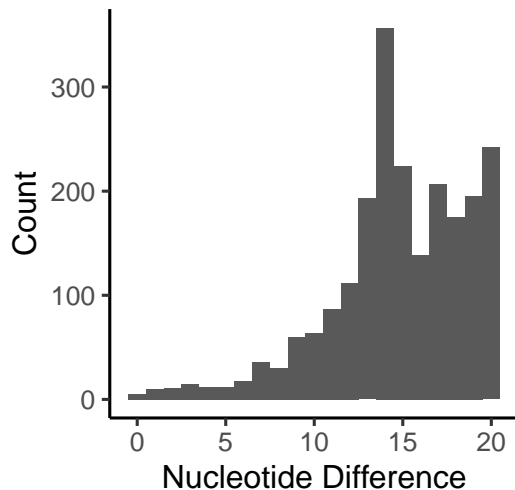


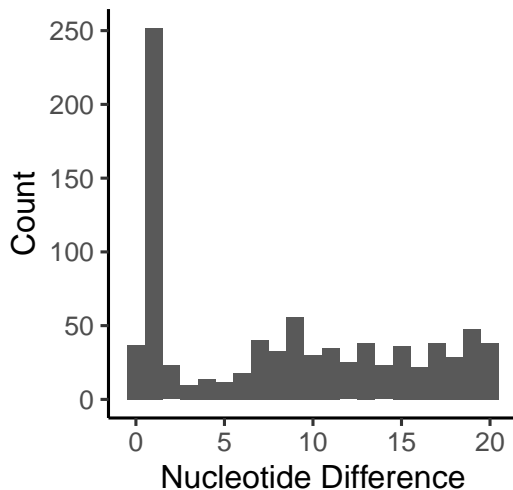
### IGHV1-2\*02

4369 sequences assigned  
5 (0.1%) exact matches, in which:  
4 unique CDR3  
2 unique J



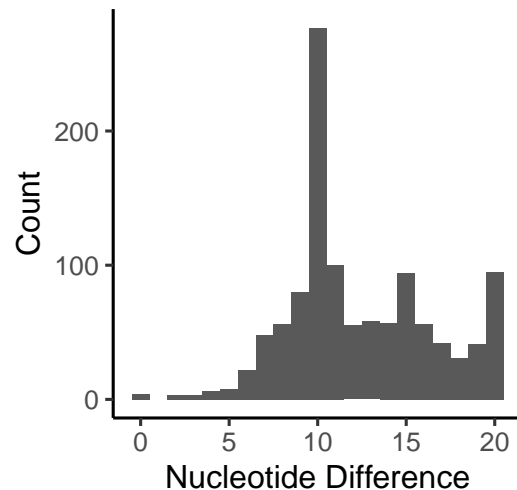
### IGHV1-8\*01

1147 sequences assigned  
37 (3.2%) exact matches, in which:  
16 unique CDR3  
3 unique J



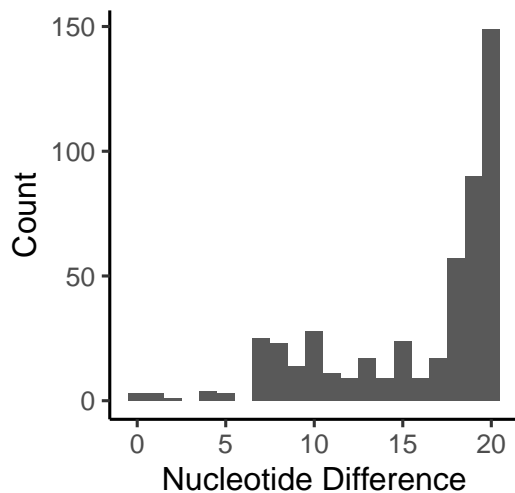
### IGHV1-24\*01

1370 sequences assigned  
4 (0.3%) exact matches, in which:  
4 unique CDR3  
3 unique J



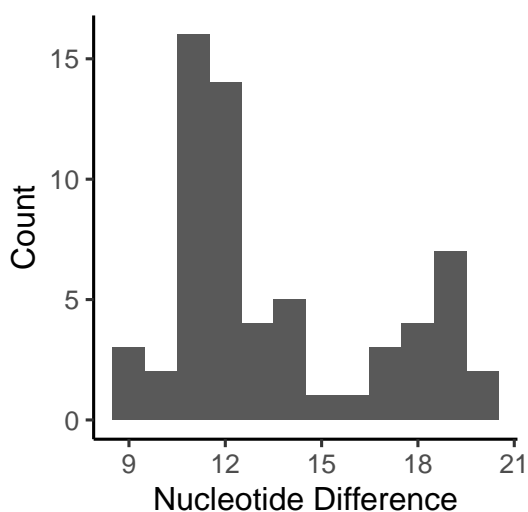
### IGHV1-3\*01

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



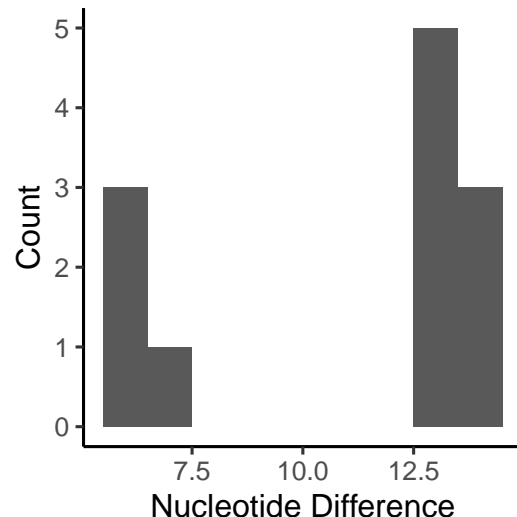
### IGHV1-8\*02

138 sequences assigned  
No exact matches.



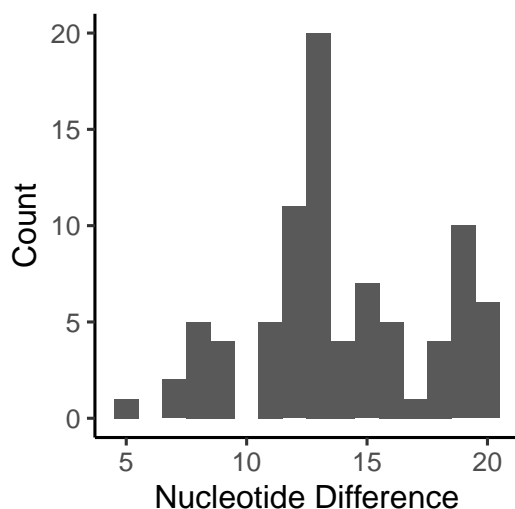
### IGHV1-45\*02

35 sequences assigned  
No exact matches.



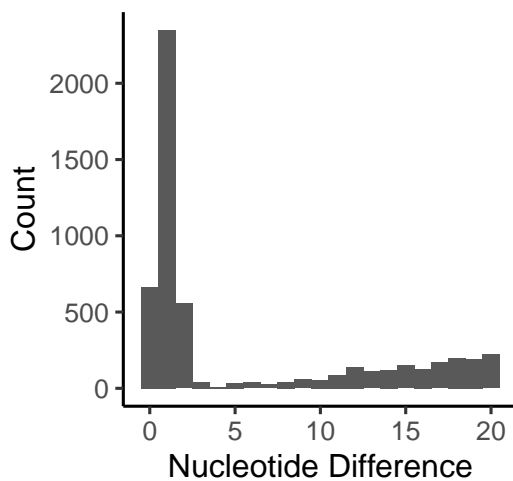
### IGHV1-3\*04

189 sequences assigned  
No exact matches.



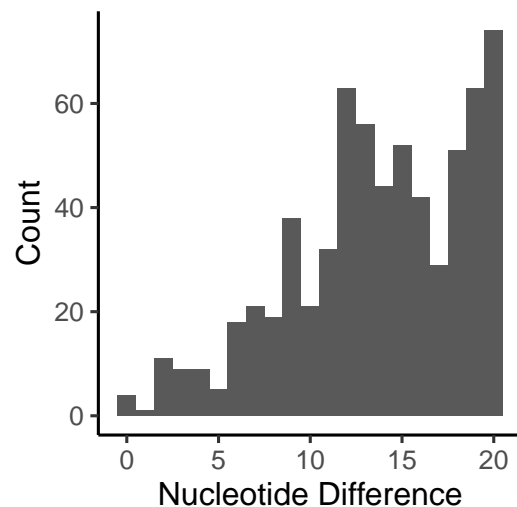
### IGHV1-18\*01

7470 sequences assigned  
665 (8.9%) exact matches, in which:  
128 unique CDR3  
4 unique J



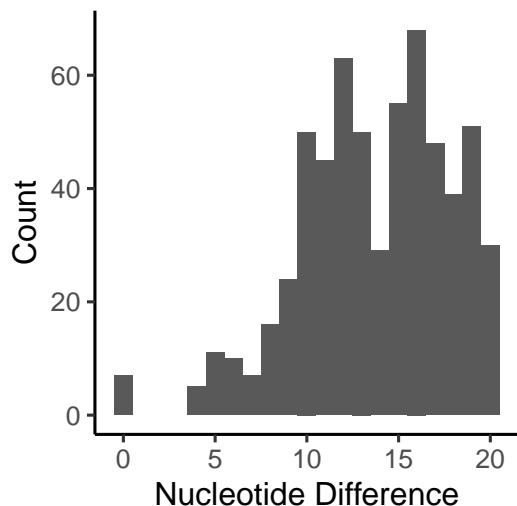
### IGHV1-46\*01

1756 sequences assigned  
4 (0.2%) exact matches, in which:  
2 unique CDR3  
1 unique J



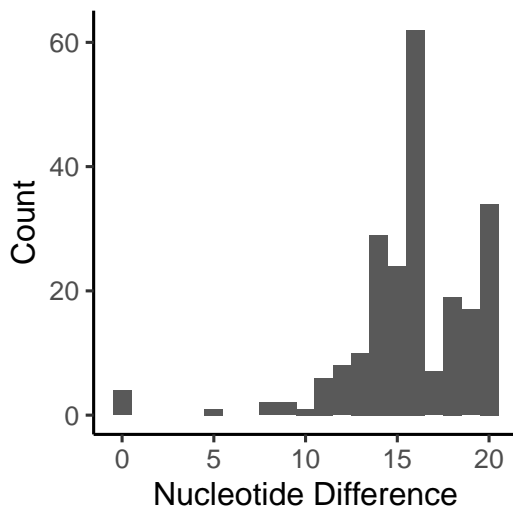
### IGHV1-46\*03

1184 sequences assigned  
7 (0.6%) exact matches, in which:  
3 unique CDR3  
2 unique J



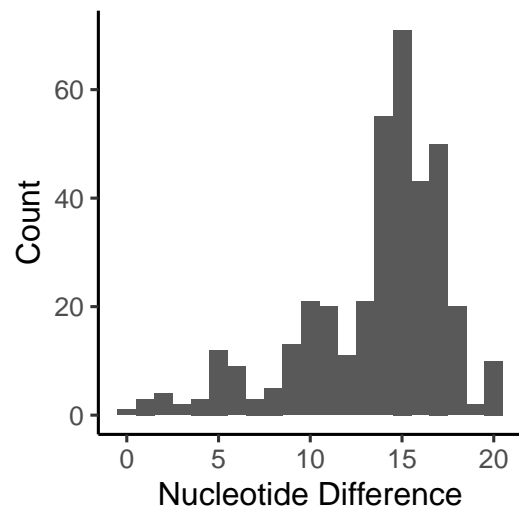
### IGHV1-69\*02

805 sequences assigned  
4 (0.5%) exact matches, in which:  
2 unique CDR3  
2 unique J



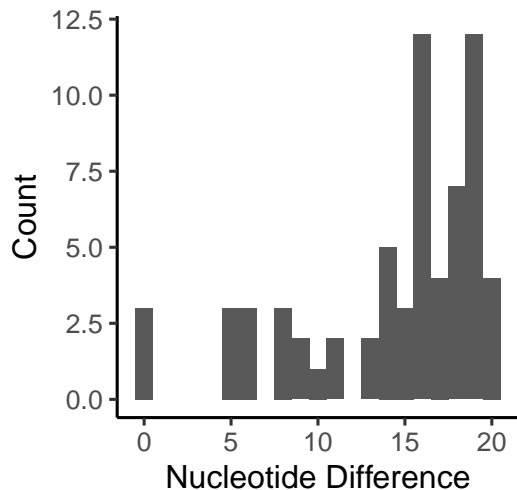
### IGHV2-26\*01

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



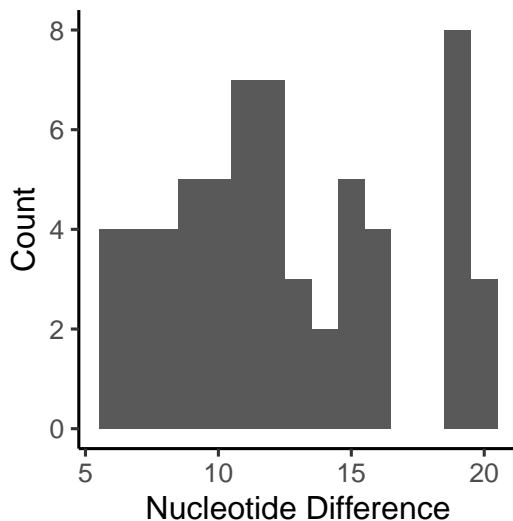
### IGHV1-58\*01

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



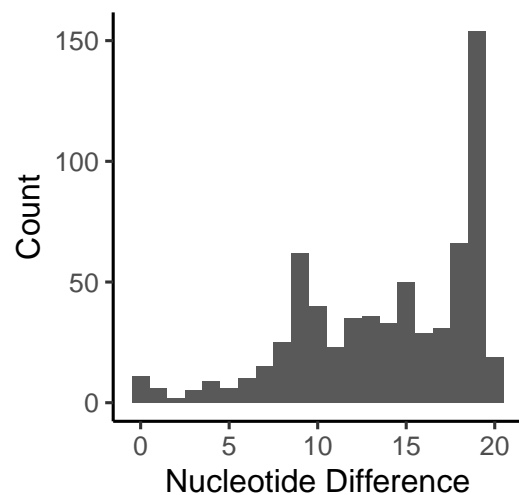
### IGHV2-5\*01

68 sequences assigned  
No exact matches.



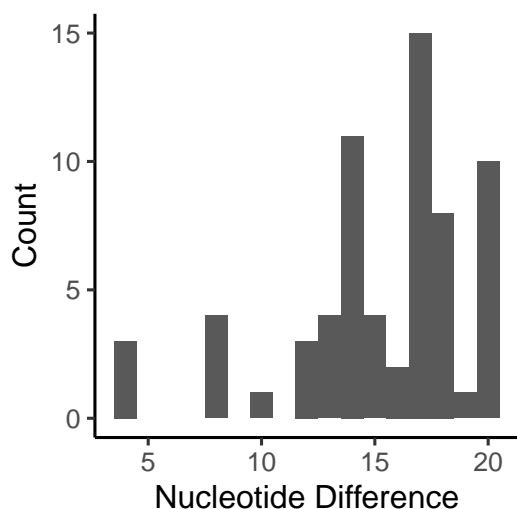
### IGHV2-70\*01

718 sequences assigned  
11 (1.5%) exact matches, in which:  
6 unique CDR3  
4 unique J



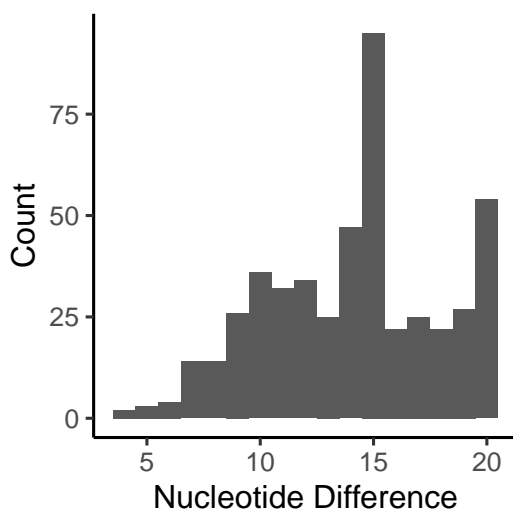
### IGHV1-58\*02

282 sequences assigned  
No exact matches.



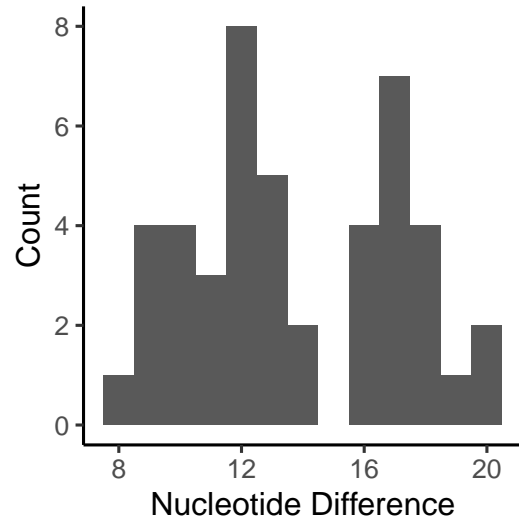
### IGHV2-5\*02

858 sequences assigned  
No exact matches.



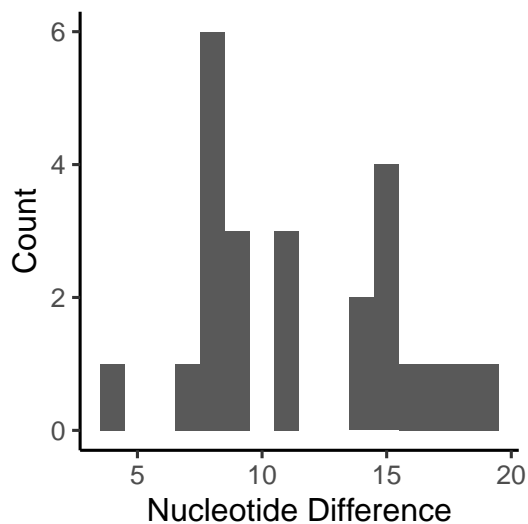
### IGHV2-70\*13

122 sequences assigned  
No exact matches.



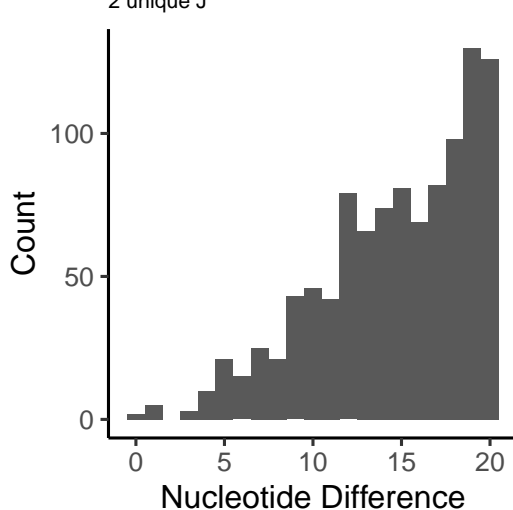
### IGHV2-70D\*14

25 sequences assigned  
No exact matches.



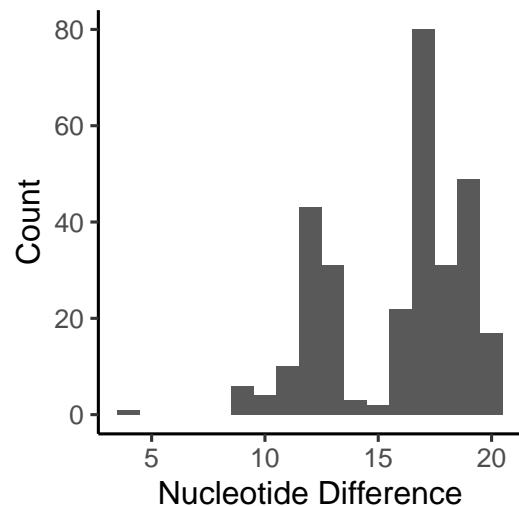
### IGHV3-11\*01

1885 sequences assigned  
2 (0.1%) exact matches, in which:  
2 unique CDR3  
2 unique J



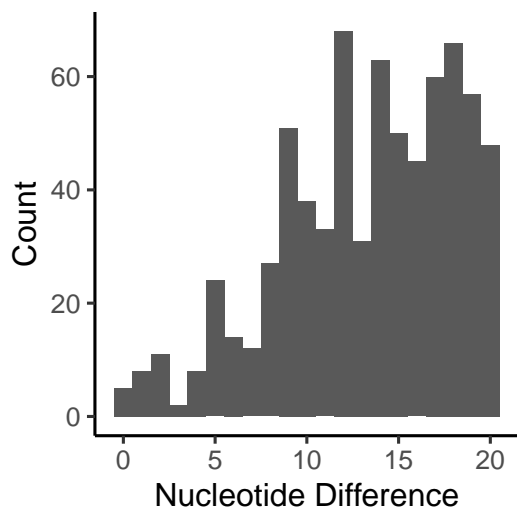
### IGHV3-20\*01

325 sequences assigned  
No exact matches.



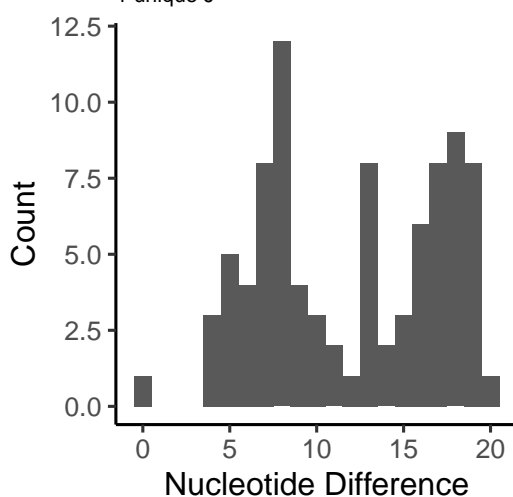
### IGHV3-7\*01

1072 sequences assigned  
5 (0.5%) exact matches, in which:  
4 unique CDR3  
2 unique J



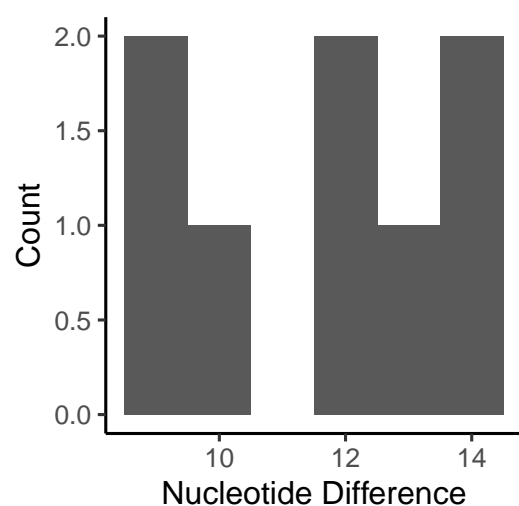
### IGHV3-13\*01

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



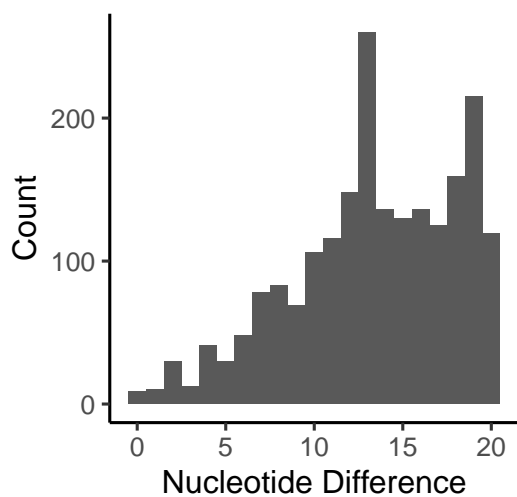
### IGHV3-20\*04

10 sequences assigned  
No exact matches.



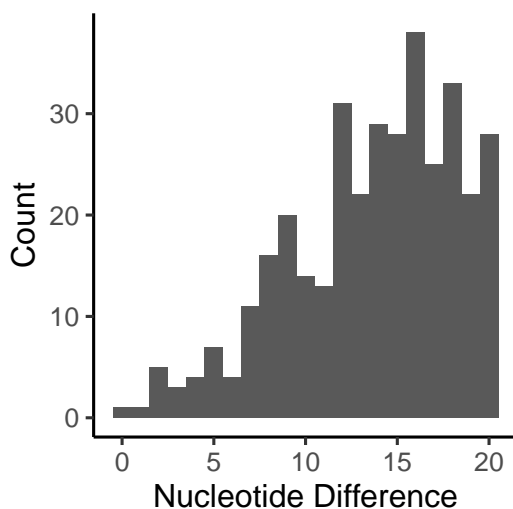
### IGHV3-9\*01

3076 sequences assigned  
9 (0.3%) exact matches, in which:  
7 unique CDR3  
2 unique J



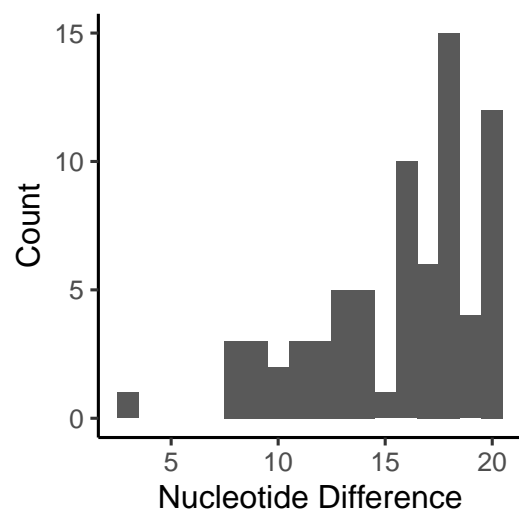
### IGHV3-15\*01

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



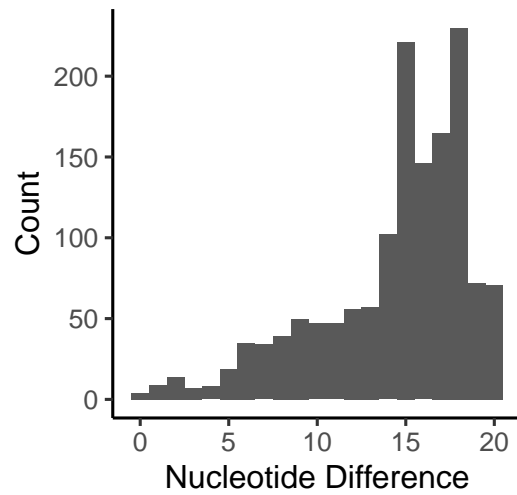
### IGHV3-21\*06

179 sequences assigned  
No exact matches.



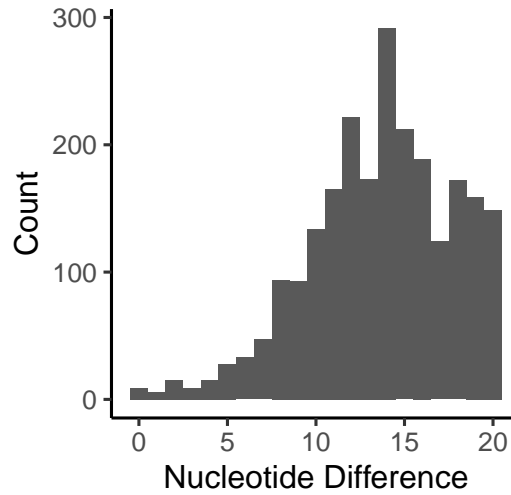
### IGHV3-30-3\*01

2482 sequences assigned  
4 (0.2%) exact matches, in which:  
3 unique CDR3  
2 unique J



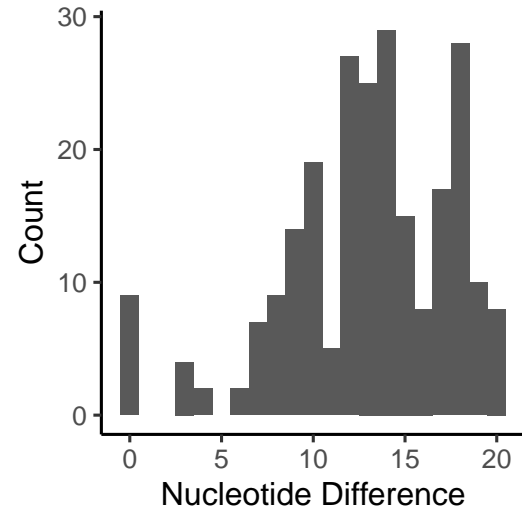
### IGHV3-30\*18

3715 sequences assigned  
9 (0.2%) exact matches, in which:  
6 unique CDR3  
2 unique J



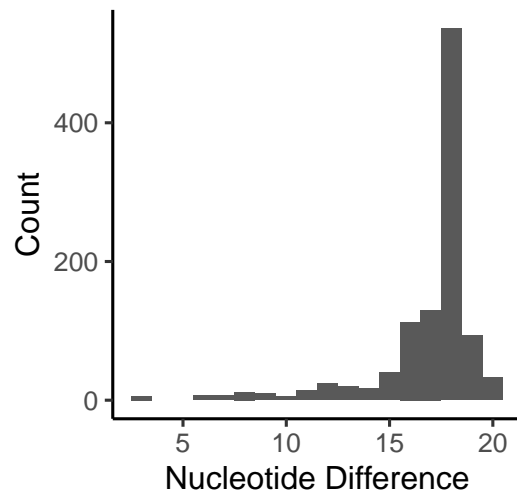
### IGHV3-48\*01

459 sequences assigned  
9 (2%) exact matches, in which:  
8 unique CDR3  
2 unique J



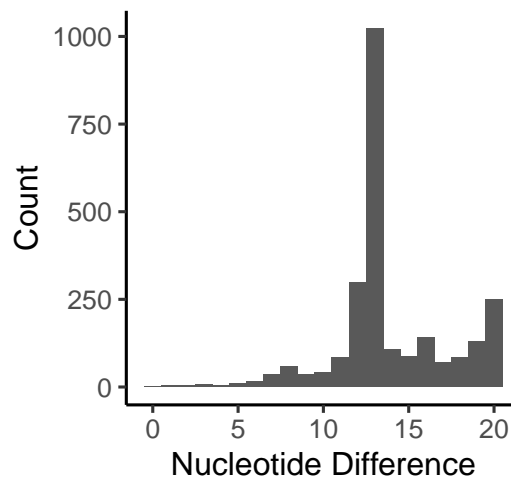
### IGHV3-30\*03

1343 sequences assigned  
No exact matches.



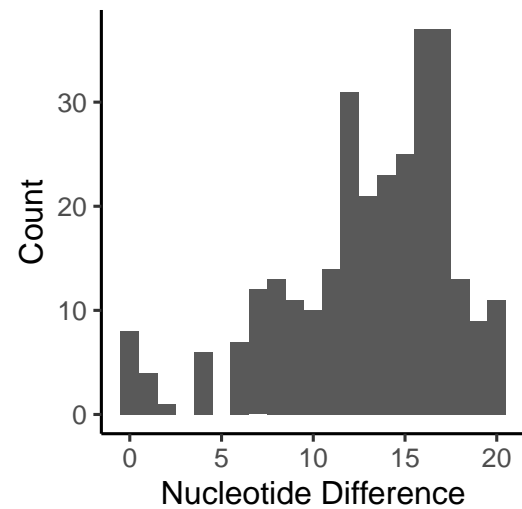
### IGHV3-33\*01

2914 sequences assigned  
1 (0%) exact matches, in which:  
1 unique CDR3  
1 unique J



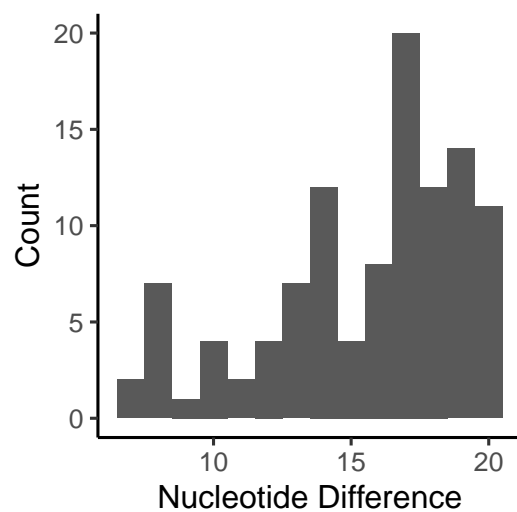
### IGHV3-48\*02

373 sequences assigned  
8 (2.1%) exact matches, in which:  
4 unique CDR3  
2 unique J



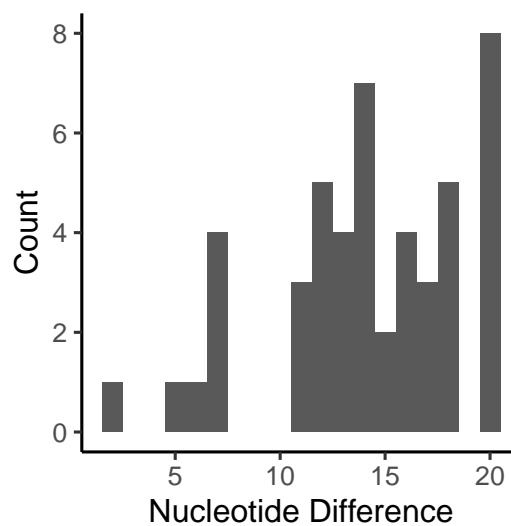
### IGHV3-30\*04

220 sequences assigned  
No exact matches.



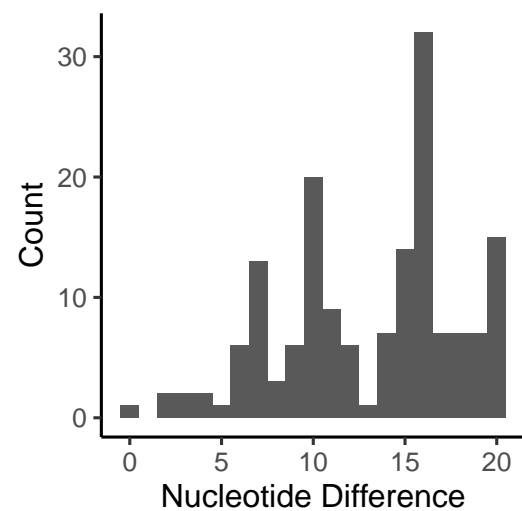
### IGHV3-43\*01

132 sequences assigned  
No exact matches.



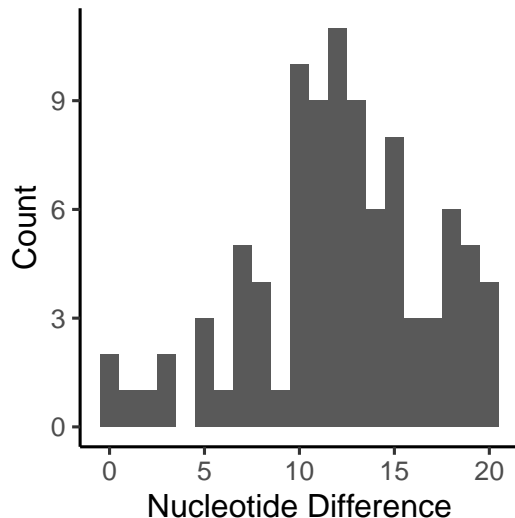
### IGHV3-49\*03

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



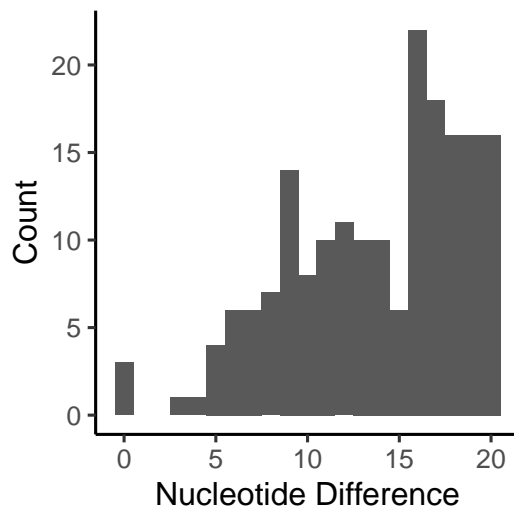
### IGHV3-49\*05

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



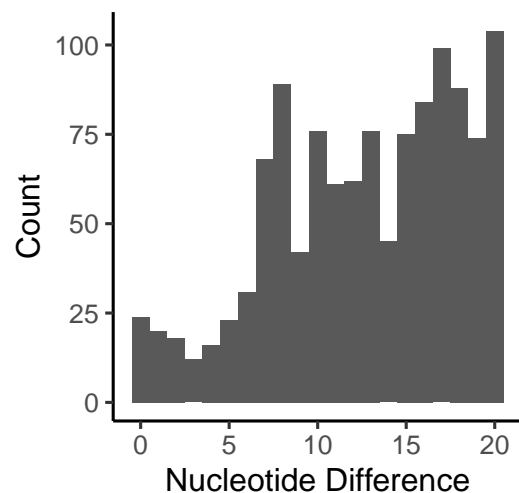
### IGHV3-66\*02

394 sequences assigned  
3 (0.8%) exact matches, in which:  
2 unique CDR3  
2 unique J



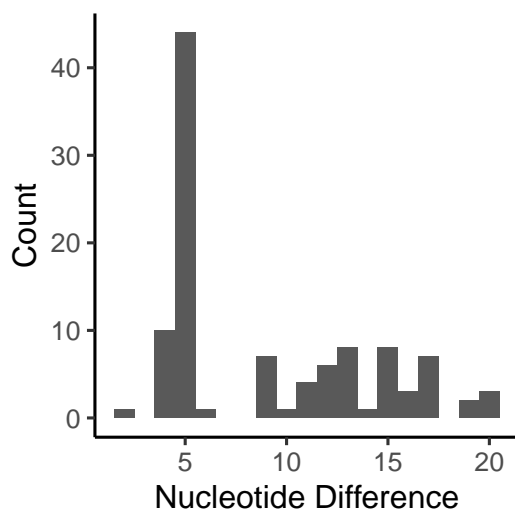
### IGHV3-74\*01

1864 sequences assigned  
24 (1.3%) exact matches, in which:  
13 unique CDR3  
4 unique J



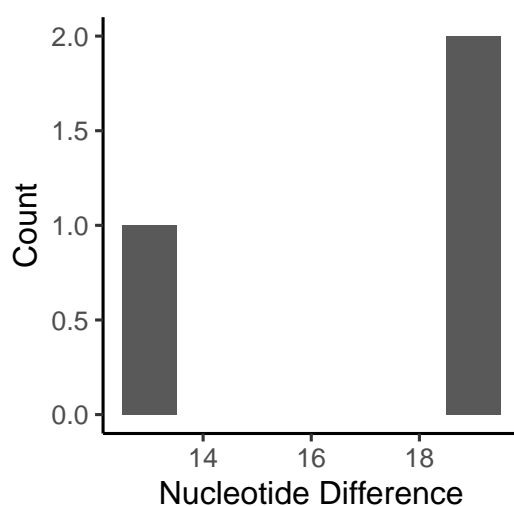
### IGHV3-64\*01

132 sequences assigned  
No exact matches.



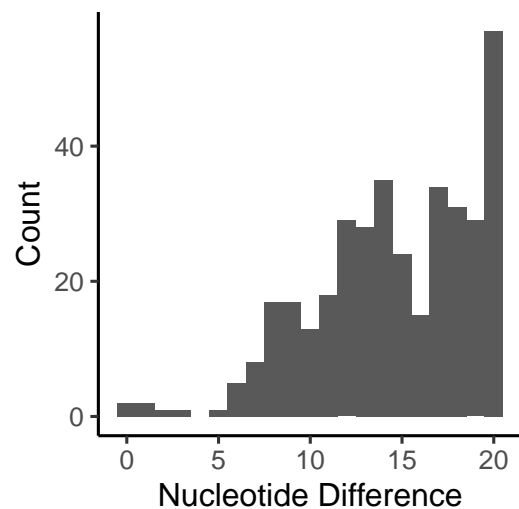
### IGHV3-69-1\*02

7 sequences assigned  
No exact matches.



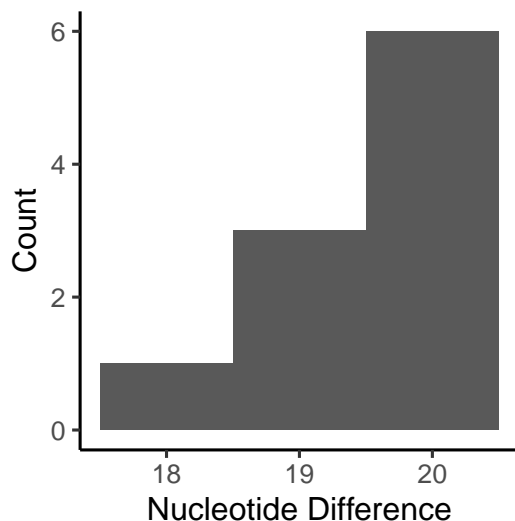
### IGHV4-4\*02

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



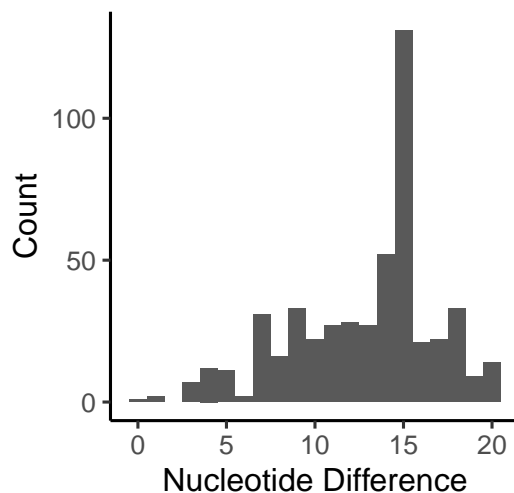
### IGHV3-64\*07

26 sequences assigned  
No exact matches.



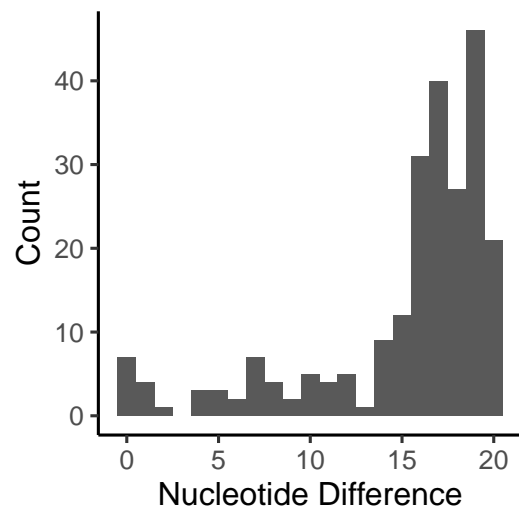
### IGHV3-72\*01

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



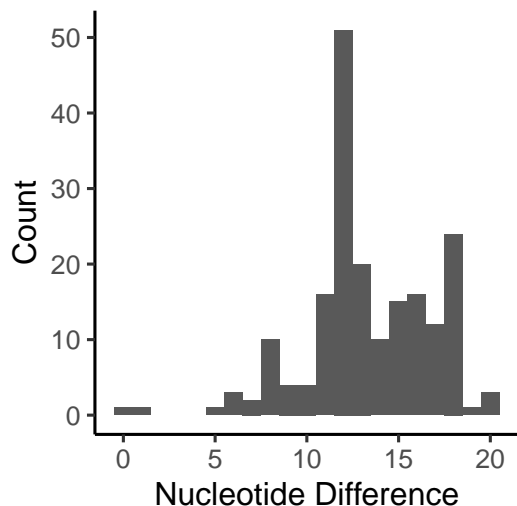
### IGHV4-4\*07

521 sequences assigned  
7 (1.3%) exact matches, in which:  
6 unique CDR3  
3 unique J



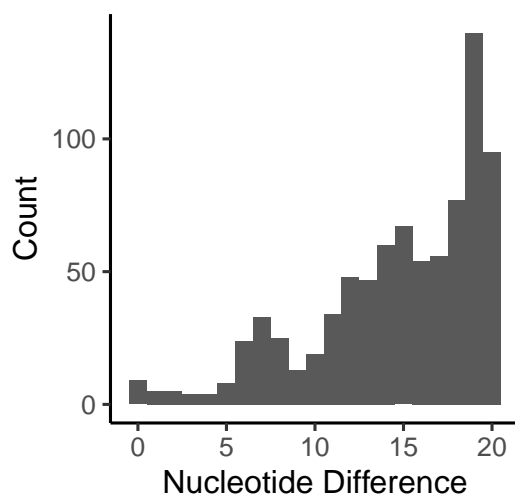
### IGHV4-30-2\*01

238 sequences assigned  
1 (0.4%) exact matches, in which:  
1 unique CDR3  
1 unique J



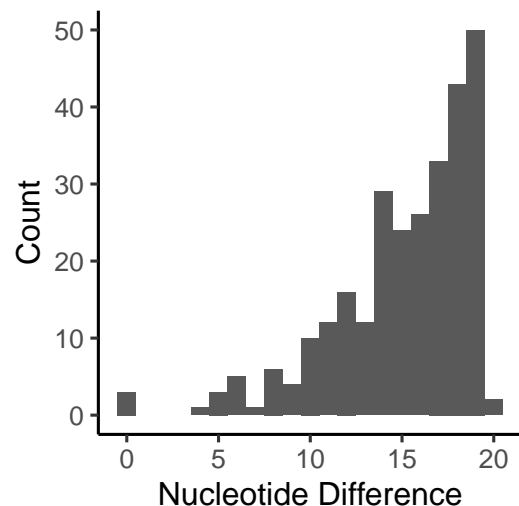
### IGHV4-31\*03

1259 sequences assigned  
9 (0.7%) exact matches, in which:  
6 unique CDR3  
2 unique J



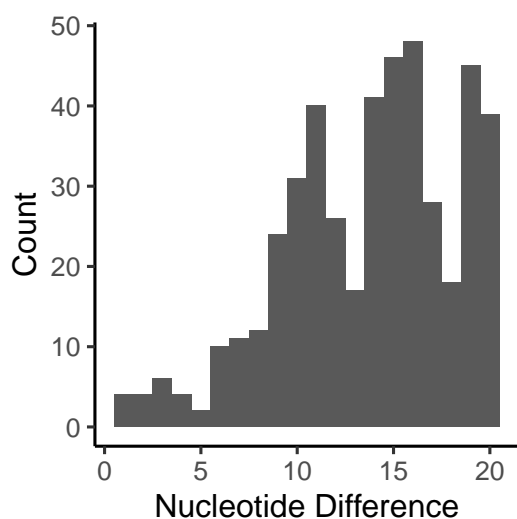
### IGHV4-61\*01

399 sequences assigned  
3 (0.8%) exact matches, in which:  
3 unique CDR3  
1 unique J



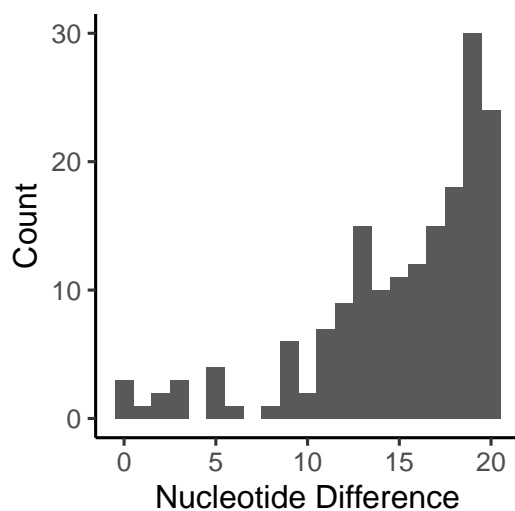
### IGHV4-30-4\*01

664 sequences assigned  
No exact matches.



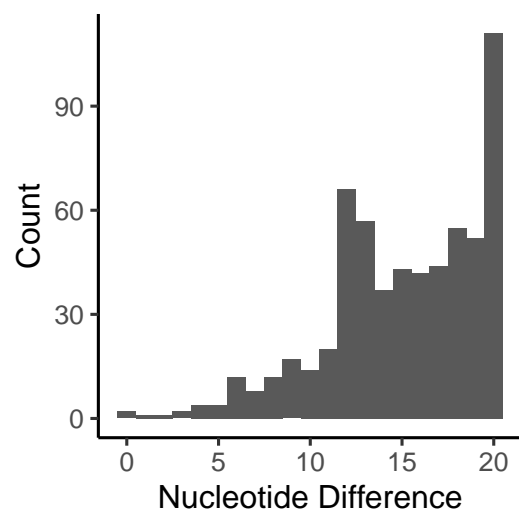
### IGHV4-39\*01

967 sequences assigned  
3 (0.3%) exact matches, in which:  
3 unique CDR3  
1 unique J



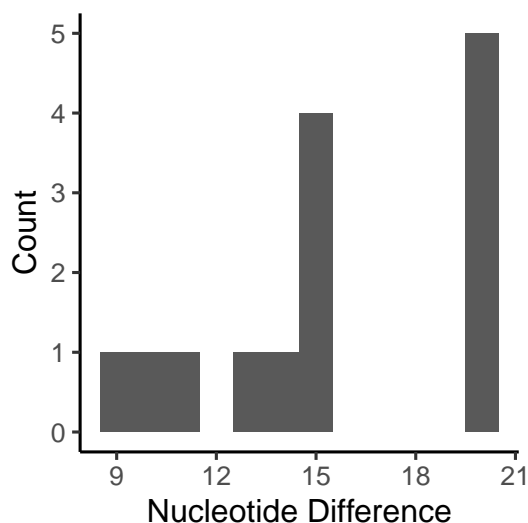
### IGHV4-61\*02

1272 sequences assigned  
2 (0.2%) exact matches, in which:  
2 unique CDR3  
1 unique J



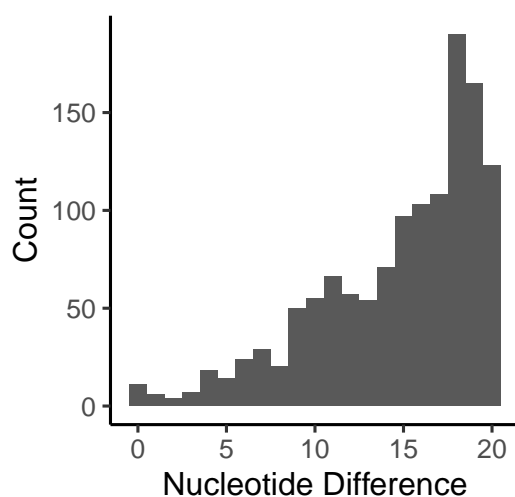
### IGHV4-30-2\*06

28 sequences assigned  
No exact matches.



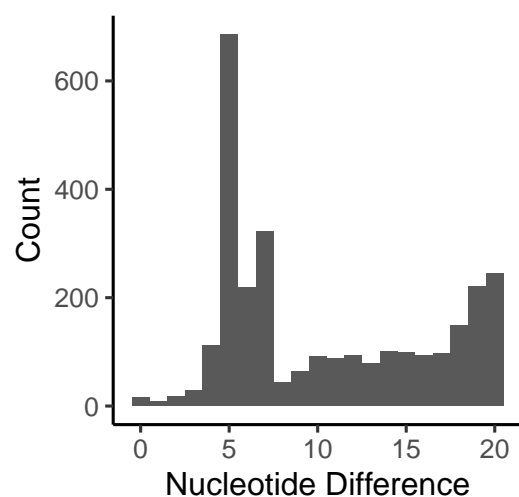
### IGHV4-59\*01

2286 sequences assigned  
11 (0.5%) exact matches, in which:  
8 unique CDR3  
3 unique J



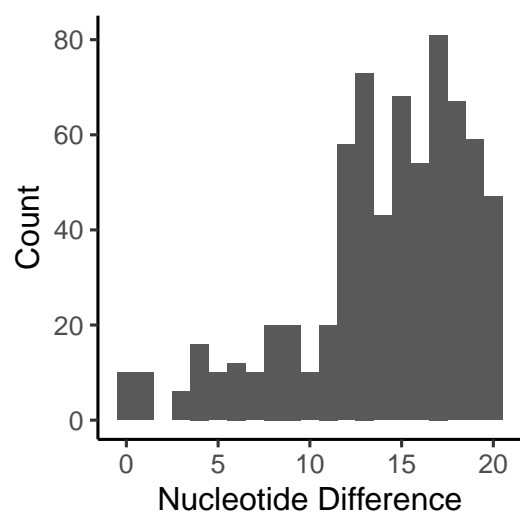
### IGHV5-51\*01

3628 sequences assigned  
15 (0.4%) exact matches, in which:  
9 unique CDR3  
3 unique J



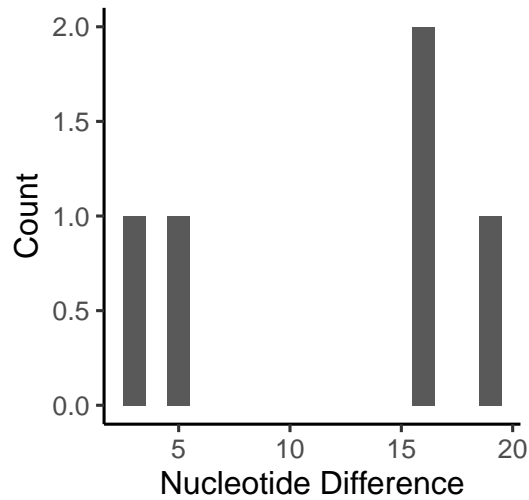
### IGHV5–51\*03

1244 sequences assigned  
10 (0.8%) exact matches, in which:  
5 unique CDR3  
3 unique J



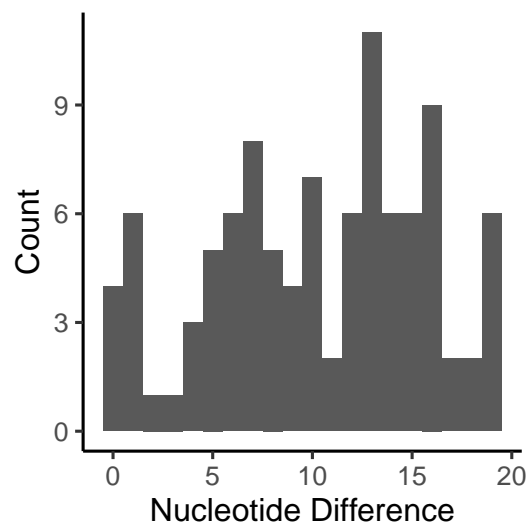
### IGHV7–4–1\*02

5 sequences assigned  
No exact matches.



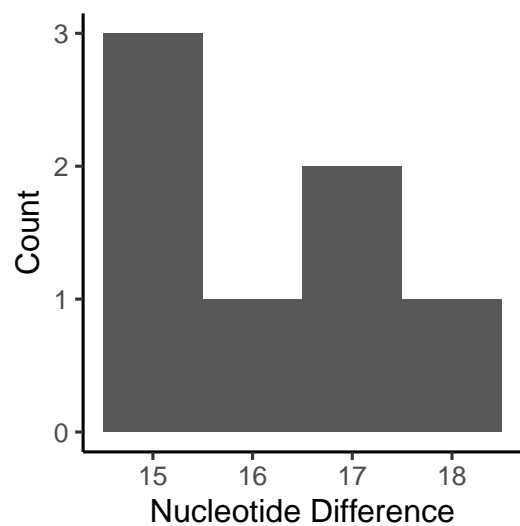
### IGHV6–1\*01

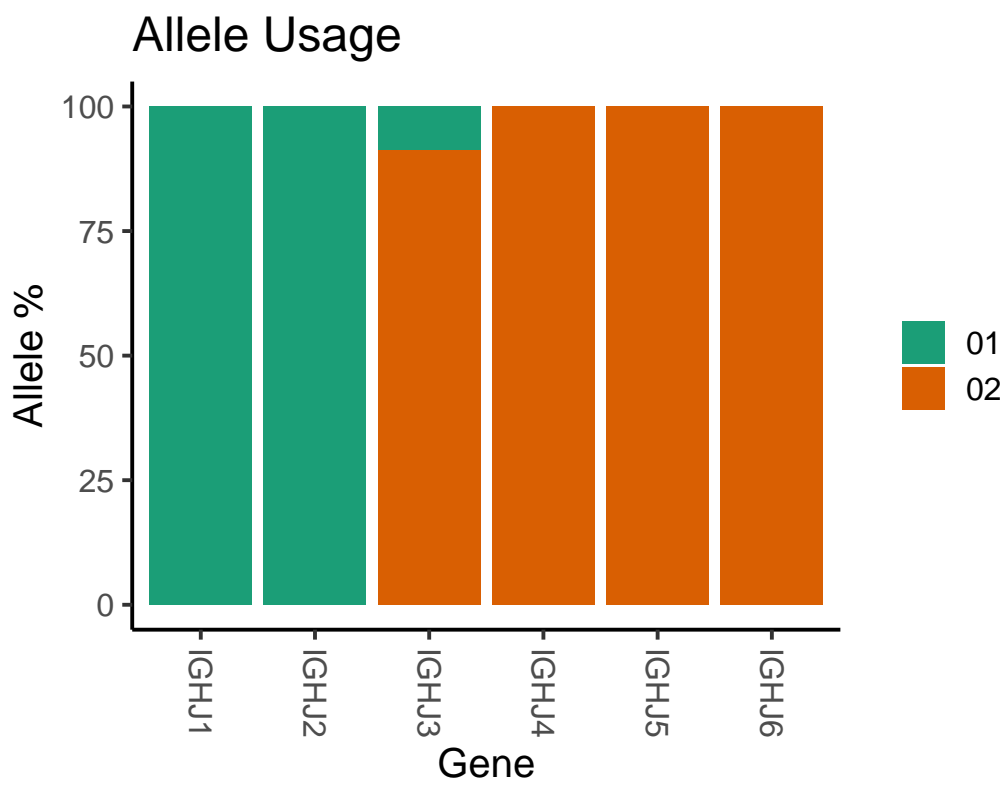
133 sequences assigned  
4 (3%) exact matches, in which:  
3 unique CDR3  
2 unique J



### IGHV7–4–1\*01

30 sequences assigned  
No exact matches.







Warning – no inferred sequences found.