```
logo                                                
```

logo

```
NTDB id 1177 A1552VC RS01165 WP 000422572.1          YRNQHRTGHILTVEDPIEFVHEHKRCIVTQREVGLDTESYEVALKNSLRQAPDMILIGEIRSRETMEYAMTFAET  218
NTDB id 1203 PSJM300 01605 AFN76401.1                YRNKNSSGHIISIEDPIEFIHQHQNCIVTQREVGIDTDSFEVALKNTLRQAPDVILIGEVRTRETMDHAVAFAET  220
NTDB id 1019 ACIAD RS04205 WP 004922051.1            HRNQHSKGHIITIEDPIEFIHEHAGCIITQREVGIDTDSFEIALKNTLRQAPDVILIGEIRSREVMDYALAFAET  221
NTDB id 1307 DR RS10055 WP 010888596.1               HINTTKKLHILTIEDPIEFMHPNKASIINQREVGSDTLSFDDALRAALRQAPDVILVGEMRDYETIKAAVTAAET  224
NTDB id 1086 NMV RS00245 WP 002218487.1              YINETQPAHILTIEDPIEFVHQSKKSLINQRELHQHTLSFANALRSALREDPDVILVGEMRDPETIGLALTAAET  220
NTDB id 1116 NGFG RS10615 WP 003690200.1             YINETQPAHILTIEDPIEFVHQSKKSLINQRELHQHTLSFANALSSALREDPDVILVGEMRDPETIGLALTAAET  220
NTDB id 1185 GTF74 RS11940 WP 000350195.1            YVNAHHNKHILTIEDPIEFVHSNNKCLINQREVHRDTHSFKNALRSALREDPDVILVGELRDQETISLALTAAET  220
NTDB id 1176 A1552VC RS01160 WP 000350195.1          YVNAHHNKHILTIEDPIEFVHSNNKCLINQREVHRDTHSFKNALRSALREDPDVILVGELRDQETISLALTAAET  220
NTDB id 1283 ACE17W RS02630 WP 010947729.1           YINSSRYEHILTVEDPIEFVHQSKKCLVNQREVHKDTLSFNAALRSALREDPDIILVGELRDLETIRLAMTAAET  220
NTDB id 1259 GCO85 RS10305 WP 010947729.1            YINSSRYEHILTVEDPIEFVHQSKKCLVNQREVHKDTLSFNAALRSALREDPDIILVGELRDLETIRLAMTAAET  220
NTDB id 227710 XcfCFBP4885P RS08440 WP 022558867.1   YINKNEYGHILTVEDPIEFVHTSQKCLINQREVHRDTHGFNEALRSALREDPDIILVGELRDLETIRLALTAAET  220
NTDB id 1202 PSJM300 01600 AFN76400.1                YLNNTKYHHILTIEDPIEFVHESKKCLVNQREVHRDTLGFSEALRSALREDPDIILVGEMRDLETIRLALTAAET  220
NTDB id 1194 PAKAF RS01995 WP 003084552.1            YLNNTKYHHILTIEDPIEFVHESKKCLVNQREVHRDTLGFSEALRSALREDPDIILVGEMRDLETIRLALTAAET  220
NTDB id 1020 ACIAD RS04210 WP 011182164.1            YINNHRYDHILTVEDPIEFVHEPKKCLINQREVHRDTLGFNEALRSALREDPDIILVGEMRDLETIRLALTAAET  220
NTDB id 1060 ABD1 RS04380 WP 000355489.1             YINENRYDHILTVEDPIEFVHQSKKCLINQREVHRDTHGFNEALRSALREDPDIILVGEMRDLETIRLALTAAET  220
NTDB id 1040 HON27 RS13360 WP 000355489.1            YINENRYDHILTVEDPIEFVHQSKKCLINQREVHRDTHGFNEALRSALREDPDIILVGEMRDLETIRLALTAAET  220
NTDB id 1081 FDQ49 RS05335 WP 006581387.1            YINENRYDHILTVEDPIEFVHQSKKCLINQREVHRDTHGFNEALRSALREDPDIILVGEMRDLETIRLALTAAET  220
consensus                                            **!  *  !!***!!!!!!*! *******!!!****! **  !!****!!**!!*!*!!*!* !****!****!!!
```

logo

```
NTDB id 1177 A1552VC RS01165 WP 000422572.1          GHLCMATLHANNANQALERILHLVPKEQREQFLLDLSLNLKGVIAQQLLRDKNGKGRHGVFEVLLNSPRIADLIR  293
NTDB id 1203 PSJM300 01605 AFN76401.1                GHLCLATLHANNANQALDRIINFFPADRQNQVWMDLSLNLKAIVAQQLVPTPDGKGRRAVIEVLINTPLAADLIR  295
NTDB id 1019 ACIAD RS04205 WP 004922051.1            GHLVFATLHANNANQTLERIIHFFDADRHQQIFMDLSLNLKAVISQQLIPTHDGQSRRAAVEVLINTPLLSDYIR  296
NTDB id 1307 DR RS10055 WP 010888596.1               GHLVMGTLHTNSAPESIDRIVDVFPEEQQEQIRVQLANNLVAVMTQQLLPRADGQGRVLAYEILLANPAVRALIR  299
NTDB id 1086 NMV RS00245 WP 002218487.1              GHLVFGTLHTTGAAKTVDRIVDVFPAGEKEMVRSMLSESLTAVISQNLLKTHDGNGRVASHEILIANPAVRNLIR  295
NTDB id 1116 NGFG RS10615 WP 003690200.1             GHLVFGTLHTTGAAKTVDRIVDVFPAGEKEMVRSMLSESLTAVISQNLLKTHDGNGRVASHEILIANPAVRNLIR  295
NTDB id 1185 GTF74 RS11940 WP 000350195.1            GHLVFGTLHTSSAAKTIDRIIDVFPGSDKDMVRSMLSESLRAVIAQKLLKR.VGGGRVACHEIMLATPAIRNLIR  294
NTDB id 1176 A1552VC RS01160 WP 000350195.1          GHLVFGTLHTSSAAKTIDRIIDVFPGSDKDMVRSMLSESLRAVIAQKLLKR.VGGGRVACHEIMLATPAIRNLIR  294
NTDB id 1283 ACE17W RS02630 WP 010947729.1           GHLVFGTLHTNSATKTINRIIDVFPAEEKSMVRSMLSESLQAVVAQSLLKK.NKGGRVAALEIMMCTGAIRNLIR  294
NTDB id 1259 GCO85 RS10305 WP 010947729.1            GHLVFGTLHTNSATKTINRIIDVFPAEEKSMVRSMLSESLQAVVAQSLLKK.NKGGRVAALEIMMCTGAIRNLIR  294
NTDB id 227710 XcfCFBP4885P RS08440 WP 022558867.1   GHLVFGTLHTSSAAKTIDRIIDVFPAGEKPMVRSMLSESLRAVISQALLKK.VGGGRTAAWEIMVGTPAIRNLIR  294
NTDB id 1202 PSJM300 01600 AFN76400.1                GHLVFGTLHTTSAAKTIDRVVDVFPAEEKSMVRSMLSESLQAVISQTLLKK.VGGGRVAAHEIMIGTPAIRNLIR  294
NTDB id 1194 PAKAF RS01995 WP 003084552.1            GHLVFGTLHTTSAAKTIDRVVDVFPAEEKAMVRSMLSESLQSVISQTLLKK.IGGGRVAAHEIMIGTPAIRNLIR  294
NTDB id 1020 ACIAD RS04210 WP 011182164.1            GHLVFGTLHTTSAAKTIDRIIDVFPAEEKDMVRTMLSESLQAVISQTLLKK.EGGGRVAAHEIMIGIPAIRNLIR  294
NTDB id 1060 ABD1 RS04380 WP 000355489.1             GHLVFGTLHTTSAAKTIDRVIDVFPAEEKDMVRAMLSESLQAVISQTLLKK.NGGGRVAAHEIMIGIPAIRNLIR  294
NTDB id 1040 HON27 RS13360 WP 000355489.1            GHLVFGTLHTTSAAKTIDRVIDVFPAEEKDMVRAMLSESLQAVISQTLLKK.NGGGRVAAHEIMIGIPAIRNLIR  294
NTDB id 1081 FDQ49 RS05335 WP 006581387.1            GHLVFGTLHTTSAAKTIDRVIDVFPAEEKDMVRAMLSESLQAVISQTLLKK.NGGGRVAAHEIMIGIPAIRNLIR  294
consensus                                            !!!***!!!***!*****!**********************!***!  ****!  !***   ***!****!**********!!
```

logo

```
NTDB id 1177 A1552VC RS01165 WP 000422572.1          RGELHELKATMARSQEVGMQTFDQALYQLVVDDKISEQDALHSADSANDLRLMLKTKRGDDY...GSGSLQNVKI   365
NTDB id 1203 PSJM300 01605 AFN76401.1                KGEVHFLKGLMKRSTDLGMQTFDQALYNLYVQGEITYEDALLHADSSNDLRLMIKLGSETDGEHLTSVS.QGLTL   369
NTDB id 1019 ACIAD RS04205 WP 004922051.1            QGEIYKIKELMARSGELGMQTFDQALFDLYDHQHISYADALKHADSPNNLRLQIKLSEEANKPLDNRERMSEMER   371
NTDB id 1307 DR RS10055 WP 010888596.1               EGKTFQITSVMQTGAREGMVTMDAYLAGLFRRHLITYDKGLERAI.DPKE..FARLANDASAGL.GGASMTPAAP   370
NTDB id 1086 NMV RS00245 WP 002218487.1              ENKITQINSVLQTGQASGMQTMDQSLQSLVRQGLIAPEVARRRAQNSESM..SF.....................   347
NTDB id 1116 NGFG RS10615 WP 003690200.1             ENKITQINSVLQTGQASGMQTMDQSLQSLVRQGLIAPEAARRRAQNSESM..SF.....................   347
NTDB id 1185 GTF74 RS11940 WP 000350195.1            EDKVAQMYSIIQTGAAHGMQTMEQNAKQLIARGVVDAQEVQSKIELDLKA..F.....................   345
NTDB id 1176 A1552VC RS01160 WP 000350195.1          EDKVAQMYSIIQTGAAHGMQTMEQNAKQLIARGVVDAQEVQSKIELDLKA..F.....................   345
NTDB id 1283 ACE17W RS02630 WP 010947729.1           EDKIAQMYSSIQTGQAKGMQTLDQHLTELVNKNIISKHTAHEAAL.NKSL..F.....................   344
NTDB id 1259 GCO85 RS10305 WP 010947729.1            EDKIAQMYSSIQTGQAKGMQTLDQHLTELVNKNIISKHTAHEAAL.NKSL..F.....................   344
NTDB id 227710 XcfCFBP4885P RS08440 WP 022558867.1   EDKVAQMYSSIQTGQQYGMQTLDQHLQDLVKRSLITRNQAHEYAK.DKRI..FE.....................   345
NTDB id 1202 PSJM300 01600 AFN76400.1                EDKVAQMYSSIQTGGSLGMQTLDSCLKGLLAKGLISRDSAKEKAK.QPEN..F.....................   344
NTDB id 1194 PAKAF RS01995 WP 003084552.1            EDKVAQMYSAIQTGGSLGMQTLDMCLKGLVAKGLISRENAREKAK.IPEN..F.....................   344
NTDB id 1020 ACIAD RS04210 WP 011182164.1            EGKVAQMYSSIQTGATHGMTTLDQSLKQLLAKGIINLPTARAVAK.SPES..F.....................   344
NTDB id 1060 ABD1 RS04380 WP 000355489.1             ENKVAQMYSAIQTGANHGMTTLDQSLKGLVARGVISPQTARTAAK.QPES..FL....................   345
NTDB id 1040 HON27 RS13360 WP 000355489.1            ENKVAQMYSAIQTGANHGMTTLDQSLKGLVARGVISPQTARTAAK.QPES..FL....................   345
NTDB id 1081 FDQ49 RS05335 WP 006581387.1            ENKVAQMYSAIQTGANHGMTTLDQSLKGLVSRGVISPQTARTAAK.QPES..FL....................   345
consensus                                            * ******* *****  !!*!*** *  !* *****   *   *        *
```

logo

```
NTDB id 1177 A1552VC RS01165 WP 000422572.1          .........DME.....................................   368
NTDB id 1203 PSJM300 01605 AFN76401.1                .........EMSDDDPGRSFR............................   381
NTDB id 1019 ACIAD RS04205 WP 004922051.1            .........KMTFDGQRRNLK............................   383
NTDB id 1307 DR RS10055 WP 010888596.1               PVPAYNSASSSSTGRGGDFGRGAAAPATPAAPAAGRSEPGRAGGFGRR   418
NTDB id 1086 NMV RS00245 WP 002218487.1              .................................................   347
NTDB id 1116 NGFG RS10615 WP 003690200.1             .................................................   347
NTDB id 1185 GTF74 RS11940 WP 000350195.1            .................................................   345
NTDB id 1176 A1552VC RS01160 WP 000350195.1          .................................................   345
NTDB id 1283 ACE17W RS02630 WP 010947729.1           .................................................   344
NTDB id 1259 GCO85 RS10305 WP 010947729.1            .................................................   344
NTDB id 227710 XcfCFBP4885P RS08440 WP 022558867.1   .................................................   345
NTDB id 1202 PSJM300 01600 AFN76400.1                .................................................   344
NTDB id 1194 PAKAF RS01995 WP 003084552.1            .................................................   344
NTDB id 1020 ACIAD RS04210 WP 011182164.1            .................................................   344
NTDB id 1060 ABD1 RS04380 WP 000355489.1             .................................................   345
NTDB id 1040 HON27 RS13360 WP 000355489.1            .................................................   345
NTDB id 1081 FDQ49 RS05335 WP 006581387.1            .................................................   345
consensus
```

X non conserved
X similar
X ≥ 50% conserved