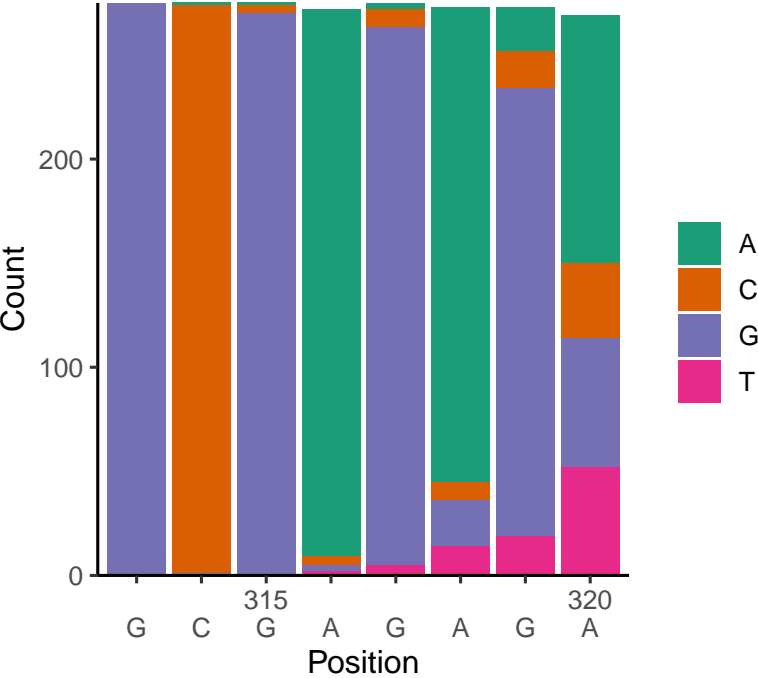


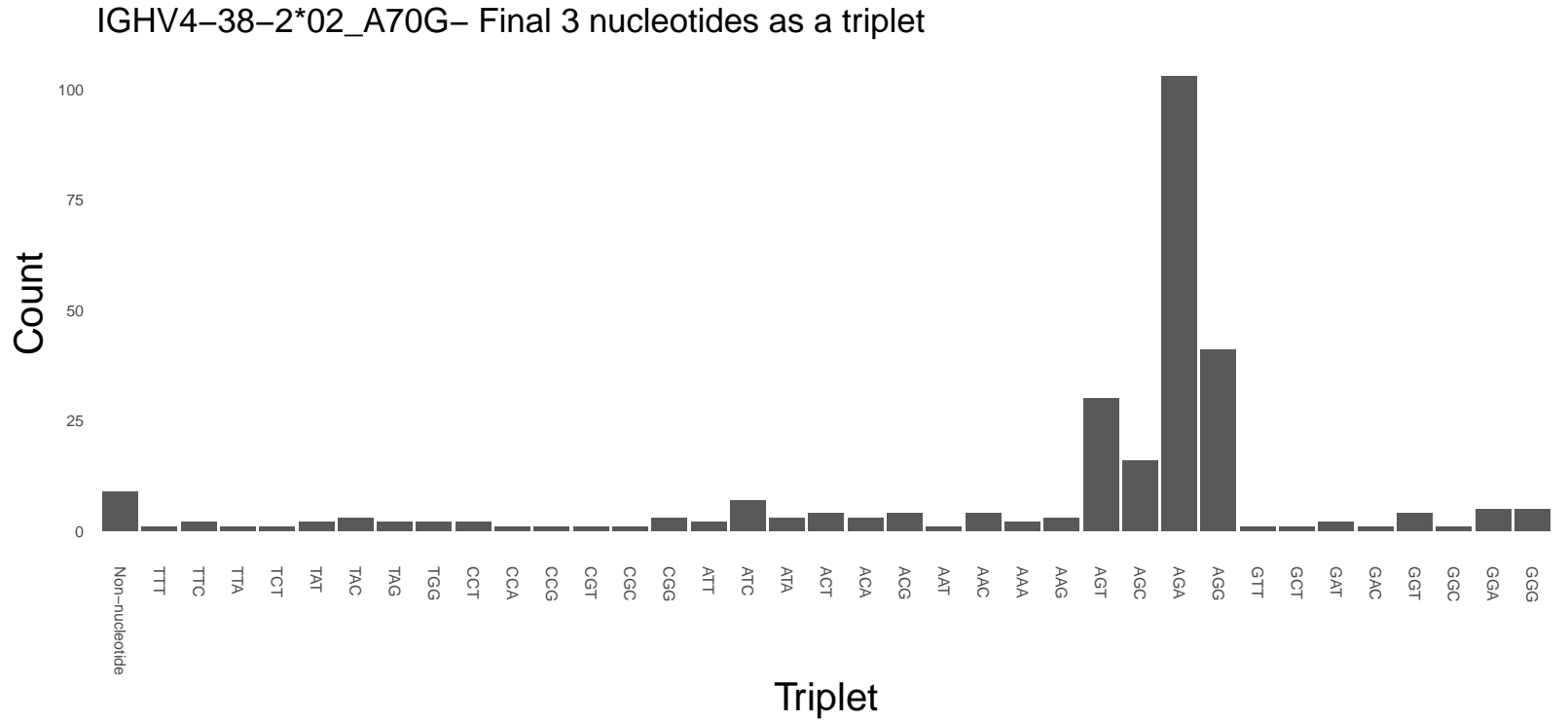
Gene IGHV4-38-2\*02\_A70G



Gene IGHV4-38-2\*02\_A70G

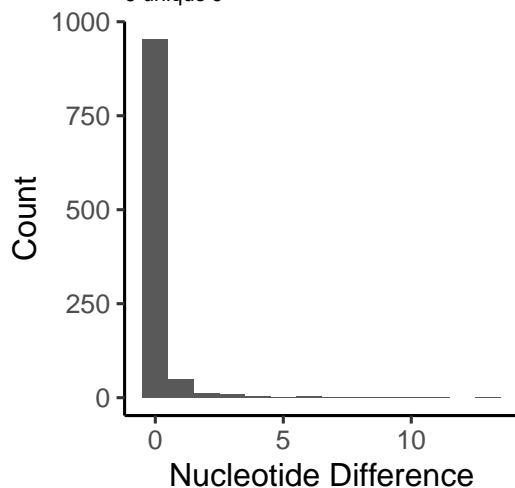


IGHV4-38-2\*02\_A70G- Final 3 nucleotides as a triplet



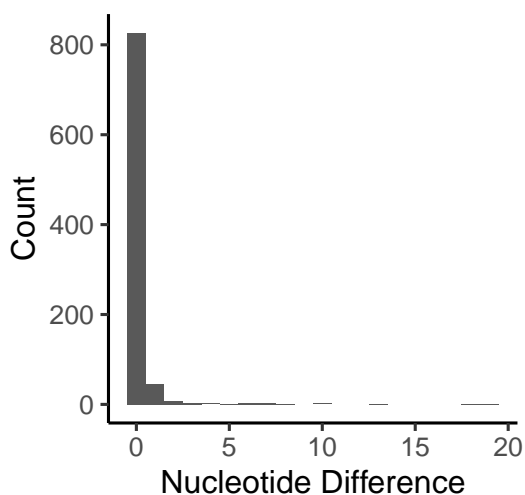
### IGHV1-2\*02

1039 sequences assigned  
953 (91.7%) exact matches, in which:  
950 unique CDR3  
6 unique J



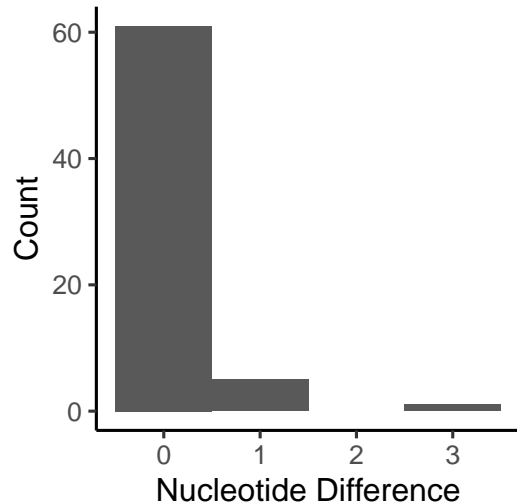
### IGHV1-18\*01

899 sequences assigned  
827 (92%) exact matches, in which:  
826 unique CDR3  
6 unique J



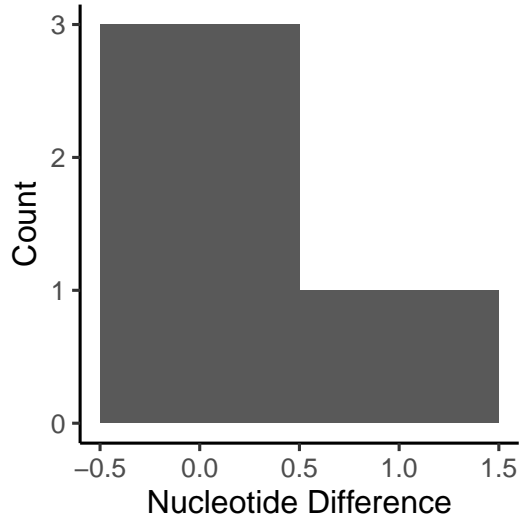
### IGHV1-46\*01

67 sequences assigned  
61 (91%) exact matches, in which:  
61 unique CDR3  
5 unique J



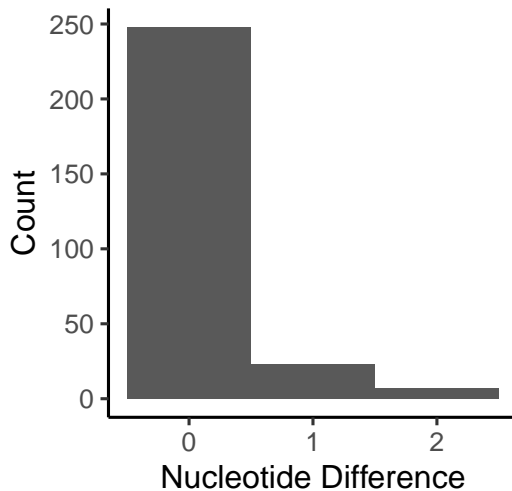
### IGHV1-3\*02

4 sequences assigned  
3 (75%) exact matches, in which:  
3 unique CDR3  
2 unique J



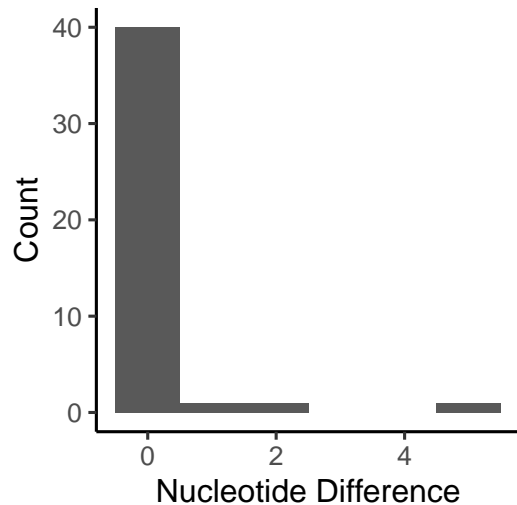
### IGHV1-24\*01

278 sequences assigned  
248 (89.2%) exact matches, in which:  
247 unique CDR3  
6 unique J



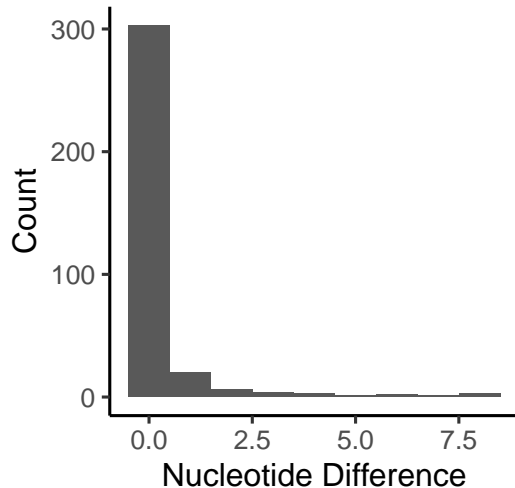
### IGHV1-46\*03

43 sequences assigned  
40 (93%) exact matches, in which:  
40 unique CDR3  
6 unique J



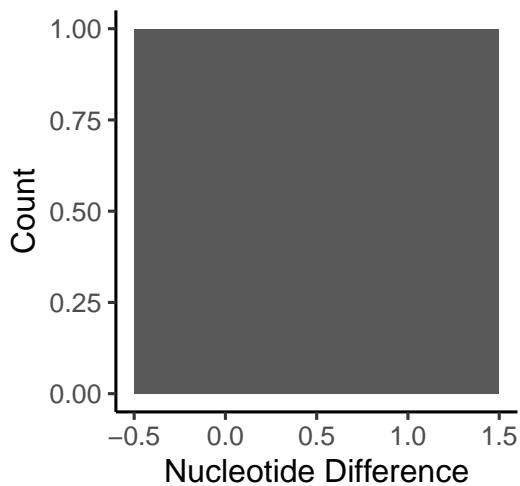
### IGHV1-8\*01

343 sequences assigned  
303 (88.3%) exact matches, in which:  
303 unique CDR3  
6 unique J



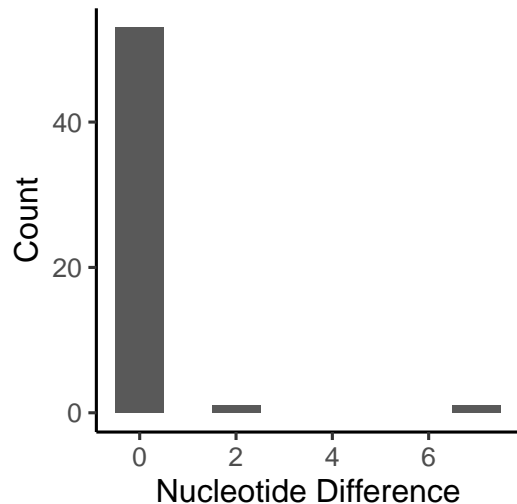
### IGHV1-45\*02

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



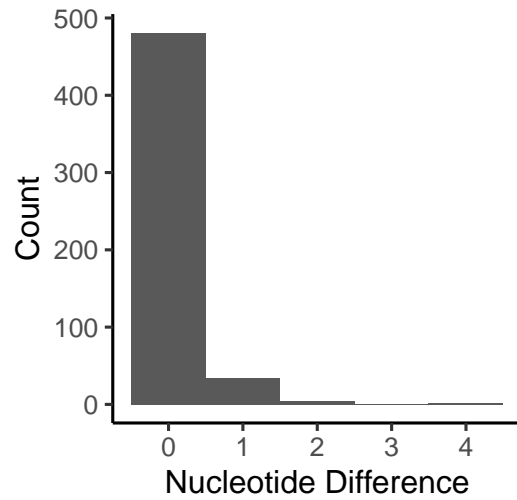
### IGHV1-58\*01

55 sequences assigned  
53 (96.4%) exact matches, in which:  
53 unique CDR3  
5 unique J



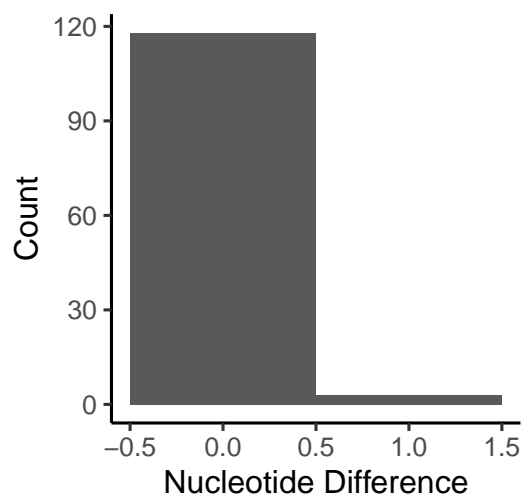
### IGHV1–69\*04

523 sequences assigned  
481 (92%) exact matches, in which:  
481 unique CDR3  
6 unique J



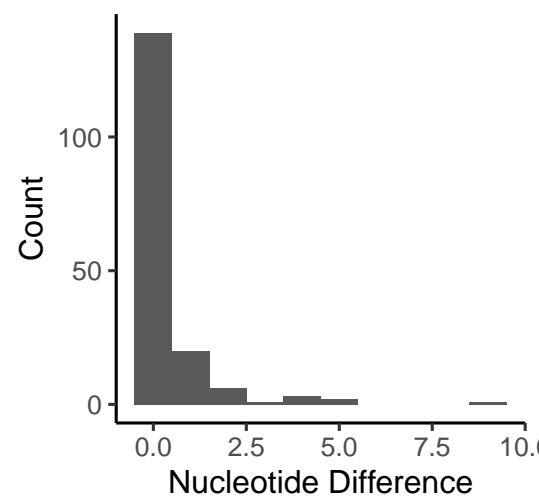
### IGHV2–26\*01

121 sequences assigned  
118 (97.5%) exact matches, in which:  
118 unique CDR3  
5 unique J



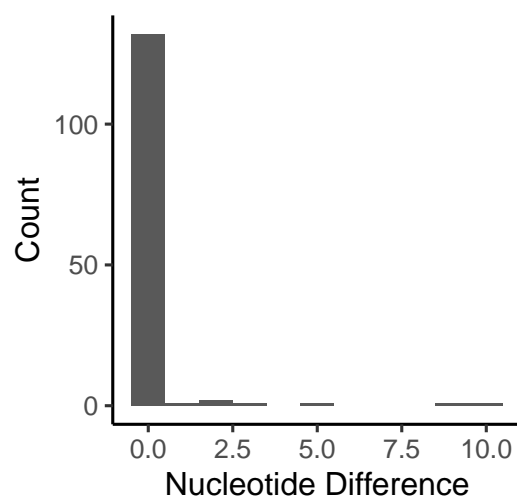
### IGHV3–7\*01

172 sequences assigned  
139 (80.8%) exact matches, in which:  
139 unique CDR3  
6 unique J



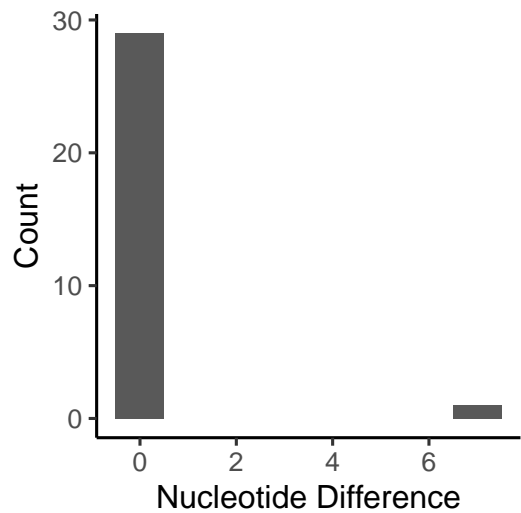
### IGHV2–5\*01

139 sequences assigned  
132 (95%) exact matches, in which:  
132 unique CDR3  
6 unique J



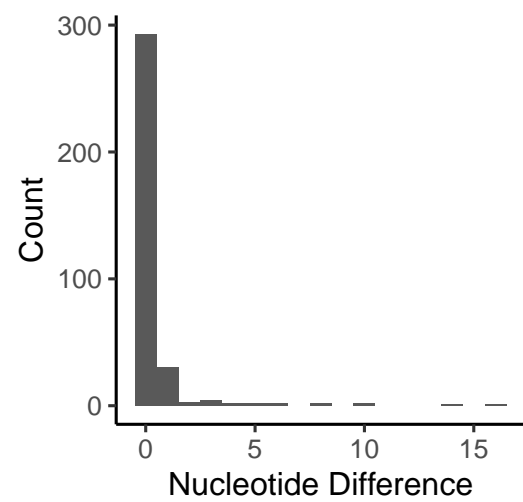
### IGHV2–70\*01

30 sequences assigned  
29 (96.7%) exact matches, in which:  
29 unique CDR3  
5 unique J



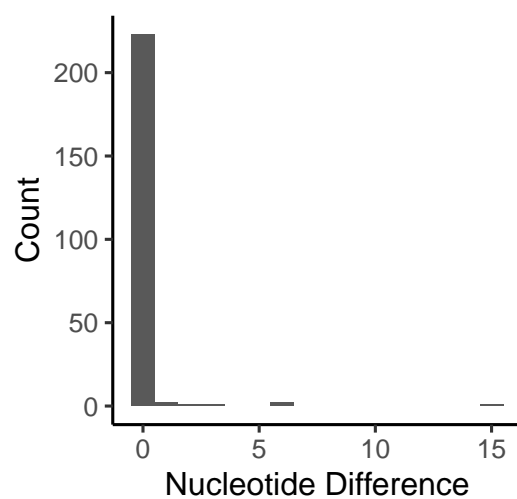
### IGHV3–9\*01

342 sequences assigned  
293 (85.7%) exact matches, in which:  
293 unique CDR3  
6 unique J



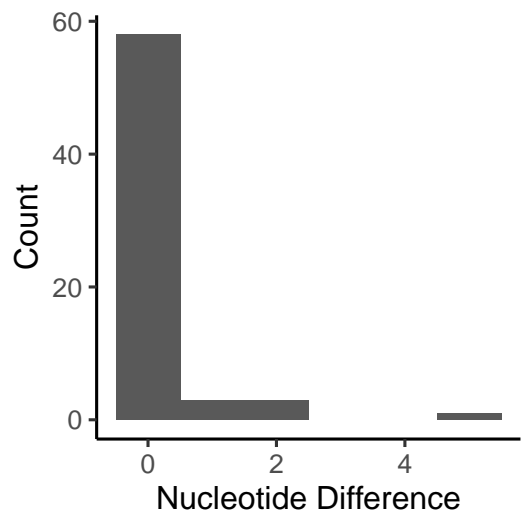
### IGHV2–5\*02

230 sequences assigned  
223 (97%) exact matches, in which:  
223 unique CDR3  
6 unique J



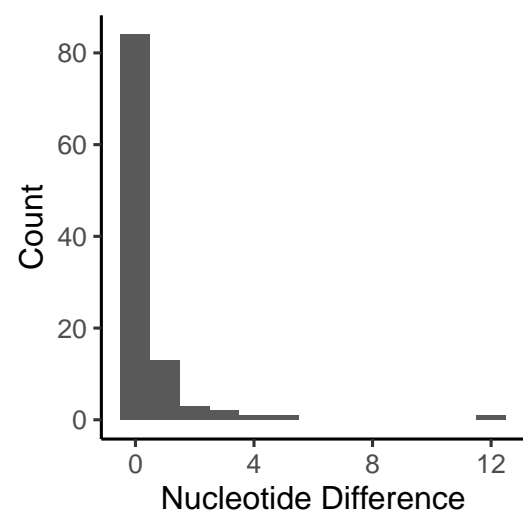
### IGHV2–70\*15

65 sequences assigned  
58 (89.2%) exact matches, in which:  
58 unique CDR3  
6 unique J



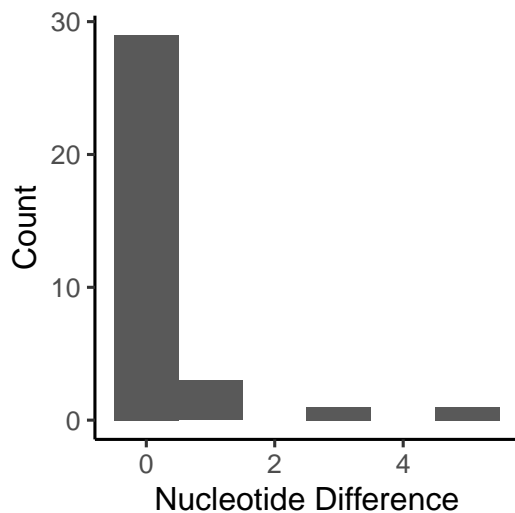
### IGHV3–11\*01

105 sequences assigned  
84 (80%) exact matches, in which:  
84 unique CDR3  
5 unique J



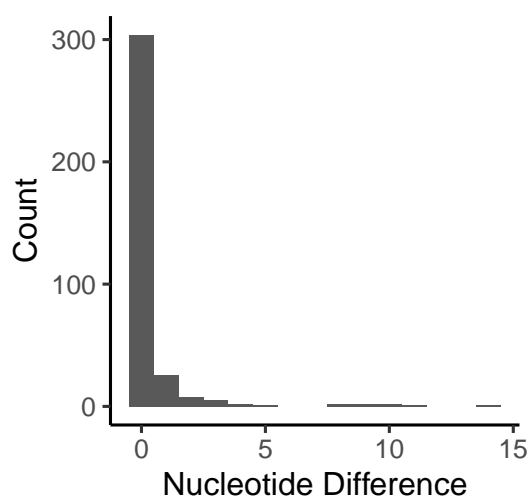
### IGHV3-13\*01

34 sequences assigned  
29 (85.3%) exact matches, in which:  
29 unique CDR3  
5 unique J



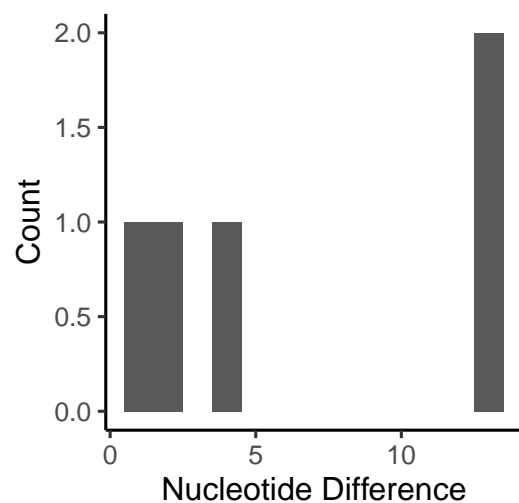
### IGHV3-21\*01

354 sequences assigned  
304 (85.9%) exact matches, in which:  
303 unique CDR3  
6 unique J



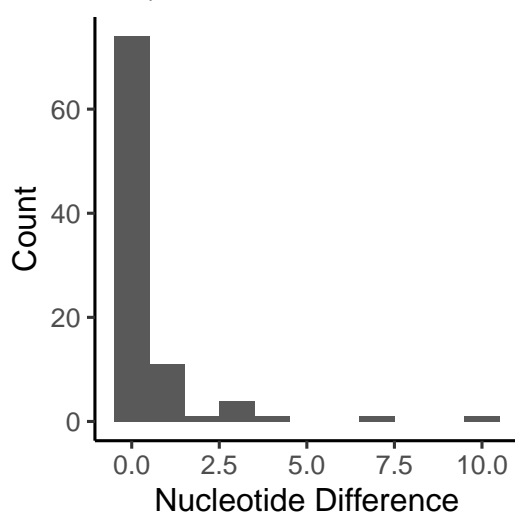
### IGHV3-30-3\*03

5 sequences assigned  
No exact matches.



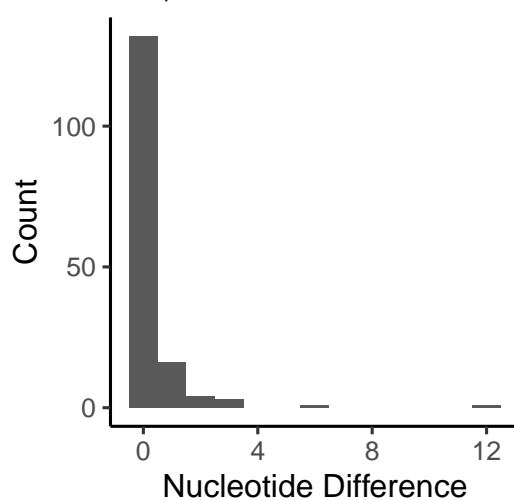
### IGHV3-15\*01

93 sequences assigned  
74 (79.6%) exact matches, in which:  
74 unique CDR3  
6 unique J



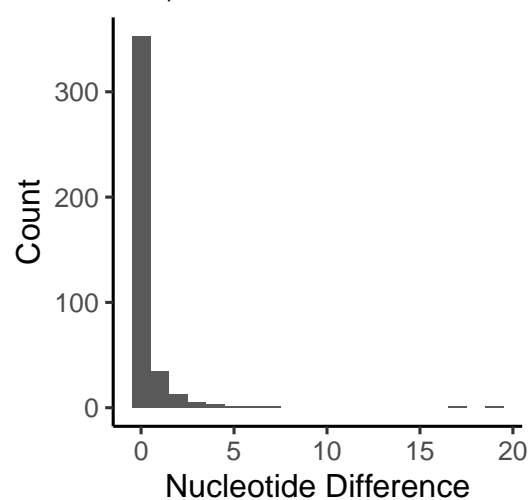
### IGHV3-23\*04

157 sequences assigned  
132 (84.1%) exact matches, in which:  
132 unique CDR3  
5 unique J



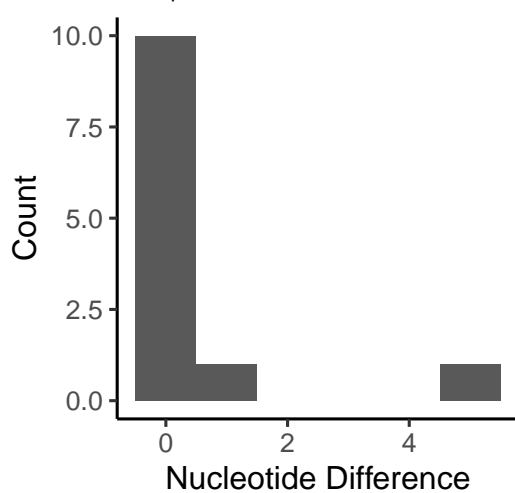
### IGHV3-33\*01

415 sequences assigned  
353 (85.1%) exact matches, in which:  
353 unique CDR3  
6 unique J



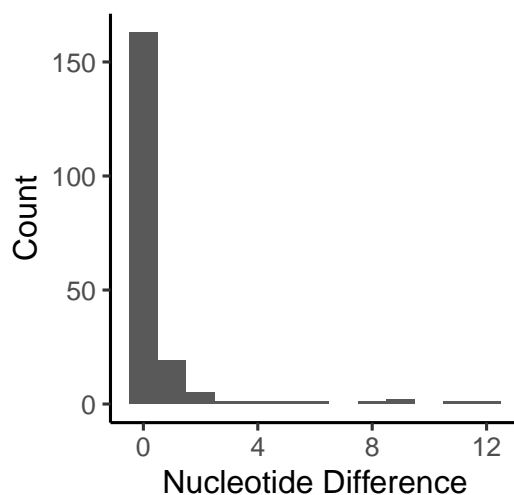
### IGHV3-20\*01

12 sequences assigned  
10 (83.3%) exact matches, in which:  
10 unique CDR3  
4 unique J



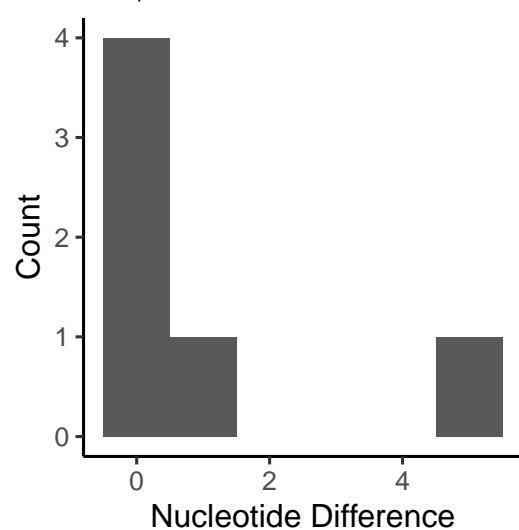
### IGHV3-30\*01

196 sequences assigned  
163 (83.2%) exact matches, in which:  
163 unique CDR3  
6 unique J



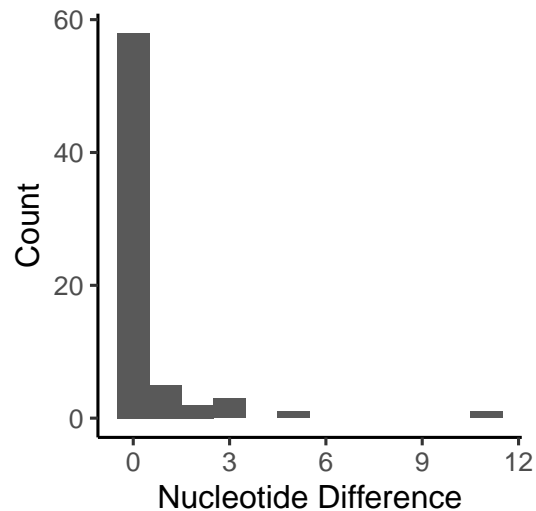
### IGHV3-43\*01

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



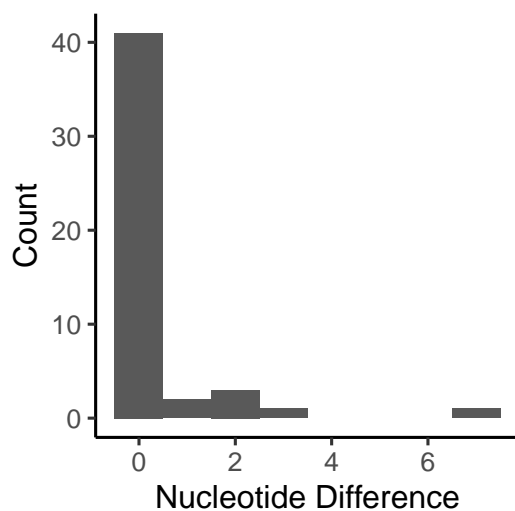
### IGHV3-48\*01

70 sequences assigned  
58 (82.9%) exact matches, in which:  
58 unique CDR3  
5 unique J



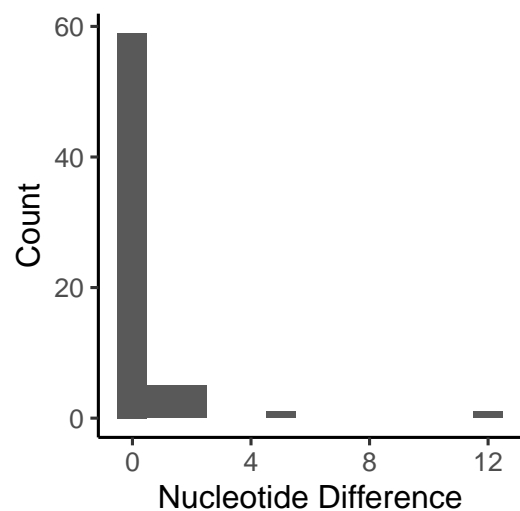
### IGHV3-49\*04

48 sequences assigned  
41 (85.4%) exact matches, in which:  
41 unique CDR3  
5 unique J



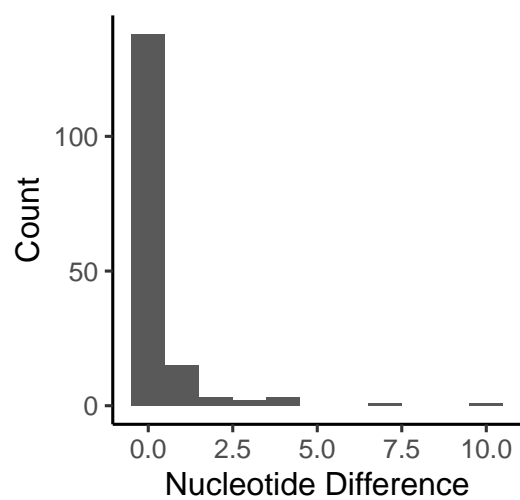
### IGHV3-66\*01

71 sequences assigned  
59 (83.1%) exact matches, in which:  
59 unique CDR3  
5 unique J



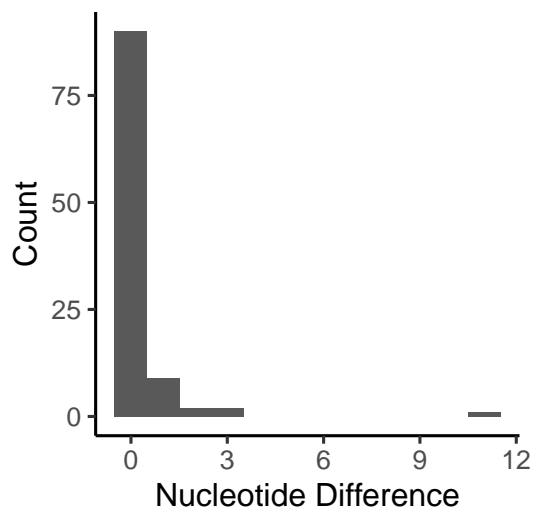
### IGHV3-48\*03

163 sequences assigned  
138 (84.7%) exact matches, in which:  
138 unique CDR3  
5 unique J



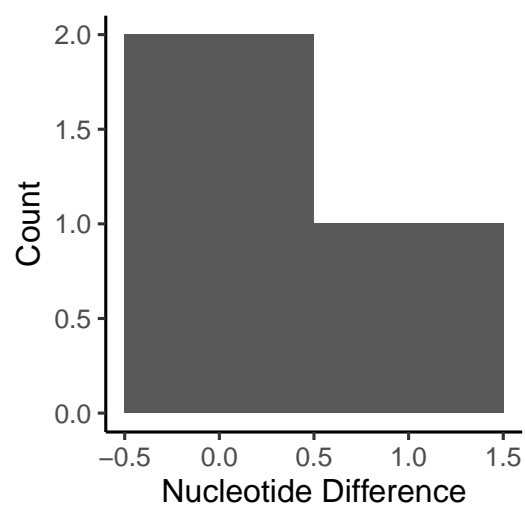
### IGHV3-53\*02

105 sequences assigned  
90 (85.7%) exact matches, in which:  
90 unique CDR3  
5 unique J



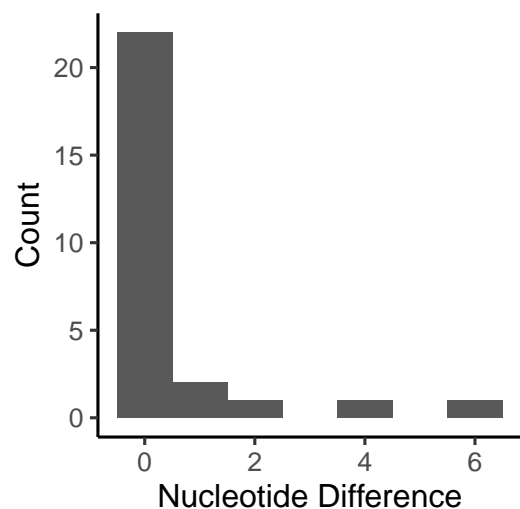
### IGHV3-72\*01

3 sequences assigned  
2 (66.7%) exact matches, in which:  
2 unique CDR3  
2 unique J



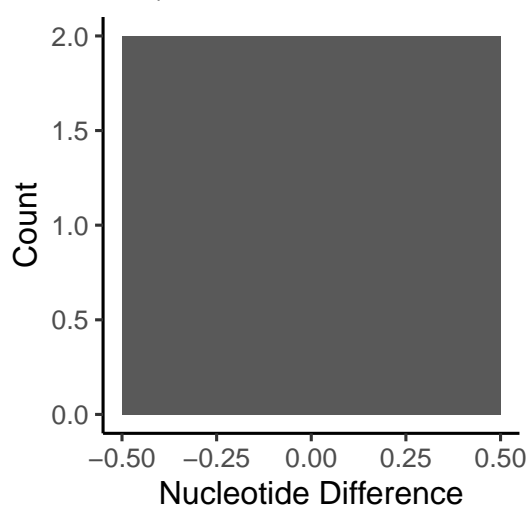
### IGHV3-49\*03

27 sequences assigned  
22 (81.5%) exact matches, in which:  
22 unique CDR3  
4 unique J



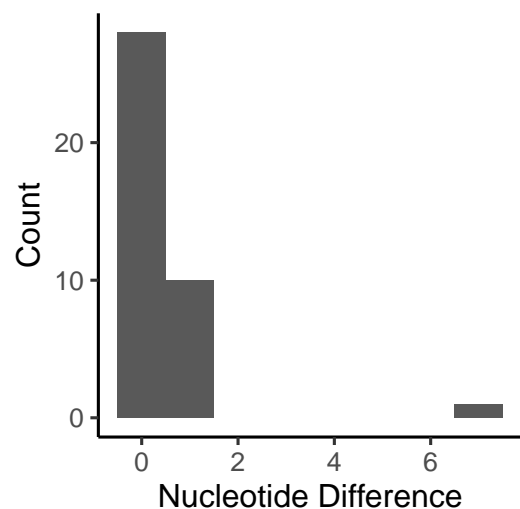
### IGHV3-64\*02

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



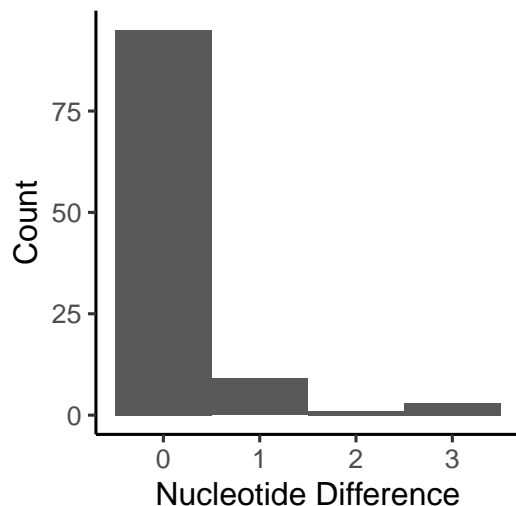
### IGHV3-73\*02

39 sequences assigned  
28 (71.8%) exact matches, in which:  
28 unique CDR3  
5 unique J



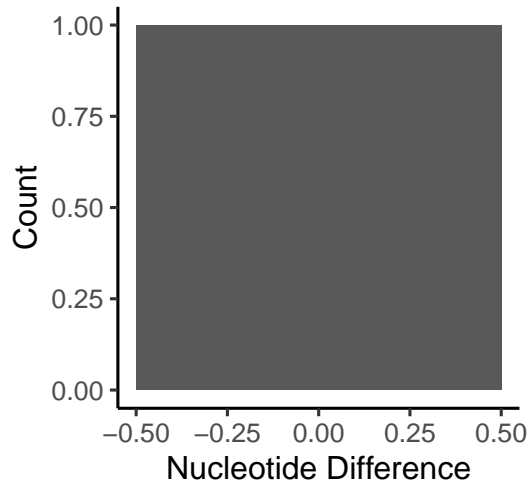
### IGHV3-74\*01

108 sequences assigned  
95 (88%) exact matches, in which:  
95 unique CDR3  
5 unique J



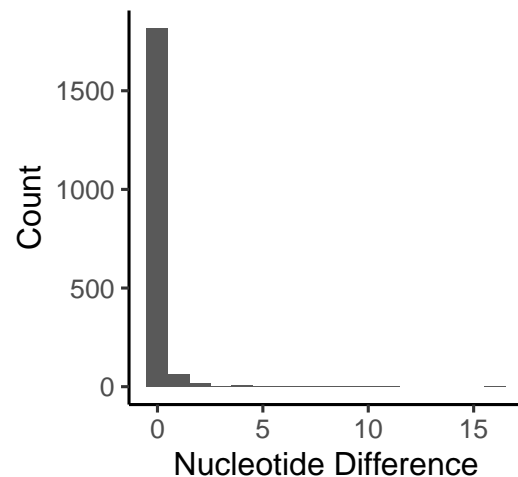
### IGHV4-28\*01

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



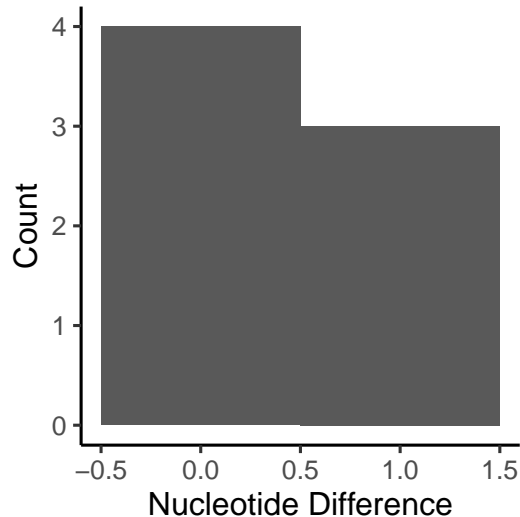
### IGHV4-34\*01

1919 sequences assigned  
1816 (94.6%) exact matches, in which:  
1816 unique CDR3  
6 unique J



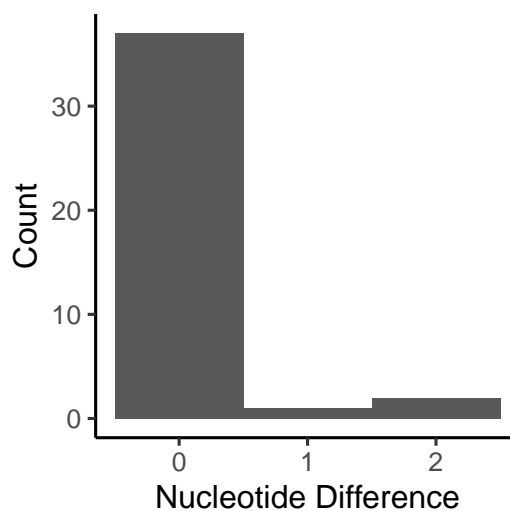
### IGHV3-43D\*04

7 sequences assigned  
4 (57.1%) exact matches, in which:  
4 unique CDR3  
2 unique J



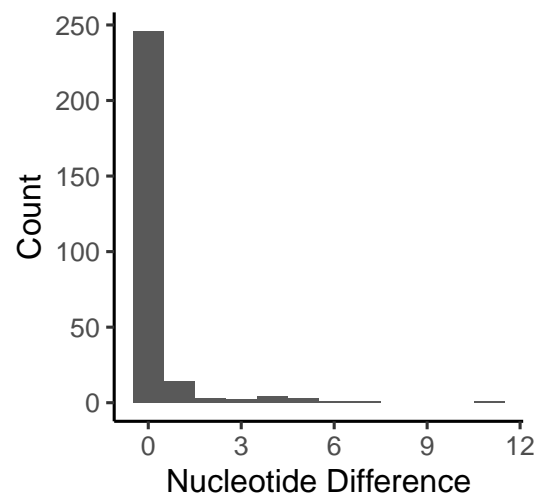
### IGHV4-30-2\*01

40 sequences assigned  
37 (92.5%) exact matches, in which:  
37 unique CDR3  
5 unique J



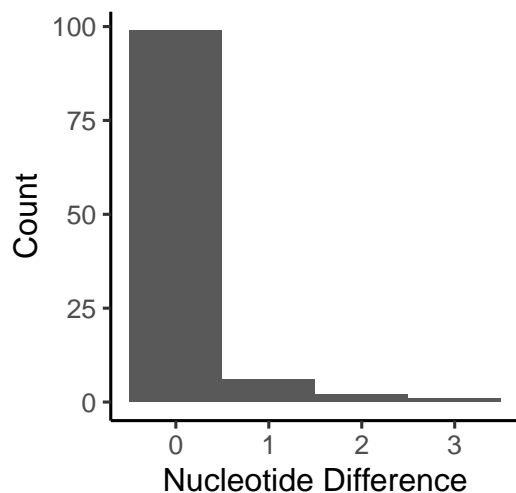
### IGHV4-38-2\*02\_A70G

275 sequences assigned  
246 (89.5%) exact matches, in which:  
246 unique CDR3  
6 unique J



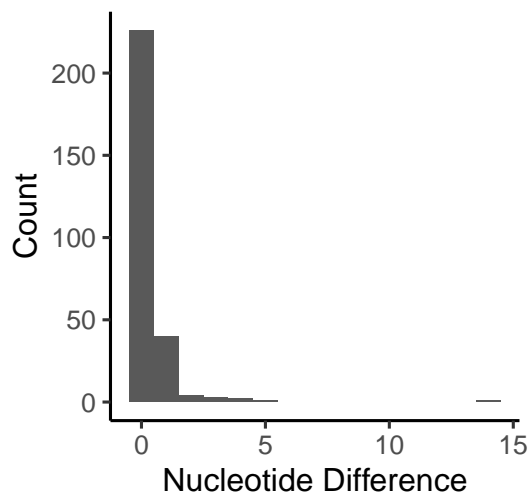
### IGHV4-4\*07

108 sequences assigned  
99 (91.7%) exact matches, in which:  
99 unique CDR3  
6 unique J



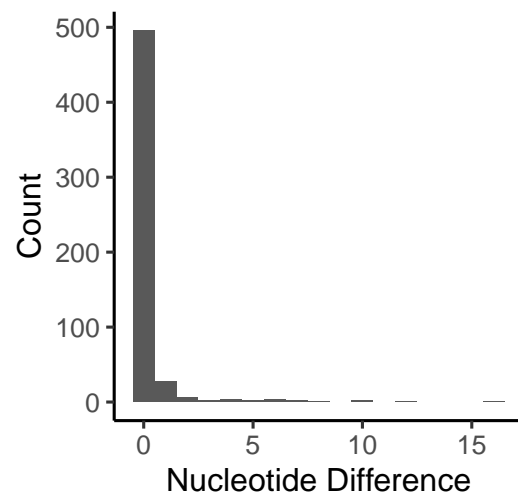
### IGHV4-31\*03

277 sequences assigned  
226 (81.6%) exact matches, in which:  
226 unique CDR3  
6 unique J



### IGHV4-39\*01

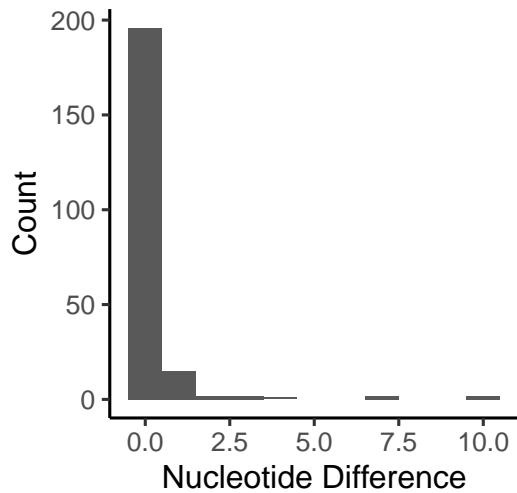
547 sequences assigned  
496 (90.7%) exact matches, in which:  
495 unique CDR3  
6 unique J





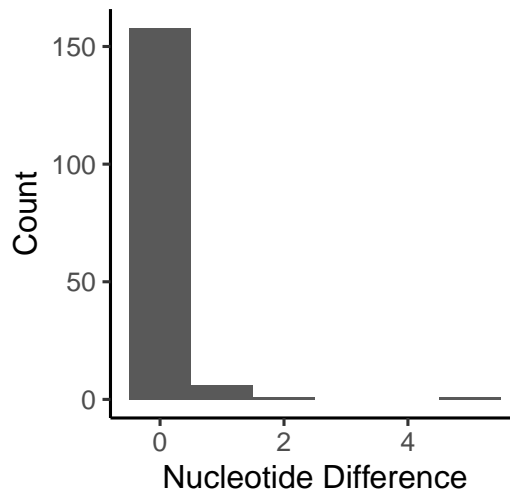
### IGHV4–59\*01

220 sequences assigned  
196 (89.1%) exact matches, in which:  
196 unique CDR3  
6 unique J



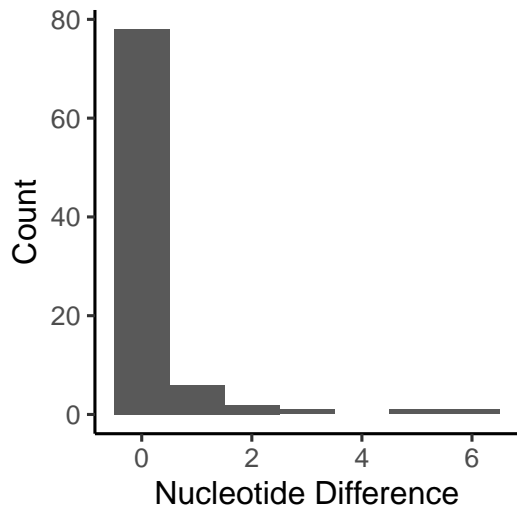
### IGHV5–51\*03

166 sequences assigned  
158 (95.2%) exact matches, in which:  
158 unique CDR3  
6 unique J



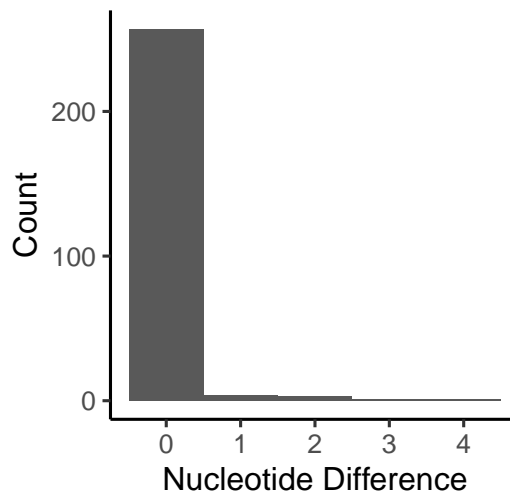
### IGHV4–61\*01

89 sequences assigned  
78 (87.6%) exact matches, in which:  
78 unique CDR3  
5 unique J



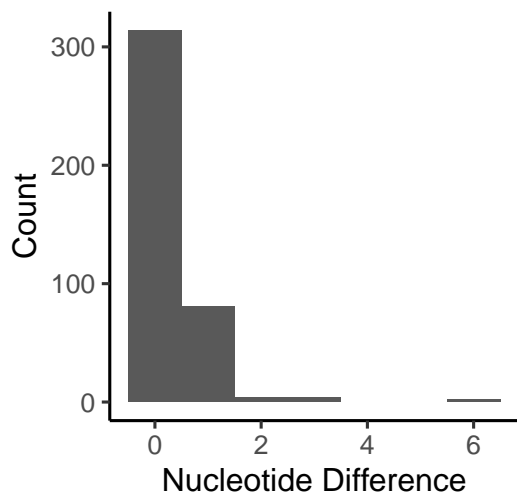
### IGHV6–1\*01

266 sequences assigned  
257 (96.6%) exact matches, in which:  
257 unique CDR3  
6 unique J



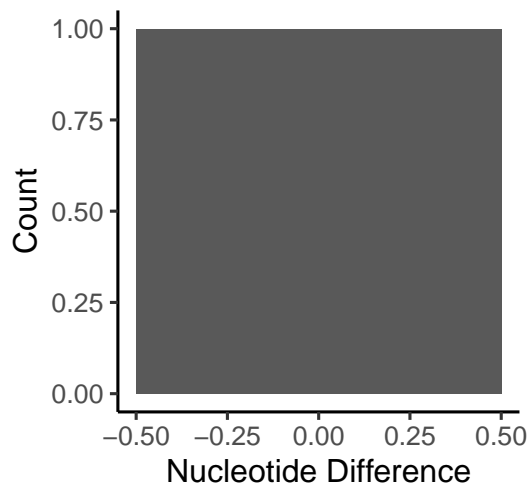
### IGHV5–51\*01

405 sequences assigned  
314 (77.5%) exact matches, in which:  
313 unique CDR3  
6 unique J

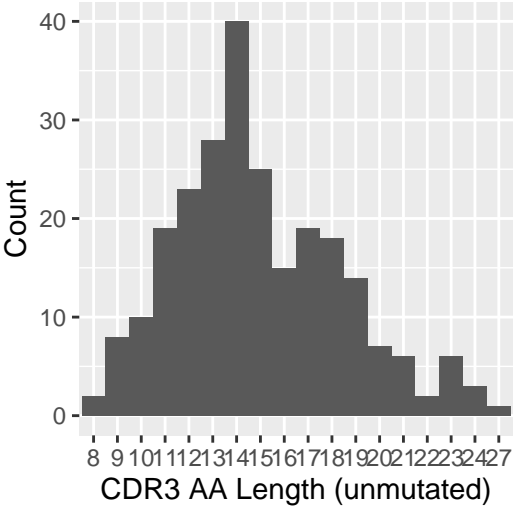


### IGHV7–81\*01

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



IGHV4-38-2\*02\_A70G





[illegible]