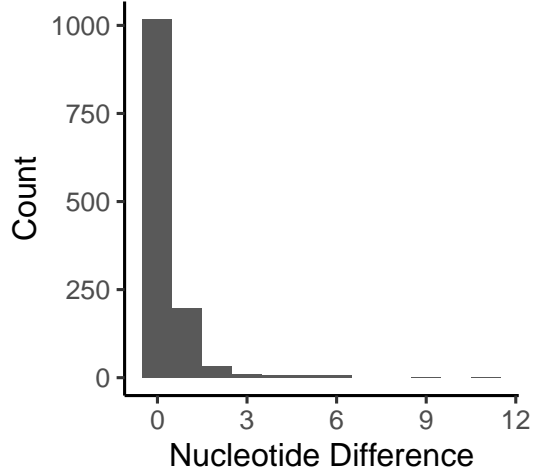


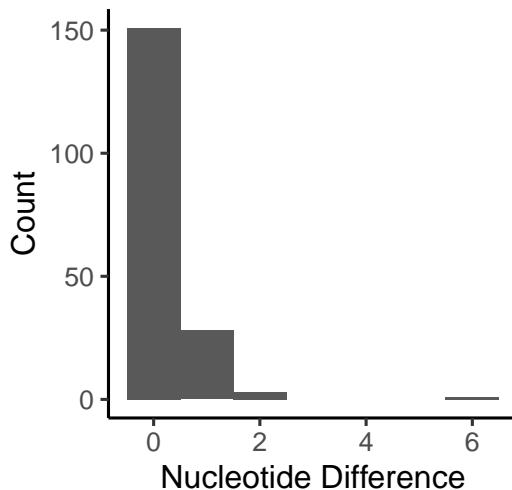
### IGKV1-5\*03

1278 sequences assigned  
1017 (79.6%) exact matches, in which:  
844 unique CDR3  
6 unique J



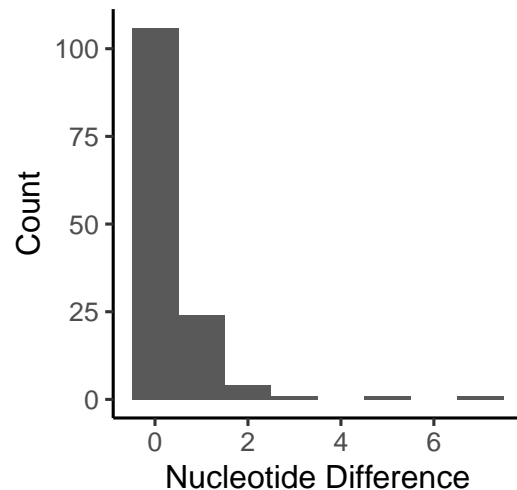
### IGKV1-8\*01\_G12A\_T31C

183 sequences assigned  
151 (82.5%) exact matches, in which:  
137 unique CDR3  
5 unique J



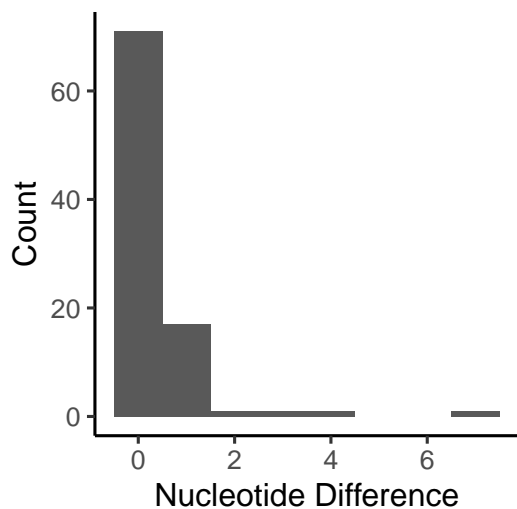
### IGKV1-16\*02

137 sequences assigned  
106 (77.4%) exact matches, in which:  
88 unique CDR3  
6 unique J



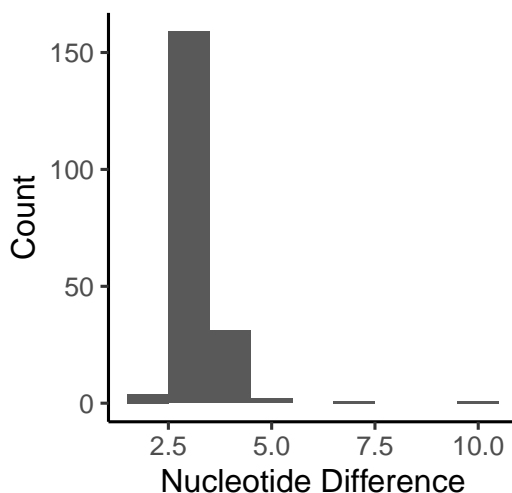
### IGKV1-6\*01

92 sequences assigned  
71 (77.2%) exact matches, in which:  
58 unique CDR3  
6 unique J



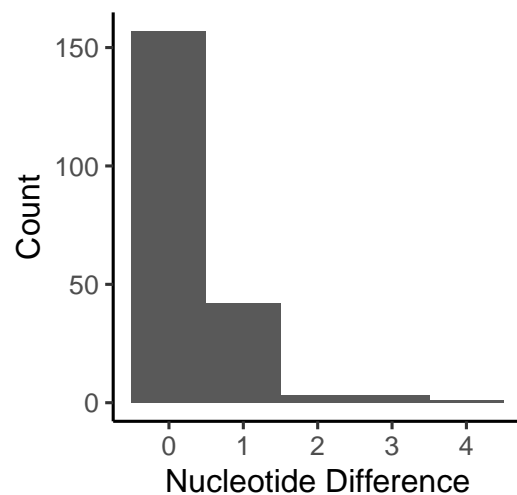
### IGKV1-9\*01

198 sequences assigned  
No exact matches.



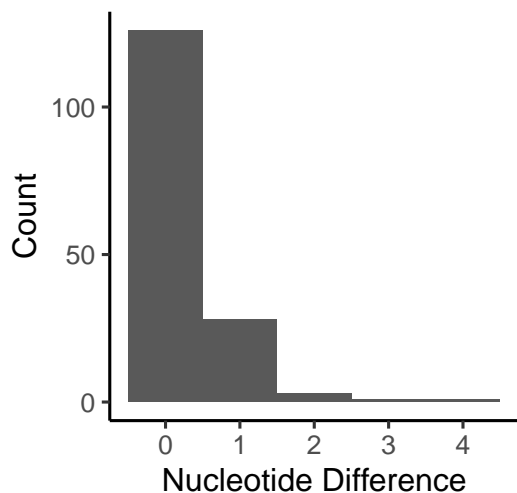
### IGKV1-17\*01

206 sequences assigned  
157 (76.2%) exact matches, in which:  
138 unique CDR3  
6 unique J



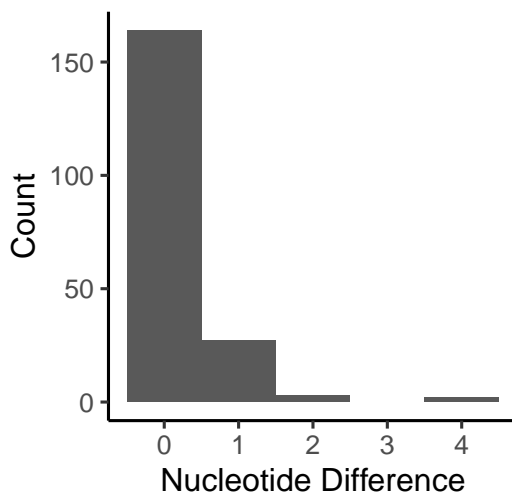
### IGKV1-8\*01

159 sequences assigned  
126 (79.2%) exact matches, in which:  
113 unique CDR3  
5 unique J



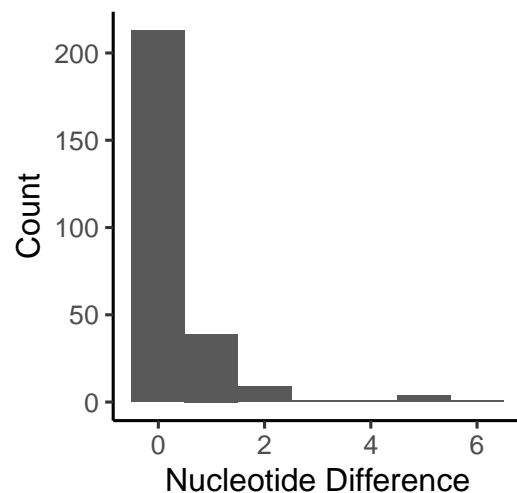
### IGKV1-9\*01\_C70T

196 sequences assigned  
164 (83.7%) exact matches, in which:  
151 unique CDR3  
5 unique J



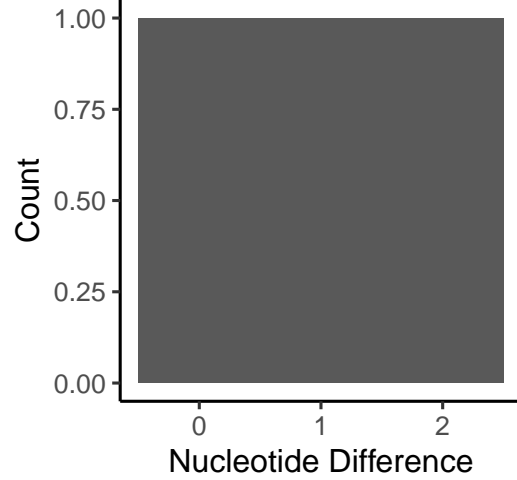
### IGKV1-27\*01

268 sequences assigned  
213 (79.5%) exact matches, in which:  
172 unique CDR3  
6 unique J



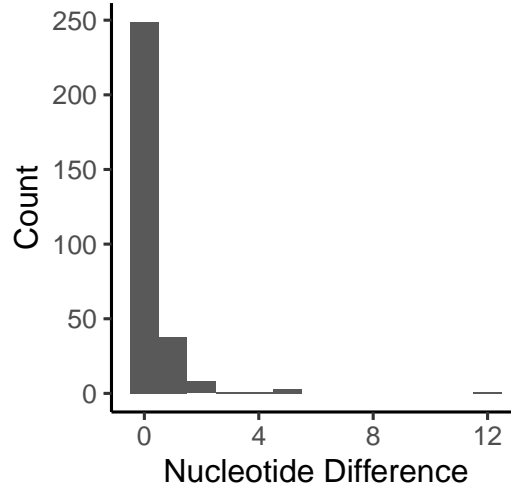
### IGKV2/OR22-4\*01

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



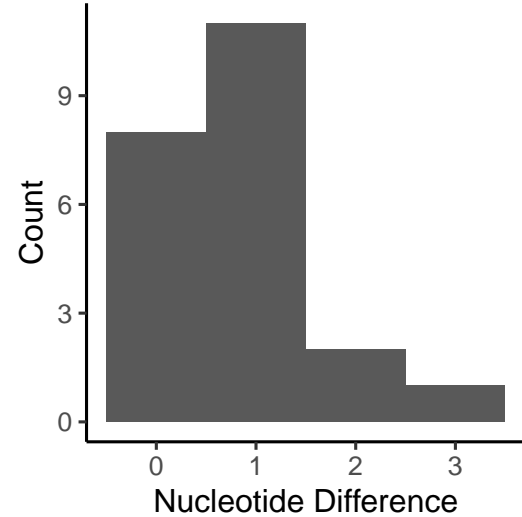
### IGKV2-30\*01

301 sequences assigned  
249 (82.7%) exact matches, in which:  
224 unique CDR3  
6 unique J



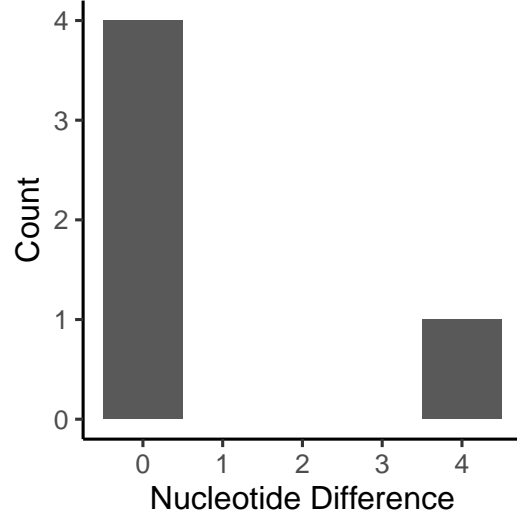
### IGKV3-7\*04

22 sequences assigned  
8 (36.4%) exact matches, in which:  
8 unique CDR3  
4 unique J



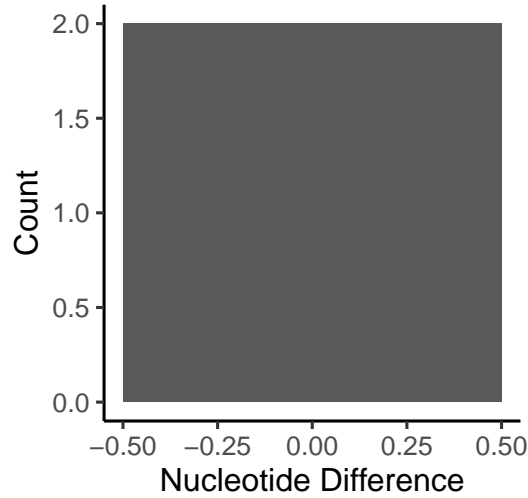
### IGKV2-18\*01

5 sequences assigned  
4 (80%) exact matches, in which:  
4 unique CDR3  
2 unique J



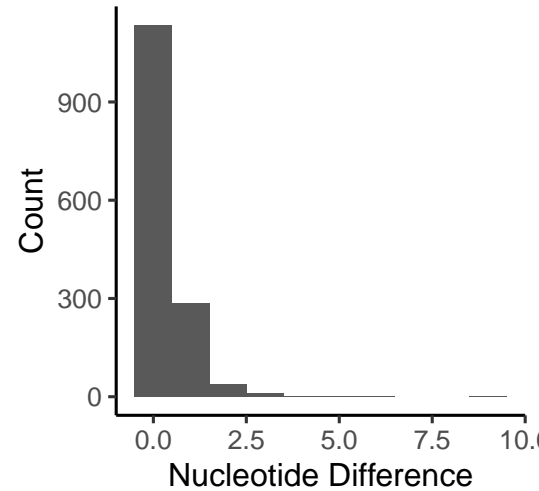
### IGKV1/OR2-108\*01

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



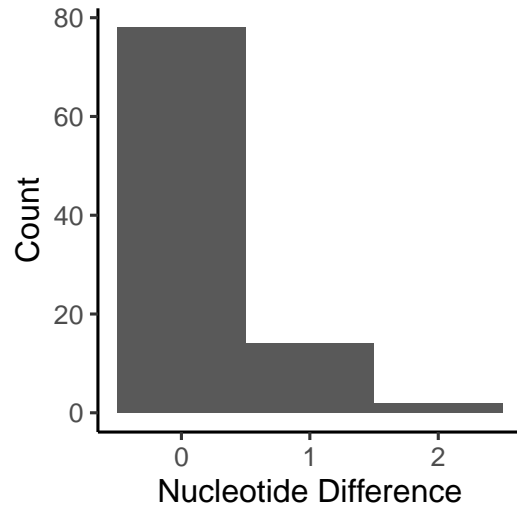
### IGKV3-11\*01

1479 sequences assigned  
1135 (76.7%) exact matches, in which:  
901 unique CDR3  
6 unique J



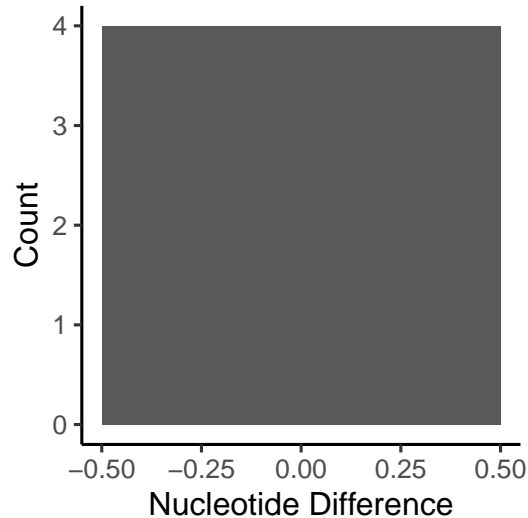
### IGKV2-24\*01

94 sequences assigned  
78 (83%) exact matches, in which:  
75 unique CDR3  
6 unique J



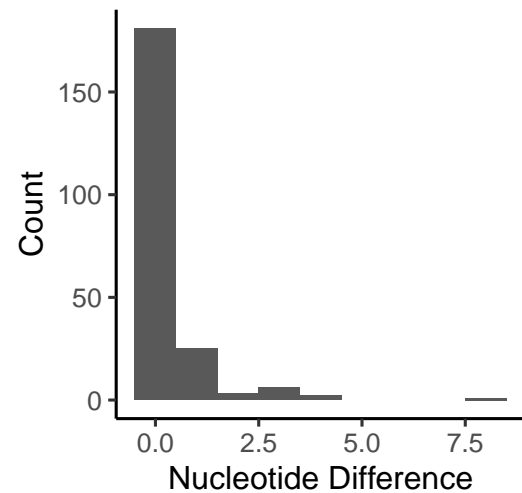
### IGKV3/OR2-268\*01

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



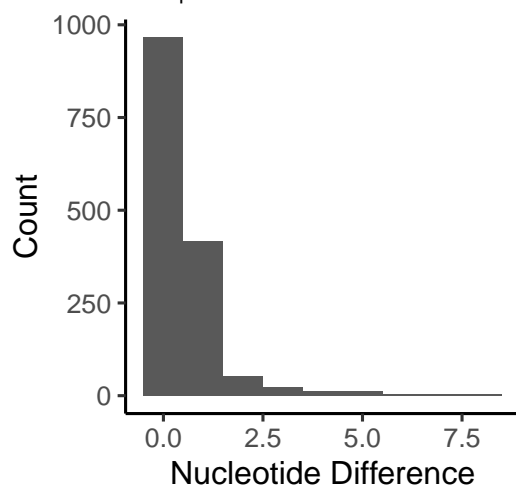
### IGKV3-11\*01\_A223C

218 sequences assigned  
181 (83%) exact matches, in which:  
175 unique CDR3  
6 unique J



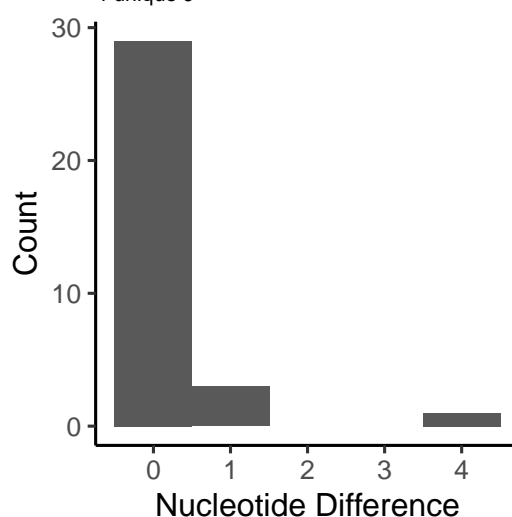
### IGKV3-15\*01

1496 sequences assigned  
966 (64.6%) exact matches, in which:  
758 unique CDR3  
6 unique J



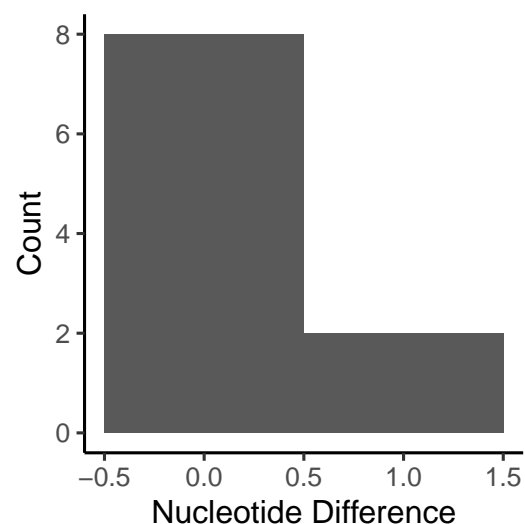
### IGKV5-2\*01

33 sequences assigned  
29 (87.9%) exact matches, in which:  
27 unique CDR3  
4 unique J



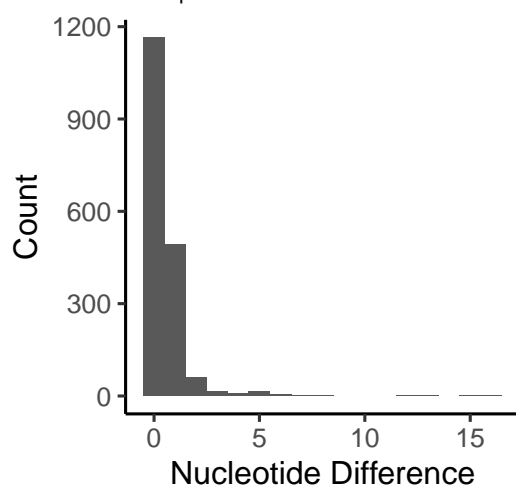
### IGKV3D-7\*01

10 sequences assigned  
8 (80%) exact matches, in which:  
8 unique CDR3  
4 unique J



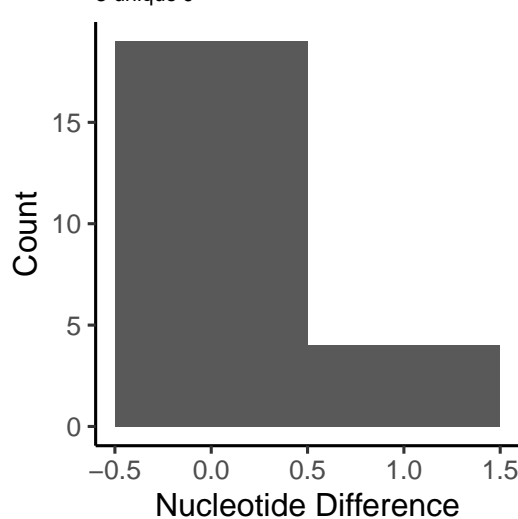
### IGKV3-20\*01

1769 sequences assigned  
1164 (65.8%) exact matches, in which:  
945 unique CDR3  
6 unique J



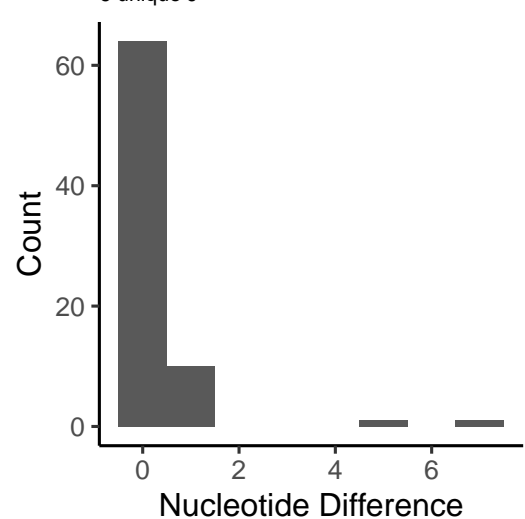
### IGKV5-2\*01\_C214T

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



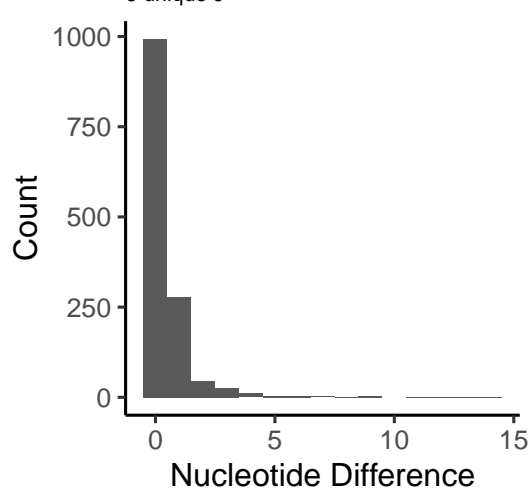
### IGKV1D-8\*01

76 sequences assigned  
64 (84.2%) exact matches, in which:  
53 unique CDR3  
6 unique J



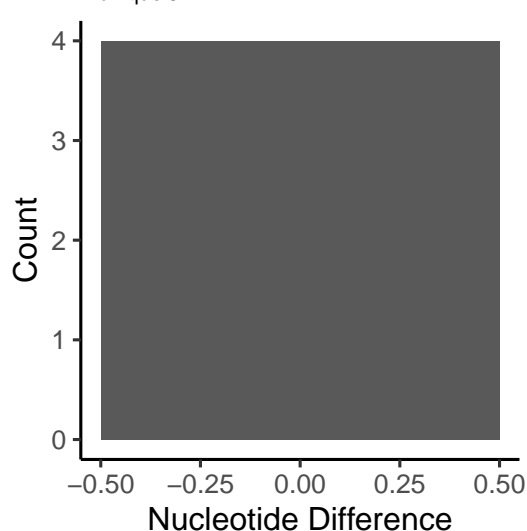
### IGKV4-1\*01

1369 sequences assigned  
993 (72.5%) exact matches, in which:  
762 unique CDR3  
6 unique J



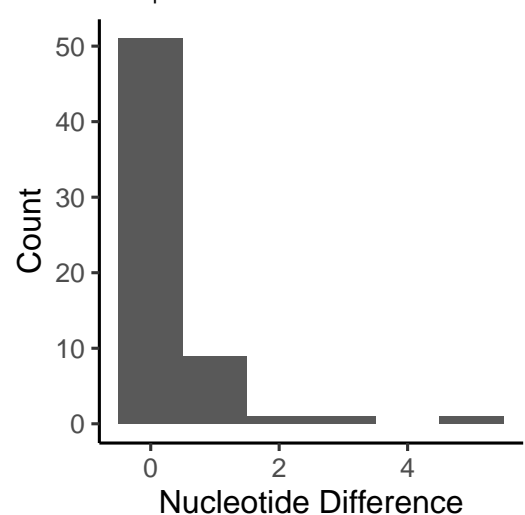
### IGKV7-3\*01

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



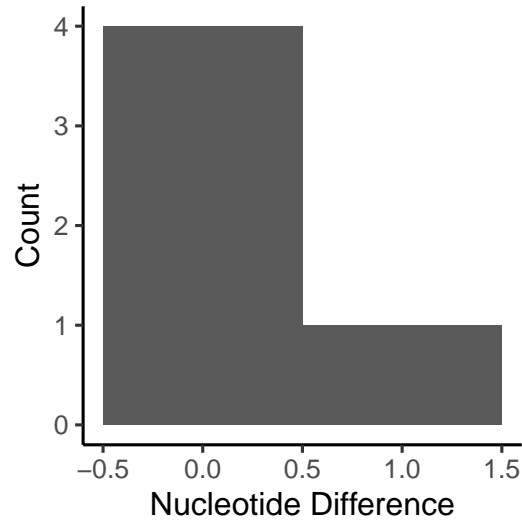
### IGKV1D-8\*02

63 sequences assigned  
51 (81%) exact matches, in which:  
47 unique CDR3  
5 unique J



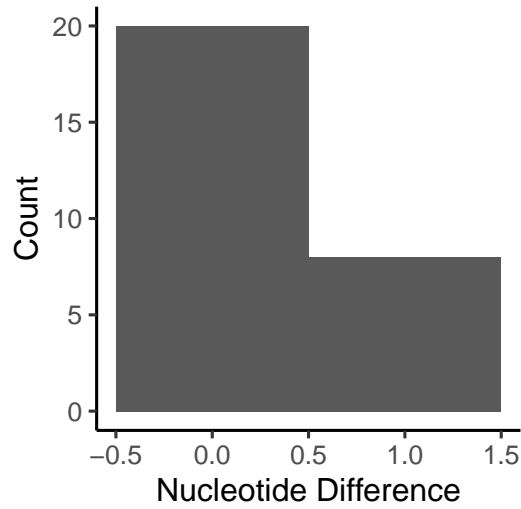
### IGKV3D-11\*01

5 sequences assigned  
4 (80%) exact matches, in which:  
4 unique CDR3  
2 unique J



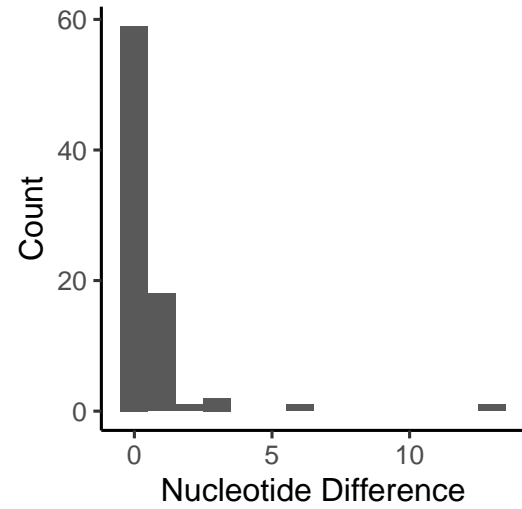
### IGKV3D-15\*03

28 sequences assigned  
20 (71.4%) exact matches, in which:  
20 unique CDR3  
5 unique J



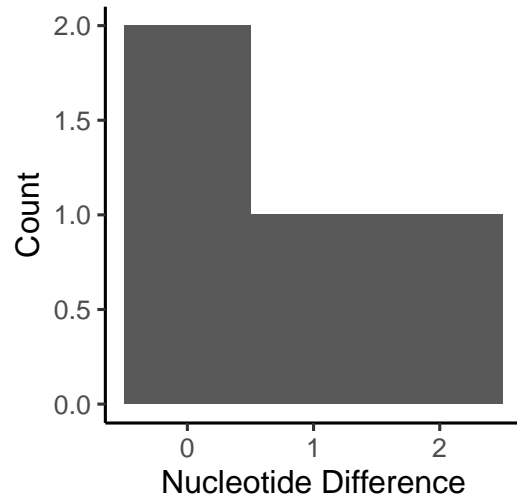
### IGKV3D-20\*01

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



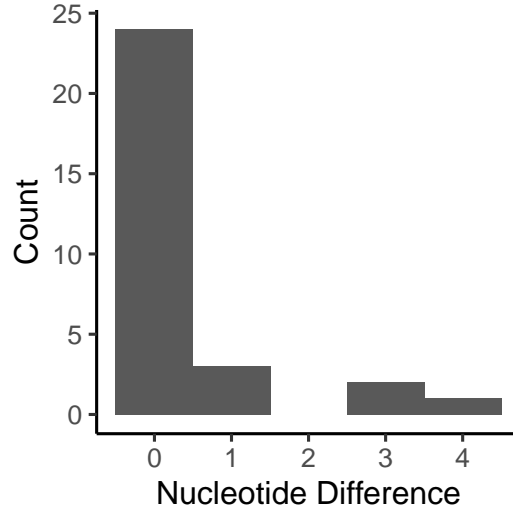
### IGKV3D-11\*02

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



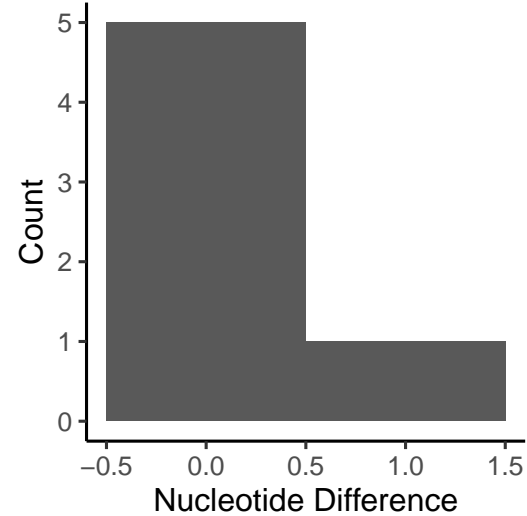
### IGKV1D-16\*01

30 sequences assigned  
24 (80%) exact matches, in which:  
23 unique CDR3  
6 unique J



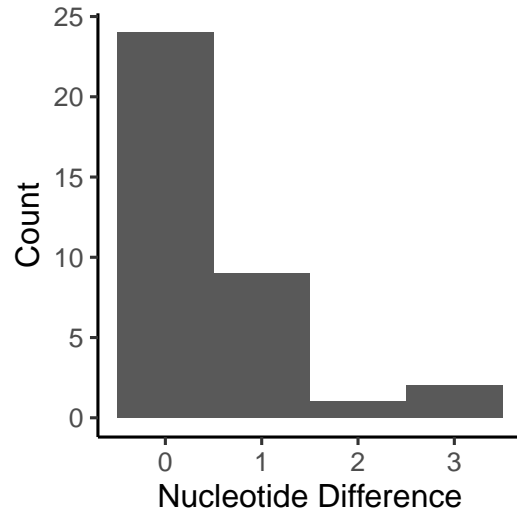
### IGKV2D-24\*01

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



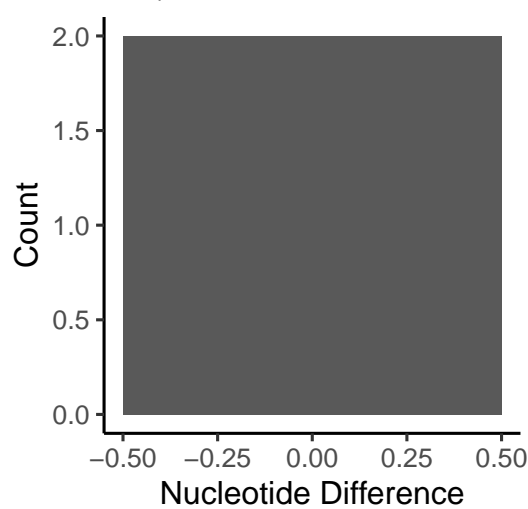
### IGKV3D-15\*01

36 sequences assigned  
24 (66.7%) exact matches, in which:  
21 unique CDR3  
6 unique J



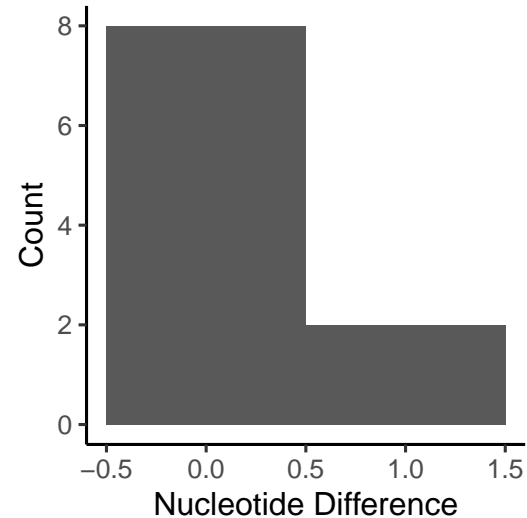
### IGKV1D-17\*01

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



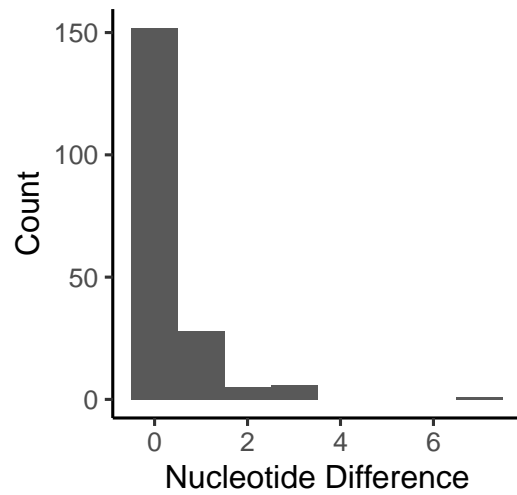
### IGKV2D-26\*03

10 sequences assigned  
8 (80%) exact matches, in which:  
7 unique CDR3  
3 unique J



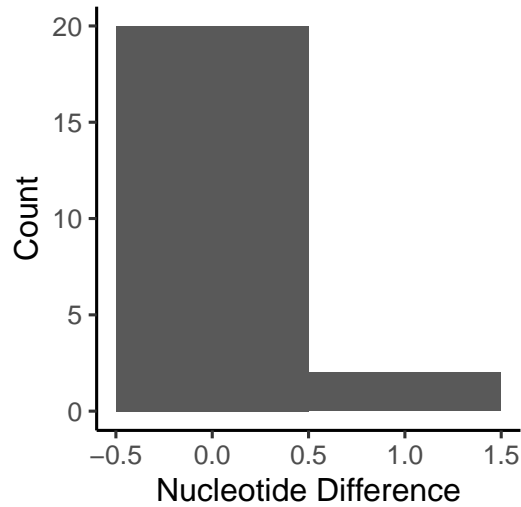
### IGKV2D-29\*01

192 sequences assigned  
152 (79.2%) exact matches, in which:  
134 unique CDR3  
6 unique J



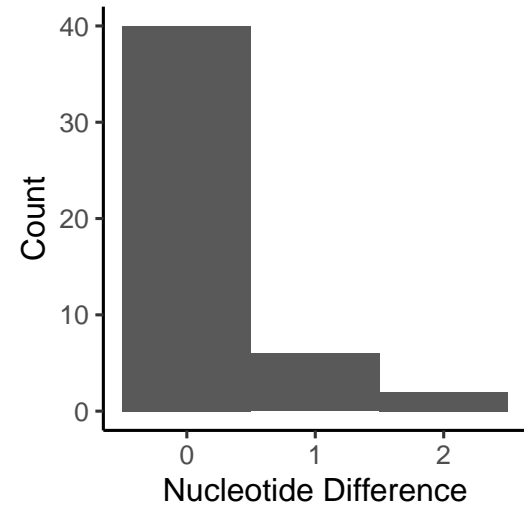
### IGKV1D-43\*01

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



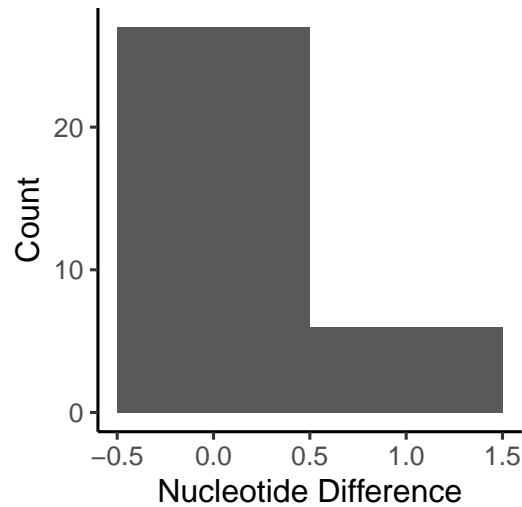
### IGKV1E-12\*03

48 sequences assigned  
40 (83.3%) exact matches, in which:  
35 unique CDR3  
5 unique J



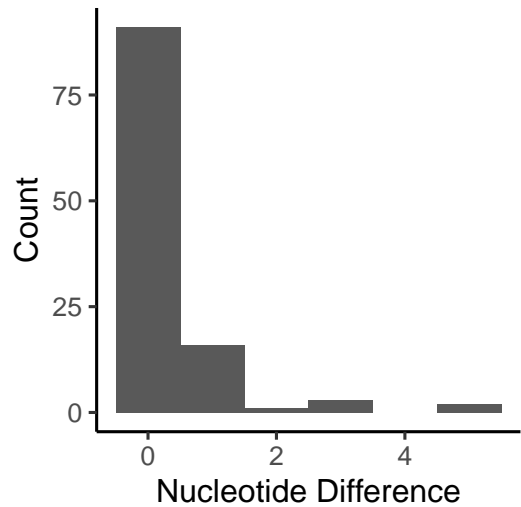
### IGKV2D-30\*01

33 sequences assigned  
27 (81.8%) exact matches, in which:  
26 unique CDR3  
6 unique J



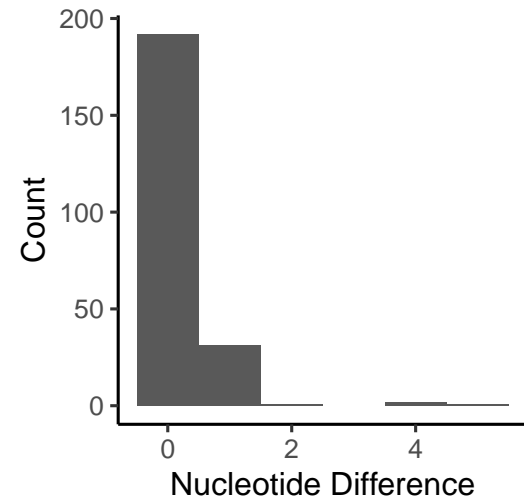
### IGKV1E-12\*01

113 sequences assigned  
91 (80.5%) exact matches, in which:  
66 unique CDR3  
6 unique J



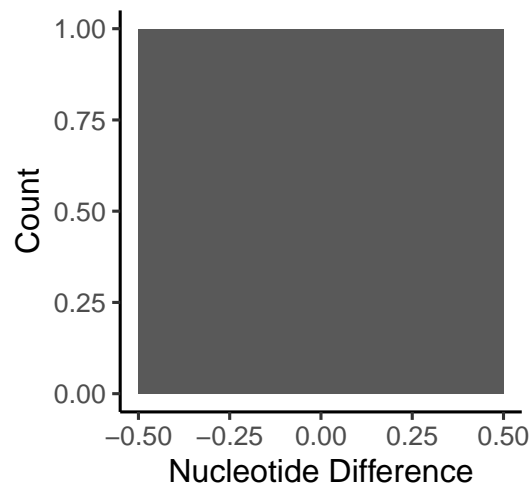
### IGKV1E-13\*02

227 sequences assigned  
192 (84.6%) exact matches, in which:  
168 unique CDR3  
6 unique J



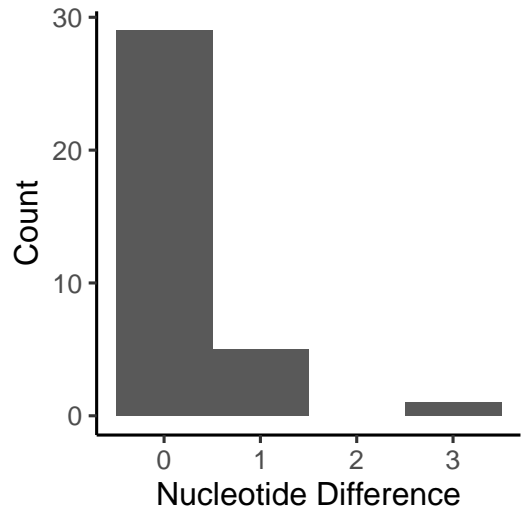
### IGKV6D-41\*01

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



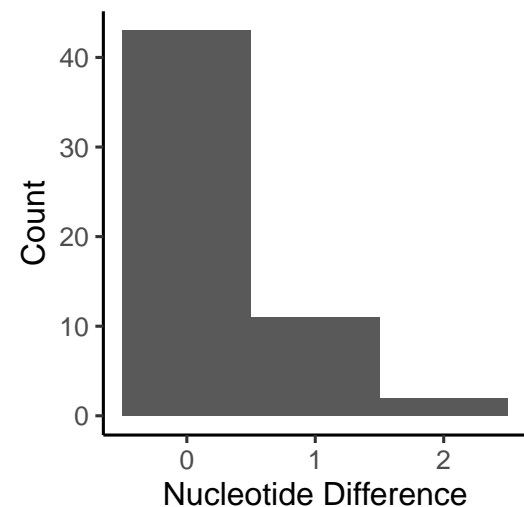
### IGKV1E-12\*02

35 sequences assigned  
29 (82.9%) exact matches, in which:  
21 unique CDR3  
4 unique J



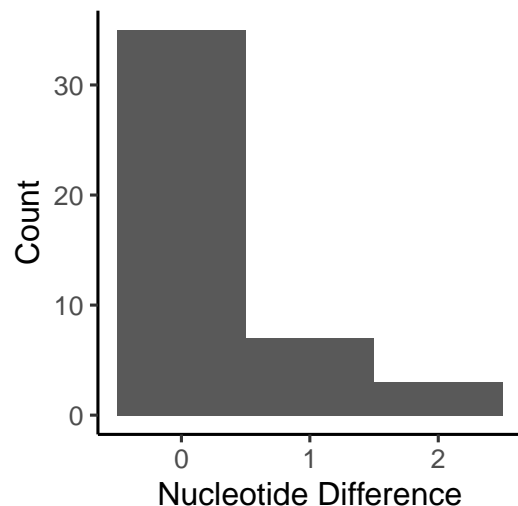
### IGKV1E-13\*03

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



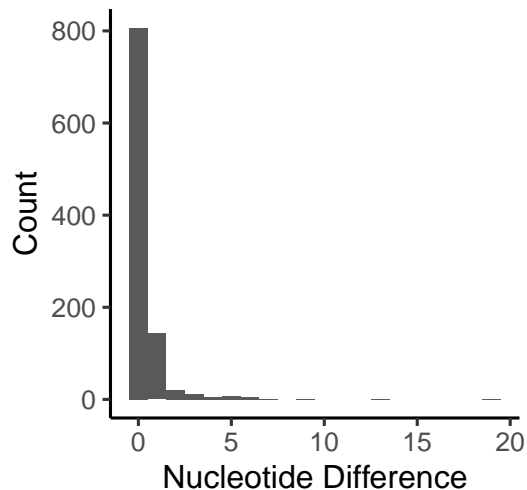
### IGKV6E-21\*01

45 sequences assigned  
35 (77.8%) exact matches, in which:  
30 unique CDR3  
6 unique J



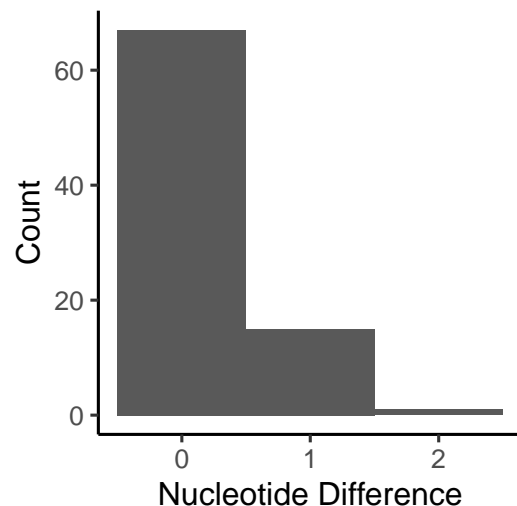
### IGKV1E-33\*01

1004 sequences assigned  
807 (80.4%) exact matches, in which:  
640 unique CDR3  
6 unique J



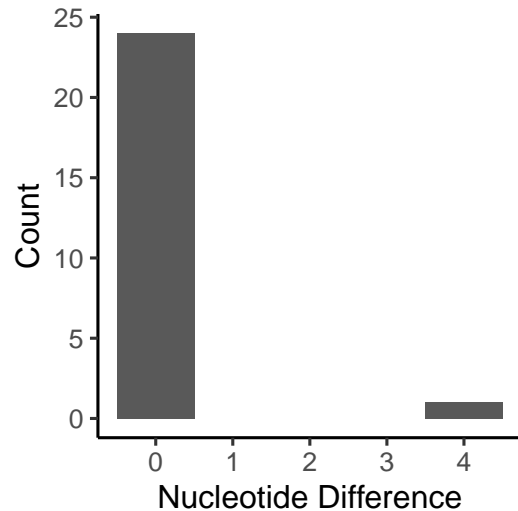
### IGKV2E-40\*01

83 sequences assigned  
67 (80.7%) exact matches, in which:  
59 unique CDR3  
6 unique J



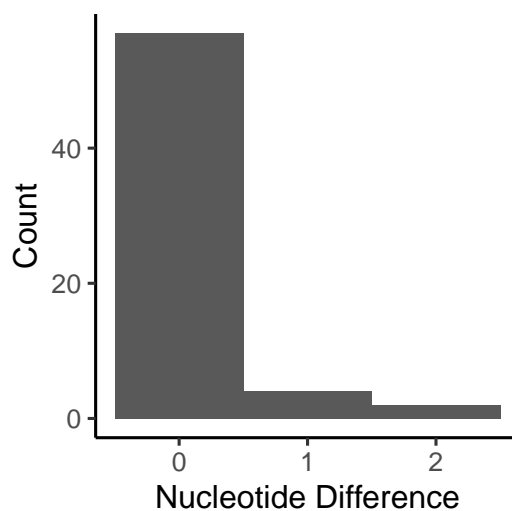
### IGKV6E-21\*03

25 sequences assigned  
24 (96%) exact matches, in which:  
23 unique CDR3  
6 unique J



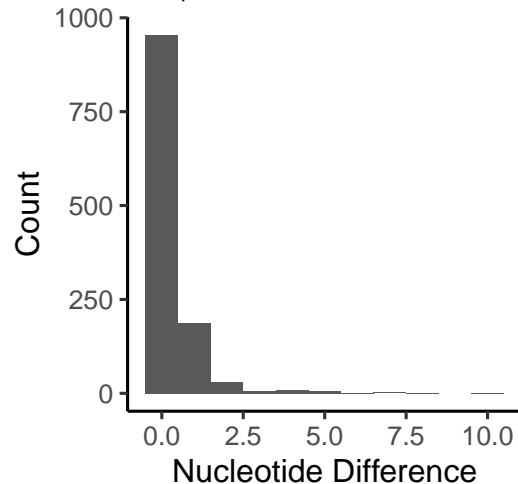
### IGKV1E-37\*01

63 sequences assigned  
57 (90.5%) exact matches, in which:  
51 unique CDR3  
6 unique J



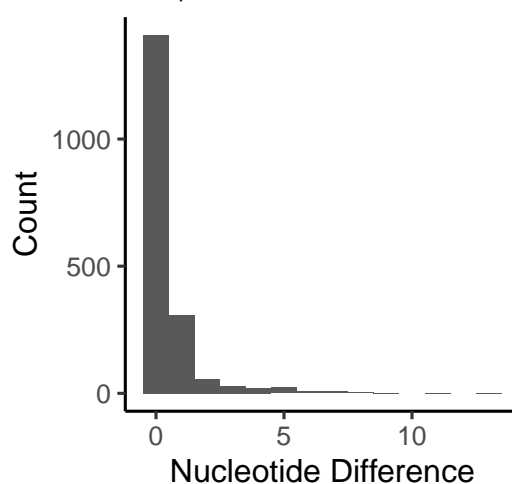
### IGKV2E-28\*01

1197 sequences assigned  
954 (79.7%) exact matches, in which:  
749 unique CDR3  
6 unique J

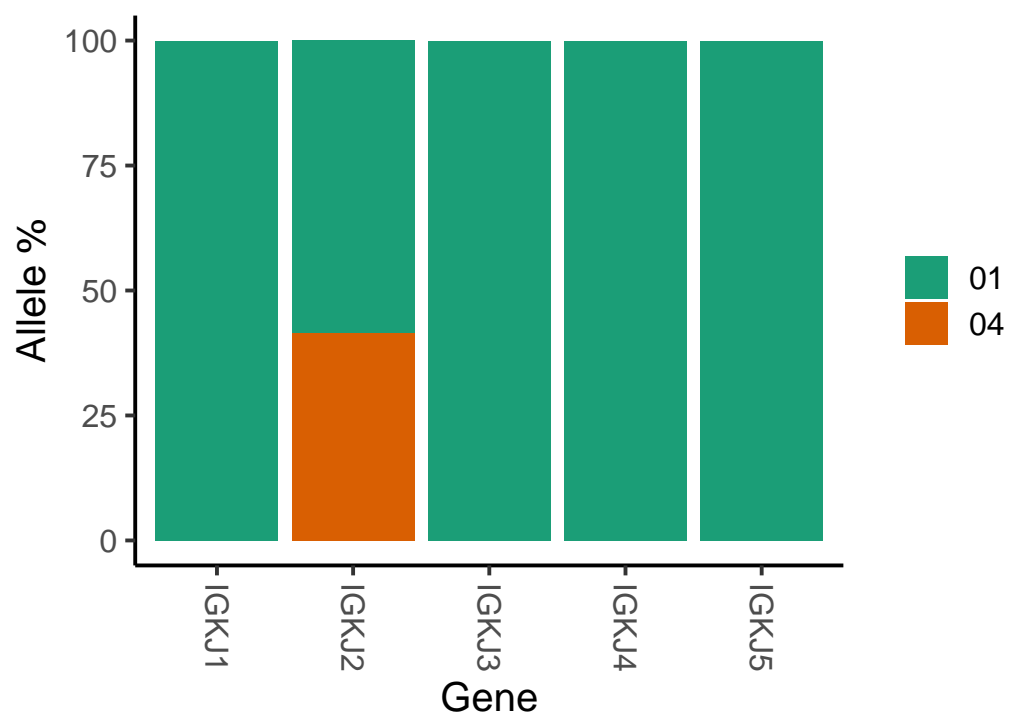


### IGKV1E-39\*01

1866 sequences assigned  
1409 (75.5%) exact matches, in which:  
1093 unique CDR3  
6 unique J



Allele Usage



Sequence Count by IGKJ2 allele usage





Warning – no inferred sequences found.