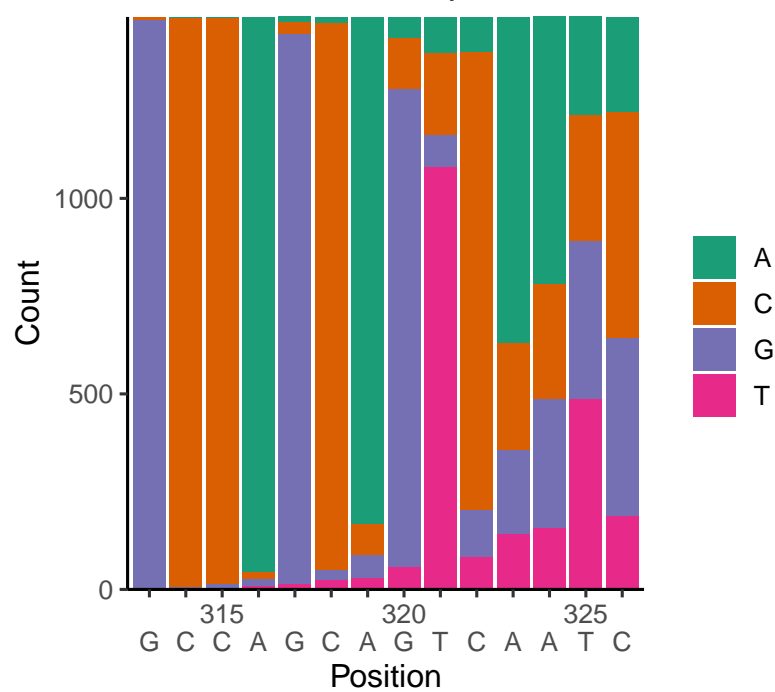
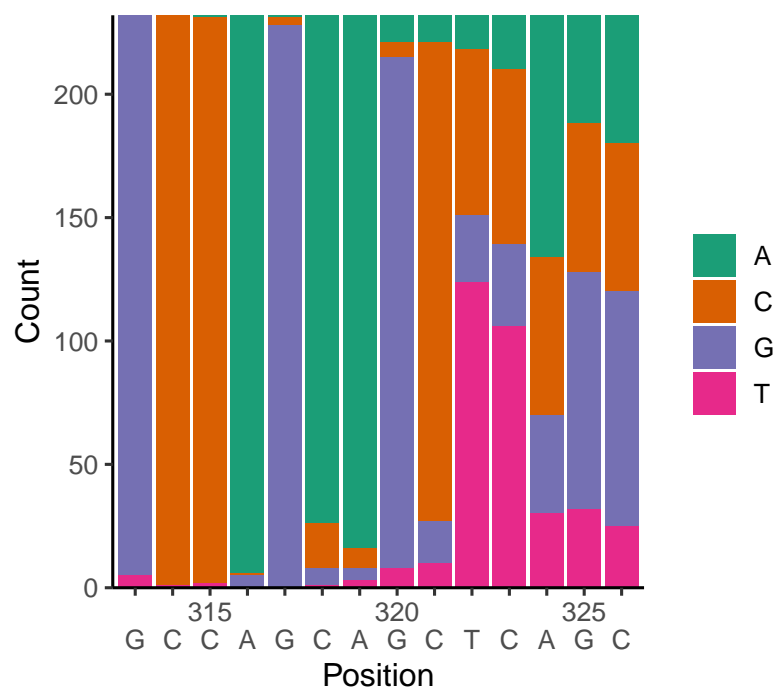


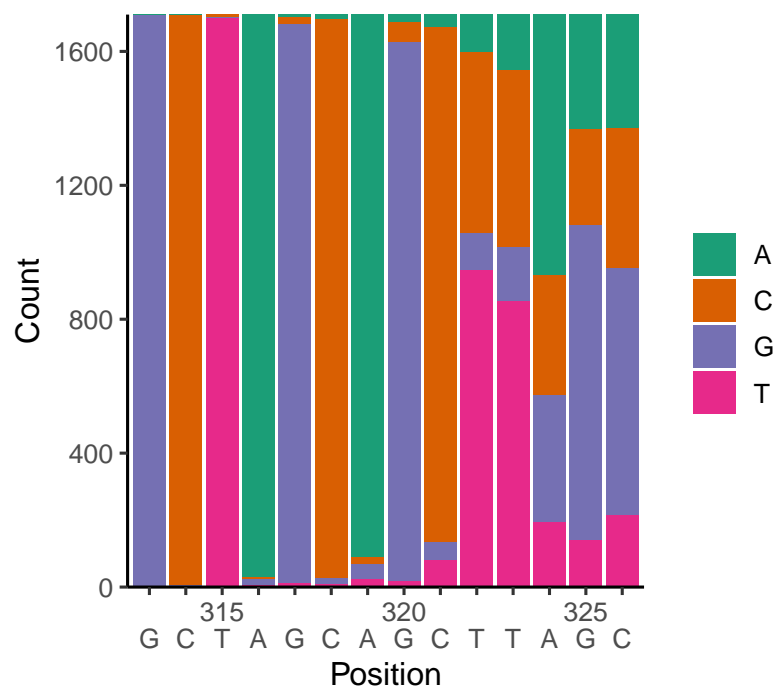
Gene TRBV23-1\*ap01\_T304C



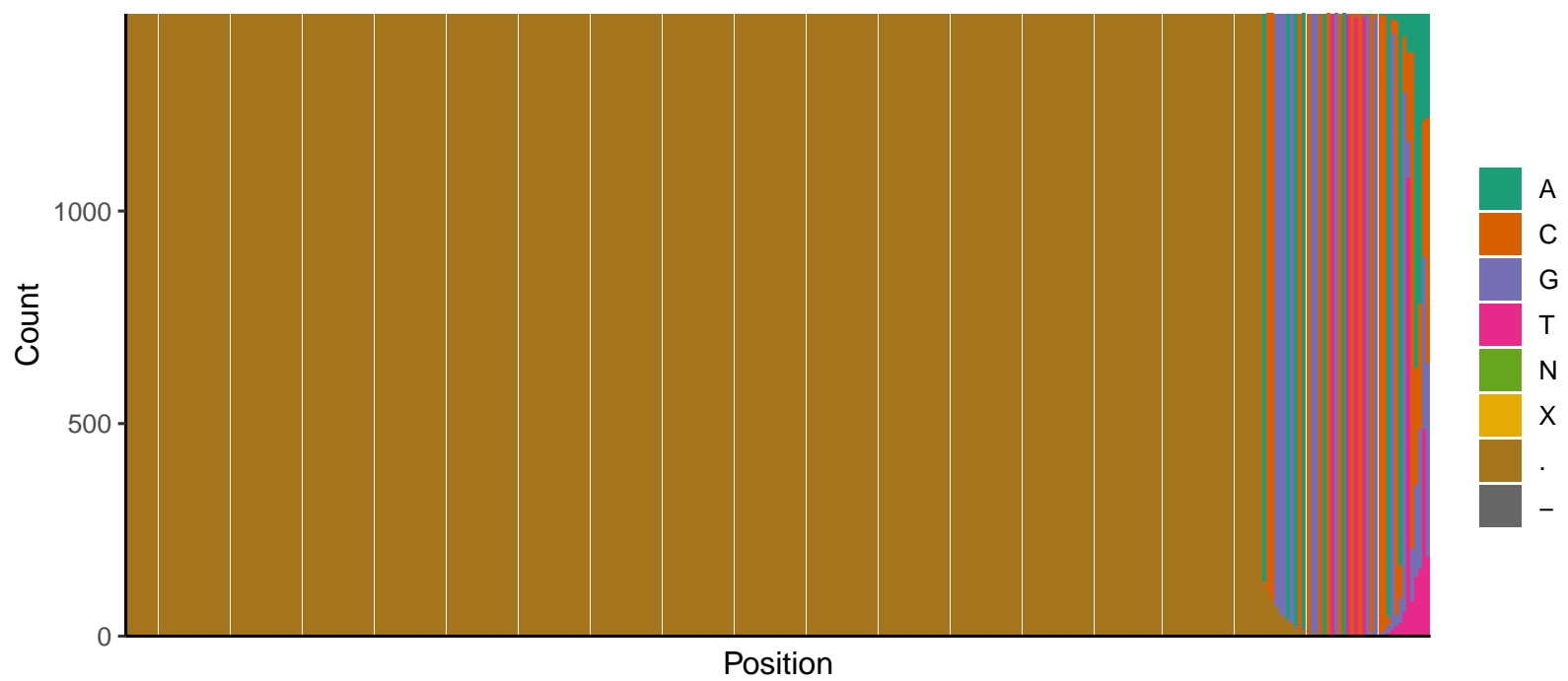
Gene TRBV7-1\*ap01\_G291C\_T296C



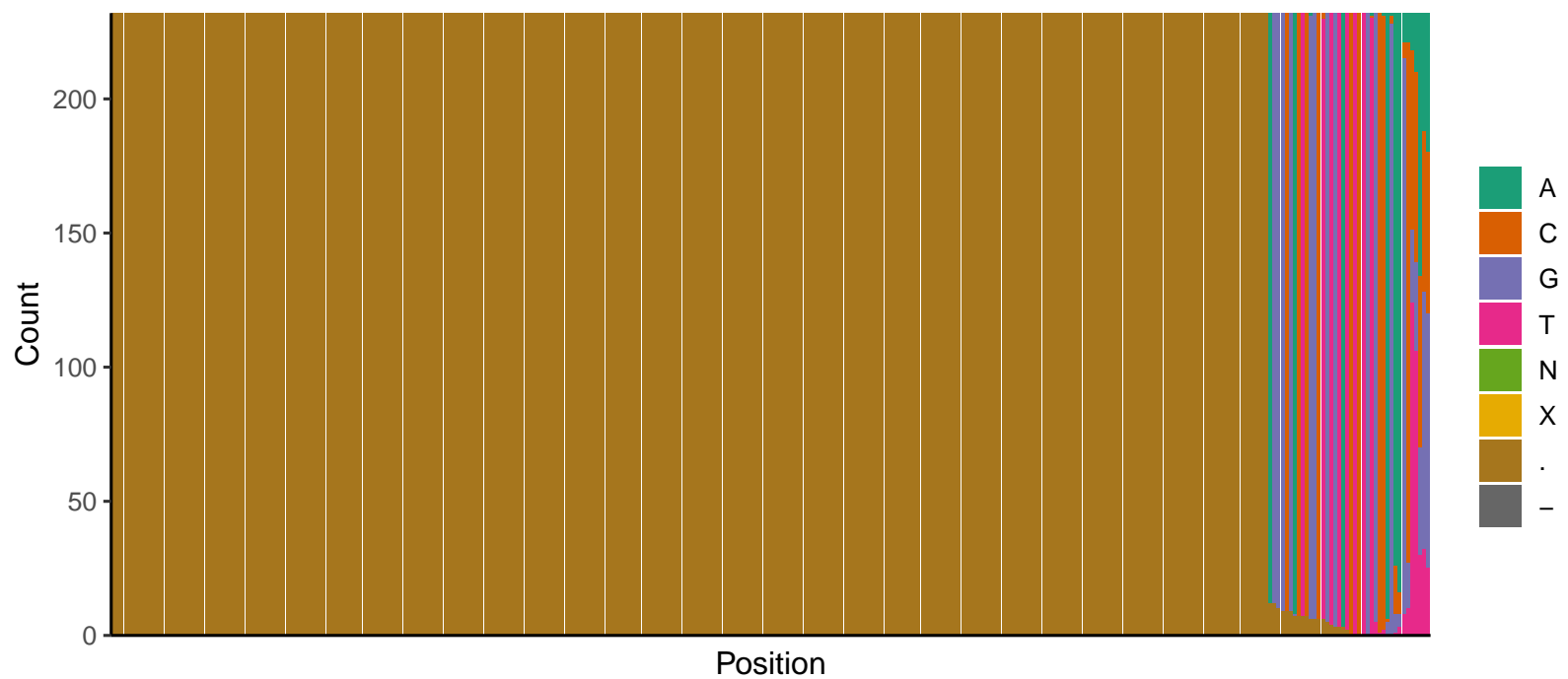
Gene TRBV7-7\*ap01\_C315T



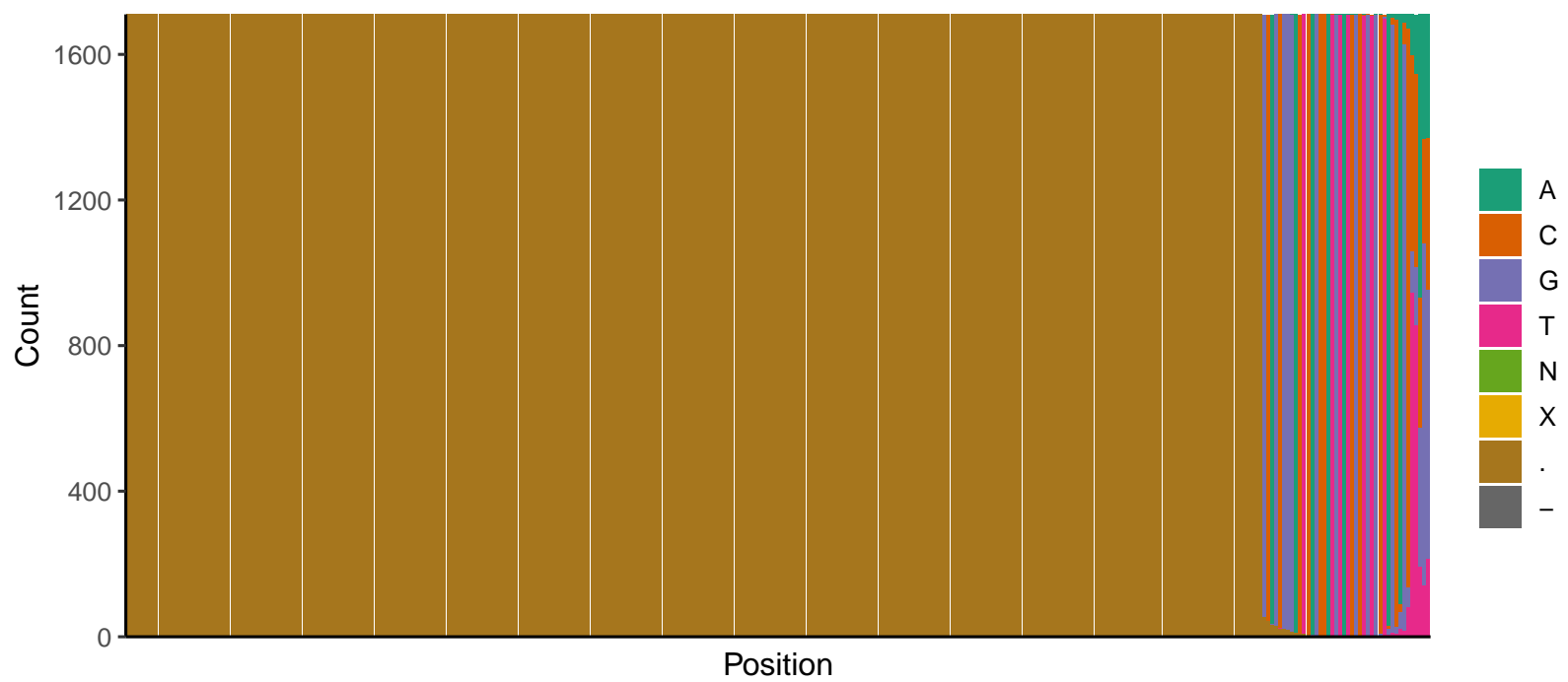
Gene TRBV23-1\*ap01\_T304C



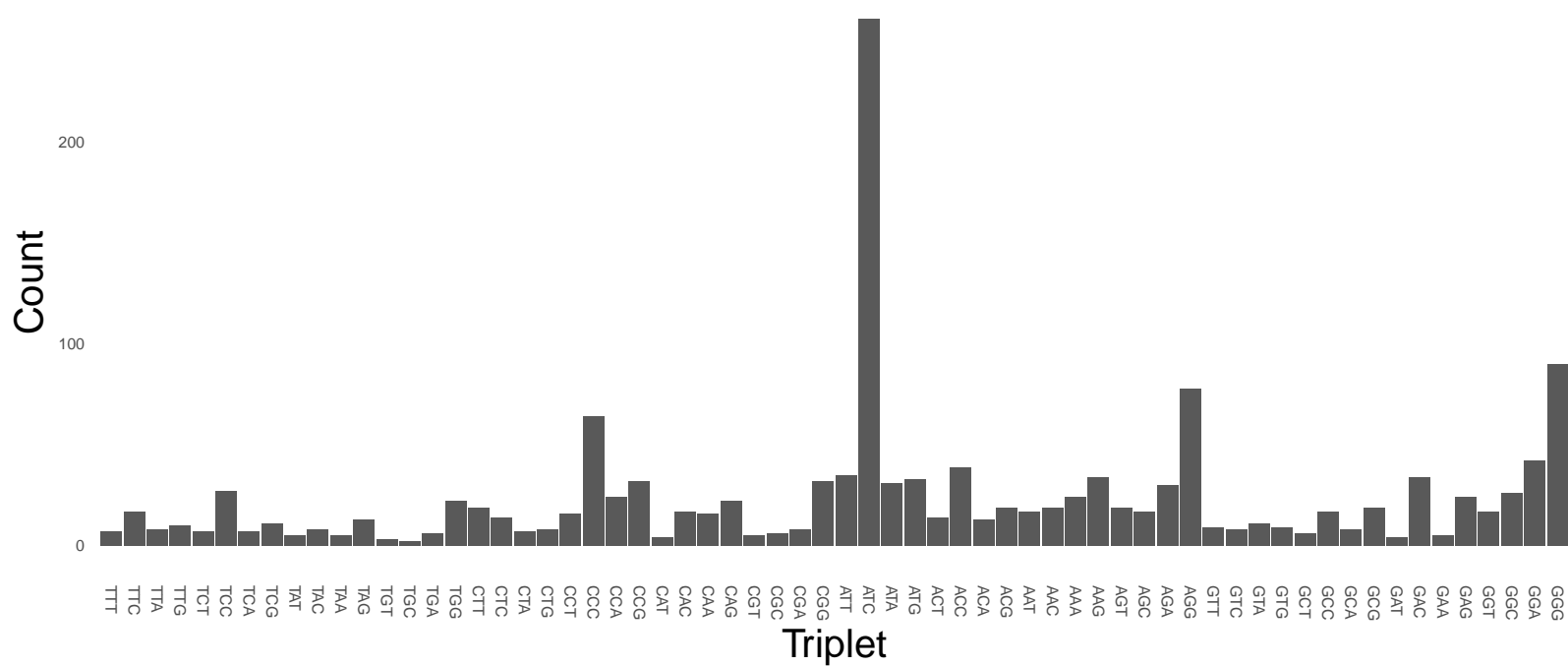
Gene TRBV7-1\*ap01\_G291C\_T296C



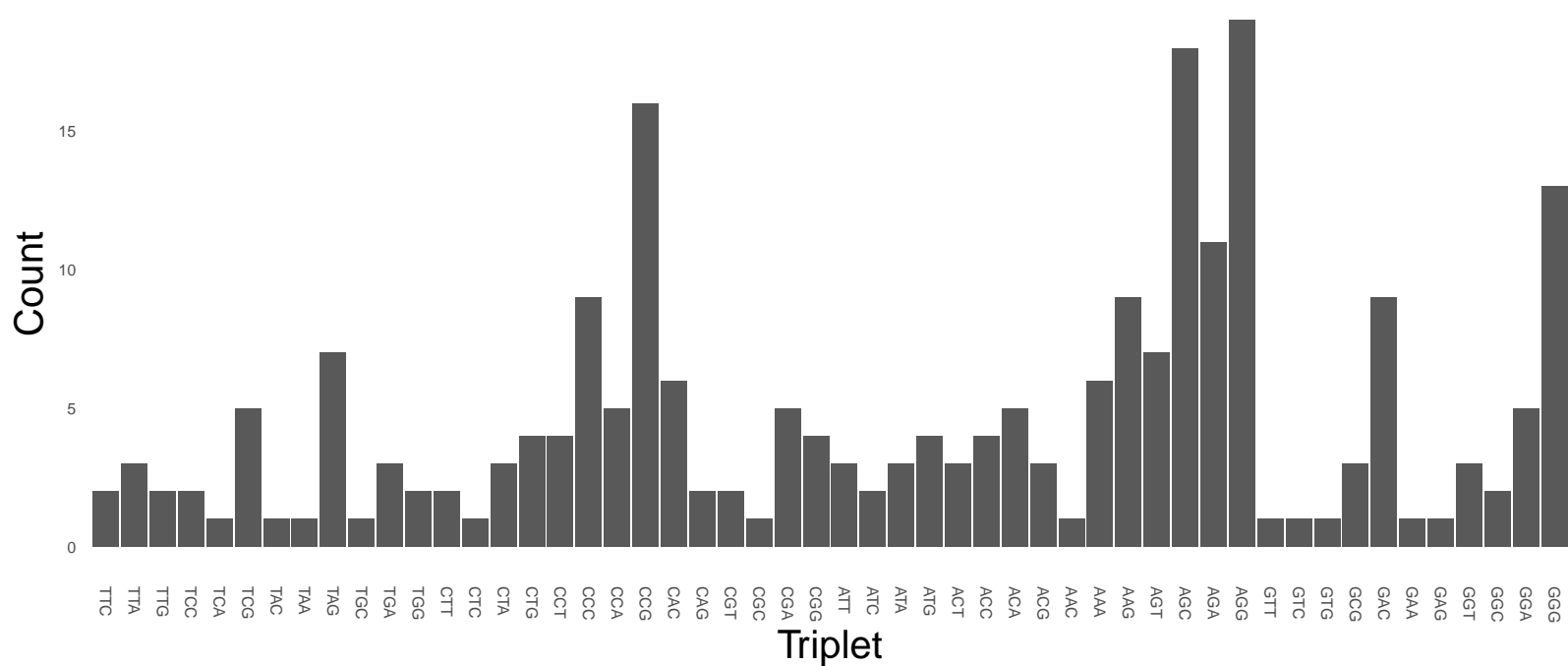
Gene TRBV7-7\*ap01\_C315T



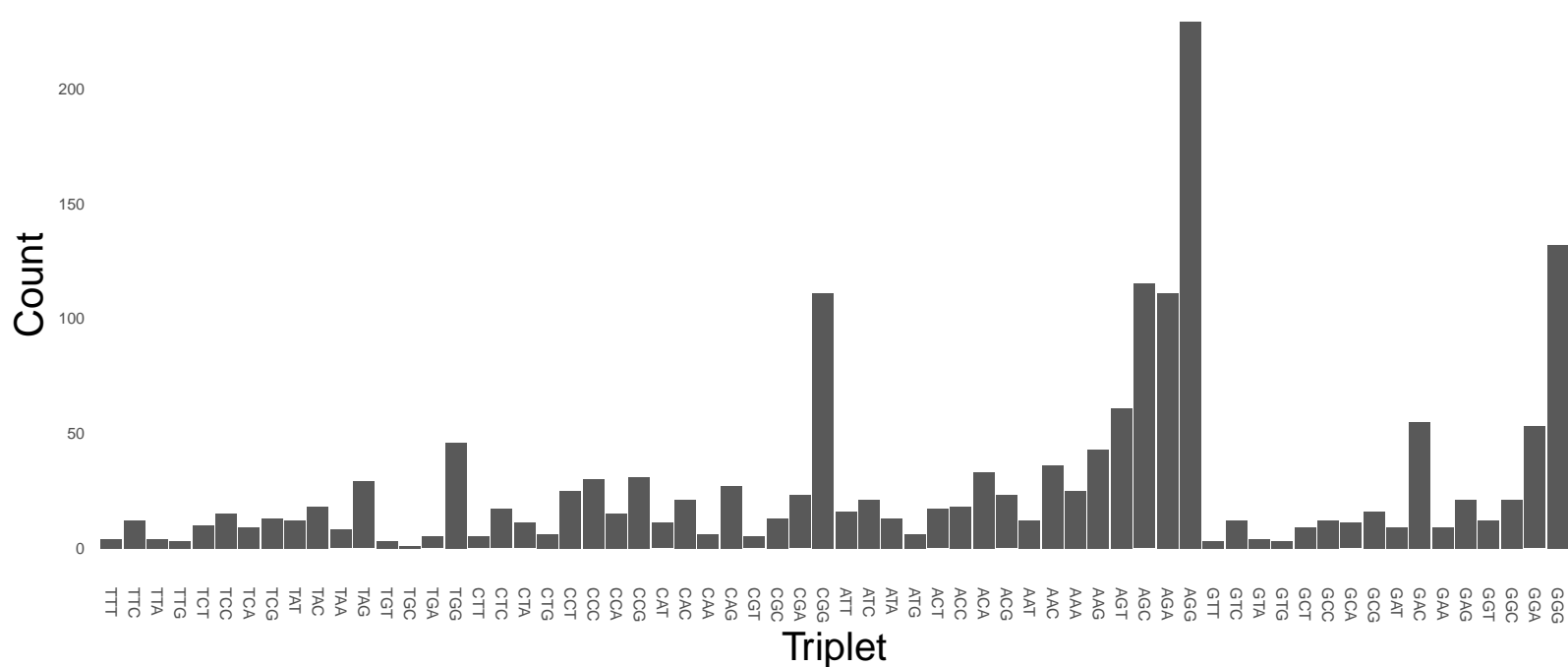
TRBV23–1\*ap01\_T304C– Final 3 nucleotides as a triplet



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

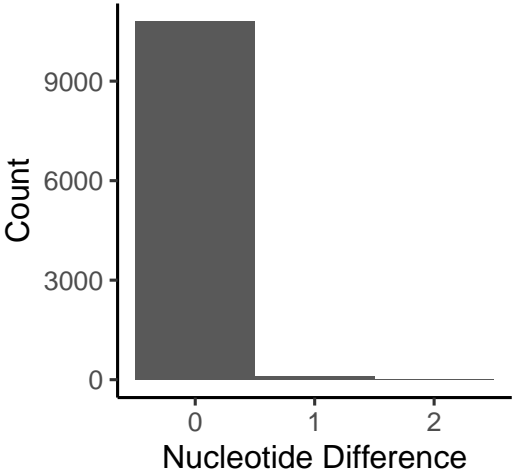


TRBV7–7\*ap01\_C315T– Final 3 nucleotides as a triplet



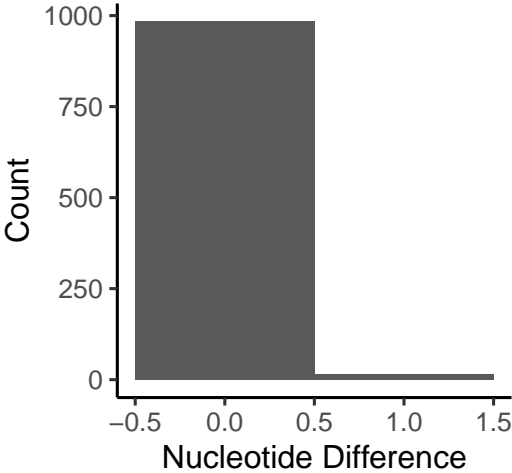
TRBV20-1\*ap01

10919 sequences assigned  
10801 (98.9%) exact matches, in which:  
10647 unique CDR3  
14 unique J



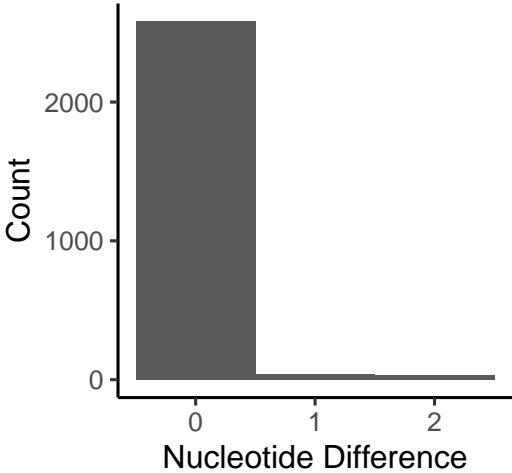
TRBV10-2\*ap01

999 sequences assigned  
984 (98.5%) exact matches, in which:  
969 unique CDR3  
13 unique J



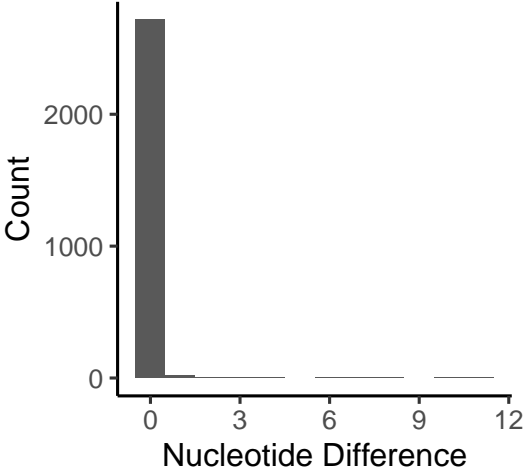
TRBV13\*ap01

2654 sequences assigned  
2581 (97.2%) exact matches, in which:  
2502 unique CDR3  
13 unique J



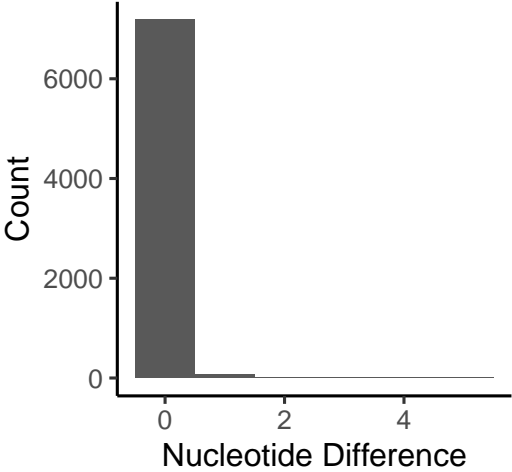
TRBV10-1\*ap01

2747 sequences assigned  
2717 (98.9%) exact matches, in which:  
2634 unique CDR3  
13 unique J



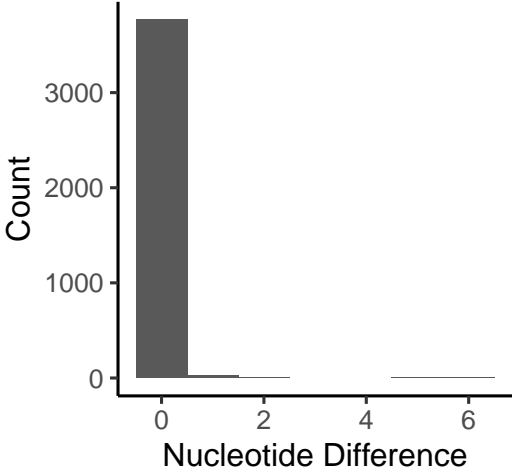
TRBV10-3\*ap01

7272 sequences assigned  
7184 (98.8%) exact matches, in which:  
7039 unique CDR3  
13 unique J



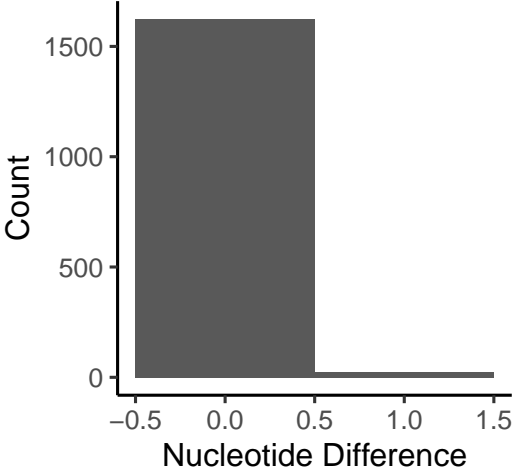
TRBV14\*ap01

3796 sequences assigned  
3766 (99.2%) exact matches, in which:  
3711 unique CDR3  
13 unique J



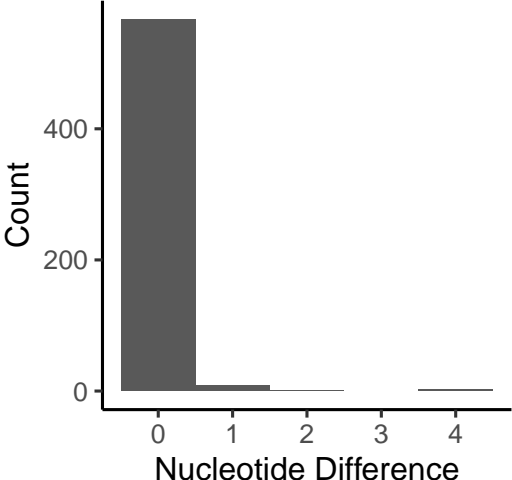
TRBV20-1\*ap02

1648 sequences assigned  
1624 (98.5%) exact matches, in which:  
1598 unique CDR3  
13 unique J



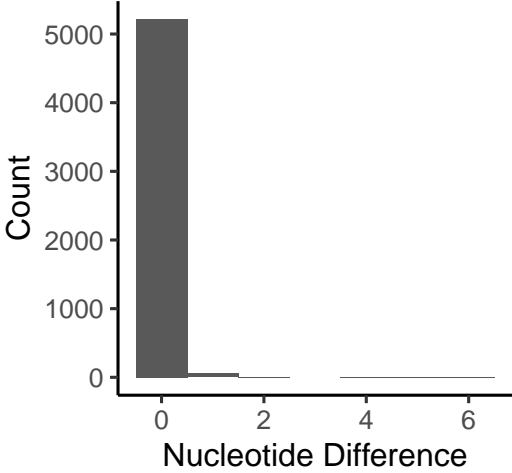
TRBV1\*ap01

578 sequences assigned  
567 (98.1%) exact matches, in which:  
556 unique CDR3  
13 unique J



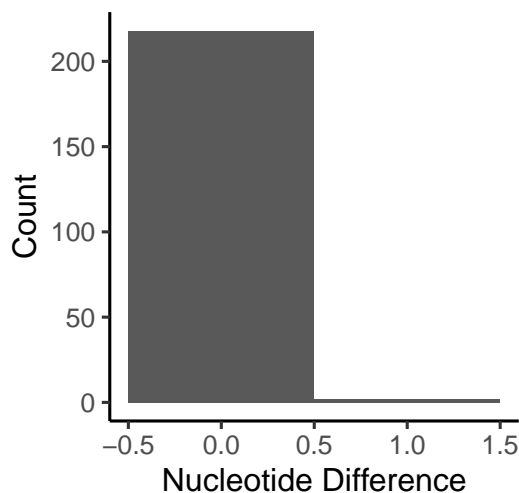
TRBV15\*ap02

5282 sequences assigned  
5218 (98.8%) exact matches, in which:  
5093 unique CDR3  
13 unique J



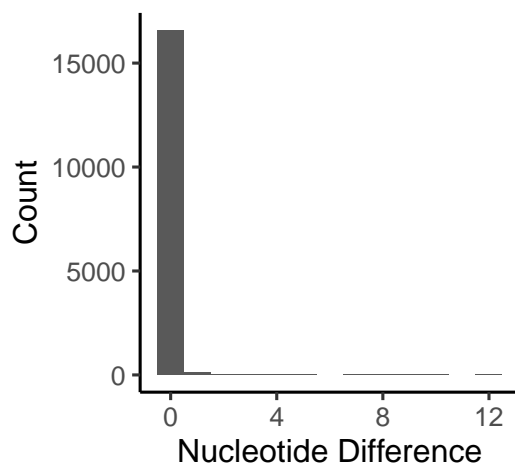
### TRBV16\*ap01

220 sequences assigned  
218 (99.1%) exact matches, in which:  
215 unique CDR3  
13 unique J



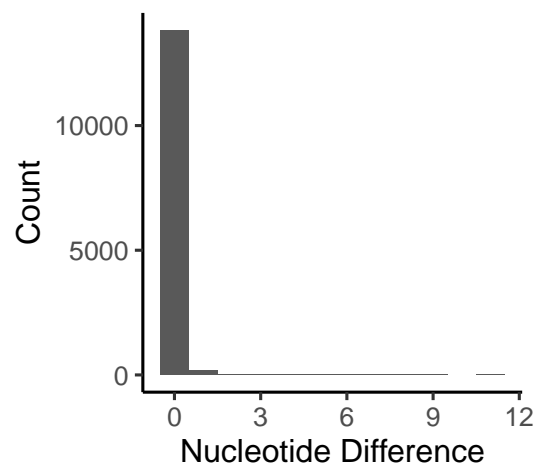
### TRBV19\*ap01

16742 sequences assigned  
16585 (99.1%) exact matches, in which:  
16411 unique CDR3  
13 unique J



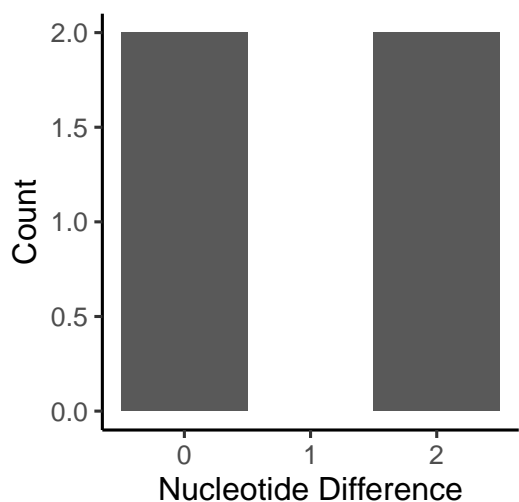
### TRBV27\*ap01

14011 sequences assigned  
13826 (98.7%) exact matches, in which:  
13457 unique CDR3  
13 unique J



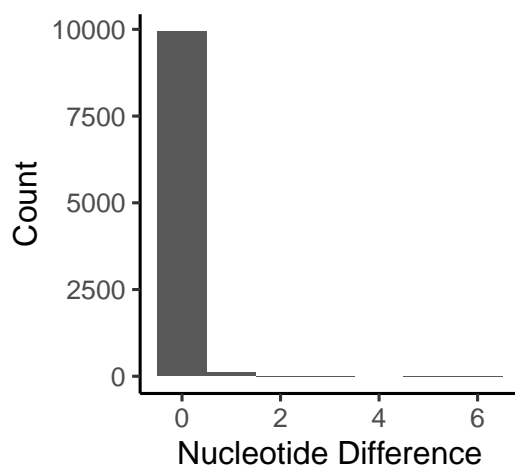
### TRBV17\*ap01

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



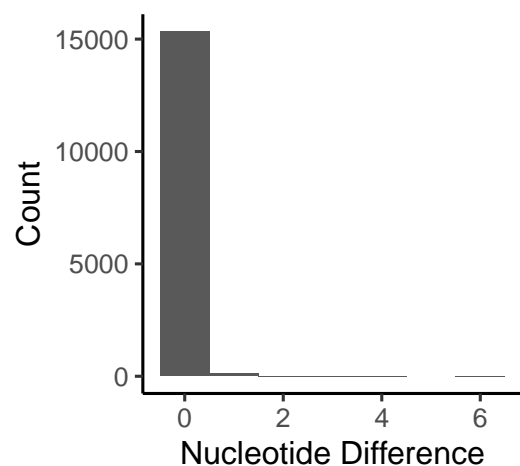
### TRBV2\*ap01

10049 sequences assigned  
9939 (98.9%) exact matches, in which:  
9752 unique CDR3  
13 unique J



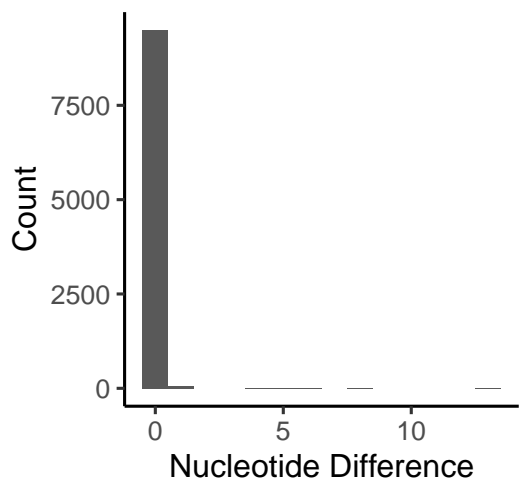
### TRBV28\*ap01

15480 sequences assigned  
15340 (99.1%) exact matches, in which:  
15034 unique CDR3  
13 unique J



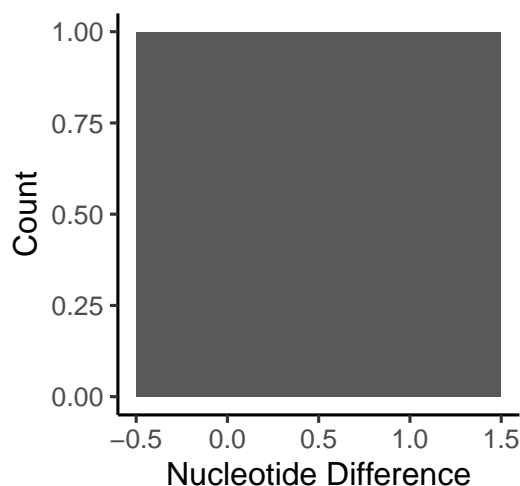
### TRBV18\*ap01

9564 sequences assigned  
9495 (99.3%) exact matches, in which:  
9397 unique CDR3  
13 unique J



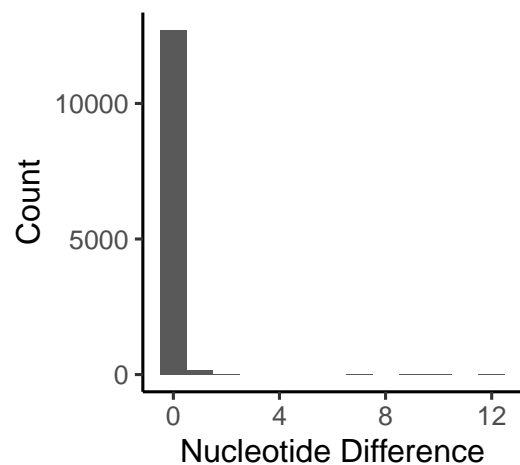
### TRBV26\*ap01

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



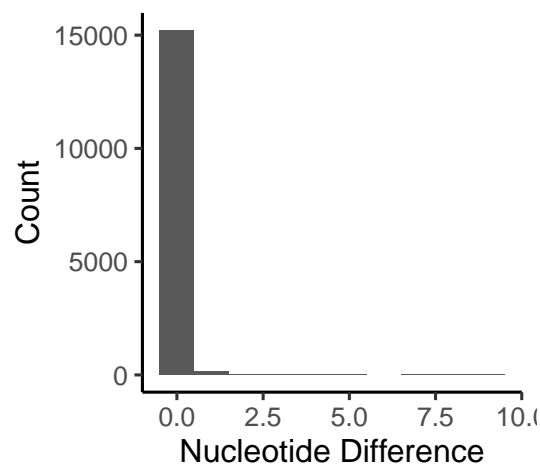
### TRBV30\*ap01

12906 sequences assigned  
12717 (98.5%) exact matches, in which:  
12511 unique CDR3  
13 unique J



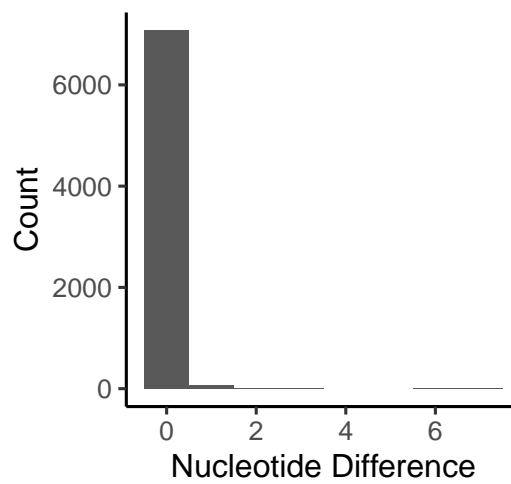
### TRBV9\*ap01

15400 sequences assigned  
15220 (98.8%) exact matches, in which:  
14938 unique CDR3  
13 unique J



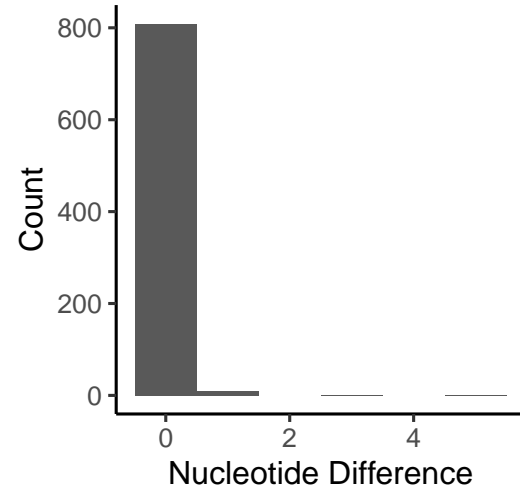
### TRBV11-2\*ap01

7154 sequences assigned  
7076 (98.9%) exact matches, in which:  
6946 unique CDR3  
13 unique J



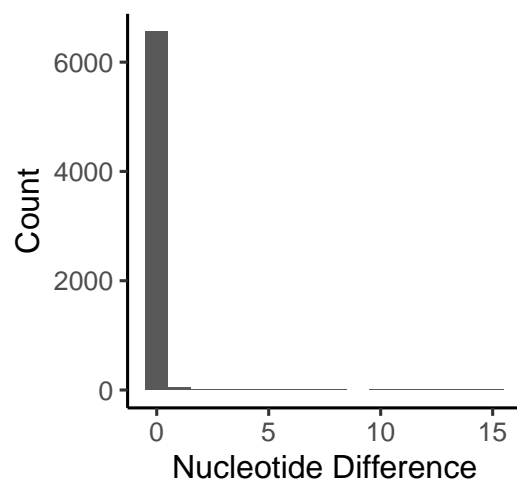
### TRBV12-2\*ap01

820 sequences assigned  
809 (98.7%) exact matches, in which:  
793 unique CDR3  
13 unique J



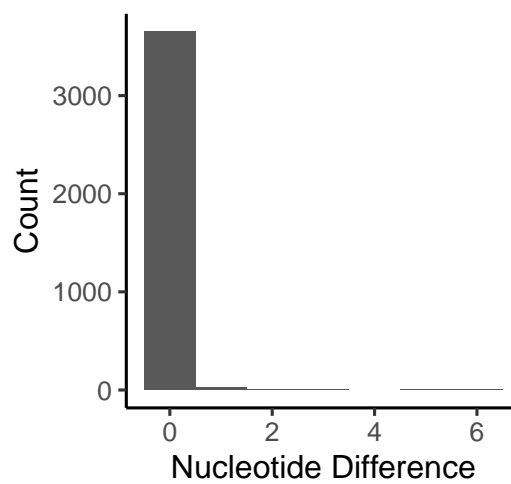
### TRBV21-1\*ap01

6650 sequences assigned  
6557 (98.6%) exact matches, in which:  
6470 unique CDR3  
13 unique J



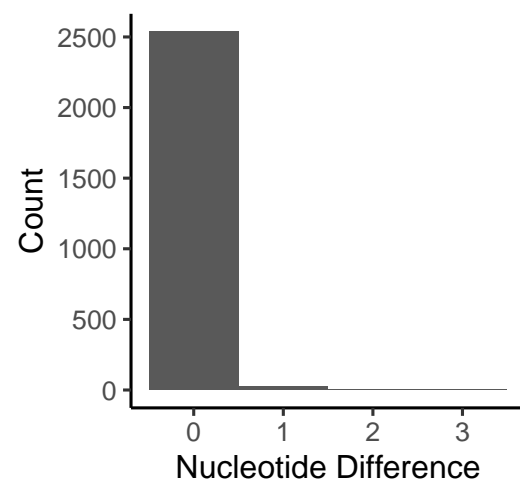
### TRBV11-3\*ap01

3685 sequences assigned  
3651 (99.1%) exact matches, in which:  
3595 unique CDR3  
13 unique J



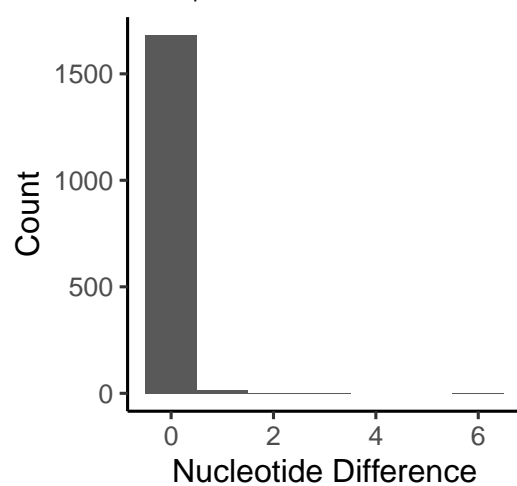
### TRBV12-5\*ap01

2565 sequences assigned  
2537 (98.9%) exact matches, in which:  
2486 unique CDR3  
13 unique J



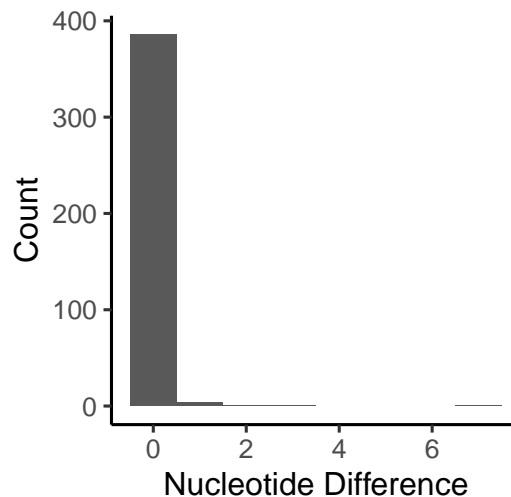
### TRBV11-1\*ap01

1702 sequences assigned  
1682 (98.8%) exact matches, in which:  
1652 unique CDR3  
13 unique J



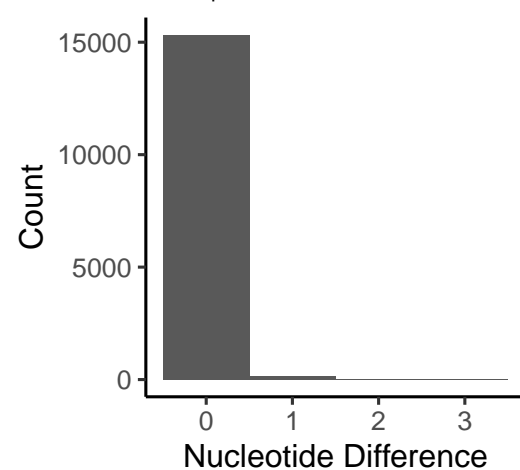
### TRBV12-1\*ap01

393 sequences assigned  
386 (98.2%) exact matches, in which:  
380 unique CDR3  
13 unique J



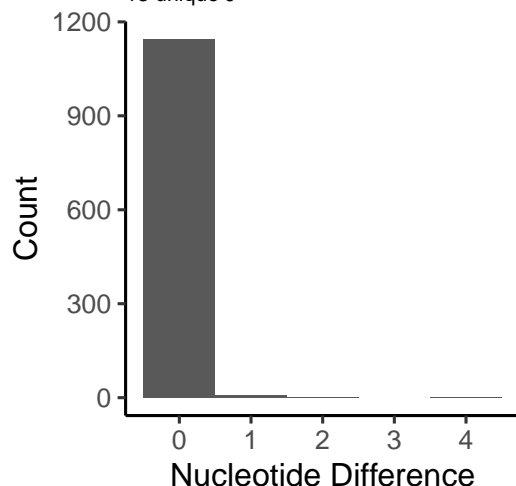
### TRBV12-34\*ap01

15497 sequences assigned  
15330 (98.9%) exact matches, in which:  
15036 unique CDR3  
13 unique J



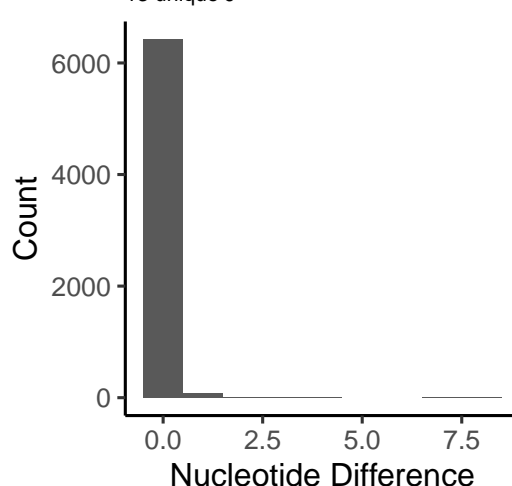
### TRBV23-1\*ap01

1155 sequences assigned  
1144 (99%) exact matches, in which:  
1122 unique CDR3  
13 unique J



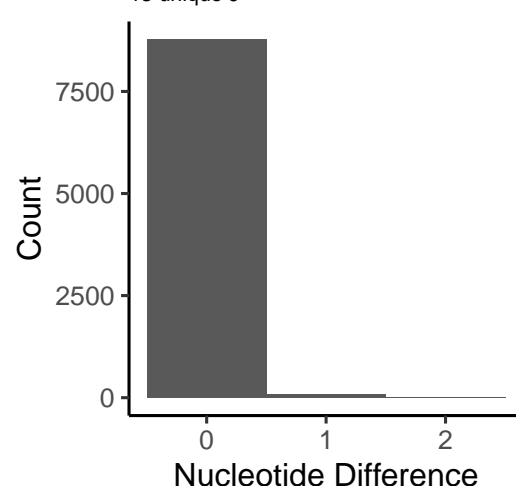
### TRBV24-1\*ap01

6520 sequences assigned  
6422 (98.5%) exact matches, in which:  
6321 unique CDR3  
13 unique J



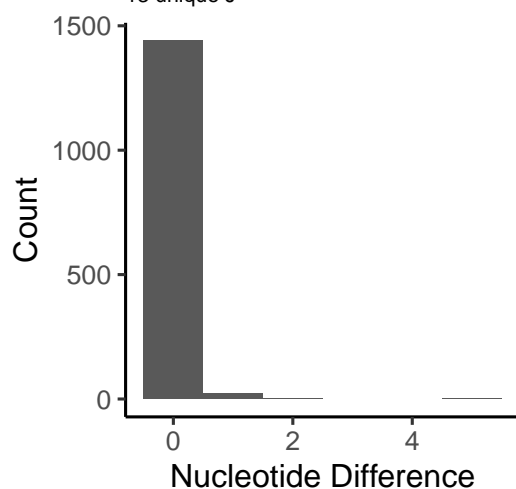
### TRBV4-3\*ap01

8861 sequences assigned  
8774 (99%) exact matches, in which:  
8583 unique CDR3  
13 unique J



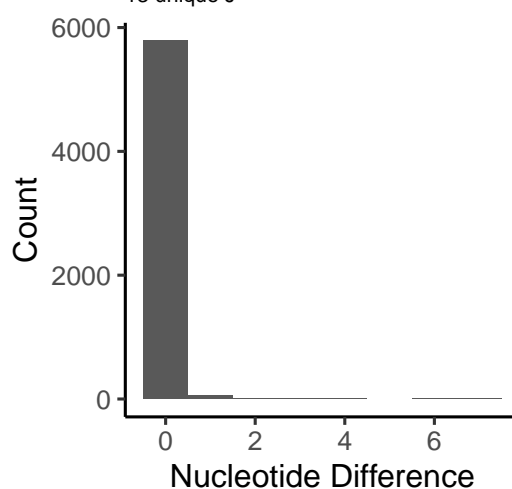
### TRBV23-1\*ap01\_T304C

1464 sequences assigned  
1440 (98.4%) exact matches, in which:  
1412 unique CDR3  
13 unique J



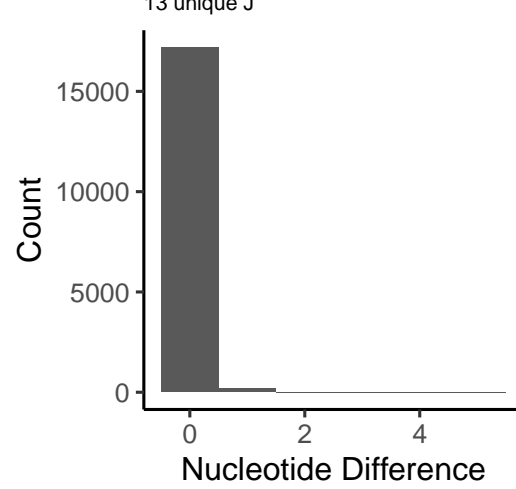
### TRBV4-1\*ap01

5857 sequences assigned  
5787 (98.8%) exact matches, in which:  
5641 unique CDR3  
13 unique J



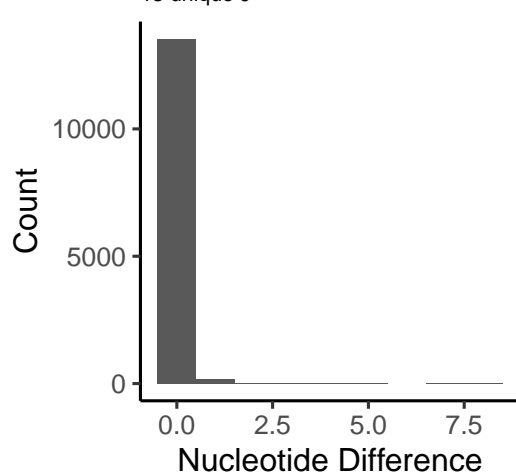
### TRBV5-1\*ap01

17377 sequences assigned  
17188 (98.9%) exact matches, in which:  
16749 unique CDR3  
13 unique J



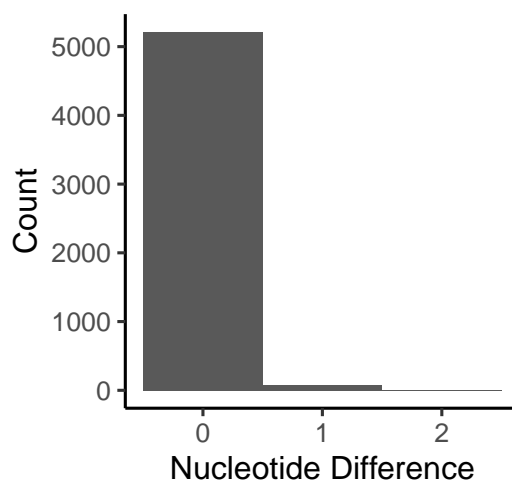
### TRBV3-12\*ap01

13751 sequences assigned  
13539 (98.5%) exact matches, in which:  
13250 unique CDR3  
13 unique J



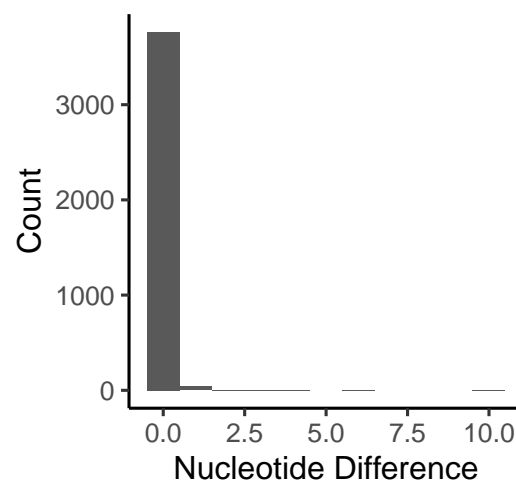
### TRBV4-2\*ap01

5295 sequences assigned  
5212 (98.4%) exact matches, in which:  
5107 unique CDR3  
13 unique J



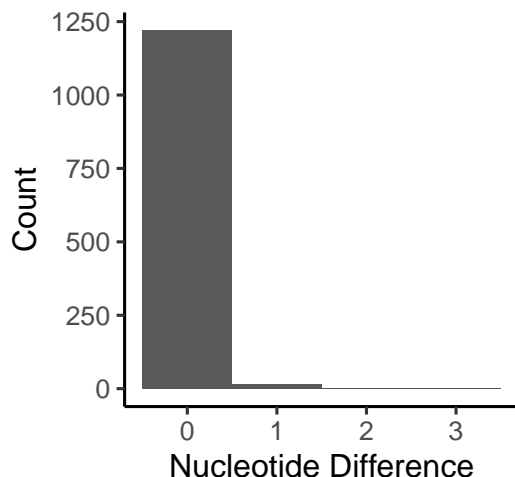
### TRBV25-1\*ap01

3814 sequences assigned  
3763 (98.7%) exact matches, in which:  
3675 unique CDR3  
13 unique J



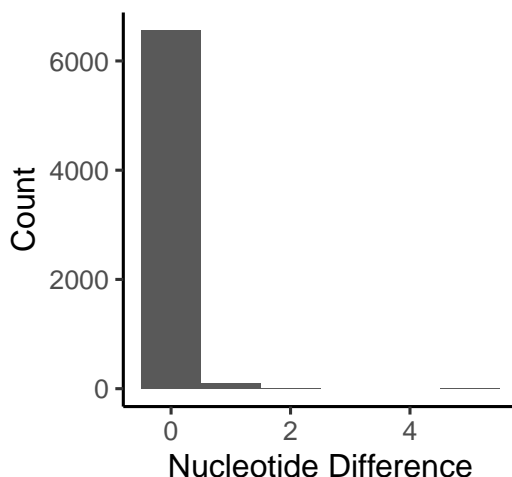
### TRBV5-3\*ap01

1243 sequences assigned  
1220 (98.1%) exact matches, in which:  
1206 unique CDR3  
13 unique J



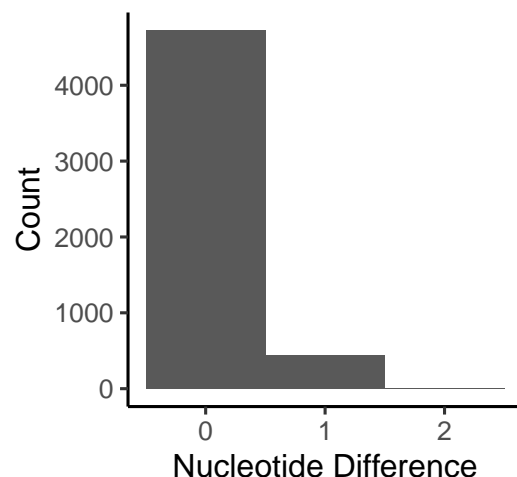
### TRBV5-6\*ap01

6657 sequences assigned  
6559 (98.5%) exact matches, in which:  
6374 unique CDR3  
13 unique J



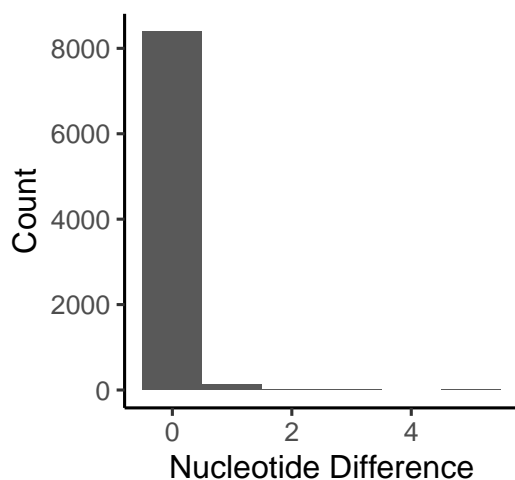
### TRBV6-1\*ap01

5167 sequences assigned  
4723 (91.4%) exact matches, in which:  
4615 unique CDR3  
13 unique J



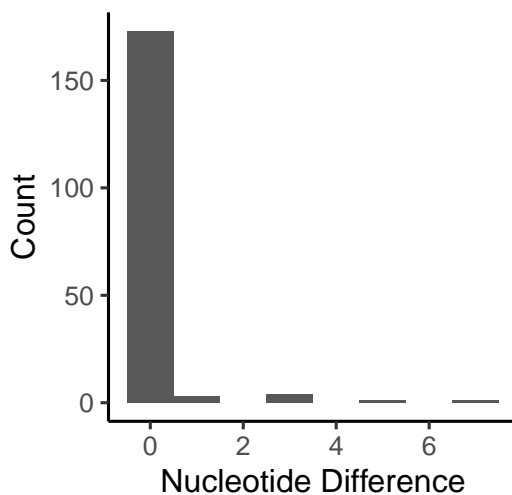
### TRBV5-4\*ap01

8528 sequences assigned  
8389 (98.4%) exact matches, in which:  
8199 unique CDR3  
13 unique J



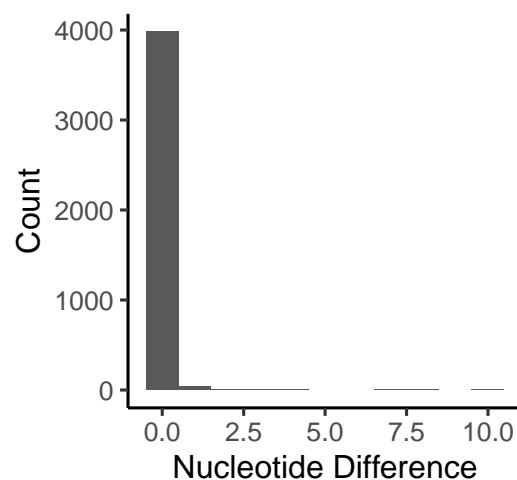
### TRBV5-7\*ap01

182 sequences assigned  
173 (95.1%) exact matches, in which:  
170 unique CDR3  
13 unique J



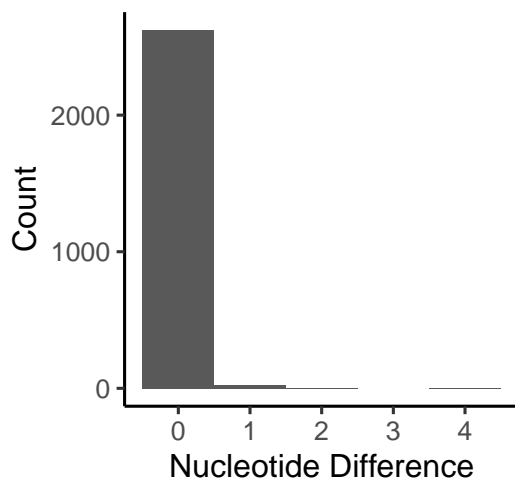
### TRBV6-4\*ap01

4043 sequences assigned  
3981 (98.5%) exact matches, in which:  
3914 unique CDR3  
13 unique J



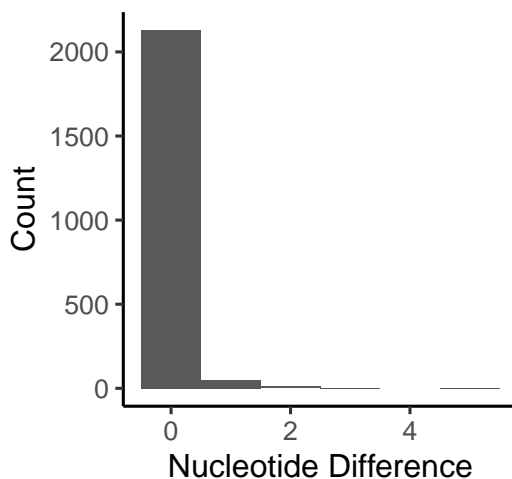
### TRBV5-5\*ap01

2651 sequences assigned  
2623 (98.9%) exact matches, in which:  
2598 unique CDR3  
13 unique J



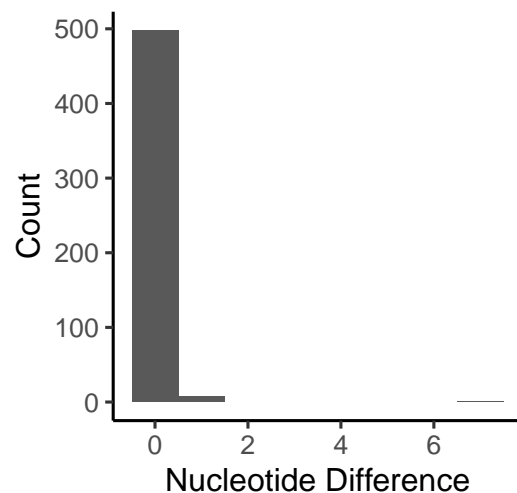
### TRBV5-8\*ap01

2191 sequences assigned  
2130 (97.2%) exact matches, in which:  
2091 unique CDR3  
13 unique J



### TRBV6-7\*ap01

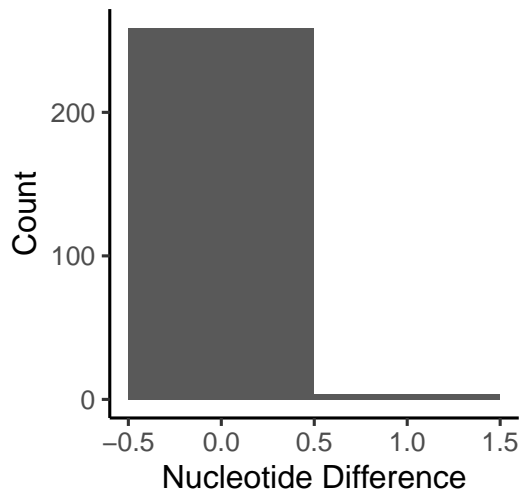
506 sequences assigned  
498 (98.4%) exact matches, in which:  
481 unique CDR3  
13 unique J





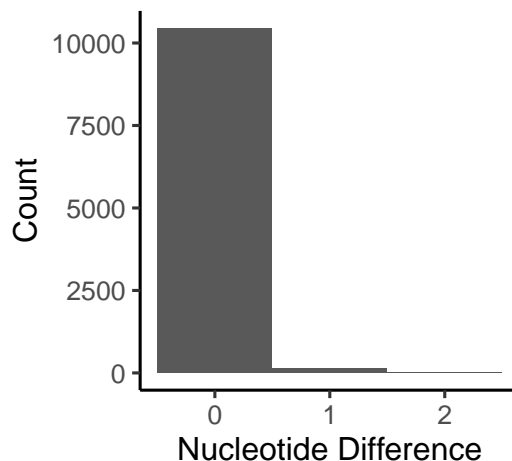
### TRBV6-8\*ap01

263 sequences assigned  
259 (98.5%) exact matches, in which:  
250 unique CDR3  
13 unique J



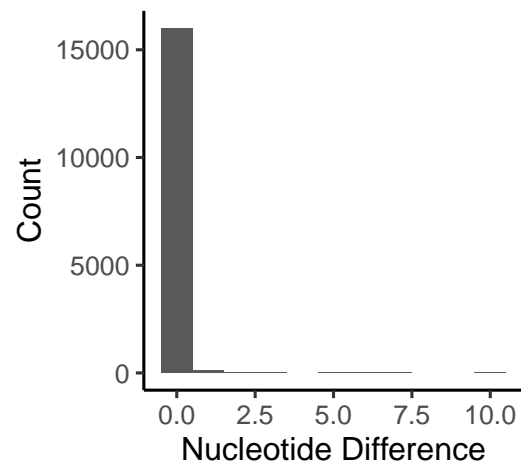
### TRBV6-56\*ap01

10581 sequences assigned  
10450 (98.8%) exact matches, in which:  
10175 unique CDR3  
13 unique J



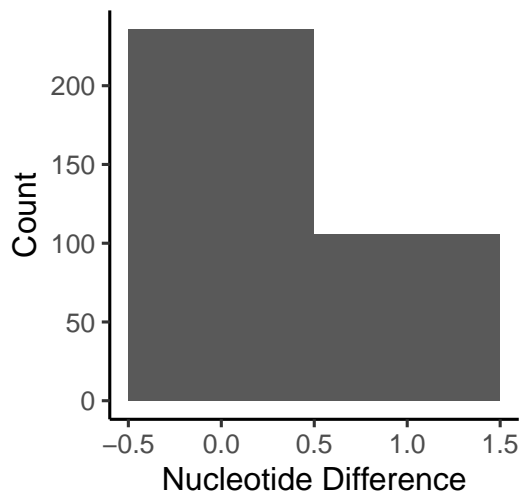
### TRBV7-2\*ap01

16135 sequences assigned  
16004 (99.2%) exact matches, in which:  
15752 unique CDR3  
13 unique J



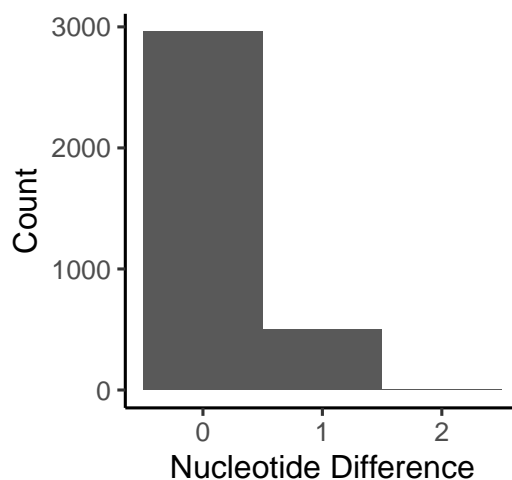
### TRBV6-9\*ap01

342 sequences assigned  
236 (69%) exact matches, in which:  
228 unique CDR3  
13 unique J



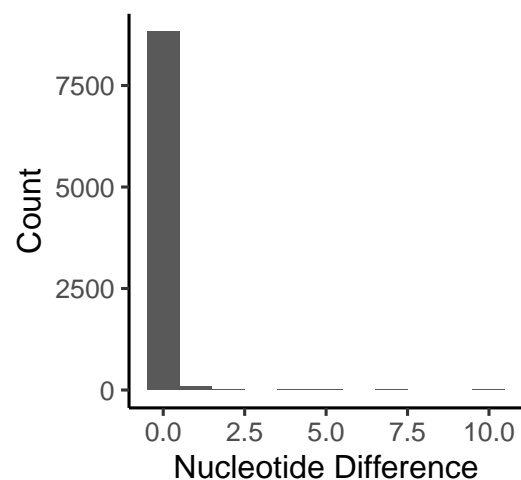
### TRBV6-56\*ap02

3467 sequences assigned  
2960 (85.4%) exact matches, in which:  
2884 unique CDR3  
13 unique J



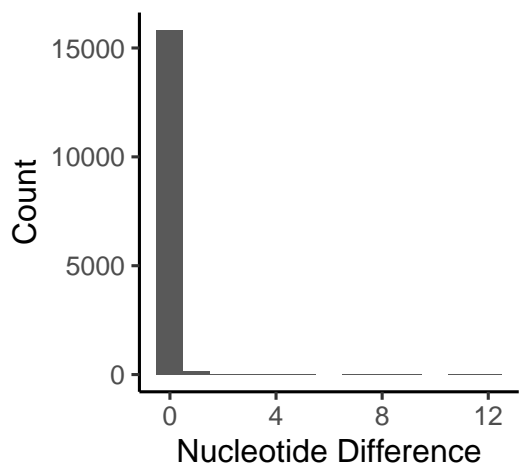
### TRBV7-3\*ap01

8909 sequences assigned  
8825 (99.1%) exact matches, in which:  
8701 unique CDR3  
13 unique J



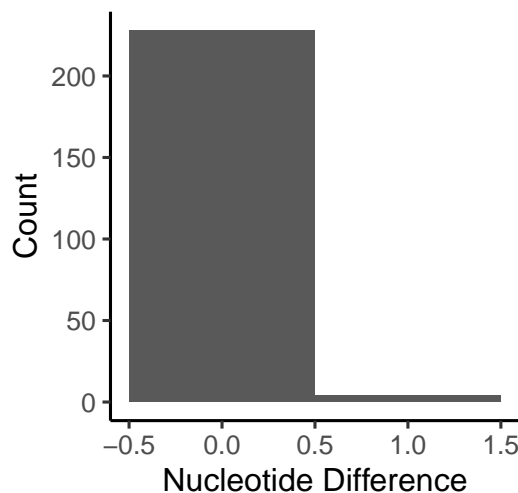
### TRBV6-23\*ap01

16022 sequences assigned  
15836 (98.8%) exact matches, in which:  
15396 unique CDR3  
13 unique J



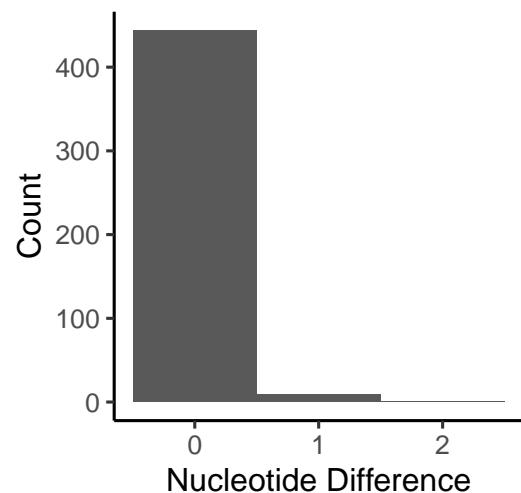
### TRBV7-1\*ap01\_G291C\_

232 sequences assigned  
228 (98.3%) exact matches, in which:  
226 unique CDR3  
13 unique J



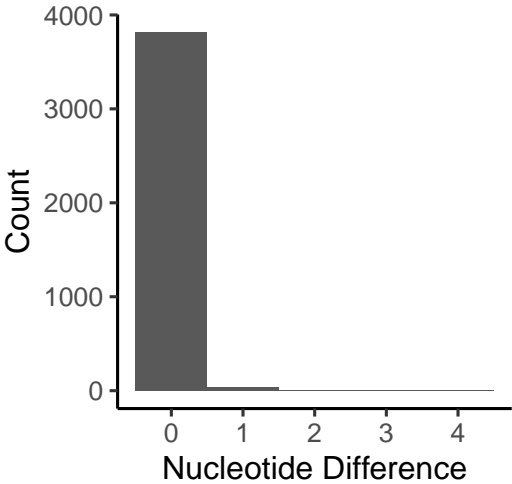
### TRBV7-4\*ap01

454 sequences assigned  
444 (97.8%) exact matches, in which:  
431 unique CDR3  
13 unique J



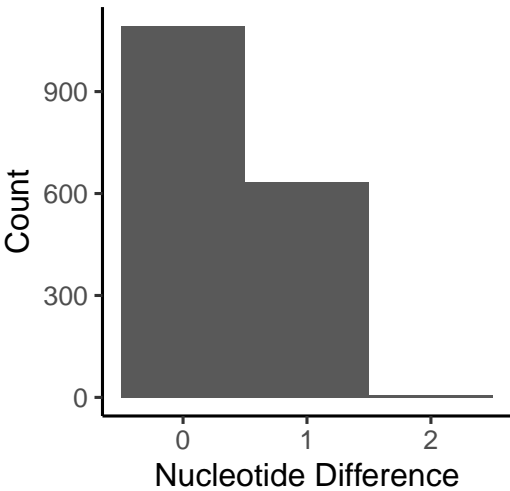
TRBV7-6\*ap01

3856 sequences assigned  
3814 (98.9%) exact matches, in which:  
3723 unique CDR3  
13 unique J



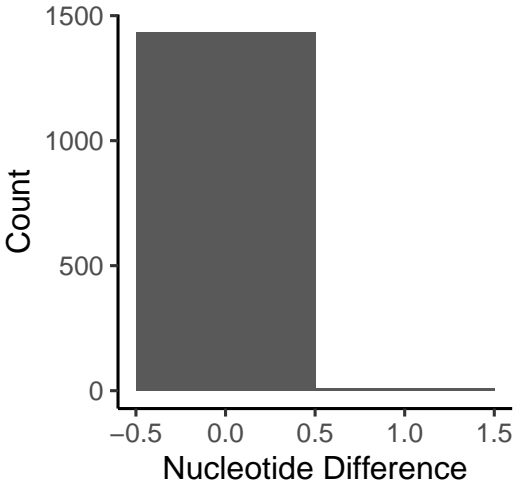
TRBV7-8\*ap03

1735 sequences assigned  
1094 (63.1%) exact matches, in which:  
1068 unique CDR3  
13 unique J



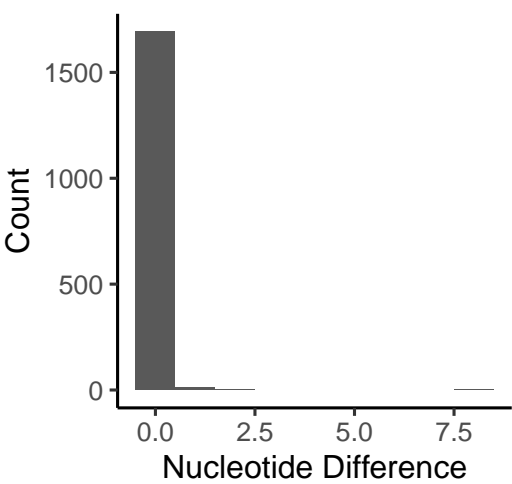
TRBV29-1\*ap02

1444 sequences assigned  
1433 (99.2%) exact matches, in which:  
1401 unique CDR3  
13 unique J



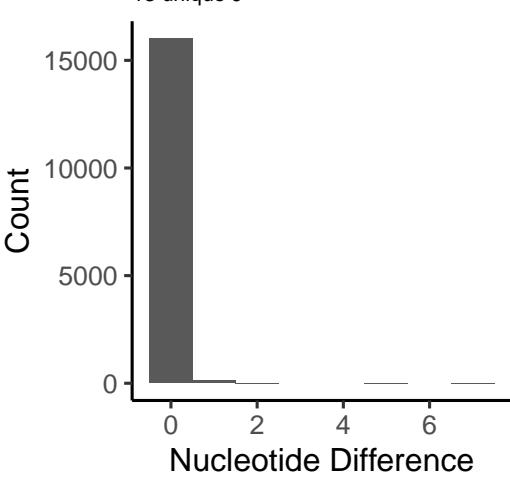
TRBV7-7\*ap01\_C315T

1710 sequences assigned  
1692 (98.9%) exact matches, in which:  
1666 unique CDR3  
13 unique J



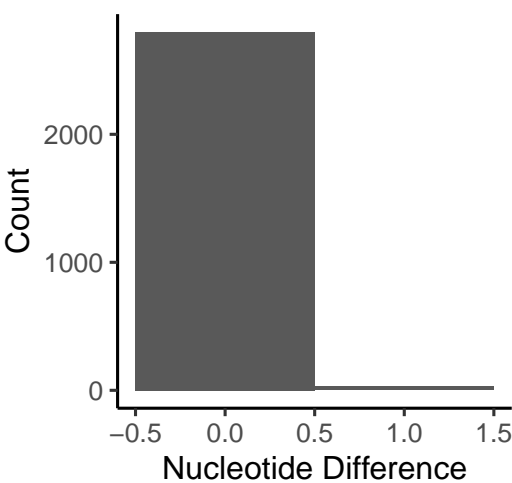
TRBV7-9\*ap01

16142 sequences assigned  
16017 (99.2%) exact matches, in which:  
15766 unique CDR3  
13 unique J



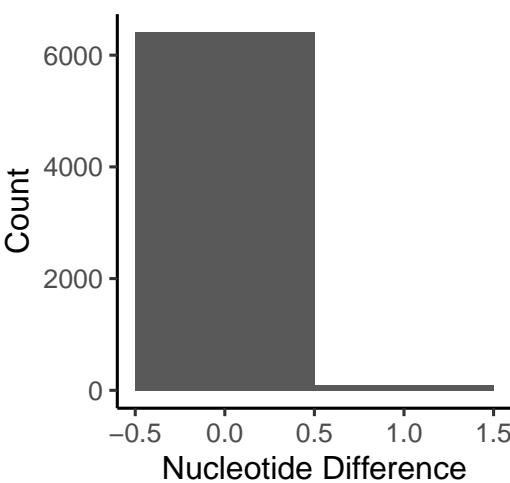
TRBV7-8\*ap01

2828 sequences assigned  
2799 (99%) exact matches, in which:  
2739 unique CDR3  
13 unique J

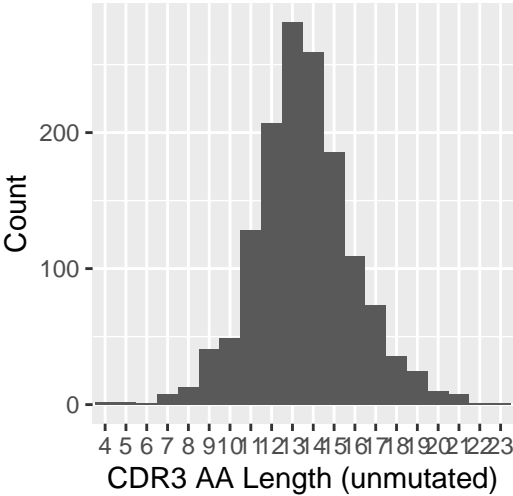


TRBV29-1\*ap01

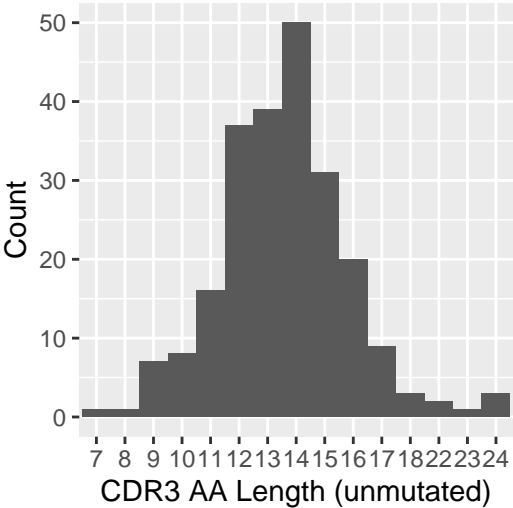
6513 sequences assigned  
6414 (98.5%) exact matches, in which:  
6271 unique CDR3  
13 unique J



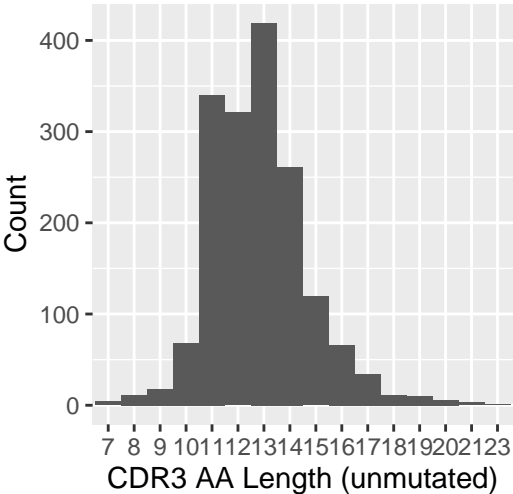
TRBV23-1\*ap01\_T304C



TRBV7-1\*ap01\_G291C\_T296C



TRBV7-7\*ap01\_C315T





[illegible]