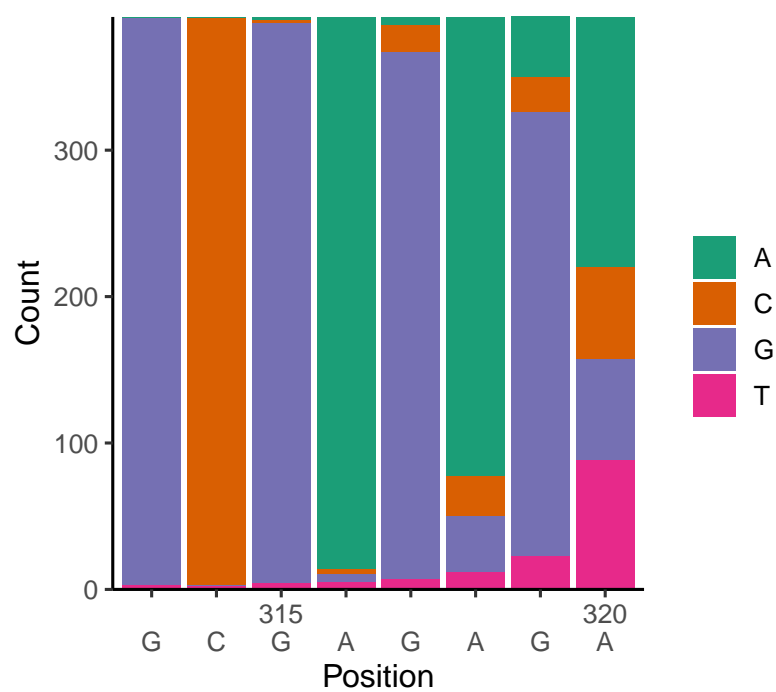


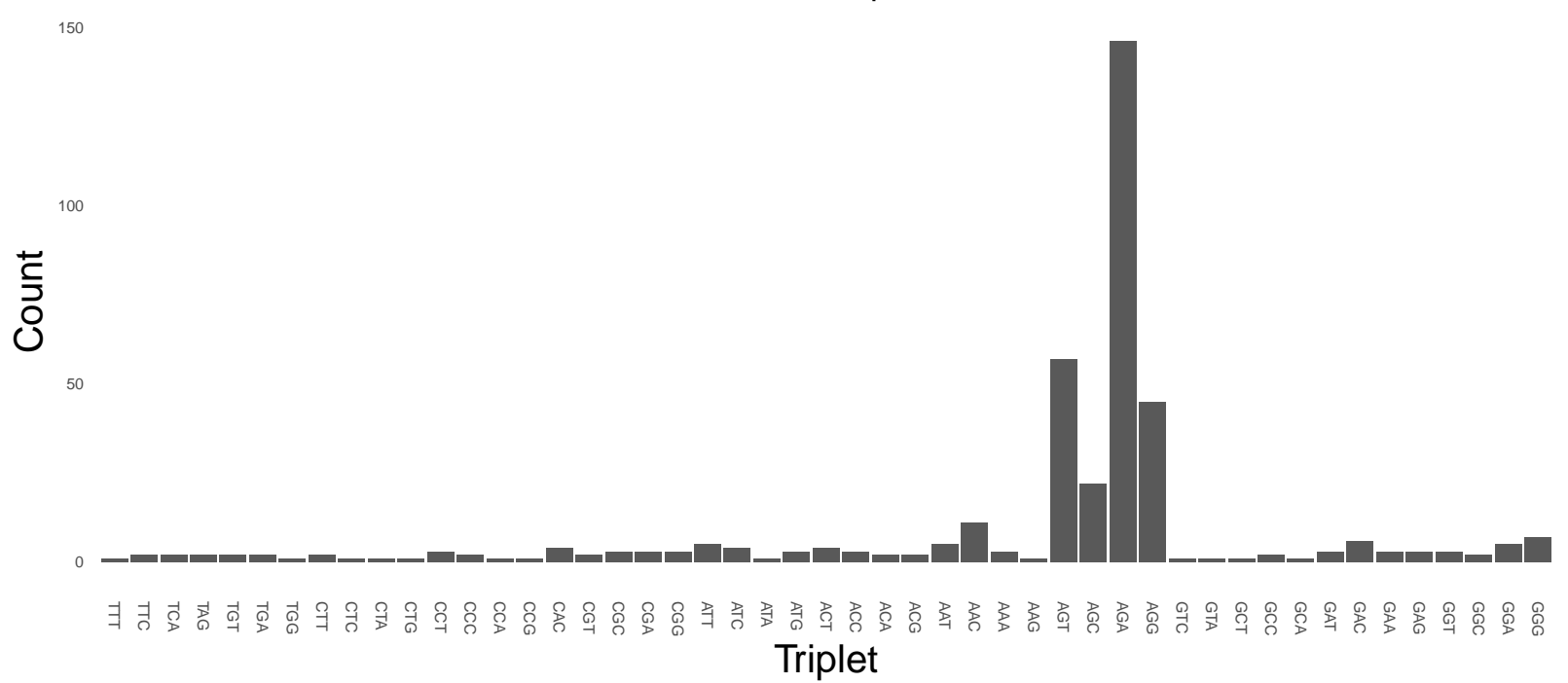
Gene IGHV4-38-2\*02\_A70G



Gene IGHV4-38-2\*02\_A70G

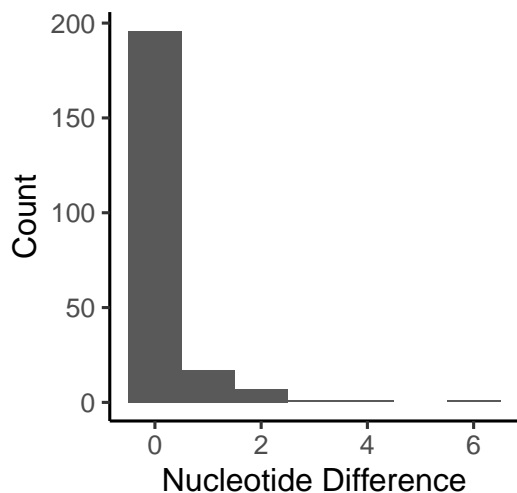


IGHV4-38-2\*02\_A70G- Final 3 nucleotides as a triplet



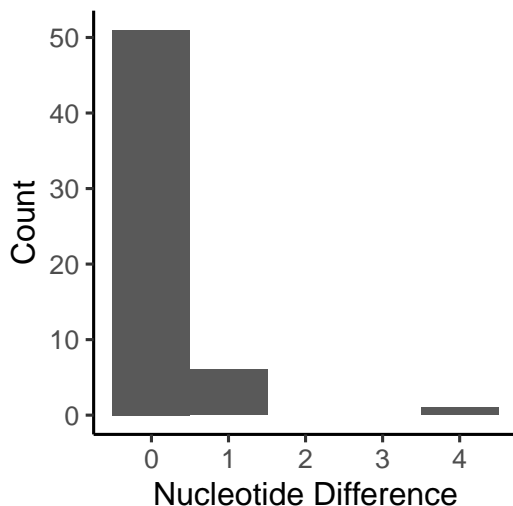
### IGHV1-2\*04

223 sequences assigned  
196 (87.9%) exact matches, in which:  
191 unique CDR3  
6 unique J



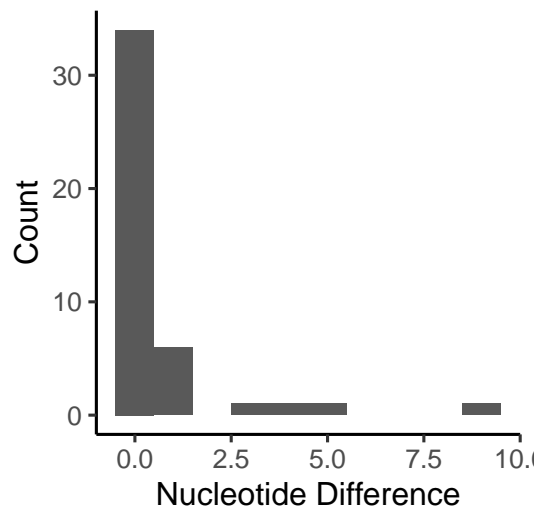
### IGHV1-24\*01

58 sequences assigned  
51 (87.9%) exact matches, in which:  
50 unique CDR3  
6 unique J



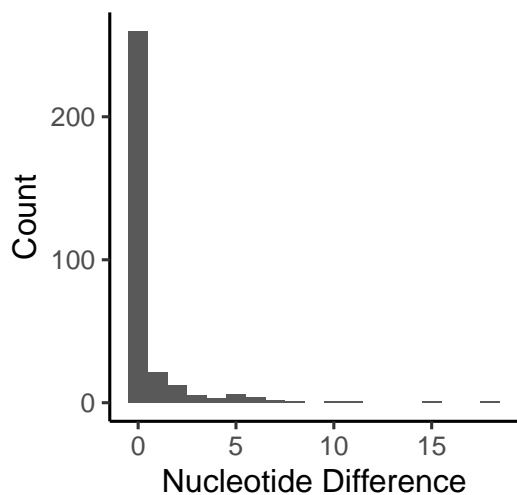
### IGHV1-58\*01

44 sequences assigned  
34 (77.3%) exact matches, in which:  
33 unique CDR3  
5 unique J



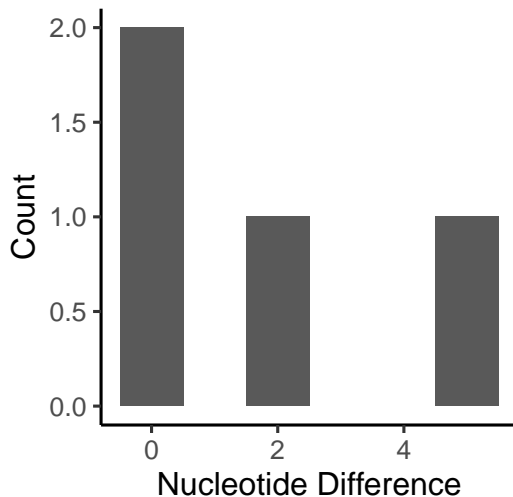
### IGHV1-3\*01

319 sequences assigned  
260 (81.5%) exact matches, in which:  
259 unique CDR3  
6 unique J



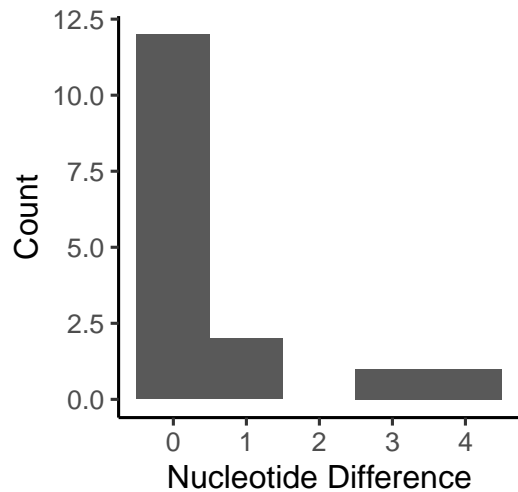
### IGHV1-45\*02

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



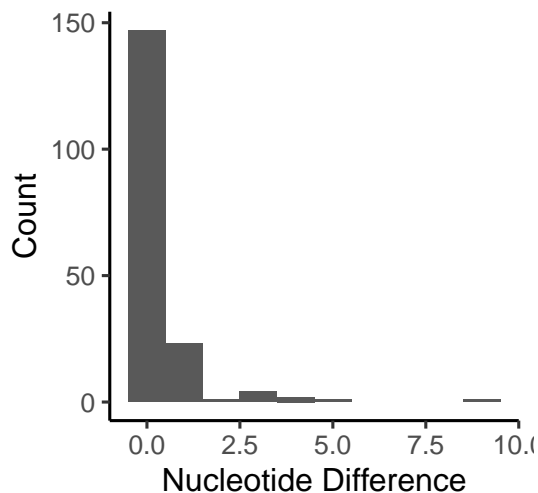
### IGHV1-58\*02

16 sequences assigned  
12 (75%) exact matches, in which:  
12 unique CDR3  
3 unique J



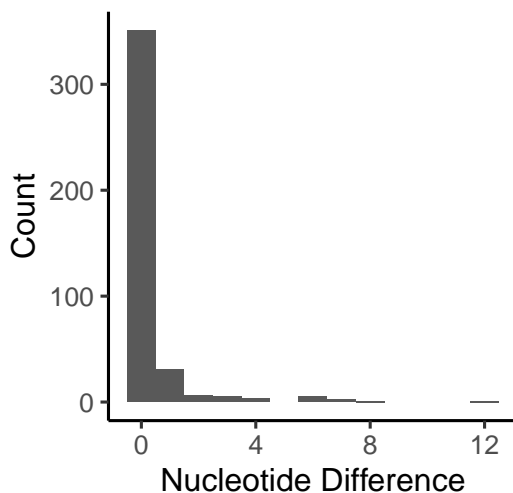
### IGHV1-18\*01

179 sequences assigned  
147 (82.1%) exact matches, in which:  
146 unique CDR3  
6 unique J



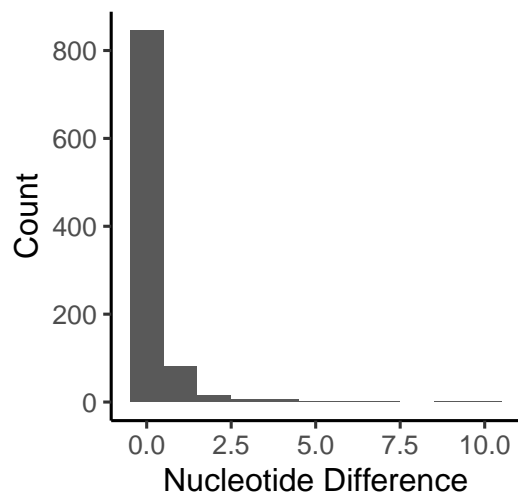
### IGHV1-46\*01

406 sequences assigned  
351 (86.5%) exact matches, in which:  
347 unique CDR3  
6 unique J



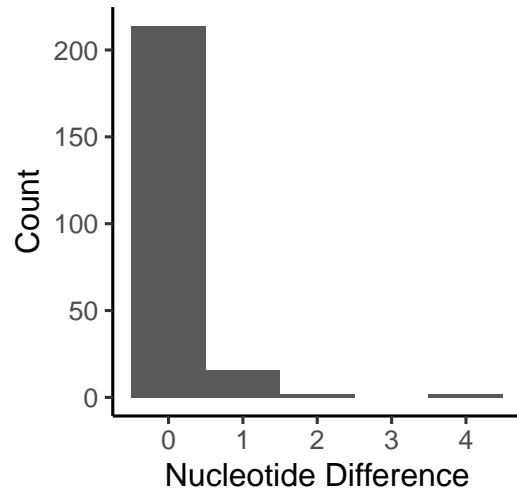
### IGHV1-69\*01

959 sequences assigned  
846 (88.2%) exact matches, in which:  
827 unique CDR3  
6 unique J



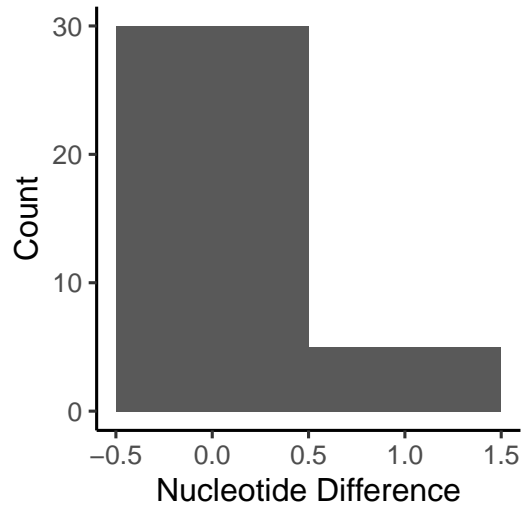
### IGHV1–69\*02

234 sequences assigned  
214 (91.5%) exact matches, in which:  
207 unique CDR3  
6 unique J



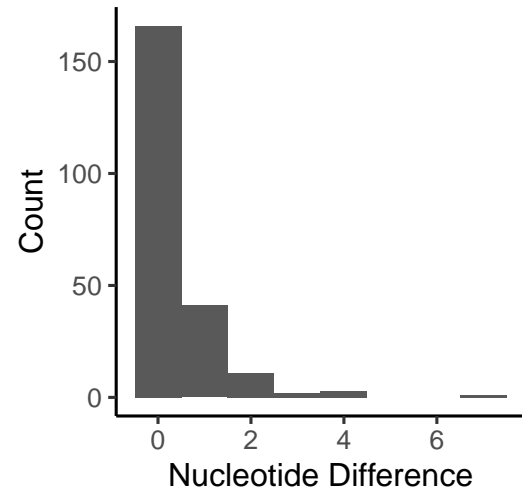
### IGHV2–70\*01

35 sequences assigned  
30 (85.7%) exact matches, in which:  
30 unique CDR3  
4 unique J



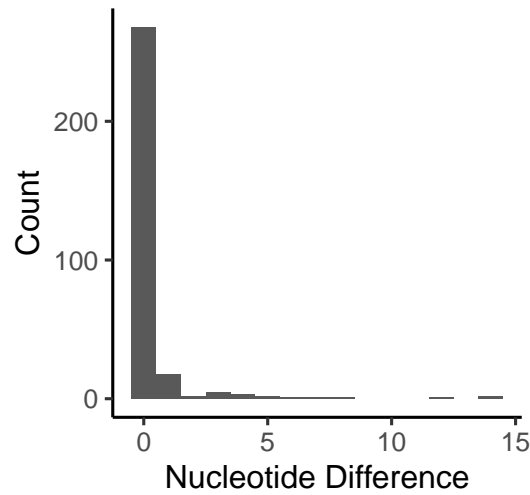
### IGHV3–11\*05

224 sequences assigned  
166 (74.1%) exact matches, in which:  
162 unique CDR3  
5 unique J



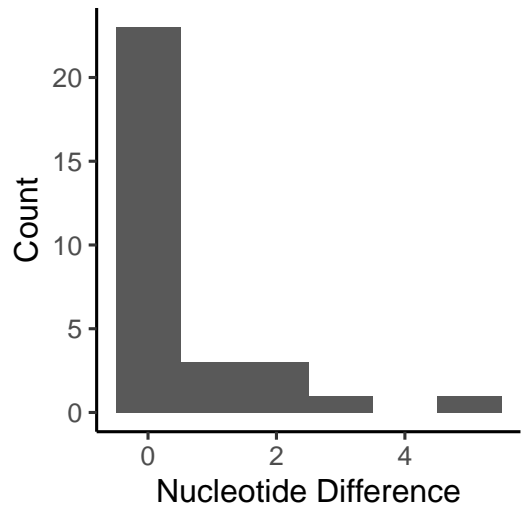
### IGHV2–5\*02

304 sequences assigned  
268 (88.2%) exact matches, in which:  
262 unique CDR3  
6 unique J



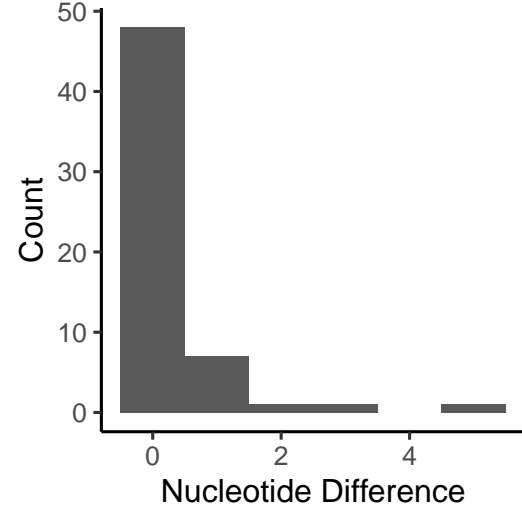
### IGHV2–70\*15

31 sequences assigned  
23 (74.2%) exact matches, in which:  
23 unique CDR3  
5 unique J



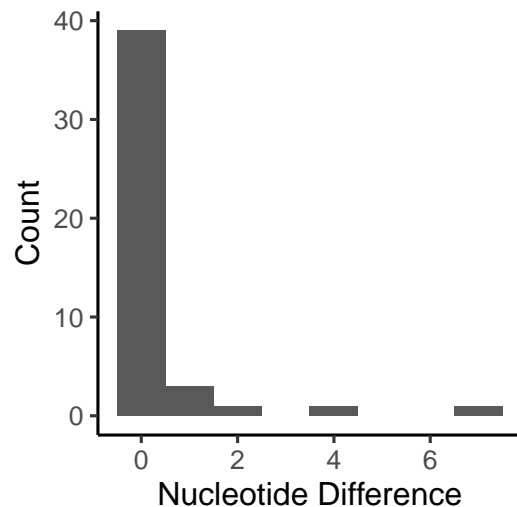
### IGHV3–13\*04

58 sequences assigned  
48 (82.8%) exact matches, in which:  
48 unique CDR3  
5 unique J



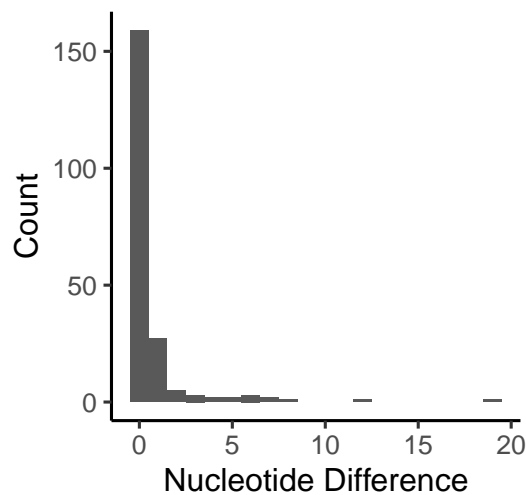
### IGHV2–26\*01

45 sequences assigned  
39 (86.7%) exact matches, in which:  
38 unique CDR3  
5 unique J



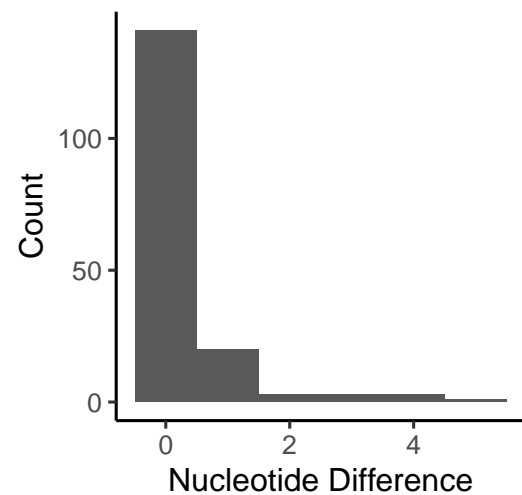
### IGHV3–7\*04

206 sequences assigned  
159 (77.2%) exact matches, in which:  
152 unique CDR3  
6 unique J



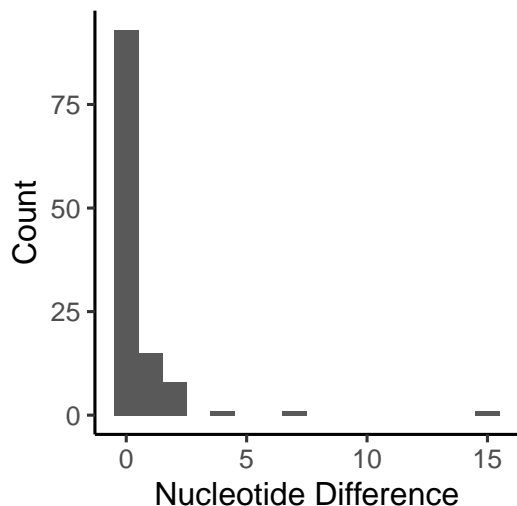
### IGHV3–15\*01

171 sequences assigned  
141 (82.5%) exact matches, in which:  
138 unique CDR3  
6 unique J



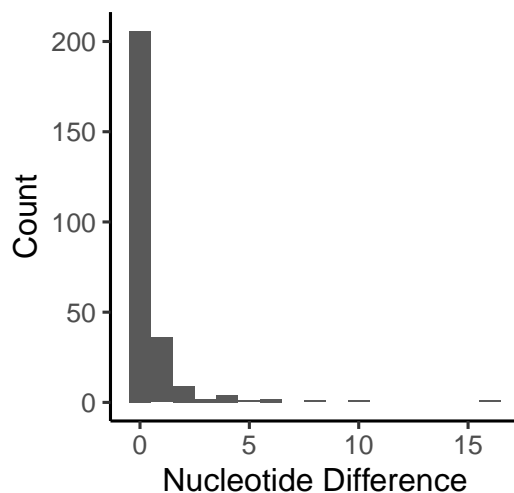
### IGHV3-20\*04

119 sequences assigned  
93 (78.2%) exact matches, in which:  
87 unique CDR3  
6 unique J



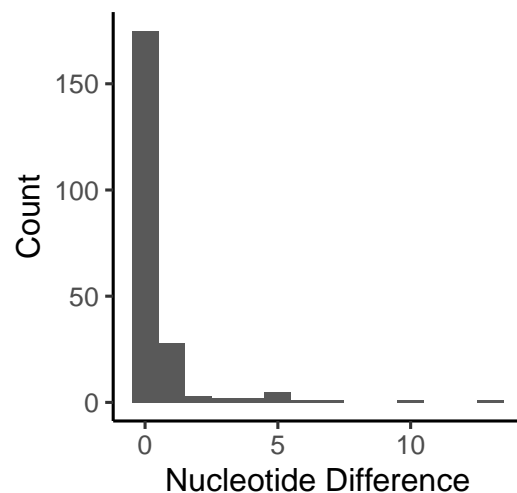
### IGHV3-30\*18

263 sequences assigned  
206 (78.3%) exact matches, in which:  
204 unique CDR3  
6 unique J



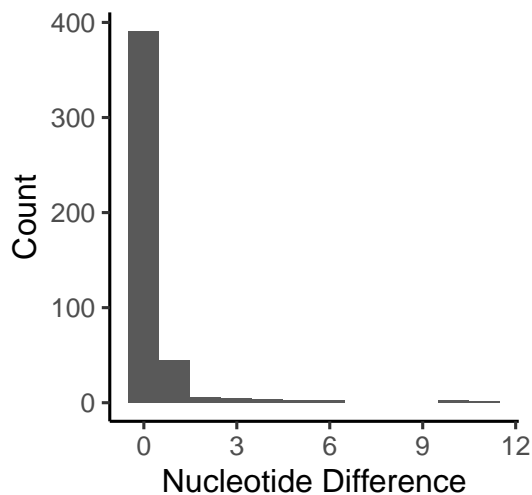
### IGHV3-48\*02

219 sequences assigned  
175 (79.9%) exact matches, in which:  
169 unique CDR3  
6 unique J



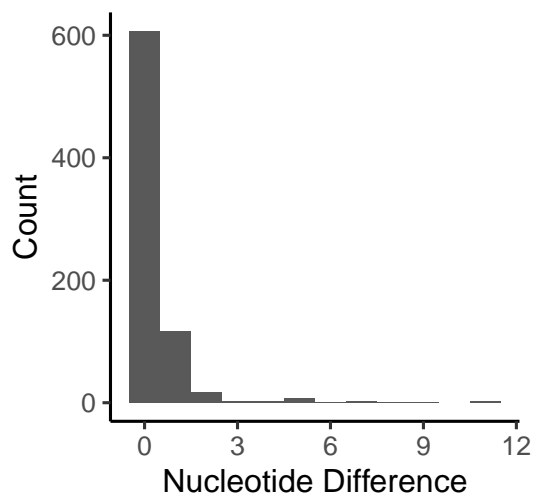
### IGHV3-21\*01

462 sequences assigned  
391 (84.6%) exact matches, in which:  
383 unique CDR3  
6 unique J



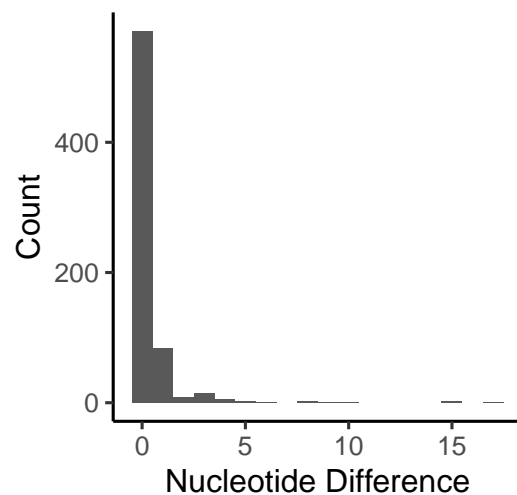
### IGHV3-33\*01

771 sequences assigned  
607 (78.7%) exact matches, in which:  
590 unique CDR3  
6 unique J



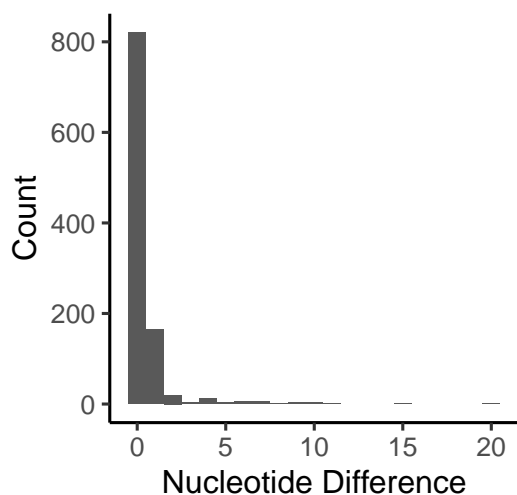
### IGHV3-48\*03

693 sequences assigned  
571 (82.4%) exact matches, in which:  
555 unique CDR3  
6 unique J



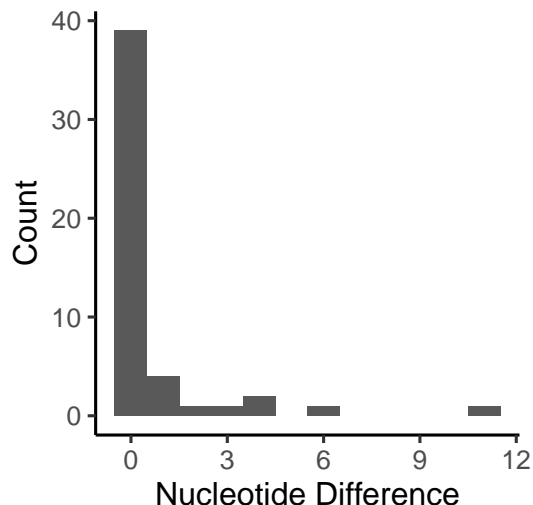
### IGHV3-23\*01

1049 sequences assigned  
821 (78.3%) exact matches, in which:  
791 unique CDR3  
6 unique J



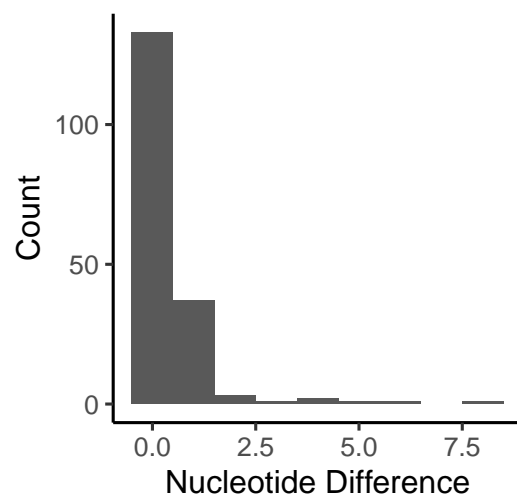
### IGHV3-43\*01

49 sequences assigned  
39 (79.6%) exact matches, in which:  
38 unique CDR3  
5 unique J



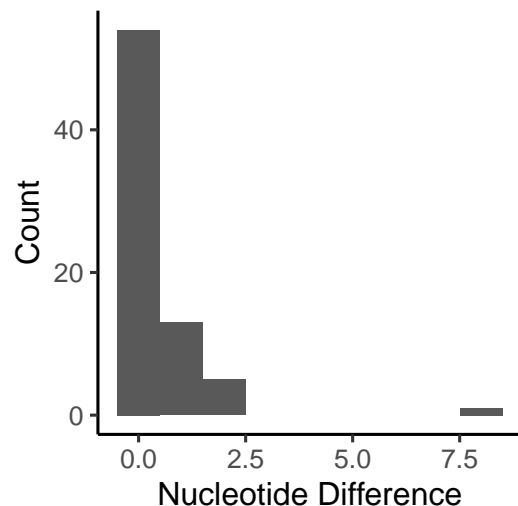
### IGHV3-49\*04

179 sequences assigned  
133 (74.3%) exact matches, in which:  
129 unique CDR3  
6 unique J



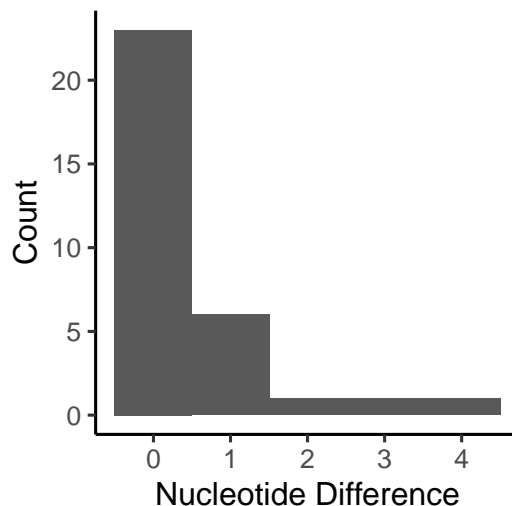
### IGHV3-49\*05

73 sequences assigned  
54 (74%) exact matches, in which:  
53 unique CDR3  
6 unique J



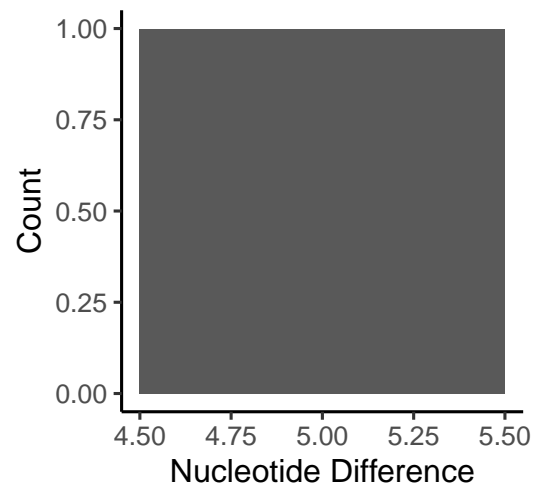
### IGHV3-64\*01

32 sequences assigned  
23 (71.9%) exact matches, in which:  
22 unique CDR3  
5 unique J



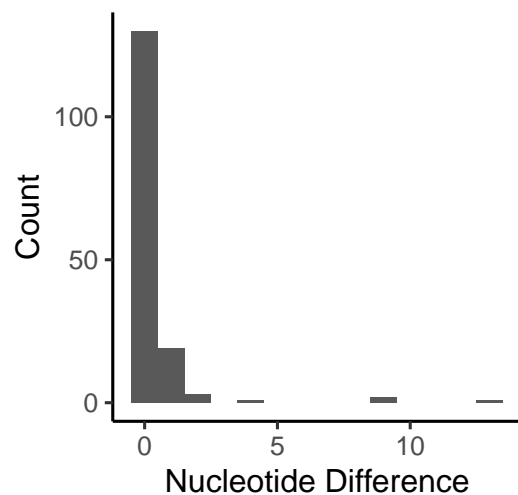
### IGHV3-69-1\*02

1 sequences assigned  
No exact matches.



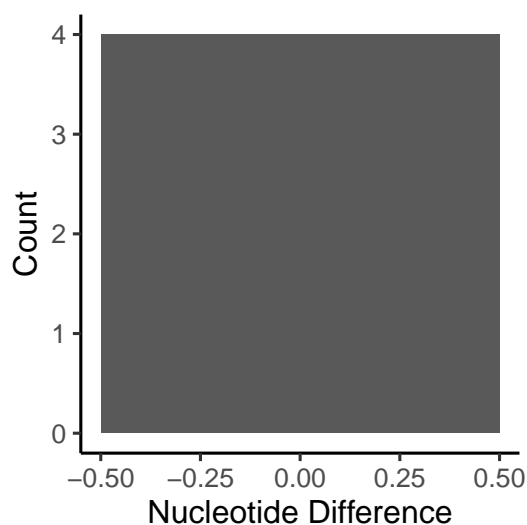
### IGHV3-53\*01

156 sequences assigned  
130 (83.3%) exact matches, in which:  
125 unique CDR3  
5 unique J



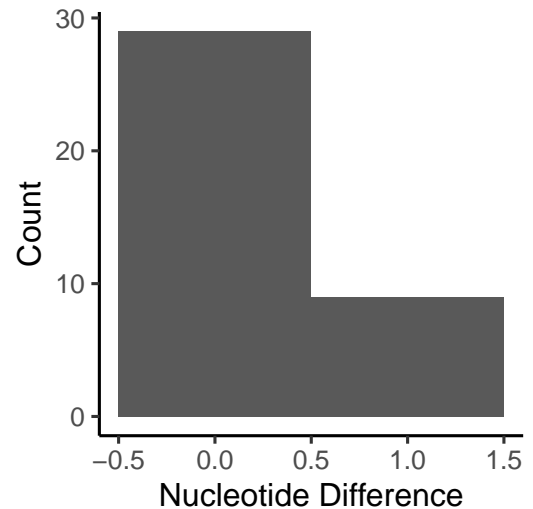
### IGHV3-64\*02

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



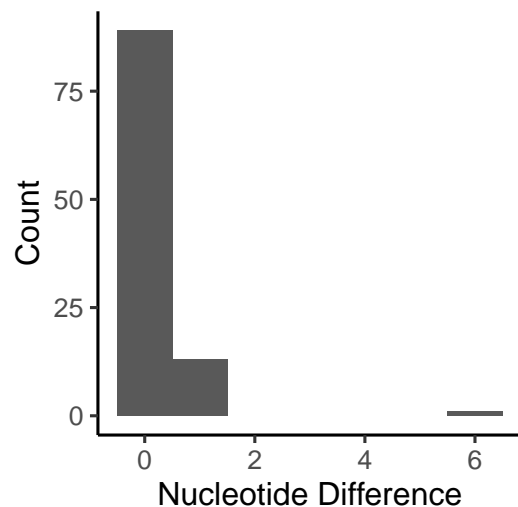
### IGHV3-72\*01

38 sequences assigned  
29 (76.3%) exact matches, in which:  
28 unique CDR3  
5 unique J



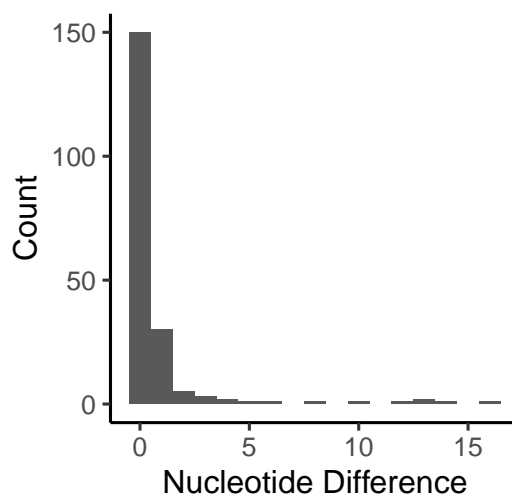
### IGHV3-53\*02

103 sequences assigned  
89 (86.4%) exact matches, in which:  
86 unique CDR3  
5 unique J



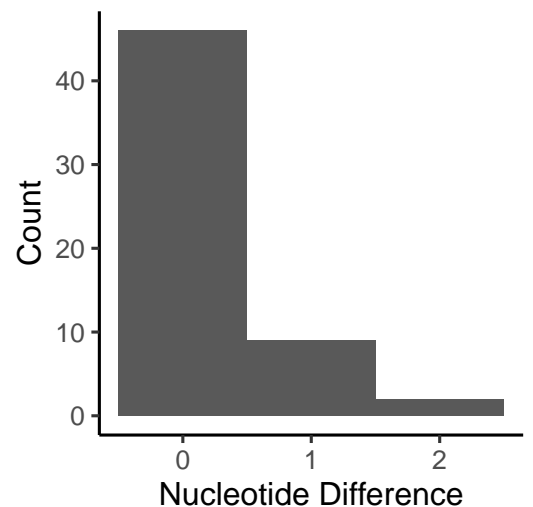
### IGHV3-66\*01

199 sequences assigned  
150 (75.4%) exact matches, in which:  
138 unique CDR3  
6 unique J



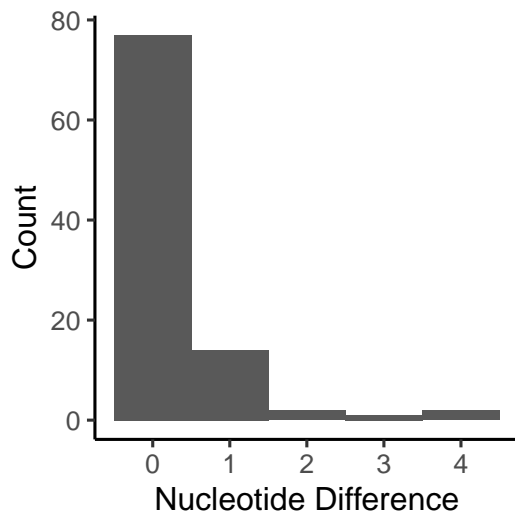
### IGHV3-73\*01

57 sequences assigned  
46 (80.7%) exact matches, in which:  
44 unique CDR3  
5 unique J



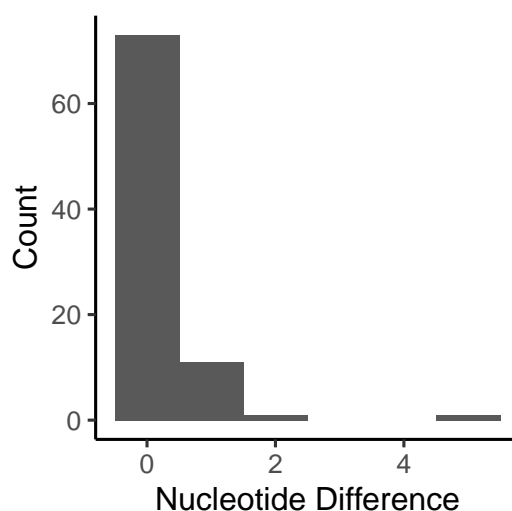
### IGHV3-73\*02

96 sequences assigned  
77 (80.2%) exact matches, in which:  
74 unique CDR3  
5 unique J



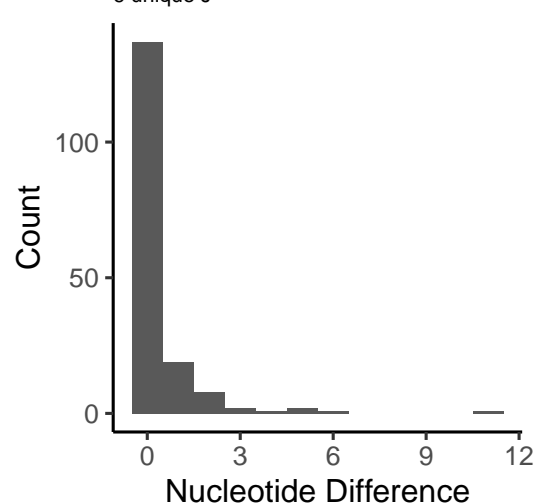
### IGHV3-64D\*06

86 sequences assigned  
73 (84.9%) exact matches, in which:  
71 unique CDR3  
6 unique J



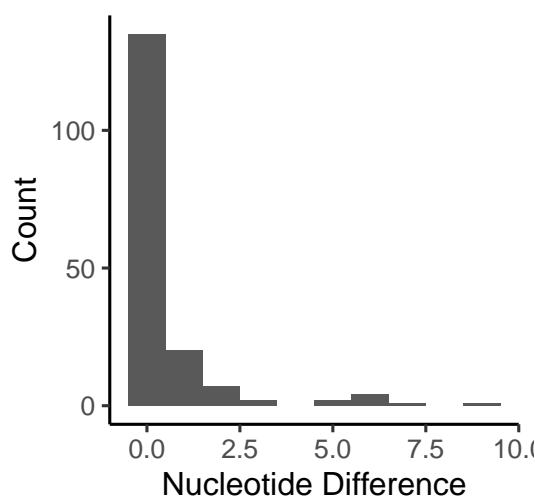
### IGHV4-31\*03

171 sequences assigned  
137 (80.1%) exact matches, in which:  
137 unique CDR3  
6 unique J



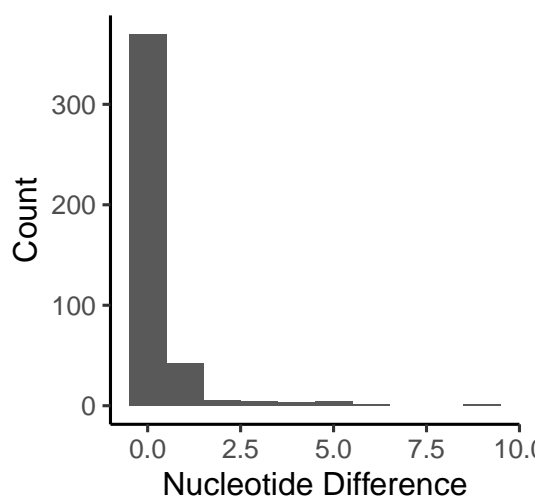
### IGHV3-74\*01

172 sequences assigned  
135 (78.5%) exact matches, in which:  
131 unique CDR3  
6 unique J



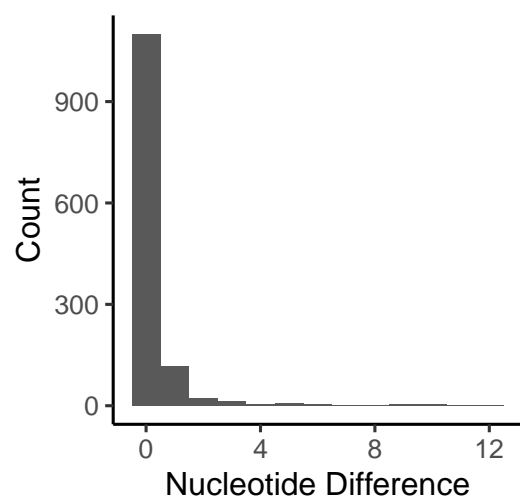
### IGHV4-4\*02

430 sequences assigned  
370 (86%) exact matches, in which:  
365 unique CDR3  
6 unique J



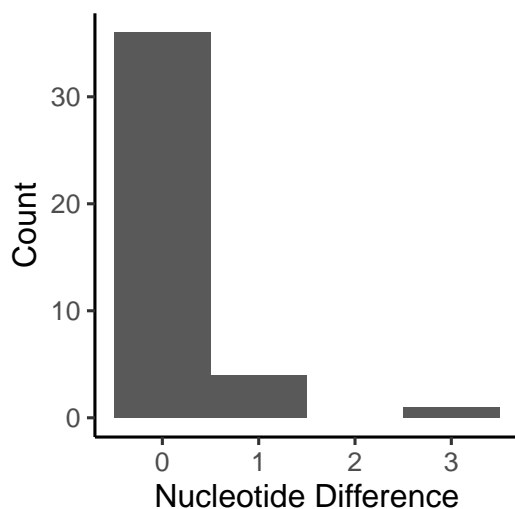
### IGHV4-34\*01

1277 sequences assigned  
1100 (86.1%) exact matches, in which:  
1077 unique CDR3  
6 unique J



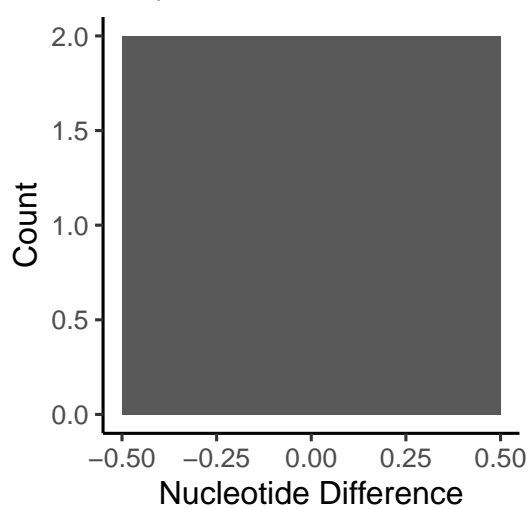
### IGHV3-43D\*04

41 sequences assigned  
36 (87.8%) exact matches, in which:  
35 unique CDR3  
6 unique J



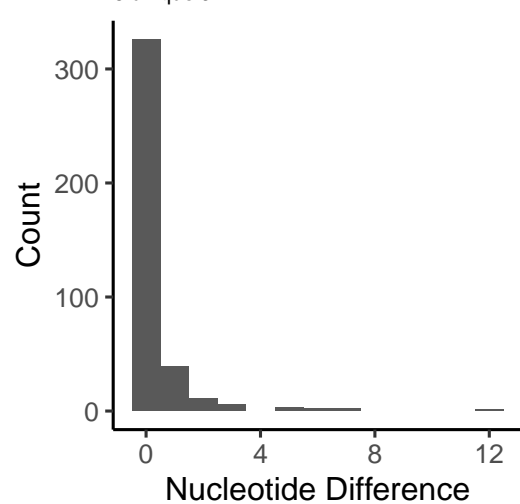
### IGHV4-28\*01

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



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

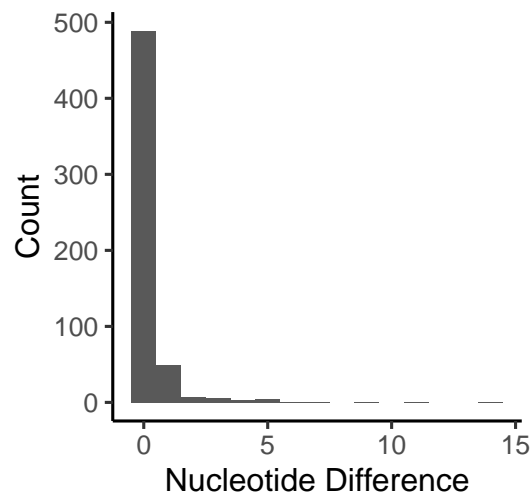
391 sequences assigned  
326 (83.4%) exact matches, in which:  
320 unique CDR3  
6 unique J





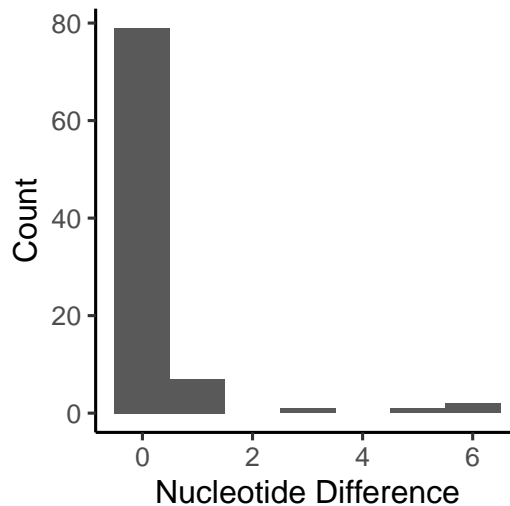
### IGHV4-39\*01

568 sequences assigned  
489 (86.1%) exact matches, in which:  
474 unique CDR3  
6 unique J



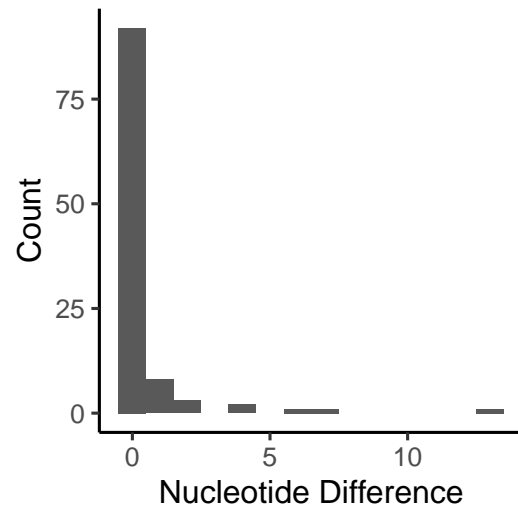
### IGHV4-61\*01

90 sequences assigned  
79 (87.8%) exact matches, in which:  
79 unique CDR3  
6 unique J



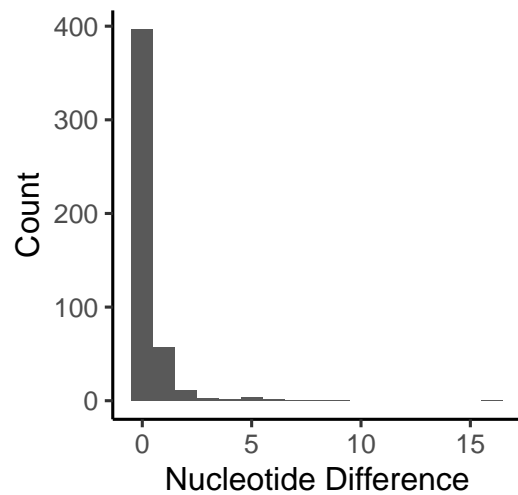
### IGHV6-1\*01

108 sequences assigned  
92 (85.2%) exact matches, in which:  
90 unique CDR3  
6 unique J



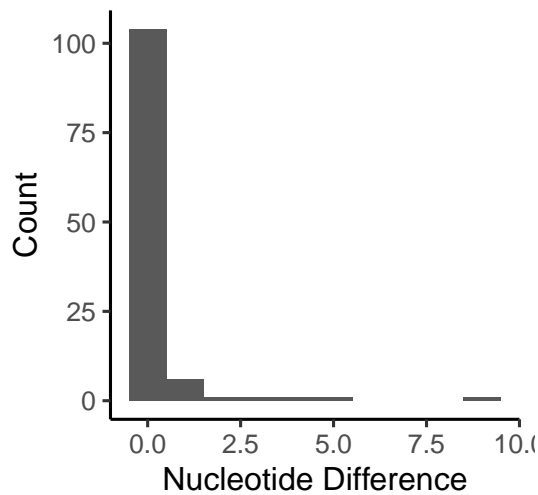
### IGHV4-59\*01

480 sequences assigned  
397 (82.7%) exact matches, in which:  
392 unique CDR3  
6 unique J



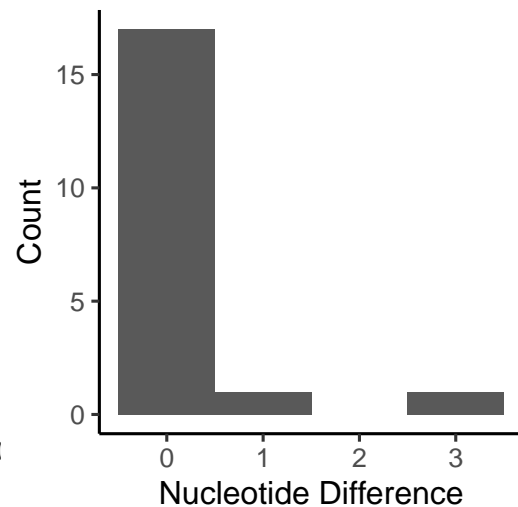
### IGHV5-10-1\*01

115 sequences assigned  
104 (90.4%) exact matches, in which:  
103 unique CDR3  
6 unique J



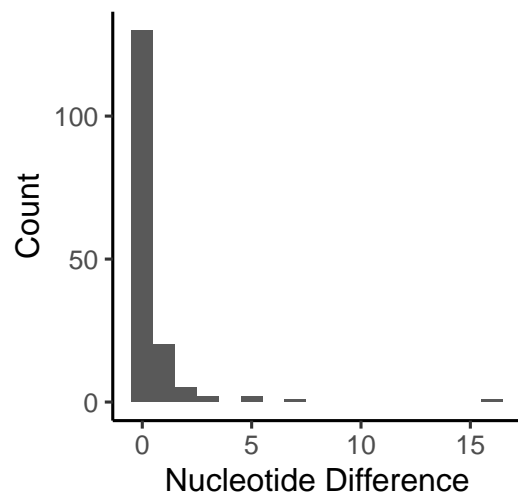
### IGHV7-4-1\*01

19 sequences assigned  
17 (89.5%) exact matches, in which:  
16 unique CDR3  
5 unique J



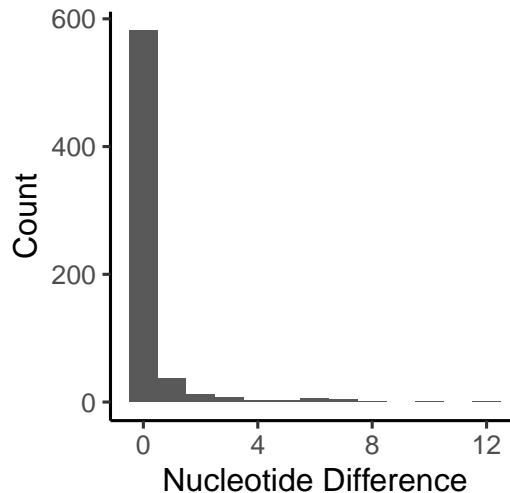
### IGHV4-59\*08

161 sequences assigned  
130 (80.7%) exact matches, in which:  
130 unique CDR3  
6 unique J



### IGHV5-51\*01

655 sequences assigned  
582 (88.9%) exact matches, in which:  
569 unique CDR3  
6 unique J



IGHV4-38-2\*02\_A70G

