









IGHV4-59*01 IGHV5-51*01 4037 sequences assigned 152 (3.8%) exact matches, in which: 131 unique CDR3 2729 sequences assigned 2 (0.1%) exact matches, in which: 2 unique CDR3 2 unique J 5 unique J 200 200 150 150 Count Count Count 100 100 50 50 0 0 15 10 15 5 10 20 0 5 20 **Nucleotide Difference** Nucleotide Difference IGHV4-59*08 IGHV5-51*03 4092 sequences assigned 52 (1.3%) exact matches, in which: 7313 sequences assigned 356 (4.9%) exact matches, in which: 39 uniqué CDR3 296 uniqué CDR3 5 unique J 6 unique J 400 200 Count Count 100 200 0 0 10 15 20 5 10 15 20 0 5 0 **Nucleotide Difference Nucleotide Difference** IGHV6-1*01 IGHV4-61*02 708 sequences assigned 2 sequences assigned 27 (3.8%) exact matches, in which: 15 unique CDR3 No exact matches. 4 unique J 1.00 60 0.75 40 Count Count 0.50 20 0.25 0.00 0 16 17 18

0

Nucleotide Difference

5

10

Nucleotide Difference

15

20

IGHV7-4-1*02

3227 sequences assigned

5

10

Nucleotide Difference

211 unique CDR3

5 unique J

200

100

0

0

236 (7.3%) exact matches, in which:

20

15



