# NS (890 bp)

Nature: cRNA

Source: DQ487332.1 Influenza A virus (A/Moscow/10/99(H3N2)) segment 8

#### NS1 protein

Source: ABE73102.1 (230 aa)

Sequence: 27-719

MDSNTVSSFQVDCFLWHIRKQVVDQELSDAPFLDRLRRDQRSLRGRGNTLGLDIKAATHVGKQIVEKILK EESDEALKMTMVSTPASRYITDMTIEELSRNWFMLMPKQKVEGPLCIRMDQAIMEKNIMLKANFSVIFDR LETIVLLRAFTEEGAIVGEISPLPSFPGHTIEDVKNAIGVLIGGLEWNDNTVRVSKNLQRFAWRSSNENG GPPLTPKQKRKMARTARSKV

### NS2 protein

Source: ABE73103.1 (121 aa)

Sequence: 27-864

MDSNTVSSFQDILLRMSKMQLGSSSEDLNGMITQFESLKIYRDSLGEAVMRMGDLHLLQNRNGKWREQLG QKFEEIRWLIEEVRHRLKTTENSFEQITFMQALQLLFEVEQEIRTFSFQLI

# NS (890 bp)

Nature: vRNA

Source: Illumina sequences from virus stocks RPS2022

### NS (890 bp)

Nature: cDNA\_pHW2000

Source: GATC sequences from Maxiprep RPS 2023

CLUSTAL O(1.2.4) multiple sequence alignment		
MO_NS_NCBI MO_NS_PHW2000 MO_NS_Virus	AGCAAAAGCAGGGTGACAAAGACATAATGGATTCCAACACTGTGTCAAGTTTCCAGGTAG AGCAAAAGCAGGGTGACAAAGACATAATGGATTCCAACACTGTGTCAAGTTTCCAGGTAG NGCAAAAGCAGGGTGACAAAGACATAATGGATTCCAACACTGTGTCAAGTTTCCAGGTAG *********************************	60
MO_NS_NCBI MO_NS_pHW2000 MO_NS_Virus	ATTGCTTTCTTTGGCATATCCGGAAACAAGTTGTAGACCAAGAACTGAGTGATGCCCCAT ATTGCTTTCTTTGGCATATCCGGAAACAAGTTGTAGACCAAGAACTGAGTGATGCCCCAT ATTGCTTTCTTTGGCATATCCGGAAACAAGTTGTAGACCAAGAACTGAGTGATGCCCCAT *********************************	120 120 120
MO_NS_NCBI MO_NS_pHW2000 MO_NS_Virus	TCCTTGATCGCCTTCGCCGAGATCAGAGGTCCCTAAGGGGAAGAGGCAACACTCTCGGTC TCCTTGATCGGCTTCGCCGAGATCAGAGGTCCCTAAGGGGAAGAGGCAACACTCTCGGTC TCCTTGATCGGCTTCGCCGAGATCAGAGGTCCCTAAGGGGAAGAGGCAACACTCTCGGTC ******************************	180 180 180
MO_NS_NCBI MO_NS_PHW2000 MO_NS_Virus	TAGACATCAAAGCAGCCACCCATGTTGGAAAGCAAATTGTAGAAAAGATTCTGAAAGAAG TAGACATCAAAGCAGCCACCCATGTTGGAAAGCAAATTGTAGAAAAAGATTCTGAAAGAAG TAGACATCAAAGCAGCCACCCATGTTGGAAAGCAAATTGTAGAAAAAGATTCTGAAAGAAG ******************************	240 240 240
MO_NS_NCBI MO_NS_PHW2000 MO_NS_Virus	AATCTGATGAGGCACTTAAAATGACCATGGTCTCCACACCTGCTTCGCGATACATAACTG AATCTGATGAGGCACTTAAAATGACCATGGTCTCCACACCTGCTTCGCGATACATAACTG AATCTGATGAGGCACTTAAAATGACCATGGTCTCCACACCTGCTTCGCGATACATAACTG ************************************	300 300 300
MO_NS_NCBI MO_NS_pHW2000 MO_NS_Virus	ACATGACTATTGAGGAATTGTCAAGAAACTGGTTCATGCTAATGCCCAAGCAGAAAGTGG ACATGACTATTGAGGAATTGTCAAGAAACTGGTTCATGCTAATGCCCAAGCAGAAAGTGG ACATGACTATTGAGGAATTGTCAAGAAACTGGTTCATGCTAATGCCCAAGCAGAAAGTGG ******************************	
MO_NS_NCBI MO_NS_PHW2000 MO_NS_Virus	AAGGACCTCTTTGCATCAGAATGGACCAGGCAATCATGGAGAAAAACATCATGTTGAAAG AAGGACCTCTTTGCATCAGAATGGACCAGGCAATCATGGAGAAAAACATCATGTTGAAAG AAGGACCTCTTTGCATCAGAATGGACCAGGCAATCATGGAGAAAAACATCATGTTGAAAG *****************************	420
MO_NS_NCBI MO_NS_pHW2000 MO_NS_Virus	CGAATTTCAGTGTGATCTTTGACCGACTAGAGACCATAGTATTACTAAGGGCTTTCACCG CGAATTTCAGTGTGATCTTTGACCGACTAGAGACCATAGTATTACTAAGGGCTTTCACCG CGAATTTCAGTGTGATCTTTGACCGACTAGAGACCATAGTATTACTAAGGGCTTTCACCG **********************************	480 480 480
MO_NS_NCBI MO_NS_pHW2000 MO_NS_Virus	AAGAGGGAGCAATTGTTGGCGAAATCTCACCATTGCCTTCTTTTCCAGGACATACTATTG AAGAGGGAGCAATTGTTGGCGAAATCTCACCATTGCCTTCTTTTCCAGGACATACTATTG AAGAGGGAGCAATTGTTGGCGAAATCTCACCATTGCCTTCTTTTCCAGGACATACTATTG **********************************	540 540 540
MO_NS_NCBI MO_NS_PHW2000 MO_NS_Virus	AGGATGTCAAAAATGCAATTGGGGTCCTCATCGGAGGACTTGAATGGAATGATAACACAG AGGATGTCAAAAATGCAATTGGGGTCCTCATCGGAGGACTTGAATGGAATGATAACACAG AGGATGTCAAAAATGCAATTGGGGTCCTCATCGGAGGACTTGAATGGAATGATAACACAG ********************************	600 600 600
MO_NS_NCBI MO_NS_PHW2000 MO_NS_Virus	TTCGAGTCTCTAAAAATCTACAGAGATTCGCTTGGAGAAGCAGTAATGAGAATGGGGGAC TTCGAGTCTCTAAAAATCTACAGAGATTCGCTTGGAGAAGCAGTAATGAGAATGGGGGAC TTCGAGTCTCTAAAAATCTACAGAGATTCGCTTGGAGAAGCAGTAATGAGAATGGGGGAC ********************************	660 660 660
MO_NS_NCBI MO_NS_pHW2000 MO_NS_Virus	CTCCACTTACTCCAAAACAGAAACGGAAAATGGCGAGAACAGCTAGGTCAAAAGTTTGAA CTCCACTTACTCCAAAACAGAAACGGAAAATGGCGAGAACAGCTAGGTCAAAAGTTTGAA CTCCACTTACTCCAAAACAGAAACGGAAAATGGCGAGAACAGCTAGGTCAAAAGTTTGAA ****************************	
MO_NS_NCBI MO_NS_pHW2000 MO_NS_Virus	GAGATAAGATGGCTGATTGAAGAAGTGAGACACAGACTAAAAACAACTGAAAATAGCTTT GAGATAAGATGGCTGATTGAAGAAGTGAGACACAGACTAAAAACAACTGAAAATAGCTTT GAGATAAGATGGCTGATTGAAGAAGTGAGACACAGACTAAAAACAACTGAAAATAGCTTT **********************************	780 780 780
MO_NS_NCBI MO_NS_pHW2000 MO_NS_Virus	GAGCAAATAACATTCATGCAAGCATTACAGCTGCTGTTTGAAGTGGAACAGGAGATAAGA GAGCAAATAACATTCATGCAAGCATTACAGCTGCTGTTTGAAGTGGAACAGGAGATAAGA GAGCAAATAACATTCATGCAAGCATTACAGCTGCTGTTTGAAGTGGAACAGGAGATAAGA ****************************	840
MO_NS_NCBI MO_NS_pHW2000 MO_NS_Virus	ACTTTCTCATTTCAGCTTATTTAATGATAAAAAACACCCTTGTTTCTACT 890 ACTTTCTCATTTCAGCTTATTTAATGATAAAAAACACCCTTGTTTCTACT 890 ACTTTCTCATTTCAGCTTATTTAATGATAAAAAACACCNNNNNNNNNN	