```
logo
NTDB id 68195 JMUB1235 RS00260 WP 002986681.1  MLEHFGGKVKVLRLEKRISREDLCGDESELSVRQLARIELGQSIPSLSKVIFIAKALNVSVGYLTDGADLELPKRYKELK   80
NTDB id 451 SPYM18 RS00325 WP 002986681.1      MLEHFGGKVKVLRLEKRISREDLCGDESELSVRQLARIELGQSIPSLSKVIFIAKALNVSVGYLTDGADLELPKRYKELK   80
NTDB id 443 SPYM3 RS00325 WP 011054099.1       MLEHFGGKVKVLRLEKRISREDLCGDESELSVRQLARIELGQSIPSLSKVIFIAKALNVSVGYLTDGADLELPKRYKELK   80
NTDB id 45 SMU RS00375 WP 002263400.1          MLKDFGKKIKSLRLEKGLTKEAVCLDESQLSTRQLTRIESGQSTPTLNKAVYIAGRLGVTLGYLTDGENVELPSRYKELK   80
NTDB id 555 STRINF RS01865 WP 174221231.1      ...........MREEKEISREEFCGDETELSVRQLARIELNQSIPNLSKASFIANRLGVKLGTLTDGDSLELPKRYKELK   69
consensus                                      ************!*!!****!**!*!!**!!*!!!*!!!**!!*!*!*!***!!**!*!**!*!!!!***!!!*!!!!!!
```

```
logo
NTDB id 68195 JMUB1235 RS00260 WP 002986681.1  YLILRTPTYMDDGKLQVREEQFDEIFEDYYDKLPEEEKIIIDCLQATLDTLLSENTNFGIDLLQEYFNQIKTKVRFRQND  160
NTDB id 451 SPYM18 RS00325 WP 002986681.1      YLILRTPTYMDDGKLQVREEQFDEIFEDYYDKLPEEEKIIIDCLQATLDTLLSENTNFGIDLLQEYFNQIKTKVRFRQND  160
NTDB id 443 SPYM3 RS00325 WP 011054099.1       YLILRTPTYMDDGKLQVREEQFDEIFEDYYDKLPEEEKVAVDIIQAKFEVYQTGDINFGYSILKEFLPQLKRKSIYNLNE  160
NTDB id 45 SMU RS00375 WP 002263400.1          YLLLRTPTYGDQQRLAEKETYFDEIFSQFYDDLPEEEQLIIDGLQSKLDIHFSDNIDFGVGILNDYFDQILRKTNYQVND  160
NTDB id 555 STRINF RS01865 WP 174221231.1      YLLLRTPTYGDQVRLDRKNDYFDEIAEVFYDVIPEEERLIIDCLQSKFDVHFSEDVNFGEGILNDYFGQVNRKKVFTIND  149
consensus                                      !!*!!!!!!*!***!*****!!!!****!!**!!!!****!**!*****  *****!!* *!**** !***!  * *!*
```

```
logo
NTDB id 68195 JMUB1235 RS00260 WP 002986681.1  LILLELYLAYLDIEGMDGQYSDKIFYDSLLDNLSEQFEQFELDELFIVNKIIIDISSLSLKNNRLDNLEKAIEMSQKIMA  240
NTDB id 451 SPYM18 RS00325 WP 002986681.1      LILLELYLAYLDIEGMDGQYSDKIFYDSLLDNLSEQFEQFELDELFIVNKIIIDISSLSLKNNRLDNLEKAIEMSQKIMA  240
NTDB id 443 SPYM3 RS00325 WP 011054099.1       LLLIDLYLIILVVSHFSDDIFDVQFYEEITESMLKQHNNLSLEDLFLLNNILLSCADTYIRLKMFGHLKETLQLSHFIMS  240
NTDB id 45 SMU RS00375 WP 002263400.1          LILIDLYFSCLTVSGLDSAIFDSRKYNQLLETLLKQVDCLPLEDLFVLNNVLLNNFGLLLELKKYDFVKQLIAVSNKIMD  240
NTDB id 555 STRINF RS01865 WP 174221231.1      LILIDLYFACLSSAKKFEGIYSLDFYDDLMKRLVNQKHVSPETD.LILNNVLLNNIDLAFQFKREYYIERVITISEKIMT  228
consensus                                      !*!**!!** ! * ***  ***  *!* *** ** ! **  *******!****    * ** ** * *** * *!**!!
```

```
logo
NTDB id 68195 JMUB1235 RS00260 WP 002986681.1  KIQDWNRMPILKLIEWKYFLIKQKDIIKAEQSFMKACLFAQMTADQYLENKLIQEWEKDVKSY.  303
NTDB id 451 SPYM18 RS00325 WP 002986681.1      KIQDWNRMPILKLIEWKYFLIKQKDIIKAEQSFMKACLFAQMTADQYLENKLIQEWEKDVKSY.  303
NTDB id 443 SPYM3 RS00325 WP 011054099.1       TIQDFQKMPMYCMYEWKLSIFYLKDINRARNYFEQSILFTQMTGDTYLVQKLRGEWNKDIHYI.  303
NTDB id 45 SMU RS00375 WP 002263400.1          RTHDFQKKPIVNLLTWKHHLFVEKDYAEAKKSYDAAILFAQLTENINLRENLEKEWQKDSQNGT  304
NTDB id 555 STRINF RS01865 WP 174221231.1      EIHDFQRRPILSLVEWKYYLKLKHDFALAEQSFTNATLFARLVGDTYLENKLKEEWQLDIDAVE  292
consensus                                      ***!****!** ***!!***   *!* *!****  * !!****** *!***!  !!**!*
```

X non conserved

X similar

X $\geq$ 50% conserved