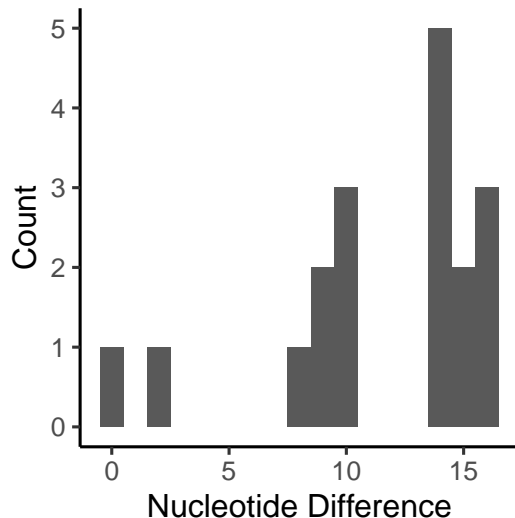


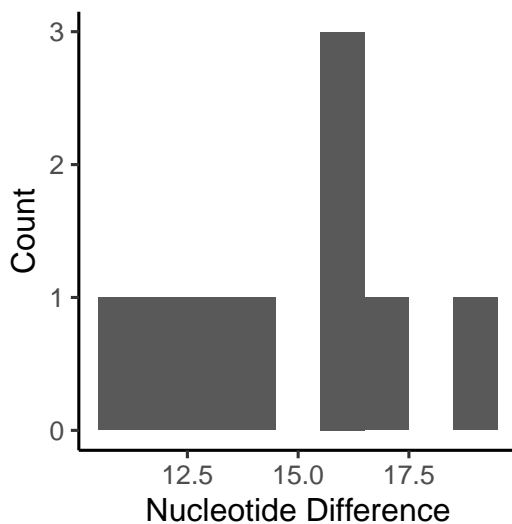
### IGHV1-2\*02

45 sequences assigned  
1 (2.2%) exact matches, in which:  
1 unique CDR3  
1 unique J



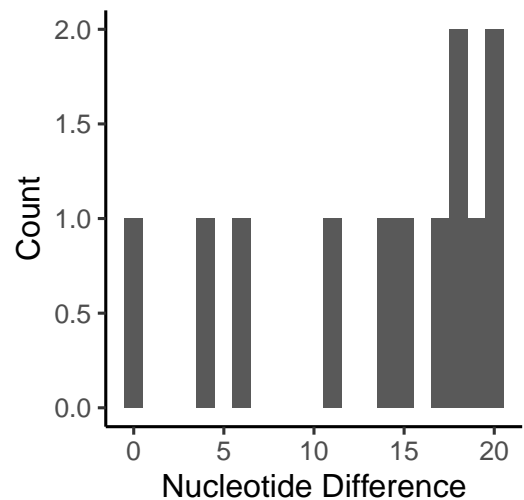
### IGHV1-18\*01

25 sequences assigned  
No exact matches.



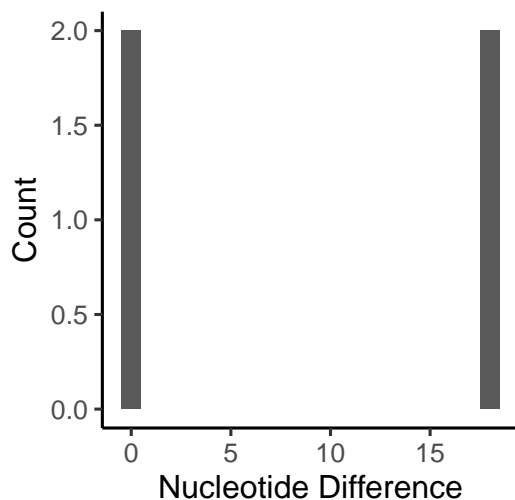
### IGHV1-46\*01

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



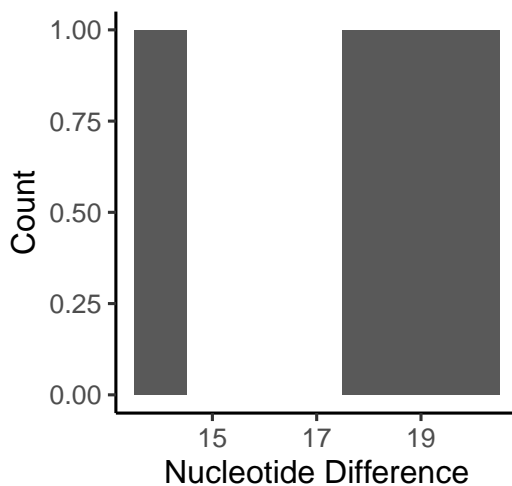
### IGHV1-2\*04

7 sequences assigned  
2 (28.6%) exact matches, in which:  
2 unique CDR3  
2 unique J



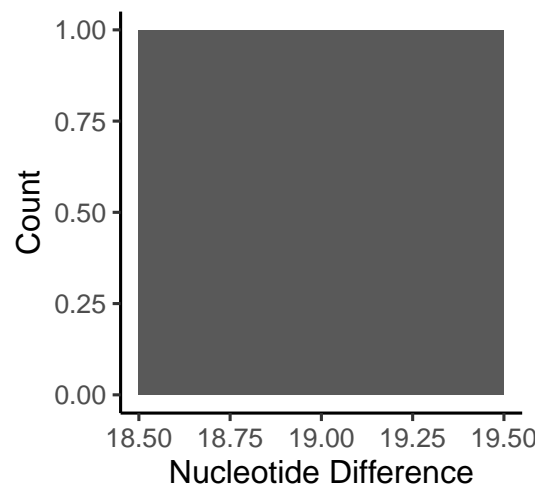
### IGHV1-24\*01

10 sequences assigned  
No exact matches.



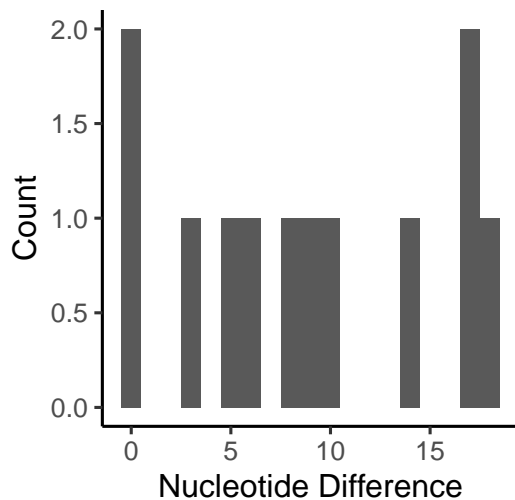
### IGHV1-69-2\*01

6 sequences assigned  
No exact matches.



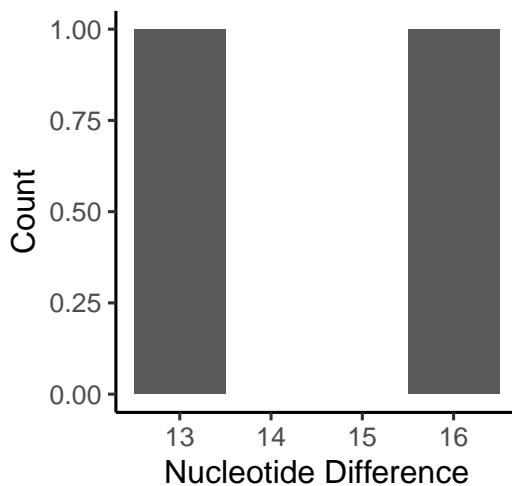
### IGHV1-8\*03

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



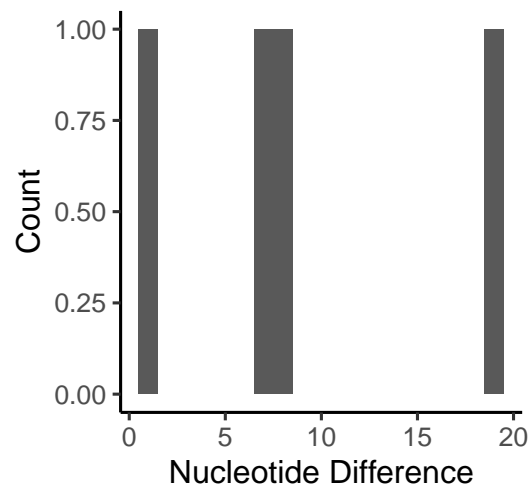
### IGHV1-45\*02

2 sequences assigned  
No exact matches.



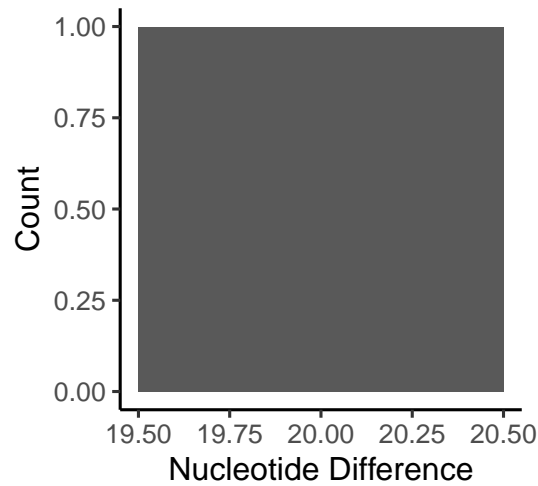
### IGHV1-69\*04

10 sequences assigned  
No exact matches.



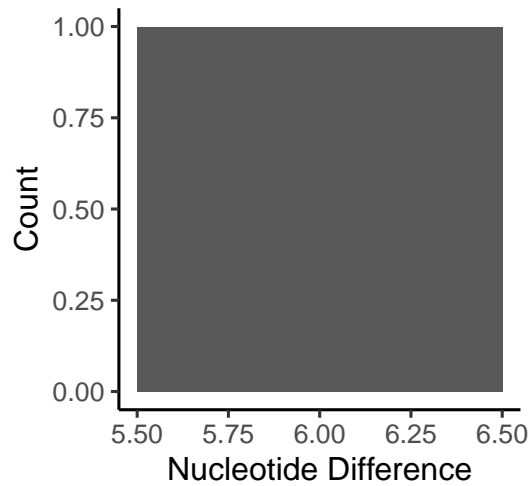
### IGHV1-69\*11

7 sequences assigned  
No exact matches.



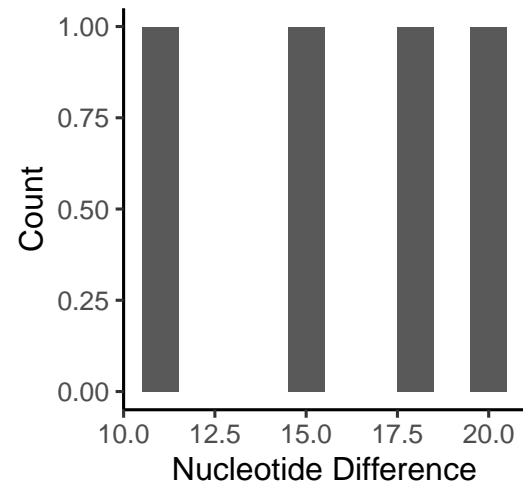
### IGHV2-26\*01

4 sequences assigned  
No exact matches.



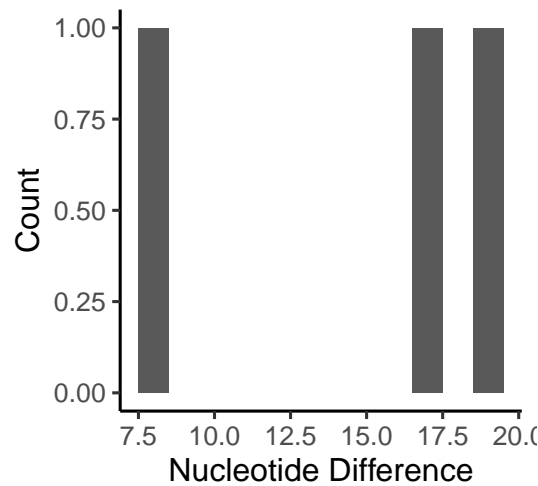
### IGHV3-9\*01

8 sequences assigned  
No exact matches.



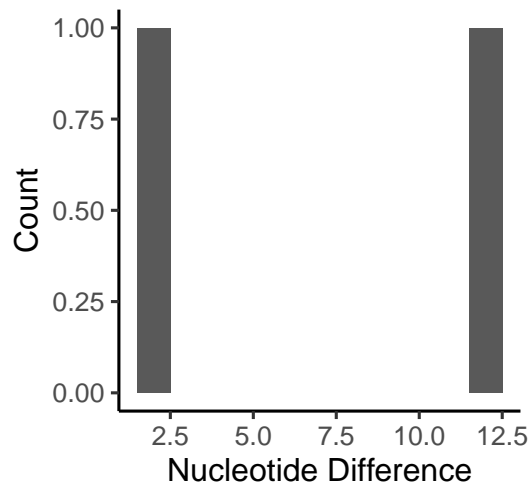
### IGHV1-69\*14

8 sequences assigned  
No exact matches.



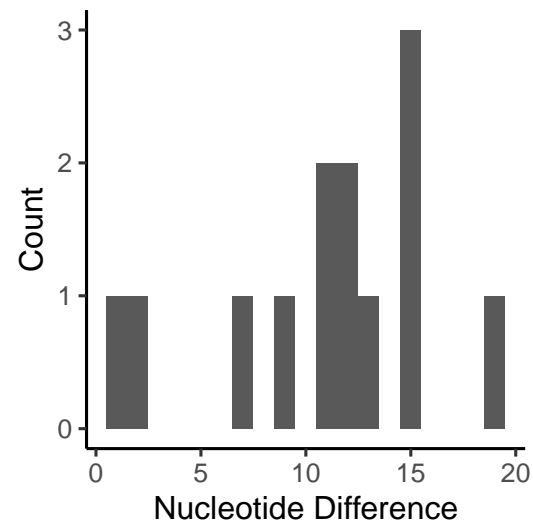
### IGHV2-70\*15

5 sequences assigned  
No exact matches.



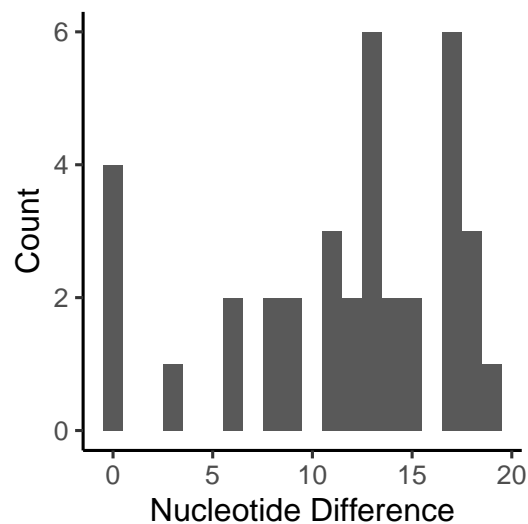
### IGHV3-9\*03

15 sequences assigned  
No exact matches.



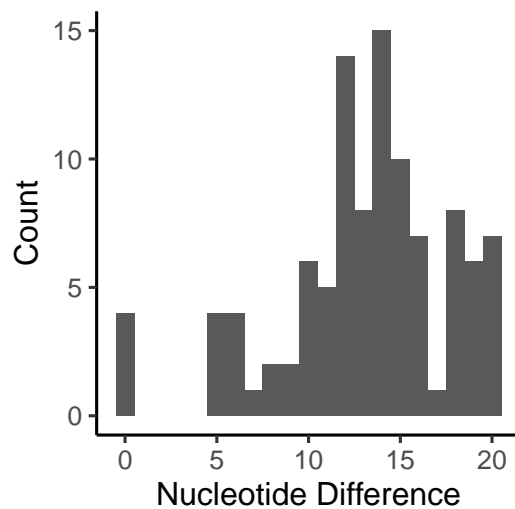
### IGHV2-5\*01

44 sequences assigned  
4 (9.1%) exact matches, in which:  
3 unique CDR3  
2 unique J



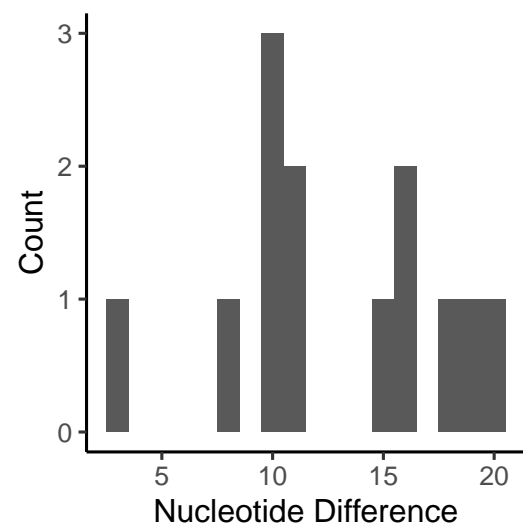
### IGHV3-7\*01

147 sequences assigned  
4 (2.7%) exact matches, in which:  
4 unique CDR3  
3 unique J



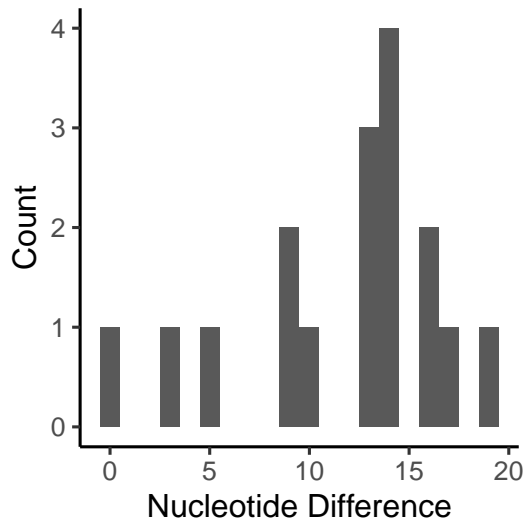
### IGHV3-11\*04

27 sequences assigned  
No exact matches.



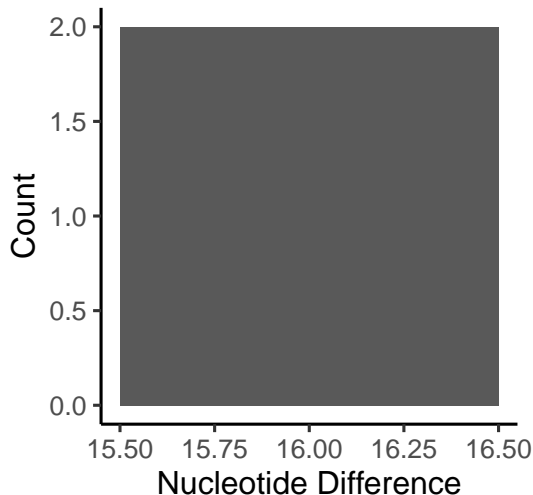
### IGHV3-15\*01

30 sequences assigned  
1 (3.3%) exact matches, in which:  
1 unique CDR3  
1 unique J



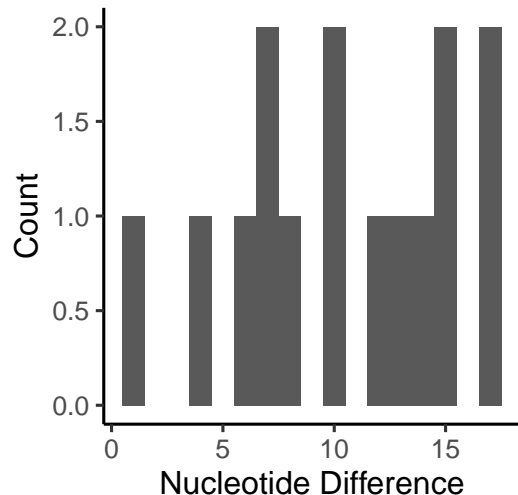
### IGHV3-21\*02

5 sequences assigned  
No exact matches.



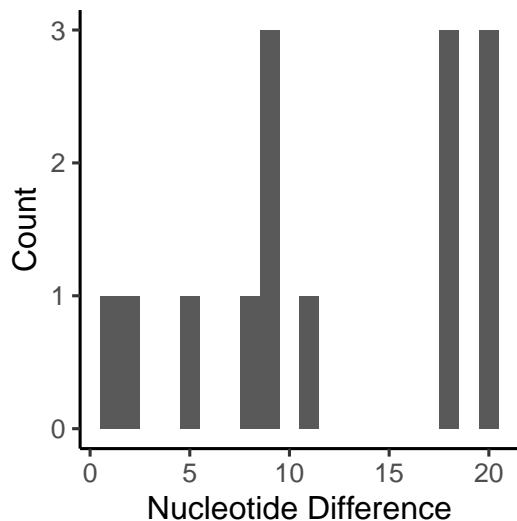
### IGHV3-33\*06

22 sequences assigned  
No exact matches.



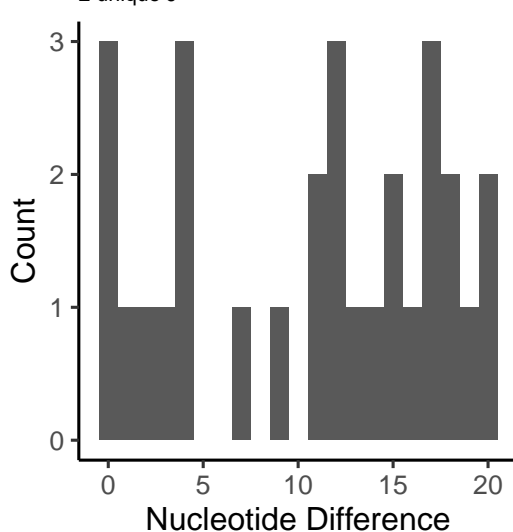
### IGHV3-20\*04

21 sequences assigned  
No exact matches.



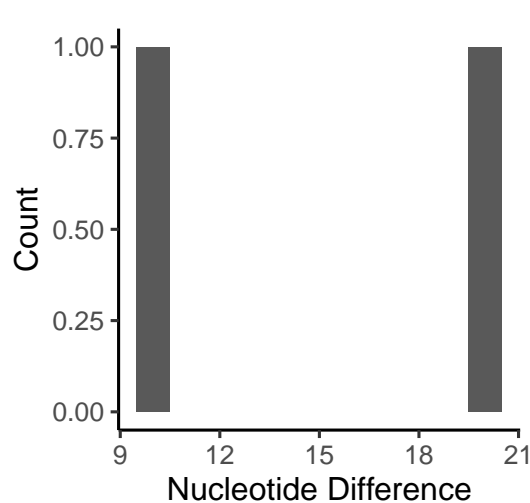
### IGHV3-30\*01

39 sequences assigned  
3 (7.7%) exact matches, in which:  
3 unique CDR3  
2 unique J



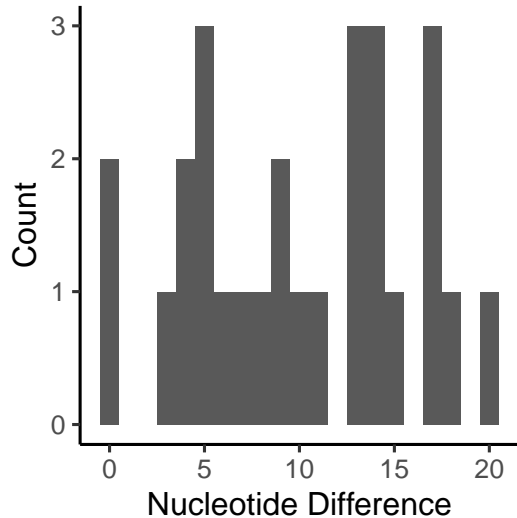
### IGHV3-43\*01

3 sequences assigned  
No exact matches.



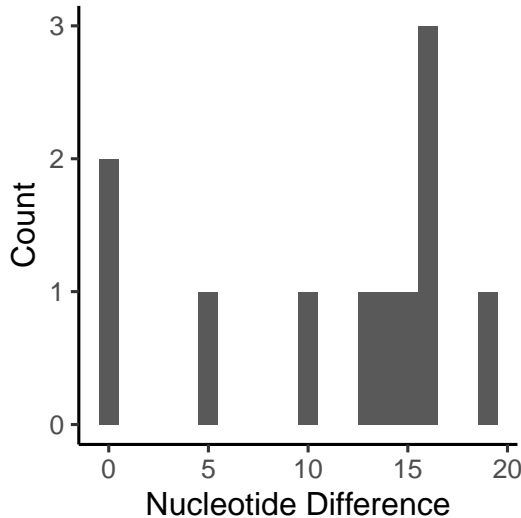
### IGHV3-21\*01

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



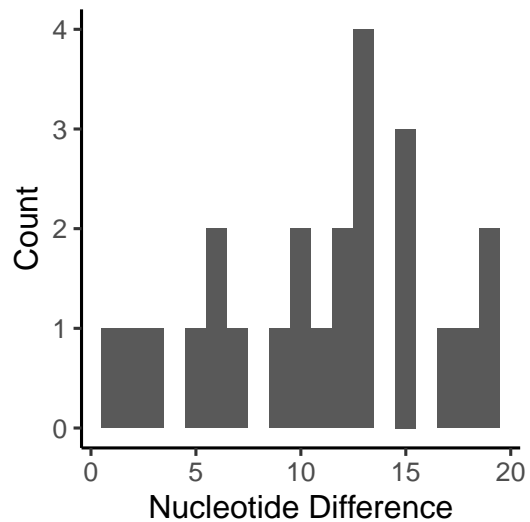
### IGHV3-30-3\*01

28 sequences assigned  
2 (7.1%) exact matches, in which:  
2 unique CDR3  
1 unique J



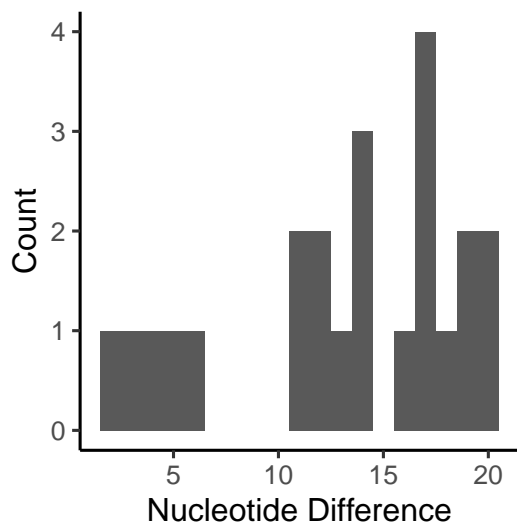
### IGHV3-48\*03

43 sequences assigned  
No exact matches.



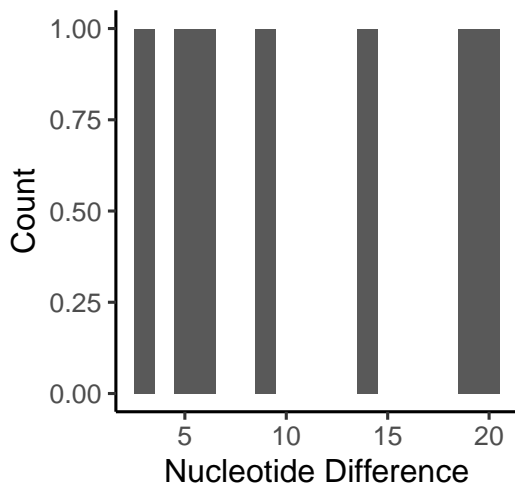
### IGHV3-48\*04

36 sequences assigned  
No exact matches.



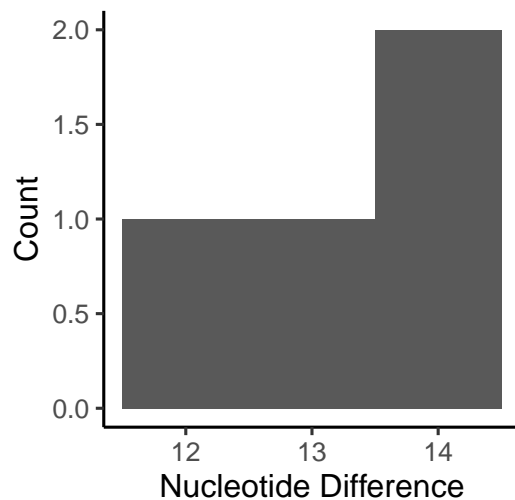
### IGHV3-53\*01

11 sequences assigned  
No exact matches.



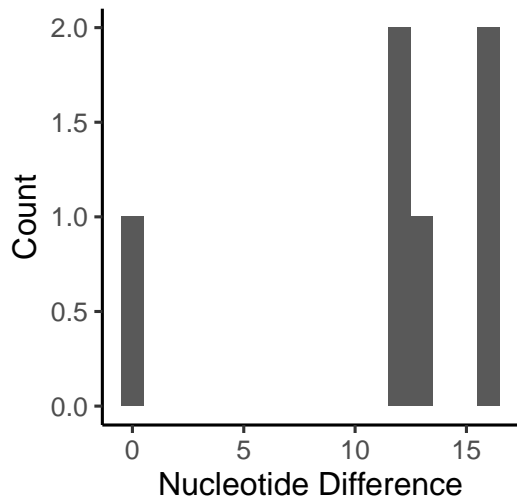
### IGHV3-66\*02

7 sequences assigned  
No exact matches.



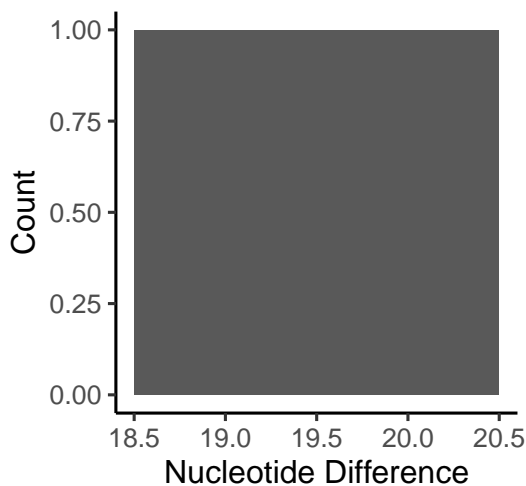
### IGHV3-49\*03

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



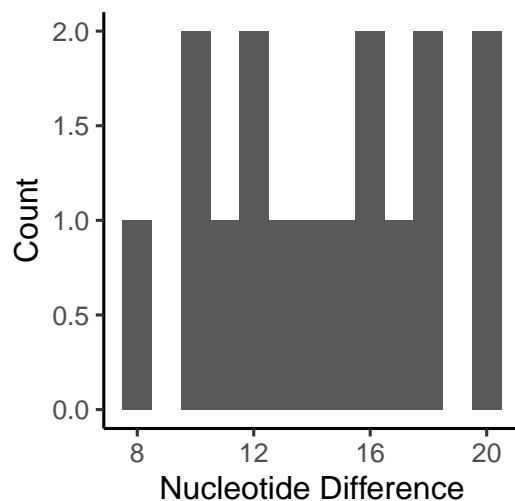
### IGHV3-64\*01

4 sequences assigned  
No exact matches.



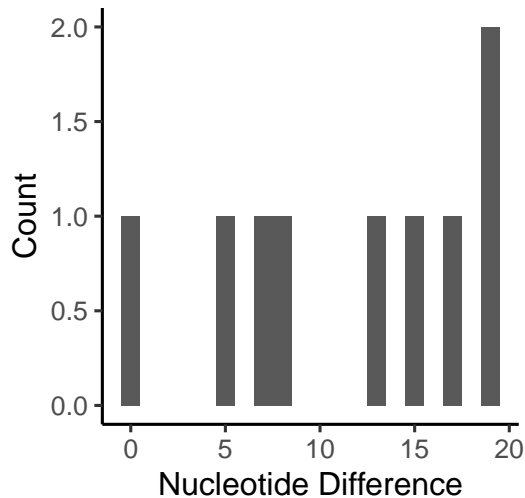
### IGHV3-72\*01

27 sequences assigned  
No exact matches.



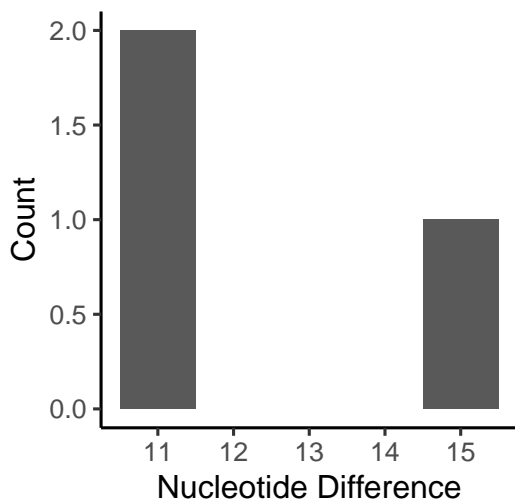
### IGHV3-49\*04

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



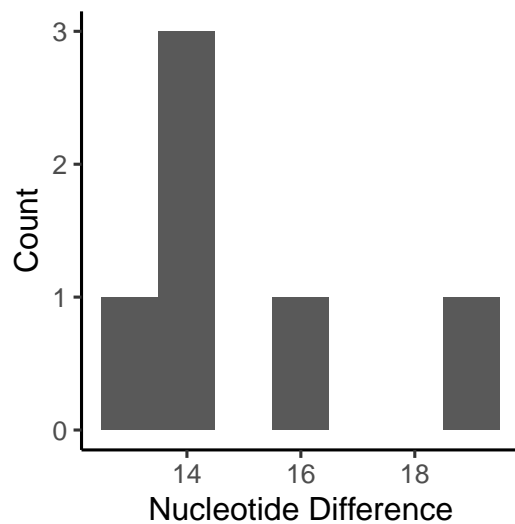
### IGHV3-64\*07

3 sequences assigned  
No exact matches.



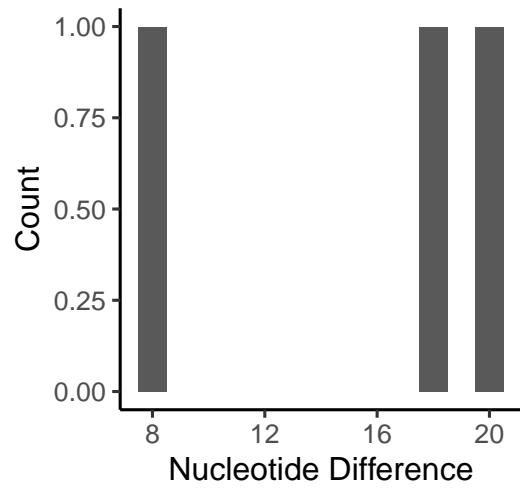
### IGHV3-73\*01

10 sequences assigned  
No exact matches.



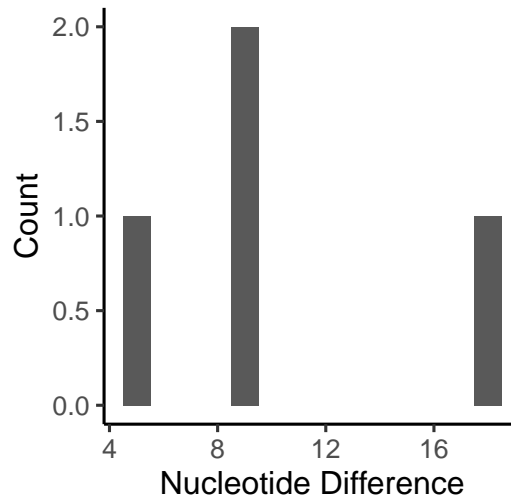
### IGHV3-74\*01

7 sequences assigned  
No exact matches.



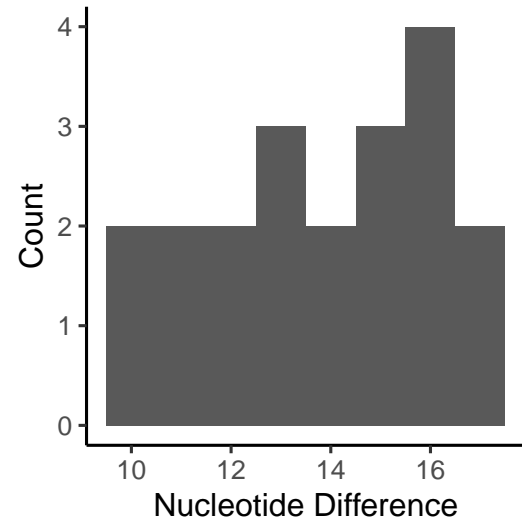
### IGHV3-43D\*04

5 sequences assigned  
No exact matches.



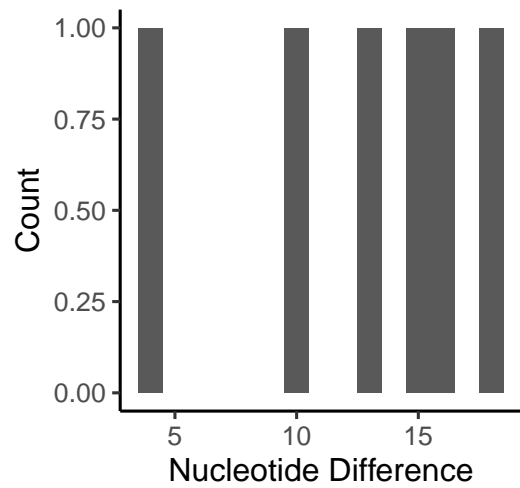
### IGHV4-28\*01

21 sequences assigned  
No exact matches.



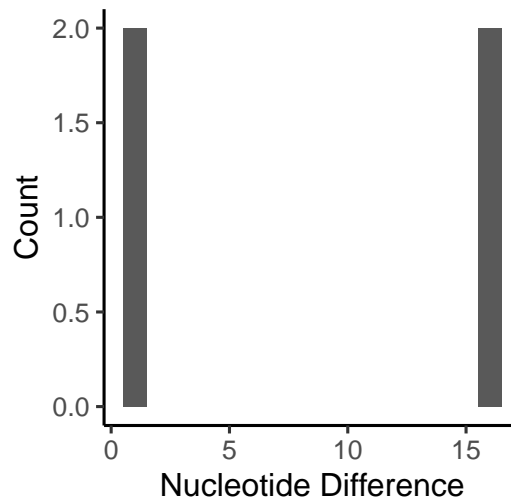
### IGHV3-74\*02

7 sequences assigned  
No exact matches.



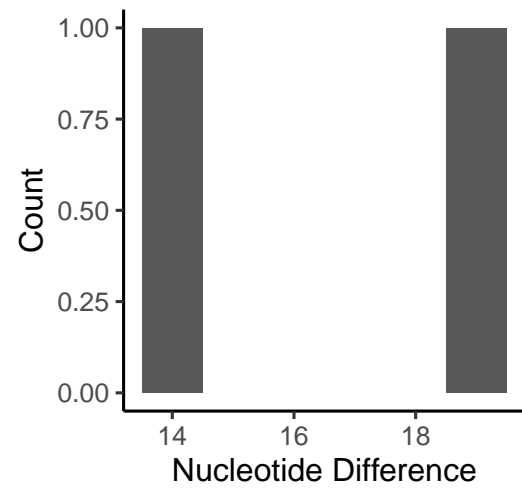
### IGHV4-4\*02

12 sequences assigned  
No exact matches.



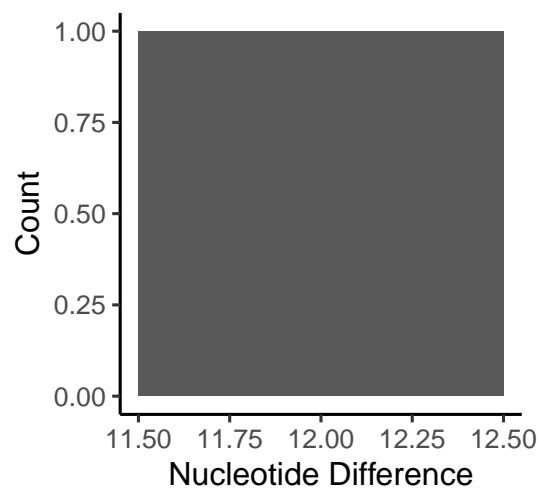
### IGHV4-30-4\*01

4 sequences assigned  
No exact matches.



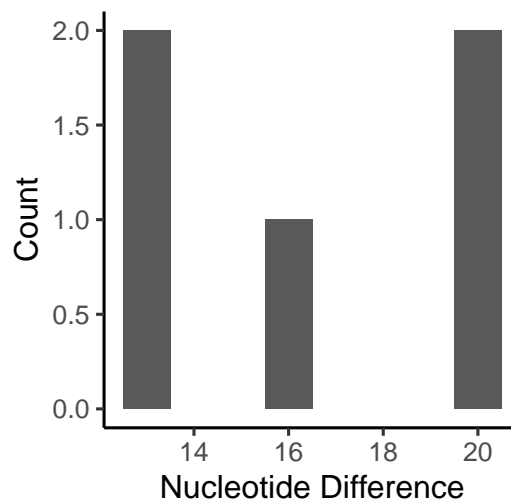
### IGHV3-74\*03

2 sequences assigned  
No exact matches.



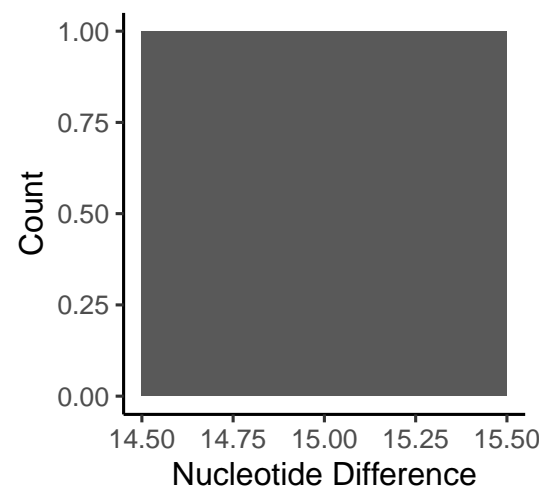
### IGHV4-4\*07

14 sequences assigned  
No exact matches.



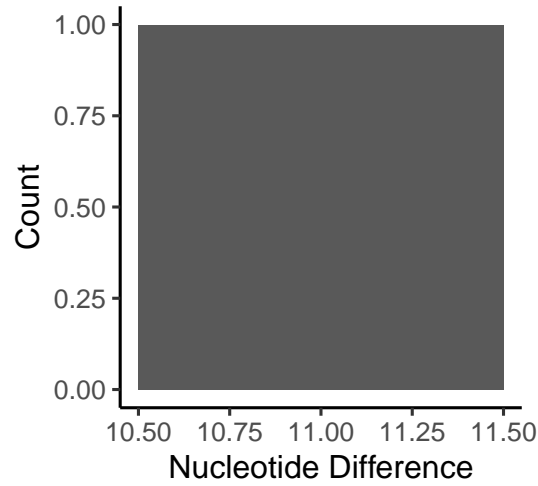
### IGHV4-30-4\*08

2 sequences assigned  
No exact matches.



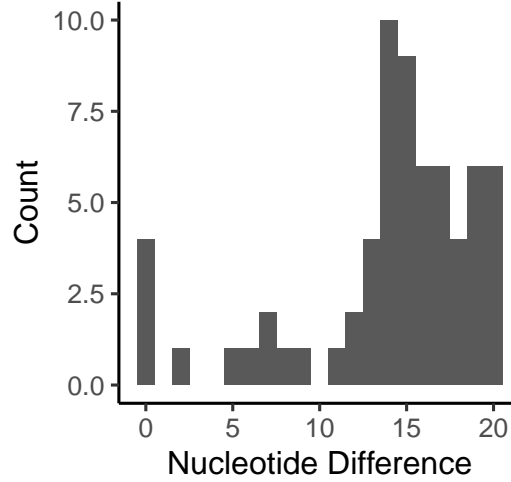
### IGHV4-31\*01

2 sequences assigned  
No exact matches.



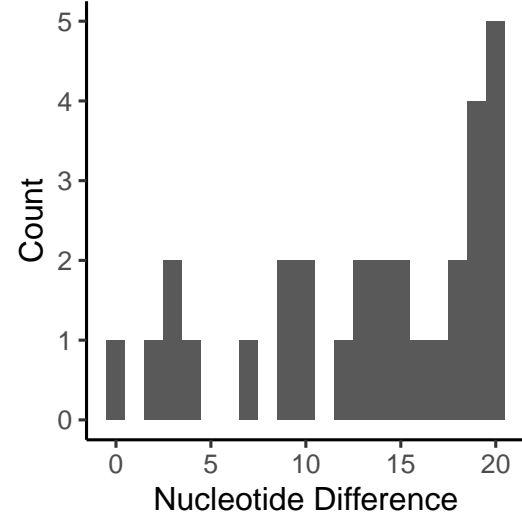
### IGHV4-38-2\*01

106 sequences assigned  
4 (3.8%) exact matches, in which:  
4 unique CDR3  
2 unique J



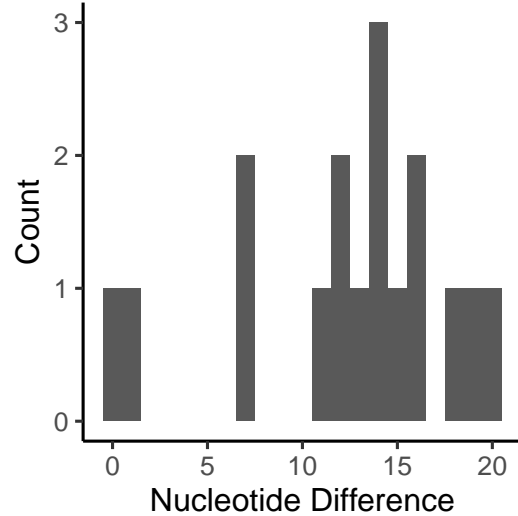
### IGHV4-39\*07

64 sequences assigned  
1 (1.6%) exact matches, in which:  
1 unique CDR3  
1 unique J



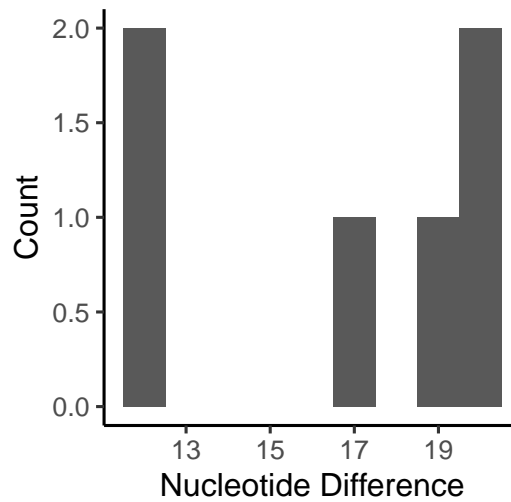
### IGHV4-34\*01

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



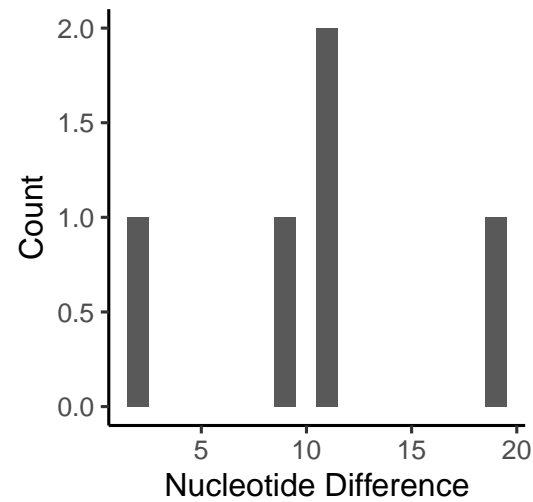
### IGHV4-38-2\*02

26 sequences assigned  
No exact matches.



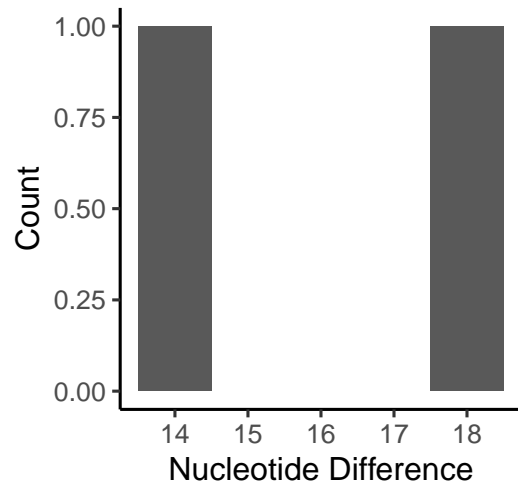
### IGHV4-59\*01

13 sequences assigned  
No exact matches.



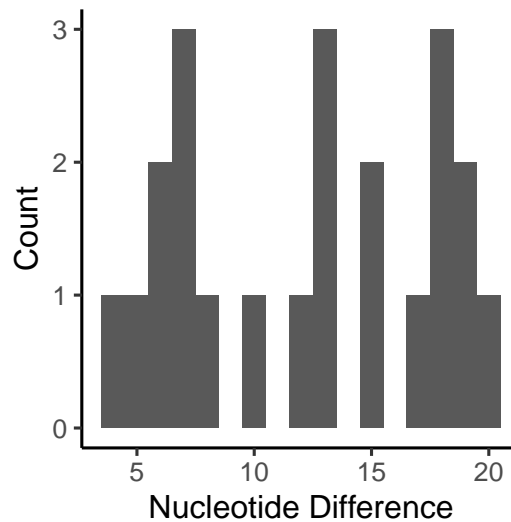
### IGHV4-34\*02

11 sequences assigned  
No exact matches.



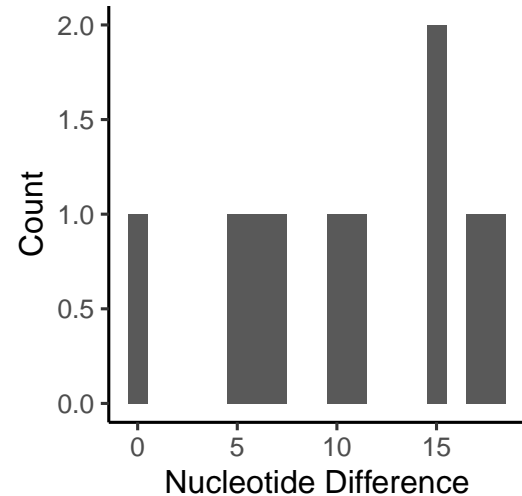
### IGHV4-39\*01

50 sequences assigned  
No exact matches.



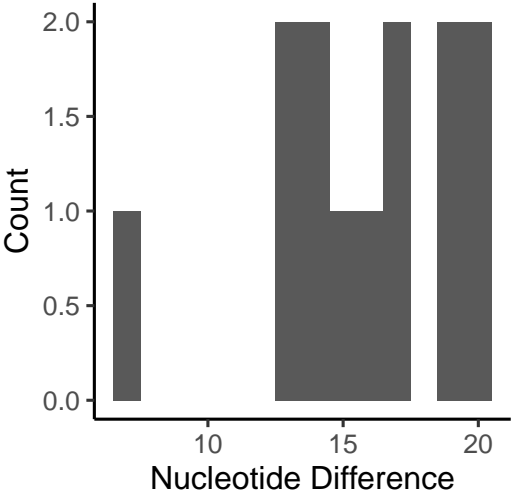
### IGHV4-59\*08

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



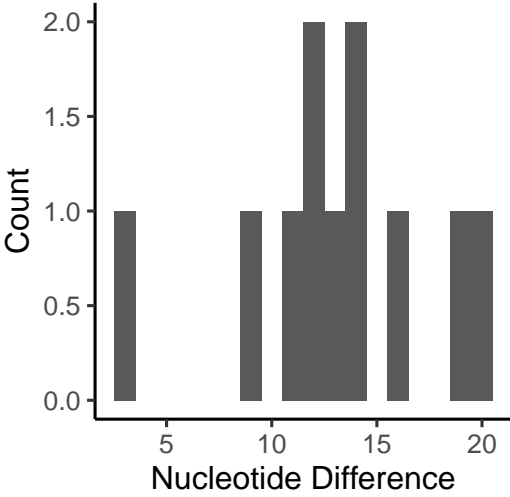
IGHV4-59\*11

26 sequences assigned  
No exact matches.



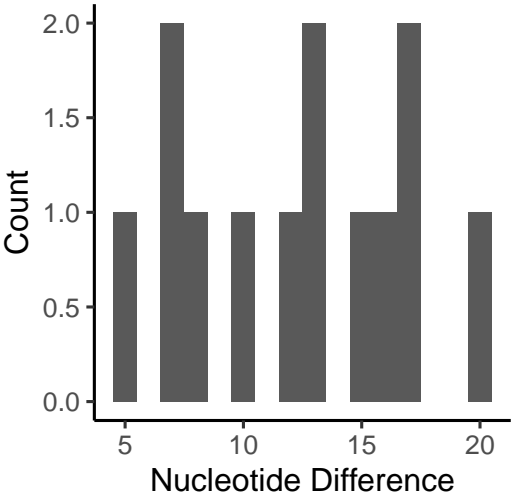
IGHV5-51\*03

14 sequences assigned  
No exact matches.



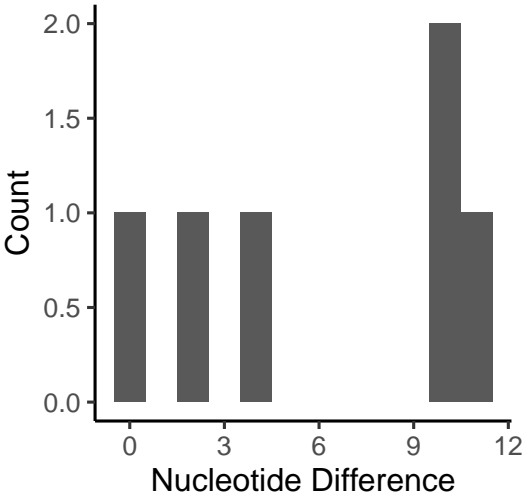
IGHV4-61\*02

28 sequences assigned  
No exact matches.



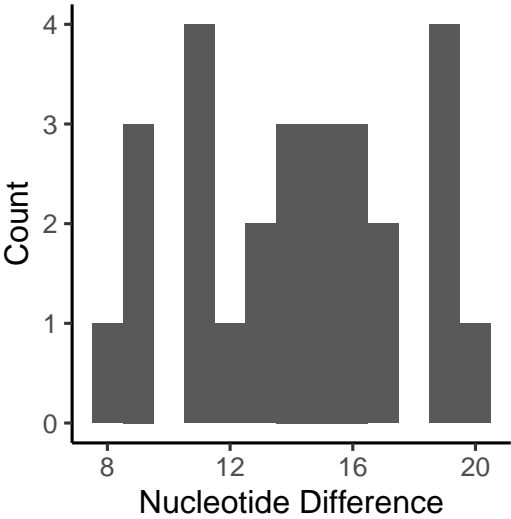
IGHV6-1\*01

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



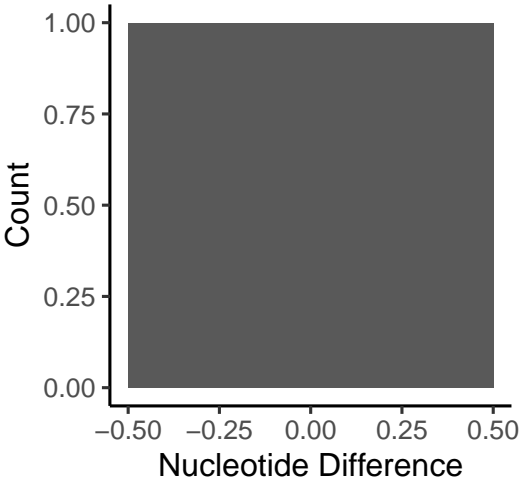
IGHV5-51\*01

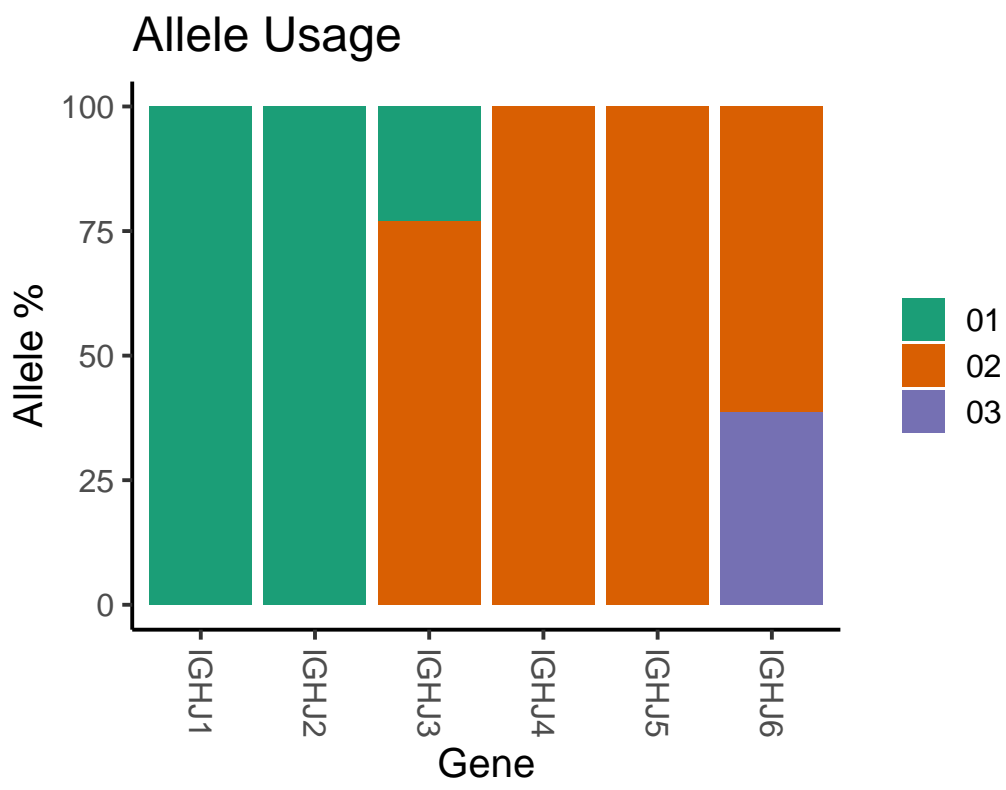
36 sequences assigned  
No exact matches.



IGHV7-4-1\*01

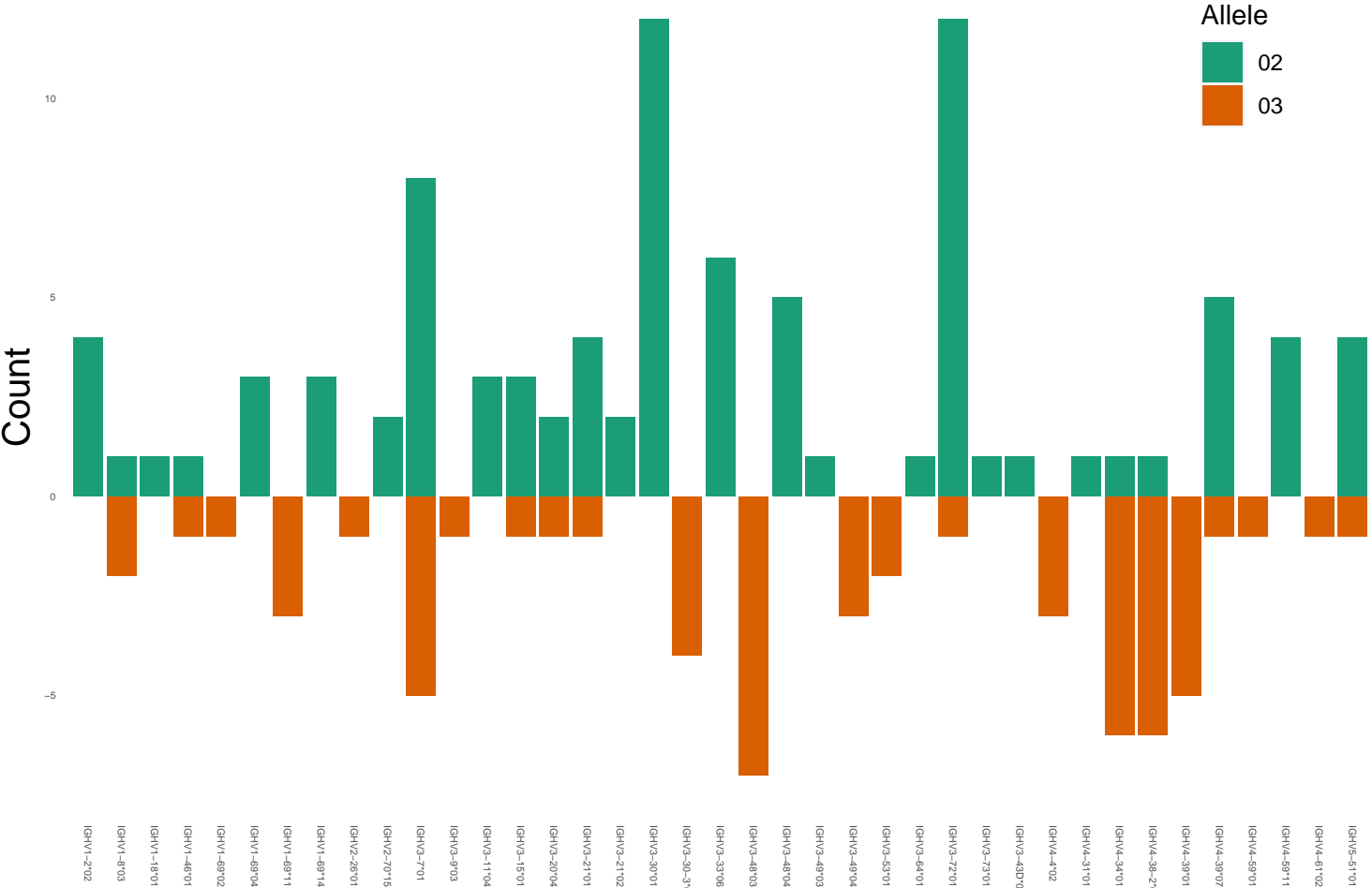
1 sequences assigned  
1 (100%) exact matches, in which:  
1 unique CDR3  
1 unique J







Sequence Count by IGHJ6 allele usage



Warning – no inferred sequences found.