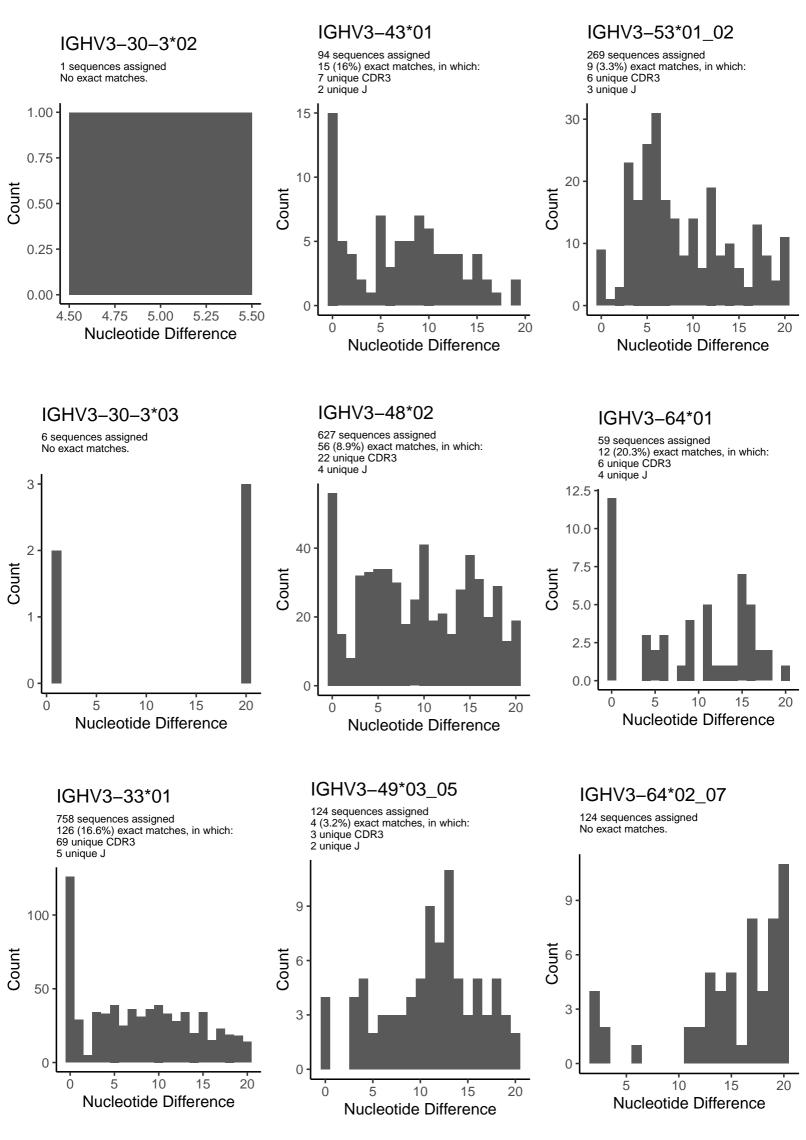


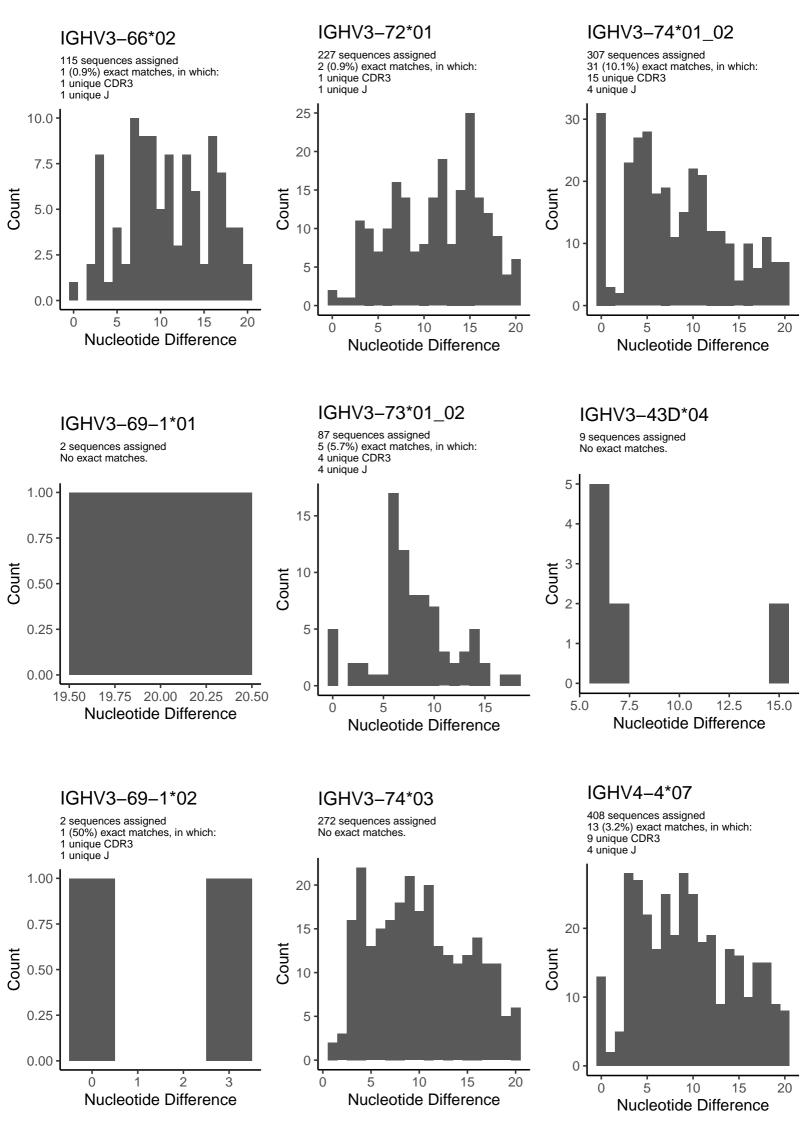
IGHV3-7*01 IGHV3-13*01 IGHV3-20*03_04 1006 sequences assigned 56 (5.6%) exact matches, in which: 221 sequences assigned 12 (5.4%) exact matches, in which: 24 sequences assigned No exact matches. 5 unique CDR3 31 unique CDR3 5 unique J 2 unique J 5 20 60 15 3 Count 10 20 5 1 0 0 0 12 16 10 15 20 0 10 15 20 0 5 **Nucleotide Difference** Nucleotide Difference **Nucleotide Difference** IGHV3-9*01 IGHV3-15*01_02 IGHV3-21*01_02 444 sequences assigned 54 (12.2%) exact matches, in which: 259 sequences assigned 1052 sequences assigned 87 (8.3%) exact matches, in which: 56 (21.6%) exact matches, in which: 32 unique CDR3 29 unique CDR3 44 unique CDR3 3 unique J 5 unique J 5 unique J 100 40 40 75 Count Count 50 20 20 25 0 0 0 10 15 20 0 5 0 10 15 20 0 10 15 20 5 5 Nucleotide Difference Nucleotide Difference Nucleotide Difference IGHV3-20*01_02 IGHV3-11*01 IGHV3-23*01_04 38 sequences assigned 8 (21.1%) exact matches, in which: 5 unique CDR3 469 sequences assigned 2748 sequences assigned 98 (3.6%) exact matches, in which: 41 (8.7%) exact matches, in which: 23 unique CDR3 51 unique CDR3 3 unique J 5 unique J 5 unique J 40 150 6 30 Count Count 100 20 50 10 2 0 0 0 5 10 15 20 10 0 5 15 20 0 5 10 15

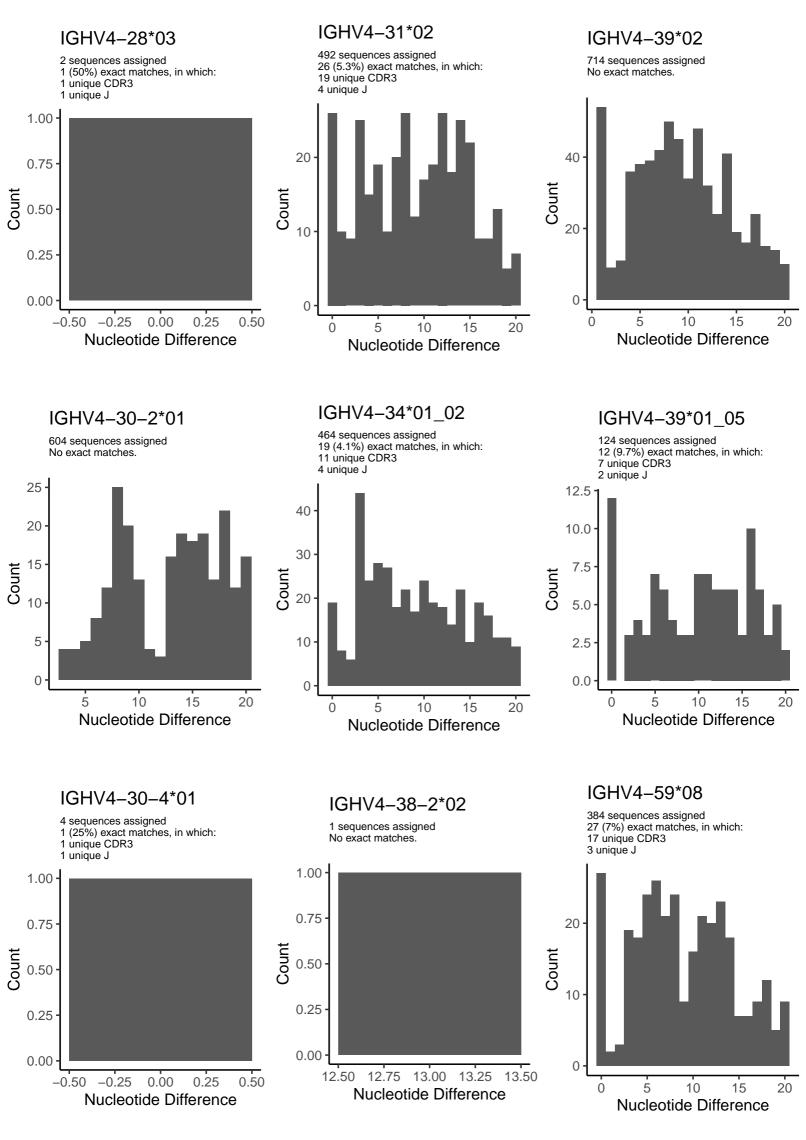
Nucleotide Difference

Nucleotide Difference

Nucleotide Difference







IGHV4-61*01 IGHV6-1*01_02 160 sequences assigned 9 (5.6%) exact matches, in which: 5 unique CDR3 4 unique J 236 sequences assigned 8 (3.4%) exact matches, in which: 8 unique CDR3 4 unique J 25 20 10 15 Count Count 5 5 0 0 5 10 15 5 10 15 Nucleotide Difference Nucleotide Difference IGHV7-4-1*01 IGHV4/OR15-8*01 3 sequences assigned 1 sequences assigned 1 (100%) exact matches, in which: No exact matches. 1 unique CDR3 1 unique J 2.0 1.00 1.5 0.75 Count Count Count

0.25

0.00

-0.50

-0.25

0.00

Nucleotide Difference

0.25

0.50

IGHV5-51*07

5

6

Nucleotide Difference

1 sequences assigned No exact matches.

0.5

0.0

