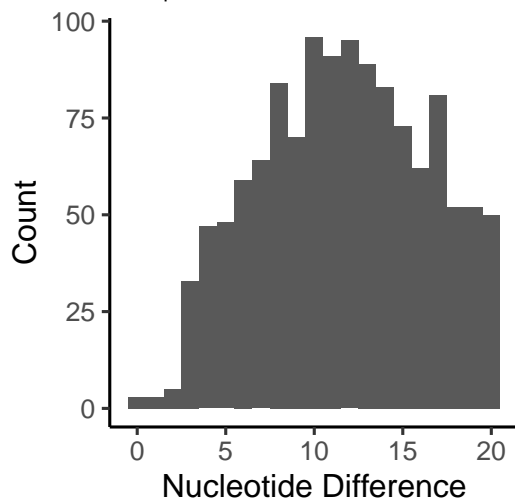


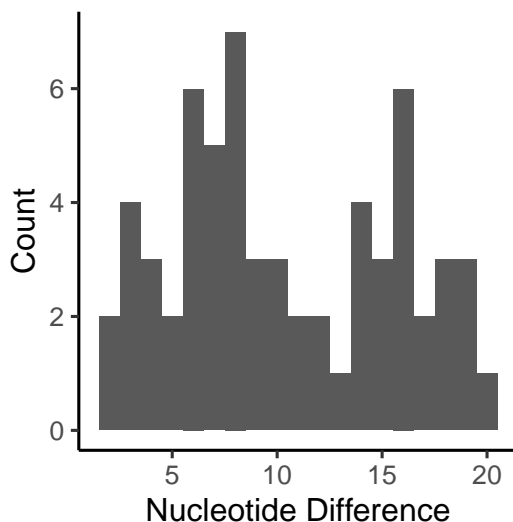
### IGHV1-2\*02

1548 sequences assigned  
3 (0.2%) exact matches, in which:  
3 unique CDR3  
3 unique J



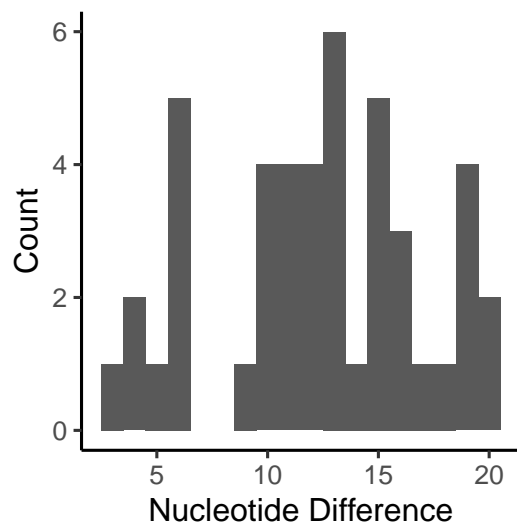
### IGHV1-24\*01

101 sequences assigned  
No exact matches.



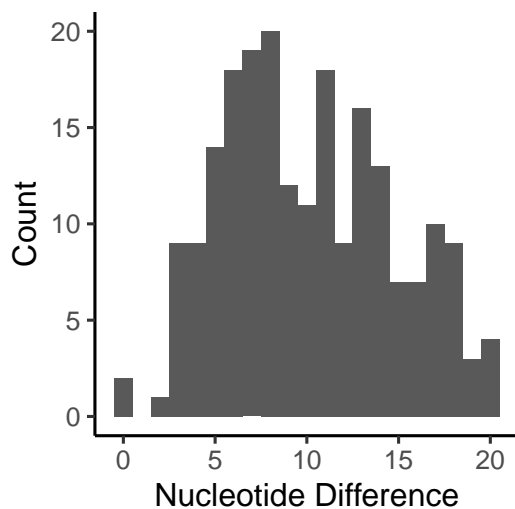
### IGHV1-46\*03

57 sequences assigned  
No exact matches.



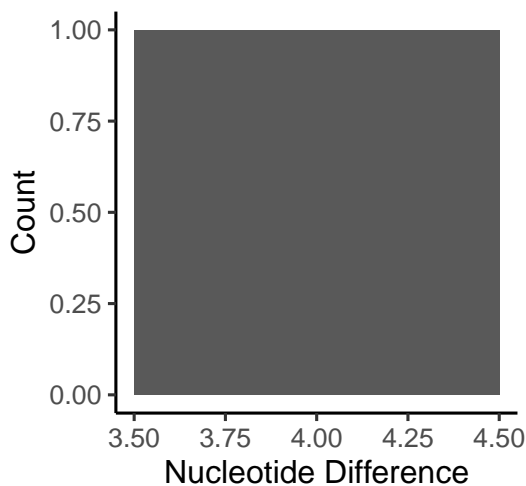
### IGHV1-8\*01

270 sequences assigned  
2 (0.7%) exact matches, in which:  
2 unique CDR3  
2 unique J



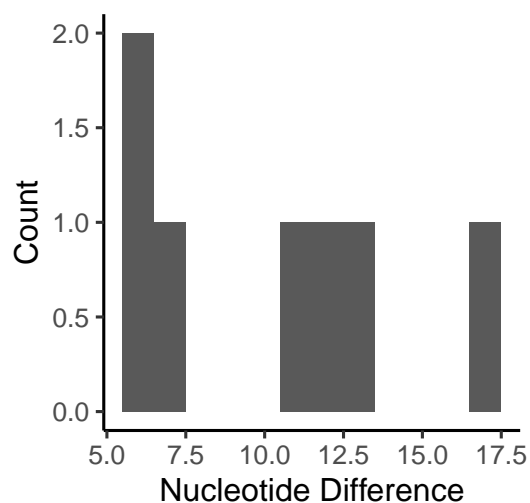
### IGHV1-45\*02

1 sequences assigned  
No exact matches.



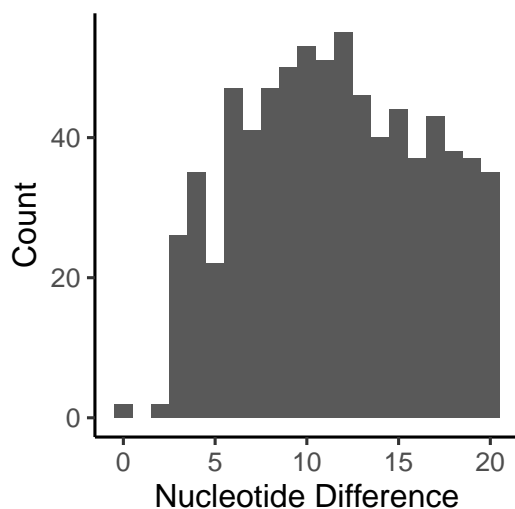
### IGHV1-58\*02

9 sequences assigned  
No exact matches.



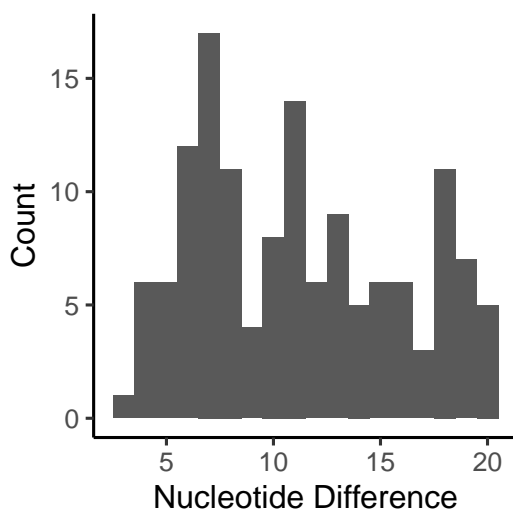
### IGHV1-18\*01

1015 sequences assigned  
2 (0.2%) exact matches, in which:  
2 unique CDR3  
1 unique J



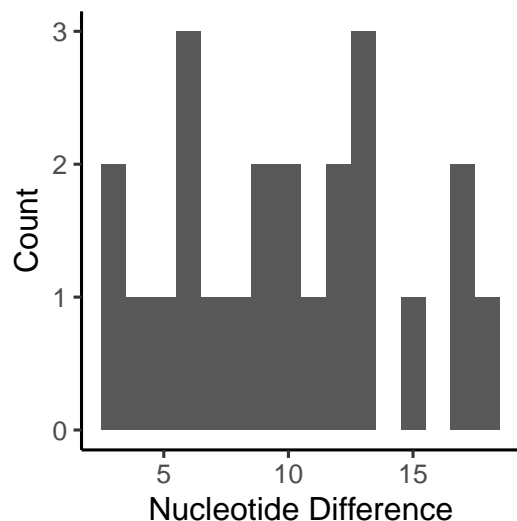
### IGHV1-46\*01

161 sequences assigned  
No exact matches.



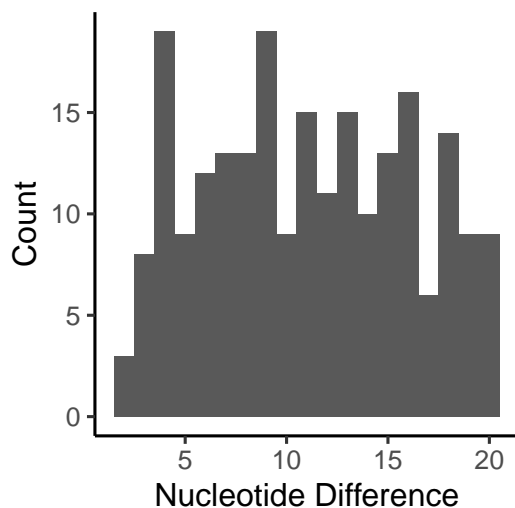
### IGHV1-58\*01\_03

31 sequences assigned  
No exact matches.



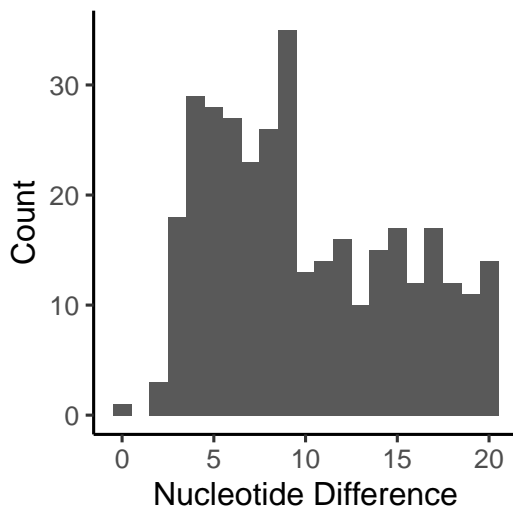
### IGHV1-69\*01\_12\_13

381 sequences assigned  
No exact matches.



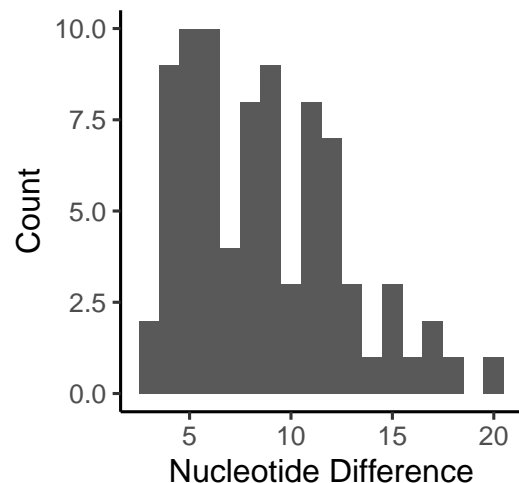
### IGHV2-5\*02

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



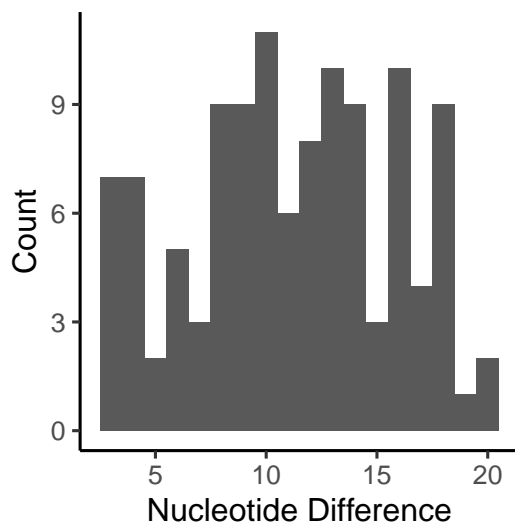
### IGHV2-70\*04

108 sequences assigned  
No exact matches.



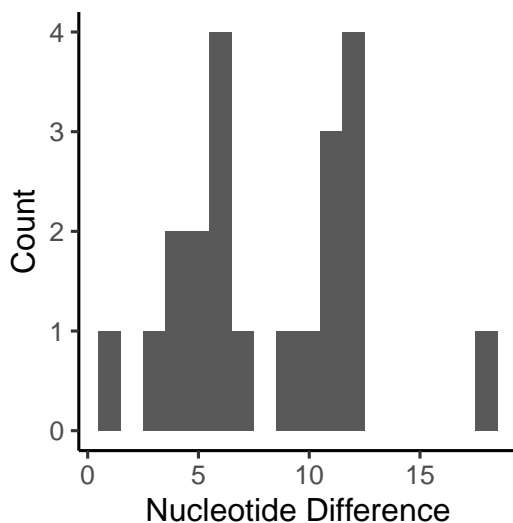
### IGHV1-69\*06\_14

190 sequences assigned  
No exact matches.



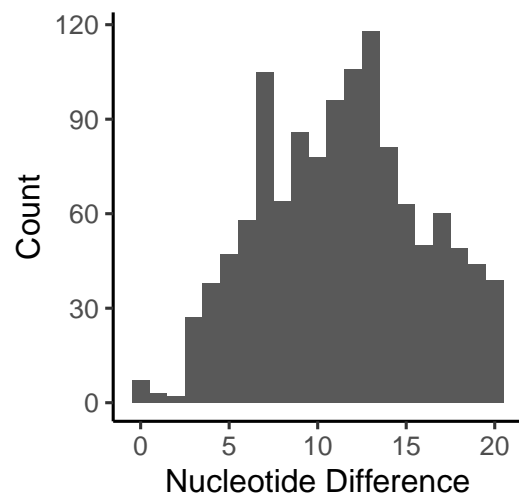
### IGHV2-26\*01

27 sequences assigned  
No exact matches.



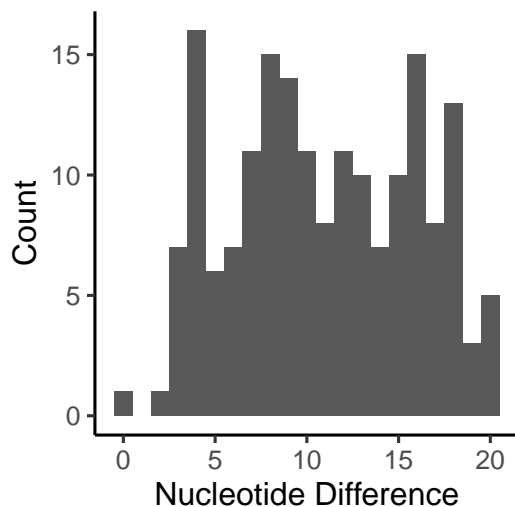
### IGHV3-7\*01

1458 sequences assigned  
7 (0.5%) exact matches, in which:  
4 unique CDR3  
3 unique J



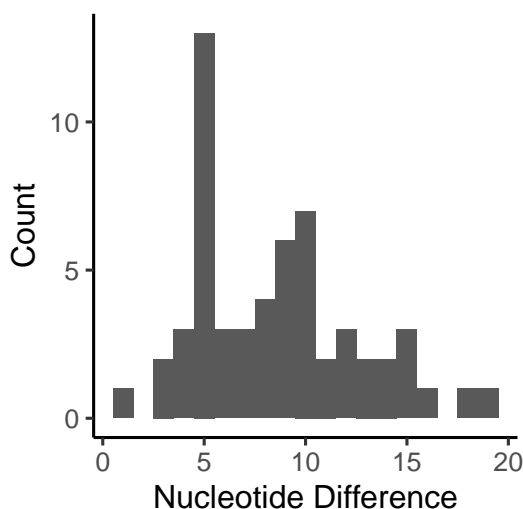
### IGHV2-5\*01

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



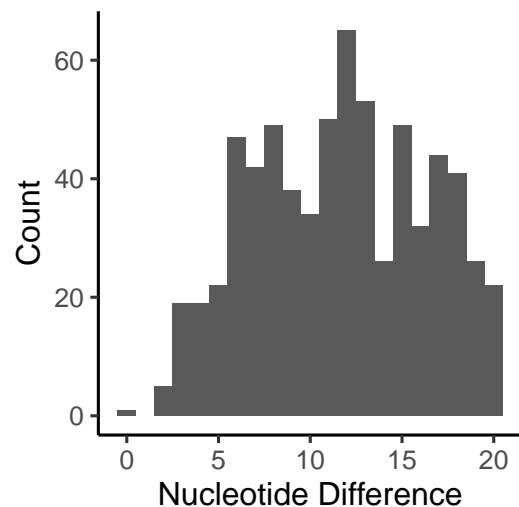
### IGHV2-70\*01

74 sequences assigned  
No exact matches.



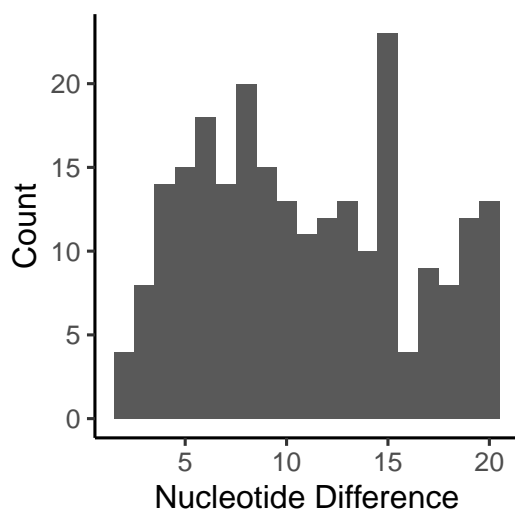
### IGHV3-7\*04

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



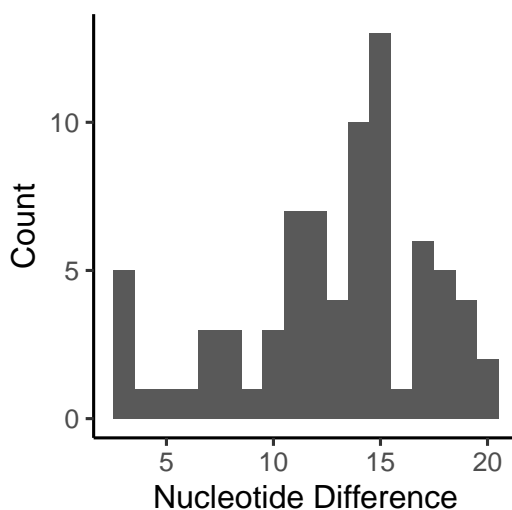
### IGHV3-9\*01

304 sequences assigned  
No exact matches.



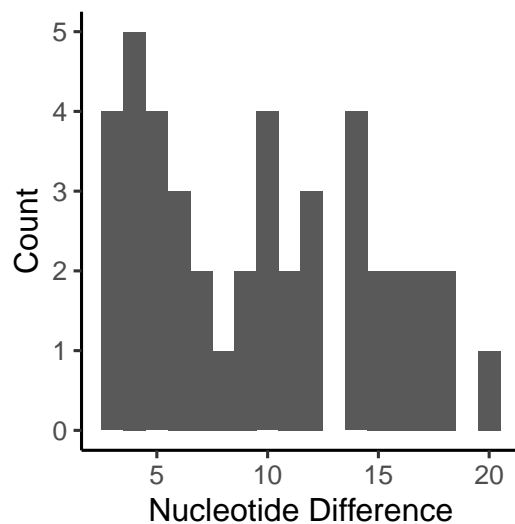
### IGHV3-13\*01

105 sequences assigned  
No exact matches.



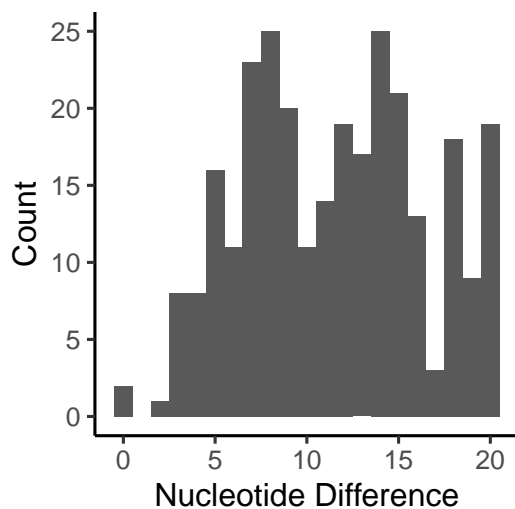
### IGHV3-20\*01\_02

56 sequences assigned  
No exact matches.



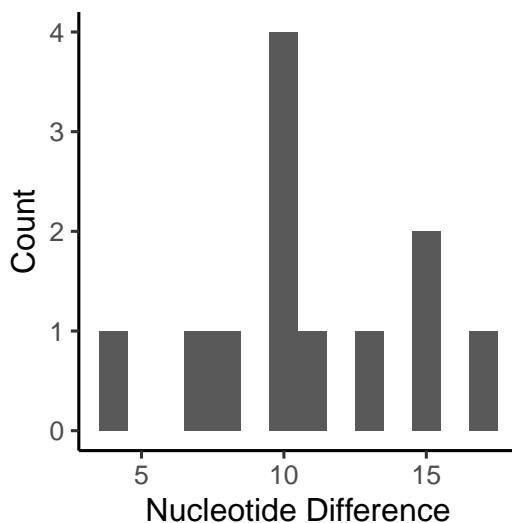
### IGHV3-11\*01

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



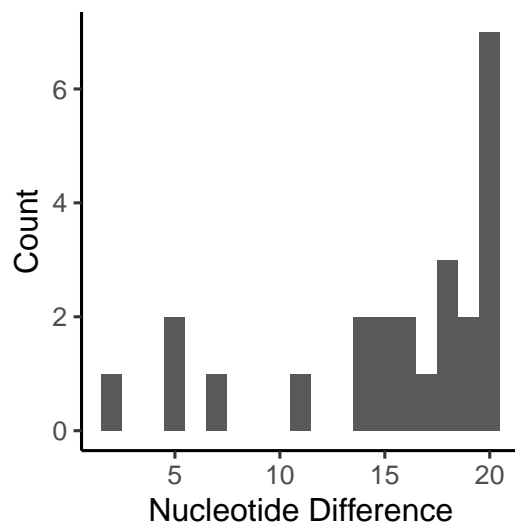
### IGHV3-13\*05

22 sequences assigned  
No exact matches.



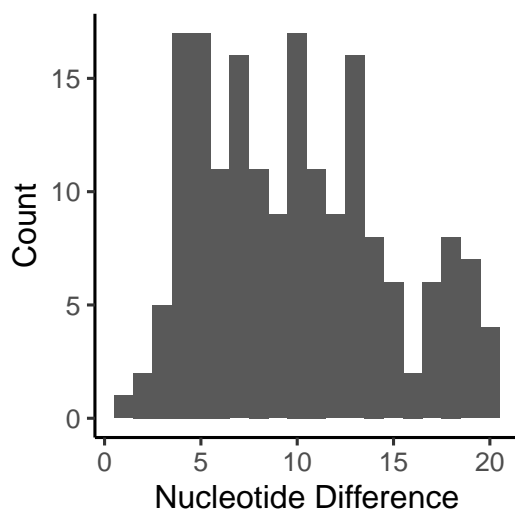
### IGHV3-20\*03\_04

111 sequences assigned  
No exact matches.



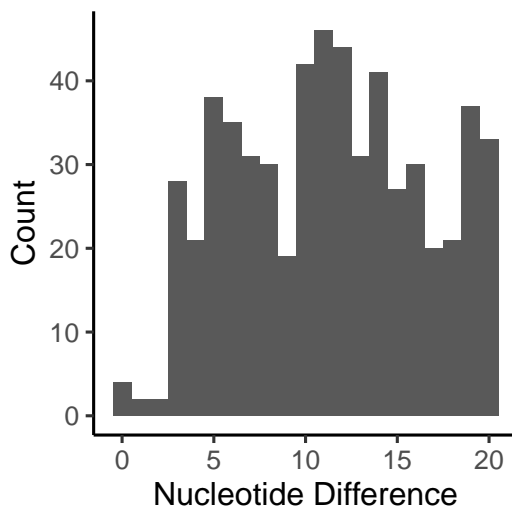
### IGHV3-11\*06

291 sequences assigned  
No exact matches.



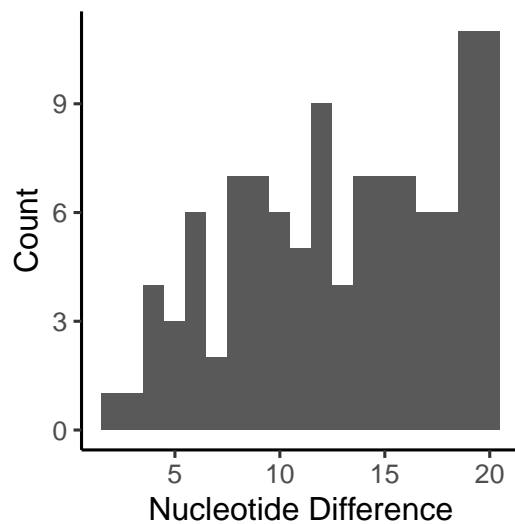
### IGHV3-15\*01\_02

992 sequences assigned  
4 (0.4%) exact matches, in which:  
1 unique CDR3  
1 unique J



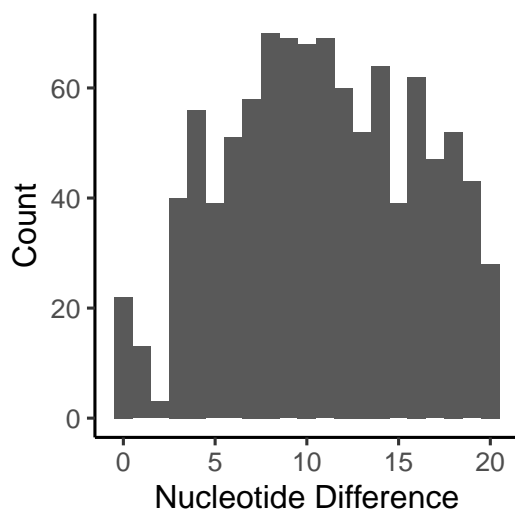
### IGHV3-21\*06

201 sequences assigned  
No exact matches.



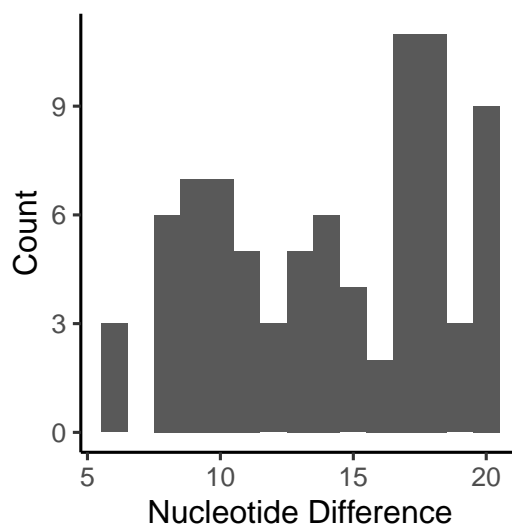
### IGHV3-21\*01\_02

1208 sequences assigned  
22 (1.8%) exact matches, in which:  
9 unique CDR3  
4 unique J



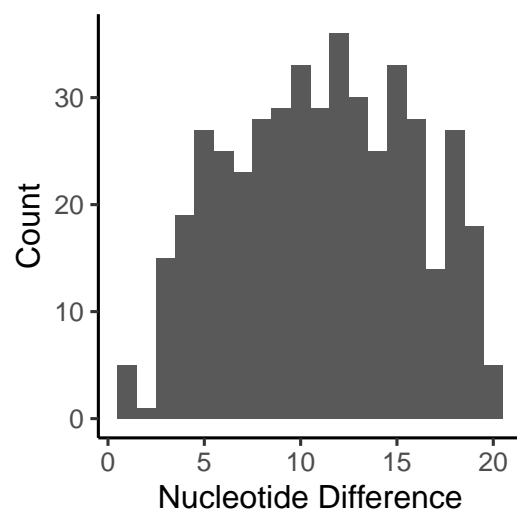
### IGHV3-30\*03

178 sequences assigned  
No exact matches.



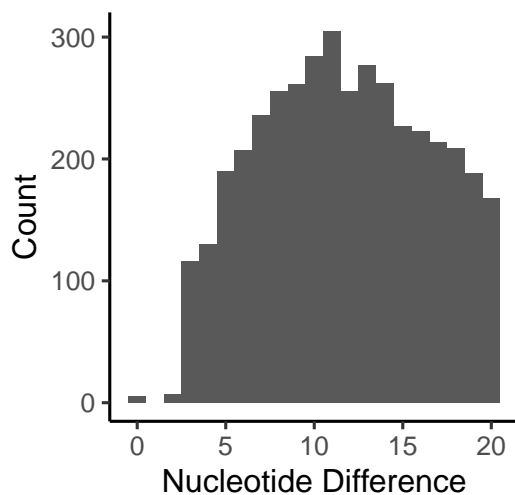
### IGHV3-33\*01

608 sequences assigned  
No exact matches.



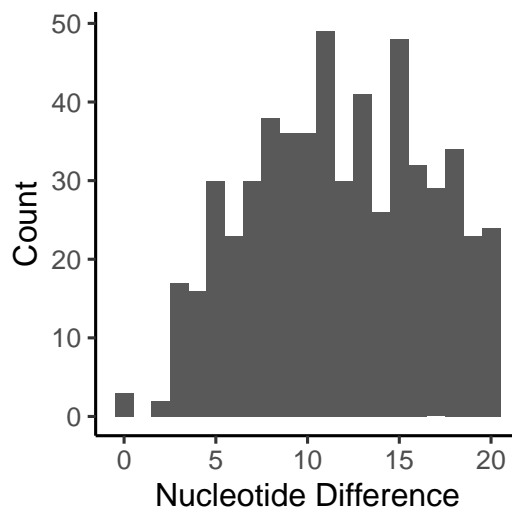
### IGHV3-23\*01\_04

5504 sequences assigned  
5 (0.1%) exact matches, in which:  
3 unique CDR3  
2 unique J



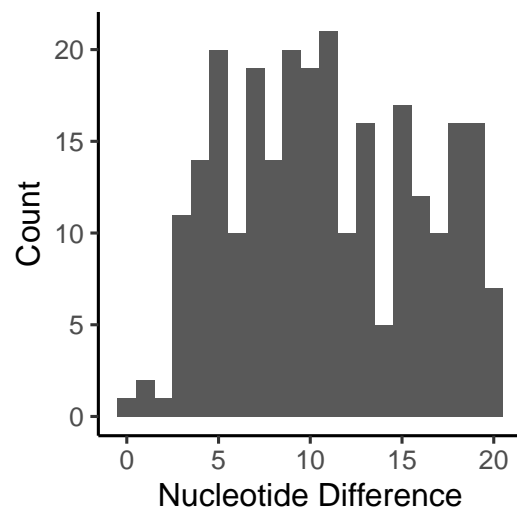
### IGHV3-30\*04

848 sequences assigned  
3 (0.4%) exact matches, in which:  
2 unique CDR3  
1 unique J



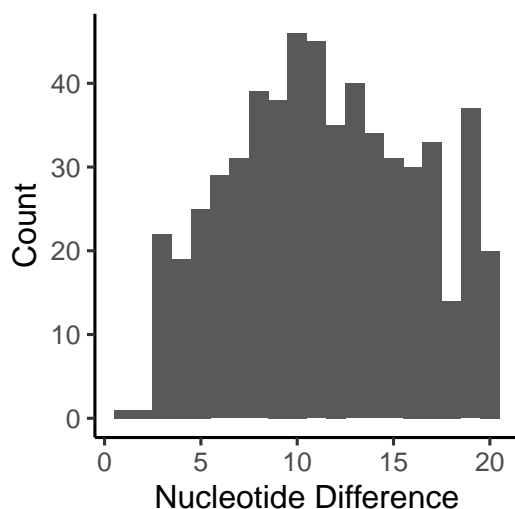
### IGHV3-43\*02

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



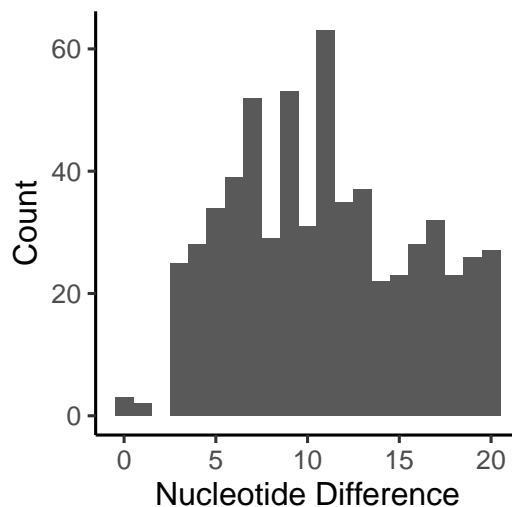
### IGHV3-30-3\*01

764 sequences assigned  
No exact matches.



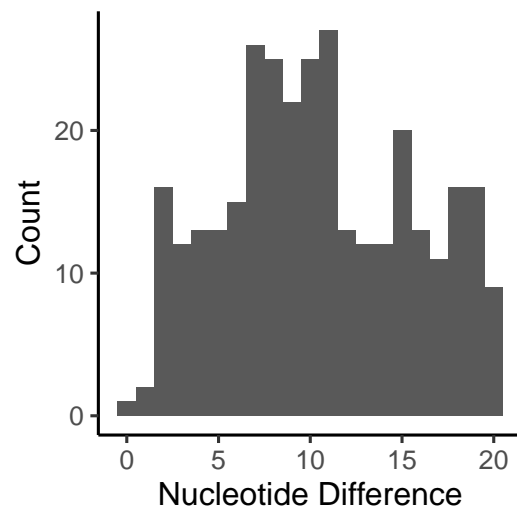
### IGHV3-30\*18

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



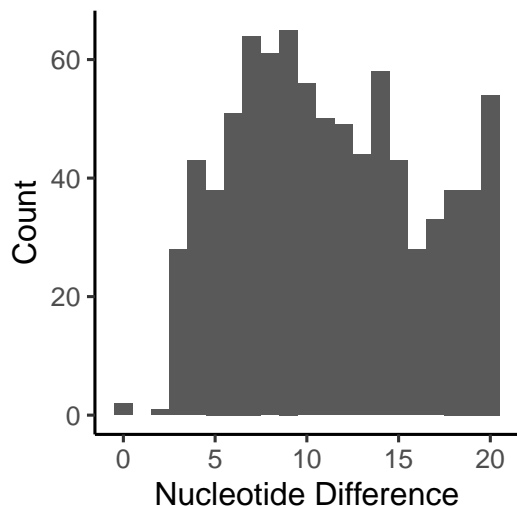
### IGHV3-48\*01

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



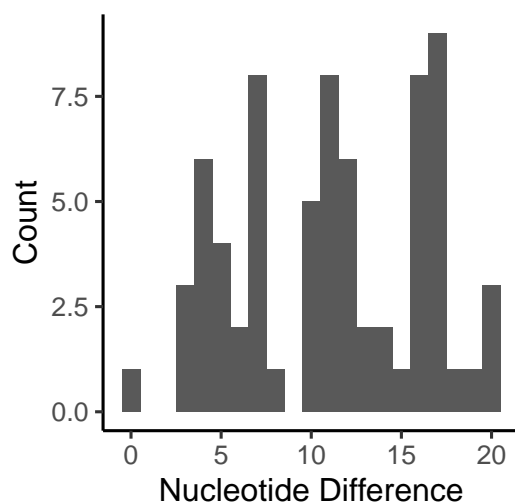
### IGHV3-48\*03

1054 sequences assigned  
2 (0.2%) exact matches, in which:  
2 unique CDR3  
1 unique J



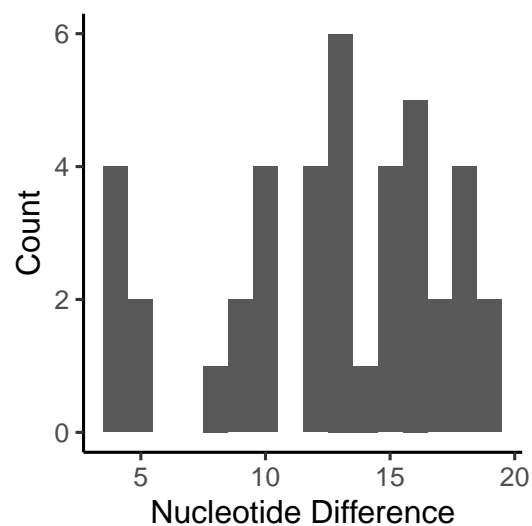
### IGHV3-53\*04

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



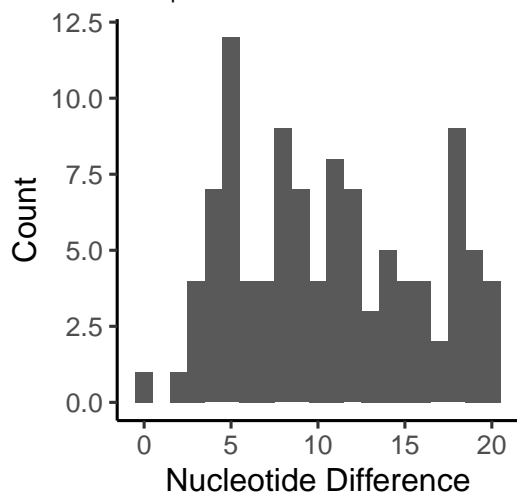
### IGHV3-64\*02\_07

45 sequences assigned  
No exact matches.



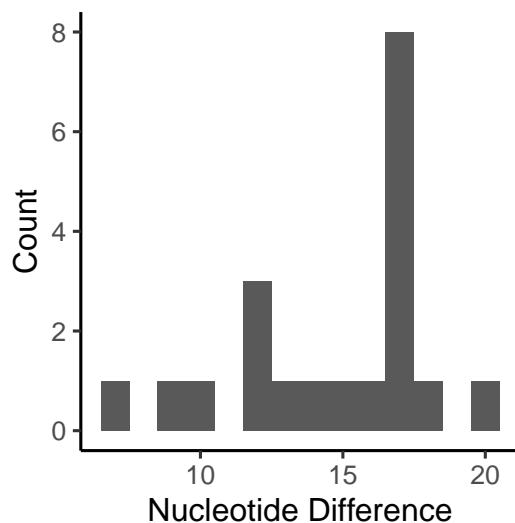
### IGHV3-49\*04

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



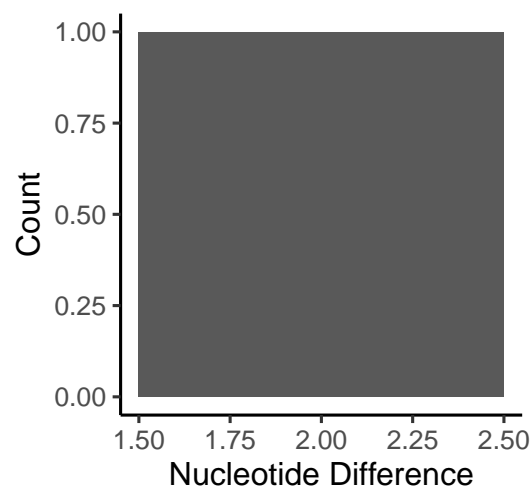
### IGHV3-53\*05

34 sequences assigned  
No exact matches.



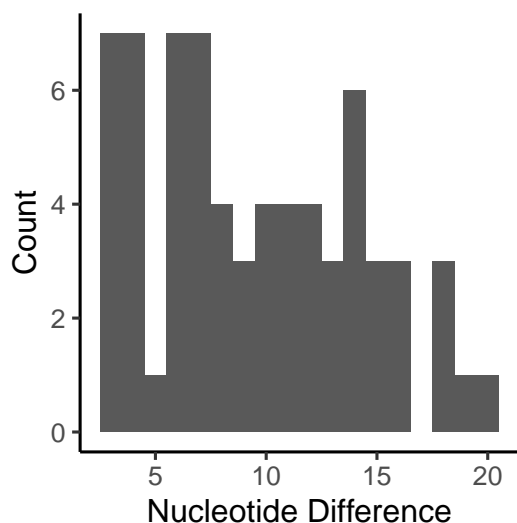
### IGHV3-66\*04

1 sequences assigned  
No exact matches.



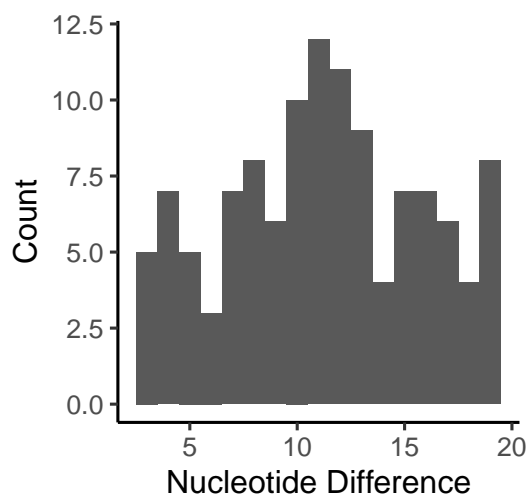
### IGHV3-49\*03\_05

86 sequences assigned  
No exact matches.



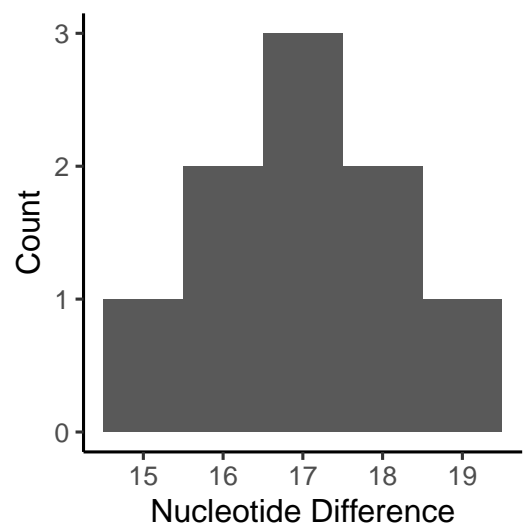
### IGHV3-53\*01\_02

138 sequences assigned  
No exact matches.



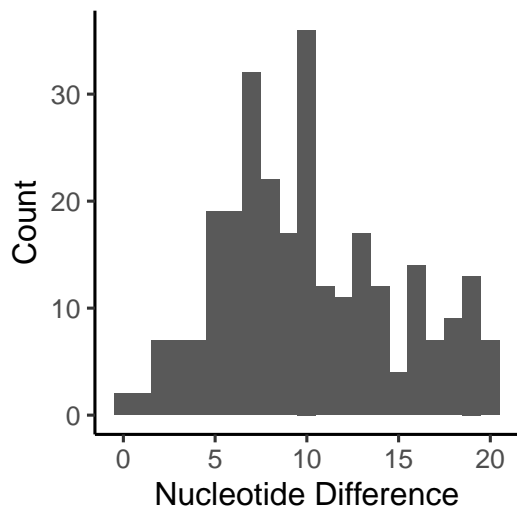
### IGHV3-69-1\*01

18 sequences assigned  
No exact matches.



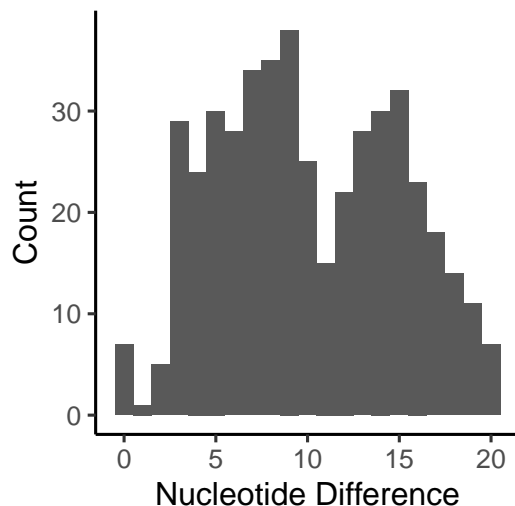
### IGHV3-72\*01

326 sequences assigned  
2 (0.6%) exact matches, in which:  
1 unique CDR3  
1 unique J



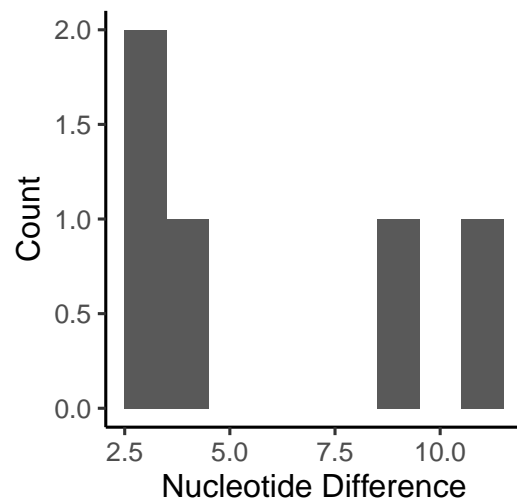
### IGHV3-74\*01\_02

591 sequences assigned  
7 (1.2%) exact matches, in which:  
4 unique CDR3  
2 unique J



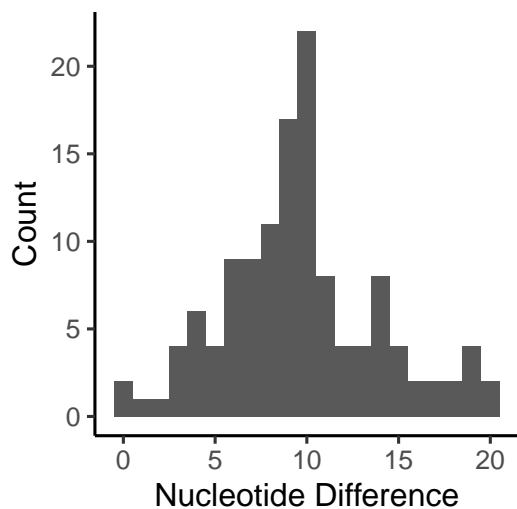
### IGHV4-28\*01\_07

6 sequences assigned  
No exact matches.



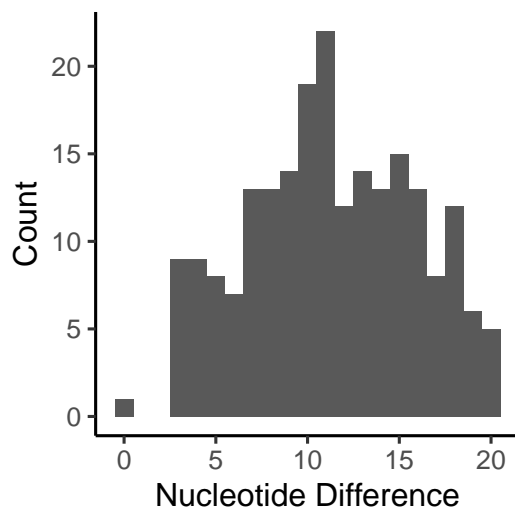
### IGHV3-73\*01\_02

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



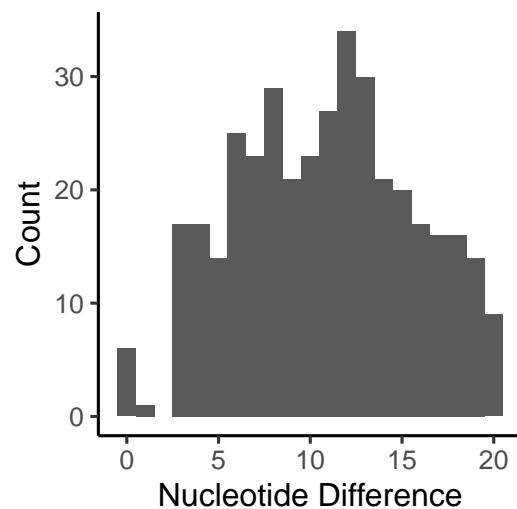
### IGHV3-64D\*06

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



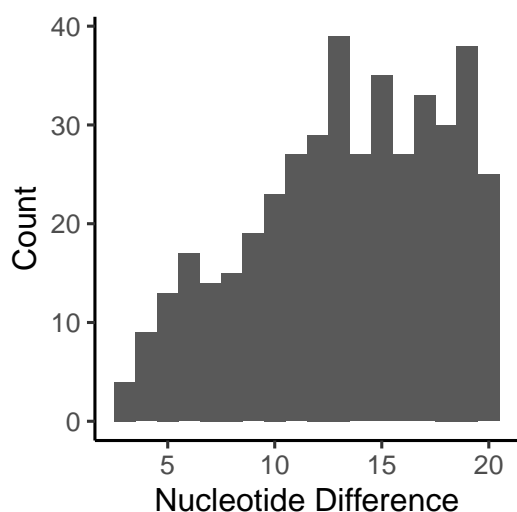
### IGHV4-30-4\*01

549 sequences assigned  
6 (1.1%) exact matches, in which:  
3 unique CDR3  
3 unique J



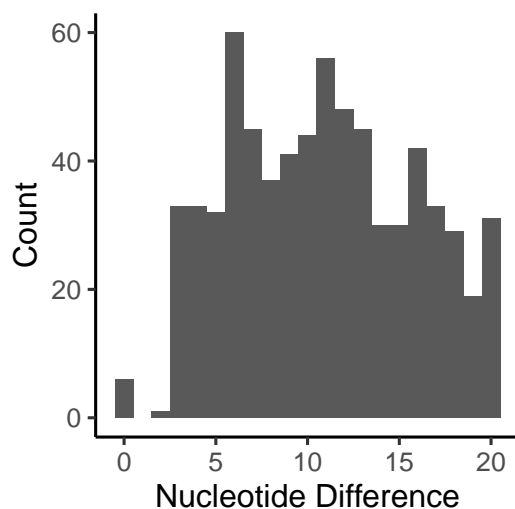
### IGHV3-74\*03

570 sequences assigned  
No exact matches.



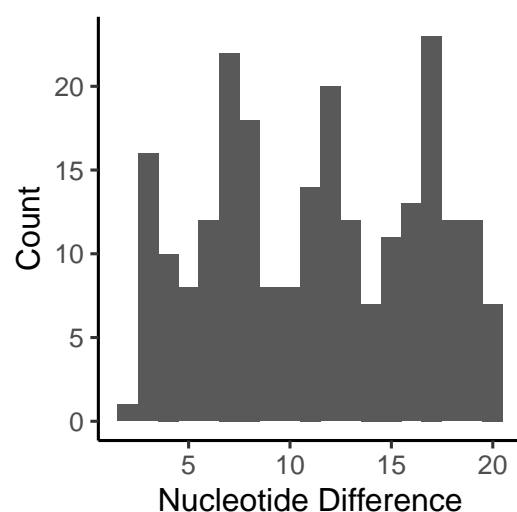
### IGHV4-4\*07

848 sequences assigned  
6 (0.7%) exact matches, in which:  
4 unique CDR3  
2 unique J



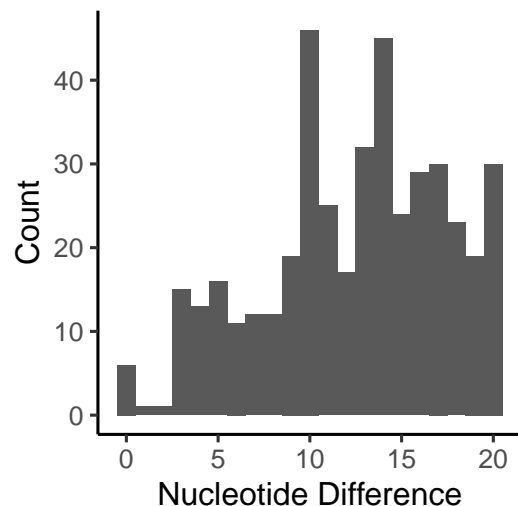
### IGHV4-30-2\*01

413 sequences assigned  
No exact matches.



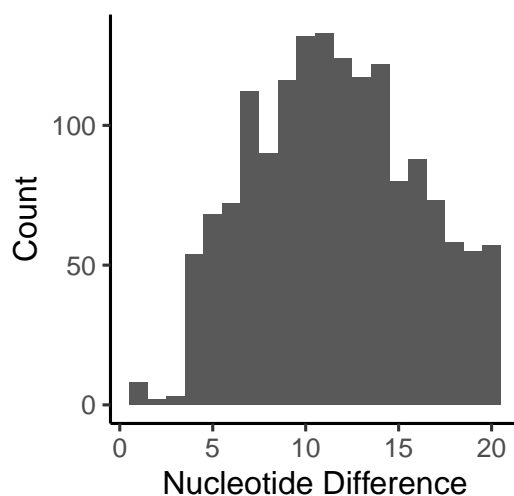
### IGHV4-31\*02

568 sequences assigned  
6 (1.1%) exact matches, in which:  
3 unique CDR3  
1 unique J



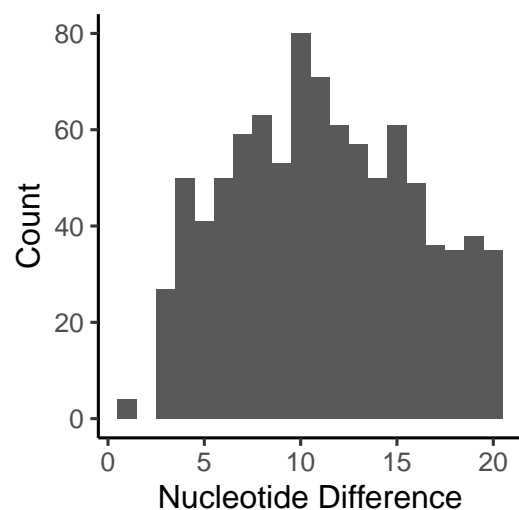
### IGHV4-39\*02

2113 sequences assigned  
No exact matches.



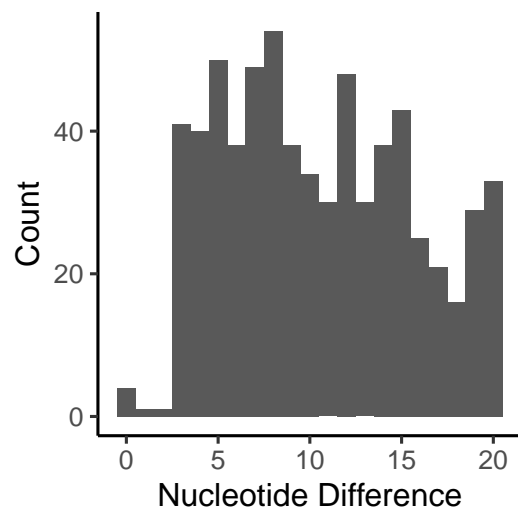
### IGHV4-59\*01\_07

1118 sequences assigned  
No exact matches.



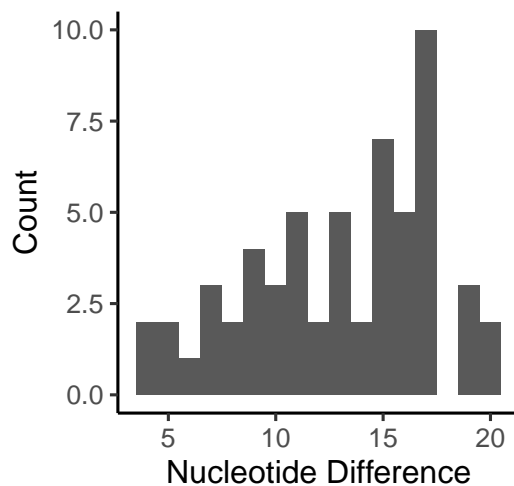
### IGHV4-34\*01\_02

819 sequences assigned  
4 (0.5%) exact matches, in which:  
4 unique CDR3  
2 unique J



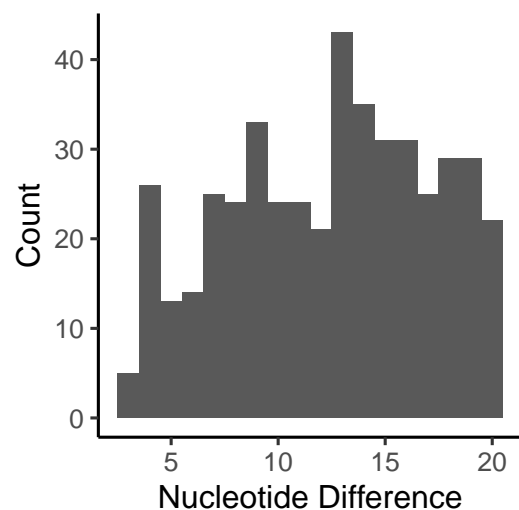
### IGHV4-59\*02

124 sequences assigned  
No exact matches.



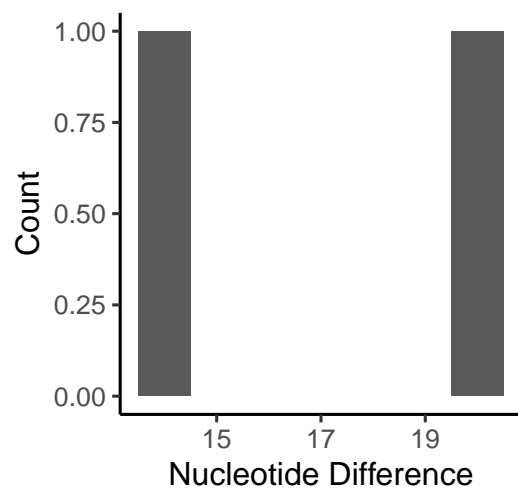
### IGHV4-61\*01

582 sequences assigned  
No exact matches.



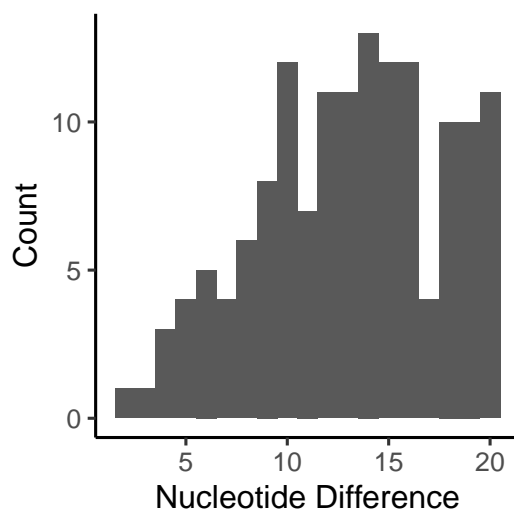
### IGHV4-38-2\*02

14 sequences assigned  
No exact matches.



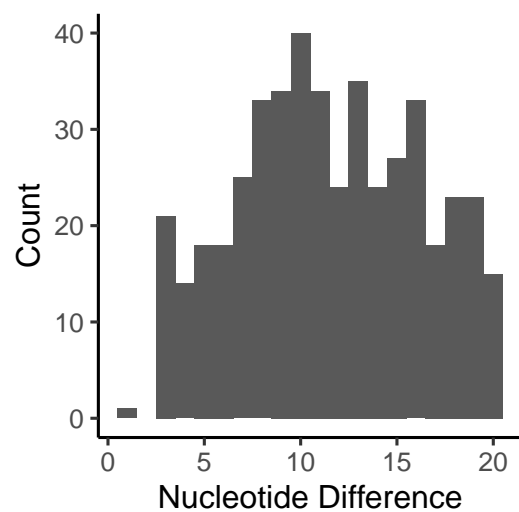
### IGHV4-59\*11

227 sequences assigned  
No exact matches.



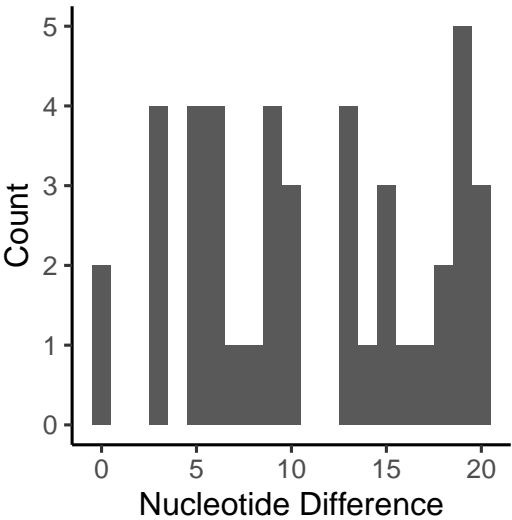
### IGHV4-61\*02

720 sequences assigned  
No exact matches.



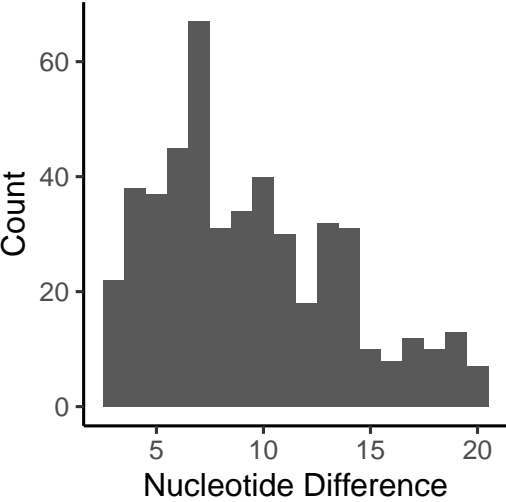
### IGHV5-10-1\*01\_03

86 sequences assigned  
2 (2.3%) exact matches, in which:  
2 unique CDR3  
2 unique J



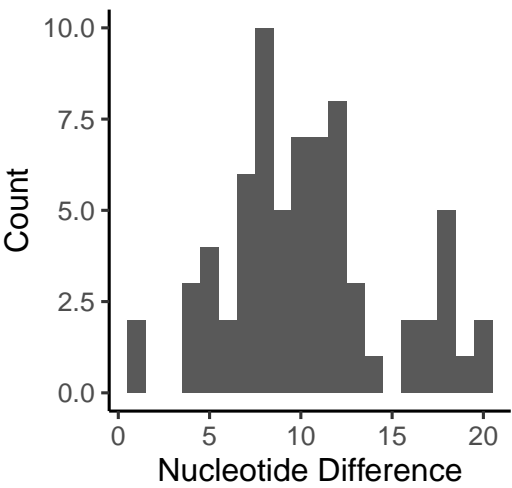
### IGHV6-1\*01\_02

514 sequences assigned  
No exact matches.



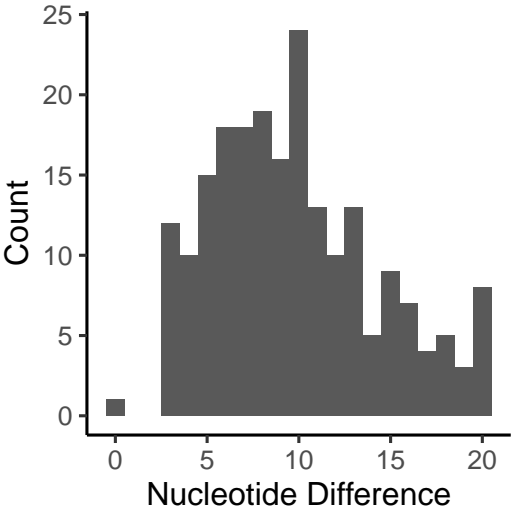
### IGHV5-51\*07

82 sequences assigned  
No exact matches.



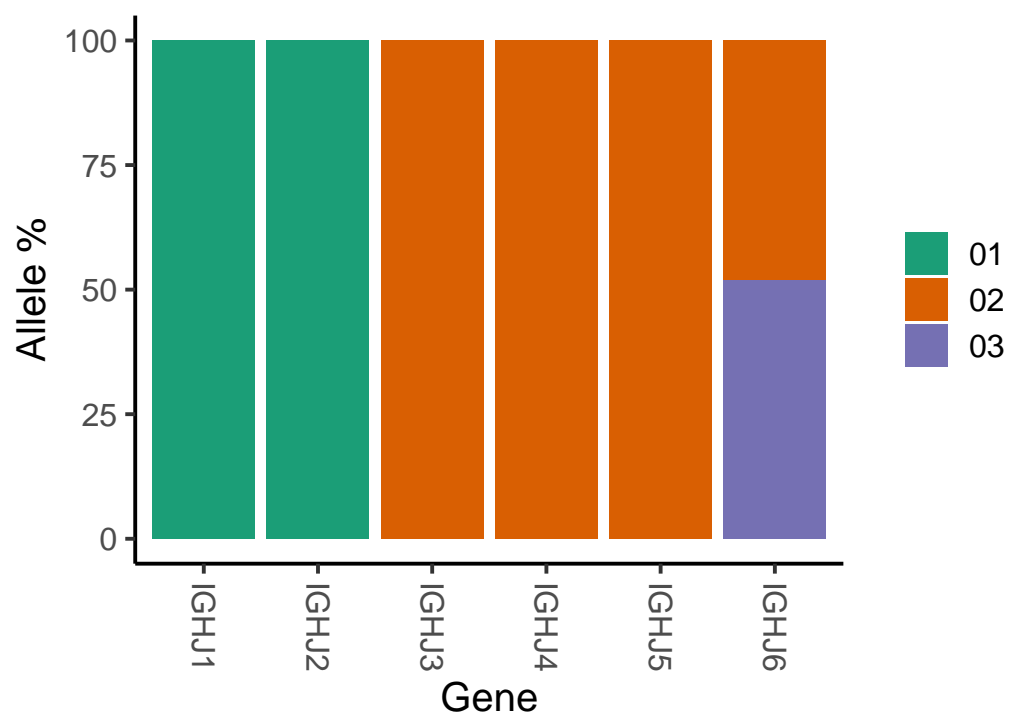
### IGHV5-51\*01\_03

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

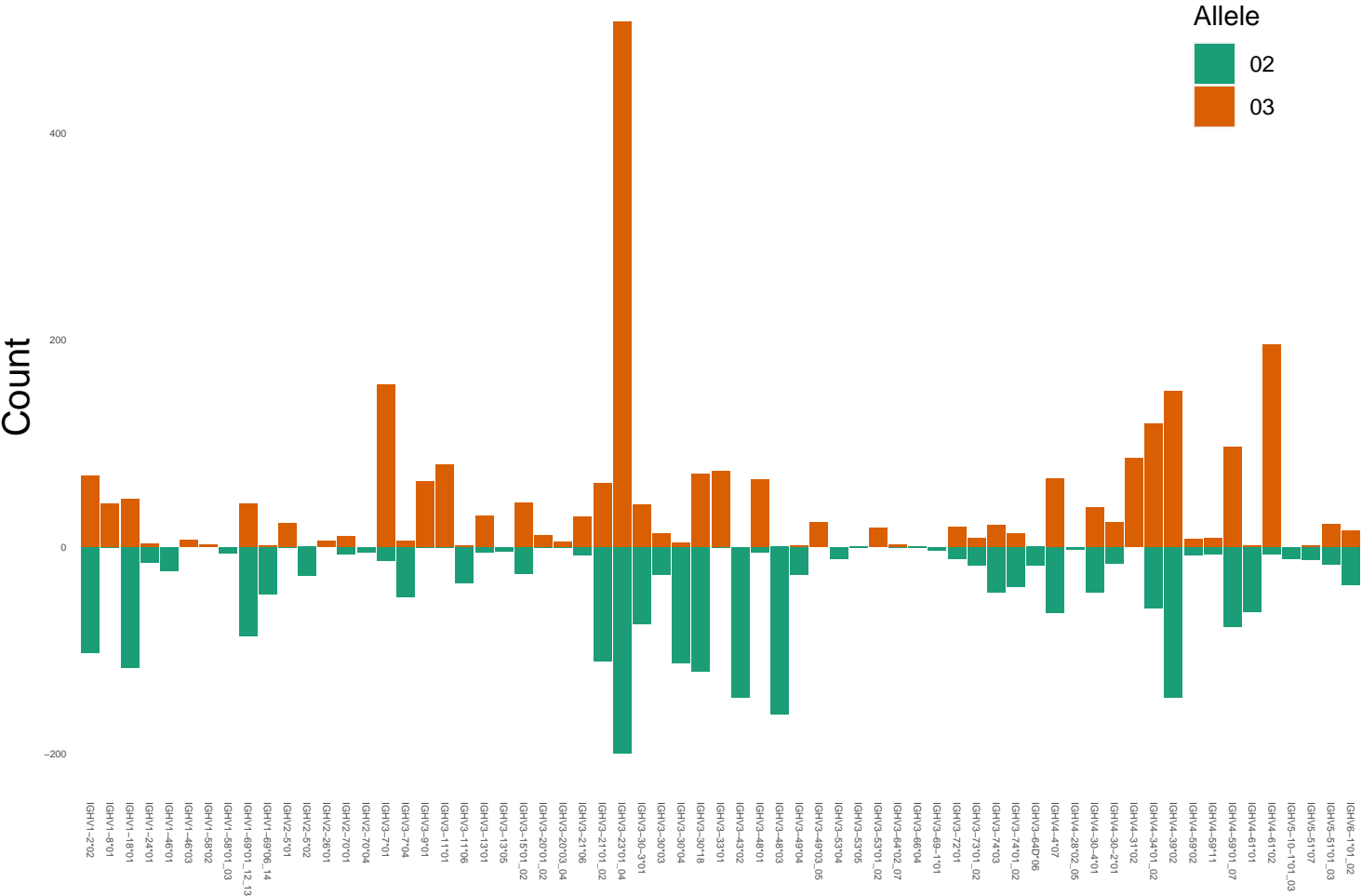




Allele Usage



Sequence Count by IGHJ6 allele usage



Warning – no inferred sequences found.