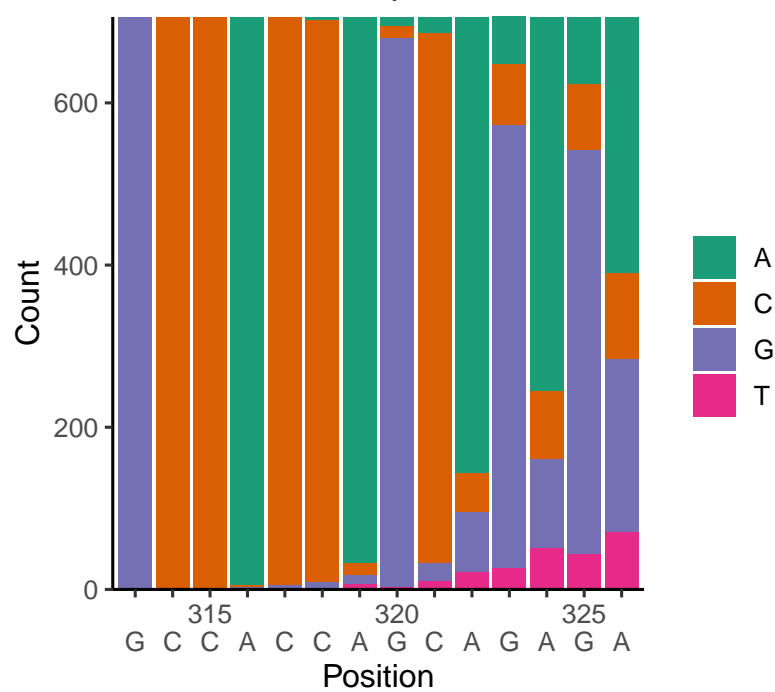
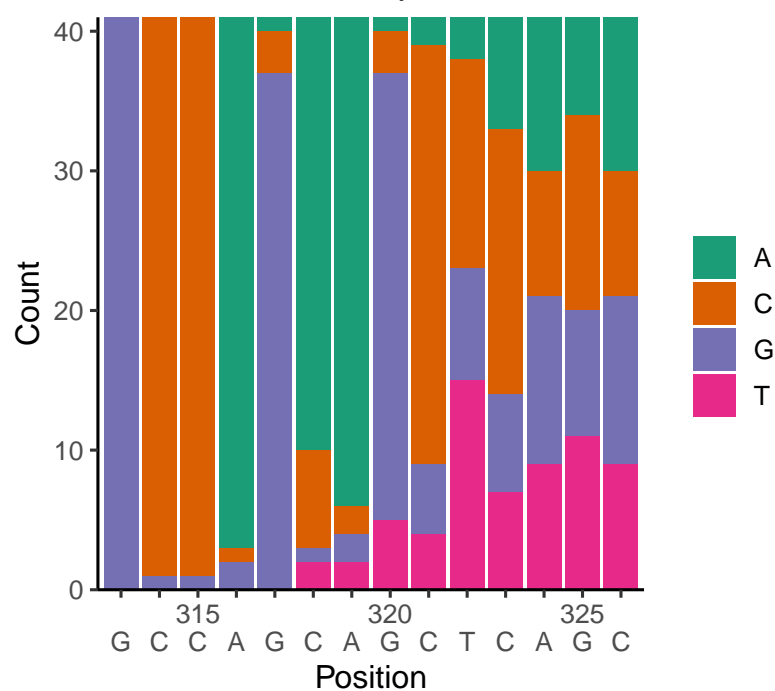


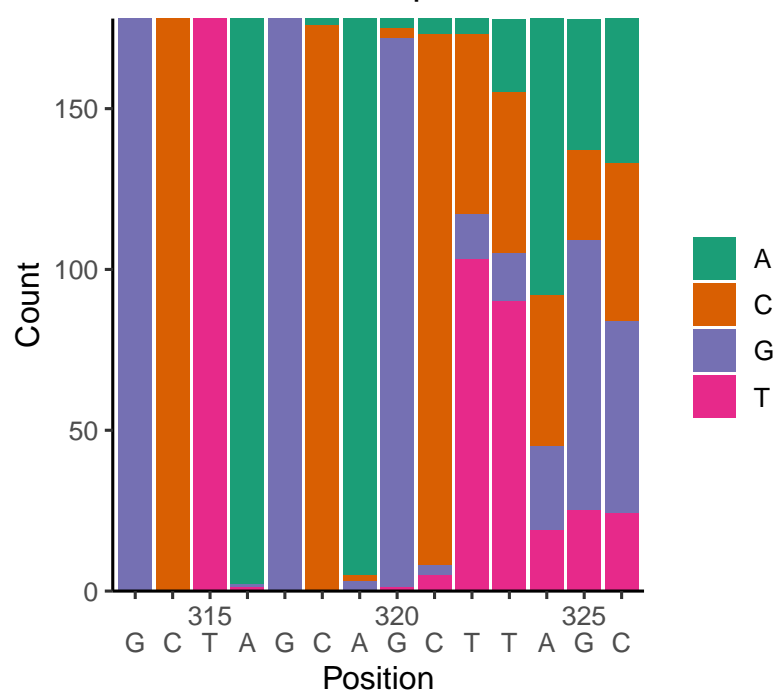
Gene TRBV15\*ap02\_G290C



Gene TRBV7-1\*ap01\_T296C



Gene TRBV7-7\*ap01\_C315T



Gene TRBV15\*ap02\_G290C



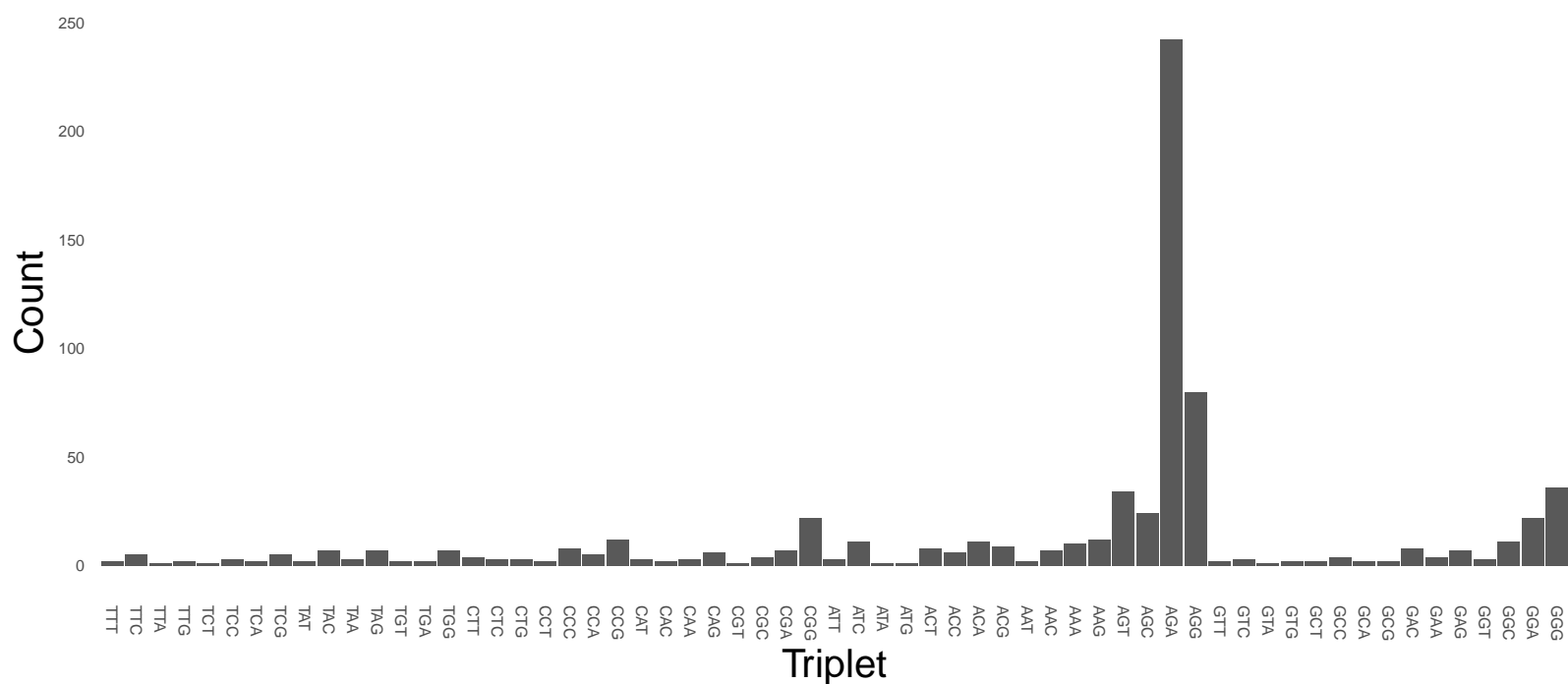
Gene TRBV7-1\*ap01\_T296C



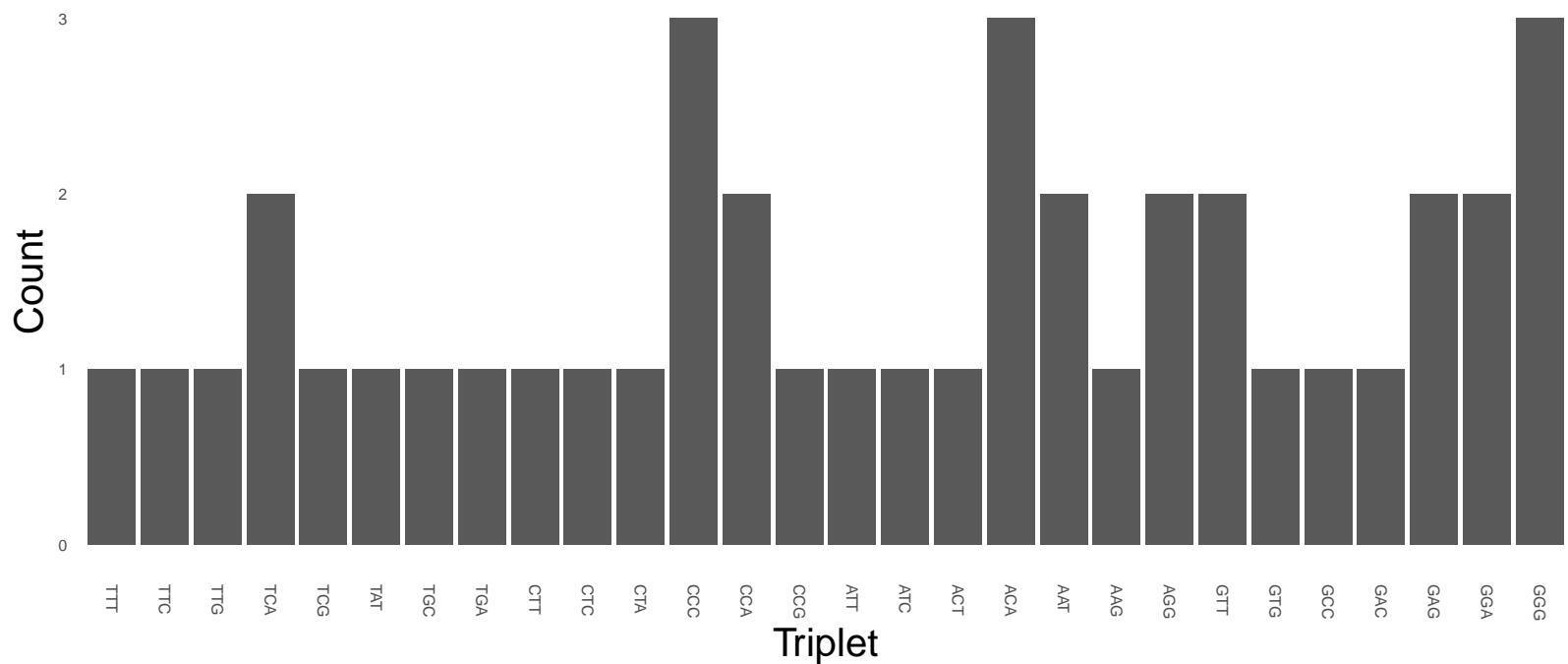
Gene TRBV7-7\*ap01\_C315T



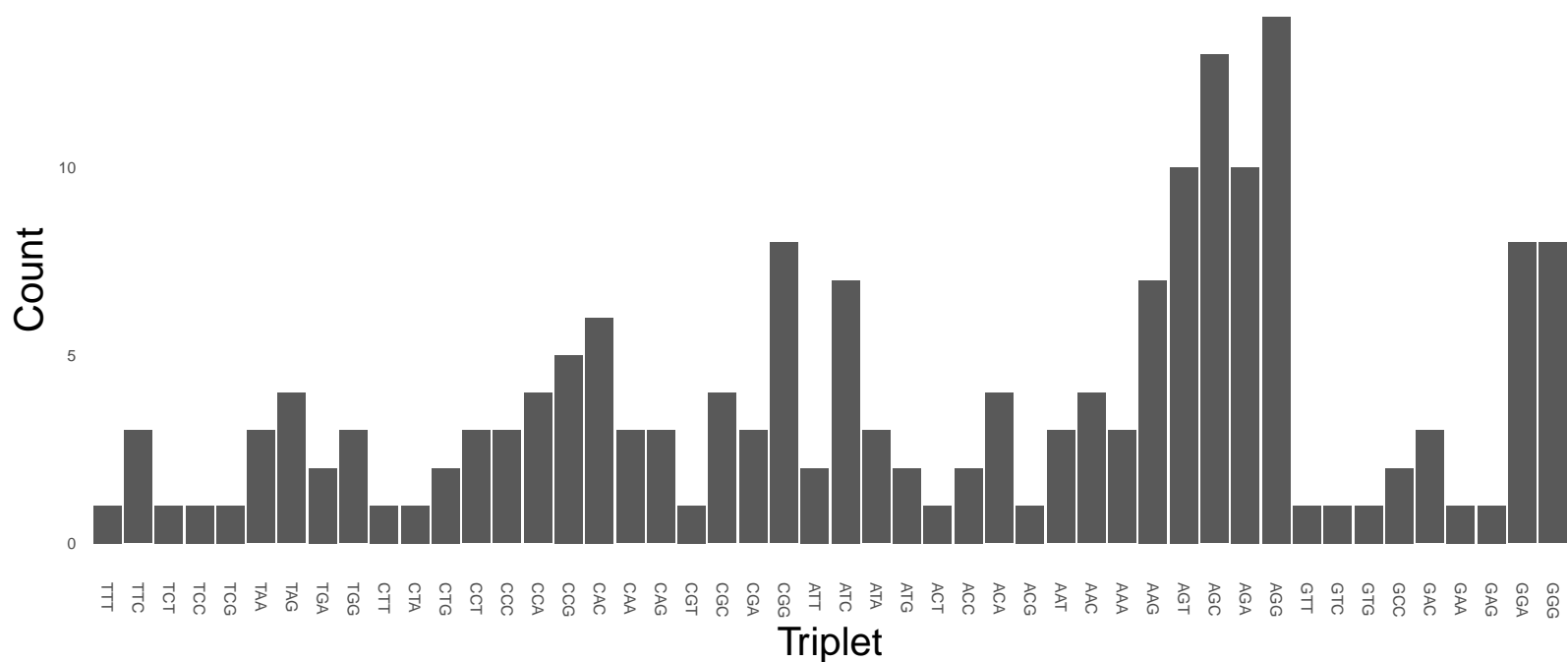
TRBV15\*ap02\_G290C– Final 3 nucleotides as a triplet



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

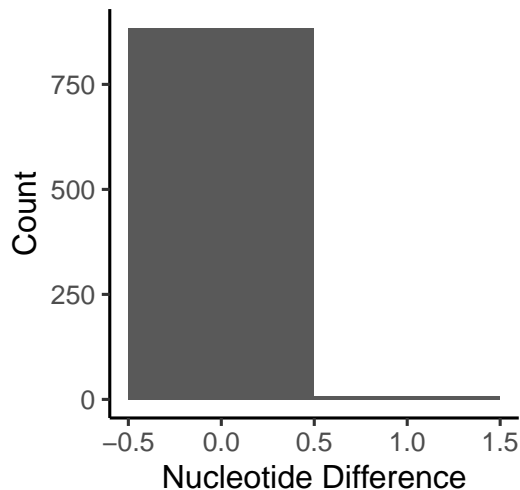


TRBV7–7\*ap01\_C315T– Final 3 nucleotides as a triplet



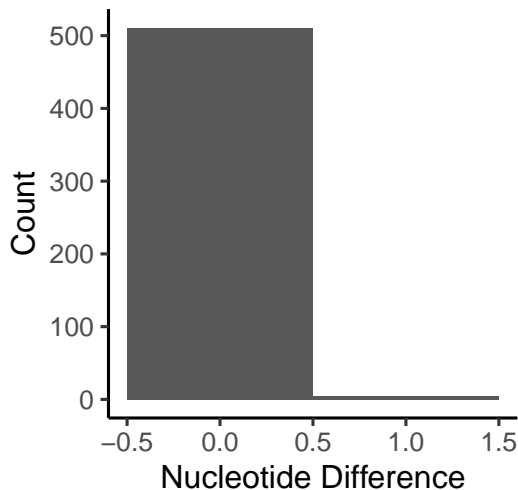
### TRBV10–1\*ap01

894 sequences assigned  
885 (99%) exact matches, in which:  
874 unique CDR3  
14 unique J



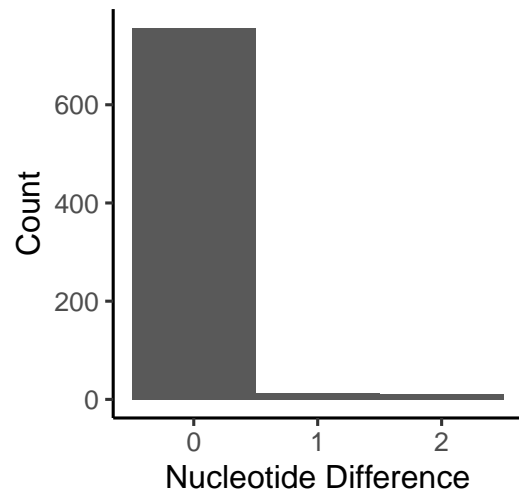
### TRBV10–2\*ap01

516 sequences assigned  
511 (99%) exact matches, in which:  
509 unique CDR3  
14 unique J



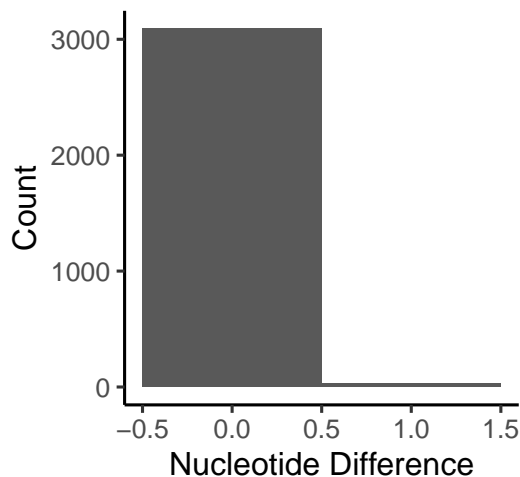
### TRBV13\*ap01

781 sequences assigned  
757 (96.9%) exact matches, in which:  
747 unique CDR3  
14 unique J



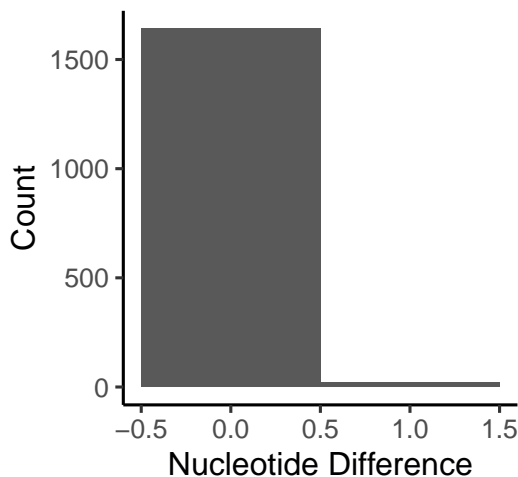
### TRBV20–1\*ap01

3118 sequences assigned  
3091 (99.1%) exact matches, in which:  
3078 unique CDR3  
14 unique J



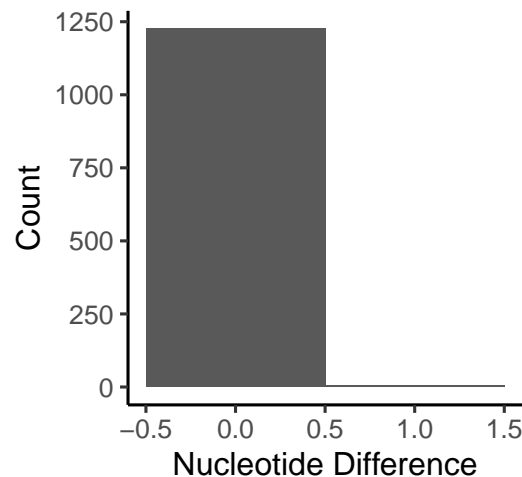
### TRBV10–3\*ap01

1660 sequences assigned  
1641 (98.9%) exact matches, in which:  
1631 unique CDR3  
14 unique J



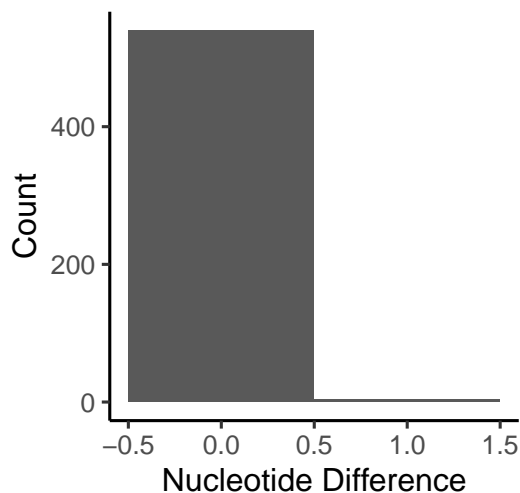
### TRBV14\*ap01

1230 sequences assigned  
1226 (99.7%) exact matches, in which:  
1224 unique CDR3  
14 unique J



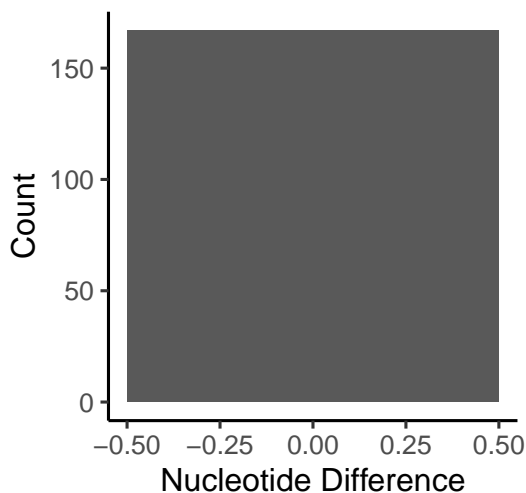
### TRBV20–1\*ap02

544 sequences assigned  
540 (99.3%) exact matches, in which:  
539 unique CDR3  
14 unique J



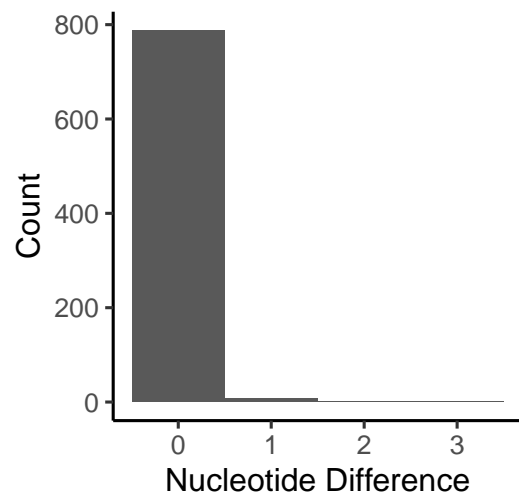
### TRBV1\*ap01

167 sequences assigned  
167 (100%) exact matches, in which:  
165 unique CDR3  
14 unique J



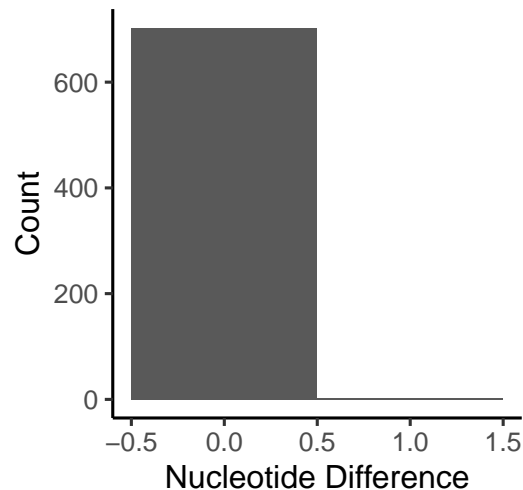
### TRBV15\*ap02

797 sequences assigned  
788 (98.9%) exact matches, in which:  
779 unique CDR3  
13 unique J



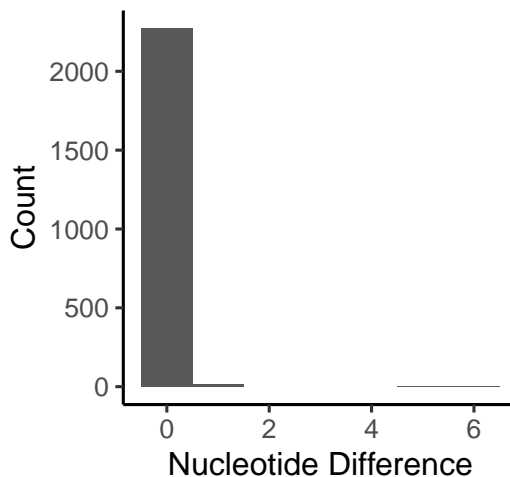
### TRBV15\*ap02\_G290C

706 sequences assigned  
703 (99.6%) exact matches, in which:  
702 unique CDR3  
13 unique J



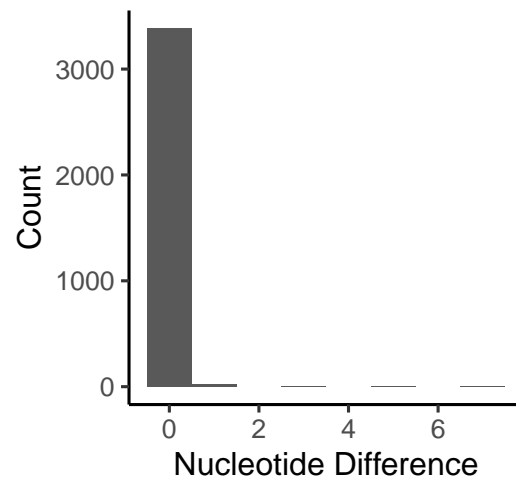
### TRBV18\*ap01

2288 sequences assigned  
2272 (99.3%) exact matches, in which:  
2267 unique CDR3  
14 unique J



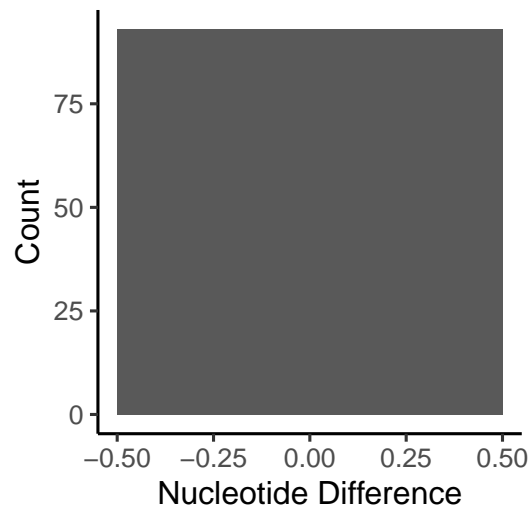
### TRBV27\*ap01

3413 sequences assigned  
3384 (99.2%) exact matches, in which:  
3369 unique CDR3  
14 unique J



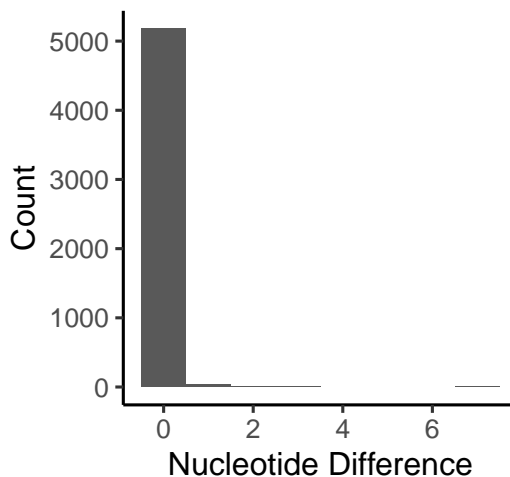
### TRBV16\*ap01

93 sequences assigned  
93 (100%) exact matches, in which:  
93 unique CDR3  
13 unique J



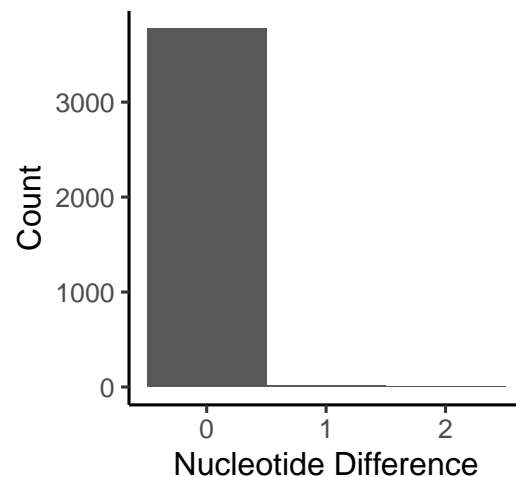
### TRBV19\*ap01

5217 sequences assigned  
5179 (99.3%) exact matches, in which:  
5166 unique CDR3  
14 unique J



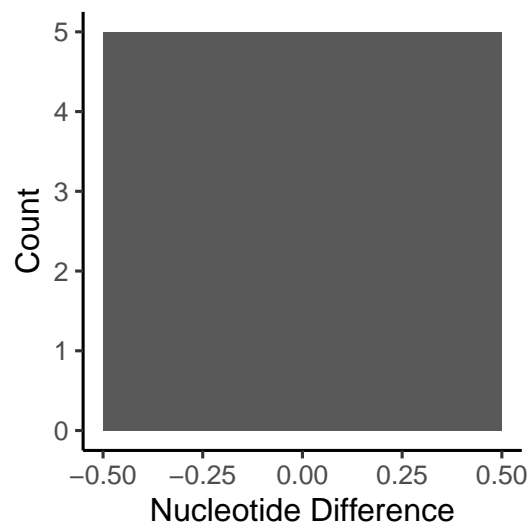
### TRBV28\*ap01

3794 sequences assigned  
3773 (99.4%) exact matches, in which:  
3759 unique CDR3  
15 unique J



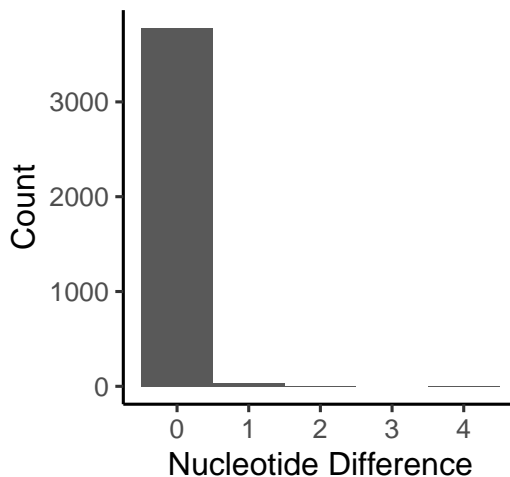
### TRBV17\*ap01

5 sequences assigned  
5 (100%) exact matches, in which:  
5 unique CDR3  
4 unique J



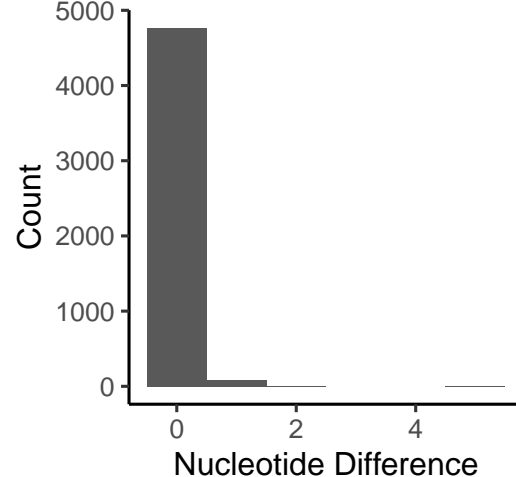
### TRBV2\*ap01

3817 sequences assigned  
3779 (99%) exact matches, in which:  
3759 unique CDR3  
14 unique J



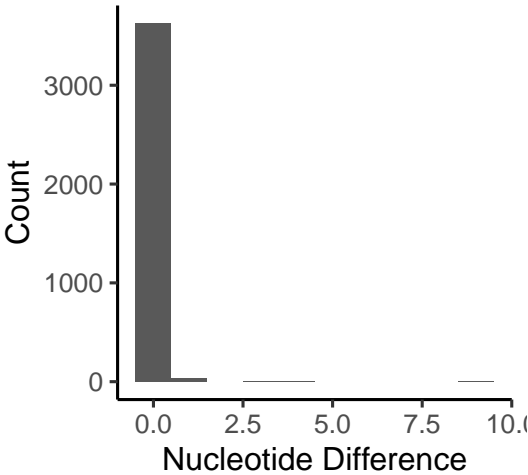
### TRBV30\*ap01

4853 sequences assigned  
4764 (98.2%) exact matches, in which:  
4721 unique CDR3  
14 unique J



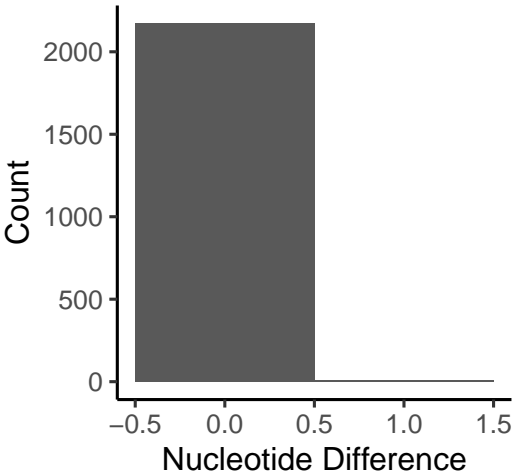
TRBV9\*ap01

3669 sequences assigned  
3626 (98.8%) exact matches, in which:  
3616 unique CDR3  
14 unique J



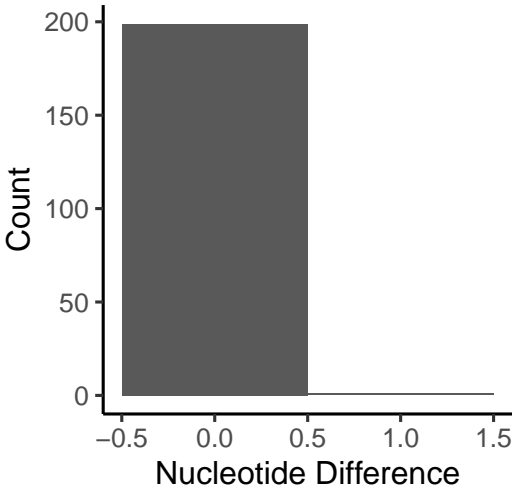
TRBV11-2\*ap01

2183 sequences assigned  
2172 (99.5%) exact matches, in which:  
2162 unique CDR3  
14 unique J



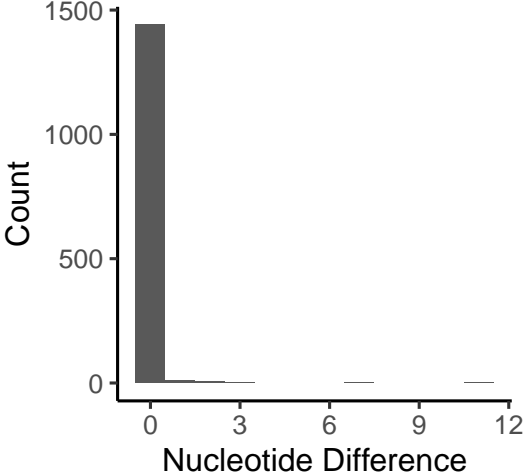
TRBV12-2\*ap01

200 sequences assigned  
199 (99.5%) exact matches, in which:  
196 unique CDR3  
13 unique J



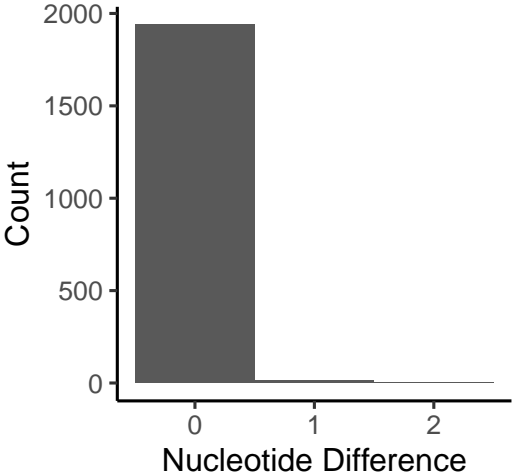
TRBV21-1\*ap01

1463 sequences assigned  
1441 (98.5%) exact matches, in which:  
1437 unique CDR3  
14 unique J



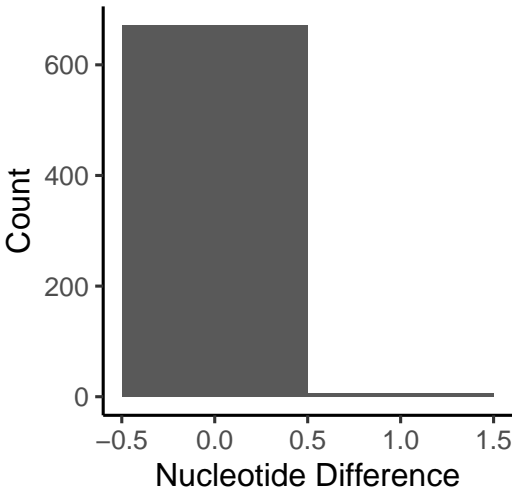
TRBV11-3\*ap01

1952 sequences assigned  
1939 (99.3%) exact matches, in which:  
1931 unique CDR3  
14 unique J



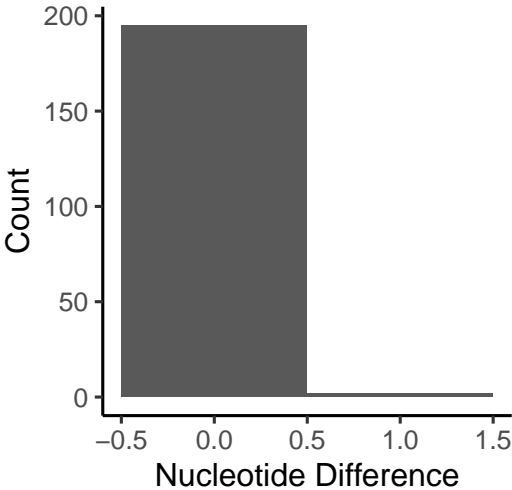
TRBV12-5\*ap01

678 sequences assigned  
672 (99.1%) exact matches, in which:  
669 unique CDR3  
14 unique J



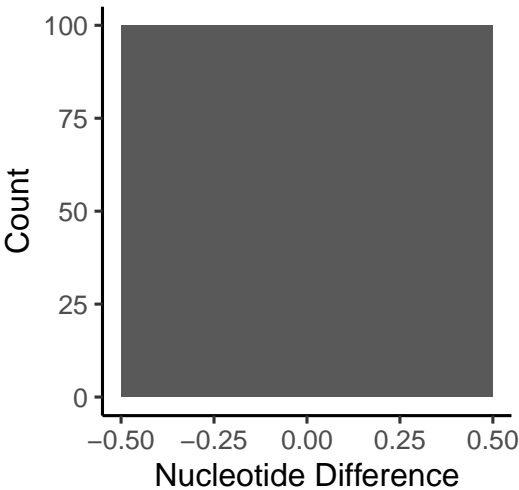
TRBV11-1\*ap01

197 sequences assigned  
195 (99%) exact matches, in which:  
195 unique CDR3  
13 unique J



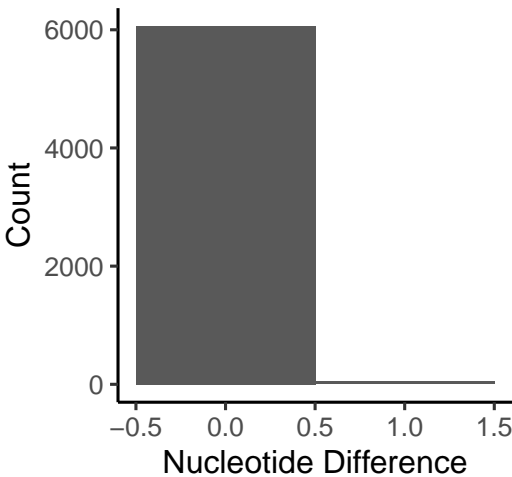
TRBV12-1\*ap01

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



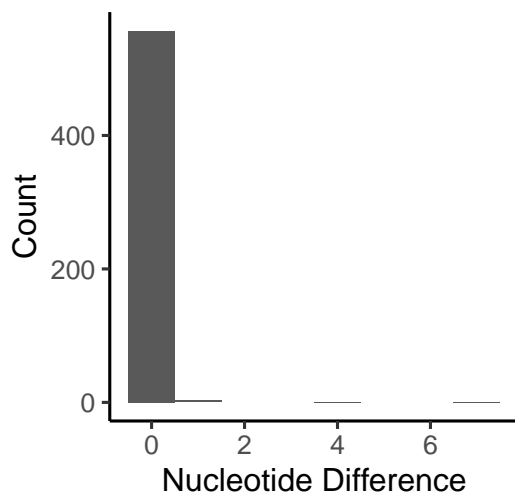
TRBV12-34\*ap01

6111 sequences assigned  
6063 (99.2%) exact matches, in which:  
6030 unique CDR3  
14 unique J



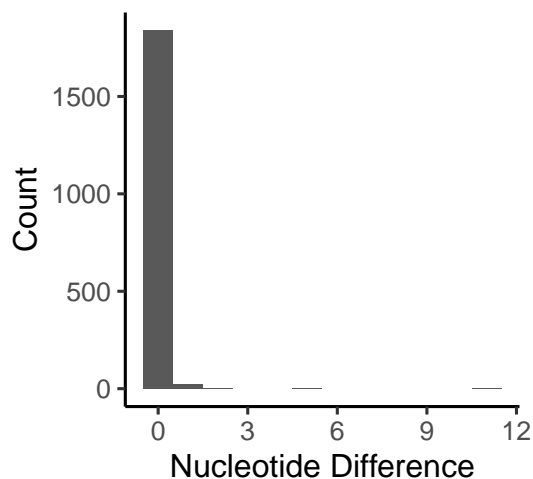
### TRBV23-1\*ap01

562 sequences assigned  
557 (99.1%) exact matches, in which:  
554 unique CDR3  
14 unique J



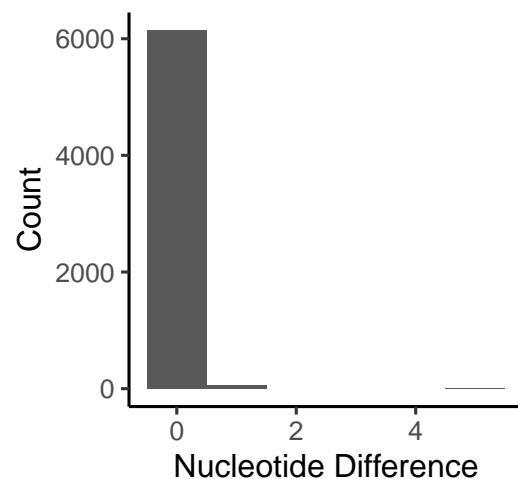
### TRBV4-1\*ap01

1865 sequences assigned  
1839 (98.6%) exact matches, in which:  
1825 unique CDR3  
14 unique J



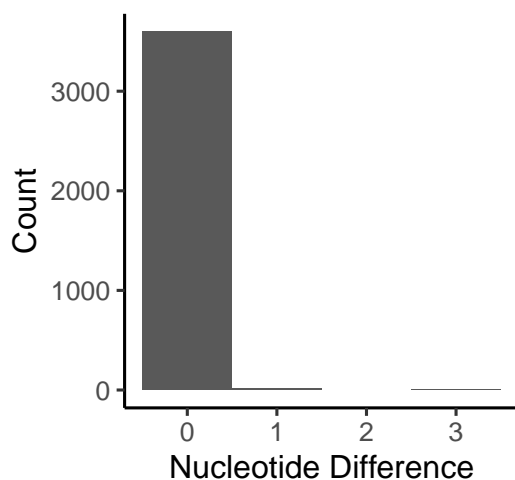
### TRBV5-1\*ap01

6204 sequences assigned  
6142 (99%) exact matches, in which:  
6086 unique CDR3  
14 unique J



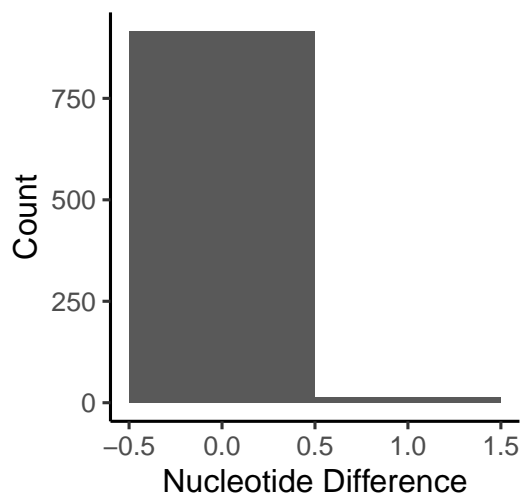
### TRBV3-12\*ap01

3612 sequences assigned  
3597 (99.6%) exact matches, in which:  
3587 unique CDR3  
14 unique J



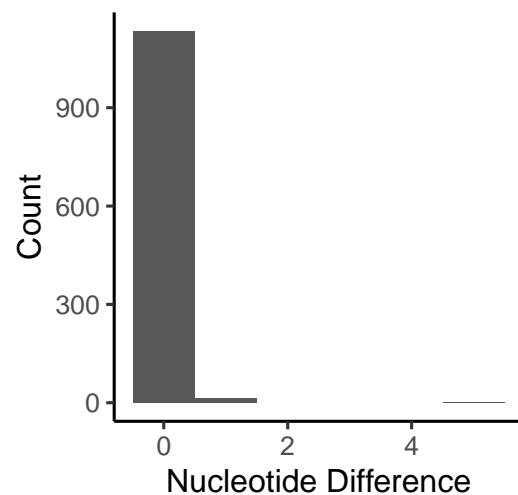
### TRBV4-2\*ap01

930 sequences assigned  
916 (98.5%) exact matches, in which:  
914 unique CDR3  
14 unique J



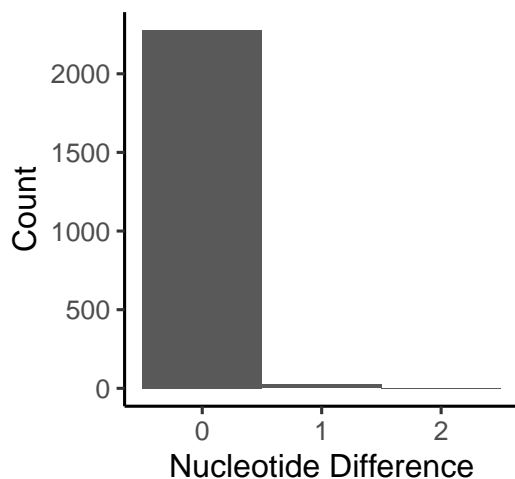
### TRBV25-1\*ap01

1150 sequences assigned  
1134 (98.6%) exact matches, in which:  
1124 unique CDR3  
14 unique J



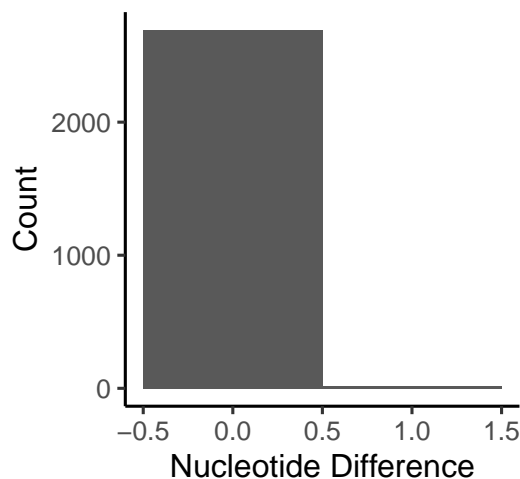
### TRBV24-1\*ap01

2304 sequences assigned  
2278 (98.9%) exact matches, in which:  
2255 unique CDR3  
14 unique J



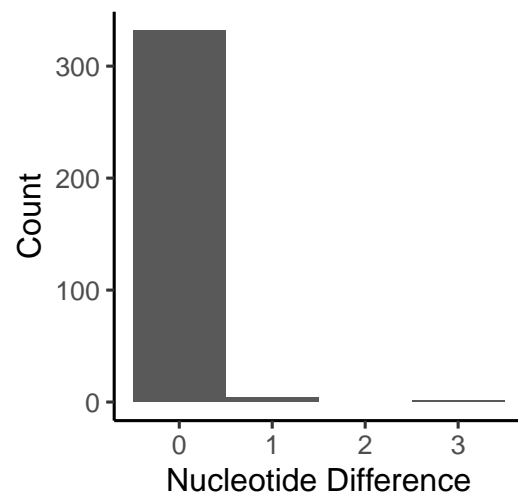
### TRBV4-3\*ap01

2710 sequences assigned  
2692 (99.3%) exact matches, in which:  
2666 unique CDR3  
14 unique J



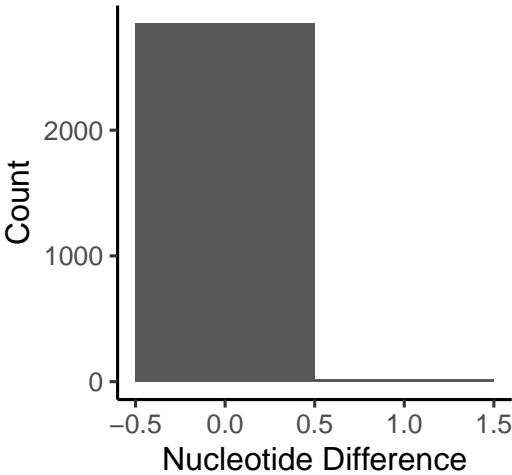
### TRBV5-3\*ap01

337 sequences assigned  
332 (98.5%) exact matches, in which:  
331 unique CDR3  
14 unique J



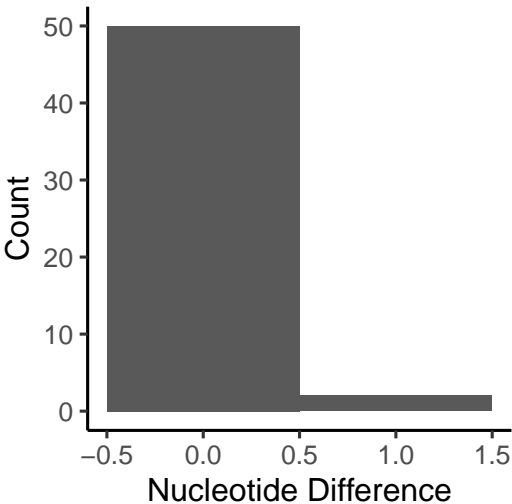
TRBV5-4\*ap01

2866 sequences assigned  
2849 (99.4%) exact matches, in which:  
2830 unique CDR3  
14 unique J



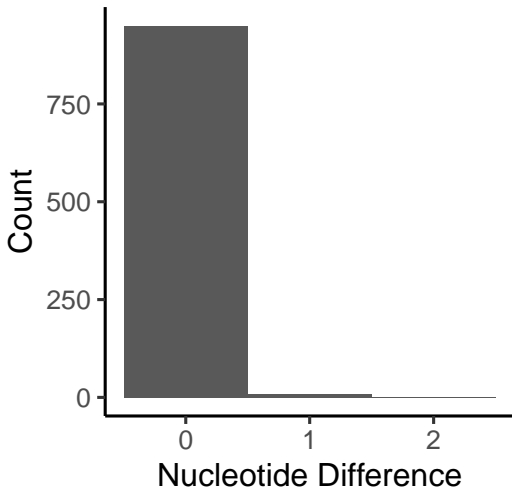
TRBV5-7\*ap01

52 sequences assigned  
50 (96.2%) exact matches, in which:  
46 unique CDR3  
12 unique J



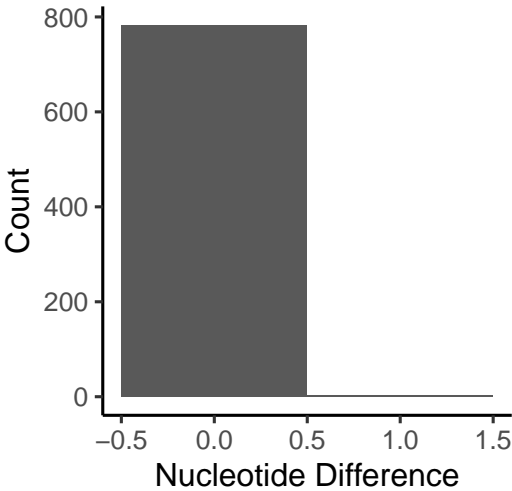
TRBV6-4\*ap01

959 sequences assigned  
950 (99.1%) exact matches, in which:  
945 unique CDR3  
14 unique J



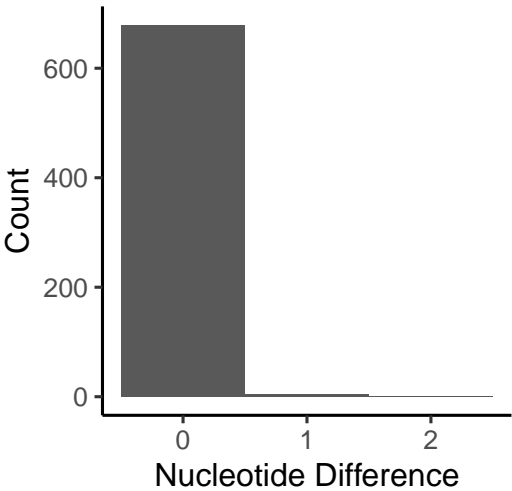
TRBV5-5\*ap01

786 sequences assigned  
783 (99.6%) exact matches, in which:  
779 unique CDR3  
14 unique J



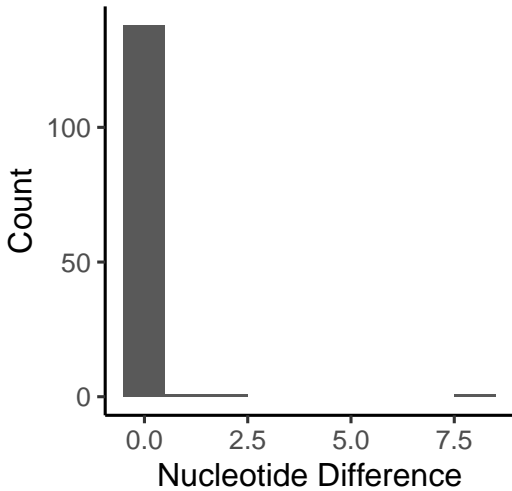
TRBV5-8\*ap01

685 sequences assigned  
679 (99.1%) exact matches, in which:  
676 unique CDR3  
14 unique J



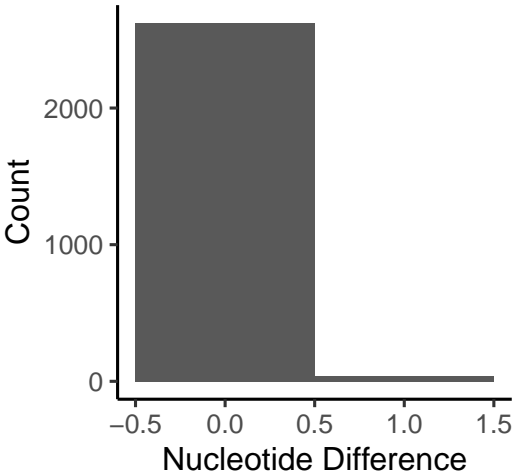
TRBV6-7\*ap01

141 sequences assigned  
138 (97.9%) exact matches, in which:  
135 unique CDR3  
14 unique J



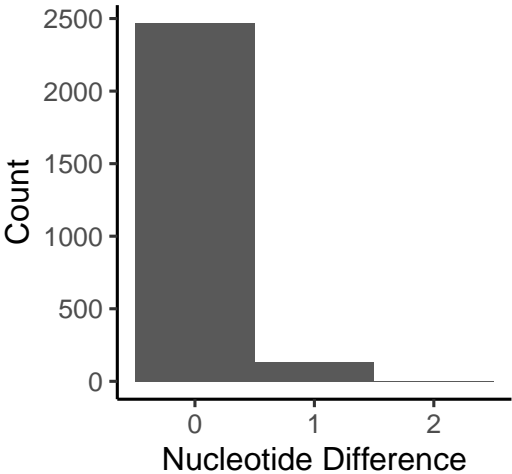
TRBV5-6\*ap01

2662 sequences assigned  
2622 (98.5%) exact matches, in which:  
2572 unique CDR3  
14 unique J



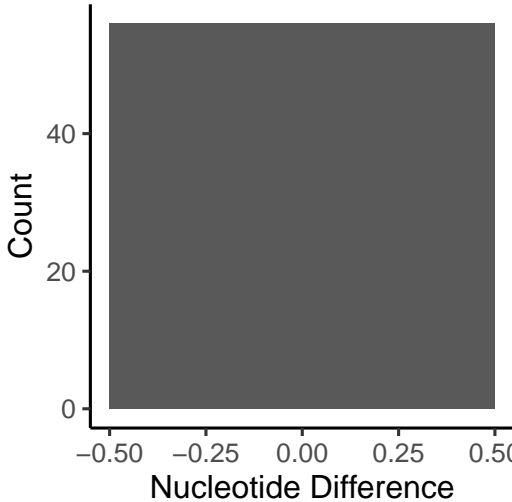
TRBV6-1\*ap01

2602 sequences assigned  
2469 (94.9%) exact matches, in which:  
2438 unique CDR3  
14 unique J



TRBV6-8\*ap01

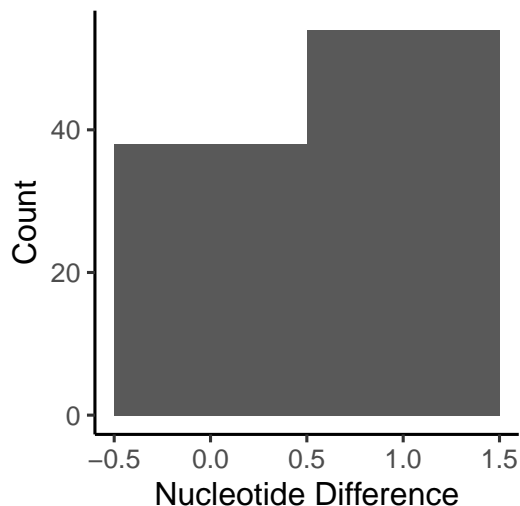
56 sequences assigned  
56 (100%) exact matches, in which:  
56 unique CDR3  
13 unique J





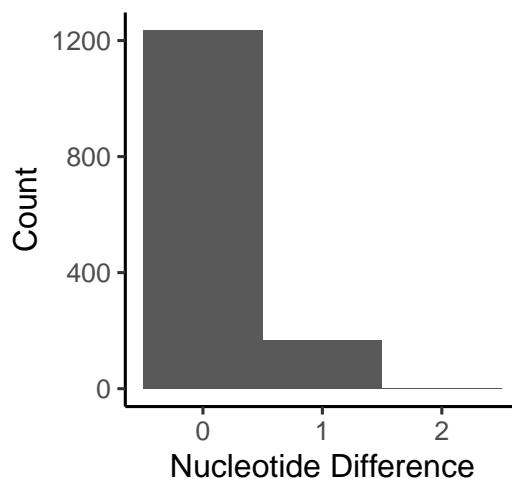
### TRBV6-9\*ap01

92 sequences assigned  
38 (41.3%) exact matches, in which:  
37 unique CDR3  
11 unique J



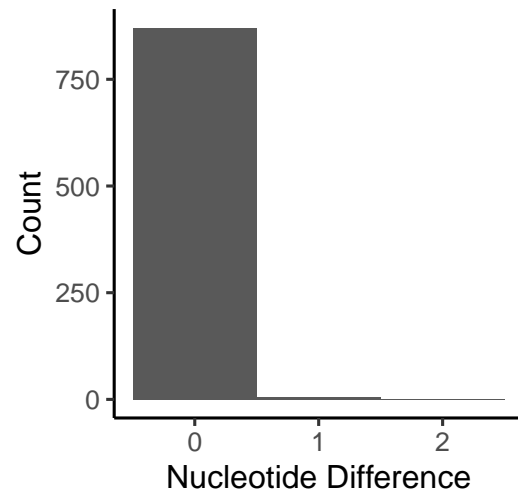
### TRBV6-56\*ap02

1402 sequences assigned  
1235 (88.1%) exact matches, in which:  
1222 unique CDR3  
14 unique J



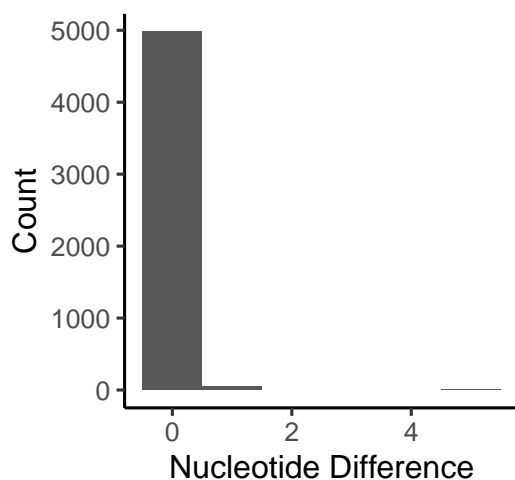
### TRBV7-3\*ap01

878 sequences assigned  
871 (99.2%) exact matches, in which:  
868 unique CDR3  
14 unique J



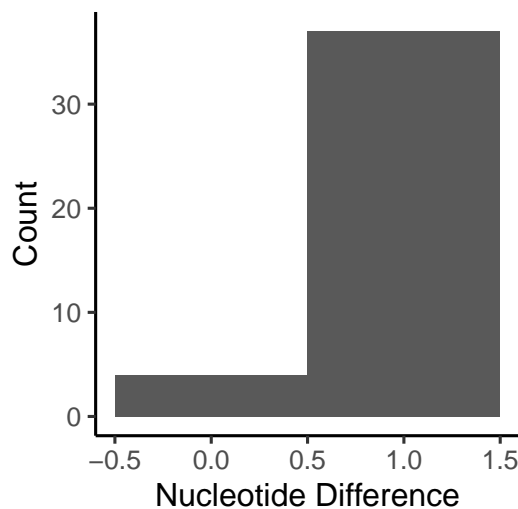
### TRBV6-23\*ap01

5033 sequences assigned  
4980 (98.9%) exact matches, in which:  
4902 unique CDR3  
14 unique J



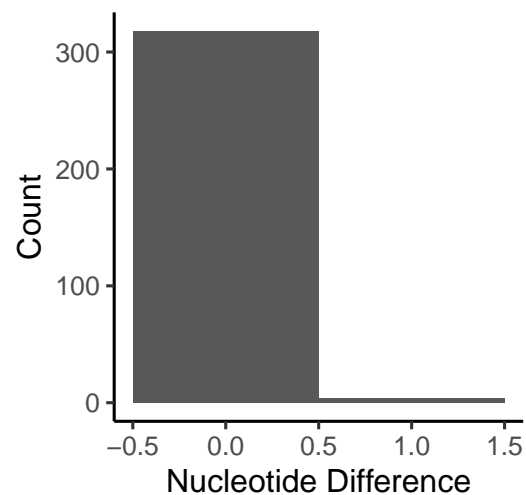
### TRBV7-1\*ap01\_T296C

41 sequences assigned  
4 (9.8%) exact matches, in which:  
4 unique CDR3  
3 unique J



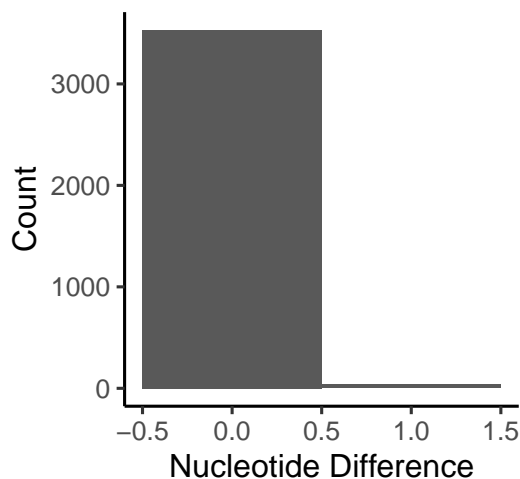
### TRBV7-3\*ap02

322 sequences assigned  
318 (98.8%) exact matches, in which:  
313 unique CDR3  
13 unique J



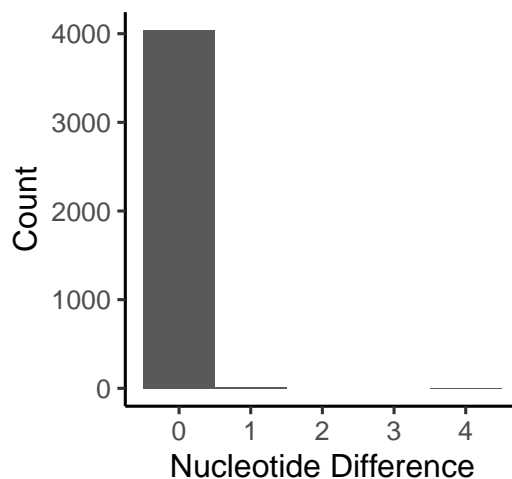
### TRBV6-56\*ap01

3569 sequences assigned  
3531 (98.9%) exact matches, in which:  
3481 unique CDR3  
14 unique J



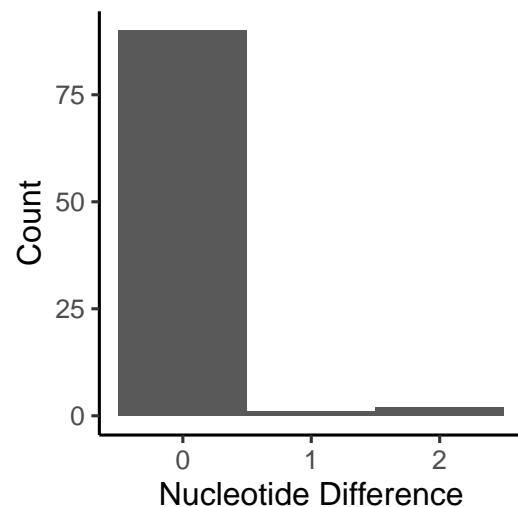
### TRBV7-2\*ap01

4057 sequences assigned  
4041 (99.6%) exact matches, in which:  
4028 unique CDR3  
14 unique J



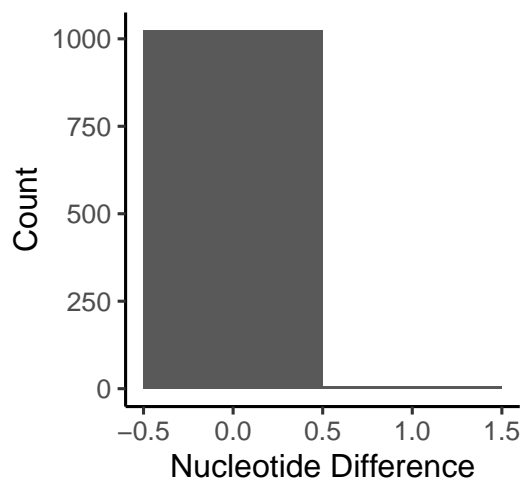
### TRBV7-4\*ap01

93 sequences assigned  
90 (96.8%) exact matches, in which:  
90 unique CDR3  
14 unique J



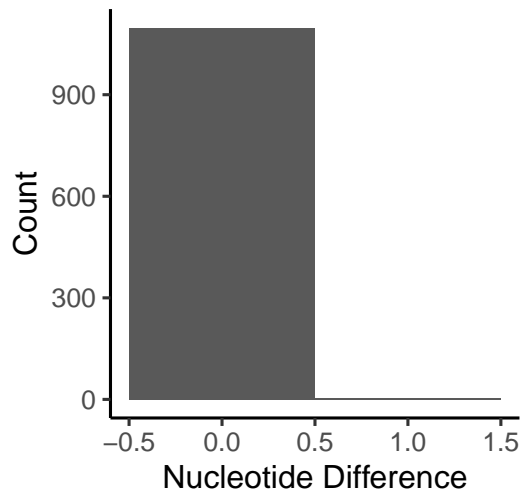
### TRBV7-6\*ap01

1032 sequences assigned  
1024 (99.2%) exact matches, in which:  
1015 unique CDR3  
14 unique J



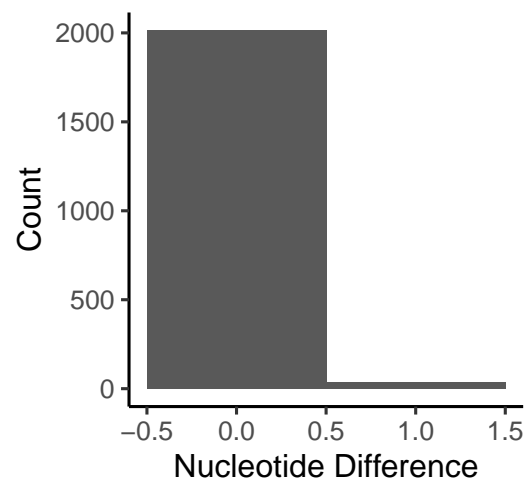
### TRBV7-8\*ap01

1102 sequences assigned  
1098 (99.6%) exact matches, in which:  
1090 unique CDR3  
14 unique J



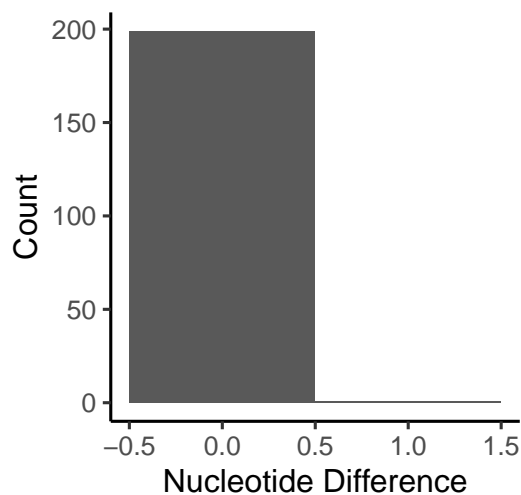
### TRBV29-1\*ap01

2050 sequences assigned  
2014 (98.2%) exact matches, in which:  
1987 unique CDR3  
14 unique J



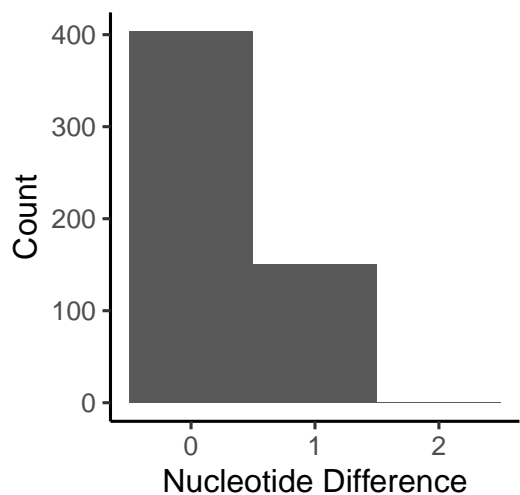
### TRBV7-7\*ap01

200 sequences assigned  
199 (99.5%) exact matches, in which:  
198 unique CDR3  
13 unique J



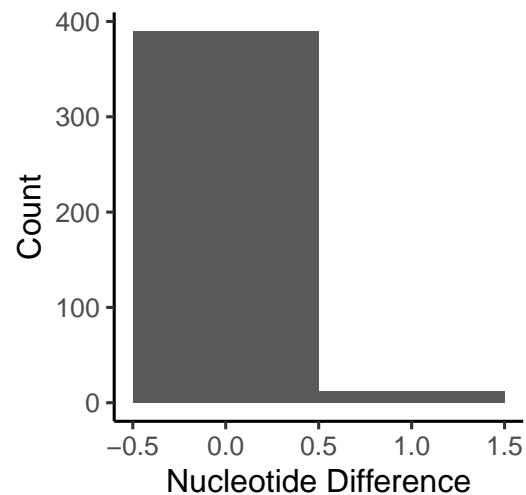
### TRBV7-8\*ap03

556 sequences assigned  
404 (72.7%) exact matches, in which:  
401 unique CDR3  
14 unique J



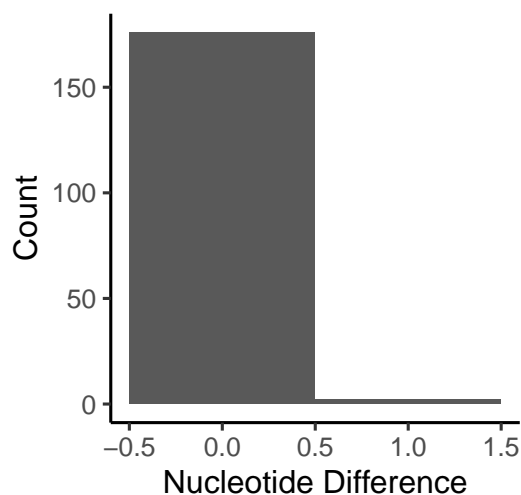
### TRBV29-1\*ap02

402 sequences assigned  
390 (97%) exact matches, in which:  
384 unique CDR3  
14 unique J



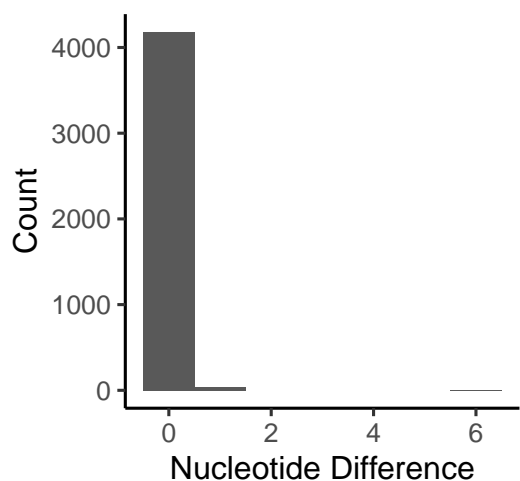
### TRBV7-7\*ap01\_C315T

178 sequences assigned  
176 (98.9%) exact matches, in which:  
176 unique CDR3  
12 unique J

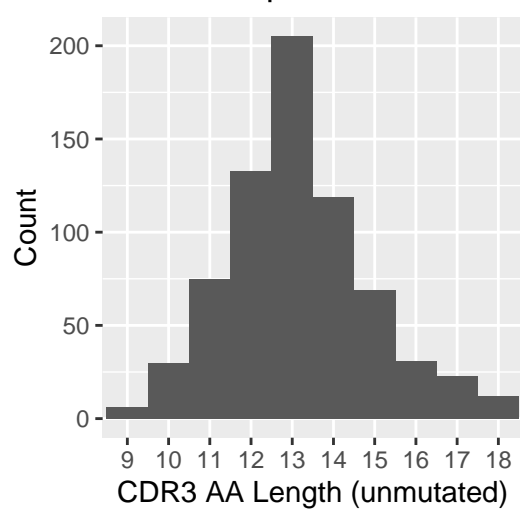


### TRBV7-9\*ap01

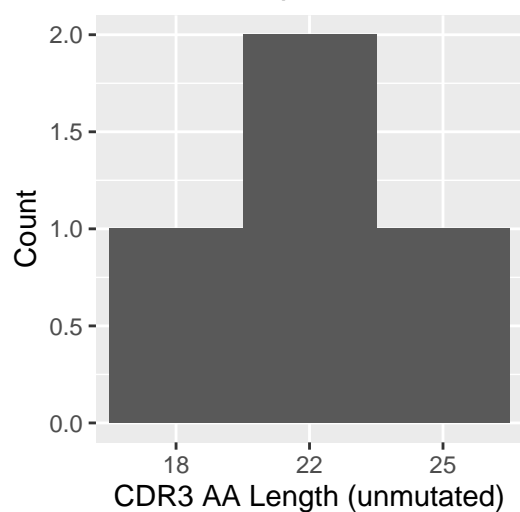
4220 sequences assigned  
4180 (99.1%) exact matches, in which:  
4159 unique CDR3  
14 unique J



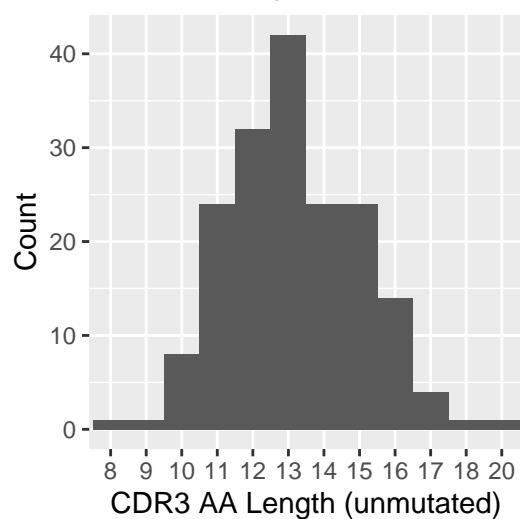
TRBV15\*ap02\_G290C

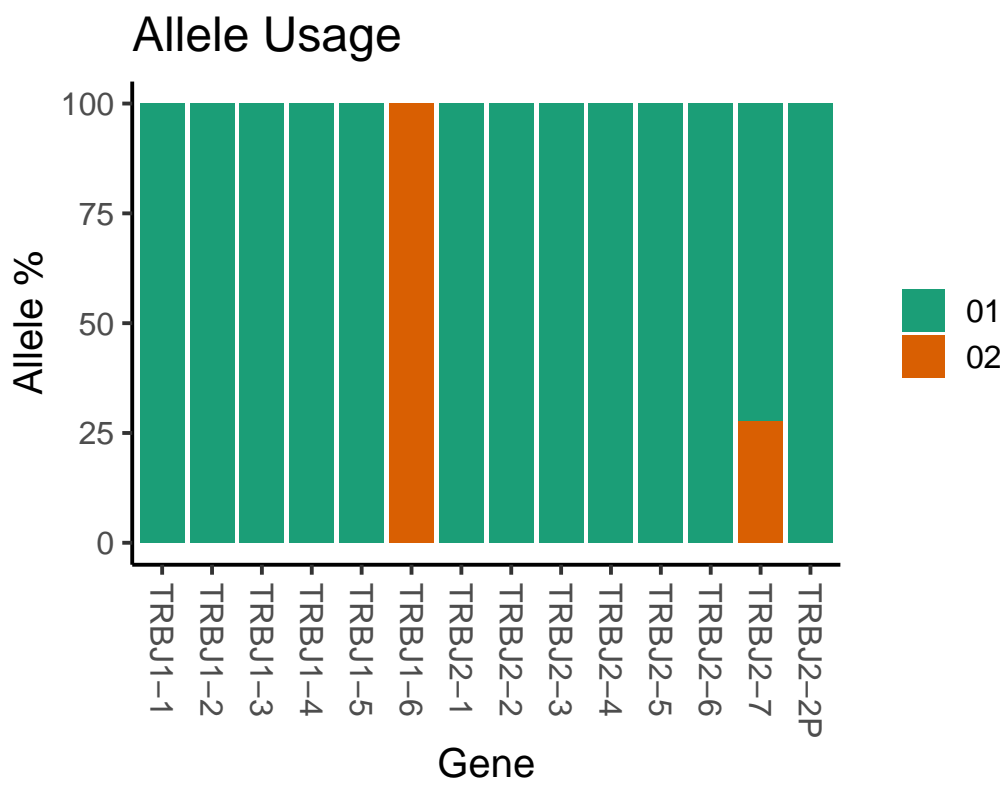


TRBV7-1\*ap01\_T296C



TRBV7-7\*ap01\_C315T





## Sequence Count by TRBJ2-7 allele usage



[illegible]