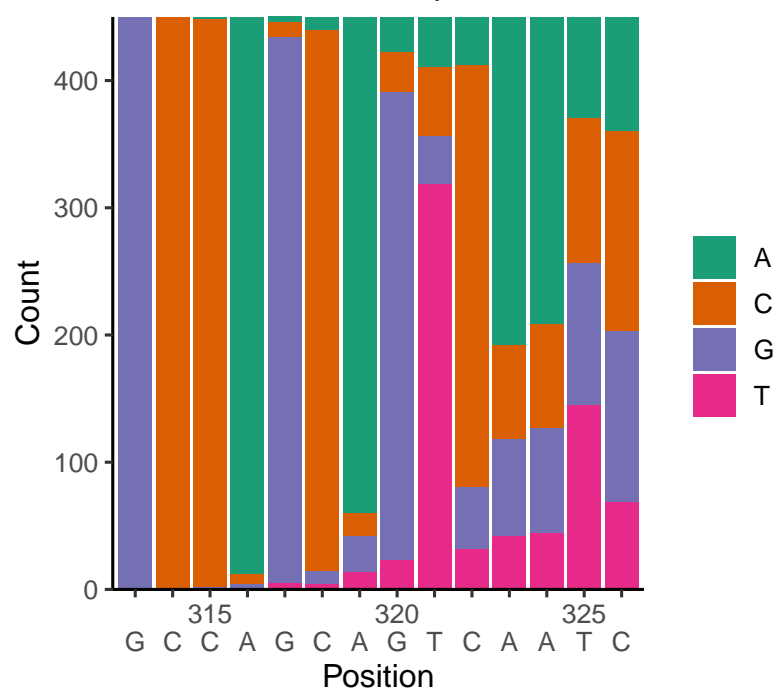
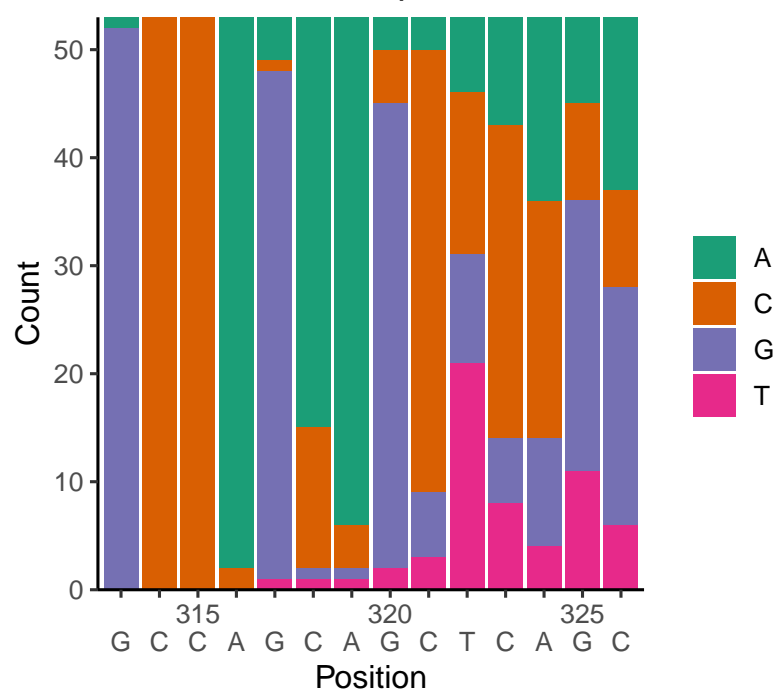


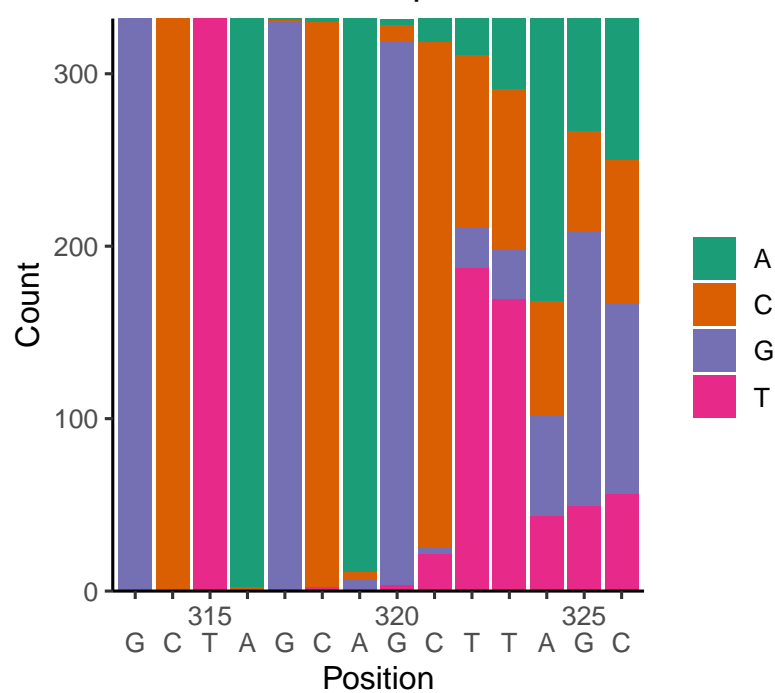
Gene TRBV23-1\*ap01\_T304C



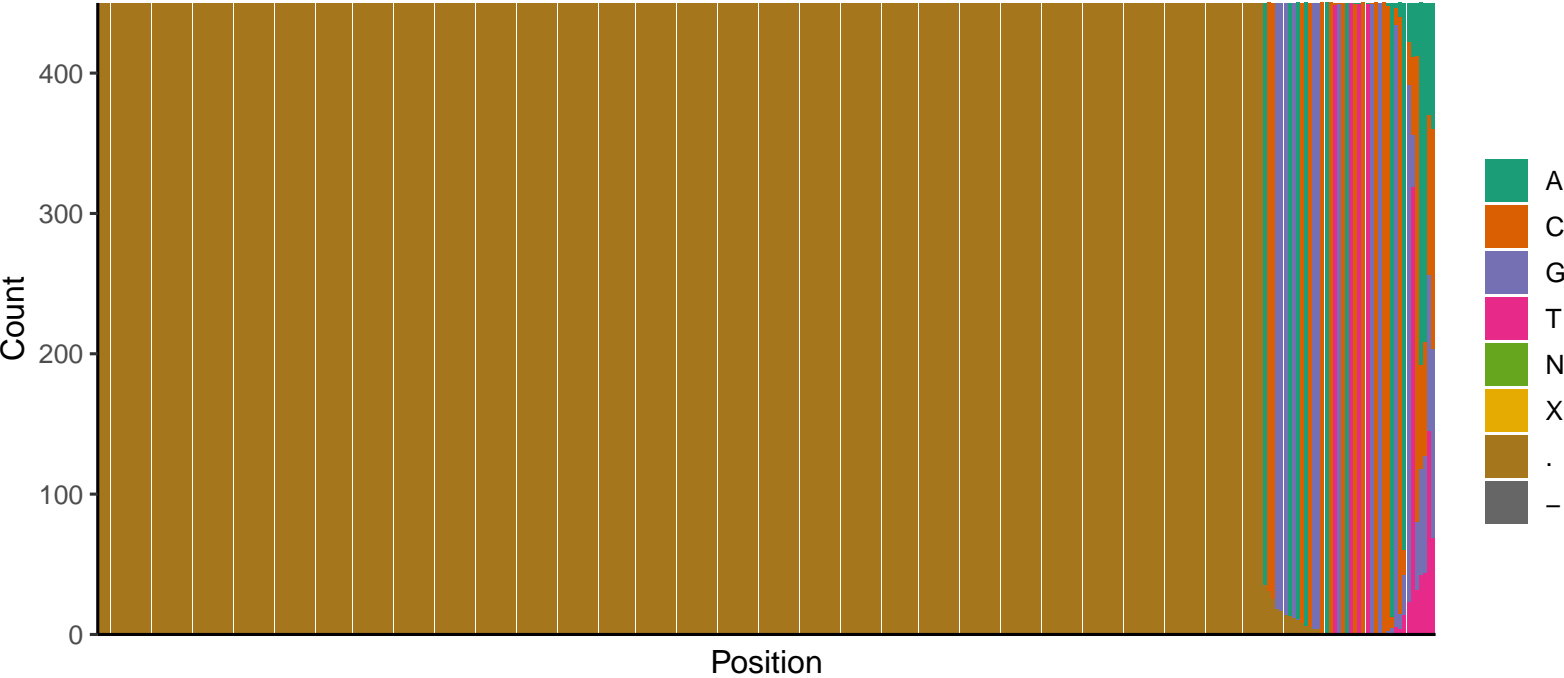
Gene TRBV7-1\*ap01\_T296C



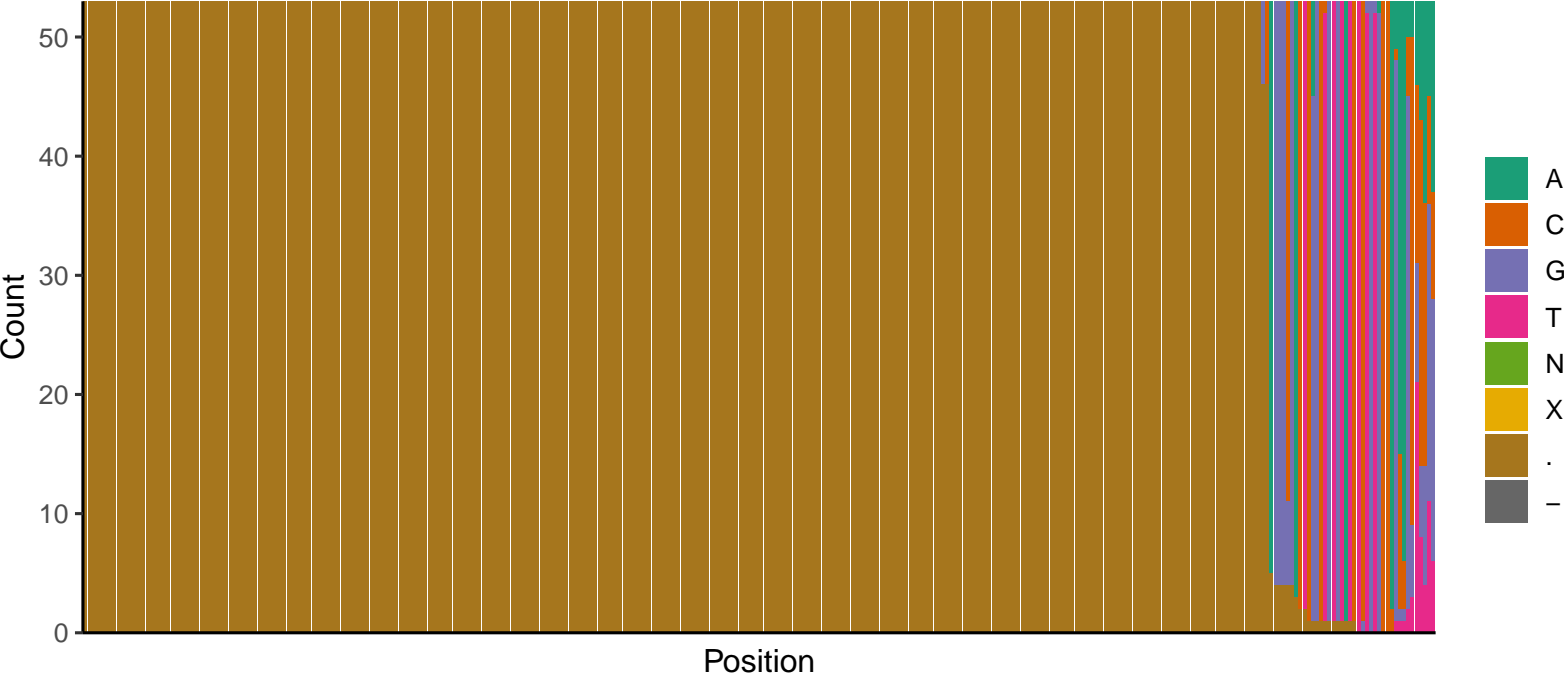
Gene TRBV7-7\*ap01\_C315T



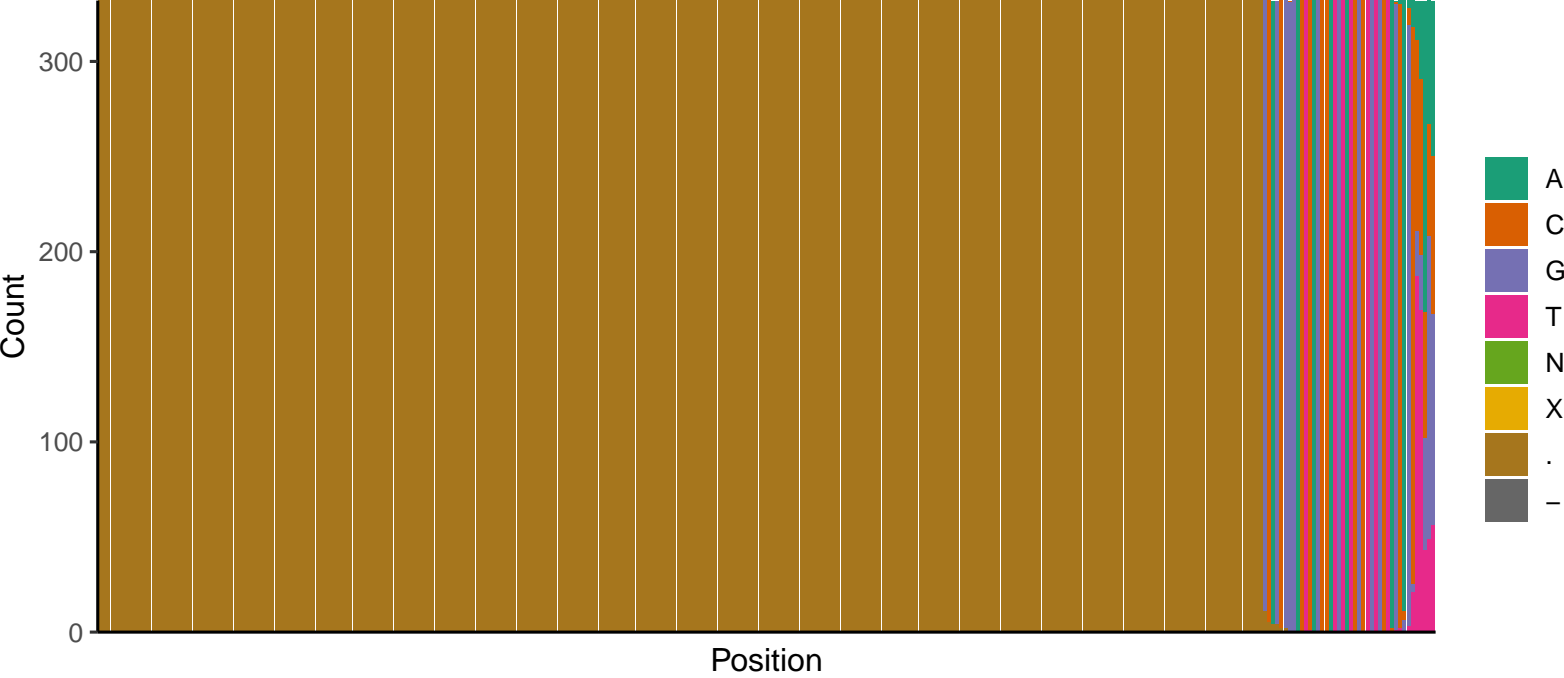
Gene TRBV23-1\*ap01\_T304C



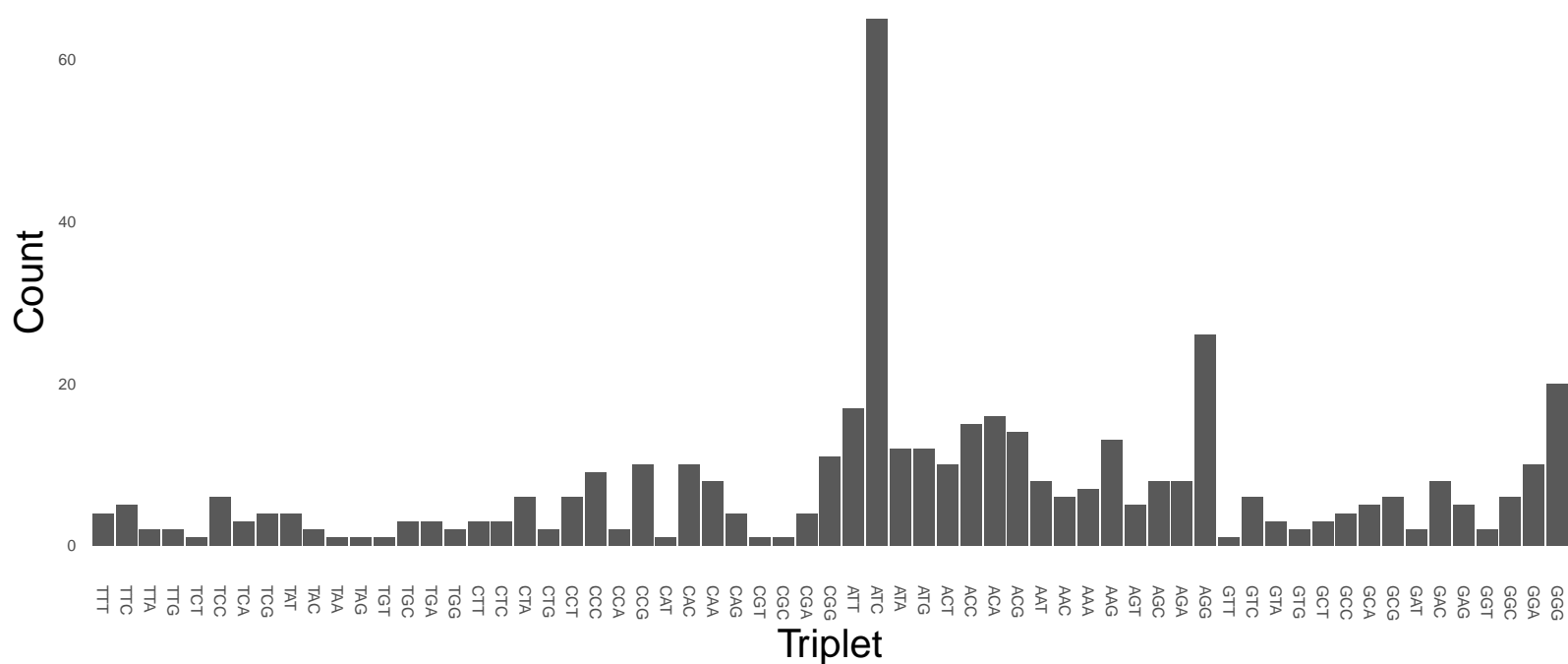
Gene TRBV7-1\*ap01\_T296C



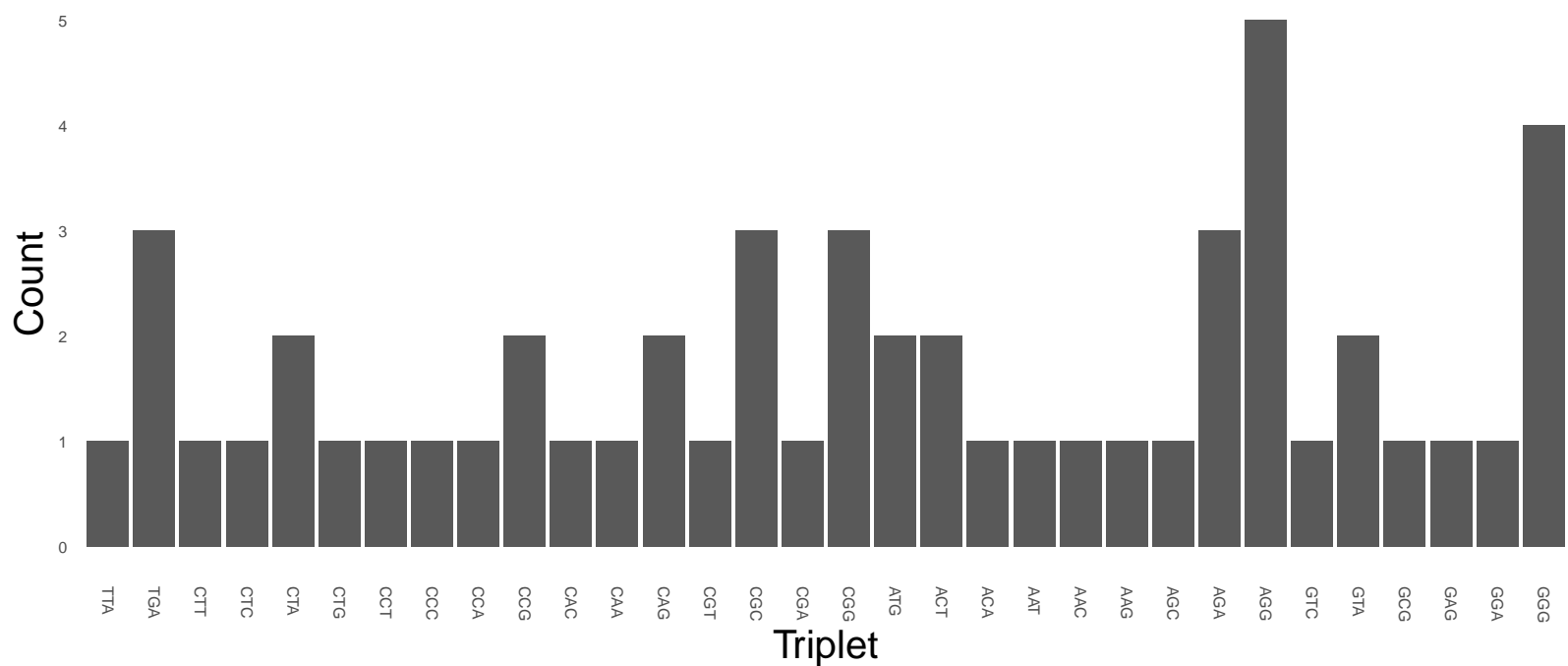
Gene TRBV7-7\*ap01\_C315T



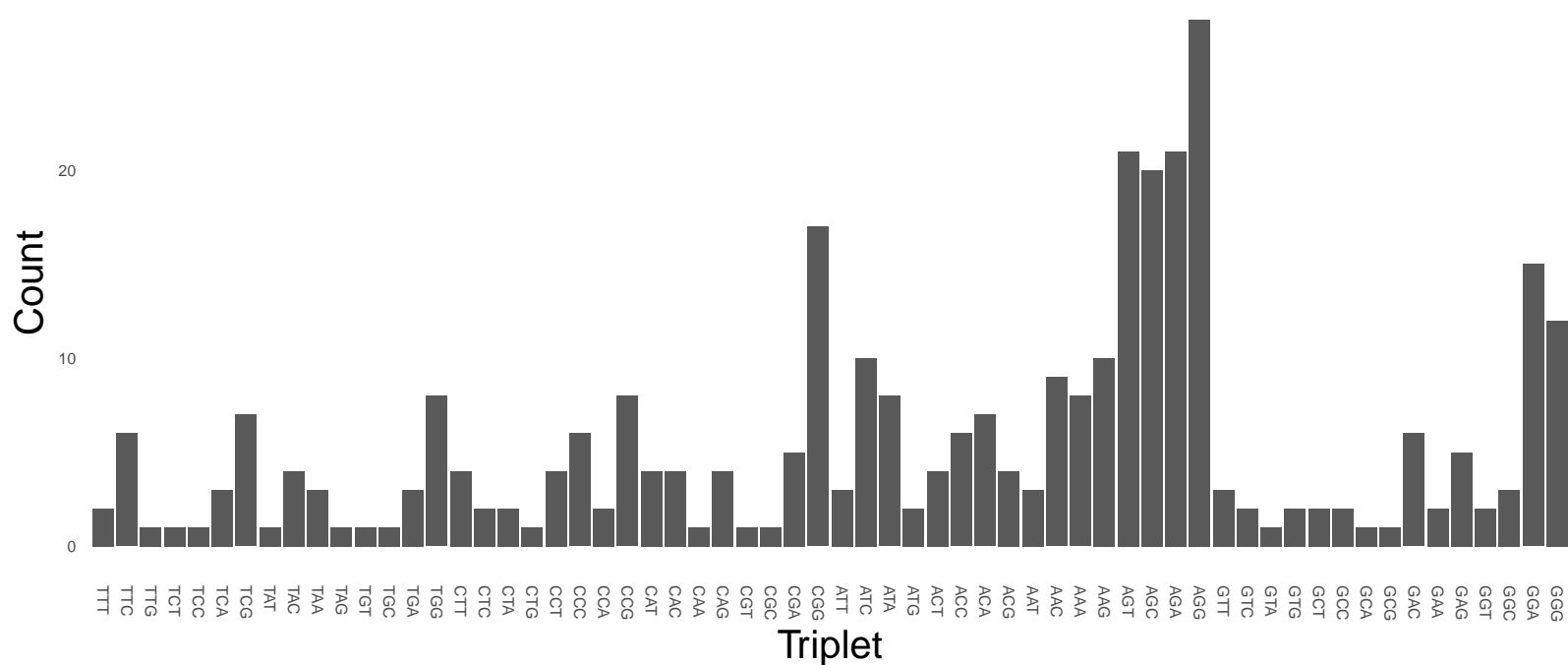
TRBV23–1\*ap01\_T304C– Final 3 nucleotides as a triplet



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

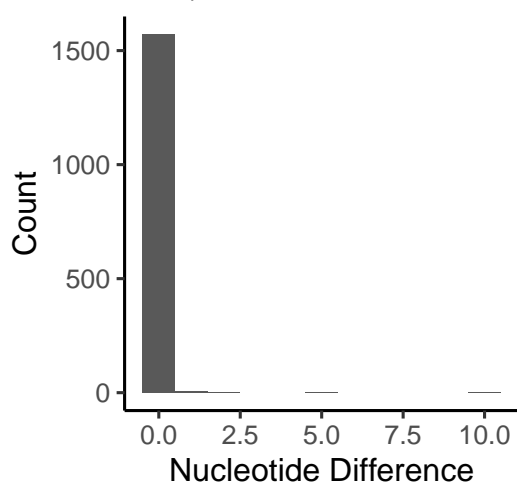


TRBV7–7\*ap01\_C315T– Final 3 nucleotides as a triplet



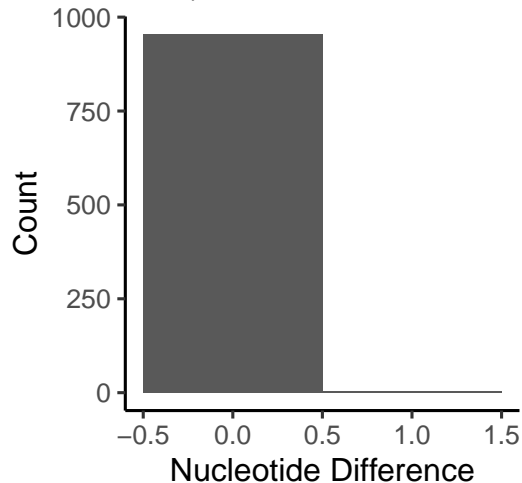
### TRBV10-1\*ap01

1581 sequences assigned  
1571 (99.4%) exact matches, in which:  
1564 unique CDR3  
13 unique J



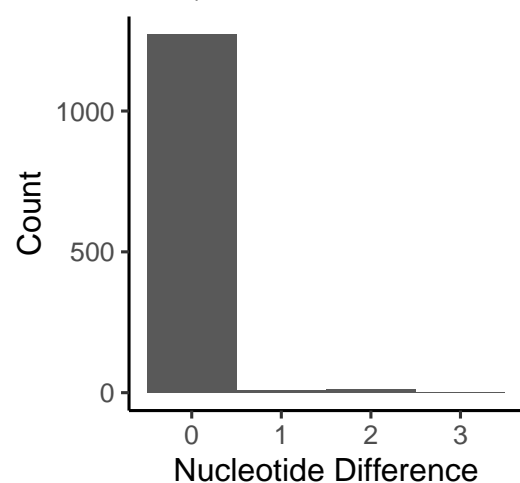
### TRBV10-2\*ap01

958 sequences assigned  
954 (99.6%) exact matches, in which:  
947 unique CDR3  
13 unique J



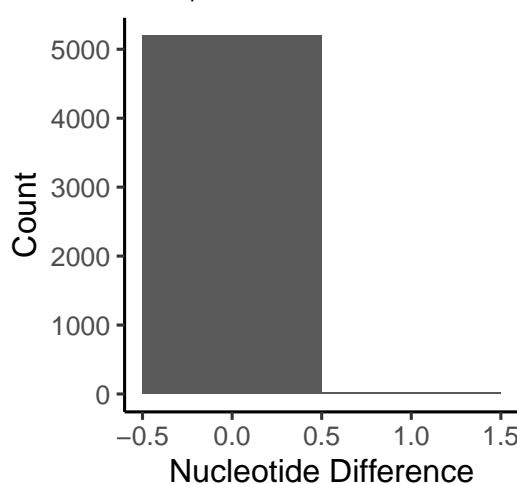
### TRBV13\*ap01

1296 sequences assigned  
1272 (98.1%) exact matches, in which:  
1262 unique CDR3  
13 unique J



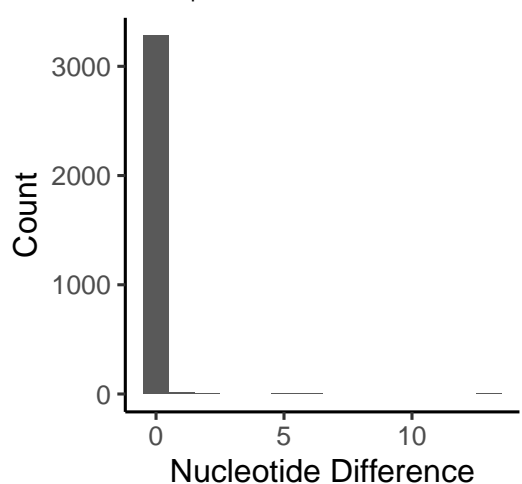
### TRBV20-1\*ap01

5217 sequences assigned  
5196 (99.6%) exact matches, in which:  
5173 unique CDR3  
13 unique J



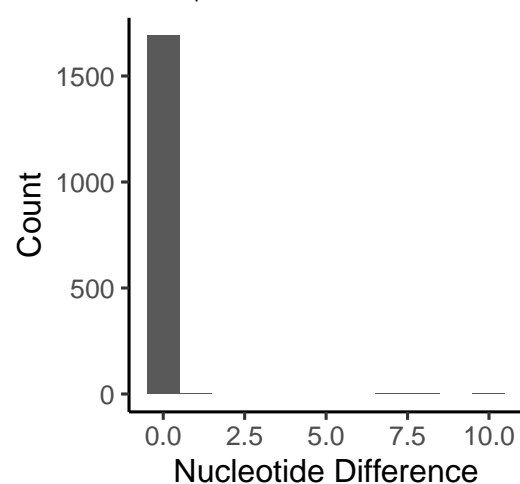
### TRBV10-3\*ap01

3299 sequences assigned  
3280 (99.4%) exact matches, in which:  
3266 unique CDR3  
13 unique J



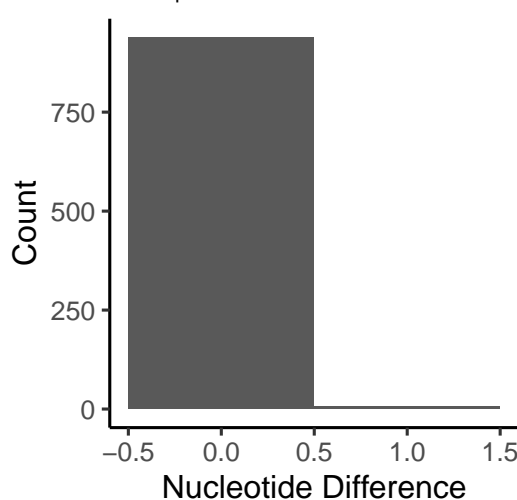
### TRBV14\*ap01

1696 sequences assigned  
1690 (99.6%) exact matches, in which:  
1679 unique CDR3  
13 unique J



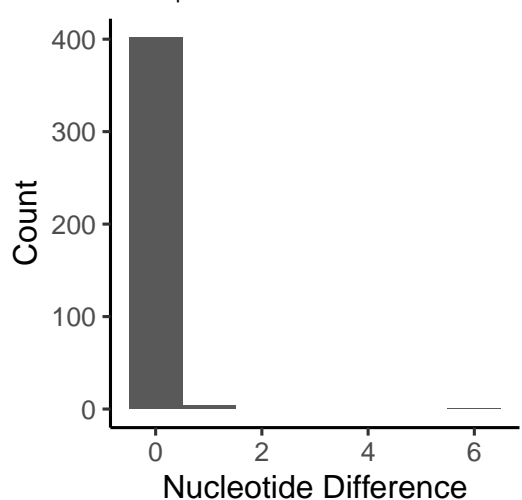
### TRBV20-1\*ap02

945 sequences assigned  
939 (99.4%) exact matches, in which:  
931 unique CDR3  
13 unique J



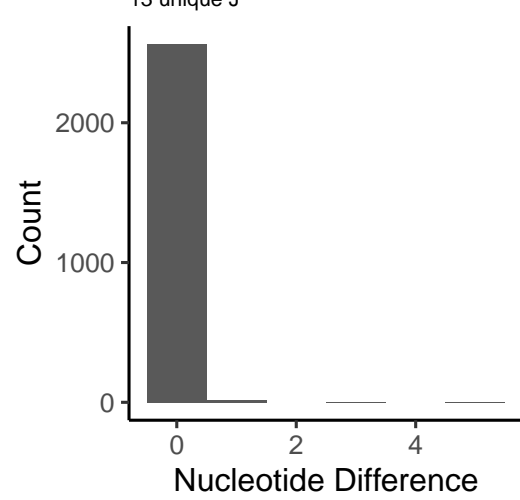
### TRBV1\*ap01

407 sequences assigned  
402 (98.8%) exact matches, in which:  
398 unique CDR3  
13 unique J



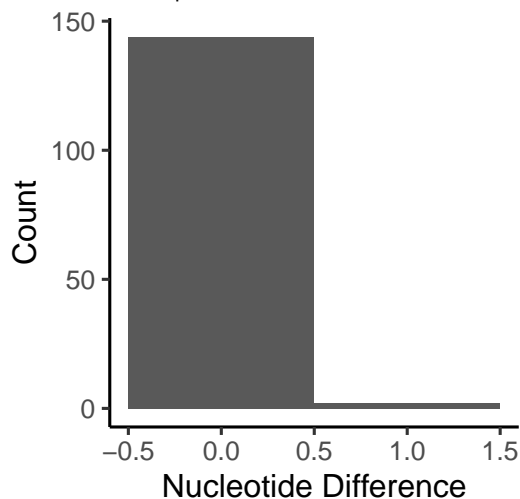
### TRBV15\*ap02

2583 sequences assigned  
2563 (99.2%) exact matches, in which:  
2554 unique CDR3  
13 unique J



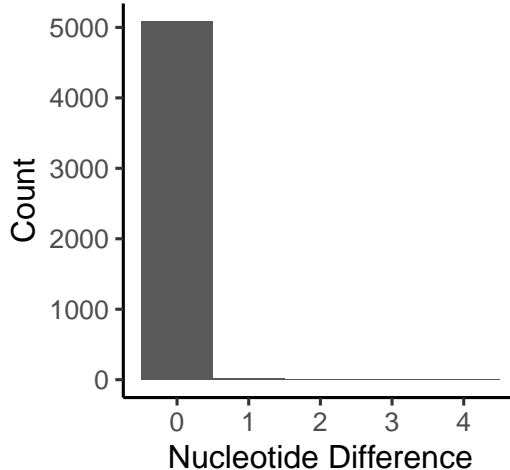
### TRBV16\*ap01

146 sequences assigned  
144 (98.6%) exact matches, in which:  
144 unique CDR3  
12 unique J



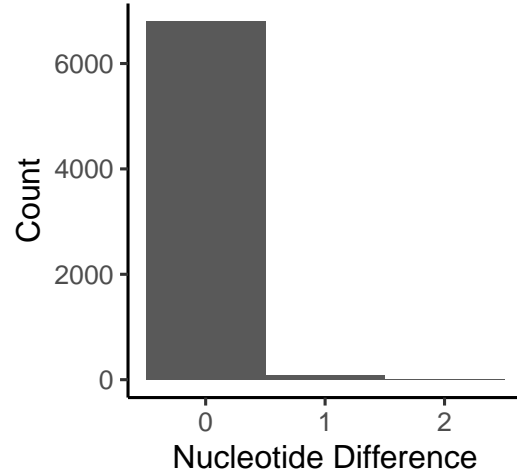
### TRBV2\*ap01

5119 sequences assigned  
5085 (99.3%) exact matches, in which:  
5060 unique CDR3  
13 unique J



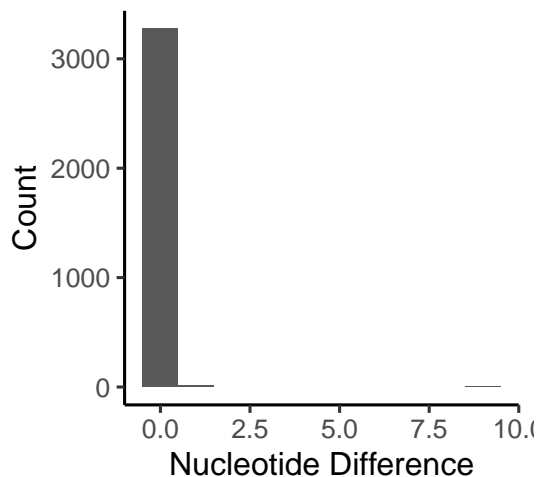
### TRBV30\*ap01

6889 sequences assigned  
6799 (98.7%) exact matches, in which:  
6710 unique CDR3  
13 unique J



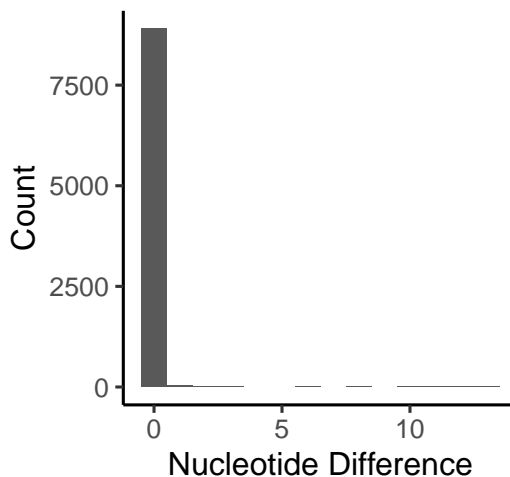
### TRBV18\*ap01

3289 sequences assigned  
3275 (99.6%) exact matches, in which:  
3268 unique CDR3  
13 unique J



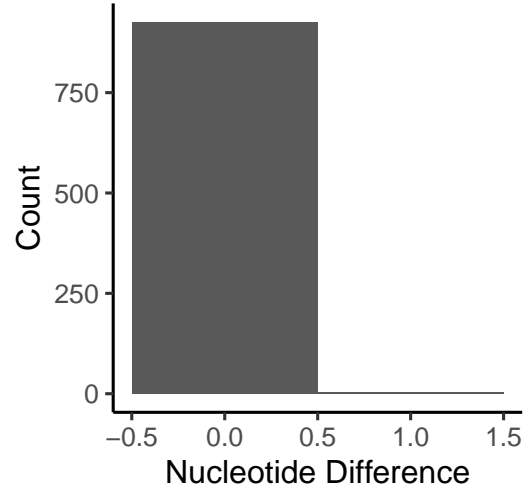
### TRBV27\*ap01

8944 sequences assigned  
8901 (99.5%) exact matches, in which:  
8865 unique CDR3  
13 unique J



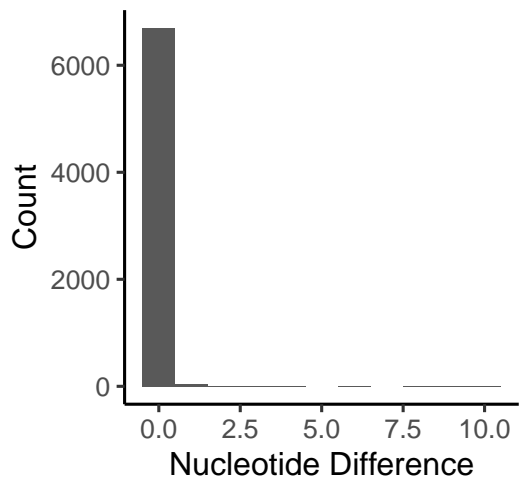
### TRBV30\*ap03

930 sequences assigned  
926 (99.6%) exact matches, in which:  
917 unique CDR3  
13 unique J



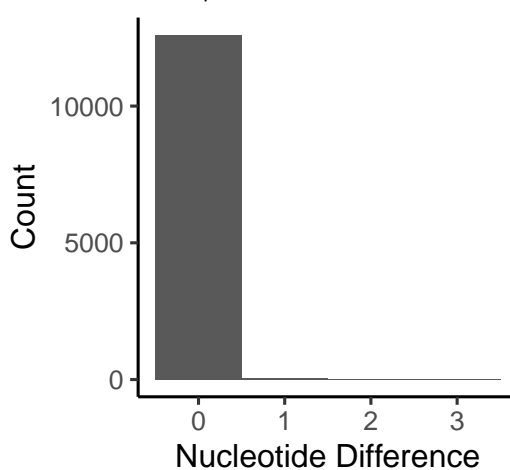
### TRBV19\*ap01

6745 sequences assigned  
6696 (99.3%) exact matches, in which:  
6676 unique CDR3  
13 unique J



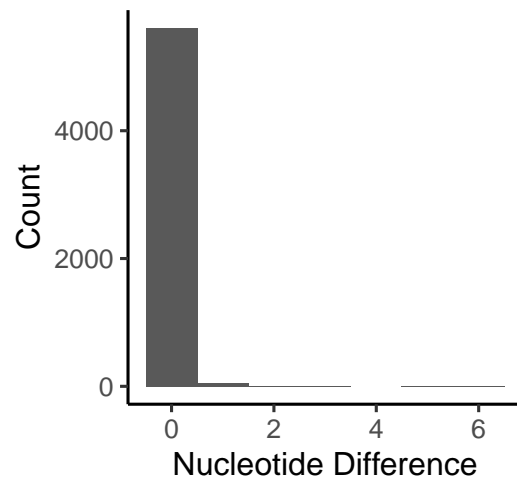
### TRBV28\*ap01

12671 sequences assigned  
12607 (99.5%) exact matches, in which:  
12567 unique CDR3  
13 unique J



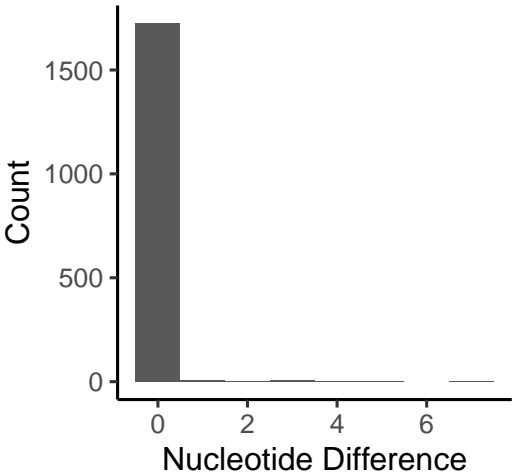
### TRBV9\*ap01

5667 sequences assigned  
5607 (98.9%) exact matches, in which:  
5590 unique CDR3  
13 unique J



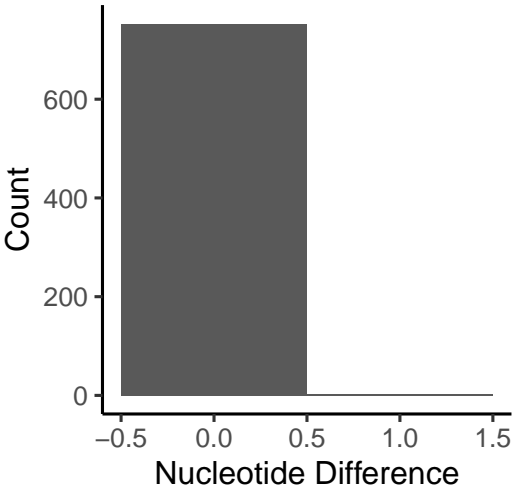
TRBV21-1\*ap01

1747 sequences assigned  
1724 (98.7%) exact matches, in which:  
1722 unique CDR3  
13 unique J



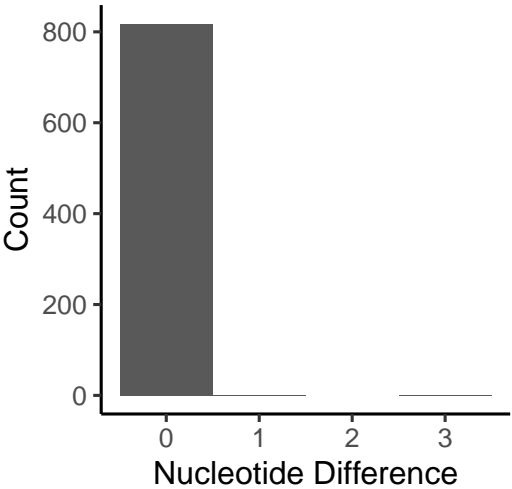
TRBV11-3\*ap01

756 sequences assigned  
753 (99.6%) exact matches, in which:  
752 unique CDR3  
13 unique J



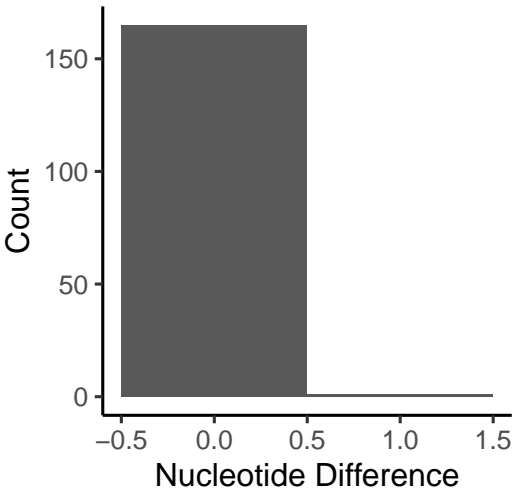
TRBV12-5\*ap01

820 sequences assigned  
818 (99.8%) exact matches, in which:  
817 unique CDR3  
13 unique J



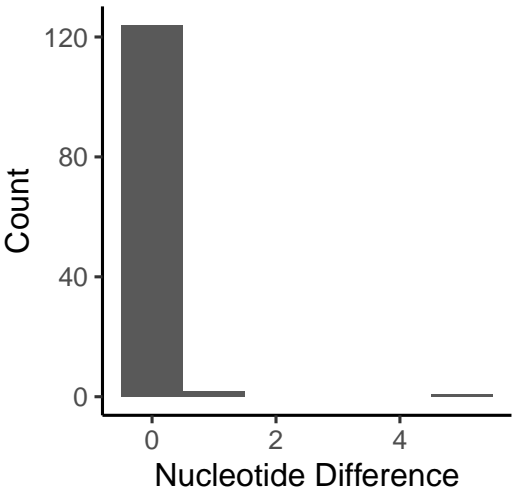
TRBV11-1\*ap01

166 sequences assigned  
165 (99.4%) exact matches, in which:  
165 unique CDR3  
12 unique J



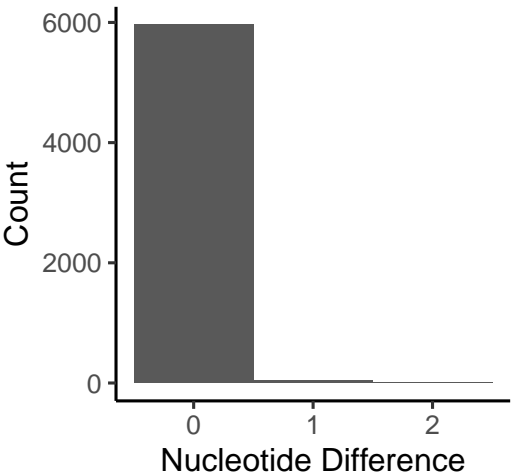
TRBV12-1\*ap01

127 sequences assigned  
124 (97.6%) exact matches, in which:  
124 unique CDR3  
12 unique J



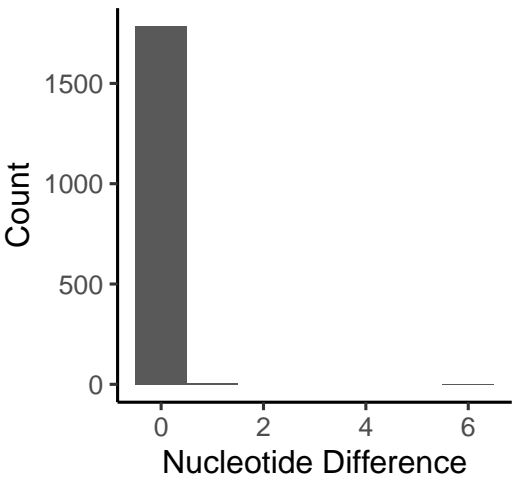
TRBV12-34\*ap01

5999 sequences assigned  
5962 (99.4%) exact matches, in which:  
5931 unique CDR3  
13 unique J



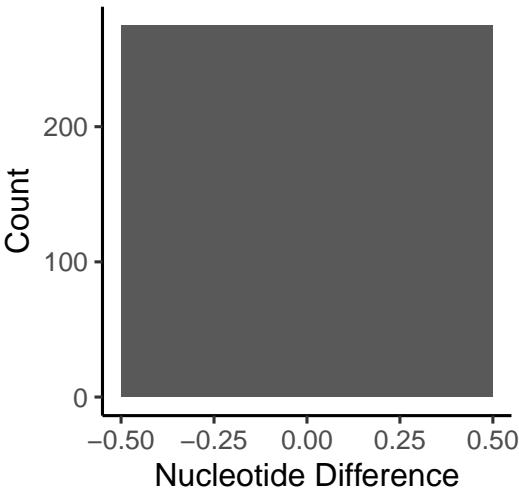
TRBV11-2\*ap01

1792 sequences assigned  
1786 (99.7%) exact matches, in which:  
1779 unique CDR3  
13 unique J



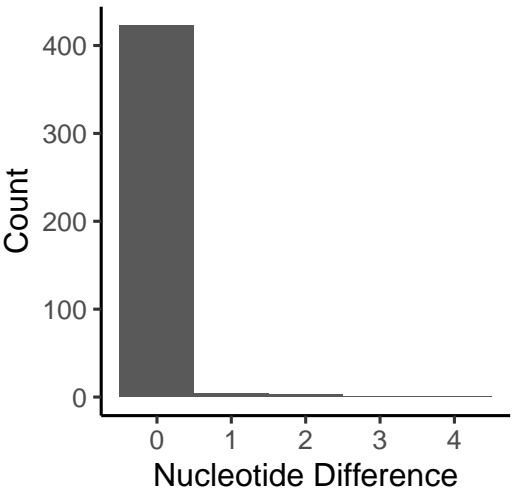
TRBV12-2\*ap01

275 sequences assigned  
275 (100%) exact matches, in which:  
272 unique CDR3  
12 unique J



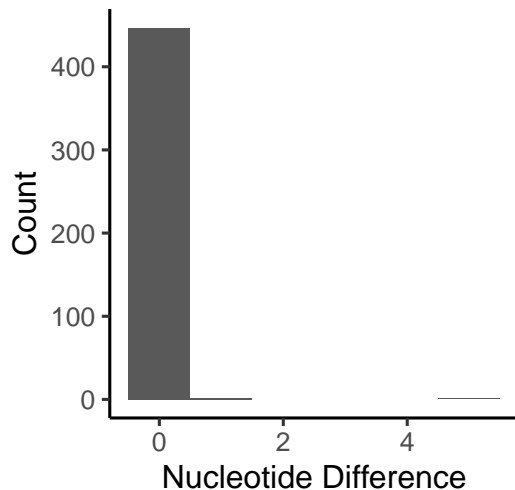
TRBV23-1\*ap01

432 sequences assigned  
423 (97.9%) exact matches, in which:  
422 unique CDR3  
12 unique J



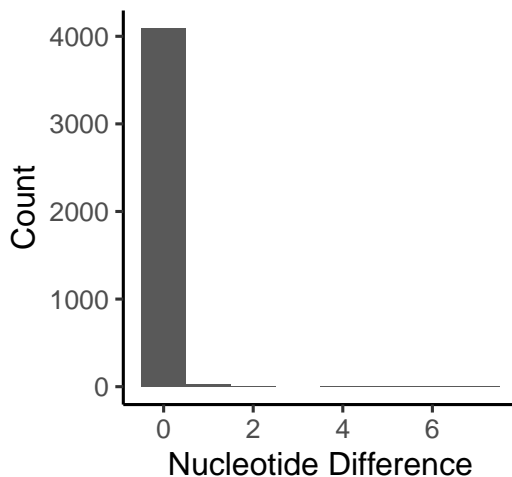
### TRBV23–1\*ap01\_T304C

450 sequences assigned  
447 (99.3%) exact matches, in which:  
447 unique CDR3  
13 unique J



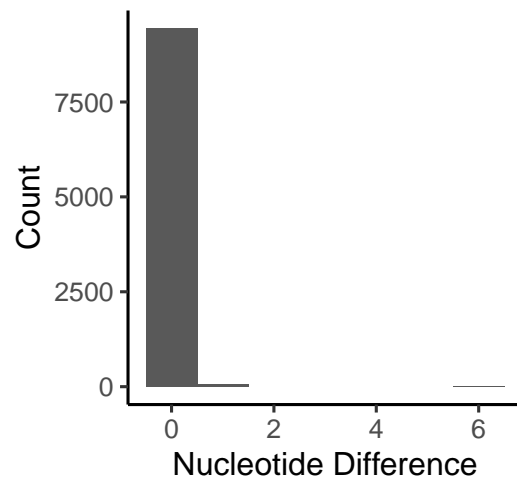
### TRBV24–1\*ap01

4131 sequences assigned  
4090 (99%) exact matches, in which:  
4051 unique CDR3  
13 unique J



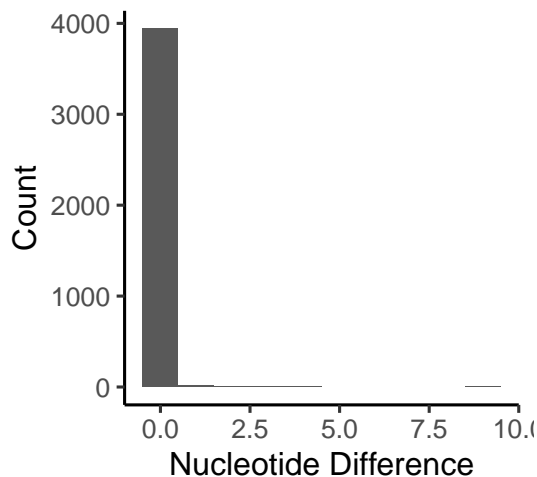
### TRBV5–1\*ap01

9517 sequences assigned  
9438 (99.2%) exact matches, in which:  
9378 unique CDR3  
13 unique J



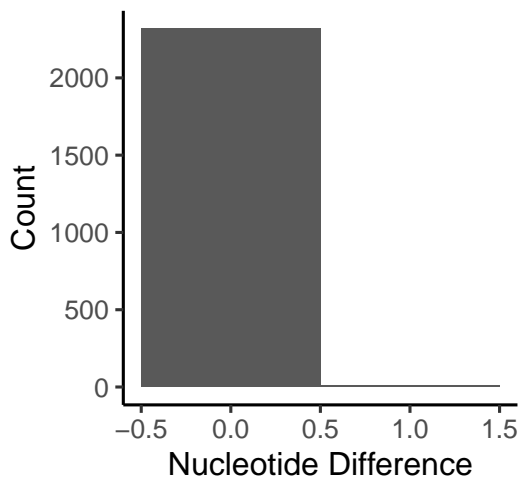
### TRBV3–12\*ap01

3963 sequences assigned  
3941 (99.4%) exact matches, in which:  
3929 unique CDR3  
13 unique J



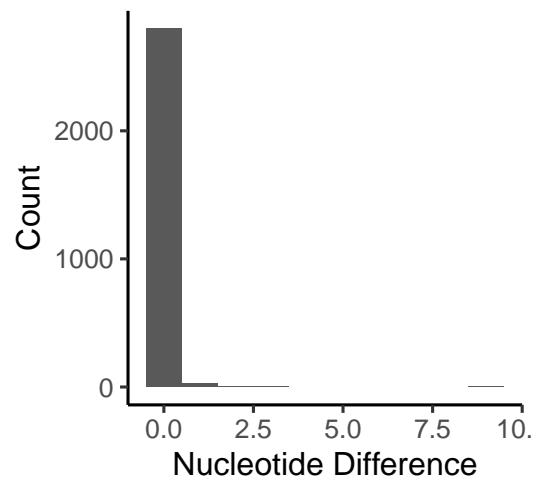
### TRBV4–2\*ap01

2330 sequences assigned  
2318 (99.5%) exact matches, in which:  
2302 unique CDR3  
13 unique J



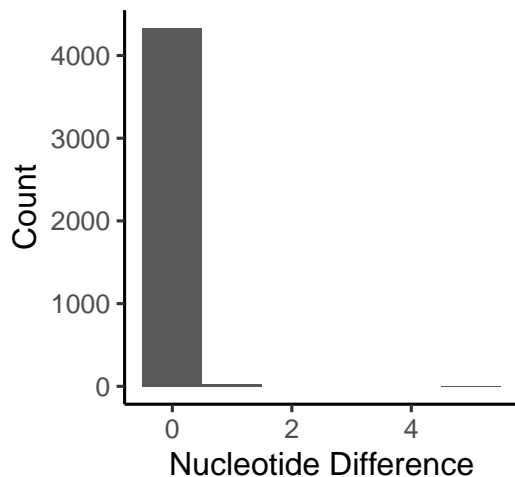
### TRBV25–1\*ap01

2831 sequences assigned  
2797 (98.8%) exact matches, in which:  
2765 unique CDR3  
13 unique J



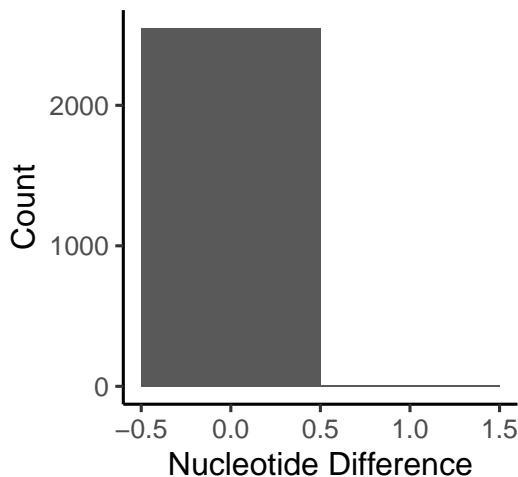
### TRBV4–1\*ap01

4360 sequences assigned  
4332 (99.4%) exact matches, in which:  
4304 unique CDR3  
13 unique J



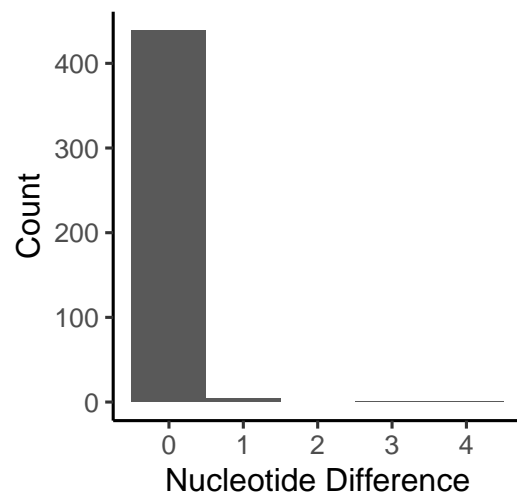
### TRBV4–3\*ap01

2558 sequences assigned  
2550 (99.7%) exact matches, in which:  
2531 unique CDR3  
13 unique J



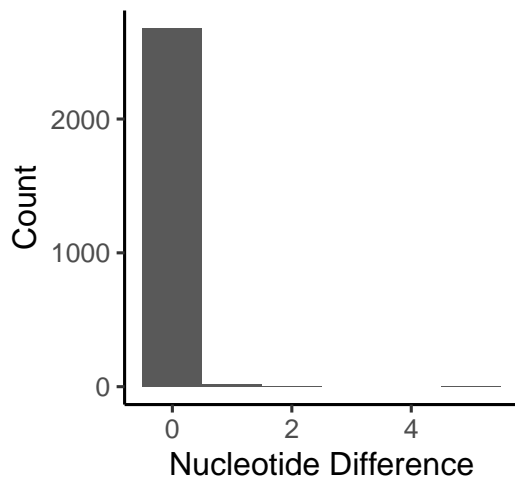
### TRBV5–3\*ap01

445 sequences assigned  
439 (98.7%) exact matches, in which:  
439 unique CDR3  
13 unique J



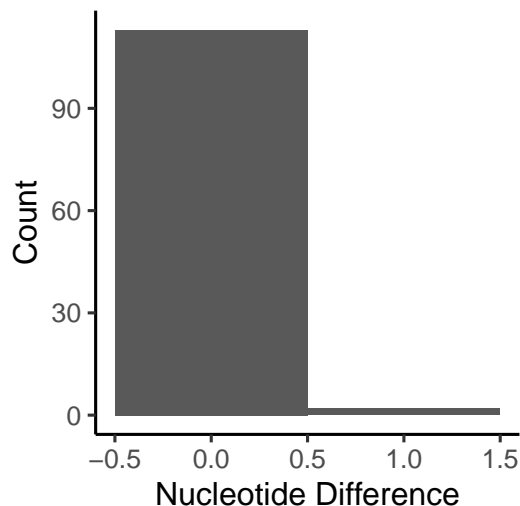
### TRBV5-4\*ap01

2697 sequences assigned  
2677 (99.3%) exact matches, in which:  
2655 unique CDR3  
13 unique J



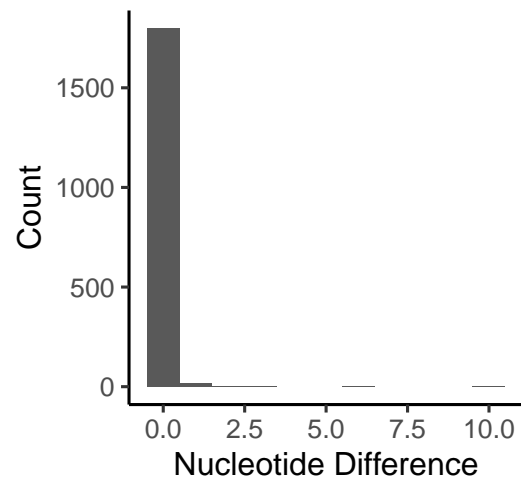
### TRBV5-7\*ap01

115 sequences assigned  
113 (98.3%) exact matches, in which:  
112 unique CDR3  
12 unique J



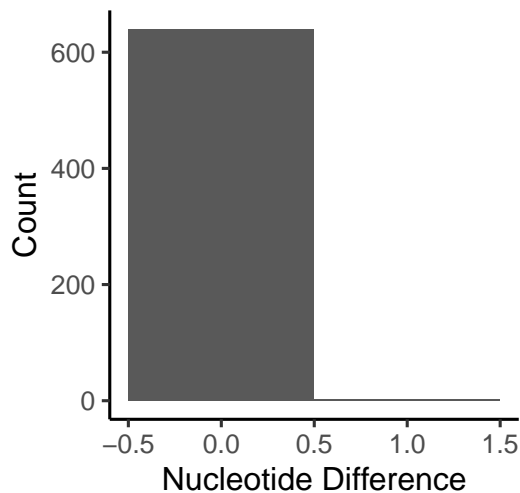
### TRBV6-4\*ap01

1819 sequences assigned  
1798 (98.8%) exact matches, in which:  
1793 unique CDR3  
13 unique J



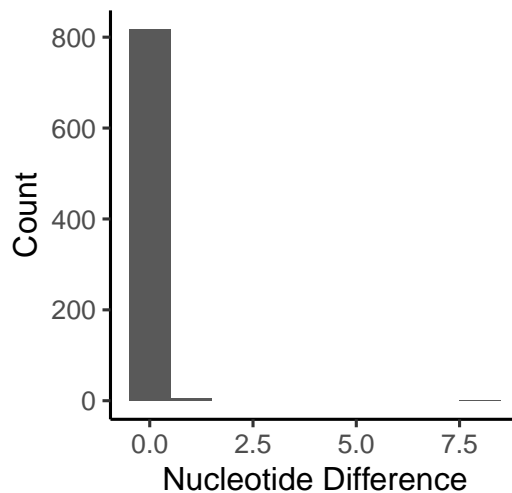
### TRBV5-5\*ap01

642 sequences assigned  
640 (99.7%) exact matches, in which:  
638 unique CDR3  
13 unique J



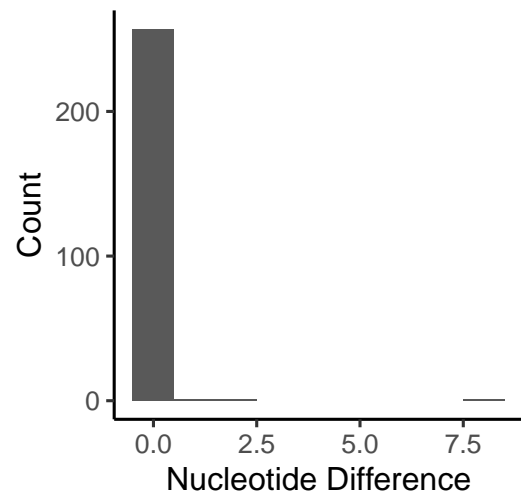
### TRBV5-8\*ap01

826 sequences assigned  
818 (99%) exact matches, in which:  
812 unique CDR3  
13 unique J



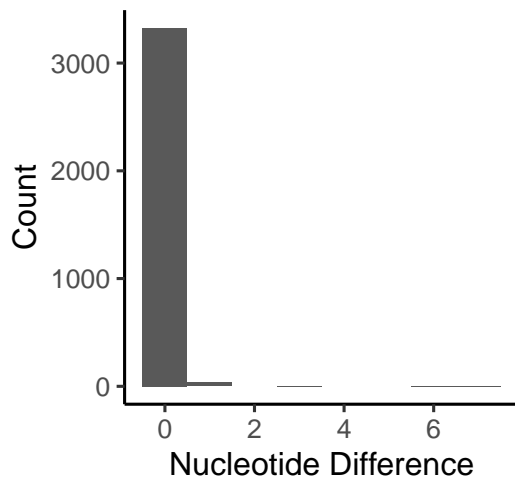
### TRBV6-7\*ap01

260 sequences assigned  
257 (98.8%) exact matches, in which:  
256 unique CDR3  
13 unique J



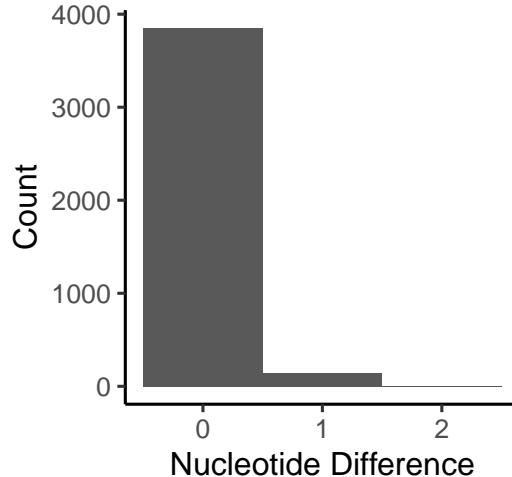
### TRBV5-6\*ap01

3362 sequences assigned  
3325 (98.9%) exact matches, in which:  
3290 unique CDR3  
13 unique J



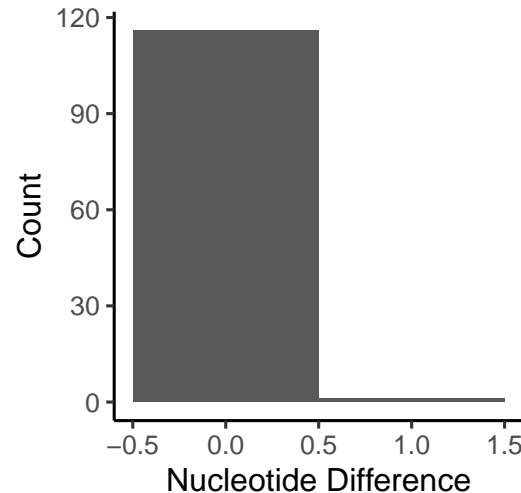
### TRBV6-1\*ap01

3999 sequences assigned  
3851 (96.3%) exact matches, in which:  
3818 unique CDR3  
13 unique J



### TRBV6-8\*ap01

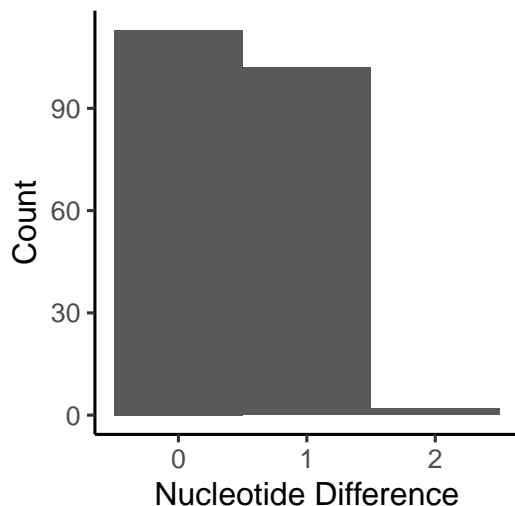
117 sequences assigned  
116 (99.1%) exact matches, in which:  
115 unique CDR3  
12 unique J





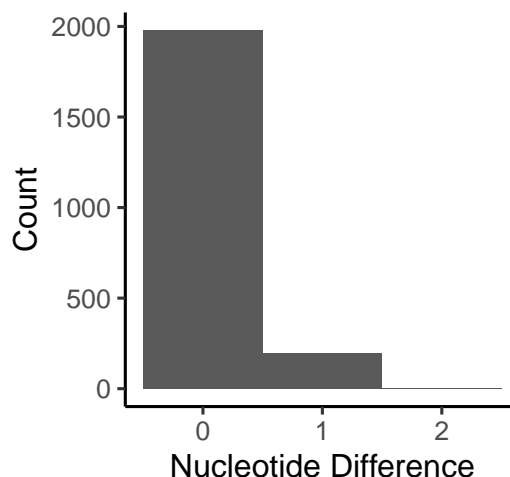
### TRBV6-9\*ap01

217 sequences assigned  
113 (52.1%) exact matches, in which:  
111 unique CDR3  
11 unique J



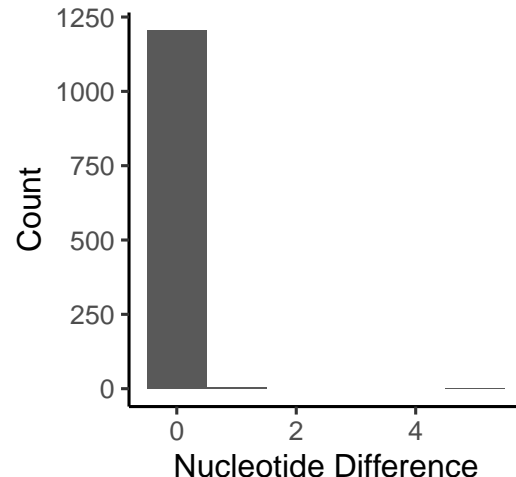
### TRBV6-56\*ap02

2173 sequences assigned  
1978 (91%) exact matches, in which:  
1960 unique CDR3  
13 unique J



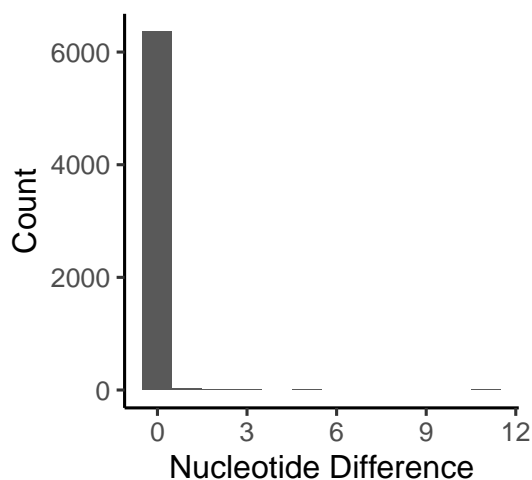
### TRBV7-3\*ap01

1210 sequences assigned  
1205 (99.6%) exact matches, in which:  
1201 unique CDR3  
13 unique J



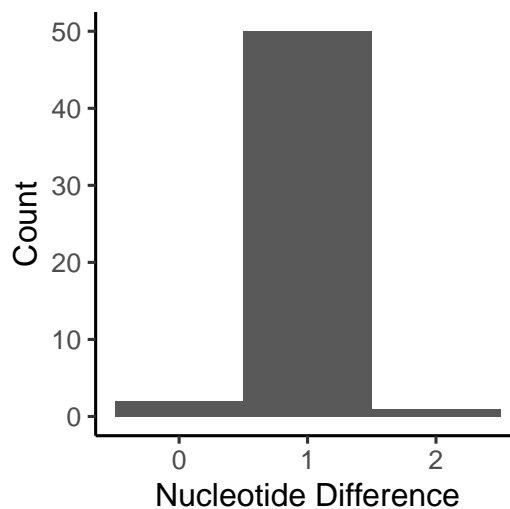
### TRBV6-23\*ap01

6395 sequences assigned  
6361 (99.5%) exact matches, in which:  
6287 unique CDR3  
14 unique J



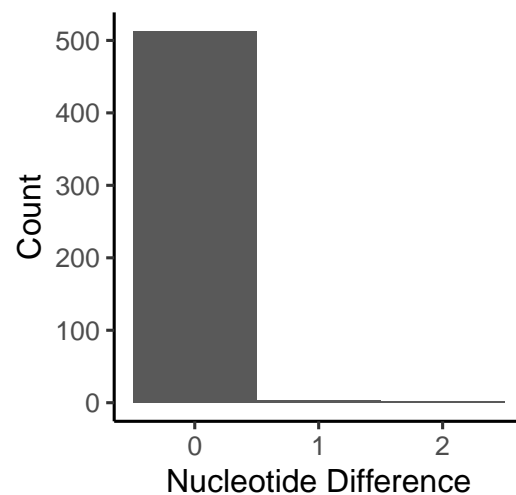
### TRBV7-1\*ap01\_T296C

53 sequences assigned  
2 (3.8%) exact matches, in which:  
2 unique CDR3  
2 unique J



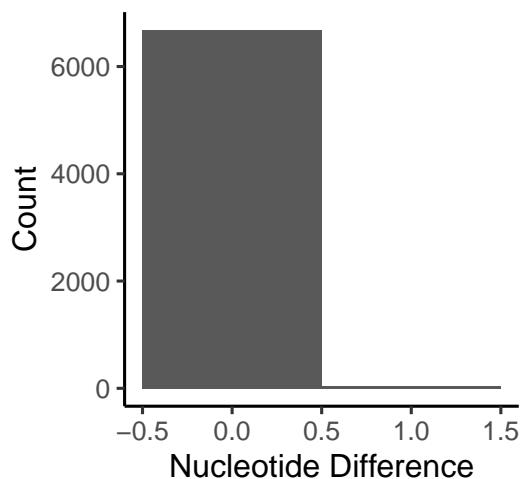
### TRBV7-3\*ap02

518 sequences assigned  
513 (99%) exact matches, in which:  
511 unique CDR3  
13 unique J



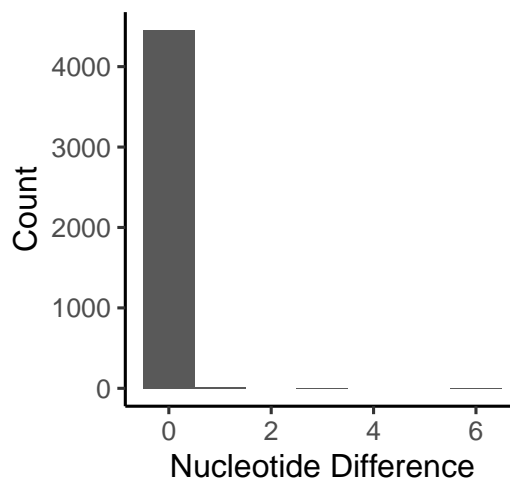
### TRBV6-56\*ap01

6720 sequences assigned  
6680 (99.4%) exact matches, in which:  
6605 unique CDR3  
13 unique J



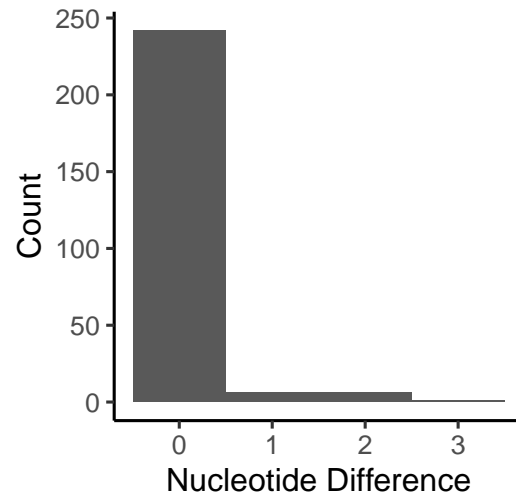
### TRBV7-2\*ap01

4474 sequences assigned  
4455 (99.6%) exact matches, in which:  
4444 unique CDR3  
13 unique J



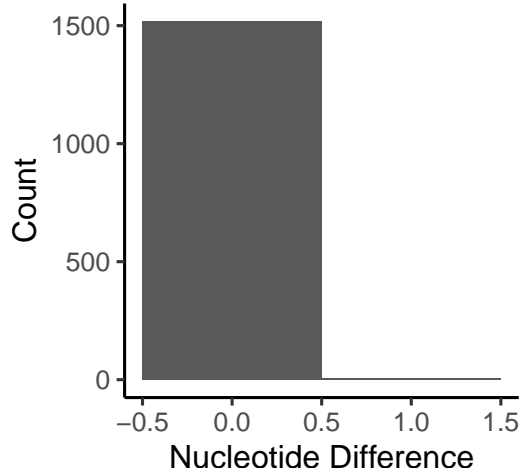
### TRBV7-4\*ap01

255 sequences assigned  
242 (94.9%) exact matches, in which:  
241 unique CDR3  
12 unique J



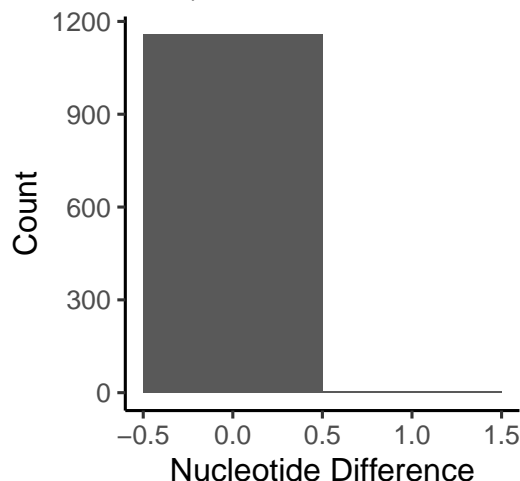
### TRBV7-6\*ap01

1523 sequences assigned  
1518 (99.7%) exact matches, in which:  
1509 unique CDR3  
13 unique J



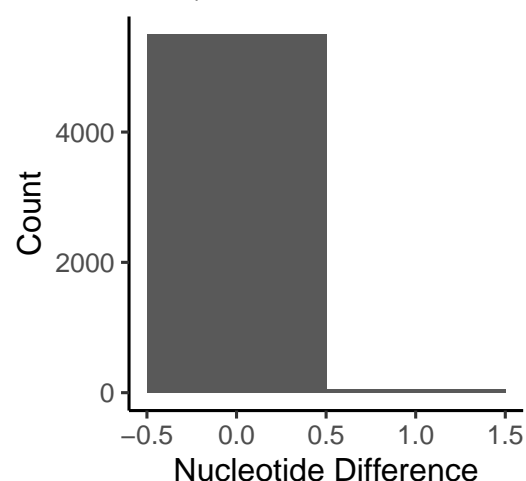
### TRBV7-8\*ap01

1162 sequences assigned  
1158 (99.7%) exact matches, in which:  
1157 unique CDR3  
13 unique J



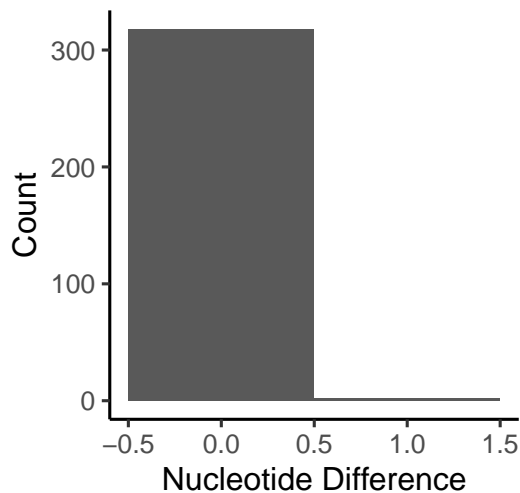
### TRBV29-1\*ap01

5550 sequences assigned  
5499 (99.1%) exact matches, in which:  
5421 unique CDR3  
13 unique J



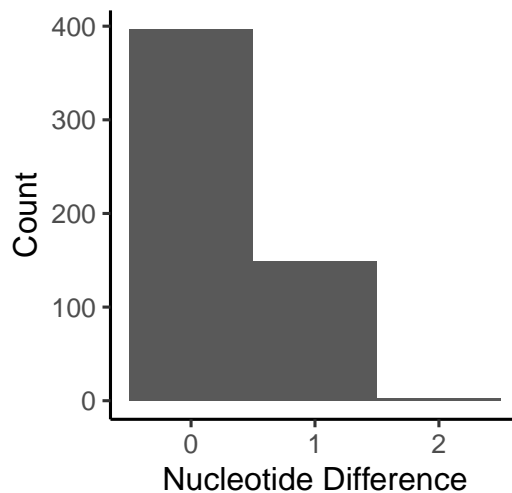
### TRBV7-7\*ap01

320 sequences assigned  
318 (99.4%) exact matches, in which:  
315 unique CDR3  
12 unique J



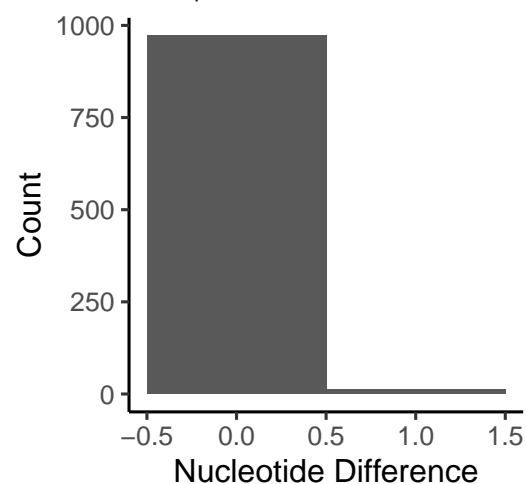
### TRBV7-8\*ap03

549 sequences assigned  
397 (72.3%) exact matches, in which:  
396 unique CDR3  
13 unique J



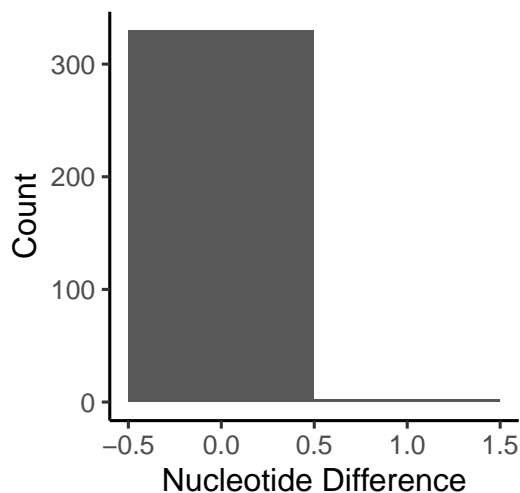
### TRBV29-1\*ap02

985 sequences assigned  
972 (98.7%) exact matches, in which:  
957 unique CDR3  
13 unique J



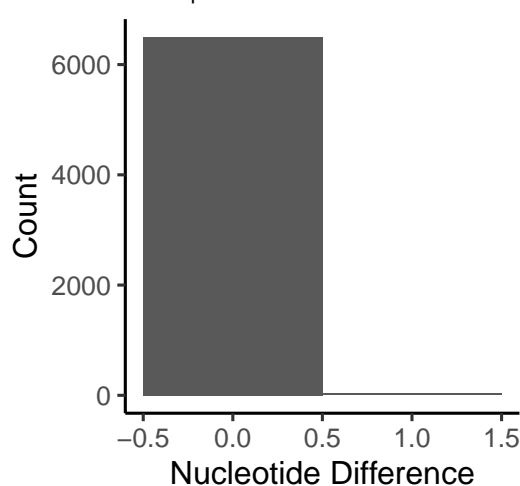
### TRBV7-7\*ap01\_C315T

332 sequences assigned  
330 (99.4%) exact matches, in which:  
328 unique CDR3  
13 unique J

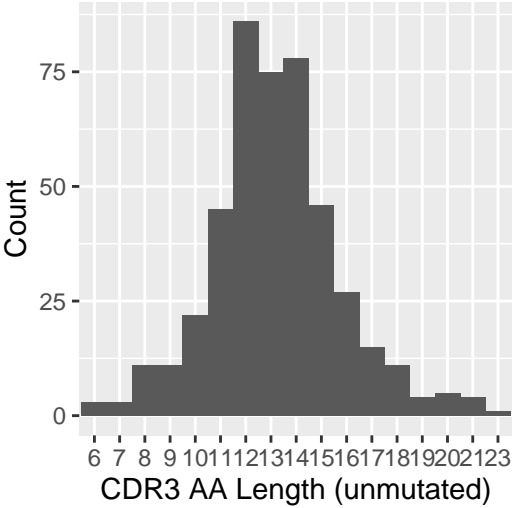


### TRBV7-9\*ap01

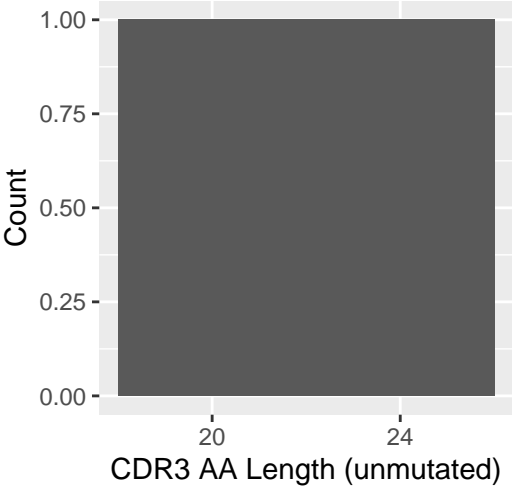
6530 sequences assigned  
6500 (99.5%) exact matches, in which:  
6463 unique CDR3  
13 unique J



TRBV23-1\*ap01\_T304C



TRBV7-1\*ap01\_T296C



TRBV7-7\*ap01\_C315T

