

logo

	MKEILKTLTEAMTLPEDSYSEQDAEFLEIFIEEIEEIVFDLQPLINKWMQSENIATLTEIRRHFTLKGSGRMIGAKSSA	
NTDB id 1278 LPP RS13600 WP 011947563.1	.....	0
NTDB id 1262 GC085 RS13310 WP 011947563.1	.....	0
NTDB id 372 SMU RS05280 WP 002262198.1	.....	0
NTDB id 1419 SGL RS12550 WP 010873252.1	.....	0
NTDB id 413 AAK55817.1 141..845( )	.....	0
NTDB id 1046 HON27 RS03130 WP 168726941.1	MKEILKTLTEAMTLPEDSYSEQDAEFLEIFIEEIEEIVFDLQPLINKWMQSENIATLTEIRRHFTLKGSGRMIGAKSSA	80
NTDB id 1047 HON27 RS03110 WP 000389061.1	.....	0
NTDB id 66940 GM3709 RS04400 WP 066121722.1	.....	0
NTDB id 1417 SGL RS04200 WP 014407071.1	.....	0
consensus		

logo

	ELAWTVEDTLNRVINQSLQLTPTIQSYVQLVFKFYFLKLVDFNFKQKRAHTLDFRPLILLGQQLQQQSLEPALEELLQLS	
NTDB id 1278 LPP RS13600 WP 011947563.1	.....	0
NTDB id 1262 GC085 RS13310 WP 011947563.1	.....	0
NTDB id 372 SMU RS05280 WP 002262198.1	.....	0
NTDB id 1419 SGL RS12550 WP 010873252.1	.....	0
NTDB id 413 AAK55817.1 141..845( )	.....	0
NTDB id 1046 HON27 RS03130 WP 168726941.1	ELAWTVEDTLNRVINQSLQLTPTIQSYVQLVFKFYFLKLVDFNFKQKRAHTLDFRPLILLGQQLQQQSLEPALEELLQLS	160
NTDB id 1047 HON27 RS03110 WP 000389061.1	.....	0
NTDB id 66940 GM3709 RS04400 WP 066121722.1	.....	0
NTDB id 1417 SGL RS04200 WP 014407071.1	.....	0
consensus		

logo

	HTLMAETVTGLELDYIEQDSLAEPIIQATHTEIEINLDETLTLFMEEAEEHLATIHQFLDQELHQYDSYNALIRALHTLR	
NTDB id 1278 LPP RS13600 WP 011947563.1	.....	0
NTDB id 1262 GC085 RS13310 WP 011947563.1	.....	0
NTDB id 372 SMU RS05280 WP 002262198.1	.....	0
NTDB id 1419 SGL RS12550 WP 010873252.1	.....	0
NTDB id 413 AAK55817.1 141..845( )	.....	0
NTDB id 1046 HON27 RS03130 WP 168726941.1	HTLMAETVTGLELDYIEQDSLAEPIIQATHTEIEINLDETLTLFMEEAEEHLATIHQFLDQELHQYDSYNALIRALHTLR	240
NTDB id 1047 HON27 RS03110 WP 000389061.1	.....	0
NTDB id 66940 GM3709 RS04400 WP 066121722.1	.....	0
NTDB id 1417 SGL RS04200 WP 014407071.1	.....	0
consensus		

logo

	GSSAMAQVETIFEASTKVEHLFKILLQEELSSHSEEILLQEYREFVDRSLELLSRYSSSEQLLEARLLQFNQSWDAYVEQ	
NTDB id 1278 LPP RS13600 WP 011947563.1	.....	0
NTDB id 1262 GC085 RS13310 WP 011947563.1	.....	0
NTDB id 372 SMU RS05280 WP 002262198.1	.....	0
NTDB id 1419 SGL RS12550 WP 010873252.1	.....	0
NTDB id 413 AAK55817.1 141..845( )	.....	0
NTDB id 1046 HON27 RS03130 WP 168726941.1	GSSAMAQVETIFEASTKVEHLFKILLQEELSSHSEEILLQEYREFVDRSLELLSRYSSSEQLLEARLLQFNQSWDAYVEQ	320
NTDB id 1047 HON27 RS03110 WP 000389061.1	.....	0
NTDB id 66940 GM3709 RS04400 WP 066121722.1	.....	0
NTDB id 1417 SGL RS04200 WP 014407071.1	.....	0
consensus		

logo

	HGDRTDPLMP SHGLV S QLLQLD V S ELLDAELDFEKGIRNEFPDYLERLSEQADLLLQHTHSQAMLGLHEYTSQLKESYEV	
NTDB id 1278 LPP RS13600 WP 011947563.1	.....	0
NTDB id 1262 GC085 RS13310 WP 011947563.1	.....	0
NTDB id 372 SMU RS05280 WP 002262198.1	.....	0
NTDB id 1419 SGL RS12550 WP 010873252.1	.....	0
NTDB id 413 AAK55817.1 141..845( )	.....	0
NTDB id 1046 HON27 RS03130 WP 168726941.1	HGDRTDPLMP SHGLV S QLLQLD V S ELLDAELDFEKGIRNEFPDYLERLSEQADLLLQHTHSQAMLGLHEYTSQLKESYEV	400
NTDB id 1047 HON27 RS03110 WP 000389061.1	.....	0
NTDB id 66940 GM3709 RS04400 WP 066121722.1	.....	0
NTDB id 1417 SGL RS04200 WP 014407071.1	.....	0
consensus		

logo

	LLDKPALLQSDYIFEIYQKAHQQLIQLFDALAAAGQRVGVVKQHQSI L EELKLYTQYTPDISNDLPQQDSTSFEP IYNYTEP	
NTDB id 1278 LPP RS13600 WP 011947563.1	.....	0
NTDB id 1262 GC085 RS13310 WP 011947563.1	.....	0
NTDB id 372 SMU RS05280 WP 002262198.1	.....	0
NTDB id 1419 SGL RS12550 WP 010873252.1	.....	3
NTDB id 413 AAK55817.1 141..845( )	.....	0
NTDB id 1046 HON27 RS03130 WP 168726941.1	LLDKPALLQSDYIFEIYQKAHQQLIQLFDALAAAGQRVGVVKQHQSI L EELKLYTQYTPDISNDLPQQDSTSFEP IYNYTEP	480
NTDB id 1047 HON27 RS03110 WP 000389061.1	.....	0
NTDB id 66940 GM3709 RS04400 WP 066121722.1	.....	0
NTDB id 1417 SGL RS04200 WP 014407071.1	.....	0
consensus		

logo

	EPN EWATVENFSDSADWAVL GQSVQQDRQYI SSTQVNRNFDADLLDIFLEEAEEELLEGGTQQXFFENWYEEENEDAFNNLY	
NTDB id 1278 LPP RS13600 WP 011947563.1	.....	0
NTDB id 1262 GC085 RS13310 WP 011947563.1	.....	0
NTDB id 372 SMU RS05280 WP 002262198.1	.....	0
NTDB id 1419 SGL RS12550 WP 010873252.1	DPN.....PAQAFENWFEEEEEGDDAFTSLI	28
NTDB id 413 AAK55817.1 141..845( )	.....	0
NTDB id 1046 HON27 RS03130 WP 168726941.1	EPEVVATVENFSDSADWAVL GQSVQQDRQYI SSTQVNRNFDADLLDIFLEEAEEELLEGGIDTDLNIWVGEQENFAALNNLM	560
NTDB id 1047 HON27 RS03110 WP 000389061.1	.....	0
NTDB id 66940 GM3709 RS04400 WP 066121722.1	.....	0
NTDB id 1417 SGL RS04200 WP 014407071.1	.....	0
consensus		

logo

	RYL EHTLKGGANMVQATYLG LIAHELES IYERLIQKQLVVTSDLIDFIRLVQDDLADRLQIMREQQLDYAAPYTINALKRA	
NTDB id 1278 LPP RS13600 WP 011947563.1	.....	0
NTDB id 1262 GC085 RS13310 WP 011947563.1	.....	0
NTDB id 372 SMU RS05280 WP 002262198.1	.....	0
NTDB id 1419 SGL RS12550 WP 010873252.1	AGE.....	31
NTDB id 413 AAK55817.1 141..845( )	.....	0
NTDB id 1046 HON27 RS03130 WP 168726941.1	RYLHTLKGGANMVQATYLG LIAHELES IYERLIQKQLVVTSDLIDFIRLVQDDLADRLQIMREQQLDYAAPYTINALKRA	640
NTDB id 1047 HON27 RS03110 WP 000389061.1	.....	0
NTDB id 66940 GM3709 RS04400 WP 066121722.1	.....	0
NTDB id 1417 SGL RS04200 WP 014407071.1	.....	0
consensus		

logo

NTDB id 1278 LPP RS13600 WP 011947563.1  
 NTDB id 1262 GC085 RS13310 WP 011947563.1  
 NTDB id 372 SMU RS05280 WP 002262198.1  
 NTDB id 1419 SGL RS12550 WP 010873252.1  
 NTDB id 413 AAK55817.1 141..845( )  
 NTDB id 1046 HON27 RS03130 WP 168726941.1  
 NTDB id 1047 HON27 RS03110 WP 000389061.1  
 NTDB id 66940 GM3709 RS04400 WP 066121722.1  
 NTDB id 1417 SGL RS04200 WP 014407071.1  
 consensus

EQNSNIFEELEBYBBAFBXEPFVLSSESYLS E I I D E I P V E L E P A L A E L E T H H D Q V F D T S X S C E E R T P V E M I T T V T S Q E N E V A  
 .....  
 ETNSGIEELDFGDLFEQEPTVIQGGFGS..... PSSGEEDPPVRMTLDFNSPEAELD  
 .....  
 GQNSNFQPLPVVEAFDAESEVFSEQKVISEIIIDEIPVELEPALAELETHHDQVFDTAVTELATPVEMITTVTSQENEVA  
 .....  
 .....

0  
0  
0  
84  
0  
720  
0  
0  
0

logo

NTDB id 1278 LPP RS13600 WP 011947563.1  
 NTDB id 1262 GC085 RS13310 WP 011947563.1  
 NTDB id 372 SMU RS05280 WP 002262198.1  
 NTDB id 1419 SGL RS12550 WP 010873252.1  
 NTDB id 413 AAK55817.1 141..845( )  
 NTDB id 1046 HON27 RS03130 WP 168726941.1  
 NTDB id 1047 HON27 RS03110 WP 000389061.1  
 NTDB id 66940 GM3709 RS04400 WP 066121722.1  
 NTDB id 1417 SGL RS04200 WP 014407071.1  
 consensus

ANEQDIEAVVEQTFLFEEATELLEMAESLLKQWFQRTNR.....S.....ILL.....  
 .....  
 .....ALFTDEDAPTTAIDPFESSSWLEIDQMMEADPLASIPETNAPAYQTAGGLDDNDLAE LQDLLGVGDVEP  
 .....  
 ANEQDIEAVVEQTFLFEEATELLEMAESLLKQWFQRTNR.....S.....ILL.....  
 .....  
 .....

0  
0  
0  
153  
0  
763  
0  
0  
0

logo

NTDB id 1278 LPP RS13600 WP 011947563.1  
 NTDB id 1262 GC085 RS13310 WP 011947563.1  
 NTDB id 372 SMU RS05280 WP 002262198.1  
 NTDB id 1419 SGL RS12550 WP 010873252.1  
 NTDB id 413 AAK55817.1 141..845( )  
 NTDB id 1046 HON27 RS03130 WP 168726941.1  
 NTDB id 1047 HON27 RS03110 WP 000389061.1  
 NTDB id 66940 GM3709 RS04400 WP 066121722.1  
 NTDB id 1417 SGL RS04200 WP 014407071.1  
 consensus

AITNPG LHSFAGADRVTPLTNEVLL.FA.....AIDDLGLINAPVLDEEFSF.....TELET LIDTPAPKS  
 .....  
 AITNPG LHSFAGADRVTPLTNEVLL.FA.....AIDDLGLINAPVLDEEFSF.....TELET LIDTPAPKS  
 .....  
 .QLQRAVHSLKGGARMVGL EAVQAIAYQLENAFEQFALHHFNSNIYDHLLES AIAWLKDAIFNHNHYQHFDGLQQSLENIQ  
 .....  
 .....

0  
0  
0  
214  
0  
842  
0  
0  
0

logo

NTDB id 1278 LPP RS13600 WP 011947563.1  
 NTDB id 1262 GC085 RS13310 WP 011947563.1  
 NTDB id 372 SMU RS05280 WP 002262198.1  
 NTDB id 1419 SGL RS12550 WP 010873252.1  
 NTDB id 413 AAK55817.1 141..845( )  
 NTDB id 1046 HON27 RS03130 WP 168726941.1  
 NTDB id 1047 HON27 RS03110 WP 000389061.1  
 NTDB id 66940 GM3709 RS04400 WP 066121722.1  
 NTDB id 1417 SGL RS04200 WP 014407071.1  
 consensus

FATISHPFR L P VAMEEDEFKDL EALLEQADSSLGGGIAGMGGARLPARP...RQVKRSRFEQTM RVPIKQLDNLSNLI  
 .....  
 FATISHPFR L P VAMEEDEFKDL EALLEQADSSLGGGIAGMGGARLPARP...RQVKRSRFEQTM RVPIKQLDNLSNLI  
 .....  
 F..FETTIQIPTKLTRA.DLFSS.EP.....VMTFIQGDGTEPPMMGAWEQTERLDQNNEMIRVSADLIEK MIDLS  
 .....  
 .....

0  
0  
0  
291  
0  
910  
0  
0  
0

logo

NTDB id 1278 LPP RS13600 WP 011947563.1  
 NTDB id 1262 GC085 RS13310 WP 011947563.1  
 NTDB id 372 SMU RS05280 WP 002262198.1  
 NTDB id 1419 SGL RS12550 WP 010873252.1  
 NTDB id 413 AAK55817.1 141..845( )  
 NTDB id 1046 HON27 RS03130 WP 168726941.1  
 NTDB id 1047 HON27 RS03110 WP 000389061.1  
 NTDB id 66940 GM3709 RS04400 WP 066121722.1  
 NTDB id 1417 SGL RS04200 WP 014407071.1

GENSYNR<sup>R</sup>RY<sup>E</sup>SD<sup>E</sup>ES<sup>F</sup>SR<sup>F</sup>LY<sup>N</sup>MLE<sup>N</sup>QA<sup>Q</sup>NLS<sup>D</sup>YLS<sup>R</sup>ME<sup>E</sup>LY<sup>E</sup>RT<sup>T</sup>LE<sup>G</sup>ALLAS<sup>R</sup>STNS<sup>R</sup>HH<sup>S</sup>SK<sup>T</sup>TY<sup>P</sup>DAR<sup>I</sup>TK<sup>S</sup>ST<sup>E</sup>H  
 .....  
 .....  
 GELVVKRNRLEQDQERLRQFLDNLLNQAQNLSDVGGRMQDLYERTLLE<sup>G</sup>ALLAS<sup>R</sup>STNS<sup>R</sup>HH<sup>S</sup>SK<sup>T</sup>TY<sup>P</sup>DARITASS<sup>S</sup>ST  
 .....  
 GENSINRSRIEMDLSQFSHTLVEMELAIQRLADQLRRMEGELETQI.....IAKHGIEH  
 .....  
 .....

0  
0  
0  
371  
0  
964  
0  
0  
0

consensus

logo

NTDB id 1278 LPP RS13600 WP 011947563.1  
 NTDB id 1262 GC085 RS13310 WP 011947563.1  
 NTDB id 372 SMU RS05280 WP 002262198.1  
 NTDB id 1419 SGL RS12550 WP 010873252.1  
 NTDB id 413 AAK55817.1 141..845( )  
 NTDB id 1046 HON27 RS03130 WP 168726941.1  
 NTDB id 1047 HON27 RS03110 WP 000389061.1  
 NTDB id 66940 GM3709 RS04400 WP 066121722.1  
 NTDB id 1417 SGL RS04200 WP 014407071.1

SRYS<sup>T</sup>FD<sup>A</sup>LE<sup>M</sup>D<sup>S</sup>YS<sup>T</sup>FN<sup>L</sup>SR<sup>E</sup>ML<sup>E</sup>LY<sup>B</sup>Y<sup>K</sup>FK<sup>N</sup>ST<sup>S</sup>Y<sup>K</sup>Y<sup>B</sup>ST<sup>E</sup>SY<sup>K</sup>RT<sup>S</sup>SY<sup>C</sup>ET<sup>Q</sup>E<sup>G</sup>MT<sup>R</sup>RY<sup>V</sup>PF<sup>I</sup>ST<sup>L</sup>LR<sup>L</sup>R  
 .....  
 .....  
 MNDQPLDALEMDRFTGFHLLSQEMIELIVRVRESASDIQYLVEDETQVARTLRQVTTQLQEGMTKSRMVPFTQTADRLPR  
 .....  
 SRYTDFDPLEMDQYSSLNQLSKSLAESASDLVDFKNTLSDKIRDTESLLLQQSRIQAEIQEGLMRTRLVPPFSRLLPRLQR  
 .....  
 .....

0  
0  
0  
451  
0  
1044  
0  
0  
0

consensus

logo

NTDB id 1278 LPP RS13600 WP 011947563.1  
 NTDB id 1262 GC085 RS13310 WP 011947563.1  
 NTDB id 372 SMU RS05280 WP 002262198.1  
 NTDB id 1419 SGL RS12550 WP 010873252.1  
 NTDB id 413 AAK55817.1 141..845( )  
 NTDB id 1046 HON27 RS03130 WP 168726941.1  
 NTDB id 1047 HON27 RS03110 WP 000389061.1  
 NTDB id 66940 GM3709 RS04400 WP 066121722.1  
 NTDB id 1417 SGL RS04200 WP 014407071.1

AYREYS<sup>T</sup>IK<sup>L</sup>NR<sup>R</sup>X<sup>N</sup>LE<sup>V</sup>NT<sup>E</sup>Y<sup>L</sup>Y<sup>T</sup>DR<sup>N</sup>IL<sup>E</sup>RL<sup>V</sup>TP<sup>M</sup>EH<sup>L</sup>Y<sup>N</sup>AI<sup>D</sup>HG<sup>T</sup>E<sup>S</sup>PA<sup>E</sup>R<sup>Q</sup>R<sup>K</sup>PK<sup>E</sup>EG<sup>T</sup>Y<sup>R</sup>AP<sup>E</sup>Q<sup>G</sup>TS<sup>Y</sup>Y<sup>Y</sup>  
 .....  
 .....  
 AIREVSMKLNKKVNLEVEGGDVLIDKMLEHLYNPMTHLVNNAITHGIETPAERQKLGKSPEGHLAVRAFLQGNQTLITV  
 .....  
 IVRQTSTALNRPALFVNNTEGELDRNILERLVTPLEHMLRNAIDHGLEDRAQRQQANKPETGRIELNIQRQGTDVVVVF  
 .....  
 .....

0  
0  
0  
531  
0  
1124  
0  
0  
0

consensus

logo

NTDB id 1278 LPP RS13600 WP 011947563.1  
 NTDB id 1262 GC085 RS13310 WP 011947563.1  
 NTDB id 372 SMU RS05280 WP 002262198.1  
 NTDB id 1419 SGL RS12550 WP 010873252.1  
 NTDB id 413 AAK55817.1 141..845( )  
 NTDB id 1046 HON27 RS03130 WP 168726941.1  
 NTDB id 1047 HON27 RS03110 WP 000389061.1  
 NTDB id 66940 GM3709 RS04400 WP 066121722.1  
 NTDB id 1417 SGL RS04200 WP 014407071.1

SDDG<sup>R</sup>G<sup>I</sup>N<sup>E</sup>V<sup>R</sup>Q<sup>K</sup>A<sup>Y</sup>L<sup>K</sup>G<sup>L</sup>I<sup>R</sup>M<sup>E</sup>A<sup>Q</sup>S<sup>L</sup>S<sup>Q</sup>S<sup>E</sup>V<sup>Y</sup>D<sup>L</sup>L<sup>F</sup>H<sup>A</sup>G<sup>F</sup>S<sup>T</sup>K<sup>D</sup>T<sup>A</sup>D<sup>D</sup>F<sup>A</sup>G<sup>R</sup>V<sup>G</sup>L<sup>D</sup>V<sup>V</sup>R<sup>T</sup>S<sup>L</sup>I<sup>D</sup>I<sup>R</sup>G<sup>A</sup>I<sup>N</sup>I<sup>E</sup>S<sup>T</sup>V  
 .....  
 .....  
 SDDGAGINTEMVKQKAVEKGLISRMEAQSLSQSEVYDLLFHAGFSTKDTADDFAGRGVGLDVVVRTSLIDIRGAINIESTV  
 .....  
 SDDGQGIDVEKVRQKALLAGLIKP..EQDLEQQDILQLIFHPGLSTAEQVTQISGRGVGLDVVQSDIKSLGGHVSVESVY  
 .....  
 .....

0  
0  
0  
611  
0  
1202  
0  
0  
0

consensus

logo

NTDB id 1278 LPP RS13600 WP 011947563.1  
 NTDB id 1262 GC085 RS13310 WP 011947563.1  
 NTDB id 372 SMU RS05280 WP 002262198.1  
 NTDB id 1419 SGL RS12550 WP 010873252.1  
 NTDB id 413 AAK55817.1 141..845( )  
 NTDB id 1046 HON27 RS03130 WP 168726941.1  
 NTDB id 1047 HON27 RS03110 WP 000389061.1  
 NTDB id 66940 GM3709 RS04400 WP 066121722.1  
 NTDB id 1417 SGL RS04200 WP 014407071.1

GRGTTFTIRYPITYSYSEKALMVKYRBSBFAIPYRXYBTRFVYEPKSTYGGFESSEQELKYEYEREALLLREYPLRLLENFNS  
 .....  
 .....  
 GKGTTFTIRLPLTLTSICKALCCLSDRARIAPMDGVEDTRDYLPKDIVTD.EDGQKCVKYGKEALLLPLYPLKDLLNYNR  
 .....  
 GQGTTFTIRVPTTVAVSDALMVKVADQQFAIPLAQIDRIIRVSPASLEQYFESPQELFEYEN.....KRYPLRYLSEFVG  
 .....  
 .....

0  
0  
0  
690  
0  
1277  
0  
0  
0

logo

NTDB id 1278 LPP RS13600 WP 011947563.1  
 NTDB id 1262 GC085 RS13310 WP 011947563.1  
 NTDB id 372 SMU RS05280 WP 002262198.1  
 NTDB id 1419 SGL RS12550 WP 010873252.1  
 NTDB id 413 AAK55817.1 141..845( )  
 NTDB id 1046 HON27 RS03130 WP 168726941.1  
 NTDB id 1047 HON27 RS03110 WP 000389061.1  
 NTDB id 66940 GM3709 RS04400 WP 066121722.1  
 NTDB id 1417 SGL RS04200 WP 014407071.1

REPRERLYNGCKQVEEDSVFVHYLRANNGRTLYALEYDQYTGEEQIVYKPIESPSPRPEXLAGATYREGDGSYREIADYENTLA  
 .....  
 .....  
 QLSRGSVYGGKQEEDVVRVVIARGSSGNLLALQIDQVLGEEE.IVIKQIEGPIPKPPGIAGATVRGDGSIMPIADVLELI  
 .....  
 NQPIPRNLNG...VMYSLPVLMIKANNGQTVALLVDQLIGSRAQIVVKPIGQQFSSIGAIAGATILGDGQVCLILDGQNTIA  
 .....  
 .....

0  
0  
0  
769  
0  
1354  
0  
0  
0

logo

NTDB id 1278 LPP RS13600 WP 011947563.1  
 NTDB id 1262 GC085 RS13310 WP 011947563.1  
 NTDB id 372 SMU RS05280 WP 002262198.1  
 NTDB id 1419 SGL RS12550 WP 010873252.1  
 NTDB id 413 AAK55817.1 141..845( )  
 NTDB id 1046 HON27 RS03130 WP 168726941.1  
 NTDB id 1047 HON27 RS03110 WP 000389061.1  
 NTDB id 66940 GM3709 RS04400 WP 066121722.1  
 NTDB id 1417 SGL RS04200 WP 014407071.1

ETIQSTQRHKQLSEAVY.....RQRESDERRLIMIVDDSVTVRKVTSRLLER.QGYDVVTAKD.GVDATEIQLENIK.PD  
 .....  
 .....  
 EIAQGRRLRT.DSSGGLWRKTLTPTVNEVHMDPTVLIVDDSVTVRELLSLSFKK.AGFRVEQARD.GQEAWDQLKSGLPD  
 .....  
 RQIQSTQRHKQLSEAVY.....RQRESDERRLIMIVDDSVTVRKVTSRLLER.QGYDVVTAKD.GVDATEIQLENIK.PD  
 .....  
 MEDAFQNLKVMVIDDSKTIRRTAETLLQR.EGCEVITAVD.GFEALSKEIAEAN.PD  
 .....  
 MSTVLLVEDSTTRKMISELLIK.QGLKVEIATD.GVEALEILPTIS.PD  
 .....  
 MNAVLLVEDSSSQREMISGILKD.HGWQVTIACD.GVEALEKLNQNS.PD

49  
49  
52  
846  
47  
1425  
53  
47  
47

logo

NTDB id 1278 LPP RS13600 WP 011947563.1  
 NTDB id 1262 GC085 RS13310 WP 011947563.1  
 NTDB id 372 SMU RS05280 WP 002262198.1  
 NTDB id 1419 SGL RS12550 WP 010873252.1  
 NTDB id 413 AAK55817.1 141..845( )  
 NTDB id 1046 HON27 RS03130 WP 168726941.1  
 NTDB id 1047 HON27 RS03110 WP 000389061.1  
 NTDB id 66940 GM3709 RS04400 WP 066121722.1  
 NTDB id 1417 SGL RS04200 WP 014407071.1

VVLLDMKMPGIDGWEVTRRLKKT..NPNIKVIAVTAICSDPLPTRVLQLGAMGYLTKEGAEEMAAAIRKVAKGEKYL  
 .....  
 VVLLDMKMPGIDGWEVTRRLKKT..NPNIKVIAVTAICSDPLPTRVLQLGAMGYLTKEGAEEMAAAIRKVAKGEKYL  
 .....  
 LAILDIMLPDGSGFVLRREIR...KTSTIPVFLSAVSDIEKQYQGFELGADDYIVKPFPRKPELELRILSILKRAYPEKD  
 .....  
 LVFCDIEMPRKNGLELLSELQADEELSSIPVALLTSRGADRRHRKVAAKLGATGYFTKPYTEKDILDAANRMLNGEVLLPG  
 .....  
 IILDIMLPDIDGLEVAKTIR...KTSSVPILMISAKDSEFDKVIQLELGADDYVTKPFSNRELQARVKALLRRSQMPV  
 .....  
 LMLLDIEMPRMDGFVLRNLRHHDMHQYMPIIMITSRTGKHRERAFSLGVSQYMGKPFQEELENIIDALLVAFESEVK  
 .....  
 IVFVDIMMPRLDGYQTCALIKNSQNYQNIPVIMLSSKDGFLDQAKGRVVGSDYELTKPFSKDELLNAIRNHVSS.....  
 .....  
 IVILDIVMPKMNGYEVCRNIKSNPKTKNVPVVICSSKGEDFDRIYWGKMGADAYIAKPFQPKELIATIKQLLKG.....  
 .....  
 LVVLDIVMPRMNGYEVCRRIKSDPKTKNVPVVICSSKGEFDRFWGMRQADAYIAKPFQPMELVGTIKQLLRN.....

127  
127  
129  
926  
124  
1505  
127  
121  
121

logo

NTDB id 1278 LPP RS13600 WP 011947563.1  
 NTDB id 1262 GC085 RS13310 WP 011947563.1  
 NTDB id 372 SMU RS05280 WP 002262198.1  
 NTDB id 1419 SGL RS12550 WP 010873252.1  
 NTDB id 413 AAK55817.1 141..845( )  
 NTDB id 1046 HON27 RS03130 WP 168726941.1  
 NTDB id 1047 HON27 RS03110 WP 000389061.1  
 NTDB id 66940 GM3709 RS04400 WP 066121722.1  
 NTDB id 1417 SGL RS04200 WP 014407071.1  
 consensus

ETASGINSLOEPDGFLLSEVRYE MQVLMITSGMNVQDI...ADRLFLSSKTI... 180  
 DLEEKMAKSTLELNTALIKTRSLLEKADYVRSRYGLRSTYDSSKMRDSTGMAKRYELLYUTKNSNSYTF 180  
 EIAQKMAINSIQEPQD.....SPFDLLSE.....R..E.MQVMLMITSGMNVQDI...ADRLFLSSKTI... 176  
 EIAQKMAINSIQEPQD.....SPFDLLSE.....R..E.MQVMLMITSGMNVQDI...ADRLFLSSKTI... 176  
 DTLI...LPTCQVNFSQLITKGEL.....EIQLTAKEYSILKVLYNNQNRIVTF 992  
 STRK...TNSILSRFK...KARGNFSEEAPTIVRSNPGTLRSTVLIIDDSVMVREMLSMTFKK..ADYHTETAR..... 180  
 DGQE...ADSKPQPIQ...I..GDLEIVPDAYVAKKYG.....EELDLTHREFELLYHLASHTGQVITR 1506  
 S..... 127  
 ..... 121  
 ..... 121  
 ..... \*

<0

logo

NTDB id 1278 LPP RS13600 WP 011947563.1  
 NTDB id 1262 GC085 RS13310 WP 011947563.1  
 NTDB id 372 SMU RS05280 WP 002262198.1  
 NTDB id 1419 SGL RS12550 WP 010873252.1  
 NTDB id 413 AAK55817.1 141..845( )  
 NTDB id 1046 HON27 RS03130 WP 168726941.1  
 NTDB id 1047 HON27 RS03110 WP 000389061.1  
 NTDB id 66940 GM3709 RS04400 WP 066121722.1  
 NTDB id 1417 SGL RS04200 WP 014407071.1  
 consensus

NGYRYMFEKLGIKNDVELTYLAMKHRITIEHPNDLSQDD... 219  
 ..NGYRYRMFEKLGIKNDVELTY.....LAMKHRITIEHPNDLSQDD..... 219  
 DQLLEKVVWGLQYQGYENTMMA.....HIRKTRQKIEANPS...KPECLLTVKG.....LGYKLVKVS... 229  
 ..DGQDAWEKLVKSLGPCDLILCDIEMPRMNGLELLERIQEDPNLSRIPVAMITSRGAQKMQRMAAEKGAKGYFVKPYIEE 1070  
 EHLLLETVWGYDYFC...DVRTVDVTV....RRIREKIEDTPS...RPEYILTRRG.....VGYYMRNNA\* 234  
 ..... 1506  
 ..... 127  
 ..... 121  
 ..... 121  
 ..... \* \* \* \* \*

logo

NTDB id 1278 LPP RS13600 WP 011947563.1  
 NTDB id 1262 GC085 RS13310 WP 011947563.1  
 NTDB id 372 SMU RS05280 WP 002262198.1  
 NTDB id 1419 SGL RS12550 WP 010873252.1  
 NTDB id 413 AAK55817.1 141..845( )  
 NTDB id 1046 HON27 RS03130 WP 168726941.1  
 NTDB id 1047 HON27 RS03110 WP 000389061.1  
 NTDB id 66940 GM3709 RS04400 WP 066121722.1  
 NTDB id 1417 SGL RS04200 WP 014407071.1  
 consensus

TLLEASQRLIRGEVLLDLAALSAD 219  
 ..... 219  
 ..... 229  
 TLLEASQRLIRGEVLLDLAALSAD 1095  
 ..... 234  
 ..... 1506  
 ..... 127  
 ..... 121  
 ..... 121

⊠ non conserved  
 ⊠ similar  
 ⊠ ≥ 50% conserved