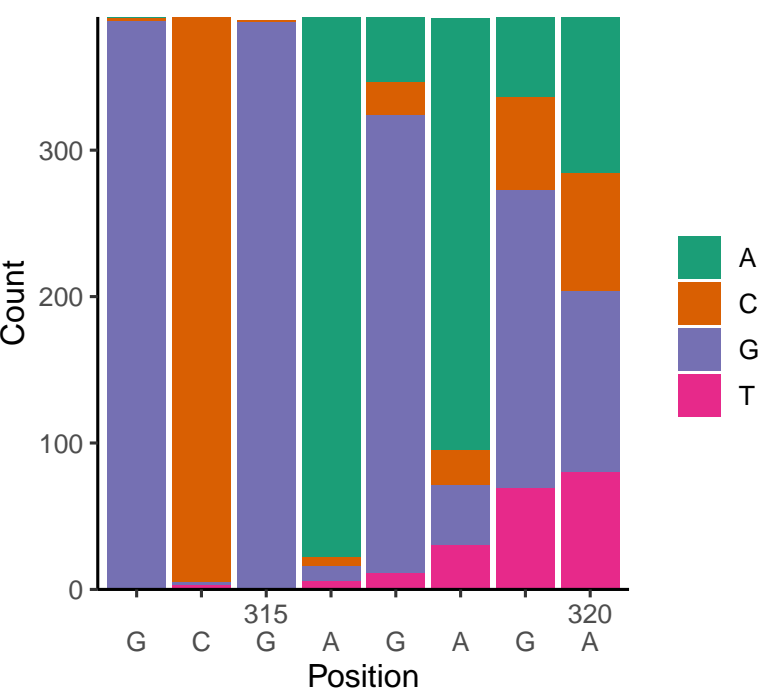


Gene IGHV4-4\*02\_C20T

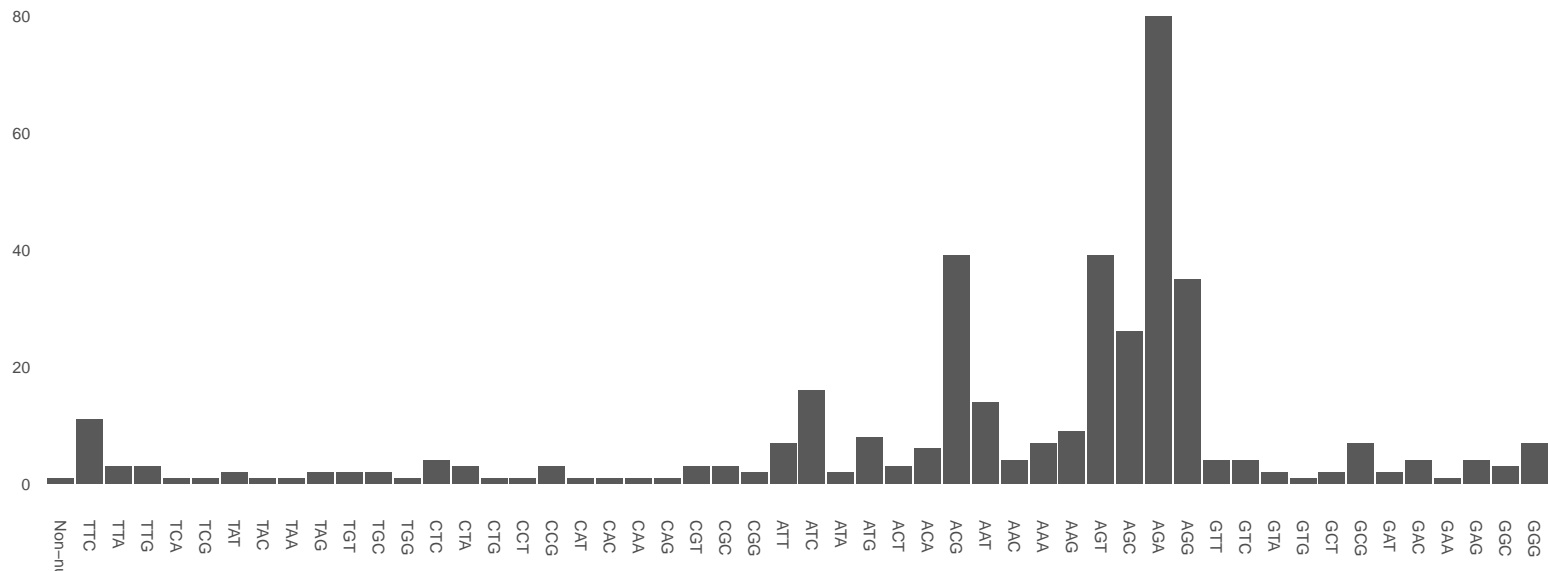


Gene IGHV4-4\*02\_C20T



IGHV4-4\*02\_C20T- Final 3 nucleotides as a triplet

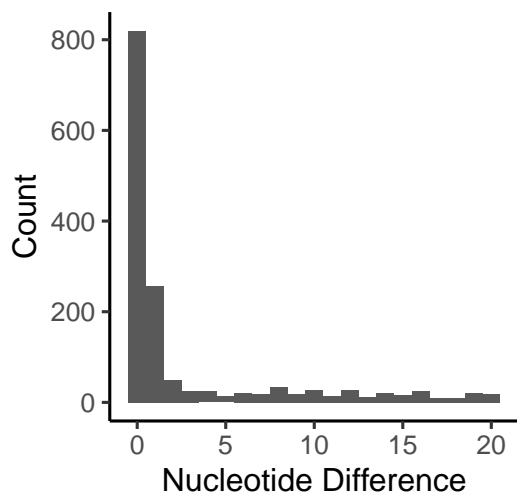
Count



Triplet

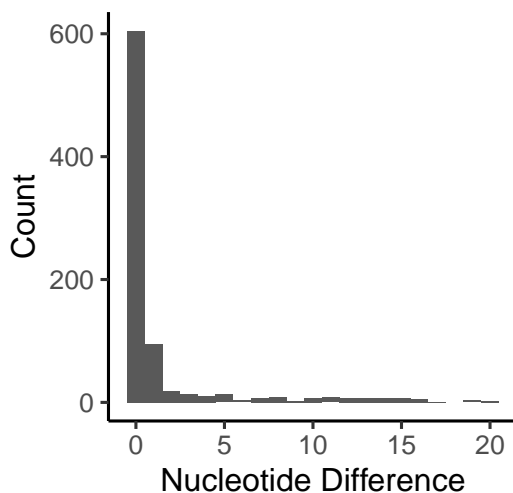
### IGHV1-2\*02

1824 sequences assigned  
820 (45%) exact matches, in which:  
808 unique CDR3  
6 unique J



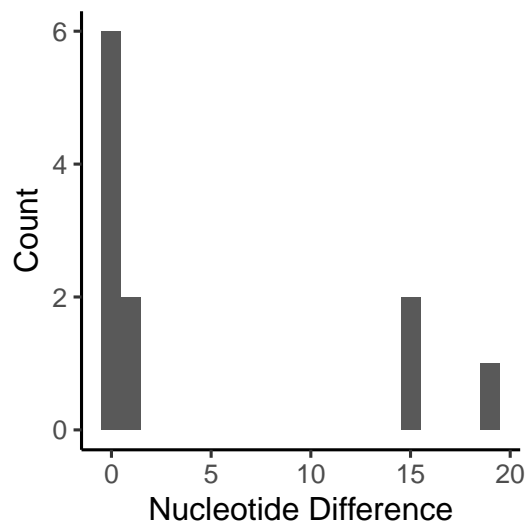
### IGHV1-8\*01

934 sequences assigned  
605 (64.8%) exact matches, in which:  
598 unique CDR3  
7 unique J



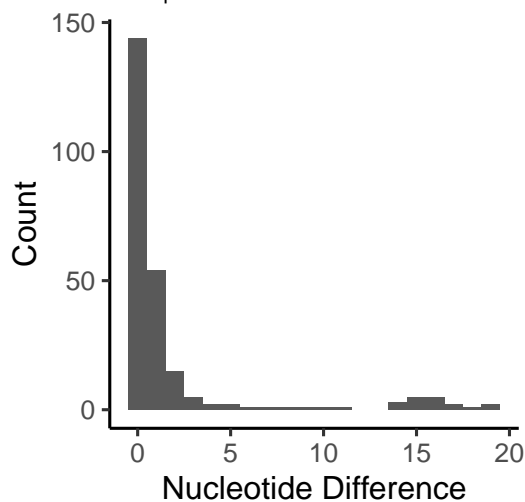
### IGHV1-45\*02

45 sequences assigned  
6 (13.3%) exact matches, in which:  
6 unique CDR3  
3 unique J



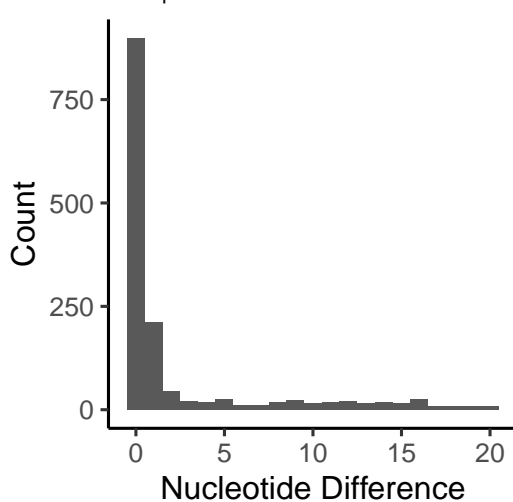
### IGHV1-2\*04

248 sequences assigned  
144 (58.1%) exact matches, in which:  
141 unique CDR3  
6 unique J



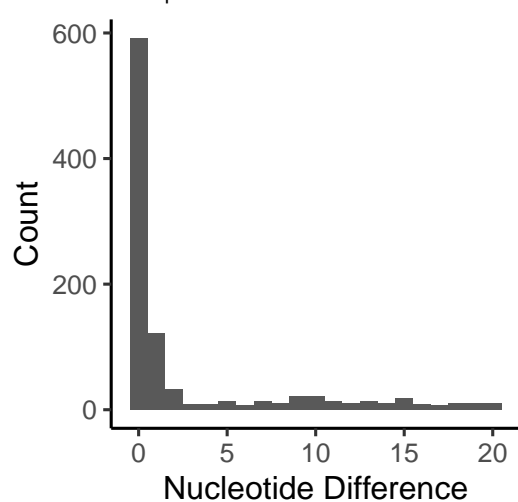
### IGHV1-18\*01

1633 sequences assigned  
899 (55.1%) exact matches, in which:  
890 unique CDR3  
7 unique J



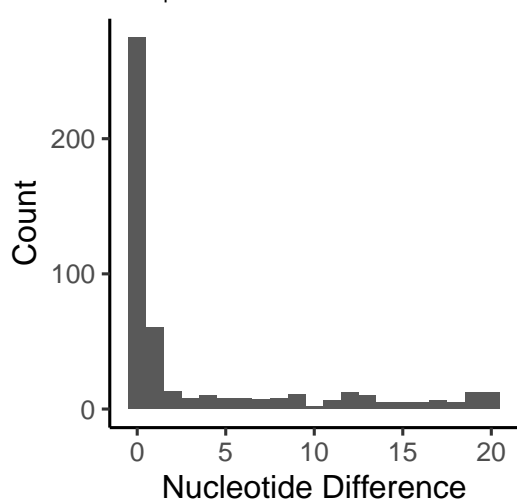
### IGHV1-46\*01

1197 sequences assigned  
592 (49.5%) exact matches, in which:  
583 unique CDR3  
7 unique J



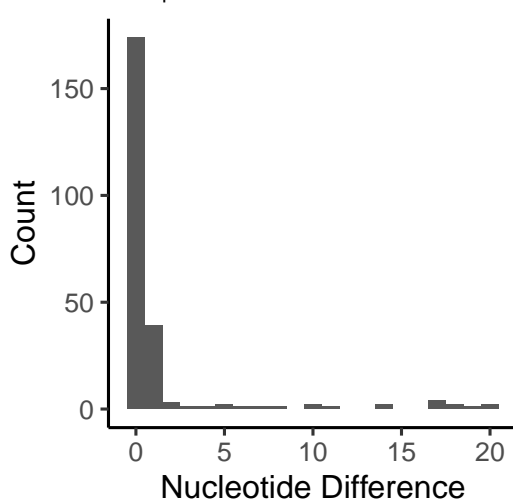
### IGHV1-3\*01

687 sequences assigned  
275 (40%) exact matches, in which:  
273 unique CDR3  
6 unique J



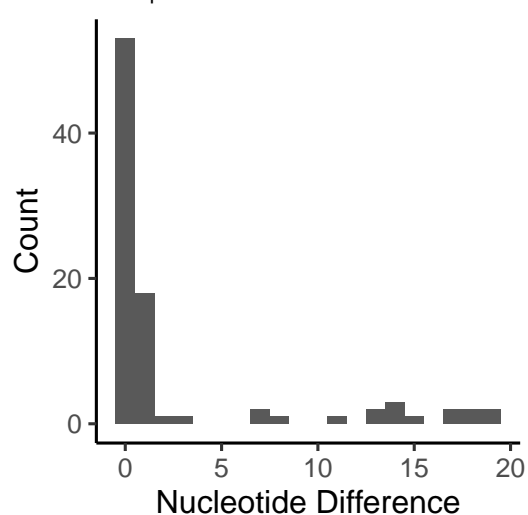
### IGHV1-24\*01

247 sequences assigned  
174 (70.4%) exact matches, in which:  
172 unique CDR3  
7 unique J



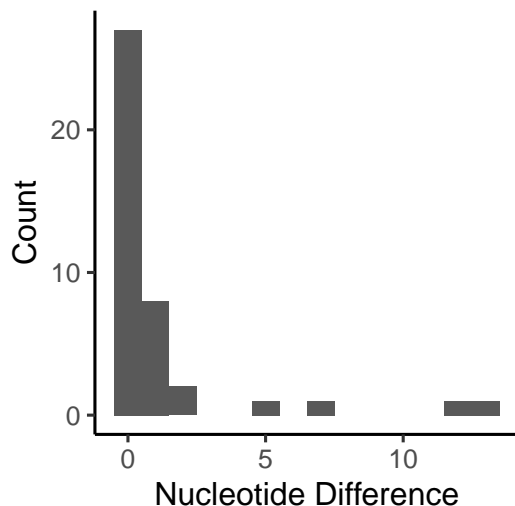
### IGHV1-58\*01

98 sequences assigned  
53 (54.1%) exact matches, in which:  
53 unique CDR3  
5 unique J



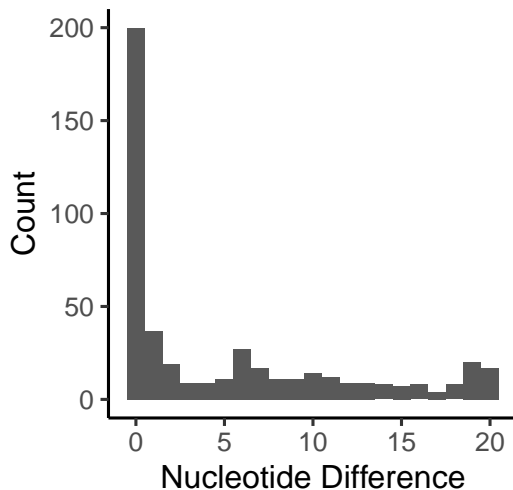
## IGHV1-58\*02

41 sequences assigned  
27 (65.9%) exact matches, in which:  
27 unique CDR3  
5 unique J



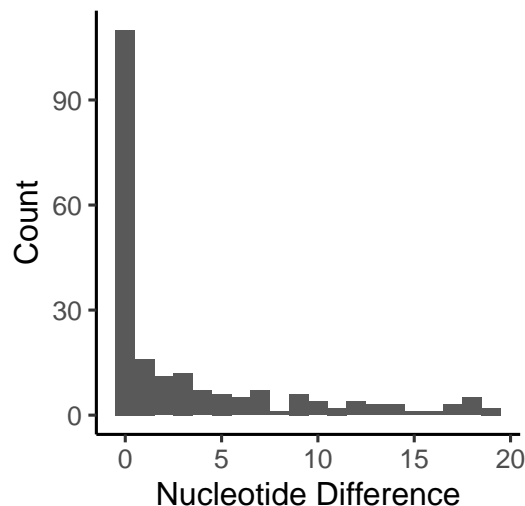
## IGHV2-5\*02

803 sequences assigned  
200 (24.9%) exact matches, in which:  
196 unique CDR3  
6 unique J



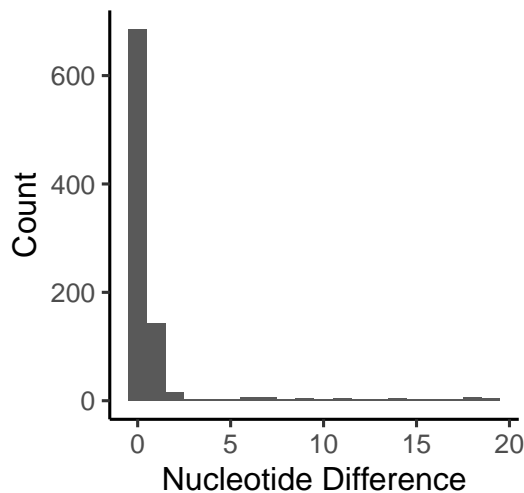
## IGHV2-70\*15

216 sequences assigned  
110 (50.9%) exact matches, in which:  
108 unique CDR3  
5 unique J



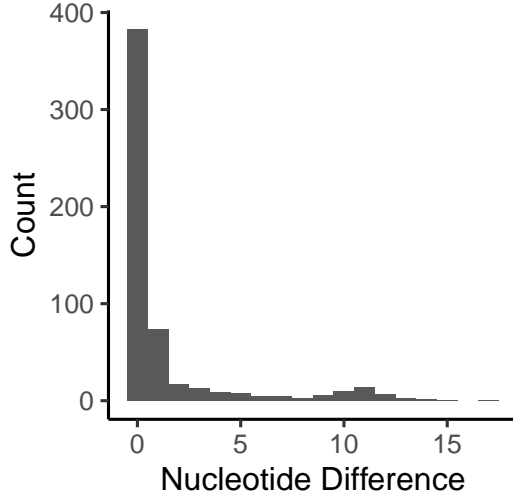
## IGHV1-69\*04

1159 sequences assigned  
686 (59.2%) exact matches, in which:  
678 unique CDR3  
6 unique J



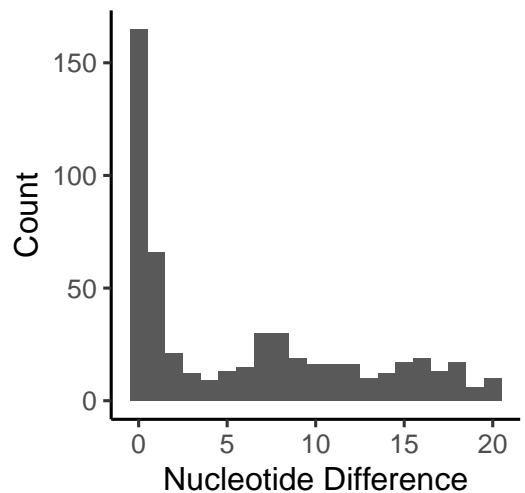
## IGHV2-26\*01

579 sequences assigned  
383 (66.1%) exact matches, in which:  
376 unique CDR3  
7 unique J



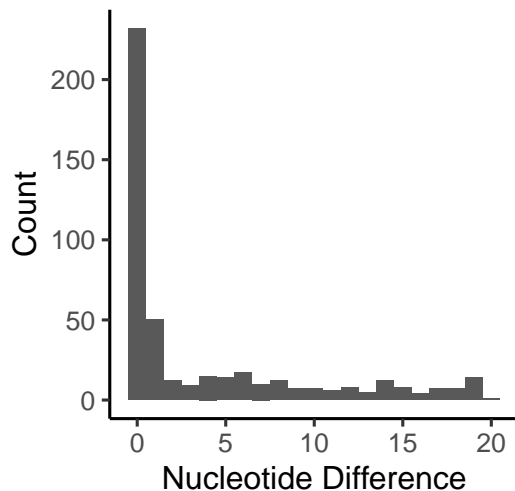
## IGHV3-7\*01

605 sequences assigned  
165 (27.3%) exact matches, in which:  
161 unique CDR3  
6 unique J



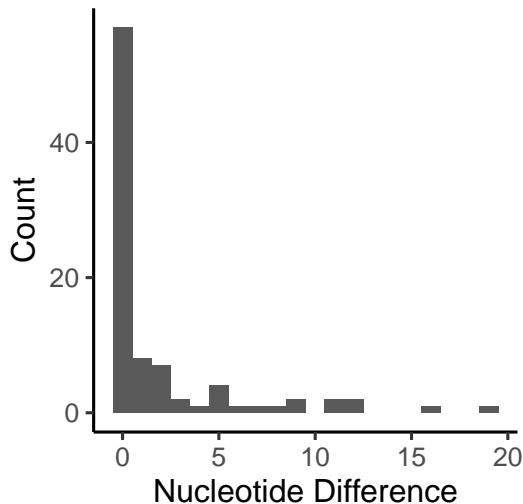
## IGHV2-5\*01

499 sequences assigned  
232 (46.5%) exact matches, in which:  
229 unique CDR3  
6 unique J



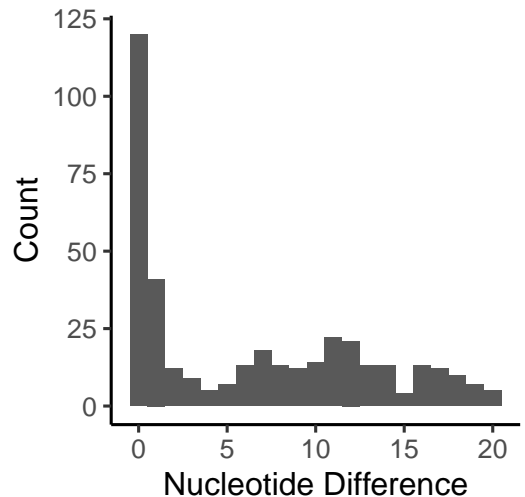
## IGHV2-70\*01

95 sequences assigned  
57 (60%) exact matches, in which:  
57 unique CDR3  
5 unique J



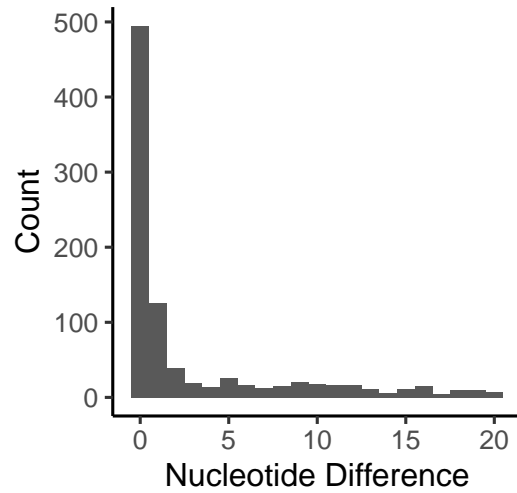
## IGHV3-7\*03

447 sequences assigned  
120 (26.8%) exact matches, in which:  
120 unique CDR3  
5 unique J



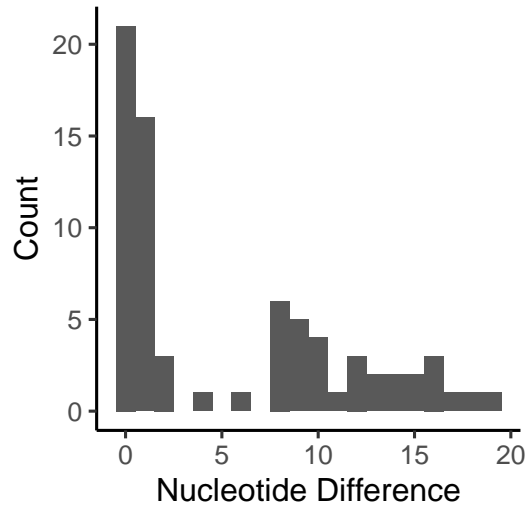
### IGHV3-9\*01

1032 sequences assigned  
495 (48%) exact matches, in which:  
489 unique CDR3  
6 unique J



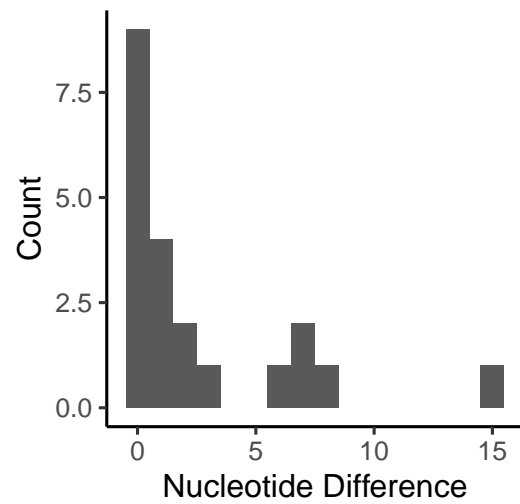
### IGHV3-13\*01

75 sequences assigned  
21 (28%) exact matches, in which:  
21 unique CDR3  
5 unique J



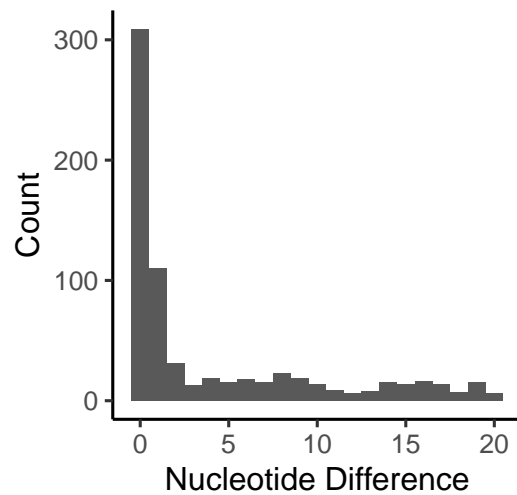
### IGHV3-20\*01

21 sequences assigned  
9 (42.9%) exact matches, in which:  
9 unique CDR3  
3 unique J



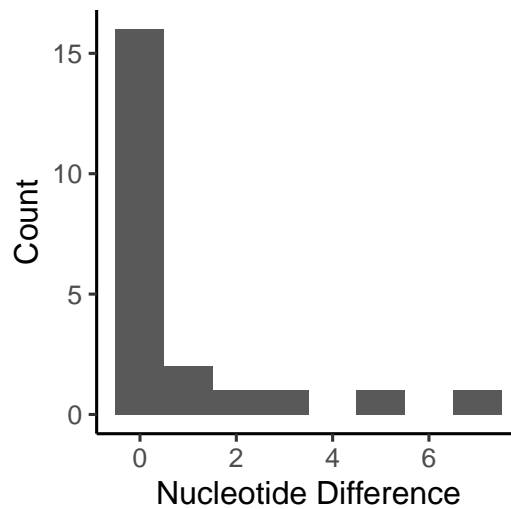
### IGHV3-11\*01

743 sequences assigned  
309 (41.6%) exact matches, in which:  
305 unique CDR3  
7 unique J



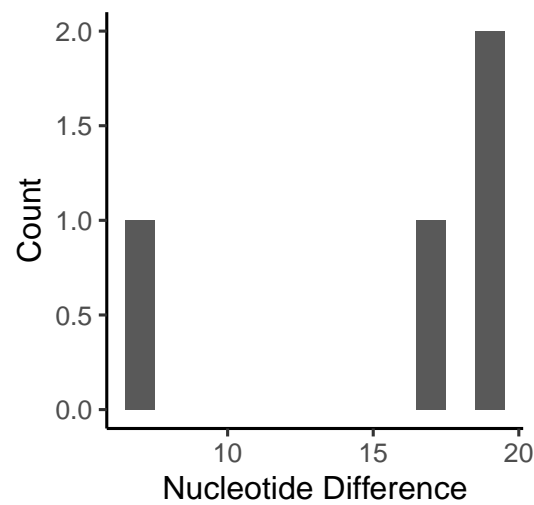
### IGHV3-13\*05

22 sequences assigned  
16 (72.7%) exact matches, in which:  
16 unique CDR3  
6 unique J



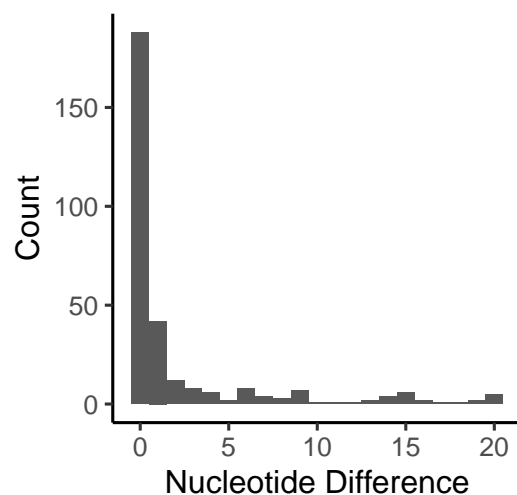
### IGHV3-20\*04

10 sequences assigned  
No exact matches.



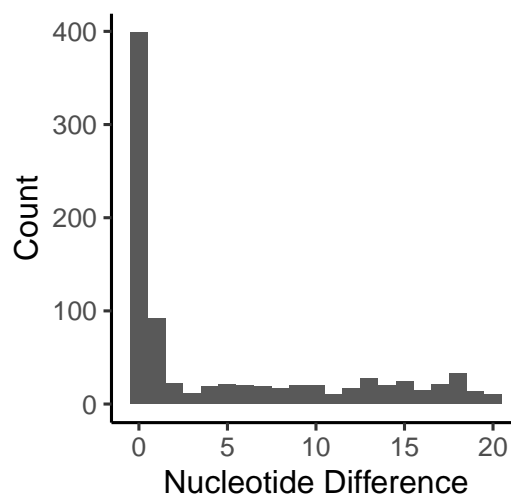
### IGHV3-11\*06

332 sequences assigned  
188 (56.6%) exact matches, in which:  
185 unique CDR3  
6 unique J



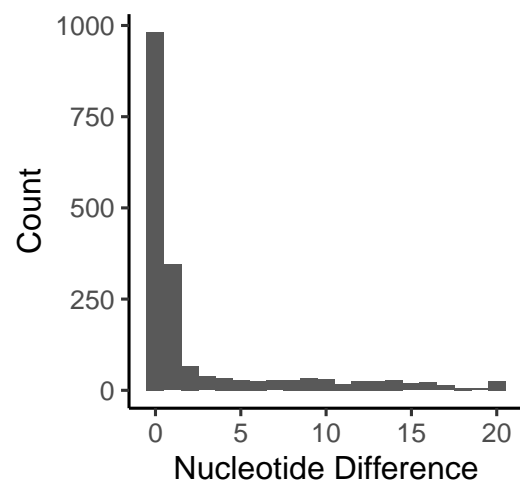
### IGHV3-15\*01

994 sequences assigned  
399 (40.1%) exact matches, in which:  
393 unique CDR3  
7 unique J



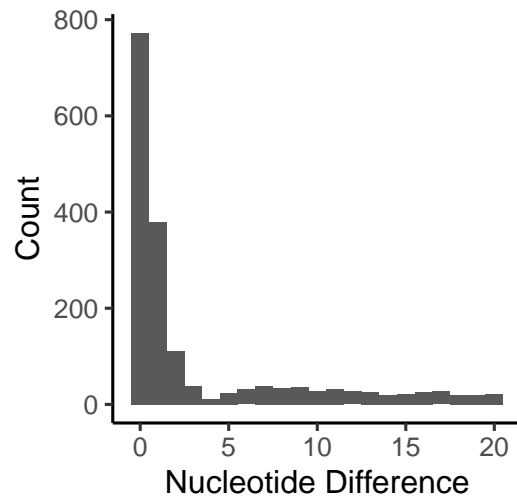
### IGHV3-21\*01

1960 sequences assigned  
982 (50.1%) exact matches, in which:  
964 unique CDR3  
7 unique J



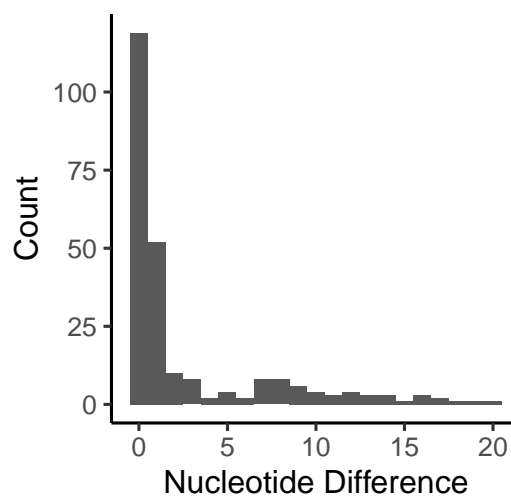
### IGHV3-30-3\*01

2812 sequences assigned  
773 (27.5%) exact matches, in which:  
764 unique CDR3  
7 unique J



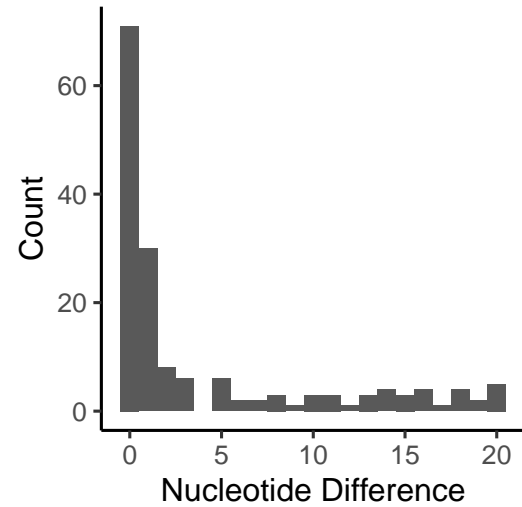
### IGHV3-43\*02

271 sequences assigned  
119 (43.9%) exact matches, in which:  
119 unique CDR3  
6 unique J



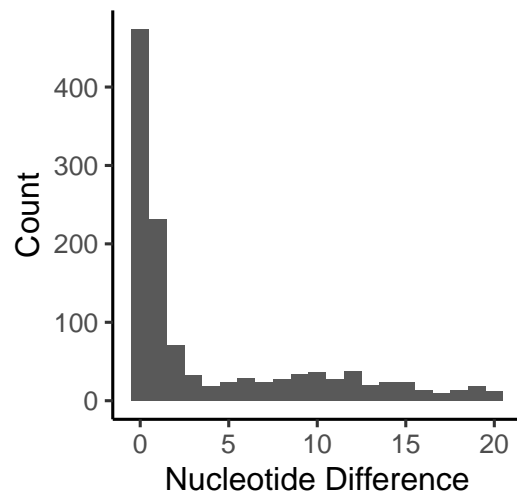
### IGHV3-49\*04

216 sequences assigned  
71 (32.9%) exact matches, in which:  
65 unique CDR3  
5 unique J



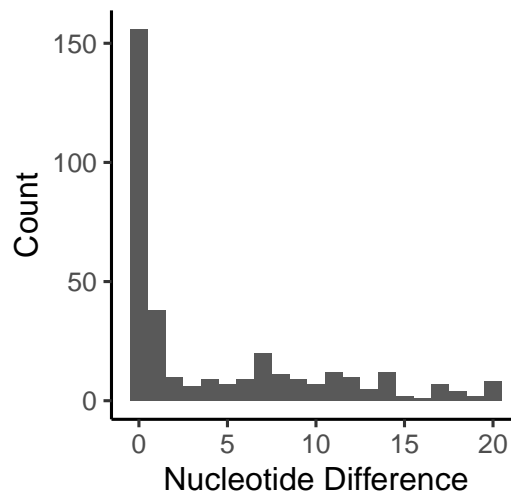
### IGHV3-33\*01

1417 sequences assigned  
474 (33.5%) exact matches, in which:  
473 unique CDR3  
7 unique J



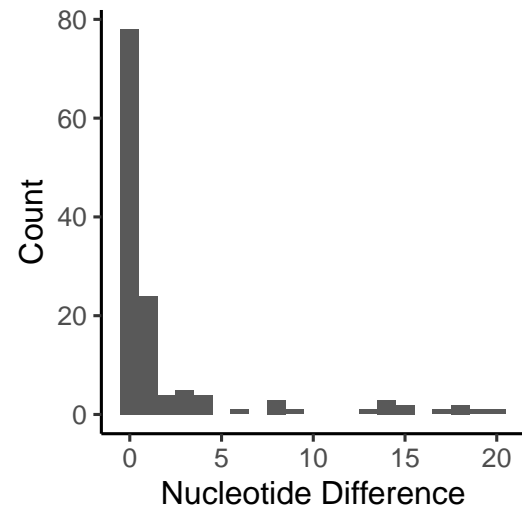
### IGHV3-48\*02

374 sequences assigned  
156 (41.7%) exact matches, in which:  
155 unique CDR3  
6 unique J



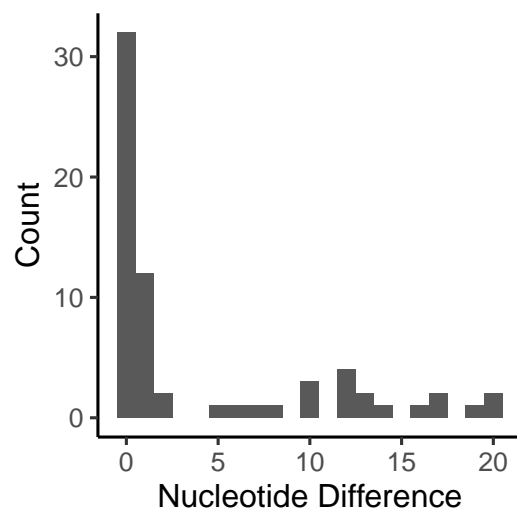
### IGHV3-49\*05

185 sequences assigned  
78 (42.2%) exact matches, in which:  
78 unique CDR3  
6 unique J



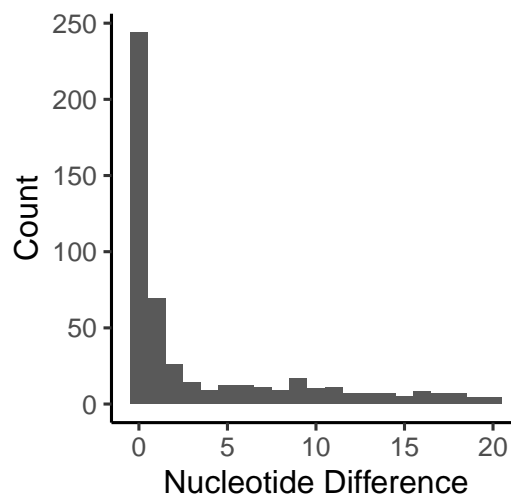
### IGHV3-43\*01

81 sequences assigned  
32 (39.5%) exact matches, in which:  
32 unique CDR3  
5 unique J



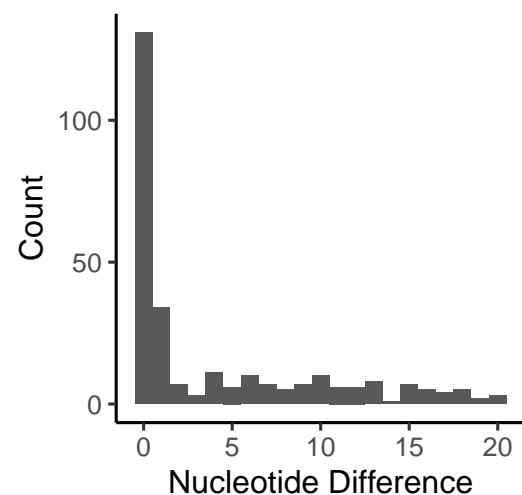
### IGHV3-48\*03

546 sequences assigned  
244 (44.7%) exact matches, in which:  
244 unique CDR3  
6 unique J



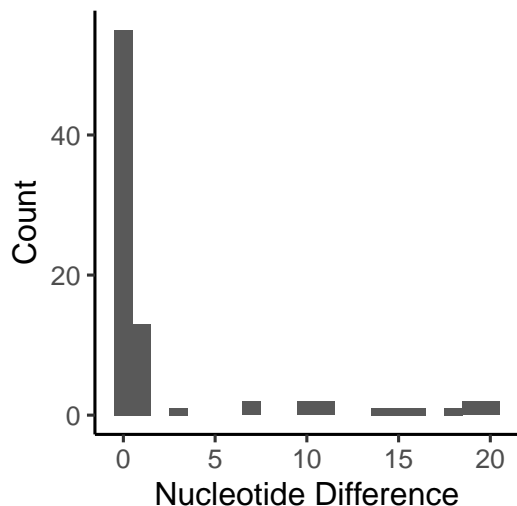
### IGHV3-53\*01

377 sequences assigned  
131 (34.7%) exact matches, in which:  
129 unique CDR3  
6 unique J



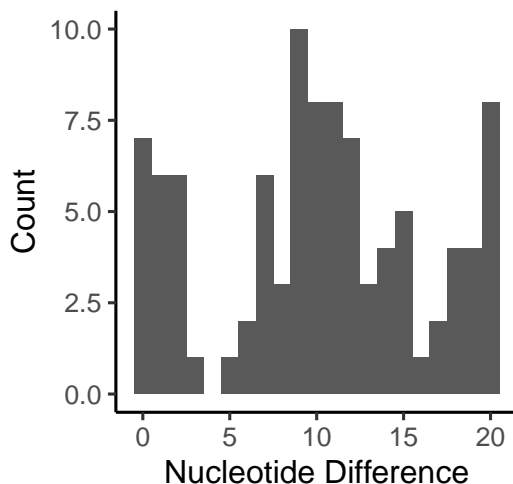
### IGHV3-53\*04

84 sequences assigned  
55 (65.5%) exact matches, in which:  
54 unique CDR3  
5 unique J



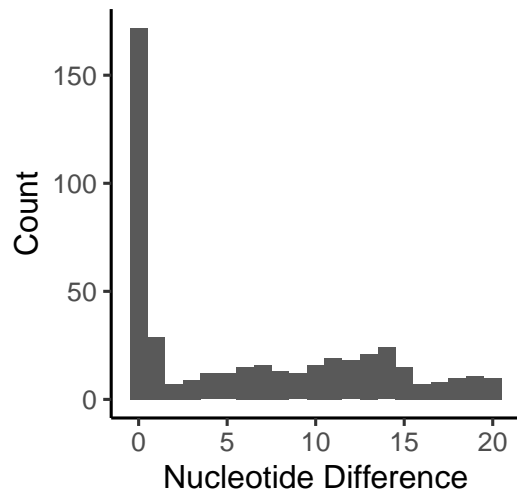
### IGHV3-72\*01

116 sequences assigned  
7 (6%) exact matches, in which:  
7 unique CDR3  
3 unique J



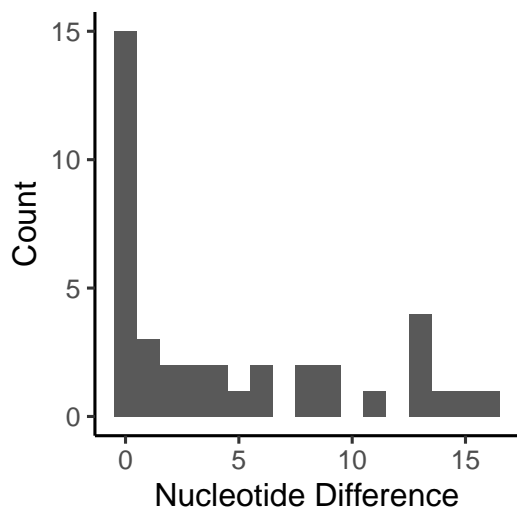
### IGHV3-74\*01

556 sequences assigned  
172 (30.9%) exact matches, in which:  
170 unique CDR3  
7 unique J



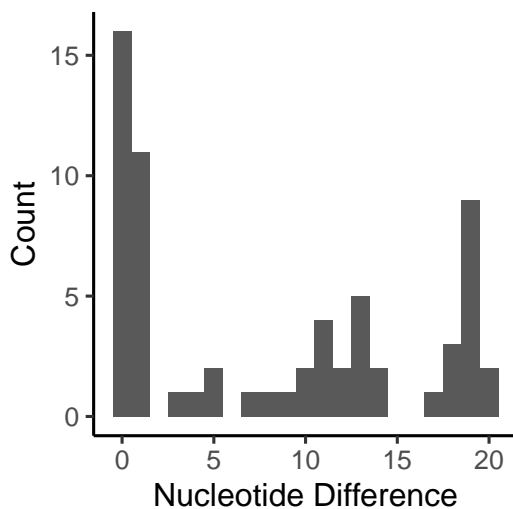
### IGHV3-64\*01

55 sequences assigned  
15 (27.3%) exact matches, in which:  
15 unique CDR3  
3 unique J



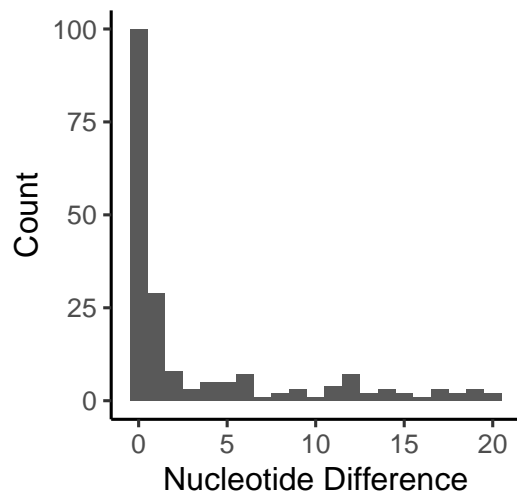
### IGHV3-73\*01

92 sequences assigned  
16 (17.4%) exact matches, in which:  
16 unique CDR3  
4 unique J



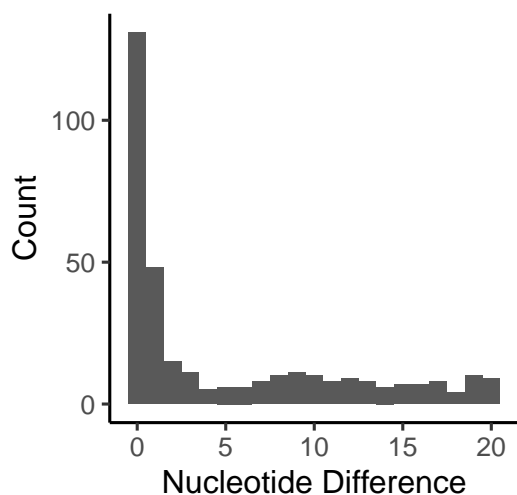
### IGHV3-64D\*06

217 sequences assigned  
100 (46.1%) exact matches, in which:  
100 unique CDR3  
6 unique J



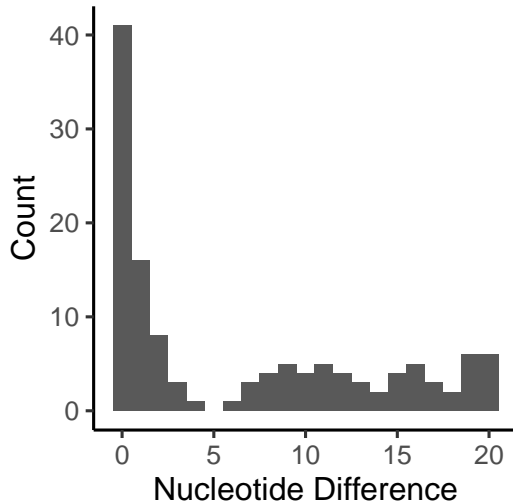
### IGHV3-66\*01

374 sequences assigned  
131 (35%) exact matches, in which:  
130 unique CDR3  
6 unique J



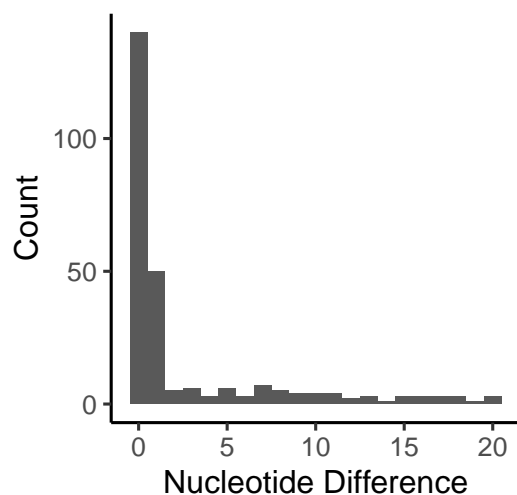
### IGHV3-73\*02

145 sequences assigned  
41 (28.3%) exact matches, in which:  
39 unique CDR3  
5 unique J



### IGHV4-4\*07

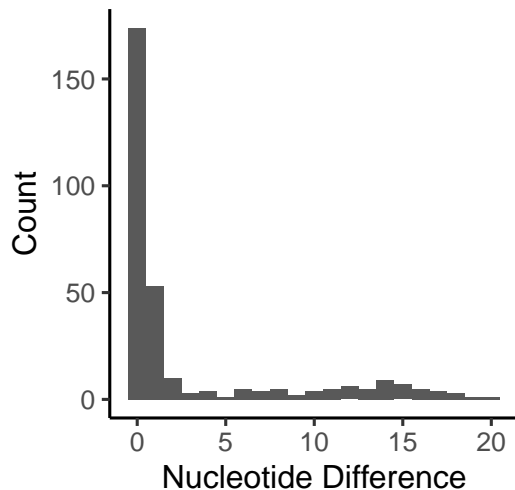
286 sequences assigned  
140 (49%) exact matches, in which:  
139 unique CDR3  
5 unique J





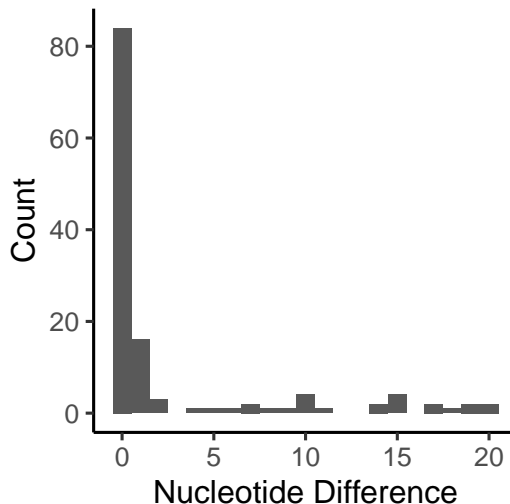
### IGHV4-4\*02\_C20T

391 sequences assigned  
174 (44.5%) exact matches, in which:  
171 unique CDR3  
6 unique J



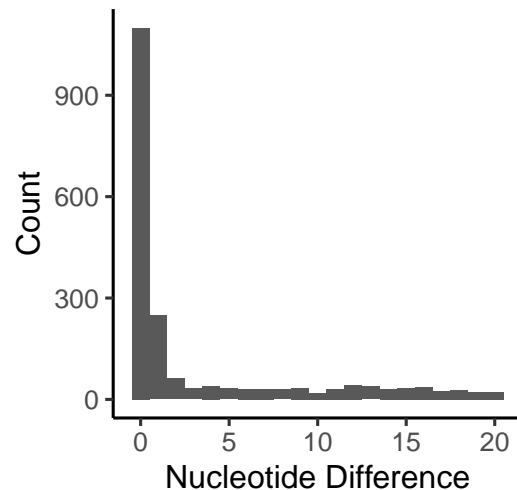
### IGHV4-30-2\*01

139 sequences assigned  
84 (60.4%) exact matches, in which:  
84 unique CDR3  
6 unique J



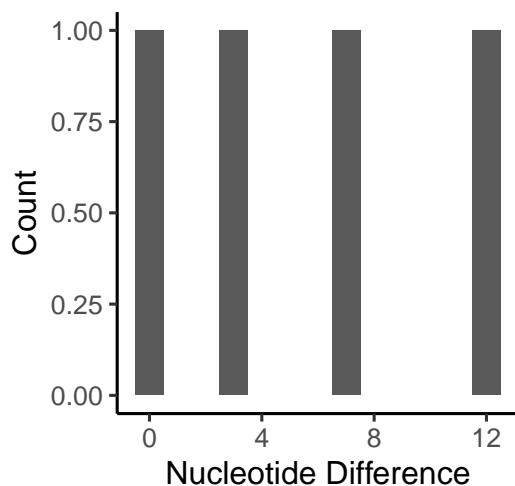
### IGHV4-39\*01

2360 sequences assigned  
1100 (46.6%) exact matches, in which:  
1088 unique CDR3  
7 unique J



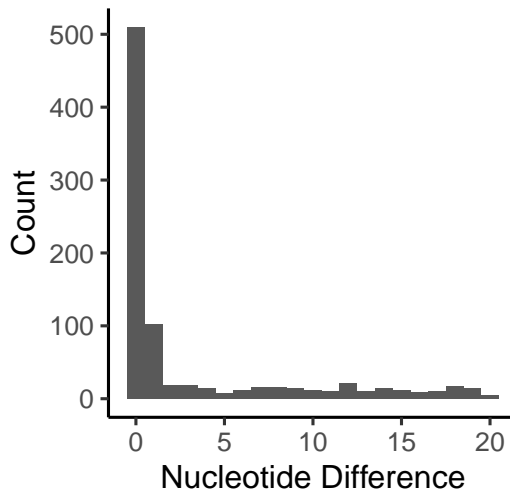
### IGHV4-28\*01

4 sequences assigned  
1 (25%) exact matches, in which:  
1 unique CDR3  
1 unique J



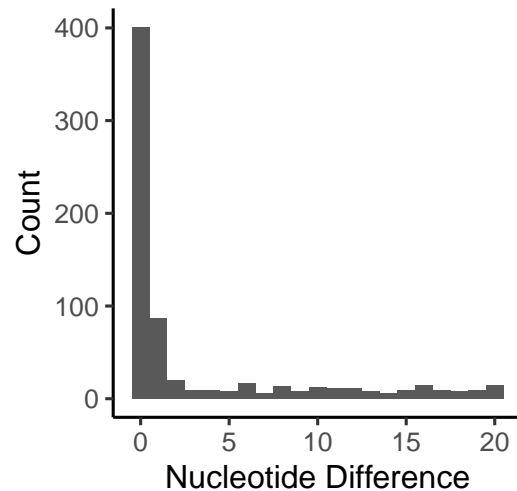
### IGHV4-31\*03

988 sequences assigned  
510 (51.6%) exact matches, in which:  
509 unique CDR3  
7 unique J



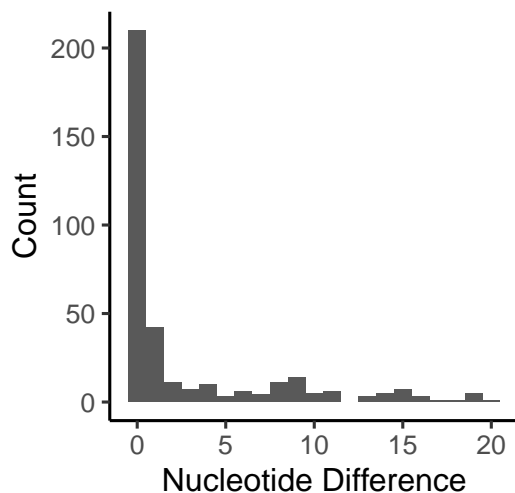
### IGHV4-59\*01

815 sequences assigned  
401 (49.2%) exact matches, in which:  
398 unique CDR3  
7 unique J



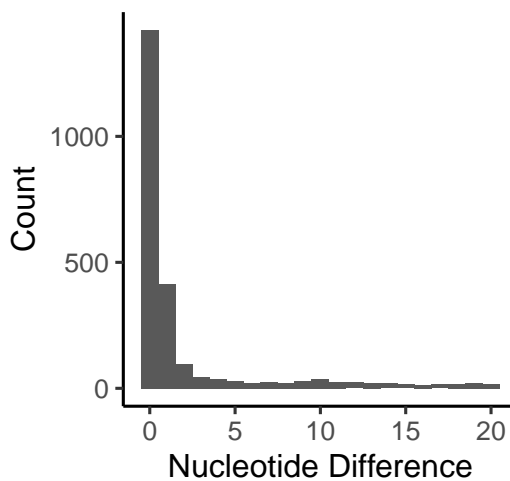
### IGHV4-30-4\*01

399 sequences assigned  
210 (52.6%) exact matches, in which:  
207 unique CDR3  
5 unique J



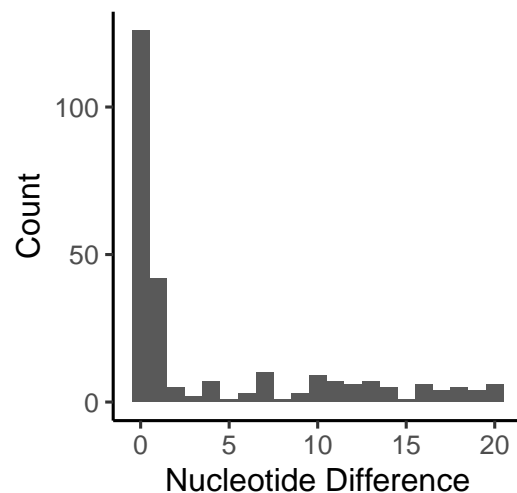
### IGHV4-34\*01

2674 sequences assigned  
1422 (53.2%) exact matches, in which:  
1394 unique CDR3  
7 unique J



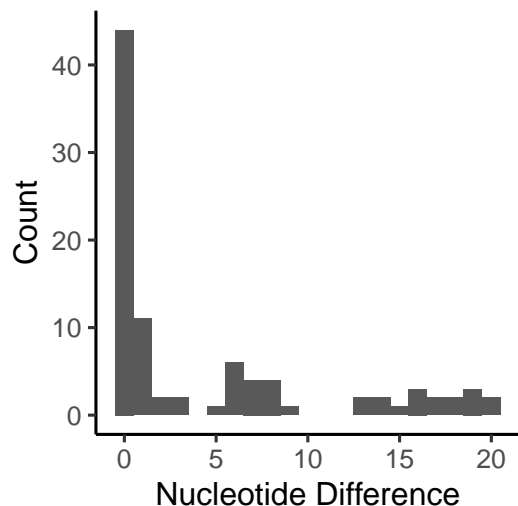
### IGHV4-59\*08

308 sequences assigned  
126 (40.9%) exact matches, in which:  
122 unique CDR3  
6 unique J



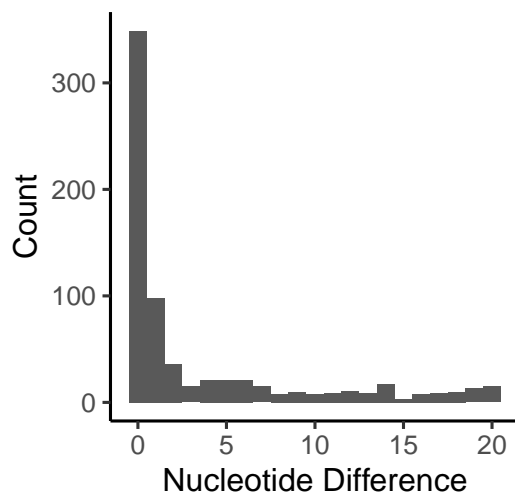
## IGHV4-61\*01

109 sequences assigned  
44 (40.4%) exact matches, in which:  
44 unique CDR3  
5 unique J



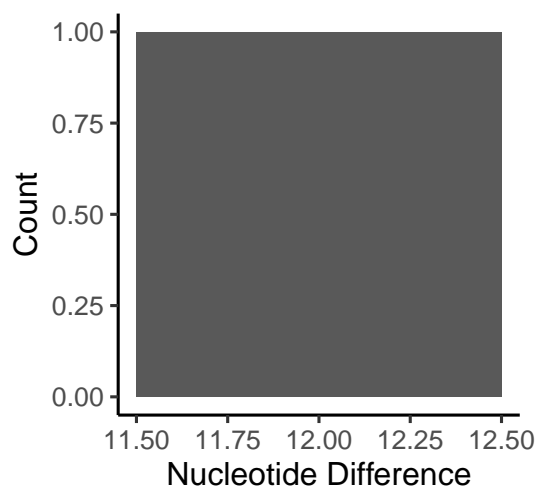
## IGHV5-51\*01

858 sequences assigned  
349 (40.7%) exact matches, in which:  
343 unique CDR3  
6 unique J



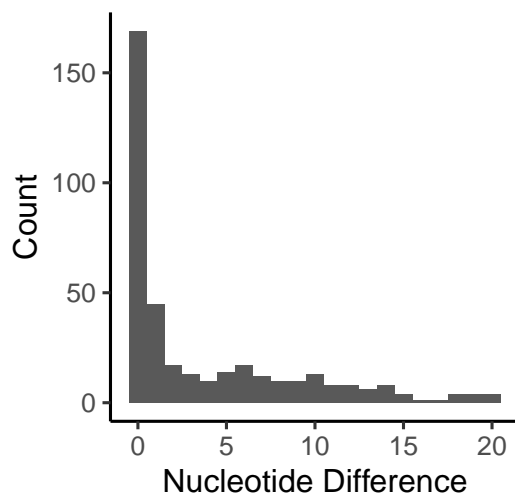
## IGHV1/OR15-9\*01

1 sequences assigned  
No exact matches.



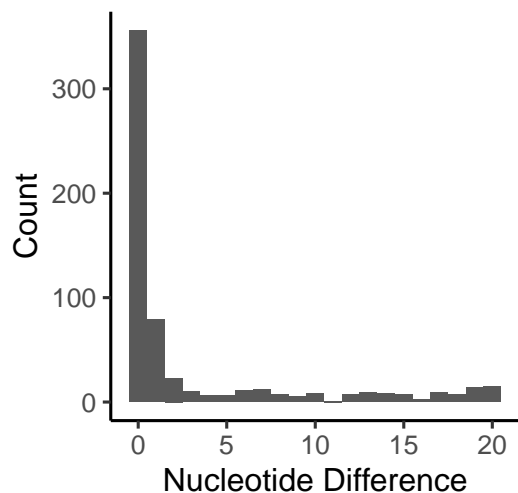
## IGHV6-1\*01

396 sequences assigned  
169 (42.7%) exact matches, in which:  
168 unique CDR3  
7 unique J



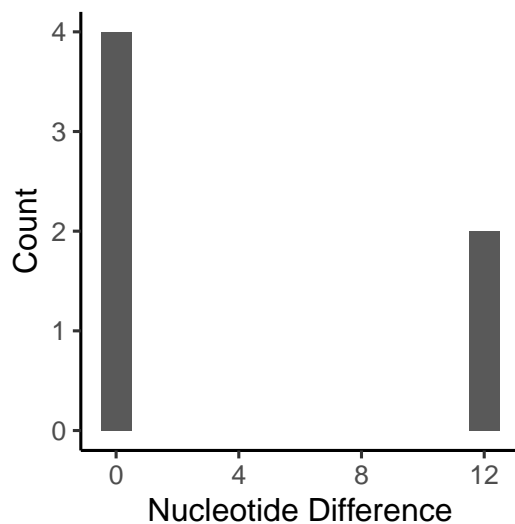
## IGHV5-10-1\*03

705 sequences assigned  
356 (50.5%) exact matches, in which:  
354 unique CDR3  
6 unique J

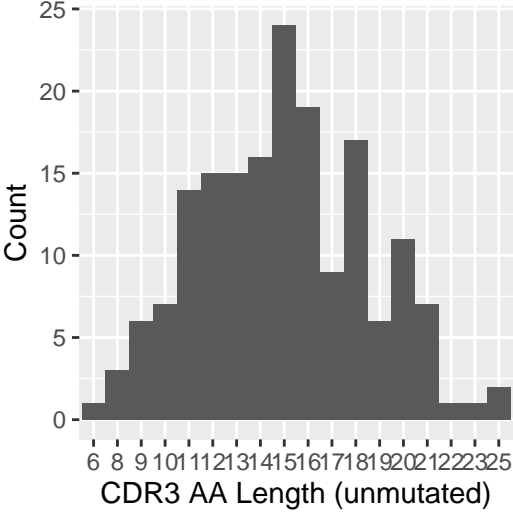


## IGHV7-4-1\*01

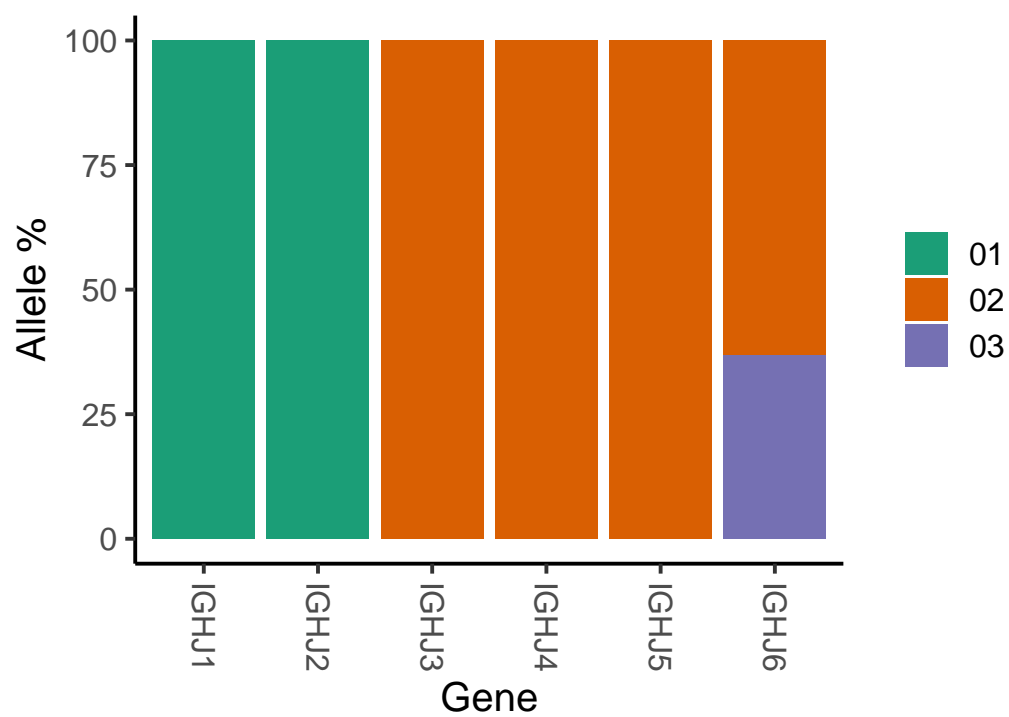
6 sequences assigned  
4 (66.7%) exact matches, in which:  
4 unique CDR3  
3 unique J



IGHV4-4\*02\_C20T



Allele Usage



## Sequence Count byIGHJ6 allele usage

