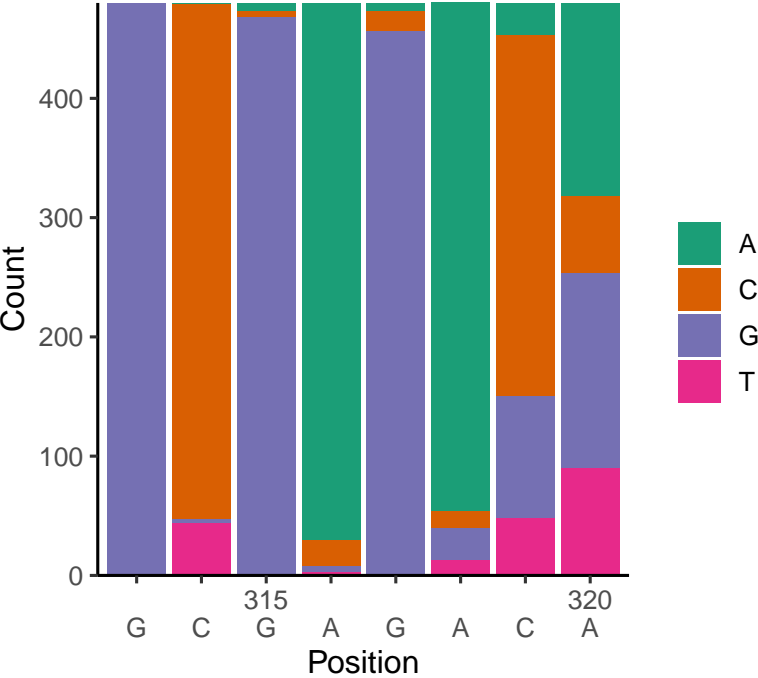
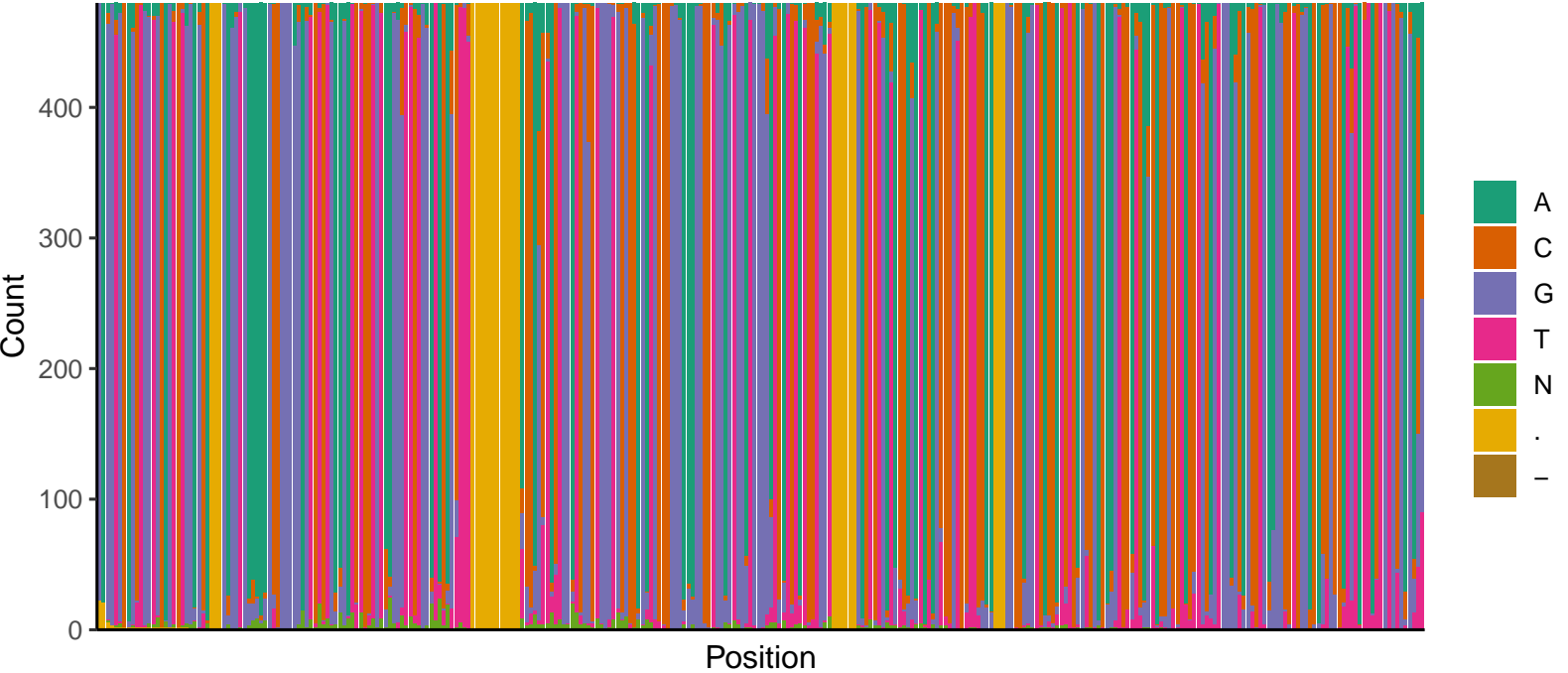


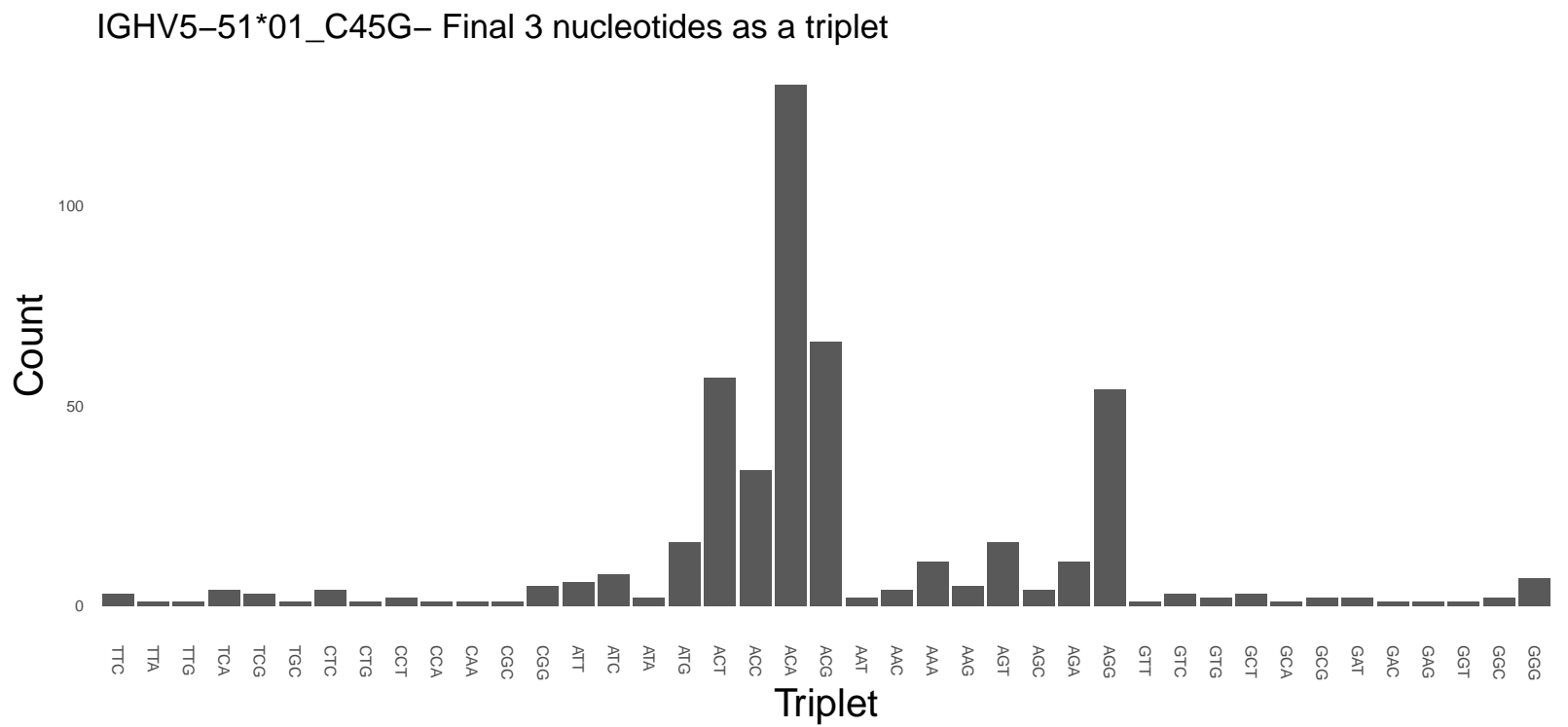
Gene IGHV5-51\*01\_C45G



Gene IGHV5-51\*01\_C45G

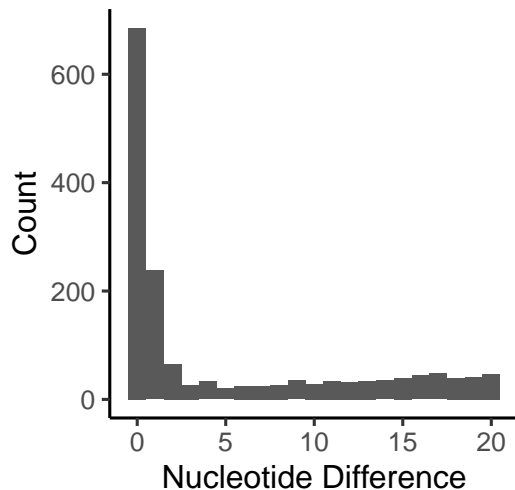


IGHV5-51\*01\_C45G- Final 3 nucleotides as a triplet



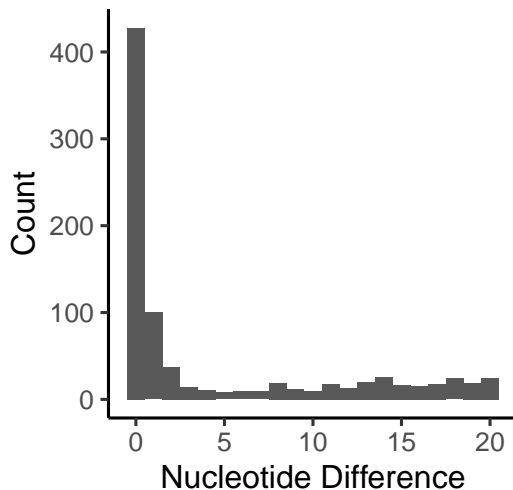
### IGHV1-2\*02

3292 sequences assigned  
686 (20.8%) exact matches, in which:  
684 unique CDR3  
6 unique J



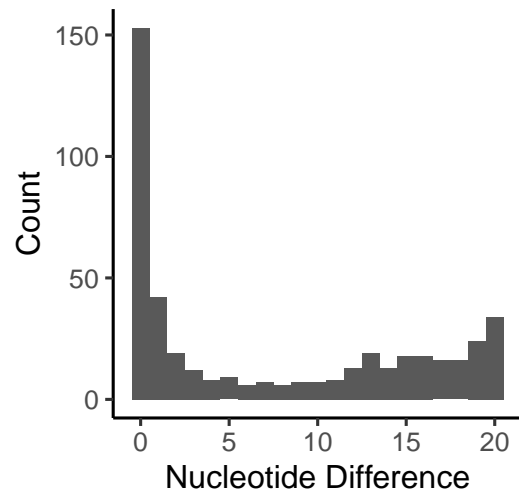
### IGHV1-18\*01

1469 sequences assigned  
428 (29.1%) exact matches, in which:  
425 unique CDR3  
6 unique J



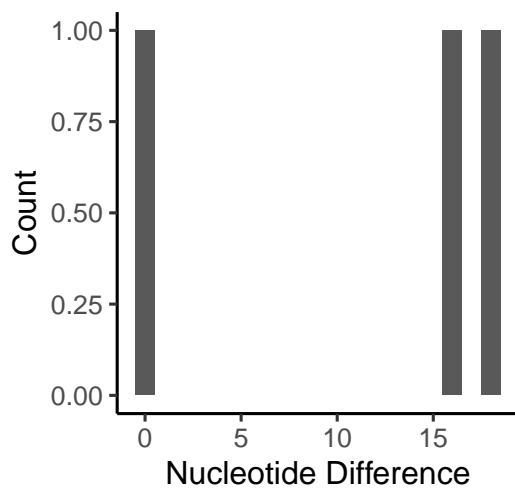
### IGHV1-46\*01

869 sequences assigned  
153 (17.6%) exact matches, in which:  
153 unique CDR3  
5 unique J



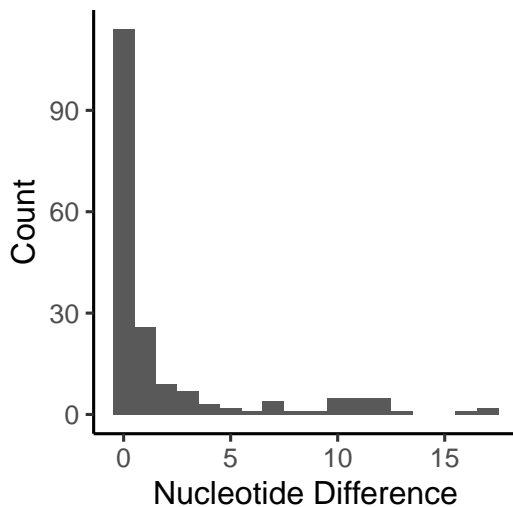
### IGHV1-3\*02

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



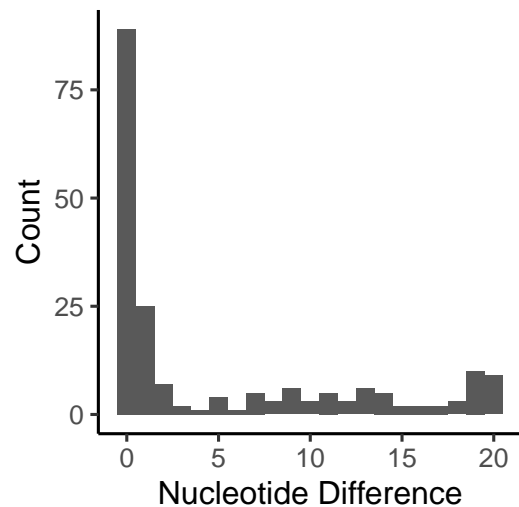
### IGHV1-24\*01

214 sequences assigned  
114 (53.3%) exact matches, in which:  
113 unique CDR3  
6 unique J



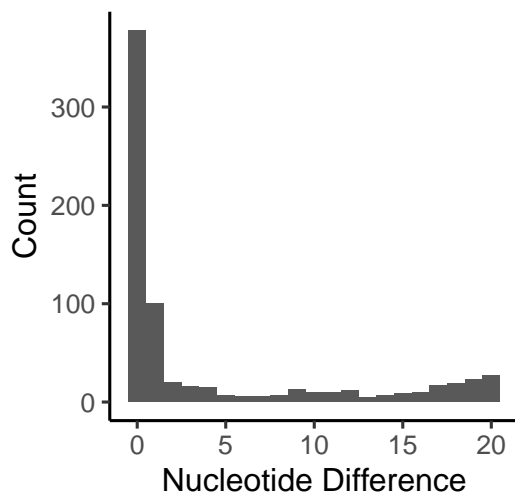
### IGHV1-46\*03

248 sequences assigned  
89 (35.9%) exact matches, in which:  
89 unique CDR3  
5 unique J



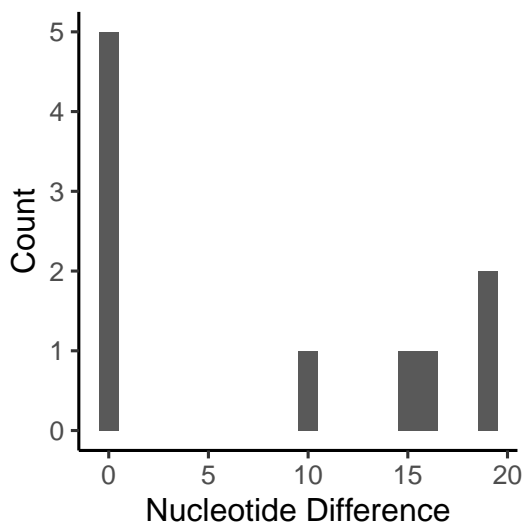
### IGHV1-8\*01

1270 sequences assigned  
378 (29.8%) exact matches, in which:  
376 unique CDR3  
5 unique J



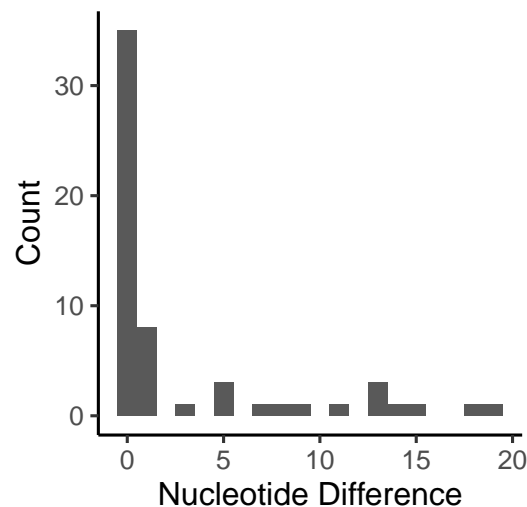
### IGHV1-45\*02

13 sequences assigned  
5 (38.5%) exact matches, in which:  
5 unique CDR3  
3 unique J



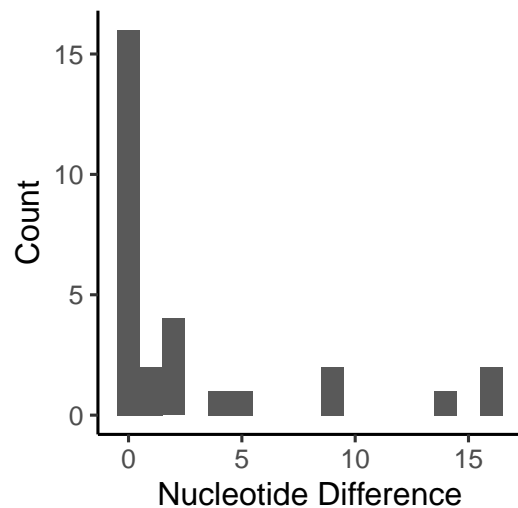
### IGHV1-58\*01

74 sequences assigned  
35 (47.3%) exact matches, in which:  
35 unique CDR3  
4 unique J



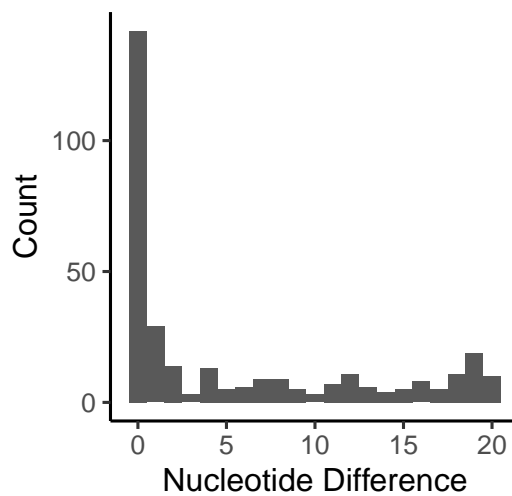
### IGHV1-58\*02

33 sequences assigned  
16 (48.5%) exact matches, in which:  
16 unique CDR3  
4 unique J



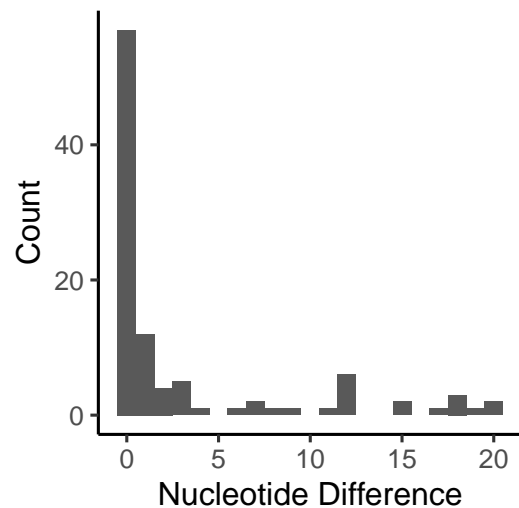
### IGHV2-5\*01

425 sequences assigned  
142 (33.4%) exact matches, in which:  
142 unique CDR3  
5 unique J



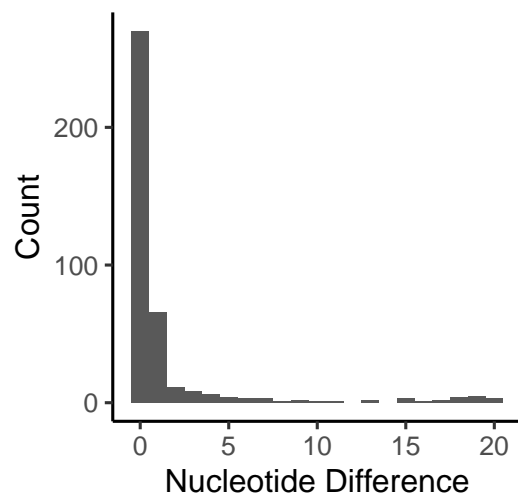
### IGHV2-70\*01

120 sequences assigned  
57 (47.5%) exact matches, in which:  
56 unique CDR3  
4 unique J



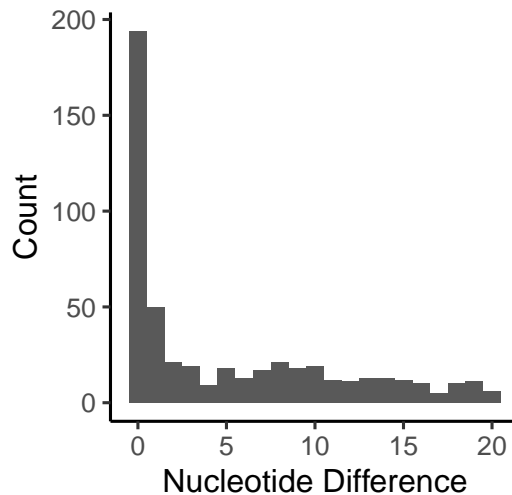
### IGHV1-69\*04

515 sequences assigned  
270 (52.4%) exact matches, in which:  
266 unique CDR3  
6 unique J



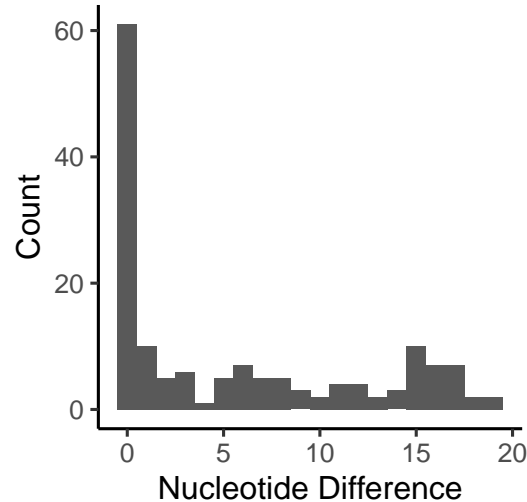
### IGHV2-5\*02

731 sequences assigned  
194 (26.5%) exact matches, in which:  
193 unique CDR3  
6 unique J



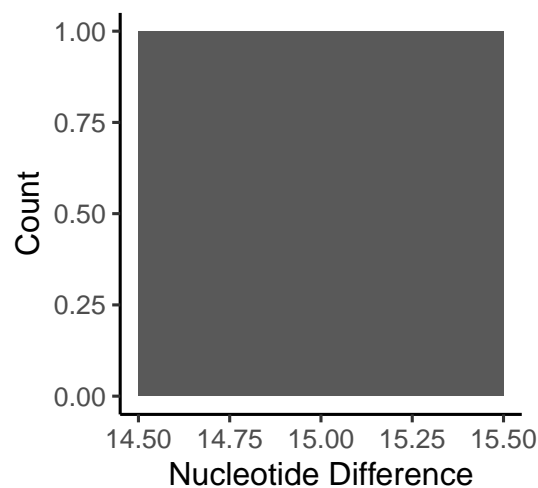
### IGHV2-70\*15

180 sequences assigned  
61 (33.9%) exact matches, in which:  
61 unique CDR3  
4 unique J



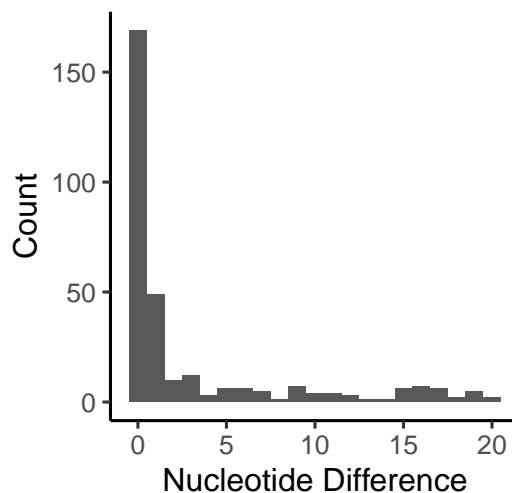
### IGHV1-NL1\*01

1 sequences assigned  
No exact matches.



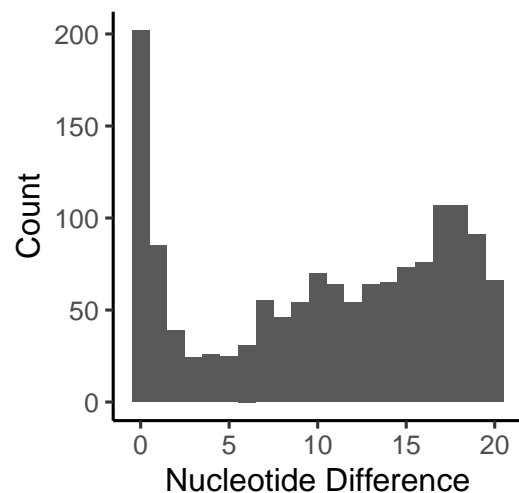
### IGHV2-26\*01

360 sequences assigned  
169 (46.9%) exact matches, in which:  
167 unique CDR3  
6 unique J



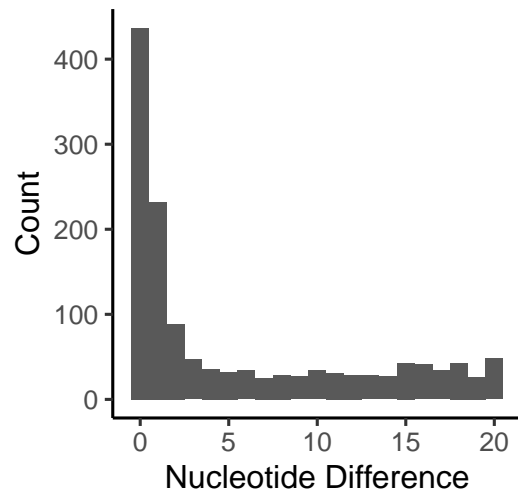
### IGHV3-7\*01

3461 sequences assigned  
202 (5.8%) exact matches, in which:  
197 unique CDR3  
6 unique J



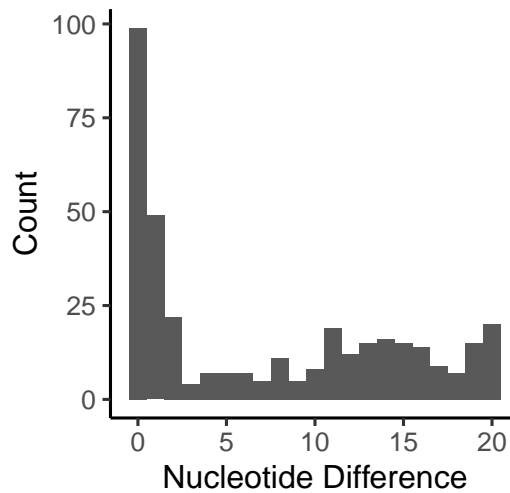
### IGHV3-9\*01

2125 sequences assigned  
437 (20.6%) exact matches, in which:  
434 unique CDR3  
6 unique J



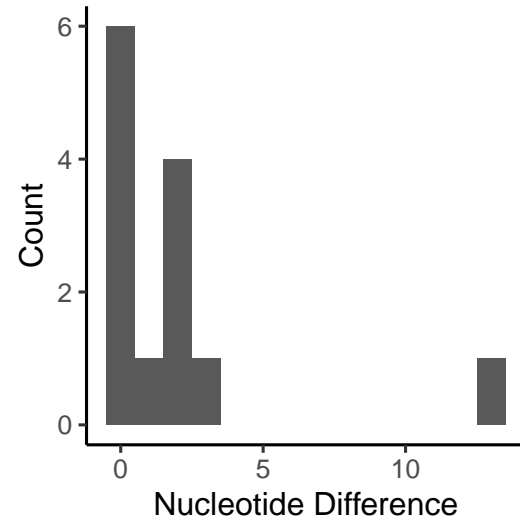
### IGHV3-15\*01

664 sequences assigned  
99 (14.9%) exact matches, in which:  
96 unique CDR3  
4 unique J



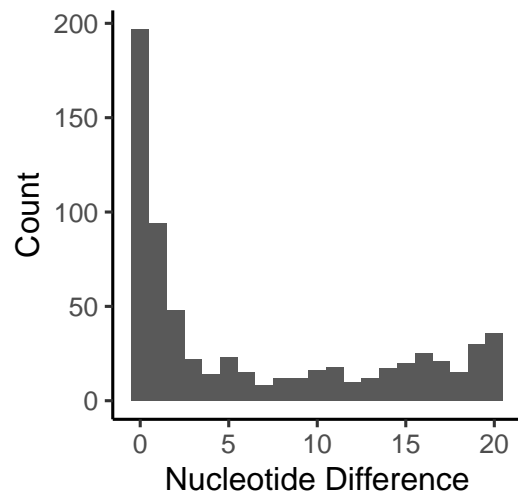
### IGHV3-20\*04

19 sequences assigned  
6 (31.6%) exact matches, in which:  
6 unique CDR3  
2 unique J



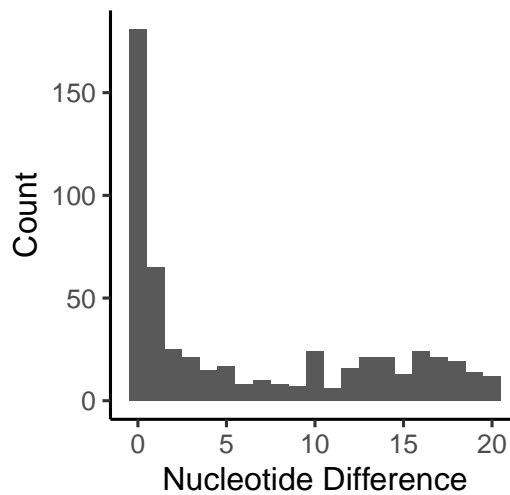
### IGHV3-11\*01

987 sequences assigned  
197 (20%) exact matches, in which:  
194 unique CDR3  
6 unique J



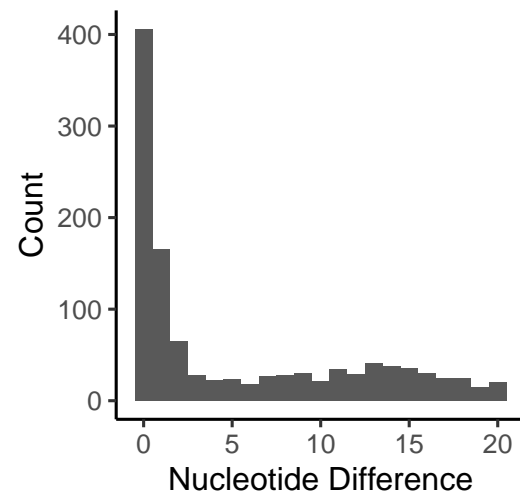
### IGHV3-15\*07

1110 sequences assigned  
181 (16.3%) exact matches, in which:  
179 unique CDR3  
6 unique J



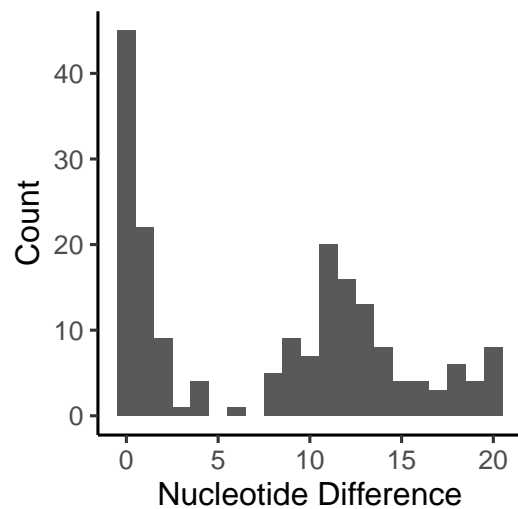
### IGHV3-21\*01

1584 sequences assigned  
406 (25.6%) exact matches, in which:  
403 unique CDR3  
6 unique J



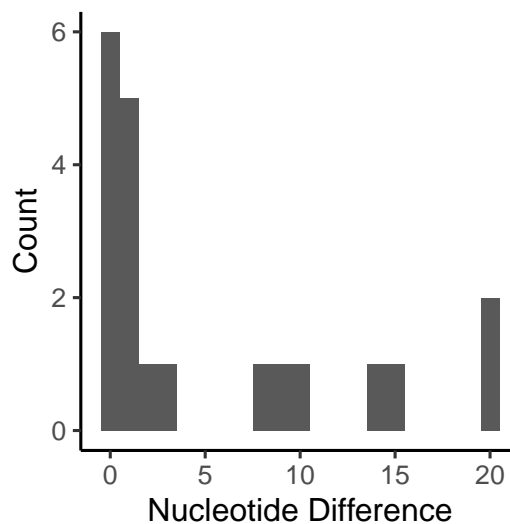
### IGHV3-13\*01

285 sequences assigned  
45 (15.8%) exact matches, in which:  
45 unique CDR3  
5 unique J



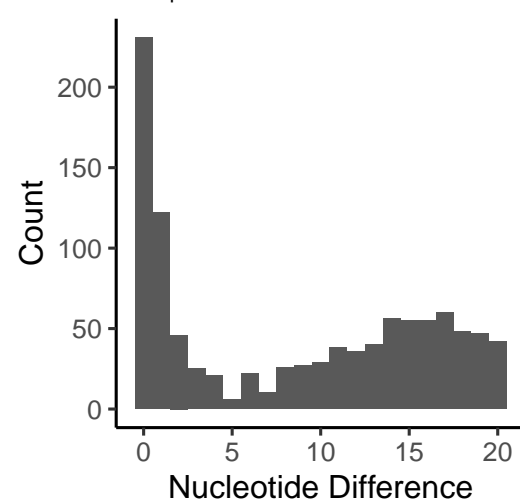
### IGHV3-20\*01

26 sequences assigned  
6 (23.1%) exact matches, in which:  
6 unique CDR3  
3 unique J



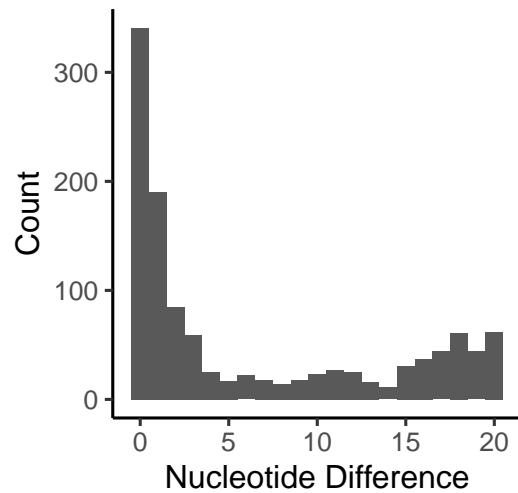
### IGHV3-23\*04

1516 sequences assigned  
231 (15.2%) exact matches, in which:  
231 unique CDR3  
6 unique J



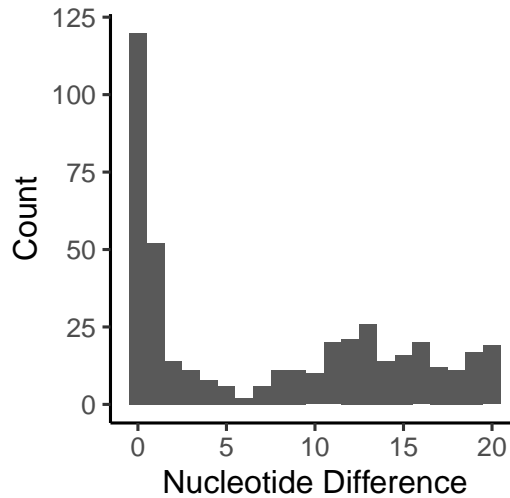
### IGHV3–33\*01

2020 sequences assigned  
341 (16.9%) exact matches, in which:  
337 unique CDR3  
6 unique J



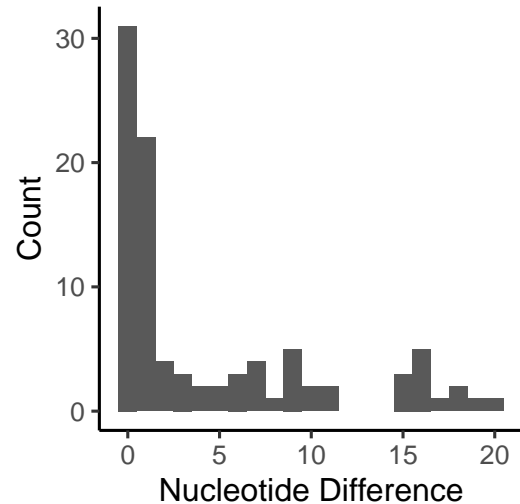
### IGHV3–48\*01

734 sequences assigned  
120 (16.3%) exact matches, in which:  
120 unique CDR3  
6 unique J



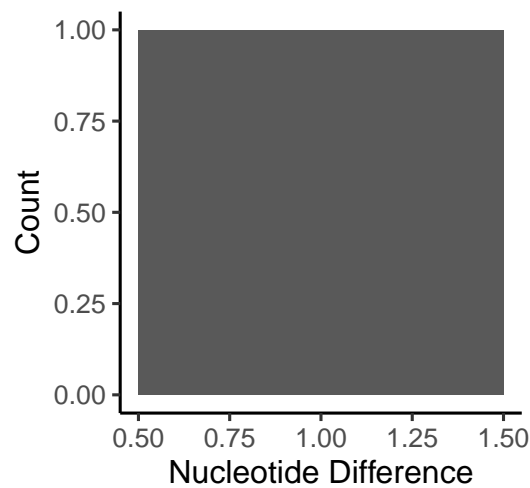
### IGHV3–49\*05

125 sequences assigned  
31 (24.8%) exact matches, in which:  
31 unique CDR3  
4 unique J



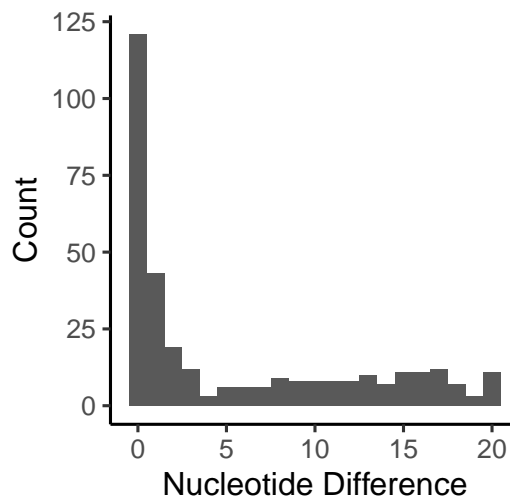
### IGHV3–35\*01

1 sequences assigned  
No exact matches.



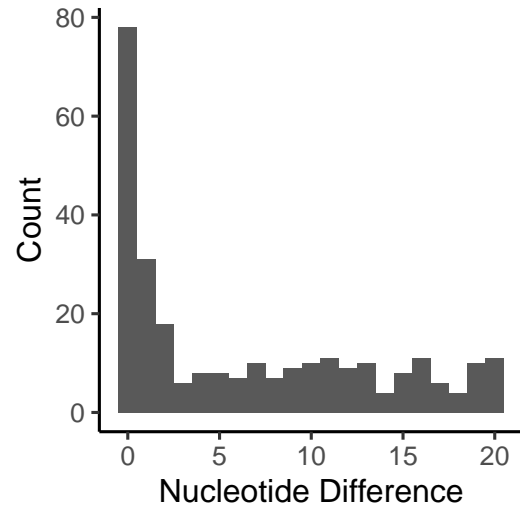
### IGHV3–48\*02

609 sequences assigned  
121 (19.9%) exact matches, in which:  
120 unique CDR3  
5 unique J



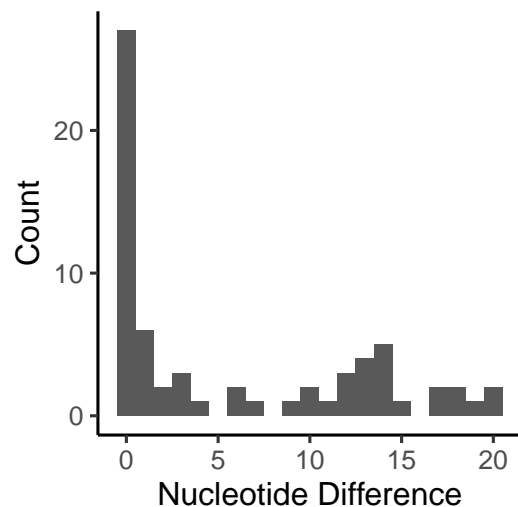
### IGHV3–53\*01

389 sequences assigned  
78 (20.1%) exact matches, in which:  
78 unique CDR3  
4 unique J



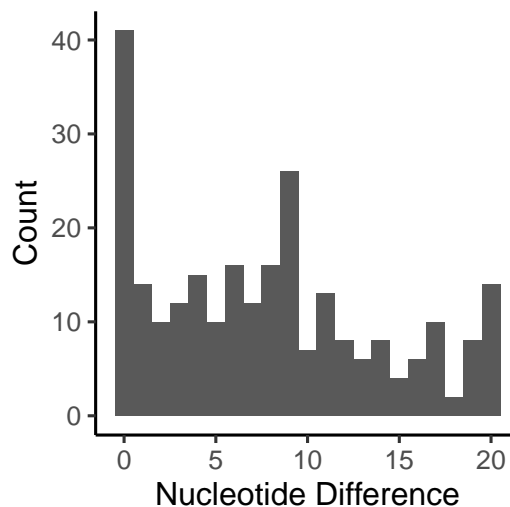
### IGHV3–43\*01

107 sequences assigned  
27 (25.2%) exact matches, in which:  
27 unique CDR3  
5 unique J



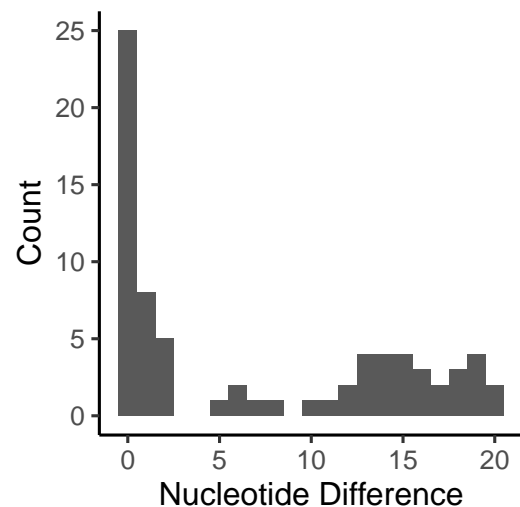
### IGHV3–49\*03

347 sequences assigned  
41 (11.8%) exact matches, in which:  
41 unique CDR3  
6 unique J



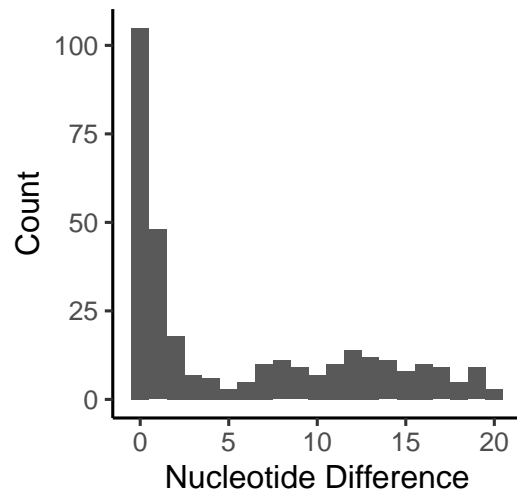
### IGHV3–64\*01

180 sequences assigned  
25 (13.9%) exact matches, in which:  
25 unique CDR3  
4 unique J



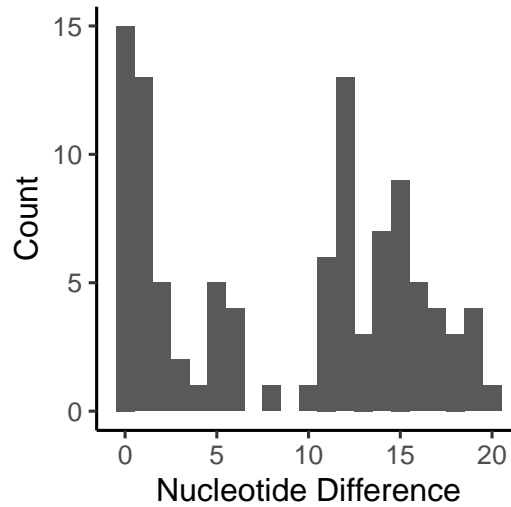
### IGHV3-66\*01

441 sequences assigned  
105 (23.8%) exact matches, in which:  
105 unique CDR3  
6 unique J



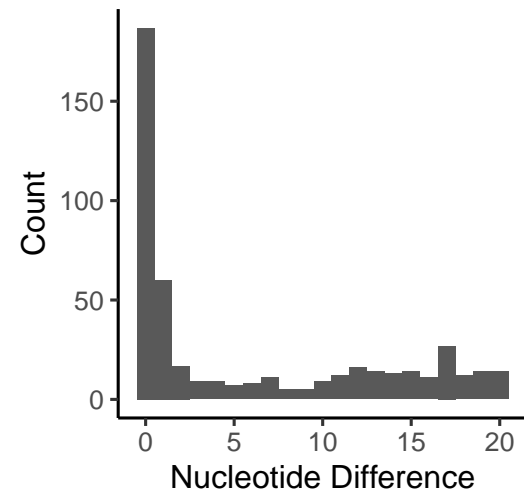
### IGHV3-73\*01

121 sequences assigned  
15 (12.4%) exact matches, in which:  
15 unique CDR3  
4 unique J



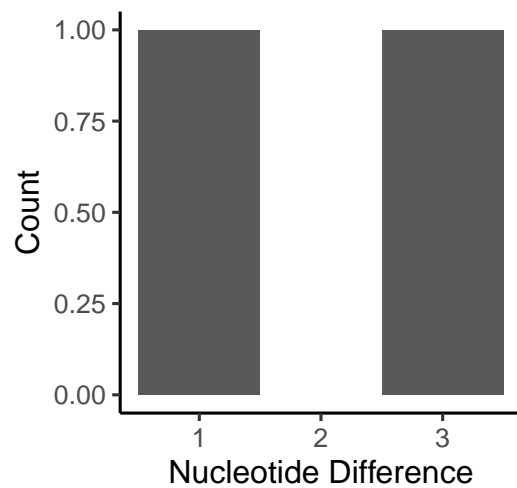
### IGHV4-4\*07

792 sequences assigned  
187 (23.6%) exact matches, in which:  
187 unique CDR3  
6 unique J



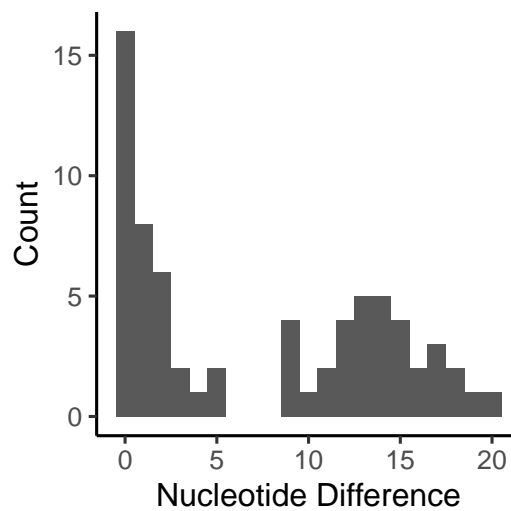
### IGHV3-69-1\*02

2 sequences assigned  
No exact matches.



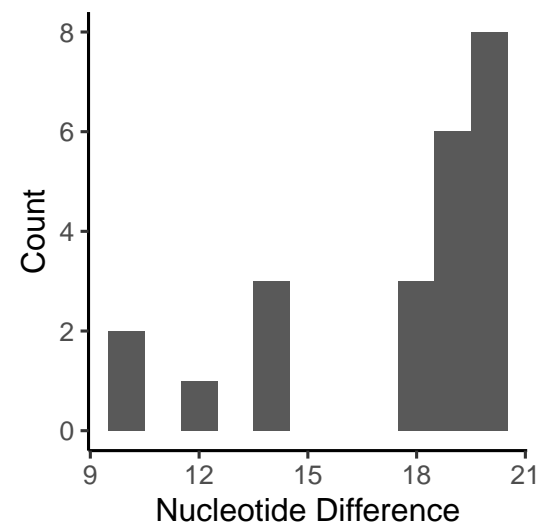
### IGHV3-73\*02

105 sequences assigned  
16 (15.2%) exact matches, in which:  
16 unique CDR3  
4 unique J



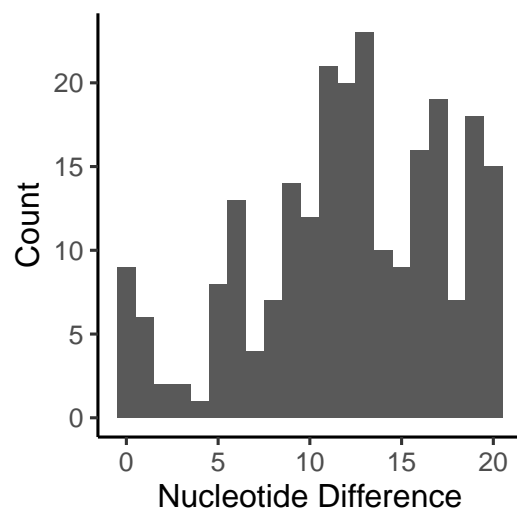
### IGHV4-28\*01

86 sequences assigned  
No exact matches.



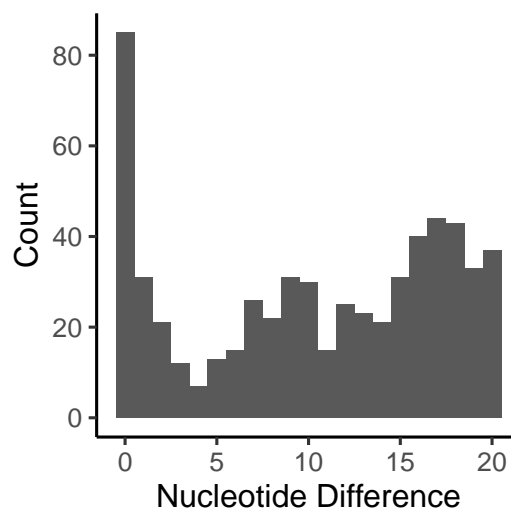
### IGHV3-72\*01

409 sequences assigned  
9 (2.2%) exact matches, in which:  
9 unique CDR3  
3 unique J



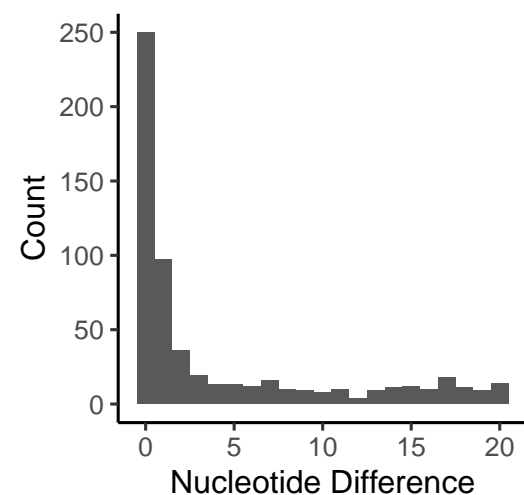
### IGHV3-74\*01

1126 sequences assigned  
85 (7.5%) exact matches, in which:  
83 unique CDR3  
5 unique J



### IGHV4-31\*03

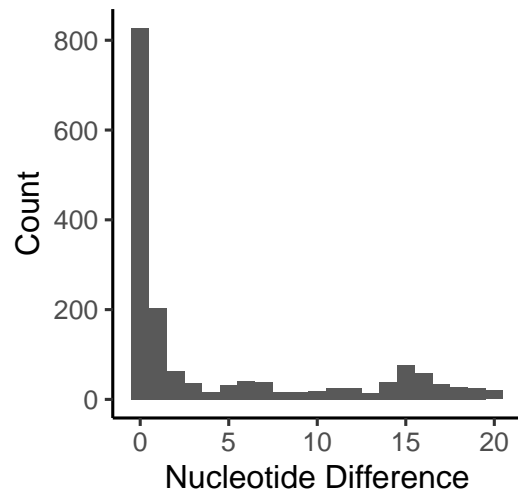
896 sequences assigned  
250 (27.9%) exact matches, in which:  
249 unique CDR3  
6 unique J





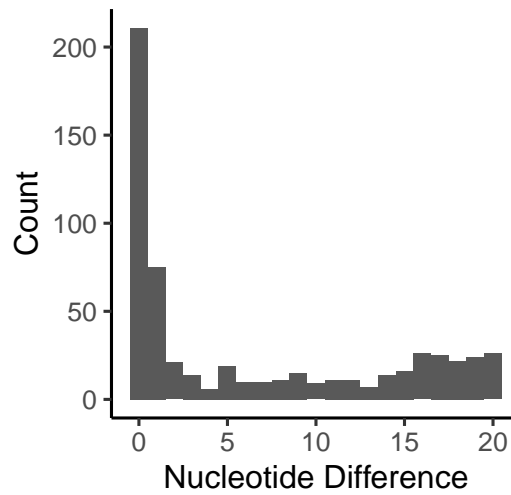
### IGHV4-34\*01

2130 sequences assigned  
828 (38.9%) exact matches, in which:  
823 unique CDR3  
6 unique J



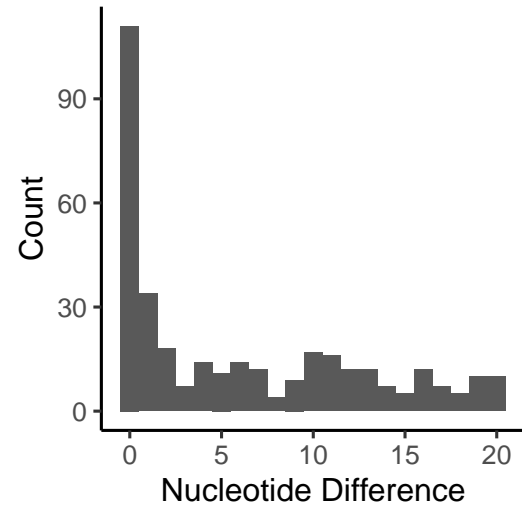
### IGHV4-59\*01

1004 sequences assigned  
211 (21%) exact matches, in which:  
210 unique CDR3  
5 unique J



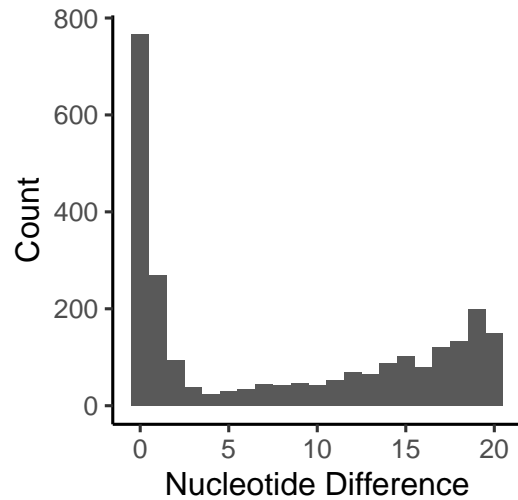
### IGHV5-51\*01

458 sequences assigned  
111 (24.2%) exact matches, in which:  
111 unique CDR3  
5 unique J



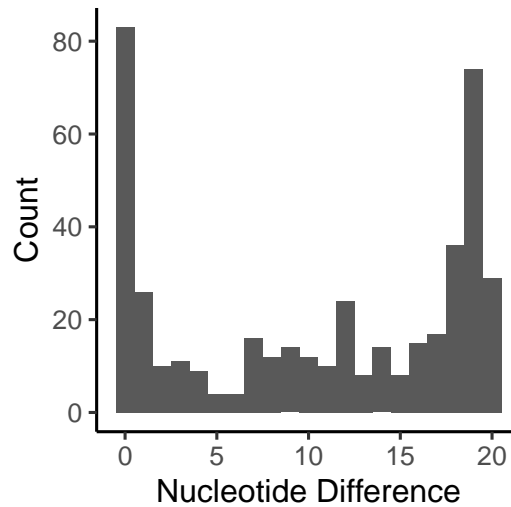
### IGHV4-39\*01

5126 sequences assigned  
767 (15%) exact matches, in which:  
761 unique CDR3  
6 unique J



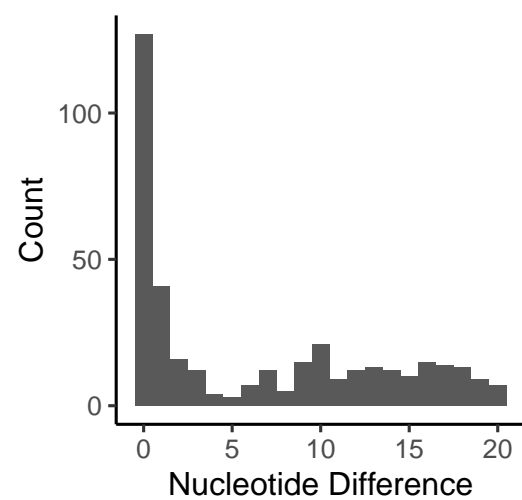
### IGHV4-59\*08

791 sequences assigned  
83 (10.5%) exact matches, in which:  
81 unique CDR3  
5 unique J



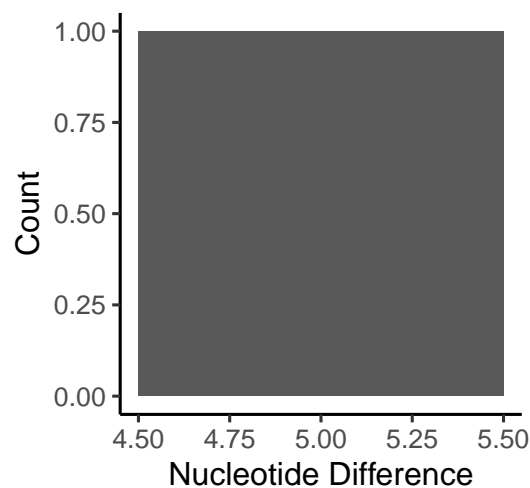
### IGHV5-51\*01\_C45G

480 sequences assigned  
127 (26.5%) exact matches, in which:  
127 unique CDR3  
6 unique J



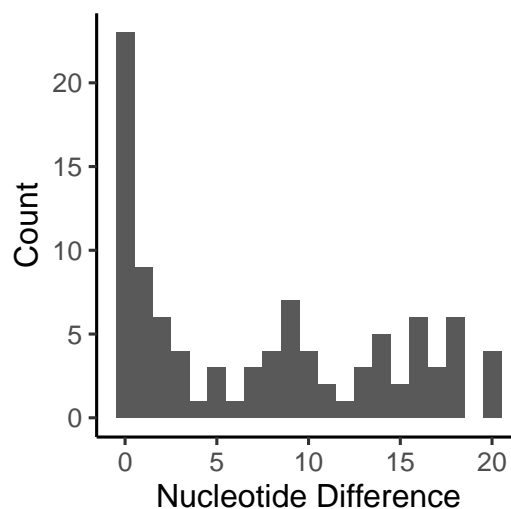
### IGHV4-55\*08

1 sequences assigned  
No exact matches.



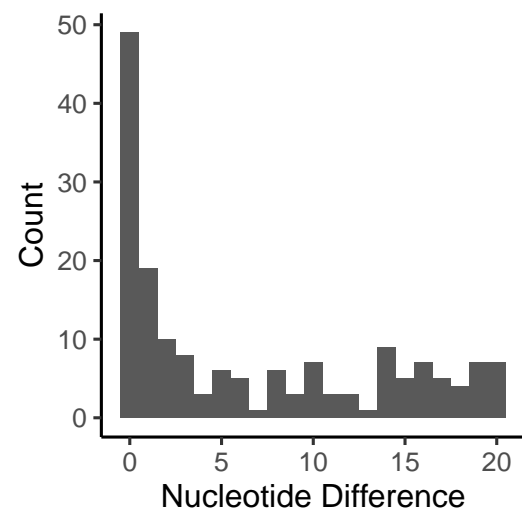
### IGHV4-61\*01

136 sequences assigned  
23 (16.9%) exact matches, in which:  
23 unique CDR3  
4 unique J



### IGHV6-1\*01

235 sequences assigned  
49 (20.9%) exact matches, in which:  
49 unique CDR3  
4 unique J





Warning – no inferred sequences found.

Warning – no inferred sequences found.

Warning – no inferred sequences found.

Warning – no inferred sequences found.

Warning – no inferred sequences found.

Warning – no inferred sequences found.