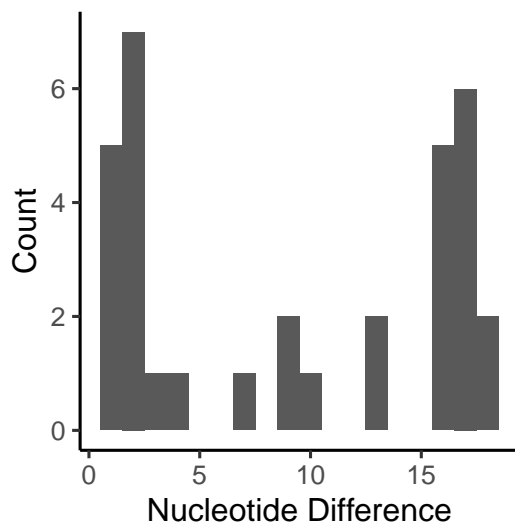


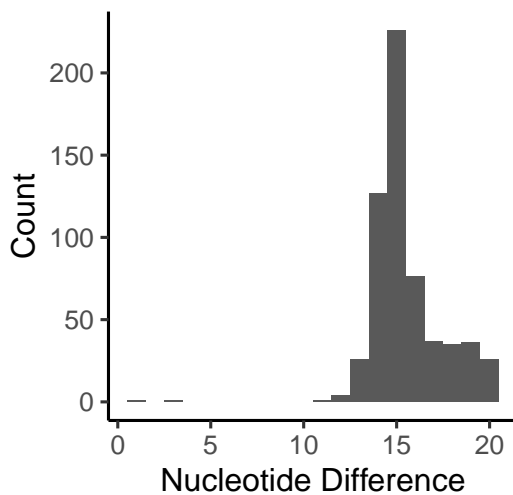
### IGHV1-2\*04

40 sequences assigned  
No exact matches.



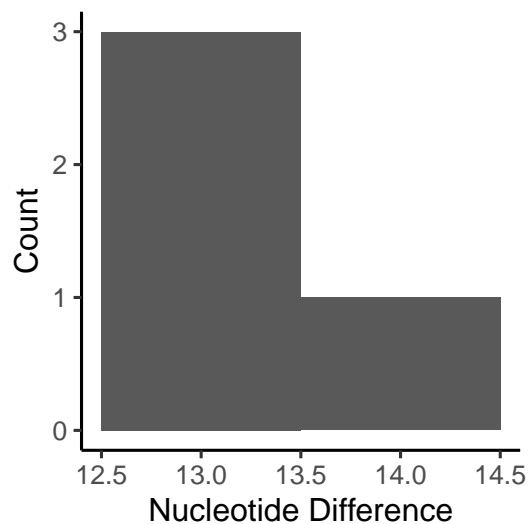
### IGHV1-8\*01

654 sequences assigned  
No exact matches.



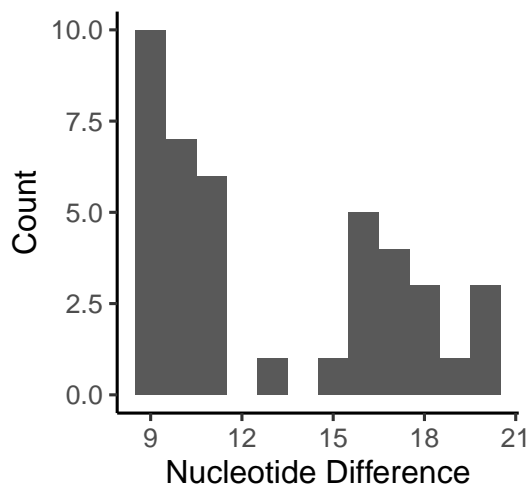
### IGHV1-58\*01\_03

4 sequences assigned  
No exact matches.



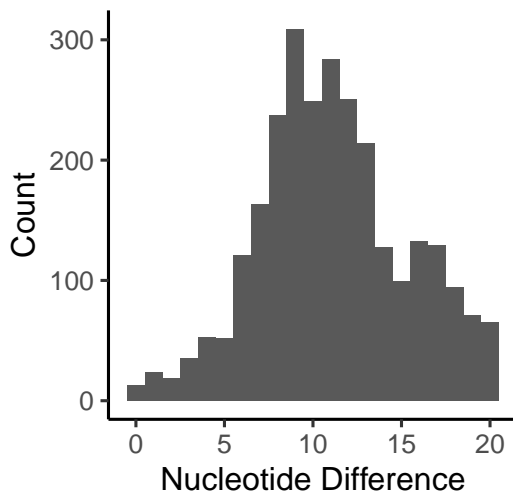
### IGHV1-3\*04

44 sequences assigned  
No exact matches.



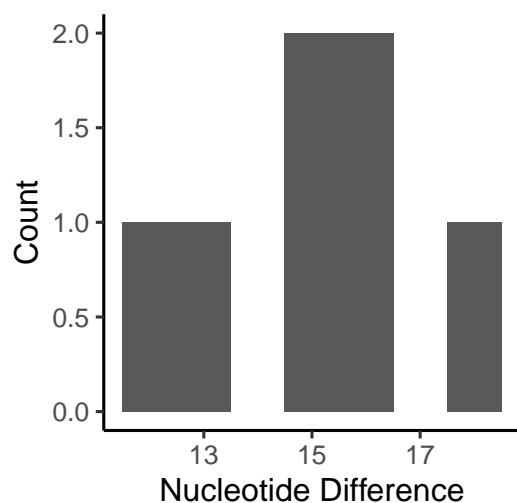
### IGHV1-18\*01

2900 sequences assigned  
13 (0.4%) exact matches, in which:  
11 unique CDR3  
4 unique J



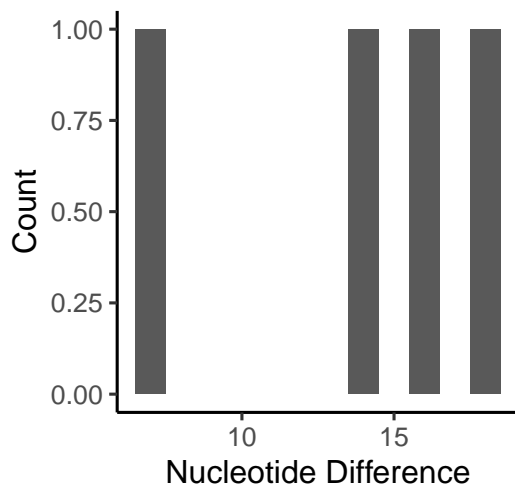
### IGHV1-69-2\*01

8 sequences assigned  
No exact matches.



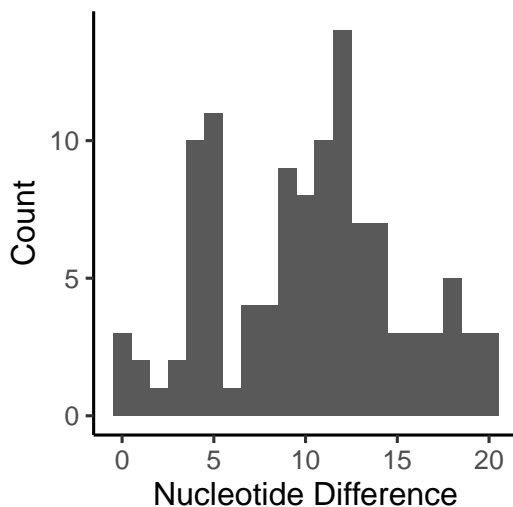
### IGHV1-3\*01\_05

8 sequences assigned  
No exact matches.



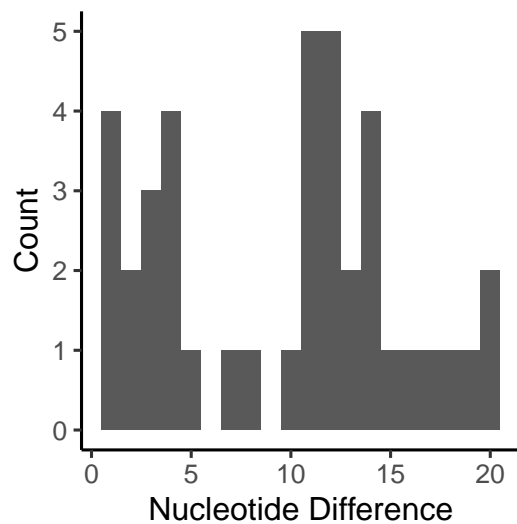
### IGHV1-46\*01

119 sequences assigned  
3 (2.5%) exact matches, in which:  
2 unique CDR3  
1 unique J



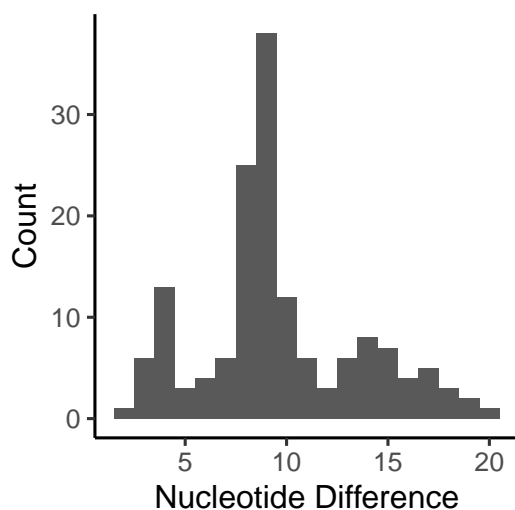
### IGHV1-69\*01\_12\_13

134 sequences assigned  
No exact matches.



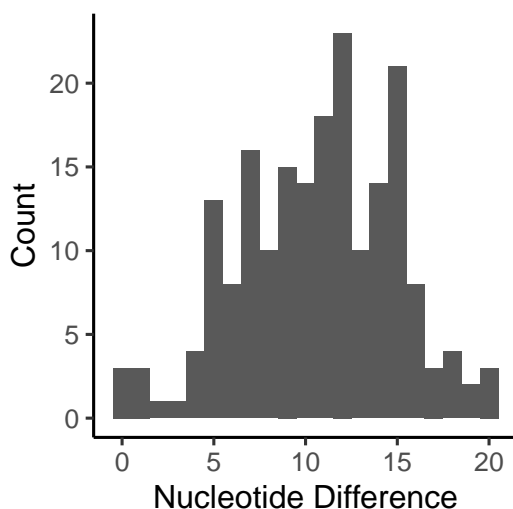
### IGHV1-69\*06\_14

199 sequences assigned  
No exact matches.



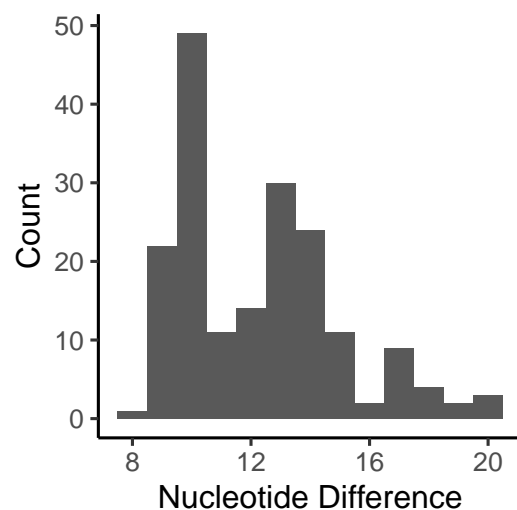
### IGHV3-7\*01

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



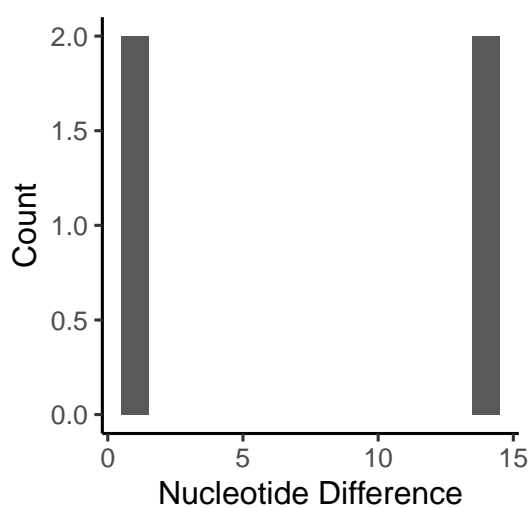
### IGHV3-11\*01

186 sequences assigned  
No exact matches.



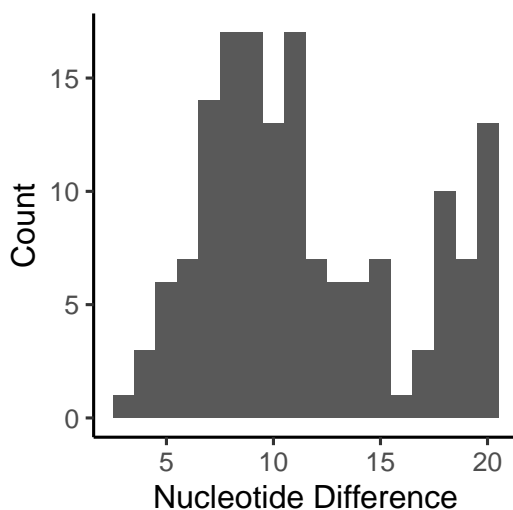
### IGHV2-5\*02

5 sequences assigned  
No exact matches.



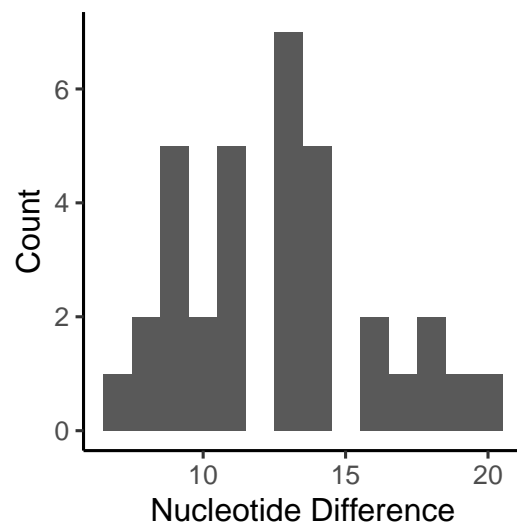
### IGHV3-7\*03

195 sequences assigned  
No exact matches.



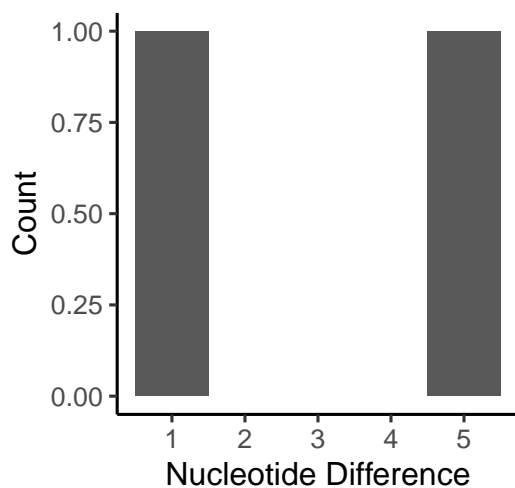
### IGHV3-11\*04

37 sequences assigned  
No exact matches.



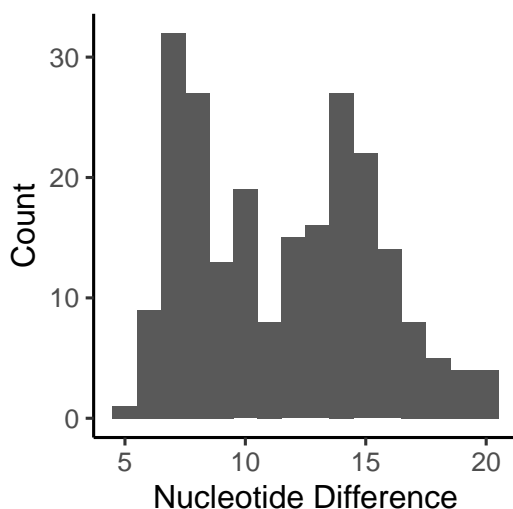
### IGHV2-70\*01

2 sequences assigned  
No exact matches.



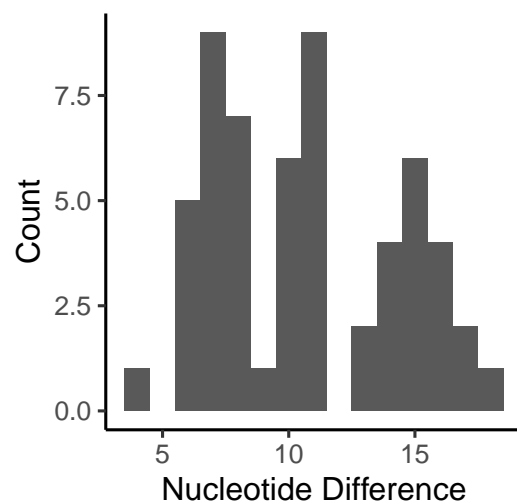
### IGHV3-9\*01

259 sequences assigned  
No exact matches.



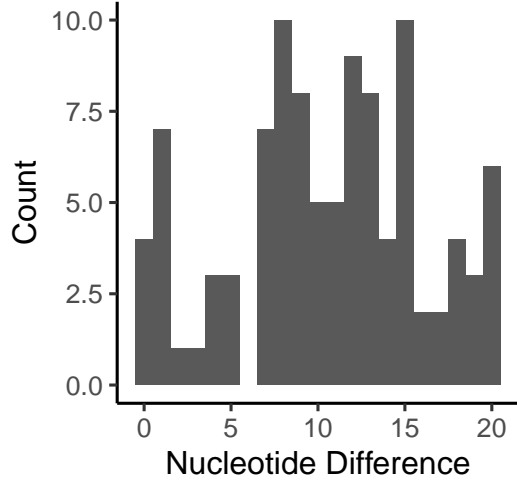
### IGHV3-11\*06

57 sequences assigned  
No exact matches.



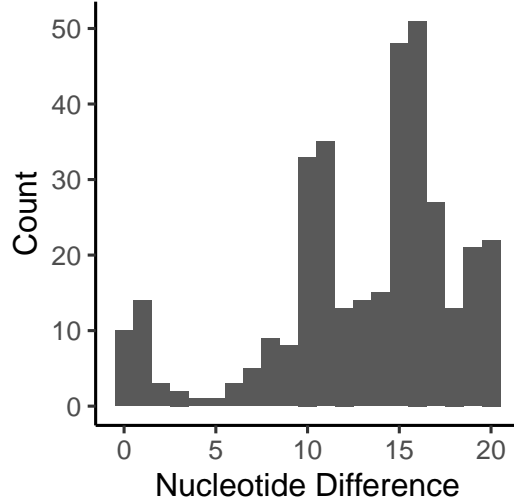
### IGHV3-15\*07

118 sequences assigned  
4 (3.4%) exact matches, in which:  
4 unique CDR3  
1 unique J



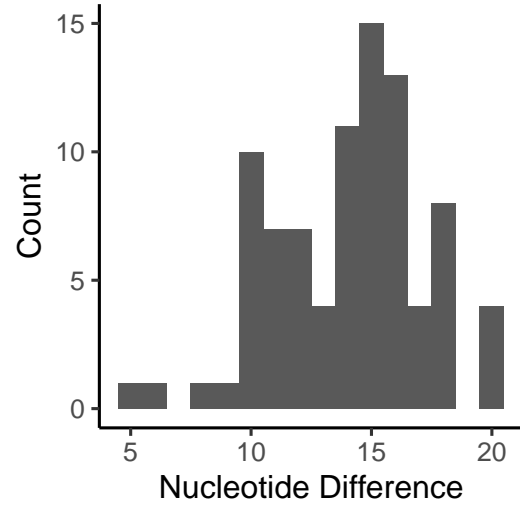
### IGHV3-21\*01\_02

449 sequences assigned  
10 (2.2%) exact matches, in which:  
8 unique CDR3  
3 unique J



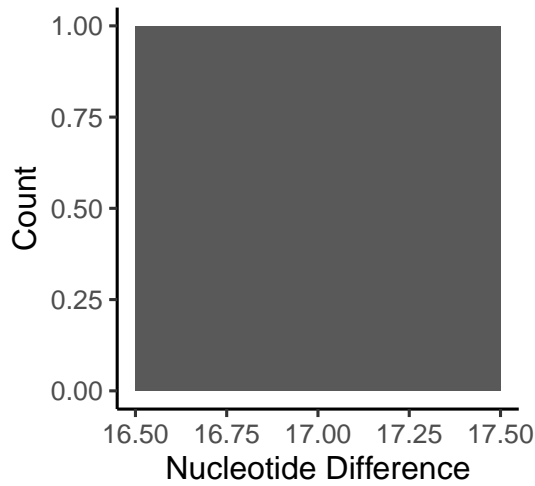
### IGHV3-30\*03

134 sequences assigned  
No exact matches.



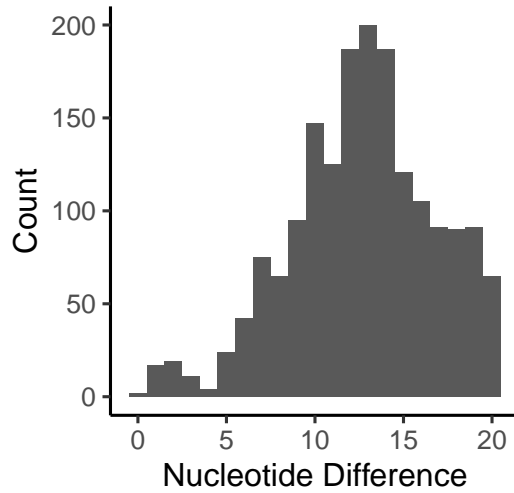
### IGHV3-20\*01\_02

1 sequences assigned  
No exact matches.



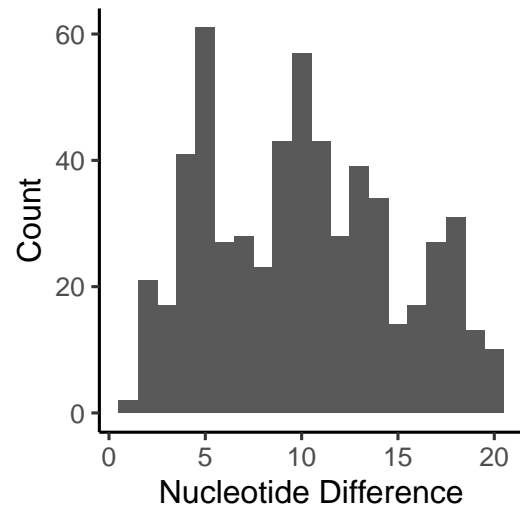
### IGHV3-23\*01\_04

2072 sequences assigned  
2 (0.1%) exact matches, in which:  
2 unique CDR3  
2 unique J



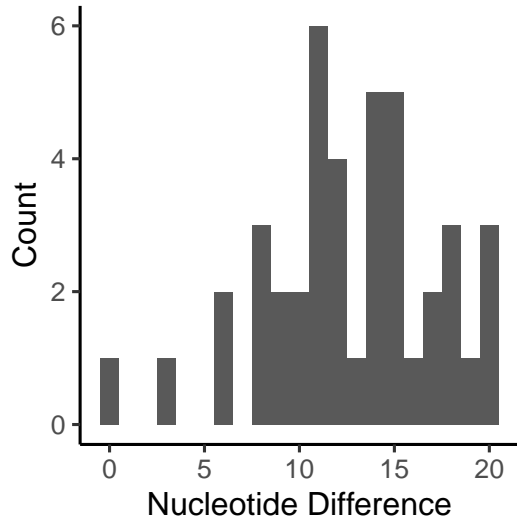
### IGHV3-33\*01

655 sequences assigned  
No exact matches.



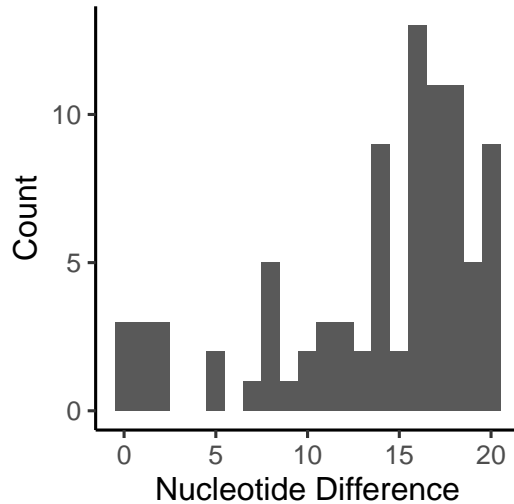
### IGHV3-21\*04

56 sequences assigned  
1 (1.8%) exact matches, in which:  
1 unique CDR3  
1 unique J



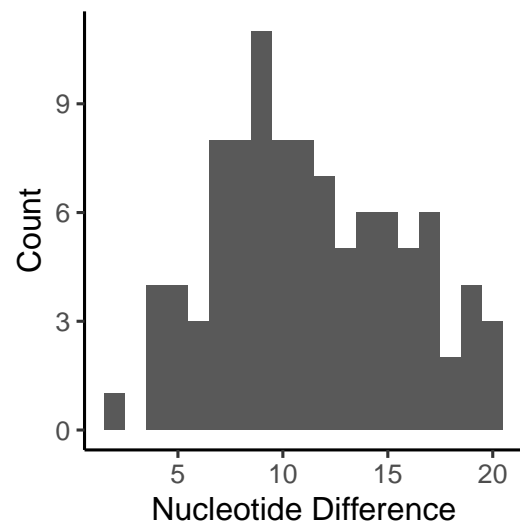
### IGHV3-30-3\*01

121 sequences assigned  
3 (2.5%) exact matches, in which:  
2 unique CDR3  
1 unique J



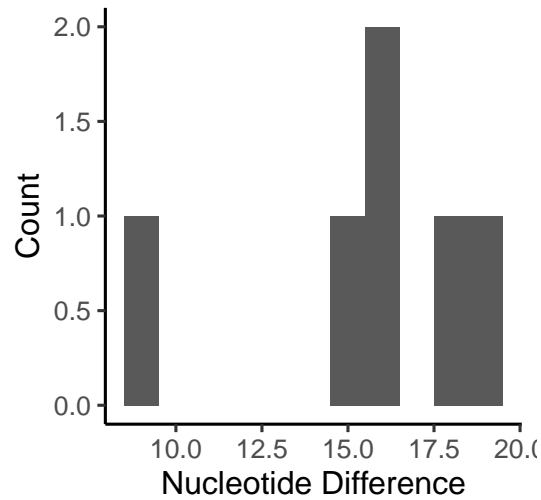
### IGHV3-33\*06

114 sequences assigned  
No exact matches.



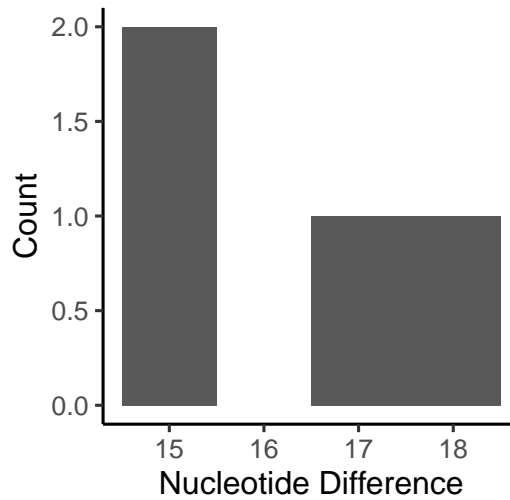
### IGHV3-48\*01

17 sequences assigned  
No exact matches.



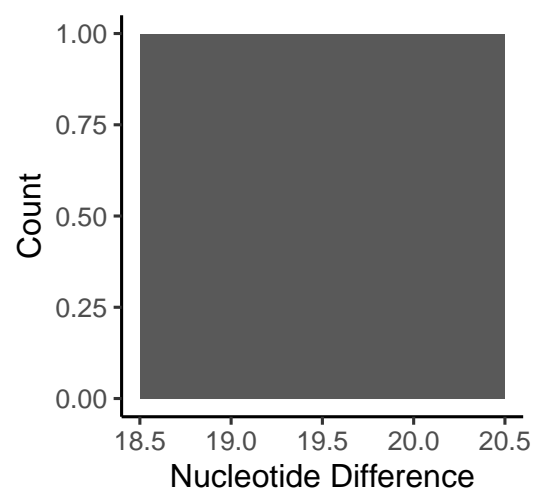
### IGHV3-49\*04

5 sequences assigned  
No exact matches.



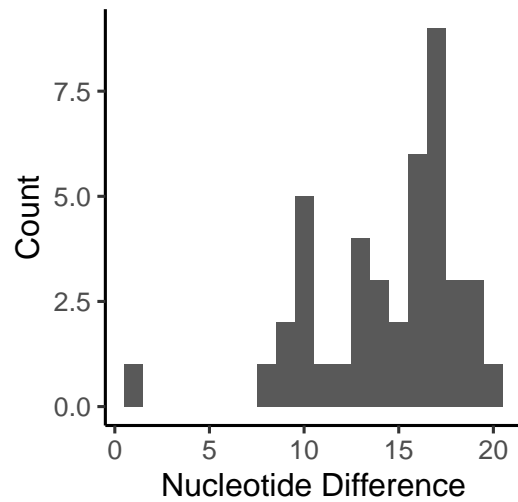
### IGHV3-64\*04

8 sequences assigned  
No exact matches.



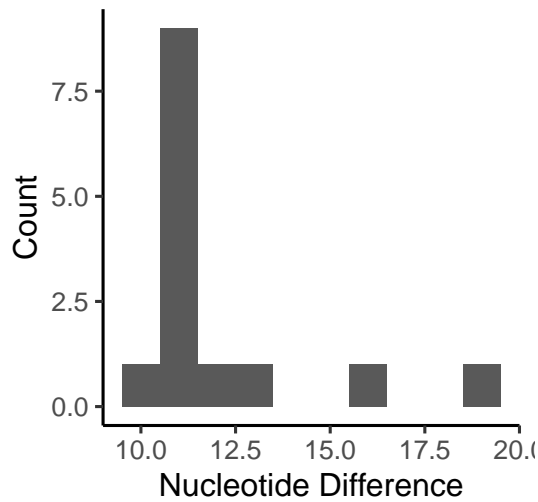
### IGHV3-48\*02

118 sequences assigned  
No exact matches.



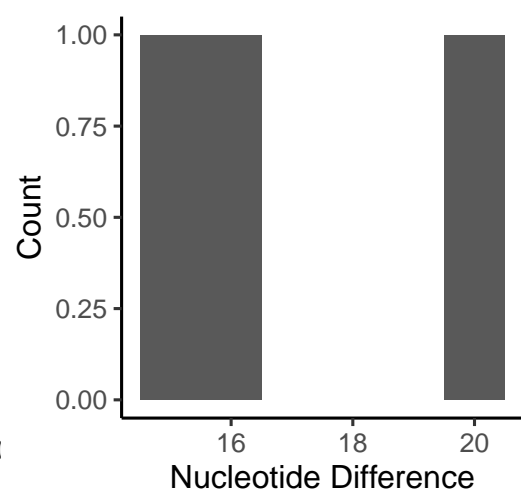
### IGHV3-49\*03\_05

18 sequences assigned  
No exact matches.



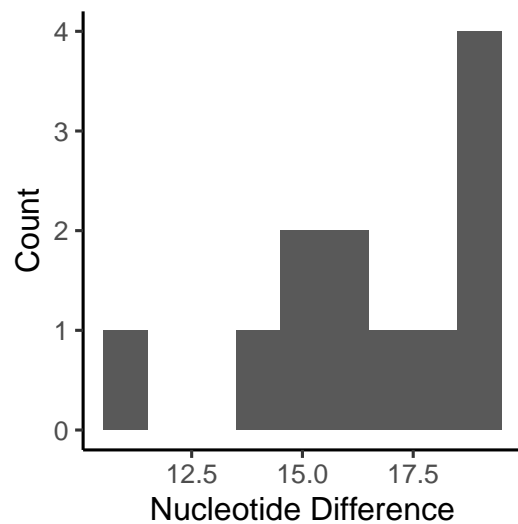
### IGHV3-64\*02\_07

4 sequences assigned  
No exact matches.



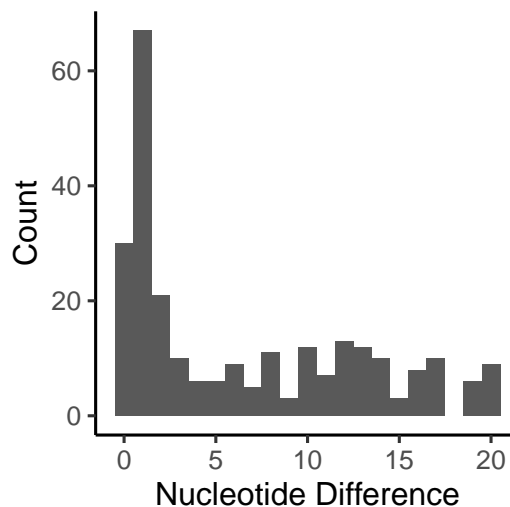
### IGHV3-48\*04

24 sequences assigned  
No exact matches.



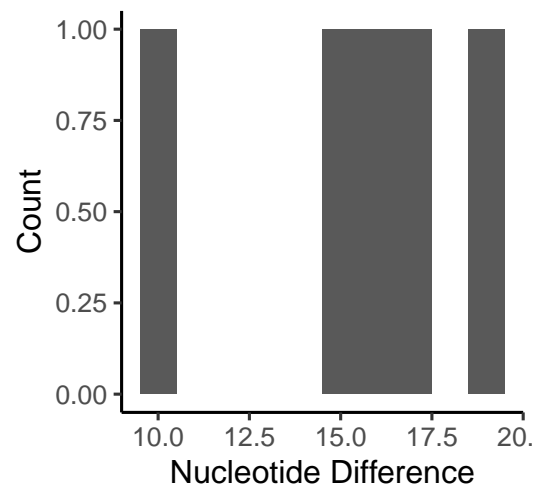
### IGHV3-53\*01\_02

296 sequences assigned  
30 (10.1%) exact matches, in which:  
15 unique CDR3  
4 unique J



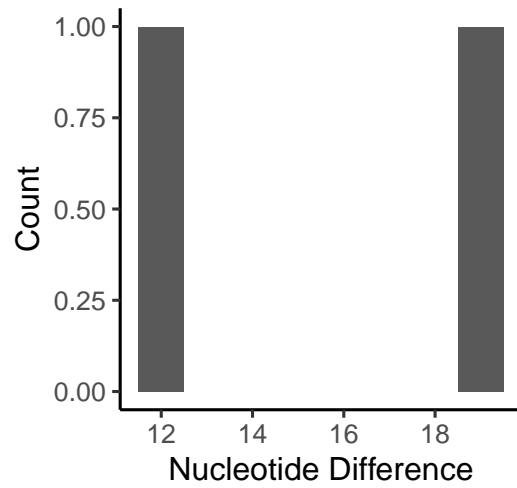
### IGHV3-66\*01

7 sequences assigned  
No exact matches.



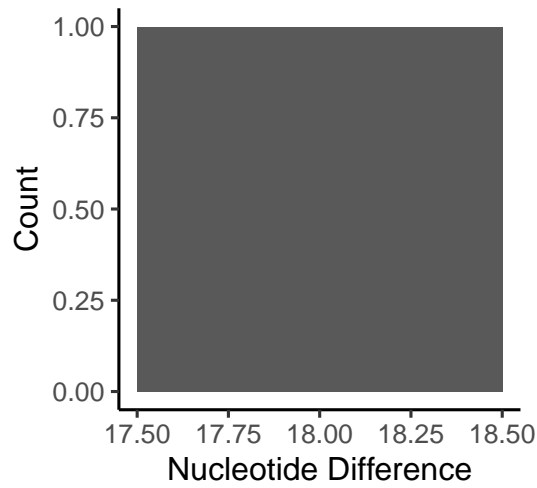
### IGHV3-66\*02

3 sequences assigned  
No exact matches.



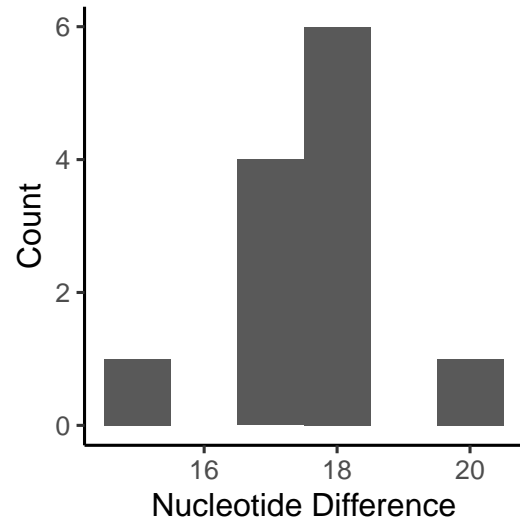
### IGHV3-73\*01\_02

1 sequences assigned  
No exact matches.



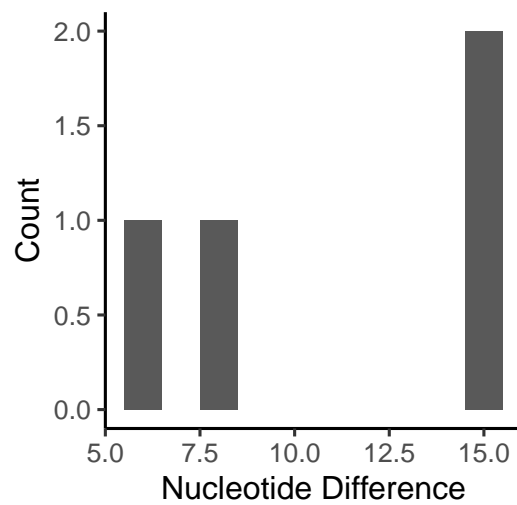
### IGHV3-64D\*06

18 sequences assigned  
No exact matches.



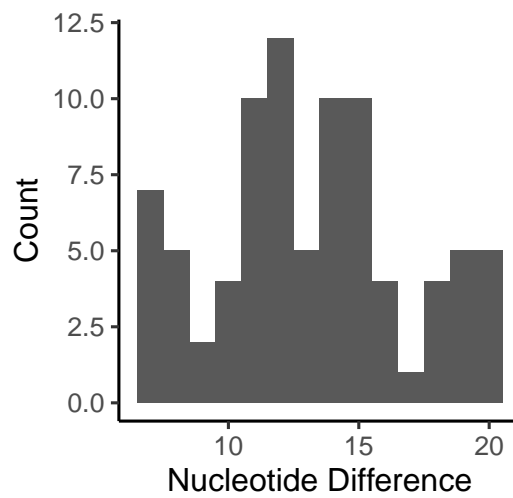
### IGHV3-66\*03

4 sequences assigned  
No exact matches.



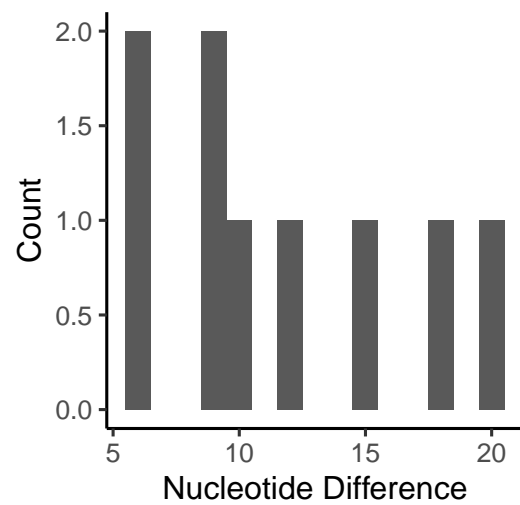
### IGHV3-74\*03

131 sequences assigned  
No exact matches.



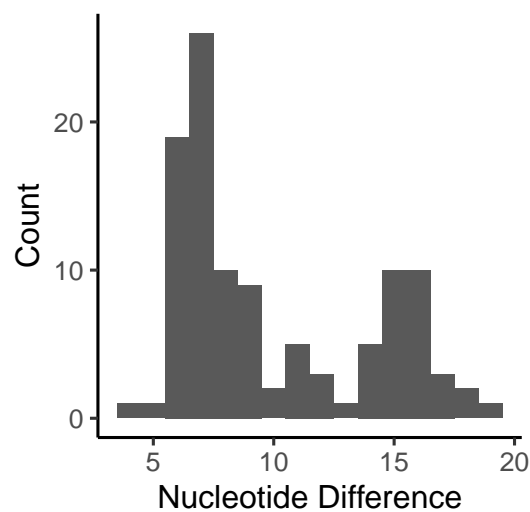
### IGHV3-NL1\*01

10 sequences assigned  
No exact matches.



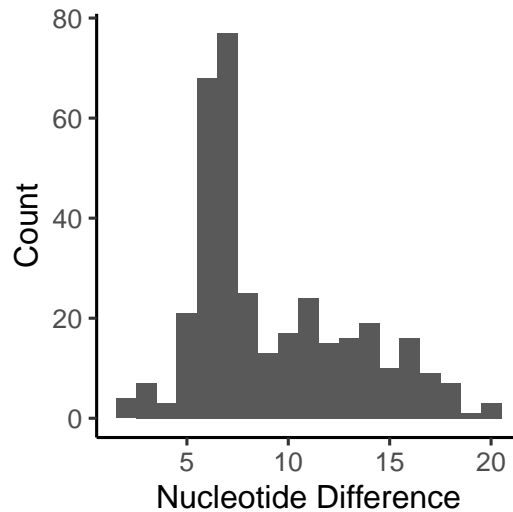
### IGHV3-72\*01

124 sequences assigned  
No exact matches.



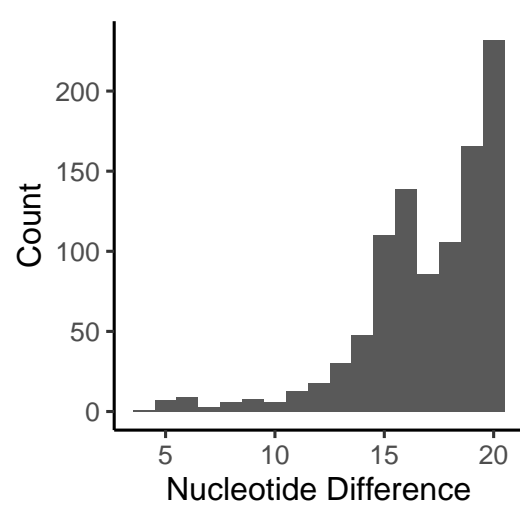
### IGHV3-74\*01\_02

380 sequences assigned  
No exact matches.



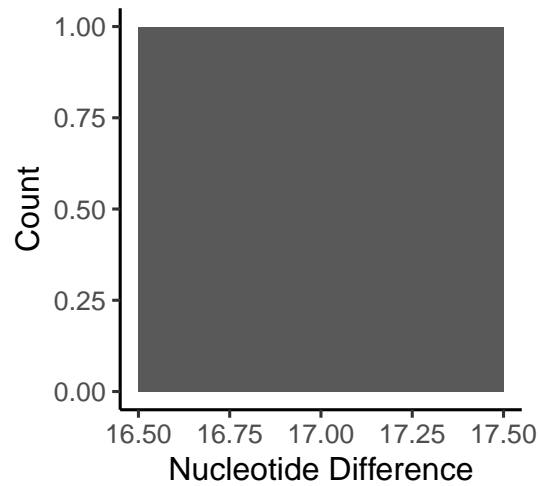
### IGHV4-4\*02\_03

1376 sequences assigned  
No exact matches.



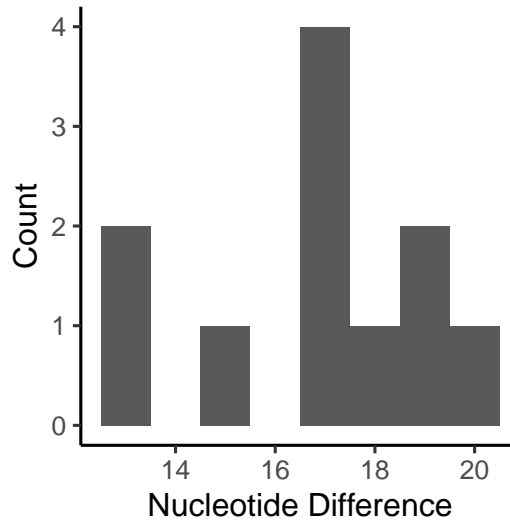
### IGHV4-28\*03

5 sequences assigned  
No exact matches.



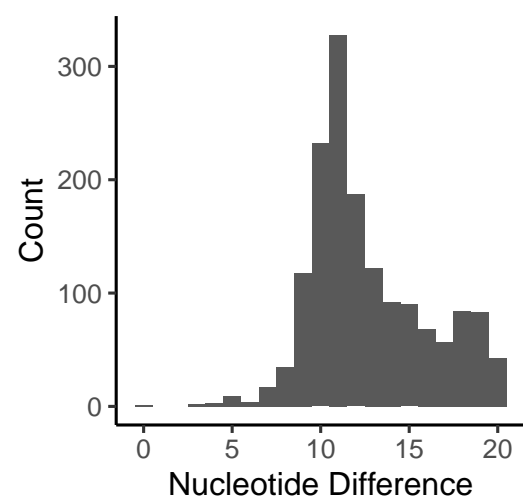
### IGHV4-30-2\*03

65 sequences assigned  
No exact matches.



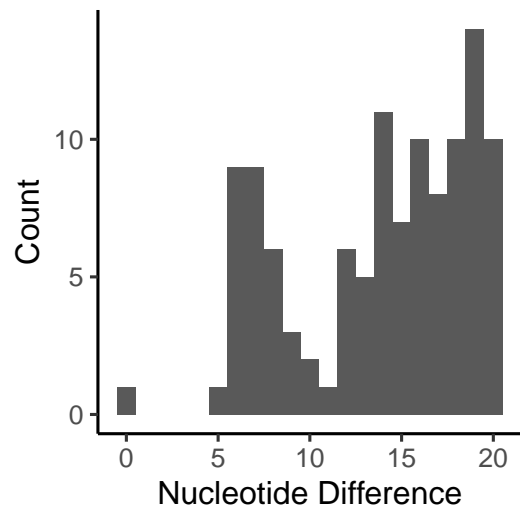
### IGHV4-31\*02

1947 sequences assigned  
1 (0.1%) exact matches, in which:  
1 unique CDR3  
1 unique J



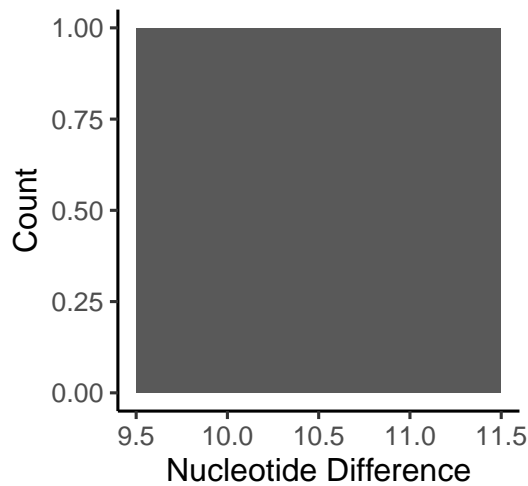
### IGHV4-30-4\*01

1183 sequences assigned  
1 (0.1%) exact matches, in which:  
1 unique CDR3  
1 unique J



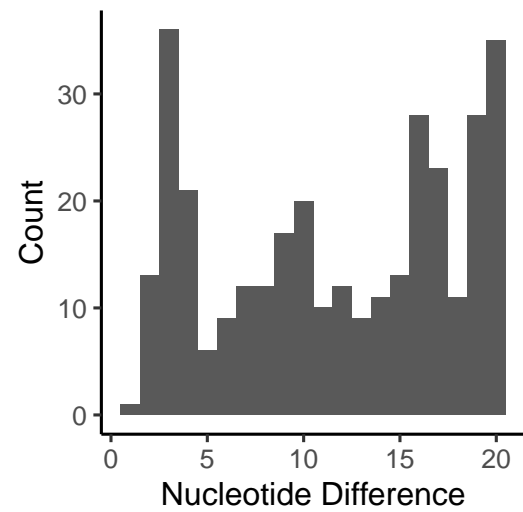
### IGHV4-30-2\*04

2 sequences assigned  
No exact matches.



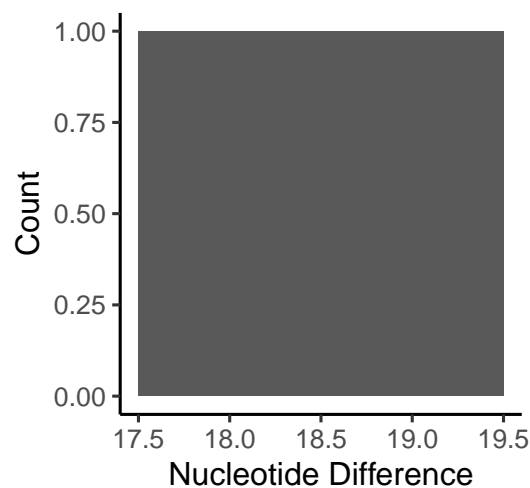
### IGHV4-34\*01\_02

392 sequences assigned  
No exact matches.



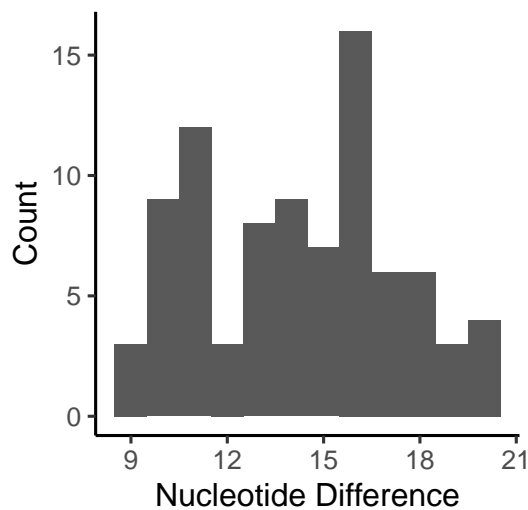
### IGHV4-30-2\*01

5 sequences assigned  
No exact matches.



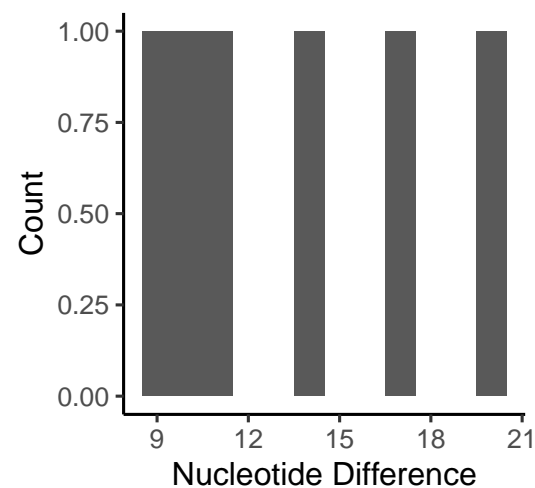
### IGHV4-30-4\*08

247 sequences assigned  
No exact matches.



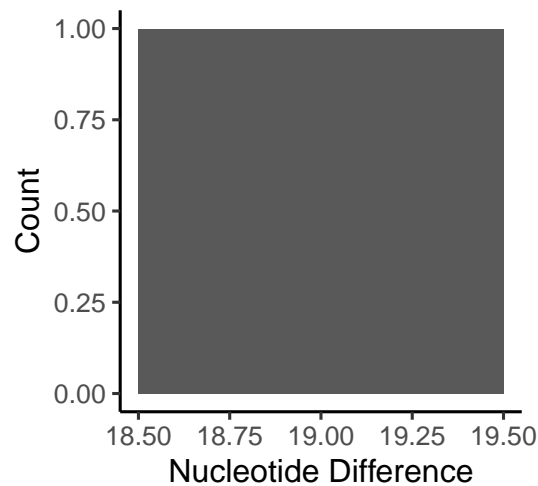
### IGHV4-38-2\*01

6 sequences assigned  
No exact matches.



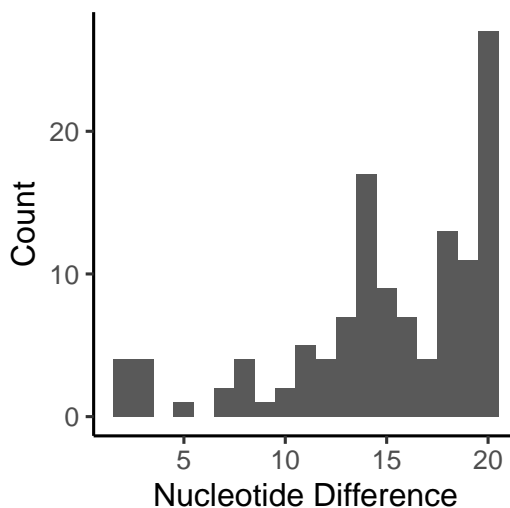
### IGHV4-38-2\*02

4 sequences assigned  
No exact matches.



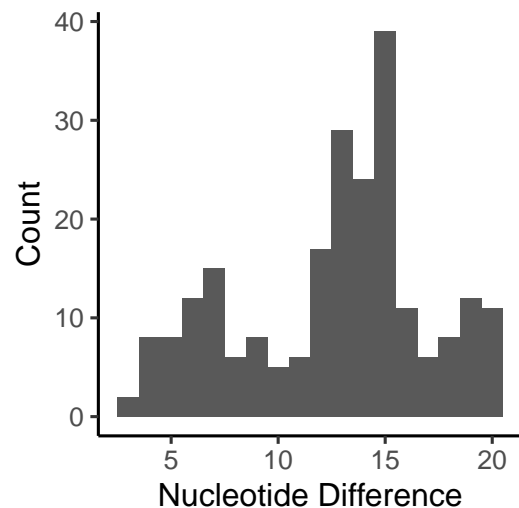
### IGHV4-39\*01\_05

188 sequences assigned  
No exact matches.



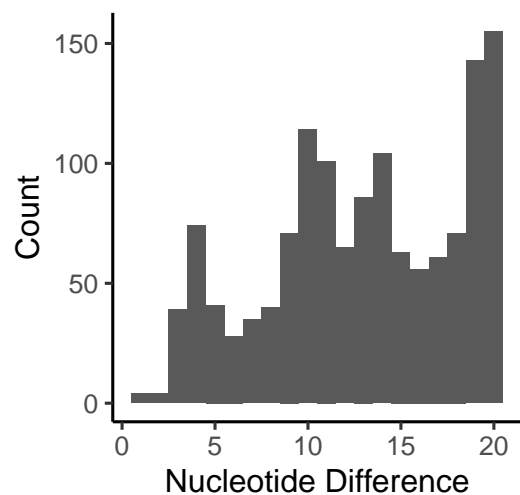
### IGHV4-59\*12

428 sequences assigned  
No exact matches.



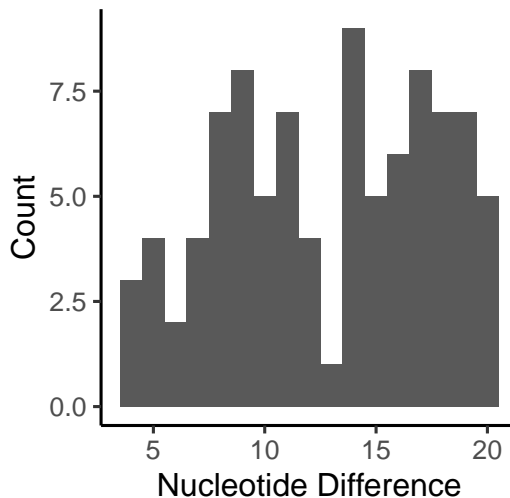
### IGHV4-39\*02

1791 sequences assigned  
No exact matches.



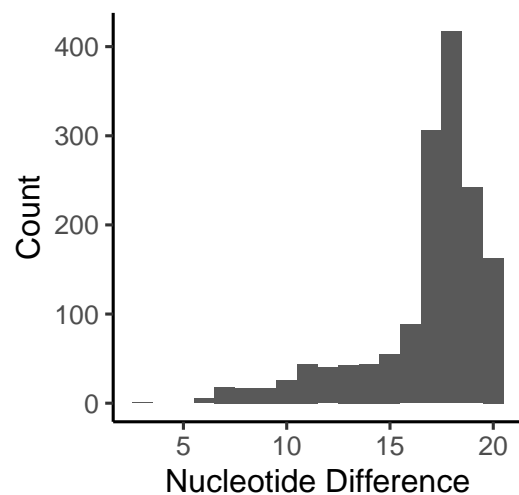
### IGHV4-59\*08

152 sequences assigned  
No exact matches.



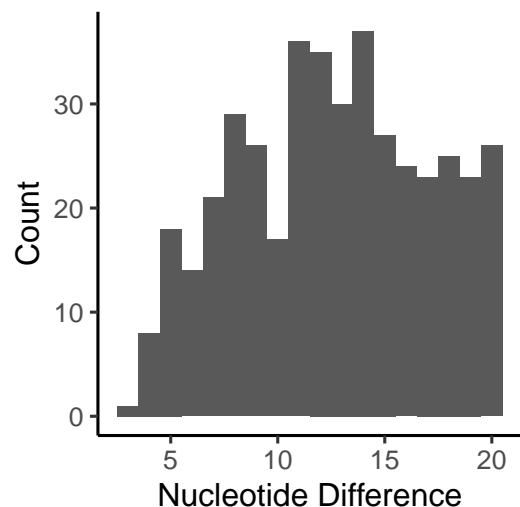
### IGHV4-61\*01

2042 sequences assigned  
No exact matches.



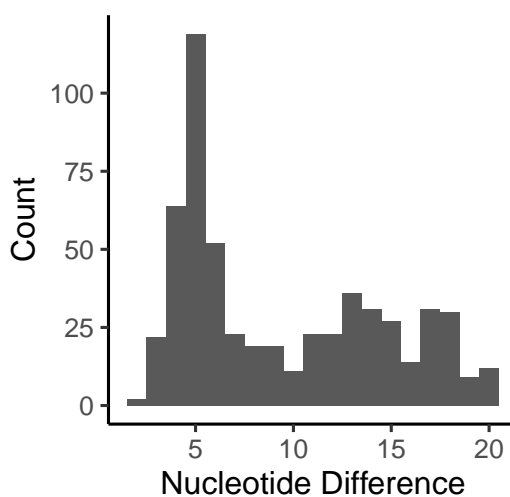
### IGHV4-39\*07

583 sequences assigned  
No exact matches.



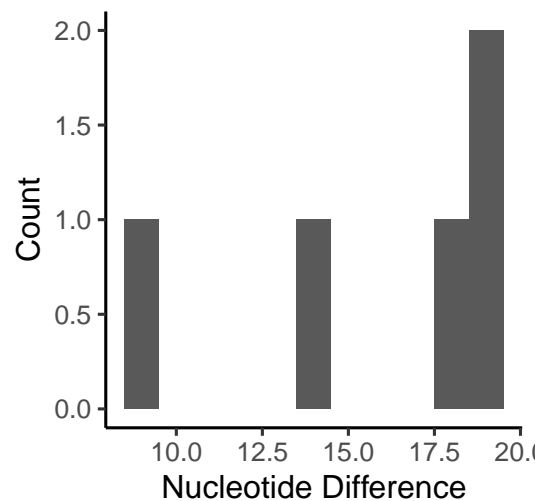
### IGHV4-59\*01\_07

664 sequences assigned  
No exact matches.



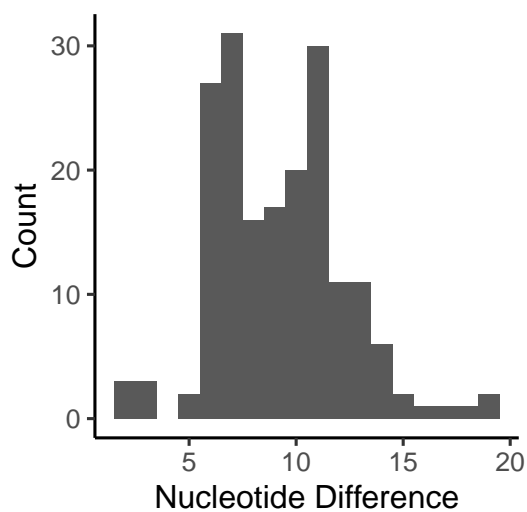
### IGHV4/OR15-8\*01

5 sequences assigned  
No exact matches.



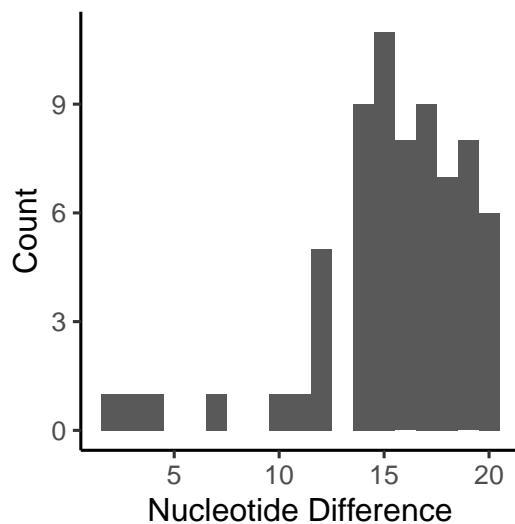
### IGHV5-10-1\*01\_03

199 sequences assigned  
No exact matches.



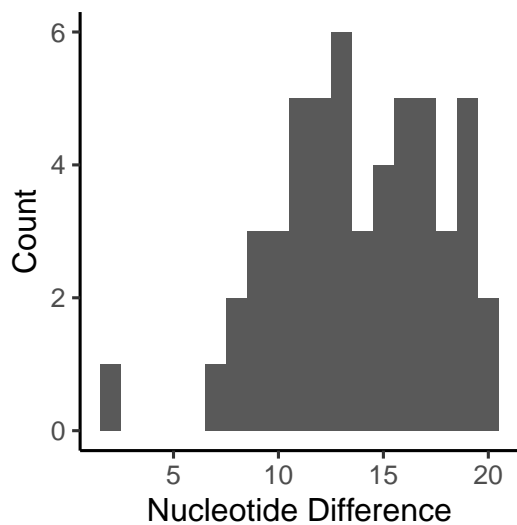
### IGHV6-1\*01\_02

94 sequences assigned  
No exact matches.



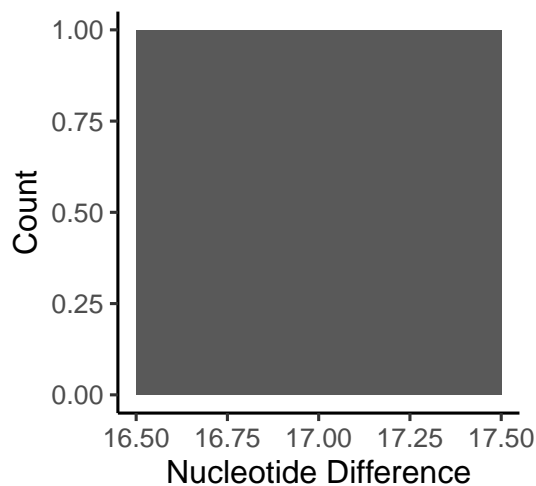
### IGHV5-51\*07

162 sequences assigned  
No exact matches.



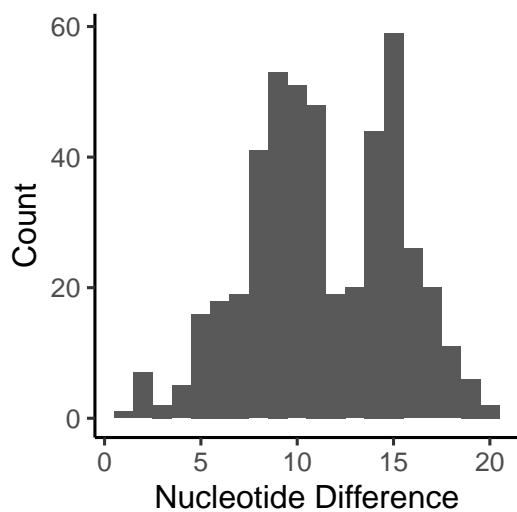
### IGHV7-4-1\*01

1 sequences assigned  
No exact matches.



### IGHV5-51\*01\_03

535 sequences assigned  
No exact matches.







Warning – no inferred sequences found.

Warning – no inferred sequences found.