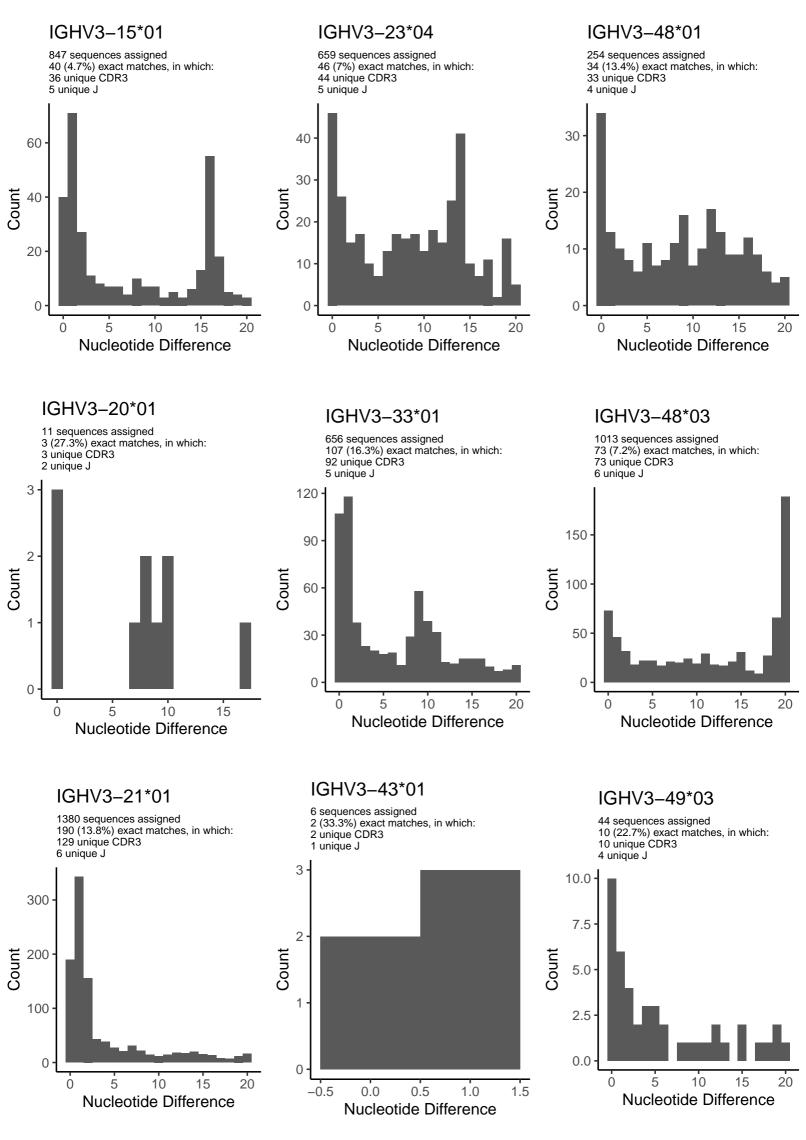
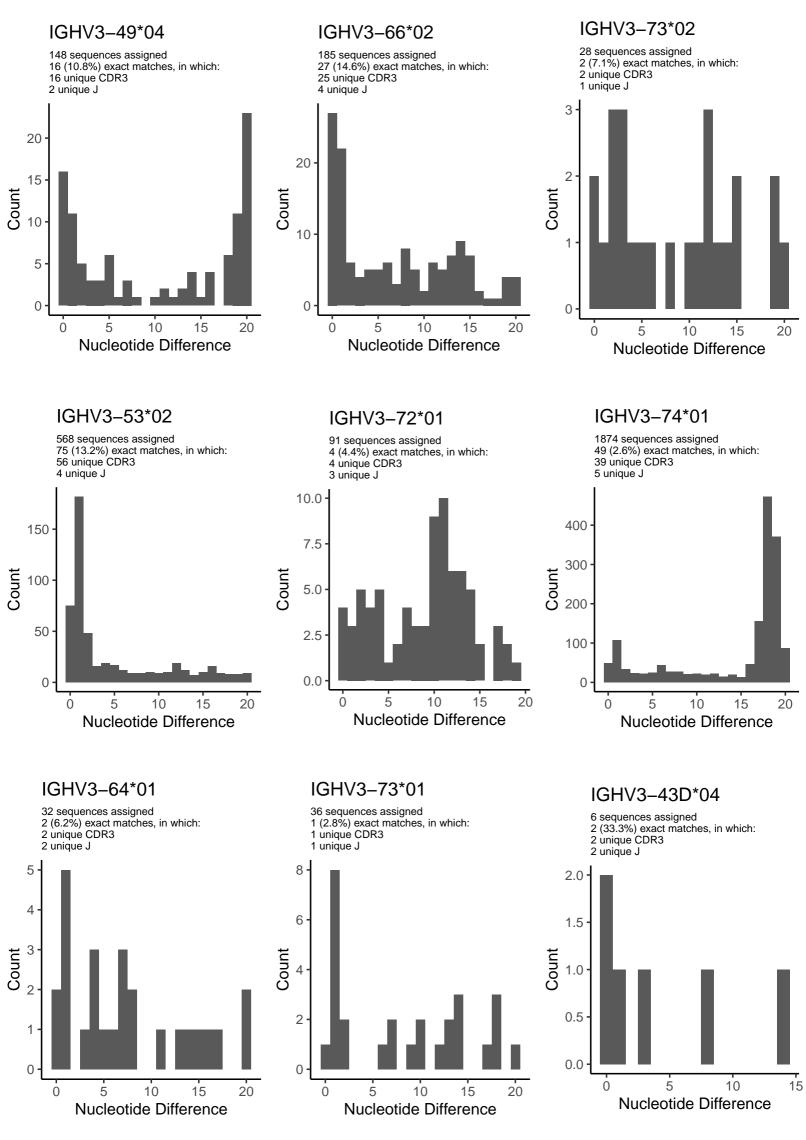
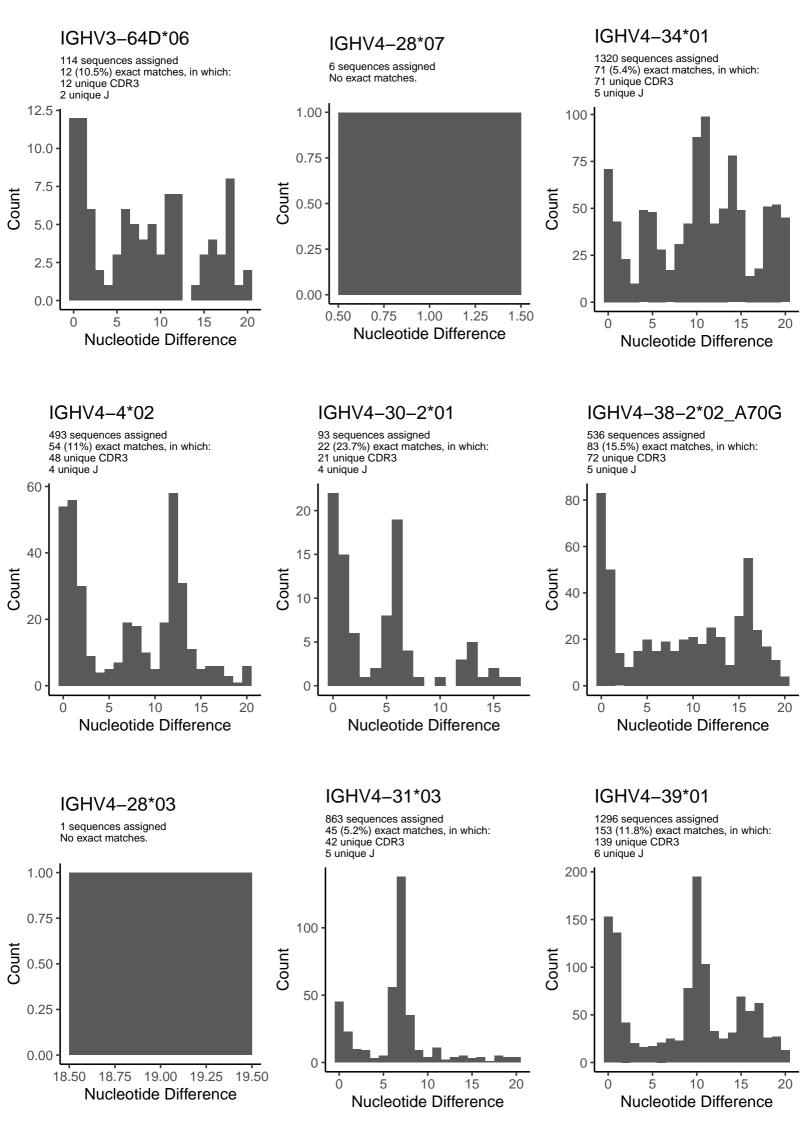


IGHV1-46*03 IGHV1-69*06 IGHV1-68*02 406 sequences assigned 42 (10.3%) exact matches, in which: 406 sequences assigned 98 (24.1%) exact matches, in which: 1 sequences assigned 28 unique CDR3 No exact matches. 92 unique CDR3 5 unique J 4 unique J 1.00 -100 -60 0.75 75 Count Count 0.50 50 20 0.25 25 0.00 0 0 5.50 5.75 6.00 6.25 6.50 5 10 15 20 0 10 15 20 0 5 **Nucleotide Difference** Nucleotide Difference Nucleotide Difference IGHV1-58*01 IGHV1-69*08 IGHV1-69-2*01 394 sequences assigned 3 (0.8%) exact matches, in which: 62 sequences assigned 44 sequences assigned 19 (43.2%) exact matches, in which: 21 (33.9%) exact matches, in which: 14 unique CDR3 19 unique CDR3 2 unique CDR3 1 unique J 3 unique J 4 unique J 20 60 15 15 40 Count Count 10 10 20 5 5 0 0 0 10 15 10 15 20 10 20 0 0 5 0 15 Nucleotide Difference Nucleotide Difference Nucleotide Difference IGHV1-58*02 IGHV1-69*02 IGHV2-5*02 14 sequences assigned 270 sequences assigned 2037 sequences assigned 95 (4.7%) exact matches, in which: 3 (21.4%) exact matches, in which: 52 (19.3%) exact matches, in which: 2 unique CDR3 43 unique CDR3 87 unique CDR3 2 unique J 6 unique J 6 unique J 3 60 400 2 Count Count 40 200 20 0 0 10 15 20 10 12 0 0 8 Nucleotide Difference Nucleotide Difference Nucleotide Difference

IGHV2-26*01 IGHV3-11*06 IGHV3-7*03 105 sequences assigned 50 sequences assigned 1311 sequences assigned 23 (21.9%) exact matches, in which: 81 (6.2%) exact matches, in which: 66 unique CDR3 7 (14%) exact matches, in which: 20 unique CDR3 7 unique CDR3 4 unique J 3 unique J 5 unique J 25 300 7.5 20 200 15 Count Count 5.0 10 100 2.5 5 0 0.0 0 5 10 15 20 0 10 15 20 0 5 5 10 0 15 Nucleotide Difference Nucleotide Difference Nucleotide Difference IGHV2-70*01 IGHV3-9*01 IGHV3-13*01 42 sequences assigned 400 sequences assigned 38 (9.5%) exact matches, in which: 36 sequences assigned 9 (21.4%) exact matches, in which: 2 (5.6%) exact matches, in which: 8 unique CDR3 37 unique CDR3 2 ùniqué CDR3 5 unique J 4 unique J 1 unique J 10.0 40 7.5 10 Count Count 5.0 20 5 2.5 0.0 0 0 20 15 5 10 0 10 15 20 0 8 12 0 5 **Nucleotide Difference Nucleotide Difference** Nucleotide Difference IGHV3-7*01 IGHV3-11*01 IGHV3-13*05 389 sequences assigned 168 sequences assigned 5 sequences assigned 35 (9%) exact matches, in which: 38 (22.6%) exact matches, in which: (20%) exact matches, in which: 35 unique CDR3 37 unique CDR3 1 unique CDR3 4 unique J 5 unique J 1 unique J 2.0 30 30 1.5 Count 20 20 1.0 10 10 0.5 0 0.0 0 2 6 0 5 10 15 20 0 5 10 15 20 Nucleotide Difference Nucleotide Difference Nucleotide Difference







IGHV4-59*01 IGHV5-10-1*03 IGHV6-1*01 1215 sequences assigned 136 (11.2%) exact matches, in which: 665 sequences assigned 69 (10.4%) exact matches, in which: 451 sequences assigned 22 (4.9%) exact matches, in which: 22 unique CDR3 118 unique CDR3 58 unique CDR3 6 unique J 3 unique J 6 unique J 100 100 75 100 75 Count Count Count 50 50 50 25 25 0 0 0 5 10 15 20 5 10 15 20 5 10 15 20 0 0 0 Nucleotide Difference Nucleotide Difference Nucleotide Difference IGHV4-61*01 IGHV5-51*01 IGHV7-4-1*02 289 sequences assigned 660 sequences assigned 100 (15.2%) exact matches, in which: 992 sequences assigned 42 (4.2%) exact matches, in which: 17 (5.9%) exact matches, in which: 16 unique CDR3 40 uniqué CDR3 87 unique CDR3 4 unique J 5 unique J 6 unique J 100 -150 75 Count Count Count 100 50 5 50 25 0 0 0 20 10 20 0 5 15 0 5 10 15 0 10 15 20 5 Nucleotide Difference Nucleotide Difference Nucleotide Difference IGHV5-51*03 IGHV4-61*02 282 sequences assigned 1393 sequences assigned 17 (6%) exact matches, in which: 100 (7.2%) exact matches, in which: 17 unique CDR3 89 unique CDR3 4 unique J 6 unique J 150 40 100 30 Count 20

10

0

0

10

Nucleotide Difference

15

20

50

0

0

10

Nucleotide Difference

15

20



