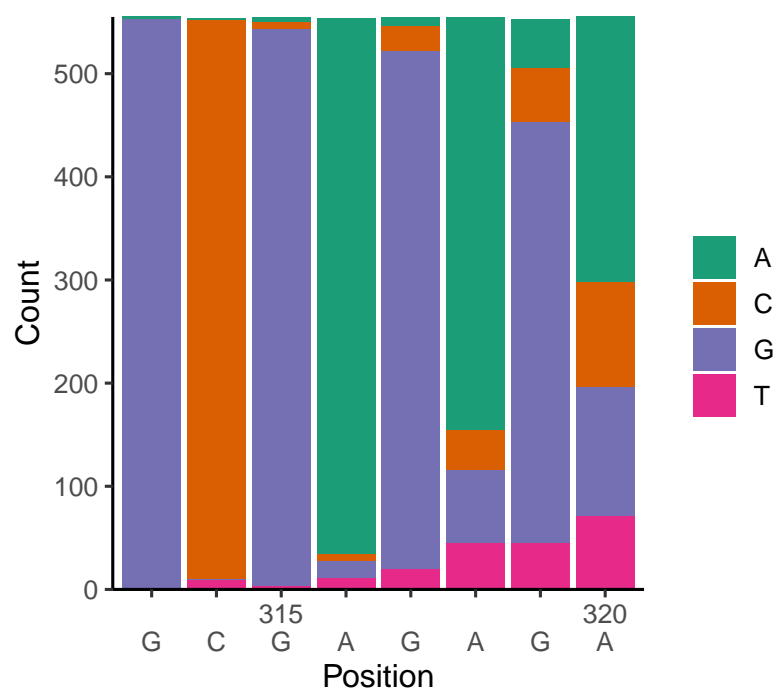
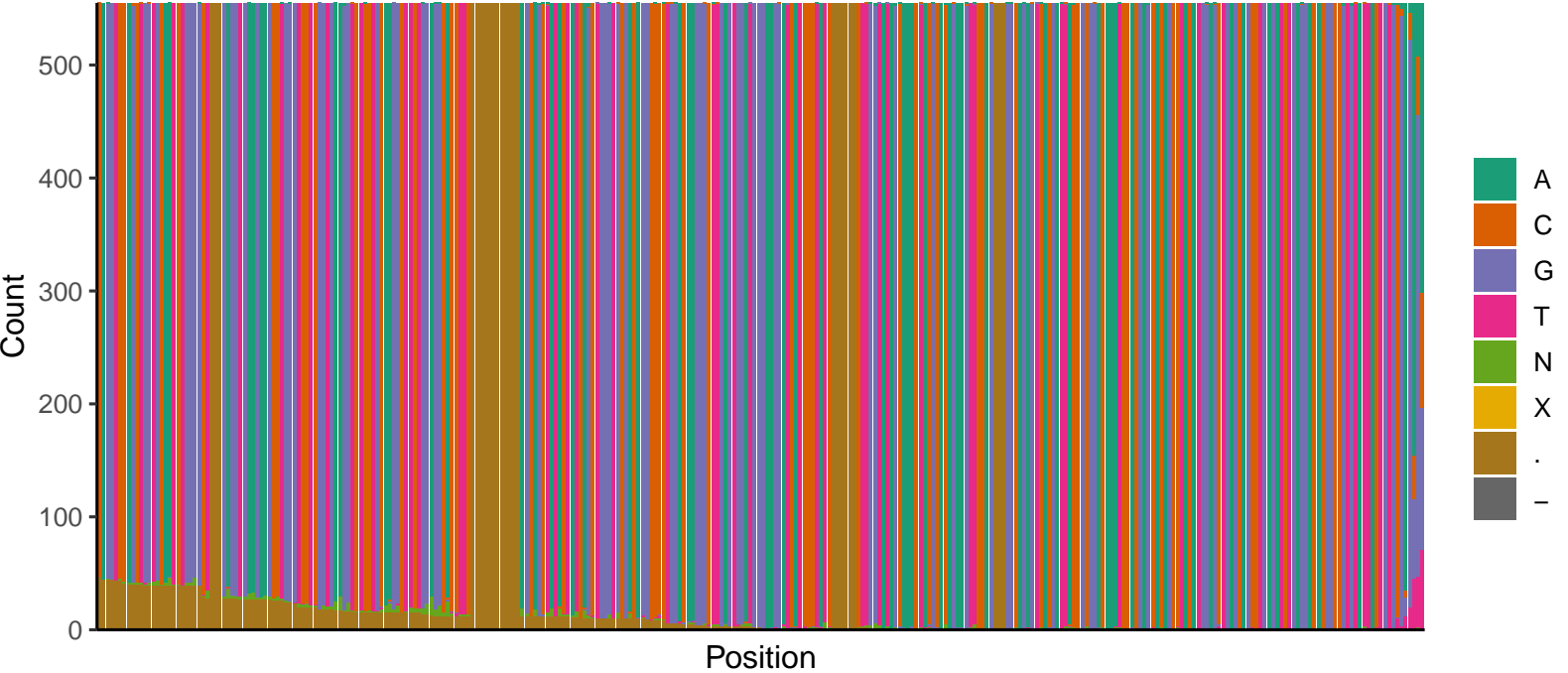


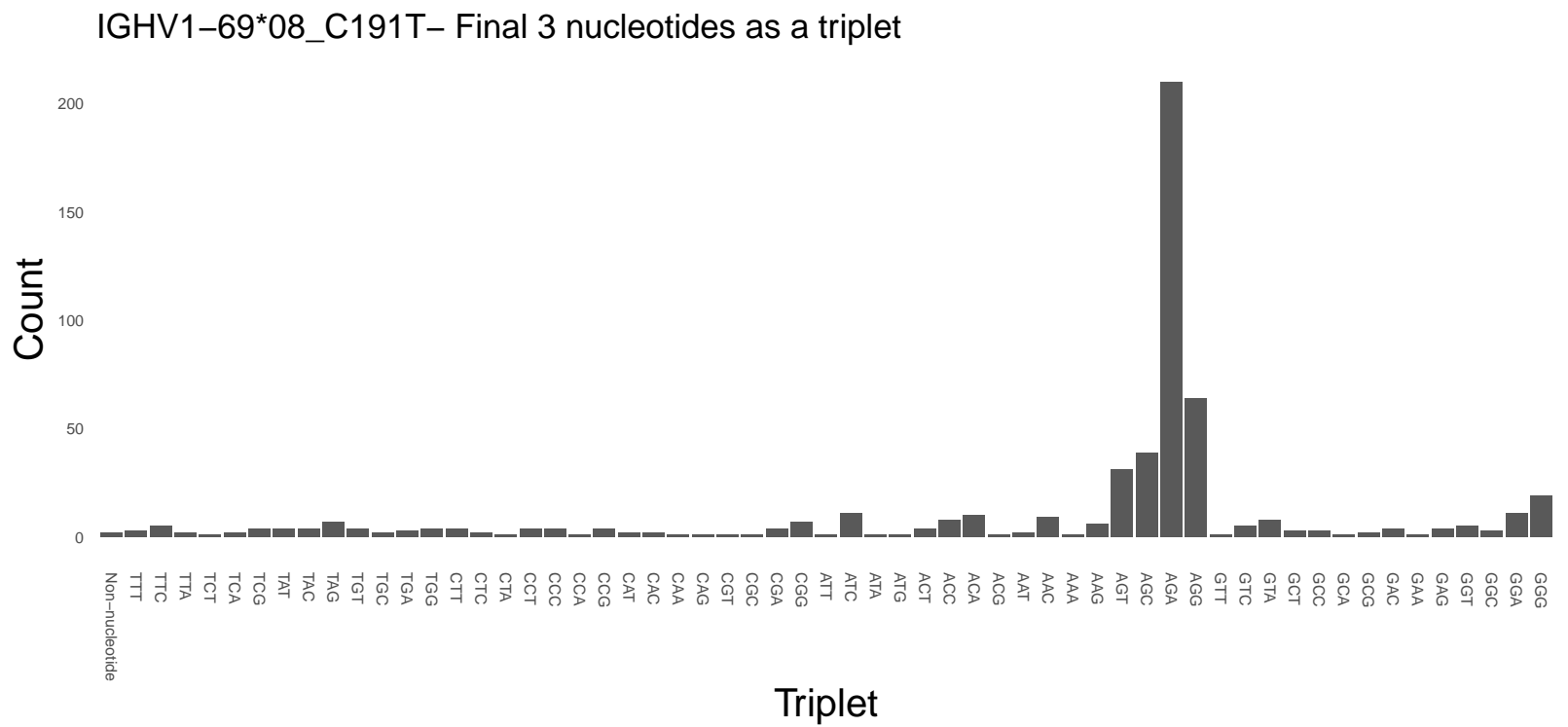
# Gene IGHV1-69\*08\_C191T



Gene IGHV1-69\*08\_C191T

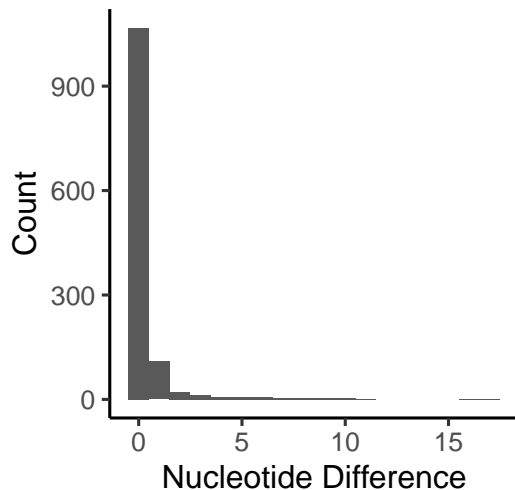


IGHV1-69\*08\_C191T- Final 3 nucleotides as a triplet



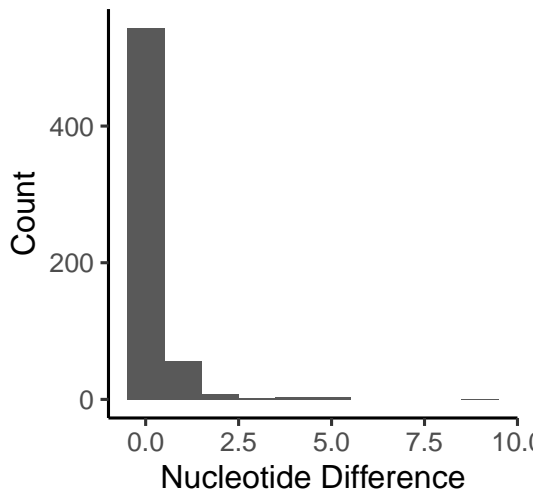
### IGHV1-2\*02

1253 sequences assigned  
1068 (85.2%) exact matches, in which:  
1020 unique CDR3  
7 unique J



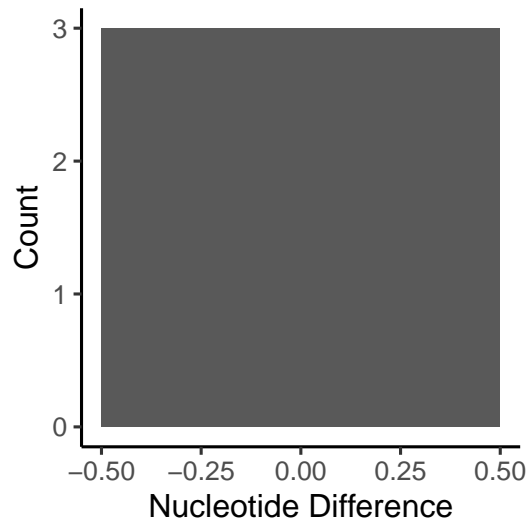
### IGHV1-8\*01

620 sequences assigned  
544 (87.7%) exact matches, in which:  
512 unique CDR3  
6 unique J



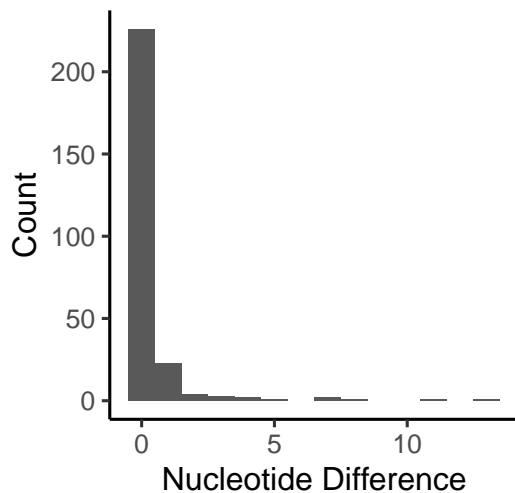
### IGHV1-45\*02

3 sequences assigned  
3 (100%) exact matches, in which:  
3 unique CDR3  
2 unique J



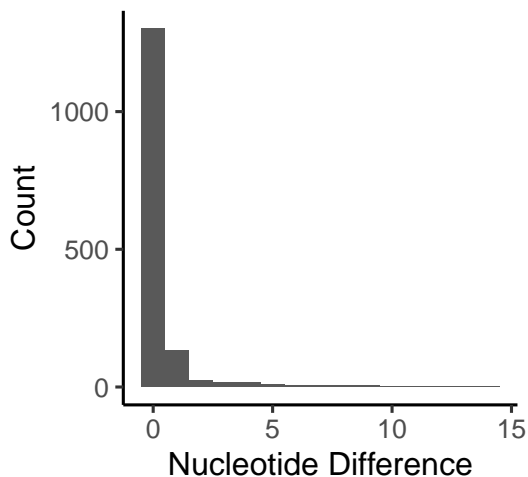
### IGHV1-2\*04

264 sequences assigned  
226 (85.6%) exact matches, in which:  
216 unique CDR3  
6 unique J



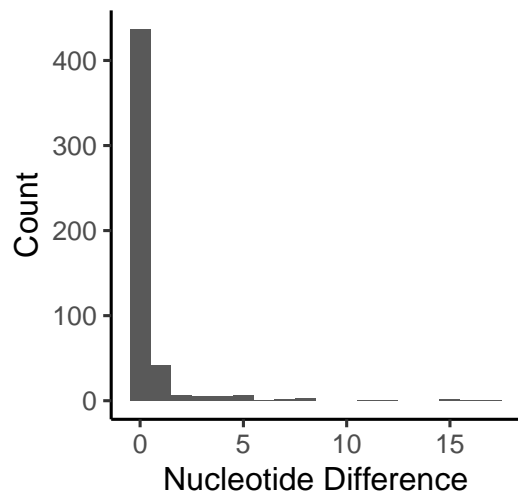
### IGHV1-18\*01

1527 sequences assigned  
1301 (85.2%) exact matches, in which:  
1249 unique CDR3  
7 unique J



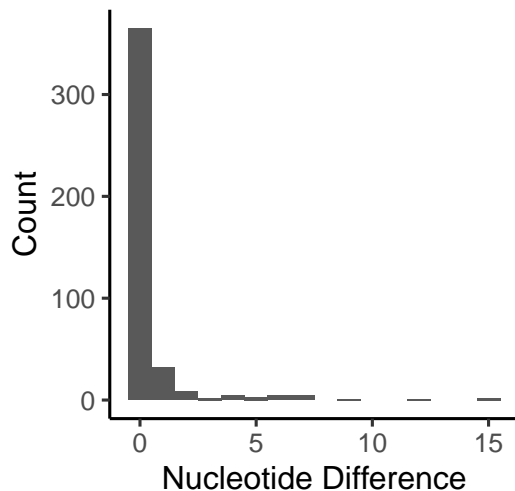
### IGHV1-46\*01

515 sequences assigned  
437 (84.9%) exact matches, in which:  
422 unique CDR3  
6 unique J



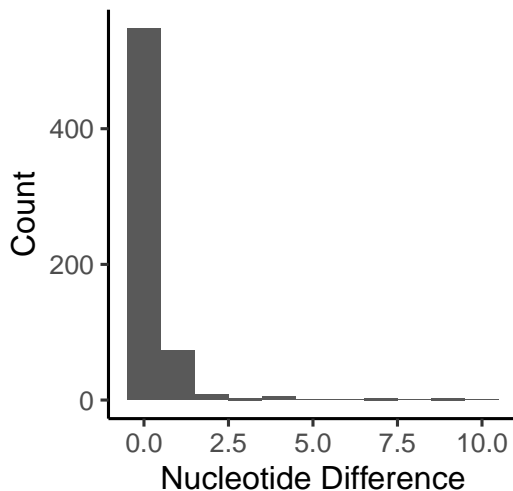
### IGHV1-3\*01

426 sequences assigned  
365 (85.7%) exact matches, in which:  
354 unique CDR3  
7 unique J



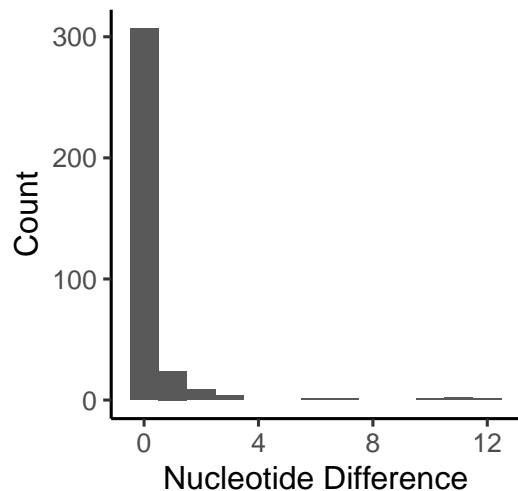
### IGHV1-24\*01

649 sequences assigned  
548 (84.4%) exact matches, in which:  
527 unique CDR3  
7 unique J



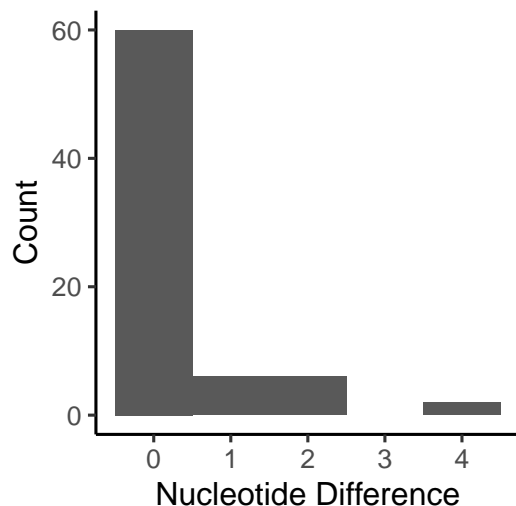
### IGHV1-46\*03

350 sequences assigned  
307 (87.7%) exact matches, in which:  
290 unique CDR3  
7 unique J



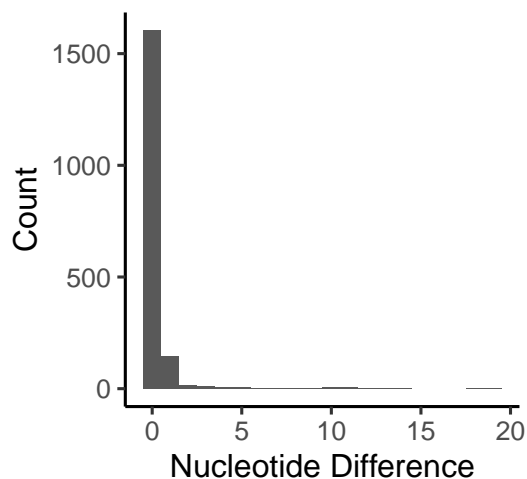
### IGHV1-58\*01

74 sequences assigned  
60 (81.1%) exact matches, in which:  
58 unique CDR3  
5 unique J



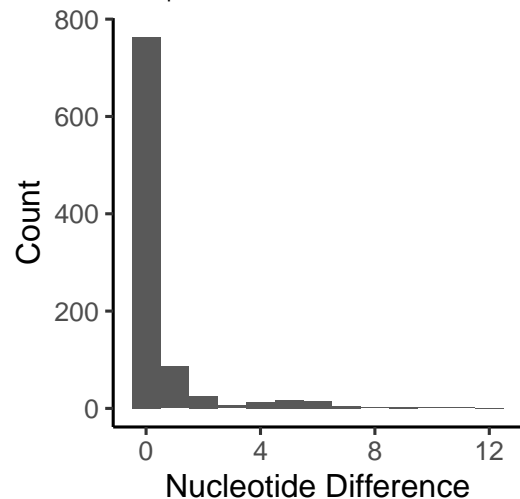
### IGHV1-69\*06

1819 sequences assigned  
1604 (88.2%) exact matches, in which:  
1523 unique CDR3  
7 unique J



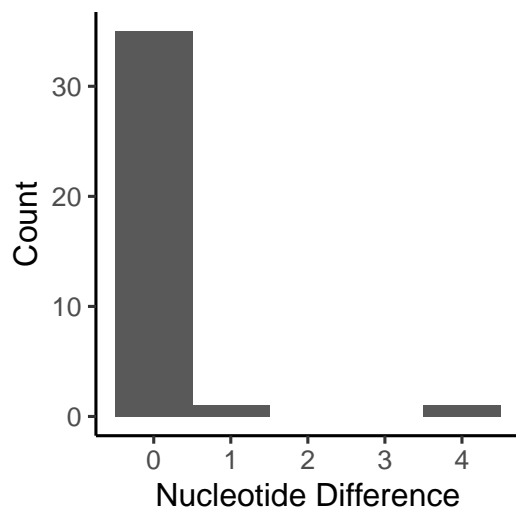
### IGHV2-5\*02

941 sequences assigned  
764 (81.2%) exact matches, in which:  
742 unique CDR3  
7 unique J



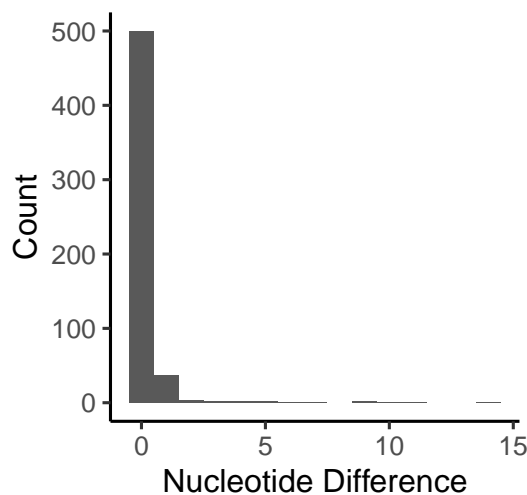
### IGHV1-58\*02

37 sequences assigned  
35 (94.6%) exact matches, in which:  
35 unique CDR3  
5 unique J



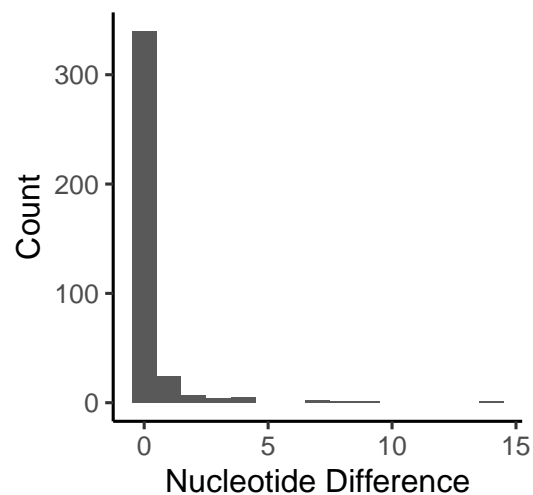
### IGHV1-69\*08\_C191T

555 sequences assigned  
500 (90.1%) exact matches, in which:  
475 unique CDR3  
6 unique J



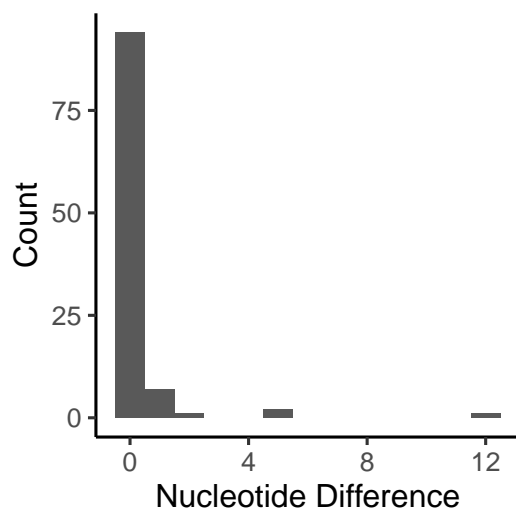
### IGHV2-26\*01

385 sequences assigned  
340 (88.3%) exact matches, in which:  
329 unique CDR3  
6 unique J



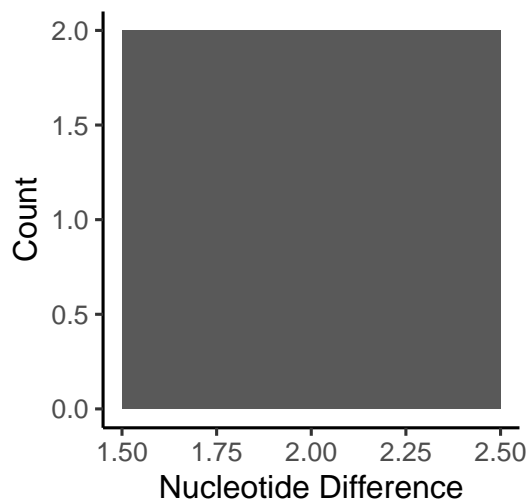
### IGHV1-69-2\*01

105 sequences assigned  
94 (89.5%) exact matches, in which:  
87 unique CDR3  
5 unique J



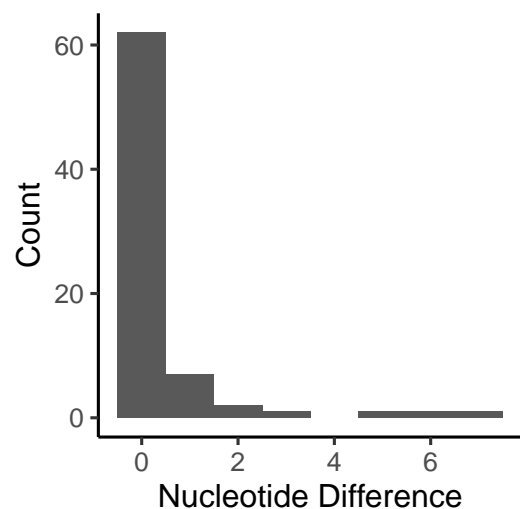
### IGHV1-NL1\*01

2 sequences assigned  
No exact matches.



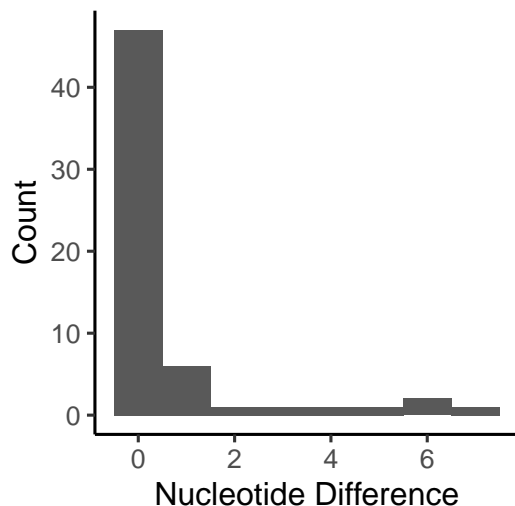
### IGHV2-70\*01

75 sequences assigned  
62 (82.7%) exact matches, in which:  
61 unique CDR3  
5 unique J



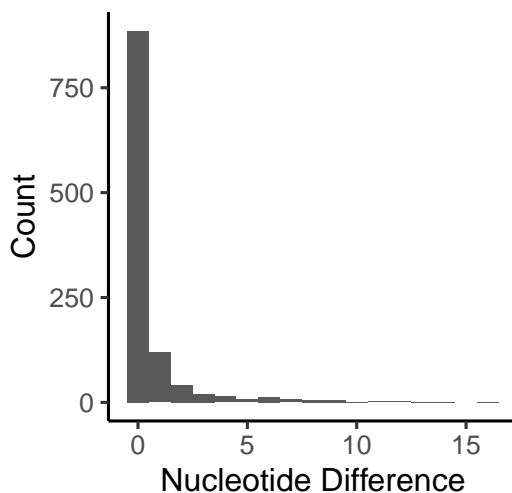
## IGHV2-70\*04

60 sequences assigned  
47 (78.3%) exact matches, in which:  
46 unique CDR3  
5 unique J



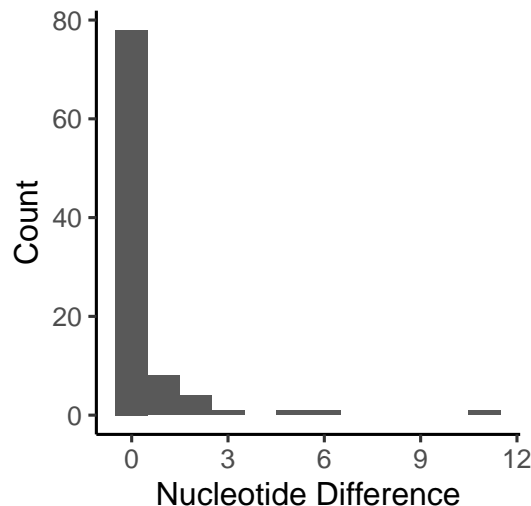
## IGHV3-9\*01

1126 sequences assigned  
886 (78.7%) exact matches, in which:  
833 unique CDR3  
7 unique J



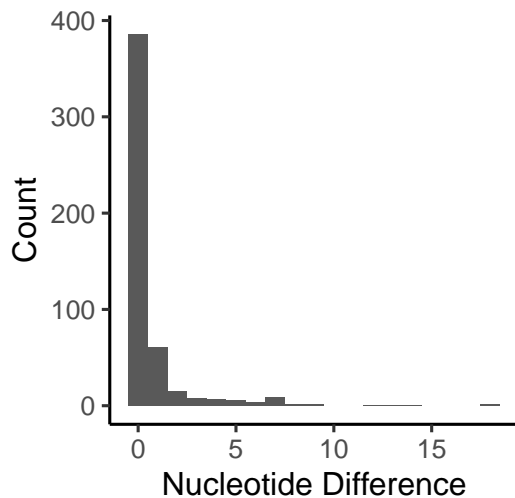
## IGHV3-13\*01

94 sequences assigned  
78 (83%) exact matches, in which:  
74 unique CDR3  
6 unique J



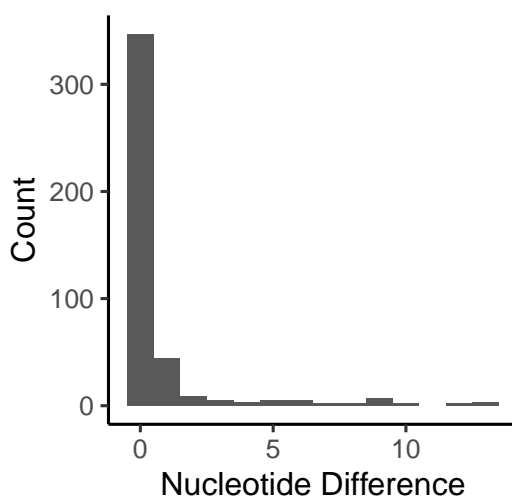
## IGHV3-7\*01

505 sequences assigned  
386 (76.4%) exact matches, in which:  
370 unique CDR3  
6 unique J



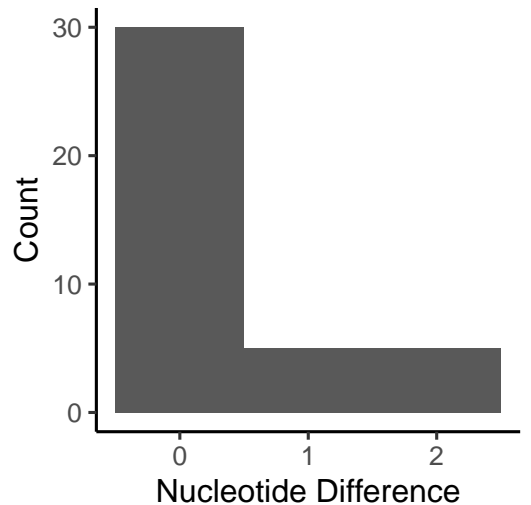
## IGHV3-11\*01

436 sequences assigned  
347 (79.6%) exact matches, in which:  
335 unique CDR3  
6 unique J



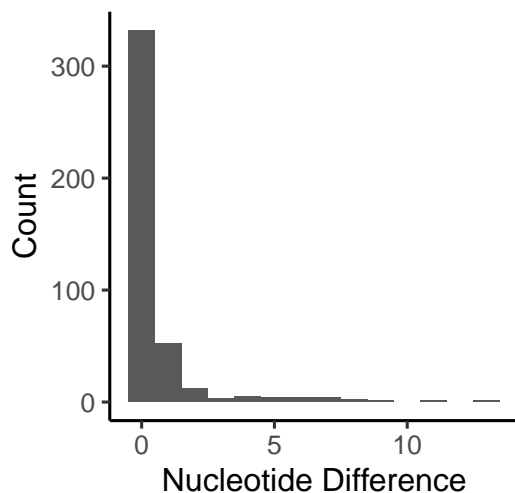
## IGHV3-13\*05

40 sequences assigned  
30 (75%) exact matches, in which:  
29 unique CDR3  
5 unique J



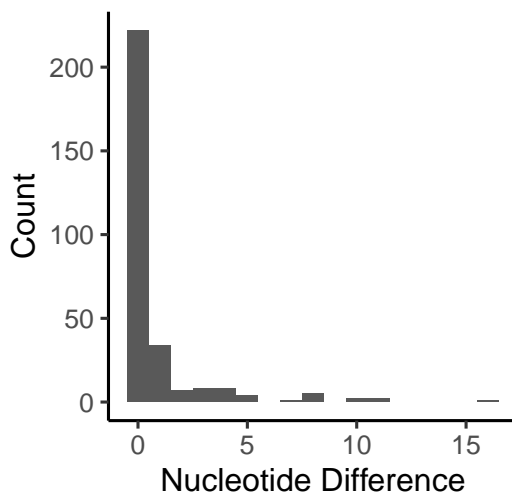
## IGHV3-7\*03

421 sequences assigned  
332 (78.9%) exact matches, in which:  
321 unique CDR3  
7 unique J



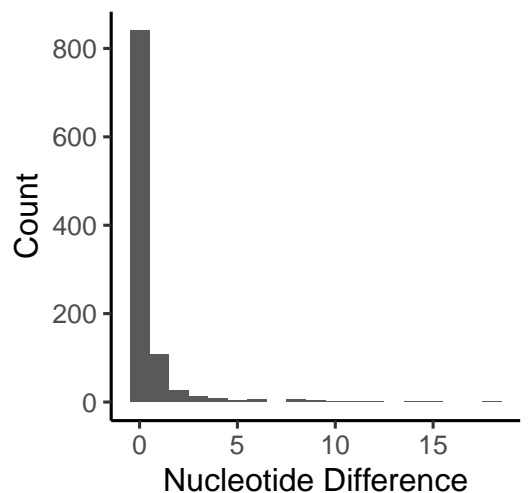
## IGHV3-11\*06

294 sequences assigned  
222 (75.5%) exact matches, in which:  
213 unique CDR3  
6 unique J



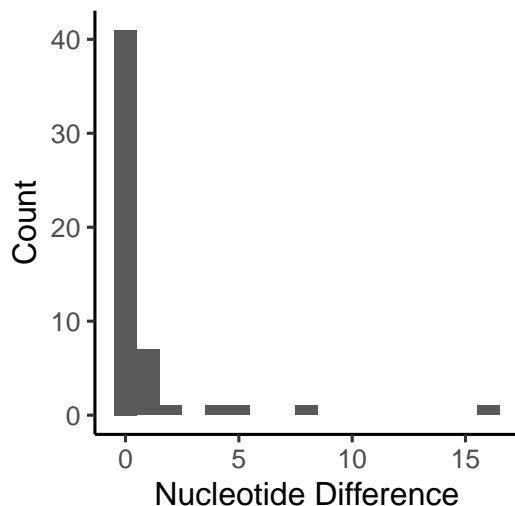
## IGHV3-15\*01

1020 sequences assigned  
841 (82.5%) exact matches, in which:  
808 unique CDR3  
7 unique J



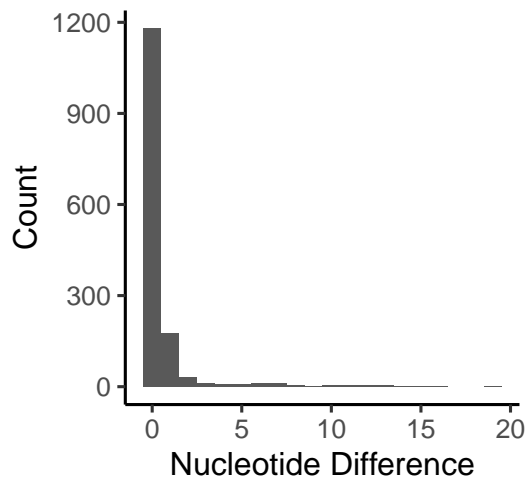
### IGHV3-20\*01

53 sequences assigned  
41 (77.4%) exact matches, in which:  
39 unique CDR3  
5 unique J



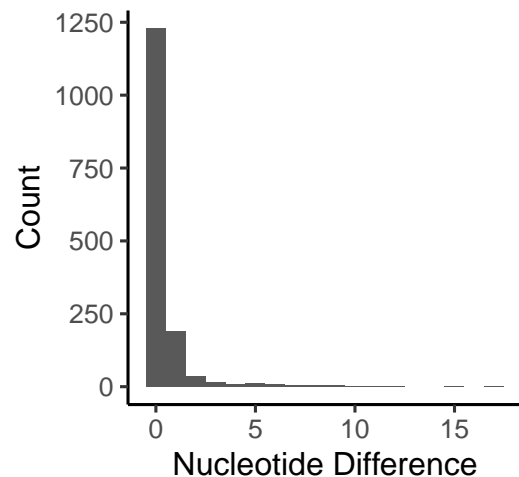
### IGHV3-23\*04

1469 sequences assigned  
1180 (80.3%) exact matches, in which:  
1119 unique CDR3  
7 unique J



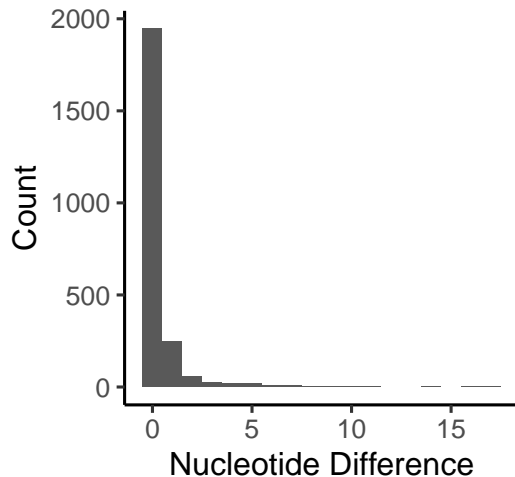
### IGHV3-33\*01

1521 sequences assigned  
1229 (80.8%) exact matches, in which:  
1146 unique CDR3  
7 unique J



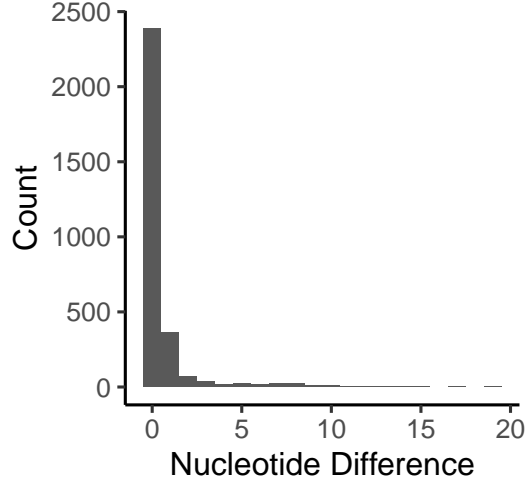
### IGHV3-21\*01

2345 sequences assigned  
1946 (83%) exact matches, in which:  
1812 unique CDR3  
7 unique J



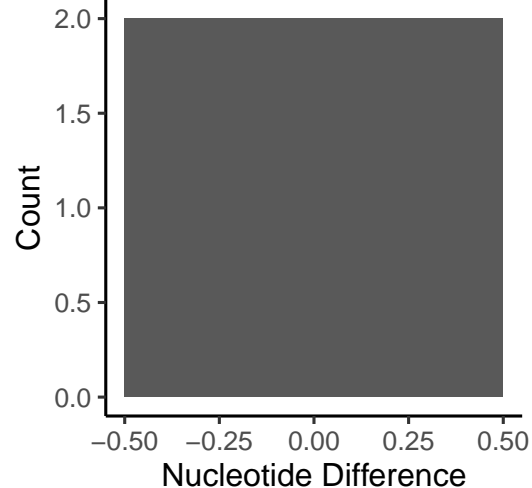
### IGHV3-30-3\*01

2996 sequences assigned  
2386 (79.6%) exact matches, in which:  
2267 unique CDR3  
7 unique J



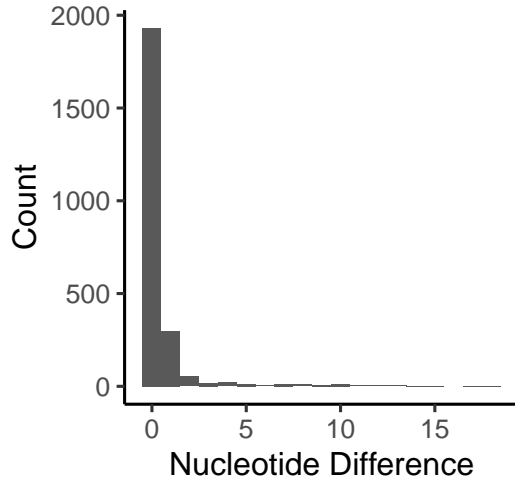
### IGHV3-35\*01

2 sequences assigned  
2 (100%) exact matches, in which:  
2 unique CDR3  
2 unique J



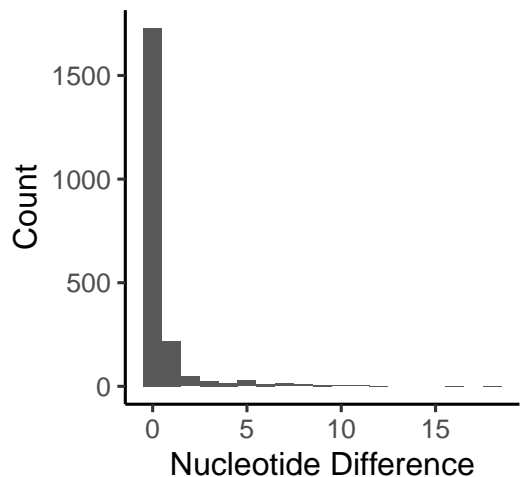
### IGHV3-23\*01

2402 sequences assigned  
1931 (80.4%) exact matches, in which:  
1821 unique CDR3  
6 unique J



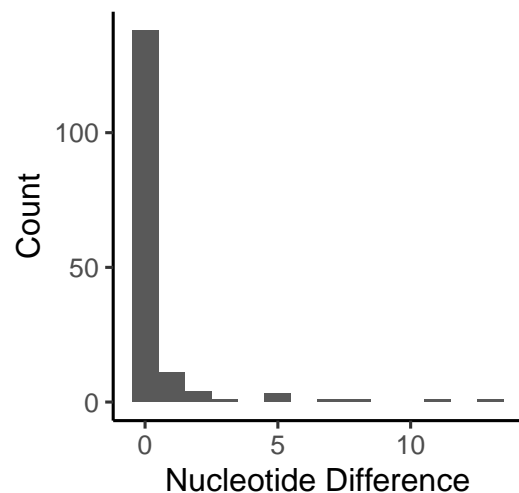
### IGHV3-30\*18

2122 sequences assigned  
1729 (81.5%) exact matches, in which:  
1660 unique CDR3  
7 unique J



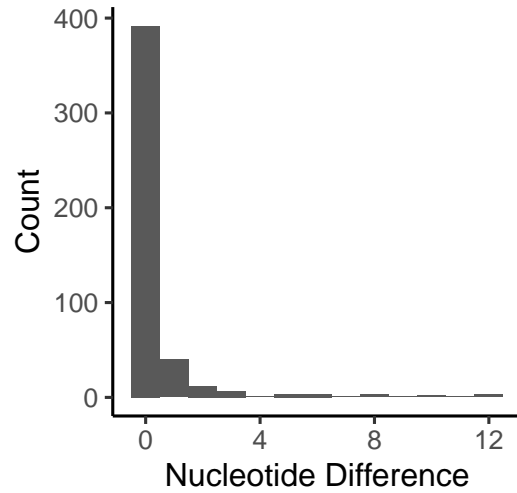
### IGHV3-43\*01

161 sequences assigned  
138 (85.7%) exact matches, in which:  
132 unique CDR3  
7 unique J



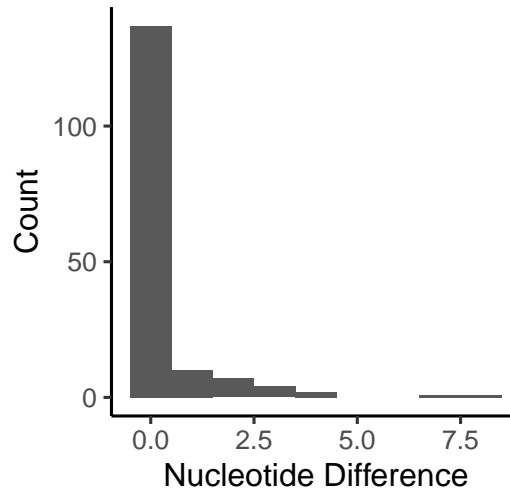
### IGHV3-48\*01

471 sequences assigned  
392 (83.2%) exact matches, in which:  
379 unique CDR3  
6 unique J



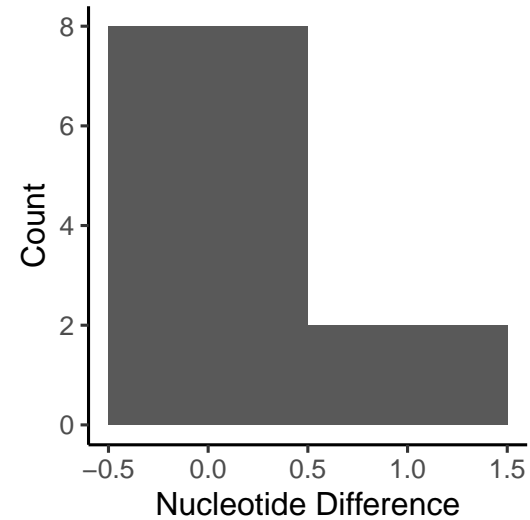
### IGHV3-49\*05

162 sequences assigned  
137 (84.6%) exact matches, in which:  
130 unique CDR3  
5 unique J



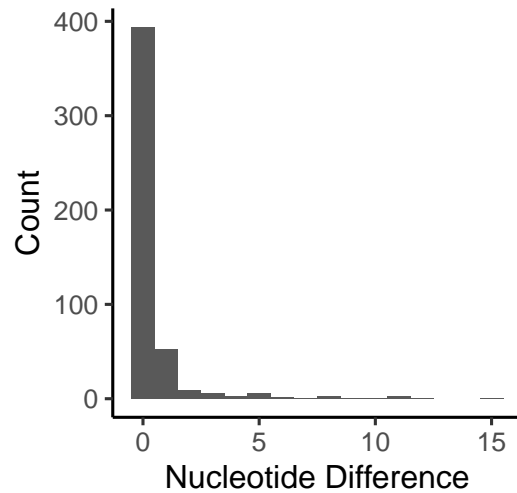
### IGHV3-64\*02

10 sequences assigned  
8 (80%) exact matches, in which:  
8 unique CDR3  
3 unique J



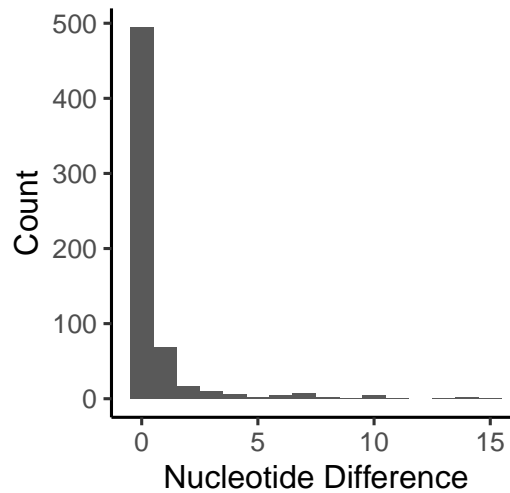
### IGHV3-48\*02

483 sequences assigned  
394 (81.6%) exact matches, in which:  
375 unique CDR3  
7 unique J



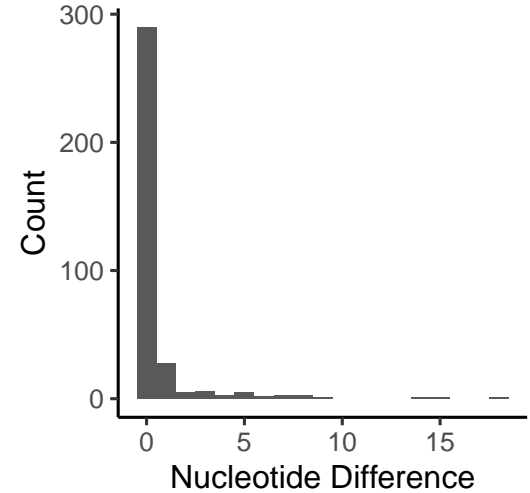
### IGHV3-53\*01

623 sequences assigned  
495 (79.5%) exact matches, in which:  
475 unique CDR3  
7 unique J



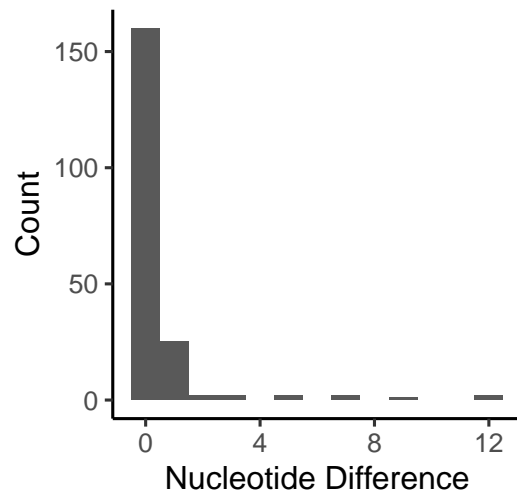
### IGHV3-66\*02

349 sequences assigned  
290 (83.1%) exact matches, in which:  
273 unique CDR3  
6 unique J



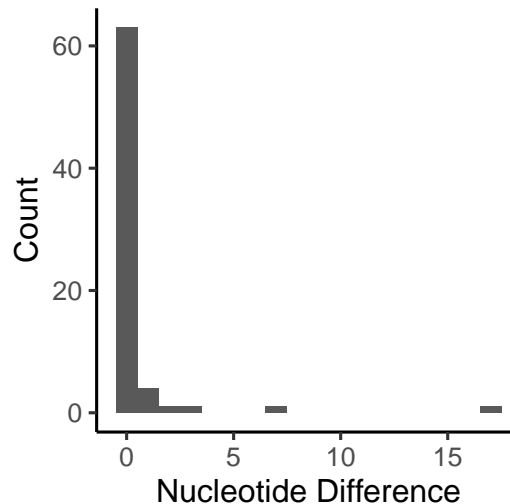
### IGHV3-49\*03

196 sequences assigned  
160 (81.6%) exact matches, in which:  
154 unique CDR3  
6 unique J



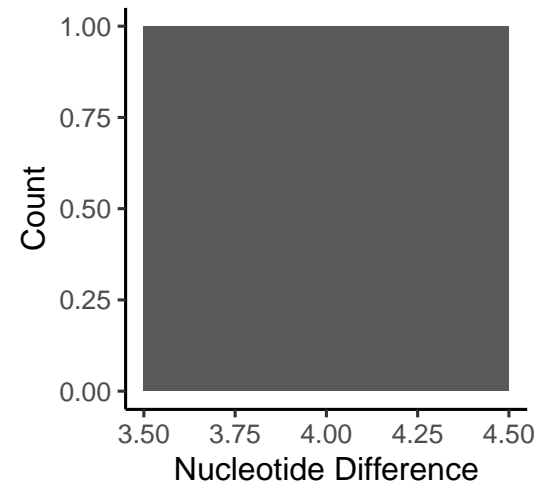
### IGHV3-64\*01

71 sequences assigned  
63 (88.7%) exact matches, in which:  
60 unique CDR3  
6 unique J



### IGHV3-71\*02

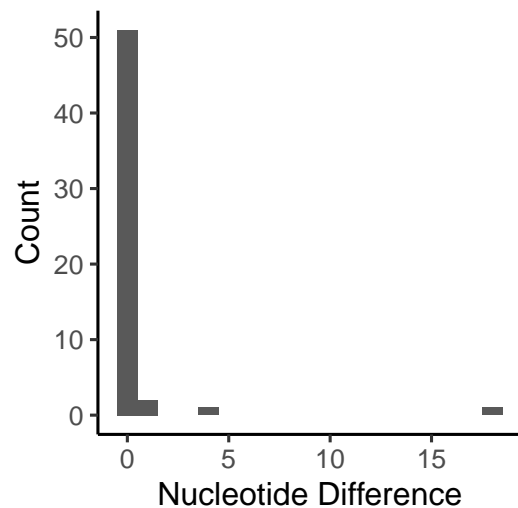
1 sequences assigned  
No exact matches.





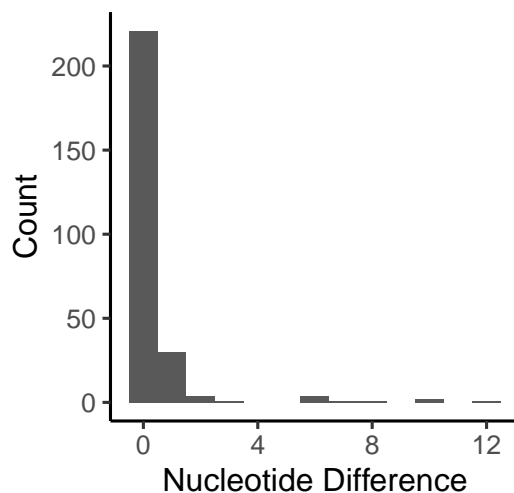
### IGHV3-72\*01

55 sequences assigned  
51 (92.7%) exact matches, in which:  
49 unique CDR3  
6 unique J



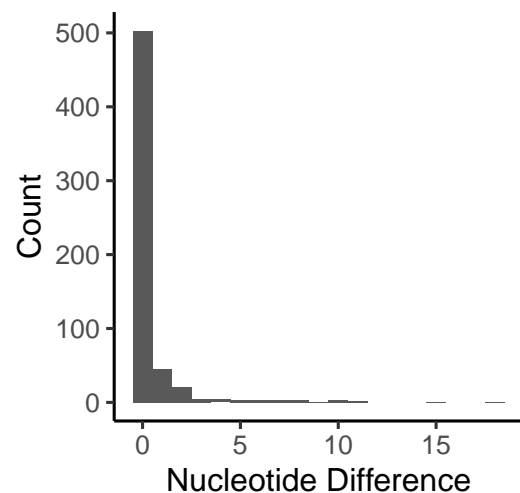
### IGHV3-64D\*06

265 sequences assigned  
221 (83.4%) exact matches, in which:  
207 unique CDR3  
6 unique J



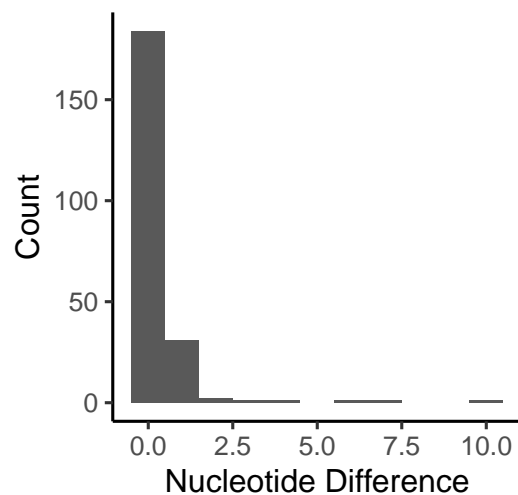
### IGHV4-30-4\*01

598 sequences assigned  
503 (84.1%) exact matches, in which:  
494 unique CDR3  
6 unique J



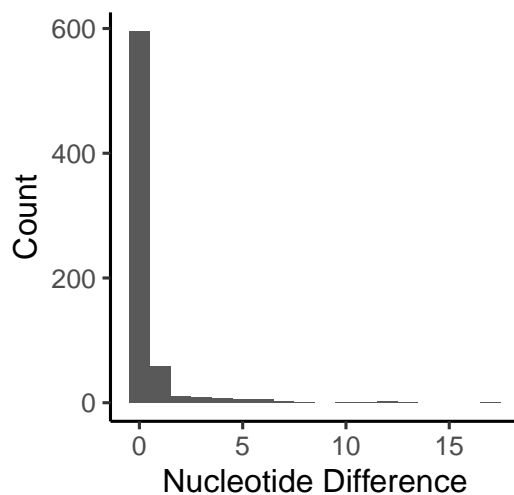
### IGHV3-73\*02

222 sequences assigned  
184 (82.9%) exact matches, in which:  
174 unique CDR3  
7 unique J



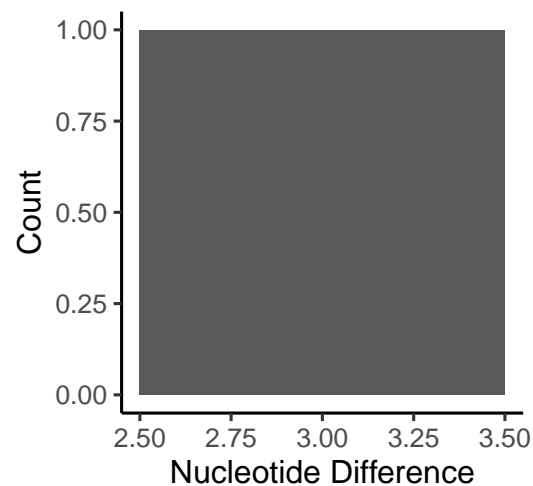
### IGHV4-4\*02

703 sequences assigned  
596 (84.8%) exact matches, in which:  
572 unique CDR3  
7 unique J



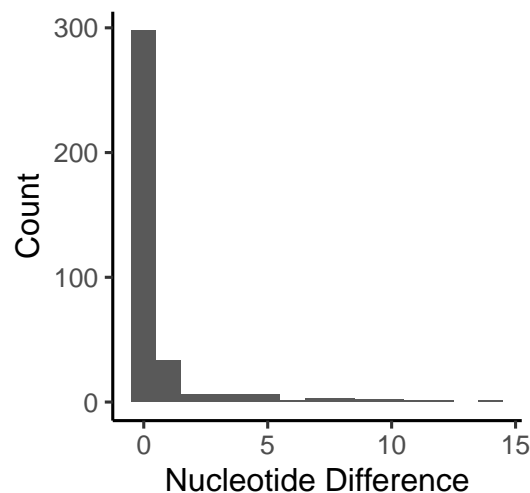
### IGHV4-30-2\*03

1 sequences assigned  
No exact matches.



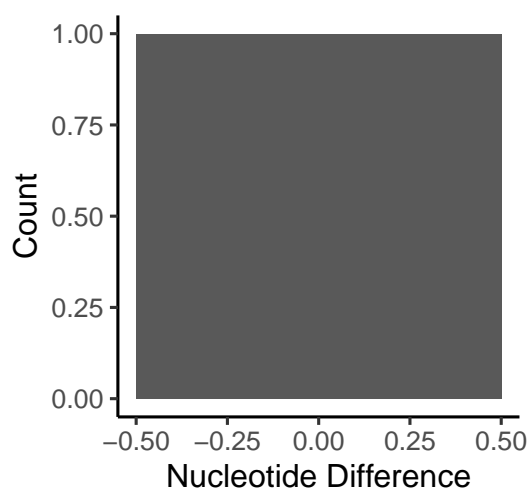
### IGHV3-74\*01

369 sequences assigned  
298 (80.8%) exact matches, in which:  
289 unique CDR3  
7 unique J



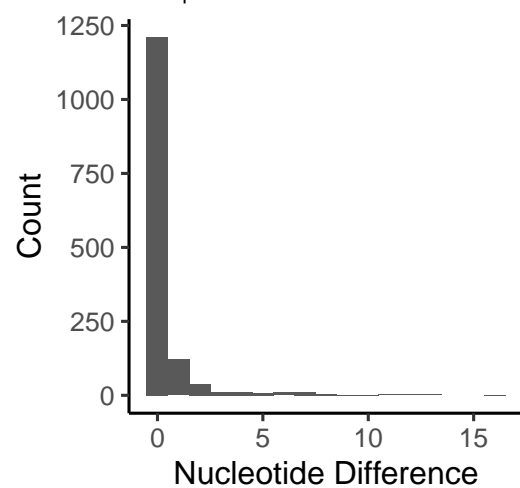
### IGHV4-28\*01

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



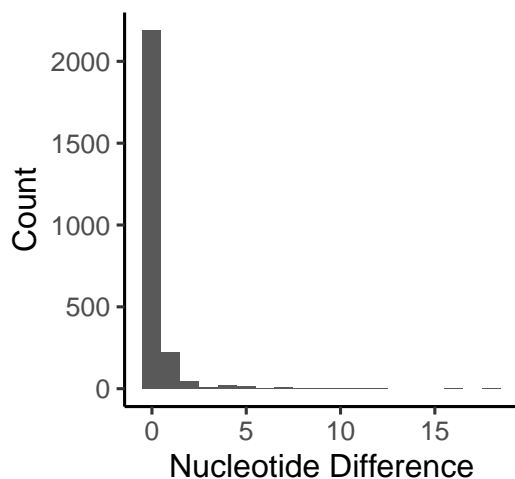
### IGHV4-31\*03

1440 sequences assigned  
1211 (84.1%) exact matches, in which:  
1176 unique CDR3  
7 unique J



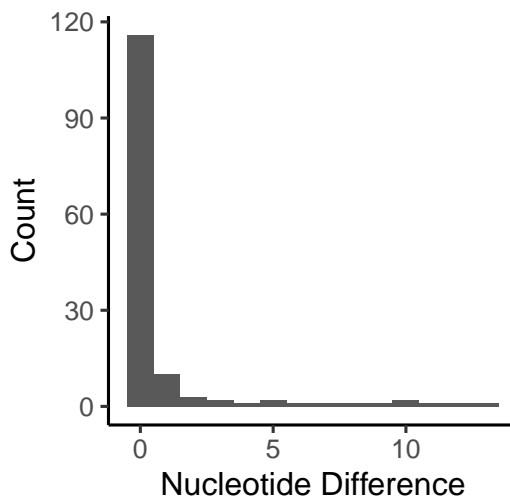
### IGHV4-34\*01

2538 sequences assigned  
2189 (86.2%) exact matches, in which:  
2083 unique CDR3  
7 unique J



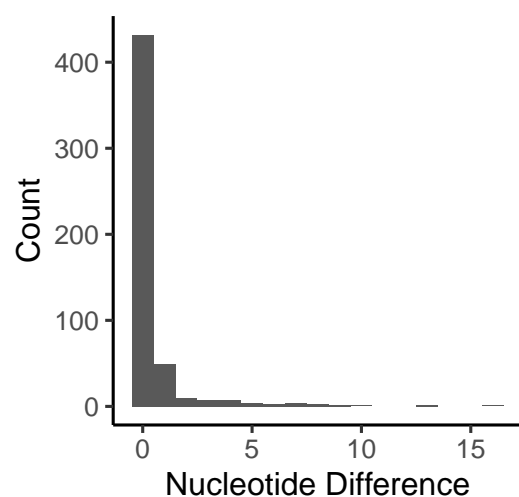
### IGHV4-61\*01

144 sequences assigned  
116 (80.6%) exact matches, in which:  
114 unique CDR3  
6 unique J



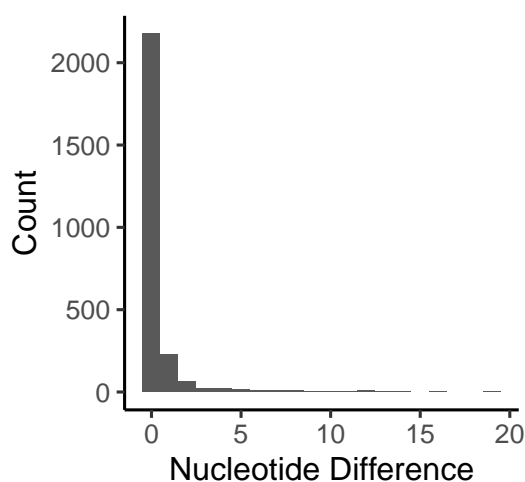
### IGHV5-10-1\*03

525 sequences assigned  
432 (82.3%) exact matches, in which:  
415 unique CDR3  
7 unique J



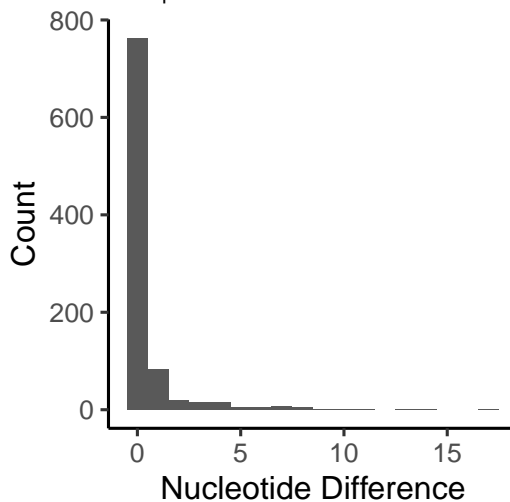
### IGHV4-39\*01

2592 sequences assigned  
2176 (84%) exact matches, in which:  
2047 unique CDR3  
7 unique J



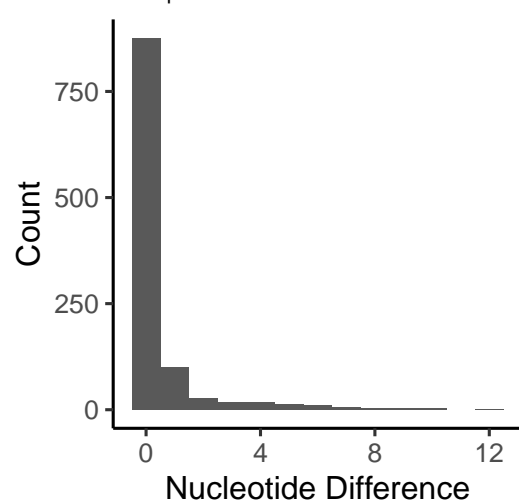
### IGHV4-61\*02

928 sequences assigned  
763 (82.2%) exact matches, in which:  
745 unique CDR3  
7 unique J



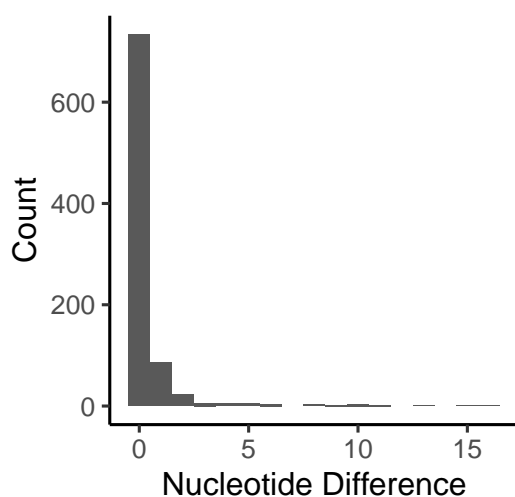
### IGHV5-51\*01

1079 sequences assigned  
876 (81.2%) exact matches, in which:  
853 unique CDR3  
7 unique J



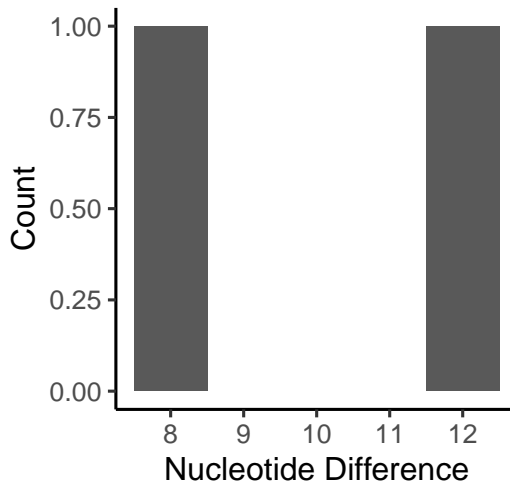
### IGHV4-59\*01

877 sequences assigned  
734 (83.7%) exact matches, in which:  
713 unique CDR3  
7 unique J



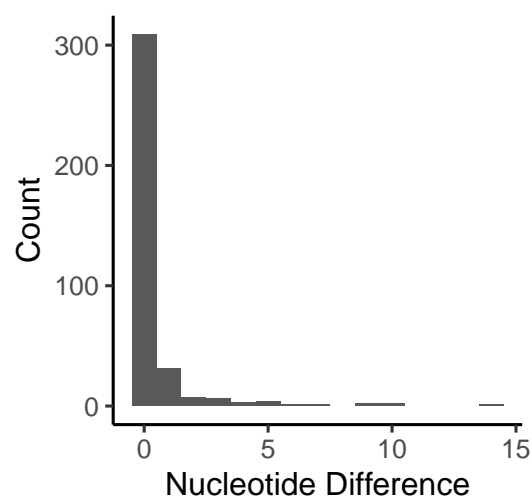
### IGHV1/OR15-9\*01

2 sequences assigned  
No exact matches.



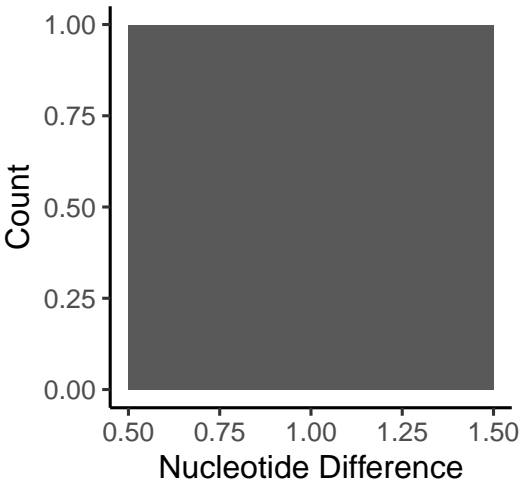
### IGHV6-1\*01

367 sequences assigned  
309 (84.2%) exact matches, in which:  
297 unique CDR3  
7 unique J



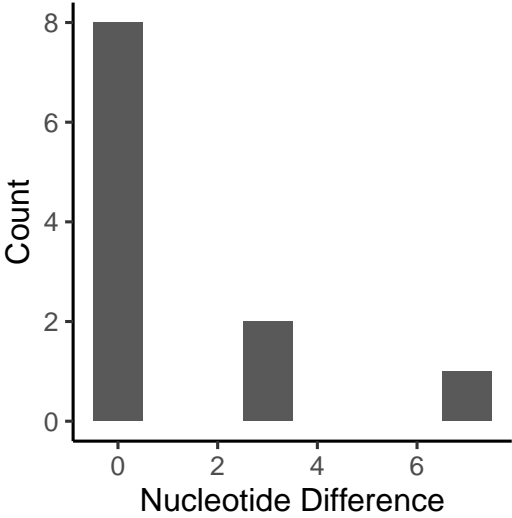
# IGHV3/OR16-8\*01

1 sequences assigned  
No exact matches.

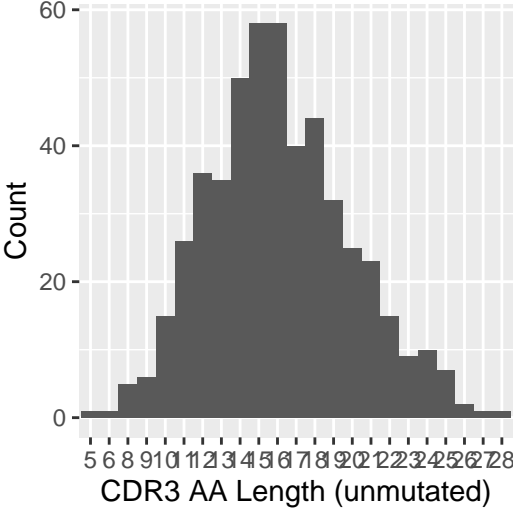


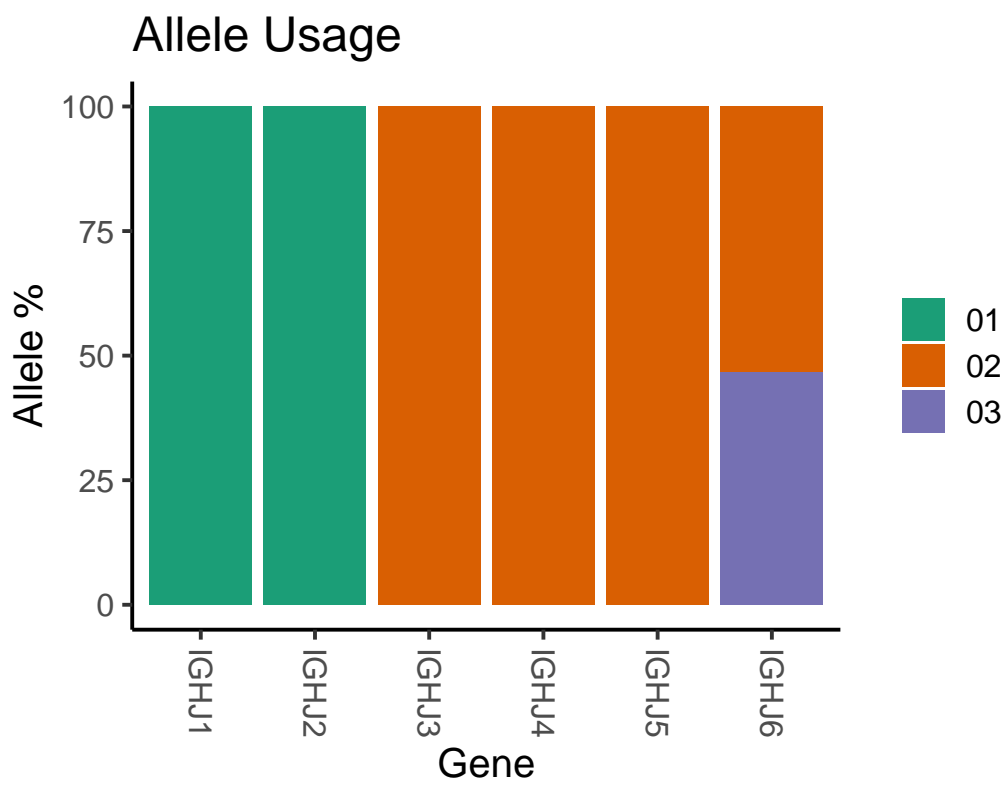
# IGHV7-4-1\*01

11 sequences assigned  
8 (72.7%) exact matches, in which:  
7 unique CDR3  
5 unique J



IGHV1-69\*08\_C191T





Sequence Count by IGHJ6 allele usage

