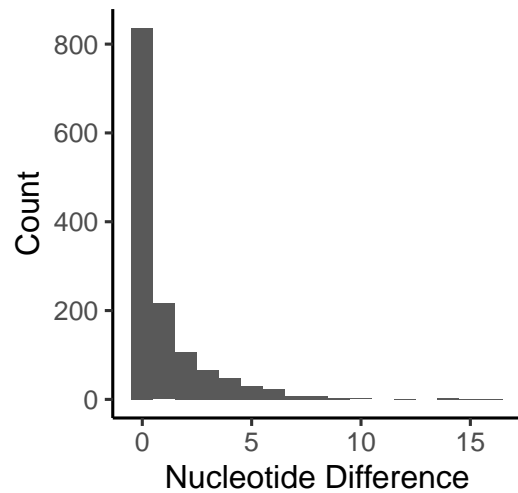


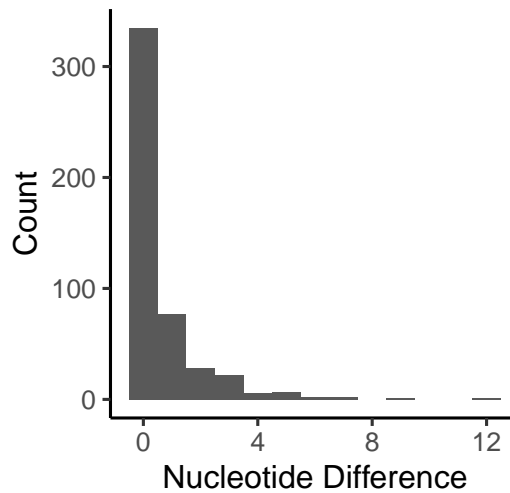
### IGKV1-5\*03

1356 sequences assigned  
837 (61.7%) exact matches, in which:  
615 unique CDR3  
6 unique J



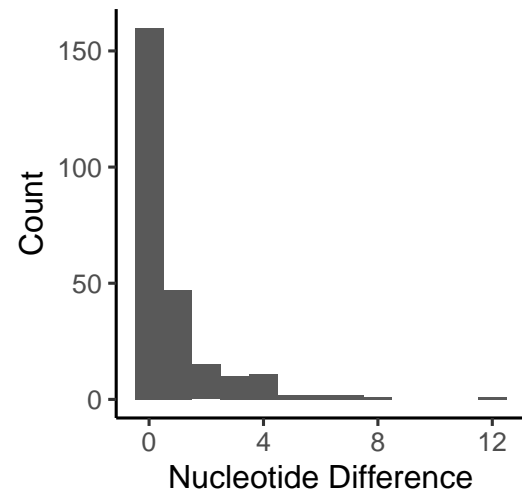
### IGKV1-9\*01

481 sequences assigned  
335 (69.6%) exact matches, in which:  
285 unique CDR3  
6 unique J



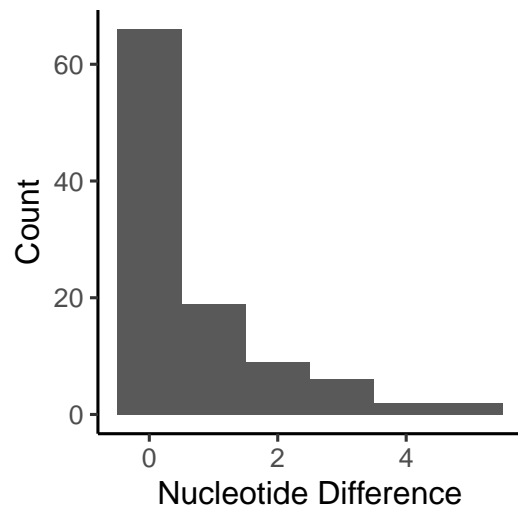
### IGKV1-27\*01

251 sequences assigned  
160 (63.7%) exact matches, in which:  
136 unique CDR3  
6 unique J



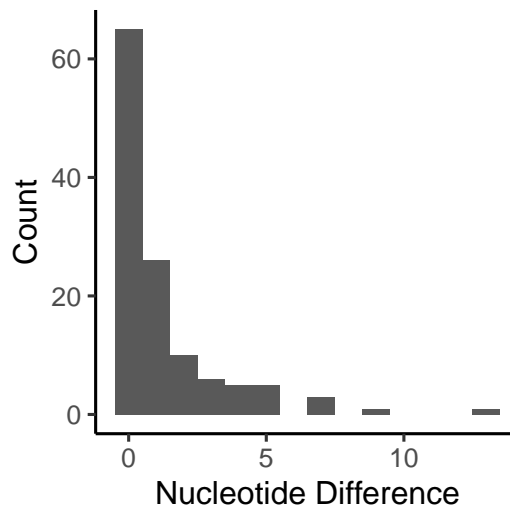
### IGKV1-6\*01

104 sequences assigned  
66 (63.5%) exact matches, in which:  
49 unique CDR3  
6 unique J



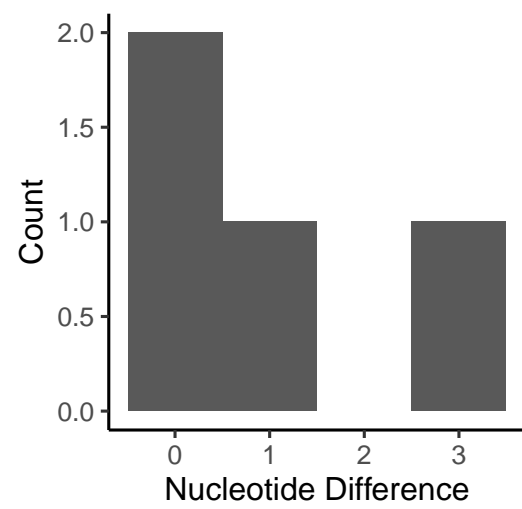
### IGKV1-16\*02

122 sequences assigned  
65 (53.3%) exact matches, in which:  
55 unique CDR3  
6 unique J



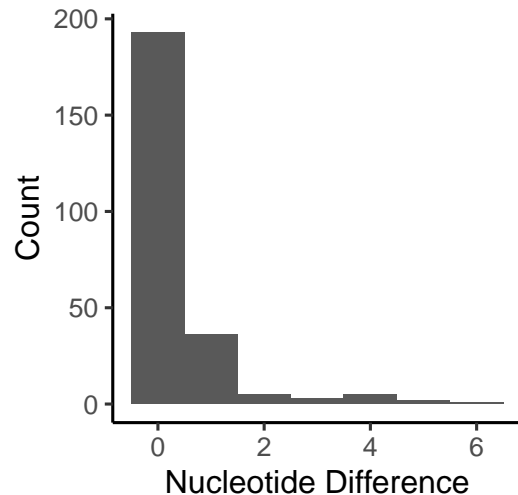
### IGKV2/OR22-4\*01

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



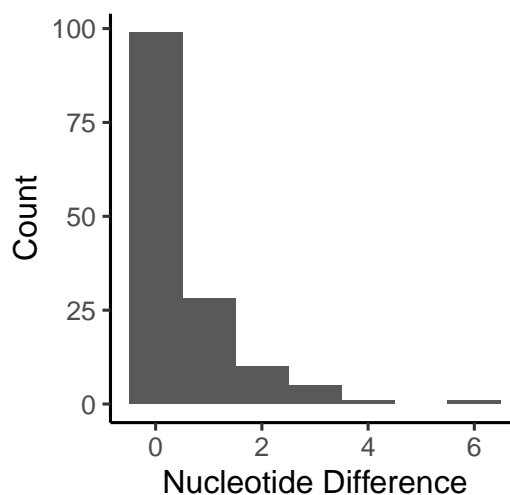
### IGKV1-8\*01

245 sequences assigned  
193 (78.8%) exact matches, in which:  
146 unique CDR3  
6 unique J



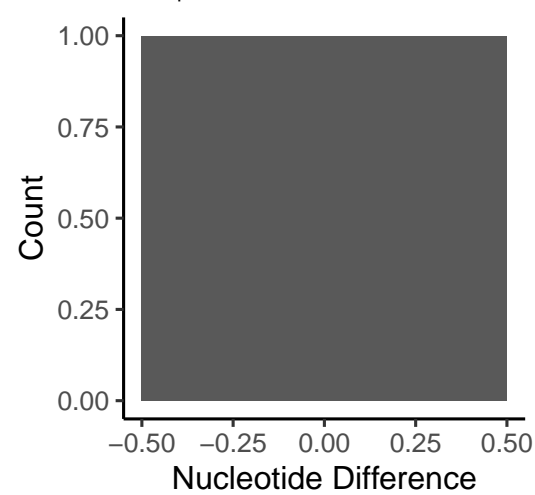
### IGKV1-17\*01

144 sequences assigned  
99 (68.8%) exact matches, in which:  
89 unique CDR3  
6 unique J



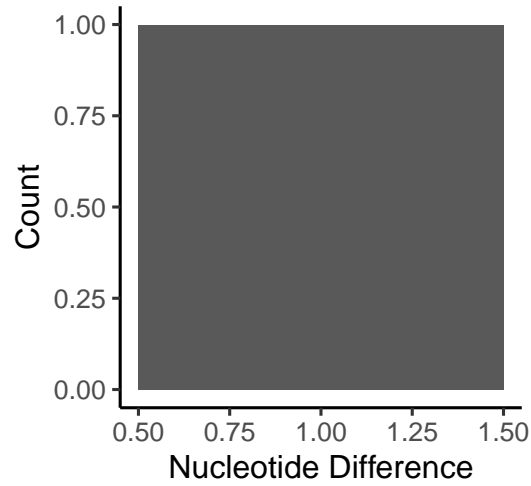
### IGKV2-4\*01

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



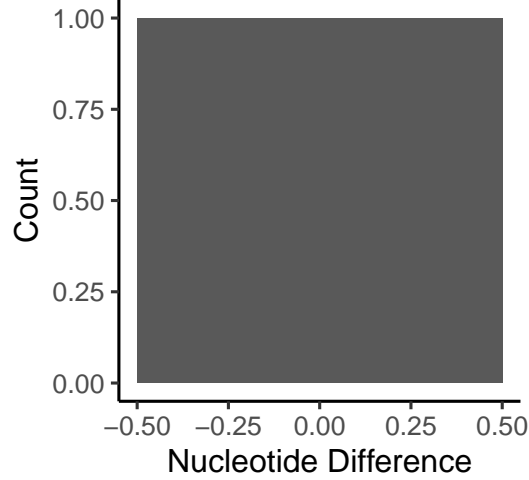
### IGKV2-18\*01

1 sequences assigned  
No exact matches.



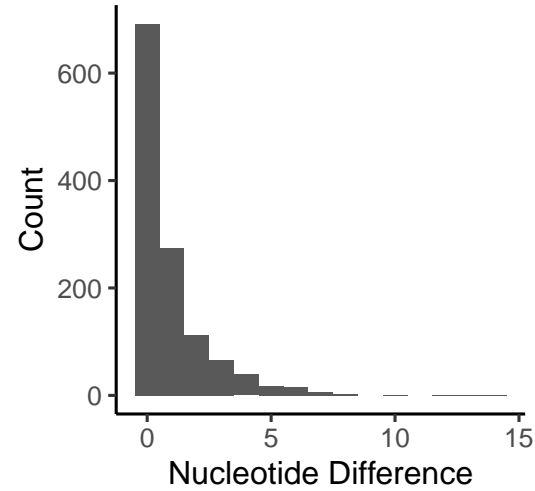
### IGKV1/OR2-108\*01

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



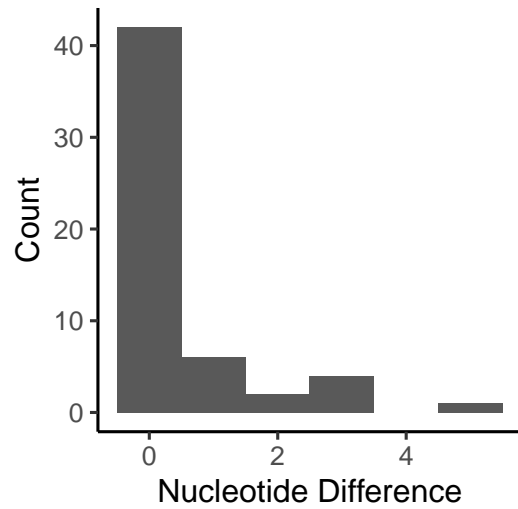
### IGKV3-15\*01

1230 sequences assigned  
692 (56.3%) exact matches, in which:  
557 unique CDR3  
6 unique J



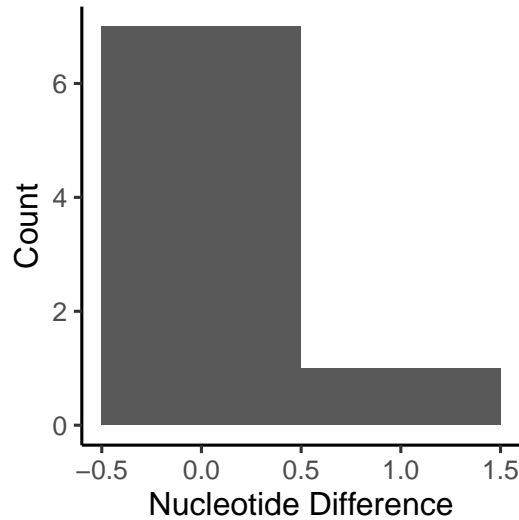
### IGKV2-24\*01

55 sequences assigned  
42 (76.4%) exact matches, in which:  
40 unique CDR3  
6 unique J



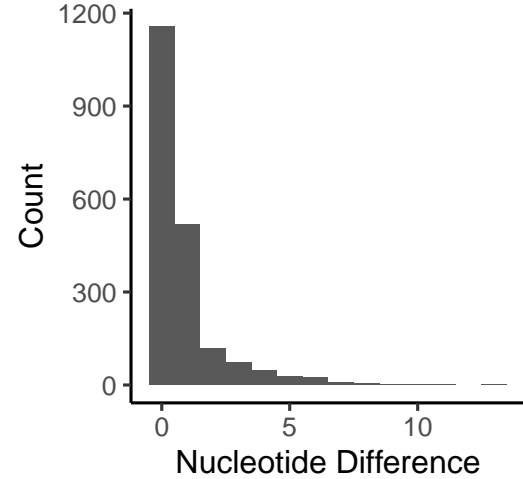
### IGKV3-7\*04

8 sequences assigned  
7 (87.5%) exact matches, in which:  
7 unique CDR3  
5 unique J



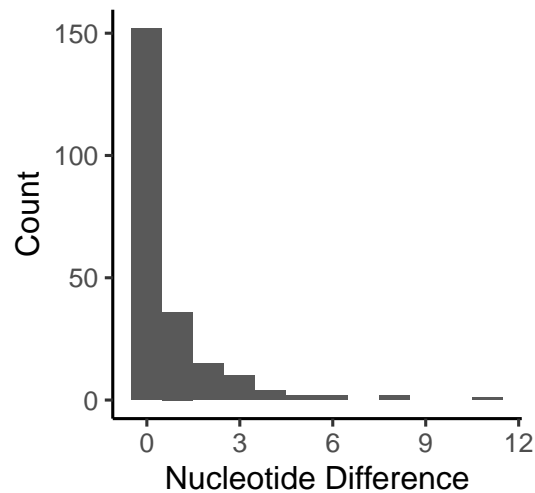
### IGKV3-20\*01

1984 sequences assigned  
1156 (58.3%) exact matches, in which:  
946 unique CDR3  
6 unique J



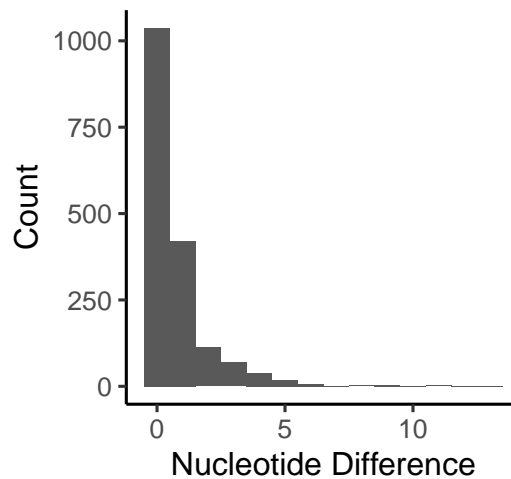
### IGKV2-30\*01

224 sequences assigned  
152 (67.9%) exact matches, in which:  
142 unique CDR3  
6 unique J



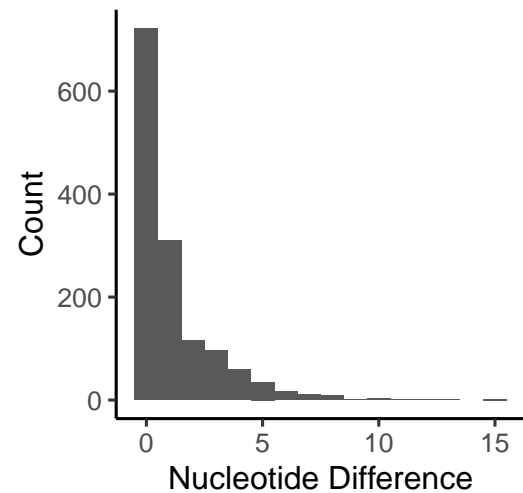
### IGKV3-11\*01

1712 sequences assigned  
1037 (60.6%) exact matches, in which:  
805 unique CDR3  
6 unique J



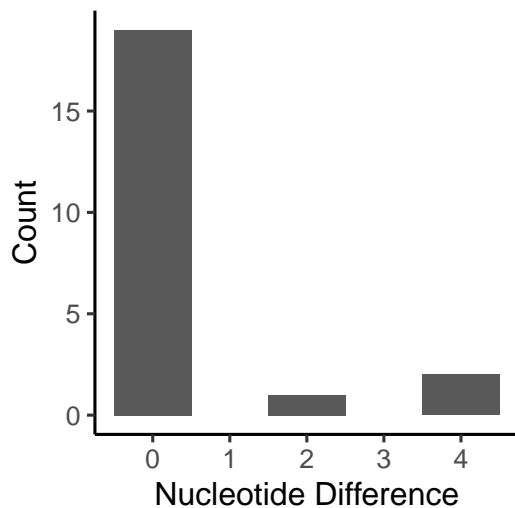
### IGKV4-1\*01

1383 sequences assigned  
722 (52.2%) exact matches, in which:  
533 unique CDR3  
6 unique J



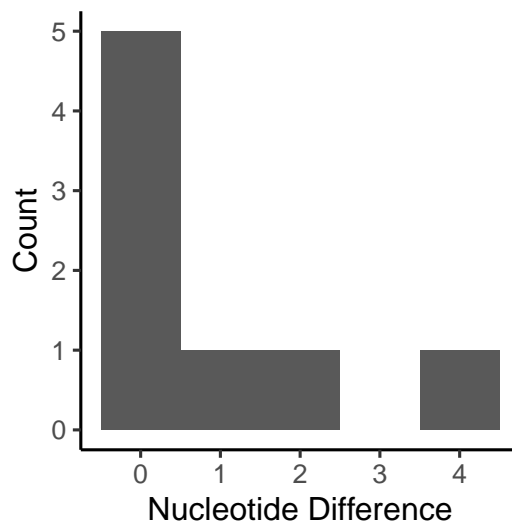
### IGKV5-2\*01

22 sequences assigned  
19 (86.4%) exact matches, in which:  
17 unique CDR3  
4 unique J



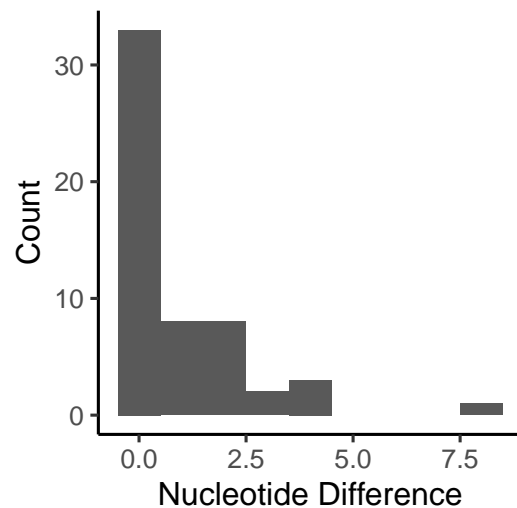
### IGKV3D-7\*01

8 sequences assigned  
5 (62.5%) exact matches, in which:  
5 unique CDR3  
3 unique J



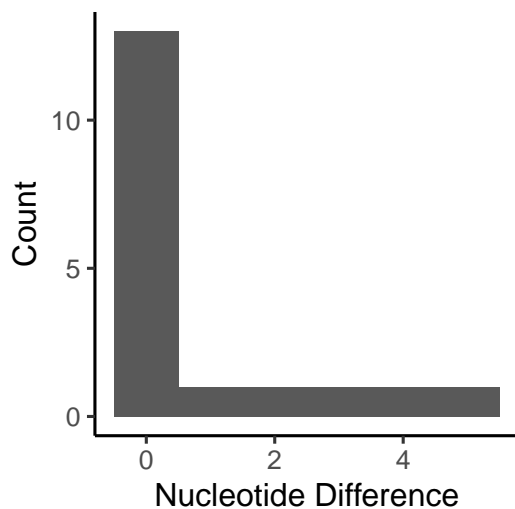
### IGKV3D-15\*01

55 sequences assigned  
33 (60%) exact matches, in which:  
33 unique CDR3  
6 unique J



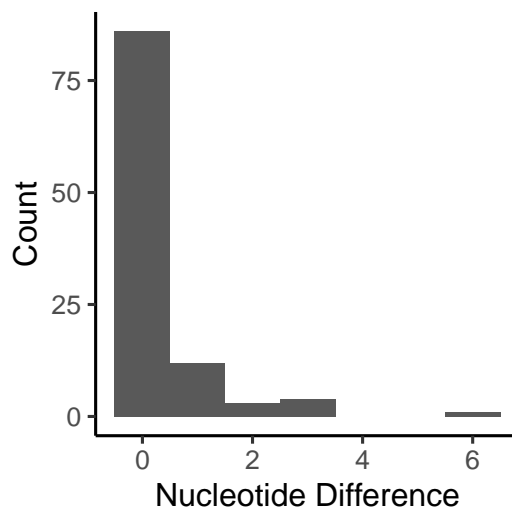
### IGKV5-2\*01\_C214T

18 sequences assigned  
13 (72.2%) exact matches, in which:  
13 unique CDR3  
4 unique J



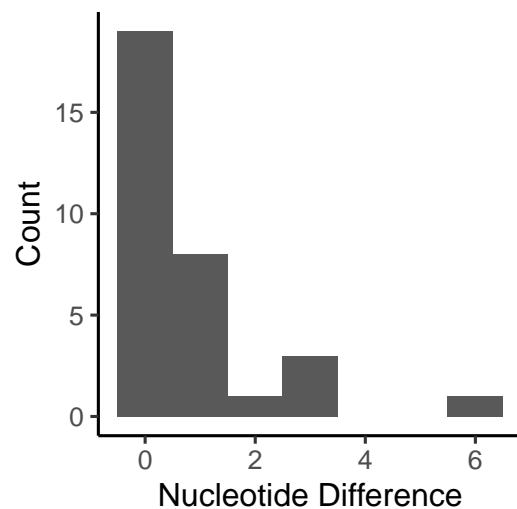
### IGKV1D-8\*01

106 sequences assigned  
86 (81.1%) exact matches, in which:  
62 unique CDR3  
6 unique J



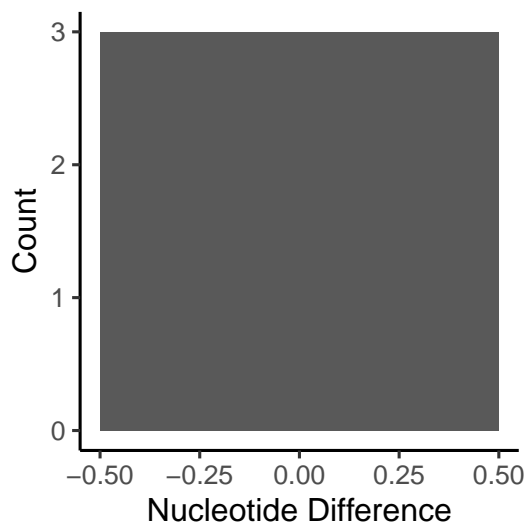
### IGKV1D-16\*01

32 sequences assigned  
19 (59.4%) exact matches, in which:  
17 unique CDR3  
5 unique J



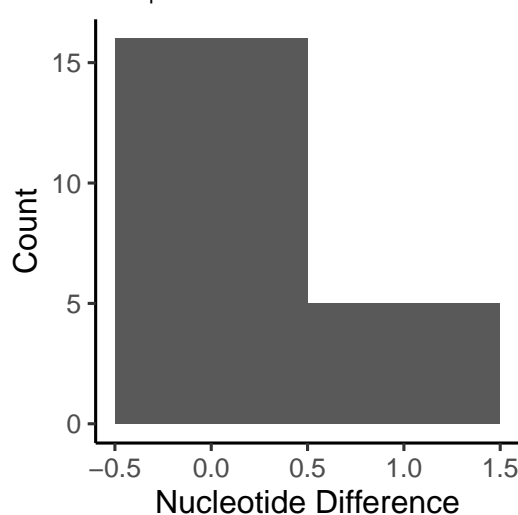
### IGKV7-3\*01

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



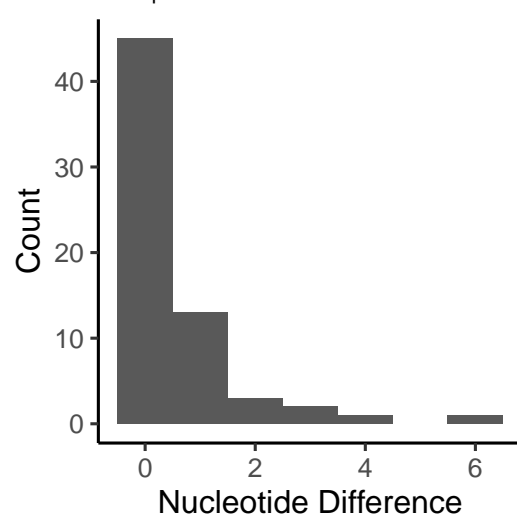
### IGKV3D-11\*01

21 sequences assigned  
16 (76.2%) exact matches, in which:  
16 unique CDR3  
3 unique J



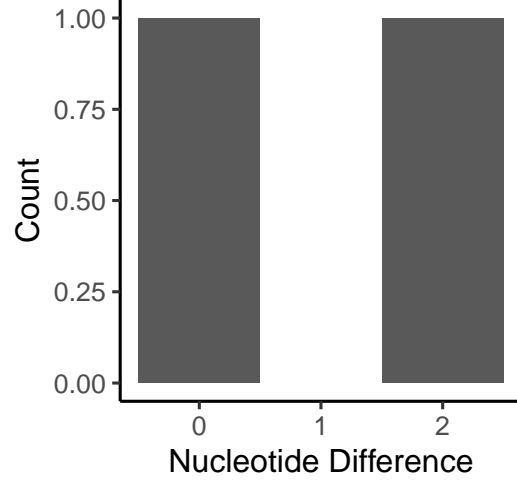
### IGKV3D-20\*01

65 sequences assigned  
45 (69.2%) exact matches, in which:  
40 unique CDR3  
6 unique J



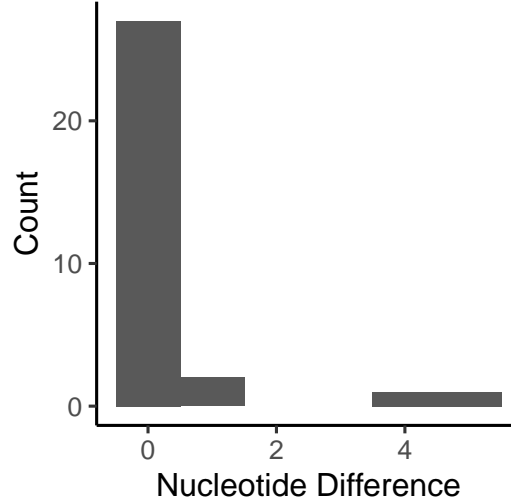
### IGKV2D-24\*01

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



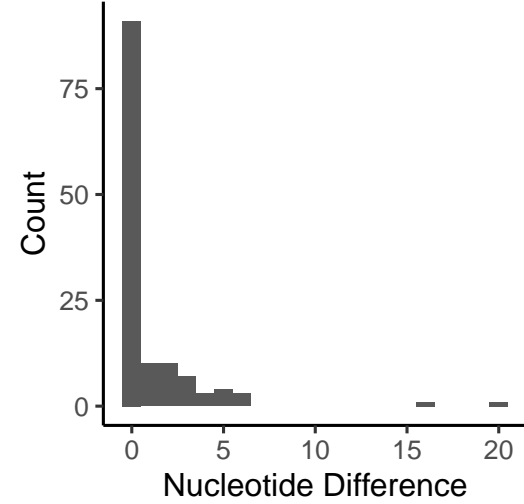
### IGKV2D-30\*01

31 sequences assigned  
27 (87.1%) exact matches, in which:  
25 unique CDR3  
6 unique J



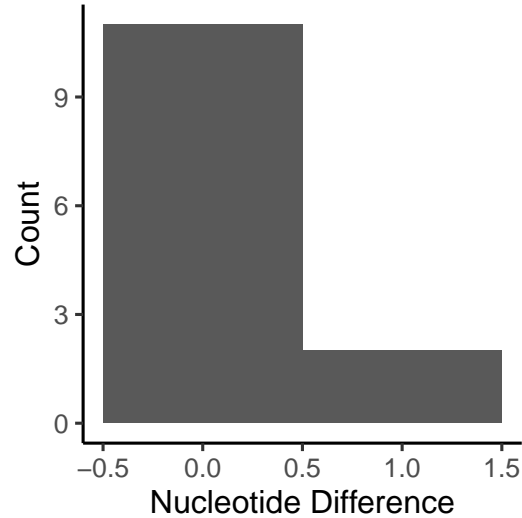
### IGKV1E-12\*03

130 sequences assigned  
91 (70%) exact matches, in which:  
72 unique CDR3  
6 unique J



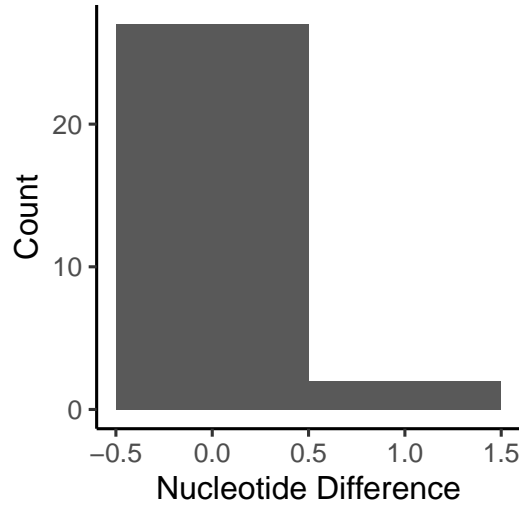
### IGKV2D-26\*03

13 sequences assigned  
11 (84.6%) exact matches, in which:  
10 unique CDR3  
5 unique J



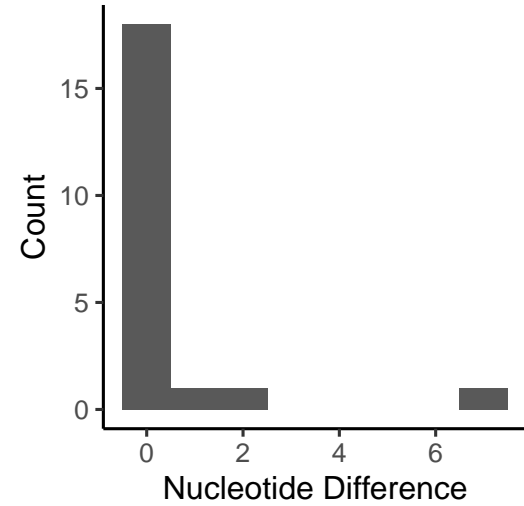
### IGKV1D-43\*01

29 sequences assigned  
27 (93.1%) exact matches, in which:  
26 unique CDR3  
5 unique J



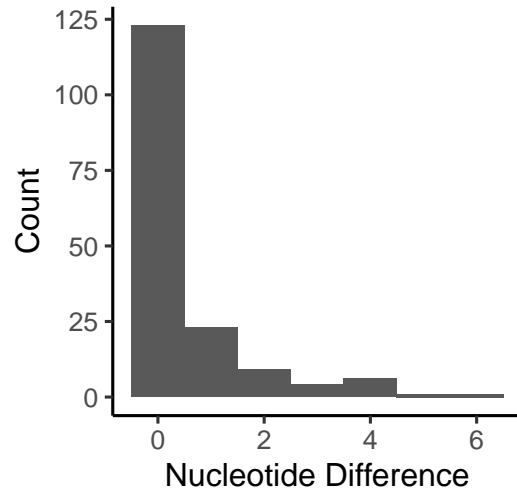
### IGKV1E-13\*03

21 sequences assigned  
18 (85.7%) exact matches, in which:  
16 unique CDR3  
4 unique J



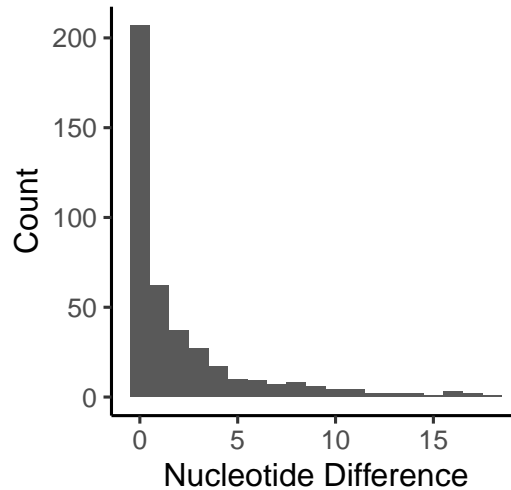
### IGKV2D-29\*01

167 sequences assigned  
123 (73.7%) exact matches, in which:  
111 unique CDR3  
6 unique J



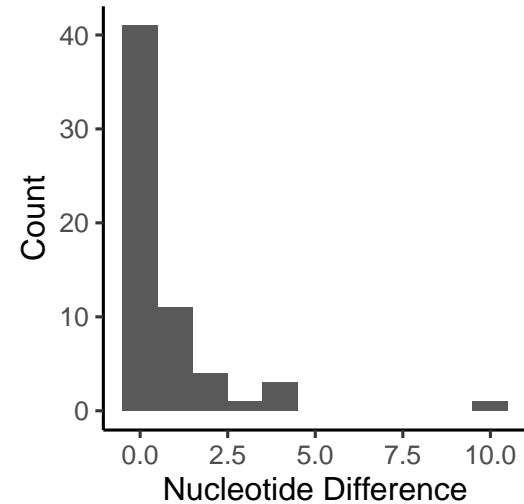
### IGKV1E-12\*01

411 sequences assigned  
207 (50.4%) exact matches, in which:  
146 unique CDR3  
6 unique J



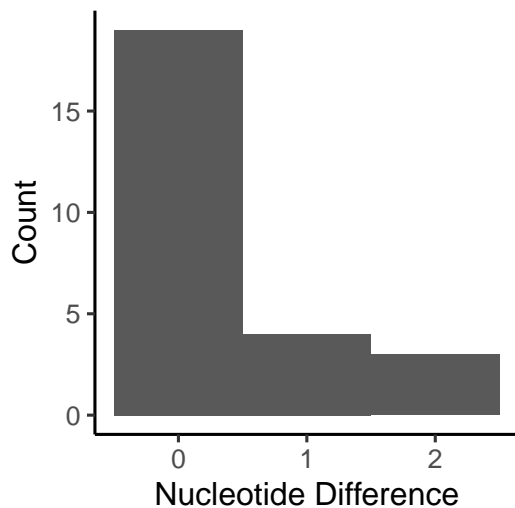
### IGKV6E-21\*01

61 sequences assigned  
41 (67.2%) exact matches, in which:  
30 unique CDR3  
6 unique J



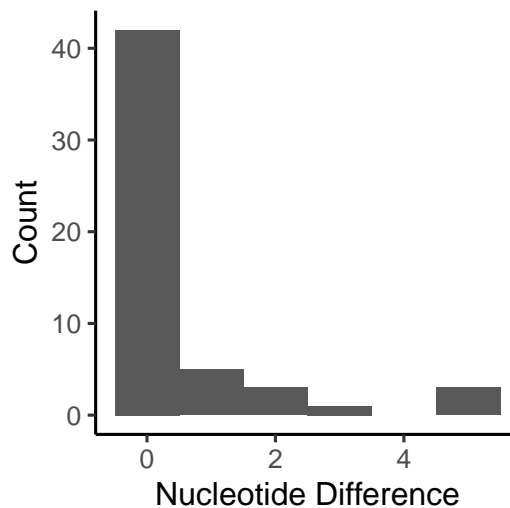
### IGKV6E-21\*03

26 sequences assigned  
19 (73.1%) exact matches, in which:  
17 unique CDR3  
4 unique J



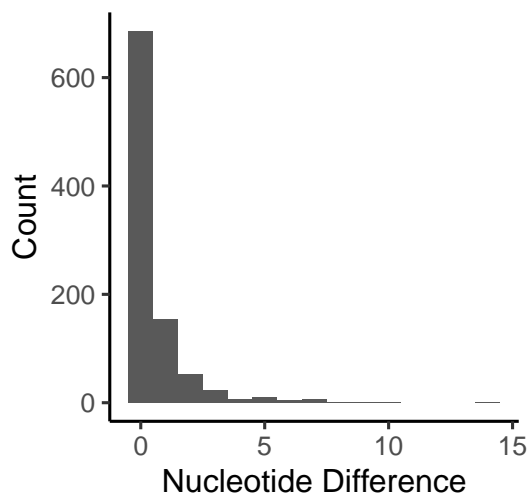
### IGKV1E-37\*01

54 sequences assigned  
42 (77.8%) exact matches, in which:  
40 unique CDR3  
6 unique J



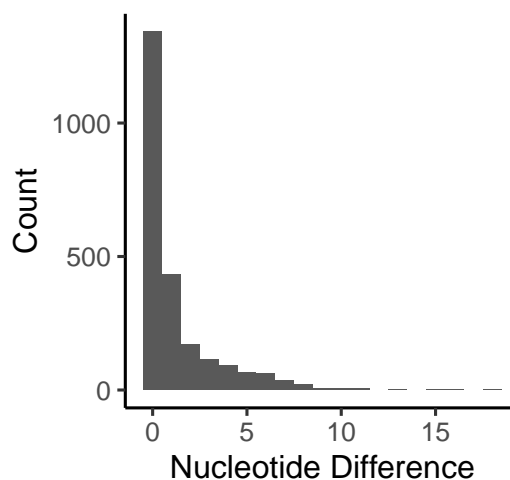
### IGKV2E-28\*01

948 sequences assigned  
686 (72.4%) exact matches, in which:  
533 unique CDR3  
6 unique J



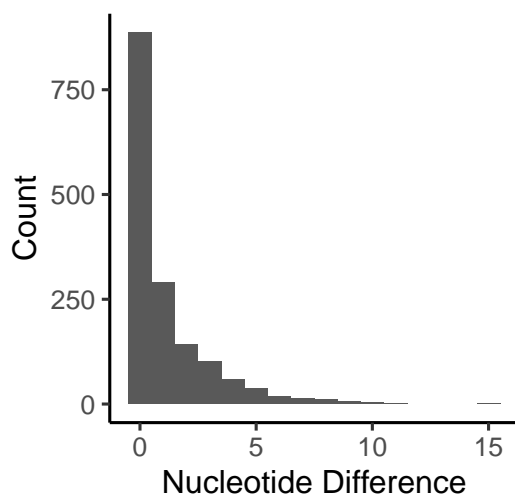
### IGKV1E-39\*01

2357 sequences assigned  
1342 (56.9%) exact matches, in which:  
976 unique CDR3  
6 unique J



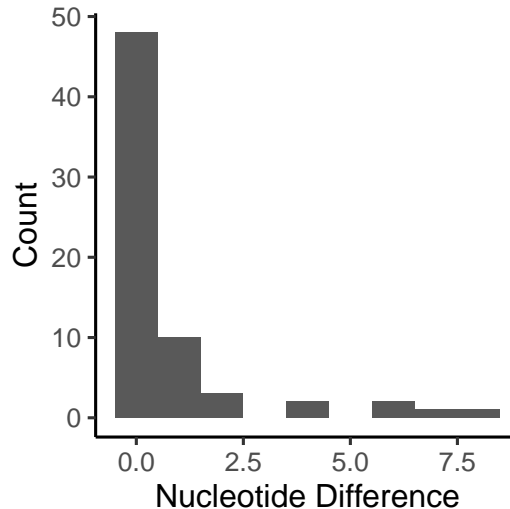
### IGKV1E-33\*01

1571 sequences assigned  
887 (56.5%) exact matches, in which:  
679 unique CDR3  
6 unique J

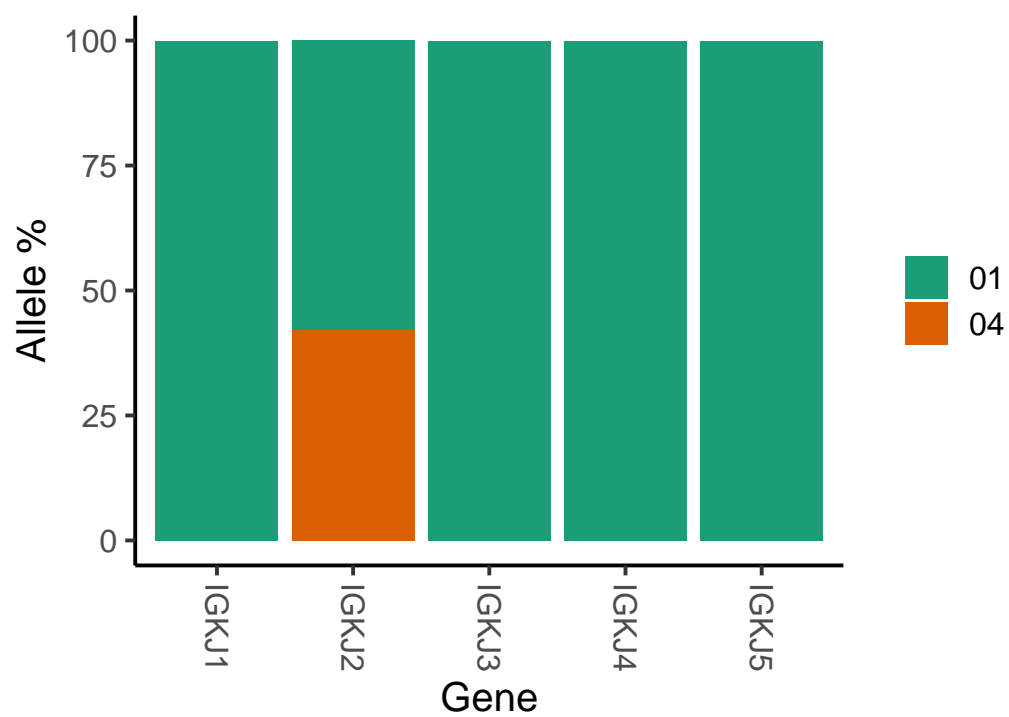


### IGKV2E-40\*01

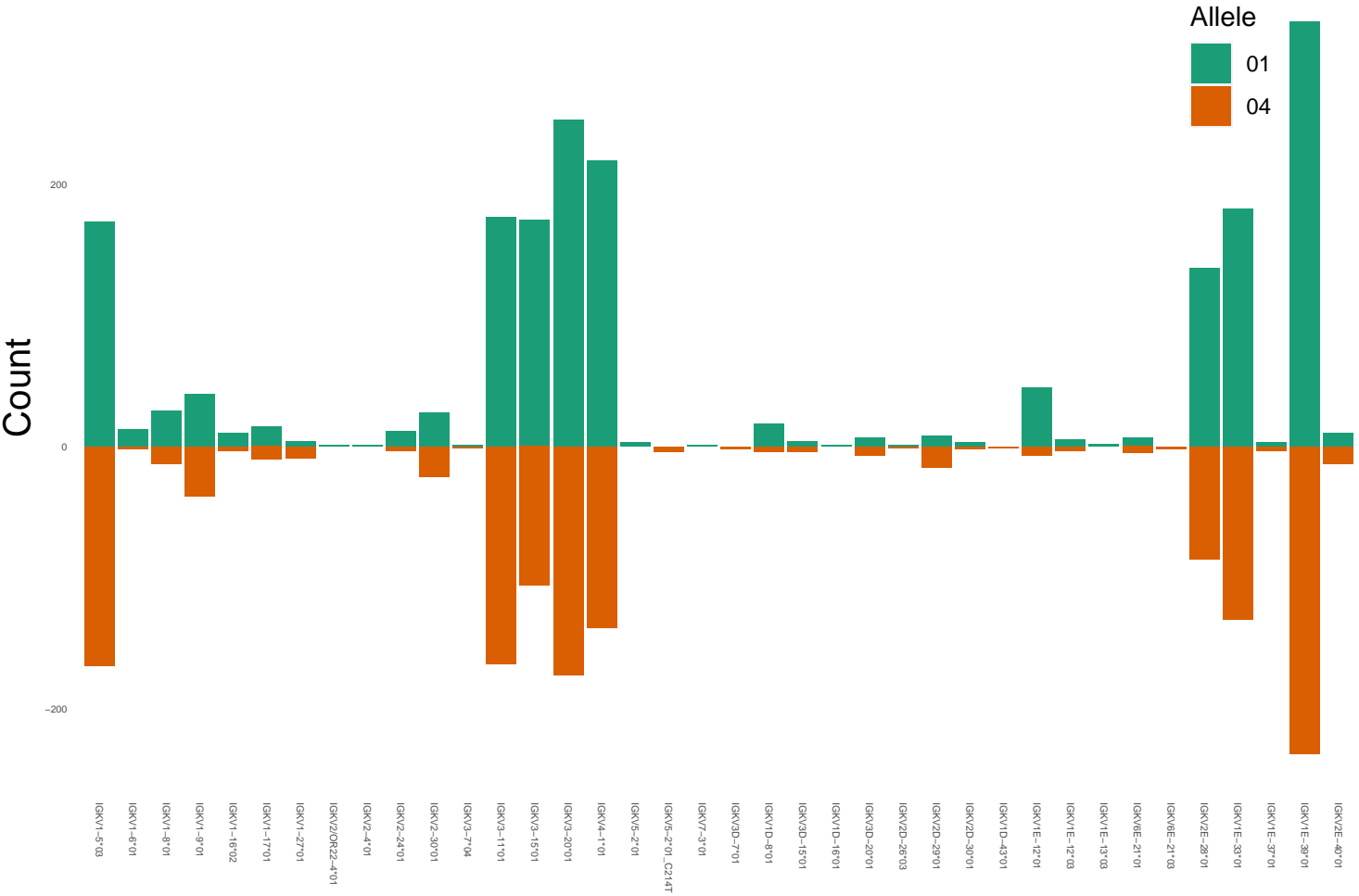
67 sequences assigned  
48 (71.6%) exact matches, in which:  
42 unique CDR3  
6 unique J



Allele Usage



Sequence Count by IGKJ2 allele usage



Warning – no inferred sequences found.