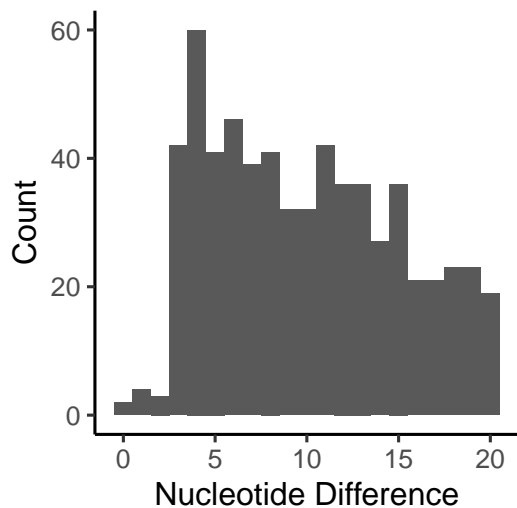


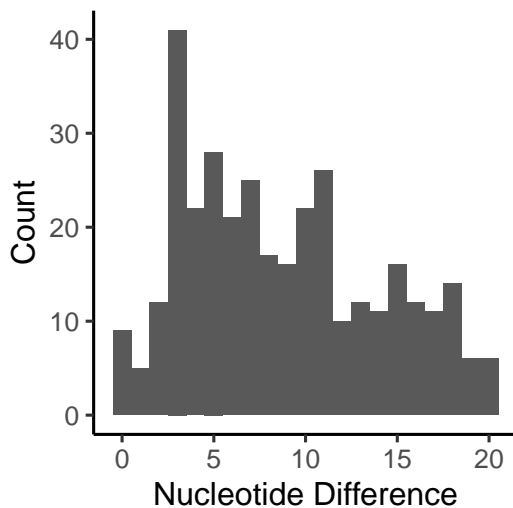
## IGHV1-2\*02

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



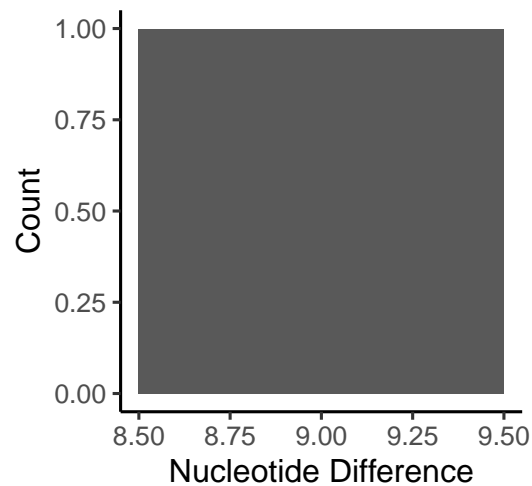
## IGHV1-8\*01

382 sequences assigned  
9 (2.4%) exact matches, in which:  
9 unique CDR3  
3 unique J



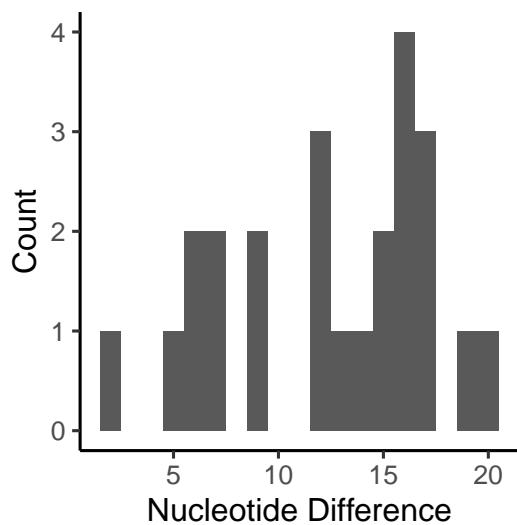
## IGHV1-45\*02

1 sequences assigned  
No exact matches.



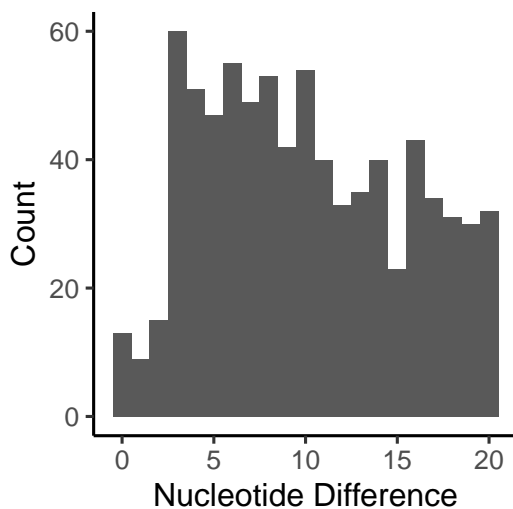
## IGHV1-3\*04

34 sequences assigned  
No exact matches.



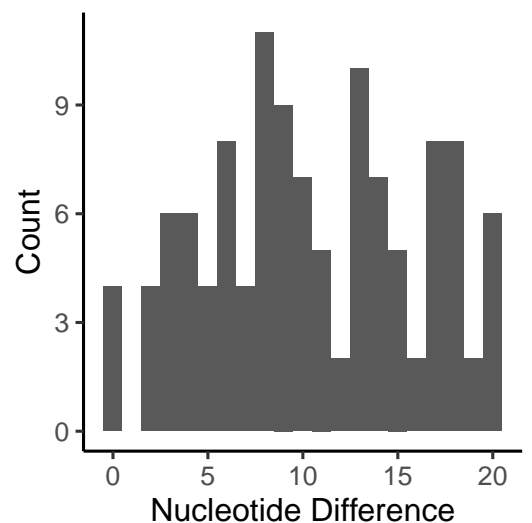
## IGHV1-18\*01

996 sequences assigned  
13 (1.3%) exact matches, in which:  
13 unique CDR3  
3 unique J



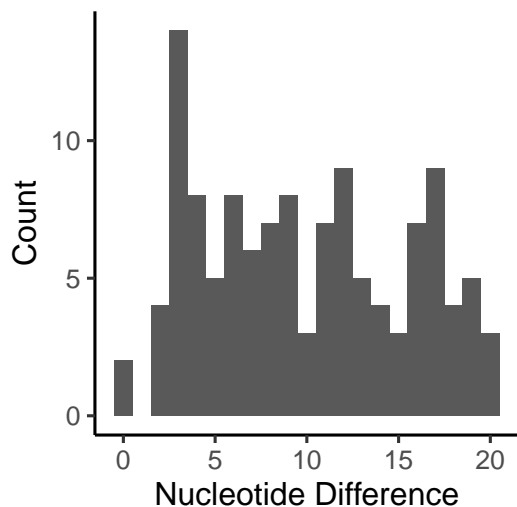
## IGHV1-46\*01

152 sequences assigned  
4 (2.6%) exact matches, in which:  
4 unique CDR3  
3 unique J



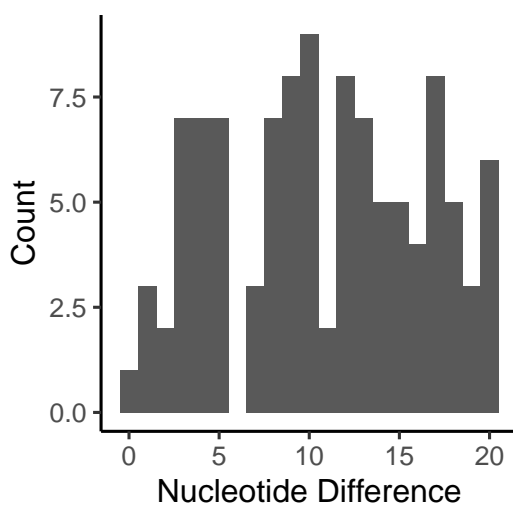
## IGHV1-3\*01\_05

155 sequences assigned  
2 (1.3%) exact matches, in which:  
2 unique CDR3  
1 unique J



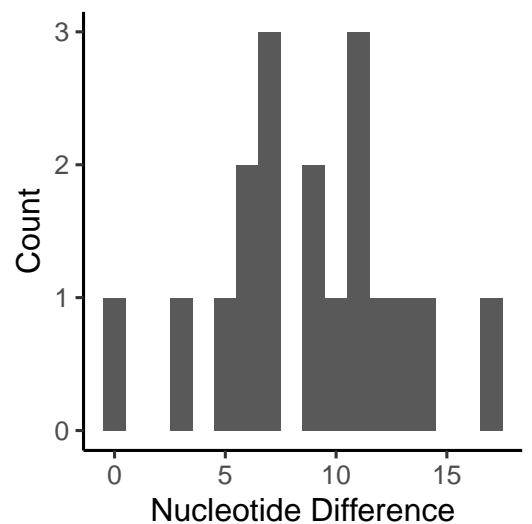
## IGHV1-24\*01

138 sequences assigned  
1 (0.7%) exact matches, in which:  
1 unique CDR3  
1 unique J



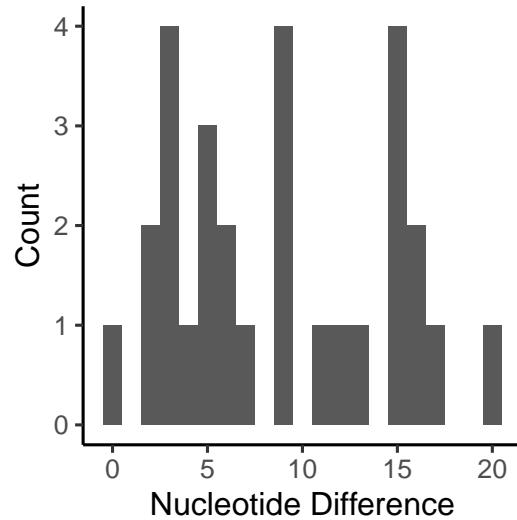
## IGHV1-58\*02

21 sequences assigned  
1 (4.8%) exact matches, in which:  
1 unique CDR3  
1 unique J



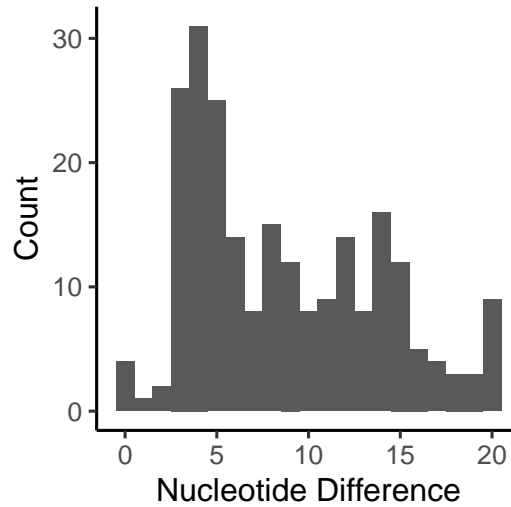
### IGHV1-58\*01\_03

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



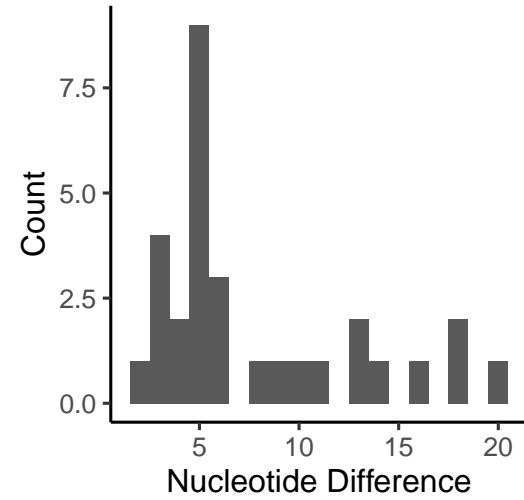
### IGHV2-5\*01

253 sequences assigned  
4 (1.6%) exact matches, in which:  
4 unique CDR3  
3 unique J



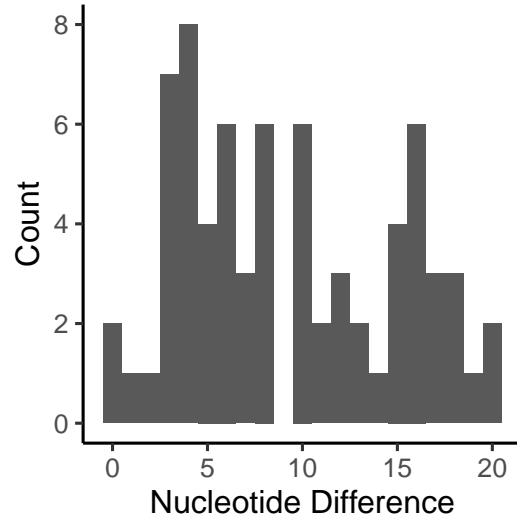
### IGHV2-70\*01

34 sequences assigned  
No exact matches.



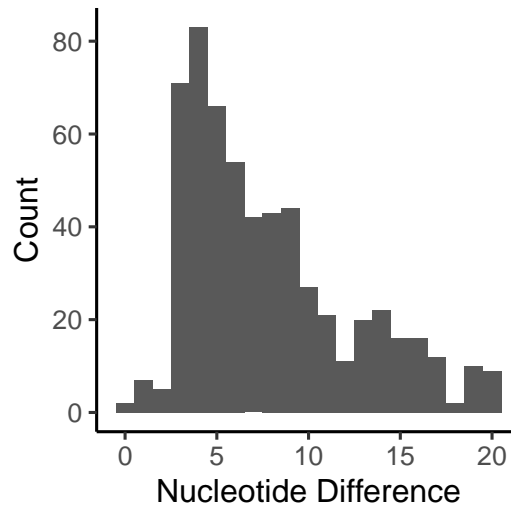
### IGHV1-69\*01\_12\_13

115 sequences assigned  
2 (1.7%) exact matches, in which:  
2 unique CDR3  
2 unique J



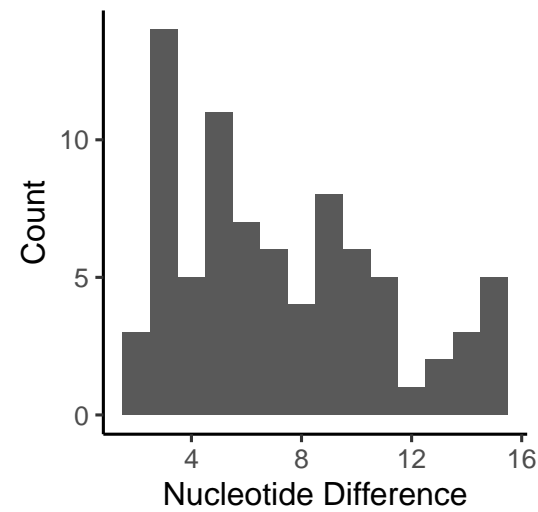
### IGHV2-5\*02

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



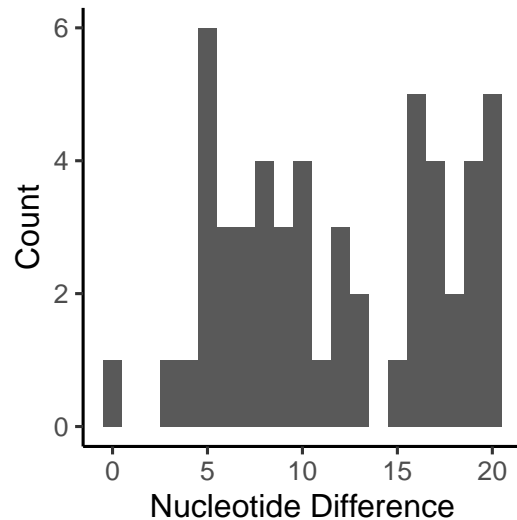
### IGHV2-70\*11\_15

85 sequences assigned  
No exact matches.



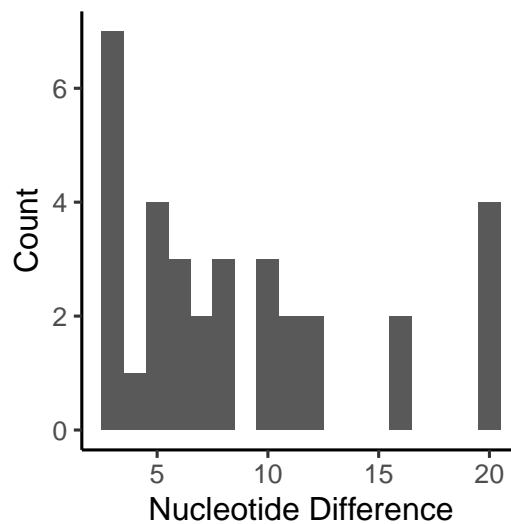
### IGHV1-69\*04\_09

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



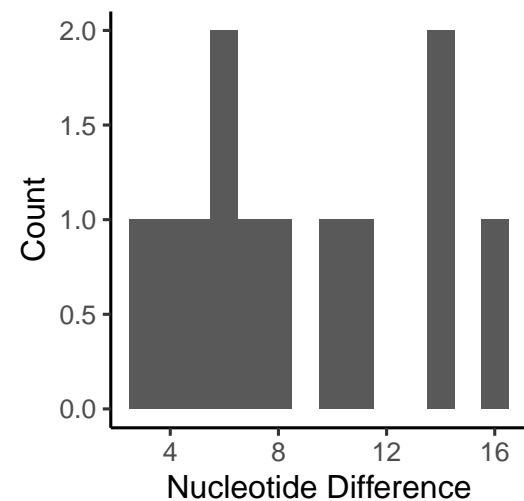
### IGHV2-26\*01

39 sequences assigned  
No exact matches.



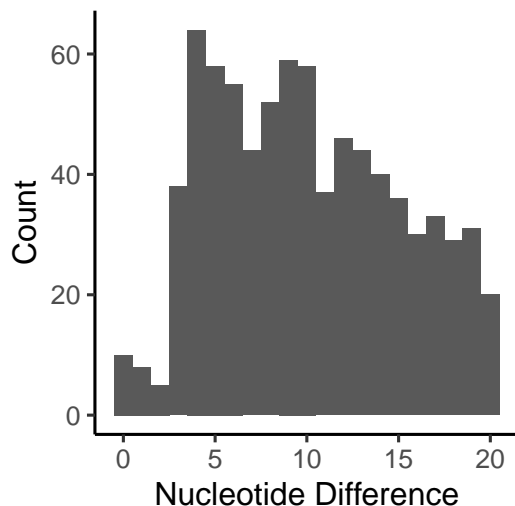
### IGHV2-70\*16\_17

12 sequences assigned  
No exact matches.



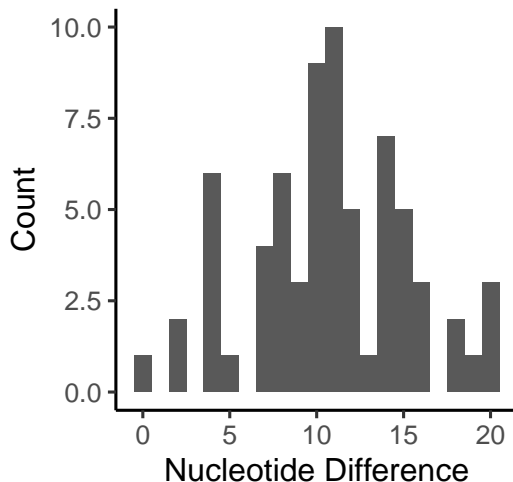
### IGHV3-7\*01

924 sequences assigned  
10 (1.1%) exact matches, in which:  
8 unique CDR3  
2 unique J



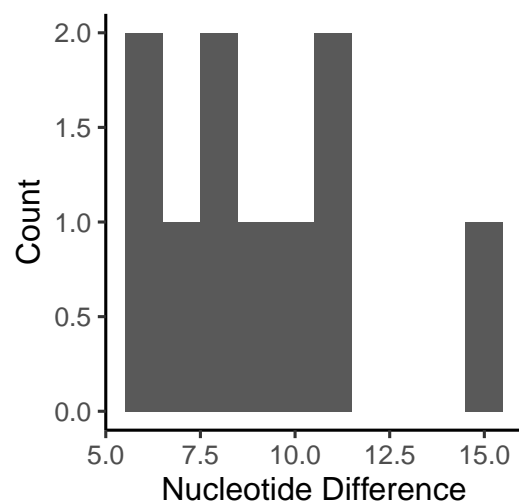
### IGHV3-13\*01

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



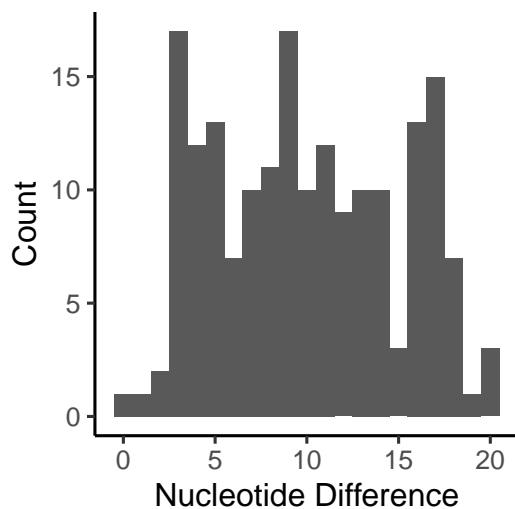
### IGHV3-20\*01\_02

12 sequences assigned  
No exact matches.



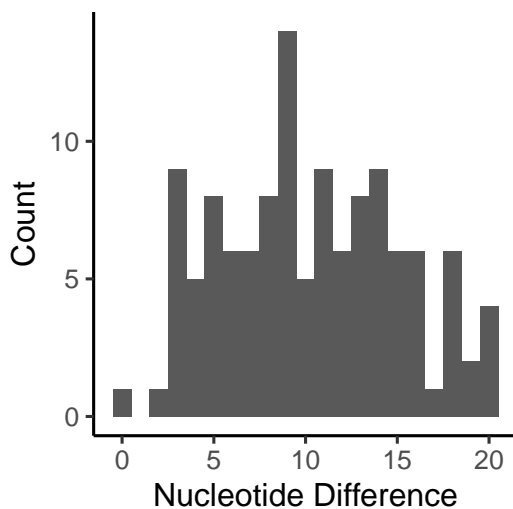
### IGHV3-9\*01

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



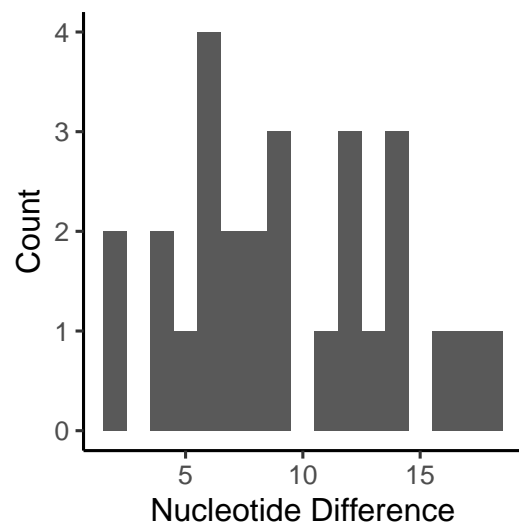
### IGHV3-15\*07

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



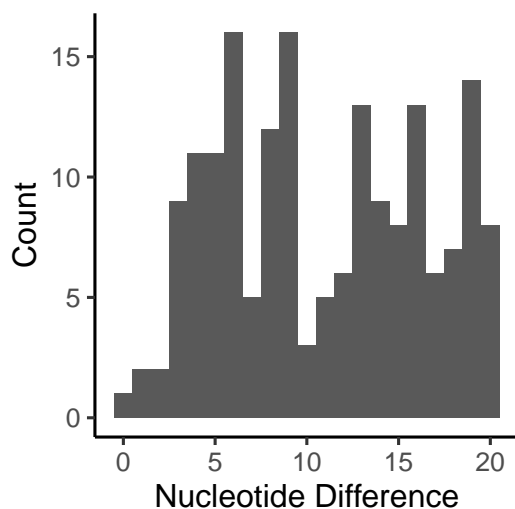
### IGHV3-20\*03\_04

29 sequences assigned  
No exact matches.



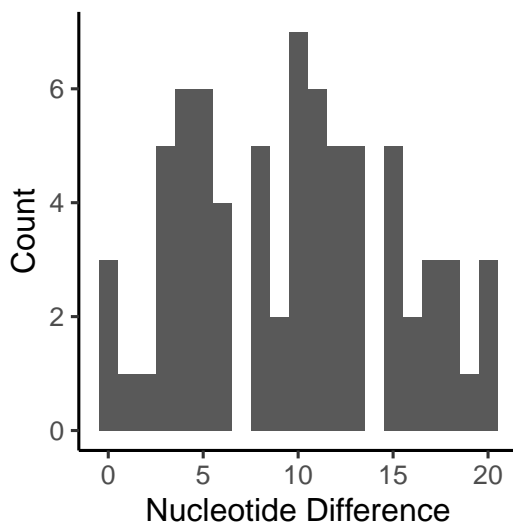
### IGHV3-11\*01

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



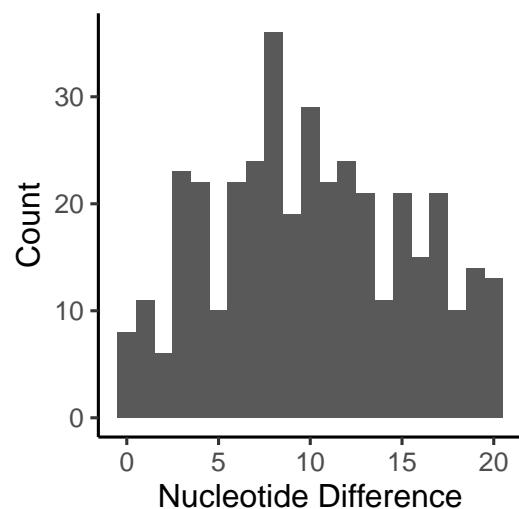
### IGHV3-15\*01\_02

94 sequences assigned  
3 (3.2%) exact matches, in which:  
3 unique CDR3  
2 unique J



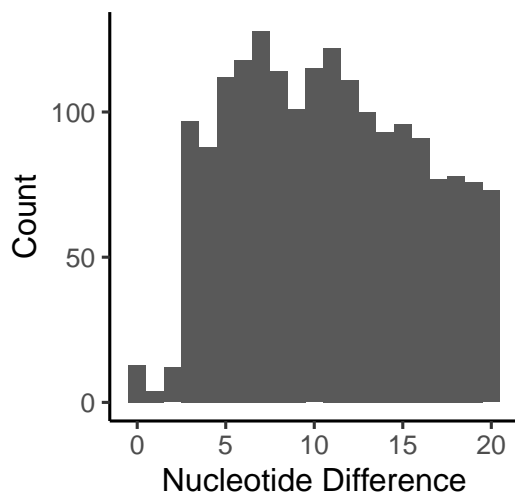
### IGHV3-21\*01\_02

468 sequences assigned  
8 (1.7%) exact matches, in which:  
8 unique CDR3  
4 unique J



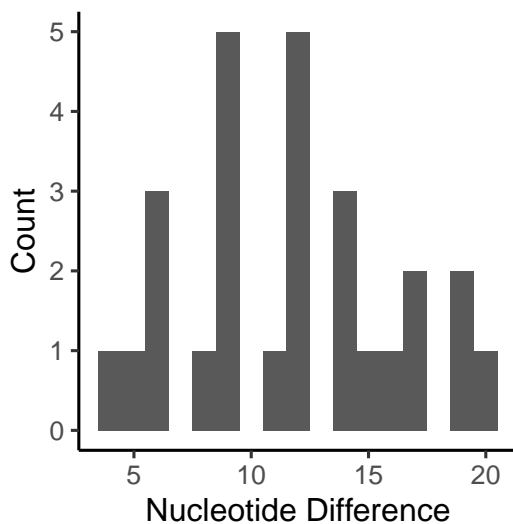
### IGHV3-23\*01\_04

2252 sequences assigned  
13 (0.6%) exact matches, in which:  
11 unique CDR3  
3 unique J



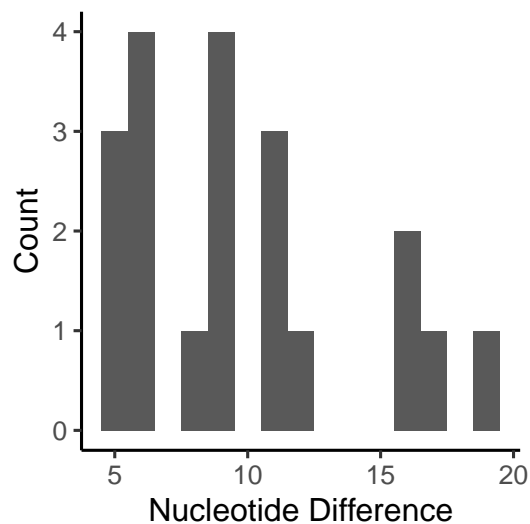
### IGHV3-30\*04

38 sequences assigned  
No exact matches.



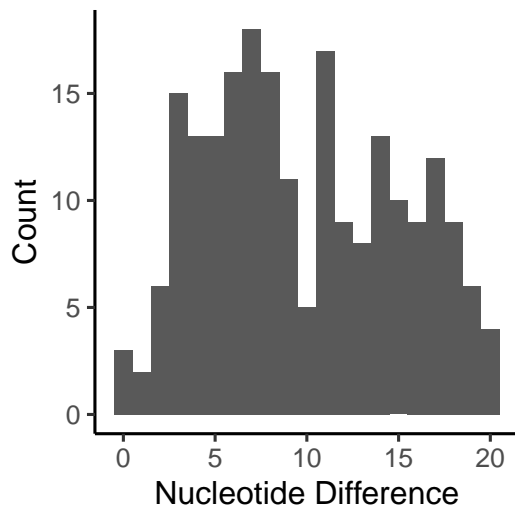
### IGHV3-43\*01

25 sequences assigned  
No exact matches.



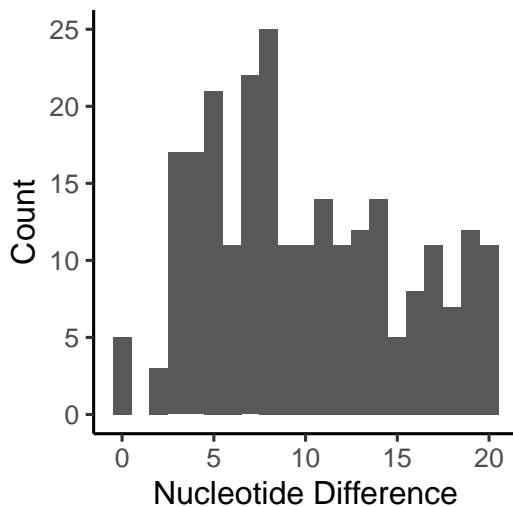
### IGHV3-30-3\*01

264 sequences assigned  
3 (1.1%) exact matches, in which:  
3 unique CDR3  
2 unique J



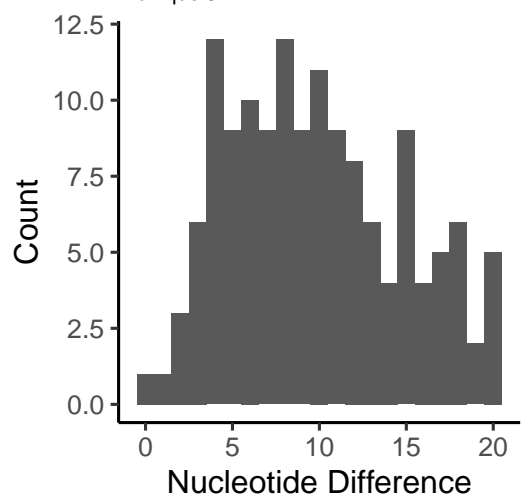
### IGHV3-33\*01

311 sequences assigned  
5 (1.6%) exact matches, in which:  
5 unique CDR3  
3 unique J



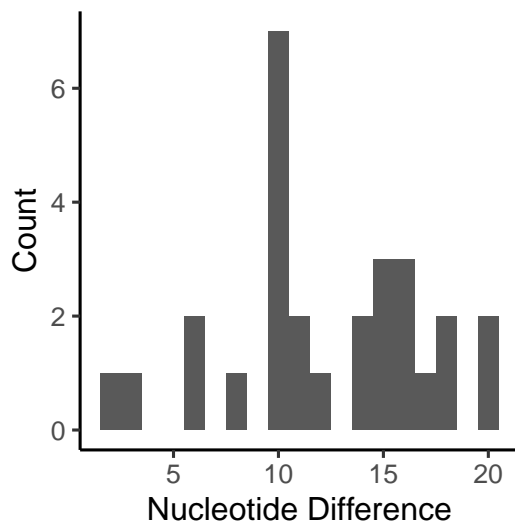
### IGHV3-43\*02

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



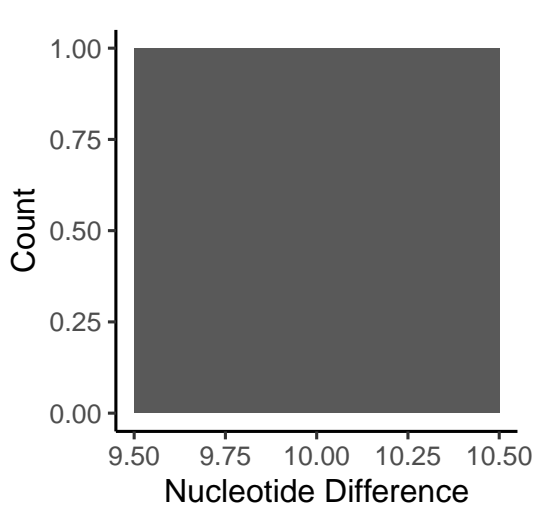
### IGHV3-30\*03

45 sequences assigned  
No exact matches.



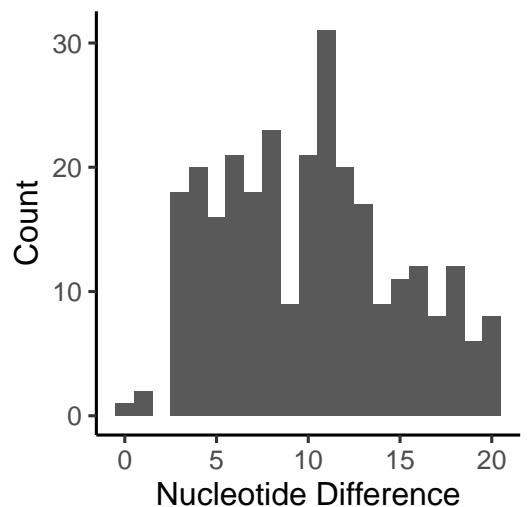
### IGHV3-35\*01

1 sequences assigned  
No exact matches.



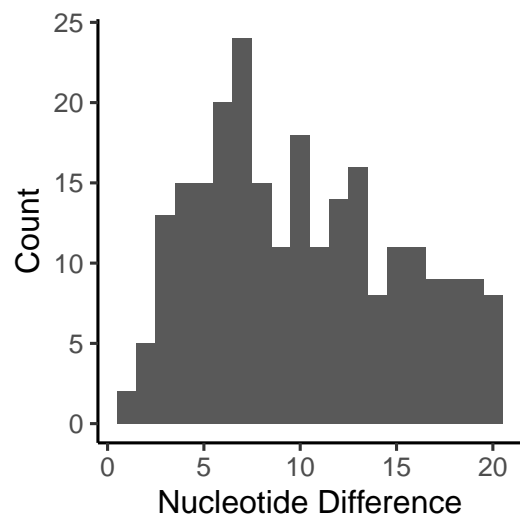
### IGHV3-48\*02

340 sequences assigned  
1 (0.3%) exact matches, in which:  
1 unique CDR3  
0 unique J



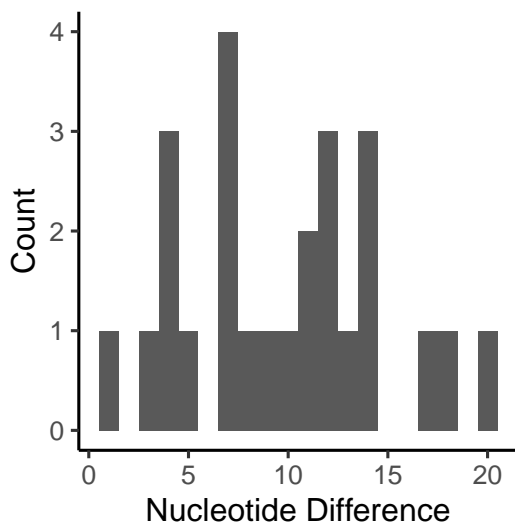
### IGHV3-48\*03

283 sequences assigned  
No exact matches.



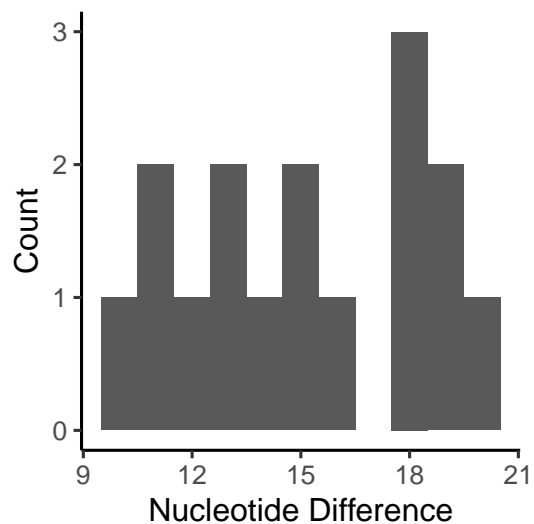
### IGHV3-53\*04

33 sequences assigned  
No exact matches.



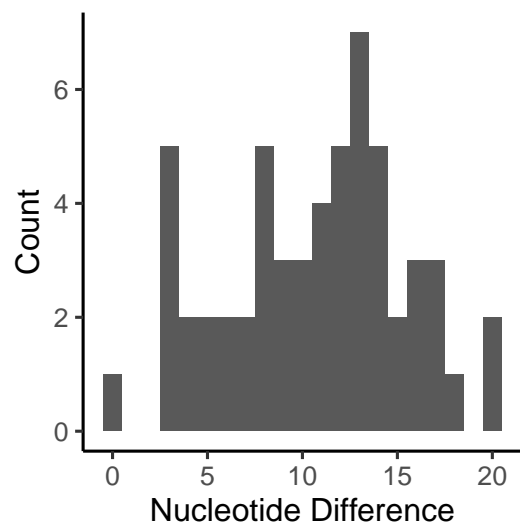
### IGHV3-64\*02\_07

23 sequences assigned  
No exact matches.



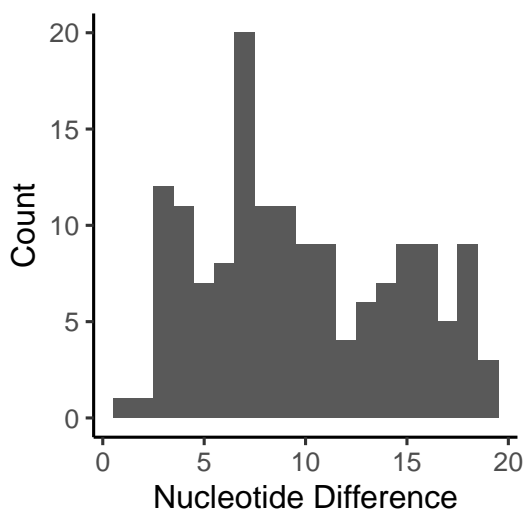
### IGHV3-49\*04

73 sequences assigned  
1 (1.4%) exact matches, in which:  
1 unique CDR3  
1 unique J



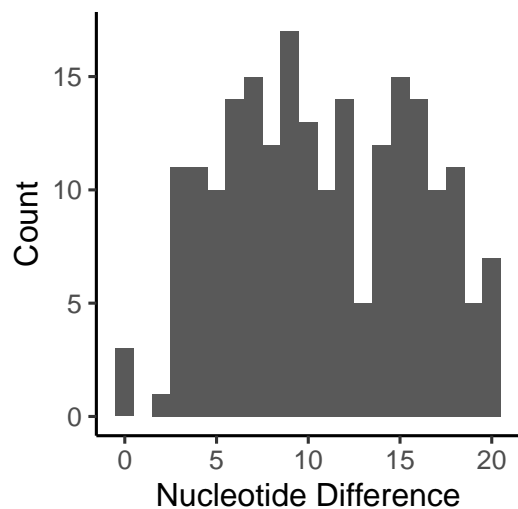
### IGHV3-53\*01\_02

175 sequences assigned  
No exact matches.



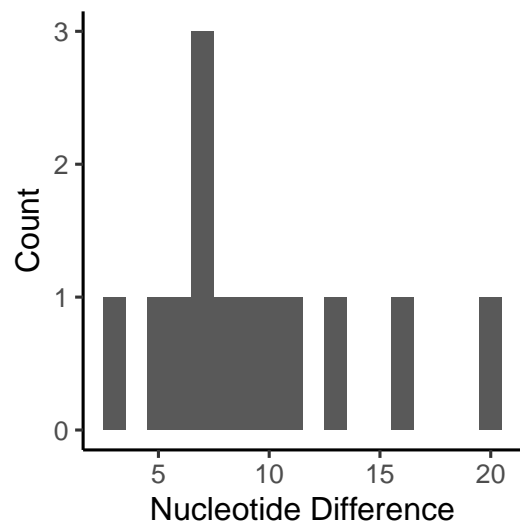
### IGHV3-66\*01

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



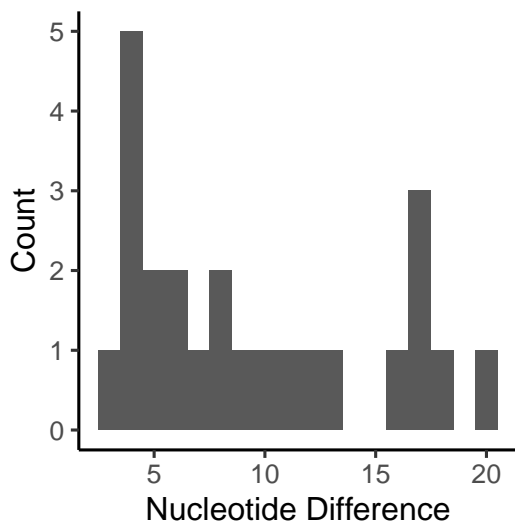
### IGHV3-49\*03\_05

15 sequences assigned  
No exact matches.



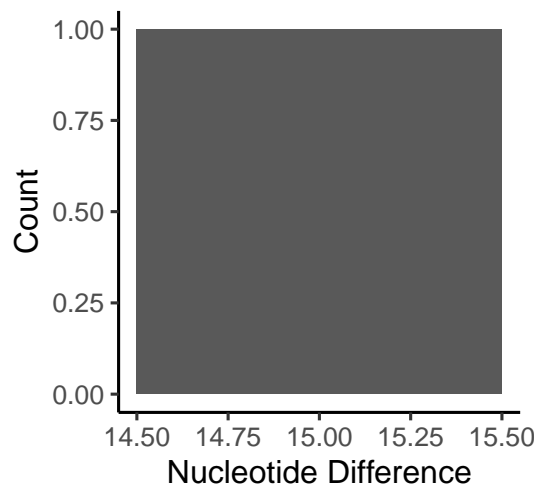
### IGHV3-64\*01

34 sequences assigned  
No exact matches.



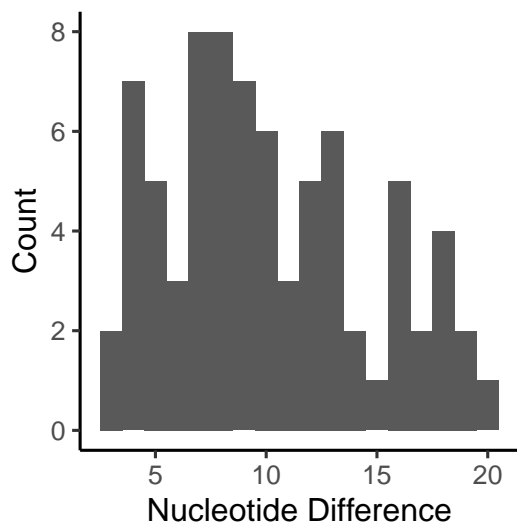
### IGHV3-69-1\*01

4 sequences assigned  
No exact matches.



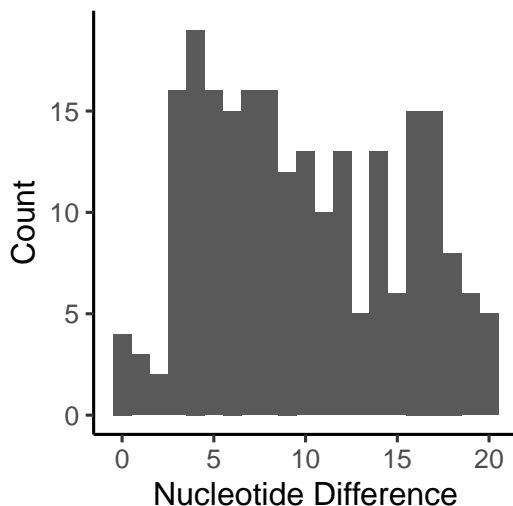
### IGHV3-72\*01

87 sequences assigned  
No exact matches.



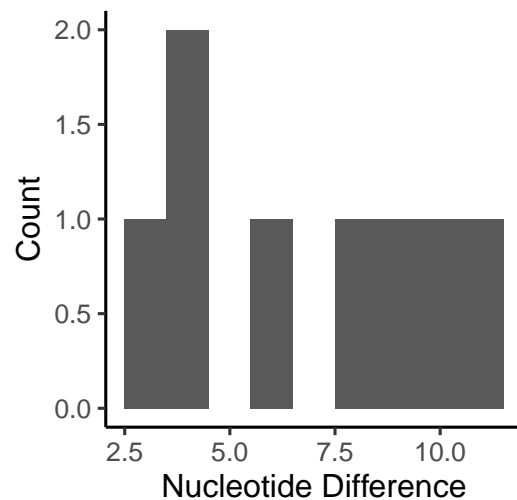
### IGHV3-74\*01\_02

251 sequences assigned  
4 (1.6%) exact matches, in which:  
4 unique CDR3  
2 unique J



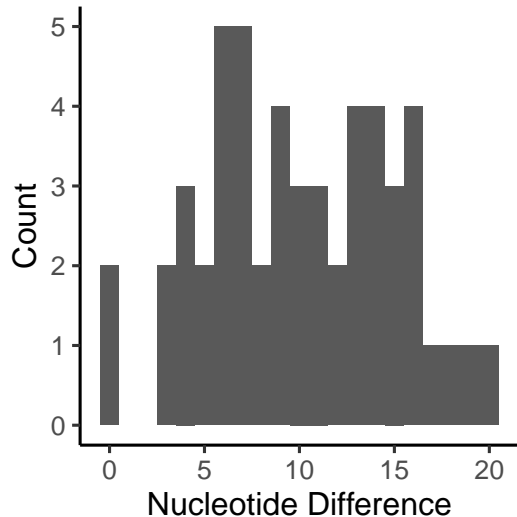
### IGHV4-28\*01\_07

12 sequences assigned  
No exact matches.



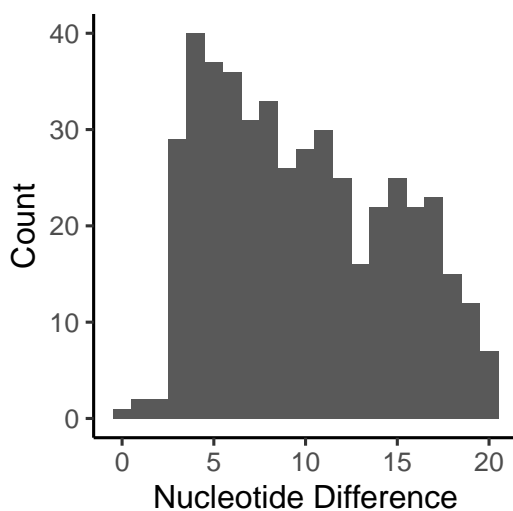
### IGHV3-73\*01\_02

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



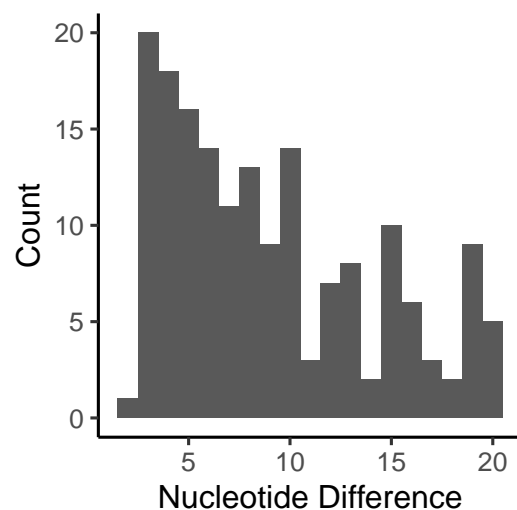
### IGHV4-4\*07

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



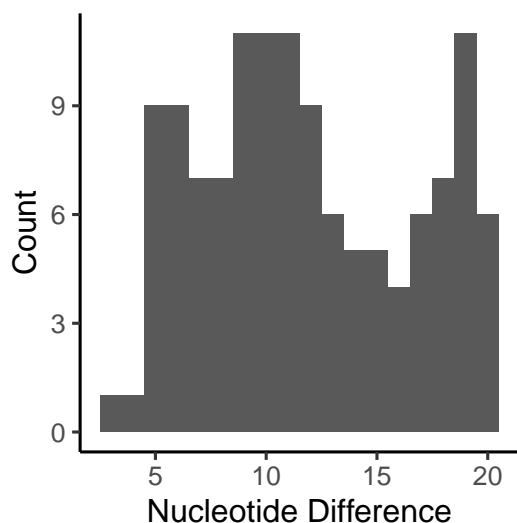
### IGHV4-30-2\*01

210 sequences assigned  
No exact matches.



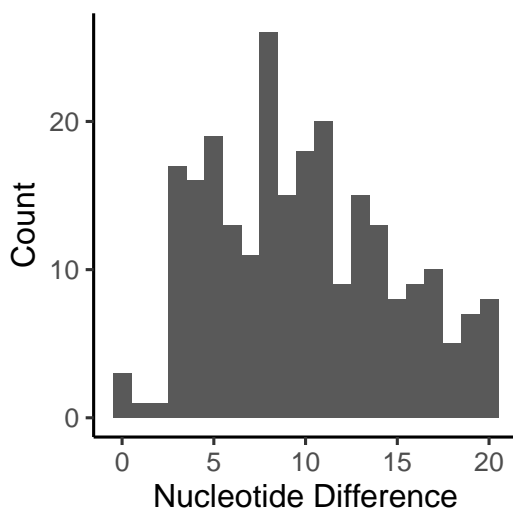
### IGHV3-74\*03

160 sequences assigned  
No exact matches.



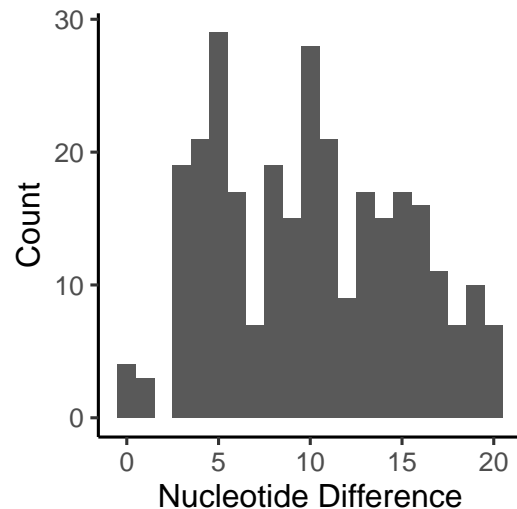
### IGHV4-4\*02\_03

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



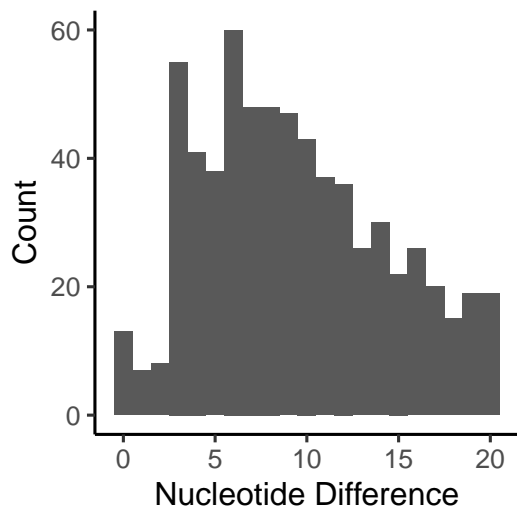
### IGHV4-30-4\*01

366 sequences assigned  
4 (1.1%) exact matches, in which:  
3 unique CDR3  
3 unique J



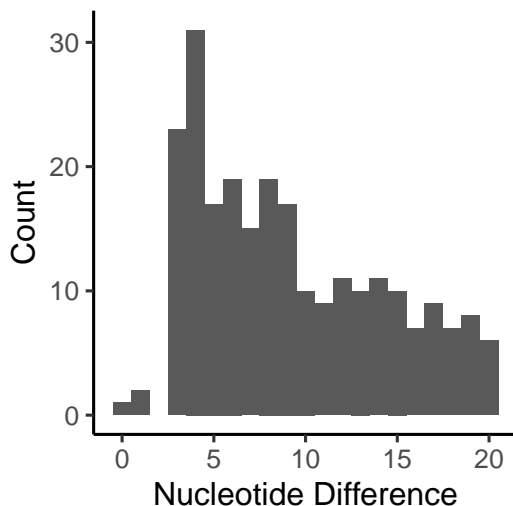
### IGHV4-31\*02

776 sequences assigned  
13 (1.7%) exact matches, in which:  
12 unique CDR3  
4 unique J



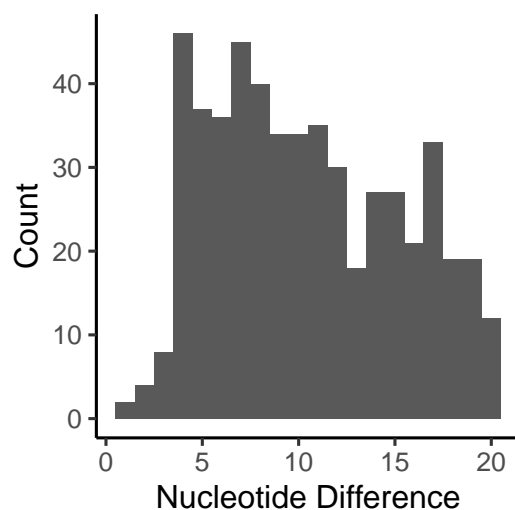
### IGHV4-39\*01\_05

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



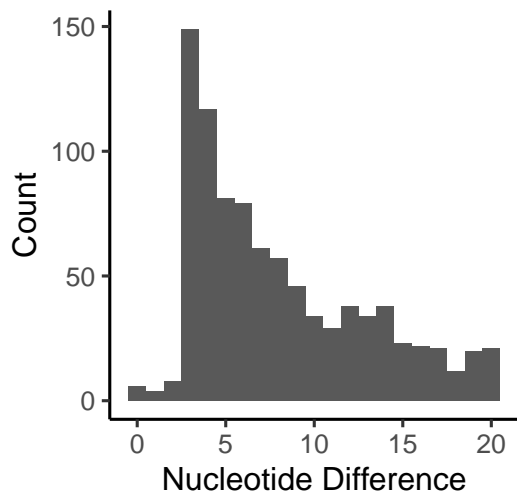
### IGHV4-59\*11

654 sequences assigned  
No exact matches.



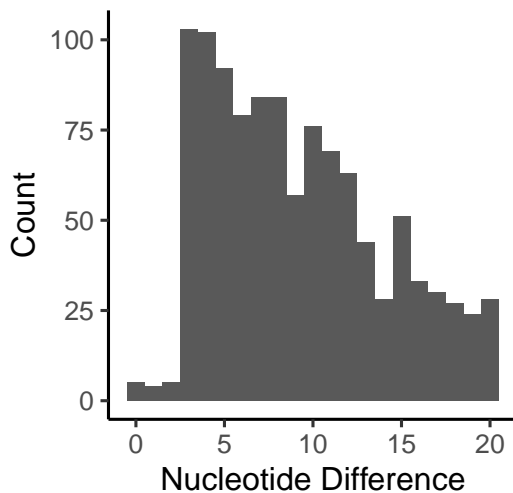
### IGHV4-34\*01\_02

1027 sequences assigned  
6 (0.6%) exact matches, in which:  
6 unique CDR3  
4 unique J



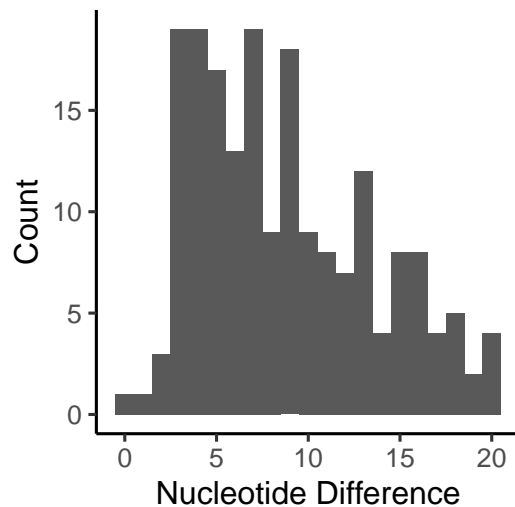
### IGHV4-59\*08

1242 sequences assigned  
5 (0.4%) exact matches, in which:  
5 unique CDR3  
3 unique J



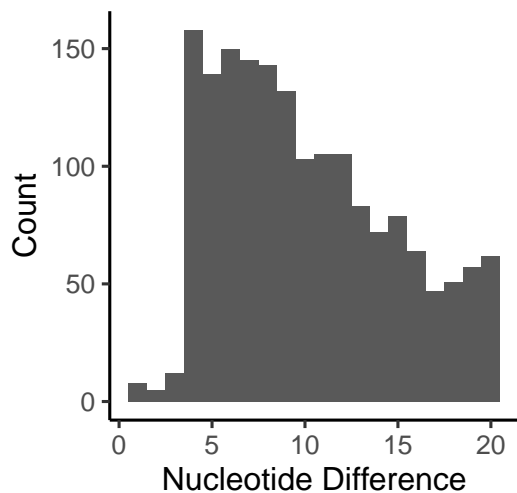
### IGHV4-61\*01

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



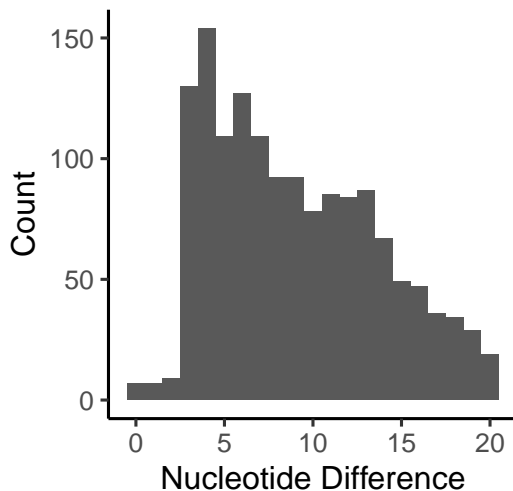
### IGHV4-39\*02

2066 sequences assigned  
No exact matches.



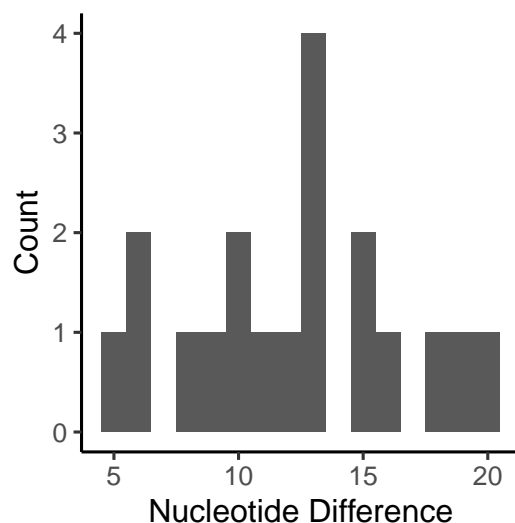
### IGHV4-59\*01\_07

1605 sequences assigned  
7 (0.4%) exact matches, in which:  
6 unique CDR3  
2 unique J



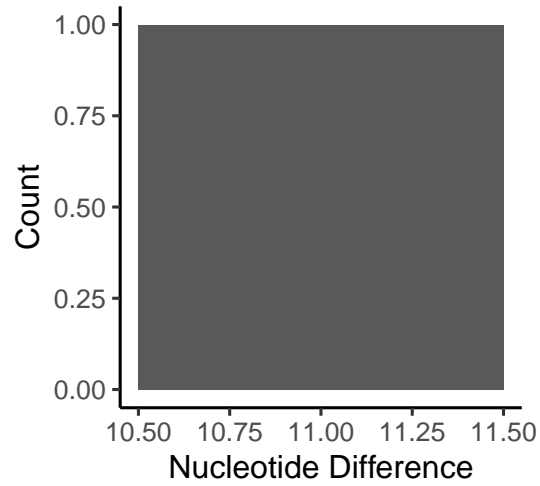
### IGHV4-61\*08

25 sequences assigned  
No exact matches.



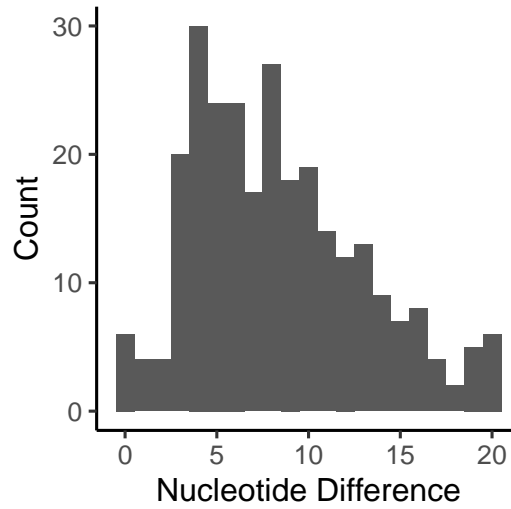
### IGHV4/OR15-8\*01

2 sequences assigned  
No exact matches.



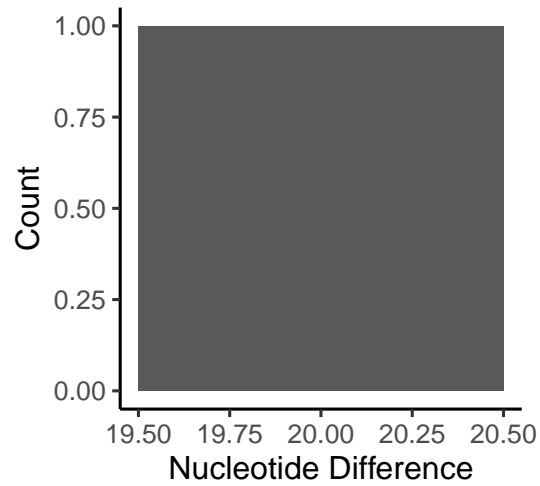
### IGHV5-51\*01\_03

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



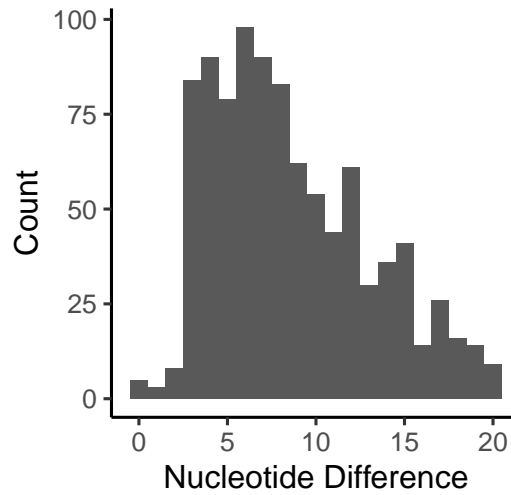
### IGHV4/OR15-8\*02

3 sequences assigned  
No exact matches.



### IGHV6-1\*01\_02

1023 sequences assigned  
5 (0.5%) exact matches, in which:  
5 unique CDR3  
2 unique J



### IGHV5-51\*07

88 sequences assigned  
No exact matches.

