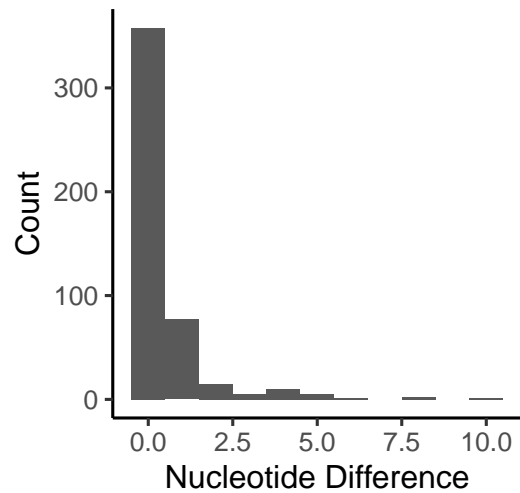


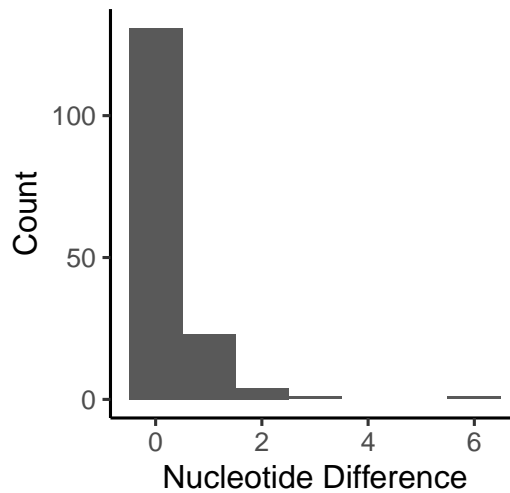
### IGKV1–5\*03

474 sequences assigned  
358 (75.5%) exact matches, in which:  
307 unique CDR3  
6 unique J



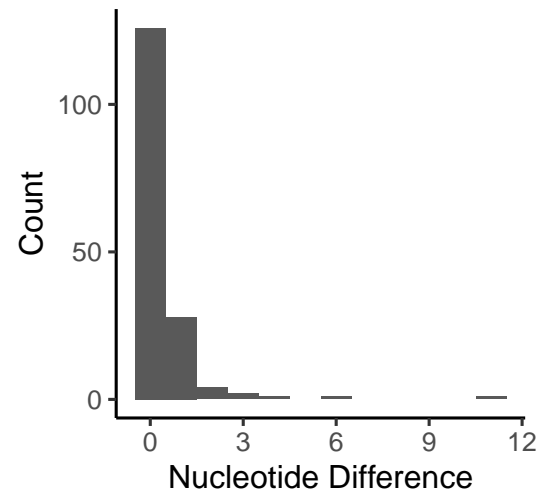
### IGKV1–9\*01

160 sequences assigned  
131 (81.9%) exact matches, in which:  
111 unique CDR3  
6 unique J



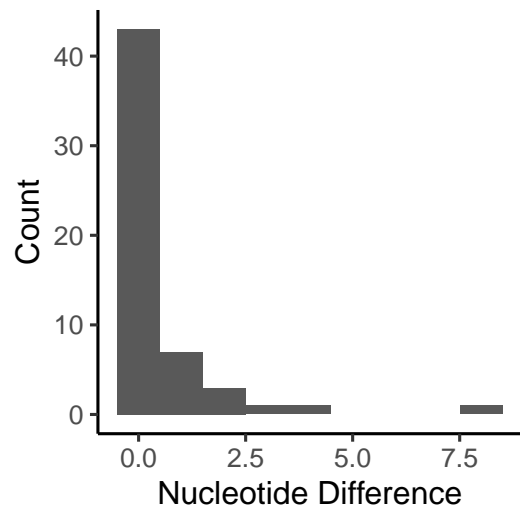
### IGKV1–27\*01

163 sequences assigned  
126 (77.3%) exact matches, in which:  
108 unique CDR3  
6 unique J



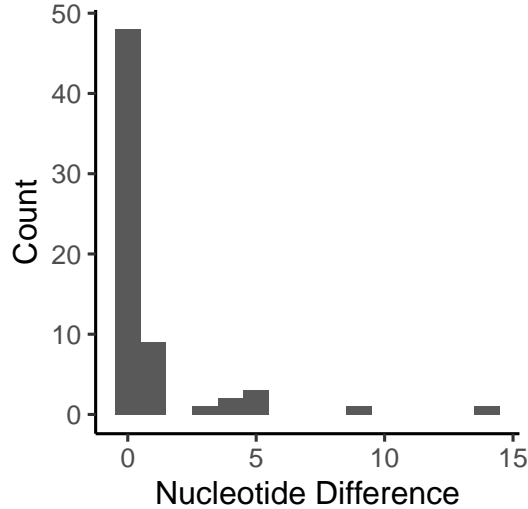
### IGKV1–6\*01

56 sequences assigned  
43 (76.8%) exact matches, in which:  
36 unique CDR3  
6 unique J



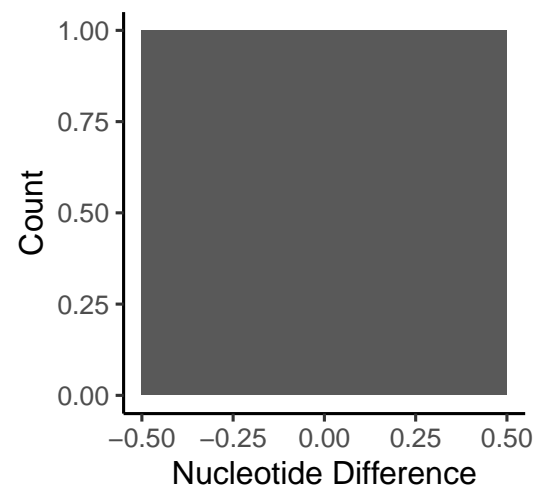
### IGKV1–16\*02

65 sequences assigned  
48 (73.8%) exact matches, in which:  
44 unique CDR3  
5 unique J



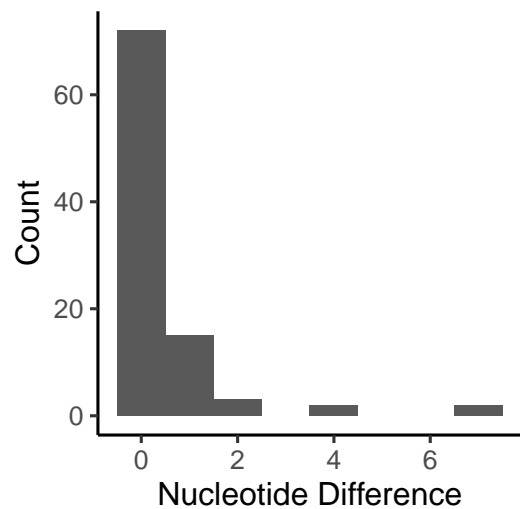
### IGKV2/OR22–4\*01

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



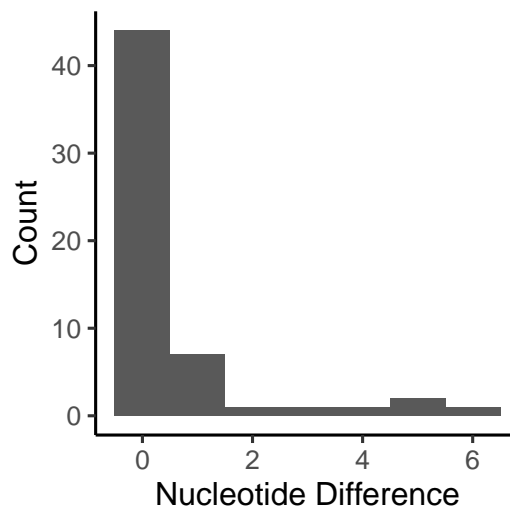
### IGKV1–8\*01

94 sequences assigned  
72 (76.6%) exact matches, in which:  
59 unique CDR3  
6 unique J



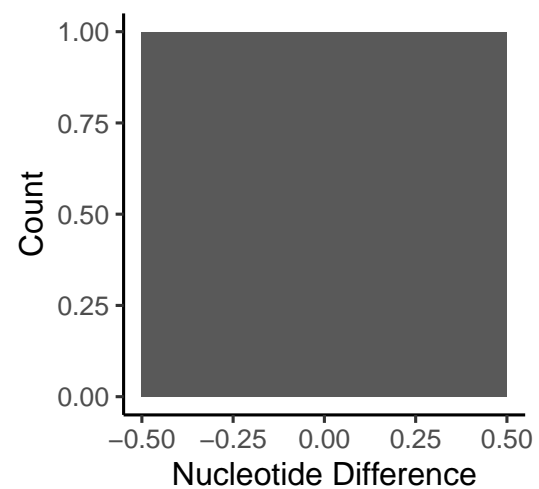
### IGKV1–17\*01

57 sequences assigned  
44 (77.2%) exact matches, in which:  
34 unique CDR3  
6 unique J



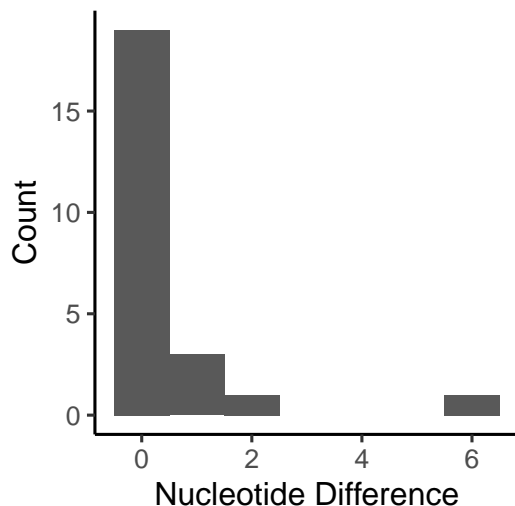
### IGKV2–18\*01

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



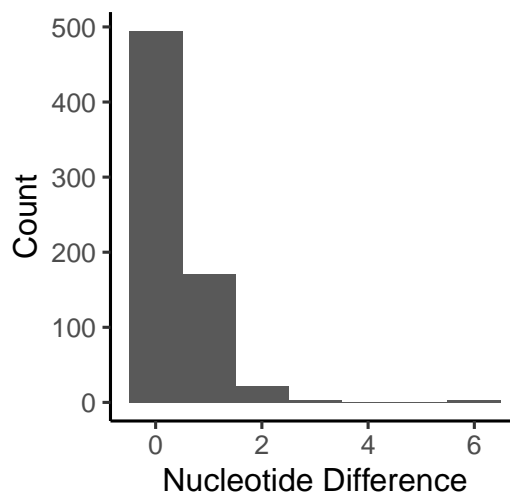
### IGKV2-24\*01

24 sequences assigned  
19 (79.2%) exact matches, in which:  
18 unique CDR3  
5 unique J



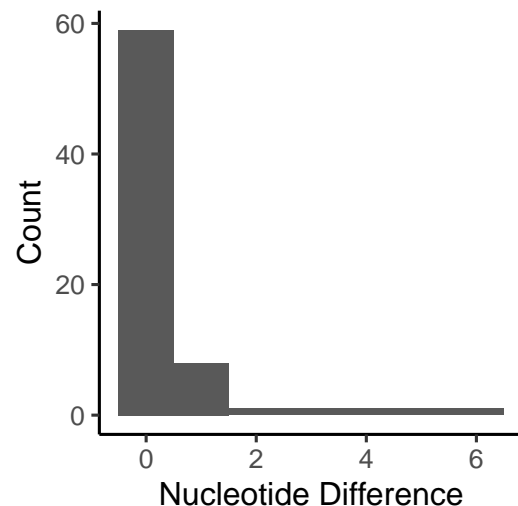
### IGKV3-11\*01

696 sequences assigned  
495 (71.1%) exact matches, in which:  
398 unique CDR3  
6 unique J



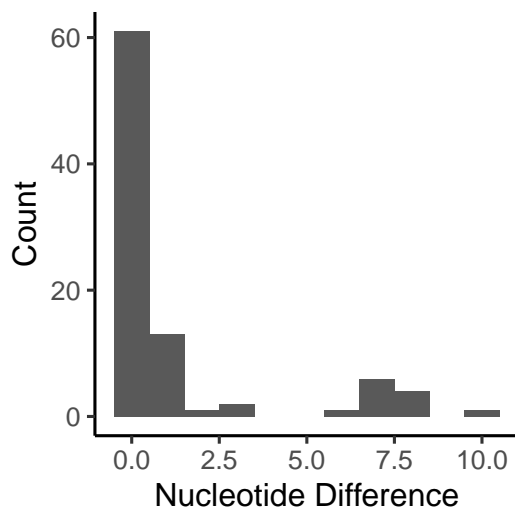
### IGKV3-15\*01\_A223C

72 sequences assigned  
59 (81.9%) exact matches, in which:  
58 unique CDR3  
6 unique J



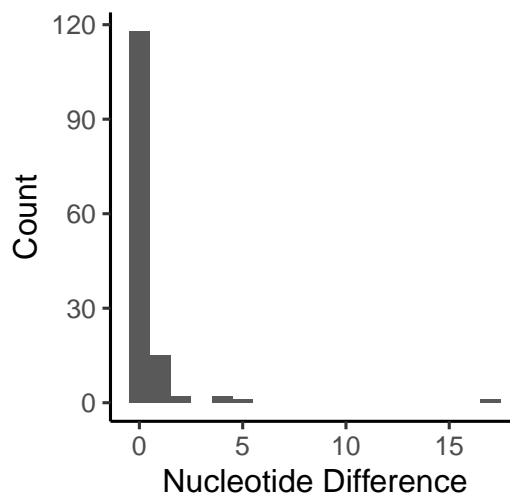
### IGKV2-30\*01

89 sequences assigned  
61 (68.5%) exact matches, in which:  
56 unique CDR3  
5 unique J



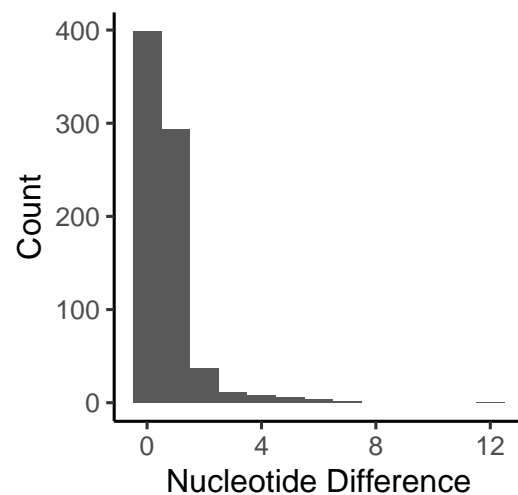
### IGKV3-11\*01\_A223C

139 sequences assigned  
118 (84.9%) exact matches, in which:  
116 unique CDR3  
6 unique J



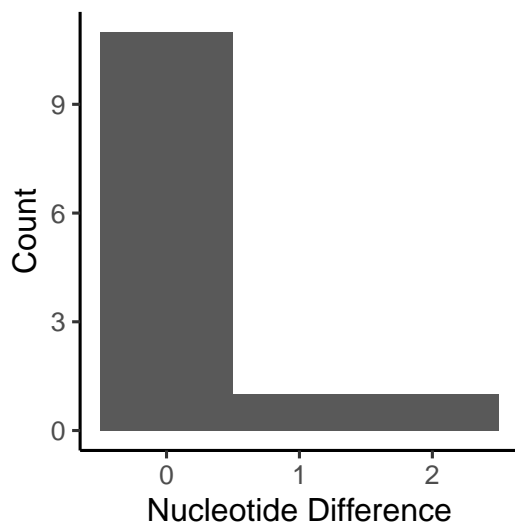
### IGKV3-20\*01

762 sequences assigned  
399 (52.4%) exact matches, in which:  
353 unique CDR3  
6 unique J



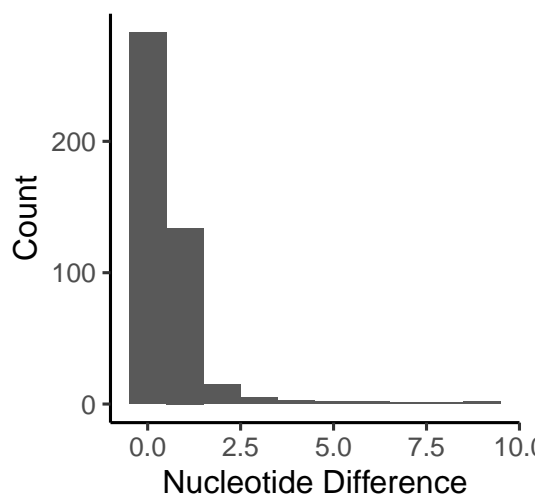
### IGKV3-7\*04

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



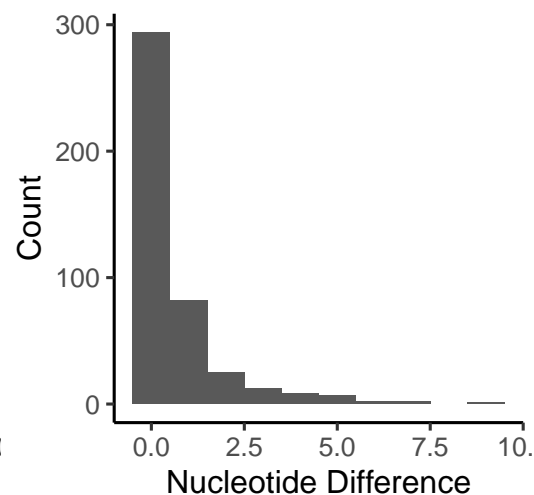
### IGKV3-15\*01

449 sequences assigned  
283 (63%) exact matches, in which:  
248 unique CDR3  
6 unique J



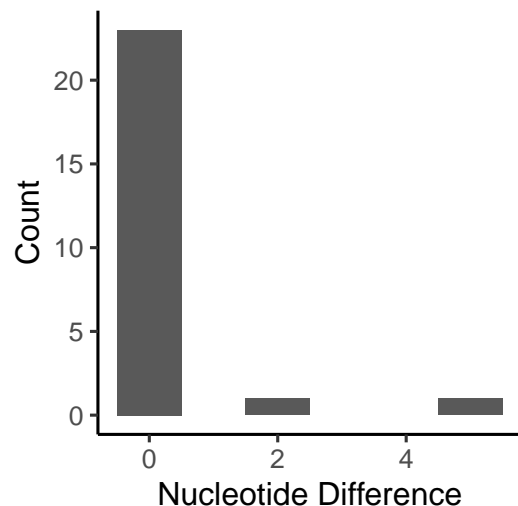
### IGKV4-1\*01

433 sequences assigned  
294 (67.9%) exact matches, in which:  
232 unique CDR3  
6 unique J



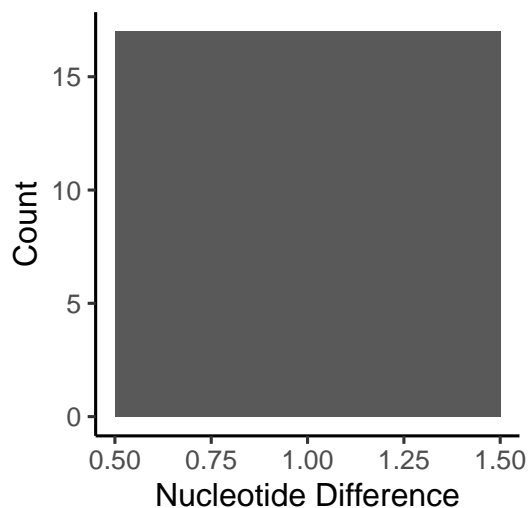
### IGKV5-2\*01

25 sequences assigned  
23 (92%) exact matches, in which:  
23 unique CDR3  
5 unique J



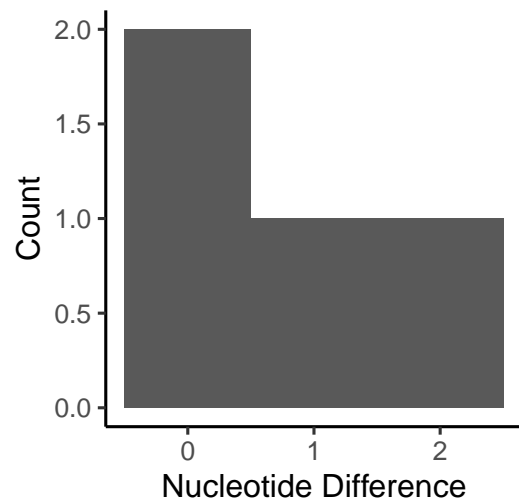
### IGKV1D-8\*01

17 sequences assigned  
No exact matches.



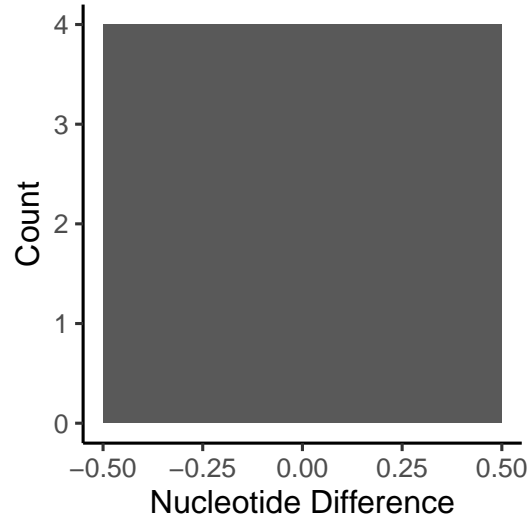
### IGKV3D-11\*02

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



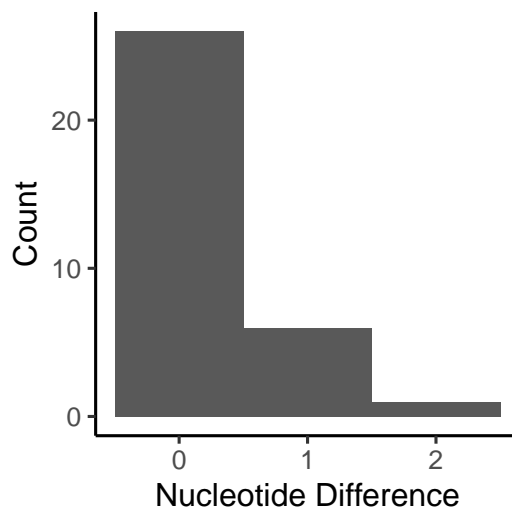
### IGKV7-3\*01

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



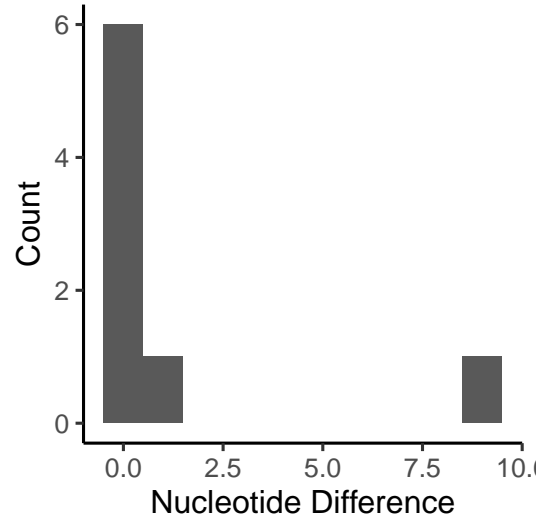
### IGKV1D-8\*02

33 sequences assigned  
26 (78.8%) exact matches, in which:  
22 unique CDR3  
5 unique J



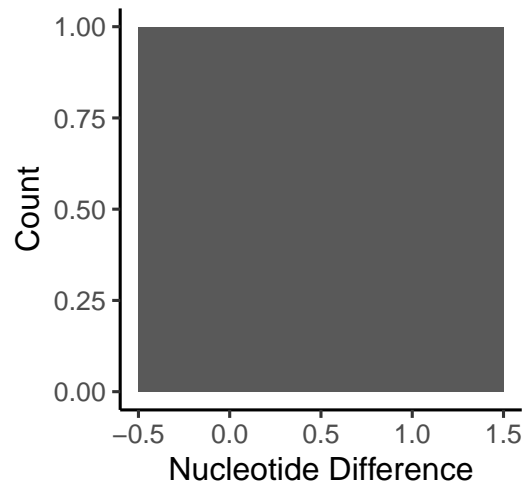
### IGKV3D-15\*01

8 sequences assigned  
6 (75%) exact matches, in which:  
6 unique CDR3  
3 unique J



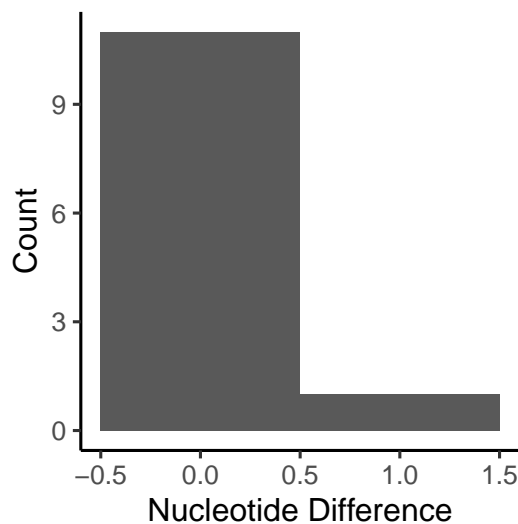
### IGKV3D-7\*01

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



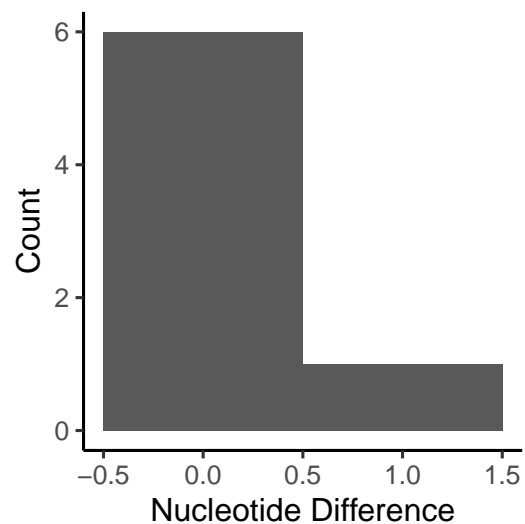
### IGKV3D-11\*01

12 sequences assigned  
11 (91.7%) exact matches, in which:  
9 unique CDR3  
3 unique J



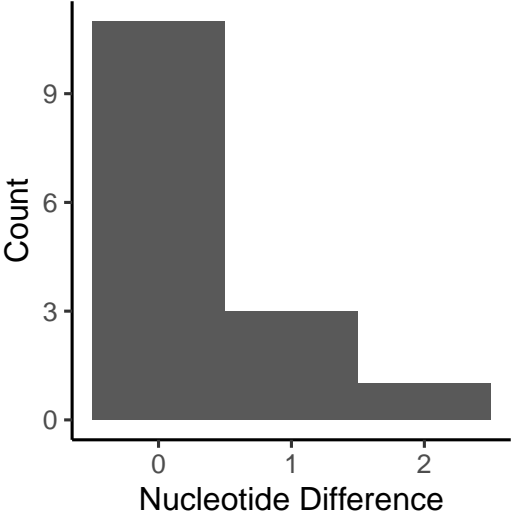
### IGKV3D-15\*03

7 sequences assigned  
6 (85.7%) exact matches, in which:  
6 unique CDR3  
4 unique J



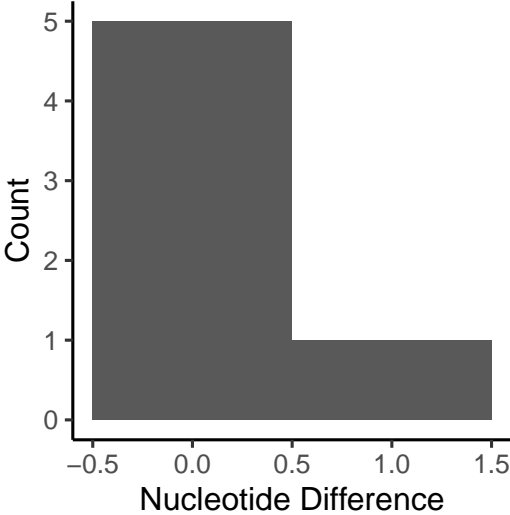
IGKV1D-16\*01

15 sequences assigned  
11 (73.3%) exact matches, in which:  
11 unique CDR3  
4 unique J



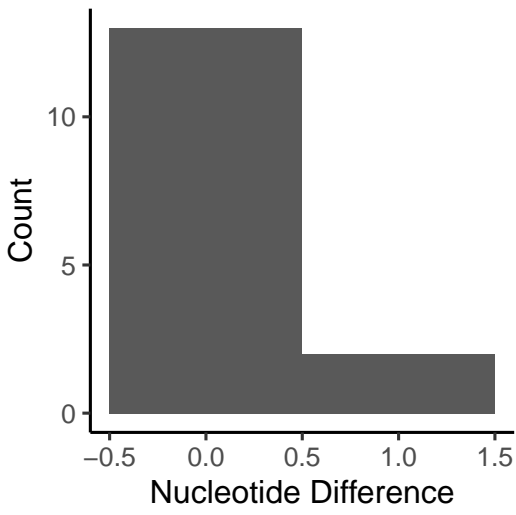
IGKV2D-26\*03

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



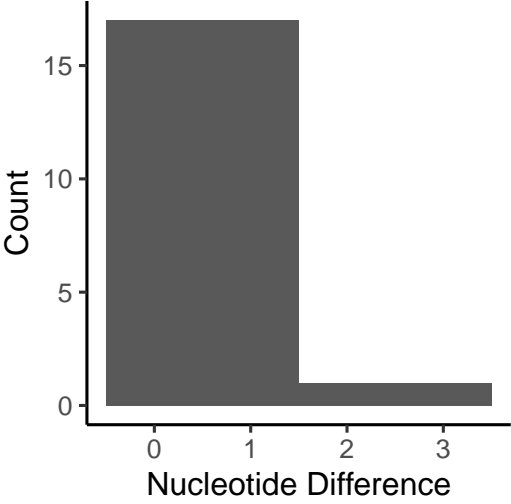
IGKV1D-43\*01

15 sequences assigned  
13 (86.7%) exact matches, in which:  
13 unique CDR3  
6 unique J



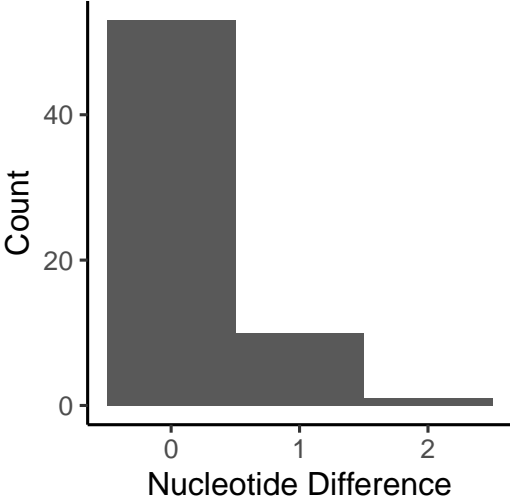
IGKV3D-20\*01

36 sequences assigned  
17 (47.2%) exact matches, in which:  
17 unique CDR3  
6 unique J



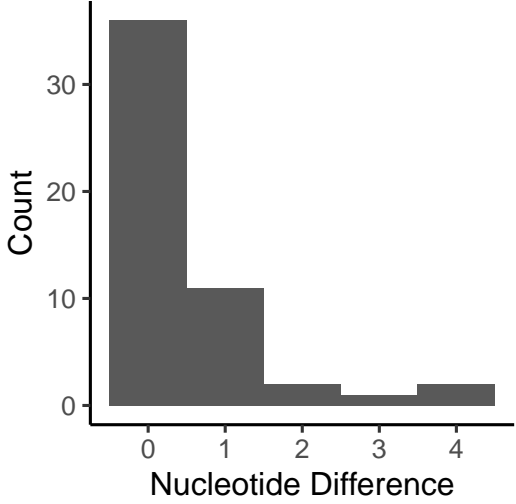
IGKV2D-29\*01

64 sequences assigned  
53 (82.8%) exact matches, in which:  
47 unique CDR3  
5 unique J



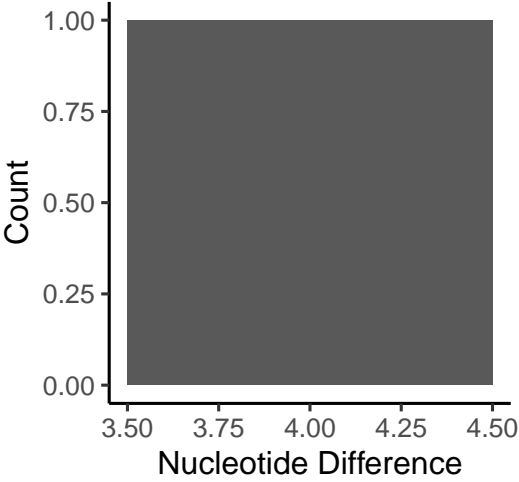
IGKV1E-12\*01

52 sequences assigned  
36 (69.2%) exact matches, in which:  
28 unique CDR3  
6 unique J



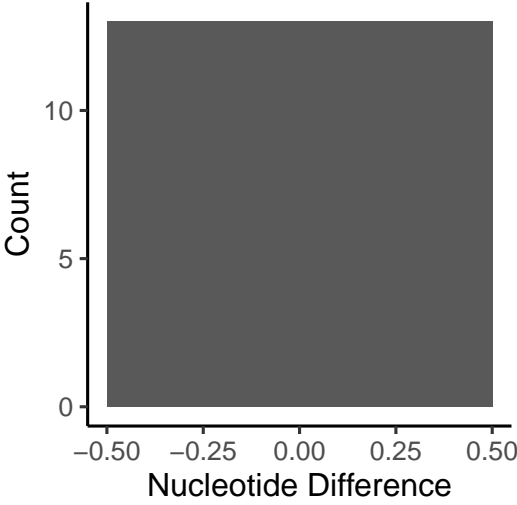
IGKV2D-26\*01

1 sequences assigned  
No exact matches.



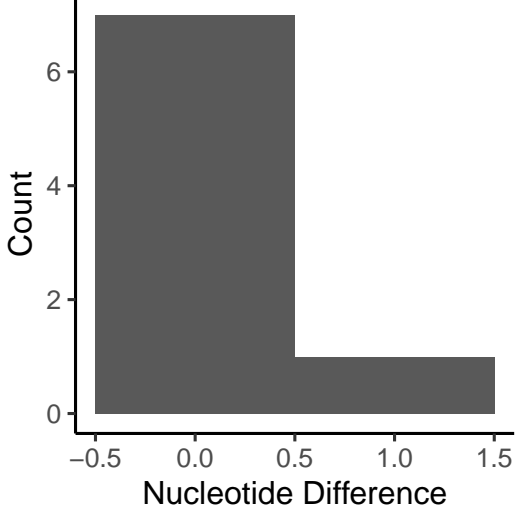
IGKV2D-30\*01

13 sequences assigned  
13 (100%) exact matches, in which:  
13 unique CDR3  
5 unique J



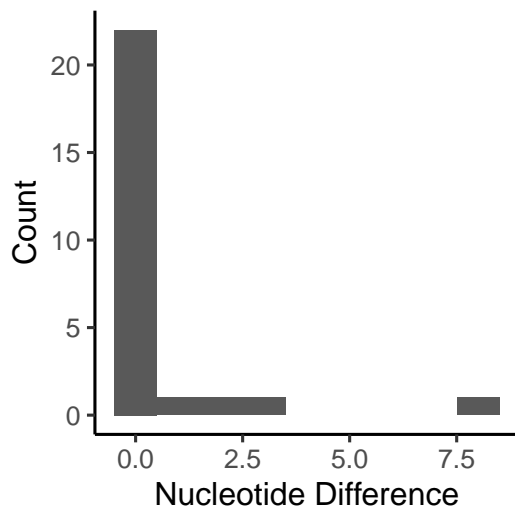
IGKV1E-12\*02

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



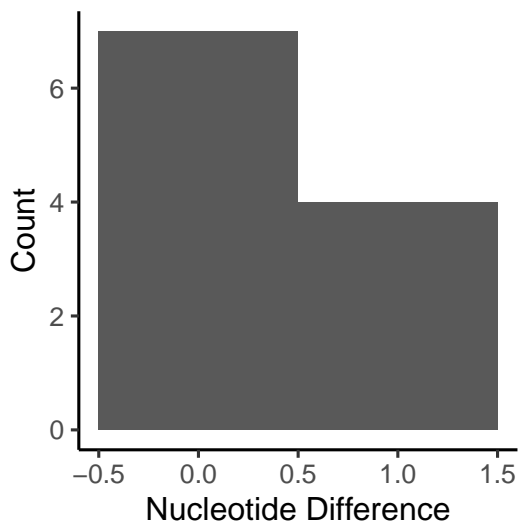
### IGKV1E-12\*03

26 sequences assigned  
22 (84.6%) exact matches, in which:  
20 unique CDR3  
4 unique J



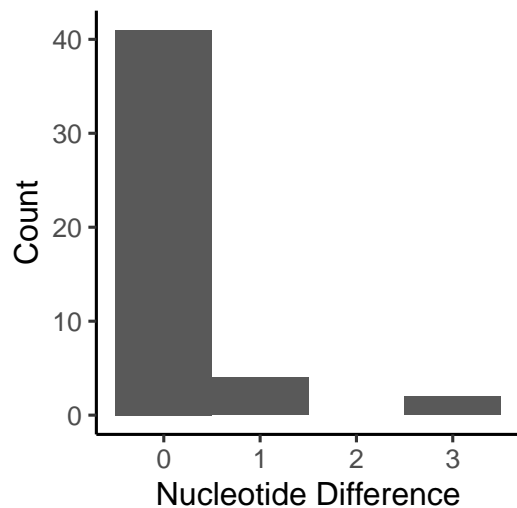
### IGKV6E-21\*03

11 sequences assigned  
7 (63.6%) exact matches, in which:  
7 unique CDR3  
4 unique J



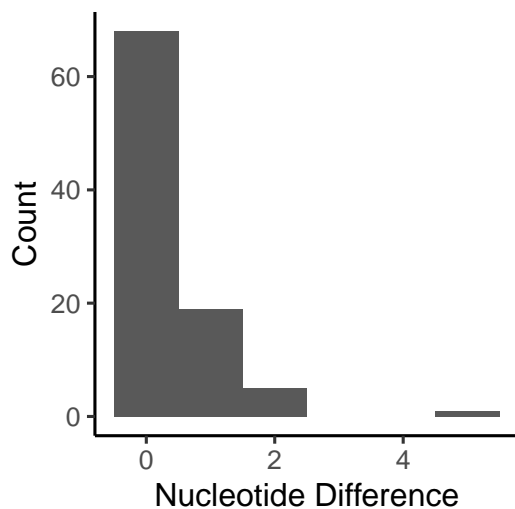
### IGKV1E-37\*01

47 sequences assigned  
41 (87.2%) exact matches, in which:  
41 unique CDR3  
6 unique J



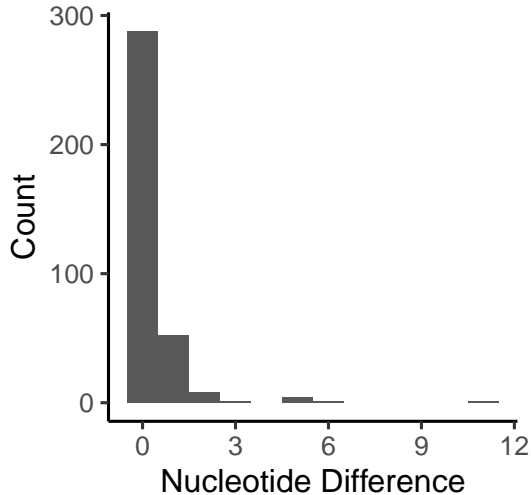
### IGKV1E-13\*02

93 sequences assigned  
68 (73.1%) exact matches, in which:  
59 unique CDR3  
5 unique J



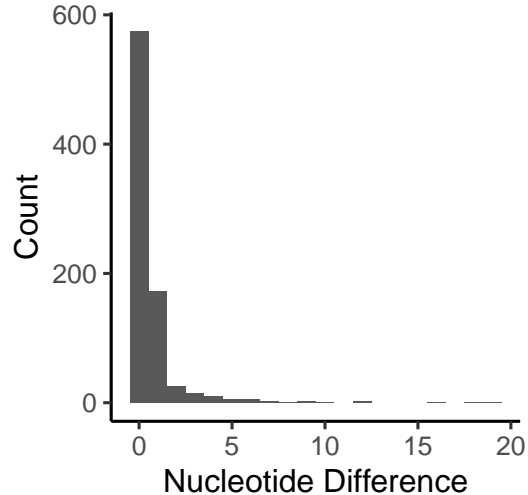
### IGKV2E-28\*01

355 sequences assigned  
288 (81.1%) exact matches, in which:  
242 unique CDR3  
6 unique J



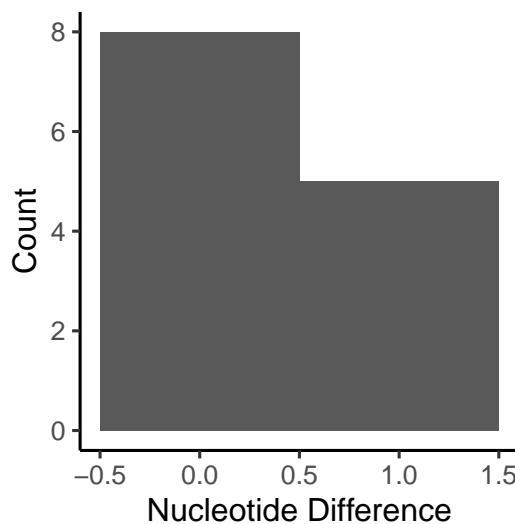
### IGKV1E-39\*01

823 sequences assigned  
575 (69.9%) exact matches, in which:  
457 unique CDR3  
6 unique J



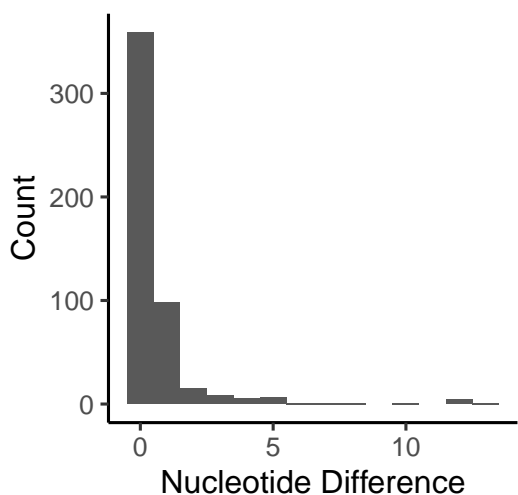
### IGKV6E-21\*01

13 sequences assigned  
8 (61.5%) exact matches, in which:  
7 unique CDR3  
4 unique J



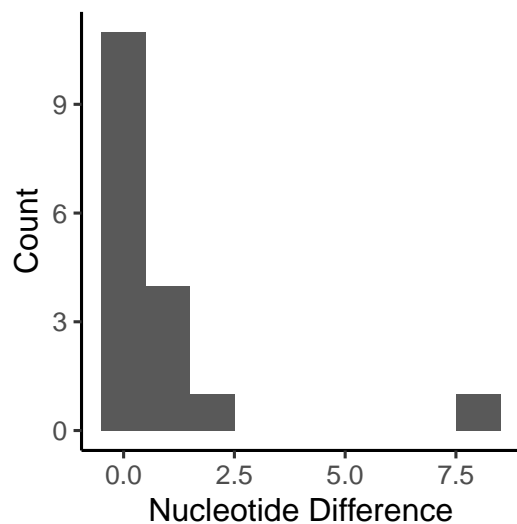
### IGKV1E-33\*01

500 sequences assigned  
359 (71.8%) exact matches, in which:  
293 unique CDR3  
6 unique J

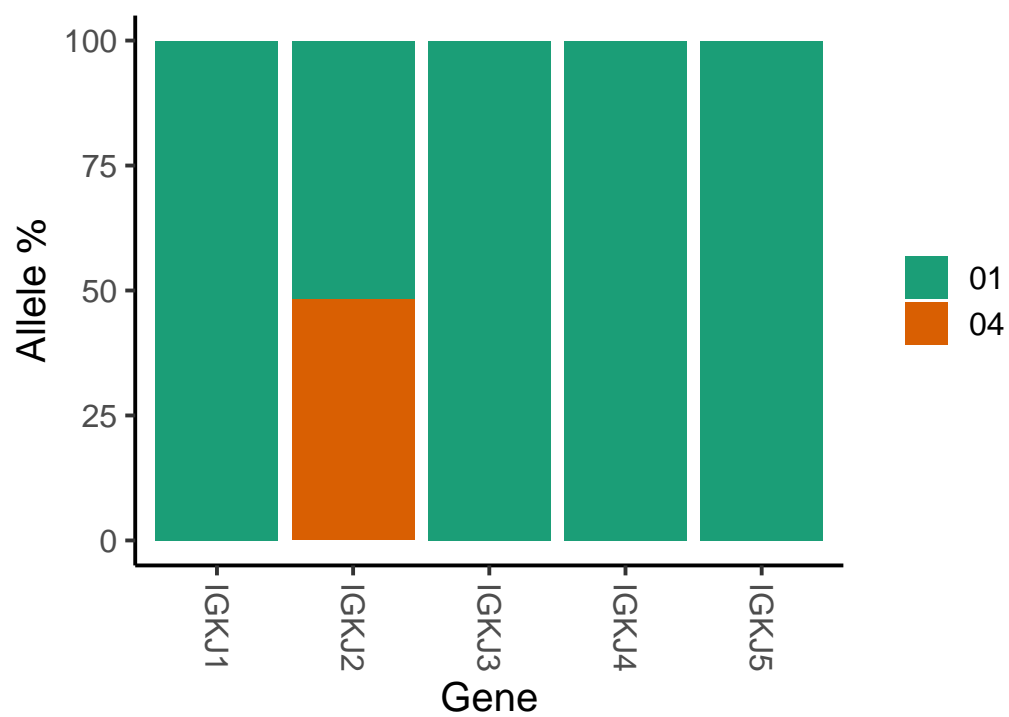


### IGKV2E-40\*01

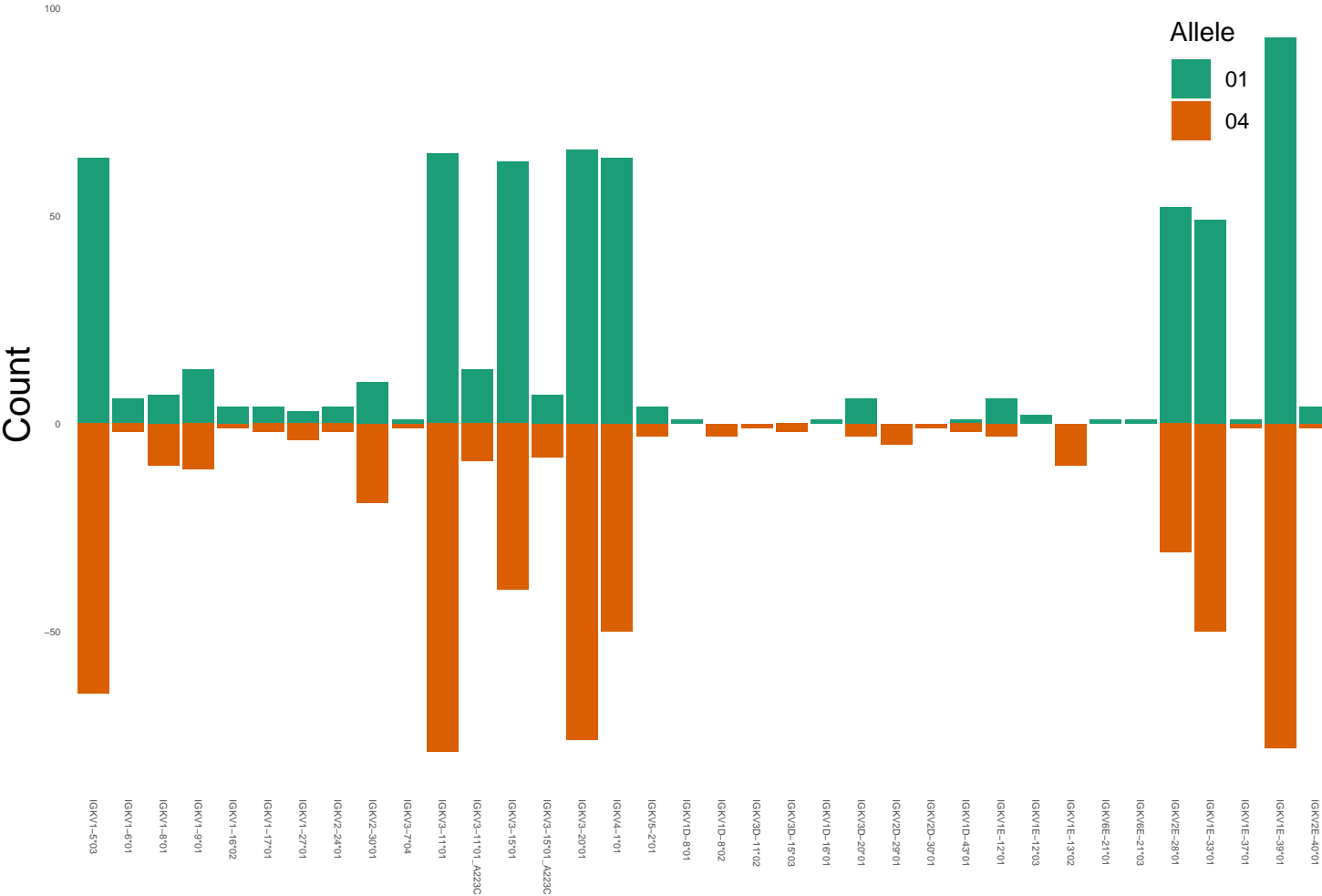
17 sequences assigned  
11 (64.7%) exact matches, in which:  
11 unique CDR3  
5 unique J



Allele Usage



Sequence Count by IGKJ2 allele usage



Warning – no inferred sequences found.