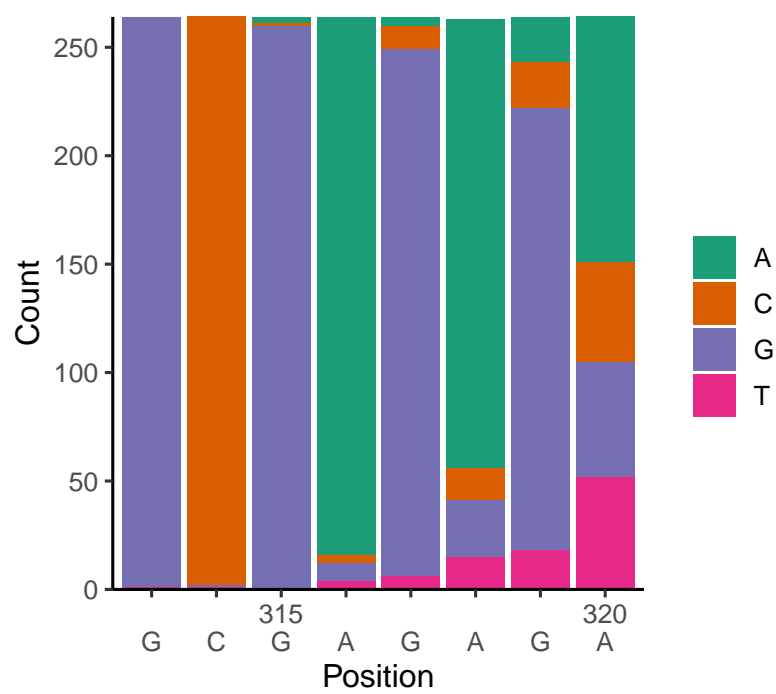


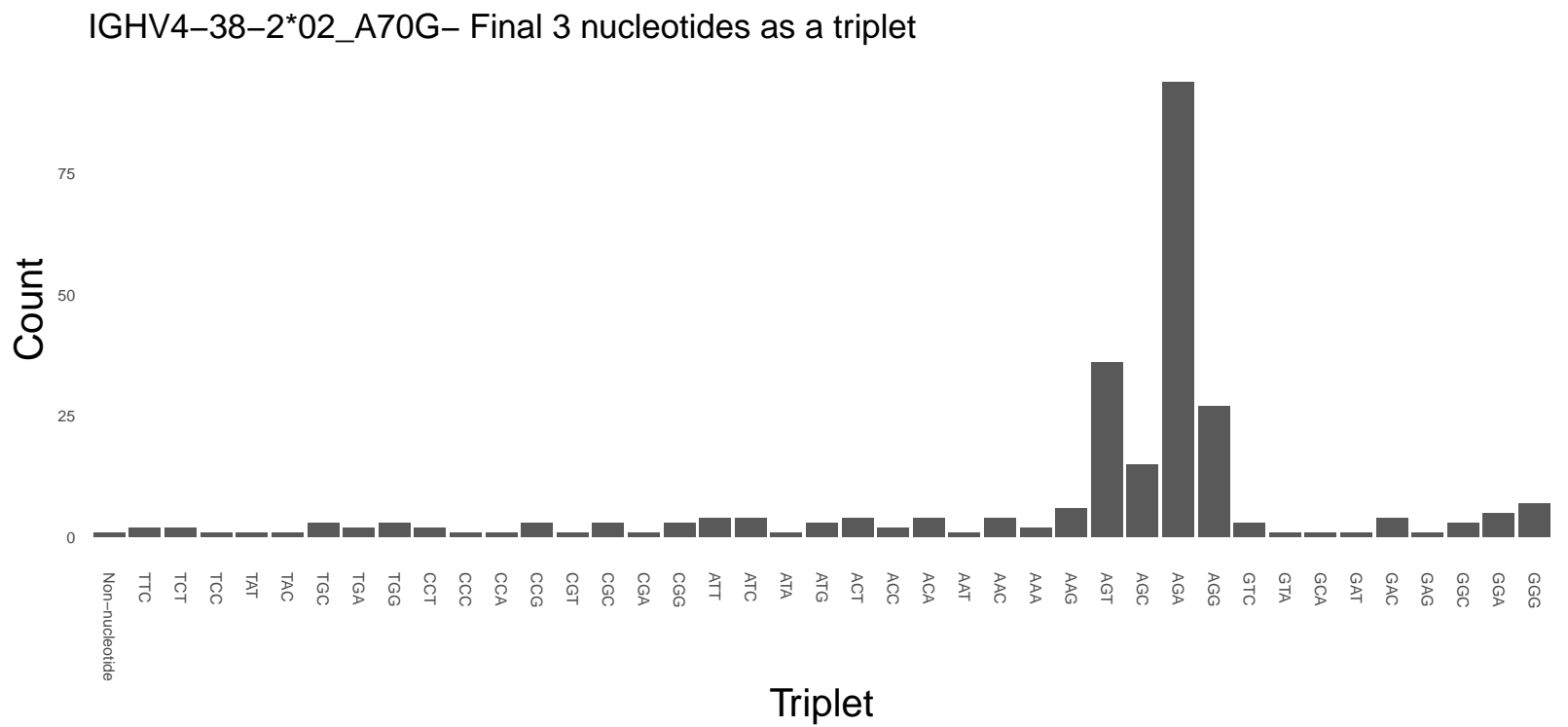
# Gene IGHV4-38-2\*02\_A70G



Gene IGHV4-38-2\*02\_A70G

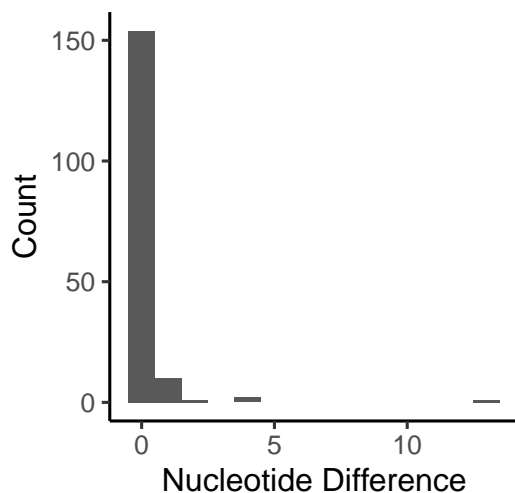


IGHV4-38-2\*02\_A70G- Final 3 nucleotides as a triplet



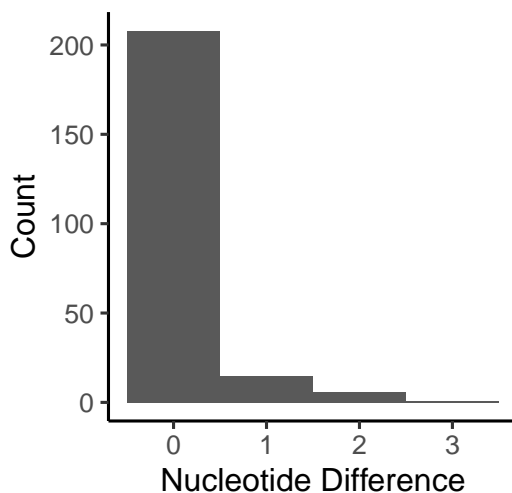
### IGHV1-2\*04

168 sequences assigned  
154 (91.7%) exact matches, in which:  
152 unique CDR3  
6 unique J



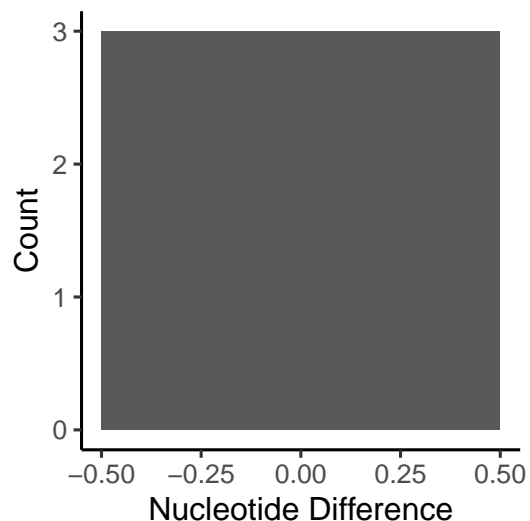
### IGHV1-8\*01

230 sequences assigned  
208 (90.4%) exact matches, in which:  
207 unique CDR3  
6 unique J



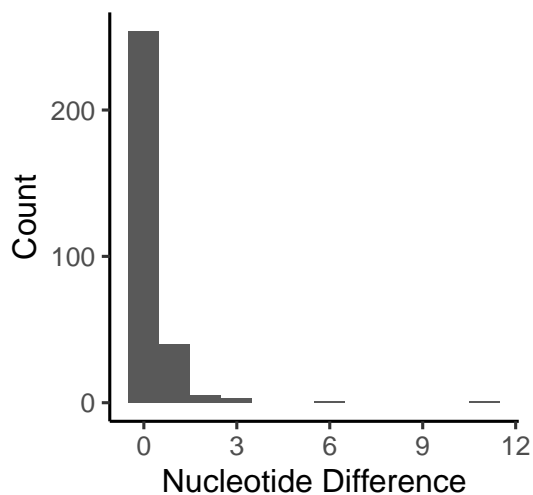
### IGHV1-45\*02

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



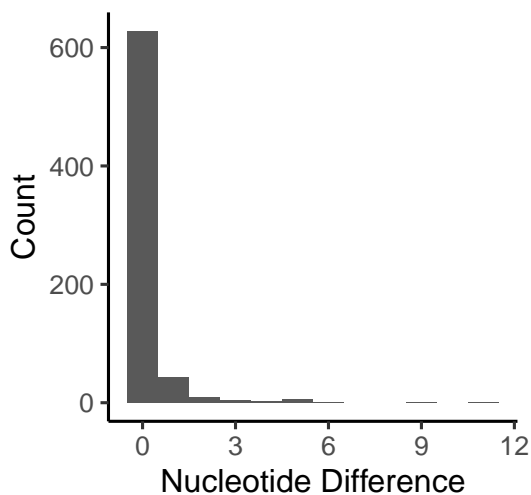
### IGHV1-2\*06

304 sequences assigned  
254 (83.6%) exact matches, in which:  
254 unique CDR3  
6 unique J



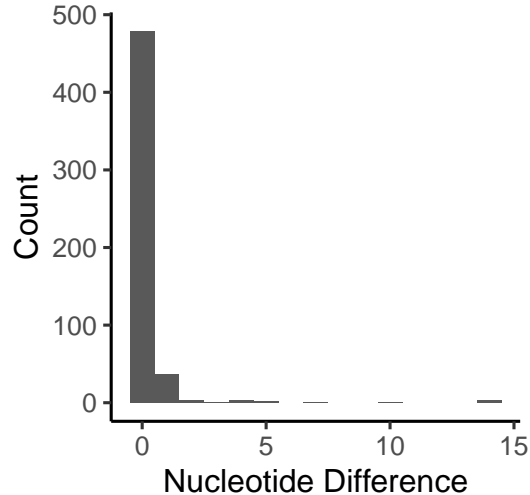
### IGHV1-18\*01

696 sequences assigned  
628 (90.2%) exact matches, in which:  
624 unique CDR3  
6 unique J



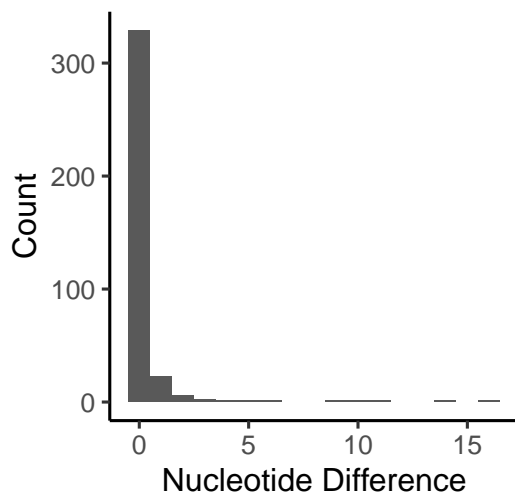
### IGHV1-46\*01

531 sequences assigned  
479 (90.2%) exact matches, in which:  
475 unique CDR3  
6 unique J



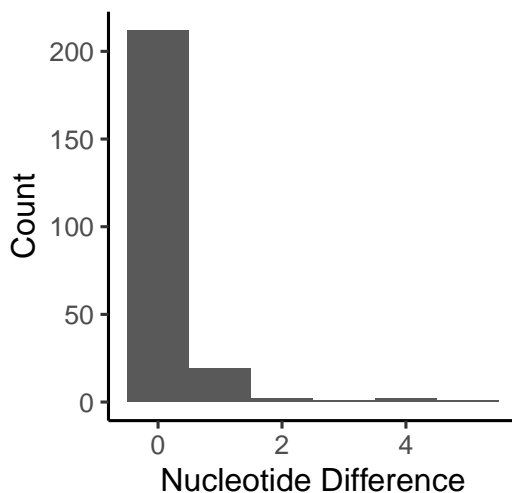
### IGHV1-3\*01

369 sequences assigned  
329 (89.2%) exact matches, in which:  
326 unique CDR3  
6 unique J



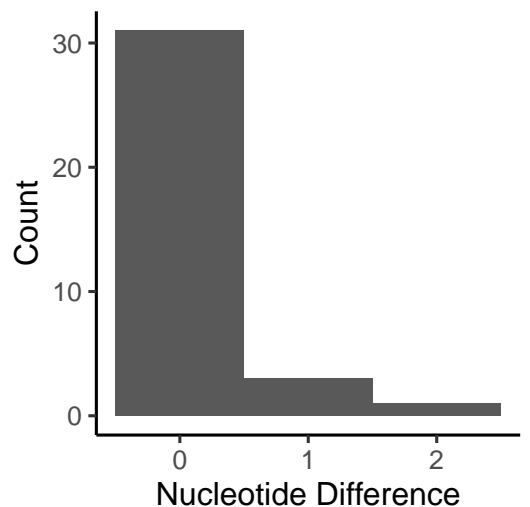
### IGHV1-24\*01

237 sequences assigned  
212 (89.5%) exact matches, in which:  
208 unique CDR3  
5 unique J



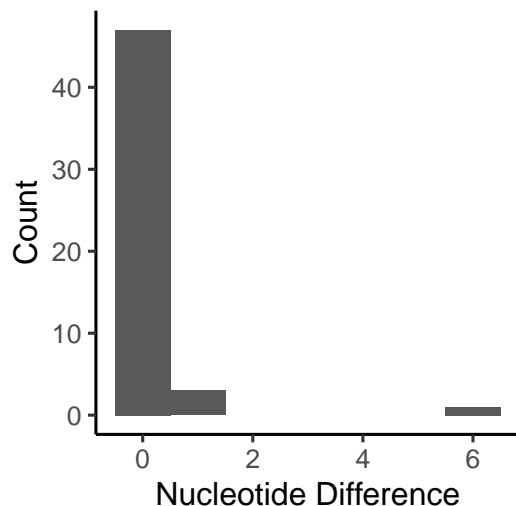
### IGHV1-58\*01

35 sequences assigned  
31 (88.6%) exact matches, in which:  
31 unique CDR3  
6 unique J



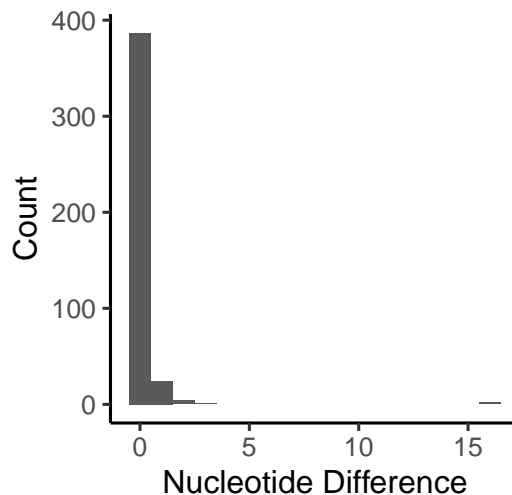
### IGHV1-58\*02

51 sequences assigned  
47 (92.2%) exact matches, in which:  
47 unique CDR3  
5 unique J



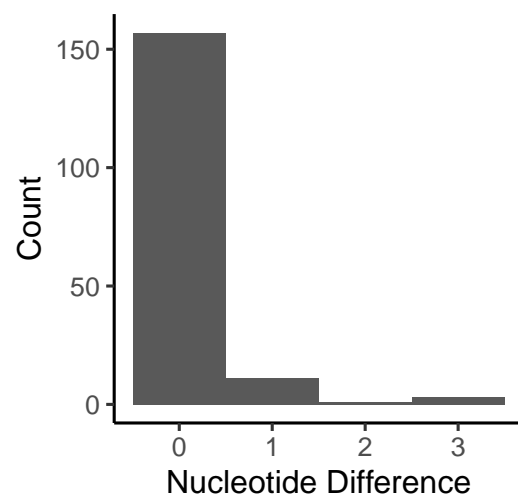
### IGHV1-69\*04

419 sequences assigned  
387 (92.4%) exact matches, in which:  
384 unique CDR3  
6 unique J



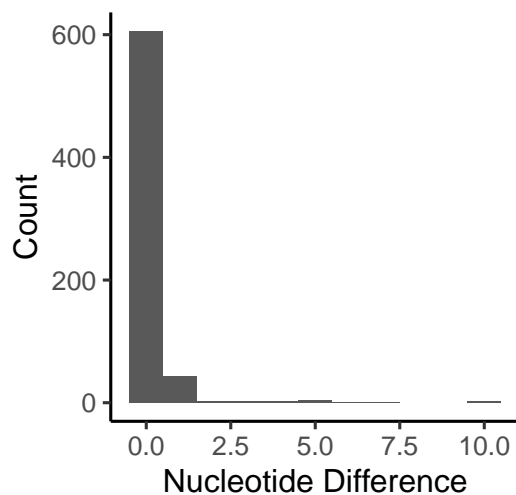
### IGHV2-26\*01

172 sequences assigned  
157 (91.3%) exact matches, in which:  
156 unique CDR3  
5 unique J



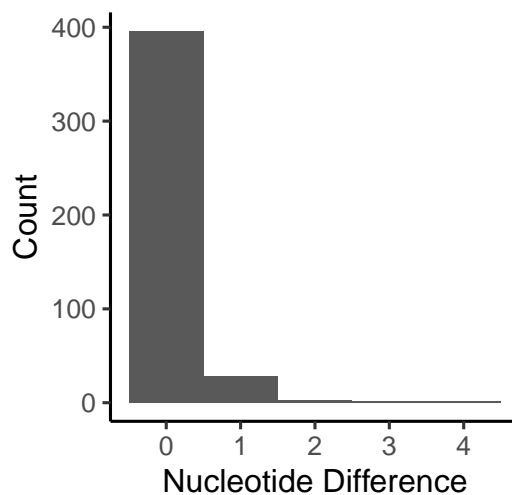
### IGHV1-69\*01

664 sequences assigned  
606 (91.3%) exact matches, in which:  
599 unique CDR3  
6 unique J



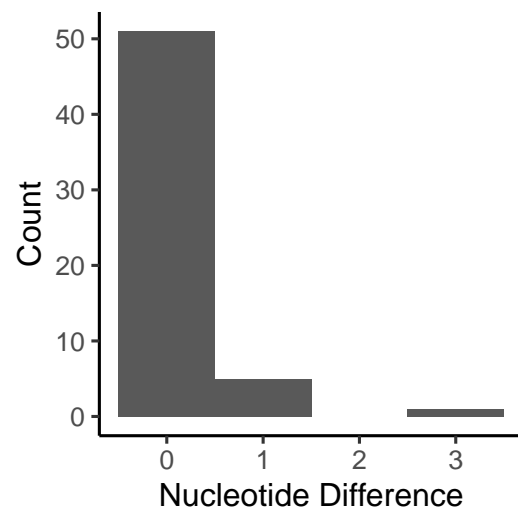
### IGHV1-69\*06

431 sequences assigned  
396 (91.9%) exact matches, in which:  
390 unique CDR3  
6 unique J



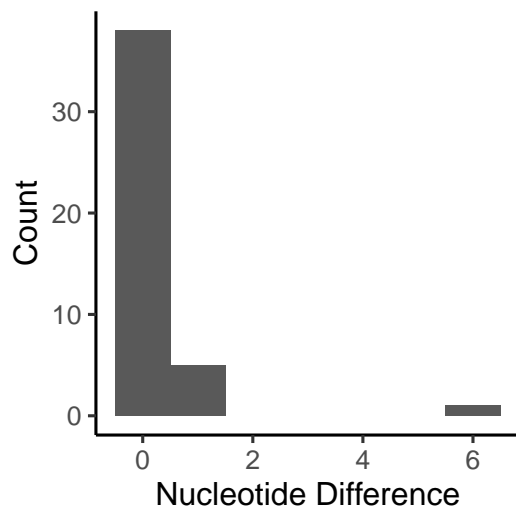
### IGHV2-70\*01

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



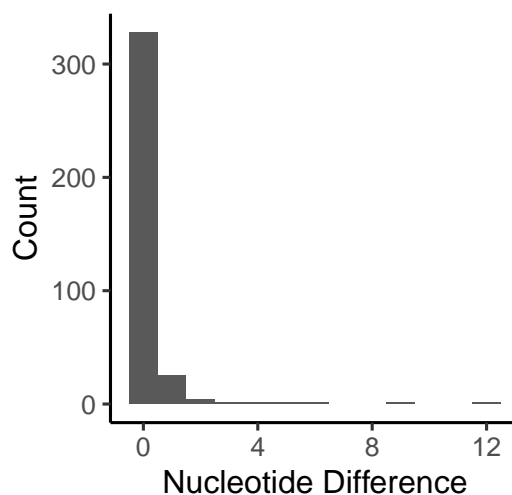
### IGHV1-69-2\*01

44 sequences assigned  
38 (86.4%) exact matches, in which:  
38 unique CDR3  
4 unique J



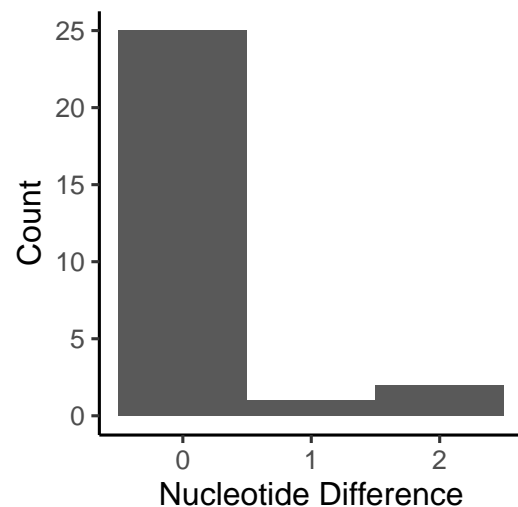
### IGHV2-5\*02

363 sequences assigned  
328 (90.4%) exact matches, in which:  
326 unique CDR3  
6 unique J



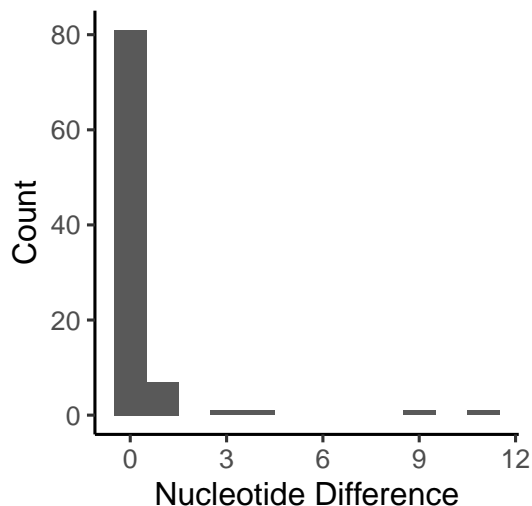
### IGHV2-70\*04

28 sequences assigned  
25 (89.3%) exact matches, in which:  
25 unique CDR3  
6 unique J



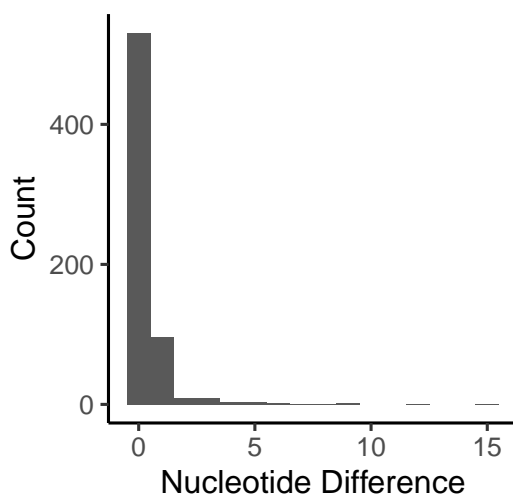
## IGHV2-70\*15

92 sequences assigned  
81 (88%) exact matches, in which:  
80 unique CDR3  
5 unique J



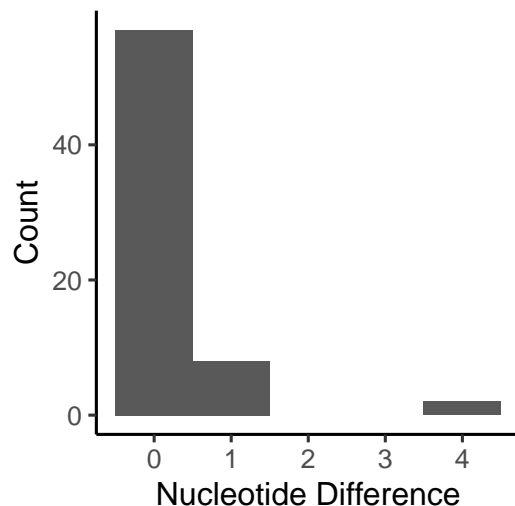
## IGHV3-9\*01

660 sequences assigned  
531 (80.5%) exact matches, in which:  
526 unique CDR3  
6 unique J



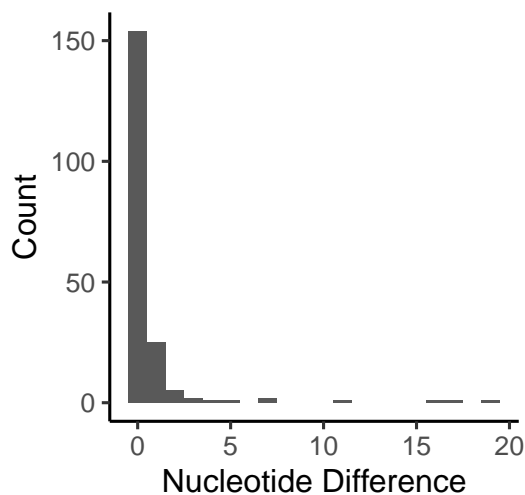
## IGHV3-13\*01

67 sequences assigned  
57 (85.1%) exact matches, in which:  
57 unique CDR3  
5 unique J



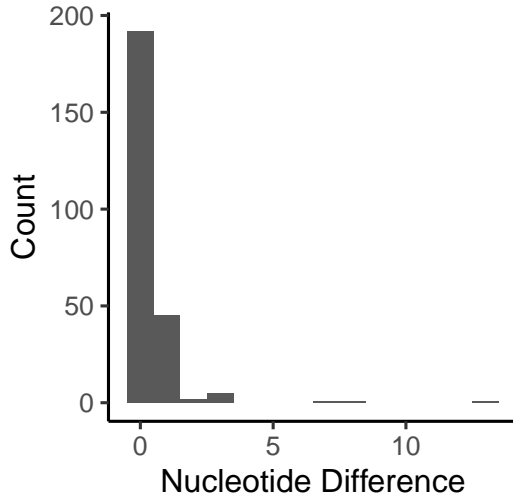
## IGHV3-7\*01

194 sequences assigned  
154 (79.4%) exact matches, in which:  
151 unique CDR3  
6 unique J



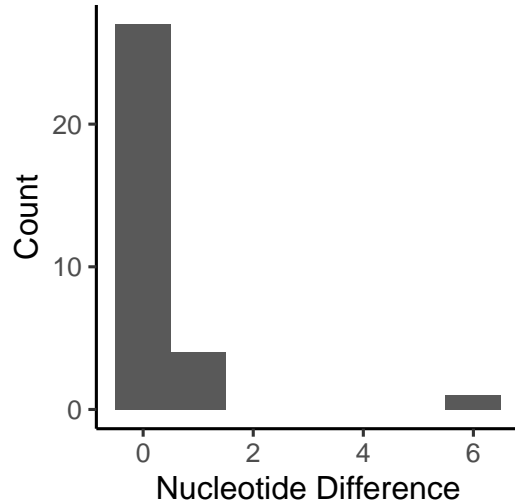
## IGHV3-11\*01

248 sequences assigned  
192 (77.4%) exact matches, in which:  
191 unique CDR3  
6 unique J



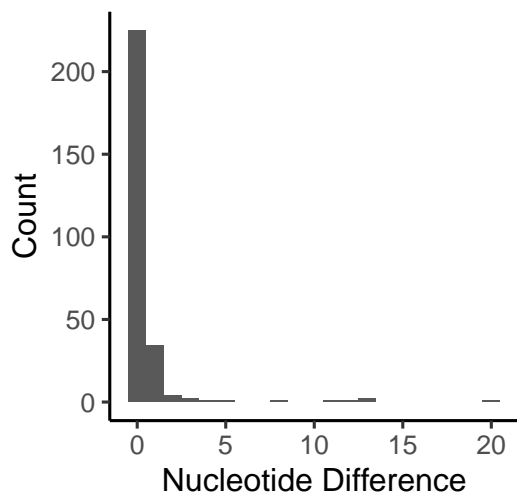
## IGHV3-13\*05

32 sequences assigned  
27 (84.4%) exact matches, in which:  
27 unique CDR3  
4 unique J



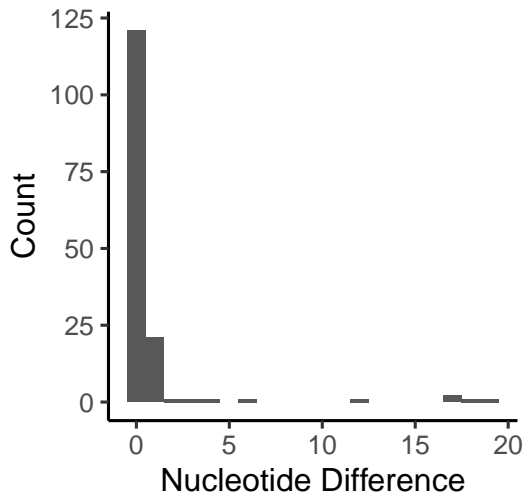
## IGHV3-7\*03

273 sequences assigned  
225 (82.4%) exact matches, in which:  
221 unique CDR3  
6 unique J



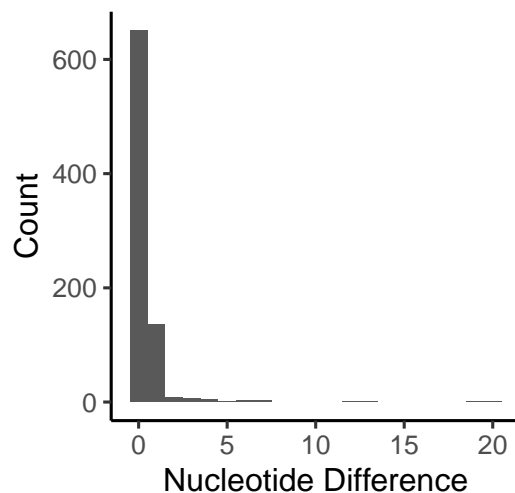
## IGHV3-11\*06

151 sequences assigned  
121 (80.1%) exact matches, in which:  
120 unique CDR3  
6 unique J



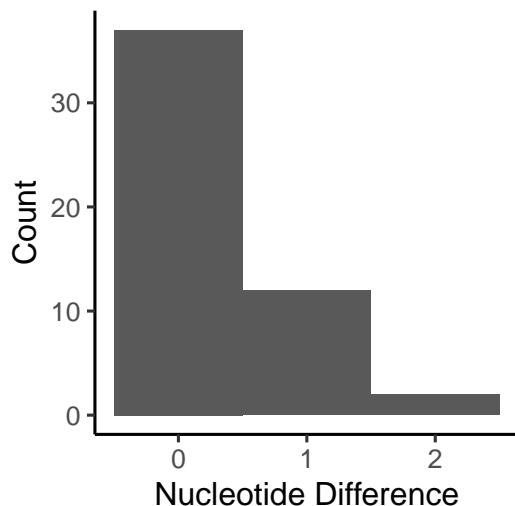
## IGHV3-15\*01

816 sequences assigned  
651 (79.8%) exact matches, in which:  
642 unique CDR3  
6 unique J



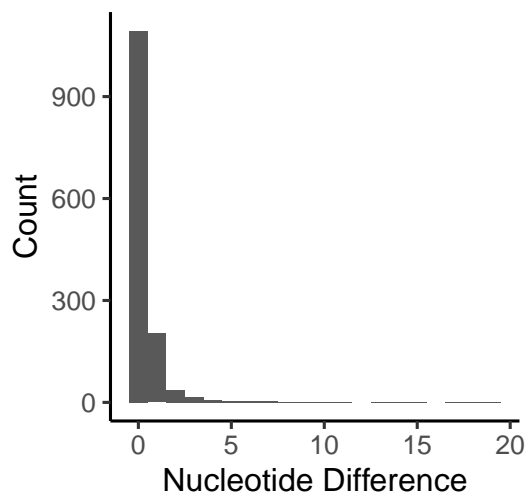
### IGHV3-20\*01

51 sequences assigned  
37 (72.5%) exact matches, in which:  
37 unique CDR3  
5 unique J



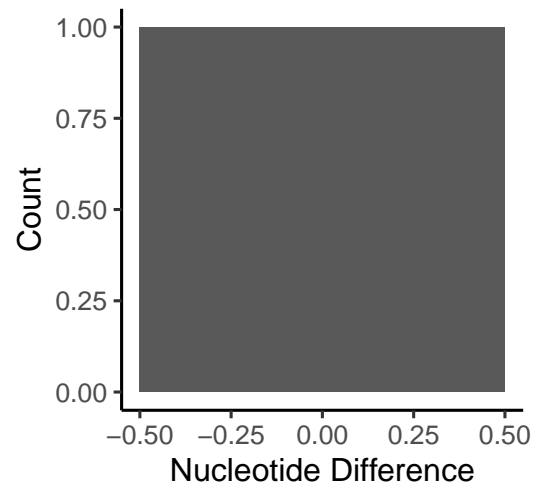
### IGHV3-30\*04

1382 sequences assigned  
1094 (79.2%) exact matches, in which:  
1074 unique CDR3  
6 unique J



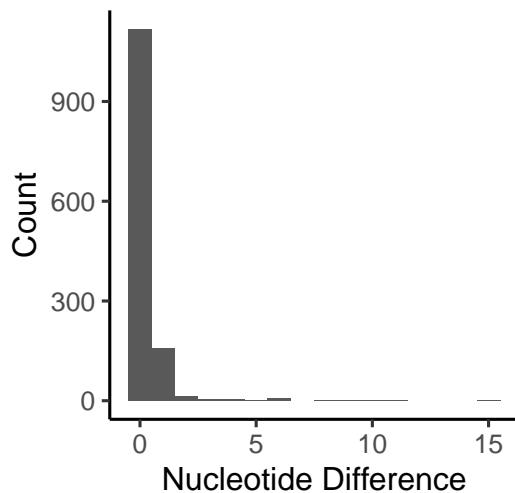
### IGHV3-47\*01

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



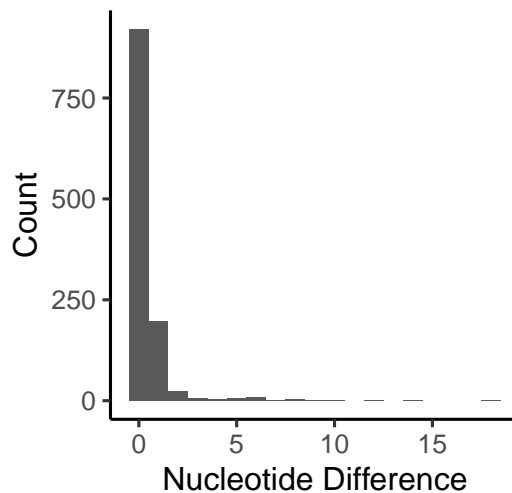
### IGHV3-21\*01

1321 sequences assigned  
1118 (84.6%) exact matches, in which:  
1105 unique CDR3  
6 unique J



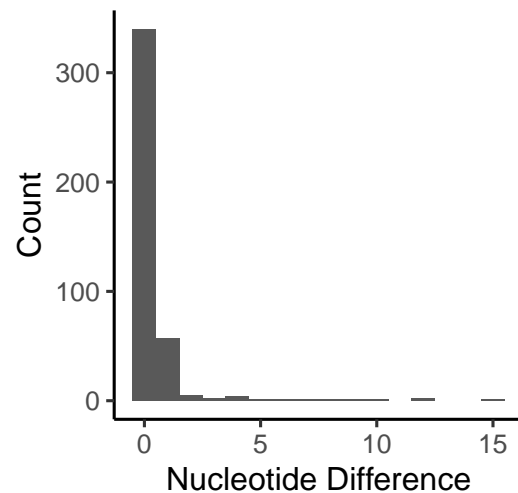
### IGHV3-33\*01

1178 sequences assigned  
921 (78.2%) exact matches, in which:  
898 unique CDR3  
6 unique J



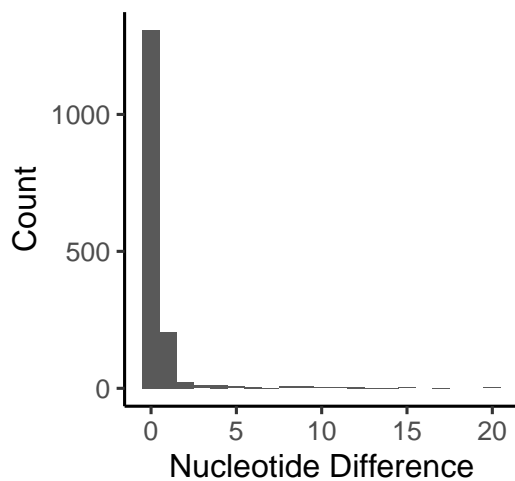
### IGHV3-48\*02

417 sequences assigned  
340 (81.5%) exact matches, in which:  
335 unique CDR3  
6 unique J



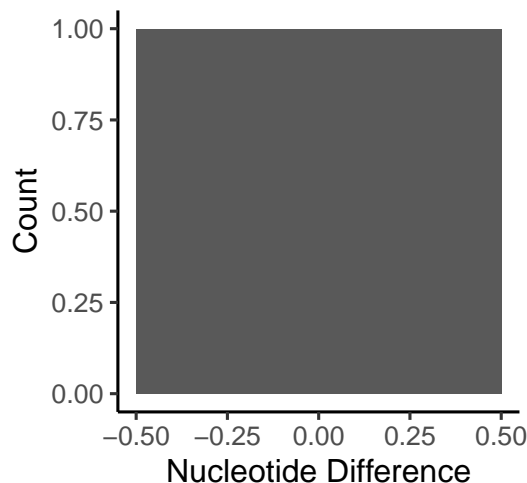
### IGHV3-23\*01

1612 sequences assigned  
1308 (81.1%) exact matches, in which:  
1284 unique CDR3  
6 unique J



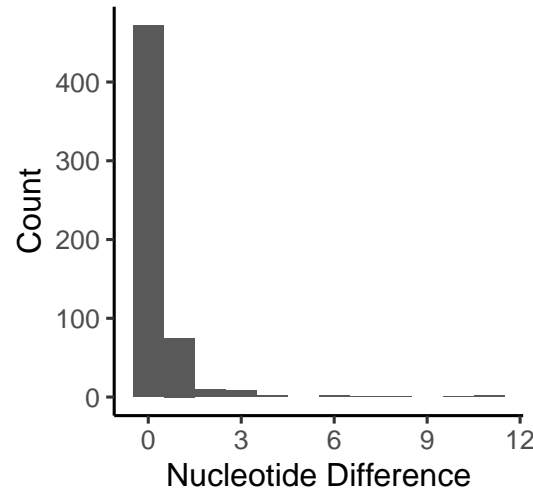
### IGHV3-38-3\*01

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



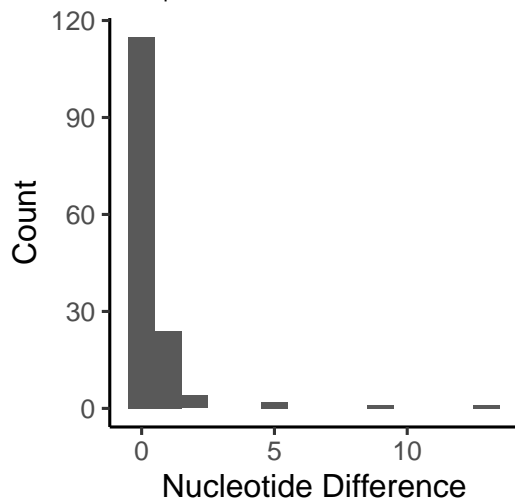
### IGHV3-48\*03

575 sequences assigned  
472 (82.1%) exact matches, in which:  
465 unique CDR3  
6 unique J



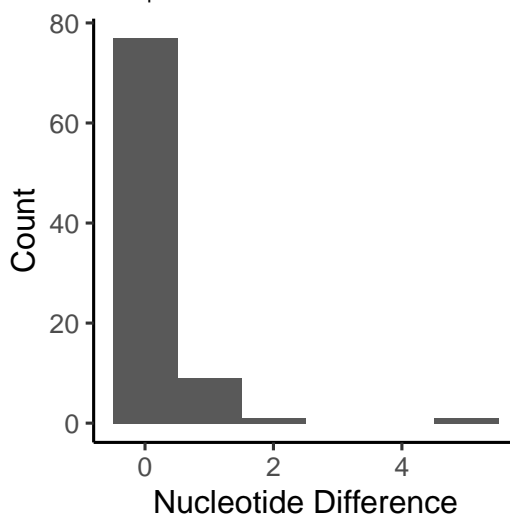
### IGHV3-49\*04

149 sequences assigned  
115 (77.2%) exact matches, in which:  
114 unique CDR3  
4 unique J



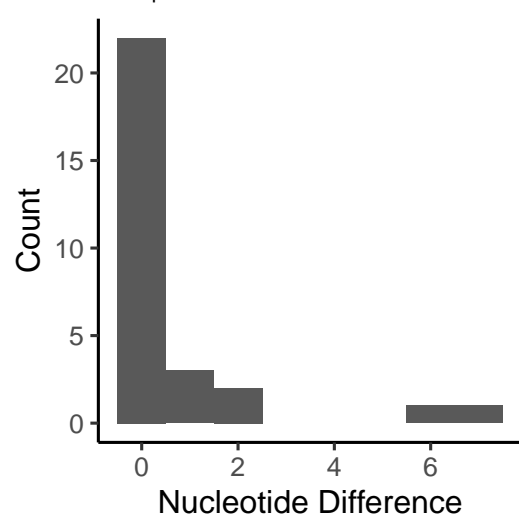
### IGHV3-53\*02

88 sequences assigned  
77 (87.5%) exact matches, in which:  
77 unique CDR3  
5 unique J



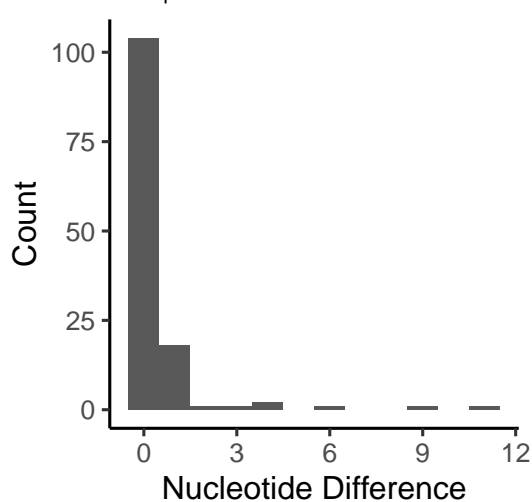
### IGHV3-72\*01

29 sequences assigned  
22 (75.9%) exact matches, in which:  
20 unique CDR3  
3 unique J



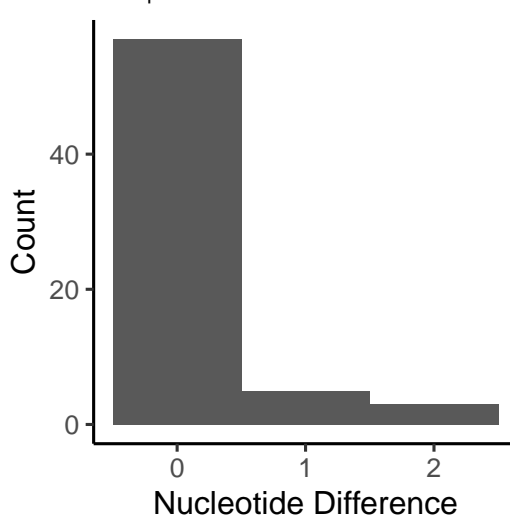
### IGHV3-49\*05

129 sequences assigned  
104 (80.6%) exact matches, in which:  
102 unique CDR3  
4 unique J



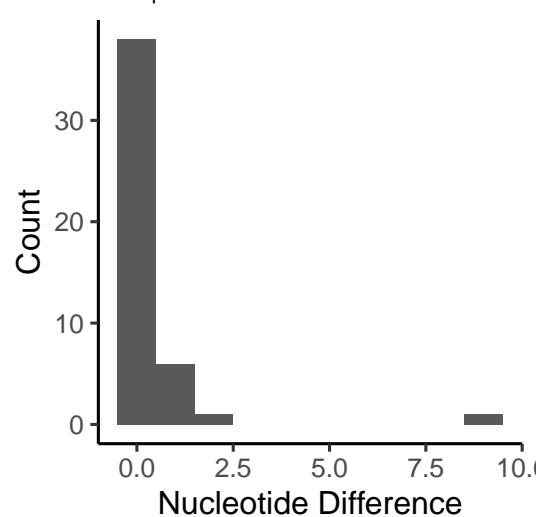
### IGHV3-64\*01

65 sequences assigned  
57 (87.7%) exact matches, in which:  
57 unique CDR3  
4 unique J



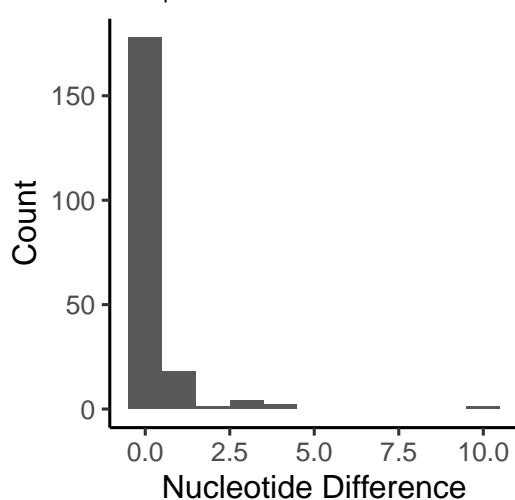
### IGHV3-73\*01

46 sequences assigned  
38 (82.6%) exact matches, in which:  
38 unique CDR3  
3 unique J



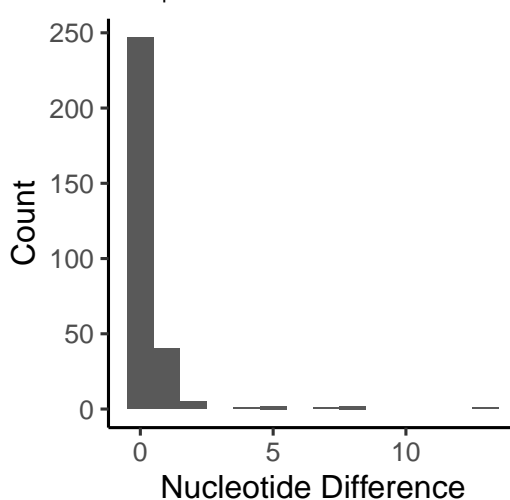
### IGHV3-53\*01

204 sequences assigned  
178 (87.3%) exact matches, in which:  
178 unique CDR3  
6 unique J



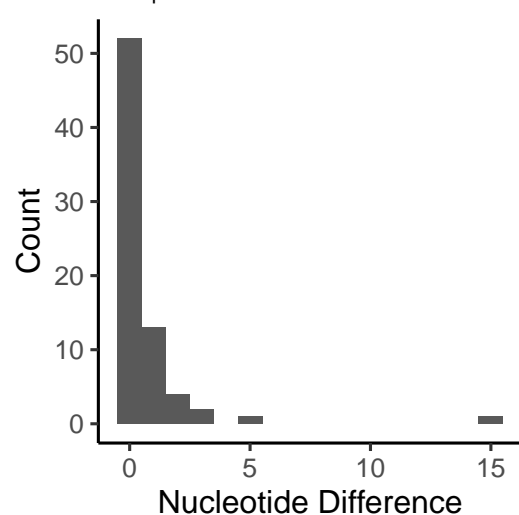
### IGHV3-66\*01

299 sequences assigned  
247 (82.6%) exact matches, in which:  
243 unique CDR3  
6 unique J



### IGHV3-73\*02

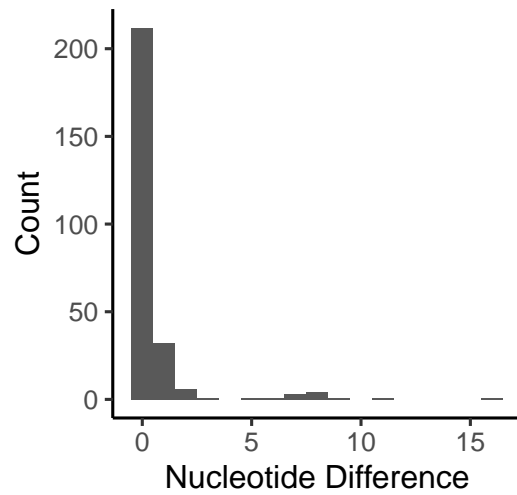
73 sequences assigned  
52 (71.2%) exact matches, in which:  
52 unique CDR3  
4 unique J





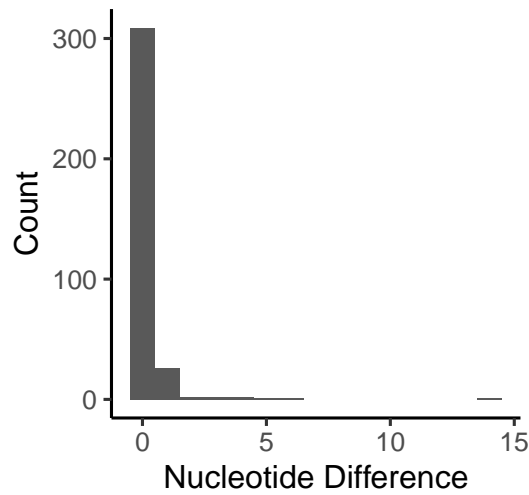
### IGHV3-74\*01

263 sequences assigned  
212 (80.6%) exact matches, in which:  
211 unique CDR3  
5 unique J



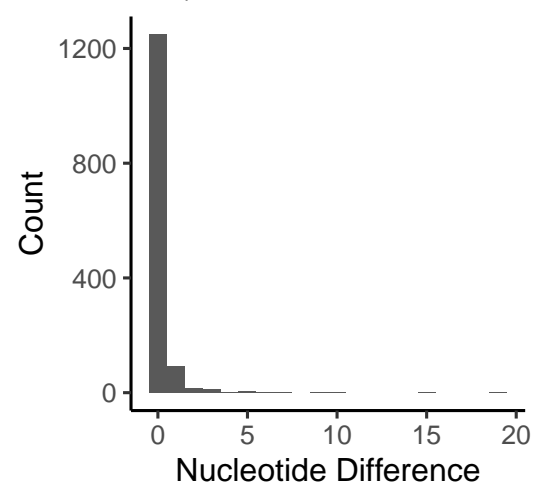
### IGHV4-4\*02

344 sequences assigned  
309 (89.8%) exact matches, in which:  
308 unique CDR3  
6 unique J



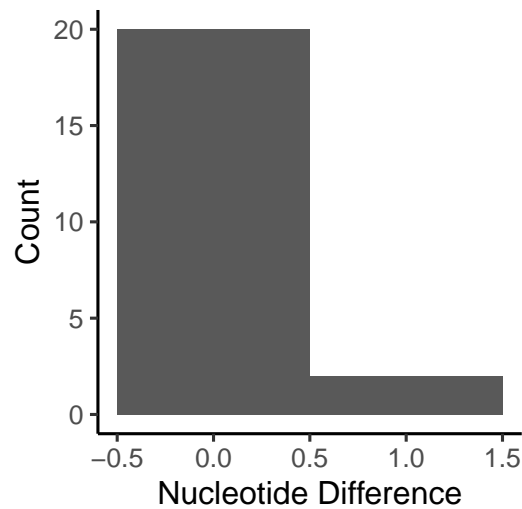
### IGHV4-34\*01

1387 sequences assigned  
1249 (90.1%) exact matches, in which:  
1242 unique CDR3  
6 unique J



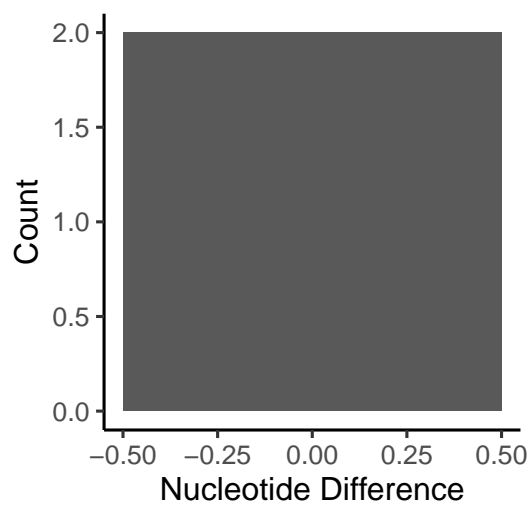
### IGHV3-43D\*04

22 sequences assigned  
20 (90.9%) exact matches, in which:  
20 unique CDR3  
3 unique J



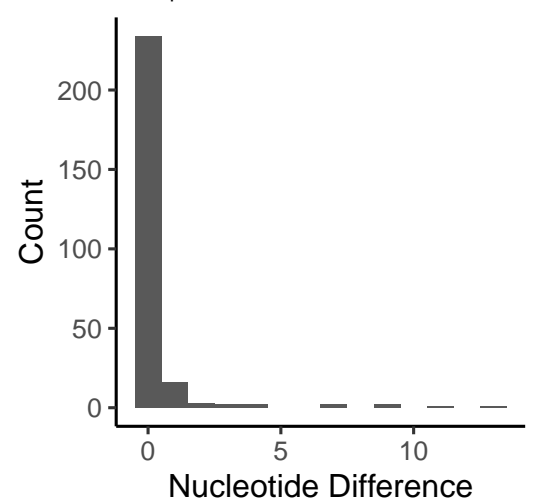
### IGHV4-28\*05

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



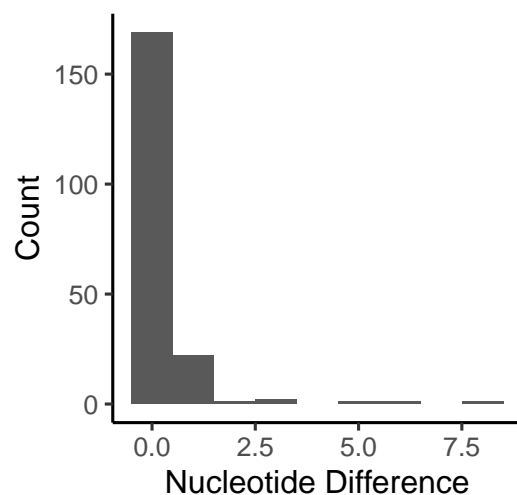
### IGHV4-38-2\*02\_A70G

264 sequences assigned  
234 (88.6%) exact matches, in which:  
232 unique CDR3  
6 unique J



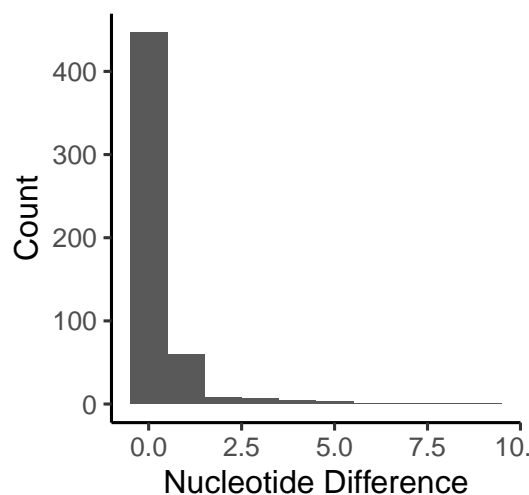
### IGHV3-64D\*06

197 sequences assigned  
169 (85.8%) exact matches, in which:  
161 unique CDR3  
6 unique J



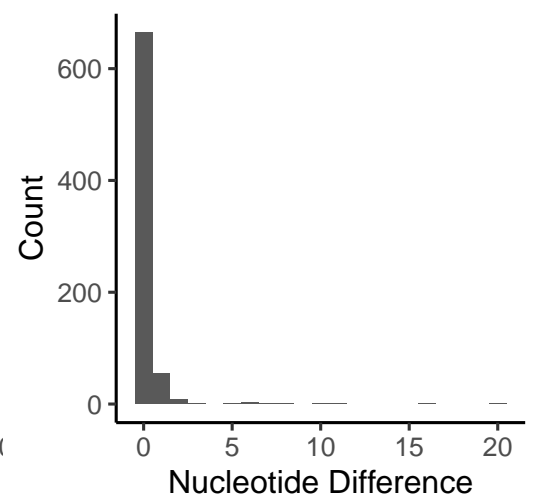
### IGHV4-31\*03

533 sequences assigned  
447 (83.9%) exact matches, in which:  
445 unique CDR3  
6 unique J



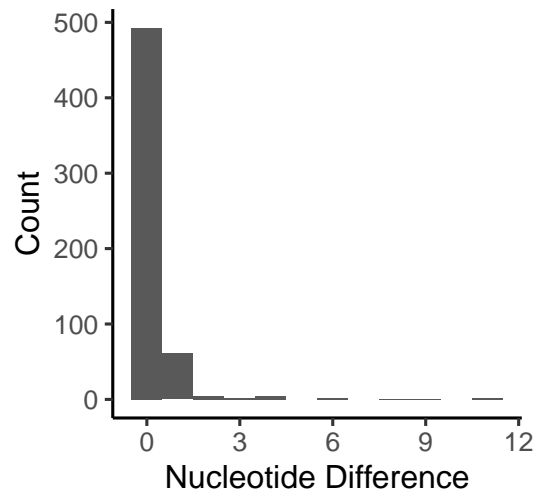
### IGHV4-39\*01

740 sequences assigned  
665 (89.9%) exact matches, in which:  
661 unique CDR3  
6 unique J



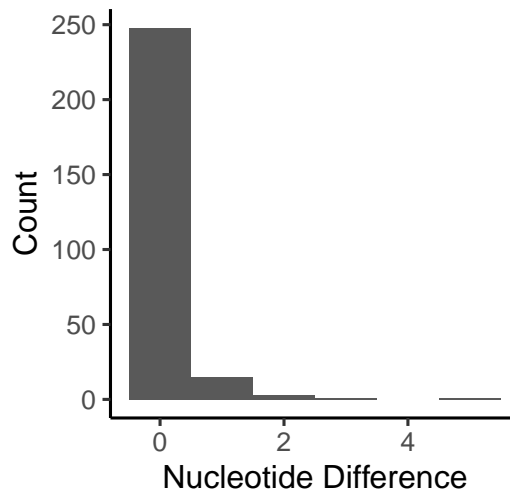
### IGHV4-59\*01

572 sequences assigned  
493 (86.2%) exact matches, in which:  
490 unique CDR3  
6 unique J



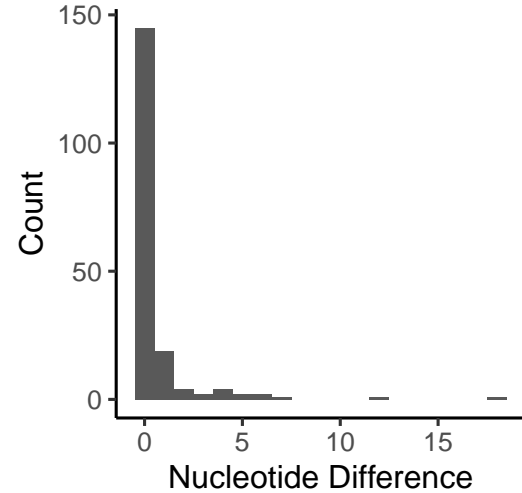
### IGHV5-10-1\*03

271 sequences assigned  
248 (91.5%) exact matches, in which:  
247 unique CDR3  
6 unique J



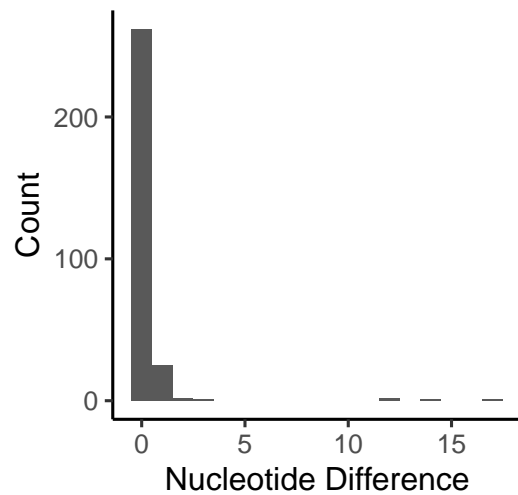
### IGHV7-4-1\*02

181 sequences assigned  
145 (80.1%) exact matches, in which:  
145 unique CDR3  
6 unique J



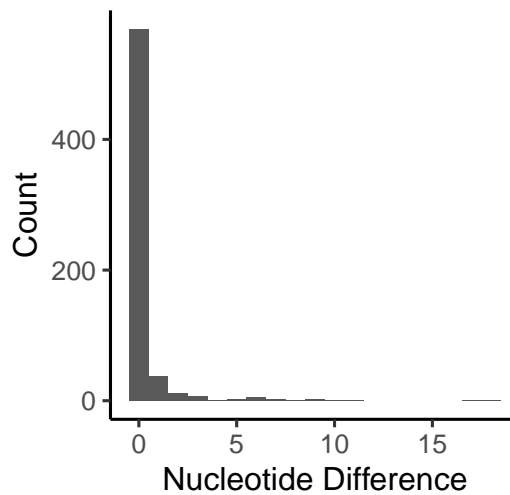
### IGHV4-59\*08

297 sequences assigned  
262 (88.2%) exact matches, in which:  
261 unique CDR3  
6 unique J



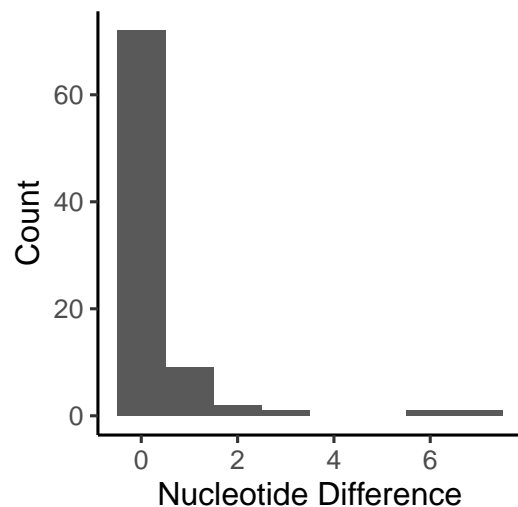
### IGHV5-51\*01

643 sequences assigned  
569 (88.5%) exact matches, in which:  
564 unique CDR3  
6 unique J



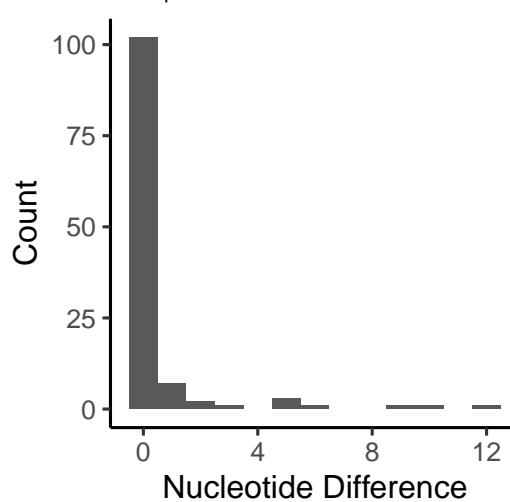
### IGHV4-61\*01

86 sequences assigned  
72 (83.7%) exact matches, in which:  
72 unique CDR3  
4 unique J



### IGHV6-1\*01

119 sequences assigned  
102 (85.7%) exact matches, in which:  
102 unique CDR3  
4 unique J



IGHV4-38-2\*02\_A70G

