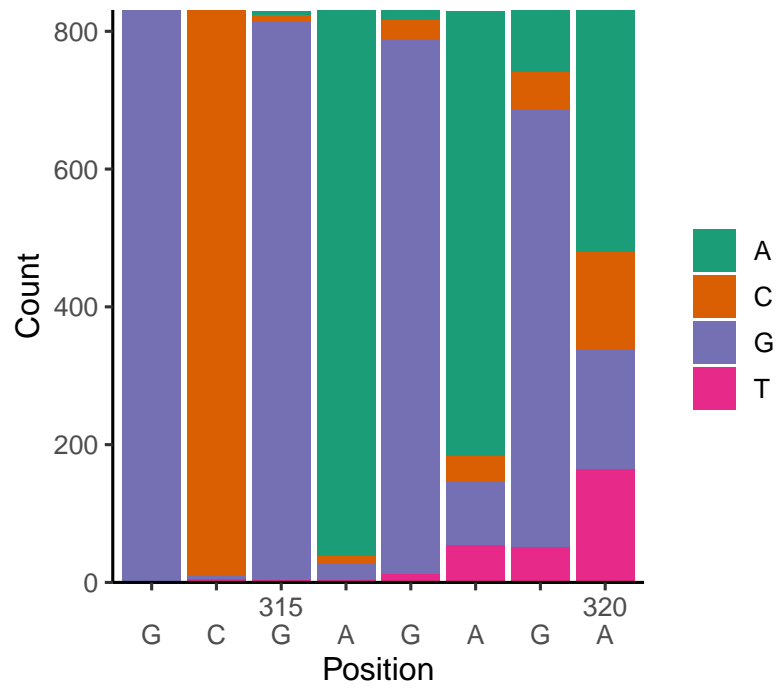
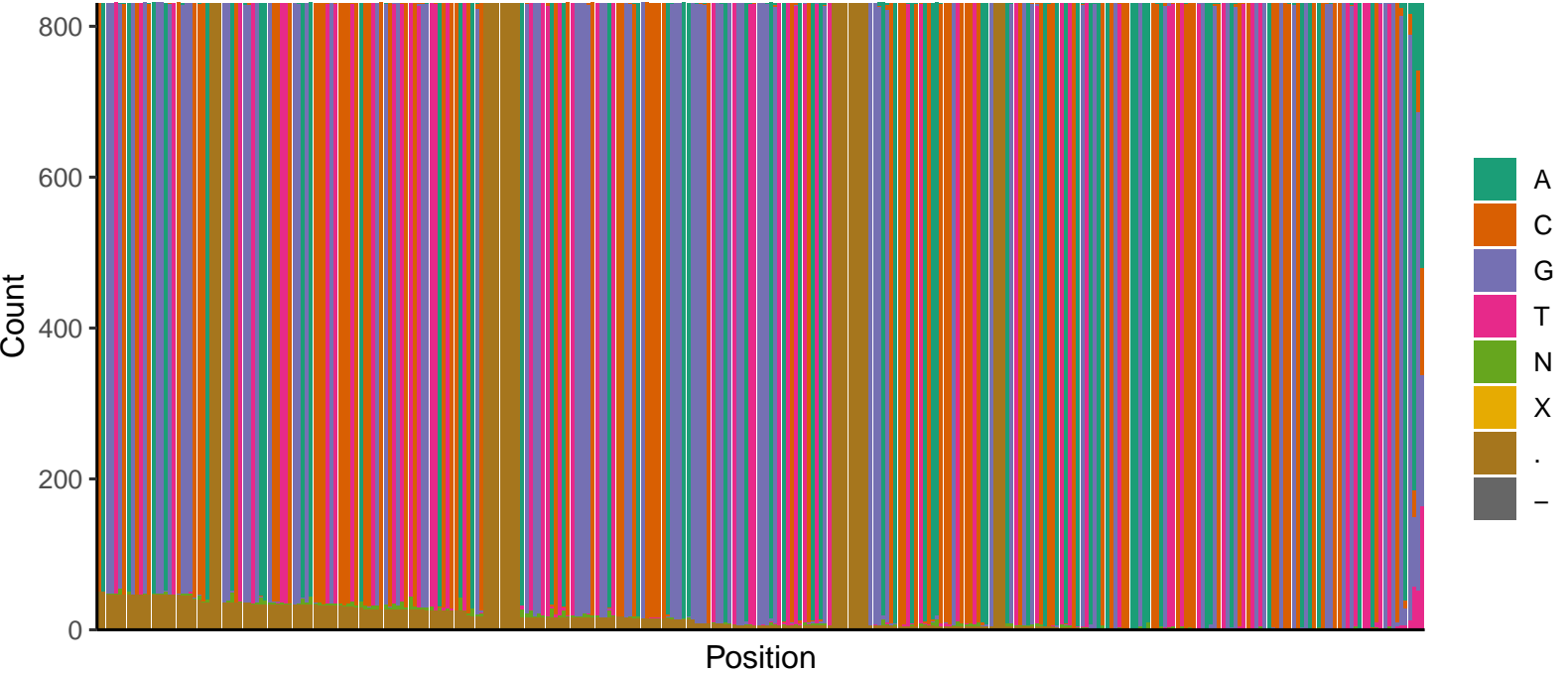


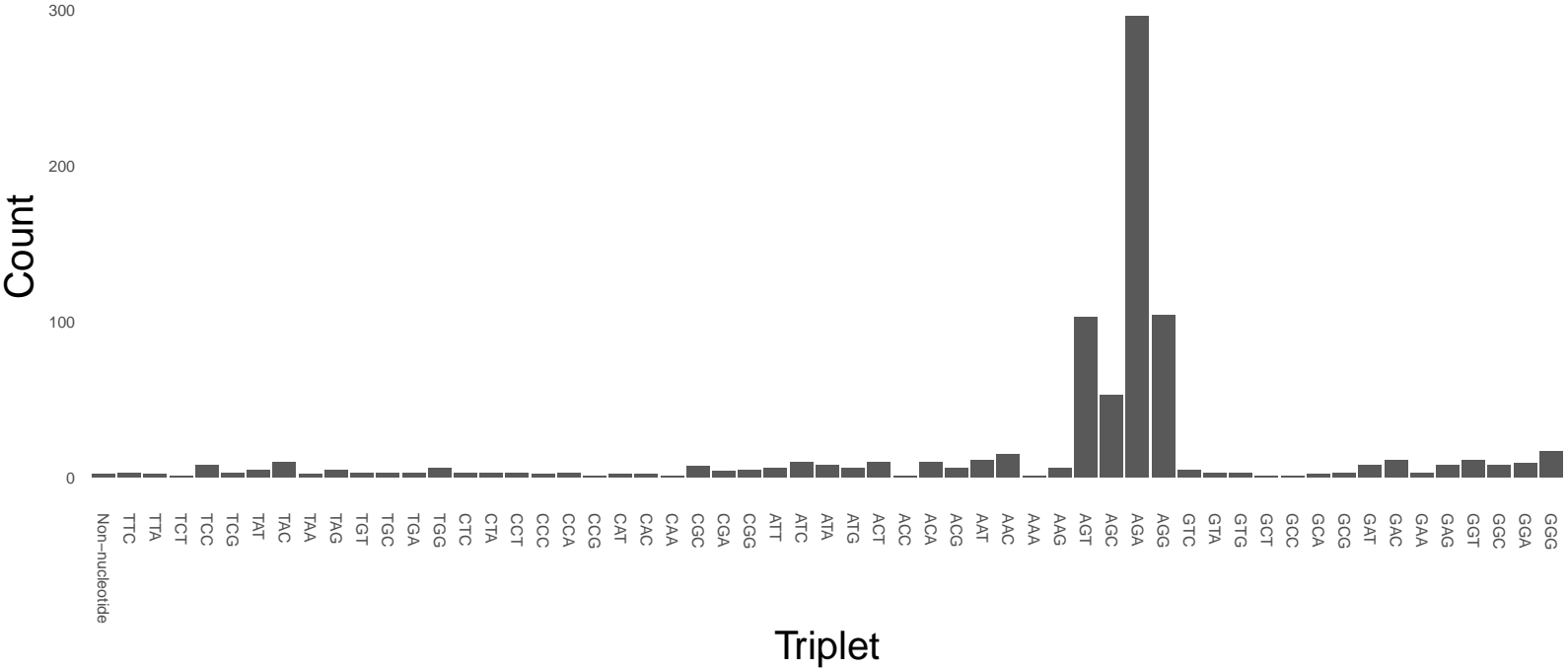
# Gene IGHV4-38-2\*02\_A70G



Gene IGHV4-38-2\*02\_A70G

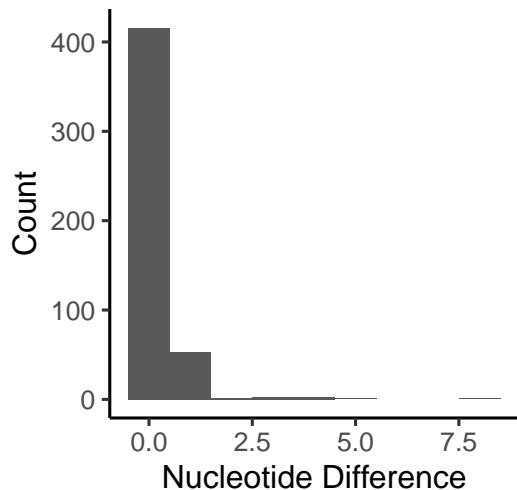


IGHV4-38-2\*02\_A70G- Final 3 nucleotides as a triplet



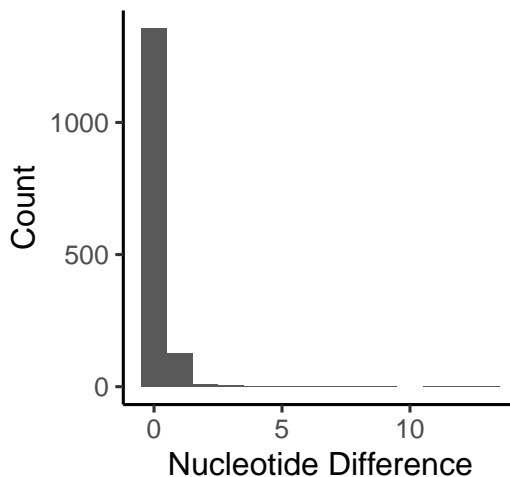
### IGHV1-2\*04

479 sequences assigned  
416 (86.8%) exact matches, in which:  
387 unique CDR3  
6 unique J



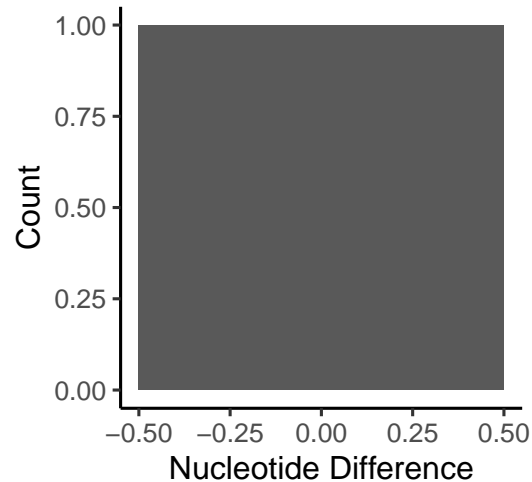
### IGHV1-8\*01

1515 sequences assigned  
1356 (89.5%) exact matches, in which:  
1238 unique CDR3  
6 unique J



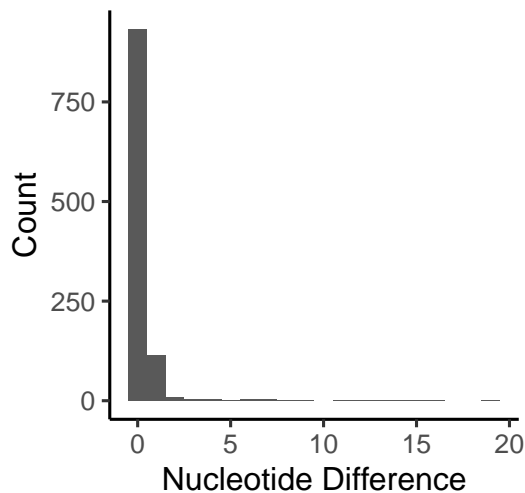
### IGHV1-45\*03

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



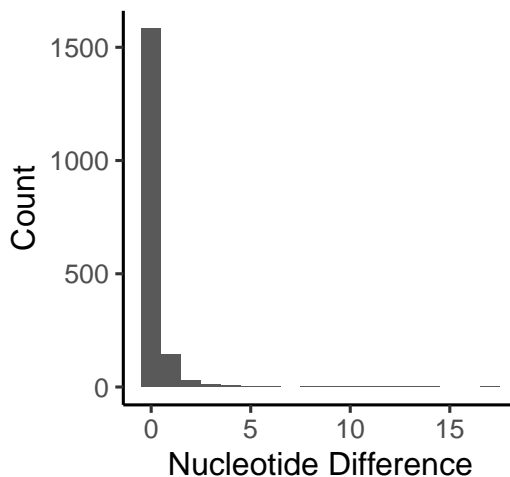
### IGHV1-2\*06

1089 sequences assigned  
933 (85.7%) exact matches, in which:  
851 unique CDR3  
6 unique J



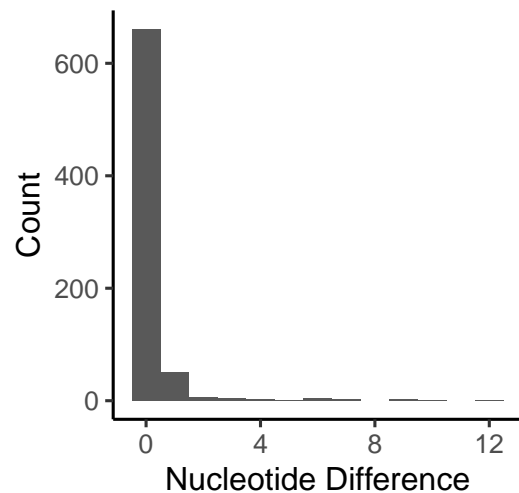
### IGHV1-18\*01

1798 sequences assigned  
1582 (88%) exact matches, in which:  
1476 unique CDR3  
6 unique J



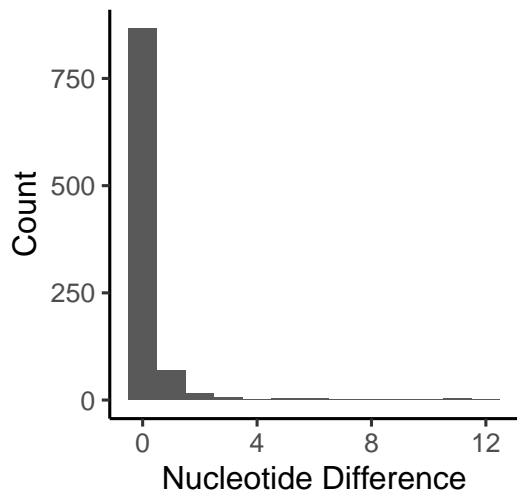
### IGHV1-46\*01

738 sequences assigned  
661 (89.6%) exact matches, in which:  
602 unique CDR3  
6 unique J



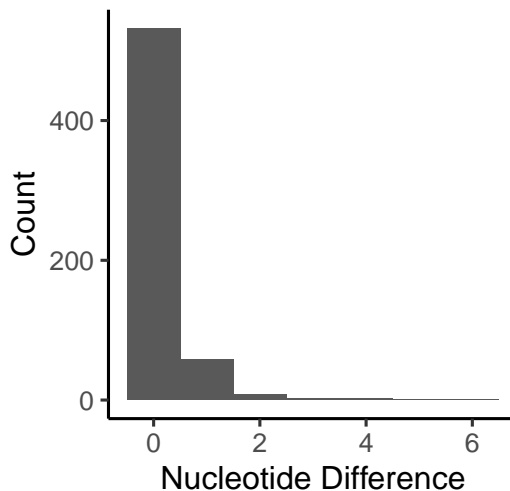
### IGHV1-3\*01

979 sequences assigned  
867 (88.6%) exact matches, in which:  
813 unique CDR3  
6 unique J



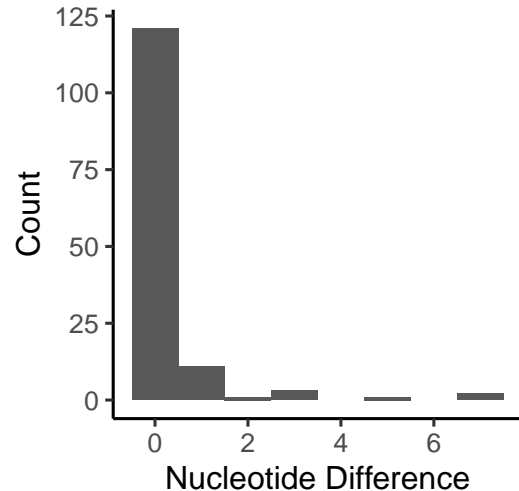
### IGHV1-24\*01

605 sequences assigned  
532 (87.9%) exact matches, in which:  
494 unique CDR3  
6 unique J



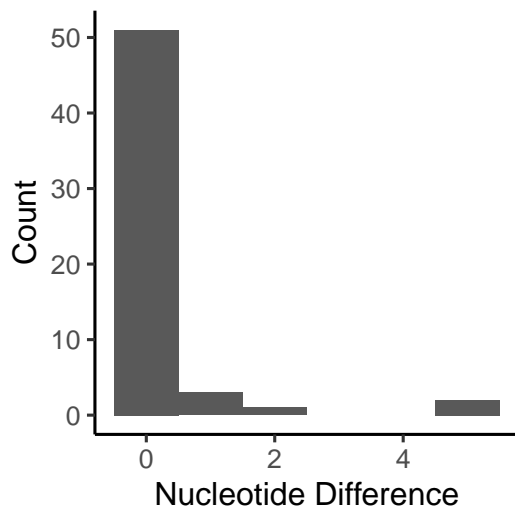
### IGHV1-58\*01

139 sequences assigned  
121 (87.1%) exact matches, in which:  
112 unique CDR3  
5 unique J



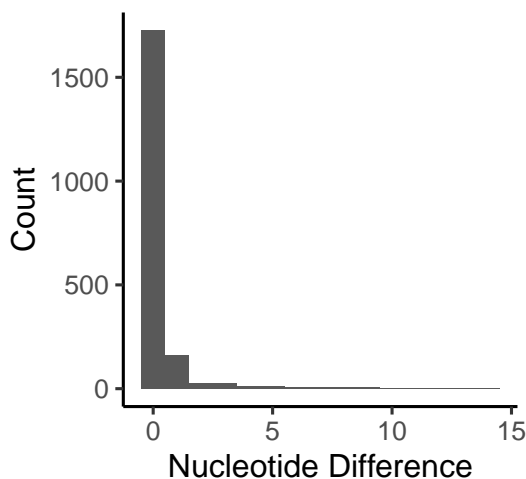
## IGHV1-58\*02

57 sequences assigned  
51 (89.5%) exact matches, in which:  
47 unique CDR3  
4 unique J



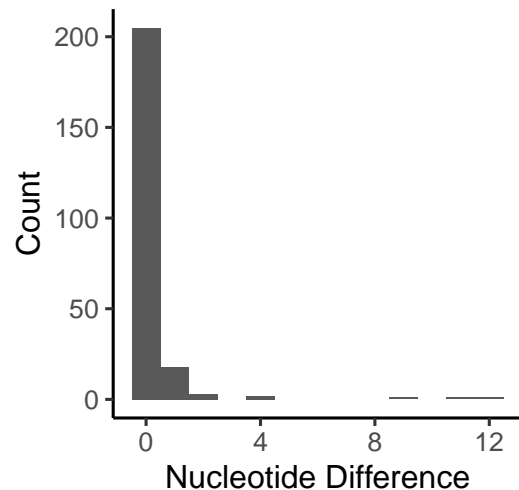
## IGHV2-5\*02

2002 sequences assigned  
1726 (86.2%) exact matches, in which:  
1610 unique CDR3  
6 unique J



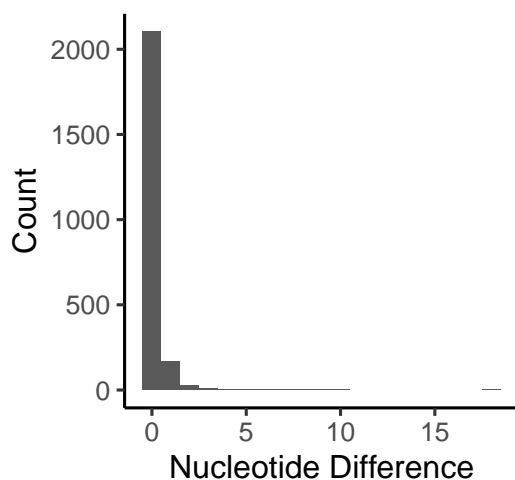
## IGHV2-70\*15

231 sequences assigned  
205 (88.7%) exact matches, in which:  
198 unique CDR3  
6 unique J



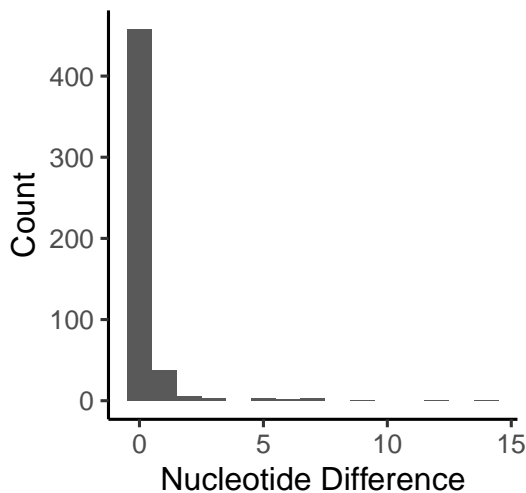
## IGHV1-69\*01

2334 sequences assigned  
2103 (90.1%) exact matches, in which:  
1899 unique CDR3  
6 unique J



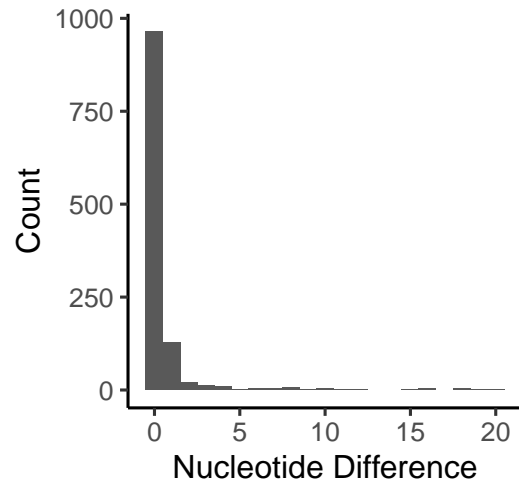
## IGHV2-26\*01

517 sequences assigned  
458 (88.6%) exact matches, in which:  
430 unique CDR3  
6 unique J



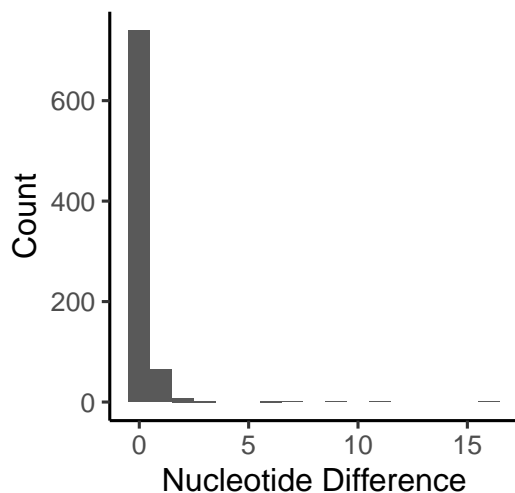
## IGHV3-7\*01

1176 sequences assigned  
964 (82%) exact matches, in which:  
884 unique CDR3  
6 unique J



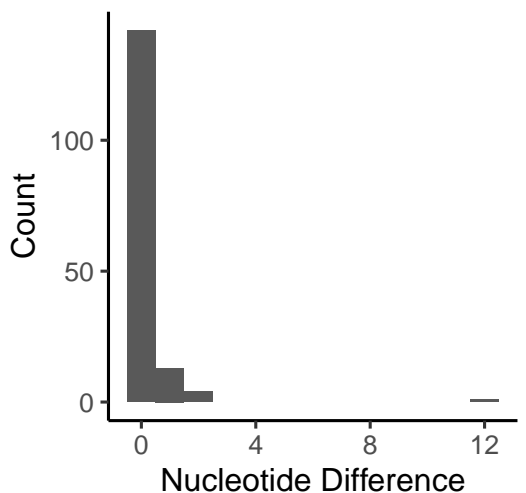
## IGHV1-69\*04

822 sequences assigned  
740 (90%) exact matches, in which:  
676 unique CDR3  
6 unique J



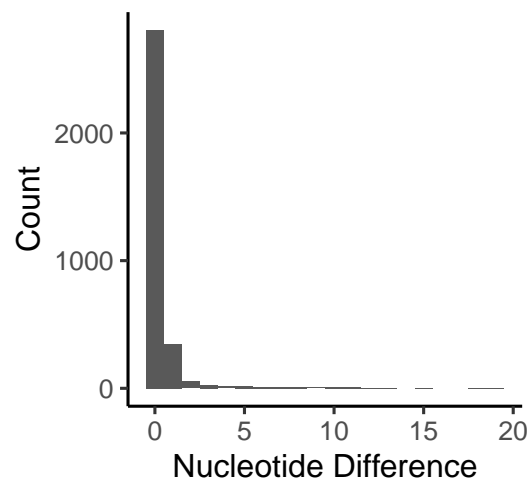
## IGHV2-70\*01

160 sequences assigned  
142 (88.8%) exact matches, in which:  
138 unique CDR3  
5 unique J



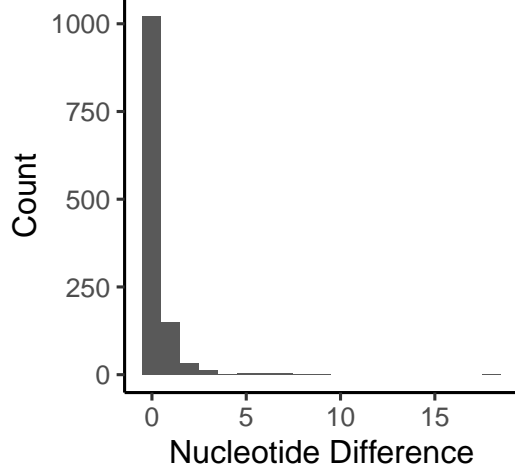
## IGHV3-9\*01

3330 sequences assigned  
2806 (84.3%) exact matches, in which:  
2451 unique CDR3  
6 unique J



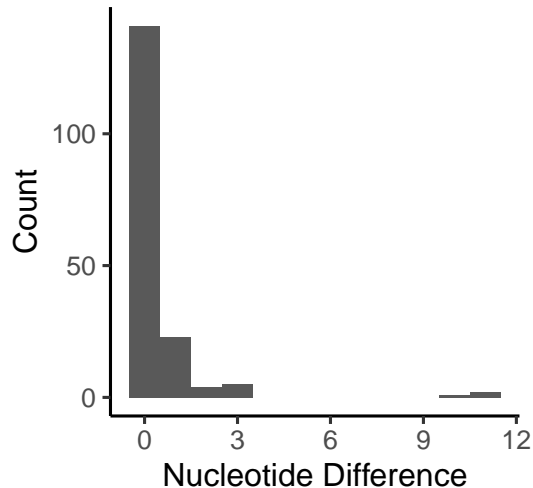
### IGHV3-11\*01

1242 sequences assigned  
1021 (82.2%) exact matches, in which:  
928 unique CDR3  
6 unique J



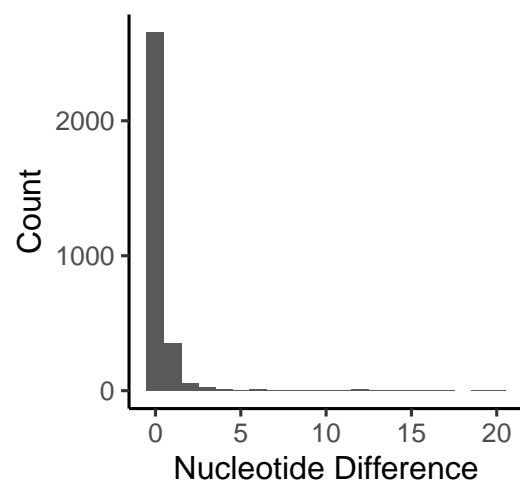
### IGHV3-20\*01

176 sequences assigned  
141 (80.1%) exact matches, in which:  
128 unique CDR3  
6 unique J



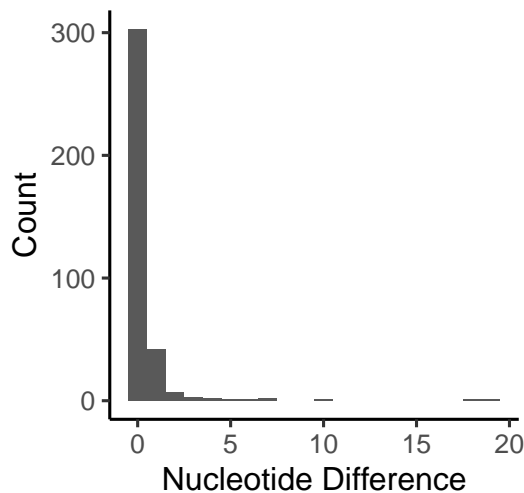
### IGHV3-30-3\*01

3163 sequences assigned  
2655 (83.9%) exact matches, in which:  
2341 unique CDR3  
6 unique J



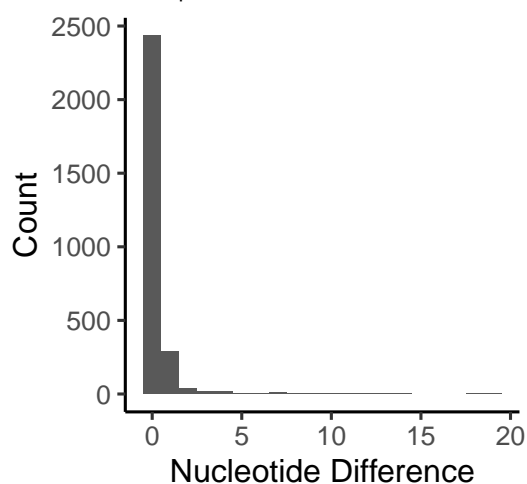
### IGHV3-13\*01

364 sequences assigned  
303 (83.2%) exact matches, in which:  
264 unique CDR3  
6 unique J



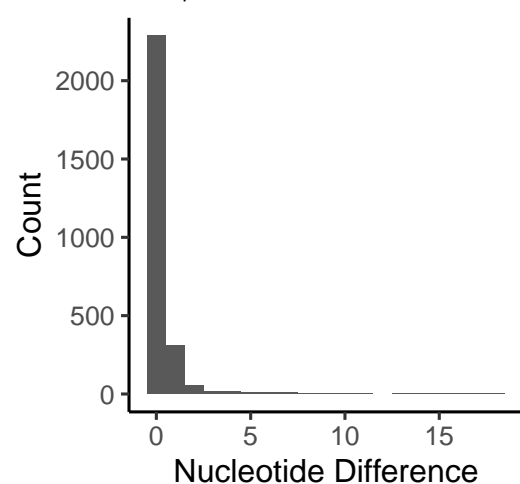
### IGHV3-21\*01

2831 sequences assigned  
2434 (86%) exact matches, in which:  
2153 unique CDR3  
6 unique J



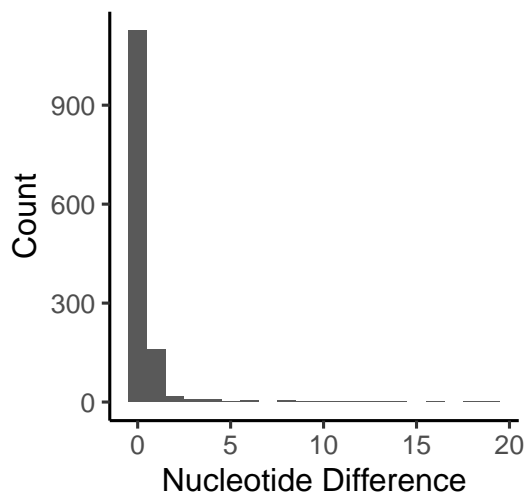
### IGHV3-30\*18

2730 sequences assigned  
2287 (83.8%) exact matches, in which:  
2059 unique CDR3  
6 unique J



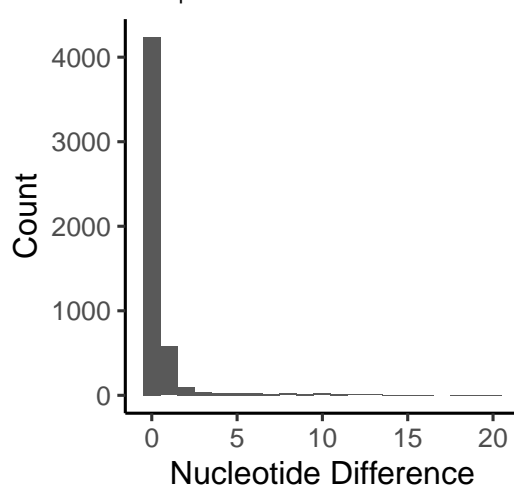
### IGHV3-15\*01

1344 sequences assigned  
1127 (83.9%) exact matches, in which:  
1012 unique CDR3  
6 unique J



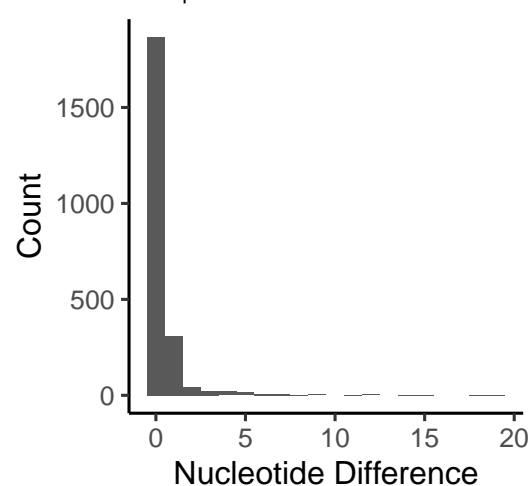
### IGHV3-23\*01

5176 sequences assigned  
4238 (81.9%) exact matches, in which:  
3771 unique CDR3  
6 unique J



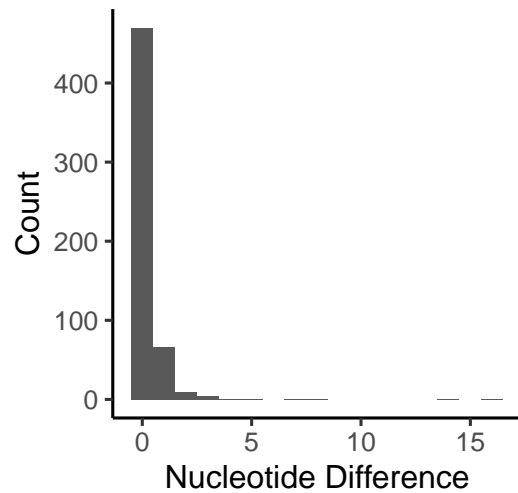
### IGHV3-33\*01

2319 sequences assigned  
1867 (80.5%) exact matches, in which:  
1667 unique CDR3  
6 unique J



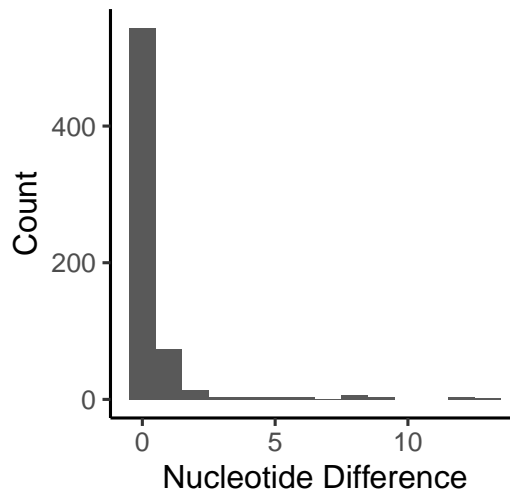
### IGHV3-43\*02

555 sequences assigned  
470 (84.7%) exact matches, in which:  
412 unique CDR3  
6 unique J



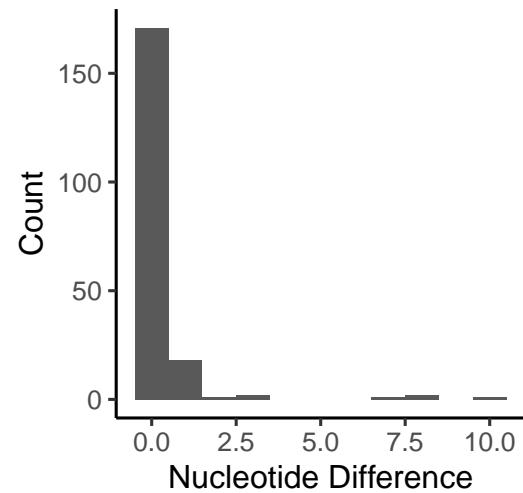
### IGHV3-49\*04

664 sequences assigned  
544 (81.9%) exact matches, in which:  
488 unique CDR3  
6 unique J



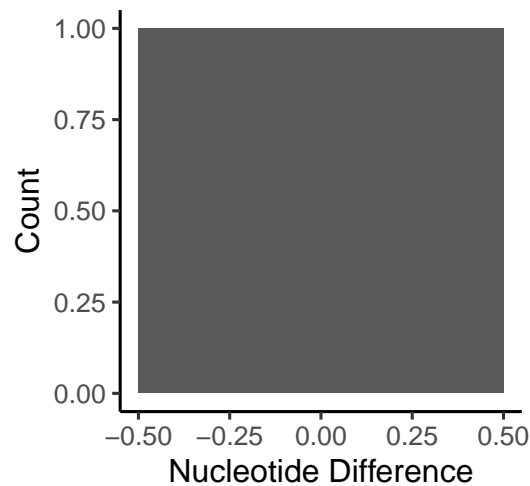
### IGHV3-53\*04

196 sequences assigned  
171 (87.2%) exact matches, in which:  
157 unique CDR3  
6 unique J



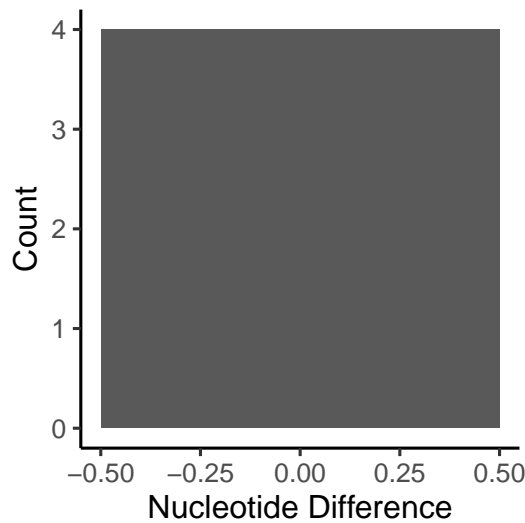
### IGHV3-47\*01

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



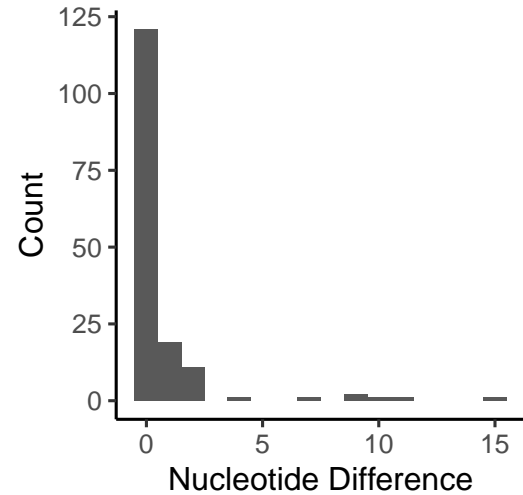
### IGHV3-52\*01

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



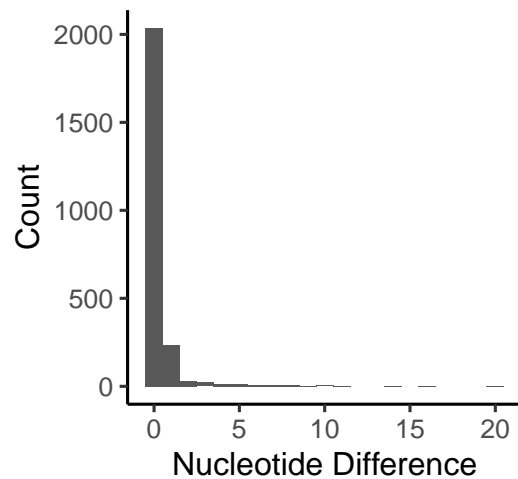
### IGHV3-64\*01

158 sequences assigned  
121 (76.6%) exact matches, in which:  
109 unique CDR3  
6 unique J



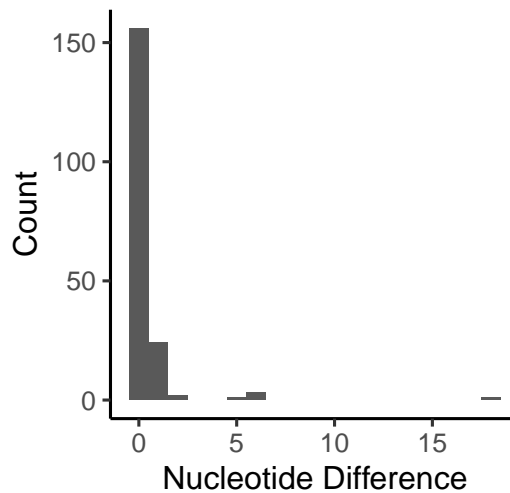
### IGHV3-48\*03

2382 sequences assigned  
2036 (85.5%) exact matches, in which:  
1829 unique CDR3  
6 unique J



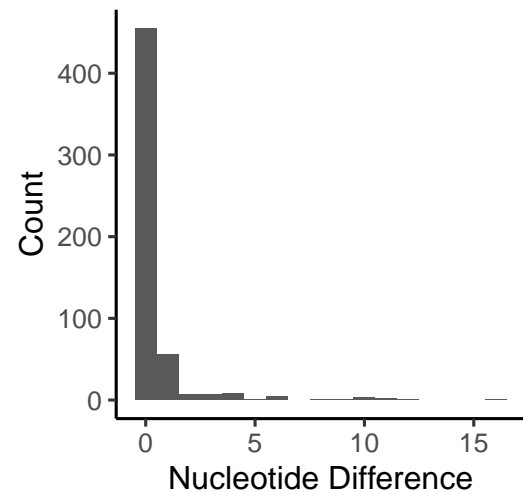
### IGHV3-53\*02

187 sequences assigned  
156 (83.4%) exact matches, in which:  
145 unique CDR3  
5 unique J



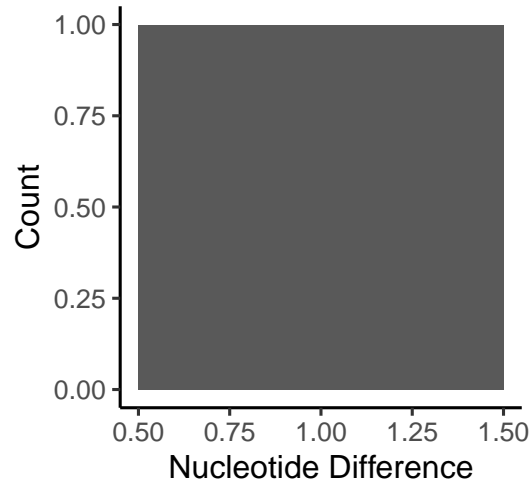
### IGHV3-66\*01

547 sequences assigned  
455 (83.2%) exact matches, in which:  
402 unique CDR3  
6 unique J



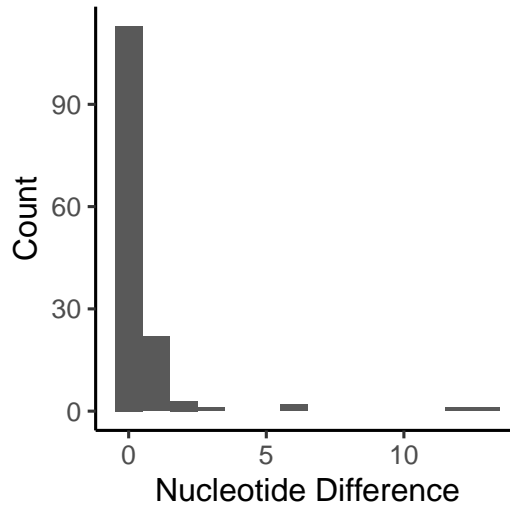
### IGHV3-69-1\*02

1 sequences assigned  
No exact matches.



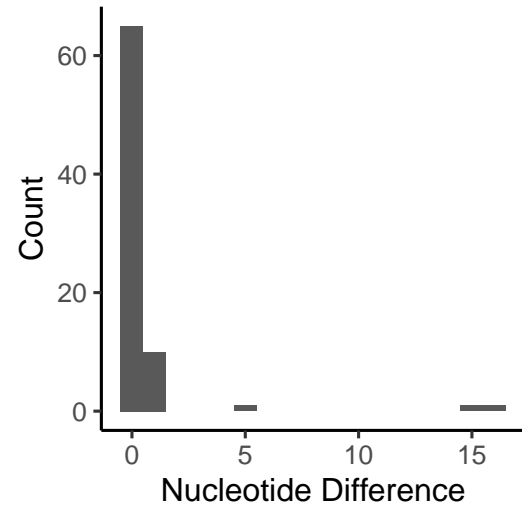
### IGHV3-73\*01

143 sequences assigned  
113 (79%) exact matches, in which:  
100 unique CDR3  
4 unique J



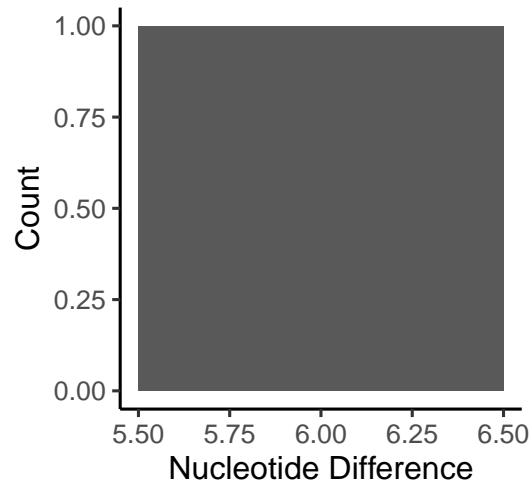
### IGHV3-43D\*04

78 sequences assigned  
65 (83.3%) exact matches, in which:  
58 unique CDR3  
4 unique J



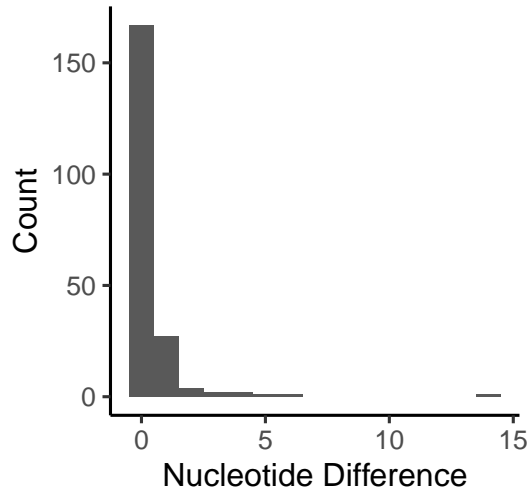
### IGHV3-71\*02

1 sequences assigned  
No exact matches.



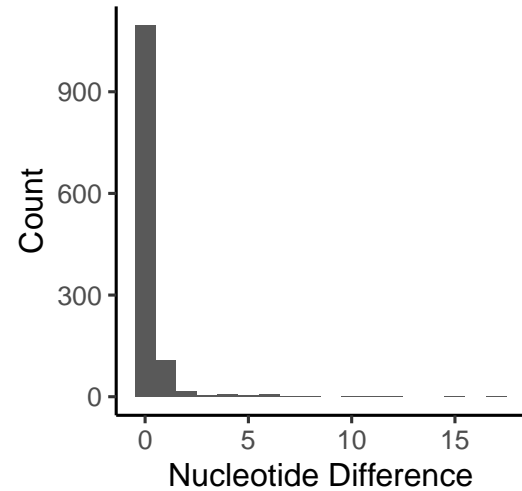
### IGHV3-73\*02

205 sequences assigned  
167 (81.5%) exact matches, in which:  
155 unique CDR3  
6 unique J



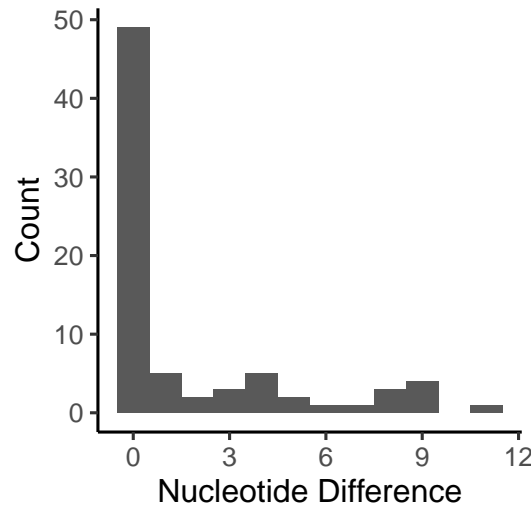
### IGHV4-4\*02

1253 sequences assigned  
1097 (87.5%) exact matches, in which:  
997 unique CDR3  
6 unique J



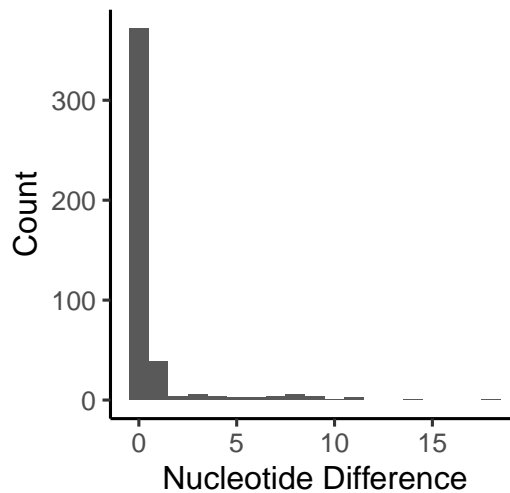
### IGHV3-72\*01

78 sequences assigned  
49 (62.8%) exact matches, in which:  
46 unique CDR3  
5 unique J



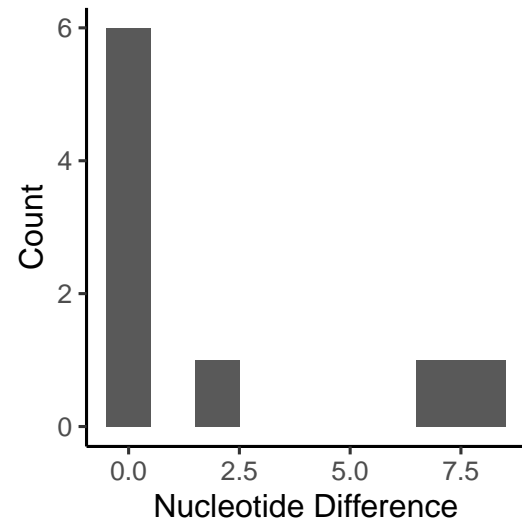
### IGHV3-74\*01

451 sequences assigned  
372 (82.5%) exact matches, in which:  
344 unique CDR3  
6 unique J



### IGHV4-28\*01

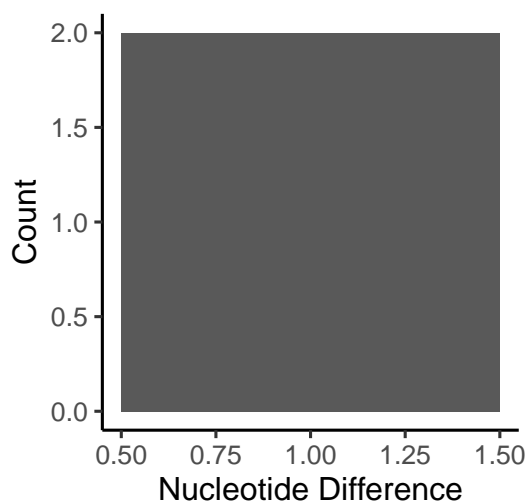
9 sequences assigned  
6 (66.7%) exact matches, in which:  
6 unique CDR3  
4 unique J





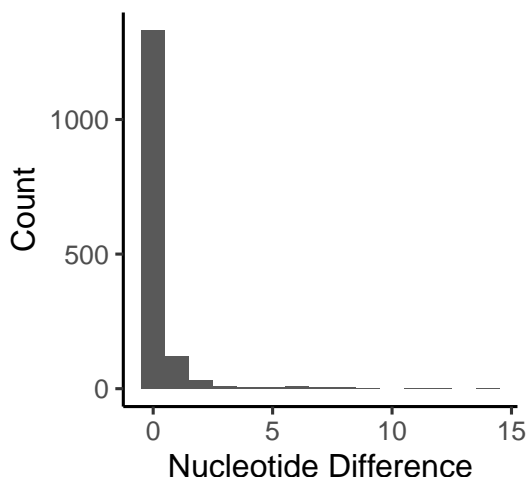
### IGHV4-28\*04

2 sequences assigned  
No exact matches.



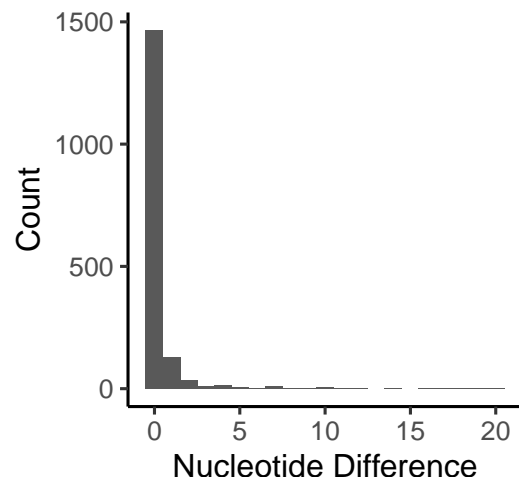
### IGHV4-31\*03

1529 sequences assigned  
1331 (87.1%) exact matches, in which:  
1227 unique CDR3  
6 unique J



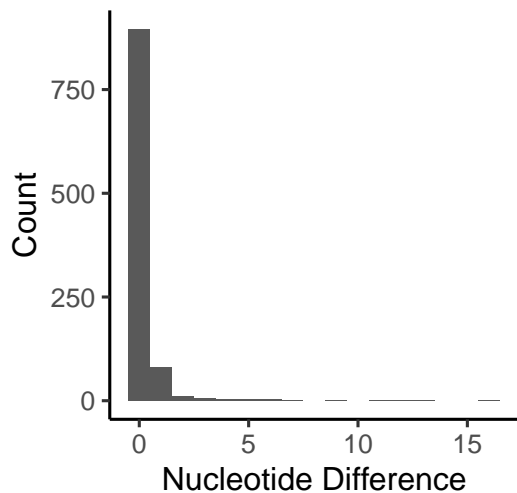
### IGHV4-39\*01

1692 sequences assigned  
1465 (86.6%) exact matches, in which:  
1314 unique CDR3  
6 unique J



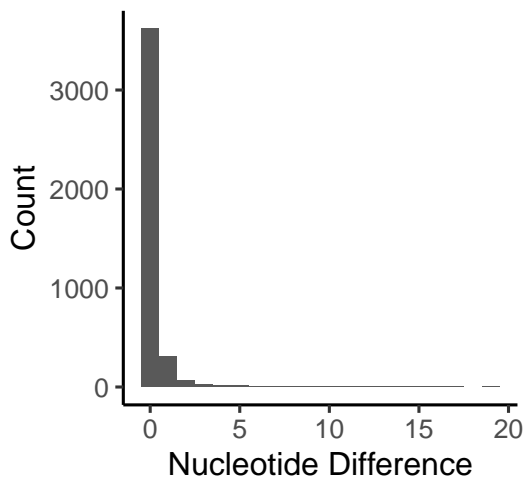
### IGHV4-30-4\*01

1011 sequences assigned  
896 (88.6%) exact matches, in which:  
835 unique CDR3  
6 unique J



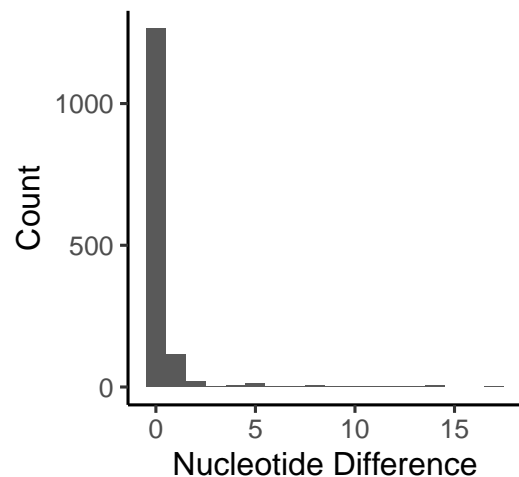
### IGHV4-34\*01

4098 sequences assigned  
3619 (88.3%) exact matches, in which:  
3243 unique CDR3  
6 unique J



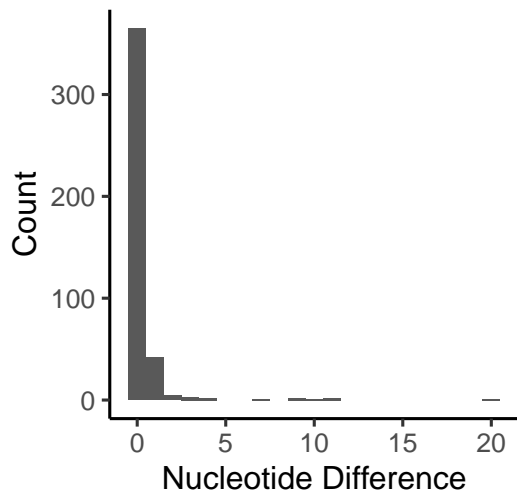
### IGHV4-59\*01

1443 sequences assigned  
1264 (87.6%) exact matches, in which:  
1188 unique CDR3  
6 unique J



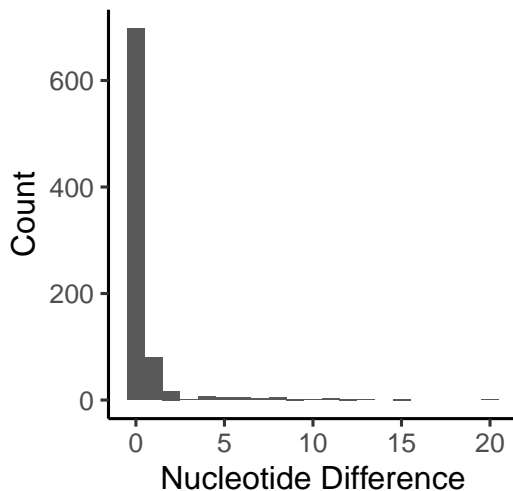
### IGHV4-30-2\*01

423 sequences assigned  
365 (86.3%) exact matches, in which:  
340 unique CDR3  
6 unique J



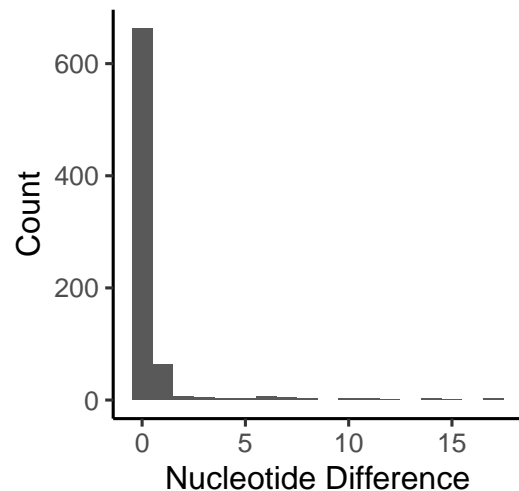
### IGHV4-38-2\*02\_A70G

831 sequences assigned  
698 (84%) exact matches, in which:  
623 unique CDR3  
6 unique J



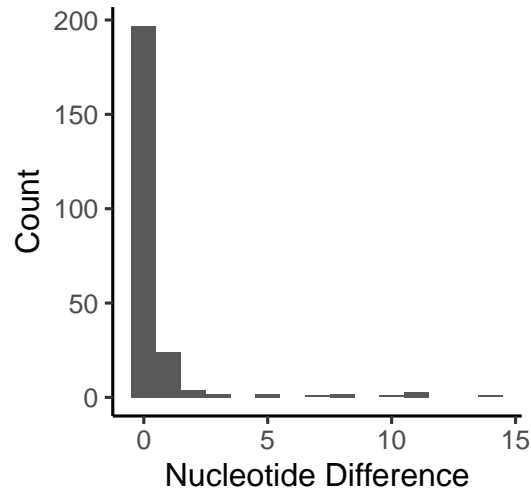
### IGHV4-59\*08

769 sequences assigned  
663 (86.2%) exact matches, in which:  
615 unique CDR3  
6 unique J



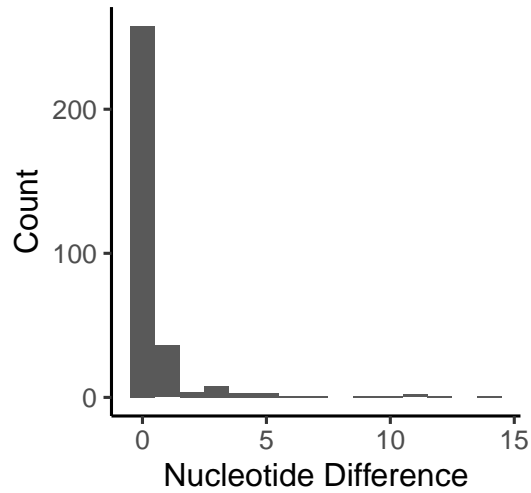
### IGHV4–61\*01

237 sequences assigned  
197 (83.1%) exact matches, in which:  
190 unique CDR3  
6 unique J



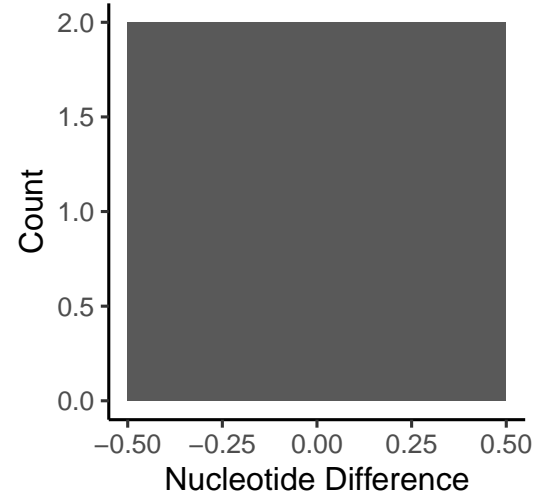
### IGHV6–1\*01

320 sequences assigned  
258 (80.6%) exact matches, in which:  
236 unique CDR3  
6 unique J



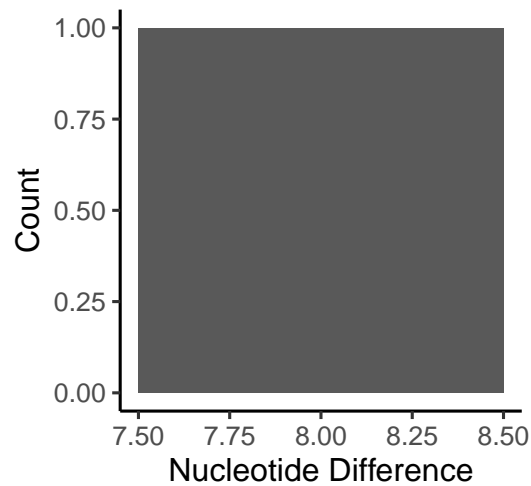
### IGHV7–81\*01

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



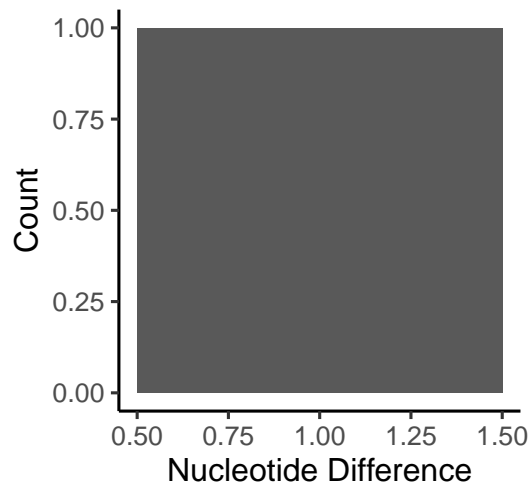
### IGHV1/OR15–2\*01

1 sequences assigned  
No exact matches.



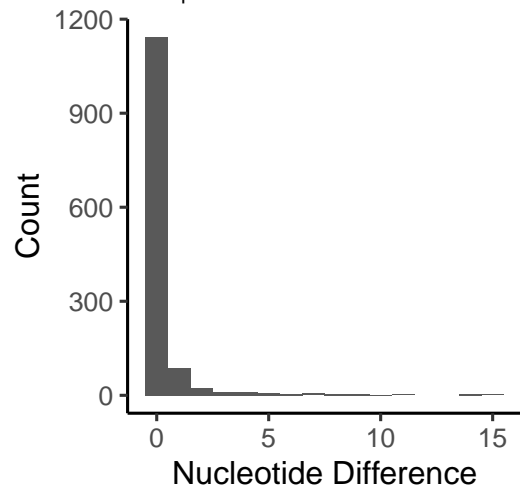
### IGHV3/OR16–12\*01

1 sequences assigned  
No exact matches.



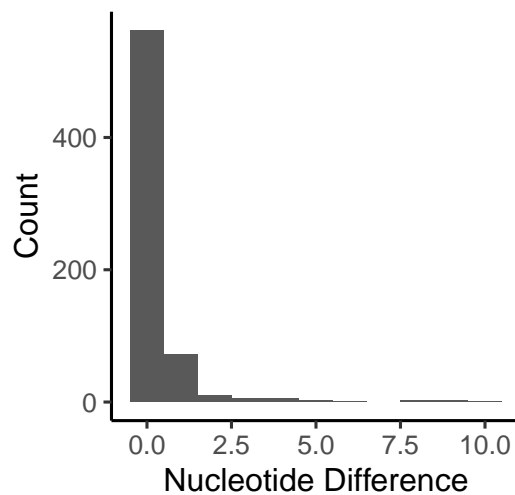
### IGHV5–51\*01

1315 sequences assigned  
1143 (86.9%) exact matches, in which:  
1042 unique CDR3  
6 unique J



### IGHV7–4–1\*02

663 sequences assigned  
562 (84.8%) exact matches, in which:  
524 unique CDR3  
6 unique J



IGHV4-38-2\*02\_A70G

