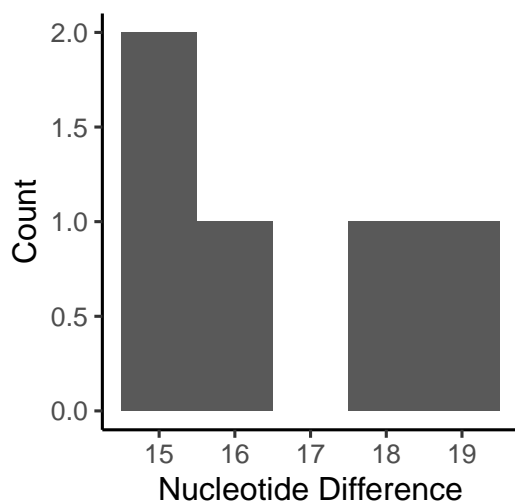
### IGHV3-15\*01\_02

473 sequences assigned  
1 (0.2%) exact matches, in which:  
1 unique CDR3  
1 unique J



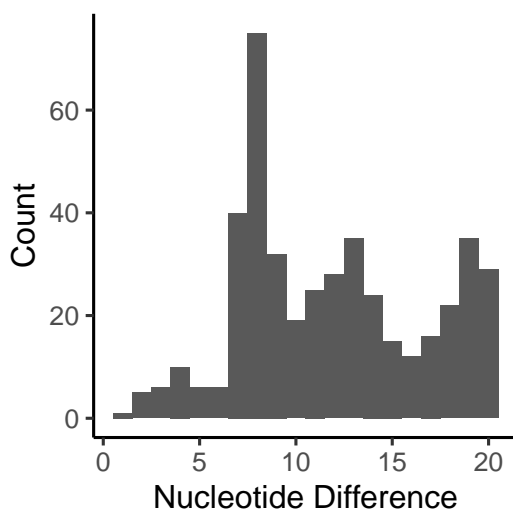
### IGHV2-70\*04

13 sequences assigned  
No exact matches.



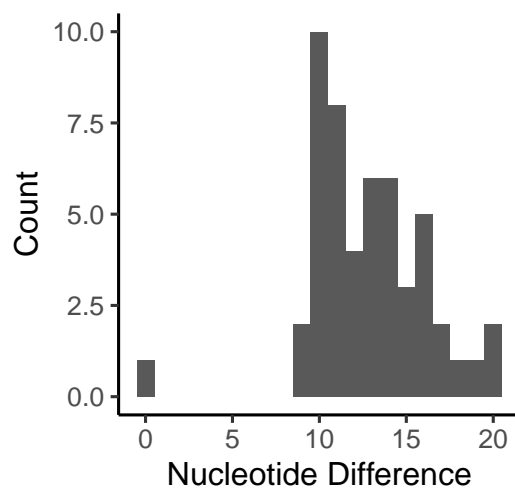
### IGHV3-11\*01

965 sequences assigned  
No exact matches.



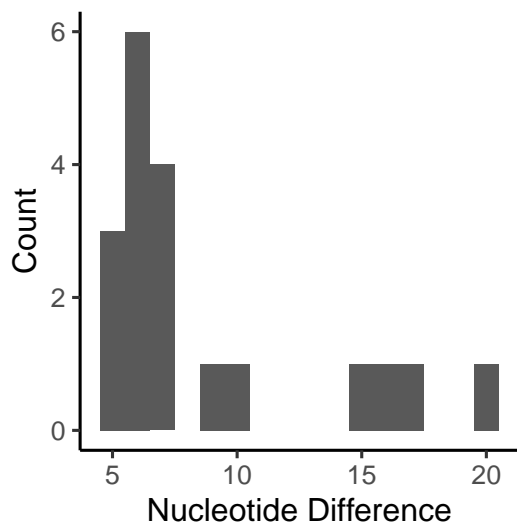
### IGHV3-20\*01\_02

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



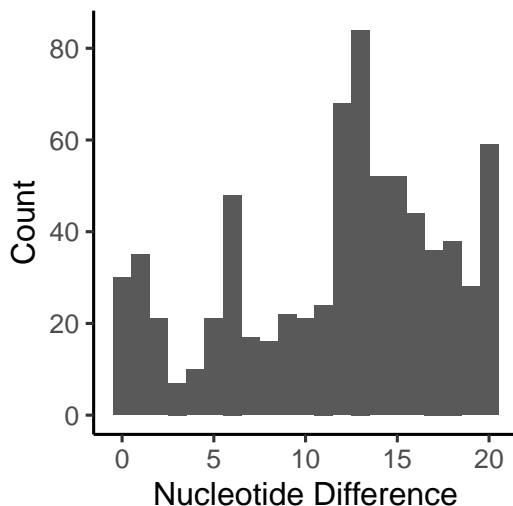
### IGHV3-20\*03\_04

31 sequences assigned  
No exact matches.



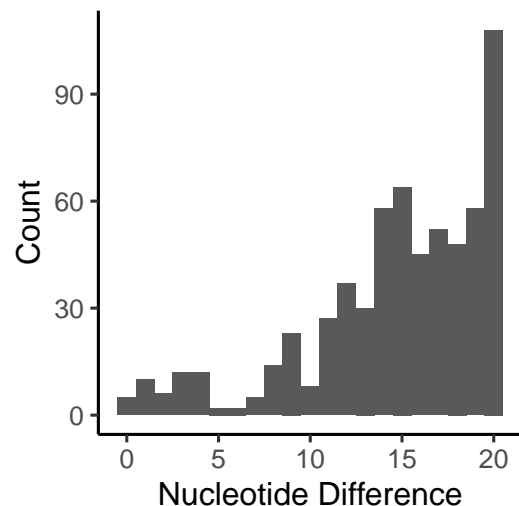
### IGHV3-21\*01\_02

906 sequences assigned  
30 (3.3%) exact matches, in which:  
18 unique CDR3  
3 unique J



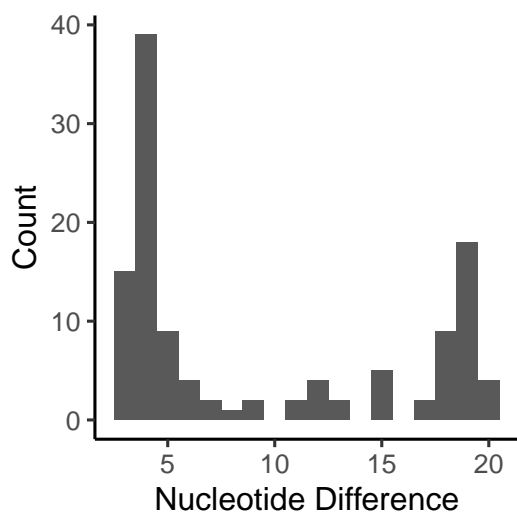
### IGHV3-30\*02

1291 sequences assigned  
5 (0.4%) exact matches, in which:  
5 unique CDR3  
3 unique J



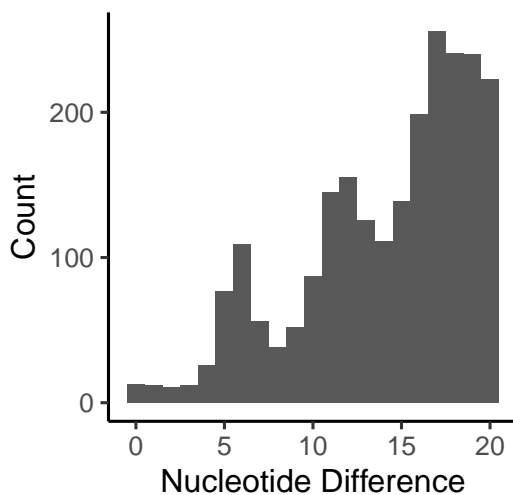
### IGHV3-21\*04

135 sequences assigned  
No exact matches.



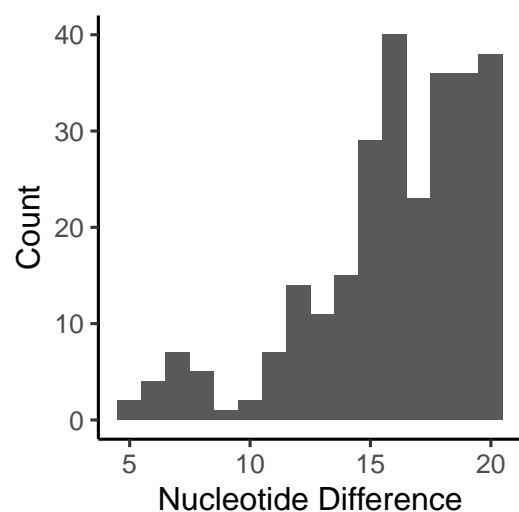
### IGHV3-23\*01\_04

4299 sequences assigned  
13 (0.3%) exact matches, in which:  
11 unique CDR3  
2 unique J



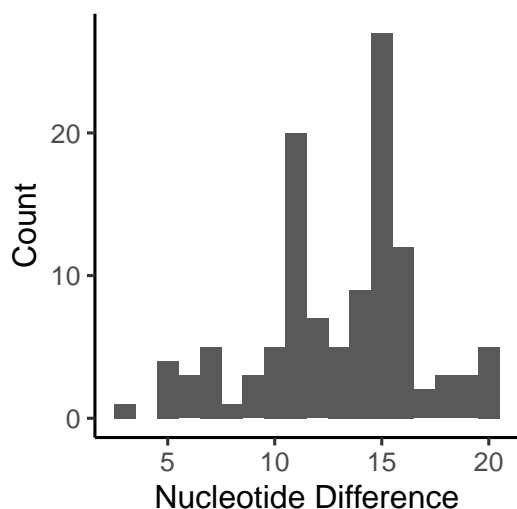
### IGHV3-30\*18

791 sequences assigned  
No exact matches.



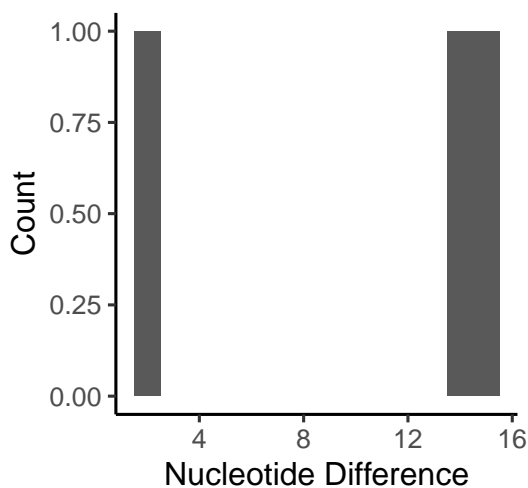
### IGHV3-21\*06

286 sequences assigned  
No exact matches.



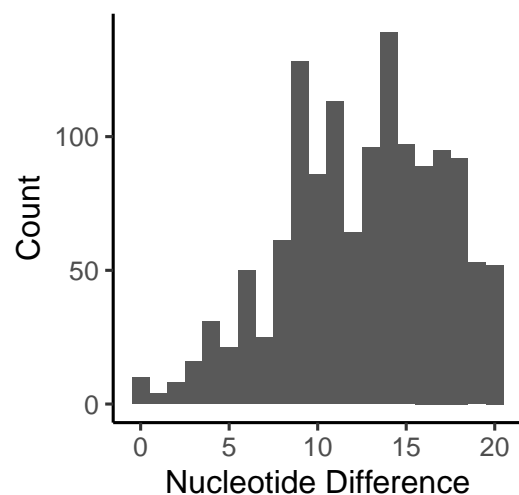
### IGHV3-30-3\*01

5 sequences assigned  
No exact matches.



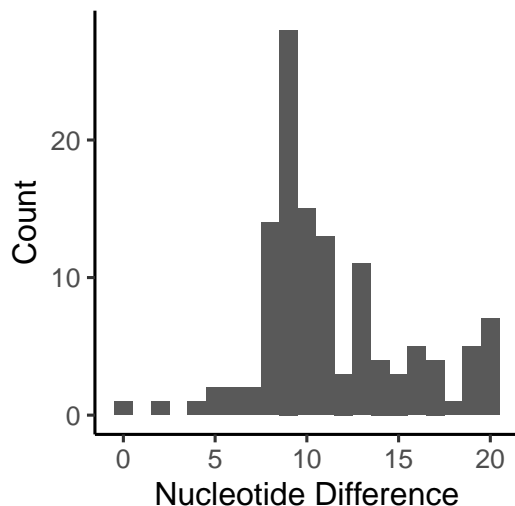
### IGHV3-33\*01

2129 sequences assigned  
10 (0.5%) exact matches, in which:  
6 unique CDR3  
3 unique J



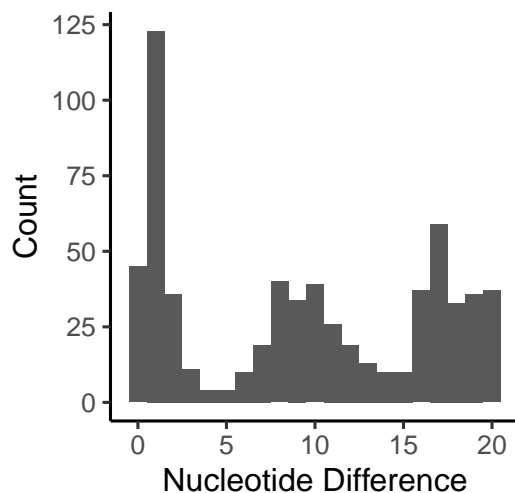
### IGHV3-33\*06

168 sequences assigned  
1 (0.6%) exact matches, in which:  
1 unique CDR3  
1 unique J



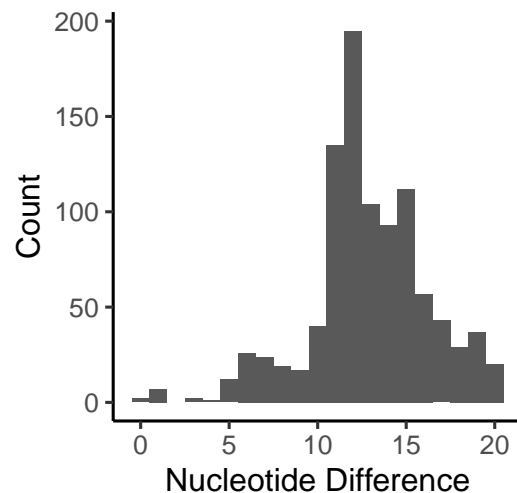
### IGHV3-48\*02

906 sequences assigned  
45 (5%) exact matches, in which:  
21 unique CDR3  
2 unique J



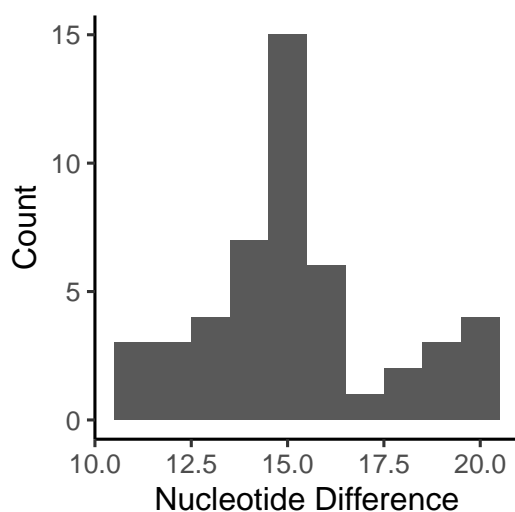
### IGHV3-53\*01\_02

1476 sequences assigned  
2 (0.1%) exact matches, in which:  
2 unique CDR3  
1 unique J



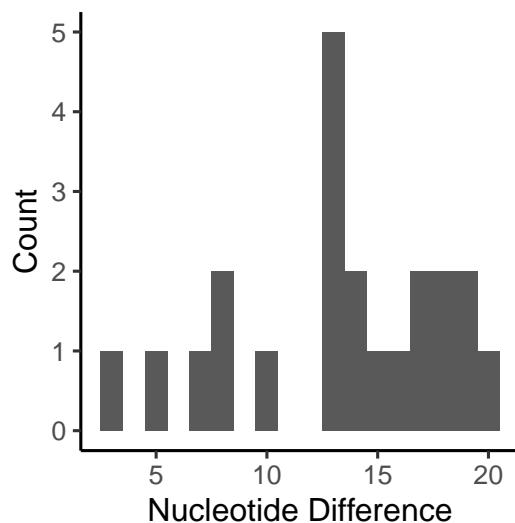
### IGHV3-43\*01

173 sequences assigned  
No exact matches.



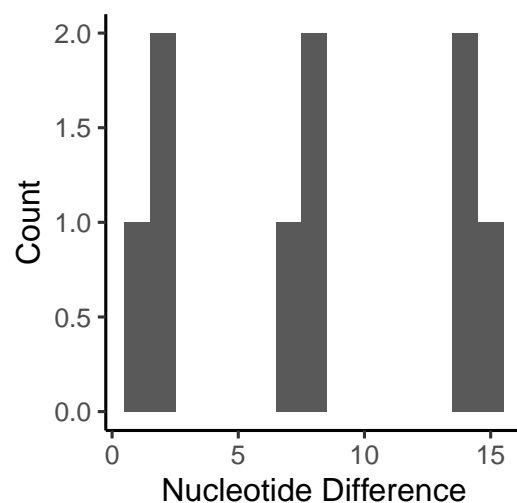
### IGHV3-48\*04

66 sequences assigned  
No exact matches.



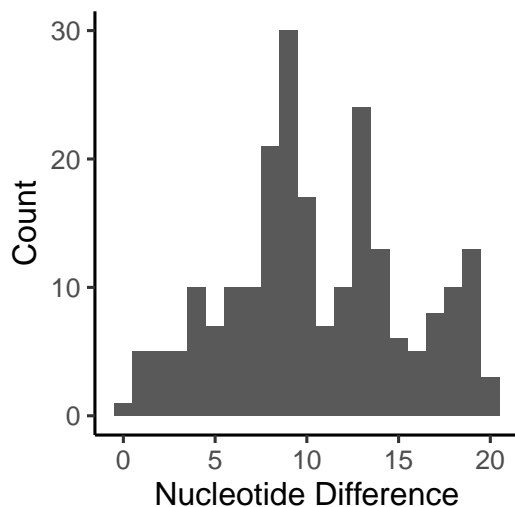
### IGHV3-64\*01

10 sequences assigned  
No exact matches.



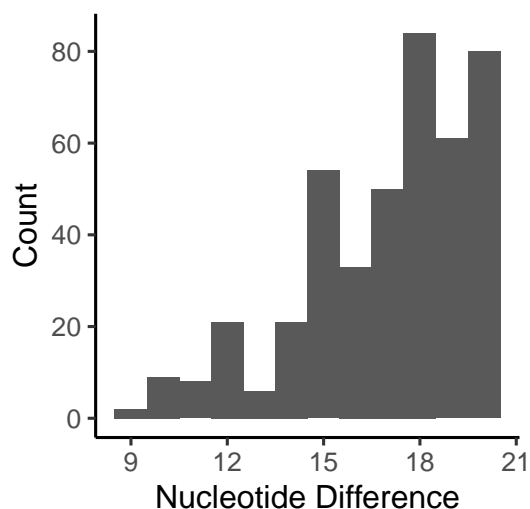
### IGHV3-48\*01

274 sequences assigned  
1 (0.4%) exact matches, in which:  
1 unique CDR3  
1 unique J



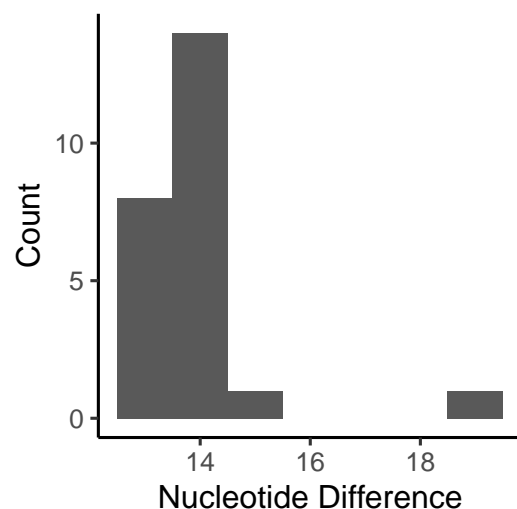
### IGHV3-49\*03\_05

635 sequences assigned  
No exact matches.



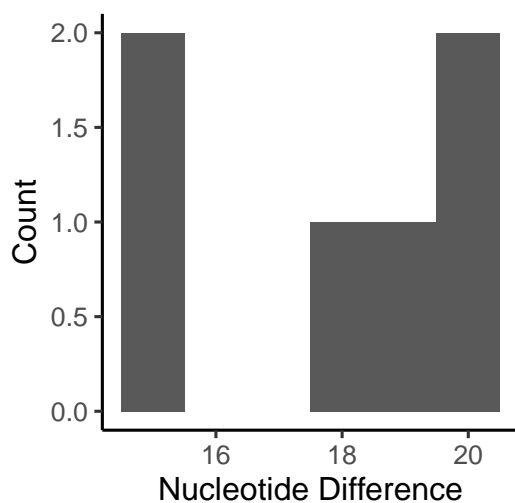
### IGHV3-64\*02\_07

75 sequences assigned  
No exact matches.



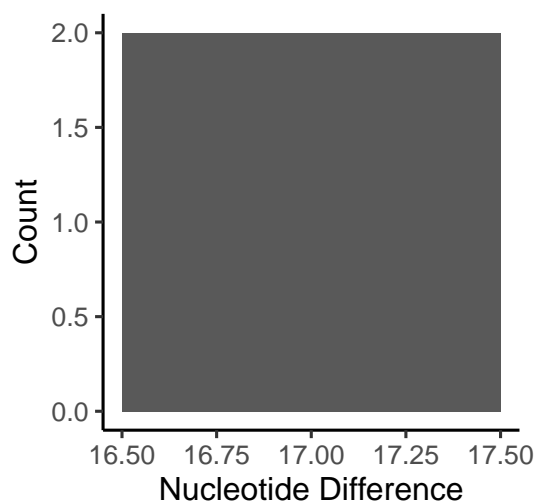
### IGHV3-66\*01

7 sequences assigned  
No exact matches.



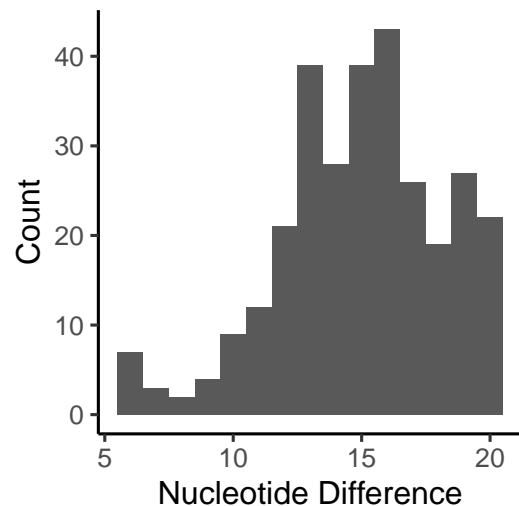
### IGHV3-69-1\*02

19 sequences assigned  
No exact matches.



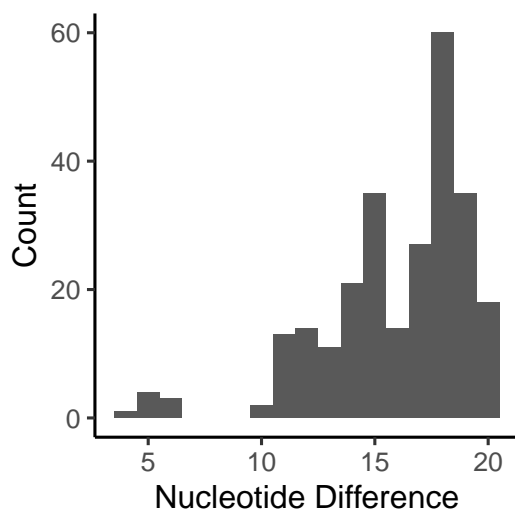
### IGHV3-74\*03

849 sequences assigned  
No exact matches.



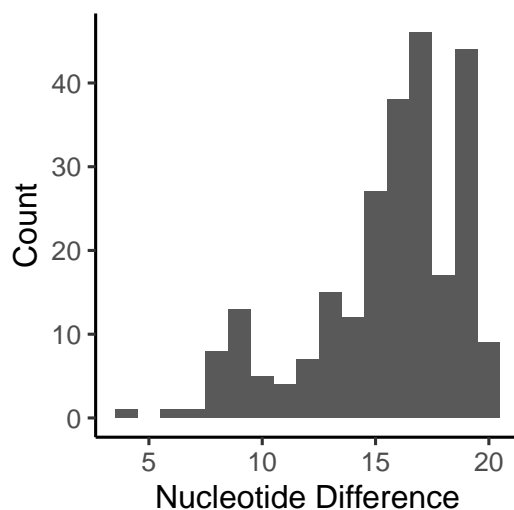
### IGHV3-66\*02

323 sequences assigned  
No exact matches.



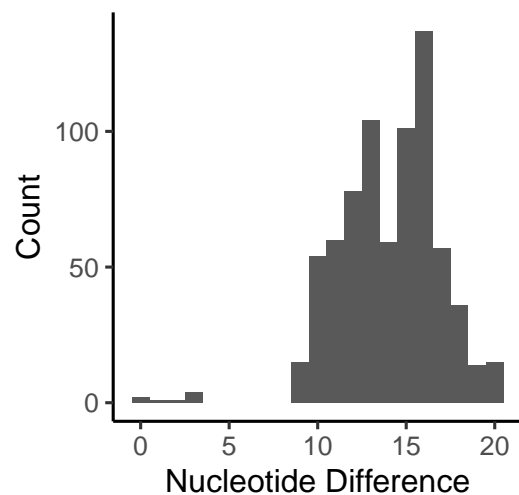
### IGHV3-72\*01

317 sequences assigned  
No exact matches.



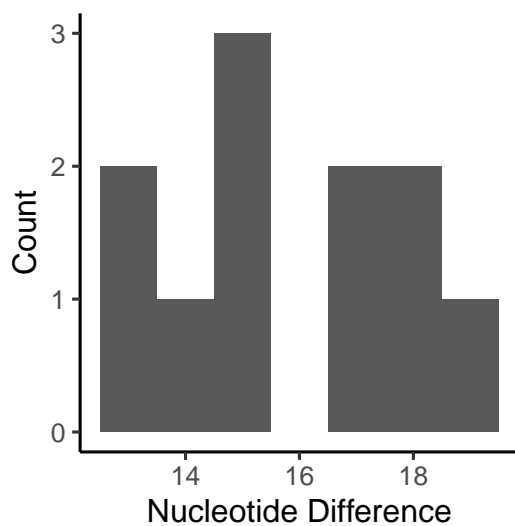
### IGHV3-74\*01\_02

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



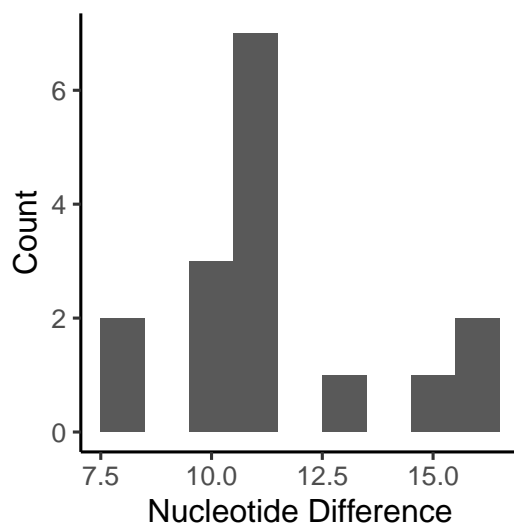
### IGHV3-66\*03

14 sequences assigned  
No exact matches.



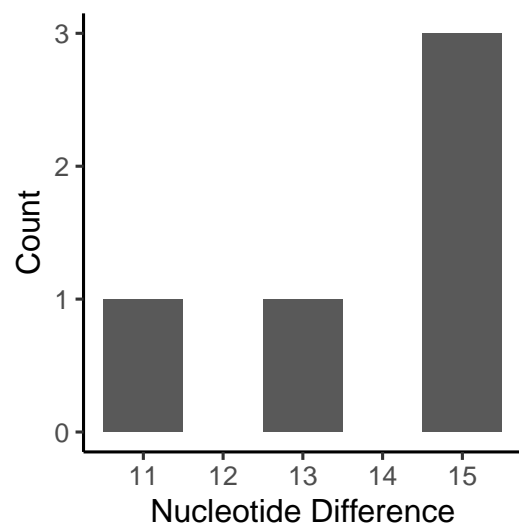
### IGHV3-73\*01\_02

62 sequences assigned  
No exact matches.



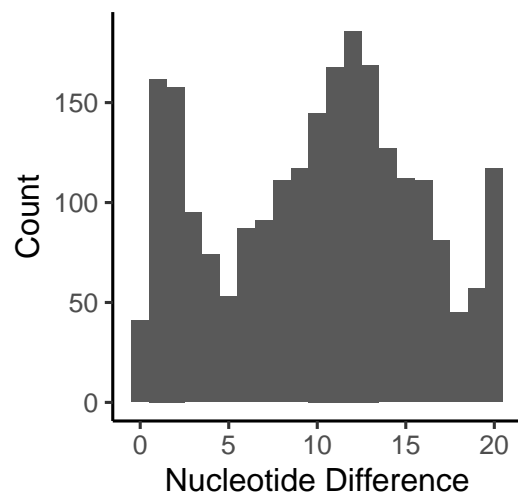
### IGHV3-NL1\*01

9 sequences assigned  
No exact matches.



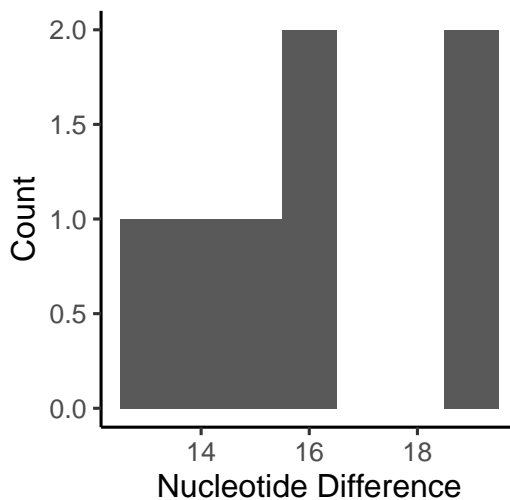
### IGHV4-4\*07

4244 sequences assigned  
41 (1%) exact matches, in which:  
24 unique CDR3  
4 unique J



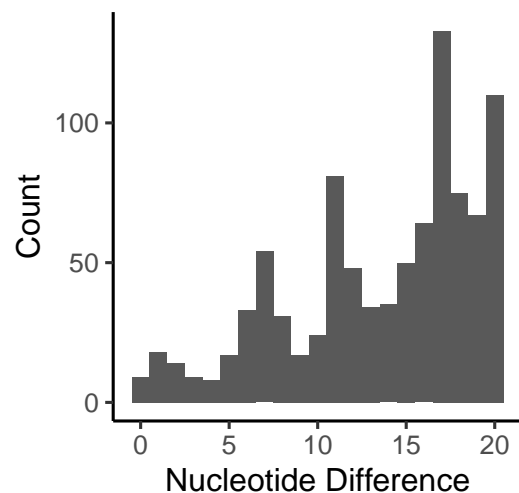
### IGHV4-30-4\*07

14 sequences assigned  
No exact matches.



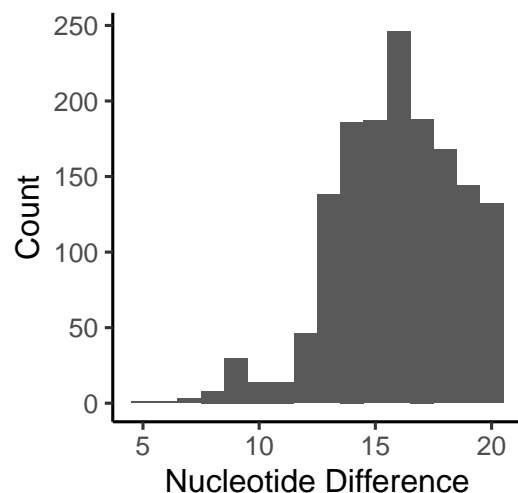
### IGHV4-34\*01\_02

4507 sequences assigned  
9 (0.2%) exact matches, in which:  
6 unique CDR3  
3 unique J



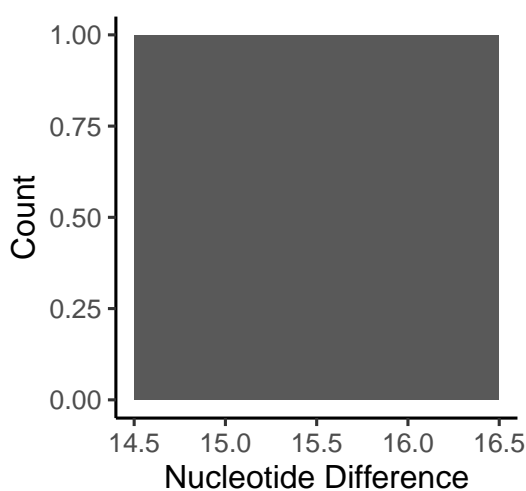
### IGHV4-30-2\*01

2615 sequences assigned  
No exact matches.



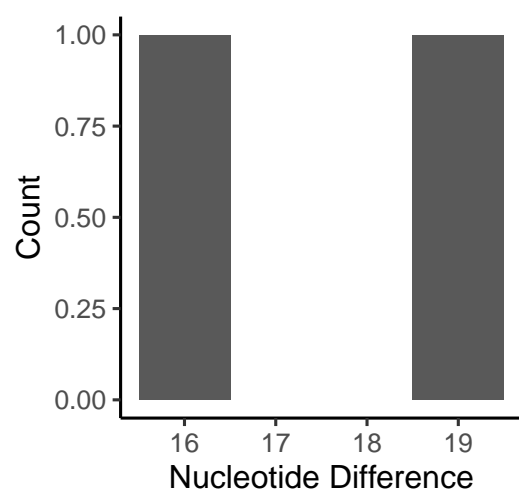
### IGHV4-30-4\*08

13 sequences assigned  
No exact matches.



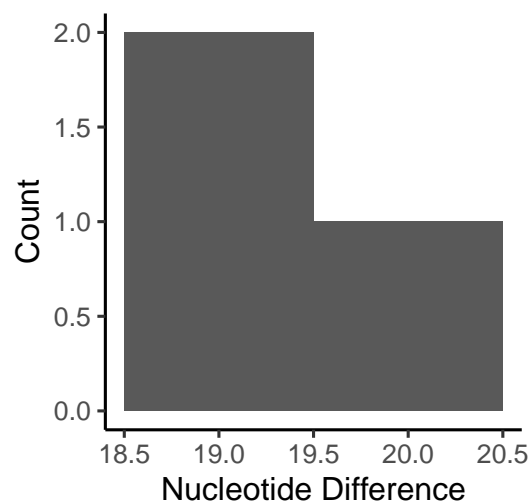
### IGHV4-38-2\*02

161 sequences assigned  
No exact matches.



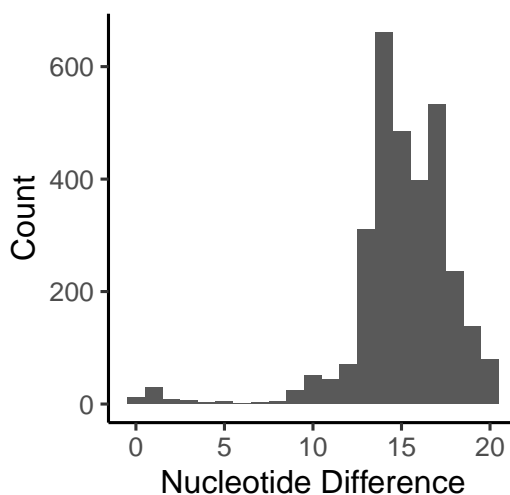
### IGHV4-30-4\*01

20 sequences assigned  
No exact matches.



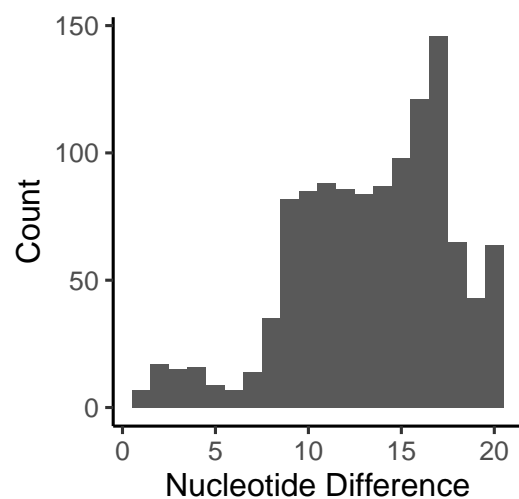
### IGHV4-31\*02

5839 sequences assigned  
11 (0.2%) exact matches, in which:  
9 unique CDR3  
3 unique J



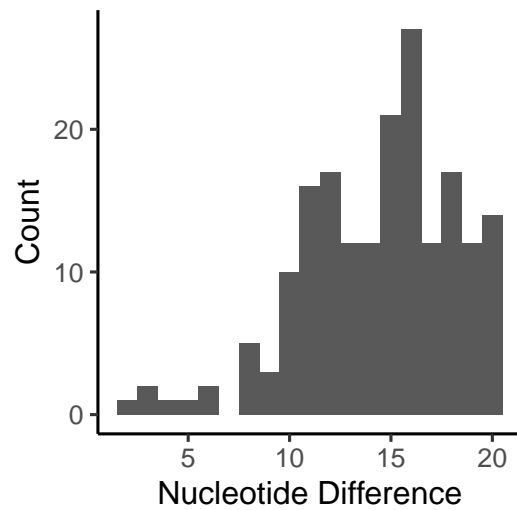
### IGHV4-39\*02

3215 sequences assigned  
No exact matches.



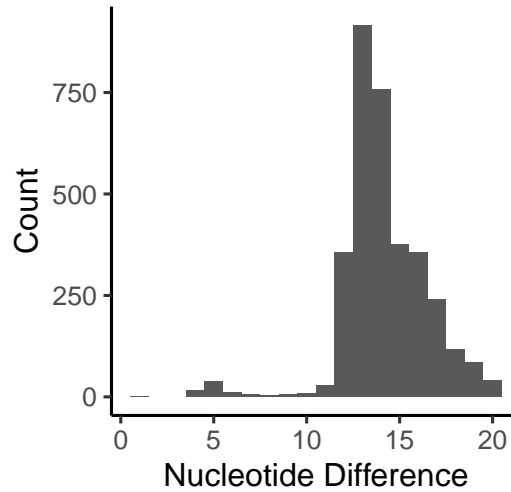
### IGHV4-39\*07

322 sequences assigned  
No exact matches.



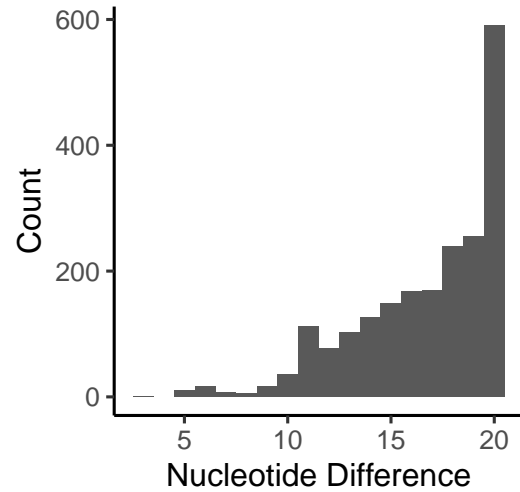
### IGHV4-59\*11

3658 sequences assigned  
No exact matches.



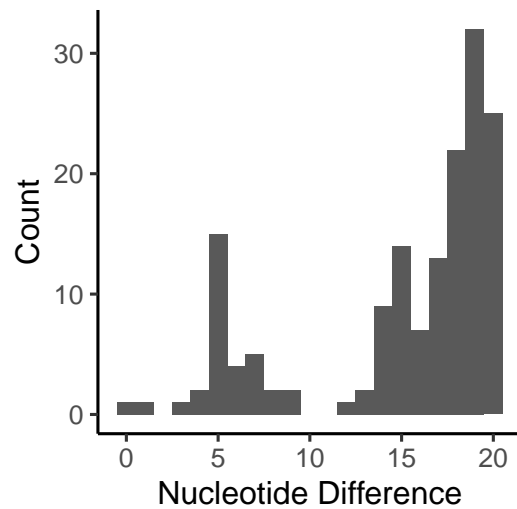
### IGHV4-61\*01

6416 sequences assigned  
No exact matches.



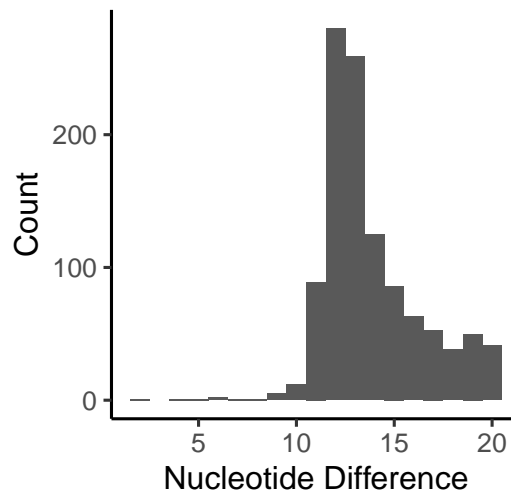
### IGHV4-39\*01\_05

591 sequences assigned  
1 (0.2%) exact matches, in which:  
1 unique CDR3  
1 unique J



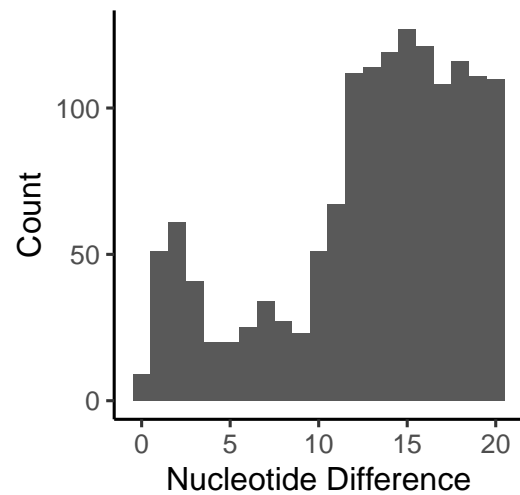
### IGHV4-59\*12

1761 sequences assigned  
No exact matches.



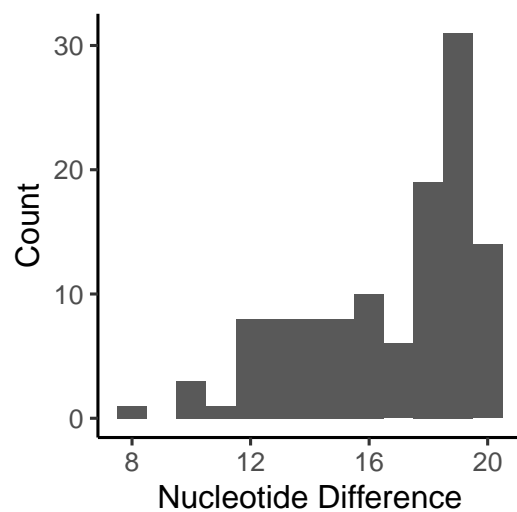
### IGHV4-61\*02

2683 sequences assigned  
9 (0.3%) exact matches, in which:  
6 unique CDR3  
4 unique J



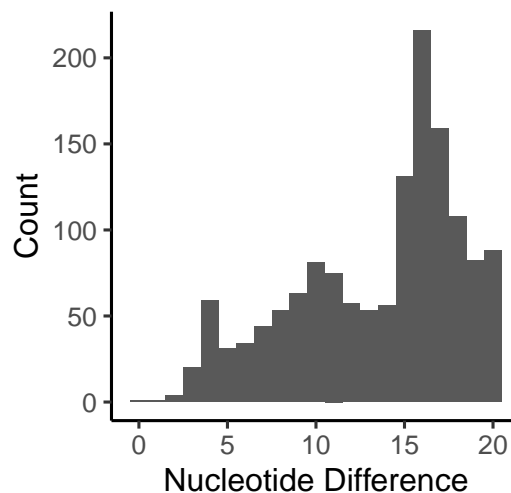
### IGHV4-59\*02

1748 sequences assigned  
No exact matches.



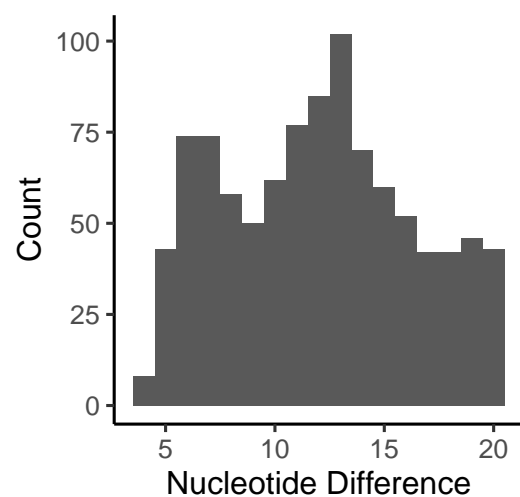
### IGHV4-59\*01\_07

2747 sequences assigned  
1 (0%) exact matches, in which:  
1 unique CDR3  
1 unique J



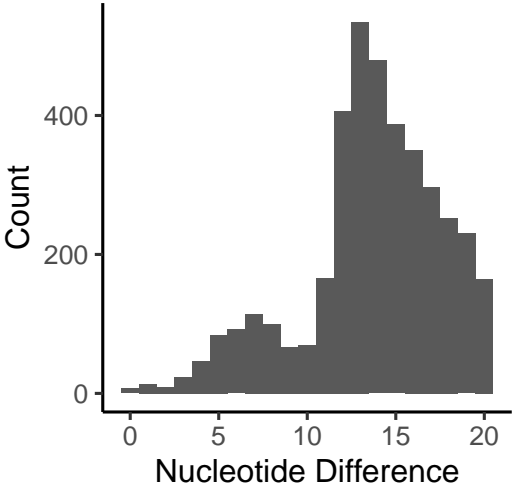
### IGHV5-51\*07

1202 sequences assigned  
No exact matches.



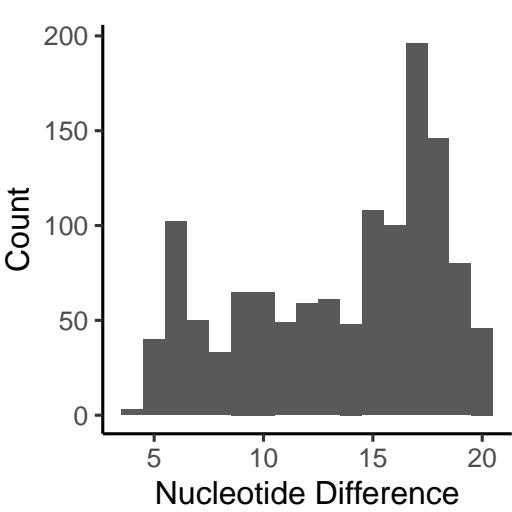
# IGHV5-51\*01\_03

4905 sequences assigned  
7 (0.1%) exact matches, in which:  
6 unique CDR3  
4 unique J



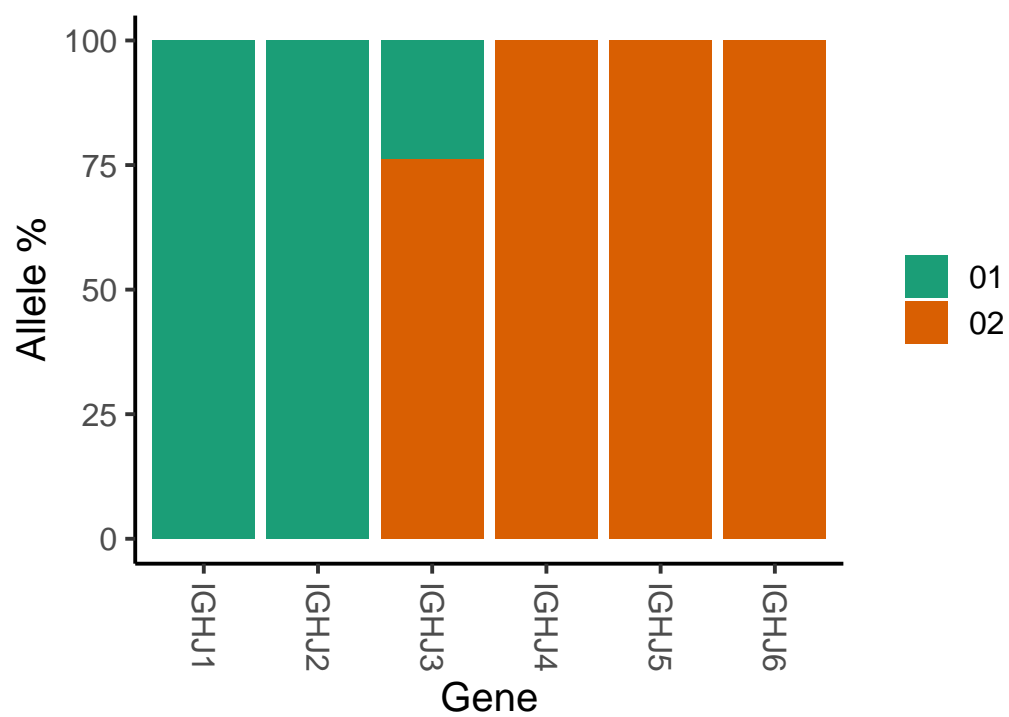
# IGHV6-1\*01\_02

1591 sequences assigned  
No exact matches.





Allele Usage



Warning – no inferred sequences found.