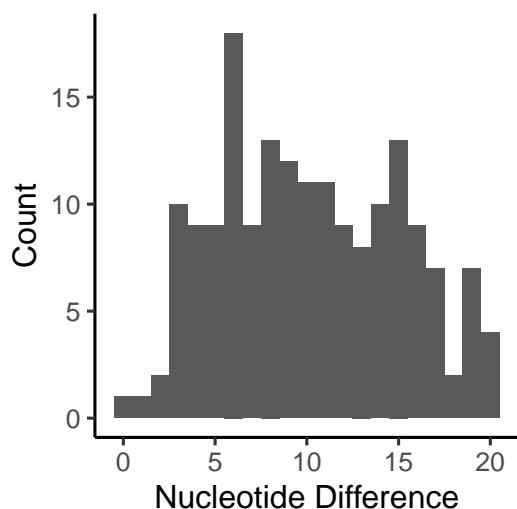


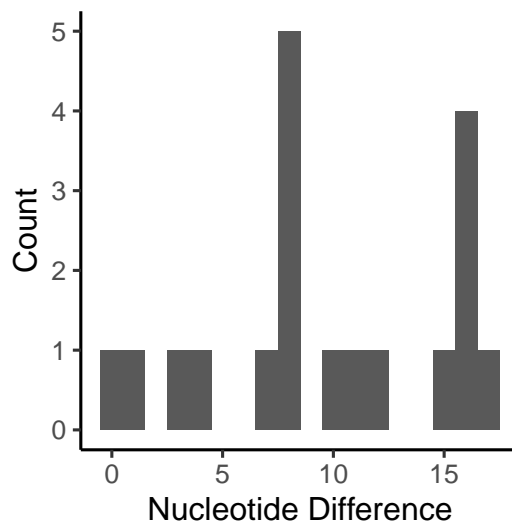
## IGHV1-2\*02

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



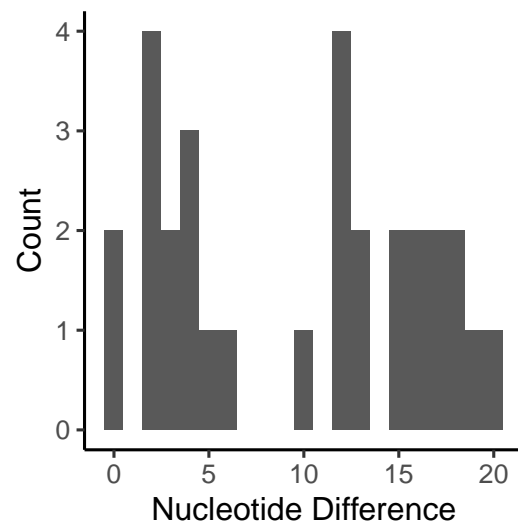
## IGHV1-3\*01\_05

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



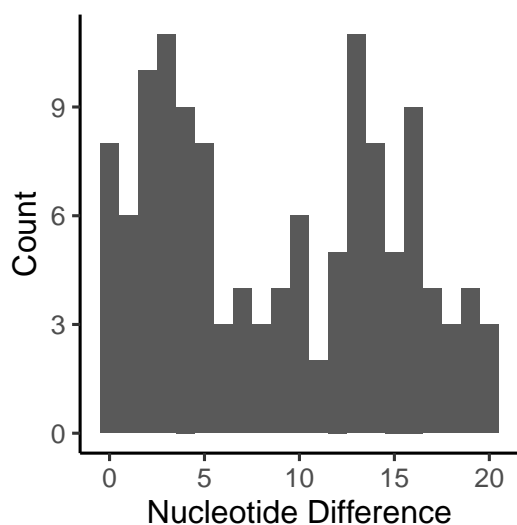
## IGHV1-24\*01

36 sequences assigned  
2 (5.6%) exact matches, in which:  
2 unique CDR3  
2 unique J



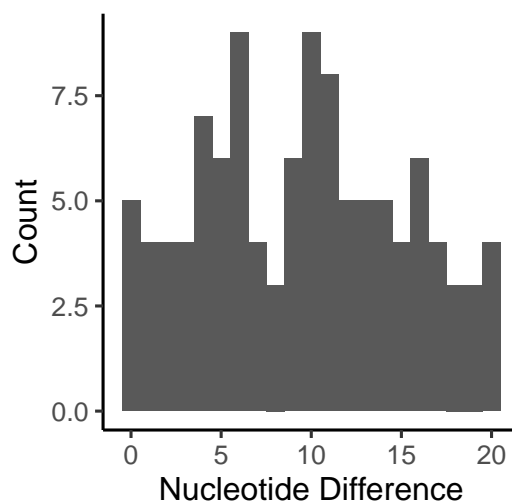
## IGHV1-2\*06

149 sequences assigned  
8 (5.4%) exact matches, in which:  
7 unique CDR3  
2 unique J



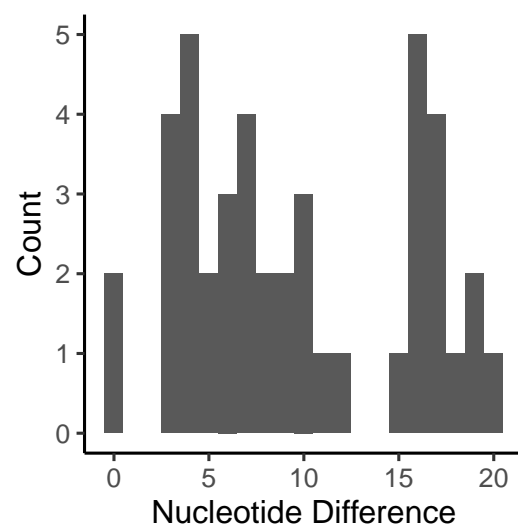
## IGHV1-8\*01

128 sequences assigned  
5 (3.9%) exact matches, in which:  
5 unique CDR3  
3 unique J



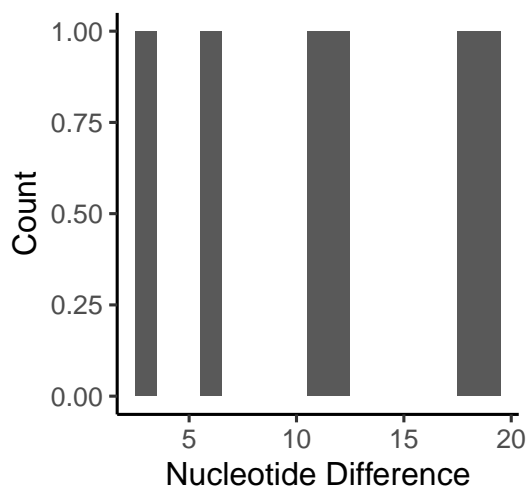
## IGHV1-46\*01

51 sequences assigned  
2 (3.9%) exact matches, in which:  
2 unique CDR3  
1 unique J



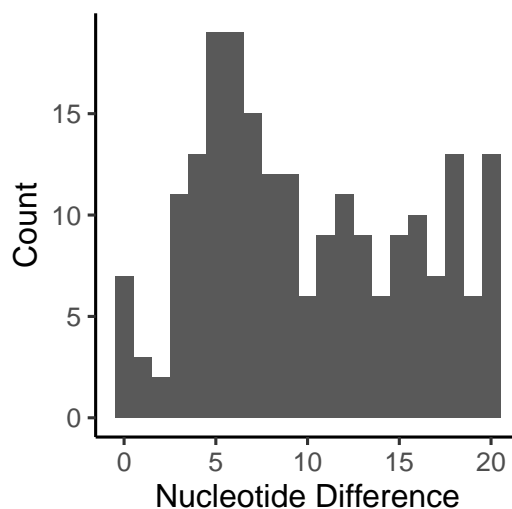
## IGHV1-3\*04

8 sequences assigned  
No exact matches.



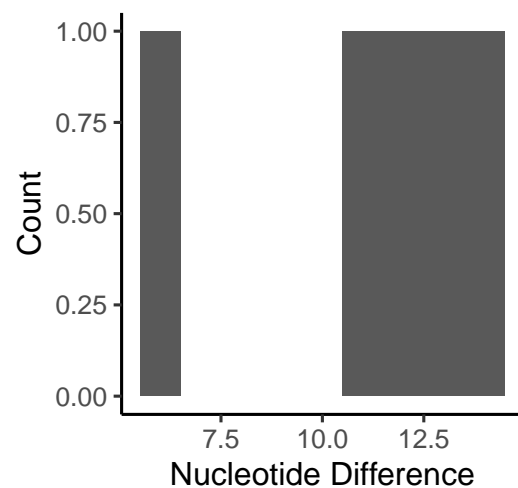
## IGHV1-18\*01

274 sequences assigned  
7 (2.6%) exact matches, in which:  
7 unique CDR3  
3 unique J



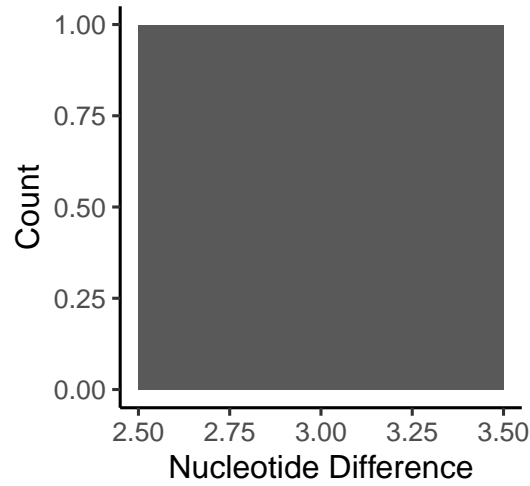
## IGHV1-58\*01\_03

7 sequences assigned  
No exact matches.



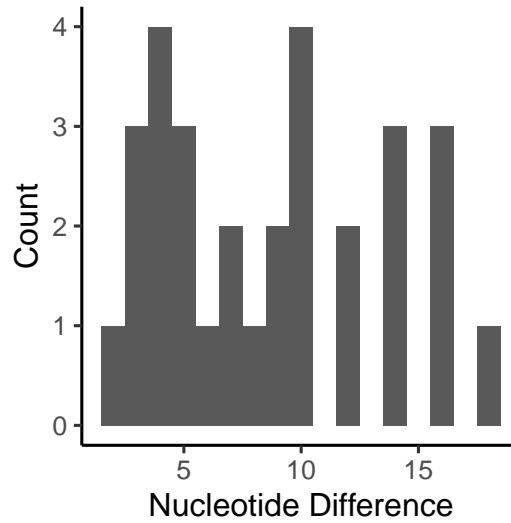
### IGHV1-68\*02\_03

1 sequences assigned  
No exact matches.



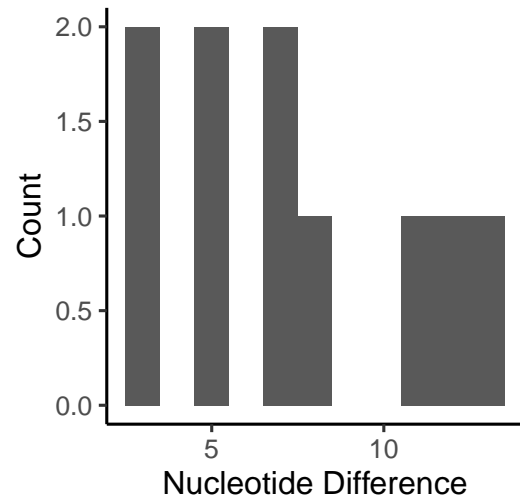
### IGHV2-5\*01

34 sequences assigned  
No exact matches.



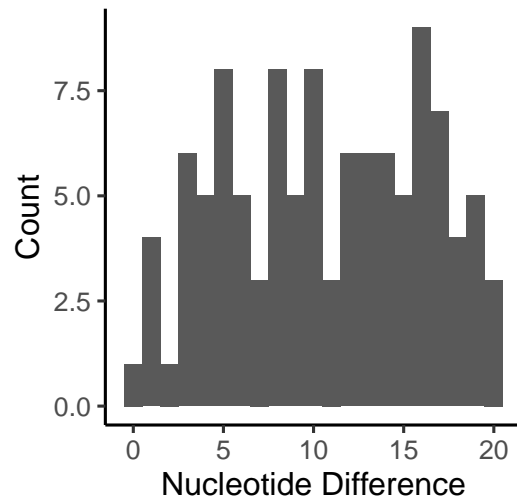
### IGHV2-70\*01

10 sequences assigned  
No exact matches.



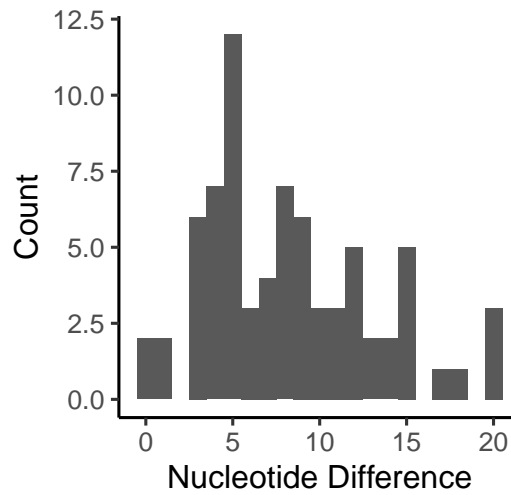
### IGHV1-69\*01\_12\_13

131 sequences assigned  
1 (0.8%) exact matches, in which:  
1 unique CDR3  
1 unique J



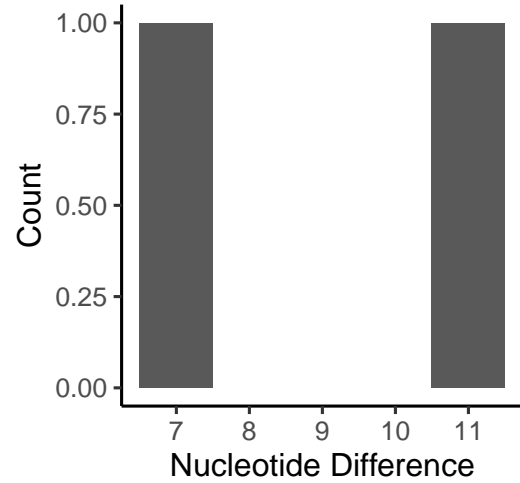
### IGHV2-5\*02

78 sequences assigned  
2 (2.6%) exact matches, in which:  
2 unique CDR3  
2 unique J



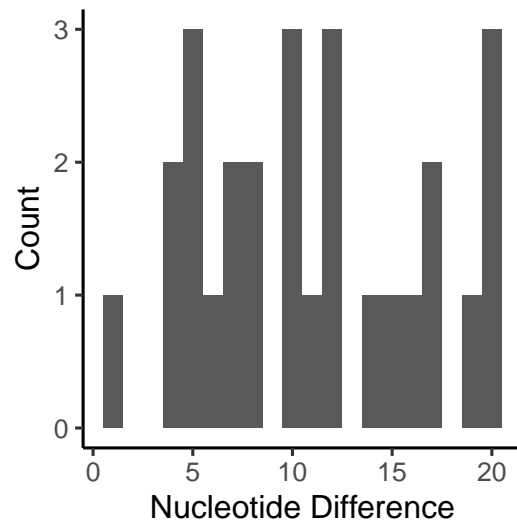
### IGHV2-70\*13

2 sequences assigned  
No exact matches.



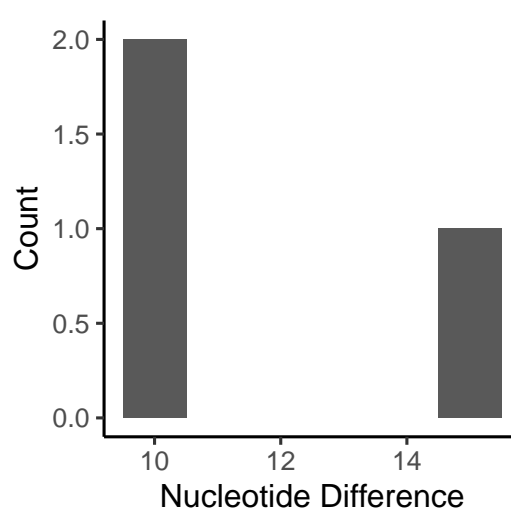
### IGHV1-69\*06\_14

44 sequences assigned  
No exact matches.



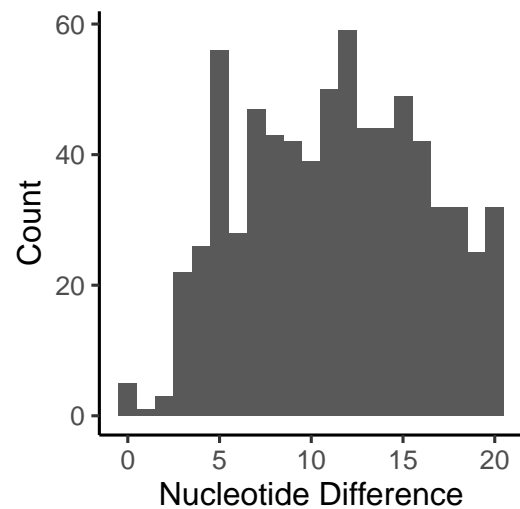
### IGHV2-26\*01

4 sequences assigned  
No exact matches.



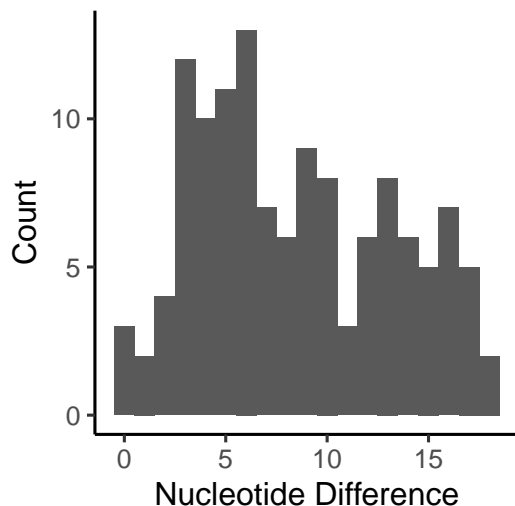
### IGHV3-7\*01

810 sequences assigned  
5 (0.6%) exact matches, in which:  
4 unique CDR3  
1 unique J



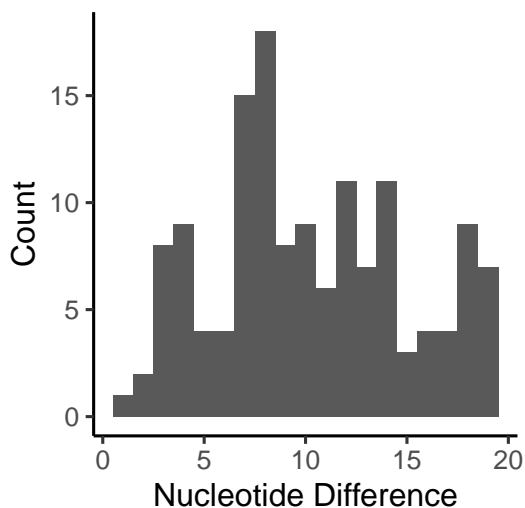
### IGHV3-9\*01

139 sequences assigned  
3 (2.2%) exact matches, in which:  
3 unique CDR3  
1 unique J



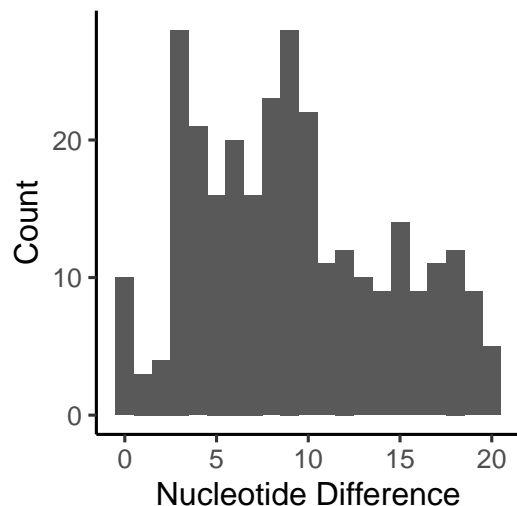
### IGHV3-15\*01\_02

160 sequences assigned  
No exact matches.



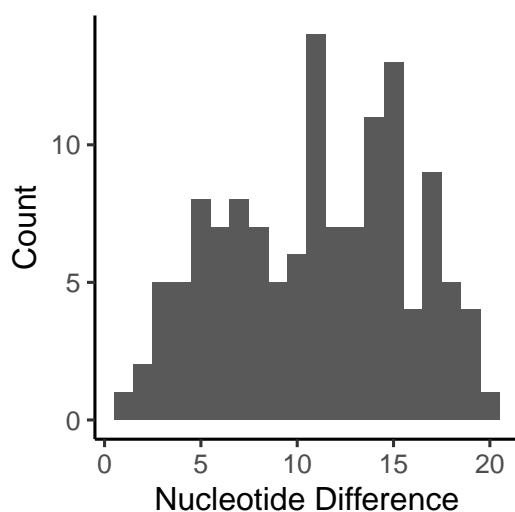
### IGHV3-21\*01\_02

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



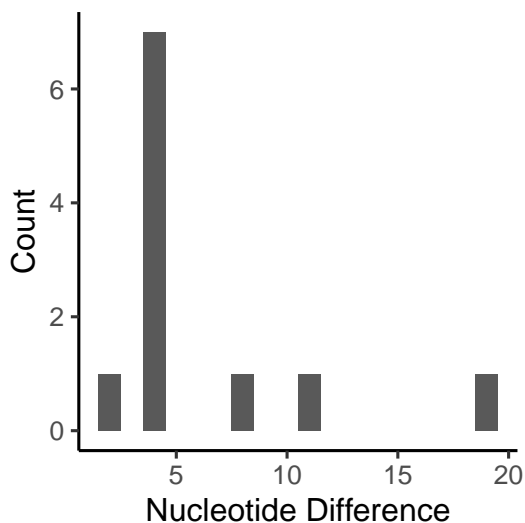
### IGHV3-11\*01

151 sequences assigned  
No exact matches.



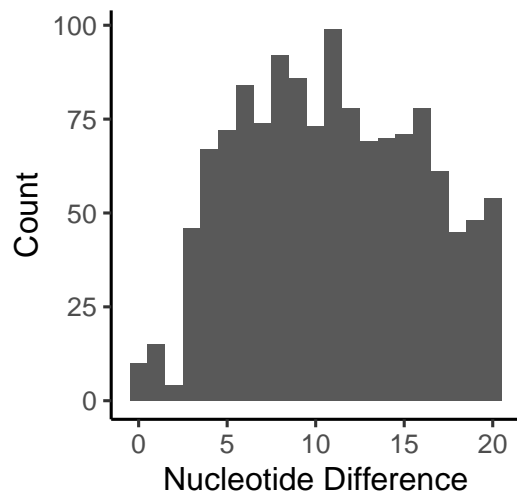
### IGHV3-20\*01\_02

12 sequences assigned  
No exact matches.



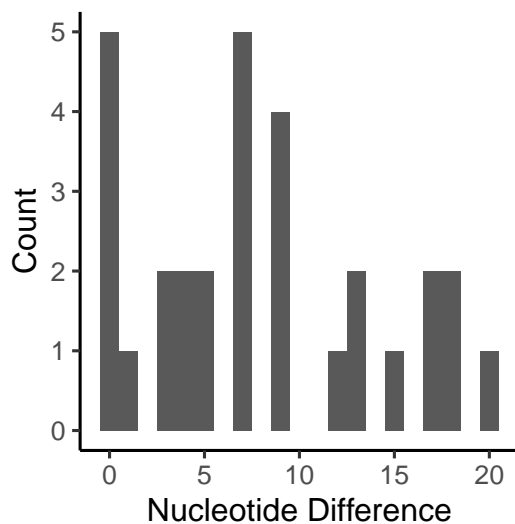
### IGHV3-23\*01\_04

1567 sequences assigned  
10 (0.6%) exact matches, in which:  
8 unique CDR3  
2 unique J



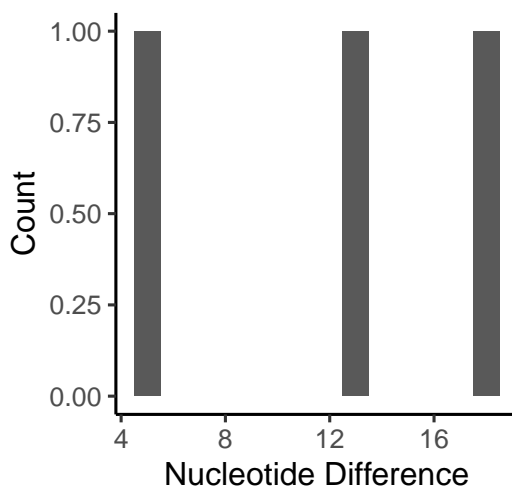
### IGHV3-13\*01

37 sequences assigned  
5 (13.5%) exact matches, in which:  
3 unique CDR3  
3 unique J



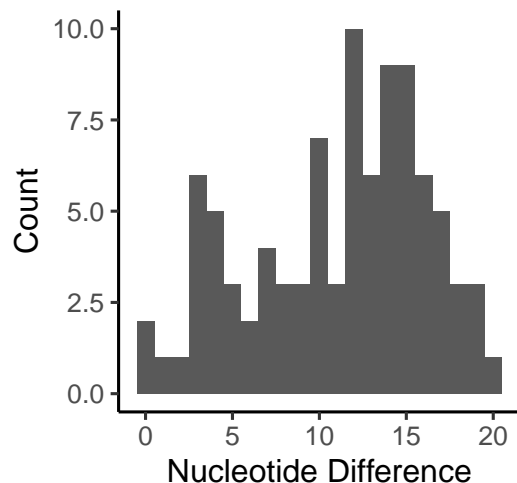
### IGHV3-20\*03\_04

8 sequences assigned  
No exact matches.



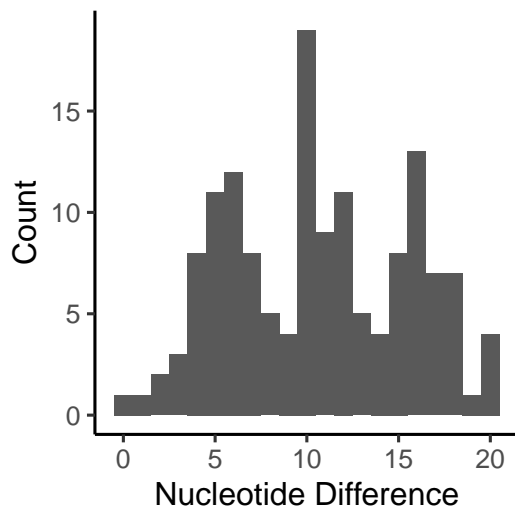
### IGHV3-30-3\*01

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



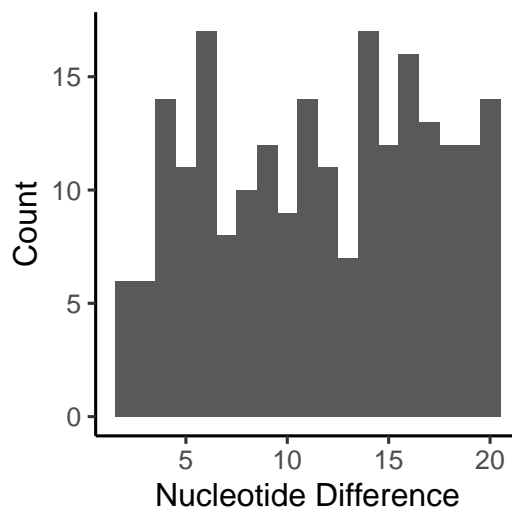
### IGHV3-33\*01

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



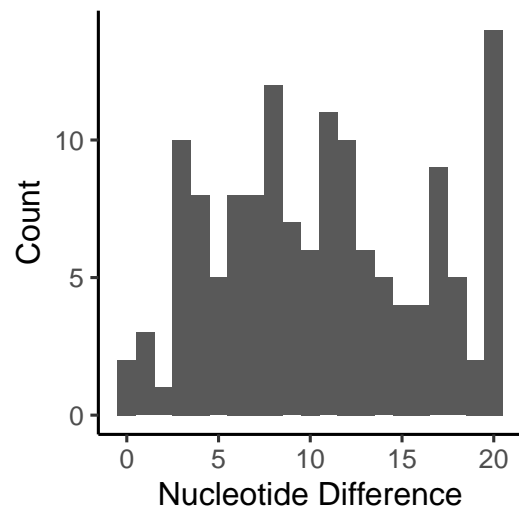
### IGHV3-48\*04

295 sequences assigned  
No exact matches.



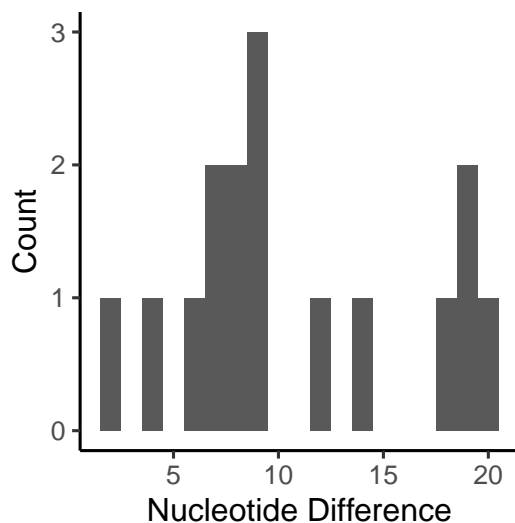
### IGHV3-53\*01\_02

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



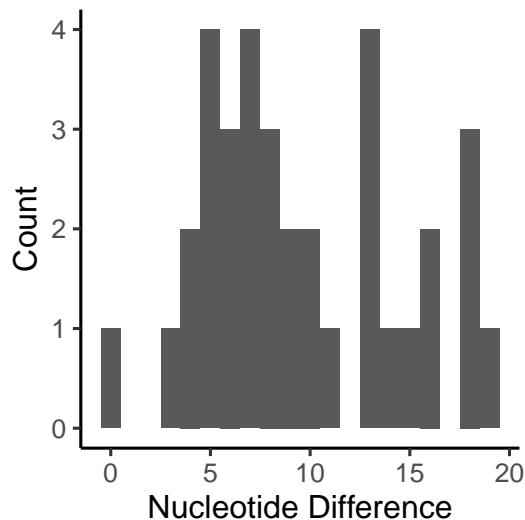
### IGHV3-43\*01

16 sequences assigned  
No exact matches.



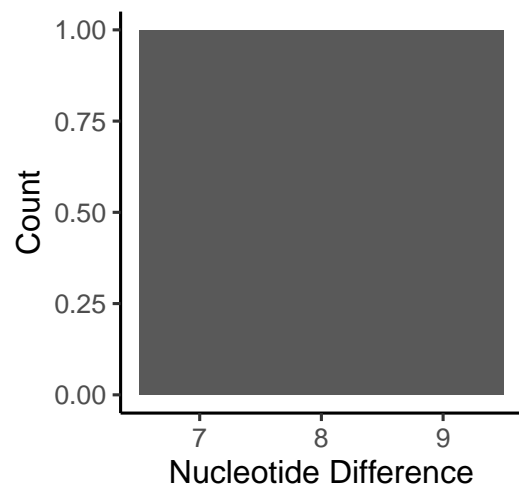
### IGHV3-49\*04

39 sequences assigned  
1 (2.6%) exact matches, in which:  
1 unique CDR3  
1 unique J



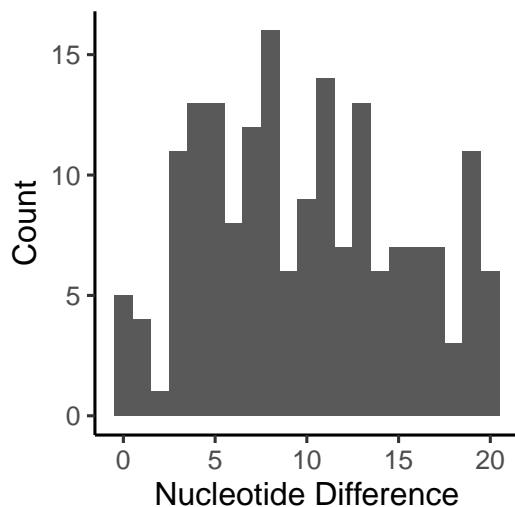
### IGHV3-64\*01

5 sequences assigned  
No exact matches.



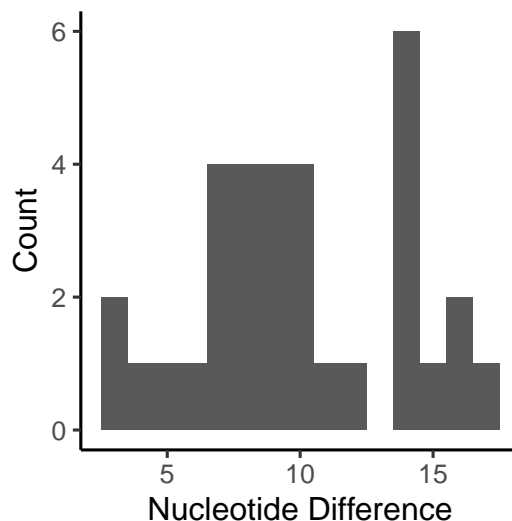
### IGHV3-48\*03

200 sequences assigned  
5 (2.5%) exact matches, in which:  
5 unique CDR3  
2 unique J



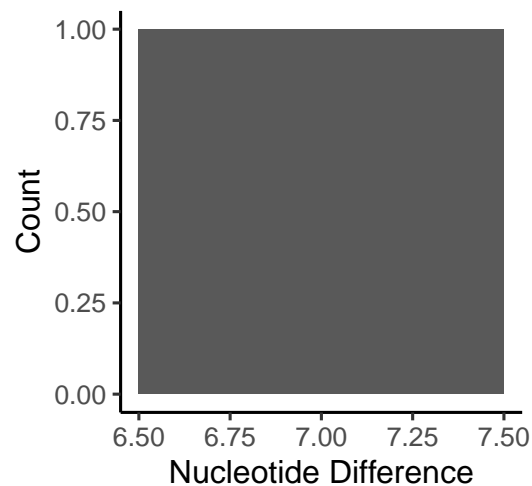
### IGHV3-49\*03\_05

37 sequences assigned  
No exact matches.



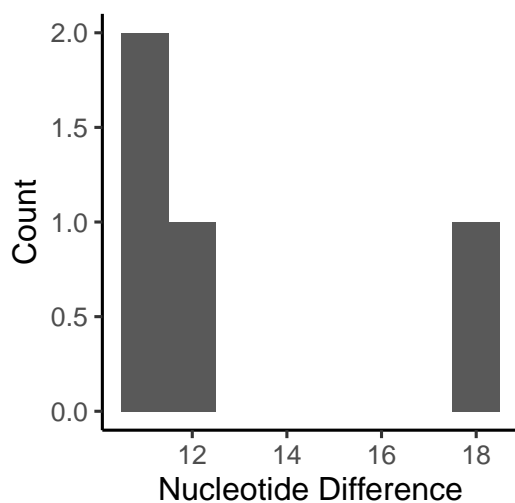
### IGHV3-64\*04

1 sequences assigned  
No exact matches.



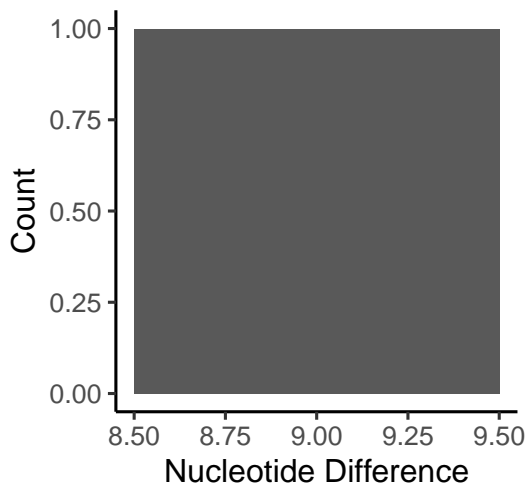
### IGHV3-64\*02\_07

5 sequences assigned  
No exact matches.



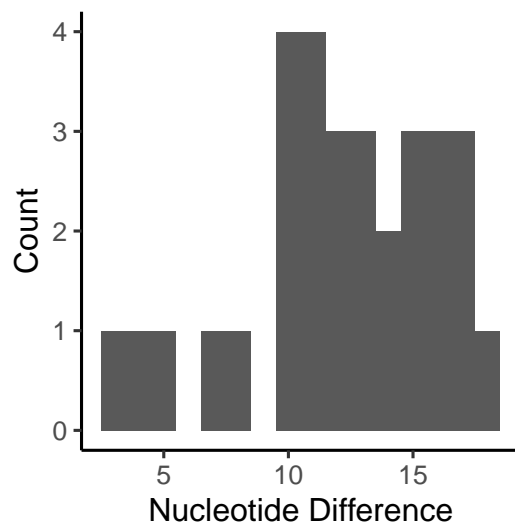
### IGHV3-66\*03

2 sequences assigned  
No exact matches.



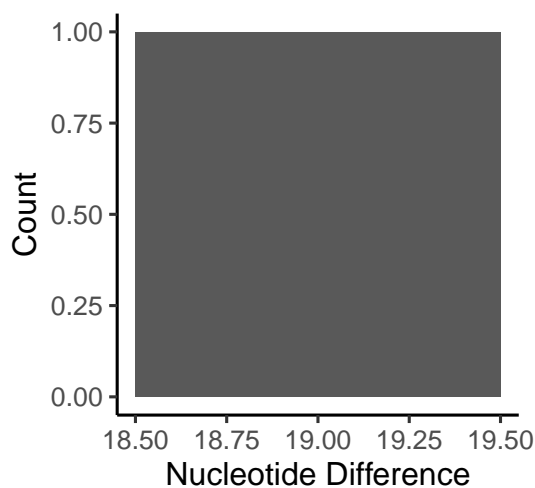
### IGHV3-73\*01\_02

38 sequences assigned  
No exact matches.



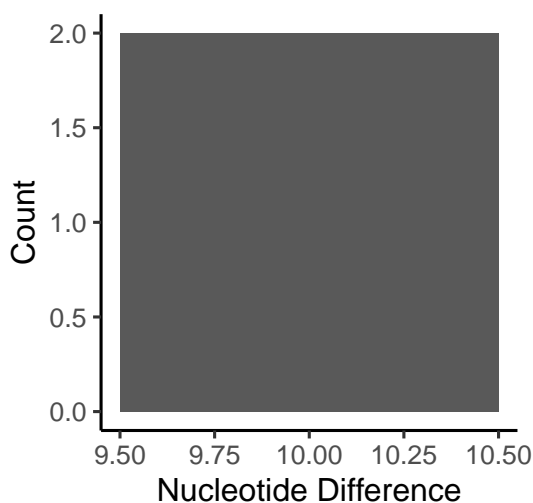
### IGHV3-66\*01

1 sequences assigned  
No exact matches.



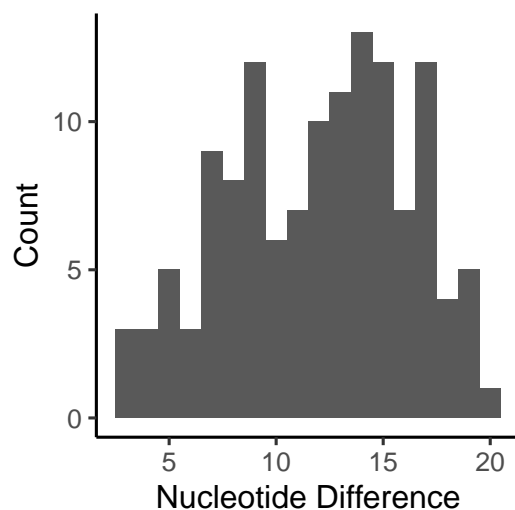
### IGHV3-69-1\*01

6 sequences assigned  
No exact matches.



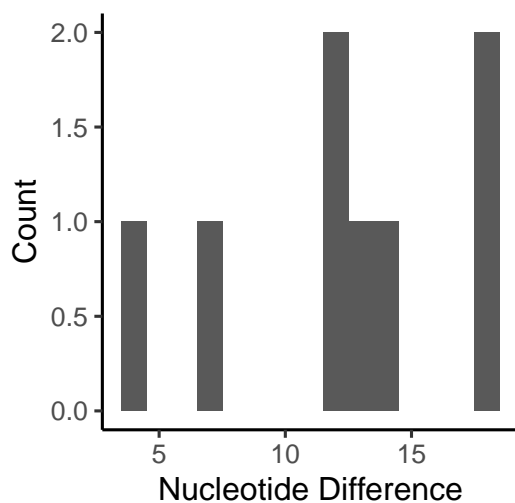
### IGHV3-74\*03

162 sequences assigned  
No exact matches.



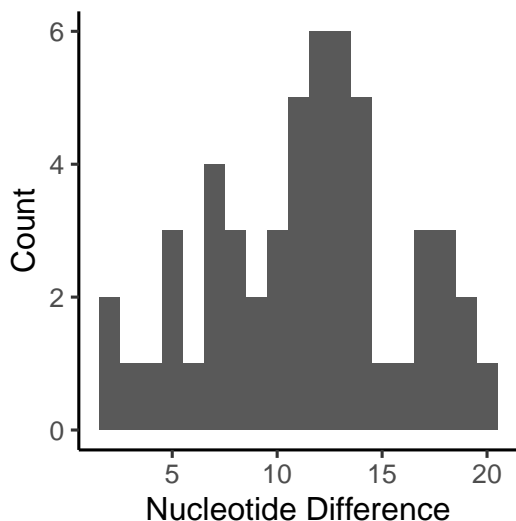
### IGHV3-66\*02

11 sequences assigned  
No exact matches.



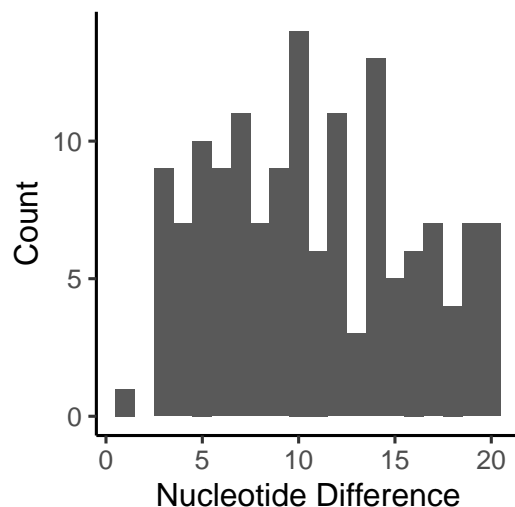
### IGHV3-72\*01

57 sequences assigned  
No exact matches.



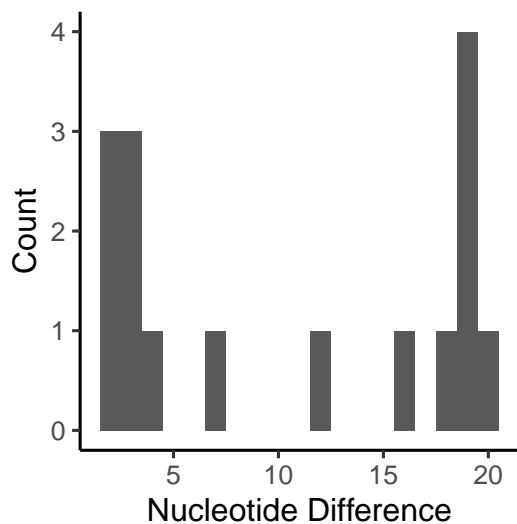
### IGHV3-74\*01\_02

173 sequences assigned  
No exact matches.



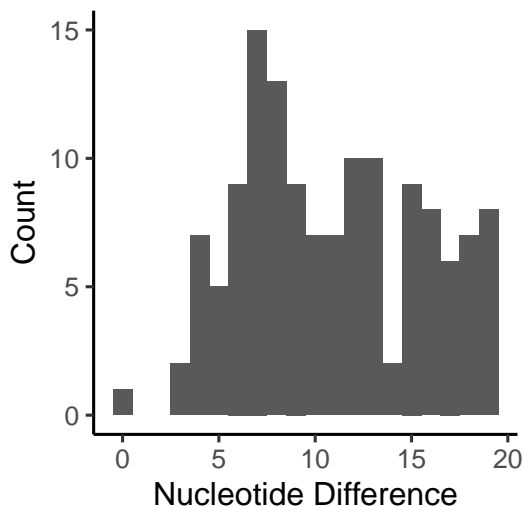
### IGHV3-43D\*03

18 sequences assigned  
No exact matches.



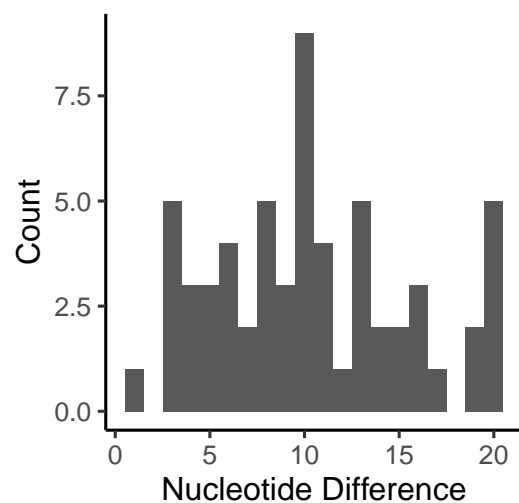
### IGHV4-4\*07

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



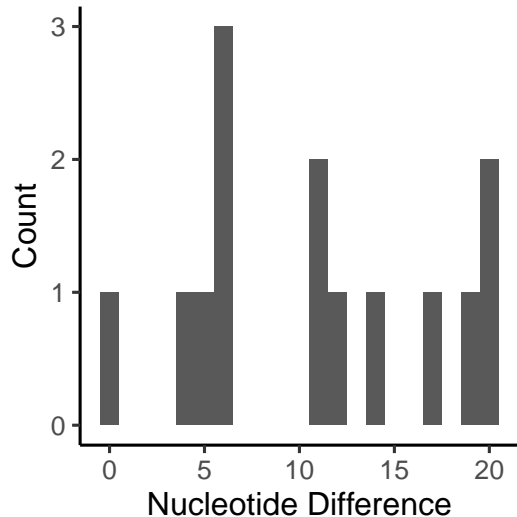
### IGHV4-30-4\*01

71 sequences assigned  
No exact matches.



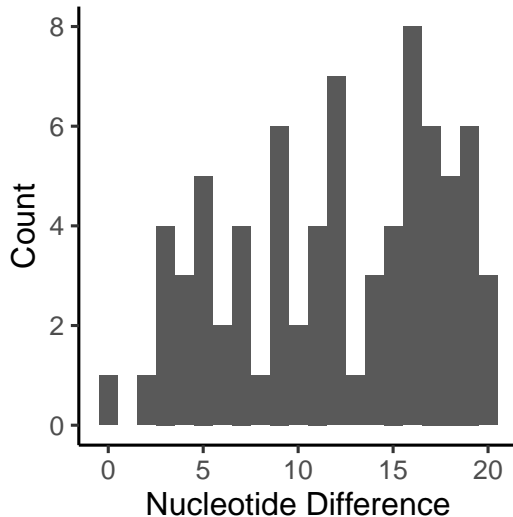
### IGHV3-43D\*04

16 sequences assigned  
1 (6.2%) exact matches, in which:  
1 unique CDR3  
1 unique J



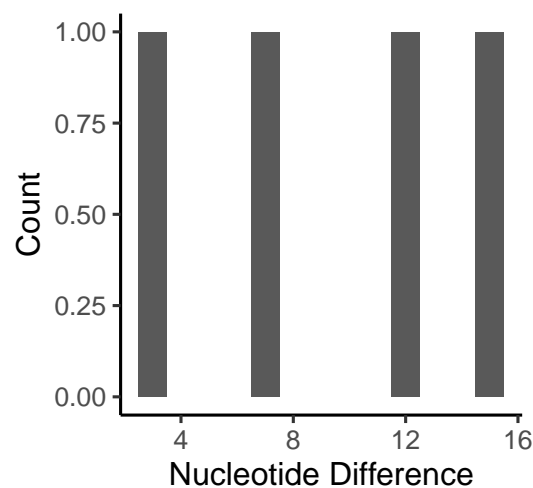
### IGHV4-4\*02\_03

90 sequences assigned  
1 (1.1%) exact matches, in which:  
1 unique CDR3  
1 unique J



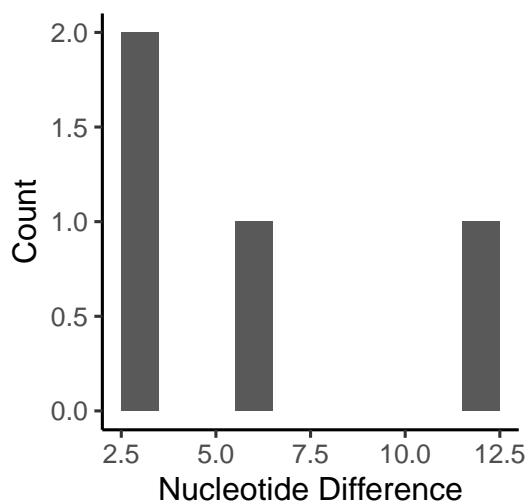
### IGHV4-30-2\*01

4 sequences assigned  
No exact matches.



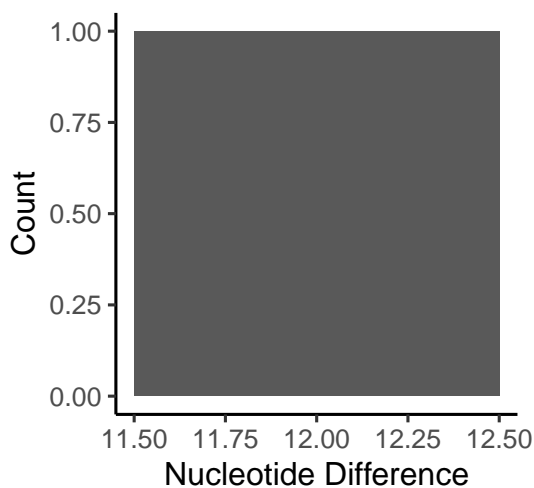
### IGHV3-64D\*09

6 sequences assigned  
No exact matches.



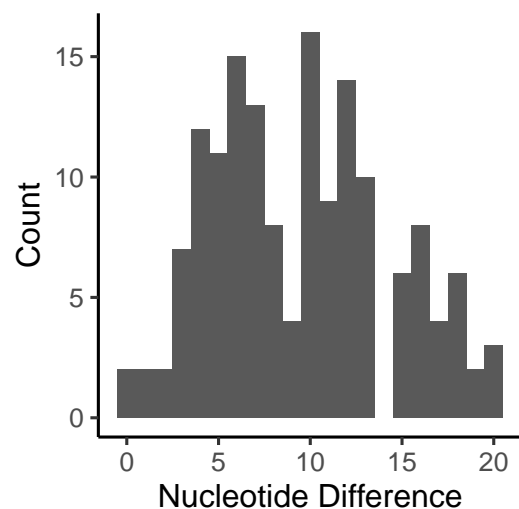
### IGHV4-28\*01\_07

1 sequences assigned  
No exact matches.



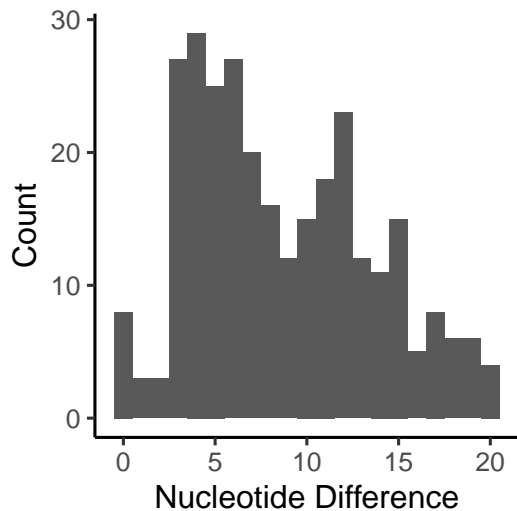
### IGHV4-31\*02

188 sequences assigned  
2 (1.1%) exact matches, in which:  
2 unique CDR3  
2 unique J



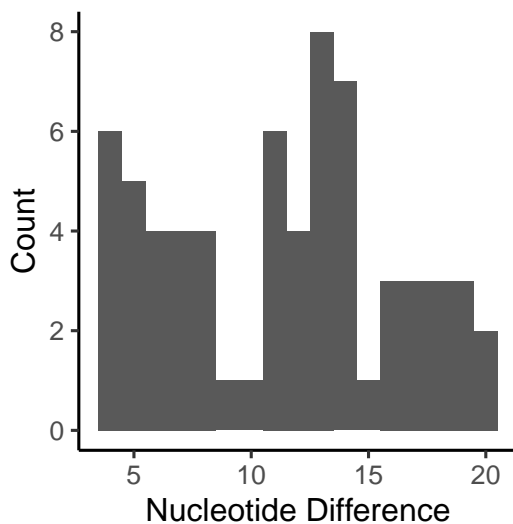
### IGHV4-34\*01\_02

356 sequences assigned  
8 (2.2%) exact matches, in which:  
6 unique CDR3  
2 unique J



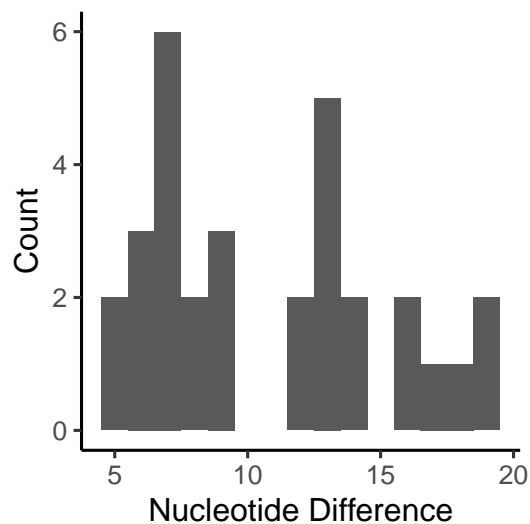
### IGHV4-39\*02

94 sequences assigned  
No exact matches.



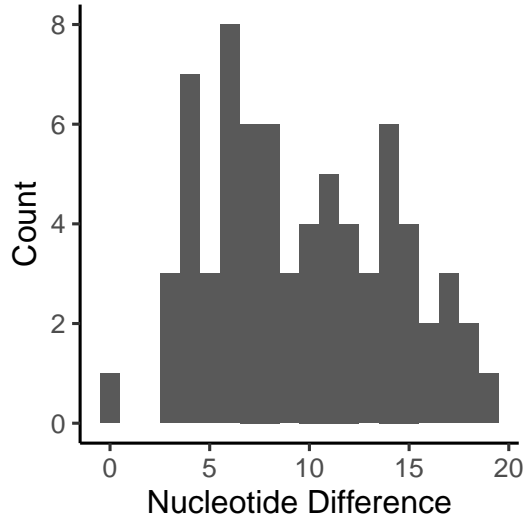
### IGHV4-59\*11

36 sequences assigned  
No exact matches.



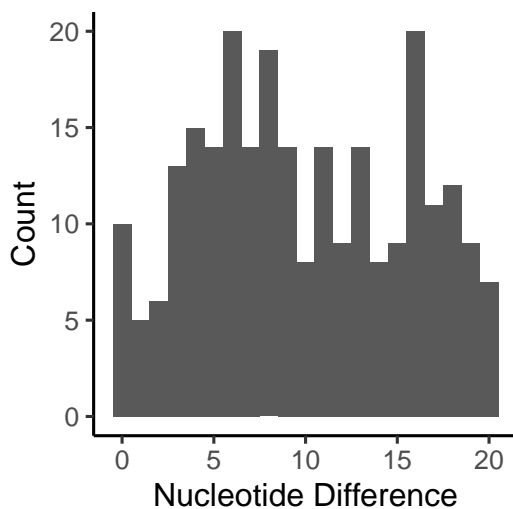
### IGHV4-38-2\*01

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



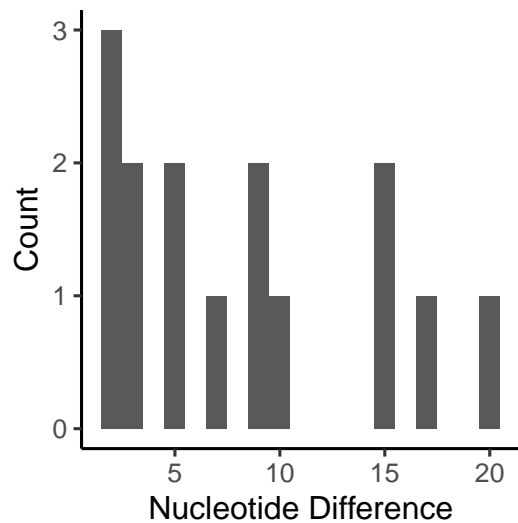
### IGHV4-39\*07

339 sequences assigned  
10 (2.9%) exact matches, in which:  
9 unique CDR3  
4 unique J



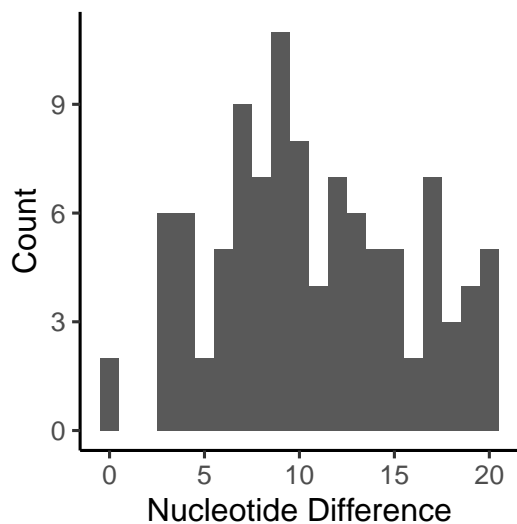
### IGHV4-59\*12

21 sequences assigned  
No exact matches.



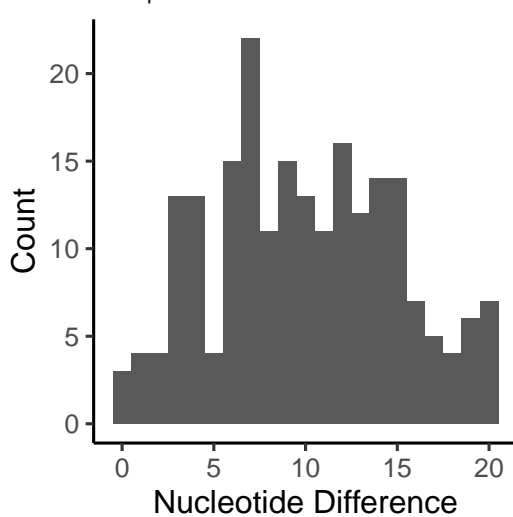
### IGHV4-38-2\*02

128 sequences assigned  
2 (1.6%) exact matches, in which:  
2 unique CDR3  
2 unique J



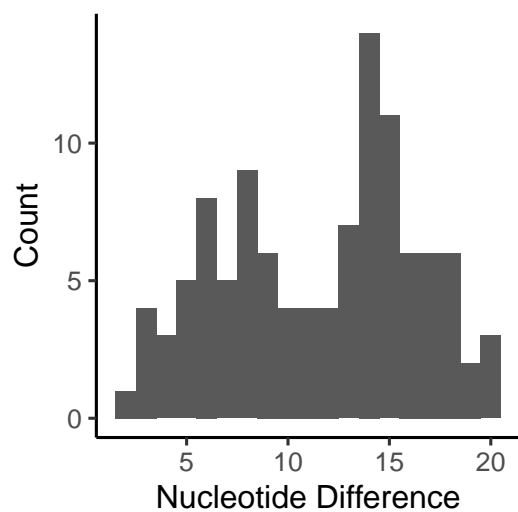
### IGHV4-59\*01\_07

254 sequences assigned  
3 (1.2%) exact matches, in which:  
3 unique CDR3  
2 unique J



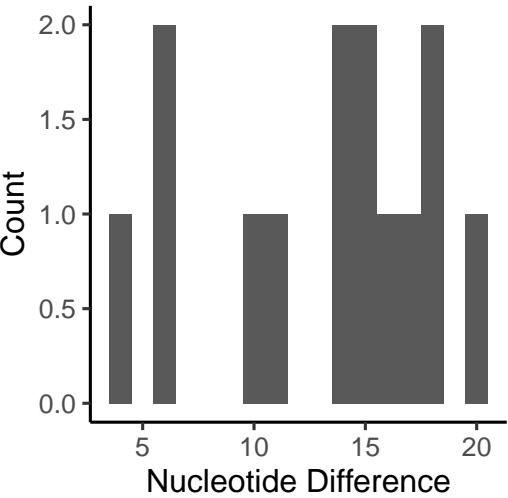
### IGHV4-61\*01

128 sequences assigned  
No exact matches.



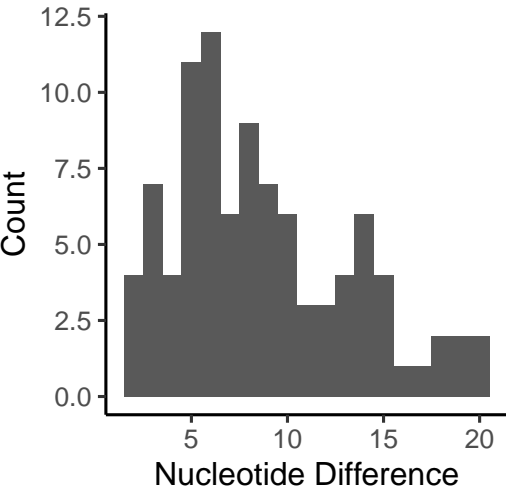
IGHV4-61\*08

19 sequences assigned  
No exact matches.



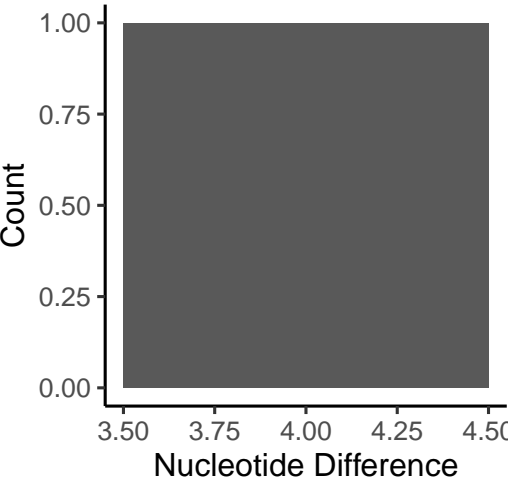
IGHV5-51\*01\_03

102 sequences assigned  
No exact matches.



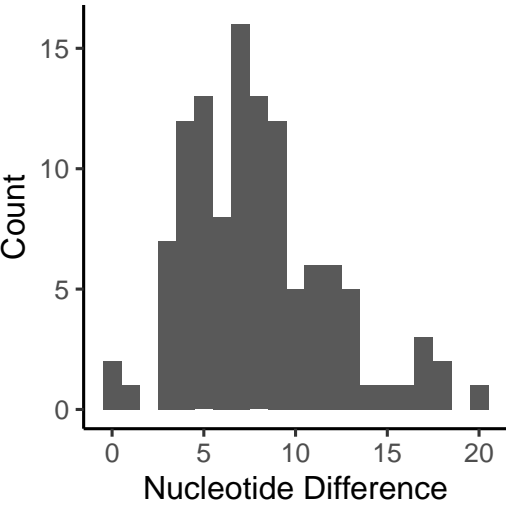
IGHV5-10-1\*01\_03

1 sequences assigned  
No exact matches.



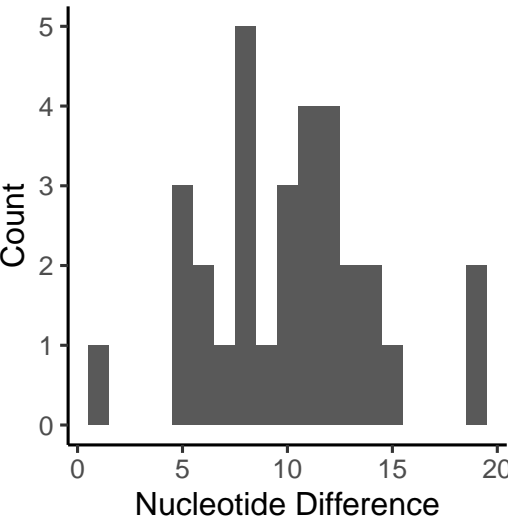
IGHV6-1\*01\_02

126 sequences assigned  
2 (1.6%) exact matches, in which:  
2 unique CDR3  
2 unique J



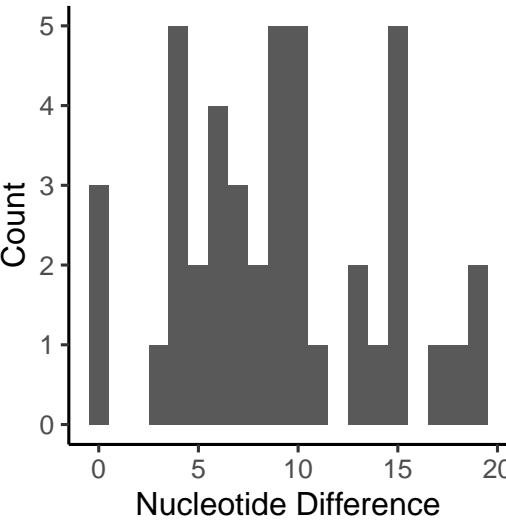
IGHV5-51\*07

35 sequences assigned  
No exact matches.



IGHV7-4-1\*02

47 sequences assigned  
3 (6.4%) exact matches, in which:  
3 unique CDR3  
2 unique J







Warning – no inferred sequences found.