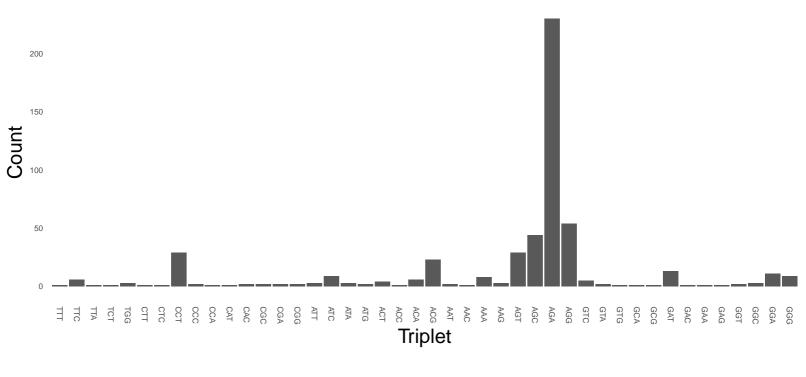
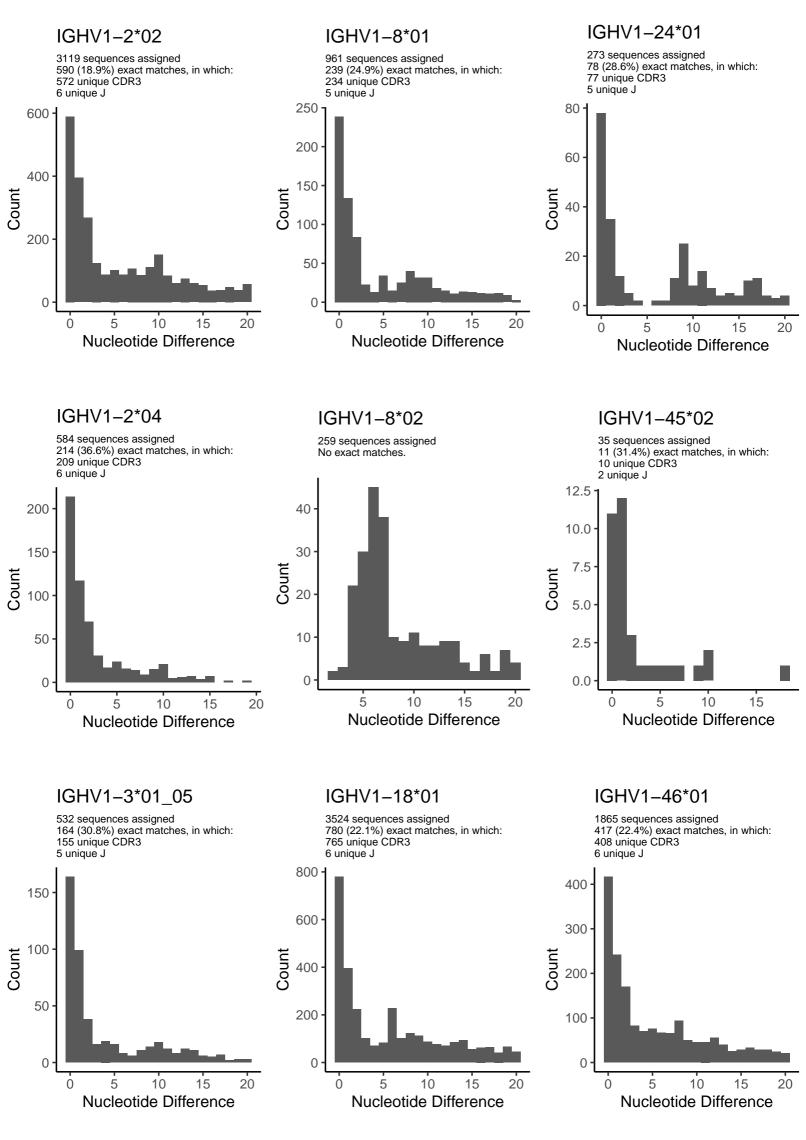
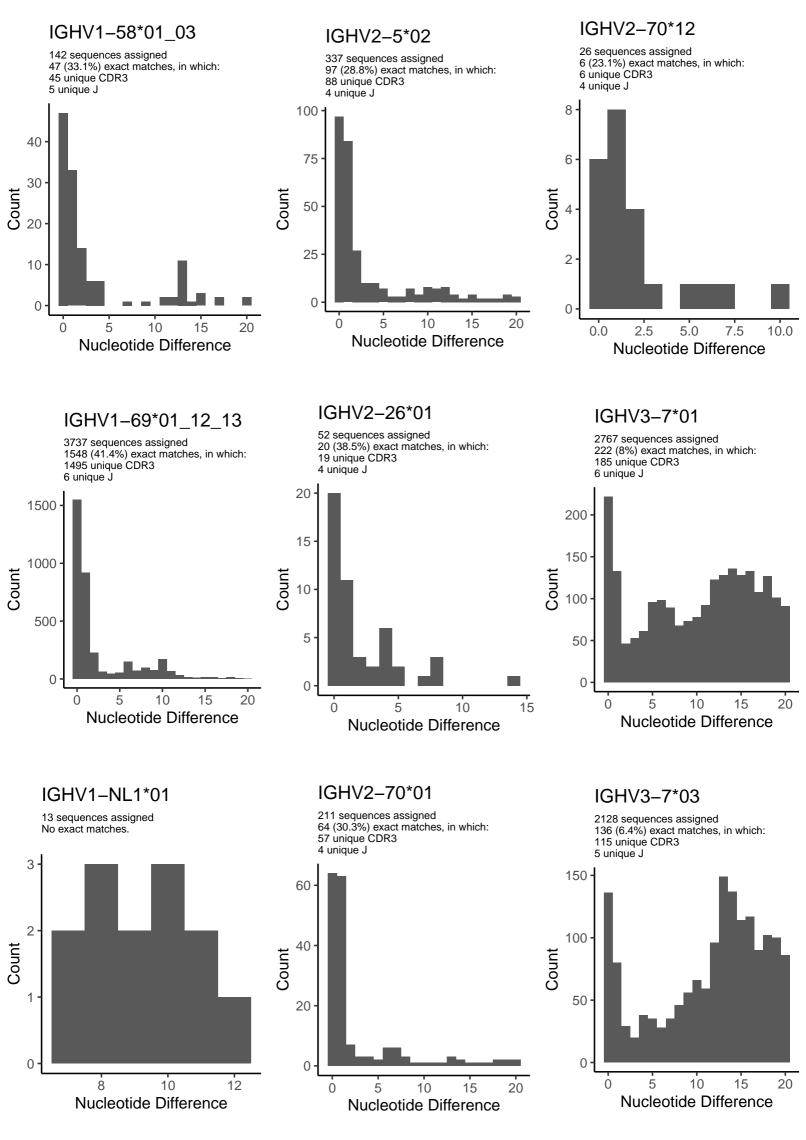
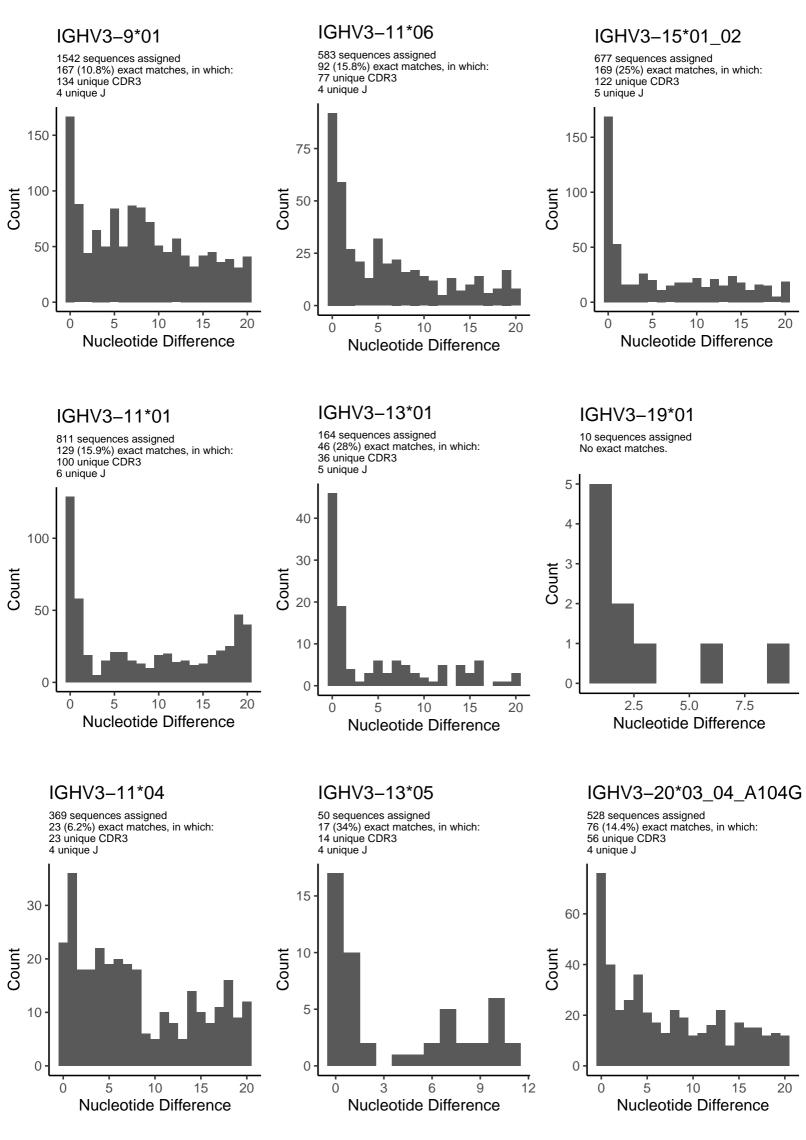


IGHV3-20\*03\_04\_A104G- Final 3 nucleotides as a triplet

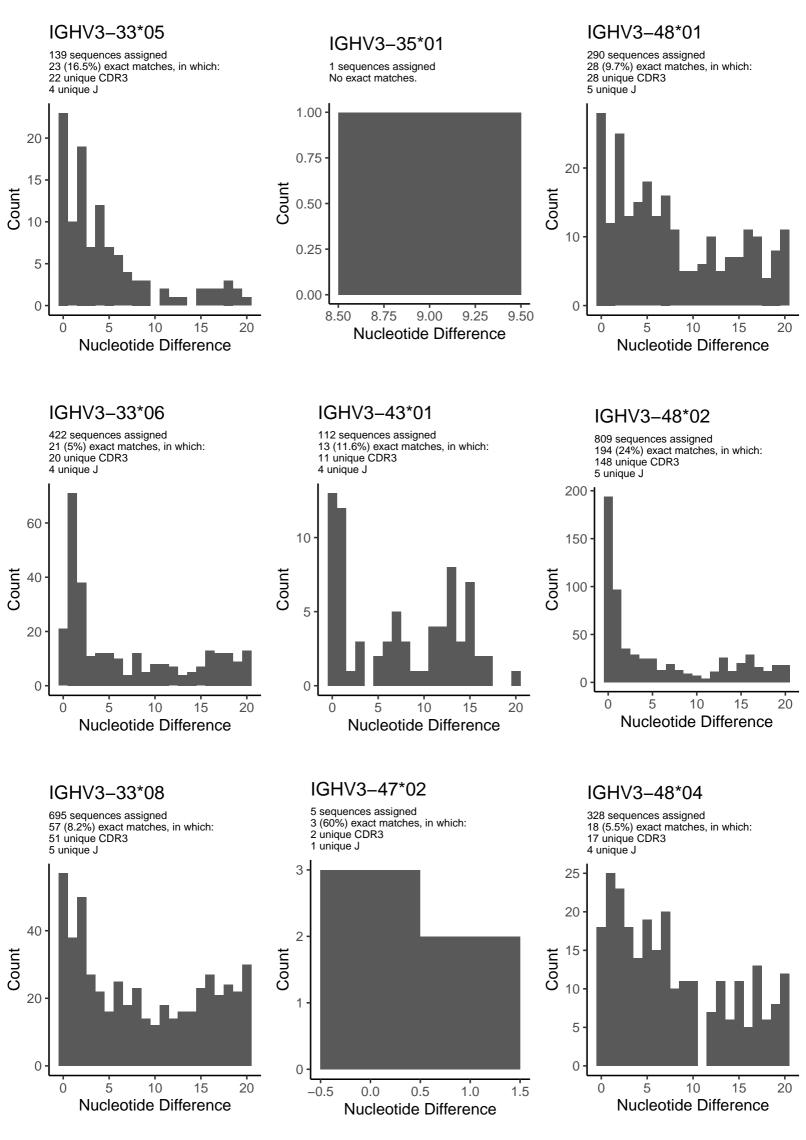


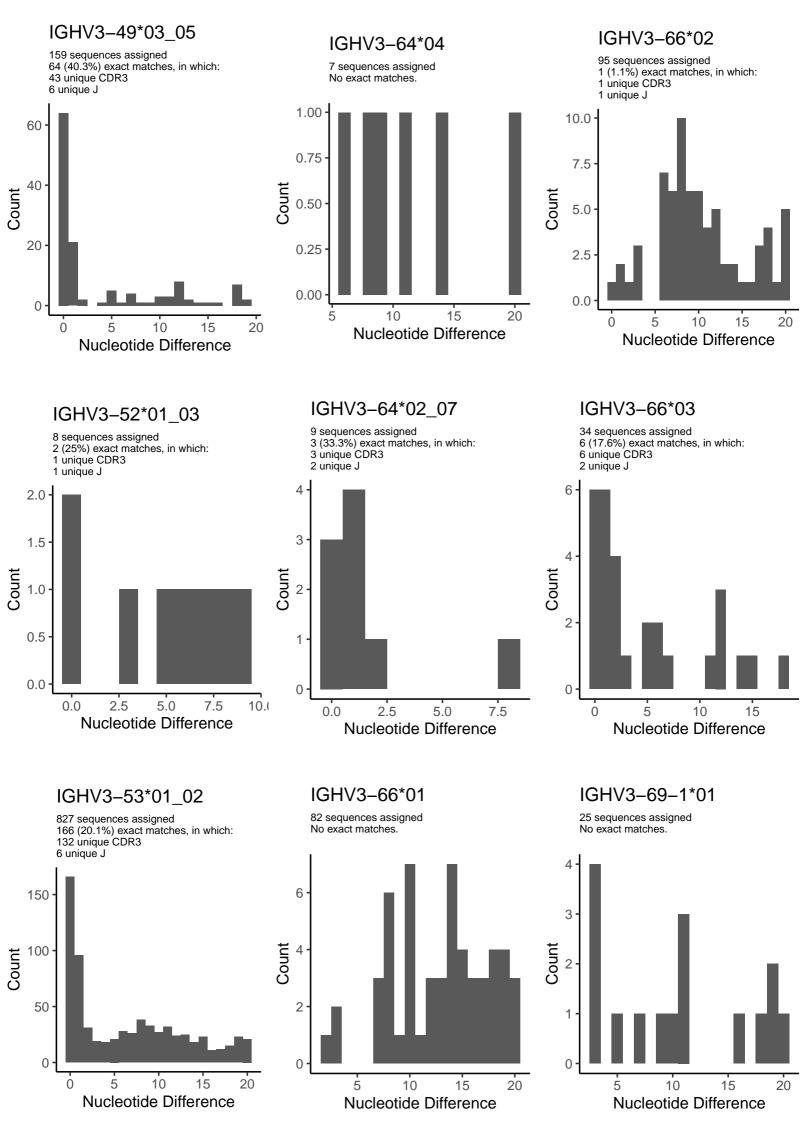


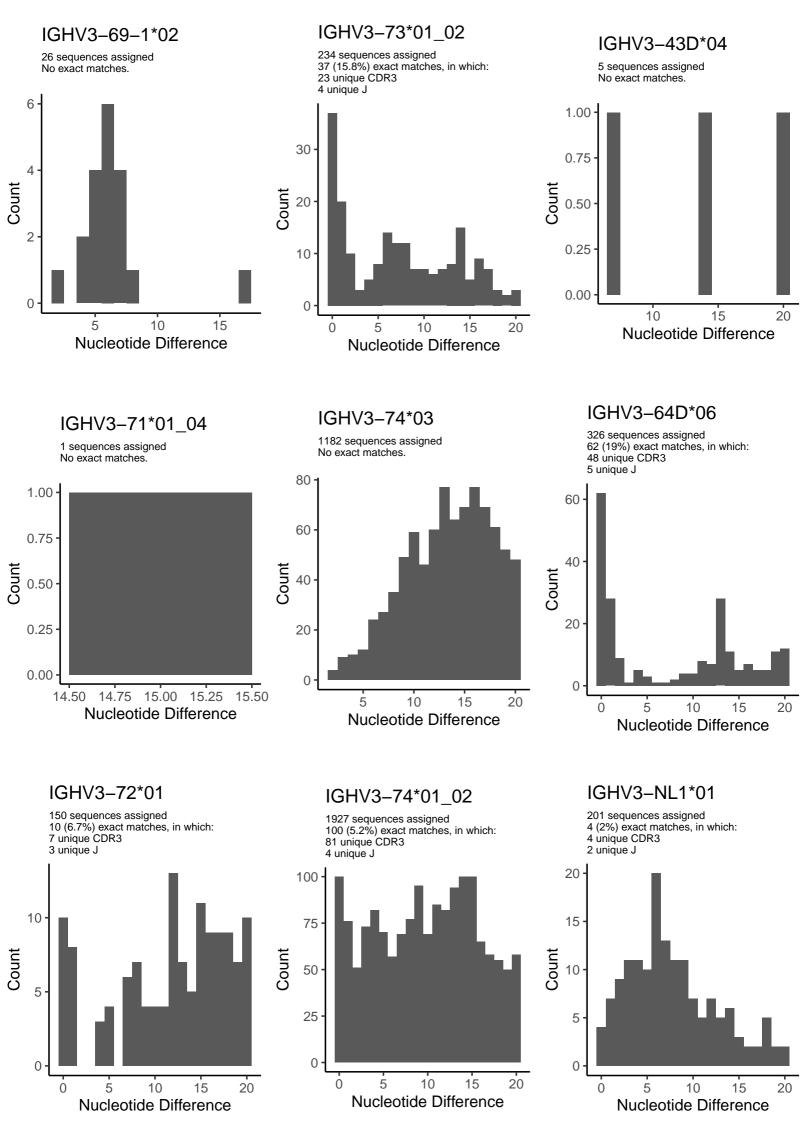


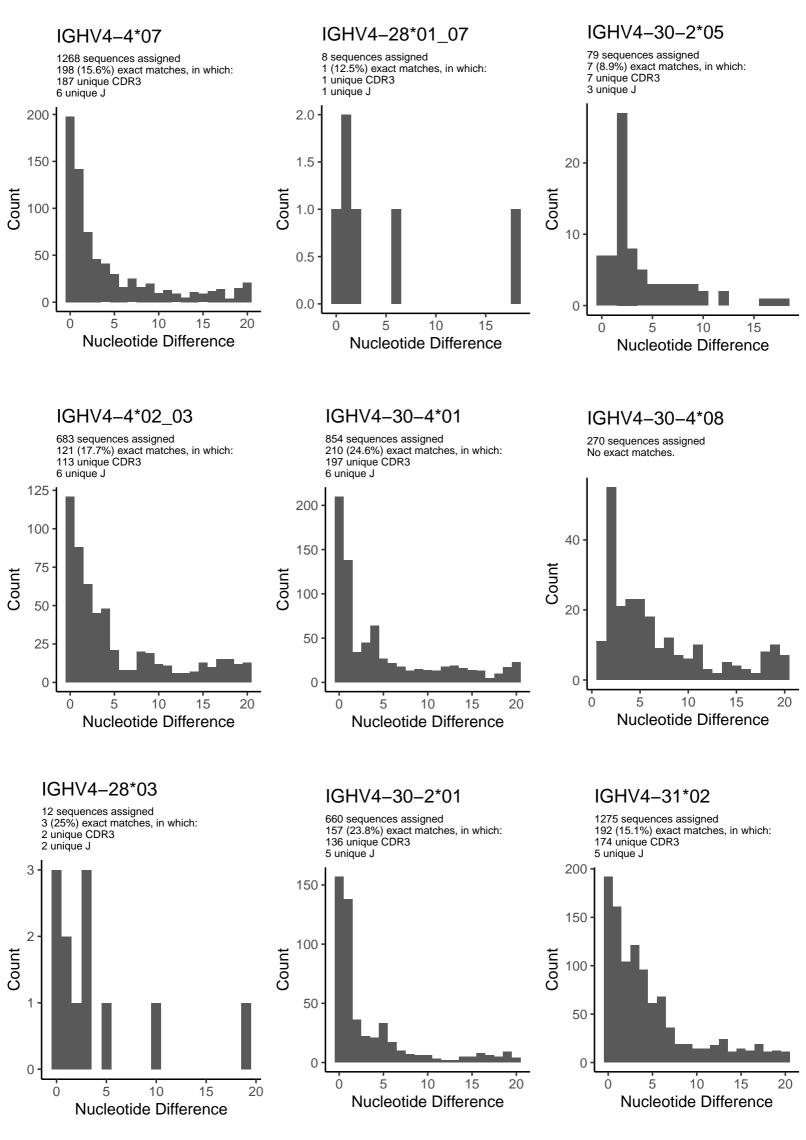


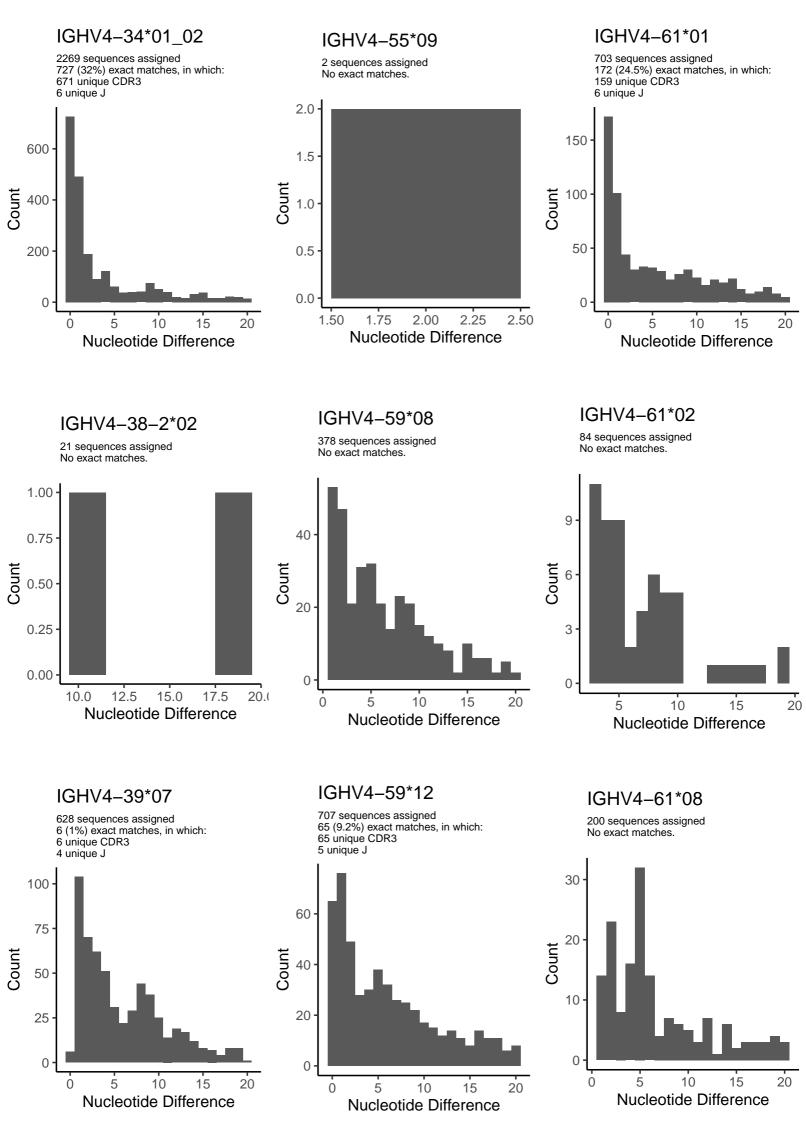
## IGHV3-21\*04 IGHV3-23\*03 IGHV3-30\*03 740 sequences assigned 2922 sequences assigned 755 sequences assigned 50 (6.8%) exact matches, in which: 49 unique CDR3 275 (36.4%) exact matches, in which: 264 unique CDR3 373 (12.8%) exact matches, in which: 287 unique CDR3 6 unique J 5 unique J 6 unique J 60 300 200 Count Count 200 100 20 100 0 0 0 15 5 10 20 5 10 15 20 0 0 0 10 15 20 5 Nucleotide Difference Nucleotide Difference Nucleotide Difference IGHV3-30\*04 IGHV3-21\*01\_02 IGHV3-23\*01\_04 239 sequences assigned 13 (5.4%) exact matches, in which: 2860 sequences assigned 728 (25.5%) exact matches, in which: 5078 sequences assigned 261 (5.1%) exact matches, in which: 13 unique CDR3 586 unique CDR3 206 unique CDR3 3 unique J 6 unique J 6 unique J 40 300 600 30 200 Count Count Count 400 20 100 200 10 0 0 0 20 10 15 5 10 15 20 0 5 0 10 15 20 0 **Nucleotide Difference** Nucleotide Difference Nucleotide Difference IGHV3-33\*01 IGHV3-30-3\*01 IGHV3-22\*01\_02 1016 sequences assigned 3588 sequences assigned 1244 (34.7%) exact matches, in which: 3 sequences assigned 182 (17.9%) exact matches, in which: No exact matches. 146 unique CDR3 1058 unique CDR3 6 unique J 6 unique J 1.00 1200 150 0.75 800 Count 100 0.50 400 0.25 50 0.00 0 0 12 16 10 15 20 10 15 20 **Nucleotide Difference Nucleotide Difference** Nucleotide Difference

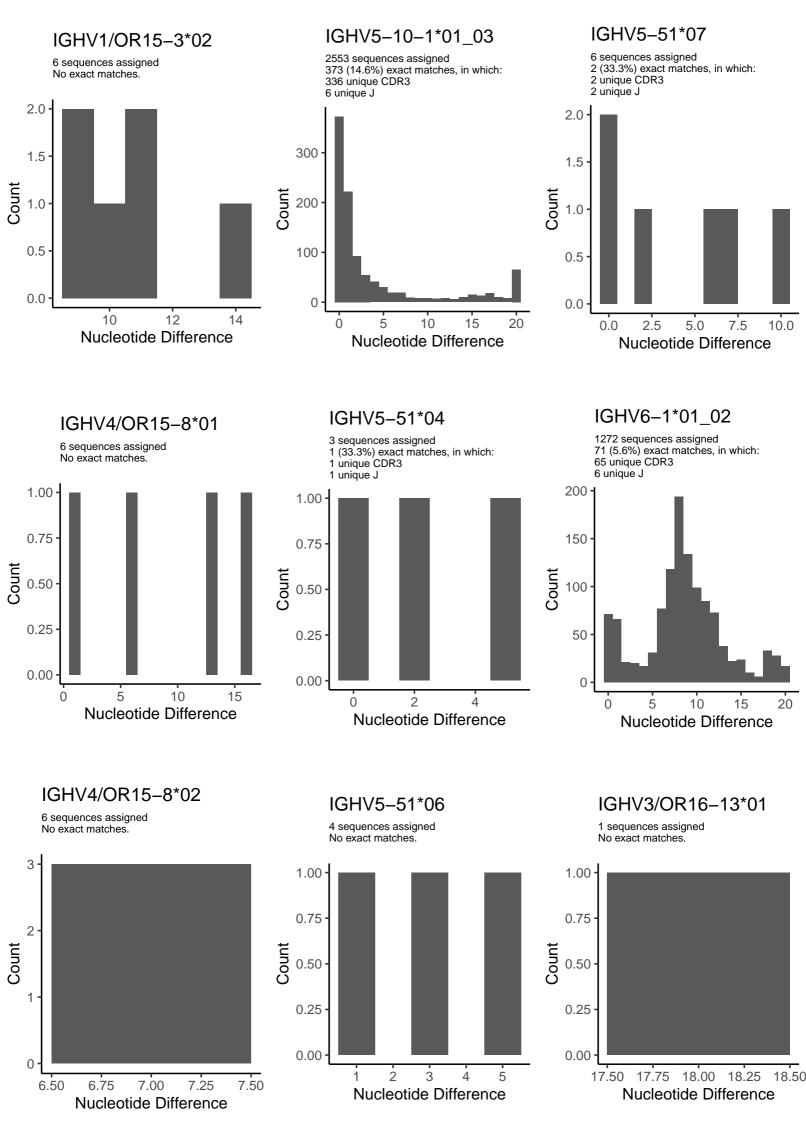






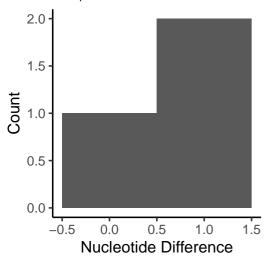




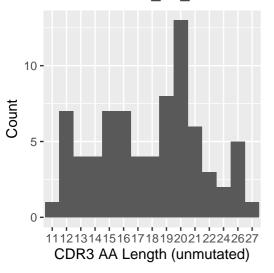


## IGHV7-4-1\*01

- 3 sequences assigned 1 (33.3%) exact matches, in which: 1 unique CDR3 1 unique J



IGHV3-20\*03\_04\_A104G





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