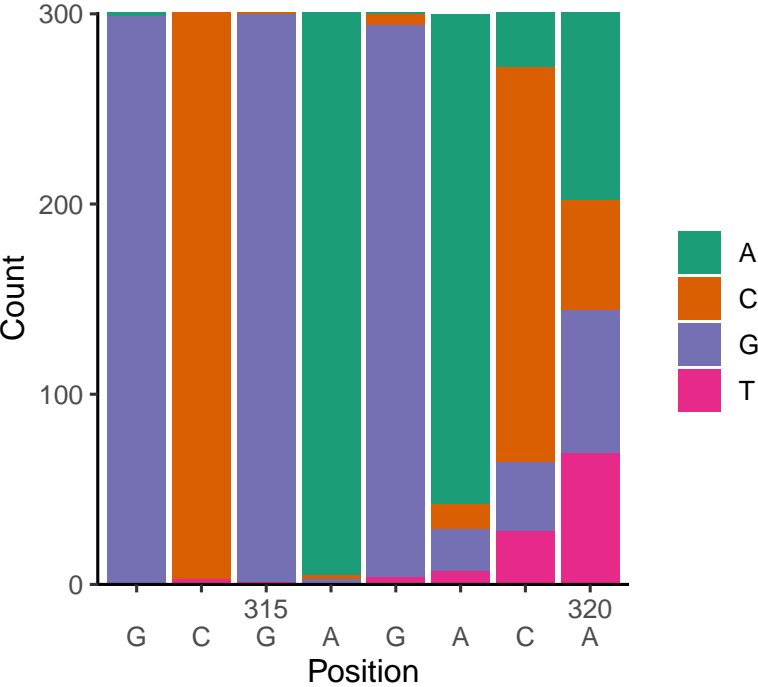
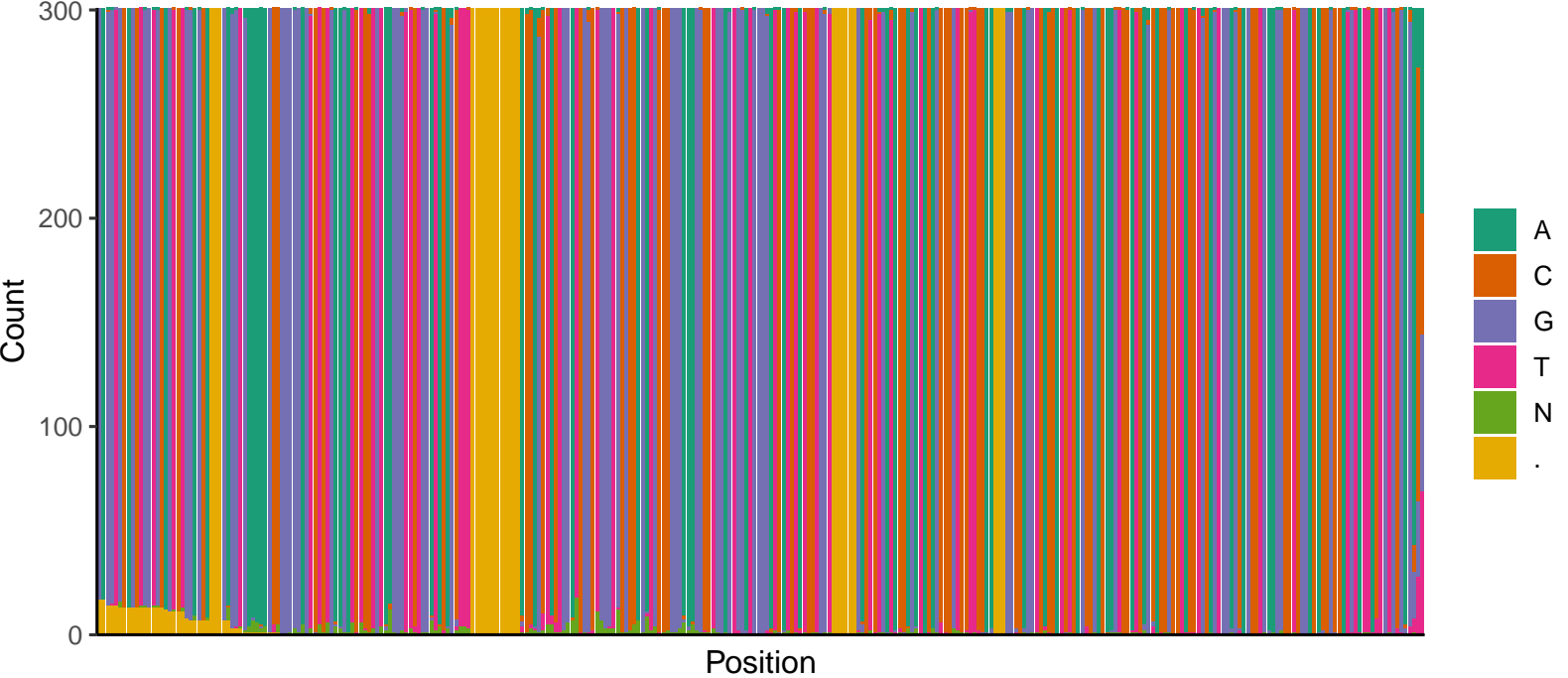


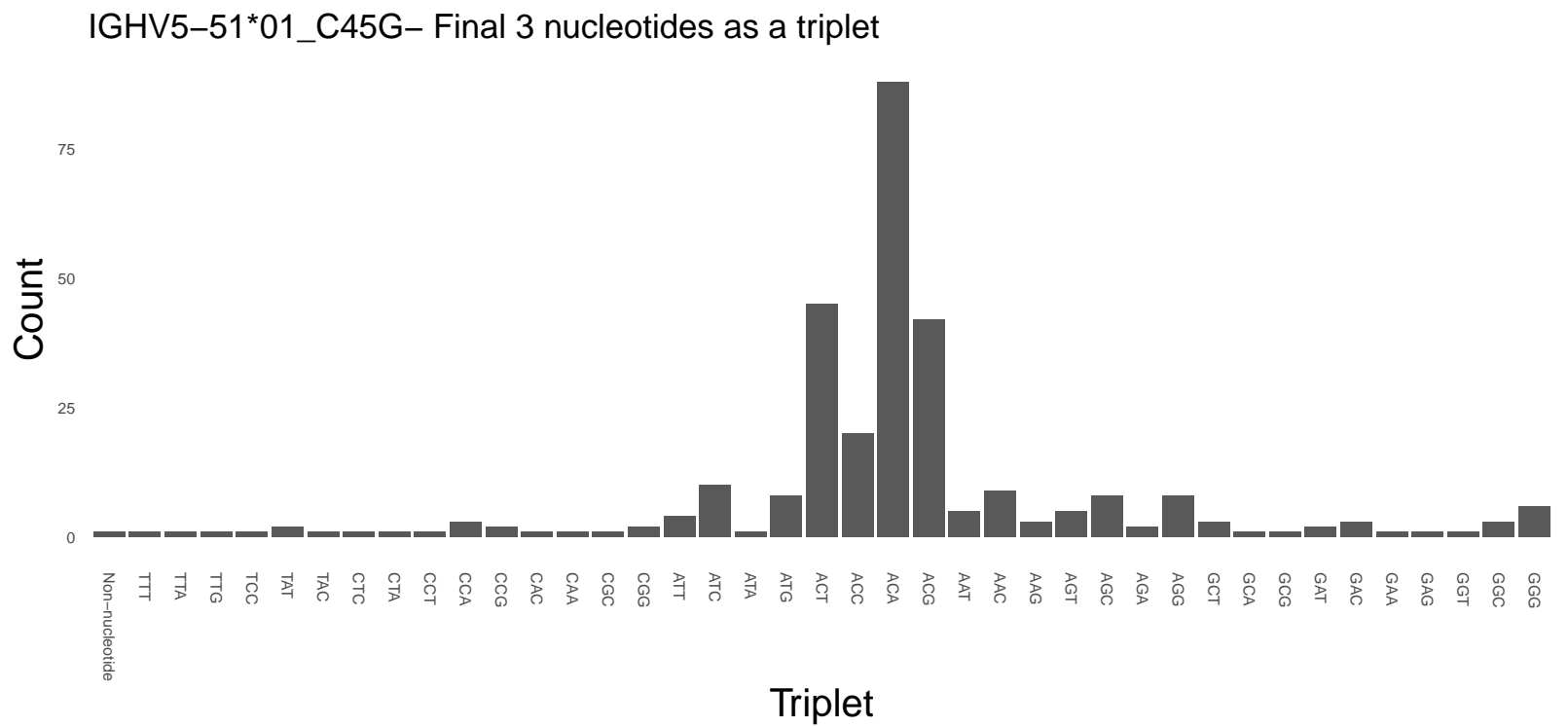
Gene IGHV5-51\*01\_C45G



Gene IGHV5-51\*01\_C45G

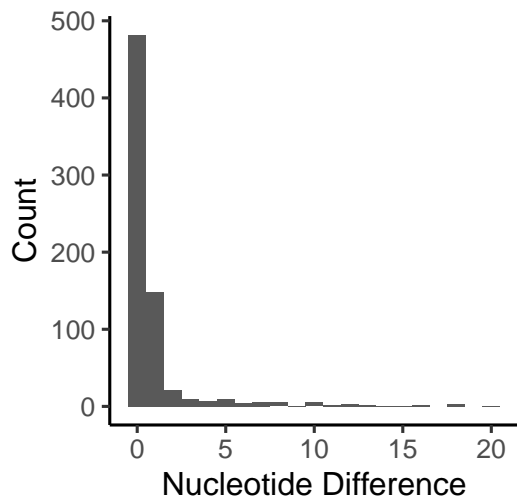


IGHV5-51\*01\_C45G- Final 3 nucleotides as a triplet



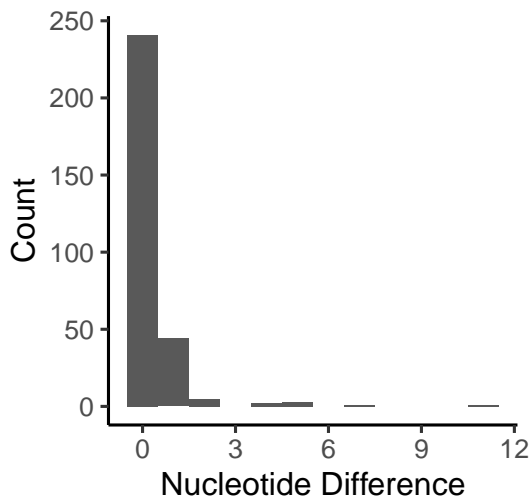
### IGHV1-2\*02

722 sequences assigned  
482 (66.8%) exact matches, in which:  
480 unique CDR3  
6 unique J



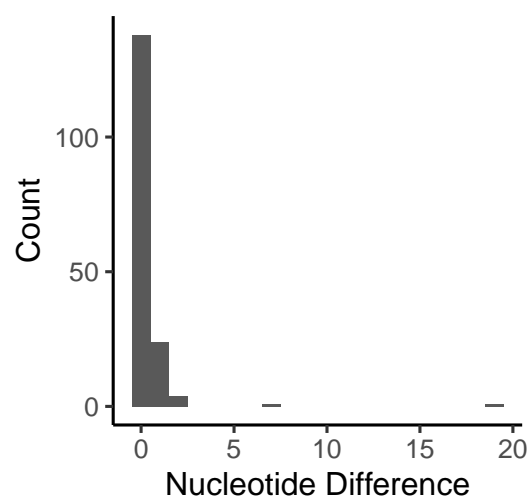
### IGHV1-8\*01

299 sequences assigned  
241 (80.6%) exact matches, in which:  
239 unique CDR3  
6 unique J



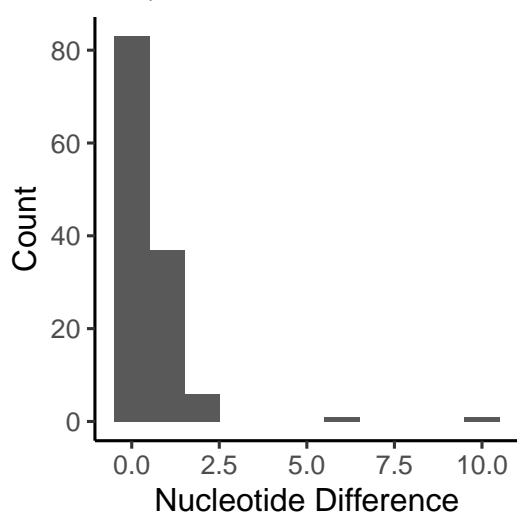
### IGHV1-24\*01

168 sequences assigned  
138 (82.1%) exact matches, in which:  
137 unique CDR3  
6 unique J



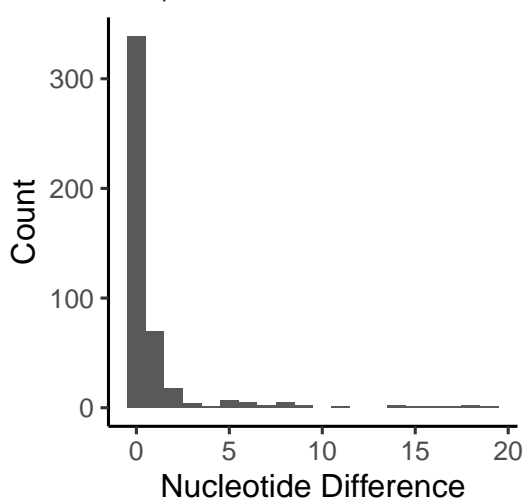
### IGHV1-2\*04

128 sequences assigned  
83 (64.8%) exact matches, in which:  
83 unique CDR3  
4 unique J



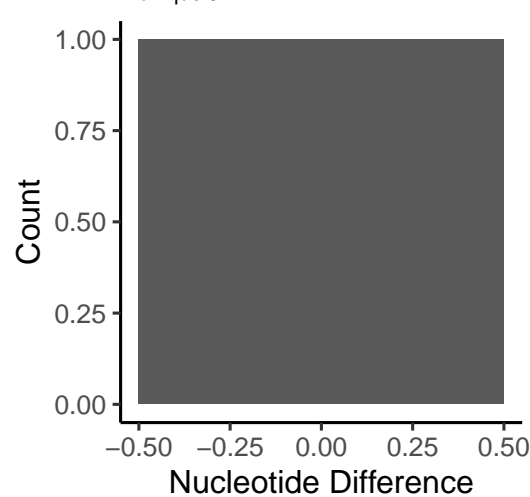
### IGHV1-18\*01

469 sequences assigned  
339 (72.3%) exact matches, in which:  
339 unique CDR3  
6 unique J



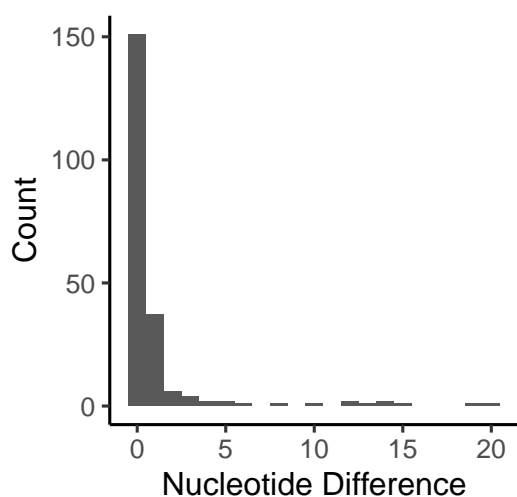
### IGHV1-45\*02

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



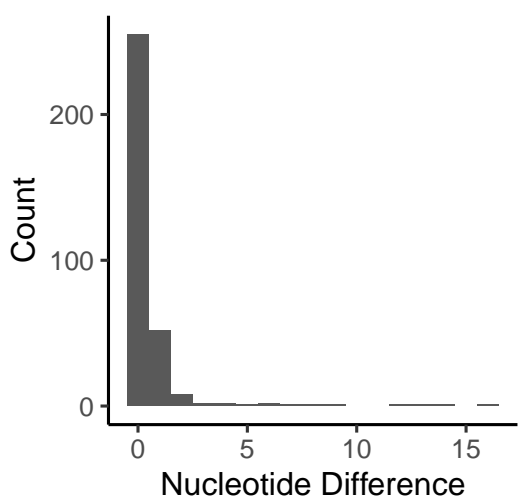
### IGHV1-3\*01

217 sequences assigned  
151 (69.6%) exact matches, in which:  
150 unique CDR3  
6 unique J



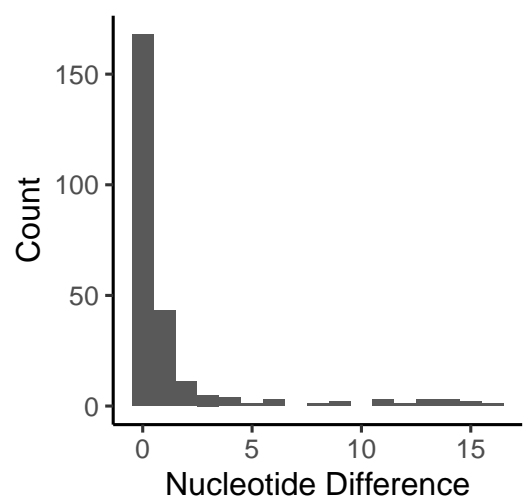
### IGHV1-18\*04

330 sequences assigned  
255 (77.3%) exact matches, in which:  
254 unique CDR3  
6 unique J



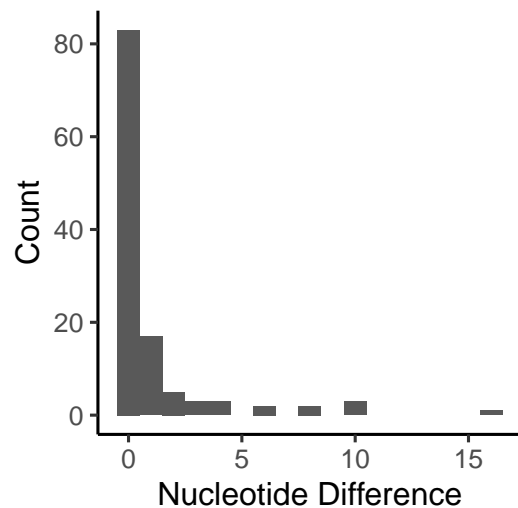
### IGHV1-46\*01

252 sequences assigned  
168 (66.7%) exact matches, in which:  
168 unique CDR3  
6 unique J



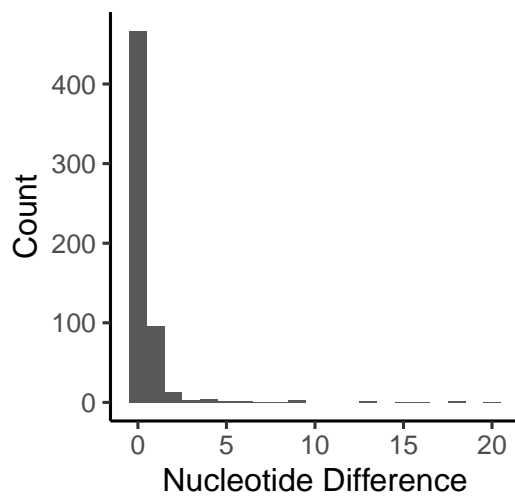
### IGHV1-46\*03

121 sequences assigned  
83 (68.6%) exact matches, in which:  
82 unique CDR3  
5 unique J



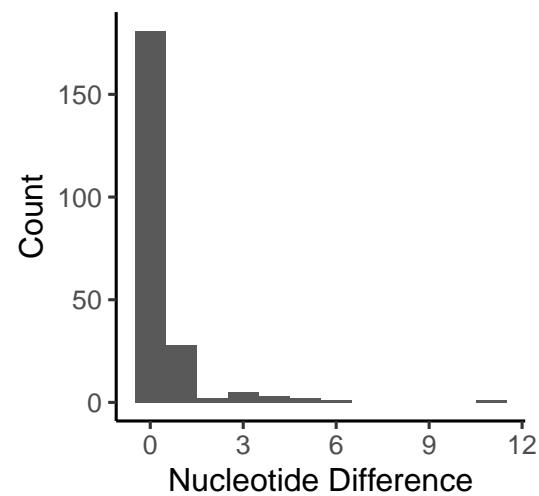
### IGHV1-69\*10

603 sequences assigned  
467 (77.4%) exact matches, in which:  
467 unique CDR3  
6 unique J



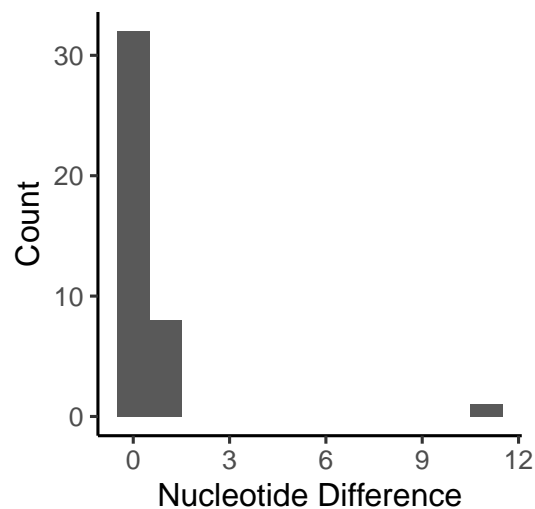
### IGHV2-26\*01

223 sequences assigned  
181 (81.2%) exact matches, in which:  
181 unique CDR3  
5 unique J



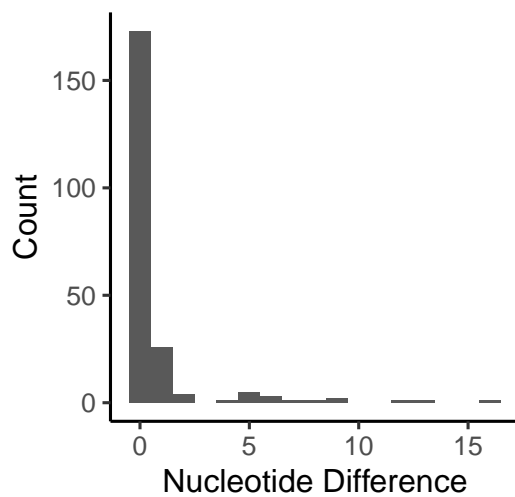
### IGHV1-58\*01

41 sequences assigned  
32 (78%) exact matches, in which:  
32 unique CDR3  
4 unique J



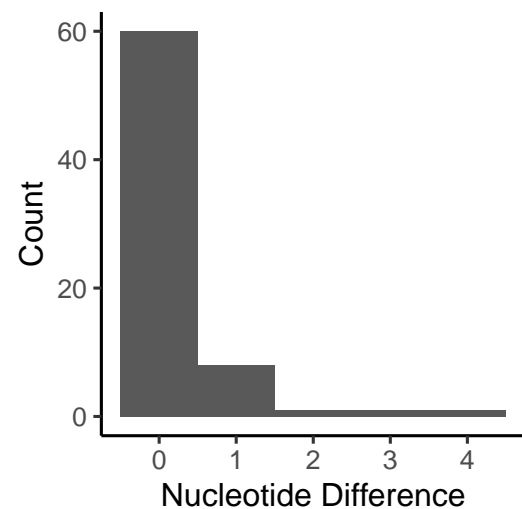
### IGHV2-5\*01

219 sequences assigned  
173 (79%) exact matches, in which:  
173 unique CDR3  
6 unique J



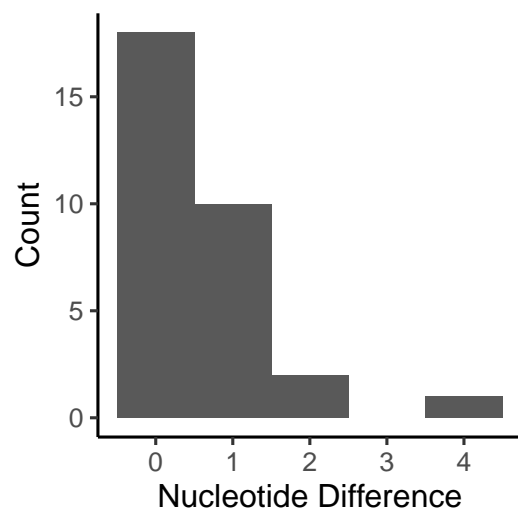
### IGHV2-70\*01

71 sequences assigned  
60 (84.5%) exact matches, in which:  
60 unique CDR3  
5 unique J



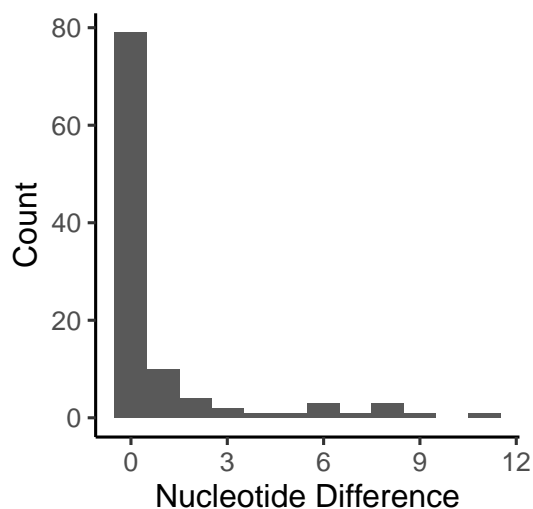
### IGHV1-58\*02

31 sequences assigned  
18 (58.1%) exact matches, in which:  
17 unique CDR3  
3 unique J



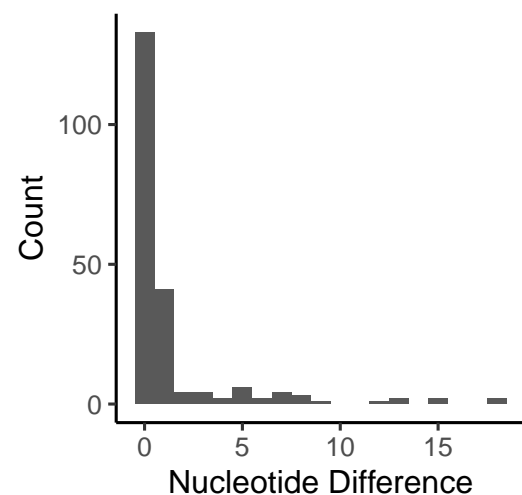
### IGHV2-5\*02

106 sequences assigned  
79 (74.5%) exact matches, in which:  
79 unique CDR3  
6 unique J



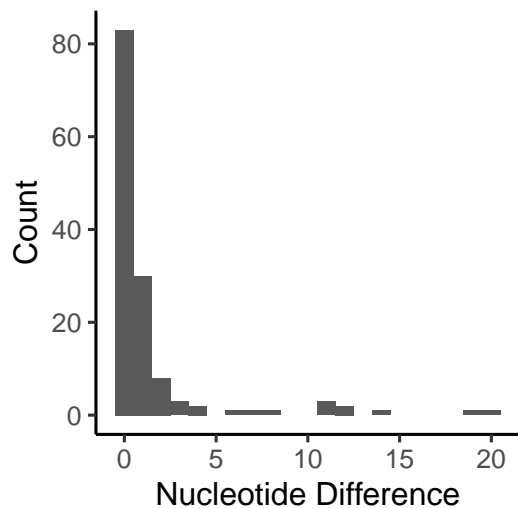
### IGHV3-7\*01

208 sequences assigned  
133 (63.9%) exact matches, in which:  
131 unique CDR3  
6 unique J



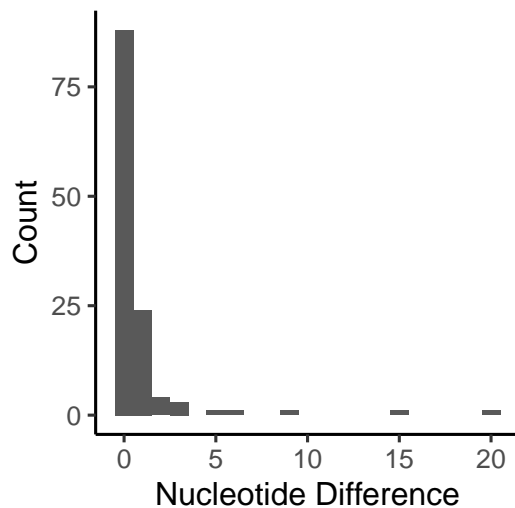
### IGHV3-7\*03

139 sequences assigned  
83 (59.7%) exact matches, in which:  
83 unique CDR3  
5 unique J



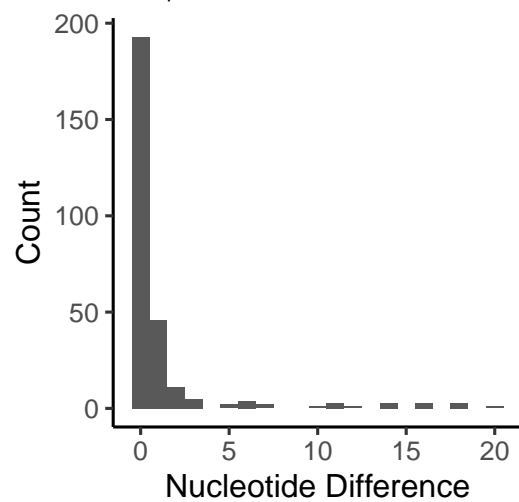
### IGHV3-11\*06

127 sequences assigned  
88 (69.3%) exact matches, in which:  
88 unique CDR3  
5 unique J



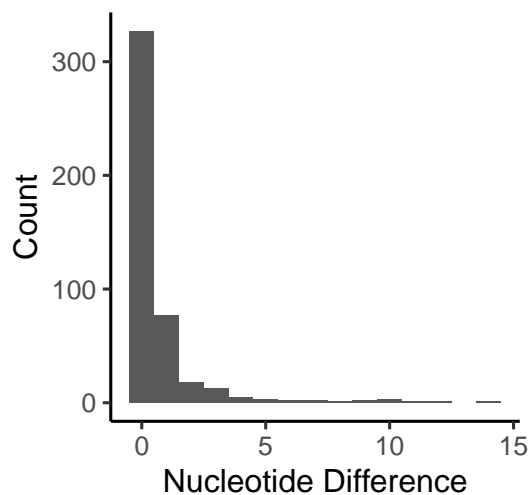
### IGHV3-15\*01

284 sequences assigned  
193 (68%) exact matches, in which:  
193 unique CDR3  
6 unique J



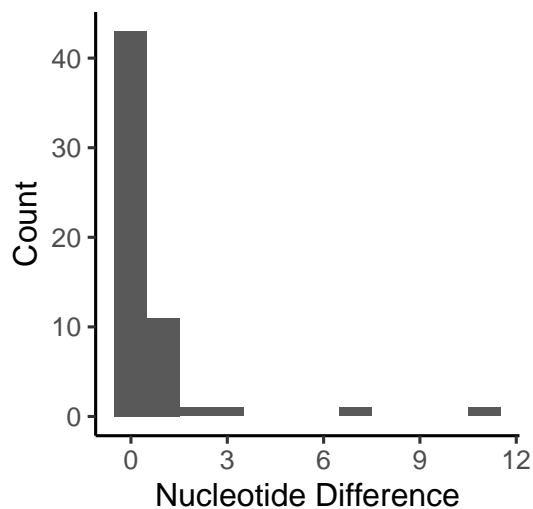
### IGHV3-9\*01

458 sequences assigned  
327 (71.4%) exact matches, in which:  
325 unique CDR3  
6 unique J



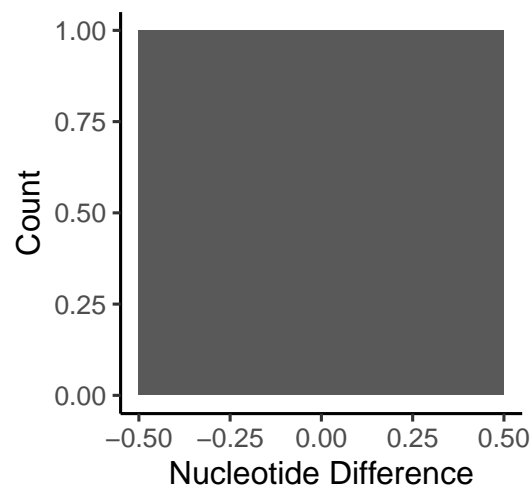
### IGHV3-13\*01

58 sequences assigned  
43 (74.1%) exact matches, in which:  
43 unique CDR3  
5 unique J



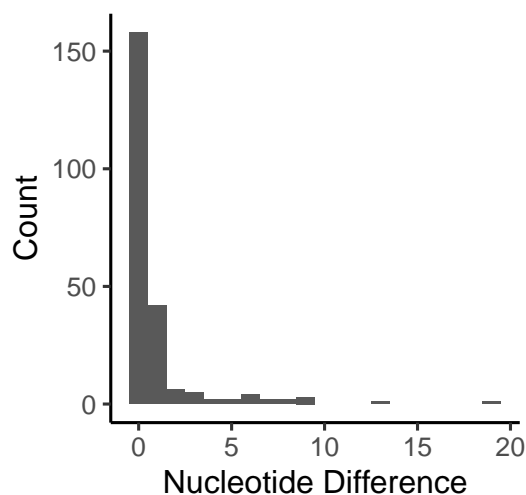
### IGHV3-20\*02

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



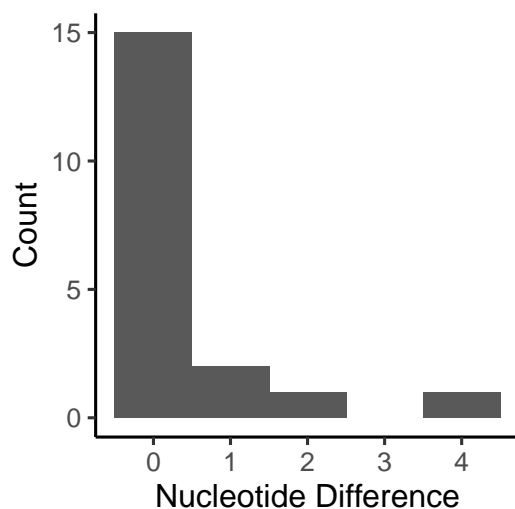
### IGHV3-11\*01

229 sequences assigned  
158 (69%) exact matches, in which:  
158 unique CDR3  
6 unique J



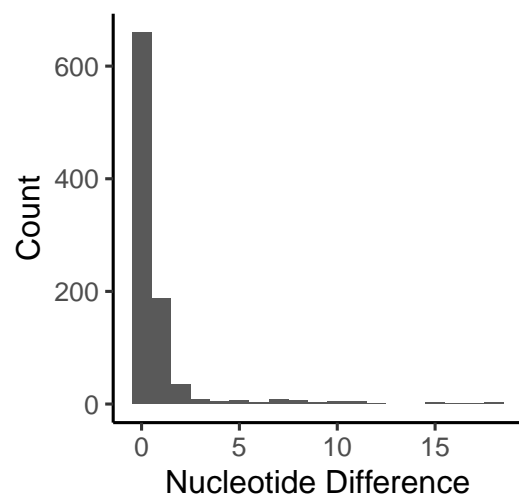
### IGHV3-13\*05

19 sequences assigned  
15 (78.9%) exact matches, in which:  
15 unique CDR3  
4 unique J



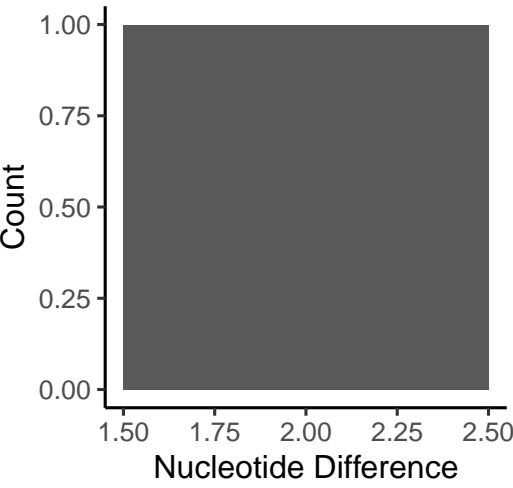
### IGHV3-21\*01

944 sequences assigned  
660 (69.9%) exact matches, in which:  
658 unique CDR3  
6 unique J



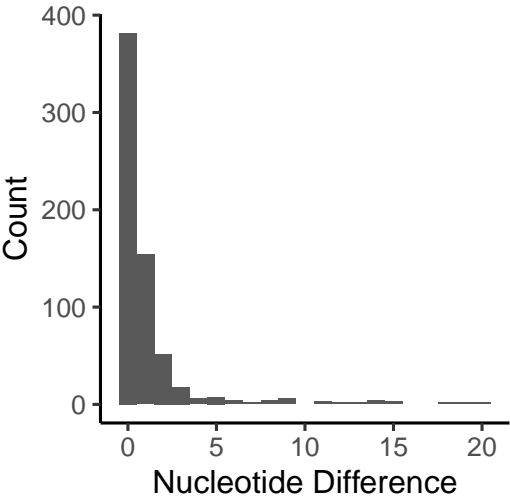
IGHV3-22\*02

1 sequences assigned  
No exact matches.



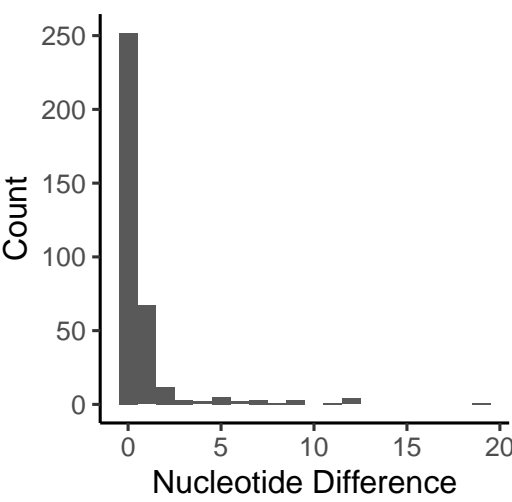
IGHV3-33\*01

659 sequences assigned  
382 (58%) exact matches, in which:  
382 unique CDR3  
6 unique J



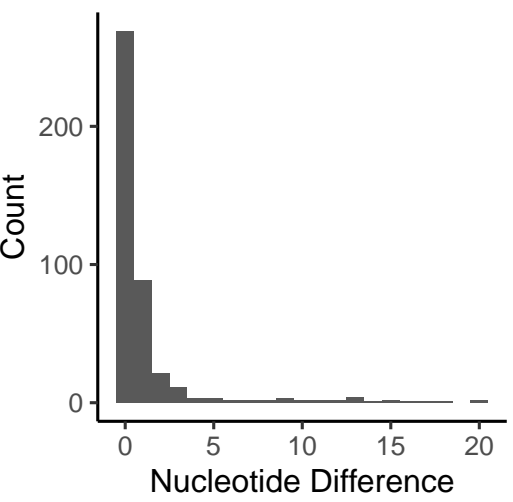
IGHV3-48\*03

358 sequences assigned  
252 (70.4%) exact matches, in which:  
252 unique CDR3  
6 unique J



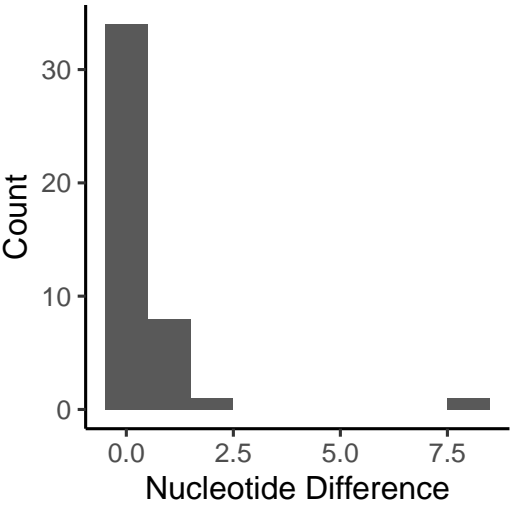
IGHV3-30\*01

426 sequences assigned  
269 (63.1%) exact matches, in which:  
269 unique CDR3  
6 unique J



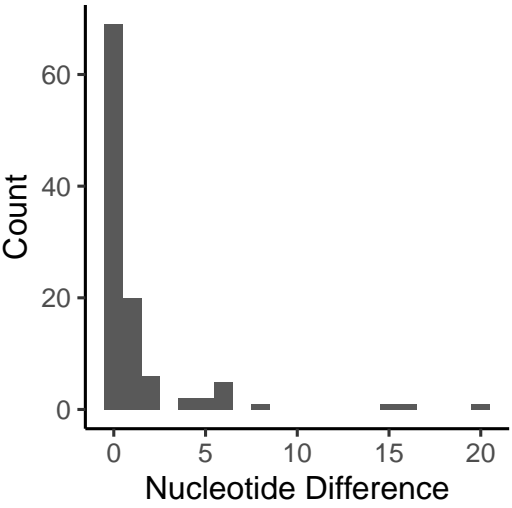
IGHV3-43\*01

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



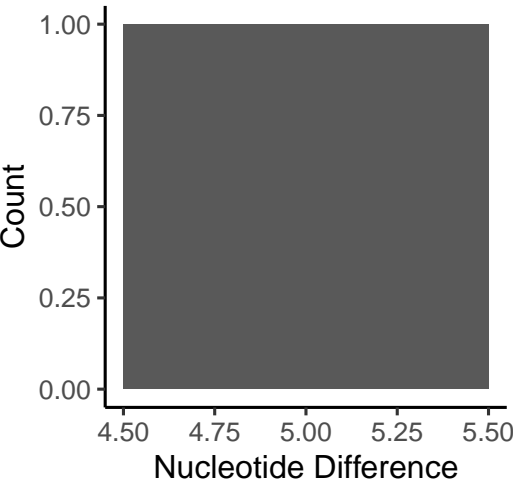
IGHV3-49\*04

109 sequences assigned  
69 (63.3%) exact matches, in which:  
69 unique CDR3  
5 unique J



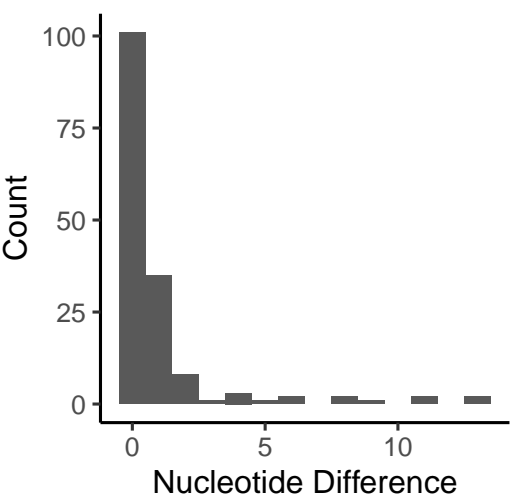
IGHV3-30-3\*03

2 sequences assigned  
No exact matches.



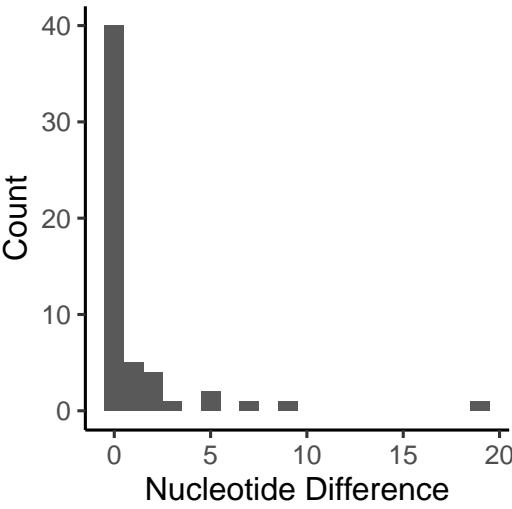
IGHV3-48\*02

161 sequences assigned  
101 (62.7%) exact matches, in which:  
100 unique CDR3  
6 unique J



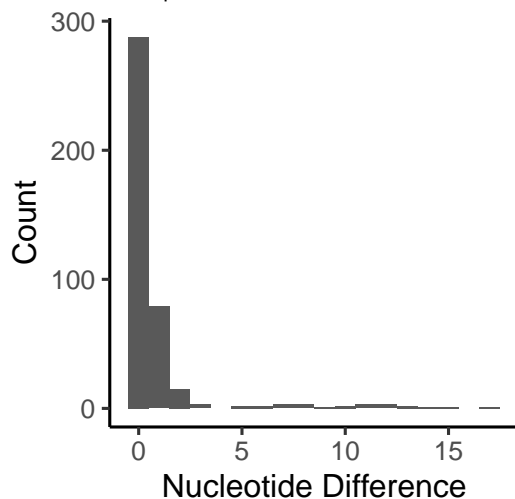
IGHV3-49\*05

55 sequences assigned  
40 (72.7%) exact matches, in which:  
40 unique CDR3  
5 unique J



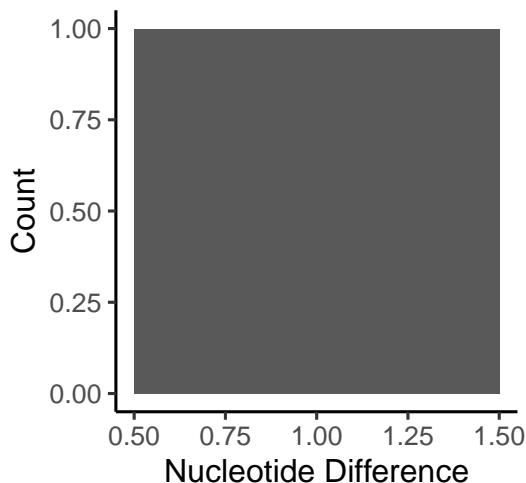
### IGHV3-53\*01

413 sequences assigned  
288 (69.7%) exact matches, in which:  
288 unique CDR3  
6 unique J



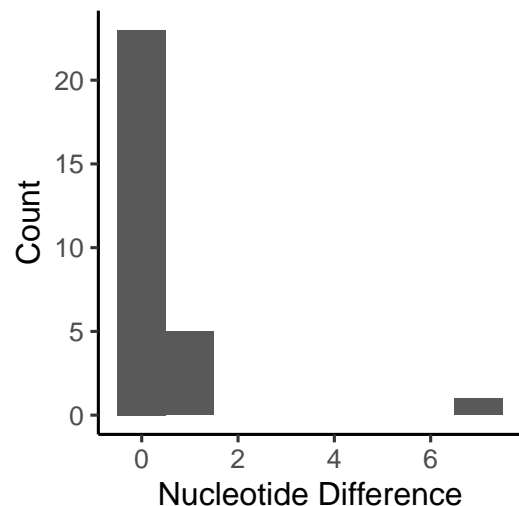
### IGHV3-66\*03

1 sequences assigned  
No exact matches.



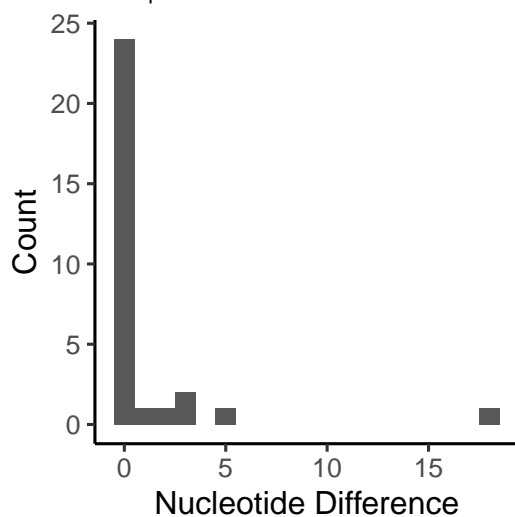
### IGHV3-73\*02

29 sequences assigned  
23 (79.3%) exact matches, in which:  
23 unique CDR3  
4 unique J



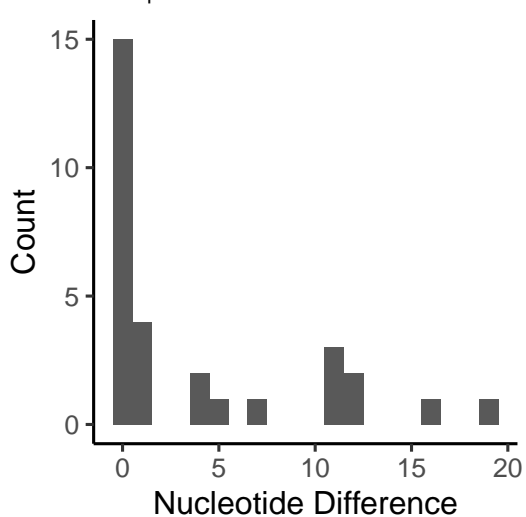
### IGHV3-64\*01

30 sequences assigned  
24 (80%) exact matches, in which:  
24 unique CDR3  
6 unique J



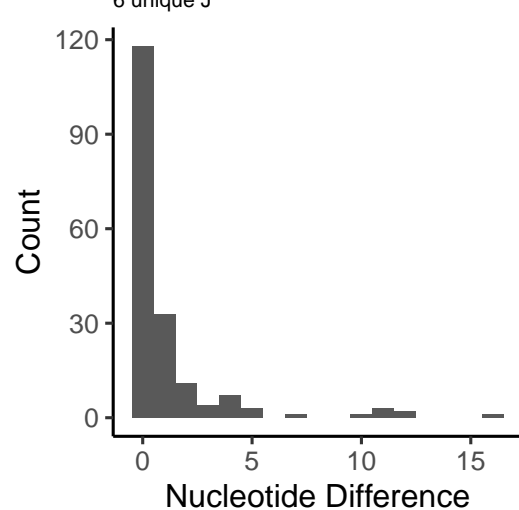
### IGHV3-72\*01

30 sequences assigned  
15 (50%) exact matches, in which:  
15 unique CDR3  
5 unique J



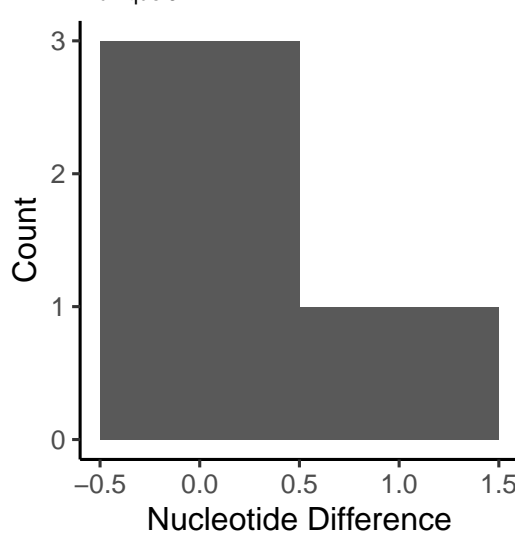
### IGHV3-74\*01

187 sequences assigned  
118 (63.1%) exact matches, in which:  
116 unique CDR3  
6 unique J



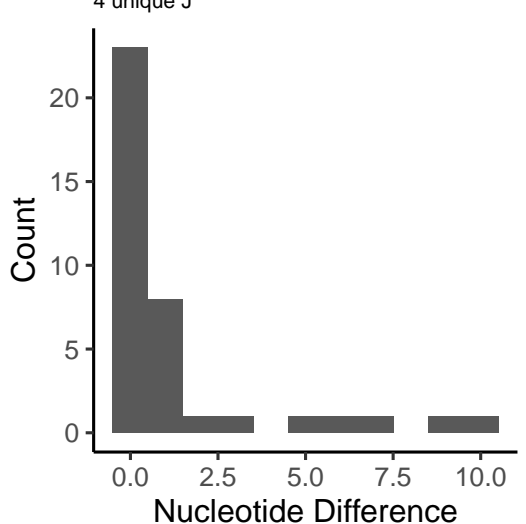
### IGHV3-64\*02

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



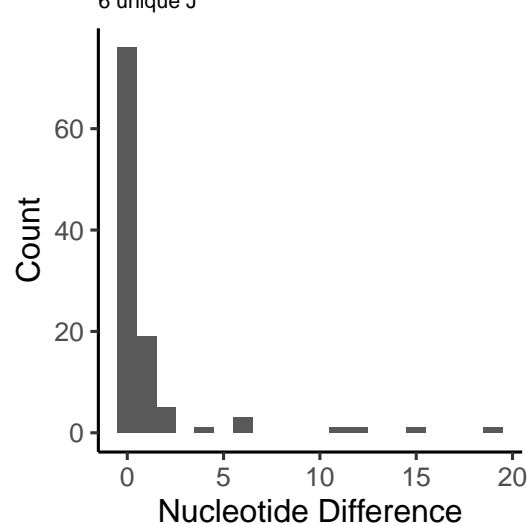
### IGHV3-73\*01

38 sequences assigned  
23 (60.5%) exact matches, in which:  
23 unique CDR3  
4 unique J



### IGHV3-64D\*06

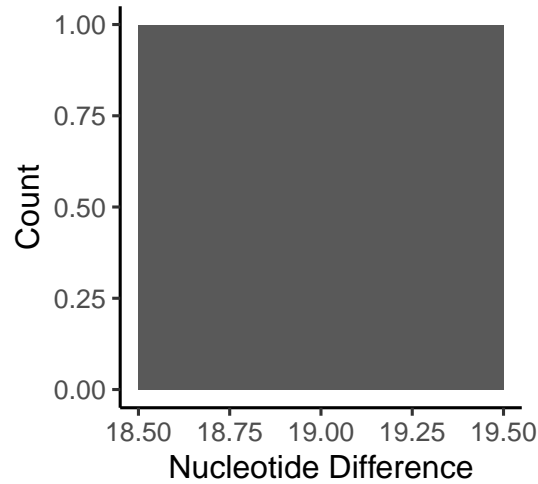
109 sequences assigned  
76 (69.7%) exact matches, in which:  
76 unique CDR3  
6 unique J





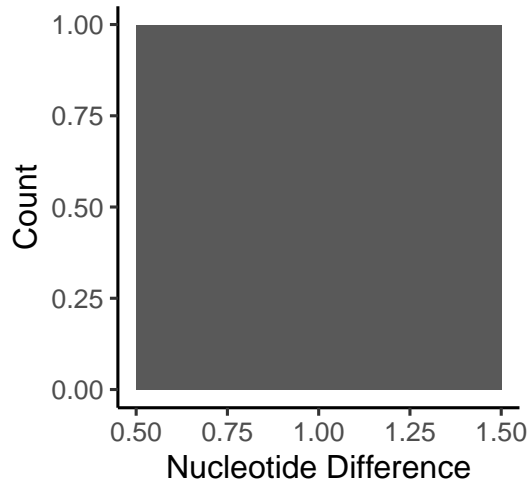
### IGHV3–NL1\*01

1 sequences assigned  
No exact matches.



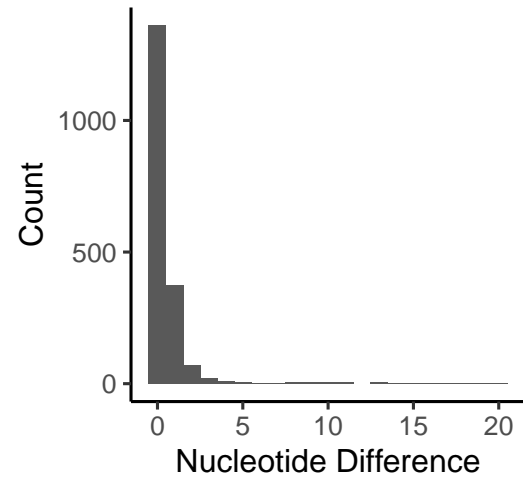
### IGHV4–28\*07

1 sequences assigned  
No exact matches.



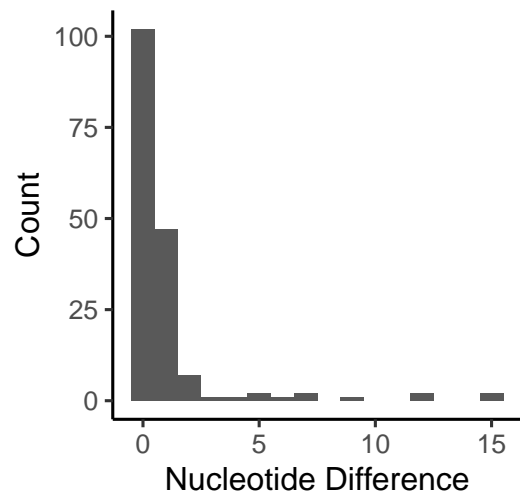
### IGHV4–34\*01

1892 sequences assigned  
1361 (71.9%) exact matches, in which:  
1359 unique CDR3  
6 unique J



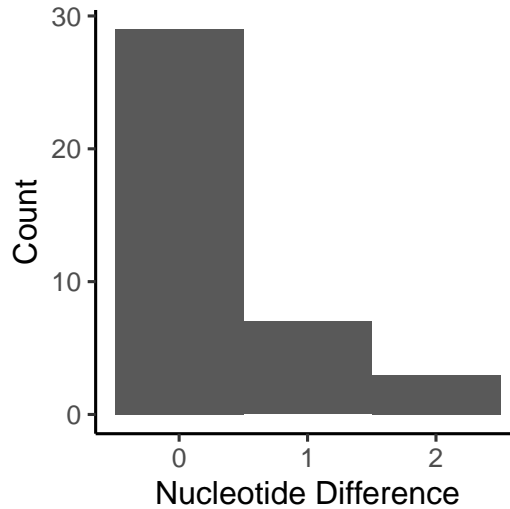
### IGHV4–4\*02

169 sequences assigned  
102 (60.4%) exact matches, in which:  
101 unique CDR3  
5 unique J



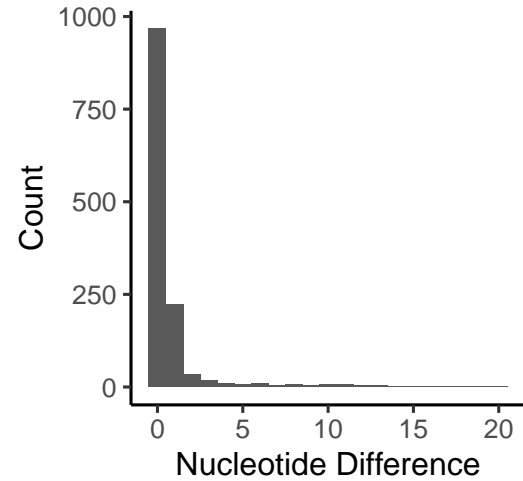
### IGHV4–31\*01

39 sequences assigned  
29 (74.4%) exact matches, in which:  
29 unique CDR3  
6 unique J



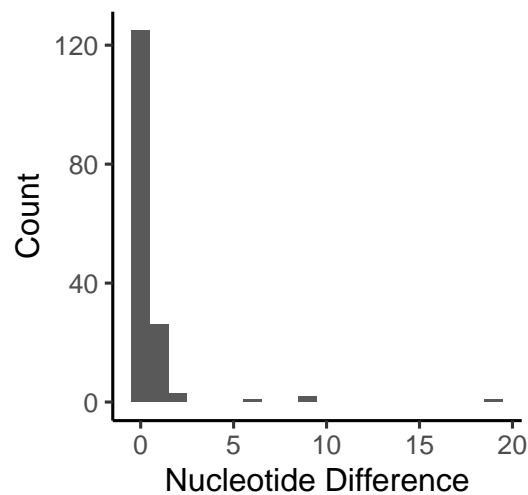
### IGHV4–39\*01

1329 sequences assigned  
967 (72.8%) exact matches, in which:  
967 unique CDR3  
6 unique J



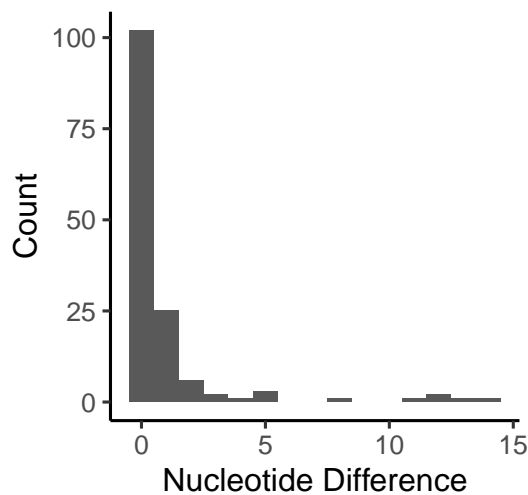
### IGHV4–4\*07

160 sequences assigned  
125 (78.1%) exact matches, in which:  
125 unique CDR3  
6 unique J



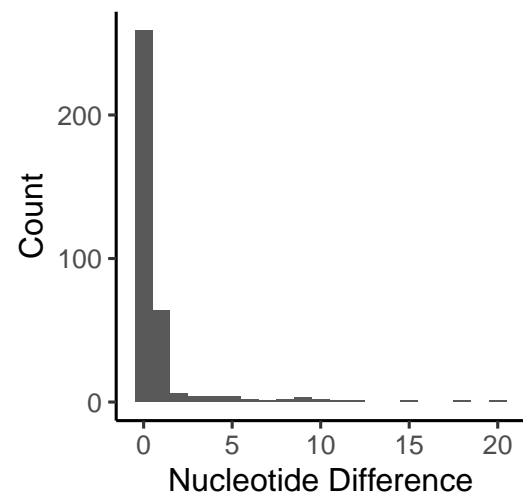
### IGHV4–31\*03

146 sequences assigned  
102 (69.9%) exact matches, in which:  
102 unique CDR3  
5 unique J



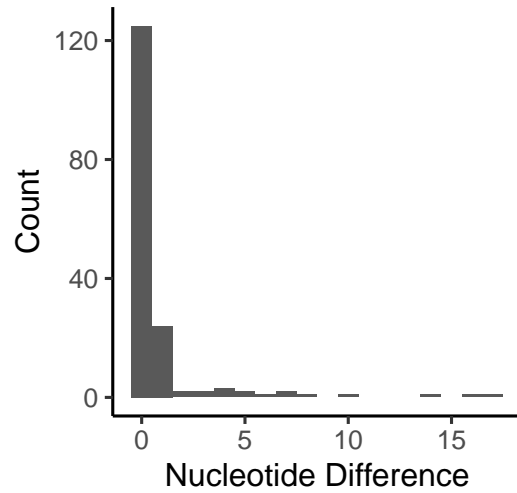
### IGHV4–59\*01

361 sequences assigned  
259 (71.7%) exact matches, in which:  
259 unique CDR3  
6 unique J



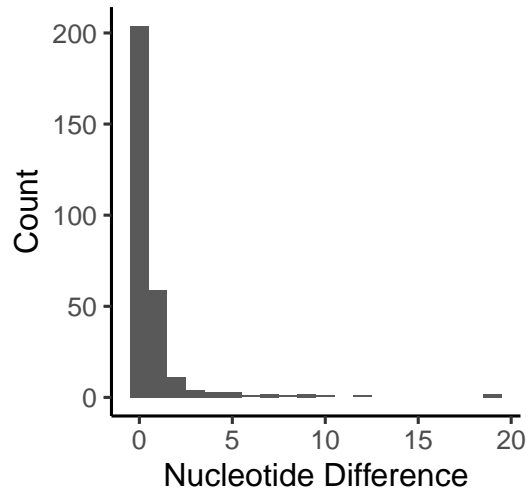
### IGHV4–59\*08

166 sequences assigned  
125 (75.3%) exact matches, in which:  
125 unique CDR3  
6 unique J



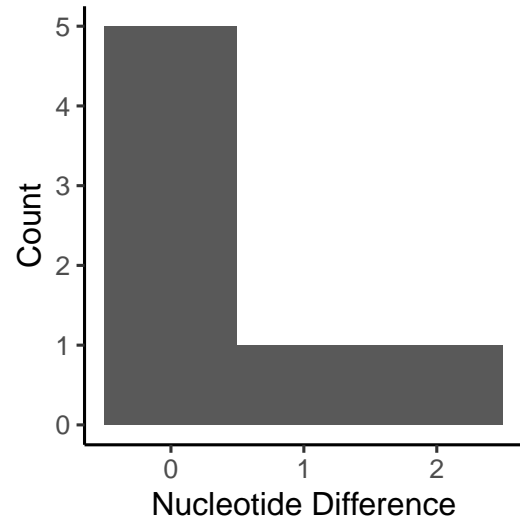
### IGHV5–51\*01

298 sequences assigned  
204 (68.5%) exact matches, in which:  
204 unique CDR3  
6 unique J



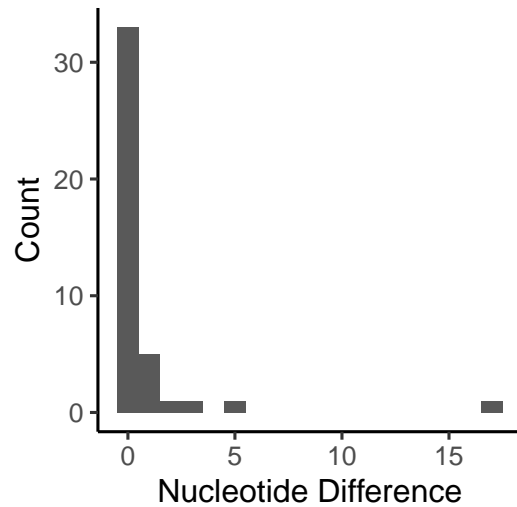
### IGHV7–4–1\*01

7 sequences assigned  
5 (71.4%) exact matches, in which:  
5 unique CDR3  
3 unique J



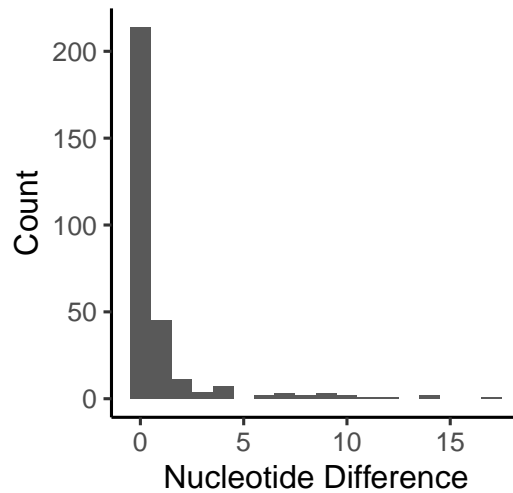
### IGHV4–61\*01

42 sequences assigned  
33 (78.6%) exact matches, in which:  
33 unique CDR3  
4 unique J



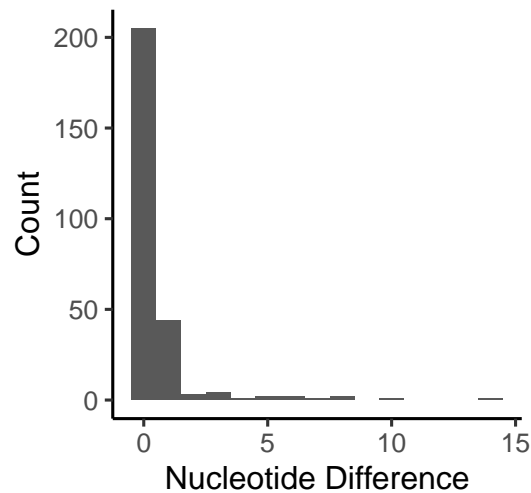
### IGHV5–51\*01\_C45G

301 sequences assigned  
214 (71.1%) exact matches, in which:  
214 unique CDR3  
6 unique J



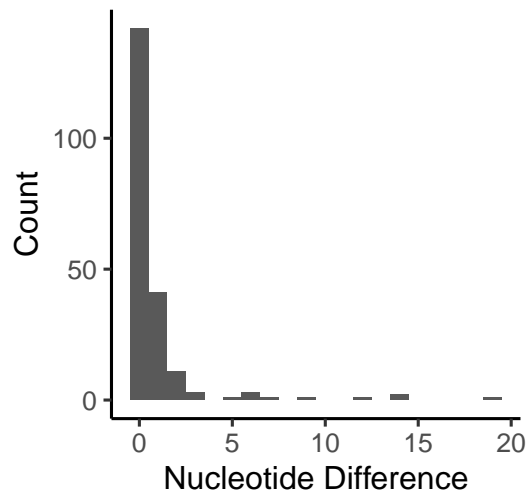
### IGHV5–10–1\*03

267 sequences assigned  
205 (76.8%) exact matches, in which:  
205 unique CDR3  
6 unique J



### IGHV6–1\*01

208 sequences assigned  
142 (68.3%) exact matches, in which:  
142 unique CDR3  
6 unique J





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.