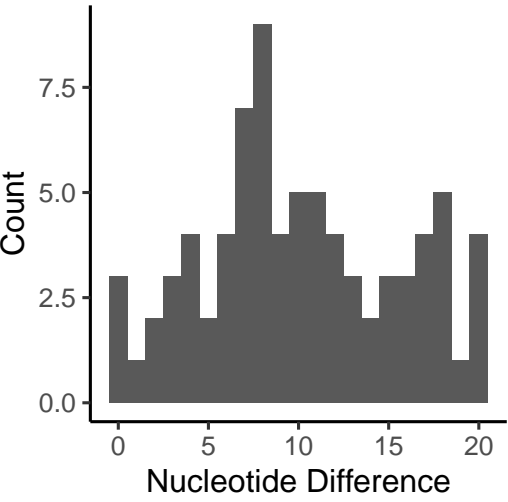


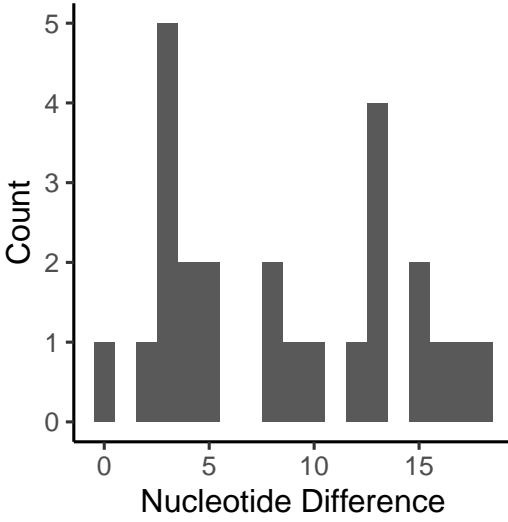
IGHV1-2\*02

106 sequences assigned  
3 (2.8%) exact matches, in which:  
3 unique CDR3  
2 unique J



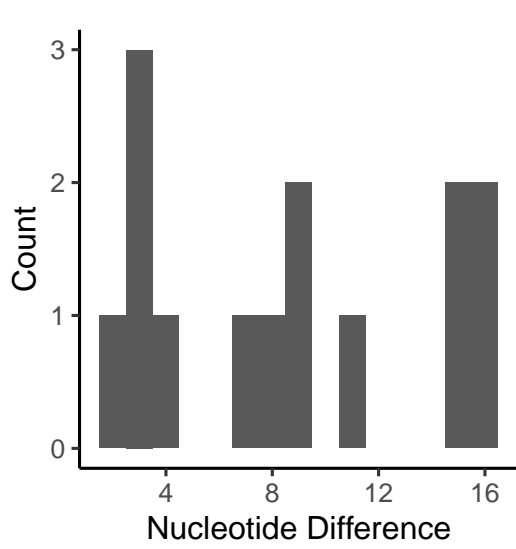
IGHV1-8\*01

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



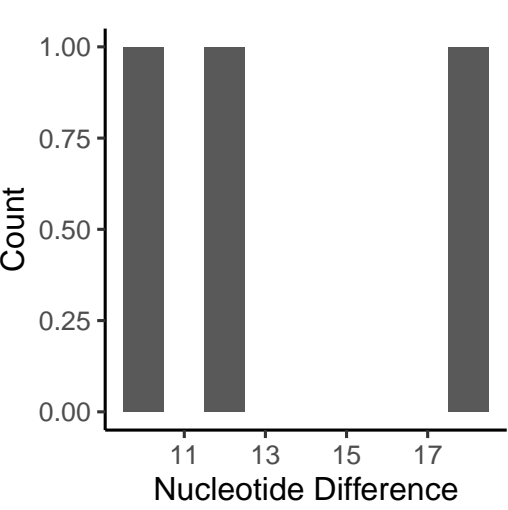
IGHV1-46\*01

15 sequences assigned  
No exact matches.



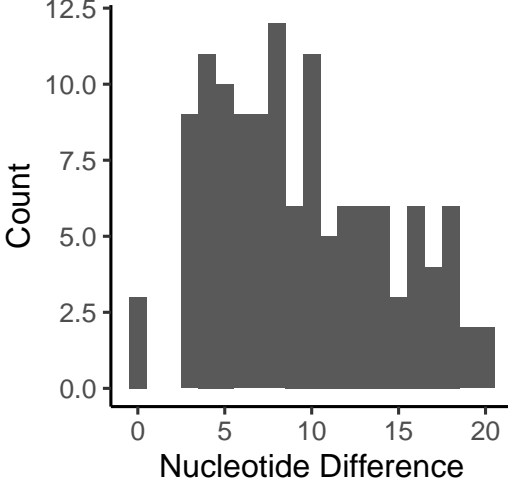
IGHV1-3\*04

3 sequences assigned  
No exact matches.



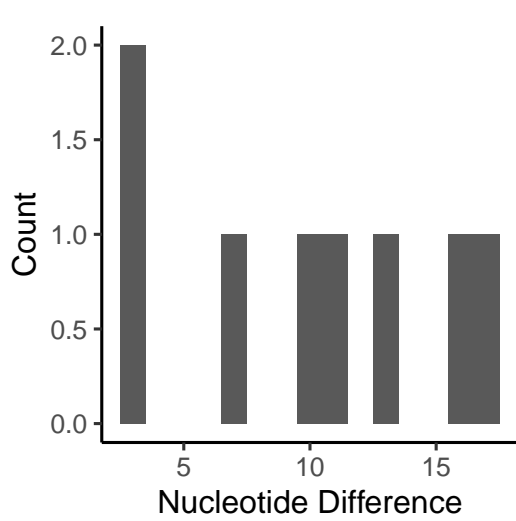
IGHV1-18\*01

157 sequences assigned  
3 (1.9%) exact matches, in which:  
3 unique CDR3  
3 unique J



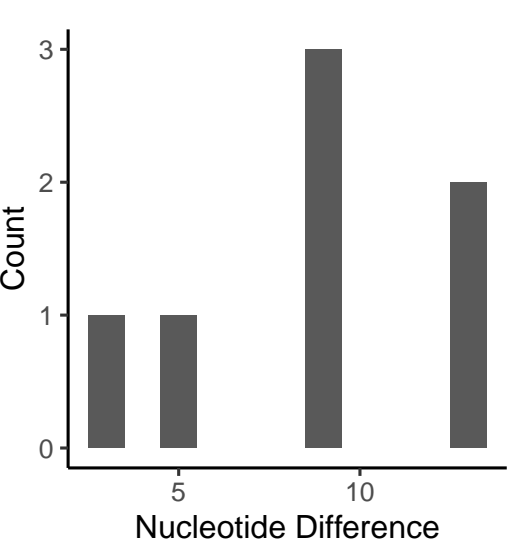
IGHV1-46\*03

8 sequences assigned  
No exact matches.



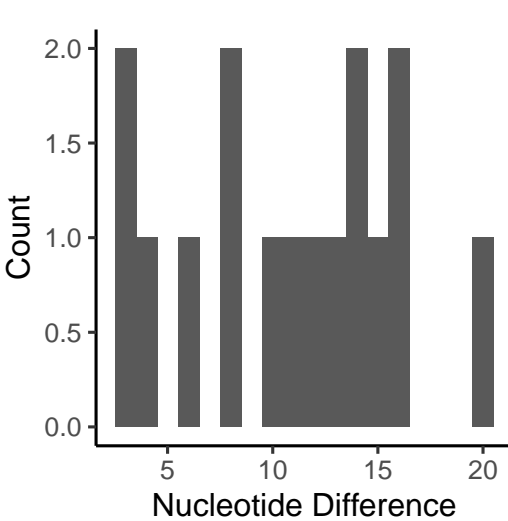
IGHV1-3\*01\_05

9 sequences assigned  
No exact matches.



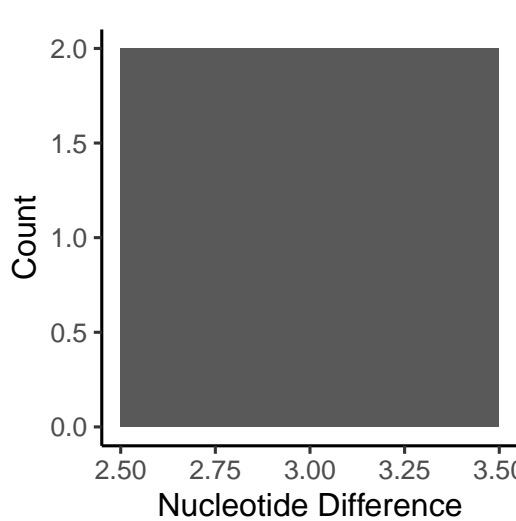
IGHV1-24\*01

18 sequences assigned  
No exact matches.



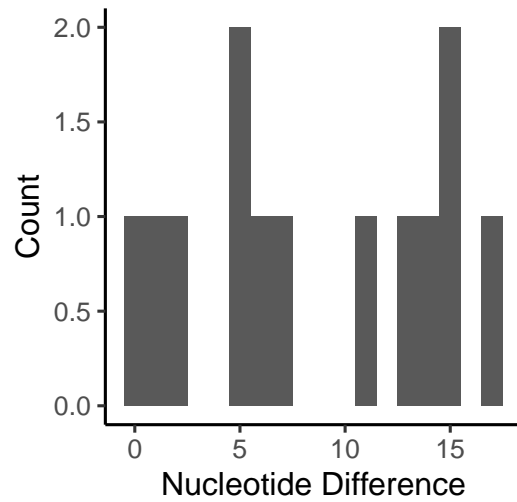
IGHV1-58\*01\_03

3 sequences assigned  
No exact matches.



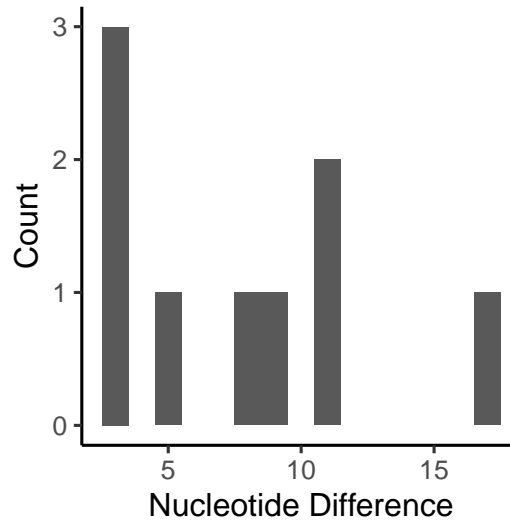
### IGHV1-69\*01\_12\_13

18 sequences assigned  
1 (5.6%) exact matches, in which:  
1 unique CDR3  
1 unique J



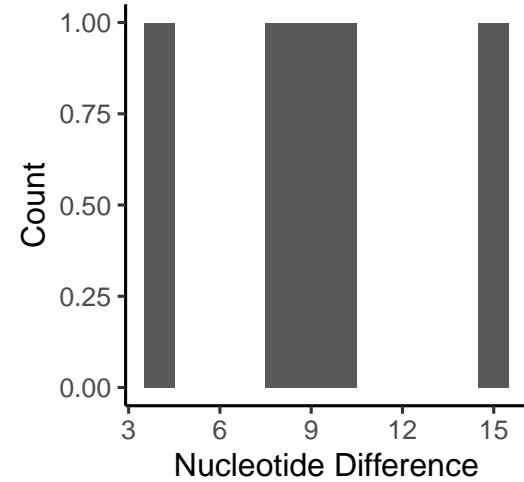
### IGHV2-5\*01

9 sequences assigned  
No exact matches.



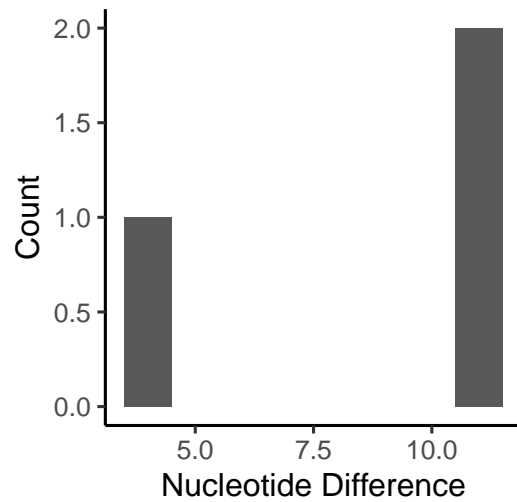
### IGHV2-70\*01

5 sequences assigned  
No exact matches.



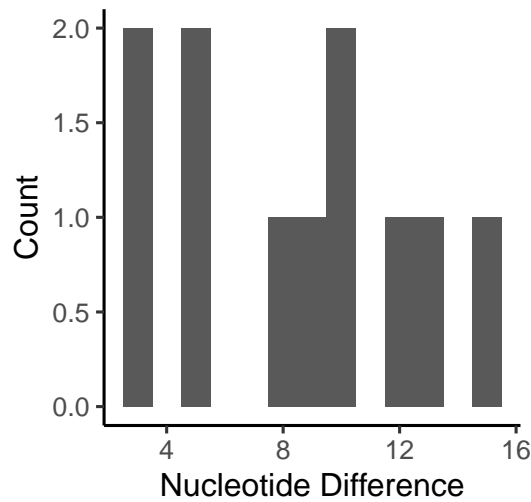
### IGHV1-69\*04\_09

5 sequences assigned  
No exact matches.



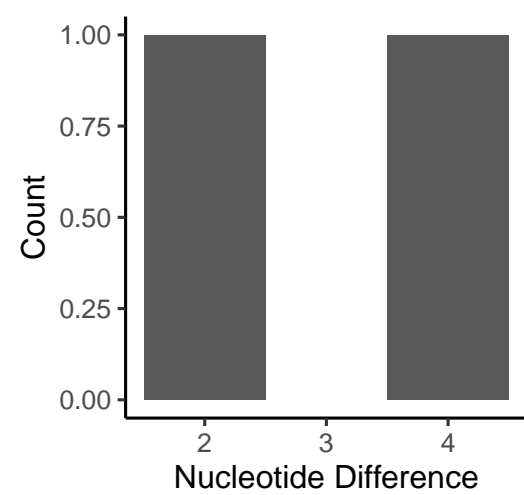
### IGHV2-5\*02

16 sequences assigned  
No exact matches.



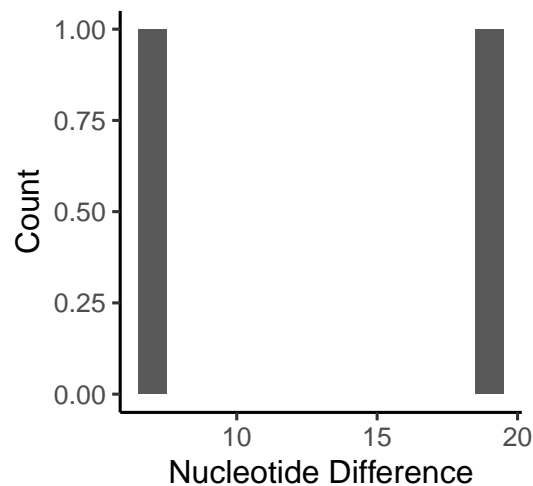
### IGHV2-70\*04

3 sequences assigned  
No exact matches.



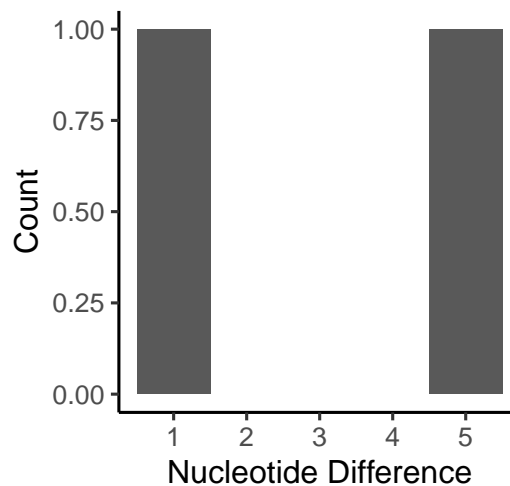
### IGHV1-69\*06\_14

9 sequences assigned  
No exact matches.



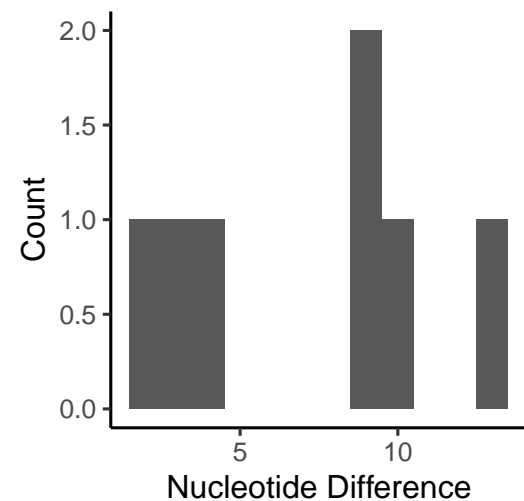
### IGHV2-26\*01

2 sequences assigned  
No exact matches.



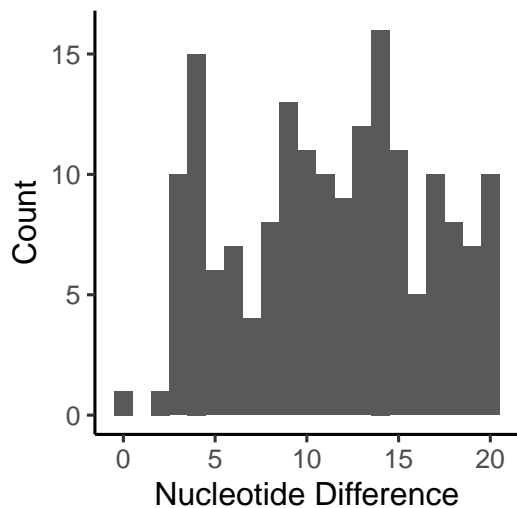
### IGHV2-70\*11\_15

7 sequences assigned  
No exact matches.



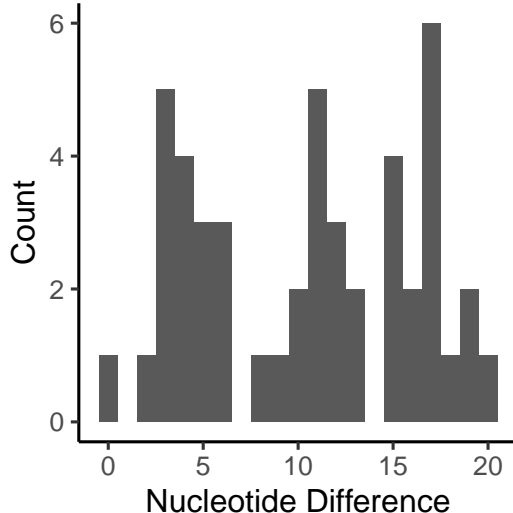
### IGHV3-7\*01

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



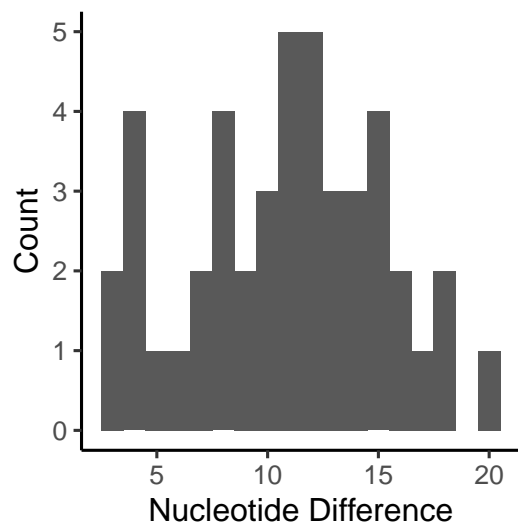
### IGHV3-11\*01

58 sequences assigned  
1 (1.7%) exact matches, in which:  
1 unique CDR3  
1 unique J



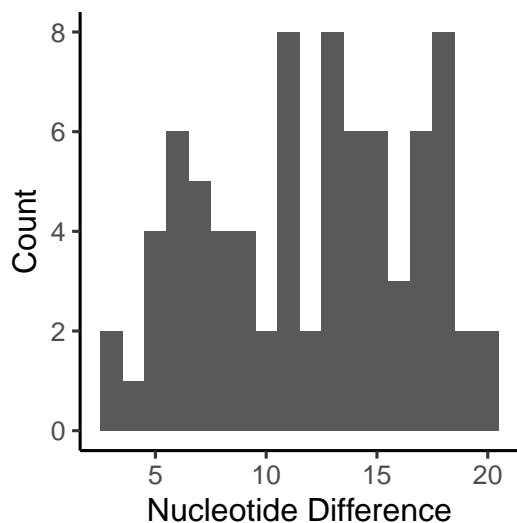
### IGHV3-15\*01\_02

50 sequences assigned  
No exact matches.



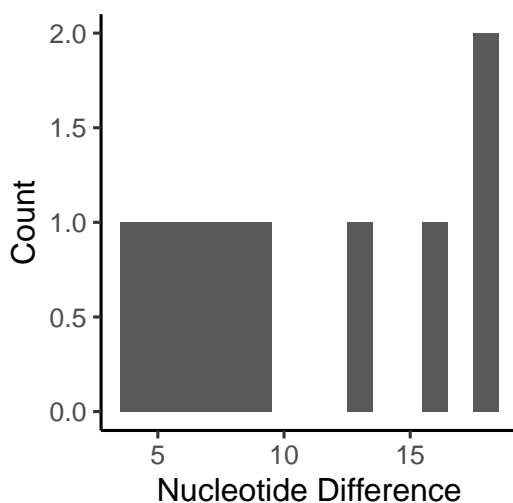
### IGHV3-7\*03

95 sequences assigned  
No exact matches.



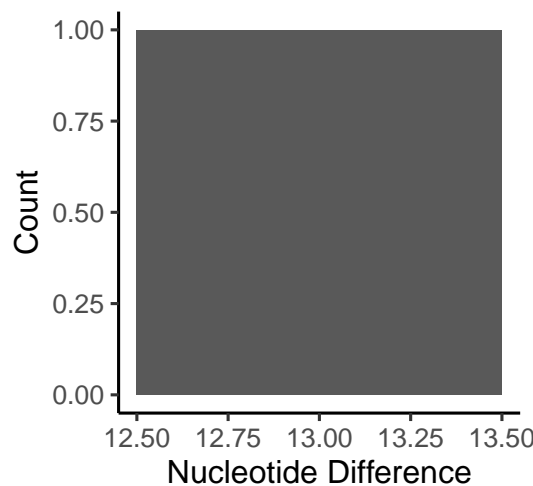
### IGHV3-11\*06

13 sequences assigned  
No exact matches.



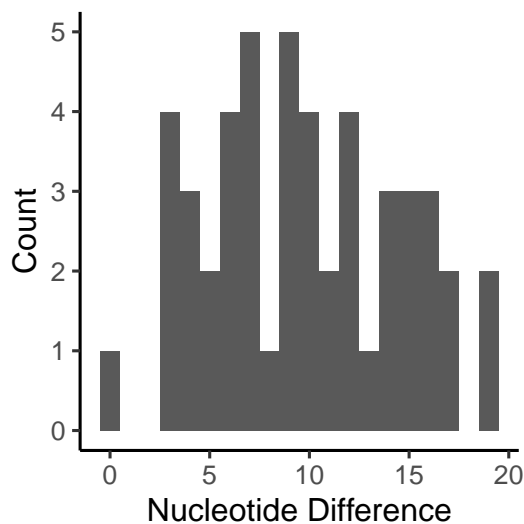
### IGHV3-20\*01\_02

3 sequences assigned  
No exact matches.



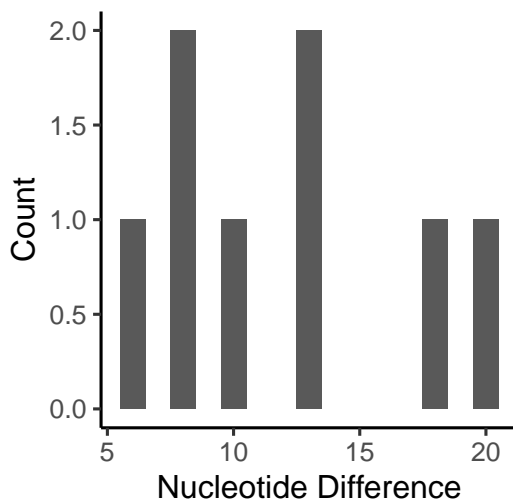
### IGHV3-9\*01

53 sequences assigned  
1 (1.9%) exact matches, in which:  
1 unique CDR3  
1 unique J



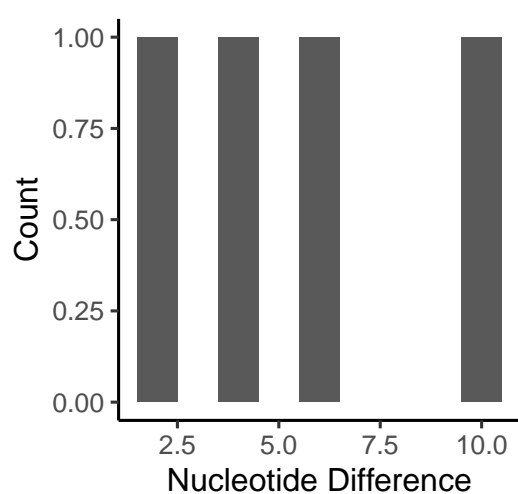
### IGHV3-13\*01

10 sequences assigned  
No exact matches.



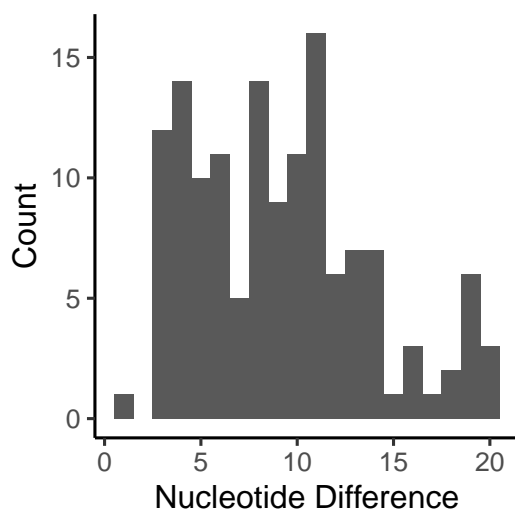
### IGHV3-20\*03\_04

4 sequences assigned  
No exact matches.



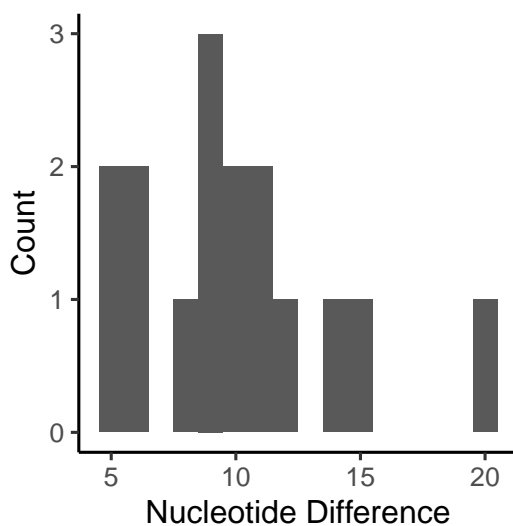
### IGHV3–21\*01\_02

162 sequences assigned  
No exact matches.



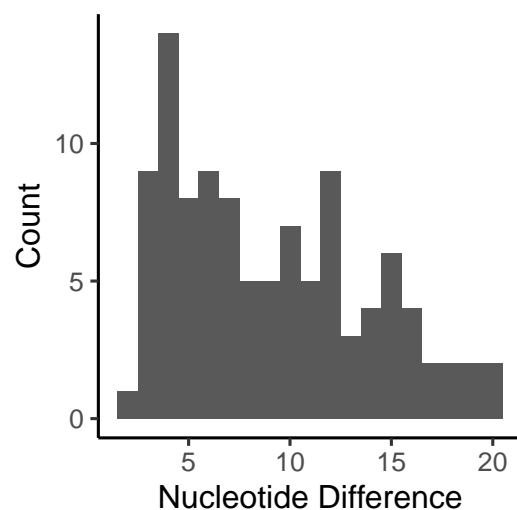
### IGHV3–30\*03

26 sequences assigned  
No exact matches.



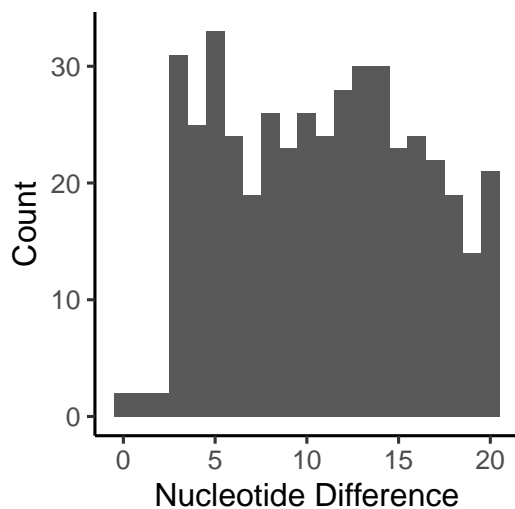
### IGHV3–33\*01

126 sequences assigned  
No exact matches.



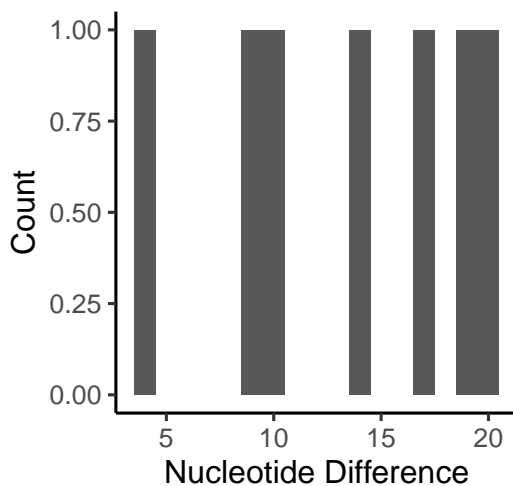
### IGHV3–23\*01\_04

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



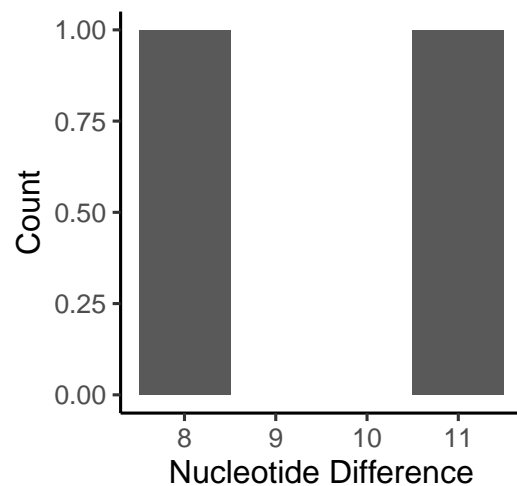
### IGHV3–30\*04

10 sequences assigned  
No exact matches.



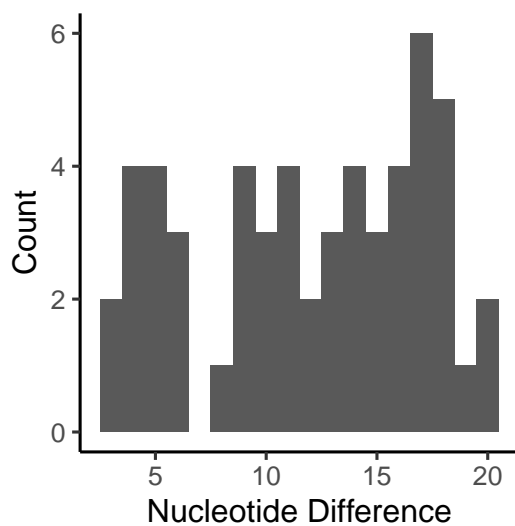
### IGHV3–43\*01

6 sequences assigned  
No exact matches.



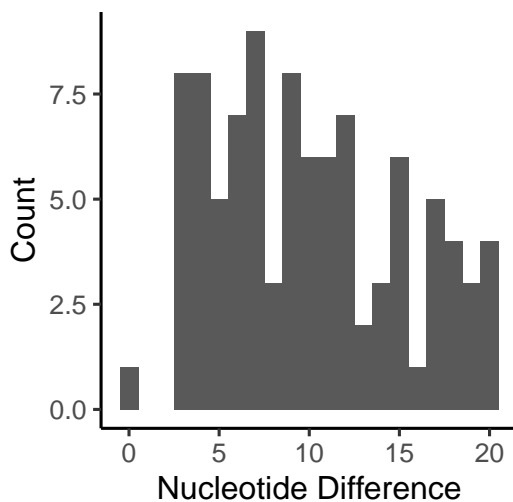
### IGHV3–30–3\*01

61 sequences assigned  
No exact matches.



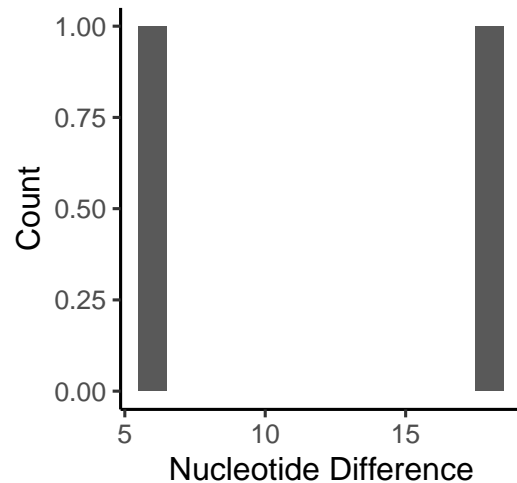
### IGHV3–30\*18

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



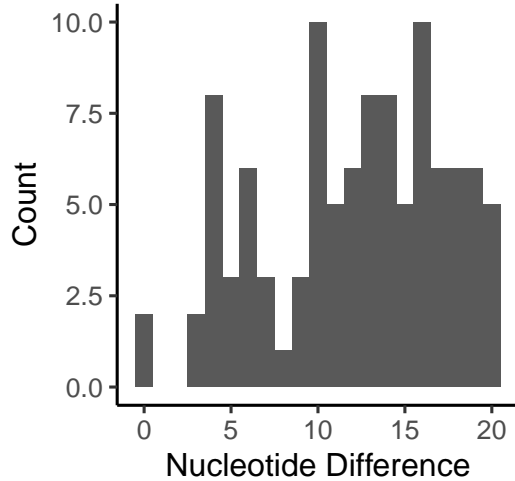
### IGHV3–43\*02

2 sequences assigned  
No exact matches.



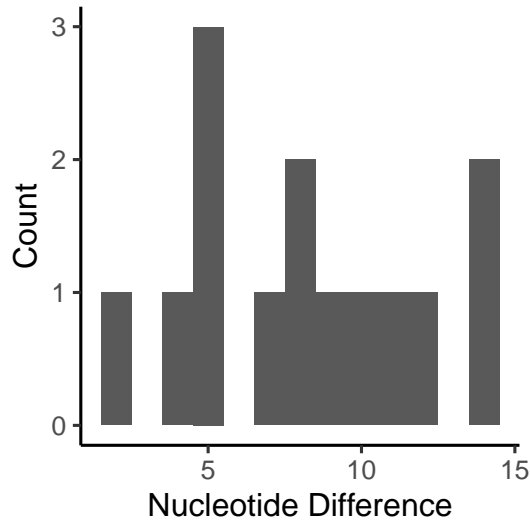
### IGHV3-48\*01

143 sequences assigned  
2 (1.4%) exact matches, in which:  
1 unique CDR3  
1 unique J



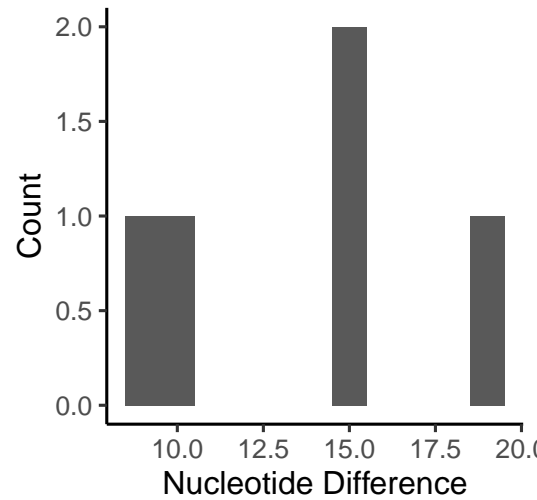
### IGHV3-49\*03\_05

14 sequences assigned  
No exact matches.



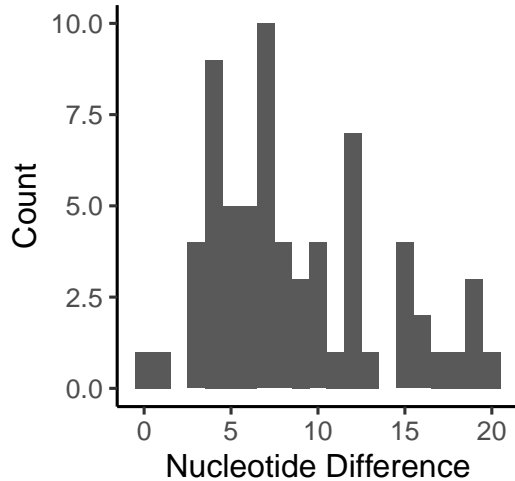
### IGHV3-64\*02\_07

5 sequences assigned  
No exact matches.



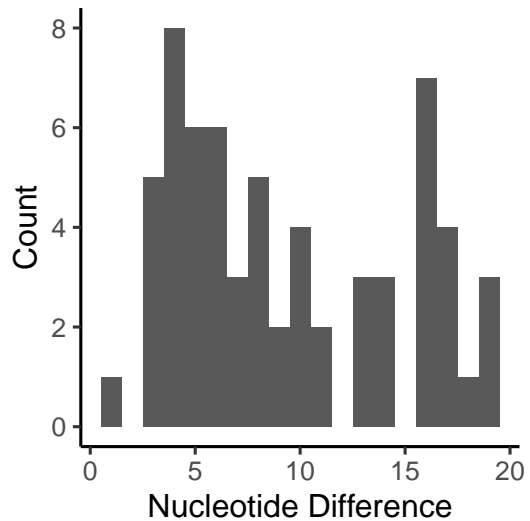
### IGHV3-48\*03

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



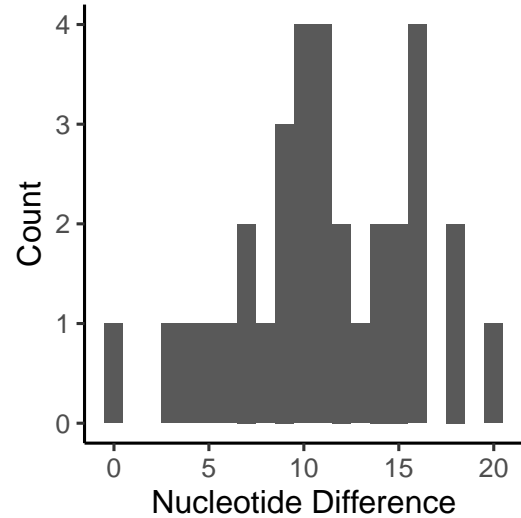
### IGHV3-53\*01\_02

92 sequences assigned  
No exact matches.



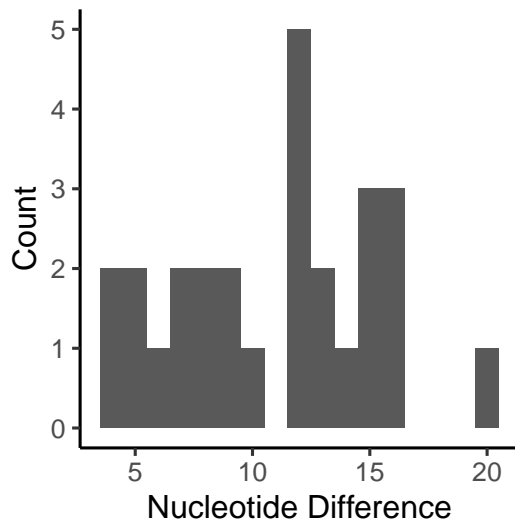
### IGHV3-66\*01

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



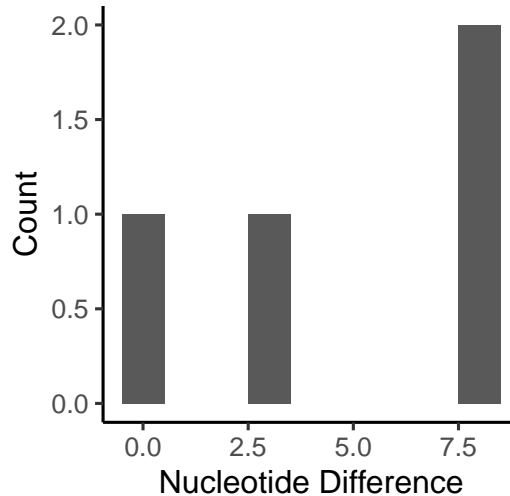
### IGHV3-49\*04

32 sequences assigned  
No exact matches.



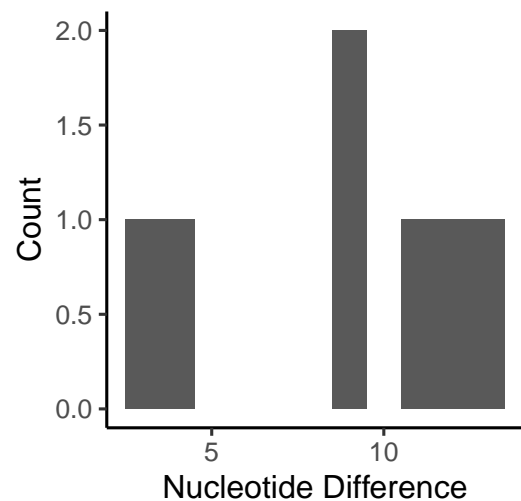
### IGHV3-64\*01

6 sequences assigned  
1 (16.7%) exact matches, in which:  
1 unique CDR3  
1 unique J



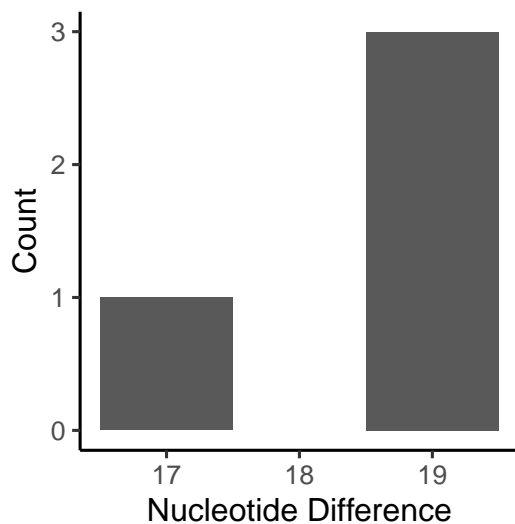
### IGHV3-66\*02

10 sequences assigned  
No exact matches.



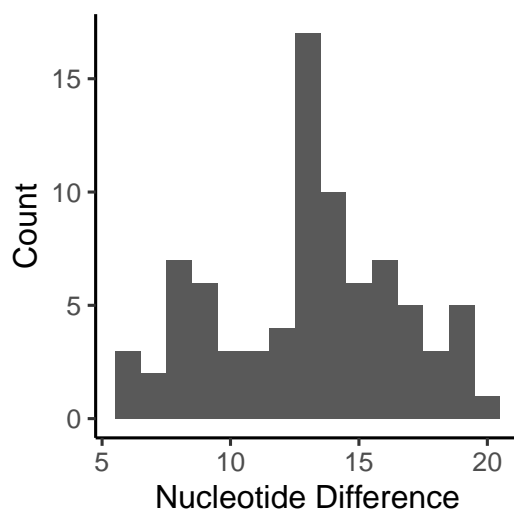
### IGHV3-69-1\*02

11 sequences assigned  
No exact matches.



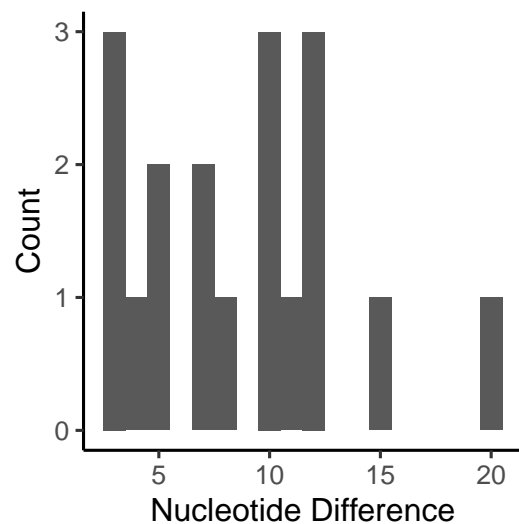
### IGHV3-74\*03

92 sequences assigned  
No exact matches.



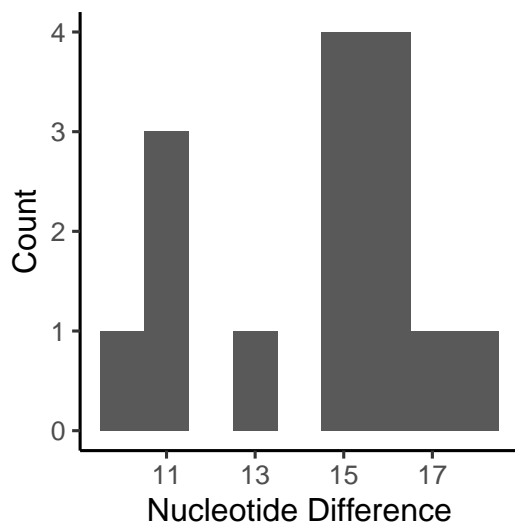
### IGHV3-64D\*06

24 sequences assigned  
No exact matches.



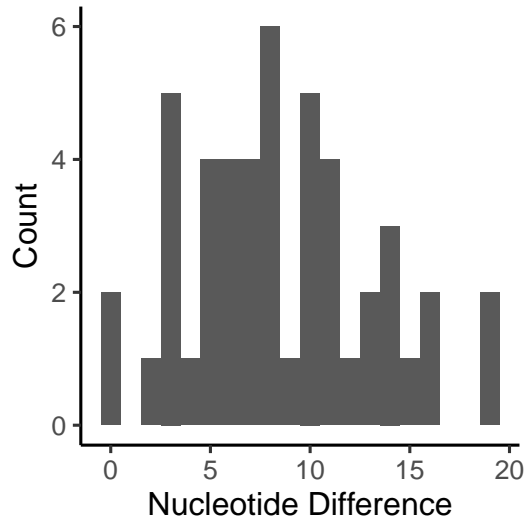
### IGHV3-72\*01

22 sequences assigned  
No exact matches.



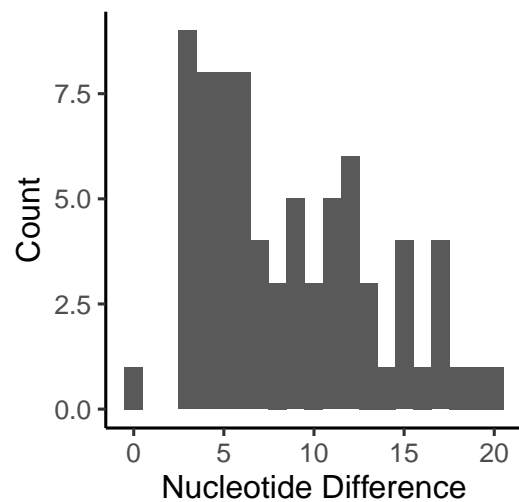
### IGHV3-74\*01\_02

57 sequences assigned  
2 (3.5%) exact matches, in which:  
2 unique CDR3  
1 unique J



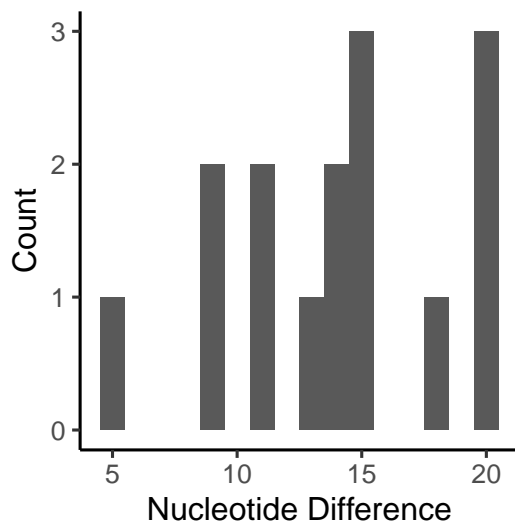
### IGHV4-4\*07

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



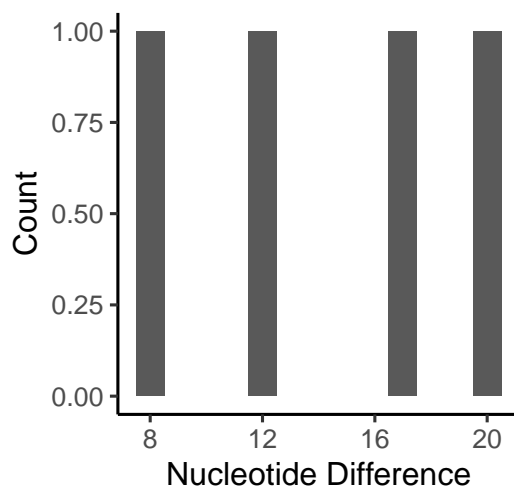
### IGHV3-73\*01\_02

18 sequences assigned  
No exact matches.



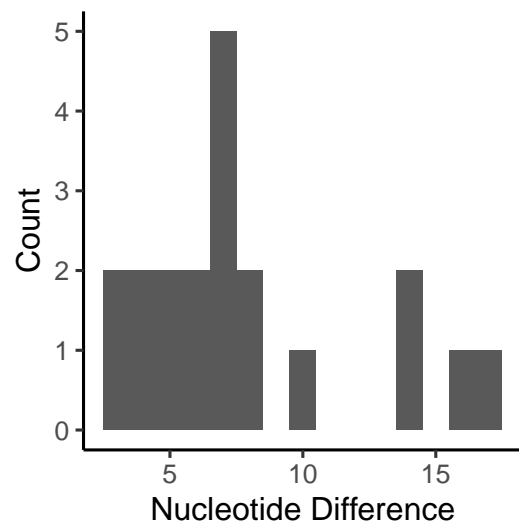
### IGHV3-43D\*04

4 sequences assigned  
No exact matches.



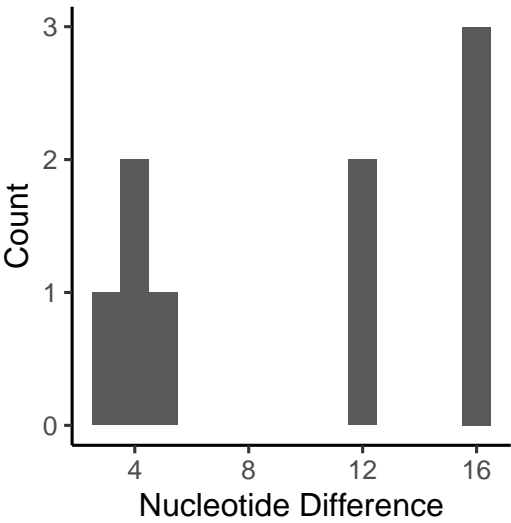
### IGHV4-4\*02\_03

30 sequences assigned  
No exact matches.



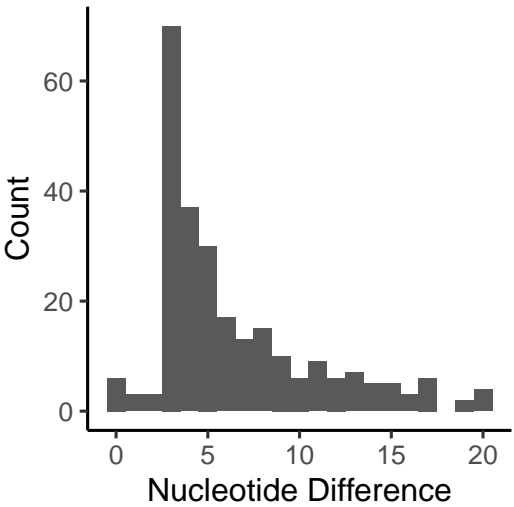
IGHV4-30-2\*01

12 sequences assigned  
No exact matches.



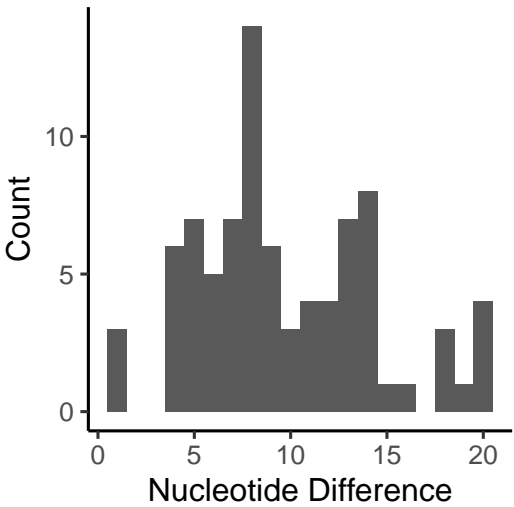
IGHV4-34\*01\_02

289 sequences assigned  
6 (2.1%) exact matches, in which:  
6 unique CDR3  
2 unique J



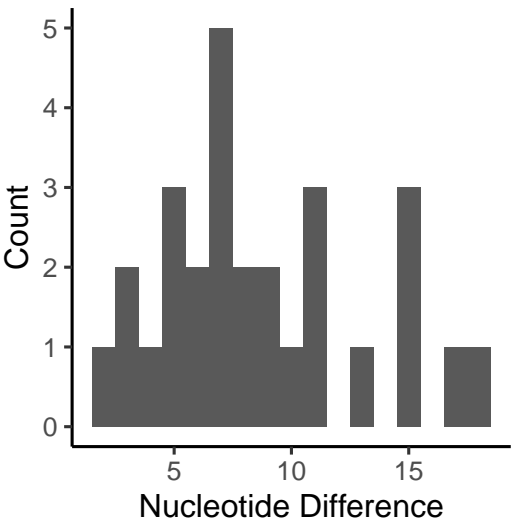
IGHV4-39\*02

117 sequences assigned  
No exact matches.



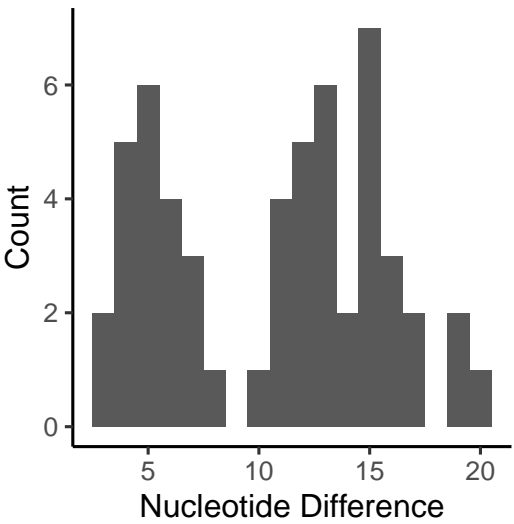
IGHV4-30-4\*01

33 sequences assigned  
No exact matches.



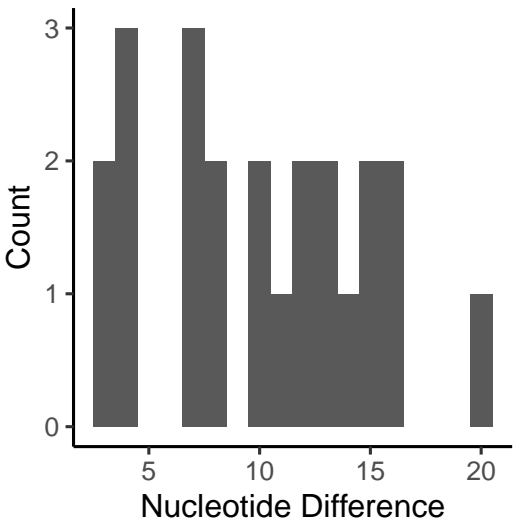
IGHV4-38-2\*01

61 sequences assigned  
No exact matches.



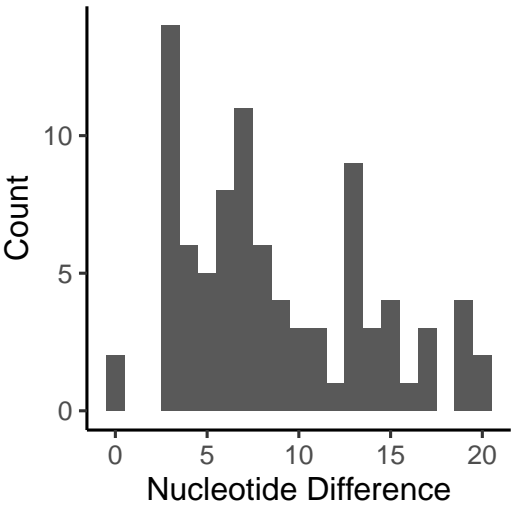
IGHV4-39\*07

34 sequences assigned  
No exact matches.



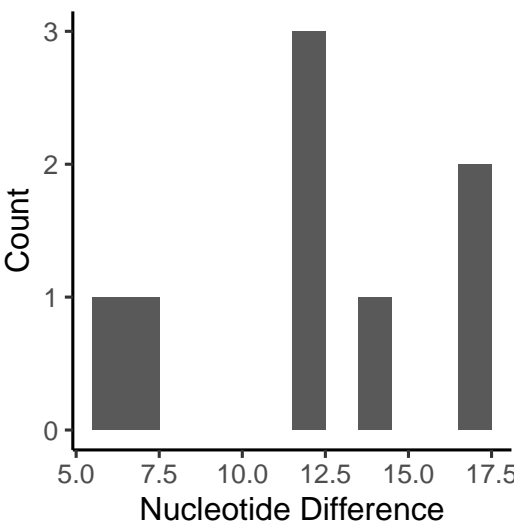
IGHV4-31\*02

107 sequences assigned  
2 (1.9%) exact matches, in which:  
2 unique CDR3  
2 unique J



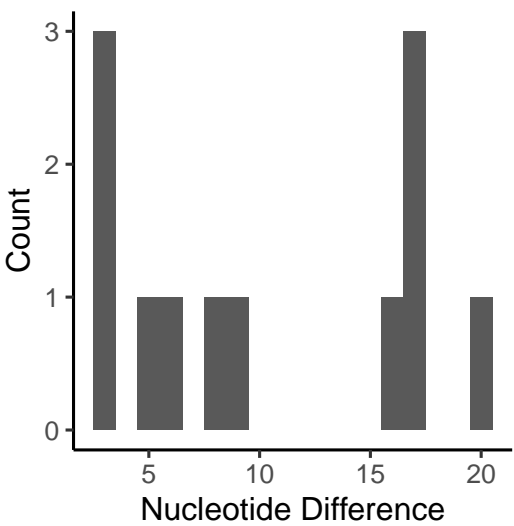
IGHV4-38-2\*02

16 sequences assigned  
No exact matches.



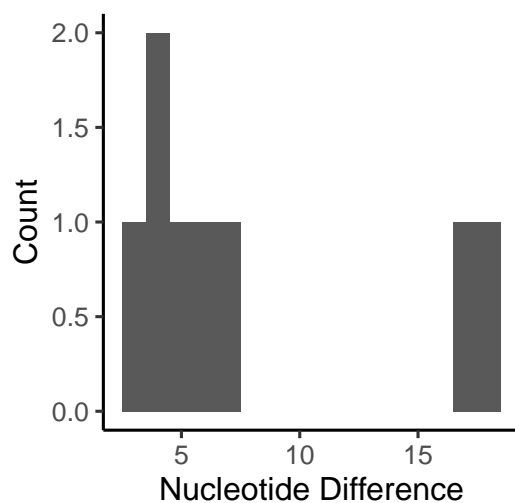
IGHV4-39\*01\_05

13 sequences assigned  
No exact matches.



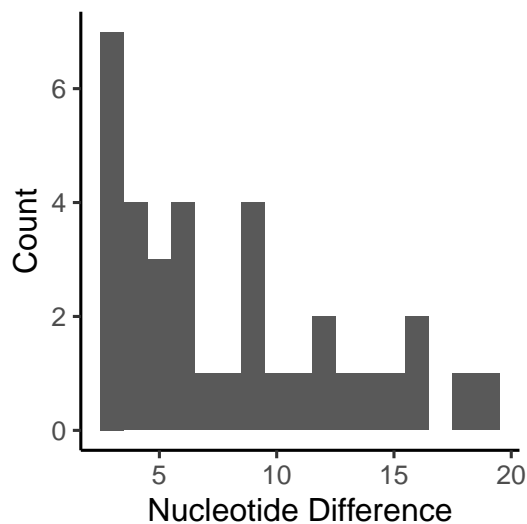
### IGHV4-59\*02

15 sequences assigned  
No exact matches.



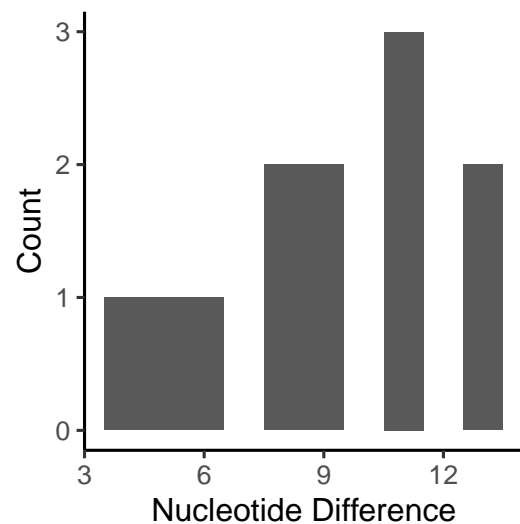
### IGHV4-61\*01

39 sequences assigned  
No exact matches.



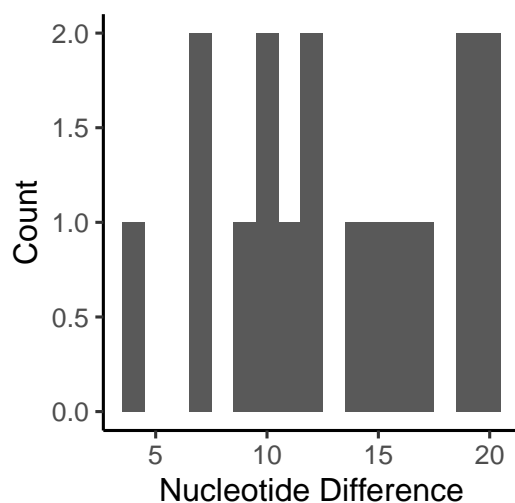
### IGHV5-51\*07

13 sequences assigned  
No exact matches.



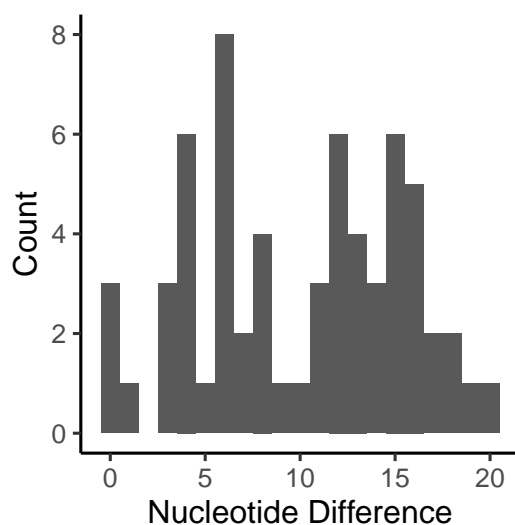
### IGHV4-59\*11

23 sequences assigned  
No exact matches.



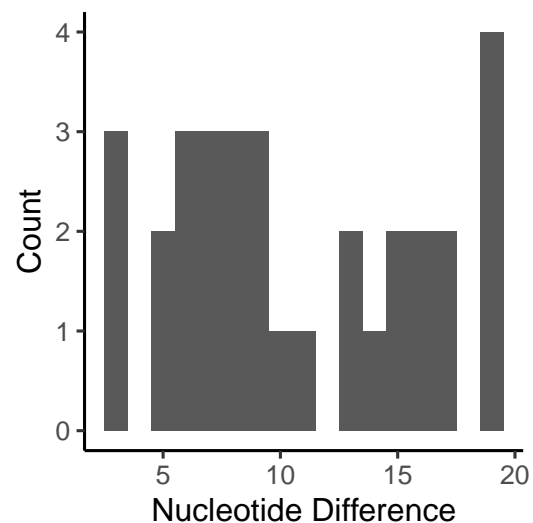
### IGHV4-61\*02

80 sequences assigned  
3 (3.8%) exact matches, in which:  
3 unique CDR3  
2 unique J



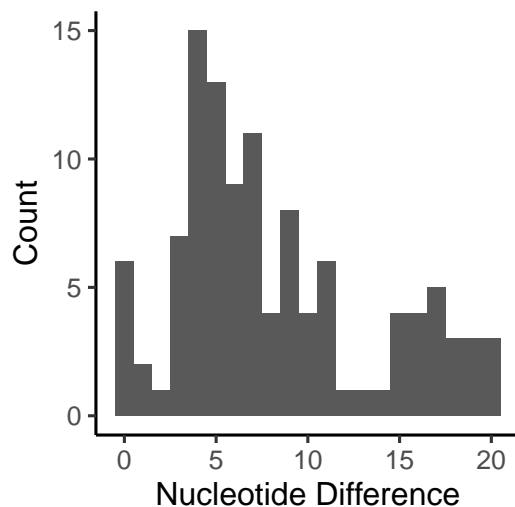
### IGHV5-51\*01\_03

34 sequences assigned  
No exact matches.



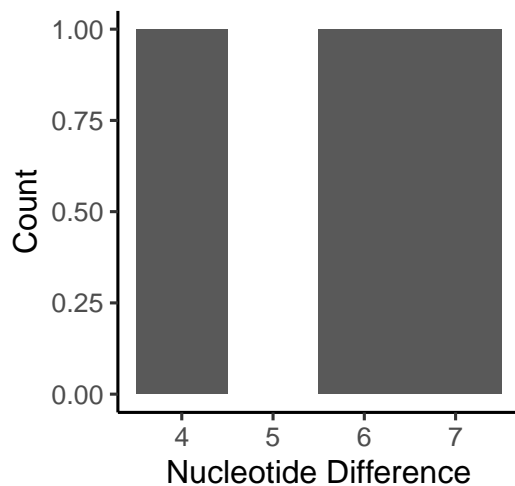
### IGHV4-59\*01\_07

135 sequences assigned  
6 (4.4%) exact matches, in which:  
6 unique CDR3  
2 unique J



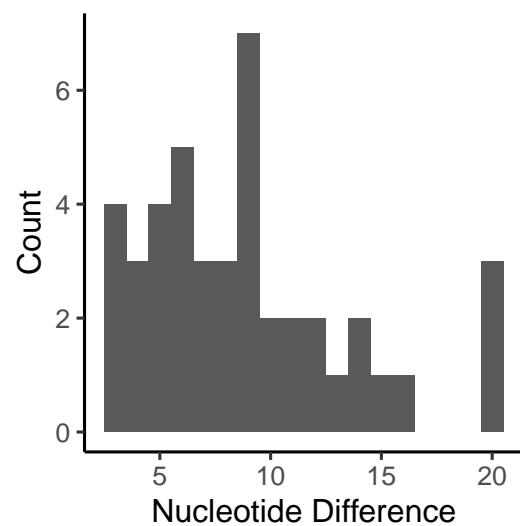
### IGHV5-10-1\*01\_03

6 sequences assigned  
No exact matches.



### IGHV6-1\*01\_02

49 sequences assigned  
No exact matches.







Warning – no inferred sequences found.