**Sequence: Codon optimized Vpx Range: 1 to 357**

 10 20 30 40 50 60 70

 AAAGAATTCAACATGAGCGACCCCAGAGAGAGAATCCCCCCCGGCAACAGCGGCGAGGAGACCATCGGCG

 TTTCTTAAGTTGTACTCGCTGGGGTCTCTCTCTTAGGGGGGGCCGTTGTCGCCGCTCCTCTGGTAGCCGC

 M S D P R E R I P P G N S G E E T I G>

 \_\_\_\_"CODON OPTIMIZED SIV VPX (FULL LENGTH AA 1:112)"\_\_\_\_\_\_>

 80 90 100 110 120 130 140

 AGGCCTTCGAGTGGCTGAACAGAACCGTGGAGGAGATCAACAGAGAGGCCGTGAACCACCTGCCCAGAGA

 TCCGGAAGCTCACCGACTTGTCTTGGCACCTCCTCTAGTTGTCTCTCCGGCACTTGGTGGACGGGTCTCT

 E A F E W L N R T V E E I N R E A V N H L P R E>

 \_\_\_\_\_\_\_\_\_\_"CODON OPTIMIZED SIV VPX (FULL LENGTH AA 1:112)"\_\_\_\_\_\_\_\_\_\_\_\_>

 150 160 170 180 190 200 210

 GCTGATCTTCCAGGTGTGGCAGAGAAGCTGGGAGTACTGGCACGACGAGCAGGGCATGAGCCCCAGCTAC

 CGACTAGAAGGTCCACACCGTCTCTTCGACCCTCATGACCGTGCTGCTCGTCCCGTACTCGGGGTCGATG

 L I F Q V W Q R S W E Y W H D E Q G M S P S Y>

 \_\_\_\_\_\_\_\_\_\_"CODON OPTIMIZED SIV VPX (FULL LENGTH AA 1:112)"\_\_\_\_\_\_\_\_\_\_\_\_>

 220 230 240 250 260 270 280

 GTGAAGTACAGATACCTGTGCCTGATCCAGAAGGCCCTGTTCATGCACTGCAAGAAGGGCTGCAGATGCC

 CACTTCATGTCTATGGACACGGACTAGGTCTTCCGGGACAAGTACGTGACGTTCTTCCCGACGTCTACGG

 V K Y R Y L C L I Q K A L F M H C K K G C R C>

 \_\_\_\_\_\_\_\_\_\_"CODON OPTIMIZED SIV VPX (FULL LENGTH AA 1:112)"\_\_\_\_\_\_\_\_\_\_\_\_>

 290 300 310 320 330 340 350

 TGGGCGAGGGCCACGGCGCCGGCGGCTGGAGACCCGGCCCTCCTCCTCCTCCTCCTCCTGGCCTGGCCCT

 ACCCGCTCCCGGTGCCGCGGCCGCCGACCTCTGGGCCGGGAGGAGGAGGAGGAGGAGGACCGGACCGGGA

 L G E G H G A G G W R P G P P P P P P P G L A>

 \_\_\_\_\_\_\_\_\_"CODON OPTIMIZED SIV VPX (FULL LENGTH AA 1:112)"\_\_\_\_\_\_\_\_\_\_\_>

 CGAGAAA

 GCTCTTT