

logo

	MKEILKTLTEAMLPEDSYSEQDAEFLEIFIEEIEEIFVDLQPLINKWMQSENIATLTEIRRHFTLKGSGRMI GAKSSAELAWT	
NTDB id 1419 SGL RS12550 WP 010873252.1	.....	0
NTDB id 374 SMU RS06885 WP 002262930.1	.....	0
NTDB id 413 AAK55817.1 141..845( )	.....	0
NTDB id 1046 HON27 RS03130 WP 168726941.1	MKEILKTLTEAMLPEDSYSEQDAEFLEIFIEEIEEIFVDLQPLINKWMQSENIATLTEIRRHFTLKGSGRMI GAKSSAELAWT	85
NTDB id 1047 HON27 RS03110 WP 000389061.1	.....	0
NTDB id 26225 TERY RS15575 WP 011612707.1	.....	0
NTDB id 1417 SGL RS04200 WP 014407071.1	.....	0
consensus		

logo

	VEDTLNRVINQSLQLTPTTIQSYVQLVFKFYFLKLVDFNFKQKRAHTLDFRPLILLGQQLQQQSSLEPALEELLQLSHTLMAETVTG	
NTDB id 1419 SGL RS12550 WP 010873252.1	.....	0
NTDB id 374 SMU RS06885 WP 002262930.1	.....	0
NTDB id 413 AAK55817.1 141..845( )	.....	0
NTDB id 1046 HON27 RS03130 WP 168726941.1	VEDTLNRVINQSLQLTPTTIQSYVQLVFKFYFLKLVDFNFKQKRAHTLDFRPLILLGQQLQQQSSLEPALEELLQLSHTLMAETVTG	170
NTDB id 1047 HON27 RS03110 WP 000389061.1	.....	0
NTDB id 26225 TERY RS15575 WP 011612707.1	0
NTDB id 1417 SGL RS04200 WP 014407071.1	0
consensus		

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	LELDYIEQDSLAEPIIQATHTEIEINLDETTLTFMEEAEEHLATIHQFLDQELHQYDSYNALIRALHTLRGSSAMAQVETIFEAS	
NTDB id 1419 SGL RS12550 WP 010873252.1	.....	0
NTDB id 374 SMU RS06885 WP 002262930.1	.....	0
NTDB id 413 AAK55817.1 141..845( )	.....	0
NTDB id 1046 HON27 RS03130 WP 168726941.1	LELDYIEQDSLAEPIIQATHTEIEINLDETTLTFMEEAEEHLATIHQFLDQELHQYDSYNALIRALHTLRGSSAMAQVETIFEAS	255
NTDB id 1047 HON27 RS03110 WP 000389061.1	.....	0
NTDB id 26225 TERY RS15575 WP 011612707.1	0
NTDB id 1417 SGL RS04200 WP 014407071.1	0
consensus		

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	TKVEHLFKILLQEELSSHSEEILLLQYREFVDRSLELLSRYSSSEQLLEARLLQFNQSWDAYVEQHGDRTPLMPSHGLVSQLLQ	
NTDB id 1419 SGL RS12550 WP 010873252.1	.....	0
NTDB id 374 SMU RS06885 WP 002262930.1	.....	0
NTDB id 413 AAK55817.1 141..845( )	.....	0
NTDB id 1046 HON27 RS03130 WP 168726941.1	TKVEHLFKILLQEELSSHSEEILLLQYREFVDRSLELLSRYSSSEQLLEARLLQFNQSWDAYVEQHGDRTPLMPSHGLVSQLLQ	340
NTDB id 1047 HON27 RS03110 WP 000389061.1	.....	0
NTDB id 26225 TERY RS15575 WP 011612707.1	0
NTDB id 1417 SGL RS04200 WP 014407071.1	0
consensus		

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NTDB id 1419 SGL RS12550 WP 010873252.1	LDVSELLDAELDFEKGIRNEFPDYLERLSEQADLLLQHTHSQAMLGLHEYTSQLKESYEVLLDKPALLQSDYIFEIYQKAHQQLI	0
NTDB id 374 SMU RS06885 WP 002262930.1	.....	0
NTDB id 413 AAK55817.1 141..845( )	.....	0
NTDB id 1046 HON27 RS03130 WP 168726941.1	LDVSELLDAELDFEKGIRNEFPDYLERLSEQADLLLQHTHSQAMLGLHEYTSQLKESYEVLLDKPALLQSDYIFEIYQKAHQQLI	425
NTDB id 1047 HON27 RS03110 WP 000389061.1	.....	0
NTDB id 26225 TERY RS15575 WP 011612707.1	0
NTDB id 1417 SGL RS04200 WP 014407071.1	0
consensus		

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NTDB id 1419 SGL RS12550 WP 010873252.1	QLFDALAAQQRVGVVKQHQSI L EELKLYTQYTPDISNDLPQQDSTS FEP I YN I E P S I M T S D P N E W A T V E N F S D S A D W A V L G Q S V Q Q D R Q Y	6
NTDB id 374 SMU RS06885 WP 002262930.1	.....	0
NTDB id 413 AAK55817.1 141..845( )	.....	0
NTDB id 1046 HON27 RS03130 WP 168726941.1	QLFDALAAQQRVGVVKQHQSI L EELKLYTQYTPDISNDLPQQDSTS FEP I YN I E P S I M T S D P N E W A T V E N F S D S A D W A V L G Q S V Q Q D R Q Y	510
NTDB id 1047 HON27 RS03110 WP 000389061.1	.....	0
NTDB id 26225 TERY RS15575 WP 011612707.1	0
NTDB id 1417 SGL RS04200 WP 014407071.1	0
consensus		

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NTDB id 1419 SGL RS12550 WP 010873252.1	I S S T Q V N R N F D A D L L D I F L E E A E E L L E G I D T D L N I W V G E Q E N F A A L N N L M R Y L H T L K G G A N M V Q A T Y L G L I A H E L E S I Y E R L I Q K	31
NTDB id 374 SMU RS06885 WP 002262930.1	.....	0
NTDB id 413 AAK55817.1 141..845( )	.....	0
NTDB id 1046 HON27 RS03130 WP 168726941.1	I S S T Q V N R N F D A D L L D I F L E E A E E L L E G I D T D L N I W V G E Q E N F A A L N N L M R Y L H T L K G G A N M V Q A T Y L G L I A H E L E S I Y E R L I Q K	595
NTDB id 1047 HON27 RS03110 WP 000389061.1	.....	0
NTDB id 26225 TERY RS15575 WP 011612707.1	0
NTDB id 1417 SGL RS04200 WP 014407071.1	0
consensus		

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NTDB id 1419 SGL RS12550 WP 010873252.1	Q L V V T S D L I D F I R L V Q D D L A D R L Q I M R E Q Q L D Y A A P Y T I N A L K R A G Q N S N F Q P L P V V E A F D A E S E V F S E Q K V I S E I I I D E I P V E L	60
NTDB id 374 SMU RS06885 WP 002262930.1	.....	0
NTDB id 413 AAK55817.1 141..845( )	.....	0
NTDB id 1046 HON27 RS03130 WP 168726941.1	Q L V V T S D L I D F I R L V Q D D L A D R L Q I M R E Q Q L D Y A A P Y T I N A L K R A G Q N S N F Q P L P V V E A F D A E S E V F S E Q K V I S E I I I D E I P V E L	680
NTDB id 1047 HON27 RS03110 WP 000389061.1	.....	0
NTDB id 26225 TERY RS15575 WP 011612707.1	0
NTDB id 1417 SGL RS04200 WP 014407071.1	0
consensus		

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NTDB id 1419 SGL RS12550 WP 010873252.1	EPALAELETHHDQVFDTSYIEERTPVEMITDYNISPEEYRANEQDI EAVVERTFTERTETTYREFLEKSWLEFBINREADPLA	118
NTDB id 374 SMU RS06885 WP 002262930.1	.....PSSGEEDPPVRMTLDFNSPEAELD.....ALFTDEDAPTTAIDPFESSSWLEIDQMMEADPLA	0
NTDB id 413 AAK55817.1 141..845( )	.....	0
NTDB id 1046 HON27 RS03130 WP 168726941.1	EPALAELETHHDQVFDTAVTELATPVEMITTVTSQENEVAANEQDIEAVVEQTFLEEATELLEMAESLLKQWFEQRTNR.....	759
NTDB id 1047 HON27 RS03110 WP 000389061.1	.....	0
NTDB id 26225 TERY RS15575 WP 011612707.1	0
NTDB id 1417 SGL RS04200 WP 014407071.1	0
consensus		

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NTDB id 1419 SGL RS12550 WP 010873252.1	SIPETNAPAYQTAGGLDDNDLAEIQDLLGVGDVEPATLRPAVHSHKGRMYELINMHTAYSLENAFEQFATHHNSNLYRFL	194
NTDB id 374 SMU RS06885 WP 002262930.1	SIPETNAPAYQTAGGLDDNDLAEIQDLLGVGDVEPAITNPNGLHSFAGADRVTPLTNEVLL.FA.....AIDDLGLINAPVL	0
NTDB id 413 AAK55817.1 141..845( )	.....	0
NTDB id 1046 HON27 RS03130 WP 168726941.1	S.....ILL.....QLQRAVHSLKGGARMVGLAVQAIAYQLENAFEQFALHHFNSNIYDHL	812
NTDB id 1047 HON27 RS03110 WP 000389061.1	.....	0
NTDB id 26225 TERY RS15575 WP 011612707.1	0
NTDB id 1417 SGL RS04200 WP 014407071.1	0
consensus		

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NTDB id 1419 SGL RS12550 WP 010873252.1	EEFLAWFLKDAIFNHNYSDEHSLDSTLANKSFATTEHTFSTPYKTEDEDFRBLERALLEQADSSVMTFIRQGTETPLXPAWES	266
NTDB id 374 SMU RS06885 WP 002262930.1	DEEFSF.....TELETLIDTPAPKSFATISHPFRPLVAMEEDEDEFKDLALLEQADSSLGGIAGMGGARLPARP...R	0
NTDB id 413 AAK55817.1 141..845( )	.....	0
NTDB id 1046 HON27 RS03130 WP 168726941.1	ESAIAWLKDAIFNHNYSQHFQDGLQQSLENIQF..FETTIQIPTKLTRA.DLFSS.EP.....VMTFIQGDGTEPPPMGAWEQ	885
NTDB id 1047 HON27 RS03110 WP 000389061.1	.....	0
NTDB id 26225 TERY RS15575 WP 011612707.1	0
NTDB id 1417 SGL RS04200 WP 014407071.1	0
consensus		

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NTDB id 1419 SGL RS12550 WP 010873252.1	CYRDSNNGYRVASDEYEMSLFGENYRARRSDPSHRAFLNMLNRQLADYLRMDELEYETI	351
NTDB id 374 SMU RS06885 WP 002262930.1	QVKSRSEFEQTMRVPIKQLDNLNLIQELVVKRNRLEQDQERLRQFLDNLNQAQNLSDVGGRMQDLYERTLLEGALLASRSTNSR	0
NTDB id 413 AAK55817.1 141..845( )	.....	0
NTDB id 1046 HON27 RS03130 WP 168726941.1	TERLDQNNEMIRVSADLIEKMIDLSGENSINRSRIEMDLSQFSHTLVEMELAIQRLADQLRRMEGELETQI.....	956
NTDB id 1047 HON27 RS03110 WP 000389061.1	.....	0
NTDB id 26225 TERY RS15575 WP 011612707.1	.....	0
NTDB id 1417 SGL RS04200 WP 014407071.1	.....	0
consensus		

logo

NTDB id 1419 SGL RS12550 WP 010873252.1	HHSSKTTYPDAR IAKFSSTETSRYSBFDALVMDYISFHNLSRMAEAYBYKPKKSTISYKYBETESYLRISRBYGAEYQEQMR	436
NTDB id 374 SMU RS06885 WP 002262930.1	HHSSKTTYPDARITASSSSTMNDQPLDALEMDRFTGFHLLSQEMIELIVRVRESASDIQYLVDETDQVARTLRQVTTQLQEGMTK	0
NTDB id 413 AAK55817.1 141..845( )	.....	0
NTDB id 1046 HON27 RS03130 WP 168726941.1	.....IAKHGIEHSRYTDFDPLEMDQYSSLNQLSKSLAESASDLVDFKNTLSDKIRDTESLLLQQSRIQAEIQEGLMR	1029
NTDB id 1047 HON27 RS03110 WP 000389061.1	.....	0
NTDB id 26225 TERY RS15575 WP 011612707.1	.....	0
NTDB id 1417 SGL RS04200 WP 014407071.1	.....	0
consensus		

logo

NTDB id 1419 SGL RS12550 WP 010873252.1	SRMVPFPTQTADRLPRAIREVSMKLNKKVNLEVEGGDVLIDKMLEHLNPMTHLVNNAITHGIEPTAERQKLGKSPEGHLAVRAF	521
NTDB id 374 SMU RS06885 WP 002262930.1	.....	0
NTDB id 413 AAK55817.1 141..845( )	.....	0
NTDB id 1046 HON27 RS03130 WP 168726941.1	TRLVPPFSRLLPRLQRIVRQTSTALNRPaelFVNNTEGELDRNILERLVTPLHMLRNAIDHGLEDRAQRQQANKPETGRIELNIQ	1114
NTDB id 1047 HON27 RS03110 WP 000389061.1	.....	0
NTDB id 26225 TERY RS15575 WP 011612707.1	.....	0
NTDB id 1417 SGL RS04200 WP 014407071.1	.....	0
consensus		

logo

NTDB id 1419 SGL RS12550 WP 010873252.1	LQGNQTLITVSDDGAGINTEMVKQKAVEKGLISRMEASLSQSEVYDLLFHAGFSTKDTADDFAGRGVGLDVVRTSLIDIRGAIN	606
NTDB id 374 SMU RS06885 WP 002262930.1	.....	0
NTDB id 413 AAK55817.1 141..845( )	.....	0
NTDB id 1046 HON27 RS03130 WP 168726941.1	RQGTDVVVVFSDDGQGIDVEKVRQKALLAGLIKP..EQDLEQQDILQLIFHPGLSTAEQVTQISGRGVGLDVVQSDIKSLGGHVS	1197
NTDB id 1047 HON27 RS03110 WP 000389061.1	.....	0
NTDB id 26225 TERY RS15575 WP 011612707.1	.....	0
NTDB id 1417 SGL RS04200 WP 014407071.1	.....	0
consensus		

logo

NTDB id 1419 SGL RS12550 WP 010873252.1	IESTVGKGTTFTRIRLPLTLISICKALCCLSDRARIAPFMDGVEDTRDYLPKDIVTD.EDGQKCVKYGKEALLLPLYPLKDLLNYNR	690
NTDB id 374 SMU RS06885 WP 002262930.1	.....	0
NTDB id 413 AAK55817.1 141..845( )	.....	0
NTDB id 1046 HON27 RS03130 WP 168726941.1	VESVYGQGTTFTRIRVPTTVAVSDALMVKVADQQFAIPLAQIDRIIRVSPASLEQYFESPQELFEYEN...KRYPLRYLSEFVG	1277
NTDB id 1047 HON27 RS03110 WP 000389061.1	.....	0
NTDB id 26225 TERY RS15575 WP 011612707.1	.....	0
NTDB id 1417 SGL RS04200 WP 014407071.1	.....	0
consensus		

logo

NTDB id 1419 SGL RS12550 WP 010873252.1
 NTDB id 374 SMU RS06885 WP 002262930.1
 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 26225 TERY RS15575 WP 011612707.1
 NTDB id 1417 SGL RS04200 WP 014407071.1
 consensus

RLSRGSGVYGGKQEEEDVVRVVIARGSSGNLLALQIDQVLGEEE.IVIKQIEGPIPKPPGIAGATVRGDGSIPIADVLELIEIAQG

 NQPIPRLNG...VMYSLPVLMIKANNGQTVALLVDQLIGSRAQIVVKPIGQQFSSIGAIAGATILGDGQVCLILDGGQNIARQIQS

774
0
0
1359
0
0
0

logo

NTDB id 1419 SGL RS12550 WP 010873252.1
 NTDB id 374 SMU RS06885 WP 002262930.1
 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 26225 TERY RS15575 WP 011612707.1
 NTDB id 1417 SGL RS04200 WP 014407071.1
 consensus

RLRT.DSSGGLWRKTLTPTVNEVHMDPTVLIIVDDSIIVRELISLSFKKAGFRVEQARDGQEAWDQLKSGLPCDLVFCDIEMPRKN

 TQRHKQLSEAVY.....RQRESDEERRLIMIVDDSVTVRKVTSRLLERQGVVTAADGVDATIEQLENIKP.DLMLLDIEMPRMD

MEDAFQNLKVMVIVDDSKTIRRTAETLLQREGCEVITAVDGFALSKIAEANP.DIVFVDIEMPRMD

MNAVLVDDSSQREMISGLKDHGQVTTIACDGVEALEKLNFS.PDLVLDIVMPRMN

858
59
59
1437
65
59
59

logo

NTDB id 1419 SGL RS12550 WP 010873252.1
 NTDB id 374 SMU RS06885 WP 002262930.1
 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 26225 TERY RS15575 WP 011612707.1
 NTDB id 1417 SGL RS04200 WP 014407071.1
 consensus

GLELSEIQADEELSSIPVALLISRGADRHRKVAAKGATGYFTKPYTEKDIIDAANRMINGEVLLPGSTRKTNLSRFFKARG

 GFEVLNIVRHHDMHQYMPIMITSRTEKHRERAFSLGVSQYMGKPFQEEELLENIDALLVAFESEVKS.....

 GYQTCALIKNSQNYQNIPVIMLSSKDGDFDQAKGRVVGSDIYLTGKPFKDELLNAINRHVSS.....

 GYEVCRRIKSDPQTKHPVIMCSSKGEFDRYWGKQGADAYIAKPFQPTLVGTVKQLLR.....

 GYEVCRRIKSDPKTKNIPVIMCSSKGEFDRFWGMRQGADAYIAKPFQPMELVGTIKQLLRN.....

943
131
130
1506
127
121
121

logo

NTDB id 1419 SGL RS12550 WP 010873252.1
 NTDB id 374 SMU RS06885 WP 002262930.1
 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 26225 TERY RS15575 WP 011612707.1
 NTDB id 1417 SGL RS04200 WP 014407071.1
 consensus

NFSEEAQETIRSNPGLTLRSTVLIIDDSVMVRE...MLSMTFKKA..DYHTETARDG.....QDAWEKLSGLPCDLILCDI

 ...SGIPEIII...G...DLQILPDAFVAKKRGTEVELTHREFELHHLAT.HTGQVMTREHLLLETVWGYYDFG...DVRTVDV

 ...SKPQIQI...G...DLEIVPDAYVAKKYGEELDLTHREFELLYHLAS.HTGQVITREHLLLETVWGYYDFG...DVRTVDV

1014
202
201
1506
127
121
121

logo

	TV.....RRLREKIEDTPSR...PEYILT.....RRGVGYMKSYD.....	1095
NTDB id 1419 SGL RS12550 WP 010873252.1	EMPRMNGLELLERIQEDPNLSRIPVAMITSRGAQKMRMAAEKAKGVRRNRREETLLEASQRLIRGEVLLDLAALSAD	
NTDB id 374 SMU RS06885 WP 002262930.1	TV.....RRLREKIEDTPSR...PEYILT.....RRGVGYMKSYD.....	235
NTDB id 413 AAK55817.1 141..845()	TV.....RRLREKIEDTPSR...PEYILT.....RRGVGYMRNNA*.....	234
NTDB id 1046 HON27 RS03130 WP 168726941.1	.....	1506
NTDB id 1047 HON27 RS03110 WP 000389061.1	.....	127
NTDB id 26225 TERY RS15575 WP 011612707.1	.....	121
NTDB id 1417 SGL RS04200 WP 014407071.1	.....	121
consensus		

- X non conserved
- X similar
- X ≥ 50% conserved