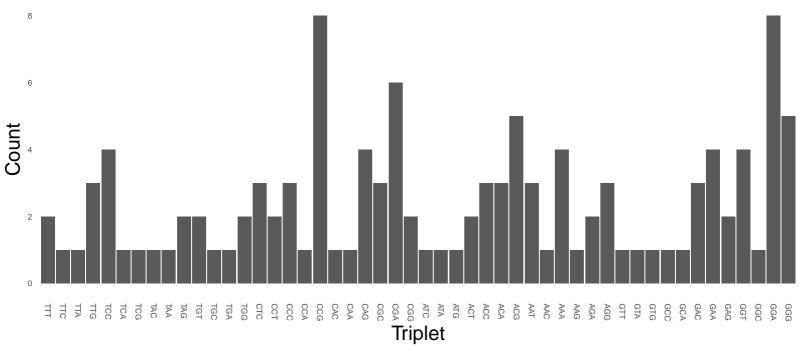
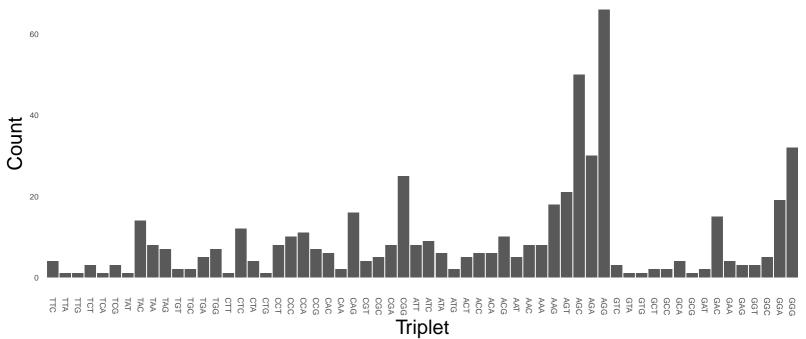


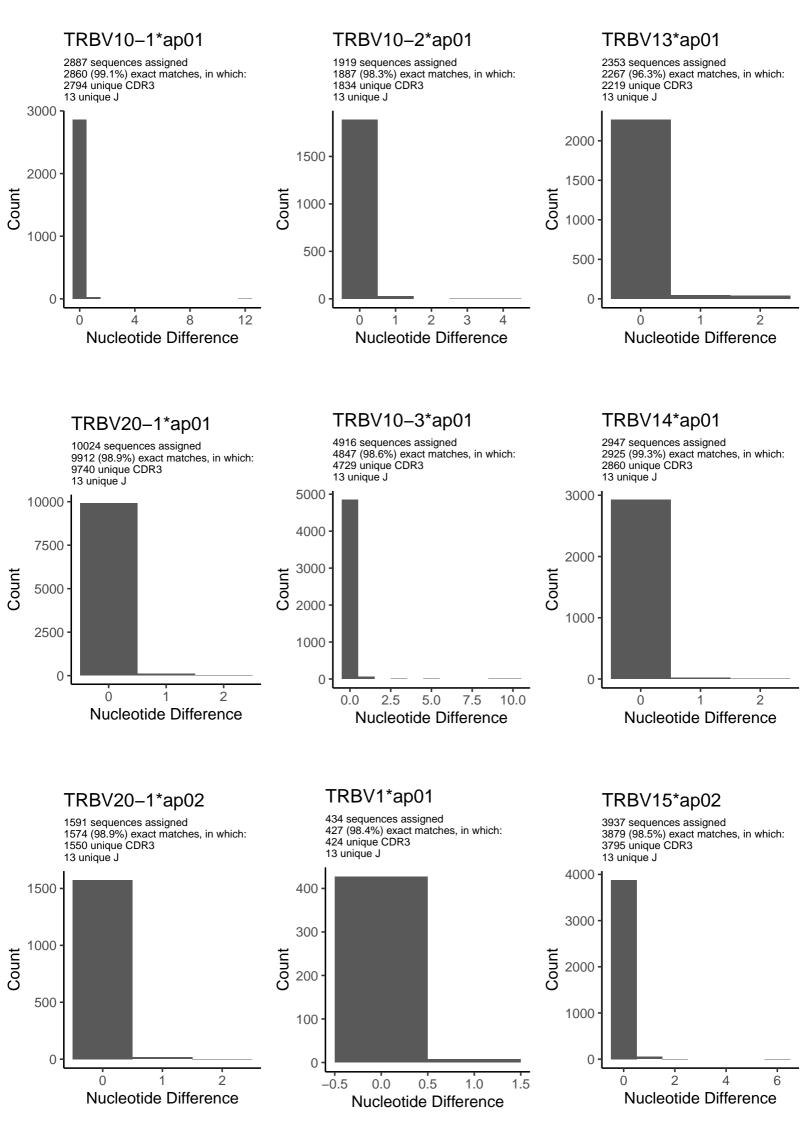
Position

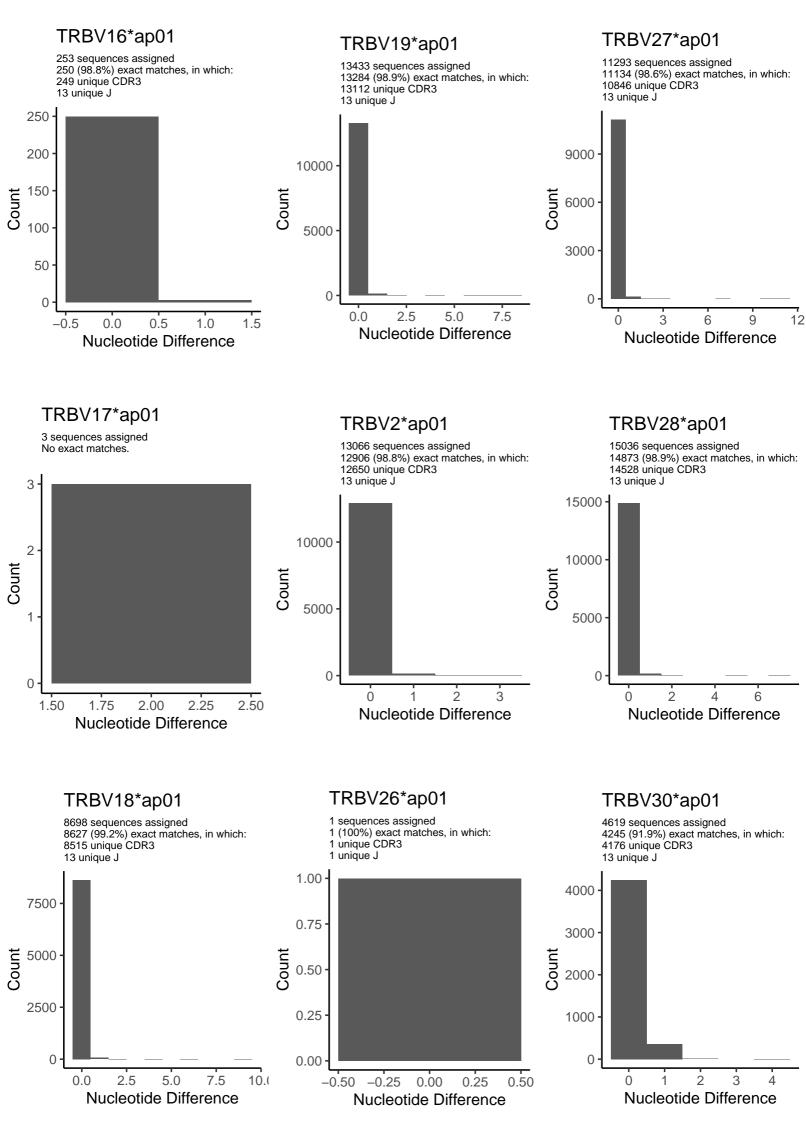
TRBV7-1*ap01_T296C- Final 3 nucleotides as a triplet

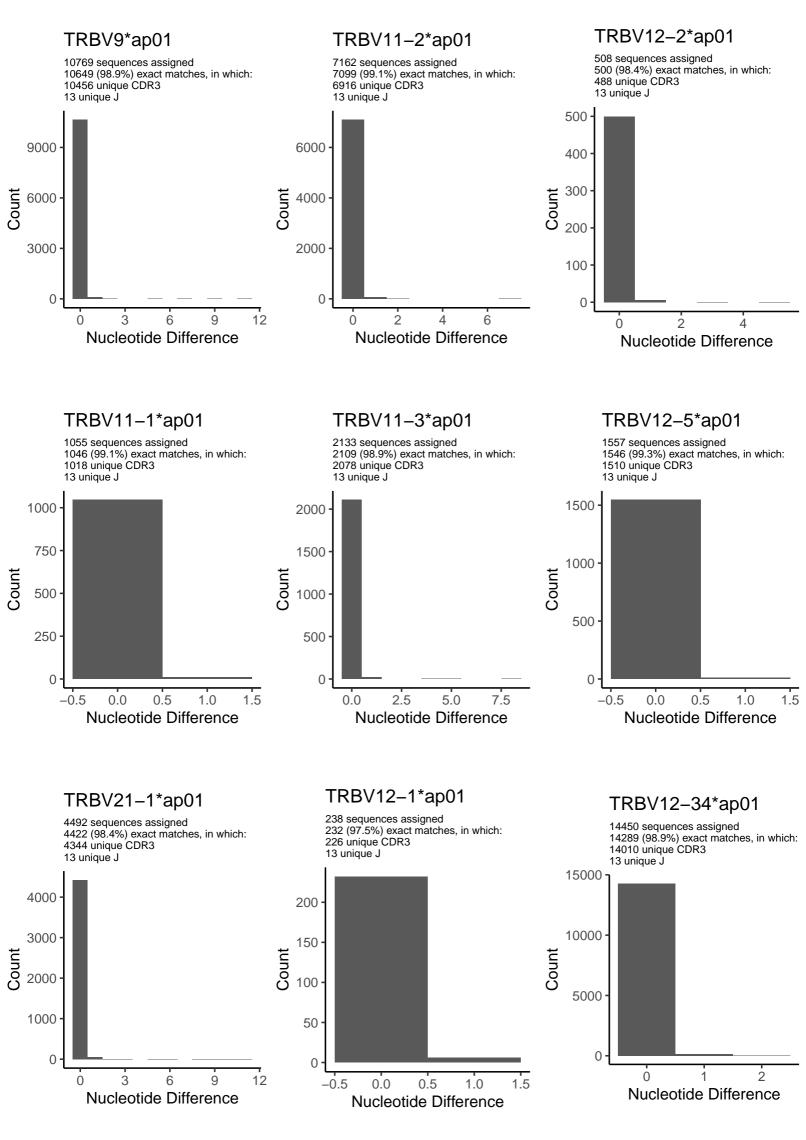


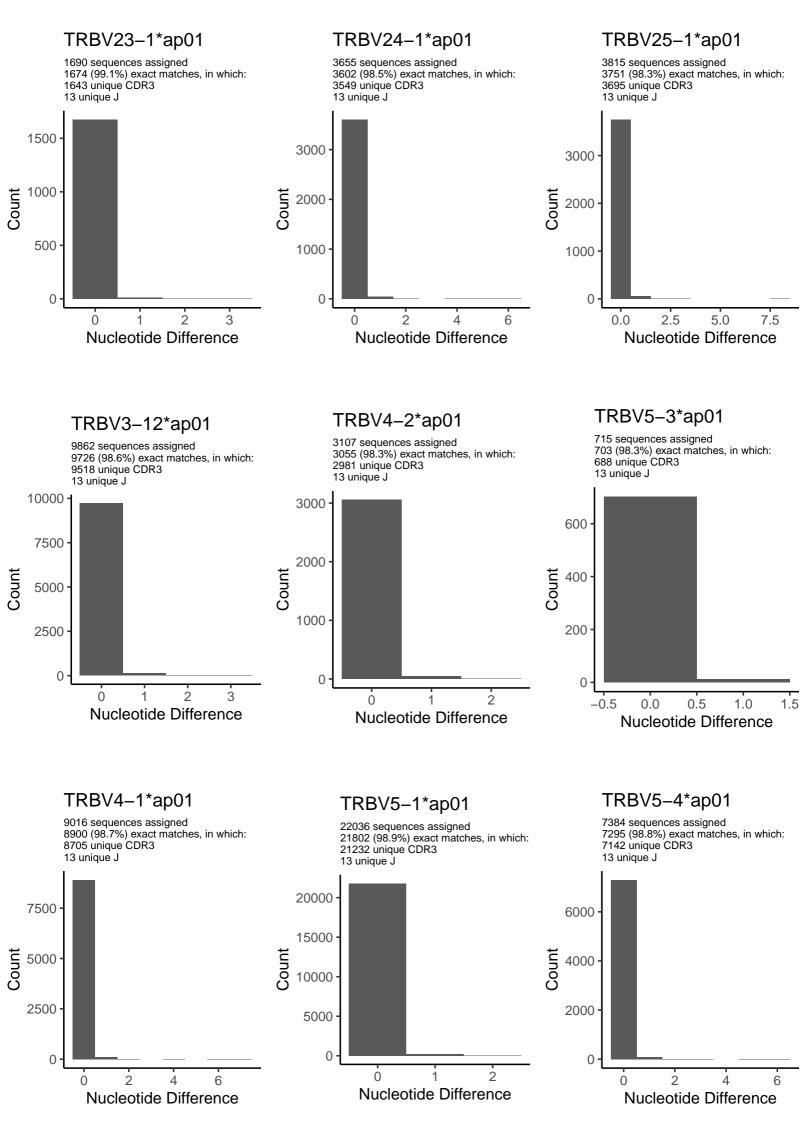
TRBV7-7*ap01_C315T- Final 3 nucleotides as a triplet

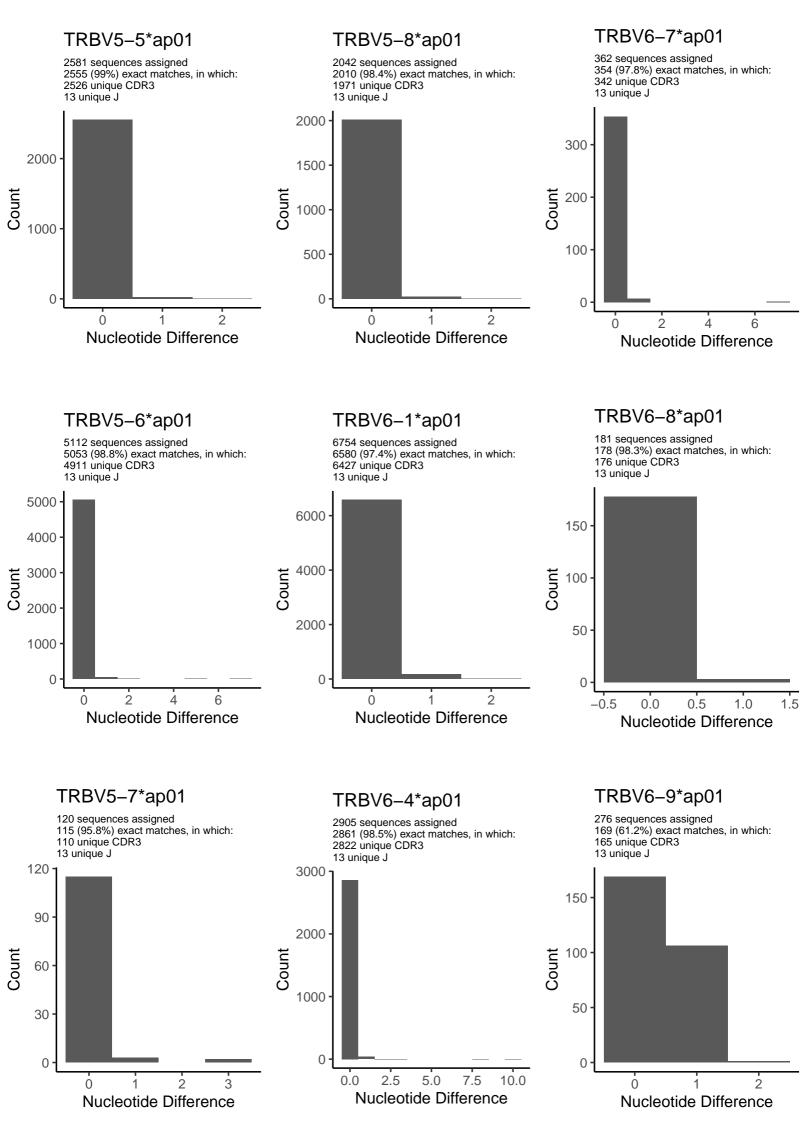


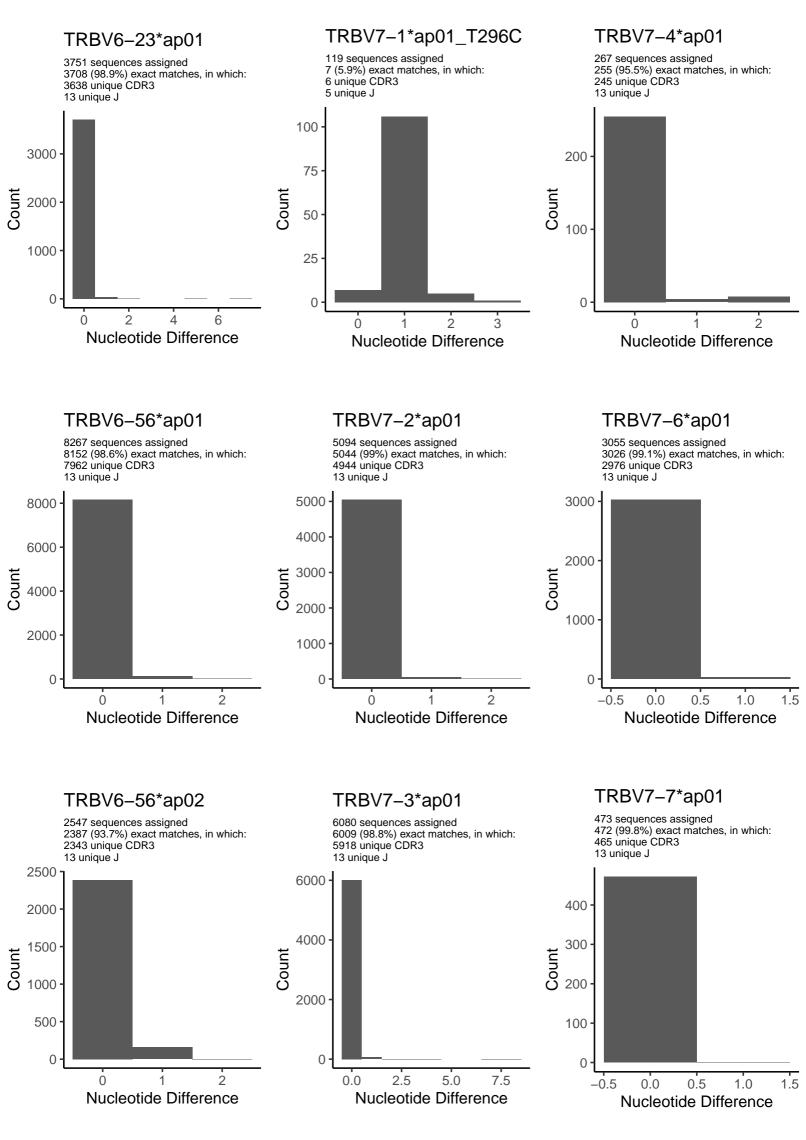










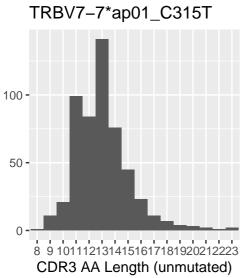


TRBV7-7*ap01_C315T TRBV7-9*ap01 534 sequences assigned 531 (99.4%) exact matches, in which: 518 unique CDR3 15044 sequences assigned 14882 (98.9%) exact matches, in which: 14617 unique CDR3 13 unique J 13 unique J 15000 400 10000 Count 200 5000 0 0 0 -0.50.0 0.5 1.0 1.5 **Nucleotide Difference Nucleotide Difference** TRBV7-8*ap01 TRBV29-1*ap01 5330 sequences assigned 5252 (98.5%) exact matches, in which: 2903 sequences assigned 2871 (98.9%) exact matches, in which: 2808 unique CDR3 5168 unique CDR3 13 unique J 13 unique J 3000 5000 4000 2000 Count 3000 2000 1000 1000 0 **Nucleotide Difference Nucleotide Difference** TRBV7-8*ap03 TRBV29-1*ap02 1154 sequences assigned 1026 sequences assigned 1012 (98.6%) exact matches, in which: 927 (80.3%) exact matches, in which: 909 unique CDR3 997 unique CDR3 13 unique J 13 unique J 1000 750 750 Count 500 500 250 250 0 0 **Nucleotide Difference Nucleotide Difference**

TRBV7-1*ap01_T296C

6
4
19

CDR3 AA Length (unmutated)



Count

