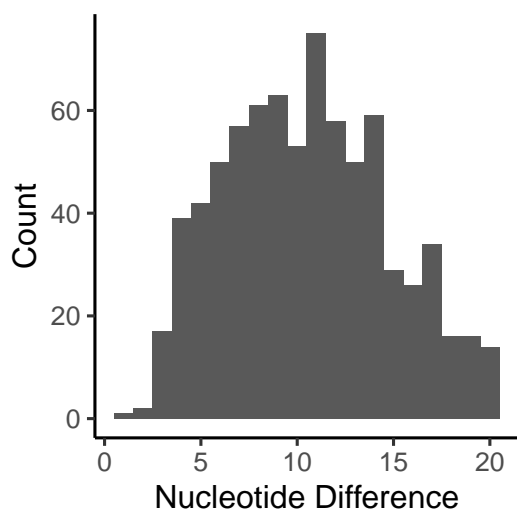


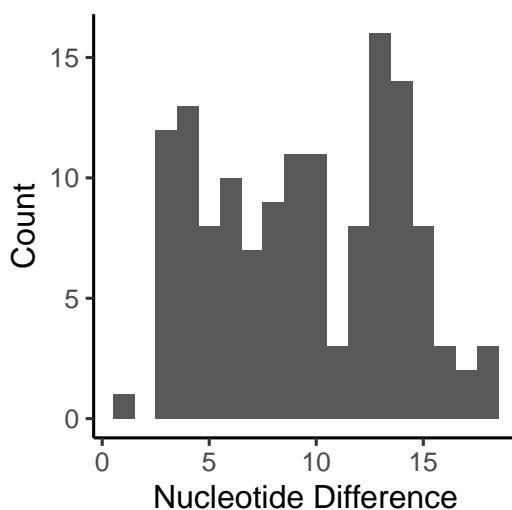
### IGHV1-2\*02

842 sequences assigned  
No exact matches.



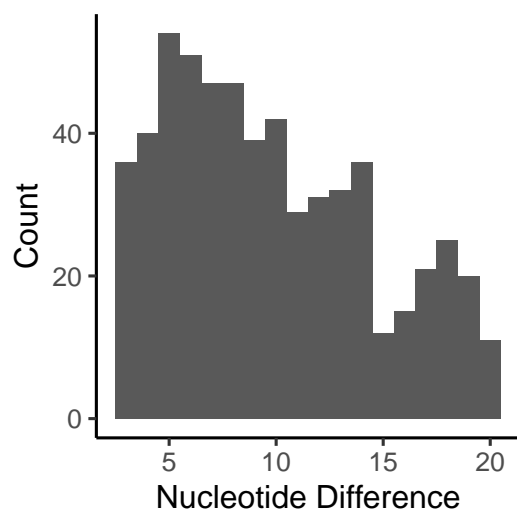
### IGHV1-8\*01

156 sequences assigned  
No exact matches.



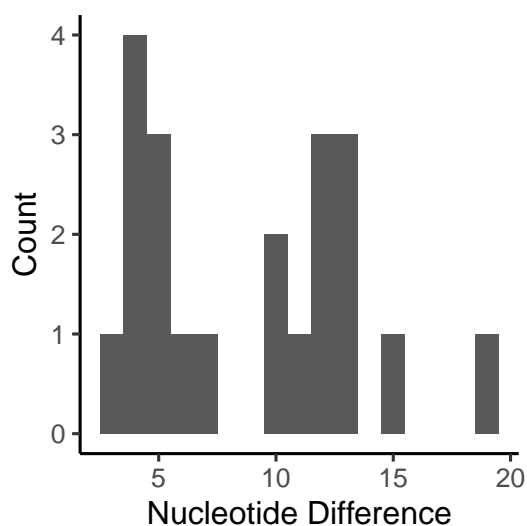
### IGHV1-46\*01

676 sequences assigned  
No exact matches.



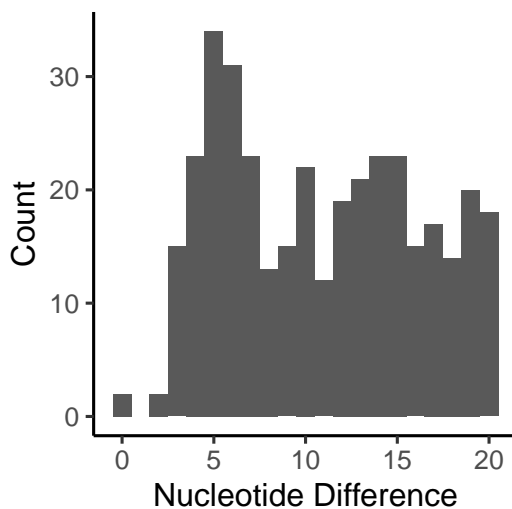
### IGHV1-3\*04

29 sequences assigned  
No exact matches.



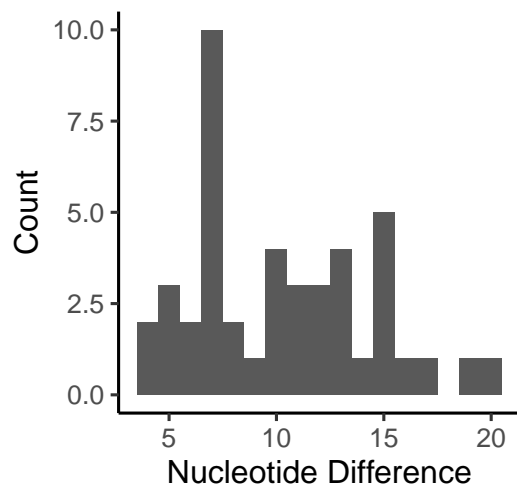
### IGHV1-18\*01

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



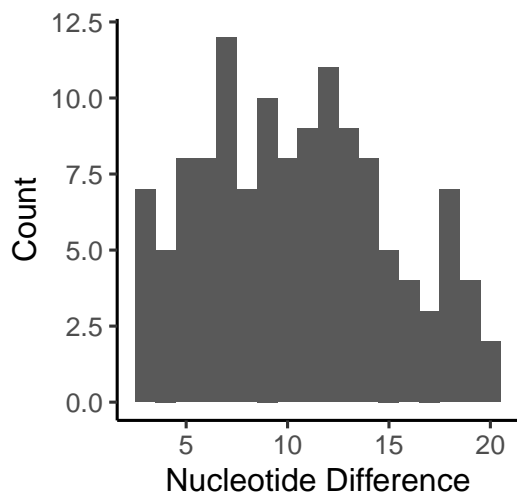
### IGHV1-58\*01\_03

48 sequences assigned  
No exact matches.



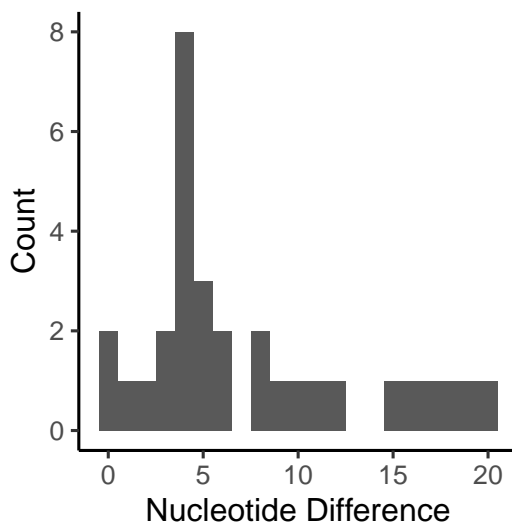
### IGHV1-3\*01\_05

162 sequences assigned  
No exact matches.



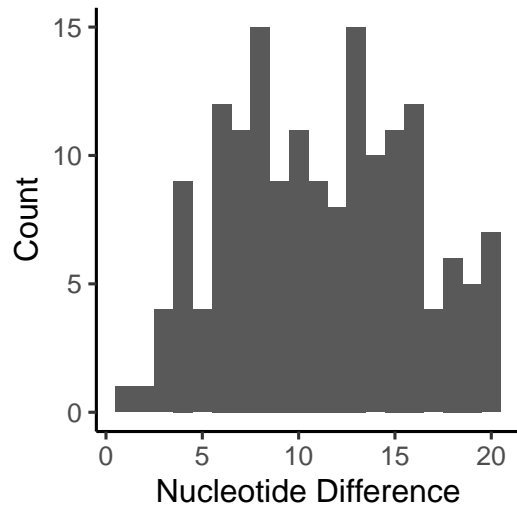
### IGHV1-24\*01

47 sequences assigned  
2 (4.3%) exact matches, in which:  
2 unique CDR3  
1 unique J



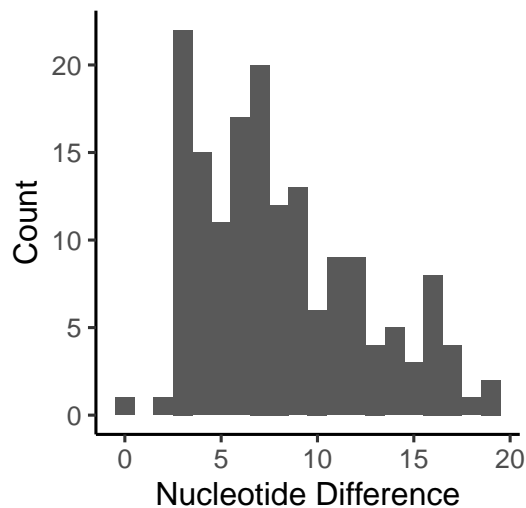
### IGHV1-69\*04\_09

222 sequences assigned  
No exact matches.



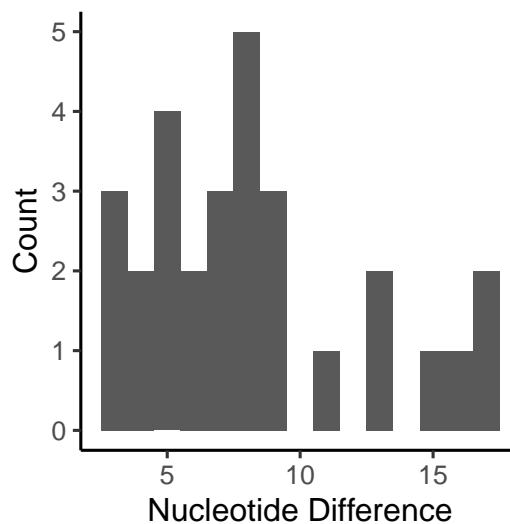
### IGHV2-5\*01

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



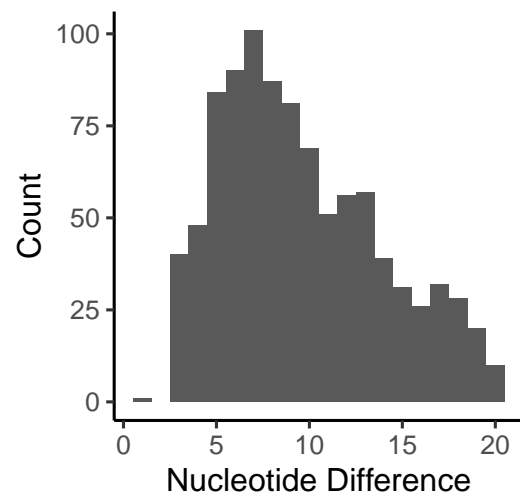
### IGHV2-70\*01

34 sequences assigned  
No exact matches.



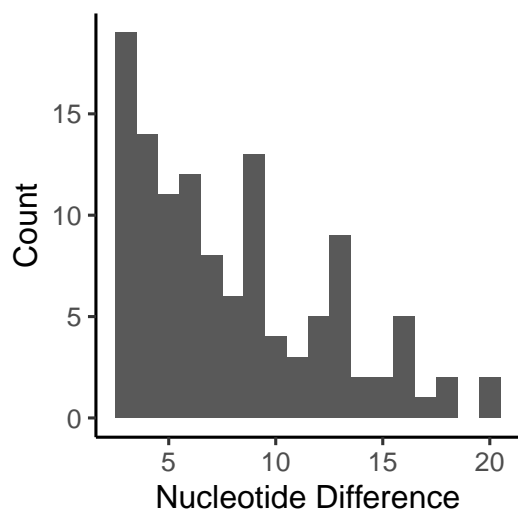
### IGHV3-7\*01

1045 sequences assigned  
No exact matches.



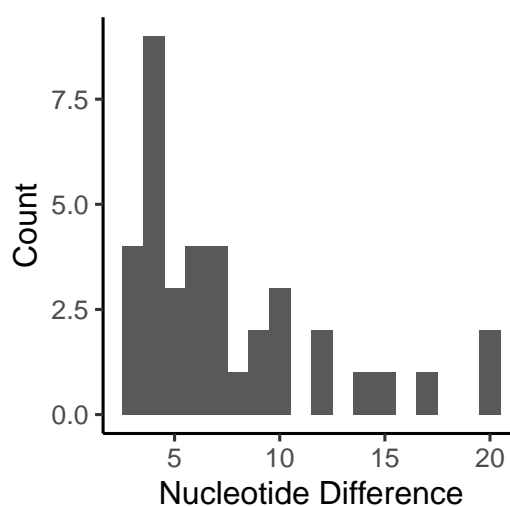
### IGHV2-5\*02

135 sequences assigned  
No exact matches.



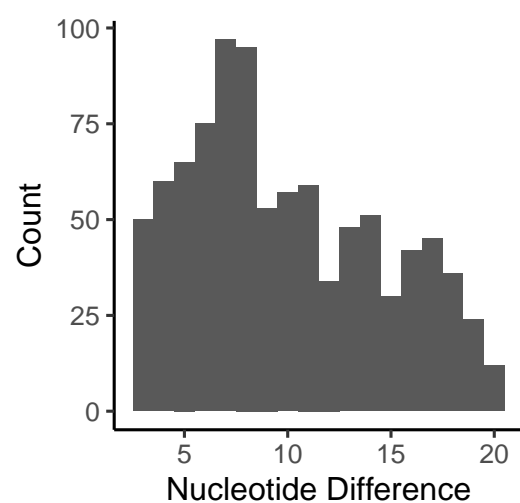
### IGHV2-70\*11\_15

42 sequences assigned  
No exact matches.



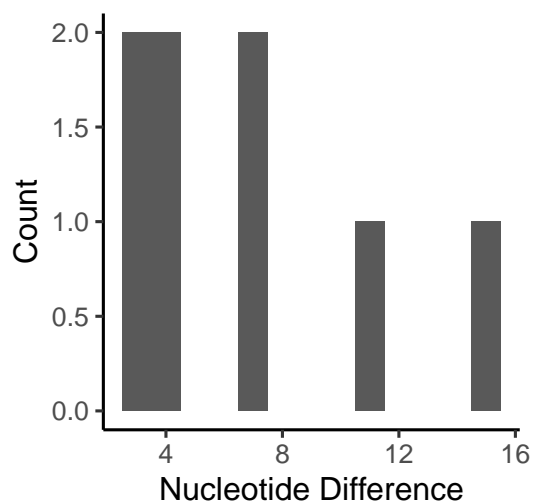
### IGHV3-7\*03

1038 sequences assigned  
No exact matches.



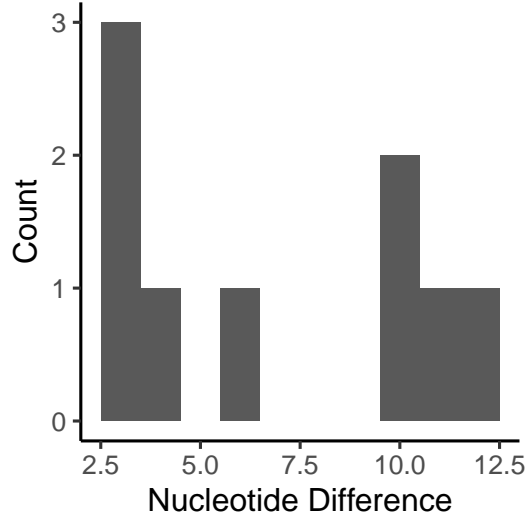
### IGHV2-26\*01

11 sequences assigned  
No exact matches.



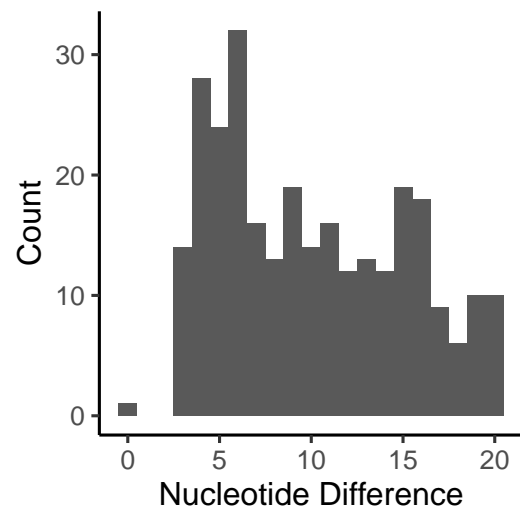
### IGHV2-70\*16\_17

11 sequences assigned  
No exact matches.



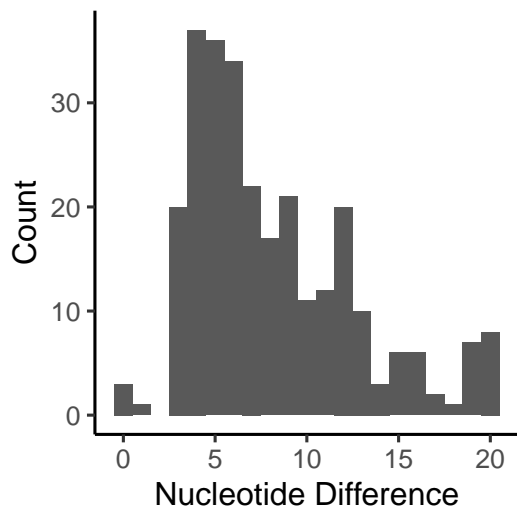
### IGHV3-9\*01

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



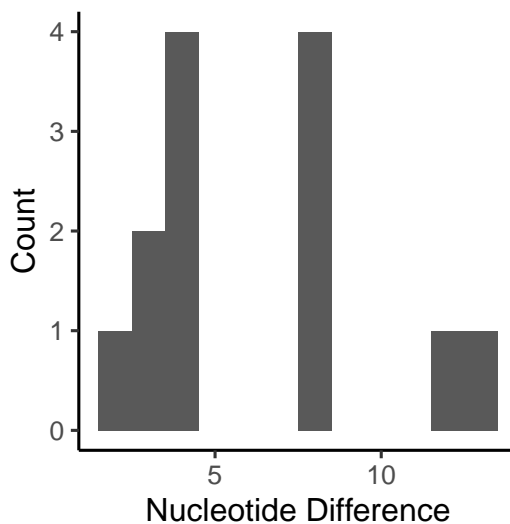
### IGHV3-11\*01

327 sequences assigned  
3 (0.9%) exact matches, in which:  
1 unique CDR3  
1 unique J



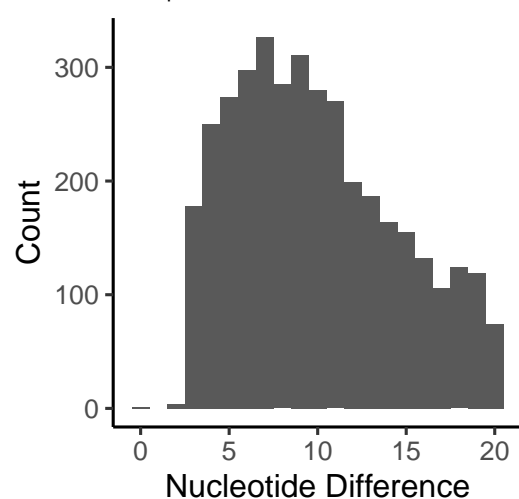
### IGHV3-20\*01\_02

13 sequences assigned  
No exact matches.



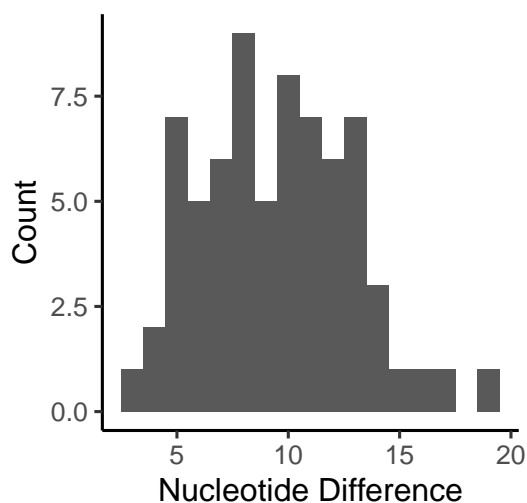
### IGHV3-23\*01\_04

4158 sequences assigned  
1 (0%) exact matches, in which:  
1 unique CDR3  
1 unique J



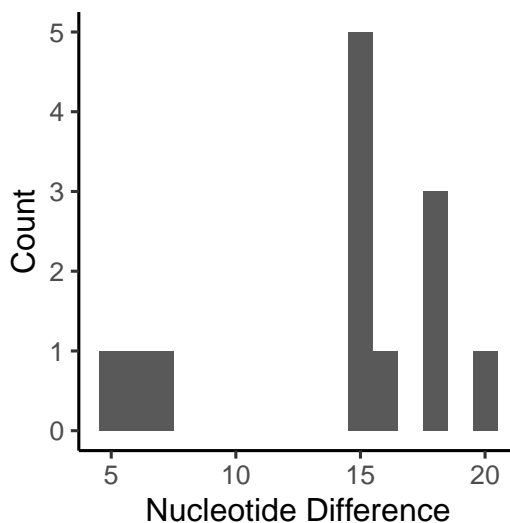
### IGHV3-13\*01

90 sequences assigned  
No exact matches.



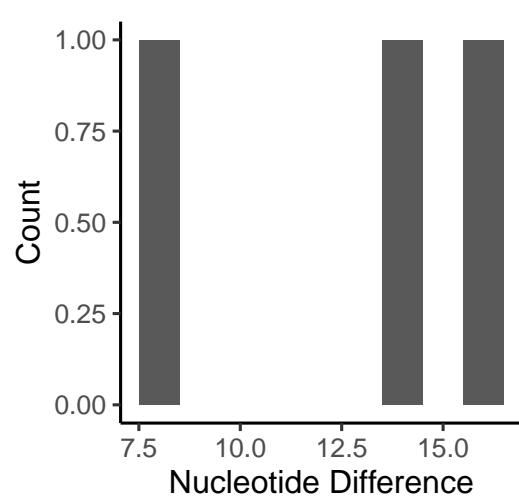
### IGHV3-20\*03\_04

17 sequences assigned  
No exact matches.



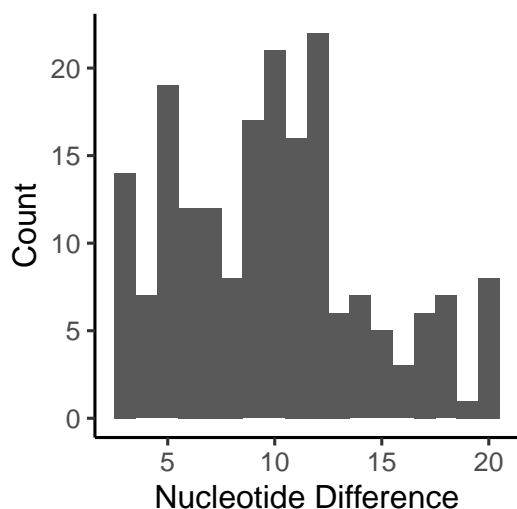
### IGHV3-30-3\*03

5 sequences assigned  
No exact matches.



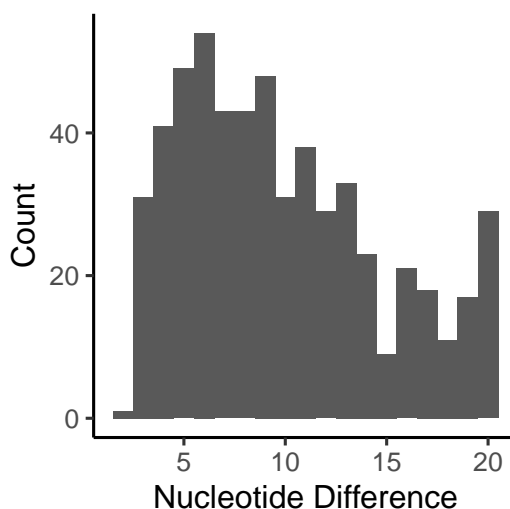
### IGHV3-15\*01\_02

214 sequences assigned  
No exact matches.



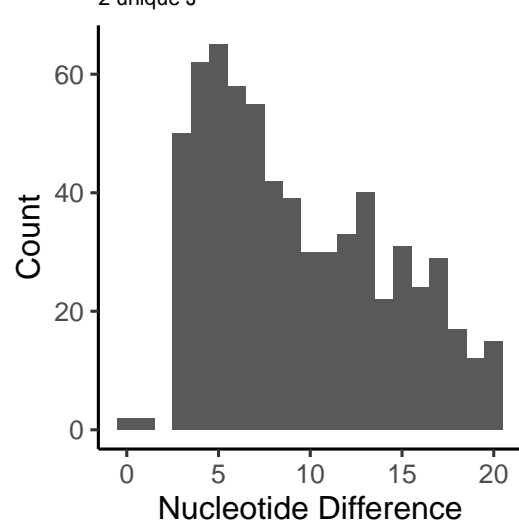
### IGHV3-21\*01\_02

654 sequences assigned  
No exact matches.



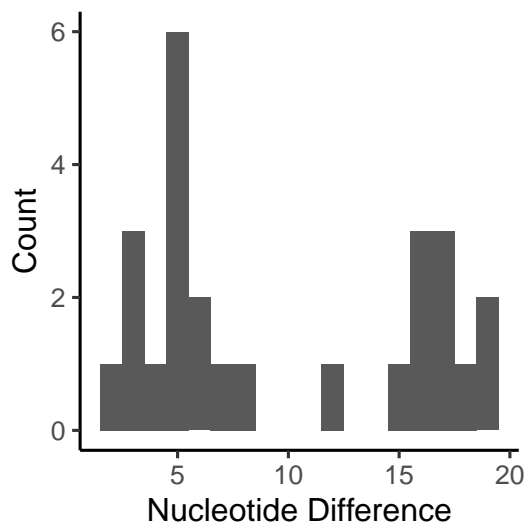
### IGHV3-33\*01

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



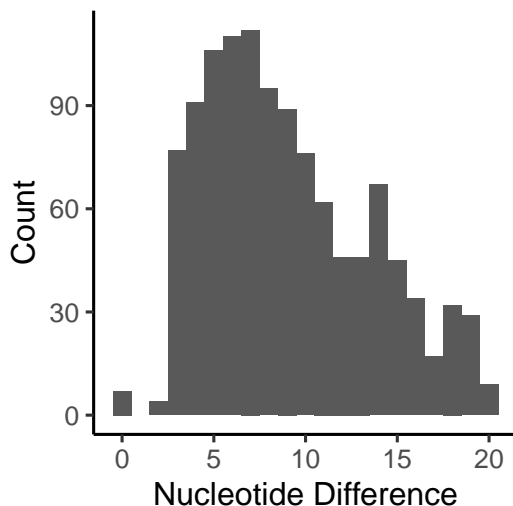
### IGHV3-43\*01

37 sequences assigned  
No exact matches.



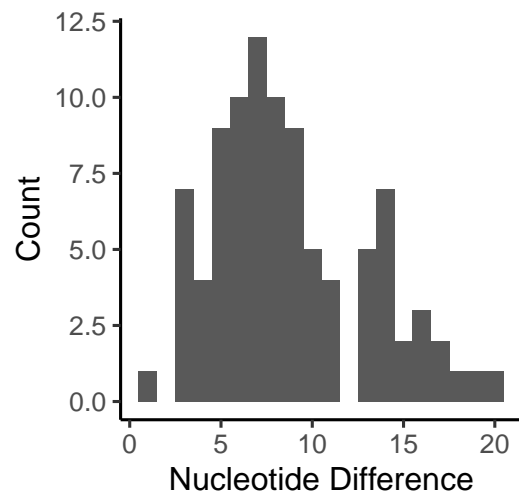
### IGHV3-48\*03

1270 sequences assigned  
7 (0.6%) exact matches, in which:  
3 unique CDR3  
2 unique J



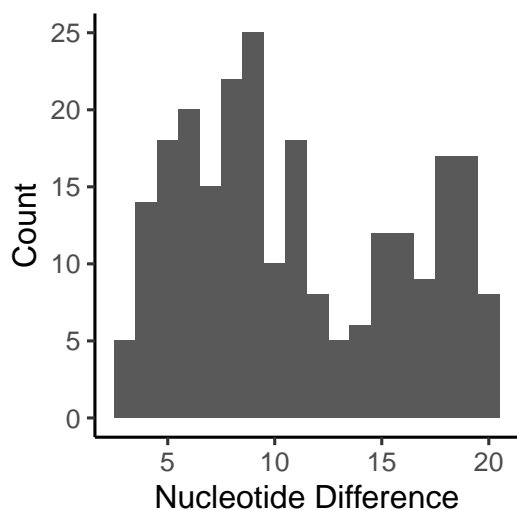
### IGHV3-53\*04

100 sequences assigned  
No exact matches.



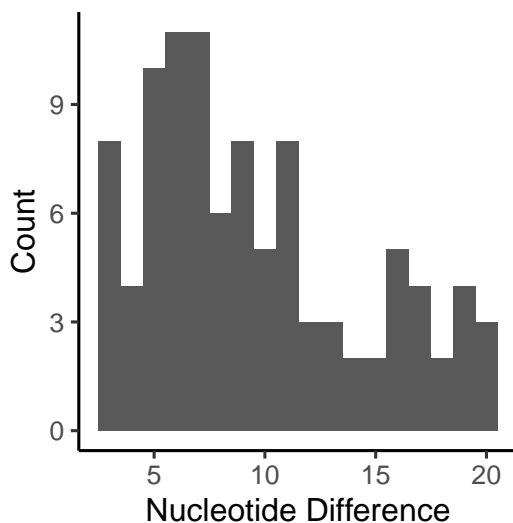
### IGHV3-43\*02

424 sequences assigned  
No exact matches.



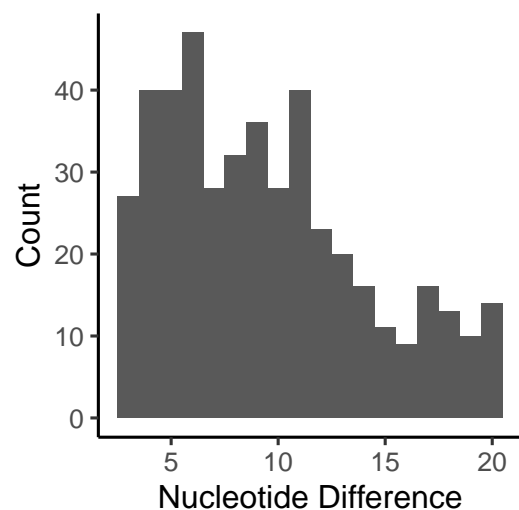
### IGHV3-49\*04

117 sequences assigned  
No exact matches.



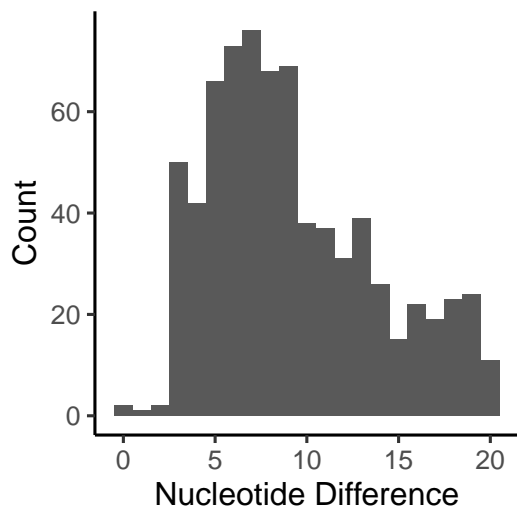
### IGHV3-53\*01\_02

621 sequences assigned  
No exact matches.



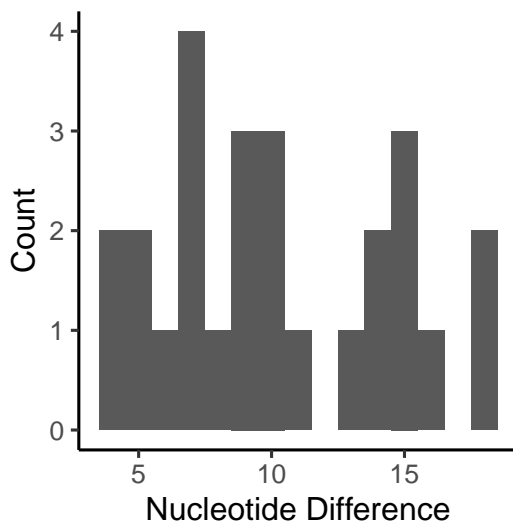
### IGHV3-48\*02

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



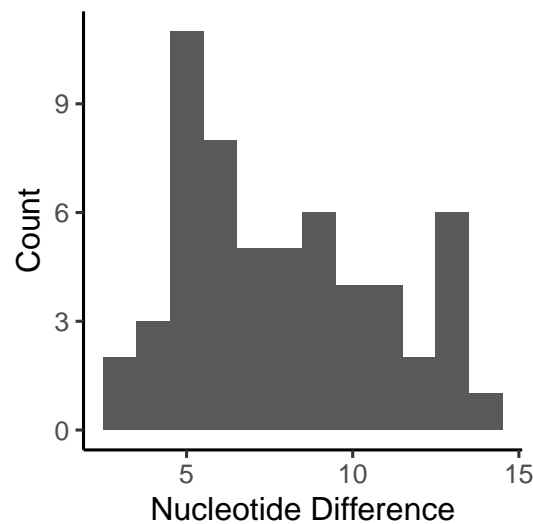
### IGHV3-49\*03\_05

32 sequences assigned  
No exact matches.



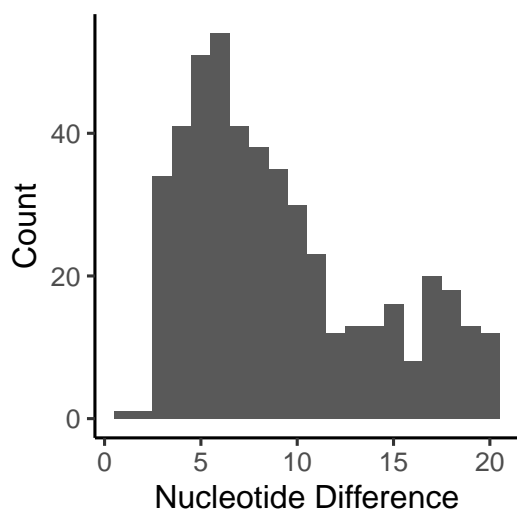
### IGHV3-64\*02\_07

58 sequences assigned  
No exact matches.



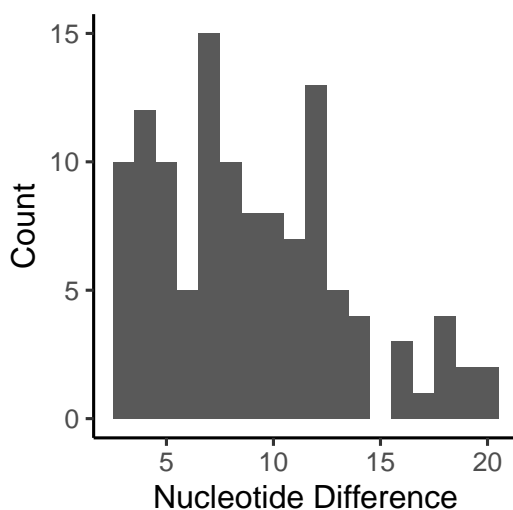
### IGHV3-66\*01

529 sequences assigned  
No exact matches.



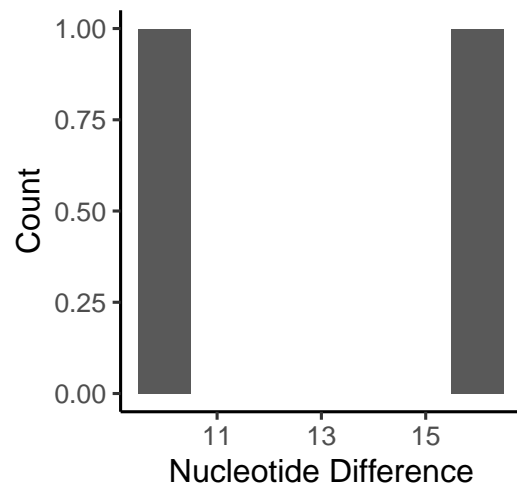
### IGHV3-73\*01\_02

135 sequences assigned  
No exact matches.



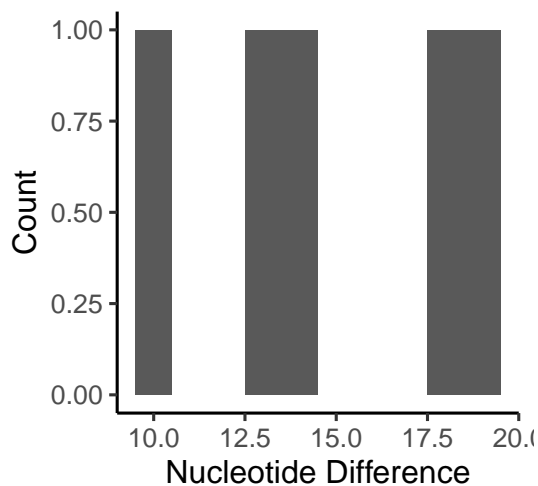
### IGHV3-64D\*06

2 sequences assigned  
No exact matches.



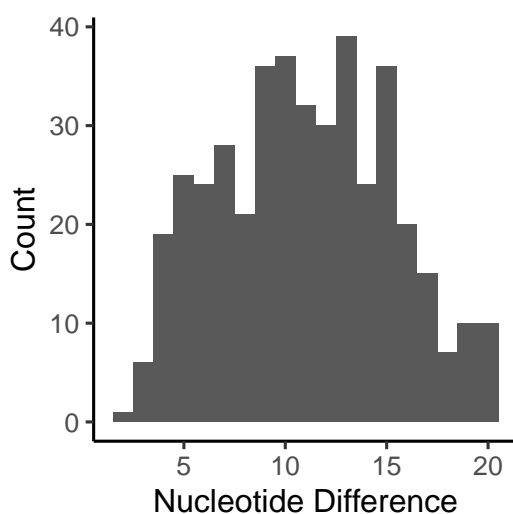
### IGHV3-69-1\*01

12 sequences assigned  
No exact matches.



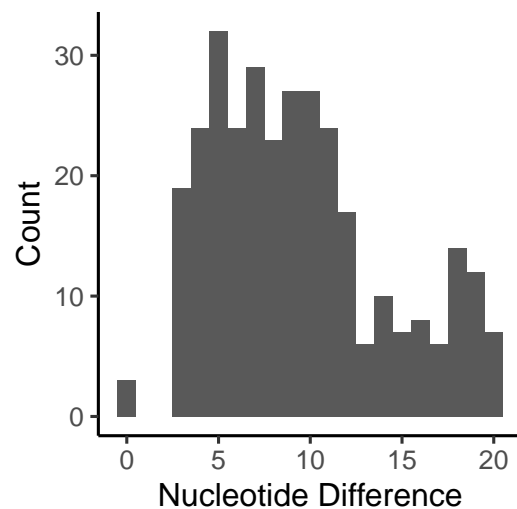
### IGHV3-74\*03

486 sequences assigned  
No exact matches.



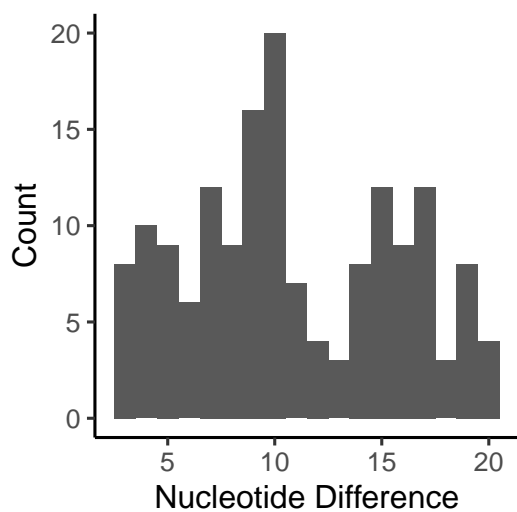
### IGHV4-4\*07

372 sequences assigned  
3 (0.8%) exact matches, in which:  
2 unique CDR3  
1 unique J



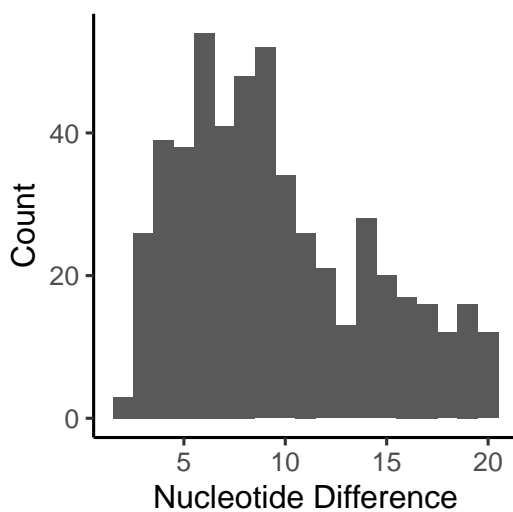
### IGHV3-72\*01

191 sequences assigned  
No exact matches.



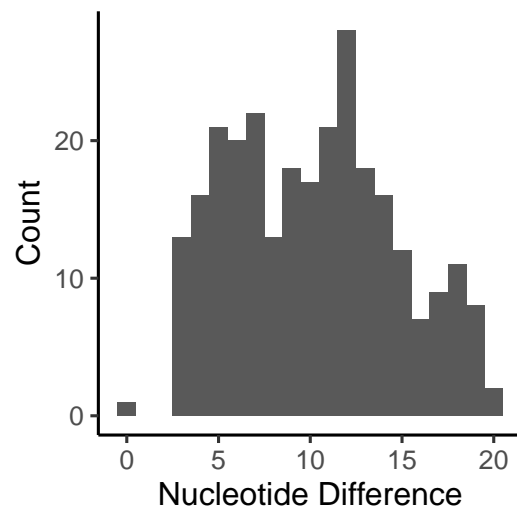
### IGHV3-74\*01\_02

610 sequences assigned  
No exact matches.



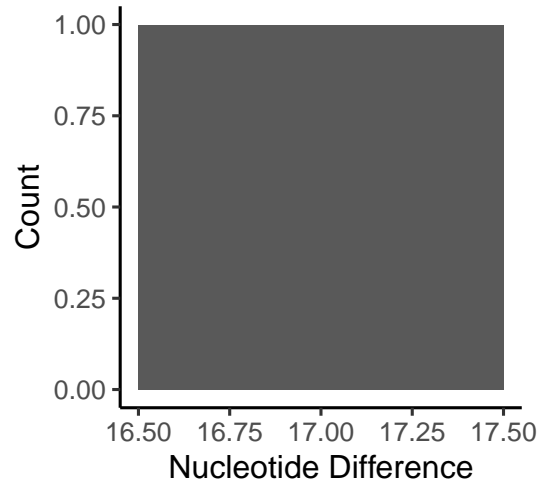
### IGHV4-4\*02\_03

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



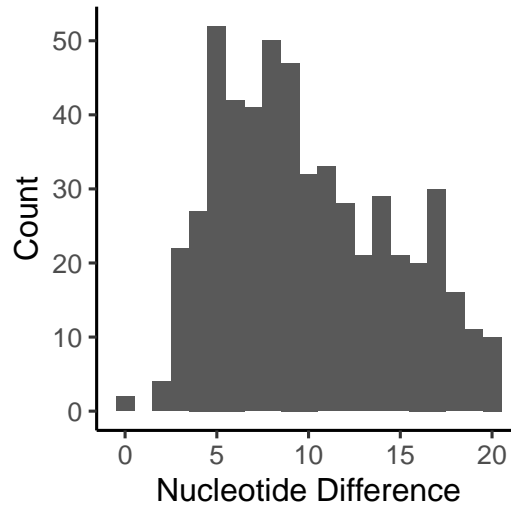
### IGHV4-30-2\*01

1 sequences assigned  
No exact matches.



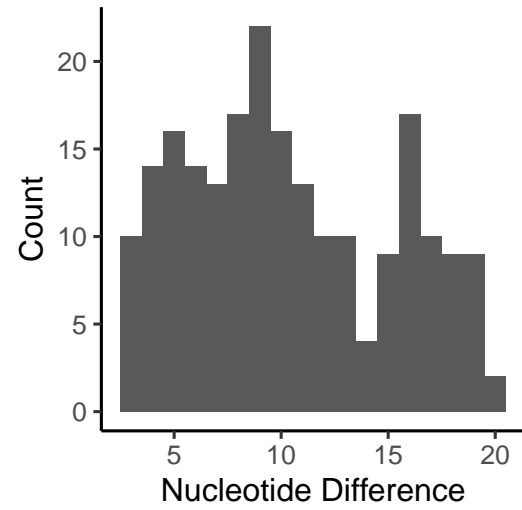
### IGHV4-34\*01\_02

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



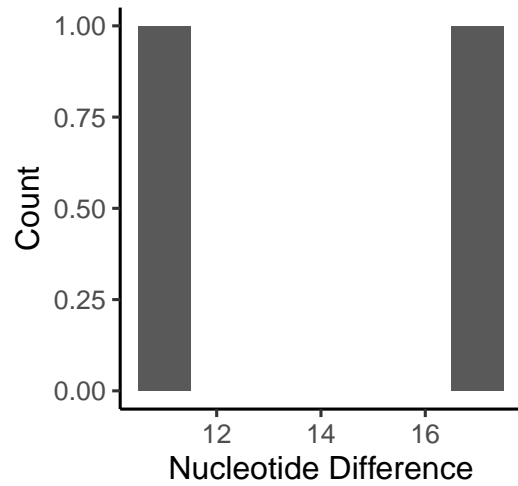
### IGHV4-39\*01\_05

260 sequences assigned  
No exact matches.



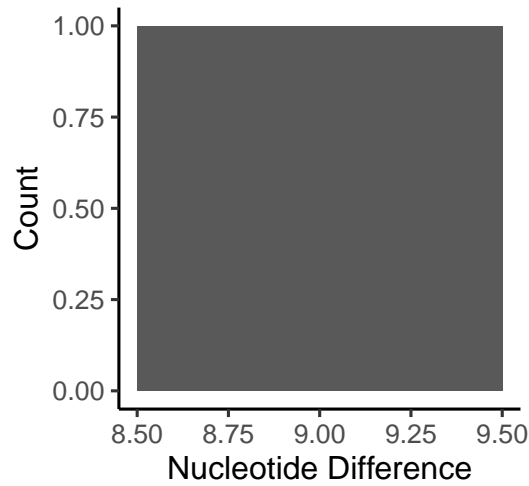
### IGHV4-30-2\*03

5 sequences assigned  
No exact matches.



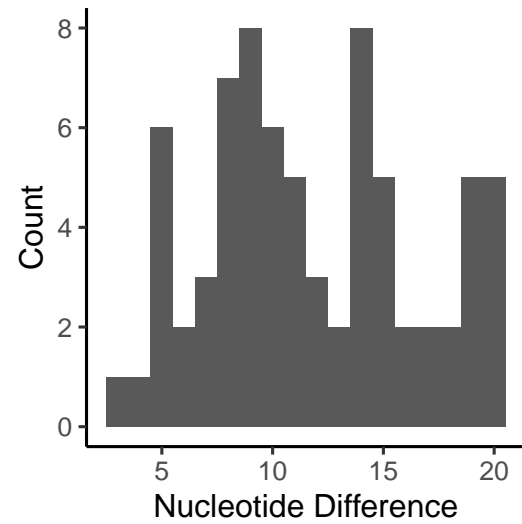
### IGHV4-38-2\*02

1 sequences assigned  
No exact matches.



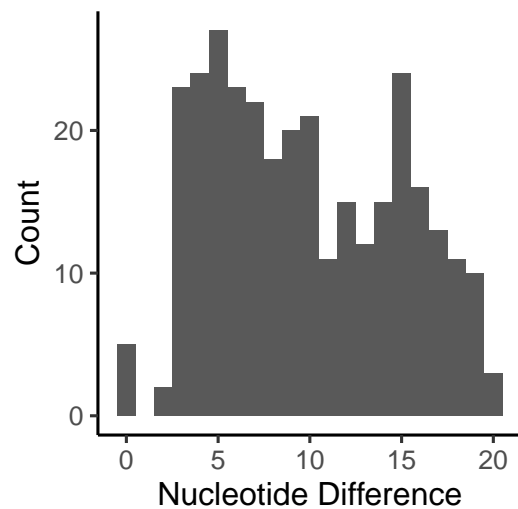
### IGHV4-59\*02

103 sequences assigned  
No exact matches.



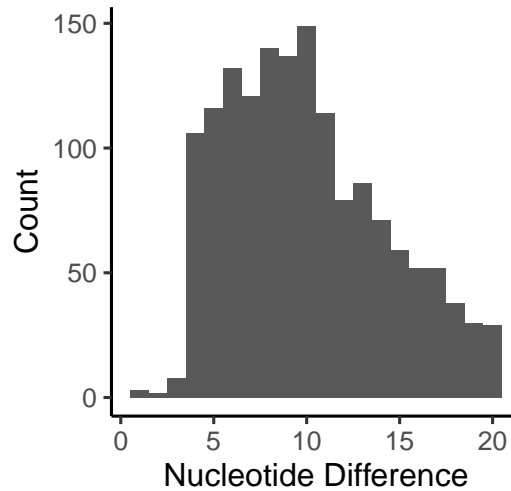
### IGHV4-31\*02

400 sequences assigned  
5 (1.2%) exact matches, in which:  
1 unique CDR3  
1 unique J



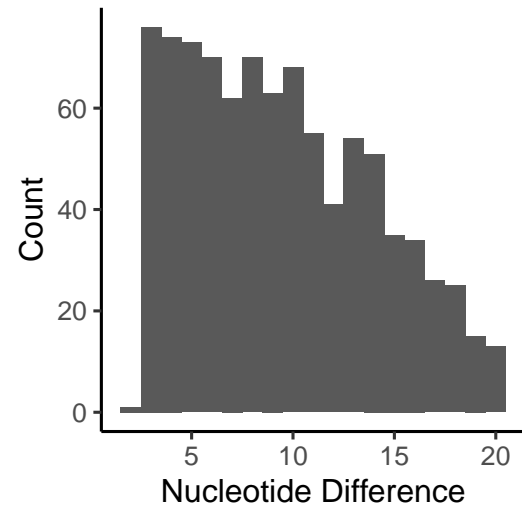
### IGHV4-39\*02

1817 sequences assigned  
No exact matches.



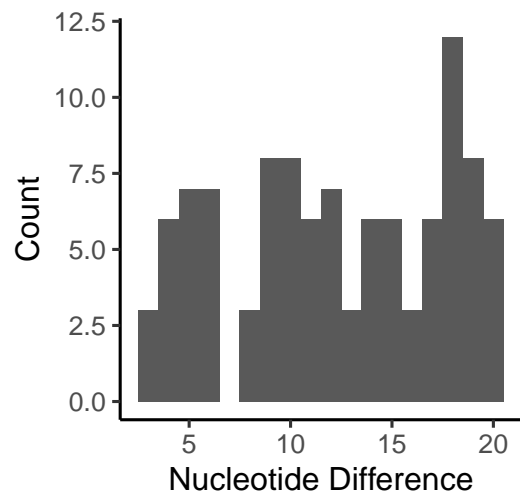
### IGHV4-59\*01\_07

1088 sequences assigned  
No exact matches.



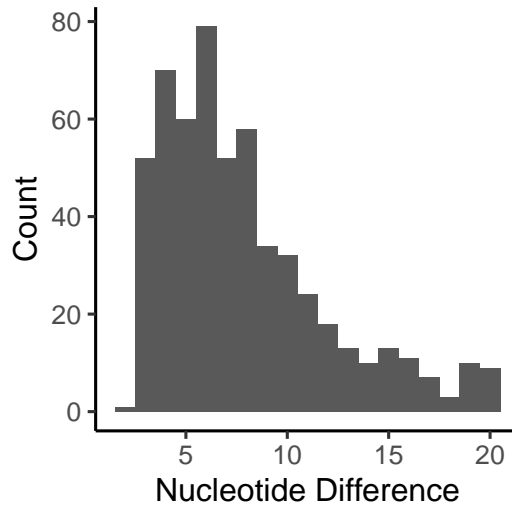
### IGHV4-59\*11

131 sequences assigned  
No exact matches.



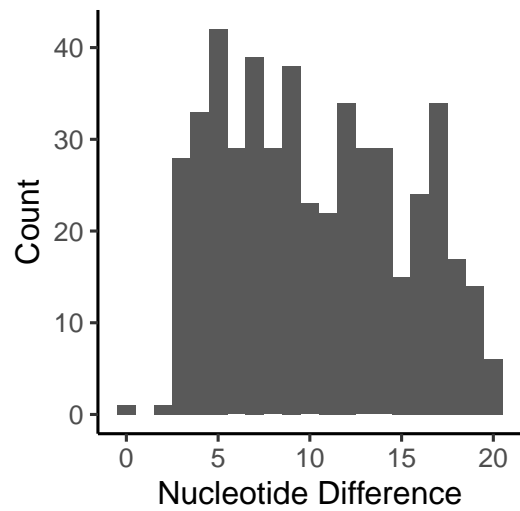
### IGHV5-51\*01\_03

595 sequences assigned  
No exact matches.



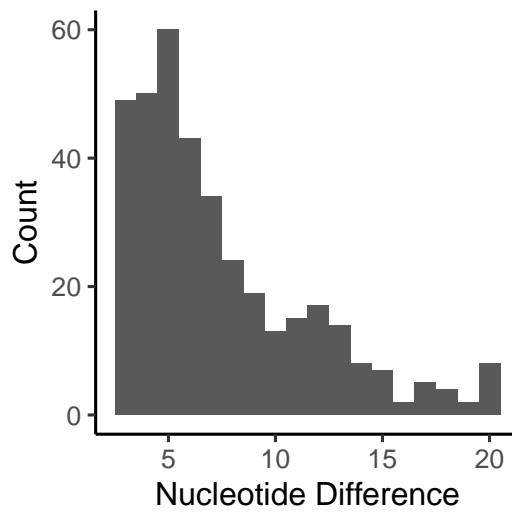
### IGHV4-61\*01

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



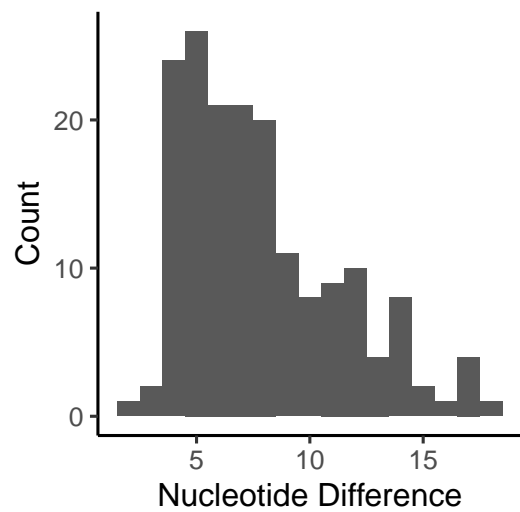
### IGHV6-1\*01\_02

385 sequences assigned  
No exact matches.



### IGHV5-51\*07

178 sequences assigned  
No exact matches.







Warning – no inferred sequences found.