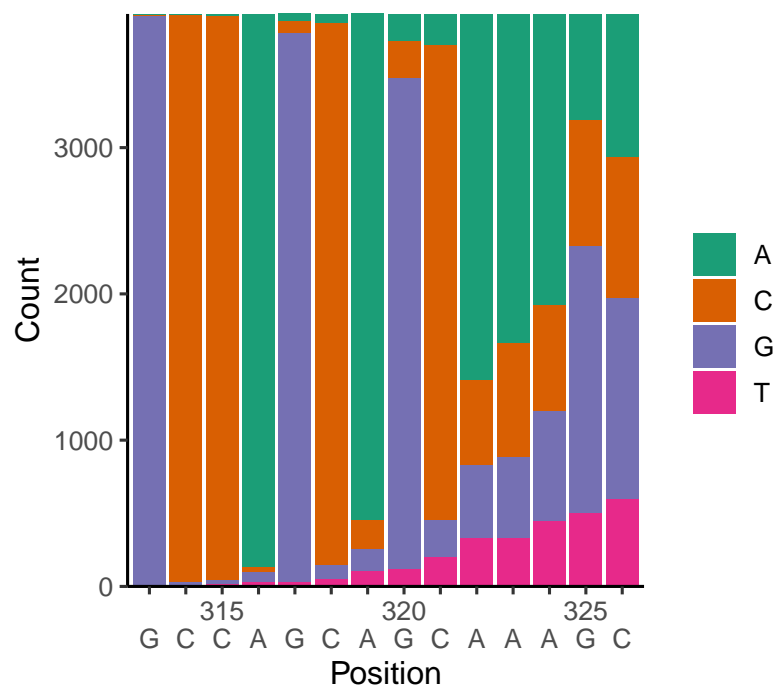
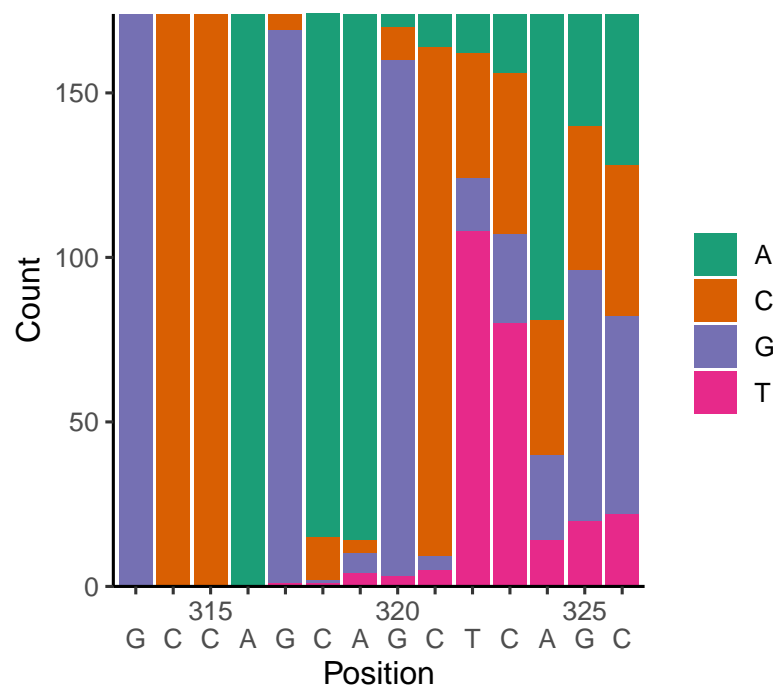


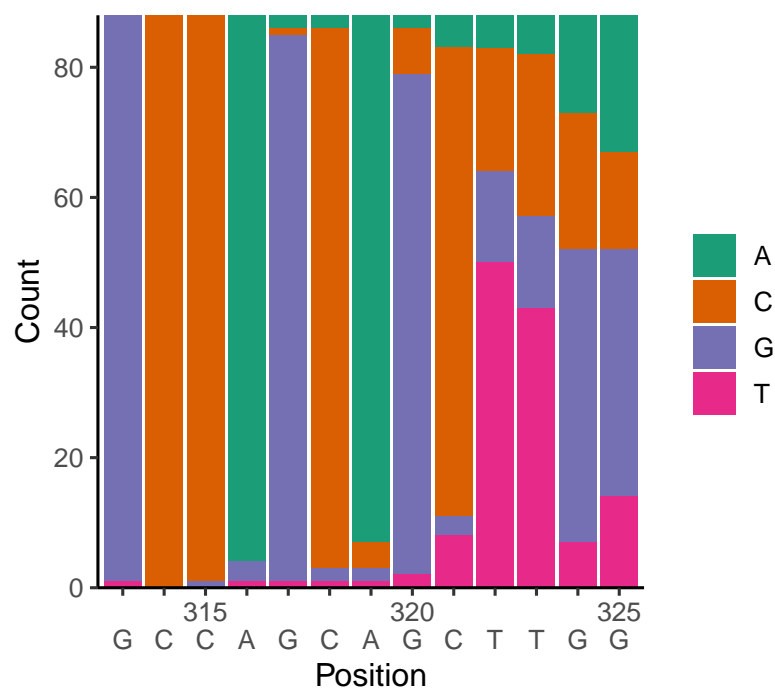
Gene TRBV21-1\*ap01\_T307C



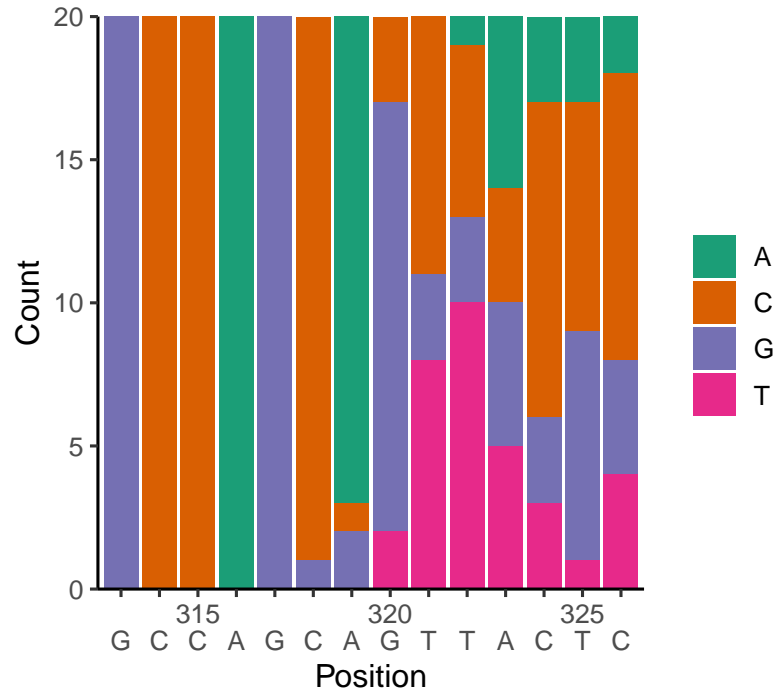
Gene TRBV7-1\*ap01\_G291C\_T296C



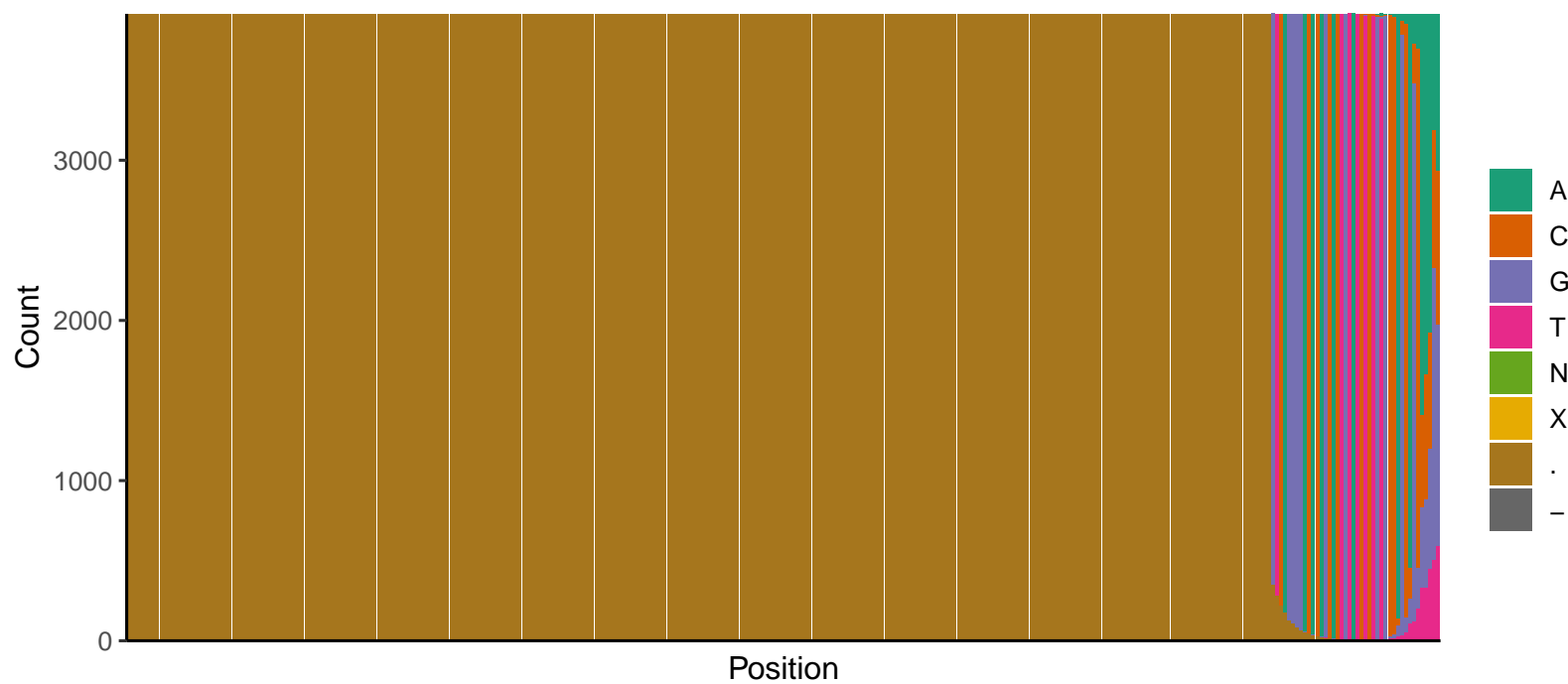
Gene TRBV5-7\*ap01\_G290A



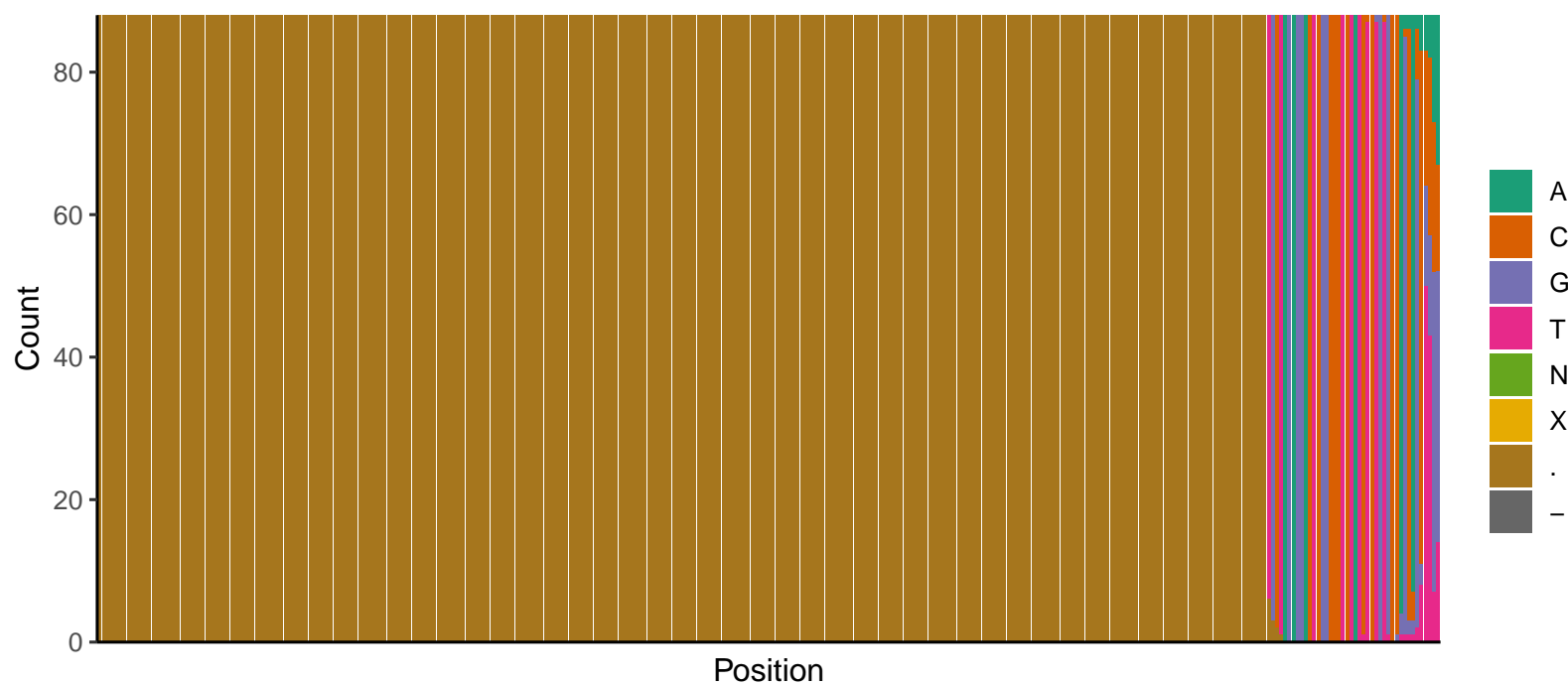
Gene TRBV6-8\*ap01\_A293G



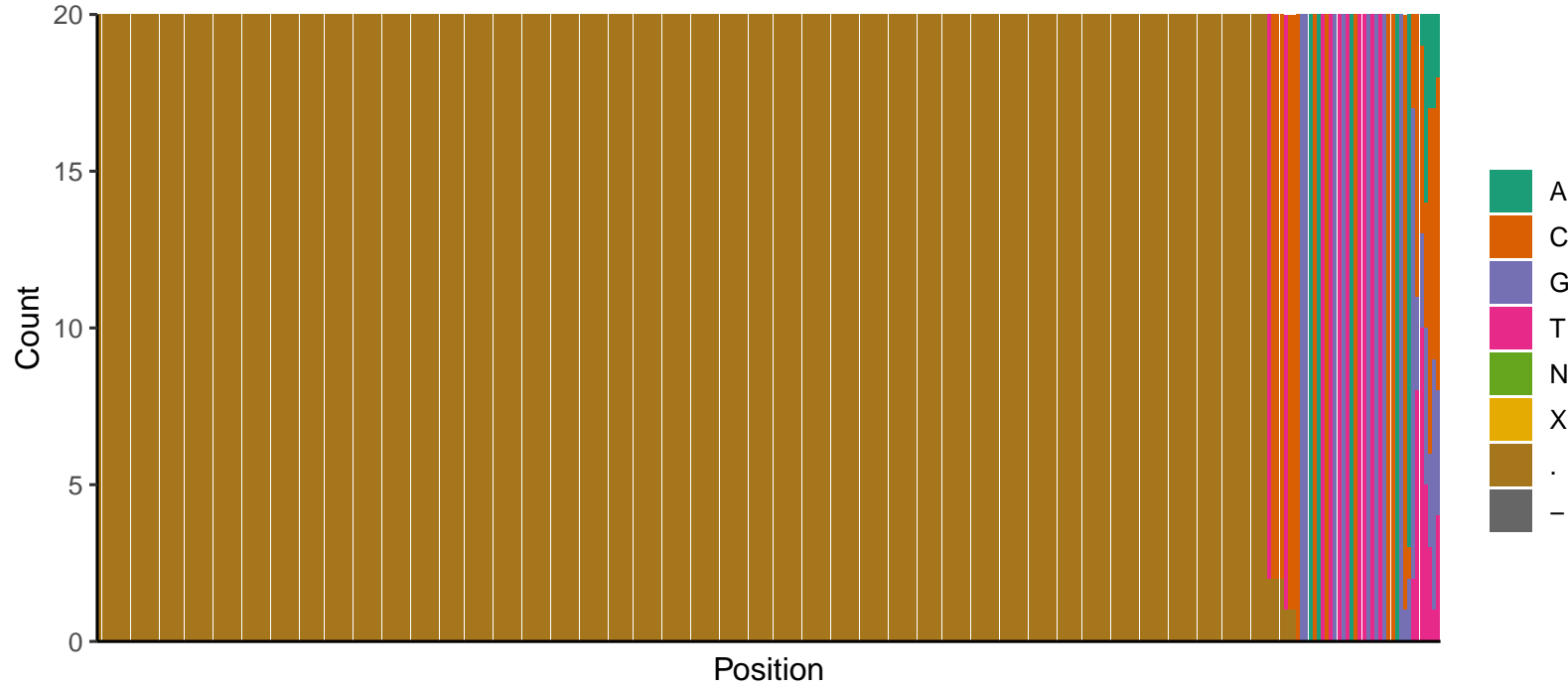
Gene TRBV21-1\*ap01\_T307C



Gene TRBV5-7\*ap01\_G290A



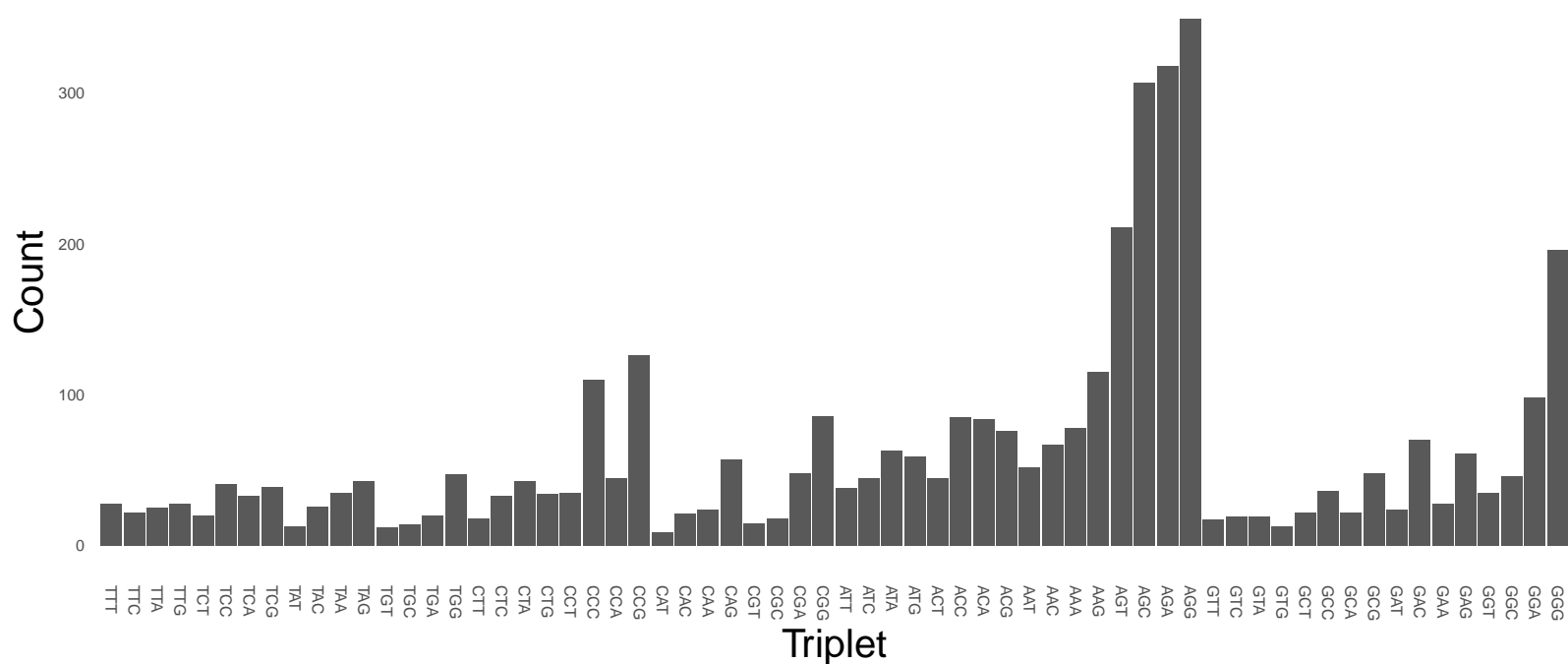
Gene TRBV6-8\*ap01\_A293G



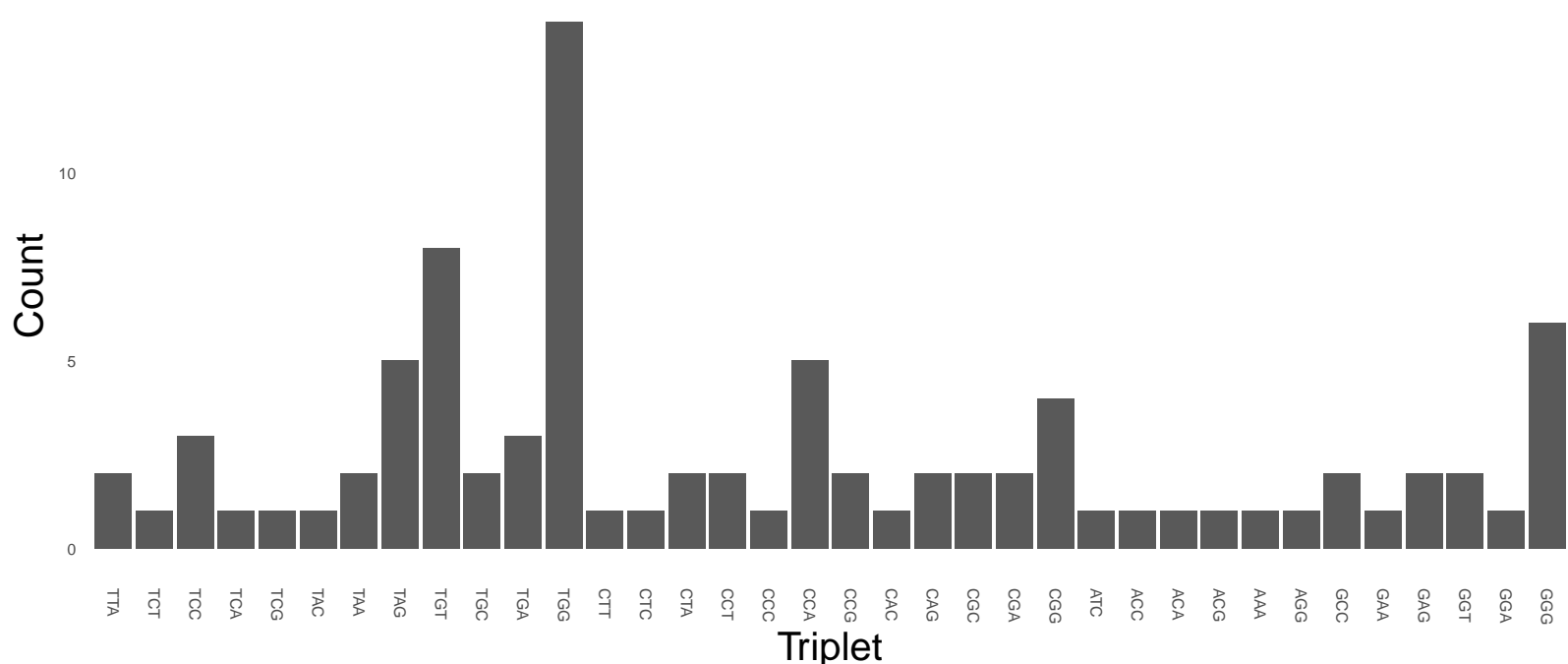
Gene TRBV7-1\*ap01\_G291C\_T296C



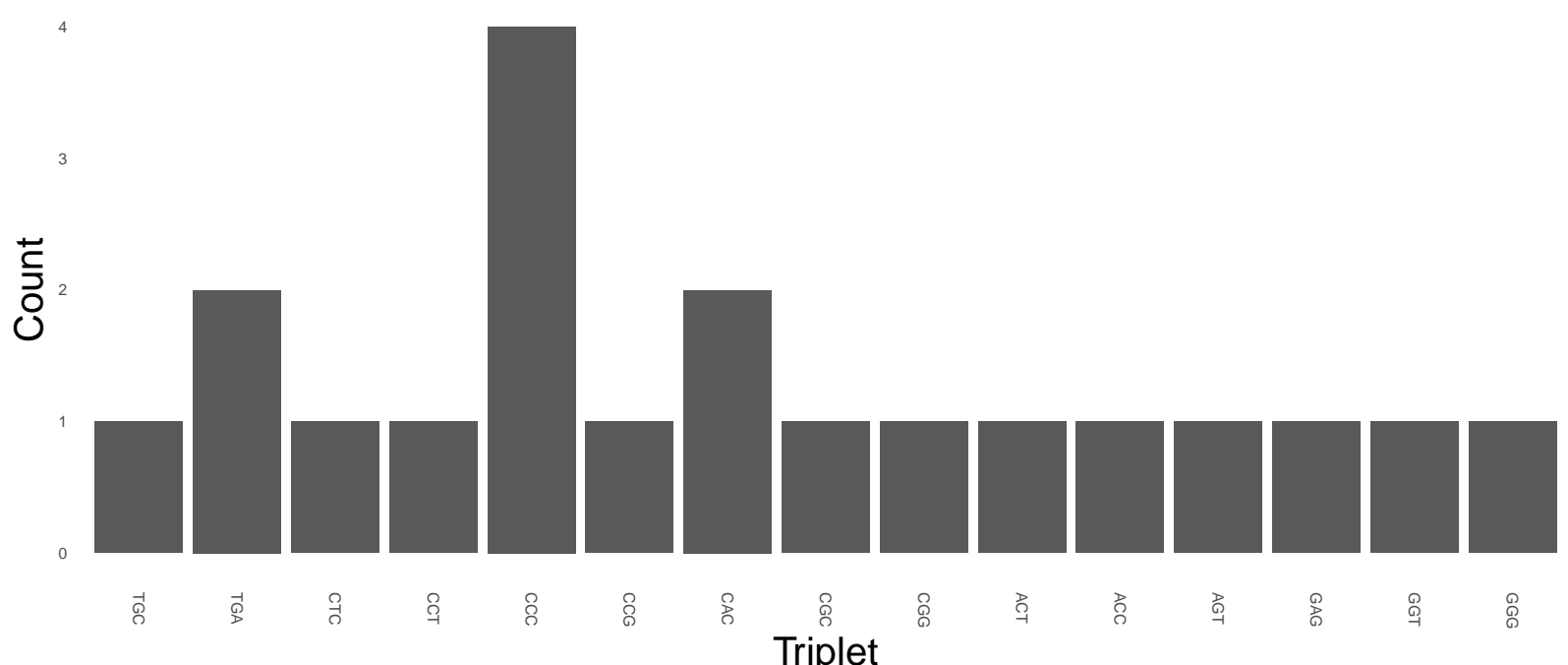
TRBV21–1\*ap01\_T307C– Final 3 nucleotides as a triplet



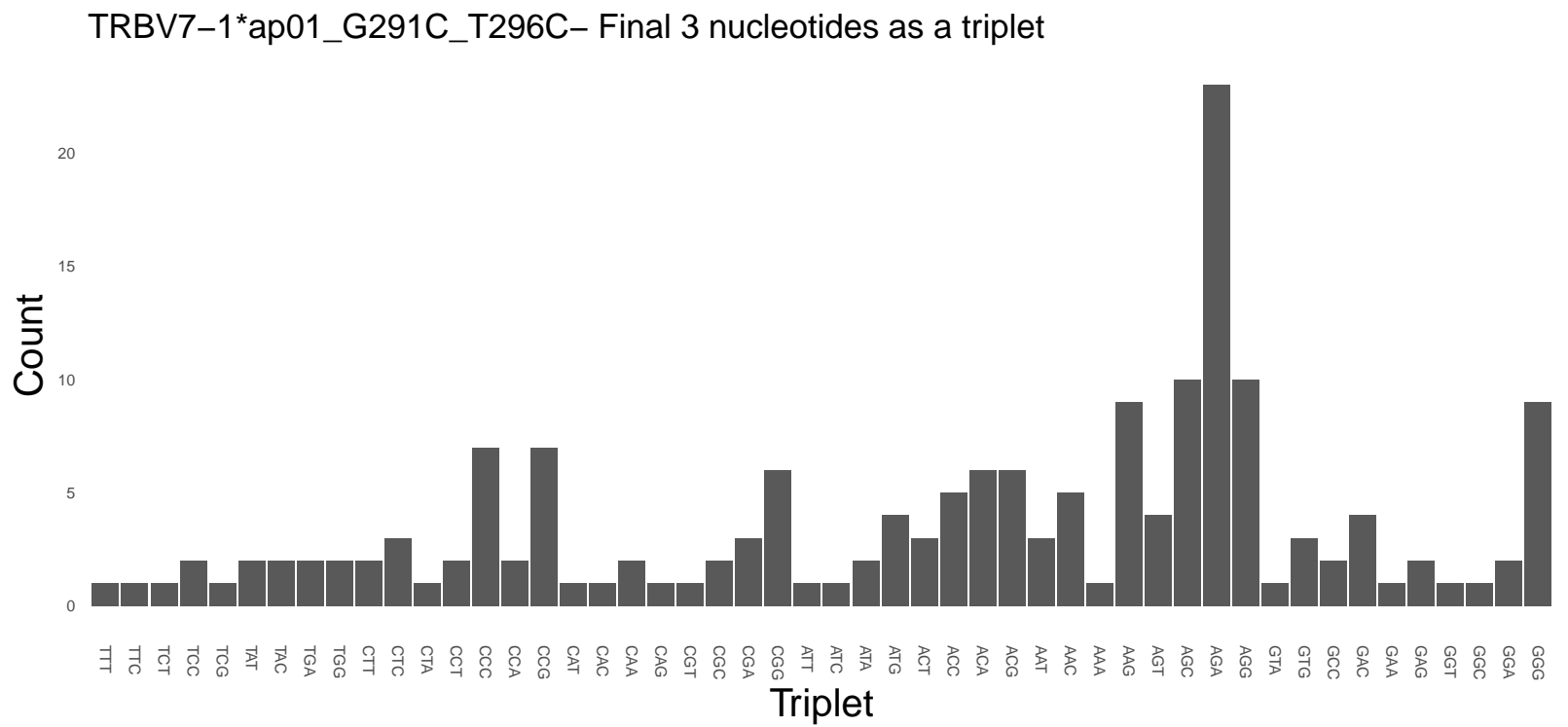
TRBV5–7\*ap01\_G290A– Final 3 nucleotides as a triplet



TRBV6–8\*ap01\_A293G– Final 3 nucleotides as a triplet

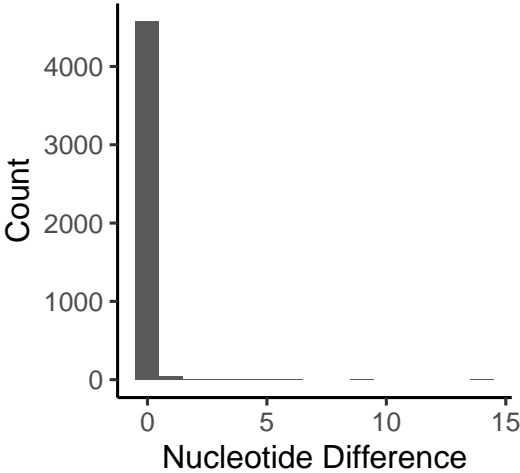


TRBV7-1\*ap01\_G291C\_T296C- Final 3 nucleotides as a triplet



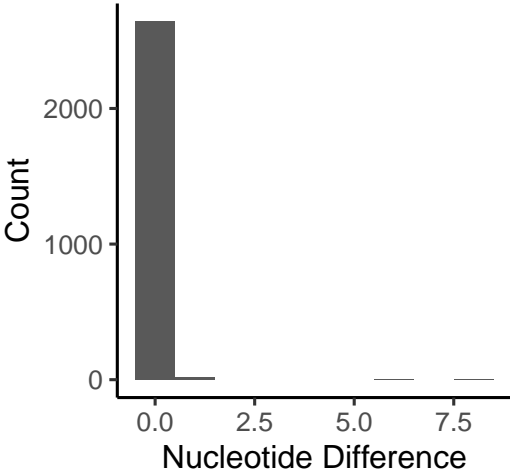
TRBV10-1\*ap01

4623 sequences assigned  
4575 (99%) exact matches, in which:  
4491 unique CDR3  
13 unique J



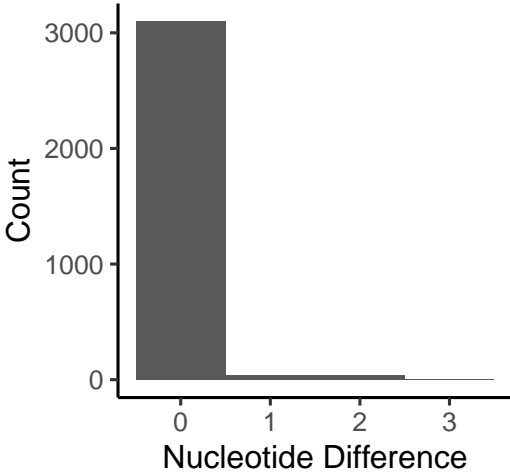
TRBV10-2\*ap01

2665 sequences assigned  
2642 (99.1%) exact matches, in which:  
2603 unique CDR3  
13 unique J



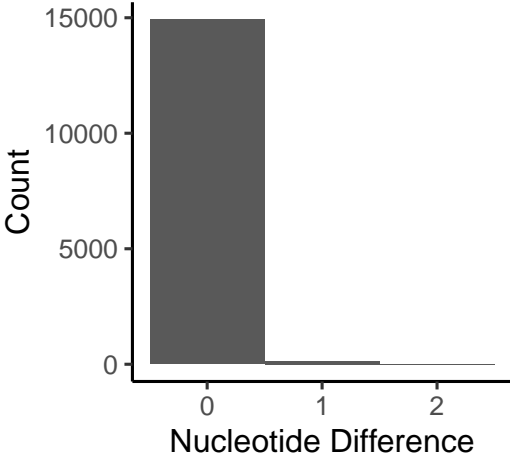
TRBV13\*ap01

3181 sequences assigned  
3099 (97.4%) exact matches, in which:  
3022 unique CDR3  
13 unique J



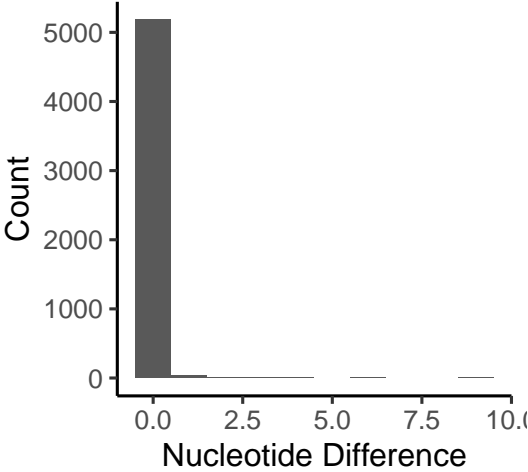
TRBV20-1\*ap01

15063 sequences assigned  
14925 (99.1%) exact matches, in which:  
14739 unique CDR3  
13 unique J



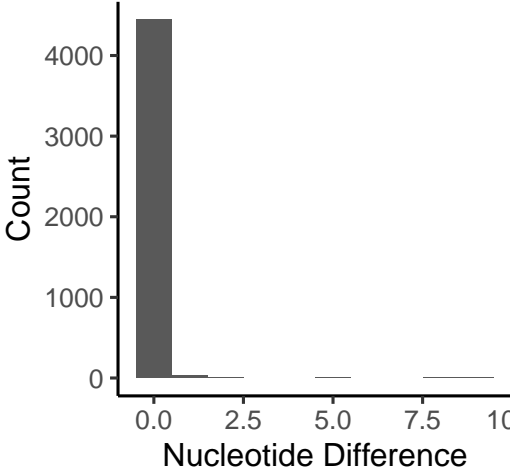
TRBV10-3\*ap01

5231 sequences assigned  
5183 (99.1%) exact matches, in which:  
5102 unique CDR3  
13 unique J



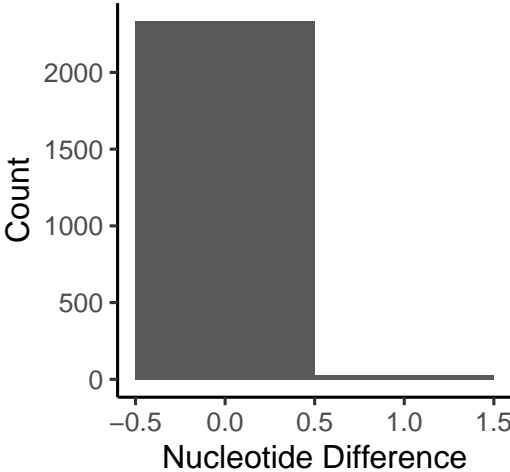
TRBV14\*ap01

4482 sequences assigned  
4444 (99.2%) exact matches, in which:  
4407 unique CDR3  
13 unique J



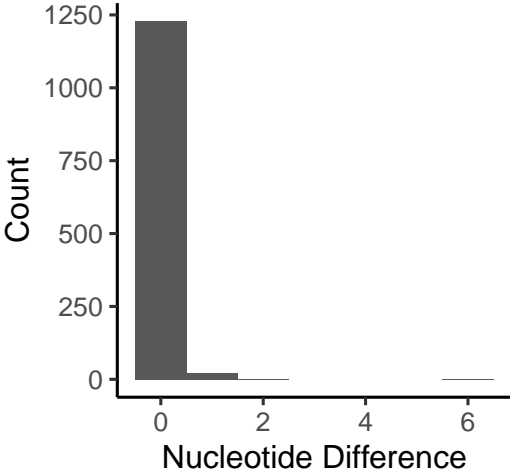
TRBV20-1\*ap02

2365 sequences assigned  
2335 (98.7%) exact matches, in which:  
2296 unique CDR3  
13 unique J



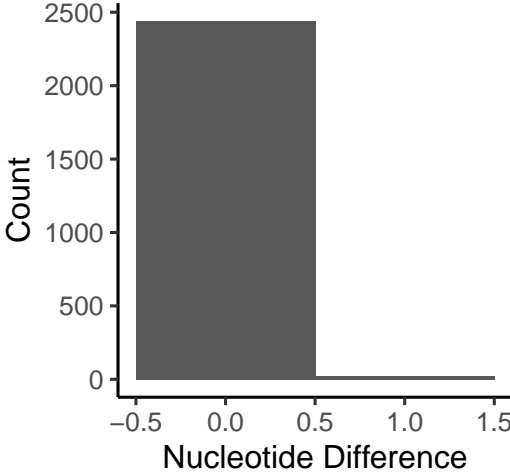
TRBV1\*ap01

1252 sequences assigned  
1229 (98.2%) exact matches, in which:  
1207 unique CDR3  
13 unique J



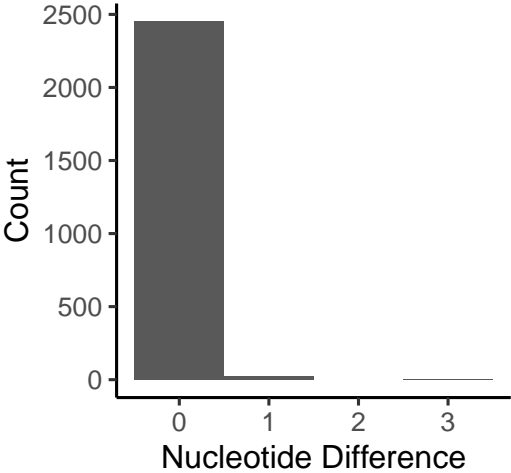
TRBV15\*ap01

2461 sequences assigned  
2440 (99.1%) exact matches, in which:  
2404 unique CDR3  
13 unique J



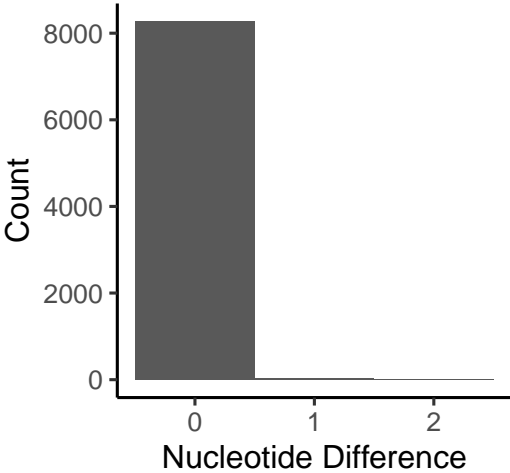
TRBV15\*ap02

2476 sequences assigned  
2452 (99%) exact matches, in which:  
2414 unique CDR3  
13 unique J



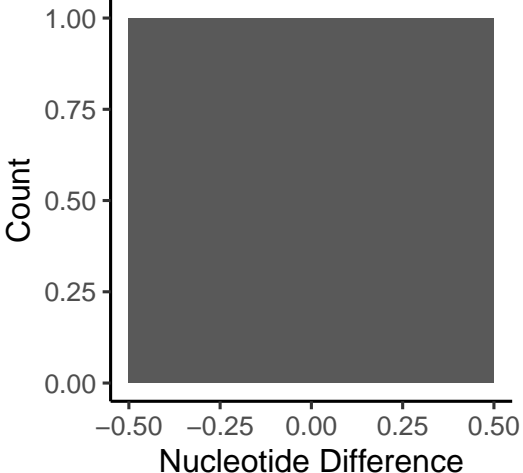
TRBV18\*ap01

8302 sequences assigned  
8272 (99.6%) exact matches, in which:  
8235 unique CDR3  
13 unique J



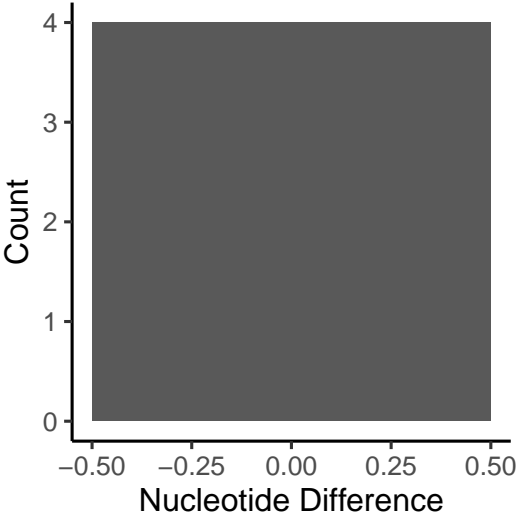
TRBV26\*ap01

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



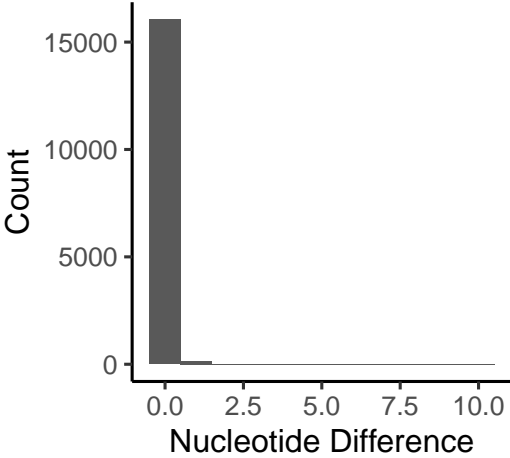
TRBV16\*ap01

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



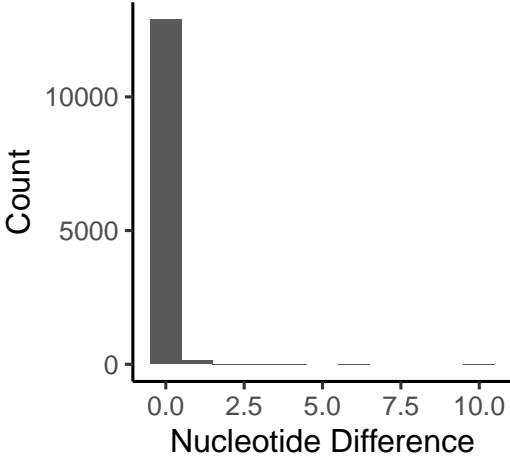
TRBV19\*ap01

16216 sequences assigned  
16053 (99%) exact matches, in which:  
15934 unique CDR3  
13 unique J



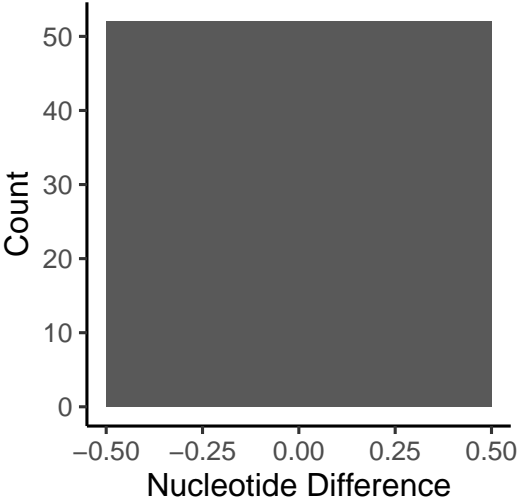
TRBV27\*ap01

13046 sequences assigned  
12895 (98.8%) exact matches, in which:  
12730 unique CDR3  
13 unique J



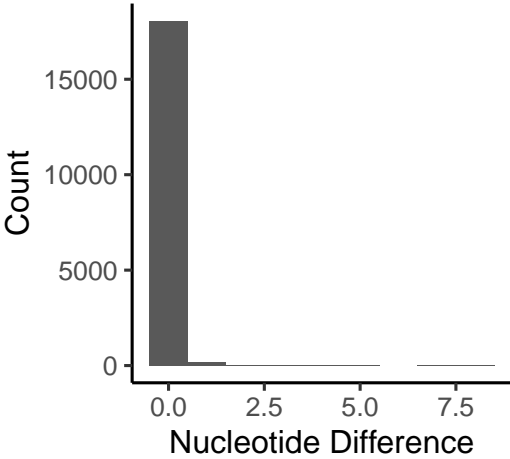
TRBV17\*ap01

52 sequences assigned  
52 (100%) exact matches, in which:  
52 unique CDR3  
11 unique J



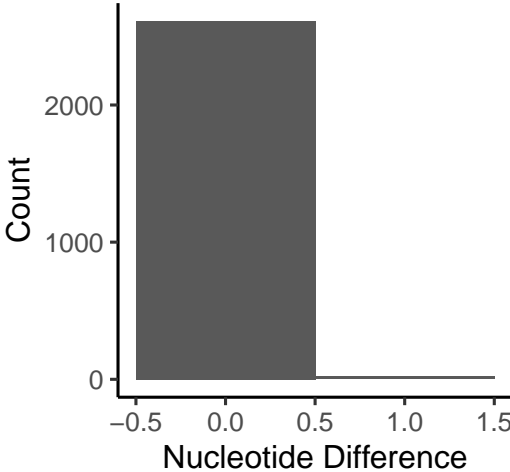
TRBV2\*ap01

18268 sequences assigned  
18062 (98.9%) exact matches, in which:  
17768 unique CDR3  
13 unique J



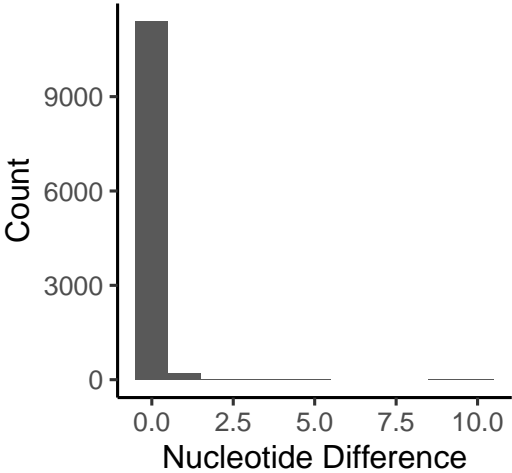
TRBV28\*ap01

2633 sequences assigned  
2612 (99.2%) exact matches, in which:  
2593 unique CDR3  
13 unique J



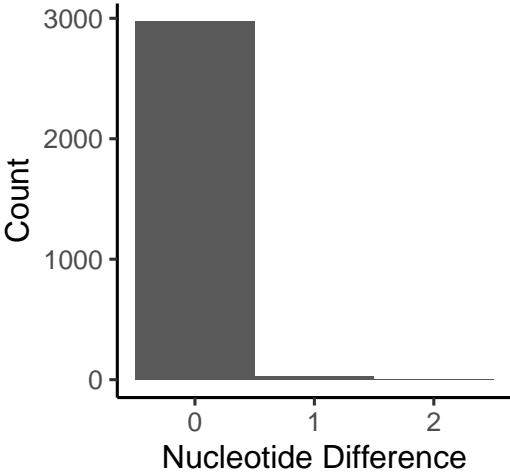
TRBV30\*ap02

11625 sequences assigned  
11392 (98%) exact matches, in which:  
11134 unique CDR3  
13 unique J



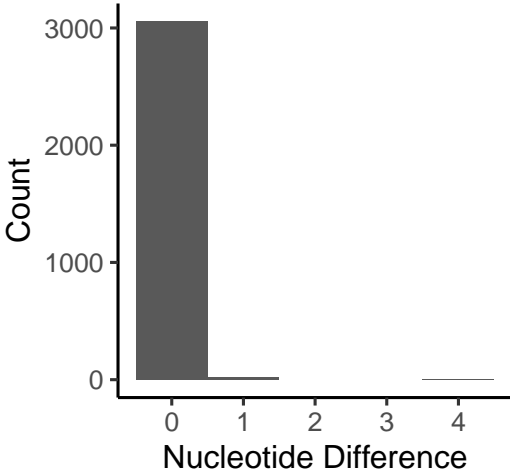
TRBV21-1\*ap01

3003 sequences assigned  
2974 (99%) exact matches, in which:  
2952 unique CDR3  
13 unique J



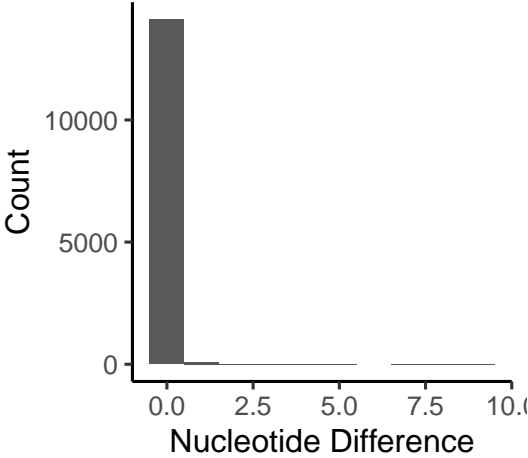
TRBV11-3\*ap01

3080 sequences assigned  
3056 (99.2%) exact matches, in which:  
3034 unique CDR3  
13 unique J



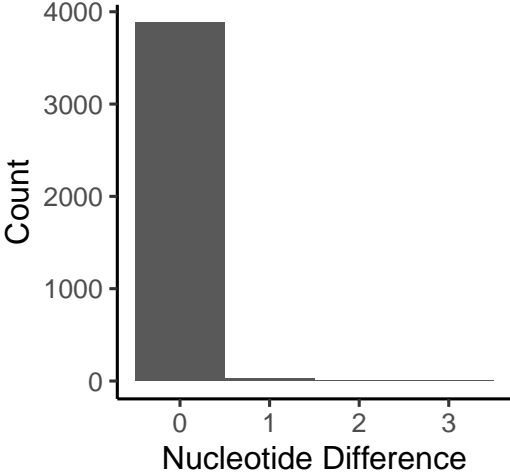
TRBV9\*ap01

14216 sequences assigned  
14113 (99.3%) exact matches, in which:  
13983 unique CDR3  
13 unique J



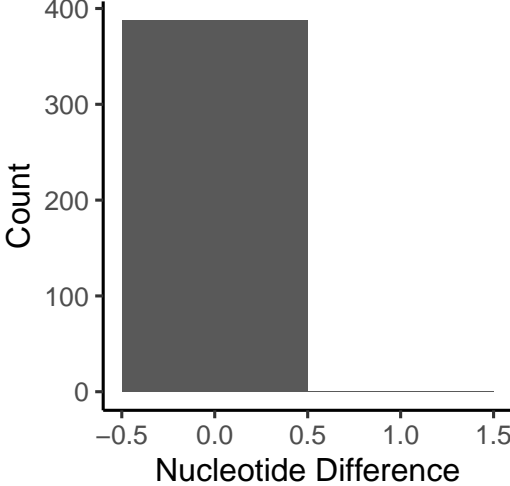
TRBV21-1\*ap01\_T307C

3914 sequences assigned  
3881 (99.2%) exact matches, in which:  
3852 unique CDR3  
13 unique J



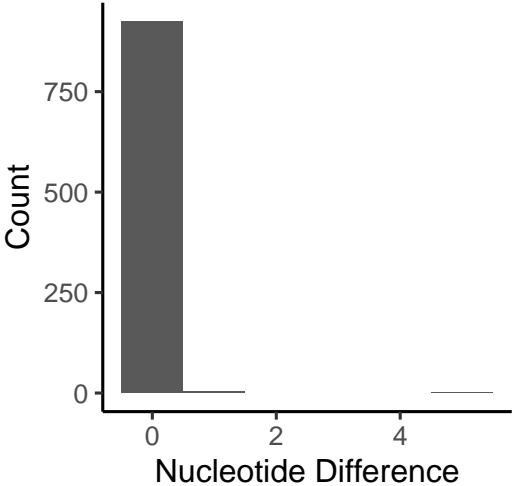
TRBV12-1\*ap01

389 sequences assigned  
388 (99.7%) exact matches, in which:  
384 unique CDR3  
13 unique J



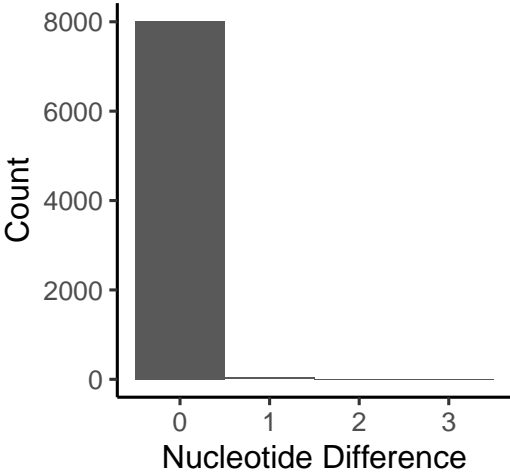
TRBV11-1\*ap01

930 sequences assigned  
925 (99.5%) exact matches, in which:  
917 unique CDR3  
13 unique J



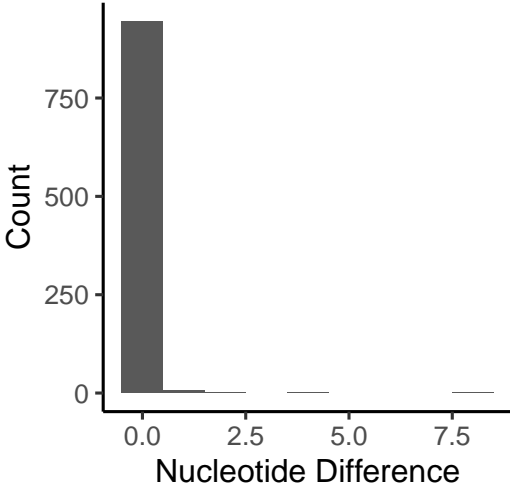
TRBV11-2\*ap01

8063 sequences assigned  
8016 (99.4%) exact matches, in which:  
7937 unique CDR3  
13 unique J



TRBV12-2\*ap01

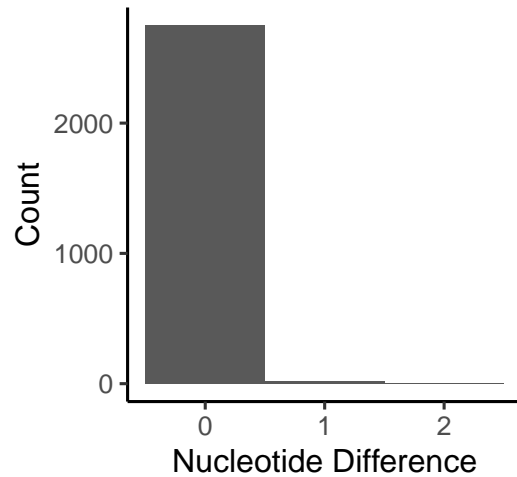
955 sequences assigned  
945 (99%) exact matches, in which:  
932 unique CDR3  
13 unique J





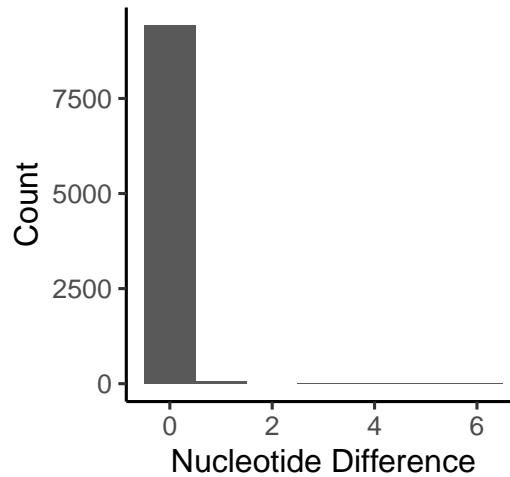
### TRBV12-5\*ap01

2771 sequences assigned  
2750 (99.2%) exact matches, in which:  
2701 unique CDR3  
13 unique J



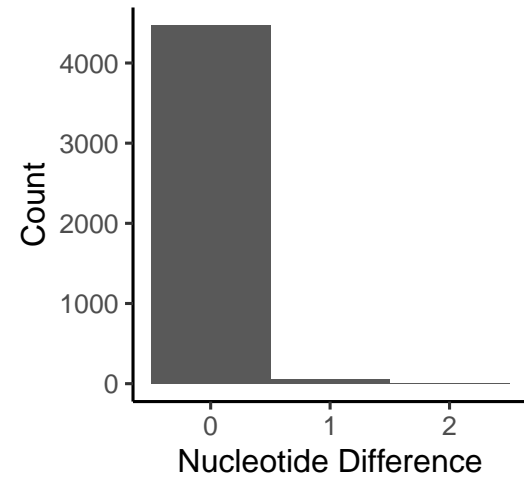
### TRBV3-12\*ap01

9488 sequences assigned  
9421 (99.3%) exact matches, in which:  
9347 unique CDR3  
13 unique J



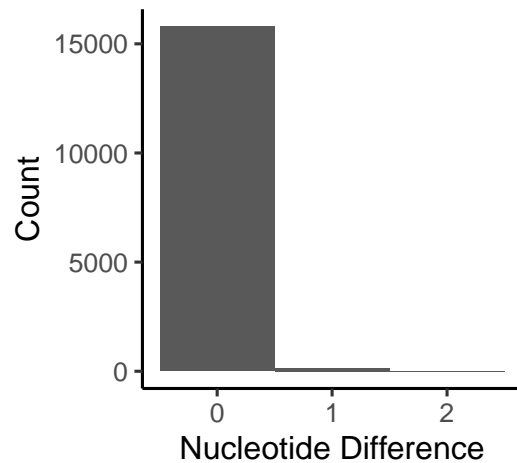
### TRBV4-2\*ap01

4526 sequences assigned  
4469 (98.7%) exact matches, in which:  
4357 unique CDR3  
13 unique J



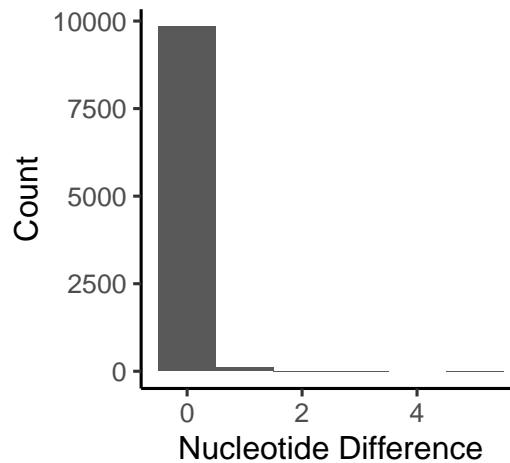
### TRBV12-34\*ap01

15949 sequences assigned  
15796 (99%) exact matches, in which:  
15545 unique CDR3  
13 unique J



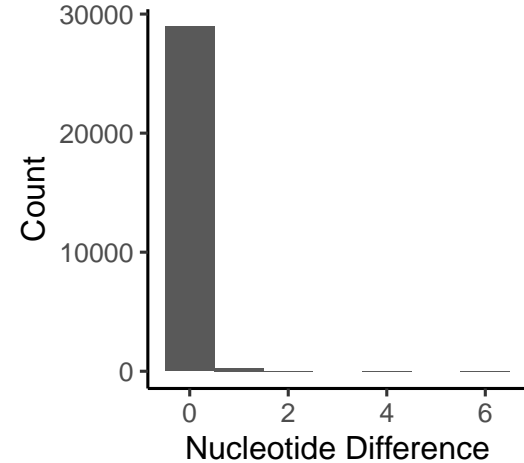
### TRBV4-1\*ap01

9953 sequences assigned  
9845 (98.9%) exact matches, in which:  
9649 unique CDR3  
13 unique J



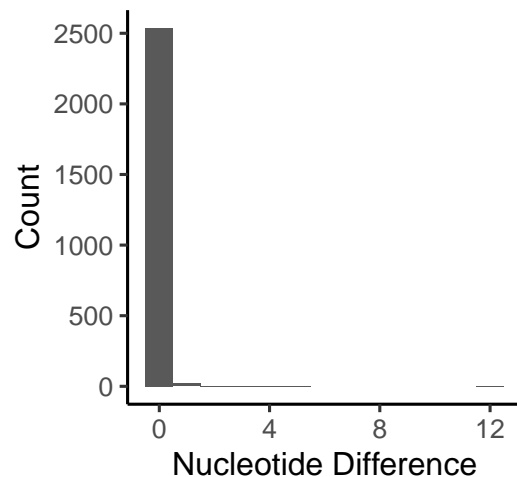
### TRBV5-1\*ap01

29245 sequences assigned  
28960 (99%) exact matches, in which:  
28489 unique CDR3  
13 unique J



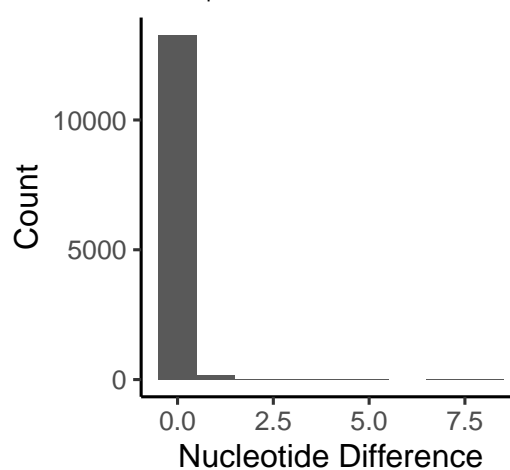
### TRBV23-1\*ap01

2564 sequences assigned  
2537 (98.9%) exact matches, in which:  
2516 unique CDR3  
14 unique J



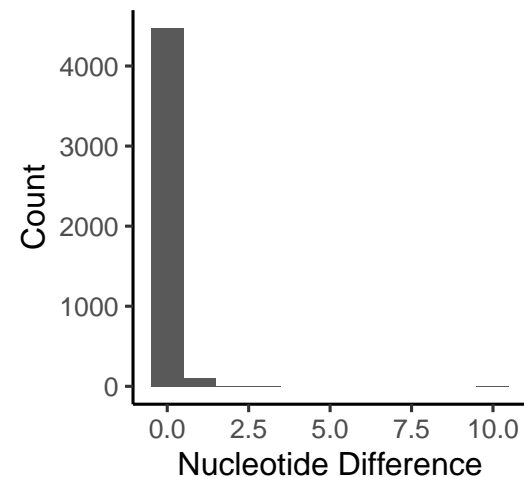
### TRBV24-1\*ap01

13468 sequences assigned  
13281 (98.6%) exact matches, in which:  
13082 unique CDR3  
14 unique J



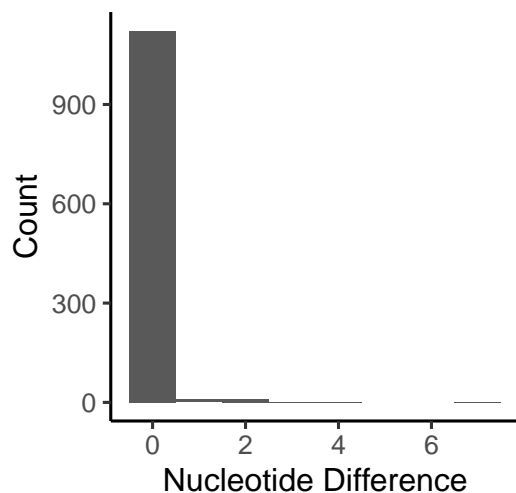
### TRBV25-1\*ap01

4583 sequences assigned  
4474 (97.6%) exact matches, in which:  
4366 unique CDR3  
13 unique J



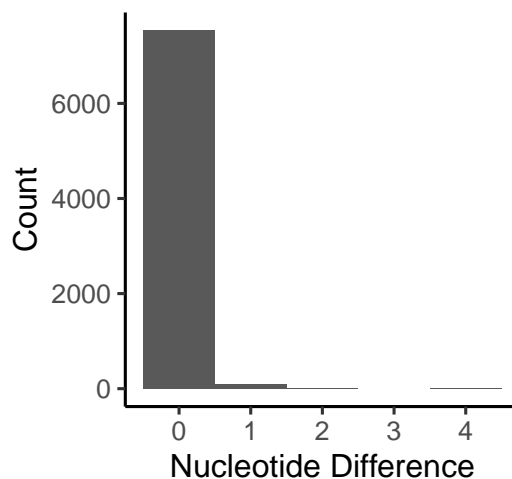
### TRBV5-3\*ap01

1146 sequences assigned  
1123 (98%) exact matches, in which:  
1102 unique CDR3  
13 unique J



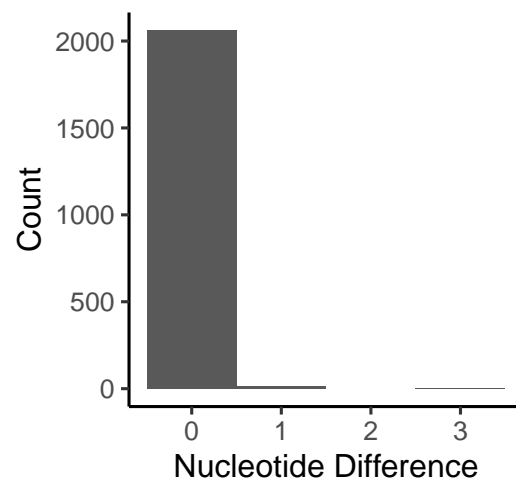
### TRBV5-6\*ap01

7636 sequences assigned  
7535 (98.7%) exact matches, in which:  
7362 unique CDR3  
13 unique J



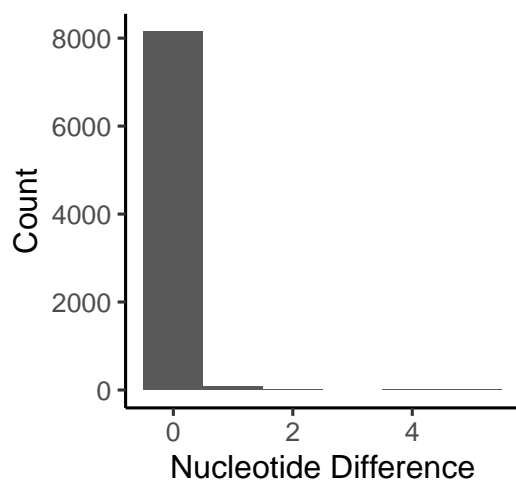
### TRBV5-8\*ap01

2074 sequences assigned  
2061 (99.4%) exact matches, in which:  
2043 unique CDR3  
13 unique J



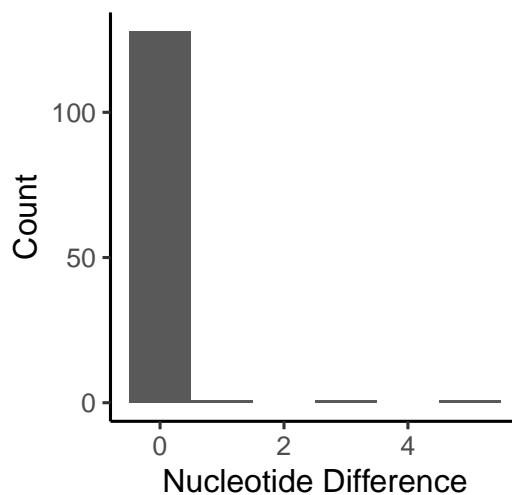
### TRBV5-4\*ap01

8231 sequences assigned  
8146 (99%) exact matches, in which:  
7999 unique CDR3  
13 unique J



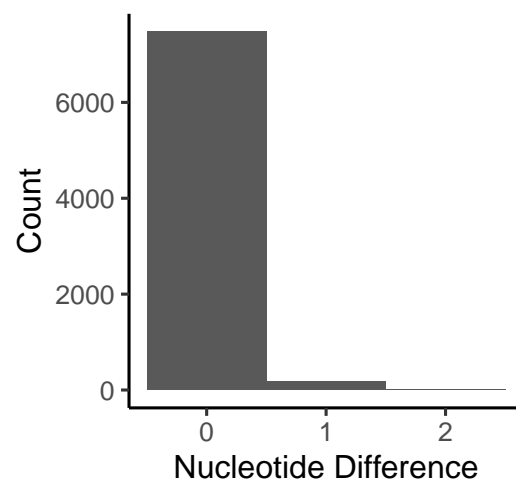
### TRBV5-7\*ap01

131 sequences assigned  
128 (97.7%) exact matches, in which:  
125 unique CDR3  
13 unique J



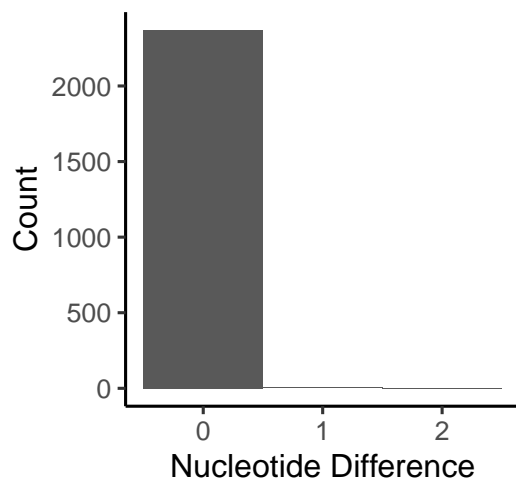
### TRBV6-1\*ap01

7659 sequences assigned  
7474 (97.6%) exact matches, in which:  
7305 unique CDR3  
14 unique J



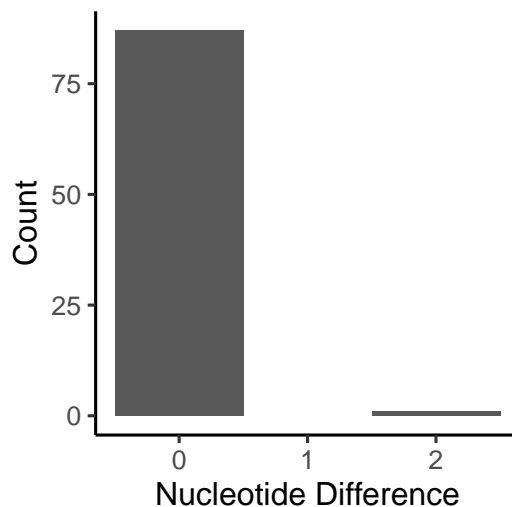
### TRBV5-5\*ap01

2377 sequences assigned  
2370 (99.7%) exact matches, in which:  
2359 unique CDR3  
14 unique J



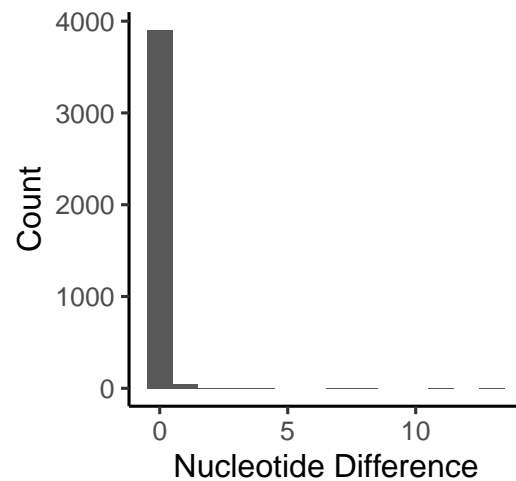
### TRBV5-7\*ap01\_G290A

88 sequences assigned  
87 (98.9%) exact matches, in which:  
81 unique CDR3  
13 unique J



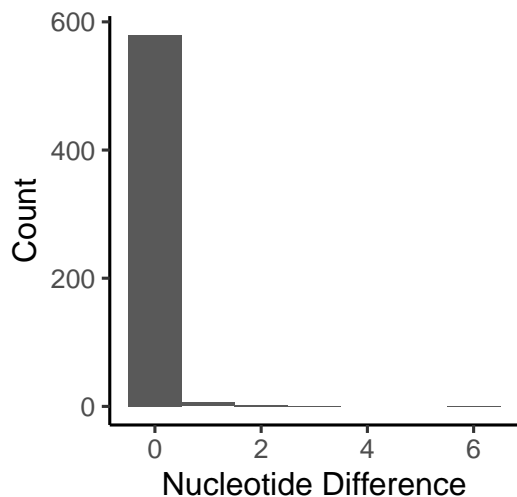
### TRBV6-4\*ap01

3960 sequences assigned  
3903 (98.6%) exact matches, in which:  
3854 unique CDR3  
13 unique J



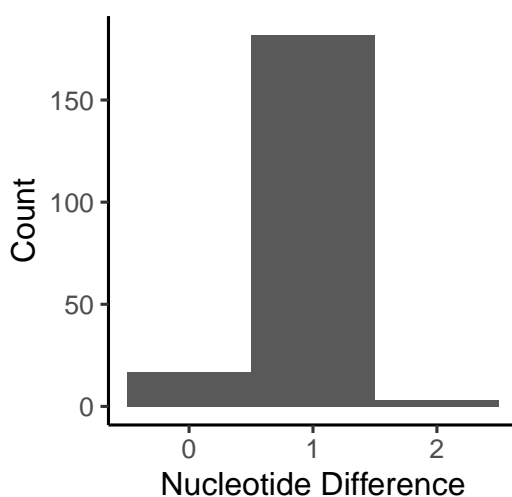
### TRBV6-7\*ap01

590 sequences assigned  
580 (98.3%) exact matches, in which:  
564 unique CDR3  
13 unique J



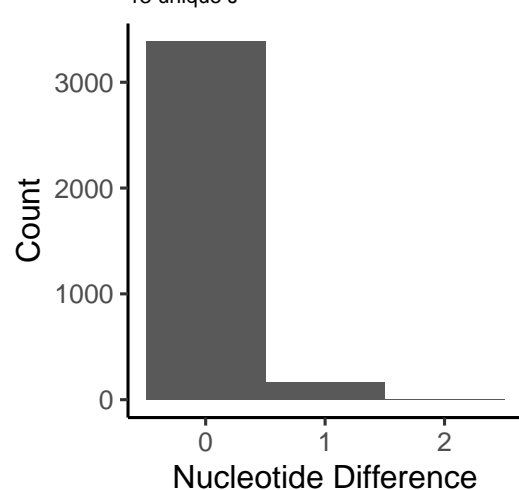
### TRBV6-9\*ap01

202 sequences assigned  
17 (8.4%) exact matches, in which:  
17 unique CDR3  
8 unique J



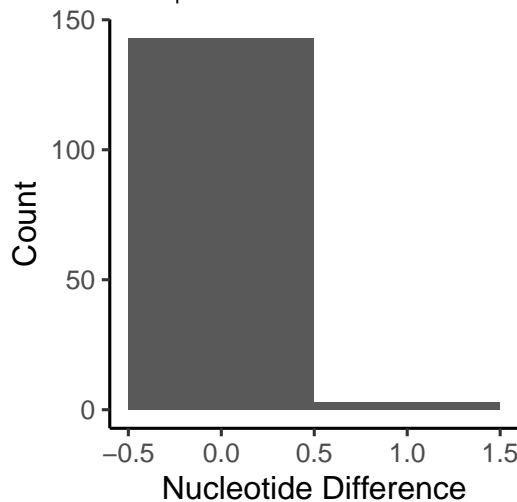
### TRBV6-56\*ap02

3548 sequences assigned  
3386 (95.4%) exact matches, in which:  
3303 unique CDR3  
13 unique J



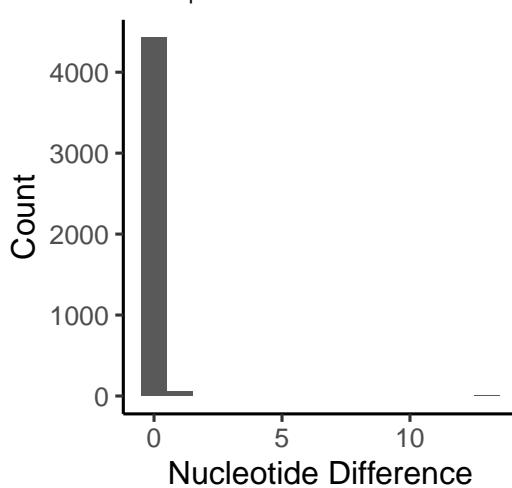
### TRBV6-8\*ap01

146 sequences assigned  
143 (97.9%) exact matches, in which:  
140 unique CDR3  
13 unique J



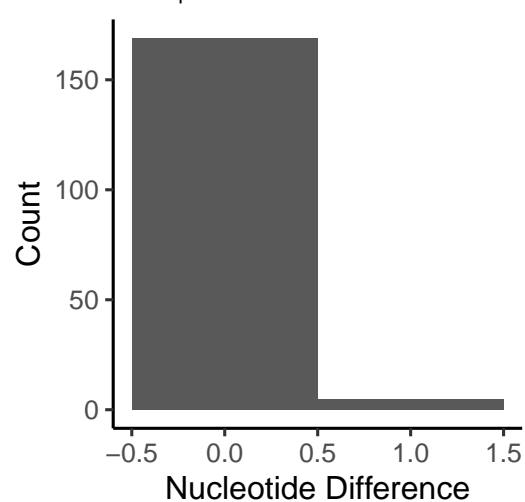
### TRBV6-23\*ap01

4485 sequences assigned  
4426 (98.7%) exact matches, in which:  
4305 unique CDR3  
13 unique J



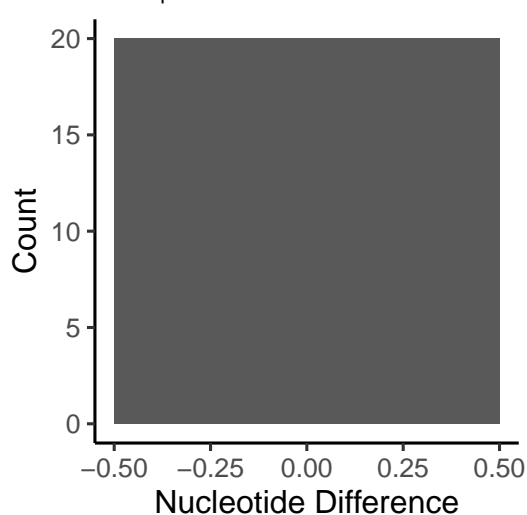
### TRBV7-1\*ap01\_G291C\_

174 sequences assigned  
169 (97.1%) exact matches, in which:  
168 unique CDR3  
13 unique J



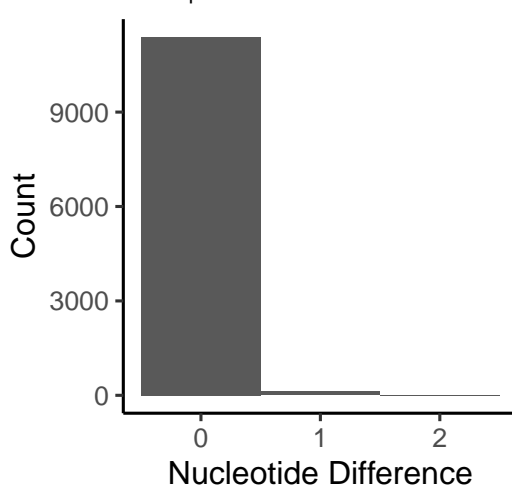
### TRBV6-8\*ap01\_A293G

20 sequences assigned  
20 (100%) exact matches, in which:  
20 unique CDR3  
11 unique J



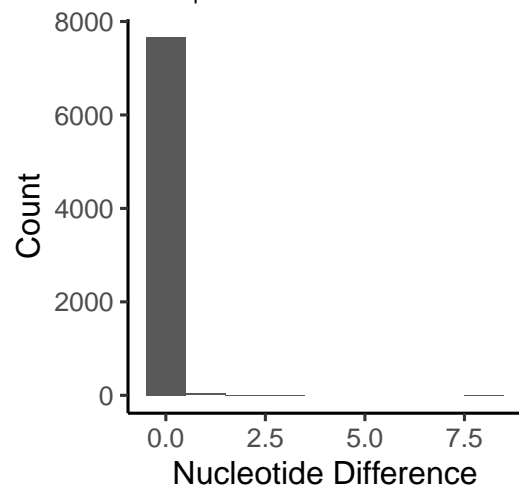
### TRBV6-56\*ap01

11509 sequences assigned  
11385 (98.9%) exact matches, in which:  
11115 unique CDR3  
13 unique J



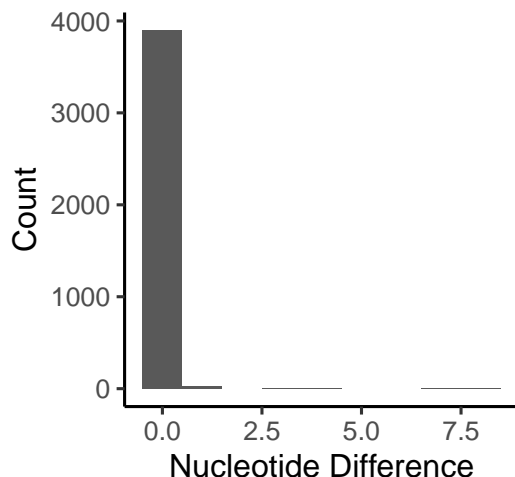
### TRBV7-2\*ap01

7708 sequences assigned  
7667 (99.5%) exact matches, in which:  
7583 unique CDR3  
13 unique J



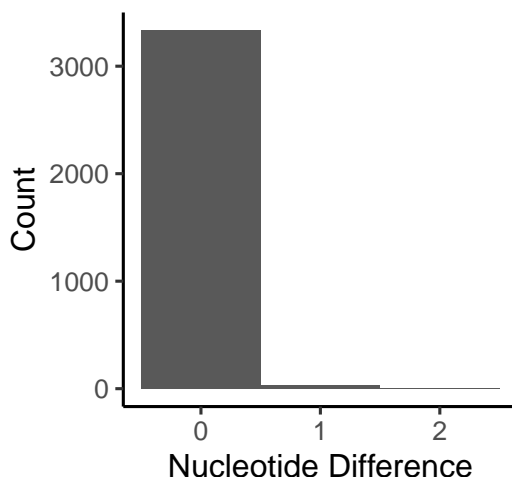
### TRBV7-3\*ap01

3932 sequences assigned  
3897 (99.1%) exact matches, in which:  
3868 unique CDR3  
13 unique J



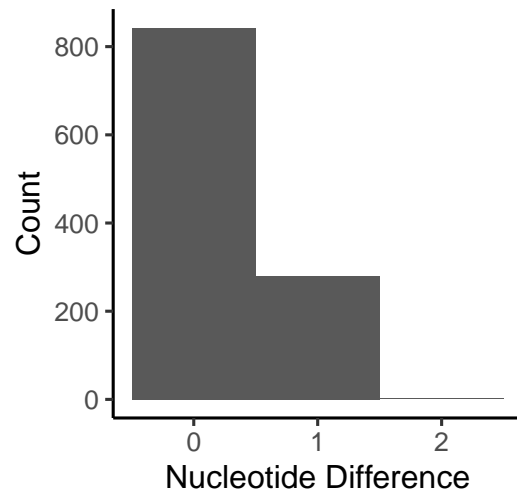
### TRBV7-6\*ap01

3364 sequences assigned  
3333 (99.1%) exact matches, in which:  
3294 unique CDR3  
13 unique J



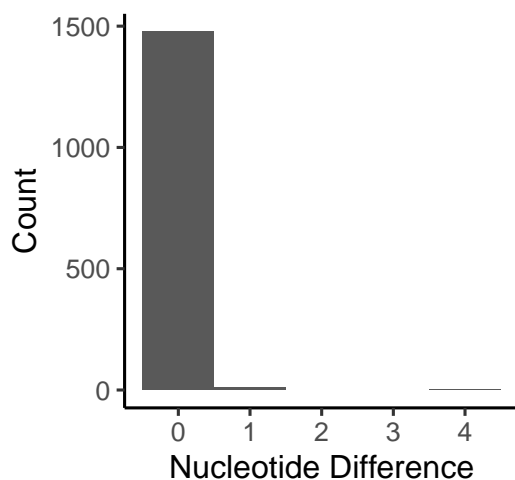
### TRBV7-8\*ap03

1125 sequences assigned  
843 (74.9%) exact matches, in which:  
831 unique CDR3  
13 unique J



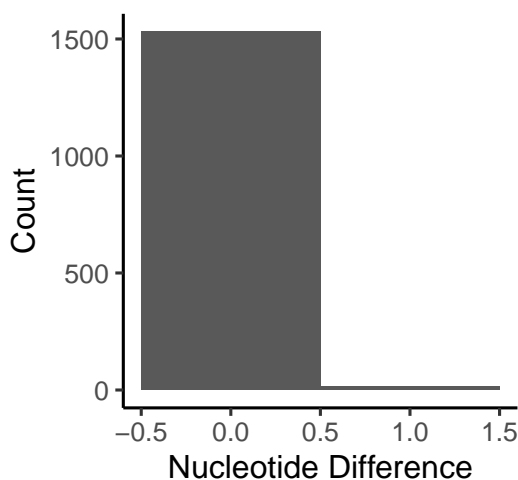
### TRBV7-3\*ap03

1488 sequences assigned  
1477 (99.3%) exact matches, in which:  
1463 unique CDR3  
13 unique J



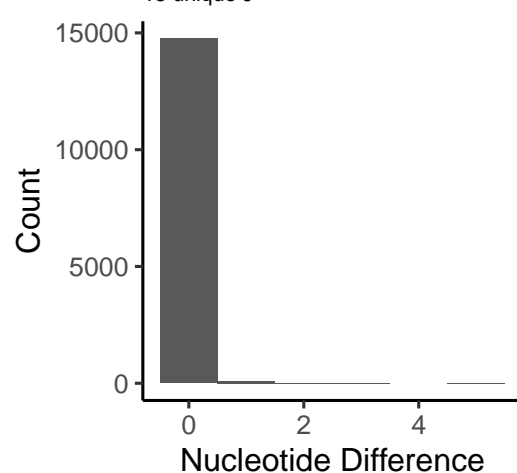
### TRBV7-7\*ap01

1548 sequences assigned  
1531 (98.9%) exact matches, in which:  
1507 unique CDR3  
13 unique J



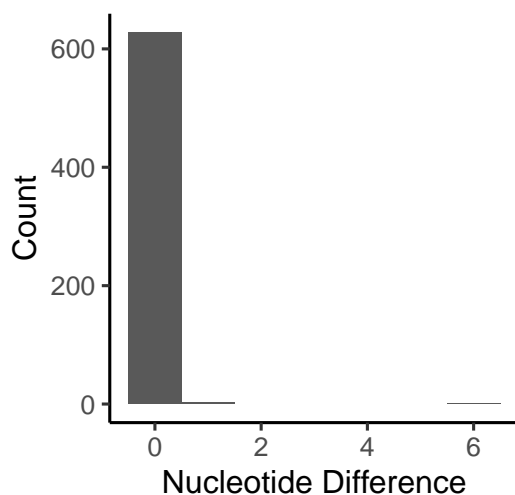
### TRBV7-9\*ap01

14867 sequences assigned  
14761 (99.3%) exact matches, in which:  
14591 unique CDR3  
13 unique J



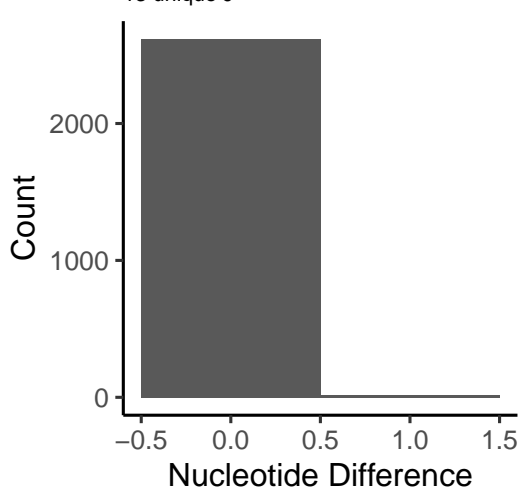
### TRBV7-4\*ap01

631 sequences assigned  
628 (99.5%) exact matches, in which:  
618 unique CDR3  
13 unique J



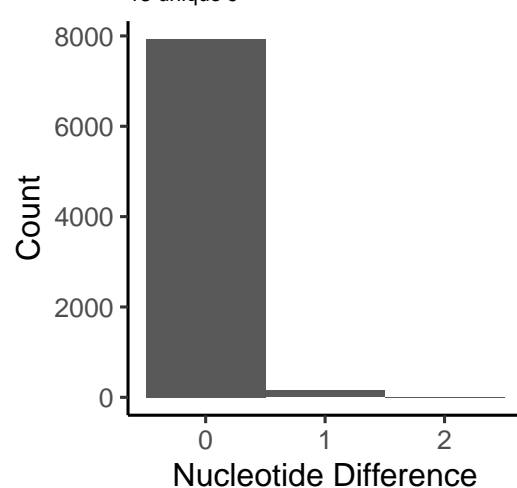
### TRBV7-8\*ap01

2634 sequences assigned  
2617 (99.4%) exact matches, in which:  
2582 unique CDR3  
13 unique J



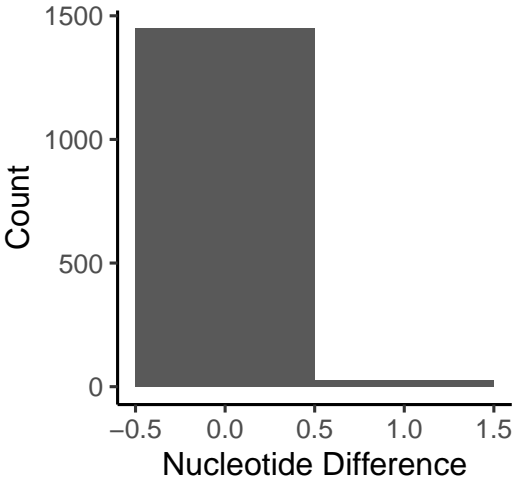
### TRBV29-1\*ap01

8086 sequences assigned  
7931 (98.1%) exact matches, in which:  
7722 unique CDR3  
13 unique J

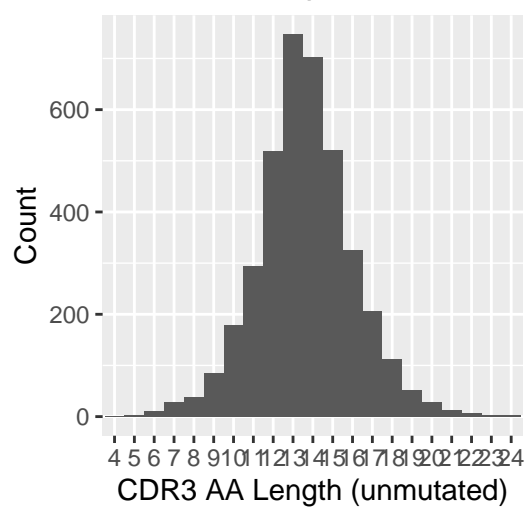


# TRBV29-1\*ap02

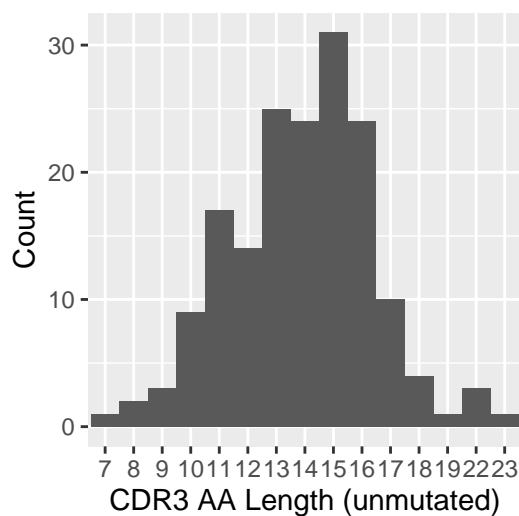
1474 sequences assigned  
1449 (98.3%) exact matches, in which:  
1409 unique CDR3  
13 unique J



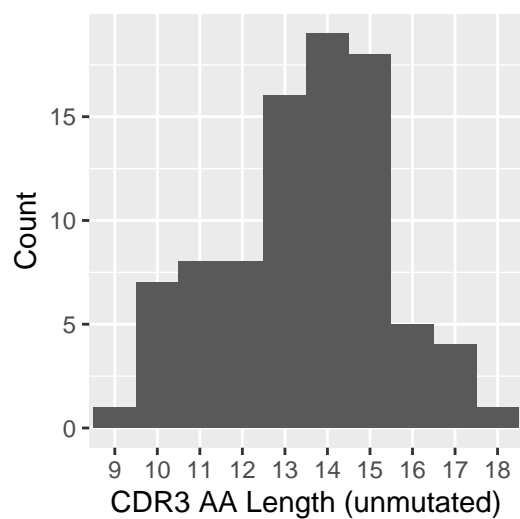
TRBV21-1\*ap01\_T307C



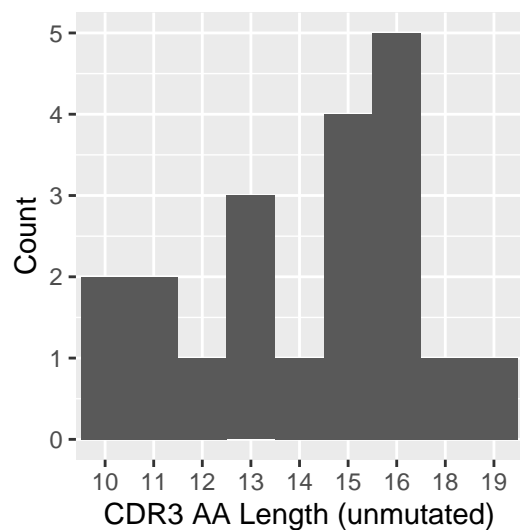
TRBV7-1\*ap01\_G291C\_T296C

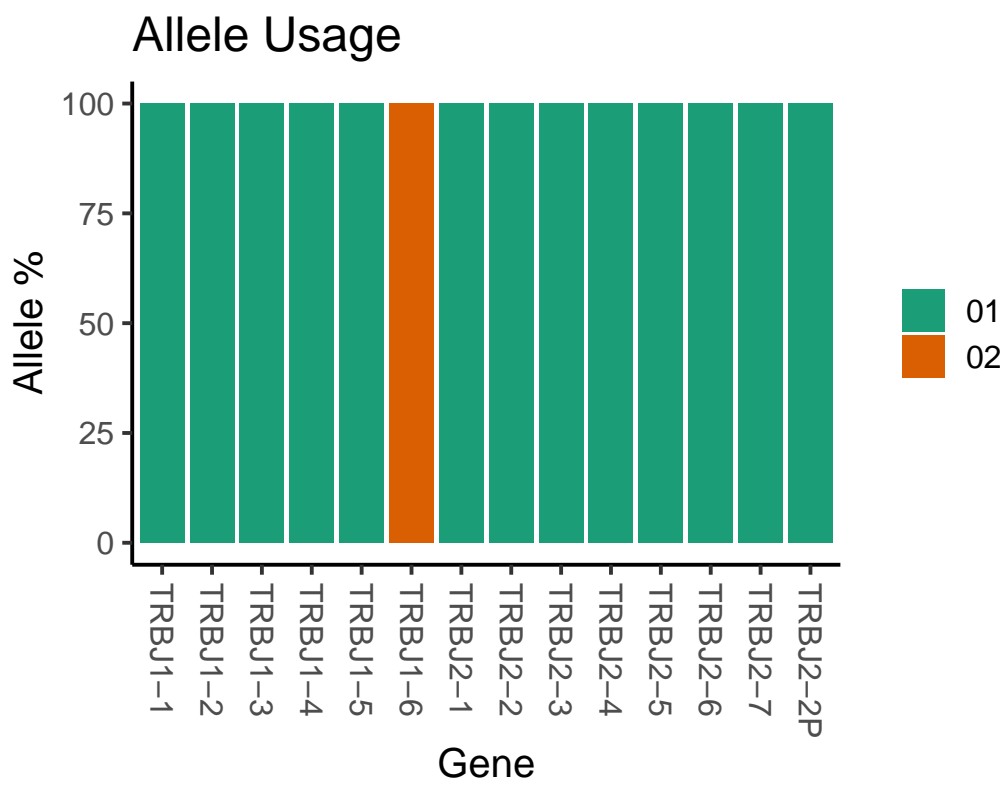


TRBV5-7\*ap01\_G290A



TRBV6-8\*ap01\_A293G





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