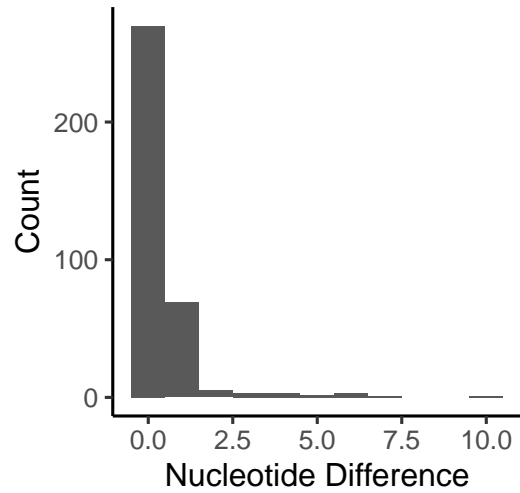


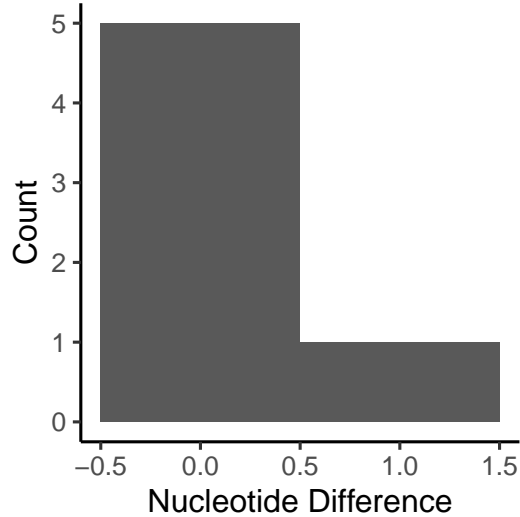
### IGKV1-5\*03

357 sequences assigned  
270 (75.6%) exact matches, in which:  
243 unique CDR3  
5 unique J



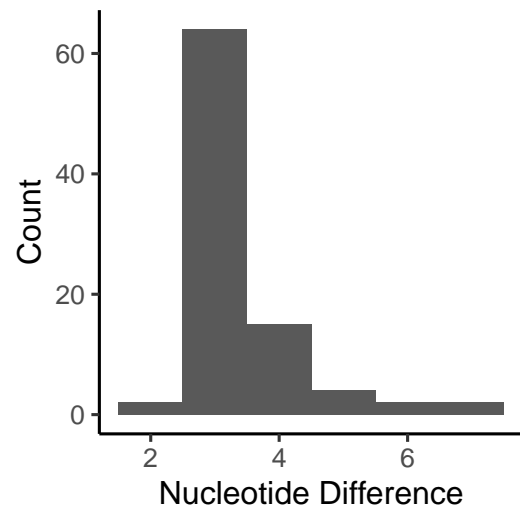
### IGKV1-6\*01\_A229C

6 sequences assigned  
5 (83.3%) exact matches, in which:  
5 unique CDR3  
3 unique J



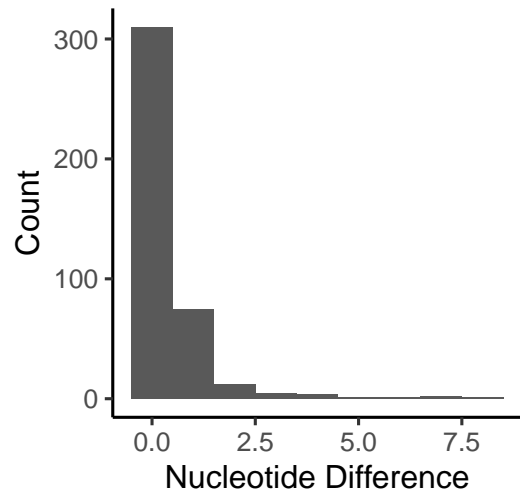
### IGKV1-9\*01

89 sequences assigned  
No exact matches.



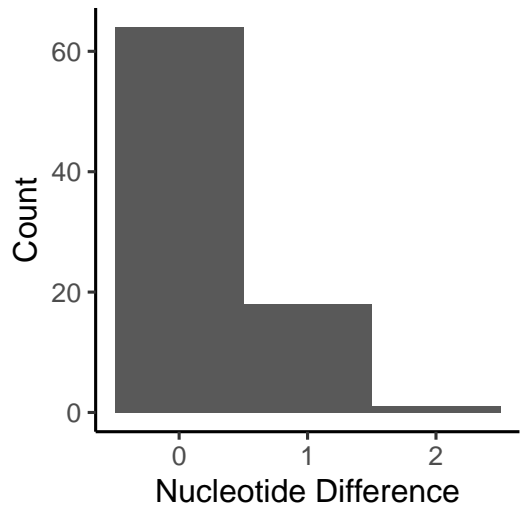
### IGKV1-5\*03\_G171A

411 sequences assigned  
310 (75.4%) exact matches, in which:  
278 unique CDR3  
6 unique J



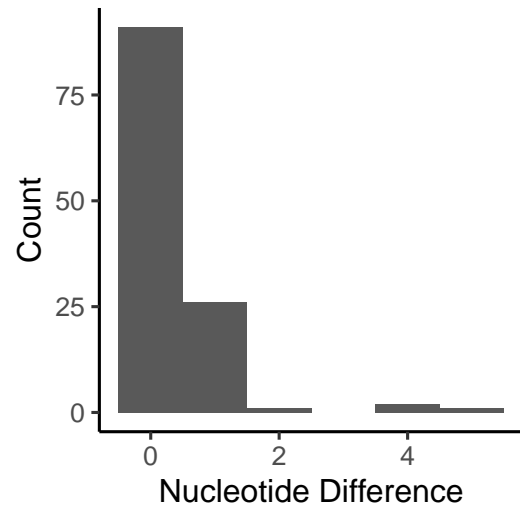
### IGKV1-8\*01

83 sequences assigned  
64 (77.1%) exact matches, in which:  
58 unique CDR3  
6 unique J



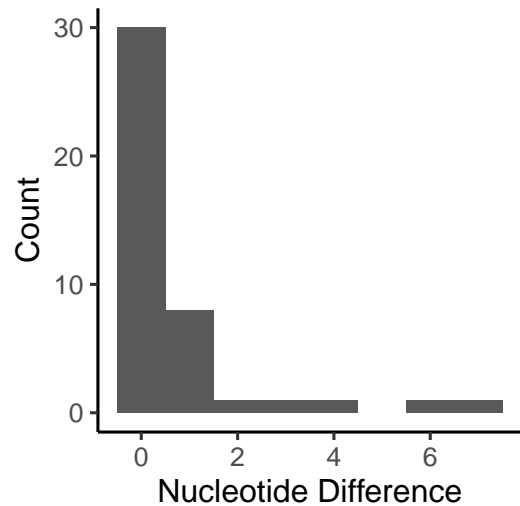
### IGKV1-9\*01\_C75A

121 sequences assigned  
91 (75.2%) exact matches, in which:  
82 unique CDR3  
6 unique J



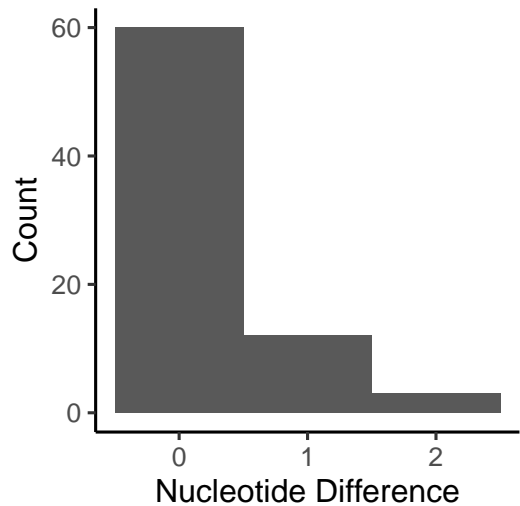
### IGKV1-6\*01

43 sequences assigned  
30 (69.8%) exact matches, in which:  
26 unique CDR3  
5 unique J



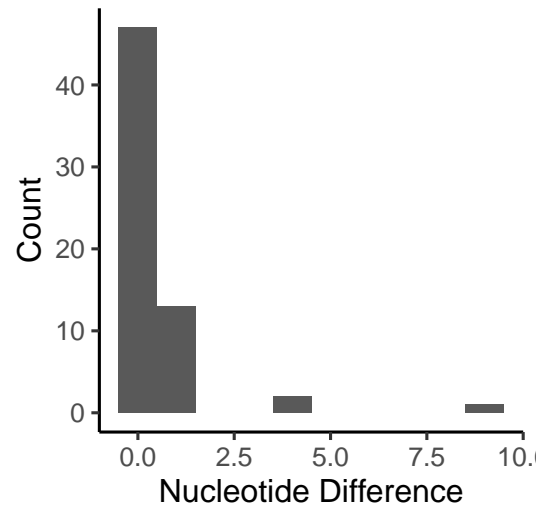
### IGKV1-8\*01\_G12A\_T31C

75 sequences assigned  
60 (80%) exact matches, in which:  
55 unique CDR3  
5 unique J



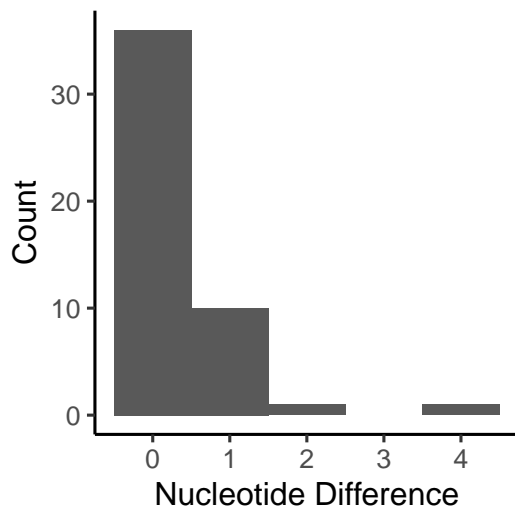
### IGKV1-16\*02

63 sequences assigned  
47 (74.6%) exact matches, in which:  
40 unique CDR3  
6 unique J



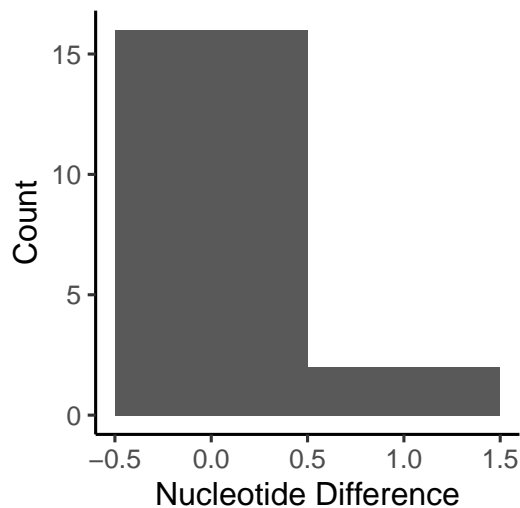
### IGKV1-17\*01

48 sequences assigned  
36 (75%) exact matches, in which:  
32 unique CDR3  
5 unique J



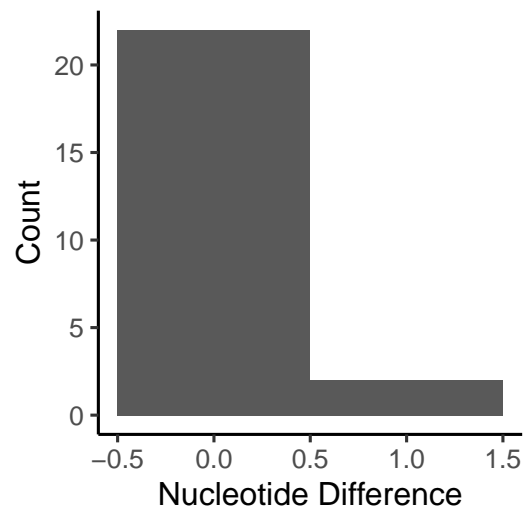
### IGKV1-27\*01\_A229C

18 sequences assigned  
16 (88.9%) exact matches, in which:  
16 unique CDR3  
5 unique J



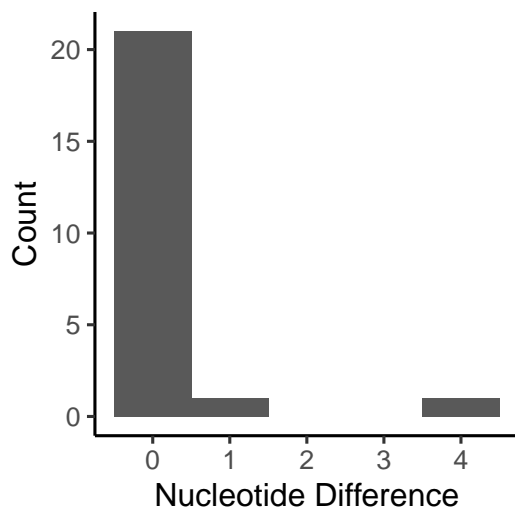
### IGKV2-24\*01

24 sequences assigned  
22 (91.7%) exact matches, in which:  
22 unique CDR3  
6 unique J



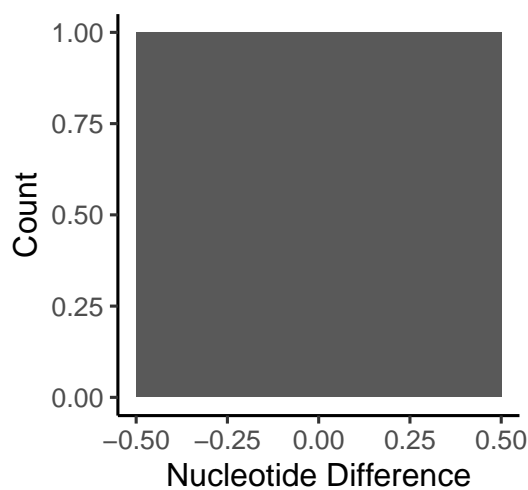
### IGKV1-17\*03

23 sequences assigned  
21 (91.3%) exact matches, in which:  
18 unique CDR3  
5 unique J



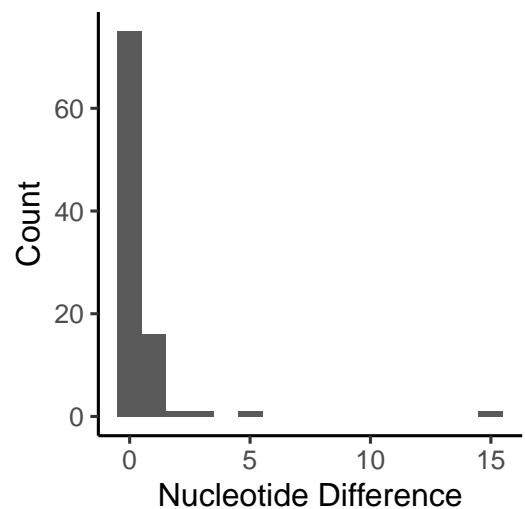
### IGKV2/OR22-4\*01

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



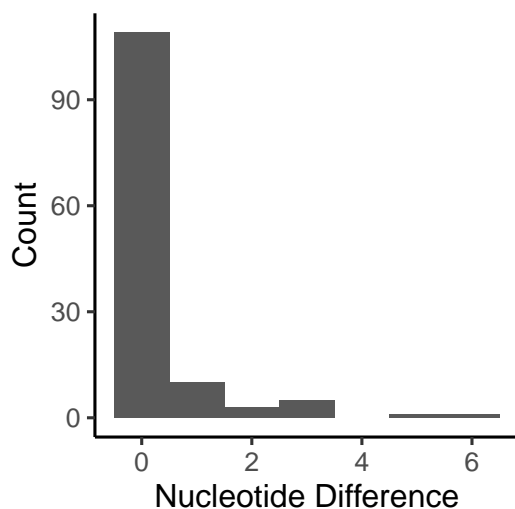
### IGKV2-30\*01

95 sequences assigned  
75 (78.9%) exact matches, in which:  
73 unique CDR3  
6 unique J



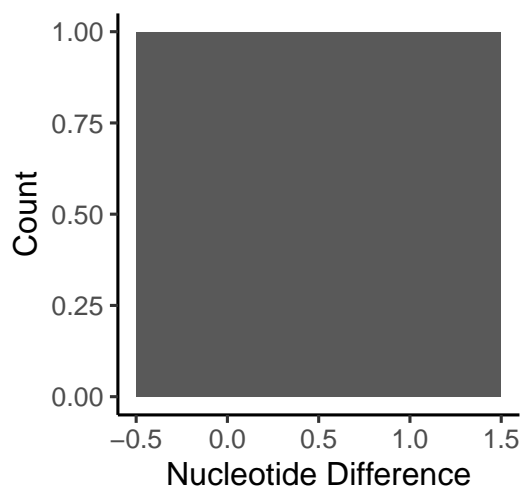
### IGKV1-27\*01

129 sequences assigned  
109 (84.5%) exact matches, in which:  
92 unique CDR3  
6 unique J



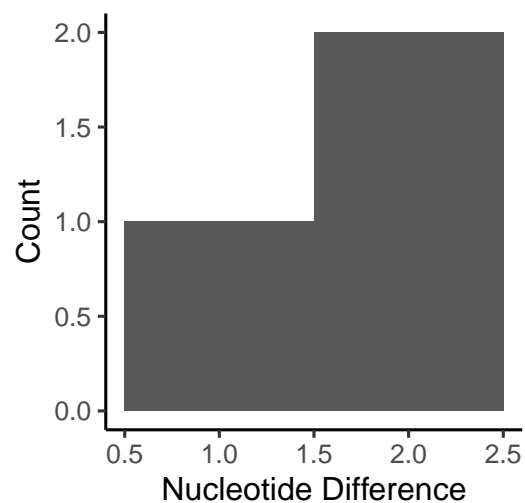
### IGKV2-18\*01

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



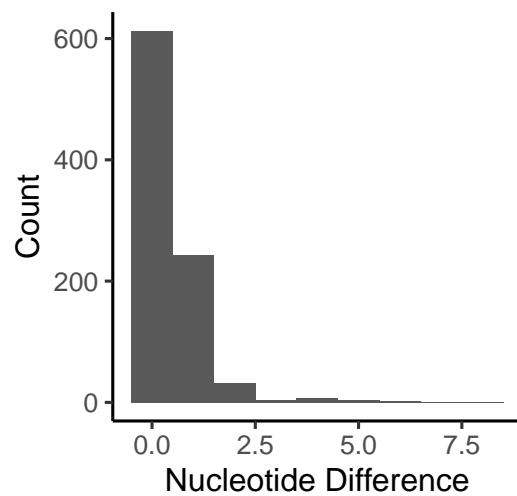
### IGKV3-7\*04

3 sequences assigned  
No exact matches.



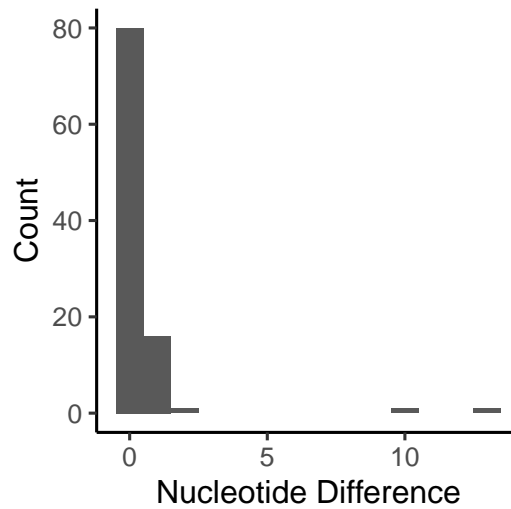
### IGKV3–11\*01

907 sequences assigned  
613 (67.6%) exact matches, in which:  
499 unique CDR3  
6 unique J



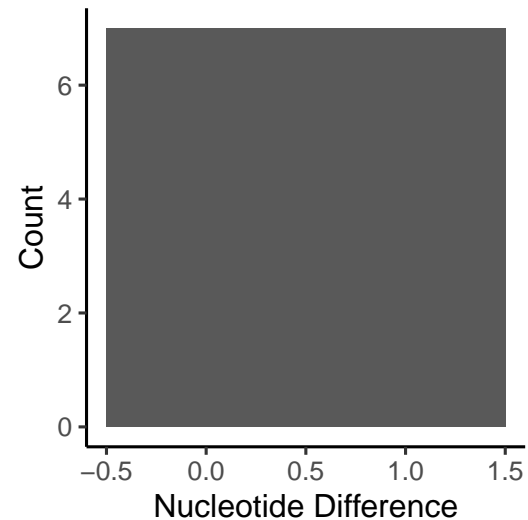
### IGKV3–15\*01\_A223C

99 sequences assigned  
80 (80.8%) exact matches, in which:  
80 unique CDR3  
6 unique J



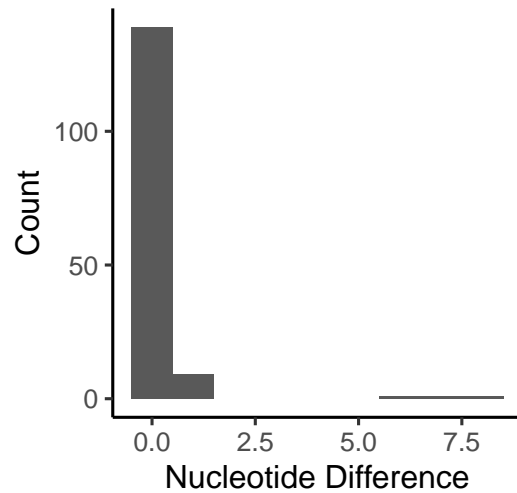
### IGKV5–2\*01

14 sequences assigned  
7 (50%) exact matches, in which:  
7 unique CDR3  
2 unique J



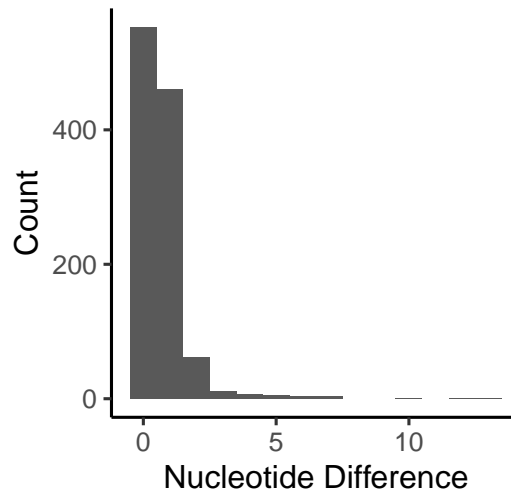
### IGKV3–11\*01\_A223C

151 sequences assigned  
139 (92.1%) exact matches, in which:  
135 unique CDR3  
6 unique J



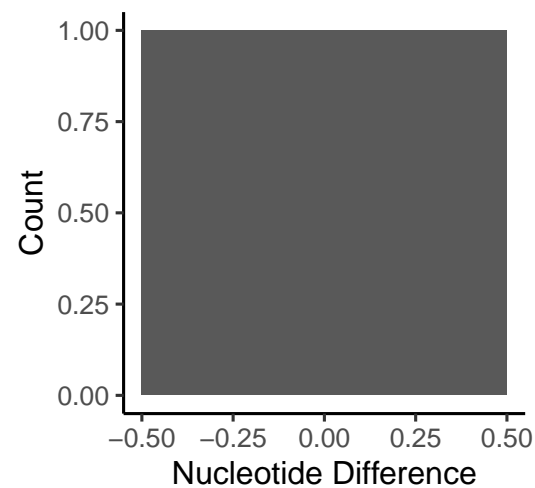
### IGKV3–20\*01

1107 sequences assigned  
553 (50%) exact matches, in which:  
463 unique CDR3  
6 unique J



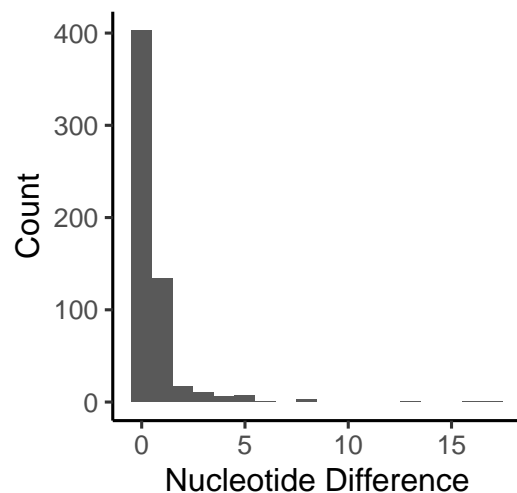
### IGKV7–3\*01

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



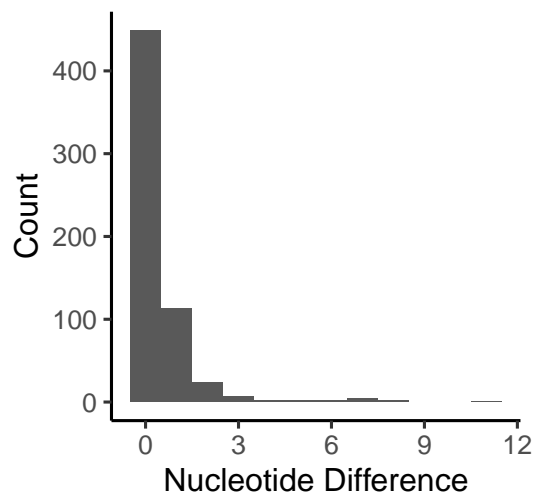
### IGKV3–15\*01

584 sequences assigned  
403 (69%) exact matches, in which:  
332 unique CDR3  
6 unique J



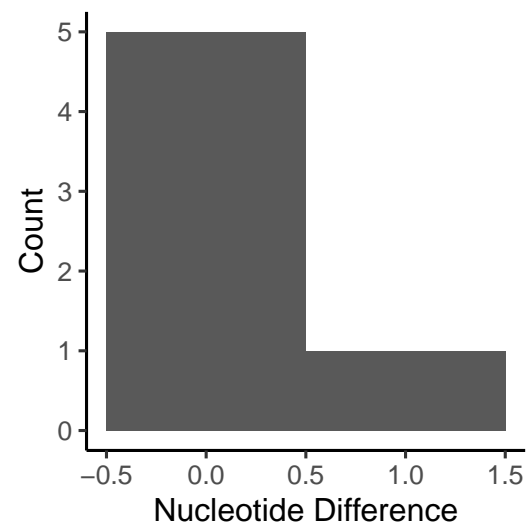
### IGKV4–1\*01

606 sequences assigned  
449 (74.1%) exact matches, in which:  
363 unique CDR3  
6 unique J



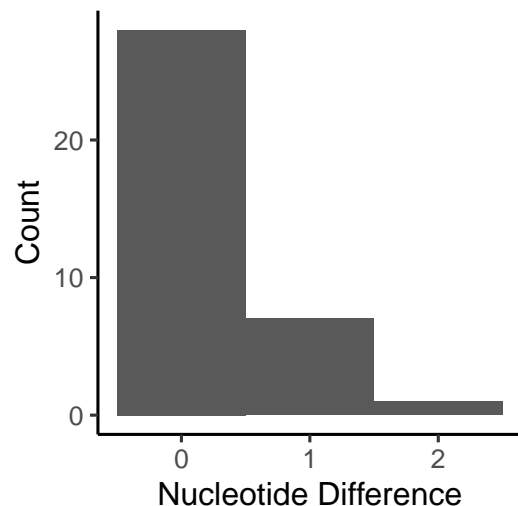
### IGKV3D–7\*01

6 sequences assigned  
5 (83.3%) exact matches, in which:  
4 unique CDR3  
2 unique J



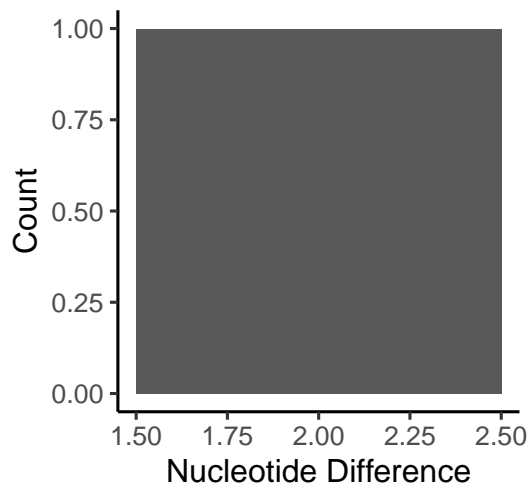
### IGKV1D-8\*01

36 sequences assigned  
28 (77.8%) exact matches, in which:  
24 unique CDR3  
3 unique J



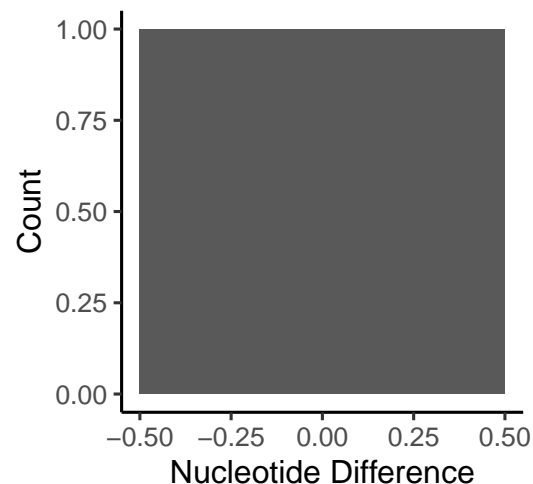
### IGKV3D-15\*01

1 sequences assigned  
No exact matches.



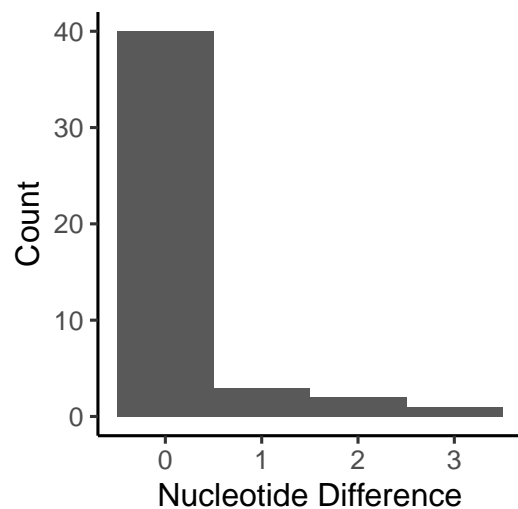
### IGKV1D-17\*01

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



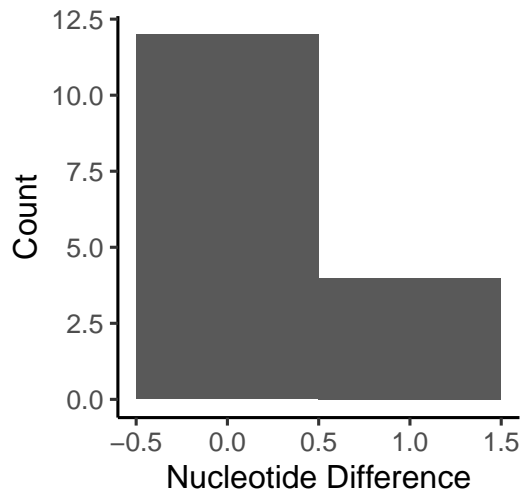
### IGKV1D-8\*02

46 sequences assigned  
40 (87%) exact matches, in which:  
35 unique CDR3  
4 unique J



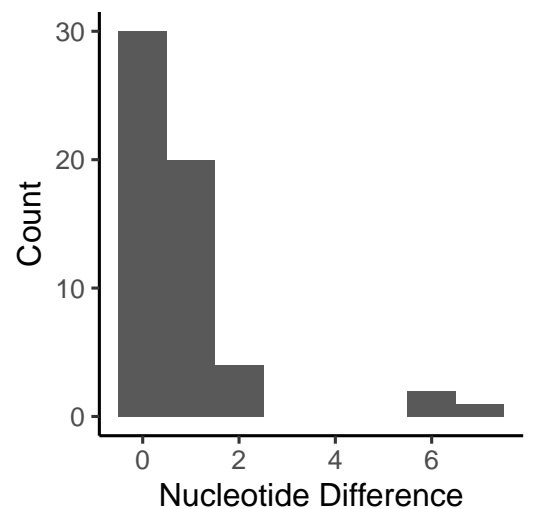
### IGKV3D-15\*03

16 sequences assigned  
12 (75%) exact matches, in which:  
10 unique CDR3  
4 unique J



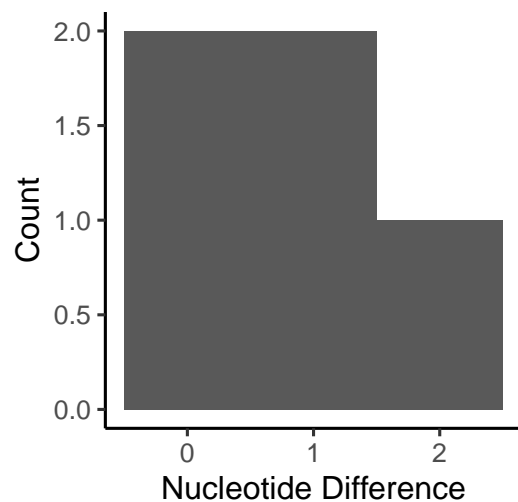
### IGKV3D-20\*01

57 sequences assigned  
30 (52.6%) exact matches, in which:  
28 unique CDR3  
6 unique J



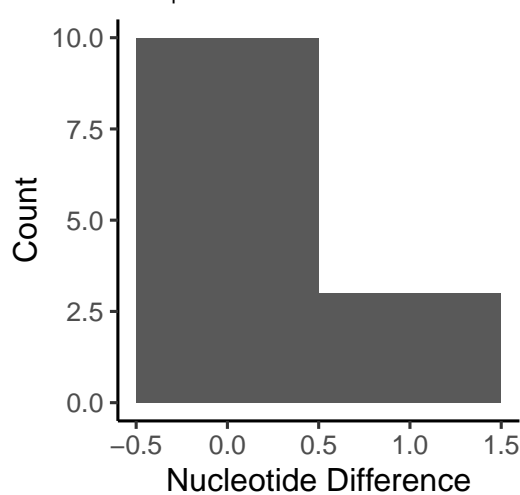
### IGKV3D-11\*02

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



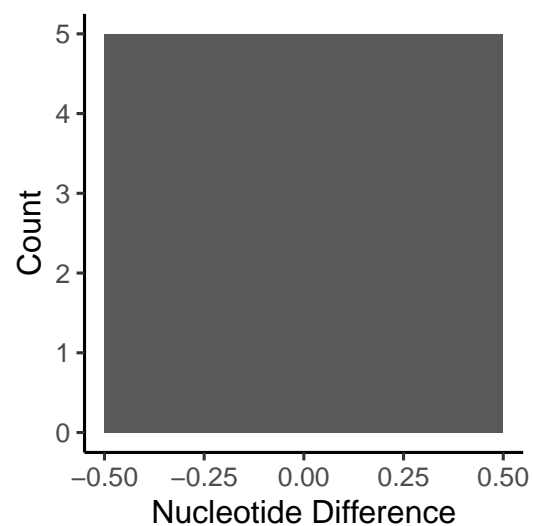
### IGKV1D-16\*01

13 sequences assigned  
10 (76.9%) exact matches, in which:  
9 unique CDR3  
5 unique J



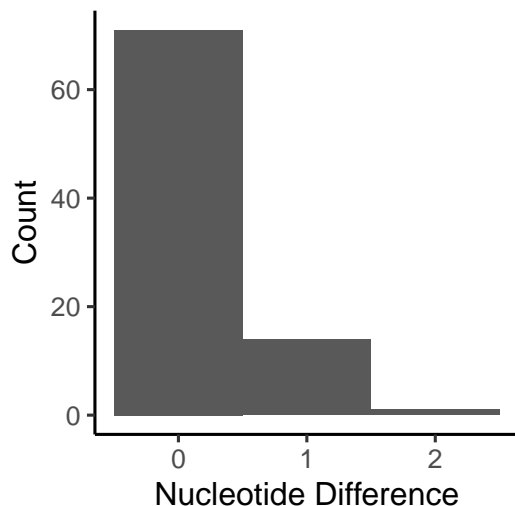
### IGKV2D-26\*03

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



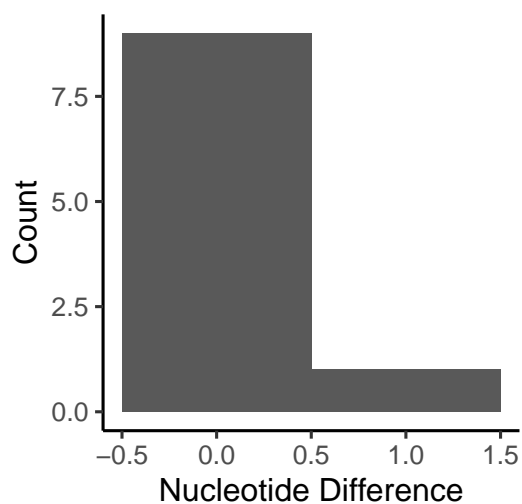
### IGKV2D-29\*01

86 sequences assigned  
71 (82.6%) exact matches, in which:  
64 unique CDR3  
6 unique J



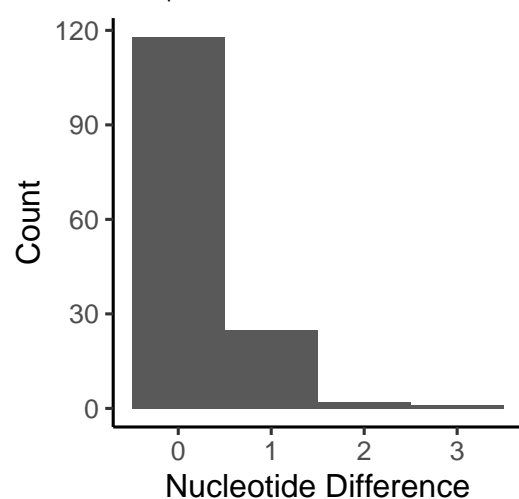
### IGKV1D-43\*01

10 sequences assigned  
9 (90%) exact matches, in which:  
9 unique CDR3  
4 unique J



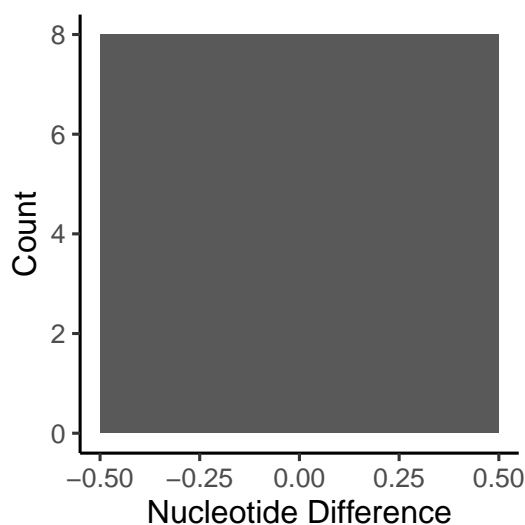
### IGKV1E-13\*02

146 sequences assigned  
118 (80.8%) exact matches, in which:  
104 unique CDR3  
6 unique J



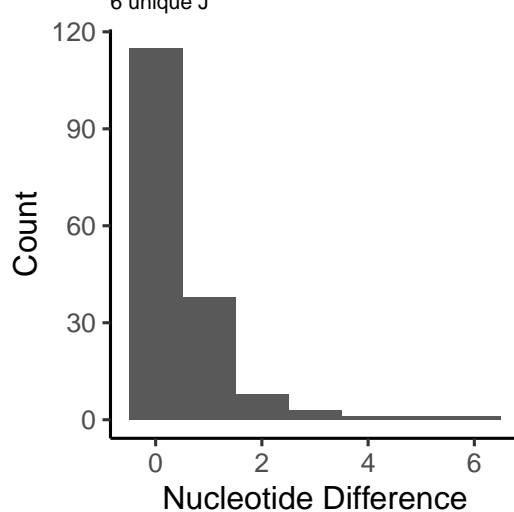
### IGKV2D-30\*01

8 sequences assigned  
8 (100%) exact matches, in which:  
8 unique CDR3  
4 unique J



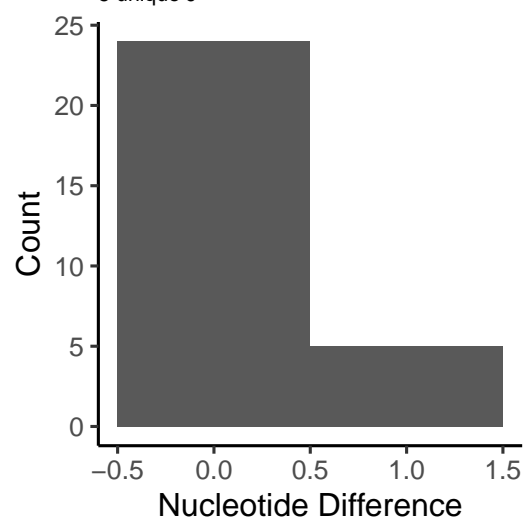
### IGKV1E-12\*01

167 sequences assigned  
115 (68.9%) exact matches, in which:  
94 unique CDR3  
6 unique J



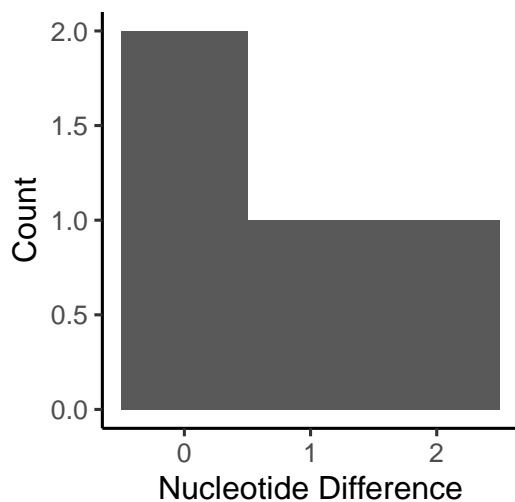
### IGKV1E-13\*03

29 sequences assigned  
24 (82.8%) exact matches, in which:  
23 unique CDR3  
5 unique J



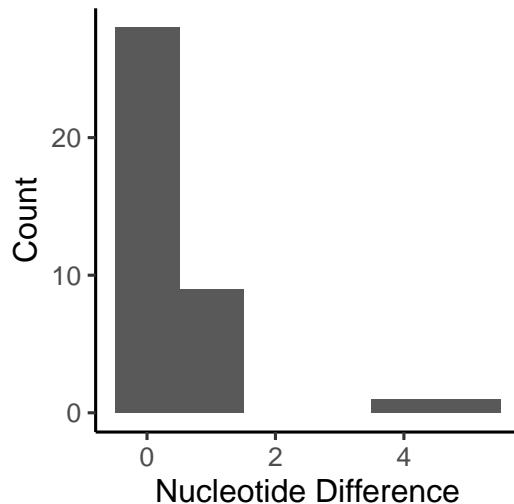
### IGKV6D-41\*01

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



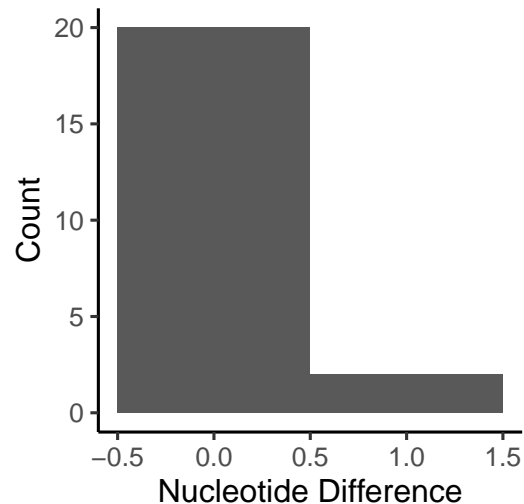
### IGKV1E-12\*03

39 sequences assigned  
28 (71.8%) exact matches, in which:  
26 unique CDR3  
5 unique J



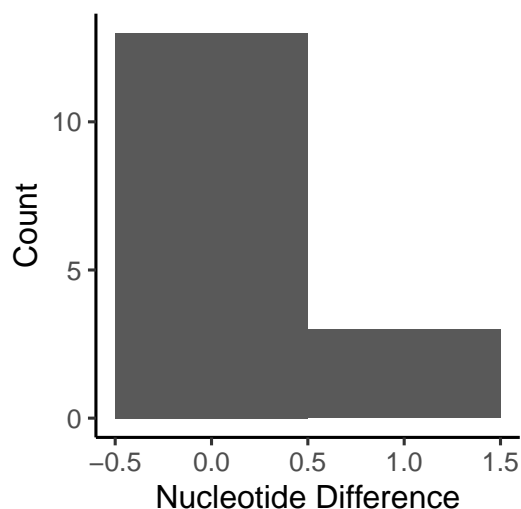
### IGKV6E-21\*01

22 sequences assigned  
20 (90.9%) exact matches, in which:  
17 unique CDR3  
5 unique J



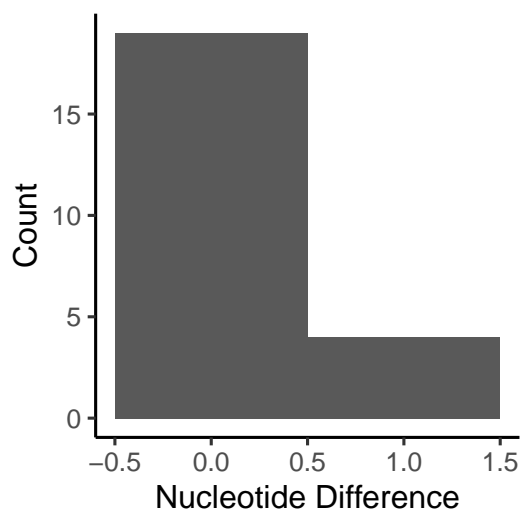
### IGKV6E-21\*03

16 sequences assigned  
13 (81.2%) exact matches, in which:  
13 unique CDR3  
6 unique J



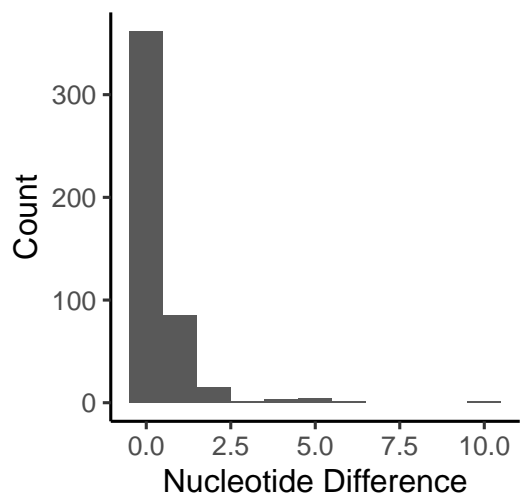
### IGKV1E-37\*01

23 sequences assigned  
19 (82.6%) exact matches, in which:  
18 unique CDR3  
5 unique J



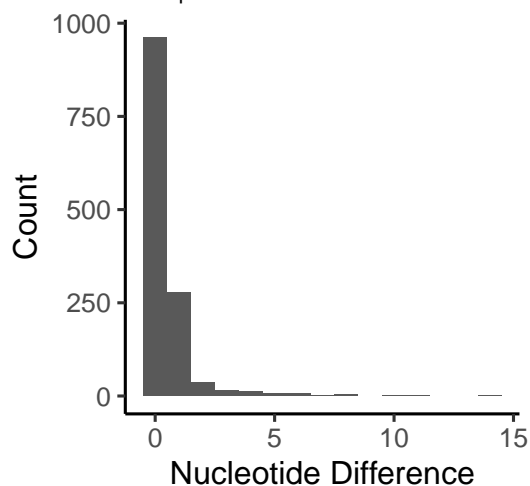
### IGKV2E-28\*01

472 sequences assigned  
362 (76.7%) exact matches, in which:  
308 unique CDR3  
6 unique J



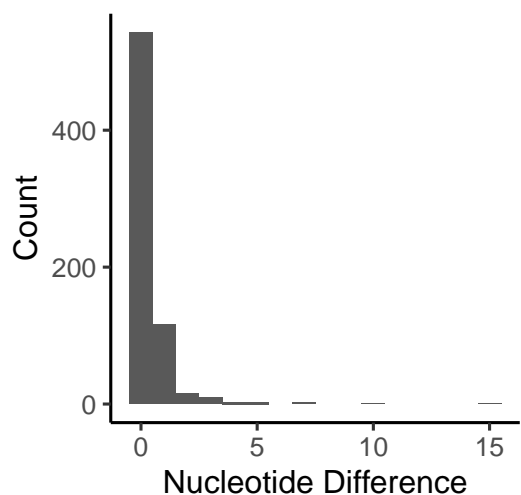
### IGKV1E-39\*01

1326 sequences assigned  
961 (72.5%) exact matches, in which:  
775 unique CDR3  
6 unique J



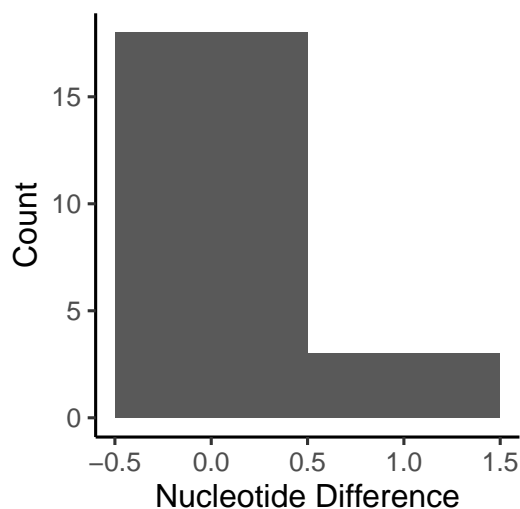
### IGKV1E-33\*01

695 sequences assigned  
543 (78.1%) exact matches, in which:  
452 unique CDR3  
6 unique J

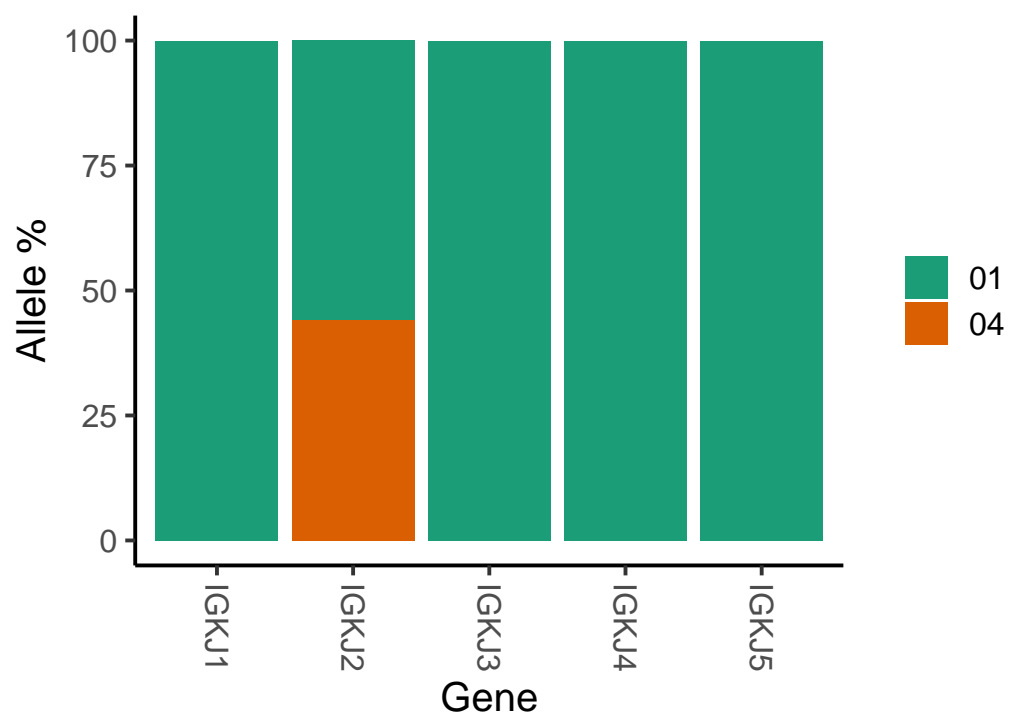


### IGKV2E-40\*01

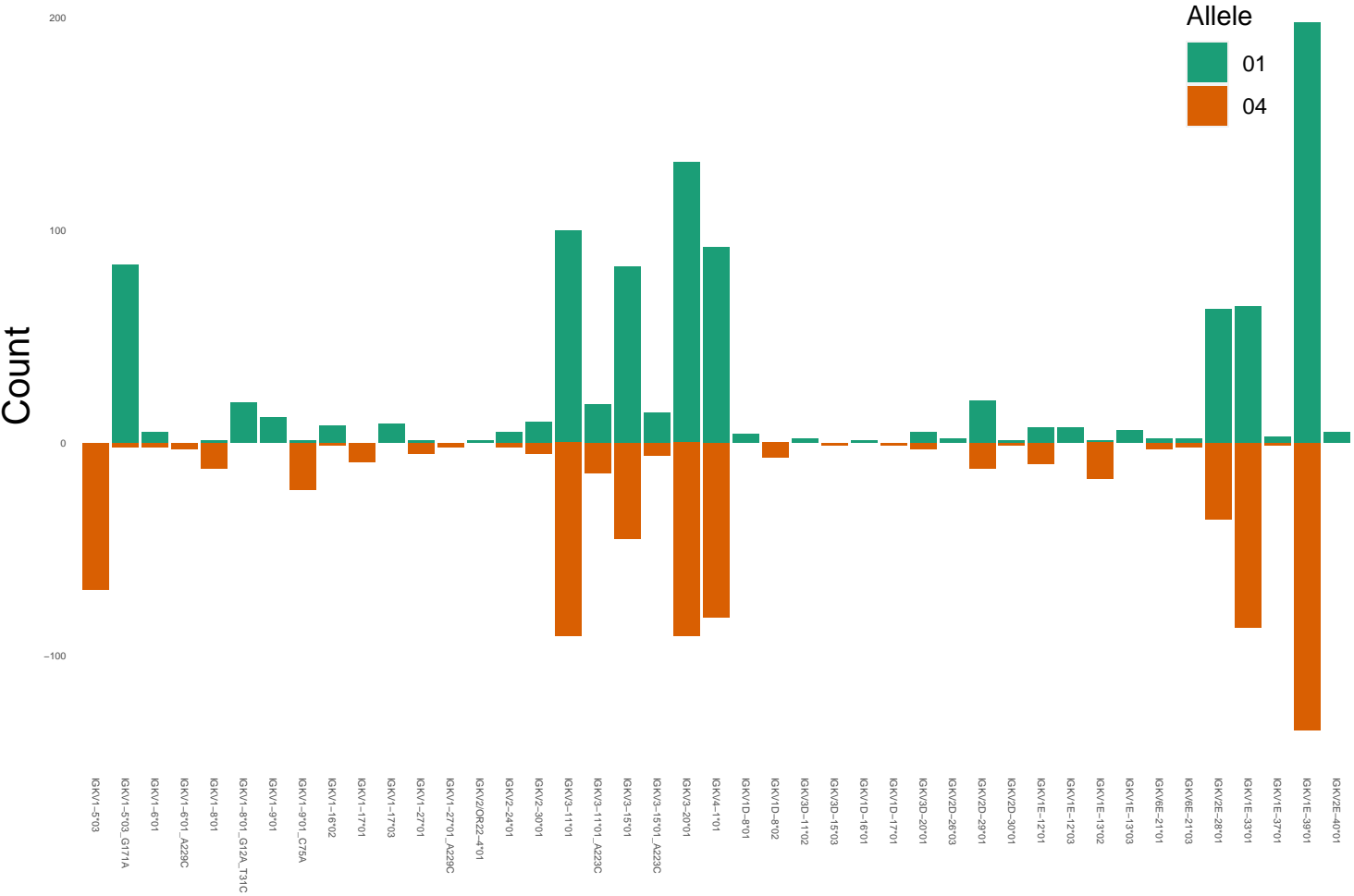
21 sequences assigned  
18 (85.7%) exact matches, in which:  
18 unique CDR3  
5 unique J



Allele Usage



Sequence Count by IGKJ2 allele usage





Warning – no inferred sequences found.