

```
NTDB id 184489 A9E90 RS13720 WP 015443981.1  MIKWFKRNQNSEP.NLDAEE.....................................................  19
NTDB id 1118 NGFG RS11455 WP 003696286.1     MFSFFRRKKKQETPALEEAQVQETAAKVESEVAQIVGNIKEDVESLAESVKGRAESAVETVSGAVEQVKETVAEMPSEAG  80
consensus                                    !  *!*!   !** !*  **************************************************
```



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NTDB id 184489 A9E90 RS13720 WP 015443981.1  ....QQDHAKSS....MESRLEEPQELTVKEPSPKESIFARFRKGLSKTRHQLGEGISRLLLGKKEISQELLEELETLLI  91
NTDB id 1118 NGFG RS11455 WP 003696286.1     EAAERVESAKEAVAETVGEAVGQVQEAVATTEEHKLGWAARLKQGLAKSRDKMAKSLAG.VFGGGQIGEDLYEELETVLI  159
consensus                                    ****  **!!  *****  *  *!!     *  !    !! * !! !*!* **  *  ** !   !  *! !!!!!*!!
```



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NTDB id 184489 A9E90 RS13720 WP 015443981.1  SADLGLDTTQDVLKQLNEGLARKQLSNGEAVYLTLKTNLQTILSQEEKPLSIETEDGSPFVILMVGVNGAGKTTTIGKLA  171
NTDB id 1118 NGFG RS11455 WP 003696286.1     TGDMGMEATEYLMKDVRGRVSLKGLKDGNELRGALKEALYDLIKPLEKPLVL.PETKEPFVIMLAGINGAGKTTSIGKLA  238
consensus                                    **!*!** !  **! *  *  ! ! !  *   !!  !  ** * !!!! ***!   !!!!** !*!!!!!!!*!!!!!
```



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NTDB id 184489 A9E90 RS13720 WP 015443981.1  KQFQKQGKKVMLAAGDTFRAAAVEQLHVWGERNGIPVIAQHTGADSASVIFDALQAAKARKIDVLIADTAGRLHTQSNLM  251
NTDB id 1118 NGFG RS11455 WP 003696286.1     KYFQAQGKSVLLAAGDTFRAAAREQLQAWGGRNNVTVISQTTG.DSAAVCFDAVQAAKARGIDIVLADTAGRLPTQLHLM  317
consensus                                    ! !! !!! !*!!!!!!!!!!!! !!!* !! !! **!! !*!!*!!! !*!!!*!!!!!! !!***!!!!!!! !! *!!
```



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NTDB id 184489 A9E90 RS13720 WP 015443981.1  EELKKVKRVMQKLDPKAPHETMLVLDASIGQNALAQAKQFHEAVQLTGITMTKLDGTAKGGILFAIANDLGIPFRYLGVG  331
NTDB id 1118 NGFG RS11455 WP 003696286.1     EEIKKVKRVLQKAIPGAPHEIIVVLDANIGQNAVNQVKAFDDALGLTGLIVTKLDGTAKGGILAALASDRPVPVRYIGVG  397
consensus                                    !!*!!!!!!*!!  ! !!!! **!!!! !!!!!* ! ! !**!* !!!* *!!!!!!!!!!!! !*! ! **! !!*!!!
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NTDB id 184489 A9E90 RS13720 WP 015443981.1  EGIEDLRPFDAAQFVSAIFDDDHI  355
NTDB id 1118 NGFG RS11455 WP 003696286.1     EGIDDLRPFDARAFVDALLD....  417
consensus                                    !!!*!!!!!!!  !! !* !****
```

X non conserved

X similar

X ≥ 50% conserved