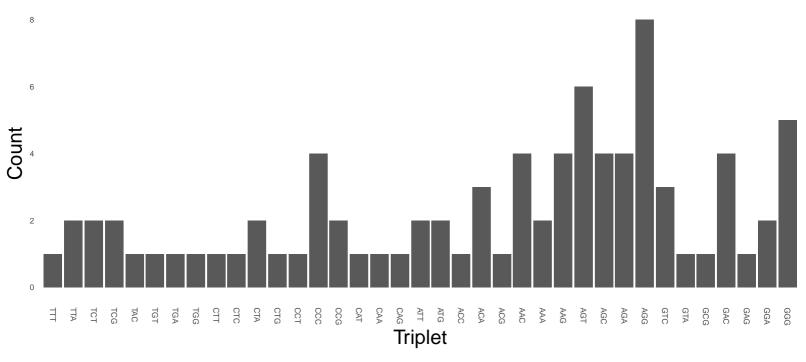
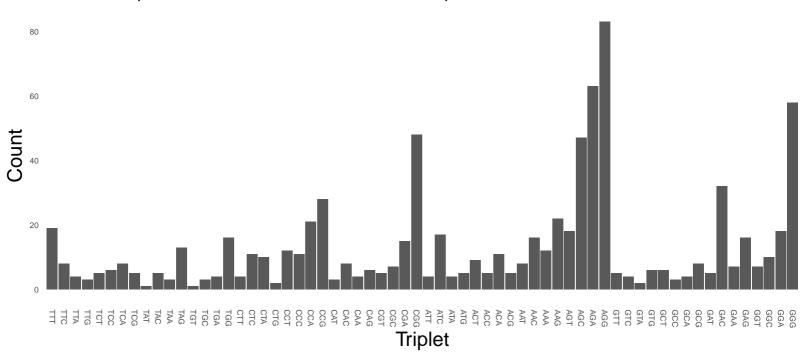
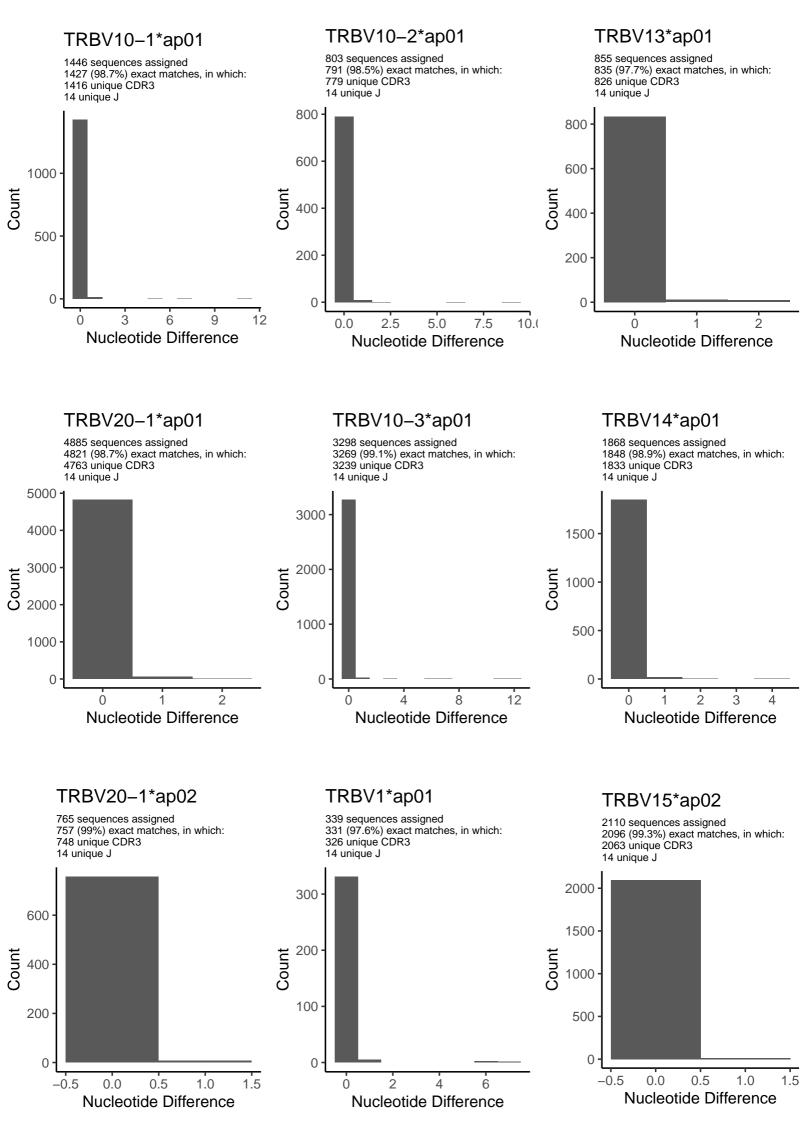


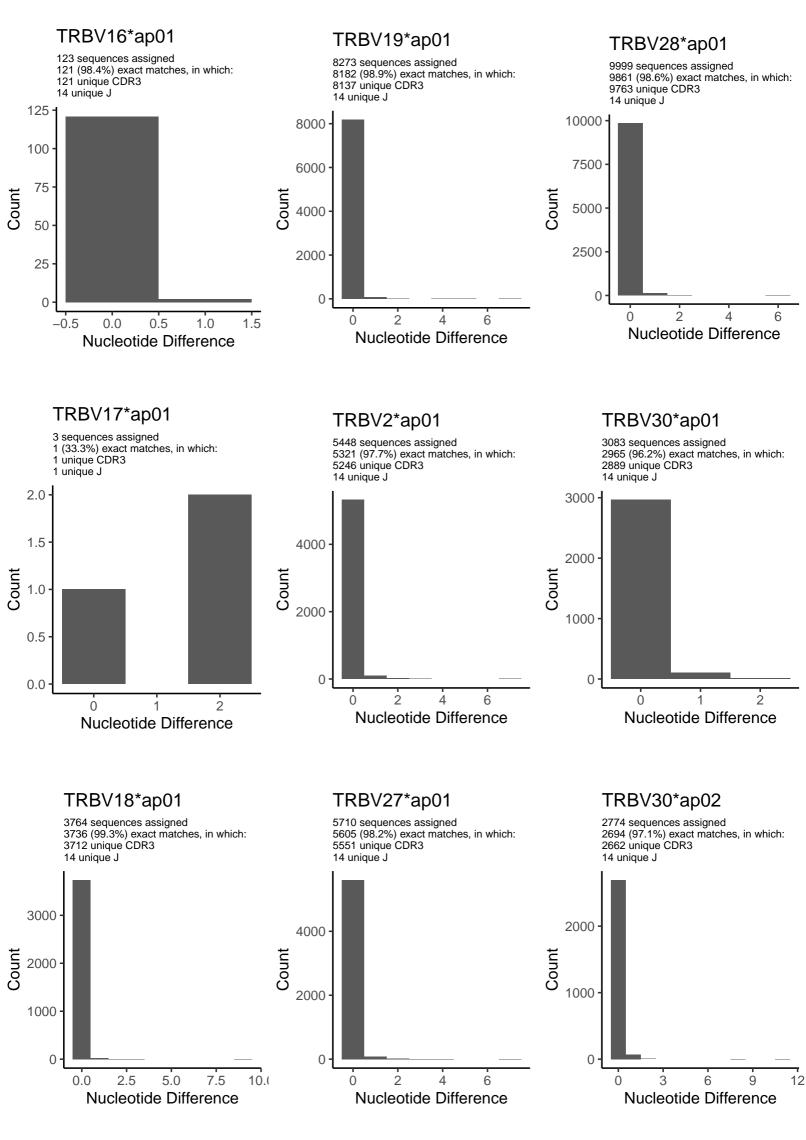
TRBV7-1\*ap01\_G291C\_T296C- Final 3 nucleotides as a triplet

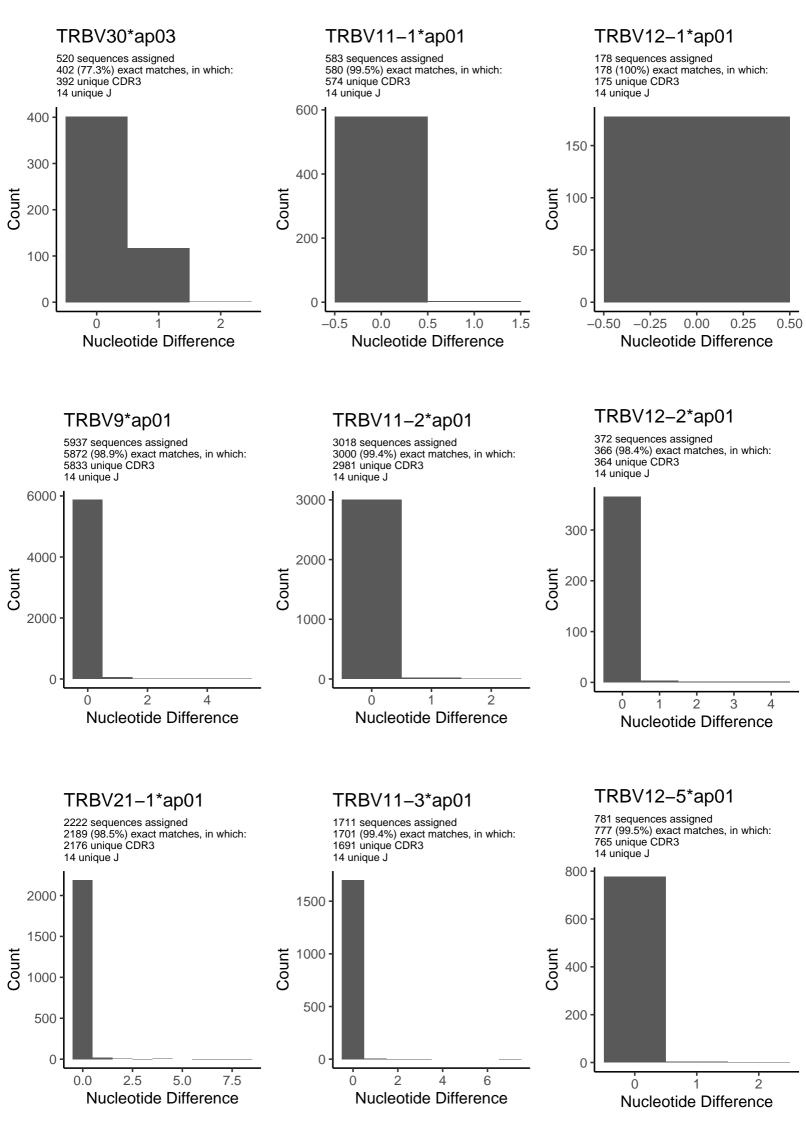


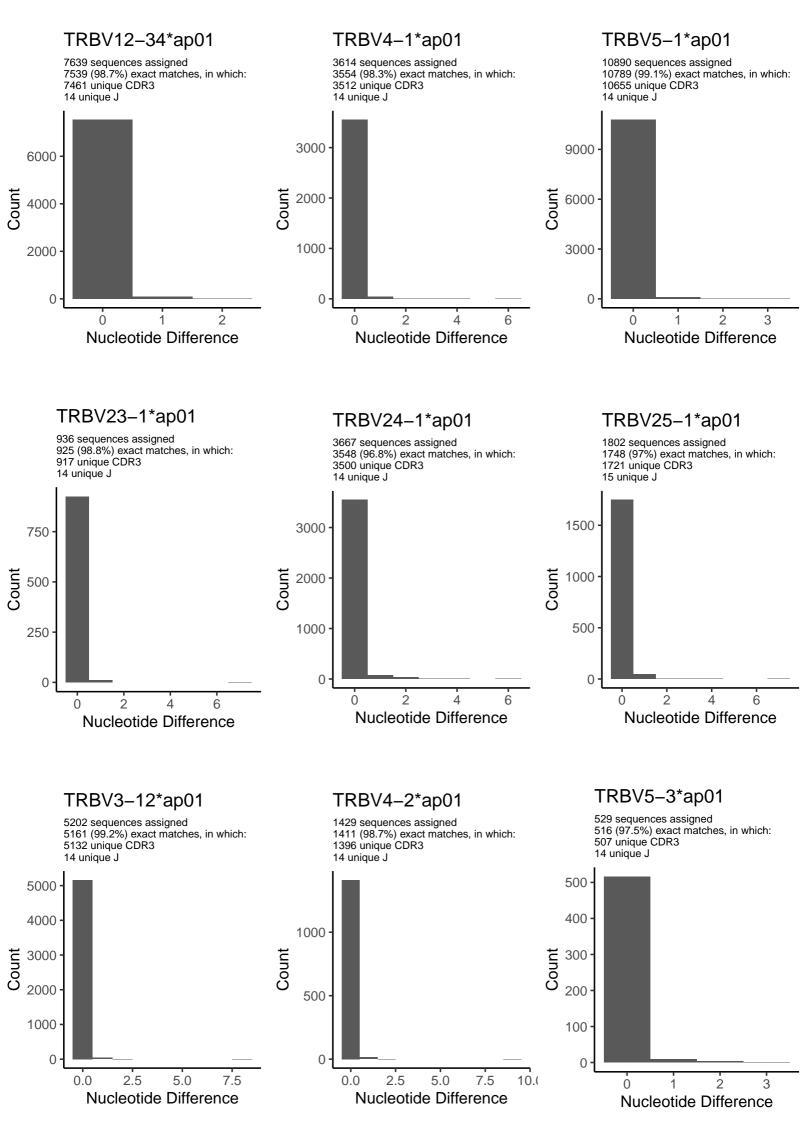
TRBV7-7\*ap01\_C315T- Final 3 nucleotides as a triplet

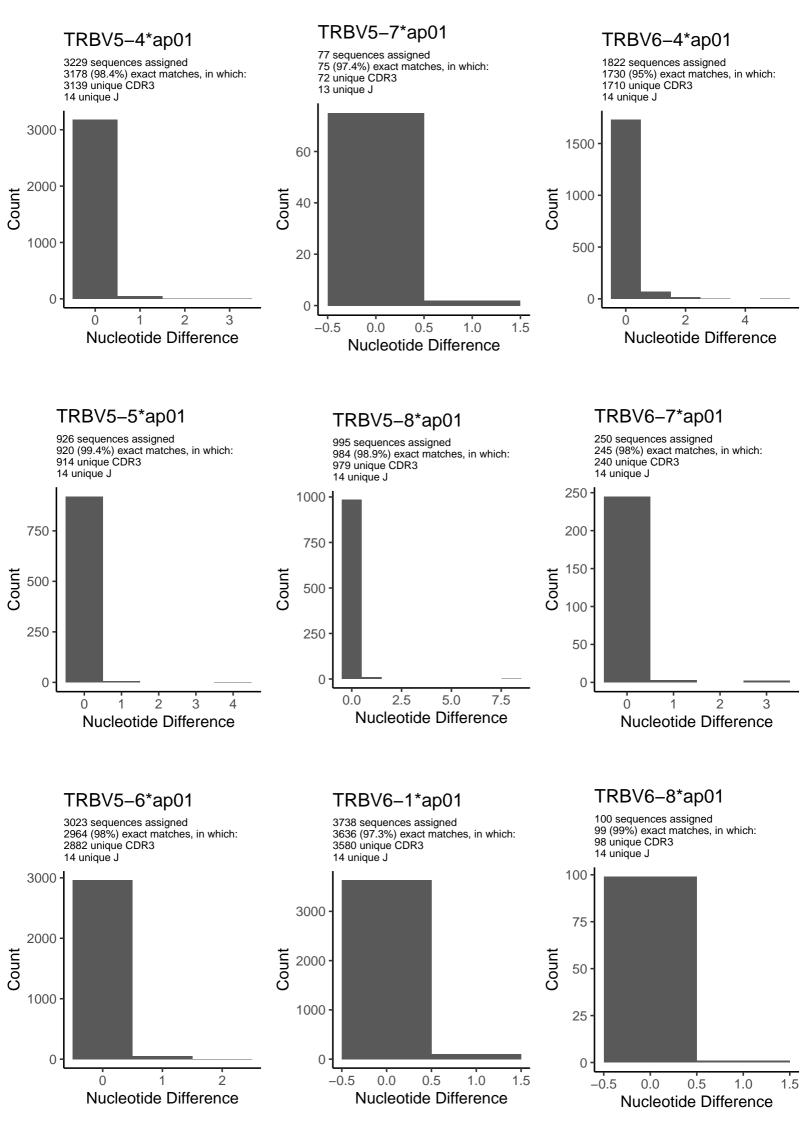


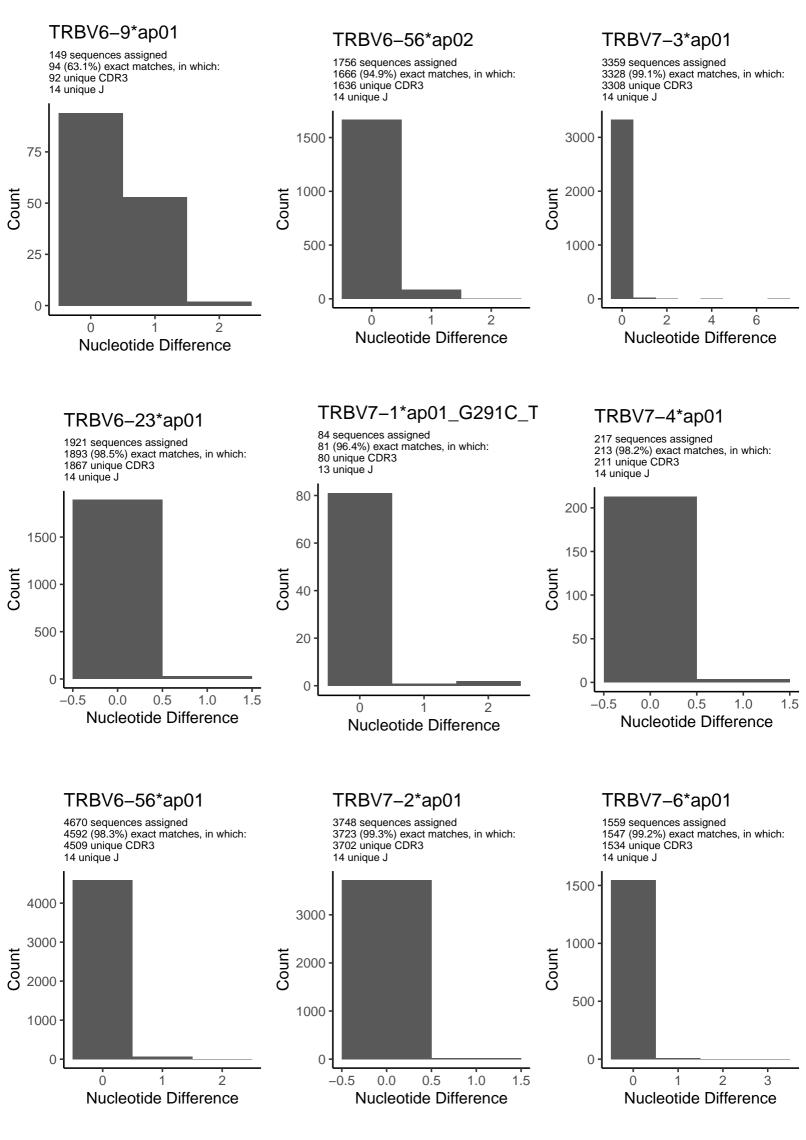






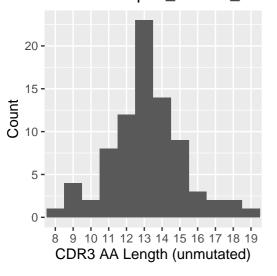


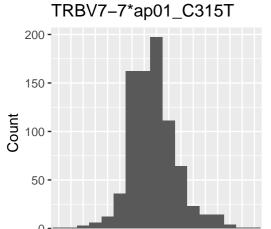




## TRBV7-7\*ap01\_C315T TRBV7-9\*ap01 819 sequences assigned 812 (99.1%) exact matches, in which: 5314 sequences assigned 5253 (98.9%) exact matches, in which: 806 unique CDR3 5193 unique CDR3 14 unique J 14 unique J 800 5000 4000 600 Count 600 3000 2000 200 1000 0 0 0.0 2.5 5.0 7.5 2 **Nucleotide Difference Nucleotide Difference** TRBV7-8\*ap01 TRBV29-1\*ap01 1243 sequences assigned 1232 (99.1%) exact matches, in which: 3137 sequences assigned 3079 (98.2%) exact matches, in which: 3018 unique CDR3 1220 unique CDR3 14 unique J 14 unique J 1250 3000 1000 2000 750 Count 500 1000 250 0 0 **Nucleotide Difference Nucleotide Difference** TRBV7-8\*ap03 TRBV29-1\*ap02 629 sequences assigned 735 sequences assigned 705 (95.9%) exact matches, in which: 491 (78.1%) exact matches, in which: 487 unique CDR3 682 unique CDR3 14 unique J 14 unique J 500 600 400 Count 200 300 400 200 100 0 0 **Nucleotide Difference Nucleotide Difference**

TRBV7-1\*ap01\_G291C\_T296C





5 6 7 8 9 101112131415161718192022 CDR3 AA Length (unmutated)

