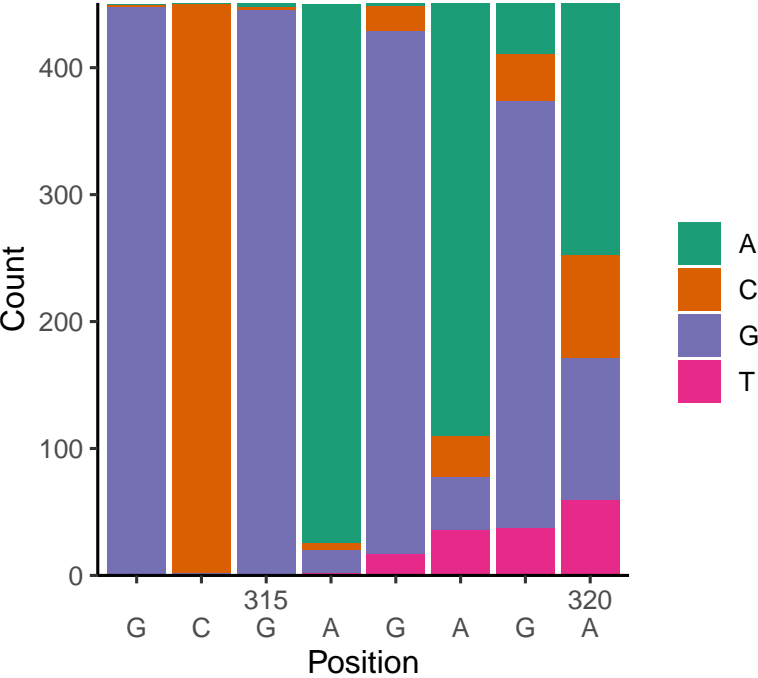


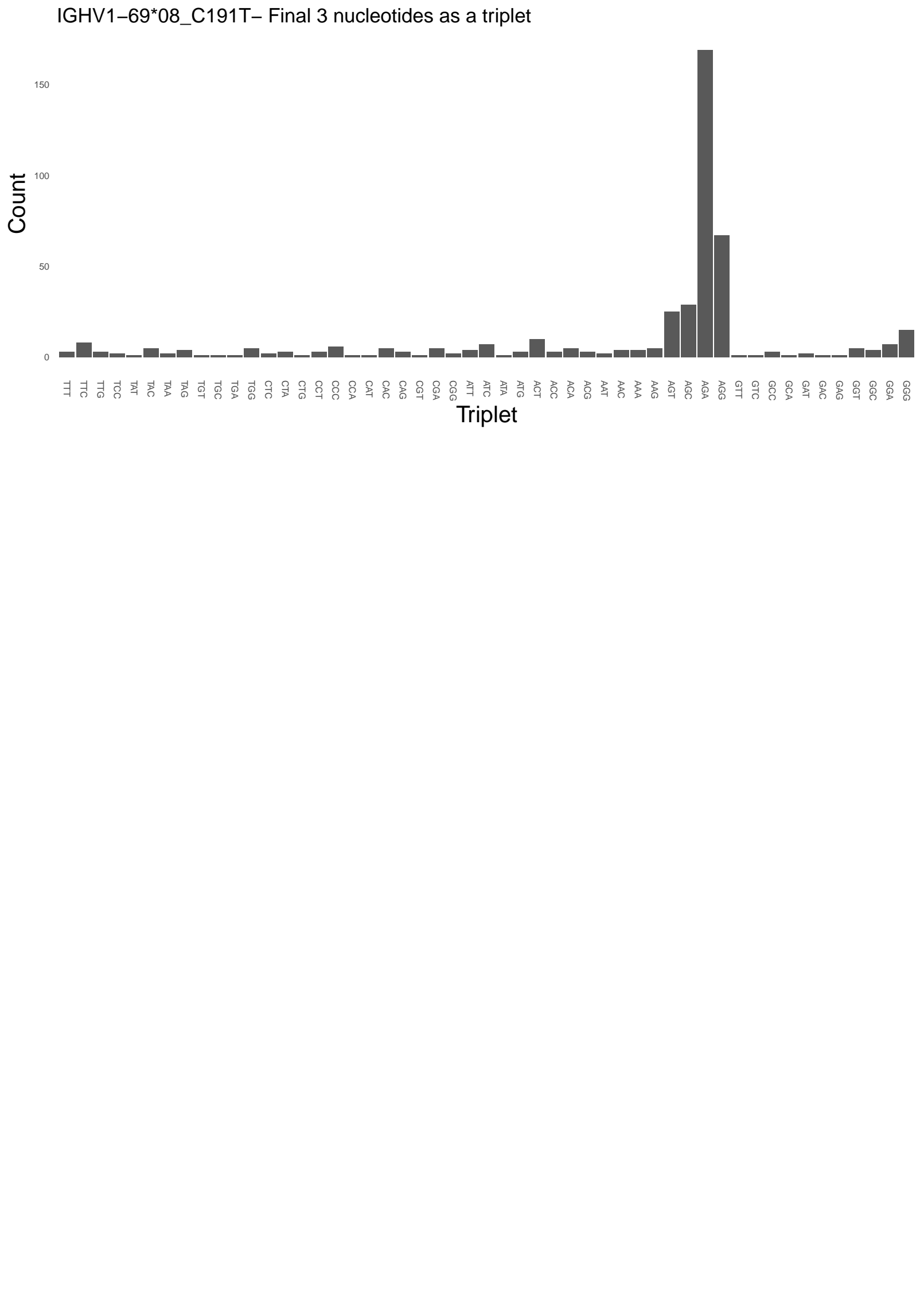
Gene IGHV1-69\*08\_C191T



Gene IGHV1-69\*08\_C191T

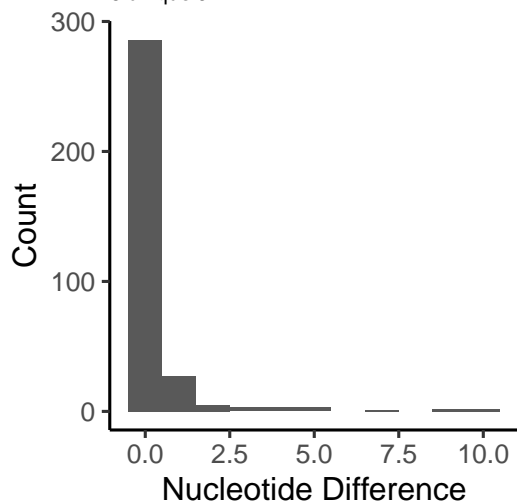


IGHV1-69\*08\_C191T- Final 3 nucleotides as a triplet



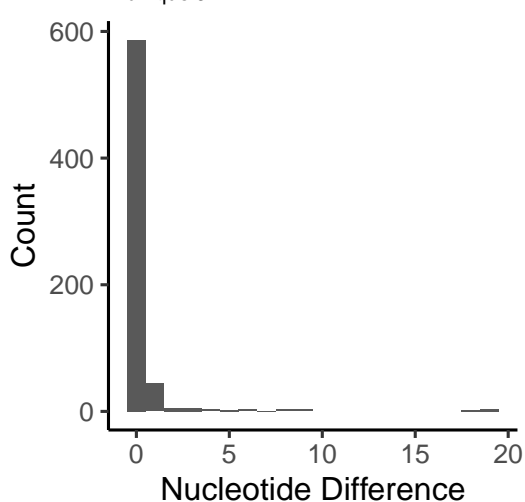
### IGHV1-2\*04

332 sequences assigned  
286 (86.1%) exact matches, in which:  
260 unique CDR3  
6 unique J



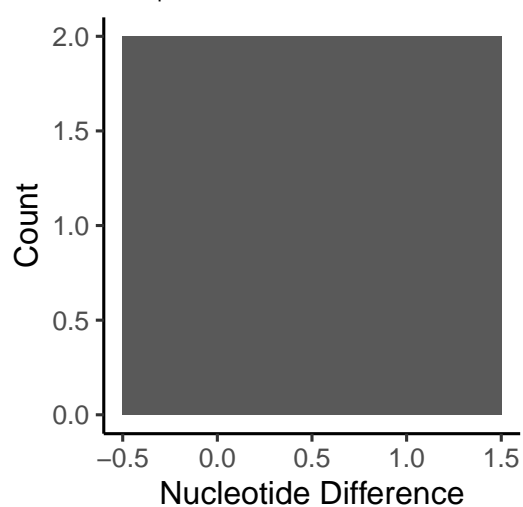
### IGHV1-18\*01

668 sequences assigned  
587 (87.9%) exact matches, in which:  
559 unique CDR3  
7 unique J



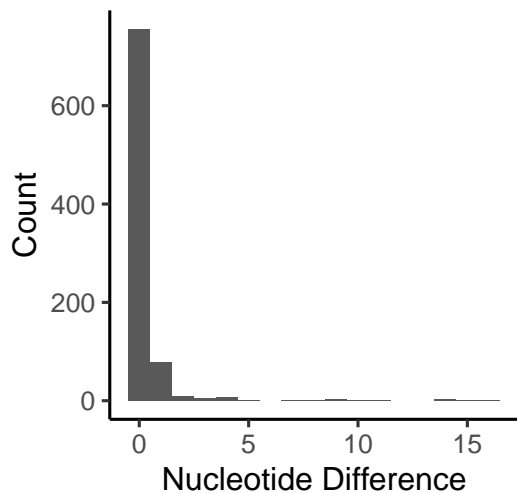
### IGHV1-45\*02

4 sequences assigned  
2 (50%) exact matches, in which:  
2 unique CDR3  
1 unique J



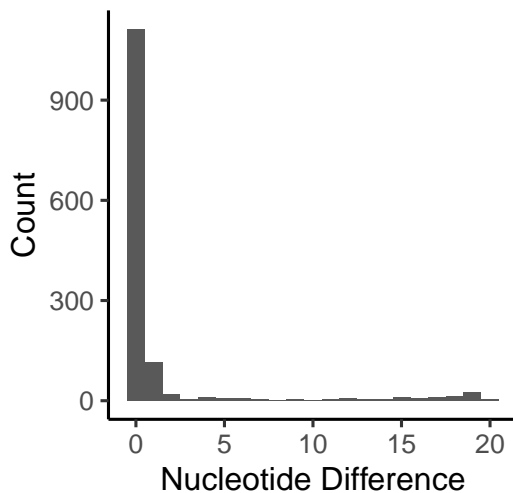
### IGHV1-2\*06

872 sequences assigned  
756 (86.7%) exact matches, in which:  
692 unique CDR3  
7 unique J



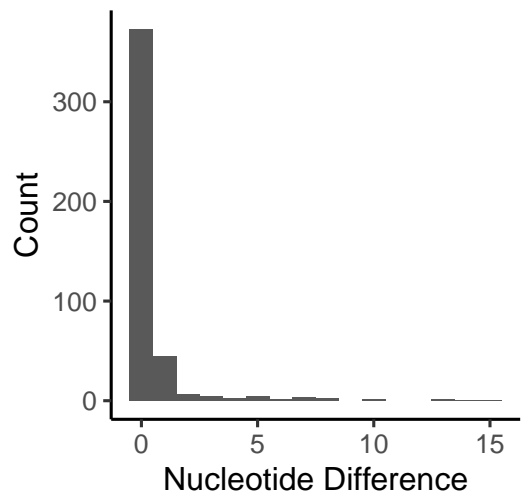
### IGHV1-18\*04

1431 sequences assigned  
1113 (77.8%) exact matches, in which:  
1056 unique CDR3  
6 unique J



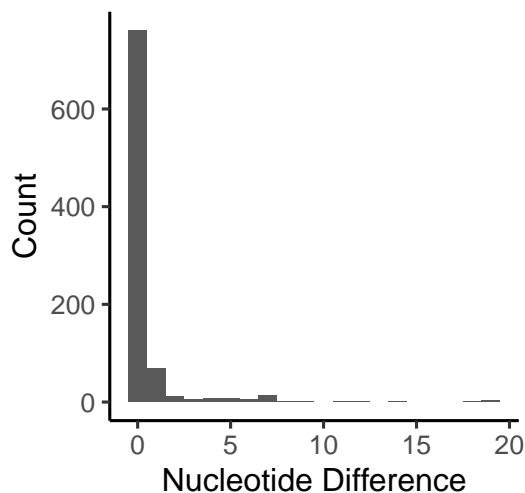
### IGHV1-46\*01

453 sequences assigned  
373 (82.3%) exact matches, in which:  
349 unique CDR3  
7 unique J



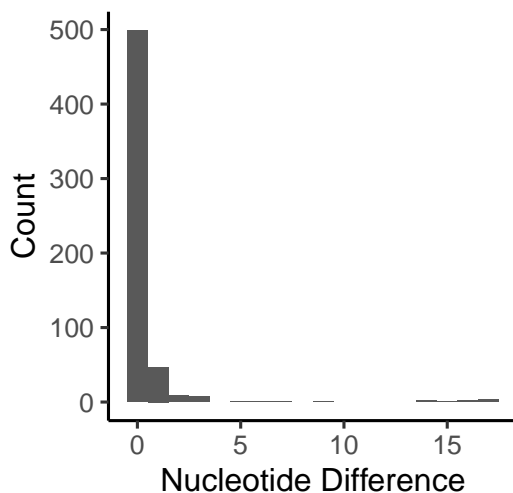
### IGHV1-3\*01

892 sequences assigned  
761 (85.3%) exact matches, in which:  
715 unique CDR3  
7 unique J



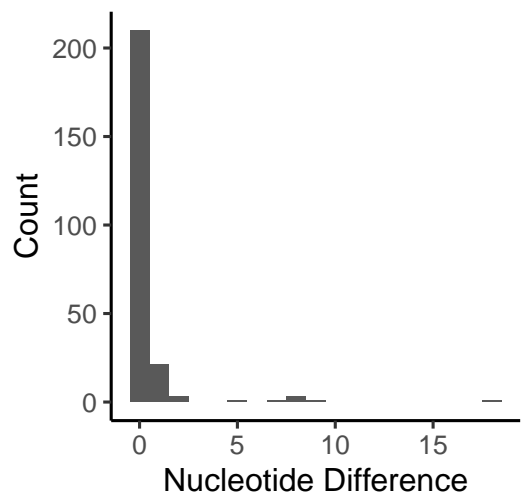
### IGHV1-24\*01

575 sequences assigned  
499 (86.8%) exact matches, in which:  
458 unique CDR3  
7 unique J



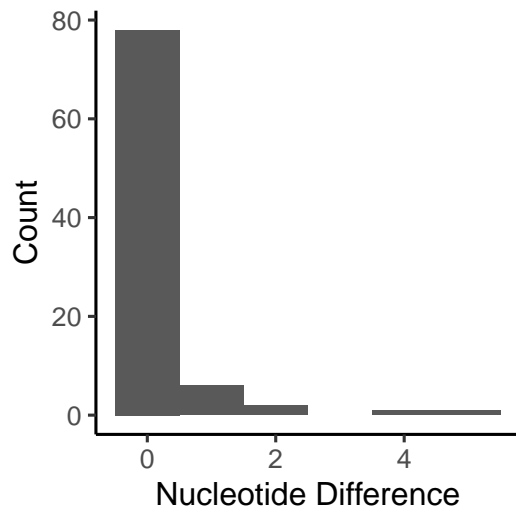
### IGHV1-46\*03

241 sequences assigned  
210 (87.1%) exact matches, in which:  
198 unique CDR3  
5 unique J



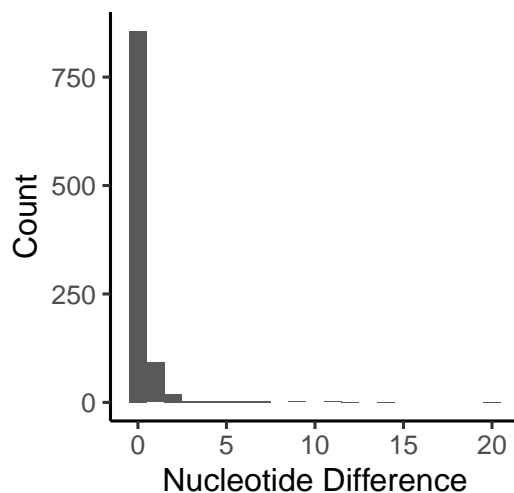
### IGHV1-58\*01

88 sequences assigned  
78 (88.6%) exact matches, in which:  
74 unique CDR3  
6 unique J



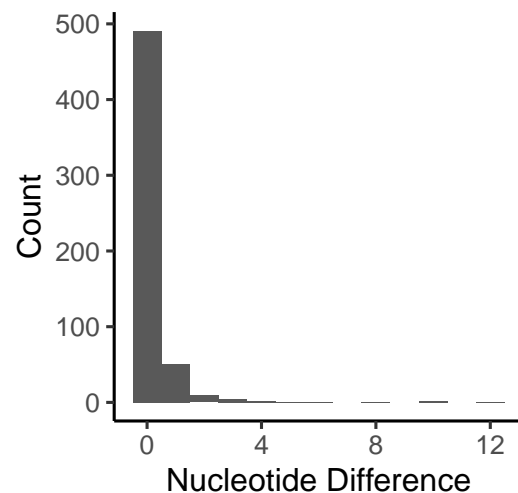
### IGHV1-69\*06

994 sequences assigned  
857 (86.2%) exact matches, in which:  
777 unique CDR3  
6 unique J



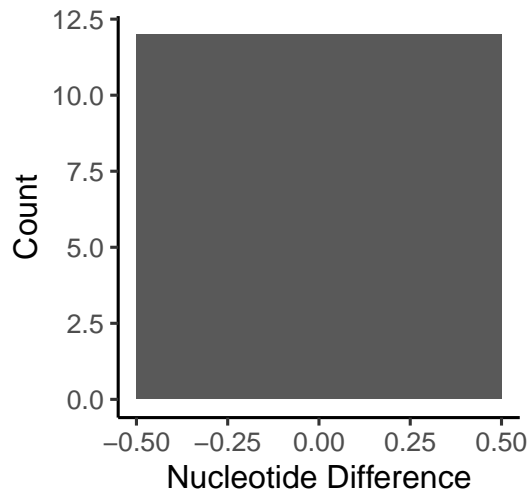
### IGHV2-26\*01

563 sequences assigned  
491 (87.2%) exact matches, in which:  
468 unique CDR3  
7 unique J



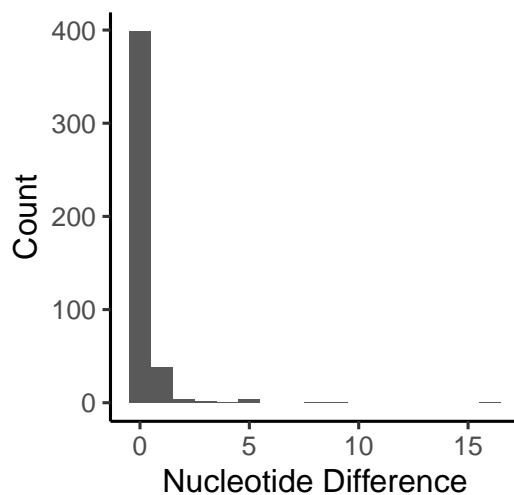
### IGHV1-58\*02

12 sequences assigned  
12 (100%) exact matches, in which:  
12 unique CDR3  
4 unique J



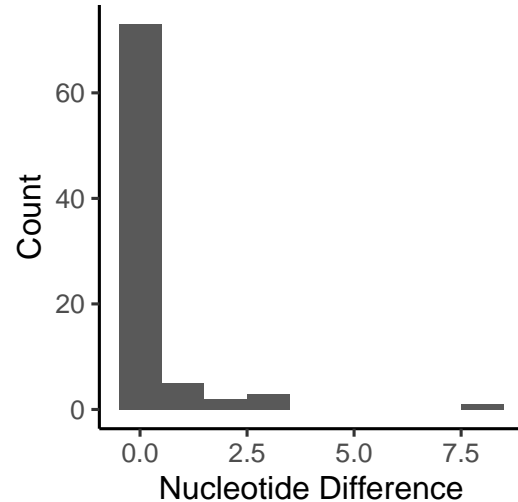
### IGHV1-69\*08\_C191T

451 sequences assigned  
399 (88.5%) exact matches, in which:  
368 unique CDR3  
6 unique J



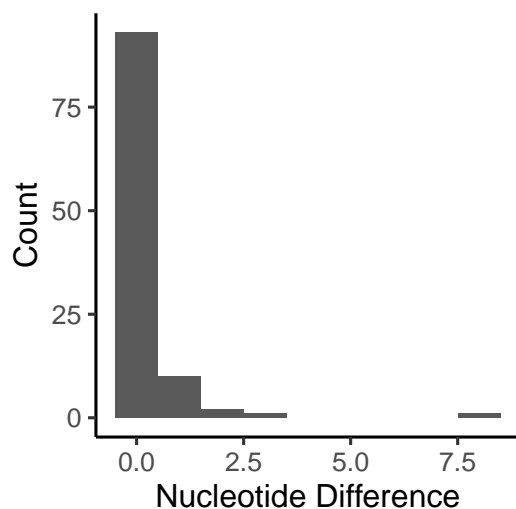
### IGHV2-70\*01

84 sequences assigned  
73 (86.9%) exact matches, in which:  
71 unique CDR3  
5 unique J



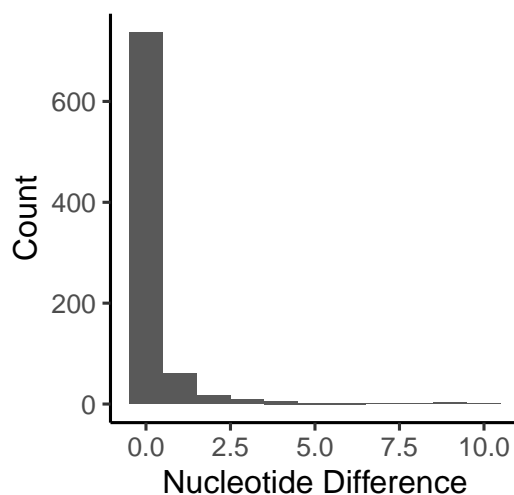
### IGHV1-69-2\*01

109 sequences assigned  
93 (85.3%) exact matches, in which:  
85 unique CDR3  
6 unique J



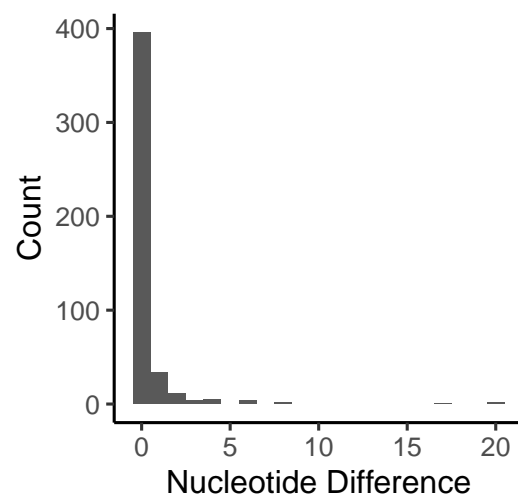
### IGHV2-5\*02

839 sequences assigned  
737 (87.8%) exact matches, in which:  
699 unique CDR3  
7 unique J



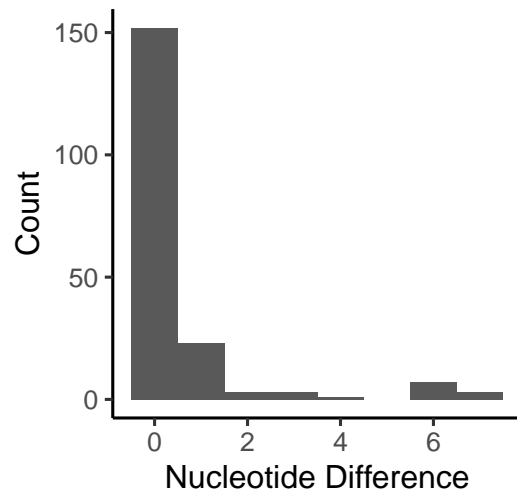
### IGHV3-7\*03

459 sequences assigned  
396 (86.3%) exact matches, in which:  
368 unique CDR3  
7 unique J



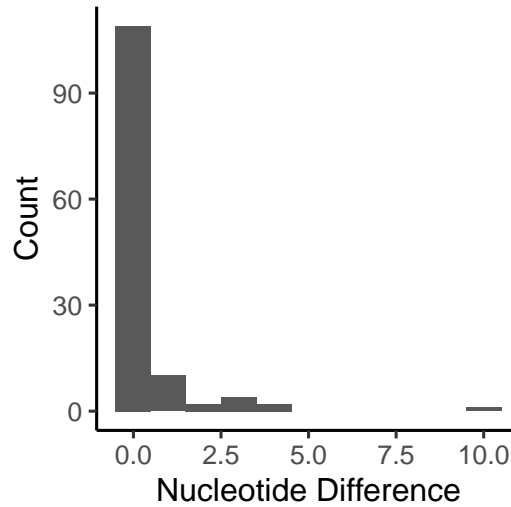
### IGHV3-7\*04

192 sequences assigned  
152 (79.2%) exact matches, in which:  
141 unique CDR3  
7 unique J



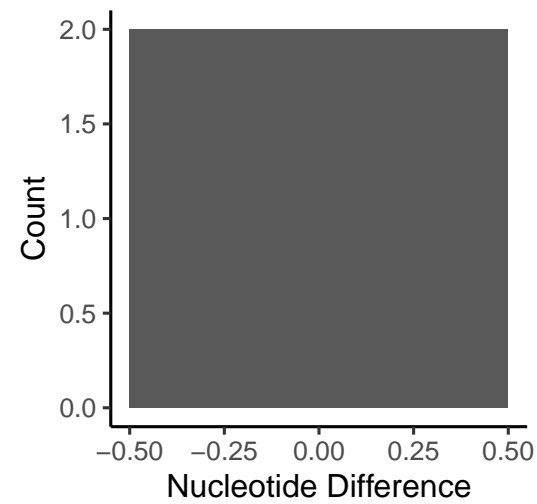
### IGHV3-13\*04

128 sequences assigned  
109 (85.2%) exact matches, in which:  
98 unique CDR3  
5 unique J



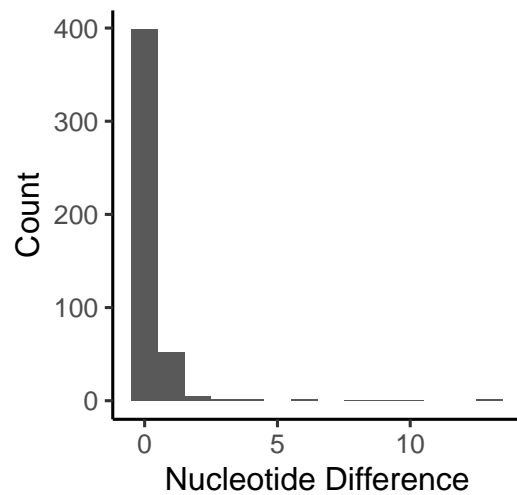
### IGHV3-19\*01

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



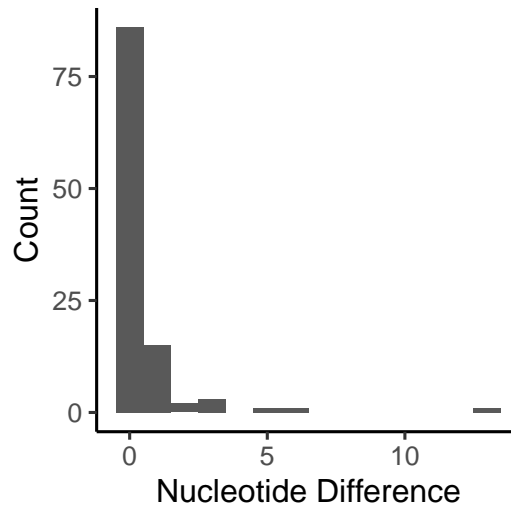
### IGHV3-11\*05

467 sequences assigned  
399 (85.4%) exact matches, in which:  
365 unique CDR3  
6 unique J



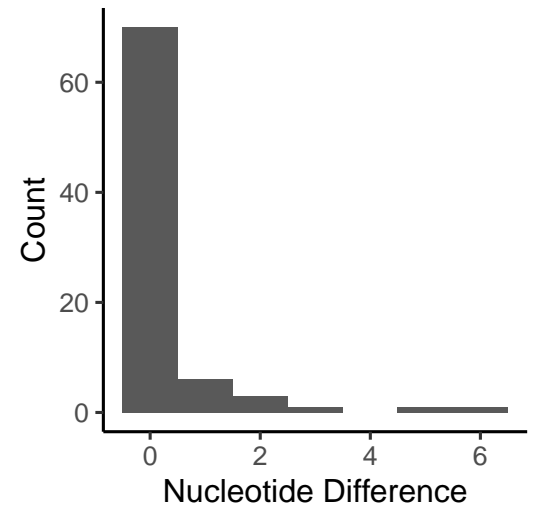
### IGHV3-13\*05

109 sequences assigned  
86 (78.9%) exact matches, in which:  
80 unique CDR3  
5 unique J



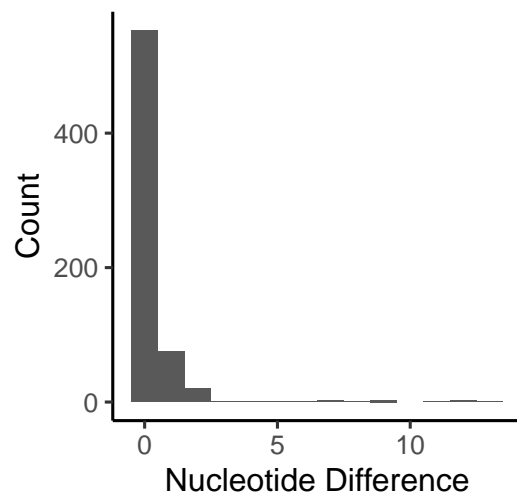
### IGHV3-20\*01

83 sequences assigned  
70 (84.3%) exact matches, in which:  
62 unique CDR3  
5 unique J



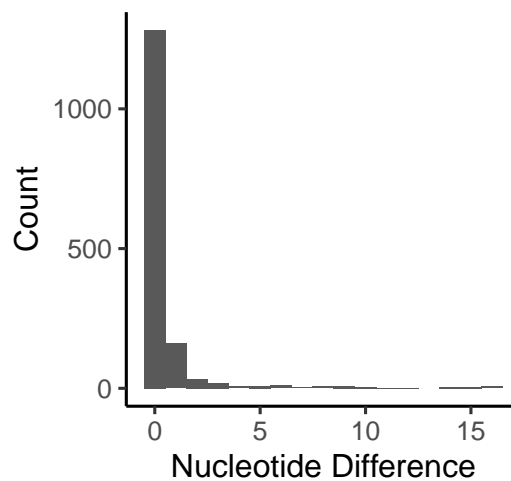
### IGHV3-11\*06

662 sequences assigned  
553 (83.5%) exact matches, in which:  
506 unique CDR3  
6 unique J



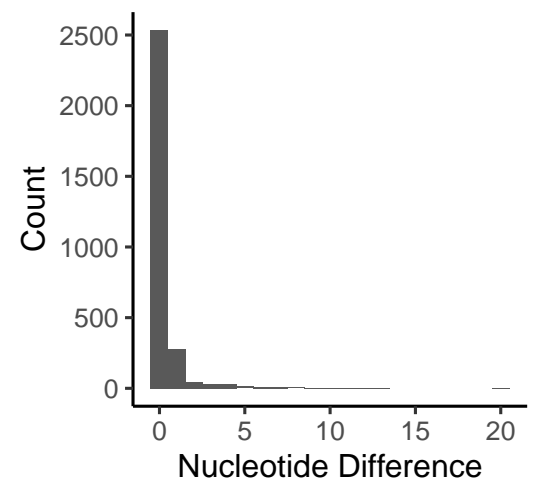
### IGHV3-15\*01

1562 sequences assigned  
1282 (82.1%) exact matches, in which:  
1177 unique CDR3  
7 unique J



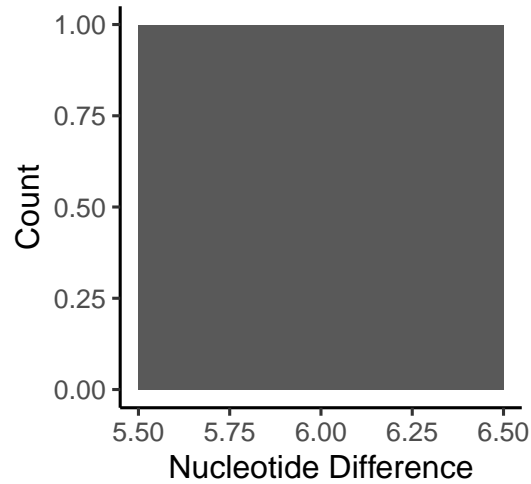
### IGHV3-21\*01

2976 sequences assigned  
2535 (85.2%) exact matches, in which:  
2296 unique CDR3  
7 unique J



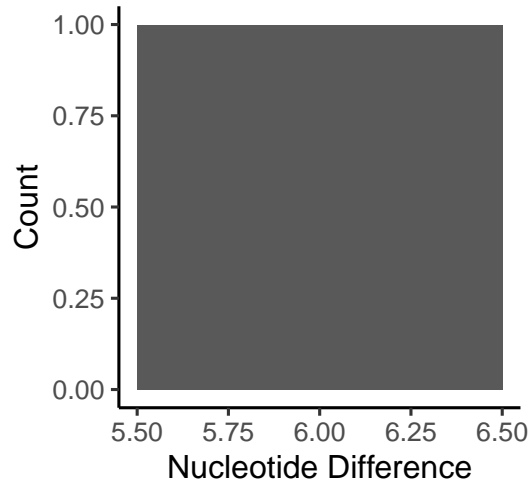
### IGHV3-30-3\*02

1 sequences assigned  
No exact matches.



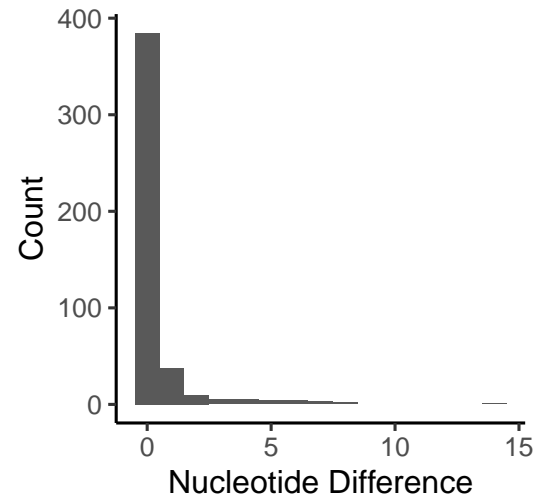
### IGHV3-41\*02

1 sequences assigned  
No exact matches.



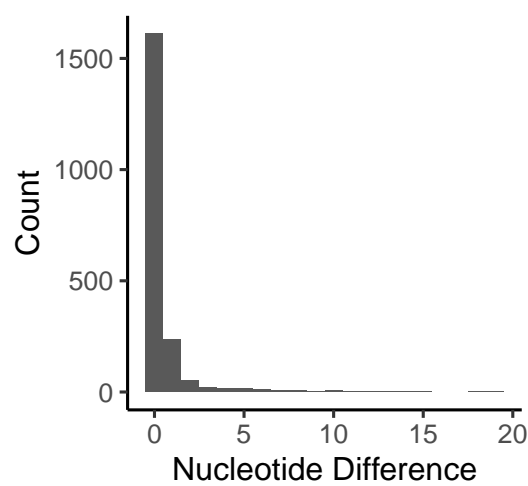
### IGHV3-48\*02

457 sequences assigned  
385 (84.2%) exact matches, in which:  
362 unique CDR3  
6 unique J



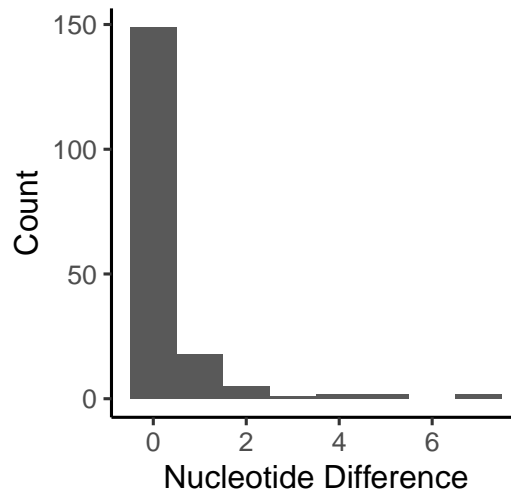
### IGHV3-33\*01

1996 sequences assigned  
1611 (80.7%) exact matches, in which:  
1484 unique CDR3  
7 unique J



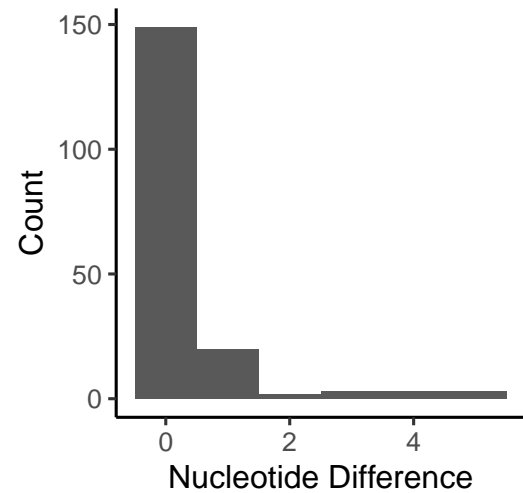
### IGHV3-43\*01

179 sequences assigned  
149 (83.2%) exact matches, in which:  
141 unique CDR3  
7 unique J



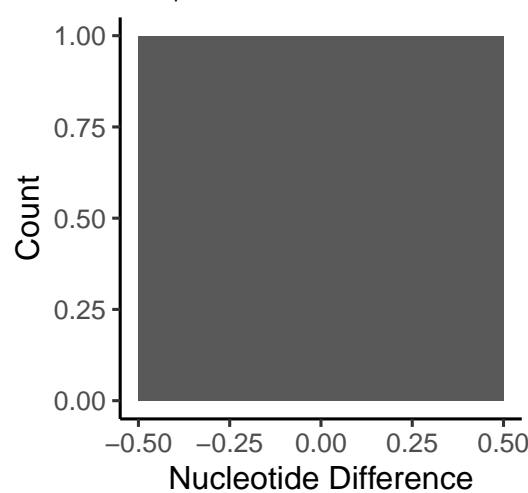
### IGHV3-49\*03

180 sequences assigned  
149 (82.8%) exact matches, in which:  
138 unique CDR3  
5 unique J



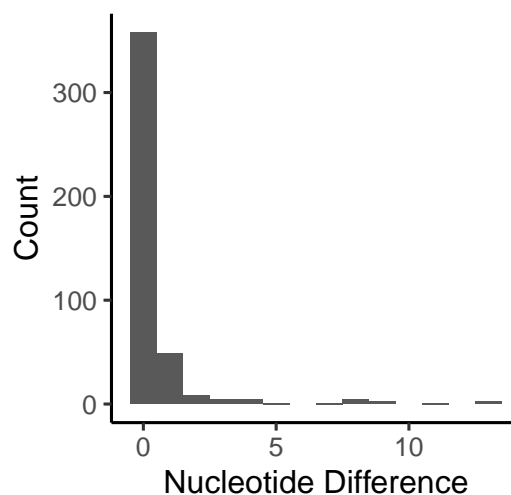
### IGHV3-35\*01

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



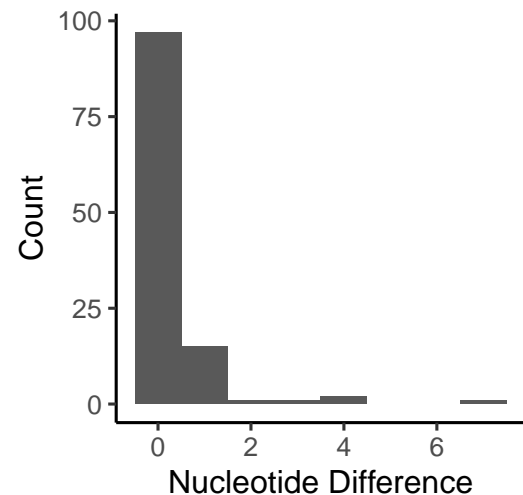
### IGHV3-48\*01

434 sequences assigned  
358 (82.5%) exact matches, in which:  
335 unique CDR3  
6 unique J



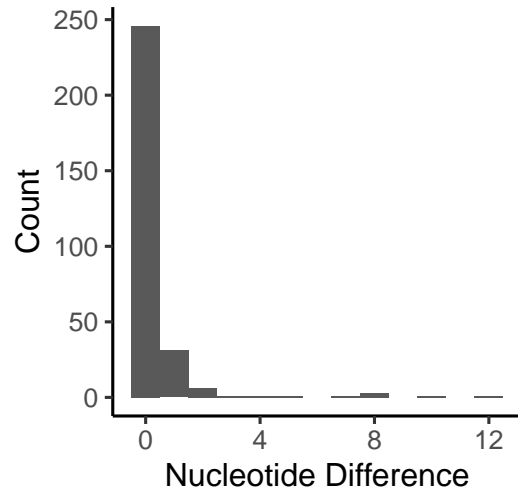
### IGHV3-49\*05

118 sequences assigned  
97 (82.2%) exact matches, in which:  
89 unique CDR3  
6 unique J



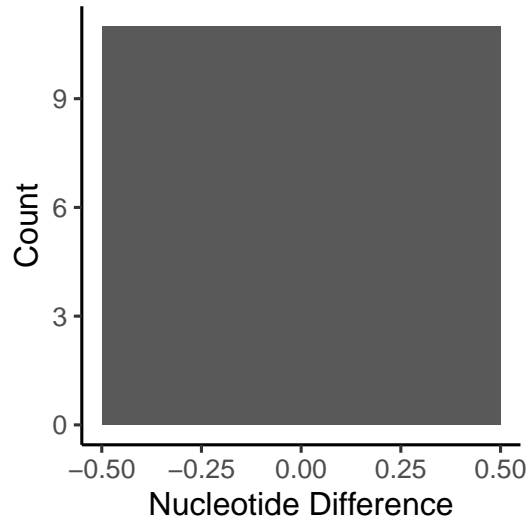
### IGHV3-53\*01

292 sequences assigned  
246 (84.2%) exact matches, in which:  
235 unique CDR3  
6 unique J



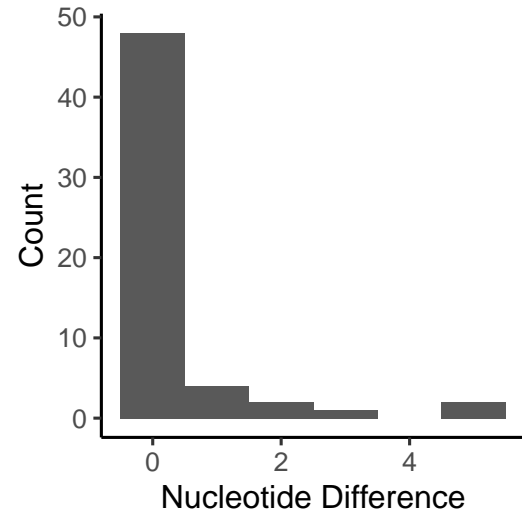
### IGHV3-64\*02

11 sequences assigned  
11 (100%) exact matches, in which:  
9 unique CDR3  
3 unique J



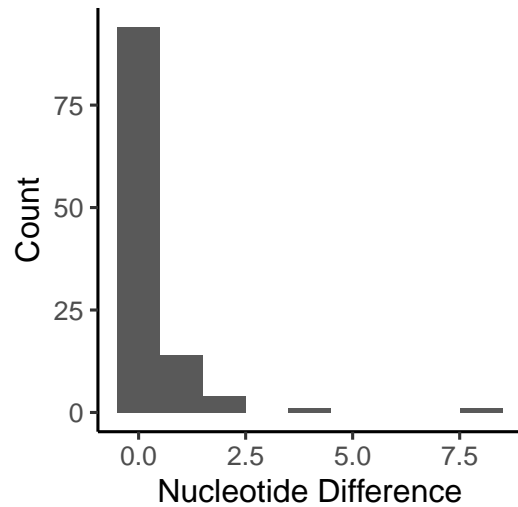
### IGHV3-72\*01

57 sequences assigned  
48 (84.2%) exact matches, in which:  
45 unique CDR3  
6 unique J



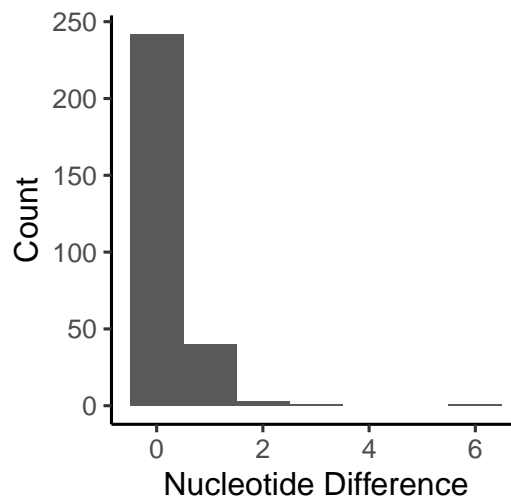
### IGHV3-53\*02

114 sequences assigned  
94 (82.5%) exact matches, in which:  
88 unique CDR3  
6 unique J



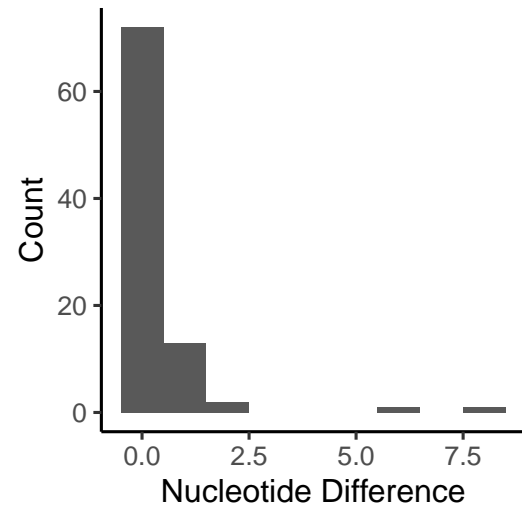
### IGHV3-66\*02

287 sequences assigned  
242 (84.3%) exact matches, in which:  
217 unique CDR3  
6 unique J



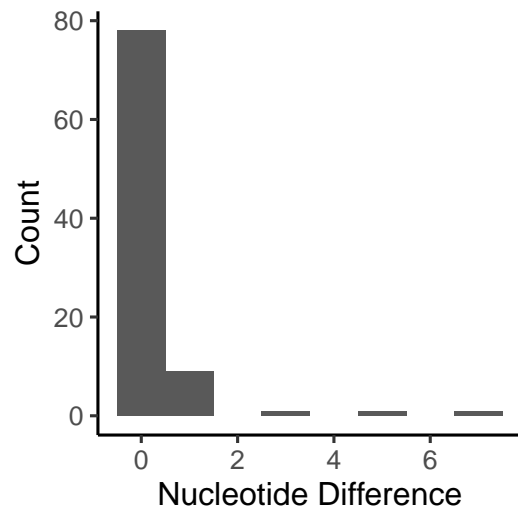
### IGHV3-73\*01

90 sequences assigned  
72 (80%) exact matches, in which:  
64 unique CDR3  
6 unique J



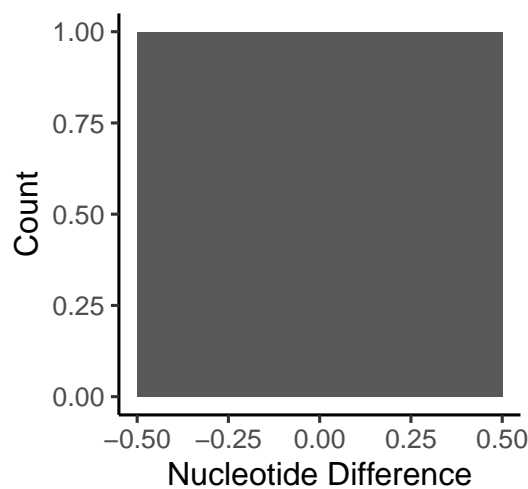
### IGHV3-64\*01

90 sequences assigned  
78 (86.7%) exact matches, in which:  
68 unique CDR3  
6 unique J



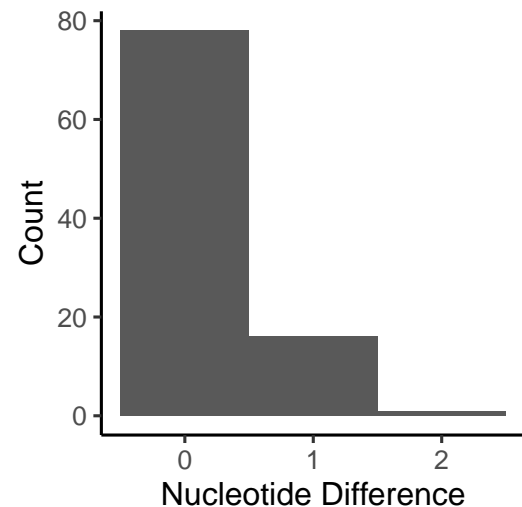
### IGHV3-69-1\*01

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



### IGHV3-73\*02

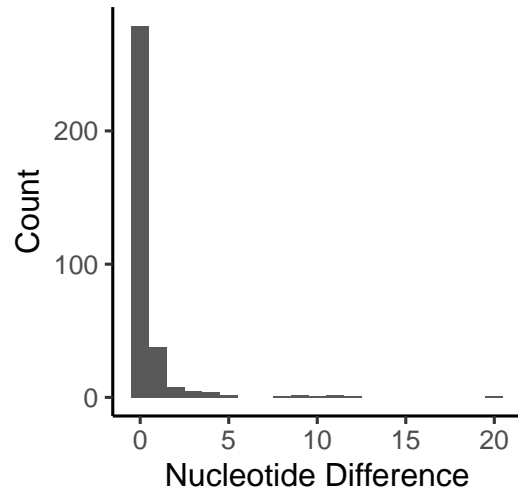
95 sequences assigned  
78 (82.1%) exact matches, in which:  
74 unique CDR3  
6 unique J





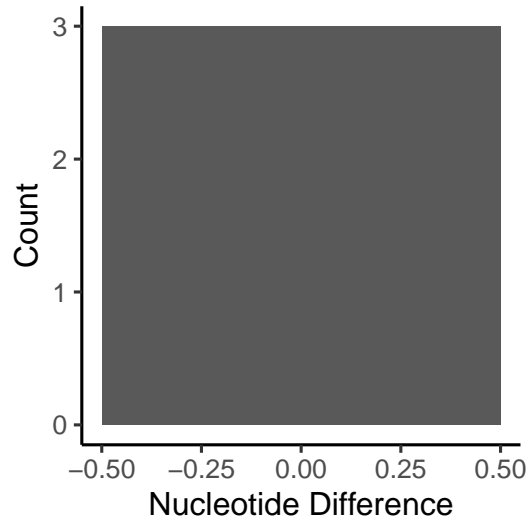
### IGHV3-74\*01

347 sequences assigned  
279 (80.4%) exact matches, in which:  
261 unique CDR3  
7 unique J



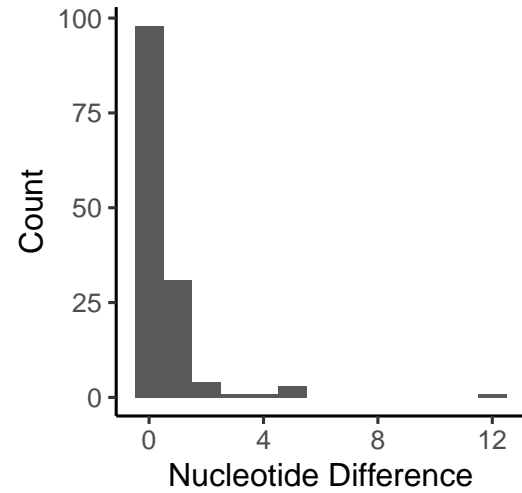
### IGHV4-28\*01

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



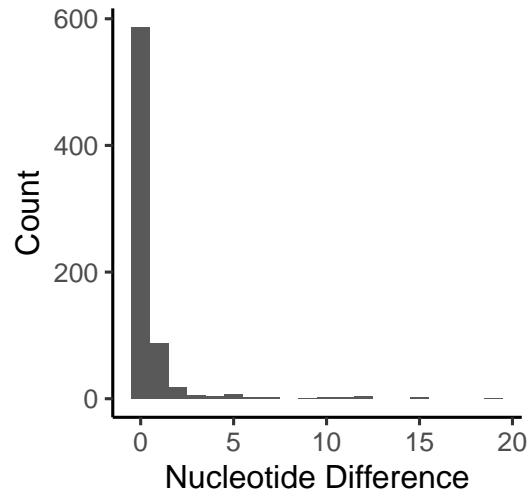
### IGHV4-30-2\*01

139 sequences assigned  
98 (70.5%) exact matches, in which:  
96 unique CDR3  
6 unique J



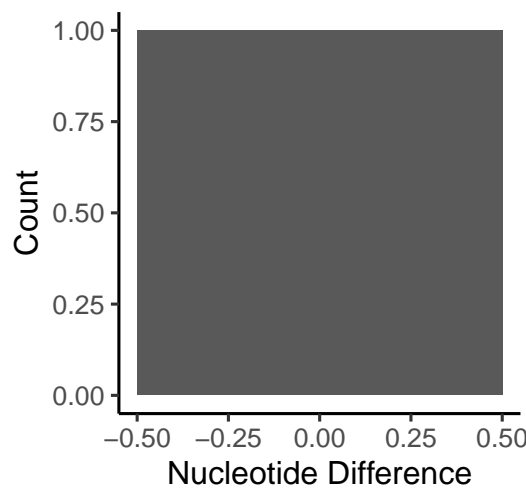
### IGHV3-64D\*06

733 sequences assigned  
587 (80.1%) exact matches, in which:  
530 unique CDR3  
7 unique J



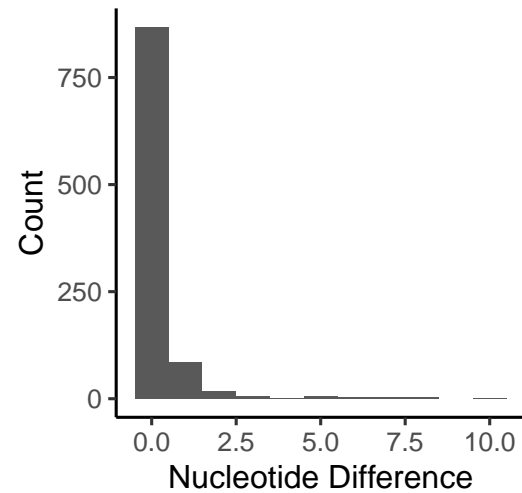
### IGHV4-28\*03

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



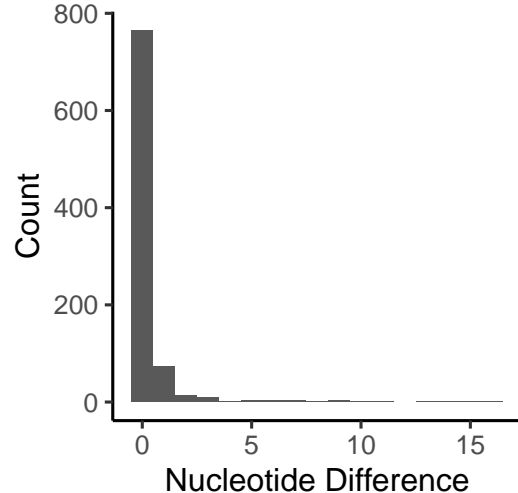
### IGHV4-31\*03

998 sequences assigned  
868 (87%) exact matches, in which:  
823 unique CDR3  
7 unique J



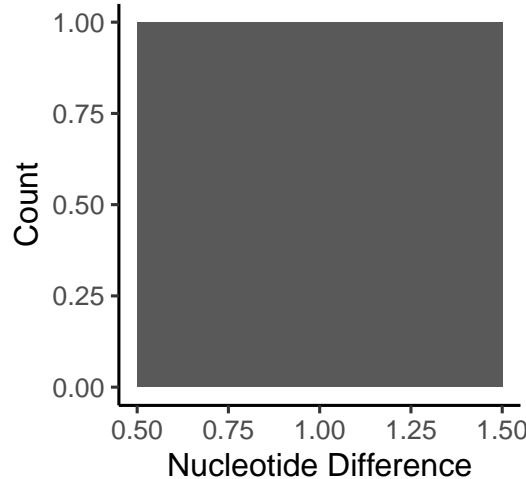
### IGHV4-4\*02

886 sequences assigned  
765 (86.3%) exact matches, in which:  
726 unique CDR3  
7 unique J



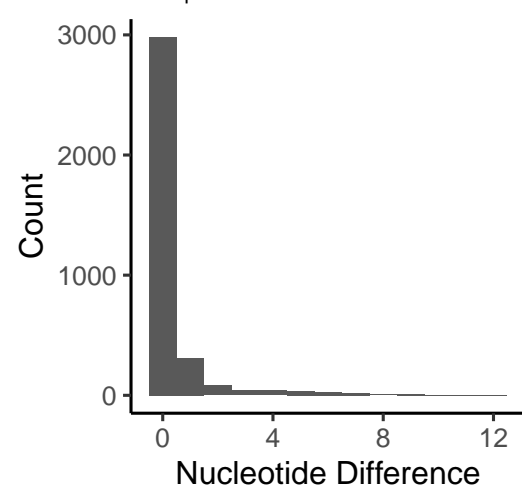
### IGHV4-28\*04

1 sequences assigned  
No exact matches.



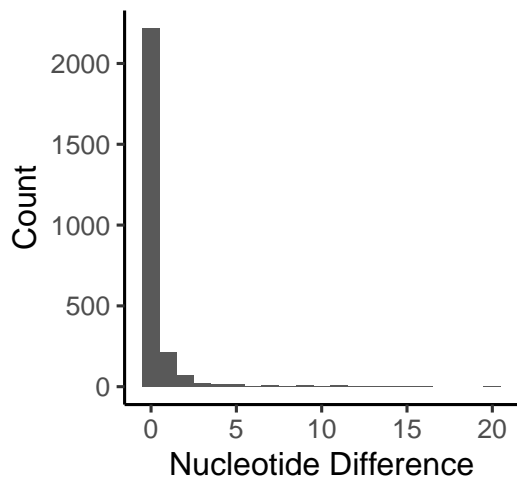
### IGHV4-34\*01

3564 sequences assigned  
2982 (83.7%) exact matches, in which:  
2682 unique CDR3  
7 unique J



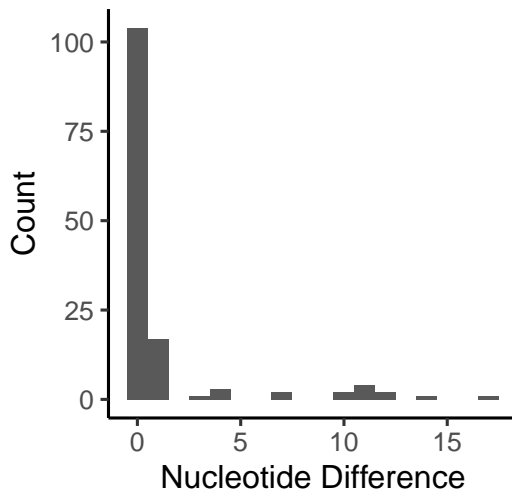
### IGHV4-39\*01

2621 sequences assigned  
2217 (84.6%) exact matches, in which:  
2030 unique CDR3  
7 unique J



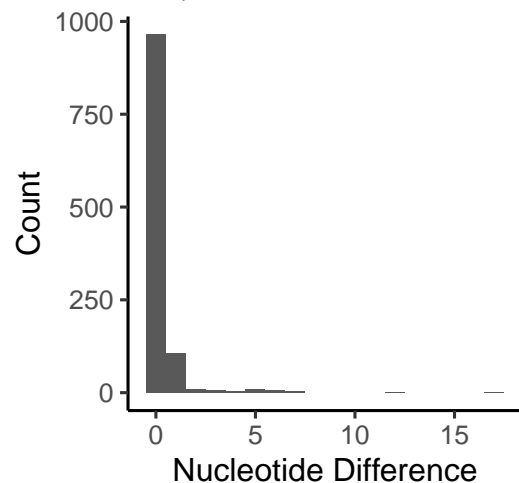
### IGHV4-61\*01

138 sequences assigned  
104 (75.4%) exact matches, in which:  
98 unique CDR3  
5 unique J



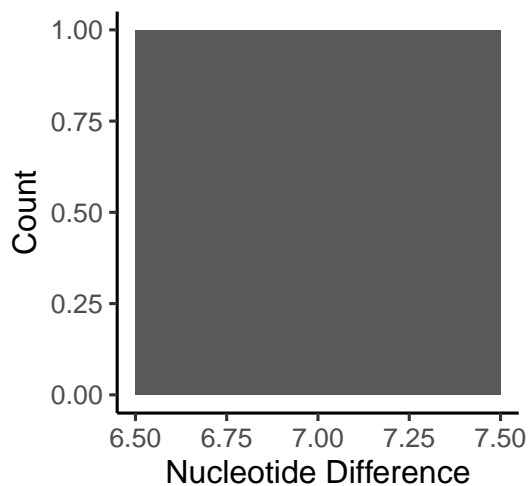
### IGHV5-10-1\*03

1116 sequences assigned  
965 (86.5%) exact matches, in which:  
911 unique CDR3  
6 unique J



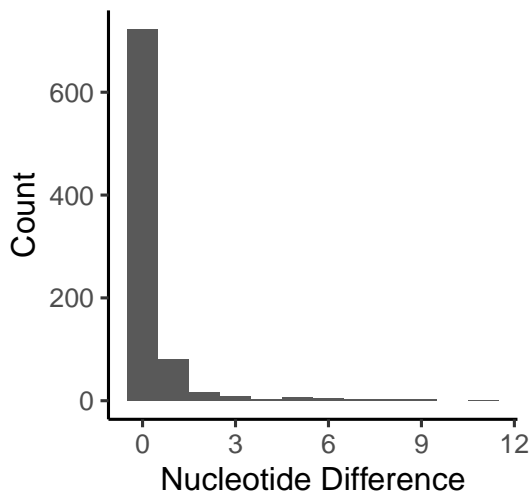
### IGHV4-55\*08

1 sequences assigned  
No exact matches.



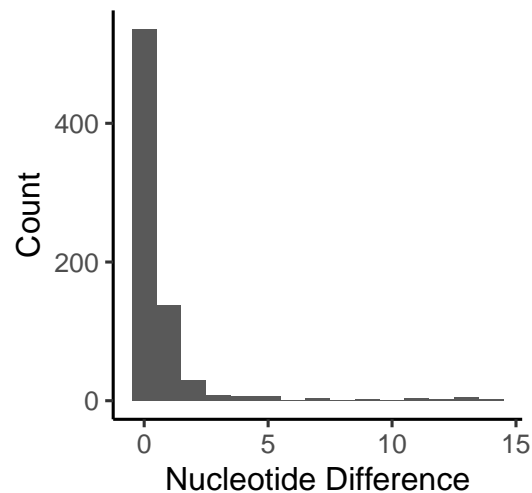
### IGHV4-61\*02

850 sequences assigned  
723 (85.1%) exact matches, in which:  
683 unique CDR3  
7 unique J



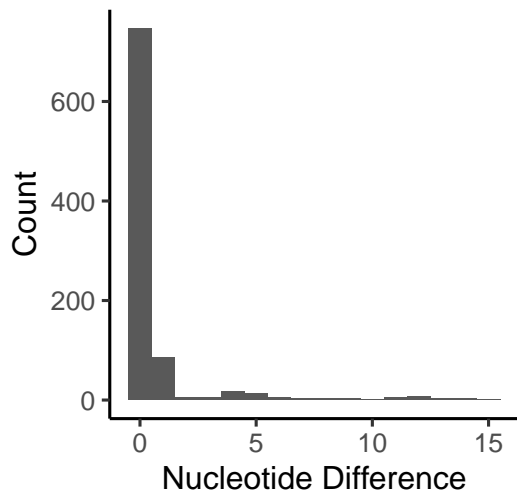
### IGHV5-51\*01

745 sequences assigned  
536 (71.9%) exact matches, in which:  
502 unique CDR3  
7 unique J



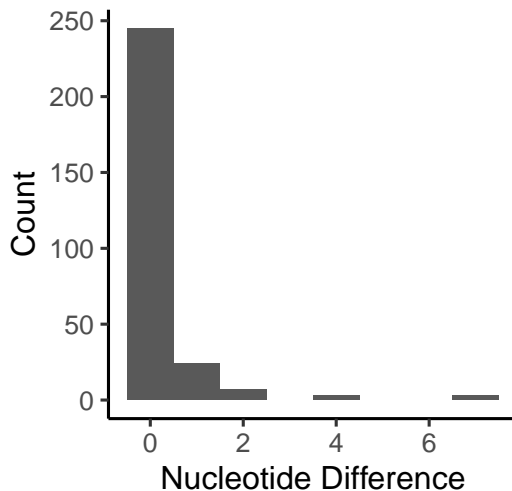
### IGHV4-59\*01

915 sequences assigned  
747 (81.6%) exact matches, in which:  
715 unique CDR3  
7 unique J



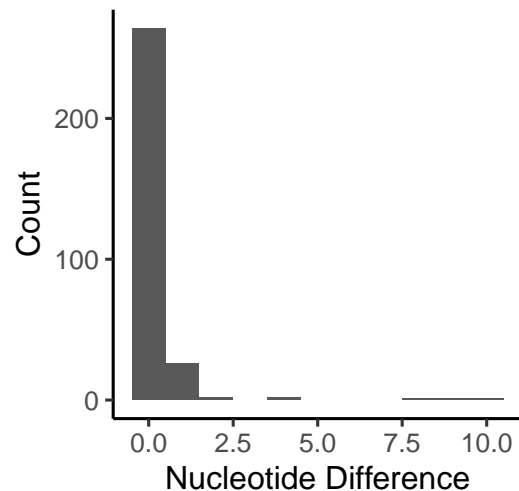
### IGHV5-10-1\*01

282 sequences assigned  
245 (86.9%) exact matches, in which:  
229 unique CDR3  
7 unique J



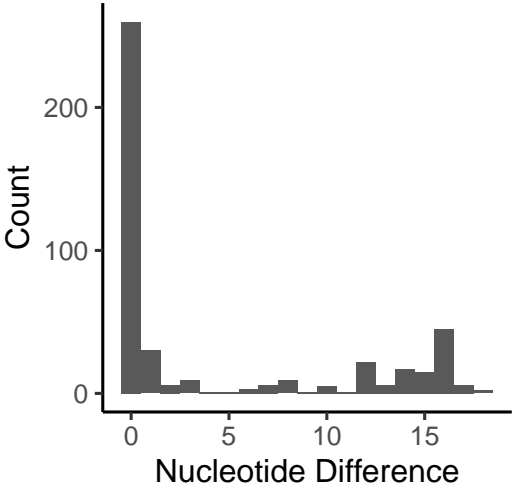
### IGHV5-51\*03

298 sequences assigned  
264 (88.6%) exact matches, in which:  
239 unique CDR3  
6 unique J



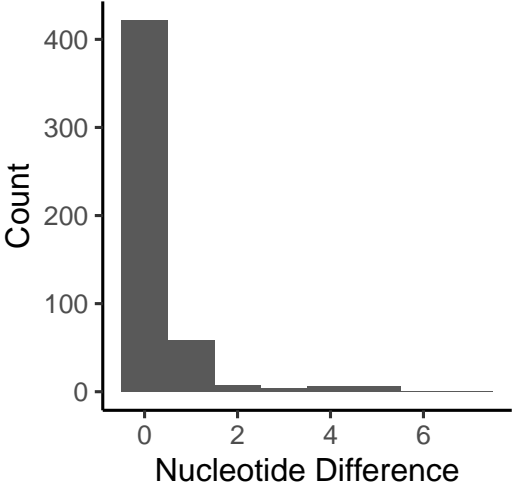
# IGHV6-1\*01

447 sequences assigned  
260 (58.2%) exact matches, in which:  
245 unique CDR3  
6 unique J

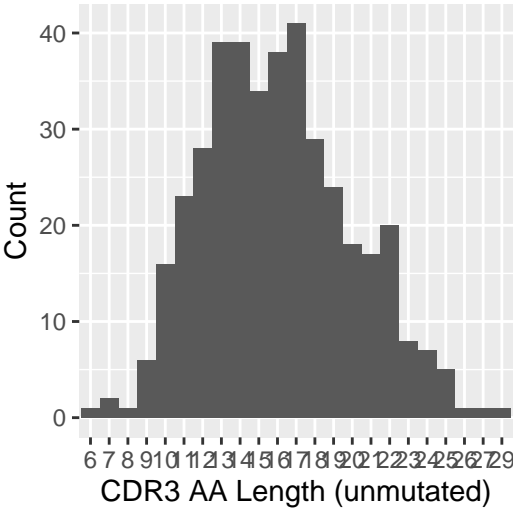


# IGHV7-4-1\*02

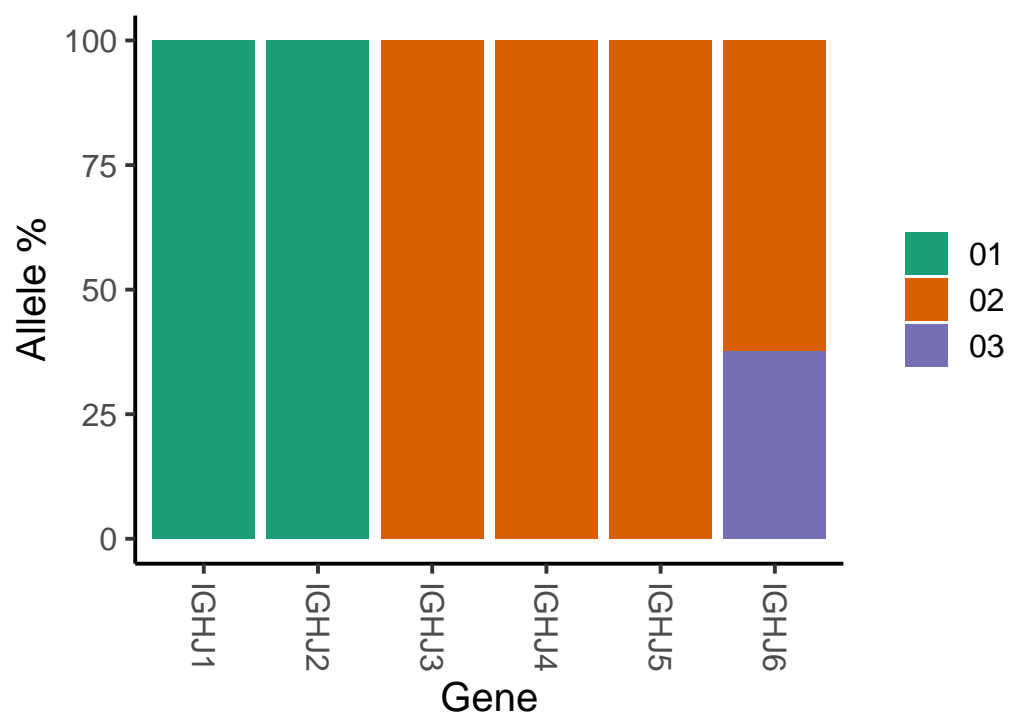
506 sequences assigned  
422 (83.4%) exact matches, in which:  
399 unique CDR3  
7 unique J



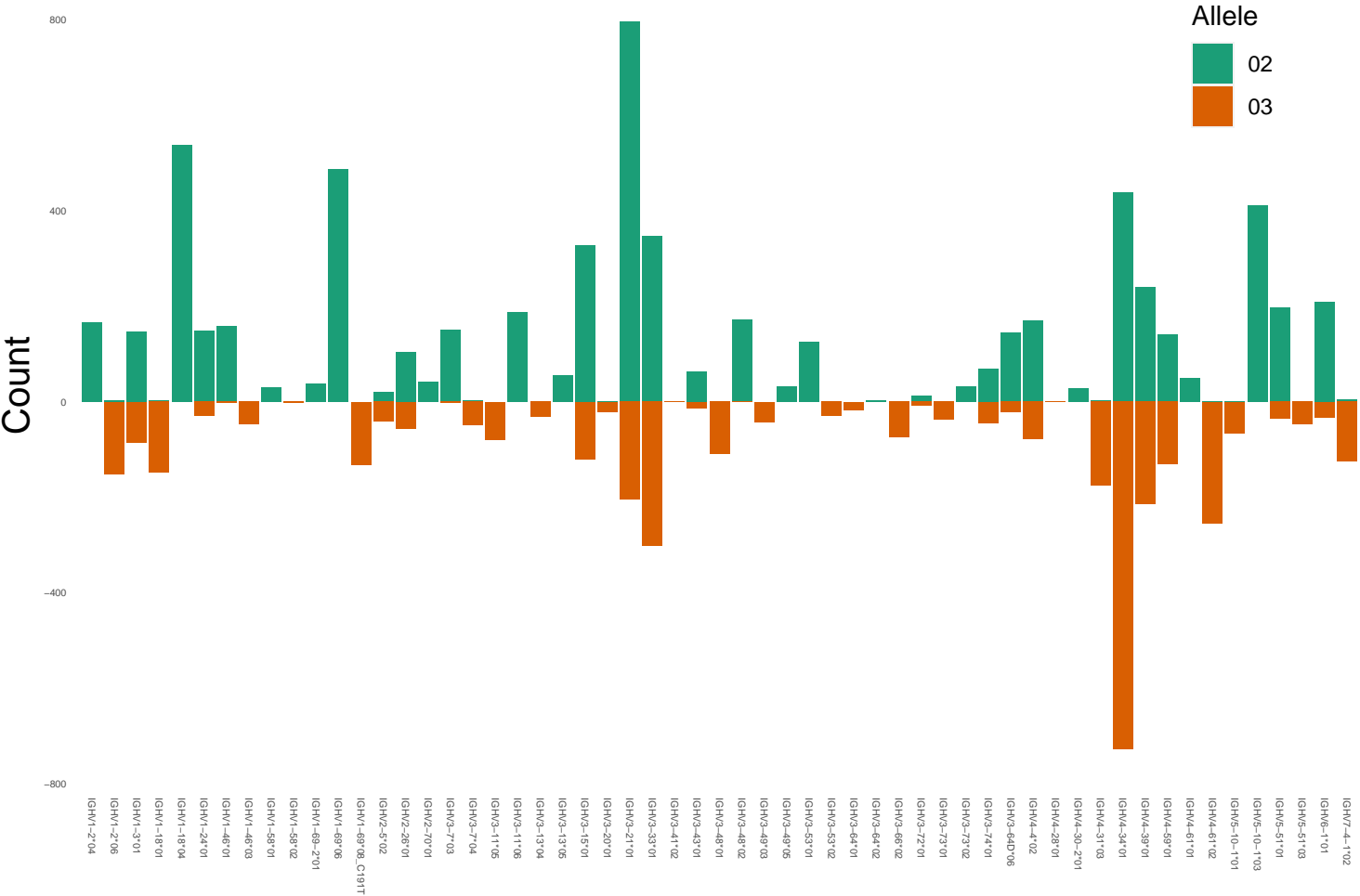
IGHV1-69\*08\_C191T



Allele Usage



Sequence Count by IGHJ6 allele usage



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.

Warning – no inferred sequences found.

Warning – no inferred sequences found.

Warning – no inferred sequences found.