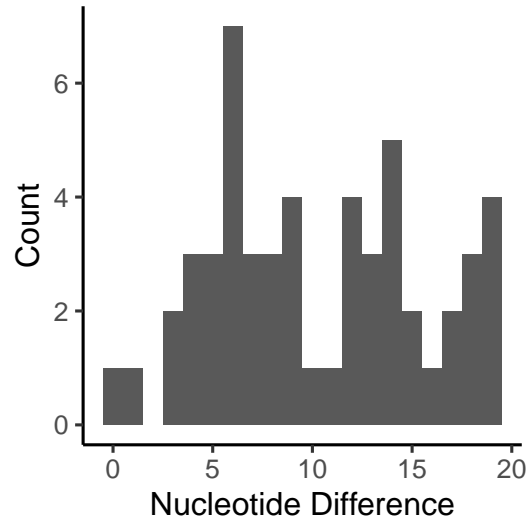


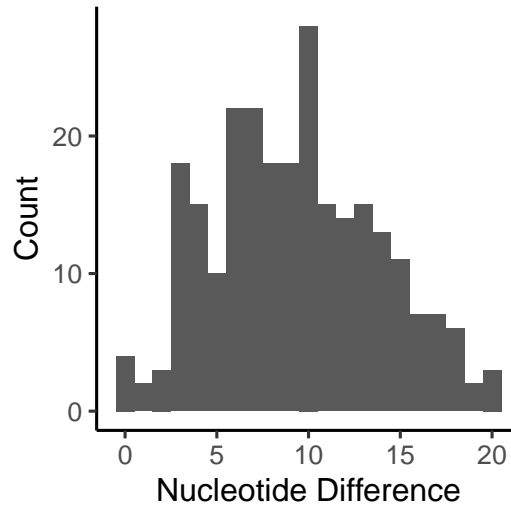
### IGHV1–2\*04

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



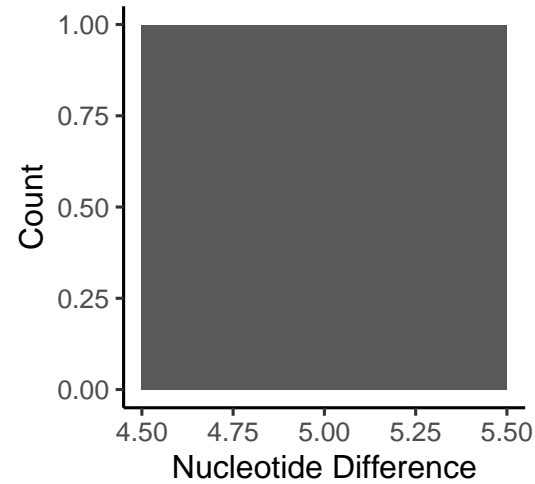
### IGHV1–18\*01

312 sequences assigned  
4 (1.3%) exact matches, in which:  
4 unique CDR3  
1 unique J



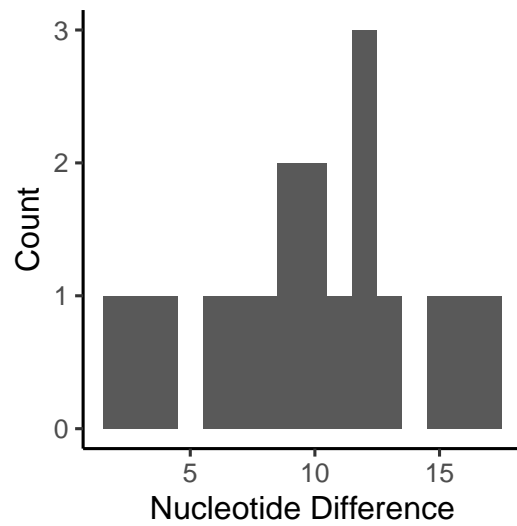
### IGHV1–45\*02

5 sequences assigned  
No exact matches.



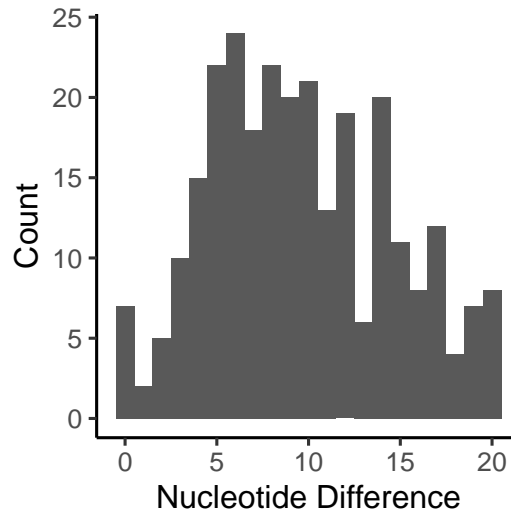
### IGHV1–3\*04

20 sequences assigned  
No exact matches.



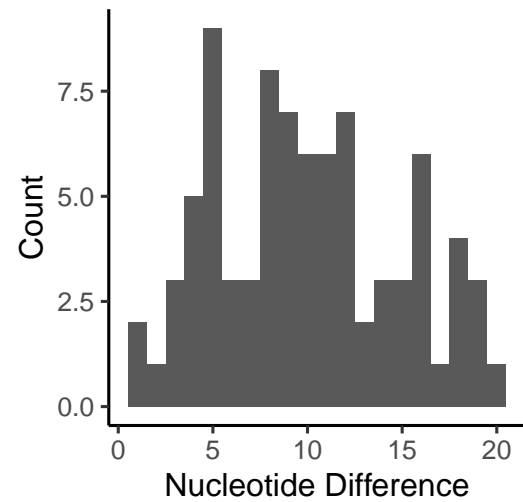
### IGHV1–18\*04

308 sequences assigned  
7 (2.3%) exact matches, in which:  
7 unique CDR3  
4 unique J



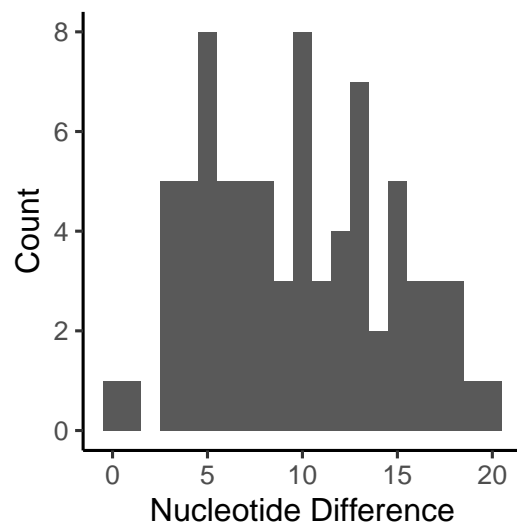
### IGHV1–46\*01

101 sequences assigned  
No exact matches.



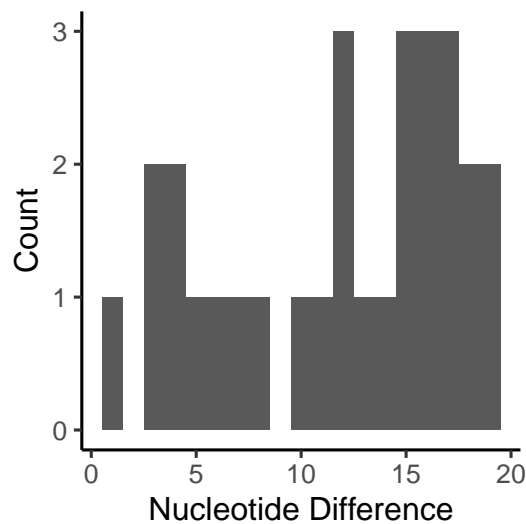
### IGHV1–3\*01\_05

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



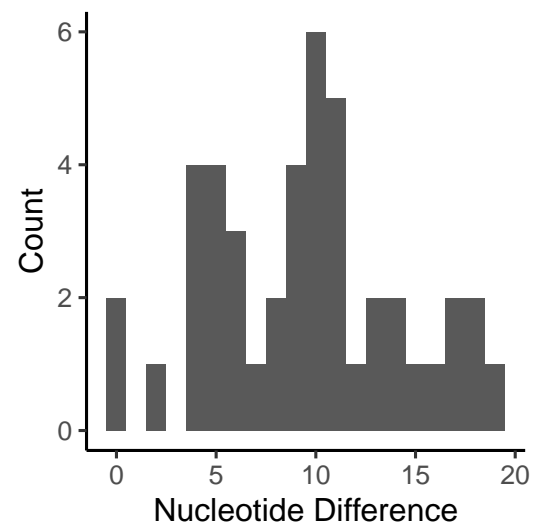
### IGHV1–24\*01

38 sequences assigned  
No exact matches.



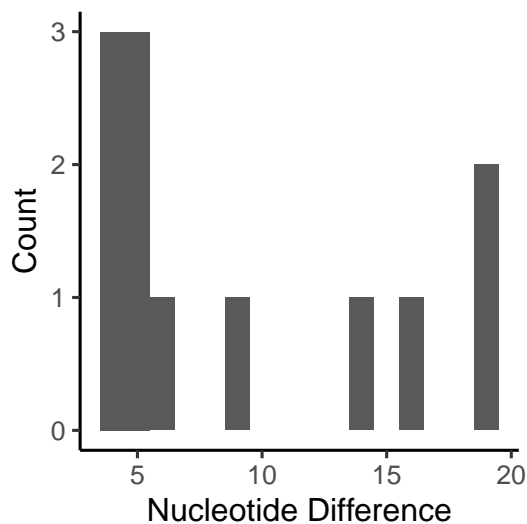
### IGHV1–46\*04

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



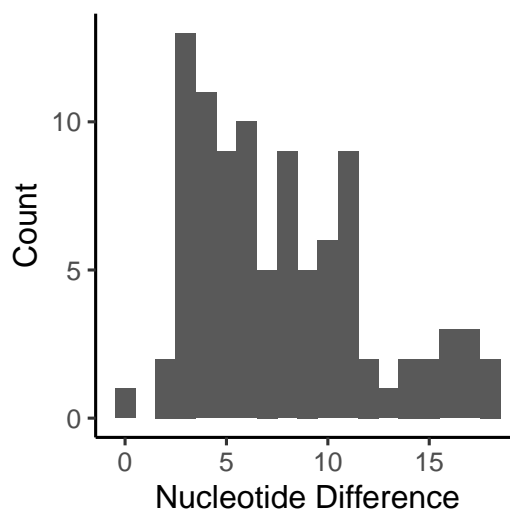
### IGHV1–58\*02

24 sequences assigned  
No exact matches.



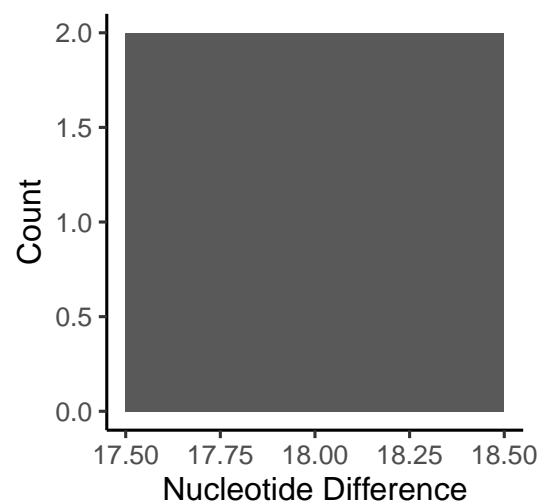
### IGHV2–5\*02

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



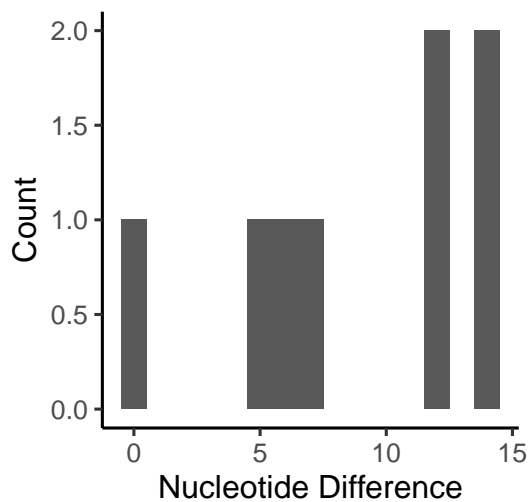
### IGHV2–70D\*04

2 sequences assigned  
No exact matches.



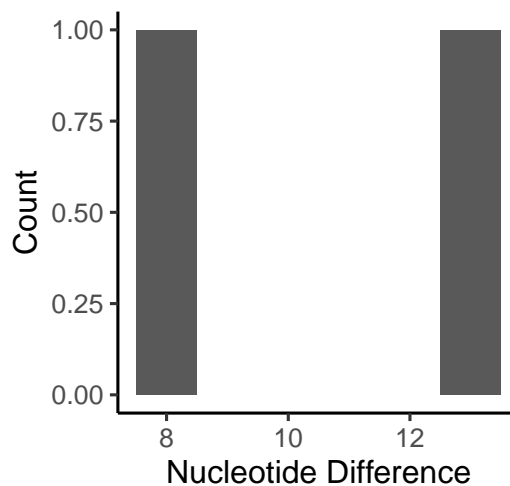
### IGHV1–58\*01\_03

42 sequences assigned  
1 (2.4%) exact matches, in which:  
1 unique CDR3  
1 unique J



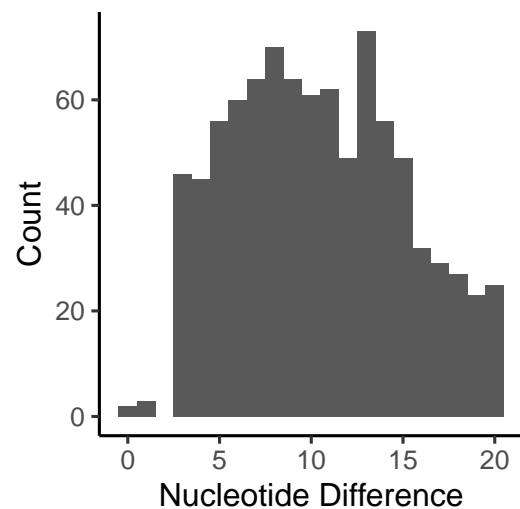
### IGHV2–26\*01

5 sequences assigned  
No exact matches.



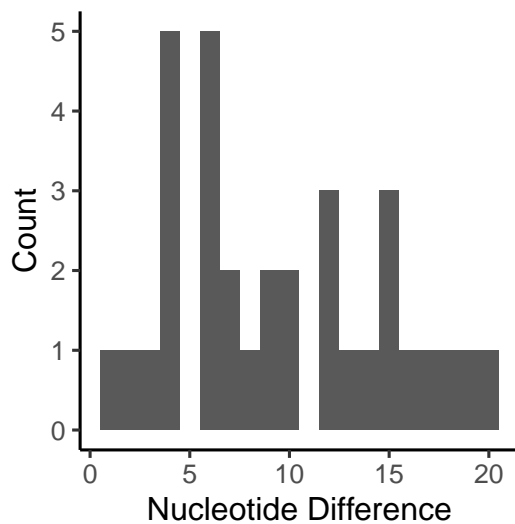
### IGHV3–7\*03

948 sequences assigned  
2 (0.2%) exact matches, in which:  
1 unique CDR3  
1 unique J



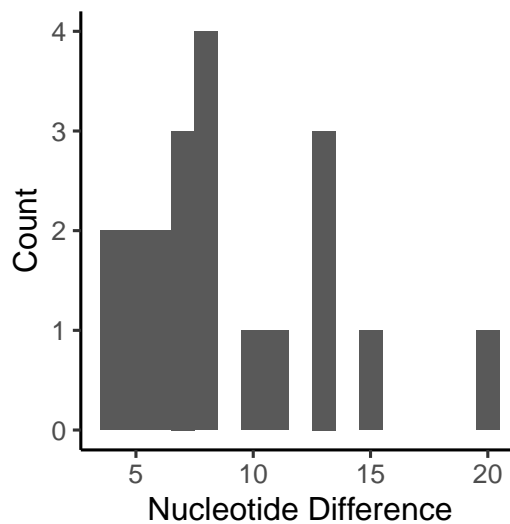
### IGHV1–69\*10

61 sequences assigned  
No exact matches.



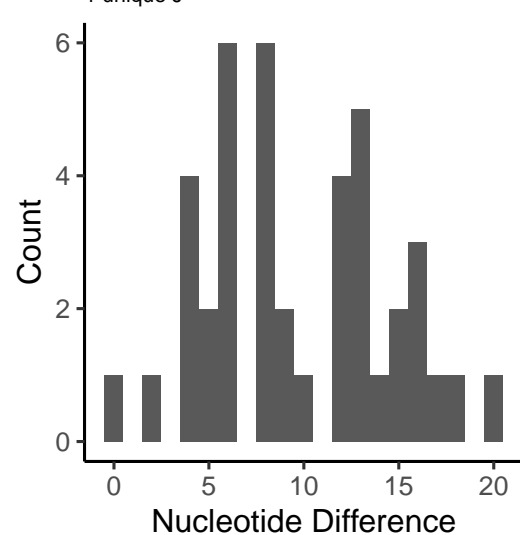
### IGHV2–70\*01

23 sequences assigned  
No exact matches.



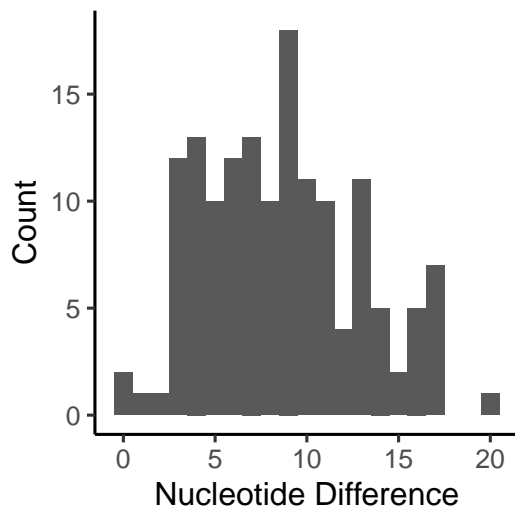
### IGHV3–11\*06

48 sequences assigned  
1 (2.1%) exact matches, in which:  
1 unique CDR3  
1 unique J



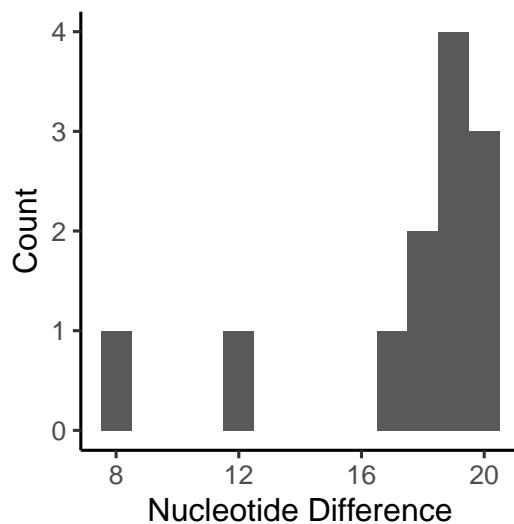
### IGHV3-11\*03\_05

161 sequences assigned  
2 (1.2%) exact matches, in which:  
2 unique CDR3  
1 unique J



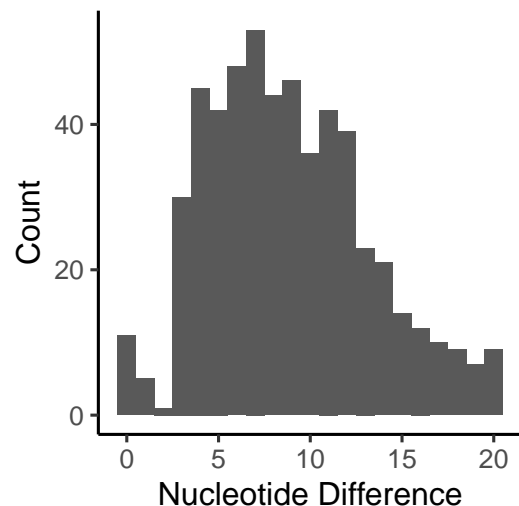
### IGHV3-13\*05

12 sequences assigned  
No exact matches.



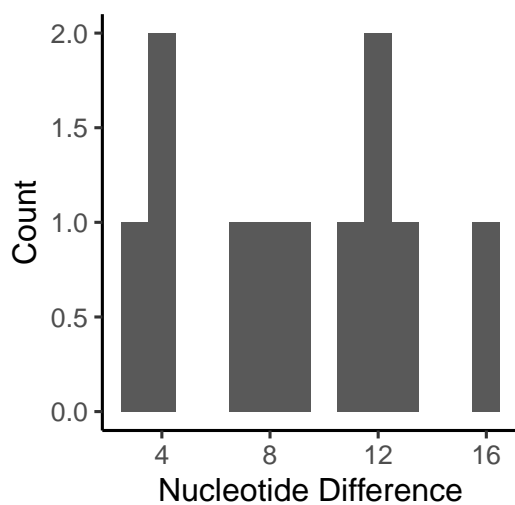
### IGHV3-21\*01\_02

587 sequences assigned  
11 (1.9%) exact matches, in which:  
6 unique CDR3  
4 unique J



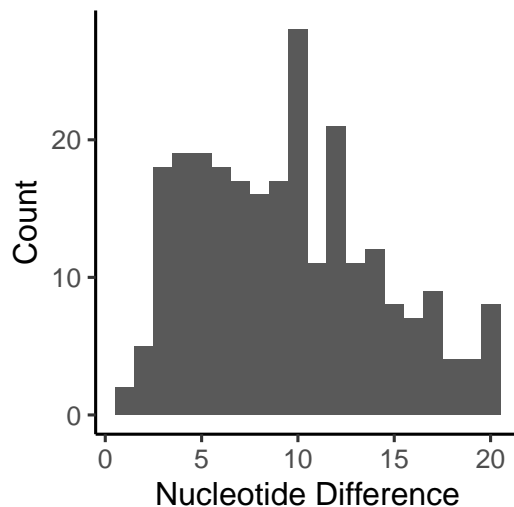
### IGHV3-13\*01

12 sequences assigned  
No exact matches.



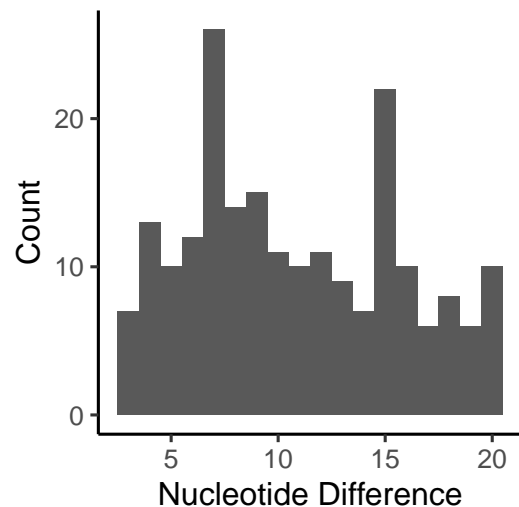
### IGHV3-15\*01\_02

291 sequences assigned  
No exact matches.



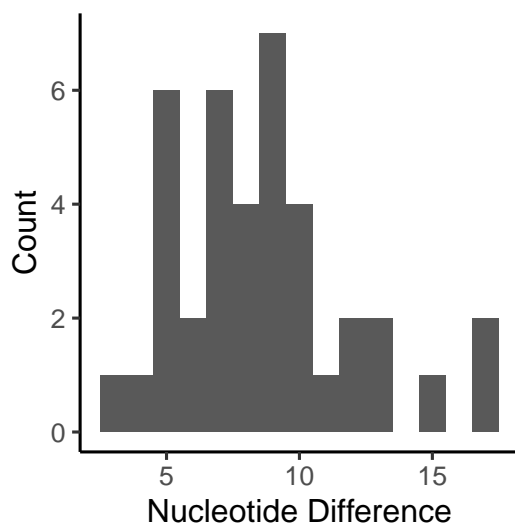
### IGHV3-30\*01

236 sequences assigned  
No exact matches.



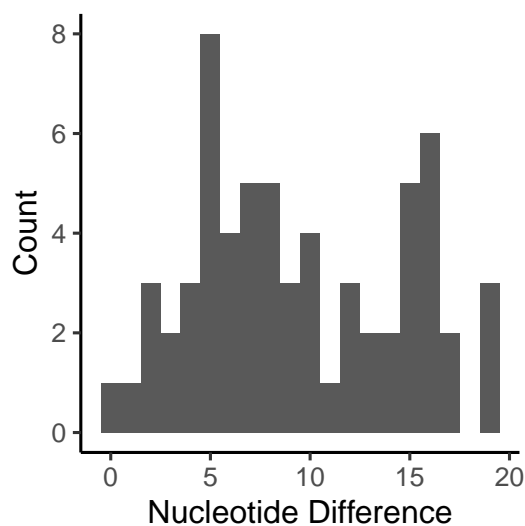
### IGHV3-13\*04

73 sequences assigned  
No exact matches.



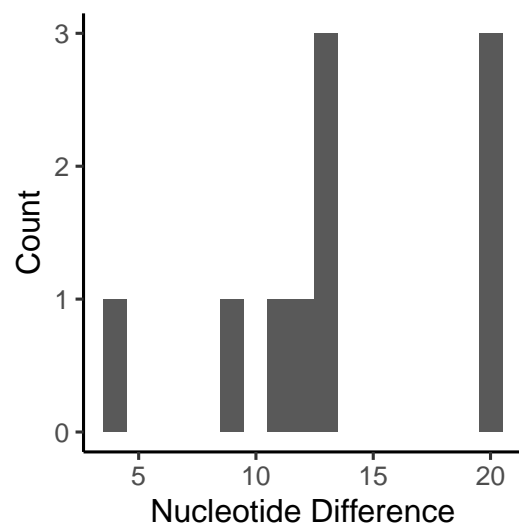
### IGHV3-20\*03\_04

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



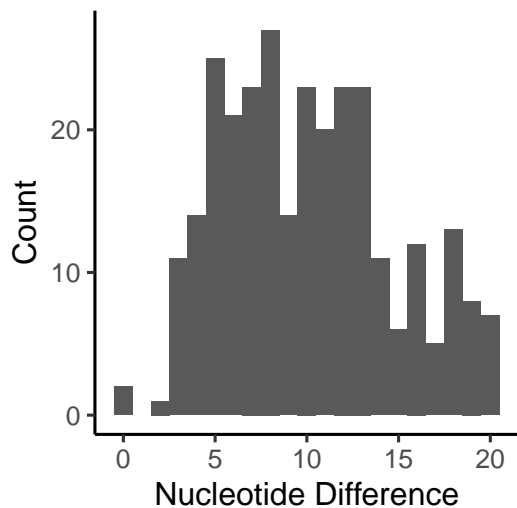
### IGHV3-30-3\*03

15 sequences assigned  
No exact matches.



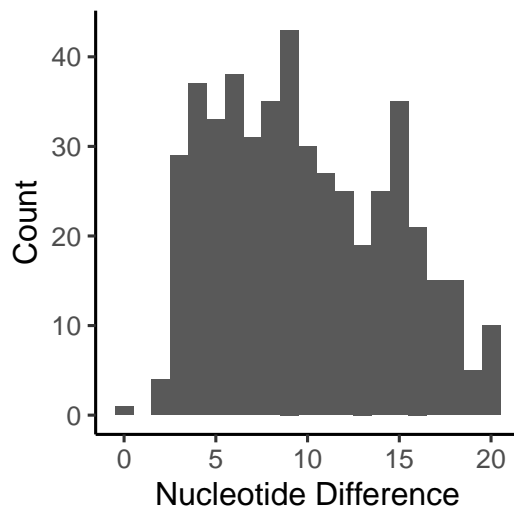
### IGHV3-33\*01

322 sequences assigned  
2 (0.6%) exact matches, in which:  
2 unique CDR3  
1 unique J



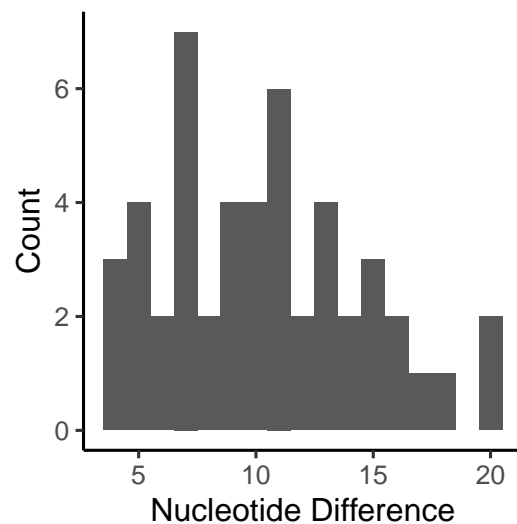
### IGHV3-48\*02

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



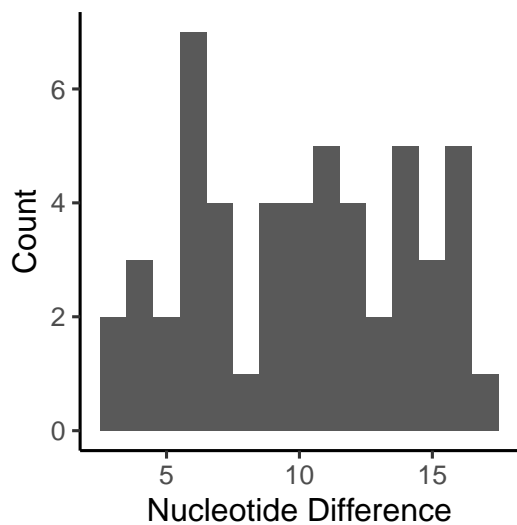
### IGHV3-53\*04

55 sequences assigned  
No exact matches.



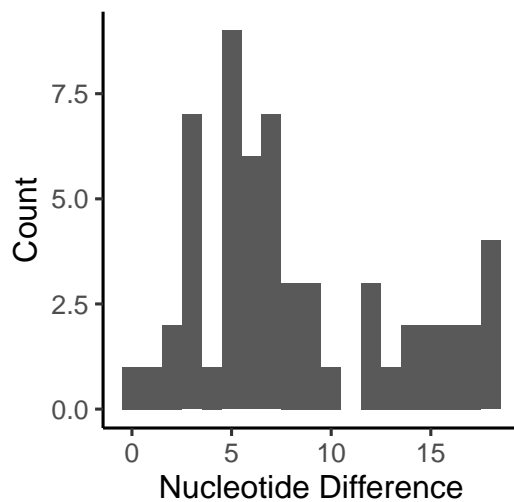
### IGHV3-43\*01

63 sequences assigned  
No exact matches.



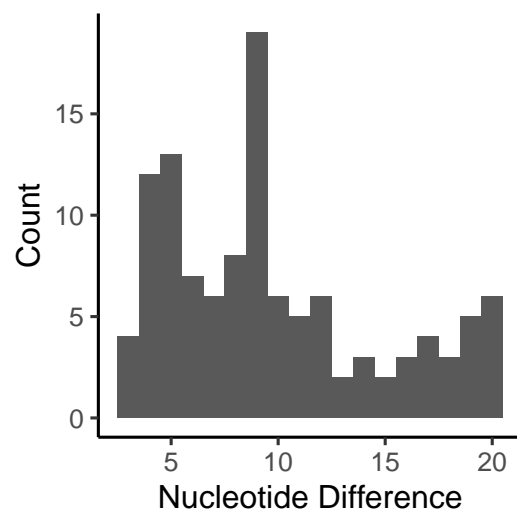
### IGHV3-49\*04

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



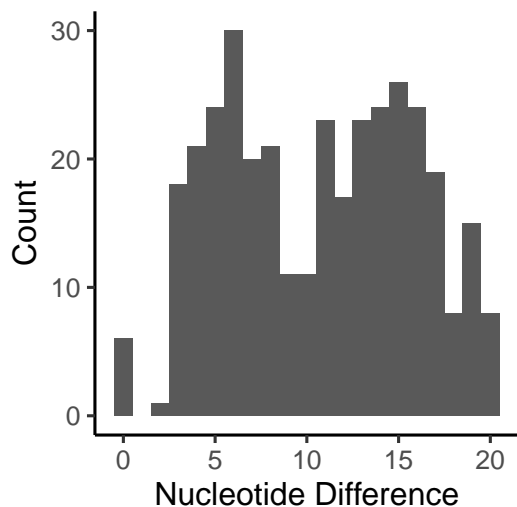
### IGHV3-53\*01\_02

119 sequences assigned  
No exact matches.



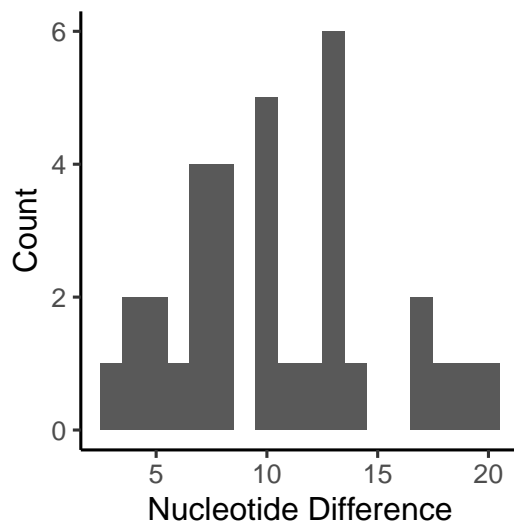
### IGHV3-48\*01

380 sequences assigned  
6 (1.6%) exact matches, in which:  
5 unique CDR3  
2 unique J



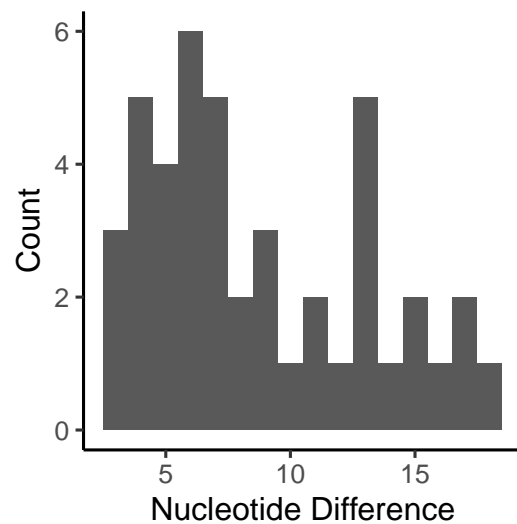
### IGHV3-49\*03\_05

33 sequences assigned  
No exact matches.



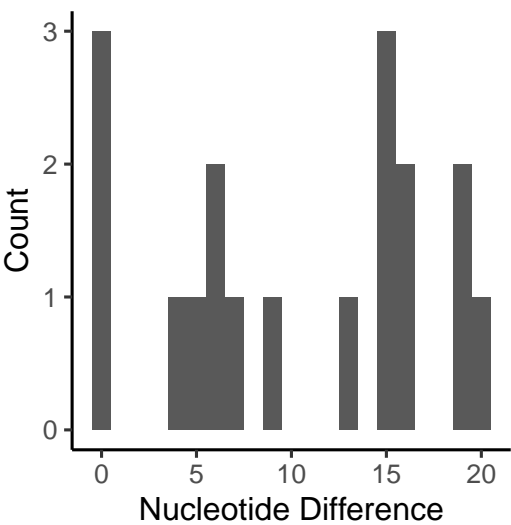
### IGHV3-64\*01

50 sequences assigned  
No exact matches.



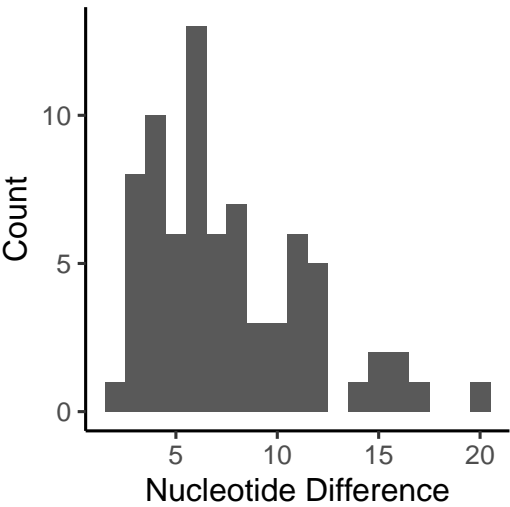
IGHV3-64\*02\_07

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



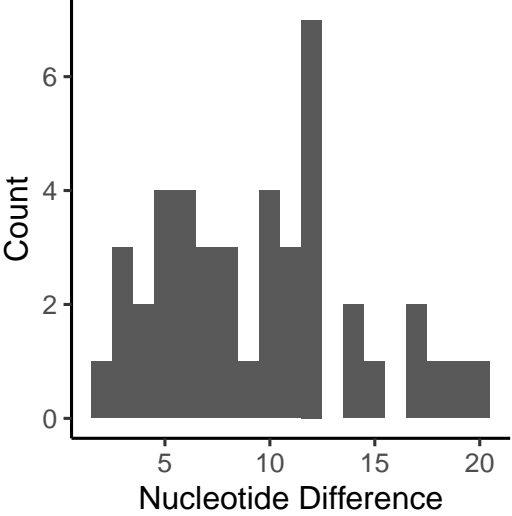
IGHV3-73\*01\_02

76 sequences assigned  
No exact matches.



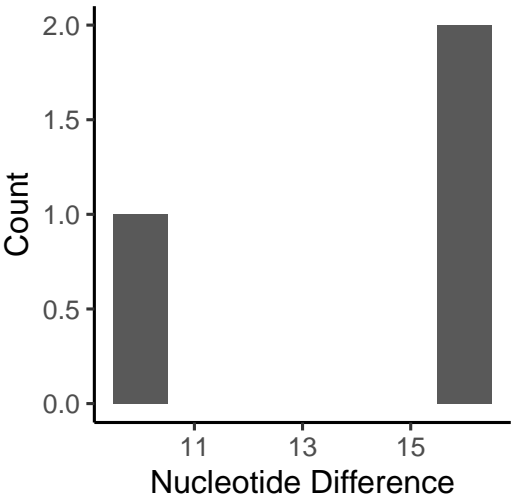
IGHV3-64D\*06

49 sequences assigned  
No exact matches.



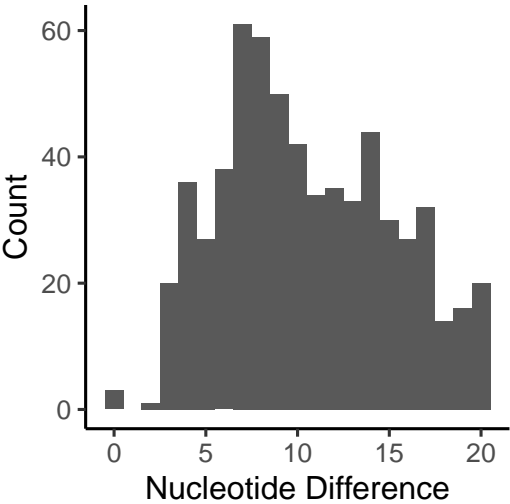
IGHV3-69-1\*01

8 sequences assigned  
No exact matches.



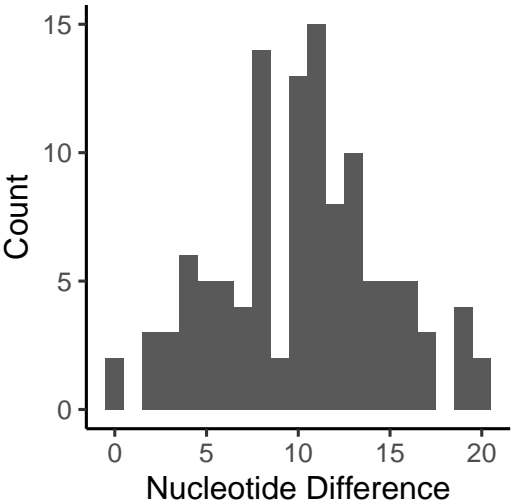
IGHV3-74\*01\_02

703 sequences assigned  
3 (0.4%) exact matches, in which:  
2 unique CDR3  
2 unique J



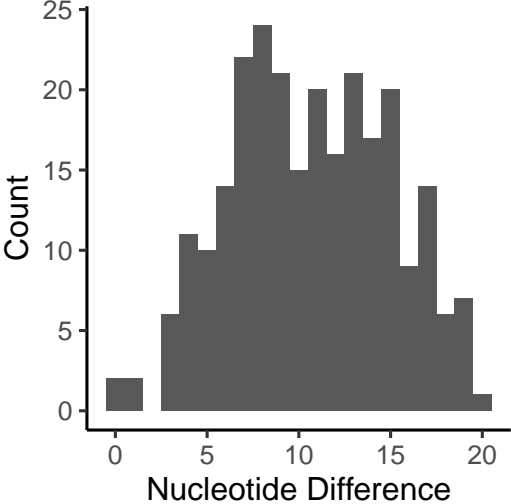
IGHV3-64D\*09

123 sequences assigned  
2 (1.6%) exact matches, in which:  
1 unique CDR3  
1 unique J



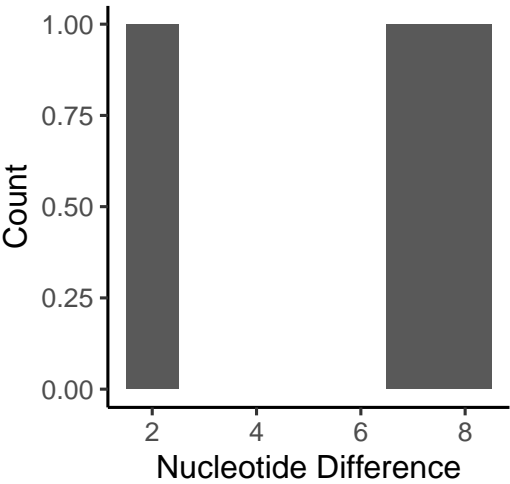
IGHV3-72\*01

280 sequences assigned  
2 (0.7%) exact matches, in which:  
1 unique CDR3  
1 unique J



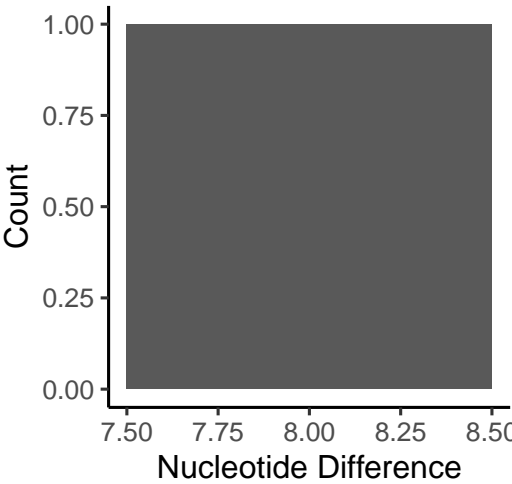
IGHV3-43D\*04

3 sequences assigned  
No exact matches.



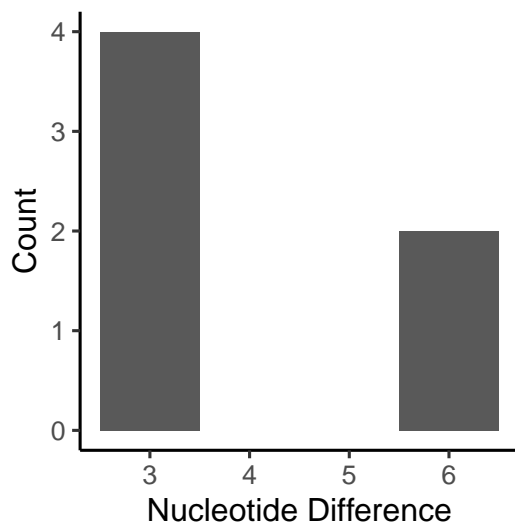
IGHV4-28\*01\_07

2 sequences assigned  
No exact matches.



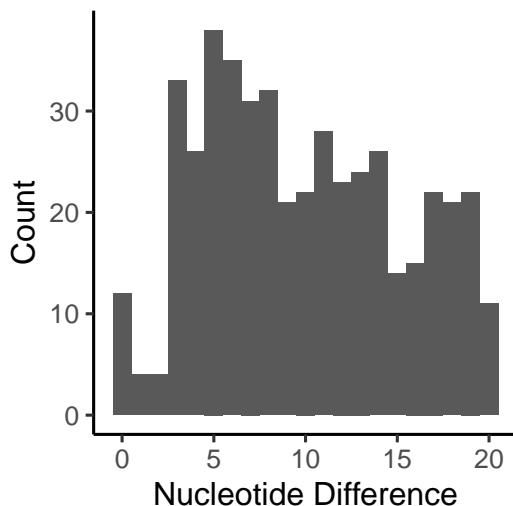
### IGHV4-28\*02\_05

6 sequences assigned  
No exact matches.



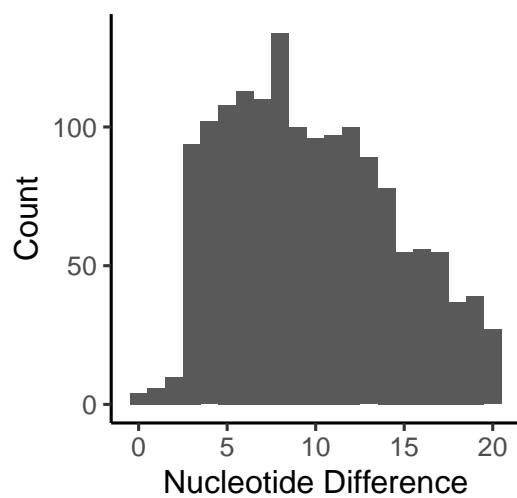
### IGHV4-34\*01\_02

539 sequences assigned  
12 (2.2%) exact matches, in which:  
9 unique CDR3  
5 unique J



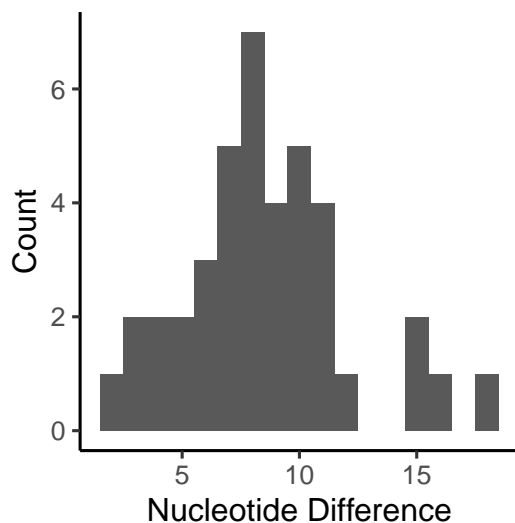
### IGHV4-39\*01\_05

1730 sequences assigned  
4 (0.2%) exact matches, in which:  
4 unique CDR3  
3 unique J



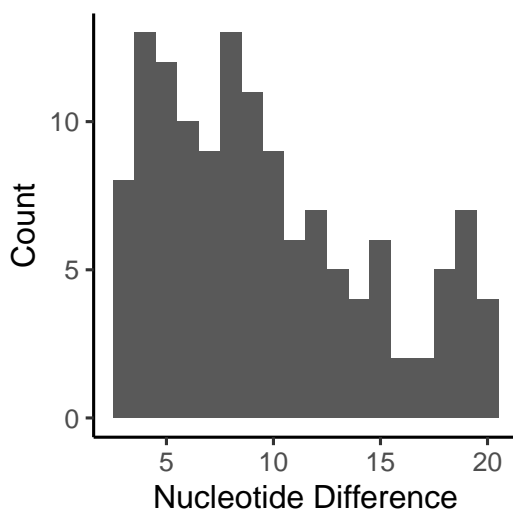
### IGHV4-31\*01

45 sequences assigned  
No exact matches.



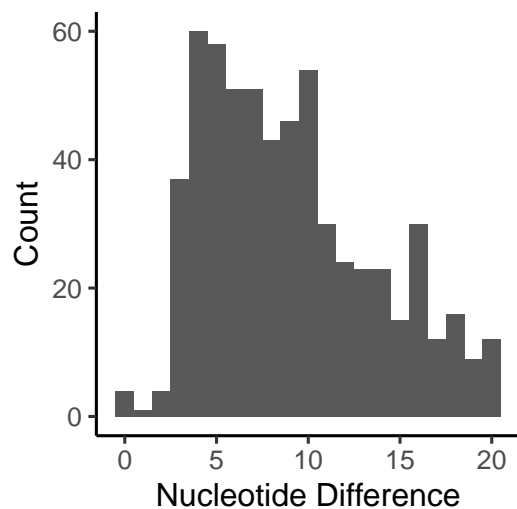
### IGHV4-38-2\*01

138 sequences assigned  
No exact matches.



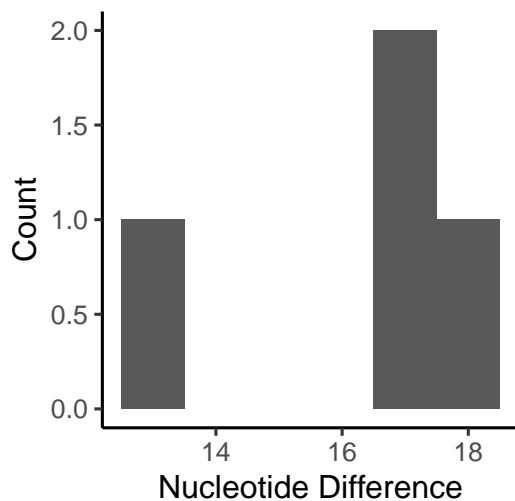
### IGHV4-59\*08

698 sequences assigned  
4 (0.6%) exact matches, in which:  
4 unique CDR3  
3 unique J



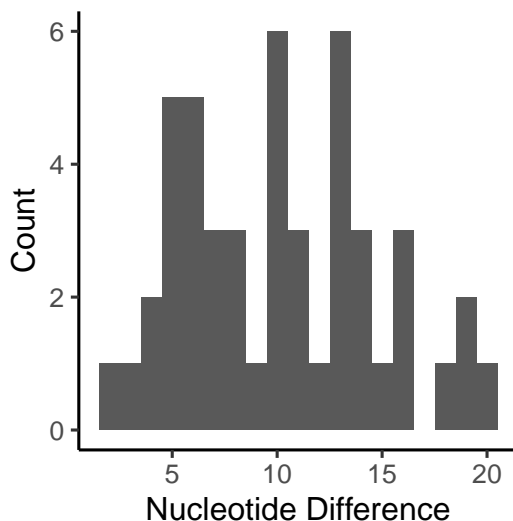
### IGHV4-31\*03\_04

27 sequences assigned  
No exact matches.



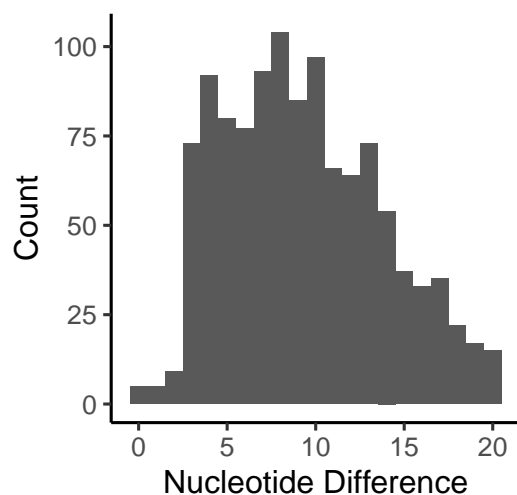
### IGHV4-38-2\*02

64 sequences assigned  
No exact matches.



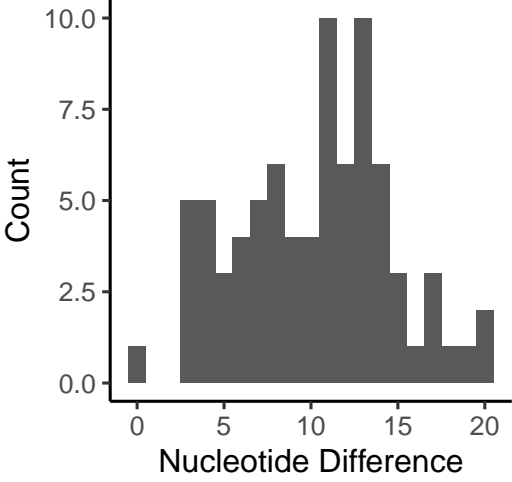
### IGHV4-59\*01\_07

1264 sequences assigned  
5 (0.4%) exact matches, in which:  
5 unique CDR3  
2 unique J



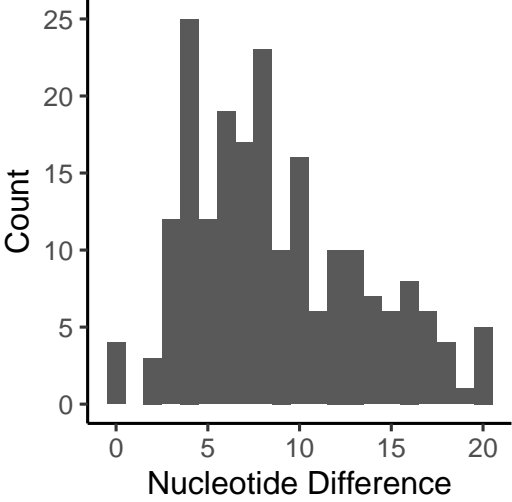
IGHV4-61\*01

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



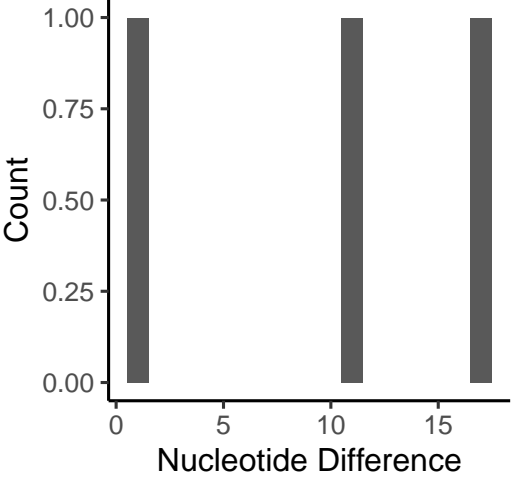
IGHV5-51\*01\_03

225 sequences assigned  
4 (1.8%) exact matches, in which:  
4 unique CDR3  
2 unique J



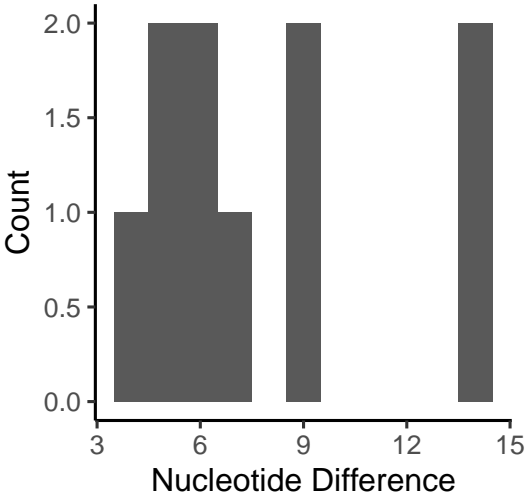
IGHV7-4-1\*02

3 sequences assigned  
No exact matches.



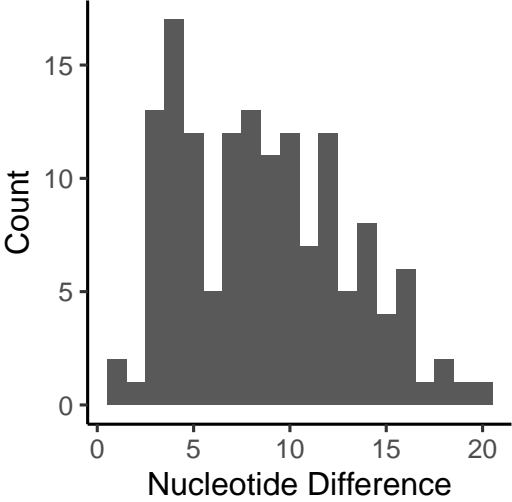
IGHV4-61\*08

11 sequences assigned  
No exact matches.



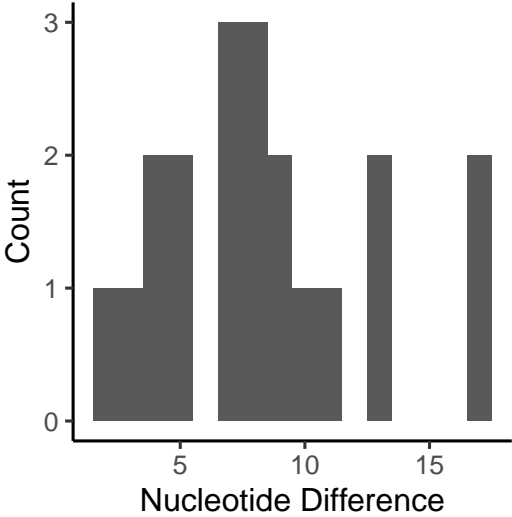
IGHV6-1\*01\_02

155 sequences assigned  
No exact matches.



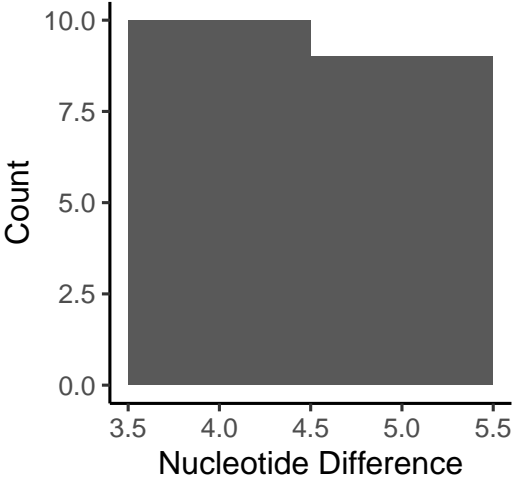
IGHV5-10-1\*01\_03

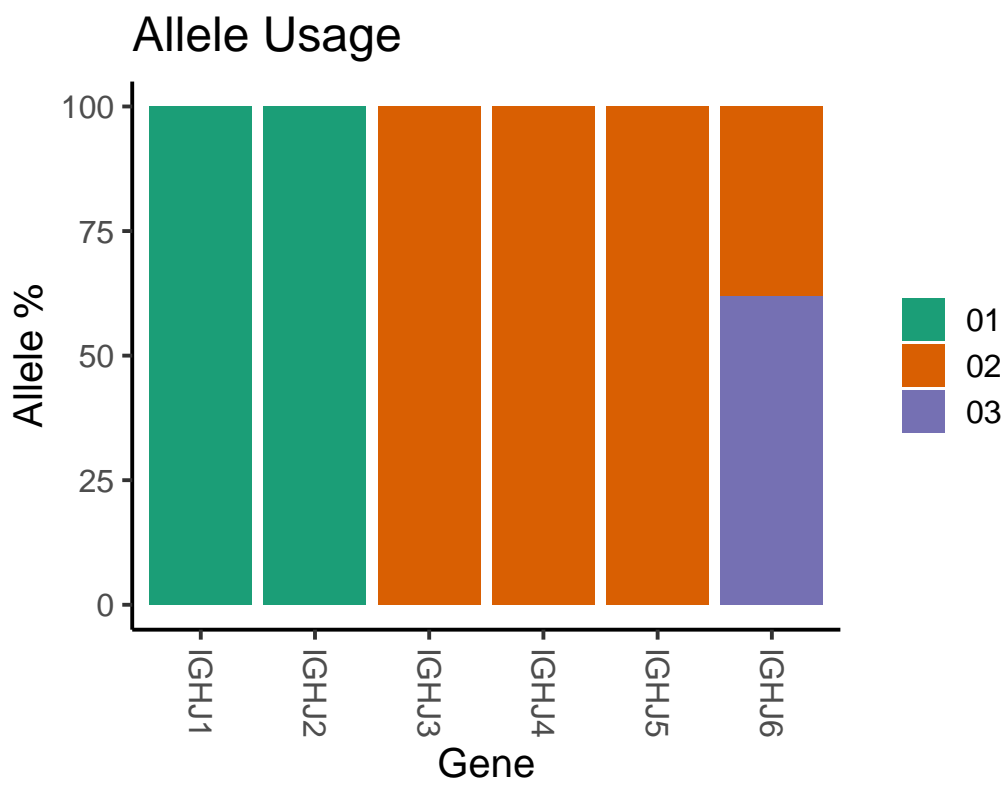
27 sequences assigned  
No exact matches.



IGHV7-4-1\*01

19 sequences assigned  
No exact matches.







Sequence Count by IGHJ6 allele usage

