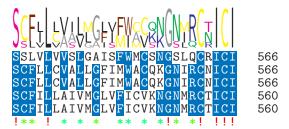
AHX38123.1 hemagglutinin Influenza A virus (A/Gainesville/05/2014(H1N1)) AIZ07500.1 hemagglutinin Influenza A virus (A/Gainesville/05/2014(H3N2)) AIZ07504.1 hemagglutinin Influenza A virus (A/Gainesville/09/2014(H3N2)) AHJ57418.1 hemagglutinin Influenza A virus (A/Shanghai/PD-02/2014(H7N9)) AIN76383.1 hemagglutinin Influenza A virus (A/Zhejiang/LS01/2014(H7N9)) consensus	MKAILVVLLYTFATANADTLCIGYHANNSTDTVDTVLEKNVTVTHS MKTIIALSYILCLVFAQKIPGNDNSTATLCLGHHAVPNGTIVKTITNDRIEVTNA MKTIIALSYILCLVFAQKIPGNDNSTATLCLGHHAVPNGTIVKTITNDRIEVTNA MKTIIALSYILCLVFAQKIPGNDNSTATLCLGHHAVPNGTIVKTITNDRIEVTNA MNTQILVFALIAIIPTNADKICLGHHAVSNGTKVNTLTERGVEVVNA MNTQILVFALIAIVPTNADKICLGHHAVSNGTKVNTLTERGVEVVNA !****** !!* * ***** *****!!!* *** ! ! ** **	46 55 55 47 47
logo AHX38123.1 hemagglutinin Influenza A virus (A/Gainesville/05/2014(H1N1)) AIZ07500.1 hemagglutinin Influenza A virus (A/Gainesville/05/2014(H3N2)) AIZ07504.1 hemagglutinin Influenza A virus (A/Gainesville/09/2014(H3N2)) AHJ57418.1 hemagglutinin Influenza A virus (A/Shanghai/PD-02/2014(H7N9)) AIN76383.1 hemagglutinin Influenza A virus (A/Zhejiang/LS01/2014(H7N9)) consensus	TELVERTS GRISS GKOTLD GOTT LGTIL POOD ON KSWD IV PS VNILEDKHNGKLCKLRGVAPLHLGKCNIAGWILGNPECESLSTASSWSYIVETSS TELVQNSSIGEICDS.PHQILDGENCTLIDALLGDPQCDGFQN.KKWDLFVERS.TELVQNSSIGEICDS.PHQILDGENCTLIDALLGDPQCDGFQN.KKWDLFVERS.TETVERTNIPRICSK.GKRTVDLGQCGLLGTTTGPPQCDQFLE.FSADLITERR.TETVERTNIPRICSK.GKKTVDLGQCGLLGTTTGPPQCDQFLE.FSADLITERR.***********************************	101 107 107 99 99
AHX38123.1 hemagglutinin Influenza A virus (A/Gainesville/05/2014(H1N1)) AIZ07500.1 hemagglutinin Influenza A virus (A/Gainesville/05/2014(H3N2)) AIZ07504.1 hemagglutinin Influenza A virus (A/Gainesville/09/2014(H3N2)) AHJ57418.1 hemagglutinin Influenza A virus (A/Shanghai/PD-02/2014(H7N9)) AIN76383.1 hemagglutinin Influenza A virus (A/Zhejiang/LS01/2014(H7N9)) consensus	KGYSN VPGE VYES SILRS CTLEKN NS TWT V TWITTS ARE SONGTCYPGDFINYEELREQUSSVSSFERFEIFPKTSSWPNHDSNKGVTAACPHA KAYSNCYPYDVPDYASLRSLVASSGTLEFNNESFNWTGV.TQNGTSSACIRR KAYSNCYPYDVPDYASLRSLVASSGTLEFNNESFNWTGV.TQNGTSSACIRR EGSDICYPGKFVNEEALRQILRESGGIDKEAMGFTYSGI.RTNGATSACR.R EGSDVCYPGKFVNEEALRQILRESGGIDKEAMGFTYSGI.RTNGTTSACR.R *!!!*** *** !! * *** * * * * * * * * *	156 158 158 149 149
logo AHX38123.1 hemagglutinin Influenza A virus (A/Gainesville/05/2014(H1N1)) AIZ07500.1 hemagglutinin Influenza A virus (A/Gainesville/05/2014(H3N2)) AIZ07504.1 hemagglutinin Influenza A virus (A/Gainesville/09/2014(H3N2)) AHJ57418.1 hemagglutinin Influenza A virus (A/Shanghai/PD-02/2014(H7N9)) AIN76383.1 hemagglutinin Influenza A virus (A/Zhejiang/LS01/2014(H7N9)) consensus	SSSFYAEMKWLLSNTDNAAFPQMTKSYKNTRKSPALIVWGIHHSVSTAEQTKLY SGSSFYAEMKWLLSNTDNAAFPQMTKSYKNTRKSPALIVWGIHHSVSTAEQTKLY SGSSFYAEMKWLLSNTDNAAFPQMTKSYKNTRKSPALIVWGIHHSVSTAEQTKLY * *!! * *! *** !! !! **** !!	209 211 211 204 204
logo AHX38123.1 hemagglutinin Influenza A virus (A/Gainesville/05/2014(H1N1)) AIZ07500.1 hemagglutinin Influenza A virus (A/Gainesville/05/2014(H3N2)) AIZ07504.1 hemagglutinin Influenza A virus (A/Gainesville/09/2014(H3N2)) AHJ57418.1 hemagglutinin Influenza A virus (A/Shanghai/PD-02/2014(H7N9)) AIN76383.1 hemagglutinin Influenza A virus (A/Zhejiang/LS01/2014(H7N9)) consensus	GSSSKRVT GTSPY OS FY SIGN RVRDLSG SIVIT VN GOTVTFSST NA RVRDLSG SIVIT VN GOTVTFSST NA RVRDLSG SEN RVRDLSG SIVIT VN GOTVTFSST NA RVRDLSG SEN RVRDLSG SE	264 266 266 259 259

logo AHX38123.1 hemagglutinin Influenza A virus (A/Gainesville/05/2014(H1N1)) AIZ07500.1 hemagglutinin Influenza A virus (A/Gainesville/05/2014(H3N2)) AIZ07504.1 hemagglutinin Influenza A virus (A/Gainesville/09/2014(H3N2)) AHJ57418.1 hemagglutinin Influenza A virus (A/Shanghai/PD-02/2014(H7N9)) AIN76383.1 hemagglutinin Influenza A virus (A/Zhejiang/LS01/2014(H7N9)) consensus	PRAFKL PSKSSG OSSDOPIGN KSE TPN T PSN PRAFKA PSKSSG OSSDOPIGN KSE TPN T PSN PRAFKA PSKSSG OSSDOPIGN KSE TPN T PSN PRAFKA PSKSSG I ISD TPVHD CNTTCQTPEGAINTSLPFQNIHPITIGK LIAPRGYFKI.RSGKSSIMRSDAPIGKCKSECITPNGSIPNDKPFQNVNRITYGA LIAPRGYFKI.RSGKSSIMRSDAPIGKCKSECITPNGSIPNDKPFQNVNRITYGA FIAPDRASFL.KGKSMGIQSGVQVDANCEGDCYHSGGTIISNLPFQNIDSRAVGK FIAPDRASFL.RGKSMGIQSGVQVDANCEGDCYHSGGTIISNLPFQNIDSRAVGK ***!* ** **! ** * ! ! **!!!! **!!!! ** !!	319 320 320 313 313
logo AHX38123.1 hemagglutinin Influenza A virus (A/Gainesville/05/2014(H1N1)) AIZ07500.1 hemagglutinin Influenza A virus (A/Gainesville/05/2014(H3N2)) AIZ07504.1 hemagglutinin Influenza A virus (A/Gainesville/09/2014(H3N2)) AHJ57418.1 hemagglutinin Influenza A virus (A/Shanghai/PD-02/2014(H7N9)) AIN76383.1 hemagglutinin Influenza A virus (A/Zhejiang/LS01/2014(H7N9)) consensus	CPKYVKSTKLRLATRLRNVPSI.QSRGLFRAIAGFIEGGWTGMVDGWYGYHHQNE CPRYVKHSTLKLATGMRNVPEK.QTRGIFGAIAGFIENGWEGMVDGWYGFRHQNS CPRYVKHSTLKLATGMRNVPEK.QTRGIFGAIAGFIENGWEGMVDGWYGFRHQNS CPRYVKQRSLLLATGMKNVPEIPKGRGLFGAIAGFIENGWEGLIDGWYGFRHQNA CPRYVKQKSLLLATGMKNVPEIPKGRGLFGAIAGFIENGWEGLIDGWYGFRHQNA CPRYVKQKSLLLATGMKNVPEIPKGRGLFGAIAGFIENGWEGLIDGWYGFRHQNA	373 374 374 368 368
AHX38123.1 hemagglutinin Influenza A virus (A/Gainesville/05/2014(H1N1)) AIZ07500.1 hemagglutinin Influenza A virus (A/Gainesville/05/2014(H3N2)) AIZ07504.1 hemagglutinin Influenza A virus (A/Gainesville/09/2014(H3N2)) AHJ57418.1 hemagglutinin Influenza A virus (A/Shanghai/PD-02/2014(H7N9)) AIN76383.1 hemagglutinin Influenza A virus (A/Zhejiang/LS01/2014(H7N9)) consensus	QGSGYAADLKSTQNAIDKITNKVNSVIEKMNTQFTAVGKEFNHLEKRIENLNKKV EGRGQAADLKSTQAAIDQINGKLNRLIGKTNEKFHQIEKEFSEVEGRIQDLEKYV EGRGQAADLKSTQAAIDQINGKLNRLIGKTNEKFHQIEKEFSEVEGRIQDLEKYV QGEGTAADYKSTQSAIDQITGKLNRIIEKTNQQFELIDNEFNEVEKQIGNVINWT QGEGTAADYKSTQSAIDQITGKLNRLIEKTNQQFELIDNEFNEVEKQIGNVINWT *! !!!*!!! !!!*!**!*!*! * * *!!***! ** * *	428 429 429 423 423
logo AHX38123.1 hemagglutinin Influenza A virus (A/Gainesville/05/2014(H1N1)) AIZ07500.1 hemagglutinin Influenza A virus (A/Gainesville/05/2014(H3N2)) AIZ07504.1 hemagglutinin Influenza A virus (A/Gainesville/09/2014(H3N2)) AHJ57418.1 hemagglutinin Influenza A virus (A/Shanghai/PD-02/2014(H7N9)) AIN76383.1 hemagglutinin Influenza A virus (A/Zhejiang/LS01/2014(H7N9)) consensus	DDGFLDIWTYNAELLVLLENERTLDYHDSNVKNLYEKVRNQLKNNAKEIGNGCFE EDTKIDLWSYNAELLVALENQHTIDLTDSEMNKLFEKTKKQLRENAEDMGNGCFK EDTKIDLWSYNAELLVALENQHTIDLTDSEMNKLFEKTKKQLRENAEDMGNGCFK EDTKIDLWSYNAELLVAMENQHTIDLTDSEMNKLFEKTKKQLRENAEDMGNGCFK RDSITEVWSYNAELLVAMENQHTIDLADSEMDKLYERVKRQLRENAEEDGTGCFE RDSITEVWSYNAELLVAMENQHTIDLADSEMDKLYERVKRQLRENAEEDGTGCFE * !*!!!!!**!!**!!** !!** *!*!*** !!** !!** !!**	483 484 484 478 478
logo AHX38123.1 hemagglutinin Influenza A virus (A/Gainesville/05/2014(H1N1)) AIZ07500.1 hemagglutinin Influenza A virus (A/Gainesville/05/2014(H3N2)) AIZ07504.1 hemagglutinin Influenza A virus (A/Gainesville/09/2014(H3N2)) AHJ57418.1 hemagglutinin Influenza A virus (A/Shanghai/PD-02/2014(H7N9)) AIN76383.1 hemagglutinin Influenza A virus (A/Zhejiang/LS01/2014(H7N9)) consensus	TYHKCDNTCMESVKNGTYDYPKYSEEAKLNREKIDGVKLESTRIYQILAIYSTVA IYHKCDNACIGSIRNGTYDHNVYRDEALNNRFQIKGVELKSGYKDWIL WISFAI IYHKCDNACIGSIRNGTYDHNVYRDEALNNRFQIKGVELKSGYKDWIL WISFAI IFHKCDDDCMASIRNNTYDHSKYREEAMQNRIQIDPVKLSSGYKDVIL WFSFGA IFHKCDDDCMASIRNNTYDHSKYREEAMQNRIQIDPVKLSSGYKDVIL WFSFGA **!!!* !* !**!*!! !* *!**!	538 538 538 532 532

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AHX38123.1 hemagglutinin Influenza A virus (A/Gainesville/05/2014(H1N1))
AIZ07500.1 hemagglutinin Influenza A virus (A/Gainesville/05/2014(H3N2))
AIZ07504.1 hemagglutinin Influenza A virus (A/Gainesville/09/2014(H3N2))
AHJ57418.1 hemagglutinin Influenza A virus (A/Shanghai/PD-02/2014(H7N9))
AIN76383.1 hemagglutinin Influenza A virus (A/Zhejiang/LS01/2014(H7N9))
consensus
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X non-conserved

 \times \geq 50% conserved