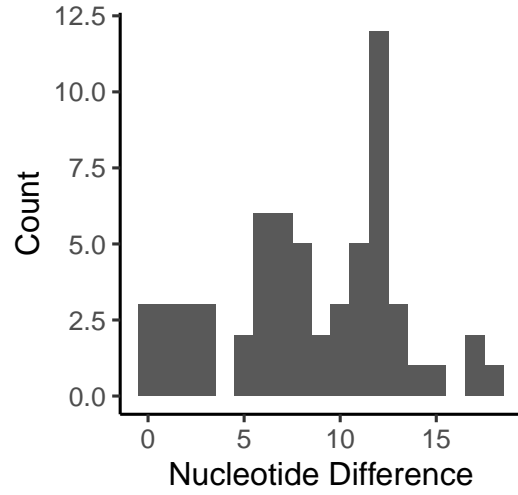


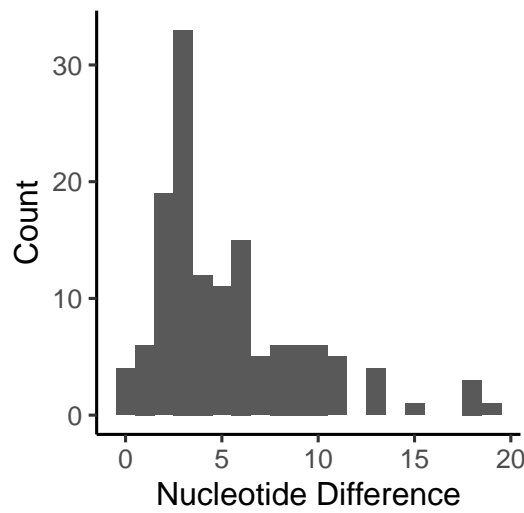
### IGHV1-60\*01\_S7772

63 sequences assigned  
3 (4.8%) exact matches, in which:  
2 unique CDR3  
1 unique J



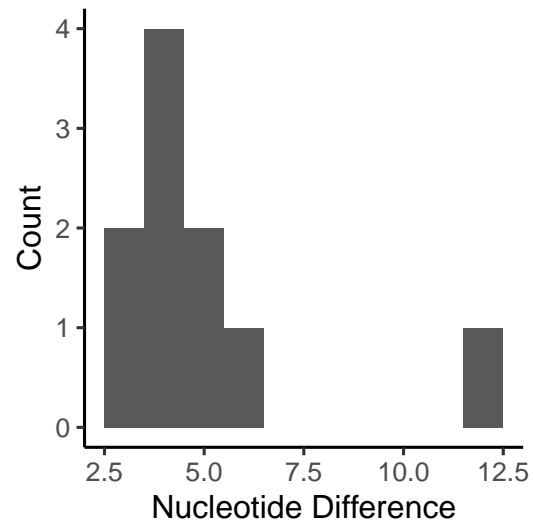
### IGHV1-NL\_1\*01\_S2052

139 sequences assigned  
4 (2.9%) exact matches, in which:  
3 unique CDR3  
1 unique J



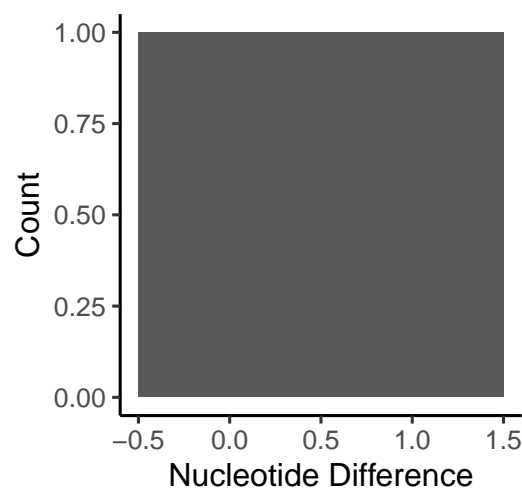
### IGHV3-36\*01\_S9128

10 sequences assigned  
No exact matches.



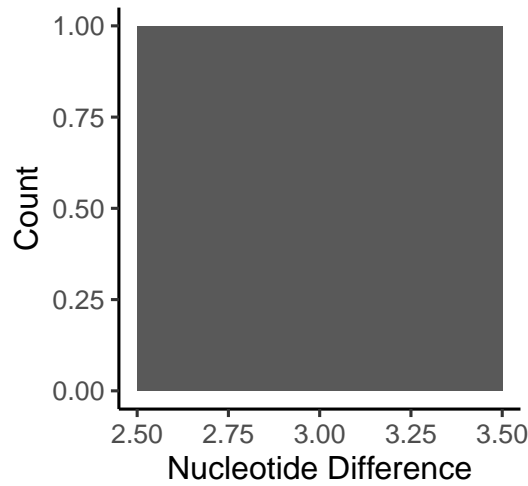
### IGHV1-84\*01\_S0025

2 sequences assigned  
1 (50%) exact matches, in which:  
1 unique CDR3  
1 unique J



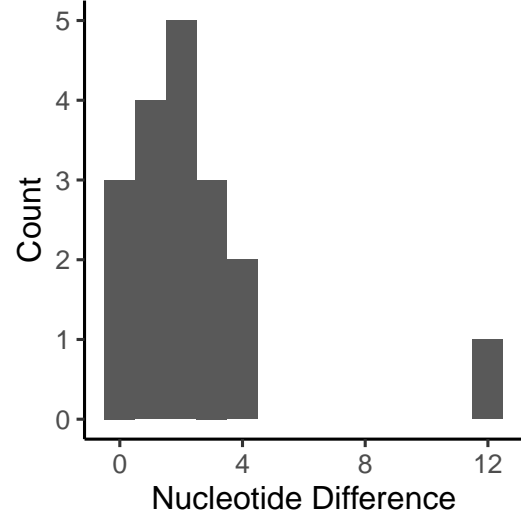
### IGHV2-118\*01\_S4531

1 sequences assigned  
No exact matches.



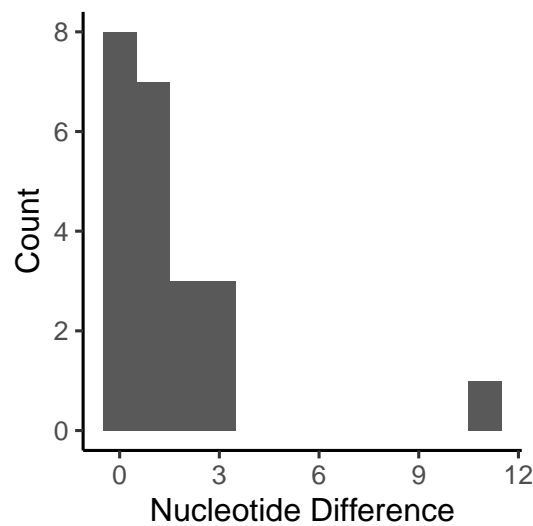
### IGHV3-50\*01\_S1879

19 sequences assigned  
3 (15.8%) exact matches, in which:  
1 unique CDR3  
1 unique J



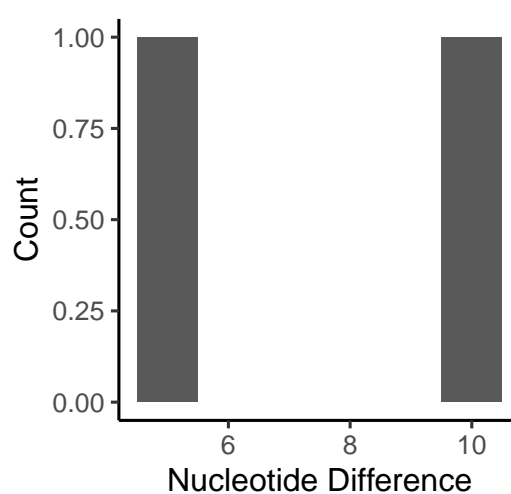
### IGHV1-138\*01\_S9603

22 sequences assigned  
8 (36.4%) exact matches, in which:  
2 unique CDR3  
1 unique J



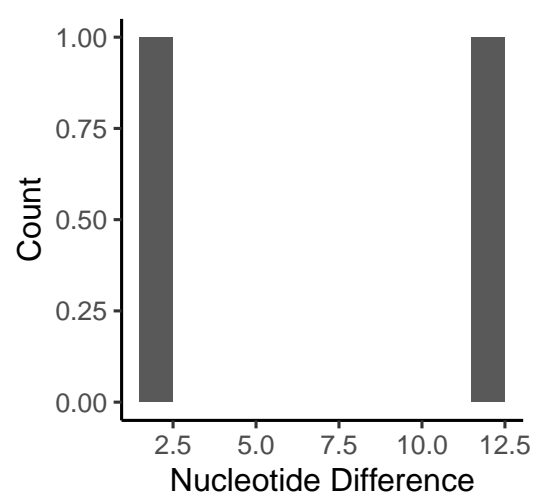
### IGHV3-36\*01\_S6650

2 sequences assigned  
No exact matches.



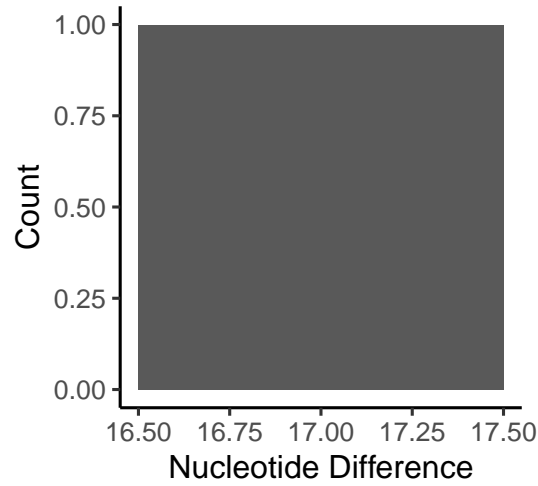
### IGHV3-50\*01\_S9079

2 sequences assigned  
No exact matches.



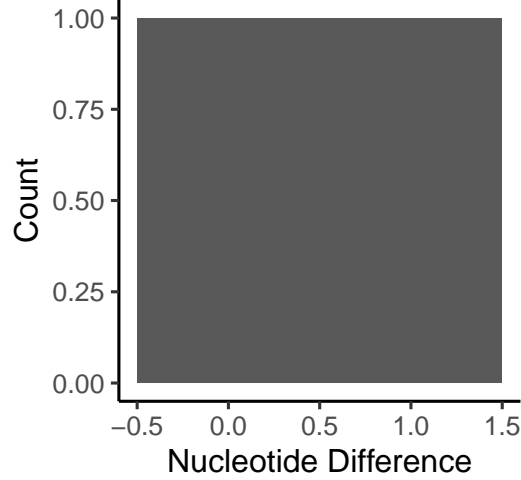
### IGHV3-94\*01\_S3427

1 sequences assigned  
No exact matches.



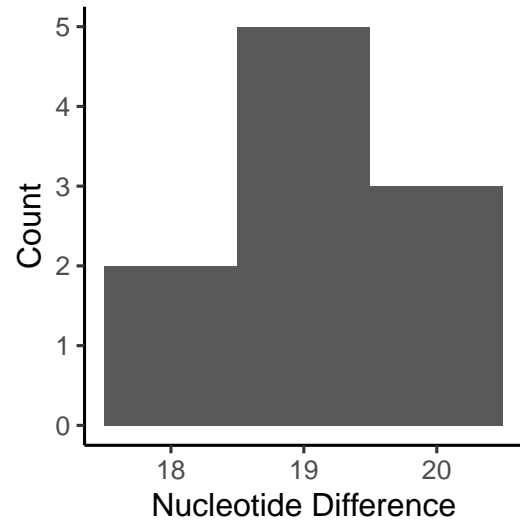
### IGHV3-103\*01\_S2756

2 sequences assigned  
1 (50%) exact matches, in which:  
1 unique CDR3  
1 unique J



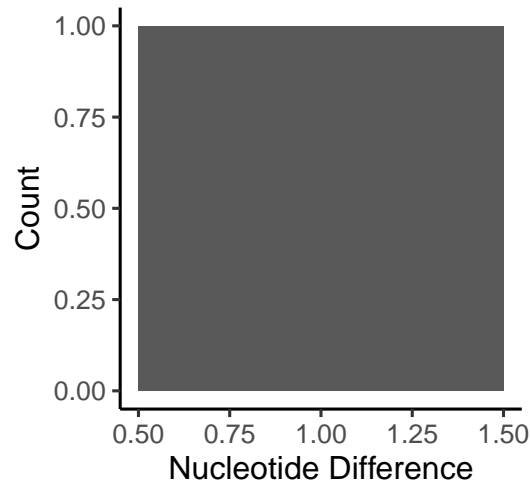
### IGHV3-187\*01\_S1133

13 sequences assigned  
No exact matches.



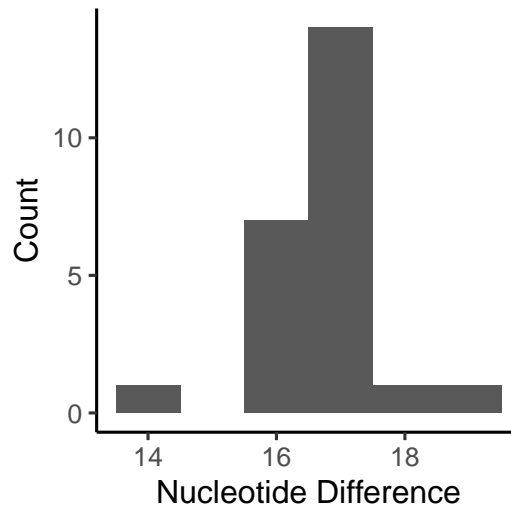
### IGHV3-94\*01\_S4458

1 sequences assigned  
No exact matches.



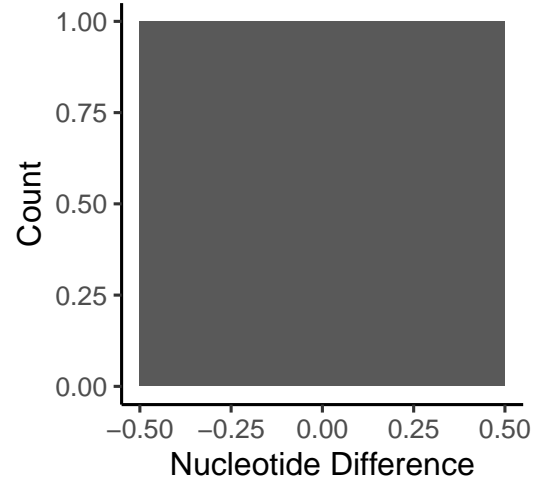
### IGHV3-122\*01\_S2730

27 sequences assigned  
No exact matches.



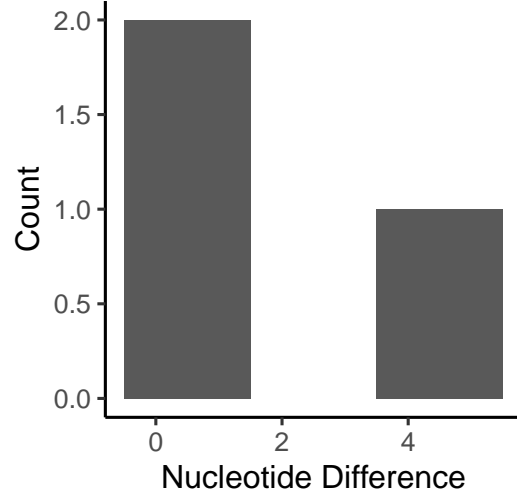
### IGHV3-NL\_1\*01\_S9854

1 sequences assigned  
1 (100%) exact matches, in which:  
1 unique CDR3  
1 unique J



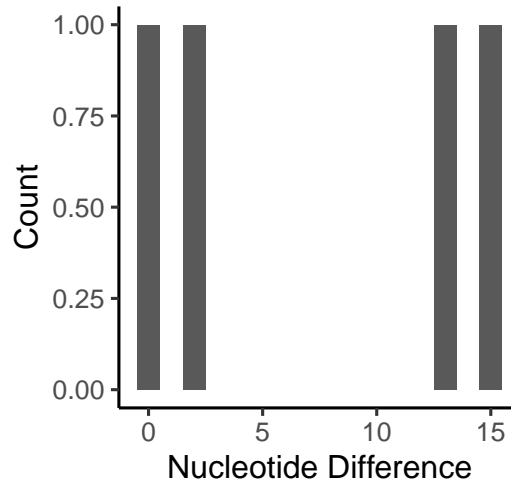
### IGHV3-100\*01\_S4375

6 sequences assigned  
2 (33.3%) exact matches, in which:  
2 unique CDR3  
1 unique J



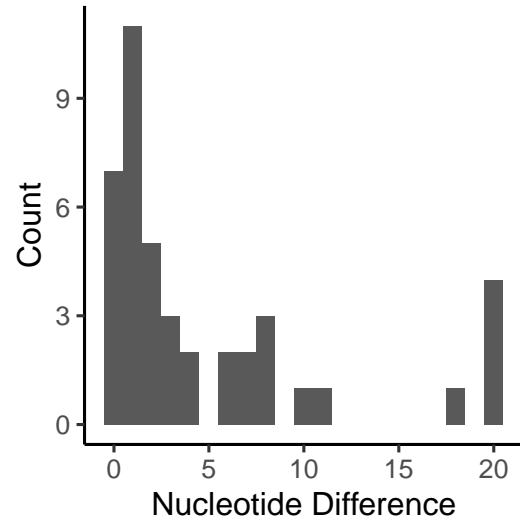
### IGHV3-177\*01\_S5369

4 sequences assigned  
1 (25%) exact matches, in which:  
1 unique CDR3  
1 unique J



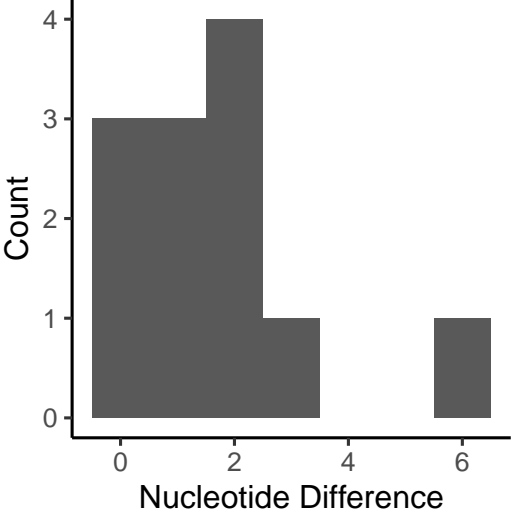
### IGHV3-NL\_11\*01\_S8390

48 sequences assigned  
7 (14.6%) exact matches, in which:  
4 unique CDR3  
1 unique J



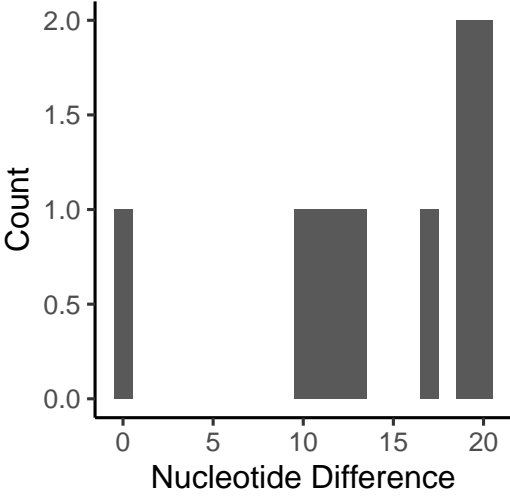
IGHV3–NL\_17\*01\_S4736

12 sequences assigned  
3 (25%) exact matches, in which:  
1 unique CDR3  
1 unique J



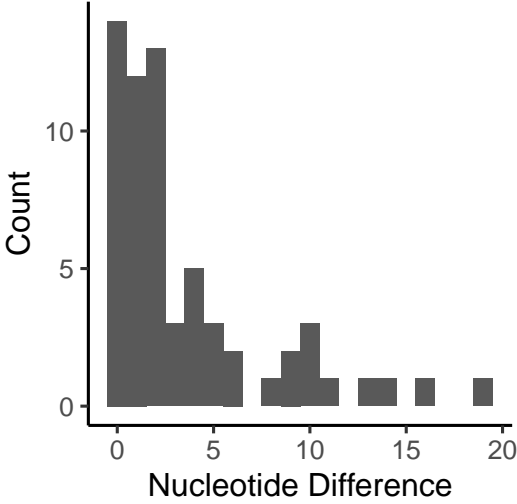
IGHV4–79\*02\_S9501

15 sequences assigned  
1 (6.7%) exact matches, in which:  
1 unique CDR3  
1 unique J



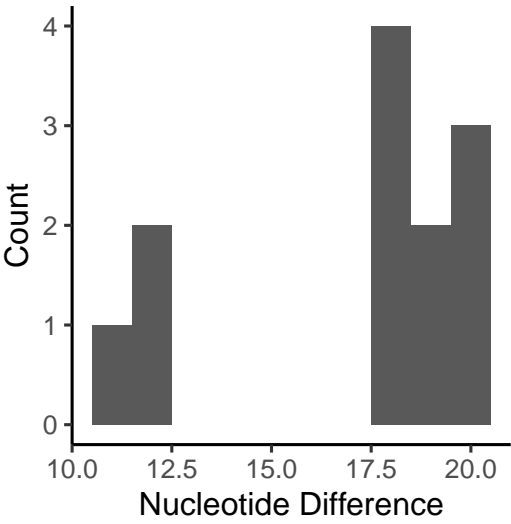
IGHV4–117\*01\_S0312

66 sequences assigned  
14 (21.2%) exact matches, in which:  
13 unique CDR3  
1 unique J



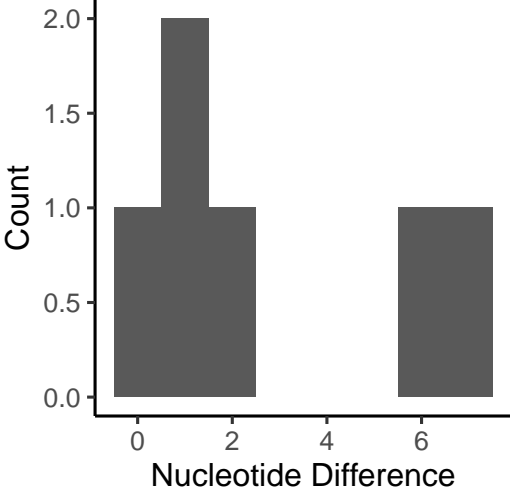
IGHV3–NL\_9\*01\_S6098

15 sequences assigned  
No exact matches.



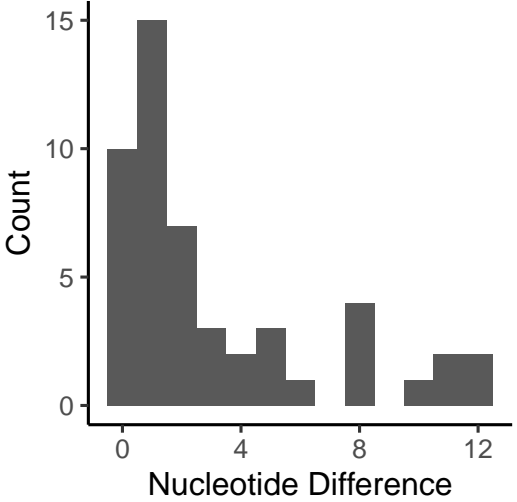
IGHV4–93\*01\_S0998

7 sequences assigned  
1 (14.3%) exact matches, in which:  
1 unique CDR3  
1 unique J



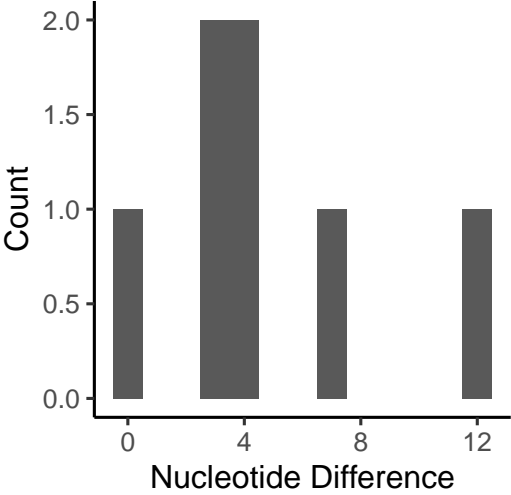
IGHV4–144\*01\_S3113

81 sequences assigned  
10 (12.3%) exact matches, in which:  
10 unique CDR3  
1 unique J



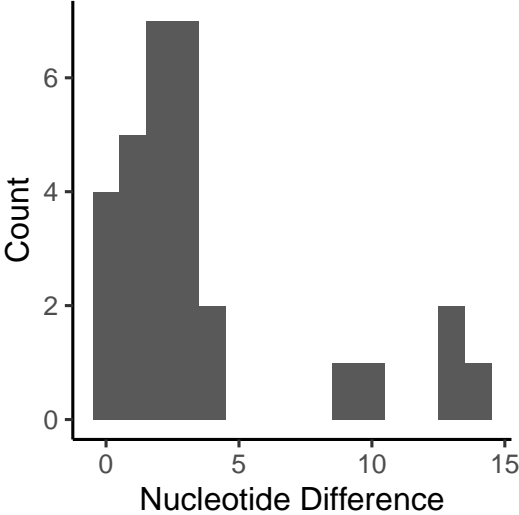
IGHV4–67\*02\_S6848

7 sequences assigned  
1 (14.3%) exact matches, in which:  
1 unique CDR3  
1 unique J



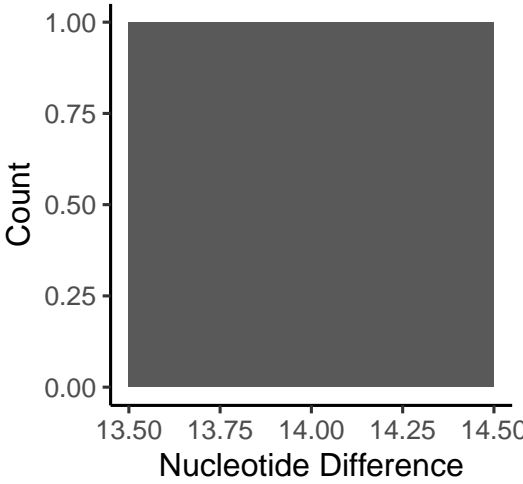
IGHV4–93\*01\_S5203

30 sequences assigned  
4 (13.3%) exact matches, in which:  
4 unique CDR3  
1 unique J



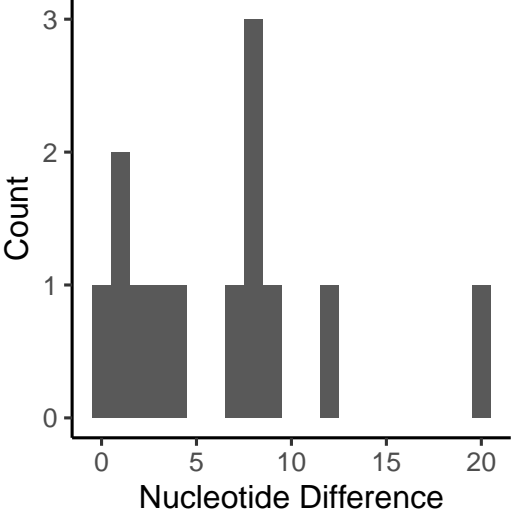
IGHV4–149\*01\_S1992

3 sequences assigned  
No exact matches.



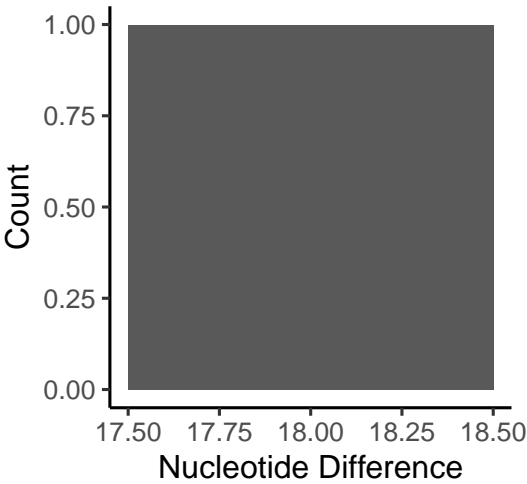
IGHV4-NL\_1\*02\_S4188

15 sequences assigned  
1 (6.7%) exact matches, in which:  
1 unique CDR3  
1 unique J



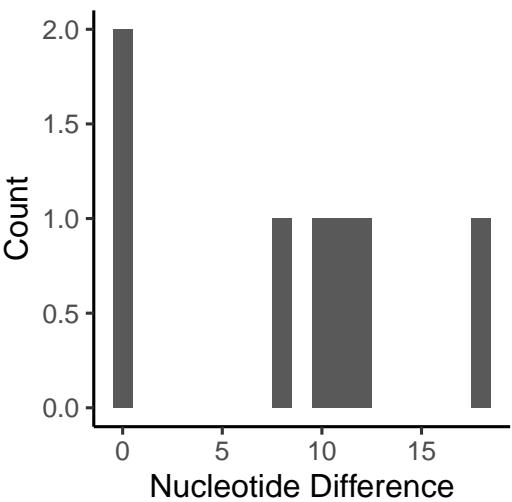
IGHV4-NL\_17\*01\_S4954

1 sequences assigned  
No exact matches.



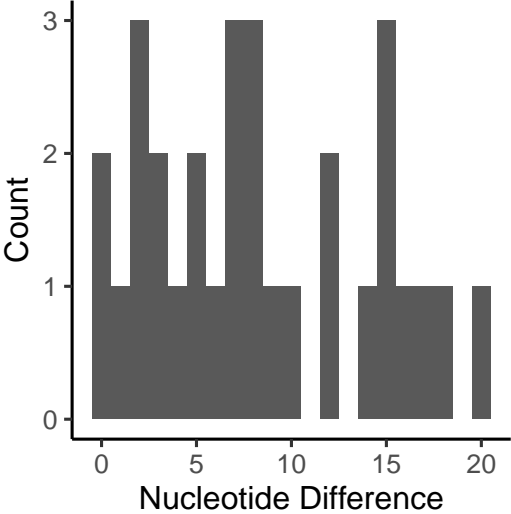
IGHV4-NL\_22\*01\_S9255

16 sequences assigned  
2 (12.5%) exact matches, in which:  
2 unique CDR3  
1 unique J



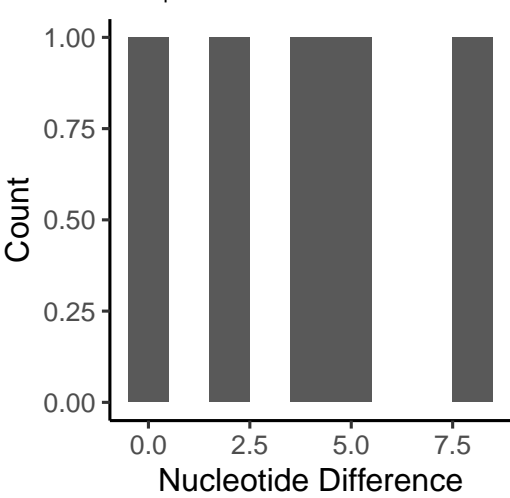
IGHV4-NL\_10\*01\_S6744

33 sequences assigned  
2 (6.1%) exact matches, in which:  
2 unique CDR3  
1 unique J



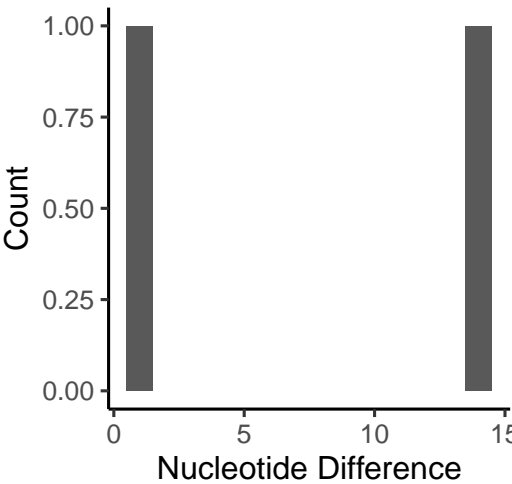
IGHV4-NL\_20\*01\_S6186

5 sequences assigned  
1 (20%) exact matches, in which:  
1 unique CDR3  
1 unique J



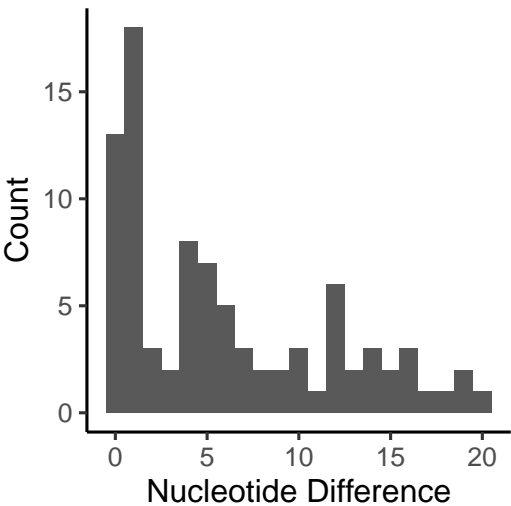
IGHV4-NL\_24\*01\_S5697

2 sequences assigned  
No exact matches.



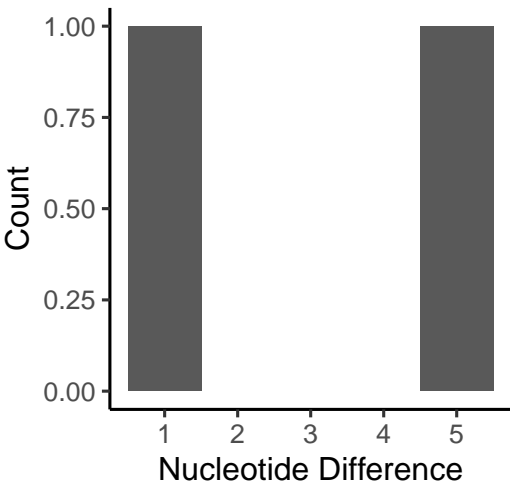
IGHV4-NL\_16\*01\_S2138

94 sequences assigned  
13 (13.8%) exact matches, in which:  
11 unique CDR3  
1 unique J



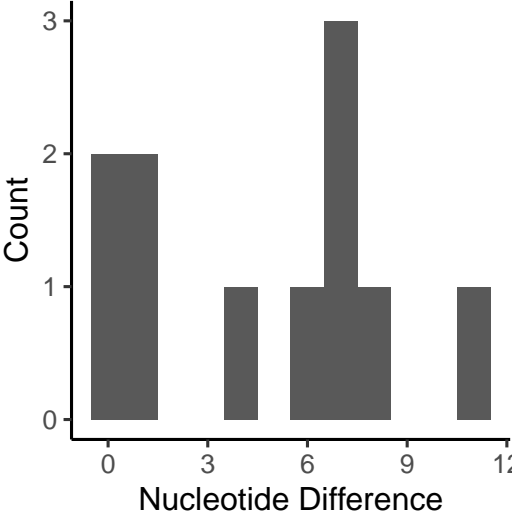
IGHV4-NL\_21\*01\_S0136

2 sequences assigned  
No exact matches.



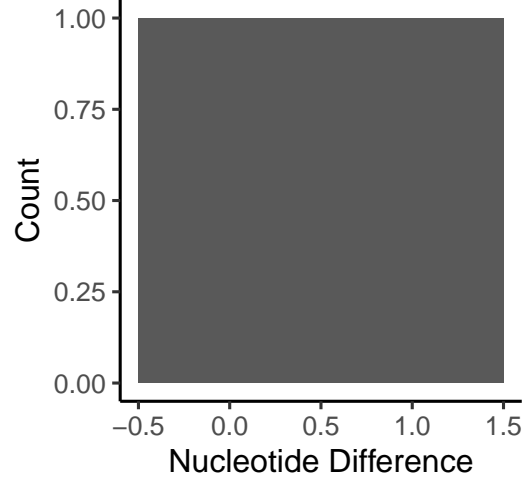
IGHV4-NL\_25\*01\_S6383

11 sequences assigned  
2 (18.2%) exact matches, in which:  
2 unique CDR3  
1 unique J



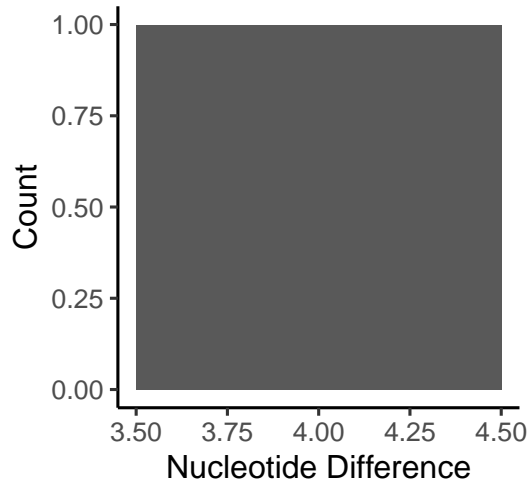
### IGHV4-NL\_27\*01\_S3510

2 sequences assigned  
1 (50%) exact matches, in which:  
1 unique CDR3  
1 unique J



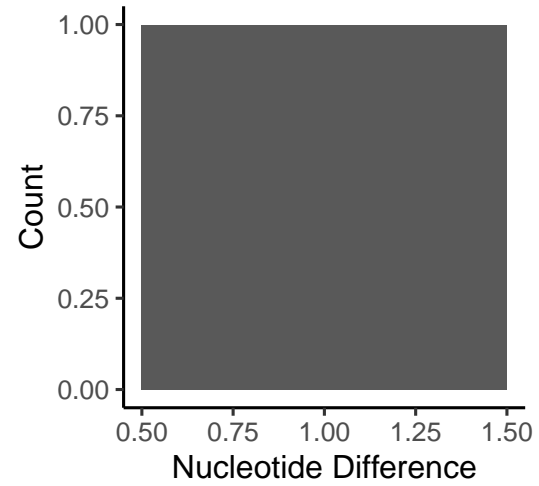
### IGHV4-NL\_32\*01\_S3033

1 sequences assigned  
No exact matches.



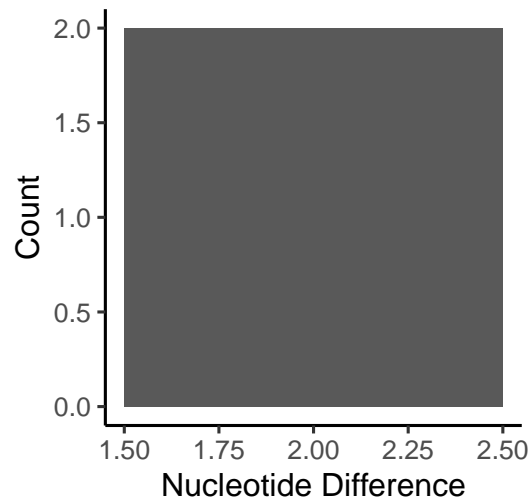
### IGHV4-NL\_38\*01\_S6935

1 sequences assigned  
No exact matches.



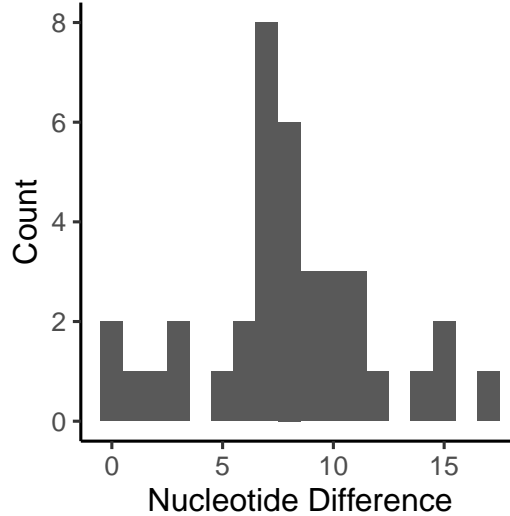
### IGHV4-NL\_3\*01\_S7576

2 sequences assigned  
No exact matches.



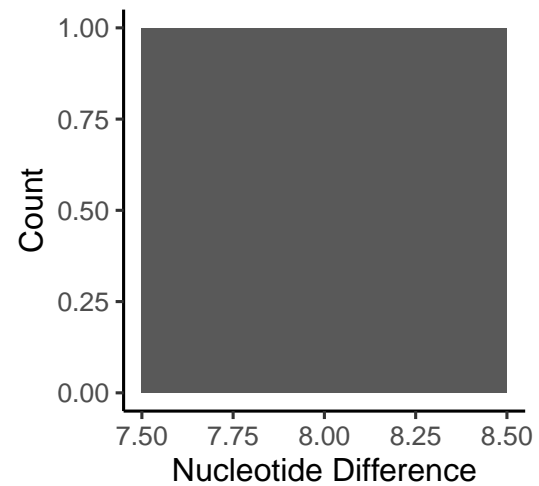
### IGHV4-NL\_36\*01\_S5319

37 sequences assigned  
2 (5.4%) exact matches, in which:  
1 unique CDR3  
1 unique J



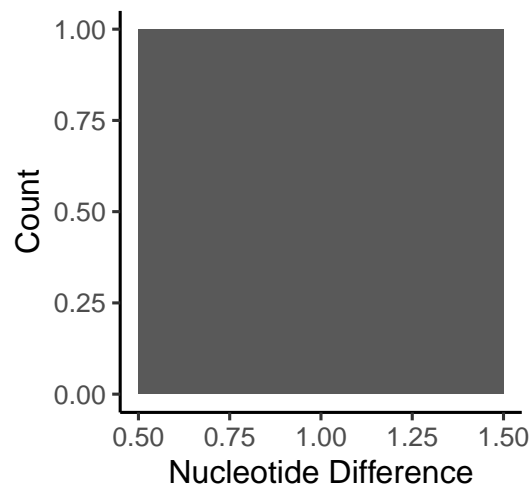
### IGHV4-NL\_38\*01\_S8437

1 sequences assigned  
No exact matches.



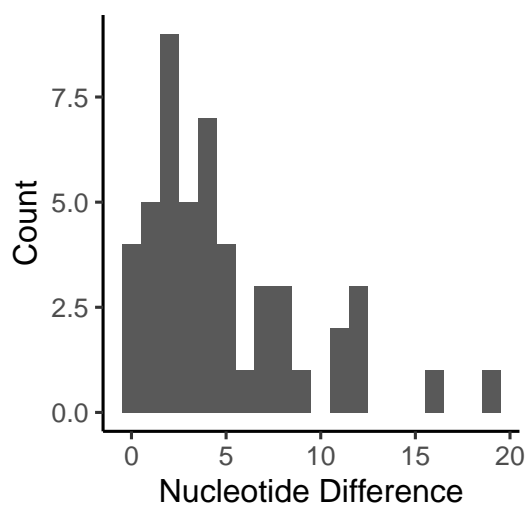
### IGHV4-NL\_31\*01\_S1675

1 sequences assigned  
No exact matches.



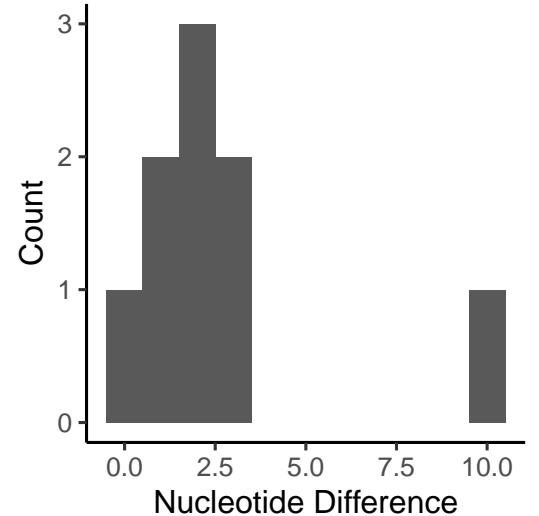
### IGHV4-NL\_36\*01\_S6973

49 sequences assigned  
4 (8.2%) exact matches, in which:  
4 unique CDR3  
1 unique J



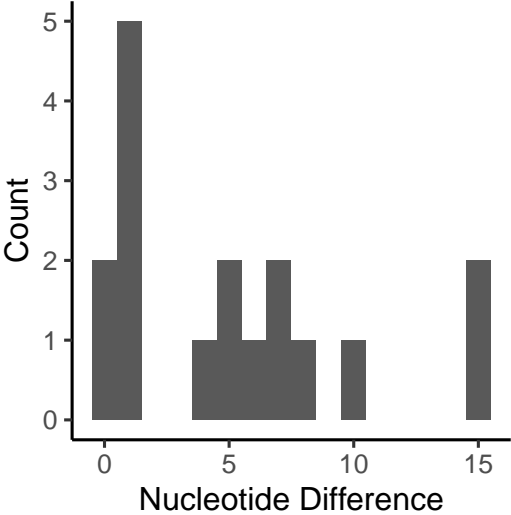
### IGHV4-NL\_4\*01\_S8866

9 sequences assigned  
1 (11.1%) exact matches, in which:  
1 unique CDR3  
1 unique J



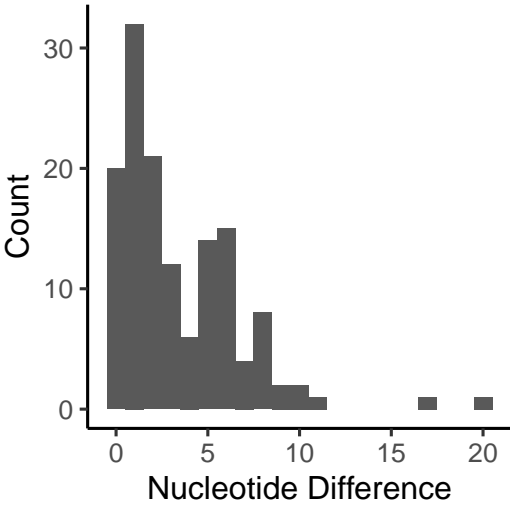
IGHV4–NL\_40\*01\_S0979

17 sequences assigned  
2 (11.8%) exact matches, in which:  
2 unique CDR3  
1 unique J



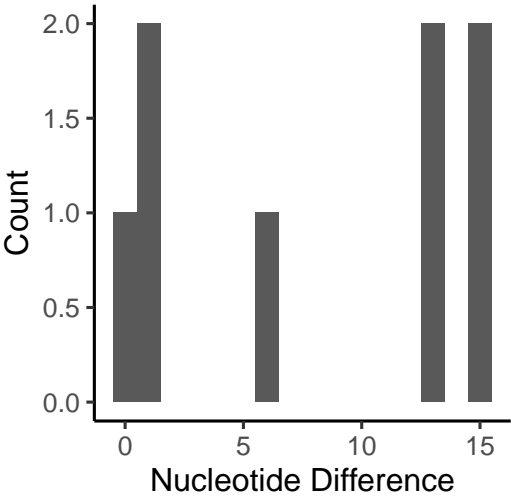
IGHV5–157\*01\_S6479

139 sequences assigned  
20 (14.4%) exact matches, in which:  
10 unique CDR3  
1 unique J



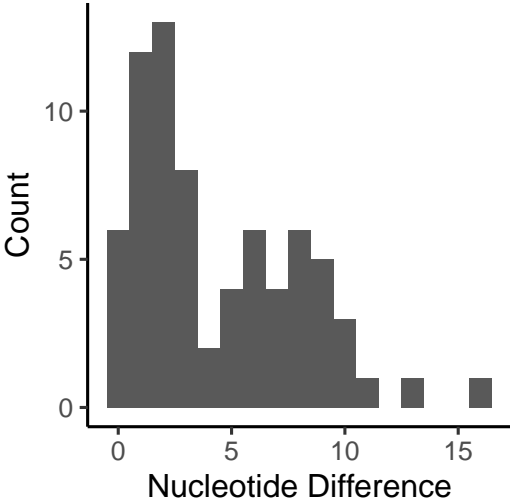
IGHV4–NL\_5\*01\_S5158

8 sequences assigned  
1 (12.5%) exact matches, in which:  
1 unique CDR3  
1 unique J



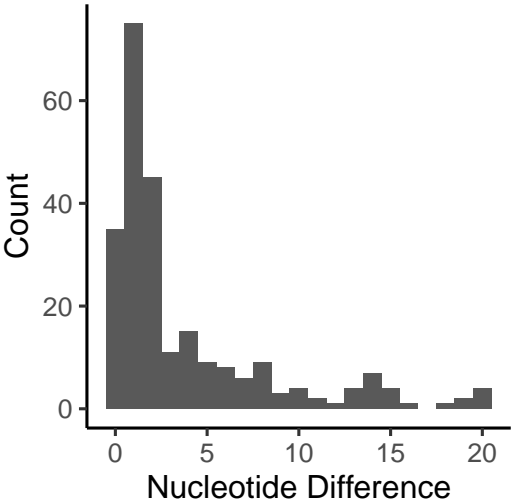
IGHV7–86\*01\_S3619

72 sequences assigned  
6 (8.3%) exact matches, in which:  
3 unique CDR3  
1 unique J

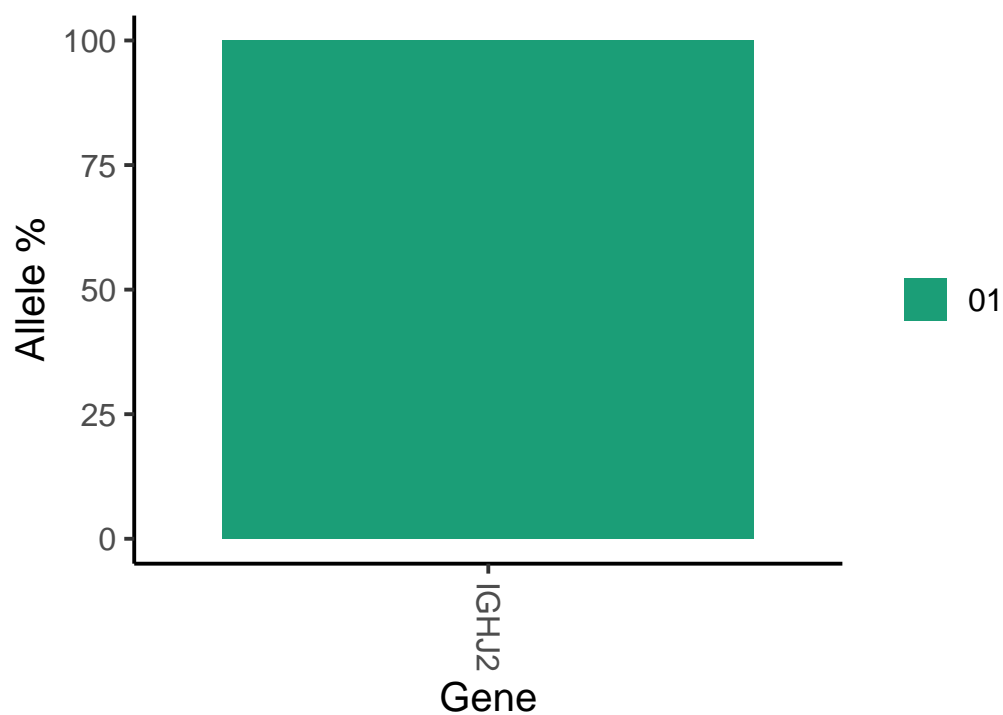


IGHV5–15\*01\_S8661

249 sequences assigned  
35 (14.1%) exact matches, in which:  
18 unique CDR3  
1 unique J



# Allele Usage



Warning – no inferred sequences found.