

logo

NTDB id 69212 EP179 RS02230 WP 071198096.1  
NTDB id 1132 OK783 RS01905 WP 010951035.1  
consensus

MSAPIRAFDPLTAPISGTNLEASAGTGKTYGIAALFTRLIVLEQKSVERVLVVTFTKAATAELKTRLRARLDDVLQVLESKEIA  
MSAPIRAFDPLTAPISGTNLEASAGTGKTYGIAALFTRLIVLEQKSVERVLVVTFTKAATAELKTRLRARLDDVLQVLESKEIA  
MSAPIRAFDPLTAPISGTNLEASAGTGKTYGIAALFTRLIVLEQKSVERVLVVTFTKAATAELKTRLRARLDDVLQVLESKEIA  
!!

85  
85

logo

NTDB id 69212 EP179 RS02230 WP 071198096.1  
NTDB id 1132 OK783 RS01905 WP 010951035.1  
consensus

ELGDDTLSDGIAAYCAEHHEGDTFLPALLEQALQKESRTRLIVRLKAAIGQFDNAAIYTIHGFCQRILRDYAFLLCQAPFDVELTE  
ELGDDTLSDGIAAYCAEHHEGDTFLPALLEQALQKESRTRLIVRLKAAIGQFDNAAIYTIHGFCQRILRDYAFLLCQAPFDVELTE  
ELGDDTLSDGIAAYCAEHHEGDTFLPALLEQALQKESRTRLIVRLKAAIGQFDNAAIYTIHGFCQRILRDYAFLLCQAPFDVELTE  
!!

170  
170

logo

NTDB id 69212 EP179 RS02230 WP 071198096.1  
NTDB id 1132 OK783 RS01905 WP 010951035.1  
consensus

EDGDRLLVPAQDFWRERVSGDPVLAALAFKRKAVPQTVLAQIRAYLSRPYLNFRPPQADLKQAQRDAETSWQTVCRLLPELEAGF  
EDGDRLLVPAQDFWRERVSGDPVLAALAFKRKAVPQTVLAQIRAYLSRPYLNFRPPQADLKQAQRDAETSWQTVCRLLPELEAGF  
EDGDRLLVPAQDFWRERVSGDPVLAALAFKRKAVPQTVLAQIRAYLSRPYLNFRPPQADLKQAQRDAETSWQTVCRLLPELEAGF  
!!

255  
255

logo

NTDB id 69212 EP179 RS02230 WP 071198096.1  
NTDB id 1132 OK783 RS01905 WP 010951035.1  
consensus

WRIHDPDLNGNSYRKNSFGNLFKELAQKSAAGQLPCLDKDITHERLLKLSSDKLEAGLKKGKTPDAAVFAELQKLADFGRDNLNALEE  
WRIHDPDLNGNSYRKNSFGNLFKELAQKSAAGQLPCLDKDITHERLLKLSSDKLEAGLKKGKTPDAAVFAELQKLADFGRDNLNALEE  
WRIHDPDLNGNSYRKNSFGNLFKELAQKSAAGQLPCLDKDITHERLLKLSSDKLEAGLKKGKTPDAAVFAELQKLADFGRDNLNALEE  
!!

340  
340

logo

NTDB id 69212 EP179 RS02230 WP 071198096.1  
NTDB id 1132 OK783 RS01905 WP 010951035.1  
consensus

AEETTMIRLQLDLIEYLNSSLAEMKKSRRERGFDDLLLDVHTALTDNPHAETPARAVAENWEIALIDEFQDTPDPLQYEIFQKIFI  
AEETTMIRLQLDLIEYLNSSLAEMKKSRRERGFDDLLLDVHTALTDNPHAETPARAVAENWEIALIDEFQDTPDPLQYEIFQKIFI  
AEETTMIRLQLDLIEYLNSSLAEMKKSRRERGFDDLLLDVHTALTDNPHAETPARAVAENWEIALIDEFQDTPDPLQYEIFQKIFI  
!!

425  
425

logo

NTDB id 69212 EP179 RS02230 WP 071198096.1  
NTDB id 1132 OK783 RS01905 WP 010951035.1  
consensus

ARNRPLFLVGDPKQAIYSFRGADIYAYLQAAEDARHRYTLATNYRSHAALIGSIGALFRLKERPFVLENIYGYSEVGAARAESRLS  
ARNRPLFLVGDPKQAIYSFRGADIYAYLQAAEDARHRYTLATNYRSHAALIGSIGALFRLKERPFVLENIYGYSEVGAARAESRLS  
ARNRPLFLVGDPKQAIYSFRGADIYAYLQAAEDARHRYTLATNYRSHAALIGSIGALFRLKERPFVLENIYGYSEVGAARAESRLS  
!!

510  
510

logo

NTDB id 69212 EP179 RS02230 WP 071198096.1  
NTDB id 1132 OK783 RS01905 WP 010951035.1  
consensus

PKRPAVQLRWLHENDNEKANKDVLRRRAADYCADEIARALNEASGGRLNFKGRPLQSGDIAVLVRTHNEAVMISAALKKRQVQSV  
PKRPAVQLRWLHENDNEKANKDVLRRRAADYCADEIARALNEASGGRLNFKGRPLQSGDIAVLVRTHNEAVMISAALKKRQVQSV  
PKRPAVQLRWLHENDNEKANKDVLRRRAADYCADEIARALNEASGGRLNFKGRPLQSGDIAVLVRTHNEAVMISAALKKRQVQSV  
!!

595  
595

logo

NTDB id 69212 EP179 RS02230 WP 071198096.1  
NTDB id 1132 OK783 RS01905 WP 010951035.1  
consensus

LLSRESVFASPEAAALSALIGFWLEPRRAGTLRFVLTSGIFGYDAQQLHDFNQNESEILHWAESARTALDIWQKYGIFAAMQQFS  
LLSRESVFASPEAAALSALIGFWLEPRRAGTLRFVLTSGIFGYDAQQLHDFNQNESEILHWAESARTALDIWQKYGIFAAMQQFS  
LLSRESVFASPEAAALSALIGFWLEPRRAGTLRFVLTSGIFGYDAQQLHDFNQNESEILHWAESARTALDIWQKYGIFAAMQQFS  
!!

680  
680

logo

NTDB id 69212 EP179 RS02230 WP 071198096.1  
NTDB id 1132 OK783 RS01905 WP 010951035.1  
consensus

QTHGIETRLLSRNNGRSLTNYFQLELLAAEDAQNRNPAALHKWLRDQISLAGNNGDNRAIRLESDEDLVKIVTMHASKGLQYP  
QTHGIETRLLSRNNGRSLTNYFQLELLAAEDAQNRNPAALHKWLRDQISLAGNNGDNRAIRLESDEDLVKIVTMHASKGLQYP  
QTHGIETRLLSRNNGRSLTNYFQLELLAAEDAQNRNPAALHKWLRDQISLAGNNGDNRAIRLESDEDLVKIVTMHASKGLQYP  
!!

765  
765

logo

NTDB id 69212 EP179 RS02230 WP 071198096.1  
NTDB id 1132 OK783 RS01905 WP 010951035.1  
consensus

LVYCPFAWDAQDTGPSDWQILHQQANRAELLAKAQLSESEKQYADEEMAERLRLLYVALTRAEEQLNIYAAYSSDTADNPLAYL  
LVYCPFAWDAQDTGPSDWQILHQQANRAELLAKAQLSESEKQYADEEMAERLRLLYVALTRAEEQLNIYAAYSSDTADNPLAYL  
LVYCPFAWDAQDTGPSDWQILHQQANRAELLAKAQLSESEKQYADEEMAERLRLLYVALTRAEEQLNIYAAYSSDTADNPLAYL  
!!

850  
850

logo

NTDB id 69212 EP179 RS02230 WP 071198096.1  
NTDB id 1132 OK783 RS01905 WP 010951035.1  
consensus

I EGLPQDSRET VRRTYACEKDGITMLKRNWRRVADNAPAGTDF AFTEDAPPPAAYRGNADQAAEFAANSIPERGFRFVRHTSFTA  
I EGLPQDSRET VRRTYACEKDGITMLKRNWRRVADNAPAGTDF AFTEDAPPPAAYRGNADQAAEFAANSIPERGFRFVRHTSFTA  
I EGLPQDSRET VRRTYACEKDGITMLKRNWRRVADNAPAGTDF AFTEDAPPPAAYRGNADQAAEFAANSIPERGFRFVRHTSFTA  
!!

935  
935

logo

NTDB id 69212 EP179 RS02230 WP 071198096.1  
NTDB id 1132 OK783 RS01905 WP 010951035.1  
consensus

LSR<sup>R</sup>HTQTPDGG EEDACPSLDAAETSVPAMPSETPTASDGISIHDFPKGTQAGLCLHEILEDFKFGQAAAEQETLIADKLKKGFE  
LSR<sup>R</sup>HTQTPDGG EEDACPSLDAAETSVPAMPSETPTASDGISIHDFPKGTQAGLCLHEILEDFKFGQAAAEQETLIADKLKKGFE  
LSR<sup>H</sup>HTQTPDGG EEDACPSLDAAETSVPAMPSETPTASDGISIHDFPKGTQAGLCLHEILEDFKFGQAAAEQETLIADKLKKGFE  
!!!!!!!!\*!!

1020  
1020

logo

NTDB id 69212 EP179 RS02230 WP 071198096.1  
NTDB id 1132 OK783 RS01905 WP 010951035.1  
consensus

EIWLPAVAEMAEACRKTPLTGAYGLSDIPPGCRRPEMGFTLHTEDFGLKRLRDWLRDDIRLPEVCRAAAETLDFHTVNGFLNGF  
EIWLPAVAEMAEACRKTPLTGAYGLSDIPPGCRRPEMGFTLHTEDFGLKRLRDWLRDDIRLPEVCRAAAETLDFHTVNGFLNGF  
EIWLPAVAEMAEACRKTPLTGAYGLSDIPPGCRRPEMGFTLHTEDFGLKRLRDWLRDDIRLPEVCRAAAETLDFHTVNGFLNGF  
!!

1105  
1105

logo

NTDB id 69212 EP179 RS02230 WP 071198096.1  
NTDB id 1132 OK783 RS01905 WP 010951035.1  
consensus

IDMVCQDPDGNICIIDYKSNHLSAYTRQAMDEAVAHQHYYLQALYAVAAARYFKLRGQPPAAVSVRYLFLRGLDGKGGGVWRWD  
IDMVCQDPDGNICIIDYKSNHLSAYTRQAMDEAVAHQHYYLQALYAVAAARYFKLRGQPPAAVSVRYLFLRGLDGKGGGVWRWD  
IDMVCQDPDGNICIIDYKSNHLSAYTRQAMDEAVAHQHYYLQALYAVAAARYFKLRGQPPAAVSVRYLFLRGLDGKGGGVWRWD  
!!

1190  
1190

logo

NTDB id 69212 EP179 RS02230 WP 071198096.1  
NTDB id 1132 OK783 RS01905 WP 010951035.1  
consensus



1200  
1200

- X non conserved
- X similar
- X  $\geq 50\%$  conserved