

SUPPLEMENTAL FIG S1 Nucleotide sequences of TEV-Ros1 and TEVΔNIb-Ros1 clones. Recombinant clones in which NIb was relocated to different intergenic positions (TEVΔNIb-Ros1-NIb1 to 9) are like TEVΔNIb-Ros1 but with the insertions indicated in each case. TEV sequence corresponds to Genbank accession number DQ986288, but includes two silent mutations (G273A and A1119G, in red) to eliminate endogenous Eco31I restriction sites. Cistron borders are highlighted on blue background. NIb sequence is in blue. *Antirrhinum majus* Ros1 cDNA is in red. In TEV-Ros1, Ros1 is flanked with sequences (in green and underlined) that complement NIaPro proteolytic sites and mediate releasing from the viral polyprotein. Amino and carboxy terminal sequences next to the relocated NIb in some of the clones (TEVΔNIb-Ros1-NIb1, 2, 3 and 9) to complement processing from the viral polyprotein are in green and underlined.

>TEV-Ros1

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>TEVANIb-Ros1

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CCCAAATAAAGGCTTATCTTGGCTTACGAGTGGAGAGTATAAGCGACTTGGTTACATAGCAGAGGATGCTGGCATAAGAATC

>TEVΔNIB-Ros1-Nib2 (Nib insertion between positions 1056-1057 of TEVΔNIB-Ros1; Nib included the indicated extra nucleotides)

AGCGACAAAGGGGAGAAGAGGAAATGGGTCGTGGAAGCACTGTCAGGGAACCTTGAGGCCAGTGGCTGAGTGTCCCAGTCAGTTAG TCACAAAGCATGTGGTTAAAGGAAAGTGTCCCCCTCTTTGAGCTCTACTTGACAGTTGAATCCAGAAAAGGAAGCATATTTTAAACC GATGATGGGAGCATATAAGCCAAGTCGACTTAATAGAGAGGCGTTCCCTCAAGGACATTCATAAAATATGCTAGTGAATTTGAGATT GGGAAATGTGGATTGTGACTTGGCTGGAGCTTGCAATAAGCATGCTCATCACAAAGCTCAAGGCGTTAGGATTCCCAACTGTGAACT ACATCACTGACCCAGAGGAAATTTTTAGTGCATTGAATATGAAAGCAGCTATGGGAGCACTATACAAAGGCAAGAAGAAAGAAGC TCTCAGCGAGCTCACACTAGATGAGCAGGAGGCAATGCTCAAAGCAAGTTGCCCTGCGACTGTATACGGGAAAGCTGGGAATTTGG AATGGCTCATTGAAAGCAGAGTTGCGTCCAATTGAGAAGGTTGAAAACAACAAAACGCGAACTTTCACAGCAGCACC AATAGACA CTCTTCTTGCTGGTAAAGTTTTCGCTGGATGATTTCAACAATCAATTTTATGATCTCAACATAAAGGCACCATGGACAGTTGGTAT GACTAAGTTTTATCAGGGGTGGAATGAATTGATGGAGGCTTTACCAAGTGGGTGGGTGTATTGTGACGCTGATGGTTCGCAATTC GACAGTTCCTTGACTCCATTCCCTCATTAATGCTGTATTGAAAGTGCAGCTTGCCCTCATGGAGGAATGGGATATTGGTGAGCAAA TGCTGCGAAATTTGTACACTGAGATAGTGTATACACCAATCCTCACACCGGATGGTACTATCATTAAGAAGCATAAAGGCAACAA TAGCGGGCAACCTTCAACAGTGGTGGACAACACACTCATGGTCATTAATTGCAATGTTATACACATGTGAGAAGTGTGGAATCAAC AAGGAAGAGATTGTGTATTACGTC AATGGCGATGACCTATTGATTGCCATTCACCCAGATAAAGCTGAGAGGTTGAGTGGATTCA AAGAATCTTTTCGGAGAGTTGGGCCTGAAATATGAATTTGACTGCACCACCAGGGACAAGACACAGTTGTGGTTCATGTCACACAG GGCTTTGGAGAGGGATGGCATGTATATAACCAAAGCTAGAAGAAGAAAGGATTGTTTCTATTTTGGAAATGGGACAGATCCAAAGAG CCGTCACATAGGCTTGAAGCCATCTGTGCATCAATGATCGAAGCATGGGGTTATGACAAGCTGGTTGAAGAAATCCGCAATTTCT ATGCATGGGTTTTGGAACAAGCGCCGATTTACAGCTTGCAGAAGAAGGAAAGGCGCCATATCTGGCTGAGACTGCGCTTAAGTT TTTGTACACATCTCAGCACGGAACAAACTCTGAGATAGAAGAGTATTTAAAAGTGTGTATGATTACGATATTCCAACGACTGAG AATCTTTATTTTCAG

>TEVΔNIB-Ros1-Nib3 (Nib insertion between positions 2433-2434 of TEVΔNIB-Ros1; Nib included the indicated extra nucleotides)

GGGATGAACGGGGAGAAGAGGAAATGGGTCGTGGAAGCACTGTCAGGGAACCTTGAGGCCAGTGGCTGAGTGTCCCAGTCAGTTAG TCACAAAGCATGTGGTTAAAGGAAAGTGTCCCCCTCTTTGAGCTCTACTTGACAGTTGAATCCAGAAAAGGAAGCATATTTTAAACC GATGATGGGAGCATATAAGCCAAGTCGACTTAATAGAGAGGCGTTCCCTCAAGGACATTCATAAAATATGCTAGTGAATTTGAGATT GGGAAATGTGGATTGTGACTTGGCTGGAGCTTGCAATAAGCATGCTCATCACAAAGCTCAAGGCGTTAGGATTCCCAACTGTGAACT ACATCACTGACCCAGAGGAAATTTTTAGTGCATTGAATATGAAAGCAGCTATGGGAGCACTATACAAAGGCAAGAAGAAAGAAGC TCTCAGCGAGCTCACACTAGATGAGCAGGAGGCAATGCTCAAAGCAAGTTGCCCTGCGACTGTATACGGGAAAGCTGGGAATTTGG AATGGCTCATTGAAAGCAGAGTTGCGTCCAATTGAGAAGGTTGAAAACAACAAAACGCGAACTTTCACAGCAGCACC AATAGACA CTCTTCTTGCTGGTAAAGTTTTCGCTGGATGATTTCAACAATCAATTTTATGATCTCAACATAAAGGCACCATGGACAGTTGGTAT GACTAAGTTTTATCAGGGGTGGAATGAATTGATGGAGGCTTTACCAAGTGGGTGGGTGTATTGTGACGCTGATGGTTCGCAATTC GACAGTTCCTTGACTCCATTCCCTCATTAATGCTGTATTGAAAGTGCAGCTTGCCCTCATGGAGGAATGGGATATTGGTGAGCAAA TGCTGCGAAATTTGTACACTGAGATAGTGTATACACCAATCCTCACACCGGATGGTACTATCATTAAGAAGCATAAAGGCAACAA TAGCGGGCAACCTTCAACAGTGGTGGACAACACACTCATGGTCATTAATTGCAATGTTATACACATGTGAGAAGTGTGGAATCAAC AAGAAAGAGATTGTGATATTACGTC AATGGCGATGACCTATTGATTGCCATTCACCCAGATAAAGCTGAGAGGTTGAGTGGATTGATGGATTCA AAGAATCTTTTCGGAGAGTTGGGCCTGAAATATGAATTTGACTGCACCACCAGGACAAGACACAGTTGTGGTTCATGTCACACAG GGCTTTGGAGAGGGATGGCATGTATATAACCAAAGCTAGAAGAAGAAAGGATTGTTTCTATTTTGGAAATGGGACAGATCCAAAGAG CCGTCACATAGGCTTGAAGCCATCTGTGCATCAATGATCGAAGCATGGGGTTATGACAAGCTGGTTGAAGAAATCCGCAATTTCT ATGCATGGGTTTTGGAACAAGCGCCGATTTACAGCTTGCAGAAGAAGGAAAGGCGCCATATCTGGCTGAGACTGCGCTTAAGTT TTTGTACACATCTCAGCACGGAACAAACTCTGAGATAGAAGAGTATTTAAAAGTGTGTATGATTACGATATTCCAACGACTGAG AATCTTTATTTTCAG

>TEVΔNIB-Ros1-Nib4 (Nib insertion positions 3474-3475 of TEVΔNIB-Ros1)

GGGGAGAAGAGGAAATGGGTCGTGGAAGCACTGTCAGGGAACCTTGAGGCCAGTGGCTGAGTGTCCCAGTCAGTTAGTGCACAAAGC ATGTGGTTAAAGGAAAGTGTCCCCCTCTTTGAGCTCTACTTGACAGTTGAATCCAGAAAAGGAAGCATATTTTAAACC GATGATGGG AGCATATAAGCCAAGTCGACTTAATAGAGAGGCGTTCCCTCAAGGACATTCATAAAATATGCTAGTGAATTTGAGATTGGGAATGTG GATTGTGACTTGGCTGGAGCTTGCAATAAGCATGCTCATCACAAAGCTCAAGGCGTTAGGATTCCCAACTGTGAACTACATCACTG ACCCAGAGGAAATTTTTAGTGCATTGAATATGAAAGCAGCTATGGGAGCACTATACAAAGGCAAGAAGAAAGAAGCTCTCAGCGA GCTCACACTAGATGAGCAGGAGGCAATGCTCAAAGCAAGTTGCCCTGCGACTGTATACGGGAAAGCTGGGAATTTGGAATGGCTCA TTGAAAGCAGAGTTGCGTCCAATTGAGAAGGTTGAAAACAACAAAACGCGAACTTTCACAGCAGCACC AATAGACACTCTTCTTG CTGGTAAAGTTTTCGCTGGATGATTTCAACAATCAATTTTATGATCTCAACATAAAGGCACCATGGACAGTTGGTATGACTAAGTT TTATCAGGGGTGCAATGAATTGATGGAGGCTTTACCAAGTGGGTGGGTGTATTGTGACGCTGATGGTTCGCAATTCGACAGTTCC TTAGACTCCATTCCCTCATTAAATGCTGTATTGAAAGTGCAGCTTGCCCTCATGGAGGAATGGGATATTGGTGAGCAAAATGCTGCGAA ATTTGTACACTGAGATAGTGTATACACCAATCCTCACACCGGATGGTACTATCATTAAGAAGCATAAAGGCAACAATAGCGGGCA ACCTTCAACAGTGGTGGACAACACACTCATGGTCATTAATTGCAATGTTATACACATGTGAGAAGTGTGGAATCAACAAGGAAGAG ATTGTGTATTACGTC AATGGCGATGACCTATTGATTGCCATTCACCCAGATAAAGCTGAGAGGTTGAGTGGATTCAAGAATCTT TCGGAGAGTTGGGCCTGAAATATGAATTTGACTGCACCACCAGGGACAAGACACAGTTGTGGTTCATGTCACACAGGGCTTTGGA GAGGGATGGCATGTATATAACCAAAGCTAGAAGAAGAAAGGATTGTTTCTATTTTGGAAATGGGACAGATCCAAAGAGCCGTCACAT AGGCTTGAAGCCATCTGTGCATCAATGATCGAAGCATGGGGTTATGACAAGCTGGTTGAAGAAATCCGCAATTTCTATGCATGGG TTTTGGAAACAAGCGCCGATTTACAGCTTGCAGAAGAAGGAAAGGCGCCATATCTGGCTGAGACTGCGCTTAAGTTTTTGTACAC ATCTCAGCACGGAACAAACTCTGAGATAGAAGAGTATTTAAAAGTGTGTATGATTACGATATTCCAACGACTGAGAATCTTTAT TTTTCAG

>TEVΔNIB-Ros1-Nib5 (Nib insertion between positions 3633-3634 of TEVΔNIB-Ros1)

GGGGAGAAGAGGAAATGGGTTCGTGGAAGCACTGTCAGGGAACCTTGAGGCCAGTGGCTGAGTGTCCCAGTCAGTTAGTCACAAAGC
ATGTGGTTAAAGGAAAGTGTCCCCTCTTTGAGCTCTACTTGCAGTTGAAATCCAGAAAAGGAAGCATATTTTAAACCGATGATGGG
AGCATATAAGCCAAGTCGACTTAATAGAGAGGCGTTCCCTCAAGGACATTTCTAAAAATATGCTAGTGAATTTGAGATTGGGAATGTG
GATTGTGACTTGTCTGGAGCTTGAATAAGCATGCTCATCACAAAGCTCAAGGCGTTAGGATTCCCAACGTGTAACACATCACTG
ACCCAGAGGAAATTTTGTAGTCATTGAATATGAAAGCAGCTATGGGAGCACTATACAAAGGCAAGAAGAAAGAAGCTCTCAGCGA
GCTCACACTAGATGAGCAGGAGGCAATGCTCAAAGCAAGTTGCCTGCGACTGTATACGGGAAAGCTGGGAATTTGGAATGGCTCA
TTGAAAGCAGAGTTGCGTCCAATTTGAGAAGGTTGAAAACAACAAAACGCGAACCTTTCACAGCAGCACCAATAGACACTCTTCTTG
CTGGTAAAGTTTTCGCTGGATGATTTCAACAATCAATTTTATGATCTCAACATAAAGGCACCATGGACAGTTGGTATGACTAAGTT
TTATCAGGGGTGGAATGAATTTGATGGAGGCTTTACCAAGTGGGTGGGTGTATTGTGACGCTGATGGTTCGCAATTCGACAGTTCC
TTGACTCCATTCTCATTAAATGCTGTATTGAAAGTGCAGCTTGCCCTCATGGAGGAATGGGATATTGGTGAGCAAATGCTGCGAA
ATTTGTACACTGAGATAGTGTATACACCAATCTCACACCGGATGGTACTATCATTAAGAAGCATAAAGGCAACAATAGCGGGCA
ACCTTCAACAGTGGTGGACAACACACTCATGGTCATTATTGCAATGTTATACACATGTGAGAAGTGTGGAATCAACAAGGAAGAG
ATTGTGTATTACGTCAATGGCGATGACCTATTGATTGCCATTCACCCAGATAAAGCTGAGAGGTTGAGTGGATTCAAAGAATCTT
TCGGAGAGTTGGGCCTGAAATATGAATTTGACTGCACCACCAGGGACAAGACACAGTTGTGGTTCATGTCCACACAGGGCTTTGGA
GAGGGATGGCATGTATATACCAAAGCTAGAAGAAGAAAGGATTGTTTCTATTTTGGAAATGGGACAGATCCAAAGAGCCGTCACAT
AGGCTTGAAGCCATCTGTGCATCAATGATCGAAGCATGGGGTTATGACAAGCTGGTTGAAGAAATCCGCAATTTCTATGCATGGG
TTTTTGAACAAGCGCCGTATTACAGCTTGCAGAAGAAGGAAAGGCGCCATATCTGGCTGAGACTGCGCTTAAGTTTTTGTACAC
ATCTCAGCACGGAACAAACTCTGAGATAGAAGAGTATTTAAAAGTGTGTATGATTACGATATTCCAACGACTGAGAATCTTTAT
TTTCAG

>TEVANIb-Ros1-Nib6 (Nib insertion between positions 5532-5533 of TEVANIb-Ros1)

GGGGAGAAGAGGAAATGGGTTCGTGGAAGCACTGTCAGGGAACCTTGAGGCCAGTGGCTGAGTGTCCCAGTCAGTTAGTCACAAAGC
ATGTGGTTAAAGGAAAGTGTCCCCTCTTTGAGCTCTACTTGCAGTTGAAATCCAGAAAAGGAAGCATATTTTAAACCGATGATGGG
AGCATATAAGCCAAGTCGACTTAATAGAGAGGCGTTCCCTCAAGGACATTTCTAAAAATATGCTAGTGAATTTGAGATTGGGAATGTG
GATTGTGACTTGTCTGGAGCTTGAATAAGCATGCTCATCACAAAGCTCAAGGCGTTAGGATTCCCAACGTGTAACACATCACTG
ACCCAGAGGAAATTTTGTAGTCATTGAATATGAAAGCAGCTATGGGAGCACTATACAAAGGCAAGAAGAAAGAAGCTCTCAGCGA
GCTCACACTAGATGAGCAGGAGGCAATGCTCAAAGCAAGTTGCCTGCGACTGTATACGGGAAAGCTGGGAATTTGGAATGGCTCA
TTGAAAGCAGAGTTGCGTCCAATTTGAGAAGGTTGAAAACAACAAAACGCGAACCTTTCACAGCAGCACCAATAGACACTCTTCTTG
CTGGTAAAGTTTTCGCTGGATGATTTCAACAATCAATTTTATGATCTCAACATAAAGGCACCATGGACAGTTGGTATGACTAAGTT
TTATCAGGGGTGGAATGAATTTGATGGAGGCTTTACCAAGTGGGTGGGTGTATTGTGACGCTGATGGTTCGCAATTCGACAGTTCC
TTGACTCCATTCTCATTAAATGCTGTATTGAAAGTGCAGCTTGCCCTCATGGAGGAATGGGATATTGGTGAGCAAATGCTGCGAA
ATTTGTACACTGAGATAGTGTATACACCAATCTCACACCGGATGGTACTATCATTAAGAAGCATAAAGGCAACAATAGCGGGCA
ACCTTCAACAGTGGTGGACAACACACTCATGGTCATTATTGCAATGTTATACACATGTGAGAAGTGTGGAATCAACAAGGAAGAG
ATTGTGTATTACGTCAATGGCGATGACCTATTGATTGCCATTCACCCAGATAAAGCTGAGAGGTTGAGTGGATTCAAAGAATCTT
TCGGAGAGTTGGGCCTGAAATATGAATTTGACTGCACCACCAGGGACAAGACACAGTTGTGGTTCATGTCCACACAGGGCTTTGGA
GAGGGATGGCATGTATATACCAAAGCTAGAAGAAGAAAGGATTGTTTCTATTTTGGAAATGGGACAGATCCAAAGAGCCGTCACAT
AGGCTTGAAGCCATCTGTGCATCAATGATCGAAGCATGGGGTTATGACAAGCTGGTTGAAGAAATCCGCAATTTCTATGCATGGG
TTTTTGAACAAGCGCCGTATTACAGCTTGCAGAAGAAGGAAAGGCGCCATATCTGGCTGAGACTGCGCTTAAGTTTTTGTACAC
ATCTCAGCACGGAACAAACTCTGAGATAGAAGAGTATTTAAAAGTGTGTATGATTACGATATTCCAACGACTGAGAATCTTTAT
TTTCAG

>TEVANIb-Ros1-Nib7 (Nib insertion between positions 5691-5692 of TEVANIb-Ros1)

GGGGAGAAGAGGAAATGGGTTCGTGGAAGCACTGTCAGGGAACCTTGAGGCCAGTGGCTGAGTGTCCCAGTCAGTTAGTCACAAAGC
ATGTGGTTAAAGGAAAGTGTCCCCTCTTTGAGCTCTACTTGCAGTTGAAATCCAGAAAAGGAAGCATATTTTAAACCGATGATGGG
AGCATATAAGCCAAGTCGACTTAATAGAGAGGCGTTCCCTCAAGGACATTTCTAAAAATATGCTAGTGAATTTGAGATTGGGAATGTG
GATTGTGACTTGTCTGGAGCTTGAATAAGCATGCTCATCACAAAGCTCAAGGCGTTAGGATTCCCAACGTGTAACACATCACTG
ACCCAGAGGAAATTTTGTAGTCATTGAATATGAAAGCAGCTATGGGAGCACTATACAAAGGCAAGAAGAAAGAAGCTCTCAGCGA
GCTCACACTAGATGAGCAGGAGGCAATGCTCAAAGCAAGTTGCCTGCGACTGTATACGGGAAAGCTGGGAATTTGGAATGGCTCA
TTGAAAGCAGAGTTGCGTCCAATTTGAGAAGGTTGAAAACAACAAAACGCGAACCTTTCACAGCAGCACCAATAGACACTCTTCTTG
CTGGTAAAGTTTTCGCTGGATGATTTCAACAATCAATTTTATGATCTCAACATAAAGGCACCATGGACAGTTGGTATGACTAAGTT
TTATCAGGGGTGGAATGAATTTGATGGAGGCTTTACCAAGTGGGTGGGTGTATTGTGACGCTGATGGTTCGCAATTCGACAGTTCC
TTGACTCCATTCTCATTAAATGCTGTATTGAAAGTGCAGCTTGCCCTCATGGAGGAATGGGATATTGGTGAGCAAATGCTGCGAA
ATTTGTACACTGAGATAGTGTATACACCAATCTCACACCGGATGGTACTATCATTAAGAAGCATAAAGGCAACAATAGCGGGCA
ACCTTCAACAGTGGTGGACAACACACTCATGGTCATTATTGCAATGTTATACACATGTGAGAAGTGTGGAATCAACAAGGAAGAG
ATTGTGTATTACGTCAATGGCGATGACCTATTGATTGCCATTCACCCAGATAAAGCTGAGAGGTTGAGTGGATTCAAAGAATCTT
TCGGAGAGTTGGGCCTGAAATATGAATTTGACTGCACCACCAGGGACAAGACACAGTTGTGGTTCATGTCCACACAGGGCTTTGGA
GAGGGATGGCATGTATATACCAAAGCTAGAAGAAGAAAGGATTGTTTCTATTTTGGAAATGGGACAGATCCAAAGAGCCGTCACAT
AGGCTTGAAGCCATCTGTGCATCAATGATCGAAGCATGGGGTTATGACAAGCTGGTTGAAGAAATCCGCAATTTCTATGCATGGG
TTTTTGAACAAGCGCCGTATTACAGCTTGCAGAAGAAGGAAAGGCGCCATATCTGGCTGAGACTGCGCTTAAGTTTTTGTACAC
ATCTCAGCACGGAACAAACTCTGAGATAGAAGAGTATTTAAAAGTGTGTATGATTACGATATTCCAACGACTGAGAATCTTTAT
TTTCAG

>TEVANIb-Ros1-Nib8 (Nib insertion between positions 6255-6256 of TEVANIb-Ros1)

GGGGAGAAGAGGAAATGGGTTCGTGGAAGCACTGTCAGGGAACCTTGAGGCCAGTGGCTGAGTGTCCCAGTCAGTTAGTCACAAAGC
ATGTGGTTAAAGGAAAGTGTCCCCTCTTTGAGCTCTACTTGCAGTTGAAATCCAGAAAAGGAAGCATATTTTAAACCGATGATGGG
AGCATATAAGCCAAGTCGACTTAATAGAGAGGCGTTCCCTCAAGGACATTTCTAAAAATATGCTAGTGAATTTGAGATTGGGAATGTG

GATTGTGACTTGCTGGAGCTTGCAATAAGCATGCTCATCACAAGCTCAAGGCGTTAGGATTCCCAACGTGTAACACTACATCACTG
ACCCAGAGGAAATTTTTAGTGCATTGAATATGAAAGCAGCTATGGGAGCATAACAAAGGCAAGAAGAAAGACTCTCAGCGA
GCTCACACTAGATGAGCAGGAGGCAATGCTCAAAGCAAGTTGCCCTGCGACTGTATACGGGAAAGCTGGGAATTTGGAATGGCTCA
TTGAAAGCAGAGTTGCGTCCAATTGAGAAGGTTGAAAACAACAAAACGCGAACTTTCACAGCAGCACCAATAGACACTCTTCTTG
CTGGTAAAGTTTTCGCTGGATGATTTCAACAATCAATTTTTATGATCTCAACATAAAGGCACCATGGACAGTTGGTATGACTAAGTT
TTATCAGGGGTGGAATGAATTGATGGAGGCTTTACCAAGTGGGTGGGTGTTATGACGCTGATGGTTCGCAATTCGACAGTTCC
TTGACTCCATTCTCATTAAATGCTGTATTGAAAGTGCAGCTTGCCCTCATGGAGGAATGGGATATTGGTGAGCAAATGCTGCGAA
ATTTGTACACTGAGATAGTGTATACACCAATCTCACACCGGATGGTACTATCATTAAGAAGCATAAAGGCAACAATAGCGGGCA
ACCTTCAACAGTGGTGGACAACACACTCATGGTCATTATTGCAATGTTATACACATGTGAGAAGTGTGGAATCAACAAGGAAGAG
ATTGTGTATTACGTCAATGGCGATGACCTATTGATTGCCATTCACCCAGATAAAGCTGAGAGGTTGAGTGGATTCAAAGAATCTT
TCGGAGAGTTGGGCTGAAATATGAATTTGACTGCACCACCAGGGACAAGACACAGTTGTGGTTCATGTACACAGGGCTTTGGA
GAGGGATGGCATGTATATACCAAAGCTAGAAGAAGAAAGGATTGTTTCTATTTTGGAAATGGGACAGATCCAAAGAGCCGTCACAT
AGGCTTGAAGCCATCTGTGCATCAATGATCGAAGCATGGGGTTATGACAAGCTGGTTGAAGAAATCCGCAATTTCTATGCATGGG
TTTTTGAACAAGCGCCGTATTTCACAGCTTGCAGAAGAAGGAAAGGCGCCATATCTGGCTGAGACTGCGCTTAAGTTTTTGTACAC
ATCTCAGCACGGAACAAACTCTGAGATAGAAGAGTATTTAAAAGTGTGTATGATTACGATATTTCAACGACTGAGAATCTTTAT
TTTCAG

>TEVANIb-Ros1-NIb9 (NIb insertion between positions 8463-8464 of TEVANIb-Ros1; NIb included the indicated the indicated extra nucleotides)

GAGAATCTTTATTTTCAGGGGGAGAAGAGGAAATGGTCTGGAAGCACTGTCAGGGAACTTGAGGCCAGTGGCTGAGTGTCCCA
GTCAGTTAGTCACAAAGCATGTGGTTAAAGGAAAGTGTCCCTCTTTGAGCTCTACTTGCAGTTGAATCCAGAAAAGGAAGCATA
TTTTAAACCGATGATGGGAGCATATAAGCCAAGTCGACTTAATAGAGAGGCGTTCCCTCAAGGACATTCAAAATATGCTAGTGAA
ATTGAGATTGGGAATGTGGATTGTGACTTGCTGGAGCTTGCAATAAGCATGCTCATCACAAGCTCAAGGCGTTAGGATTCCCAA
CTGTGAACTACATCACTGACCCAGAGGAAATTTTTAGTGCATTGAATATGAAAGCAGCTATGGGAGCATAACAAAGGCAAGAA
GAAAGAAGCTCTCAGCGAGCTCACACTAGATGAGCAGGAGGCAATGCTCAAAGCAAGTTGCCCTGCGACTGTATACGGGAAAGCTG
GGAATTTGGAATGGCTCATTGAAAGCAGAGTTGCGTCCAATTGAGAAGGTTGAAAACAACAAAACGCGAACTTTCACAGCAGCAC
CAATAGACACTCTTCTTGCTGGTAAAGTTTTCGCTGGATGATTTCAACAATCAATTTTTATGATCTCAACATAAAGGCACCATGGAC
AGTTGGTATGACTAAGTTTTATCAGGGGTGGAATGAATTGATGGAGGCTTTACCAAGTGGGTGGGTGTTATGACGCTGATGGT
TCGCAATTCGACAGTTCCCTTGACTCCATTCTCATTAAATGCTGTATTGAAAGTGCAGCTTGCCCTCATGGAGGAATGGGATATTG
GTGAGCAAATGCTGCGAAATTTGTACACTGAGATAGTGTATACACCAATCTCACACCGGATGGTACTATCATTAAGAAGCATAA
AGGCAACAATAGCGGGCAACCTTCAACAGTGGTGGACAACACACTCATGGTCATTATTGCAATGTTATACACATGTGAGAAGTGT
GGAATCAACAAGGAAGAGATTGTGTATTACGTCAATGGCGATGACCTATTGATTGCCATTCACCCAGATAAAGCTGAGAGGTTGA
GTGGATTCAAAGAATCTTTTCGGAGAGTTGGGCTGAAATATGAATTTGACTGCACCACCAGGGACAAGACACAGTTGTGGTTCAT
GTCACACAGGGCTTTGGAGAGGGATGGCATGTATATACCAAAGCTAGAAGAAGAAAGGATTGTTTCTATTTTGGAAATGGGACAGA
TCCAAAGAGCCGTCACATAGGCTTGAAGCCATCTGTGCATCAATGATCGAAGCATGGGGTTATGACAAGCTGGTTGAAGAAATCC
GCAATTTCTATGCATGGGTTTTTGAACAAGCGCCGTATTTCACAGCTTGCAGAAGAAGGAAAGGCGCCATATCTGGCTGAGACTGC
GCTTAAGTTTTTGTACACATCTCAGCACGGAACAAACTCTGAGATAGAAGAGTATTTAAAAGTGTGTATGATTACGATATTTCA
ACGACTGAGAATCTTTATTTTCAG