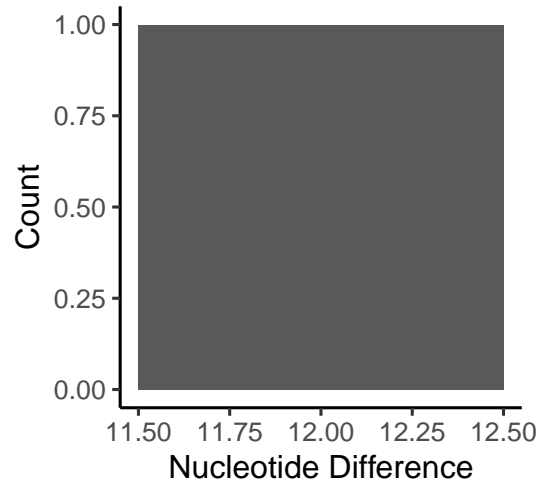


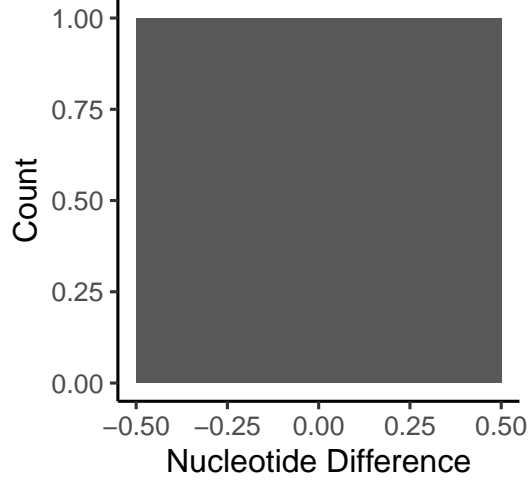
### IGHV1-58\*02

1 sequences assigned  
No exact matches.



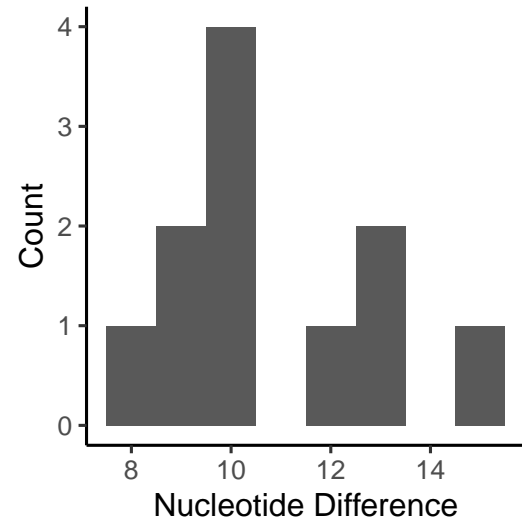
### IGHV1-193\*01\_S6037

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



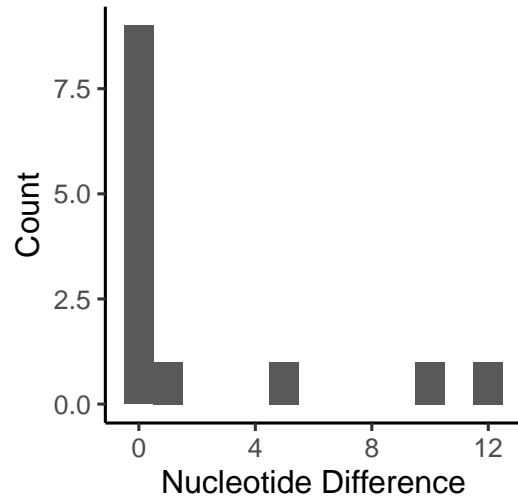
### IGHV2-118\*01\_S3831

12 sequences assigned  
No exact matches.



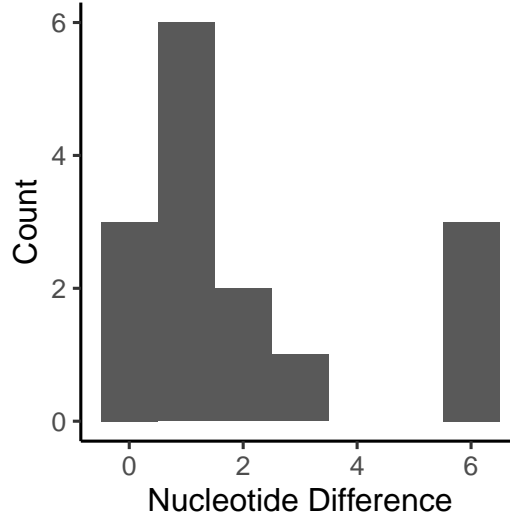
### IGHV1-84\*01\_S9366

13 sequences assigned  
9 (69.2%) exact matches, in which:  
4 unique CDR3  
1 unique J



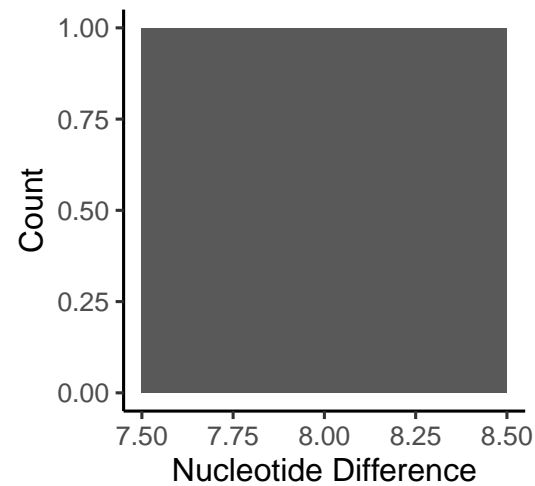
### IGHV1-NL\_1\*01\_S2052

15 sequences assigned  
3 (20%) exact matches, in which:  
2 unique CDR3  
1 unique J



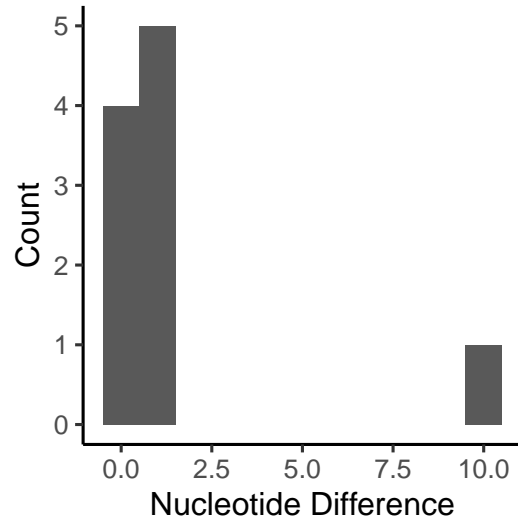
### IGHV2-118\*01\_S4527

1 sequences assigned  
No exact matches.



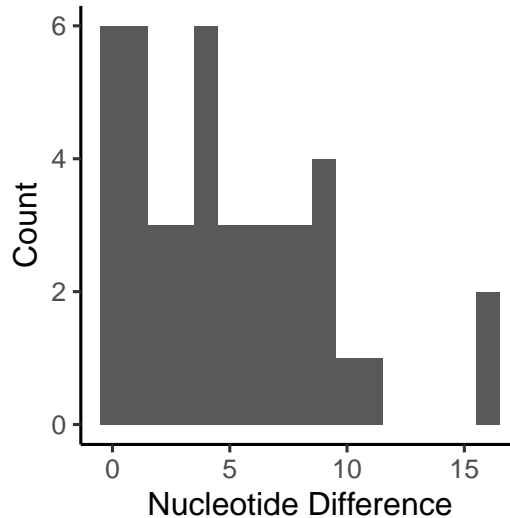
### IGHV1-138\*01\_S8712

10 sequences assigned  
4 (40%) exact matches, in which:  
3 unique CDR3  
1 unique J



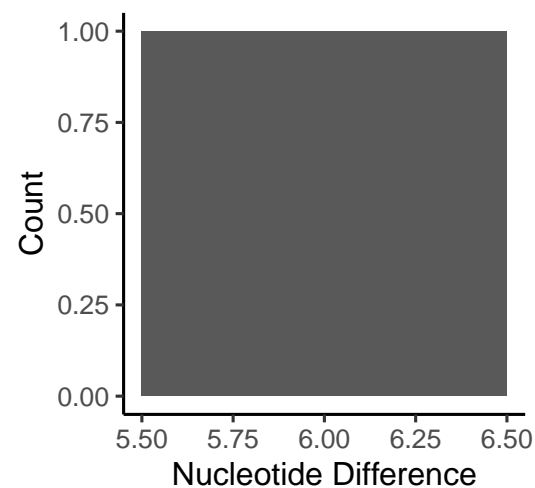
### IGHV2-69\*01\_S2931

44 sequences assigned  
6 (13.6%) exact matches, in which:  
3 unique CDR3  
1 unique J



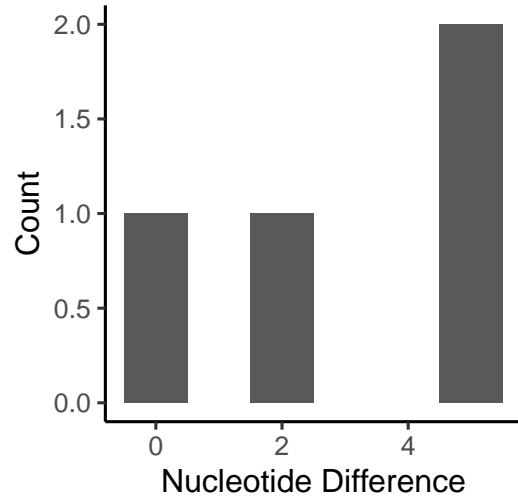
### IGHV2-NL\_1\*01\_S2133

1 sequences assigned  
No exact matches.



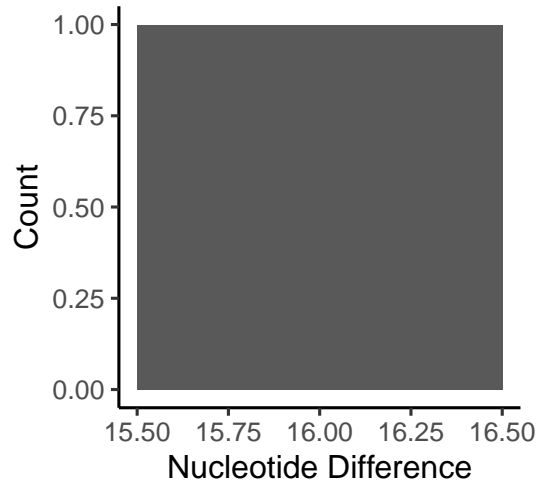
### IGHV2–NL\_1\*01\_S5779

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



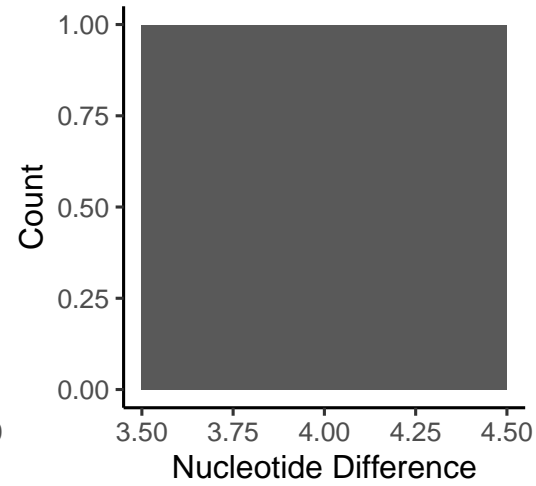
### IGHV3–53\*01\_S3451

1 sequences assigned  
No exact matches.



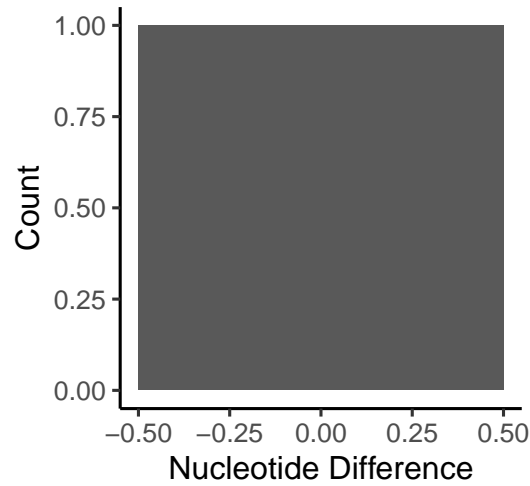
### IGHV3–127\*01\_S7059

1 sequences assigned  
No exact matches.



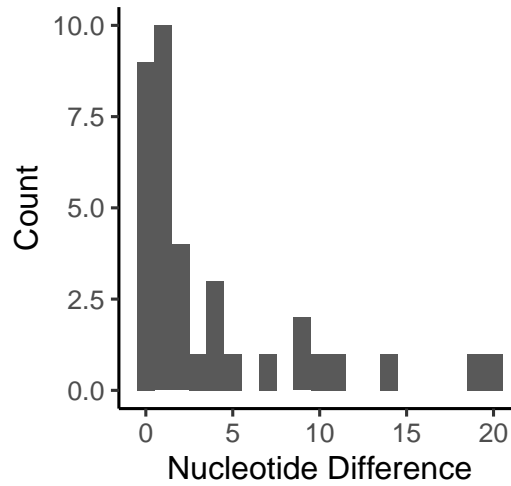
### IGHV3–36\*01\_S9128

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



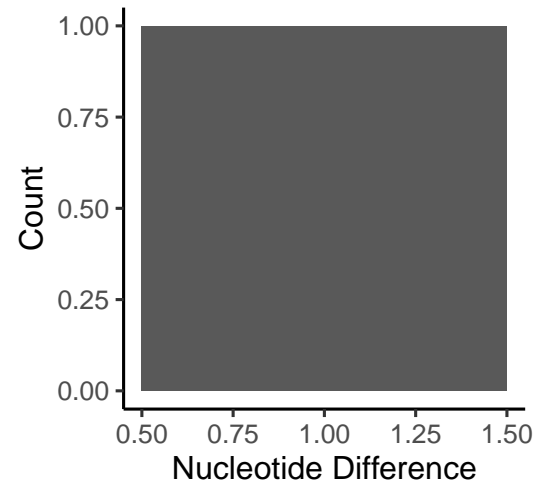
### IGHV3–76\*01\_S4285

37 sequences assigned  
9 (24.3%) exact matches, in which:  
5 unique CDR3  
1 unique J



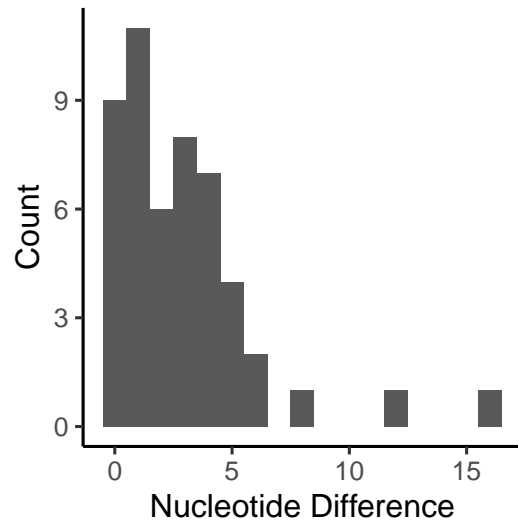
### IGHV3–152\*01\_S7388

1 sequences assigned  
No exact matches.



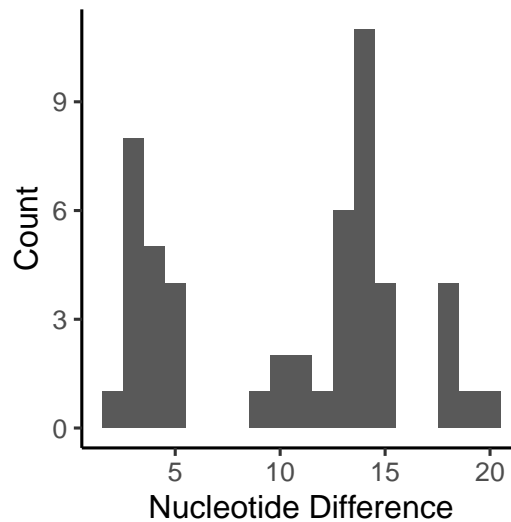
### IGHV3–50\*01\_S1879

51 sequences assigned  
9 (17.6%) exact matches, in which:  
5 unique CDR3  
1 unique J



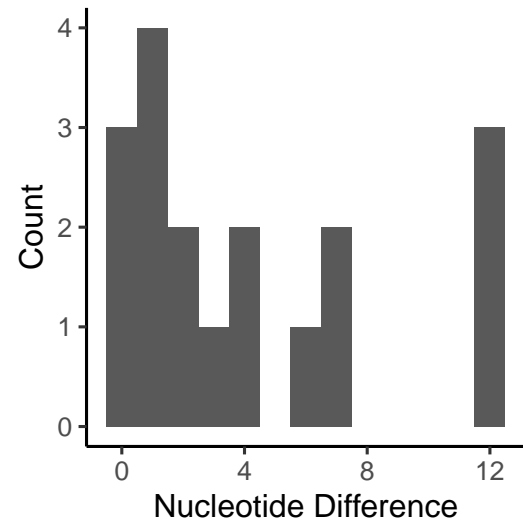
### IGHV3–88\*02\_S7590

59 sequences assigned  
No exact matches.



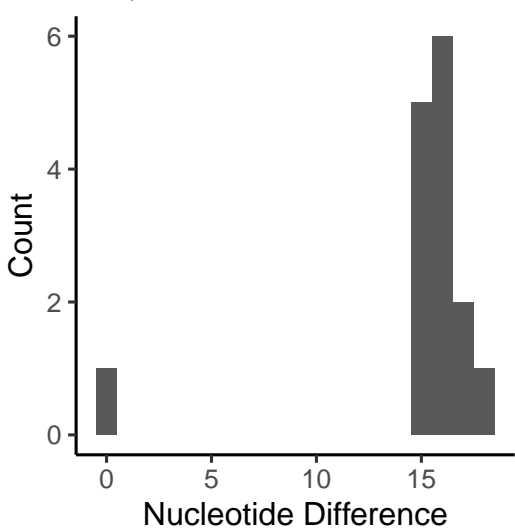
### IGHV3–172\*01\_S0645

18 sequences assigned  
3 (16.7%) exact matches, in which:  
1 unique CDR3  
1 unique J



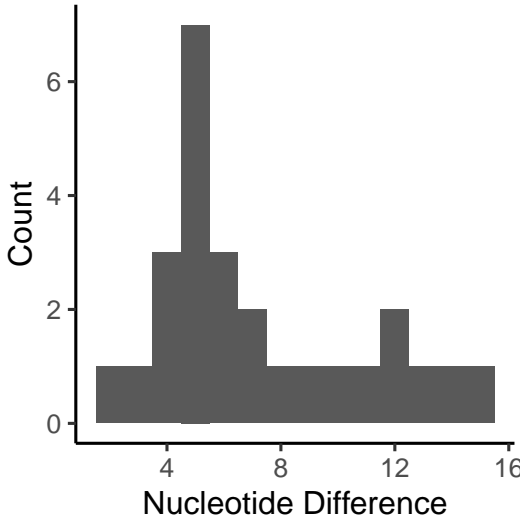
IGHV3-177\*01\_S4102

19 sequences assigned  
1 (5.3%) exact matches, in which:  
1 unique CDR3  
1 unique J



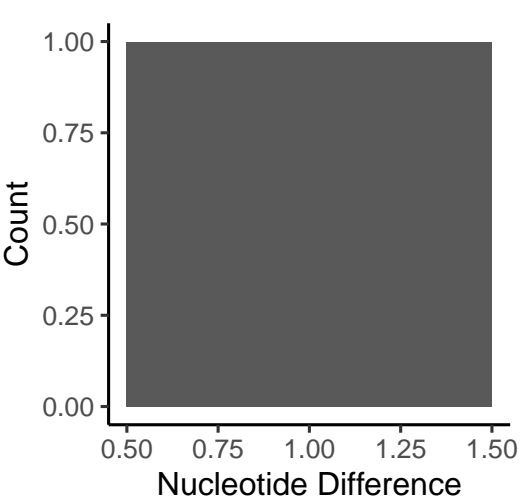
IGHV3-NL\_1\*01\_S5238

26 sequences assigned  
No exact matches.



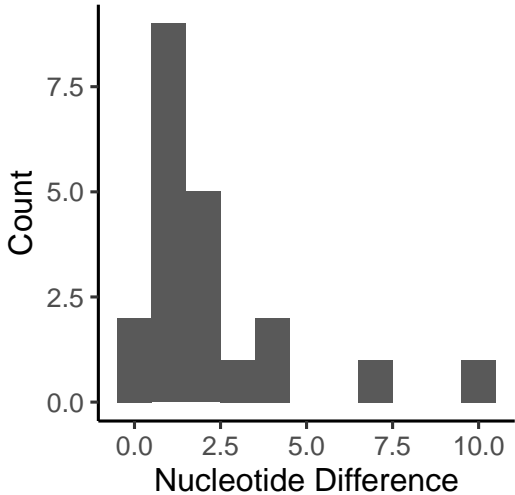
IGHV3-NL\_14\*01\_S1113

1 sequences assigned  
No exact matches.



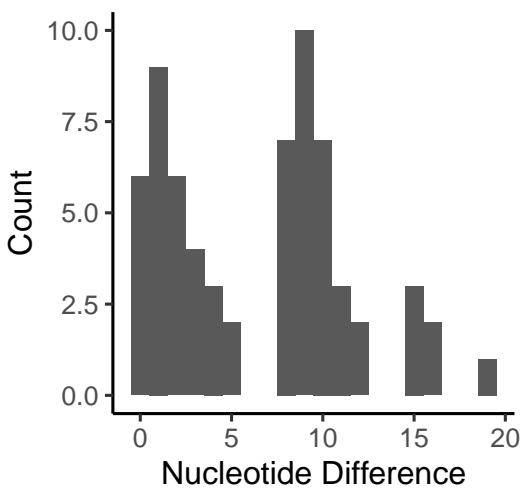
IGHV3-187\*01\_S1090

22 sequences assigned  
2 (9.1%) exact matches, in which:  
2 unique CDR3  
1 unique J



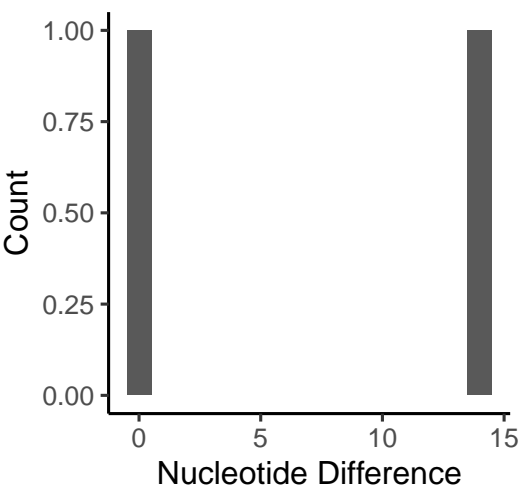
IGHV3-NL\_11\*01\_S3736

65 sequences assigned  
6 (9.2%) exact matches, in which:  
4 unique CDR3  
1 unique J



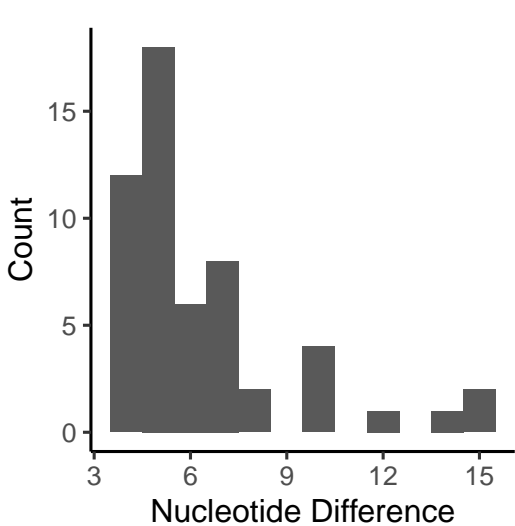
IGHV3-NL\_15\*01\_S0604

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



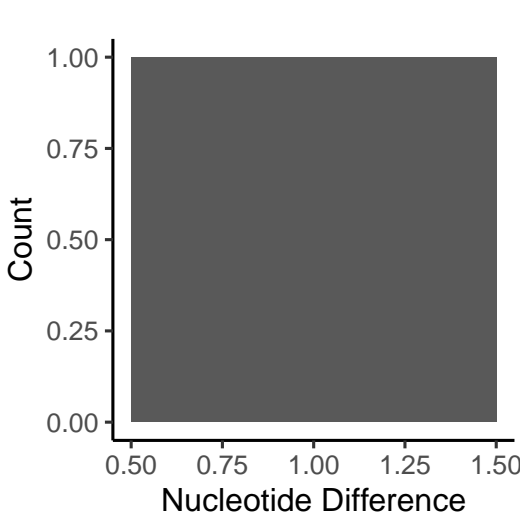
IGHV3-NL\_1\*01\_S2788

57 sequences assigned  
No exact matches.



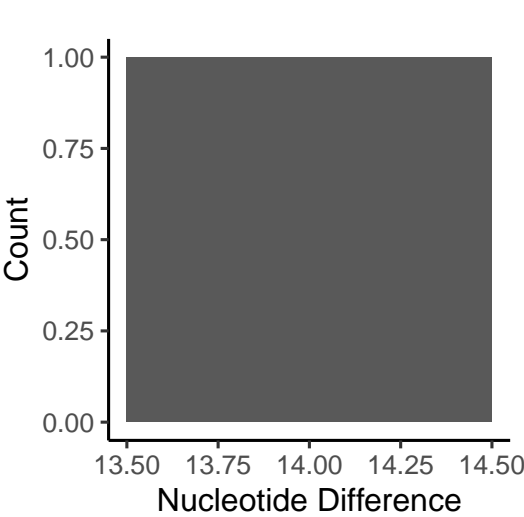
IGHV3-NL\_14\*01\_S0218

1 sequences assigned  
No exact matches.



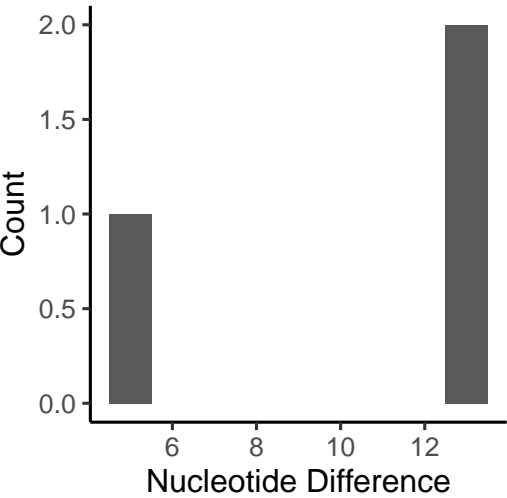
IGHV3-NL\_4\*01\_S9392

2 sequences assigned  
No exact matches.



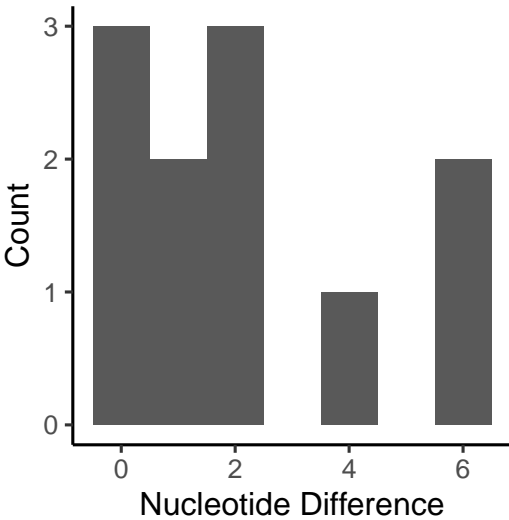
IGHV4-79\*02\_S9501

3 sequences assigned  
No exact matches.



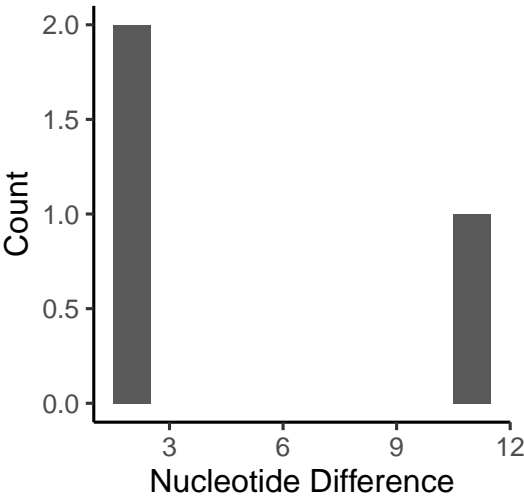
IGHV4-144\*01\_S8596

11 sequences assigned  
3 (27.3%) exact matches, in which:  
3 unique CDR3  
1 unique J



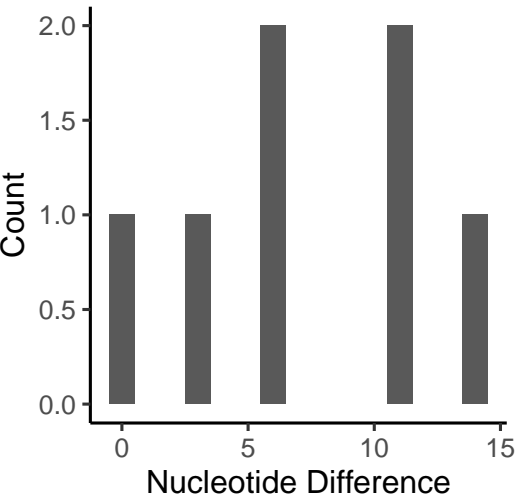
IGHV4-NL\_1\*01\_S1593

4 sequences assigned  
No exact matches.



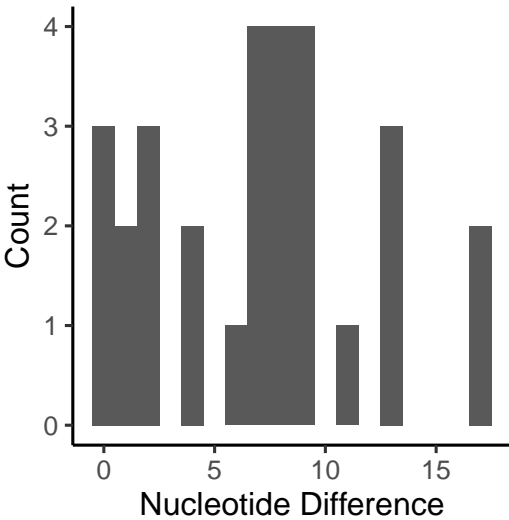
IGHV4-93\*01\_S0054

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



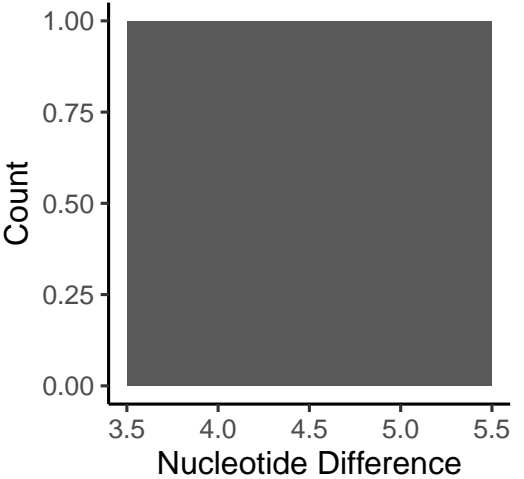
IGHV4-149\*01\_S9484

29 sequences assigned  
3 (10.3%) exact matches, in which:  
1 unique CDR3  
1 unique J



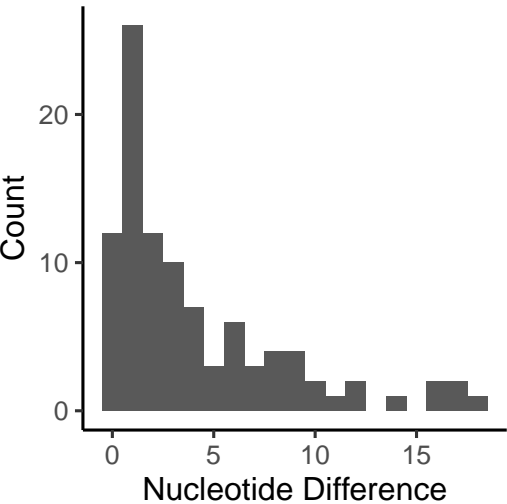
IGHV4-NL\_1\*01\_S5424

2 sequences assigned  
No exact matches.



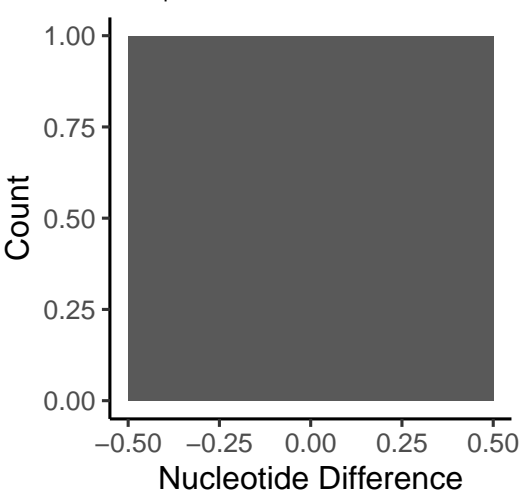
IGHV4-117\*01\_S0312

104 sequences assigned  
12 (11.5%) exact matches, in which:  
8 unique CDR3  
1 unique J



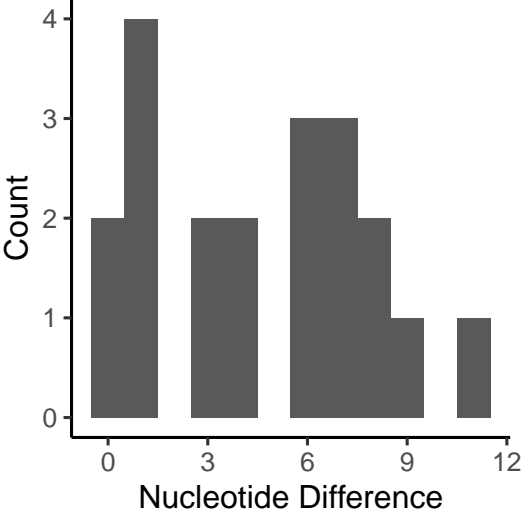
IGHV4-150\*01\_S6885

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



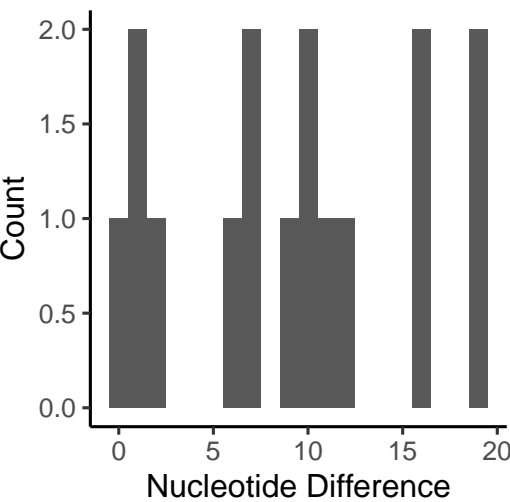
IGHV4-NL\_1\*01\_S9508

20 sequences assigned  
2 (10%) exact matches, in which:  
1 unique CDR3  
1 unique J



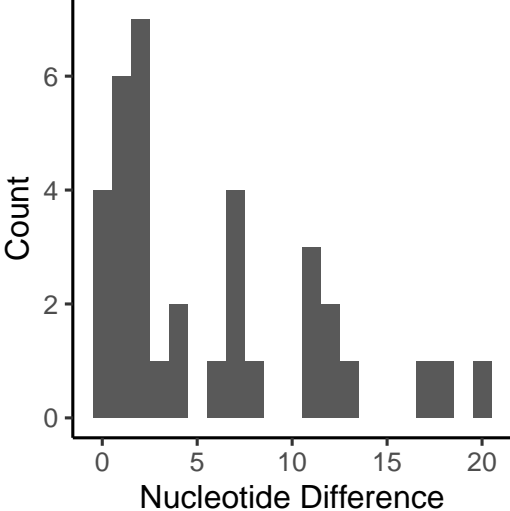
IGHV4-NL\_10\*01\_S7684

17 sequences assigned  
1 (5.9%) exact matches, in which:  
1 unique CDR3  
1 unique J



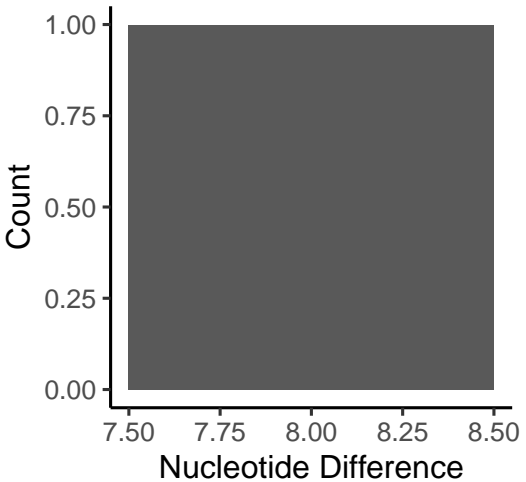
IGHV4-NL\_17\*01\_S3082

35 sequences assigned  
4 (11.4%) exact matches, in which:  
3 unique CDR3  
1 unique J



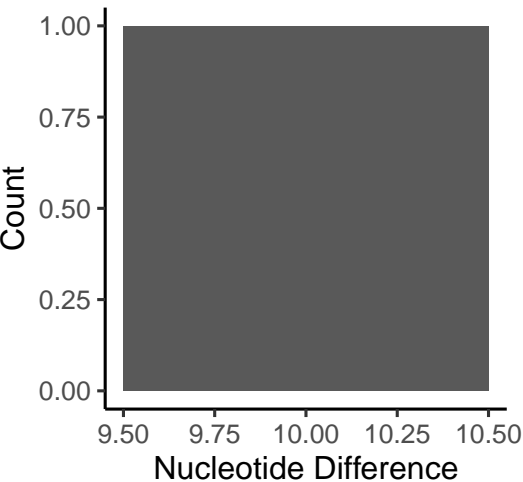
IGHV4-NL\_21\*01\_S0138

1 sequences assigned  
No exact matches.



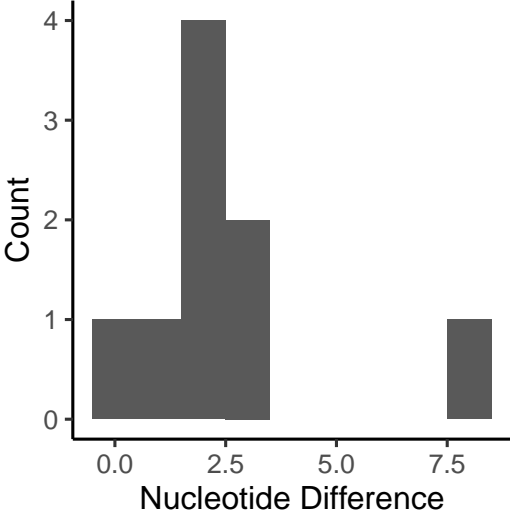
IGHV4-NL\_16\*01\_S2138

1 sequences assigned  
No exact matches.



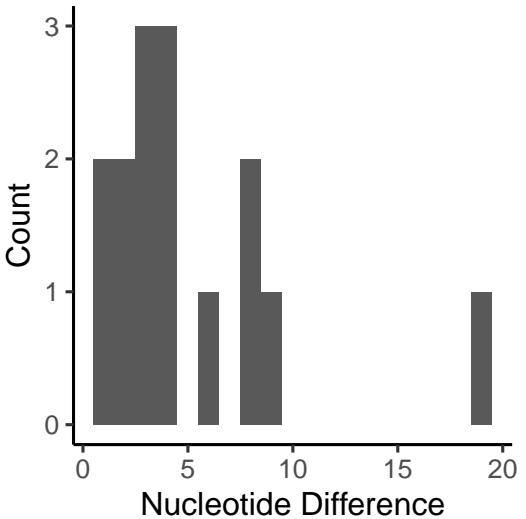
IGHV4-NL\_17\*01\_S5431

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



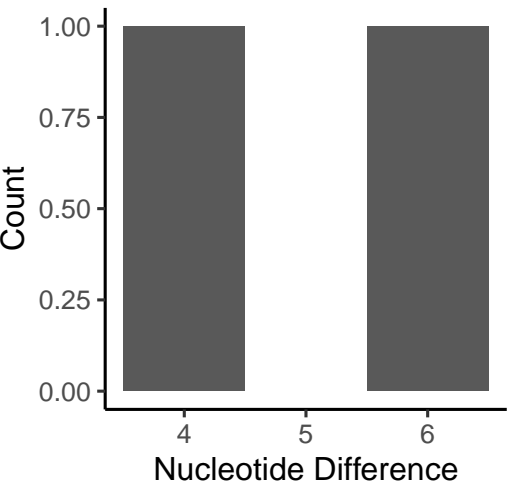
IGHV4-NL\_22\*01\_S6977

15 sequences assigned  
No exact matches.



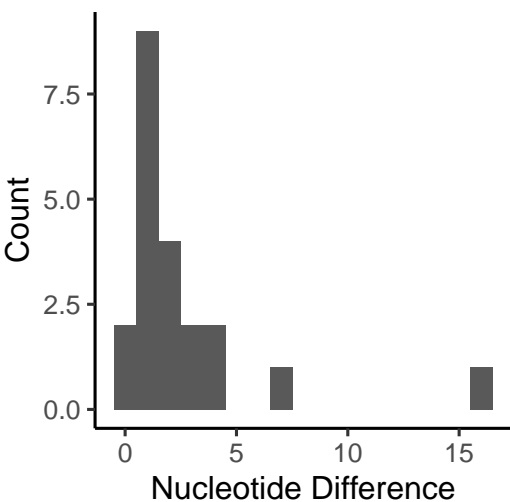
IGHV4-NL\_16\*01\_S3062

3 sequences assigned  
No exact matches.



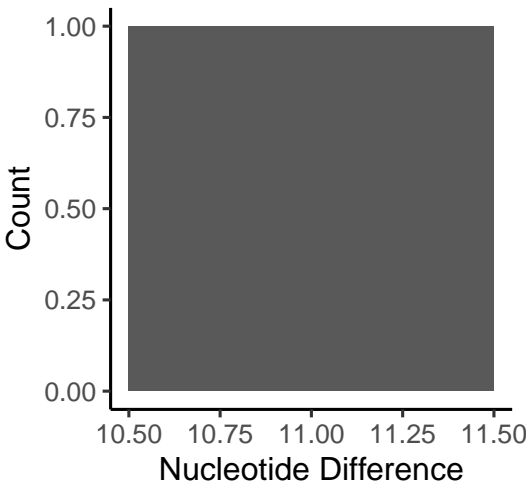
IGHV4-NL\_20\*01\_S6186

21 sequences assigned  
2 (9.5%) exact matches, in which:  
2 unique CDR3  
1 unique J



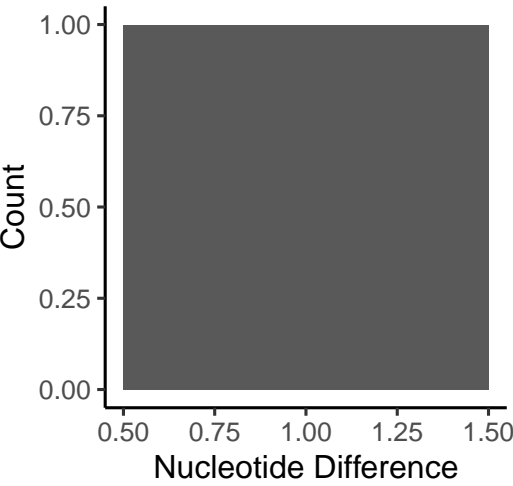
IGHV4-NL\_25\*01\_S6960

1 sequences assigned  
No exact matches.



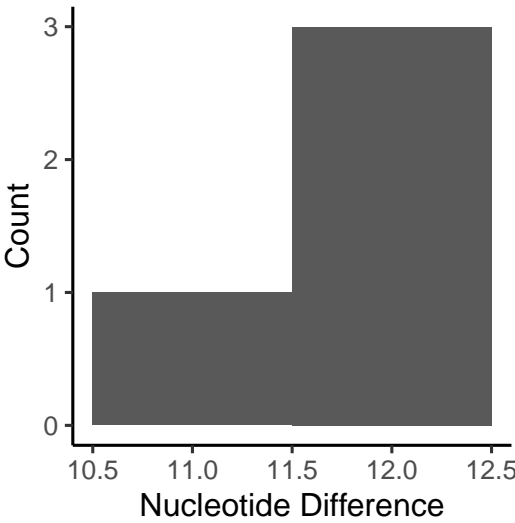
IGHV4-NL\_27\*01\_S5720

1 sequences assigned  
No exact matches.



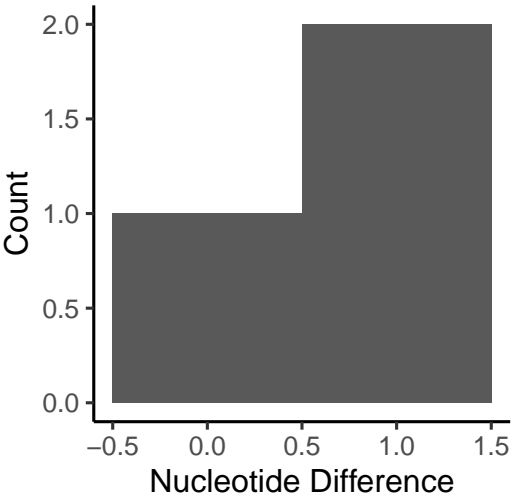
IGHV4-NL\_33\*01\_S9428

5 sequences assigned  
No exact matches.



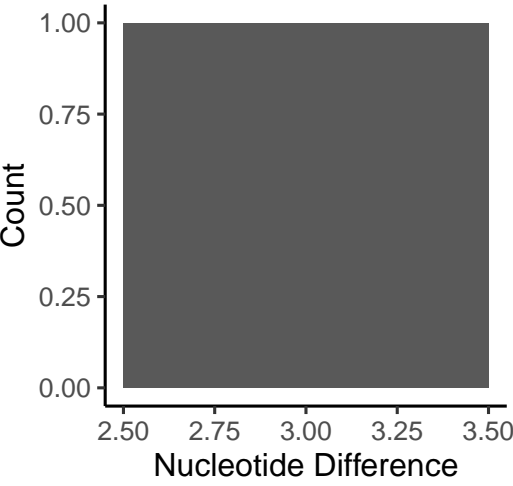
IGHV4-NL\_5\*01\_S5158

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



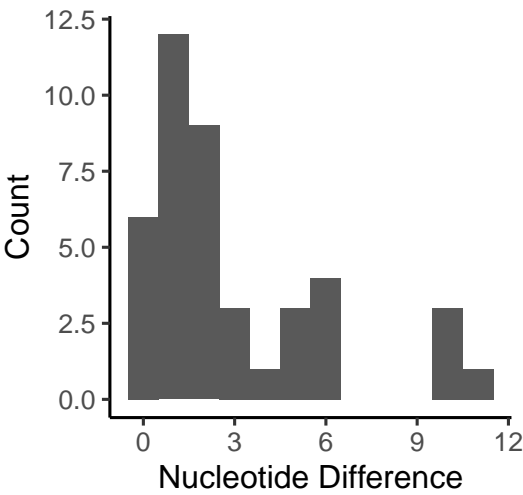
IGHV4-NL\_31\*01\_S7693

1 sequences assigned  
No exact matches.



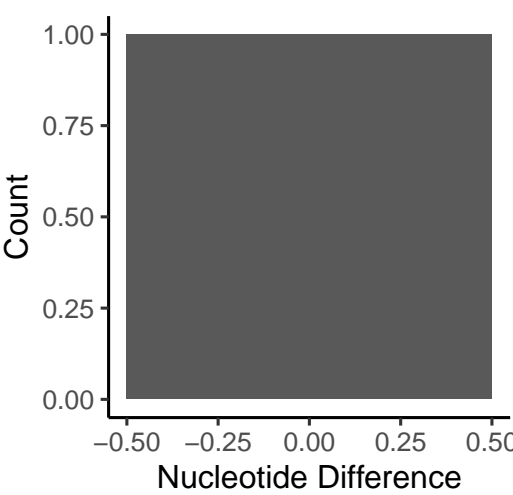
IGHV4-NL\_38\*01\_S8437

43 sequences assigned  
6 (14%) exact matches, in which:  
5 unique CDR3  
1 unique J



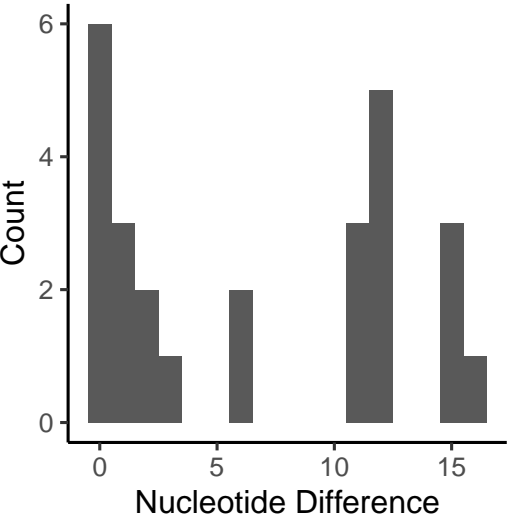
IGHV4-NL\_5\*01\_S7147

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



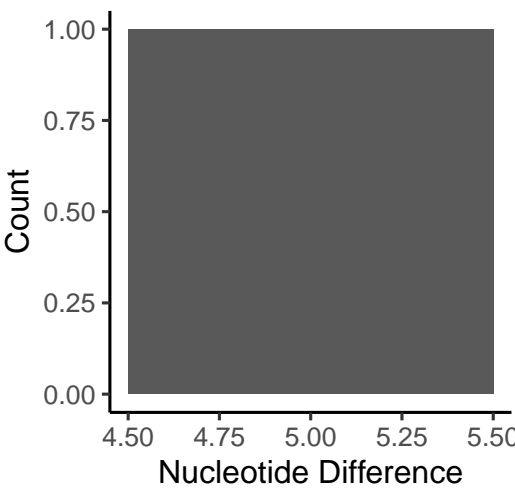
IGHV4-NL\_32\*01\_S3033

27 sequences assigned  
6 (22.2%) exact matches, in which:  
4 unique CDR3  
1 unique J



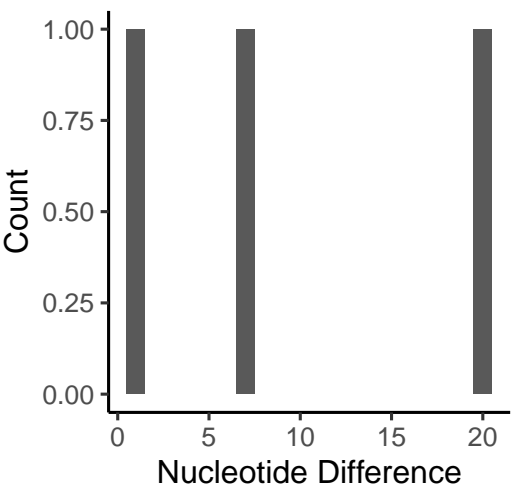
IGHV4-NL\_42\*01\_S3076

1 sequences assigned  
No exact matches.



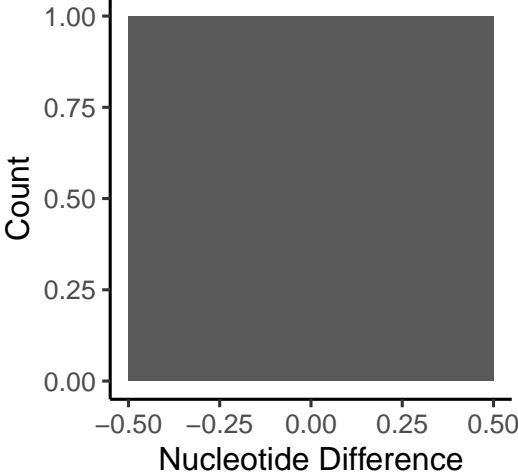
IGHV4-NL\_5\*01\_S8645

3 sequences assigned  
No exact matches.



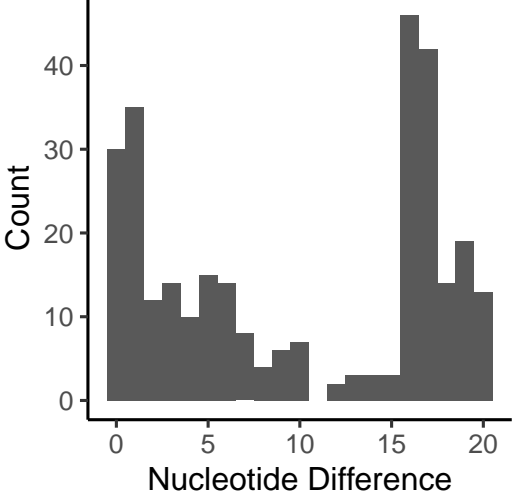
IGHV4–NL\_7\*02\_S0143

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

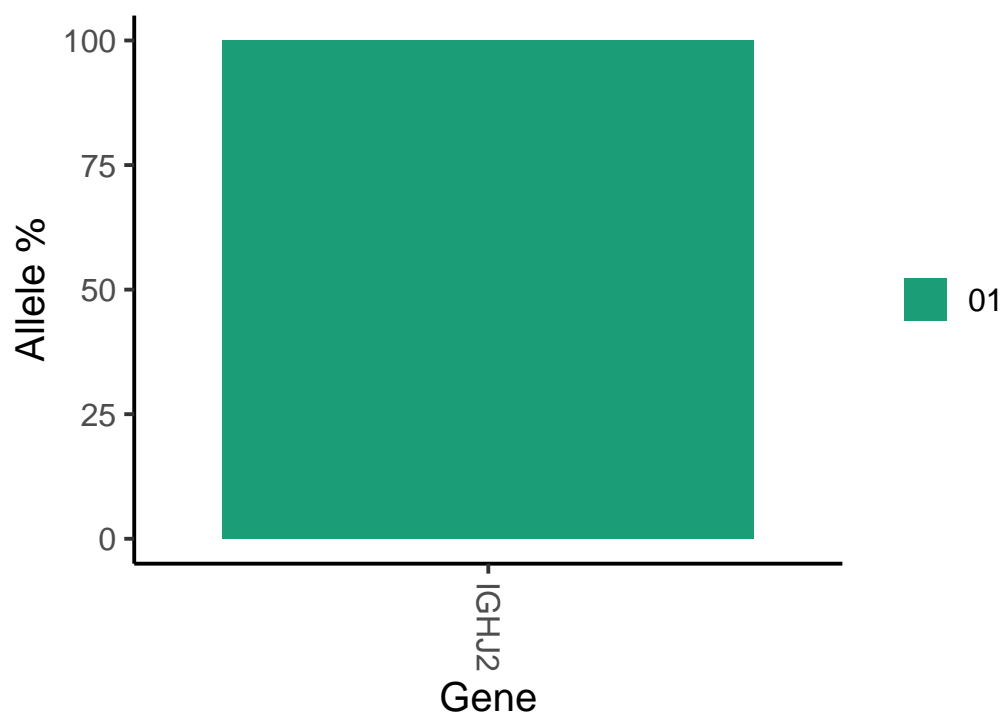


IGHV5–157\*01\_S5960

329 sequences assigned  
30 (9.1%) exact matches, in which:  
13 unique CDR3  
1 unique J



# Allele Usage





Warning – no inferred sequences found.