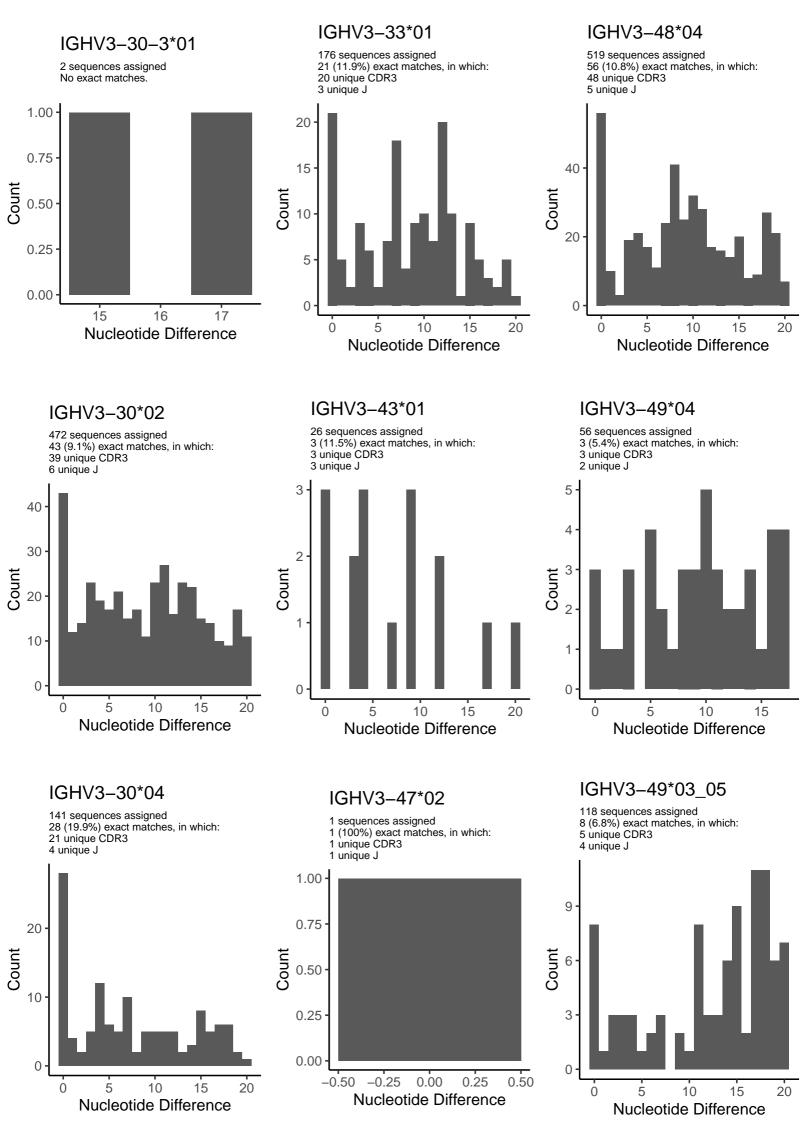
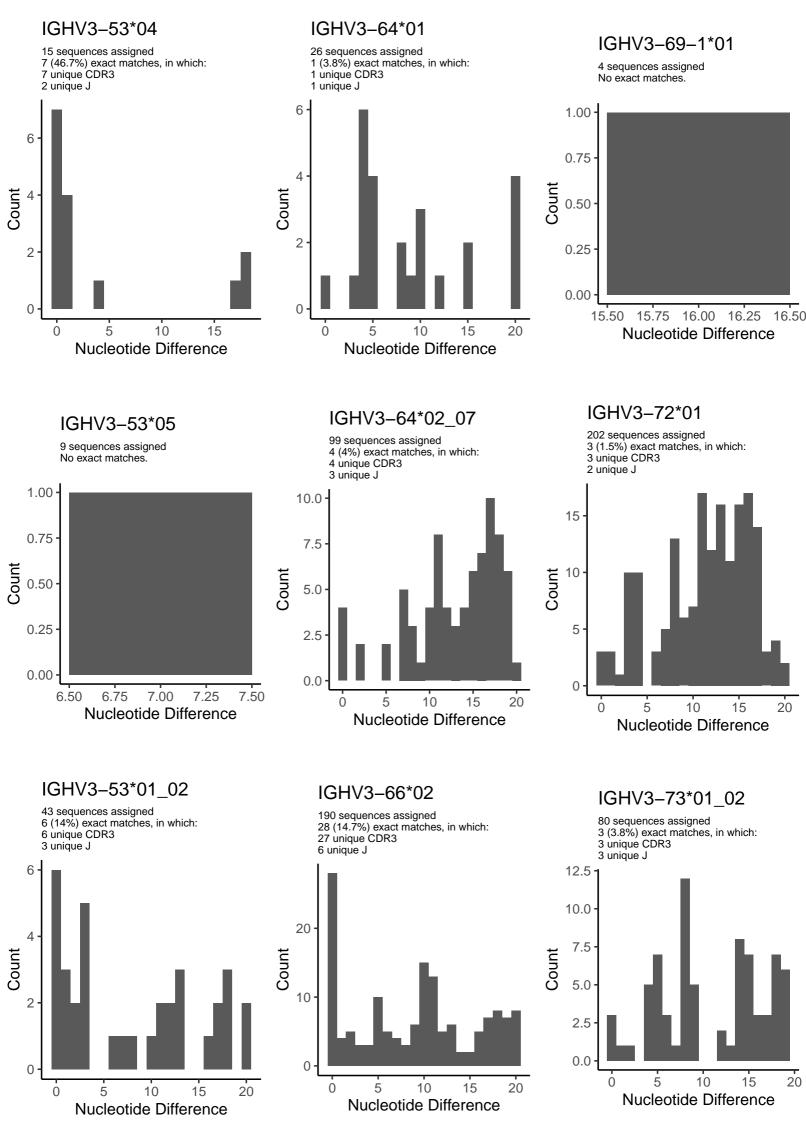
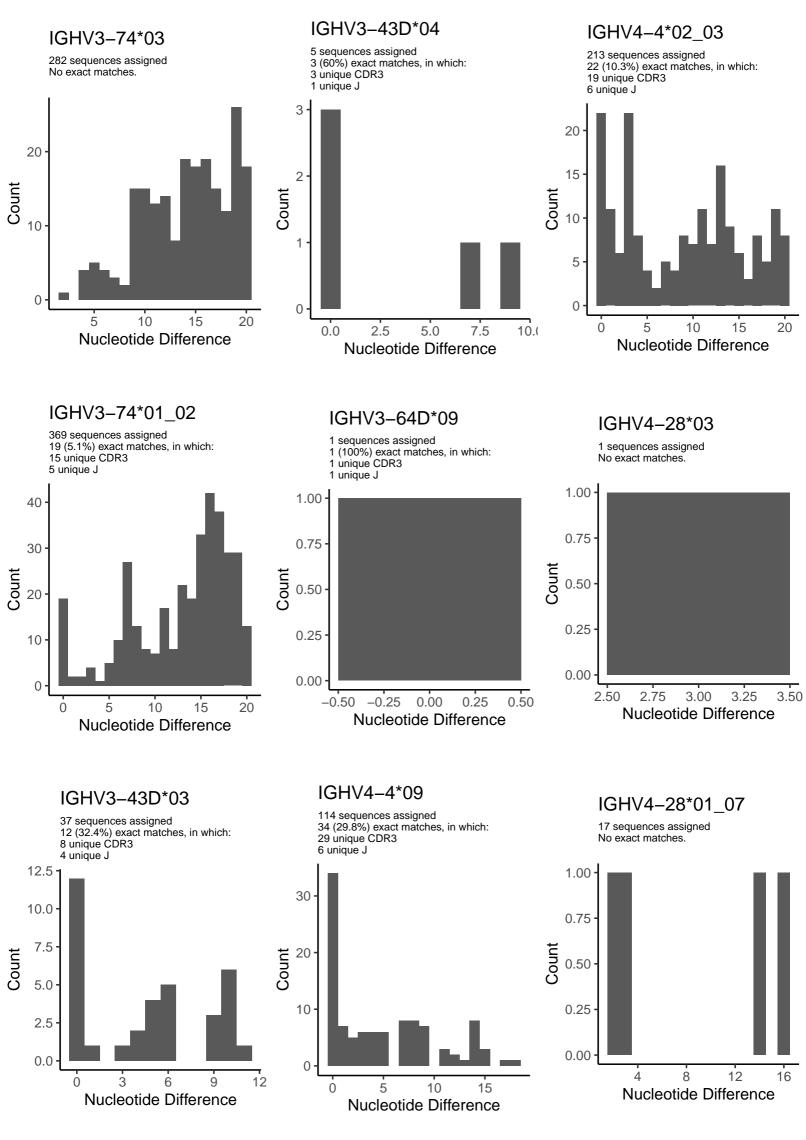
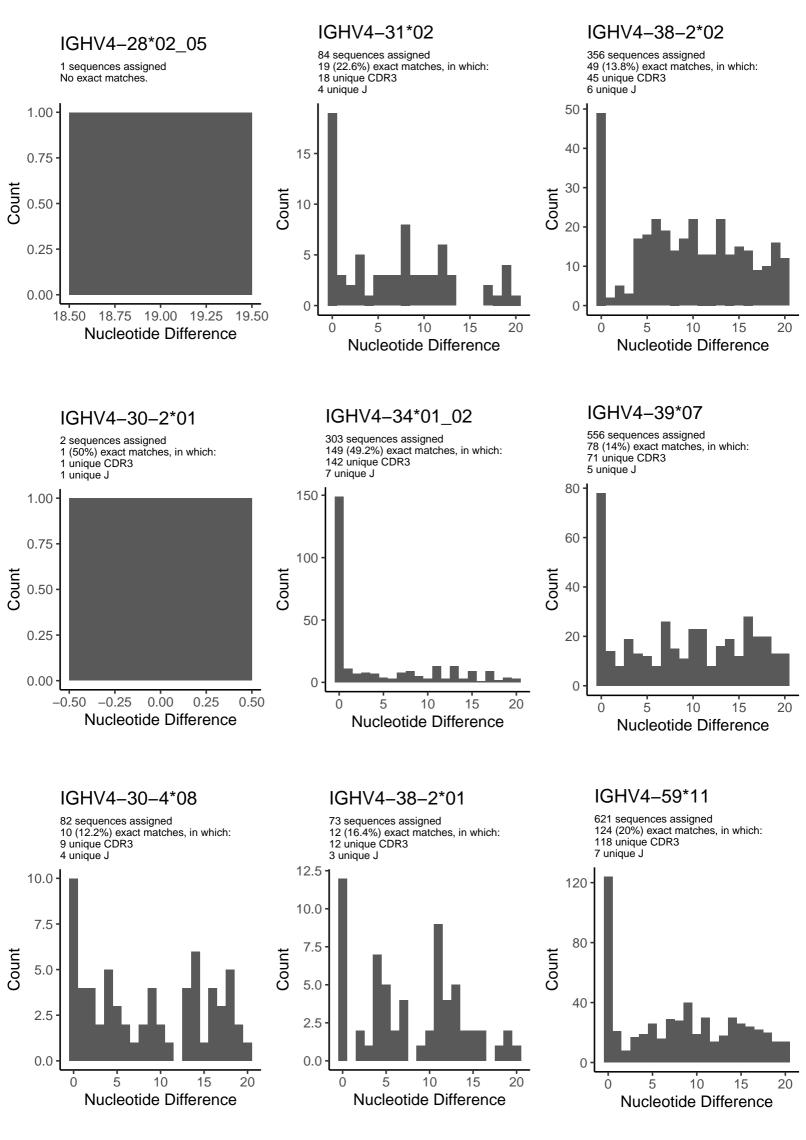


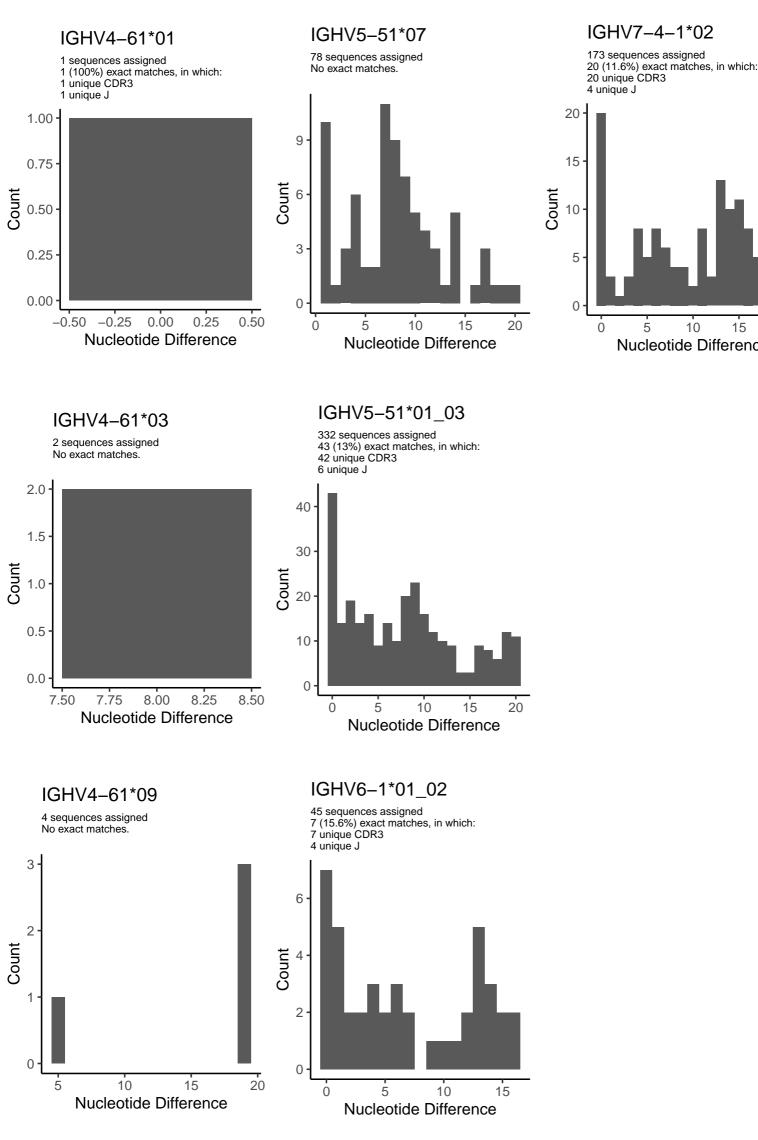
IGHV3-7*01 IGHV3-11*01 IGHV3-20*03_04 840 sequences assigned 34 (4%) exact matches, in which: 293 sequences assigned 30 (10.2%) exact matches, in which: 172 sequences assigned 30 (17.4%) exact matches, in which: 32 unique CDR3 27 unique CDR3 28 unique CDR3 4 unique J 5 unique J 6 unique J 75 20 20 Count Count Count 10 10 25 0 0 0 10 15 20 10 15 20 0 0 5 0 5 10 15 Nucleotide Difference **Nucleotide Difference** Nucleotide Difference IGHV3-7*03 IGHV3-11*04 IGHV3-21*03 411 sequences assigned 359 sequences assigned 135 sequences assigned 20 (5.6%) exact matches, in which: 16 unique CDR3 21 (15.6%) exact matches, in which: 69 (16.8%) exact matches, in which: 19 unique CDR3 62 unique CDR3 3 unique J 4 unique J 6 unique J 20 20 60 15 15 Count Count 40 10 10 20 5 5 0 0 0 10 15 20 10 15 20 0 5 0 5 10 15 20 0 Nucleotide Difference **Nucleotide Difference** Nucleotide Difference IGHV3-9*01 IGHV3-15*01_02 IGHV3-23*01_04 292 sequences assigned 1325 sequences assigned 461 sequences assigned 13 (4.5%) exact matches, in which: 107 (8.1%) exact matches, in which: 61 (13.2%) exact matches, in which: 53 unique CDR3 12 unique CDR3 95 unique CDR3 6 unique J 4 unique J 7 unique J 60 30 20 Count Count Count 60 20 10 30 0 0 0 0 5 10 15 20 0 5 10 15 20 5 10 15 20 Nucleotide Difference **Nucleotide Difference Nucleotide Difference**



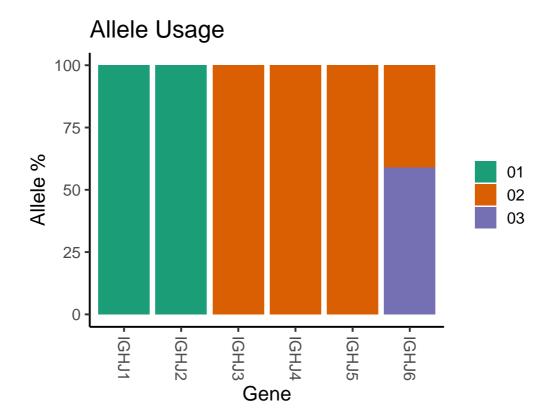








Nucleotide Difference



Sequence Count by IGHJ6 allele usage



