```
logo
NTDB id 1253 GC085 RS04835 WP 011215094.1   MLKLLKPKHRSILGIDISSSAVKILEISGSGEDICVEGYGREEIPASALEGNMIKDVDVVANCIKKLVERLKFTSKNVALAVPDS   85
NTDB id 1010 ACIAD RS15195 WP 004923715.1   MLRLYRRPKKGLVGVDISSTSVKVLELSVKNNQYRVESYGLVPLLENSVVEKNILNPEAVADALTRSINLANPQAINAAIAVPTS   85
NTDB id 71573 URS RS06590 WP 104794745.1    MRMLYRKPNKGLVGVDISSTSVKLLELSVKNGRYWVESYALIPLQENSVVEKNILNPEAVGDALERVINLANPQSTNAAIAIPTS   85
NTDB id 1054 ABD1 RS15870 WP 002014066.1    MLRLYRKPNKGLMGVDISSTSVKLLELSVKNGKYWVESYALMPLPENSVVEKNILNPEAVAEALERAMNLANPQTTHAAIAVPTS   85
NTDB id 1084 FDQ49 RS11070 WP 004711654.1   MLRLYRKPNKGLMGVDISSTSVKLLELSVKNGKYWVESYALMPLPENSVVEKNILNPEAVAEALERAMNLANPQTTNAAIAVPTS   85
consensus                                   !**!*********!*!!!!**!!*!!*!*******!!*!*************!*****!****** ***********!*!*!*!
```

```
logo
NTDB id 1253 GC085 RS04835 WP 011215094.1   AVISKVVQINEGLTDLEMEELVVIEADKYIPYPIDEINLDFEVLGHSAKSSSLLDVLIVASRAENVNTRVEAAHRAGLEPKVVDV   170
NTDB id 1010 ACIAD RS15195 WP 004923715.1   MVVHKIIEMDADMTDDEREVQIRMDAERYIPFPLDEVSLDFEVMSEPLANPNRVSVLIAATRTENVDTRIEVLELAGLTPKVADV   170
NTDB id 71573 URS RS06590 WP 104794745.1    MVIHKIIEMDADMTDDEREVQIRMDAEQYIPFPLDEVSLDFEVLPDRLANPARVNVLLVATRTENVETRVEVLELAGLTPKVADV   170
NTDB id 1054 ABD1 RS15870 WP 002014066.1    TVIHKTIEMDADMSDDEREVQIRVDAEQYIPFPLDEVSLDFEVLPDRLANPNRVNVLLVATRTENVETRVEVLELADLNPKLADV   170
NTDB id 1084 FDQ49 RS11070 WP 004711654.1   TVIHKTIEMDADMSDDEREVQIRVDAEQYIPFPLDEVSLDFEVLPDRLLNPNRVNVLLVATRTENVETRVEVLELADLNPKLADV   170
consensus                                    !**!*********!*!*!******!**!!!*!*!!**!!!!!************!!**!*!*!!!*!!*!****!*!  !!**!!
```

```
logo
NTDB id 1253 GC085 RS04835 WP 011215094.1   ESYAVERSVQQIAQELPASGQDKIVAIVDIGANYTHLFVLHGMRLIFSREEKFGGMQLVEAIAEHYHMNLEQAIALKNQGKLPED   255
NTDB id 1010 ACIAD RS15195 WP 004923715.1   ESYAMERAFSVFADTLPMGV..NTVGILDIGHTMTTLSVMQKGKIIYTREQVFGGKQLTQEVQKRYGMSYEEAGRAKKDGSLPED   253
NTDB id 71573 URS RS06590 WP 104794745.1    ESYAMERAFGVFADTLPMGV..NTVGILDIGHTMTTLSVMQNGKIIYTREQVFGGKQLTQDVQTRYGLSFEEAGRAKKERSLPDD   253
NTDB id 1054 ABD1 RS15870 WP 002014066.1    ESYAVERAFSVFADSLPMGA..NTIGILDIGHTMTTLSVMQNGKIIYTREQVFGGKQLTLEIQSRYGLSLEEASRAKKDRSLPDD   253
NTDB id 1084 FDQ49 RS11070 WP 004711654.1   ESYAVERAFSVFADSLPMGA..NTIGILDIGHTMTTLSVMQNGKIIYTREQVFGGKQLTLEIQSRYGLSLEEASRAKKDRTLPDD   253
consensus                                   !!!!*!!*****!**!!***  ****!*!!!***!*!*!******!**!!**!!!*!!* ****!****!*!  **!****!!*!
```

```
logo
NTDB id 1253 GC085 RS04835 WP 011215094.1   YESAVLEPFKDMILLQIKRTLQFFYSTSQHGFVDHILLAGGMARQPGLAALIQEQLGVTTTVANPLSHMSFGKKVNLDVINSDAP   340
NTDB id 1010 ACIAD RS15195 WP 004923715.1   FTQEVFEPYLEALVQQAARSLQFFFSSSQYNEIDHILLAGGNANILGLSRLLQQKLGYRVTIANPFLQMEFSPQVDIKKVENDAA   338
NTDB id 71573 URS RS06590 WP 104794745.1    FDTEVLEPFLEALVQQAARSLQFFFSSSQFNEIDHILLAGGNANIPGLPKLLQQKLGYRVTTANPFLQMGFSPQVDIKKIENDAS   338
NTDB id 1054 ABD1 RS15870 WP 002014066.1    YEIEVLDPFLDAVVQQAARSLQFFFSSSQFNEIDHILLAGGNANIPGLAKLLQQKLGYRVTIANPFLQMGFSPQVDVQKIENDAS   338
NTDB id 1084 FDQ49 RS11070 WP 004711654.1   YEIEVLDPFLDAVVQQAARSLQFFFSSSQFNEIDHILLAGGNANIPGLAKLLQQKLGYRVTIANPFLQMGFSPQVDVQKIENDAS   338
consensus                                   ** *!**!*******!**!*!!!!*!*!!****!!!!!!!!*!***!!**!*!**!!***!*!!!***!*!***!** ****!!*
```

```
logo
NTDB id 1253 GC085 RS04835 WP 011215094.1   TLMVACGLALRHVE.   354
NTDB id 1010 ACIAD RS15195 WP 004923715.1   SLMVACGLALRSFDE   353
NTDB id 71573 URS RS06590 WP 104794745.1    SLMVACGLALRSFD.   352
NTDB id 1054 ABD1 RS15870 WP 002014066.1    SLMVACGLALRSFD.   352
NTDB id 1084 FDQ49 RS11070 WP 004711654.1   SLMVACGLALRSFD.   352
consensus                                   *!!!!!!!!!!***
```

X non conserved
X similar
X $\geq$50% conserved