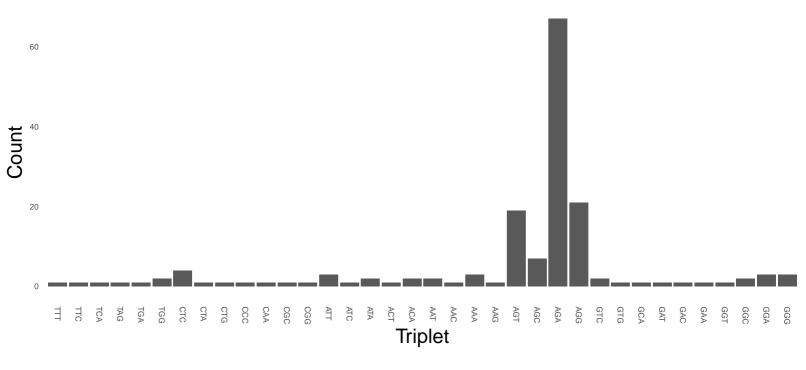
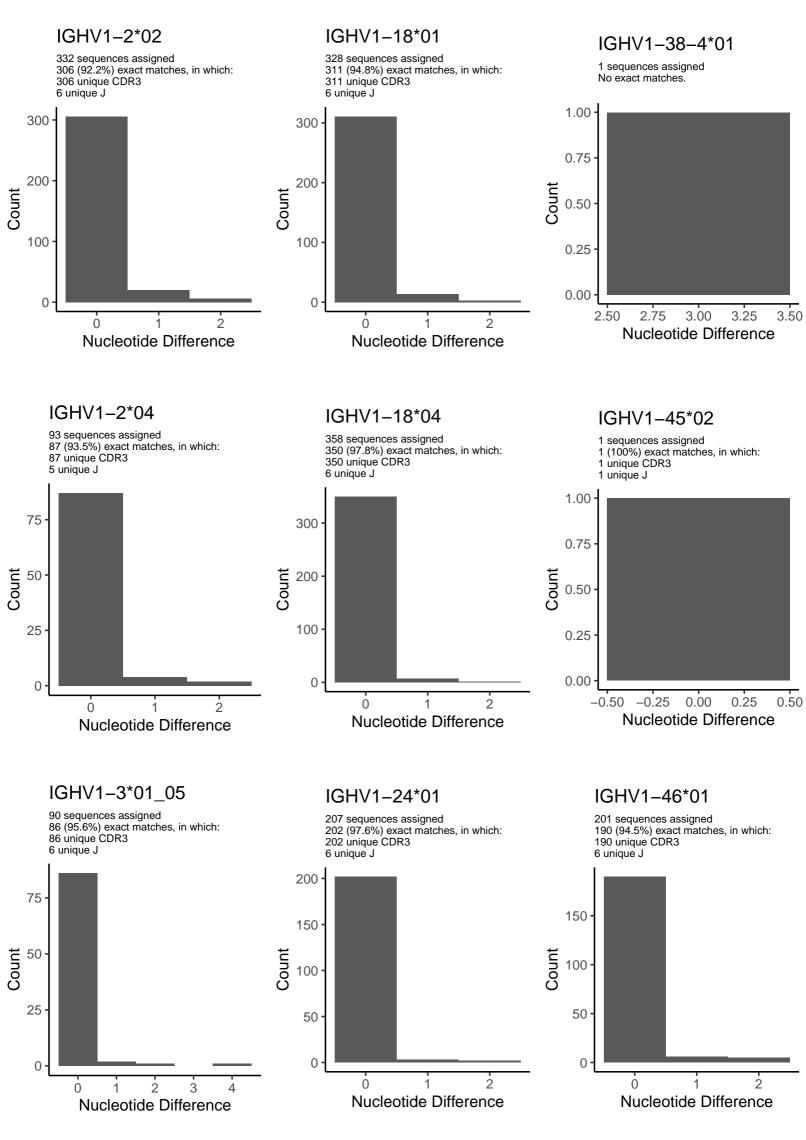
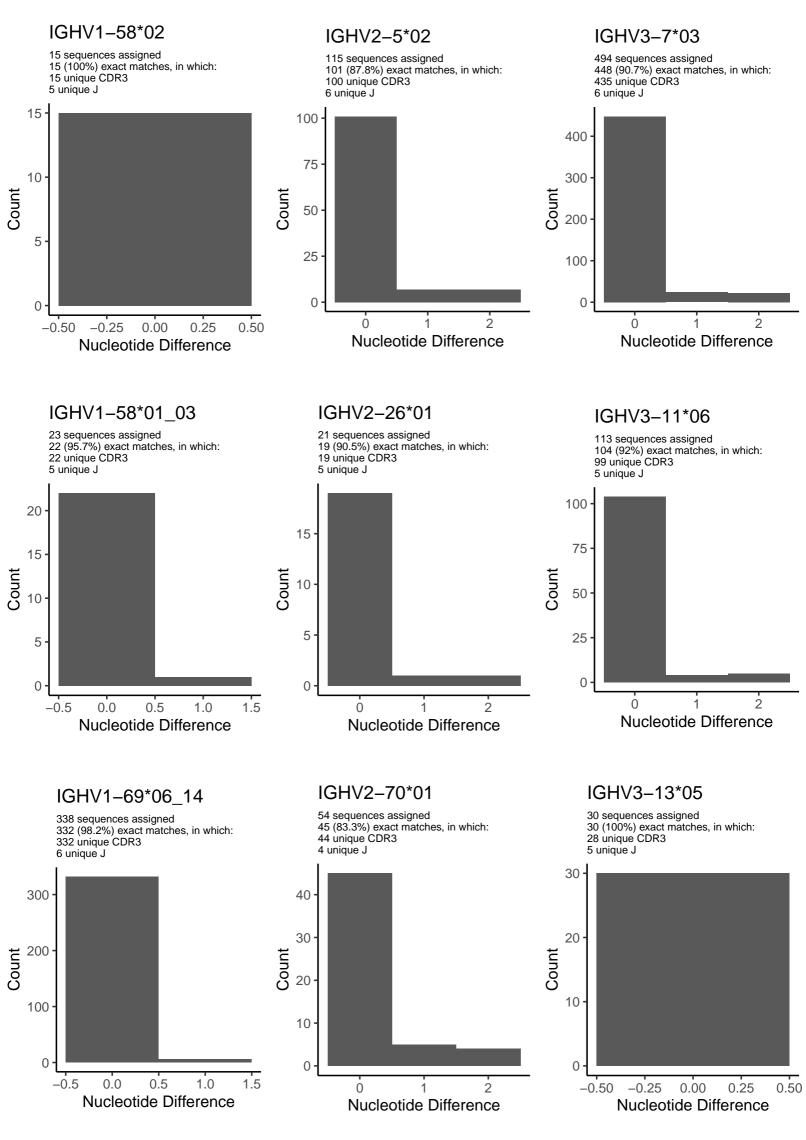


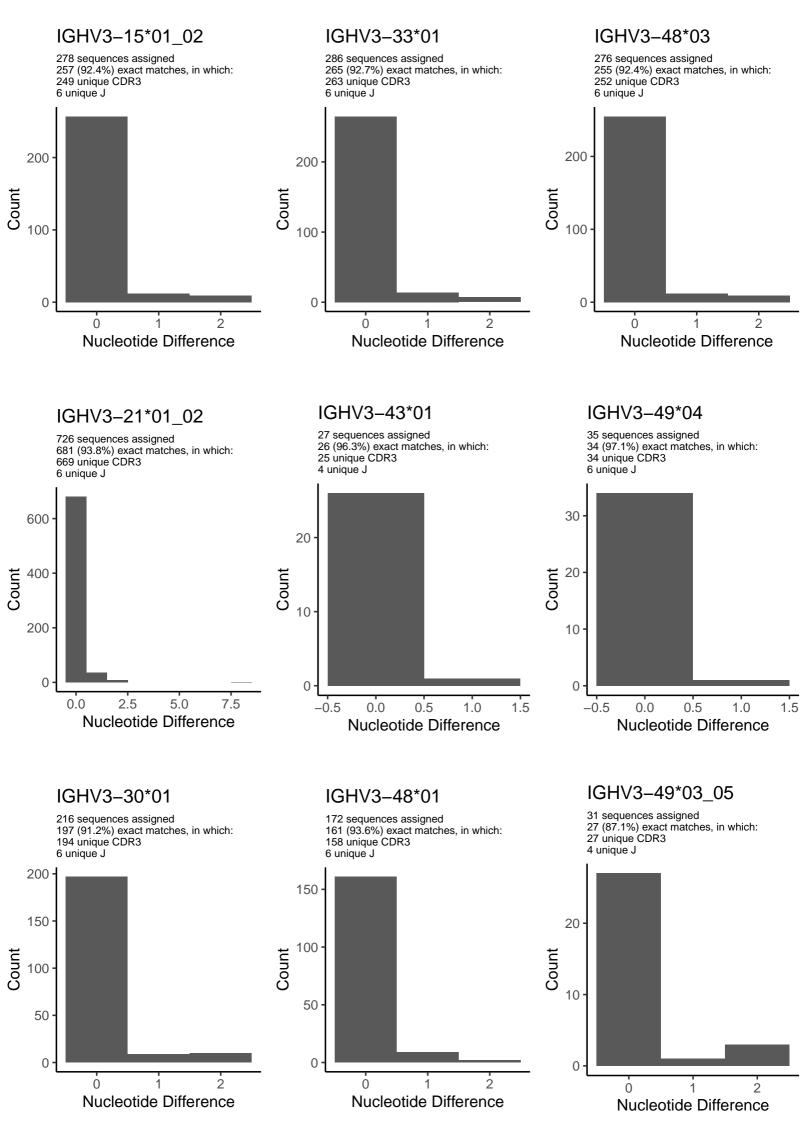


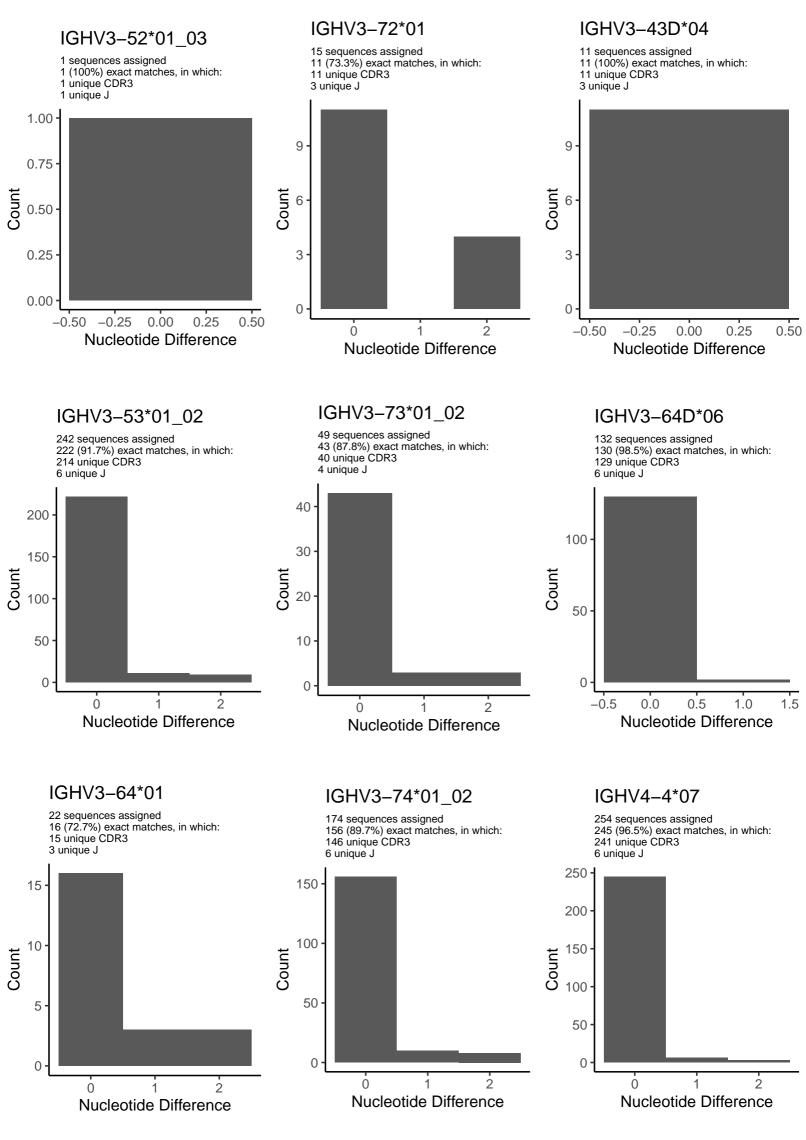
IGHV4-38-2*02_A70G- Final 3 nucleotides as a triplet

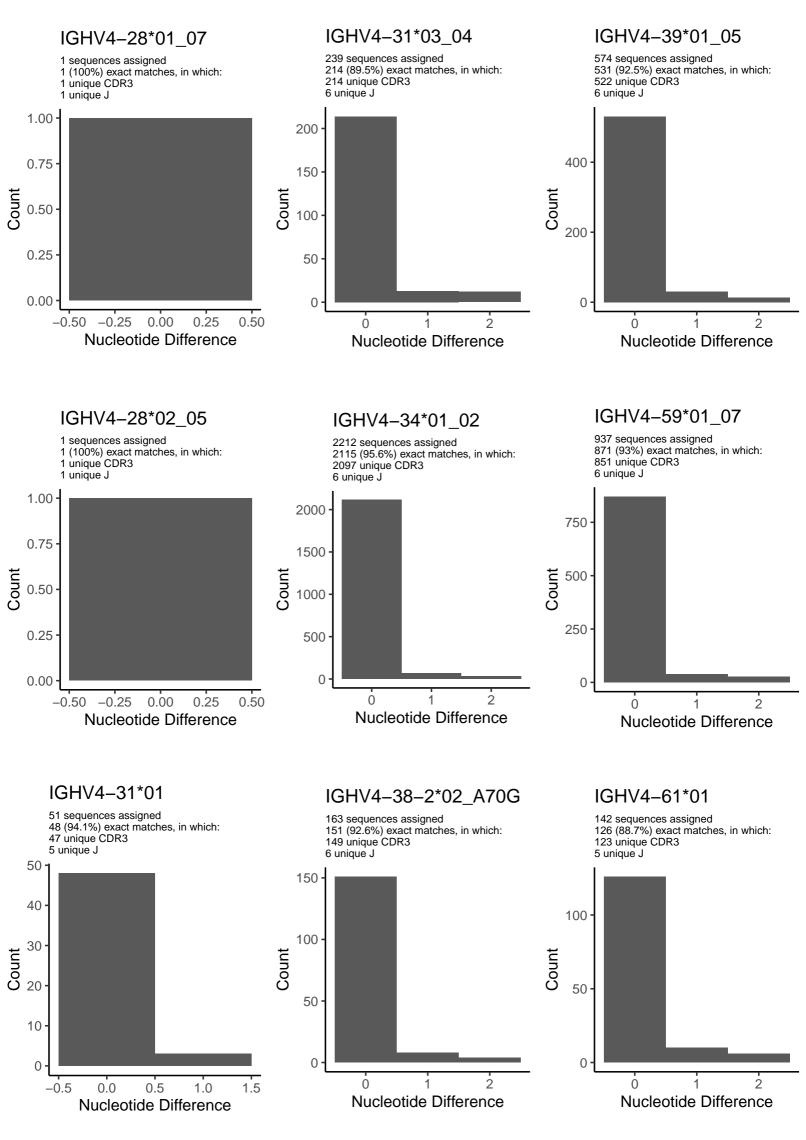




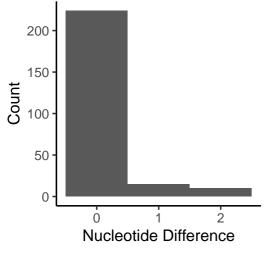








IGHV6-1*01_02 IGHV4-61*02 154 sequences assigned 132 (85.7%) exact matches, in which: 132 unique CDR3 331 sequences assigned 309 (93.4%) exact matches, in which: 305 unique CDR3 6 unique J 6 unique J 300 100 200 Count 50 100 0 0 **Nucleotide Difference Nucleotide Difference** IGHV7-4-1*01 IGHV5-10-1*01_03 3 sequences assigned 3 (100%) exact matches, in which: 3 unique CDR3 46 sequences assigned 41 (89.1%) exact matches, in which: 41 unique CDR3 5 unique J 3 unique J 3 30 Count 20 10 0 0 -0.50-0.250.00 0.25 0.50 **Nucleotide Difference Nucleotide Difference** IGHV5-51*01_03 249 sequences assigned 224 (90%) exact matches, in which: 224 unique CDR3 6 unique J





Novel sequence(s) IGHV4-59*02_G88A IGHV5-51*07_A128G are not listed in the genotype and will be ignored. Novel sequence(s) IGHV4-59*02_G88A are not listed in the genotype and will be ignored. Warning - no inferred sequences found. Novel sequence(s) IGHV4-59*02_G88A IGHV5-51*07_A128G are not listed in the genotype and will be ignored. Warning - no inferred sequences found. Novel sequence(s) IGHV4-59*02_G88A IGHV5-51*07_A128G are not listed in the genotype and will be ignored. Novel sequence(s) IGHV5-51*07_A128G are not listed in the genotype and will be ignored. Novel sequence(s) IGHV5-51*07_A128G are not listed in the genotype and will be ignored. Novel sequence(s) IGHV4-59*02_G88A IGHV5-51*07_A128G are not listed in the genotype and will be ignored. Novel sequence(s) IGHV4-59*02_G88A IGHV5-51*07_A128G are not listed in the genotype and will be ignored. Novel sequence(s) IGHV5-51*07_A128G are not listed in the genotype and will be ignored. Warning – no inferred sequences found. Novel sequence(s) IGHV1-69*04 09 G112A IGHV4-59*02 G88A IGHV5-51*07 A128G are not listed in the genotype and will be ignored. Novel sequence(s) IGHV4-59*02 G88A IGHV5-51*07 A128G are not listed in the genotype and will be ignored. Warning – no inferred sequences found. Novel sequence(s) IGHV4-59*02 G88A IGHV5-51*07 A128G are not listed in the genotype and will be ignored. Novel sequence(s) IGHV4-59*02_G88A are not listed in the genotype and will be ignored. Novel sequence(s) IGHV4-59*02_G88A are not listed in the genotype and will be ignored. Novel sequence(s) IGHV4-59*02_G88A IGHV5-51*07_A128G are not listed in the genotype and will be ignored. Novel sequence(s) IGHV4-59*02_G88A IGHV5-51*07_A128G are not listed in the genotype and will be ignored. Warning - no inferred sequences found. Warning - no inferred sequences found. Warning - no inferred sequences found. Novel sequence(s) IGHV4-59*02_G88A IGHV5-51*07_A128G are not listed in the genotype and will be ignored. Warning – no inferred sequences found. Novel sequence(s) IGHV5-51*07_A128G are not listed in the genotype and will be ignored. Novel sequence(s) IGHV4-59*02_G88A IGHV5-51*07_A128G are not listed in the genotype and will be ignored. Warning - no inferred sequences found. Novel sequence(s) IGHV4-39*02_C258G IGHV4-59*02_G88A IGHV5-51*07_A128G are not listed in the genotype and will be ignored. Warning – no inferred sequences found. Novel sequence(s) IGHV4-59*02_G88A IGHV5-51*07_A128G are not listed in the genotype and will be ignored. Novel sequence(s) IGHV4-59*02_G88A IGHV5-51*07_A128G are not listed in the genotype and will be ignored. Warning - no inferred sequences found. Novel sequence(s) IGHV4-59*02_G88A IGHV5-51*07_A128G are not listed in the genotype and will be ignored. Novel sequence(s) IGHV5-51*07_A128G are not listed in the genotype and will be ignored.

Warning – no inferred sequences found.

Novel sequence(s) IGHV3-11*06_T300C are not listed in the genotype and will be ignored.

Warning – no inferred sequences found.