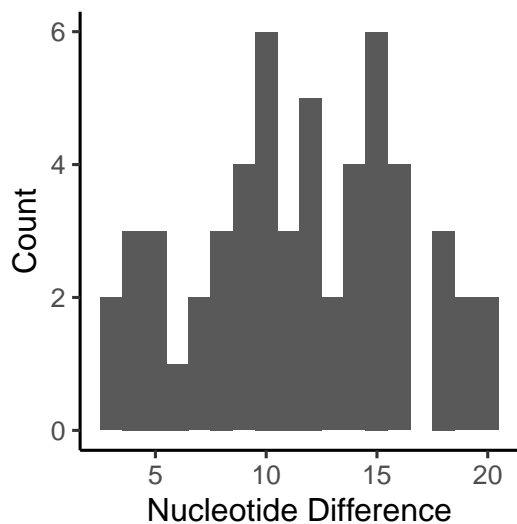


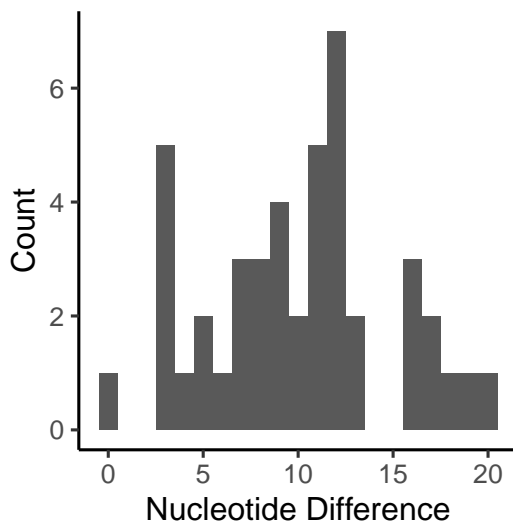
### IGHV1-2\*02

79 sequences assigned  
No exact matches.



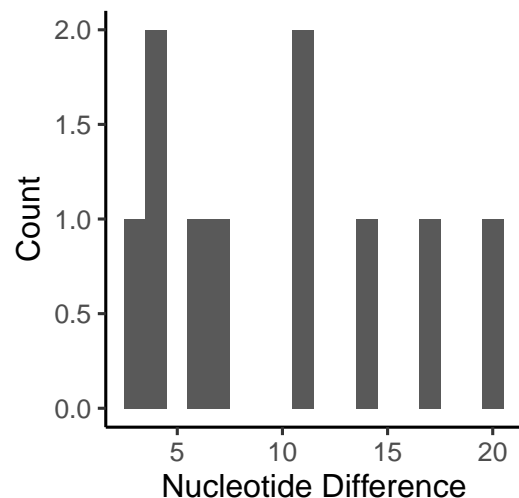
### IGHV1-8\*01

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



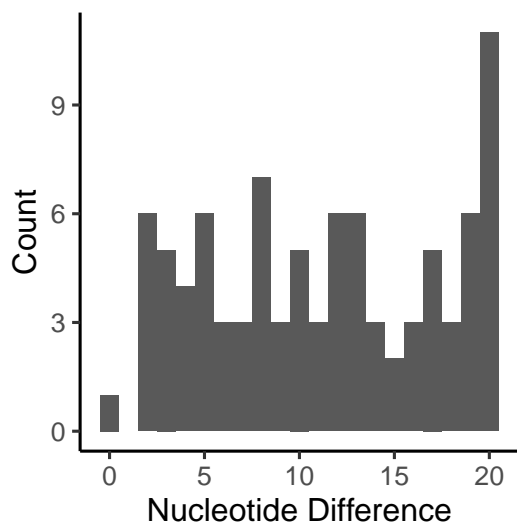
### IGHV1-24\*01

12 sequences assigned  
No exact matches.



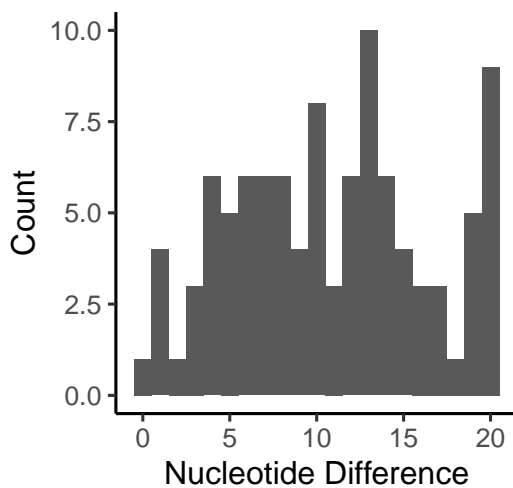
### IGHV1-2\*06

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



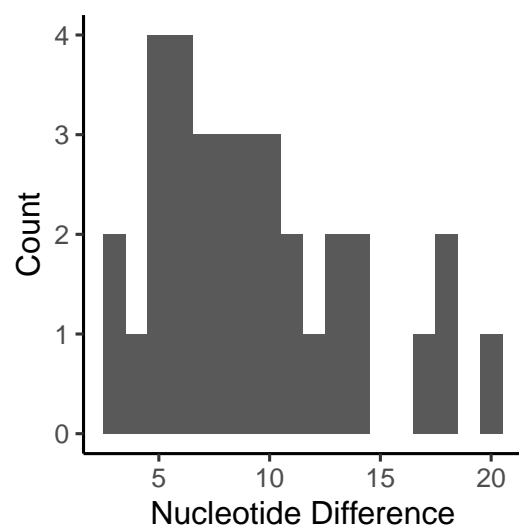
### IGHV1-18\*01

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



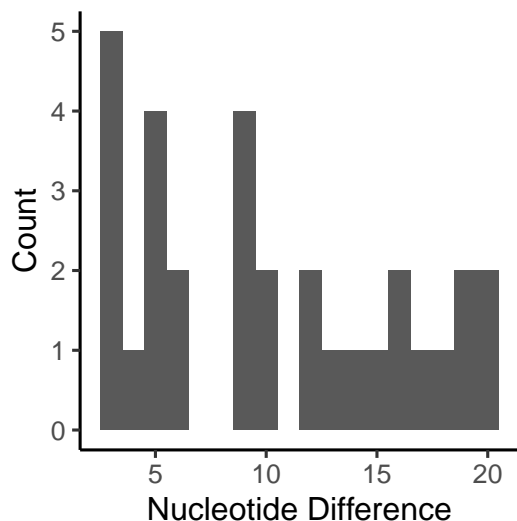
### IGHV1-46\*01

43 sequences assigned  
No exact matches.



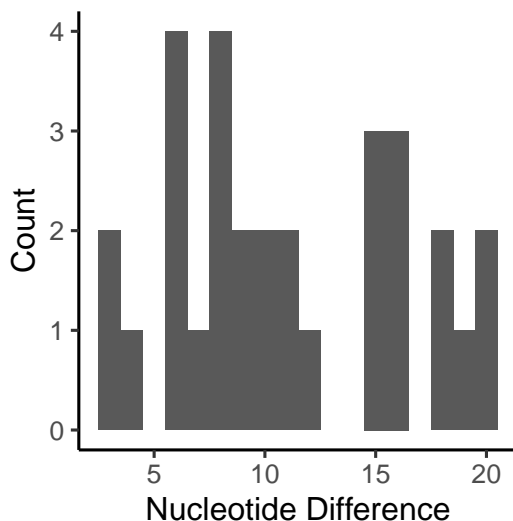
### IGHV1-3\*01\_05

36 sequences assigned  
No exact matches.



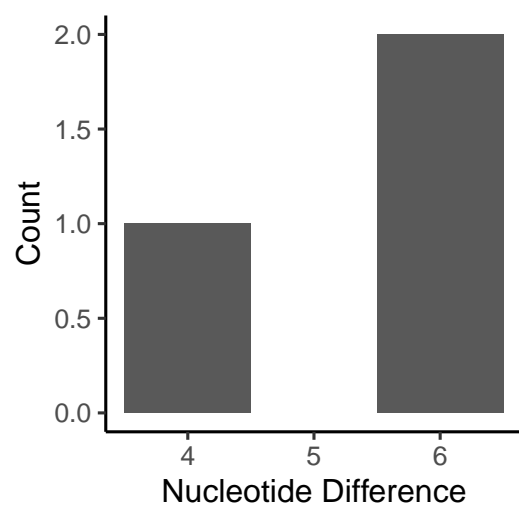
### IGHV1-18\*04

32 sequences assigned  
No exact matches.



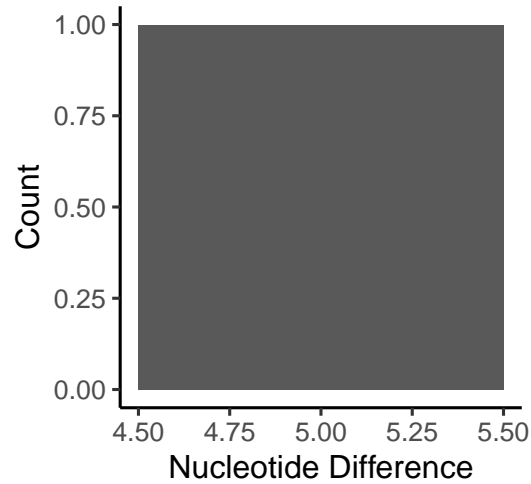
### IGHV1-58\*02

4 sequences assigned  
No exact matches.



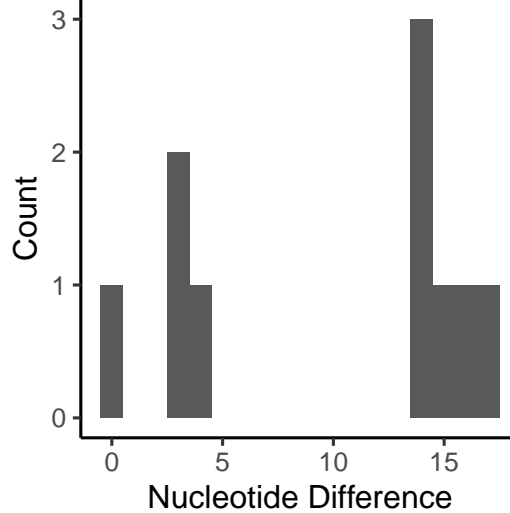
### IGHV1-58\*01\_03

1 sequences assigned  
No exact matches.



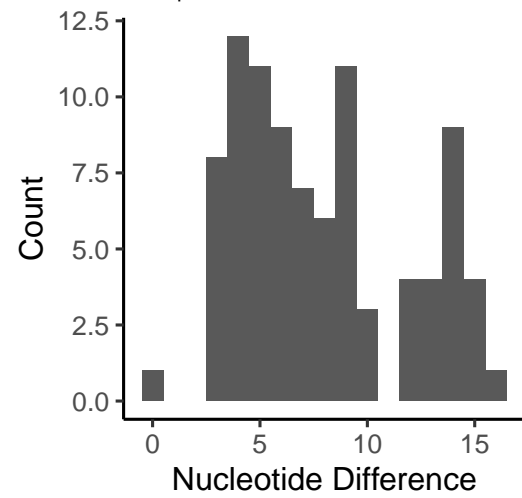
### IGHV1-69\*01\_12\_13

10 sequences assigned  
1 (10%) exact matches, in which:  
1 unique CDR3  
1 unique J



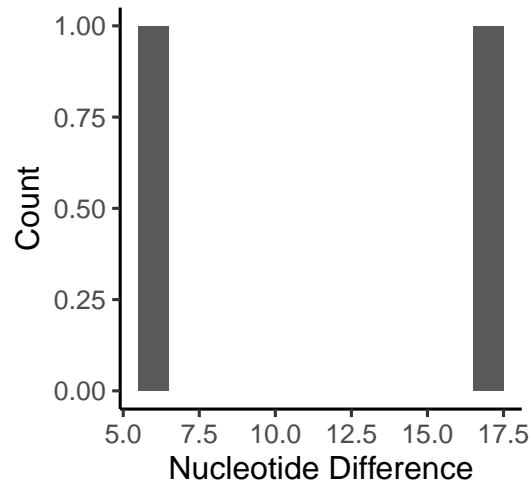
### IGHV2-5\*02

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



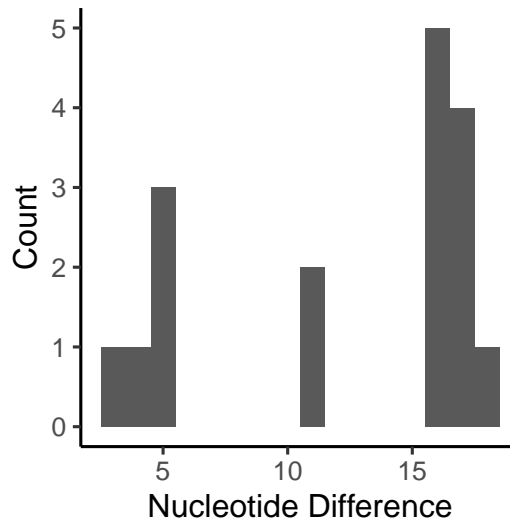
### IGHV1-69-2\*01

2 sequences assigned  
No exact matches.



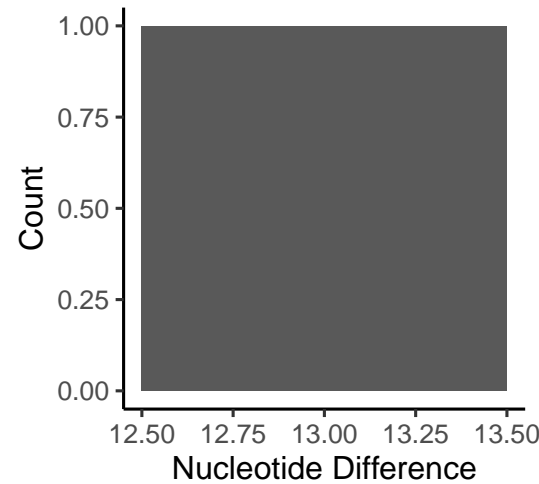
### IGHV1-69\*17

19 sequences assigned  
No exact matches.



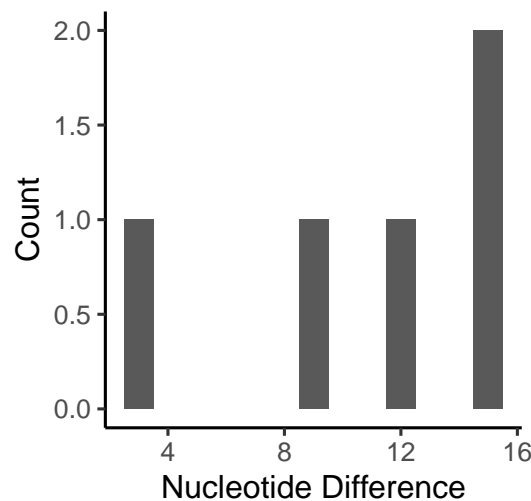
### IGHV2-26\*01

1 sequences assigned  
No exact matches.



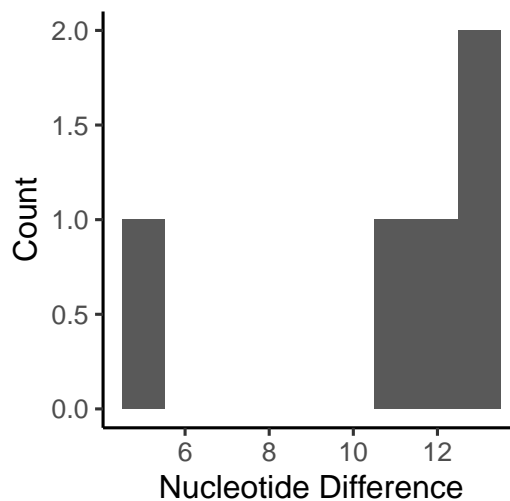
### IGHV1-69\*02

19 sequences assigned  
No exact matches.



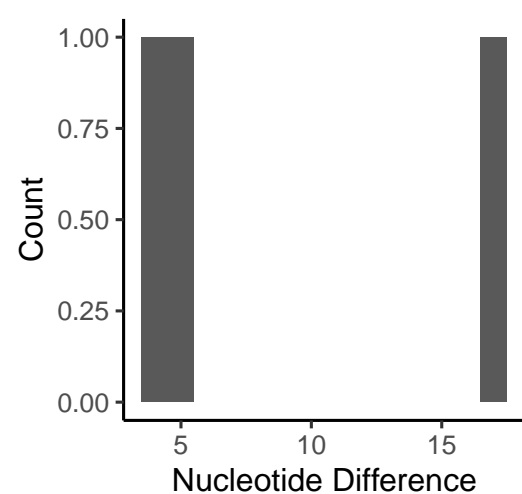
### IGHV1-69\*06\_14

5 sequences assigned  
No exact matches.



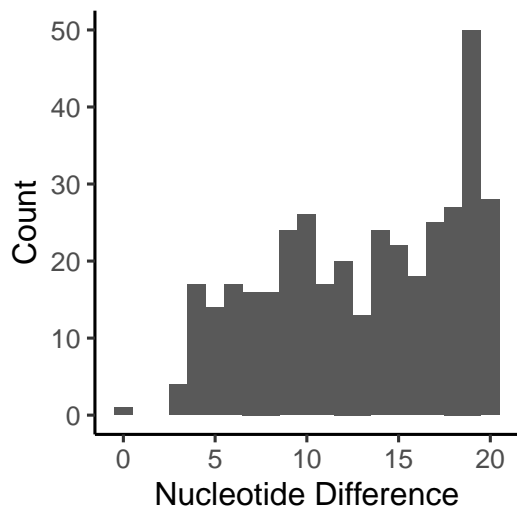
### IGHV2-70\*01

3 sequences assigned  
No exact matches.



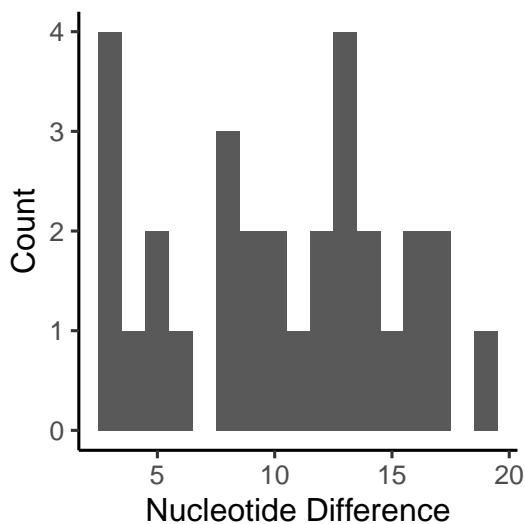
### IGHV3-7\*01

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



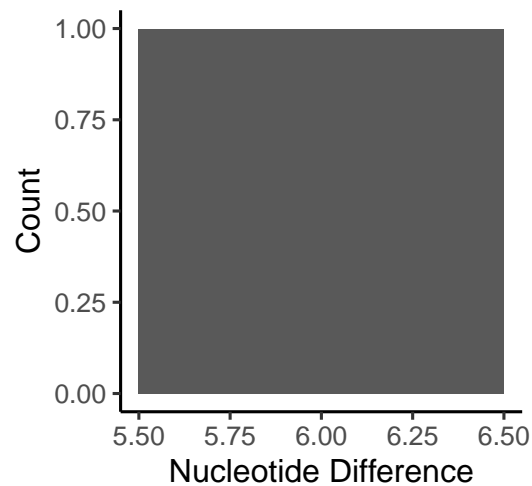
### IGHV3-11\*01

32 sequences assigned  
No exact matches.



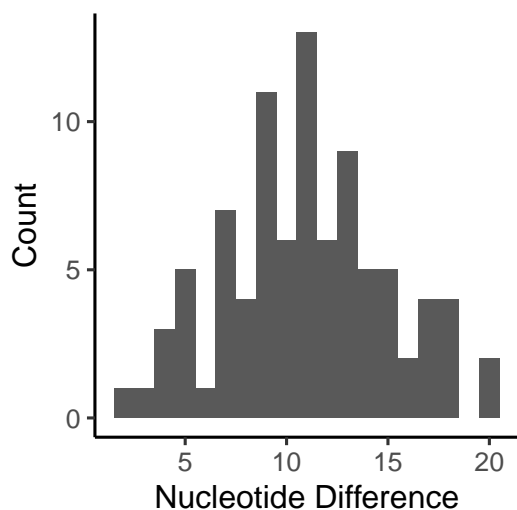
### IGHV3-13\*05

1 sequences assigned  
No exact matches.



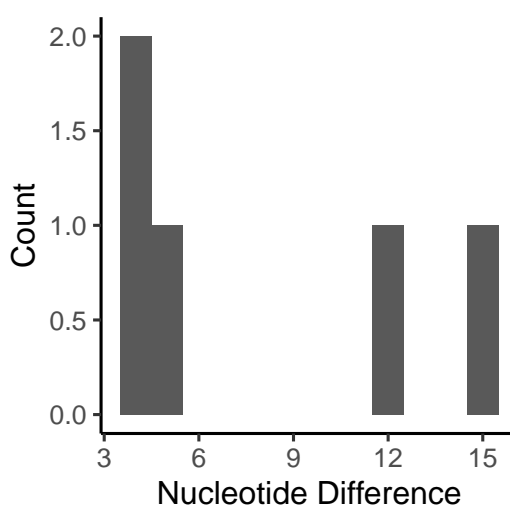
### IGHV3-7\*03

99 sequences assigned  
No exact matches.



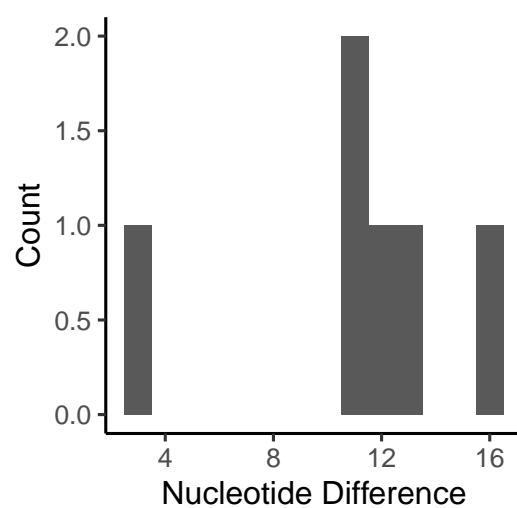
### IGHV3-11\*06

11 sequences assigned  
No exact matches.



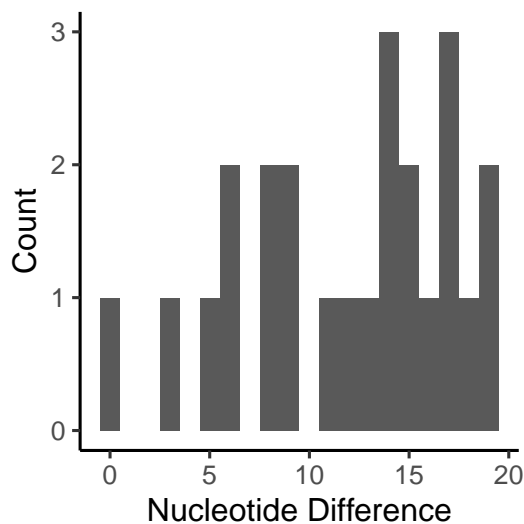
### IGHV3-15\*07

6 sequences assigned  
No exact matches.



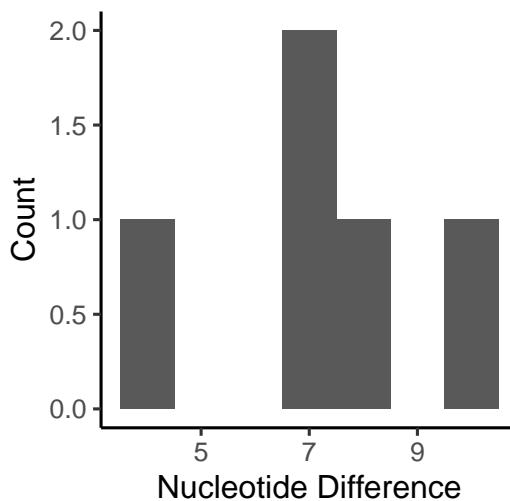
### IGHV3-9\*01

31 sequences assigned  
1 (3.2%) exact matches, in which:  
1 unique CDR3  
1 unique J



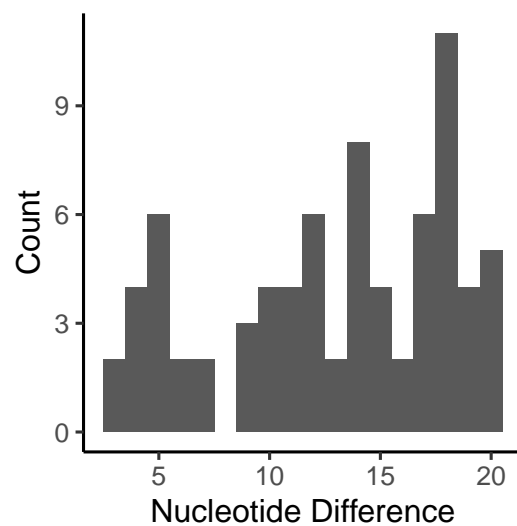
### IGHV3-13\*01

5 sequences assigned  
No exact matches.



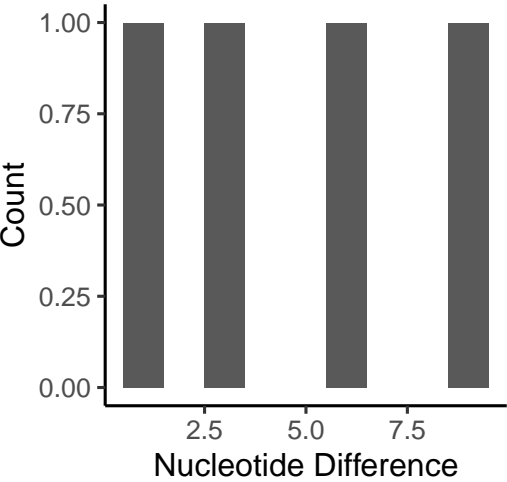
### IGHV3-15\*01\_02

89 sequences assigned  
No exact matches.



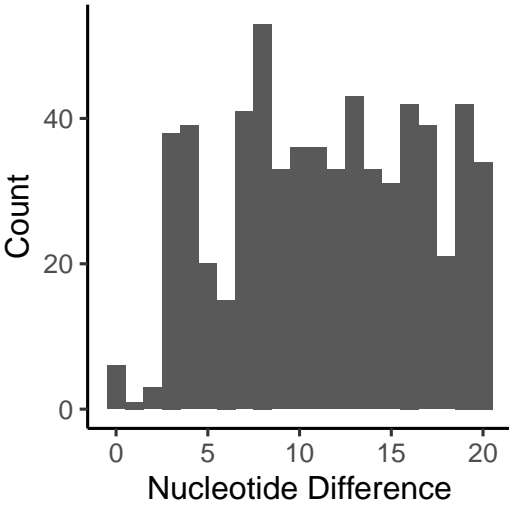
IGHV3-20\*01\_02

4 sequences assigned  
No exact matches.



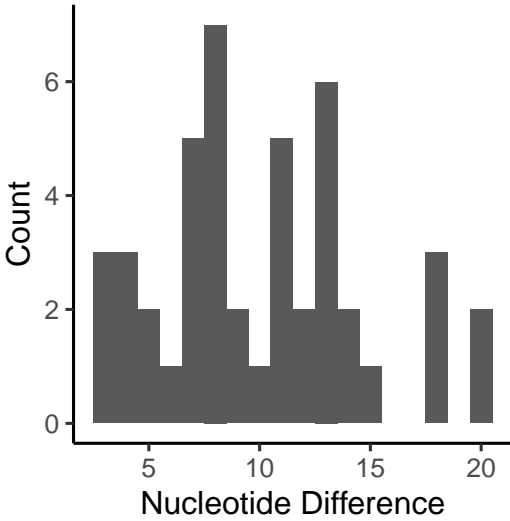
IGHV3-23\*01\_04

788 sequences assigned  
6 (0.8%) exact matches, in which:  
5 unique CDR3  
4 unique J



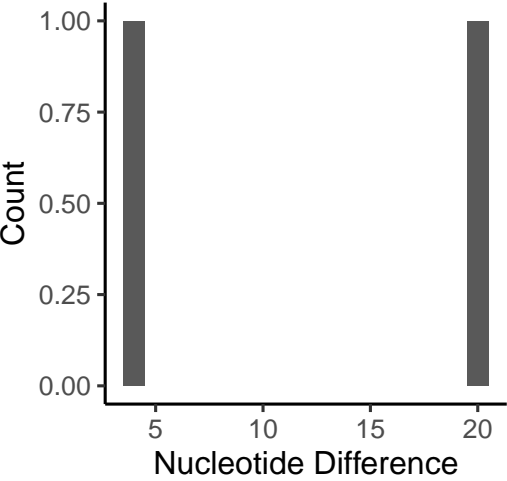
IGHV3-33\*01

50 sequences assigned  
No exact matches.



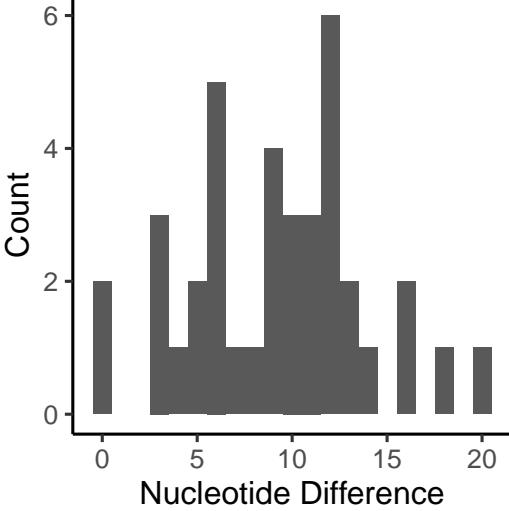
IGHV3-20\*03\_04

2 sequences assigned  
No exact matches.



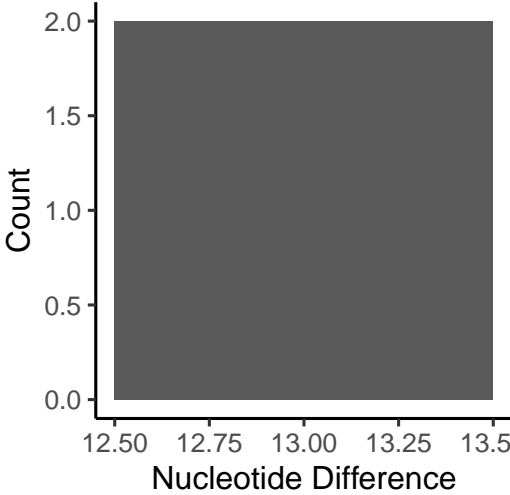
IGHV3-30-3\*01

44 sequences assigned  
2 (4.5%) exact matches, in which:  
1 unique CDR3  
1 unique J



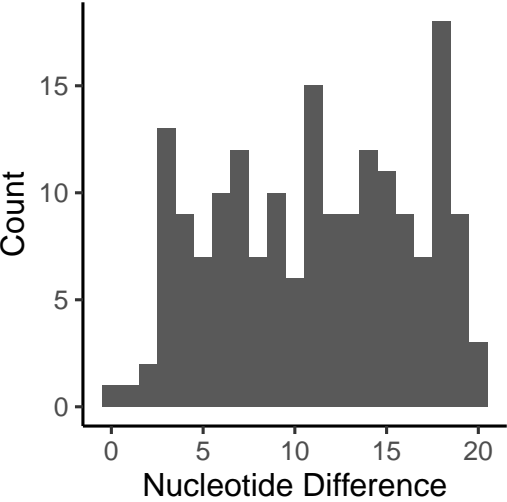
IGHV3-43\*01

2 sequences assigned  
No exact matches.



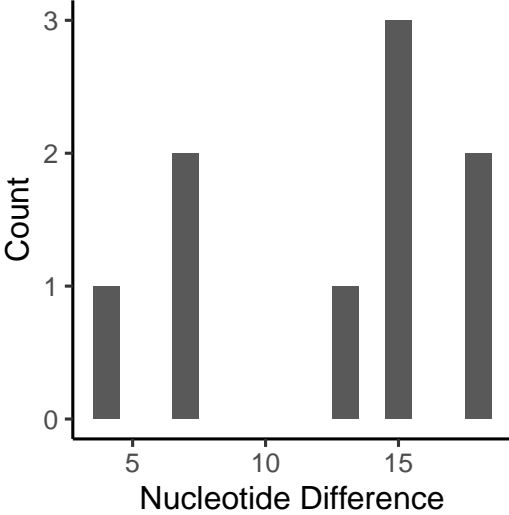
IGHV3-21\*01\_02

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



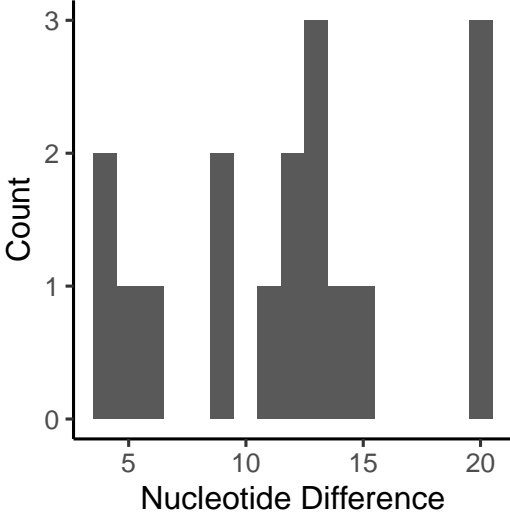
IGHV3-30\*03

16 sequences assigned  
No exact matches.



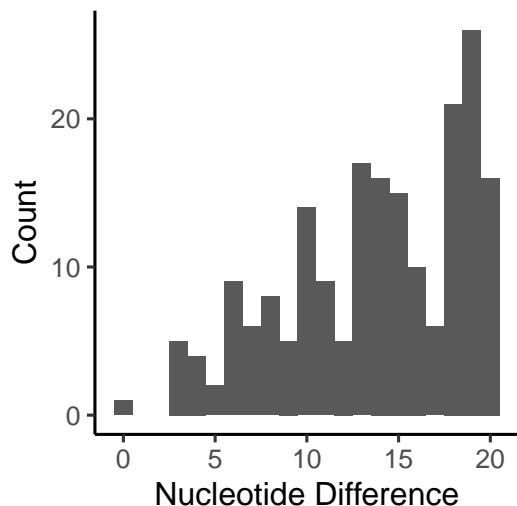
IGHV3-43\*02

18 sequences assigned  
No exact matches.



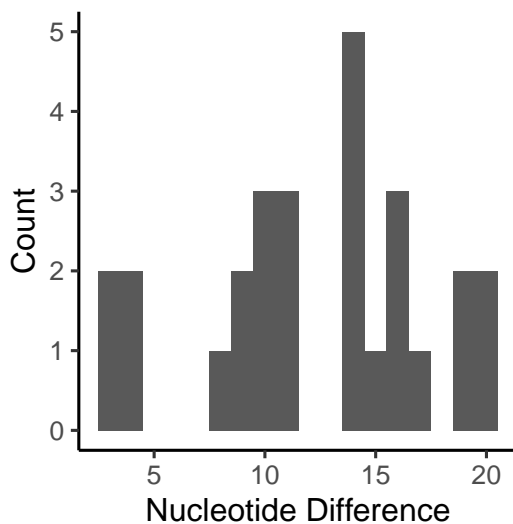
### IGHV3-48\*01

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



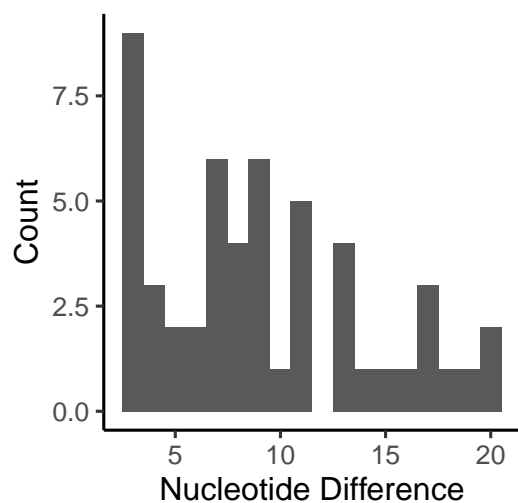
### IGHV3-48\*04

37 sequences assigned  
No exact matches.



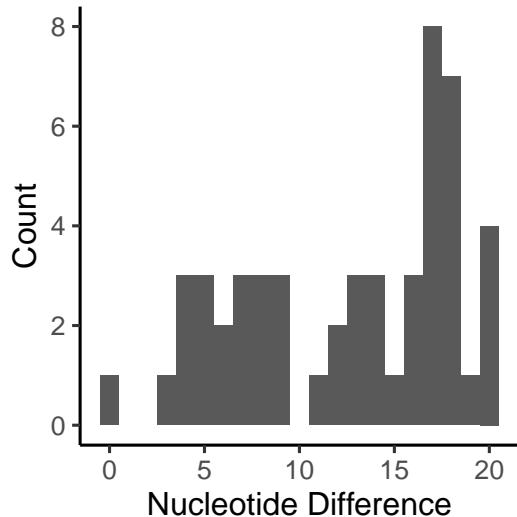
### IGHV3-53\*01\_02

55 sequences assigned  
No exact matches.



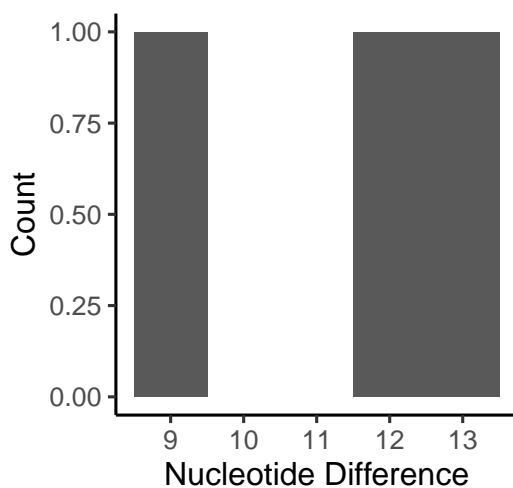
### IGHV3-48\*02

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



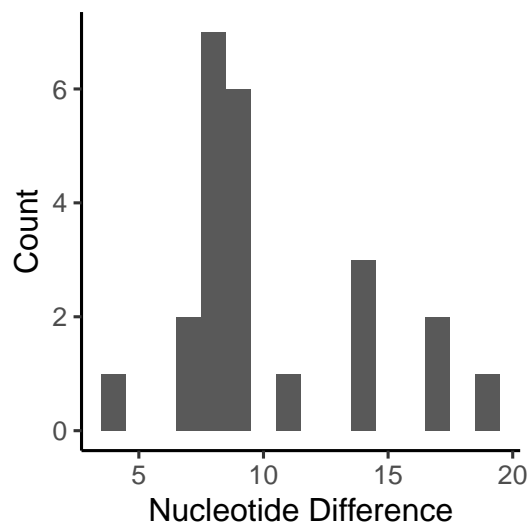
### IGHV3-49\*04

5 sequences assigned  
No exact matches.



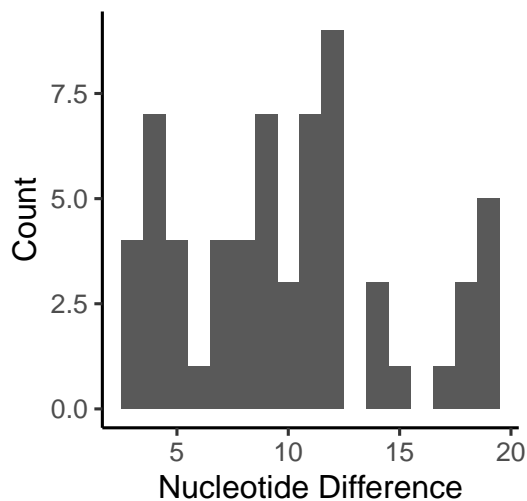
### IGHV3-64\*01

24 sequences assigned  
No exact matches.



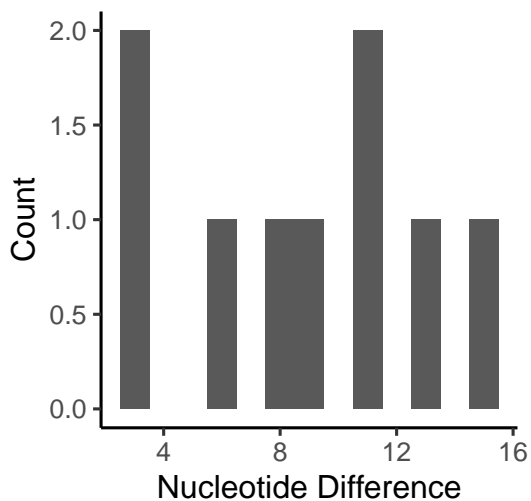
### IGHV3-48\*03

80 sequences assigned  
No exact matches.



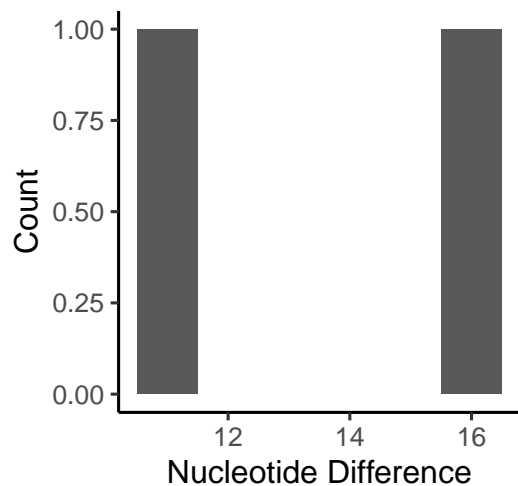
### IGHV3-49\*03\_05

9 sequences assigned  
No exact matches.



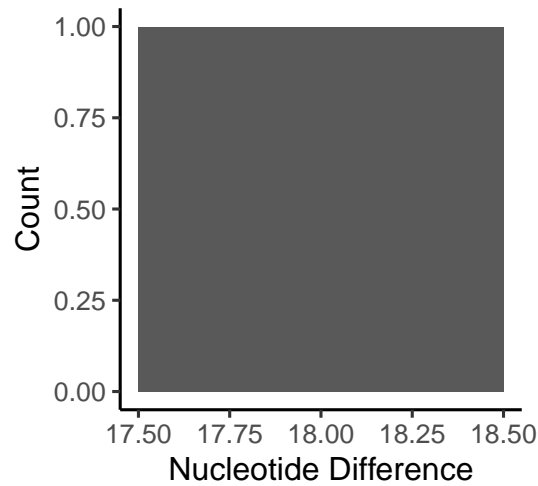
### IGHV3-64\*04

2 sequences assigned  
No exact matches.



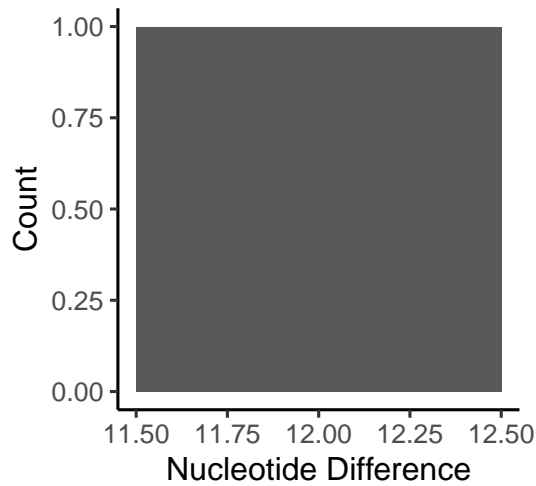
### IGHV3-64\*02\_07

4 sequences assigned  
No exact matches.



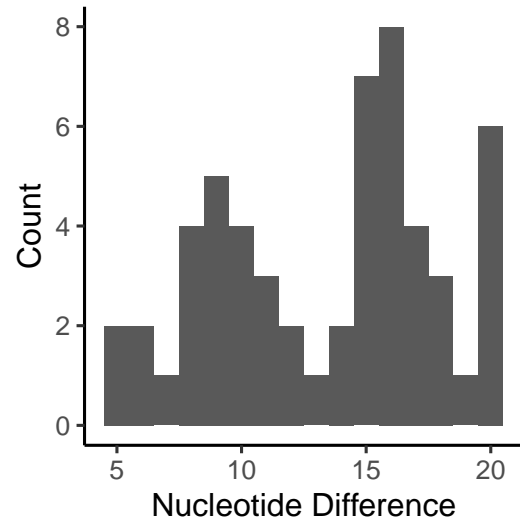
### IGHV3-69-1\*02

2 sequences assigned  
No exact matches.



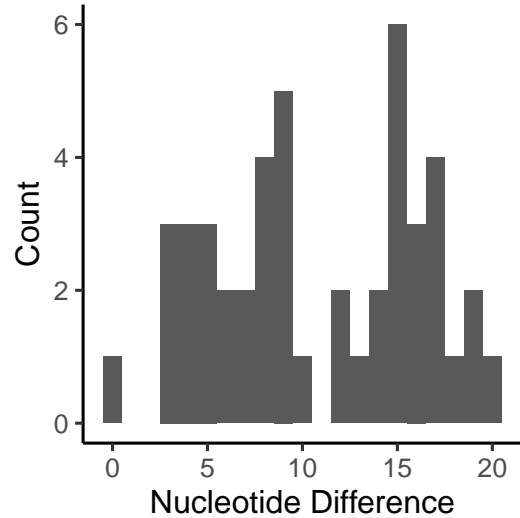
### IGHV3-74\*03

75 sequences assigned  
No exact matches.



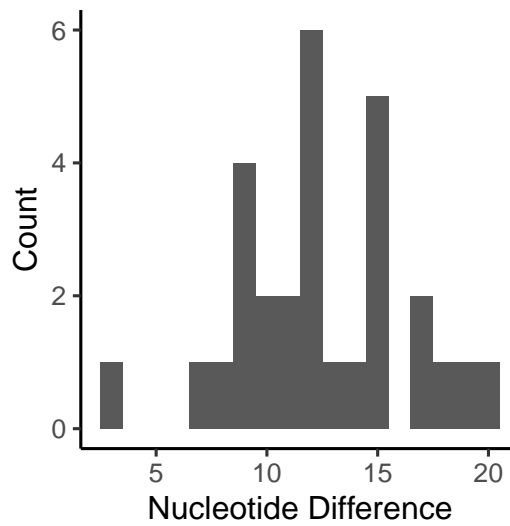
### IGHV3-66\*02

67 sequences assigned  
1 (1.5%) exact matches, in which:  
1 unique CDR3  
1 unique J



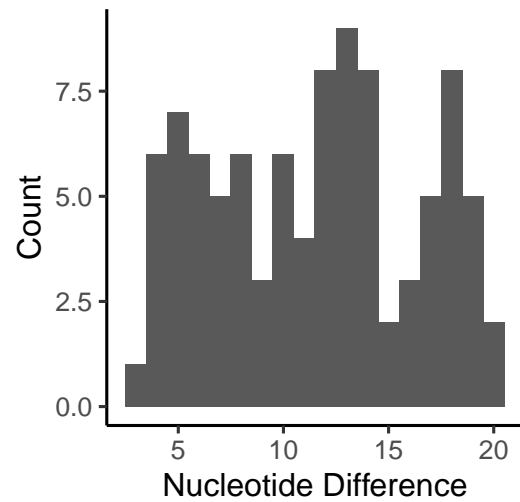
### IGHV3-72\*01

36 sequences assigned  
No exact matches.



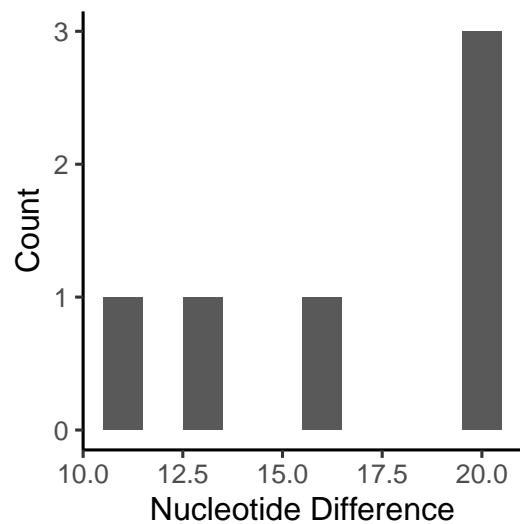
### IGHV3-74\*01\_02

109 sequences assigned  
No exact matches.



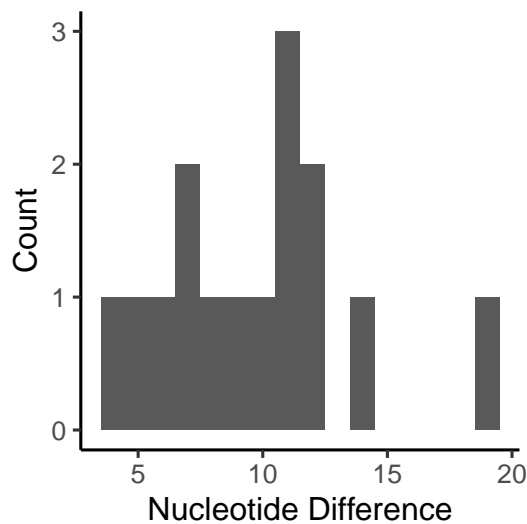
### IGHV3-69-1\*01

29 sequences assigned  
No exact matches.



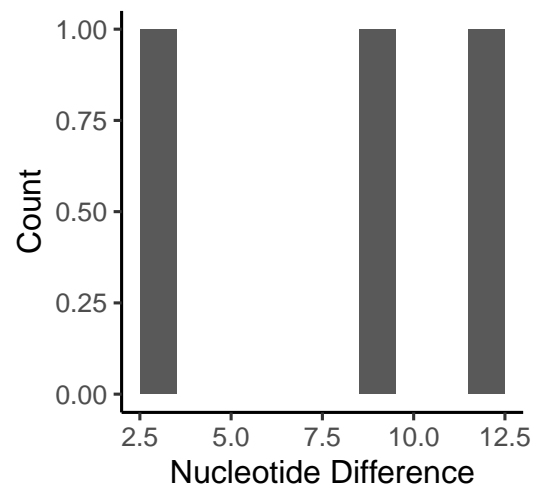
### IGHV3-73\*01\_02

15 sequences assigned  
No exact matches.



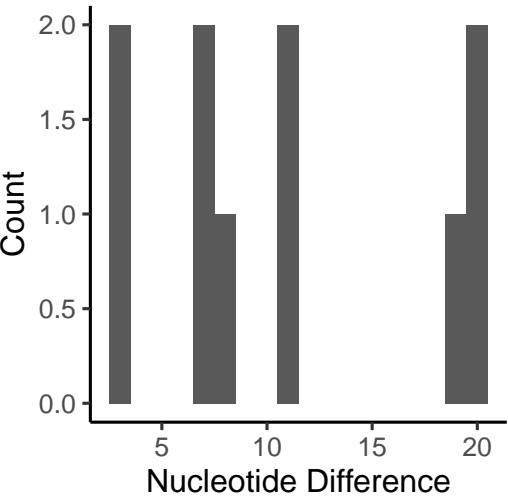
### IGHV3-43D\*04

3 sequences assigned  
No exact matches.



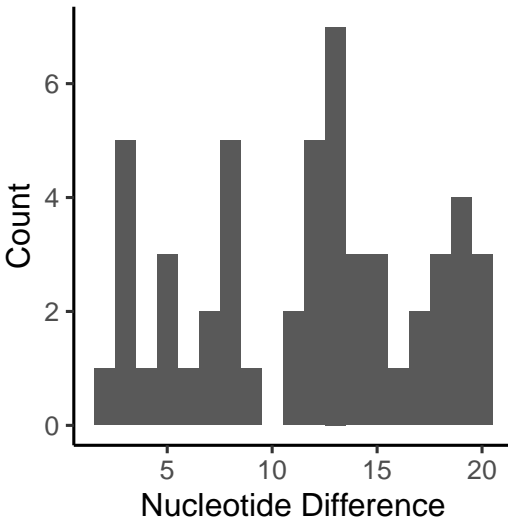
IGHV3-64D\*06

11 sequences assigned  
No exact matches.



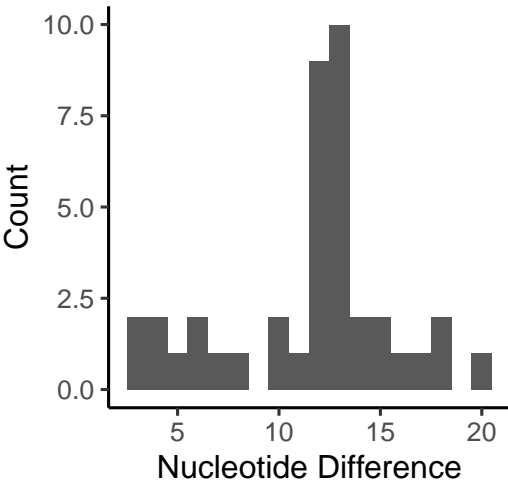
IGHV4-4\*02\_03

58 sequences assigned  
No exact matches.



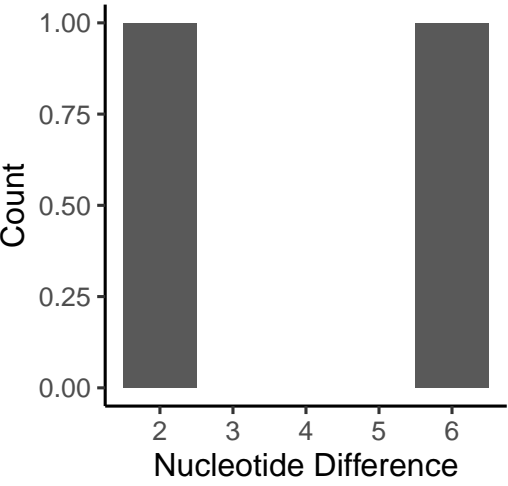
IGHV4-30-4\*01

43 sequences assigned  
No exact matches.



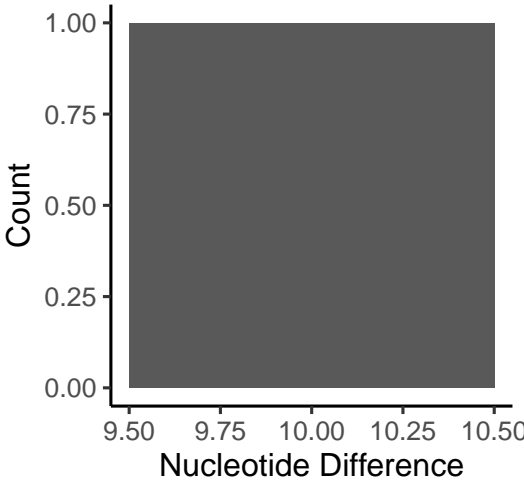
IGHV3-64D\*08

2 sequences assigned  
No exact matches.



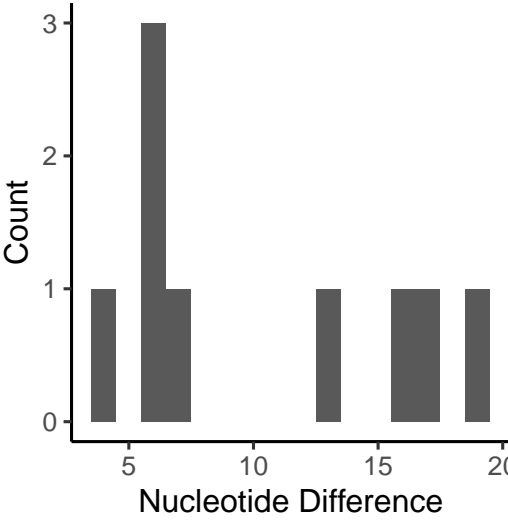
IGHV4-28\*03

1 sequences assigned  
No exact matches.



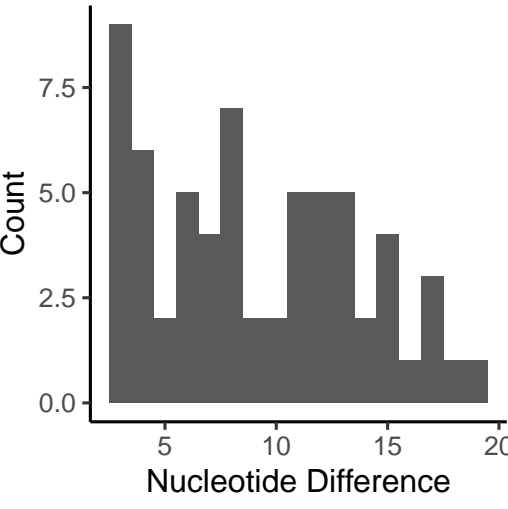
IGHV4-30-2\*01

10 sequences assigned  
No exact matches.



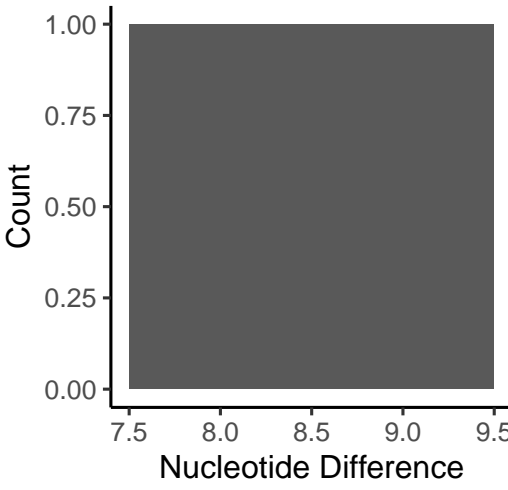
IGHV4-4\*07

81 sequences assigned  
No exact matches.



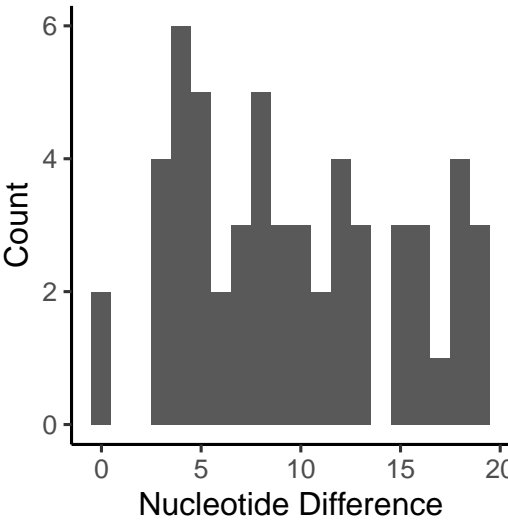
IGHV4-28\*01\_07

2 sequences assigned  
No exact matches.



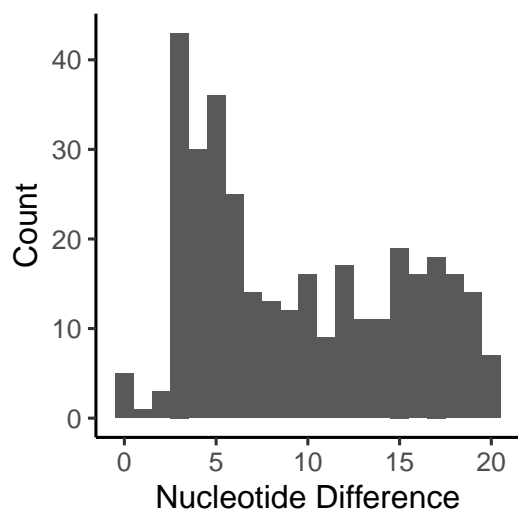
IGHV4-31\*02

75 sequences assigned  
2 (2.7%) exact matches, in which:  
2 unique CDR3  
1 unique J



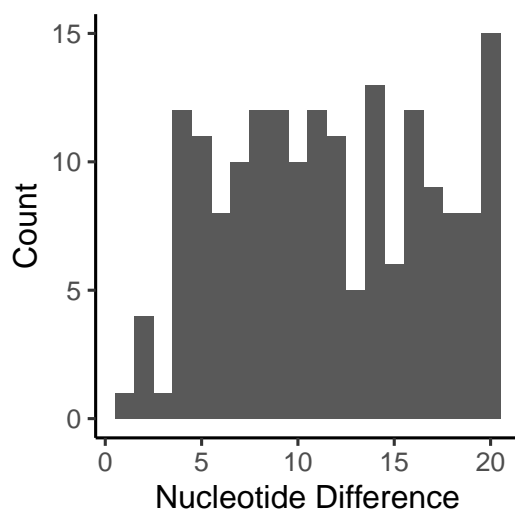
### IGHV4-34\*01\_02

470 sequences assigned  
5 (1.1%) exact matches, in which:  
4 unique CDR3  
4 unique J



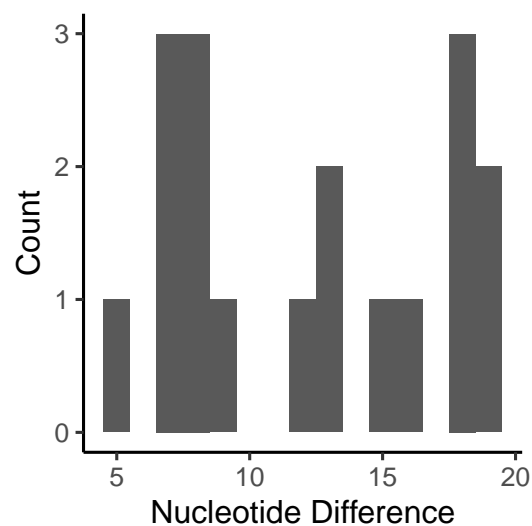
### IGHV4-39\*02

364 sequences assigned  
No exact matches.



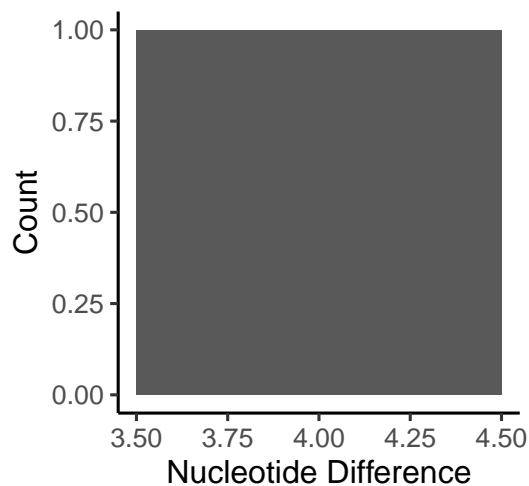
### IGHV4-59\*11

23 sequences assigned  
No exact matches.



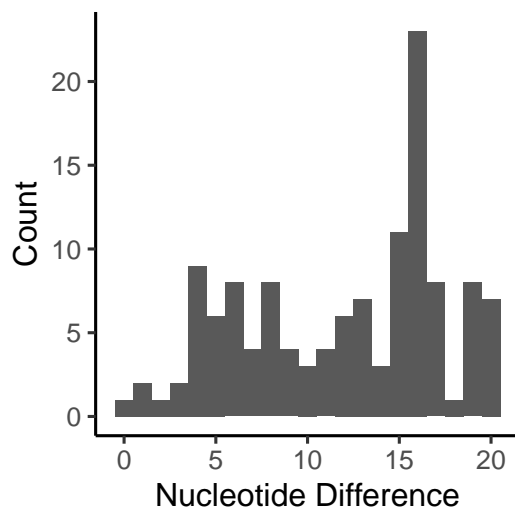
### IGHV4-38-2\*01

1 sequences assigned  
No exact matches.



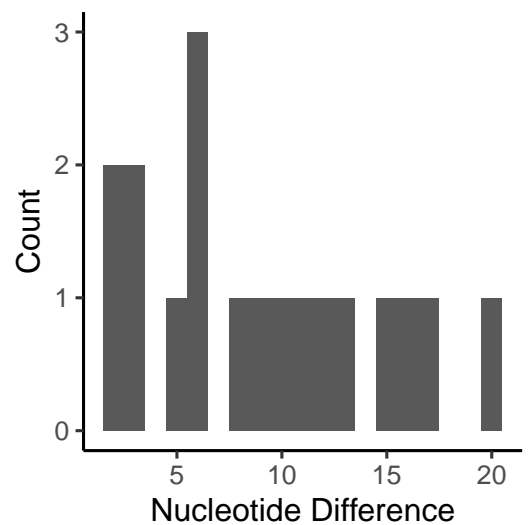
### IGHV4-39\*07

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



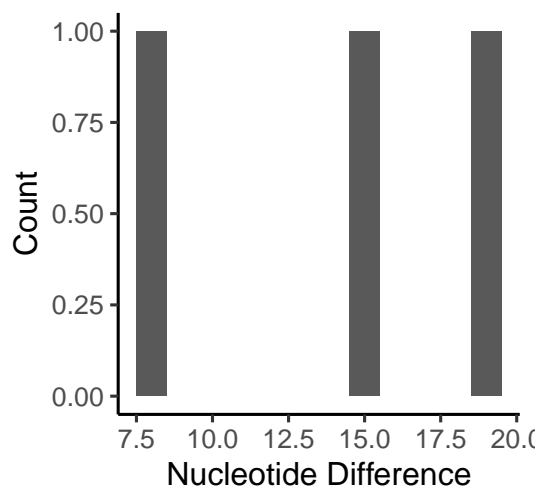
### IGHV4-59\*12

26 sequences assigned  
No exact matches.



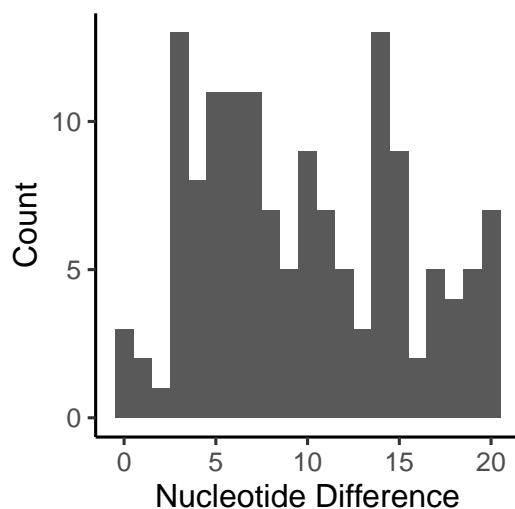
### IGHV4-38-2\*02

3 sequences assigned  
No exact matches.



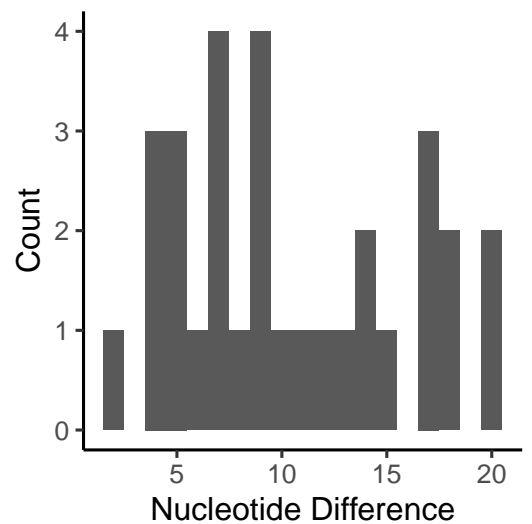
### IGHV4-59\*01\_07

177 sequences assigned  
3 (1.7%) exact matches, in which:  
3 unique CDR3  
2 unique J



### IGHV4-61\*01

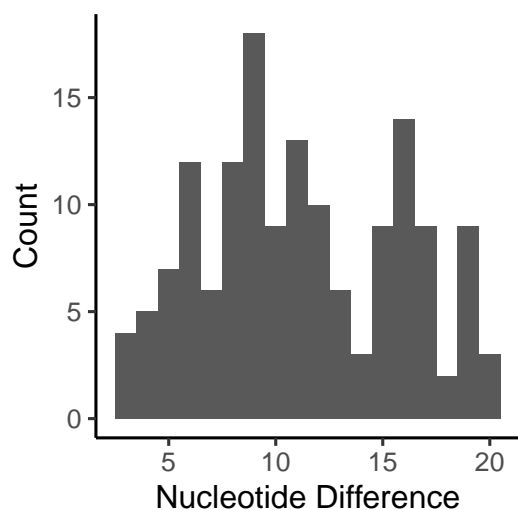
39 sequences assigned  
No exact matches.





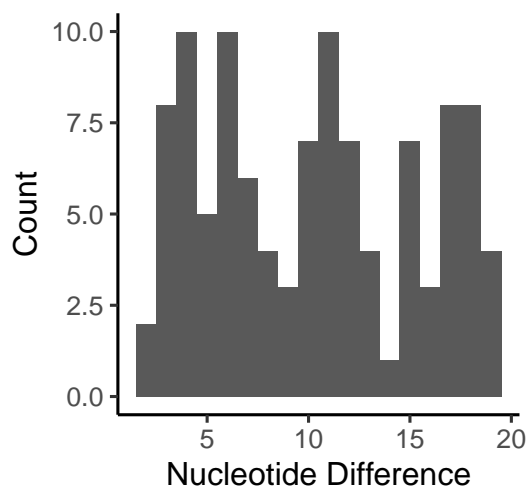
### IGHV4-61\*02

185 sequences assigned  
No exact matches.



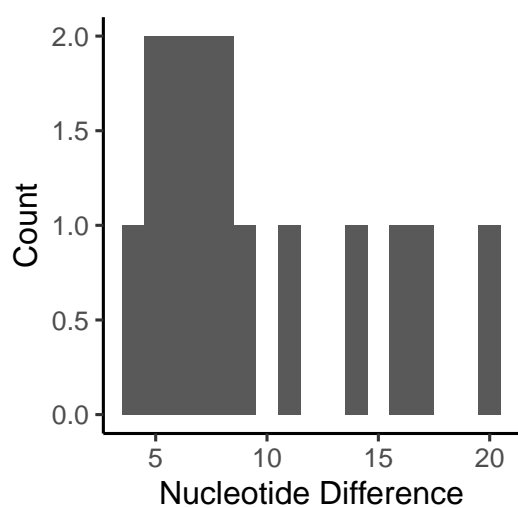
### IGHV6-1\*01\_02

109 sequences assigned  
No exact matches.



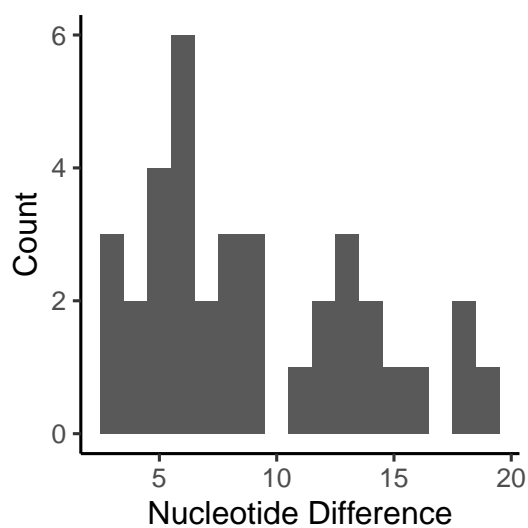
### IGHV5-51\*07

19 sequences assigned  
No exact matches.



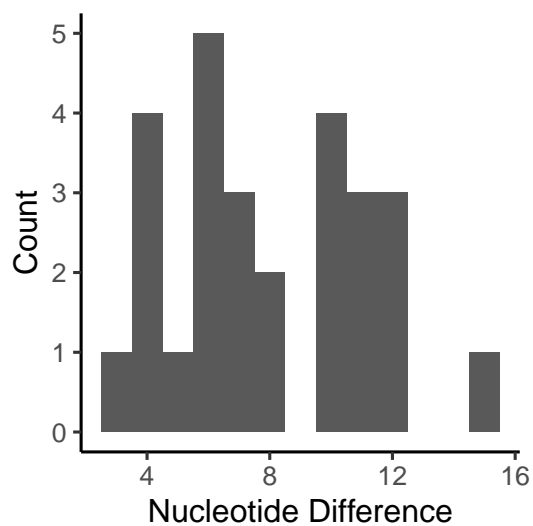
### IGHV7-4-1\*02

38 sequences assigned  
No exact matches.



### IGHV5-51\*01\_03

30 sequences assigned  
No exact matches.





Warning – no inferred sequences found.