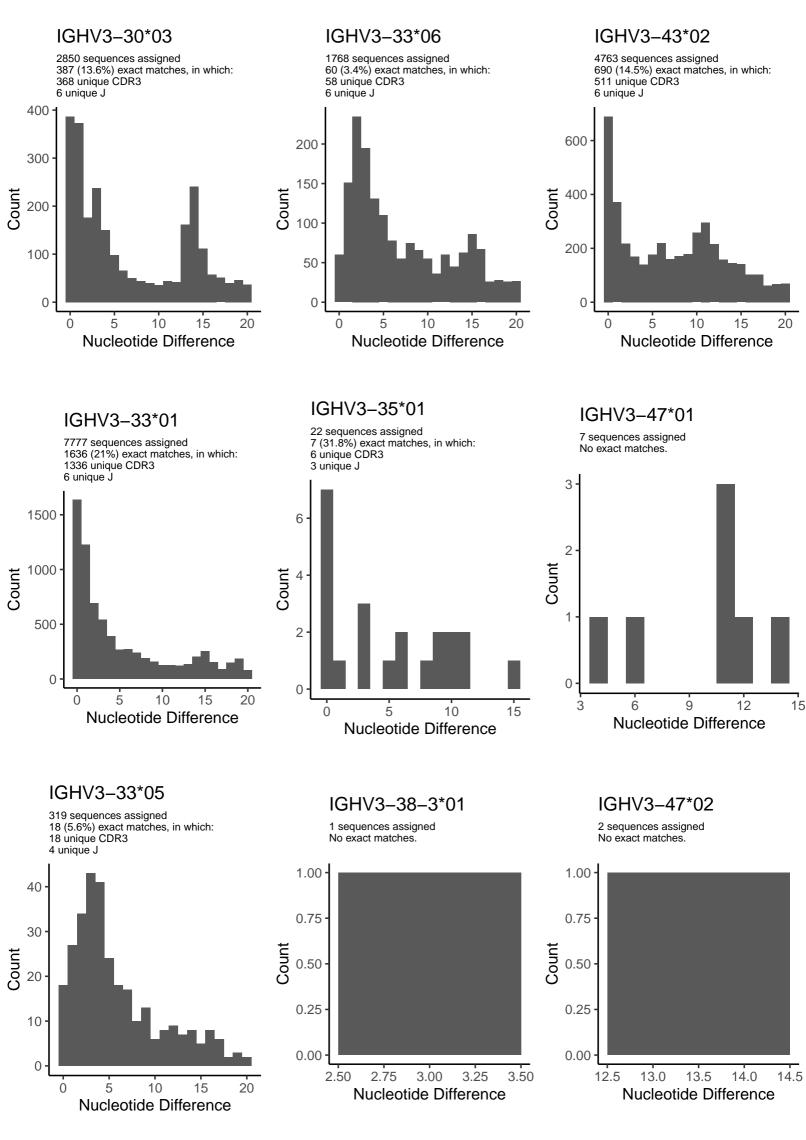
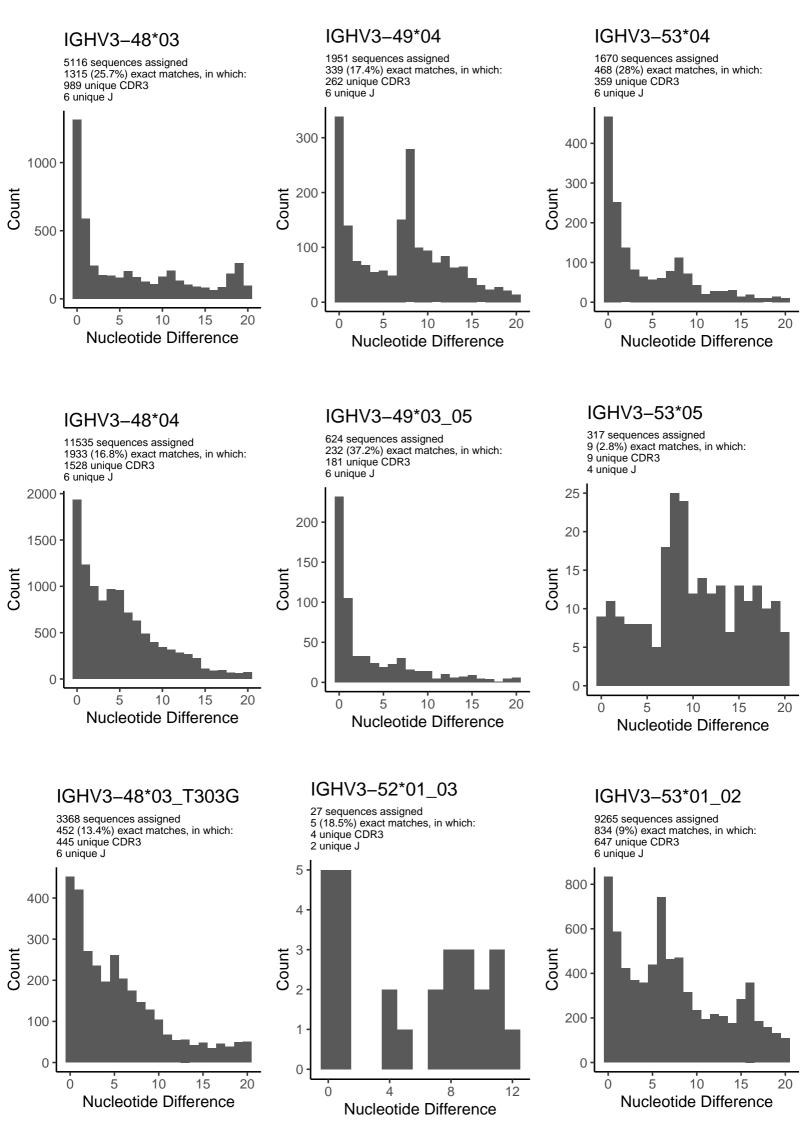
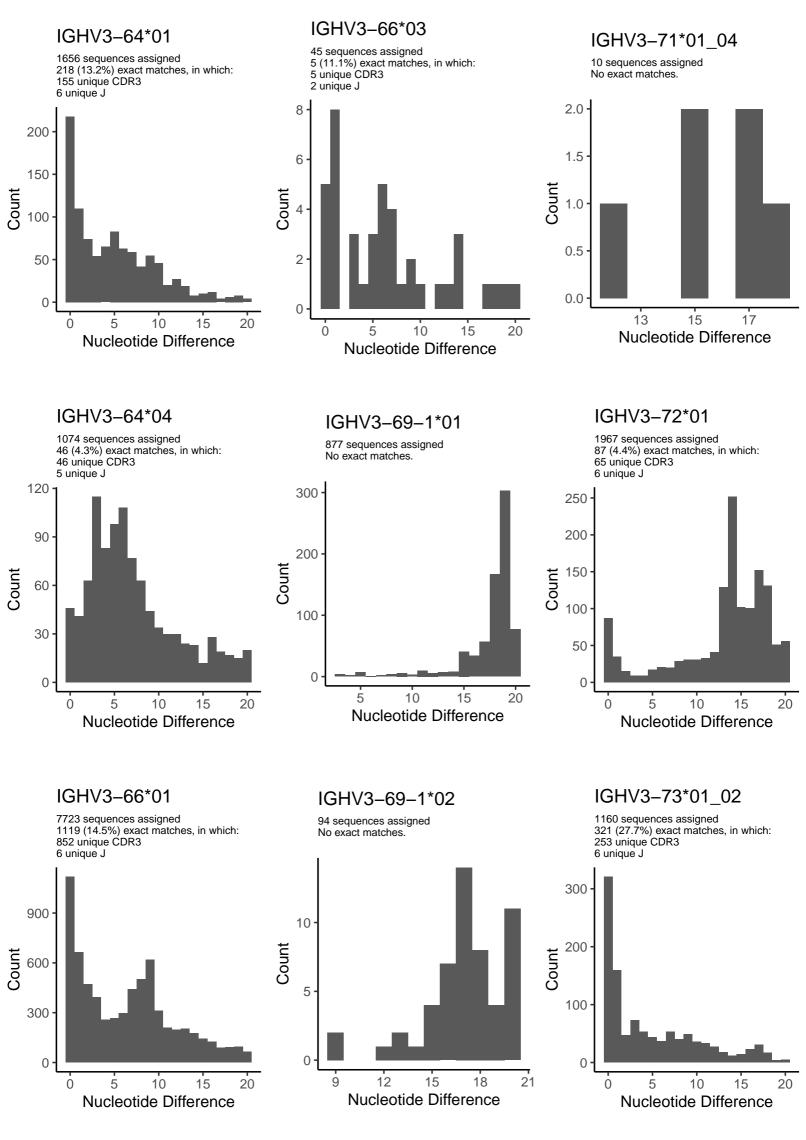
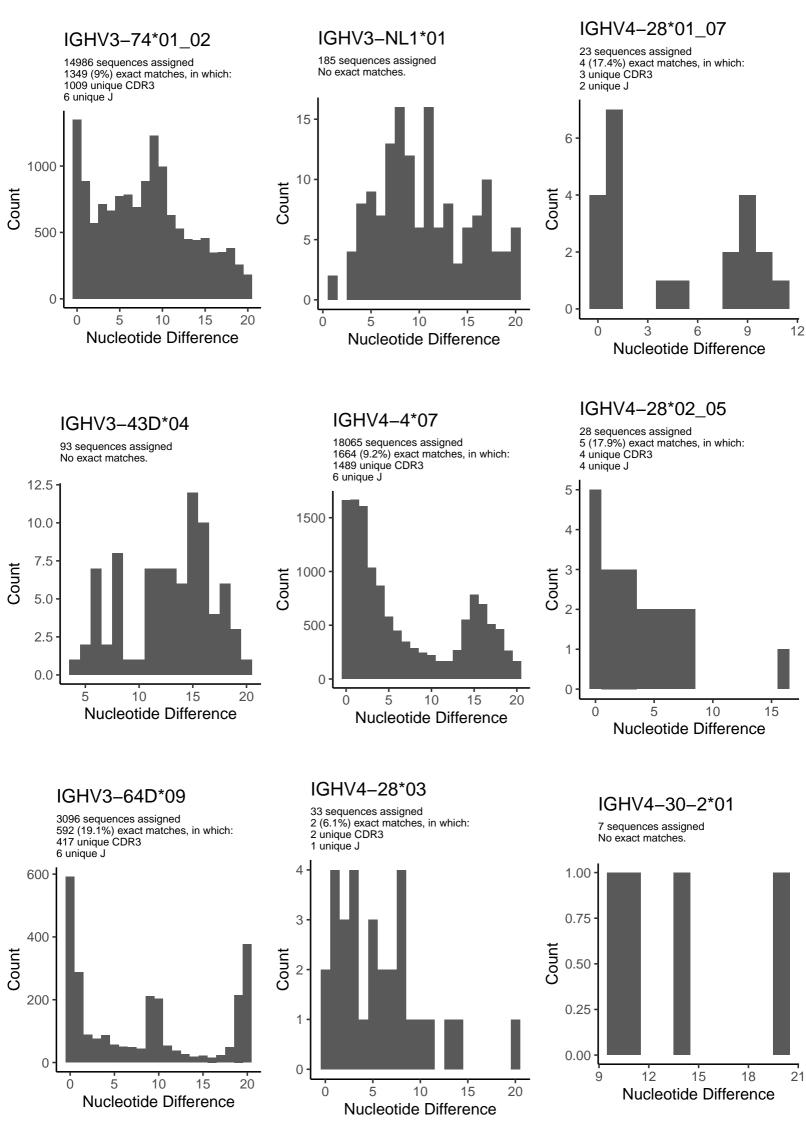


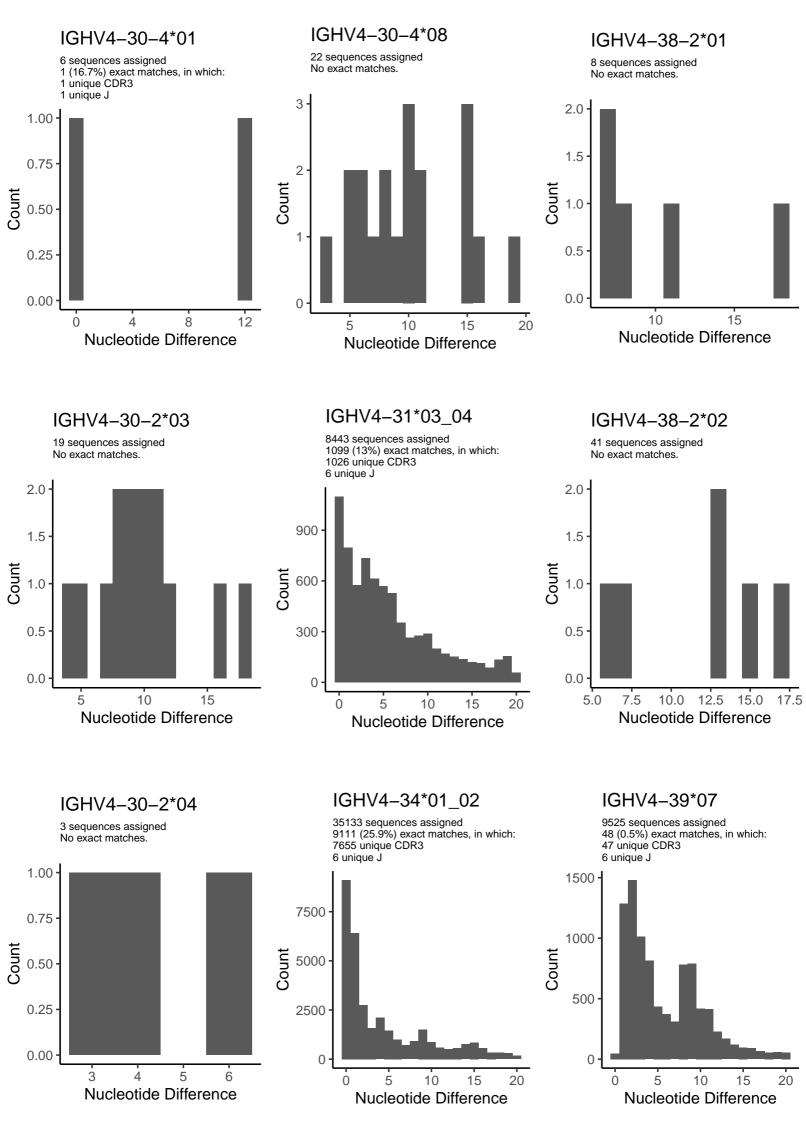
IGHV3-20*03_04 IGHV3-15*01_02 IGHV3-11*06 741 sequences assigned 2 (0.3%) exact matches, in which: 4051 sequences assigned 652 (16.1%) exact matches, in which: 6107 sequences assigned 1140 (18.7%) exact matches, in which: 2 unique CDR3 534 unique CDR3 875 unique CDR3 2 unique J 6 unique J 6 unique J 600 60 900 400 Count Count 600 40 200 300 20 0 0 0 5 10 15 20 5 10 15 20 0 0 5 10 15 Nucleotide Difference Nucleotide Difference **Nucleotide Difference** IGHV3-19*01 IGHV3-13*01 IGHV3-21*04 15 sequences assigned 1431 sequences assigned 3543 sequences assigned 7 (46.7%) exact matches, in which: 5 unique CDR3 303 (21.2%) exact matches, in which: 179 (5.1%) exact matches, in which: 222 unique CDR3 176 unique CDR3 3 unique J 6 unique J 6 unique J 300 400 6 300 200 Count Count 200 100 2 100 0 0 0 20 10 15 10 15 20 0 5 0 5 10 0 5 15 **Nucleotide Difference** Nucleotide Difference Nucleotide Difference IGHV3-13*05 IGHV3-20*01_02 IGHV3-21*01_02 355 sequences assigned 780 sequences assigned 20025 sequences assigned 5549 (27.7%) exact matches, in which: 107 (30.1%) exact matches, in which: 169 (21.7%) exact matches, in which: 79 unique CDR3 129 unique CDR3 4120 unique CDR3 5 unique J 6 unique J 6 unique J 150 90 4000 Count 100 Count 2000 50 30 0 0 0 10 15 10 15 20 0 10 15 20 Nucleotide Difference **Nucleotide Difference Nucleotide Difference**

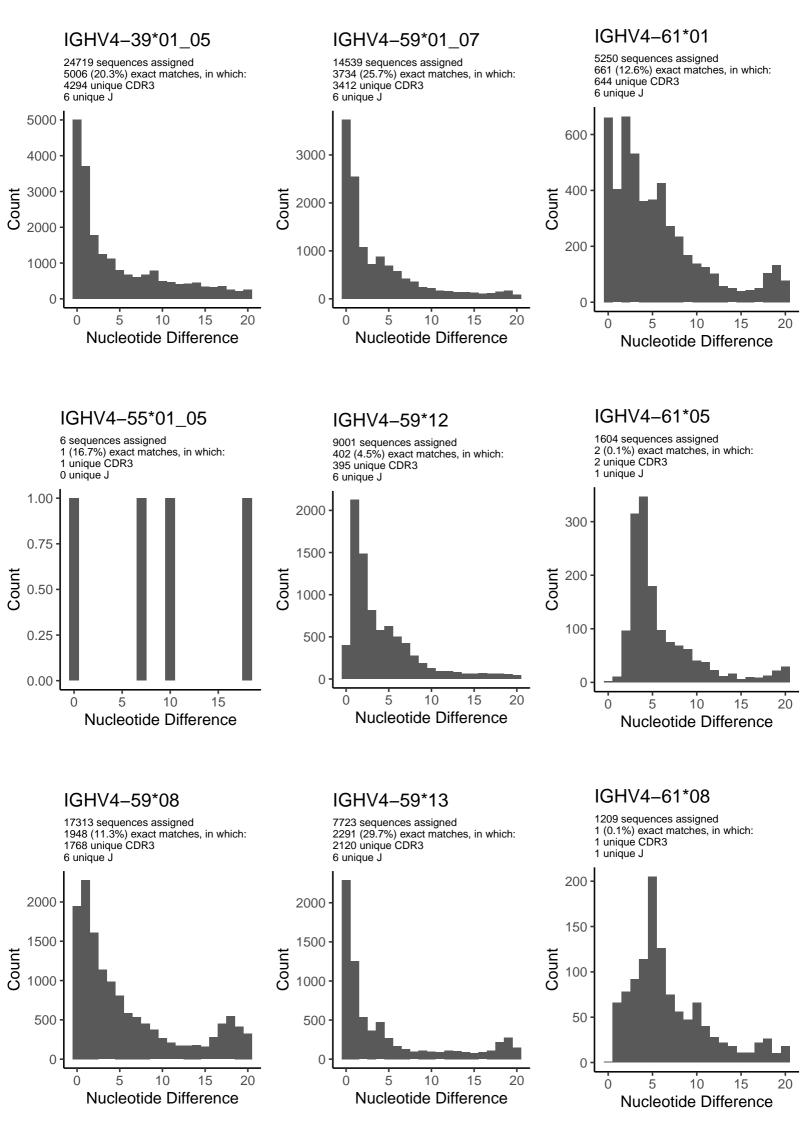










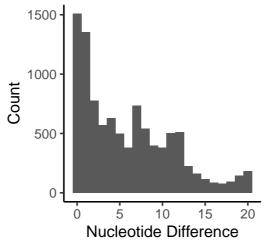


IGHV5-10-1*01_03 8261 sequences assigned 2110 (25.5%) exact matches, in which: 1609 unique CDR3 6 unique J

2000 - 1500 - 1000 - 500 - 5 10 15 20 Nucleotide Difference

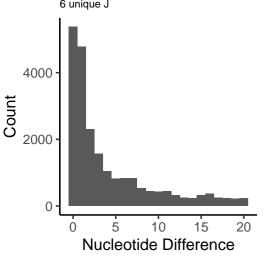
IGHV7-4-1*02

11687 sequences assigned 1509 (12.9%) exact matches, in which: 1341 unique CDR3 6 unique J



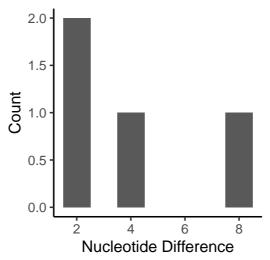
IGHV5-51*01_03

23391 sequences assigned 5375 (23%) exact matches, in which: 3716 unique CDR3 6 unique J



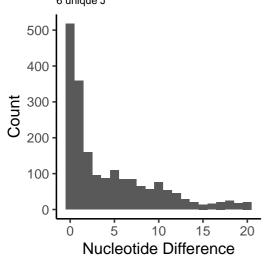
IGHV7-81*01

4 sequences assigned No exact matches.



IGHV6-1*01_02

2005 sequences assigned 518 (25.8%) exact matches, in which: 477 unique CDR3 6 unique J





Novel sequence(s) IGHV1-69*01_12_13_G238A IGHV3-48*03_T303G are not listed in the genotype and will be ignored.