```
logo
                                                  ..MKLTTLQTLKKGFTLIELMIVIAIIAILATIAIPSYQNYTKKAAVSELLQASAPYKADVELCVYSTNETTSCTGGKN.    77
NTDB id 1354 HI 0299 AAC21963.1
NTDB id 1365 NTHI RS01955 WP 011271973.1          ..MKLTTQQTLKKGFTLIELMIVIAIIAILATIAIPSYQNYTKKAAVSELLQASAPYKADVELCVYSTNETTNCTGGKN.    77
NTDB id 1109 OK783 RS10670 WP 157147416.1         .......MNTLQKGFTLIELMIVIAIVGILAAVALPAYQDYTARAQVSEAILLAEGQKSAVTEYYLNHGIWPKDNTSA..    71
NTDB id 1424 RS RS02795 WP 011000517.1            MKSMRHLNKRVQKGFTLIELMIVVAIVGILAAIAIPAYQDYTVRARVTEGLSLAAQAKALVSENAANAQSDLSV......    74
NTDB id 1002 ACIAD RS15100 WP 004923779.1         ........MNAQKGFTLIELMIVIAIIGILAAIAIPAYTDYTVRARVSEGLTAASSMKTTVSENILNAGALVAGTPSTAG    72
NTDB id 1274 LPP RS09530 WP 011214168.1           .........MRQKGFTLIELMIVVAIIGILAAIAIPAYQDYTIRARVTEGLTLADSAKLAVSETAITNNALPATQAATGY    71
NTDB id 1258 GC085 RS09745 WP 014844212.1         .........MRQKGFTLIELMIVVAIIGILAAIAIPAYQDYTIRARVTEGLTLADSAKLAVSETAITNNALPATQAATGY    71
NTDB id 1184 GTF74 RS02335 WP 000649326.1         ...MKAYKNKQQKGFTLIELMIVVAVIGVLAAIAIPQYQNYVKKSAIGVGLANITALKTNIEDYIATEGSFPATTAGTAA    77
NTDB id 1167 A1552VC RS11065 WP 000649326.1       ...MKAYKNKQQKGFTLIELMIVVAVIGVLAAIAIPQYQNYVKKSAIGVGLANITALKTNIEDYIATEGSFPATTAGTAA    77
NTDB id 1160 ABDM36 RS02330 WP 000649326.1        ...MKAYKNKQQKGFTLIELMIVVAVIGVLAAIAIPQYQNYVKKSAIGVGLANITALKTNIEDYIATEGSFPATTAGTAA    77
NTDB id 1292 VP RS12235 WP 005479693.1            ...MKHSKQKKQQGFTLIELMIVVAIIGVLAAAAIPAYQNYVTRSEVTSGLATVKALITPAELHYQE.NGIAAAAT....    72
NTDB id 1038 HON27 RS01510 WP 000993725.1         ........MNAQKGFTLIELMIVVAIIGILAAIAIPQYQNYIAKSQVNSGFSEISSIKTGYENAVNE.GAVPTKLSDV..    69
NTDB id 1192 PAKAF RS23870 WP 024947914.1         ........MKAQKGFTLIELMIVVAIIGILAAIAIPQYQNYVARSEGASALASVNPLKTTVEEALSR.GWSVKSGTGTED    71
NTDB id 168946 PcP3B5 RS30525 WP 082816254.1      ........MKAQKGFTLIELMIVVAIIGILAAIALPAYQDYTVRSQAAAALSEITPGKTAFEVAVNE.GKTPSTTATD..    69
NTDB id 1197 PSJM300 03940 AFN76866.1             ......MKAQMQKGFTLIELMIVVAIIGILAAIALPAYQDYTVRSNAAAALAEITPGKIGFEQAINE.GKTPSLTSTD..    71
NTDB id 1204 PSJM300 03935 AFN76865.1             ....MKPVKSSCRGFSLIELMIVVAIIGILAAIALPAYQNYTVRSTAASALAEITPAKAAFEQAISE.GHTPSLVSSL..    73
consensus                                                **!!*!!!!!!!*!****!!**!*!*!**!* ** *  **  *   ** *** *   *  *
```

```
logo
                                                  GIAAD.IKTAKGYVASVIT.......QSGGITVKGN.........GTLANME.....YILQAKGNAAAGVT   126
NTDB id 1354 HI 0299 AAC21963.1
NTDB id 1365 NTHI RS01955 WP 011271973.1          GIAAD.ITTAKGYVKSVTT.......SNGAITVKGD.........GTLANME.....YILQATGNAATGVT   126
NTDB id 1109 OK783 RS10670 WP 157147416.1         GVASAS.TIKGKYVQKVEV.......AKGVVTAQMASTGVNKEIQDKKLSLWAK..........RQDGSVK   124
NTDB id 1424 RS RS02795 WP 011000517.1            GSSVF...TPTKNVANLTI...AGTGTVPGQITVTYT..T...AAGGGTLALVPTAAGTALPVSSAPSGPIM   135
NTDB id 1002 ACIAD RS15100 WP 004923779.1         S....SCVGVQEISASNATTNVATA.....TCGASSAGQIIVTMD.TT...KAKGANITLTPT..........YASGAVT   129
NTDB id 1274 LPP RS09530 WP 011214168.1           V.............SPAATPNVASI.....AIGA..NGVITITY..TA...AAGGGTIVMTPTL.........QANGDVT   117
NTDB id 1258 GC085 RS09745 WP 014844212.1         V.............SPAATPNVQSI.....AIGA..NGVITITY..TA...AAGGGTIIMTPTL.........QANGDVT   117
NTDB id 1184 GTF74 RS02335 WP 000649326.1         GFTRL...GTV.....EDMGD.GKIVIA.PTASGALGGTIKYTFD.AG...VVSSSKIQLARD.............ANGL   130
NTDB id 1167 A1552VC RS11065 WP 000649326.1       GFTRL...GTV.....EDMGD.GKIVIA.PTASGALGGTIKYTFD.AG...VVSSSKIQLARD.............ANGL   130
NTDB id 1160 ABDM36 RS02330 WP 000649326.1        GFTRL...GTV.....EDMGD.GKIVIA.PTASGALGGTIKYTFD.AG...VVSSSKIQLARD.............ANGL   130
NTDB id 1292 VP RS12235 WP 005479693.1            ....LAQLGVD.....VAANDLGAIDS......ALAGGSPTLTFT.FDADSSIDGGILTFTRD.............AATG   123
NTDB id 1038 HON27 RS01510 WP 000993725.1         ........GFT.....AATSSVCATYSIDAFTETDGAGKITCTLK.GN..PKIATKIVELTRS.............TDGA   120
NTDB id 1192 PAKAF RS23870 WP 024947914.1         ATKKEVPLGVA.....ADANKLGTIALKPDPADGTADIT.LTFTM.GGAGPKNKGKIITLTRT............AADGL   132
NTDB id 168946 PcP3B5 RS30525 WP 082816254.1      ....NGYIGVP.....ATTTY.CSVAV.....TA...TTIACTTR.GGNAANFNGETITWTRD............ADDGT   118
NTDB id 1197 PSJM300 03940 AFN76866.1             ....EGYIGIT.....DSTSY.CDVDL.....DTAADGHIECTAK.GGNAGKFDGKTITLNRT.............ADGE   122
NTDB id 1204 PSJM300 03935 AFN76865.1             ....PGFIGIG.....ASTNY.CTVTL.....IATATGSITCTTQ.NGMPDRFNGKTITIART.............TDGL   124
consensus                                                **           ** * *       *   * ** *    *      *  * * *              *
```

```
logo
```

```
NTDB id 1354 HI 0299 AAC21963.1              WTTTCKG................TDASLFPANFCGSVTK........   149
NTDB id 1365 NTHI RS01955 WP 011271973.1     WTTTCKG................TDASLFPANFCGSVTQ........   149
NTDB id 1109 OK783 RS10670 WP 157147416.1    WFCGQPVTRTGDNDDTVADANNAIDTKHLPS.TCRDESSAT......   164
NTDB id 1424 RS RS02795 WP 011000517.1       WTCYAQNKAQAA.SSVAPSGTMSLAAKYAPA.ECR............   168
NTDB id 1002 ACIAD RS15100 WP 004923779.1    WKCTTT.................S.DKKYVPS.ECRG...........   147
NTDB id 1274 LPP RS09530 WP 011214168.1      WTCTGG................TLLAKYRPA.SCRP...........   136
NTDB id 1258 GCO85 RS09745 WP 014844212.1    WTCTGG................TLLAKYRPA.SCRP...........   136
NTDB id 1184 GTF74 RS02335 WP 000649326.1    WTCSTT.................VTSEIAPK.GCTAGATIN......   153
NTDB id 1167 A1552VC RS11065 WP 000649326.1  WTCSTT.................VTSEIAPK.GCTAGATIN......   153
NTDB id 1160 ABDM36 RS02330 WP 000649326.1   WTCSTT.................VTSEIAPK.GCTAGATIN......   153
NTDB id 1292 VP RS12235 WP 005479693.1       WSCLPT.................APAIA.VD.GCS............   139
NTDB id 1038 HON27 RS01510 WP 000993725.1    WTCVSD.................VPTEFLPK.GCTAGTPTEGAITSL   149
NTDB id 1192 PAKAF RS23870 WP 024947914.1    WKCTSD.................QDEQFIPK.GCSK...........   150
NTDB id 168946 PcP3B5 RS30525 WP 082816254.1 WTCSTT.................LAAKYRPG.SCGAAGS........   139
NTDB id 1197 PSJM300 03940 AFN76866.1        WSCAST.................LDAKYKPG.KCS............   139
NTDB id 1204 PSJM300 03935 AFN76865.1        WDCTSD.................LDSRYKPG.KCL............   141
consensus                                    !****                  *   * *   !
```

X non conserved

X similar

X $\geq$ 50% conserved