```
NTDB id 391803 GAS19 RS02020 WP 153477223.1  MFSFFKRLIGSKADDASQDA...PAADEQASAA.............HAPDAAGHAAAAA.............SRLAPAPAHDA   54
NTDB id 1118 NGFG RS11455 WP 003696286.1     MFSFFRRKKKQETPALEEAQVQETAAKVESEVAQIVGNIKEDVESLAESVKGRAESAVETVSGAVEQVKETVAEMPSEAG   80
consensus                                    !!!!!*!      *      ****!!     !**************!*    !*!   !  ***********   *!* !  * *
```

```
NTDB id 391803 GAS19 RS02020 WP 153477223.1  EPAASPAAPVPAAPAPAAVPAAPA.VEVVPPPAPEPAAKKSWIARLRSGLSKTS....TSLTNVFVNTRIDDELYEELEA  129
NTDB id 1118 NGFG RS11455 WP 003696286.1     EAA....ERVESAKEAVAETVGEAVGQVQEAVATTEEHKLGWAARLKQGLAKSRDKMAKSLAGVFGGGQIGEDLYEELET  156
consensus                                    !*!**** *!* !* * ! * **!*  ! ***!* * *!  ! !!!* !! !* **** !!  !!     ! **!!!!!!
```

```
NTDB id 391803 GAS19 RS02020 WP 153477223.1  ALLMSDAGIDATEYLLGALREKVRAERLSDPLQVKAALRALLVDLLAPLEKSLMLGR.AQPLVMMIAGVNGAGKTTSIGK  208
NTDB id 1118 NGFG RS11455 WP 003696286.1     VLITGDMGMEATEYLMKDVRGRVSLKGLKDGNELRGALKEALYDLIKPLEKPLVLPETKEPFVIMLAGINGAGKTTSIGK  236
consensus                                     !*  ! !**!!!!!*  *! *!    ! !*  ***!!*  ! !!* !!!!*!*!* *  ! !*!*!!*!!!!!!!!!!!!
```

```
NTDB id 391803 GAS19 RS02020 WP 153477223.1  LAKHLQRFDQSVLLAAGDTFRAAAREQLAIWGERNNVTVVQQESGDPAAVIFDAVGAARARKIDVVMADTAGRLPTQLHL  288
NTDB id 1118 NGFG RS11455 WP 003696286.1     LAKYFQAQGKSVLLAAGDTFRAAAREQLQAWGGRNNVTVISQTTGDSAAVCFDAVQAAKARGIDIVLADTAGRLPTQLHL  316
consensus                                    !!!* !    !!!!!!!!!!!!!!!!!!!  !! !!!!!!* ! *!!*!!!*!!!! !!*!! !!*!*!!!!!!!!!!!!!!
```

```
NTDB id 391803 GAS19 RS02020 WP 153477223.1  MEELRKVKRVIGKAQSDAPHEVLLVIDANTGQNALAQVKAFDDALGLTGLIVTKLDGTAKGGILAAIARQRPIPVYFIGV  368
NTDB id 1118 NGFG RS11455 WP 003696286.1     MEEIKKVKRVLQKAIPGAPHEIIVVLDANIGQNAVNQVKAFDDALGLTGLIVTKLDGTAKGGILAALASDRPVPVRYIGV  396
consensus                                    !!!**!!!!!* !! * !!!!***!*!!! !!!!* !!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!*!  !!*!! *!!!
```

```
NTDB id 391803 GAS19 RS02020 WP 153477223.1  GEKVEDLQPFNAEEFADALLG   389
NTDB id 1118 NGFG RS11455 WP 003696286.1     GEGIDDLRPFDARAFVDALLD   417
consensus                                    !! **!! !! !  ! !!!!
```

X non conserved
X similar
X ≥ 50% conserved