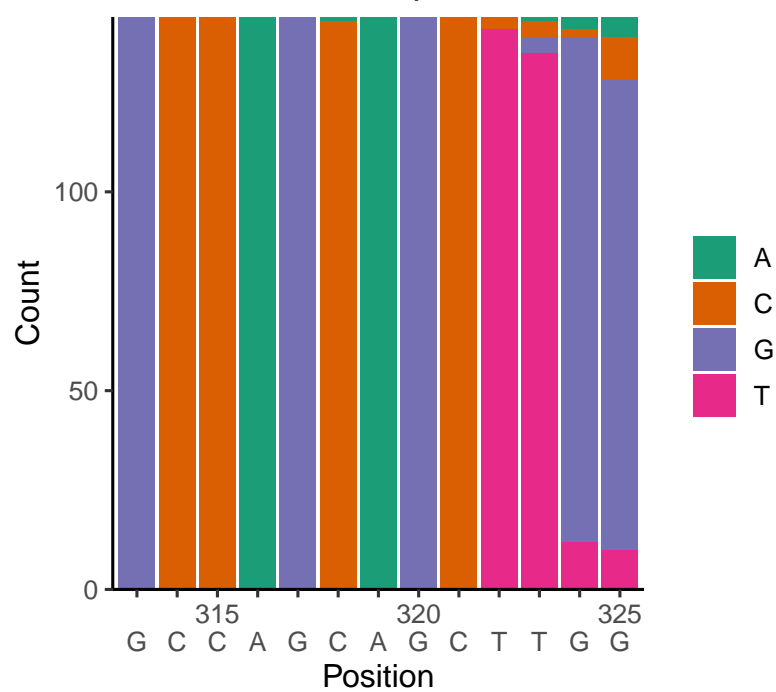
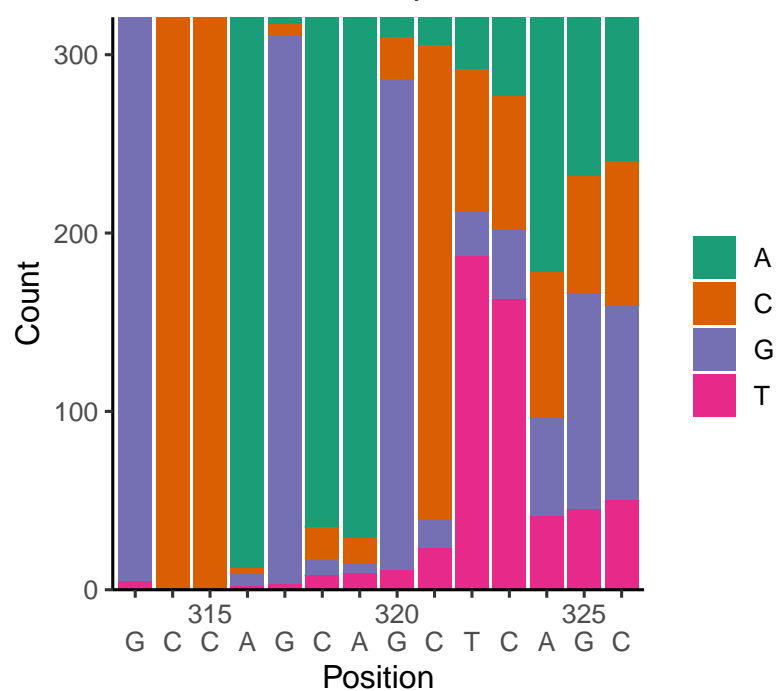


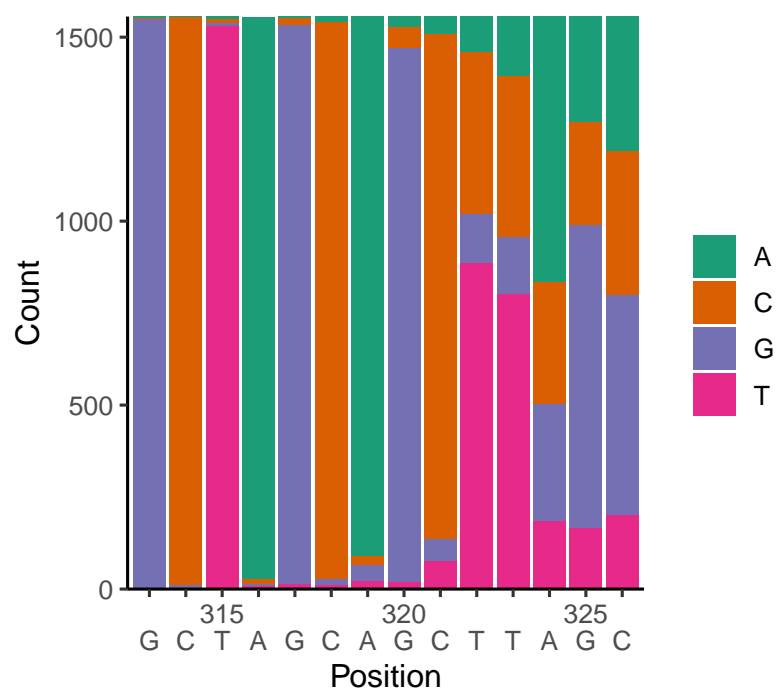
Gene TRBV5-7\*ap01\_G290A\_G291A



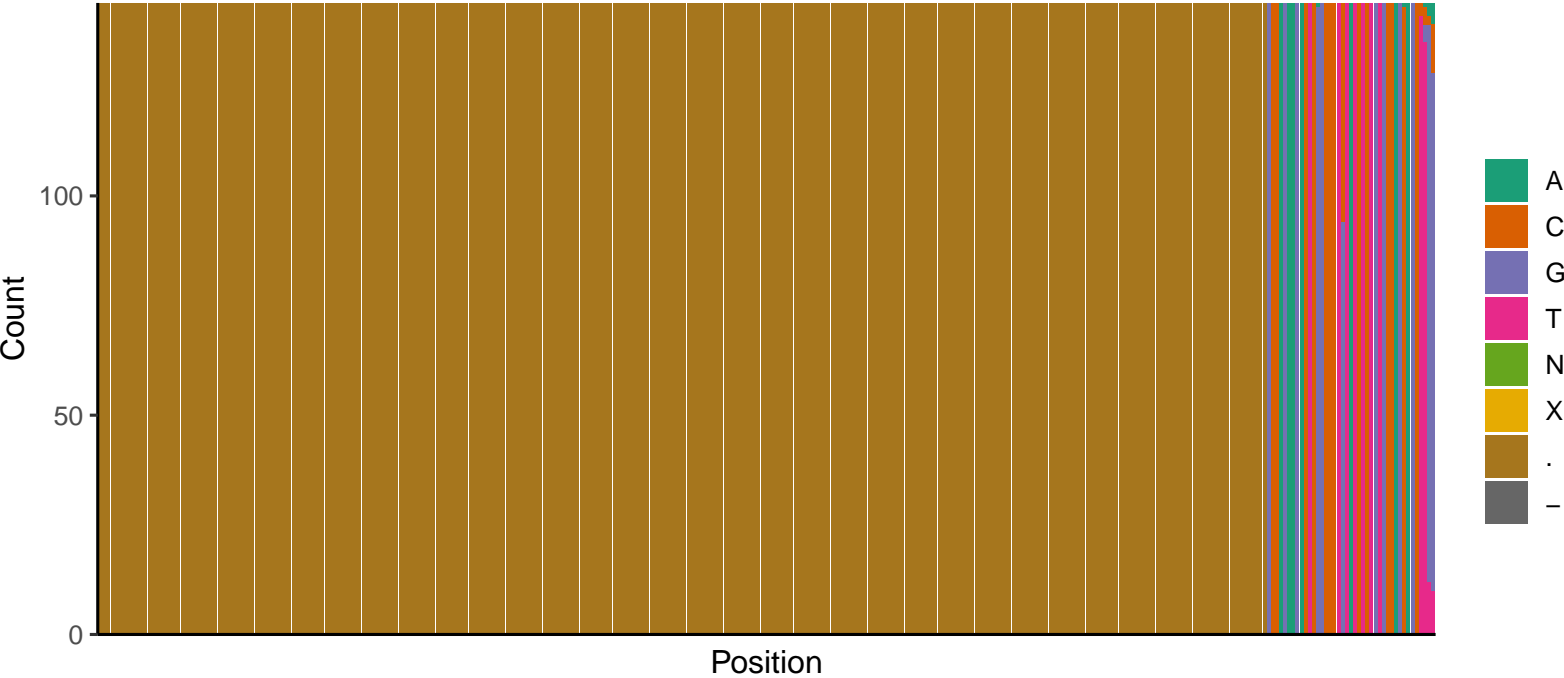
Gene TRBV7-1\*ap01\_G291C\_T296C



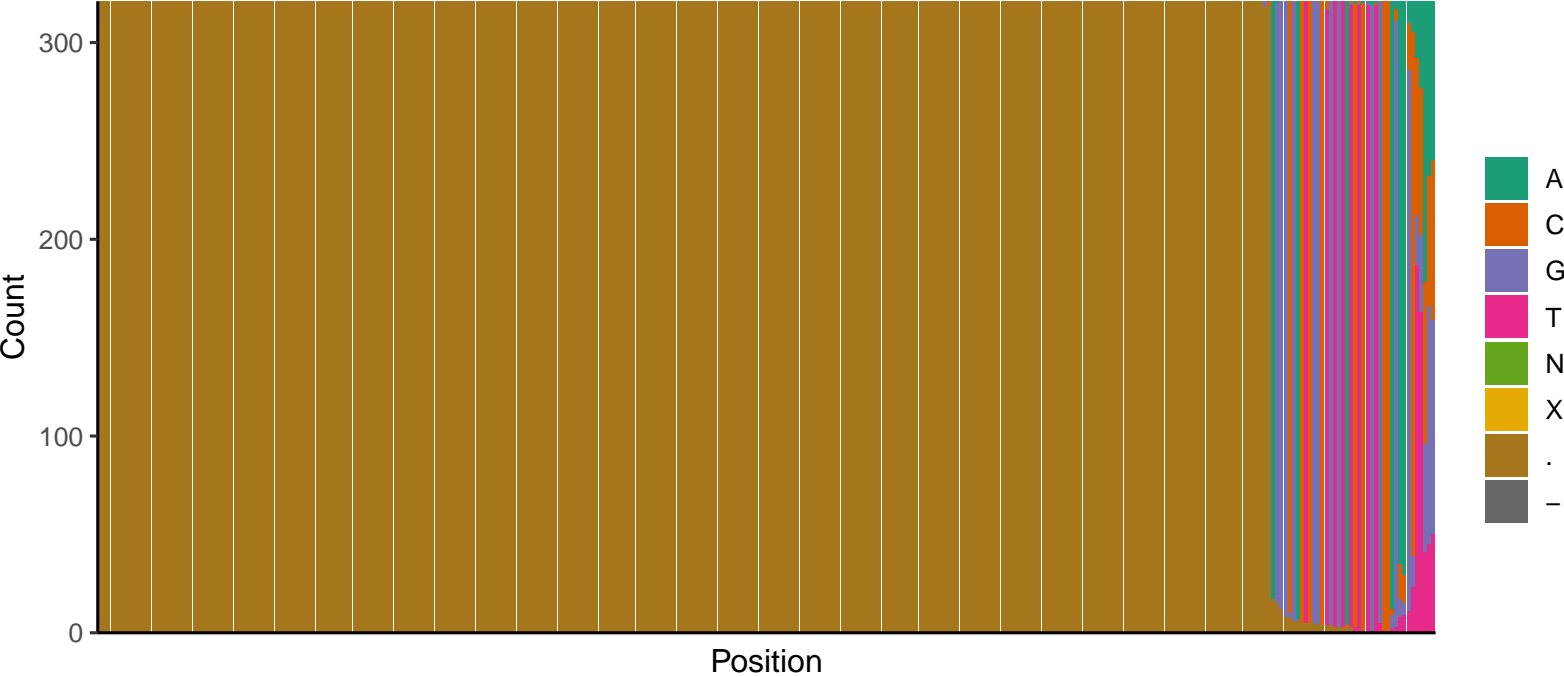
Gene TRBV7-7\*ap01\_C315T



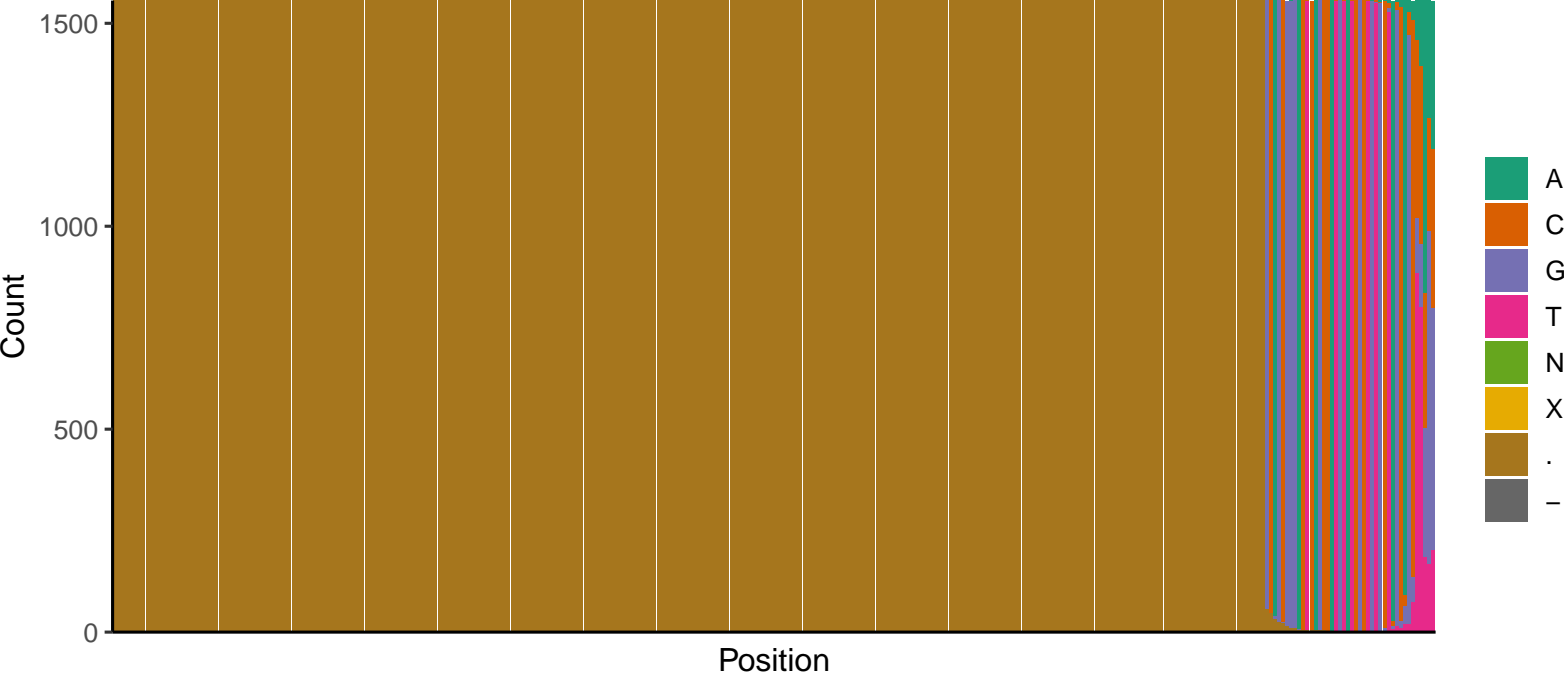
Gene TRBV5-7\*ap01\_G290A\_G291A



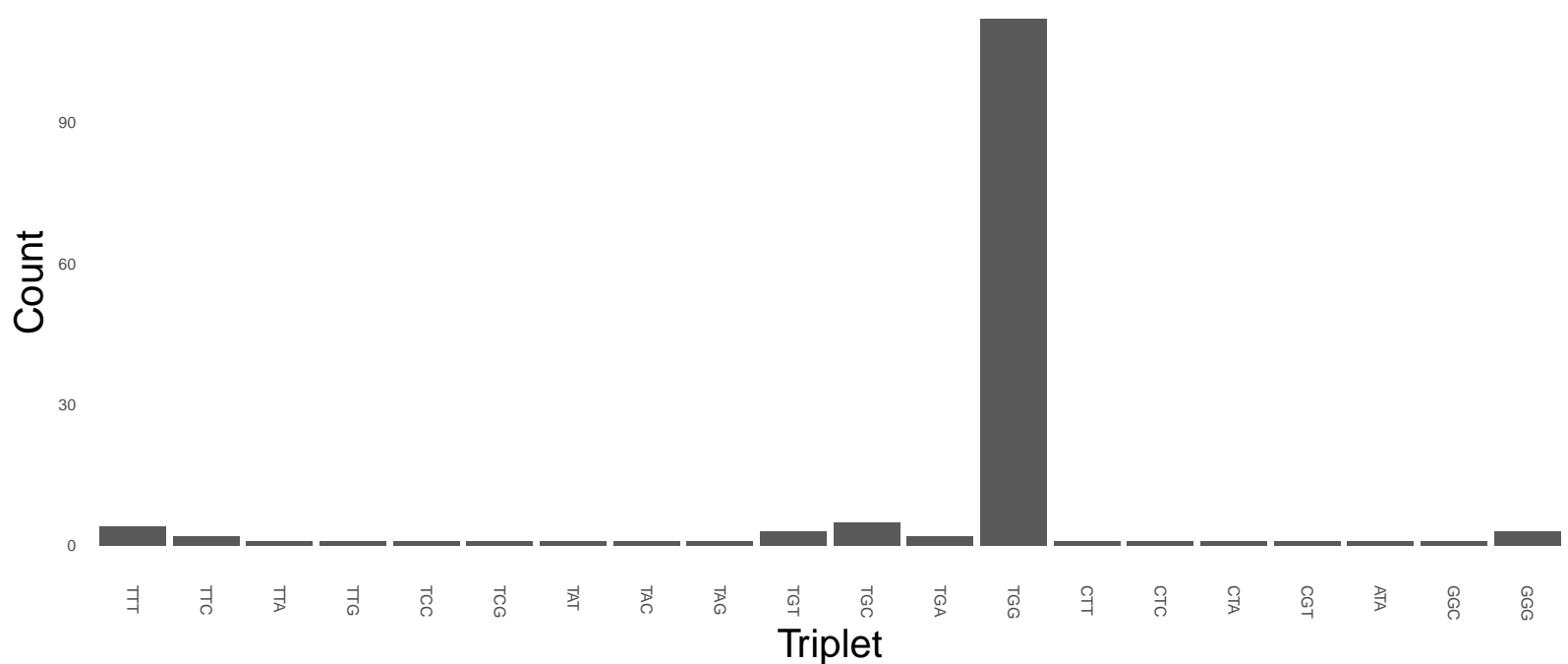
Gene TRBV7-1\*ap01\_G291C\_T296C



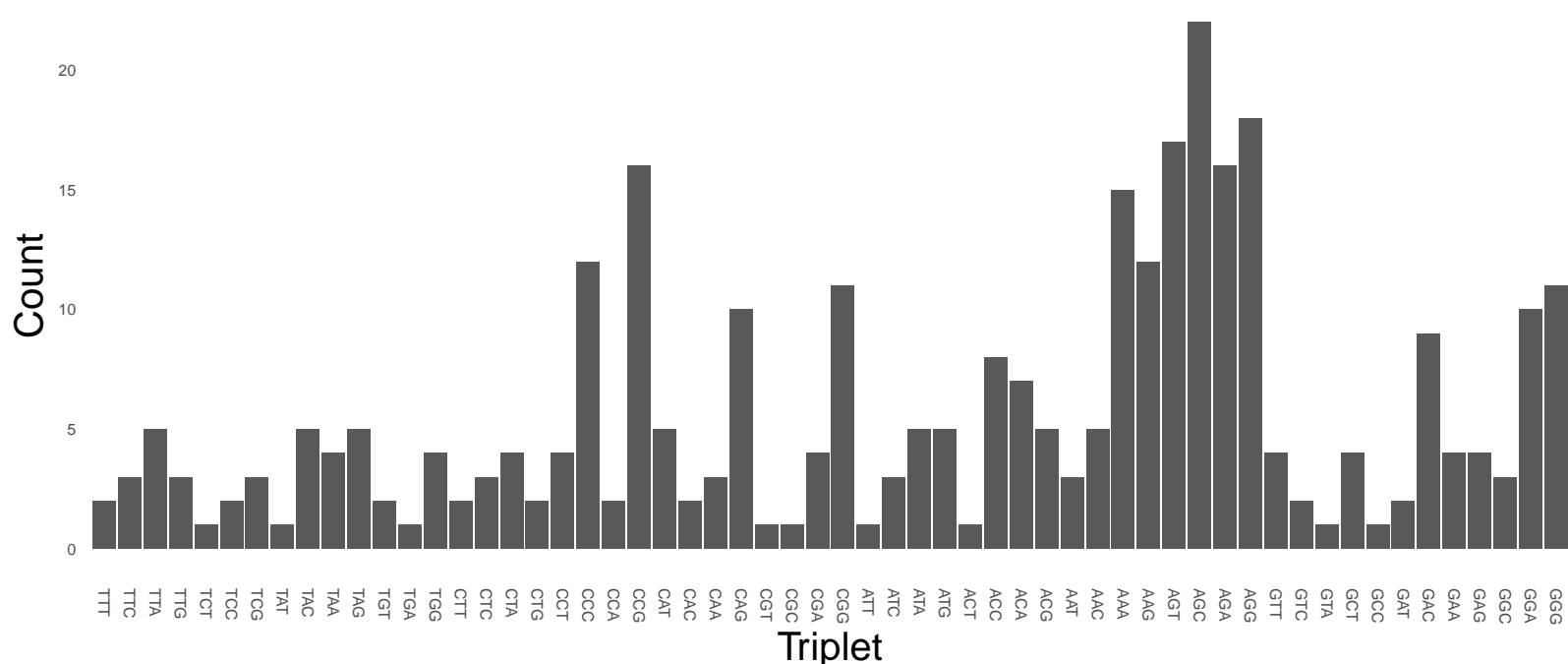
Gene TRBV7-7\*ap01\_C315T



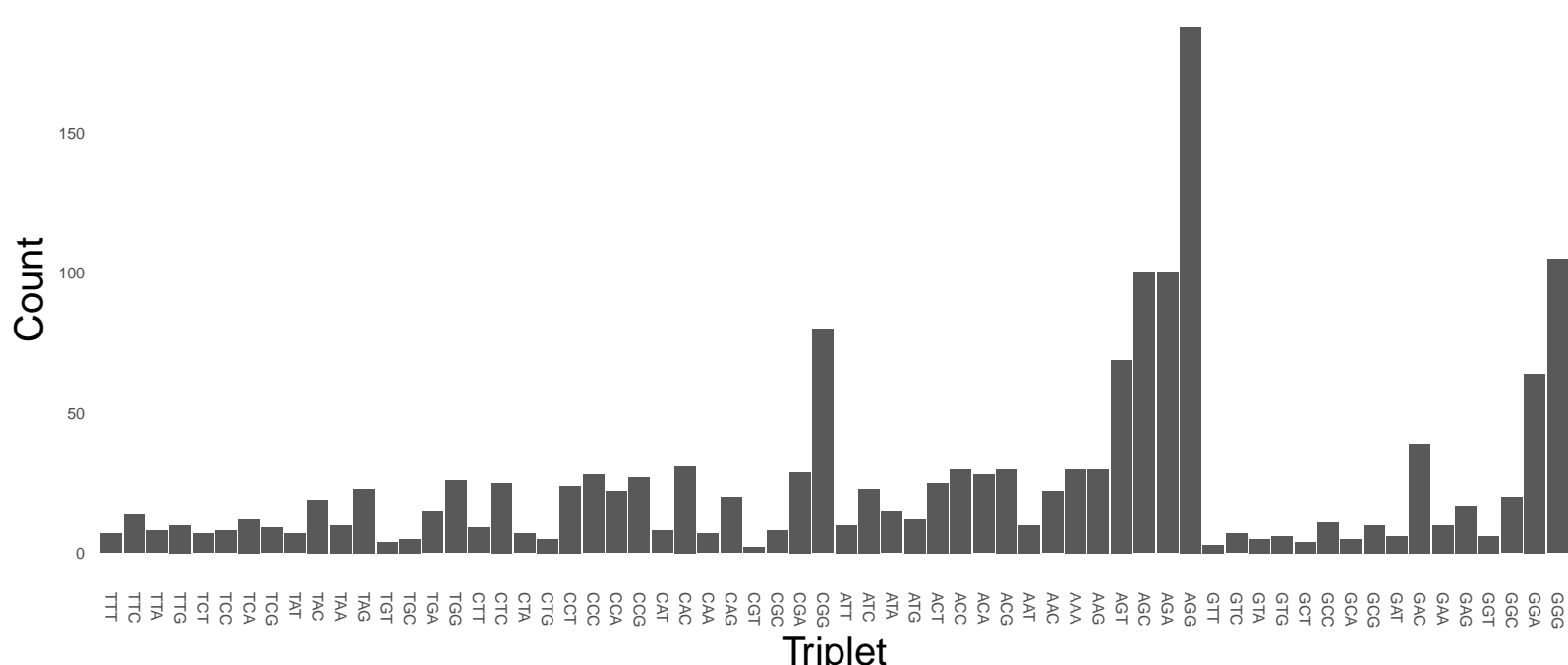
TRBV5-7\*ap01\_G290A\_G291A- Final 3 nucleotides as a triplet



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

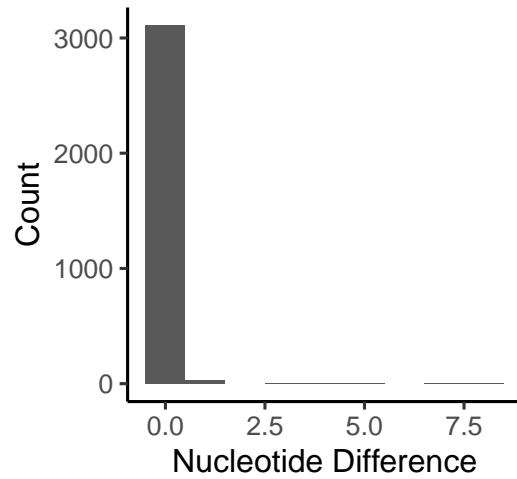


TRBV7-7\*ap01\_C315T- Final 3 nucleotides as a triplet



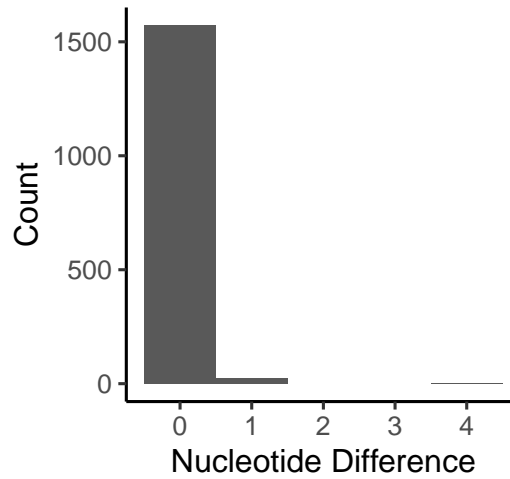
### TRBV10-1\*ap01

3151 sequences assigned  
3109 (98.7%) exact matches, in which:  
3051 unique CDR3  
13 unique J



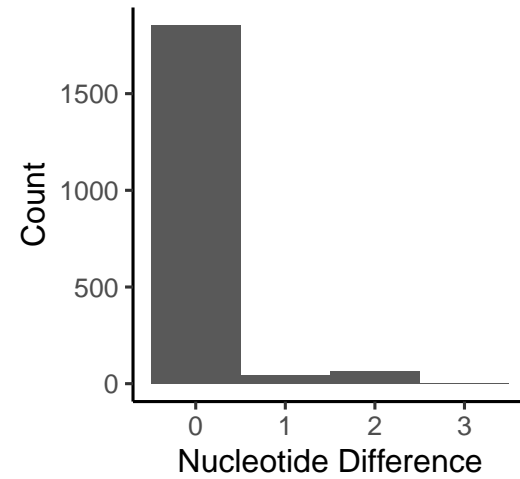
### TRBV10-2\*ap01

1598 sequences assigned  
1572 (98.4%) exact matches, in which:  
1522 unique CDR3  
13 unique J



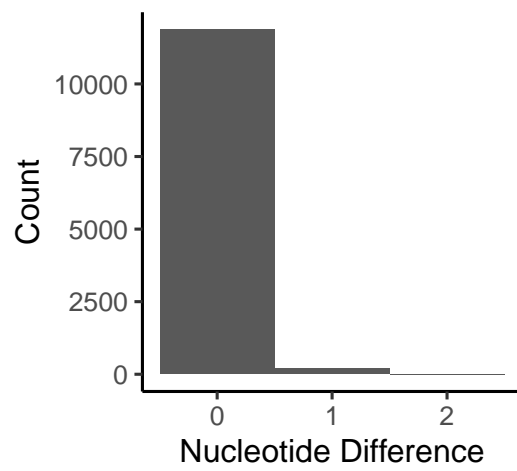
### TRBV13\*ap01

1965 sequences assigned  
1853 (94.3%) exact matches, in which:  
1798 unique CDR3  
13 unique J



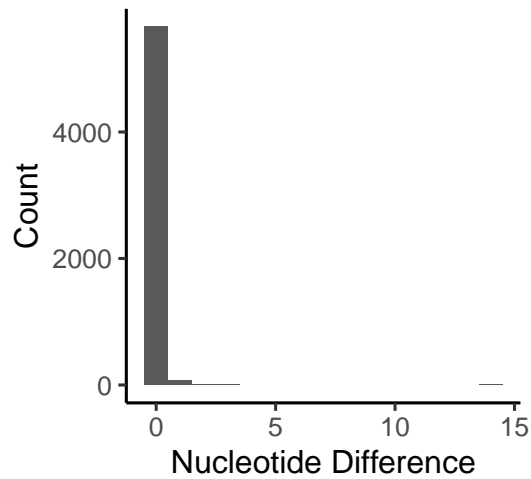
### TRBV20-1\*ap01

12081 sequences assigned  
11876 (98.3%) exact matches, in which:  
11697 unique CDR3  
13 unique J



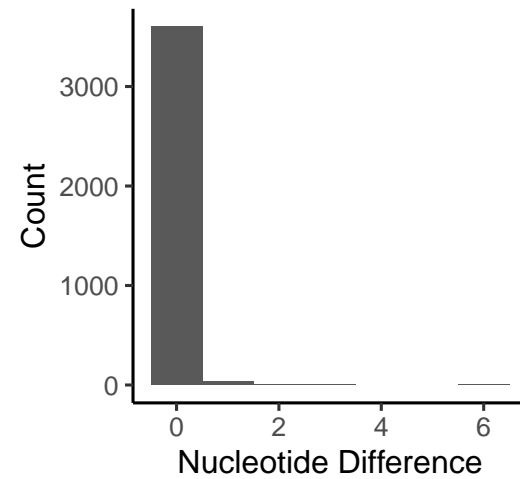
### TRBV10-3\*ap01

5741 sequences assigned  
5664 (98.7%) exact matches, in which:  
5528 unique CDR3  
13 unique J



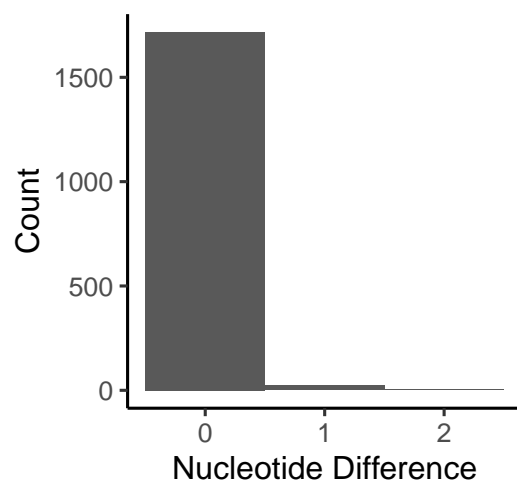
### TRBV14\*ap01

3643 sequences assigned  
3601 (98.8%) exact matches, in which:  
3538 unique CDR3  
13 unique J



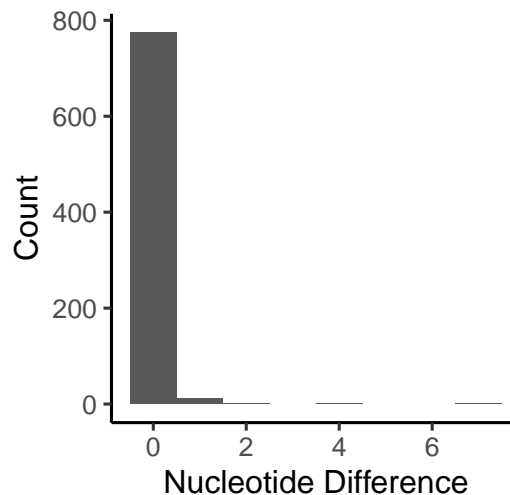
### TRBV20-1\*ap02

1744 sequences assigned  
1717 (98.5%) exact matches, in which:  
1682 unique CDR3  
13 unique J



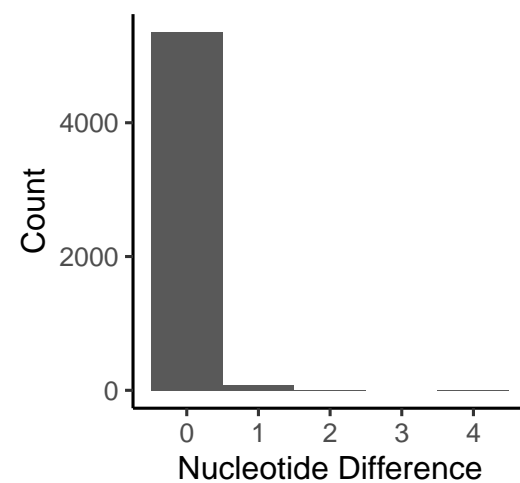
### TRBV1\*ap01

790 sequences assigned  
775 (98.1%) exact matches, in which:  
766 unique CDR3  
13 unique J



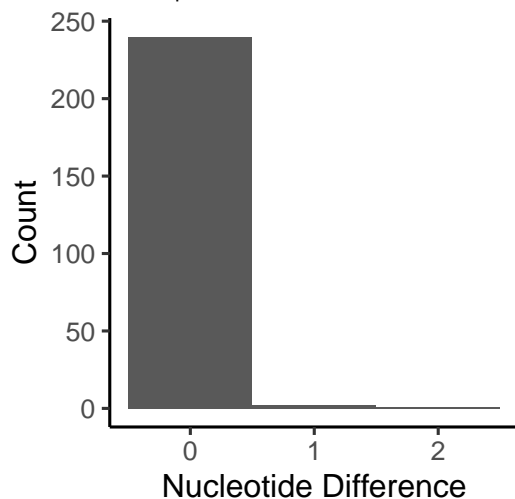
### TRBV15\*ap02

5444 sequences assigned  
5356 (98.4%) exact matches, in which:  
5175 unique CDR3  
13 unique J



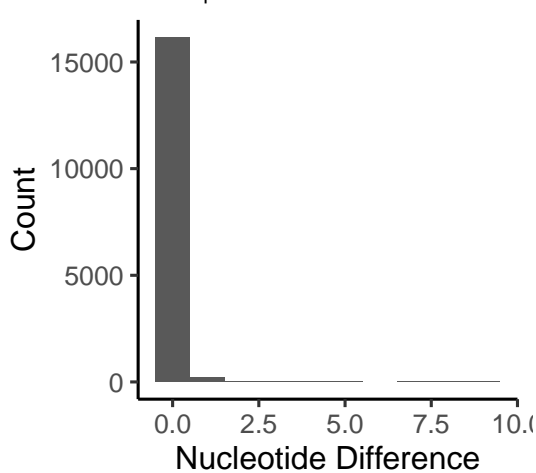
### TRBV16\*ap01

243 sequences assigned  
240 (98.8%) exact matches, in which:  
237 unique CDR3  
13 unique J



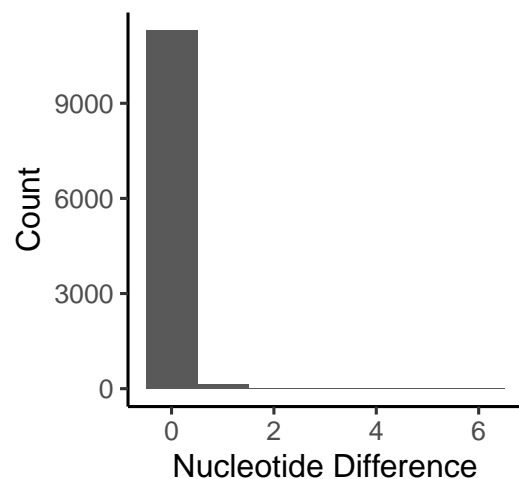
### TRBV19\*ap01

16397 sequences assigned  
16164 (98.6%) exact matches, in which:  
15961 unique CDR3  
13 unique J



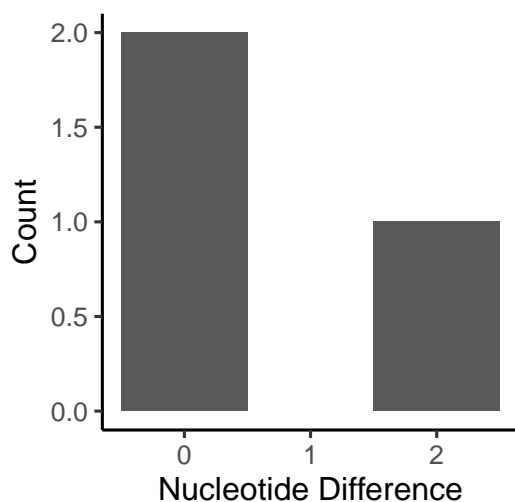
### TRBV27\*ap01

11450 sequences assigned  
11298 (98.7%) exact matches, in which:  
11061 unique CDR3  
13 unique J



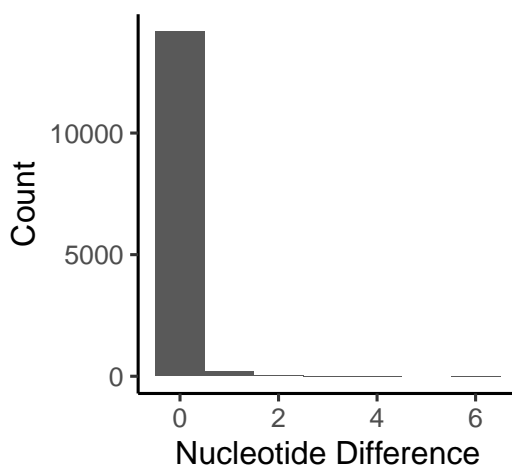
### TRBV17\*ap01

3 sequences assigned  
2 (66.7%) exact matches, in which:  
2 unique CDR3  
2 unique J



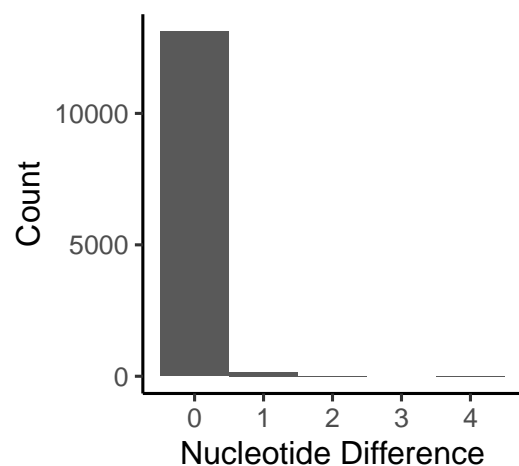
### TRBV2\*ap01

14402 sequences assigned  
14177 (98.4%) exact matches, in which:  
13929 unique CDR3  
13 unique J



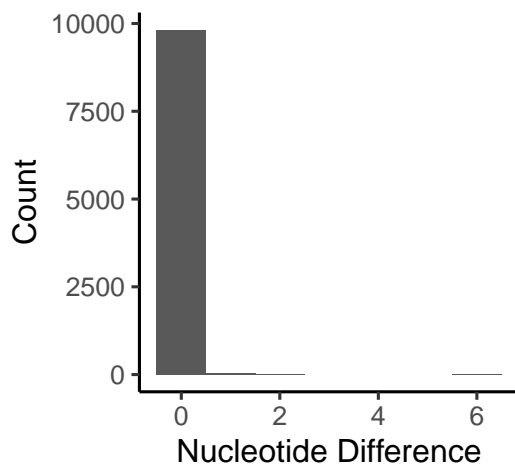
### TRBV28\*ap01

13285 sequences assigned  
13117 (98.7%) exact matches, in which:  
12883 unique CDR3  
13 unique J



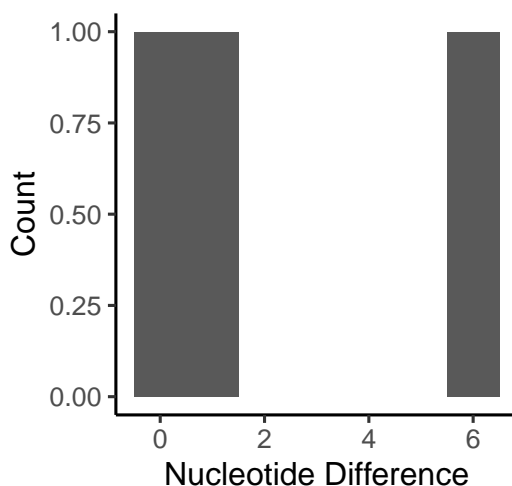
### TRBV18\*ap01

9880 sequences assigned  
9821 (99.4%) exact matches, in which:  
9665 unique CDR3  
13 unique J



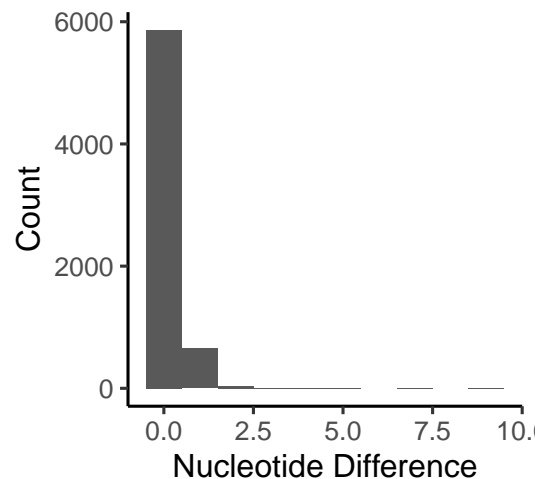
### TRBV26\*ap01

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



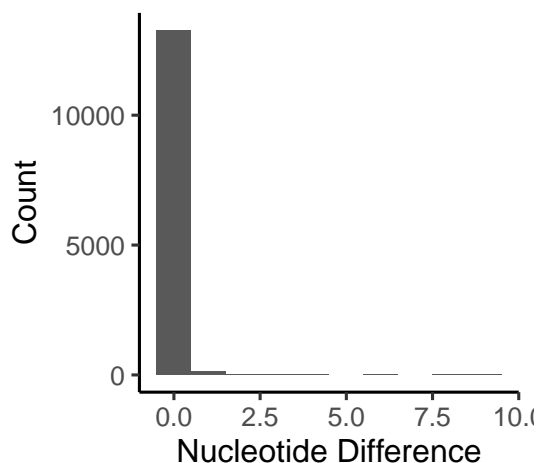
### TRBV30\*ap01

6564 sequences assigned  
5864 (89.3%) exact matches, in which:  
5767 unique CDR3  
13 unique J



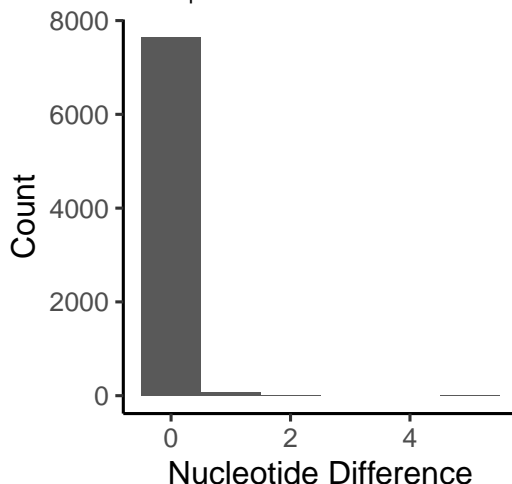
### TRBV9\*ap01

13431 sequences assigned  
13275 (98.8%) exact matches, in which:  
12975 unique CDR3  
13 unique J



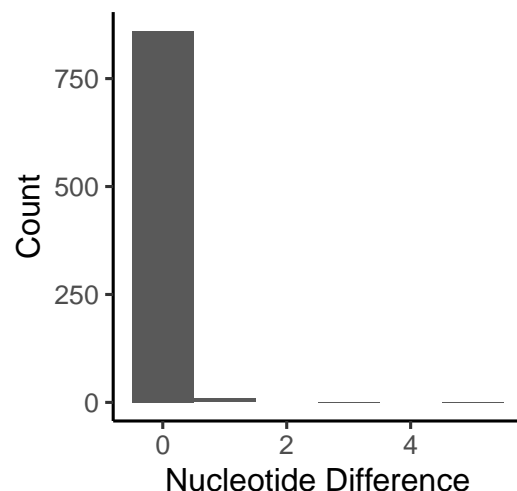
### TRBV11-2\*ap01

7717 sequences assigned  
7641 (99%) exact matches, in which:  
7552 unique CDR3  
13 unique J



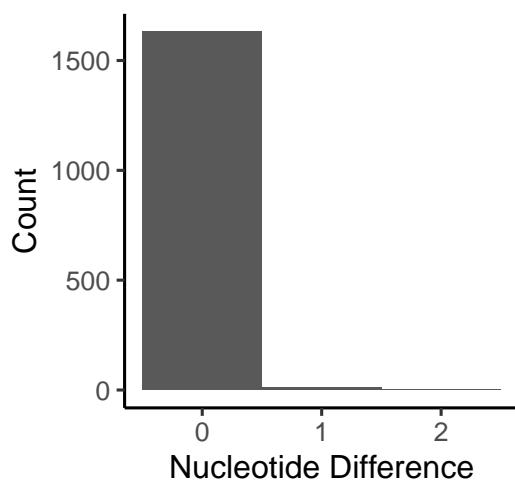
### TRBV12-2\*ap01

872 sequences assigned  
861 (98.7%) exact matches, in which:  
836 unique CDR3  
13 unique J



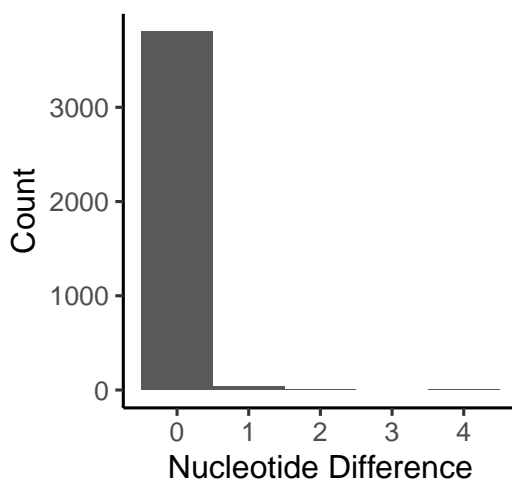
### TRBV11-1\*ap01

1642 sequences assigned  
1631 (99.3%) exact matches, in which:  
1601 unique CDR3  
13 unique J



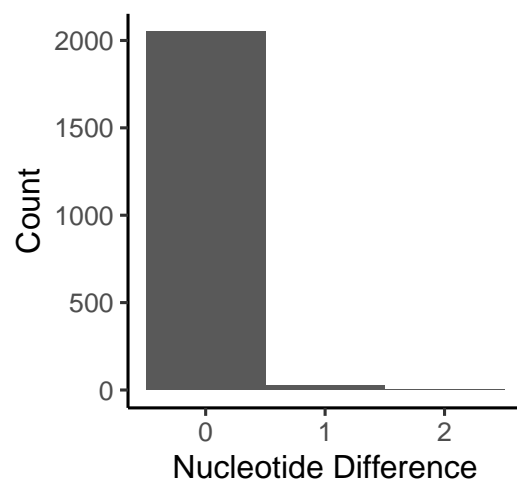
### TRBV11-3\*ap01

3840 sequences assigned  
3802 (99%) exact matches, in which:  
3756 unique CDR3  
13 unique J



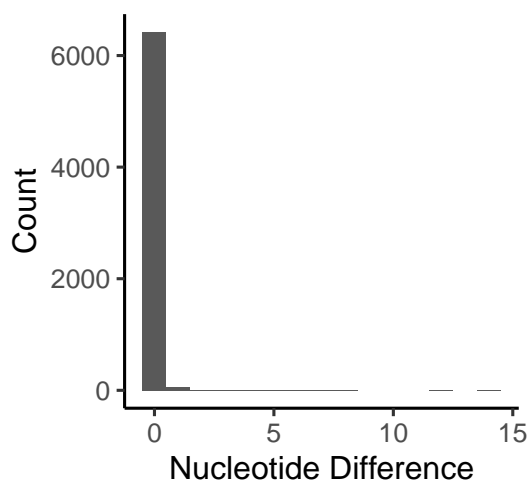
### TRBV12-5\*ap01

2079 sequences assigned  
2050 (98.6%) exact matches, in which:  
2000 unique CDR3  
13 unique J



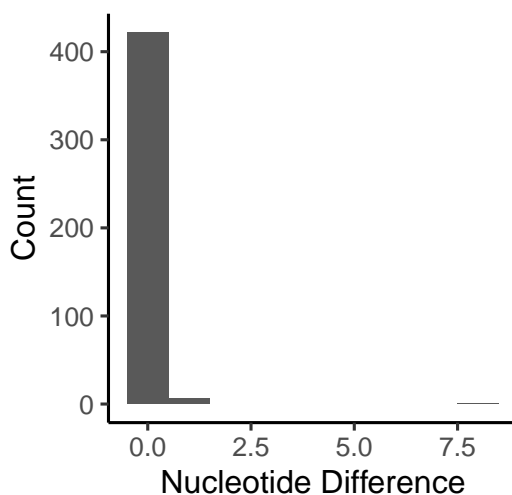
### TRBV21-1\*ap01

6529 sequences assigned  
6421 (98.3%) exact matches, in which:  
6315 unique CDR3  
13 unique J



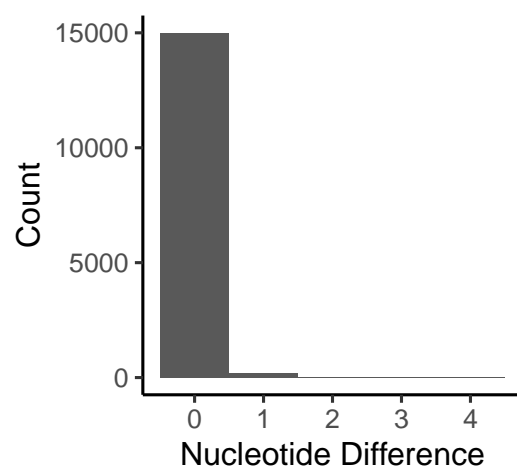
### TRBV12-1\*ap01

429 sequences assigned  
422 (98.4%) exact matches, in which:  
412 unique CDR3  
13 unique J



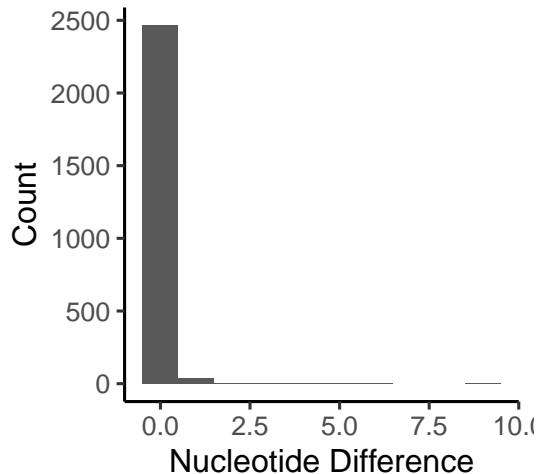
### TRBV12-34\*ap01

15235 sequences assigned  
15002 (98.5%) exact matches, in which:  
14708 unique CDR3  
13 unique J



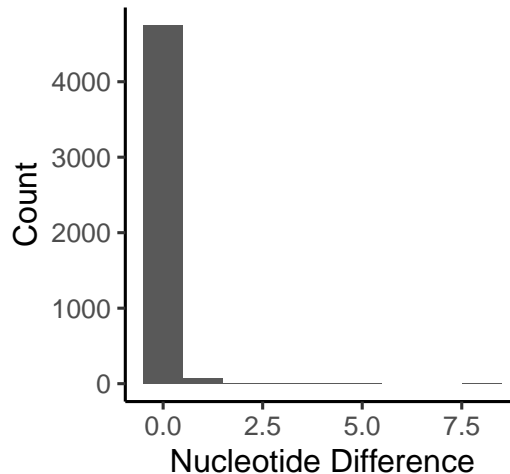
### TRBV23-1\*ap01

2512 sequences assigned  
2465 (98.1%) exact matches, in which:  
2409 unique CDR3  
13 unique J



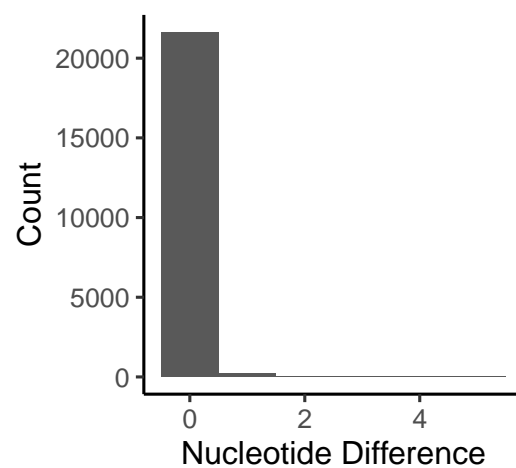
### TRBV24-1\*ap01

4831 sequences assigned  
4746 (98.2%) exact matches, in which:  
4661 unique CDR3  
13 unique J



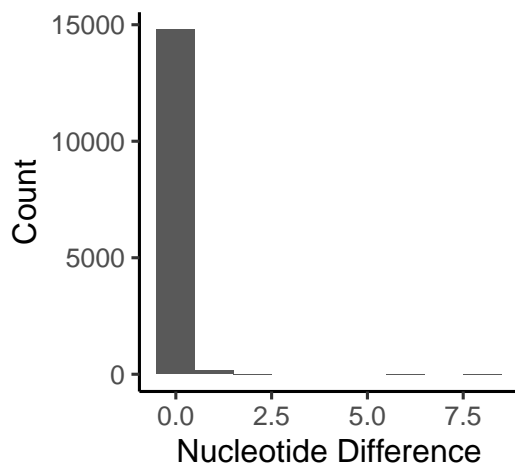
### TRBV5-1\*ap01

21902 sequences assigned  
21634 (98.8%) exact matches, in which:  
20797 unique CDR3  
13 unique J



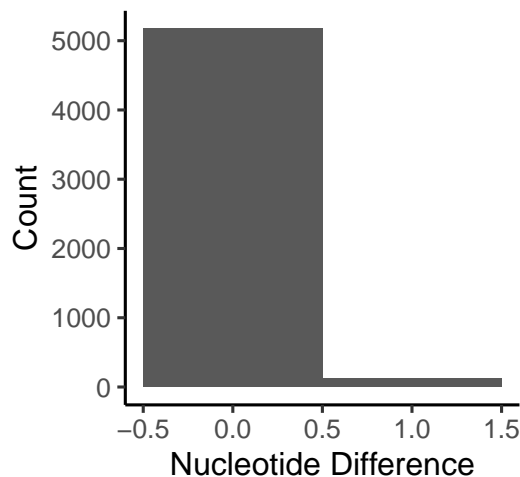
### TRBV3-12\*ap01

14977 sequences assigned  
14797 (98.8%) exact matches, in which:  
14593 unique CDR3  
13 unique J



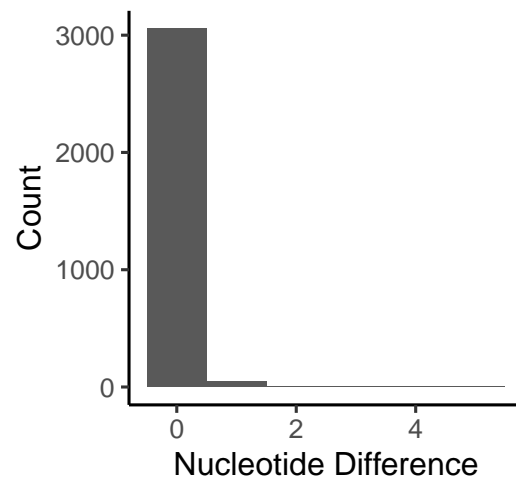
### TRBV4-2\*ap01

5294 sequences assigned  
5173 (97.7%) exact matches, in which:  
5094 unique CDR3  
13 unique J



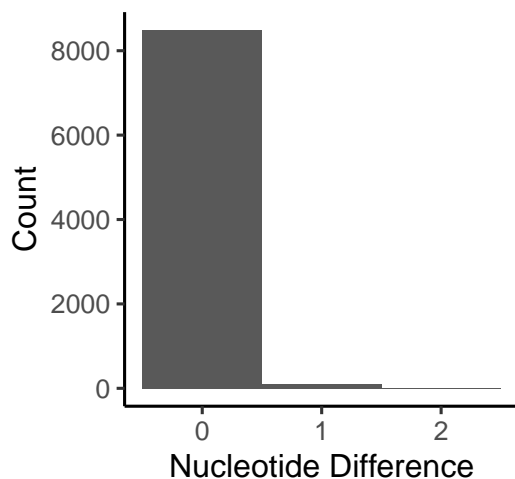
### TRBV25-1\*ap01

3112 sequences assigned  
3055 (98.2%) exact matches, in which:  
3012 unique CDR3  
13 unique J



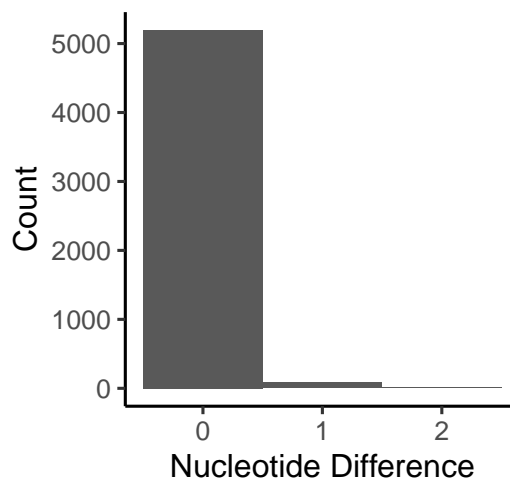
### TRBV4-1\*ap01

8599 sequences assigned  
8490 (98.7%) exact matches, in which:  
8325 unique CDR3  
13 unique J



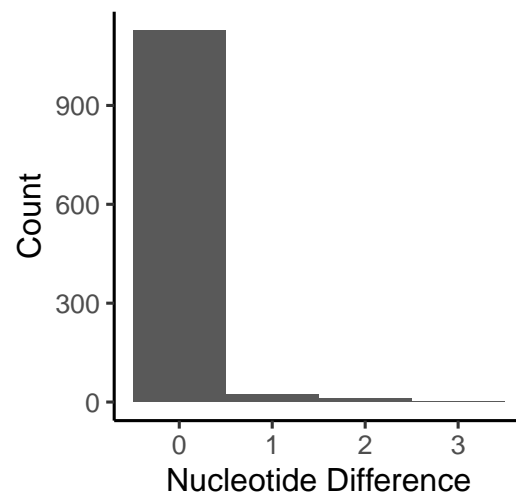
### TRBV4-3\*ap01

5289 sequences assigned  
5196 (98.2%) exact matches, in which:  
5084 unique CDR3  
14 unique J



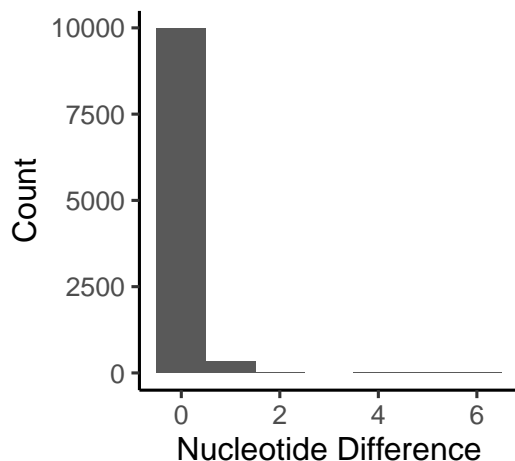
### TRBV5-3\*ap01

1162 sequences assigned  
1128 (97.1%) exact matches, in which:  
1094 unique CDR3  
13 unique J



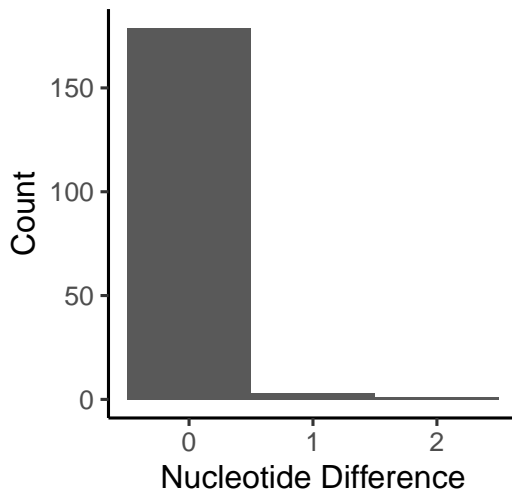
### TRBV5-4\*ap01

10325 sequences assigned  
9992 (96.8%) exact matches, in which:  
9828 unique CDR3  
13 unique J



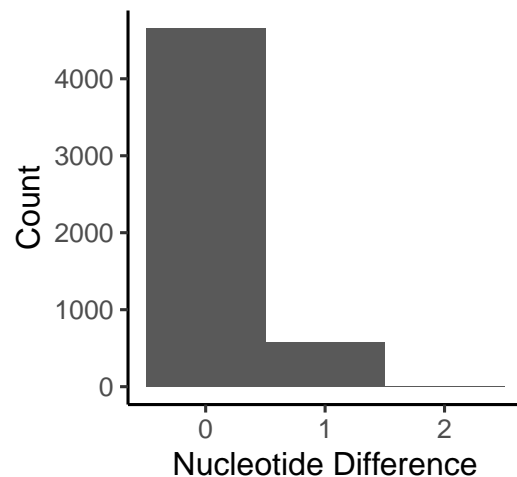
### TRBV5-7\*ap01

183 sequences assigned  
179 (97.8%) exact matches, in which:  
177 unique CDR3  
13 unique J



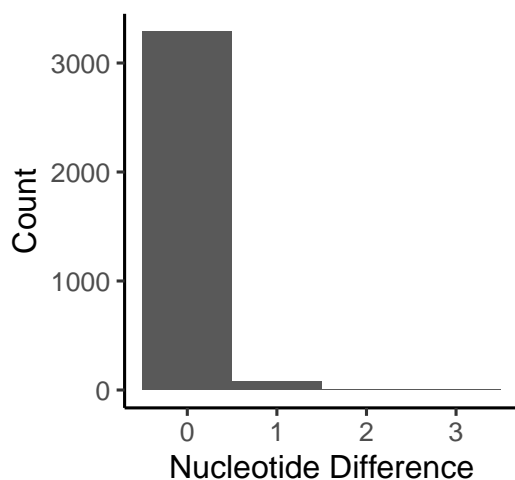
### TRBV6-1\*ap01

5237 sequences assigned  
4654 (88.9%) exact matches, in which:  
4548 unique CDR3  
13 unique J



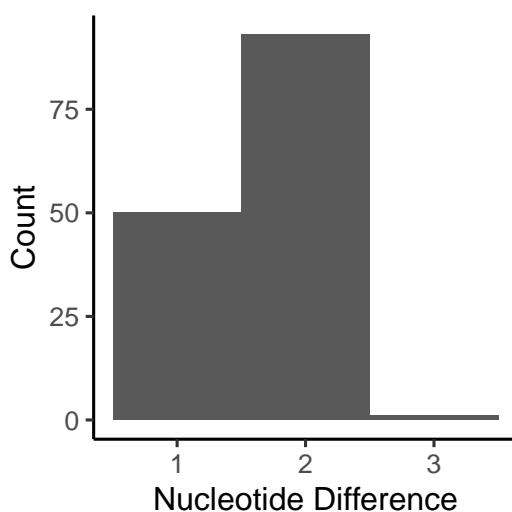
### TRBV5-5\*ap01

3365 sequences assigned  
3287 (97.7%) exact matches, in which:  
3197 unique CDR3  
13 unique J



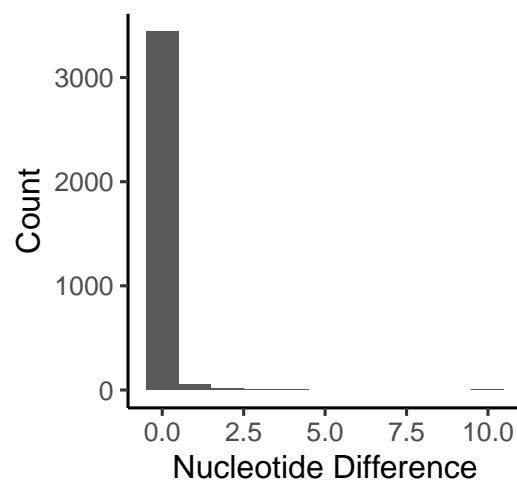
### TRBV5-7\*ap01\_G290A\_C

144 sequences assigned  
No exact matches.



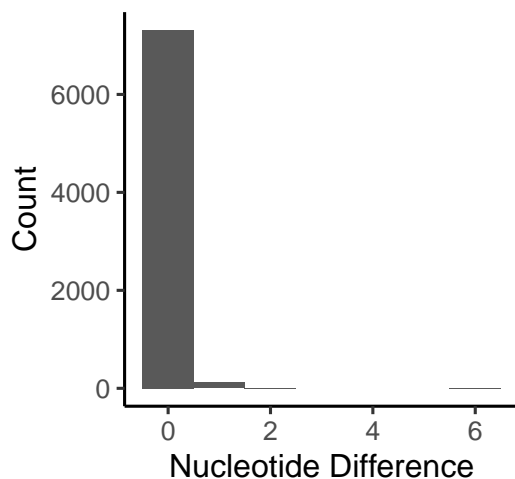
### TRBV6-4\*ap01

3504 sequences assigned  
3440 (98.2%) exact matches, in which:  
3385 unique CDR3  
13 unique J



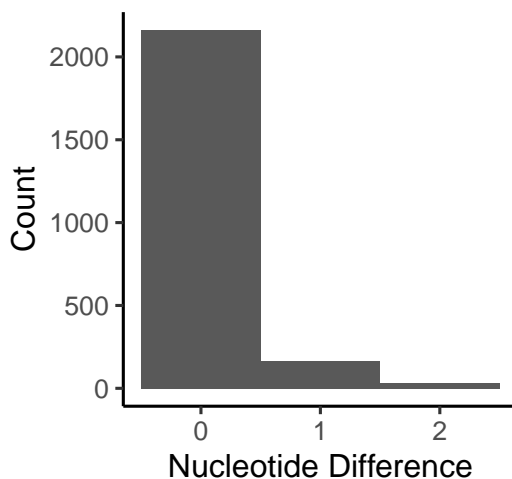
### TRBV5-6\*ap01

7435 sequences assigned  
7314 (98.4%) exact matches, in which:  
6850 unique CDR3  
13 unique J



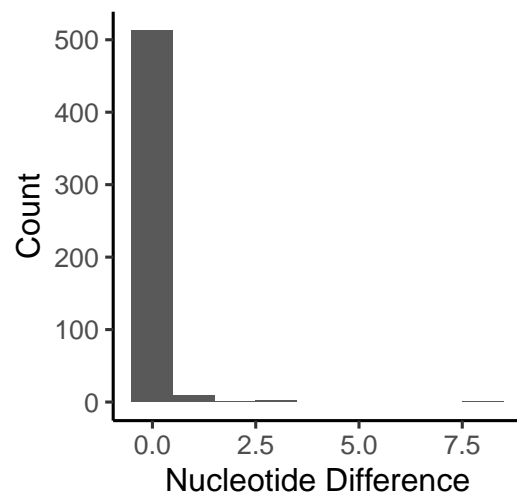
### TRBV5-8\*ap01

2360 sequences assigned  
2162 (91.6%) exact matches, in which:  
2124 unique CDR3  
13 unique J



### TRBV6-7\*ap01

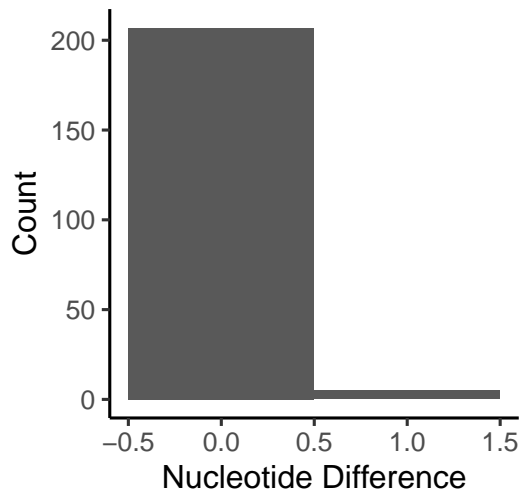
526 sequences assigned  
513 (97.5%) exact matches, in which:  
500 unique CDR3  
13 unique J





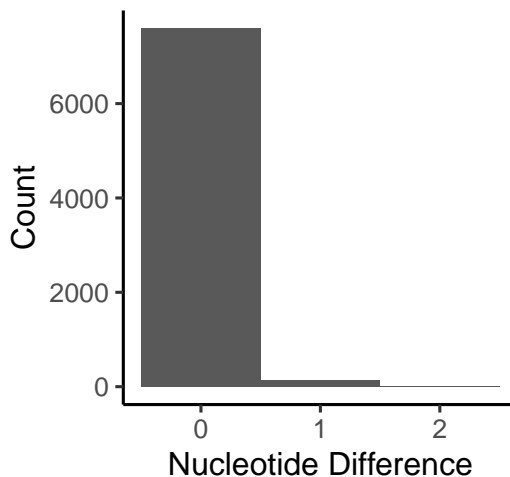
### TRBV6–8\*ap01

212 sequences assigned  
207 (97.6%) exact matches, in which:  
202 unique CDR3  
13 unique J



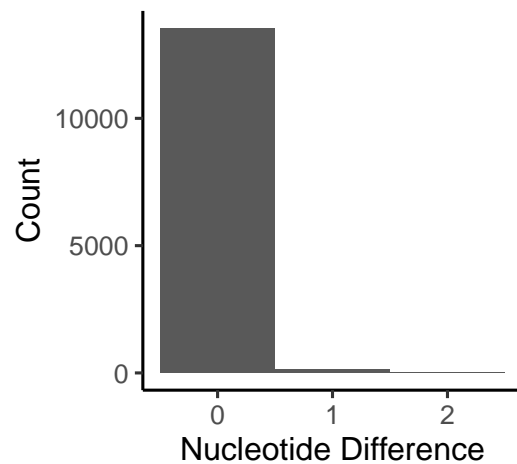
### TRBV6–56\*ap01

7749 sequences assigned  
7594 (98%) exact matches, in which:  
7410 unique CDR3  
13 unique J



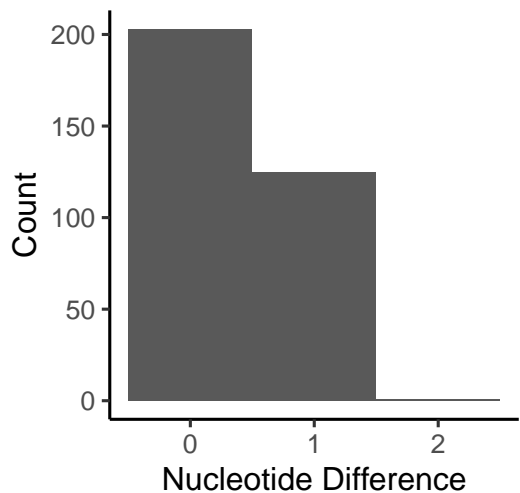
### TRBV7–2\*ap01

13697 sequences assigned  
13543 (98.9%) exact matches, in which:  
13331 unique CDR3  
13 unique J



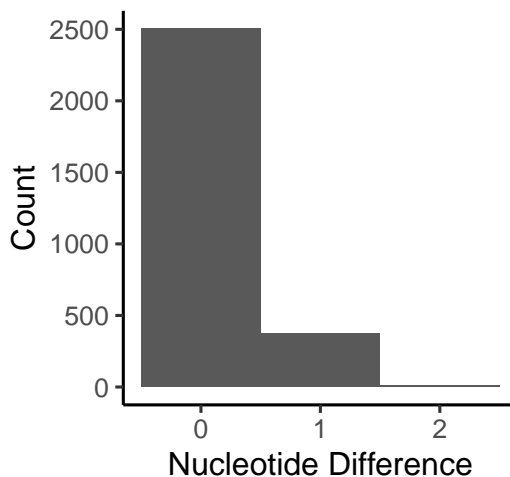
### TRBV6–9\*ap01

329 sequences assigned  
203 (61.7%) exact matches, in which:  
198 unique CDR3  
13 unique J



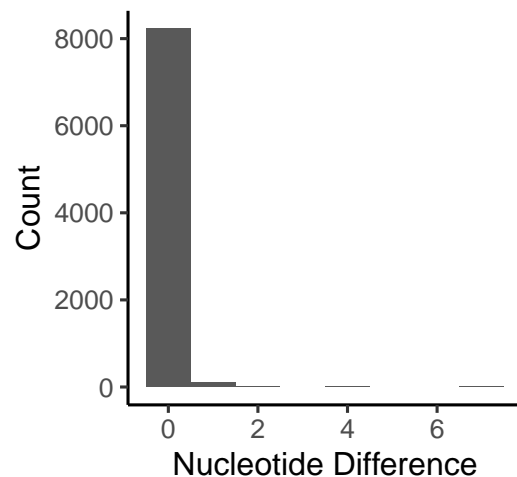
### TRBV6–56\*ap02

2882 sequences assigned  
2504 (86.9%) exact matches, in which:  
2445 unique CDR3  
13 unique J



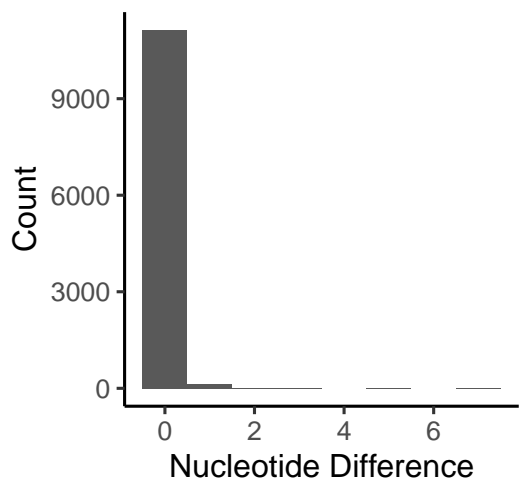
### TRBV7–3\*ap01

8336 sequences assigned  
8227 (98.7%) exact matches, in which:  
8032 unique CDR3  
13 unique J



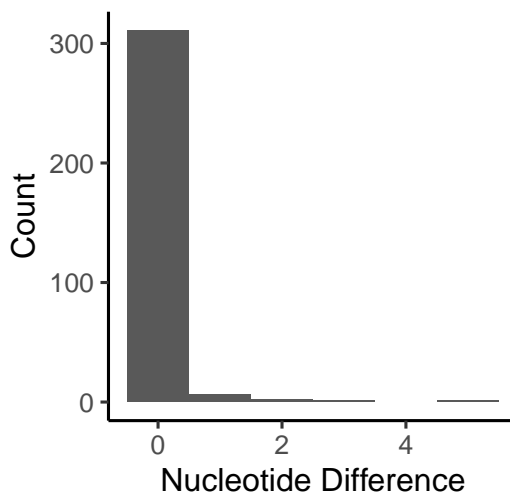
### TRBV6–23\*ap01

11289 sequences assigned  
11133 (98.6%) exact matches, in which:  
10951 unique CDR3  
13 unique J



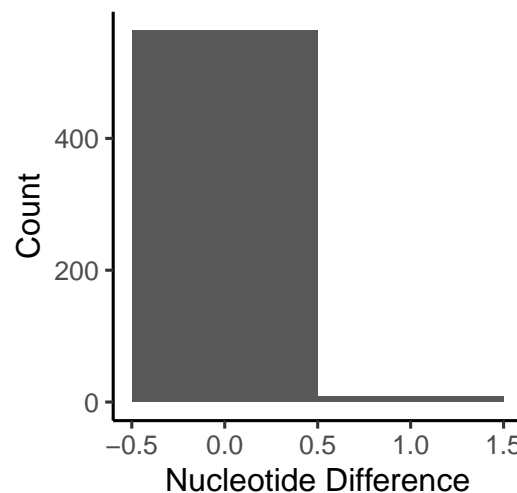
### TRBV7–1\*ap01\_G291C\_

321 sequences assigned  
311 (96.9%) exact matches, in which:  
308 unique CDR3  
13 unique J



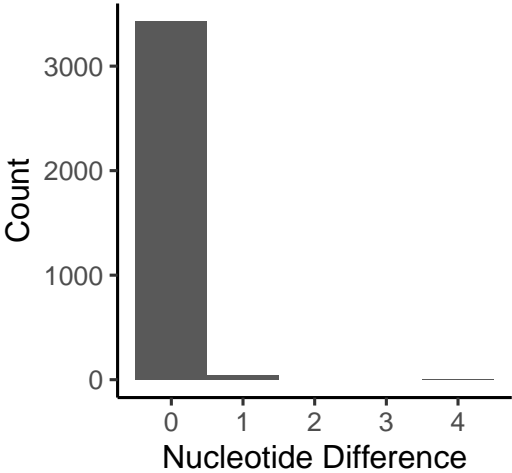
### TRBV7–4\*ap01

572 sequences assigned  
564 (98.6%) exact matches, in which:  
544 unique CDR3  
13 unique J



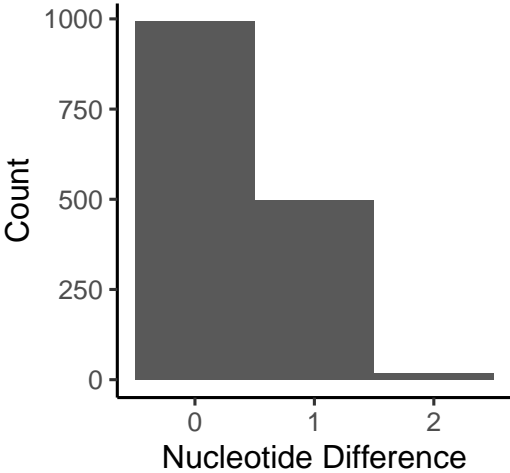
TRBV7-6\*ap01

3469 sequences assigned  
3428 (98.8%) exact matches, in which:  
3364 unique CDR3  
13 unique J



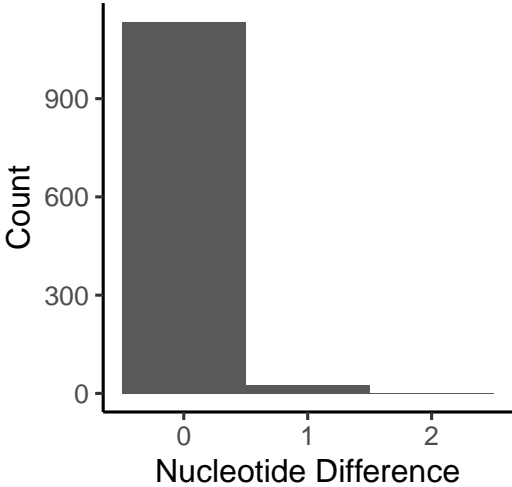
TRBV7-8\*ap03

1507 sequences assigned  
993 (65.9%) exact matches, in which:  
977 unique CDR3  
13 unique J



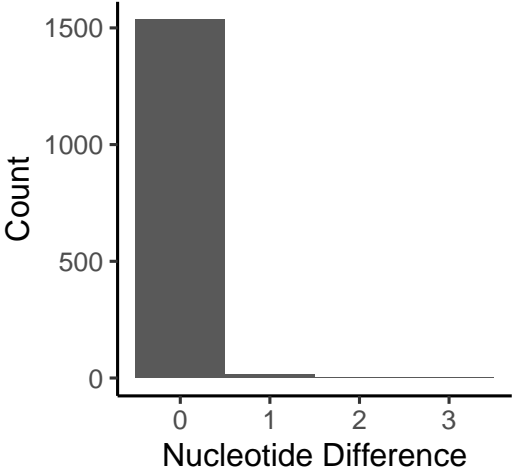
TRBV29-1\*ap02

1163 sequences assigned  
1135 (97.6%) exact matches, in which:  
1104 unique CDR3  
13 unique J



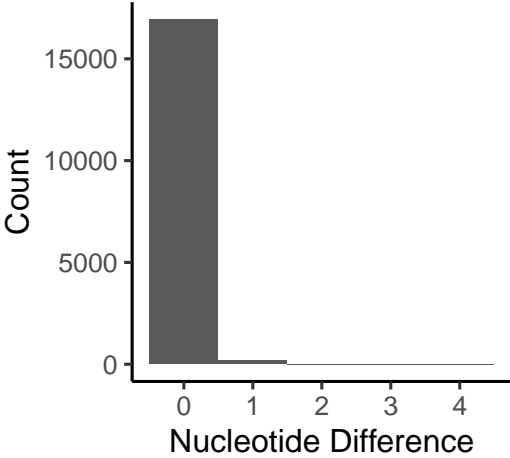
TRBV7-7\*ap01\_C315T

1556 sequences assigned  
1535 (98.7%) exact matches, in which:  
1513 unique CDR3  
13 unique J



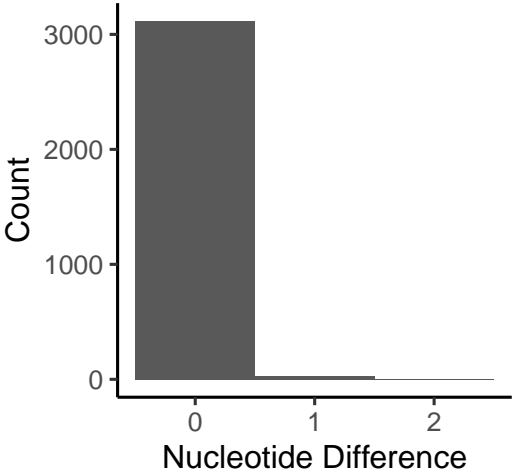
TRBV7-9\*ap01

17137 sequences assigned  
16933 (98.8%) exact matches, in which:  
16681 unique CDR3  
13 unique J



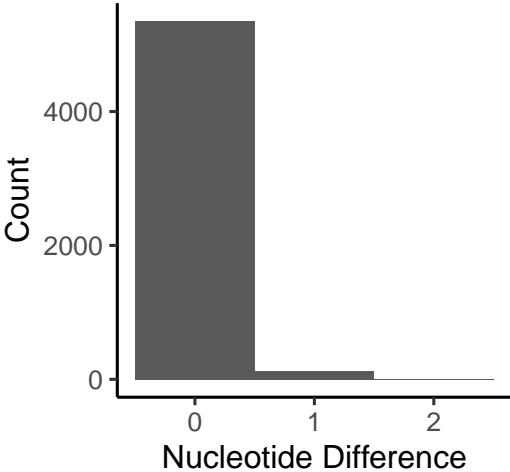
TRBV7-8\*ap01

3148 sequences assigned  
3116 (99%) exact matches, in which:  
3064 unique CDR3  
13 unique J

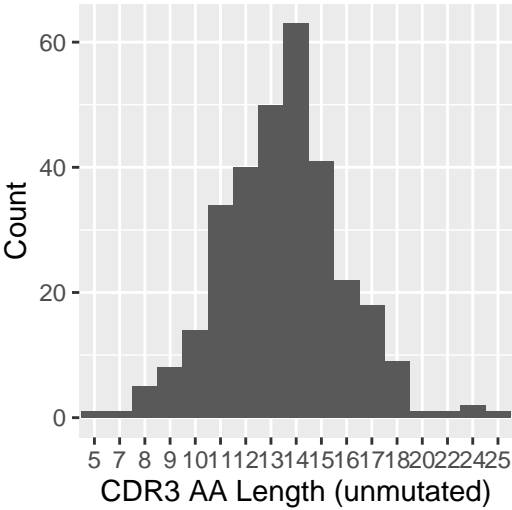


TRBV29-1\*ap01

5480 sequences assigned  
5351 (97.6%) exact matches, in which:  
5278 unique CDR3  
13 unique J



TRBV7-1\*ap01\_G291C\_T296C



TRBV7-7\*ap01\_C315T

