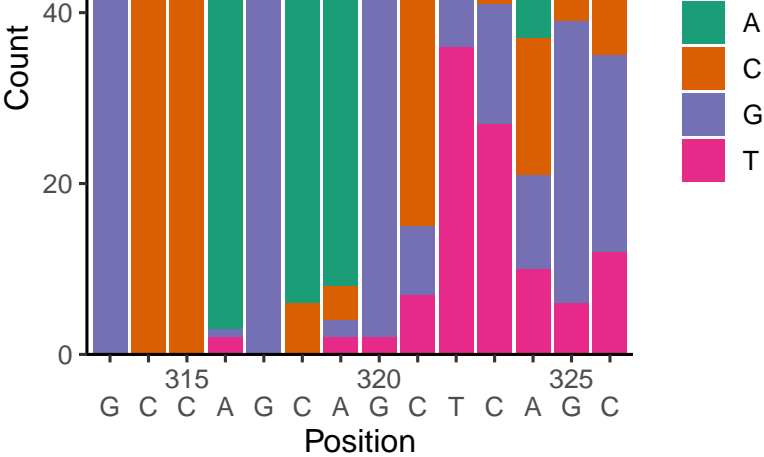
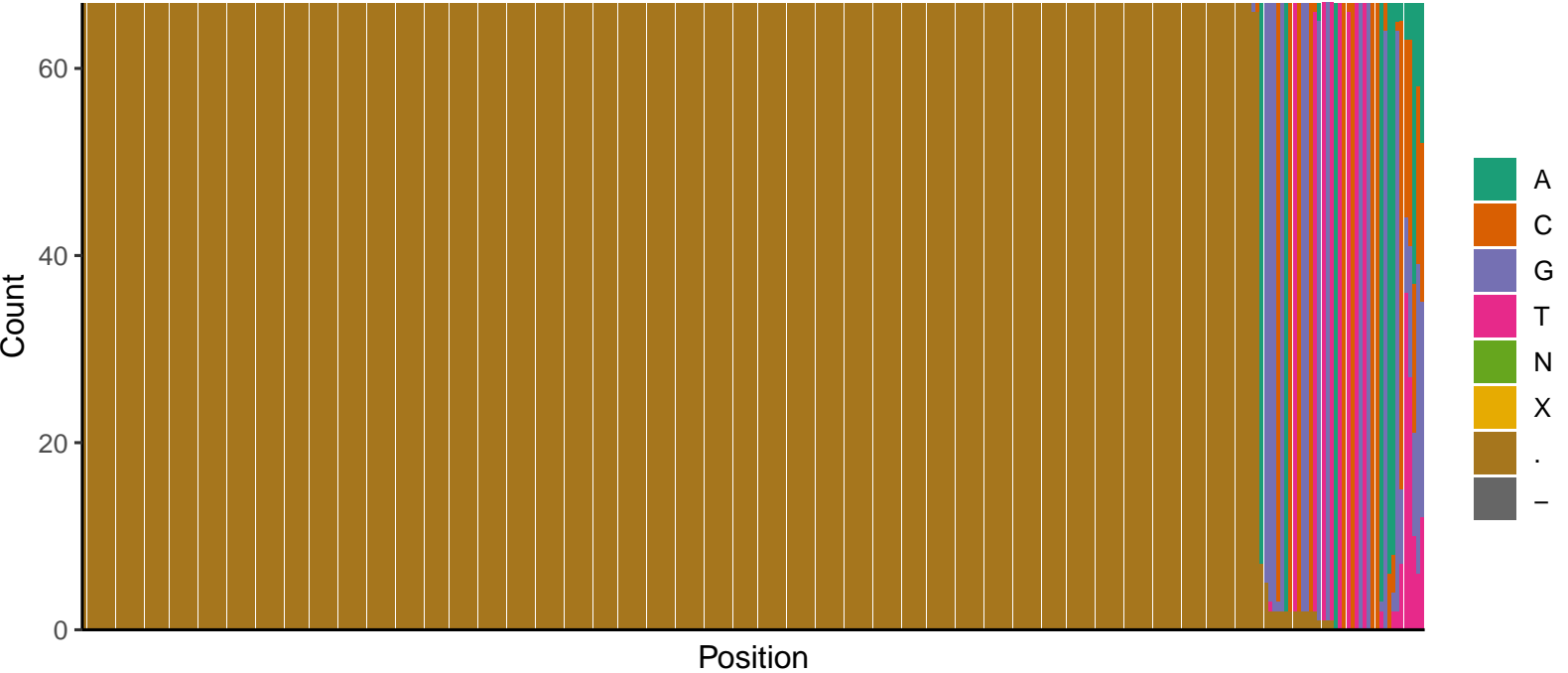


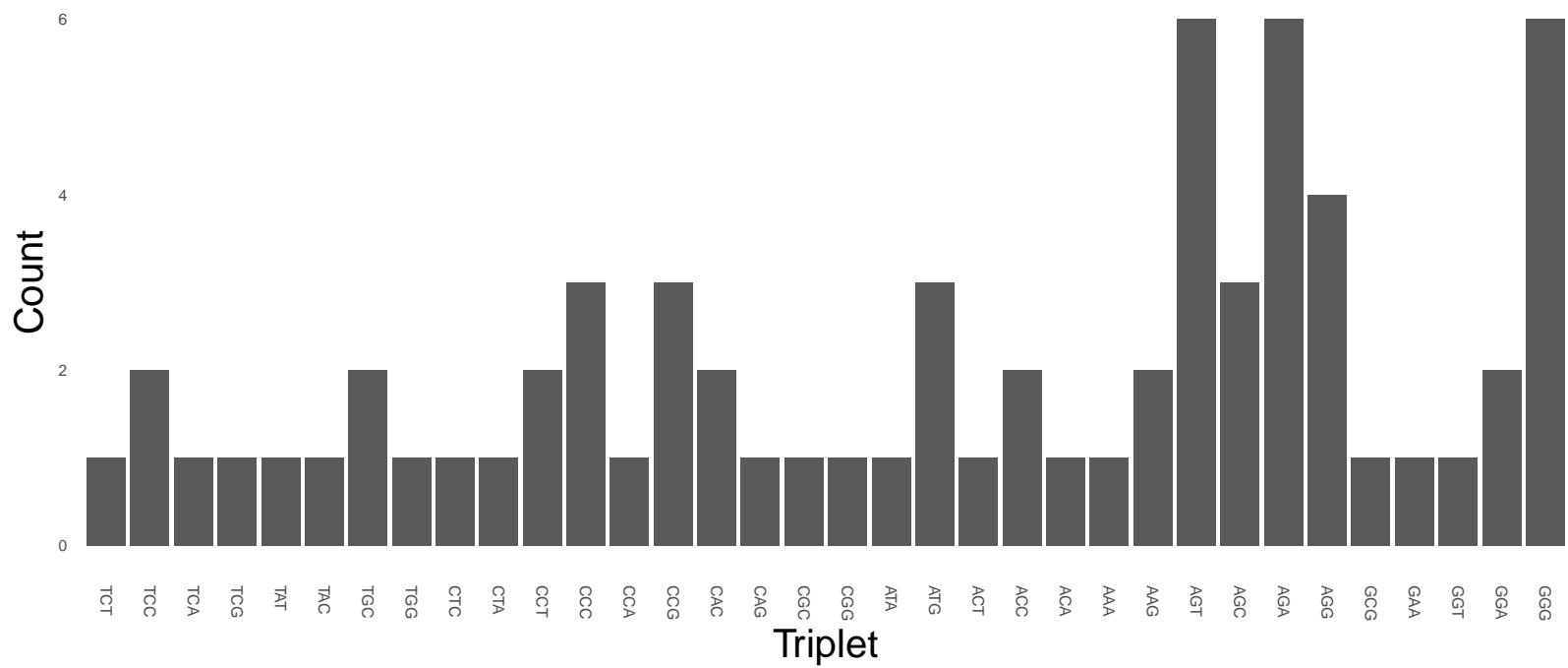
Gene TRBV7-1\*ap01\_G291C\_T296C



Gene TRBV7-1\*ap01\_G291C\_T296C

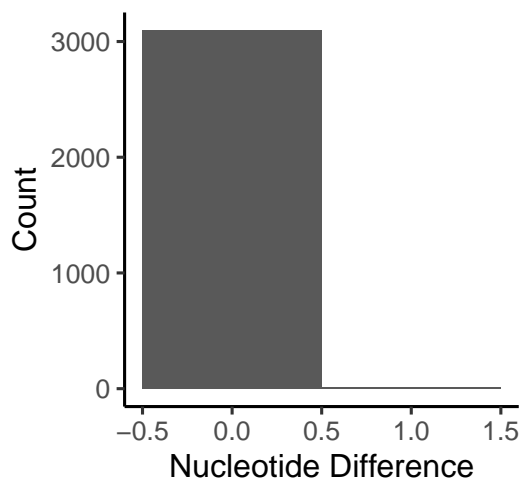


TRBV7-1\*ap01\_G291C\_T296C- Final 3 nucleotides as a triplet



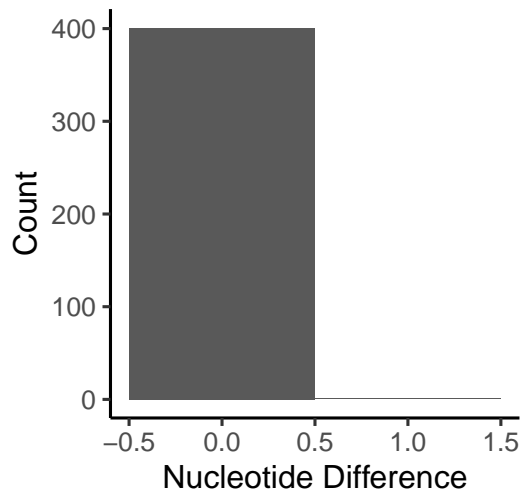
### TRBV20–1\*ap01

3111 sequences assigned  
3096 (99.5%) exact matches, in which:  
3083 unique CDR3  
13 unique J



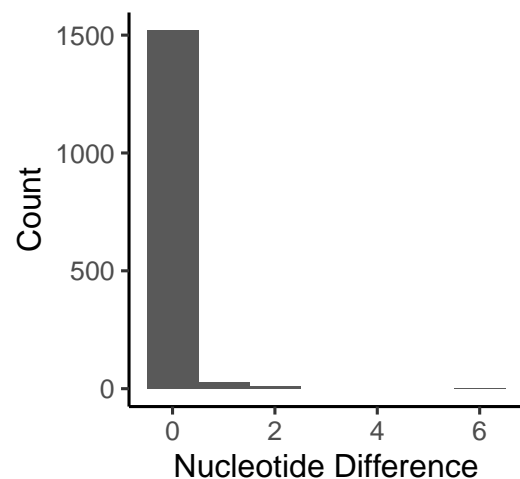
### TRBV10–2\*ap01

402 sequences assigned  
401 (99.8%) exact matches, in which:  
399 unique CDR3  
13 unique J



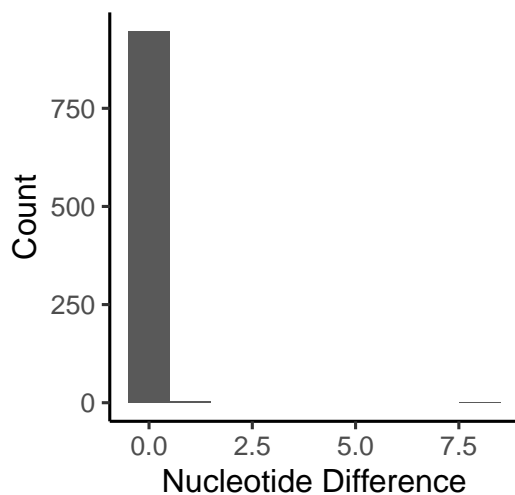
### TRBV13\*ap01

1558 sequences assigned  
1520 (97.6%) exact matches, in which:  
1514 unique CDR3  
13 unique J



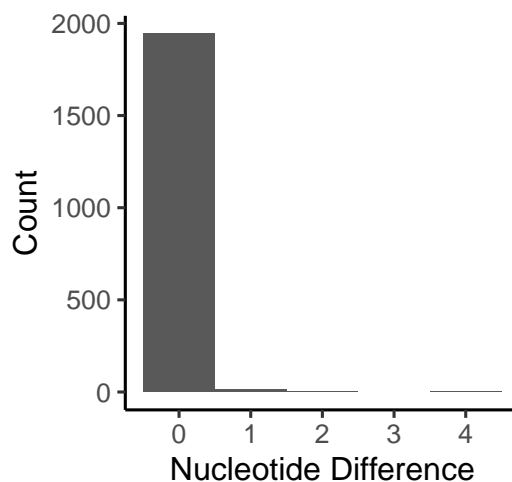
### TRBV10–1\*ap01

951 sequences assigned  
947 (99.6%) exact matches, in which:  
941 unique CDR3  
13 unique J



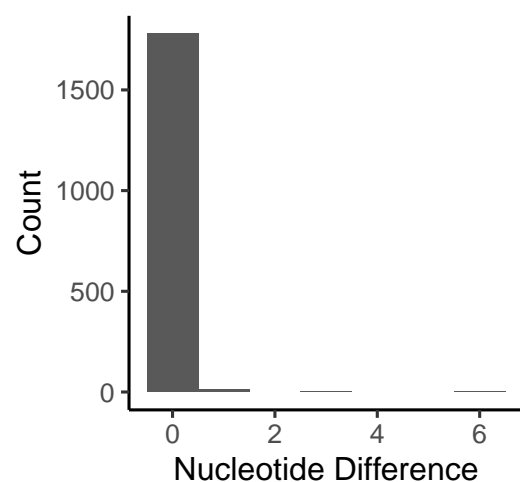
### TRBV10–3\*ap01

1960 sequences assigned  
1944 (99.2%) exact matches, in which:  
1932 unique CDR3  
13 unique J



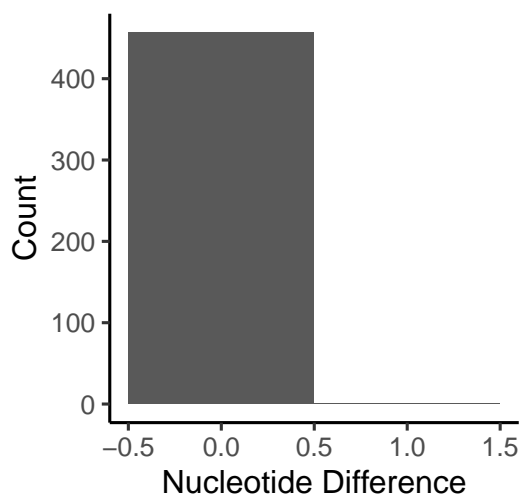
### TRBV14\*ap01

1795 sequences assigned  
1779 (99.1%) exact matches, in which:  
1766 unique CDR3  
13 unique J



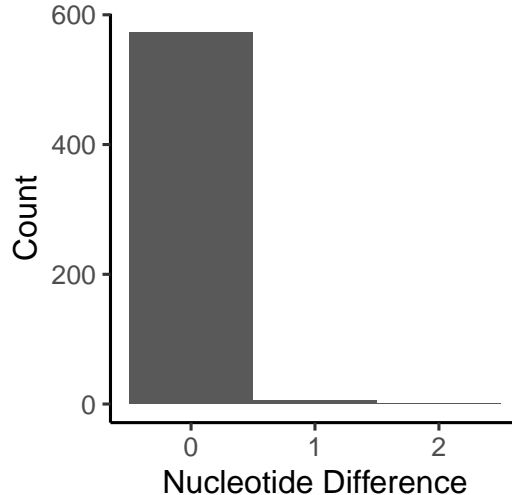
### TRBV20–1\*ap02

458 sequences assigned  
457 (99.8%) exact matches, in which:  
454 unique CDR3  
13 unique J



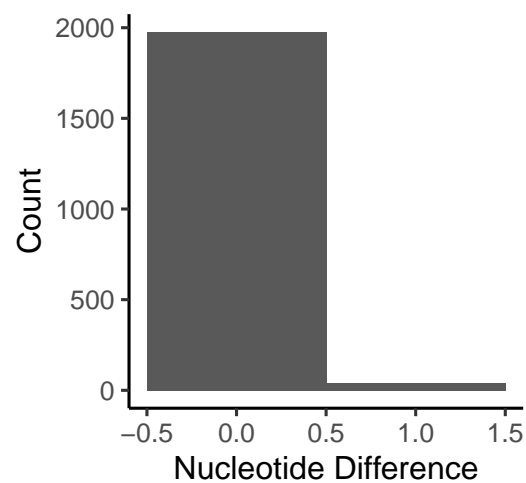
### TRBV1\*ap01

580 sequences assigned  
573 (98.8%) exact matches, in which:  
567 unique CDR3  
13 unique J



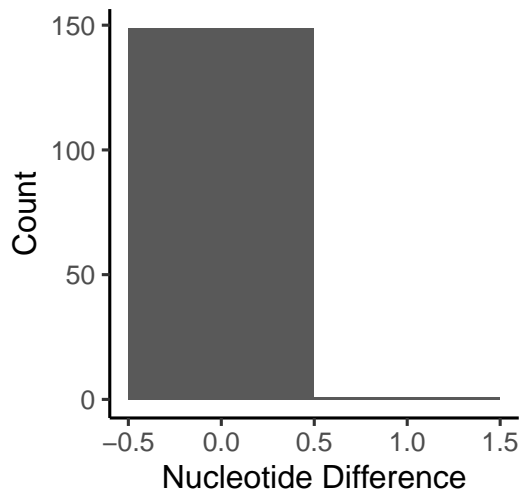
### TRBV15\*ap02

2017 sequences assigned  
1976 (98%) exact matches, in which:  
1957 unique CDR3  
13 unique J



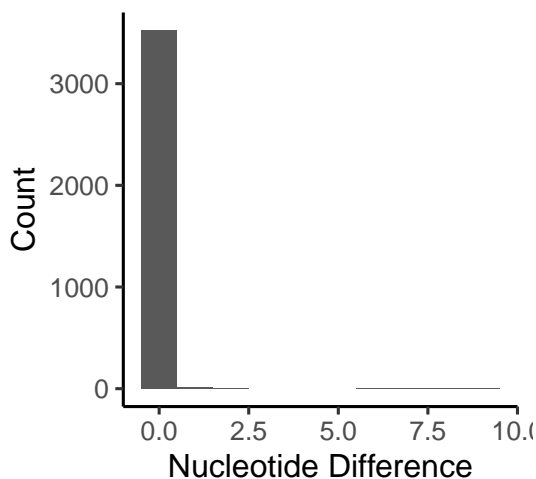
### TRBV16\*ap01

150 sequences assigned  
149 (99.3%) exact matches, in which:  
149 unique CDR3  
13 unique J



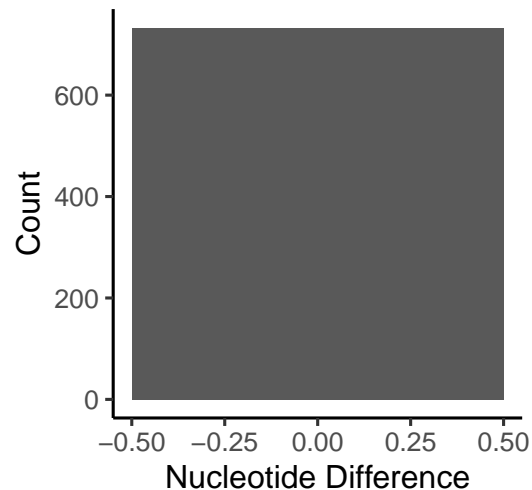
### TRBV19\*ap01

3543 sequences assigned  
3524 (99.5%) exact matches, in which:  
3509 unique CDR3  
14 unique J



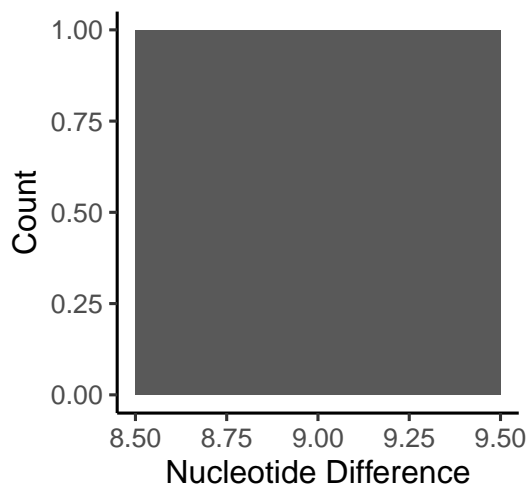
### TRBV28\*ap01

733 sequences assigned  
733 (100%) exact matches, in which:  
729 unique CDR3  
13 unique J



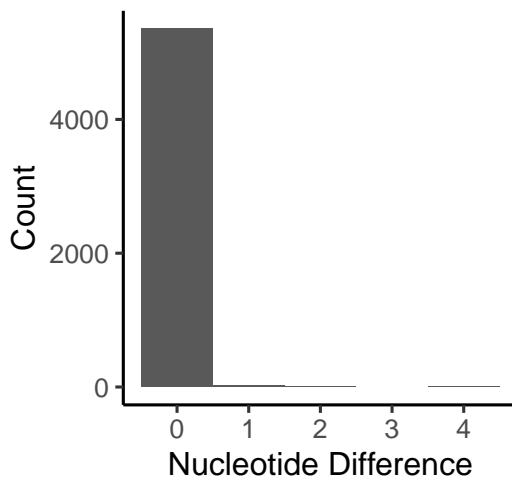
### TRBV17\*ap01

1 sequences assigned  
No exact matches.



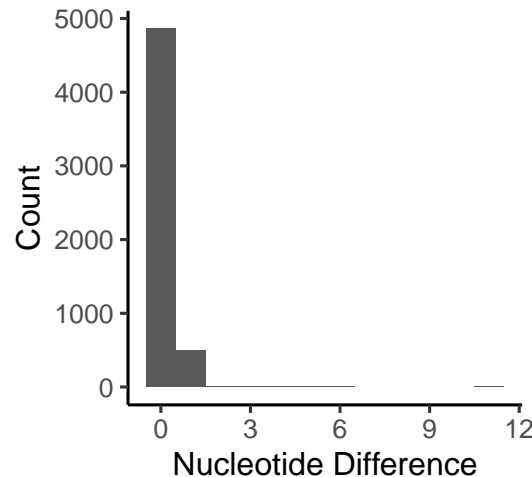
### TRBV2\*ap01

5386 sequences assigned  
5356 (99.4%) exact matches, in which:  
5325 unique CDR3  
13 unique J



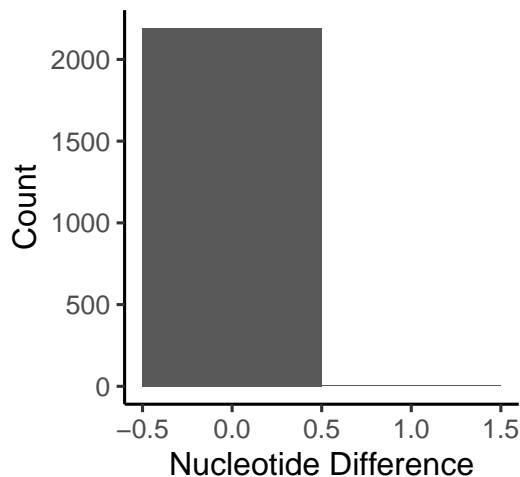
### TRBV30\*ap01

5367 sequences assigned  
4861 (90.6%) exact matches, in which:  
4805 unique CDR3  
13 unique J



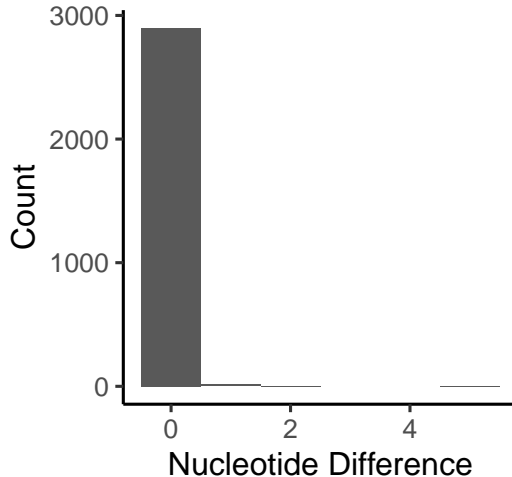
### TRBV18\*ap01

2198 sequences assigned  
2192 (99.7%) exact matches, in which:  
2186 unique CDR3  
13 unique J



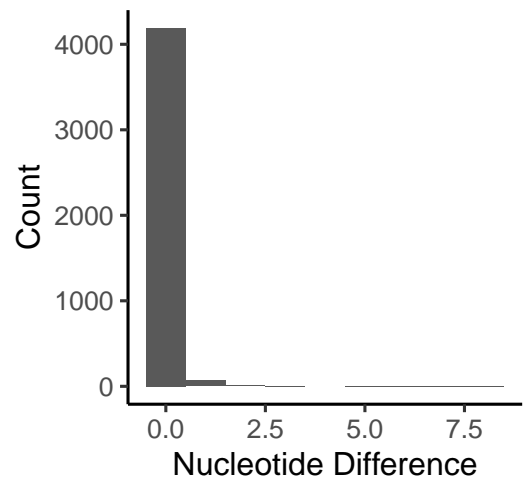
### TRBV27\*ap01

2917 sequences assigned  
2898 (99.3%) exact matches, in which:  
2881 unique CDR3  
13 unique J



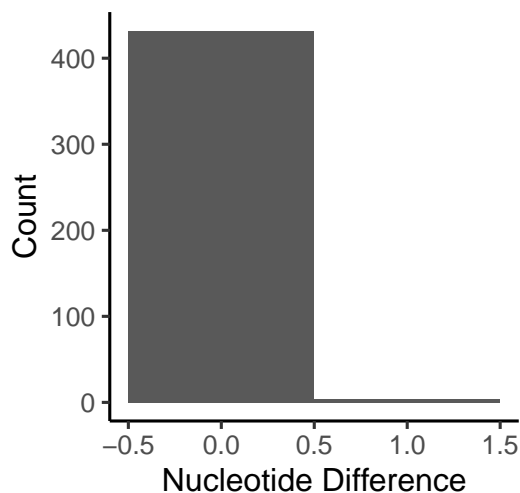
### TRBV9\*ap01

4271 sequences assigned  
4190 (98.1%) exact matches, in which:  
4173 unique CDR3  
13 unique J



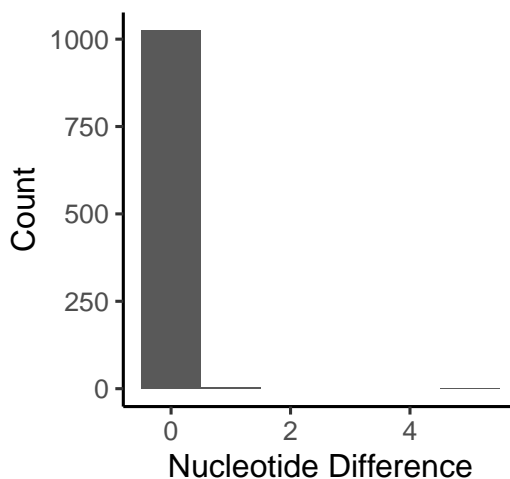
### TRBV11-1\*ap01

436 sequences assigned  
432 (99.1%) exact matches, in which:  
427 unique CDR3  
13 unique J



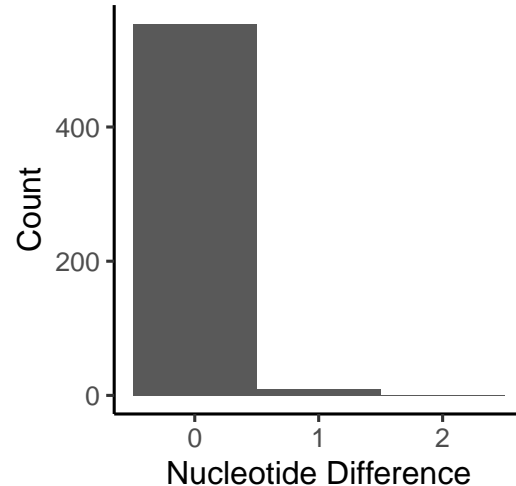
### TRBV11-3\*ap01

1030 sequences assigned  
1025 (99.5%) exact matches, in which:  
1020 unique CDR3  
13 unique J



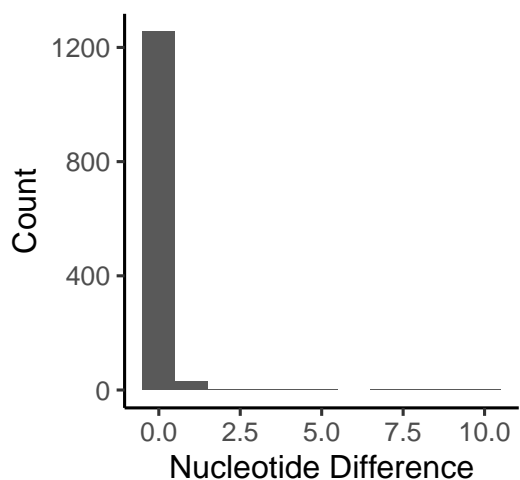
### TRBV12-5\*ap01

564 sequences assigned  
554 (98.2%) exact matches, in which:  
552 unique CDR3  
13 unique J



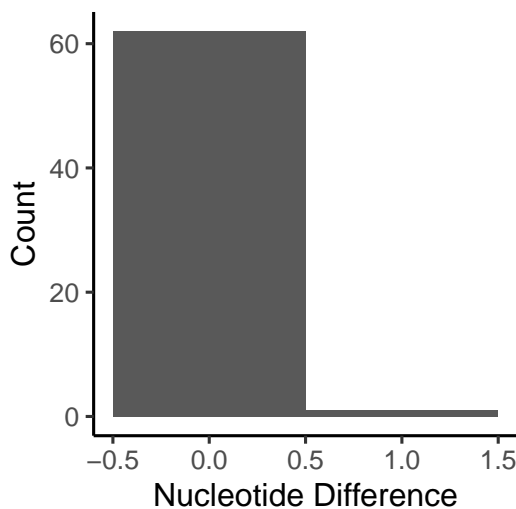
### TRBV21-1\*ap01

1299 sequences assigned  
1255 (96.6%) exact matches, in which:  
1251 unique CDR3  
13 unique J



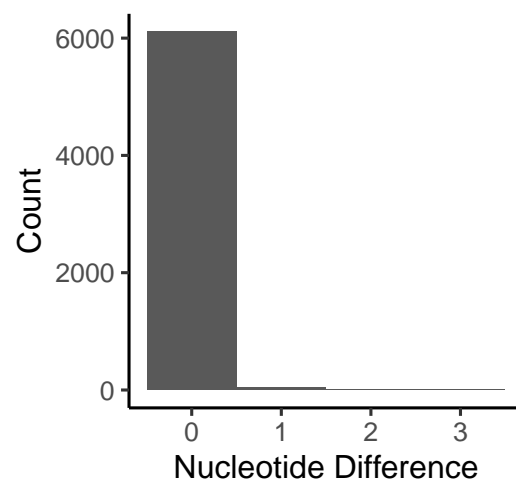
### TRBV12-1\*ap01

63 sequences assigned  
62 (98.4%) exact matches, in which:  
62 unique CDR3  
12 unique J



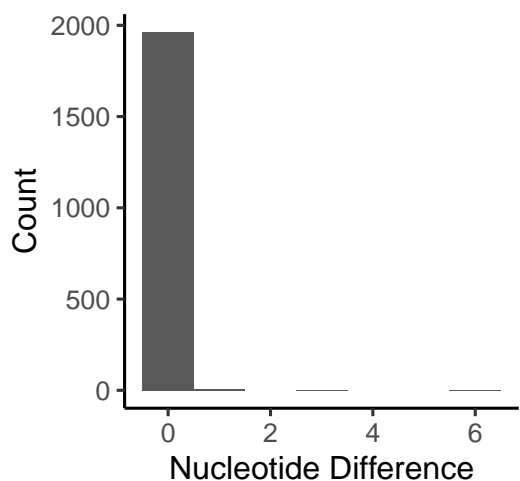
### TRBV12-34\*ap01

6162 sequences assigned  
6109 (99.1%) exact matches, in which:  
6085 unique CDR3  
13 unique J



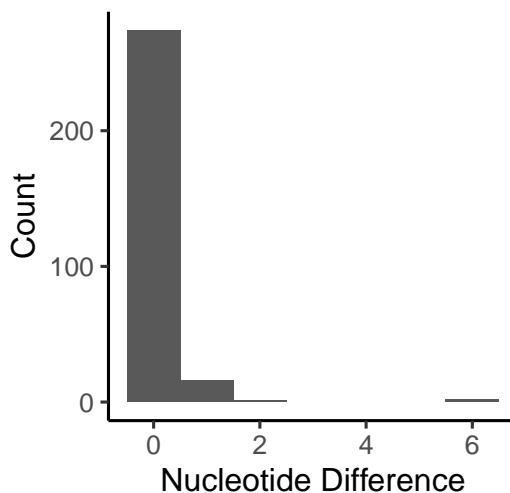
### TRBV11-2\*ap01

1972 sequences assigned  
1963 (99.5%) exact matches, in which:  
1957 unique CDR3  
13 unique J



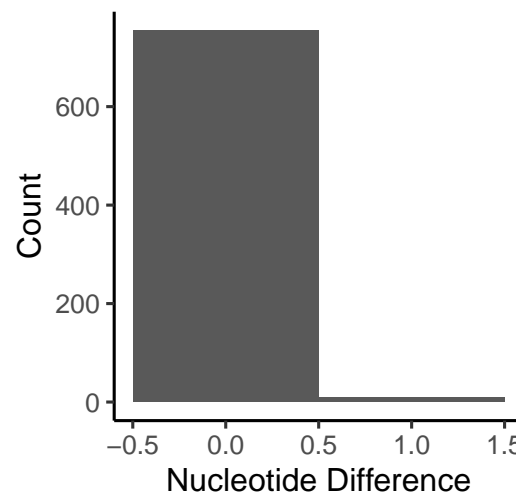
### TRBV12-2\*ap01

293 sequences assigned  
274 (93.5%) exact matches, in which:  
273 unique CDR3  
13 unique J



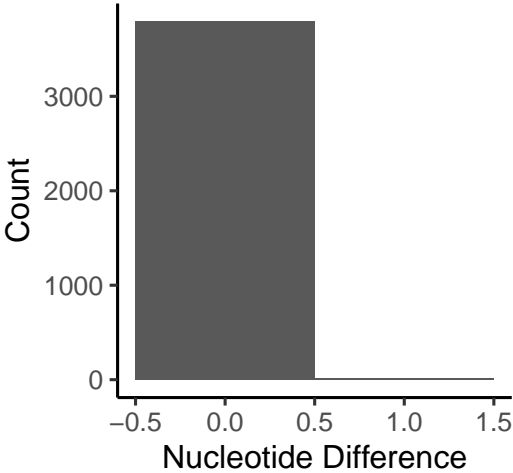
### TRBV23-1\*ap01

765 sequences assigned  
755 (98.7%) exact matches, in which:  
754 unique CDR3  
13 unique J



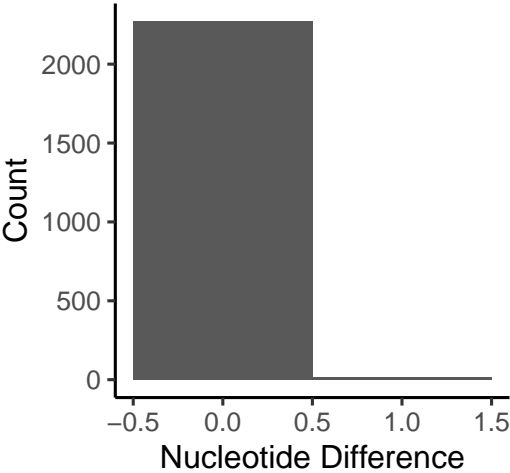
TRBV3-12\*ap01

3810 sequences assigned  
3793 (99.6%) exact matches, in which:  
3784 unique CDR3  
13 unique J



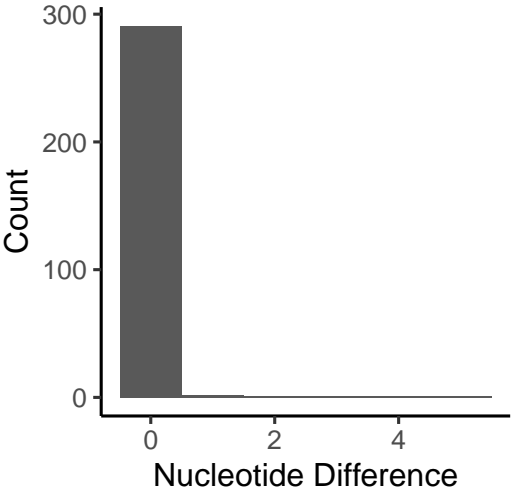
TRBV4-2\*ap01

2290 sequences assigned  
2271 (99.2%) exact matches, in which:  
2256 unique CDR3  
13 unique J



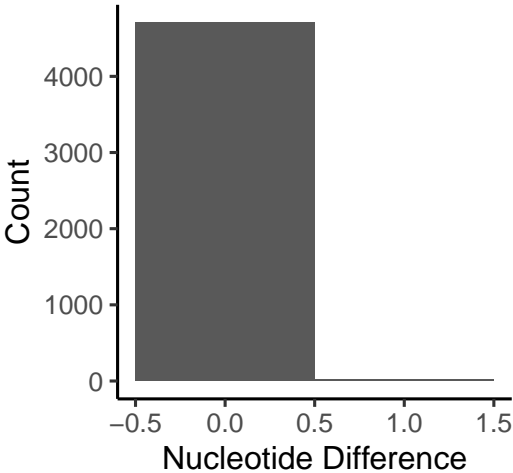
TRBV5-3\*ap01

297 sequences assigned  
291 (98%) exact matches, in which:  
289 unique CDR3  
13 unique J



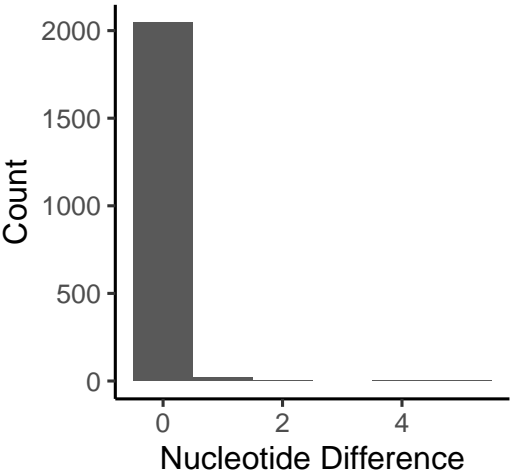
TRBV4-1\*ap01

4724 sequences assigned  
4704 (99.6%) exact matches, in which:  
4656 unique CDR3  
13 unique J



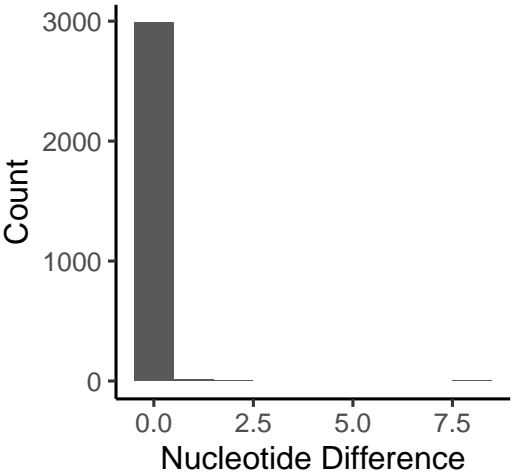
TRBV25-1\*ap01

2071 sequences assigned  
2045 (98.7%) exact matches, in which:  
2027 unique CDR3  
13 unique J



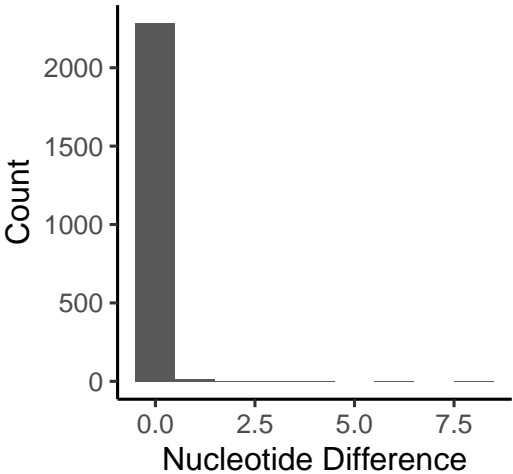
TRBV5-4\*ap01

3001 sequences assigned  
2987 (99.5%) exact matches, in which:  
2974 unique CDR3  
13 unique J



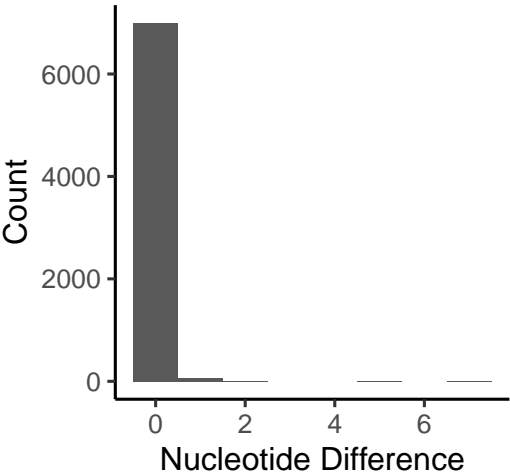
TRBV24-1\*ap01

2306 sequences assigned  
2285 (99.1%) exact matches, in which:  
2271 unique CDR3  
13 unique J



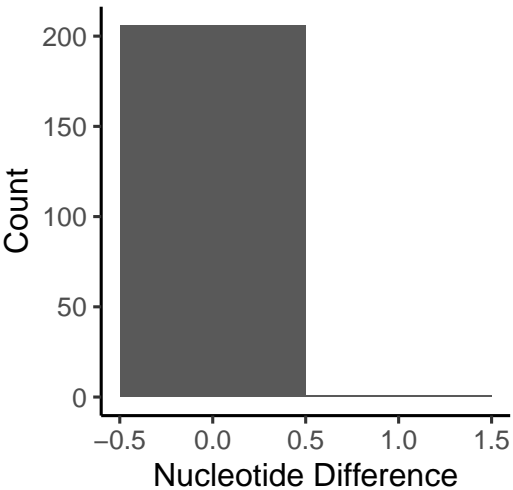
TRBV5-1\*ap01

7067 sequences assigned  
6995 (99%) exact matches, in which:  
6968 unique CDR3  
13 unique J



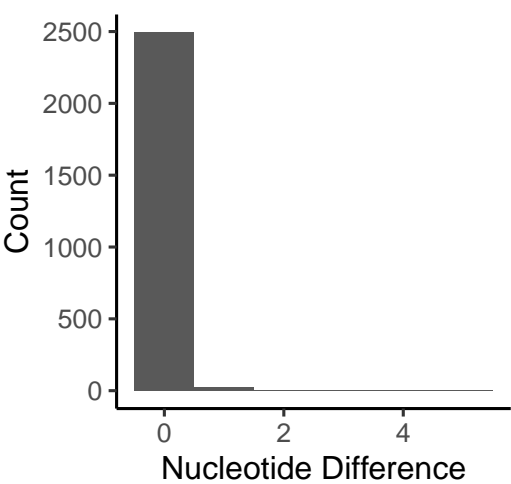
TRBV5-5\*ap01

207 sequences assigned  
206 (99.5%) exact matches, in which:  
206 unique CDR3  
13 unique J



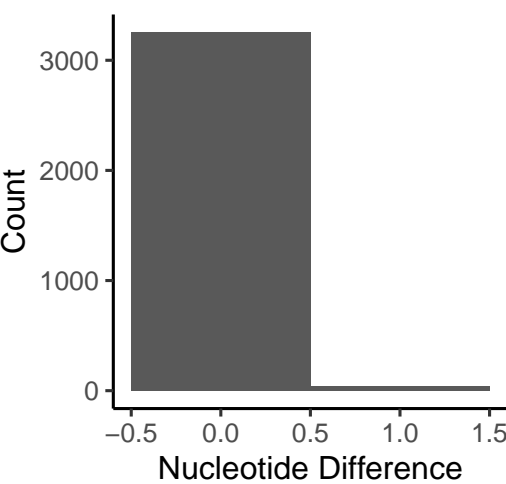
TRBV5-6\*ap01

2522 sequences assigned  
2494 (98.9%) exact matches, in which:  
2477 unique CDR3  
14 unique J



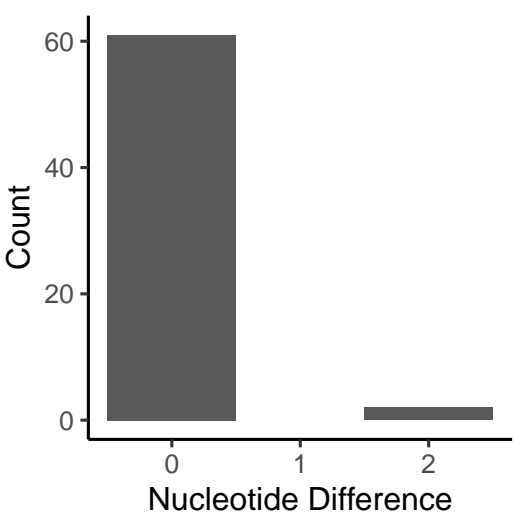
TRBV6-1\*ap01

3298 sequences assigned  
3253 (98.6%) exact matches, in which:  
3228 unique CDR3  
13 unique J



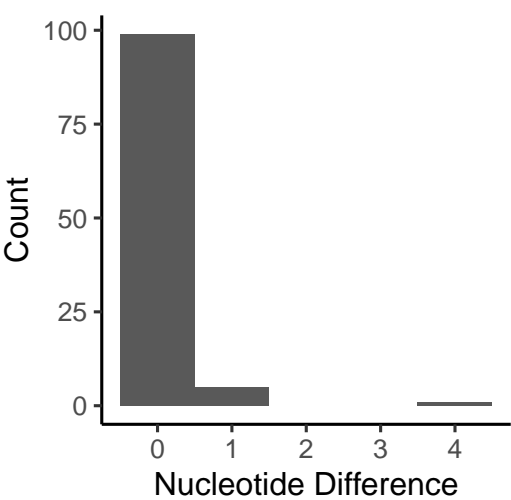
TRBV6-8\*ap01

63 sequences assigned  
61 (96.8%) exact matches, in which:  
61 unique CDR3  
12 unique J



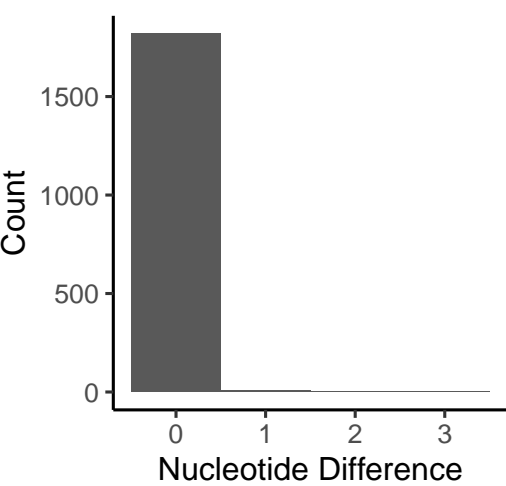
TRBV5-7\*ap01

105 sequences assigned  
99 (94.3%) exact matches, in which:  
98 unique CDR3  
13 unique J



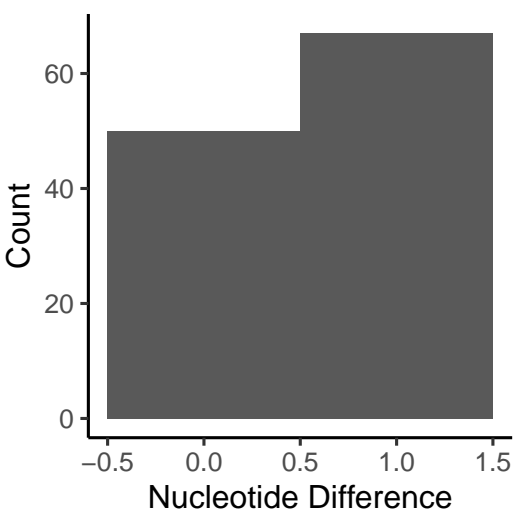
TRBV6-4\*ap01

1830 sequences assigned  
1819 (99.4%) exact matches, in which:  
1809 unique CDR3  
13 unique J



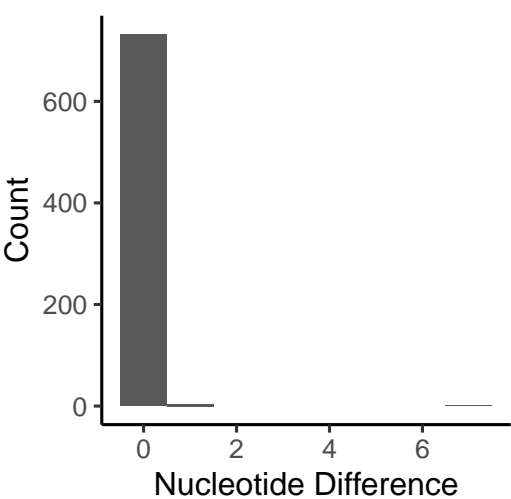
TRBV6-9\*ap01

117 sequences assigned  
50 (42.7%) exact matches, in which:  
47 unique CDR3  
10 unique J



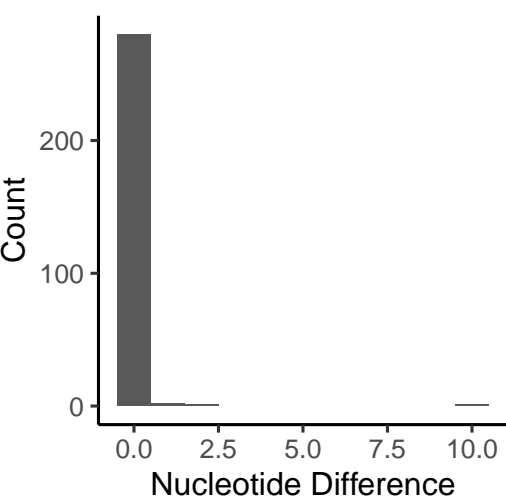
TRBV5-8\*ap01

737 sequences assigned  
732 (99.3%) exact matches, in which:  
729 unique CDR3  
13 unique J



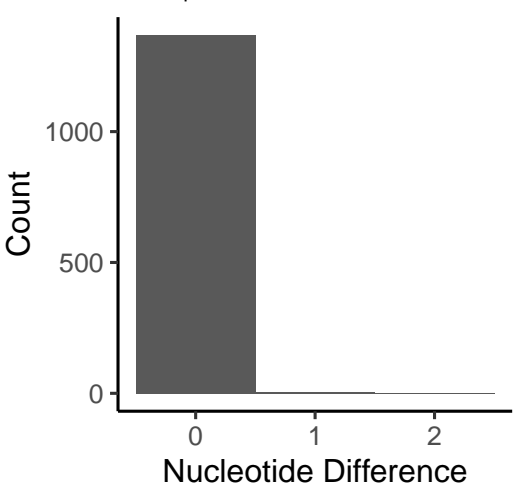
TRBV6-7\*ap01

284 sequences assigned  
280 (98.6%) exact matches, in which:  
278 unique CDR3  
13 unique J



TRBV6-23\*ap01

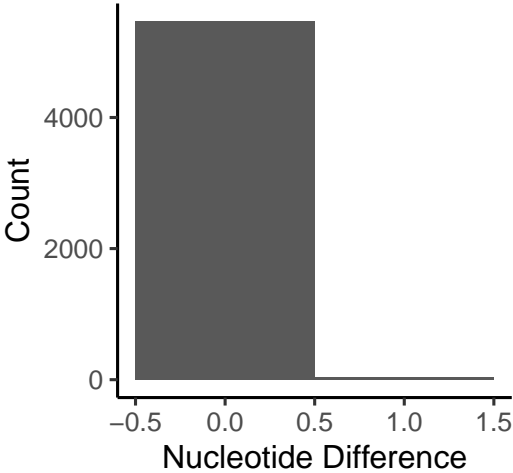
1375 sequences assigned  
1369 (99.6%) exact matches, in which:  
1363 unique CDR3  
13 unique J





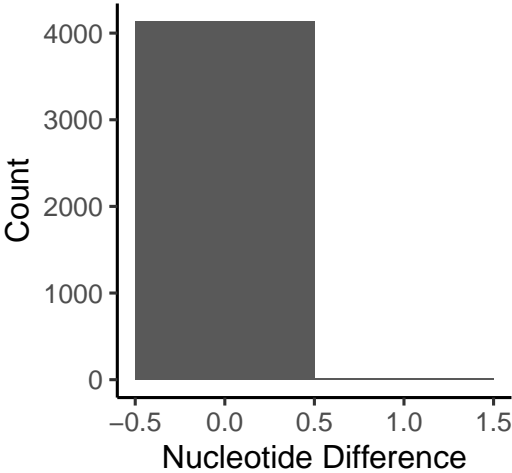
TRBV6-56\*ap01

5497 sequences assigned  
5466 (99.4%) exact matches, in which:  
5414 unique CDR3  
13 unique J



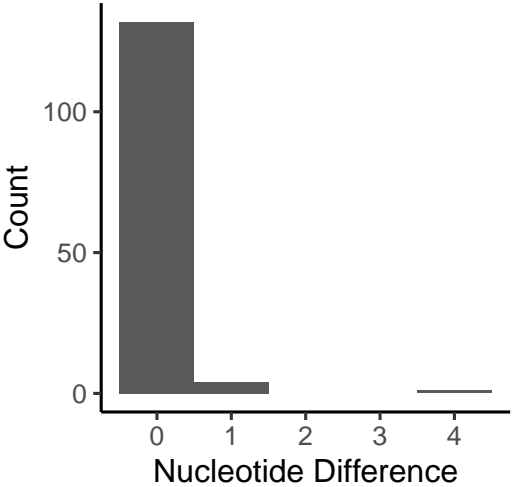
TRBV7-2\*ap01

4150 sequences assigned  
4135 (99.6%) exact matches, in which:  
4118 unique CDR3  
13 unique J



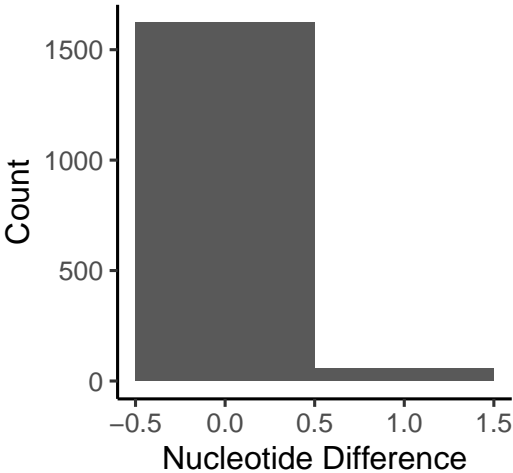
TRBV7-4\*ap01

137 sequences assigned  
132 (96.4%) exact matches, in which:  
130 unique CDR3  
13 unique J



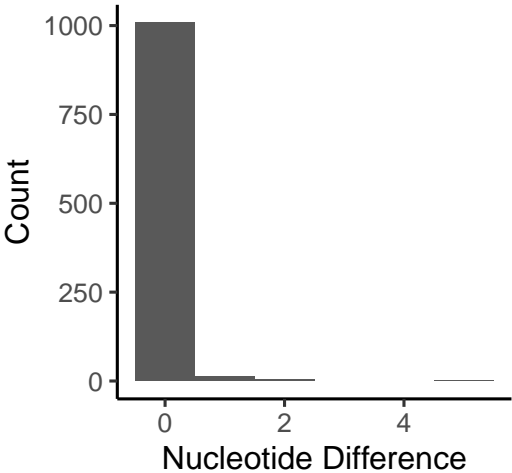
TRBV6-56\*ap02

1679 sequences assigned  
1622 (96.6%) exact matches, in which:  
1608 unique CDR3  
13 unique J



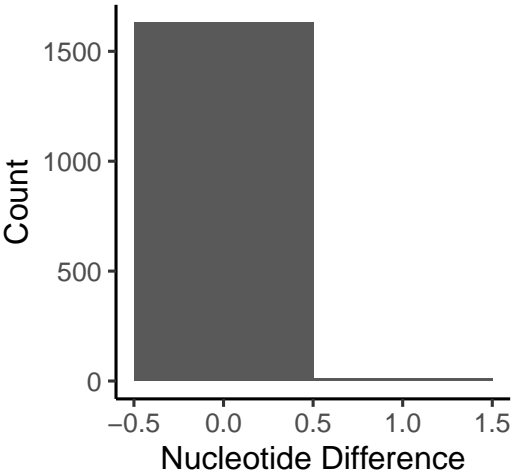
TRBV7-3\*ap01

1025 sequences assigned  
1008 (98.3%) exact matches, in which:  
1005 unique CDR3  
13 unique J



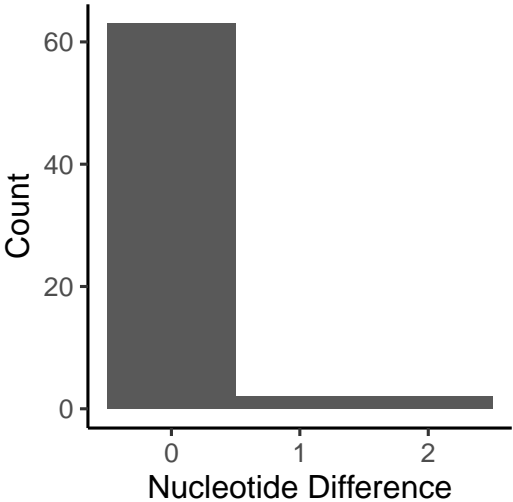
TRBV7-6\*ap01

1642 sequences assigned  
1630 (99.3%) exact matches, in which:  
1621 unique CDR3  
13 unique J



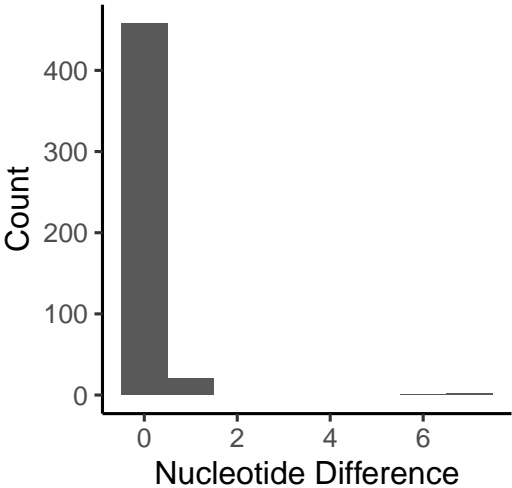
TRBV7-1\*ap01\_G291C\_T

67 sequences assigned  
63 (94%) exact matches, in which:  
62 unique CDR3  
11 unique J



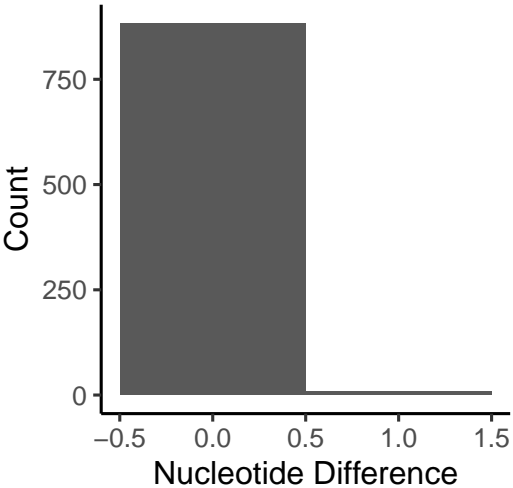
TRBV7-3\*ap03

481 sequences assigned  
458 (95.2%) exact matches, in which:  
448 unique CDR3  
13 unique J



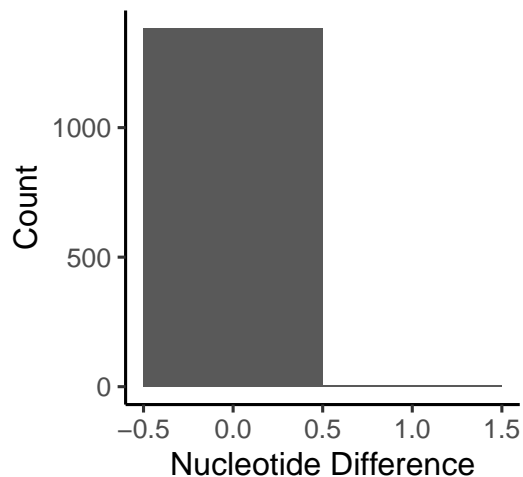
TRBV7-7\*ap01

892 sequences assigned  
883 (99%) exact matches, in which:  
880 unique CDR3  
13 unique J



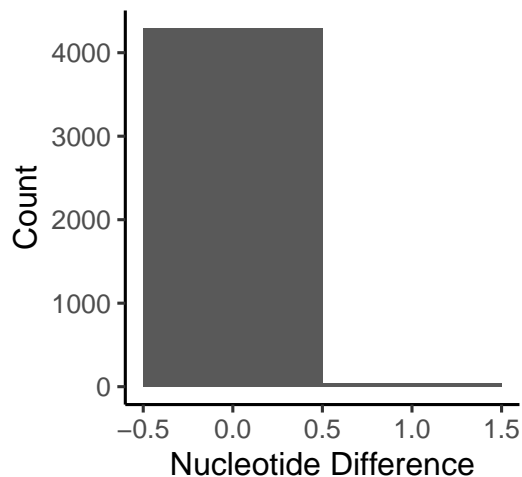
### TRBV7-8\*ap01

1387 sequences assigned  
1383 (99.7%) exact matches, in which:  
1378 unique CDR3  
13 unique J



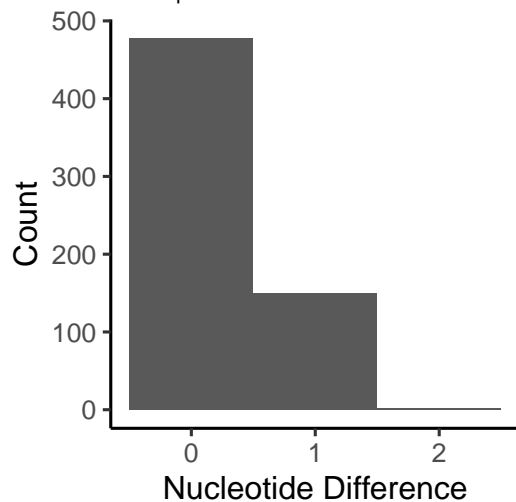
### TRBV29-1\*ap01

4327 sequences assigned  
4291 (99.2%) exact matches, in which:  
4228 unique CDR3  
13 unique J



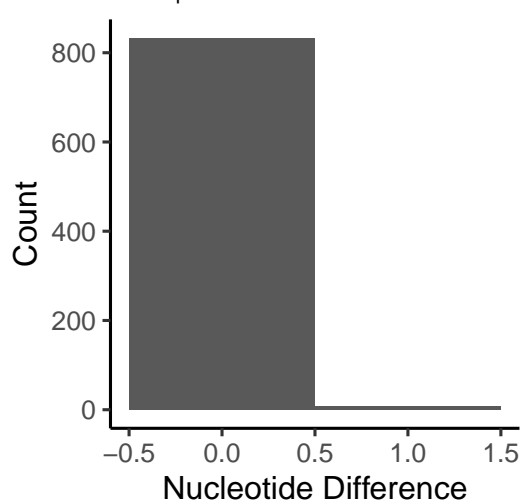
### TRBV7-8\*ap03

630 sequences assigned  
478 (75.9%) exact matches, in which:  
474 unique CDR3  
13 unique J



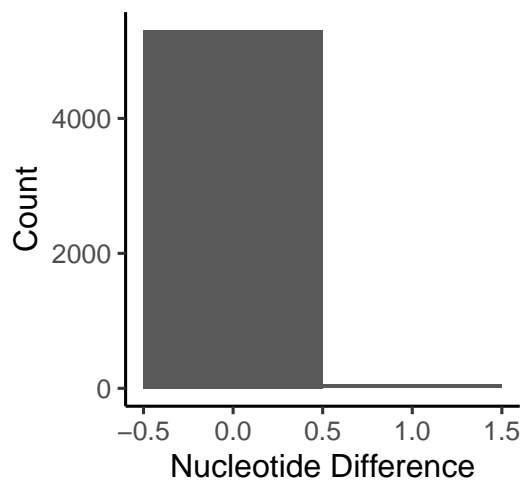
### TRBV29-1\*ap02

840 sequences assigned  
833 (99.2%) exact matches, in which:  
825 unique CDR3  
13 unique J

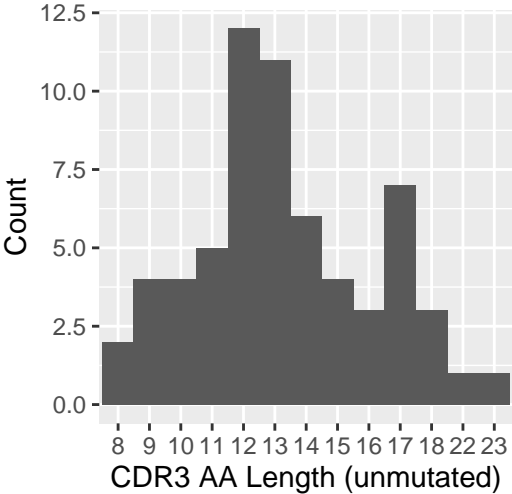


### TRBV7-9\*ap01

5366 sequences assigned  
5309 (98.9%) exact matches, in which:  
5284 unique CDR3  
13 unique J



TRBV7-1\*ap01\_G291C\_T296C





[illegible]