

# Supplementary Tables and Figures

**Suppl. Table 1.** Comprehensive list of primers used for sequencing

(a) Project Specific primers

Primer Name	Primer Sequence
PB2_av_M13_1BF	TGTA AACGACGGCCAGTAGCRAAAGCAGGTCA
PB2_av_M13_1BF	TGTA AACGACGGCCAGTAGCRAAAGCAGGTCA
PB2_av_M13_1BF	TGTA AACGACGGCCAGTAGCRAAAGCAGGTCA
PB2_av_M13_492F	TGTA AACGACGGCCAGTGAGGTYGTTTTCCCAAATGAAG
PB2_av_M13_526F	TGTA AACGACGGCCAGTGTTCCTCCCAAATGAAGTDGG
PB2_av_M13_628F	TGTA AACGACGGCCAGTTTRATGGTDGCATACATGYTRG
PB2_av_M13_1048F	TGTA AACGACGGCCAGTGAAGARGAAGTGCTYACRGGCAAYCT
PB2_av_M13_1102F	TGTA AACGACGGCCAGTGGRTATGARGARTTCACAATGG
PB2_av_M13_1507F	TGTA AACGACGGCCAGTGTGTGTRGTNGTRAGYATTGAYCG
PB2_av_M13_1619F	TGTA AACGACGGCCAGTGATGTGGGARATYAAAYGGBCC
PB2_av_M13_1678F	TGTA AACGACGGCCAGTCARTGGATCATYAGRAAYTGG
PB1_av_M13_1F	TGTA AACGACGGCCAGTAGCRAAAGCAGGCA
PB1_av_M13_1F	TGTA AACGACGGCCAGTAGCRAAAGCAGGCA
PB1_av_M13_1F	TGTA AACGACGGCCAGTAGCRAAAGCAGGCA
PB1_av_M13_430F	TGTA AACGACGGCCAGTAAAYCARCCRGCTGCWACYGC
PB1_av_M13_463F	TGTA AACGACGGCCAGTATAGARGTYTTCAGATCRAAYGGT
PB1_av_M13_679F	TGTA AACGACGGCCAGTATAAGAGCAYTGACAYTRAAYACAATG
PB1_av_M13_1000F	TGTA AACGACGGCCAGTACAAGRAAYCARCCHGAATGGTT
PB1_av_M13_1090F	TGTA AACGACGGCCAGTATGTTTCGARAGYAARAGYATGAAG
PB1_av_M13_1366F	TGTA AACGACGGCCAGTGCTCTCATAGTGAATGCACC
PB1_av_M13_1486F	TGTA AACGACGGCCAGTGGRACATTTGARTTCACRAG
PB1_av_M13_1568BF	TGTA AACGACGGCCAGTCTRCCCAGYTTTGGRGTDTC
PA_av_M13_1F	TGTA AACGACGGCCAGTAGCRAAAGCAGGTACTG
PA_av_M13_1BF	TGTA AACGACGGCCAGTAGCRAAAGCAGGTACTGAT
PA_av_M13_1BF	TGTA AACGACGGCCAGTAGCRAAAGCAGGTACTGAT
PA_av_M13_471F	TGTA AACGACGGCCAGTCATTYACYGGRGARGARATGGC
PA_av_M13_562F	TGTA AACGACGGCCAGTTGGGATTCCTTTCGTCAATC
PA_av_M13_621F	TGTA AACGACGGCCAGTARACAATTGAAGAAARATTTG
PA_av_M13_1235F	TGTA AACGACGGCCAGTGCAAGYTGATYCARAGTG
PA_av_M13_1346F	TGTA AACGACGGCCAGTATGAGRAGRAAYTAYTTYACAGC
PA_av_M13_1577F	TGTA AACGACGGCCAGTTRAAYTTYGTRAGYATGGA
PA_av_M13_1739F	TGTA AACGACGGCCAGTAARATYAARATGAARTGGG
NP_av_M13_1BF	TGTA AACGACGGCCAGTAGCAAAGCAGGGTA
NP_av_M13_1CF	TGTA AACGACGGCCAGTAGCAAAGCAGGGTAKATAATC
NP_av_M13_1BF	TGTA AACGACGGCCAGTAGCAAAGCAGGGTA
NP_av_M13_397F	TGTA AACGACGGCCAGTAGRMTYTGCGYCAAGC
NP_av_M13_403F	TGTA AACGACGGCCAGTTGGCGYCARGCRAAYAATGG
NP_av_M13_841F	TGTA AACGACGGCCAGTCTGAGRGGRTCAGTRGCYCA
NP_av_M13_898F	TGTA AACGACGGCCAGTGTGCCAGYGGRTAYGA
NP_av_M13_1053F	TGTA AACGACGGCCAGTGGATGGCATGYCAYTCTGCA
MP_av_M13_1BF	TGTA AACGACGGCCAGTAGCRAAAGCAGGTAGAT
MP_av_M13_1BF	TGTA AACGACGGCCAGTAGCRAAAGCAGGTAGAT
MP_av_M13_402F	TGTA AACGACGGCCAGTAGYTGATGGGYCTCATMTAC

MP_av_M13_605F	TGTA AACGACGGCCAGTGGRTCDAGYGAR CARGCAGC
MP_av_M13_1F	TGTA AACGACGGCCAGTAGCRAAAGCAGKTAGA
NS_av_M13_1F	TGTA AACGACGGCCAGTAGCRAAAGCAGGGTG
NS_av_M13_1F	TGTA AACGACGGCCAGTAGCRAAAGCAGGGTG
NS_av_M13_1F	TGTA AACGACGGCCAGTAGCRAAAGCAGGGTG
NS_av_M13_541F	TGTA AACGACGGCCAGTAGGATGTCAAAAATGCAATTTRG
NS_av_M13_541F	TGTA AACGACGGCCAGTAGGATGTCAAAAATGCAATTTRG
HA_av_H7_M13_1F	TGTA AACGACGGCCAGTAGCAAAAGCAGGGGAT
HA_av_H7_M13_1F	TGTA AACGACGGCCAGTAGCAAAAGCAGGGGAT
HA_av_H7_M13_1BF	TGTA AACGACGGCCAGTAGCAAAAGCAGGGGATACA
HA_av_H7_M13_467F	TGTA AACGACGGCCAGTAGATCAGGDTCTTCTCTATGCG
HA_av_H7_M13_517F	TGTA AACGACGGCCAGTAGACAATGCNGCHTTTYCC
HA_av_H7_M13_630F	TGTA AACGACGGCCAGTHTATGGRAGTGGRA
HA_av_H7_M13_995F	TGTA AACGACGGCCAGTYTGGCWACAGGRATGA
HA_av_M13_1135F	TGTA AACGACGGCCAGTTYGGNGCNATWGC
HA_av_M13_1135F	TGTA AACGACGGCCAGTTYGGNGCNATWGC
HA_av_H7N1_2_3_M13_1F	TGTA AACGACGGCCAGTAGCAAAAGCAGGGGAYAC
HA_av_H7N1_2_3_M13_645F	TGTA AACGACGGCCAGTYAARYTRATAACAGT
HA_av_H7N1_2_3_M13_1120F	TGTA AACGACGGCCAGTGARAATGGDTGGGARGG
HA_av_H7N1_2_3_M13_1F	TGTA AACGACGGCCAGTAGCAAAAGCAGGGGAYAC
HA_av_H7N1_2_3_M13_645F	TGTA AACGACGGCCAGTYAARYTRATAACAGT
HA_av_H7N1_2_3_M13_1120F	TGTA AACGACGGCCAGTGARAATGGDTGGGARGG
NA_av_N1_4_M13_1BF	TGTA AACGACGGCCAGTAGCAAAAGCAGGAGWTT
NA_av_N1_4_M13_1BF	TGTA AACGACGGCCAGTAGCAAAAGCAGGAGWTT
NA_av_N1_4_M13_517F	TGTA AACGACGGCCAGTYTRATGAGYTYGYCC
NA_av_N1_4_M13_517F	TGTA AACGACGGCCAGTYTRATGAGYTYGYCC
NA_av_N1_4_5_7_8_M13_926F	TGTA AACGACGGCCAGTAGRGAYAAAYTGG
NA_av_N1_4_5_7_8_M13_926F	TGTA AACGACGGCCAGTAGRGAYAAAYTGG
NA_H7N1_M13_1F	TGTA AACGACGGCCAGTAGCAAAAGCAGGAG
NA_H7N1_M13_465F	TGTA AACGACGGCCAGTCARTTCTRTCTTCGG
NA_H7N1_M13_903F	TGTA AACGACGGCCAGTAAAYTGGCATGGYTCRAATCG
NA_av_N2_7_M13_1F	TGTA AACGACGGCCAGTAGCAAAAGCAGG
NA_av_N2_7_M13_1F	TGTA AACGACGGCCAGTAGCAAAAGCAGG
NA_av_N2_M13_580F	TGTA AACGACGGCCAGTTDGSRTGGTCYAG
NA_av_N2_M13_580F	TGTA AACGACGGCCAGTTDGSRTGGTCYAG
NA_av_N2_M13_926F	TGTA AACGACGGCCAGTAGRGAYAAAYTGG
NA_av_N2_M13_973F	TGTA AACGACGGCCAGTTGTGTGYTCAGGRCTYGTGG
NA_H7N2_M13_1F	TGTA AACGACGGCCAGTATGAAYCCAAAYCAGAAG
NA_H7N2_M13_442F	TGTA AACGACGGCCAGTACAATACATGATAGAAYCC
NA_H7N2_M13_891F	TGTA AACGACGGCCAGTCTCTAATAGGCCYGTATAG
NA_av_N3_M13_1CF	TGTA AACGACGGCCAGTAGCAAAAGCAGGTGCGARATG
NA_av_N3_M13_1CF	TGTA AACGACGGCCAGTAGCAAAAGCAGGTGCGARATG
NA_av_N3_M13_409F	TGTA AACGACGGCCAGTTGGTCYTTTGCHCTHGCNCAAGG
NA_av_N3_M13_445F	TGTA AACGACGGCCAGTACHAARCAAYAGCAATGG
NA_av_N3_M13_1060F	TGTA AACGACGGCCAGTGGAGTBAARGDTTTTGG
PB2_av_M13_1619F	TGTA AACGACGGCCAGTGATGTGGGARATYAAAYGGBCC
PB1_av_M13_1F	TGTA AACGACGGCCAGTAGCRAAAGCAGGCCA
NP_av_M13_1BF	TGTA AACGACGGCCAGTAGCAAAAGCAGGGTA
NS_av_M13_1F	TGTA AACGACGGCCAGTAGCRAAAGCAGGGTG
NA_av_N3_M13_1091BF	TGTA AACGACGGCCAGTGAYGTRTGGYTVGG
NA_H7N3_M13_1F	TGTA AACGACGGCCAGTAGCAAAAGCAGGTGCGAG
NA_H7N3_M13_461F	TGTA AACGACGGCCAGTAAAGACAGRACRCCRTATAG

NA_H7N3_M13_1051F	TGTA AACGACGGCCAGTGGAGTSAARGD TTTGG
PB2_av_M13_662R	CAGGAAACAGCTATGACCACYARYTCYCTTTTCYARCATGTATGC
PB2_av_M13_707R	CAGGAAACAGCTATGACCACACTRCTTGTGYCCRCWCWGC
PB2_av_M13_782R	CAGGAAACAGCTATGACCCHGGDGTGTACATYTYGTCC
PB2_av_M13_1619R	CAGGAAACAGCTATGACCGVCCRTTRATYTCACACATC
PB2_av_M13_1214R	CAGGAAACAGCTATGACCTCAGCRATTGAYTGYTCRTCTCTYCCAC
PB2_av_M13_1259R	CAGGAAACAGCTATGACCATCATGCAATCCTCYTGTGARAAYACC
PB2_av_M13_1721R	CAGGAAACAGCTATGACCAGCATTGAATYTTTHACVGTYTCCC
PB2_av_M13_1820R	CAGGAAACAGCTATGACCGTYCTCACRAAYCCRCTGTAYTG
PB2_av_M13_2341BR	CAGGAAACAGCTATGACCTAGTAGAAACAAGGTCGTTT
PB2_av_M13_2341BR	CAGGAAACAGCTATGACCTAGTAGAAACAAGGTCGTTT
PB2_av_M13_2341BR	CAGGAAACAGCTATGACCTAGTAGAAACAAGGTCGTTT
PB1_av_M13_609BR	CAGGAAACAGCTATGACCGTGTGAYCATYTTCTTGGTC
PB1_av_M13_609BR	CAGGAAACAGCTATGACCGTGTGAYCATYTTCTTGGTC
PB1_av_M13_778R	CAGGAAACAGCTATGACCRAAHCTCTGATYTGCAATYCC
PB1_av_M13_1113R	CAGGAAACAGCTATGACCCTTCATGCTYTTTRCTYTCRAACAT
PB1_av_M13_1208R	CAGGAAACAGCTATGACCAGAGGYCTTATYTTTCDATTTTCTT
PB1_av_M13_1510R	CAGGAAACAGCTATGACCAAAARCTYGTGAAYTCAAATGYTCC
PB1_av_M13_1667R	CAGGAAACAGCTATGACCAGAGCCATYTGRCGCHGTTGCTGG
PB1_av_M13_1785R	CAGGAAACAGCTATGACCCTTYGARC GGGTYTYTCC
PB1_av_M13_2341R	CAGGAAACAGCTATGACCAGTAGAAACAAGGCATTT
PB1_av_M13_2341R	CAGGAAACAGCTATGACCAGTAGAAACAAGGCATTT
PB1_av_M13_2341R	CAGGAAACAGCTATGACCAGTAGAAACAAGGCATTT
PA_av_M13_612R	CAGGAAACAGCTATGACCCTYTCGGAYTGACGAAAGGAATCCC
PA_av_M13_690R	CAGGAAACAGCTATGACCTTCGGTGGGAGACTTTGGTC
PA_av_M13_756R	CAGGAAACAGCTATGACCCCTCAATGCAGCCRTTCGG
PA_av_M13_1125R	CAGGAAACAGCTATGACCTTYAAYTGGCTGT TTTTYTTCAT
PA_av_M13_1472R	CAGGAAACAGCTATGACCGTYCTGCATTTGCTTATCATTGG
PA_av_M13_1353R	CAGGAAACAGCTATGACCCTYCTCATRCTY GCAATGTGYTC
PA_av_M13_1881R	CAGGAAACAGCTATGACCAYGTYTCHGAYTTGTTTTCAAAG
PA_av_M13_2233BR	CAGGAAACAGCTATGACCAGTAGAAACAAGGTACTTTTTT
PA_av_M13_2233CR	CAGGAAACAGCTATGACCAGTAGAAACAAGGTACTTTTTTGG
PA_av_M13_2233BR	CAGGAAACAGCTATGACCAGTAGAAACAAGGTACTTTTTT
NP_av_M13_532R	CAGGAAACAGCTATGACCCTTGTCATCAGAGAGCACAT
NP_av_M13_680R	CAGGAAACAGCTATGACCCRTTYTCDCCYCTCCAGA
NP_av_M13_1053R	CAGGAAACAGCTATGACCTGCAGARTGRCATGCCATCC
NP_av_M13_1172R	CAGGAAACAGCTATGACCGARTCYATYGTYTCCATGTTYTC
NP_av_M13_1167R	CAGGAAACAGCTATGACCATKGYTTCATGTTCTCATT
NP_av_M13_1565CR	CAGGAAACAGCTATGACCAGTAGAAACAAGGGTATTTT
NP_av_M13_1565CR	CAGGAAACAGCTATGACCAGTAGAAACAAGGGTATTTT
NP_av_M13_1565BR	CAGGAAACAGCTATGACCAGTAGAAACAAGGGTATTTT
MP_av_M13_567R	CAGGAAACAGCTATGACCAGYACCATYCTGTTYTCATGYC
MP_av_M13_674R	CAGGAAACAGCTATGACCTCATYGCYTGCAACATYTYGYCT
MP_av_M13_1027R	CAGGAAACAGCTATGACCAGTAGAAACAAGGTAGTTTTT
MP_av_M13_1027R	CAGGAAACAGCTATGACCAGTAGAAACAAGGTAGTTTTT
MP_av_M13_1027R	CAGGAAACAGCTATGACCAGTAGAAACAAGGTAGTTTTT
NS_av_M13_890R	CAGGAAACAGCTATGACCAGTAGAAACAAGGGTGT TTT
NS_av_M13_577R	CAGGAAACAGCTATGACCGWRTTATCATTCCATTC AARTCC
NS_av_M13_641R	CAGGAAACAGCTATGACCYTCYCCAAGCRAATCTCTGT A
NS_av_M13_890R	CAGGAAACAGCTATGACCAGTAGAAACAAGGGTGT TTT
NS_av_M13_890R	CAGGAAACAGCTATGACCAGTAGAAACAAGGGTGT TTT
HA_av_H7_M13_659R	CAGGAAACAGCTATGACCCTYCCRTADARYTTGGTCTGYTC

HA_av_H7_M13_714R	CAGGAAACAGCTATGACCCDGYTGDCATTYACHTGTGG
HA_av_H7_M13_811R	CAGGAAACAGCTATGACCGRGCTATRAADGCYCCATTGA
HA_av_H7_M13_1166R	CAGGAAACAGCTATGACCCATTYTGATGYCTGAADCCATACC
HA_av_H7_M13_1178R	CAGGAAACAGCTATGACCCYTCYCCYTGTCATTYTGATG
HA_av_H7_M13_1221R	CAGGAAACAGCTATGACCTGATCWATTGCHGAYTGRGTGC
HA_av_H7_M13_1777R	CAGGAAACAGCTATGACCAGTAGAAACAAGGGTGTMTT
HA_av_M13_1780R	CAGGAAACAGCTATGACCAGTAGAAACWAGGGTRTTTT
HA_av_M13_1780R	CAGGAAACAGCTATGACCAGTAGAAACWAGGGTRTTTT
HA_av_H7N1_2_3_M13_809R	CAGGAAACAGCTATGACCGRGCTATRAADGCYCCATTG
HA_av_H7N1_2_3_M13_1279R	CAGGAAACAGCTATGACCTGATCWATTGCHGAYTGRGTGC
HA_av_H7N1_2_3_M13_1785R	CAGGAAACAGCTATGACCAGTAGAAACAAGGGTGTMTT
HA_av_H7N1_2_3_M13_809R	CAGGAAACAGCTATGACCGRGCTATRAADGCYCCATTG
HA_av_H7N1_2_3_M13_1279R	CAGGAAACAGCTATGACCTGATCWATTGCHGAYTGRGTGC
HA_av_H7N1_2_3_M13_1785R	CAGGAAACAGCTATGACCAGTAGAAACAAGGGTGTMTT
NA_av_N1_4_M13_679R	CAGGAAACAGCTATGACCTTATGCCATTGTATTTTCARTACWGCHACAGC
NA_av_N1_4_M13_679R	CAGGAAACAGCTATGACCTTATGCCATTGTATTTTCARTACWGCHACAGC
NA_av_N1_4_M13_1192R	CAGGAAACAGCTATGACCCATTTGGATCCCAAAYCATYTCAAANCC
NA_av_N1_4_M13_1192R	CAGGAAACAGCTATGACCCATTTGGATCCCAAAYCATYTCAAANCC
NA_av_N1_4_5_7_8_M13_1460R	CAGGAAACAGCTATGACCAGTAGAAACAAGGAGTTTTTT
NA_av_N1_4_5_7_8_M13_1460R	CAGGAAACAGCTATGACCAGTAGAAACAAGGAGTTTTTT
NA_H7N1_M13_580R	CAGGAAACAGCTATGACCCATCRTGRCARGCACTTGC
NA_H7N1_M13_1023R	CAGGAAACAGCTATGACCARCTGCCTGTCCATCATTTGG
NA_H7N1_M13_1460R	CAGGAAACAGCTATGACCAGTAGAAACAAGGAGTTT
NA_av_N2_7_M13_795R	CAGGAAACAGCTATGACCCTGATGCACCTCCATCMGTCATYACHAC
NA_av_N2_7_M13_795R	CAGGAAACAGCTATGACCCTGATGCACCTCCATCMGTCATYACHAC
NA_av_N2_M13_1128R	CAGGAAACAGCTATGACCATTGTCAAAGGCCANCCYTYACTCC
NA_av_N2_M13_1128R	CAGGAAACAGCTATGACCATTGTCAAAGGCCANCCYTYACTCC
NA_av_N2_M13_1460R	CAGGAAACAGCTATGACCAGTAGAAACAAGGAGTTTTTT
NA_av_N2_M13_1460R	CAGGAAACAGCTATGACCAGTAGAAACAAGGAGTTTTTT
NA_H7N2_M13_572R	CAGGAAACAGCTATGACCTGCARCCATGCTTTTYCCATCATG
NA_H7N2_M13_1019R	CAGGAAACAGCTATGACCGGATCCCTGCARTTGCTGC
NA_H7N2_M13_1447R	CAGGAAACAGCTATGACCAGTAGAAACAAGGAGTTT
NA_av_N3_M13_581R	CAGGAAACAGCTATGACCCRTCRAARCARCTRCTRCTYACCA
NA_av_N3_M13_631R	CAGGAAACAGCTATGACCCACTBGCATCATTRTCRTTYCC
NA_av_N3_M13_1165R	CAGGAAACAGCTATGACCATCCANCCHTCTGHRACCTTTGAT
NA_av_N3_M13_1233R	CAGGAAACAGCTATGACCTCATTGTTKGAMACHARTGTYTGTG
NA_av_N3_M13_1455R	CAGGAAACAGCTATGACCAGTAGAAACAAGGTGCTTTTT
PB2_av_M13_2341BR	CAGGAAACAGCTATGACCTAGTAGAAACAAGGTGCTTT
PB1_av_M13_609BR	CAGGAAACAGCTATGACCGTGTGAYCATYTTCTTGGTC
NP_av_M13_532R	CAGGAAACAGCTATGACCCCTTGATCAGAGAGCACAT
NS_av_M13_577R	CAGGAAACAGCTATGACCGWRTTATCATTCATTCARTCC
NA_av_N3_M13_1455R	CAGGAAACAGCTATGACCAGTAGAAACAAGGTGCTTTTT
NA_H7N3_M13_628R	CAGGAAACAGCTATGACCCTYGCATCWTRTCRTTCCC
NA_H7N3_M13_1215R	CAGGAAACAGCTATGACCGTTKGACACYARTGTYTGTG
NA_H7N3_M13_1455R	CAGGAAACAGCTATGACCAGTAGAAACAAGGTGCTTTTT

## (b) HA segment primers

Primer Name	Primer Sequence
HA_av_M13_1F	TGTA AACGACGGCCAGTAGCAA AAGCAGGGG
HA_av_M13_1F	TGTA AACGACGGCCAGTAGCAA AAGCAGGGG
HA_av_M13_1F	TGTA AACGACGGCCAGTAGCAA AAGCAGGGG
HA_av_M13_1135F	TGTA AACGACGGCCAGTTTYGGNGCNATWGC
HA_av_M13_1135F	TGTA AACGACGGCCAGTTTYGGNGCNATWGC
HA_av_H1_M13_1F	TGTA AACGACGGCCAGTAGCAA AAGCAGGGG
HA_av_H1_M13_555F	TGTA AACGACGGCCAGTTAYCCWAARCTCAGCAAATC
HA_av_H1_M13_582F	TGTA AACGACGGCCAGTAACAAYAARGRRAARGAAGTVCT
HA_av_H1_M13_618F	TGTA AACGACGGCCAGTGTDCAYCAYCCWCC
HA_av_H1_M13_976F	TGTA AACGACGGCCAGTTCACYATTGGRGARTGYCC
HA_av_all_M13_1F	TGTA AACGACGGCCAGTAGCAA AAGCAGGGG
HA_av_H2_M13_1F	TGTA AACGACGGCCAGTAGCAA AAGCAGGGGT
HA_av_H2_M13_1F	TGTA AACGACGGCCAGTAGCAA AAGCAGGGGT
HA_av_H2_M13_570F	TGTA AACGACGGCCAGTGRCTDTAYAACAAYACAA
HA_av_H2_M13_671F	TGTA AACGACGGCCAGTACMTATGKTCHGTDGG
HA_av_H2_M13_671F	TGTA AACGACGGCCAGTACMTATGKTCHGTDGG
HA_av_H2_M13_1064F	TGTA AACGACGGCCAGTGGRTTGTGGRGCAATAGC
HA_av_H2_M13_1067F	TGTA AACGACGGCCAGTTGTTTGGRGCAATMGC
HA_av_H2_M13_1167F	TGTA AACGACGGCCAGTCAGCAGACAAAGARTCCACTCA
HA_av_H3_M13_1F	TGTA AACGACGGCCAGTAGCAA AAGCAGGGGATA
HA_av_H3_M13_1F	TGTA AACGACGGCCAGTAGCAA AAGCAGGGGATA
HA_av_H3_M13_1F	TGTA AACGACGGCCAGTAGCAA AAGCAGGGGATA
HA_av_H3_M13_565F	TGTA AACGACGGCCAGTTGYTGAAAYGTRACTATGCC
HA_av_H3_M13_571F	TGTA AACGACGGCCAGTTGAAYGTRACTATGCC
HA_av_H3_M13_571F	TGTA AACGACGGCCAGTTGAAYGTRACTATGCC
HA_av_H3_4_14_M13_1095F	TGTA AACGACGGCCAGTGCWGGNTTYATAGARAATGG
HA_av_H4_M13_1F	TGTA AACGACGGCCAGTAGCAA AAGCMRGGGAA
HA_av_H4_M13_553F	TGTA AACGACGGCCAGTTAYCCMCTYCARAAYYTGACAAA
HA_av_H4_M13_620F	TGTA AACGACGGCCAGTGACAMAGARCAAAYC
HA_av_H4_M13_682F	TGTA AACGACGGCCAGTYAGTCAAACAAGTGTRG
HA_av_H4_M13_1025F	TGTA AACGACGGCCAGTAACATYCCTGARAARGC
HA_av_H5_M13_1F	TGTA AACGACGGCCAGTAGCAA AAGCAGGGGT
HA_av_H5_M13_527F	TGTA AACGACGGCCAGTTGGYTBATCAARAAG
HA_av_H5_M13_551F	TGTA AACGACGGCCAGTTACCCAACHATAAARAG
HA_av_H5_M13_617F	TGTA AACGACGGCCAGTCAYCAYCCHAATGATGC
HA_av_H5_M13_935F	TGTA AACGACGGCCAGTATAAAYTCHAGYATGCC
HA_av_H6_M13_1F	TGTA AACGACGGCCAGTAGCAA AAGCAGGGGAA
HA_av_H6_M13_507F	TGTA AACGACGGCCAGTCTNYTRTGGATAATAAA
HA_av_H6_M13_591F	TGTA AACGACGGCCAGTTATTTTGGGGTGTDCAYC
HA_av_H6_M13_666F	TGTA AACGACGGCCAGTAGRATGGGRACTGAAAG
HA_av_H6_M13_1050F	TGTA AACGACGGCCAGTAGAGGAYTBTTYGGRGC
HA_av_H6_M13_1050F	TGTA AACGACGGCCAGTAGAGGAYTBTTYGGRGC
HA_av_H7_M13_1F	TGTA AACGACGGCCAGTAGCAA AAGCAGGGGAT
HA_av_H7_M13_1F	TGTA AACGACGGCCAGTAGCAA AAGCAGGGGAT
HA_av_H7_M13_1BF	TGTA AACGACGGCCAGTAGCAA AAGCAGGGGATACA
HA_av_H7_M13_467F	TGTA AACGACGGCCAGTAGATCAGGDTCTCNTTCTATGC
HA_av_H7_M13_517F	TGTA AACGACGGCCAGTAGCAATGCNGCHTTYCC
HA_av_H7_M13_630F	TGTA AACGACGGCCAGTHTATGGRAGTGGRA
HA_av_H7_M13_995F	TGTA AACGACGGCCAGTYTGGCWACAGGRATGA

HA_av_H8_M13_1F	TGTA AACGACGGCCAGTAGCAAAGCAGGGGCACAA
HA_av_H8_M13_1F	TGTA AACGACGGCCAGTAGCAAAGCAGGGGCACAA
HA_av_H8_M13_1F	TGTA AACGACGGCCAGTAGCAAAGCAGGGGCACAA
HA_av_H8_M13_560F	TGTA AACGACGGCCAGTTATGTTAAYAATGAAGATGGAGAC
HA_av_H8_M13_581F	TGTA AACGACGGCCAGTGACATCATTTTCTTATGG
HA_av_H8_M13_634F	TGTA AACGACGGCCAGTRACACTATATAARAATGCAAACAC
HA_av_H8_M13_1102F	TGTA AACGACGGCCAGTGATTGATGGRTGGTATGGATTTC
HA_av_H9_M13_1F	TGTA AACGACGGCCAGTAGCAAAGCAGGGGAA
HA_av_H9_M13_599F	TGTA AACGACGGCCAGTGCATAMAYCAYCCACC
HA_av_H9_M13_652F	TGTA AACGACGGCCAGTGAYACAACAACAAGTGT
HA_av_H9_M13_665F	TGTA AACGACGGCCAGTGTDRCAACAGARGAT
HA_av_H9_M13_1117F	TGTA AACGACGGCCAGTTTCAGCATTCAAATGAYCARGG
HA_av_M13_1F	TGTA AACGACGGCCAGTAGCAAAGCAGGGG
HA_av_H10_M13_485F	TGTA AACGACGGCCAGTTATGCRGARCTMAARTGG
HA_av_H10_M13_669F	TGTA AACGACGGCCAGTCTACWTATCARAACARCTTTG
HA_av_H10_M13_719F	TGTA AACGACGGCCAGTAAYGGHCAAAAGTGGRCG
HA_av_H10_M13_1041F	TGTA AACGACGGCCAGTGGRATGARRAAYGTNCCNG
HA_av_H11_M13_1F	TGTA AACGACGGCCAGTAGCAAAGCAGGGG
HA_av_H11_M13_540F	TGTA AACGACGGCCAGTTCAGGRACATAYCCTG
HA_av_H11_M13_576F	TGTA AACGACGGCCAGTAAYACCAAAGGRAGAG
HA_av_H11_M13_669F	TGTA AACGACGGCCAGTTATGTAGCAGTGGGTTCAG
HA_av_H11_M13_1063F	TGTA AACGACGGCCAGTTGTTTGGWGCATAGCYGG
HA_av_H12_M13_1BF	TGTA AACGACGGCCAGTAGCAAAGCAGG
HA_av_H12_M13_1F	TGTA AACGACGGCCAGTAGCAAAGCAGGGGTCA
HA_av_H12_M13_1F	TGTA AACGACGGCCAGTAGCAAAGCAGGGGTCA
HA_av_H12_M13_599F	TGTA AACGACGGCCAGTATTCAAYCCACCAACATC
HA_av_H12_M13_650F	TGTA AACGACGGCCAGTGATACYCTCTCYTCWGTG
HA_av_H12_M13_680F	TGTA AACGACGGCCAGTATCAATAGGAGYTTCAAGC
HA_av_H12_M13_1047F	TGTA AACGACGGCCAGTGRCTCTTTGGAGCAATGCAGG
HA_av_H12_M13_1176F	TGTA AACGACGGCCAGTCAATAGACAAYATGCARAACAAAC
HA_av_H12_M13_1214F	TGTA AACGACGGCCAGTGAYAAAATGAAYAARCAATTTG
HA_av_H13_M13_1F	TGTA AACGACGGCCAGTAGCAAAGCAGGGGA
HA_av_H13_M13_579F	TGTA AACGACGGCCAGTGACYTACAACAAYACHACKGGHAG
HA_av_H13_M13_621F	TGTA AACGACGGCCAGTGGGDATAAYCAYCCWGT
HA_av_H13_M13_1088F	TGTA AACGACGGCCAGTTTGAGVTTTCATAGAAGGWGG
HA_av_H14_M13_1F	TGTA AACGACGGCCAGTAGCAAAGCAGGGGAA
HA_av_H14_M13_582F	TGTA AACGACGGCCAGTGGCTCTTATGTCAGGCTC
HA_av_H14_M13_633F	TGTA AACGACGGCCAGTAATGAGCAAACGGATCTC
HA_av_H14_M13_1117F	TGTA AACGACGGCCAGTGGTGGTATGGATTTCAGGCACCA
PB2_av_M13_1619F	TGTA AACGACGGCCAGTGATGTGGGARATYAAYGBCC
PB1_av_M13_1F	TGTA AACGACGGCCAGTAGCRAAAGCAGGCA
NP_av_M13_1BF	TGTA AACGACGGCCAGTAGCAAAGCAGGGTA
NS_av_M13_1F	TGTA AACGACGGCCAGTAGCRAAAGCAGGGTG
HA_av_H15_M13_1F	TGTA AACGACGGCCAGTAGCAAAGCAGGGGA
HA_av_H15_M13_613F	TGTA AACGACGGCCAGTGATGAGCAAAATAAGCTATATGG
HA_av_H15_M13_682F	TGTA AACGACGGCCAGTTCGTTTTCCACCAAGTCCAGG
HA_av_H15_M13_1048F	TGTA AACGACGGCCAGTCCAGAGAAAATACRTACTAGG
HA_av_M13_1761R	CAGGAAACAGCTATGACCAGTAGAAACAAGGGTRTTTT
HA_av_M13_639R	CAGGAAACAGCTATGACCGGAGGATGRTGYACNCCCA
HA_av_M13_639R	CAGGAAACAGCTATGACCGGAGGATGRTGYACNCCCA
HA_av_M13_1780R	CAGGAAACAGCTATGACCAGTAGAAACWAGGGTRTTTT
HA_av_M13_1780R	CAGGAAACAGCTATGACCAGTAGAAACWAGGGTRTTTT

HA_av_H1_M13_775R	CAGGAAACAGCTATGACCCARTAATAGTTCATYCTDCCTGC
HA_av_H1_M13_1195R	CAGGAAACAGCTATGACCCGATTYTGYGTGCTTTTYTGRTC
HA_av_H1_M13_1263R	CAGGAAACAGCTATGACCCCACTGCDGTGAATTGWGTRTTC
HA_av_H1_M13_1337R	CAGGAAACAGCTATGACCAYATCCARRAAHCATCATCRAC
HA_av_H1_M13_1779R	CAGGAAACAGCTATGACCAGTAGAAACAAGGGTGTTT
HA_av_H2_M13_715R	CAGGAAACAGCTATGACCCYTKRRTYARTGTTGATGTBCC
HA_av_H2_M13_737R	CAGGAAACAGCTATGACCTDGGYCKTGTGKCTATTTWCWG
HA_av_H2_M13_765R	CAGGAAACAGCTATGACCTCCATTCTNCCYCCYTYGCC
HA_av_H2_M13_1186R	CAGGAAACAGCTATGACCAGTGGATTCTTTRTCKGICYGC
HA_av_H2_M13_1357R	CAGGAAACAGCTATGACCAGYTCRGCATTRTATGTCC
HA_av_H2_M13_1357R	CAGGAAACAGCTATGACCAGYTCRGCATTRTATGTCC
HA_av_H2_M13_1773R	CAGGAAACAGCTATGACCAGTAGAAACAAGGGTGTTT
HA_av_H2_M13_1773R	CAGGAAACAGCTATGACCAGTAGAAACAAGGGTGTTT
HA_av_H2_M13_1773R	CAGGAAACAGCTATGACCAGTAGAAACAAGGGTGTTT
HA_av_H2_M13_1773R	CAGGAAACAGCTATGACCAGTAGAAACAAGGGTGTTT
HA_av_H3_M13_686R	CAGGAAACAGCTATGACCACYCTYCCYGABGCTGAAC
HA_av_H3_M13_734R	CAGGAAACAGCTATGACCCCRATRTTHGGRATTAYRGTYTGRCT
HA_av_H3_M13_754R	CAGGAAACAGCTATGACCTGRCCYCTBACCMARGGYC
HA_av_H3_M13_1126R	CAGGAAACAGCTATGACCCARCCRTCTAYCATYCCYTCC
HA_av_H3_M13_1180R	CAGGAAACAGCTATGACCAGRTCTGCWGTGTYCCTG
HA_av_H3_M13_1195R	CAGGAAACAGCTATGACCCGYTGWGTGCTTTTWAGRTCTGC
HA_av_all_M13_1780R	CAGGAAACAGCTATGACCAGTAGAAACWAGGGTRTTTT
HA_av_H4_M13_829R	CAGGAAACAGCTATGACCCRATTARATTYCCTATKGRTRTG
HA_av_H4_M13_1153R	CAGGAAACAGCTATGACCCGYCTYCTGTGYCCYTCWGCRTTYTG
HA_av_H4_M13_1227R	CAGGAAACAGCTATGACCTTTGTYYTCTCRATRAGACG
HA_av_H4_M13_1308R	CAGGAAACAGCTATGACCGTRTCYCAACATABTTYTC
HA_av_H4_M13_1739R	CAGGAAACAGCTATGACCAGTAGAAACAAGGGTGTTT
HA_av_H5_M13_762R	CAGGAAACAGCTATGACCTCCATYCTTCCACTTTGYCC
HA_av_H5_M13_1139R	CAGGAAACAGCTATGACCCCATKCCYTGCCAYCCYCC
HA_av_H5_M13_1185R	CAGGAAACAGCTATGACCCCACTHCCYTGCTCRTTGC
HA_av_H5_M13_1264R	CAGGAAACAGCTATGACCCATTTTGTCAATGATYGARTTBAC
HA_av_H5_M13_1802R	CAGGAAACAGCTATGACCAGTAGAAACWAGGGTGTTT
HA_av_H6_M13_793R	CAGGAAACAGCTATGACCACATTYAADGTTTCYCHGG
HA_av_H6_M13_1168R	CAGGAAACAGCTATGACCTCTYTRTCTGTGCATANCC
HA_av_H6_M13_1243R	CAGGAAACAGCTATGACCTCRAAYTGTGTRTTTCATYTTG
HA_av_H6_M13_1345R	CAGGAAACAGCTATGACCARTTCAGCATTGTATGTCCA
HA_av_H6_M13_1749R	CAGGAAACAGCTATGACCAGTAGAAACAAGGGTGTTT
HA_av_H6_M13_1749R	CAGGAAACAGCTATGACCAGTAGAAACAAGGGTGTTT
HA_av_H7_M13_659R	CAGGAAACAGCTATGACCCYCCRTADARYTTGGTCTGYTC
HA_av_H7_M13_714R	CAGGAAACAGCTATGACCCDGYATGDCCATTYACHTGTGG
HA_av_H7_M13_811R	CAGGAAACAGCTATGACCGRGCTATRAADGCYCCATTGA
HA_av_H7_M13_1166R	CAGGAAACAGCTATGACCCATTYTGATGYCTGAADCCATACC
HA_av_H7_M13_1178R	CAGGAAACAGCTATGACCCYTCYCCYTGTCATTYTGATG
HA_av_H7_M13_1221R	CAGGAAACAGCTATGACCTGATCWATTGCHGAYTGRGTGC
HA_av_H7_M13_1777R	CAGGAAACAGCTATGACCAGTAGAAACAAGGGTGTTT
HA_av_H8_M13_712R	CAGGAAACAGCTATGACCACCAATATTKGGTTGAAAGYTTCC
HA_av_H8_M13_740R	CAGGAAACAGCTATGACCCCTGYTGTCTCTTACTAATGG
HA_av_H8_M13_761R	CAGGAAACAGCTATGACCCCCARTAGTAATCCATYCTYCC
HA_av_H8_M13_1203R	CAGGAAACAGCTATGACCTTATTGGTKATCTTATCGATGGC
HA_av_H8_M13_1249R	CAGGAAACAGCTATGACCCACAACYCAAAYTCCCTGTTC
HA_av_H8_M13_1348R	CAGGAAACAGCTATGACCAAGGAGCTCTGCATTGTARGCC
HA_av_H8_M13_1744R	CAGGAAACAGCTATGACCAGTAGAAACAAGGGTGTTT
HA_av_H9_M13_815R	CAGGAAACAGCTATGACCGCDATTAGATTYCCATTRGAYCT

HA_av_H9_M13_1238R	CAGGAAACAGCTATGACCTCATAYTGYYTTGTTTCATYTTTRTC
HA_av_H9_M13_1307R	CAGGAAACAGCTATGACCTGRTCATCRATCTTRTTRTTGATC
HA_av_H9_M13_1400R	CAGGAAACAGCTATGACCAGATTRTTYACATTYGCATCATG
HA_av_H9_M13_1742R	CAGGAAACAGCTATGACCAGTAGAAACAAGGGTGTTT
HA_av_H10_15_M13_760R	CAGGAAACAGCTATGACCCARTGRAARTCDATYCKYCC
HA_av_H10_M13_1230R	CAGGAAACAGCTATGACCTCRAACTCHGTGTTBGTCTTCTC
HA_av_H10_M13_1181R	CAGGAAACAGCTATGACCTTTGRTCWATAGCYGCTGAGTAC
HA_av_H10_M13_1309R	CAGGAAACAGCTATGACCGTCKGTTATWGAATCYTTRGTCC
HA_av_all_M13_1780R	CAGGAAACAGCTATGACCAGTAGAAACWAGGGTRTTTT
HA_av_H11_M13_814R	CAGGAAACAGCTATGACCCATTGDAYTCRAATGTTATTG
HA_av_H11_M13_1210R	CAGGAAACAGCTATGACCTTRGANGTTATCTGGTCTAYTGC
HA_av_H11_M13_1282R	CAGGAAACAGCTATGACCTCYWCWATTTCACTGAATTCRTG
HA_av_H11_M13_1330R	CAGGAAACAGCTATGACCARTRCRAYMACAGAATCATC
HA_av_H11_M13_1760R	CAGGAAACAGCTATGACCAGTAGAAACAAGGGTGTTT
HA_av_H12_M13_758R	CAGGAAACAGCTATGACCCCCARTARTATAATCCATTCTCCC
HA_av_H12_M13_791R	CAGGAAACAGCTATGACCGTATYTTBACWGTGTTGBCWGG
HA_av_H12_M13_837R	CAGGAAACAGCTATGACCGTKATTAARTGACCATATTCAGG
HA_av_H12_M13_1161R	CAGGAAACAGCTATGACCTCTCTGTCTGCAGCYATGCC
HA_av_H12_M13_1292R	CAGGAAACAGCTATGACCTGGAATTRATCRTGTTTATYCTGC
HA_av_H12_M13_1343R	CAGGAAACAGCTATGACCCAAGCARTTCWGCATTGTAYGC
HA_av_H12_M13_1737R	CAGGAAACAGCTATGACCAGTAGAAACAAGGGTGTTT
HA_av_H12_M13_1737R	CAGGAAACAGCTATGACCAGTAGAAACAAGGGTGTTT
HA_av_H12_M13_1737R	CAGGAAACAGCTATGACCAGTAGAAACAAGGGTGTTT
HA_av_H13_M13_783R	CAGGAAACAGCTATGACCCARTAAATYTTTCATCCARCTC
HA_av_H13_M13_1195R	CAGGAAACAGCTATGACCGTGTYGAYTCTTTRTCTGCAGC
HA_av_H13_M13_1265R	CAGGAAACAGCTATGACCGARTCATARTYCCRTTCATTTTDTC
HA_av_H13_M13_1770R	CAGGAAACAGCTATGACCAGTAGAAACAAGGGTRTTT
HA_av_H14_M13_749R	CAGGAAACAGCTATGACCGCTCTGATTCCTTACYCTCGG
HA_av_H14_M13_1222R	CAGGAAACAGCTATGACCAATCTGTTTCAGCTTGCCATTTATC
HA_av_H14_M13_1315R	CAGGAAACAGCTATGACCTCCTCAACGTACTIONTCTCAAGG
HA_av_H14_M13_1747R	CAGGAAACAGCTATGACCAGTAGAAACAAGGGTGTTTT
PB2_av_M13_2341BR	CAGGAAACAGCTATGACCTAGTAGAAACAAGGTCGTTT
PB1_av_M13_609BR	CAGGAAACAGCTATGACCGTGTGAYCATYTTCTTGGTC
NP_av_M13_532R	CAGGAAACAGCTATGACCCCTTGCAATCAGAGAGCACAT
NS_av_M13_577R	CAGGAAACAGCTATGACCGWRTTATCATTCCATTCAARTCC
HA_av_H15_M13_791R	CAGGAAACAGCTATGACCTTGAAGGTAAGTACTGTATCC
HA_av_H15_M13_1197R	CAGGAAACAGCTATGACCAGCCTGAGTACTCTTGTAGTC
HA_av_H15_M13_1277R	CAGGAAACAGCTATGACCAACTCATTGTCTATGAGTTCAAAC
HA_av_H15_M13_1763R	CAGGAAACAGCTATGACCAGTAGAAACAAGGGTGTTT
HA_av_H16_M13_783R	CAGGAAACAGCTATGACCATBARGTGCCAATADAKTTTCATCC
HA_av_H16_M13_1227R	CAGGAAACAGCTATGACCATATTRTTWATYTTTGTGTTATYTC
HA_av_H16_M13_1302R	CAGGAAACAGCTATGACCAKCATGTTGATYCTCTTTTCYA
HA_av_H16_M13_1761R	CAGGAAACAGCTATGACCAGTAGAAACAAGGGTRTTT
HA_av_H16_M13_1F	TGTAAAACGACGGCCAGTAGCAAAAGCAGGGGATA
HA_av_H16_M13_591F	TGTAAAACGACGGCCAGTCAGGCAGAGATGTTTYTAG
HA_av_H16_M13_620F	TGTAAAACGACGGCCAGTATTCACCAYCCDGAYACAG
HA_av_H16_M13_1085F	TGTAAAACGACGGCCAGTGGMTTYATAGAAGGAGGRTGG



(c) PB2, PB1, PA, NP, MP, NS, NA segment primers

Primer Name	Primer Sequence
PB2_av_M13_1BF	TGTA AACGACGGCCAGTAGCRAAAGCAGGTCA
PB2_av_M13_1BF	TGTA AACGACGGCCAGTAGCRAAAGCAGGTCA
PB2_av_M13_1BF	TGTA AACGACGGCCAGTAGCRAAAGCAGGTCA
PB2_av_M13_492F	TGTA AACGACGGCCAGTGAGGTYGTTTTCCCAAATGAAG
PB2_av_M13_526F	TGTA AACGACGGCCAGTGTTCCTCCCAAATGAAGTDGG
PB2_av_M13_628F	TGTA AACGACGGCCAGTTTRATGGTDGCATACATGYTRG
PB2_av_M13_1048F	TGTA AACGACGGCCAGTGAAGARGAAGTGCTYACRGGCAAAYCT
PB2_av_M13_1102F	TGTA AACGACGGCCAGTGGRTATGARGARTTCACAATGG
PB2_av_M13_1507F	TGTA AACGACGGCCAGTGTGRTNGTRAGYATTGAYCG
PB2_av_M13_1619F	TGTA AACGACGGCCAGTGATGTGGGARATYAAYGGBCC
PB2_av_M13_1678F	TGTA AACGACGGCCAGTCARTGGATCATYAGRAAYTGG
PB1_av_M13_1F	TGTA AACGACGGCCAGTAGCRAAAGCAGGCA
PB1_av_M13_1F	TGTA AACGACGGCCAGTAGCRAAAGCAGGCA
PB1_av_M13_1F	TGTA AACGACGGCCAGTAGCRAAAGCAGGCA
PB1_av_M13_430F	TGTA AACGACGGCCAGTAAYCARCCRGCTGCWACYGC
PB1_av_M13_463F	TGTA AACGACGGCCAGTATAGARGTYTTCAGATCRAAYGGT
PB1_av_M13_679F	TGTA AACGACGGCCAGTATAAGAGCAYTGACAYTRAAYACAATG
PB1_av_M13_1000F	TGTA AACGACGGCCAGTACAAGRAAYCARCCHGAATGGTT
PB1_av_M13_1090F	TGTA AACGACGGCCAGTATGTTTCGARAGYAARAGYATGAAG
PB1_av_M13_1366F	TGTA AACGACGGCCAGTGCTCTCATAGTGAATGCACC
PB1_av_M13_1486F	TGTA AACGACGGCCAGTGGACATTTGARTTCACRAG
PB1_av_M13_1568BF	TGTA AACGACGGCCAGTCTRCCCAGYTTTGGRTDTC
PA_av_M13_1F	TGTA AACGACGGCCAGTAGCRAAAGCAGGTACTG
PA_av_M13_1BF	TGTA AACGACGGCCAGTAGCRAAAGCAGGTACTGAT
PA_av_M13_1BF	TGTA AACGACGGCCAGTAGCRAAAGCAGGTACTGAT
PA_av_M13_471F	TGTA AACGACGGCCAGTCATTYACYGGRGARGARATGGC
PA_av_M13_562F	TGTA AACGACGGCCAGTTGGGATTCCTTTTCGTCAATC
PA_av_M13_621F	TGTA AACGACGGCCAGTARACAATTGAAGAAARATTTG
PA_av_M13_1235F	TGTA AACGACGGCCAGTGCAAGYTGATYCARAGTG
PA_av_M13_1346F	TGTA AACGACGGCCAGTATGAGRAGRAAYTAYTTYACAGC
PA_av_M13_1577F	TGTA AACGACGGCCAGTTRAAYTTYGTRAGYATGGA
PA_av_M13_1739F	TGTA AACGACGGCCAGTAARATYAARATGAARTGGG
NP_av_M13_1BF	TGTA AACGACGGCCAGTAGCAAAGCAGGGTA
NP_av_M13_1CF	TGTA AACGACGGCCAGTAGCAAAGCAGGGTAKATAATC
NP_av_M13_1BF	TGTA AACGACGGCCAGTAGCAAAGCAGGGTA
NP_av_M13_403F	TGTA AACGACGGCCAGTTGGCGYCARGCRAAYAATGG
NP_av_M13_841F	TGTA AACGACGGCCAGTCTGAGRGGRTCAGTRGCYCA
NP_av_M13_898F	TGTA AACGACGGCCAGTGTGCCAGYGGRTAYGA
NP_av_M13_1053F	TGTA AACGACGGCCAGTGGATGGCATGYCAYTCTGCA
MP_av_M13_1BF	TGTA AACGACGGCCAGTAGCRAAAGCAGGTAGAT
MP_av_M13_1BF	TGTA AACGACGGCCAGTAGCRAAAGCAGGTAGAT
MP_av_M13_402F	TGTA AACGACGGCCAGTAGYTYATGGGYCTCATMTAC
MP_av_M13_605F	TGTA AACGACGGCCAGTGGRTCDAGYGARCARGCAGC
MP_av_M13_1F	TGTA AACGACGGCCAGTAGCRAAAGCAGKTAGA
NS_av_M13_1F	TGTA AACGACGGCCAGTAGCRAAAGCAGGGTG
NS_av_M13_1F	TGTA AACGACGGCCAGTAGCRAAAGCAGGGTG
NS_av_M13_1F	TGTA AACGACGGCCAGTAGCRAAAGCAGGGTG
NS_av_M13_541F	TGTA AACGACGGCCAGTAGGATGTCAAATGCAATTRG
NS_av_M13_541F	TGTA AACGACGGCCAGTAGGATGTCAAATGCAATTRG
NA_av_N1_4_5_7_8_M13_926F	TGTA AACGACGGCCAGTAGRGAYAYTGG

NA_av_N1_4_5_7_8_M13_926F	TGTA AACGACGGCCAGTAGRGAYAA YTG
NA_av_N1_4_M13_1BF	TGTA AACGACGGCCAGTAGCAAAAGCAGGAGWTT
NA_av_N1_4_M13_1BF	TGTA AACGACGGCCAGTAGCAAAAGCAGGAGWTT
NA_av_N1_4_M13_517F	TGTA AACGACGGCCAGTYTRATGAGYTYGCC
NA_av_N1_4_M13_517F	TGTA AACGACGGCCAGTYTRATGAGYTYGCC
NA_av_N2_7_M13_1F	TGTA AACGACGGCCAGTAGCAAAAGCAGG
NA_av_N2_7_M13_1F	TGTA AACGACGGCCAGTAGCAAAAGCAGG
NA_av_N2_M13_580F	TGTA AACGACGGCCAGTTDGSRTGGTCYAG
NA_av_N2_M13_580F	TGTA AACGACGGCCAGTTDGSRTGGTCYAG
NA_av_N2_M13_926F	TGTA AACGACGGCCAGTAGRGAYAA YTG
NA_av_N2_M13_973F	TGTA AACGACGGCCAGTTGTGTGYTCAGGRCTYGTGG
NA_av_N3_M13_1CF	TGTA AACGACGGCCAGTAGCAAAAGCAGGTGCGARATG
NA_av_N3_M13_1CF	TGTA AACGACGGCCAGTAGCAAAAGCAGGTGCGARATG
NA_av_N3_M13_409F	TGTA AACGACGGCCAGTTGGTCYTTTGCHCTHGCNCAAGG
NA_av_N3_M13_445F	TGTA AACGACGGCCAGTACHAARCA YAGCAATGG
NA_av_N3_M13_1060F	TGTA AACGACGGCCAGTGGAGTBAARGD TTTGG
NA_av_N3_M13_1091BF	TGTA AACGACGGCCAGTGAYGTRTGGYTVGG
NA_av_N5_8_M13_1F	TGTA AACGACGGCCAGTAGCAAAAGCAGGAGT
NA_av_N5_8_M13_1F	TGTA AACGACGGCCAGTAGCAAAAGCAGGAGT
NA_av_N5_8_M13_728F	TGTA AACGACGGCCAGTTGYTAYTGGGTRATGAC
NA_av_N5_8_M13_735F	TGTA AACGACGGCCAGTTATTGGGTRATGACDGAYGG
NA_av_N6_9_M13_1BF	TGTA AACGACGGCCAGTAGCAAAAGCAGGGTSAA
NA_av_N6_9_M13_1BF	TGTA AACGACGGCCAGTAGCAAAAGCAGGGTSAA
NA_av_N6_M13_461F	TGTA AACGACGGCCAGTCAAATGGRACNATACAYG
NA_av_N6_9_M13_462F	TGTA AACGACGGCCAGTCAAATGGRACHATACAYGAYAG
NA_av_N6_M13_495F	TGTA AACGACGGCCAGTNGCHYTNATAAGYTTG
NA_av_N6_9_M13_850F	TGTA AACGACGGCCAGTCAYATHGAAGARTGYTCNTGC
NA_av_N6_9_M13_919F	TGTA AACGACGGCCAGTGGNKCRATAGRCCRGTTRAT
NA_av_N7_M13_608F	TGTA AACGACGGCCAGTGGRAATAATGAYAA YGCHACAGC
NA_av_N7_M13_608F	TGTA AACGACGGCCAGTGGRAATAATGAYAA YGCHACAGC
NA_av_N9_M13_455F	TGTA AACGACGGCCAGTTCAAAYGGAACAATACAYGAYAG
NA_av_N9_M13_455F	TGTA AACGACGGCCAGTTCAAAYGGAACAATACAYGAYAG
NA_av_N1_4_M13_902F	TGTA AACGACGGCCAGTRGAYAA YTGGRBGG
NA_av_N3_M13_449BF	TGTA AACGACGGCCAGTCAYAGCAATGGRAC
NA_av_N5_8_M13_979F	TGTA AACGACGGCCAGTCCCSASHGAYACYCCAMG
PB2_av_M13_1082F	TGTA AACGACGGCCAGTGARGAGTTCA CAATGGTTGG
PB1_av_M13_1F	TGTA AACGACGGCCAGTAGCRAAAGCAGGCA
NP_av_M13_532F	TGTA AACGACGGCCAGTATGTGCTCTCTGATGCAAGG
PB2_av_M13_1619F	TGTA AACGACGGCCAGTGATGTGGGARATYAA YGGBCC
PB1_av_M13_1F	TGTA AACGACGGCCAGTAGCRAAAGCAGGCA
NP_av_M13_1BF	TGTA AACGACGGCCAGTAGCAAAAGCAGGGTA
NS_av_M13_1F	TGTA AACGACGGCCAGTAGCRAAAGCAGGGTG
PB2_av_M13_662R	CAGGAAACAGCTATGACCACYARYTCYCTTTCYARCATGTATGC
PB2_av_M13_707R	CAGGAAACAGCTATGACCACACTRCTTGTGCCRCWGC
PB2_av_M13_782R	CAGGAAACAGCTATGACCCCHGGDGTGTACATYTYTCC
PB2_av_M13_1619R	CAGGAAACAGCTATGACCGVCCRTRATYTYTCCACATC
PB2_av_M13_1214R	CAGGAAACAGCTATGACCTCAGCRATTGAYTYTCRTCTCTYCCAC
PB2_av_M13_1259R	CAGGAAACAGCTATGACCATCATGCAATCCTCYTGTGARAAYACC
PB2_av_M13_1721R	CAGGAAACAGCTATGACCGACCATGAATYTTTHACVGTYTCCC
PB2_av_M13_1820R	CAGGAAACAGCTATGACCGTYCTCACRAAYCCRCTGTAYTG
PB2_av_M13_2341BR	CAGGAAACAGCTATGACCTAGTAGAAACAAGGTCGTTT
PB2_av_M13_2341BR	CAGGAAACAGCTATGACCTAGTAGAAACAAGGTCGTTT

PB2_av_M13_2341BR	CAGGAAACAGCTATGACCTAGTAGAAACAAGGTCGTTT
PB1_av_M13_609BR	CAGGAAACAGCTATGACCGTGTGAYCATYTTCTTGGTC
PB1_av_M13_609BR	CAGGAAACAGCTATGACCGTGTGAYCATYTTCTTGGTC
PB1_av_M13_778R	CAGGAAACAGCTATGACCCRAAHCCTCTGATYTGTCATYCC
PB1_av_M13_1113R	CAGGAAACAGCTATGACCCCTTCATGCTYTRCTYTCRAACAT
PB1_av_M13_1208R	CAGGAAACAGCTATGACCAGAGGYCTTATYTTYTCDATTTTCTT
PB1_av_M13_1510R	CAGGAAACAGCTATGACCAAARCTYGTGAAYTCAAATGTYCC
PB1_av_M13_1667R	CAGGAAACAGCTATGACCAGAGCCATYTRGCHGTTGCTGG
PB1_av_M13_1785R	CAGGAAACAGCTATGACCGCYTTYGARCGGGTYTGYTCCC
PB1_av_M13_2341R	CAGGAAACAGCTATGACCAGTAGAAACAAGGCATTT
PB1_av_M13_2341R	CAGGAAACAGCTATGACCAGTAGAAACAAGGCATTT
PB1_av_M13_2341R	CAGGAAACAGCTATGACCAGTAGAAACAAGGCATTT
PA_av_M13_612R	CAGGAAACAGCTATGACCCYTCGAYTGACGAAAGGAATCCC
PA_av_M13_690R	CAGGAAACAGCTATGACCTTCGGTGGGAGACTTTGGTC
PA_av_M13_756R	CAGGAAACAGCTATGACCCCTCAATGCAGCCRTTCGG
PA_av_M13_1125R	CAGGAAACAGCTATGACCTTYAAYTGCTTGTFTTYTTCAT
PA_av_M13_1472R	CAGGAAACAGCTATGACCGTYCTGCATTTGCTTATCATTGG
PA_av_M13_1353R	CAGGAAACAGCTATGACCCYCTCATRCTYGAATGTGYTC
PA_av_M13_1881R	CAGGAAACAGCTATGACCCAYGTYTCHGAYTTGTFTTCAAAG
PA_av_M13_2233BR	CAGGAAACAGCTATGACCAGTAGAAACAAGGTACTTTTT
PA_av_M13_2233CR	CAGGAAACAGCTATGACCAGTAGAAACAAGGTACTTTTTTGG
PA_av_M13_2233BR	CAGGAAACAGCTATGACCAGTAGAAACAAGGTACTTTTT
NP_av_M13_532R	CAGGAAACAGCTATGACCCCTTGCAATCAGAGAGCACAT
NP_av_M13_680R	CAGGAAACAGCTATGACCCRTTYTCDCCYCTCCAGA
NP_av_M13_1053R	CAGGAAACAGCTATGACCTGCAGARTGRCATGCCATCC
NP_av_M13_1167R	CAGGAAACAGCTATGACCATKGYTYTCCATGTTCTCATT
NP_av_M13_1565CR	CAGGAAACAGCTATGACCAGTAGAAACAAGGGTATTTT
NP_av_M13_1565CR	CAGGAAACAGCTATGACCAGTAGAAACAAGGGTATTTT
NP_av_M13_1565BR	CAGGAAACAGCTATGACCAGTAGAAACAAGGGTATTTT
MP_av_M13_567R	CAGGAAACAGCTATGACCAGYACCATYCTGTTYTCATGYC
MP_av_M13_674R	CAGGAAACAGCTATGACCTCATYGCYTGACCATYTYGYCT
MP_av_M13_1027R	CAGGAAACAGCTATGACCAGTAGAAACAAGGTAGTTTTT
MP_av_M13_1027R	CAGGAAACAGCTATGACCAGTAGAAACAAGGTAGTTTTT
MP_av_M13_1027R	CAGGAAACAGCTATGACCAGTAGAAACAAGGTAGTTTTT
NS_av_M13_890R	CAGGAAACAGCTATGACCAGTAGAAACAAGGGTGTFTT
NS_av_M13_577R	CAGGAAACAGCTATGACCGWRTTATCATTCATTCAARTCC
NS_av_M13_641R	CAGGAAACAGCTATGACCYCYCCAAGCRAATCTCTGTA
NS_av_M13_890R	CAGGAAACAGCTATGACCAGTAGAAACAAGGGTGTFTT
NS_av_M13_890R	CAGGAAACAGCTATGACCAGTAGAAACAAGGGTGTFTT
NA_av_N1_4_5_7_8_M13_1460R	CAGGAAACAGCTATGACCAGTAGAAACAAGGAGTTTTTT
NA_av_N1_4_5_7_8_M13_1460R	CAGGAAACAGCTATGACCAGTAGAAACAAGGAGTTTTTT
NA_av_N1_4_M13_679R	CAGGAAACAGCTATGACCTTATGCCATTGTATTTTCARTACWGCHACAGC
NA_av_N1_4_M13_679R	CAGGAAACAGCTATGACCTTATGCCATTGTATTTTCARTACWGCHACAGC
NA_av_N1_4_M13_1192R	CAGGAAACAGCTATGACCCATTTGGATCCCAAAYCATYTCAAANCC
NA_av_N1_4_M13_1192R	CAGGAAACAGCTATGACCCATTTGGATCCCAAAYCATYTCAAANCC
NA_av_N2_7_M13_795R	CAGGAAACAGCTATGACCCCTGATGCACCTCCATCMGTTCATYACHAC
NA_av_N2_7_M13_795R	CAGGAAACAGCTATGACCCCTGATGCACCTCCATCMGTTCATYACHAC
NA_av_N2_M13_1128R	CAGGAAACAGCTATGACCCATTGTCAAAGGCCANCCYTTYACTCC
NA_av_N2_M13_1128R	CAGGAAACAGCTATGACCCATTGTCAAAGGCCANCCYTTYACTCC
NA_av_N2_M13_1460R	CAGGAAACAGCTATGACCAGTAGAAACAAGGAGTTTTTT
NA_av_N2_M13_1460R	CAGGAAACAGCTATGACCAGTAGAAACAAGGAGTTTTTT
NA_av_N3_M13_581R	CAGGAAACAGCTATGACCCCTCRAARCARCTRCRCTYGACCA

NA_av_N3_M13_631R	CAGGAAACAGCTATGACCCACTBGCATCATTRTCRTTYCC
NA_av_N3_M13_1165R	CAGGAAACAGCTATGACCATCCANCCHTCTGHRACCTTTGAT
NA_av_N3_M13_1233R	CAGGAAACAGCTATGACCTCATTGTTKGAMACHARTGTYTGTG
NA_av_N3_M13_1455R	CAGGAAACAGCTATGACCAGTAGAAACAAGGTGCTTTTT
NA_av_N3_M13_1455R	CAGGAAACAGCTATGACCAGTAGAAACAAGGTGCTTTTT
NA_av_N5_8_M13_881R	CAGGAAACAGCTATGACCTTGGGGTAGCATGAGCAYTCTTCWATRTG
NA_av_N5_8_M13_881R	CAGGAAACAGCTATGACCTTGGGGTAGCATGAGCAYTCTTCWATRTG
NA_av_N5_8_M13_1362R	CAGGAAACAGCTATGACCTGGAGCTRCTDGARGTCCA
NA_av_N5_8_M13_1259R	CAGGAAACAGCTATGACCGTGAARGMNCRCRTRAHCCYGACCA
NA_av_N6_9_M13_619R	CAGGAAACAGCTATGACCCCYGAYAYRCAKATWGACATYCT
NA_av_N6_9_M13_619R	CAGGAAACAGCTATGACCCCYGAYAYRCAKATWGACATYCT
NA_av_N6_M13_1160R	CAGGAAACAGCTATGACCCATYTCRTANCCNGAYCTDGARKCTKTGCT
NA_av_N6_9_M13_1136R	CAGGAAACAGCTATGACCCTKTGCTWATBGTYCTHCCNARCC
NA_av_N6_M13_1160R	CAGGAAACAGCTATGACCCATYTCRTANCCNGAYCTDGARKCTKTGCT
NA_av_N6_9_M13_1461R	CAGGAAACAGCTATGACCAGTAGAWACAAGGGTSTTTTT
NA_av_N6_9_M13_1461R	CAGGAAACAGCTATGACCAGTAGAWACAAGGGTSTTTTT
NA_av_N7_M13_1083R	CAGGAAACAGCTATGACCAAMCCGAAAYCCYTTBACYC
NA_av_N7_M13_1083R	CAGGAAACAGCTATGACCAAMCCGAAAYCCYTTBACYC
NA_av_N9_M13_1161R	CAGGAAACAGCTATGACCCGCACYTTYAGCATYTCRTAYCC
NA_av_N9_M13_1161R	CAGGAAACAGCTATGACCCGCACYTTYAGCATYTCRTAYCC
NA_av_N1_4_M13_1460R	CAGGAAACAGCTATGACCAGTAGAAACAAGGAGTTTTT
NA_av_N3_M13_1233R	CAGGAAACAGCTATGACCTCATTGTTKGAMACHARTGTYTGTG
NA_av_N5_8_M13_1460R	CAGGAAACAGCTATGACCAGTAGAAACAAGGAGTTTTT
PB2_av_M13_2341R	CAGGAAACAGCTATGACCATATGGTCTCGTATTAGTAGAAACAAGGTCGTTT
PB1_av_M13_1123BR	CAGGAAACAGCTATGACCGTGTGCGDAGYTTTCATDCTC
NP_av_M13_1565R	CAGGAAACAGCTATGACCATATCGTCTCGTATTAGTAGAAACAAGGGTATTTTT
PB2_av_M13_2341BR	CAGGAAACAGCTATGACCTAGTAGAAACAAGGTCGTTT
PB1_av_M13_609BR	CAGGAAACAGCTATGACCGTGTGAYCATYTTCTTGGTC
NP_av_M13_532R	CAGGAAACAGCTATGACCCCTTGCATCAGAGAGCACAT
NS_av_M13_577R	CAGGAAACAGCTATGACCGWRTTATCATTCATTCARTCC

**Suppl. Table 2.** Details of subtype H7 sequences used in this study.

#1	Protein <sup>2</sup>	Subtype	country	Region <sup>3</sup>	Year	Animal	GenBank	Virus name
1	HA	H7N4	Australia	A	1997	emu	CY022709	A/emu/New South Wales/775/97(H7N4)
2	HA	H7N7	Australia	A	1976	duck		A/duck/Victoria/76(H7N7)
3	HA	H7N6	Australia	A	2007	duck		A/duck/Victoria/512/2007(H7N6)
4	HA	H7N3	Australia	A	1994	chicken	CY022685	A/chicken/Queensland/1994(H7N3)
5	HA	H7N4	Australia	A	1997	chicken	CY022693	A/chicken/New South Wales/2/1997(H7N4)
6	HA	H7N7	Australia	A	1985	starling	CY024778	A/starling/Victoria/1985(H7N7)
7	HA	H7N4	Australia	A	1997	chicken	CY022701	A/chicken/New South Wales/327/1997(H7N4)
8	HA	H7N7	Australia	A	1976	chicken	CY024786	A/chicken/Victoria/1976(H7N7)
9	HA	H7N7	Australia	A	1985	chicken	CY025069	A/chicken/Victoria/1/1985(H7N7)
10	HA	H7N3	Australia	A	1992	chicken	CY025077	A/chicken/Victoria/224/1992(H7N3)
11	HA	H7N2	Australia	A	2007	duck	CY033161	A/duck/Tasmania/277/2007(H7N2)
12	HA	H7N3	Bolivia	SA	2001	cinnamon teal	DQ525411	A/cinnamon teal/Bolivia/4537/2001(H7N3)
13	HA	H7N3	Canada	NA	2004	chicken	AY648287	A/GSC_chicken_B/British Columbia/04(H7N3)
14	HA	H7N3	Canada	NA	1985	mallard duck	CY014587	A/mallard duck/Alberta/435/1985(H7N3)
15	HA	H7N3	Canada	NA	2007	American black duck	EU500852	A/American black duck/NB/2538/2007(H7N3)
16	HA	H7	Canada	NA	2007	duck	EF576989	A/duck/AB/AFLBs8734c16/2007(H7)
17	HA	H7N3	Canada	NA	2004	chicken	EF470587	A/chicken/British Columbia/CN-7/2004(H7N3)
18	HA	H7N3	Canada	NA	1977	mallard duck	CY005976	A/mallard duck/ALB/279/1977(H7N3)
19	HA	H7N3	Canada	NA	1977	blue winged teal	CY005974	A/blue-winged teal/ALB/295/1977(H7N3)
20	HA	H7N3	Canada	NA	1985	green winged teal	CY005978	A/green-winged teal/ALB/228/1985(H7N3)
21	HA	H7N3	Canada	NA	2004	chicken	AY646078	A/chicken/British Columbia/GSC_human_B/04(H7N3)
22	HA	H7N3	Canada	NA	2001	mallard	DQ017513	A/mallard/Alberta/24/01(H7N3)
23	HA	H7N3	Canada	NA	2004	chicken	AY611524	A/chicken/British Columbia/04(H7N3)
24	HA	H7N3	Canada	NA	2004	chicken	AY650270	A/GSC_chicken/British Columbia/04(H7N3)
25	HA	H7N1	Canada	NA	2001	mallard	CY005983	A/mallard/Alberta/34/2001(H7N1)
26	HA	H7N5	Canada	NA	1977	mallard duck	CY005973	A/mallard duck/ALB/224/1977(H7N5)
27	HA	H7N3	Canada	NA	2001	mallard	DQ017504	A/mallard/Alberta/24/01(H7N3)
28	HA	H7N3	Canada	NA	2007	Canada goose	EU500844	A/Canada goose/BC/3752/2007(H7N3)
29	HA	H7N3	Canada	NA	2007	chicken	EU500860	A/chicken/SK/HR-00011/2007(H7N3)
30	HA	H7N3	Chile	SA	2002	chicken	CY015027	A/chicken/Chile/184240-4322/2002(H7N3)
31	HA	H7N3	Chile	SA	2002	chicken	AY303633	A/chicken/Chile/4968/02(H7N3)
32	HA	H7N3	Chile	SA	2002	chicken	AY303631	A/chicken/Chile/4322/02(H7N3)
33	HA	H7N3	Chile	SA	2002	turkey	AY303635	A/turkey/Chile/4418/02(H7N3)
34	HA	H7N3	Chile	SA	2002	chicken	AY303630	A/chicken/Chile/176822/02(H7N3)
35	HA	H7N3	Chile	SA	2002	chicken	AY303632	A/chicken/Chile/4957/02(H7N3)
36	HA	H7N3	Chile	SA	2002	chicken	AY303634	A/chicken/Chile/4977/02(H7N3)
37	HA	H7N7	China	E	2003	duck	EU158108	A/duck/Jiangxi/1742/03(H7N7)
38	HA	H7N2	China	E	2002	chicken	AY724257	A/chicken/Hebei/1/2002(H7N2)
39	HA	H7N1	China	E	1992	duck	CY014612	A/duck/Nanchang/1904/1992(H7N1)
40	HA	H7N1	Egypt	E	1945	fowl	AF202237	A/fowl/Egypt/45(H7N1)
41	HA	H7N1	Germany	E	1934	chicken	M24457	A/chicken/Rostock/8/1934(H7N1)
42	HA	H7N7	Germany	E	1987	chicken	U20469	A/chicken/Jena/1816/87(H7N7)
43	HA	H7N7	Germany	E	2003	chicken	AJ620350	A/chicken/Germany/R28/03(H7N7)
44	HA	H7N7	Germany	E	1979	goose	L43913	A/goose/Leipzig/137/8/1979(H7N7)
45	HA	H7N7	Germany	E	1979	goose	L43915	A/goose/Leipzig/192/7/1979(H7N7)
46	HA	H7N1	Germany	E	1934	ts1	M24458	A/ts1/1/A/FPV/Rostock/1934(H7N1)
47	HA	H7N7	Germany	E	1979	goose	L43914	A/goose/Leipzig/187-7/1979(H7N7)
48	HA	H7N7	Germany	E	1979	chicken	U20459	A/chicken/Leipzig/79(H7N7)
49	HA	H7N7	Germany	E	1986	duck	U20465	A/duck/Heinersdorf/S495/6/86(H7N7)
50	HA	H7N1	Hong Kong	E	1972	duck	DQ003216	A/duck/Hongkong/301/72(H7N1)
51	HA	H7N2	Hong Kong	E	1978	duck	CY006029	A/duck/Hong Kong/293/1978(H7N2)
52	HA	H7N2	Hong Kong	E	1978	duck	U20461	A/duck/Hong Kong/293/1978(H7N2)
53	HA	H7N2	Hong Kong	E	1978	duck	AB302789	A/duck/Hong Kong/301/1978(H7N2)
54	HA	H7N7	Ireland	E	1995	turkey	AF028021	A/turkey/Ireland/PV74/1995(H7N7)
55	HA	H7N2	Israel	E	1979	turkey	AF202235	A/turkey/Israel/Ramon/79(H7N2)
56	HA	H7N3	Italy	E	2003	turkey	CY021493	A/turkey/Italy/2987/2003(H7N3)
57	HA	H7N1	Italy	E	2000	quail	CY022669	A/quail/Italy/396/2000(H7N1)
58	HA	H7N1	Italy	E	1999	chicken	CY022677	A/chicken/Italy/1082/99(H7N1)
59	HA	H7N1	Italy	E	2001	turkey	CY021421	A/turkey/Italy/1351/2001(H7N1)
60	HA	H7N3	Italy	E	2003	turkey	CY021485	A/turkey/Italy/4608/2003(H7N3)
61	HA	H7N1	Italy	E	2000	pekin duck	CY024898	A/pekin duck/Italy/1848/2000(H7N1)
62	HA	H7N3	Italy	E	2003	turkey	CY020589	A/turkey/Italy/251/2003(H7N3)
63	HA	H7N3	Italy	E	2001	mallard	AY586410	A/mallard/Italy/43/2001(H7N3)
64	HA	H7N1	Italy	E	1999	turkey	CY025189	A/turkey/Italy/1265/1999(H7N1)
65	HA	H7N1	Italy	E	1999	turkey	AJ493470	A/turkey/Italy/4602/99(H7N1)
66	HA	H7N1	Italy	E	1999	turkey	AJ489520	A/turkey/Italy/12598/99(H7N1)
67	HA	H7N3	Italy	E	2002	guinea fowl	EU158110	A/Guinea fowl/Italy/266184/02(H7N3)

# <sup>1</sup>	Protein <sup>2</sup>	Subtype	country	Region <sup>3</sup>	Year	Animal	GenBank	Virus name
68	HA	H7N3	Italy	E	2001	mallard	EU158109	A/mallard/Italy/199/01(H7N3)
69	HA	H7N1	Italy	E	2000	chicken	CY015014	A/chicken/Italy/1285/2000(H7N1)
70	HA	H7N1	Italy	E	2000	ostrich	DQ991304	A/ostrich/Italy/2332/00(H7N1)
71	HA	H7N1	Italy	E	1999	turkey	CY025157	A/turkey/Italy/3489/1999(H7N1)
72	HA	H7N1	Italy	E	1999	turkey	CY025173	A/turkey/Italy/2715/1999(H7N1)
73	HA	H7N3	Italy	E	2007	turkey	EU391536	A/turkey/Italy/5425/2007(H7N3)
74	HA	H7N2	Italy	E	1993	gull	AF202248	A/gull/Italy/692-2/93(H7N2)
75	HA	H7N1	Italy	E	1999	turkey	CY006037	A/turkey/Italy/4169/1999(H7N1)
76	HA	H7N3	Italy	E	2003	turkey	CY021357	A/turkey/Italy/3620/2003(H7N3)
77	HA	H7N1	Italy	E	2000	guinea fowl	CY022661	A/guinea fowl/Italy/155/2000(H7N1)
78	HA	H7N1	Italy	E	1999	turkey	CY024874	A/turkey/Italy/4295/1999(H7N1)
79	HA	H7N1	Italy	E	1999	turkey	CY024858	A/turkey/Italy/4708/1999(H7N1)
80	HA	H7N3	Italy	E	2002	turkey	CY028660	A/turkey/Italy/9742/2002(H7N3)
81	HA	H7N3	Italy	E	2004	turkey	CY028676	A/turkey/Italy/3829/2004(H7N3)
82	HA	H7N3	Italy	E	2002	turkey	CY020605	A/turkey/Italy/8912/2002(H7N3)
83	HA	H7N3	Italy	E	2002	turkey	CY024738	A/turkey/Italy/8000/2002(H7N3)
84	HA	H7N2	Italy	E	2003	duck	CY031028	A/duck/Italy/4609/2003(H7N2)
85	HA	H7N2	Italy	E	1991	psittacine	AF202242	A/psittacine/Italy/1/91(H7N2)
86	HA	H7N3	Italy	E	2004	turkey	CY021501	A/turkey/Italy/3337/2004(H7N3)
87	HA	H7N1	Italy	E	2001	chicken	CY021549	A/chicken/Italy/322/2001(H7N1)
88	HA	H7N1	Italy	E	1999	turkey	CY021405	A/turkey/Italy/4580/1999(H7N1)
89	HA	H7N3	Italy	E	2003	turkey	CY021365	A/turkey/Italy/1010/2003(H7N3)
90	HA	H7N1	Italy	E	1999	turkey	CY021413	A/turkey/Italy/3675/1999(H7N1)
91	HA	H7N1	Italy	E	1999	turkey	CY024866	A/turkey/Italy/4482/1999(H7N1)
92	HA	H7N3	Italy	E	2004	turkey	CY020581	A/turkey/Italy/4479/2004(H7N3)
93	HA	H7N1	Italy	E	1999	turkey	CY024754	A/turkey/Italy/977/1999(H7N1)
94	HA	H7N3	Italy	E	2004	turkey	CY029913	A/turkey/Italy/4130/2004(H7N3)
95	HA	H7N1	Italy	E	1999	turkey	CY025165	A/turkey/Italy/3560/1999(H7N1)
96	HA	H7N3	Italy	E	2003	turkey	CY028668	A/turkey/Italy/2685/2003(H7N3)
97	HA	H7N1	Italy	E	1999	turkey	AJ493466	A/turkey/Italy/3889/99(H7N1)
98	HA	H7N1	Italy	E	1999	turkey	AJ493467	A/turkey/Italy/4073/99(H7N1)
99	HA	H7N1	Italy	E	1999	turkey	AJ493468	A/turkey/Italy/4169/1999(H7N1)
100	HA	H7N1	Italy	E	1999	chicken	AJ493469	A/chicken/Italy/4575/99(H7N1)
101	HA	H7N1	Italy	E	1999	chicken	AJ584647	A/Chicken/Italy/1067/99(H7N1)
102	HA	H7N1	Italy	E	2002	mallard	EU158105	A/mallard/Italy/250/02(H7N1)
103	HA	H7N7	Italy	E	2005	mallard	EU158104	A/mallard/Italy/299/05(H7N7)
104	HA	H7N1	Italy	E	1999	chicken	AJ491720	A/chicken/Italy/13474/99(H7N1)
105	HA	H7N1	Italy	E	1999	chicken	AJ493214	A/chicken/Italy/13489/99(H7N1)
106	HA	H7N1	Italy	E	1999	turkey	AJ493471	A/turkey/Italy/4603/1999(H7N1)
107	HA	H7N1	Italy	E	1999	chicken	AJ580353	A/chicken/Italy/445/99(H7N1)
108	HA	H7N3	Italy	E	2002	turkey	AJ627491	A/turkey/Italy/214845/2002(H7N3)
109	HA	H7N1	Italy	E	2000	chicken	CY024762	A/chicken/Italy/2335/2000(H7N1)
110	HA	H7N3	Italy	E	2004	turkey	CY020597	A/turkey/Italy/3807/2004(H7N3)
111	HA	H7N3	Italy	E	2004	quail	CY020613	A/quail/Italy/3347/2004(H7N3)
112	HA	H7N1	Italy	E	2000	duck	CY021557	A/duck/Italy/551/2000(H7N1)
113	HA	H7N1	Italy	E	2000	turkey	CY021541	A/turkey/Italy/4426/2000(H7N1)
114	HA	H7N1	Italy	E	2000	turkey	CY021533	A/turkey/Italy/2984/2000(H7N1)
115	HA	H7N2	Italy	E	2003	quail	CY021509	A/quail/Italy/4610/2003(H7N2)
116	HA	H7N3	Italy	E	2003	turkey	CY022613	A/turkey/Italy/2043/2003(H7N3)
117	HA	H7N1	Italy	E	1999	turkey	CY025133	A/turkey/Italy/4294/1999(H7N1)
118	HA	H7N1	Italy	E	1999	quail	CY025117	A/quail/Italy/4992/1999(H7N1)
119	HA	H7N1	Italy	E	1999	turkey	CY025181	A/turkey/Italy/2732/1999(H7N1)
120	HA	H7N1	Italy	E	1999	turkey	CY025149	A/turkey/Italy/4301/1999(H7N1)
121	HA	H7N3	Italy	E	2002	turkey	CY031611	A/turkey/Italy/9739/2002(H7N3)
122	HA	H7N1	Italy	E	1999	turkey	CY024882	A/turkey/Italy/3185/1999(H7N1)
123	HA	H7N3	Italy	E	2003	chicken	CY034750	A/chicken/Italy/682/2003(H7N3)
124	HA	H7N8	Japan	E	1999	swan	AB269872	A/swan/Shimane/42/1999(H7N8)
125	HA	H7N1	Japan	E	2003	duck	AB269694	A/duck/Hokkaido/143/2003(H7N1)
126	HA	H7N9	Mongolia	E	2008	duck	AB481212	A/duck/Mongolia/119/2008(H7N9)
127	HA	H7N6	Mongolia	E	2007	duck	AB450448	A/duck/Mongolia/720/2007(H7N6)
128	HA	H7N1	Mongolia	E	2001	duck	AB268557	A/duck/Mongolia/47/2001(H7N1)
129	HA	H7N1	Mongolia	E	2002	duck	AB473543	A/duck/Mongolia/867/2002(H7N1)
130	HA	H7N7	Netherlands	E	2003	chicken	AB438941	A/chicken/Netherlands/2586/2003(H7N7)
131	HA	H7N7	Netherlands	E	1927	fowl	Z12617	A/fowl/Dutch/27(H7N7)
132	HA	H7N7	Netherlands	E	2003	chicken	EF015551	A/chicken/Netherlands/03010132/03(H7N7)
133	HA	H7N1	Netherlands	E	1994	parakeet	AF202251	A/parakeet/Netherlands/267497/94(H7N1)
134	HA	H7N8	Netherlands	E	2006	mallard	CY041410	A/mallard/Netherlands/33/2006(H7N8)
135	HA	H7N3	Netherlands	E	2000	mallard	CY014718	A/mallard/Netherlands/12/2000(H7N3)
136	HA	H7N7	Netherlands	E	2003	chicken	AY338458	A/chicken/Netherlands/1/03(H7N7)
137	HA	H7N3	Netherlands	E	2000	mallard	AY338460	A/mallard/Netherlands/12/2000(H7N3)
138	HA	H7N7	New Zealand	NZ	2005	duck		A/duck/New Zealand/2005(H7N7)

# <sup>1</sup>	Protein <sup>2</sup>	Subtype	country	Region <sup>3</sup>	Year	Animal	GenBank	Virus name
139	HA	H7N3	Pakistan	E	1995	chicken	CY035831	A/chicken/Pakistan/34668/1995(H7N3)
140	HA	H7N3	Pakistan	E	1995	chicken	AF202230	A/chicken/Pakistan/CR2/95(H7N3)
141	HA	H7N3	Pakistan	E	2002	chicken	CY035823	A/chicken/Rawalpindi/NARC68/2002(H7N3)
142	HA	H7N3	Pakistan	E	2002	chicken	CY035839	A/chicken/Rawalpindi/NARC72/2002(H7N3)
143	HA	H7N3	Pakistan	E	1995	chicken	CY015033	A/chicken/Pakistan/34669/1995(H7N3)
144	HA	H7N3	Pakistan	E	1998	chicken	CY037754	A/chicken/Pakistan/c1998/1998(H7N3)
145	HA	H7N3	Pakistan	E	1995	chicken	AF202226	A/chicken/Pakistan/447/95(H7N3)
146	HA	H7N1	Singapore	E	1995	common iora	AF202228	A/common iora /Singapore/F89/95(H7N1)
147	HA	H7N1	Singapore	E	1994	fairy bluebird	AF202229	A/fairy bluebird/Singapore/F92/94(H7N1)
148	HA	H7N1	South Africa	E	1991	ostrich	AF202244	A/ostrich/South Africa/1069/91(H7N1)
149	HA	H7N7	South Africa	E	1996	ostrich	AF202253	A/ostrich/South Africa/M320/96(H7N7)
150	HA	H7N7	Sweden	E	2002	mallard	AY999977	A/mallard/Sweden/56/02(H7N7)
151	HA	H7N7	Sweden	E	2002	mallard	AY999978	A/mallard/Sweden/82/02(H7N7)
152	HA	H7N7	Sweden	E	2002	mallard	AY999980	A/mallard/Sweden/87/02(H7N7)
153	HA	H7N7	Sweden	E	2002	mallard	AY999989	A/mallard/Sweden/105/02(H7N7)
154	HA	H7N7	Sweden	E	2002	mallard	AY999991	A/mallard/Sweden/107/02(H7N7)
155	HA	H7N9	Sweden	E	2002	mallard	AY999981	A/mallard/Sweden/91/02(H7N9)
156	HA	H7N7	Sweden	E	2002	mallard	AY999982	A/mallard/Sweden/92/02(H7N7)
157	HA	H7N7	Sweden	E	2002	mallard	AY999988	A/mallard/Sweden/104/02(H7N7)
158	HA	H7N7	Sweden	E	2002	mallard	AY999983	A/mallard/Sweden/93/02(H7N7)
159	HA	H7N7	Sweden	E	2002	mallard	AY999986	A/mallard/Sweden/102/02(H7N7)
160	HA	H7N7	Sweden	E	2002	mallard	AY999990	A/mallard/Sweden/106/02(H7N7)
161	HA	H7N7	Sweden	E	2002	mallard	AY999979	A/mallard/Sweden/85/02(H7N7)
162	HA	H7N7	Sweden	E	2002	mallard	AY999984	A/mallard/Sweden/94/02(H7N7)
163	HA	H7N7	Sweden	E	2002	mallard	AY999985	A/mallard/Sweden/100/02(H7N7)
164	HA	H7N7	Sweden	E	2002	mallard	AY999987	A/mallard/Sweden/103/02(H7N7)
165	HA	H7N7	Taiwan	E	1993	duck	AB297923	A/duck/Taiwan/33/1993(H7N7)
166	HA	H7N7	Taiwan	E	1993	duck	AB297925	A/duck/Taiwan/Ya103/1993(H7N7)
167	HA	H7N7	Taiwan	E	1999	duck	AB269695	A/duck/Taiwan/4201/99(H7N7)
168	HA	H7N1	UK	E	1973	parrot	AF202252	A/parrot/Northern Ireland/VF-73-67/73(H7N1)
169	HA	H7N1	UK	E	1979	African starling	AF202232	A/African starling/England-Q/983/1979(H7N1)
170	HA	H7N3	UK	E	1979	turkey	AF202245	A/turkey/England/192-328/79(H7N3)
171	HA	H7N7	UK	E	1998	turkey	AF202246	A/turkey/Northern Ireland/VF-1545 C5/98(H7N7)
172	HA	H7N3	UK	E	2006	chicken	EF467826	A/chicken/England/4054/2006(H7N3)
173	HA	H7N7	UK	E	2008	chicken	FJ476173	A/chicken/England/1158-11406/2008(H7N7)
174	HA	H7N2	UK	E	2007	chicken	EF675618	A/chicken/Wales/1306/2007(H7N2)
175	HA	H7N3	UK	E	2006	chicken	EF467825	A/chicken/England/4266/2006(H7N3)
176	HA	H7N3	UK	E	1963	turkey	CY015065	A/turkey/England/1963(H7N3)
177	HA	H7N7	UK	E	1989	non psittacine	AF202240	A/non-psittacine/England-Q/1985/89(H7N7)
178	HA	H7N7	UK	E	1977	turkey	AF202247	A/turkey/England/647/77(H7N7)
179	HA	H7N1	UK	E	1994	conure	AF202249	A/conure/England/766/94(H7N1)
180	HA	H7N7	UK	E	1934	fowl	L37794	A/fowl/Weybridge(H7N7)
181	HA	H7N3	UK	E	1963	turkey	U20462	A/turkey/England/1963(H7N3)
182	HA	H7N1	UK	E	1979	African starling	AF149295	A/African starling/England-Q/983/1979(H7N1)
183	HA	H7N1	UK	E	1994	conure	AF202241	A/conure/England/1234/94(H7N1)
184	HA	H7N7	UK	E	1980	macaw	AF202250	A/macaw/England/626/80(H7N7)
185	HA	H7N1	UK	E	1994	parrot	AF202243	A/parrot/England/1174/94(H7N1)
186	HA	H7N3	UK	E	1963	turkey	AF202238	A/turkey/England/1963(H7N3)
187	HA	H7N1	UK	E	1982	chicken	AF202236	A/chicken/England/71/82(H7N1)
188	HA	H7N3	USA	NA	2007	ruddy turnstone	CY036775	A/ruddy turnstone/Delaware Bay/108/2007(H7N3)
189	HA	H7N3	USA	NA	2007	ruddy turnstone	CY036783	A/ruddy turnstone/Delaware Bay/121/2007(H7N3)
190	HA	H7N2	USA	NA	2005	chicken	CY031228	A/chicken/New York/23164-6/2005(H7N2)
191	HA	H7N2	USA	NA	2005	chicken	CY035946	A/chicken/New York/11646-2/2005(H7N2)
192	HA	H7N2	USA	NA	2005	chicken	CY031244	A/chicken/New York/23165-7/2005(H7N2)
193	HA	H7N3	USA	NA	2006	laughing gull	CY037079	A/laughing gull/Delaware Bay/6/2006(H7N3)
194	HA	H7N3	USA	NA	2007	northern shoveler	CY039580	A/northern shoveler/California/HKWF1026/2007(H7N3)
195	HA	H7N2	USA	NA	1996	chicken	CY035580	A/chicken/New Jersey/Sg-00295/1996(H7N2)
196	HA	H7N2	USA	NA	1996	duck	CY035565	A/duck/New York/Sg-00291/1996(H7N2)
197	HA	H7N2	USA	NA	1996	duck	CY035546	A/duck/New Jersey/Sg-00286/1996(H7N2)
198	HA	H7N2	USA	NA	1996	turkey	CY035538	A/turkey/New York/Sg-00284/1996(H7N2)
199	HA	H7N2	USA	NA	2005	chicken	CY034302	A/chicken/New York/23165-10/2005(H7N2)
200	HA	H7N2	USA	NA	1995	chicken	CY035519	A/chicken/New York/Sg-00279/1995(H7N2)
201	HA	H7N2	USA	NA	1995	chicken	CY035491	A/chicken/New York/Sg-00270/1995(H7N2)
202	HA	H7N3	USA	NA	1994	chicken	CY035466	A/chicken/New Jersey/Sg-00258/1994(H7N3)
203	HA	H7N2	USA	NA	2005	chicken	CY034838	A/chicken/New York/10508/2005(H7N2)
204	HA	H7N3	USA	NA	2006	laughing gull	EU030984	A/laughing gull/Delaware/42/06(H7N3)
205	HA	H7N2	USA	NA	2003	chicken	EU742995	A/chicken/CT/260413-2/2003(H7N2)
206	HA	H7N2	USA	NA	2005	chicken	CY037015	A/chicken/New York/63806-11/2005(H7N2)
207	HA	H7N2	USA	NA	2006	chicken	CY028628	A/chicken/New York/29047-4/2006(H7N2)
208	HA	H7N2	USA	NA	2005	chicken	CY031683	A/chicken/New York/23164-5/2005(H7N2)
209	HA	H7N2	USA	NA	2005	chicken	CY033305	A/chicken/New York/63806-8/2005(H7N2)

# <sup>1</sup>	Protein <sup>2</sup>	Subtype	country	Region <sup>3</sup>	Year	Animal	GenBank	Virus name
210	HA	H7N2	USA	NA	1999	chicken	EU742978	A/chicken/NJ/16224-6/1999(H7N2)
211	HA	H7N2	USA	NA	2005	chicken	CY034246	A/chicken/New York/19499/2005(H7N2)
212	HA	H7N2	USA	NA	2005	guinea fowl	CY031763	A/Guinea fowl/New York/37982-3/2005(H7N2)
213	HA	H7N2	USA	NA	2005	chukar	CY022765	A/chukar/New York/11653-1/2005(H7N2)
214	HA	H7N2	USA	NA	1994	chicken	AF072384	A/Chicken/New York/13142-5/94 (H7N2)
215	HA	H7N2	USA	NA	1994	turkey	AF072386	A/turkey/New York/4450-5/94 (H7N2)
216	HA	H7N2	USA	NA	1997	chicken	AF072395	A/Chicken/Pennsylvania/11767-1/97(H7N2)
217	HA	H7N2	USA	NA	1998	chicken	AF072398	A/Chicken/Pennsylvania/13552-1/98 (H7N2)
218	HA	H7N2	USA	NA	2000	avian	AY240879	A/avian/NY/74211-2/00(H7N2)
219	HA	H7N2	USA	NA	2001	chicken	AY240884	A/chicken/NJ/118878-5/2001(H7N2)
220	HA	H7N2	USA	NA	2002	chicken	AY240885	A/chicken/NJ/150383-7/02(H7N2)
221	HA	H7N2	USA	NA	2002	chicken	AY240886	A/chicken/NJ/151244-18/02(H7N2)
222	HA	H7N2	USA	NA	1999	chicken	AY240887	A/chicken/NJ/15814-9/99(H7N2)
223	HA	H7N2	USA	NA	2002	turkey	AY240913	A/turkey/VA/66/02(H7N2)
224	HA	H7N2	USA	NA	2002	turkey	AY240914	A/turkey/VA/67/02(H7N2)
225	HA	H7N2	USA	NA	1998	chicken	AY240917	A/chicken/NY/3572/98(H7N2)
226	HA	H7N2	USA	NA	1999	chicken	AY240918	A/chicken/NJ/15827/99(H7N2)
227	HA	H7N2	USA	NA	1999	chicken	AY240919	A/chicken/NY/1398-6/99(H7N2)
228	HA	H7N2	USA	NA	1999	chicken	AY240920	A/chicken/NY/34173-3/99(H7N2)
229	HA	H7N2	USA	NA	1998	Goose	AY240922	A/Goose/New Jersey/8600-3/98(H7N2)
230	HA	H7N2	USA	NA	2000	avian	AY240925	A/avian/NY/73063-6/00(H7N2)
231	HA	H7N3	USA	NA	1971	turkey	M31689	A/turkey/Oregon/1971(H7N3)
232	HA	H7N3	USA	NA	2008	green winged teal	CY039540	A/green winged teal/California/AKS1370/2008(H7N3)
233	HA	H7N3	USA	NA	2008	northern shoveler	CY039596	A/northern shoveler/California/HKWF2031/2008(H7N3)
234	HA	H7N2	USA	NA	1996	goose	CY035561	A/goose/New Jersey/Sg-00290/1996(H7N2)
235	HA	H7N2	USA	NA	1996	chicken	CY035554	A/chicken/New York/Sg-00288/1996(H7N2)
236	HA	H7N2	USA	NA	2005	chukar	CY031068	A/chukar/New York/23164-13/2005(H7N2)
237	HA	H7N7	USA	NA	1927	fowl	CY014992	A/fowl/Dobson/1927(H7N7)
238	HA	H7N9	USA	NA	1988	turkey	CY014786	A/turkey/Minnesota/1/1988(H7N9)
239	HA	H7N3	USA	NA	2004	blue winged teal	CY018901	A/blue-winged teal/Ohio/658/2004(H7N3)
240	HA	H7N3	USA	NA	2001	black duck	CY020885	A/Black Duck/Ohio/415/2001(H7N3)
241	HA	H7N3	USA	NA	1995	turkey	EF470585	A/turkey/Utah/24721-10/1995(H7N3)
242	HA	H7N3	USA	NA	2001	black duck	EU684257	A/black duck/MD/415/2001(H7N3)
243	HA	H7N7	USA	NA	2006	ruddy turnstone	EU684262	A/ruddy turnstone/DE/892/2006(H7N7)
244	HA	H7N2	USA	NA	2004	chicken	EU743253	A/chicken/NJ/294508-12/2004(H7N2)
245	HA	H7N2	USA	NA	2005	turkey	CY034894	A/turkey/New York/122501-2/2005(H7N2)
246	HA	H7N2	USA	NA	2005	guinea fowl	CY034830	A/Guinea fowl/New York/101276-1/2005(H7N2)
247	HA	H7N2	USA	NA	2005	duck	CY034814	A/duck/New York/98616-5/2005(H7N2)
248	HA	H7N2	USA	NA	2005	guinea fowl	CY031723	A/Guinea fowl/New York/23165-12/2005(H7N2)
249	HA	H7N2	USA	NA	2005	quail	CY033313	A/quail/New York/63806-13/2005(H7N2)
250	HA	H7N2	USA	NA	1995	chicken	CY035512	A/chicken/New York/Sg-00277/1995(H7N2)
251	HA	H7N2	USA	NA	2006	chicken	CY035986	A/chicken/New York/19495-4/2006(H7N2)
252	HA	H7N2	USA	NA	2006	chicken	CY028580	A/chicken/New York/8391-2/2006(H7N2)
253	HA	H7N2	USA	NA	2005	guinea fowl	CY031675	A/Guinea fowl/New York/23164-3-05/2005(H7N2)
254	HA	H7N2	USA	NA	2005	chicken	CY031635	A/chicken/New York/22067-7/2005(H7N2)
255	HA	H7N2	USA	NA	2005	chicken	CY033241	A/chicken/New York/30732-9/2005(H7N2)
256	HA	H7N2	USA	NA	2005	chicken	CY034190	A/chicken/New York/143646-2/2005(H7N2)
257	HA	H7N2	USA	NA	1995	chicken	CY035470	A/chicken/New York/Sg-00261/1995(H7N2)
258	HA	H7N3	USA	NA	1998	Mallard	CY016188	A/Mallard/Ohio/322/1998(H7N3)
259	HA	H7N7	USA	NA	1988	ruddy turnstone	CY005980	A/ruddy turnstone/DE/2378/1988(H7N7)
260	HA	H7N8	USA	NA	1987	mallard	CY021621	A/mallard/Ohio/421/1987(H7N8)
261	HA	H7N2	USA	NA	1996	chicken	AF072393	A/Chicken/New York/8030-2/96 (H7N2)
262	HA	H7N3	USA	NA	1971	turkey	DQ870894	A/turkey/Oregon/1971(H7N3)
263	HA	H7N2	USA	NA	2006	chicken	DQ873807	A/chicken/NY/3181-5/06(H7N2)
264	HA	H7N3	USA	NA	1971	turkey	DQ870888	A/turkey/Oregon/1971(H7N3)
265	HA	H7N2	USA	NA	2005	chicken	CY024834	A/chicken/New York/21211-1/2005(H7N2)
266	HA	H7N2	USA	NA	2001	chicken	AY240891	A/chicken/NY/119256-7/2001(H7N2)
267	HA	H7N3	USA	NA	1999	chicken	AY240892	A/chicken/New York/12273-11/1999(H7N3)
268	HA	H7N2	USA	NA	1998	chicken	AY240893	A/chicken/NY/1387-8/98(H7N2)
269	HA	H7N3	USA	NA	1999	chicken	AY240894	A/chicken/New York/14714-9/1999(H7N3)
270	HA	H7N2	USA	NA	2002	turkey	AY240912	A/turkey/VA/55/2002(H7N2)
271	HA	H7N2	USA	NA	2004	chicken	AY831670	A/chicken/MD/MINH MA/2004(H7N2)
272	HA	H7N3	USA	NA	1971	turkey	AB269693	A/turkey/Oregon/1971(H7N3)
273	HA	H7N3	USA	NA	2001	duck	EU743008	A/duck/PA/143585/2001(H7N3)
274	HA	H7N2	USA	NA	2002	turkey	EU743261	A/turkey/VA/158512/2002(H7N2)
275	HA	H7N2	USA	NA	2005	turkey	CY031715	A/turkey/New York/23164-11/2005(H7N2)
276	HA	H7N2	USA	NA	1995	emu	EU980454	A/emu/TX/25414/1995(H7N2)
277	HA	H7N2	USA	NA	2005	duck	CY034806	A/duck/New York/98616-4/2005(H7N2)
278	HA	H7N2	USA	NA	2005	chicken	CY034798	A/chicken/New York/88291-8/2005(H7N2)
279	HA	H7N3	USA	NA	2006	shorebird	CY036767	A/shorebird/Delaware Bay/560/2006(H7N3)



# <sup>1</sup>	Protein <sup>2</sup>	Subtype	country	Region <sup>3</sup>	Year	Animal	GenBank	Virus name
280	HA	H7N3	USA	NA	2007	northern pintail	FJ520108	A/northern pintail/California/44387-486/2007(H11N9)
281	HA	H7N2	USA	NA	2006	chicken	CY036010	A/chicken/New York/19499-1/2006(H7N2)
282	HA	H7N2	USA	NA	2006	muscovy duck	CY036002	A/Muscovy duck/New York/19495-7/2006(H7N2)
283	HA	H7N2	USA	NA	2006	guinea fowl	CY035994	A/Guinea fowl/New York/19495-6/2006(H7N2)
284	HA	H7N2	USA	NA	2005	guinea fowl	CY035954	A/Guinea fowl/New York/11646-3/2005(H7N2)
285	HA	H7N2	USA	NA	2006	chicken	CY034902	A/chicken/New York/19495-2/2006(H7N2)
286	HA	H7N3	USA	NA	2006	ruddy turnstone	CY037103	A/ruddy turnstone/Delaware Bay/283/2006(H7N3)
287	HA	H7N2	USA	NA	2005	chicken	CY031076	A/chicken/New York/23165-6/2005(H7N2)
288	HA	H7N2	USA	NA	2005	chicken	CY031116	A/chicken/New York/30732-6/2005(H7N2)
289	HA	H7N2	USA	NA	2002	chicken	CY014896	A/chicken/Pennsylvania/143586/2002(H7N2)
290	HA	H7N2	USA	NA	2005	chicken	CY031747	A/chicken/New York/31621-9/2005(H7N2)
291	HA	H7N2	USA	NA	2005	chicken	CY033233	A/chicken/New York/30732-8/2005(H7N2)
292	HA	H7N3	USA	NA	2004	green winged teal	EU684259	A/green-winged teal/MD/648/2004(H7N3)
293	HA	H7N3	USA	NA	2004	blue winged teal	EU684260	A/blue-winged teal/MD/658/2004(H7N3)
294	HA	H7N2	USA	NA	1995	guinea fowl	CY035495	A/guinea fowl/New York/Sg-00271/1995(H7N2)
295	HA	H7N2	USA	NA	2005	quail	CY034390	A/quail/New York/89641/2005(H7N2)
296	HA	H7N2	USA	NA	2005	duck	CY034374	A/duck/New York/88291-13/2005(H7N2)
297	HA	H7N2	USA	NA	2005	chicken	CY034342	A/chicken/New York/63806-12/2005(H7N2)
298	HA	H7N2	USA	NA	2005	guinea fowl	CY033281	A/Guinea fowl/New York/31621-8/2005(H7N2)
299	HA	H7N2	USA	NA	1996	turkey	CY035550	A/turkey/New Jersey/Sg-00287/1996(H7N2)
300	HA	H7N2	USA	NA	1996	chicken	CY035542	A/chicken/New York/Sg-00285/1996(H7N2)
301	HA	H7N2	USA	NA	1996	chicken	CY035569	A/chicken/New Jersey/Sg-00292/1996(H7N2)
302	HA	H7N2	USA	NA	2005	chicken	CY031691	A/chicken/New York/23164-7/2005(H7N2)
303	HA	H7N2	USA	NA	2004	chicken	AY831669	A/chicken/DE/VIV A/2004(H7N2)
304	HA	H7N2	USA	NA	2001	avian	AY240877	A/avian/NY/118353-1/2001(H7N2)
305	HA	H7N2	USA	NA	2000	avian	AY240878	A/avian/NY/70411-12/00(H7N2)
306	HA	H7N2	USA	NA	2000	avian	AY240880	A/avian/NY/76247-3/00(H7N2)
307	HA	H7N2	USA	NA	2000	avian	AY240882	A/avian/NY/7729-6/00(H7N2)
308	HA	H7N2	USA	NA	2001	chicken	AY240890	A/chicken/NY/119055-7/01(H7N2)
309	HA	H7N2	USA	NA	1999	chicken	AY240895	A/chicken/NY/21586-8/1999(H7N2)
310	HA	H7N2	USA	NA	2000	chicken	AY240897	A/chicken/NY/30749-3/2000(H7N2)
311	HA	H7N2	USA	NA	1999	chicken	AY240907	A/chicken/NY/14858-12/1999(H7N2)
312	HA	H7N2	USA	NA	1998	guineafowl	AY240909	A/guineafowl/NJ/13246-9/98(H7N2)
313	HA	H7N2	USA	NA	2002	turkey	AY240910	A/turkey/NC/11165/02(H7N2)
314	HA	H7N2	USA	NA	1999	chicken	AY240916	A/Chicken/New Jersey/20621/99(H7N2)
315	HA	H7N2	USA	NA	1999	chicken	AY240921	A/Chicken/NY/14714-2/1999(H7N3)
316	HA	H7N2	USA	NA	1998	quail	AY240924	A/quail/PA/20304/1998(H7N2)
317	HA	H7N2	USA	NA	2006	guinea fowl	CY028572	A/Guinea fowl/New York/8391-1/2006(H7N2)
318	HA	H7N9	USA	NA	2006	blue winged teal	CY024818	A/blue-winged teal/Ohio/566/2006(H7N9)
319	HA	H7N3	USA	NA	2005	mallard	CY021637	A/mallard/Delaware/418/2005(H7N3)
320	HA	H7N2	USA	NA	1995	chicken	AF072388	A/Chicken/New York/13833-7/95 (H7N2)
321	HA	H7N2	USA	NA	1997	chicken	AF072396	A/Chicken/New York/6777-3/97(H7N2)
322	HA	H7N2	USA	NA	1998	quail	AF072399	A/quail/NY/13989-51/1998(H7N2)
323	HA	H7N2	USA	NA	2005	chicken	CY022821	A/chicken/New York/16330/2005(H7N2)
324	HA	H7N7	USA	NA	1989	red knot	CY005981	A/red knot/NJ/325/1989(H7N7)
325	HA	H7N2	USA	NA	2004	chicken	AY831668	A/chicken/DE/HOBO/2004(H7N2)
326	HA	H7N2	USA	NA	2000	avian	AY240881	A/avian/NY/81746-5/00(H7N2)
327	HA	H7N2	USA	NA	2001	chicken	AY240883	A/chicken/FL/90348-4/2001(H7N2)
328	HA	H7N2	USA	NA	2002	chicken	AY240888	A/chicken/NJ/608/02(H7N2)
329	HA	H7N2	USA	NA	1999	chicken	AY240896	A/chicken/NY/22409-4/99(H7N2)
330	HA	H7N2	USA	NA	2002	chicken	AY240900	A/chicken/PA/149092-1/2002(H7N2)
331	HA	H7N2	USA	NA	2002	chicken	AY240906	A/chicken/VA/32/02(H7N2)
332	HA	H7N2	USA	NA	2002	guineafowl	AY240908	A/guineafowl/MA/148081-11/02(H7N2)
333	HA	H7N2	USA	NA	1999	chicken	AY240915	A/chicken/NJ/17206/99(H7N2)
334	HA	H7N2	USA	NA	1999	quail	AY240923	A/quail/NY/11430/99(H7N2)
335	HA	H7N2	USA	NA	2006	guinea fowl	CY028596	A/Guinea fowl/New York/19501-4/2006(H7N2)
336	HA	H7N2	USA	NA	2005	chicken	CY022813	A/chicken/New York/16326-5/2005(H7N2)
337	HA	H7N2	USA	NA	2005	chicken	CY022829	A/chicken/New York/21211-2/2005(H7N2)
338	HA	H7N2	USA	NA	1997	turkey	AF072397	A/turkey/PA/7975/1997(H7N2)
339	HA	H7N3	USA	NA	1985	ruddy turnstone	CY005928	A/ruddy turnstone/New Jersey/65/1985(H7N3)
340	HA	H7N2	USA	NA	2006	guineafowl	DQ907528	A/guineafowl/NY/4649-18/2006(H7N2)
341	HA	H7N3	USA	NA	1980	pheasant	CY014721	A/pheasant/Minnesota/917/1980(H7N3)
342	HA	H7N3	USA	NA	1980	turkey	CY014778	A/turkey/Minnesota/1200/1980(H7N3)
343	HA	H7N2	USA	NA	2006	guinea fowl	CY034238	A/Guinea fowl/New York/32084/2006(H7N2)
344	HA	H7N1	USA	NA	1993	rhea	EF470586	A/rhea/North Carolina/39482/1993(H7N1)
345	HA	H7N2	USA	NA	2005	duck	CY022845	A/duck/New York/21211-6/2005(H7N2)
346	HA	H7N2	USA	NA	2005	chicken	CY031771	A/chicken/New York/42217/2005(H7N2)
347	HA	H7N3	USA	NA	2006	shorebird	EU030968	A/shorebird/Delaware/22/06(H7N3)
348	HA	H7N3	USA	NA	2001	mallard	EU684258	A/mallard/MD/423/2001(H7N3)
349	HA	H7N9	USA	NA	2000	ruddy turnstone	EU684261	A/ruddy turnstone/DE/1538/2000(H7N9)
350	HA	H7N2	USA	NA	2005	muscovy duck	CY031707	A/Muscovy duck/New York/23164-10/2005(H7N2)

# <sup>1</sup>	Protein <sup>2</sup>	Subtype	country	Region <sup>3</sup>	Year	Animal	GenBank	Virus name
351	HA	H7N2	USA	NA	2005	guinea fowl	CY031651	A/Guinea fowl/New York/22071/2005(H7N2)
352	HA	H7N2	USA	NA	2005	chicken	CY035978	A/chicken/New York/122501-1/2005(H7N2)
353	HA	H7N2	USA	NA	2005	muscovy duck	CY034790	A/Muscovy duck/New York/87493-3/2005(H7N2)
354	HA	H7N2	USA	NA	2005	muscovy duck	CY034846	A/Muscovy duck/New York/11646-4/2005(H7N2)
355	HA	H7N2	USA	NA	1997	chicken	EU742961	A/chicken/PA/19241/1997(H7N2)
356	HA	H7N3	USA	NA	1993	duck	AB450437	A/duck/Alaska/3111/1993(H7N3)
357	HA	H7N2	USA	NA	2005	guinea fowl	CY037063	A/Guinea fowl/New York/98616-3/2005(H7N2)
358	HA	H7N1	USA	NA	1993	rhea	FJ610056	A/rhea/North Carolina/39482/1993(H7N1)
359	HA	H7N2	USA	NA	2001	guinea fowl	EU742912	A/guinea fowl/NJ/119063-8/2001(H7N2)
360	HA	H7N2	USA	NA	1994	guinea fowl	CY035462	A/guinea fowl/New York/Sg-00257/1994(H7N2)
361	HA	H7N2	USA	NA	1995	chicken	CY035504	A/chicken/New York/Sg-00274/1995(H7N2)
362	HA	H7N2	USA	NA	1995	chicken	CY035522	A/chicken/New Jersey/Sg-00280/1995(H7N2)
363	HA	H7N2	USA	NA	1996	chicken	CY035526	A/chicken/New York/Sg-00281/1996(H7N2)
364	HA	H7N3	USA	NA	1979	turkey	AB269692	A/turkey/Tennessee/1/1979(H7N3)
365	HA	H7N3	USA	NA	2006	laughing gull	CY037087	A/laughing gull/Delaware Bay/46/2006(H7N3)
366	HA	H7N2	USA	NA	2005	chicken	CY037095	A/chicken/New York/87493-2/2005(H7N2)
367	HA	H7N2	USA	NA	2006	chicken	CY031188	A/chicken/New York/46545-2/2006(H7N2)
368	HA	H7N7	USA	NA	2007	mallard	CY033380	A/mallard/California/HKWF1971/2007(H7N7)
369	HA	H7N2	USA	NA	2005	guinea fowl	CY028507	A/Guinea fowl/New York/143646-3/2005(H7N2)
370	HA	H7N2	USA	NA	2006	chicken	CY028540	A/chicken/New York/3181-5/2006(H7N2)
371	HA	H7N1	Zimbabwe	E	1996	ostrich	AF202234	A/ostrich/Zimbabwe/222/96(H7N1)
1	M1	H7N7	Australia	A	1985	starling	CY024779	A/starling/Victoria/85(H7N7)
2	M1	H7N4	Australia	A	1997	chicken	CY022702	A/chicken/New South Wales/327/97(H7N4)
3	M1	H7N7	Australia	A	1985	chicken	CY025070	A/chicken/Victoria/1/85(H7N7)
4	M1	H7N4	Australia	A	1997	emu	CY022710	A/emu/New South Wales/775/97(H7N4)
5	M1	H7N7	Australia	A	1976	duck		A/duck/Victoria/76(H7N7)
6	M1	H7N6	Australia	A	2007	duck		A/duck/Victoria/512/2007(H7N6)
7	M1	H7N7	New Zealand	NZ	2005	duck		A/duck/New Zealand/2005(H7N7)
8	M1	H7N3	Australia	A	1994	chicken	CY022686	A/chicken/Queensland/1994(H7N3)
9	M1	H7N4	Australia	A	1997	chicken	CY022694	A/chicken/New South Wales/2/1997(H7N4)
10	M1	H7N7	Australia	A	1976	chicken	CY024787	A/chicken/Victoria/1976(H7N7)
11	M1	H7N3	Australia	A	1992	chicken	CY025078	A/chicken/Victoria/224/1992(H7N3)
12	M1	H7N2	Australia	A	2007	duck	CY033162	A/duck/Tasmania/277/2007(H7N2)
13	M1	H7N3	Bolivia	SA	2001	cinnamon teal	DQ525415	A/cinnamon teal/Bolivia/4537/2001(H7N3)
14	M1	H7N3	Canada	NA	1977	gadwall duck	CY005033	A/gadwall duck/Alberta/291/1977(H7N3)
15	M1	H7N3	Canada	NA	2004	chicken	AY611525	A/chicken/British Columbia/04(H7N3)
16	M1	H7N3	Canada	NA	1985	green winged teal	CY005051	A/green-winged teal/ALB/228/1985(H7N3)
17	M1	H7N3	Canada	NA	2004	chicken	AY650271	A/GSC_chicken/British Columbia/04(H7N3)
18	M1	H7N3	Canada	NA	1976	mallard duck	CY004325	A/mallard duck/ALB/48/1976(H7N3)
19	M1	H7N3	Canada	NA	2007	chicken	EU500863	A/chicken/SK/HR-00011/2007(H7N3)
20	M1	H7N3	Canada	NA	2007	American black duck	EU500855	A/American black duck/NB/2538/2007(H7N3)
21	M1	H7N3	Canada	NA	1985	mallard duck	CY005058	A/mallard duck/Alberta/435/1985(H7N3)
22	M1	H7N3	Canada	NA	2007	Canada goose	EU500847	A/Canada goose/BC/3752/2007(H7N3)
23	M1	H7N3	Canada	NA	2004	chicken	AY677732	A/chicken/British Columbia/CN7-3/04 (H7N3)
24	M1	H7N3	Canada	NA	2001	mallard	DQ017502	A/mallard/Alberta/24/01(H7N3)
25	M1	H7N5	Canada	NA	1977	mallard duck	CY005009	A/mallard duck/ALB/224/1977(H7N5)
26	M1	H7N8	Canada	NA	1979	pintail duck	CY005039	A/pintail duck/Alberta/291/1979(H7N8)
27	M1	H7N3	Chile	SA	2002	chicken	AY303653	A/chicken/Chile/4322/02(H7N3)
28	M1	H7N3	Chile	SA	2002	chicken	AY303652	A/chicken/Chile/176822/02(H7N3)
29	M1	H7N2	China	E	2002	chicken	AY724263	A/chicken/Hebei/1/2002(H7N2)
30	M1	H7N1	China	E	1992	duck	CY005494	A/duck/Nanchang/1904/1992(H7N1)
31	M1	H7N7	China	E	2003	duck	EU158116	A/duck/Jiangxi/1742/03(H7N7)
32	M1	H7N7	China	E	2003	duck	EU158112	A/duck/Jiangxi/1814/03(H7N7)
33	M1	H7N1	France	E	2001	mallard	AM157380	A/mallard/France/2526/2001(H7N1)
34	M1	H7N1	France	E	2001	mallard	AM157379	A/mallard/France/2525/2001(H7N1)
35	M1	H7N1	Germany	E	1934	chicken	CY015047	A/chicken/Rostock/45/1934(H7N1)
36	M1	H7N7	Germany	E	1979	goose	CY015040	A/goose/Leipzig/187-7/1979(H7N7)
37	M1	H7N1	Germany	E	1934	chicken	M55474	A/chicken/Rostock/8/1934(H7N1)
38	M1	H7N2	Hong Kong	E	1978	duck	CY005619	A/duck/Hong Kong/293/1978(H7N2)
39	M1	H7N1	Italy	E	2000	ostrich	DQ991307	A/ostrich/Italy/2332/00(H7N1)
40	M1	H7N3	Italy	E	2004	turkey	CY028677	A/turkey/Italy/3829/2004(H7N3)
41	M1	H7N3	Italy	E	2003	turkey	CY028669	A/turkey/Italy/2685/2003(H7N3)
42	M1	H7N1	Italy	E	2000	turkey	CY021542	A/turkey/Italy/4426/2000(H7N1)
43	M1	H7N1	Italy	E	2000	quail	CY022670	A/quail/Italy/396/2000(H7N1)
44	M1	H7N3	Italy	E	2004	turkey	CY020582	A/turkey/Italy/4479/2004(H7N3)
45	M1	H7N3	Italy	E	2003	turkey	CY021358	A/turkey/Italy/3620/2003(H7N3)
46	M1	H7N3	Italy	E	2003	turkey	EU158113	A/turkey/Italy/97500/03(H7N3)
47	M1	H7N3	Italy	E	2002	turkey	CY029906	A/turkey/Italy/8535/2002(H7N3)
48	M1	H7N3	Italy	E	2004	turkey	CY029914	A/turkey/Italy/4130/2004(H7N3)
49	M1	H7N1	Italy	E	1999	turkey	CY025190	A/turkey/Italy/1265/1999(H7N1)

# <sup>1</sup>	Protein <sup>2</sup>	Subtype	country	Region <sup>3</sup>	Year	Animal	GenBank	Virus name
50	M1	H7N1	Italy	E	1999	turkey	CY021406	A/turkey/Italy/4580/1999(H7N1)
51	M1	H7N1	Italy	E	2001	turkey	CY021422	A/turkey/Italy/1351/2001(H7N1)
52	M1	H7N7	Italy	E	1902	chicken	CY015054	A/chicken/Brescia/1902(H7N7)
53	M1	H7N3	Italy	E	2002	turkey	CY028661	A/turkey/Italy/9742/2002(H7N3)
54	M1	H7N3	Italy	E	2003	turkey	EU158118	A/turkey/Italy/121964/03(H7N3)
55	M1	H7N1	Italy	E	2002	mallard	EU158120	A/mallard/Italy/250/02(H7N1)
56	M1	H7N3	Italy	E	2004	turkey	CY020598	A/turkey/Italy/3807/2004(H7N3)
57	M1	H7N1	Italy	E	2000	pekin duck	CY024899	A/pekin duck/Italy/1848/2000(H7N1)
58	M1	H7N3	Italy	E	2003	turkey	CY021366	A/turkey/Italy/1010/2003(H7N3)
59	M1	H7N3	Italy	E	2003	turkey	CY021486	A/turkey/Italy/4608/2003(H7N3)
60	M1	H7N3	Italy	E	2003	turkey	CY021494	A/turkey/Italy/2987/2003(H7N3)
61	M1	H7N1	Italy	E	2001	chicken	CY021550	A/chicken/Italy/322/2001(H7N1)
62	M1	H7N1	Italy	E	1999	chicken	CY022654	A/chicken/Italy/4746/1999(H7N1)
63	M1	H7N1	Italy	E	2000	ostrich	DQ991338	A/ostrich/Italy/984/00(H7N1)
64	M1	H7N1	Italy	E	2000	chicken	CY015015	A/chicken/Italy/1285/2000(H7N1)
65	M1	H7N7	Italy	E	2005	mallard	EU158117	A/mallard/Italy/299/05(H7N7)
66	M1	H7N1	Italy	E	1999	chicken	AJ416630	A/Chicken/Italy/1067/99(H7N1)
67	M1	H7N1	Italy	E	1999	turkey	AJ627489	A/turkey/Italy/4603/1999(H7N1)
68	M1	H7N3	Italy	E	2002	turkey	AJ627492	A/turkey/Italy/214845/2002(H7N3)
69	M1	H7N1	Italy	E	1999	turkey	CY021414	A/turkey/Italy/3675/1999(H7N1)
70	M1	H7N1	Italy	E	2000	turkey	CY024771	A/turkey/Italy/1084/2000(H7N1)
71	M1	H7N3	Italy	E	2003	turkey	CY020590	A/turkey/Italy/251/2003(H7N3)
72	M1	H7N7	Italy	E	1902	chicken	L37795	A/chicken/Brescia/1902(H7N7)
73	M1	H7N2	Italy	E	2003	quail	CY021510	A/quail/Italy/4610/2003(H7N2)
74	M1	H7N1	Italy	E	2000	turkey	CY021534	A/turkey/Italy/2984/2000(H7N1)
75	M1	H7N3	Italy	E	2003	turkey	CY022614	A/turkey/Italy/2043/2003(H7N3)
76	M1	H7N1	Italy	E	1999	chicken	DQ991323	A/chicken/Italy/5093/99(H7N1)
77	M1	H7N1	Italy	E	1999	chicken	DQ991331	A/chicken/Italy/5093/99(H7N1)
78	M1	H7N1	Italy	E	1999	turkey	CY025110	A/turkey/Italy/4644/1999(H7N1)
79	M1	H7N3	Italy	E	2003	chicken	CY034751	A/chicken/Italy/682/2003(H7N3)
80	M1	H7N1	Japan	E	2003	duck	AB428683	A/duck/Hokkaido/143/2003(H7N1)
81	M1	H7N1	Mongolia	E	2002	duck	AB473546	A/duck/Mongolia/867/2002(H7N1)
82	M1	H7N1	Mongolia	E	2001	duck	AB268555	A/duck/Mongolia/47/2001(H7N1)
83	M1	H7N3	Netherlands	E	2000	mallard	CY005845	A/mallard/Netherlands/12/2000(H7N3)
84	M1	H7N8	Netherlands	E	2006	mallard	CY041411	A/mallard/Netherlands/33/2006(H7N8)
85	M1	H7N7	Netherlands	E	2003	chicken	AY340091	A/chicken/Netherlands/1/03(H7N7)
86	M1	H7N3	Pakistan	E	1995	chicken	CY015034	A/chicken/Pakistan/34669/1995(H7N3)
87	M1	H7N3	Pakistan	E	2002	chicken	CY035826	A/chicken/Rawalpindi/NARC68/2002(H7N3)
88	M1	H7N3	Pakistan	E	1998	chicken	CY037757	A/chicken/Pakistan/c1998/1998(H7N3)
89	M1	H7N3	Pakistan	E	1995	chicken	CY035834	A/chicken/Pakistan/34668/1995(H7N3)
90	M1	H7N7	UK	E	1934	fowl	M38299	A/fowl/Weybridge(H7N7)
91	M1	H7N7	UK	E	1934	fowl	L37797	A/fowl/Weybridge(H7N7)
92	M1	H7N3	UK	E	1963	turkey	CY015066	A/turkey/England/1963(H7N3)
93	M1	H7N1	UK	E	1979	African starling	AY724262	A/African starling/England-Q/983/1979(H7N1)
94	M1	H7N7	UK	E	1927	fowl	L37796	A/fowl/Dobson(H7N7)
95	M1	H7N7	UK	E	1934	chicken	M23917	A/chicken/FPV/Weybridge(H7N7)
96	M1	H7N7	UK	E	1927	fowl	M63526	A/fowl/Dobson/1927(H7N7)
97	M1	H7N2	USA	NA	2005	chicken	CY037016	A/chicken/New York/63806-11/2005(H7N2)
98	M1	H7N2	USA	NA	2003	chicken	EU742996	A/chicken/CT/260413-2/2003(H7N2)
99	M1	H7N2	USA	NA	2005	chicken	CY031644	A/chicken/New York/22067-12/2005(H7N2)
100	M1	H7N2	USA	NA	2005	chicken	CY034247	A/chicken/New York/19499/2005(H7N2)
101	M1	H7N2	USA	NA	1995	guinea fowl	AF073184	A/Guinea Fowl/New York/13820-3/95 (H7N2NSB)
102	M1	H7N2	USA	NA	1995	chicken	AF073185	A/Chicken/New York/13833-7/95 (H7N2NSB)
103	M1	H7N2	USA	NA	1995	chicken	AF073186	A/Chicken/New York/19542-5/95 (H7N2NSB)
104	M1	H7N2	USA	NA	1995	chicken	AF073187	A/Chicken/New York/3112-1/95 (H7N2NSB)
105	M1	H7N2	USA	NA	1998	chicken	AF073195	A/Chicken/Pennsylvania/13552-1/98 (H7N2NSB)
106	M1	H7N2	USA	NA	1998	Quail	AF073196	A/Quail/New York/13989-51/98 (H7N2NSA)
107	M1	H7N3	USA	NA	1971	turkey	AF073197	A/turkey/Oregon/71(H7N3NSB)
108	M1	H7N3	USA	NA	1991	turkey	AF073198	A/Turkey/Colorado/13356/91 (H7N3NSA)
109	M1	H7N3	USA	NA	1998	mallard	DQ021717	A/mallard/MN/284/98(H7N3)
110	M1	H7N3	USA	NA	1980	pheasant	CY005889	A/pheasant/Minnesota/917/1980(H7N3)
111	M1	H7N2	USA	NA	2000	avian	AY241589	A/avian/NY/76247-3/00(H7N2)
112	M1	H7N2	USA	NA	2001	chicken	AY241591	A/Chicken/NJ/118555-2/01(H7N2)
113	M1	H7N2	USA	NA	2002	chicken	AY241596	A/chicken/NJ/608/02(H7N2)
114	M1	H7N2	USA	NA	1998	chicken	AY241597	A/chicken/NJ/9777-7/98(H7N2)
115	M1	H7N2	USA	NA	2001	chicken	AY241598	A/chicken/NY/119055-7/01(H7N2)
116	M1	H7N2	USA	NA	1998	chicken	AY241601	A/chicken/NY/1387-8/98(H7N2)
117	M1	H7N3	USA	NA	1999	chicken	AY241602	A/chicken/New York/14714-9/1999(H7N3)
118	M1	H7N2	USA	NA	1999	chicken	AY241604	A/chicken/NY/21586-8/1999(H7N2)
119	M1	H7N2	USA	NA	1998	guineafowl	AY241618	A/guineafowl/NJ/13246-9/98(H7N2)
120	M1	H7N2	USA	NA	1998	quail	AY241619	A/quail/PA/20304/1998(H7N2)
121	M1	H7N2	USA	NA	1998	turkey	AY241621	A/turkey/NJ/9778-8/98(H7N2)

# <sup>1</sup>	Protein <sup>2</sup>	Subtype	country	Region <sup>3</sup>	Year	Animal	GenBank	Virus name
122	M1	H7N2	USA	NA	2005	chicken	CY034343	A/chicken/New York/63806-12/2005(H7N2)
123	M1	H7N2	USA	NA	2005	chicken	CY031213	A/chicken/New York/10196-6/2005(H7N2)
124	M1	H7N3	USA	NA	2006	shorebird	CY036768	A/shorebird/Delaware Bay/560/2006(H7N3)
125	M1	H7N2	USA	NA	2005	guinea fowl	CY031221	A/Guinea fowl/New York/10196-7/2005(H7N2)
126	M1	H7N2	USA	NA	1997	chicken	EU742962	A/chicken/PA/19241/1997(H7N2)
127	M1	H7N3	USA	NA	2008	northern shoveler	CY039599	A/northern shoveler/California/HKWF2031/2008(H7N3)
128	M1	H7N2	USA	NA	2005	quail	CY033314	A/quail/New York/63806-13/2005(H7N2)
129	M1	H7N2	USA	NA	2005	guinea fowl	CY031724	A/Guinea fowl/New York/23165-12/2005(H7N2)
130	M1	H7N3	USA	NA	2007	ruddy turnstone	CY036776	A/ruddy turnstone/Delaware Bay/108/2007(H7N3)
131	M1	H7N2	USA	NA	2005	guinea fowl	CY031652	A/Guinea fowl/New York/22071/2005(H7N2)
132	M1	H7N2	USA	NA	2005	chicken	CY034367	A/chicken/New York/88291-11/2005(H7N2)
133	M1	H7N3	USA	NA	2004	blue winged teal	CY018902	A/blue-winged teal/Ohio/658/2004(H7N3)
134	M1	H7N9	USA	NA	1988	turkey	CY014787	A/turkey/Minnesota/1/1988(H7N9)
135	M1	H7N7	USA	NA	1999	mallard	DQ021697	A/mallard/MN/17/99(H7N7)
136	M1	H7N9	USA	NA	2006	blue winged teal	CY024819	A/blue-winged teal/Ohio/566/2006(H7N9)
137	M1	H7N2	USA	NA	2000	avian	AY241590	A/avian/NY/81746-5/00(H7N2)
138	M1	H7N2	USA	NA	2001	chicken	AY241599	A/chicken/NY/119256-7/2001(H7N2)
139	M1	H7N2	USA	NA	2002	chicken	AY241609	A/chicken/PA/149092-1/2002(H7N2)
140	M1	H7N2	USA	NA	1997	chicken	AY241610	A/chicken/PA/9701524/97(H7N2)
141	M1	H7N2	USA	NA	1997	chicken	AY241611	A/chicken/PA/9701530/97(H7N2)
142	M1	H7N2	USA	NA	1998	chicken	AY241612	A/chicken/PA/9800896/98(H7N2)
143	M1	H7N3	USA	NA	2001	blue winged teal	AY300975	A/blue-winged teal/TX/2/01(H7N3)
144	M1	H7N2	USA	NA	1996	chicken	AF073190	A/Chicken/New York/8030-2/96 (H7N2NSB)
145	M1	H7N3	USA	NA	1994	Quail	AF073200	A/Quail/Arkansas/16309-7/94 (H7N3NSA)
146	M1	H7N3	USA	NA	1995	turkey	AF073201	A/turkey/Utah/24721-10/95 (H7N3NSA)
147	M1	H7N9	USA	NA	2000	ruddy turnstone	DQ021735	A/ruddy turnstone/DE/1538/2000(H7N9)
148	M1	H7N9	USA	NA	2000	ruddy turnstone	DQ021737	A/ruddy turnstone/DE/629/00(H7N9)
149	M1	H7N3	USA	NA	2005	mallard	CY021638	A/mallard/Delaware/418/2005(H7N3)
150	M1	H7N8	USA	NA	1987	mallard	CY021622	A/mallard/Ohio/421/1987(H7N8)
151	M1	H7N3	USA	NA	1998	Mallard	CY016189	A/Mallard/Ohio/322/1998(H7N3)
152	M1	H7N2	USA	NA	2005	guinea fowl	CY035923	A/Guinea fowl/New York/88291-9/2005(H7N2)
153	M1	H7N2	USA	NA	2006	chicken	CY034903	A/chicken/New York/19495-2/2006(H7N2)
154	M1	H7N2	USA	NA	2005	turkey	CY034895	A/turkey/New York/122501-2/2005(H7N2)
155	M1	H7N2	USA	NA	2005	chicken	CY034799	A/chicken/New York/88291-8/2005(H7N2)
156	M1	H7N2	USA	NA	1995	emu	EU980455	A/emu/TX/25414/1995(H7N2)
157	M1	H7N2	USA	NA	2005	duck	CY034807	A/duck/New York/98616-4/2005(H7N2)
158	M1	H7N2	USA	NA	2005	guinea fowl	CY034831	A/Guinea fowl/New York/101276-1/2005(H7N2)
159	M1	H7N2	USA	NA	2006	chicken	CY036011	A/chicken/New York/19499-1/2006(H7N2)
160	M1	H7N3	USA	NA	2006	shorebird	EU030971	A/shorebird/Delaware/22/06(H7N3)
161	M1	H7N2	USA	NA	2004	chicken	EU743254	A/chicken/NJ/294508-12/2004(H7N2)
162	M1	H7N2	USA	NA	2005	chicken	CY031636	A/chicken/New York/22067-7/2005(H7N2)
163	M1	H7N2	USA	NA	2005	guinea fowl	CY031676	A/Guinea fowl/New York/23164-3-05/2005(H7N2)
164	M1	H7N2	USA	NA	2005	chicken	CY031748	A/chicken/New York/31621-9/2005(H7N2)
165	M1	H7N7	USA	NA	1989	red knot	CY005079	A/red knot/NJ/325/1989(H7N7)
166	M1	H7N7	USA	NA	1988	ruddy turnstone	CY005072	A/ruddy turnstone/DE/2378/1988(H7N7)
167	M1	H7N4	USA	NA	2001	blue winged teal	DQ021687	A/blue-winged teal/TX/11/01(H7N4)
168	M1	H7N2	USA	NA	2001	avian	AY241588	A/avian/NY/118353-1/2001(H7N2)
169	M1	H7N2	USA	NA	2002	chicken	AY241593	A/chicken/NJ/150383-7/02(H7N2)
170	M1	H7N2	USA	NA	2000	chicken	AY241606	A/chicken/NY/30749-3/2000(H7N2)
171	M1	H7N2	USA	NA	2001	chicken	AY241608	A/chicken/PA/143586/2001(H7N2)
172	M1	H7N2	USA	NA	2002	chicken	AY241614	A/chicken/VA/32/02(H7N2)
173	M1	H7N3	USA	NA	2001	Duck	AY241616	A/Duck/PA/143585/01(H7N3)
174	M1	H7N3	USA	NA	1999	pintail	DQ021732	A/pintail/MN/423/99(H7N3)
175	M1	H7N3	USA	NA	1994	chicken	AF073180	A/chicken/New Jersey/15086-3/1994(H7N3)NSA)
176	M1	H7N2	USA	NA	1994	chicken	AF073182	A/Chicken/New York/4447-7/94 (H7N2NSA)
177	M1	H7N2	USA	NA	1996	chicken	AF073189	A/Chicken/New York/3202-7/96 (H7N2NSB)
178	M1	H7N2	USA	NA	1996	guinea fowl	AF073191	A/Guinea Fowl/Pennsylvania/7777-1/96 (H7N2NSB)
179	M1	H7N2	USA	NA	1997	chicken	AF073193	A/Chicken/New York/6777-3/97 (H7N2NSB)
180	M1	H7N2	USA	NA	2005	chukar	CY022766	A/chukar/New York/11653-1/2005(H7N2)
181	M1	H7N2	USA	NA	2006	chicken	CY028581	A/chicken/New York/8391-2/2006(H7N2)
182	M1	H7N3	USA	NA	1971	turkey	DQ870897	A/turkey/Oregon/1971(H7N3)
183	M1	H7N3	USA	NA	2008	green winged teal	CY039543	A/green winged teal/California/AKS1370/2008(H7N3)
184	M1	H7N2	USA	NA	2001	chicken	EU742889	A/chicken/FL/90348-4/2001 (H7N2)
185	M1	H7N2	USA	NA	2005	quail	CY034391	A/quail/New York/89641/2005(H7N2)
186	M1	H7N3	USA	NA	2006	ruddy turnstone	CY037104	A/ruddy turnstone/Delaware Bay/283/2006(H7N3)
187	M1	H7N7	USA	NA	2007	mallard	CY033383	A/mallard/California/HKWF1971/2007(H7N7)
188	M1	H7N2	USA	NA	2005	chicken	CY031077	A/chicken/New York/23165-6/2005(H7N2)
189	M1	H7N2	USA	NA	2005	chukar	CY024843	A/chukar/New York/21211-7/2005(H7N2)
190	M1	H7N3	USA	NA	1998	mallard	DQ021701	A/mallard/MN/187/98(H7N3)

# <sup>1</sup>	Protein <sup>2</sup>	Subtype	country	Region <sup>3</sup>	Year	Animal	GenBank	Virus name
191	M1	H7N3	USA	NA	1998	mallard	DQ021702	A/mallard/MN/190/98(H7N3)
192	M1	H7N3	USA	NA	1998	mallard	DQ021728	A/mallard/MN/88/98(H7N3)
193	M1	H7N2	USA	NA	2005	chicken	CY022814	A/chicken/New York/16326-5/2005(H7N2)
194	M1	H7N2	USA	NA	2005	chicken	CY022830	A/chicken/New York/21211-2/2005(H7N2)
195	M1	H7N2	USA	NA	1994	chicken	AF073181	A/Chicken/New York/13142-5/94 (H7N2NSB)
196	M1	H7N2	USA	NA	1994	turkey	AF073183	A/Turkey/New York/4450-5/94 (H7N2NSB)
197	M1	H7N2	USA	NA	1995	chicken	AF073188	A/Chicken/Rhode Island/4328/95 (H7N2NSB)
198	M1	H7N2	USA	NA	1997	chicken	AF073192	A/Chicken/Pennsylvania/11767-1/97 (H7N2NSB)
199	M1	H7N2	USA	NA	1997	turkey	AF073194	A/Turkey/Pennsylvania/7975/97 (H7N2NSB)
200	M1	H7N1	USA	NA	1993	rhea	AF073199	A/rhea/North Carolina/39482/93 (H7N1NSA)
201	M1	H7N3	USA	NA	2000	laughing gull	DQ021689	A/laughing gull/NY/2455/00(H7N3)
202	M1	H7N2	USA	NA	2001	chicken	AY241592	A/chicken/NJ/118878-5/2001(H7N2)
203	M1	H7N2	USA	NA	2002	chicken	AY241594	A/chicken/NJ/151244-18/02(H7N2)
204	M1	H7N3	USA	NA	1999	chicken	AY241600	A/chicken/New York/12273-11/1999(H7N3)
205	M1	H7N2	USA	NA	1999	chicken	AY241605	A/chicken/NY/22409-4/99(H7N2)
206	M1	H7N2	USA	NA	1998	chicken	AY241607	A/chicken/NY/6031-19/1998(H7N2)
207	M1	H7N3	USA	NA	2001	Duck	AY241615	A/Duck/NJ/117228-7/01(H7N3)
208	M1	H7N2	USA	NA	2002	guineafowl	AY241617	A/guineafowl/MA/148081-11/02(H7N2)
209	M1	H7N3	USA	NA	1999	chicken	EU182302	A/Chicken/NY/14714-2/1999(H7N3)
210	M1	H7N2	USA	NA	1998	goose	EU743266	A/goose/NY/8600-3/1998(H7N2)
211	M1	H7N3	USA	NA	2001	black duck	CY020886	A/Black Duck/Ohio/415/2001(H7N3)
212	M1	H7N3	USA	NA	2006	laughing gull	EU030987	A/laughing gull/Delaware/42/06(H7N3)
213	M1	H7N3	USA	NA	1985	ruddy turnstone	CY004406	A/ruddy turnstone/New Jersey/65/1985(H7N3)
214	M1	H7N3	USA	NA	1980	turkey	CY014779	A/turkey/Minnesota/1200/1980(H7N3)
215	M1	H7N2	USA	NA	2006	guinea fowl	CY034239	A/Guinea fowl/New York/32084/2006(H7N2)
216	M1	H7N3	USA	NA	2007	northern shoveler	CY039583	A/northern shoveler/California/HKWF1026/2007(H7N3)
217	M1	H7N2	USA	NA	2005	chicken	CY034839	A/chicken/New York/10508/2005(H7N2)
218	M1	H7N2	USA	NA	2005	muscovy duck	CY034847	A/Muscovy duck/New York/11646-4/2005(H7N2)
219	M1	H7N2	USA	NA	2005	muscovy duck	CY034791	A/Muscovy duck/New York/87493-3/2005(H7N2)
220	M1	H7N2	USA	NA	2005	guinea fowl	CY028508	A/Guinea fowl/New York/143646-3/2005(H7N2)
221	M1	H7N2	USA	NA	2005	chicken	CY031117	A/chicken/New York/30732-6/2005(H7N2)
222	M1	H7N3	USA	NA	2006	laughing gull	CY037088	A/laughing gull/Delaware Bay/46/2006(H7N3)
1	NA	H7N1	Canada	NA	2000	turkey	AY261521	A/turkey/Ontario/HR2/2000(H7N1)
2	NA	H7N1	Canada	NA	2001	mallard	CY005094	A/mallard/Alberta/34/2001(H7N1)
3	NA	H7N1	China	E	1992	duck	AY207527	A/duck/Nanchang/1944/92(H7N1)
4	NA	H7N1	China	E	1992	duck	CY005495	A/duck/Nanchang/1904/1992(H7N1)
5	NA	H7N1	France	E	2001	mallard	AM157357	A/mallard/France/2526/2001(H7N1)
6	NA	H7N1	France	E	2001	mallard	AM157356	A/mallard/France/2525/2001(H7N1)
7	NA	H7N1	France	E	2001	mallard	AJ697874	A/mallard/France/2526/2001(H7N1)
8	NA	H7N1	France	E	2001	mallard	AJ697875	A/mallard/France/2525/2001(H7N1)
9	NA	H7N1	Germany	E	1934	chicken	CY015048	A/chicken/Rostock/45/1934(H7N1)
10	NA	H7N1	Germany	E	1934	chicken	X52226	A/chicken/Rostock/8/1934(H7N1)
11	NA	H7N1	Ireland	E	1973	parrot	K02252	A/parrot/Ulster/73(H7N1)
12	NA	H7N1	Italy	E	2000	duck	CY021559	A/duck/Italy/551/2000(H7N1)
13	NA	H7N1	Italy	E	2000	guinea fowl	CY022663	A/guinea fowl/Italy/155/2000(H7N1)
14	NA	H7N1	Italy	E	2001	turkey	CY021423	A/turkey/Italy/1351/2001(H7N1)
15	NA	H7N1	Italy	E	2000	pekin duck	CY024900	A/pekin duck/Italy/1848/2000(H7N1)
16	NA	H7N1	Italy	E	1999	turkey	CY025151	A/turkey/Italy/4301/1999(H7N1)
17	NA	H7N1	Italy	E	1999	turkey	CY025183	A/turkey/Italy/2732/1999(H7N1)
18	NA	H7N1	Italy	E	1999	chicken	AJ416627	A/Chicken/Italy/1067/99(H7N1)
19	NA	H7N1	Italy	E	1999	turkey	AJ416628	A/turkey/Italy/4580/1999(H7N1)
20	NA	H7N1	Italy	E	1999	turkey	CY024884	A/turkey/Italy/3185/1999(H7N1)
21	NA	H7N1	Italy	E	2000	turkey	CY021543	A/turkey/Italy/4426/2000(H7N1)
22	NA	H7N1	Italy	E	2000	quail	CY022671	A/quail/Italy/396/2000(H7N1)
23	NA	H7N1	Italy	E	2001	chicken	CY021551	A/chicken/Italy/322/2001(H7N1)
24	NA	H7N1	Italy	E	1999	turkey	CY005785	A/turkey/Italy/3620/1999(H7N1)
25	NA	H7N1	Italy	E	1999	quail	CY025119	A/quail/Italy/4992/1999(H7N1)
26	NA	H7N1	Italy	E	1999	turkey	CY025159	A/turkey/Italy/3489/1999(H7N1)
27	NA	H7N1	Italy	E	1999	turkey	CY025175	A/turkey/Italy/2715/1999(H7N1)
28	NA	H7N1	Italy	E	2000	ostrich	DQ991306	A/ostrich/Italy/2332/00(H7N1)
29	NA	H7N1	Italy	E	1999	turkey	CY021415	A/turkey/Italy/3675/1999(H7N1)
30	NA	H7N1	Italy	E	2000	chicken	CY024764	A/chicken/Italy/2335/2000(H7N1)
31	NA	H7N1	Italy	E	2000	turkey	CY024772	A/turkey/Italy/1084/2000(H7N1)
32	NA	H7N1	Italy	E	2000	turkey	CY021535	A/turkey/Italy/2984/2000(H7N1)
33	NA	H7N1	Italy	E	1999	chicken	DQ991330	A/chicken/Italy/5093/99(H7N1)
34	NA	H7N1	Italy	E	2000	ostrich	DQ991314	A/ostrich/Italy/2332/00(H7N1)
35	NA	H7N1	Italy	E	1999	turkey	CY025167	A/turkey/Italy/3560/1999(H7N1)
36	NA	H7N1	Italy	E	1999	turkey	CY024860	A/turkey/Italy/4708/1999(H7N1)
37	NA	H7N1	Italy	E	1999	turkey	CY005790	A/turkey/Italy/4169/1999(H7N1)
38	NA	H7N1	Italy	E	1999	turkey	CY024868	A/turkey/Italy/4482/1999(H7N1)
39	NA	H7N1	Italy	E	1999	turkey	CY025191	A/turkey/Italy/1265/1999(H7N1)

# <sup>1</sup>	Protein <sup>2</sup>	Subtype	country	Region <sup>3</sup>	Year	Animal	GenBank	Virus name
40	NA	H7N1	Italy	E	2000	chicken	CY015016	A/chicken/Italy/1285/2000(H7N1)
41	NA	H7N1	Italy	E	2000	ostrich	DQ991337	A/ostrich/Italy/984/00(H7N1)
42	NA	H7N1	Italy	E	2002	mallard	EU158122	A/mallard/Italy/250/02(H7N1)
43	NA	H7N1	Italy	E	1999	chicken	CY022679	A/chicken/Italy/1082/99(H7N1)
44	NA	H7N1	Japan	E	2003	duck	AB451873	A/duck/Hokkaido/143/2003(H7N1)
45	NA	H7N1	Mongolia	E	2002	duck	AB473545	A/duck/Mongolia/867/2002(H7N1)
46	NA	H7N1	Mongolia	E	2001	duck	AB302788	A/duck/Mongolia/47/2001(H7N1)
47	NA	H7N1	South Africa	E	1992	softbill	AY207538	A/softbill/South Africa/142/92(H7N1)
48	NA	H7N1	UK	E	1979	African starling	AJ416629	A/African starling/England/983/79(H7N1)
49	NA	H7N1	USA	NA	1993	rhea	EF607926	A/rhea/North Carolina/39482/1993(H7N1)
50	NA	H7N2	Australia	A	2007	duck	CY033163	A/duck/Tasmania/277/2007(H7N2)
51	NA	H7N2	China	E	2002	chicken	AY724264	A/chicken/Hebei/1/2002(H7N2)
52	NA	H7N2	Hong Kong	E	1978	duck	AB302790	A/duck/Hong Kong/301/1978(H7N2)
53	NA	H7N2	Hong Kong	E	1978	duck	CY005620	A/duck/Hong Kong/293/1978(H7N2)
54	NA	H7N2	Italy	E	2003	quail	CY021511	A/quail/Italy/4610/2003(H7N2)
55	NA	H7N2	Italy	E	2003	duck	CY031030	A/duck/Italy/4609/2003(H7N2)
56	NA	H7N2	UK	E	2007	chicken	EF675617	A/chicken/Wales/1306/2007(H7N2)
57	NA	H7N2	USA	NA	2005	duck	CY037041	A/duck/New York/88291-12/2005(H7N2)
58	NA	H7N2	USA	NA	2005	chicken	CY034840	A/chicken/New York/10508/2005(H7N2)
59	NA	H7N2	USA	NA	2005	duck	CY034808	A/duck/New York/98616-4/2005(H7N2)
60	NA	H7N2	USA	NA	2006	chicken	CY036012	A/chicken/New York/19499-1/2006(H7N2)
61	NA	H7N2	USA	NA	2005	chicken	CY035980	A/chicken/New York/122501-1/2005(H7N2)
62	NA	H7N2	USA	NA	2005	turkey	CY034896	A/turkey/New York/122501-2/2005(H7N2)
63	NA	H7N2	USA	NA	2005	guinea fowl	CY035956	A/Guinea fowl/New York/11646-3/2005(H7N2)
64	NA	H7N2	USA	NA	2005	muscovy duck	CY034848	A/Muscovy duck/New York/11646-4/2005(H7N2)
65	NA	H7N2	USA	NA	2005	chicken	CY034800	A/chicken/New York/88291-8/2005(H7N2)
66	NA	H7N2	USA	NA	2005	quail	CY033315	A/quail/New York/63806-13/2005(H7N2)
67	NA	H7N2	USA	NA	2005	duck	CY034816	A/duck/New York/98616-5/2005(H7N2)
68	NA	H7N2	USA	NA	2005	muscovy duck	CY034792	A/Muscovy duck/New York/87493-3/2005(H7N2)
69	NA	H7N2	USA	NA	2006	chicken	CY035988	A/chicken/New York/19495-4/2006(H7N2)
70	NA	H7N2	USA	NA	2005	chicken	CY037017	A/chicken/New York/63806-11/2005(H7N2)
71	NA	H7N2	USA	NA	2005	guinea fowl	CY037065	A/Guinea fowl/New York/98616-3/2005(H7N2)
72	NA	H7N2	USA	NA	2006	chicken	CY034904	A/chicken/New York/19495-2/2006(H7N2)
73	NA	H7N2	USA	NA	2005	guinea fowl	CY034832	A/Guinea fowl/New York/101276-1/2005(H7N2)
74	NA	H7N2	USA	NA	2005	chicken	CY035948	A/chicken/New York/11646-2/2005(H7N2)
75	NA	H7N2	USA	NA	2005	chicken	CY031773	A/chicken/New York/42217/2005(H7N2)
76	NA	H7N2	USA	NA	2005	chicken	CY031637	A/chicken/New York/22067-7/2005(H7N2)
77	NA	H7N2	USA	NA	2005	guinea fowl	CY031677	A/Guinea fowl/New York/23164-3-05/2005(H7N2)
78	NA	H7N2	USA	NA	2005	duck	CY034376	A/duck/New York/88291-13/2005(H7N2)
79	NA	H7N2	USA	NA	2005	chicken	CY034344	A/chicken/New York/63806-12/2005(H7N2)
80	NA	H7N2	USA	NA	2006	guinea fowl	CY034240	A/Guinea fowl/New York/32084/2006(H7N2)
81	NA	H7N2	USA	NA	2000	avian	AY254106	A/avian/NY/76247-3/00(H7N2)
82	NA	H7N2	USA	NA	2001	chicken	AY254116	A/chicken/NY/119256-7/2001(H7N2)
83	NA	H7N2	USA	NA	1998	chicken	AY254118	A/chicken/NY/1387-8/98(H7N2)
84	NA	H7N2	USA	NA	2000	chicken	AY254123	A/chicken/NY/30749-3/2000(H7N2)
85	NA	H7N2	USA	NA	1996	chicken	AY254125	A/Chicken/New York/3202-7/96 (H7N2)
86	NA	H7N2	USA	NA	1998	chicken	AY254127	A/chicken/NY/6031-19/1998(H7N2)
87	NA	H7N2	USA	NA	1997	chicken	AY254131	A/chicken/PA/9701524/97(H7N2)
88	NA	H7N2	USA	NA	1998	guineafowl	AY254138	A/guineafowl/NJ/13246-9/98(H7N2)
89	NA	H7N2	USA	NA	1998	turkey	AY254143	A/turkey/NJ/9778-8/98(H7N2)
90	NA	H7N2	USA	NA	2002	turkey	AY254146	A/turkey/VA/55/2002(H7N2)
91	NA	H7N2	USA	NA	2002	turkey	AY254148	A/turkey/VA/67/02(H7N2)
92	NA	H7N2	USA	NA	2005	chicken	CY022815	A/chicken/New York/16326-5/2005(H7N2)
93	NA	H7N2	USA	NA	2006	guinea fowl	CY028574	A/Guinea fowl/New York/8391-1/2006(H7N2)
94	NA	H7N2	USA	NA	2006	chicken	CY028582	A/chicken/New York/8391-2/2006(H7N2)
95	NA	H7N2	USA	NA	2003	chicken	EU742997	A/chicken/CT/260413-2/2003(H7N2)
96	NA	H7N2	USA	NA	2005	guinea fowl	CY031725	A/Guinea fowl/New York/23165-12/2005(H7N2)
97	NA	H7N2	USA	NA	2005	chicken	CY031214	A/chicken/New York/10196-6/2005(H7N2)
98	NA	H7N2	USA	NA	2005	chicken	CY031078	A/chicken/New York/23165-6/2005(H7N2)
99	NA	H7N2	USA	NA	1997	chicken	EU742963	A/chicken/PA/19241/1997(H7N2)
100	NA	H7N2	USA	NA	2001	chicken	EU742890	A/chicken/FL/90348-4/2001(H7N2)
101	NA	H7N2	USA	NA	2005	chicken	CY034368	A/chicken/New York/88291-11/2005(H7N2)
102	NA	H7N2	USA	NA	2005	guinea fowl	CY028509	A/Guinea fowl/New York/143646-3/2005(H7N2)
103	NA	H7N2	USA	NA	2005	chukar	CY031070	A/chukar/New York/23164-13/2005(H7N2)
104	NA	H7N2	USA	NA	2005	chicken	CY031118	A/chicken/New York/30732-6/2005(H7N2)
105	NA	H7N2	USA	NA	2005	chicken	CY034304	A/chicken/New York/23165-10/2005(H7N2)
106	NA	H7N2	USA	NA	1998	goose	EU743267	A/goose/NY/8600-3/1998(H7N2)
107	NA	H7N2	USA	NA	2005	guinea fowl	CY031653	A/Guinea fowl/New York/22071/2005(H7N2)
108	NA	H7N2	USA	NA	2005	muscovy duck	CY031709	A/Muscovy duck/New York/23164-10/2005(H7N2)
109	NA	H7N2	USA	NA	2005	chicken	CY034192	A/chicken/New York/143646-2/2005(H7N2)
110	NA	H7N2	USA	NA	2004	chicken	AY831673	A/chicken/MD/MINH MA/2004(H7N2)
111	NA	H7N2	USA	NA	2001	avian	AY254105	A/avian/NY/118353-1/2001(H7N2)

# <sup>1</sup>	Protein <sup>2</sup>	Subtype	country	Region <sup>3</sup>	Year	Animal	GenBank	Virus name
112	NA	H7N2	USA	NA	2001	chicken	AY254109	A/chicken/NJ/118878-5/2001(H7N2)
113	NA	H7N2	USA	NA	2002	chicken	AY254110	A/chicken/NJ/150383-7/02(H7N2)
114	NA	H7N2	USA	NA	2001	chicken	AY254115	A/chicken/NY/119055-7/01(H7N2)
115	NA	H7N2	USA	NA	2001	chicken	AY254130	A/chicken/PA/143586/2001(H7N2)
116	NA	H7N2	USA	NA	1997	chicken	AY254132	A/chicken/PA/9701527/97(H7N2)
117	NA	H7N2	USA	NA	2002	guineafowl	AY254137	A/guineafowl/MA/148081/02(H7N2)
118	NA	H7N2	USA	NA	1998	quail	AY254140	A/quail/NY/13989/98(H7N2)
119	NA	H7N2	USA	NA	2005	chukar	CY024844	A/chukar/New York/21211-7/2005(H7N2)
120	NA	H7N2	USA	NA	2005	chicken	CY034360	A/chicken/New York/88291-6/2005(H7N2)
121	NA	H7N2	USA	NA	2006	chicken	CY028542	A/chicken/New York/3181-5/2006(H7N2)
122	NA	H7N2	USA	NA	2000	avian	AY254107	A/avian/NY/81746-5/00(H7N2)
123	NA	H7N2	USA	NA	2001	chicken	AY254108	A/Chicken/NJ/118555-2/01(H7N2)
124	NA	H7N2	USA	NA	1999	chicken	AY254119	A/chicken/NY/14858-12/1999(H7N2)
125	NA	H7N2	USA	NA	1997	chicken	AY254128	A/Chicken/New York/6777-3/97(H7N2)
126	NA	H7N2	USA	NA	1998	chicken	AY254129	A/Chicken/Pennsylvania/13552-1/98 (H7N2)
127	NA	H7N2	USA	NA	2002	turkey	AY254142	A/turkey/NC/11165/02(H7N2)
128	NA	H7N2	USA	NA	1997	turkey	AY254145	A/turkey/PA/7975/1997(H7N2)
129	NA	H7N2	USA	NA	2005	chicken	CY031701	A/chicken/New York/23164-9/2005(H7N2)
130	NA	H7N2	USA	NA	2005	chicken	CY029835	A/chicken/New York/16326-4/2005(H7N2)
131	NA	H7N2	USA	NA	1997	chicken	EU742928	A/chicken/PA/7777-1/1997(H7N2)
132	NA	H7N2	USA	NA	1997	chicken	EU742943	A/chicken/PA/11767/1997(H7N2)
133	NA	H7N2	USA	NA	2001	guinea fowl	EU742914	A/guinea fowl/NJ/119063-8/2001(H7N2)
134	NA	H7N2	USA	NA	2005	chicken	CY031749	A/chicken/New York/31621-9/2005(H7N2)
135	NA	H7N2	USA	NA	2005	guinea fowl	CY031765	A/Guinea fowl/New York/37982-3/2005(H7N2)
136	NA	H7N2	USA	NA	2005	muscovy duck	CY033227	A/Muscovy duck/New York/23165-13/2005(H7N2)
137	NA	H7N2	USA	NA	2005	chicken	CY022831	A/chicken/New York/21211-2/2005(H7N2)
138	NA	H7N2	USA	NA	2005	chicken	CY022823	A/chicken/New York/16330/2005(H7N2)
139	NA	H7N2	USA	NA	2005	chicken	CY034248	A/chicken/New York/19499/2005(H7N2)
140	NA	H7N2	USA	NA	2006	guinea fowl	CY028598	A/Guinea fowl/New York/19501-4/2006(H7N2)
141	NA	H7N2	USA	NA	2006	chicken	CY028630	A/chicken/New York/29047-4/2006(H7N2)
142	NA	H7N2	USA	NA	2005	quail	CY034392	A/quail/New York/89641/2005(H7N2)
143	NA	H7N2	USA	NA	2005	chicken	CY033299	A/chicken/New York/37982-4/2005(H7N2)
144	NA	H7N2	USA	NA	2005	chicken	CY033307	A/chicken/New York/63806-8/2005(H7N2)
145	NA	H7N2	USA	NA	2005	chicken	CY033259	A/chicken/New York/30732-11/2005(H7N2)
146	NA	H7N2	USA	NA	2005	chicken	CY033203	A/chicken/New York/22067-8/2005(H7N2)
147	NA	H7N2	USA	NA	2004	chicken	EU743255	A/chicken/NJ/294508-12/2004(H7N2)
148	NA	H7N2	USA	NA	2002	chicken	EU742969	A/chicken/PA/149092-1/2002(H7N2)
149	NA	H7N2	USA	NA	2005	chukar	CY022767	A/chukar/New York/11653-1/2005(H7N2)
150	NA	H7N2	USA	NA	2004	chicken	AY831671	A/chicken/DE/HOBO/2004(H7N2)
151	NA	H7N2	USA	NA	2004	chicken	AY831672	A/chicken/DE/VIV A/2004(H7N2)
152	NA	H7N2	USA	NA	2002	chicken	AY254111	A/chicken/NJ/151244-18/02(H7N2)
153	NA	H7N2	USA	NA	1999	chicken	AY254112	A/chicken/NJ/16224-6/1999(H7N2)
154	NA	H7N2	USA	NA	2000	chicken	AY254113	A/Chicken/New Jersey/30739-6/00(H7N2)
155	NA	H7N2	USA	NA	1998	chicken	AY254114	A/chicken/NJ/9777-7/98(H7N2)
156	NA	H7N2	USA	NA	1999	chicken	AY254121	A/chicken/NY/21586-8/1999(H7N2)
157	NA	H7N2	USA	NA	1999	chicken	AY254122	A/chicken/NY/22409-4/99(H7N2)
158	NA	H7N2	USA	NA	1997	chicken	AY254133	A/chicken/PA/9701530/97(H7N2)
159	NA	H7N2	USA	NA	1998	chicken	AY254134	A/chicken/PA/9800896/98(H7N2)
160	NA	H7N2	USA	NA	1998	chicken	AY254135	A/chicken/PA/9801289/98(H7N2)
161	NA	H7N2	USA	NA	2002	chicken	AY254136	A/chicken/VA/32/02(H7N2)
162	NA	H7N2	USA	NA	1995	chicken	EU742952	A/chicken/NY/13833-7/1995(H7N2)
163	NA	H7N2	USA	NA	1995	guinea fowl	CY014838	A/guinea fowl/New York/13820-3/1995(H7N2)
164	NA	H7N2	USA	NA	1994	chicken	AY254117	A/Chicken/New York/13142-5/94 (H7N2)
165	NA	H7N2	USA	NA	1995	chicken	AY254124	A/Chicken/New York/3112-1/95 (H7N2)
166	NA	H7N2	USA	NA	1994	chicken	AY254126	A/Chicken/New York/4447-7/94 (H7N2)
167	NA	H7N2	USA	NA	1997	guineafowl	AY254139	A/guineafowl/New York/13820-3/97(H7N2)
168	NA	H7N2	USA	NA	1995	chicken	EU742938	A/chicken/RI/4328-1/1995(H7N2)
169	NA	H7N2	USA	NA	1997	chicken	EU742933	A/chicken/NY/8030-2/1997(H7N2)
170	NA	H7N2	USA	NA	1995	chicken	AY254120	A/Chicken/New York/19542-5/95 (H7N2)
171	NA	H7N3	Australia	A	1994	chicken	CY022687	A/chicken/Queensland/1994(H7N3)
172	NA	H7N3	Australia	A	1992	chicken	CY025079	A/chicken/Victoria/224/1992(H7N3)
173	NA	H7N3	Bolivia	SA	2001	cinnamon teal	DQ525412	A/cinnamon teal/Bolivia/4537/2001(H7N3)
174	NA	H7N3	Canada	NA	2007	Canada goose	EU500846	A/Canada goose/BC/3752/2007(H7N3)
175	NA	H7N3	Canada	NA	2007	American black duck	EU500854	A/American black duck/NB/2538/2007(H7N3)
176	NA	H7N3	Canada	NA	2007	chicken	EU500862	A/chicken/SK/HR-00011/2007(H7N3)
177	NA	H7N3	Canada	NA	2004	chicken	AY646080	A/chicken/British Columbia/GSC_human_B/04(H7N3)
178	NA	H7N3	Canada	NA	2004	chicken	AY611526	A/chicken/British Columbia/04(H7N3)
179	NA	H7N3	Canada	NA	2001	mallard	DQ017503	A/mallard/Alberta/24/01(H7N3)
180	NA	H7N3	Canada	NA	1985	green winged teal	CY005052	A/green-winged teal/ALB/228/1985(H7N3)
181	NA	H7N3	Canada	NA	1985	mallard duck	CY005059	A/mallard duck/Alberta/435/1985(H7N3)

# <sup>1</sup>	Protein <sup>2</sup>	Subtype	country	Region <sup>3</sup>	Year	Animal	GenBank	Virus name
182	NA	H7N3	Canada	NA	2004	chicken	AY650272	A/GSC_chicken/British Columbia/04(H7N3)
183	NA	H7N3	Canada	NA	1977	widgeon	AY207505	A/widgeon/Alberta/284/1977(H7N3)
184	NA	H7N3	Canada	NA	2001	mallard	DQ017515	A/mallard/Alberta/24/01(H7N3)
185	NA	H7N3	Chile	SA	2002	chicken	AY303637	A/chicken/Chile/4322/02(H7N3)
186	NA	H7N3	Chile	SA	2002	chicken	AY303642	A/chicken/Chile/4347/02(H7N3)
187	NA	H7N3	Chile	SA	2002	turkey	AY303643	A/turkey/Chile/4418/02(H7N3)
188	NA	H7N3	Chile	SA	2002	chicken	AY303636	A/chicken/Chile/176822/02(H7N3)
189	NA	H7N3	Chile	SA	2002	chicken	AY303638	A/chicken/Chile/4957/02(H7N3)
190	NA	H7N3	Chile	SA	2002	chicken	AY303639	A/chicken/Chile/4968/02(H7N3)
191	NA	H7N3	Chile	SA	2002	chicken	AY303641	A/chicken/Chile/4345/02(H7N3)
192	NA	H7N3	Germany	E	1980	gull	AY207515	A/gull/Heuwiese/899-6/80(H7N3)
193	NA	H7N3	Italy	E	2003	chicken	CY034752	A/chicken/Italy/682/2003(H7N3)
194	NA	H7N3	Italy	E	2002	turkey	AY586418	A/turkey/Italy/220158/2002(H7N3)
195	NA	H7N3	Italy	E	2002	turkey	AY586417	A/turkey/Italy/214845/2002(H7N3)
196	NA	H7N3	Italy	E	2004	quail	CY020615	A/quail/Italy/3347/2004(H7N3)
197	NA	H7N3	Italy	E	2002	turkey	CY024740	A/turkey/Italy/8000/2002(H7N3)
198	NA	H7N3	Italy	E	2002	turkey	CY028662	A/turkey/Italy/9742/2002(H7N3)
199	NA	H7N3	Italy	E	2002	turkey	AJ627490	A/turkey/Italy/214845/2002(H7N3)
200	NA	H7N3	Italy	E	2002	turkey	AJ627494	A/turkey/Italy/220158/2002(H7N3)
201	NA	H7N3	Italy	E	2004	turkey	CY020583	A/turkey/Italy/4479/2004(H7N3)
202	NA	H7N3	Italy	E	2003	turkey	CY021359	A/turkey/Italy/3620/2003(H7N3)
203	NA	H7N3	Italy	E	2003	turkey	CY020591	A/turkey/Italy/251/2003(H7N3)
204	NA	H7N3	Italy	E	2003	turkey	CY022615	A/turkey/Italy/2043/2003(H7N3)
205	NA	H7N3	Italy	E	2002	turkey	CY031613	A/turkey/Italy/9739/2002(H7N3)
206	NA	H7N3	Italy	E	2003	turkey	CY021495	A/turkey/Italy/2987/2003(H7N3)
207	NA	H7N3	Italy	E	2003	turkey	CY021487	A/turkey/Italy/4608/2003(H7N3)
208	NA	H7N3	Italy	E	2004	turkey	CY020599	A/turkey/Italy/3807/2004(H7N3)
209	NA	H7N3	Italy	E	2001	mallard	EU158131	A/mallard/Italy/199/01(H7N3)
210	NA	H7N3	Italy	E	2001	mallard	AY586415	A/mallard/Italy/33/01(H7N3)
211	NA	H7N3	Japan	E	2006	duck	AB472025	A/duck/Shimane/83/2006(H7N3)
212	NA	H7N3	Netherlands	E	2000	mallard	CY005846	A/mallard/Netherlands/12/2000(H7N3)
213	NA	H7N3	Pakistan	E	2002	chicken	CY035825	A/chicken/Rawalpindi/NARC68/2002(H7N3)
214	NA	H7N3	Pakistan	E	1998	chicken	CY037756	A/chicken/Pakistan/c1998/1998(H7N3)
215	NA	H7N3	Pakistan	E	1995	chicken	CY035833	A/chicken/Pakistan/34668/1995(H7N3)
216	NA	H7N3	Pakistan	E	1995	chicken	AY207504	A/chicken/Pakistan/34669/1995(H7N3)
217	NA	H7N3	USA	NA	1985	ruddy turnstone	AY586421	A/ruddy turnstone/New Jersey/65/1985(H7N3)
218	NA	H7N3	USA	NA	2006	shorebird	CY041324	A/shorebird/Delaware Bay/332/2006(H7N3)
219	NA	H7N3	USA	NA	2006	laughing gull	CY037081	A/laughing gull/Delaware Bay/6/2006(H7N3)
220	NA	H7N3	USA	NA	2007	northern shoveler	CY039582	A/northern shoveler/California/HKWF1026/2007(H7N3)
221	NA	H7N3	USA	NA	2006	shorebird	CY036769	A/shorebird/Delaware Bay/560/2006(H7N3)
222	NA	H7N3	USA	NA	2008	northern shoveler	CY039598	A/northern shoveler/California/HKWF2031/2008(H7N3)
223	NA	H7N3	USA	NA	1980	turkey	AY586420	A/turkey/Minnesota/916/1980(H7N3)
224	NA	H7N3	USA	NA	2006	ruddy turnstone	CY041316	A/ruddy turnstone/Delaware Bay/279/2006(H7N3)
225	NA	H7N3	USA	NA	2006	laughing gull	CY037089	A/laughing gull/Delaware Bay/46/2006(H7N3)
226	NA	H7N3	USA	NA	1998	Mallard	CY016190	A/Mallard/Ohio/322/1998(H7N3)
227	NA	H7N3	USA	NA	2008	green winged teal	CY039542	A/green winged teal/California/AKS1370/2008(H7N3)
228	NA	H7N3	USA	NA	2007	ruddy turnstone	CY036777	A/ruddy turnstone/Delaware Bay/108/2007(H7N3)
229	NA	H7N3	USA	NA	1980	turkey	CY014780	A/turkey/Minnesota/1200/1980(H7N3)
230	NA	H7N3	USA	NA	2006	shorebird	EU030970	A/shorebird/Delaware/22/06(H7N3)
231	NA	H7N3	USA	NA	2004	blue winged teal	CY018903	A/blue-winged teal/Ohio/658/2004(H7N3)
232	NA	H7N3	USA	NA	1971	turkey	DQ870896	A/turkey/Oregon/1971(H7N3)
233	NA	H7N3	USA	NA	1979	turkey	AB294218	A/turkey/Tennessee/1/1979(H7N3)
234	NA	H7N3	USA	NA	1995	turkey	EU980469	A/turkey/Utah/24721-10/1995(H7N3)
235	NA	H7N3	USA	NA	2001	black duck	CY020887	A/Black Duck/Ohio/415/2001(H7N3)
236	NA	H7N3	USA	NA	2006	laughing gull	EU030986	A/laughing gull/Delaware/42/06(H7N3)
237	NA	H7N3	USA	NA	2001	duck	EU743009	A/duck/PA/143585/2001(H7N3)
238	NA	H7N3	USA	NA	1985	ruddy turnstone	CY004407	A/ruddy turnstone/New Jersey/65/1985(H7N3)
239	NA	H7N3	USA	NA	1983	gadwell duck	AY207507	A/gadwell duck/Maryland/3495/83(H7N3)
240	NA	H7N3	USA	NA	1980	turkey	AY207514	A/turkey/Minnesota/916/1980(H7N3)
241	NA	H7N3	USA	NA	2001	blue winged teal	AY300951	A/blue-winged teal/TX/2/01(H7N3)
242	NA	H7N3	USA	NA	1971	turkey	DQ870890	A/turkey/Oregon/1971(H7N3)
243	NA	H7N3	USA	NA	1996	ruddy turnstone	AY207519	A/ruddy turnstone/Delaware/135/96(H7N3)
244	NA	H7N3	USA	NA	1988	shorebird	AY207520	A/shorebird/Delaware/2696/88(H7N3)
245	NA	H7N3	USA	NA	1999	chicken	EU182301	A/Chicken/NY/14714-2/1999(H7N3)
246	NA	H7N3	USA	NA	1993	duck	AB450438	A/duck/Alaska/3111/1993(H7N3)
247	NA	H7N3	USA	NA	2005	mallard	CY021639	A/mallard/Delaware/418/2005(H7N3)
248	NA	H7N3	USA	NA	1980	pheasant	CY005890	A/pheasant/Minnesota/917/1980(H7N3)
249	NA	H7N3	USA	NA	1995	emu	AY207511	A/emu/Texas/25414-1/95(H7N3)
250	NA	H7N4	Australia	A	1997	chicken	CY022695	A/chicken/New South Wales/2/1997(H7N4)



# <sup>1</sup>	Protein <sup>2</sup>	Subtype	country	Region <sup>3</sup>	Year	Animal	GenBank	Virus name
251	NA	H7N4	Australia	A	1997	chicken	CY022703	A/chicken/New South Wales/327/1997(H7N4)
252	NA	H7N4	Australia	A	1997	emu	CY022711	A/emu/New South Wales/775/1997(H7N4)
253	NA	H7N5	Canada	NA	1977	mallard duck	CY005010	A/mallard duck/ALB/224/1977(H7N5)
254	NA	H7N6	Australia	A	2007	duck		A/duck/Victoria/512/2007(H7N6)
255	NA	H7N6	Mongolia	E	2007	duck	AB450449	A/duck/Mongolia/720/2007(H7N6)
256	NA	H7N7	Australia	A	1976	duck		A/duck/Victoria/76(H7N7)
257	NA	H7N7	Australia	A	1985	chicken	CY025071	A/chicken/Victoria/1/85(H7N7)
258	NA	H7N7	Australia	A	1985	starling	CY024780	A/starling/Victoria/85(H7N7)
259	NA	H7N7	Australia	A	1976	chicken	CY024788	A/chicken/Victoria/1976(H7N7)
260	NA	H7N7	Canada	NA	2007	mallard	AM933238	A/mallard/Alberta/8734/07(H7N7)
261	NA	H7N7	Germany	E	2006	Anser anser	AM933236	A/Anser anser/Germany/R752/06(H7N7)
262	NA	H7N7	Germany	E	2005	Anas crecca	AM933237	A/Anas crecca/Germany/Wv177/05(H7N7)
263	NA	H7N7	Germany	E	2003	chicken	AJ620349	A/chicken/Germany/R28/03(H7N7)
264	NA	H7N7	Japan	E	2007	duck	AB472031	A/duck/Shiga/B149/2007(H7N7)
265	NA	H7N7	Japan	E	2007	duck	AB472059	A/duck/Tsukuba/664/2007(H7N7)
266	NA	H7N7	Japan	E	2008	duck	AB472060	A/duck/Tsukuba/922/2008(H7N7)
267	NA	H7N7	Japan	E	2008	duck	AB472061	A/duck/Chiba/13/2008(H7N7)
268	NA	H7N7	Japan	E	2006	duck	AB472030	A/duck/Shimane/18/2006(H7N7)
269	NA	H7N7	Japan	E	2007	duck	AB472063	A/duck/Tsukuba/30/2007(H7N7)
270	NA	H7N7	Netherlands	E	2003	chicken	AY340077	A/chicken/Netherlands/1/03(H7N7)
271	NA	H7N7	Netherlands	E	2003	chicken	EF015553	A/chicken/Netherlands/03010132/03(H7N7)
272	NA	H7N7	New Zealand	NZ	2005	duck		A/duck/New Zealand/2005(H7N7)
273	NA	H7N7	Norway	E	2006	whooper swan	FM179762	A/whooper swan/Norway/10_438/2006(H7N7)
274	NA	H7N7	Taiwan	E	1999	duck	AB450450	A/duck/Taiwan/4201/99(H7N7)
275	NA	H7N7	UK	E	1934	fowl	M38330	A/fowl/Weybridge(H7N7)
276	NA	H7N7	USA	NA	1989	red knot	CY005080	A/red knot/NJ/325/1989(H7N7)
277	NA	H7N7	USA	NA	1988	ruddy turnstone	CY005073	A/ruddy turnstone/DE/2378/1988(H7N7)
278	NA	H7N7	USA	NA	1927	fowl	CY014993	A/fowl/Dobson/1927(H7N7)
279	NA	H7N8	Canada	NA	1979	pintail duck	CY005040	A/pintail duck/Alberta/121/1979(H7N8)
280	NA	H7N8	Japan	E	1999	swan	AB303079	A/swan/Shimane/42/1999(H7N8)
281	NA	H7N8	Netherlands	E	2006	mallard	CY041412	A/mallard/Netherlands/33/2006(H7N8)
282	NA	H7N8	USA	NA	1987	mallard	CY021623	A/mallard/Ohio/421/1987(H7N8)
283	NA	H7N9	Mongolia	E	2008	duck	AB481213	A/duck/Mongolia/119/2008(H7N9)
284	NA	H7N9	USA	NA	1988	turkey	CY014788	A/turkey/Minnesota/1/1988(H7N9)
285	NA	H7N9	USA	NA	2006	blue winged teal	CY024820	A/blue-winged teal/Ohio/566/2006(H7N9)
1	NP	H7N7	Australia	A	1985	starling	CY024781	A/starling/Victoria/85(H7N7)
2	NP	H7N7	Australia	A	1976	duck		A/duck/Victoria/76(H7N7)
3	NP	H7N6	Australia	A	2007	duck		A/duck/Victoria/512/2007(H7N6)
4	NP	H7N3	Australia	A	1994	chicken	CY022688	A/chicken/Queensland/1994(H7N3)
5	NP	H7N4	Australia	A	1997	chicken	CY022696	A/chicken/New South Wales/2/1997(H7N4)
6	NP	H7N4	Australia	A	1997	chicken	CY022704	A/chicken/New South Wales/327/1997(H7N4)
7	NP	H7N7	Australia	A	1976	chicken	CY024789	A/chicken/Victoria/1976(H7N7)
8	NP	H7N7	Australia	A	1985	chicken	CY025072	A/chicken/Victoria/1/1985(H7N7)
9	NP	H7N3	Australia	A	1992	chicken	CY025080	A/chicken/Victoria/224/1992(H7N3)
10	NP	H7N4	Australia	A	1997	emu	CY022712	A/emu/New South Wales/775/1997(H7N4)
11	NP	H7N2	Australia	A	2007	duck	CY033164	A/duck/Tasmania/277/2007(H7N2)
12	NP	H7N3	Bolivia	SA	2001	cinnamon teal	DQ525414	A/cinnamon teal/Bolivia/4537/2001(H7N3)
13	NP	H7N3	Canada	NA	1977	blue winged teal	CY005018	A/blue-winged teal/ALB/295/1977(H7N3)
14	NP	H7N9	Canada	NA	1999	mallard	CY005092	A/mallard/ALB/114/1999(H7N9)
15	NP	H7N8	Canada	NA	1979	pintail duck	CY005041	A/pintail duck/Alberta/121/1979(H7N8)
16	NP	H7N3	Canada	NA	2004	chicken	AY611527	A/chicken/British Columbia/04(H7N3)
17	NP	H7N3	Canada	NA	2001	mallard	DQ017505	A/mallard/Alberta/24/01(H7N3)
18	NP	H7N3	Canada	NA	2001	mallard	CY004329	A/mallard/Alberta/27/2001(H7N3)
19	NP	H7N3	Canada	NA	2004	chicken	AY650273	A/GSC_chicken/British Columbia/04(H7N3)
20	NP	H7N3	Canada	NA	1985	green winged teal	CY005053	A/green-winged teal/ALB/228/1985(H7N3)
21	NP	H7N3	Canada	NA	2007	American black duck	EU500853	A/American black duck/NB/2538/2007(H7N3)
22	NP	H7N3	Canada	NA	2007	Canada goose	EU500845	A/Canada goose/BC/3752/2007(H7N3)
23	NP	H7N1	Canada	NA	2001	mallard	CY005095	A/mallard/Alberta/34/2001(H7N1)
24	NP	H7N5	Canada	NA	1977	mallard duck	CY005011	A/mallard duck/ALB/224/1977(H7N5)
25	NP	H7N3	Canada	NA	1985	mallard duck	CY005060	A/mallard duck/Alberta/435/1985(H7N3)
26	NP	H7N3	Canada	NA	1977	mallard duck	CY005030	A/mallard duck/ALB/279/1977(H7N3)
27	NP	H7N3	Canada	NA	1976	mallard duck	CY004326	A/mallard duck/ALB/48/1976(H7N3)
28	NP	H7N3	Canada	NA	2007	chicken	EU500861	A/chicken/SK/HR-00011/2007(H7N3)
29	NP	H7N3	Chile	SA	2002	chicken	AY303659	A/chicken/Chile/4957/02(H7N3)
30	NP	H7N3	Chile	SA	2002	chicken	AY303658	A/chicken/Chile/176822/02(H7N3)
31	NP	H7N3	Chile	SA	2002	chicken	CY015029	A/chicken/Chile/184240-4322/2002(H7N3)
32	NP	H7N2	China	E	2002	chicken	AY724258	A/chicken/Hebei/1/2002(H7N2)
33	NP	H7N7	China	E	2003	duck	EU158134	A/duck/Jiangxi/1786/03(H7N7)
34	NP	H7N7	China	E	2003	duck	EU158133	A/duck/Jiangxi/1760/03(H7N7)
35	NP	H7N1	China	E	1992	duck	CY005496	A/duck/Nanchang/1904/1992(H7N1)

# <sup>1</sup>	Protein <sup>2</sup>	Subtype	country	Region <sup>3</sup>	Year	Animal	GenBank	Virus name
36	NP	H7N7	China	E	2003	duck	EU158140	A/duck/Jiangxi/1742/03(H7N7)
37	NP	H7N7	Germany	E	2003	chicken	AJ620352	A/chicken/Germany/R28/03(H7N7)
38	NP	H7N1	Germany	E	1934	chicken	M24557	A/chicken/Rostock/8/1934(H7N1)
39	NP	H7N1	Germany	E	1934	chicken	M24556	A/chicken/Rostock/8/1934(H7N1)
40	NP	H7N1	Germany	E	1934	chicken	M24660	A/chicken/Rostock/8/1934(H7N1)
41	NP	H7N1	Germany	E	1934	chicken	M22576	A/chicken/Rostock/8/1934(H7N1)
42	NP	H7N1	Germany	E	1934	chicken	M21937	A/chicken/Rostock/8/1934(H7N1)
43	NP	H7N7	Germany	E	1979	goose	CY015042	A/goose/Leipzig/187-7/1979(H7N7)
44	NP	H7N1	Germany	E	1934	chicken	CY015049	A/chicken/Rostock/45/1934(H7N1)
45	NP	H7N2	Hong Kong	E	1978	duck	CY005621	A/duck/Hong Kong/293/1978(H7N2)
46	NP	H7N7	Iceland	E	1980	teal	M63784	A/teal/Iceland/29/1980(H7N7)
47	NP	H7N1	Ireland	E	1973	parrot	M22344	A/parrot/Ulster/73(H7N1)
48	NP	H7N1	Italy	E	1999	chicken	CY022680	A/chicken/Italy/1082/99(H7N1)
49	NP	H7N3	Italy	E	2003	turkey	CY022616	A/turkey/Italy/2043/2003(H7N3)
50	NP	H7N1	Italy	E	2000	duck	CY021560	A/duck/Italy/551/2000(H7N1)
51	NP	H7N2	Italy	E	2003	quail	CY021512	A/quail/Italy/4610/2003(H7N2)
52	NP	H7N1	Italy	E	2000	turkey	CY021544	A/turkey/Italy/4426/2000(H7N1)
53	NP	H7N1	Italy	E	2001	chicken	CY021552	A/chicken/Italy/322/2001(H7N1)
54	NP	H7N3	Italy	E	2003	turkey	CY021360	A/turkey/Italy/3620/2003(H7N3)
55	NP	H7N1	Italy	E	1999	turkey	CY021408	A/turkey/Italy/4580/1999(H7N1)
56	NP	H7N7	Italy	E	1902	chicken	CY015055	A/chicken/Brescia/1902(H7N7)
57	NP	H7N1	Italy	E	2000	ostrich	DQ991305	A/ostrich/Italy/2332/00(H7N1)
58	NP	H7N3	Italy	E	2003	chicken	CY034753	A/chicken/Italy/682/2003(H7N3)
59	NP	H7N1	Italy	E	1999	turkey	CY005791	A/turkey/Italy/4169/1999(H7N1)
60	NP	H7N1	Italy	E	1999	turkey	CY021416	A/turkey/Italy/3675/1999(H7N1)
61	NP	H7N3	Italy	E	2004	turkey	CY020584	A/turkey/Italy/4479/2004(H7N3)
62	NP	H7N3	Italy	E	2002	turkey	AJ627486	A/turkey/Italy/214845/2002(H7N3)
63	NP	H7N2	Italy	E	2003	duck	CY031031	A/duck/Italy/4609/2003(H7N2)
64	NP	H7N1	Italy	E	1999	turkey	AJ627488	A/turkey/Italy/4603/1999(H7N1)
65	NP	H7N1	Italy	E	2000	guinea fowl	CY022664	A/guinea fowl/Italy/155/2000(H7N1)
66	NP	H7N1	Italy	E	2000	turkey	CY021536	A/turkey/Italy/2984/2000(H7N1)
67	NP	H7N3	Italy	E	2003	turkey	CY021496	A/turkey/Italy/2987/2003(H7N3)
68	NP	H7N3	Italy	E	2003	turkey	EU158139	A/turkey/Italy/68819/03(H7N3)
69	NP	H7N3	Italy	E	2003	turkey	CY021368	A/turkey/Italy/1010/2003(H7N3)
70	NP	H7N3	Italy	E	2002	turkey	CY020608	A/turkey/Italy/8912/2002(H7N3)
71	NP	H7N1	Italy	E	2000	chicken	CY024765	A/chicken/Italy/2335/2000(H7N1)
72	NP	H7N1	Italy	E	1999	chicken	DQ991321	A/chicken/Italy/5093/99(H7N1)
73	NP	H7N1	Italy	E	1999	turkey	CY025184	A/turkey/Italy/2732/1999(H7N1)
74	NP	H7N1	Italy	E	1999	turkey	CY025192	A/turkey/Italy/1265/1999(H7N1)
75	NP	H7N1	Italy	E	1999	turkey	CY025168	A/turkey/Italy/3560/1999(H7N1)
76	NP	H7N3	Italy	E	2002	turkey	CY028663	A/turkey/Italy/9742/2002(H7N3)
77	NP	H7N1	Italy	E	1999	turkey	CY024861	A/turkey/Italy/4708/1999(H7N1)
78	NP	H7N1	Italy	E	1999	turkey	CY024877	A/turkey/Italy/4295/1999(H7N1)
79	NP	H7N1	Italy	E	1999	chicken	AJ584648	A/Chicken/Italy/1067/99(H7N1)
80	NP	H7N3	Italy	E	2003	chicken	EU158132	A/turkey/Italy/97500/03(H7N3)
81	NP	H7N3	Italy	E	2003	turkey	CY021488	A/turkey/Italy/4608/2003(H7N3)
82	NP	H7N1	Italy	E	1999	turkey	CY005786	A/turkey/Italy/3620/1999(H7N1)
83	NP	H7N1	Italy	E	2001	turkey	CY021424	A/turkey/Italy/1351/2001(H7N1)
84	NP	H7N1	Italy	E	1999	turkey	CY024869	A/turkey/Italy/4482/1999(H7N1)
85	NP	H7N1	Italy	E	2000	pekin duck	CY024901	A/pekin duck/Italy/1848/2000(H7N1)
86	NP	H7N3	Italy	E	2004	turkey	CY020600	A/turkey/Italy/3807/2004(H7N3)
87	NP	H7N1	Italy	E	1999	turkey	CY025160	A/turkey/Italy/3489/1999(H7N1)
88	NP	H7N3	Italy	E	2004	turkey	CY028679	A/turkey/Italy/3829/2004(H7N3)
89	NP	H7N1	Italy	E	2000	chicken	CY015017	A/chicken/Italy/1285/2000(H7N1)
90	NP	H7N1	Italy	E	2000	ostrich	DQ991344	A/ostrich/Italy/984/00(H7N1)
91	NP	H7N1	Mongolia	E	2002	duck	AB473544	A/duck/Mongolia/867/2002(H7N1)
92	NP	H7N1	Mongolia	E	2001	duck	AB268554	A/duck/Mongolia/47/2001(H7N1)
93	NP	H7N3	Netherlands	E	2000	mallard	CY005847	A/mallard/Netherlands/12/2000(H7N3)
94	NP	H7N7	Netherlands	E	2003	chicken	AY342427	A/chicken/Netherlands/1/03(H7N7)
95	NP	H7N8	Netherlands	E	2006	mallard	CY041413	A/mallard/Netherlands/33/2006(H7N8)
96	NP	H7N7	New Zealand	NZ	2005	duck		A/duck/New Zealand/2005(H7N7)
97	NP	H7N3	Pakistan	E	1998	chicken	CY037755	A/chicken/Pakistan/c1998/1998(H7N3)
98	NP	H7N3	Pakistan	E	1995	chicken	CY015035	A/chicken/Pakistan/34669/1995(H7N3)
99	NP	H7N3	Pakistan	E	2002	chicken	CY035824	A/chicken/Rawalpindi/NARC68/2002(H7N3)
100	NP	H7N3	Pakistan	E	1995	chicken	CY035832	A/chicken/Pakistan/34668/1995(H7N3)
101	NP	H7N7	UK	E	1927	fowl	M63779	A/fowl/Dobson/Dutch/1927(H7N7)
102	NP	H7N1	UK	E	1979	African starling	AY724252	A/African starling/England-Q/983/1979(H7N1)
103	NP	H7N3	UK	E	1963	turkey	CY015068	A/turkey/England/1963(H7N3)
104	NP	H7N2	USA	NA	2005	Muscovy duck	CY034849	A/Muscovy duck/New York/11646-4/2005(H7N2)
105	NP	H7N2	USA	NA	2005	duck	CY034809	A/duck/New York/98616-4/2005(H7N2)
106	NP	H7N2	USA	NA	1996	chicken	EU980465	A/chicken/NY/3202-7/1996(H7N2)

# <sup>1</sup>	Protein <sup>2</sup>	Subtype	country	Region <sup>3</sup>	Year	Animal	GenBank	Virus name
107	NP	H7N2	USA	NA	1995	emu	EU980456	A/emu/TX/25414/1995(H7N2)
108	NP	H7N2	USA	NA	2005	turkey	CY031718	A/turkey/New York/23164-11/2005(H7N2)
109	NP	H7N3	USA	NA	1995	turkey	EU980470	A/turkey/Utah/24721-10/1995(H7N3)
110	NP	H7N3	USA	NA	1985	ruddy turnstone	CY004408	A/ruddy turnstone/New Jersey/65/1985(H7N3)
111	NP	H7N3	USA	NA	2004	blue winged teal	CY018904	A/blue-winged teal/Ohio/658/2004(H7N3)
112	NP	H7N3	USA	NA	2006	laughing gull	EU030985	A/laughing gull/Delaware/42/06(H7N3)
113	NP	H7N3	USA	NA	2001	duck	EU743010	A/duck/PA/143585/2001(H7N3)
114	NP	H7N2	USA	NA	1998	goose	EU743268	A/goose/NY/8600-3/1998(H7N2)
115	NP	H7N2	USA	NA	1997	chicken	EU742944	A/chicken/PA/11767/1997(H7N2)
116	NP	H7N2	USA	NA	2006	chicken	CY028631	A/chicken/New York/29047-4/2006(H7N2)
117	NP	H7N2	USA	NA	2006	guinea fowl	CY028599	A/Guinea fowl/New York/19501-4/2006(H7N2)
118	NP	H7N2	USA	NA	2005	chicken	CY031694	A/chicken/New York/23164-7/2005(H7N2)
119	NP	H7N2	USA	NA	1999	chicken	EU742979	A/chicken/NJ/16224-6/1999(H7N2)
120	NP	H7N1	USA	NA	1993	rhea	EU742877	A/rhea/North Carolina/39482/1993(H7N1)
121	NP	H7N2	USA	NA	2005	chicken	CY022824	A/chicken/New York/16330/2005(H7N2)
122	NP	H7N2	USA	NA	2005	chicken	CY031774	A/chicken/New York/42217/2005(H7N2)
123	NP	H7N2	USA	NA	2001	chicken	EU084912	A/chicken/NY/119256-7/2001(H7N2)
124	NP	H7N3	USA	NA	1998	Mallard	CY016191	A/Mallard/Ohio/322/1998(H7N3)
125	NP	H7N7	USA	NA	1988	ruddy turnstone	CY005074	A/ruddy turnstone/DE/2378/1988(H7N7)
126	NP	H7N2	USA	NA	2005	chicken	CY031215	A/chicken/New York/10196-6/2005(H7N2)
127	NP	H7N2	USA	NA	2006	chicken	CY028543	A/chicken/New York/3181-5/2006(H7N2)
128	NP	H7N2	USA	NA	2005	chicken	CY031231	A/chicken/New York/23164-6/2005(H7N2)
129	NP	H7N3	USA	NA	2006	ruddy turnstone	CY037106	A/ruddy turnstone/Delaware Bay/283/2006(H7N3)
130	NP	H7N3	USA	NA	2006	laughing gull	CY037090	A/laughing gull/Delaware Bay/46/2006(H7N3)
131	NP	H7N2	USA	NA	2006	guinea fowl	CY035997	A/Guinea fowl/New York/19495-6/2006(H7N2)
132	NP	H7N3	USA	NA	2006	ruddy turnstone	CY041317	A/ruddy turnstone/Delaware Bay/279/2006(H7N3)
133	NP	H7N2	USA	NA	2005	guinea fowl	CY037066	A/Guinea fowl/New York/98616-3/2005(H7N2)
134	NP	H7N2	USA	NA	1999	chicken	FJ517327	A/chicken/NY/21586-8/1999(H7N2)
135	NP	H7N2	USA	NA	2005	quail	CY034393	A/quail/New York/89641/2005(H7N2)
136	NP	H7N2	USA	NA	2005	chicken	CY034841	A/chicken/New York/10508/2005(H7N2)
137	NP	H7N2	USA	NA	2006	chicken	CY034905	A/chicken/New York/19495-2/2006(H7N2)
138	NP	H7N2	USA	NA	2005	chicken	CY034801	A/chicken/New York/88291-8/2005(H7N2)
139	NP	H7N2	USA	NA	2005	chicken	CY035949	A/chicken/New York/11646-2/2005(H7N2)
140	NP	H7N3	USA	NA	2007	ruddy turnstone	CY036778	A/ruddy turnstone/Delaware Bay/108/2007(H7N3)
141	NP	H7N2	USA	NA	2006	guinea fowl	CY028575	A/Guinea fowl/New York/8391-1/2006(H7N2)
142	NP	H7N2	USA	NA	2005	guinea fowl	CY031654	A/Guinea fowl/New York/22071/2005(H7N2)
143	NP	H7N2	USA	NA	2005	chicken	CY033308	A/chicken/New York/63806-8/2005(H7N2)
144	NP	H7N2	USA	NA	2002	guinea hen	EU742974	A/guinea hen/MA/14801-11/2002(H7N2)
145	NP	H7N2	USA	NA	1998	chicken	EU742924	A/chicken/PA/13552-1/1998(H7N2)
146	NP	H7N2	USA	NA	2005	chicken	CY031750	A/chicken/New York/31621-9/2005(H7N2)
147	NP	H7N2	USA	NA	2005	chicken	CY022832	A/chicken/New York/21211-2/2005(H7N2)
148	NP	H7N2	USA	NA	1997	chicken	EU742934	A/chicken/NY/8030-2/1997(H7N2)
149	NP	H7N2	USA	NA	1997	chicken	EU742929	A/chicken/PA/7777-1/1997(H7N2)
150	NP	H7N7	USA	NA	1927	fowl	CY014994	A/fowl/Dobson/1927(H7N7)
151	NP	H7N2	USA	NA	2002	chicken	CY014898	A/chicken/Pennsylvania/143586/2002(H7N2)
152	NP	H7N3	USA	NA	2001	black duck	CY020888	A/Black Duck/Ohio/415/2001(H7N3)
153	NP	H7N3	USA	NA	2005	mallard	CY021640	A/mallard/Delaware/418/2005(H7N3)
154	NP	H7N2	USA	NA	2005	chukar	CY022768	A/chukar/New York/11653-1/2005(H7N2)
155	NP	H7N2	USA	NA	2000	chicken	EU084906	A/chicken/NY/30749-3/2000(H7N2)
156	NP	H7N2	USA	NA	1997	chicken	EU084919	A/chicken/NY/6777-3/1997(H7N2)
157	NP	H7N2	USA	NA	1994	chicken	EU084926	A/chicken/NY/4447-7/1994(H7N2)
158	NP	H7N2	USA	NA	2001	avian	EU026098	A/avian/NY/118353-1/2001(H7N2)
159	NP	H7N9	USA	NA	2006	blue winged teal	CY024821	A/blue-winged teal/Ohio/566/2006(H7N9)
160	NP	H7N2	USA	NA	2005	chicken	CY037098	A/chicken/New York/87493-2/2005(H7N2)
161	NP	H7N2	USA	NA	2005	guinea fowl	CY031223	A/Guinea fowl/New York/10196-7/2005(H7N2)
162	NP	H7N2	USA	NA	1997	chicken	EU742964	A/chicken/PA/19241/1997(H7N2)
163	NP	H7N2	USA	NA	2001	guinea fowl	EU742915	A/guinea fowl/NJ/119063-8/2001(H7N2)
164	NP	H7N3	USA	NA	2006	laughing gull	CY037082	A/laughing gull/Delaware Bay/6/2006(H7N3)
165	NP	H7N2	USA	NA	2006	chicken	CY031191	A/chicken/New York/46545-2/2006(H7N2)
166	NP	H7N3	USA	NA	2008	green winged teal	CY039541	A/green winged teal/California/AKS1370/2008(H7N3)
167	NP	H7N3	USA	NA	1971	turkey	DQ870889	A/turkey/Oregon/1971(H7N3)
168	NP	H7N2	USA	NA	2005	chukar	CY024845	A/chukar/New York/21211-7/2005(H7N2)
169	NP	H7N7	USA	NA	1989	red knot	CY005081	A/red knot/NJ/325/1989(H7N7)
170	NP	H7N3	USA	NA	1980	pheasant	CY005891	A/pheasant/Minnesota/917/1980(H7N3)
171	NP	H7N2	USA	NA	1995	chicken	EU182300	A/chicken/NY/19542-5/1995(H7N2)
172	NP	H7N9	USA	NA	1988	turkey	CY014789	A/turkey/Minnesota/1/1988(H7N9)
173	NP	H7N2	USA	NA	1995	guinea fowl	CY014839	A/guinea fowl/New York/13820-3/1995(H7N2)
174	NP	H7N3	USA	NA	2006	shorebird	EU030969	A/shorebird/Delaware/22/06(H7N3)
175	NP	H7N2	USA	NA	1998	quail	EU742957	A/quail/PA/20304/1998(H7N2)
176	NP	H7N2	USA	NA	1998	quail	EU742920	A/quail/NY/13989-51/1998(H7N2)
177	NP	H7N2	USA	NA	2005	chicken	CY034193	A/chicken/New York/143646-2/2005(H7N2)

# <sup>1</sup>	Protein <sup>2</sup>	Subtype	country	Region <sup>3</sup>	Year	Animal	GenBank	Virus name
178	NP	H7N2	USA	NA	2005	chicken	CY034249	A/chicken/New York/19499/2005(H7N2)
179	NP	H7N2	USA	NA	2005	chicken	CY037018	A/chicken/New York/63806-11/2005(H7N2)
180	NP	H7N2	USA	NA	2001	chicken	EU742891	A/chicken/FL/90348-4/2001(H7N2)
181	NP	H7N2	USA	NA	2002	turkey	EU743262	A/turkey/VA/158512/2002(H7N2)
182	NP	H7N3	USA	NA	2008	northern shoveler	CY039597	A/northern shoveler/California/HKWF2031/2008(H7N3)
183	NP	H7N2	USA	NA	2004	chicken	EU743256	A/chicken/NJ/294508-12/2004(H7N2)
184	NP	H7N3	USA	NA	2006	shorebird	CY036770	A/shorebird/Delaware Bay/560/2006(H7N3)
185	NP	H7N2	USA	NA	2005	muscovy duck	CY034793	A/Muscovy duck/New York/87493-3/2005(H7N2)
186	NP	H7N2	USA	NA	2005	quail	CY033316	A/quail/New York/63806-13/2005(H7N2)
187	NP	H7N2	USA	NA	2002	turkey	EU982304	A/turkey/VA/55/2002(H7N2)
188	NP	H7N2	USA	NA	2005	guinea fowl	CY028510	A/Guinea fowl/New York/143646-3/2005(H7N2)
189	NP	H7N2	USA	NA	2005	chicken	CY031119	A/chicken/New York/30732-6/2005(H7N2)
190	NP	H7N2	USA	NA	2005	chukar	CY031071	A/chukar/New York/23164-13/2005(H7N2)
191	NP	H7N2	USA	NA	1995	chicken	EU084908	A/chicken/NY/3112-1/1995(H7N2)
192	NP	H7N3	USA	NA	1999	chicken	EU084930	A/Chicken/NY/14714-2/1999(H7N3)
193	NP	H7N7	USA	NA	2007	mallard	CY033381	A/mallard/California/HKWF1971/2007(H7N7)
194	NP	H7N2	USA	NA	2005	chicken	CY031079	A/chicken/New York/23165-6/2005(H7N2)
195	NP	H7N3	USA	NA	2007	northern shoveler	CY039581	A/northern shoveler/California/HKWF1026/2007(H7N3)
196	NP	H7N2	USA	NA	2005	chicken	CY034361	A/chicken/New York/88291-6/2005(H7N2)
197	NP	H7N2	USA	NA	2005	chicken	CY029836	A/chicken/New York/16326-4/2005(H7N2)
198	NP	H7N2	USA	NA	1995	chicken	EU742939	A/chicken/RI/4328-1/1995(H7N2)
199	NP	H7N2	USA	NA	1995	chicken	EU742953	A/chicken/NY/13833-7/1995(H7N2)
200	NP	H7N2	USA	NA	2002	chicken	EU742970	A/chicken/PA/149092-1/2002(H7N2)
201	NP	H7N2	USA	NA	2005	chicken	CY031638	A/chicken/New York/22067-7/2005(H7N2)
202	NP	H7N2	USA	NA	2003	chicken	EU742998	A/chicken/CT/260413-2/2003(H7N2)
203	NP	H7N2	USA	NA	2005	guinea fowl	CY031678	A/Guinea fowl/New York/23164-3-05/2005(H7N2)
204	NP	H7N2	USA	NA	2005	chicken	CY031686	A/chicken/New York/23164-5/2005(H7N2)
205	NP	H7N2	USA	NA	1994	turkey	EU980461	A/turkey/NY/4450-5/1994(H7N2)
206	NP	H7N2	USA	NA	2005	guinea fowl	CY034833	A/Guinea fowl/New York/101276-1/2005(H7N2)
207	NP	H7N2	USA	NA	2005	turkey	CY034897	A/turkey/New York/122501-2/2005(H7N2)
208	NP	H7N2	USA	NA	2005	guinea fowl	CY035957	A/Guinea fowl/New York/11646-3/2005(H7N2)
209	NP	H7N2	USA	NA	2006	chicken	CY036013	A/chicken/New York/19499-1/2006(H7N2)
210	NP	H7N2	USA	NA	2005	chicken	CY034345	A/chicken/New York/63806-12/2005(H7N2)
211	NP	H7N2	USA	NA	2005	chicken	CY034305	A/chicken/New York/23165-10/2005(H7N2)
212	NP	H7N3	USA	NA	2007	ruddy turnstone	CY036786	A/ruddy turnstone/Delaware Bay/121/2007(H7N3)
213	NP	H7N2	USA	NA	2001	chicken	EU182292	A/chicken/NJ/118878-5/2001(H7N2)
214	NP	H7N2	USA	NA	2005	guinea fowl	CY033284	A/Guinea fowl/New York/31621-8/2005(H7N2)
215	NP	H7N2	USA	NA	2005	guinea fowl	CY031726	A/Guinea fowl/New York/23165-12/2005(H7N2)
216	NP	H7N2	USA	NA	2006	guinea fowl	CY034241	A/Guinea fowl/New York/32084/2006(H7N2)
217	NP	H7N2	USA	NA	1994	chicken	EU742948	A/chicken/NY/13142-5/1994(H7N2)
218	NP	H7N3	USA	NA	1994	chicken	EU743015	A/chicken/New Jersey/15086-3/1994(H7N3)
219	NP	H7N2	USA	NA	2000	chicken	EU742983	A/chicken/NJ/30739-6/2000(H7N2)
220	NP	H7N3	USA	NA	1980	turkey	CY014781	A/turkey/Minnesota/1200/1980(H7N3)
221	NP	H7N2	USA	NA	2006	chicken	CY028583	A/chicken/New York/8391-2/2006(H7N2)
222	NP	H7N2	USA	NA	2005	chicken	CY022816	A/chicken/New York/16326-5/2005(H7N2)
223	NP	H7N3	USA	NA	1971	turkey	DQ870895	A/turkey/Oregon/1971(H7N3)
224	NP	H7N2	USA	NA	1997	turkey	EU084923	A/turkey/PA/7975/1997(H7N2)
225	NP	H7N8	USA	NA	1987	mallard	CY021624	A/mallard/Ohio/421/1987(H7N8)
1	NS1	H7N7	Australia	A	1985	starling	CY024782	A/starling/Victoria/85(H7N7)
2	NS1	H7N4	Australia	A	1997	chicken	CY022705	A/chicken/New South Wales/327/97(H7N4)
3	NS1	H7N7	Australia	A	1985	chicken	CY025073	A/chicken/Victoria/1/85(H7N7)
4	NS1	H7N7	Australia	A	1976	duck		A/duck/Victoria/76(H7N7)
5	NS1	H7N6	Australia	A	2007	duck		A/duck/Victoria/512/2007(H7N6)
6	NS1	H7N7	New Zealand	NZ	2005	duck		A/duck/New Zealand/2005(H7N7)
7	NS1	H7N3	Afghanistan	E	2004	chicken	EF688539	A/chicken/Afghanistan/NARC-483/2004(H7N3)
8	NS1	H7N3	Australia	A	1994	chicken	CY022689	A/chicken/Queensland/1994(H7N3)
9	NS1	H7N4	Australia	A	1997	chicken	CY022697	A/chicken/New South Wales/2/1997(H7N4)
10	NS1	H7N7	Australia	A	1976	chicken	CY024790	A/chicken/Victoria/1976(H7N7)
11	NS1	H7N3	Australia	A	1992	chicken	CY025081	A/chicken/Victoria/224/1992(H7N3)
12	NS1	H7N4	Australia	A	1997	emu	CY022713	A/emu/New South Wales/775/1997(H7N4)
13	NS1	H7N2	Australia	A	2007	duck	CY033165	A/duck/Tasmania/277/2007(H7N2)
14	NS1	H7N3	Bolivia	SA	2001	cinnamon teal	DQ525413	A/cinnamon teal/Bolivia/4537/2001(H7N3)
15	NS1	H7N2	Canada	NA	1978	blue winged teal	CY005035	A/blue-winged teal/ALB/221/1978(H7N2)
16	NS1	H7N3	Canada	NA	1985	green winged teal	CY005054	A/green-winged teal/ALB/228/1985(H7N3)
17	NS1	H7N3	Canada	NA	2004	chicken	EF583621	A/chicken/British Columbia/NS-01827-4/2004(H7N3)
18	NS1	H7N3	Canada	NA	2007	Canada goose	EU500848	A/Canada goose/BC/3752/2007(H7N3)
19	NS1	H7	Canada	NA	2007	duck	EF585299	A/duck/AB/AFLBs8734c16/2007(H7)
20	NS1	H7N3	Canada	NA	1985	mallard duck	CY005061	A/mallard duck/Alberta/435/1985(H7N3)

# <sup>1</sup>	Protein <sup>2</sup>	Subtype	country	Region <sup>3</sup>	Year	Animal	GenBank	Virus name
21	NS1	H7N3	Canada	NA	2007	American black duck	EU500856	A/American black duck/NB/2538/2007(H7N3)
22	NS1	H7N3	Canada	NA	2004	chicken	AY650274	A/GSC_chicken/British Columbia/04(H7N3)
23	NS1	H7N3	Canada	NA	2001	mallard	DQ017506	A/mallard/Alberta/24/01(H7N3)
24	NS1	H7N3	Canada	NA	2007	chicken	EU500864	A/chicken/SK/HR-00011/2007(H7N3)
25	NS1	H7N3	Canada	NA	2004	chicken	AY611528	A/chicken/British Columbia/04(H7N3)
26	NS1	H7N3	Canada	NA	1976	mallard duck	CY004327	A/mallard duck/ALB/48/1976(H7N3)
27	NS1	H7N5	Canada	NA	1977	mallard duck	CY005012	A/mallard duck/ALB/224/1977(H7N5)
28	NS1	H7N3	Canada	NA	1977	blue winged teal	CY005019	A/blue-winged teal/ALB/295/1977(H7N3)
29	NS1	H7N3	Chile	SA	2002	chicken	AY303650	A/chicken/Chile/4345/02(H7N3)
30	NS1	H7N3	Chile	SA	2003	chicken	AY303646	A/chicken/Chile/4957/03(H7N3)
31	NS1	H7N3	Chile	SA	2003	chicken	AY303644	A/chicken/Chile/176822/03(H7N3)
32	NS1	H7N3	Chile	SA	2003	chicken	AY303645	A/chicken/Chile/4322/03(H7N3)
33	NS1	H7N7	China	E	2003	duck	EU158144	A/duck/Jiangxi/1814/03(H7N7)
34	NS1	H7N4	China	E	1993	duck	U49493	A/duck/Nanchang/1944/1993(H7N4)
35	NS1	H7N7	China	E	2003	duck	EU158150	A/duck/Jiangxi/1786/03(H7N7)
36	NS1	H7N7	China	E	2003	duck	EU158147	A/duck/Jiangxi/1742/03(H7N7)
37	NS1	H7N2	China	E	2002	chicken	AY724259	A/chicken/Hebei/1/2002(H7N2)
38	NS1	H7N1	Germany	E	1934	chicken	M60799	A/chicken/Rostock/8/1934(H7N1)
39	NS1	H7N1	Germany	E	1934	chicken	M29617	A/chicken/Rostock/8/1934(H7N1)
40	NS1	H7N7	Germany	E	2003	chicken	AJ619678	A/chicken/Germany/R28/03(H7N7)
41	NS1	H7N1	Germany	E	1934	chicken	V01101	A/chicken/Rostock/8/1934(H7N1)
42	NS1	H7N7	Germany	E	1979	goose	CY015043	A/goose/Leipzig/187-7/1979(H7N7)
43	NS1	H7N1	Italy	E	1999	chicken	DQ090035	A/chicken/Italy/5074/99(H7N1)
44	NS1	H7N1	Italy	E	2000	turkey	DQ090037	A/turkey/Italy/421/00(H7N1)
45	NS1	H7N1	Italy	E	2000	ostrich	DQ090044	A/ostrich/Italy/984/00(H7N1)
46	NS1	H7N1	Italy	E	2000	turkey	DQ090052	A/turkey/Italy/4426/2000(H7N1)
47	NS1	H7N7	Italy	E	1902	chicken	CY015056	A/chicken/Brescia/1902(H7N7)
48	NS1	H7N1	Italy	E	2000	turkey	CY021545	A/turkey/Italy/4426/2000(H7N1)
49	NS1	H7N1	Italy	E	2001	chicken	CY021553	A/chicken/Italy/322/2001(H7N1)
50	NS1	H7N3	Italy	E	2003	turkey	CY022617	A/turkey/Italy/2043/2003(H7N3)
51	NS1	H7N3	Italy	E	2003	turkey	DQ090061	A/turkey/Italy/3620/2003(H7N3)
52	NS1	H7N3	Italy	E	2003	chicken	DQ090064	A/chicken/Italy/4616/2003(H7N3)
53	NS1	H7N1	Italy	E	1999	turkey	CY025137	A/turkey/Italy/4294/1999(H7N1)
54	NS1	H7N3	Italy	E	2004	turkey	CY028688	A/turkey/Italy/3477/2004(H7N3)
55	NS1	H7N1	Italy	E	2002	mallard	EU158145	A/mallard/Italy/250/02(H7N1)
56	NS1	H7N3	Italy	E	2003	turkey	EU158148	A/turkey/Italy/121964/03(H7N3)
57	NS1	H7N7	Italy	E	2005	mallard	EU158146	A/mallard/Italy/299/05(H7N7)
58	NS1	H7N2	Italy	E	2003	duck	CY031032	A/duck/Italy/4609/2003(H7N2)
59	NS1	H7N1	Italy	E	1999	turkey	DQ090025	A/turkey/Italy/977/1999(H7N1)
60	NS1	H7N1	Italy	E	1999	chicken	DQ090027	A/chicken/Italy/1082/99(H7N1)
61	NS1	H7N3	Italy	E	2003	quail	DQ090063	A/quail/Italy/4610/03(H7N3)
62	NS1	H7N1	Italy	E	2000	turkey	CY021537	A/turkey/Italy/2984/2000(H7N1)
63	NS1	H7N1	Italy	E	1999	chicken	CY022657	A/chicken/Italy/4746/1999(H7N1)
64	NS1	H7N1	Italy	E	2000	chicken	DQ090036	A/chicken/Italy/78/00(H7N1)
65	NS1	H7N1	Italy	E	2000	chicken	DQ090038	A/chicken/Italy/522/00(H7N1)
66	NS1	H7N1	Italy	E	2000	turkey	DQ090045	A/turkey/Italy/1713/00(H7N1)
67	NS1	H7N1	Italy	E	1999	turkey	CY005792	A/turkey/Italy/4169/1999(H7N1)
68	NS1	H7N3	Italy	E	2004	turkey	CY020585	A/turkey/Italy/4479/2004(H7N3)
69	NS1	H7N3	Italy	E	2002	turkey	AY586444	A/turkey/Italy/214845/2002(H7N3)
70	NS1	H7N3	Italy	E	2004	turkey	CY028680	A/turkey/Italy/3829/2004(H7N3)
71	NS1	H7N3	Italy	E	2004	turkey	CY029917	A/turkey/Italy/4130/2004(H7N3)
72	NS1	H7N3	Italy	E	2003	chicken	CY034754	A/chicken/Italy/682/2003(H7N3)
73	NS1	H7N1	Italy	E	2000	duck	DQ090039	A/duck/Italy/551/2000(H7N1)
74	NS1	H7N1	Italy	E	2000	guinea fowl	CY022665	A/guinea fowl/Italy/155/2000(H7N1)
75	NS1	H7N1	Italy	E	1999	chicken	DQ090029	A/chicken/Italy/1279/99(H7N1)
76	NS1	H7N3	Italy	E	2003	turkey	CY021369	A/turkey/Italy/1010/2003(H7N3)
77	NS1	H7N1	Italy	E	2000	ostrich	DQ991308	A/ostrich/Italy/2332/00(H7N1)
78	NS1	H7N3	Italy	E	2001	mallard	AY586442	A/mallard/Italy/33/01(H7N3)
79	NS1	H7N1	Italy	E	1999	turkey	CY025169	A/turkey/Italy/3560/1999(H7N1)
80	NS1	H7N3	Italy	E	2007	chicken	EU873091	A/chicken/Italy/3981/2007(H7N3)
81	NS1	H7N1	Italy	E	1999	turkey	CY024870	A/turkey/Italy/4482/1999(H7N1)
82	NS1	H7N3	Italy	E	2001	mallard	EU158151	A/mallard/Italy/199/01(H7N3)
83	NS1	H7N1	Italy	E	2001	turkey	CY021425	A/turkey/Italy/1351/2001(H7N1)
84	NS1	H7N3	Italy	E	2004	turkey	CY020601	A/turkey/Italy/3807/2004(H7N3)
85	NS1	H7N1	Italy	E	1999	turkey	DQ090034	A/turkey/Italy/4580/1999(H7N1)
86	NS1	H7N1	Italy	E	2000	chicken	DQ090041	A/chicken/Italy/662/00(H7N1)
87	NS1	H7N1	Italy	E	2000	chicken	DQ090042	A/chicken/Italy/910/00(H7N1)
88	NS1	H7N1	Italy	E	2000	chicken	DQ090043	A/chicken/Italy/914/00(H7N1)
89	NS1	H7N1	Italy	E	2001	turkey	DQ090056	A/turkey/Italy/284/01(H7N1)
90	NS1	H7N1	Italy	E	2001	turkey	DQ090057	A/turkey/Italy/1351/2001(H7N1)
91	NS1	H7N3	Italy	E	2003	turkey	CY021489	A/turkey/Italy/4608/2003(H7N3)

# <sup>1</sup>	Protein <sup>2</sup>	Subtype	country	Region <sup>3</sup>	Year	Animal	GenBank	Virus name
92	NS1	H7N1	Italy	E	1999	turkey	DQ090032	A/turkey/Italy/2732/1999(H7N1)
93	NS1	H7N1	Italy	E	1999	turkey	DQ090033	A/turkey/Italy/3675/1999(H7N1)
94	NS1	H7N3	Italy	E	2002	turkey	DQ090058	A/turkey/Italy/8000/2002(H7N3)
95	NS1	H7N7	Italy	E	1902	chicken	L37798	A/chicken/Brescia/1902(H7N7)
96	NS1	H7N7	Japan	E	1924	chicken	M16561	A/chicken/Japan/1924(H7N7)
97	NS1	H7N1	Mongolia	E	2001	duck	AB268556	A/duck/Mongolia/47/2001(H7N1)
98	NS1	H7N1	Mongolia	E	2002	duck	AB473547	A/duck/Mongolia/867/2002(H7N1)
99	NS1	H7N7	Netherlands	E	2003	chicken	EF015555	A/chicken/Netherlands/03010132/03(H7N7)
100	NS1	H7N8	Netherlands	E	2006	mallard	CY041414	A/mallard/Netherlands/33/2006(H7N8)
101	NS1	H7N7	Netherlands	E	2003	chicken	AY342424	A/chicken/Netherlands/1/03(H7N7)
102	NS1	H7N3	Netherlands	E	2000	mallard	CY005848	A/mallard/Netherlands/12/2000(H7N3)
103	NS1	H7N3	Pakistan	E	2004	chicken	EF688538	A/chicken/Pakistan/NARC-214/2004(H7N3)
104	NS1	H7N3	Pakistan	E	2004	chicken	EF688541	A/chicken/Pakistan/NARC-100/2004(H7N3)
105	NS1	H7N3	Pakistan	E	2004	chicken	EF688553	A/chicken/Pakistan/NARC-1118/2004(H7N3)
106	NS1	H7N3	Pakistan	E	2003	chicken	EF688536	A/chicken/Pakistan/NARC-43/2003(H7N3)
107	NS1	H7N3	Pakistan	E	1995	chicken	CY035835	A/chicken/Pakistan/34668/1995(H7N3)
108	NS1	H7N3	Pakistan	E	2002	chicken	CY035827	A/chicken/Rawalpindi/NARC68/2002(H7N3)
109	NS1	H7N3	Pakistan	E	2004	chicken	EF688537	A/chicken/Pakistan/NARC-169/2004(H7N3)
110	NS1	H7N3	Pakistan	E	2000	chicken	EF688540	A/chicken/Pakistan/NARC-BM/2000(H7N3)
111	NS1	H7N3	Pakistan	E	2005	chicken	EF688542	A/chicken/Pakistan/NARC-N19/2005(H7N3)
112	NS1	H7N3	Pakistan	E	2005	chicken	EF688547	A/chicken/Pakistan/NARC-N30/2005(H7N3)
113	NS1	H7N3	Pakistan	E	2003	chicken	EF688549	A/chicken/Pakistan/NARC-23/2003(H7N3)
114	NS1	H7N3	Pakistan	E	1995	chicken	CY015036	A/chicken/Pakistan/34669/1995(H7N3)
115	NS1	H7N3	Pakistan	E	2004	chicken	EF688545	A/chicken/Pakistan/NARC-70/2004(H7N3)
116	NS1	H7N3	Pakistan	E	2004	chicken	EF688546	A/chicken/Pakistan/NARC-178/2004(H7N3)
117	NS1	H7N3	Pakistan	E	2004	chicken	EF688552	A/chicken/Pakistan/NARC-160/2004(H7N3)
118	NS1	H7N3	Pakistan	E	2005	chicken	EF688534	A/chicken/Pakistan/NARC-2419/2005(H7N3)
119	NS1	H7N3	Pakistan	E	2004	chicken	EF688535	A/chicken/Pakistan/NARC-1282/2004(H7N3)
120	NS1	H7N7	Sweden	E	2005	mallard	EU518733	A/mallard/Sweden/S90514/2005(H7N7)
121	NS1	H7N7	Sweden	E	2005	mallard	EU518738	A/mallard/Sweden/S90599/2005(H7N7)
122	NS1	H7N7	UK	E	1934	fowl	L37800	A/fowl/Weybridge(H7N7)
123	NS1	H7N3	UK	E	1963	turkey	CY015069	A/turkey/England/1963(H7N3)
124	NS1	H7N7	UK	E	1927	fowl	L37799	A/fowl/Dobson(H7N7)
125	NS1	H7N1	UK	E	1979	African starling	AY724253	A/African starling/England-Q/983/1979(H7N1)
126	NS1	H7N3	USA	NA	2006	laughing gull	EU030988	A/laughing gull/Delaware/42/06(H7N3)
127	NS1	H7N3	USA	NA	2001	black duck	CY020889	A/Black Duck/Ohio/415/2001(H7N3)
128	NS1	H7N2	USA	NA	2005	duck	CY034810	A/duck/New York/98616-4/2005(H7N2)
129	NS1	H7N3	USA	NA	2006	shorebird	CY036771	A/shorebird/Delaware Bay/560/2006(H7N3)
130	NS1	H7N3	USA	NA	2007	ruddy turnstone	CY036779	A/ruddy turnstone/Delaware Bay/108/2007(H7N3)
131	NS1	H7N2	USA	NA	2005	guinea fowl	CY031767	A/Guinea fowl/New York/37982-3/2005(H7N2)
132	NS1	H7N2	USA	NA	1995	chicken	AF074271	A/Chicken/New York/13833-7/95 (H7N2NSB)
133	NS1	H7N2	USA	NA	1997	chicken	AF074278	A/Chicken/New York/6777-3/97 (H7N2NSB)
134	NS1	H7N3	USA	NA	1983	chicken	U96741	A/Chicken/Pennsylvania/21525/83)
135	NS1	H7N1	USA	NA	1993	rhea	AF007036	A/rhea/North Carolina/39482/93 (H7N1NS1)
136	NS1	H7N3	USA	NA	1980	pheasant	CY005892	A/pheasant/Minnesota/917/1980(H7N3)
137	NS1	H7N3	USA	NA	1998	mallard	DQ021607	A/mallard/MN/88/98(H7N3)
138	NS1	H7N3	USA	NA	2000	laughing gull	DQ021641	A/laughing gull/NY/2455/00(H7N3)
139	NS1	H7N3	USA	NA	1999	chicken	EU084931	A/Chicken/NY/14714-2/1999(H7N3)
140	NS1	H7N9	USA	NA	2006	blue winged teal	CY024822	A/blue-winged teal/Ohio/566/2006(H7N9)
141	NS1	H7N7	USA	NA	1989	red knot	CY005082	A/red knot/NJ/325/1989(H7N7)
142	NS1	H7N2	USA	NA	2000	avian	AY241626	A/avian/NY/76247-3/00(H7N2)
143	NS1	H7N2	USA	NA	2001	chicken	AY241630	A/chicken/NJ/118878-5/2001(H7N2)
144	NS1	H7N2	USA	NA	2002	chicken	AY241632	A/chicken/NJ/151244-18/02(H7N2)
145	NS1	H7N2	USA	NA	1998	chicken	AY241640	A/chicken/NY/1387-8/98(H7N2)
146	NS1	H7N2	USA	NA	2002	chicken	AY241653	A/chicken/VA/32/02(H7N2)
147	NS1	H7N3	USA	NA	2005	mallard	CY021641	A/mallard/Delaware/418/2005(H7N3)
148	NS1	H7N2	USA	NA	2005	chicken	CY037019	A/chicken/New York/63806-11/2005(H7N2)
149	NS1	H7N3	USA	NA	2007	northern shoveler	CY039584	A/northern shoveler/California/HKWF1026/2007(H7N3)
150	NS1	H7N2	USA	NA	2001	guinea fowl	EU742916	A/guinea fowl/NJ/119063-8/2001(H7N2)
151	NS1	H7N2	USA	NA	2005	guinea fowl	CY031224	A/Guinea fowl/New York/10196-7/2005(H7N2)
152	NS1	H7N2	USA	NA	2005	chicken	CY031080	A/chicken/New York/23165-6/2005(H7N2)
153	NS1	H7N2	USA	NA	2005	chukar	CY031072	A/chukar/New York/23164-13/2005(H7N2)
154	NS1	H7N2	USA	NA	2005	chicken	CY031120	A/chicken/New York/30732-6/2005(H7N2)
155	NS1	H7N2	USA	NA	2005	chicken	CY035934	A/chicken/New York/88291-10/2005(H7N2)
156	NS1	H7N2	USA	NA	2005	duck	CY034818	A/duck/New York/98616-5/2005(H7N2)
157	NS1	H7N2	USA	NA	2005	guinea fowl	CY034834	A/Guinea fowl/New York/101276-1/2005(H7N2)
158	NS1	H7N2	USA	NA	2005	quail	CY033317	A/quail/New York/63806-13/2005(H7N2)
159	NS1	H7N3	USA	NA	2008	northern shoveler	CY039600	A/northern shoveler/California/HKWF2031/2008(H7N3)
160	NS1	H7N3	USA	NA	2008	green winged teal	CY039544	A/green winged teal/California/AKS1370/2008(H7N3)

# <sup>1</sup>	Protein <sup>2</sup>	Subtype	country	Region <sup>3</sup>	Year	Animal	GenBank	Virus name
161	NS1	H7N2	USA	NA	2001	chicken	EU742892	A/chicken/FL/90348-4/2001(H7N2)
162	NS1	H7N2	USA	NA	2000	avian	AY241625	A/avian/NY/70411-12/00(H7N2)
163	NS1	H7N2	USA	NA	1999	chicken	AY241633	A/chicken/NJ/16224-6/1999(H7N2)
164	NS1	H7N2	USA	NA	2002	chicken	AY241635	A/chicken/NJ/608/02(H7N2)
165	NS1	H7N2	USA	NA	2001	chicken	AY241638	A/chicken/NY/119256-7/2001(H7N2)
166	NS1	H7N3	USA	NA	1999	chicken	AY241641	A/chicken/New York/14714-9/1999(H7N3)
167	NS1	H7N2	USA	NA	1997	chicken	AY241648	A/Chicken/PA/9701027B/97(H7N2)
168	NS1	H7N2	USA	NA	1998	chicken	AY241652	A/chicken/PA/9801289/98(H7N2)
169	NS1	H7N3	USA	NA	2004	blue winged teal	CY018905	A/blue-winged teal/Ohio/658/2004(H7N3)
170	NS1	H7N2	USA	NA	1987	laughing gull	U49488	A/laughing gull/Delaware/2838/1987(H7N2)
171	NS1	H7N9	USA	NA	2000	ruddy turnstone	DQ021611	A/ruddy turnstone/DE/1538/2000(H7N9)
172	NS1	H7N2	USA	NA	2006	chicken	CY028584	A/chicken/New York/8391-2/2006(H7N2)
173	NS1	H7N3	USA	NA	1971	turkey	U96740	A/turkey/Oregon/1971(H7N3)
174	NS1	H7N2	USA	NA	1994	chicken	AF001409	A/Chicken/New York/13142-5/94 (H7N2)
175	NS1	H7N8	USA	NA	1987	mallard	AF007035	A/mallard/Ohio/421/1987(H7N8)
176	NS1	H7N2	USA	NA	2005	chicken	CY031639	A/chicken/New York/22067-7/2005(H7N2)
177	NS1	H7N2	USA	NA	2005	guinea fowl	CY031679	A/Guinea fowl/New York/23164-3-05/2005(H7N2)
178	NS1	H7N2	USA	NA	2005	chicken	CY034362	A/chicken/New York/88291-6/2005(H7N2)
179	NS1	H7N2	USA	NA	2006	guinea fowl	CY034242	A/Guinea fowl/New York/32084/2006(H7N2)
180	NS1	H7N2	USA	NA	2005	chicken	CY033309	A/chicken/New York/63806-8/2005(H7N2)
181	NS1	H7N2	USA	NA	2005	guinea fowl	CY031727	A/Guinea fowl/New York/23165-12/2005(H7N2)
182	NS1	H7N3	USA	NA	1985	ruddy turnstone	CY004409	A/ruddy turnstone/New Jersey/65/1985(H7N3)
183	NS1	H7N3	USA	NA	1980	turkey	CY014782	A/turkey/Minnesota/1200/1980(H7N3)
184	NS1	H7N2	USA	NA	1995	guinea fowl	CY014840	A/guinea fowl/New York/13820-3/1995(H7N2)
185	NS1	H7N9	USA	NA	1988	turkey	CY014790	A/turkey/Minnesota/1/1988(H7N9)
186	NS1	H7N2	USA	NA	1995	guinea fowl	AF074270	A/Guinea Fowl/New York/13820-3/95 (H7N2NSB)
187	NS1	H7N2	USA	NA	1995	chicken	AF074272	A/Chicken/New York/19542-5/95 (H7N2NSB)
188	NS1	H7N2	USA	NA	1997	turkey	AF074279	A/Turkey/Pennsylvania/7975/97 (H7N2NSB)
189	NS1	H7N3	USA	NA	1995	turkey	AF074284	A/turkey/Utah/24721-10/95 (H7N3NSA)
190	NS1	H7N2	USA	NA	2006	guinea fowl	CY028600	A/Guinea fowl/New York/19501-4/2006(H7N2)
191	NS1	H7N2	USA	NA	2006	chicken	CY028632	A/chicken/New York/29047-4/2006(H7N2)
192	NS1	H7N2	USA	NA	2005	chicken	CY034250	A/chicken/New York/19499/2005(H7N2)
193	NS1	H7N2	USA	NA	2001	chicken	EU182289	A/chicken/PA/143586/2001(H7N2)
194	NS1	H7N2	USA	NA	2005	chicken	CY031775	A/chicken/New York/42217/2005(H7N2)
195	NS1	H7N2	USA	NA	2003	chicken	EU742999	A/chicken/CT/260413-2/2003(H7N2)
196	NS1	H7N2	USA	NA	2004	chicken	EU743257	A/chicken/NJ/294508-12/2004(H7N2)
197	NS1	H7N3	USA	NA	2001	duck	EU743011	A/duck/PA/143585/2001(H7N3)
198	NS1	H7N2	USA	NA	1998	goose	EU743269	A/goose/NY/8600-3/1998(H7N2)
199	NS1	H7N2	USA	NA	2005	guinea fowl	CY035926	A/Guinea fowl/New York/88291-9/2005(H7N2)
200	NS1	H7N3	USA	NA	1994	chicken	AF074267	A/chicken/New Jersey/15086-3/1994(H7N3)NSA)
201	NS1	H7N2	USA	NA	1994	chicken	AF074268	A/Chicken/New York/4447-7/94 (H7N2NSA)
202	NS1	H7N2	USA	NA	1994	turkey	AF074269	A/Turkey/New York/4450-5/94 (H7N2NSB)
203	NS1	H7N2	USA	NA	1995	chicken	AF074273	A/Chicken/New York/3112-1/95 (H7N2NSB)
204	NS1	H7N2	USA	NA	1995	chicken	AF074274	A/Chicken/Rhode Island/4328/95 (H7N2NSB)
205	NS1	H7N2	USA	NA	1996	chicken	AF074275	A/Chicken/New York/8030-2/96 (H7N2NSB)
206	NS1	H7N2	USA	NA	1998	chicken	AF074280	A/Chicken/Pennsylvania/13552-1/98 (H7N2NSB)
207	NS1	H7N2	USA	NA	1998	Quail	AF074281	A/Quail/New York/13989-51/98 (H7N2NSA)
208	NS1	H7N3	USA	NA	1991	turkey	AF074282	A/Turkey/Colorado/13356/91 (H7N3NSA)
209	NS1	H7N3	USA	NA	1994	Quail	AF074283	A/Quail/Arkansas/16309-7/94 (H7N3NSA)
210	NS1	H7N2	USA	NA	2005	chicken	CY031703	A/chicken/New York/23164-9/2005(H7N2)
211	NS1	H7N2	USA	NA	1995	emu	EU980457	A/emu/TX/25414/1995(H7N2)
212	NS1	H7N2	USA	NA	2005	muscovy duck	CY034794	A/Muscovy duck/New York/87493-3/2005(H7N2)
213	NS1	H7N2	USA	NA	2005	chicken	CY034802	A/chicken/New York/88291-8/2005(H7N2)
214	NS1	H7N2	USA	NA	2005	muscovy duck	CY034850	A/Muscovy duck/New York/11646-4/2005(H7N2)
215	NS1	H7N2	USA	NA	2006	chicken	CY034906	A/chicken/New York/19495-2/2006(H7N2)
216	NS1	H7N2	USA	NA	2000	chicken	AY241634	A/Chicken/New Jersey/30739-6/00(H7N2)
217	NS1	H7N3	USA	NA	1999	chicken	AY241639	A/chicken/New York/12273-11/1999(H7N3)
218	NS1	H7N2	USA	NA	2002	chicken	AY241647	A/chicken/PA/149092-1/2002(H7N2)
219	NS1	H7N2	USA	NA	1997	chicken	AY241650	A/chicken/PA/9701530/97(H7N2)
220	NS1	H7N2	USA	NA	1998	chicken	AY241651	A/chicken/PA/9800896/98(H7N2)
221	NS1	H7N2	USA	NA	1998	chicken	AY241663	A/Chicken/NY/21665-73/98(H7N2)
222	NS1	H7N4	USA	NA	2001	blue winged teal	DQ021547	A/blue-winged teal/TX/11/01(H7N4)
223	NS1	H7N7	USA	NA	1999	mallard	DQ021559	A/mallard/MN/17/99(H7N7)
224	NS1	H7N3	USA	NA	1998	mallard	DQ021596	A/mallard/MN/187/98(H7N3)
225	NS1	H7N3	USA	NA	1998	Mallard	CY016192	A/Mallard/Ohio/322/1998(H7N3)
226	NS1	H7N7	USA	NA	1988	ruddy turnstone	CY005075	A/ruddy turnstone/DE/2378/1988(H7N7)
227	NS1	H7N3	USA	NA	2006	laughing gull	CY037091	A/laughing gull/Delaware Bay/46/2006(H7N3)
228	NS1	H7N2	USA	NA	2005	chicken	CY031232	A/chicken/New York/23164-6/2005(H7N2)
229	NS1	H7N2	USA	NA	2006	chicken	CY036014	A/chicken/New York/19499-1/2006(H7N2)
230	NS1	H7N2	USA	NA	2005	chicken	CY031216	A/chicken/New York/10196-6/2005(H7N2)
231	NS1	H7N2	USA	NA	2005	guinea fowl	CY028511	A/Guinea fowl/New York/143646-3/2005(H7N2)
232	NS1	H7N2	USA	NA	2005	guinea fowl	CY037067	A/Guinea fowl/New York/98616-3/2005(H7N2)

# <sup>1</sup>	Protein <sup>2</sup>	Subtype	country	Region <sup>3</sup>	Year	Animal	GenBank	Virus name
233	NS1	H7N2	USA	NA	1987	gull	M80977	A/gull/Delaware/2838/1987(H7N2)
234	NS1	H7N3	USA	NA	1977	Gull	U96742	A/Gull/Maryland/19/77)
235	NS1	H7N2	USA	NA	1996	chicken	AF001410	A/Chicken/NY/13202-7/96 (H7N2)
236	NS1	H7N2	USA	NA	2006	chicken	CY028544	A/chicken/New York/3181-5/2006(H7N2)
237	NS1	H7N2	USA	NA	2000	avian	AY241627	A/avian/NY/81746-5/00(H7N2)
238	NS1	H7N2	USA	NA	2001	chicken	AY241629	A/Chicken/NJ/118555-2/01(H7N2)
239	NS1	H7N2	USA	NA	2002	chicken	AY241631	A/chicken/NJ/150383-7/02(H7N2)
240	NS1	H7N2	USA	NA	1999	chicken	AY241644	A/chicken/NY/22409-4/99(H7N2)
241	NS1	H7N2	USA	NA	2000	chicken	AY241645	A/chicken/NY/30749-3/2000(H7N2)
242	NS1	H7N2	USA	NA	1998	quail	AY241656	A/quail/PA/20304/1998(H7N2)
243	NS1	H7N2	USA	NA	1998	turkey	AY241658	A/turkey/NJ/9778-8/98(H7N2)
244	NS1	H7N3	USA	NA	2001	blue winged teal	AY300999	A/blue-winged teal/TX/2/01(H7N3)
245	NS1	H7N3	USA	NA	1998	mallard	DQ021603	A/mallard/MN/284/98(H7N3)
246	NS1	H7N2	USA	NA	2005	guinea fowl	CY031655	A/Guinea fowl/New York/22071/2005(H7N2)
247	NS1	H7N2	USA	NA	2006	guinea fowl	CY028576	A/Guinea fowl/New York/8391-1/2006(H7N2)
248	NS1	H7N3	USA	NA	2007	northern pintail	FJ520225	A/northern pintail/California/44387-486/2007(H11N9)
249	NS1	H7N2	USA	NA	2005	chicken	CY034842	A/chicken/New York/10508/2005(H7N2)
250	NS1	H7N2	USA	NA	2005	chicken	CY031751	A/chicken/New York/31621-9/2005(H7N2)
251	NS1	H7N2	USA	NA	2005	chicken	CY022833	A/chicken/New York/21211-2/2005(H7N2)
252	NS1	H7N2	USA	NA	2005	chukar	CY022769	A/chukar/New York/11653-1/2005(H7N2)
253	NS1	H7N2	USA	NA	2005	chicken	CY022817	A/chicken/New York/16326-5/2005(H7N2)
254	NS1	H7N3	USA	NA	2006	shorebird	EU030972	A/shorebird/Delaware/22/06(H7N3)
255	NS1	H7N7	USA	NA	1927	fowl	CY014995	A/fowl/Dobson/1927(H7N7)
256	NS1	H7N7	USA	NA	2007	mallard	CY033384	A/mallard/California/HKWF1971/2007(H7N7)
257	NS1	H7N2	USA	NA	1997	chicken	EU742965	A/chicken/PA/19241/1997(H7N2)
258	NS1	H7N3	USA	NA	2006	laughing gull	CY037083	A/laughing gull/Delaware Bay/6/2006(H7N3)
1	PA	H7N7	Australia	A	1976	duck		A/duck/Victoria/76(H7N7)
2	PA	H7N6	Australia	A	2007	duck		A/duck/Victoria/512/2007(H7N6)
3	PA	H7N3	Australia	A	1994	chicken	CY022690	A/chicken/Queensland/1994(H7N3)
4	PA	H7N4	Australia	A	1997	chicken	CY022698	A/chicken/New South Wales/2/1997(H7N4)
5	PA	H7N7	Australia	A	1985	starling	CY024783	A/starling/Victoria/1985(H7N7)
6	PA	H7N4	Australia	A	1997	chicken	CY022706	A/chicken/New South Wales/327/1997(H7N4)
7	PA	H7N7	Australia	A	1976	chicken	CY024791	A/chicken/Victoria/1976(H7N7)
8	PA	H7N7	Australia	A	1985	chicken	CY025074	A/chicken/Victoria/1/1985(H7N7)
9	PA	H7N3	Australia	A	1992	chicken	CY025082	A/chicken/Victoria/224/1992(H7N3)
10	PA	H7N4	Australia	A	1997	emu	CY022714	A/emu/New South Wales/775/1997(H7N4)
11	PA	H7N2	Australia	A	2007	duck	CY033166	A/duck/Tasmania/277/2007(H7N2)
12	PA	H7N3	Bolivia	SA	2001	cinnamon teal	DQ525416	A/cinnamon teal/Bolivia/4537/2001(H7N3)
13	PA	H7N3	Canada	NA	2001	mallard	DQ017508	A/mallard/Alberta/24/01(H7N3)
14	PA	H7N5	Canada	NA	1977	mallard duck	CY005013	A/mallard duck/ALB/224/1977(H7N5)
15	PA	H7N3	Canada	NA	1985	green winged teal	CY005055	A/green-winged teal/ALB/228/1985(H7N3)
16	PA	H7N3	Canada	NA	2004	chicken	AY616764	A/chicken/British Columbia/04(H7N3)
17	PA	H7N3	Canada	NA	2007	American black duck	EU500851	A/American black duck/NB/2538/2007(H7N3)
18	PA	H7N3	Canada	NA	2004	chicken	AY648292	A/GSC_chicken_B/British Columbia/04(H7N3)
19	PA	H7N3	Canada	NA	1985	mallard duck	CY005062	A/mallard duck/Alberta/435/1985(H7N3)
20	PA	H7N3	Canada	NA	2001	mallard	DQ017512	A/mallard/Alberta/24/01(H7N3)
21	PA	H7N3	Canada	NA	2007	chicken	EU500859	A/chicken/SK/HR-00011/2007(H7N3)
22	PA	H7N1	Canada	NA	2001	mallard	CY014589	A/mallard/Alberta/34/2001(H7N1)
23	PA	H7N3	Canada	NA	1977	blue winged teal	CY005020	A/blue-winged teal/ALB/295/1977(H7N3)
24	PA	H7N3	Canada	NA	2004	chicken	AY646083	A/chicken/British Columbia/GSC_human_B/04(H7N3)
25	PA	H7N2	Canada	NA	1978	blue winged teal	CY005036	A/blue-winged teal/ALB/221/1978(H7N2)
26	PA	H7N3	Canada	NA	2007	Canada goose	EU500843	A/Canada goose/BC/3752/2007(H7N3)
27	PA	H7N3	Chile	SA	2002	chicken	AY303660	A/chicken/Chile/176822/02(H7N3)
28	PA	H7N3	Chile	SA	2002	chicken	CY015031	A/chicken/Chile/184240-4322/2002(H7N3)
29	PA	H7N3	Chile	SA	2002	chicken	AY303661	A/chicken/Chile/4957/02(H7N3)
30	PA	H7N1	China	E	1992	duck	CY005498	A/duck/Nanchang/1904/1992(H7N1)
31	PA	H7N2	China	E	2002	chicken	AY724260	A/chicken/Hebei/1/2002(H7N2)
32	PA	H7N1	Germany	E	1934	chicken	CY015051	A/chicken/Rostock/45/1934(H7N1)
33	PA	H7N7	Germany	E	1979	goose	CY015044	A/goose/Leipzig/187-7/1979(H7N7)
34	PA	H7N1	Germany	E	1934	chicken	X17223	A/chicken/Rostock/8/1934(H7N1)
35	PA	H7N7	Germany	E	2003	chicken	AJ619677	A/chicken/Germany/R28/03(H7N7)
36	PA	H7N2	Hong Kong	E	1978	duck	CY005622	A/duck/Hong Kong/293/1978(H7N2)
37	PA	H7N1	Italy	E	1999	turkey	CY021410	A/turkey/Italy/4580/1999(H7N1)
38	PA	H7N1	Italy	E	1999	turkey	CY005793	A/turkey/Italy/4169/1999(H7N1)
39	PA	H7N1	Italy	E	1999	turkey	CY005788	A/turkey/Italy/3620/1999(H7N1)
40	PA	H7N1	Italy	E	1999	turkey	CY024759	A/turkey/Italy/977/1999(H7N1)
41	PA	H7N3	Italy	E	2003	turkey	CY020594	A/turkey/Italy/251/2003(H7N3)
42	PA	H7N1	Italy	E	1999	turkey	CY024895	A/turkey/Italy/3488/1999(H7N1)
43	PA	H7N1	Italy	E	1999	turkey	CY024871	A/turkey/Italy/4482/1999(H7N1)



# <sup>1</sup>	Protein <sup>2</sup>	Subtype	country	Region <sup>3</sup>	Year	Animal	GenBank	Virus name
44	PA	H7N1	Italy	E	2000	chicken	CY024767	A/chicken/Italy/2335/2000(H7N1)
45	PA	H7N1	Italy	E	2000	quail	CY022674	A/quail/Italy/396/2000(H7N1)
46	PA	H7N2	Italy	E	2003	quail	CY021514	A/quail/Italy/4610/2003(H7N2)
47	PA	H7N1	Italy	E	2000	turkey	CY021538	A/turkey/Italy/2984/2000(H7N1)
48	PA	H7N1	Italy	E	1999	turkey	CY025178	A/turkey/Italy/2715/1999(H7N1)
49	PA	H7N1	Italy	E	1999	turkey	CY025162	A/turkey/Italy/3489/1999(H7N1)
50	PA	H7N1	Italy	E	1999	chicken	DQ991327	A/chicken/Italy/5093/99(H7N1)
51	PA	H7N3	Italy	E	2004	turkey	CY028681	A/turkey/Italy/3829/2004(H7N3)
52	PA	H7N3	Italy	E	2003	chicken	CY034755	A/chicken/Italy/682/2003(H7N3)
53	PA	H7N1	Italy	E	2002	mallard	EU158155	A/mallard/Italy/250/02(H7N1)
54	PA	H7N2	Italy	E	2003	duck	CY031033	A/duck/Italy/4609/2003(H7N2)
55	PA	H7N1	Italy	E	2001	chicken	CY021554	A/chicken/Italy/322/2001(H7N1)
56	PA	H7N3	Italy	E	2003	turkey	CY021490	A/turkey/Italy/4608/2003(H7N3)
57	PA	H7N3	Italy	E	2003	turkey	CY022618	A/turkey/Italy/2043/2003(H7N3)
58	PA	H7N1	Italy	E	1999	turkey	CY021418	A/turkey/Italy/3675/1999(H7N1)
59	PA	H7N3	Italy	E	2003	turkey	CY021370	A/turkey/Italy/1010/2003(H7N3)
60	PA	H7N3	Italy	E	2003	turkey	CY021362	A/turkey/Italy/3620/2003(H7N3)
61	PA	H7N1	Italy	E	1999	turkey	CY024879	A/turkey/Italy/4295/1999(H7N1)
62	PA	H7N1	Italy	E	2000	turkey	CY024775	A/turkey/Italy/1084/2000(H7N1)
63	PA	H7N1	Italy	E	1999	turkey	CY024863	A/turkey/Italy/4708/1999(H7N1)
64	PA	H7N3	Italy	E	2004	turkey	CY020602	A/turkey/Italy/3807/2004(H7N3)
65	PA	H7N1	Italy	E	2000	ostrich	CY020690	A/ostrich/Italy/1038/2000(H7N1)
66	PA	H7N3	Italy	E	2002	turkey	CY024743	A/turkey/Italy/8000/2002(H7N3)
67	PA	H7N7	Italy	E	1902	chicken	CY015057	A/chicken/Brescia/1902(H7N7)
68	PA	H7N1	Italy	E	1999	turkey	CY025114	A/turkey/Italy/4644/1999(H7N1)
69	PA	H7N1	Italy	E	1999	turkey	CY025170	A/turkey/Italy/3560/1999(H7N1)
70	PA	H7N1	Italy	E	1999	turkey	CY025146	A/turkey/Italy/4617/1999(H7N1)
71	PA	H7N1	Italy	E	2000	ostrich	DQ991335	A/ostrich/Italy/984/00(H7N1)
72	PA	H7N3	Italy	E	2004	turkey	CY020586	A/turkey/Italy/4479/2004(H7N3)
73	PA	H7N3	Italy	E	2002	turkey	CY020610	A/turkey/Italy/8912/2002(H7N3)
74	PA	H7N1	Italy	E	1999	turkey	CY024887	A/turkey/Italy/3185/1999(H7N1)
75	PA	H7N1	Italy	E	1999	chicken	CY022682	A/chicken/Italy/1082/99(H7N1)
76	PA	H7N1	Italy	E	2000	turkey	CY021546	A/turkey/Italy/4426/2000(H7N1)
77	PA	H7N1	Italy	E	2000	guinea fowl	CY022666	A/guinea fowl/Italy/155/2000(H7N1)
78	PA	H7N1	Italy	E	2001	turkey	CY021426	A/turkey/Italy/1351/2001(H7N1)
79	PA	H7N1	Italy	E	1999	turkey	CY025186	A/turkey/Italy/2732/1999(H7N1)
80	PA	H7N1	Italy	E	2000	pekin duck	CY024903	A/pekin duck/Italy/1848/2000(H7N1)
81	PA	H7N1	Italy	E	2000	chicken	CY015018	A/chicken/Italy/1285/2000(H7N1)
82	PA	H7N1	Italy	E	2000	ostrich	DQ991303	A/ostrich/Italy/2332/00(H7N1)
83	PA	H7N1	Italy	E	1999	chicken	DQ991319	A/chicken/Italy/5093/99(H7N1)
84	PA	H7N3	Italy	E	2002	turkey	CY029910	A/turkey/Italy/8535/2002(H7N3)
85	PA	H7N3	Italy	E	2003	turkey	CY021498	A/turkey/Italy/2987/2003(H7N3)
86	PA	H7N1	Italy	E	2000	duck	CY021562	A/duck/Italy/551/2000(H7N1)
87	PA	H7N1	Italy	E	2000	ostrich	DQ991342	A/ostrich/Italy/984/00(H7N1)
88	PA	H7N1	Italy	E	2000	ostrich	DQ991311	A/ostrich/Italy/2332/00(H7N1)
89	PA	H7N3	Italy	E	2004	turkey	CY029918	A/turkey/Italy/4130/2004(H7N3)
90	PA	H7N1	Italy	E	1999	turkey	CY025194	A/turkey/Italy/1265/1999(H7N1)
91	PA	H7N3	Italy	E	2003	turkey	CY028673	A/turkey/Italy/2685/2003(H7N3)
92	PA	H7N1	Mongolia	E	2002	duck	AB473542	A/duck/Mongolia/867/2002(H7N1)
93	PA	H7N1	Mongolia	E	2001	duck	AB268553	A/duck/Mongolia/47/2001(H7N1)
94	PA	H7N8	Netherlands	E	2006	mallard	CY041415	A/mallard/Netherlands/33/2006(H7N8)
95	PA	H7N7	Netherlands	E	2003	chicken	AY342420	A/chicken/Netherlands/1/03(H7N7)
96	PA	H7N7	Netherlands	E	2003	chicken	EF015556	A/chicken/Netherlands/03010132/03(H7N7)
97	PA	H7N3	Netherlands	E	2000	mallard	CY005849	A/mallard/Netherlands/12/2000(H7N3)
98	PA	H7N7	New Zealand	NZ	2005	duck		A/duck/New Zealand/2005(H7N7)
99	PA	H7N3	Pakistan	E	1995	chicken	CY035830	A/chicken/Pakistan/34668/1995(H7N3)
100	PA	H7N3	Pakistan	E	1998	chicken	CY037753	A/chicken/Pakistan/c1998/1998(H7N3)
101	PA	H7N3	Pakistan	E	2002	chicken	CY035838	A/chicken/Rawalpindi/NARC72/2002(H7N3)
102	PA	H7N3	Pakistan	E	1995	chicken	CY015037	A/chicken/Pakistan/34669/1995(H7N3)
103	PA	H7N1	UK	E	1979	African starling	AY724254	A/African starling/England-Q/983/1979(H7N1)
104	PA	H7N3	UK	E	1963	turkey	CY015070	A/turkey/England/1963(H7N3)
105	PA	H7N2	USA	NA	2001	chicken	EU084911	A/chicken/NY/119256-7/2001(H7N2)
106	PA	H7N3	USA	NA	1999	chicken	EU084929	A/Chicken/NY/14714-2/1999(H7N3)
107	PA	H7N7	USA	NA	1988	ruddy turnstone	CY005076	A/ruddy turnstone/DE/2378/1988(H7N7)
108	PA	H7N2	USA	NA	1995	chicken	EU742954	A/chicken/NY/13833-7/1995(H7N2)
109	PA	H7N2	USA	NA	2005	duck	CY037044	A/duck/New York/88291-12/2005(H7N2)
110	PA	H7N2	USA	NA	2002	turkey	EU743263	A/turkey/VA/158512/2002(H7N2)
111	PA	H7N3	USA	NA	2006	laughing gull	EU030983	A/laughing gull/Delaware/42/06(H7N3)
112	PA	H7N3	USA	NA	1995	turkey	EU980471	A/turkey/Utah/24721-10/1995(H7N3)
113	PA	H7N2	USA	NA	2005	muscovy duck	CY031712	A/Muscovy duck/New York/23164-10/2005(H7N2)
114	PA	H7N2	USA	NA	1994	turkey	EU980462	A/turkey/NY/4450-5/1994(H7N2)

# <sup>1</sup>	Protein <sup>2</sup>	Subtype	country	Region <sup>3</sup>	Year	Animal	GenBank	Virus name
115	PA	H7N2	USA	NA	2005	guinea fowl	CY034835	A/Guinea fowl/New York/101276-1/2005(H7N2)
116	PA	H7N2	USA	NA	2005	muscovy duck	CY034795	A/Muscovy duck/New York/87493-3/2005(H7N2)
117	PA	H7N2	USA	NA	2005	turkey	CY034899	A/turkey/New York/122501-2/2005(H7N2)
118	PA	H7N2	USA	NA	2005	chicken	CY034803	A/chicken/New York/88291-8/2005(H7N2)
119	PA	H7N2	USA	NA	2005	muscovy duck	CY034851	A/Muscovy duck/New York/11646-4/2005(H7N2)
120	PA	H7N2	USA	NA	2006	chicken	CY034907	A/chicken/New York/19495-2/2006(H7N2)
121	PA	H7N2	USA	NA	2006	guinea fowl	CY028601	A/Guinea fowl/New York/19501-4/2006(H7N2)
122	PA	H7N2	USA	NA	2006	chicken	CY028633	A/chicken/New York/29047-4/2006(H7N2)
123	PA	H7N2	USA	NA	2006	chicken	CY028585	A/chicken/New York/8391-2/2006(H7N2)
124	PA	H7N2	USA	NA	2005	chicken	CY034251	A/chicken/New York/19499/2005(H7N2)
125	PA	H7N2	USA	NA	1999	chicken	EU742980	A/chicken/NJ/16224-6/1999(H7N2)
126	PA	H7N1	USA	NA	1993	rhea	EU742878	A/rhea/North Carolina/39482/1993(H7N1)
127	PA	H7N2	USA	NA	2001	chicken	EU182287	A/chicken/PA/143586/2001(H7N2)
128	PA	H7N2	USA	NA	2005	chicken	CY031121	A/chicken/New York/30732-6/2005(H7N2)
129	PA	H7N2	USA	NA	2005	chukar	CY031073	A/chukar/New York/23164-13/2005(H7N2)
130	PA	H7N2	USA	NA	2005	chicken	CY031233	A/chicken/New York/23164-6/2005(H7N2)
131	PA	H7N3	USA	NA	2006	laughing gull	CY037092	A/laughing gull/Delaware Bay/46/2006(H7N3)
132	PA	H7N3	USA	NA	2006	ruddy turnstone	CY037108	A/ruddy turnstone/Delaware Bay/283/2006(H7N3)
133	PA	H7N2	USA	NA	2006	chicken	CY036015	A/chicken/New York/19499-1/2006(H7N2)
134	PA	H7N2	USA	NA	2005	quail	CY034395	A/quail/New York/89641/2005(H7N2)
135	PA	H7N2	USA	NA	2005	chicken	CY034307	A/chicken/New York/23165-10/2005(H7N2)
136	PA	H7N2	USA	NA	2001	chicken	CY036395	A/chicken/New Jersey/Sg-00380/2001(H7N2)
137	PA	H7N2	USA	NA	2001	chicken	CY036391	A/chicken/New Jersey/Sg-00379/2001(H7N2)
138	PA	H7N2	USA	NA	2001	chicken	CY036411	A/chicken/New York/Sg-00384/2001(H7N2)
139	PA	H7N2	USA	NA	2002	guinea fowl	CY036435	A/guinea fowl/Massachusetts/Sg-00390/2002(H7N2)
140	PA	H7N2	USA	NA	2003	chicken	CY036537	A/chicken/New York/Sg-00416/2003(H7N2)
141	PA	H7N2	USA	NA	2004	chicken	CY036599	A/chicken/New York/Sg-00432/2004(H7N2)
142	PA	H7N2	USA	NA	2005	chicken	CY036634	A/chicken/New Jersey/Sg-00441/2005(H7N2)
143	PA	H7N3	USA	NA	2007	northern shoveler	CY039579	A/northern shoveler/California/HKWF1026/2007(H7N3)
144	PA	H7N2	USA	NA	2004	chicken	CY036611	A/chicken/New Jersey/Sg-00435/2004(H7N2)
145	PA	H7N2	USA	NA	2004	chicken	CY036587	A/chicken/New Jersey/Sg-00429/2004(H7N2)
146	PA	H7N2	USA	NA	2002	chicken	CY036443	A/chicken/New Jersey/Sg-00392/2002(H7N2)
147	PA	H7N2	USA	NA	2001	chicken	CY036419	A/chicken/New York/Sg-00386/2001(H7N2)
148	PA	H7N2	USA	NA	2004	chicken	CY036607	A/chicken/New Jersey/Sg-00434/2004(H7N2)
149	PA	H7N2	USA	NA	2005	chicken	CY036627	A/chicken/New Jersey/Sg-00439/2005(H7N2)
150	PA	H7N2	USA	NA	2001	guinea fowl	CY036403	A/guinea fowl/New Jersey/Sg-00382/2001(H7N2)
151	PA	H7N2	USA	NA	1997	chicken	EU742966	A/chicken/PA/19241/1997(H7N2)
152	PA	H7N3	USA	NA	2006	shorebird	CY041327	A/shorebird/Delaware Bay/332/2006(H7N3)
153	PA	H7N2	USA	NA	2005	chicken	CY031081	A/chicken/New York/23165-6/2005(H7N2)
154	PA	H7N7	USA	NA	2007	mallard	CY033379	A/mallard/California/HKWF1971/2007(H7N7)
155	PA	H7N2	USA	NA	2006	muscovy duck	CY036007	A/Muscovy duck/New York/19495-7/2006(H7N2)
156	PA	H7N2	USA	NA	2005	chicken	CY034843	A/chicken/New York/10508/2005(H7N2)
157	PA	H7N2	USA	NA	1995	emu	EU980458	A/emu/TX/25414/1995(H7N2)
158	PA	H7N2	USA	NA	2005	guinea fowl	CY031680	A/Guinea fowl/New York/23164-3-05/2005(H7N2)
159	PA	H7N2	USA	NA	2006	guinea fowl	CY028577	A/Guinea fowl/New York/8391-1/2006(H7N2)
160	PA	H7N3	USA	NA	1994	chicken	EU743016	A/chicken/New Jersey/15086-3/1994(H7N3)
161	PA	H7N2	USA	NA	2002	guinea hen	EU742975	A/guinea hen/MA/14801-11/2002(H7N2)
162	PA	H7N2	USA	NA	2005	guinea fowl	CY031768	A/Guinea fowl/New York/37982-3/2005(H7N2)
163	PA	H7N2	USA	NA	1995	turkey	EU182295	A/turkey/NY/13820-3/1995(H7N2)
164	PA	H7N2	USA	NA	2005	chicken	CY033206	A/chicken/New York/22067-8/2005(H7N2)
165	PA	H7N2	USA	NA	2005	chicken	CY031752	A/chicken/New York/31621-9/2005(H7N2)
166	PA	H7N2	USA	NA	2005	chicken	CY022818	A/chicken/New York/16326-5/2005(H7N2)
167	PA	H7N2	USA	NA	2005	chicken	CY022834	A/chicken/New York/21211-2/2005(H7N2)
168	PA	H7N2	USA	NA	1997	chicken	EU742945	A/chicken/PA/11767/1997(H7N2)
169	PA	H7N2	USA	NA	1997	chicken	EU742935	A/chicken/NY/8030-2/1997(H7N2)
170	PA	H7N3	USA	NA	2001	black duck	CY020890	A/Black Duck/Ohio/415/2001(H7N3)
171	PA	H7N3	USA	NA	2005	mallard	CY021642	A/mallard/Delaware/418/2005(H7N3)
172	PA	H7N2	USA	NA	2001	avian	EU026099	A/avian/NY/118353-1/2001(H7N2)
173	PA	H7N9	USA	NA	2006	blue winged teal	CY024823	A/blue-winged teal/Ohio/566/2006(H7N9)
174	PA	H7N2	USA	NA	2006	chicken	CY028545	A/chicken/New York/3181-5/2006(H7N2)
175	PA	H7N2	USA	NA	2006	chicken	CY034915	A/chicken/New York/19495-3/2006(H7N2)
176	PA	H7N2	USA	NA	2005	guinea fowl	CY035927	A/Guinea fowl/New York/88291-9/2005(H7N2)
177	PA	H7N2	USA	NA	2006	guinea fowl	CY035999	A/Guinea fowl/New York/19495-6/2006(H7N2)
178	PA	H7N3	USA	NA	2006	shorebird	CY036772	A/shorebird/Delaware Bay/560/2006(H7N3)
179	PA	H7N2	USA	NA	2005	duck	CY034811	A/duck/New York/98616-4/2005(H7N2)
180	PA	H7N3	USA	NA	2007	ruddy turnstone	CY036780	A/ruddy turnstone/Delaware Bay/108/2007(H7N3)
181	PA	H7N2	USA	NA	2005	chicken	CY037020	A/chicken/New York/63806-11/2005(H7N2)
182	PA	H7N3	USA	NA	2001	duck	EU743012	A/duck/PA/143585/2001(H7N3)
183	PA	H7N2	USA	NA	2001	guinea fowl	EU742917	A/guinea fowl/NJ/119063-8/2001(H7N2)
184	PA	H7N2	USA	NA	2005	guinea fowl	CY031225	A/Guinea fowl/New York/10196-7/2005(H7N2)
185	PA	H7N2	USA	NA	2005	chicken	CY031217	A/chicken/New York/10196-6/2005(H7N2)

# <sup>1</sup>	Protein <sup>2</sup>	Subtype	country	Region <sup>3</sup>	Year	Animal	GenBank	Virus name
186	PA	H7N2	USA	NA	2005	guinea fowl	CY028512	A/Guinea fowl/New York/143646-3/2005(H7N2)
187	PA	H7N2	USA	NA	2005	chicken	CY036623	A/chicken/New York/Sg-00438/2005(H7N2)
188	PA	H7N2	USA	NA	2005	chicken	CY031640	A/chicken/New York/22067-7/2005(H7N2)
189	PA	H7N2	USA	NA	2005	chicken	CY036638	A/chicken/New York/Sg-00342/2005(H7N2)
190	PA	H7N2	USA	NA	1999	chicken	FJ517328	A/chicken/NY/21586-8/1999(H7N2)
191	PA	H7N3	USA	NA	2008	green winged teal	CY039539	A/green winged teal/California/AKS1370/2008(H7N3)
192	PA	H7N2	USA	NA	2004	chicken	CY036603	A/chicken/New York/Sg-00433/2004(H7N2)
193	PA	H7N2	USA	NA	2001	chicken	CY036399	A/chicken/New York/Sg-00381/2001(H7N2)
194	PA	H7N2	USA	NA	2005	chicken	CY033310	A/chicken/New York/63806-8/2005(H7N2)
195	PA	H7N2	USA	NA	2000	chicken	EU742984	A/chicken/NJ/30739-6/2000(H7N2)
196	PA	H7N2	USA	NA	1994	chicken	EU742949	A/chicken/NY/13142-5/1994(H7N2)
197	PA	H7N2	USA	NA	2005	chicken	CY033302	A/chicken/New York/37982-4/2005(H7N2)
198	PA	H7N2	USA	NA	1998	quail	EU742921	A/quail/NY/13989-51/1998(H7N2)
199	PA	H7N3	USA	NA	1985	ruddy turnstone	CY004410	A/ruddy turnstone/New Jersey/65/1985(H7N3)
200	PA	H7N3	USA	NA	2006	shorebird	EU030967	A/shorebird/Delaware/22/06(H7N3)
201	PA	H7N2	USA	NA	1995	guinea fowl	CY014841	A/guinea fowl/New York/13820-3/1995(H7N2)
202	PA	H7N2	USA	NA	2004	chicken	EU743258	A/chicken/NJ/294508-12/2004(H7N2)
203	PA	H7N2	USA	NA	2002	chicken	EU742971	A/chicken/PA/149092-1/2002(H7N2)
204	PA	H7N2	USA	NA	1995	chicken	EU182291	A/chicken/NY/3112-1/1995(H7N2)
205	PA	H7N7	USA	NA	1989	red knot	CY005083	A/red knot/NJ/325/1989(H7N7)
206	PA	H7N3	USA	NA	1998	Mallard	CY016193	A/Mallard/Ohio/322/1998(H7N3)
207	PA	H7N2	USA	NA	2005	chukar	CY022770	A/chukar/New York/11653-1/2005(H7N2)
208	PA	H7N3	USA	NA	1980	pheasant	CY005893	A/pheasant/Minnesota/917/1980(H7N3)
209	PA	H7N2	USA	NA	2005	duck	CY034819	A/duck/New York/98616-5/2005(H7N2)
210	PA	H7N2	USA	NA	1996	chicken	EU980466	A/chicken/NY/3202-7/1996(H7N2)
211	PA	H7N2	USA	NA	2005	quail	CY033318	A/quail/New York/63806-13/2005(H7N2)
212	PA	H7N2	USA	NA	2006	guinea fowl	CY034243	A/Guinea fowl/New York/32084/2006(H7N2)
213	PA	H7N2	USA	NA	2006	chicken	CY035991	A/chicken/New York/19495-4/2006(H7N2)
214	PA	H7N3	USA	NA	2007	ruddy turnstone	CY036788	A/ruddy turnstone/Delaware Bay/121/2007(H7N3)
215	PA	H7N2	USA	NA	2003	chicken	EU743000	A/chicken/CT/260413-2/2003(H7N2)
216	PA	H7N2	USA	NA	2005	guinea fowl	CY031656	A/Guinea fowl/New York/22071/2005(H7N2)
217	PA	H7N2	USA	NA	2005	chicken	CY031648	A/chicken/New York/22067-12/2005(H7N2)
218	PA	H7N2	USA	NA	2005	chicken	CY031688	A/chicken/New York/23164-5/2005(H7N2)
219	PA	H7N2	USA	NA	2002	turkey	EU982305	A/turkey/VA/55/2002(H7N2)
220	PA	H7N2	USA	NA	1998	goose	EU743270	A/goose/NY/8600-3/1998(H7N2)
221	PA	H7N2	USA	NA	1997	chicken	EU742930	A/chicken/PA/7777-1/1997(H7N2)
222	PA	H7N2	USA	NA	1995	chicken	EU742940	A/chicken/RI/4328-1/1995(H7N2)
223	PA	H7N2	USA	NA	1995	chicken	EU182299	A/chicken/NY/19542-5/1995(H7N2)
224	PA	H7N2	USA	NA	2005	chicken	CY022826	A/chicken/New York/16330/2005(H7N2)
225	PA	H7N2	USA	NA	2005	chicken	CY033238	A/chicken/New York/30732-8/2005(H7N2)
226	PA	H7N2	USA	NA	2005	guinea fowl	CY031728	A/Guinea fowl/New York/23165-12/2005(H7N2)
227	PA	H7N2	USA	NA	2005	chicken	CY031776	A/chicken/New York/42217/2005(H7N2)
228	PA	H7N7	USA	NA	1927	fowl	CY014996	A/fowl/Dobson/1927(H7N7)
229	PA	H7N3	USA	NA	1980	turkey	CY014783	A/turkey/Minnesota/1200/1980(H7N3)
230	PA	H7N9	USA	NA	1988	turkey	CY014791	A/turkey/Minnesota/1/1988(H7N9)
231	PA	H7N2	USA	NA	1998	quail	EU742958	A/quail/PA/20304/1998(H7N2)
232	PA	H7N2	USA	NA	1998	chicken	EU742925	A/chicken/PA/13552-1/1998(H7N2)
233	PA	H7N3	USA	NA	2004	blue winged teal	CY018906	A/blue-winged teal/Ohio/658/2004(H7N3)
234	PA	H7N2	USA	NA	2000	chicken	EU084905	A/chicken/NY/30749-3/2000(H7N2)
235	PA	H7N2	USA	NA	2001	chicken	EU084915	A/chicken/NJ/118878-5/2001(H7N2)
236	PA	H7N2	USA	NA	1997	chicken	EU084918	A/chicken/NY/6777-3/1997(H7N2)
237	PA	H7N2	USA	NA	1997	turkey	EU084922	A/turkey/PA/7975/1997(H7N2)
238	PA	H7N2	USA	NA	1994	chicken	EU084925	A/chicken/NY/4447-7/1994(H7N2)
239	PA	H7N3	USA	NA	1971	turkey	DQ870887	A/turkey/Oregon/1971(H7N3)
240	PA	H7N8	USA	NA	1987	mallard	CY021626	A/mallard/Ohio/421/1987(H7N8)
241	PA	H7N2	USA	NA	2001	chicken	EU742893	A/chicken/FL/90348-4/2001(H7N2)
242	PA	H7N2	USA	NA	2005	chicken	CY037052	A/chicken/New York/88291-14/2005(H7N2)
243	PA	H7N2	USA	NA	2005	guinea fowl	CY037068	A/Guinea fowl/New York/98616-3/2005(H7N2)
244	PA	H7N3	USA	NA	2008	northern shoveler	CY039595	A/northern shoveler/California/HKWF2031/2008(H7N3)
245	PA	H7N2	USA	NA	2005	chicken	CY034371	A/chicken/New York/88291-11/2005(H7N2)
246	PA	H7N2	USA	NA	2005	chicken	CY034347	A/chicken/New York/63806-12/2005(H7N2)
247	PA	H7N2	USA	NA	2005	chicken	CY034363	A/chicken/New York/88291-6/2005(H7N2)
248	PA	H7N2	USA	NA	2001	chicken	CY036407	A/chicken/New York/Sg-00383/2001(H7N2)
249	PA	H7N2	USA	NA	2002	guinea fowl	CY036439	A/guinea fowl/New Jersey/Sg-00391/2002(H7N2)
250	PA	H7N2	USA	NA	2004	chicken	CY036595	A/chicken/New Jersey/Sg-00431/2004(H7N2)
251	PA	H7N2	USA	NA	2004	chicken	CY036556	A/chicken/New Jersey/Sg-00421/2004(H7N2)
252	PA	H7N2	USA	NA	2000	chicken	CY036292	A/chicken/New York/Sg-00352/2000(H7N2)
1	PB1	H7N7	Australia	A	1985	starling	CY024784	A/starling/Victoria/85(H7N7)
2	PB1	H7N7	Australia	A	1985	chicken	CY025075	A/chicken/Victoria/1/85(H7N7)
3	PB1	H7N7	Australia	A	1976	duck		A/duck/Victoria/76(H7N7)

#1	Protein <sup>2</sup>	Subtype	country	Region <sup>3</sup>	Year	Animal	GenBank	Virus name
4	PB1	H7N6	Australia	A	2007	duck		A/duck/Victoria/512/2007(H7N6)
5	PB1	H7N3	Australia	A	1994	chicken	CY022691	A/chicken/Queensland/1994(H7N3)
6	PB1	H7N4	Australia	A	1997	chicken	CY022699	A/chicken/New South Wales/2/1997(H7N4)
7	PB1	H7N4	Australia	A	1997	chicken	CY022707	A/chicken/New South Wales/327/1997(H7N4)
8	PB1	H7N7	Australia	A	1976	chicken	CY024792	A/chicken/Victoria/1976(H7N7)
9	PB1	H7N3	Australia	A	1992	chicken	CY025083	A/chicken/Victoria/224/1992(H7N3)
10	PB1	H7N4	Australia	A	1997	emu	CY022715	A/emu/New South Wales/775/1997(H7N4)
11	PB1	H7N2	Australia	A	2007	duck	CY033167	A/duck/Tasmania/277/2007(H7N2)
12	PB1	H7N3	Canada	NA	1985	green winged teal	CY005056	A/green-winged teal/ALB/228/1985(H7N3)
13	PB1	H7N3	Canada	NA	1977	blue winged teal	CY005021	A/blue-winged teal/ALB/435/1977(H7N3)
14	PB1	H7N8	Canada	NA	1979	pintail duck	CY005042	A/pintail duck/Alberta/121/1979(H7N8)
15	PB1	H7N3	Canada	NA	1976	mallard duck	CY004328	A/mallard duck/ALB/48/1976(H7N3)
16	PB1	H7N3	Canada	NA	2007	American black duck	EU500850	A/American black duck/NB/2538/2007(H7N3)
17	PB1	H7N3	Canada	NA	2001	mallard	CY004331	A/mallard/Alberta/27/2001(H7N3)
18	PB1	H7N3	Canada	NA	2001	mallard	DQ017511	A/mallard/Alberta/24/01(H7N3)
19	PB1	H7N3	Canada	NA	2004	chicken	AY648293	A/GSC_chicken_B/British Columbia/04(H7N3)
20	PB1	H7N2	Canada	NA	1978	blue winged teal	CY005037	A/blue-winged teal/ALB/221/1978(H7N2)
21	PB1	H7N3	Canada	NA	1985	mallard duck	CY005063	A/mallard duck/Alberta/435/1985(H7N3)
22	PB1	H7N3	Canada	NA	2007	chicken	EU500858	A/chicken/SK/HR-00011/2007(H7N3)
23	PB1	H7N3	Canada	NA	2007	Canada goose	EU500842	A/Canada goose/BC/3752/2007(H7N3)
24	PB1	H7N3	Canada	NA	2004	chicken	AY616765	A/chicken/British Columbia/04(H7N3)
25	PB1	H7N3	Canada	NA	2004	chicken	AY646084	A/chicken/British Columbia/GSC_human_B/04(H7N3)
26	PB1	H7N5	Canada	NA	1977	mallard duck	CY005014	A/mallard duck/ALB/224/1977(H7N5)
27	PB1	H7N3	Canada	NA	2001	mallard	DQ017507	A/mallard/Alberta/24/01(H7N3)
28	PB1	H7N3	Canada	NA	2004	chicken	AY653039	A/GSC_chicken/British Columbia/04(H7N3)
29	PB1	H7N3	Chile	SA	2002	chicken	CY015032	A/chicken/Chile/184240-4322/2002(H7N3)
30	PB1	H7N3	Chile	SA	2002	chicken	AY303663	A/chicken/Chile/176822/02(H7N3)
31	PB1	H7N2	China	E	2002	chicken	AY724261	A/chicken/Hebei/1/2002(H7N2)
32	PB1	H7N1	China	E	1992	duck	CY005499	A/duck/Nanchang/1904/1992(H7N1)
33	PB1	H7N7	China	E	2003	duck	EU158166	A/duck/Jiangxi/1742/03(H7N7)
34	PB1	H7N7	China	E	2003	duck	EU158168	A/duck/Jiangxi/1786/03(H7N7)
35	PB1	H7N7	Germany	E	2003	chicken	AJ620348	A/chicken/Germany/R28/03(H7N7)
36	PB1	H7N1	Germany	E	1934	chicken	CY015052	A/chicken/Rostock/45/1934(H7N1)
37	PB1	H7N7	Germany	E	1979	goose	CY015045	A/goose/Leipzig/187-7/1979(H7N7)
38	PB1	H7N2	Hong Kong	E	1978	duck	CY005623	A/duck/Hong Kong/293/1978(H7N2)
39	PB1	H7N3	Italy	E	2003	turkey	CY021363	A/turkey/Italy/3620/2003(H7N3)
40	PB1	H7N1	Italy	E	2001	turkey	CY021427	A/turkey/Italy/1351/2001(H7N1)
41	PB1	H7N1	Italy	E	1999	turkey	CY024888	A/turkey/Italy/3185/1999(H7N1)
42	PB1	H7N1	Italy	E	1999	turkey	CY024872	A/turkey/Italy/4482/1999(H7N1)
43	PB1	H7N3	Italy	E	2002	turkey	CY020611	A/turkey/Italy/8912/2002(H7N3)
44	PB1	H7N3	Italy	E	2004	turkey	CY020587	A/turkey/Italy/4479/2004(H7N3)
45	PB1	H7N1	Italy	E	2000	guinea fowl	CY022667	A/guinea fowl/Italy/155/2000(H7N1)
46	PB1	H7N1	Italy	E	2000	quail	CY022675	A/quail/Italy/396/2000(H7N1)
47	PB1	H7N1	Italy	E	2000	turkey	CY021547	A/turkey/Italy/4426/2000(H7N1)
48	PB1	H7N1	Italy	E	2000	duck	CY021563	A/duck/Italy/551/2000(H7N1)
49	PB1	H7N1	Italy	E	2000	ostrich	DQ991302	A/ostrich/Italy/2332/00(H7N1)
50	PB1	H7N3	Italy	E	2002	turkey	CY029911	A/turkey/Italy/8535/2002(H7N3)
51	PB1	H7N1	Italy	E	1999	turkey	CY025139	A/turkey/Italy/4294/1999(H7N1)
52	PB1	H7N1	Italy	E	1999	turkey	CY025179	A/turkey/Italy/2715/1999(H7N1)
53	PB1	H7N1	Italy	E	1999	turkey	CY025187	A/turkey/Italy/2732/1999(H7N1)
54	PB1	H7N1	Italy	E	2000	pekin duck	CY024904	A/pekin duck/Italy/1848/2000(H7N1)
55	PB1	H7N3	Italy	E	2004	turkey	CY028690	A/turkey/Italy/3477/2004(H7N3)
56	PB1	H7N2	Italy	E	2003	duck	CY031034	A/duck/Italy/4609/2003(H7N2)
57	PB1	H7N3	Italy	E	2003	turkey	EU158167	A/turkey/Italy/121964/03(H7N3)
58	PB1	H7N3	Italy	E	2004	turkey	CY020603	A/turkey/Italy/3807/2004(H7N3)
59	PB1	H7N3	Italy	E	2004	quail	CY020619	A/quail/Italy/3347/2004(H7N3)
60	PB1	H7N3	Italy	E	2003	turkey	CY021371	A/turkey/Italy/1010/2003(H7N3)
61	PB1	H7N1	Italy	E	2001	chicken	CY021555	A/chicken/Italy/322/2001(H7N1)
62	PB1	H7N1	Italy	E	1999	chicken	CY022683	A/chicken/Italy/1082/99(H7N1)
63	PB1	H7N3	Italy	E	2004	turkey	CY029919	A/turkey/Italy/4130/2004(H7N3)
64	PB1	H7N1	Italy	E	1999	turkey	CY025115	A/turkey/Italy/4644/1999(H7N1)
65	PB1	H7N1	Italy	E	1999	turkey	CY025171	A/turkey/Italy/3560/1999(H7N1)
66	PB1	H7N3	Italy	E	2003	turkey	CY028674	A/turkey/Italy/2685/2003(H7N3)
67	PB1	H7N3	Italy	E	2003	chicken	CY034756	A/chicken/Italy/682/2003(H7N3)
68	PB1	H7N3	Italy	E	2002	turkey	CY024744	A/turkey/Italy/8000/2002(H7N3)
69	PB1	H7N1	Italy	E	1999	turkey	CY024760	A/turkey/Italy/977/1999(H7N1)
70	PB1	H7N3	Italy	E	2003	turkey	CY021491	A/turkey/Italy/4608/2003(H7N3)
71	PB1	H7N3	Italy	E	2003	turkey	CY022619	A/turkey/Italy/2043/2003(H7N3)
72	PB1	H7N1	Italy	E	1999	turkey	CY021419	A/turkey/Italy/3675/1999(H7N1)
73	PB1	H7N1	Italy	E	1999	chicken	DQ991318	A/chicken/Italy/5093/99(H7N1)

# <sup>1</sup>	Protein <sup>2</sup>	Subtype	country	Region <sup>3</sup>	Year	Animal	GenBank	Virus name
74	PB1	H7N1	Italy	E	2000	ostrich	DQ991334	A/ostrich/Italy/984/00(H7N1)
75	PB1	H7N1	Italy	E	2000	ostrich	DQ991341	A/ostrich/Italy/984/00(H7N1)
76	PB1	H7N1	Italy	E	2000	chicken	CY015019	A/chicken/Italy/1285/2000(H7N1)
77	PB1	H7N1	Italy	E	1999	turkey	CY025163	A/turkey/Italy/3489/1999(H7N1)
78	PB1	H7N1	Italy	E	2000	chicken	CY024768	A/chicken/Italy/2335/2000(H7N1)
79	PB1	H7N3	Italy	E	2003	turkey	CY020595	A/turkey/Italy/251/2003(H7N3)
80	PB1	H7N1	Italy	E	1999	turkey	CY024896	A/turkey/Italy/3488/1999(H7N1)
81	PB1	H7N1	Italy	E	1999	turkey	CY021411	A/turkey/Italy/4580/1999(H7N1)
82	PB1	H7N1	Italy	E	1999	turkey	CY005794	A/turkey/Italy/4169/1999(H7N1)
83	PB1	H7N1	Italy	E	1999	chicken	CY022659	A/chicken/Italy/4746/1999(H7N1)
84	PB1	H7N3	Italy	E	2003	turkey	CY021499	A/turkey/Italy/2987/2003(H7N3)
85	PB1	H7N2	Italy	E	2003	quail	CY021515	A/quail/Italy/4610/2003(H7N2)
86	PB1	H7N1	Italy	E	2000	turkey	CY021539	A/turkey/Italy/2984/2000(H7N1)
87	PB1	H7N1	Italy	E	1999	turkey	CY025195	A/turkey/Italy/1265/1999(H7N1)
88	PB1	H7N1	Italy	E	1999	chicken	DQ991326	A/chicken/Italy/5093/99(H7N1)
89	PB1	H7N3	Italy	E	2004	turkey	CY028682	A/turkey/Italy/3829/2004(H7N3)
90	PB1	H7N3	Italy	E	2003	turkey	EU158162	A/turkey/Italy/68819/03(H7N3)
91	PB1	H7N1	Mongolia	E	2001	duck	AB268552	A/duck/Mongolia/47/2001(H7N1)
92	PB1	H7N1	Mongolia	E	2002	duck	AB473541	A/duck/Mongolia/867/2002(H7N1)
93	PB1	H7N7	Netherlands	E	2003	chicken	AY340085	A/chicken/Netherlands/1/03(H7N7)
94	PB1	H7N8	Netherlands	E	2006	mallard	CY041416	A/mallard/Netherlands/33/2006(H7N8)
95	PB1	H7N7	Netherlands	E	2003	chicken	EF015557	A/chicken/Netherlands/03010132/03(H7N7)
96	PB1	H7N3	Netherlands	E	2000	mallard	CY005850	A/mallard/Netherlands/12/2000(H7N3)
97	PB1	H7N7	New Zealand	NZ	2005	duck		A/duck/New Zealand/2005(H7N7)
98	PB1	H7N3	Pakistan	E	1995	chicken	CY015038	A/chicken/Pakistan/34669/1995(H7N3)
99	PB1	H7N3	Pakistan	E	1995	chicken	CY035829	A/chicken/Pakistan/34668/1995(H7N3)
100	PB1	H7N3	Pakistan	E	2002	chicken	CY035821	A/chicken/Rawalpindi/NARC68/2002(H7N3)
101	PB1	H7N3	Pakistan	E	1998	chicken	CY037752	A/chicken/Pakistan/c1998/1998(H7N3)
102	PB1	H7N3	Pakistan	E	2002	chicken	CY035837	A/chicken/Rawalpindi/NARC72/2002(H7N3)
103	PB1	H7N1	UK	E	1979	African starling	AY724255	A/African starling/England-Q/983/1979(H7N1)
104	PB1	H7N3	UK	E	1963	turkey	CY015071	A/turkey/England/1963(H7N3)
105	PB1	H7N2	USA	NA	2005	turkey	CY034900	A/turkey/New York/122501-2/2005(H7N2)
106	PB1	H7N3	USA	NA	2006	shorebird	CY036773	A/shorebird/Delaware Bay/560/2006(H7N3)
107	PB1	H7N2	USA	NA	2006	chicken	CY034916	A/chicken/New York/19495-3/2006(H7N2)
108	PB1	H7N2	USA	NA	2006	chicken	CY028634	A/chicken/New York/29047-4/2006(H7N2)
109	PB1	H7N2	USA	NA	2005	chicken	CY031705	A/chicken/New York/23164-9/2005(H7N2)
110	PB1	H7N2	USA	NA	2005	guinea fowl	CY031681	A/Guinea fowl/New York/23164-3-05/2005(H7N2)
111	PB1	H7N2	USA	NA	1997	chicken	EU742946	A/chicken/PA/11767/1997(H7N2)
112	PB1	H7N2	USA	NA	2004	chicken	EU743259	A/chicken/NJ/294508-12/2004(H7N2)
113	PB1	H7N3	USA	NA	2006	laughing gull	EU030981	A/laughing gull/Delaware/42/06(H7N3)
114	PB1	H7N2	USA	NA	1995	guinea fowl	CY014842	A/guinea fowl/New York/13820-3/1995(H7N2)
115	PB1	H7N2	USA	NA	2002	chicken	CY014899	A/chicken/Pennsylvania/143586/2002(H7N2)
116	PB1	H7N3	USA	NA	1985	ruddy turnstone	CY004411	A/ruddy turnstone/New Jersey/65/1985(H7N3)
117	PB1	H7N2	USA	NA	1998	quail	EU742922	A/quail/NY/13989-51/1998(H7N2)
118	PB1	H7N3	USA	NA	1994	chicken	EU743017	A/chicken/New Jersey/15086-3/1994(H7N3)
119	PB1	H7N2	USA	NA	2005	chicken	CY022835	A/chicken/New York/21211-2/2005(H7N2)
120	PB1	H7N2	USA	NA	1995	chicken	EU182290	A/chicken/NY/3112-1/1995(H7N2)
121	PB1	H7N3	USA	NA	2004	blue-winged teal	CY018907	A/blue-winged teal/Ohio/658/2004(H7N3)
122	PB1	H7N3	USA	NA	1980	pheasant	CY005894	A/pheasant/Minnesota/917/1980(H7N3)
123	PB1	H7N2	USA	NA	2005	chukar	CY022771	A/chukar/New York/11653-1/2005(H7N2)
124	PB1	H7N2	USA	NA	2005	guinea fowl	CY031226	A/Guinea fowl/New York/10196-7/2005(H7N2)
125	PB1	H7N2	USA	NA	2005	chicken	CY031082	A/chicken/New York/23165-6/2005(H7N2)
126	PB1	H7N2	USA	NA	2005	guinea fowl	CY028513	A/Guinea fowl/New York/143646-3/2005(H7N2)
127	PB1	H7N2	USA	NA	2006	chicken	CY028546	A/chicken/New York/3181-5/2006(H7N2)
128	PB1	H7N2	USA	NA	2001	guinea fowl	EU742918	A/guinea fowl/NJ/119063-8/2001(H7N2)
129	PB1	H7N2	USA	NA	1997	chicken	EU742967	A/chicken/PA/19241/1997(H7N2)
130	PB1	H7N2	USA	NA	2005	chicken	CY037021	A/chicken/New York/63806-11/2005(H7N2)
131	PB1	H7N3	USA	NA	2006	laughing gull	CY037085	A/laughing gull/Delaware Bay/6/2006(H7N3)
132	PB1	H7N2	USA	NA	2001	chicken	EU084910	A/chicken/NY/119256-7/2001(H7N2)
133	PB1	H7N2	USA	NA	1997	chicken	EU084917	A/chicken/NY/6777-3/1997(H7N2)
134	PB1	H7N2	USA	NA	1994	chicken	EU084924	A/chicken/NY/4447-7/1994(H7N2)
135	PB1	H7N8	USA	NA	1987	mallard	CY021627	A/mallard/Ohio/421/1987(H7N8)
136	PB1	H7N2	USA	NA	2005	chicken	CY022827	A/chicken/New York/16330/2005(H7N2)
137	PB1	H7N2	USA	NA	2006	chicken	CY028586	A/chicken/New York/8391-2/2006(H7N2)
138	PB1	H7N2	USA	NA	2001	avian	EU026100	A/avian/NY/118353-1/2001(H7N2)
139	PB1	H7N2	USA	NA	2005	chicken	CY031689	A/chicken/New York/23164-5/2005(H7N2)
140	PB1	H7N2	USA	NA	2005	duck	CY034380	A/duck/New York/88291-13/2005(H7N2)
141	PB1	H7N2	USA	NA	2005	quail	CY034396	A/quail/New York/89641/2005(H7N2)
142	PB1	H7N2	USA	NA	2005	chicken	CY034308	A/chicken/New York/23165-10/2005(H7N2)
143	PB1	H7N2	USA	NA	2005	chicken	CY034364	A/chicken/New York/88291-6/2005(H7N2)
144	PB1	H7N2	USA	NA	1999	chicken	EU742981	A/chicken/NJ/16224-6/1999(H7N2)

# <sup>1</sup>	Protein <sup>2</sup>	Subtype	country	Region <sup>3</sup>	Year	Animal	GenBank	Virus name
145	PB1	H7N2	USA	NA	1998	chicken	EU742926	A/chicken/PA/13552-1/1998(H7N2)
146	PB1	H7N2	USA	NA	2006	guinea fowl	CY034244	A/Guinea fowl/New York/32084/2006(H7N2)
147	PB1	H7N2	USA	NA	2005	chicken	CY034252	A/chicken/New York/19499/2005(H7N2)
148	PB1	H7N2	USA	NA	1998	quail	EU742959	A/quail/PA/20304/1998(H7N2)
149	PB1	H7N2	USA	NA	1994	chicken	EU742950	A/chicken/NY/13142-5/1994(H7N2)
150	PB1	H7N2	USA	NA	2005	chicken	CY033239	A/chicken/New York/30732-8/2005(H7N2)
151	PB1	H7N2	USA	NA	1995	chicken	EU742941	A/chicken/RI/4328-1/1995(H7N2)
152	PB1	H7N2	USA	NA	2002	chicken	EU742972	A/chicken/PA/149092-1/2002(H7N2)
153	PB1	H7N2	USA	NA	2005	chicken	CY033247	A/chicken/New York/30732-9/2005(H7N2)
154	PB1	H7N2	USA	NA	2005	guinea fowl	CY031729	A/Guinea fowl/New York/23165-12/2005(H7N2)
155	PB1	H7N2	USA	NA	1995	chicken	EU182298	A/chicken/NY/19542-5/1995(H7N2)
156	PB1	H7N7	USA	NA	1927	fowl	CY014997	A/fowl/Dobson/1927(H7N7)
157	PB1	H7N2	USA	NA	2005	chicken	CY029839	A/chicken/New York/16326-4/2005(H7N2)
158	PB1	H7N7	USA	NA	2007	mallard	CY033378	A/mallard/California/HKWF1971/2007(H7N7)
159	PB1	H7N3	USA	NA	2007	ruddy turnstone	CY036781	A/ruddy turnstone/Delaware Bay/108/2007(H7N3)
160	PB1	H7N2	USA	NA	2005	guinea fowl	CY037069	A/Guinea fowl/New York/98616-3/2005(H7N2)
161	PB1	H7N2	USA	NA	2005	chicken	CY037053	A/chicken/New York/88291-14/2005(H7N2)
162	PB1	H7N2	USA	NA	2005	guinea fowl	CY034836	A/Guinea fowl/New York/101276-1/2005(H7N2)
163	PB1	H7N2	USA	NA	1996	chicken	EU980467	A/chicken/NY/3202-7/1996(H7N2)
164	PB1	H7N2	USA	NA	2005	chicken	CY034844	A/chicken/New York/10508/2005(H7N2)
165	PB1	H7N2	USA	NA	2005	quail	CY033319	A/quail/New York/63806-13/2005(H7N2)
166	PB1	H7N2	USA	NA	2005	turkey	CY031721	A/turkey/New York/23164-11/2005(H7N2)
167	PB1	H7N2	USA	NA	1995	emu	EU980459	A/emu/TX/25414/1995(H7N2)
168	PB1	H7N2	USA	NA	2006	chicken	CY035992	A/chicken/New York/19495-4/2006(H7N2)
169	PB1	H7N2	USA	NA	2006	guinea fowl	CY036000	A/Guinea fowl/New York/19495-6/2006(H7N2)
170	PB1	H7N2	USA	NA	2005	guinea fowl	CY031657	A/Guinea fowl/New York/22071/2005(H7N2)
171	PB1	H7N2	USA	NA	2005	chicken	CY034348	A/chicken/New York/63806-12/2005(H7N2)
172	PB1	H7N2	USA	NA	2005	chicken	CY034372	A/chicken/New York/88291-11/2005(H7N2)
173	PB1	H7N2	USA	NA	2006	guinea fowl	CY028578	A/Guinea fowl/New York/8391-1/2006(H7N2)
174	PB1	H7N2	USA	NA	1995	turkey	EU182294	A/turkey/NY/13820-3/1995(H7N2)
175	PB1	H7N2	USA	NA	2005	chicken	CY031753	A/chicken/New York/31621-9/2005(H7N2)
176	PB1	H7N2	USA	NA	2005	chicken	CY031777	A/chicken/New York/42217/2005(H7N2)
177	PB1	H7N2	USA	NA	1997	chicken	EU742936	A/chicken/NY/8030-2/1997(H7N2)
178	PB1	H7N2	USA	NA	1997	chicken	EU742931	A/chicken/PA/7777-1/1997(H7N2)
179	PB1	H7N3	USA	NA	1980	turkey	CY014784	A/turkey/Minnesota/1200/1980(H7N3)
180	PB1	H7N3	USA	NA	2001	black duck	CY020891	A/Black Duck/Ohio/415/2001(H7N3)
181	PB1	H7N3	USA	NA	2005	mallard	CY021643	A/mallard/Delaware/418/2005(H7N3)
182	PB1	H7N3	USA	NA	1971	turkey	DQ870886	A/turkey/Oregon/1971(H7N3)
183	PB1	H7N2	USA	NA	2000	chicken	EU084904	A/chicken/NY/30749-3/2000(H7N2)
184	PB1	H7N2	USA	NA	2001	chicken	EU084914	A/chicken/NJ/118878-5/2001(H7N2)
185	PB1	H7N2	USA	NA	1997	turkey	EU084921	A/turkey/PA/7975/1997(H7N2)
186	PB1	H7N2	USA	NA	2005	chukar	CY024848	A/chukar/New York/21211-7/2005(H7N2)
187	PB1	H7N9	USA	NA	2006	blue winged teal	CY024824	A/blue-winged teal/Ohio/566/2006(H7N9)
188	PB1	H7N2	USA	NA	2001	chicken	EU742894	A/chicken/FL/90348-4/2001(H7N2)
189	PB1	H7N2	USA	NA	2003	chicken	EU743001	A/chicken/CT/260413-2/2003(H7N2)
190	PB1	H7N2	USA	NA	2006	chicken	CY031194	A/chicken/New York/46545-2/2006(H7N2)
191	PB1	H7N2	USA	NA	2005	duck	CY037045	A/duck/New York/88291-12/2005(H7N2)
192	PB1	H7N3	USA	NA	2008	northern shoveler	CY039594	A/northern shoveler/California/HKWF2031/2008(H7N3)
193	PB1	H7N3	USA	NA	2007	northern shoveler	CY039578	A/northern shoveler/California/HKWF1026/2007(H7N3)
194	PB1	H7N2	USA	NA	1999	chicken	FJ517329	A/chicken/NY/21586-8/1999(H7N2)
195	PB1	H7N3	USA	NA	2008	green winged teal	CY039538	A/green winged teal/California/AKS1370/2008(H7N3)
196	PB1	H7N2	USA	NA	2005	chicken	CY037101	A/chicken/New York/87493-2/2005(H7N2)
197	PB1	H7N2	USA	NA	2006	chicken	CY034908	A/chicken/New York/19495-2/2006(H7N2)
198	PB1	H7N2	USA	NA	2005	muscovy duck	CY034852	A/Muscovy duck/New York/11646-4/2005(H7N2)
199	PB1	H7N2	USA	NA	2005	muscovy duck	CY034796	A/Muscovy duck/New York/87493-3/2005(H7N2)
200	PB1	H7N2	USA	NA	2005	chicken	CY034804	A/chicken/New York/88291-8/2005(H7N2)
201	PB1	H7N2	USA	NA	2005	duck	CY034812	A/duck/New York/98616-4/2005(H7N2)
202	PB1	H7N2	USA	NA	1994	turkey	EU980463	A/turkey/NY/4450-5/1994(H7N2)
203	PB1	H7N3	USA	NA	1995	turkey	EU980472	A/turkey/Utah/24721-10/1995(H7N3)
204	PB1	H7N2	USA	NA	1995	chicken	EU742955	A/chicken/NY/13833-7/1995(H7N2)
205	PB1	H7N2	USA	NA	1998	goose	EU743271	A/goose/NY/8600-3/1998(H7N2)
206	PB1	H7N3	USA	NA	2001	duck	EU743013	A/duck/PA/143585/2001(H7N3)
207	PB1	H7N2	USA	NA	2002	turkey	EU743264	A/turkey/VA/158512/2002(H7N2)
208	PB1	H7N9	USA	NA	1988	turkey	CY014792	A/turkey/Minnesota/1/1988(H7N9)
209	PB1	H7N3	USA	NA	2006	shorebird	EU030965	A/shorebird/Delaware/22/06(H7N3)
210	PB1	H7N2	USA	NA	2005	chicken	CY031641	A/chicken/New York/22067-7/2005(H7N2)
211	PB1	H7N2	USA	NA	2006	guinea fowl	CY028602	A/Guinea fowl/New York/19501-4/2006(H7N2)
212	PB1	H7N2	USA	NA	2005	chicken	CY034196	A/chicken/New York/143646-2/2005(H7N2)
213	PB1	H7N1	USA	NA	1993	rhea	EU742879	A/rhea/North Carolina/39482/1993(H7N1)

# <sup>1</sup>	Protein <sup>2</sup>	Subtype	country	Region <sup>3</sup>	Year	Animal	GenBank	Virus name
214	PB1	H7N2	USA	NA	2002	guinea hen	EU742976	A/guinea hen/MA/14801-11/2002(H7N2)
215	PB1	H7N2	USA	NA	2000	chicken	EU742985	A/chicken/NJ/30739-6/2000(H7N2)
216	PB1	H7N2	USA	NA	2005	chicken	CY033311	A/chicken/New York/63806-8/2005(H7N2)
217	PB1	H7N2	USA	NA	2005	chicken	CY022819	A/chicken/New York/16326-5/2005(H7N2)
218	PB1	H7N3	USA	NA	1999	chicken	EU084928	A/Chicken/NY/14714-2/1999(H7N3)
219	PB1	H7N2	USA	NA	2005	chicken	CY024840	A/chicken/New York/21211-1/2005(H7N2)
220	PB1	H7N3	USA	NA	1998	Mallard	CY016194	A/Mallard/Ohio/322/1998(H7N3)
221	PB1	H7N7	USA	NA	1988	ruddy turnstone	CY005077	A/ruddy turnstone/DE/2378/1988(H7N7)
222	PB1	H7N7	USA	NA	1989	red knot	CY005084	A/red knot/NJ/325/1989(H7N7)
223	PB1	H7N2	USA	NA	2006	chicken	CY036016	A/chicken/New York/19499-1/2006(H7N2)
224	PB1	H7N2	USA	NA	2005	chukar	CY031074	A/chukar/New York/23164-13/2005(H7N2)
225	PB1	H7N2	USA	NA	2005	chicken	CY031122	A/chicken/New York/30732-6/2005(H7N2)
226	PB1	H7N2	USA	NA	2005	chicken	CY031218	A/chicken/New York/10196-6/2005(H7N2)
227	PB1	H7N2	USA	NA	2006	muscovy duck	CY036008	A/Muscovy duck/New York/19495-7/2006(H7N2)
228	PB1	H7N3	USA	NA	2006	ruddy turnstone	CY037109	A/ruddy turnstone/Delaware Bay/283/2006(H7N3)
229	PB1	H7N3	USA	NA	2006	laughing gull	CY037093	A/laughing gull/Delaware Bay/46/2006(H7N3)
1	PB2	H7N4	Australia	A	1997	chicken	CY022708	A/chicken/New South Wales/327/97(H7N4)
2	PB2	H7N7	Australia	A	1985	Chicken	CY025076	A/chicken/Victoria/1/85(H7N7)
3	PB2	H7N7	Australia	A	1976	duck		A/duck/Victoria/76(H7N7)
4	PB2	H7N6	Australia	A	2007	duck		A/duck/Victoria/512/2007 (H7N6)
5	PB2	H7N3	Australia	A	1994	chicken	CY022692	A/chicken/Queensland/1994(H7N3)
6	PB2	H7N4	Australia	A	1997	chicken	CY022700	A/chicken/New South Wales/2/1997(H7N4)
7	PB2	H7N7	Australia	A	1985	starling	CY024785	A/starling/Victoria/1985(H7N7)
8	PB2	H7N7	Australia	A	1976	chicken	CY024793	A/chicken/Victoria/1976(H7N7)
9	PB2	H7N3	Australia	A	1992	chicken	CY025084	A/chicken/Victoria/224/1992(H7N3)
10	PB2	H7N4	Australia	A	1997	emu	CY022716	A/emu/New South Wales/775/1997(H7N4)
11	PB2	H7N2	Australia	A	2007	duck	CY033168	A/duck/Tasmania/277/2007(H7N2)
12	PB2	H7N3	Bolivia	SA	2001	cinnamon teal	DQ525418	A/cinnamon teal/Bolivia/4537/2001(H7N3)
13	PB2	H7N2	Canada	NA	1978	blue winged teal	CY005038	A/blue-winged teal/ALB/221/1978(H7N2)
14	PB2	H7N3	Canada	NA	2004	chicken	AY616766	A/chicken/British Columbia/04(H7N3)
15	PB2	H7N3	Canada	NA	2001	mallard	DQ017509	A/mallard/Alberta/24/01(H7N3)
16	PB2	H7N3	Canada	NA	2001	mallard	DQ017510	A/mallard/Alberta/24/01(H7N3)
17	PB2	H7N3	Canada	NA	2004	chicken	AY648294	A/GSC_chicken_B/British Columbia/04(H7N3)
18	PB2	H7N3	Canada	NA	1985	mallard duck	CY005064	A/mallard duck/Alberta/435/1985(H7N3)
19	PB2	H7N5	Canada	NA	1977	mallard duck	CY005015	A/mallard duck/ALB/224/1977(H7N5)
20	PB2	H7N3	Canada	NA	2007	Canada goose	EU500841	A/Canada goose/BC/3752/2007(H7N3)
21	PB2	H7N3	Canada	NA	2007	chicken	EU500857	A/chicken/SK/HR-00011/2007(H7N3)
22	PB2	H7N3	Canada	NA	1977	gadwall duck	CY005034	A/gadwall duck/Alberta/291/1977(H7N3)
23	PB2	H7N8	Canada	NA	1979	pintail duck	CY005043	A/pintail duck/Alberta/121/1979(H7N8)
24	PB2	H7N3	Canada	NA	1985	green winged teal	CY005057	A/green-winged teal/ALB/228/1985(H7N3)
25	PB2	H7N1	Canada	NA	2001	mallard	CY005098	A/mallard/Alberta/34/2001(H7N1)
26	PB2	H7N3	Canada	NA	2004	chicken	AY650276	A/GSC_chicken/British Columbia/04(H7N3)
27	PB2	H7N3	Canada	NA	2007	American black duck	EU500849	A/American black duck/NB/2538/2007(H7N3)
28	PB2	H7N2	China	E	2002	chicken	AY724251	A/chicken/Hebei/1/2002(H7N2)
29	PB2	H7N1	China	E	1992	duck	CY005500	A/duck/Nanchang/1904/1992(H7N1)
30	PB2	H7N7	Germany	E	2003	chicken	AJ620347	A/chicken/Germany/R28/03(H7N7)
31	PB2	H7N1	Germany	E	1934	chicken	M21851	A/chicken/FPV/Rostock/1934(H7N1)
32	PB2	H7N1	Germany	E	1934	chicken	CY015053	A/chicken/Rostock/45/1934(H7N1)
33	PB2	H7N7	Germany	E	1979	goose	CY015046	A/goose/Leipzig/187-7/1979(H7N7)
34	PB2	H7N2	Hong Kong	E	1978	duck	CY005624	A/duck/Hong Kong/293/1978(H7N2)
35	PB2	H7N1	Italy	E	1999	turkey	CY021420	A/turkey/Italy/3675/1999(H7N1)
36	PB2	H7N7	Italy	E	1902	chicken	CY015058	A/chicken/Brescia/1902(H7N7)
37	PB2	H7N1	Italy	E	2000	chicken	CY024769	A/chicken/Italy/2335/2000(H7N1)
38	PB2	H7N1	Italy	E	2000	guinea fowl	CY022668	A/guinea fowl/Italy/155/2000(H7N1)
39	PB2	H7N3	Italy	E	2003	turkey	CY021492	A/turkey/Italy/4608/2003(H7N3)
40	PB2	H7N1	Italy	E	1999	chicken	DQ991325	A/chicken/Italy/5093/99(H7N1)
41	PB2	H7N1	Italy	E	1999	turkey	CY025188	A/turkey/Italy/2732/1999(H7N1)
42	PB2	H7N1	Italy	E	2001	chicken	CY021556	A/chicken/Italy/322/2001(H7N1)
43	PB2	H7N1	Italy	E	1999	chicken	CY022660	A/chicken/Italy/4746/1999(H7N1)
44	PB2	H7N1	Italy	E	2001	turkey	CY021428	A/turkey/Italy/1351/2001(H7N1)
45	PB2	H7N3	Italy	E	2003	turkey	CY021372	A/turkey/Italy/1010/2003(H7N3)
46	PB2	H7N1	Italy	E	1999	turkey	CY024873	A/turkey/Italy/4482/1999(H7N1)
47	PB2	H7N1	Italy	E	2000	pekin duck	CY024905	A/pekin duck/Italy/1848/2000(H7N1)
48	PB2	H7N3	Italy	E	2004	turkey	CY020604	A/turkey/Italy/3807/2004(H7N3)
49	PB2	H7N1	Italy	E	1999	turkey	CY024761	A/turkey/Italy/977/1999(H7N1)
50	PB2	H7N1	Italy	E	1999	turkey	CY025180	A/turkey/Italy/2715/1999(H7N1)
51	PB2	H7N1	Italy	E	1999	turkey	CY025196	A/turkey/Italy/1265/1999(H7N1)
52	PB2	H7N1	Italy	E	1999	chicken	DQ991317	A/chicken/Italy/5093/99(H7N1)
53	PB2	H7N1	Italy	E	2000	ostrich	DQ991340	A/ostrich/Italy/984/00(H7N1)
54	PB2	H7N3	Italy	E	2003	turkey	CY028675	A/turkey/Italy/2685/2003(H7N3)
55	PB2	H7N3	Italy	E	2002	turkey	AJ627485	A/turkey/Italy/214845/2002(H7N3)

# <sup>1</sup>	Protein <sup>2</sup>	Subtype	country	Region <sup>3</sup>	Year	Animal	GenBank	Virus name
56	PB2	H7N1	Italy	E	1999	turkey	AJ627487	A/turkey/Italy/4603/1999(H7N1)
57	PB2	H7N1	Italy	E	2002	mallard	EU158170	A/mallard/Italy/250/02(H7N1)
58	PB2	H7N3	Italy	E	2004	quail	CY020620	A/quail/Italy/3347/2004(H7N3)
59	PB2	H7N1	Italy	E	1999	turkey	CY024889	A/turkey/Italy/3185/1999(H7N1)
60	PB2	H7N3	Italy	E	2003	turkey	CY021364	A/turkey/Italy/3620/2003(H7N3)
61	PB2	H7N1	Italy	E	1999	turkey	CY021412	A/turkey/Italy/4580/1999(H7N1)
62	PB2	H7N3	Italy	E	2003	turkey	CY021500	A/turkey/Italy/2987/2003(H7N3)
63	PB2	H7N1	Italy	E	2000	quail	CY022676	A/quail/Italy/396/2000(H7N1)
64	PB2	H7N1	Italy	E	2000	turkey	CY021548	A/turkey/Italy/4426/2000(H7N1)
65	PB2	H7N1	Italy	E	1999	quail	CY025124	A/quail/Italy/4992/1999(H7N1)
66	PB2	H7N3	Italy	E	2004	turkey	CY028683	A/turkey/Italy/3829/2004(H7N3)
67	PB2	H7N3	Italy	E	2004	turkey	CY028691	A/turkey/Italy/3477/2004(H7N3)
68	PB2	H7N1	Italy	E	2000	ostrich	DQ991301	A/ostrich/Italy/2332/00(H7N1)
69	PB2	H7N2	Italy	E	2003	duck	CY031035	A/duck/Italy/4609/2003(H7N2)
70	PB2	H7N3	Italy	E	2004	turkey	CY020588	A/turkey/Italy/4479/2004(H7N3)
71	PB2	H7N3	Italy	E	2003	turkey	CY020596	A/turkey/Italy/251/2003(H7N3)
72	PB2	H7N3	Italy	E	2003	turkey	CY022620	A/turkey/Italy/2043/2003(H7N3)
73	PB2	H7N1	Italy	E	1999	chicken	CY022684	A/chicken/Italy/1082/99(H7N1)
74	PB2	H7N2	Italy	E	2003	quail	CY021516	A/quail/Italy/4610/2003(H7N2)
75	PB2	H7N1	Italy	E	2000	turkey	CY021540	A/turkey/Italy/2984/2000(H7N1)
76	PB2	H7N1	Italy	E	1999	turkey	CY014643	A/turkey/Italy/4169/1999(H7N1)
77	PB2	H7N1	Italy	E	1999	turkey	CY025116	A/turkey/Italy/4644/1999(H7N1)
78	PB2	H7N1	Italy	E	1999	chicken	CY025132	A/chicken/Italy/4789/1999(H7N1)
79	PB2	H7N1	Italy	E	1999	turkey	CY025148	A/turkey/Italy/4617/1999(H7N1)
80	PB2	H7N1	Italy	E	1999	turkey	CY025156	A/turkey/Italy/4301/1999(H7N1)
81	PB2	H7N1	Italy	E	1999	turkey	CY025172	A/turkey/Italy/3560/1999(H7N1)
82	PB2	H7N3	Italy	E	2003	chicken	CY034757	A/chicken/Italy/682/2003(H7N3)
83	PB2	H7N1	Mongolia	E	2002	duck	AB473540	A/duck/Mongolia/867/2002(H7N1)
84	PB2	H7N1	Mongolia	E	2001	duck	AB473548	A/duck/Mongolia/47/2001(H7N1)
85	PB2	H7N7	Netherlands	E	2003	chicken	AB438938	A/chicken/Netherlands/2586/2003(H7N7)
86	PB2	H7N7	Netherlands	E	2003	chicken	AY342414	A/chicken/Netherlands/1/03(H7N7)
87	PB2	H7N7	Netherlands	E	2003	chicken	EF015558	A/chicken/Netherlands/03010132/03(H7N7)
88	PB2	H7N3	Netherlands	E	2000	mallard	CY005851	A/mallard/Netherlands/12/2000(H7N3)
89	PB2	H7N8	Netherlands	E	2006	mallard	CY041417	A/mallard/Netherlands/33/2006(H7N8)
90	PB2	H7N7	New Zealand	NZ	2005	duck		A/duck/New Zealand/2005(H7N7)
91	PB2	H7N3	Pakistan	E	1998	chicken	CY037751	A/chicken/Pakistan/c1998/1998(H7N3)
92	PB2	H7N3	Pakistan	E	1995	chicken	CY015039	A/chicken/Pakistan/34669/1995(H7N3)
93	PB2	H7N3	Pakistan	E	2002	chicken	CY035820	A/chicken/Rawalpindi/NARC68/2002(H7N3)
94	PB2	H7N3	Pakistan	E	1995	chicken	CY035828	A/chicken/Pakistan/34668/1995(H7N3)
95	PB2	H7N3	Pakistan	E	2002	chicken	CY035836	A/chicken/Rawalpindi/NARC72/2002(H7N3)
96	PB2	H7N1	UK	E	1979	African starling	AY724256	A/African starling/England-Q/983/1979(H7N1)
97	PB2	H7N3	UK	E	1963	turkey	CY015072	A/turkey/England/1963(H7N3)
98	PB2	H7N7	UK	E	1934	fowl	M38291	A/fowl/Weybridge(H7N7)
99	PB2	H7N2	USA	NA	2005	muscovy duck	CY034853	A/Muscovy duck/New York/11646-4/2005(H7N2)
100	PB2	H7N2	USA	NA	2005	turkey	CY034901	A/turkey/New York/122501-2/2005(H7N2)
101	PB2	H7N2	USA	NA	2006	chicken	CY034917	A/chicken/New York/19495-3/2006(H7N2)
102	PB2	H7N2	USA	NA	2005	muscovy duck	CY031714	A/Muscovy duck/New York/23164-10/2005(H7N2)
103	PB2	H7N2	USA	NA	2002	turkey	EU982307	A/turkey/VA/55/2002(H7N2)
104	PB2	H7N2	USA	NA	1995	emu	EU980460	A/emu/TX/25414/1995(H7N2)
105	PB2	H7N2	USA	NA	2005	chicken	CY034805	A/chicken/New York/88291-8/2005(H7N2)
106	PB2	H7N2	USA	NA	2005	chicken	CY034845	A/chicken/New York/10508/2005(H7N2)
107	PB2	H7N3	USA	NA	2006	shorebird	CY036774	A/shorebird/Delaware Bay/560/2006(H7N3)
108	PB2	H7N3	USA	NA	2007	ruddy turnstone	CY036790	A/ruddy turnstone/Delaware Bay/121/2007(H7N3)
109	PB2	H7N3	USA	NA	2001	duck	EU743014	A/duck/PA/143585/2001(H7N3)
110	PB2	H7N2	USA	NA	1994	chicken	FJ610057	A/chicken/NY/4447-7/1994(H7N2)
111	PB2	H7N3	USA	NA	2006	laughing gull	CY037086	A/laughing gull/Delaware Bay/6/2006(H7N3)
112	PB2	H7N3	USA	NA	2006	shorebird	CY041329	A/shorebird/Delaware Bay/332/2006(H7N3)
113	PB2	H7N3	USA	NA	2006	laughing gull	CY037094	A/laughing gull/Delaware Bay/46/2006(H7N3)
114	PB2	H7N2	USA	NA	2005	chicken	CY031219	A/chicken/New York/10196-6/2005(H7N2)
115	PB2	H7N2	USA	NA	2005	guinea fowl	CY031227	A/Guinea fowl/New York/10196-7/2005(H7N2)
116	PB2	H7N2	USA	NA	2005	chicken	CY031235	A/chicken/New York/23164-6/2005(H7N2)
117	PB2	H7N2	USA	NA	1997	chicken	EU742947	A/chicken/PA/11767/1997(H7N2)
118	PB2	H7N2	USA	NA	2005	guinea fowl	CY031730	A/Guinea fowl/New York/23165-12/2005(H7N2)
119	PB2	H7N2	USA	NA	2005	chicken	CY031754	A/chicken/New York/31621-9/2005(H7N2)
120	PB2	H7N3	USA	NA	1985	ruddy turnstone	CY004412	A/ruddy turnstone/New Jersey/65/1985(H7N3)
121	PB2	H7N2	USA	NA	1998	quail	EU742960	A/quail/PA/20304/1998(H7N2)
122	PB2	H7N2	USA	NA	1999	chicken	EU742982	A/chicken/NJ/16224-6/1999(H7N2)
123	PB2	H7N2	USA	NA	2005	quail	CY034397	A/quail/New York/89641/2005(H7N2)
124	PB2	H7N2	USA	NA	2005	chicken	CY031650	A/chicken/New York/22067-12/2005(H7N2)
125	PB2	H7N3	USA	NA	1998	Mallard	CY016195	A/Mallard/Ohio/322/1998(H7N3)
126	PB2	H7N2	USA	NA	2005	chukar	CY022772	A/chukar/New York/11653-1/2005(H7N2)



# <sup>1</sup>	Protein <sup>2</sup>	Subtype	country	Region <sup>3</sup>	Year	Animal	GenBank	Virus name
127	PB2	H7N2	USA	NA	2005	chicken	CY022820	A/chicken/New York/16326-5/2005(H7N2)
128	PB2	H7N2	USA	NA	2005	duck	CY022852	A/duck/New York/21211-6/2005(H7N2)
129	PB2	H7N2	USA	NA	2006	chicken	CY028635	A/chicken/New York/29047-4/2006(H7N2)
130	PB2	H7N2	USA	NA	2006	guinea fowl	CY028579	A/Guinea fowl/New York/8391-1/2006(H7N2)
131	PB2	H7N3	USA	NA	2004	blue winged teal	CY018908	A/blue-winged teal/Ohio/658/2004(H7N3)
132	PB2	H7N2	USA	NA	1997	chicken	EU084916	A/chicken/NY/6777-3/1997(H7N2)
133	PB2	H7N7	USA	NA	1988	ruddy turnstone	CY005078	A/ruddy turnstone/DE/2378/1988(H7N7)
134	PB2	H7N2	USA	NA	1996	chicken	EU980468	A/chicken/NY/3202-7/1996(H7N2)
135	PB2	H7N2	USA	NA	2006	chicken	CY035993	A/chicken/New York/19495-4/2006(H7N2)
136	PB2	H7N3	USA	NA	2007	ruddy turnstone	CY036782	A/ruddy turnstone/Delaware Bay/108/2007(H7N3)
137	PB2	H7N2	USA	NA	2005	chicken	CY034253	A/chicken/New York/19499/2005(H7N2)
138	PB2	H7N2	USA	NA	2005	guinea fowl	CY031658	A/Guinea fowl/New York/22071/2005(H7N2)
139	PB2	H7N2	USA	NA	2005	chicken	CY031690	A/chicken/New York/23164-5/2005(H7N2)
140	PB2	H7N3	USA	NA	2001	black duck	CY020892	A/Black Duck/Ohio/415/2001(H7N3)
141	PB2	H7N3	USA	NA	2006	shorebird	EU030966	A/shorebird/Delaware/22/06(H7N3)
142	PB2	H7N2	USA	NA	2002	chicken	EU742973	A/chicken/PA/149092-1/2002(H7N2)
143	PB2	H7N2	USA	NA	1995	chicken	EU742956	A/chicken/NY/13833-7/1995(H7N2)
144	PB2	H7N2	USA	NA	1995	chicken	EU742942	A/chicken/RI/4328-1/1995(H7N2)
145	PB2	H7N2	USA	NA	1997	chicken	EU742937	A/chicken/NY/8030-2/1997(H7N2)
146	PB2	H7N2	USA	NA	1997	chicken	EU742932	A/chicken/PA/7777-1/1997(H7N2)
147	PB2	H7N2	USA	NA	2004	chicken	EU743260	A/chicken/NJ/294508-12/2004(H7N2)
148	PB2	H7N7	USA	NA	1927	fowl	CY014998	A/fowl/Dobson/1927(H7N7)
149	PB2	H7N2	USA	NA	2005	chicken	CY033304	A/chicken/New York/37982-4/2005(H7N2)
150	PB2	H7N2	USA	NA	1994	chicken	EU742951	A/chicken/NY/13142-5/1994(H7N2)
151	PB2	H7N1	USA	NA	1993	rhea	EU742880	A/rhea/North Carolina/39482/1993(H7N1)
152	PB2	H7N2	USA	NA	1995	chicken	EU182297	A/chicken/NY/19542-5/1995(H7N2)
153	PB2	H7N2	USA	NA	2005	chicken	CY022836	A/chicken/New York/21211-2/2005(H7N2)
154	PB2	H7N2	USA	NA	2005	chicken	CY031778	A/chicken/New York/42217/2005(H7N2)
155	PB2	H7N2	USA	NA	2005	chicken	CY033208	A/chicken/New York/22067-8/2005(H7N2)
156	PB2	H7N2	USA	NA	2005	chicken	CY033256	A/chicken/New York/30732-10/2005(H7N2)
157	PB2	H7N3	USA	NA	2005	mallard	CY021644	A/mallard/Delaware/418/2005(H7N3)
158	PB2	H7N2	USA	NA	1995	chicken	EU084907	A/chicken/NY/3112-1/1995(H7N2)
159	PB2	H7N2	USA	NA	2005	chicken	CY037054	A/chicken/New York/88291-14/2005(H7N2)
160	PB2	H7N2	USA	NA	2001	guinea fowl	EU742919	A/guinea fowl/NJ/119063-8/2001(H7N2)
161	PB2	H7N3	USA	NA	2007	northern shoveler	CY039577	A/northern shoveler/California/HKWF1026/2007(H7N3)
162	PB2	H7N2	USA	NA	2005	chicken	CY034373	A/chicken/New York/88291-11/2005(H7N2)
163	PB2	H7N2	USA	NA	2005	chicken	CY031123	A/chicken/New York/30732-6/2005(H7N2)
164	PB2	H7N7	USA	NA	2007	mallard	CY033377	A/mallard/California/HKWF1971/2007(H7N7)
165	PB2	H7N2	USA	NA	2005	chicken	CY037102	A/chicken/New York/87493-2/2005(H7N2)
166	PB2	H7N7	USA	NA	1989	red knot	CY005085	A/red knot/NJ/325/1989(H7N7)
167	PB2	H7N2	USA	NA	2005	guinea fowl	CY028514	A/Guinea fowl/New York/143646-3/2005(H7N2)
168	PB2	H7N2	USA	NA	2006	chicken	CY028547	A/chicken/New York/3181-5/2006(H7N2)
169	PB2	H7N2	USA	NA	2000	chicken	EU084903	A/chicken/NY/30749-3/2000(H7N2)
170	PB2	H7N2	USA	NA	2001	chicken	EU084913	A/chicken/NJ/118878-5/2001(H7N2)
171	PB2	H7N2	USA	NA	1997	turkey	EU084920	A/turkey/PA/7975/1997(H7N2)
172	PB2	H7N9	USA	NA	2006	blue winged teal	CY024825	A/blue-winged teal/Ohio/566/2006(H7N9)
173	PB2	H7N2	USA	NA	2005	chukar	CY024849	A/chukar/New York/21211-7/2005(H7N2)
174	PB2	H7N2	USA	NA	2005	duck	CY034813	A/duck/New York/98616-4/2005(H7N2)
175	PB2	H7N2	USA	NA	2005	quail	CY033320	A/quail/New York/63806-13/2005(H7N2)
176	PB2	H7N2	USA	NA	2005	duck	CY034821	A/duck/New York/98616-5/2005(H7N2)
177	PB2	H7N2	USA	NA	2005	chicken	CY035985	A/chicken/New York/122501-1/2005(H7N2)
178	PB2	H7N2	USA	NA	2006	guinea fowl	CY036001	A/Guinea fowl/New York/19495-6/2006(H7N2)
179	PB2	H7N3	USA	NA	1994	chicken	EU743018	A/chicken/New Jersey/15086-3/1994(H7N3)
180	PB2	H7N2	USA	NA	1998	quail	EU742923	A/quail/NY/13989-51/1998(H7N2)
181	PB2	H7N2	USA	NA	2005	chicken	CY034309	A/chicken/New York/23165-10/2005(H7N2)
182	PB2	H7N2	USA	NA	2005	chicken	CY034349	A/chicken/New York/63806-12/2005(H7N2)
183	PB2	H7N2	USA	NA	2005	chicken	CY034365	A/chicken/New York/88291-6/2005(H7N2)
184	PB2	H7N2	USA	NA	1995	turkey	EU182293	A/turkey/NY/13820-3/1995(H7N2)
185	PB2	H7N2	USA	NA	2003	chicken	EU743002	A/chicken/CT/260413-2/2003(H7N2)
186	PB2	H7N2	USA	NA	2002	chicken	CY014900	A/chicken/Pennsylvania/143586/2002(H7N2)
187	PB2	H7N3	USA	NA	1980	turkey	CY014785	A/turkey/Minnesota/1200/1980(H7N3)
188	PB2	H7N2	USA	NA	1997	chicken	EU742968	A/chicken/PA/19241/1997(H7N2)
189	PB2	H7N2	USA	NA	2001	chicken	EU742895	A/chicken/FL/90348-4/2001(H7N2)
190	PB2	H7N2	USA	NA	2005	chicken	CY031083	A/chicken/New York/23165-6/2005(H7N2)
191	PB2	H7N2	USA	NA	2005	guinea fowl	CY037070	A/Guinea fowl/New York/98616-3/2005(H7N2)
192	PB2	H7N3	USA	NA	2008	green winged teal	CY039537	A/green winged teal/California/AKS1370/2008(H7N3)
193	PB2	H7N3	USA	NA	2008	northern shoveler	CY039593	A/northern shoveler/California/HKWF2031/2008(H7N3)
194	PB2	H7N3	USA	NA	1980	pheasant	CY005895	A/pheasant/Minnesota/917/1980(H7N3)
195	PB2	H7N2	USA	NA	2001	chicken	EU084909	A/chicken/NY/119256-7/2001(H7N2)

# <sup>1</sup>	Protein <sup>2</sup>	Subtype	country	Region <sup>3</sup>	Year	Animal	GenBank	Virus name
196	PB2	H7N3	USA	NA	1999	chicken	EU084927	A/Chicken/NY/14714-2/1999(H7N3)
197	PB2	H7N2	USA	NA	2005	chicken	CY024841	A/chicken/New York/21211-1/2005(H7N2)
198	PB2	H7N2	USA	NA	2001	avian	EU026101	A/avian/NY/118353-1/2001(H7N2)
199	PB2	H7N8	USA	NA	1987	mallard	CY021628	A/mallard/Ohio/421/1987(H7N8)
200	PB2	H7N9	USA	NA	1988	turkey	CY014793	A/turkey/Minnesota/1/1988(H7N9)
201	PB2	H7N2	USA	NA	1995	guinea fowl	CY014843	A/guinea fowl/New York/13820-3/1995(H7N2)
202	PB2	H7N3	USA	NA	2006	laughing gull	EU030982	A/laughing gull/Delaware/42/06(H7N3)
203	PB2	H7N2	USA	NA	2005	chicken	CY029840	A/chicken/New York/16326-4/2005(H7N2)
204	PB2	H7N2	USA	NA	1998	goose	EU743272	A/goose/NY/8600-3/1998(H7N2)
205	PB2	H7N2	USA	NA	2002	turkey	EU743265	A/turkey/VA/158512/2002(H7N2)
206	PB2	H7N2	USA	NA	2005	chicken	CY035937	A/chicken/New York/88291-10/2005(H7N2)
207	PB2	H7N2	USA	NA	2006	chicken	CY034909	A/chicken/New York/19495-2/2006(H7N2)
208	PB2	H7N3	USA	NA	1995	turkey	EU980473	A/turkey/Utah/24721-10/1995(H7N3)
209	PB2	H7N2	USA	NA	1994	turkey	EU980464	A/turkey/NY/4450-5/1994(H7N2)
210	PB2	H7N2	USA	NA	2005	muscovy duck	CY034797	A/Muscovy duck/New York/87493-3/2005(H7N2)
211	PB2	H7N2	USA	NA	2005	guinea fowl	CY034837	A/Guinea fowl/New York/101276-1/2005(H7N2)
212	PB2	H7N2	USA	NA	2005	chicken	CY031642	A/chicken/New York/22067-7/2005(H7N2)
213	PB2	H7N2	USA	NA	2005	guinea fowl	CY031682	A/Guinea fowl/New York/23164-3-05/2005(H7N2)
214	PB2	H7N2	USA	NA	2006	chicken	CY028587	A/chicken/New York/8391-2/2006(H7N2)
215	PB2	H7N2	USA	NA	2006	guinea fowl	CY028603	A/Guinea fowl/New York/19501-4/2006(H7N2)
216	PB2	H7N2	USA	NA	2005	guinea fowl	CY033288	A/Guinea fowl/New York/31621-8/2005(H7N2)
217	PB2	H7N2	USA	NA	2005	chicken	CY033312	A/chicken/New York/63806-8/2005(H7N2)
218	PB2	H7N2	USA	NA	2000	chicken	EU742986	A/chicken/NJ/30739-6/2000(H7N2)
219	PB2	H7N2	USA	NA	2002	guinea hen	EU742977	A/guinea hen/MA/14801-11/2002(H7N2)
220	PB2	H7N2	USA	NA	1998	chicken	EU742927	A/chicken/PA/13552-1/1998(H7N2)
221	PB2	H7N2	USA	NA	2005	chicken	CY034197	A/chicken/New York/143646-2/2005(H7N2)
222	PB2	H7N2	USA	NA	2006	guinea fowl	CY034245	A/Guinea fowl/New York/32084/2006(H7N2)
223	PB2	H7N2	USA	NA	2005	chicken	CY033248	A/chicken/New York/30732-9/2005(H7N2)
224	PB2	H7N2	USA	NA	2005	chukar	CY031075	A/chukar/New York/23164-13/2005(H7N2)
225	PB2	H7N3	USA	NA	2006	ruddy turnstone	CY037110	A/ruddy turnstone/Delaware Bay/283/2006(H7N3)
226	PB2	H7N2	USA	NA	2005	guinea fowl	CY035961	A/Guinea fowl/New York/11646-3/2005(H7N2)
227	PB2	H7N2	USA	NA	2006	muscovy duck	CY036009	A/Muscovy duck/New York/19495-7/2006(H7N2)
228	PB2	H7N2	USA	NA	2006	chicken	CY036017	A/chicken/New York/19499-1/2006(H7N2)
229	PB2	H7N2	USA	NA	1999	chicken	FJ517330	A/chicken/NY/21586-8/1999(H7N2)

<sup>1</sup> Reference number for taxa displayed in trees. <sup>2</sup> Protein coding region used. Common abbreviations are used for protein names. <sup>3</sup> Geographic Regions. E=Eurasia (includes Asia, Africa, Europe), NA=North America, SA=South America, A=Australia, NZ=New Zealand

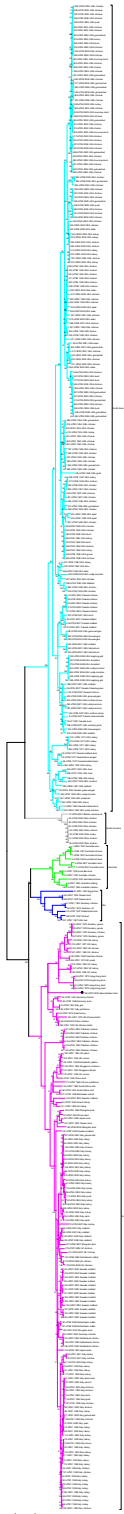
**Suppl. Table 2.** Details of additional subtype N3 taxa used in Suppl. Fig. 3.

#1	Protein <sup>2</sup>	Subtype	country	Region <sup>5</sup>	Year	Animal	GenBank	Virus name
286	NA	H10N3	Canada	NA	1978	blue-winged teal	CY005189	A/blue-winged teal/ALB/778/1978(H10N3)
287	NA	H10N3	China	E	2003	duck	EU429702	A/duck/Eastern China/368/2003(H10N3)
288	NA	H10N3	China	E	2003	duck	EU429708	A/duck/Eastern China/397/2003(H10N3)
289	NA	H10N3	China	E	2003	duck	EU429709	A/duck/Eastern China/404/2003(H10N3)
290	NA	H10N3	China	E	2003	duck	EU429714	A/duck/Eastern China/372/2003(H10N3)
291	NA	H10N3	China	E	2003	duck	EU429715	A/duck/Eastern China/495/2003(H10N3)
292	NA	H10N3	China	E	2003	duck	EU429716	A/duck/Eastern China/527/2003(H10N3)
293	NA	H10N3	China	E	2003	duck	EU429704	A/duck/Eastern China/395/2003(H10N3)
294	NA	H10N3	China	E	2002	duck	EU429711	A/duck/Eastern China/453/2002(H10N3)
295	NA	H10N3	China	E	2003	duck	EU429703	A/duck/Eastern China/356/2003(H10N3)
296	NA	H10N3	China	E	2003	duck	EU429705	A/duck/Eastern China/502/2003(H10N3)
297	NA	H10N3	China	E	2003	duck	EU429712	A/duck/Eastern China/488/2003(H10N3)
298	NA	H10N3	Hong_Kong	E	1979	duck	AB292413	A/duck/Hong Kong/786/1979(H10N3)
299	NA	H10N3	USA	NA	2007	northern shoveler	CY032658	A/northern shoveler/California/HKWF1005/2007(H10N3)
300	NA	H10N3	USA	NA	2007	northern shoveler	CY032690	A/northern shoveler/California/HKWF1370/2007(H10N3)
301	NA	H11N3	Canada	NA	1983	mallard duck	CY005275	A/mallard duck/ALB/797/1983(H11N3)
302	NA	H11N3	Japan	E	1985	swan	AB296077	A/swan/Shimane/183/1985(H11N3)
303	NA	H11N3	New_Zealand	NZ	1976	duck	AY207508	A/duck/New Zealand/164/76(H11N3)
304	NA	H11N3	New_Zealand	NZ	1976	duck	CY005741	A/duck/New Zealand/164/76(H11N3)
305	NA	H11N3	USA	NA	2005	mallard	CY021143	A/mallard/Missouri/MO130/2005(H11N3)
306	NA	H11N3	USA	NA	1986	mallard	CY018017	A/mallard/Ohio/102/1986(H11N3)
307	NA	H11N3	USA	NA	1993	mallard	CY021255	A/mallard/Ohio/94/1993(H11N3)
308	NA	H12N3	Norway	E	2006	mallard	FM179760	A/mallard/Norway/10_1781/2006(H12N3)
309	NA	H13N3	Russia	E	1983	tern	AY207523	A/tern/Astrakhan/775/83(H13N3)
310	NA	H16N3	Norway	E	2006	herring gull	FM179761	A/herring gull/Norway/10_1623/2006(H16N3)
311	NA	H16N3	Norway	E	2006	common gull	FM179759	A/common gull/Norway/10_1617/2006(H16N3)
312	NA	H16N3	Sweden	E	1999	black-headed gull	AY684903	A/black-headed gull/Sweden/3/99(H16N3)
313	NA	H16N3	Sweden	E	1999	black-headed gull	AY684905	A/black-headed gull/Sweden/5/99(H16N3)
314	NA	H16N3	Sweden	E	1999	black-headed gull	AY684902	A/black-headed gull/Sweden/2/99(H16N3)
315	NA	H16N3	USA	NA	1988	herring gull	CY014569	A/herring gull/Delaware/712/1988(H16N3)
316	NA	H16N3	USA	NA	2006	shorebird	EU030978	A/shorebird/Delaware/168/06(H16N3)
317	NA	H1N3	France	E	2001	teal	AJ849936	A/teal/France/2546/2001(H1N3)
318	NA	H1N3	New_Zealand	NZ	1976	duck	CY005736	A/duck/NZL/160/1976(H1N3)
319	NA	H1N3	USA	NA	2002	blue winged teal	FJ357039	A/blue winged teal/TX/34/2002(H1N3)
320	NA	H1N3	USA	NA	2002	blue winged teal	FJ357047	A/blue winged teal/TX/75/2002(H1N3)
321	NA	H2N3	Canada	NA	1998	mallard	AY207517	A/mallard/Alberta/226/98(H2N3)
322	NA	H2N3	Canada	NA	1998	mallard	AY633198	A/mallard/Alberta/205/98(H2N3)
323	NA	H2N3	Canada	NA	1985	mallard duck	CY003881	A/mallard duck/Alberta/376/1985(H2N3)
324	NA	H2N3	Canada	NA	1988	mallard	CY003938	A/mallard/Alberta/353/1988(H2N3)
325	NA	H2N3	Canada	NA	1977	mallard	CY003849	A/mallard/Alberta/77/1977(H2N3)
326	NA	H2N3	Canada	NA	1996	mallard	CY003946	A/mallard/Alberta/201/1996(H2N3)
327	NA	H2N3	Canada	NA	2003	mallard	CY003994	A/mallard/Alberta/79/2003(H2N3)
328	NA	H2N3	Germany	E	1973	duck	AY207522	A/duck/Germany/1215/1973(H2N3)
329	NA	H2N3	Germany	E	1985	duck	AY207509	A/duck/Postdam/1689/85(H2N3)
330	NA	H2N3	Italy	E	1999	mallard	AY586413	A/mallard/Italy/36/1999(H2N3)
331	NA	H2N3	Italy	E	1999	mallard	AY586412	A/mallard/Italy/35/1999(H2N3)
332	NA	H2N3	Japan	E	2001	duck	AB298282	A/duck/Hokkaido/17/2001(H2N3)
333	NA	H2N3	Russia	E	1976	pintail	AY207518	A/pintail/Primorie/625/76(H2N3)
334	NA	H2N3	Sweden	E	2005	mallard	CY041332	A/mallard/Sweden/45/2005(H2N3)
335	NA	H2N3	USA	NA	1994	laughing gull	AY207516	A/laughing gull/Delaware/34/94(H2N3)
336	NA	H2N3	USA	NA	1996	silkiechicken	AY207521	A/silkiechicken/Pennsylvania/897/96(H2N3)
337	NA	H2N3	USA	NA	2001	mallard	FJ686788	A/mallard/Maryland/234/2001(H2N3)
338	NA	H2N3	USA	NA	1998	mallard	FJ357086	A/mallard/MN/51/1998(H2N3)
339	NA	H2N3	USA	NA	2001	mallard	FJ686780	A/mallard/Maryland/233/2001(H2N3)
340	NA	H2N3	USA	NA	2003	mallard	FJ686812	A/mallard/Maryland/316/2003(H2N3)
341	NA	H2N3	USA	NA	2006	northern pintail	EU557561	A/northern pintail/Alaska/44183-123/2006(H2N3)
342	NA	H2N3	USA	NA	2001	mallard	FJ686756	A/mallard/Maryland/228/2001(H2N3)
343	NA	H2N3	USA	NA	2001	mallard	FJ686772	A/mallard/Maryland/232/2001(H2N3)
344	NA	H2N3	USA	NA	2003	mallard	GQ257513	A/mallard/Maryland/333/2003(H2N3)
345	NA	H2N3	USA	NA	1998	mallard	FJ357079	A/mallard/MN/14/1998(H2N3)

# <sup>1</sup>	Protein <sup>2</sup>	Subtype	country	Region <sup>3</sup>	Year	Animal	GenBank	Virus name
346	NA	H2N3	USA	NA	2000	mallard	FJ517269	A/mallard/MN/506/2000(H2N3)
347	NA	H3N3	Canada	NA	1978	mallard duck	CY004601	A/mallard duck/ALB/712/1978(H3N3)
348	NA	H3N3	Canada	NA	1988	mallard	CY004682	A/mallard/ALB/394/1988(H3N3)
349	NA	H3N3	China	E	2000	bantam	AY180837	A/bantam/Nanchang/9-366/2000(H3N3)
350	NA	H3N3	China	E	2000	pigeon	AY180838	A/pigeon/Nanchang/9-058/2000(H3N3)
351	NA	H3N3	Hong_Kong	E	1976	duck	AB292411	A/duck/Hong Kong/22A/1976(H3N3)
352	NA	H3N3	SouthKorea	E	2006	aquatic bird	EU301282	A/aquatic bird/Korea/CN-4/2006(H3N3)
353	NA	H3N3	USA	NA	2007	northern shoveler	CY032730	A/northern shoveler/California/HKWF979/2007(H3N3)
354	NA	H4N3	Barbados	NA	2004	blue-winged teal	DQ236167	A/blue-winged teal/Barbados/21/04(H4N3)
355	NA	H4N3	Canada	NA	1990	blue-winged teal	CY004898	A/blue-winged teal/ALB/136/1990(H4N3)
356	NA	H4N3	Canada	NA	1977	mallard	CY004751	A/mallard/Alberta/300/1977(H4N3)
357	NA	H4N3	Hong_Kong	E	1977	duck	AB292409	A/duck/Hong Kong/229/1977(H4N3)
358	NA	H4N3	Mongolia	E	2007	duck	AB450447	A/duck/Mongolia/274/2007(H4N3)
359	NA	H4N3	Sweden	E	2005	mallard	CY041356	A/mallard/Sweden/65/2005(H4N3)
360	NA	H4N3	USA	NA	1982	pintail duck	CY014939	A/pintail duck/New York/155/1982(H4N3)
361	NA	H5N3	China	E	2002	duck	EF597318	A/duck/Yunnan/435/2002(H5N3)
362	NA	H5N3	China	E	2003	duck	EF597319	A/duck/Jiang Xi/6146/2003(H5N3)
363	NA	H5N3	China	E	2005	migratory duck	EF597321	A/migratory duck/Jiang Xi/13487/2005(H5N3)
364	NA	H5N3	France	E	2005	duck	AM040151	A/duck/France/05054a/2005(H5N3)
365	NA	H5N3	France	E	2002	duck	AJ849934	A/duck/France/02166/2002(H5N3)
366	NA	H5N3	Hong_Kong	E	1979	duck	AY207506	A/duck/HongKong/27408/79(H5N3)
367	NA	H5N3	Hong_Kong	E	1978	goose	AY207512	A/goose/HongKong/27404/78(H5N3)
368	NA	H5N3	Hong_Kong	E	1980	duck	EF597317	A/duck/Hong Kong/819/1980(H5N3)
369	NA	H5N3	Hong_Kong	E	1977	duck	CY005591	A/duck/Hong Kong/205/1977(H5N3)
370	NA	H5N3	Hong_Kong	E	1979	duck	EF597316	A/duck/Hong Kong/698/1979(H5N3)
371	NA	H5N3	Hong_Kong	E	2004	migratory duck	EF597320	A/migratory duck/Hong Kong/MP206/2004(H5N2)
372	NA	H5N3	Hong_Kong	E	1976	duck	EF597312	A/duck/Hong Kong/23/1976(H5N3)
373	NA	H5N3	Hong_Kong	E	1978	goose	EF597313	A/goose/Hong Kong/23/1978(H5N3)
374	NA	H5N3	Hong_Kong	E	1978	duck	EF597315	A/duck/Hong Kong/394/1978(H5N3)
375	NA	H5N3	Italy	E	2000	mallard	AY586414	A/mallard/Italy/208/2000(H5N3)
376	NA	H5N3	Italy	E	2005	teal	CY022647	A/teal/Italy/3812/2005(H5N3)
377	NA	H5N3	Italy	E	2004	duck	CY024748	A/duck/Italy/775/2004(H5N3)
378	NA	H5N3	Japan	E	2002	duck	AB472023	A/duck/Shizuoka/40/2002(H5N3)
379	NA	H5N3	Japan	E	2005	duck	AB472024	A/duck/Tsukuba/394/2005(H5N3)
380	NA	H5N3	Japan	E	2006	duck	AB472057	A/duck/Niigata/514/2006(H5N3)
381	NA	H5N3	Japan	E	2006	duck	AB472056	A/duck/Chiba/1/2006(H5N3)
382	NA	H5N3	Japan	E	2002	duck	AB299161	A/duck/Hokkaido/84/2002(H5N3)
383	NA	H5N3	Japan	E	1996	swan	AB300043	A/swan/Hokkaido/67/1996(H5N3)
384	NA	H5N3	Japan	E	2007	duck	AB378684	A/duck/Hokkaido/167/2007(H5N3)
385	NA	H5N3	Russia	E	2001	duck	GQ227605	A/duck/Primorie/2633/2001(H5N3)
386	NA	H5N3	Russia	E	1991	duck	GQ227552	A/duck/Altai/1285/1991(H5N3)
387	NA	H5N3	Singapore	E	1997	duck	AY207510	A/duck/Singapore/3/1997(H5N3)
388	NA	H5N3	SouthAfrica	E	1961	tern	AY207524	A/tern/South Africa/1961(H5N3)
389	NA	H5N3	USA	NA	1979	turkey	AY207525	A/turkey/CA/6878/1979(H5N3)
390	NA	H5N3	USA	NA	2000	ruddy turnstone	AY300946	A/ruddy turnstone/NJ/2242/00(H5N3)
391	NA	H5N3	USA	NA	1975	mallard	EU743130	A/mallard/WI/169/1975(H5N3)
392	NA	H5N3	USA	NA	1989	herring gull	CY004972	A/herring gull/NJ/406/1989(H5N3)
393	NA	H5N3	USA	NA	1975	sabines gull	CY015157	A/sabines gull/Alaska/296/1975(H5N3)
394	NA	H5N3	USA	NA	2000	mallard	EU871908	A/mallard/MN/479/2000(H5N3)
395	NA	H6N3	Canada	NA	1985	mallard duck	CY004204	A/mallard duck/ALB/76/1985(H6N3)
396	NA	H6N3	USA	NA	1989	chicken	CY014911	A/chicken/New York/28263/1989(H6N3)
397	NA	H8N3	Germany	E	2006	Perdix perdix	AM933234	A/Perdix perdix/Germany/R44/06(H8N3)
398	NA	H9N3	France	E	2001	mallard	AJ849935	A/mallard/France/2518/2001(H9N3)
399	NA	H9N3	Ireland	E	1993	mallard	AB303078	A/mallard/Ireland/PV46B/1993(H9N3)

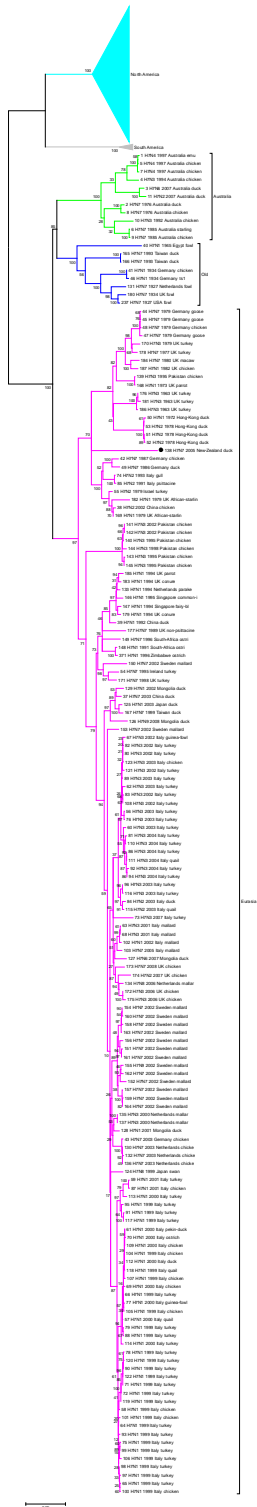
<sup>1</sup> Reference number for taxa displayed in trees. <sup>2</sup> Protein coding region used. Common abbreviations are used for protein names. <sup>3</sup> Geographic Regions. E=Eurasia (includes Asia, Africa, Europe), NA=North America, SA=South America, A=Australia, NZ=New Zealand

**Suppl. Figure 1: Minimum Evolution Tree: hemagglutinin (view 1)**



**Suppl. Figure 1: Inferred relationships for 371 subtype H7 protein coding sequences for HA<sub>0</sub>.** The tree shows the relationships between the major geographic clades of the HA0 gene. The evolutionary history was inferred using the Minimum Evolution method. The optimal tree with the sum of branch length = 3.05693659 is shown. The percentage of replicate trees in which the associated taxa clustered together in the bootstrap test (100 replicates) are shown next to the branches. The tree is drawn to scale, with branch lengths in the same units as those of the evolutionary distances used to infer the phylogenetic tree. The evolutionary distances were computed using the Maximum Composite Likelihood method and are in the units of the number of base substitutions per site. The ME tree was searched using the Close-Neighbor-Interchange (CNI) algorithm at a search level of 1. The Neighbor-joining algorithm was used to generate the initial tree. All positions containing gaps and missing data were eliminated from the dataset (Complete deletion option). There were a total of 1557 positions in the final dataset. Phylogenetic analyses were conducted in MEGA4 (29).

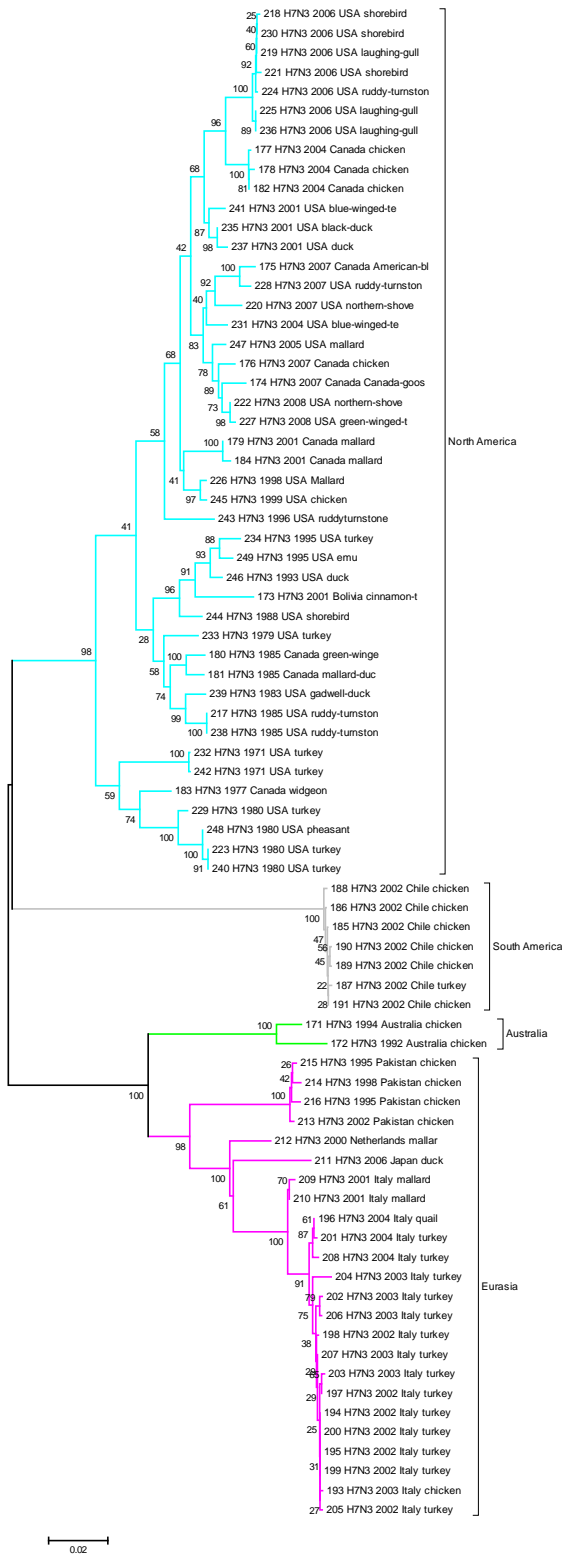
# Suppl. Figure 1: Minimum Evolution Tree: hemagglutinin (view 2: Compressed North America)



**Suppl. Figure 1: Inferred relationships for 371 subtype H7 protein coding sequences for HA<sub>0</sub>.** The tree shows the relationships between the major geographic clades of the HA0 gene. The evolutionary history was inferred using the Minimum Evolution method. The optimal tree with the sum of branch length = 3.05693659 is shown. The percentage of replicate trees in which the associated taxa clustered together in the bootstrap test (100 replicates) are shown next to the branches. The tree is drawn to scale, with branch lengths in the same units as those of the evolutionary distances used to infer the phylogenetic tree. The evolutionary distances were computed using the Maximum Composite Likelihood method and are in the units of the number of base substitutions per site. The ME tree was searched using the Close-Neighbor-Interchange (CNI) algorithm at a search level of 1. The Neighbor-joining algorithm was used to generate the initial tree. All positions containing gaps and missing data were eliminated from the dataset (Complete deletion option). There were a total of 1557 positions in the final dataset. Phylogenetic analyses were conducted in MEGA4 (29).

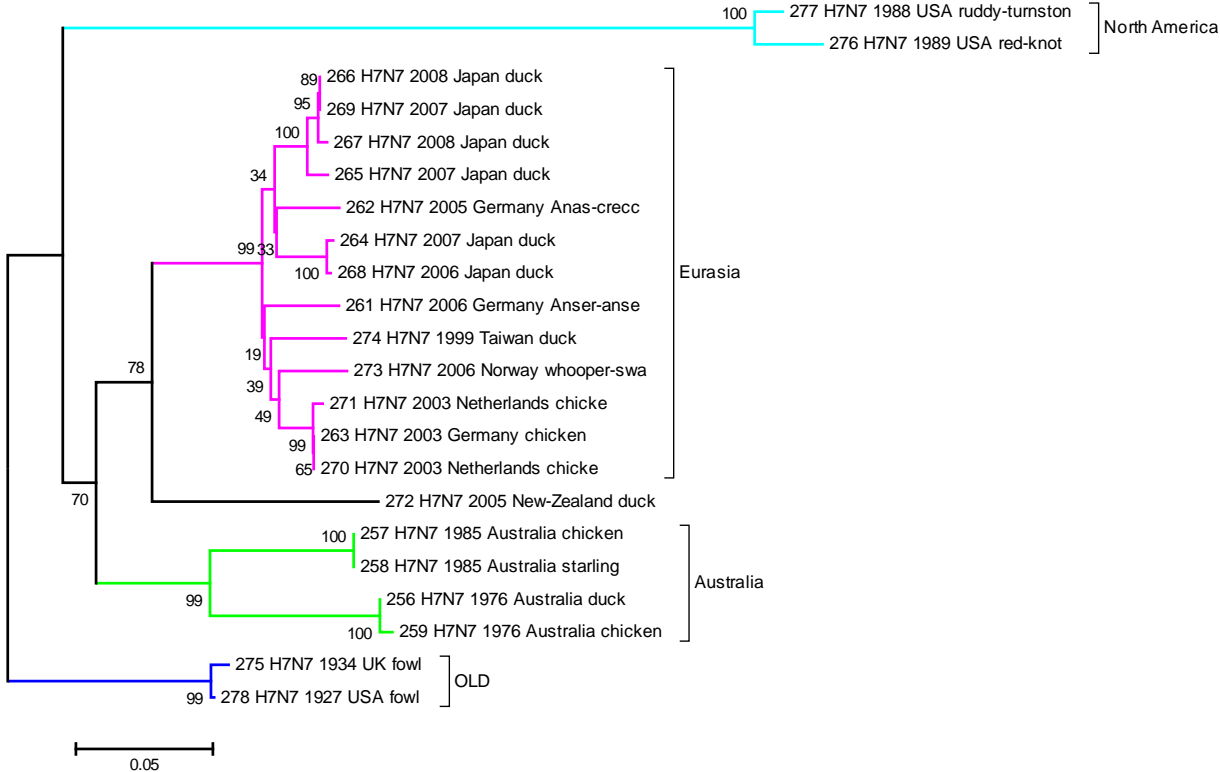


**Suppl. Figure 2a: Minimum Evolution Tree: neuraminidase\_H7N3**



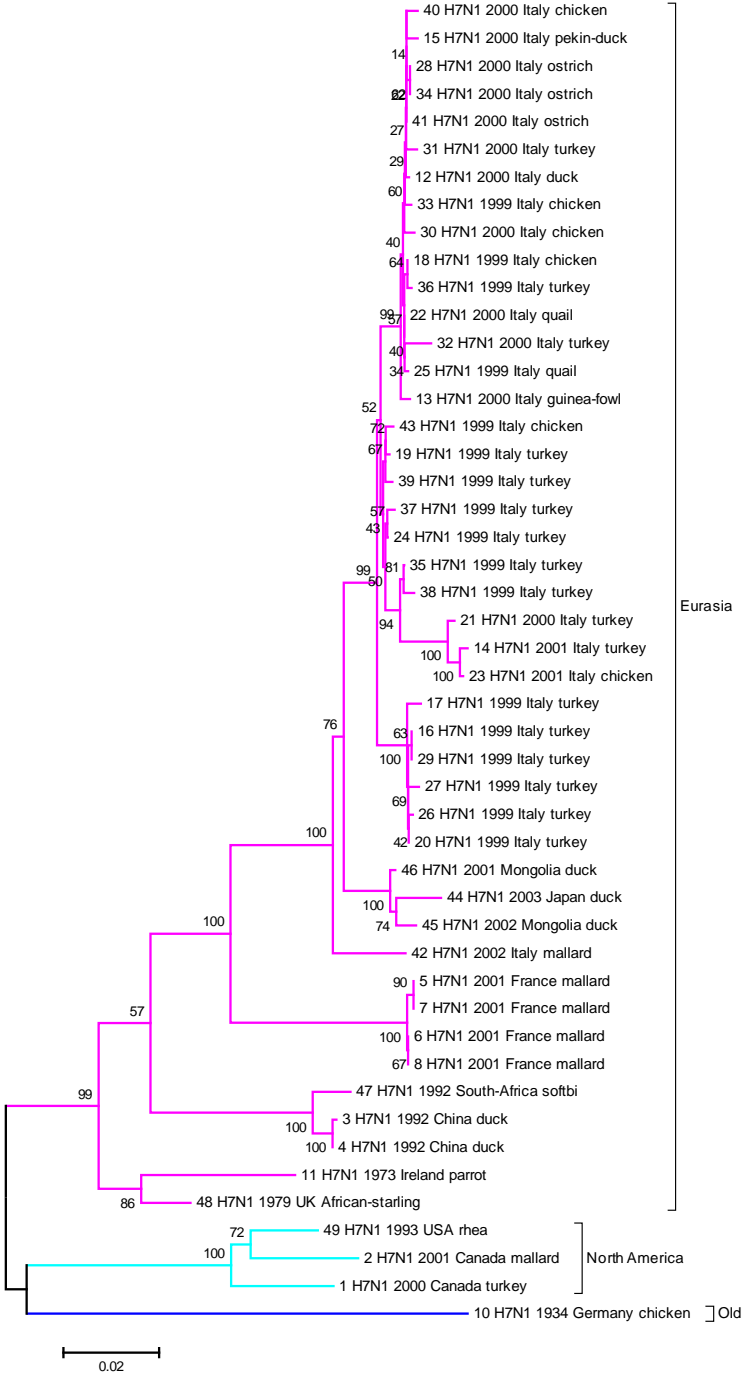
**Suppl. Figure 2: (a) Inferred relationships for 78 subtype H7N3 neuraminidase protein coding sequences.** The tree shows the relationships between the major geographic clades of the subtype H7N3 neuraminidase gene. The evolutionary history was inferred using the Minimum Evolution method. The optimal tree with the sum of branch length = 0.81060971 is shown. The percentage of replicate trees in which the associated taxa clustered together in the bootstrap test (500 replicates) are shown next to the branches. The tree is drawn to scale, with branch lengths in the same units as those of the evolutionary distances used to infer the phylogenetic tree. The evolutionary distances were computed using the Maximum Composite Likelihood method and are in the units of the number of base substitutions per site. The ME tree was searched using the Close-Neighbor-Interchange (CNI) algorithm at a search level of 1. The Neighbor-joining algorithm was used to generate the initial tree. All positions containing gaps and missing data were eliminated from the dataset (Complete deletion option). There were a total of 1247 positions in the final dataset. Phylogenetic analyses were conducted in MEGA4 (29).

**Suppl. Figure 2b: Minimum Evolution Tree: neuraminidase \_H7N7**



**Suppl. Figure 2: (b) Inferred relationships for 22 subtype H7N7 neuraminidase protein coding sequences.** The tree shows the relationships between the major geographic clades of the H7N7 neuraminidase gene. The evolutionary history was inferred using the Minimum Evolution method. The optimal tree with the sum of branch length = 0.88321959 is shown. The percentage of replicate trees in which the associated taxa clustered together in the bootstrap test (500 replicates) are shown next to the branches. The tree is drawn to scale, with branch lengths in the same units as those of the evolutionary distances used to infer the phylogenetic tree. The evolutionary distances were computed using the Maximum Composite Likelihood method and are in the units of the number of base substitutions per site. The ME tree was searched using the Close-Neighbor-Interchange (CNI) algorithm at a search level of 1. The Neighbor-joining algorithm was used to generate the initial tree. All positions containing gaps and missing data were eliminated from the dataset (Complete deletion option). There were a total of 527 positions in the final dataset. Phylogenetic analyses were conducted in MEGA4 (29).

Suppl. Figure 2c: Minimum Evolution Tree: neuraminidase \_H7N1



**Suppl. Figure 2: (c) Inferred relationships for 48 subtype H7N1 neuraminidase protein coding sequences.** The tree shows the relationships between the major geographic clades of the H7N1 neuraminidase gene. The evolutionary history was inferred using the Minimum Evolution method. The optimal tree with the sum of branch length = 0.52780887 is shown. The percentage of replicate trees in which the associated taxa clustered together in the bootstrap test (500 replicates) are shown next to the branches. The tree is drawn to scale, with branch lengths in the same units as those of the evolutionary distances used to infer the phylogenetic tree. The evolutionary distances were computed using the Maximum Composite Likelihood method and are in the units of the number of base substitutions per site. The ME tree was searched using the Close-Neighbor-Interchange (CNI) algorithm at a search level of 1. The Neighbor-joining algorithm was used to generate the initial tree. All positions containing gaps and missing data were eliminated from the dataset (Complete deletion option). There were a total of 1271 positions in the final dataset. Phylogenetic analyses were conducted in MEGA4 (29).



**Suppl. Figure 2: (d) Inferred relationships for 120 subtype H7N2 neuraminidase protein coding sequences.** The tree shows the relationships between the major geographic clades of the H7N2 neuraminidase gene. The evolutionary history was inferred using the Minimum Evolution method. The optimal tree with the sum of branch length = 0.64898981 is shown. The percentage of replicate trees in which the associated taxa clustered together in the bootstrap test (500 replicates) are shown next to the branches. The tree is drawn to scale, with branch lengths in the same units as those of the evolutionary distances used to infer the phylogenetic tree. The evolutionary distances were computed using the Maximum Composite Likelihood method and are in the units of the number of base substitutions per site. The ME tree was searched using the Close-Neighbor-Interchange (CNI) algorithm at a search level of 1. The Neighbor-joining algorithm was used to generate the initial tree. All positions containing gaps and missing data were eliminated from the dataset (Complete deletion option). There were a total of 1312 positions in the final dataset. Phylogenetic analyses were conducted in MEGA4 (29).



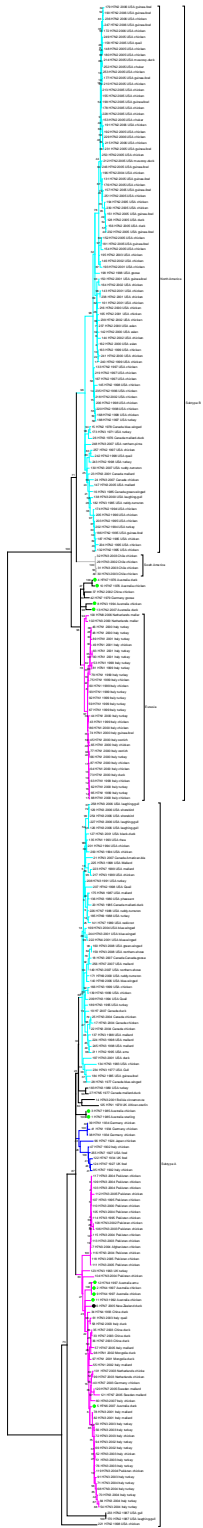
Suppl. Figure 3: Minimum Evolution Tree subtype N3: neuraminidase



**Suppl. Figure 3: Inferred relationships for 193 subtype N3 neuraminidase protein coding sequences.**

The tree shows the relationships between the major geographic clades of the neuraminidase gene. The evolutionary history was inferred using the Minimum Evolution method. The optimal tree with the sum of branch length = 2.59324955 is shown. The percentage of replicate trees in which the associated taxa clustered together in the bootstrap test (100 replicates) are shown next to the branches. The tree is drawn to scale, with branch lengths in the same units as those of the evolutionary distances used to infer the phylogenetic tree. The evolutionary distances were computed using the Maximum Composite Likelihood method and are in the units of the number of base substitutions per site. The ME tree was searched using the Close-Neighbor-Interchange (CNI) algorithm at a search level of 1. The Neighbor-joining algorithm was used to generate the initial tree. Codon positions included were 1st+2nd+3rd. All positions containing gaps and missing data were eliminated from the dataset (Complete deletion option). There were a total of 1214 positions in the final dataset. Phylogenetic analyses were conducted in MEGA4 (29).

# Suppl. Figure 4: Minimum Evolution Tree: NS1



**Suppl. Figure 4: Inferred relationships for 258 subtype H7 NS1 protein coding sequences.**

The tree shows the relationships between the major geographic clades of the NS1 gene. The evolutionary history was inferred using the Minimum Evolution method. The bootstrap consensus tree inferred from 500 replicates is taken to represent the evolutionary history of the taxa analyzed. Branches corresponding to partitions reproduced in less than 56% bootstrap replicates are collapsed. The percentage of replicate trees in which the associated taxa clustered together in the bootstrap test (500 replicates) are shown next to the branches. The tree is drawn to scale, with branch lengths in the same units as those of the evolutionary distances used to infer the phylogenetic tree. The evolutionary distances were computed using the Maximum Composite Likelihood method and are in the units of the number of base substitutions per site. The ME tree was searched using the Close-Neighbor-Interchange (CNI) algorithm at a search level of 1. The Neighbor-joining algorithm was used to generate the initial tree. All positions containing gaps and missing data were eliminated from the dataset (Complete deletion option). There were a total of 621 positions in the final dataset. Phylogenetic analyses were conducted in MEGA4 (29).

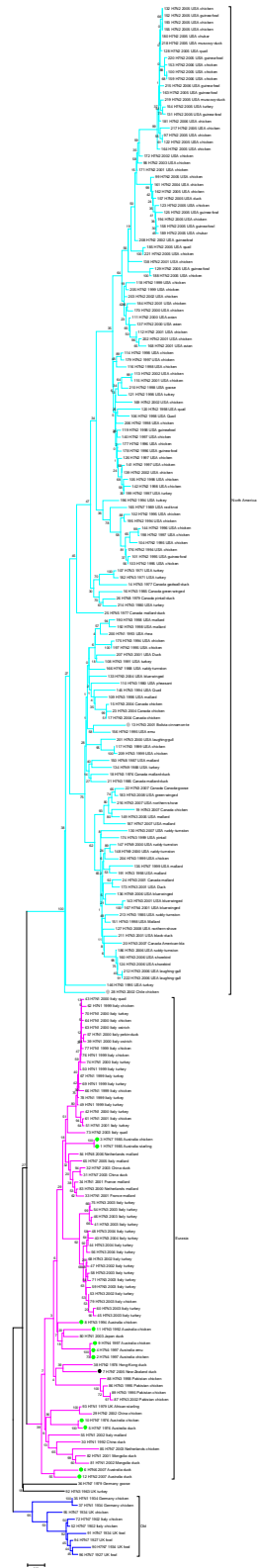
# Suppl. Figure 5: Minimum Evolution Tree: PA



**Suppl. Figure 5: Inferred relationships for 252 subtype H7 PA protein coding sequences.**

The tree shows the relationships between the major geographic clades of the PA gene. The evolutionary history was inferred using the Minimum Evolution method . The optimal tree with the sum of branch length = 1.99895260 is shown. The percentage of replicate trees in which the associated taxa clustered together in the bootstrap test (500 replicates) are shown next to the branches. The tree is drawn to scale, with branch lengths in the same units as those of the evolutionary distances used to infer the phylogenetic tree. The evolutionary distances were computed using the Maximum Composite Likelihood method and are in the units of the number of base substitutions per site. The ME tree was searched using the Close-Neighbor-Interchange (CNI) algorithm at a search level of 1. The Neighbor-joining algorithm was used to generate the initial tree. All positions containing gaps and missing data were eliminated from the dataset (Complete deletion option). There were a total of 2128 positions in the final dataset. Phylogenetic analyses were conducted in MEGA4 (29).

# Suppl. Figure 6: Minimum Evolution Tree: M

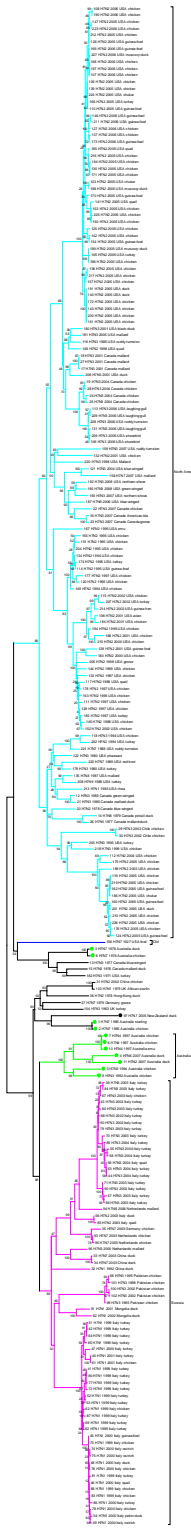


**Suppl. Figure 6: Inferred relationships for 222 subtype H7 Matrix protein coding sequences.**

The tree shows the relationships between the major geographic clades of the matrix gene. The evolutionary history was inferred using the Minimum Evolution method. The optimal tree with the sum of branch length = 1.56339193 is shown. The percentage of replicate trees in which the associated taxa clustered together in the bootstrap test (500 replicates) are shown next to the branches. The tree is drawn to scale, with branch lengths in the same units as those of the evolutionary distances used to infer the phylogenetic tree. The evolutionary distances were computed using the Maximum Composite Likelihood method and are in the units of the number of base substitutions per site. The ME tree was searched using the Close-Neighbor-Interchange (CNI) algorithm at a search level of 1. The Neighbor-joining algorithm was used to generate the initial tree. All positions containing gaps and missing data were eliminated from the dataset (Complete deletion option). There were a total of 751 positions in the final dataset. Phylogenetic analyses were conducted in MEGA4 (29).



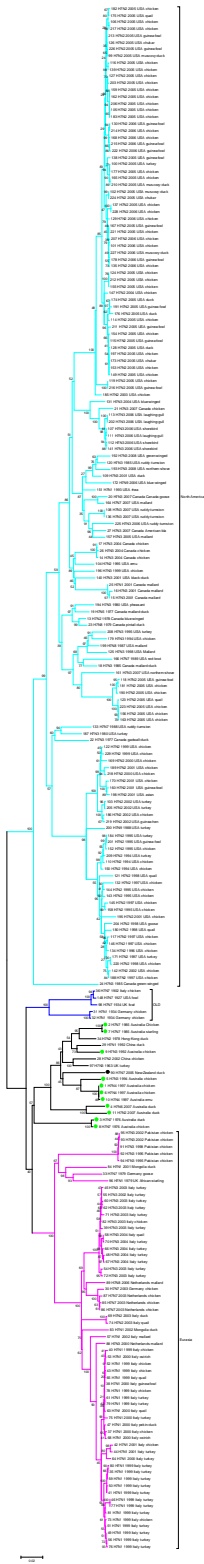
Suppl. Figure 7: Minimum Evolution Tree: PB1



**Suppl. Figure 7: Inferred relationships for 229 subtype H7 PB1 protein coding sequences**

The tree shows the relationships between the major geographic clades of the PB1 gene. The evolutionary history was inferred using the Minimum Evolution method. The optimal tree with the sum of branch length = 1.79522666 is shown. The percentage of replicate trees in which the associated taxa clustered together in the bootstrap test (500 replicates) are shown next to the branches. The tree is drawn to scale, with branch lengths in the same units as those of the evolutionary distances used to infer the phylogenetic tree. The evolutionary distances were computed using the Maximum Composite Likelihood method and are in the units of the number of base substitutions per site. The ME tree was searched using the Close-Neighbor-Interchange (CNI) algorithm at a search level of 1. The Neighbor-joining algorithm was used to generate the initial tree. All positions containing gaps and missing data were eliminated from the dataset (Complete deletion option). There were a total of 2249 positions in the final dataset. Phylogenetic analyses were conducted in MEGA4 (29).

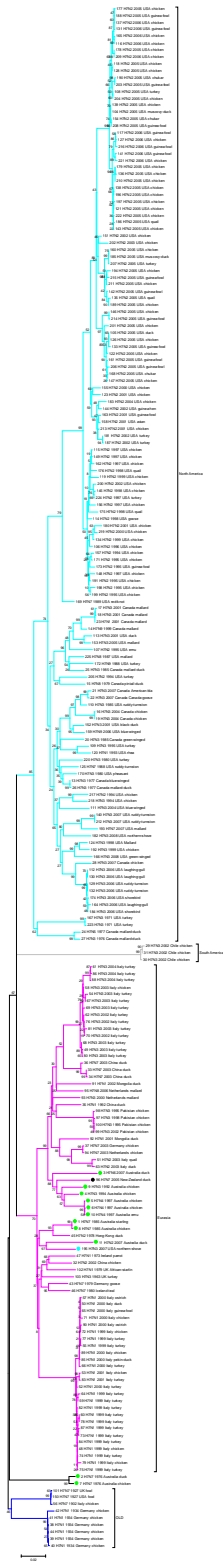
Suppl. Figure 8: Minimum Evolution Tree: PB2



**Suppl. Figure 8: Inferred relationships for 229 subtype H7 PB2 protein coding sequences.**

The tree shows the relationships between the major geographic clades of the PB2 gene. The evolutionary history was inferred using the Minimum Evolution method. The optimal tree with the sum of branch length = 2.11880439 is shown. The percentage of replicate trees in which the associated taxa clustered together in the bootstrap test (500 replicates) are shown next to the branches. The tree is drawn to scale, with branch lengths in the same units as those of the evolutionary distances used to infer the phylogenetic tree. The evolutionary distances were computed using the Maximum Composite Likelihood method and are in the units of the number of base substitutions per site. The ME tree was searched using the Close-Neighbor-Interchange (CNI) algorithm at a search level of 1. The Neighbor-joining algorithm was used to generate the initial tree. All positions containing gaps and missing data were eliminated from the dataset (Complete deletion option). There were a total of 2250 positions in the final dataset. Phylogenetic analyses were conducted in MEGA4 (29).

Suppl. Figure 9: Minimum Evolution Tree: NP



**Suppl. Figure 9: Inferred relationships for 225 subtype H7 NP protein coding sequences.**

The tree shows the relationships between the major geographic clades of the NP gene. The evolutionary history was inferred using the Minimum Evolution method. The optimal tree with the sum of branch length = 1.93601994 is shown. The percentage of replicate trees in which the associated taxa clustered together in the bootstrap test (500 replicates) are shown next to the branches. The tree is drawn to scale, with branch lengths in the same units as those of the evolutionary distances used to infer the phylogenetic tree. The evolutionary distances were computed using the Maximum Composite Likelihood method and are in the units of the number of base substitutions per site. The ME tree was searched using the Close-Neighbor-Interchange (CNI) algorithm at a search level of 1. The Neighbor-joining algorithm was used to generate the initial tree. All positions containing gaps and missing data were eliminated from the dataset (Complete deletion option). There were a total of 1480 positions in the final dataset. Phylogenetic analyses were conducted in MEGA4 (29).