

Supplementary Information

Novel methods for the rapid and sensitive detection of Nipah virus based on CRISPR/Cas12a system

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Supplementary Texts

1. Seven candidate primer pairs targeting the conserved regions of *N* gene.

F1/R1:

F2/R2:

KY425646.1	TAGGAGTTATCAATCTAAGTTAGGGAGAGATG
KY425655.1	TAGGAGTTATCAATCTAAGTTAGGGAGAGATG
MK673563.1	TAGGAGTTATCAATCTAAGTTAGGGAGAGATG
MK673561.1	TAGGAGTTATCAATCTAAGTTAGGGAGAGATG
MK673560.1	TAGGAGTTATCAATCTAAGTTAGGGAGAGATG
MK673559.1	TAGGAGTTATCAATCTAAGTTAGGGAGAGATG
MK673558.1	TAGGAGTTATCAATCTAAGTTAGGGAGAGATG
KT163249.1	TAGGAGTTATCAATCTAAGTTAGGGAGAGATG
KT163248.1	TAGGAGTTATCAATCTAAGTTAGGGAGAGATG
JN808861.1	TAGGAGTTATCAATCTAAGTTAGGAAGAGATG
AY858110.1	TAGGAGTTATCAATCTAAGTTAGGAAGAGATG
MK673565.1	TAGGAGTTATCAATCTAAGTTAGGAAGAGATG
MK673590.1	TAGGAGTTATCAATCTAAGTTAGGAAGAGATG
MK673589.1	TAGGAGTTATCAATCTAAGTTAGGAAGAGATG
JN808857.1	TAGGAGTTATCAATCTAAGTTAGGAAGAGATG
MK673570.1	TAGGAGTTATCAATCTAAGTTAGGAAGAGATG
MK673564.1	TAGGAGTTATCAATCTAAGTTAGGAAGAGATG
AY988601.1	TAGGAGTTATCAATCTAAGTTAGGAAGAGATG
JN808864.1	TAGGAGTTATCAATCTAAGTTAGGAAGAGATG
MK673583.1	TAGGAGTTATCAATCTAAGTTAGGAAGAGATG
MK673578.1	TAGGAGTTATCAATCTAAGTTAGGAAGAGATG
MK673582.1	TAGGAGTTATCAATCTAAGTTAGGAAGAGATG
MK673577.1	TAGGAGTTATCAATCTAAGTTAGGAAGAGATG
KT163252.1	TAGGAGTTATCAATCTAAGTTAGGAAGAGATG
KT163255.1	TAGGAGTTATCAATCTAAGTTAGGAAGAGATG
KT163254.1	TAGGAGTTATCAATCTAAGTTAGGAAGAGATG
KT163251.1	TAGGAGTTATCAATCTAAGTTAGGAAGAGATG
KT163256.1	TAGGAGTTATCAATCTAAGTTAGGAAGAGATG
FJ513078.1	TAGGAGTTATCAATCTAAGTTAGGAAGAGATG
NC_002728.1	TAGGAGTTATCAATCTAAGTTAGGGAGAGATG
KT163250.1	TAGGAGTTATCAATCTAAGTTAGGGAGAGATG
KT163253.1	TAGGAGTTATCAATCTAAGTTAGGAAGAGATG
JN808858.1	TAGGAGTTATCAATCTAAGTTAGGAAGAGATG
JN808860.1	TAGGAGTTATCAATCTAAGTTAGGAAGAGATG
AY029768.1	TAGGAGTTATCAATCTAAGTTAGGGAGAGATG
AY029767.1	TAGGAGTTATCAATCTAAGTTAGGGAGAGATG
AJ627196.1	TAGGAGTTATCAATCTAAGTTAGGGAGAGATG
AJ564623.1	TAGGAGTTATCAATCTAAGTTAGGGAGAGATG
FN869553.1	TAGGAGTTATCAATCTAAGTTAGGGAGAGATG
AJ564622.1	TAGGAGTTATCAATCTAAGTTAGGGAGAGATG

KY425646.1	GAAGCTGTAAATAAAGATGTTGGATCAATTGGT
KY425655.1	GAAGCTGTAAATAAAGATGTTGGATCAATTGGT
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MK673561.1	GAAGCTGTAAATAAAGATGTTGGATCAATTGGT
MK673560.1	GAAGCTGTAAATAAAGATGTTGGATCAATTGGT
MK673559.1	GAAGCTGTAAATAAAGATGTTGGATCAATTGGT
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MK673590.1	GAAGCTGTAAATAAAGATGTTGGATCAATTGGT
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AY988601.1	GAAGCTGTAAATAAAGATGTTGGATCAATTGGT
JN808864.1	GAAGCTGTAAATAAAGATGTTGGATCAATTGGT
MK673583.1	GAAGCTGTAAATAAAGATGTTGGATCAATTGGT
MK673578.1	GAAGCTGTAAATAAAGATGTTGGATCAATTGGT
MK673582.1	GAAGCTGTAAATAAAGATGTTGGATCAATTGGT
MK673577.1	GAAGCTGTAAATAAAGATGTTGGATCAATTGGT
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KT163255.1	GAAGCTGTAAATAAAGACGTTGGATCAATTGGT
KT163254.1	GAAGCTGTAAATAAAGACGTTGGATCAATTGGT
KT163251.1	GAAGCTGTAAATAAAGACGTTGGATCAATTGGT
KT163256.1	GAAGCTGTAAATAAAGACGTTGGATCAATTGGT
FJ513078.1	GAAGCTGTAAATAAAGATGTTGGATCAATTGGT
NC_002728.1	GAAGCTGTAAATAAAGATGTTGGATCAATTGGT
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KT163253.1	GAAGCTGTAAATAAAGACGTTGGATCAATTGGT
JN808858.1	GAAGCTGTAAATAAAGATGTTGGATCAATTGGT
JN808860.1	GAAGCTGTAAATAAAGATGTTGGATCAATTGGT
AY029768.1	GAAGCTGTAAATAAAGATGTTGGATCAATTGGT
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AJ672196.1	GAAGCTGTAAATAAAGATGTTGGATCAATTGGT
AJ564623.1	GAAGCTGTAAATAAAGATGTTGGATCAATTGGT
FN869553.1	GAAGCTGTAAATAAAGATGTTGGATCAATTGGT
AJ564622.1	GAAGCTGTAAATAAAGATGTTGGATCAATTGGT

F3/R3:

F3: *****
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 KY425655.1 GGAGTTATCAATCTAAGTTAGGGAGAGATG
 MK673563.1 GGAGTTATCAATCTAAGTTAGGGAGAGATG
 MK673561.1 GGAGTTATCAATCTAAGTTAGGGAGAGATG
 MK673560.1 GGAGTTATCAATCTAAGTTAGGGAGAGATG
 MK673559.1 GGAGTTATCAATCTAAGTTAGGGAGAGATG
 MK673558.1 GGAGTTATCAATCTAAGTTAGGGAGAGATG
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 KT163248.1 GGAGTTATCAATCTAAGTTAGGGAGAGATG
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 AY858110.1 GGAGTTATCAATCTAAGTTAGGGAGAGATG
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 JN808857.1 GGAGTTATCAATCTAAGTTAGGAAGAGATG
 MK673570.1 GGAGTTATCAATCTAAGTTAGGAAGAGATG
 MK673564.1 GGAGTTATCAATCTAAGTTAGGAAGAGATG
 AY988601.1 GGAGTTATCAATCTAAGTTAGGAAGAGATG
 JN808864.1 GGAGTTATCAATCTAAGTTAGGAAGAGATG
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 MK673578.1 GGAGTTATCAATCTAAGTTAGGAAGAGATG
 MK673582.1 GGAGTTATCAATCTAAGTTAGGAAGAGATG
 MK673577.1 GGAGTTATCAATCTAAGTTAGGAAGAGATG
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 KT163251.1 GGAGTTATCAATCTAAGTTAGGAAGAGATG
 KT163256.1 GGAGTTATCAATCTAAGTTAGGAAGAGATG
 FJ513078.1 GGAGTTATCAATCTAAGTTAGGAAGAGATG
 NC_002728.1 GGAGTTATCAATCTAAGTTAGGGAGAGATG
 KT163250.1 GGAGTTATCAATCTAAGTTAGGGAGAGATG
 KT163253.1 GGAGTTATCAATCTAAGTTAGGGAGAGATG
 JN808858.1 GGAGTTATCAATCTAAGTTAGGGAGAGATG
 JN808860.1 GGAGTTATCAATCTAAGTTAGGGAGAGATG
 AY029768.1 GGAGTTATCAATCTAAGTTAGGGAGAGATG
 AY029767.1 GGAGTTATCAATCTAAGTTAGGGAGAGATG
 AJ627196.1 GGAGTTATCAATCTAAGTTAGGGAGAGATG
 AJ564623.1 GGAGTTATCAATCTAAGTTAGGGAGAGATG
 FN869553.1 GGAGTTATCAATCTAAGTTAGGGAGAGATG
 AJ564622.1 GGAGTTATCAATCTAAGTTAGGGAGAGATG

R3: *****
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 MK673559.1 CTTTACACTCATCTCTATGTATTCAAGAGA
 MK673558.1 CTTTACACTCATCTCTATGTATTCAAGAGA
 KT163249.1 CTTTACACTCATCTCTATGTATTCAAGAGA
 KT163248.1 CTTTACACTCATCTCTATGTATTCAAGAGA
 JN808861.1 CTTTACACTCATCTCTATGTATTCAAGAGA
 AY858110.1 CTTTACACTCATCTCTATGTATTCAAGAGA
 MK673565.1 CTTTACACTCATCTCTATGTATTCAAGAGA
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 MK673589.1 CTTTACACTCATCTCTATGTATTCAAGAGA
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 MK673564.1 CTTTACACTCATCTCTATGTATTCAAGAGA
 AY988601.1 CTTTACACTCATCTCTATGTATTCAAGAGA
 JN808864.1 CTTTACACTCATCTCTATGTATTCAAGAGA
 MK673583.1 CTTTACACTCATCTCTATGTATTCAAGAGA
 MK673578.1 CTTTACACTCATCTCTATGTATTCAAGAGA
 MK673582.1 CTTTACACTCATCTCTATGTATTCAAGAGA
 MK673577.1 CTTTACACTCATCTCTATGTATTCAAGAGA
 KT163252.1 CTTTACACTCATCTCTATGTATTCAAGAGA
 KT163255.1 CTTTACACTCATCTCTATGTATTCAAGAGA
 KT163254.1 CTTTACACTCATCTCTATGTATTCAAGAGA
 KT163251.1 CTTTACACTCATCTCTATGTATTCAAGAGA
 KT163256.1 CTTTACACTCATCTCTATGTATTCAAGAGA
 FJ513078.1 CTTTACACTCATCTCTATGTATTCAAGAGA
 NC_002728.1 CTTTACACTCATCTCTATGTATTCAAGAGA
 KT163250.1 CTTTACACTCATCTCTATGTATTCAAGAGA
 KT163253.1 CTTTACACTCATCTCTATGTATTCAAGAGA
 JN808858.1 CTTTACACTCATCTCTATGTATTCAAGAGA
 JN808860.1 CTTTACACTCATCTCTATGTATTCAAGAGA
 AY029768.1 CTTTACACTCATCTCTATGTATTCAAGAGA
 AY029767.1 CTTTACACTCATCTCTATGTATTCAAGAGA
 AJ627196.1 CTTTACACTCATCTCTATGTATTCAAGAGA
 AJ564623.1 CTTTACACTCATCTCTATGTATTCAAGAGA
 FN869553.1 CTTTACACTCATCTCTATGTATTCAAGAGA
 AJ564622.1 CTTTACACTCATCTCTATGTATTCAAGAGA

F4/R4:

	F4:	* *
KY425646.1	CAAAATAGACTGGGACTAAGTTCAGATCAAG	
KY425655.1	CAAAATAGACTGGGACTAAGTTCAGATCAAG	
MK673563.1	CAAAATAGACTGGGACTAAGTTCAGATCAAG	
MK673561.1	CAAAATAGACTGGGACTAAGTTCAGATCAAG	
MK673560.1	CAAAATAGACTGGGACTAAGTTCAGATCAAG	
MK673559.1	CAAAATAGACTGGGACTAAGTTCAGATCAAG	
MK673558.1	CAAAATAGACTGGGACTAAGTTCAGATCAAG	
KT163249.1	CAAGTAGACTGGGACTAAGTTCAGATCAAG	
KT163248.1	CAAGTAGACTGGGACTAAGTTCAGATCAAG	
JN808861.1	CGAAATAGACTTAGGATTAAAGTCCAATCAAG	
AY858110.1	CAAAATAGACTGGGACTAAGTTCAGATCAAG	
MK673565.1	CGAAATAGACTTAGGATTAAAGTCCAATCAAG	
MK673590.1	CGAAATAGACTTAGGATTAAAGTCCAATCAAG	
MK673589.1	CGAAATAGACTTAGGATTAAAGTCCAATCAAG	
JN808857.1	CGAAATAGACTTAGGATTAAAGTCCAATCAAG	
MK673570.1	CGAAATAGACTTAGGATTAAAGTCCAATCAAG	
MK673564.1	CGAAATAGACTTAGGATTAAAGTCCAATCAAG	
AY988601.1	CGAAATAGACTTAGGATTAAAGTCCAATCAAG	
JN808864.1	CGAAATAACTAGGATTAAAGTCCAATCAAG	
MK673583.1	CGAAATAGACTTAGGATTAAAGTCCAATCAAG	
MK673578.1	CGAAATAGACTTAGGATTAAAGTCCAATCAAG	
MK673582.1	CGAAATAGACTTAGGATTAAAGTCCAATCAAG	
MK673577.1	CGAAATAGACTTAGGATTAAAGTCCAATCAAG	
KT163252.1	CGAAATAGACTTAGGATTAAAGTCCAATCAAG	
KT163255.1	CGAAATAGACTTAGGATTAAAGTCCAATCAAG	
KT163254.1	CGAAATAGACTTAGGATTAAAGTCCAATCAAG	
KT163251.1	CGAAATAGACTTAGGATTAAAGTCCAATCAAG	
KT163256.1	CGAAATAGACTTAGGATTAAAGTCCAATCAAG	
FJ513078.1	CGAAATAGACTTAGGATTAAAGTCCAATCAAG	
NC_002728.1	CAAATAGACTGGGACTAAGTTCAGATCAAG	
KT163250.1	CAAGTAGACTGGGACTAAGTTCAGATCAAG	
KT163253.1	CGAAATAGACTTAGGATTAAAGTCCAATCAAG	
JN808858.1	CGAAATAGACTTAGGATTAAAGTCCAATCAAG	
JN808860.1	CGAAATAGACTTAGGATTAAAGTCCAATCAAG	
AY029768.1	CAAATAGACTGGGACTAAGTTCAGATCAAG	
AY029767.1	CAAATAGACTGGGACTAAGTTCAGATCAAG	
AJ627196.1	CAAATAGACTGGGACTAAGTTCAGATCAAG	
AJ564623.1	CAAATAGACTGGGACTAAGTTCAGATCAAG	
FN869553.1	CAAATAGACTGGGACTAAGTTCAGATCAAG	
AJ564622.1	CAAATAGACTGGGACTAAGTTCAGATCAAG	

F5/R5:

F6/R6:

F6:	** * * * * * * * * * * * * * * *	R6:	*** * * * * * * * * * * * * * * *
KY425646.1	GAAAGTGAACCTAGAAGATGGGCTAAATAC	KY425646.1	AGTAGAAATAATCTCAGACATCGGAAACTA
KY425655.1	GAAAGTGAACCTAGAACATGGGCTAAATAC	KY425655.1	AGTAGAAATAATCTCAGACATCGGAAACTA
MK673563.1	GAAAGTGAACCTAGAAGATGGGCTAAATAC	MK673563.1	AGTAGAAATAATCTCAGACATCGGAAACTA
MK673561.1	GAAAGTGAACCTAGAAGATGGGCTAAATAC	MK673561.1	AGTAGAAATAATCTCAGACATCGGAAACTA
MK673560.1	GAAAGTGAACCTAGAACATGGGCTAAATAC	MK673560.1	AGTAGAAATAATCTCAGACATCGGAAACTA
MK673559.1	GAAAGTGAACCTAGAACATGGGCTAAATAC	MK673559.1	AGTAGAAATAATCTCAGACATCGGAAACTA
MK673558.1	GAAAGTGAACCTAGAACATGGGCTAAATAC	MK673558.1	AGTAGAAATAATCTCAGACATCGGAAACTA
KT163249.1	GAAAGTGAACCTAGAACATGGGCTAAATAC	KT163249.1	AGTAGAAATAATCTCAGACATCGGAAACTA
KT163248.1	GAAAGTGAAGCTAGAACATGGGCTAAATAC	KT163248.1	AGTAGAAATAATCTCAGACATCGGAAACTA
JN808861.1	GAGAGTGAACCTAGAACATGGGCTAAATAC	JN808861.1	AGTGGAAAATAATCTCAGACATTGGAAACTA
AY858110.1	GAAAGTGAACCTAGAACGTGGGCTAAATAT	AY858110.1	AGTAGAAATAATCTCAGACATTGGAAACTA
MK673565.1	GAGAGTGAACCTAGAACATGGGCTAAATAC	MK673565.1	AGTGGAAAATAATCTCAGACATTGGAAACTA
MK673590.1	GAGAGTGAACCTAGAACATGGGCTAAATAC	MK673590.1	AGTGGAAAATAATCTCAGACATTGGAAACTA
MK673589.1	GAGAGTGAACCTAGAACATGGGCTAAATAC	MK673589.1	AGTGGAAAATAATCTCAGACATTGGAAACTA
JN808857.1	GAGAGTGAACCTAGAACATGGGCTAAATAC	JN808857.1	AGTGGAAAATAATCTCAGACATTGGAAACTA
MK673570.1	GAGAGTGAACCTAGAACATGGGCTAAATAC	MK673570.1	AGTGGAAAATAATCTCAGACATTGGAAACTA
MK673564.1	GATAGTGAACCTAGAACATGGGCTAAATAC	MK673564.1	AGTGGAAAATAATCTCAGACATTGGAAACTA
AY988601.1	GATAGTGAACCTAGAACATGGGCTAAATAC	AY988601.1	AGTGGAAAATAATCTCAGACATTGGAAACTA
JN808864.1	GAGAGTGAACCTAGAACATGGGCTAAATAC	JN808864.1	AGTGGAAAATAATCTCAGACATTGGAAACTA
MK673583.1	GAGAGTGAACCTAGAACATGGGCTAAATAC	MK673583.1	AGTGGAAAATAATCTCAGACATTGGAAACTA
MK673578.1	GAGAGTGAACCTAGAACATGGGCTAAATAC	MK673578.1	AGTGGAAAATAATCTCAGACATTGGAAACTA
MK673582.1	GAGAGTGAACCTAGAACATGGGCTAAATAC	MK673582.1	AGTGGAAAATAATCTCAGACATTGGAAACTA
MK673577.1	GAGAGTGAACCTAGAACATGGGCTAAATAC	MK673577.1	AGTGGAAAATAATCTCAGACATTGGAAACTA
KT163252.1	GAGAGTGAACCTAGAACATGGGCTAAATAC	KT163252.1	AGTGGAAAATAATCTCAGACATTGGAAACTA
KT163255.1	GAGAGTGAACCTAGAACATGGGCTAAATAC	KT163255.1	AGTGGAAAATAATCTCAGACATTGGAAACTA
KT163254.1	GAGAGTGAACCTAGAACATGGGCTAAATAC	KT163254.1	AGTGGAAAATAATCTCAGACATTGGAAACTA
KT163251.1	GAGAGTGAACCTAGAACATGGGCTAAATAC	KT163251.1	AGTGGAAAATAATCTCAGACATTGGAAACTA
KT163256.1	GAGAGTGAACCTAGAACATGGGCTAAATAC	KT163256.1	AGTGGAAAATAATCTCAGACATTGGAAACTA
FJ513078.1	GAGAGTGAACCTAGAACATGGGCTAAATAC	FJ513078.1	AGTGGAAAATAATCTCAGACATTGGAAACTA
NC_002728.1	GAAAGTGAACCTAGAACATGGGCTAAATAC	NC_002728.1	AGTAGAAATAATCTCAGACATCGGAAACTA
KT163250.1	GAAAGTGAACCTAGAACATGGGCTAAATAC	KT163250.1	AGTAGAAATAATCTCAGACATCGGAAACTA
KT163253.1	GAGAGTGAACCTAGAACATGGGCTAAATAC	KT163253.1	AGTGGAAAATAATCTCAGACATTGGAAACTA
JN808858.1	GAGAGTGAACCTAGAACATGGGCTAAATAC	JN808858.1	AGTGGAAAATAATCTCAGACATTGGAAACTA
JN808860.1	GAGAGTGAACCTAGAACATGGGCTAAATAC	JN808860.1	AGTGGAAAATAATCTCAGACATTGGAAACTA
AY029768.1	GAAAGTGAACCTAGAACATGGGCTAAATAC	AY029768.1	AGTAGAAATAATCTCAGACATTGGAAACTA
AY029767.1	GAAAGTGAACCTAGAACATGGGCTAAATAC	AY029767.1	AGTAGAAATAATCTCAGACATTGGAAACTA
AJ627196.1	GAAAGTGAACCTAGAACATGGGCTAAATAC	AJ627196.1	AGTAGAAATAATCTCAGACATTGGAAACTA
AJ564623.1	GAAAGTGAACCTAGAACATGGGCTAAATAC	AJ564623.1	AGTAGAAATAATCTCAGACATTGGAAACTA
FN869553.1	GAAAGTGAACCTAGAACATGGGCTAAATAC	FN869553.1	AGTAGAAATAATCTCAGACATTGGAAACTA
AJ564622.1	GAAAGTGAACCTAGAACATGGGCTAAATAC	AJ564622.1	AGTAGAAATAATCTCAGACATTGGAAACTA

F7/R7:

F7: *** ***** ***** ***
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KY425655.1 GGAAAGTGAACCTAGAACGATGGGCTAAATAC
MK673563.1 GGAAAGTGAACCTAGAACGATGGGCTAAATAC
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MK673560.1 GGAAAGTGAACCTAGAACGATGGGCTAAATAC
MK673559.1 GGAAAGTGAACCTAGAACGATGGGCTAAATAC
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KT163249.1 GGAAAGTGAACCTAGAACGATGGGCTAAATAC
KT163248.1 GGAAAGTGAACCTAGAACGATGGGCTAAATAC
JN808861.1 GGAGAGTGAACCTAGAACGATGGGCTAAATAC
AY858110.1 GGAAAGTGAACCTAGAACGGTGGGCTAAATAC
MK673565.1 GGAGAGTGAACCTAGAACGATGGGCTAAATAC
MK673590.1 GGAGAGTGAACCTAGAACGATGGGCTAAATAC
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JN808857.1 GGAGAGTGAACCTAGAACGATGGGCTAAATAC
MK673570.1 GGAGAGTGAACCTAGAACGATGGGCTAAATAC
MK673564.1 GGATAGTGAACCTAGAACGATGGGCTAAATAC
AY988601.1 GGATAGTGAACCTAGAACGATGGGCTAAATAC
JN808864.1 GGAGAGTGAACCTAGAACGATGGGCTAAATAC
MK673583.1 GGAGAGTGAACCTAGAACGATGGGCTAAATAC
MK673578.1 GGAGAGTGAACCTAGAACGATGGGCTAAATAC
MK673582.1 GGAGAGTGAACCTAGAACGATGGGCTAAATAC
MK673577.1 GGAGAGTGAACCTAGAACGATGGGCTAAATAC
KT163252.1 GGAGAGTGAACCTAGAACGATGGGCTAAATAC
KT163255.1 GGAGAGTGAACCTAGAACGATGGGCTAAATAC
KT163254.1 GGAGAGTGAACCTAGAACGATGGGCTAAATAC
KT163251.1 GGAGAGTGAACCTAGAACGATGGGCTAAATAC
KT163256.1 GGAGAGTGAACCTAGAACGATGGGCTAAATAC
FJ513078.1 GGAGAGTGAACCTAGAACGATGGGCTAAATAC
NC_002728.1 GGAAAGTGAACCTAGAACGATGGGCTAAATAC
KT163250.1 GGAAAGTGAACCTAGAACGATGGGCTAAATAC
KT163253.1 GGAGAGTGAACCTAGAACGATGGGCTAAATAC
JN808858.1 GGAGAGTGAACCTAGAACGATGGGCTAAATAC
JN808860.1 GGAGAGTGAACCTAGAACGATGGGCTAAATAC
AY029768.1 GGAAAGTGAACCTAGAACGATGGGCTAAATAC
AY029767.1 GGAAAGTGAACCTAGAACGATGGGCTAAATAC
AJ627196.1 GGAAAGTGAACCTAGAACGATGGGCTAAATAC
AJ564623.1 GGAAAGTGAACCTAGAACGATGGGCTAAATAC
FN869553.1 GGAAAGTGAACCTAGAACGATGGGCTAAATAC
AJ564622.1 GGAAAGTGAACCTAGAACGATGGGCTAAATAC

R7: ***** *****
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KY425646.1 GCAGTAGAAATAATCTCAGACATCGAAC
KY425655.1 GCAGTAGAAATAATCTCAGACATCGAAC
MK673563.1 GCAGTAGAAATAATCTCAGACATCGAAC
MK673561.1 GCAGTAGAAATAATCTCAGACATCGAAC
MK673560.1 GCAGTAGAAATAATCTCAGACATCGAAC
MK673559.1 GCAGTAGAAATAATCTCAGACATTGGAAC
MK673558.1 GCAGTAGAAATAATCTCAGACATTGGAAC
KT163249.1 GCAGTAGAAATAATCTCAGACATTGGAAC
KT163248.1 GCAGTAGAAATAATCTCAGACATTGGAAC
JN808861.1 GCAGTGGAAATAATCTCAGACATTGGAAC
AY858110.1 GCAGTGGAAATAATCTCAGACATTGGAAC
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MK673589.1 GCAGTGGAAATAATCTCAGACATTGGAAC
JN808857.1 GCAGTGGAAATAATCTCAGACATTGGAAC
MK673570.1 GCAGTGGAAATAATCTCAGACATTGGAAC
MK673564.1 GCAGTGGAAATAATCTCAGACATTGGAAC
AY988601.1 GCAGTGGAAATAATCTCAGACATTGGAAC
JN808864.1 GCAGTGGAAATAATCTCAGACATTGGAAC
MK673583.1 GCAGTGGAAATAATCTCAGACATTGGAAC
MK673578.1 GCAGTGGAAATAATCTCAGACATTGGAAC
MK673582.1 GCAGTGGAAATAATCTCAGACATTGGAAC
MK673577.1 GCAGTGGAAATAATCTCAGACATTGGAAC
KT163252.1 GCAGTGGAAATAATCTCAGACATTGGAAC
KT163255.1 GCAGTGGAAATAATCTCAGACATTGGAAC
KT163254.1 GCAGTGGAAATAATCTCAGACATTGGAAC
KT163251.1 GCAGTGGAAATAATCTCAGACATTGGAAC
KT163256.1 GCAGTGGAAATAATCTCAGACATTGGAAC
FJ513078.1 GCAGTGGAAATAATCTCAGACATTGGAAC
NC_002728.1 GCAGTAGAAATAATCTCAGACATCGAAC
KT163250.1 GCAGTAGAAATAATCTCAGACATCGAAC
KT163253.1 GCAGTGGAAATAATCTCAGACATTGGAAC
JN808858.1 GCAGTGGAAATAATCTCAGACATTGGAAC
JN808860.1 GCAGTGGAAATAATCTCAGACATTGGAAC
AY029768.1 GCAGTAGAAATAATCTCAGACATCGAAC
AY029767.1 GCAGTAGAAATAATCTCAGACATCGAAC
AJ627196.1 GCAGTAGAAATAATCTCAGACATCGAAC
AJ564623.1 GCAGTAGAAATAATCTCAGACATCGAAC
FN869553.1 GCAGTAGAAATAATCTCAGACATCGAAC
AJ564622.1 GCAGTAGAAATAATCTCAGACATCGAAC

2. Five candidate crRNAs targeting the conserved regions of *N* gene.

CR1:

	CR1: PAM	Spacer sequence
	TTTNACACUCAUCUUAUGUAUU	
KY425646.1	TTTCACACTCATCTCTATGTATT	
KY425655.1	TTTCACACTCATCTCTATGTATT	
MK673563.1	TTTCACACTCATCTCTATGTATT	
MK673561.1	TTTCACACTCATCTCTATGTATT	
MK673560.1	TTTCACACTCATCTCTATGTATT	
MK673559.1	TTTCACACTCATCTCTATGTATT	
MK673558.1	TTTCACACTCATCTCTATGTATT	
KT163249.1	TTTCACACTCATCTCTATGTATT	
KT163248.1	TTTCACACTCATCTCTATGTATT	
JN808861.1	TTTTACACTCATCTCTATGTATT	
AY858110.1	TTTTACACTCATCTCTATGTATT	
MK673565.1	TTTTACACTCATCTCTATGTATT	
MK673590.1	TTTTACACTCATCTCTATGTATT	
MK673589.1	TTTTACACTCATCTCTATGTATT	
JN808857.1	TTTTACACTCATCTCTATGTATT	
MK673570.1	TTTTACACTCATCTCTATGTATT	
MK673564.1	TTTTACACTCATCTCTATGTATT	
AY988601.1	TTTTACACTCATCTCTATGTATT	
JN808864.1	TTTTACACTCATCTCTATGTATT	
MK673583.1	TTTTACACTCATCTCTATGTATT	
MK673578.1	TTTTACACTCATCTCTATGTATT	
MK673582.1	TTTTACACTCATCTCTATGTATT	
MK673577.1	TTTTACACTCATCTCTATGTATT	
KT163252.1	TTTTACACTCATCTCTATGTATT	
KT163255.1	TTTTACACTCATCTCTATGTATT	
KT163254.1	TTTTACACTCATCTCTATGTATT	
KT163251.1	TTTTACACTCATCTCTATGTATT	
KT163256.1	TTTTACACTCATCTCTATGTATT	
FJ513078.1	TTTTACACTCATCTCTATGTATT	
NC_002728.1	TTTCACACTCATCTCTATGTATT	
KT163250.1	TTTCACACTCATCTCTATGTATT	
KT163253.1	TTTTACACTCATCTCTATGTATT	
JN808858.1	TTTTACACTCATCTCTATGTATT	
JN808860.1	TTTCACACTCATCTCTATGTATT	
AY029768.1	TTTCACACTCATCTCTATGTATT	
AY029767.1	TTTCACACTCATCTCTATGTATT	
AJ627196.1	TTTCACACTCATCTCTATGTATT	
AJ564623.1	TTTCACACTCATCTCTATGTATT	
FN869553.1	TTTCACACTCATCTCTATGTATT	
AJ564622.1	TTTCACACTCATCTCTATGTATT	

CR2:

	CR2: PAM	Spacer sequence
KY425646.1	TTT	AGGAGTTATCAATCTAAGTT
KY425655.1	TTT	AGGAGTTATCAATCTAAGTT
MK673563.1	TTT	AGGAGTTATCAATCTAAGTT
MK673561.1	TTT	AGGAGTTATCAATCTAAGTT
MK673560.1	TTT	AGGAGTTATCAATCTAAGTT
MK673559.1	TTT	AGGAGTTATCAATCTAAGTT
MK673558.1	TTT	AGGAGTTATCAATCTAAGTT
KT163249.1	TTT	AGGAGTTATCAATCTAAGTT
KT163248.1	TTT	AGGAGTTATCAATCTAAGTT
JN808861.1	TTT	AGGAGTTATCAATCTAAGTT
AY858110.1	TTT	AGGAGTTATCAATCTAAGTT
MK673565.1	TTT	AGGAGTTATCAATCTAAGTT
MK673590.1	TTT	AGGAGTTATCAATCTAAGTT
MK673589.1	TTT	AGGAGTTATCAATCTAAGTT
JN808857.1	TTT	AGGAGTTATCAATCTAAGTT
MK673570.1	TTT	AGGAGTTATCAATCTAAGTT
MK673564.1	TTT	AGGAGTTATCAATCTAAGTT
AY988601.1	TTT	AGGAGTTATCAATCTAAGTT
JN808864.1	TTT	AGGAGTTATCAATCTAAGTT
MK673583.1	TTT	AGGAGTTATCAATCTAAGTT
MK673578.1	TTT	AGGAGTTATCAATCTAAGTT
MK673582.1	TTT	AGGAGTTATCAATCTAAGTT
MK673577.1	TTT	AGGAGTTATCAATCTAAGTT
KT163252.1	TTT	AGGAGTTATCAATCTAAGTT
KT163255.1	TTT	AGGAGTTATCAATCTAAGTT
KT163254.1	TTT	AGGAGTTATCAATCTAAGTT
KT163251.1	TTT	AGGAGTTATCAATCTAAGTT
KT163256.1	TTT	AGGAGTTATCAATCTAAGTT
FJ513078.1	TTT	AGGAGTTATCAATCTAAGTT
NC_002728.1	TTT	AGGAGTTATCAATCTAAGTT
KT163250.1	TTT	AGGAGTTATCAATCTAAGTT
KT163253.1	TTT	AGGAGTTATCAATCTAAGTT
JN808858.1	TTT	AGGAGTTATCAATCTAAGTT
JN808860.1	TTT	AGGAGTTATCAATCTAAGTT
AY029768.1	TTT	AGGAGTTATCAATCTAAGTT
AY029767.1	TTT	AGGAGTTATCAATCTAAGTT
AJ627196.1	TTT	AGGAGTTATCAATCTAAGTT
AJ564623.1	TTT	AGGAGTTATCAATCTAAGTT
FN869553.1	TTT	AGGAGTTATCAATCTAAGTT
AJ564622.1	TTT	AGGAGTTATCAATCTAAGTT

CR3:

	CR3: PAM	Spacer sequence
	TTTNACAACCAAGAUAAGGAUAU	
KY425646.1	TTTGACAACCAAGATAAAGGATAT	
KY425655.1	TTTGACAACCAAGATAAAGGATAT	
MK673563.1	TTTGACAACCAAGATAAAGGATAT	
MK673561.1	TTTGACAACCAAGATAAAGGATAT	
MK673560.1	TTTGACAACCAAGATAAAGGATAT	
MK673559.1	TTTGACAACCAAGATAAAGGATAT	
MK673558.1	TTTGACAACCAAGATAAAGGATAT	
KT163249.1	TTTGACAACCAAGATAAAGGATAT	
KT163248.1	TTTGACAACCAAGATAAAGGATAT	
JN808861.1	TTTGACAACCAAGATAAAGGATAT	
AY858110.1	TTTGACAACCAAGATAAAGGATAT	
MK673565.1	TTTGACAACCAAGATAAAGGATAT	
MK673590.1	TTTGACAACCAAGATAAAGGATAT	
MK673589.1	TTTGACAACCAAGATAAAGGATAT	
JN808857.1	TTTGACAACCAAGATAAAGGATAT	
MK673570.1	TTTGACAACCAAGATAAAGGATAT	
MK673564.1	TTTGACAACCAAGATAAAGGATAT	
AY988601.1	TTTGACAACCAAGATAAAGGATAT	
JN808864.1	TTTGACAACCAAGATAAAGGATAT	
MK673583.1	TTTGACAACCAAGATAAAGGATAT	
MK673578.1	TTTGACAACCAAGATAAAGGATAT	
MK673582.1	TTTGACAACCAAGATAAAGGATAT	
MK673577.1	TTTGACAACCAAGATAAAGGATAT	
KT163252.1	TTTGACAACCAAGATAAAGGATAT	
KT163255.1	TTTGACAACCAAGATAAAGGATAT	
KT163254.1	TTTGACAACCAAGATAAAGGATAT	
KT163251.1	TTTGACAACCAAGATAAAGGATAT	
KT163256.1	TTTGACAACCAAGATAAAGGATAT	
FJ513078.1	TTTGACAACCAAGATAAAGGATAT	
NC_002728.1	TTTGACAACCAAGATAAAGGATAT	
KT163250.1	TTTGACAACCAAGATAAAGGATAT	
KT163253.1	TTTGACAACCAAGATAAAGGATAT	
JN808858.1	TTTGACAACCAAGATAAAGGATAT	
JN808860.1	TTTGACAACCAAGATAAAGGATAT	
AY029768.1	TTTGACAACCAAGATAAAGGATAT	
AY029767.1	TTTGACAACCAAGATAAAGGATAT	
AJ627196.1	TTTGACAACCAAGATAAAGGATAT	
AJ564623.1	TTTGACAACCAAGATAAAGGATAT	
FN869553.1	TTTGACAACCAAGATAAAGGATAT	
AJ564622.1	TTTGACAACCAAGATAAAGGATAT	

CR4:

	CR4: PAM	Spacer sequence
KY425646.1	TTT	CUGCAGGAGGGUGUGCUCAU
KY425655.1	TTT	GCTGCAGGAGGTGTGCTCAT
MK673563.1	TTT	GCTGCAGGAGGTGTGCTCAT
MK673561.1	TTT	GCTGCAGGAGGTGTGCTCAT
MK673560.1	TTT	GCTGCAGGAGGTGTGCTCAT
MK673559.1	TTT	GCTGCAGGAGGTGTGCTCAT
MK673558.1	TTT	GCTGCAGGAGGTGTGCTCAT
KT163249.1	TTT	GCTGCAGGAGGTGTGCTCAT
KT163248.1	TTT	GCTGCAGGAGGTGTGCTCAT
JN808861.1	TTT	GCTGCAGGAGGTGTGCTCAT
AY858110.1	TTT	GCTGCAGGAGGTGTGCTCAT
MK673565.1	TTT	GCTGCAGGAGGTGTGCTCAT
MK673590.1	TTT	GCTGCAGGAGGTGTGCTCAT
MK673589.1	TTT	GCTGCAGGAGGTGTGCTCAT
JN808857.1	TTT	GCTGCAGGAGGTGTGCTCAT
MK673570.1	TTT	GCTGCAGGAGGTGTGCTCAT
MK673564.1	TTT	GCTGCAGGAGGTGTGCTCAT
AY988601.1	TTT	GCTGCAGGAGGTGTGCTCAT
JN808864.1	TTT	GCTGCAGGAGGTGTGCTCAT
MK673583.1	TTT	GCTGCAGGAGGTGTGCTCAT
MK673578.1	TTT	GCTGCAGGAGGTGTGCTCAT
MK673582.1	TTT	GCTGCAGGAGGTGTGCTCAT
MK673577.1	TTT	GCTGCAGGAGGTGTGCTCAT
KT163252.1	TTT	GCTGCAGGAGGTGTGCTCAT
KT163255.1	TTT	GCTGCAGGAGGTGTGCTCAT
KT163254.1	TTT	GCTGCAGGAGGTGTGCTCAT
KT163251.1	TTT	GCTGCAGGAGGTGTGCTCAT
KT163256.1	TTT	GCTGCAGGAGGTGTGCTCAT
FJ513078.1	TTT	GCTGCAGGAGGTGTGCTCAT
NC_002728.1	TTT	GCTGCAGGAGGTGTGCTCAT
KT163250.1	TTT	GCTGCAGGAGGTGTGCTCAT
KT163253.1	TTT	GCTGCAGGAGGTGTGCTCAT
JN808858.1	TTT	GCTGCAGGAGGTGTGCTCAT
JN808860.1	TTT	GCTGCAGGAGGTGTGCTCAT
AY029768.1	TTT	GCTGCAGGAGGTGTGCTCAT
AY029767.1	TTT	GCTGCAGGAGGTGTGCTCAT
AJ627196.1	TTT	GCTGCAGGAGGTGTGCTCAT
AJ564623.1	TTT	GCTGCAGGAGGTGTGCTCAT
FN869553.1	TTT	GCTGCAGGAGGTGTGCTCAT
AJ564622.1	TTT	GCTGCAGGAGGTGTGCTCAT

CR5:

	CR5:	Spacer sequence	PAM
KY425646.1	TCAAGAAAGGAGGA	AGUCUUUCCUAGACG	NTTT
KY425655.1	TCAAGAAAGGAGGA		
MK673563.1	TCAAGAAAGGAGGA		
MK673561.1	TCAAGAAAGGAGGA		
MK673560.1	TCAAGAAAGGAGGA		
MK673559.1	TCAAGAAAGGAGGA		
MK673558.1	TCAAGAAAGGAGGA		
KT163249.1	TCAAGAAAGGAGGA		
KT163248.1	TCAAGAAAGGAGGA		
JN808861.1	TCAAGAAAGGAGGA		
AY858110.1	TCAAGAAAGGAGGA		
MK673565.1	TCAAGAAAGGAGGA		
MK673590.1	TCAAGAAAGGAGGA		
MK673589.1	TCAAGAAAGGAGGA		
JN808857.1	TCAAGAAAGGAGGA		
MK673570.1	TCAAGAAAGGAGGA		
MK673564.1	TCAAGAAAGGAGGA		
AY988601.1	TCAAGAAAGGAGGA		
JN808864.1	TCAAGAAAGGAGGA		
MK673583.1	TCAAGAAAGGAGGA		
MK673578.1	TCAAGAAAGGAGGA		
MK673582.1	TCAAGAAAGGAGGA		
MK673577.1	TCAAGAAAGGAGGA		
KT163252.1	TCAAGAAAGGAGGA		
KT163255.1	TCAAGAAAGGAGGA		
KT163254.1	TCAAGAAAGGAGGA		
KT163251.1	TCAAGAAAGGAGGA		
KT163256.1	TCAAGAAAGGAGGA		
FJ513078.1	TCAAGAAAGGAGGA		
NC_002728.1	TCAAGAAAGGAGGA		
KT163250.1	TCAAGAAAGGAGGA		
KT163253.1	TCAAGAAAGGAGGA		
JN808858.1	TCAAGAAAGGAGGA		
JN808860.1	TCAAGAAAGGAGGA		
AY029768.1	TCAAGAAAGGAGGA		
AY029767.1	TCAAGAAAGGAGGA		
AJ627196.1	TCAAGAAAGGAGGA		
AJ564623.1	TCAAGAAAGGAGGA		
FN869553.1	TCAAGAAAGGAGGA		
AJ564622.1	TCAAGAAAGGAGGA		

Table S1. RAA primer pairs used in this study.

Primer	Sequence (5'-3')	Product size
F1	ATGAGTGATATCTTGAAGAGGGCGGCTAGT	325
R1	TGACCATTGATCCAACATCTATTATTACAGCTTC	
F2	TAGGAGTTATCAATCTAAGTTAGGGAGAGATG	291
R2	ACCATTGATCCAACATCTATTATTACAGCTTC	
F3	GGAGTTATCAATCTAAGTTAGGGAGAGATG	213
R3	TCTCTGAATACATAGAGATGAGTGTGAAAG	
F4	CAAATAGACTGGACTAAGTTCAGATCAAG	225
R4	ATGAAATACTCATCTCCCTTTGAAGGTAAC	
F5	GAGGAATTGATCAGAACATGGCAAATAGAC	245
R5	TGAAATACTCATCTCCCTTTGAAGGTAAC	
F6	GAAAGTGAACACTAGAAGATGGGCTAAATAC	212
R6	TAGTTCCGATGTCTGAGATTATTCTACT	
F7	GGAAAGTGAACACTAGAAGATGGGCTAAATAC	211
R7	GTTTCCGATGTCTGAGATTATTCTACTGC	

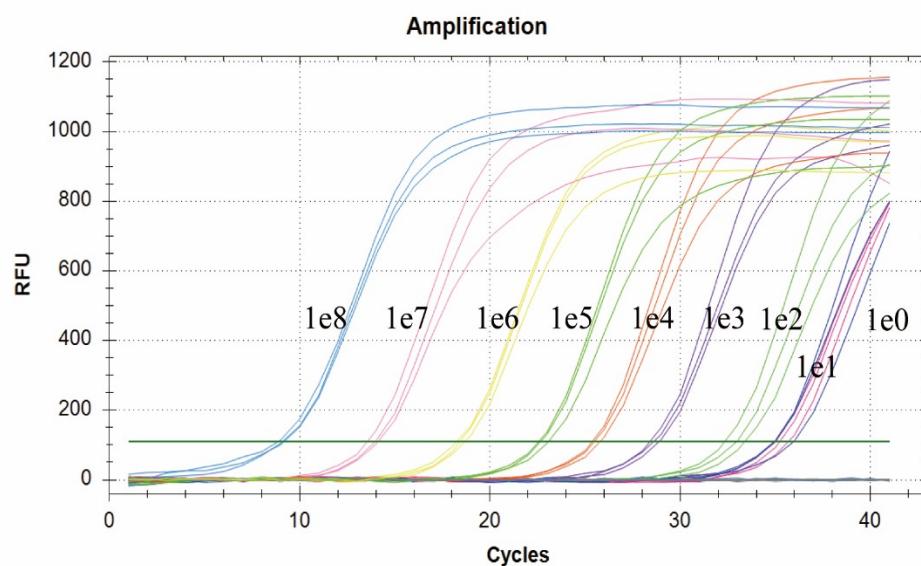


Figure S1. The sensitivity of the qPCR assay in NiV detection. qPCR was conducted with the CFX96 real-time PCR detection systems, and the amplification curves of each sample were shown in this figure.