```
NTDB id 1111 NGFG RS09220 WP 003689814.1     MS...DLSVLSPFA.VPLAAVLGLLVGSFLNVVIYRVPVMMERGWTVFAKEHLNLPLTDDESRTFNLMKPDSCCPKCRVP   76
NTDB id 391898 GBN68 RS01420 WP 234955116.1  MQEIISYLINTPMALYFAVGVFSLCIGSFLNVVIYRTPKMMEQEWRTDCQLLLHPEQPIIDETKLTLSKPASTCPKCKSA   80
NTDB id 1061 ABD1 RS18470 WP 001152280.1     MQDIIAYFIQNLTALYIAVALVSLCIGSFLNVVIYRTPKMMEQDWQQECQMLLNPEQPIIDHERLTLNKPASSCPACQQP   80
NTDB id 1080 FDQ49 RS18305 WP 022575844.1    MQDIIAYFIQNLTALYIAVALVSLCIGSFLNVVIYRTPRMMEQDWQQECQMLLNPEQPIIDHEKLTLSKPASSCPACHQP   80
NTDB id 1170 A1552VC RS11080 WP 000418747.1  ....MELFYFYPWLFPVLATLFGLIVGSFLNVVIYRLPKIMEREWRAECAASFPEYGITPPEGKLTLSLPRSTCPHCQTP   76
NTDB id 1403 DSB67 RS12675 WP 010643256.1    ....MEVFQYYPWLFVVFATIFGLIVGSFLNVVIYRLPKIMELEWRRECAESFPEYKIEPPKETLTLSVPRSSCQQCGTQ   76
consensus                                    *    *  **  * *  *  **  ! *!!!!!!!!!! !**!! *!  **   *        *  ***!**! !*!* !  *
```

```
NTDB id 1111 NGFG RS09220 WP 003689814.1     IRAWQNIPIVSYLLLRGKCASCQTKISIRYPLIELLTGVLFGLVAWQYGWSWITLGGLILTAFLISLTFIDADTQYLPDS   156
NTDB id 391898 GBN68 RS01420 WP 234955116.1  IHWYQNIPVMSWLLLRGKCGTCHNPISIRYPAIELLTAICALVVAVFGPTIQMLFGLVLTYILIALTFIDFDTQLLPDR   160
NTDB id 1061 ABD1 RS18470 WP 001152280.1     IRWYQNIPVISWLVLRGKCGHCQHPISIRYPAIELLTMLCSLVVMVFGPTIQMLFGLVLTWVLIALTFIDFDTQLLPDR   160
NTDB id 1080 FDQ49 RS18305 WP 022575844.1    IRWYQNIPLISWLVLRGKCGHCQHPISIRYPAIELLTMLCSLVVMVFGPTIQMLFGLVLTWVLIALTFIDFDTQLLPDR   160
NTDB id 1170 A1552VC RS11080 WP 000418747.1  IRVIDNIPLLSWLALRGQCSHCKAPISARYPLIELLTALMSLVIATHFPFGVFAVALLFFSYVLIAATFIDFDTLLLPDQ   156
NTDB id 1403 DSB67 RS12675 WP 010643256.1    IRIRDNIPVISWLLLRGKCHNCQAPINARYPLIELLTAFCSGFIAFHFGFSYFTVALVFFTFVLIAATFIDLDTMLLPDQ   156
consensus                                    !* **!!!**!*!*!!!*!* !* *!**!!! !!!!!******   ** **  * *******!!**!!!!*!!**!!!
```

```
NTDB id 1111 NGFG RS09220 WP 003689814.1     MTLPLIWLGLIFNLDGGF.VPLQSAVLGAVAGYSSLWLLCAVYKLLTGKTGMGNGDFKLIAALGAWLGISALPVLIFVSS   235
NTDB id 391898 GBN68 RS01420 WP 234955116.1  YTLTLAGLGLGVNSYAIY.TTPTAAIWGYIIGFLCLWIVYYLFKLITGKEGMGYGDFKLLAALGAWMGPLLLPLIVLLSS   239
NTDB id 1061 ABD1 RS18470 WP 001152280.1     FTLPLAALGLGINTFNIY.TSPNSAIWGYLIGFLCLWIVYYLFKVITGKEGMGYGDFKLLAALGAWMGPLMLPLIVLLSS   239
NTDB id 1080 FDQ49 RS18305 WP 022575844.1    FTLPLAALGLGINTFNIY.TSPNSAIWGYLIGFLCLWIVYYLFKVITGKEGMGYGDFKLLAALGAWMGPLMLPLIVLLSS   239
NTDB id 1170 A1552VC RS11080 WP 000418747.1  LTLPLLWGGIALALLGFSPVSLSDAVIGAMAGYLSLWSIYWLFKLLTGKEGMGYGDFKLLAALGAWLGWQQLPVIVLLSS   236
NTDB id 1403 DSB67 RS12675 WP 010643256.1    LTLPLMWTGIALALAGISPVSLQDSIIGAMAGYLCLWSVYWLFKLLTGKEGMGYGDFKLLAALGAWLGWQSLPMIILLSS   236
consensus                                      !!*!  *!**** *** * * ** ! * !***!!******!**!!!*!!!*!!!!!*!!!!!!*!    !!******!!
```

```
NTDB id 1111 NGFG RS09220 WP 003689814.1     LIGLVAAIVMR....VAKGRHFAFGPALTVSGWIIFTANDSVWRAVNWWLTHPVR...   286
NTDB id 391898 GBN68 RS01420 WP 234955116.1  FVGAIIGIILLKVRKE..NQPFAFGPYIAIAGWIAFLWGEQI...MKIYLGN......   286
NTDB id 1061 ABD1 RS18470 WP 001152280.1     LLGAIIGIILLKLRND..NQPFAFGPYIAIAGWVAFLWGDQI...MKIYLGG......   286
NTDB id 1080 FDQ49 RS18305 WP 022575844.1    LLGAIIGIILLKLRND..NQPFAFGPYIAIAGWVAFLWGDQI...MKIYLGG......   286
NTDB id 1170 A1552VC RS11080 WP 000418747.1  VVGVIFGLIQLRQQKKGIDMAFPFGPYLAIAGWFALLWGDKV...IDWYFTTWVGQPL   291
NTDB id 1403 DSB67 RS12675 WP 010643256.1    VVGVIFGLIQLRLQKQGIEKAFPFGPYLAIAGWVSLIWGHQI...LNWYFTSILGV..   289
consensus                                    **! * *******         !*!!!*****!!********    *   **
```

X non conserved
X similar
X ≥ 50% conserved