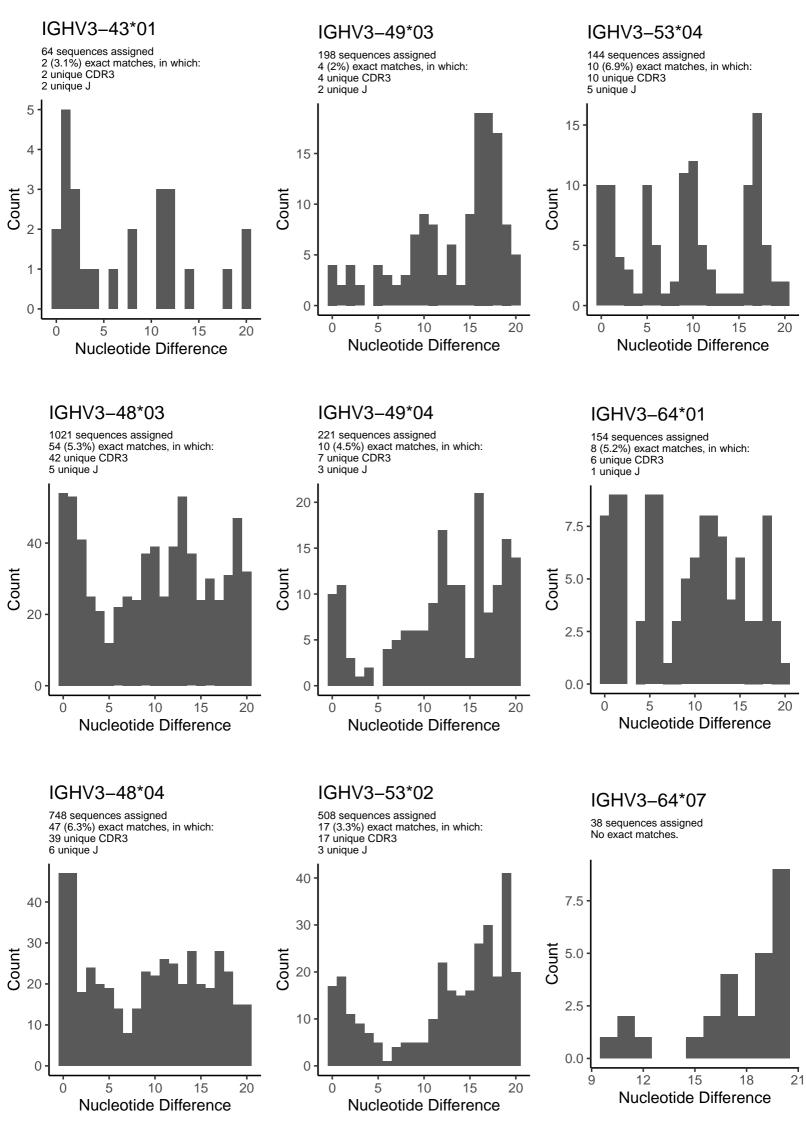
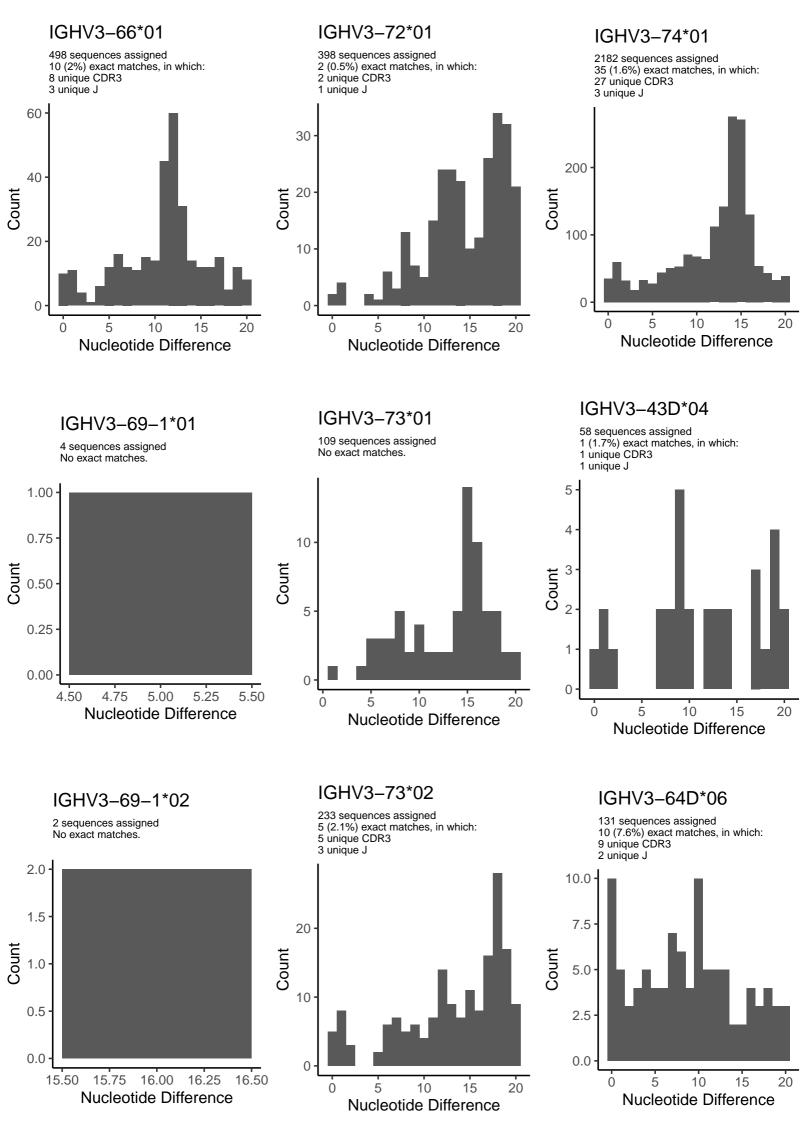
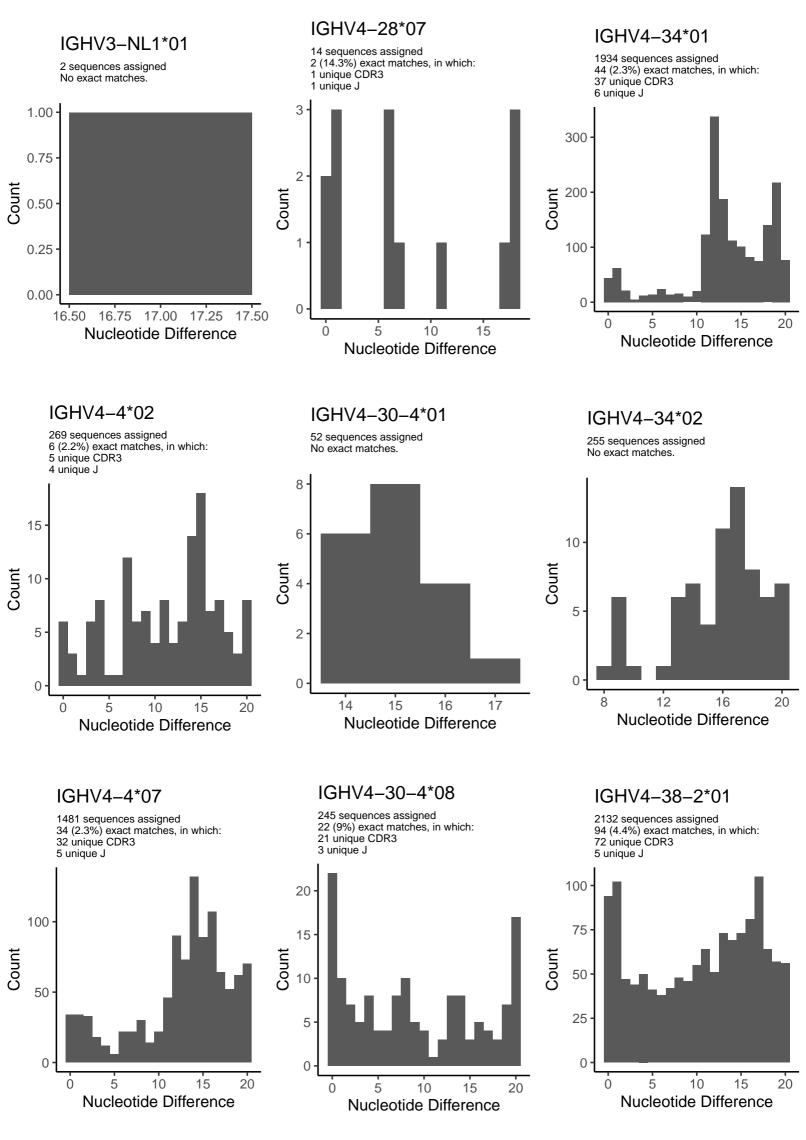
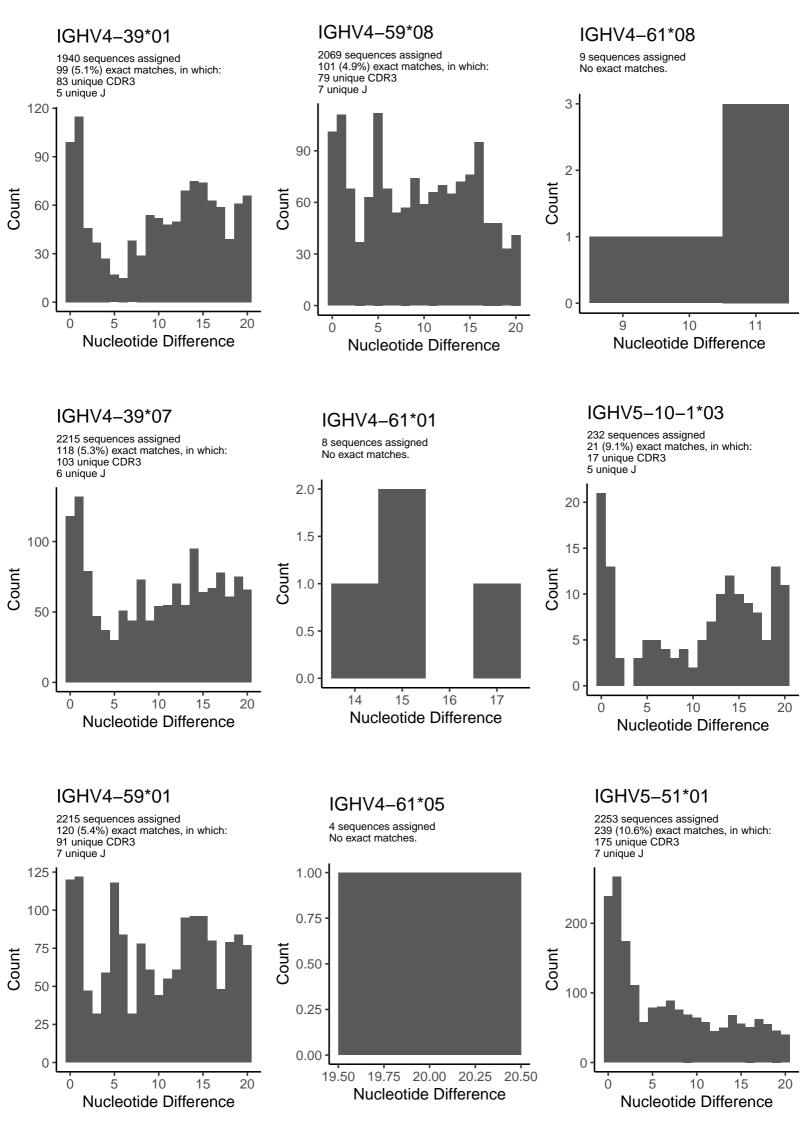


IGHV3-15*01 IGHV3-23*01 IGHV3-30*02 506 sequences assigned 1861 sequences assigned 1250 sequences assigned 16 (3.2%) exact matches, in which: 15 unique CDR3 79 (6.3%) exact matches, in which: 67 unique CDR3 37 (2%) exact matches, in which: 34 unique CDR3 5 unique J 6 unique J 6 unique J 25 125 200 100 20 150 75 15 Count Count 100 50 10 50 25 5 0 0 0 20 5 10 15 20 10 15 0 5 10 15 20 0 Nucleotide Difference Nucleotide Difference **Nucleotide Difference** IGHV3-20*04 IGHV3-30*04 IGHV3-23*04 151 sequences assigned 1262 sequences assigned 73 (5.8%) exact matches, in which: 127 sequences assigned 6 (4%) exact matches, in which: No exact matches. 6 unique CDR3 57 ùniqué CDR3 3 unique J 4 unique J 8 120 6 10 90 Count 4 60 5 2 30 0 0 10 20 0 5 15 12 15 18 10 15 9 0 5 20 Nucleotide Difference **Nucleotide Difference** Nucleotide Difference IGHV3-30-3*01 IGHV3-33*08 IGHV3-21*01 1050 sequences assigned 714 sequences assigned 1346 sequences assigned 48 (4.6%) exact matches, in which: 28 (3.9%) exact matches, in which: 137 (10.2%) exact matches, in which: 39 unique CDR3 23 unique CDR3 94 unique CDR3 5 unique J 4 unique J 7 unique J 150 40 40 100 30 Count Count Count 20 20 50 10 0 0 0 5 10 15 20 0 5 10 15 20 5 10 15 20 **Nucleotide Difference** Nucleotide Difference Nucleotide Difference



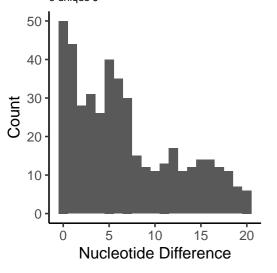






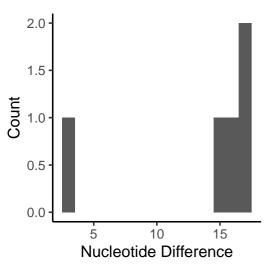
IGHV6-1*01

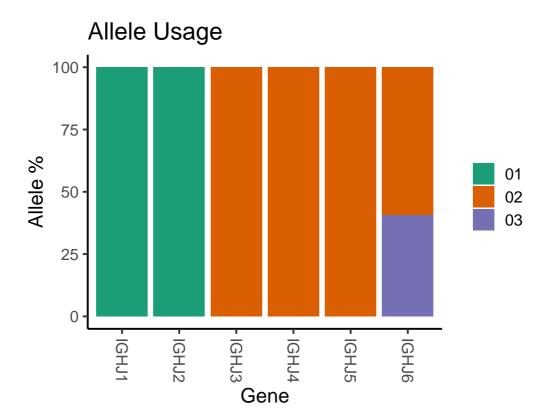
603 sequences assigned 50 (8.3%) exact matches, in which: 40 unique CDR3 6 unique J



IGHV7-4-1*01

6 sequences assigned No exact matches.





Sequence Count by IGHJ6 allele usage

