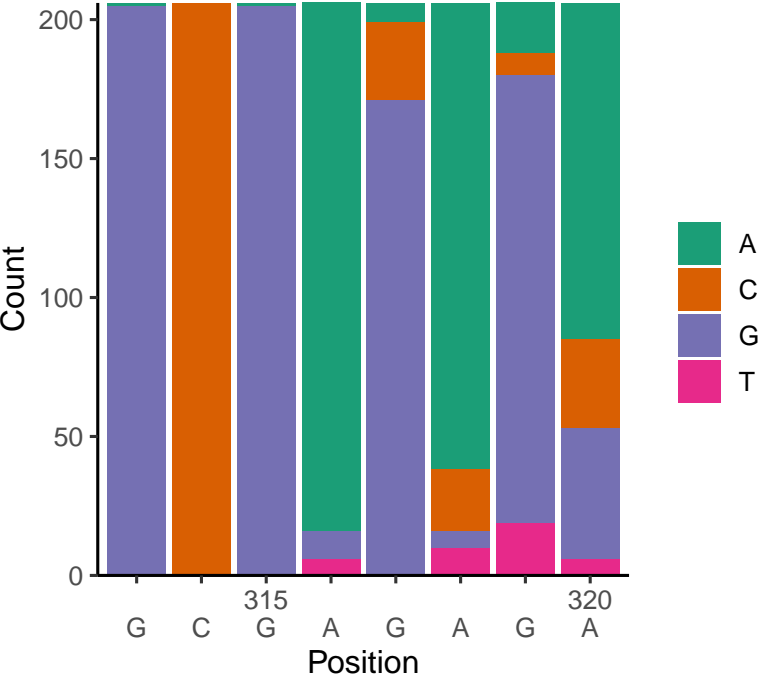
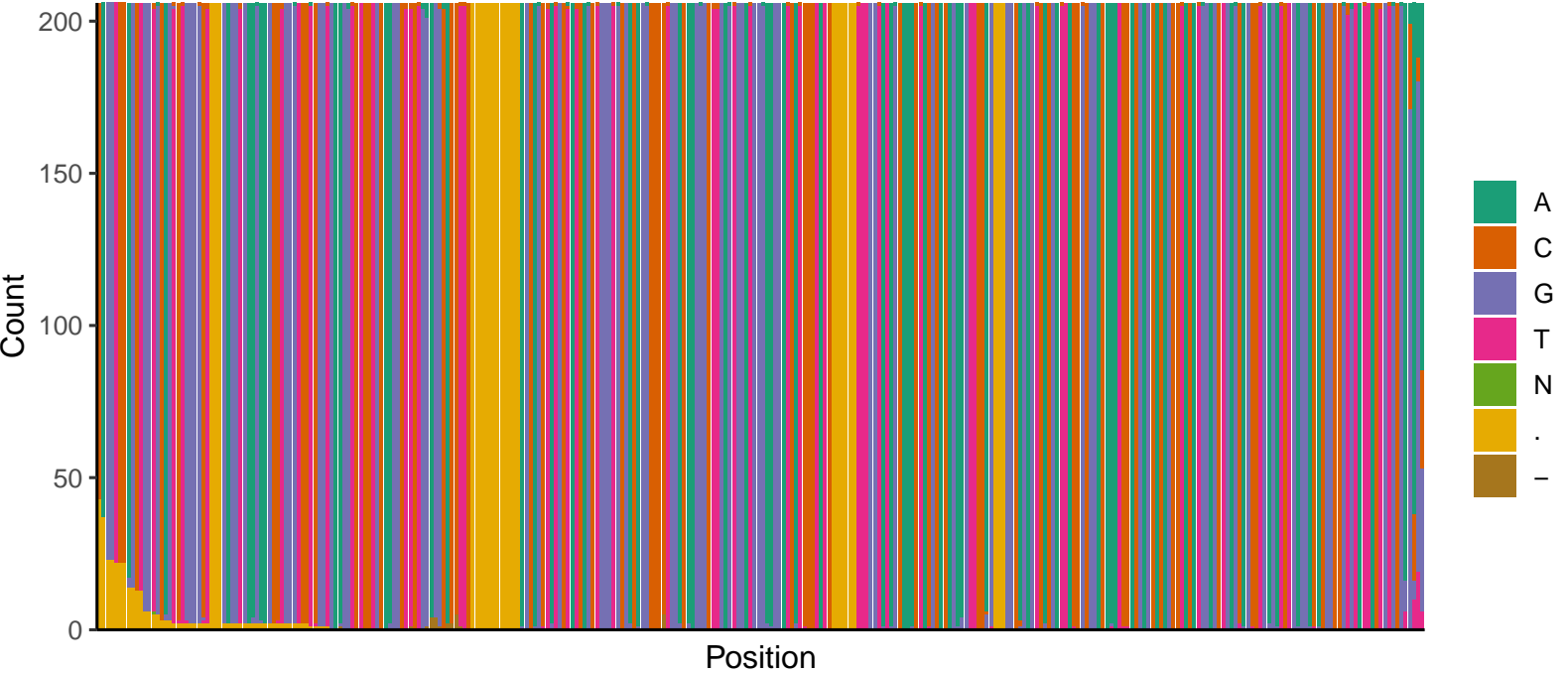


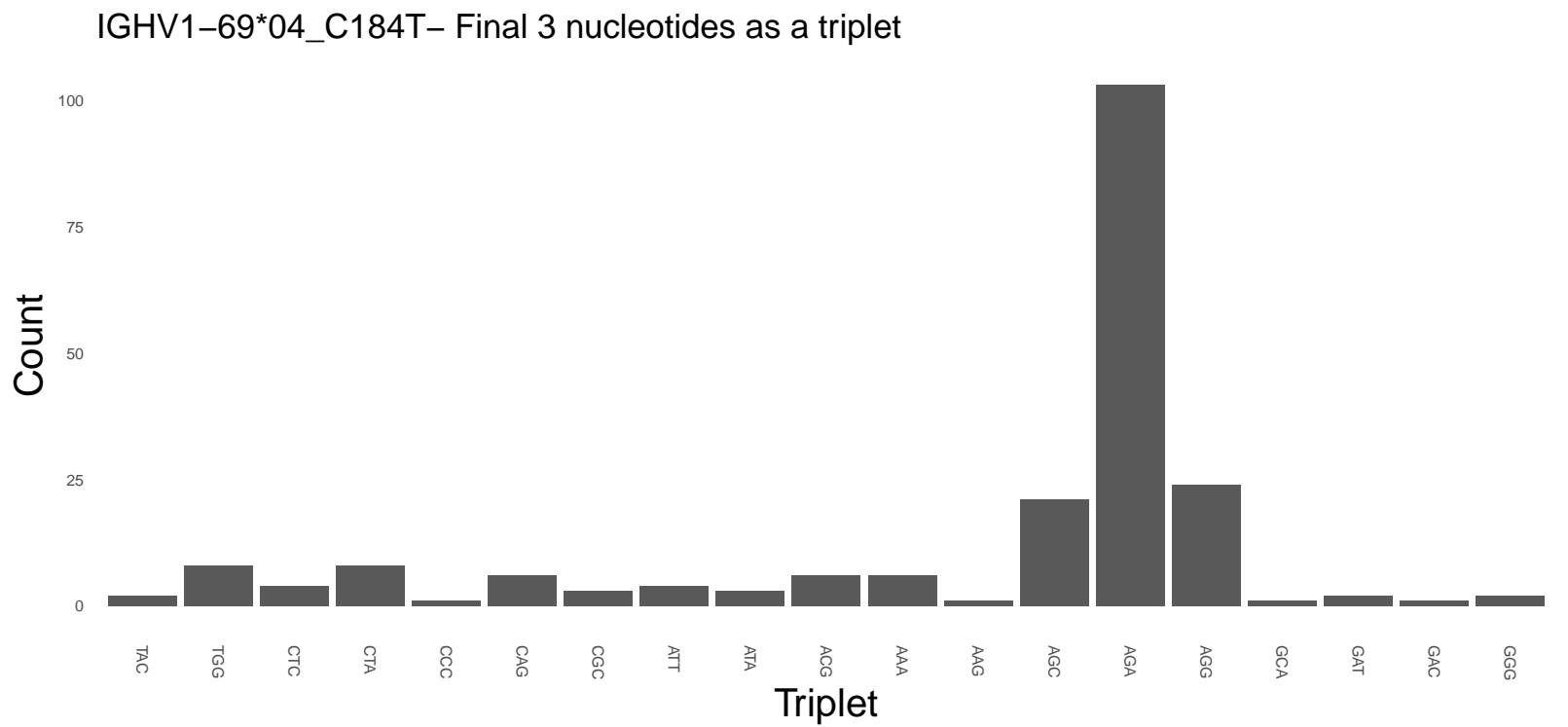
Gene IGHV1-69\*04\_C184T



Gene IGHV1-69\*04\_C184T

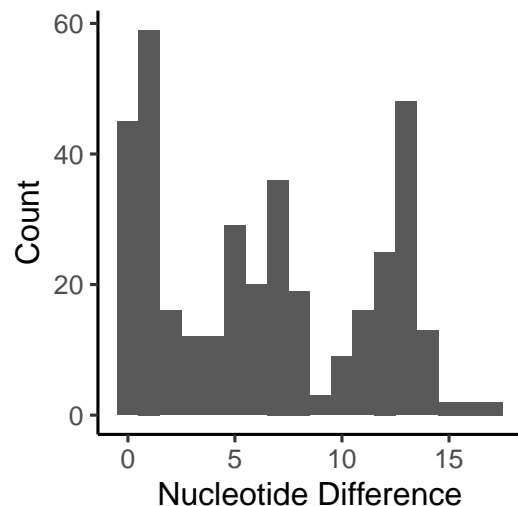


IGHV1-69\*04\_C184T- Final 3 nucleotides as a triplet



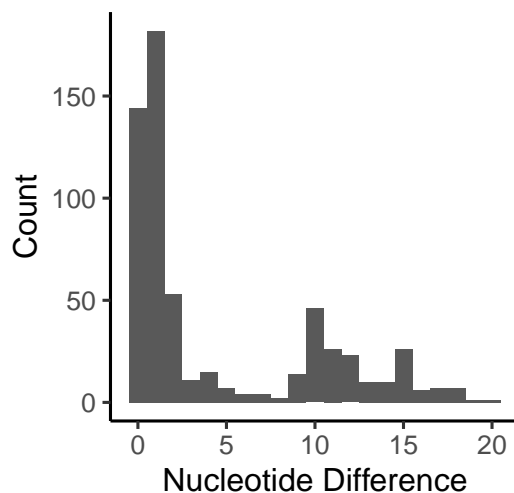
### IGHV1-2\*02

404 sequences assigned  
45 (11.1%) exact matches, in which:  
34 unique CDR3  
4 unique J



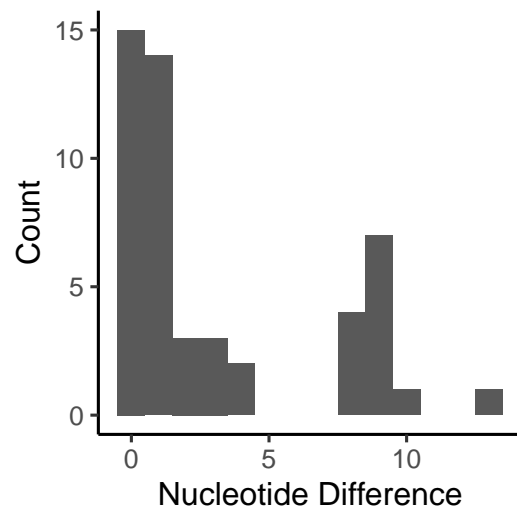
### IGHV1-18\*01

601 sequences assigned  
144 (24%) exact matches, in which:  
92 unique CDR3  
7 unique J



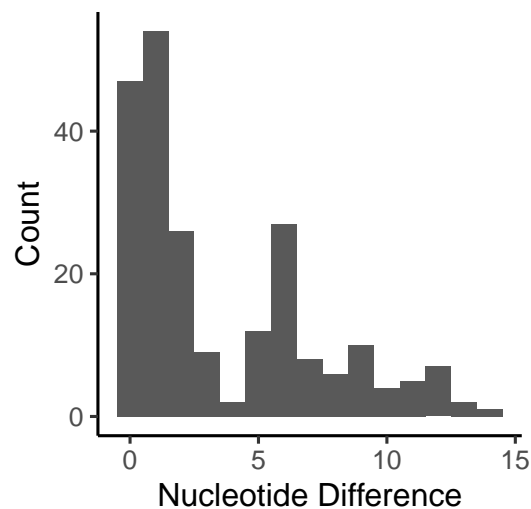
### IGHV1-46\*03

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



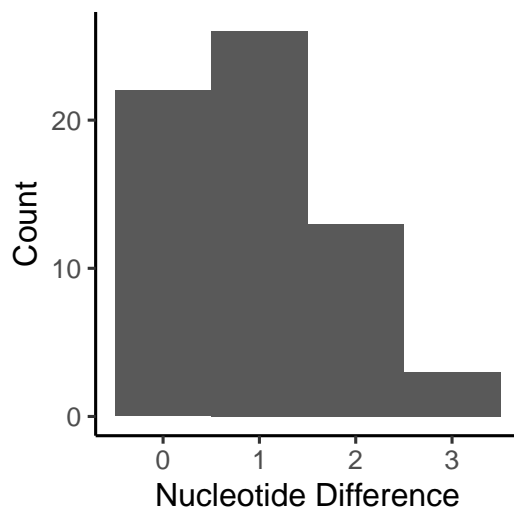
### IGHV1-3\*01

220 sequences assigned  
47 (21.4%) exact matches, in which:  
29 unique CDR3  
4 unique J



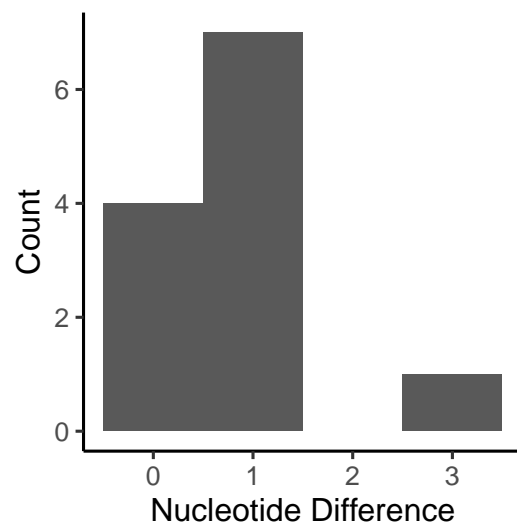
### IGHV1-24\*01

64 sequences assigned  
22 (34.4%) exact matches, in which:  
20 unique CDR3  
5 unique J



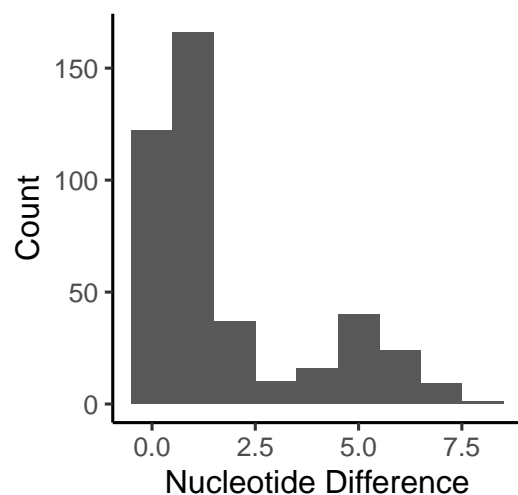
### IGHV1-58\*01

12 sequences assigned  
4 (33.3%) exact matches, in which:  
3 unique CDR3  
2 unique J



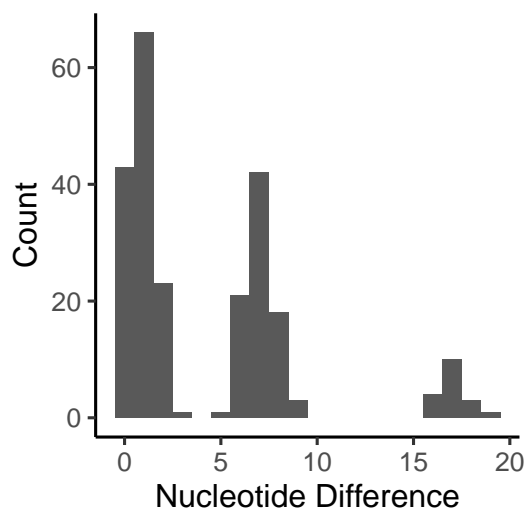
### IGHV1-8\*01

425 sequences assigned  
122 (28.7%) exact matches, in which:  
85 unique CDR3  
6 unique J



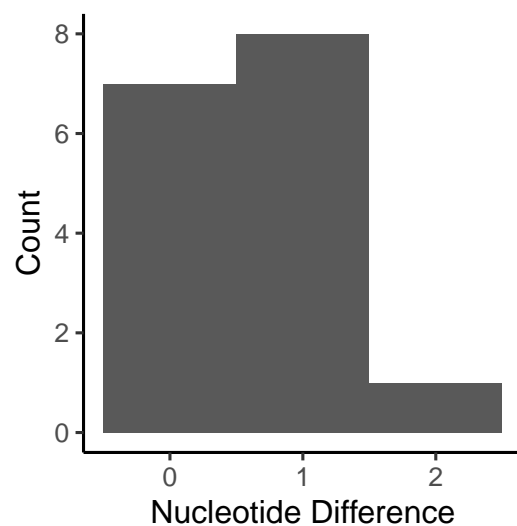
### IGHV1-46\*01

236 sequences assigned  
43 (18.2%) exact matches, in which:  
25 unique CDR3  
5 unique J



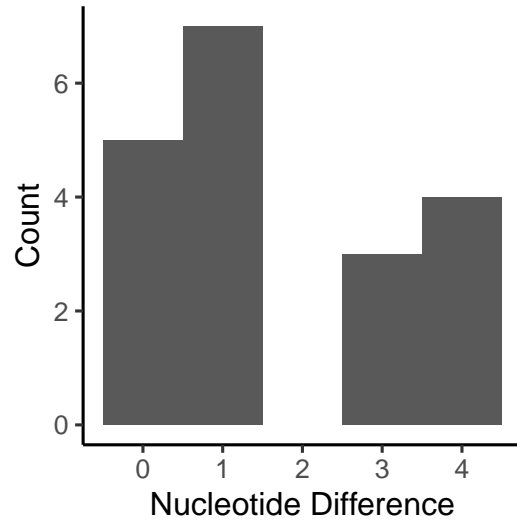
### IGHV1-58\*02

16 sequences assigned  
7 (43.8%) exact matches, in which:  
4 unique CDR3  
3 unique J



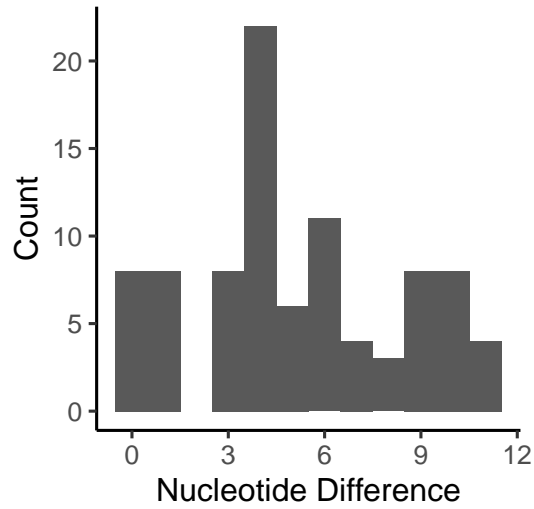
### IGHV1-69-2\*01

19 sequences assigned  
5 (26.3%) exact matches, in which:  
5 unique CDR3  
1 unique J



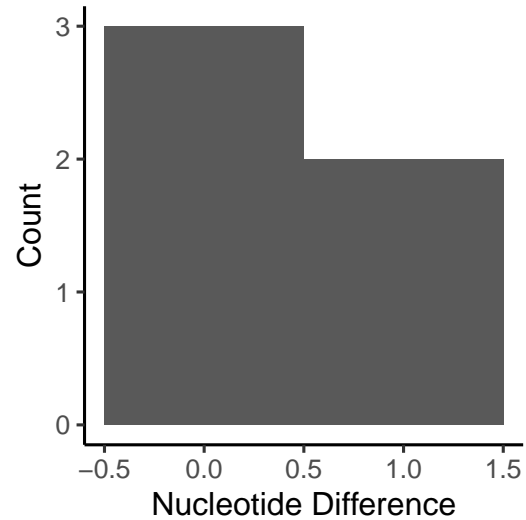
### IGHV2-5\*01

90 sequences assigned  
8 (8.9%) exact matches, in which:  
6 unique CDR3  
4 unique J



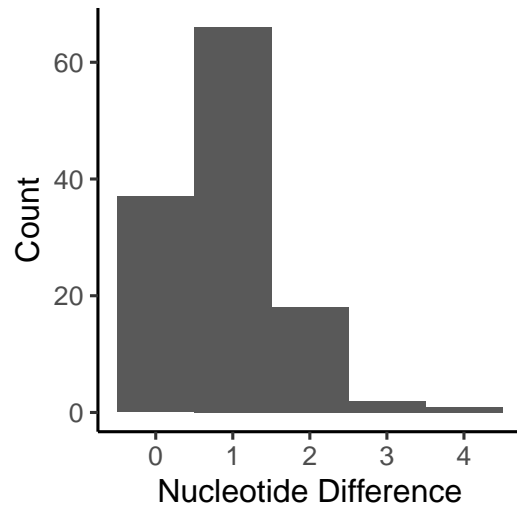
### IGHV2-70\*01

5 sequences assigned  
3 (60%) exact matches, in which:  
2 unique CDR3  
2 unique J



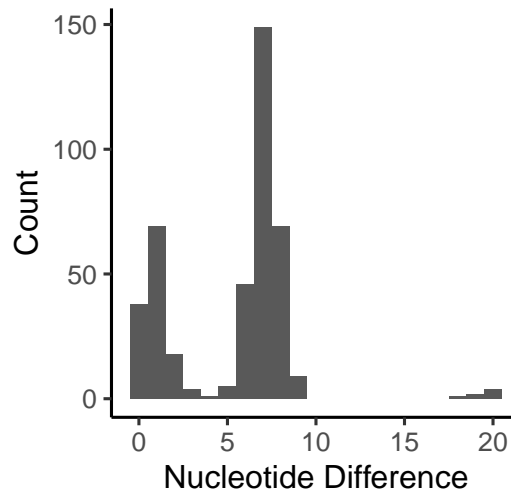
### IGHV1-69\*02

124 sequences assigned  
37 (29.8%) exact matches, in which:  
30 unique CDR3  
4 unique J



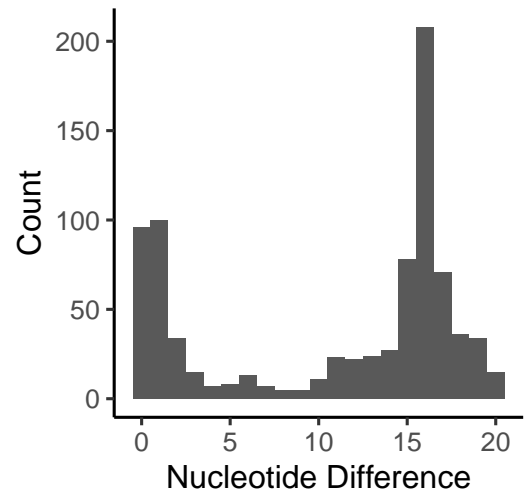
### IGHV2-5\*02

423 sequences assigned  
38 (9%) exact matches, in which:  
22 unique CDR3  
3 unique J



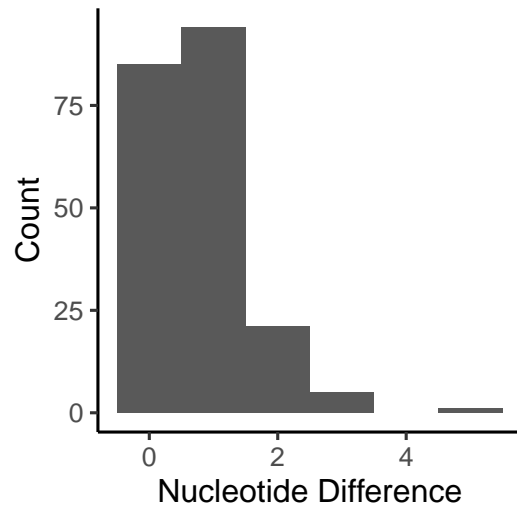
### IGHV3-7\*01

888 sequences assigned  
96 (10.8%) exact matches, in which:  
70 unique CDR3  
7 unique J



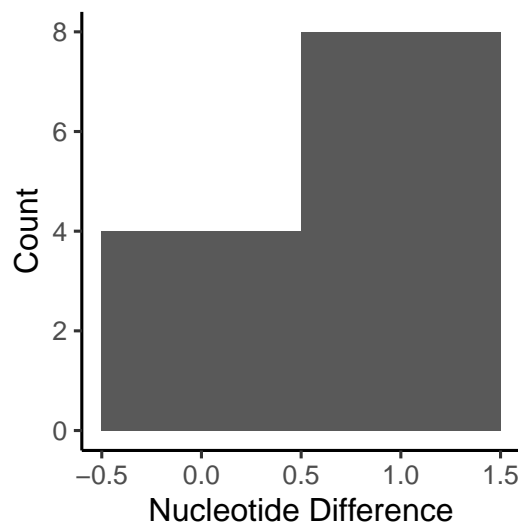
### IGHV1-69\*04\_C184T

206 sequences assigned  
85 (41.3%) exact matches, in which:  
68 unique CDR3  
6 unique J



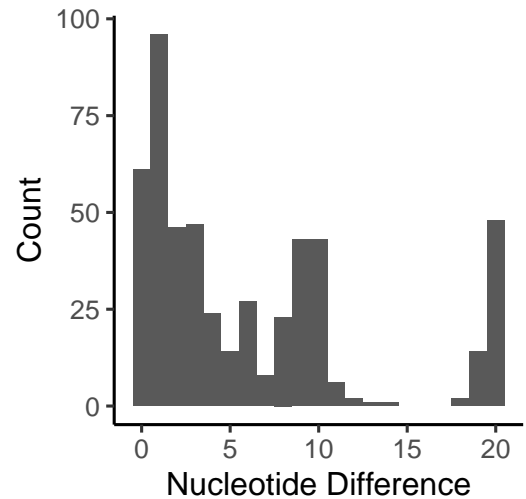
### IGHV2-26\*01

12 sequences assigned  
4 (33.3%) exact matches, in which:  
3 unique CDR3  
1 unique J



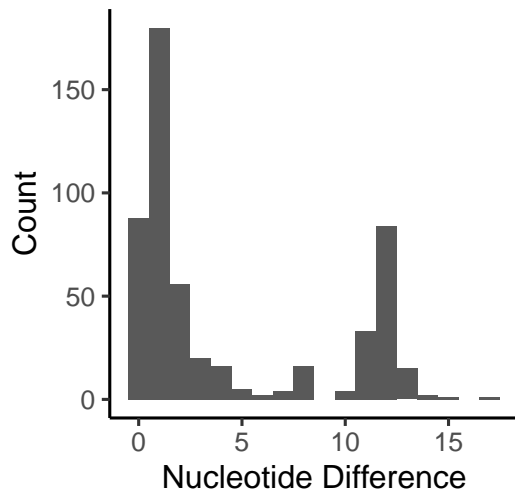
### IGHV3-9\*01

726 sequences assigned  
61 (8.4%) exact matches, in which:  
48 unique CDR3  
5 unique J



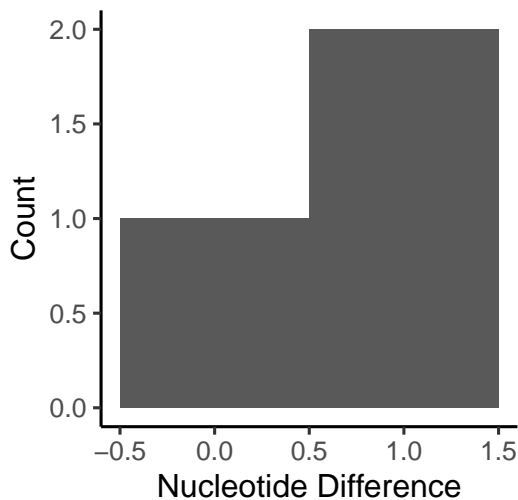
### IGHV3-11\*01

527 sequences assigned  
88 (16.7%) exact matches, in which:  
57 unique CDR3  
5 unique J



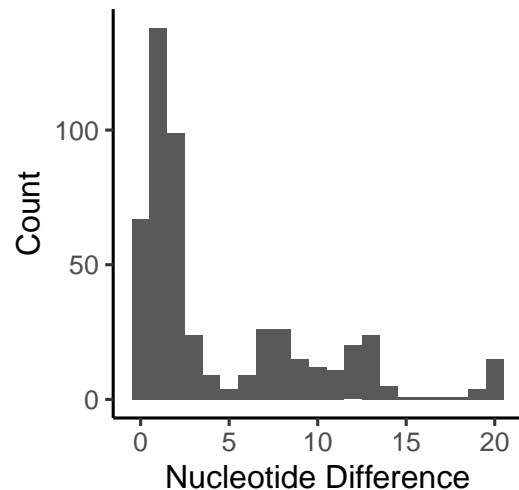
### IGHV3-20\*01

3 sequences assigned  
1 (33.3%) exact matches, in which:  
1 unique CDR3  
1 unique J



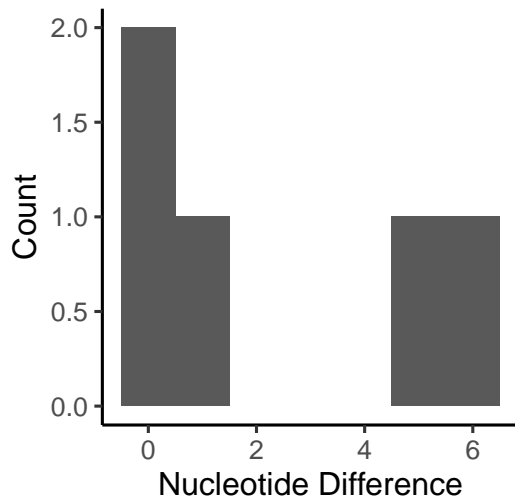
### IGHV3-33\*01

546 sequences assigned  
67 (12.3%) exact matches, in which:  
44 unique CDR3  
4 unique J



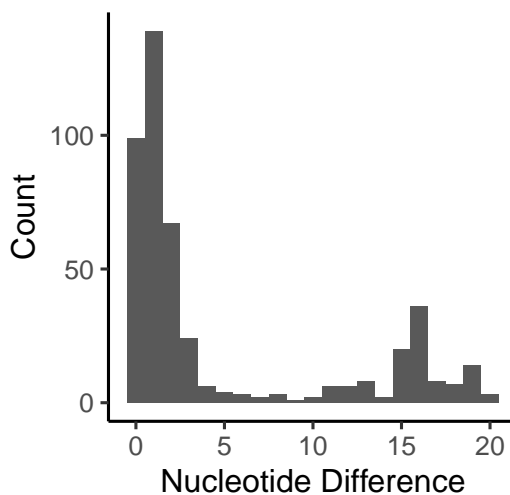
### IGHV3-13\*01

5 sequences assigned  
2 (40%) exact matches, in which:  
2 unique CDR3  
1 unique J



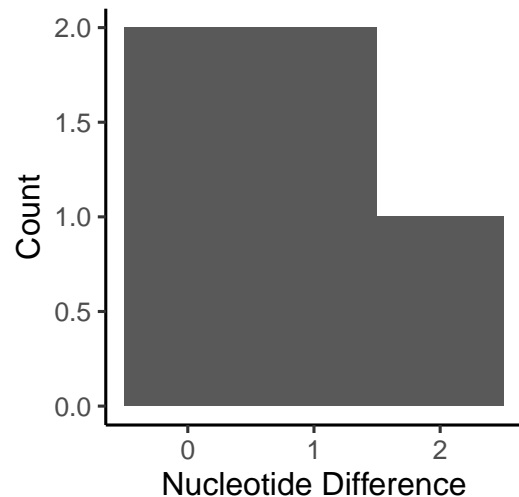
### IGHV3-21\*01

462 sequences assigned  
99 (21.4%) exact matches, in which:  
57 unique CDR3  
6 unique J



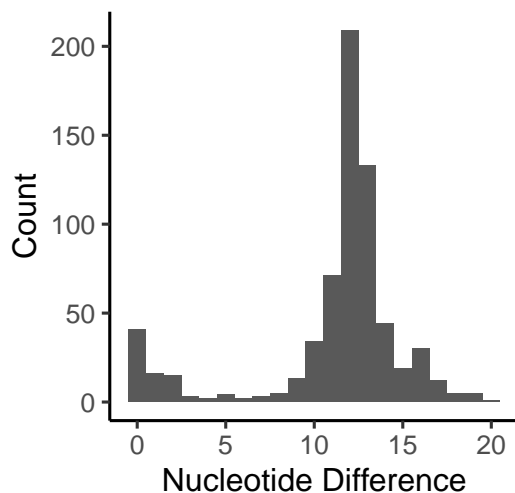
### IGHV3-43\*01

5 sequences assigned  
2 (40%) exact matches, in which:  
2 unique CDR3  
2 unique J



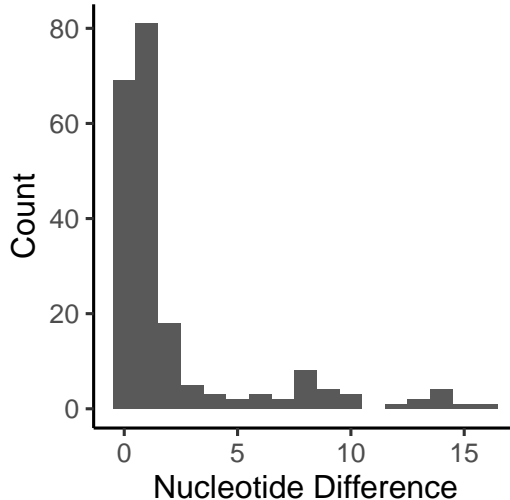
### IGHV3-15\*01

667 sequences assigned  
41 (6.1%) exact matches, in which:  
36 unique CDR3  
5 unique J



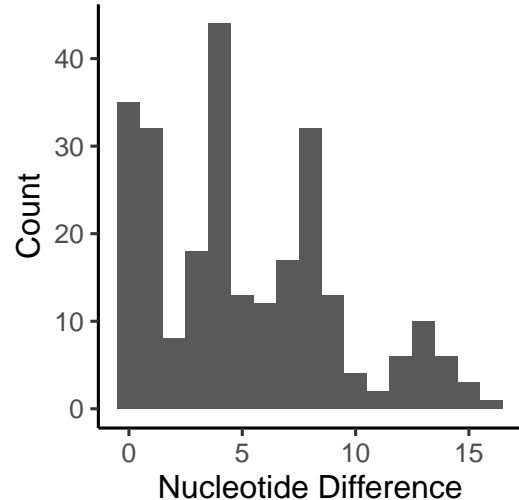
### IGHV3-30-3\*01

207 sequences assigned  
69 (33.3%) exact matches, in which:  
39 unique CDR3  
6 unique J



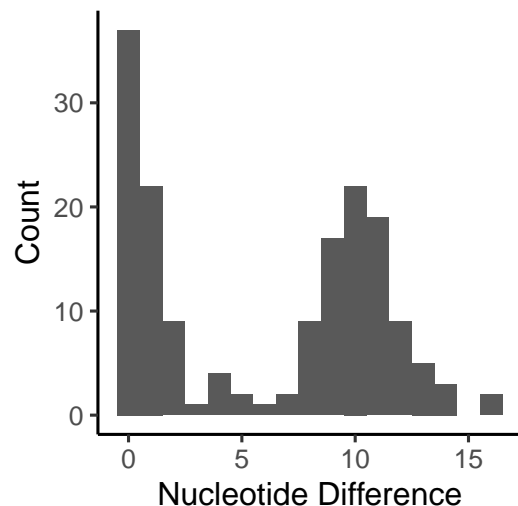
### IGHV3-48\*01

256 sequences assigned  
35 (13.7%) exact matches, in which:  
22 unique CDR3  
4 unique J



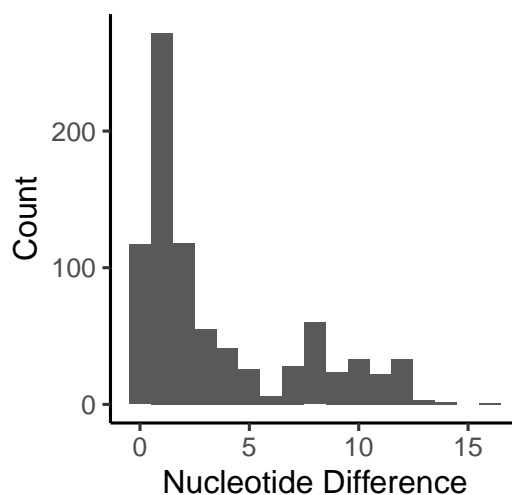
### IGHV3-48\*02

164 sequences assigned  
37 (22.6%) exact matches, in which:  
24 unique CDR3  
6 unique J



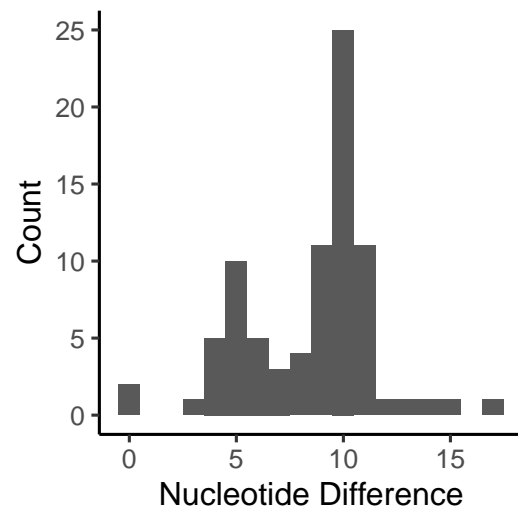
### IGHV3-53\*01

844 sequences assigned  
117 (13.9%) exact matches, in which:  
81 unique CDR3  
6 unique J



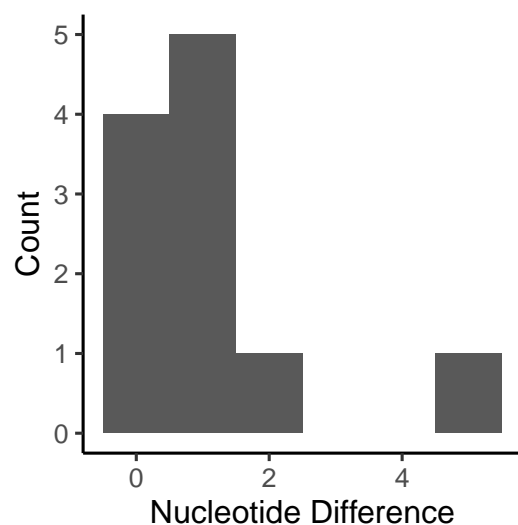
### IGHV3-72\*01

82 sequences assigned  
2 (2.4%) exact matches, in which:  
1 unique CDR3  
1 unique J



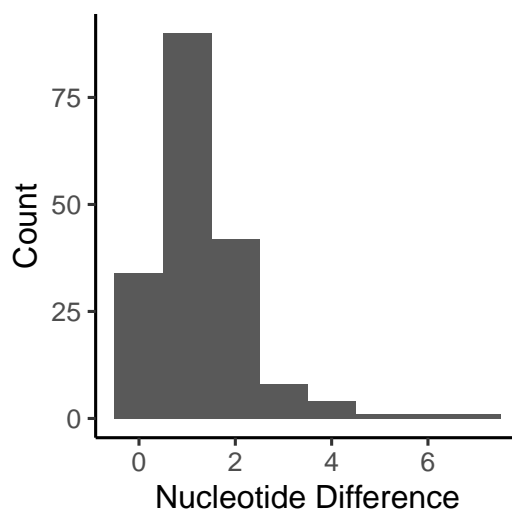
### IGHV3-49\*03

11 sequences assigned  
4 (36.4%) exact matches, in which:  
4 unique CDR3  
3 unique J



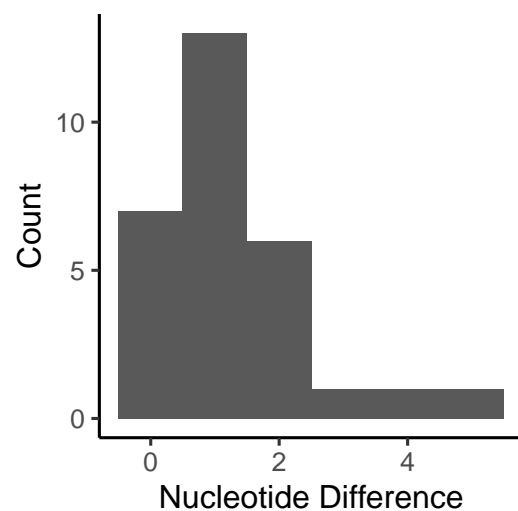
### IGHV3-64\*01

181 sequences assigned  
34 (18.8%) exact matches, in which:  
19 unique CDR3  
2 unique J



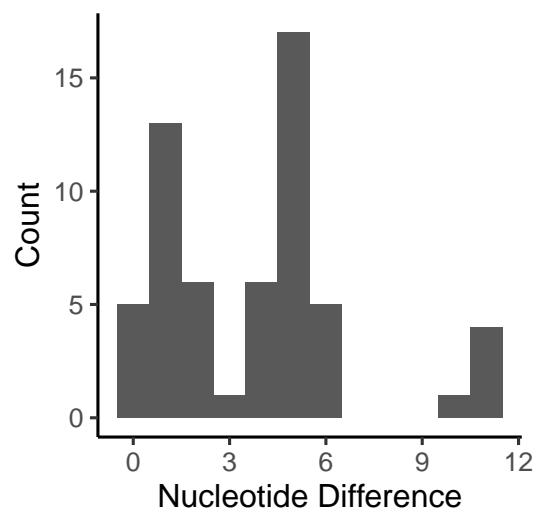
### IGHV3-73\*01

29 sequences assigned  
7 (24.1%) exact matches, in which:  
5 unique CDR3  
2 unique J



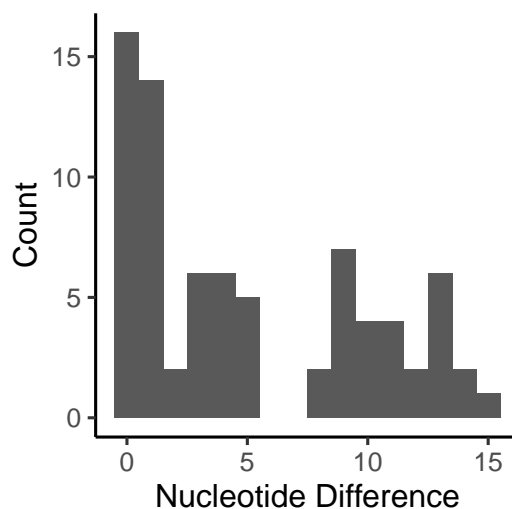
### IGHV3-49\*05

58 sequences assigned  
5 (8.6%) exact matches, in which:  
3 unique CDR3  
2 unique J



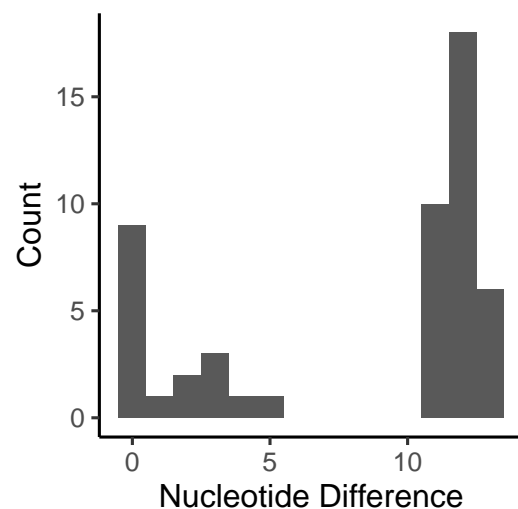
### IGHV3-66\*02

77 sequences assigned  
16 (20.8%) exact matches, in which:  
13 unique CDR3  
5 unique J



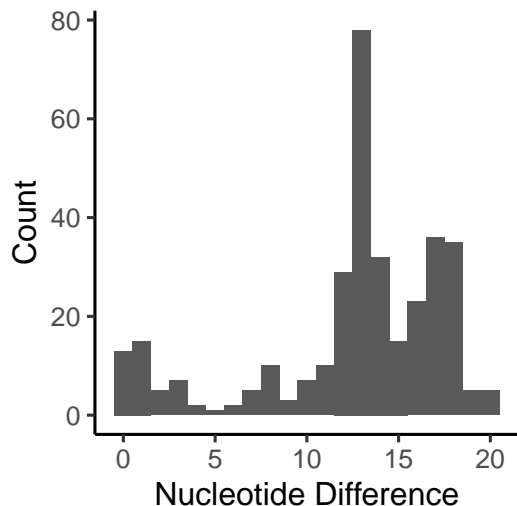
### IGHV3-73\*02

51 sequences assigned  
9 (17.6%) exact matches, in which:  
7 unique CDR3  
2 unique J



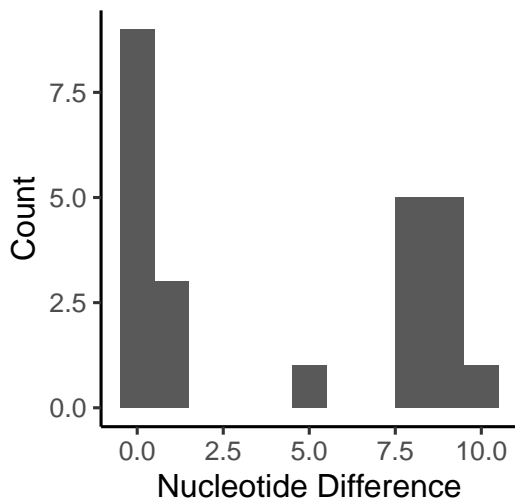
### IGHV3-74\*01

341 sequences assigned  
13 (3.8%) exact matches, in which:  
11 unique CDR3  
4 unique J



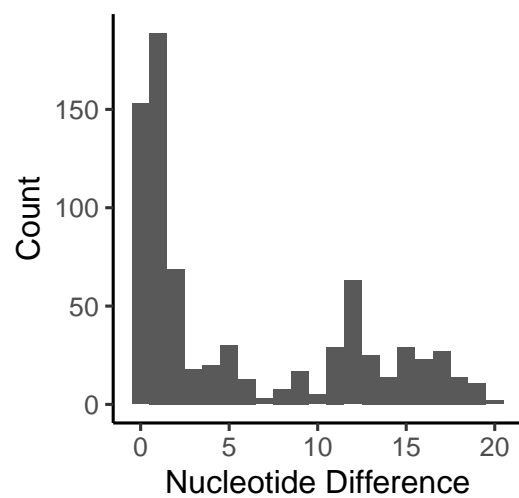
### IGHV4-30-2\*01

24 sequences assigned  
9 (37.5%) exact matches, in which:  
6 unique CDR3  
3 unique J



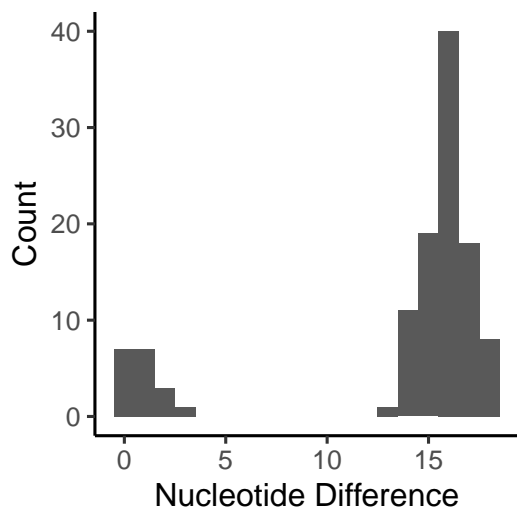
### IGHV4-39\*01

778 sequences assigned  
153 (19.7%) exact matches, in which:  
112 unique CDR3  
7 unique J



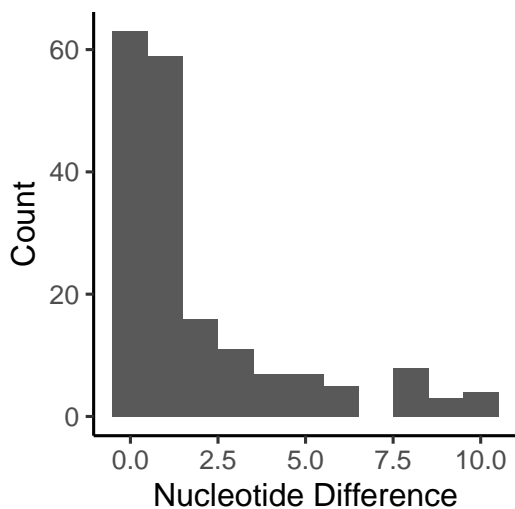
### IGHV4-4\*07

115 sequences assigned  
7 (6.1%) exact matches, in which:  
4 unique CDR3  
3 unique J



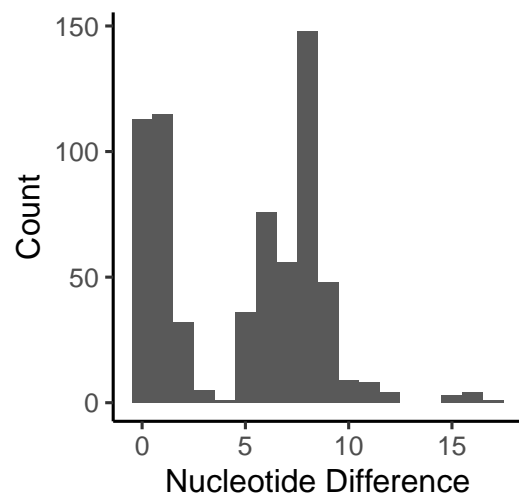
### IGHV4-31\*03

183 sequences assigned  
63 (34.4%) exact matches, in which:  
36 unique CDR3  
5 unique J



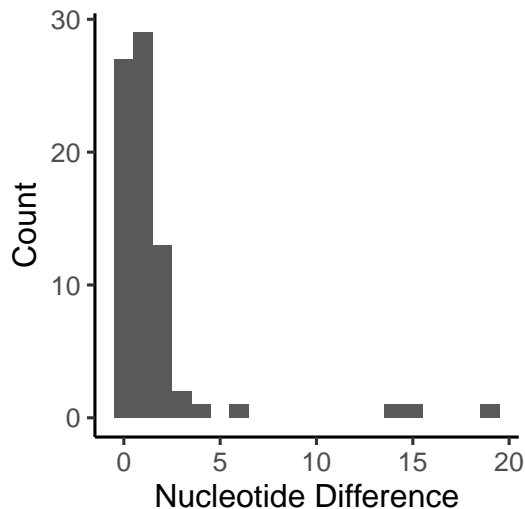
### IGHV4-59\*01

660 sequences assigned  
113 (17.1%) exact matches, in which:  
72 unique CDR3  
6 unique J



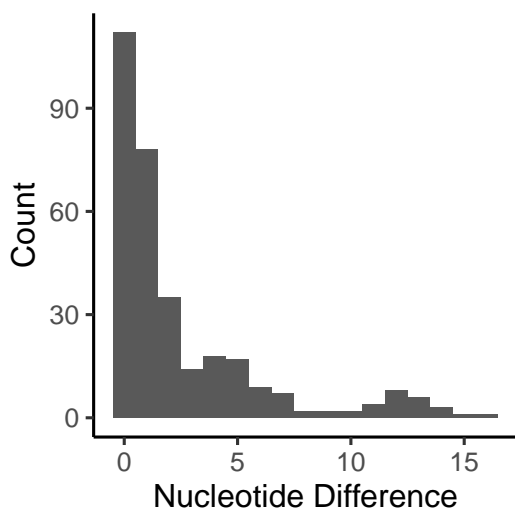
### IGHV4-30-4\*01

76 sequences assigned  
27 (35.5%) exact matches, in which:  
17 unique CDR3  
3 unique J



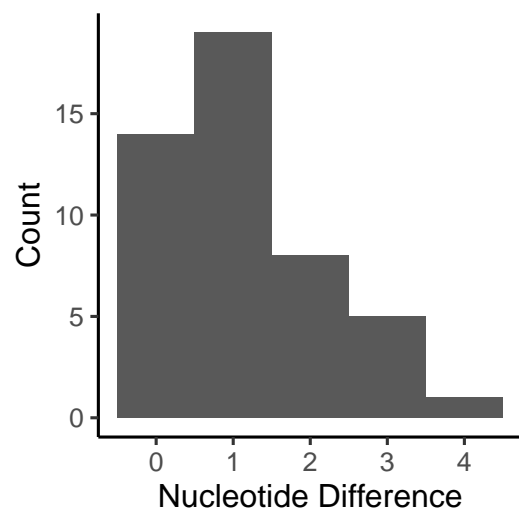
### IGHV4-34\*01

319 sequences assigned  
112 (35.1%) exact matches, in which:  
75 unique CDR3  
6 unique J



### IGHV4-61\*01

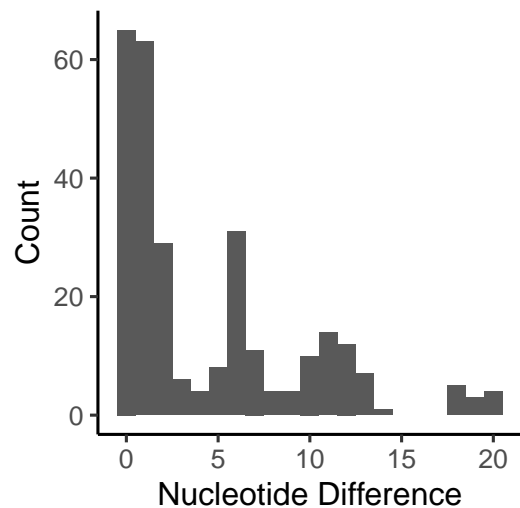
47 sequences assigned  
14 (29.8%) exact matches, in which:  
8 unique CDR3  
3 unique J





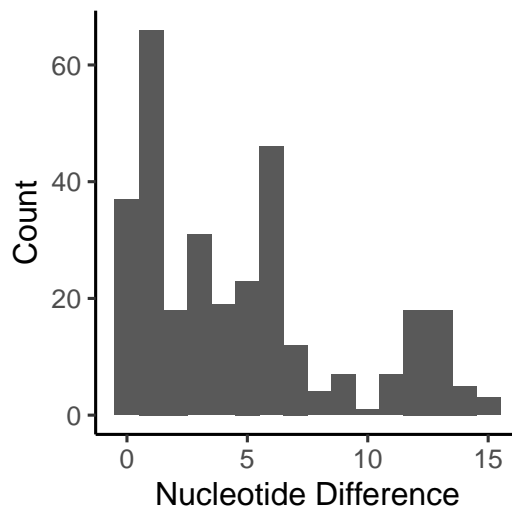
## IGHV4-61\*02

284 sequences assigned  
65 (22.9%) exact matches, in which:  
38 unique CDR3  
6 unique J



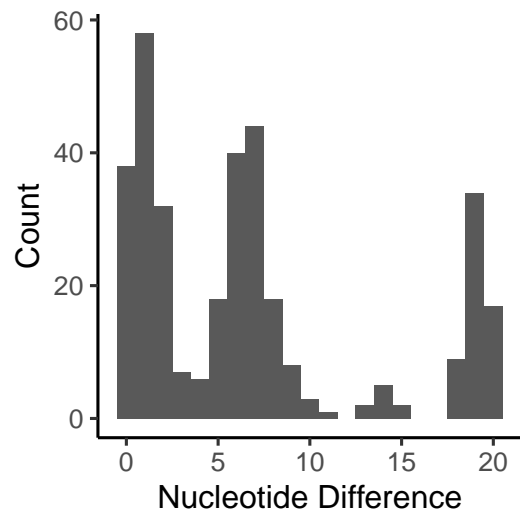
## IGHV6-1\*01

315 sequences assigned  
37 (11.7%) exact matches, in which:  
18 unique CDR3  
4 unique J



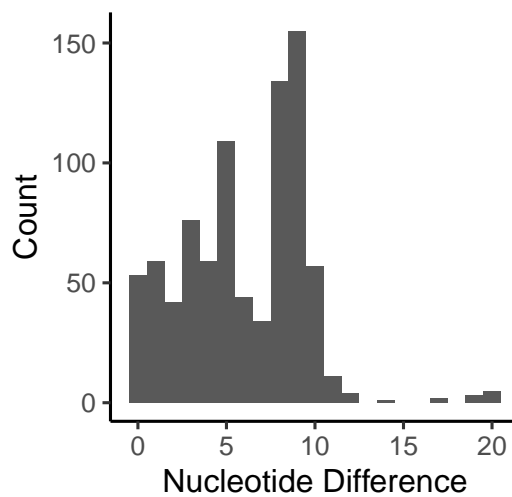
## IGHV5-51\*01

509 sequences assigned  
38 (7.5%) exact matches, in which:  
35 unique CDR3  
4 unique J



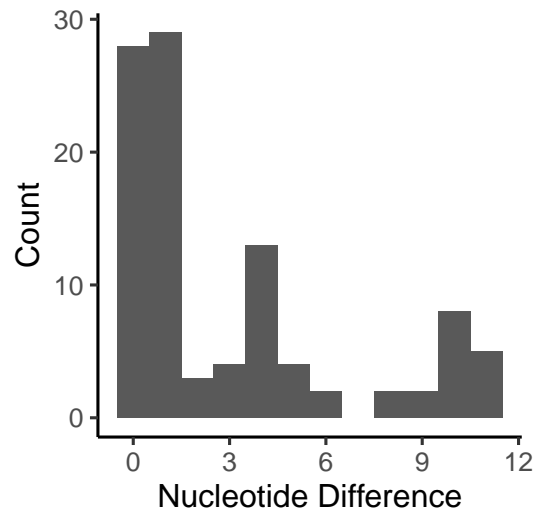
## IGHV7-4-1\*02

907 sequences assigned  
53 (5.8%) exact matches, in which:  
33 unique CDR3  
6 unique J

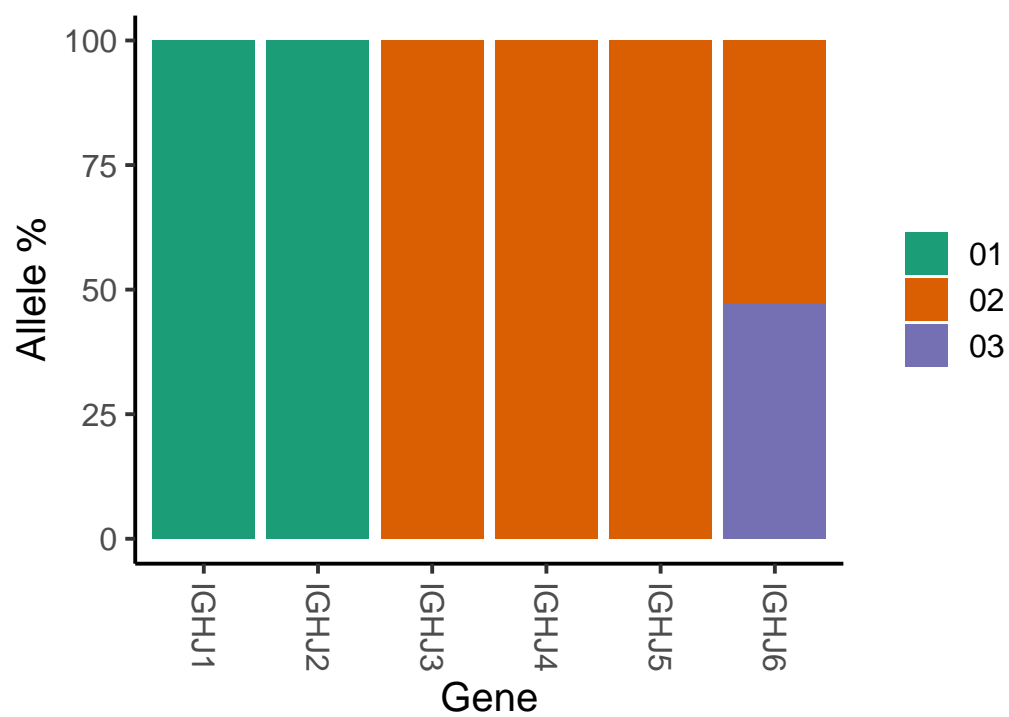


## IGHV5-51\*03

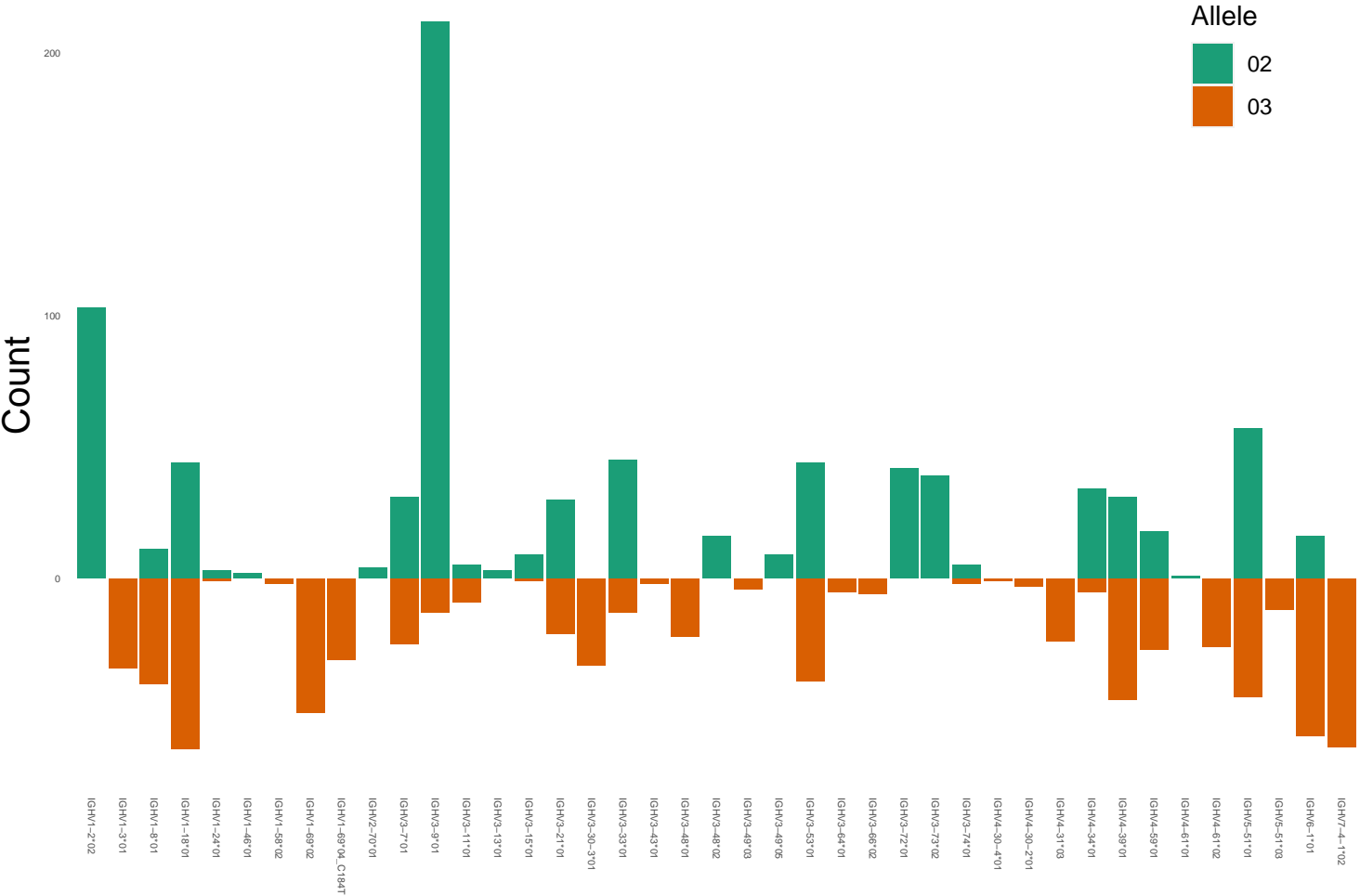
100 sequences assigned  
28 (28%) exact matches, in which:  
23 unique CDR3  
4 unique J



Allele Usage



Sequence Count by IGHJ6 allele usage



Warning – no inferred sequences found.

Warning – no inferred sequences found.

Warning – no inferred sequences found.

Warning – no inferred sequences found.