

REP1

TGAAATTGAA TCAACTCATC AAATTAACAA ACTCTCAAGA AAATTTACAA 50
TGGGCTATCT CAAGGCTAAT ATACCAATT CTCCTTCCT AATATTTAA 100
TTGGATGACT ACATTTTAA CACATTAAA TAAAATAAA AAAAAAATT 150
TTAAGAATT TTTTTAAA AAATATTATA CAATGT**GAA** **TGACATATAG** 200
TGTGAATGA **CATAAACGT** **GGAAATGACAT** **ATAGTGTGGA** **ATGACATACA** 250
ACGTGGAATG ACATTGTTGT GACATGACTA TAATTCTACA TTATACCAAT 300
AAATTTTAA ATTATTAAATT AGAGGCAATT TACAAAATAA ATATGTCTAT 350
ATATTTAATA ATACAAAAAC AAATAAAATT TATAAAACTA ATATAAAATA 400
TTCTAT 406

Repeat: GAATGACATATAGTGTGGAATGACATACAACGTG

Number: 2

REP2-1

TGAAATAAAT ACAACTACTA TTCCAATGTC TATCAACCGG AGTTAATGAG 50
AACCTACGAT GCTCTGTATT CAAAACATAA AATACTCAAT CAATCTGCAA 100
AATATTTAAA AAAAAGGGAAA AAAAGATGA CCCAAATTAG ATCCAAAATG 150
CTCAGATAAA AAATAAGGAA AACTACTCCC AACTCAATAT CTACAAAATT 200
AACTATGCTA GCAACTTGA TAATCTGGT AATTTGGGA TTCCAAGTTA 250
TCGGAAAAC TCGGGAATT **GAGGAATTG** **ATGAAATTGA** **TGTAATTGAT** 300
GAAATTGATG **CAATTGATGC** **AATTGATGAA** **ATTGATGAAT** **TTGATGACTT** 350
TGATGTACTT AGATGATTG GATGAATTG ATGACTTAGA TGACATTGAT 400
GACTTTGATA ACAGAAAATA AAAATGTGAA TTTTAATTG GTATGAAAAA 450
TAATAATAAA AATAAAATAA ATTAAAATAT ATATAAACAC AATAAAAAAA 500
AAATTTAATT 510

Repeat: TTGATGAA

Number: 8

REP2-2

TGAAAGAAAA AATCAGCTCC CAAAATTAA AATTCTCACT CAAAAAAA 50
AAAAAACTTAA AGAATCATTC AAGAATTGAG AGGCCCTTT CAATGTGAGC 100
CAAGTATTGA ACAAACGCC TTCATTTG TTCAAATGGA AGAAATAGTG 150
AGGAGTTCT TTAATAACCA TGAAGTTACT GTCTTACACATC ATGTGAGTCA 200
TGTATAGTAT ATGTACATCC ATAACATTAA AAAAAACT GAAAGAATCA 250
CCCATGAAGT TTAAGCCTA **TACAATGTGA** **GTCATGTATA** **GAACAAGCCC** 300
TTCATTTG TTCAAAGTGG AGGCAATAGT GAGGAGTTTC TTTAATAACC 350
ATGAAGTTAC TGTCTATAC AATGTGAGTC ATGTATAGTA TATGTACATC 400
CATACTATTA AATAAAATTAA AAGAACATCC CATGAAGTTT AAGCCCTATA 450
CAATGTGAGT CATGTATAGA ACAAGCCCTT CATGTTGTT CAAAGTGGAG 500
GCAATAGTGA **GGAGTTCTT** **TAATAACCAT** **GAAGTTACTG** **TCCTATACAA** 550
TGTGAGTCAT GTATAGTATA TGACATCCA TAACTATTAA AAAAAACTGA 600
AAGAACATCC CATGAAGTTT AAGCCCTATA CATGTATAGA ACAAGCCCTT 650
CATGTTGTT CAAAAGTAA AATAAAATTAT TTTCATGTT AAGCGCAAAT 700
AAATAATTAA AAATAATTAA CAATAATTAA AATAAAATTAA TTGACTCGGA 750
ACAATAATAA GAAAAGGTT ATTAAAATTAC CAAATTGTTG TGGAATTAAAT 800
GAGAAAAGA GGAAACTGGG TGTATATTAA ATATTCAAA ATCAGATATT 850
GATTGAATTA TTAAAATTAA ATAATTGGA AAATACCTAA AAATAAAATAA 900
AAATTATCTA TATAAAATAA ATAAAAATAA ATT 933

Repeat: CCTATACAATGTGAGTCATGTATAGTAGATGAACGTCGAGGCTATTGAAAG
GAGTTCTTAAATAACCATGAAGTTAAGTCTATACAAATGTGAGT

Number : 3

REPR6

TGAAATAAAA TAAGCCTCGA AAATTTAATT ATTCTCACTA AAATATCCTT 50
TTTTGTACCC CCTTAAGTTT CTCTCTTCG ATGATAAAAATA TAAAAAAATA 100
AAATTAATAAAT AAATATTAAAT AATAAAATAA ATAATCAAAT AATAATCAAT 150
TATTGAAGAT ATTTTCTATG AAATGCTAGA TTTACTAATA AACTAAAAAA 200
TTAGCTTAA TAAAGCAAGC TAAATTAAATA ATATTAATG CTTTTTATTG 250
AAAAAGTATAA ATATGCTCAA ATTGTCCAAA TCAACAAAAA TAAAAATAAA 300
AAAAAAAGGG GGTGCTCTA TGATCTTCG TTAATTAAATA ATTTAAAAAAA 350
TAATGATCGA ATCTACCAAG ATATTCTAA AGTTAGATGA ACAAAATAAGA 400
AAACTACACC CCCCCCCCCC TCCCCCCCTC CCATTAACACT CATCCAACCT 450
ATGAAACTCA TATGGAACCTC ATGTAGCTCA AGTAACATC GTAATTCTATG 500
GAACCTCATGA AGCTCCTGAA GAAACTCCCTG CAACTCCAGC TCCTACAACT 550
CCTGAAACTC CTGAAGCTCC **CGAAGCTACA** **GAAGCTACAG** **AAGCTACGG** 600
AGCTCCGGCA **ACTAAATGGA** GTGACGTTGA TACTATATAT AATATTGAA 650
TTAATAATAAAT AAACAAATTG CTTTGAAAAC CCTTATCTAG ACCTACAGAT 700
TAACACAAAAA AAATAAAATAA AATAAAATAT ATAAAATTGT TTTCTATAA 750
TATAATTAA 76

Repeat: GAAGCTACA

Number: 5

Figure C: A tandemly repeated sequence occurs in four of the five REP elements. The 3'UTR sequence of respective REP elements is defined here as the sequence immediately downstream of the **TGA** stop codon of ORF2 to the conserved 54bp sequence. The region containing the tandemly repeated sequence is **bolded** and the actual repeat, as well as the number of times repeated, is listed below the respective REP element 3'UTR. The numbering begins at the stop codon of ORF2 of the respective REP element.