

Suppl. Table S1 RT-qPCR Protocol for MIDV and WSLV

S1.1 Primer sequences

MIDV	MIDV_PA_f	ACCATGCTAACGCGAGGGCGTTTTTCGCA	
	MIDV_PA_r	CGGCGCGCTGCCTATRTCCAGGAT	
	MIDV_PA_p	TAATWGAAGGAGAGGTGGAAGTGGGC	FAM
WSLV	WESSV_f	GAAAGGAGTAGAAGAAAGGAGATTC	
	WESSV_r	TAGGTTCTTCACTCTAGCCGCTA	
	WESSV_p	CAACAAAGGGGATGAATAAGTCTCG	HEX

S1.2 Primer/Probe mixes

MIDV	16 µl	MIDV_PA_f (100 µM)
	16 µl	MIDV_PA_r (100 µM)
	2 µl	MIDV_p_Probe FAM (100 µM)
	166 µl	0.1 x TE Buffer
	200 µl	total
WSLV	16 µl	WESSV_f (100 µM)
	16 µl	WESSV_r (100 µM)
	2 µl	WESSV_p_Probe HEX (100 µM)
	166 µl	0.1 x TE Buffer
	200 µl	total


S1.3 Master-Mix

Processing steps	Master Mix	Volume
1.	RNase free water	3.5 µl
2.	2× RT-PCR Buffer	12.5 µl
3.	Primer-Probe-Mix 1: MIDV-Mix FAM	0.5 µl
4.	Primer-Probe-Mix 2: WSLV-Mix HEX	0.5 µl
5.	Primer-Probe-Mix 4: b-Actin Mix Cy5	2.0 µl
6.	25x RT-PCR Enzyme Mix	1.0 µl
	Total Volume Master Mix	20 µl
	Total Volume	25 µl

AgPath-ID™ One-Step RT-PCR Kit (Ambion)

S1.3 Cyclor program

Cyclor program		
Reverse transcription	50°C	20 min
Activation Taq	95°C	15 min
Denaturation	95°C	30 sec
Annealing	55°C	45 sec
Elongation	68°C	45 sec



45 cycles

Suppl. Table S2 Generated genome sequences of all six viruses

>Crimean-Congo hemorrhagic fever virus segment L (animal origin)

TCTGCAGATACTCCCCGTTACCCACGCCAACACAGAGAGCTCCAGTAGTGGTCTTTCCCTTTG
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Crimean-Congo hemorrhagic fever virus segment M (animal origin)

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TGGAAAATTTACCGGCAGGCGTTTGGGAAAAAGAGGAAGACCTAACAACTTCTGCCATCAG
GAGTGCCAAAGTAACAGAAACTGAATGCCTTTGCCCATATGAAGCCTTAATGCTTAGAAAGCC
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GAGCTTGCAATTGAAGCTCCGTGGGGGGCAATCAATGTTCAATCAACTTTCAGACCAACAGT
TTCAGCCGCCAATATAGCACTTAGCTGGAGTTCAGTTGAACACAAGGGCAACAAGATCTTAG
TTTCAGGTAGATCAGAGTCAATTATGAAATTAGAAGAAAGAACTGGAATCAGCTGGTGTCTA
GGTGTGGAAGATGCCTCTGAGTCAAAAACACTCACCGTCTCTGTTATGGATCTGTCTCAAATG
TATTCTCCTGTTTTCGAGTACCTGTCAGGTGACCGACAGGTGGAGGAGTGGCCAAAAGCAACC
TGCACAGGTGACTGTCCAGAAAGATGTGGCTGCACTTCATCAACCTGCCTGCATAAGGAGTG
GCCGCACTCGAGGAACTGGCGCTGTAACCCCACTTGGTGTTGGGGGGTGGGAACTGGCTGCA
CCTGCTGTGGGCTAGATGTAAAGGATCTCTTTACAGACTACATGTTGGTTAAATGGAAAGTGG
AATATATAAAACAGAAAGCCATAATATGTGTTGAGCTTACTAGTCAAGAGAGGCAATGTAGT
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TTTTTGATTTGATGCATGTGCAGAAGGTAATGTCTGCAAACACGGTTTGTAAGCTGCAAAGCT
GTACTCATGGTGTGCCTGGAGACTTACAAGTCTACCATGTTGGCAACTTGTTAAAGGGGGACA
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GATGGGTGTGATTTAGACTATTTTTGCAACATGGGGGACTGGCCCTCATGCACATACACAGGG
GTGACACAACACAACCATGCTGCATTCATCAACATGCTTAACATTGAGACTGATTACACAAA
AACTTTCACTTTCATTCAAAAAGGGTCACAGCACACGGAGACACCCCTCAGTTGGACCTAA
AAGCGAGACCAACATATGGTGCAGGCGAAATCACTGTTCTAGTAGAAGTTGCAGATTTAGAA
CTGCACACGAAGAAAATTGAAGTGTGCGGTCTGAAATTCGCAAGTTTGTATGCTCCGGATGT
TATGCTTGCAGCTCCGGCATCTCCTGCAAAGTTAGGATTCATGTAAATGAACCGGATGAATTC
ACAGTACATGTAAAAAGTAATGACCCAGATGTTGTAGCAGCAGGATCAAGTCTCATGGCTAG

AAAGATAGAGTCTGGGGCCGACAGCACGTTTAAAGGCTTTTTCATCAATGCCAAAAAACTCTCT
ATGTTTTTACATAGTAGAAAGAGATTATTGTAGCAGCTGTACAGATGATGACACTCAGAAATG
TGTTGACATTAACTTGAACATCCACAGAGCATACTCATTGAACACAAAGGAACGATTATTG
GCAAGCAAAATGACACCTGTCCAACTAAAACAAGCTGCTGGTTGGAATCTATTAAGAGTTTTT
TTNATGGGCTTAAAAACATGCTGAGTGGGATCTTCAGTAATGTTTTCTTAGGCATGCTCCTGTT
TCTTGCTCCTTTTGTATTGCTAATATTGTTTTTCTTCTTCGGGTGGAGACGTCGCTAGATGCCTTA
AGTGCTGTAGAAGGACCAGAAAGCTGCTAAAGTATAAGCACCTTAGGGATGCGAAGAAGAG
AGAGTGTTACAAAAAAATCATTGAAAGGCTAAATGACCACCAAAAAAGGCAAAAGTCGAT
TGTTTGATGGAGAAAGGCTTGCAGACAGAAAAATTGCCGAACCTTTTTCAACTAAAACCTCATA
GGTTGACGAATCAGACAAGCTGTTTTCTGCCACCAATATTCATCTTTAATGTTGCTACATACA
TCTTCCCTAACCAACATGCCCAATTATCACATACCTGAACAGTGGAACCTACCTTAGATGAT
AACACACACCTGCTTGAACTCGCAACAGGAACGCAGAAAACGTTAGTGGATTAACGCTCTT
AATATCGTGTTTCCCTATTAACCTTAGCAATACG

>Crimean-Congo hemorrhagic fever virus segment S (animal origin)

TGTTCACTTCGATTTTGTCTCCATTGTTGCCTTGAGTGTTAGCAAAATGGAGAACAAAATCGA
AGTGAACAACAAAGATGAGCTTAACAAATGGTTTGGGAGTTCAAGAAAGGAAACGGGCTTGT
GGACACTTCACAACTCCTATTCTTCTGTGAGAACGTGCCAAACCTGACAGGTTTGTATCC
AGATGGCTGGTGCAACCGATGATGCACAAAAAGACATTCCATCTATGCATCTGCCAAGGTTTT
ATGAGGGAAACACCATAGAACTGTGCTCCTGATAGGCATGCACCTCGGGCCTGCGTTAGCCC
CACAGATATANTNAAAAGAGGCCTTGAGTGGTTCGAAAAAAACACAGGAACCATTAAG
TCTCTGGGATGAGAGCTACACTGAACTACTGGAAAGCTTGATGTGCTCCAAAATTTTGAACAG
CTTGCCAACTACCAGCAGGCTGCTCTCAAGTGGAGGAAGGACATAGGGCTTCCGCGTCAATG
CAAAACACAGCAGCCCTAAGCAATAACAAAGTCCTCTCTGAGTACAAGGTTCTGGGTGAGA
TTGTAATGTCTGTCAAAGAGATGCTTTCAGACATGATCAGAAGGAGGAACCTCGATCTCTCAA
CAGAGGGGGTGATGAAAACCAAGGGGCCAGTAAGCAAGGAGCACATAGAATGGTGCAG
AGAGTTTGTCAAGGGCAAATACATAATGGCCTTCAATCCACCCTGGGGTGATGTCAACAAGTC
CGGCCGCTCAGGAATAGCACTAGTTGCTACAGGTCTTGCCAACTTGCAAGAACAGAGGGAA
AGGGAGTTTTTGAGGAGGCCAAAAAGACGGTGGAGGCCCTCAAGGAGTACCTTGACAAACA
CAAAGATGAGGTAGACAAGGCCAGTGCTGATAGCATGGTAACAAACCTCCTCAAGCACATCA
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CACCCCTTTCAGCTCCTTCTACTGGCTCTACAAAGCGGGCGTGAATCCAGAAACCTTCCCCAC
TGTCTCTCAATTCCTNTTTGAGCTGGGAAAGCAGCCAAGAGGCACTAAAAAANTGAAGAAG
CACTTCTGAGCACCCCAATGAAGTGGGGAAAGAAGCTTTATGAGCTCTTGCTGATGATTCTT
TCCAGCAAAACAGGATCTACATGCACCCTGCTGTATTGACAGCTGGCAGAATCAGTGAGATG
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ACCAAGTCAATTCTGAACCTCCGAACAAATAGTGAACTAACAATCCCTGTGCCAAAACGAT
TGTCAGCTTTTCGAGGTTGAGAAAACAGGATTCAACATACAGGACATGGACATTGTTGCCTC
TGAGCATCTGCTGCACCAGTCTTGTGTTGGCAAGCAGTCCCCGTTCCAAAATGCTTACAACGT
CAAAGGCAATGCCACCAGTGCCAACATCATCTAAATCTCCAAAATTTTTTTTTTATTGTTCCAG
TTTGTGCTTCTGCTTCTAACCACAACCTAACAACCGCATTTGCTTTTTNNAGTTACCAAAACCTA
TTTTATCTTGCTTTATTTCAATTTTACTTCATGCTATTATATTCTTCTTTTACATATTAAGGGCTGT
GCGGCAACGATATCTTGACAG

>Rift Valley fever virus segment L (animal origin)

ACACAANGGCGCCCAATCATGGATTCTATATTATCAAAACAGCTGGTTGACAAGACTGGTTTT
GTTAGAGTGCCAATCAAGCATTATGACTGTACAATGCTAACTCTGGCACTCCCAACATTTGAT
GTCTCCAAGATGGTAGATAGAATTACCATAGACTTCAATTTAGACGACATACAAGGAGCATC
TGAAATAGGCTCAACTTTGCTACCCTCTATGTGATAGATGTGGAAGATATGGCCAATTTTGT
CACGATTTACCTTTGGCCACTTAGCTGACAAGACTGACAGACTCTTAATGCGTGAGTTTCCC
ATGATGAATGACGGGTTTGATCATCTGAGCCCTGACATGATTATCAAACTACATCTGGCATG
TATAACATCGTTGAGTTCACCACCTTTAGGGGGGATGAAAGAGGTGCATTCCAGGCTGCCATG
ACTAACTCGCTAAGTATGAGGTTCTTTGTGAGAACAGATCTCAGGGCAGGACTGTTGTTCTT
TATGTTGTTAGCGCCTACCGGCATGGTGTGTTGTTGTTCTAATTTGGAGCTAGAGGACTCTGAAGCA
GAGGAGATGGTATATAGGTACAGACTTGGCCTTAGTGTGATGGATGAGCTAAGGACCTTGTTCC
CCAGAACTGTCATCCACAGATGAGGAACTAGGAAAGACTGAGAGAGAGTTGCTAGCCATGGT
CTCCTCCATCCAAATAAATTGGTCAGTCACAGAATCTGTGTTTCTCCTTTAGCAGAGAAATG
TTTGACAGGTTGAGATCTTCTCCTCCCGATTGAGAGTACATCACGAGGATAGTGAGCAGATGC
CTCATAAATTCTCAAGAGAACTCATCAATAATTCTTCTTTGCTGAAGGGAATGATAAAGTT
TTGAGATTTTCAAAAAACGCTGAGGAGTGTTCCTTGGCAATAGAGAGAGCTTTAAATCAGTAT
AGGGCAGAAGACAACCTTAGGGACCTAAATGACCACAAGTCTACTATTCAGCTGCCTCCCTG
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AGACCATCCCATGTGCAACCTGTGGAGAGAAGTGGTTACCTCTGCAAATCTAGAGGAGATTG
AGAGGATGCACGATGATGCAGCGGCAGAACTTGAGTTTGGCCTTTAGGGGTGAAGGACAGG
CCAGATGAAAGAAACAGATACCATAGAGTCCATCTGAATATGGACTCAGATGATAGTGTCTA
CATAGCTGCTTTAGGGGTTAATGGAAAGAAGCATAAAGCAGACACATTAGTGCAACAAATGA
GAGACAGGAGCAAACAGCCCTTCTCTCCAGATCATGATGTGGATCACATATCTGAATTTCTCT
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CAGTTTAATAGGAGCTGAGCTATCAGCTTCTGTAAAGCAACATGTTAAGCCTAACTATTTTGT
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ATGCCTCATAATGGGCAAACTCTCTTTATTAACCTTTTGGGAAGACAAAGCAAACTGAAG
AGTTACAGACTATTGCAAGATATATAATCATGGAGGGCTTTGTCTCGCCCCCAGAAATCCCAA
AACCTCACAAGATGACCTCTAAGTTTCCCAAGGTTCTCAGGTCAGAGCTGCAGGTTTACTTAT
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AGCCCCCAAGGCTTAGGAATGTCACAATACTGTGAGAGCAGCCCATGGGATCTGAGTGTG
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CTAGAGACAGGTTCGGTGCTCTAGCAAAGACTATGATTTATCAAAGGTTCTCTTCAGAACTCTA
CAGAGACCAGAAGAGAGCATTAGGATAGATGATCTGGAGTTATATGAGGAGACAGATGTGG
CGGATGACATGCTAGGCTAAGACCAATAAGCAAAGTCAGGCTTAGATTTAGGGATACTACGC
TAGTATTGGAATCCATGTGGGTTCTGATACTAGCATAGTGCTACAATATTGGGCGGTCTTTGTG
T

>Rift valley fever virus segment M (animal origin)

ACACAAAGACGGTGCATTAAATGTATGTTTTACTAACAATTCTGATCACGGTTCTGGTGTGTG
AGGCGGTTATTAGAGTGTCTCTAAGTTCCACAAGAGAAGAGACCTGCTTTGGTGACTACACCA
ACCCAGAGATGATTGAAGGAGCTTGGGATTCCTCAGAGAGGAGGAGATGCCAGAGGAGCT
CTCCTGTTCCATATCAGGCATAAGGGAGGTCAAAACCTCAAGCCAGGAATTGTATAGGGCATT
AAAAGCCATCATTGCTGCTGATGGCTTGAACAACATCACCTGCCATGGTAAGGATCCTGAGG
ATAAGATTTCTCTCGTAAAGGGTCCTCCTCACAAAAAGCGGGTGGGGATAGTTCCGGTGTGAGA
GACGAAGAGACGCTAAGCAAATAGGAAGAGAAACCATGGCAGGGATTGCAATGACAGTCTT
TCCAGCCTTAGCAGTTTTTGTCTTGGCACCTGTTGTTTTTGTGTAAGACCCTCATCTCAGAAAC
AGACCAGGGAAGGGGCACAACCTACATTGACGGGATGACTCAGGAGGACGCCACATGCAAAC
CTGTGACATATGCTGGGGCTTGTAGCAGTTTTGATGTCTTGCTCGAAAAGGGAAAAATTCCCCCT
CTTCCAGTCGTATGCCCATCACAGAACCTACTAGAAGCAGTTCACGACACCATCATTGCAAA
GGCTGATCCACCTAGCTGTGACCTTCAGAGTGCTCATGGGAATCCCTGCATGAAGGAGAAACT
CGTGATGAAGACACACTGTCCAAATGACTACCAGTCAGCTCATTACCTCAACAATGACGGGA
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CCCCAGGATCCATGCCTAGTGCATGGCTGCATAGTGTGTGCTCATGGCCTGATAAATTACCAG
TGTCACACTGCTCTCAGTGCCTTTGTTGTTGTGTTTCGTATTTAGCTCTGTGCAATAATTTGTTT
GCCATTCTTTATAAAGTTCTCAAGTGCCTAAAGATTGCCCCAAGGAAAGTTCTGGATCCACTA
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ATCAATCAGGTGAACAGGGAAATAGGATGGATGGAAGGAGGCCAGCTGGCTCTAGGGAACC

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TGTCTCATATGCATCAGCATGTTTCAGAACTGATTCAGGCAAGCTCCAGAATCACCACCTTGCTC
CACAGAAGGTGTCAACACCAAGTGTAGGCTGTCTGGCACAGCATTAAATCAGGGCAGGGTCAG
TTGGGGCAGAGGCTTGTGTTGATGTTAAAGGGGGTCAAGGAAGACCAAACCAAGTTTTTTGAAG
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AGCCCTAAATGTCTGAGCTCAAGGAGATGCCATCTTGTCTGGGGAATGTCATGTGAATAGGTGT
CTGTCTTGGAGAGACAATGAAACCTCAGCAGAATTTTCATTTGTTGGGGAAAGCACGACCATG
CGGGAGAACAAGTGTGTTTGTAGCAGTGTGGAGGATGGGGATGTGGGTGTTTCAATGTGAACCC
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CAGAGGGCATTTCAGGCTCAAACAGCTTTTCCTTCATTGAGAGCCCAGGCAAAGGGTATGCA
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AGCCCATGATAGATCAGTTGGAGTGCACAACAAATCTGATTGATCCCTTTGTTGCTTTGAGA
GGGGCTCTCTGCCACAGACAAGGAATGACAAAACCTTTGCAGCTTCAAAAGGAAATAGGGGT
GTTCAAGCTTTCTCTAAGGGCTCTGTACAGGCTGATCTAACACTGATGTTTGACAATTTTGAGG
TGGACTTTGTGGGAGCAGCCGTGTCTTGTGATGCCGCCTTCTTAAATTTGACAGGTTGCTATTC
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GGCTTGCTGCCACCAAGAAAGCCTCATAGATCAGTACGTGTAGAAGCAATATATAGAAATAA
GTAAACATAAGCAAATCTAATTATGTAAATATTGTACAGATGGGTCAAACCTATTGGGATATCC
AAGTTTAGAATCTTGTACAATAGTACTTTAGATGTAAGCTTAGTTGTAATTTGGGGTGGTGGGG
TGAGGCAGCAGTAGTCTCAAGTACATGTGGATATTCTAGTTAATGTGAATGTCTTTTGCCAGAT
TAGCTGGAATTAACTAACTCTTTGAAGTTGCACCGGTCTTTGTGT

>Rift valley fever virus segment S (animal origin)

TCCGTACAGTTATACGTATTACTAAAGGTTAACTGGTAACTGGGACACAAGACTCCAGCACA
GGACCACCTGAGCCACCTCCAACCACCACCAGCAAAACCAGCAAAAACCTTTTCAGAAACAT
ATTGATCCTAATAAGCTAGGCCATATGACTCACATTCAAGTGTGTTTCGGCTCCTGCAGGGGAG
CAAGAGAGGATATTTCTAATGCTGTAGTTCCAACTCAGCTCTCATTGATCTTATGGAGGGAG
AAGAAACGATGCTGCGCTCATCCACTCCCCTAGCATGATGGGGAGAAACAACTGGAGTTCCA
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GTTGAGGTAACTGGTAACTGGGACATAAGACTCCAGCACCACCACCCCAACCCCAATCCC
GACCGTAACCCCAACCACCCCTTTTCCCCAAACCCCTGGGCAGCCACTTAGGCTGCTGTCTTG
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AGCTTTCAAGAATTCTCTCCTCTTCTCATGGCTTATAAAGTTGCTATTCACTGCTGCATTCATTG
GCTGCGTGAACGTTGCGGCAACCTCCTCCTTTGTTCTACCTCGGAGGTTTGGGTGATGACCCG
GGAGAACTGCAGCAGATACAGAGAGTGAGCATCCAATATTGCCCTTAGATAGTCTTCTGGTA
GAGAAGGGTCCACCATGCCAGCAAAGCTGGGGTGCATCATATGCCTTGGGTATGCAGGGGAT

AGGCCATCCATGGTGGTCCCAGTGACAGGAAGCCACTCACTCAAGACGACCAAAGCCTGGCA
AGTCCAGCCAGCCAGGGCAGCAGCAACTCGTGATAGAGTCAACTCATCCCGGGAAGGATTCC
CCTCCTTTAGCTTATACTTGTTGATGAGAGCCTCCACAGTTGCTTTGCCTTCTTTCGACATTTTC
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GATAAGCAAACCTCTCGGACCCACTGTTCAATCTCATTGCGGTCCACTGCTTGAGCAGCAAACCT
GGATCGCAAGCTCTTGATTAGTTGTCCATTATTGTAATGTAGTGTGTTGTATCTCTAAAAGGGAG
CNNNGTGG

> Dugbe virus segment S (animal origin)

TCCCACAGTAACACCACNNGCCGGAGCTCTGCAGATCTCGCCCGGTGTGCTTACTTTGAAAG
AAGCAAGATGGAGAATCAGATCAAGGCAAACAATNAAAAAGAGTTTGATGAGTGGTTTAAA
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CTCAATCTTTTCTAATGCTCTGGTGGAGGCAACACGTTTCTGTGCTCCAATTTATGAGTGTGCTT
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CTAGAGGATGGGAAAGGCAATGAGCTCGTCCAGACTATGACAAAGCATCTGGCTCAAGCAGT
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> Dugbe virus segment M (animal origin)

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> Dugbe virus segment L (animal origin)

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>Nairobi sheep disease virus segment S (animal origin)

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>Nairobi sheep disease virus strain segment L (animal origin)

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>Nairobi sheep disease virus segment M (animal origin)

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>Middelburg virus (animal origin)

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TAGA

>Wesselsbron virus (animal origin)

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GCAGAGCTCCGGCAGGTGCTGGTGTT

Segment	Accession No.
L	NC_005301.3
M	NC_005300.2
S	NC_005302.1

Suppl. Table S3 Reference sequences used for the genome assembly (de-novo and map-to-reference)

3.1 CCHFV

3.2 RVFV

Segment	Accession No.
L	NC_014397.1
M	NC_014396.1
S	NC_014395.1

3.3 DUGV

Segment	Accession No.
L	NC_004159.1
M	NC_004158.1
S	NC_004157.1

3.4 NSDV

Segment	Accession No.
L	NC_034387.1
M	NC_034391.1
S	NC_034386.1

3.5 MIDV

NC_024887.1

3.6 WSLV

NC_012735.1