```
logo
NTDB id 1365 NTHI RS01955 WP 011271973.1     .M.KLTTQQTLKKGFTLIELMIVIAIIAILATIAIPSYQNYTKKAAVSELLQASAPYKADVELCVYSTNE..TTNC.T..   73
NTDB id 1383 A4U84 RS08530 WP 005711781.1    MK.KIRLIRPLAKAFTLIELMIVIAIIAILATIAIPSYTSYTQKAALSELLSASASYKSDVEICIYNVGDKKISEC.S..   76
NTDB id 1197 PSJM300 03940 AFN76866.1        ......MKAQMQKGFTLIELMIVVAIIGILAAIALPAYQDYTVRSNAAAALAEITPGKIGFE.QAINEGKTPSLTSTDEG   73
NTDB id 1038 HON27 RS01510 WP 000993725.1    ........MNAQKGFTLIELMIVVAIIGILAAIAIPQYQNYIAKSQVNSGFSEISSIKTGYE.NAVNEGAVPTKLS.DVG   70
NTDB id 1119 NGFG RS11465 WP 017147169.1     .......MNTLQKGFTLIELMIVIAIVGILAAVALPAYQDYTARAQVSEAILLAEGQKSAVTEYYLNHGKWPENNT.SAG   72
NTDB id 1109 OK783 RS10670 WP 157147416.1    .......MNTLQKGFTLIELMIVIAIVGILAAVALPAYQDYTARAQVSEAILLAEGQKSAVTEYYLNHGIWPKDNT.SAG   72
NTDB id 1191 AAC28468.1 484..945( )          ......MLKKVQKGFTLIELMIVIAIIGILAAIALPAYQDYTARAQATEGFKATAGLQTDLGAWRADRGSFPNAAA.LVA   73
NTDB id 1400 DSB67 RS12660 WP 010643261.1    ...MKTNKQKKQQGFTLIELMIVVAIIGILAALAIPAYQDYTKKATMAEFPKIASSTKLAVELCAHEHAADAGA......   71
NTDB id 1188 NELON RS01755 WP 003772458.1    .......MKAMQKGFTLIELMIVIAIIGILAAIALPAYQDYTVRSKVSEALIAASSPKSALSEAFQTDGITGMTAA.AKA   72
NTDB id 411803 GSR16 RS18510 WP 159879948.1 ......MQKQIQQGFTLIELMIVVAIIGILAAIAIPAYQDYTVRAKVSEGLAAVAAAKTAVSEAAITYGTMPGSQA.SAG   73
NTDB id 1424 RS RS02795 WP 011000517.1       MKSMRHLNKRVQKGFTLIELMIVVAIVGILAAIAIPAYQDYTVRARVTEGLSLAAQAKALVSENAANAQSDLSV......   74
NTDB id 1002 ACIAD RS15100 WP 004923779.1    ........MNAQKGFTLIELMIVIAIIGILAAIAIPAYTDYTVRARVSEGLTAASSMKTTVSENILNAGALVAGTP.STA   71
NTDB id 1274 LPP RS09530 WP 011214168.1      .........MRQKGFTLIELMIVVAIIGILAAIAIPAYQDYTIRARVTEGLTLADSAKLAVSETAITNNALPATQA.ATG   70
NTDB id 1258 GCO85 RS09745 WP 014844212.1    .........MRQKGFTLIELMIVVAIIGILAAIAIPAYQDYTIRARVTEGLTLADSAKLAVSETAITNNALPATQA.ATG   70
consensus                                              *****!!!!!!!!!*!!**!!!**!*!*!**!*  **  *****   *    ******   *   *   *        *
```

```
logo
NTDB id 1365 NTHI RS01955 WP 011271973.1     ........GGKNGIAADITT..AKGYVKSVTTS......NGAITVKGDGTL........ANMEYILQATG.........N   120
NTDB id 1383 A4U84 RS08530 WP 005711781.1    ........SGKNGVRADKSDVPDAKYLKSISVA......SGVITVAGKGNI........DGYGYTMTP.K.........F   124
NTDB id 1197 PSJM300 03940 AFN76866.1        YIGITD.............ST...SYCDVDLD....TAADGHIECTAKGGN....AGKFDGKTITLNR............   117
NTDB id 1038 HON27 RS01510 WP 000993725.1    FTAATS.............SVCATYSIDAFTE....TDGAGKITCTLKGN......PKIATKIVELTR............   115
NTDB id 1119 NGFG RS11465 WP 017147169.1     VA.............S.PPTDIKGKYVKEVEVK......NGVVTATMLSS...GVNNEIKGKK..........LSLWGRR   119
NTDB id 1109 OK783 RS10670 WP 157147416.1    VA.............S.A.STIKGKYVQKVEVA......KGVVTAQMAST...GVNKEIQDKK..........LSLWAKR   118
NTDB id 1191 AAC28468.1 484..945( )          GNVIFDSANGLDG.........KYFAPGGVTVT....PDTGAINIAFDAGAN.......AGKTMTITPTVIA.......A   126
NTDB id 1400 DSB67 RS12660 WP 010643261.1    FKTKCHQ..TANGIP.......AAFTLNNLTVTPAAGAASGAISITVNAANDKG........PI....KQNEKYILTATY   130
NTDB id 1188 NELON RS01755 WP 003772458.1    FNKTAAAGGGAGGAAA.AGTQHASKYVKSVKV...TEASPWDITVAISATEANGIPTGLDGNTIRLFPLVNK..AVPAAT   146
NTDB id 411803 GSR16 RS18510 WP 159879948.1 FTS.......V...........ATKYVSSVTY.TQTDSTHGVLTVMMNAGNV.......GGNVTTSTNQ....FSLTGLL   123
NTDB id 1424 RS RS02795 WP 011000517.1       ............GSSV.F...TPTKNVANLTI.AGTGTVPGQITVTYT.TAA.......GGGTLALVPTAAGTALPVSSA   129
NTDB id 1002 ACIAD RS15100 WP 004923779.1    GSS.......CVGVQE.ISASNATTNVATA...TCGASSAGQIIVTMDTTKA.......KGANITLTPT..........Y   123
NTDB id 1274 LPP RS09530 WP 011214168.1      YV................SPAATPNVASI...AIGA..NGVITITY.TAAA.......GGGTIVMTPTL.........Q   111
NTDB id 1258 GCO85 RS09745 WP 014844212.1    YV................SPAATPNVQSI...AIGA..NGVITITY.TAAA.......GGGTIIMTPTL.........Q   111
consensus                                                      *  *   *  *          * ****  *           *  * *
```

<0

```
logo
                                                  ASGVTWTTCTSSAT                          LPAKYLPSSCR
                                                  ANNDIKFASSQAS                           ITDTNFRAEYP
                                                  SINSSSAISSKARSIADRRATSSYAYAAYANNYYSSKSCRSARSSDRISITK
                                                  EDKSSSAKSSKARSIADRRATSSYAYAAYANNYYSSKSCRSARSSEAPSKK
                                                  ITSL

NTDB id 1365 NTHI RS01955 WP 011271973.1          AATGVTWTTTCKGTD.............ASLFPANFCGSVTQ............   149
NTDB id 1383 A4U84 RS08530 WP 005711781.1         ANNNITWATSCQGAD.............ISLFPANFCGQKATP...........   154
NTDB id 1197 PSJM300 03940 AFN76866.1             .TADGEWSCAS...................TLDAKYKPGKCS............   139
NTDB id 1038 HON27 RS01510 WP 000993725.1         .STDGAWTCVS...................DVPTEFLPKGCTAGTPTEGAITSL   149
NTDB id 1119 NGFG RS11465 WP 017147169.1          ENGSVKWFCGQPVTRADDDTVAD..AKDGKEIDTKHLPSTCRDKASDAK.....   166
NTDB id 1109 OK783 RS10670 WP 157147416.1         QDGSVKWFCGQPVTRTGDNDDTV..ADANNAIDTKHLPSTCRDESSAT......   164
NTDB id 1191 AAC28468.1 484..945( )               SGQISTWTCAPGAAN...............GIETRRLPTSCQ*...........   153
NTDB id 1400 DSB67 RS12660 WP 010643261.1         ASNGVTWSSECKDAT..............NAVQTSYCP................   154
NTDB id 1188 NELON RS01755 WP 003772458.1         STGAIDWACASAAKETADKRFGTGSGVAVGTLPAKYAPSECK............   188
NTDB id 411803 GSR16 RS18510 WP 159879948.1       ASGTVTWTCAQAASQ...............PIATQYLPANCR............   150
NTDB id 1424 RS RS02795 WP 011000517.1            PSCPIMWTCYAQNKAQAASSVAPS...GTMSLAAKYAPAECR............   168
NTDB id 1002 ACIAD RS15100 WP 004923779.1         ASGAVTWKCTTT..................S.DKKYVPSECRG...........   147
NTDB id 1274 LPP RS09530 WP 011214168.1           ANGDVTWTCTGG..................TLLAKYRPASCRP...........   136
NTDB id 1258 GCO85 RS09745 WP 014844212.1         ANGDVTWTCTGG..................TLLAKYRPASCRP...........   136
consensus                                           * **!**                       *  **  *  **
```

X non conserved

X similar

X ≥50% conserved