

**Supplementary Table S1. Synthesized DNAs for generating plasmids encoding GP5 proteins**

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PRRSV-2 (GD) Accession# ABV02057.1	TGACTACGCG <u>ACCGGTTT</u> GGGAAAATGCCTCACTGCGTGTGCTGCTCAAGA TTGCTGTTTCTTTGGTGTATCGTGCCCTTCTACCTGGCAGTCCTTGTGAACGCA TCTAATAATAACAGCAGCCATATACAACCTCATATACAATTTGACATTGTGTG AGCTGAACGGGACTGACTGGCTCGCACAGAAATTTGATTGGGCTGTGCGAAA CGTTCGTGATTTTCCCAGTTCTTACGCATATTGTTAGCTATGGTGCCTTGACTA CCTCACACTTTCTCGACACGGTCGGACTGGCCACCGTCTCTACGGCCGGATA CTATCACGGCAGGTACGTCTTGTCTTCAATTTACGCGGTGTGTGCCCTCGCTG CACTTATCTGTTTTGTTATTAGATTGGCAAAAACTGTATGAGCTGGAGGTAC TCTTGACAAGGTACACCAATTTCTCTGGATACCAAGGGCCGCTGTACC GCTGGCGGTACCTGTCATAGTCGAAAAAGGCGGCAAAGTGGAGGTGAGG GACATCTGATAGACCTTAAACGCGTCGTCTGGACGGCAGTGCCGCAACTCC GCTGACAAGGGTGTGAGCAGAGCAATGGGGACGGTTGT <u>GAGCTAGCAGATC</u> TTTTT
PRRSV-1 (Zad-1) Accession# ABC74828.2	TTTTGGCAAAGAATTCGCCACCATGAGAGATCATATGGTTTTGCATGAGTAC GTGAACGCAGCTGGTATCACATGC <u>ACCGGT</u> AGATGTAGTCGCACTTTGGGTC AGCCTAGTACGCACCATTTTTATCTTTGGTGGCTTTTTTTGCTTTGCATAGGCC TCTCCTGGTCATTTGCTGATGGGAATGGAAATAGCAGTACCTACCAATACAT CTATGATCTTACGATATGTGAACTTAATGGCACCAACTGGTTGGCGTCACGC TTCAGCTGGGTTGTGGAAAGTTTTGTGTTTTATCCTGTGCTCACTCACATTCTT TCTCTCGGGTTCCTGACCACTAGTCATTTCTTCGATATGCTCGGTCTGGGTGC GGTGGCTGCTGCAGGCTTTCATGGTCAGAGGTACGTCTTGTATCTATATACG GGATTAGCGCCCTGGCTGCATTCGTCTGTTTCGCAATTCGGGCTGCAAAAAA CTGCATGGCGTGCAGGTACGCCTGCACGCGTTCACTAACTTCATTGTTGAC GACAGAGGACGCATACATCGGTGGAAGTCTCCTGTGCTCGTGGA AAAA ACTT GGCAAGGCAGAGGTGGGAGGCAACTTGGTCACCATAAAGCACGTTATTCTT GAAGGTGTGAAGGCTAAACCTTTGGCTAGAACTGCAGCTGAGCAGT <u>AGGCT</u> AGCAGATCTTTTT
PRRSV-2 (01NP1) Accession# AAP57172.1	TATCACATGC <u>ACCGGT</u> CTCGGTAAATGTCTTACCGCTGGCTGCTGTTCTCGCC TTCCGTTTCTCTGGTGCATCGTCCCCTTTTGTGTTGCTGCTCTCGCTAATGCTTC TAACAGCTCTTCCCATCTCCAGCTGATATACAACCTTACCATTTGCGAACTTA ACGGTACGGATTGGCTCAAACATAACTTTGACTGGGCGGTGGAGACCTTCGT GATCTTCCCTGTGCTGACTCACATTGTGTCATACGGGGCACTCACTACTTCCC ATTTCTTGGACGCAGTTGGTCTCATCACAGTCTCAACCGCAGGTTACTACCAT GGACGGTATGTTCTCAGTTCTATCTACGCTGTTTGCGCACTTGCTGCGTTGAT ATGCTTCATTATTAGGCTTACGAAGAATTGTATGAGCTGGCGGTACTCTTGCA CCCGCTACACGAATTTTGTCTTGACACAAAAGGAAAATTGTACCGCTGGA

	GGAGCCCAGTGATTATCGAGAAGGGCGGTAAAGTTGAGGTCGGTGGGCATC TGATTGACCTTAAACGGGTTGTTCTCGACGGTAGTGCGGCCACCCCGGTCAC TCGGGTTTCAGCAGAGCAGTGGGGTAGGCCATAGGCTAGCAGATCTTTTT
PRRSV-2 (NADC30) Accession# AFP43978.1	TATCACATGCACCGGTCTCGGTAAATGTCTCACAGCCGGGTATTGTTACAG CTGCCGTTTCTCTGGTGTATCGTGCCGTTCTGCTTCGCAGCATTGGTGAATGC TAATTCCAACCTCTAGTAGCCATTTGCAACTTATTTACAACCTCACAATCTGTG AATTGAATGGAACAGACTGGCTTAATGAAAGGTTCTATTGGGCCGTGCGAGA CATTTGTTATTTTCCCTGTCCTGACCCACATAGTTTCTATGGTGCTCTTACGA CATCACATTTCTGGACACGGTTGGGCTGATTACGGTTTCCACGGCAGGCTA TTACCACAGGCGCTACGTCCTCTCATCTATCTATGCCGTTTGTGCGCTGGCAG CTTTGATTTGTTTTGCGATTTCGCTCGCAAAGAACTGCATGAGTTGGCGCTAC TCTTGACAAGGTACACTAACTTTTTGCTGGACACAAAAGGTAAATTGTACC GCTGGCGCTCTCCTGTCATAATCGAAAAGGAGGCAAGGTGGATGTGCGGG GGCACCTCATAGACTTGAAGCGCGTGGTGCTGGACGGTTCCGCAGCGACTCC AGTTACCAAAATCAGTGCTGAACAATGGGGGAGGCCATGAGCTAGCAGATC TTTTT
PRRSV-2 (PRRSV0000008 973) Accession# ACG54454.1	TATCACATGCACCGGTCTGGGAAAATGCCTGACAGCCGGCTGCTGCTCCAG GCTTCTGTCACTTTGGTGCATTGTCTTTTCTGTTTCGCAGTGCTGGTGAACGC CAACAATAGTTCTTCTTCCCACTCCCAACTTATATACAACCTGACTATCTGCG AGCTTAACGGAACAAAATGGTTGGGTAACAACCTTAACTGGGCGGTTGAGA CCTTTGTTATCTTTCCTGTCCTCACTCATATAGTTAGTTATGGTGCTCTTACTA CCAGCCACTTTCTTGACACGGTTGGCCTGGTGACGGTCAGTACCGCTGGATA TTACCATGGTTCGGTATGTCCTTAGCAGTGTTTACGCTGTCTGTGCCTTGGCGG CGTTGATCTGTTTCATTATACGGTTCGTTAAAACTGTATGTCTTGGAGATAT TCATGTACGCGGCACACCAATTTTCTTTTGGATACGAAAGGACGCCTGTACA GGTGGCGCTCACCTGTGATCGTCGAGAAGAACGGAAGAGTCGAGGTCGGAA ACCATCTTATCGATCTGAAGAGAGTCGTGCTCGACGGCAGCGCGGCGACAC CGCTTACGCGCGTCAGTGCAGAGCAATGGGGAAGACCCTGAGCTAGCAGAT CTTTTT
PRRSV-2 (XW008) Accession# AHC53194.1	TATCACATGCACCGGTTTGGGCAGGTGCCTGACCGCTGGGTATTGTTCAAGA CTTCTGAGCCTCTGGTGCATCGTTTCTTTCTGGTTTGCCGTGCTCGTTAACGCC AATAATACGAGCTCATCTCACTTCCAGTTGATCTATAACCTGACACTGTGTG AGTTGAACGGCACCGAATGGCTTGGGAACAAATTCAACTGGGCAGTGGA CCTTCGTGATATTCCCAGTGCTCACACATATAGTTTCTATGGGGCGCTGACA ACCAGTCACTTTTTGGACACAGTCGGCCTCGTGACCGTTTCTACAGCTGGCTT CGTTCACGAACGCTACGTTCTTTCTTCAGTGACGCGGTGTGCGCGCTCGCTG CACTCATTTGTTTCACTATACGGTTGGCTAAGAATTGCATGAGTTGGCGGTAC AGCTGCACCAGGTACACTAACTTCTGCTCGACACCAAAGGGAAACTGTAT AGATGGCGGTCACCTGTGATTATTGAGAAAGGTGGAAGAGTCGAGGTGGAG GGACATCTCATCGACTTGAAGCGCGTCGTCCTGGACGGGTCAGCCGCTACTC

	CGCTGACGCGCGTTTCCGCAGAACAGTGGGGAAGGCTCTAGGCTAGCAGATCTTTTT
PRRSV-2 (GXLA12-2013) Accession# AGL08390.1	TATCACATGCACCGGTCTTGGTAAATGTAGTATTGCAGGCTATTGCAGTCAGTCTCTTTTTTGTGGTGTATCGTTCCTTTCTGCTCAATAGCACTCGTTTCCGCGAACGGAAACAGCTCATCTTATTTCCAGTTGATTTATAATTTGACCTTGTGTGAGCTTAACGGCACCGACTGGCTCGCTGCTAAGTTTGATTGGGCAGTTGAATGCTTCGTTATTTTTCCCGTGCTGACTCATATTGTCTCATATGGAGCCCTGACCACGAGCCATTTCTGGATACGGTCAGCTTGGTCACAGTCAGTACCGCAGGGTTCATCACGGGAGGTACGTGCTCAGTAGCATATACGCAGTGTGTGCGTTCGCGGCGTTTATCTGTTTTGTCATTGCGCTCGTCAAGAACTGTATGAGCTGGAGGTACTCATGTACCCGCTATACTAATTTCTTCTTGACACAAAAGGGAAGATATACAGGTGGCGCAGCCAGTTATTATTGAGAAGGGAGGAAAGGTGGAGGTCGGGGTCACTTGATAGACCTCAAGCGCGTTGTCTTGACGGTTCAGCGGCGACACCTGTGACAAAGATTTACGCAGAGCGGTGGGGTCACCCATAGGCTAGCAGATCTTTTT
PRRSV-2 (MD001) Accession# AKS03951.1	TATCACATGCACCGGTGGGTAAGTGCCTGACAGTGGGATGCTGTTCAAGAAGCCTGTTTTTGTGGTGTATAGTGCCTTTTTGCCTTGACGCGTTGGTCTCCGCGAATGGCAACAGTTCTTCTTATTCACAGTTGATCTATAACCTTACCTTGTGTGAGTTGAATGGTACTGATTGGCTTGCCAAAAAGTTCGACTGGGCAGTGGAACCTTTGTGATTTTTCCCGTTATAACACACATCGTTTCCTACGGAGCCCTCACCACGAGTCACCTTCTGGATACTGTCGGATTGGTCACCGTTTCTACAGCGGGTTTCTACCACGGAAGGTATGTGCTCAGTAGTATCTATGCGGTCTGCGCGTTGGCAGCACTCATCTGTTTTGTCATCCGGCTCGCCAAGAATTGTATGTCTTGCGCTATTCTGCACACGCTATACTAAGTTTTTGCTTGATACGAAGGGCAGAATATATCGGTGGAGATCTCCAGTTATTATCGAAAAGGGCGGCAAAGTGGAAGTCGAGGGACACCTCATTGACTTGAAGAGAGTGGTGCTCGACGGTTCCGCAGCAACTCCCGTCACCAGGATACCGGCGGAAAGATGGGGGAGGCCATAAGCTAGCAGATCTTTTT
PRRSV-2 (EDRD-1) Accession# BAG49673.1	TATCACATGCACCGGTCTCGGAAAGTGTCTTACCGCCGGGTGCTGTTACGCTTGCCATTCTCTGGTGTATTGTGCCGTTCTGCCTGGCGGCACTCGTGAACGCAGCGACAGCTCATCCTCCACCTTCAACTCATTTACAACCTGACTCTGTGCGAACTCAACGGTACGGATTGGCTCGCGGACAAGTTCGACTGGGCCGTGGAGAGTTTTGTTATATTTCCCGTTCTTACGCACATAGTTAGCTATTGCGCATTGACGACTTCACACTTCCTCGATACAGTCGGCCTGGTTGCAGTTTCCACGGCCGGTTTATACCACGGGCGGTACGTGCTTCTTCTATATATGCTGTTTGCGCACTTGCAGCTCTGGTCTGCTTCGTCATAAGATTGACGAAGAATTGCATGAGCTGGCGGTACTCCTGCACCAGGTACACAACTTTTTGTTGGATACAAAGGGTAGATTGTATAGATGGAGGAGCCCGGTCATTATTGAGAAGGGTGGTAAAGTCGAGGTGGAGGGGCACCTCATTGATCTGAAGCGGGTTGTGCTGGACGGATCTGCAGCAACACCCATTACGAAGGTCAGCGCAGAGCAATGGGGCCATCCGTAGGCTAGCAGATCTTTTT

PRRSV-2 (Miyagi08-2) Accession# BAJ14526.1	TATCACATGCACCGGCTGCGGCAAGTGTCTCACTGCCGGATGCTGTCTGAGA CTCCCTTTTAGTTGGTGCATTATGCCCTTTTGTCTTGCTGTGTTGGTCAACGCG AATGGCAACTCAAGTAGCCACCTTCAGCTTATTTACAATTTGACTCTTTGCGA ACTTAACGGTACGGACTGGCTTGCTGGAACTTCGACTGGGCAGTGGAGAG TTTTGTTATTTTTCCTGTCTCACCATATAGTTTCATATGGGGCACTTACGAC ATCCCATTTCCCTTGACACGGTGGGACTTGTACCGTTTCAACCACTGGTTTTT ACCATGAAAGGTATGTCTTGAGTAGTATCTATGCAGTGTGTGCCCTTGCTGC GCTCATTTGCTTCGTCATTAGATTGACGAAAAATTGTATGTCCTGGAGGTACT CATGCACGAGGTACACAACTTTCTTTTGGATACTAAAGGTAGATTGTACCG CTGGAGGTCACCTGTGATTATAGAAAAAGGTGGTAAGGCTGAAGTCGAGGG GCATCTCATCGACCTGAAAAGGGTTGTTCTTGATGGGAGCGCGGCTACTCCC ATAACGAAAGTCAGTGTGAACAGTGGGGGAGACCTTGAGCTAGCAGATCT TTTT
PRRSV-2 (RespPRRS vac cine) Accession# AAD27656.1	TATCACATGCACCGGCTTGAGAAGTGTCTCACCGCAGGATGTTGTTCCCAA CTTCTTAGTCTTTGGTGTATAGTTCCATTCTGCTTCGCTGTCTTGCTAACGCT TCAAATGACTCCTCCTCACACCTCCAGCTCATCTATAATCTCACACTCTGTGA GCTCAACGGCACAGACTGGCTGGCGAATAAGTTTGATTGGGCCGTGGAGTCT TTTGTTCATATTTCCAGTCTGACTCATATAGTCTCCTACGGTGCCTGACTAC CAGCCACTTTTTGGATACCGTCGCGCTCGTTACCGTTAGCACTGCTGGATTG TTCATGGAAGGTATGTGTTGTCTCAATATACGCGGTGTGTGCGTTGGCCGCC CTCACCTGCTTTGTTATCAGATTCGCTAAAAATTGTATGTCATGGCGCTACGC CTGTACACGGTACACGAACTTTCTCCTGGACACCAAGGGGGGGCTTTACCGC TGGCGGAGCCCCGTCATAATAGAAAAGAGGGGGCAAAGTCGAAGTGGAGGG ACATCTTATAGACCTGAAGAGAGTCGTTTTGGATGGCAGCGTCGCGACACCG ATTACTCGCGTGTCCGCTGAACAGTGGGGAAGACCTTAAGCTAGCAGATCTT TTT
PRRSV-2 (Sar01/2013) Accession# AMW91022.1	TATCACATGCACCGGTTTGGGAGAATGTCTTACTGCAGGCTGTTGTTCTCAGC TTCTGAGCCTTTGGTGTATCGTCCCATTTGTTTCGCTGTTCTTGCTAATGCTTC AAACGACTCATCATCTCATTTGCAGCTGATCTATAACCTGACGTTGTGTGAGT TGAACGGTACTGACTGGCTTGCGAACAAGTTCGACTGGGCTGTGAGAGTTT CGTTATCTTCCCAGTTTTGACTCATATTGTTTCTTACGGGGCATTGACTACTTC CCATTTCTCGATACCGTTGCTTTGGTCACGGTGTCAACAGCAGGATTTGTTT ATGGTCGCTATGTGCTGAGCAGCATCTACGCGTTTGTGCTCTGGCAGCCCTT ACTTGTTTTGTATCCGCTTCGCTAAAAATTGTATGTCATGGAGGTATGCGTG TACTAGATACACCAACTTTCTGTTGGATACGAAAGGGGGTCTCTACAGATGG AGATCACCCGTCATCATTGAAAAGCGGGGAAAAGTCGAAGTGAAGGACA CCTTATCGATTTGAAACGCGTTGTTCTCGACGGGTCCGTTGCCACCCCATAA CTAGAGTCTCCGCTGAACAGTGGGGTTCGGCCATGAGCTAGCAGATCTTTTT
PRRSV-2 (VR2332) Accession# ABU87666.1	TATCACATGCACCGGTTTGGAAAAATGTTTGACGGCCGGATGTTATAGTCAA CTCCTCAGCCTTTGGTGTATTGTTCCATTTGTTTCGCTGTTCTTGTAACGCTT CTAATGATTCAAGTAGCCATTTGCAGCTCATATACAACTTGACCCTCTGCGA

	GCTTAATGGAACGGACTGGCTCGCCAACAAGTTCGATTGGGCGGTCTGAGTCT TTCGTTATTTTTCCCGTGCTCACTCACATAGTCTCTTATGGGGCCCTCACTACA TCTCATTTTTTGGATACTGTGCCCCCTCGTCACCGTCAGCACTGCAGGCTTCGT CCACGGAAGATACGTGCTCTCAAGCATATATGCCGTTTGTGCACTGGCAGCC TTGACTTGTTTCGTTATCAGATTTGCGAAGAATTGTATGTCATGGCGCTATGC CTGCACTCGCTATACTAATTTTTTGCTGGATACAAAAGGGCGGCTCTACAGA TGGCGGAGCCCCGTCATAATTGAGAAACGGGGCAAAGTTGAAGTTGAGGGG CACCTGATCGACCTGAAGCGGGTGGTGCTGGATGGCAGCGTGGCTACTCCG ATCACGAGGGTTTCTGCAGAACAGTGGGGCAGGCCATGAGCTAGCAGATCT TTTT
PRRSV-2 (Ingelvac ATP) Accession# ABJ51873.1	TATCACATGCACCGGTTTGGGCAGGTGTTGACTGCTGGATGCTGCAGCCGC CTTCTGTCCCTGTGGTGTATCGTCCATTCTGCTTTGCTGCCTTGGTGAATGCT AACTCTAACTCTTCTTCCCACTTGCAGCTCATTTACAATCTGACATTGTGTGA GCTGAACGGCACGGATTGGTTGAAGGACAAATTCGATTGGGCTCTTGAGAC CTTTGTGATCTTTCCCGTCCTCACACATATAGTGAGTTATTCCGCGCTCACAA CGTCTCACTTCTTGGATACGGTGGGGTTGGTCACGGTGAGCACTGCAGGTTTT TATCACGGACGCTATGTTTTGAGCTCTATTTATGCCGTTTGGCCTTGGCAGC TCTTACCTGCTTCGTCATCAGACTGGCGAAAAATTGTATGAGCTGGCGGTAC TCATGTACTAGGTACACTAACTTCCTCCTTGACACGAAGGGAAGATTGTACA GGTGGAGGTCCCCCGTGATTATAGAGAAGGGAGGAAAAGTTCGAGGTGGAA GGCCATCTTATAGACCTCAAAAGAGTTGTCTTGGACGGATCAGTTGCCACTC CTCTTACGCGCGTTTCTGCTGAACAGTGGGGTAGGTTGTAAAGCTAGCAGATC TTTTT
PRRSV-2 (P129) Accession# AAM18563.1	TATCACATGCACCGGTTTGGGCAAATGTCTTACAGCGGGGTGTTGTAGCCGC TTGTTGAGCCTCTGGTGCATCGTGCCCTTCTGTTTTGCCGTCCTCGGCAGTGCG AACTCTAGCTCAAGTTCTCACTTTCAACTCATTTATAACCTTACCCTGTGTGA GTTGAATGGCACAGACTGGTTGGCCGAGAAATTTGACTGGGCAGTCGAGAC ATTTGTGATTTTTCCAGTGCTCACACATATAGTCTCCTATGGTGCGTTGACCA CTTCACATTTTCTGGACACCGTCGGCTTGGTGACAGTCAGTACAGCGGGATT CTACCACGGAAGATATGTTCTGTCTTCCATCTATGCTGTCTGTGCGCTTGCCG CACTCATTTGTTTCGTCATCAGGTTGGCCAAAAATTGCATGTCCTGGAGGTAT TCTTGTACTCGCTACACTAACTTTCTGTTGGATACGAAAGGACGGTTGTATAG GTGGAGAAGCCCAGTGATTATCGAAAAGGGTGGCAAAGTCGAGGTGGAAG GGCACCTCATTGACCTTAAGCGCGTCGTCCTTGATGGATCCGTGGCTACTCC GCTGACTAGGGTTTCCGCTGAACAGTGGGGAAGGCTGTGAGCTAGCAGATC TTTTT
PRRSV-2 (Prime Pac) Accession# ABG76930.1	TATCACATGCACCGGTTCTCGGAAAATGTTTGACAGCCGGGTGCTGTAGTAGA CTGCTGTCATTTTGGTGTATTGTCCCTTTTGTCTCGCCGTCCTCGTGAATGCC AGCTACAGCAGCTCCTCCCATCTTCAGCTCATATACAACCTTGACACTGTGCG AGCTCAATGGGACCGATTGGTTGGCAAACAAATTTGACTGGGCGGTTCGAGA GTTTCGTTATATTTCCAGTGCTGACTCACATTGTGTCCTATGGAGCCCTCACA

	<p>ACTTCCCATTTTTTGGATACTGTCGGCCTTGTGACGGTCTCAACGGCCGGTTT  CTACCACGGCAGATACGTGTTGAGTAGTATCTACGCTGTGTGTGCGTTGGCT  GCCTTGATATGTTTTGTGATCAGGCTGGCGAAAAATTGTATGAGCTGGCGGT  ATTCCTGCACTAGATACACCAATTTTCTCCTGGATACGAAAGGCAGATTGTA  TAGGTGGAGGTCCCCAGTTATTATTGAGAAGGGTGGCAAAGTCGAGGTTGA  ATCTCACTTGATCGACCTTAAAAGAGTTGTGCTGGACGGGTCTGCGGCCACG  CCACTGACTAGGGTCTCCGCTGAGCAATGGGGTAGACCTTAGGCTAGCAGA  TCTTTTT</p>
<p>PRRSV-2 (Neb-1)  Accession# ACE87854.1</p>	<p>TATCACATGCACCGGTCTTGGGAAATGTCTTACTGCCGGATGCTGTAGTAGG  CTGCTCAGCTTGTGGTGTATCGTTCCTTTCTGCTTTGCCGTGCTCGTTAATGCG  AGCTATTCATCATCATCCCATCTTCAGCTCATTTACAACCTGACACTCTGTGA  ACTGAATGGTACGGATTGGCTGGCAAACAAGTTTGATTGGGCAGTCGAGAG  TTTCGTTATCTTCCCGGTTTTGACTCATATCGTGTACATACGGCGCACTCACTA  CTAGCCACTTCCTTGACACGGTGGGCTTGGTGACGGTTTCAACAGCGGGCTT  CTATCATGGCCGGTATGTGCTGAGTTCTATATATGCGGTGTGCGCCTTGGCGG  CTCTGATTGTCTTTGTGATCAGGCTCGCAAAAAATTGCATGTCATGGAGATA  CTCATGTACCCGGTACACCAACTTTCTGCTCGACACAAAGGGACGCCTTTAC  AGGTGGAGATCACCTGTGATAATTGAAAAGGGTGGCAAGGTTGAAGTGGAA  GGGCACCTTATCGACCTCAAGCGCGTGGTTCTCGACGGGTCCGCAGCTACGC  CCCTCACGCGCGTCTCTGCAGAACAGTGGGGGCGGCCCTAAGCTAGCAGAT  CTTTTT</p>
<p>PRRSV-2 (CH-1R)  Accession# ACF93752.1</p>	<p>TATCACATGCACCGGTCTCGGTAAATACTTGACTACCGGGTGCTGTAGTAGA  CTTTTGTCTCTCTGGTGTATAGTTCGGTTTTGCTTCGCTGTTCTGGTCAATGCC  AACTCCAACCTCCTCAAGTCAGTTTCAACTTATCTACAACCTTACGCTGTGCG  AGCTGAATGGCACGGACTGGCTTGCAAATAAGTTTCGATTGGGCAGTCGAGA  CATTCGTTATTTTTCCGGTGCTGACCCATATAGTCTCTTACGGAGCCTTGACT  ACCAGCCATTTCTTGACACAGTGGGCCTGGTTACGGTCTCTACCGCCGGGT  TTTACCATGGACGGTATGTGTTGTCTAGCATTACGCTGTTTGTGCCCTTGCTG  CTCTGATCTGCTTTGTGATTAGACTTGCTAAGAATTGCATGTCTTGGAGATAT  TCATGCACGCGCTATACTAATTTCTTCAGGATACAAAAGGACGGCTGTATA  GATGGCGGTACACAGTGATTGTTGAAAAGGGCGGAAAGGTTGAAGTTGAGG  GGCATCTCATCGACCTCAAACGGGTGGTCTGGATGGGAGTGTGGCTACACC  TCTCACAAGAGTCTCAGCAGAGCAATGGGGAAGGCTTTAAGCTAGCAGATC  TTTTT</p>
<p>PRRSV-2 (HG.RV2)  Accession# AFM37611.1</p>	<p>TATCACATGCACCGGTCTTGGCAAATGCCTGACAGCATGTTGTTGTAGTAGA  TTGCTGTTCTTTGGTGCATCGTCCCTTTTATCTGGCAGTTCTTGCCAATGCG  AGCAATTCTAATTCATCATATACAGCTTATTTACAATCTCACGCTCTGCGA  ACTTAATGGAAGTATTGGCTTGCTCAAAAATTTGATTGGGCTGTGAAACT  TTCGTGATATTCCCGTTCTGACGCACATCGTTAGTTACGGCGCCCTCACCAC  CAGCCACTTCCTGGATACCGTCGGGCTGGCCACTGTCAGCACGGCTGGATAT  TACCACGGCAGATATGTCTTGTCTCTATATATGCTGTCTGCGCCCTCGCTGC</p>

	<p>ACTCATCTGTTTCGTTATAAGACTTGCGAAGAATTGCATGTCCTGGCGGTAC  AGCTGCACACGCTATACTAATTTCTGCTGGACACTAAAGGACGCCTTTACA  GATGGAGAAGTCCTGTATCGTGGAAAAGGGGGGGAAAGTGGAAGTGGAG  GGTCACCTTATTGATCTCAAGAGAGTTGTTTTGGACGGCAGTGCGGCTACGC  CTCTGACACGGGTAGTGCTGAACAATGGGGGAGACTCTAGGCTAGCAGAT  CTTTT</p>
<p>PRRSV-2 (JXA1)  Accession# ABL60902.1</p>	<p>TATCACATGCACCGGCTCTGGGAAATGCCTCACTGCCTGTTGCTGCTCAAGG  CTCCTGTTCTCTGGTGTATCGTTCCTGCTACCTGGCTGTCCTTGTTAATGCC  TCTAATAACAATAGCTCCCATATTCAGTTGATATATAACCTTACTCTTTGCGA  GTTGAATGGAACCGATTGGCTGGCACAGAAGTTCGATTGGGCCGTTGAAACT  TTCGTGATATCCCCGTTCTCACTCACATAGTGAGTTACGGAGCTCTGACGAC  ATCACATTTCTGGATACTGTGGGCCTGGCTACAGTTAGTACGGCTGGCTAC  TATCATGGTAGGTACGTGTTGAGCAGTATATATGCAGTTTGTGCACTGGCGG  CGCTCATCTGCTTCGTGATAAGACTCGCCAAGAATTGCATGTCCTGGCGGTA  TTCTTGTACTAGGTATACGAATTTCTTGCTCGATACAAAAGGAAGACTTTATC  GCTGGCGCTCTCCTGTGATTGTTGAGAAGGGGGGGAAGGTCGAGGTCGAGG  GCCACCTGATTGATCTCAAGCGCGTCGTCCTGGACGGGTCTGCGGCTACTCC  TCTACCCGCGTGTGACCCGAATTGTGGGGAAGACTGTAGGCTAGCAGATCT  TTTT</p>
<p>PRRSV-2 (2000-2454)  Accession# ACB41436.1</p>	<p>TATCACATGCACCGGCTCTGGGGAGATGCCTTACGGCGGGCTGTTGTAGTCGG  CTTTTGTCCCTTTGGTGCATTGTGCCGTTTGGTTTGCCGTTCTGGTTCGATGCA  AATAGCAACTCCTCCAGTCACTTCCAGTTGATCTACAATTTGACATTGTGCG  AACTTAACGGGACTGACTGGCTTGATAAAAAGTTCGACTGGGCCGTCGAGA  CCTTTGTGATTTTCCAGTCCTCACGCACATCGTCAGCTACGGGGCTTTGACA  ACGTCTCACTTCTTGACACTGTTGGCCTGGTTACCGTTTCAACTGCTGGATT  TTACCACGGGCGGTATGTGCTTAGCAGTATCTATGCTGTTTGTGCTCTCGCTG  CCCTGATCTGTTTTGTGATTTCGGTTCGCTAAAACTGCATGAGTTGGCGGTAC  TCCTGCACTAGATATACCAATTTCTCCTCGATACAAAGGGTCGGTTGTACC  GCTGGCGCAGTCCTGTCATAATCGAAAAGGGTGGAAGGTTGAAGTCGAAG  GCCACCTTATTGACCTTAAACGCGTTGTCTTGACGGCAGTGTTGCAACTCC  ACTGACACGGGTTTCTGCAGAACAGTGGGGCCGCCCTAAGCTAGCAGATC  TTTTT</p>
<p>PRRSV-2 (MN30100)  Accession# ABU87642.1</p>	<p>TATCACATGCACCGGTTGGGTAGATGTCTGACCGCGGGCTACTGCTCACGG  CTTTTGAGTCTGTGGTGTATAGTCCCTTTTGGTTTCGCTGTCCTTGTTGAATGCA  AATTCTACCTCCAGCTCACATTTTCAAGTTGATTACAACCTCACTCTGTGCGA  GCTCAATGGTACAGACTGGCTCGCCGGTAAATTTCGATTGGGCAGTTGAAGCT  TTCGTGATTTTCCGGTCTTGACTCACATAGTTTCTTATGGAGCTCTCACTACG  TCTCATTTTCTGGATACGGTTGGTCTGGTGACAGTCTCAACGGCTGGCTTCTG  TCATGGAAGGTACGTGTTGAGCTCCGCTATGCTGTTTGGCGCTTGGCGGCCC  TGATTTGCTTTGTCATAAGATTTCGCTAAGAATTGTATGTCCTGGCGGTATTCT  TGCACCCGCTATACCAATTTCTCCTCGATACAAAGGGCAGGCTGTATCGCT</p>

	GGAGAAGCCCTGTTATTATCGAAAAGGGCGGGAAGGTGGAAGTCGAGGGA CATTGATCGACTTGAAGCGCGTGGTCCTCGACGGCAGCGTGGCGACTCCCC TCACAAGGGTGTCCGCAGAACAAATGGGGACGCCCC <u>TGAG</u> CTAGCAGATCTT TTT
Lopma virus Accession# QYL35076.1	TGACTACGCG <u>ACCGGT</u> ACCTGCTCTAAAAGCTGGGCACCCTGCAGTATGCG GTTTCGTGTCTTTGCTTTCCGTCTTGTTTTTTGCACCATTACACAACGGAGGC GTCTAATACTACGCTTGCAACCATTACAACCTCACGTTGTGCCAATTTAATG TGACGGATGTCTTAACCATTTCGATTATGTCATCGAAGGTGCACTTATTTAC CCTCTTGACCCATGCAATTAGCCATTACTTTCTTACCACAGCGTATTTCCCTT GATTTCCGCGCCTTTGGCTGCTATAAGTATCGCTGCAATATACCAGAAGTTGT ATGTCCTGGGCGCGATCCACGCCTTTATGGCGATTGTTGCTCTGATTTTGCTTT GTCGCAGAGTGATACTTAATATCCTGGCACTCCGGTATGCTTGACGCGCCA TACCAATTTCAATTTGGACACCAAAGGATCTGTCCATCTGAACAAATCCCCT GTGTTGATTTAGACACGTTTGGTGTTAGACTCAACAACGCACACATCCAGC CAAAAATAGTCGTCTTTGACGGTATTAAGGCTCACCTGTGAACACAAGCCA GGCTGAAGAGTGGGCAGCTTAAGCTAGCAGATCTTTTT
RtMruf arterivirus Accession# ALI16783.1	TGACTACGCG <u>ACCGGT</u> AGACCGTCCTGTTTGTGTTTGGTTGTCACCTCTGTTCA TAGGATGGTCATGTCCCGTTTCAGTGGCGGCGAATAGTAATTCAAGTAGCAC TCTCCAATCATTACAAATATGACCCTGTGTGAACTCAATGGGACAGATTTTC CTTGCGAACAAGTTTGACTGGGCGGTTGAGAGTTTCGTGCTTTTCCCAGTGTT TACACATATTGTCTCTAGAGGGTTTATGACAACGAGCCACCTCCTGGACACC ATAGGACTCGCAACCGTTACTATCTCTGGGTACTGGCATCAGAGATATGTCC TTAGTAGTATTTACGCTGTTTGTGCATTCGCCGCGTTTTGCTGTTTTCTTGTC GAGTTATTAAGAACTGTATGTCATGGCGGTACTCATGCACCAGGTTACAAAA CTTTATTCTCGACACTAAAGGACACTTGTTTCAGATGGAAGAGCCCCATACTG GTTGAGAGGGCTGGTAAGGTCGAGGTCGATGGACACCTTATTGATGTTAAGC ACGTGATAATTGAGGGGACTAAAGCCAAACCCGTGACCAGAGTTCCCGCCG AACAGTGGGGTAGTGCA <u>TGAG</u> CTAGCAGATCTTTTT
RtEi arterivirus Accession# ATP66641.1	TGACTACGCG <u>ACCGGT</u> AAATGTTATAGATCCTCAGCTGCGTCTGTTATGCGG GCATTCTACTGGTGTCTGCCCTTCTTTCTCTACATAGGCTGGTGTGCCCCGTGC GCTTCCGCTTCTAATGGCACAGGCTCCACCATGCAGCTTATATATAACATGA CACTTTGCGAACTGAACGGAACGGATTGGTTGGTCGATAAATTCGACTGGGC AGTGGAGAGCTTTGTCTTGTTCGGGTGTTTACTCACATTGTGAGTAGAGGAT TCATGACCACCTCACATTTGCTGGATTGGATTGCACTCACAACCATTGCTACT GCCGGTTATTATCATTCCCGGTACGTGCTCAGCTCAATTTATGCGGTGTGTGC TTTCGCTGCCCTTGTCTGTTTTCTTGTCGCTTTATCAAAAACATGCTGCTTG GAGATATAGCTGTACGAGGTACACAACTTTATCCTCGATACCAAGGGAAG ACTGTTTAGGTGGAACAGTCCAATCATCATTGAGAAACAAGGTAAGGCTGA TGTGGACGGGCAACTCGTCGACATCAAACACGTTGTTATTCAAGGAACGAA GGCGAAACCGCTTACGCGCGTCGCAGCAGAGCAGTGGGGCTCAGGTT <u>GAGC</u> TAGCAGATCTTTTT



LDV (Isolate p) Accession# WKR37874.1	TGACTACGCG <u>ACCGGT</u> AAGTGCCTCAAGAAGCTGGGGAGCGGTTGGATTCC ATCTCGCCTTCTCCCCTTCTGTTTCATTCTCTATTTTCTGAGTACTGAGAACGC CTGCCGCGGTGGTAACTCATCTACTAAGAATCTGATATATAACTTGACCCTC TGTGAACTTAATGTTACAGGATTTCAACAACATTTTGGATATGCCGTTGAAA CCTTCGTGATTTTTCCCGCGTTGACGCATCTTATTTCTCTCAACTTTCTCACGA CTGCTCACCTCTTGGATTTCCCTTCCCTTGAATAGTGGCCGGTGGCGGCTAC TGGCATAAGCAATATGTCATCTCCAGTATCTACGCCTCTTGTGCCCTTTTGGC ATTCATATTTTTCTGCTGTAGGGCCGTTAGAAATTGTATGTCCTGGAGATACA AGTGTACGCGGTTTACCAACTTCGTGTTGGACACAAAAGGAAAGGTCTACA GAAATCGGTCTCCAGTGCTTGTGAGCAGCACGGACGGGTTATGTTGCAAGG TCACCCAATCGAGGTCAAGACCGTGGTGTGGATGGGGTCAAAGCAGTCCG GGCAAAAACGTGTTCCAGCCGAGAAATGGGAGGCT <u>TAG</u> GCTAGCAGATCTTT TT
LDV (Neuro-virulent type C) Accession# AAA74108.1	TGACTACGCG <u>ACCGGT</u> GGGGATGGGTATAATTTGGGGTTCGGACGGTTCGTC GGTATCATGACGTGCCTCAACAGGCTCGGGGGTTTTCTCATTCTAGCTGGTT GCTGCCATATTATTTTGTCTTTACATTTTGTCCACAGAGAATGCCTGTGTGG CAGGGGATTCTCCACGAAGAACCTGATATATACTAGCACACTCTGTGAACT GAATGTTACCGGATTCCAACAGCATTTTCGGGTACGCCGTTGAAACATTTGTC ATTTTCCCTGCGGTTACACATCTCATATCTTTGAAGTTCCTTACAACAGCACA CCTGCTGGATTTCCCTTTCATTGGGGGTCTGTGGCGGGTGGAGGCTATTGGCATC AGCAATACGTTGTGTCCAGCATTTACGCGTCTGCGCATTTGTTGGCTTTCATC TTTTTTTGCTGTGCGGGCTGTCAGAAATTGCATGAGTTGGAGATATAAGTGTAC TCGGTTTACGAATTTTGTCTCGACACCAAGGGCAGGGTGTTCGGAATAGA TCATCTGTTCTCGTTGAACAGCATGGAAAAGTTCTCCTCCAGGGACAACCCA TAGAAGTGAAAACGGTCTGTGCTCGACGGCGTTAAGGCCGTGCGGGCGAAAA CGGTCCCCGCTGAAAAGTGGGAGGCT <u>TAG</u> GCTAGCAGATCTTTTT
RtClon arterivirus Accession# APT40626.1	TGACTACGCG <u>ACCGGT</u> CCAGCGTGTGTAGCTATCTCCTTTTCTTCCTGTTTCA TGTTTGGTCTTGTCCAGCAACCGTCGCAGGAAGTGGCAACAGTTCCTCTACC TTGCAAAGCATATACAATCTCACCGTTTGCGAATTGAATGGAACGCAGTGGC TTGCGACTCACTTCAGCTGGGCCGCGGAGACCTTCGTGCTTTACCCCGTCATT ACTCATATAATTAGCCGCGGTTTTATGACAACGAGTCACCTTCTGGACGCGA TTGGTCTTGTGCGAGTGGCGGCTAGTGGGTATCATCACGGACGGTATGTGCT CAGCTCCGTCTATGCTGTCTGCGCATCTGCTGCTTTTCGTGTGCTTTGTGGTTCC CATGGTTAAGAATTGTATGTCCTGGCGCTATAGCTGTACACGCTATACAAAT TATATTTTGGATACAAAGGGTAGAGTCCACAGGTGGCACAGCCCCGTTCTGG TGGAGCGGCAAGGGAAGATTGATGTGAATGGGGATCTTATCGACCCGAAAC ACGTCGTGATAGAGGGAGTGAAAGCTCAGCCAGTCGTTAGGGTTCCCGCCG AACAATGGGGGCCTCGCT <u>TAG</u> GCTAGCAGATCTTTTT
MgAV1 Accession# QHD57634.1	TGACTACGCG <u>ACCGGT</u> GGCCACAGGCGCAACCTGTGTCACTGCCGCGCCTG CAGTGTGGTTACAATGAAATGCTGGTCAAAGTCTGCGGAGCCTCTTACACGG GCATGCTGCCTGTGGCTTTGCTCACTCCTTTTTATAGGCTGGTTCTGTCCAGGT

	<p>TCAGTCGCGGCTGATGGGAACATCAAGTACGCTTCAACTGATTTATAATC  TTACCCTCTGTGAGTTGAACGGTACTGATTGGTTGGCAAACAAGTTCGATTG  GGCCGTCGAGTCTTTTGTCTTTTCCAGTGTTACGCGATATCGTCAGCCAGG  GATTCTGACTACGTCCCATCTTCTTGACACCATTGGATTGGCTACAGTGGCA  ATCTCCGGGTACTGGCATTCCAGATACGTGCTTTCATCAATCTACGCGGTCTG  CTCCTTTGCCGCTTTGTCTGTTTTTTGATTTCGATTGTTAAAAATTGTATGTC  ATGGCGGTACTCCTGCACCCGCTTCACCTCATACATACTGGATACAAAGGT  CGGCTCTTTAGGTGGAAGTCACCCATATTGATAGAGCAGGCTGGGAAAGTC  GCGGTTGACGGCCACCAGATCGACGTCAAACACGTTATTATTGAGGGAAC  AAGGCCAAGCCTATCACGCGCGTGCCTGCTGAGCAGTGGGGACTTGCGTAA  GCTAGCAGATCTTTTT</p>
SHFV (LVR 42-0/M6941) Accession# AIL48195.1	<p>TGACTACGCGACCGGTATCTCTGTCTTGGAAGATCCGAAACGCCCTTATA  GGTCTGTTCCGCACCAGTTCACATCCATATCATGGTTTTATGTCCTGTTTTT  GTTTCTATCACATTTAGTTCCACGGGTGCGAGCGAAAATAATACGGGTACGA  CATGGATTAGCATATCAAAGTTTCCATCTCTTCTGTTGTCTCAGATCATTTC  CCATCATATATTGTCAATATCAGTGTCTGCGGAGCGTTCGACATACAGAACA  ACACCCACTGGTTTACGCCGTGCAACCTCAGTGTGCTCAATCACTCTGACTG  CCATACCTGTAAATCTGAACAGTCTAACCAAAGTCTCCTTTCCAATTGCAGT  ACGTGTTTCACGCACTTGTCTTCTGTTTTTGCATACATACACAGGACATCA  TATAACAATACTAGGCTGCTGTTGGAAACATATCTCGCTGTCCCCCTGCTC  ACTCACCTCCTTTCTTACAAGTTTGCTACAACAGCGTCTTTCTTGACTTTGC  GTTCTTCGCTGGGCTTTCAATTACTGCCTATCGCTACGTGAGTCCCGCGATAC  TCTTTTTTCTCCCGCTGGCACTGATATTTTCAGCAATATTTATTAAAAACTG  GTTGTGAACTGCATGGCTCTTCGGTTTGCGTGGACAAGGCATACTAATTCAT  TATTGATGACCGCGGACGCCTCTTCGTCAACCACGATGATGTGCTCATTTCC  GATCCTCAAGGCCTCCGGGTGCGGCCGCATAAGGTGCGGGCGGCCAAAGTT  ATCCTGGGTGGAAGGGAGGCCAACCTGTTGCGCCAAGCCCATGTTGAAGAG  TGGTCTGTTAAGCTAGCAGATCTTTTT</p>
SHFV (B11661) Accession# AIY55127.1	<p>TGACTACGCGACCGGTACTTGTGCTTGGGTGCGTCTGAGACTTCCCTGATTG  GTCTTTTCCGCACCAGTCCACTTCTATCTCATGGTTCTACGTGCTTTTCTTCG  TTTCTATCACATTCAGTCTACAGGCGCATCAGAGAATAACACCGGCACCAC  GTGGATTTCTATTTCAAATTCCTTCACTGTTGTTGTCCCAAATCATCTCTCC  ATCCTATATAGTGAATATAAGCGTCTGTGGTGCTTTTGATATACAGAACAAC  ACTCATTGGTTTACACCCTGTAACCTGTGCTAGTCTCAACCACTCCGATTGCCA  TACTTGCAAATCAGAACAGAGCAATCAGAGTCTGCTGAGTAACTGCTCTAC  ATGCTTCACGCATCTCTCAAGTTGCTTTTTGCACACTTATACCGGGCACCACA  TAAATAACACGCGCCTTTTGCTCGAAACCTACCTCGCCGTGCCTTTGCTTACG  CACTTGCTTAGCTACAAATTTGCGACTACGGCTAGTTTTTTGGATTTTCGCTTTC  TTCGAGGGCTCTCCATTACTGCGTATAGGTATGTCAGCCCGGCGATCCTGTT  TTTCTTGCCATTGGCCCTGATCTTTAGCGCCATTTTCATAAAAAAACTGGTTG  TGAATTGTATGGCTCTCCGTTTCGCTGGACCAGACACACGAACCTTTATAAT</p>

	CGATGATCGGGGGCGCCTGTTTGTCAATCATGACGATGTTTTGATAAGCGAT CCACAGGGACTTCGGGTGGGGCCGCACAAGGTTAGGGCTGCGAAAGTTATA CTGGGAGGGAGAGAGAGGCAAATCTGTTGAGACAGGCTCACGTGAGGAGTG GAGTTGGT <u>GAG</u> CTAGCAGATCTTTTT
Free State vervet virus Accession# YP_009249819 .1	TGACTACGCG <u>ACCGG</u> TCTCAGCGCTTCTCTCTTGTCTGTGTTCTTTTTATGCT CCAAGTGCGGTGCTCAACGTCAGCAGCCTCAAATGTTTCACTCTTTTCCAAC CCGTCAGGCTTCATTCAGGCACTGCAAAAGACCCTGATCTCTGATTCTCTACG TGGTCAACATCAGTATCTGCGGTGCCCTGTCTATTCAGAACAAATACACATTG GTTCCAAGACCTCAGCACTTGTAACCATACGGGGGCCAACACGAAACACG CAACAAGACCGACAGTTTTCCCGTCACCTGCTTGATCCATAACTATACAGGG GTTAACATCAATCACACACGCCTCGCTCTCGAGACCTATCTCGCGGTGCCTT TGGCCACATATTTCTGTCATTTTATGCAGCTACCACCGCAGCTTTTTCTTGAC TTCCTGTTCTGGCTTGGCCTTGGGTTGACGGCTGCTCATTATGCCTCCCCAGC AGTTATTATTTACGCTCCCTTGGCGTTGATCTTCTTGGTGGTGTTCCTTAAAG AGTCATAATTAAGTGCCTTGCTCTGAGGTATGCATGGACCAGACATACTAAT TTCATAATAGATCAAAGCGGTGCGTTGTTGTTAATCACGATGATTGTCTGAT AGAACGGAATGGAAAAACCGTGCTCAACAACCAAGAGGTGAAAGTGGGAA AGGTGATCCTCGGGGGACGGCTTGCTCATGGGATTAAAGCGACTCATGTTGA GGAGTGGGGCTGGT <u>GAG</u> CTAGCAGATCTTTTT
Zambian malbrouck virus Accession# ANB32510.1	TGACTACGCG <u>ACCGG</u> TCTCCACGCCTCACTCCTCTCATGTGTTTTGCTCACGT TGCTTATTCAATTCTCAAACGGAGCCAATTCCAATACATCCCTCTTCTCCTCT CCGGCGGGGTTTATTTAGCACTCCAGCAGACCTTGATCTCTGACTCCTATAT CGTCAATATAAGCATCTGCGGTGCACTGGACATTGAGAACCAAGACTCACTG GTTCCAGGACTTCTCTCATTGCAAACCGTTGACAGCTACGAGTAACACAACC ACCTCCTATCCAGTTTCTGTGAAATACAGAATTACACCGGACAGTATATAA ATCATACGAGACTTGCCCTTGAAACCTATCTCGCTGTCCCACTGGCGACGTA CTACTTGAGCTTTTTCTGCTGCTACTACTGCCGCTTTTTCTTGACTTCCTTTTTTG CTCGGCCTCTCCCTTACCGCAGCACACTTTGCTTACCAGCATTCAATTGTTTA CAGTCCTCTTGCAATTGTGTTCTTGGTCGTCTTTCTGAAACGGGCGATAACAA ATTGTCTTGCGCTTAGATATGCCTGGACCAGGCACACTAACTTCATTATCGA CCAGTCTGGTAGGCTGTTTGTGAATCACGATGACTGTCTGATAGAACGCAAT GGAAAGACAGTTATTGGGAATCAAGAGCTTAAGGTGGGAAAGTTATACTG GGAGGGCGGCTGGCGCATGGAATCAAATCAACGCACGTGGAAGAATGGGG ATGGT <u>AAG</u> CTAGCAGATCTTTTT
DeBrazza's monkey arterivirus Accession# YP_009121781 .1	TGACTACGCG <u>ACCGG</u> TAAATGCTATGTTCCGAGTGAAAGGAGTAGTACCGG GACTCACATTACGAGCGCGCTTAGTACGTTTCTTTTGCTCTGTGCCTGCTGTG TGAGCACTTTTAAAACTGCAAGTGCCACCGATGTTGGGGGGTTTAGTAGTAA CAGCACATTGTGGAGCTCTTTCAAAAATCATATCATTAGTGATTCTTATGTCG TCAACATTAGTATATGCGGCGCCCTTGATATATCTAATAACACGCATTGGCT GACGCCTTGCAACTACTCTCAGTTTAAGCAAGATTGTCTCGATGGAAATGGG ACATTTAAGAAGAACGAGAATAAGTGTAACCACTCCTCCTGCTTTCTTCAGC

	<p>ACTACACCGGGCAGAACATTAACCTACACTCGGGTGATTCTCGAAACGTATTT  GGCGACACCGTTGTTTACGCATCTCCTGTCCTACTATGCTGCGACTACGGCC  GCCGGGCTTGACTTTCTGTACTTCGCGGGCCTGGCTCTGACCGCTGTCTATTA  TCAAAGTCCAGCATTCTTGACGTTTAGCCCGCTCGCTCTCATTTTCTGGTTGT  CTTTGTCAGACGGTTGGTCCTTAATTGTATGGCGCTGAGATACGCATGGACC  CGGCACACAACTTCATCATAGATCAGAATGGAAGGCTCTTTGTTAACCACG  ATGACGTTCTCATAGCCGATAAAGATGGAGTGAAAGTTGGGAGTCAGAAAG  TGAAAGTCGCTAAGGTGATACTCGGGGGACGGGAAGCCTGCCTTCTTAGAC  AGGCACACGTCGAGGAGTGGACATGGT<u>AGG</u>CTAGCAGATCTTTTT</p>
<p>Pebjah virus  Accession# AKI29935.1</p>	<p>TGACTACGCG<u>ACCGG</u>TACATATCAGTCCTCTTGAGCTTGACCTTGCTTTTGT  CCTCTACCGTCACAAGATGCGTGTCTTCTGATGGCGATGTGAAGTCTTATGC  GCCCTCAAGTTGGATGAGCAAAGTTAAAGAGATGATTCTGGAACCAAGCTA  CGTTGTCAACATTTCCATTTGCGGAGCGTTTGATATTCAGAATAATACCCACT  GGTTCAGACCATGCGACAGTTTTAAACAAAATATCACAGGCAACTGTAATA  ACGAGACCGCTAGATGCTCCGCCTTCCTCAACAACCTTCCATGTATGCTGCA  CAATTACACTGGATCTCATATAAACCATACTCAGGTCCTTCTCGAAACCTAC  TTGGCGGTTCCGTTGTTGACTCATTTGCTCTCTTACTACGCGGCGACCACTGC  AAGTTTCCCTCGATTTACATTCTTTGGTATGCTTGAGGTTCTGCATACTACTA  CTTCTCTCCCTCTTTTTTTTTTTTTCGCTCCCTCGCACTCATCTTCTGTGTATAT  TTCTGAGGCGGATCATAACTAAGTGTATGGCTCTTCGGTATGCGTGGACGCG  CCATACCAATTTTATAATAGATCAGAAGGGCCGGTTGTTGTCGAATCACGAC  GATGTTCTTGTGAGCGATCAAGGCCAAGTGAAATTGGGAGATCATCGGGTTG  TTGTTGCCAAAGTCATTCTCGGTGGAAGGGAAGCCCAACTTCTCCGGGAAAG  TCATGTGGAAGAATGGGCATGGT<u>GAG</u>CTAGCAGATCTTTTT</p>
<p>Mikumi yellow baboon  virus 1  Accession# YP_009067059  .1</p>	<p>TGACTACGCG<u>ACCGG</u>TAAACAAGTGCTATAGAAATTGGGAGCCGTTCTCCATG  CCATCACCGTCCACACTCAGCCTTTGCACCTTTCTGCTGCTTTTGACATCTTCT  TTGTCAGACATGGCGGATAATGCCACTTCTCATGATCCAGTCACCGTCTGGT  CCGACATATTCAGCAACCTTATGAGCCCTTCCTATGTTGTGAATATATCTATT  TGCGGGGAGTGTCCATACAGAATGATACACATTGGTACAAACCATGCACA  GCCGCAGAGATTGGTAACGCCACTAAGAACGATGCAAACCTACACCAAGGTG  AGTAGCCTGCCCTGTATCCTGCACTCTTATACAGGAGTGACAGTGAACCATA  CAAAGGTGTTCTTGAGACTTACCTGGCTGTCCCGCTGCTCACACACATGCT  GTCTTACTTCTGCGCTACGACGGCTGCTTTTCTTGATTTCACTTTCTTTGGAGG  CCTTGCGGGGGCGGCATATTATTATCATTCTCCTGCTCTTTTGCTGTACACAC  CCTTGGCCCTTATTTTCTGGTTGTTTTATCCGGCGCTTGACATTGAACATCC  TGGCGTTGAGATTGCGATGGACCCGGCATAACCAATTTTATAATAGACCAGA  AGGGACGGTTGTTTGTGAACCATGACGACGTCTTGATAGAGGGACCAAACG  GTGTCAAACCTGGCTGATAAGGAGGTTCCGGTTCGCAACCGTCGTCCTGGGGG  GCCGCAAGGCACATCTTCTCCGCAGCGCCCATGCAGAAGAATGGTCCTGGT  <u>AGG</u>CTAGCAGATCTTTTT</p>



<p>African pouched rat arterivirus Accession# AJG06163.1</p>	<p>TGACTACGCG<u>ACCGGT</u>GCCGTCCCGTATTGCCATGCAGTTGGAGACCACAAT CTTATGCGCGATAGGAATACACCTTGTTCAATGATTTGCTTGCGGGGGACGC GGTACCTGAGTTCCATGCTCAGTAGTCTGCAATGGGTCGTTTTCTGCGTGATC TGC GTTTGCTGTGCCAGCTCTGGGGTGGCAGCTTCTGGAAACCTCACGTCTGT TACGCATACTTGGA CT CATAATTTGACACTCTGTGCGTTGAATAACACAGAG AATGCGACAAAACGCTTCCAACATGTTGTGGAGGCATTTCGCGGTGTCCCTC TGGTGACACATGTGGTGTCA TTGTTTTCTTCACAACCGCGAGCTTCCTGGAT GCCGCCGCCTTTGGTCTTGCTTCATGGTATACCTTCCAAGGCGATGCTATTGT GCTTTGTGGGTTGTATGGGCTCTGCGGAGCAATAGCTCTGTTTCATCGCCAGTT GGCGGGCTGTCTTGA ACTGCCTCGCCTTTAGGTATGCCTGTACGCGGCGCAC AAACTTCCTCTTGACTGACAAAGGGGCGGTGTGCCATTGCAAGAGCGGTA CGTGGTGATGCAGGGAAGCCAGGCTGTTCTTCCTGGGGGTCAAAAAGTTACC CCGAAAGCTGTTATTCTTGAGGGGCGGGAGGCCAAGTCACTTAACAGTATTA CGGCTGAACACTGGAGCCCC<u>TGAG</u>CTAGCAGATCTTTTT</p>
<p>Hedgehog arterivirus Accession# QRL06414.1</p>	<p>TGACTACGCG<u>ACCGGT</u>TGTTTGAAATGTTTGCTGGGGTTGCCCCACACGTTG ATGAGGGGATTACCAAGTAGCTTCGCAGTGTGGTGTTTTTCAATTCTTTTTAT TGCGAGTGTCCCCGCCGGGGTCAACGCTACGA ACTATAGGCTT TTTACAAATCTCACCTGTGCGCGTTGAATGGGAGCAGTAATGCATATTTTA AGTACCTTTCTGAAGCTGTTTTAGTGCCCCATCCTCAGTCAAATCATCAAC CAAAAGTTCAAACTACAGCCTCTTTATCGACACAGCCTGTTTTACCATAG TTGCAGCTTTCCTGTTTGCCGACCATAACCGCACGGCTTCTCGGCAGTATTTAT GCATGTATTGCTTTGATGGCCTTGAGTA ACTTCGCCTGGAGGTTCTTTAACA CTGTGCACTTGAGATACGCATGCACACGCTTTACGTCATTTATACTTACG ACTAAGGGGGCCGTTATCCGGTACTCCTACCCGTATCTGCTGCACAAGCAAA AACAGGTGCTCTTGCTGATGGGACCATGGTTGAACCCAAGCACATTTTGTC AGGGGGTCGGTTGGTTACATCCGATACGGGTATTGAGGCGGAATTGTGGGC <u>GTAAG</u>CTAGCAGATCTTTTT</p>
<p>Olivier's shrew virus 1 Accession# ASA49508.1</p>	<p>TGACTACGCG<u>ACCGGT</u>AAATGCCTGAATAATTCCGCTCGGCCGCTGACACTT TGGTCTGCATTGCCATTCTTTTTCATATTCTTGTTGGTGCGGTGGCGTGCAAGTG GGGATCGTCGGGGCCAGCAACACAACCTCTCACAGTCTCAAGTATTACTTGA TCCATAACATCACCTCTGCGAATTGAATACAACCGCGCTGCCCGGGGGTTA TTCCTTCACCTATGTCGAGGAGTATTGGGTGATCGCGCCATTCA TTGTGCTATA TTATGGGCTTCACTGCAAAAACACTCAGCCTGTCCTGCGATCTCTTGGTGGTG GGTCCATTGTTGGGGTTGCCGCCACATGAAAGCTTATTATTTGATGGTTAT GCTTATTCCA ACTTCTGCCATCCTTCTGGGAGCCTGGCTTTACCAGGTGATTA TTACCTTCATGACATGGCGGCACGCCTGTACCCGCCACACTTCATTCGTCAG GAGTAGTGACGGCCAACTGGGAAAAATTA ACTCACATGTGCTGCTTGTA GGGCGGTAAAGCTCTTACCAACAACGGCTGGGTCAAACCCGACCTTGTGGTT TTGAAGGGGCGGAAAGCGGTTGAAACACACTCTGTGCCGTGTGACCACTAC GCATA<u>AG</u>CTAGCAGATCTTTTT</p>

<p>EAV (ARVAC) Accession# ACE82280.1</p>	<p>TGACTACGCG<u>ACCGG</u>TTTGTCTATGATTGTGCTGCTCTTCCTTTTGTGGGGCG CACCTTCACATGCCTATTTTTCATATTATACAGCTCAGAGATTCACTGACTTT ACACTCTGCATGCTGACAGATAGGGGGGTTATAGCTAACTTGCTCAGATACG ATGAGCACACCGCCCTCTACAACTGTTCCGCGTCCAAGACGTGTTGGTACTG CACTTTTCCTGACGAAAAAATCATCACGTTCCGGGACTGATTGCGACGATACT TACGCGGTCCCCGTGGCTGAGGTCCTGGAGCAAGCCCATGGCCCCCTACGGG GTTCTGTTCCGAGATGTCCCGCCCTTCATATATTACGGAAGAGAATTTGGGA TTGTCGTCCTGGATGTCTTTATGTTTTATCCGGTGCTGGTGCTCTTCTTCCTCA GCGTCCTGCCTTACGCGACCTTGATTTTGGAGATGTGCGTCTCCATCCTTTTT ATTATCTACGGAATCTATTCCGGTGCCTATCTCGCGATGGGAATTTTTTCAGC TACACTTGCTATACACAGCATAGTGGTGCTGAGGCAGTTGTTGTGGCTTTGTC TGGCTTGCGGTACCGCTGCACTCTGCACGCATCTTTTATCTCTGCAGAGGGT AAAGTGTATCCCGTTGATCCCGAGCTGCCTGTTGCTGCAGCAGGGAATCGCC TCCTCGTGCCCGGTGCGCCCCACCATAGACTATGCAGTGGCGTATGGATCAAA GGTCAACCTGGTGAGACTCGGAGCGGCGGAAGTTTGGGAGCCCT<u>AGG</u>CTAG CAGATCTTTTT</p>
<p>EAV (F20) Accession# ABR92874.1</p>	<p>TGACTACGCG<u>ACCGG</u>TCTCAGCATGATTGTCCTCCTCTTCTTGTCTGTTCTGGGGAG TGCCCTCTCACGCCTATTTCTCATACTACACAGCCAGCGGTTACCGACTTC ACCTTGTGTATGTTGACAGATCGCGGCGTGATTGCAAATCTGCTCAGATACG ATGAGCATACCGCATTGTATAATTGCAGTGCCAGCAAGACCTGCTGGTATTG CACATTCCTGGATGAGCAAATCATAACATTCGGGACTGGCTGTAACAACAC ATATTCTGTGCCTGTTAGTACCGTCTTGGAACAAGCGCATGGCCCCTACAGC ACGCTTTTTGACGACATGCCCCCATTCATTTACTATGGAAGGGAATTTGGTAT TTTCGTCATGGATGTGTTTCATGTTTTACCCCGTTCTCGTCTCTTTTTCTTGTCC GTGCTTCCGTACACCACTTTGATCCTTGAAATGTGTGTGAGCATATTGTTGT CGTCTACGGACTTTACTCTGGGGCGTATCTTGCCATGGGTATTTTTGCTACTA CGTTGGTGGTCCATTCAATAGTGGTGTTGCGCCAACCTTCTCTGGTTGTGCATG GCCTGGCGGTATCGGTGTACCCTTCATGCCAGTTTCATTAGCGCGGAAGGCA AAGTCTATCCAGTCGATCCAGGGCTTCCTATCGCGACACTCGGAAATCGCTT GTTGGTGCCTGGGCGGCCAACGATCGATTATGCGGTGGCGTATGGGTCTAAA GTTAACCTTGTCAGACTTGCGCGTCTGAAGTGTGGGAACCC<u>TGAG</u>CTAGCA GATCTTTTT</p>
<p>EAV (GB_Glos_2012) Accession# BAQ56335.1</p>	<p>TGACTACGCG<u>ACCGG</u>TCTCTTTATGATAGTGCTCCTGCTCTCATTCTGGGGAG TTCCATCTCATGCCTACTTCTCATACTACACGGCACAGCGCTTTACAGATTTT ACTCTCTGTATGTTGACGGATAGAGGTGTCATAGCCAACTTGCTCAGATATG ACGAGCACACAGCGTTGTATAATTGCAGTGCGTCCGCCGATTGTTGGTATTG CACGTTTCTCGACGAACAAATCATTACTTTCCGTACCGGGTGAATGACACG TACAGTGTCCCAGTCAGCGTTGTCCTCGAACAAGCGCACGGCCCATACAGC GTCCTGTTTGACGATATGCCCCCTTTCAATTTATTATGGGAGGGAATTTGGTAT TTTTGTGATGGACGTTTTTCATGTTCTACCCAGTTTGGTGCTGTTTTCTTTCT GTTTTGCCTTACGCTACATTGGTCCTGGAATGTGCGTTTCAATCCTCTTTGTG</p>

	<p>ATTTACGGGATCTATTCTGGGGCTTATTTGGCTATGGGCGTGTGTTGCTGCCAC  CCTGGTCGTTACAGTGTGGTGGTTCTCAGACAATTGCTCTGGCTCTGTTTGG  CATGGCGGTACCGCTGCACCCCTCATGCGTCTTTTATATCCGCAGAAGGCCG  GGTCTACCCCGTCGACCCCGGTCTGCCTATTGCGACAGCAGGCAACAGGCTG  CTCGTTCCGGGCCCGCCGACTATAGACTATGCGGTTCGCATACGGTAGCAAG  GTGAATTTGGTGAGACTCGGCGCGGCGGAGGTTTGGGAGCCTTAAGCTAGC  AGATCTTTTT</p>
<p>Wobbly possum disease  virus  Accession# YP_009130637  .1</p>	<p>TGACTACGCGACCGGTAAGGCGCTGATTGACCTCACGTACGCCAACCTGAC  GATGGAAGTGGGTCACCAGATCAACGTGAGAGAGGAGAATGGCACGTACG  CGCAGGCCGCGGCGCTGCTCTTTGCCAGCATCGCCTCAATGCCTCACTTCAC  GCTTGGTTCTACCCGGTCAAGCGGGTCAGTGTCTTTATCACCATAATAAG  ACCGACCACTGCTTCGGGGTCAGGCTTCACATCGCTACACACTTTTGTAAAC  AGACGAAACTTGAGGTCAATTGCATAAATGACTACCTCCACACATGCCAAA  TCCCTCTTTGTGCGCATGGTAACCTTCTCTGCGTTCACCCCATGTGAGGTGT  AATCCGTGGTTTGCTAGAACTTCTTTTTCGATATGTACTTGCGCTCACTGGC  TCTTTCTGACAAGCAACGGTACCACAAGTATTTGGACTATCACGCGCACTTG  TCCTTTGCTGCCCCCATCACTTGTCTTATACTCACAACCTTATGTGATCTTCACA  CTGATGGCTCGGGTGAGAATCTCTGGCTAAGCTAGCAGATCTTTTT</p>
<p>EAV (PLD76)  Accession# AAA92913.1</p>	<p>TATCACATGCACCGGTTGTCTATGATTGTTCTGTTGTTCTTGCTGTGGGGAG  CTCCAAGCCACGCCTACTTCTCATATTATACGGCGCAGAGATTACTGATTTT  ACTTTGTGCATGCTGACCGATCGGGGCGTTATCGCTAACCTCTTGCGGTATG  ACGAACATACGGCACTCTATAATTGTTCTGCGAGCAAGACATGCTGGTATTG  CACTTTTCCCGATGAGCAAATAACTACTTTTGGGACAGATTGCGATGACACT  TATGCGGTTCCCGTGGCTGAAGTGTTGGAACAGGCCACGGCCCATACGGTG  TGTTGTTTGGAGATATGCCCCCTTTTATATACTATGGCAGGGAGTTTGGTATT  GTTGTTATGGACGTGTTTCTATCCAGTTCTGGTCCTTTTCTTTCTGAGC  GTCCTTCCGTATGCGACTCTCATTTTGGAAATGTGCGTTAGCATTTTGTATT  ATATATGGGATCTACTCCGGGGCTTACCTTGCTATGGGGATTTTAGCGCTAC  CCTCGGATACATAGCATAGTCGTTCTTAGGCAACTTTTGTGGCTTTGTCTTG  CTTGCGGTATAGGTGCACTCTCCATGCCTCCTTCATATCTGCGGAAGGGAA  GGTTTACCCCGTCGACCCAGGGCTCCAGTCGCAGCCGCTGGGAATAGGCTC  CTCGTTCCAGGTCGGCCTACCATTGATTACGCGGTGGCTTATGGTTCCAAAGT  GAACTTGTTTCGGTTGGGCGCTGCGGAGGTTTGGGAACCGTAAGCTAGCAG  ATCTTTTT</p>

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**Supplementary Table S2. Synthesized DNA for generating plasmids encoding pig TRIF protein**

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<p>pig TRIF</p> <p>Accession#</p> <p>NP_001302667.1</p>	<p>TTTTGGCAAAGAATTCGCCACCATGGCGAATACATCACCTTCTCTGAGCGGGGCATTT</p> <p>AATATACTGTCCGCAGCCGGGCAAGGGAAGCTGTTGTATTTGAAGCACAAGCTCAAA</p> <p>ACACTGAGGCTGGGATGTCAGGGGGCTGACTTGCTGCACGCAATGGTTCTCCTTAAAT</p> <p>TGGGGCAAGAGACAGAGGCACGCATTTCCCTCGAAGCCCTTAAAGCCGACGCTGTTG</p> <p>CTCAGCTCGTCGCGCGGCAATGGGCGGGCGTGGATAGTACTGAGACGCCTGAAGAGC</p> <p>CCGCAGATGTTAGTTGGGCGGTTCGCACGCGTCTACCACCTCTTGGTCGAGGAGAACT</p> <p>TTGTCCAGCCTCAATGCGGGAGGAAGCTTATGGCGCAGCACTCCGGGCCTTCAGGAG</p> <p>TCGGGATGATCACCAGCTCGGAGAGTTGCAGGAGGAGGCAAGGGATCGGTGTGGAT</p> <p>GGGATATCCTTCGGGACATGGAGGATGTTCAAGCGCTCCGCAGTGACCTGGGTTGTCC</p> <p>TAGATTGTCTCTGCGTTGCCCTCTCCTCCGCGCAGCCATCCACGGCCGATTGAAGATT</p> <p>TGTCCGGCTGGTCACGCGGACATAGCTTGCGCTCCACGGGGAGCCCAGCTTCCTTGGC</p> <p>CTCAAATCTCGAAATCAGTCAAAGCCCAACTATGGCGTTGCTGAGCCTGCATCACTCT</p> <p>CCTCACGGTCCCTCAAAGTTGTGCGATGAACCGCGCGTAGTCCAGTTCCGGAACCA</p> <p>GCCCCTATGGGATGTCAGGAACCCGAAGAAATGAGCTGGCCGCCGTCTGTTGAGGGA</p> <p>GCAAACCTCTCTGTGCAGAGTAATTCCCCCGTTCTCGGGACCTGGAGGTGGCGGCAG</p> <p>ATGCGAGCCCCGCGAGTCTCCAGAAGCCCCAGAGGCGCCAGAGACAAGCACTCAT</p> <p>TACCCCGTGGAATGTACGGAAGAGCCGGCCGCGCCGAAAAGTCTCCCTAGTCCTTCC</p> <p>AGGAATGCGAGTCCGGATGTTACGGACCAAAAGCCACCGCTCCACTTGTCTGAAGAG</p> <p>GATACCACGTATCCTACTGCGCAGCCACATCCTCCTACACCCTCAGTGCCCCAAACAT</p> <p>CCCCGCCATTCCCGTCCCCGTCTACGCTCTCTAGCGCGCCACCTACGGTGAGTAACCC</p> <p>TTCCCCGCCTGCCCCGAACTCGAATTGAGCGAGCAGAAATTCTACAATTTTGTGGTG</p> <p>CTGCATGCCGGCGCCGACGAACATATTGCCCTGAGGGTGAGGGAGAAGCTCGAATCT</p> <p>CTTGCGGTTTCGCGATGGTTCGACATTCTGTGAGGATTTCCAGGTCCCCGGTCGCGGTC</p> <p>AGCTGAGGTGCCTTCAAGACGCTCTGGACCATAGCGCGTTTACCATCCTGCTGTTGAC</p> <p>CCCCAACTTTGACTGTGCGCTGAGCCAACATCAAGCCAATCAATCCTTGATGAGCAGC</p> <p>CTGACACGGCCAGGTTGGCAAGATTGTGTTATACCATTTCTCCCGTTGGAGTCCTCCCT</p> <p>GGCACAACCTCTCACCTGGTACGAGCAGCTTGTTGAGCTCACTGGTGTGGCTTGACGAA</p> <p>CACAGCCAGATCTTCGCACGCAAAGTCGCCAATACCTTCAAACCGCAGAAACTTCGG</p> <p>GCTAGAAAGGCAAAATGGCGCAAAGAACAAGACGCCAGAGCACTCCGCGAGCAGTC</p> <p>CCAGCACCTCGAGGGCGAACGCCAACAGGCTGCGGCATGGGGTGCTGCCTGTTTCAGC</p> <p>TTATATACACAGCTACCTTTCTTACCAGACACAATTGGAAAAGCTGCAAATGGCCTTT</p> <p>GCCAGTTACATGCCGTTTCGGAGCCCAGCTCCCTAGTGCTCCCCAGCTCCTTTCGGCG</p> <p>AACAGGGACCGCTGGGCGCTCCACCGCCTTTTCCACCTGGCCCCGTTTGCAACCCCC</p> <p>TCCAGTTAGTCCCTGGTTGGCGGGAACACCTCCGCCGGCATTCCCCAACCTCCGGCT</p> <p>TTTCTCAACCACCAGCGTTCCCTCAACCTCCTGCGTTTCCCCAACCAACCCGCTGCAA</p> <p>GCCAGTCCAGTCCTGTCAATCCACAGTCAAGTGGAGTCCAACCTTTGATAATCCACCA</p> <p>CGCTCAGATGGTGCAGCTGGGACTGAATAATCATATGTGGAATCAAAGAGGGACTCA</p> <p>GGCCCCGGAGGATAAGTCACCGGAAACGCAAGAGCAGAAGTTGATCTCCGAAGAAG</p> <p>ATTTGTAAAGCTAGCAGATCTTTTT</p>
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Supplementary Table S3. The oligonucleotides used to quantify ISGs mRNA levels

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Primer	Forward (5' - 3')	Reverse (5' - 3')
<i>Mx1</i>	TACGACATCGAATACCAGATCAA	ATGGTCCTGTCTCCTTCGG
<i>Isg15</i>	GACTGCATGATGGCATCGGA	TGCACCATCAACAGGACCAT
$\beta$ -actin	TGGATAAGCCTGCAGTCACAG	GCGTAGAGGTCCTTCCTGATGT

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