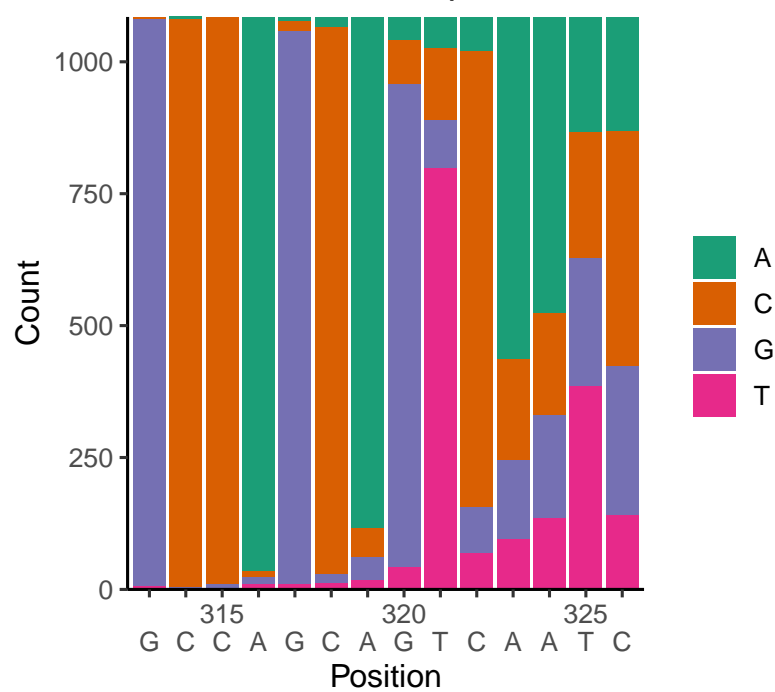
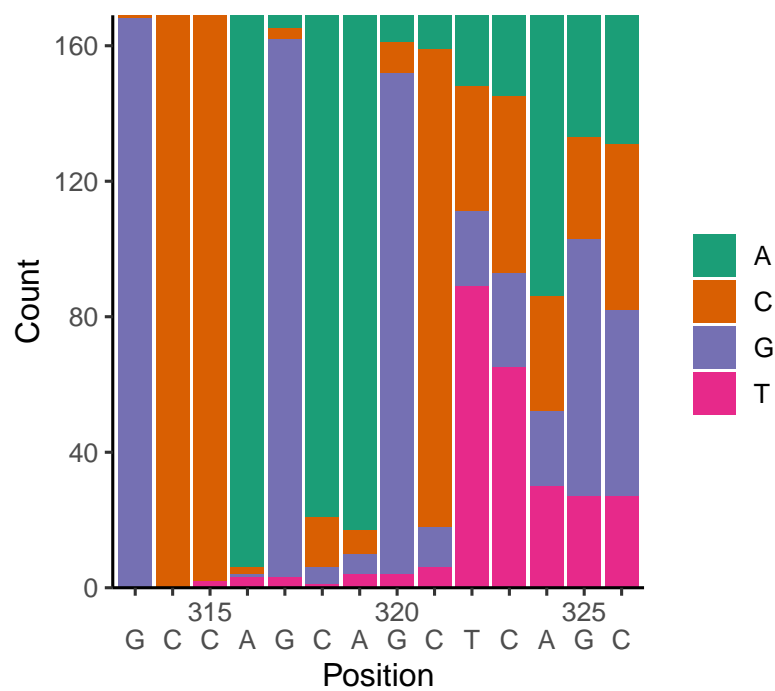


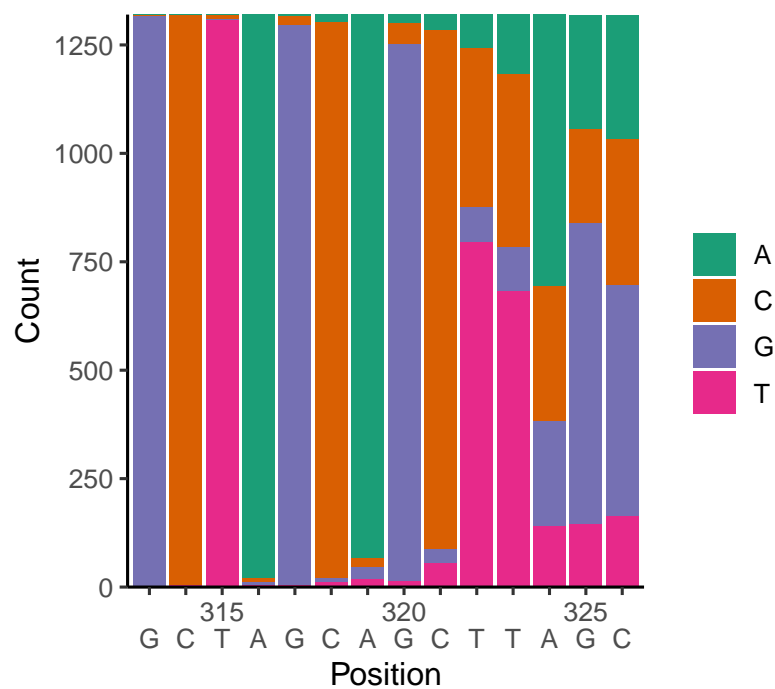
Gene TRBV23-1\*ap01\_T304C



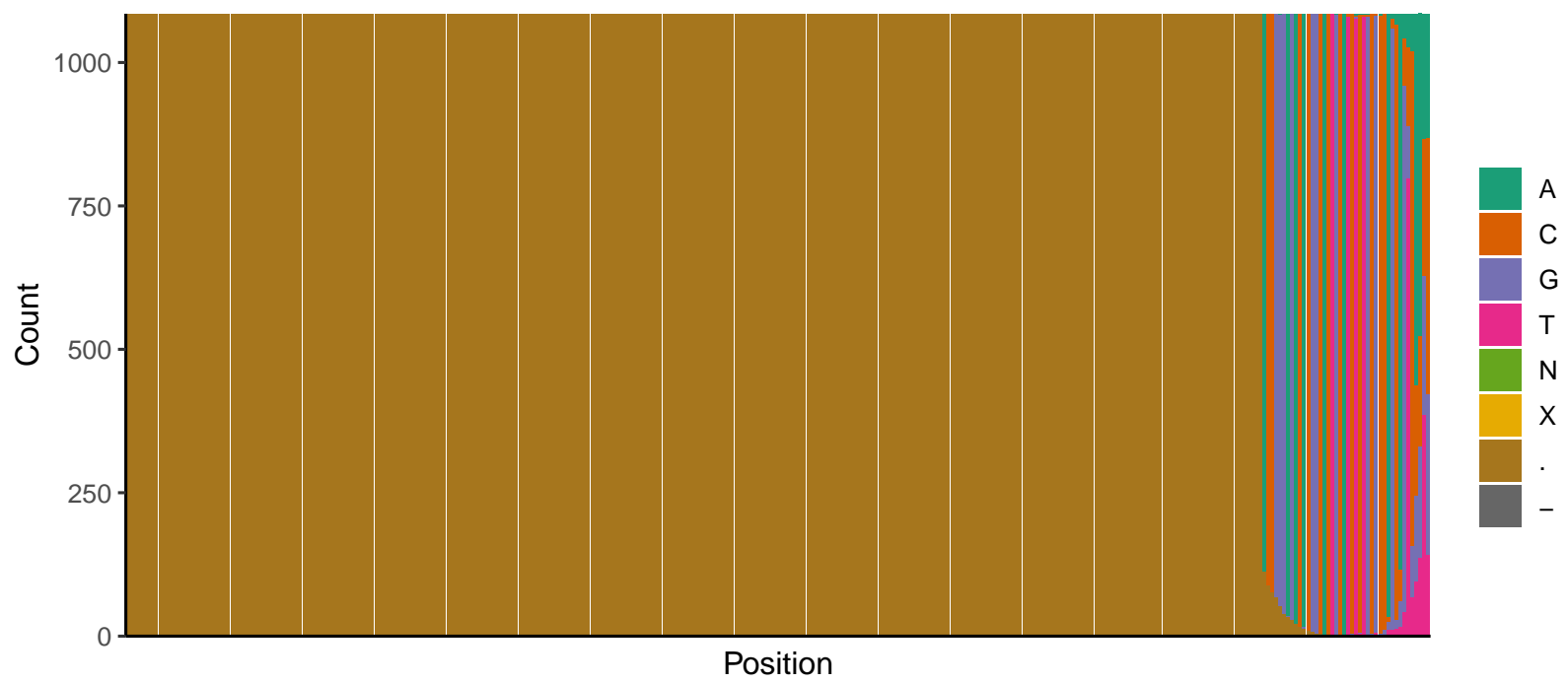
Gene TRBV7-1\*ap01\_G291C\_T296C



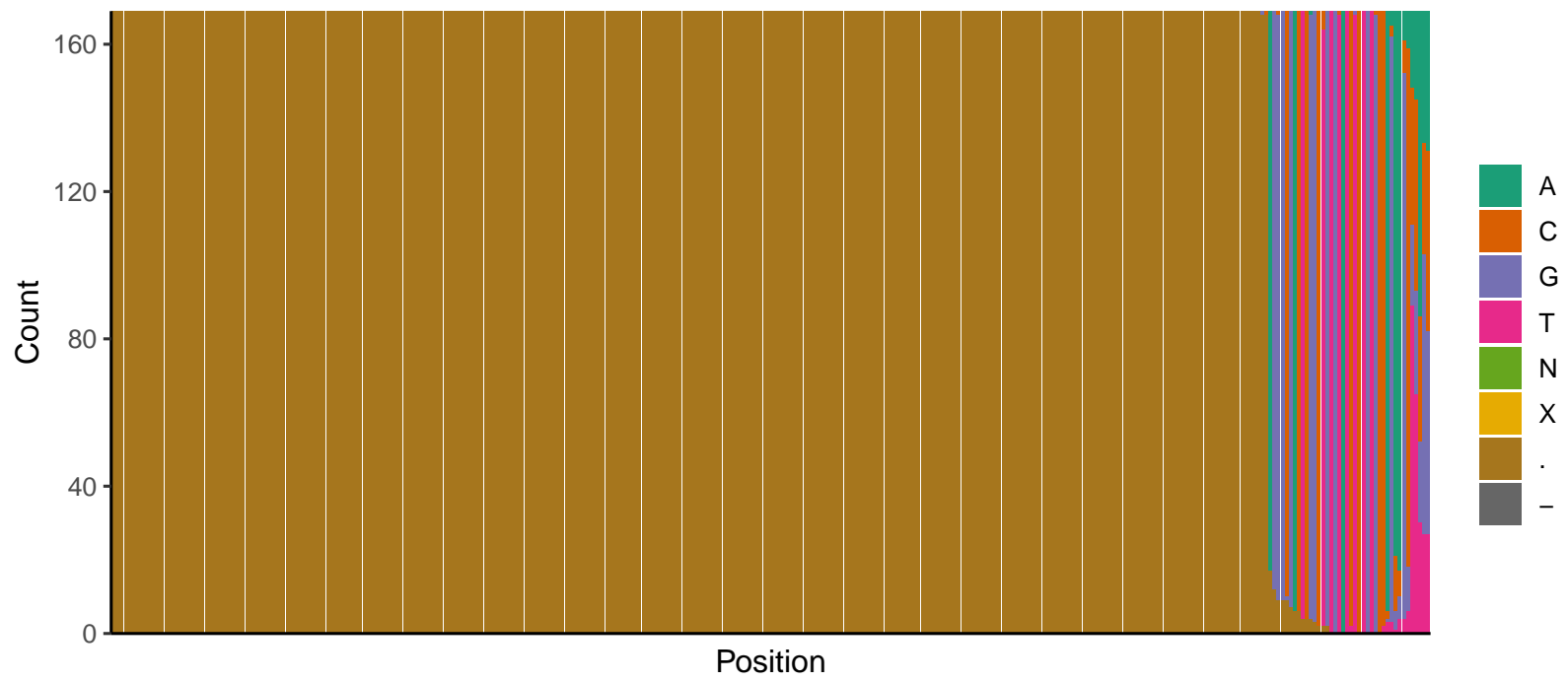
Gene TRBV7-7\*ap01\_C315T



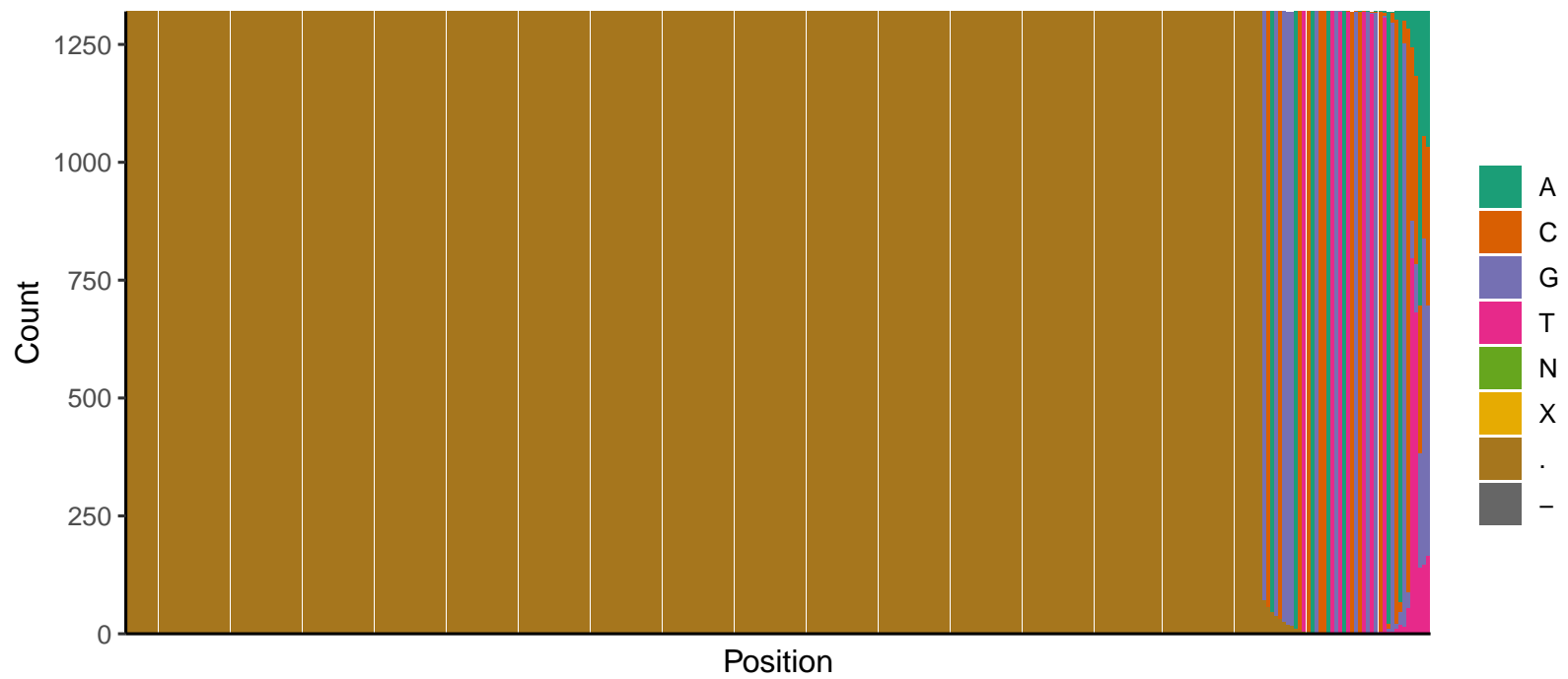
Gene TRBV23-1\*ap01\_T304C



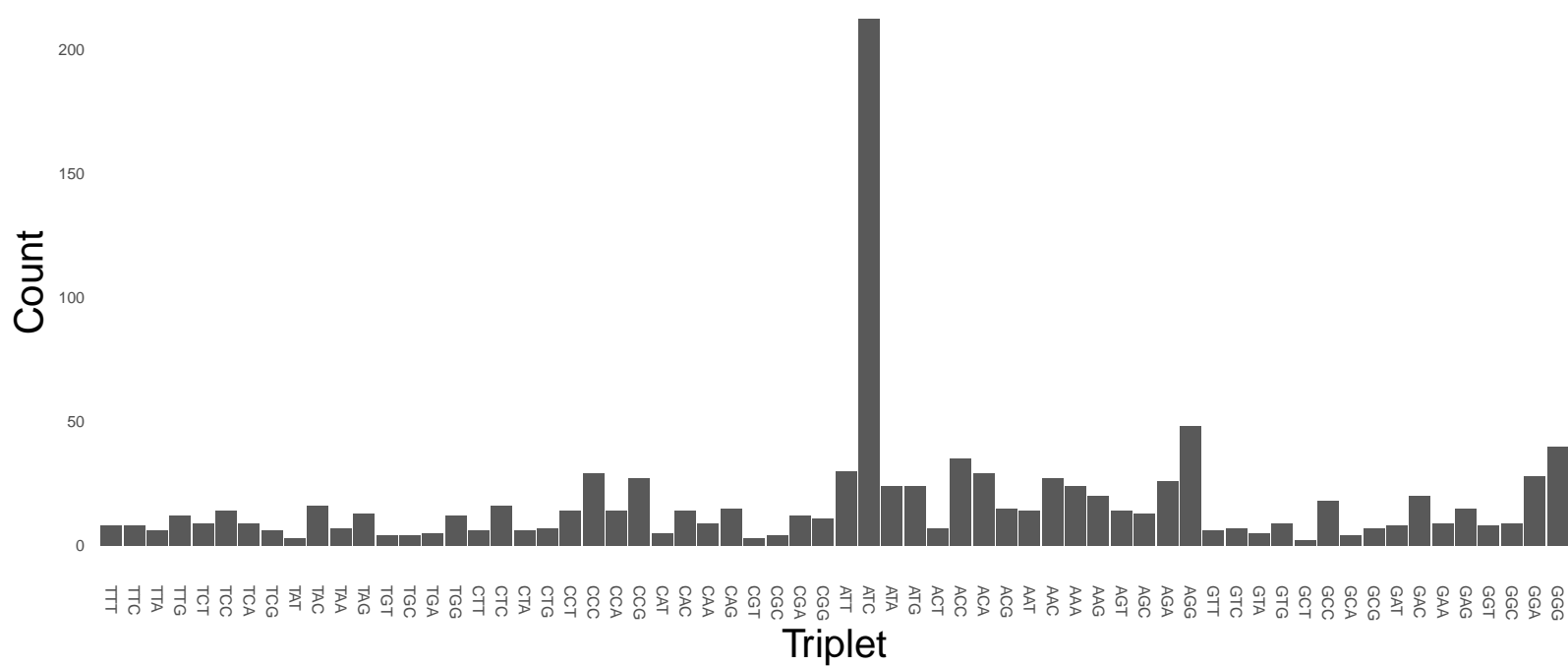
Gene TRBV7-1\*ap01\_G291C\_T296C



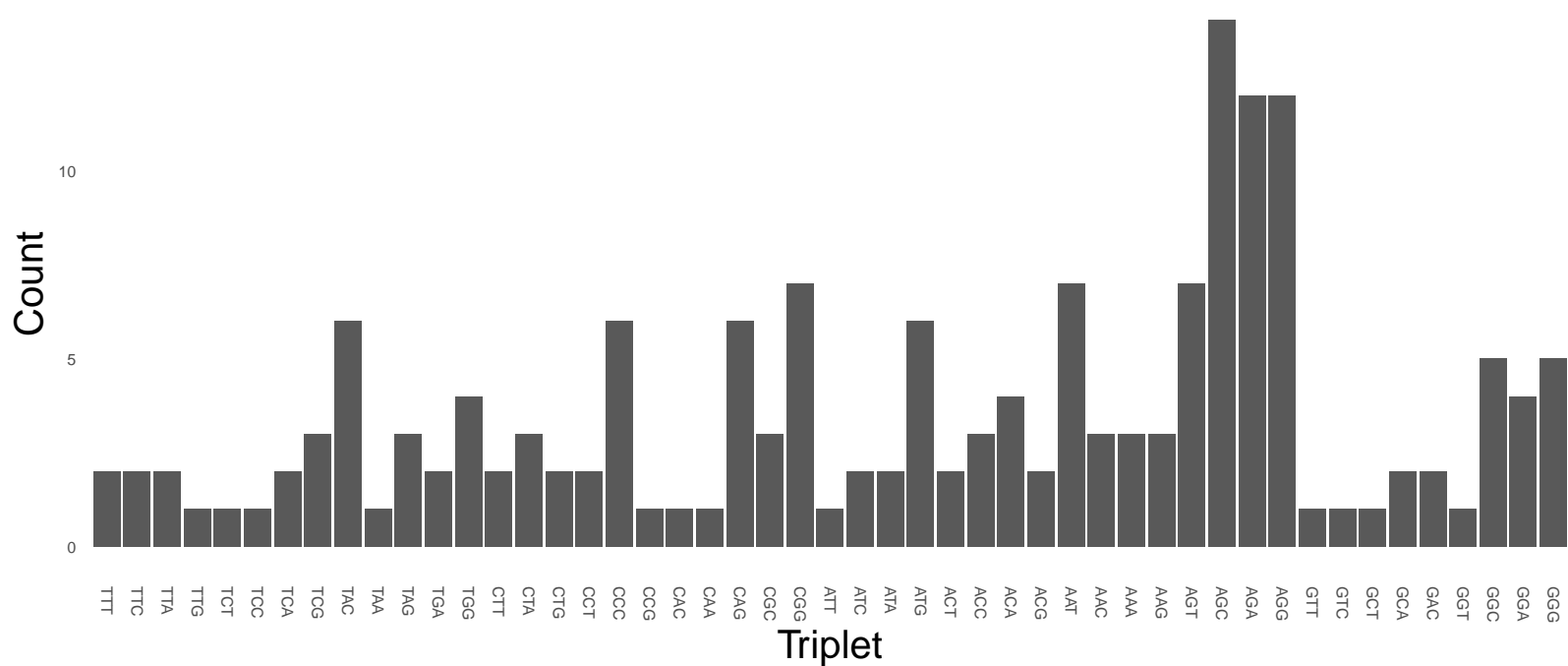
Gene TRBV7-7\*ap01\_C315T



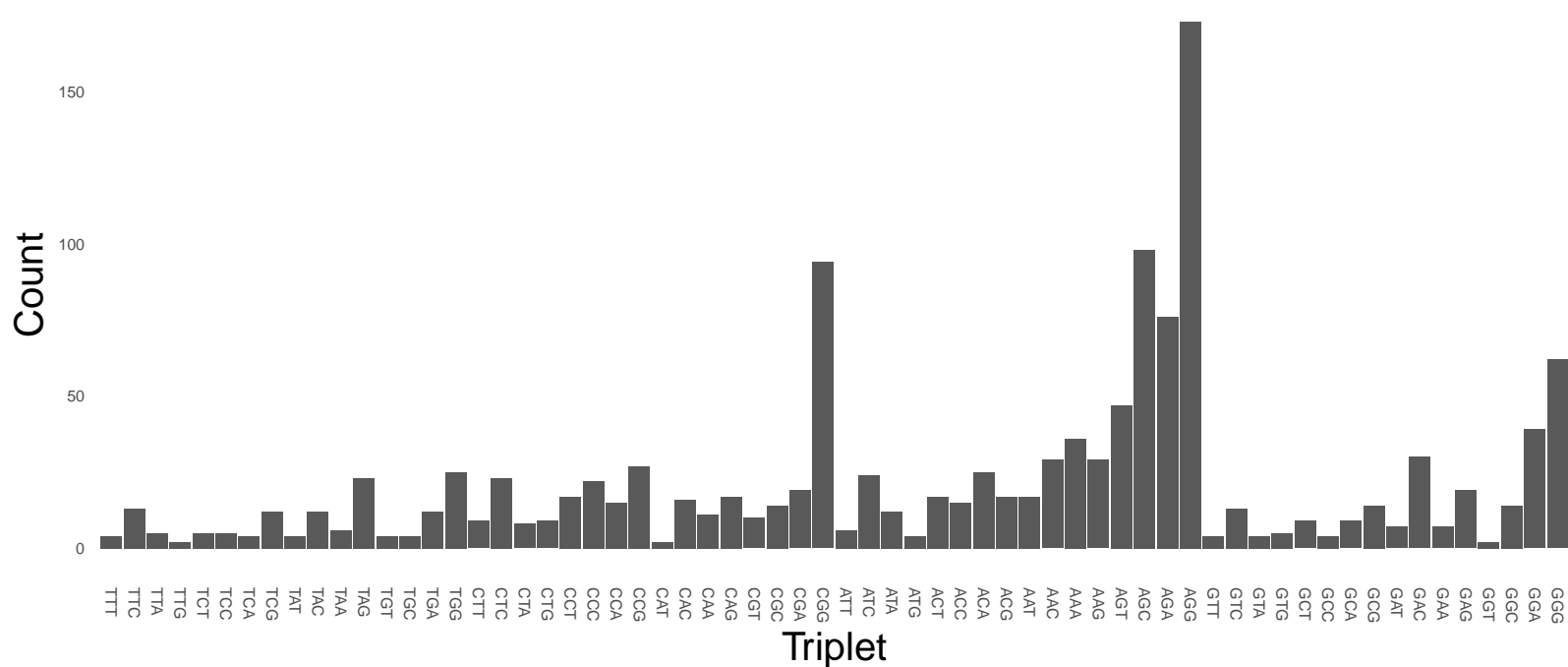
TRBV23-1\*ap01\_T304C- Final 3 nucleotides as a triplet



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

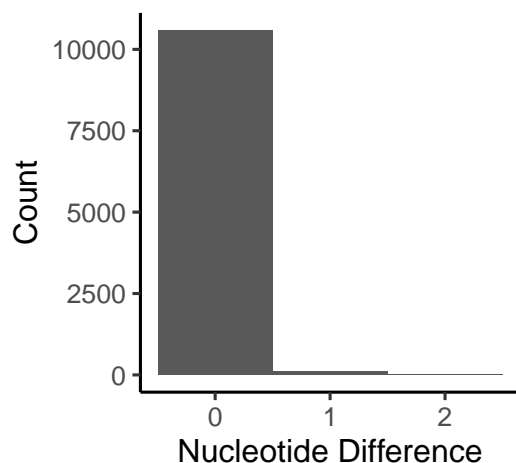


TRBV7-7\*ap01\_C315T- Final 3 nucleotides as a triplet



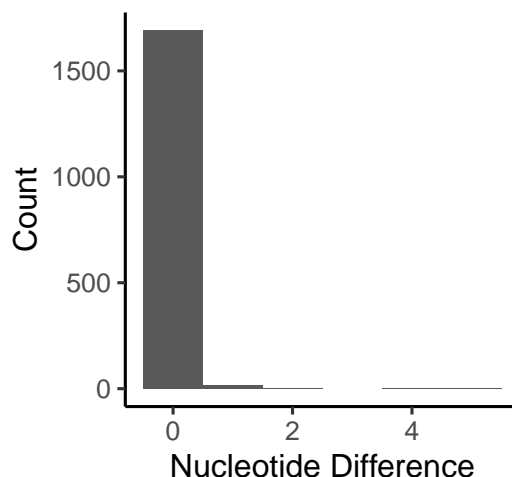
### TRBV20-1\*ap01

10710 sequences assigned  
10590 (98.9%) exact matches, in which:  
10375 unique CDR3  
13 unique J



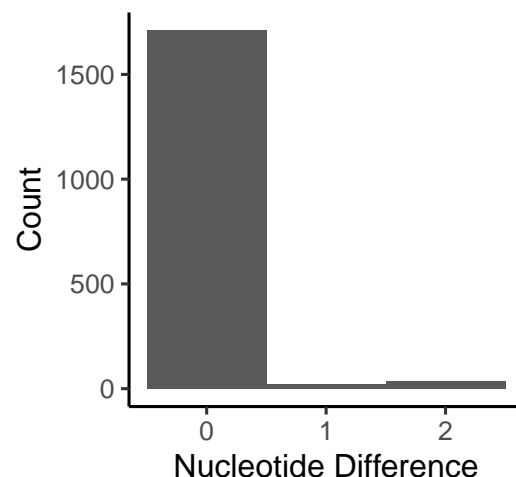
### TRBV10-2\*ap01

1709 sequences assigned  
1691 (98.9%) exact matches, in which:  
1652 unique CDR3  
13 unique J



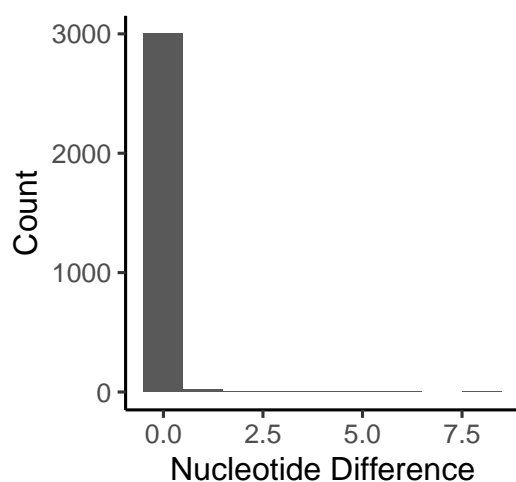
### TRBV13\*ap01

1766 sequences assigned  
1710 (96.8%) exact matches, in which:  
1658 unique CDR3  
13 unique J



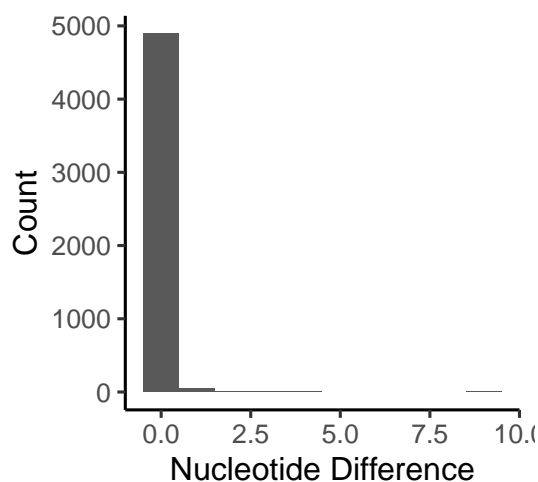
### TRBV10-1\*ap01

3034 sequences assigned  
3001 (98.9%) exact matches, in which:  
2907 unique CDR3  
13 unique J



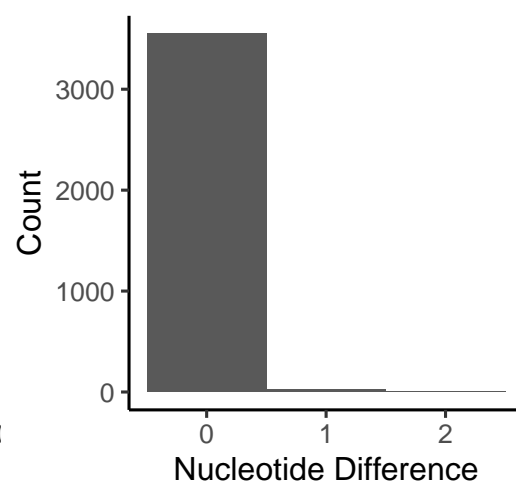
### TRBV10-3\*ap01

4950 sequences assigned  
4893 (98.8%) exact matches, in which:  
4755 unique CDR3  
13 unique J



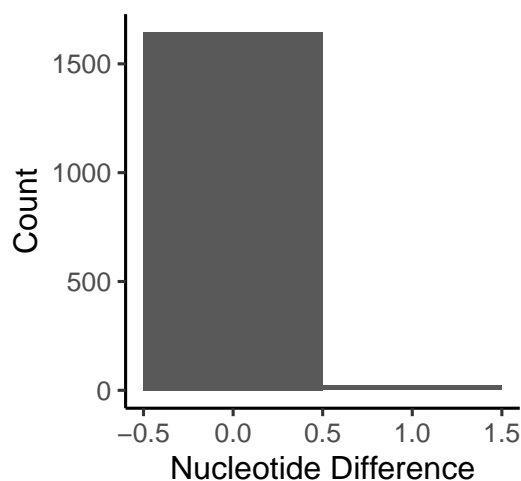
### TRBV14\*ap01

3574 sequences assigned  
3550 (99.3%) exact matches, in which:  
3479 unique CDR3  
13 unique J



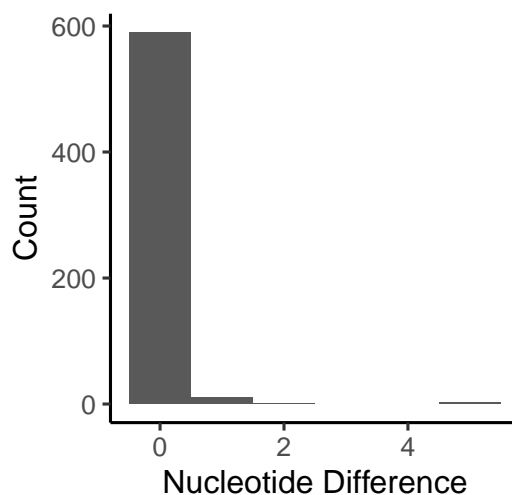
### TRBV20-1\*ap02

1668 sequences assigned  
1646 (98.7%) exact matches, in which:  
1614 unique CDR3  
13 unique J



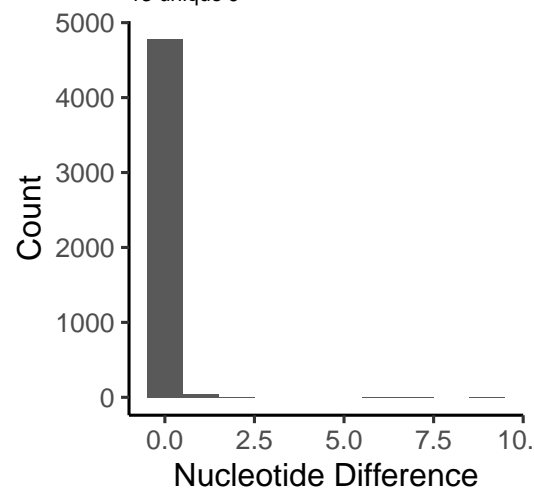
### TRBV1\*ap01

603 sequences assigned  
590 (97.8%) exact matches, in which:  
578 unique CDR3  
13 unique J



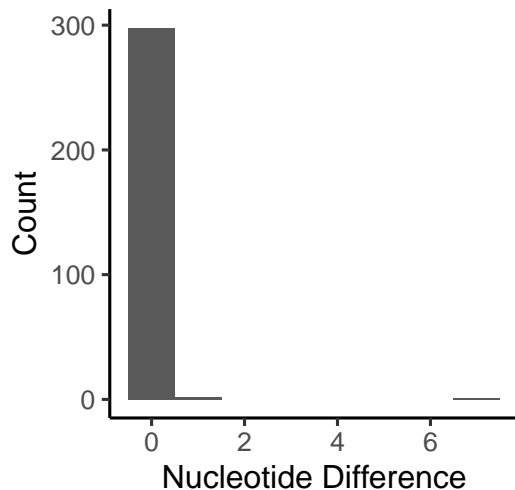
### TRBV15\*ap02

4831 sequences assigned  
4781 (99%) exact matches, in which:  
4662 unique CDR3  
13 unique J



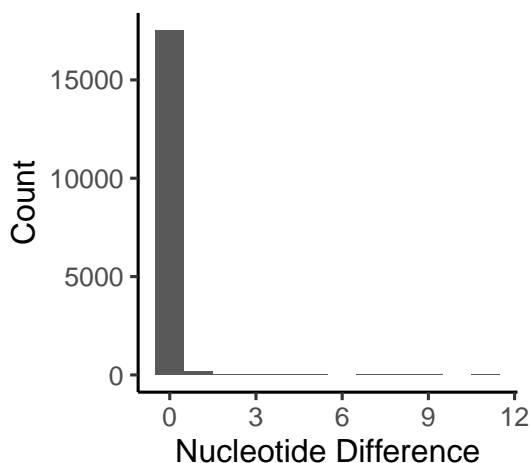
### TRBV16\*ap01

301 sequences assigned  
298 (99%) exact matches, in which:  
296 unique CDR3  
13 unique J



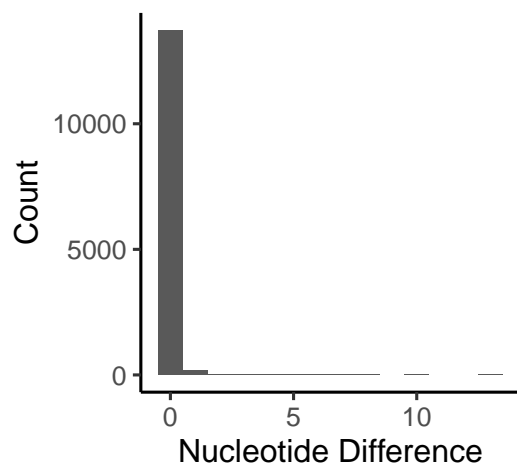
### TRBV19\*ap01

17705 sequences assigned  
17530 (99%) exact matches, in which:  
17332 unique CDR3  
13 unique J



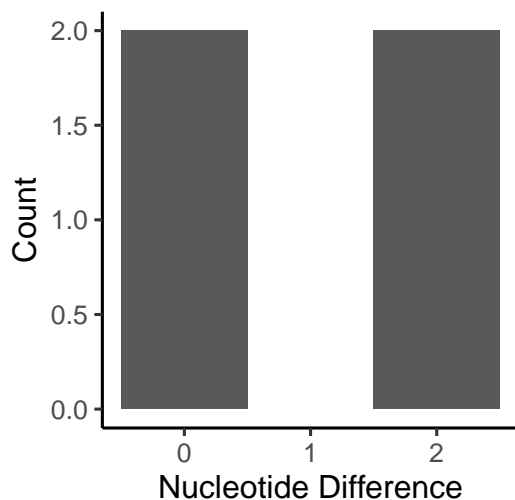
### TRBV27\*ap01

13926 sequences assigned  
13727 (98.6%) exact matches, in which:  
13359 unique CDR3  
13 unique J



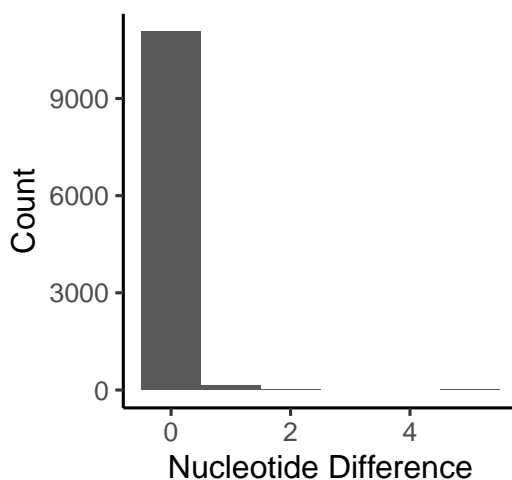
### TRBV17\*ap01

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



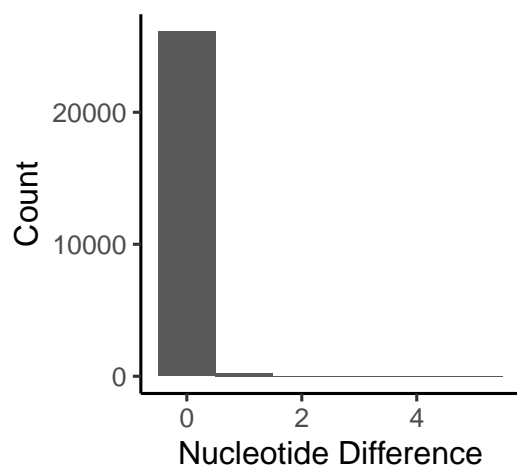
### TRBV2\*ap01

11211 sequences assigned  
11061 (98.7%) exact matches, in which:  
10821 unique CDR3  
13 unique J



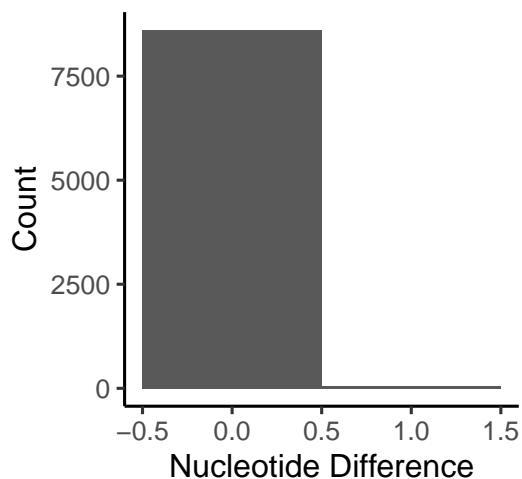
### TRBV28\*ap01

26381 sequences assigned  
26125 (99%) exact matches, in which:  
25676 unique CDR3  
13 unique J



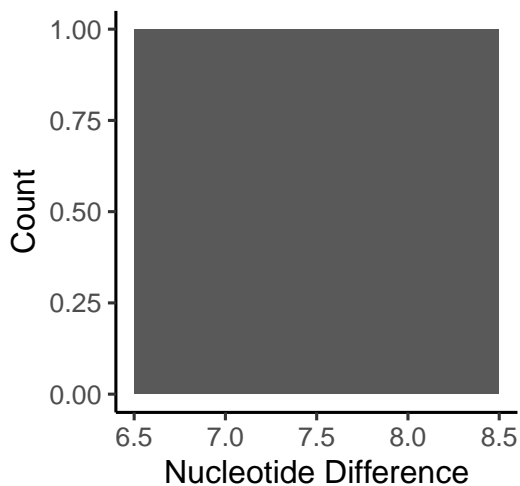
### TRBV18\*ap01

8666 sequences assigned  
8607 (99.3%) exact matches, in which:  
8510 unique CDR3  
13 unique J



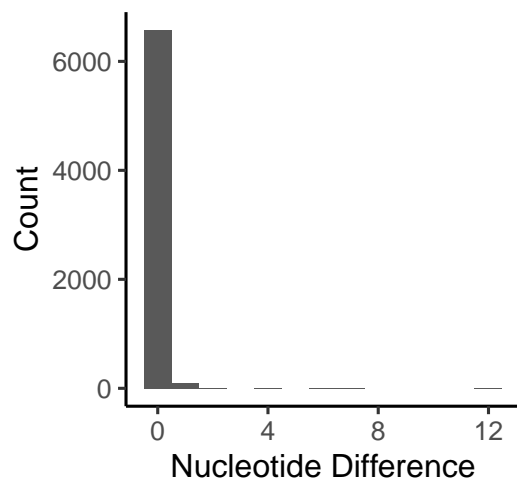
### TRBV26\*ap01

2 sequences assigned  
No exact matches.



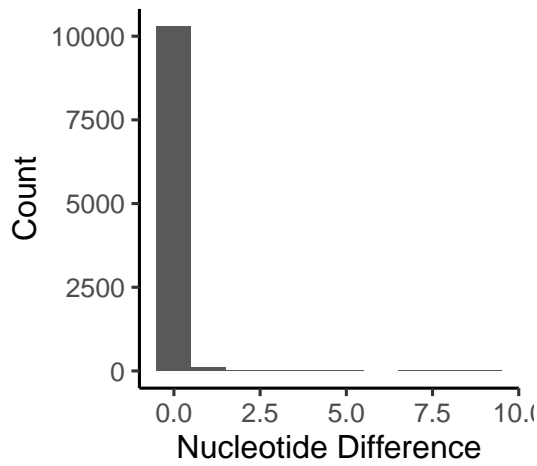
### TRBV30\*ap01

6687 sequences assigned  
6575 (98.3%) exact matches, in which:  
6459 unique CDR3  
13 unique J



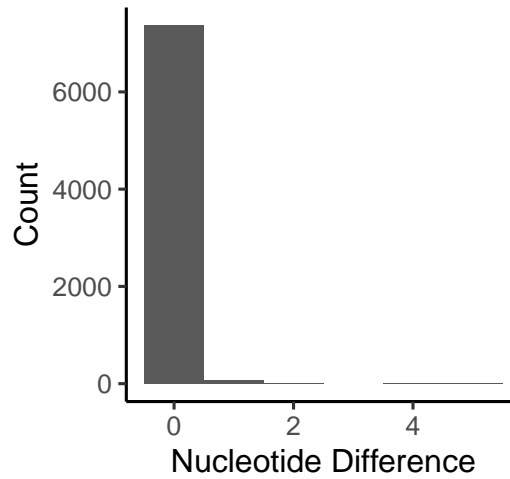
### TRBV9\*ap01

10406 sequences assigned  
10300 (99%) exact matches, in which:  
10112 unique CDR3  
13 unique J



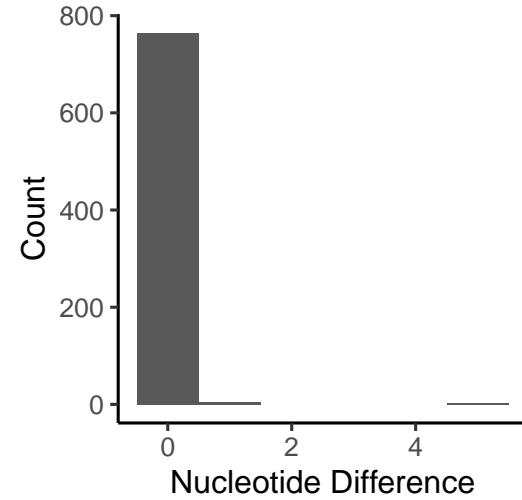
### TRBV11-2\*ap01

7437 sequences assigned  
7367 (99.1%) exact matches, in which:  
7221 unique CDR3  
13 unique J



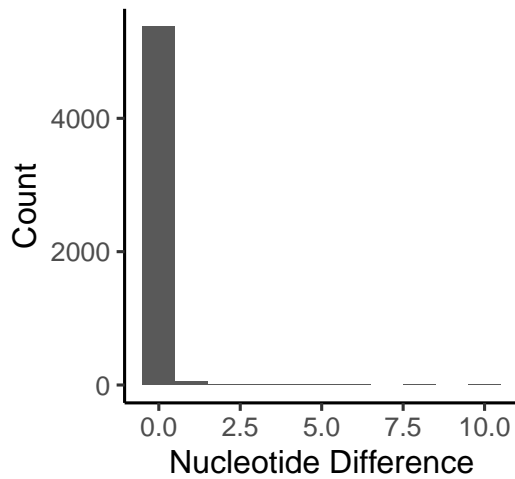
### TRBV12-2\*ap01

773 sequences assigned  
765 (99%) exact matches, in which:  
745 unique CDR3  
13 unique J



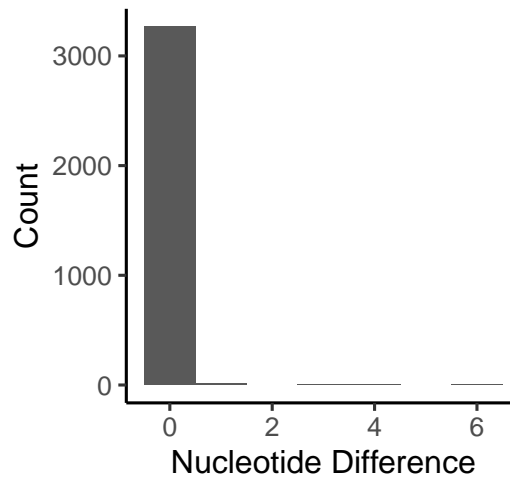
### TRBV21-1\*ap01

5447 sequences assigned  
5374 (98.7%) exact matches, in which:  
5296 unique CDR3  
13 unique J



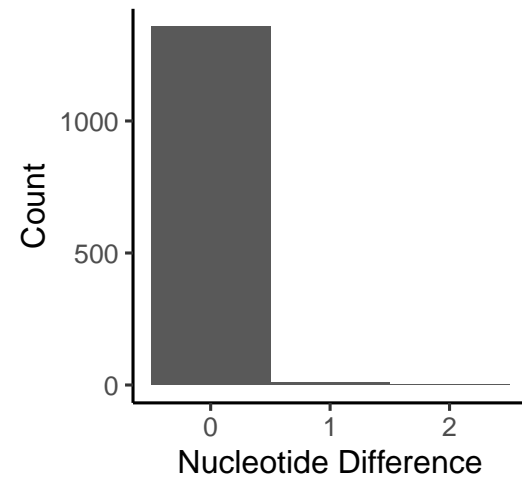
### TRBV11-3\*ap01

3285 sequences assigned  
3266 (99.4%) exact matches, in which:  
3220 unique CDR3  
13 unique J



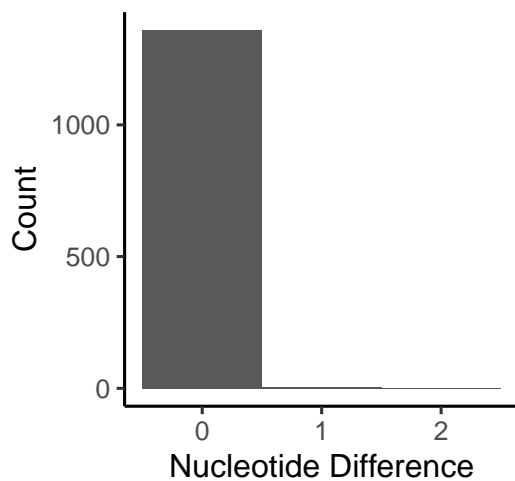
### TRBV12-5\*ap01

1367 sequences assigned  
1357 (99.3%) exact matches, in which:  
1326 unique CDR3  
13 unique J



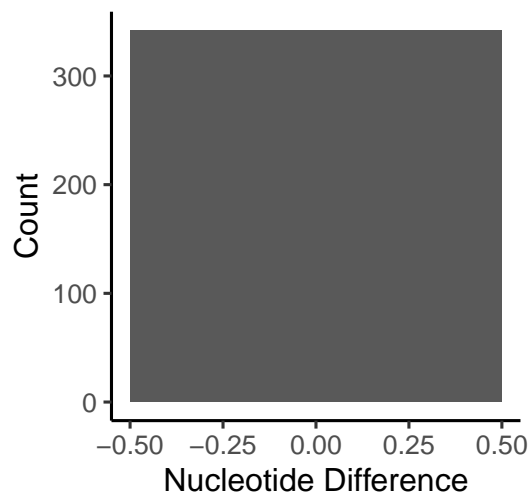
### TRBV11-1\*ap01

1367 sequences assigned  
1360 (99.5%) exact matches, in which:  
1337 unique CDR3  
13 unique J



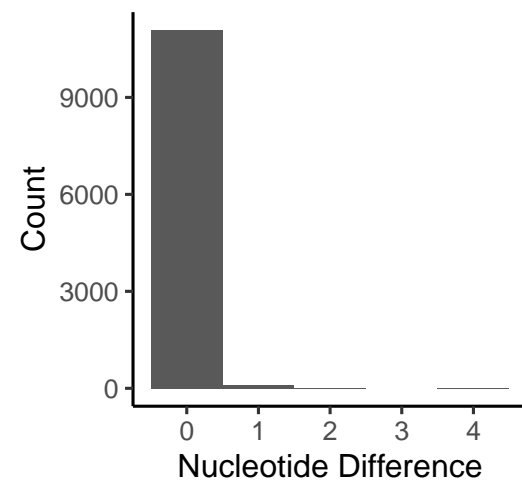
### TRBV12-1\*ap01

342 sequences assigned  
342 (100%) exact matches, in which:  
336 unique CDR3  
13 unique J



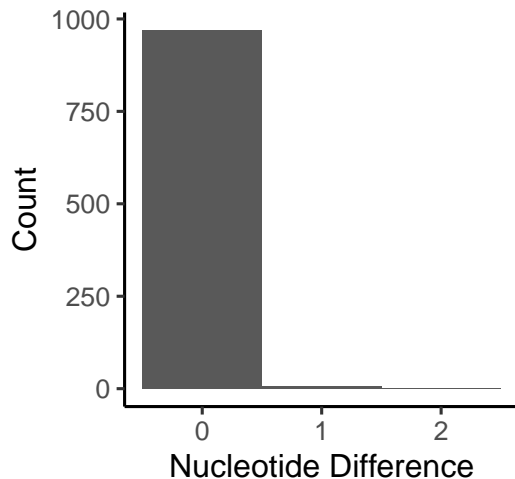
### TRBV12-34\*ap01

11195 sequences assigned  
11084 (99%) exact matches, in which:  
10840 unique CDR3  
13 unique J



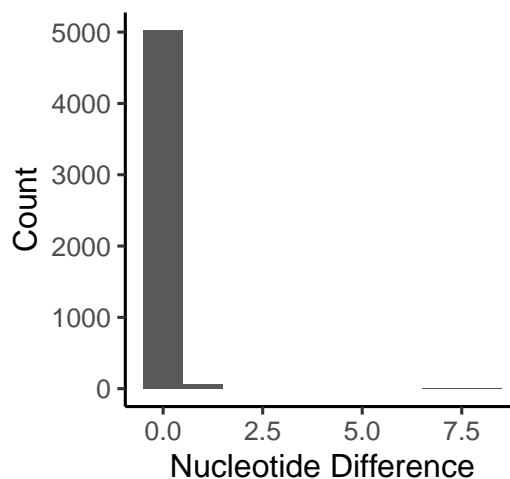
### TRBV23–1\*ap01

979 sequences assigned  
969 (99%) exact matches, in which:  
956 unique CDR3  
13 unique J



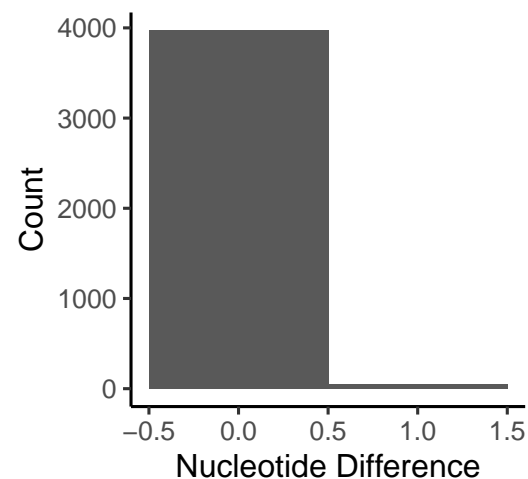
### TRBV4–1\*ap01

5083 sequences assigned  
5024 (98.8%) exact matches, in which:  
4908 unique CDR3  
13 unique J



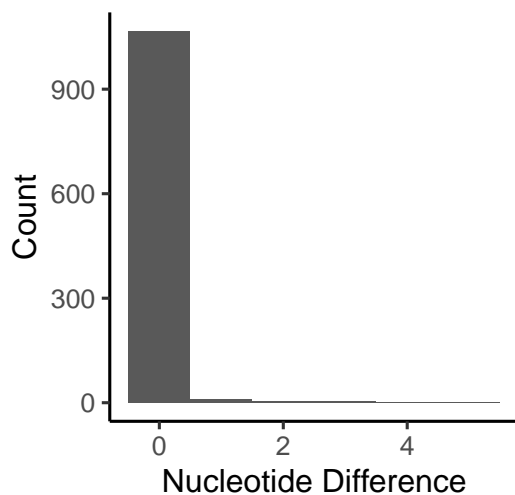
### TRBV4–3\*ap01

4027 sequences assigned  
3972 (98.6%) exact matches, in which:  
3891 unique CDR3  
13 unique J



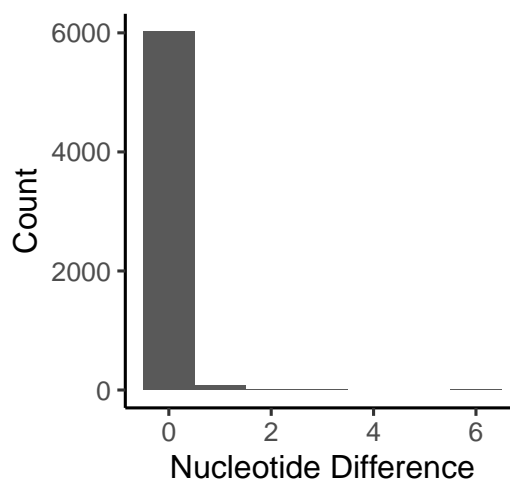
### TRBV23–1\*ap01\_T304C

1085 sequences assigned  
1067 (98.3%) exact matches, in which:  
1044 unique CDR3  
13 unique J



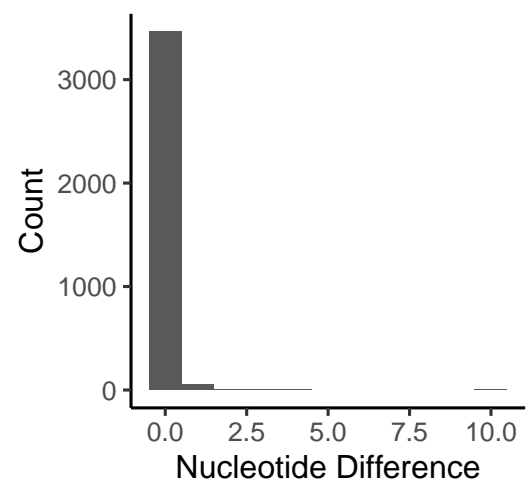
### TRBV24–1\*ap01

6111 sequences assigned  
6019 (98.5%) exact matches, in which:  
5914 unique CDR3  
13 unique J



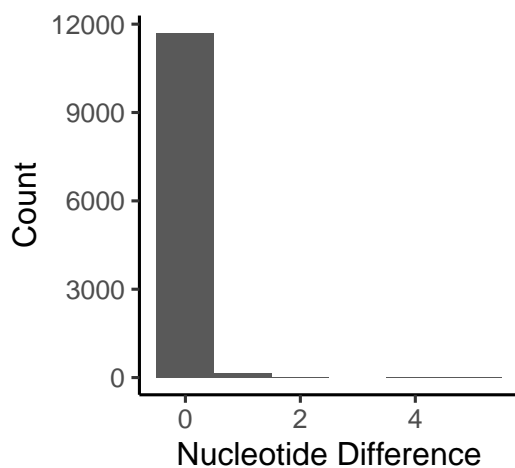
### TRBV25–1\*ap01

3527 sequences assigned  
3463 (98.2%) exact matches, in which:  
3383 unique CDR3  
13 unique J



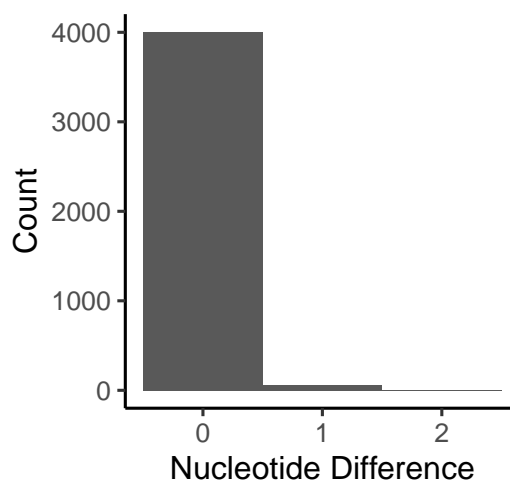
### TRBV3–12\*ap01

11867 sequences assigned  
11707 (98.7%) exact matches, in which:  
11437 unique CDR3  
13 unique J



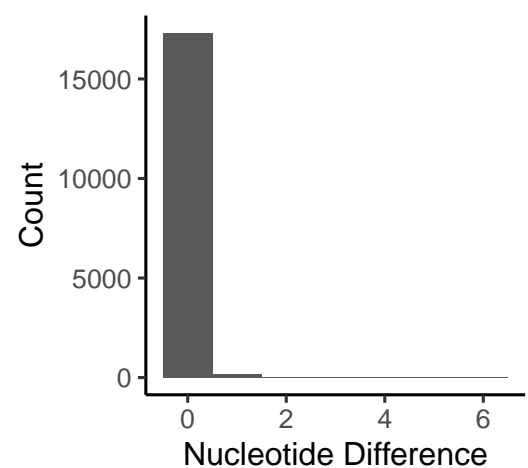
### TRBV4–2\*ap01

4067 sequences assigned  
4003 (98.4%) exact matches, in which:  
3896 unique CDR3  
13 unique J



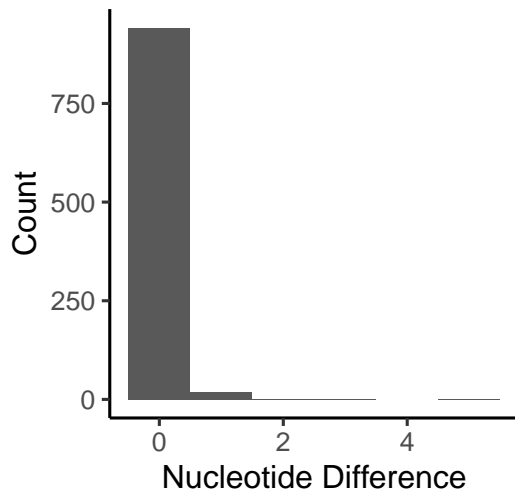
### TRBV5–1\*ap01

17485 sequences assigned  
17317 (99%) exact matches, in which:  
16915 unique CDR3  
13 unique J



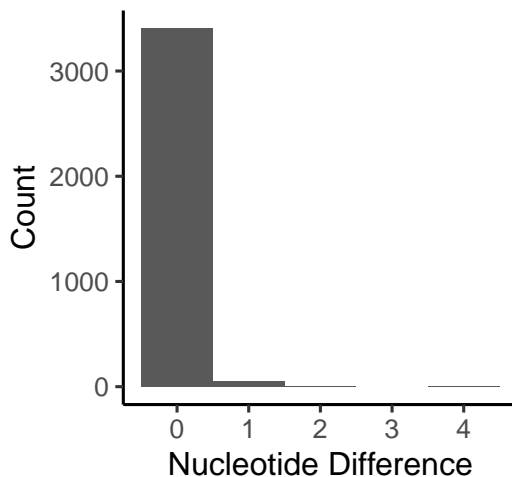
### TRBV5-3\*ap01

965 sequences assigned  
942 (97.6%) exact matches, in which:  
927 unique CDR3  
13 unique J



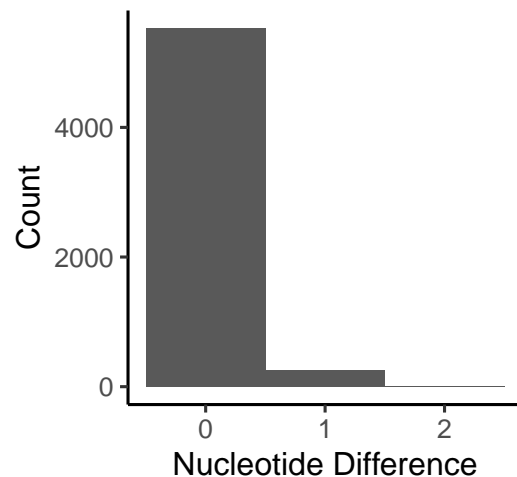
### TRBV5-6\*ap01

3456 sequences assigned  
3405 (98.5%) exact matches, in which:  
3302 unique CDR3  
13 unique J



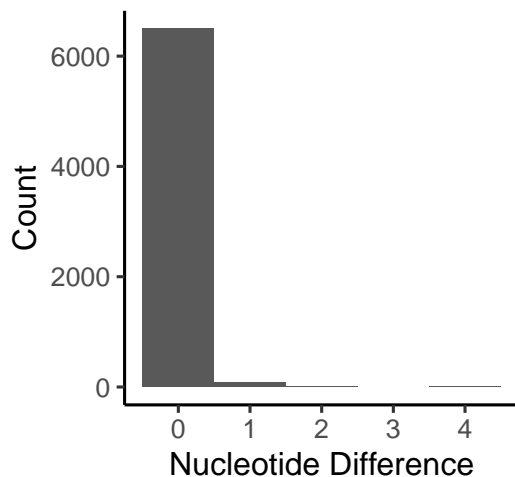
### TRBV6-1\*ap01

5792 sequences assigned  
5527 (95.4%) exact matches, in which:  
5388 unique CDR3  
13 unique J



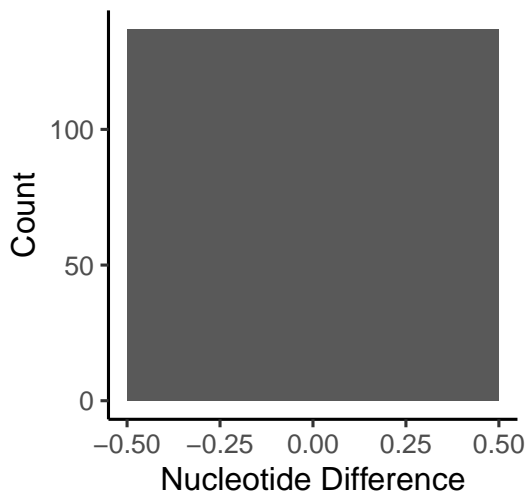
### TRBV5-4\*ap01

6576 sequences assigned  
6497 (98.8%) exact matches, in which:  
6359 unique CDR3  
13 unique J



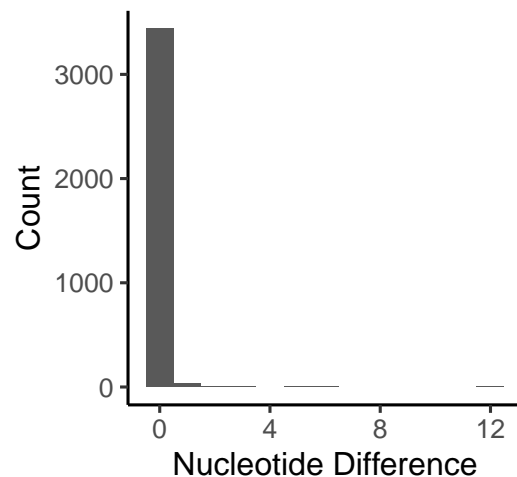
### TRBV5-7\*ap01

137 sequences assigned  
137 (100%) exact matches, in which:  
132 unique CDR3  
13 unique J



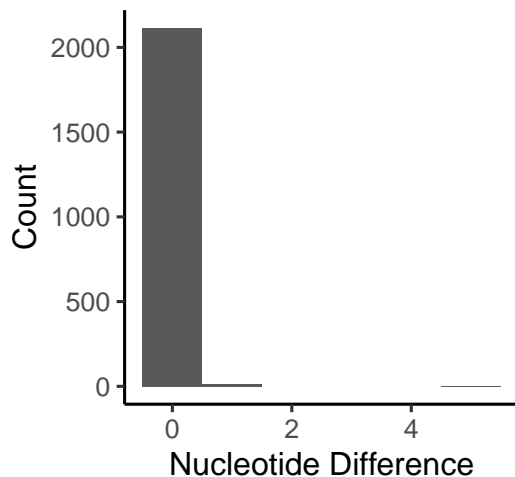
### TRBV6-4\*ap01

3479 sequences assigned  
3438 (98.8%) exact matches, in which:  
3374 unique CDR3  
13 unique J



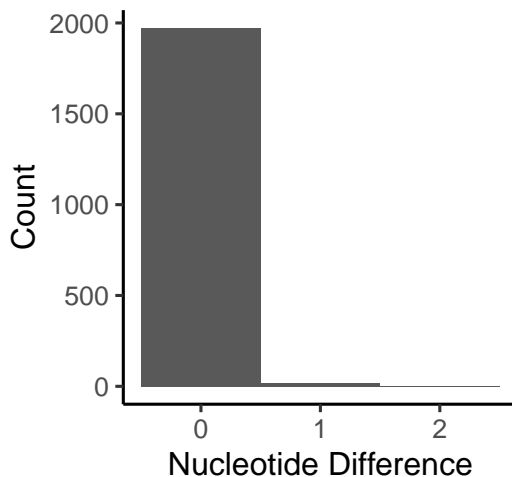
### TRBV5-5\*ap01

2129 sequences assigned  
2114 (99.3%) exact matches, in which:  
2101 unique CDR3  
13 unique J



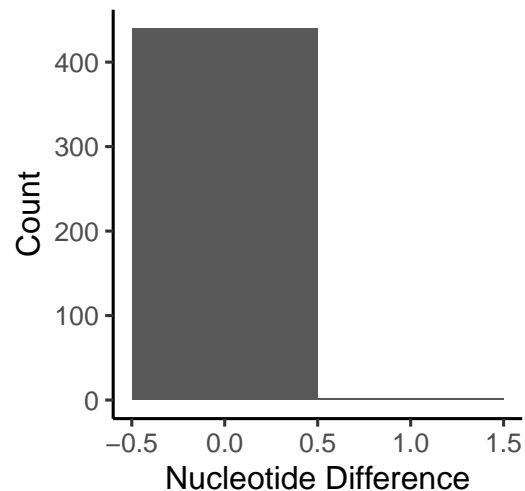
### TRBV5-8\*ap01

1993 sequences assigned  
1972 (98.9%) exact matches, in which:  
1928 unique CDR3  
13 unique J



### TRBV6-7\*ap01

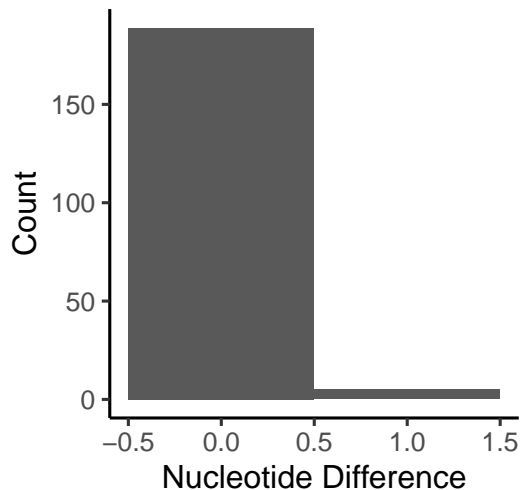
442 sequences assigned  
440 (99.5%) exact matches, in which:  
423 unique CDR3  
13 unique J





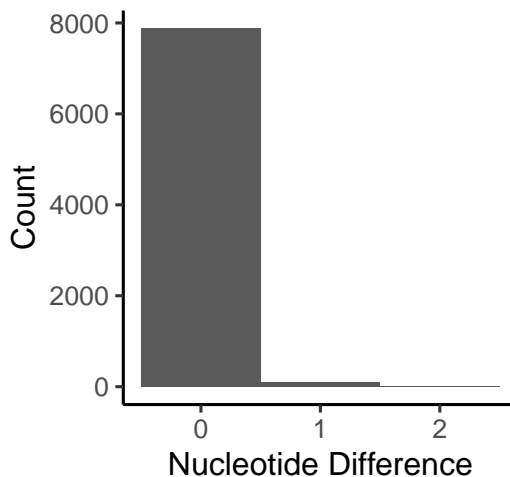
### TRBV6-8\*ap01

194 sequences assigned  
189 (97.4%) exact matches, in which:  
186 unique CDR3  
13 unique J



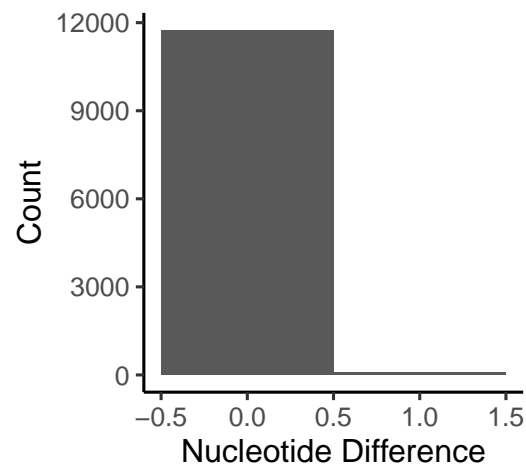
### TRBV6-56\*ap01

7974 sequences assigned  
7880 (98.8%) exact matches, in which:  
7671 unique CDR3  
13 unique J



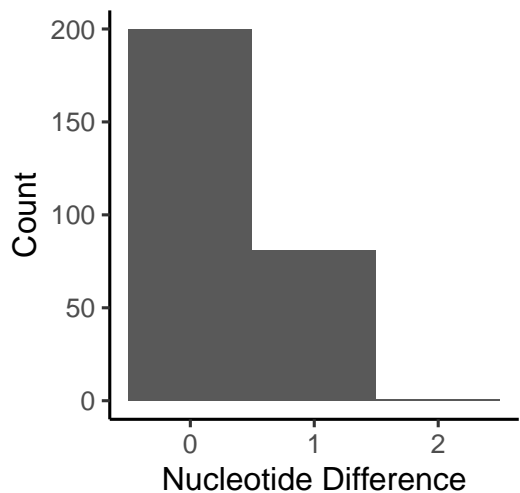
### TRBV7-2\*ap01

11846 sequences assigned  
11745 (99.1%) exact matches, in which:  
11515 unique CDR3  
13 unique J



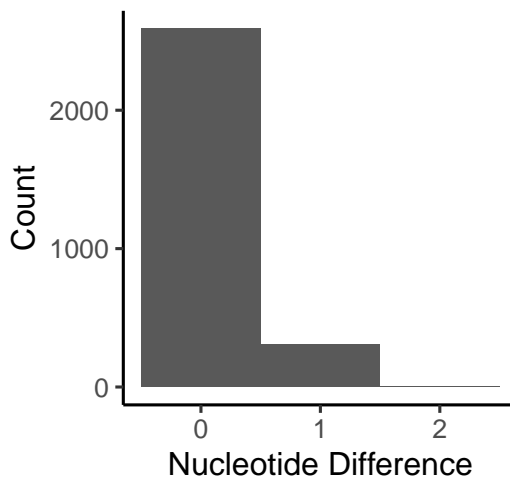
### TRBV6-9\*ap01

282 sequences assigned  
200 (70.9%) exact matches, in which:  
200 unique CDR3  
13 unique J



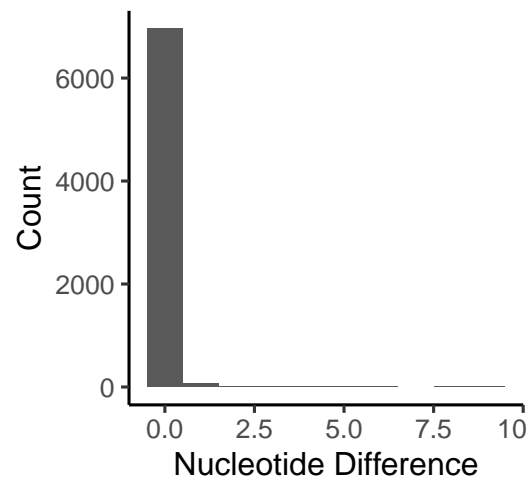
### TRBV6-56\*ap02

2904 sequences assigned  
2589 (89.2%) exact matches, in which:  
2526 unique CDR3  
13 unique J



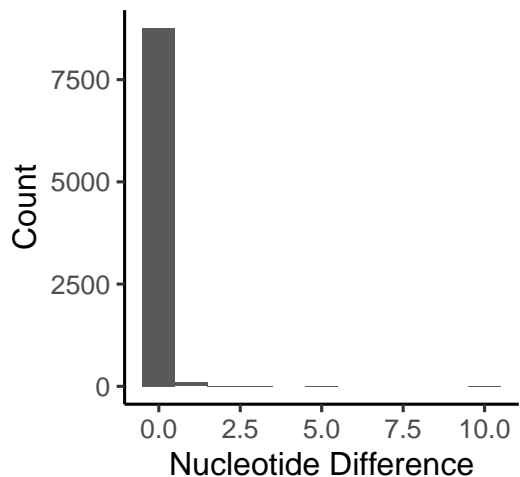
### TRBV7-3\*ap01

7027 sequences assigned  
6958 (99%) exact matches, in which:  
6879 unique CDR3  
13 unique J



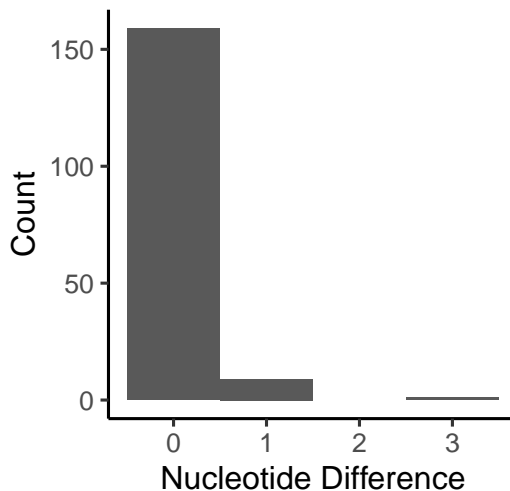
### TRBV6-23\*ap01

8869 sequences assigned  
8761 (98.8%) exact matches, in which:  
8498 unique CDR3  
13 unique J



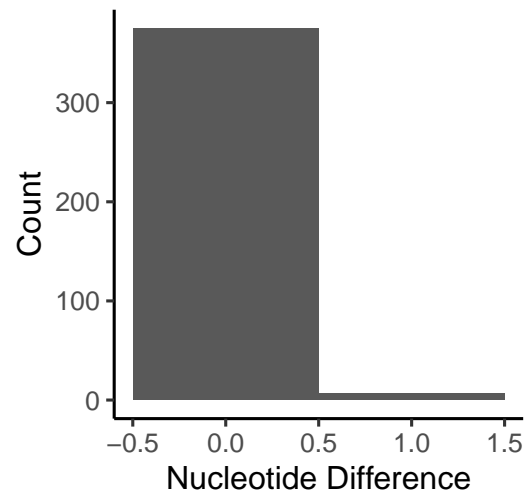
### TRBV7-1\*ap01\_G291C\_

169 sequences assigned  
159 (94.1%) exact matches, in which:  
155 unique CDR3  
13 unique J



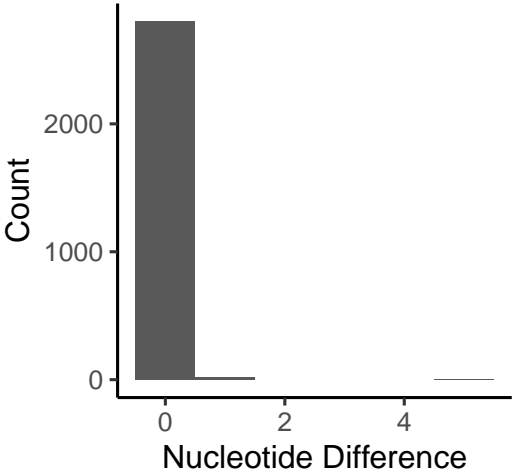
### TRBV7-4\*ap01

382 sequences assigned  
375 (98.2%) exact matches, in which:  
364 unique CDR3  
13 unique J



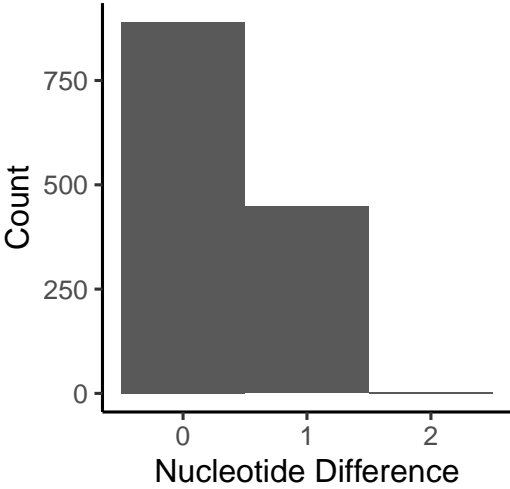
TRBV7-6\*ap01

2824 sequences assigned  
2801 (99.2%) exact matches, in which:  
2735 unique CDR3  
13 unique J



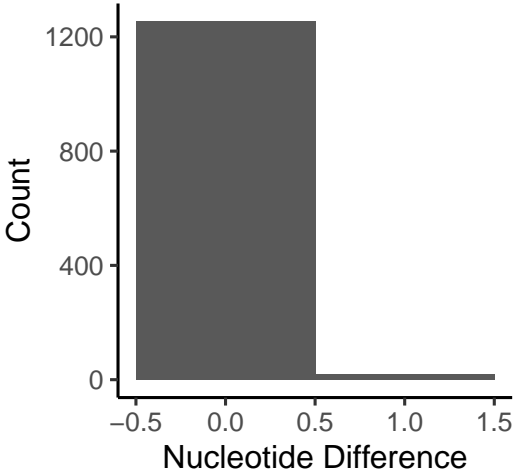
TRBV7-8\*ap03

1343 sequences assigned  
891 (66.3%) exact matches, in which:  
873 unique CDR3  
13 unique J



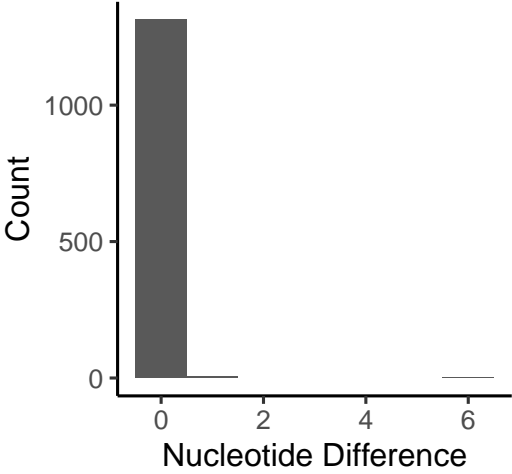
TRBV29-1\*ap02

1273 sequences assigned  
1254 (98.5%) exact matches, in which:  
1233 unique CDR3  
13 unique J



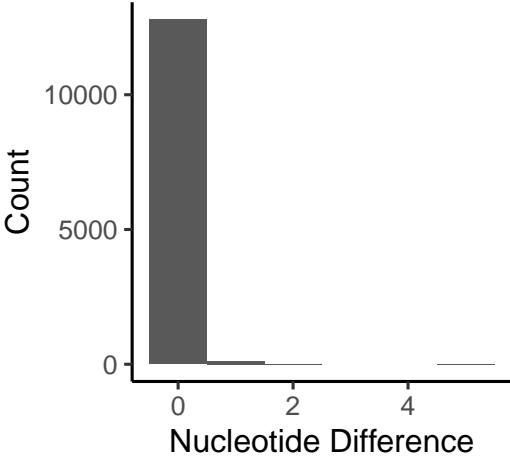
TRBV7-7\*ap01\_C315T

1320 sequences assigned  
1313 (99.5%) exact matches, in which:  
1292 unique CDR3  
13 unique J



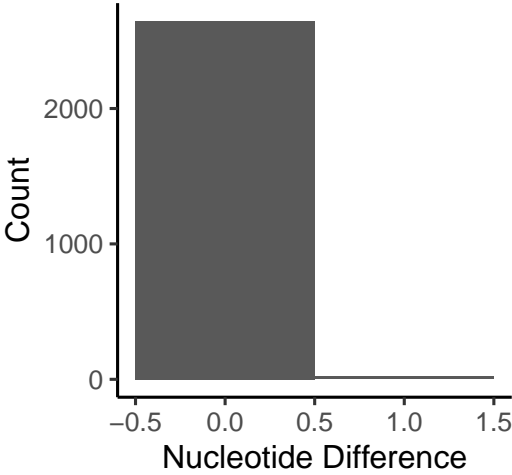
TRBV7-9\*ap01

12912 sequences assigned  
12793 (99.1%) exact matches, in which:  
12578 unique CDR3  
13 unique J



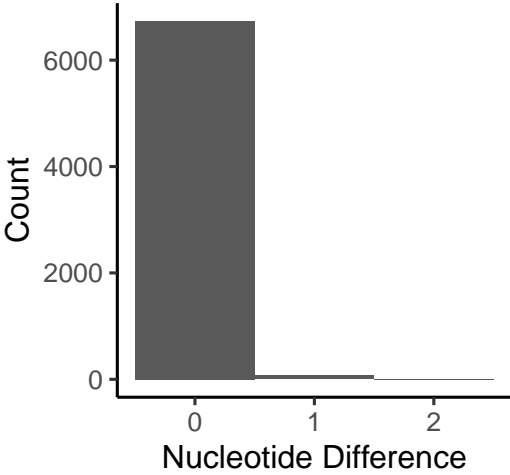
TRBV7-8\*ap01

2668 sequences assigned  
2646 (99.2%) exact matches, in which:  
2596 unique CDR3  
13 unique J

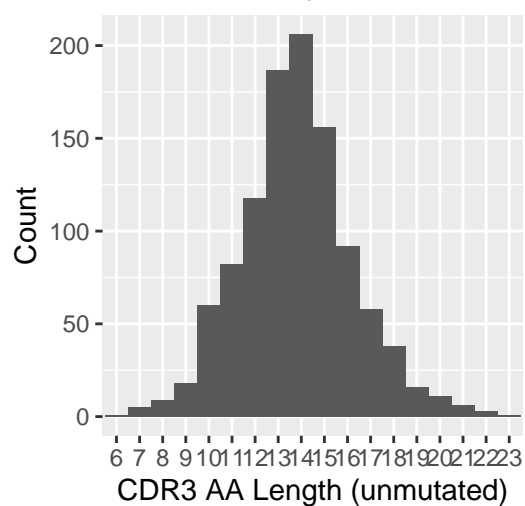


TRBV29-1\*ap01

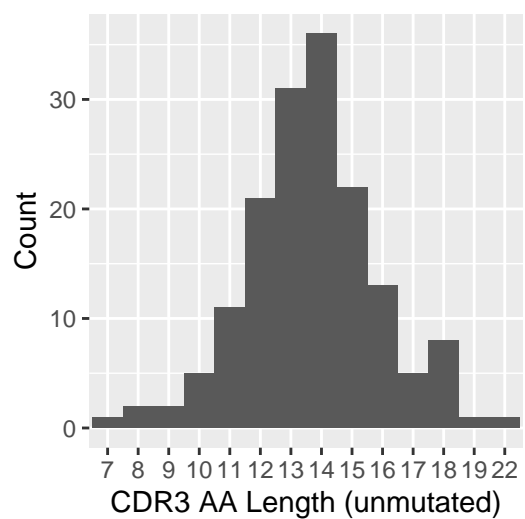
6807 sequences assigned  
6735 (98.9%) exact matches, in which:  
6610 unique CDR3  
13 unique J



TRBV23-1\*ap01\_T304C



TRBV7-1\*ap01\_G291C\_T296C



TRBV7-7\*ap01\_C315T

