logo

```
NTDB id 328378 EGH17 RS02625 WP 047923872.1 MSAPIRAFDPLTAPISGTNLIEASAGTGKTYGIAALFTRLIVLEQKSVERVLVVTFTKAATAELKTRLRARLDDVLQVLE  80
NTDB id 1132 OK783 RS01905 WP 010951035.1   MSAPIRAFDPLTAPISGTNLIEASAGTGKTYGIAALFTRLIVLEQKSVERVLVVTFTKAATAELKTRLRARLDDVLQVLE  80
consensus                                   !!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
```

logo

```
NTDB id 328378 EGH17 RS02625 WP 047923872.1 SKEIAELGDDTLSDGIAAYCAEHHEGDTFLPALLEQALQKESRTRLIVRLKAAIGQFDNAAIYTIHGFCQRILRDYAFLC 160
NTDB id 1132 OK783 RS01905 WP 010951035.1   SKEIAELGDDTLSDGIAAYCAEHHEGDTFLPALLEQALQKESRTRLIVRLKAAIGQFDNAAIYTIHGFCQRILRDYAFLC 160
consensus                                   !!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
```

logo

```
NTDB id 328378 EGH17 RS02625 WP 047923872.1 QAPFDVELTEEDGDRLLVPAQDFWRERVSGDPVLAALAFKRKAVPQTVLAQIRAYLSRPYLNFRRPQADLKQAQRDAETS 240
NTDB id 1132 OK783 RS01905 WP 010951035.1   QAPFDVELTEEDGDRLLVPAQDFWRERVSGDPVLAALAFKRKAVPQTVLAQIRAYLSRPYLNFRRPQADLKQAQRDAETS 240
consensus                                   !!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
```

logo

```
NTDB id 328378 EGH17 RS02625 WP 047923872.1 WQTVCRLLPELEAGFWRIHPDLNGNSYRKNSFGNLFKELAQKSAAGQLPFLDKDTHERLLKLSSDKLEAGLKKGKTPDAA 320
NTDB id 1132 OK783 RS01905 WP 010951035.1   WQTVCRLLPELEAGFWRIHPDLNGNSYRKNSFGNLFKELAQKSAAGQLPCLDKDTHERLLKLSSDKLEAGLKKGKTPDAA 320
consensus                                   !!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!*!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
```

logo

```
NTDB id 328378 EGH17 RS02625 WP 047923872.1 VFAELQKLADFGRDLNALEEAEETTMIRLQLDLIEYLNSSLAEMKKSRRERGFDDLLLDVHTALTDNPHAETPARAVAEN 400
NTDB id 1132 OK783 RS01905 WP 010951035.1   VFAELQKLADFGRDLNALEEAEETTMIRLQLDLIEYLNSSLAEMKKSRRERGFDDLLLDVHTALTDNPHAETPARAVAEN 400
consensus                                   !!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
```

logo

```
NTDB id 328378 EGH17 RS02625 WP 047923872.1 WEIALIDEFQDTDPLQYEIFQKIFIARNRPLFLVGDPKQAIYSFRGADIYAYLQAAEDARHRYTLATNYRSHAALIGSIG 480
NTDB id 1132 OK783 RS01905 WP 010951035.1   WEIALIDEFQDTDPLQYEIFQKIFIARNRPLFLVGDPKQAIYSFRGADIYAYLQAAEDARHRYTLATNYRSHAALIGSIG 480
consensus                                   !!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
```

logo

```
NTDB id 328378 EGH17 RS02625 WP 047923872.1 ALFRLKERPFVLENIGYSEVGAARAESRLSPKRPAVQLRWLHENDNEKANKDVLRRRAADYCADEIARALNEASGGRLNF 560
NTDB id 1132 OK783 RS01905 WP 010951035.1   ALFRLKERPFVLENIGYSEVGAARAESRLSPKRPAVQLRWLHENDNEKANKDVLRRRAADYCADEIARALNEASGGRLNF 560
consensus                                   !!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
```

logo

```
NTDB id 328378 EGH17 RS02625 WP 047923872.1  KGRPLQSGDIAVLVRTHNEAVMISAALKKRQVQSVLLSRESVFASPEAAALSALIGFWLEPRRAGTLRFVLTSGIFGYDA   640
NTDB id 1132 OK783 RS01905 WP 010951035.1    KDRPLQSGDIAVLVRTHNEAVMISAALKKRQVQSVLLSRESVFASPEAAALSALIGFWLEPRRAGTLRFVLTSGIFGYDA   640
consensus                                    ! !!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
```

logo

```
NTDB id 328378 EGH17 RS02625 WP 047923872.1  QQLHDFNQNESEILHWAESARTALDIWQKYGIFAAMQQFSQTHGIETRLLSRNNGRSLTNYFQLLELLAAEDAQNRNPAA   720
NTDB id 1132 OK783 RS01905 WP 010951035.1    QQLHDFNQNESEILHWAESARTALDIWQKYGIFAAMQQFSQTHGIETRLLSRNNGRSLTNYFQLLELLAAEDAQNRNPAA   720
consensus                                    !!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
```

logo

```
NTDB id 328378 EGH17 RS02625 WP 047923872.1  LHKWLRDQISLAGNNGGDNRAIRLESDEDLVKIVTMHASKGLQYPLVYCPFAWDAQDTGPSDWQILHQGANRAELLAKAQ   800
NTDB id 1132 OK783 RS01905 WP 010951035.1    LHKWLRDQISLAGNNGGDNRAIRLESDEDLVKIVTMHASKGLQYPLVYCPFAWDAQDTGPSDWQILHQGANRAELLAKAQ   800
consensus                                    !!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
```

logo

```
NTDB id 328378 EGH17 RS02625 WP 047923872.1  LSESEQKQYADEEMAERLRLLYVALTRAEEQLNIYAAYSSDTADNPLAYLIEGLPQDSRETVRRTYACEKDGITMLKRNW   880
NTDB id 1132 OK783 RS01905 WP 010951035.1    LSESEQKQYADEEMAERLRLLYVALTRAEEQLNIYAAYSSDTADNPLAYLIEGLPQDSRETVRRTYACEKDGITMLKRNW   880
consensus                                    !!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
```

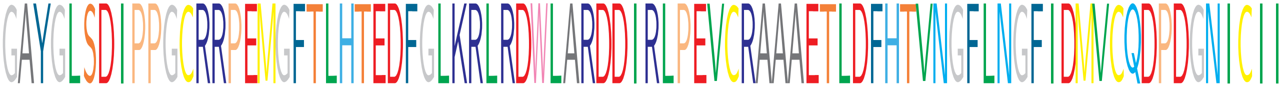
logo

```
NTDB id 328378 EGH17 RS02625 WP 047923872.1  RRVADNAPAGTDFAFTEDAPPPAAYRGNADQAAEFAANSIPERGFRFVRHTSFTALSRHTQTPDGGEEDACPSLDAAETS   960
NTDB id 1132 OK783 RS01905 WP 010951035.1    RRVADNAPAGTDFTFTEDAPPPAAYRGNADQAAEFAANSIPERGFRFVRHTSFTALSRHTQTPDGGEEDACPSLDAAETS   960
consensus                                    !!!!!!!!!!!!! !!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
```

logo

```
NTDB id 328378 EGH17 RS02625 WP 047923872.1  VPAMPSETPTASDGISIHDFPKGTQAGLCLHEILEDFKFGQAAAEQETLIADKLKKYGFEEIWLPAVAEMAEACRKTPLT  1040
NTDB id 1132 OK783 RS01905 WP 010951035.1    VPAMPSETPTASDGISIHDFPKGTQAGLCLHEILEDFKFGQAAAEQETLIADKLKKYGFEEIWLPAVAEMAEACRKTPLT  1040
consensus                                    !!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
```

logo



```
NTDB id 328378 EGH17 RS02625 WP 047923872.1  GAYGLSDIPPGCRRPEMGFTLHTEDFGLKRLRDWLARDDIRLPEVCRAAAETLDFHTVNGFLNGFIDMVCQDPDGNICII  1120
NTDB id 1132 OK783 RS01905 WP 010951035.1    GAYGLSDIPPGCRRPEMGFTLHTEDFGLKRLRDWLARDDIRLPEVCRAAAETLDFHTVNGFLNGFIDMVCQDPDGNICII  1120
consensus                                    !!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
```

logo

```
NTDB id 328378 EGH17 RS02625 WP 047923872.1  DYKSNHLSAYTRQAMDEAVAHQHYYLQALIYAVAAARYFKLRGQPPAAVSVRYLFLRGLDGKGGGVWRWDIDAAALEQIK  1200
NTDB id 1132 OK783 RS01905 WP 010951035.1    DYKSNHLSAYTRQAMDEAVAHQHYYLQALIYAVAAARYFKLRGQPPAAVSVRYLFLRGLDGKGGGVWRWDIDAAALEQIK  1200
consensus                                    !!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
```

X non conserved

X similar

X ≥ 50% conserved