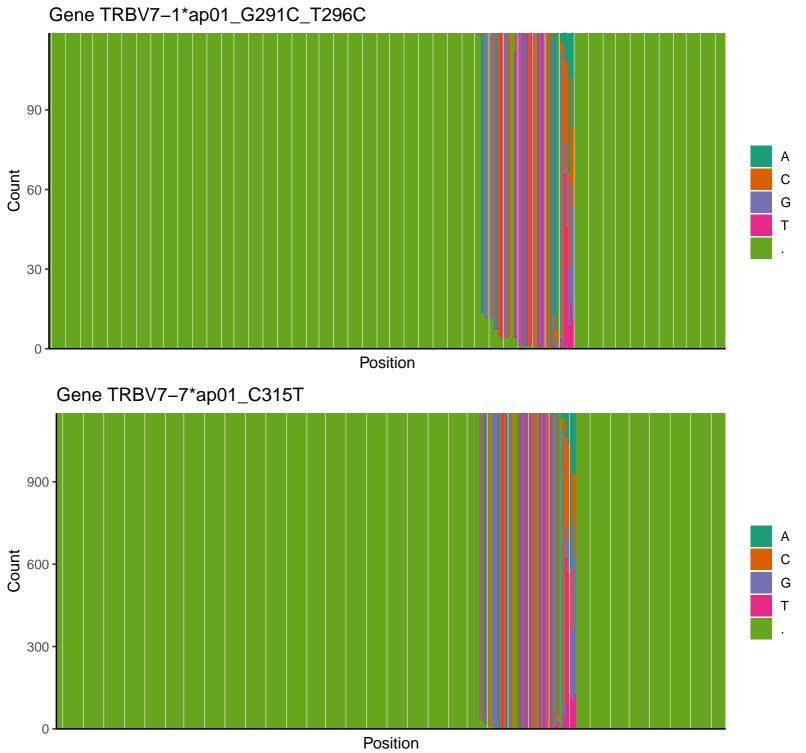
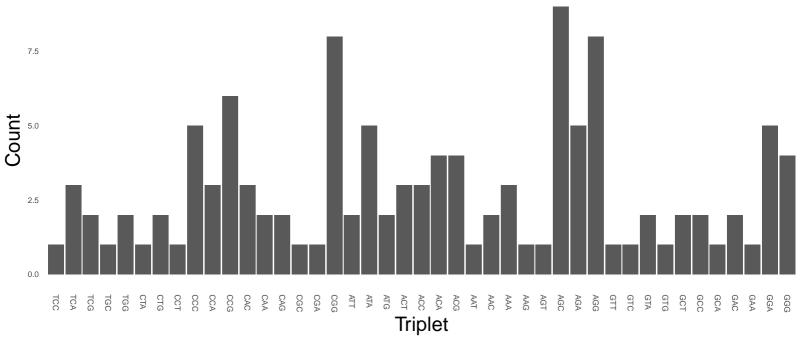


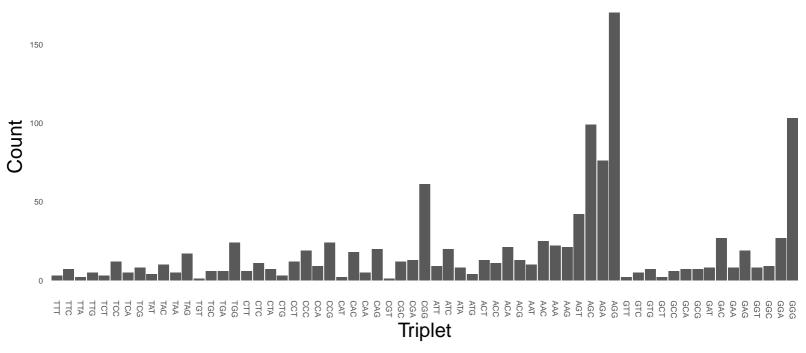
315 320 325 GCTAGCAGCTTAGC Position

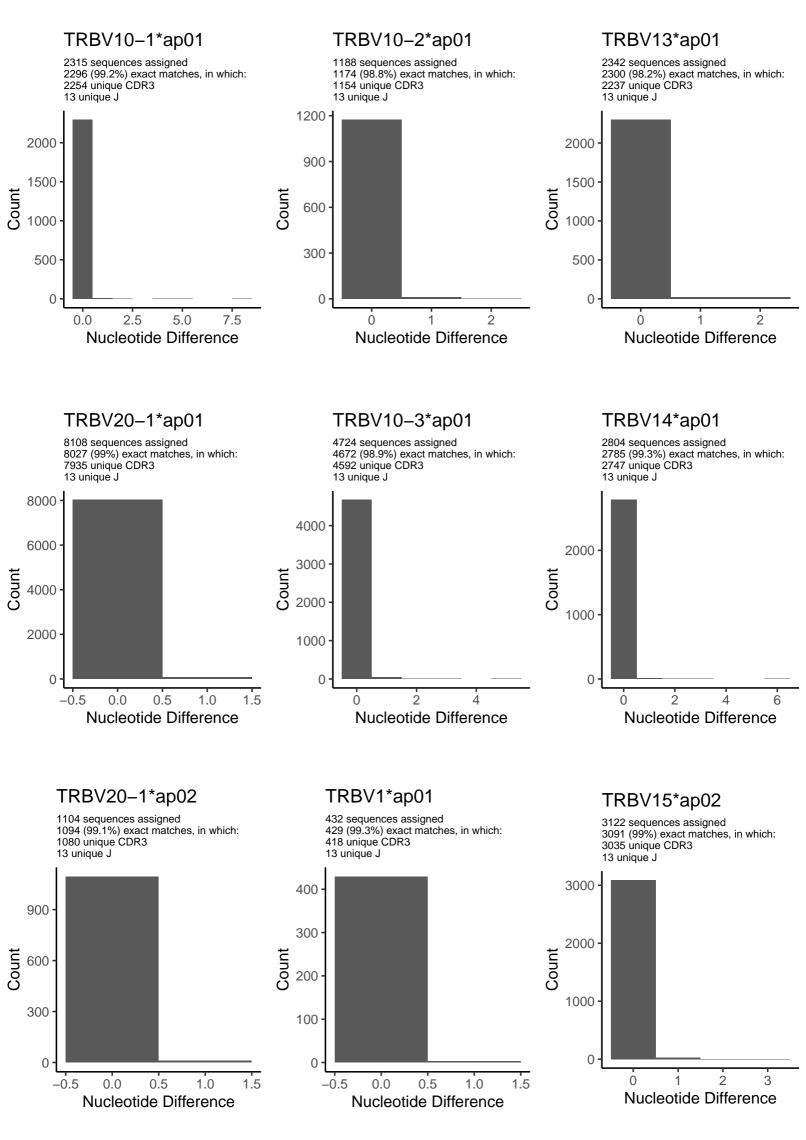


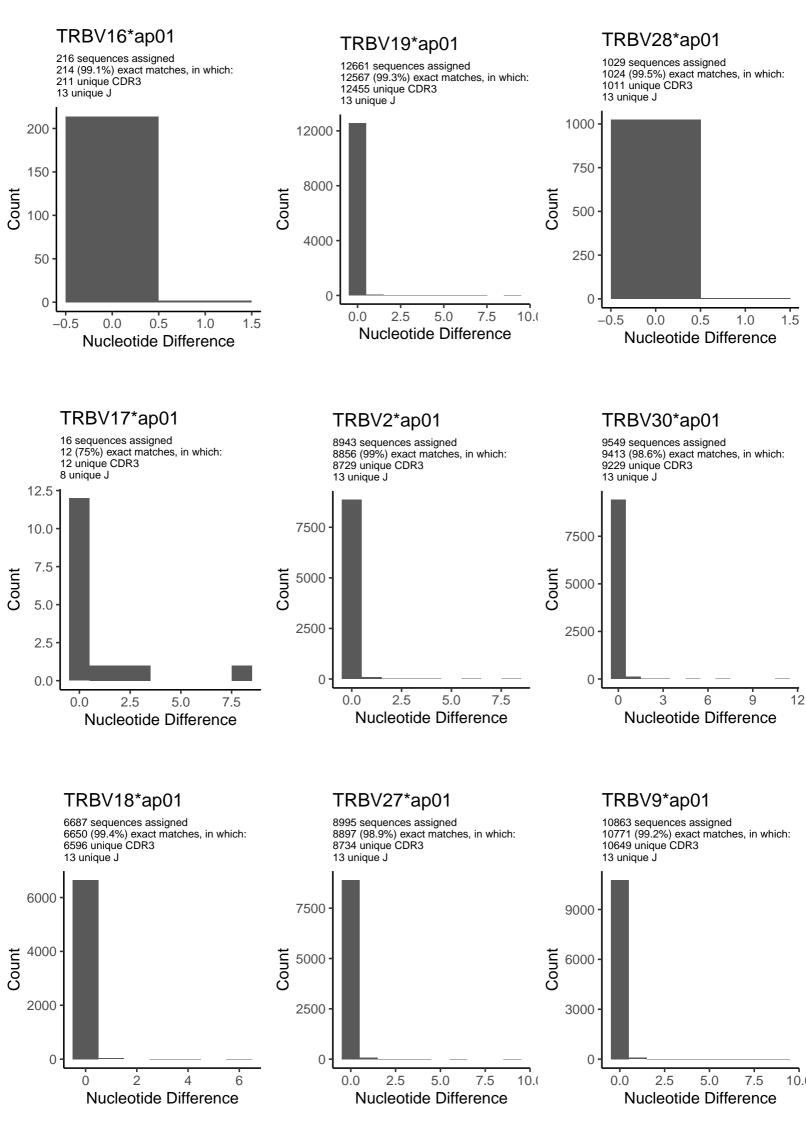
TRBV7-1*ap01_G291C_T296C- Final 3 nucleotides as a triplet

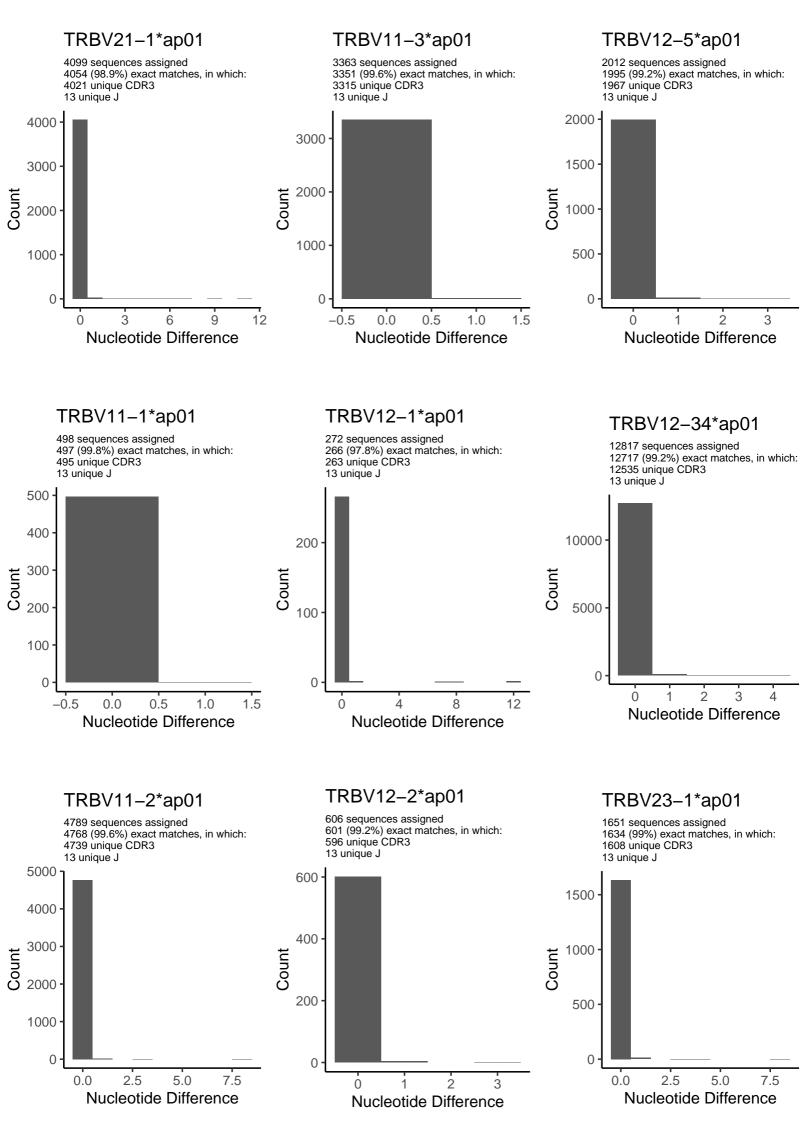


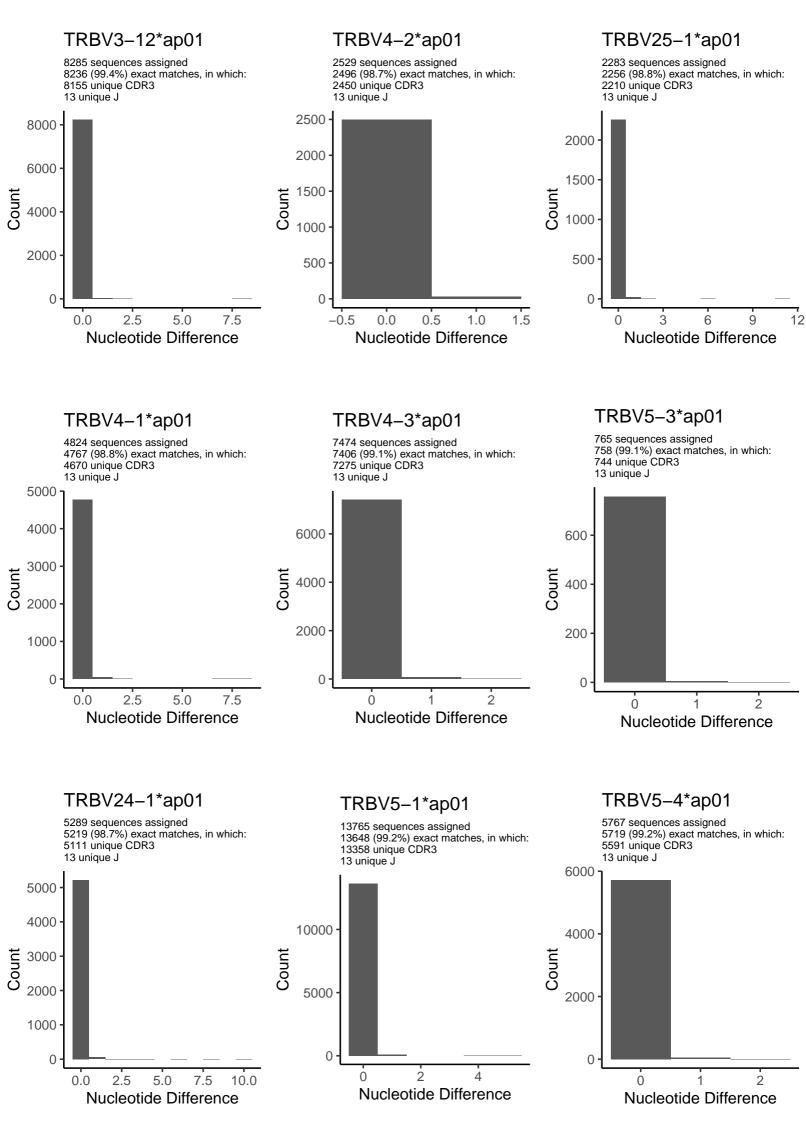
TRBV7-7*ap01_C315T- Final 3 nucleotides as a triplet

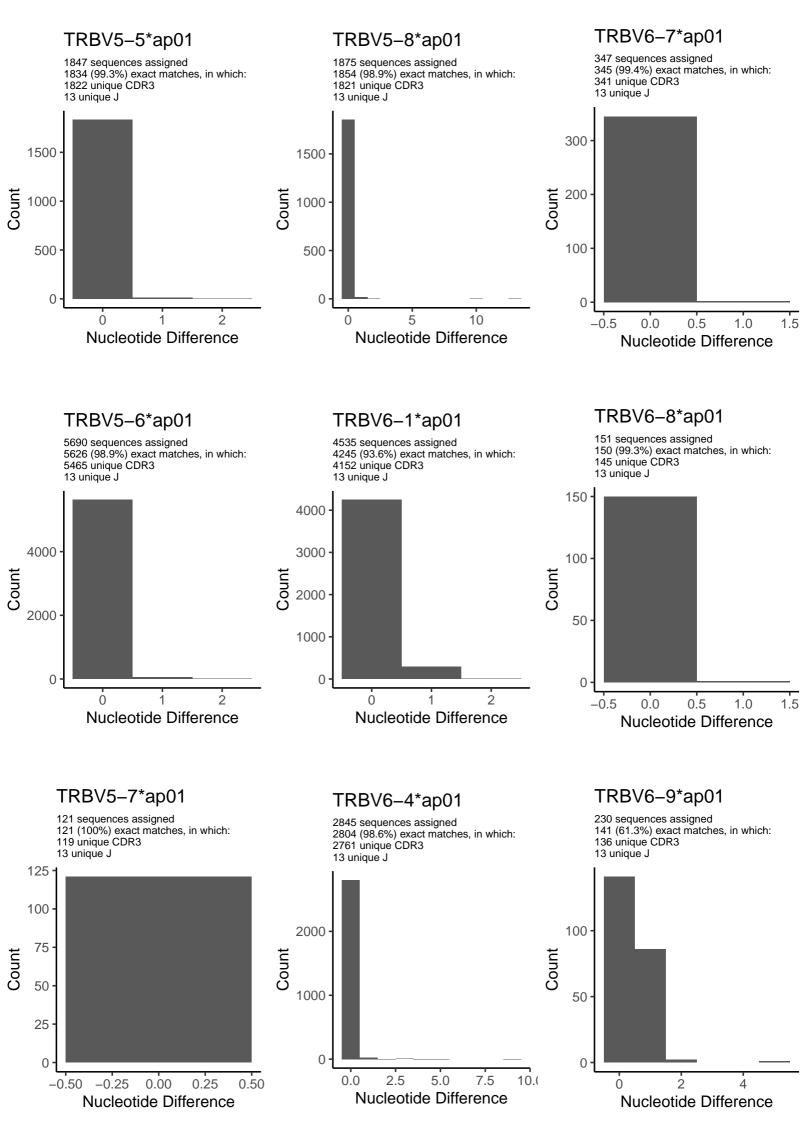


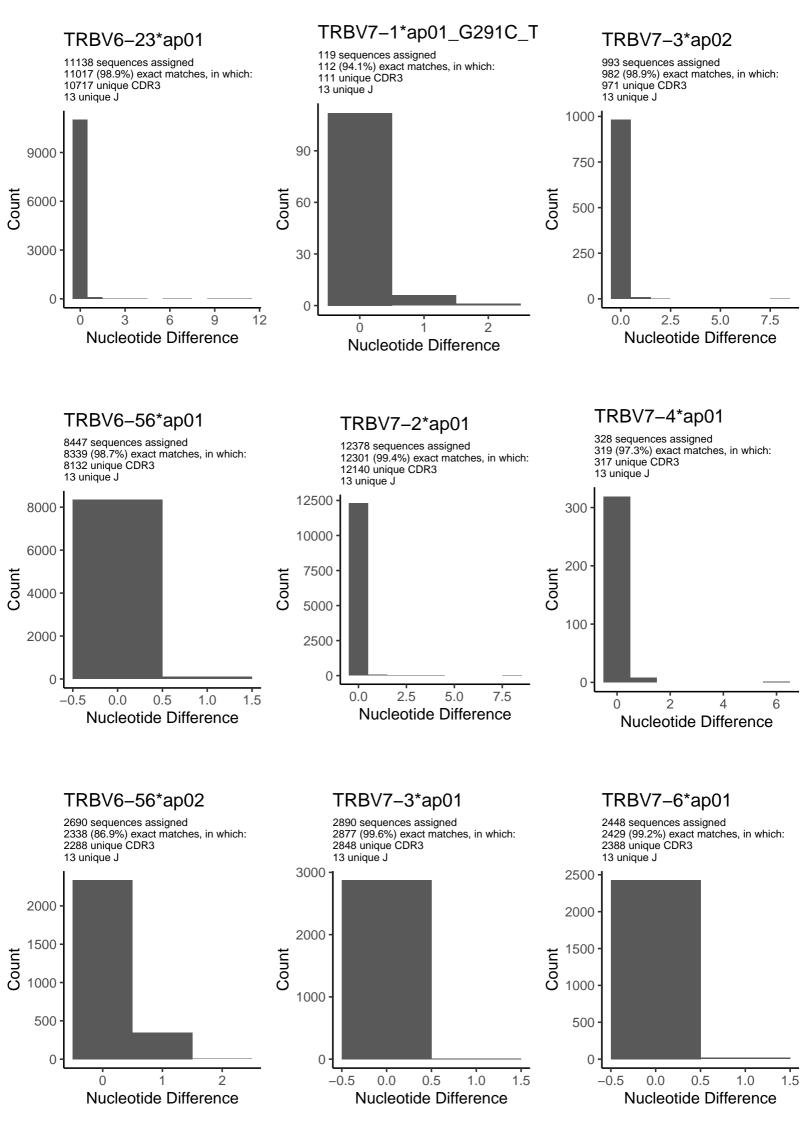






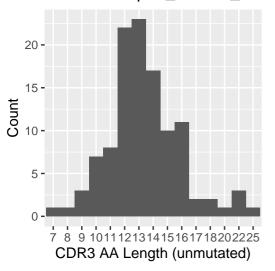


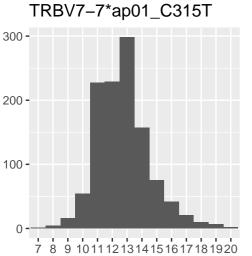




TRBV7-7*ap01_C315T TRBV7-9*ap01 1150 sequences assigned 1143 (99.4%) exact matches, in which: 12199 sequences assigned 12092 (99.1%) exact matches, in which: 11906 unique CDR3 1119 unique CDR3 13 unique J 13 unique J 1200 12500 10000 900 7500 Count 600 5000 300 2500 0 0 3 -0.50.0 0.5 1.0 1.5 Nucleotide Difference **Nucleotide Difference** TRBV7-8*ap01 TRBV29-1*ap01 2196 sequences assigned 2180 (99.3%) exact matches, in which: 4338 sequences assigned 4284 (98.8%) exact matches, in which: 2154 unique CDR3 4184 unique CDR3 13 unique J 13 unique J 4000 2000 3000 1500 2000 1000 500 1000 0 0 -0.50.0 0.5 1.0 1.5 -0.50.0 0.5 1.0 **Nucleotide Difference** Nucleotide Difference TRBV7-8*ap03 TRBV29-1*ap02 866 sequences assigned 854 (98.6%) exact matches, in which: 1204 sequences assigned 759 (63%) exact matches, in which: 750 unique CDR3 833 unique CDR3 13 unique J 13 unique J 750 600 Count Month 500 250 200 0 0 -0.50.0 0.5 1.0 **Nucleotide Difference Nucleotide Difference**

TRBV7-1*ap01_G291C_T296C





CDR3 AA Length (unmutated)

Count



