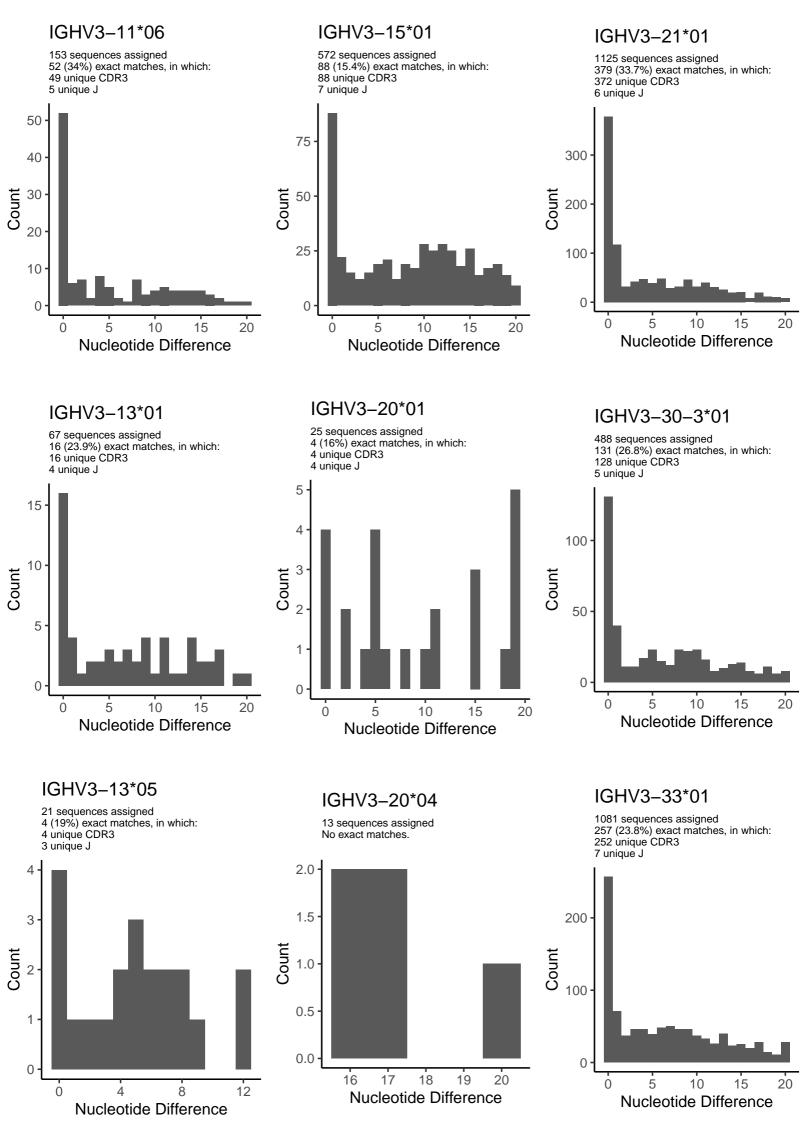
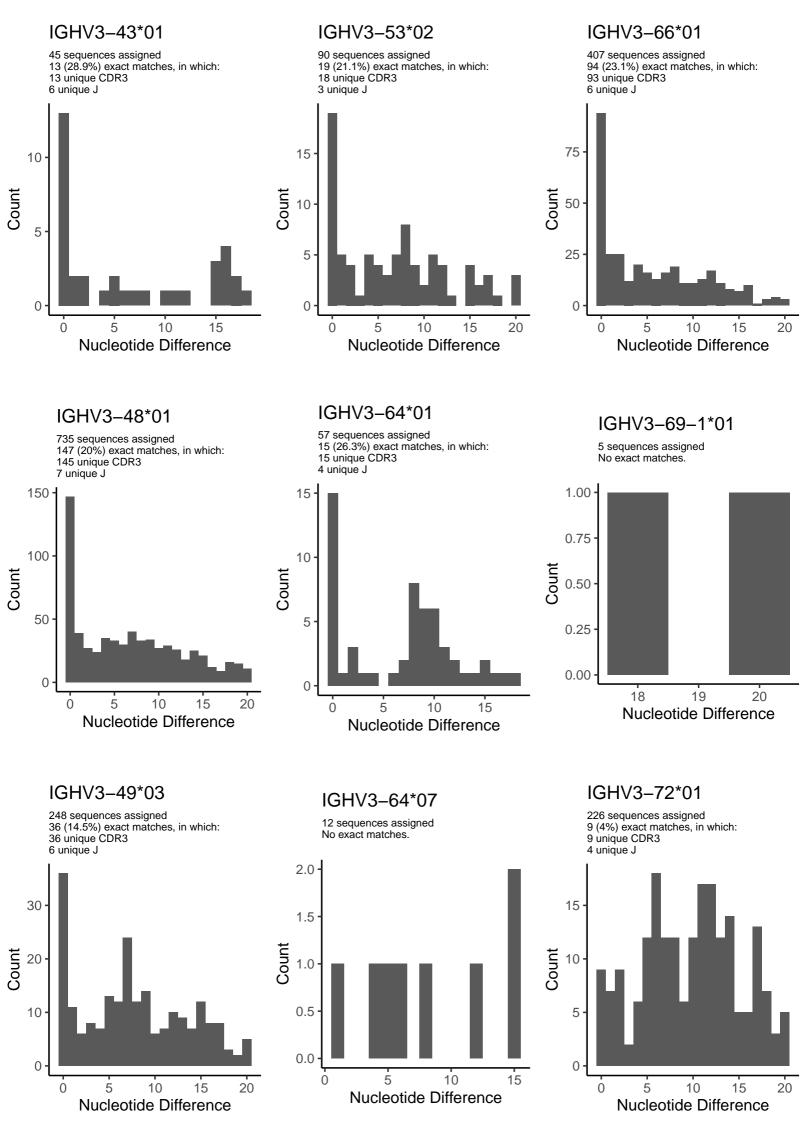
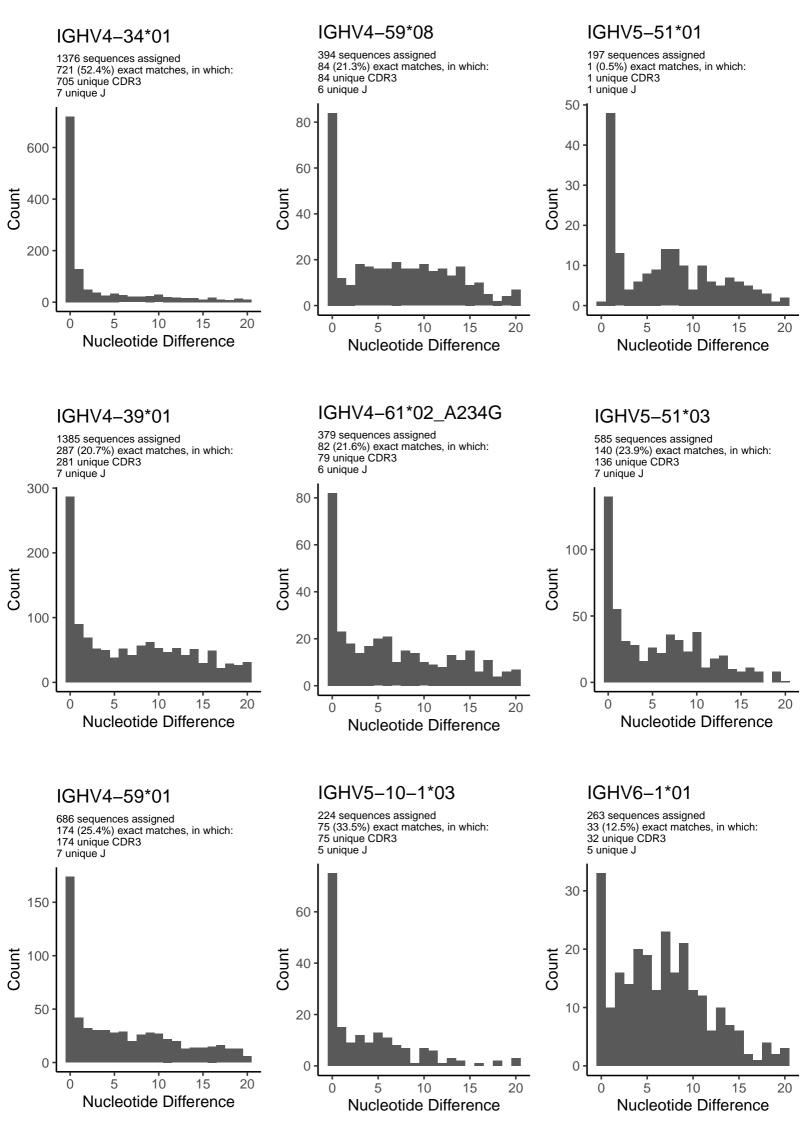


IGHV2-5*01 IGHV3-7*03 IGHV2-70*01 230 sequences assigned 38 (16.5%) exact matches, in which: 778 sequences assigned 26 sequences assigned 84 (10.8%) exact matches, in which: 10 (38.5%) exact matches, in which: 83 unique CDR3 38 unique CDR3 10 unique CDR3 4 unique J 6 unique J 4 unique J 10.0 80 30 7.5 60 Count Count 5.0 40 10 2.5 20 0.0 0 0 5 15 10 0 10 5 10 15 20 0 15 20 **Nucleotide Difference Nucleotide Difference Nucleotide Difference** IGHV2-5*02 IGHV2-70*15 IGHV3-9*01 236 sequences assigned 41 (17.4%) exact matches, in which: 112 sequences assigned 29 (25.9%) exact matches, in which: 557 sequences assigned 140 (25.1%) exact matches, in which: 28 unique CDR3 41 unique CDR3 140 unique CDR3 5 unique J 5 unique J 6 unique J 30 30 100 20 Count Count Count 20 50 10 10 0 0 0 10 15 20 0 5 10 15 20 0 10 15 0 20 Nucleotide Difference Nucleotide Difference **Nucleotide Difference** IGHV2-26*01 IGHV3-7*01 IGHV3-11*01 118 sequences assigned 672 sequences assigned 289 sequences assigned 79 (11.8%) exact matches, in which: 71 (24.6%) exact matches, in which: 36 (30.5%) exact matches, in which: 36 unique CDR3 7 unique J 79 unique CDR3 71 unique CDR3 6 unique J 5 unique J 80 30 60 Count Count 40 20 40 20 10 20 0 0 0 0 10 15 20 0 5 10 15 20 0 5 10 15 20 **Nucleotide Difference** Nucleotide Difference Nucleotide Difference



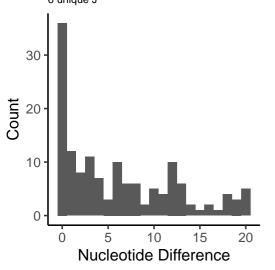


IGHV3-73*01 IGHV3-64D*06 IGHV4-30-4*01 105 sequences assigned 15 (14.3%) exact matches, in which: 131 sequences assigned 32 (24.4%) exact matches, in which: 200 sequences assigned 18 (9%) exact matches, in which: 32 unique CDR3 18 unique CDR3 15 unique CDR3 5 unique J 4 unique J 3 unique J 15 30 15 10 Count Count Count 5 10 5 0 0 0 10 0 0 5 15 20 5 10 15 0 5 10 15 Nucleotide Difference **Nucleotide Difference** Nucleotide Difference IGHV3-73*02 IGHV4-4*07 IGHV4-30-2*01 190 sequences assigned 47 (24.7%) exact matches, in which: 83 sequences assigned 72 sequences assigned 20 (24.1%) exact matches, in which: 13 (18.1%) exact matches, in which: 12 unique CDR3 47 unique CDR3 19 unique CDR3 6 unique J 3 unique J 4 unique J 20 40 10 15 30 Count Count 10 20 5 5 10 0 0 0 10 10 15 20 10 0 5 15 0 5 0 5 15 Nucleotide Difference Nucleotide Difference Nucleotide Difference IGHV3-74*01 IGHV4-31*03 IGHV4-28*05 522 sequences assigned 653 sequences assigned 48 (9.2%) exact matches, in which: 1 sequences assigned 213 (32.6%) exact matches, in which: 46 unique CDR3 No exact matches. 213 unique CDR3 7 unique J 5 unique J 50 1.00 200 40 0.75 150 Count Count 0.50 100 20 0.25 50 10 0.00 0 0 19.00 19.25 19.50 18.50 18.75 10 15 20 0 5 10 15 20 **Nucleotide Difference** Nucleotide Difference Nucleotide Difference

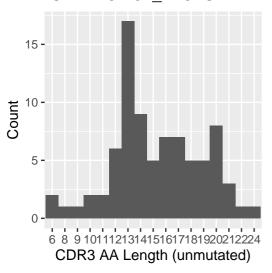


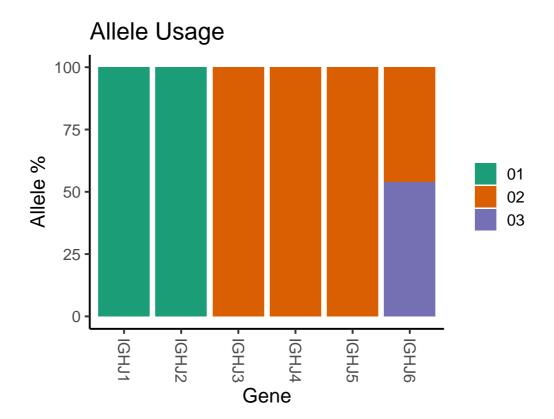
IGHV7-4-1*02

159 sequences assigned 36 (22.6%) exact matches, in which: 36 unique CDR3 6 unique J

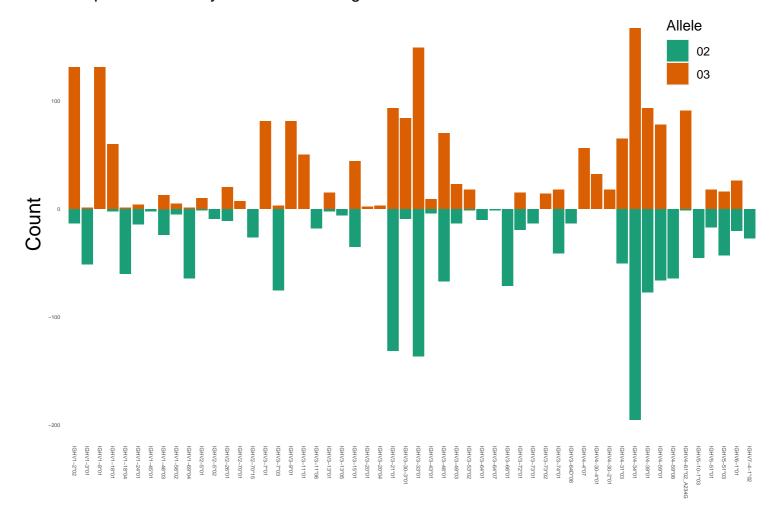


IGHV4-61*02_A234G





Sequence Count by IGHJ6 allele usage



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