## 1. influenza extracted.fasta

>gi|58576|gb|X52226|Influenza A virus (A/FPV/Rostock/34(H7N1)) gene for neuraminidase, genomic RNA AGCAAAAGCAGGAGTTCAAAATGAATCCAAATCAGAAAATAATAACCATTGGGTCAATCT GTATGGGGATCGGAATAATCAGCCTAATATTACAAATTGGAAACATAATCTCAATGTGGG TTAGTCATTCAATTCAGACTGAAAATCAAAATCACCATGAAGCATGCAACCCAAGCATTG CTGGACAGGATGCAGCTCAGTGGCACTAGCAGGCAATTCCTCTCTTTGTCCCATTAGTG GGTGGGCTATATACAGTAAAGACAATGGTATAAGAATTGGCTCCAAAGGAGACGTATTTG TCATAAGAGAGCCATTTATTTCATGCTCTCACTTGGAATGCAGGACCTTTTTTCTGACTC AGGGCGCCTTGTTGAATGACAAACACTCAAATGGAACCGTTAAAGACAGAAGCCCTTATA GAACCTTGATGAGCTGTCCTGTTGGTGAAGCTCCTTCTCCCTACAATTCAAGGTTCGTGT CGGTTGCATGGTCAGCAAGTGCCTGCCATGATGGCATGGGTTGGCTAACAATCGGAATTT CTGGTCCAGATAATGGAGCAGTGGCTGTATTAAAATACAATGGTATAATAACAGACACCA TCAAAAGTTGGAAAAATAACATATTGAGAACGCAAGAGTCTGAATGTGCCTGTATAAATG GTTCATGTTTCACTATAATGACCGATGGCCCAAGTAATGGGCAGGCCTCGTACAAAATTT TCAAGATAGAAAAGGGGAAGGTAGTCAAATCAAGTGAATTAAATGCACCTAATTACCACT ACGAGGAATGTTCTTGTTATCCTGATGCAGGTGAAGTAATGTGTGTATGCAGGGATAATT GGCATGGTTCGAATCGACCATGGGTGTCTTTCAATAAAAACCTTGATTATCAAATAGGTT ACATCTGCAGTGGGGTTTTTGGTGATAATCCACGACCCAATGATGGAACAGGCAGCTGTG GTCCAGTGTCTTCTAATGGAGCATATGGGATAAAGGGGTTCTCATTTAAGTATGGTAATG GTGTTTGGATAGGGAGAACCAAAAGCACTAGTTCCAGAAGCGGGTTTGAGATGATTTGGG ATCCCAATGGATGGACAGAAACTGACAGCAGTTTCTCTGTGAAGCAAGATATTGTAGCAA TAACTGATTGGTCGGGATATAGCGGGAGTTTCGTCCAACACCCTGAATTAACAGGGTTGG ACTGCATGAGGCCTTGTTTCTGGGTTGAACTGATCAGGGGACGGCCCAACCACAATACGA TCTGGACTAGTGGGAGCAGCATTTCCTTCTGTGGTGTAACAGCGATACTGTAGGTTGGT  ${\tt CTTGGCCAGACGGTGCTGAGTTGCCATTCACCATTGACAAGTAGTTTGTTCAAAAAAACT}$ **CCTTGTTTCTACT** 

>gi|59292|gb|X53029|Influenza A virus (A/USSR/90/1977(H1N1)) genes for matrix proteins 1 and 2, genomic RNA

>gi|59294|gb|X59778|Influenza A virus (A/NIB/4/1988(H1N1)) gene for polyprotein, genomic RNA GGATCCTGTTATGTGCATTTACAGCTACAGATGCAGACACAATATGTATAGGCTACCATG CGAACAACTCAACCGACACTGTTGACACAGTACTTGAGAAGAACGTGACAGTGACACACT CTGTCAACCTACTTGAGGACAGTCACAACAGAAAACTATGTCGACTAAAAGGAATAGCCC CACTACAATTGGGTAATTGCAGCATTGCCGGATGGATCTTAGGAAACCCAGAATGCGAAT CACTGTTTTCTAAGGAATCATGGTCCTACATTGCAGAAACACCCAAACTCCGAGAATGGAA CATGTTACCCAGGGTATTTCGCCGACTATGAGGAACTGAGGGAGCAATTGAGTTCAGTAT CATCATTCGAGGGATTCGAAATATTCCCCGAAGAAAGCTCATGGCCCAACCACCGTAA CCAAGGGAGTAACGGCATCATGCTCCCATAATGGGAAAAGCAGTTTTTACAGAAATTTGC TATGGCTGACGGAGAAGAATGGCTTGTACCCAAATCTGAGCAAGTCCTATGTAAACAACA AAGAGAAGAAGTCCTTGTACTATGGGGTGTTCATCACCCGTCTAACATAGGGGACCAAA GGGCCATCTATCATACAGAAAATGCTTATGTCTCTGTAGTGTCTTCACATTATAGCAGGA ACTACTGGACTCTGCTGGAACCCGGGGACACAATAATATTTGAGGCAAATGGAAATCTAA TAGCGCCATGGTATGCTTTCGCACTGAGTAGAGGCTTTGGGTCAGGAATCATCACCTCAA ACGCATCAATGGATGAATGTGACGCGAAGTGTCAAACACCCCAGGGAGCTATAAACAGTA GTCTTCCTTTCCAGAATGTACACCCAGTCACAATAGGAGAGTGTCCAAAGTATGTCAGGA TGTTTGGAGCCATTGCCGGTTTCATTGAAGGGGGATGGACTGGAATTC

>gi|59296|gb|X66320|Influenza A virus (A/Chile/1/1983(H1N1)) gene for PB1 polymerase ACACCAAATGGAACGAAAATCAGAACCCTAGAATGTTTTTGGCCATGATCACATATATAA CCAGAAATCAGCCCGAATGGTTCAGAAATATTCTAAGTATTGCTCCAATAATGTTCTCAA ACAAAATGGCGAGACTAGGTAAGGGGTACATGTTTGAAAGCAAGAGTATGAAACTTAGAA CTCAAATACCTGCAGAAATGCTAGCAAACATCGATTTGAGGTATTTCAATGATTCAACAA GAAAGAAAATTGAAAAAATCCGGCCACTCTTAATAGATGGAACTGCATCACTGAGCCCTG GAATGATGGGCATGTTCAATATGTTAAGCACTGTATTGGGCGTCTCCATCCTGAATC TTGGACAAAAGAGATACACCAAGACTACTTACTGGTGGGATGGTCTTCAATCGTCTGATG ATTTTGCTCTGATTGTGAATGCACCCAACTATGCAGGAATTCAAGCTGGAGTTGACAGGT TTTATCGAACCTGTAAGCTGCTCGGAATCAACATGAGCAAGAAAAAGTCCTACATAAACA GAACAGGTACTTTTGAATTCACGAGTTTTTTCTATCGTTATGGGTTTGTTGCCAATTTCA GCATGGAGCTTCCCAGTTTTGGGGTGTCTGGGATCAACGAGTCTGCAGACATGAGTATTG GAGTCACTGTCATCAAAAACAATATGATAAACAATGATCTTGGTCCAGCAACCGCTCAAA TGGCCCTTCAGTTATTCATCAAAGATTACAGGTACACATATCGATGCCACAGAGGTGACA CACAAATACAAACCCGAAGATCATTTGAAATAAAGAAACTGTGGGATCAAACCCGTTCCA AAACTGGGCTGCTGGTCTCTGATGGAGGTCCTAATTTGTACAACATTAGAAATCTCCACA TTCCTGAAGTCTGCTTGAAATGGGATTTGATGGATGAGGATTACCAGGGGCGTTTATGCA ACCCATTGAACCCATTTGTCAGTCATAAAGAGATTGAATCAGTGAACAATGCAGTGATGA GGGTCCCCAAAAGGAATCGATCCATCTTGAATACGAGCCAAAGGGGAATACTTGAGGATG AACAAATGTATCAGAGGTGCTGCAATTTATTTGAAAAATTCTTCCCCAGCAGTTCATACA GAAGACCAGTCGGAATATCCAGTATGGTAGAGGCTATGATTTCCAGAGCCCGAATTGATG CACGGATTGATTTCGAATCTGGAAGGATAAAGAAAGAGGAGTTCACTGAGATCATGAAGA TCTGTTCCACCATTGAAGAACTCAGACGGCAAAAATAGGGAATTTGGCTTGTCCTTCGTG AAAAAATGCCTTGTTTCTACT

>gi|60457|gb|X08088|Influenza A virus (A/WSN/33) ORF1 RNA for M1 protein and ORF2 RNA for M2 protein, genomic RNA

## output\_bed\_file.bed

gi 59292 gb X53029 Influenza 0 1027 Seq	quence_2
gi 59294 gb X59778 Influenza 0 1068 Seq	quence_3
gi 59296 gb X66320 Influenza 0 1401 Seq	quence_4
gi 60457 gb X08088 Influenza 0 982 Seq	quence_5

## 3. influenza.bed

gi 58576 gb X52226 Influenza	0	1393	Sequence_1
gi 59292 gb X53029 Influenza	0	1027	Sequence_2
gi 59294 gb X59778 Influenza	0	1068	Sequence_3
gi 59296 gb X66320 Influenza	0	1401	Sequence_4
gi 60457 gb X08088 Influenza	0	982	Sequence_5

## 4. influenza modified.fasta

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TATCATTGGGATCTTGCACTTGATATTGTGGATTCTTGATCGTCTTTTTTTCAAATGCAT
TTATCGTCGCTTTAAATACGGTTTGAAAAGAGGGCCTTCTACGGAAGGAGTGCCAGAGTC
TATGAGGGAAGAATATCGAAAGGAACAGCAGAATGCTGTGGATGTTGACGATGGTCATTT
TGTCAACATAGAGCTGGAGTAA
>gi|60463|gb|X08090|Influenza A virus (A/Port Chalmers/1/1973-mouse adapted(H3N2)) ORF1 for M1 protein and ORF2 for M2 protein, genomic RNA
ATGAGCCTTCTAACCGAGGTCGAAACGTATGTTCTCTCTATCGTTCCGTCAGGCCCCCTC
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TCTCATAGACAAATGGTGGCAACAACTAATCCACTAATAAGACATGAGAACAGAATGGTT
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CAGAAACGAATGGGGGTGCAGATGCAACGATTCAAGTGACCCTCTTGTTGTTGCTGCGAG
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TATGAGGGAAGAATATCGAAAGGAACAGCAGAGTGCTGTGGATGCTGACGACAGTCATTT
TGTCAGCATAGAGCTGGAGTAA
>gi|60466|gb|X08091|Influenza A virus (A/FW/1/1950(H1N1)) ORF1 for M1 protein and ORF2 for M2 protein, genomic RNA
ATGAGTCTTCTAACCGAGGTCGAAACGTACGTTCTCTCTATCGTCCCGTCAGGCCCCCTC
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TATGAGGGAAGAATATCGAAAGGAACAGCAGAGTGCTGTGGATGCTGACGATAGTCATTT
TGTCAACATAGAGCTGGAGTAA
>gi|60469|gb|X08092|Influenza A virus (A/Port Chalmers/1/1973(H3N2)) ORF1 for M1 protein and ORF2 for M2 protein, genomic RNA
ATGAGCCTTCTAACCGAGGTCGAAACGTATGTTCTCTCTATCGTTCCGTCAGGCCCCCTC
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CTATCGATTCTTTGAACACGGTCTGAAAAGAGGGCCTTCTACGGAAGGAGTACCTGAGTC
TATGAGGGAAGAATATCGAAAGGAACAGCAGAGTGCTGTGGATGCTGACGACAGTCATTT
TGTCAGCATAGAGCTGGAGTAA
>gi|60472|gb|X08093|Influenza A virus (A/Singapore/1/1957(H2N2)) ORF1 for M1 protein and ORF2 for M2 protein, genomic RNA
ATGAGTCTTCTAACCGAGGTCGAAACGTACGTTCTCTCTATCGTCCCGTCAGGCCCCCTC
AAAGCCGAGATCGCACAGAGACTTGAAGATGTCTTTGCTGGGAAGAACACCGATCTTGAG
GCTCTCATGGAATGGCTAAAGACAAGACCAATCCTGTCACCTCTGACTAAGGGGATTTTG
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>gi|60475|gb|X14217|Influenza B virus (STRAIN B/ANN ARBOR/1/86) np gene for nucleoprotein, genomic RNA GCAGAAGCAGAGCATTTTCTTGTGAACTTAAAGTACCAACAAAAACTGAAAAATCAAAAT GTCCAACATGGATATTGACGGCATCAACGCTGGAACAATTGACAAAACACCAGAAGAAAC AACTTCTGGAACCAGTGGAGCAACCAGACCAATCATCAGACCAGCAACCCTTGCCCCACC AAGCAACAAACGGACCCGGAACCCATCCCCGGAAAGGGCAACCACAAGCAGTGAAGCTGA TATCGGAAGGAGAACCCAAAAGAACCACGGACAGAGATAAAGAAGAGGCGTCTACAA TATGGTAGTGAAACTGGGTGAATTCTACAACCAGATGATGGTCAAAGCTGGACTCAACGA TGACATGGAGAGAAACCTAATCCAAAATGCACATGCTGTGGAAAGAATTCTATTGGCTGC TACGGATGACAAGAAAACTGAATTCCAGAAGAAAAAGAATGCCAGAGATGTCAAAGAAGG GAAAGAAGAAATAGACCACAACAAAACAGGAGGCACCTTTTACAAGATGGTAAGAGATGA TAAAACCATCTACTTCAGCCCTATAAGAATTACCTTTTTAAAAGAAGAGGTGAAAACAAT GTACAAAACCACCATGGGGAGTGATGGTTTCAGTGGACTAAATCACATCATGATTGGGCA TTCACAGATGAACGATGTCTGCTTCCAAAGGTCAAAGGCATTAAAAAGAGTTGGACTTGA  ${\tt CCCTTCATTAATCAGCACTTTTGCAGGGAGCACGCTCCCCAGAAGATCAGGTACAACTGG}$ TGTTGCGACCAAAGGAGGTGGAACTTTAGTAGCAGAAGCCATTCGATTTATAGGAAGAGC AATGGCAGATAGAGGCTATTGAGAGACATCAAAGCCAAGACGGCCTATGAAAAGATTCT TCTGAATCTGAAAAACAAGTGCTCTGCGCCCCAACAAAAGGCTCTAGTTGATCAAGTGAT GGTCGTTGTTAGGCCCTCTGTGGCGAGCAAAGTGGTGCTTCCCATAAGCATTTATGCTAA AATACCCCAACTAGGGTTCAATGTTGAAGAATACTCTATGGTTGGGTATGAAGCCATGGC TCTTTATAATATGGCAACACCTGTTTCCATATTAAGAATGGGAGATGATGCAAAAGATAA ATCACAACTATTCTTCATGTCTTGCTTCGGAGCTGCCTATGAAGACCTAAGAGTTTTGTC TGCACTAACAGGCACAGAATTCAAGCCCAGGTCAGCATTAAAGTGCAAGGGTTTCCACGT TCCAGCAAAGGAGCAAGTGGAAGGAATGGGGGCAGCTCTGATGTCCATCAAGCTCCAGTT TTGGGCTCCAATGACCAGATCTGGGGGAAATGAAGTAGGTGGAGAGACGGAGGGTCTGGCCA AATAAGTTGCAACCCAGTGTTTGCAGTAGAAAGACCTATTGCTCTAAGCAAACAAGCTGT AAGAAGAATGCTGTCAATGAATATTGAGGGACGTGATGCAGATGTCAAAGGAAATCTACT CAAGATGATGAATGATTCAATGGCTAAGAAAACCAATGGGAATGCTTTCATTGGGAAGAA AATGTTTCAAATATCAGACAAAAACAAAACCAATCCCATTGAGATTCAAATTAAGCAGAC CATCCCCAATTTCTTCTTTGGGAGGGACACAGCAGAGGATTATGATGACCTCGACTATTA AAGCAACAAAATAGACACTATGGCTGTGATTGTTTCAGTACGTTTGGGATGTGGGTGTTT

>gi|60477|gb|X15890|Influenza A virus (A/81/HO) RNA for nucleoprotein, genomic RNA, 81/HO reassortant AGCAAAAGCAGGGTAGATAATCACTCACTGAGTGACATCAAAATCATGGCGTCCCAAGGC ACCAAACGGTCTTATGAACAGATGGAAACTGATGGGGAACGCCAGAATGCAACTGAGATC AGAGCATCCGTCGGGAAGATGATTGATGGAATTGGACGATTCTACATCCAAATGTGCACT GAACTTAAACTCAGTGATTATGAGGGGCGACTGATCCAGAACAGCTTAACAATAGAGAGA ATGGTGCTCTCTGCTTTTGACGAAAGAAGGAATAAATATCTGGAAGAACATCCCAGCGCG GGGAAGGATCCTAAGAAAACTGGAGGACCCATATACAAGAGAGTAGATGGAAAGTGGATG AGGGAACTCGTCCTTTATGACAAAGAAGAAATAAGGCGAATCTGGCGCCAAGCCAATAAT GGTGATGATGCAACAGCTGGTCTGACTCACATGATGATCTGGCATTCCAATTTGAATGAT ACAACATACCAGAGGACAAGAGCTCTTGTTCGCACCGGCATGGATCCCAGGATGTGCTCT CTGATGCAGGGTTCGACTCTCCCTAGGAGGTCTGGAGCTGCAGGCGCTGCAGTCAAAGGA GTTGGGACAATGGTGATGGAGTTGATAAGGATGATCAAACGTGGGATCAATGATCGGAAC TTCTGGAGAGGTGAAAATGGACGAAAAACAAGGAGTGCTTACGAGAGAATGTGCAACATTCTCAAAGGAAAATTTCAAACAGCTGCACAAAGGGCAATGATGGATCAAGTGAGAAAGT CGGAACCCAGGAAATGCTGAGATCGAAGATCTCATCTTTCTGGCACGGTCTGCACTCATA TTGAGAGGGTCAGTTGCTCACAAATCTTGTCTGCCCGCCTGTGTGTATGGACCTGCCGTA GCCAGTGGCTACGACTTCGAAAAAGAGGGATACTCTTTAGTGGGAATAGACCCTTTCAAA CTGCTTCAAAACAGCCACGTATACAGCCTAATCAGACCGAACGAGAATCCAGCACACAAG AGTCAGCTGGTGTGGATGGCATGCAATTCTGCTGCATTTGAAGATCTAAGAGTATTAAGC TTCATCAGAGGGACCAAAGTATCCCCAAGGGGGAAACTTTCCACTAGAGGAGTACAAATT GCTTCAAATGAAAACATGGATGCTATGGAATCAAGTACTCTTGAACTGAGAAGCAGGTAC TGGGCCATAAGAACCAGAAGTGGAGGAAACACTAATCAACAGAGGGCCTCTGCAGGTCAA ATGGCAGCATTCACTGGGAATACAGAGGGAAGAACATCAGACATGAGGGCAGAAATTATA AGGATGATGGAAGGTGCAAAACCAGAAGAAATGTCCTTCCAGGGGCGGGGAGTCTTCGAG CTCTCGGACGAAAAGGCAGCGAACCCGATCGTGCCCTCTTTTGACATGAGTAATGAAGGA TCTTATTTCTTCGGAGACAATGCAGAGGAGTACGACAATTAAGGAAAAATACCCTTGTTT CTACT

CTCCACTCACTCCAAAACAGAAACGGAAAATGGCGAGAGCAATTAGGTCAGAAGTTCGAA GAAATAAGATGGCTGATTGAAGAAGTGAGACATAAATTGAAGATAACAGAGAATAGTTTT GAGCAAATAACATTTATGCAAGCCTTACAGCTATTGTTTGAAGTGGAACAAGAGATAAGA ACGTTTTCGTTTCAGCTTATTTAATGATAAAAAAACACCCTTGTTTCTACT >gi|60482|gb|X07869|Influenza A virus (A/chicken/Scotland/59(H5N1)) mRNA for haemagglutinin precursor AGCAAAAGCAGGGGTCTGATCTACTAAAATGGAGAGAATAGTGCTTCTTCTTGCAATAGT CAGTCTTGTCAAAAGTGACCAGATTTGCATTGGTTACCATGCAAAACAAATCGACAAAACA GGTTGACACAATAATGGAGAAGAATGTGACTGTCACACACGCCCAAGATATACTTGAAAG GACACAACGGGAAGCTCTGCAGTCTAAATGGGGTGAAACCTCTCATCTTGAGGGACTG TAGTGTAGCTGGATGGCTCCTGGGAAACCCCATGTGTGACGAGTTCCTAAATCTGCCAGA ATGGTTATACATAGTAGAAAAGGACAATCCAATCAACAGCCTCTGCTACCCAGGGGATTT TAATGACTACGAAGAACTGAAATACCTATTGAGCAGTACAAACCATTTTGAGAAAATTCG AATCATCCCCAGGAGCTCTTGGTCCAATCATGATGCTTCATCAGGAGTGAGCTCTGCATG TCCATACATTGGGAGGTCCTCCTTTTTAAGAAATGTGGTATGGCTGATCAAAAAGAACAA CACTTACGTTTCTGTCGGAACATCAACACTGAACCAGAGATCAATTCCAGAAATAGCCAC TAGGCCTAAAGTAAATGGGCAGAGCGGACGAATGGAATTCTTCTGGACAATTTTAAAGCC AAATGATGCAATCAATTTTGAGAGTAATGGGAACTTCATAGCTCCAAGATATGCATACAA AATCGTCAAGAAGGGGGACTCGGCAATCATGAAAAGCGGCTTGGCATATGGTAACTGTGA TACTAAGTGTCAAACTCCAGTGGGTGAGATAAACTCCAGTATGCCCTTCCACAATATACA CCCTCACACCATTGGGGAATGCCCTAAATACGTGAAATCAGATAGGTTGGTCCTTGCAAC TGGACTCAGAAACGTCCCTCAAAGGAAGAAAAGAGGTCTATTTGGGGCTATAGCGGGCTT TATTGAAGGGGGATGGCAGGGAATGGTAGACGGTTGGTATGGATACCATCATAGCAACGA ACAGGGAAGTGGGTATGCTGCAGACAAAGAGTCCACTCAAAAGGCAATTGATGGAATCAC CAACAAGGTCAATTCAATCATTGACAAAATGAACACCCGGTTTGAGGCCGTCGGAAAGGA ATTTAATAATTTGGAGAGGGGGTAGAGAATTTGAACAAGAAAATGGAAGACGGGTTTCT AGATGTTTGGACTTACAATGTGGAACTTCTAGTCCTTATGGAAAATGAAAGGACTCTGGA TTTCCATGACTCAAACGTCAACAACCTTTATGATAAAGTCCGACTACAGCTTAAGGACAA GGAAAGTGTGAGAAACGGAACATATGACTACCCACAGTATTCAGAAGAAGCAAGACTAAA CAGGGAGGAAATAAGTGGAGTTAAATTGGAATCAATGGGGGTTTATCAAATACTGTCAAT TTATTCAACAGTGGCAAGTTCCCTAGCACTGGCAATCATGATAGCTGGTCTATCTTTTTG GATGTGTTCCAATGGGTCATTGCAGTGCAGAATTTGCATTTGAATTTATTGAGTTCAGAT TGTAGTTAAAAACACCCTTGTTTCTACT >gi|60484|gb|V00603|Influenza A virus (A/PR/8/34(H1N1)) mRNA for hypothetical protein, strain A/PR/8/34

AGCGAAAGCAGGTCAATTATATTCAATATGGAAAGAATAAAAGAACTAAGAAATCTAATG TCGCAGTCTCGCACCCGCGAGATACTCACAAAAACCACCGTGGACCATATGGCCATAATC AAGAAGTACACATCAGGAAGACAGGAGAAGAACCCAGCACTTAGGATGAAATGGATGATG GCAATGAAATATCCAATTACAGCAGACAAGAGGATAACGGAAATGATTCCTGAGAGAAAT GAGCAAGGACAAACTTTATGGAGTAAAATGAATGATGCCGGATCAGACCGAGTGATGGTA TCACCTCTGGCTGTGACATGGTGGAATAGGAATGGACCAATGACAAATACAGTTCATTATCCAAAAATCTACAAAACTTATTTTGAAAGAGTCGAAAGGCTAAAGCATGGAACCTTTGGC CCTGTCCATTTTAGAAACCAAGTCAAAATACGTCGGAGAGTTGACATAAATCCTGGTCAT GCAGATCTCAGTGCCAAGGAGGCACAGGATGTAATCATGGAAGTTGTTTTCCCTAACGAA GTCCGCAAAACGAGATTCCTCCCAGTGGCTGGTGGAACAAGCAGTGTGTACATTGAAGTG TTGCATTTGACTCAAGGAACATGCTGGGAACAGATGTATACTCCAGGAGGGGAAGTGAAG AATGATGATGATCAAAGCTTGATTATTGCTGCTAGGAACATAGTGAGAAGAGCTGCA GTATCAGCAGACCCACTAGCATCTTTATTGGAGATGTGCCACAGCACACAGATTGGTGGA ATTAGGATGGTAGACATCCTTAAGCAGAACCCAACAGAAGAGCAAGCCGTGGGTATATGC AAGGCTGCAATGGGACTGAGAATTAGCTCATCCTTCAGTTTTTGGTGGATTCACATTTAAG AGAACAAGCGGATCATCAGTCAAGAGAGAGGAAGAGGTGCTTACGGGCAATCTTCAAACA TTGAAGATAAGAGTGCATGAGGGATATGAAGAGTTCACAATGGTTGGGAGAAGAGCAACA CAGTCGATTGCCGAAGCAATAATTGTGGCCATGGTATTTTCACAAGAGGATTGTATGATA AAAGCAGTTAGAGGTGATCTGAATTTCGTCAATAGGGCGAATCAGCGACTGAATCCTATG CATCAACTTTTAAGACATTTTCAGAAGGATGCGAAAGTGCTTTTTCAAAATTGGGGAGTT GAACCTATCGACAATGTGATGGGAATGATTGGGATATTGCCCGACATGACTCCAAGCATC GAGATGTCAATGAGAGGAGTGAGAATCAGCAAAATGGGTGTAGATGAGTACTCCAGCACG GAGAGGGTAGTGGTGAGCATTGACCGGTTCTTGAGAGTCCGGGACCAACGAGGAAATGTA CTACTGTCTCCCGAGGAGGTCAGTGAAACACAGGGAACAGAGAAACTGACAATAACTTAC TCATCGTCAATGATGTGGGAGATTAATGGTCCTGAATCAGTGTTGGTCAATACCTATCAA TGGATCATCAGAAACTGGGAAACTGTTAAAATTCAGTGGTCCCAGAACCCTACAATGCTA TACAATAAAATGGAATTTGAACCATTTCAGTCTTTAGTACCTAAGGCCATTAGAGGCCAA TACAGTGGGTTTGTGAGAACTCTGTTCCAACAAATGAGGGATGTGCTTGGGACATTTGAT ACCGCACAGATAATAAAACTTCTTCCCTTCGCAGCCGCTCCACCAAAGCAAAGTAGAATG CAGTTCTCCTCATTTACTGTGAATGTGAGGGGATCAGGAATGAGAATACTTGTAAGGGGC AATTCTCCTGTATTCAACTACAACAAGGCCACGAAGAGACTCACAGTTCTCGGAAAGGAT GCTGGCACTTTAACCGAAGACCCAGATGAAGGCACAGCTGGAGTGGAGTCCGCTGTTCTG AGGGGATTCCTCATTCTGGGCAAAGAAGACAGGAGATATGGGCCAGCATTAAGCATCAAT GAACTGAGCAACCTTGCGAAAGGAGAGAGAGGCTAATGTGCTAATTGGGCAAGGAGACGTG 

AAAAGAATTCGGATGGCCATCAATTAGTGTCGAATAGTTTAAAAAACGACCTTGTTTCTAC

>gi|60486|gb|X55992|Influenza C virus (STRAIN C/BERLIN/1/85) mRNA for basic polymerase 2 precursor GGATTGAAAATGTCTCTTCTATTGACAATAGCAAAGGAATACAAAAGACTATGCCAAGAT GCTAAGGCAGCTCAAATGATGACAGTGGGAACTGTATCGAACTACACTACGTTCAAGAAA TGGACTACATCAAGGAAGGAAAAGAATCCTTCATTAAGAATGAGGTGGGCAATGAGCAGT AAATTCCCAATAATAGCTAACAAGAGAATGCTGGAAGAAGCACAAATTCCTAAAGAACAC AACAATGTAGCCCTTTGGGAAGACACGGAAGATGTTTCAAAAAGGGATCATGTTCTTGCA AGCGCCTCTTGTATAAATTATTGGAATTTTTGTGGACCTTGTGTTAACAATTCAGAAGTG AAAGAACTTAGATTTACATTAGTTGATAGACAACGAAGAAGAGTTGACACTCAACCTGTA GAACAAAGATTGAGAACTGGAGAAATTAAAGACTTGCAAATGTGGACTTTGTTCGAAGAT GAAGCTCCTCTTGCTAGCAAATTCATTTTAGACAATTATGGTCTAGTCAAAGAAATGAGA TCAAAGTTTGCAAACAACCTTTGAATAAAGAAGTAGTTGCACATATGTTAGAAAAACAA TTGATCCATGCATTAGGAGGAGAAACTTGGATACAAGAAGCTAACACTGCAGGGATTTCC AATGTTGATCAAAGGAAAAATGATATGAGAGCAGTATGTAGAAAAGTTTGTCTTGCAGCA AATGCAAGTATAATGAACGCCAAAAGCAAACTGGTTGAGTATAAAAAAGTACAAGTATG AGAATTGGAGAAACAGAAAGAAAGCTTGAAGAACTTATACCTGAAACCGATGATGTCTCA  ${\tt CCTGAAGTAACATTATGTAAATCTGCTTTAGGAGGACCATTAGGAAAAACTCTATCCTTT}$ GGGCCCATGCTACTCAAGAAAATTTCTGGTTCCGGAGTAAAAGTTAAAGATACAGTATAT ATCCAAGGCGTCAGAGCAGTACAATTTGAATACTGGAGTGAGCAAGAAGAATTCTATGGA GAATATAAGTCAGCCACCGCTTTATTCAGCAGAAAGGAAAGATCACTAGAATGGATTACA ATAGGAGGAGGAATAAATGAAGACAGAAAGAGACTTCTAGCTATGTGCATGATATTTTGC AGAGATGGAGATTATTTTAAAGACGCCCCTGCAACAATAACAATGGCAGATTTAACTACA AAATTAGGAAGAAAATTCCATATCAATATGTGATGATGAATTGGATACAAAAATCAGAA GATAATCTTGAAGCCTTATTATACAGTAGGGGAATTGTAGAAACTAATCCAGGGAAAATG GGAAGTTCAATGGGAATTGATGGTTCCAAAAGAGCAATTAAATCTTTGAGGGCTGTCACA ATACAATCAGGAAAGATTGATATGCCAGAATCAAAAGAAAAAATTCACCTTGAGCTCTCT GATAATCTTGAAGCATTTGATTCATCAGGAAGAATTGTTGCAACAATTTTAGACCTTCCT AGTGACAAAAAGTAACATTTCAGGATGTAAGCTTTCAACATCCTGATCTGGCAGTATTG AGAGATGAGAAAACGGCCATAACAAAAGGGTATGAAGCGCTAATCAAAAGGCTAGGAACA GGGGACAATGATATTCCTTCCTTAATTGCTAAGAAGGATTATTTGTCGCTTTATAATTTA CCGGAAGTAAAATTAATGGCTCCCTTAATTAGACCCAATAGAAAAGGAGTTTATTCCAGA GTTGCTAGAAAATTAGTGTCTACACAAGTTACTACTGGACATTATTCATTACATGAATTG TTCTTTAGCAACGATAGCTTTGTTGAGCCTGGAGTAAATAACAATGTGTTGTCTTGGAGT AAGGCTGACAGTTCTAAAATATATTGTCATGGAATAGCTATAAGGGTACCTTTAGTTGTT GGAGATGAACACATGGACACTTCGTTAGCACTATTAGAAGGGTTTAGTGTTTGTGAAAAC GACCCCAGAGCACCAATGGTAACAGGACAAGACTTAATTGATGTGGGATTTGGGCAAAAA GTTAGACTCTTCGTAGGCCAAGGGAGCGTTAGAACCTTCAAGCGAACTGCCTCACAAAGG >gi|60493|gb|X17221|Influenza A virus (A/CHR/157/83(H1N1)) gene for haemagglutinin, genomic RNA CCAAAATGAAAGCAAAACTACTGGTCCTGTTATGTGCACTCTCAGCTACAGATGCAGACA CAATATGTATAGGCTACCATGCGAACAACTCAACCGACACTGTTGACACAGTACTCGAAA AGAACGTGACAGTGACACTCTGTCAACCTACTTGAGGACAATCACAACGGGAAACTAT TAGGAAACCCAGAATGCGAATCACTGTTTTCTAAGAAATCATGGTCCTACATTGCAGAAA CACCAAACTCCGAGAATGGAACATGTTACCCAGGGTATTTCGCCGACTATGAAGAACTGA GGGAACAATTGAGTTCAGTATCATCATTCGAGAGATTCGAAATATTCCCCAAGGAAAGTT CATGGCCCAACCACAACGTAACCAAAGGAGTAACGGCATCATGCTCCCATAAGGGGAAAA GCAGTTTTTACAGAAATTTGCTATGGCTGACGGAGAAAAATGGCTCGTACCCAAATCTGA GCAAGTCCTATGTGAACAACAAAGAGAAAGAAGTCCTTGTACTATGGGGTGTTCATCACC CGTCTAACATAGAGGACCAAAAGACCATCTATCGTAAAGAAAATGCTTATGTCTCTGTAG TGTCTTCACATTATAACAGGAGATTCACCCCAGAAATAGCAAAAAGACCCAAAGTAAGAG ATCAAGAAGGGAGAATTAACTACTACTGGACTCTGCTGGAACCCGGGGACACAATAATAT TTGAGGCAAATGGAAATCTAATAGCGCCATGGTATGCTTTCGCACTGAGTAGAGGCTTTGGGTCAGGAATCATCACCTCAAACGCATCGATGGATGAATGTGACGCGAAGTGTCAAACAC CCCAGGGAGCTATAAACAGTAGTCTTCCTTTTCAGAATGTACACCCAGTCACAATAGGAG AGTGCCCAAAGTACGTAAGGAGTACAAAATTAAGGATGGTTACAGGACTAAGGAACATCC CATCCATTCAATCCAGAGGTTTGTTTGGAGCCATTGCCGGTTTCATTGAAGGGGGATGGA CTGGAATGATTGATGGATGGTATGGTTATCATCATCAGAATGAACAGGGATCTGGCTATG TAATCGAGAAAATGAACACTCAATTCACAGCTGTGGGTAAAGAATTCAACAAACTAGAAA AAAGGATGGAAAACTTAAATAAAAAAGTTGATGATGGATTTCTGGACATTTGGACATATA ATGCAGAATTGTTGGTTCTACTGGAAAATGAAAGGACTTTGGATTTCCATGACTCAAATG TGAAGAACCTGTATGAGAAAGTAAAAAGCCAATTAAAGAATAATGCCAAAGAAATAGGAA GAACTTATGACTATCCAAAATATTCAGAGGAATCAAAATTAAACAGGGAAAAAATTGATG GAGTGAAATTGGAATCAATGGGAGTCTATCAGATTCTGGCGATCTACTCAACTGTCGCCA GTTCACTGGTGCTTTTGGTCTCCCTGGGGGCAATCAGCTTCTGGATGTGTTCTAATGGGT CTTTGCAGTGCAGAATATGCATCTGAGACCAGAATTTCAGAAATATAAGAAAAAAACACC CTTGTTTCTACT

<sup>&</sup>gt;gi|60495|gb|X17223|Influenza A virus (A/FPV/Rostock/34(H7N1)) gene for PA polymerase 1 precursor, genomic RNA

AGCAAAAGCAGGTACTGATCCAAAATGGAAGAATTTGTGCGACAATGCTTCAATCCAATG ATCGTCGAGCTTGCGGAAAAGACAATGAAAGAATATGGAGAGGACCCGAAGATTGAAACA AACAAATTCGCAGCAATATGCACACATTTGGAAGTGTTTCATGTATTCAGATTTCCAC TTTATTGATGAACGGGGAGAGTCAAAGATTGTAGAATCTGGTGACCCAAATGCACTCTTG AAGCACCGATTTGAGATAATTGAAGGAAGAGATCGCACGATGGCCTGGACGGTGGTGAAT AAGGAGAACCGATTCATTGAAATTGGAGTGACAAGAAGGGAGGTCCACATATACTACTTA GAAAAAGCCAATAAGATAAAATCTGAGAAGACACACATCCACATCTTCTCATTCACTGGG GAAGAAATGGCCACTAAGGCGGACTACACTCTTGATGAAGAGAGCAGAGCAAGGATCAAA ACCAGGCTATTCACCATAAGACAAGAAATGGCCAGTAGAGGCCTCTGGGATTCCTTTCGT CAGTCCGAGAGAGGCGAAGACAATTGAAGAAAGATTTGAAATCACAGGAACCATGCGC AGGCTTGCCGAACAAGTCTCCCACCGAACTTCTCCAGCCTTGAAAACTTTAGAGCCTAT GTGGATGGATTCAAACCGAACGGCTGCATTGAGGGCAAGCTTTCTCAAATGTCCAAAGAA GTAAATGCAAGAATCGAGCCATTCTTGAAGACAACACCCCCCCTCTCAGATTACCTGAT GAAGACCCAAGTCATGAGGGGGGGGGGTACCACTACATGATGCAATCAAATGCATGAAG A CATTCTTTGGCTGGAAAGAGCCCAATATTGTCAAACCGCATGAGAAGGGCATAAATCCCAACTATCTCCTGGCTTGGAACCAGGTGCTAGCAGAACTGAAGGATATTGAGAATGAGGAG AAAATTCCAAAAACAAAAATATGAAGAAAACAAGCCAGTTAAAGTGGGCACTTGGTGAG AACATGGCACCAGAGAAAGTAGACTTTGAGGATTGCAAGGACATTAGCGATCTGAAGCAG TATGACAGTGATGAGCCAGAACAGAGATCACTAGCGAGTTGGATCCAGAGTGAATTCAAC AAAGCATGTGAGCTGACCGATTCAGGTTGGATAGAACTTGATGAAATAGGAGAAGATGTA GCCCCAATCGAGCACATTGCAAGTATGAGGAGAAACTATTTCACAGCGGAAGTGTCTCAC TGCAGGGCAACGGAGTACATAATGAAAGGGGTATACATAAACACGGCCTTGCTCAATGCA  ${\tt TCTTGTGCAGCTATGGATGACTTCCAGCTGATCCCAATGATAAGCAAATGCAGGACCAAA}$ GAAGGAAGACGAAGACGAATCTGTATGGATTCATTATAAAAGGAAGATCTCACTTGAGG GAGCCACACAGTGGGAGAAGTATTGTGTTCTTGAAATAGGAGACATGCTCCTGCGGACT GCAATAGGCCAAGTATCAAGGCCCATGTTCCTGTATGTGAGAACCAATGGAACCTCCAAA ATCAAGATGAAATGGGGTATGGAGATGAGACGTTGCCTTCTTCAGTCCCTTCAACAGGTT GAAAGCATGGTTGAGGCTGAGTCCTCTGTCAAGGAGAAAGACATGACTAAGGAATTCTTT GAAAACAAGTCAAAGACGTGGCCCATTGGAGAATCACCTAAAGGAGTGGAAGAAGGTTCC ATCGGGAAAGTGTGCAGGACCTTACTGGCGAAGTCTGTATTTAACAGCTTATATGCATCC CCACAACTTGAGGGATTTTCAGCGGAATCTAGAAAACTGCTCCTCATTGTTCAGGCTCTT AGAGACAACCTGGAACCTGGAACCTTCGATCTTGGAGGGCTATATGGAGCAATTGAGGAG CATGCACTGAAATAGTTGTGGCAATGCTACTATTTGCTATCCATACTGTCCAAAAAAGTA CCTTGTTTCTACT

gi|60497|gb|Z12617|Influenza A virus (A/FPV/Dutch/27(H7N7)) mbgl gene for L protein, genomic RNA AGCAAAAGCAGGGGATACAAAATGAACACTCAAATCCTGGTATTCGCCCTTGTGGCAGTC ATTCACACAAATGCAGACAAAATTTGCCTTGGACATCATGCTGTATCAAATGGCACCAAG  ${\tt GTAAACACTCACTGAGAGAGGAGTAGAAGTTGTCAATGCAACAGAAACAGTGGAGCGG}$ ACAAACATTCCCAAAATTTGCTCAAAAGGGAAAAGAACCGTTGATCTTGGCCAATGCGGA CTACTGGGGACCATTACCGGACCACCTCAATGCGACCAATTTCTAGAATTTTCAGCTGAT TTAATAATCGAGCGGCGAGAAAGAAATGATGTTTGTTACCCGGGGAAGTTTGTGAATGGA GAGGCATTGCGGCAAATCCTCAGAAAATCAGGTGGGATTAACAAAGAAACAATGGGATTC ACATACAGTGGAATAAGAACCAATGGAACAACTAGGGCGTGTAGAAGATCAGGATCTTCA TTCTATGCAGAAATGAAGTGGCTCCTGTCAGATACAGACAATGCTGCTTTCCCACAAATG ACGAAATCATACAAAAACACAAGGAGAGAACCAGCTCTGATAGTATTGGGAATCCACCAT TCAGGATCAACCACCGAGCAGACCAAACTATATGGAAGTGGAAATAAACTGATAACAGTC GAAAGTTCCAAATATCAGCAGTCTTTTGTGCCGAGTCCAGGAACACGACCGCATTTAAAT GGCCAGTCCGGACGAATTGATTTTCACTGGTTGATACTGGATTCCAATGACACAGTTACT TTTAGTTTCAATGGGGCTTTCATAGCTCCAGATCGTGCTAGCTTCTTGAAGGGAAAGTCC ATGGGAATCCAATGCGATGTGCAGGTTGATGCCAATTGCGAAGGGGAATGCTACCACAGT GGAGGGACCATAACAAGCAGTTTGCCCTTCCAAAACATCAACAGCAGGGCAGTTGGCAAG TGCCCAAGATATGTAAAACAGGAAAGCTTATTATTGGCAACTGGGATGAAGAACGTTCCC GAACTCCCCAAAAAAGAAGAAAAAGAGGCCTGTTTGGCGCCATAGCGGGGTTTATTGAA AATGGTTGGGAAGGTCTGGTCGACGGGTGGTACGGTTTCAGGCATCAGAATGCACAAGGA GAAGGAACTGCAGCAGACTACAAAAGCACCCAGTCGGCAATTGATCAGATAACCGGAAAA TTAAATAGACTCATTGAGAAATCTAATCAGCAATTTGAGCTAATAGATAATGAATTCACT GAAGTAGAAAATCAGATTGGCAATGTAATTAACTGGACCAGAGACTCCATCACAGAAGTA TGGTCTTACAATGCTGAACTTCTTGTGGCAATGGAAAACCAGCACACTATTGATTTGGCT GATTCAGAGATGAACAGGCTGTATGAGCGAGTGAGGAAACAATTGAGGGAAAATGCTGAG TATGATGGCACTGGTTGCTTTGAAATTTTTCATAAATGTGATGATGATTGTATGGCTAGT ATAAGGAACAATACTTATGATCACAGCAAATACAGAGAAGAAGCAATGCAAAATAGAATA CAAATTGACCCAGTCAAATTGAGTAGTGGCTACAAAGATGTGATACTTTGGTTTAGCTTC GGGGCATCATGCTTTTTACTTCTTGCCATTGCAATGGGCCTTGTTTTCATATGTGTGAAG AACGGAAACATGCGGTGCACTATTTGTATATAAGTTTGGAAAAAAACACCCTTGTTTCTA

>gi|60499|gb|X17222|Influenza virus B/ENG/222/82 genomic RNA for haemagglutinin
TTGTACTACTCATGGTAGTAACATCCAATCCAGATCGAATCTGCACTGGGATAACATCTT
CAAACTCACCCCATGTGGTCAAAACAGCTACTCAAGGGGAAGTCAATGTGACTGGTGTGA
TACCACTGACAACAACACCAACCAAATCTCATTTTGCAAATCTCAAAGGAACAAAGACCA
GAGGGAAACTATGCCCAAACTGTCTCAACTGCACAGATCTGGACGTGGCCTTGGGCAGAC

CAAAGTGTATGGGGACCATACCTTCGGCAAAAGCTTCAATACTCCACGAAGTCAAACCTG TTACATCCGGGTGCTTTCCTATAATGCACGACAGAACAAAAATTAGACAGCTGCCCAATC TTCTCAGAGGATATGAAAATATCAAGTTATCAACCCGTAACGTTATCAACGCAGAAAGGG CACCAGGAGGCCCTACATAATTGGAACTTCAGGATCTTGCCCTAACGTTACCAATGGAA ACGGATTCTTCGCAACAATGGCTTGGGCTGTCCCAAAAGACAACAACAACAGCAACGAATCCATTAACAGTAGAAGTACCATACATTTGTACAAAAGGAGAAGACCAAATTACTGTTTGGG GGTTCCATTCTGATAACGCAACCCAAATGGTAAAACTCTATGGAGACTCAAAGCCTCAAA AGTTCACCTCATCTGCCAATGGAGTAACCACACATTATGTTTCTCAGATTGGTGGCTTCC CAAATCAAACAGAAGACGGAGGACTACCACAAAGCGGCAGAATTGTTGTTGATTACATGG TGCAAAAACCTGGAAAAACAGGAACAATTGTCTATCAAAGAGGTGTTTTATTGCCTCAAA AAGTGTGGTGCGCAAGTGGCAGGAGCAAGGTAATAAAAGGGTCCTTGCCTTTAATTGGTG GAGAGCATGCAAAAGCCATAGGAAATTGCCCAATATGGGTGAAAACACCCTTGAAGCTGG CCAATGGAACCAAATATAGACCTCCTGCAAAACTATTAAAGGAAAGGGGTTTCTTCGGAG CTATTGCTGGTTTCTTGGAAGGAGGATGGGAAGGAATGATTGCAGGTTGGCACGGATACA CATCTCATGGAGCACATGGAGTGGCAGTGGCAGCAGACCTTAAGAGTACGCAAGAAGCCA TAAACAAGATAACAAAAAATCTCAATTCTTTGAGTGAGCTAGAAGTAAAGAATCTTCAAA GACTAAGCGGTGCCATGGATGAACTCCACAACGAAATACTCGAGCTGGATGAGAAAGTGG ATGATCTCAGAGCTGATACAATAAGCTCGCAAATAGAGCTTGCAGTCTTGCTTTCCAACG TGCTGGGTCCCTCTGCTGTAGACATAGGGAATGGATGCTTTGAAACCAAACACAAGTGCA ACCAAACCTGCTTAGACAGGATAGCTGCTGGCACCTTTAATGCAGGAGAATTTTCTCTTC CCACCTTTGATTCACTAAATATTACTGCTGCATCTTTAAATGATGATGGATTGGATAATC ATACTATACTGCTCTACTACTCAACTGCTGCTTCTAGTTTGGCTGTAACATTGATGATAG CTATCTTTATTGTTTATATGGTCTCCAGAGACAATGTTTCTTGCTCCATCTGTCTATAGG GAGGATTGAGCCCTGTATTTTCCTTTGTTGTGGTGCTTGTTTGCTTGTTACCATTACAGA AAACGTTATTGAAAAATGCTCTTGTTACTA

>gi|60501|gb|X67013|Influenza Virus RNA for neuraminidase and NB protein ATGAACAATGCTACCTTCAACTATACAAACGTTAACCCTATTTCTCACATCAGGGGGAGT AAAATTTTCACCAACAGAAATAACTGCACCAAAAGTGCCATTGGATTGTGCAAACGCATC AAATGTTCAGGCTGTGAACCGTTCTGCAACAAAAGGGATGACACTTCTTCTCTCAGAACC GGAGTGGACATACCCTCGTTTATCTTGCCAGGGCTCAACCTTTCAGAAAGCACTCCTAAT TAGCCCTCATAGATTCGGAGAATCCAGAGGAAACTCAGCTCCCTTGATAATAAGGGAACCTTTTATTGCTTGTGGACCAAAGGAATGCAAACACTTTGCTCTAACCCATTATGCAGCTCA ACCAGGGGGATACTACAATGGAACAAGAGAGGACAGAAACAAGCTGAGGCATCTGATTTC AGTCAAATTGGGCAAAATCCCAACAGTAGAAAACTCCATTTTCCACATGGCAGCTTGGAG CGGGTCCGCATGCCATGATGGTAGAGAATGGACATATATCGGAGTTGATGGCCCTGACAG TAATGCATTGATCAAAATAAAATATGGAGAAGCATATACTGACACATACCATTCCTATGC AAACAACATCCTAAGAACACAAGAAAGTGCCTGCAATTGCATCGGGGGAGATTGTTATCT TATGATAACTGATGGCTCAGCTTCAGGAATTAGTAAATGCAGATTTCTTAAGATTCGAGA GGGTCGAATAATAAAAGAAATATTTCCAACAGGAAGAGTAGAACATACTGAAGAATGCACATGCGGATTTGCCAGCAATAAAACCATAGAATGTGCCTGTAGAGATAACAGTTACACAGC AAAAAGACCCTTTGTCAAATTAAATGTGGAGACTGATACAGCTGAAATAAGATTGATGTG CACAGAGACTTATTTGGACACCCCAGACCAGATGATGGAAGCATAACAGGGCCTTGCGA ATCTAATGGGGACAAAGGGCGTGGAGGCATCAAGGGAGGATTTGTTCATCAAAGAATGGC ATCCAAGATTGGAAGATGGTACTCTCGAACGATGTCTAAAACTGAAAGAATGGGGATGGA ACTGTATGTCAAGTATGATGGAGACCCATGGACTGACAGTGACGCCCTTGCTCCTAGTGG AGTAATGGTTTCAATGAAAGAACCTGGTTGGTATTCCTTTGGCTTCGAAATAAAAGATAA GAAATGTGATGTCCCCTGTATTGGGATAGAGATGGTACATGATGGTGGAAAAAAGACTTG GCACTCAGCAGCAACAGCCATTTACTGTTTGATGGGCTCAGGACAATTGCTATGGGACAC TGTCACAGGTGTTGATATGGCTCTGTAATGGAGGAATGGTTGAATCTGTTCTAAACCCTT TGTTCCTATTTTGTTTGAACAATTGTCCTTACTGAACTTAATTGTTTCTGAAAAATGCTC

>gi|60504|gb|X17224|Influenza A virus (STRAIN A/TAIWAN/1/86) RNA for haemagglutinin HA1 chain, genomic RNA, strain A/Taiwan/1/86 AAAACAACCAAAATGAAAGCAAAACTACTAGTCCTGTTATGTGCATTTACAGCTACAGAT GCAGACACAATATGTATAGGCTACCATGCGAACAACTCAACCGACACTGTTGACACAGTA CTTGAAAAGAACGTGACAGTGACACTCTGTCAACCTACTTGAGGACAGTCACAACGGA AAACTATGTCGACTAAAAGGAATAGCCCCACTACAATTGGGTAATTGCAGCATTGCCGGA TGGATTTTAGGAAACCCAGAATGCGAATCACTGTTTTCTAAGAAATCATGGTCCTACATT GCAGAAACACCAAACTCCGAGAATGGAACATGTTACCCAGGGTATTTCGCCGACTATGAG GAACTGAGGGAGCAATTGAGTTCAGTATCATCATTCGAGAGATTCGAAATATTCCCCAAA GAAAGCTCATGGCCCAACCACACCGTAACCAAAGGAGTAACGGCAGCATGCTCCCATAAG GGGAAAAGCAGTTTTTACAGAAATTTGCTATGGCTGACGGAGAAGAATGGCTCGTACCCA AATCTGAGCAAGTCCTATGTGAACAACAAAGAGAAAGAAGTCCTTGTACTATGGGGTGTT CATCACCCGTCTAACATAGGGGACCAAAGGGCCATCTATCATACAGAAAATGCTTATGTC TCTGTAGTGTCTTCACATTATAACAGGAGATTCACCCCAGAAATAGCAAAAAGACCCAAA GTAAGAGGTCAAGAAGGAAGAATTAACTACTACTGGACTCTGCTGGAACCCGAGGACACA ATAATATTTGAGGCAAATGGAAATCTAATAGCGCCATGGTATGCTTTCGCACTGAGTAGA GGCTTTGGGTCAGGAATCATCACCTCAAACGCATCAATGGATGAATGTGACGCGAAGTGT CAAACACCCCAGGGAGCTATAAACAGTAGTCTTCCTTTCCAGAATGTACACCCAGTCACA ATAGGAGAGTGCCCAAAGTATGTCAGGAGTACAAAATTAAGAATGGTTACAGGACTAAGG AACATCCCATCCATTCAATCCAGA

>gi|60694|gb|X05907|Influenza A virus (A/England/321/1977(H3N2)) gene for haemagglutinin precursor, genomic RNA

AGCAAAAGCAGGGGATAATTCTATTAACCATGAAGACTATCATTGCTTTGAGCTACATTT TCTGTCAGGTTCTCGCCCAAAACCTTCCAGGAAATGACAACAGCACAGCAACGCTGTGCC TGGCACATCATGCAGTGCCAAACGGAACGCTAGTGAAAACAATCACGAATGATCAGATTG AAGTGACTAATGCTACTGAGCTGGTTCAGAGTTCCTCAACAGGTAGAATATGCGACAGTC  ${\tt CTCATCGAATCCTTGATGGAAAAAACTGCACACTGATAGATGCTCTATTGGGGGACCCTC}$ ATTGTGATGGCTTTCAAAATGAGAAATGGGACCTTTTTGTTGAACGCAGCAAAGCTTTCA GCAACTGTTACCCTTATGATGTCCCAGATTATGCCTCCCTTAGGTCACTAGTTGCCTCGT CAGGCACCCTGGAGTTTATCAATGAAGGCTTCAATTGGACTGGGGTCACTCAGAATGGGGGAAGCTATGCTTGCAAAAGGGGACCTGATAACAGTTTCTTCAGTAGACTGAACTGGTTGT ACAAATCAGAAAGCACATATCCAGTGCTGAACGTGACTATGCCAAACAATGACAATTTTG ACAAACTGTACATTTGGGGAGTTCACCACCCGAGCACGGACAAAGAACAAACCAAACTAT ATGTTCAAGCATCAGGGAGAGTCACAGTCTCCACCAAGAGAAGCCAGCAAACTATAATCC CGAATGTCGGGTCTAGACCCTGGGTAAGGGGTCTGTCTAGTAGAATAAGCATCTATTGGA CAATAGTAAAACCGGGAGACATACTGTTAATTAATAGCAACGGGAACCTAATTGCTCCTC GGGGTTACTTCAAAATACGCACTGGGAAAAGCTCAATAATGAGGTCAGATGCACCCATTG GCACCTGCAGTTCTGAATGCATCACTCCAAATGGAAGCATTCCCAATGACAAGCCCTTTC AAAACGTAAACAAGATCACATATGGGGCATGTCCCAAGTATGTTAAGCAAAACACTCTGA TAGCAGGTTTCATAGAAAATGGTTGGGAGGGAATGATAGACGGTTGGTACGGTTTCAGGC ATCAAAATTCTGAGGGCACAGGACAAGCAGCAGATCTTAAAAGCACTCAAGCAGCCATCG TCGAAAAGGAATTCTCAGAAGTAGAAGGGAGAATTCAGGACCTCGAGAAATACGTTGAAG ACACTAAAATAGATCTCTGGTCTTACAATGCGGAGCTTCTTGTCGCTCTGGAGAACCAAC ATACAATTGATCTGACTGACTCGGAAATGAACAAACTGTTTGAAAAAAACAAGAAGGCAAC TGAGGGAAAATGCTGAGGACATGGCAATGGTTGCTTCAAAATATACCACAAATGTGACA ATGCTTGCATAGGGTCAATCAGAAATGGAACTTATGACCATGATGTATACAGAGACGAAG CATTAAACAACCGGTTTCAGATCAAAGGTGTTGAGCTGAAGTCAGGATACAAAGACTGGA TCCTGTGGATTTCCTTTGCCATATCATGCTTTTTGCTTTGTGTTGTTTTTGCTGGGGTTCA TCATGTGGGCCTGCCAAAAAGGCAACATTAGGTGCAACATTTGCATTTGAGTGTATTAAT TAAAAACACCCTTGTTTCTACT

>gi|60698|gb|X58690|Influenza A virus (A/FPV/Rostock/34(H7N1)) gene for cap-binding protein PB2, genomic RNA GAGAGAGTGGTCGTGAGTATTGACCGTTTCTTAAGAGTTCGAGATCAGCGTGGAAATGTA ATCCTGTCTCCTGAAGAGGTTAGCGAAACGCAGGGAACAG

>gi|60700|gb|X58691|Influenza A virus (A/FPV/Dobson/27 (H7N7)) gene for cap-binding protein PB2, genomic RNA GAGAGAGTGGTCGTGAGTATTGACCGTTTCTTAAGGGTTCGAGATCAACGTGGGAATGTG CTATTGTCTCCCGAAGAGGTTAGCGAAACGCAGGGAACAG

>gi|60702|gb|X07826|Influenza A virus (A/chicken/Scotland/59(H5N1)) HA gene for hemagglutinin, genomic RNA AGCAAAAGCAGGGGTCTGATCTACTAAAATGGAGAGAATAGTGCTTCTTCTTGCAATAGT GGTTGACACAATAATGGAGAAGAATGTGACTGTCACACACGCCCAAGATATACTTGAAAG GACACACAACGGGAAGCTCTGCAGTCTAAATGGGGTGAAACCTCTCATCTTGAGGGACTG TAGTGTAGCTGGATGGCTCCTGGGAAACCCCATGTGTGACGAGTTCCTAAATCTGCCAGA ATGGTTATACATAGTAGAAAAGGACAATCCAATCAACAGCCTCTGCTACCCAGGGGATTT TAATGACTACGAAGAACTGAAATACCTATTGAGCAGTACAAACCATTTTGAGAAAATTCG AATCATCCCCAGGAGCTCTTGGTCCAATCATGATGCTTCATCAGGAGTGAGCTCTGCATG TCCATACATTGGGAGGTCCTCCTTTTTAAGAAATGTGGTATGGCTGATCAAAAAGAACAA CACTTACGTTTCTGTCGGAACATCAACACTGAACCAGAGATCAATTCCAGAAATAGCCAC TAGGCCTAAAGTAAATGGGCAGAGCGGACGAATGGAATTCTTCTGGACAATTTTAAAGCC AAATGATGCAATCAATTTTGAGAGTAATGGGAACTTCATAGCTCCAAGATATGCATACAA AATCGTCAAGAAGGGGGACTCGGCAATCATGAAAAGCGGCTTGGCATATGGTAACTGTGA TACTAAGTGTCAAACTCCAGTGGGTGAGATAAACTCCAGTATGCCCTTCCACAATATACA CCCTCACACCATTGGGGAATGCCCTAAATACGTGAAATCAGATAGGTTGGTCCTTGCAAC TGGACTCAGAAACGTCCCTCAAAGGAAGAAAAGAGGTCTATTTGGGGCTATAGCGGGCTT TATTGAAGGGGGATGGCAGGGAATGGTAGACGGTTGGTATGGATACCATCATAGCAACGA ACAGGGAAGTGGGTATGCTGCAGACAAAGGTCCACTCAAAAGGCAATTGATGGAATCAC CAACAAGGTCAATTCAATCATTGACAAAATGAACACCCGGTTTGAGGCCGTCGGAAAGGA ATTTAATAATTTGGAGAGGAGGGTAGAGAATTTGAACAAGAAAATGGAAGACGGGTTTCT AGATGTTTGGACTTACAATGTGGAACTTCTAGTCCTTATGGAAAATGAAAGGACTCTGGA TTTCCATGACTCAAACGTCAACAACCTTTATGATAAAGTCCGACTACAGCTTAAGGACAA GGAAAGTGTGAGAAACGGAACATATGACTACCCACAGTATTCAGAAGAAGCAAGACTAAA CAGGGAGGAAATAAGTGGAGTTAAATTGGAATCAATGGGGGTTTATCAAATACTGTCAAT TTATTCAACAGTGGCAAGTTCCCTAGCACTGGCAATCATGATAGCTGGTCTATCTTTTTGGATGTGTTCCAATGGGTCATTGCAGTGCAGAATTTGCATTTGAATTTATTGAGTTCAGAT TGTAGTTAAAAACACCCTTGTTTCTACT

>gi|60716|gb|X52146|Influenza A virus (A/Leningrad/1954/1(H1N1)) gene for nonstructural protein, genomic RNA AGCAAAAGCAGGGTGACAAAAACATAATGGATCCAAACACTGTGTCAAGCTTTCAGGTAG ATTGCTTTCTTTGGCATGTCCGCAAACGAGTTGCAGACCAAGAACTAGGTGATGCCCCAT TCCTTGATCGGCTTCGCCGAGATCAGAAATCCCTAAGAGGAAGGGGCAGTACTCTCGGTC TGGACATCAAGACAGCCACACGTGCTGGAAAGCAGTAGTGGAGGGATTCTGAAAGAAG AATCCGATGAGGCACTTAAAATGACCATGGCCTCTGTACCTGCGTCGCGTTACCTAACCG ACATGACTCTTGAGGAAATGTCAAGGGACTGGTCCATGCTCATACCCAAGCAGAAAGTGG

>gi|60720|gb|X05905|Influenza A virus (A/chicken/FPV/Rostock/1934(H7N1)) viral cRNA for M1 and M2 genes, segment 7 GTTCATCATCCCTGCAAAAGCAGGTAGATATTTAAAGATGAGTCTTCTAACCGAGGTTGA AACGTACGTTCTCTCTATCATCCCATCAGGCCCCCTCAAAGCCGAGATCGCGCAGAGACT TGAAGATGTCTTTGCAGGGAAAAACACAGACCTTGAGGTTCTCATGGAATGGCTAAAGAC AAGACCAATCCTGTCACCTCTGACTAAAGGGGTTTTGGGGTTTTGTGTTTTACGCTCACCGT GCCCAGTGAGCGAGGACTGCAGCGTAGACGCTTTGTCCAAAATGCCCTAAATGGGAATGG GGATCCAAATAACATGGATAAAGCCGTCAAACTATACAGGAAGTTGAAAAGGGAGATAAC ATTCTATGGAGCTAAGGAAGTGGCACTCAGTTACTCTACTGGAGCACTTGCCAGTTGTAT GGGCCTCATATACGACAGAATGGGAACTGTGACCACAGAGGTGGCATTTGGCCTAGTGTG CACCAATCCACTAATCAGGCATGAGAACAGAATGGTAATGGCCAGCACTACAGCTAAGGC TATGGAGCAAATGGCTGGGTCAAGTGAACAGGCAGCGGAGGCCATGGAGGTTGCTAGCCA GGCTAGGCAGATGGTGCAGGCAATGAGGACAATTGGGACTCATCCTAGCTCCAGTGCTGG TCTGAAAGATGATCTTCTTGAAAATTTGCAGGCCTACCAGAAACGGATGGGAGTGCAGAT GCAACGATTCAAGTGACCCTCTCATTATTGCCGCAAGTATCATTGGGATCTTGCACTTGA TATTGTGGATTCTTAATCGTCTTTTCTTCAAATGTATTTATCGTCGCCTTAAATACGGTT TGAAAAGAGGGCCTTCTACGGAAGGAGTGCCTGAGTCTATGAGGGAAGAATATCGGCAGG AACAGCAGAGTGCTGTGGATGTTGACGATGGTCATTTTGTCAACATAGAGCTGGAGTAAA AAACTACCTTGTTTCTACT

>gi|60723|gb|X13551|Influenza B virus HA gene for haemagglutinin precursor, strain B/Memphis/6/86 ACTCATGGTAGTAACATCCAATGCAGATCGAATCTGCACTGGGATAACATCGTCAAACTC CCCCCATGTGGTCAAAACTGCTACTCAAGGGGAAGTCAATGTGACTGGTGTGATACCACT GACAACAACACCTACCAAATCTCATTTTGCAAATCTCAAAGGAACAAAAACCAGAGGGAA ACTATGCCCAAAGTGTCTCAACTGCACAGATCTGGACGTGGCCTTTGGCAGACCAAAGTGTATGGGGACCATACCTTCAGCAAAAGCTTCAATACTCCACGAAGTCAAACCTGTTACATCTGGGTGCTTTCCTATAATGCACGACAGAACAAAAATCAGGCAGCTACCCAATCTTCTCAG AGGATATGAAAATATCAGGTTATCAACCCACAACGTTATCAACGCAGAAACGGCACCAGG AGGACCCTACATAGTTGGAACCTCAGGATCTTGCCCTAACGTTACCAATGGAAACGGATT ATTAACAGTAGAAGTACCATTCATTTGTACAGAAGGAGAAGACCAGATTACTGTTTGGGG GTTCCACTCTGATAACGAAATCCAAATGGTAAAACTCTATGGAGACTCAAAGCCTCAGAA GTTCACCTCATCTGCCAACGGAGTGACCACACATTACGTTTCACAGATTGGTGGCTTCCC AAAACAAGCAGAAGACGGAGGGCTACCACAAAGCGGTAGAATTGTTGTTGATTACATGGT GCAAAAATCTGGAAAAACAGGAACAATTACCTACCAAAGAGGTATTTTATTGCCTCAAAA AGTGTGGTGCGCAAGTGGCAGGAGCAAGGTAATAAAAGGGTCCTTACCTTTAATTGGTGA GGAACATGCAAAAGCCATAGGAAATTGCCCAATATGGGTGAAAACACCCTTGAAGCTGGC CAATGGAACCAAATATAGACCTCCTGCAAAACTATTAAAGGAAAGGGGTTTCTTCGGAGC TATTGCTGGTTTCTTGGAAGGAGGATGGGAAGGAATGATTGCAGGTTGGCACGGATACAC ATCCCATGGAGCACATGGAGTAGCAGTGGCAGCAGACCTTAAGAGTACGCAAGAAGCCAT AAACAAGATAACAAAAAATCTCAATTCTTTGAGTGAGCTAGAAGTAAAGAATCTTCAAAG ACTAAGCGGTGCCATGGATGAACTCCACAACGAAATACTCGAGCTGGATGAGAAAGTGGA TAATCTCAGGGCTGATACAATAAGCTCGCAAATAGAGCTTGCAGTCTTGCTTTCCAACGA AGGAATAATAAACAGTGAAGATGAGCATCTCTTGGCGCTTGAGAGAAAACTGAAGAAAAT GCTGGGCCCCTCTGCTGTAGACATAGGGAATGGATGCTTCGAAACCAAACACAAGTGCAA  ${\tt CCAGACCTGCCTCGACAGAATAGCTGCTGGCACCTTTAATGCAGGAGAATTTTCTCTTCC}$ CACCTTTGATTCACTAAATATTACTGCTGCATCTTTAAATGATGATGGATTGGATAATCA TACTATACTGCTTTACTACTCAACTGCTGCTTCCAGTTTGGCTGTAACATTGATGATAGC TATCTTTATTGTTTATATGGTCTCCAGAGACAATGTTTCTTGCTCCATCTGTCTATAAGG AAAATTAAACCCTGTATTTTCCTTTATTGTAGTGCTTGTTTGCTTGTTACCATTACAAAA AACGTTATTGAAAAATGCTCTTGTTACTACT

>gi|60728|gb|X13552|Influenza B virus (B/USSR/100/83) HA gene for haemagglutinin precursor ACTCATGGTAGTAACATCCAACGCAGATCGAATCTGCACTGGGATAACATCTTCAAACTC CCCCCATGTGGTCAAAACAGCTACTCAAGGGGAAGTTAATGTGACTGGTGTGATACCACT GACAACAACACCAACCAAATCTCATTTTGCAAATCTCAAAGGAACAAAGACCAGAGGGAA ACTATGCCCAAACTGTCTCAACTGCACAGATCTGGACGTGGCCTTGGGCAGACCAAAGTG TATGGGGACCATACCTTCGGCAAAAGCTTCAATACTCCACGAAGTCAAACCTGTTACATC TGGGTGCTTTCCTATAATGCACGACAGAACAAAAATCAGACAGCTACCCAATCTTCTCAG AGGATATGAAAATATCAGGTTATCAACCCGTAACGTTATCAACGCAGAAAAGGGCACCAGG AGGACCCTACATAATTGGAACCTCAGGATCTTGCCCTAACGTTACCAATGGAAACGGATT CTTCGCAACAATGGCTTGGGCTGTCCCAAAAGACAAAAACAGCAACGGATCCATTAAC AATAGAAGTACCATACATTTGTACAAAAAGGAGAAGACAAATTACTGTTTGGGGGTTCCA TTCTGATAACAAAAAACCAAATGGTAAAAACTCTATGGAGACTCAAAGCCTCAAAAGTTCAC CTCATCTGCCAATGGAGTAACCACACATTATGTTTCTCAGATTGGTGGTTTCCCAAATCA AACAGAAGACGAAGGGGTTCCCAAAAGCGGAGGGTTTCCCAAATCA AACAGAAGACGAAGGGGTACCACAAATCACAAAAGCGGAGGGTTTCCCAAAAGCCTCAAAAGCTTCCAAATCA AACAGAAGACGAAGGAGGGCTACCACAAAGCGGAAATTATGTTTCTCAGATTGGTGGTTTCCCAAATCA AACAGAAGACGAAGGGGCTACCACAAAGCGGACAAATTATGTTTCTCAGATTGGTGGTGCAGAA

ACCTGGAAAACCAGGAACAATTGTCTATCAAAGAGGTGTTTTATTGCCTCAAAAAGTGTG GTGCGCAAGTGGCAGGAGCAAGGTAATAAAAGGGTCCTTGCCTTTAATTGGTGAAGCAGA TGCAAAAGCCATAGGAAATTGCCCAATATGGGTGAAAACACCCTTGAAGCTGGCCAATGG AACCAAATATAGACCTCCTGCAAAACTATTAAAGGAAAGGGGTTTCTTCGGAGCTATTGC TGGTTTCTTGGAAGGAGGATGGGAAGGAATGATTGCAGGTTGGCACGGATACACATCTCA TGGAGCACATGGAGTGGCAGTGGCAGCAGACCTTAAGAGTACGCAAGAAGCCATAAACAA GATAACAAAAAATCTCAATTCTTTGAGTGAGCTAGAAGTAAAGAATCTTCAAAGACTAAG CGGTGCCATGGATGAACTCCACAATGAAATACTCGAGCTGGATGAGAAAGTGGATGATCT CAGAGCTGACACAATAAGCTCGCAAATAGAGCTTGCAGTCTTGCTTTCCAACGAAGGAAT CCCCTCTGCTGTAGACATAGGGAATGGATGCTTCGAAACCAAACACAAGTGCAACCAGAC CTGCTTAGACAGGATAGCTGCTGGCACCTTTAATGCAGGAGAATTTTCTCTCCCCACCTT TGATTCACTAAATATTACTGCTGCATCTTTAAATGATGATGGATTGGATAATCATACTAT ACTGCTTTACTACTCAACTGCTGCTTCTAGTTTGGCTGTAACATTGATGATAGCTATCTT TATTGTTTATATGGTCTCCAGAGACAATGTTTCTTGCTCCATCTGTCTATAAGGAAAATT AAGCCCTGTATTTCCTTTATTGTAGTGCTTGTTTGCTTGTTACCATTACAAAAAACGTT ATTGAAAAATGCTCTTGTTACTACT

>gi|60733|gb|X13553|Influenza B virus HA gene for haemagglutinin precursor, strain B/B/Victoria/3/85 ACTCATGGTAGTAACATCCAATGCAGATCGAATCTGCACTGGGATAACATCGTCAAACTC CCCCATGTGGTCAAAACTGCTACTCAAGGGGAAGTCAATGTGACTGGTGTGATACCACT GACAACAACACCTACCAAATCTCATTTTGCAAATCTCAAAGGAACAAAAACCAGAGGGAA ACTATGCCCAAAGTGTCTCAACTGCACAGATCTGGACGTGGCCTTGGGCAGACCAAAGTG TATGGGGACCATACCTTCGGCAAAAGCTTCAATACTCCACGAAGTCAAACCTGTTACATC TGGGTGCTTTCCTATAATGCACGACAGAACAAAAATCAGGCAGCTACCCAATCTTCTCAG AGGATATGAAAATATCAGGTTATCAACCCACAACGTTATCAACGCAGAAACGGCACCAGG AGGACCCTACATAGTTGGAACCTCAGGATCTTGCCCTAACGTTACCAATGGAAACGGATT ATTAACAGTAGAAGTACCATTCATTTGTACAGAAGGAGAAGACCAGATTACTGTTTGGGG GTTCCACTCTGATAGCGAAACCCAAATGGTAAAACTCTATGGAGACTCAAAGCCTCAGAA GTTCACCTCATCTGCCAACGGAGTGACCACACATTACGTTTCACAGATTGGTGGCTTCCC AAAACAAGCAGAAGACGGAGGGCTACCACAAAGCGGTAGAATTGTTGTTGATTACATGGT GCAAAAATCTGGAAAAACAGGAACAATTACCTACCAAAGAGGTATTTTATTGCCTCAAAA AGTGTGGTGCGCAAGTGGCAGGAGCAAGGTAATAAAAGGGTCCTTGCCTTTAATTGGTGA GGAACATGCAAAAGCCATAGGAAATTGCCCAATATGGGTGAAAACACCCTTGAAGCTGGC CAATGGAACCAAATATAGACCTCCTGCAAAACTATTAAAGGAAAGGGGTTTCTTCGGAGC TATTGCTGGTTTCTTGGAAGGAGGATGGGAAGGAATGATTGCAGGTTGGCACGGATACACATCCCATGGAGCACATGGAGTAGCAGTGGCAGCAGACCTTAAGAGTACGCAAGAAGCCAT AAACAAGATAACAAAAAATCTCAATTCTTTGAGTGAGCTAGAAGTAAAGAATCTTCAAAG ACTAAGCGGTGCCATGGATGAACTCCACAACGAAATACTCGAACTGGATGAGAAAGTGGA TGATCTCAGAGCTGATACAATAAGCTCGCAAATAGAGCTTGCAGTCTTGCTTTCCAACGAGCTGGGCCCCTCTGCTGTAGACATAGGGAATGGATGCTTCGAAACCAAACACAAGTGCAA CCAGACCTGCCTCGACAGAATAGCTGCTGGCACCTTTAATGCAGGAGAATTTTCTCTTCC CACCTTTGATTCACTAAATATTACTGCTGCATCTTTAAATGATGATGGATTGGATAATCA TACTATACTGCTTTACTACTCAACTGCTGCTTCCAGTTTGGCTGTAACATTGATGATAGC TATCTTTATTGTTTATATGGTCTCCAGAGACAATGTTTCTTGCTCCATCTGTCTATAAGGAAAATTAAGCCCTGTATTTTCCTTTATTGTAGTGCTTGTTTGCTTGTTACCATTACAAAA AACGTTATTGAAAAATGCTCTTGTTACTACT

>gi|60738|gb|X13550|Influenza B virus (B/Bonn/43) HA gene for haemagglutinin precursor ACTCATGGTAGTAACATCCAATGCAGATCGAATCTGCACTGGGATAACATCGTCAAACTC CCCCCATGTGGTCAAAACTGCCACTCAAGGAGAAGTCAATGTGACTGGTGTGATACCACT GACAACAACACCTACCAGATCCCATTTTGCAAATCTCAAAGGAACACAGACCAGAGGAAA ACTATGCCCAAACTGTTTCAACTGTACAGATCTGGACGTGGCCTTGGGCAGACCAAAATG CATGGGGAACATACCTTCTGCAAAAGTTTCAGTACTCCATGAAGTCAAACCTGTTACATC TGGATGCTTTCCTATAATGCACGACAGAACAAAAATCAGACAACTACCTAATCTTCTCAG AGGATATGAAAATATCAGGTTATCAACCAGTAACGTTATCAGTGCAGAGACGGCGCCAGG AGGACCCTACAAGATTGGAACCTCAGGGTCTTGCCCTAACGTTACTAATGGGAGCGGCTT CTTTGAAACAATGGCTTGGGCTGTTCCGAAAAACAACAGCAATGAATCCAGTAACAGT AGAAGTACCATACATTTGTGCAAAAGGGGAAGACCAAATTACTGTTTGGGGGTTCCACTC TGATAGCGAAACCCAAATGGGAAGACTCTATGGAGACTCAAATCCTCAAAAGTTCACCTC ATATGCCAATGGAGTAACCACACATTATGTTTCTCAGATTGGTGGCTTCCCAAATCAAAC AGAGGACGAAGGGTTAAAACAAAGCGGCAGAATTGTTGTTGATTACATAGTGCAAAAACC TGAAAAACCAGGAACAATTGTTTATCAAAGAGGTATTTTATTGCCTCAAAAAGTGTGGTG CGCAAGTGGCAGGAGCAAGGTAATAAAAGGGTCCTTGCCTTTAATTGGTGAAGCAGATTG CCTCCACGAAAAGTACGGTGGATTAAATAAAAGCAAGCCTTATTACACAGGAGAGCATGC AAAGGCCATAGGAAATTGCCCAATATGGGTGAAAACACCCTTGAAGCTAGCCAATGGAAC CAAATATAGACCGCCTGCAAAACTATTAAAGGAAAGAGGTTTTTTCGGAGCTATTGCTGG TTTCTTGGAAGGAGGCTGGGAAGGAATGATTGACGGTTGGCACGGATACACATCTCATGG AGCACATGGAGTGGCAGTGGCAGCAGACCTTAAGAGTACACAAGAAGCTATAAACAAGAT AACAAAAACCTCAACTCTTTAAGTGAGCTAGAAGTAAAAAATCTTCAAAGACTAAGCGG AGAAATGGATGGGCTTCACAACGAAATACTCGAGCTAGACGAGAAGGTGGATGATCTAAG AGCTGATACAATAAGCTCACAAATAGAGCTTGCAGTCTTGCTTTCCAACGAAGGGATAAT

>gi|60743|gb|X53060|Influenza B virus HA gene for haemagglutinin precursor, genomic RNA, strain B/NIB/25/88 ATCCACAAAATGAAGGCAATAATTGTACTACTCATGGTAGTAACATCCAATGCAGATCGA ATCTGCACTGGGATAACATCGTCAAACTCACCCCATGTGGTCAAAACTGCTACTCAAGGG AATCTCAAAGGAACAAAAACCAGAGGGAAACTATGCCCAAAGTGTCTCAACTGCACAGAT CTGGACGTGGCCTTGGGCAGACCAAAGTGCACGGGGACCATACCTTCGGCAAAAGCTTCA ATACTCCACGAAGTCAAACCTGTTACATCTGGGTGCTTTCCTATAATGCACGACAGAACA AAAATTAGACAGCTACCCAATCTTCTCAGAGGATACGAAAATATCAGGTTATCAACCCAT AACGTTATCAACGCAGAAACGGCACCAGGAGGACCCTACAAAGTTGGAACCTCAGGGTCT TGCCCTAACGTTACCAATGGAAACGGATTCTTCGCAACAATGGCTTGGGCTGTTCCAAAA AACGACAATAACAAAACAGCAACAAATCCATTAACAGTAGAAGTACCATACATTTGTACA GAAGGAGAAGACCAAATTACTGTTTGGGGGTTCCACTCTGATAACGAAACCCAAATGGTA AAACTCTATGGAGACTCAAAGCCTCAGAAGTTCACCTCATCTGCCAACGGAGTGACCACA CATTACGTTTCACAGATTGGTGGCTTCCCAAATCAAGCAGAAGACGGAGGGCTACCACAA AGCGGTAGAATTGTTGTTGATTACATGGTGCAAAAATCTGGAAAAACAGGAACAATTACC TACCAAAGAGGTATTTTATTGCCTCAAAAAGTGTGGTGCGCAAGTGGCAGGAGCAAGGTA ATAAAAGGGTCCTTGCCTTTAATTGGCGAACGAGATTGCCTCCATGAAAAATACGGTGGA TTAAACAAAAGCAAGCCTTACTACACAGGGGAACATGCAAAAGCCATAGGAAATTGCCCA ATATGGGTGAAAACACCCTTGAAGCTGGCCAATGGAACCAAATATAGACCTCCTGCAAAA CTATTAAAGGAAAGGGGTTTCTTCGGAGCTATTGCTGGTTTCTTGGAAGGAGGATGGGAA GGAAT

>gi|60750|gb|V01084|Influenza A virus (A/Puerto Rico/8/1934(H1N1)) gene for nucleoprotein, genomic RNA AGCAAAAGCAGGGTAGATAATCACTCACTGAGTGACATCAAAATCATGGCGTCTCAAGGC ACCAAACGATCTTACGAACAGATGGAGACTGATGGAGAACGCCAGAATGCCACTGAAATC AGAGCATCCGTCGGAAAAATGATTGGTGGAATTGGACGATTCTACATCCAAATGTGCACC GAACTCAAACTCAGTGATTATGAGGGACGGTTGATCCAAAACAGCTTAACAATAGAGAGA ATGGTGCTCTCTGCTTTTGACGAAAGGAGAAATAAATACCTTGAAGAACATCCCAGTGCG GGGAAGGATCCTAAGAAAACTGGAGGACCTATATACAGGAGAGTAAACGGAAAGTGGATG AGAGAACTCATCCTTTATGACAAAGAAGAAATAAGGCGAATCTGGCGCCAAGCTAATAAT GGTGACGATGCAACGGCTGGTCTGACTCACATGATGATCTGGCATTCCAATTTGAATGAT GCAACTTATCAGAGGACAAGAGCTCTTGTTCGCACCGGAATGGATCCTAGGATGTGCTCT CTGATGCAAGGTTCAACTCTCCCTAGGAGGTCTGGAGCCGCAGGTGCTGCAGTCAAAGGA GTTGGAACAATGGTGATGGAATTGGTCAGAATGATCAAACGTGGGATCAATGATCGGAAC TTCTGGAGGGGTGAGAATGGACGAAAAACAAGAATTGCTTATGAAAGAATGTGCAACATT CGGAACCCAGGGAATGCTGAGTTCGAAGATCTCACTTTTCTAGCACGGTCTGCACTCATA GCCAGTGGGTACGACTTTGAAAGGGAGGGATACTCTCTAGTCGGAATAGACCCTTTCAGA  ${\tt CTGCTTCAAAACAGCCAAGTGTACAGCCTAATCAGACCAAATGAGAATCCAGCACACAAG}$ AGTCAACTGGTGTGGATGGCATGCCATTCTGCCGCATTTGAAGATCTAAGAGTATTAAGC TTCATCAAAGGGACGAAGGTGCTCCCAAGAGGGAAGCTTTCCACTAGAGGAGTTCAAATT GCTTCCAATGAAAATATGGAGACTATGGAATCAAGTACACTTGAACTGAGAAGCAGGTAC TGGGCCATAAGGACCAGAAGTGGAGGAAACACCAATCAACAGAGGGCATCTGCGGGCCAA ATCAGCATACAACCTACGTTCTCAGTACAGAGAAATCTCCCTTTTGACAGAACAACCATT ATGGCAGCATTCAATGGGAATACAGAGGGGAGAACATCTGACATGAGGACCGAAATCATA AGGATGATGGAAAGTGCAAGACCAGAAGATGTGTCTTTCCAGGGGCGGGGAGTCTTCGAG TCTTATTTCTTCGGAGACAATGCAGAGGAGTACGACAATTAAAGAAAAATACCCTTGTTT

>gi|60752|gb|V01085|Influenza A virus (A/Aichi/2/68) gene for haemagglutinin, genomic RNA AGCAAAAGCAGGGGATAATTCTATTAATCATGAAGACCATCATTGCTTTGAGCTACATTT TCTGTCTGGCTCTCGGCCAAGACCTTCCAGGAAATGACAACAGCACAGCAACGCTGTGCC TGGGACATCATGCGGTGCCAAACGGAACACTAGTGAAAACAATCACAGATGATCAGATTG AAGTGACTAATGCTACTGAGCTAGTTCAGAGCTCCTCAACGGGGAAAATATGCAACAATC CTCATCGAATCCTTGATGGAATAGACTGCACACTGATAGATGCTCTATTGGGGGACCCTC ATTGTGATGTTTTTCAAAATGAGACATGGGACCTTTTCGTTGAACGCAGCAAAGCTTTCA GCAACTGTTACCCTTATGATGTGCCAGATTATGCCTCCCTTAGGTCACTAGTTGCCTCGT CAGGCACTCTGGAGTTTATCACTGAGGGTTTCACTTGGACTGGGGTCACTCAGAATGGGG GAAGCAATGCTTGCAAAAGGGGACCTGGTAGCGGTTTTTTCAGTAGACTGAACTGGTTGA  ${\tt CCAAATCAGGAAGCACATATCCAGTGCTGAACGTGACTATGCCAAACAATGACAATTTTG}$ ACAAACTATACATTTGGGGGATTCACCACCCGAGCACGAACCAAGAACAAACCAGCCTGT ATGTTCAAGCATCAGGGAGAGTCACAGTCTCTACCAGGAGAAGCCAGCAAACTATAATCC CGAATATCGGGTCCAGACCCTGGGTAAGGGGTCTGTCTAGTAGAATAAGCATCTATTGGA CAATAGTTAAGCCGGGAGACGTACTGGTAATTAATAGTAATGGGAACCTAATCGCTCCTC GGGGTTATTTCAAAATGCGCACTGGGAAAAGCTCAATAATGAGGTCAGATGCACCTATTG ATACCTGTATTTCTGAATGCATCACTCCAAATGGAAGCATTCCCAATGACAAGCCCTTTC

>gi|60754|gb|V01086|Influenza A virus (A/Victoria/3/1975(H3N2)) gene for hemagglutinin, genomic RNA AGCAAAAGCAGGGGATAATTCTATTAACCATGAAGACTATCATTGCTTTGAGCTACATTT TCTGTCTGGTTTTCGCCCAAGACCTTCCAGGAAATGACAACAACAGCACAGCAACGCTGT GCCTGGGACATCATGCGGTGCCAAACGGAACGCTAGTGAAAACAATCACGAATGATCAGA TTGAAGTGACTAATGCTACTGAGCTGGTTCAGAGTTCCTCAACGGGTAAAATATGCAACA ATCCTCATCGAATCCTTGATGGAATAAACTGCACACTGATAGATGCTCTATTGGGGGACC CTCATTGTGATGGATTTCAAAATGAGAAATGGGACCTTTTCGTTGAACGCAGCAAAGCTT TCAGCAACTGTTACCCTTATGATGTGCCAGATTATGCCTCCCTTAGGTCACTAGTTGCCT CGTCAGGCACTCTGGAGTTTATCAATGAAGGCTTCAATTGGACTGGGGTCACTCAGAATG GGGGAAGCAGTGCTTGCAAAAGAGGACCTGATAGCGGTTTTTTCAGTAGACTGAACTGGT TGTACAAATCAGGAAGCACATATCCAGTGCAAAACGTGACCATGCCAAACAATGACAATT TATATGTTCAAGCATCAGGGAAAGTCACAGTCTCCACCAAGAGAAGCCAGCAAACTATAA GGACAATAGTTAAACCGGGAGACATACTGGTAATTAATAGTAATGGGAACCTAATTGCTC CTCGGGGTTACTTCAAAATGCGCACTGGGAAAAGCTCAATAATGAGGTCAGATGCACCTA TTGGCACCTGCAGCTCTGAATGCATCACTCCAAATGGAAGCATTCCCAATGACAAGCCCTTTCAAAACGTAAACAAGATCACATATGGGGCATGTCCCAAGTATGTTAAGCAAAACACTC GGCATCAAAATTCCGAGGGCACAGGACAAGCAGCAGATCTTAAAAGCACTCAAGCAGCCA AAATCGAAAAGGAATTCTCAGAAGTAGAAGGGAGAATTCAGGACCTCGAGAAATACGTTG AAGACACTAAAATAGATCTCTGGTCTTACAATGCGGAGCTTCTTGTCGCTCTGGAGAACC AACATACAATTGATCTGACTGACTCGGAAATGAACAAACTGTTTGAAAAAAACAAGGAGGC AACTGAGGGAAAATGCTGAGGACATGGGCAATGGTTGCTTCAAAATATACCACAAATGTG ACAATGCTTGCATAGGGTCAATCAGAAATGGTACTTATGACCATGATGTATACAGAGACG AAGCATTAAACAACCGGTTTCAGATCAAAGGTGTTGAACTGAAGTCAGGATACAAAGACT GGATCCTGTGGATTTCCTTTGCCATATCATGCTTTTTGCTTTGTGTTGTTTTTGCTGGGGT TCATCATGTGGGCCTGCCAAAAAGGCAACATTAGGTGCAACATTTGCATTTGAGTGTATT AGTAATTAAAAACACCCTTGTTTCTACT

>gi|60756|gb|V01087|Hemagglutinin gene of influenza virus strain A/duck/Ukraine/1/63 AGCAAAAGCAGGGGATACTTTCATTAATCATGAAGACCGTTATTGCTTTAAGCTACATTC TCTGTCTGACTTTCGGACAGGACCTCCCAGGGAATGACAACAGTACAGCAACACTGTGCC TGGGGCACCATGCAGTGCCGAATGGGACAATAGTGAAGACAATCACAGATGATCAGATTG AGGTGACTAATGCTACTGAGCTAGTTCAAAGCTCCTCAACAGGGAAAATATGCAACAATC  $\tt CTCACAGGATCCTTGATGGAAGGGCCTGCACATTAATAGATGCTCTACTGGGGGGATCCTC$ ATTGCGATGTCTTTCAAAATGAGACGTGGGACCTTTTTGTGGAGCGAAGCAATGCTTTCA GCAACTGTTACCCTTATGATATACCAGATTATGCATCCCTTAGGTCCCTAGTTGCCTCAT CAGGCACATTGGAGTTCATCACTGAGGGTTTCACCTGGACAGGAGTAACTCAGAATGGAG GGAGCAGTGCTTGCAAAAGAGGACCTGCTAACGGTTTCTTCAGTAGACTGAACTGGTTGA CTAAATCAGAAAGCGCATACCCAGTGCTGAACGTGACTATGCCAAATAATGACAATTTTG ATGTTCAAGCATCAGGGAGAGTCACAGTCTCTACCAGGAGAAGTCAGCAGACTATAATCC CGAATATTGGATCTAGACCCTGGGTAAGGGGCCAGCCTGGCAGAATAAGCATCTATTGGA  ${\tt CAATAGTTAAACCTGGGGACGTGCTGGTAATCAACAGTAATGGAAACCTAATCGCTCCTC}$ GGGGTTACTTCAAGATGCGCACTGGGAAAAGCTCAATAATGAGGTCAGATGCACCTATTG ACACCTGTATCTCTGAGTGCATCACTCCAAATGGAAGCATTCCCAATGACAAGCCCTTCC AAAATGTAAACAAGATCACATACGGAGCATGTCCCAAGTATGTTAAGCAGAACACCCTGA TAGCAGGTTTTATAGAAAATGGATGGGAGGGAATGATAGATGGCTGGTATGGCTTCAGGC ATCAAAATTCTGAGGGTACAGGACAAGCAGCAGACCTTAAAAGCACTCAGGCAGCCATTG ACCAAATCAATAGGAAATTGAACAGAGTGATTGAAAAGACGAATGAGAAGTTCCATCAAA TCGAAAAGGAATTCTCCGAAGTAGAAGGGAGGATTCAGGACCTTGAGAAATACGTTGAAG ACACGAAAATAGATCTCTGGTCTTACAATGCGGAACTTCTTGTTGCCCTAGAGAATCAGC ATACAATCGATCTGGCTGATTCAGAAATGAACAAATTATTTGAAAAAACCAGGAGGCAAC TGAGGGAAAATGCTGAAGACATGGGCAATGGTTGTTTCAAGATATACCACAAATGTGACA ATGCTTGCATAGAGTCAATTAGAAACGGGACTTATGATCATGATATACAGAGACGAGG CATTGAACAACCGGTTCCAGATCAAAGGTGTCGAACTAAAATCTGGATACAAAGACTGGA TCCTGTGGATTTCCTTTGCCATATCATGCCTTTTGCTTTGTGTTTTTGCTGGGTTTCA

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TTATGTGGGCCTGCCAGAGAGGCAACATTAGGTGCAACATTTGCATTTGAGTATACTAAT
GATTAAAAACACCCTTGTTTCTACT
>gi|60758|gb|V01089|Influenza A virus (A/Memphis/102/72(H3N2)) gene for hemagglutinin, genomic RNA
CAAGACTTTCCAGGAAATGACAACAGCACAGCAACGCTGTGCCTGGGACATCATGCGGTG
CCAAACGGAACACTAGTGAAAACAATCACAAATGATCAGATTGAAGTGACTAATGCTACT
GAGCTGGTTCAGAGTTCCTCAACGGGGAAAATATGCAACAATCCTCATCGAATCCTTGAT
GGAATAGACTGCACACTGATAGATGCTCTATTGGGGGGACCCTCATTGTGATGGCTTTCAA
AATGAGACATGGGACCTTTTCGTTGAACGCAGCAAAGCTTTCAGCAACTGTTACCCTTAT
GATGTGCCAGATTATGCCTCCCTTAGGTTACTAGTTGCCTCGTCAGGCACTTTGGAGTTT
ATCAATGAAGGCTTCACTTTGACTGGGGTCACTCAGAATGGGGGAAGCAATGCTTGCAAA
AGGGGACCTGATAGCGGTTTTTTCAGTAGACTGAACTGGTTGTACAAATCAGGAAGCACA
TATCCAGTGCTGAATGTGACTATGCCAAACAATGACAATTTTGACAAACTATACATTTGG
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AGAGTCACAGTCTCTACCAAGAGAAGCCAGCAAACTATAATCCCGAATATCGGGTCTAGA
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GACATACTGGTAATTAATAGTAATGGGAACCTAATTGCTCCTCGGGGTTATTTCAAAATG
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TGCATCACTCCAAATGGAAGCATTCCCAATGACAAGCCCTTTCAAAACGTAAACAAGATC
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CGGAATGTACCAGAGAAACGAACTAGAGGCCTATTCGGCGCAATAGCAGGTTTCATAGAA
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TGGTCTTACAATGCGGAGCTTCTTGTCGCTCTGGGGAACCAACATACAATTGATCTGACT
GACTCGGAAATGAACAAACTGTTTGAAAAAACAAGGAGGCAACTGAGGGAAAATGCTGAG
GACATGGGCAATGGTTGCTTCAAAATATACCACAAATGTGACAATGCTTGCATAGGGTCA
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CAGATCAAAGGTGTTGAACTGAAGTCAGGATACAAAGACTGGATCCTGTGGATTTCCTTT\\
GCCATATCATGCTTTTTGCTTGTGTAGTTTTGCTGGGGTTCATCATGTGGGCCTGCCAG
AAAGGCAACATTAGGTGCAACATTTGCATTTGA
>gi|60760|gb|V01090|Influenza virus neuraminidase gene fragment (N-terminal portion)
AGCAAAAGCAGGAGATTAAAATGAATCCAAATCAGAAAATAATAACCATTGGATCAATCT
GTATGGTAGTCGGAATAATTAGCCTAATATTGCAAATAGGGAATATTATCTCAATATGGA
TTAGCCATTCAATTCAAACTGGAAGTCAAAACCATACTGGAATATGCAACCATAGCATCA
TTACCTATAAAAATAGCACCTGGGTTAATCAAACATATGTTAATATTAGCAACACAAACG
TTGTTGCTGGAAAGGACACAACTTCAATGATATTAGCCGGCAATTCA
>gi|60762|gb|V01091|Influenza A virus (A/Memphis/102/72(H3N2)) neuraminidase gene fragment (N-terminal portion)
AGCAAAAGCAGGAGTGAAGATGAATCCAAATCAAAAGATAATAACAATTGGCTCTGTCTC
TCTCACCATTGCAACAATATGCTTTCTCATGCAGATTGCCATGCTGGTAACTACTGTAAC
ATTGCATTTCAAGCAATATGAGTGCGACTCCCCCGGGAACAACCAAGTAACGCTGTGTGA
ACCAATAATAATAGAAAGGAACATAACAGAGATAGTGCATTTGACCAACACCACCATAGA
GAAAGAGATATGCCCCAAATTAGTGGAATACAGGAATTGGTCAAAGCCGCAA
>gi|60764|gb|V01092|Influenza virus neuraminidase gene fragment (N-terminal portion)
AGCAAAAGCAGGNCGAAGATGAATCCAAATCAGAAGATAATAACAATCGGGGTAGTGAAC
ACTACTCTATCAACAATAGCCCTTCTCATTGGAGTGGGAAATCTGGTTTTCAACACAGTC
ATACATGAGAAAATAGGGAATCACCAAACAGTGATTCACCCAACAATAACGACTCCTGCA
GTACCAAACTGCAGTGACACTATAATAACATACAACAACACTGTGATAAACAACATAACA
ACAACAATAATAACTGAAGCGGAAAGGCTTTTTAAGCCTCCACTGCCGCTATGCCCTTCC
>gi|60766|gb|V01093|Influenza A virus (A/turkey/Ontario/6118/68(H8N5)) partial neuraminidase gene
AGCAAAAGCAGGNGTTTCATAATGAATCCAAATCAGAAAATCATAACCATCGGTAGTGCG
AGTATTGTATTAACAACAATAGGGTTGCTCCTCCCGATAACAAGTTTATGCTCAATATGG
TTTAGCCATTACAACCAAGGGACCCAACCGCATGAACAAGCCTGTTCGACAACACAACGA
ATTACTATAAATGAGACCTTTGTCAATGTCACCAATGTGCAGAACAACTATACCACAATA
ATCGACCCTCAGCCCCC
>gi|60768|gb|V01094|Influenza A virus (A/Shearwater/Australia/1972(H6N5)) partial gene for neuraminidase, genomic RNA
AGCAAAAGCAGGGGTTTAAAATGAATCCAAATCAGAAAATAATAACAATTGGCTCAGCAT
CGTTGGGATTAGTCATTTTCAACATTCTTCTTCATGGGGCATCAATAACCTGGGGAACAA
TATCAGTAACCAAAGACAACAAAGTACATATCTGTAATACGACCGAGGCGTANAACGAAA
CGGCGAGAGCGGAAAAAGTGGTAATCCCNGTCAACAACACCATACATTCGAATCATGAGC
CAGAATTCCTCAACAACACGGAACCTCTCNGTGATGTATCGGGATTCGCCATCGTTTCCA
ACGGACACGGGACAAGAACAGGTCAAGAGGGCACACATTCG
>gi|60770|gb|V01095|Influenza virus neuraminidase gene fragment (N-terminal portion)
AGCAAAAGCAGGNTGAAGATGAATCCAAATCAGAAGATAATATGCATCTCAGCAACAGGA
ATGACACTATCCGTAGTAAGTCAGCTAATAGGATTGGCCAACTTGGGTCTGAACATTGGG
CTTCATTTCAAGGTAGGAGAAACACCAGAAATAGGAACCCCCAGCGTCAACGAGACAAAC
TCCACAACCACGATAATCAACTACAATACTCAAAACAATTTCACAAATGTGACCAATATT
GTGTTAATCAAAGAAGAAGACGAGATGTTCACGAACCTTTCAAAACCCTTGTGTGAAGTA
AACTCATGGCACATCTTATCNAGGACA
>gi|60772|gb|V01097|Influenza A virus (A/black duck/Australia/702/78(H3N8)) partial neuraminidase gene
AGCAAAAGCAGGNGTTTAAAATGAACCCAAATCAGAAAATAATAACCATTGGGTCCGTAT
CCTTAGGATTGGTATGCCTTGATATTCTACTACACATAATTAGCATTACAATAACAGTGT
TAGGACTCCATAAAAACGGAAAACAACGGAGATGCAATGAGACAGTCATTAGGGAAGACA
```

ATGAGACCGTGAGGATTGAAAAGGTAACACAATGGCACAATACCAATGTCATTGAGTATA

 ${\it TAGAGAAATTAGAGGGTGATCATTTCATGAACAATACAGAACCATTGTGTCATGCTAAGGGTTTTGCCCTTTTTTCCAAGGATAAC}$ 

>gi|60774|gb|X00027|Influenza A virus (A/USSR/90/1977(H1N1)) hemagglutinin gene HA1 region ATGAAAGCAAAACTACTGGTCCTGTTATGTGCACTTTCAGCTACAGATGCAGACACAATA TGTATAGGCTACCATGCGAACAACTCAACCGACACTGTTGACACAGTACTCGAAAAGAAC GTGACAGTGACACCTCTGTCAACCTACTTGAGGACAGTCACAACGGAAAACTATGCAGA AACCCAGAATGCGAATCACTGTTTTCTAAGAAATCATGGTCCTACATTGCAGAAACACCA AACTCCGAGAATGGAACATGTTACCCAGGATATTTCGCCGACTATGAGGAATTGAGGGAG CAATTGAGCTCAGTATCATCATTCGAGAGATTCGAAATATTCCCCAAGGAAAGATCATGG  $\tt CCCAAACACACGTAACCAGAGGCGTAACGGCATCATGCTCCCATAAGGGGAAAAGCAGT$ TTTTACAGAAATTTGCTATGGCTGACGGAGGAAAATGGCTCGTACCCAAATCTGAGCAAG TCCTATGTGAACAACAAGAGAAAGAAGTCCTTGTACTATGGGGTGTTCATCACCCGTCT AACATAGAGGACCAAAAGACCATCTATCGGAAAGAAAATGCTTATGTCTCTGTAGTGTCT TCAAATTATAACAGGAGATTCACCCCAGAAATAGCAGAAAGACCCAAAGTAAGAGGTCAA GCAGGGAGAATTAACTACTGGACTCTGCTGGAACCCGGGGACACAATAATATTTGAG GCAAATGGAAATCTAATAGCGCCATGGCATGCTTTCGCACTGAATAGAGGCTTTGGGTCA GGAATCATCACCTCAAACGCATCGATGGATGAATGTGACACGAAGTGTCAAACNCCCCAG GGAGCTATAAACAGTAGTCTTCCTTTCCAGAATATACACCCAGTCACAATAGGGGAGTGC  ${\tt CCAAAATACGTCAGGAGTACAAAATTGAGGATGGTTACAGGACTAAGGAACATCCCATCC}$ ATTCAATCCAGAGGTCTGTTTGGAGCCATTGCCGGTTTCATTGA

>gi|58576|gb|X52226|Influenza A virus (A/FPV/Rostock/34(H7N1)) gene for neuraminidase, genomic RNA AGTAGAAACAAGGAGTTTTTTTGAACAAACTACTTGTCAATGGTGAATGGCAACTCAGCA CCGTCTGGCCAAGACCAACCTACAGTATCGCTGTTCACACCACAGAAGGAAATGCTGCTC CCACTAGTCCAGATCGTATTGTGGTTGGGCCGTCCCCTGATCAGTTCAACCCAGAAACAA GGCCTCATGCAGTCCAACCCTGTTAATTCAGGGTGTTGGACGAAACTCCCGCTATATCCC GACCAATCAGTTATTGCTACAATATCTTGCTTCACAGAGAAACTGCTGTCAGTTTCTGTC CATCCATTGGGATCCCAAATCATCTCAAACCCGCTTCTGGAACTAGTGCTTTTGGTTCTC CCTATCCAAACACCATTACCATACTTAAATGAGAACCCCTTTATCCCATATGCTCCATTA GAAGACACTGGACCACAGCTGCCTGTTCCATCATTGGGTCGTGGATTATCACCAAAAACC CCACTGCAGATGTAACCTATTTGATAATCAAGGTTTTTATTGAAAGACACCCATGGTCGA TTCGAACCATGCCAATTATCCCTGCATACACACATTACTTCACCTGCATCAGGATAACAA  ${\tt GAACATTCCTCGTAGTGGTAATTAGGTGCATTTAATTCACTTGATTTGACTACCTTCCCC}$ TTTTCTATCTTGAAAATTTTGTACGAGGCCTGCCCATTACTTGGGCCATCGGTCATTATA GTGAAACATGAACCATTTATACAGGCACATTCAGACTCTTGCGTTCTCAATATGTTATTT TTCCAACTTTTGATGGTGTCTGTTATTATACCATTGTATTTTAATACAGCCACTGCTCCA GACCATGCAACCGACACGAACCTTGAATTGTAGGGAGAAGGAGCTTCACCAACAGGACAG CTCATCAAGGTTCTATAAGGGCTTCTGTCTTTAACGGTTCCATTTGAGTGTTTTGTCATTC GGCTCTCTTATGACAAATACGTCTCCTTTGGAGCCAATTCTTATACCATTGTCTTTACTG TATATAGCCCACCCACTAATGGGACAAAGAGAGGAATTGCCTGCTAGTGCCACTGAAGCT GCATCCTGTCCAGCAATGCTTGGGTTGCATGCTTCATGGTGATTTTGATTTTCAGTCTGA ATTGAATGACTAACCCACATTGAGATTATGTTTCCAATTTGTAATATTAGGCTGATTATT CCGATCCCCATACAGATTGACCCAATGGTTATTATTTTCTGATTTGGATTCATTTTGAAC TCCTGCTTTTGCG

>gi|59292|gb|X53029|Influenza A virus (A/USSR/90/1977(H1N1)) genes for matrix proteins 1 and 2, genomic RNA AGTAGAAACAAGGTAGTTTTTTACTCTAGCTCTATGTTGACAAAATGACTATCGTCAGCA TCCACAGCATTCTGCTGTTCCTTTCGATATTCTTCCCTCATAGACTCTGGTACTCCTTCC CGATCAAGAATCCACAATATCAAGTGCAAAATCCCAATGATACTTGCGGCAACAACAAGA GGATCACTTGAATCGTTGCATCTGCACCCCCATTCGTTTCTGATAGGCCTGCAAATTTTC AAGAAGATCATTTTTCAGACCAGCACTGGAGCTAGGATGAGTCCCAATGGCTCTCATTGC  ${\tt TCCAGCCATTTGCTCCATAGCCTTAGCTGTAGTGCTGGCCAGAACCATTCTGTTCTCATG}$ TCTTATTAGTGGATTGGTTGTTGTCACCATTTGCCTATGAGACCTATGCTGGGAGTCAGC AATCTGTTCACAGGTTGCGCATATCAGGCCAAATGCCGCTTCGGTGGTCACAGCCCCCAT CCTGTTGTATATGAGGCCCATACAACTGGCAAGTGCACCAGCAGAATAACTGAGTGCTAT TTCTTTGGCCCCATGGAATGTTATCTCCCTCTTAAGCTTTCTATACAGTTTAACTGCTCT GTCCATGTTATTTGGATCCCCATTCCCATTAAGGGCATTTTGGACAAAGCGTCTACGCTG CAGTCCTCGCTCACTGGGCACGGTGAGCGTGAACACAAATCCTAAAATCCCCTTAGTCAG AGGTGACAGGATTGGTCTTGTCTTTAGCCATTCCATGAGAGCCTCAAGATCGGTGTTCTT  $\tt CCCAGCAAAGACATCTTCAAGTCTCTGTGCGATCTCGGCTTTGAGGGGGCCTGACGGGAC$ GATAGAGAGAACGTACGTTTCGACCTCGGTTAGAAGACTCATCTTTCAACATCTACCTGC

AGGACTTGCTCAGATTTGGGTACAAGCCATTCTTCTCCGTCAGCCATAGCAAATTTCTGT AAAAACTGCTTTTCCCATTATGGGAGCATGATGCCGTTACTCCCTTGGTTACGGTGTGGT TGGGCCATGAGCTTTCTTCGGGGAATATTTCGAATCCCTCGAATGATGATACTGAACTCA ATTGCTCCCTCAGTTCCTCATAGTCGGCGAAATACCCTGGGTAACATGTTCCATTCTCGG AGTTTGGTGTTTCTGCAATGTAGGACCATGATTCCTTAGAAAACAGTGATTCGCATTCTG GGTTTCCTAAGATCCATCCGGCAATGCTGCAATTACCCAATTGTAGTGGGGCTATTCCTT TTAGTCGACATAGTTTTCTGTTGTGACTGTCCTCAAGTAGGTTGACAGAGTGTGTCACTG TCACGTTCTCCAAGTACTGTGTCAACAGTGTCGGTTGAGTTGTTCGCATGGTAGCCTA TACATATTGTGTCTGCATCTGTAGCTGTAAATGCACATAACAGGATCG >gi|59296|gb|X66320|Influenza A virus (A/Chile/1/1983(H1N1)) gene for PB1 polymerase AGTAGAAACAAGGCATTTTTTCACGAAGGACAAGCCAAATTCCCTATTTTTGCCGTCTGA CAGATTCGAAATCAATCCGTGCATCAATTCGGGCTCTGGAAATCATAGCCTCTACCATAC AGCACCTCTGATACATTTGTTCATCCTCAAGTATTCCCCTTTTGGCTCGTATTCAAGATGG ATCGATTCCTTTTGGGGACCCAGGAGTGTGTTGTTGCAACAGCATCATACTCCATAATTT TGGCTGGACCATGTGCCGGCATCATCACTGCATTGTTCACTGATTCAATCTCTTTATGAC ATTTCAAGCAGACTTCAGGAATGTGGAGATTTCTAATGTTGTACAAATTAGGACCTCCAT CAGAGACCAGCAGCCCAGTTTTGGAACGGGTTTGATCCCACAGTTTCTTTATTTCAAATG ATCTTCGGGTTTGTATTTGTGTGTCACCTCTGTGGCATCGATATGTGTACCTGTAATCTT TGATGAATAACTGAAGGGCCATTTGAGCGGTTGCTGGACCAAGATCATTGTTTATCATAT TGTTTTTGATGACAGTGACTCCAATACTCATGTCTGCAGACTCGTTGATCCCAGACACCC CAAAACTGGGAAGCTCCATGCTGAAATTGGCAACAAACCCATAACGATAGAAAAAACTCG TGAATTCAAAAGTACCTGTTCTGTTTATGTAGGACTTTTTCTTGCTCATGTTGATTCCGA GCAGCTTACAGGTTCGATAAAACCTGTCAACTCCAGCTTGAATTCCTGCATAGTTGGGTG TGGTGTATCTCTTTTGTCCAAGATTCAGGATGGAGACGCCCAATACAGTGCTTAACATAT TGAACATGCCCATCATCATTCCAGGGCTCAGTGATGCAGTTCCATCTATTAAGAGTGGCC GGATTTTTCAATTTTCTTTGTTGAATCATTGAAATACCTCAAATCGATGTTTGCTA GCATTTCTGCAGGTATTTGAGTTCTAAGTTTCATACTCTTGCTTTCAAACATGTACCCCT TACCTAGTCTCGCCATTTTGTTTGAGAACATTATTGGAGCAATACTTAGAATATTTCTGA ACCATTCGGGCTGATTTCTGGTTATATATGTGATCATGGCCAAAAACATTCTAGGGTTCT GATTTTCGTTCCATTTGGTGG

>gi|60457|gb|X08088|Influenza A virus (A/WSN/33) ORF1 RNA for M1 protein and ORF2 RNA for M2 protein, genomic RNA TTACTCCAGCTCTATGTTGACAAAATGACCATCGTCAACATCCACAGCATTCTGCTGTTC CTTTCGATATTCTTCCCTCATAGACTCTGGCACTCCTTCCGTAGAAGGCCCTCTTTTCAA ACCGTATTTAAAGCGACGATAAATGCATTTGAAAAAAAGACGATCAAGAATCCACAATAT CAAGTGCAAGATTCCAATGATATTTGCTGCAATGACGAGGAGCATCACTTGAATCGTTGCA TCTGCACCCCATTCGTTTCTGATAGGCCTGCAAATTTTCAAGAAGATCATCTTTTAGAC  ${\tt CAGCACTGGAGCTAGGATGAGTCCCAATGGTTCTCATCGCCTGCACCATTTGCCTGGCCT}$ GACTAGCAATATCCATGGCCTCTGCTGCTTGCTCACTCGATCCAGCCATTTGCTCCATAG CCTTAGCTGTAGTGCTGGCTAGAACCATTCTGTTCTCATGTCTGATTAGTGGATTAGTTG TTGTCACCATTTGCCTATGAGACCGATGCTGGGAGTCAGCAATCTGTTCACAGGTTGCGC ATACCAGGCCAAATGCCACTTCAGTGGTCACAGCCCCCATCCTGTTGTATATGAGGCCCA TACAACTGGCAAGTGCACCAGCAGAATAACTGAGTGCTATTTCTTTGGCCCCATGGAATG TTATCTCCCTCTTAAGCTTCCTATACAGTTTAACTGCTTTGTCCATGTTATTTGGATCTC CGTTCCCATTAAGAGCATTTTGGACAAAGCGTCTACGCTGCAGTCCCCGCTCACTGGGCA CGGTGAGCGTGAACACAAATCCTAAAATCCCCTTAGTCAGAGGTGACAGGATTGGTCTTG TCTTTAGCCATTCCATGAGAACCTCAAGATCGGTGTTCTTCCCTGCAAAGACATCTTCAA CGACCTCGGTTAGAAGACTCAG