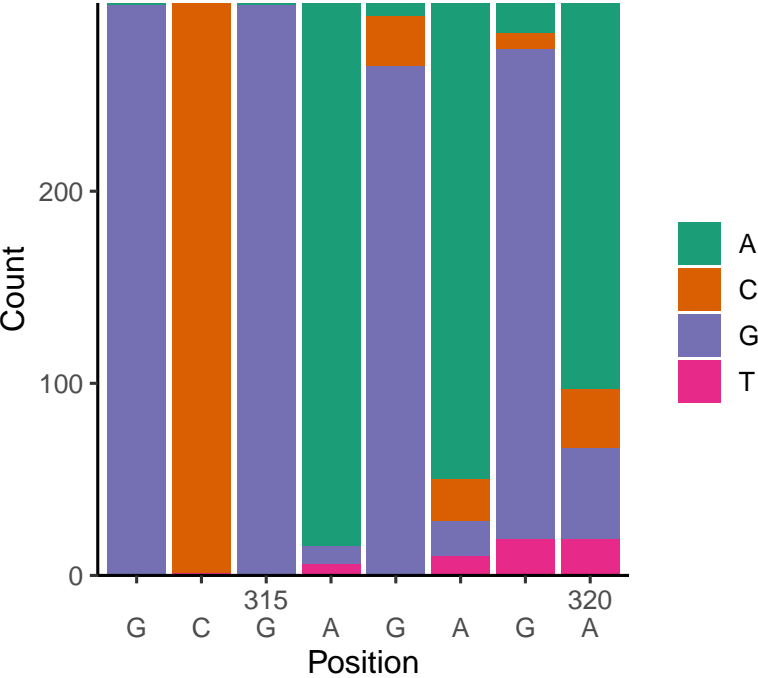


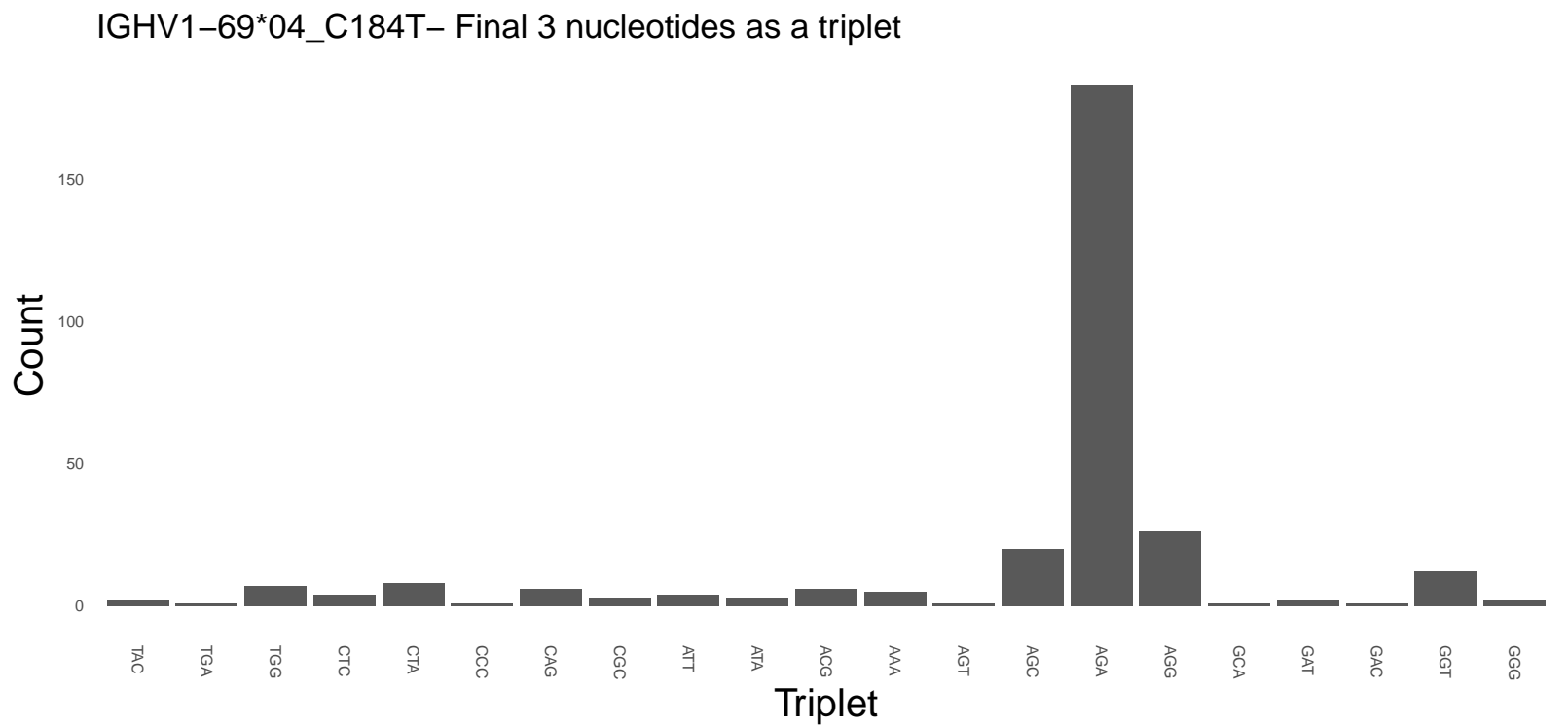
Gene IGHV1-69\*04\_C184T



Gene IGHV1-69\*04\_C184T

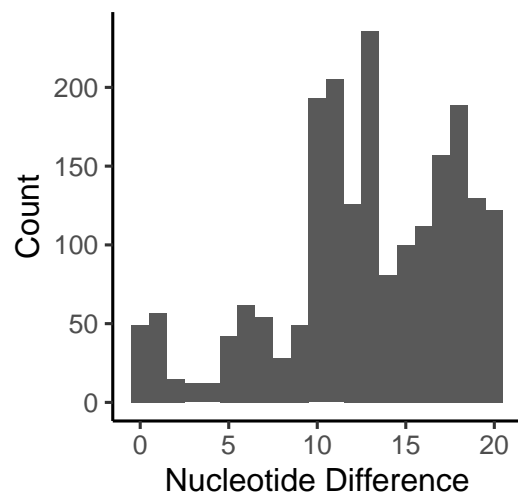


IGHV1-69\*04\_C184T- Final 3 nucleotides as a triplet



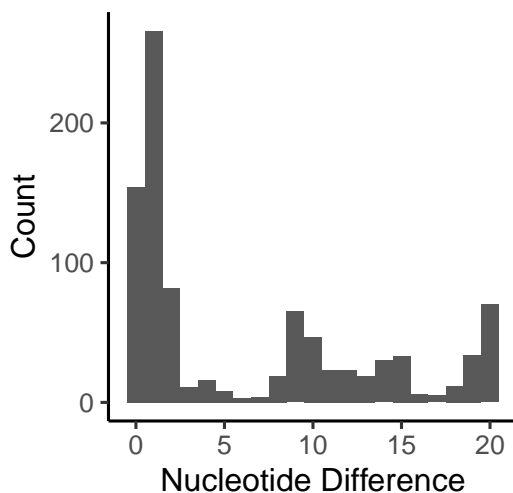
### IGHV1–2\*02

3044 sequences assigned  
49 (1.6%) exact matches, in which:  
34 unique CDR3  
4 unique J



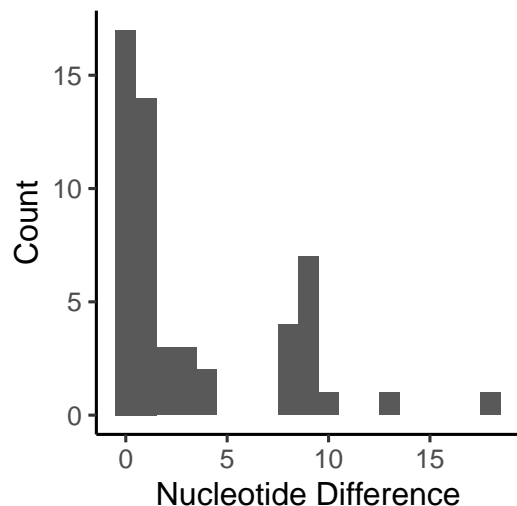
### IGHV1–18\*01

1016 sequences assigned  
154 (15.2%) exact matches, in which:  
97 unique CDR3  
7 unique J



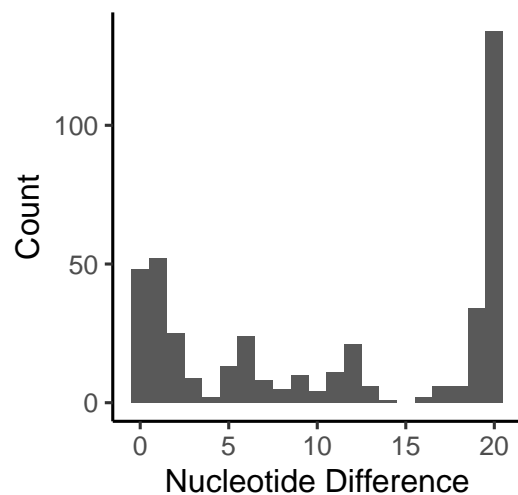
### IGHV1–46\*03

130 sequences assigned  
17 (13.1%) exact matches, in which:  
10 unique CDR3  
2 unique J



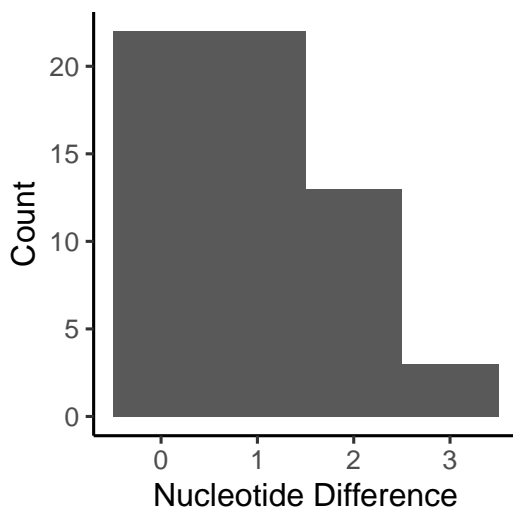
### IGHV1–3\*01

612 sequences assigned  
48 (7.8%) exact matches, in which:  
28 unique CDR3  
4 unique J



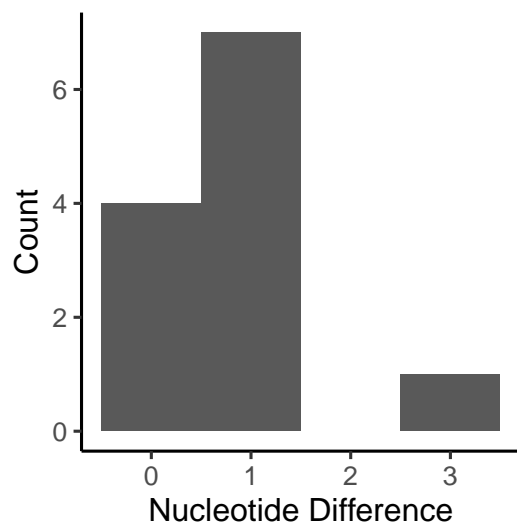
### IGHV1–24\*01

199 sequences assigned  
22 (11.1%) exact matches, in which:  
20 unique CDR3  
5 unique J



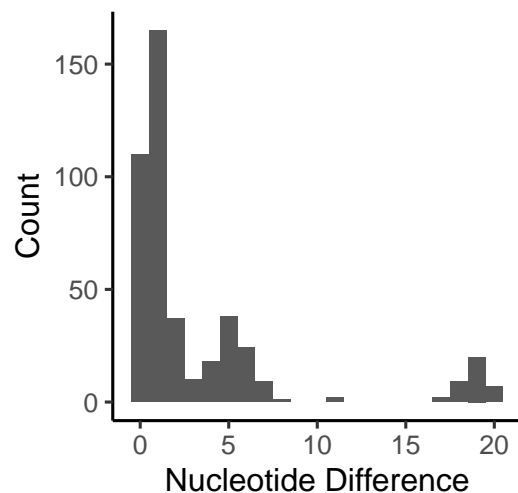
### IGHV1–58\*01

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



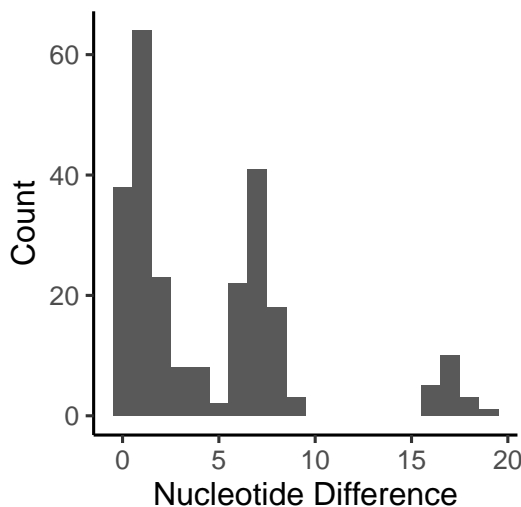
### IGHV1–8\*01

705 sequences assigned  
110 (15.6%) exact matches, in which:  
81 unique CDR3  
6 unique J



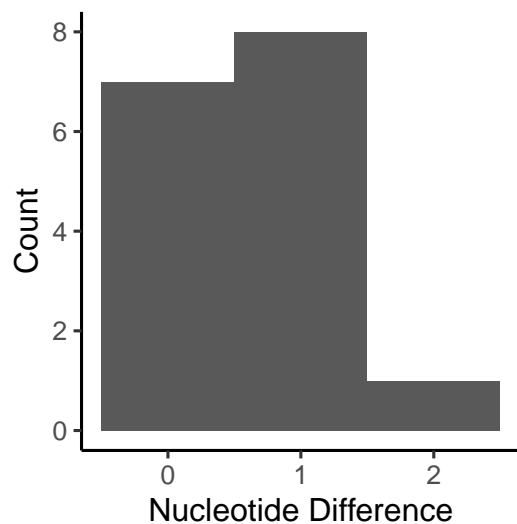
### IGHV1–46\*01

360 sequences assigned  
38 (10.6%) exact matches, in which:  
24 unique CDR3  
5 unique J



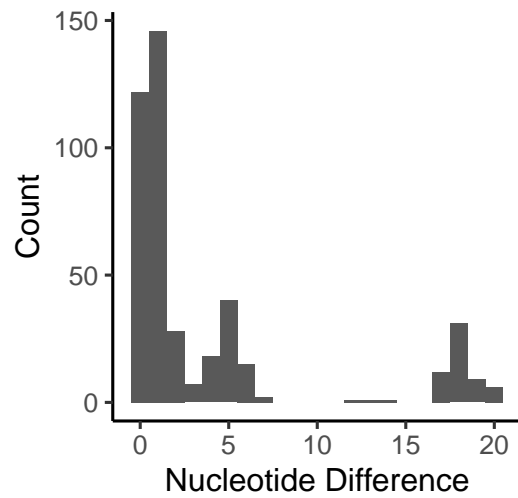
### IGHV1–58\*02

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



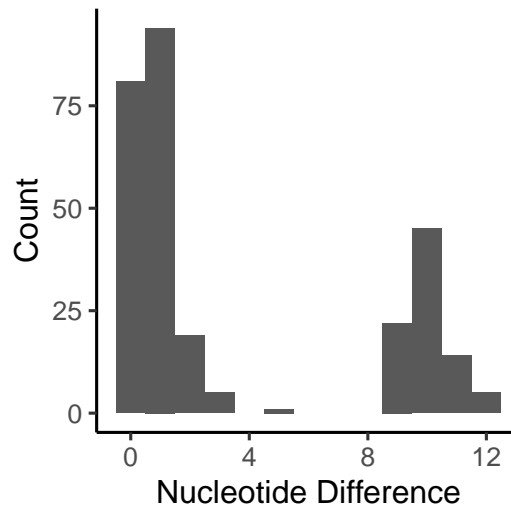
### IGHV1-69\*01

545 sequences assigned  
122 (22.4%) exact matches, in which:  
107 unique CDR3  
5 unique J



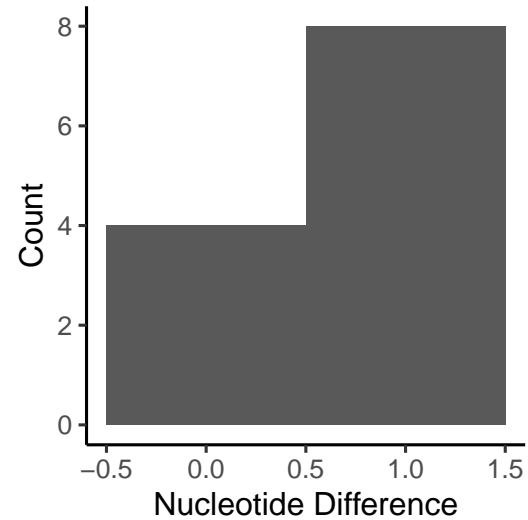
### IGHV1-69\*04\_C184T

298 sequences assigned  
81 (27.2%) exact matches, in which:  
66 unique CDR3  
6 unique J



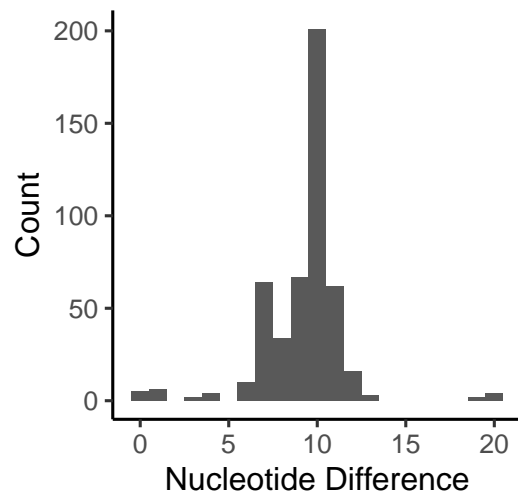
### IGHV2-26\*01

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



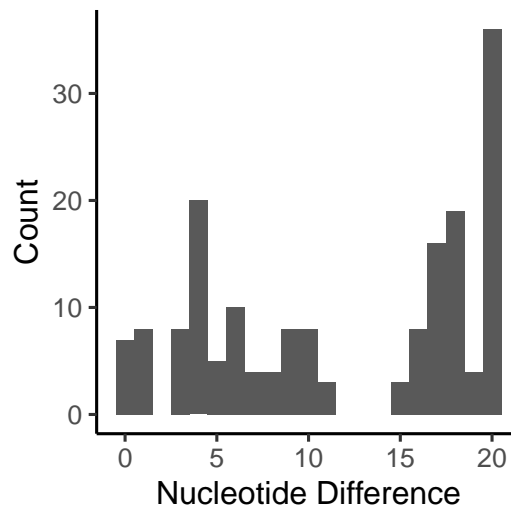
### IGHV1-69-2\*01

581 sequences assigned  
5 (0.9%) exact matches, in which:  
5 unique CDR3  
1 unique J



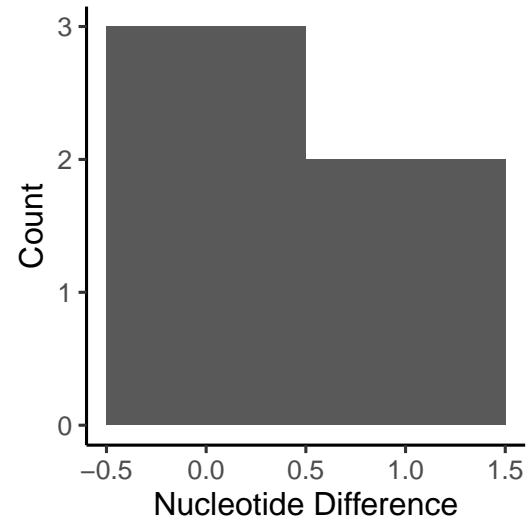
### IGHV2-5\*01

312 sequences assigned  
7 (2.2%) exact matches, in which:  
6 unique CDR3  
4 unique J



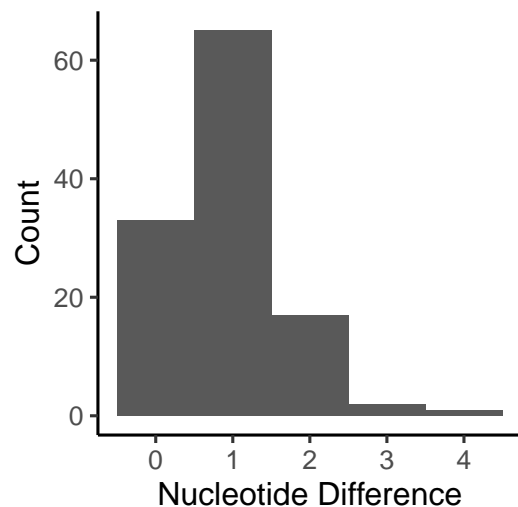
### IGHV2-70\*01

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



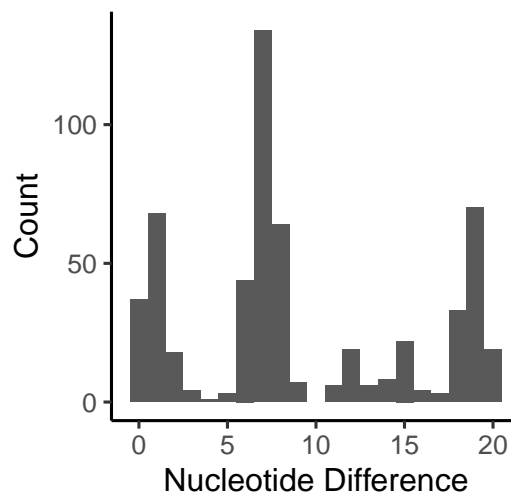
### IGHV1-69\*02

118 sequences assigned  
33 (28%) exact matches, in which:  
27 unique CDR3  
4 unique J



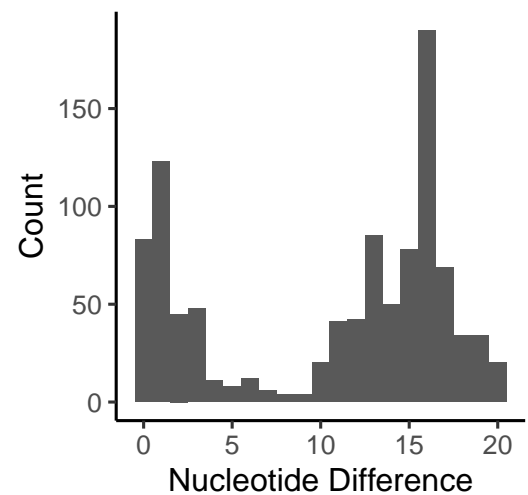
### IGHV2-5\*02

579 sequences assigned  
37 (6.4%) exact matches, in which:  
22 unique CDR3  
3 unique J



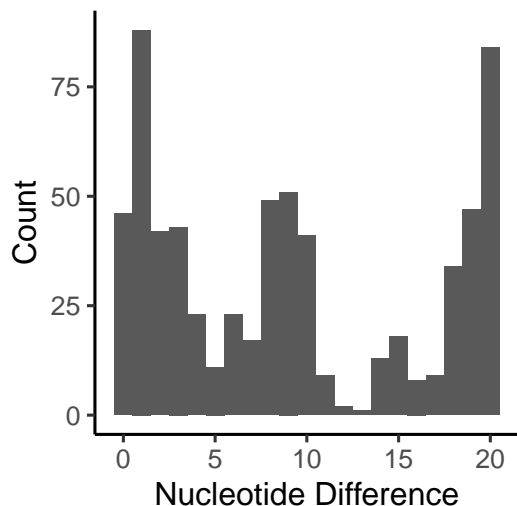
### IGHV3-7\*01

1084 sequences assigned  
83 (7.7%) exact matches, in which:  
65 unique CDR3  
7 unique J



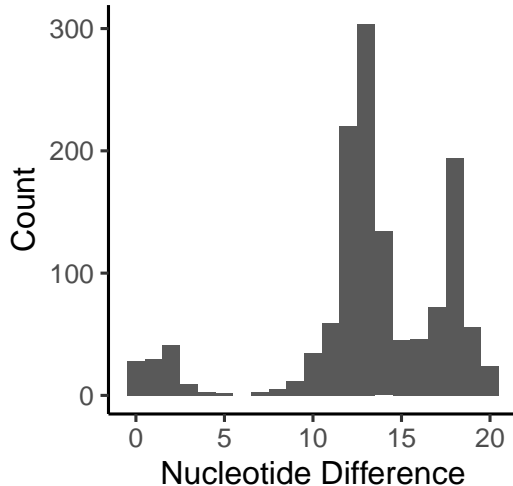
### IGHV3-9\*01

1060 sequences assigned  
46 (4.3%) exact matches, in which:  
36 unique CDR3  
5 unique J



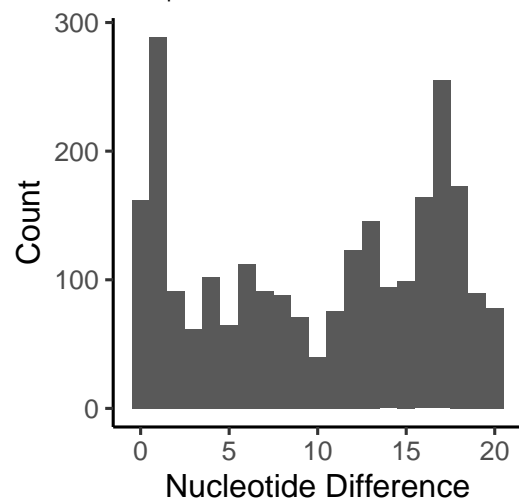
### IGHV3-15\*01

1355 sequences assigned  
28 (2.1%) exact matches, in which:  
26 unique CDR3  
4 unique J



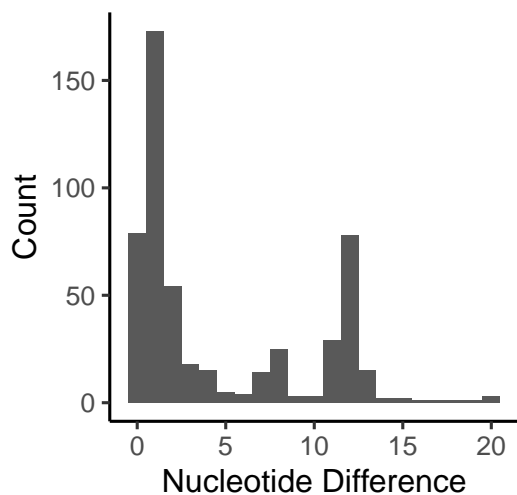
### IGHV3-23\*01

3013 sequences assigned  
162 (5.4%) exact matches, in which:  
130 unique CDR3  
7 unique J



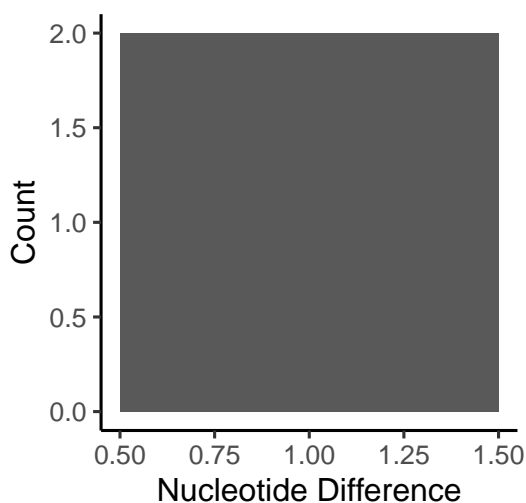
### IGHV3-11\*01

579 sequences assigned  
79 (13.6%) exact matches, in which:  
54 unique CDR3  
5 unique J



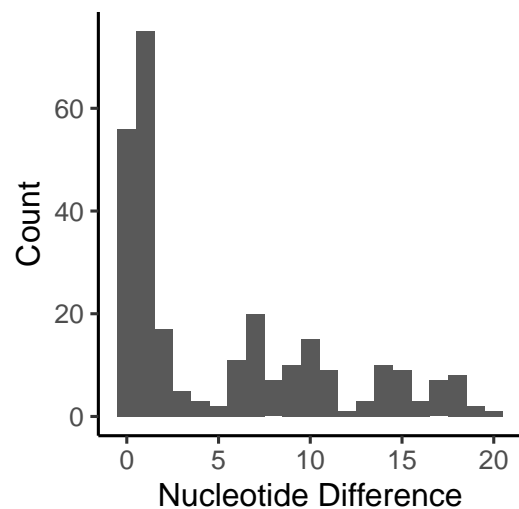
### IGHV3-20\*01

2 sequences assigned  
No exact matches.



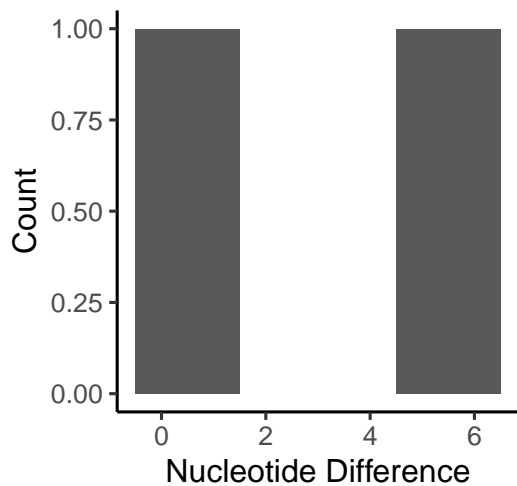
### IGHV3-30-3\*01

469 sequences assigned  
56 (11.9%) exact matches, in which:  
36 unique CDR3  
6 unique J



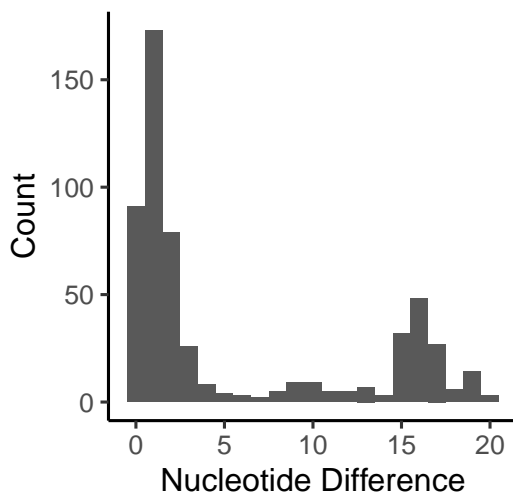
### IGHV3-13\*01

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



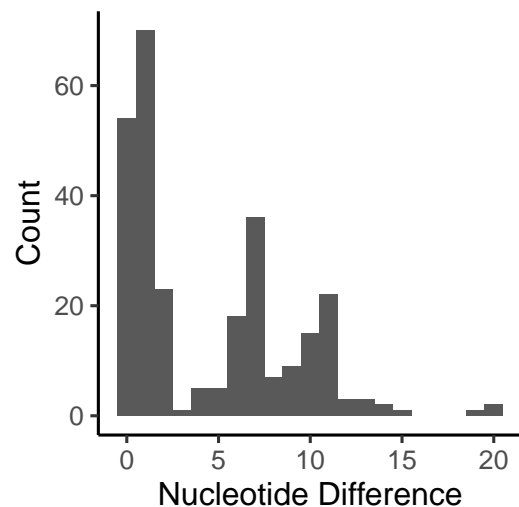
### IGHV3-21\*01

751 sequences assigned  
91 (12.1%) exact matches, in which:  
56 unique CDR3  
6 unique J



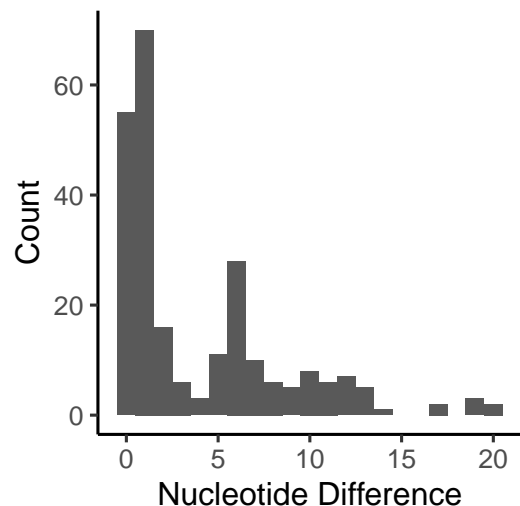
### IGHV3-30\*18

551 sequences assigned  
54 (9.8%) exact matches, in which:  
47 unique CDR3  
4 unique J



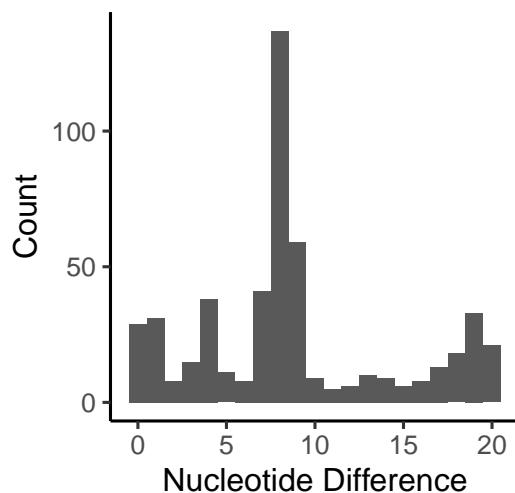
### IGHV3-33\*01

272 sequences assigned  
55 (20.2%) exact matches, in which:  
38 unique CDR3  
3 unique J



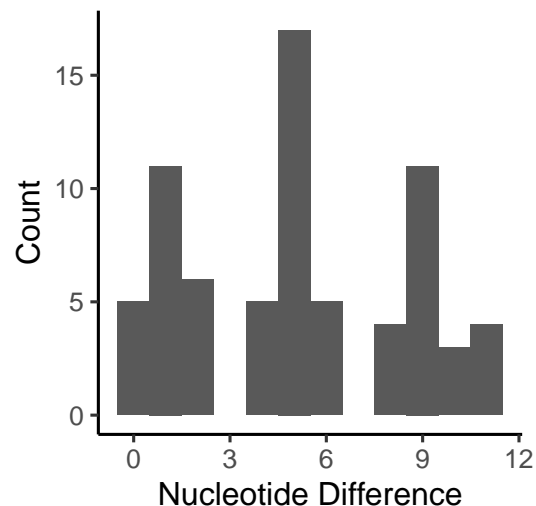
### IGHV3-48\*01

517 sequences assigned  
29 (5.6%) exact matches, in which:  
20 unique CDR3  
4 unique J



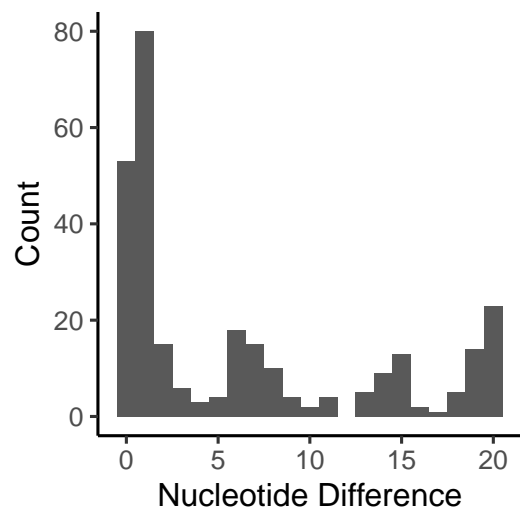
### IGHV3-49\*05

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



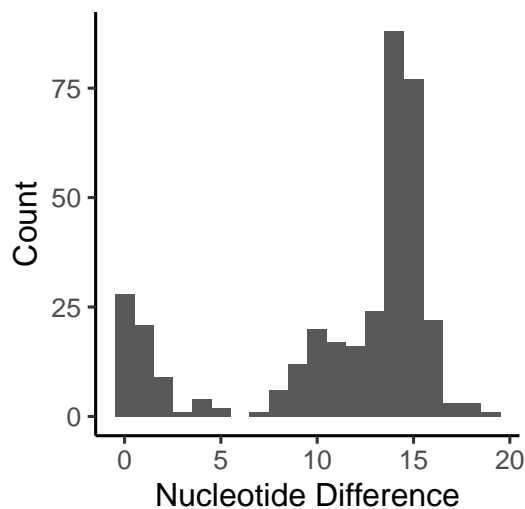
### IGHV3-33\*08

667 sequences assigned  
53 (7.9%) exact matches, in which:  
42 unique CDR3  
4 unique J



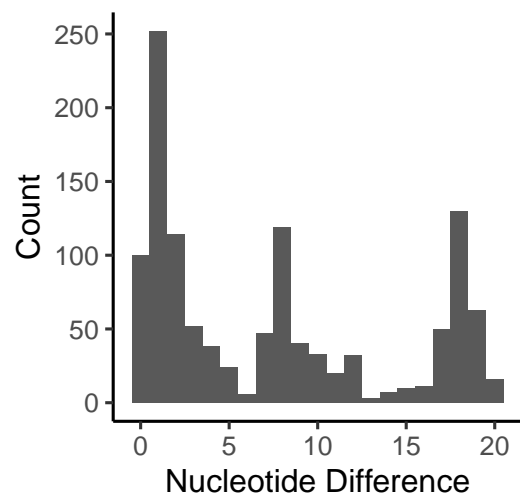
### IGHV3-48\*02

405 sequences assigned  
28 (6.9%) exact matches, in which:  
20 unique CDR3  
6 unique J



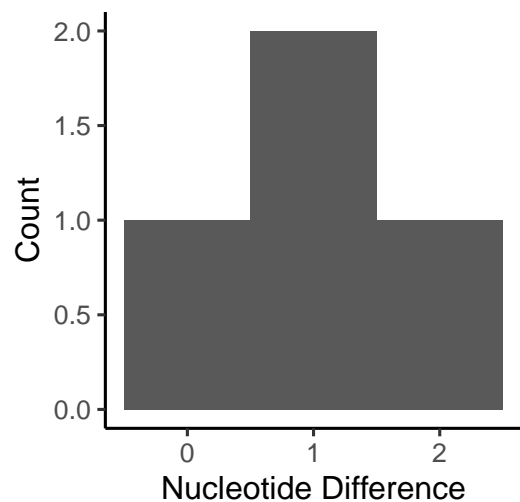
### IGHV3-53\*01

1530 sequences assigned  
100 (6.5%) exact matches, in which:  
72 unique CDR3  
6 unique J



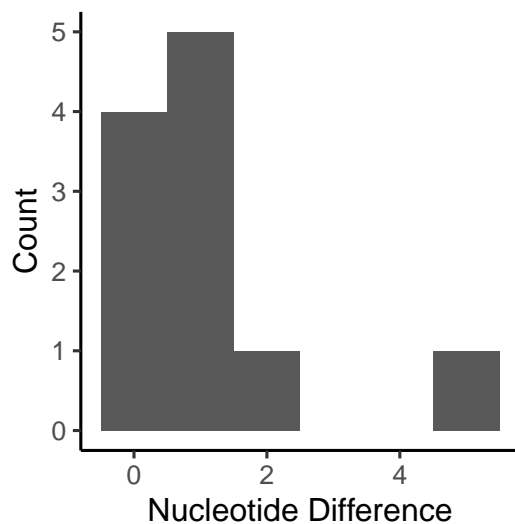
### IGHV3-43\*01

23 sequences assigned  
1 (4.3%) exact matches, in which:  
1 unique CDR3  
1 unique J



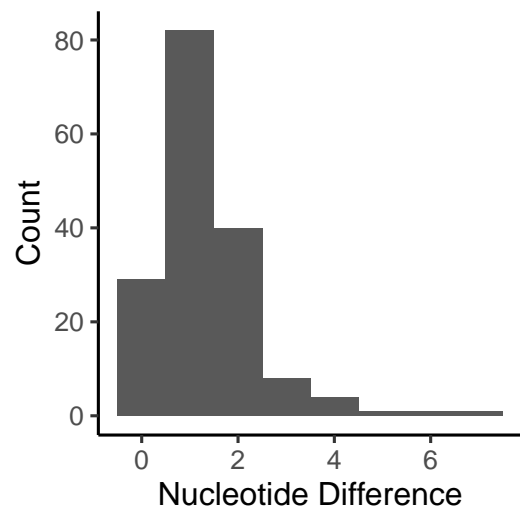
### IGHV3-49\*03

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



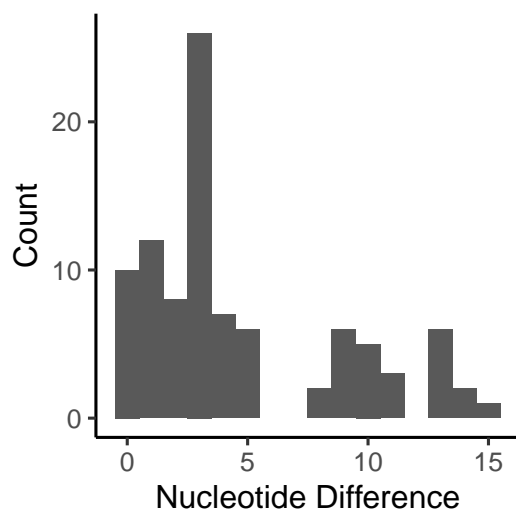
### IGHV3-64\*01

166 sequences assigned  
29 (17.5%) exact matches, in which:  
19 unique CDR3  
2 unique J



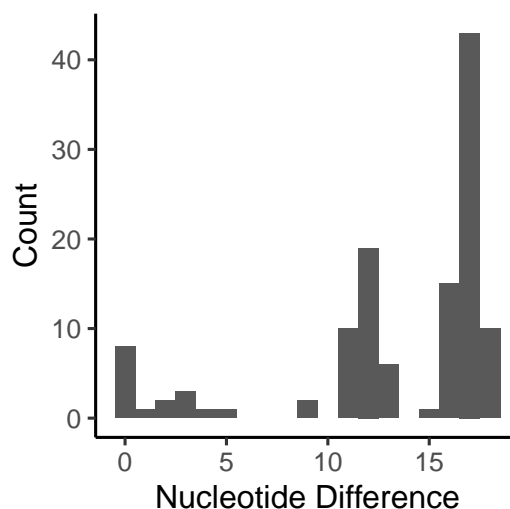
### IGHV3-66\*02

100 sequences assigned  
10 (10%) exact matches, in which:  
9 unique CDR3  
5 unique J



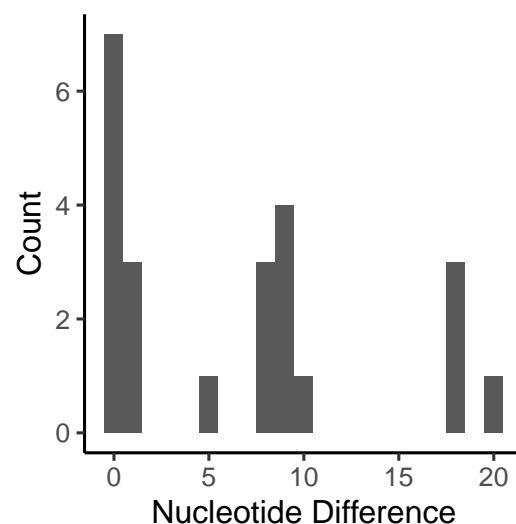
### IGHV3-73\*02

123 sequences assigned  
8 (6.5%) exact matches, in which:  
7 unique CDR3  
2 unique J



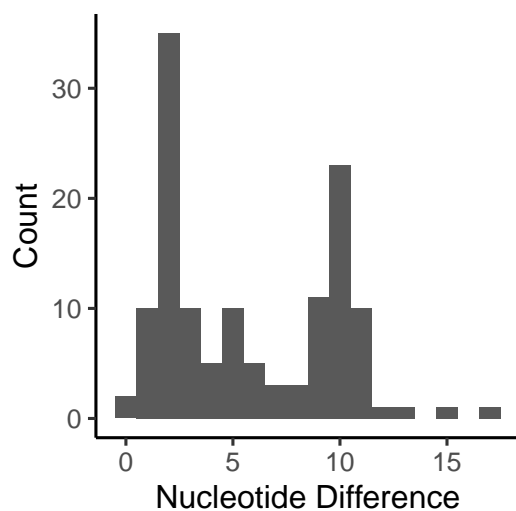
### IGHV4-30-2\*01

25 sequences assigned  
7 (28%) exact matches, in which:  
5 unique CDR3  
3 unique J



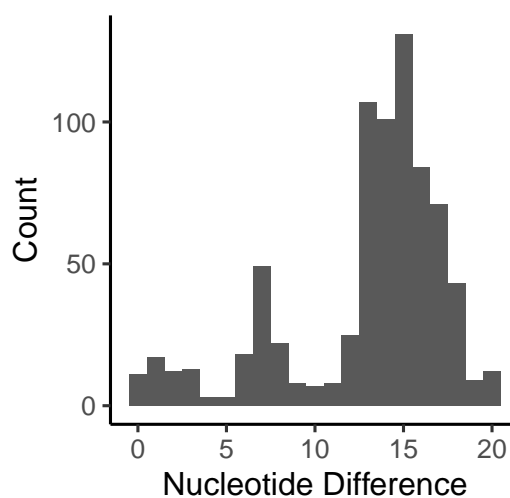
### IGHV3-72\*01

188 sequences assigned  
2 (1.1%) exact matches, in which:  
1 unique CDR3  
1 unique J



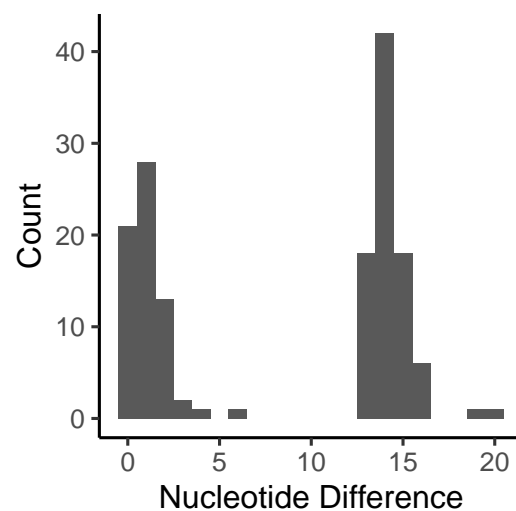
### IGHV3-74\*01

962 sequences assigned  
11 (1.1%) exact matches, in which:  
10 unique CDR3  
4 unique J



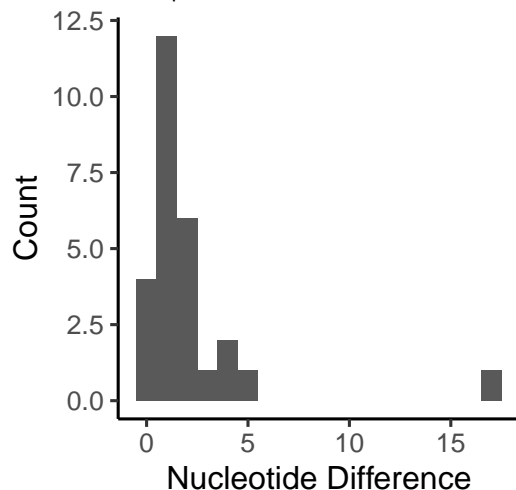
### IGHV4-30-4\*01

250 sequences assigned  
21 (8.4%) exact matches, in which:  
15 unique CDR3  
3 unique J



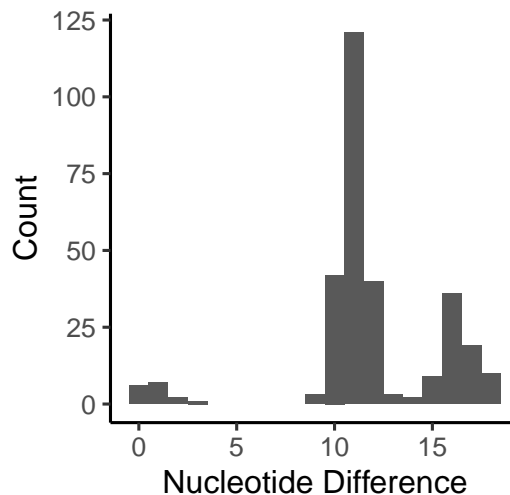
### IGHV3-73\*01

27 sequences assigned  
4 (14.8%) exact matches, in which:  
4 unique CDR3  
2 unique J



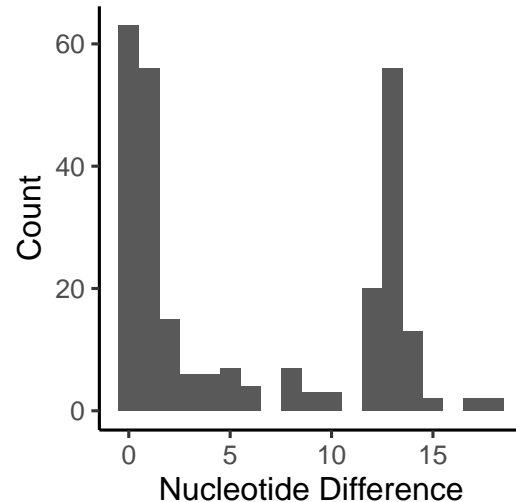
### IGHV4-4\*07

443 sequences assigned  
6 (1.4%) exact matches, in which:  
4 unique CDR3  
3 unique J



### IGHV4-31\*03

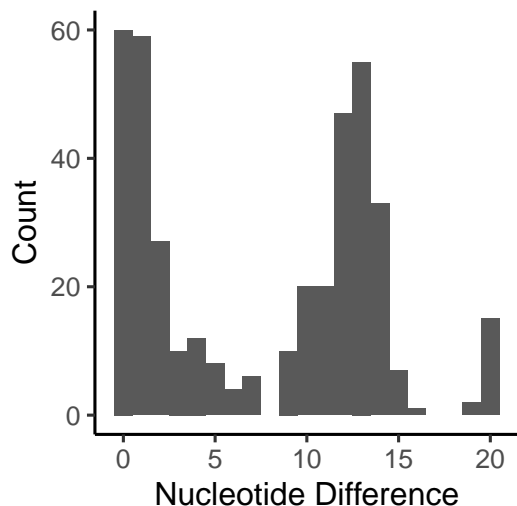
279 sequences assigned  
63 (22.6%) exact matches, in which:  
35 unique CDR3  
5 unique J





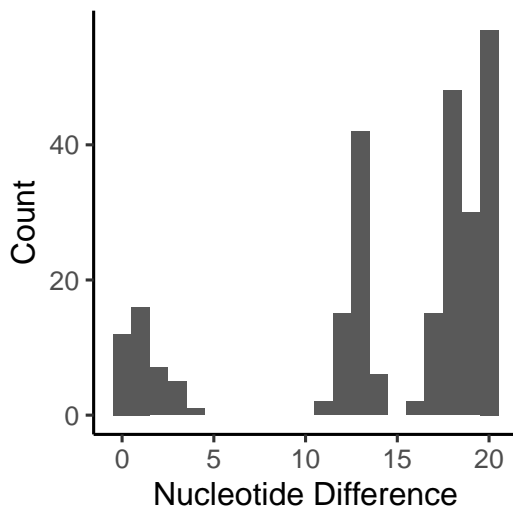
### IGHV4-34\*01

884 sequences assigned  
60 (6.8%) exact matches, in which:  
56 unique CDR3  
6 unique J



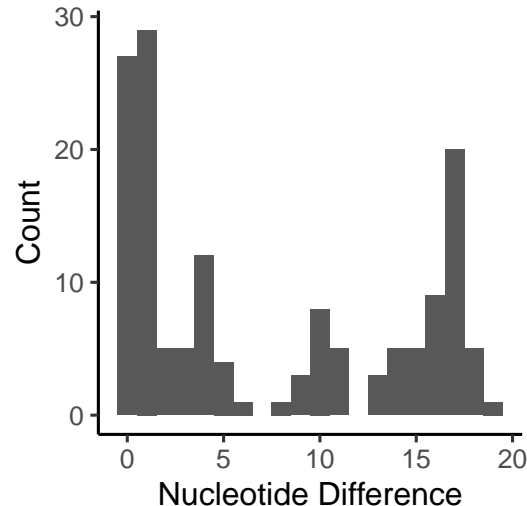
### IGHV4-61\*01

272 sequences assigned  
12 (4.4%) exact matches, in which:  
7 unique CDR3  
2 unique J



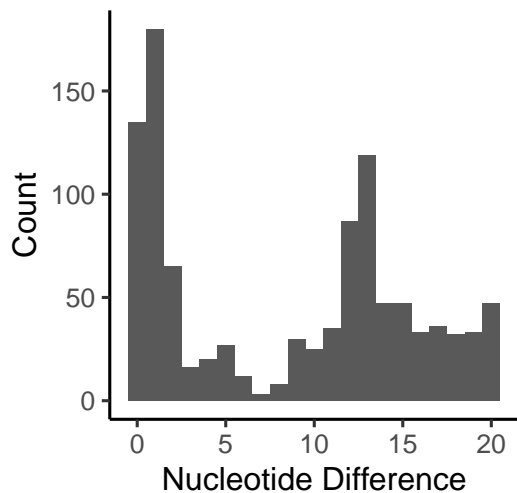
### IGHV5-51\*03

192 sequences assigned  
27 (14.1%) exact matches, in which:  
23 unique CDR3  
4 unique J



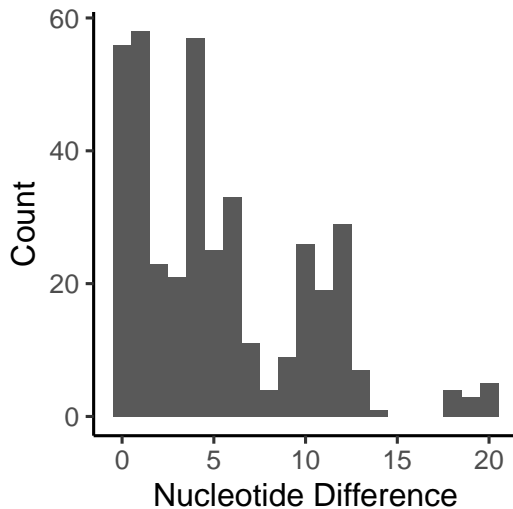
### IGHV4-39\*01

1697 sequences assigned  
135 (8%) exact matches, in which:  
102 unique CDR3  
7 unique J



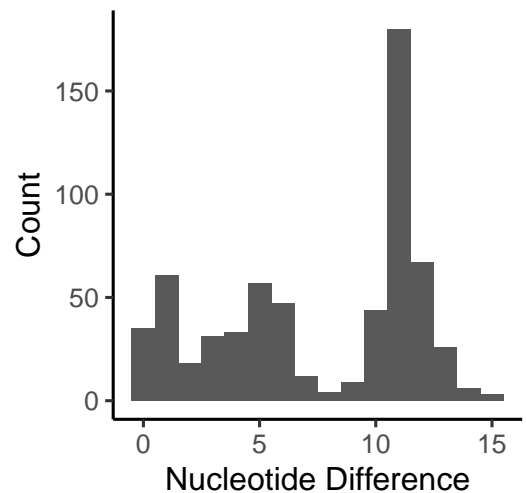
### IGHV4-61\*02

518 sequences assigned  
56 (10.8%) exact matches, in which:  
32 unique CDR3  
6 unique J



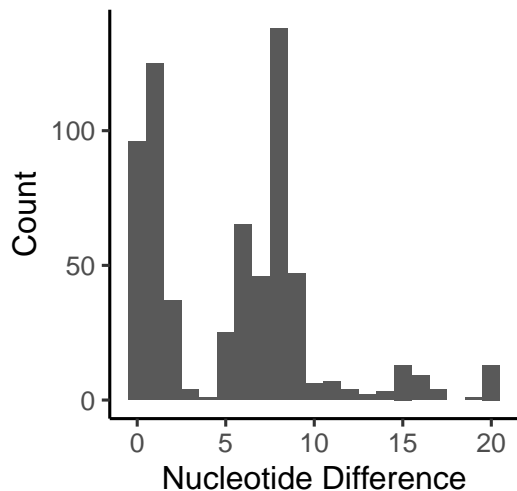
### IGHV6-1\*01

633 sequences assigned  
35 (5.5%) exact matches, in which:  
18 unique CDR3  
4 unique J



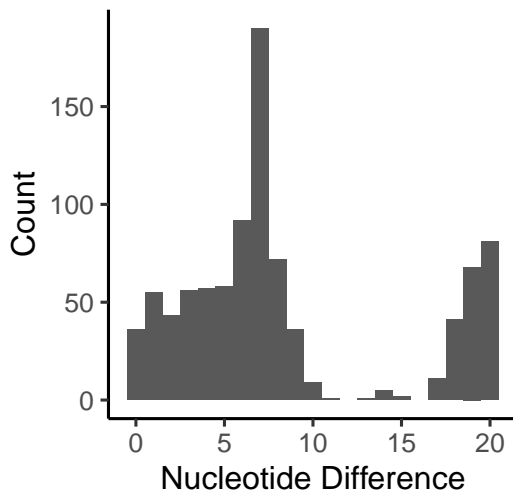
### IGHV4-59\*01

1236 sequences assigned  
96 (7.8%) exact matches, in which:  
68 unique CDR3  
5 unique J



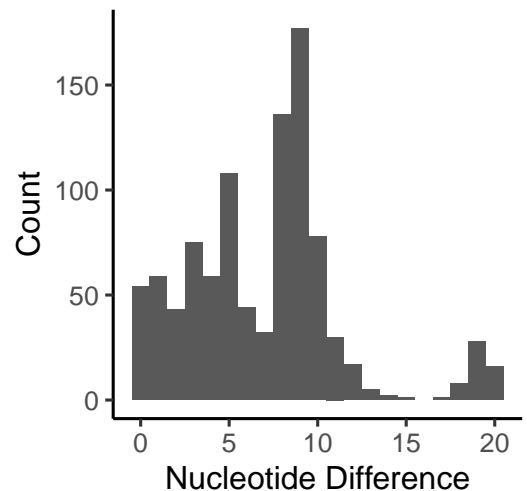
### IGHV5-51\*01

1159 sequences assigned  
36 (3.1%) exact matches, in which:  
32 unique CDR3  
4 unique J

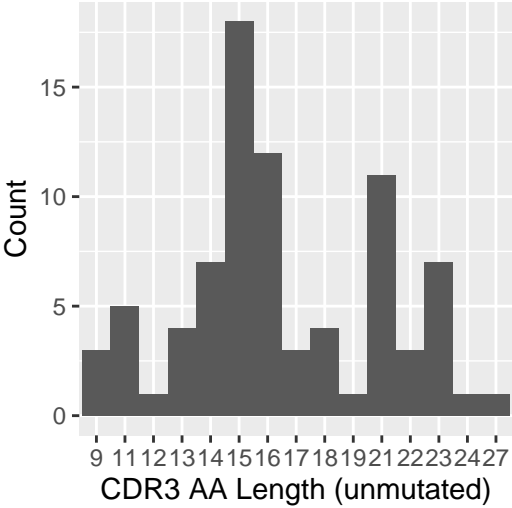


### IGHV7-4-1\*02

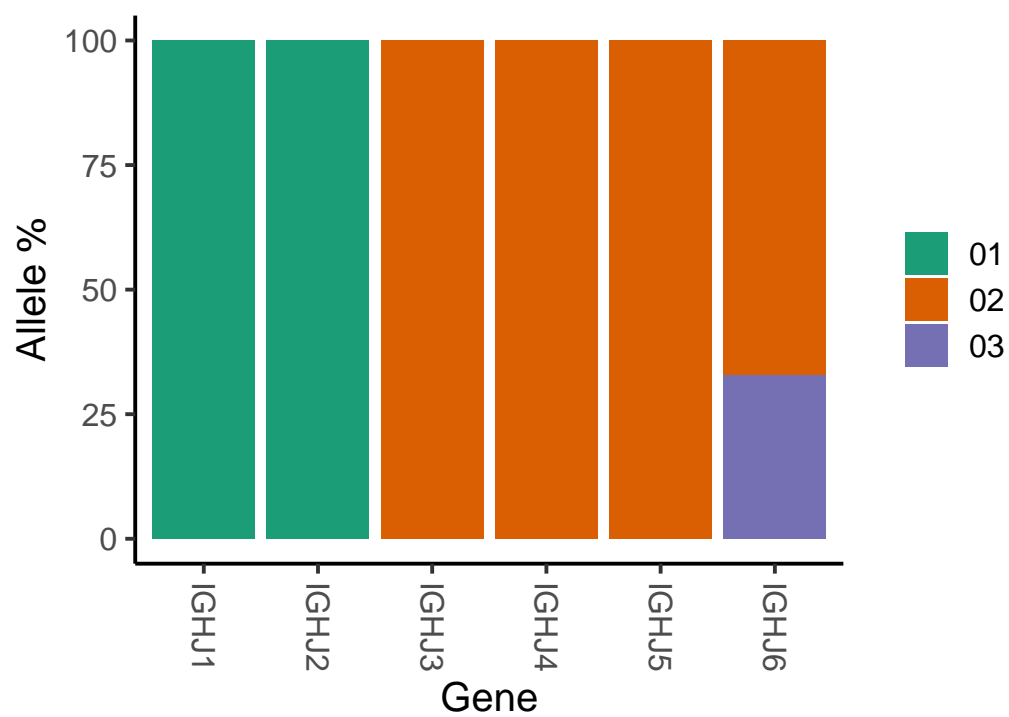
1033 sequences assigned  
54 (5.2%) exact matches, in which:  
32 unique CDR3  
6 unique J



IGHV1-69\*04\_C184T



Allele Usage



Sequence Count by IGHJ6 allele usage

